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[Decisions of the Court of Customs and Patent Appeals are indicated by a star (*).]

ERRATA

1,757,150, page 110, in the heading, assignment, name of assignee, for "The Baker-Ranling Company" read *The Baker-Rauling Company*.

1,757,153, page 111, in the heading, assignment, after the word "assignor" insert *of one-half*.

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ALPHABETICAL LIST OF REGISTRANTS OF TRADE-MARKS

Aguiló, José, Brooklyn, N. Y. Cigars. 270,506; May 6; Serial No. 294,609; published Feb. 25, 1930. Class 17.

Air Propellers, Inc., Hagerstown, Md. Propellers. 270,591; May 6; Serial No. 293,813; published Feb. 18, 1930. Class 19.

Albers Bros. Milling Company, San Francisco, Calif. Wheat flour. 270,310; May 6; Serial No. 281,643; published Feb. 18, 1930. Class 46.

Allen, Bona, Inc., Buford, Ga. Shoes. 270,436; May 6; Serial No. 292,088; published Feb. 18, 1930. Class 39.

Allentown Paint Manufacturing Company, The, Allentown, Pa. Paint enamel. 270,408; May 6; Serial No. 289,074; published Feb. 18, 1930. Class 16.

American Chemical & Engineering Co. (See Fritsch, Emma.)

American Glue Company, Boston, Mass. Abrasive papers and abrasive cloths. 270,495; May 6; Serial No. 293,709; published Feb. 18, 1930. Class 4.

American Hair & Felt Company, Chicago, Ill. Undercushion for floor coverings. 270,469; May 6; Serial No. 294,049; published Feb. 25, 1930. Class 32.

American Laundry Machinery Company, The, Cincinnati, Ohio. Extractors for removing moisture or cleaning fluids from fabrics, clothing. 270,575; May 6; Serial No. 294,376; published Feb. 25, 1930. Class 24.

American Safety Device Co., New York, N. Y. Scaffolding and parts thereof. 270,521; May 6; Serial No. 293,814; published Feb. 25, 1930. Class 50.

American Sales Book Company, Limited, Toronto, Ontario, Canada, and Niagara Falls and Elmira, N. Y. Autographic registers. 270,363; May 6; Serial No. 293,307; published Feb. 18, 1930. Class 37.

American Silver Company, The, Bristol, Conn. Spoons, forks, knives, and ladles. 270,330; May 6; Serial No. 225,691; published Mar. 23, 1926. Class 28.

Andrews, Carl, doing business as Andrews Products Co., Chicago, Ill. Malt syrup. 270,457; May 6; Serial No. 294,138; published Feb. 25, 1930. Class 46.

Anglo-American Provision Company, Chicago, Ill. Lard. 84,735; renewed June 5, 1930. Class 46.

Appollo Metal Works, La Salle, Ill. Plated, polished, nonferrous metals. 270,424; May 6; Serial No. 290,232; published Jan. 28, 1930. Class 14.

Armour and Company of Delaware. (See Babbitt, B. T., assignor.)

Armstrong Machine Works, Three Rivers, Mich. Steam traps. 270,595; May 6; Serial No. 293,509; published Feb. 25, 1930. Class 18.

Arvey Corporation, Chicago, Ill. Upholstery foundation trimming board. 270,353; May 6; Serial No. 294,200; published Feb. 18, 1930. Class 37.

Attleboro Chain Company, to Marathon Co., Attleboro, Mass., successor. Lockets and bracelets. 76,957; renewed Mar. 1, 1930. Class 28.

Aurora Photo Finishing Co., Aurora, Ill. Photographic prints and enlargements. 270,390; May 6; Serial No. 292,481; published Feb. 25, 1930. Class 38.

Babbitt, B. T., Jersey City, N. J., and New York, N. Y., assignor to Armour and Company of Delaware, Chicago, Ill. Soap. 79,390; renewed Sept. 6, 1930. Class 4.

Barton, Frank E., Los Angeles, Calif. Cleaning and polishing preparation. 270,393; May 6; Serial No. 291,754; published Feb. 18, 1930. Class 16.

Bauer, Ernst, Hamburg, Germany. Cheese. 270,373; May 6; Serial No. 289,495; published Feb. 25, 1930. Class 46.

Bickler, John M., Linton, N. Dak. Sandwiches, pies, cakes, etc. 270,317; May 6; Serial No. 279,591; published Feb. 25, 1930. Class 46.

Bindseil, Herman F., Long Island City, N. Y., to H. F. Bindseil & Son, Inc., New York, N. Y., successor. Dyed fur skins. 34,403; renewed Apr. 8, 1930. Class 1.

Birdsboro Steel Foundry and Machine Company, Birdsboro, Pa. Steel castings. 270,503; May 6; Serial No. 294,793; published Feb. 25, 1930. Class 14.

Blue Point Tool Company, Chicago, Ill. Wrenches, wrench sets, wrench sockets, tool handles, screw drivers, etc. 270,479; May 6; Serial No. 293,863; published Feb. 25, 1930. Class 23.

Boag, Incorporated, River Forest, Ill. Bath crystals, perfume-scent strips, solid sachet, etc. 270,525; May 6; Serial No. 293,514; published Feb. 18, 1930. Class 6.

Boettger Baking Co. Inc., Pleasant Ridge, Mich. Plain bread, rolls, buns, etc. 270,376; May 6; Serial No. 288,835; published Feb. 25, 1930. Class 46.

Böhme, H. Th., A. G., Chemnitz, Germany. Mixtures of oils for the treatment of leather. 270,482; May 6; Serial No. 294,807; published Feb. 25, 1930. Class 4.

Bohn, Harry, doing business as The Comfield Washer Company, Dayton, Ohio. Clothes-washing machines. 270,589; May 6; Serial No. 293,868; published Feb. 18, 1930. Class 24.

Bond Foundry and Machine Company, Manheim, Pa. Shaft couplings. 79,400; renewed Sept. 6, 1930.

Brandle & Smith Co., Philadelphia, Pa. Candy. 270,563; May 6; Serial No. 294,756; published Feb. 25, 1930. Class 46.

Breskin & Charlton Publishing Corporation, New York, N. Y. Publication. 270,354; May 6; Serial No. 294,141; published Feb. 25, 1930. Class 38.

British Needle Company Limited, The, Redditch, England. Needles for sound-reproducing machines. 270,384; May 6; Serial No. 291,757; published Feb. 25, 1930. Class 36.

Brobst, William E., jr., doing business as W. E. Brobst Company, Noblesville, Ind. Cereal breakfast food and a flavoring base. 270,554; May 6; Serial No. 293,712; published Feb. 18, 1930. Class 46.

Brogan, Byard F., Philadelphia, Pa. Finger rings. 270,475; May 6; Serial No. 293,615; published Feb. 25, 1930. Class 28.

Calco Chemical Company, Inc., The, Boundbrook, N. J. Chemical preparation. 270,513; May 6; Serial No. 294,056; published Feb. 18, 1930. Class 6.

California Crushed Fruit Corporation, Los Angeles, Calif. Beverages. 270,313; May 6; Serial No. 280,890; published Feb. 25, 1930. Class 45.

California Crushed Fruit Corporation, Los Angeles, Calif. Beverages and syrups, extracts, and concentrates for preparing the same. 270,543; May 6; Serial No. 294,759; published Feb. 25, 1930. Class 45.

California Medicinal Wine Co. (See Vai Bros.)

California Prune & Apricot Growers Association, San Jose, Calif. Fresh citrus fruit, deciduous fruit, canned fruit, etc. 270,425; May 6; Serial No. 290,450; published Feb. 25, 1930. Class 46.

Cardozo, R. N., & Bro., St. Paul, Minn. Upholstered sofas, davenports, love seats, settees, chaise lounges, chairs, rockers, and ottomans. 270,387; May 6; Serial No. 288,417; published Feb. 25, 1930. Class 32.

Carlstrom Cheese Co., St. Louis, Mo. Salad dressing, sweet pickles, honey, etc. 270,443; May 6; Serial No. 290,550; published Feb. 18, 1930. Class 46.

Cascarol Laboratories. (See McEvoy, Edward.)

Central Foundry Co., assignor to The Central Foundry Company, New York, N. Y. Plumbers' fittings. 77,862; renewed May 10, 1930.

Chambers, Joseph A., Memphis, Tenn. Lubricating oils and greases and gasoline. 270,301; May 6; Serial No. 284,201; published Feb. 18, 1930. Class 15.

Chambers, Joseph A., Memphis, Tenn. Lubricating oils and greases and gasoline. 270,410; May 6; Serial No. 287,867; published Feb. 18, 1930. Class 15.

Chicago Spring Butt Company, by change of name to Chicago Spring Hinge Company, Chicago, Ill. Hinges. 77,295; renewed Mar. 29, 1930.

Chillington Tool Company, Limited, The, Wolverhampton, England. Hoes and shovels of metal. 79,468; renewed Sept. 13, 1930.

Ciner Manufacturing Co., New York, N. Y. Finger rings. 270,302; May 6; Serial No. 283,664; published Aug. 6, 1929. Class 28.

Citro Laboratories, Inc., Los Angeles, Calif. Food preparation consisting of orange juice, honey, and yeast. 270,369; May 6; Serial No. 292,925; published Feb. 25, 1930. Class 46.

Clark, J. L., Manufacturing Company, Rockford, Ill. Boxes and cans. 270,402; May 6; Serial No. 285,334; published Feb. 25, 1930. Class 2.

Clean-Ite Company, The, Chariton, Iowa. Soap. 270,483; May 6; Serial No. 294,798; published Feb. 25, 1930. Class 4.

Close, George, Company, The, Cambridge, Mass. Confectionery. 34,908; renewed July 17, 1930.

Closgard Wardrobe Co., Inc., Washington, D. C., and South Washington, Va. Wardrobe bags. 270,329; May 6; Serial No. 281,724; published Nov. 9, 1926. Class 2.

Coates Steel Products Co., Greenville, Ill. Metal grinding elements or bodies for grinding and pulverizing rock, cement, ores, etc. 270,348; May 6; Serial No. 259,533; published Feb. 25, 1930. Class 14.

Comeld Washer Company, The. (See Bohn, Harry.)

Cohn-Hall-Marx Co., New York, N. Y. Silk piece goods. 270,588; May 6; Serial No. 291,115; published Feb. 18, 1930. Class 42.

Columbia Match Company, Cleveland, Ohio. Matches. 270,569; May 6; Serial No. 293,718; published Feb. 25, 1930. Class 9.

Columbia Match Company, Cleveland, Ohio. Matches. 270,570; May 6; Serial No. 293,715; published Feb. 25, 1930. Class 9.

Comfort Clasp Company, The, Hollywood, Calif. Shoulder-strap clasps. 270,309; May 6; Serial No. 281,941; published Feb. 25, 1930. Class 28.

Compo-Site, Inc., Newark, N. J. Tools and cutlery and kitchen utensils. 270,325; May 6; Serial No. 258,571; published Feb. 18, 1930. Class 23.

Connery Candy Company, Inc., Albany, N. Y. Candy. 270,438; May 6; Serial No. 291,908; published Feb. 25, 1930. Class 46.

Consolidated Aircraft Corporation, Buffalo, N. Y. Flying machines. 270,418; May 6; Serial No. 292,896; published Feb. 25, 1930. Class 19.

Continental Oil Company, New York, N. Y. Gasoline, motor-fuel oils, naphtha, etc. 270,389; May 6; Serial No. 287,524; published Feb. 25, 1930. Class 15.

Corliss, Macy & Company, Inc., New York, N. Y. Blank books. 77,185; renewed Mar. 15, 1930.

Cornel Drug Stores Inc., New York, N. Y. Blood, nerve, and body-building tonic. 270,332; May 6; Serial No. 276,301; published Feb. 18, 1930. Class 6.

Crowder, Clarence E., doing business as Hac Products, Paynesville, Minn. Washing powder, powdered soap, etc. 270,365; May 6; Serial No. 292,256; published Feb. 18, 1930. Class 4.

Crown Lock Company, The, New York, N. Y. Locks. 270,397; May 6; Serial No. 291,156; published Feb. 25, 1930. Class 25.

Crown Willamette Paper Company, San Francisco, Calif. Tissue paper. 270,348; May 6; Serial No. 294,509; published Feb. 18, 1930. Class 37.

Cystogen Chemical Company. (See Judge & Dolph Pharaceutical Company.)

Daimler, Gottlieb, Cannstadt, to Daimler-Benz Aktiengesellschaft, Stuttgart-Unterturkheim, Germany, successor. Motors, motor cars, carriages, etc. 34,351; renewed Mar. 20, 1930.

Daneman, A. S., Art Works, Dayton, Ohio. Stencil sheets. 270,581; May 6; Serial No. 294,009; published Feb. 25, 1930. Class 37.

De Credaro, Lino, doing business as Lino Italian Foods Company, Jacksonville, Fla. Spaghetti sauce. 270,371; May 6; Serial No. 292,203; published Feb. 25, 1930. Class 46.

Dedes Candy Company, Newburyport, Mass. Candy bars. 270,428; May 6; Serial No. 289,312; published Feb. 25, 1930. Class 46.

Deer Creek Orchards, Porterville, Calif. Fresh grapes and fresh deciduous fruits. 270,326; May 6; Serial No. 256,916; published Feb. 25, 1930. Class 46.

Dentists' Supply Company of New York, The, New York, N. Y. Artificial teeth. 270,344; May 6. Class 44.

Detlof, Alfred B. H., London, England. Medicine. 270,420; May 6; Serial No. 292,798; published Feb. 18, 1930. Class 6.

Dewey & Almy Chemical Company, North Cambridge, Mass. Stains, dressings, and finishes for leather, etc. 270,493; May 6; Serial No. 294,062; published Feb. 25, 1930. Class 4.

Dewey & Almy Chemical Company, North Cambridge, Mass. Impregnating and backing compounds, and soldering fluxes. 270,512; May 6; Serial No. 294,064; published Feb. 18, 1930. Class 6.

Diamond (H) Bag Company, The. (See Hyland, Richard C.)

Diamond Match Company, The, Chicago, Ill. Toothpicks. 270,352; May 6; Serial No. 294,214; published Feb. 18, 1930. Class 44.

Diamond Match Company, The, Chicago, Ill. Clothespins. 270,579; May 6; Serial No. 294,213; published Feb. 25, 1930. Class 24.

Diamond Match Company, The, Chicago, Ill. Clothespins. 270,580; May 6; Serial No. 294,209; published Feb. 18, 1930. Class 24.

Doelger, Peter, Brewing Corporation. Malt beverages. 270,440; May 6; Serial No. 291,608; published Feb. 25, 1930. Class 48.

Donnelley, Reuben H., Corporation, The, Chicago, Ill. Printed directories. 270,357; May 6; Serial No. 293,873; published Feb. 25, 1930. Class 38.

Drug Products Co. Inc., The, Long Island City, N. Y. Preparation indicated in case of dysmenorrhea, etc. 270,529; May 6; Serial No. 293,094; published Feb. 18, 1930. Class 6.

Dry Steam Appliance Co., Inc., San Francisco, Calif. Steam garment pressers. 270,542; May 6; Serial No. 293,030; published Feb. 25, 1930. Class 24.

Duckwall Bros. Inc., Hood River, Oreg. Deciduous fruits. 270,437; May 6; Serial No. 292,034; published Feb. 25, 1930. Class 46.

Duoflex Piston Ring Company, Philadelphia, Pa. Piston rings. 270,464; May 6; Serial No. 294,750; published Feb. 25, 1930. Class 35.

Eames Company, San Francisco, Calif. Wheels and casters for hand trucks. 270,400; May 6; Serial No. 287,458; published Feb. 25, 1930. Class 19.

East Coast Preserving Company, Jacksonville, Fla. Canned grapefruit and grapefruit juice. 270,433–4; May 6; Serial Nos. 292,261–2; published Feb. 25, 1930. Class 46.

Economic Lamp Company, Malden, Mass. Vacuum or electron tubes. 270,406; May 6; Serial No. 290,457; published Feb. 18, 1930. Class 21.

Edible Products Company, Jersey City, N. J., and New York, N. Y., assignor to The Southern Cotton Oil Company, New Orleans, La. Refined bean oil used as a food. 78,873; renewed July 19, 1930.

Electrolife Manufacturing Company. (See Turver, William H.)

Electrolux, Inc., New York, N. Y. Clothes-washing machines and parts therefor. 270,297; May 6; Serial No. 284,975; published Feb. 18, 1930. Class 24.

Emery, Elmer O., doing business as Sally Lynn Kitchen, Washington, D. C. Cakes and pies. 270,599; May 6. Class 46.

Empire Soap Company, New York, N. Y. Cleansing compounds and soaps. 79,413; renewed Sept. 6, 1930.

Eno Rubber Corporation, Los Angeles, Calif. Rubber lamp tubing, windshield rubber wiper tubing, and rubber gaskets. 270,305; May 6; Serial No. 282,776; published Feb. 25, 1930. Class 35.

Erickson, Hugo, doing business as Hugo Food Products Co. Salad dressing. 270,454; May 6; Serial No. 294,296; published Feb. 25, 1930. Class 46.

Etzler, Charles O., & Son, Verona, Ohio. Wheat flour, corn meal, biscuit flour, etc. 270,559; May 6; Serial No. 293,214; published Feb. 18, 1930. Class 46.

Evans, Katalin, Chicago, Ill. Ameliorative for rheumatism. 270,524; May 6; Serial No. 293,575; published Feb. 18, 1930. Class 6.

Fairchild Aviation Corporation, New York, N. Y. Cameras. 270,476; May 6; Serial No. 293,530; published Feb. 25, 1930. Class 26.

Fairchild Aviation Corporation, New York, N. Y. Cameras. 270,477; May 6; Serial No. 293,527; published Feb. 25, 1930. Class 26.

Fashion-Limited, Inc., New York, N. Y. Magazine. 270,399; May 6; Serial No. 289,378; published Feb. 25, 1930. Class 38.

Federal Rubber Company, The, Chicago, Ill.; Cudahy, Wis.; and Chicopee Falls, Mass. Cord and square woven fabrics coated with compounded unvulcanized rubber. 270,516–18; May 6; Serial Nos. 294,010–12; published Feb. 25, 1930. Class 50.

Fell, S. R., Company, The, assignor, by mesne assignments, to The Sal-Vet Products Co., Cleveland, Ohio. Veterinary embrocations. 77,109; renewed Mar. 8, 1930.

Fell, S. R. Company, assignor, by mesne assignments, to The Sal-Vet Products Co., Cleveland, Ohio. Veterinary vermifuges, medicated salts, and tonics. 77,492; renewed Apr. 12, 1930.

Fibre Specialty Manufacturing Company, Kennett Square, Pa. Trunks and cases. 270,534; May 6; Serial No. 291,871; published Feb. 18, 1930. Class 3.

Fitchburg Grinding Machine Corporation, Fitchburg, Mass. Metal-grinding machines. 270,386; May 6; Serial No. 290,780; published Feb. 25, 1930. Class 23.

Fleischmann Company, The, Cincinnati, Ohio, and New York, N. Y., assignor to Standard Brands Incorporated, Dover, Del. Yeast. 270,324; May 6; Serial No. 271,645; published Feb. 18, 1930. Class 46.

Flexible Steel Lacing Company, Chicago, Ill. Belt fasteners. 270,578; May 6; Serial No. 294,217; published Feb. 25, 1930. Class 13.

Flour City Specialty Mfg. Co., Minneapolis, Minn. Automobile window and windshield attachments. 270,598; May 6; Serial No. 293,420; published Feb. 18, 1930. Class 19.

Flower City Specialty Co., Rochester, N. Y. Treated cleaning and polishing cloth. 270,497; May 6; Serial No. 293,366; published Feb. 18, 1930. Class 4.

Food Makers of Sunland, San Francisco, Calif. Cookies. 270,536; May 6; Serial No. 291,386; published Feb. 18, 1930. Class 46.

Forstmann & Huffmann Company, Passaic, N. J. Woolen piece goods. 270,555; May 6; Serial No. 293,552; published Feb. 18, 1930. Class 42.

Forstmann & Huffmann Company, Passaic, N. J. Woolen piece goods. 270,556; May 6; Serial No. 293,543; published Feb. 18, 1930. Class 42.

Forstmann & Huffmann Company, Passaic, N. J. Woolen piece goods. 270,557; May 6; Serial No. 293,540; published Feb. 18, 1930. Class 42.

Forstner Chain Corp., Irvington, N. J. Watches-clocks, and parts thereof. 270,508; May 6; Serial No. 294,349; published Feb. 25, 1930. Class 27.

French, Samuel H., & Co., assignor to Samuel H. French & Co., Philadelphia, Pa. Ready-mixed paints and paste colors. 77,992; renewed May 24, 1930.

Fritsch, Emma, doing business as American Chemical & Engineering Co., Hawthorne, N. J. Waterproof paint. 270,347; May 6; Serial No. 294,510; published Feb. 18, 1930. Class 16.

Frozen Lolly Coating Company. (See Zuckerman, Lillye G.)

Gallagher, Gilbert G., Windber, Pa. Puzzles. 270,391; May 6; Serial No. 292,441; published Feb. 25, 1930. Class 38.

Galmor Candy Corporation, Chicago, Ill. Candies. 270,447; May 6; Serial No. 286,239; published Feb. 25, 1930. Class 46.

Garden City Publishing Company, Inc., Garden City, N. Y. Books. 270,356; May 6; Serial No. 293,966; published Feb. 25, 1930. Class 38.

Garey, Hellen, Salt Lake City, Utah. Remedy for certain diseases. 78,323; renewed June 7, 1930.

General Electric Company, Schenectady, N. Y. Insulating and dash-pot oil. 270,355; May 6; Serial No. 294,002; published Feb. 18, 1930. Class 15.

Gennert, The firm of G., New York, N. Y., assignor, by mesne assignments, to Hauff-Leonar A.-G., Wandsbek, Germany. Photographic developers. 34,972; renewed July 31, 1930.

Genovesi Bros., Zappelli & Co., San Jose, Calif. Olive oil. 270,375; May 6; Serial No. 289,016; published Feb. 25, 1930. Class 46.

Gestetner, D. Limited, London, England. Stencil sheets, writing paper, letter paper, etc. 270,411; May 6; Serial No. 287,701; published Feb. 18, 1930. Class 37.

Gilman Fanfold Corporation, Limited, Toronto, Ontario, Canada, and Niagara Falls, N. Y. Paper forms. 270,299; May 6; Serial No. 284,730; published Feb. 25, 1930. Class 37.

Goldstein, Benjamin, Allegheny, Pa., assignor to Harry S. Goldstein, executor of the estate of Benjamin Goldstein, Atlantic City, N. J. Ointments and lotions. 34,316; renewed Mar. 13, 1930.

Goodnight, Lee C., Landis, N. C. Granite cleaner. 270,364; May 6; Serial No. 292,401; published Feb. 25, 1930. Class 4.

Goodyear Rubber Company, San Francisco, Calif. Rubber belting and hose. 270,388; May 6; Serial No. 287,924; published Sept. 10, 1929. Class 35.

Goodyear Tire & Rubber Company, The, Akron, Ohio. Storage batteries. 270,412; May 6; Serial No. 287,467; published Feb. 18, 1930. Class 21.

Graf-Zep Specialty Co. (See Skolnick, Samuel.)

Grancell, Isaac H., Los Angeles, Calif. Brake-band dressings. 270,866; May 6; Serial No. 288,957; published Feb. 25, 1930. Class 4.

Grantorpets Tändsticksfabriks Aktiebolag, Westervik, assignor, by mesne assignments, to Jonkopings Och Vulcans Tandsticksfabriksaktiebolag, Jenkoping, Sweden. Matches. 76,360; renewed Jan. 11, 1930.

Hac Products. (See Crowder, Clarence E.)

Hagerling, Fred J., St. Louis, Mo. Powdered hand soap. 270,494; May 6; Serial No. 293,728; published Feb. 25, 1930. Class 4.

Hampshire, F. W., & Co. (1927) Limited, Derby, England. Inhalant. 270,422; May 6; Serial No. 292,497; published Feb. 18, 1930. Class 6.

Hanover Cordage Company, Hanover, Pa. Hemp sail or sewing twine. 270,566; May 6; Serial No. 294,220; published Feb. 25, 1930. Class 7.

Hauff-Leonar A.-G. (See Gennert, The firm of G., assignor.)

Henry Feed & Supply Co., The, Kosciusko, Miss. Feed, wheat flour. 270,535; May 6; Serial No. 291,663; published Feb. 18, 1930. Class 46.

Hewitt, W. B., doing business as Hewitt Hatchery, Van Nuys, Calif. Baby chicks. 270,298; May 6; Serial No. 284,908; published Feb. 25, 1930. Class 46.

Hinde & Dauch Paper Company, The, Sandusky, Ohio. Corrugated paper board. 270,349; May 6; Serial No. 294,426; published Feb. 18, 1930. Class 37.

Hollywood Dry Corporation, Los Angeles, Calif. Extracts and concentrates for beverage purposes. 270,530; May 6; Serial No. 292,875; published Feb. 25, 1930. Class 45.

Homophon Company, G. m. b. H., Berlin, Germany. Talking machines and supplies therefor. 78,099; renewed May 31, 1930.

Hookless Fastener Company, Meadville, Pa. Tobacco pouches, cigarette cases, and cigar cases. 270,509; May 6; Serial No. 294,258; published Feb. 25, 1930. Class 8.

Hugo Food Products Co. (See Erickson, Hugo.)

Huntington, Leland W., Oakland, Calif. Furniture—vis. invalid tables. 270,380; May 6; Serial No. 292,266; published Feb. 25, 1930. Class 32.

Hurd, Louis H., New York, N. Y. Boxes. 270,335; May 6; Serial No. 275,899; published Feb. 25, 1930. Class 2.

Hyde Manufacturing Company, Southbridge, Mass. Trestles and tables for paper hangers and paste boards. 270,520; May 6; Serial No. 293,837; published Feb. 25, 1930. Class 50.

Hyland, Richard C., doing business as The Diamond (H) Bag Company, assignor to Pacific Bag Company, San Francisco, Calif. Twine. 270,567–8; May 6; Serial No. 294,016–17; published Feb. 25, 1930. Class 7.

I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Artificial-silk thread and artificial spinning fibers. 270,551; May 6; Serial No. 294,071; published Feb. 18, 1930. Class 43.

Ideal Food Products Co., Cedar Rapids, Iowa. Malt syrup. 270,316; May 6; Serial No. 280,118; published Feb. 18, 1930. Class 46.

Inca Manufacturing Corporation, Fort Wayne, Ind. Wire and cables, electrical windings, coils, and transformers. 270,478; May 6; Serial No. 293,470; published Feb. 25, 1930. Class 21.

Independent Oil and Gas Company, Tulsa, Okla. Kerosene, gasoline, heating oil, etc. 270,378; May 6; Serial No. 292,992; published Feb. 25, 1930. Class 15.

Indian Products Company, The. (See Willard, Otto H.)

Ingersoll Cream Cheese Company, Limited, Ingersoll, Ontario, Canada. Cheese. 270,296; May 6; Serial No. 284,984; published Feb. 25, 1930. Class 46.

International Candy Co., Chicago, Ill. Chocolate bars and chocolate-covered fruit bars. 270,435; May 6; Serial No. 292,169; published Feb. 25, 1930. Class 46.

International Safety Lock Nut Corporation, New York, N. Y. Lock nuts and lock washers. 270,417; May 6; Serial No. 292,632; published Feb. 25, 1930. Class 13.

International Shoe Co., St. Louis, Mo. Boots and shoes. 270,442; May 6; Serial No. 291,164; published Feb. 18, 1930. Class 39.

Jackes-Evans Manufacturing Company, St. Louis, Mo. Stovepipe, heaters, ovens, etc. 270,398; May 6; Serial No. 290,577; published Feb. 18, 1930. Class 34.

James-McCullin, Inc., Los Angeles, Calif. Glass-cleaning solution. 270,489–92; May 6; Serial Nos. 294,157–60; published Feb. 25, 1930. Class 4.

Jefferson Electric Company, Chicago, Ill. Electric transformers and coils. 270,385; May 6; Serial No. 290,904; published Feb. 25, 1930. Class 21.

Jones, Mary A., Wilder, Idaho. Cleaning preparation. 270,500; May 6; Serial No. 293,327; published Feb. 18, 1930. Class 4.

Jonkopings Och Vulcans Tandsticksfabriksaktiebolag. (See Grantorpets Tändsticksfabriks Aktiebolag, assignor.)

Judge & Dolph Pharmaceutical Company, St. Louis, Mo., to Cystogen Chemical Company, Brooklyn, N. Y., successor. Remedy for certain named diseases. 34,988; renewed July 31, 1930.

Kastanis, Peter, Cleveland, Ohio. Iron tonic. 270,510; May 6; Serial No. 294,226; published Feb. 18, 1930. Class 6.

Ken-Wel Sporting Goods Company, Inc., Utica, N. Y. Golf balls. 270,315; May 6; Serial No. 280,400; published June 11, 1929. Class 22.

Keyzer, Joseph N. M., Miami, Fla. Cigarette container and dispenser. 270,527; May 6; Serial No. 293,438; published Feb. 25, 1930. Class 8.

Kiel, Conrad, & Son, Jersey City, N. J. Horse-radish, pickles, cheese, etc. 270,374; May 6; Serial No. 289,027; published Feb. 25, 1930. Class 46.

Kimberly-Clark Corporation, Neenah, Wis. Paper padding or cushioning materials. 270,350; May 6; Serial No. 294,390; published Feb. 18, 1930. Class 37.

Koh-I-Noor Bleistiftfabrik L. & C. Hardtmuth, Budweis, Czechoslovakia. Copying pencils. 270,345; May 6; Serial No. 294,673; published Feb. 18, 1930. Class 37.

Koh-I-Noor Bleistiftfabrik L. & C. Hardtmuth, Budweis, Czechoslovakia. Pencils, letter openers, crayons, etc. 270,346; May 6; Serial No. 294,672; published Feb. 18, 1930. Class 37.

Kovenko, Nina, New York, N. Y. Perfume, toilet powder, rouge, etc. 270,528; May 6; Serial No. 293,329; published Feb. 18, 1930. Class 6.

Kress, S. H., & Co., New York, N. Y. Toilet paper. 270,392; May 6; Serial No. 291,882; published Feb. 18, 1930. Class 37.

Kress, S. H., & Co., New York, N. Y. Insecticide and garden liquid sprayers. 270,463; May 6; Serial No. 294,809; published Feb. 25, 1930. Class 23.

Landers, Frary & Clark, New Britain, Conn. Electrically-operated beaters. 270,472; May 6; Serial No. 293,882; published Feb. 25, 1930. Class 23.

Lasher & Lathrop Inc., New York, N. Y., assignor to Parsons Paper Company, Holyoke, Mass. Writing and printing paper. 78,110; renewed May 31, 1930.

Lee Rubber & Tire Corporation, Conshohocken, Pa. Sponge-rubber toy animals and dolls. 270,358; May 6; Serial No. 293,781; published Feb. 18, 1930. Class 22.

Lesquendieu, Incorporated, New York, N. Y. Toilet soap. 270,485; May 6; Serial No. 294,783; published Feb. 25, 1930. Class 4.

Lily-Tulip Cup Corporation, New York, N. Y. Cup-dispensing machines. 270,379; May 6; Serial No. 292,812; published Feb. 25, 1930. Class 23.

Lindsay Thompson & Co., Limited, Belfast, Ireland, to Lindsay Thompson & Co. Ltd., Belfast, Ireland, and New York, N. Y. Linen thread. 78,011–12; renewed May 24, 1930.

Lindsay Thompson & Co., Limited, Belfast, Ireland, to Lindsay Thompson & Co. Ltd., Belfast, Ireland, and New York, N. Y. Linen thread. 78,470; renewed June 14, 1930.

Lingner, Karl A., Dresden, Germany, assignor, by mesne assignments, to Lingner Corporation, New York, N. Y. Tooth powder and an antiseptic mouth wash. 77,930; renewed May 17, 1930.

Lingner, Karl A., Dresden, Germany, assignor, by mesne assignments, to Lingner Corporation, New York, N. Y. Solid soap, liquid soap, and powdered soap. 79,133; renewed Aug. 9, 1930.

Lino Italian Foods Company. (See De Credaro, Lino.)

Liptak, Michael, St. Paul, Minn. Inspection doors for furnaces. 270,597; May 6; Serial No. 293,436; published Feb. 25, 1930. Class 34.

Lovett, John T., jr., Little Silver, N. J. Plants, balls of plants, and seeds. 270,560; May 6; Serial No. 293,055; published Feb. 18, 1930. Class 1.

Mackenzie, Robt. F., Co., The, Cleveland, Ohio. Candy. 270,562; May 6; Serial No. 294,815; published Feb. 25, 1930. Class 46.

Maine Steel Products Co., South Portland, Me. Marine and industrial hardware. 270,401; May 6; Serial No. 286,068; published Feb. 18, 1930. Class 13.

Manhattan-Kreole Products, Inc., Brooklyn, N. Y. Shoe dressing. 270,414; May 6; Serial No. 287,258; published Feb. 11, 1930. Class 4.

Maple Confectionery, The, Ukiah, Calif. Candies and ice cream. 270,314; May 6; Serial No. 280,448; published Feb. 18, 1930. Class 46.

Marat Company, The, New York, N. Y. Antiseptic suppositories, face cream, etc. 270,519; May 6; Serial No. 293,979; published Feb. 18, 1930. Class 6.

Marathon Co. (See Attleboro Chain Company.)

Marchal, Pierre, Neuilly-sur-Seine, France. Spark plugs, electric headlights, lamps, etc. 270,340–1; May 6; Serial Nos. 273,874–5; published Feb. 18, 1930. Class 21.

Marshall Field & Company, Chicago, Ill. Handkerchiefs. 270,547; May 6; Serial No. 294,584; published Feb. 18, 1930. Class 42.
Marston, C. S., jr. doing business as C. S. Marston, Jr., Co., Los Angeles, Calif. Peanut butter, salted nuts. 270,453; May 6; Serial No. 294,431; published Feb. 25, 1930. Class 46.
Martin-Copeland Company, Providence, R. I. Lavallières, pendants, necklaces, etc. 270,312; May 6; Serial No. 281,012; published May 14, 1929. Class 28.
Mathews, G. E., doing business as G. E. Mathews Co., Salinas, Calif. Fresh lettuce. 270,441; May 6; Serial No. 291,461; published Feb. 25, 1930. Class 46.
May Department Stores Company, The, New York, N. Y. Envelopes, paper. 270,593; May 6; Serial No. 293,627; published Feb. 25, 1930. Class 37.
McAvoy Products Co., Chicago, Ill. Water-treatment materials for the prevention of boiler scale and corrosion. 270,522; May 6; Serial No. 293,739; published Feb. 18, 1930. Class 6.
McCormick & Co., Incorporated, Baltimore, Md. Insecticides and insect powder or dust. 270,504; May 6; Serial No. 294,775; published Feb. 18, 1930. Class 6.
McCrillis, A. B., & Son, Inc., Providence, R. I., assignor to The Southwestern Milling Company, Inc., New York, N. Y. Wheat flour. 79,141; renewed Aug. 9, 1930.
McEvoy, Edward, doing business as Cascarol Laboratories, Dongan Hills, N. Y. Pharmaceutical preparation. 270,421; May 6; Serial No. 292,775; published Feb. 18, 1930. Class 6.
McKesson & Robbins, New York, N. Y., to McKesson & Robbins, Incorporated, Bridgeport, Conn., successor. Medicines. 34,631; renewed May 8, 1930.
McLean, Forman T., Bronxville, N. Y. Gladiolus flowers and other parts of the gladiolus plant. 270,533; May 6; Serial No. 292,504; published Feb. 18, 1930. Class 1.
Mello Bird Co. (See Shabel, Carl A.)
Merrell, Wm. S., Company, The, Cincinnati, Ohio. Preparation for use as a douche. 270,511; May 6; Serial No. 294,119; published Feb. 18, 1930. Class 6.
Midland Chemical Laboratories, Inc., Dubuque, Iowa. Cleaner for dishes, etc. 270,498; May 6; Serial No. 293,336; published Feb. 18, 1930. Class 4.
Midland Chemical Laboratories, Inc., Dubuque, Iowa. Cleaner for wood, metal, etc. 270,499; May 6; Serial No. 293,333; published Feb. 18, 1930. Class 4.
Miller High Life Company, Milwaukee, Wis. Concentrated malt syrup. 270,432; May 6; Serial No. 292,678; published Feb. 18, 1930. Class 46.
Mine Safety Appliances Company, Pittsburgh, Pa. Breathing apparatus. 270,361; May 6; Serial No. 293,630; published Feb. 11, 1930. Class 44.
Minneapolis Milling Company, Minneapolis, Minn. Wheat flour. 270,333; May 6; Serial No. 276,271; published July 23, 1929. Class 46.
Minot, Hooper & Co., New York, N. Y. Cotton-flannel sheets. 270,339; May 6; Serial No. 275,234; published Feb. 18, 1930. Class 42.
Mississippi Coast Packing Co., East Beach, Biloxi, Miss. Canned shrimp and canned oysters. 270,565; May 6; Serial No. 294,677; published Feb. 25, 1930. Class 46.
Montana Flour Mills Company, Great Falls, Mont. Bread. 270,546; May 6; Serial No. 294,587; published Feb. 18, 1930. Class 46.
Moulin, A. Richard, Chicago, Ill. Candy. 270,427; May 6; Serial No. 289,528; published Feb. 25, 1930. Class 46.
Mountain Mill Company, Lee, Mass., and New York, N. Y. Greaseproof paper. 270,351; May 6; Serial No. 294,314; published Feb. 18, 1930. Class 37.
Murphy Products Company, Burlington, Wis. Supplemental feeds for poultry, hogs, and cattle. 270,544; May 6; Serial No. 294,679; published Feb. 18, 1930. Class 46.
NEA Service, Inc., Cleveland, Ohio. Newspaper section. 270,405; May 6; Serial No. 290,660; published Dec. 17, 1929. Class 38.
National Cellulose Corporation, New York, N. Y. Paper handkerchiefs. 270,416; May 6; Serial No. 285,931; published Feb. 18, 1930. Class 37.
National Laundry Machinery Company, Inc., Syracuse, N. Y. Ironing and drying machines. 270,395–6; May 6; Serial Nos. 291,465–6; published Feb. 18, 1930. Class 24.
National Tank Company, Tulsa, Okla. Tanks. 270,334; May 6; Serial No. 276,213; published Feb. 25, 1930. Class 2.
National Trade Journals, Inc., New York, N. Y. Publication. 270,413; May 6; Serial No. 287,359; published Feb. 25, 1930. Class 38.
Nebraska Consolidated Mills Co., Omaha, Nebr. Poultry feeds of all kinds, hog and pig feeds, dairy feeds, etc. 270,458; May 6; Serial No. 293,888; published Feb. 25, 1930. Class 46.
Nekoosa-Edwards Paper Company, Port Edwards, Wis. Kraft paper. 270,596; May 6; Serial No. 293,441; published Feb. 25, 1930. Class 37.
Newhall, Henry B., New York, N. Y., assignor, by mesne assignments, to Henry B. Newhall Corporation, Garwood, N. J. Chains, chain accessories, and forgings. 34,962; renewed July 24, 1930.
New Orleans Coffee Co., Ltd., New Orleans, La. Tea. 270,564; May 6; Serial No. 294,683; published Feb. 25, 1930. Class 46.
New Process Company, Warren, Pa. Ladies' traveling cases. 270,553; May 6; Serial No. 293,787; published Feb. 18, 1930. Class 3.
Nu-Enamel Paint Company, Inc., Dallas, Tex. Polish for automobiles, etc. 270,407; May 6; Serial No. 289,534; published Feb. 18, 1930. Class 16.
Oelerich & Berry Company, Chicago, Ill. Cane and maple syrup. 270,431; May 6; Serial No. 292,747; published Feb. 18, 1930. Class 46.
Oil-Kraft, Inc., Cincinnati, Ohio. Grease and lubricating oil compounds. 270,481; May 6; Serial No. 293,282; published Feb. 25, 1930. Class 15.
Oppenheimer, A., & Co., assignor to Oppenheimer Pipes, Limited, London, England. Tobacco pipes. 77,480; renewed Apr. 12, 1930.
Orono Pulp & Paper Company, Bangor, Me. Paper. 270,592; May 6; Serial No. 293,745; published Feb. 25, 1930. Class 37.
Overholt, A., & Company, Broad Ford, Pa. Whiskey. 270,439; May 6; Serial No. 291,783; published Feb. 25, 1930. Class 49.
Pacific Bag Company. (See Hyland, Richard C., assignor.)
Pacific Egg Producers Cooperative, Inc., New York, N. Y. Eggs. 270,451; May 6; Serial No. 294,823; published Feb. 25, 1930. Class 46.
Pacific Golf Ball, Ltd., San Francisco, Calif. Golf balls. 270,409; May 6; Serial No. 289,040; published Feb. 18, 1930. Class 22.
Pacific Mills, Lawrence and Boston, Mass. Cotton piece goods. 270,552; May 6; Serial No. 293,843; published Feb. 18, 1930. Class 42.
Palmyra Pretzel Co., Inc., Palmyra, Pa. Pretzels. 270,460; May 6; Serial No. 293,445; published Feb. 25, 1930. Class 46.
Parkway Baking Company, Philadelphia, Pa. Loaves of bread. 270,461; May 6; Serial No. 293,065; published Feb. 25, 1930. Class 46.
Parsons Paper Company. (See Lasher & Lathrop Inc., assignor.)
Peters Cartridge Company, The, Cincinnati, Ohio. Shotgun shells and metallic cartridges. 270,561; May 6; Serial No. 294,857; published Feb. 25, 1930. Class 9.
Pfeiffer, S., Mfg. Co., St. Louis, Mo. Medicinal tonic. 270,319; May 6; Serial No. 277,815; published Feb. 18, 1930. Class 6.
Pittsburgh-Des Moines Steel Company, Pittsburgh, Pa. Metallic tanks. 270,577; May 6; Serial No. 294,275; published Feb. 25, 1930. Class 2.
Porter, H. K., Inc., Everett, Mass. Portable two-hand cutting-off metal-working tools and parts thereof. 270,480; May 6; Serial No. 293,108; published Feb. 25, 1930. Class 23.
Pratt & Whitney Aircraft Company, The, Hartford, Conn. Internal-combustion engines and their parts. 270,465; May 6; Serial No. 294,489; published Feb. 25, 1930. Class 23.
Press Products Company, The, Derby, Conn. Desk files and file cases. 270,474; May 6; Serial No. 293,690; published Feb. 25, 1930. Class 32.
Prewitt Brothers, Indianapolis, Ind. Doughnuts, crullers, jelly fills, etc. 270,531; May 6; Serial No. 292,749; published Feb. 18, 1930. Class 46.
Providence Steam Trap Company, Providence, R. I. Plumbing traps, shower heads, drinking fountains, etc. 270,590; May 6; Serial No. 293,851; published Feb. 18, 1930. Class 13.
Pure Oil Company, The, Chicago, Ill. Oil and greases. 270,318; May 6; Serial No. 278,605; published Apr. 16, 1929. Class 15.
R & F Pharmaceutical Company, Wichita, Kans. Cold capsules. 270,515; May 6; Serial No. 294,024; published Feb. 18, 1930. Class 6.
Radiotype Corporation, New York, N. Y. Electrical signal devices. 270,306; May 6; Serial No. 282,715; published Feb. 18, 1930. Class 21.
Raffetto, G. B., Inc., New York, N. Y. Canned and bottled fruits and vegetables. 270,571; May 6; Serial No. 293,380; published Feb. 25, 1930. Class 46.
Rastetter, Louis, & Sons, Fort Wayne, Ind. Folding chairs. 270,331; May 6; Serial No. 276,986; published Feb. 25, 1930. Class 32.
Ratterree, A. H., sr., Charlotte, N. C. Soap for use in cleaning surfaces coated with paint, duco lacquer, etc. 270,486; May 6; Serial No. 294,704; published Feb. 25, 1930. Class 4.
Red Indian Oil Company Incorporated, Detroit, Mich. Motor-oil fuel. 270,381; May 6; Serial No. 292,048; published Feb. 25, 1930. Class 15.
Red Sun Products Company, Chicago, Ill. Candy. 270,430; May 6; Serial No. 292,750; published Feb. 25, 1930. Class 46.
Red & White Corp'n, Buffalo, N. Y. Canned fruits, vegetables, fish, etc. 270,459; May 6; Serial No. 293,692; published Feb. 25, 1930. Class 46.
Rhodes, Preston T., Philadelphia, Pa. Soaps, cleaning-soap solutions, etc. 270,359; May 6; Serial No. 293,747; published Feb. 11, 1930. Class 4.
Ruppert, Edward H., Brooklyn, N. Y. Water and steam valves. 270,594; May 6; Serial No. 293,557; published Feb. 18, 1930. Class 13.
S. A. Egidio Galbani, Melzo, Milan, Italy. Cheese. 270,320–1; May 6; Serial Nos. 273,560–1; published Feb 25, 1930. Class 46.
Safety Equipment Service Company, The, Cleveland, Ohio. Devices and appliances and parts thereof for use in anesthesia, resuscitation, and induced or artificial breathing. 270,404; May 6; Serial No. 290,860; published Feb. 11, 1930. Class 44.

Sally Lynn Kitchen. (See Emery, Elmer O.)
Sal-Vet Products Co., The. (See Feil, S. R., Company, The, assignor.)
Sametz and McLean, Wilmington, N. C. Toy houses. 270,342; May 6; Serial No. 259,647; published Feb. 18, 1930. Class 22.
Samstag & Hilder Bros., Inc., New York, N. Y. Necklaces, bracelets, earrings, etc. 270,336; May 6; Serial No. 275,413; published Feb. 18, 1930. Class 28.
Sánchez, Bernabé F., Malaga, Spain. Tonic and tissue builder. 270,446; May 6; Serial No. 288,309; published Feb. 18, 1930. Class 6.
Scheuch, Charles A., jr., doing business as Charles Scheuch's Bakery, Washington, D. C. Bread. 270,501; May 6; Serial No. 294,895; published Feb. 25, 1930. Class 46.
Schieren, Chas. A., Company, New York, N. Y. Leather belting. 78,646; renewed June 28, 1930.
Schluderberg, Wm., T. J. Kurdle Co., The, Baltimore, Md. Butter. 270,452; May 6; Serial No. 294,742; published Feb. 25, 1930. Class 46.
Servus Rubber Company, The, Rock Island, Ill. Athletic shoes. 270,574; May 6; Serial No. 293,074; published Feb. 18, 1930. Class 39.
Shabel, Carl A., doing business as Mello Bird Co., Grand Rapids, Mich. Bird food. 270,587; May 6; Serial No. 291,360; published Feb. 18, 1930. Class 46.
Shilliman, A. & H., Company, Baltimore, Md. Yarns and threads. 270,558; May 6; Serial No. 293,449; published Feb. 18, 1930. Class 43.
Shumofsky, Morris, Bridgeport, Conn. Bread. 270,539; May 6; Serial No. 288,039; published Feb. 18, 1930. Class 46.
Sigma Delta Chi, Chicago, Ill. Fraternity emblem pins. 270,383; May 6; Serial No. 291,798; published Feb. 25, 1930. Class 28.
Sigma Delta Chi, Chicago, Ill. Magazine. 270,419; May 6; Serial No. 292,232; published Feb. 25, 1930. Class 38.
Simcoe Manufacturing Co. (See Simons, Julius.)
Simons, Julius, doing business as Simcoe Manufacturing Co., Philadelphia, Pa. High-tension electric discharge apparatus. 270,403; May 6; Serial No. 292,597; published Feb. 18, 1930. Class 21.
Skolnick, Samuel, doing business as Graf-Zep Specialty Co., Detroit, Mich. Hand soap. 270,488; May 6; Serial No. 294,185; published Feb. 25, 1930. Class 4.
Smith, David B., Mercedes, Tex. Fresh citrus fruits, vegetables, and cantaloupes. 270,429; May 6; Serial No. 292,911; published Feb. 25, 1930. Class 46.
Snow King Baking Powder Company, The, Cincinnati, Ohio. Dessert. 270,573; May 6; Serial No. 293,115; published Feb. 18, 1930. Class 46.
Southern Cotton Oil Company, The. (See Edible Products Company, assignor.)
Southwest Dairy Products Company, Dallas, Tex. Dairy products. 270,540; May 6; Serial No. 286,359; published Feb. 11, 1930. Class 46.
Southwestern Milling Company. (See McCrillis, A. B., & Son, Inc., assignor.)
Sperry Flour Co., San Francisco, Calif. Pancake and waffle flour, rolled oats, rye meal, etc. 270,308; May 6; Serial No. 282,200; published July 23, 1929. Class 46.
Standard Brands Incorporated. (See Fleischmann Company, The, assignor.)
Stanley Works, The, New Britain, Conn. Wrought-steel butt hinges. 270,582–6; May 6; Serial Nos. 293,939–43; published Feb. 18, 1930. Class 13.
Stanley Works, The, New Britain, Conn. Steel hinges. 270,587; May 6; Serial No. 293,938; published Feb. 25, 1930. Class 13.
Stanley Works, The, New Britain, Conn. Wrought-steel butt hinges. 270,588; May 6; Serial No. 293,937; published Feb. 18, 1930. Class 13.
Stannus Propeller Corporation, Detroit, Mich. Propeller wheels. 270,541; May 6; Serial No. 293,239; published Feb. 18, 1930. Class 19.
Star Brass Manufacturing Company, Boston, Mass. Valves and parts thereof. 78,283; renewed May 31, 1930.
Steel Sales Corporation, Chicago, Ill. Welding rods. 270,502; May 6; Serial No. 294,864; published Feb. 25, 1930. Class 14.
Stevens Linen Works, Dudley and Boston, to Stevens Linen Works, Boston, Mass. Linen crash-toweling. 34,572–82; renewed May 1, 1930.
Stewart, Frank P., Cushing, Okla. Nursery stock and horticultural growths and seeds. 270,532; May 6; Serial No. 292,557; published Feb. 18, 1930. Class 1.
Street, R. E., & Co., Inc., Chicago, Ill. Liquid preparation for removing paint, tar, road oil, grease, etc. 270,487; May 6; Serial No. 294,696; published Feb. 25, 1930. Class 4.
Sugden, Richard C., doing business as The Wichita Donut Company, Wichita, Kans. Doughnuts. 270,456; May 6; Serial No. 294,189; published Feb. 25, 1930. Class 46.
Sunny-Field Packing Co., Los Angeles, Calif. Pickles, sweet relishes, mustard, etc. 270,572; May 6; Serial No. 293,196; published Feb. 18, 1930. Class 46.
Superior Cabinet Corporation, New York, N. Y. Phonographs adapted for combination with radio receiving sets. 270,382; May 6; Serial No. 291,846; published Feb. 25, 1930. Class 36.
Superior Switchboard & Devices Company, The, Canton, Ohio. Combined meter test switches and phasing transformers. 270,360; May 6; Serial No. 293,690; published Feb. 18, 1930. Class 21.
Swift & Anderson, Inc., Boston, Mass. Weather glasses, barometric tubes, and barometers. 270,462; May 6; Serial No. 294,900; published Feb. 25, 1930. Class 26.
Syenol Company, Cincinnati, Ohio. Proprietary medicine. 270,423; May 6; Serial No. 292,470; published Feb. 18, 1930. Class 6.
Tasty Baking Company, Philadelphia, Pa. Cakes. 270,450; May 6; Serial No. 294,861; published Feb. 25, 1930. Class 46.
Tech Laboratories. (See Teubner, Karl L.)
Tennessee Chemical Company, Nashville, Tenn., assignor to Tennessee Chemical Company, Chicago, Ill. Guano. 34,755; renewed June 5, 1930.
Terry, Serphy, Oakland, Calif. Sanitary washing containers. 270,300; May 6; Serial No. 284,429; published Feb. 18, 1930. Class 2.
Teubner, Karl L., doing business as Tech Laboratories, Asheville, N. C. Dressing and polish, coated textile goods, etc. 270,367; May 6; Serial No. 288,073; published Feb. 18, 1930. Class 4.
Thomas, John L., doing business as Thomas Chemical Company, McKeesport, Pa. Astringent preparation. 270,449; May 6; Serial No. 292,835; published Feb. 18, 1930. Class 6.
Thompson, Mina I., Tampa, Fla. Cigars. 270,514; May 6; Serial No. 294,032; published Feb. 18, 1930. Class 17.
Tillotson, Lillian, Painesville, Ohio. Medicine. 270,448; May 6; Serial No. 292,912; published Feb. 18, 1930. Class 6.
Tipton, E. D., doing business as U-Neek Products Co., Chicago, Ill. Materials to be used in place of sugar for beverages. 270,370; May 6; Serial No. 292,762; published Feb. 25, 1930. Class 46.
Titanium Alloy Manufacturing Company, The, Niagara Falls, N. Y. Opaquing agents and pigments. 270,523; May 6; Serial No. 293,645; published Feb. 18, 1930. Class 6.
Tomby, B., & Co. Inc., New York, N. Y. Ceramics. 270,545; May 6; Serial No. 294,650; published Feb. 18, 1930. Class 30.
Transformer Corporation of America, Chicago, Ill. Radio receiving sets, loud-speakers, transformers, etc. 270,394; May 6; Serial No. 291,367; published Feb. 18, 1930. Class 21.
Turver, William H., doing business as Electrolife Manufacturing Company, Los Angeles, Calif. Electrically-heated pads and electrically-heated blankets. 270,362; May 6; Serial No. 293,453; published Feb. 11, 1930. Class 44.
Tyzack, Joseph, & Son, Limited, Sheffield, England. Builders' and other tools. 270,311; May 6; Serial No. 281,579; published Feb. 25, 1930. Class 23.
U-Neek Products Co. (See Tipton, E. D.)
Union Oil Company of California, Los Angeles, Calif. Dry-cleaning fluid. 270,484; May 6; Serial No. 294,747; published Feb. 25, 1930. Class 4.
U. S. Sanitary Specialties Corporation, Chicago, Ill. Fabric-cleansing soap compound. 270,368; May 6; Serial No. 287,508; published Feb. 18, 1930. Class 4.
Urban, Joseph, doing business as Urbanco Laboratories, Chicago, Ill. Insecticide. 270,445; May 6; Serial No. 289,485; published Feb. 18, 1930. Class 6.
Urbanco Laboratories. (See Urban, Joseph.)
Utility Manufacturing Co., Inc., Baltimore, Md. Ice picks, kitchen forks, cake turners, spatulas, can openers, etc. 270,467; May 6; Serial No. 294,101; published Feb. 25, 1930. Class 23.
Utility Manufacturing Co., Inc., Baltimore, Md. Ice picks, kitchen forks, cake turners, spatulas, can openers, etc. 270,468; May 6; Serial No. 294,099; published Feb. 25, 1930. Class 23.
Vai Bros., doing business as California Medicinal Wine Co., Los Angeles, Calif. Wine jelly, jams, coffee, etc. 270,372; May 6; Serial No. 292,063; published Feb. 25, 1930. Class 46.
Vawter, Charles B., Philadelphia, Pa. Cigar lighters. 270,307; May 6; Serial No. 282,582; published Feb. 25, 1930. Class 21.
Vezos Brothers, Buffalo, N. Y. Canned olive oil. 270,303; May 6; Serial No. 283,651; published Feb. 18, 1930. Class 46.
Vicao A/S, Oslo, Norway. Cocoa preparation rich in vitamines A and D. 270,426; May 6; Serial No. 289,609; published Feb. 18, 1930. Class 46.
Volíva, Wilbur G., doing business as Zion Baking Industry, Zion, Ill. Fig bars. 270,455; May 6; Serial No. 294,244; published Feb. 25, 1930. Class 46.
Wax Paper Products Co., Omaha, Nebr. Wrapping paper. 270,415; May 6; Serial No. 286,810; published Oct. 8, 1929. Class 37.
Western Bottle Manufacturing Company, doing business as The Western Company, Chicago, Ill. Powder puffs. 270,507; May 6; Serial No. 294,453; published Feb. 25, 1930. Class 29.
Western Maryland Dairy Corporation, Baltimore, Md. Milk, cream, butter, etc. 270,377; May 6; Serial No. 288,626; published Feb. 25, 1930. Class 46.
Westinghouse Electric & Manufacturing Company, East Pittsburgh, Pa. Electric-circuit breakers. 270,470; May 6; Serial No. 293,946; published Feb. 25, 1930. Class 21.
White, Mike, Houston, Pa. Preparation for treatment of venereal diseases. 270,444; May 6; Serial No. 289,610; published Feb. 18, 1930. Class 6.

Whiting, Albert L., doing business as The Urbana Laboratories, Urbana, Ill. Chemical solution. 270,526; May 6; Serial No. 293,457; published Feb. 18, 1930. Class 6.
Wichita Donut Company, The. (See Sugden, Richard C.)
Willard, Otto H., doing business as The Indian Products Company, Chicago, Ill. Concentrated stew. 270,322; May 6; Serial No. 273,090; published Feb. 25, 1930. Class 46.
Willard, Otto H., doing business as The Indian Products Company, Chicago, Ill. Imitation chop suey. 270,323; May 6; Serial No. 273,088; published Feb. 25, 1930. Class 46.
Williams, Brown and Earle, assignor to Williams, Brown & Earle, Inc., Philadelphia, Pa. Filled textile fabrics. 78,752; renewed July 5, 1930.
Williams, J. B., Company, The, Glastonbury, Conn. Shaving soap, including shaving cream. 270,496; May 6; Serial No. 293,500; published Feb. 25, 1930. Class 4.
Williams, Louise, doing business as Williams Cold Snap Co., Chicago, Ill. Cough medicine. 270,505; May 6; Serial No. 294,749; published Feb. 18, 1930. Class 6.
Wilson Coffee Company, Tampa, Fla. Coffee. 270,304; May 6; Serial No. 283,636; published June 18, 1929. Class 46.
Wilson-Jones Company, Chicago, Ill. Ledger binders, sectional-post binders, prong binders, memo books, etc. 270,327–8; May 6; Serial Nos. 256,498–9; published Feb. 18, 1930. Class 37.
Wire & Steel Products Co., Inc., The, Brooklyn, N. Y. Box-strapping machines and special tools for stretching and sealing metal bands on a box. 270,466; May 6; Serial No. 294,284; published Feb. 25, 1930. Class 23.
Woodard, Martin L., doing business as Martin Woodard Co., Seattle, Wash. Products for electrical insulation. 270,471; May 6; Serial No. 293,908; published Feb. 25, 1930. Class 21.
Woodhouse Bros., Indio, Calif. Fresh fruits. 270,337; May 6; Serial No. 275,323; published Sept. 3, 1929. Class 46.
Worumbo Manufacturing Company, Bath, Me. Woolen fabrics. 270,548; May 6; Serial No. 294,550; published Feb. 18, 1930. Class 42.
Worumbo Manufacturing Company, Bath, Me. Woolen fabrics. 270,549; May 6; Serial No. 294,548; published Feb. 18, 1930. Class 42.
Worumbo Manufacturing Company, Bath, Me. Woolen fabrics. 270,550; May 6; Serial No. 294,198; published Feb. 18, 1930. Class 42.
Wrenn Paper Company, The, Middletown, Ohio. Cabinet for the display and sale of blotting paper. 270,473; May 6; Serial No. 293,703; published Feb. 25, 1930. Class 32.
Wyeth, John, & Brother, Incorporated, Philadelphia, Pa. Certain named medicinal antiseptic preparations. 34,772; renewed June 12, 1930.
Youngstown Pressed Steel Company, The, Warren, Ohio. Stucco nails. 270,576; May 6; Serial No. 294,331; published Feb. 25, 1930. Class 18.
Zion Baking Industry. (See Voliva, Wilbur G.)
Zuckerman, Lillye G., doing business as Frozen Lolly Coating Company, Detroit, Mich. Chocolate nut coating. 270,338; May 6; Serial No. 274,863; published Feb. 25, 1930. Class 46.

ALPHABETICAL LIST OF REGISTRANTS OF LABELS

Borini, Henry L., Brooklyn, N. Y. Majestic. For Bird Food. 37,405; May 6.
Elysian Springs Water Company, Los Angeles, Calif. Elysian Spring Water—"The Water You like to Drink." For Spring Water. 37,406; May 6.
Jones, Ralph H., Company, The, Cincinnati, Ohio. Capree. For Salad Dressing. 37,407; May 6.
Lily-Tulip Cup Corporation, New York, N. Y. Frozen Fresh Fruits. For Frozen Fresh Fruit. 37,408; May 6.
Nux-Vitol Company, The, Joplin, Mo. Nux-Vitol. For Medicine for Treating Disorders of the Stomach. 37,409; May 6.
Soybel, Meyer, North Bergen, N. J. Apollos. For Prophylactic Membranous Articles for the Prevention of Contagious Diseases. 37,410; May 6.
Thornton, Renée, New York, N. Y. Orchidea Cleansing Cream. For Cleansing Cream. 37,411; May 6.

ALPHABETICAL LIST OF REGISTRANTS OF PRINTS

Congoleum-Nairn Inc., New York, N. Y., and Kearny, N. J. Only On Genuine Gold Seal Congoleum Rugs. For Congoleum Rugs. 12,523; May 6.
Hills Bros., San Francisco, Calif. Your Search (ad form 102). For Coffee. 12,524; May 6.
Ohio Truss Company, The, Cincinnati, Ohio. Adjusto Pressure Pad Truss. For Trusses. 12,525; May 6.
R C A Victor Company, Inc., New York, N. Y. City or Country There's a Radiola Suited to Your Needs. For Radios. 12,526; May 6.
Tricolator Company, Inc., New York, N. Y. Tricolator Gives Drip Coffee Maximum Flavor. For Tricolators (Percolators). 12,527; May 6.

ALPHABETICAL LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Abramson, B., & Bro., New York, N. Y. Infants' and children's dresses and coats. 294,656; May 6. Class 39.
Ace Solvent Co., Inc., New York, N. Y. Hand cleansers. 297,402; May 6. Class 4.
Alderwood Knitting Mills, Portland, Oreg. Sweaters, hosiery, caps, and dresses. 297,570; May 6. Class 39.
Alloys and Products, Inc., New York, N. Y. Metallic alloy. 296,167; May 6. Class 14.
"Alpa S. A.", Prilly, near Lausanne, Switzerland. Cheese. 293,652; May 6. Class 46.
Aluminum Industries, Inc., Cincinnati, Ohio. Piston rings. 297,839; May 6. Class 35.
American Air Compressor Works, Inc., Brooklyn, N. Y. Air compressors, vacuum pumps, and receiving tanks for compressed air. 293,914; May 6. Class 23.
American Chemical Manufacturing Company. (See Cohen, Dan.)
American Gypsum Co., The, Port Clinton, Ohio. Line of gypsum products and plaster material. 295,654; May 6. Class 12.
American Hard Rubber Company, Hempstead and New York, N. Y. Jars, cells, covers, etc., for storage batteries. 296,246; May 6. Class 21.
American Milling Company, Peoria, Ill. Stock food. 296,848; May 6. Class 46.
American Safety Headlight Corporation, Louisville, Ky. Illuminating devices. 287,223; May 6. Class 21.
American Steel and Wire Company of New Jersey, The, Cleveland, Ohio. Iron and copper wire and cable. 297,224; May 6. Class 21.
Ansco Radio Manufacturing Co. (See Anstine, Clarence L.)
Anstine, Clarence L., doing business as Ansco Radio Manufacturing Co., Baltimore, Md. Radio receiving sets and parts thereof. 293,261; May 6. Class 21.
Antennon Radio Company, Buffalo, N. Y. Antennæ. 297,052; May 6. Class 21.
Apex Soap and Sanitary Corp., Pittsburgh, Pa. Soaps and soap powders. 296,795; May 6. Class 4.
Aquino, John, Inc., New York, N. Y. Tonic. 281,248; May 6. Class 6.
Arcos, Inc., La Crosse, Wis. Electrodes. 295,881–2; May 6. Class 14.
Asphalt Products Co., Inc., The, Syracuse, N. Y. Aluminum paint. 285,006; May 6. Class 16.
Associated Apparel Industries, Inc., Chicago, Ill. Reducing corsets, reducing belts, and abdominal belts. 297,166; May 6. Class 39.
Bain, Donald H., Winnipeg, Fort William, Regina, Canada. Shelled almonds and Brazil nuts, dried beans, dates, etc. 295,885; May 6. Class 46.
Bartels, Henry, New York, N. Y. Canary birds. 292,610; May 6. Class 1.
Belsky, Israel, New York, N. Y. Cotton piece goods. 297,119; May 6. Class 42.
Berdon, Albert E., doing business as Berdon Uneek Products Co., East Orange, N. J. Clothes-drying racks. 295,922; May 6. Class 24.
Berrisford, Paul D., doing business as "Dee" Medical Supply Co., St. Paul, Minn. Therapeutic appliances. 297,578; May 6. Class 44.
Bet Products Company. (See Stenger, Joseph.)
Bethel, A. W., Richmond, Va. Chill and malaria capsules. 296,472; May 6. Class 6.

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Blue Ridge Bottling Co., St. Louis, Mo. Maltless beverages. 297,231; May 6. Class 45.
Bourjois, Inc., New York, N. Y. Perfume and face powder. 297,358; May 6. Class 6.
Brooke, Clayton E., New York, N. Y., Magazine. 296,508; May 6. Class 38.
Brownie's Blockprints, Inc., New York, N. Y. Greeting cards. 295,923; May 6. Class 37.
Builders Iron Foundry, Providence, R. I. Fluid meters and fluid-rate controllers. 295,012; May 6. Class 26.
Bunte Brothers, doing business as Bunte, Chicago, Ill. Candy. 297,954; May 6. Class 46.
Cal-Em-Best Company. (See Trotter, F. M.)
Campana, George G., Brooklyn, N. Y. Pipes. 297,467; May 6. Class 8.
Carson Pirie Scott & Co., Chicago, Ill. Cotton piece goods. 297,850; May 6. Class 42.
Carter-Waters Corporation, The, Kansas City, Mo. Bituminous concrete. 277,988; May 6. Class 12.
Carter, William, Company, The, Needham Heights, Mass. Underwear, corsets, brassières, etc. 296,259; May 6. Class 39.
Central States Paper & Bag Company, Inc., St. Louis, Mo. Tailored furniture covers. 288,603; May 6. Class 32.
Certified Personal Needs, Inc., New York, N. Y. Toilet preparations, cosmetics, and dentifrices. 297,235; May 6. Class 6.
Certified Shoe Corporation, Rockford, Ill. Shoes. 260,874; May 6. Class 39.
Champion Coated Paper Company, The, Hamilton, Ohio. Trade magazine. 297,057; May 6. Class 38.
Chesebro, Whitman Co. Inc., Long Island City, N. Y. Step-ladders. 297,239; May 6. Class 50.
Chicago Mill and Lumber Corporation, Chicago, Ill. Fibre boards. 296,582; May 6. Class 12.
Christie, Millard W., New York, N. Y. Gloves. 297,172; May 6. Class 39.
Chrysler Corporation, Detroit, Mich. Automobiles and their structural parts. 285,194; May 6. Class 19.
City Machine & Tool Works. (See Poock, O. M.)
Clifton, Buford C., doing business as The Honey Lu Company, Memphis, Tenn. Hair shampoos, hair oils, hair tonics, etc. 294,057; May 6. Class 6.
Cloverdale Spring Company, Baltimore, Md. Beverage sold as a soft drink. 296,048; May 6. Class 45.
Cohen, B., & Co., Inc., New York, N. Y. Silk, rayon, and imitation silk in the piece. 297,796; May 6. Class 42.
Cohen, Dan, doing business as American Chemical Manufacturing Company, Memphis, Tenn. Hair straightener. 294,945; May 6. Class 6.
Cohen, Goldman & Co. Inc., New York, N. Y. Woven fabric. 297,836; May 6. Class 42.
Columbia Radio Corporation, Chicago, Ill. Radio receiving sets, vacuum or electron tubes, and radiospeakers. 296,308; May 6. Class 21.
Commonwealth Shoe and Leather Company, Boston, Mass. Boots and shoes. 291,866; May 6. Class 39.
Commonwealth Shoe and Leather Company, Boston, Mass. Boots and shoes. 292,255; May 6. Class 30.
Congress, Harry, New Orleans, La. Hats and caps. 295,505; May 6. Class 39.
Continental Baking Company, Wilmington, Del., and New York, N. Y. Bread. 297,123; May 6. Class 46.
Cornhoney Co., The. (See Sanford, Franklin.)
Cramer Chemical Co., The, Gardner, Kans., and Detroit, Mich. Foot ointment, germicide and disinfectant, etc. 293,710; May 6. Class 6.
Crane, Clarence A., doing business as The Crane Co., Cleveland, Ohio. Candy. 297,958; May 6. Class 46.
Cronquist, Carl, Malmo, Sweden. Hair and scalp preparation. 291,761; May 6. Class 6.
Da-Gly-Tone Remedies Co. (See Davis, William M.)
Davis, William M., doing business as Da-Gly-Tone Remedies Co., Wheeling, W. Va. General tonic. 297,177; May 6. Class 6.
"Dee" Medical Supply Co. (See Berrisford, Paul D.)
De Marinis & Lorie, Inc., New York, N. Y. Hats. 297,063; May 6. Class 39.
Dempster Mill Manufacturing Company, Beatrice, Nebr. Stock tanks, dipping tanks, house tanks, etc. 295,561; May 6. Class 2.
Development of Industries (Autodip) Limited, London, England. Dipping and swivelling devices for vehicle lamps. 294,625; May 6. Class 19.
Diamond Chemical Works, The. (See Wolff, Edwin D.)
Dickerson, Joseph C., Lucedale, Miss. Hard-surface road materials. 292,443; May 6. Class 12.
Du Pont, E. I., de Nemours and Company, Wilmington, Del. Resins. 296,325; May 6. Class 1.
Dutton, Clara, doing business as Ye What Not Studio, Burlington, Iowa. Preparation for use in mending hosiery. 297,245; May 6. Class 6.
Edward Valve and Manufacturing Co., The, East Chicago, Ind. Metal plumbing and steam-fitting valves and parts thereof. 296,052; May 6. Class 13.
Electric Mfg. Co., The, San Francisco, Calif. Electric hair dryers. 297,362; May 6. Class 44.
Emulsion Process Corporation, The, Jersey City, N. J. Asphalt emulsion. 289,401; May 6. Class 12.
Endicott Johnson Corporation, Endicott, N. Y. Boots, shoes, and slippers. 297,473–4; May 6. Class 39.
Energine Company, The, Cleveland, Ohio. Liquid dry cleaners. 286,234; May 6. Class 4.
Enid Manufacturing Company, New York, N. Y. Brassières, corsets, and girdles. 296,268; May 6. Class 39.
Evening News Company, The, Baltimore, Md. Section of a newspaper. 293,468; May 6. Class 38.
Fairchild Bros. & Foster, New York, N. Y. Preparation of the cleavage products of the physiological conversion of proteins. 297,005; May 6. Class 6.
Feinberg, Michael, doing business as Feinberg Kosher Sausage Company, (Not Inc.), Minneapolis, Minn. Beef product made the same as bacon. 297,730; May 6. Class 46.
Fink & Easter Company, The, Baltimore, Md. Umbrellas and parasols. 296,181; May 6. Class 41.
First Texas Chemical Mfg. Co., Dallas, Tex. Medicinal preparation. 293,134; May 6. Class 6.
Fisher Hosiery Company, Inc., Reading, Pa. Hosiery. 297,475; May 6. Class 39.
Flaccus, Wm., Oak Leather Company, Pittsburgh, Pa. Oak sole leather. 296,861; May 6. Class 1.
Florida Fruit Canners, Inc., Frostproof, Fla. Fresh citrus fruits and vegetables and canned grapefruit. 293,663; May 6. Class 46.
Foltz, George V., doing business as Foltz Tea and Coffee Co., New Orleans, La. Coffee, tea, cocoa, and spices. 297,591; May 6. Class 46.
Food Trades Publishing Company, The, Chicago, Ill. Publication. 294,260; May 6. Class 38.
Foremost Fabrics Corporation, New York, N. Y. Silk piece goods. 297,731; May 6. Class 42.
Forest Hills Company, doing business as Kings Pure Malt Co., Boston, Mass. Malt tonic for medical purposes. 281,772; May 6. Class 6.
Franklin Baker Company, New York, N. Y. Prepared coconut. 297,576; May 6. Class 46.
Franklin Rayon Corporation, Providence, R. I. Rayon yarns and fibers. 297,732; May 6. Class 43.
Fusion Welding Corporation, Chicago, Ill. Welding rods and electrodes. 292,801; May 6. Class 14.
G. F. Machine Mfg. Corporation, New York, N. Y. Pressing irons. 294,770; May 6. Class 24.
Galle, S. & Co., New York, N. Y. Cheese. 284,805; May 6. Class 46.
Gass, E. J., Pipe Co., Inc., New York, N. Y. Cigarette holders and smoking pipes. 297,476; May 6. Class 8.
Glastonbury Silver Company, Chicago, Ill. Flat ware and cutlery. 282,602; May 6. Class 28.
Golden Bear Cookie Co. Inc., Long Island City, N. Y. Cookies. 297,069; May 6. Class 46.
Golden Rule Poultry Farms, Sedalia, Mo. Eggs in the shell and live chicks and poultry. 296,184; May 6. Class 46.
Grand River Canning Company, Markesan, Wis. Canned vegetables. 297,528; May 6. Class 46.
Gray Line, Inc., The, Baltimore, Md. Publication. 297,667; May 6. Class 38.
Grose, William E., New York, N. Y. Columns or articles for newspapers and/or other periodicals. 297,530; May 6. Class 38.
Gruner, Jay K., St. Louis, Mo. Dressed jointed lumber. 296,122; May 6. Class 12.
Guyes, Samuel W., Greensboro, N. C. Ladies' hats and caps. 294,068; May 6. Class 39.
Hamilton, T. E., Jamesport, Mo. Mineral water. 297,480; May 6. Class 45.
Harvey, Isaac F., Bradford, England. Silk piece goods. 297,738; May 6. Class 42.
Harvey, Isaac F., Bradford, England. Woolen or worsted piece goods. 297,739; May 6. Class 42.
Hayes-Stevens Fireplace Furnace Co. Inc., New York, N. Y. Furnaces and fireplaces. 296,701; May 6. Class 34.
Henckels, J. A., Solingen, Germany. Pocketknives, scissors, shears, etc. 260,585; May 6. Class 23.
Hicks, W. Wesley, Los Angeles, Calif. Electric air heaters. 295,515; May 6. Class 21.
Hicks, William W., assignor to Wesix National Company, San Francisco, Calif. Electric heaters. 266,373; May 6. Class 21.
High Ball Mfg. Co., The. (See Williamson, Sherman.)
High Rock Knitting Co., Philmont, N. Y. Shirts. 296,596; May 6. Class 39.
Hillerick & Bradsby Co., Louisville, Ky. Baseball bats. 297,133; May 6. Class 22.
Home Manager's Institute. (See Industrial Information Bureau, Inc.)
Honey Lu Company, The. (See Clifton, Buford C.)
Hopkins, J. L. & Co., New York, N. Y. Insect powder. 296,868; May 6. Class 6.
Housing Company, The, Boston, Mass. Fiber thermal insulating material. 297,136; May 6. Class 12.
Howell Industrial Truck Company, The, Cleveland, Ohio. Industrial motor trucks. 295,848; May 6. Class 19.
Hutchinson, Clayton T., doing business as Hutchinson Brothers, Detroit, Mich. Photographic films. 290,253; May 6. Class 26.
Hynson, Westcott & Dunning, Inc., Baltimore, Md. Liquid oral antiseptic. 297,485; May 6. Class 6.

PUBLISHED FOR OPPOSITION

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Hy-Tone Laboratories, Nashville, Tenn. Cosmetics and toilet preparations, preparation for treating the skin, etc. 286,779; May 6. Class 6.

I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Construction materials, calking and packing materials, etc. 293,181; May 6. Class 12.

Industrial Information Bureau, Inc., doing business as Home Manager's Institute, Milwaukee, Wis. Daily newspapers and magazines. 295,621; May 6. Class 38.

International Shoe Co., St. Louis, Mo. Boots and shoes. 285,567; May 6. Class 39.

International Silver Company, Meriden, Conn. Sterling-silver hollow ware. 280,335; May 6. Class 28.

International Silver Company, Meriden, Conn. Sterling-silver tableware. 295,738; May 6. Class 28.

Irving's Perfume Shop. (See Lichtenstein, Irving C.)

Jackson, Byron, Co., Los Angeles, Calif. Oil-well tools. 295,886; May 6. Class 23.

Jaeger, Fuerchtegott W., doing business as Jaeger-Bigelow Company, Boston, Mass. Catgut material. 296,125; May 6. Class 44.

Johnson, Dorothy E., Detroit, Mich. Skin creams and skin lotions. 297,015; May 6. Class 6.

Junior Dress Mfg. Co., Dallas, Tex. Children's cotton and silk wash frocks. 280,445; May 6. Class 39.

Karant, Julius, doing business as Modern Cap Company, Chicago, Ill. Caps. 266,252; May 6. Class 39.

Kattermann and Mitchell Company, New York, N. Y. Piece goods of silk and mixtures of silk and rayon. 297,017; May 6. Class 42.

Keller Mechanical Engineering Corporation, Brooklyn, N. Y. Portable, compact, electrically-controlled locating or layout unit. 297,744; May 6. Class 23.

Kelso Manufacturing Co., Trenton, N. J. Brake linings. 284,811; May 6. Class 35.

Kenney Manufacturing Company, Cranston, R. I. Curtain rods and drapery hardware. 296,425; May 6. Class 13.

Kings Pure Malt Co. (See Forest Hills Company.)

Kirby, Block & Fischer, Inc., New York, N. Y. Hosiery, underwear, and gloves. 295,677; May 6. Class 39.

Klauer Manufacturing Company, Dubuque, Iowa. Louver, deflector, and grille ventilators, dampers, ash dumps, etc. 280,714; May 6. Class 34.

Kohrs Packing Company, Davenport, Iowa. Sausage and cottage butts. 295,678; May 6. Class 46.

Kops Bros. Inc., New York, N. Y. Corsets, brassières, and girdles and combinations of the same. 297,310; May 6. Class 39.

Laboratoires G. Beytout; Societe a Responsabilite Limitee, Paris, France. Medicine. 296,812; May 6. Class 6.

Ladd, Lillian R., Mobile, Ala. Contrivance for holding the cards in a bridge game. 288,302; May 6. Class 22.

Lane Bryant, Inc., New York, N. Y. Garter and corset belts and corsets. 291,727; May 6. Class 39.

Lankenau, John R., Co., Boston, Mass. Card-table covers. 297,682; May 6. Class 42.

Layton, John, & Co. Ltd., London, England. Liquid eggs in frozen state. 294,162; May 6. Class 46.

Leathers, A. H., doing business as A. H. Leathers Manufacturing Co., Dickson, Tenn. Baseball bats. 292,173; May 6. Class 22.

Lederle Antitoxin Laboratories, Pearl River and New York, N. Y., assignor to Lederle Laboratories, Inc. Medicinal food containing vitamins. 295,303; May 6. Class 6.

Leighton, Louise, Inc., New York, N. Y. Cream depilatory. 295,183; May 6. Class 6.

Lentheric, Incorporated, New York, N. Y. Perfumes, toilet water, face powder, etc. 286,886; May 6. Class 6.

Lentheric, Incorporated, New York, N. Y. Face, bath, and talcum powders. 296,655; May 6. Class 6.

Lewis, Martha H., doing business as Martha Lewis Fruit Products Company, Denver, Colo. Powdered form of fruit and sugar ingredients. 296,126; May 6. Class 45.

Liberty Foundries Company, Rockford, Ill. Automobile heaters and parts or accessories therefor. 289,407; May 6. Class 19.

Lichtenstein, Irving C., doing business as Irving's Perfume Shop, New York, N. Y. Perfumes, face powder, lip stick, etc. 295,622; May 6. Class 6.

Logan Hat Stores, Inc., New York, N. Y. Hats and caps. 297,255; May 6. Class 39.

Maconaghie, Dysart L., Bloomington, Ill. Compressed chile con carne. 296,017; May 6. Class 46.

Manufacture Metallurgique de Tournus, Tournus, France. Frying pans, coffeepots, bowls, etc. 291,993; May 6. Class 13.

Manville Jenckes Company, Pawtucket, R. I. Bedspreads and curtains. 280,183; May 6. Class 42.

Marti, Hugh A., Company, Long Beach, Calif. Boys' wool suits and pants, raincoats, etc. 289,033; May 6. Class 39.

Mazzetti, Guido, Rome, Italy. Benzo alcoholic soap. 288,388; May 6. Class 4.

McCormick & Co., Incorporated, Baltimore, Md. Spices and mustard. 270,134; May 6. Class 46.

McSherry, George P., doing business as McSherry Drug Co., Hillsdale, Mich. Medicinal preparation. 297,442; May 6. Class 6.

Melrose Manufacturing Co., Inc., St. Louis, Mo. Hairdressing. 297,443; May 6. Class 6.

Melrose Manufacturing Co., Inc., St. Louis, Mo. Preparation for destroying dandruff. 297,444; May 6. Class 6.

Miller Train Control Corporation, Staunton, Va. Electrically-operated highway vehicle traffic-light-control-system apparatus and parts thereof. 297,198; May 6. Class 21.

Milwaukee Lubricants Co., Milwaukee, Wis. Detergent soap compound. 296,660; May 6. Class 4.

Milwaukee Lubricants Co., Milwaukee, Wis. Liquid coal tar disinfectant and deodorant, also animal dip. 296,661; May 6. Class 6.

Mitsubishi Shoji Kaisha, Ltd., Marunouchi, Tokyo, Japan. Canned crab meat. 277,014; May 6. Class 46.

Modern Cap Company. (See Karant, Julius.)

Mon-Ark Medicine Corporation, Inc., The, Cincinnati, Ohio. General tonic. 296,490; May 6. Class 6.

Mooney, Russell M., Seattle, Wash. Power-operated pleasure cruiser. 290,587; May 6. Class 19.

Mosaic Tile Company, The, Zanesville, Ohio. Ceramic tiles. 260,516-7; May 6. Class 12.

Naamloose Vennootschap Nederlandsche Linoleum-fabriek, Krommenie, Netherlands. Linoleum. 296,975; May 6. Class 20.

National Company, Inc., Malden, Mass. Dials. 275,840; May 6. Class 21.

Needham, O. G., & Co., Fort Worth, Tex. Phonographs. 289,361; May 6. Class 36.

Nichols, Chad, Newark, N. J. Maltless beverages, and syrups, extracts, and concentrates for making the same. 295,746; May 6. Class 45.

Noonan, T., & Sons Company, Boston, Mass. Cream ointment for relieving pain. 276,215; May 6. Class 6.

Oldmill Paper Products Corp., Brooklyn, N. Y. Paper cups and dishes. 296,492; May 6. Class 2.

O'Sullivan, William C., doing business as O'Sullivan's, Casper, Wyo. Pop-corn candy. 297,756; May 6. Class 46.

Oxo, Limited, London, England. Concentrated preparation of the uncoagulated juice of liver. 295,571; May 6. Class 6.

Palm, Philipp, doing business as Palm'sche Apotheke, Schorndorf, Germany. Cathartic and aperient preparations. 293,106; May 6. Class 6.

Paraffine Companies, Inc., The, San Francisco, Calif. Periodical. 297,770; May 6. Class 38.

Parker Brothers Inc., Portland, Me., and Salem, Mass. Board game. 296,717; May 6. Class 22.

Perfumeria Gal, Sociedad Anónima, Madrid, Spain. Chemical compound. 265,805; May 6. Class 6.

Perklomen Trunk & Bag Co., Inc., Pennsburg, Pa. Suitcases, week-end bags, and trunks. 297,032; May 6. Class 3.

Poock, O. M., doing business as City Machine & Tool Works, Dayton, Ohio. Tooth-chamfering machine. 297,270; May 6. Class 23.

Poock, O. M., doing business as City Machine & Tool Works, Dayton, Ohio. Grinding chucks. 297,275; May 6. Class 23.

Porter-Cable Machine Co., The, Syracuse, N. Y. Lathes. 296,771; May 6. Class 23.

Pray Company, The, Omaha, Nebr. Silk hosiery. 282,430; May 6. Class 39.

Professional Shoe Corporation, Chicago, Ill. Shoes and slippers. 296,441; May 6. Class 39.

Pure Exhaust & Economy Valve Corp., Buffalo, N. Y. Valves. 295,233; May 6. Class 23.

Purity Water Co., The, Toledo, Ohio. Ginger ale. 297,778; May 6. Class 45.

Rain-On Products Company, Chicago, Ill. Emulsified asphalt. 291,475; May 6. Class 12.

Red Raven Rubber Company, Newark, N. J. Rubber baby pants. 293,087; May 6. Class 35.

Reed, Willard H., doing business as W. H. Reed & Co., Atlanta, Ga. Sanitary rubber protectors. 296,983; May 6. Class 44.

Reeves, Robert C., Co., New York, N. Y. Wire-bound wooden fences. 296,793; May 6. Class 12.

Regent Square Bottling Works, Swissvale, Pa. Maltless beverages. 297,984; May 6. Class 45.

Republic Paint & Varnish Works, Chicago, Ill. Mastic cement. 258,493; May 6. Class 12.

Rettew, H. W., Philadelphia, Pa. Laundry tubs and washing machines. 297,165; May 6. Class 24.

Revelation Suit Case Company Limited, London, England. Trunks, suitcases, attaché cases, etc. 292,953; May 6. Class 3.

Rexford & Kelder, Chicago, Ill. Suits of clothes for men, topcoats, overcoats, etc. 295,535; May 6. Class 39.

Reynolds Metals Company, Louisville, Ky. Reflecting signs. 296,443; May 6. Class 50.

Rising Sun Ranches, Chicago, Ill. Livestock for breeding purposes. 296,772; May 6. Class 1.

Rochester Folding Box Co., The, Rochester, N. Y. Toy playhouses, theaters, etc. 295,640; May 6. Class 22.

Roland Park Company, The, Baltimore, Md. Magazine. 297,149; May 6. Class 38.

Rousmaniere Williams Corporation, New York, N. Y. Cotton piece goods. 297,875; May 6. Class 42.

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Selo, Limited, Warley, England. Films. 297,622; May 6. Class 26.

Shapiro, Samuel, New York, N. Y. Leather. 296,612; May 6. Class 1.

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Winkler-Thompson Co. Inc., New York, N. Y. Cotton, linen, and silk piece goods. 296,844; May 6. Class 42.

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Yoder Brothers, Barberton, Ohio. Fresh mushrooms. 292,307; May 6. Class 46.

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Plants, bulbs of plants, and seeds. J. T. Lovett, jr. 270,560; May 6; Serial No. 293,055; published Feb. 18, 1930.

Skins, Dyed fur. H. F. Bindseil. 34,403; renewed Apr. 8, 1930.

CLASS 2

Bags, Wardrobe. Closgard Wardrobe Co. 270,329; May 6; Serial No. 231,724; published Nov. 9, 1926.

Boxes. L. H. Hurd. 270,335; May 6; Serial No. 275,899; published Feb. 25, 1930.

Boxes and cans. J. L. Clark Manufacturing Company. 270,402; May 6; Serial No. 285,334; published Feb. 25, 1930.

Containers, Sanitary washing. S. Terry. 270,300; May 6; Serial No. 284,429; published Feb. 18, 1930.

Tanks, Metallic. Pittsburgh-Des Moines Steel Company. 270,577; May 6; Serial No. 294,275; published Feb. 25, 1930.

Tanks, National Tank Company. 270,334; May 6; Serial No. 276,213; published Feb. 25, 1930.

CLASS 3

Cases, Ladies' traveling. New Process Company. 270,553; May 6; Serial No. 293,787; published Feb. 18, 1930.

Trunks and cases. Fibre Specialty Manufacturing Company. 270,534; May 6; Serial No. 291,871; published Feb. 18, 1930.

CLASS 4

Abrasive papers and cloths. American Glue Company. 270,495; May 6; Serial No. 293,709; published Feb. 18, 1930.

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Hy-Tone Laboratories, Nashville, Tenn. Cosmetics and toilet preparations, preparation for treating the skin, etc. 286,779; May 6. Class 6.

I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Construction materials, calking and packing materials, etc. 293,181; May 6. Class 12.

Industrial Information Bureau, Inc., doing business as Home Manager's Institute, Milwaukee, Wis. Daily newspapers and magazines. 295,621; May 6. Class 38.

International Shoe Co., St. Louis, Mo. Boots and shoes. 285,567; May 6. Class 39.

International Silver Company, Meriden, Conn. Sterling-silver hollow ware. 280,335; May 6. Class 28.

International Silver Company, Meriden, Conn. Sterling-silver tableware. 295,738; May 6. Class 28.

Irving's Perfume Shop. (See Lichtenstein, Irving C.)

Jackson, Byron, Co., Los Angeles, Calif. Oil-well tools. 295,886; May 6. Class 23.

Jaeger, Fuerchtegott W., doing business as Jaeger-Bigelow Company, Boston, Mass. Catgut material. 296,125; May 6. Class 44.

Johnson, Dorothy E., Detroit, Mich. Skin creams and skin lotions. 297,015; May 6. Class 6.

Junior Dress Mfg. Co., Dallas, Tex. Children's cotton and silk wash frocks. 280,445; May 6. Class 39.

Karant, Julius, doing business as Modern Cap Company, Chicago, Ill. Caps. 266,252; May 6. Class 39.

Kattermann and Mitchell Company, New York, N. Y. Piece goods of silk and mixtures of silk and rayon. 297,017; May 6. Class 42.

Keller Mechanical Engineering Corporation, Brooklyn, N. Y. Portable, compact, electrically-controlled locating or layout unit. 297,744; May 6. Class 23.

Kelso Manufacturing Co., Trenton, N. J. Brake linings. 284,811; May 6. Class 35.

Kenney Manufacturing Company, Cranston, R. I. Curtain rods and drapery hardware. 296,425; May 6. Class 13.

Kings Pure Malt Co. (See Forest Hills Company.)

Kirby, Block & Fischer, Inc., New York, N. Y. Hosiery, underwear, and gloves. 295,677; May 6. Class 39.

Klauer Manufacturing Company, Dubuque, Iowa. Louver, deflector, and grille ventilators, dampers, ash dumps, etc. 280,714; May 6. Class 34.

Kohrs Packing Company, Davenport, Iowa. Sausage and cottage butts. 295,678; May 6. Class 46.

Kops Bros. Inc., New York, N. Y. Corsets, brassières, and girdles and combinations of the same. 297,310; May 6. Class 39.

Laboratoires G. Beytout; Societe a Responsabilite Limitee, Paris, France. Medicine. 296,812; May 6. Class 6.

Ladd, Lillian R., Mobile, Ala. Contrivance for holding the cards in a bridge game. 288,302; May 6. Class 22.

Lane Bryant, Inc., New York, N. Y. Garter and corset belts and corsets. 291,727; May 6. Class 39.

Lankenau, John R., Co., Boston, Mass. Card-table covers. 297,682; May 6. Class 42.

Layton, John, & Co. Ltd., London, England. Liquid eggs in frozen state. 294,162; May 6. Class 46.

Leathers, A. H., doing business as A. H. Leathers Manufacturing Co., Dickson, Tenn. Baseball bats. 292,173; May 6. Class 22.

Lederle Antitoxin Laboratories, Pearl River and New York, N. Y., assignor to Lederle Laboratories, Inc. Medicinal food containing vitamins. 295,303; May 6. Class 6.

Leighton, Louise, Inc., New York, N. Y. Cream depilatory. 295,183; May 6. Class 6.

Lentheric, Incorporated, New York, N. Y. Perfumes, toilet water, face powder, etc. 286,886; May 6. Class 6.

Lentheric, Incorporated, New York, N. Y. Face, bath, and talcum powders. 296,655; May 6. Class 6.

Lewis, Martha H., doing business as Martha Lewis Fruit Products Company, Denver, Colo. Powdered form of fruit and sugar ingredients. 296,126; May 6. Class 45.

Liberty Foundries Company, Rockford, Ill. Automobile heaters and parts or accessories therefor. 289,407; May 6. Class 19.

Lichtenstein, Irving C., doing business as Irving's Perfume Shop, New York, N. Y. Perfumes, face powder, lip stick, etc. 295,622; May 6. Class 6.

Logan Hat Stores, Inc., New York, N. Y. Hats and caps. 297,255; May 6. Class 39.

Maconaghie, Dysart L., Bloomington, Ill. Compressed chile con carne. 296,017; May 6. Class 46.

Manufacture, Metallurgique de Tournus, Tournus, France. Frying pans, coffeepots, bowls, etc. 291,993; May 6. Class 13.

Manville Jenckes Company, Pawtucket, R. I. Bedspreads and curtains. 280,183; May 6. Class 42.

Marti, Hugh A., Company, Long Beach, Calif. Boys' wool suits and pants, raincoats, etc. 289,033; May 6. Class 39.

Mazzetti, Guido, Rome, Italy. Benzo alcoholic soap. 288,388; May 6. Class 4.

McCormick & Co., Incorporated, Baltimore, Md. Spices and mustard. 270,134; May 6. Class 46.

McSherry, George P., doing business as McSherry Drug Co., Hillsdale, Mich. Medicinal preparation. 297,442; May 6. Class 6.

Melrose Manufacturing Co., Inc., St. Louis, Mo. Hairdressing. 297,443; May 6. Class 6.

Melrose Manufacturing Co., Inc., St. Louis, Mo. Preparation for destroying dandruff. 297,444; May 6. Class 6.

Miller Train Control Corporation, Staunton, Va. Electrically-operated highway vehicle traffic-light-control-system apparatus and parts thereof. 297,198; May 6. Class 21.

Milwaukee Lubricants Co., Milwaukee, Wis. Detergent soap compound. 296,660; May 6. Class 4.

Milwaukee Lubricants Co., Milwaukee, Wis. Liquid coal tar disinfectant and deodorant, also animal dip. 296,661; May 6. Class 6.

Mitsubishi Shoji Kaisha, Ltd., Marunouchi, Tokyo, Japan. Canned crab meat. 277,014; May 6. Class 46.

Modern Cap Company. (See Karant, Julius.)

Mon-Ark Medicine Corporation, Inc., The, Cincinnati, Ohio. General tonic. 296,490; May 6. Class 6.

Mooney, Russell M., Seattle, Wash. Power-operated pleasure cruiser. 290,587; May 6. Class 19.

Mosaic Tile Company, The, Zanesville, Ohio. Ceramic tiles. 260,516–7; May 6. Class 12.

Naamlooze Vennootschap Nederlandsche Linoleum-fabriek, Krommenie, Netherlands. Linoleum. 296,975; May 6. Class 20.

National Company, Inc., Malden, Mass. Dials. 275,840; May 6. Class 21.

Needham, O. G., & Co., Fort Worth, Tex. Phonographs. 289,361; May 6. Class 36.

Nichols, Chad, Newark, N. J. Maltless beverages, and syrups, extracts, and concentrates for making the same. 295,746; May 6. Class 45.

Noonan, T., & Sons Company, Boston, Mass. Cream ointment for relieving pain. 276,215; May 6. Class 6.

Oldmill Paper Products Corp., Brooklyn, N. Y. Paper cups and dishes. 296,492; May 6. Class 2.

O'Sullivan, William C., doing business as O'Sullivan's, Casper, Wyo. Pop-corn candy. 297,756; May 6. Class 46.

Oxo, Limited, London, England. Concentrated preparation of the uncoagulated juice of liver. 295,571; May 6. Class 6.

Palm, Philipp, doing business as Palm'sche Apotheke, Schorndorf, Germany. Cathartic and aperient preparations. 293,106; May 6. Class 6.

Paraffine Companies, Inc., The, San Francisco, Calif. Periodical. 297,770; May 6. Class 38.

Parker Brothers Inc., Portland, Me., and Salem, Mass. Board game. 296,717; May 6. Class 22.

Perfumería Gal, Sociedad Anónima, Madrid, Spain. Chemical compound. 265,805; May 6. Class 6.

Perkiomen Trunk & Bag Co., Inc., Pennsburg, Pa. Suitcases, week-end bags, and trunks. 297,032; May 6. Class 3.

Poock, O. M., doing business as City Machine & Tool Works, Dayton, Ohio. Tooth-chamfering machine. 297,270; May 6. Class 23.

Poock, O. M., doing business as City Machine & Tool Works, Dayton, Ohio. Grinding chucks. 297,275; May 6. Class 23.

Porter-Cable Machine Co., The, Syracuse, N. Y. Lathes. 296,771; May 6. Class 23.

Pray Company, The, Omaha, Nebr. Silk hosiery. 282,430; May 6. Class 39.

Professional Shoe Corporation, Chicago, Ill. Shoes and slippers. 296,441; May 6. Class 39.

Pure Exhaust & Economy Valve Corp., Buffalo, N. Y. Valves. 295,233; May 6. Class 23.

Purity Water Co., The, Toledo, Ohio. Ginger ale. 297,778; May 6. Class 45.

Rain-On Products Company, Chicago, Ill. Emulsified asphalt. 291,475; May 6. Class 12.

Red Raven Rubber Company, Newark, N. J. Rubber baby pants. 293,087; May 6. Class 35.

Reed, Willard H., doing business as W. H. Reed & Co., Atlanta, Ga. Sanitary rubber protectors. 296,983; May 6. Class 44.

Reeves, Robert C., Co., New York, N. Y. Wire-bound wooden fences. 296,793; May 6. Class 12.

Regent Square Bottling Works, Swissvale, Pa. Maltless beverages. 297,084; May 6. Class 45.

Republic Paint & Varnish Works, Chicago, Ill. Mastic cement. 258,493; May 6. Class 12.

Rettew, H. W., Philadelphia, Pa. Laundry tubs and washing machines. 297,165; May 6. Class 24.

Revelation Suit Case Company Limited, London, England. Trunks, suitcases, attaché cases, etc. 292,953; May 6. Class 3.

Rexford & Kelder, Chicago, Ill. Suits of clothes for men, topcoats, overcoats, etc. 295,536; May 6. Class 39.

Reynolds Metals Company, Louisville, Ky. Reflecting signs. 296,443; May 6. Class 50.

Rising Sun Ranches, Chicago, Ill. Livestock for breeding purposes. 296,772; May 6. Class 1.

Rochester Folding Box Co., The, Rochester, N. Y. Toy playhouses, theaters, etc. 295,640; May 6. Class 22.

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CLASS 2

Bags, Wardrobe. Closgard Wardrobe Co. 270,329; May 6; Serial No. 231,724; published Nov. 9, 1926.

Boxes. L. H. Hurd. 270,335; May 6; Serial No. 275,899; published Feb. 25, 1930.

Boxes and cans. J. L. Clark Manufacturing Company. 270,402; May 6; Serial No. 285,334; published Feb. 25, 1930.

Containers, Sanitary washing. S. Terry. 270,300; May 6; Serial No. 284,429; published Feb. 18, 1930.

Tanks, Metallic. Pittsburgh-Des Moines Steel Company. 270,577; May 6; Serial No. 294,275; published Feb. 25, 1930.

Tanks, National Tank Company. 270,334; May 6; Serial No. 276,213; published Feb. 25, 1930.

CLASS 3

Cases, Ladies' traveling. New Process Company. 270,553; May 6; Serial No. 293,787; published Feb. 18, 1930.

Trunks and cases. Fibre Specialty Manufacturing Company. 270,534; May 6; Serial No. 291,871; published Feb. 18, 1930.

CLASS 4

Abrasive papers and cloths. American Glue Company. 270,495; May 6; Serial No. 293,709; published Feb. 18, 1930.

Cleaner for dishes, etc. Midland Chemical Laboratories, Inc. 270,498; May 6; Serial No. 293,336; published Feb. 18, 1930.
Cleaner for wood, metal, etc. Midland Chemical Laboratories, Inc. 270,499; May 6; Serial No. 293,383; published Feb. 18, 1930.
Cleaner, Granite. L. C. Goodnight. 270,364; May 6; Serial No. 292,401; published Feb. 25, 1930.
Cleaning fluid, Dry-. Union Oil Company of California. 270,484; May 6; Serial No. 294,747; published Feb. 25, 1930.
Cleaning preparation. M. A. Jones. 270,500; May 6; Serial No. 293,327; published Feb. 18, 1930.
Cleaning solution, Glass-. James-McCullin, Inc. 270,489–92; May 6; Serial Nos. 294,157–60; published Feb. 25, 1930.
Cleansing compounds and soaps. Empire Soap Company. 79,413; renewed Sept. 6, 1930.
Dressing and polish for coated textile goods, etc. K. L. Teubner. 270,367; May 6; Serial No. 288,673; published Feb. 18, 1930.
Dressing, Shoe. Manhattan-Kreole Products, Inc. 270,414; May 6; Serial No. 287,258; published Feb. 11, 1930.
Dressings, Brake-band. I. H. Grancell. 270,366; May 6; Serial No. 288,957; published Feb. 25, 1930.
Mixtures of oils for the treatment of leather. H. Th. Böhme A. G. 270,482; May 6; Serial No. 294,807; published Feb. 25, 1930.
Preparation for removing paint, tar, road oil, grease, etc., Liquid. R. R. Street & Co. 270,487; May 6; Serial No. 294,696; published Feb. 25, 1930.
Soap. B. T. Babbitt. 79,390; renewed Sept. 6, 1930.
Soap. Clean-Ite Company. 270,483; May 6; Serial No. 294,798; published Feb. 25, 1930.
Soap. K. A. Lingner. 79,133; renewed Aug. 9, 1930.
Soap compound, Fabric-cleansing. U. S. Sanitary Specialties Corporation. 270,368; May 6; Serial No. 287,508; published Feb. 18, 1930.
Soap for use in cleaning surfaces coated with paint, duco lacquer, etc. A. H. Ratterree, sr. 270,486; May 6; Serial No. 294,704; published Feb. 25, 1930.
Soap, Hand. S. Skolnick. 270,488; May 6; Serial No. 294,185; published Feb. 25, 1930.
Soap, including shaving cream, Shaving. J. B. Williams Company. 270,496; May 6; Serial No. 293,500; published Feb. 25, 1930.
Soap, Powdered hand. F. J. Hagerling. 270,494; May 6; Serial No. 293,728; published Feb. 25, 1930.
Soap, Toilet. Lesquendieu, Incorporated. 270,485; May 6; Serial No. 294,733; published Feb. 25, 1930.
Soaps, cleaning soap solutions, prebrushing soaps, Dry-cleaning. P. T. Rhodes. 270,359; May 6; Serial No. 293,747; published Feb. 11, 1930.
Stains, dressings, and finishes. Dewey & Almy Chemical Company. 270,493; May 6; Serial No. 294,062; published Feb. 25, 1930.
Treated cleaning and polishing cloth. Flower City Specialty Co. 270,497; May 6; Serial No. 293,366; published Feb. 18, 1930.
Washing powder, powdered soap, etc. C. E. Crowder. 270,365; May 6; Serial No. 292,256; published Feb. 18, 1930.

CLASS 6

Ameliorative for rheumatism. K. Evans. 270,524; May 6; Serial No. 293,575; published Feb. 18, 1930.
Antiseptic suppositories, face cream, etc. Marat Company. 270,519; May 6; Serial No. 293,979; published Feb. 18, 1930.
Astringent preparation. J. L. Thomas. 270,449; May 6; Serial No. 292,835; published Feb. 18, 1930.
Capsules, Cold. R & F Pharmaceutical Company. 270,515; May 6; Serial No. 294,024; published Feb. 18, 1930.
Chemical preparation. Calco Chemical Company. 270,513; May 6; Serial No. 294,056; published Feb. 18, 1930.
Chemical solution. A. L. Whiting. 270,526; May 6; Serial No. 293,457; published Feb. 18, 1930.
Compounds and soldering fluxes, Impregnating and backing. Dewey & Almy Chemical Company. 270,512; May 6; Serial No. 294,064; published Feb. 18, 1930.
Crystals, perfume scent strips, solid sachet, etc., Bath. Boag, Incorporated. 270,525; May 6; Serial No. 293,514; published Feb. 18, 1930.
Inhalant. F. W. Hampshire & Co. (1927) Limited. 270,422; May 6; Serial No. 292,497; published Feb. 18, 1930.
Insecticide. J. Urban. 270,445; May 6; Serial No. 289,485; published Feb. 18, 1930.
Insecticides and insect powder or dust. McCormick & Co. 270,504; May 6; Serial No. 294,775; published Feb. 18, 1930.
Medicinal antiseptic preparations, Certain Named. John Wyeth & Brother, Incorporated. 34,772; renewed June 12, 1930.
Medicinal tonic. S. Pfeiffer Mfg. Co. 270,319; May 6; Serial No. 277,815; published Feb. 18, 1930.
Medicine. A. B. H. Detloff. 270,420; May 6; Serial No. 292,912; published Feb. 18, 1930.
Medicine. L. Tillotson. 270,448; May 6; Serial No. 292,912; published Feb. 18, 1930.
Medicine, Cough. L. Williams. 270,505; May 6; Serial No. 294,749; published Feb. 18, 1930.
Medicines. McKesson & Robbins. 34,631; renewed May 8, 1930.
Ointments and lotions. B. Goldstein. 34,316; renewed Mar. 18, 1930.
Opaquing agents and pigments. Titanium Alloy Manufacturing Company. 270,523; May 6; Serial No. 293,645; published Feb. 18, 1930.
Perfume, toilet powder, rouge, etc. N. Kovenko. 270,528; May 6; Serial No. 293,329; published Feb. 18, 1930.
Pharmaceutical preparation. E. McEvoy. 270,421; May 6; Serial No. 292,775; published Feb. 18, 1930.
Photographic developers. The firm of G. Gennert. 34,972; renewed July 31, 1930.
Preparation for treatment of venereal diseases. M. White. 270,444; May 6; Serial No. 289,610; published Feb. 18, 1930.
Preparation for use as a douche. Wm. S. Merrell Company. 270,511; May 6; Serial No. 294,119; published Feb. 18, 1930.
Preparation indicated in cases of dysmenorrhea, etc. Drug Products Co. Inc. 270,529; May 6; Serial No. 293,094; published Feb. 18, 1930.
Proprietary medicine. Syenol Company. 270,423; May 6; Serial No. 292,470; published Feb. 18, 1930.
Remedy for certain diseases. H. Garey. 78,323; renewed June 7, 1930.
Remedy for certain named diseases. Judge & Dolph Pharmaceutical Company. 34,988; renewed July 31, 1930.
Tonic. Cornel Drug Stores Inc. 270,332; May 6; Serial No. 276,301; published Feb. 18, 1930.
Tonic and tissue builder. B. F. Sánchez. 270,446; May 6; Serial No. 288,309; published Feb. 18, 1930.
Tonic, Iron. P. Kastanis. 270,510; May 6; Serial No. 294,226; published Feb. 18, 1930.
Tooth powder and an antiseptic mouth wash. K. A. Lingner. 77,930; renewed May 17, 1930.
Veterinary embrocations. S. R. Feil Company. 77,109; renewed Mar. 8, 1930.
Veterinary vermifuges, medicated salts, and tonics. S. R. Feil Company. 77,492; renewed Apr. 12, 1930.
Water-treatment materials for the prevention of boiler scale and corrosion. McAvoy Products Co. 270,522; May 6; Serial No. 293,730; published Feb. 18, 1930.

CLASS 7

Hemp sail or sewing twine. Hanover Cordage Company. 270,566; May 6; Serial No. 294,220; published Feb. 25, 1930.
Twine. R. C. Hyland. 270,567–8; May 6; Serial Nos. 294,016–17; published Feb. 25, 1930.

CLASS 8

Cigarette container and dispenser. J. N. M. Keyzer. 270,527; May 6; Serial No. 293,438; published Feb. 25, 1930.
Pipes, Tobacco. A. Oppenheimer & Co. 77,480; renewed Apr. 12, 1930.
Tobacco pouches, cigarette, and cigar cases. Hookless Fastener Company. 270,509; May 6; Serial No. 294,258; published Feb. 25, 1930.

CLASS 9

Matches. Columbia Match Company. 270,569; May 6; Serial No. 293,718; published Feb. 25, 1930.
Matches. Columbia Match Company. 270,570; May 6; Serial No. 293,715; published Feb. 25, 1930.
Matches. Grantorpets Tändsticksfabriks Aktiebolag. 76,360; renewed Jan. 11, 1930.
Shells and metallic cartridges, Shotgun. Peters Cartridge Company. 270,561; May 6; Serial No. 294,857; published Feb. 25, 1930.

CLASS 10

Guano. Tennessee Chemical Company. 34,755; renewed June 5, 1930.

CLASS 13

Belt fasteners. Flexible Steel Lacing Company. 270,578; May 6; Serial No. 294,217; published Feb. 25, 1930.
Chains, chain accessories, and forgings. H. B. Newhall. 34,962; renewed July 24, 1930.
Fittings, Plumbers'. Central Foundry Co. 77,862; renewed May 10, 1930.
Hardware, Marine and industrial. Maine Steel Products Co. 270,401; May 6; Serial No. 286,068; published Feb. 18, 1930.
Hinges. Chicago Spring Butt Company. 77,295; renewed Mar. 29, 1930.
Hinges, Steel. Stanley Works. 270,587; May 6; Serial No. 293,938; published Feb. 25, 1930.
Hinges, Wrought-steel butt. Stanley Works. 270,582–6; May 6; Serial Nos. 293,939–43; published Feb. 18, 1930.
Hinges, Wrought-steel butt. Stanley Works. 270,588; May 6; Serial No. 293,937; published Feb. 18, 1930.
Lock nuts and lock washers. International Safety Lock Nut Corporation. 270,417; May 6; Serial No. 292,632; published Feb. 25, 1930.
Nails, Stucco. Youngstown Pressed Steel Company. 270,576; May 6; Serial No. 294,331; published Feb. 25, 1930.
Plumbing traps, shower heads, drinking fountains, etc. Providence Steam Trap Company. 270,590; May 6; Serial No. 293,851; published Feb. 18, 1930.
Steam traps. Armstrong Machine Works. 270,595; May 6; Serial No. 293,509; published Feb. 25, 1930.

CARNEGIE LIBRARY OF ATLANTA

Valves and parts thereof. Star Brass Manufacturing Company. 78,283; renewed May 31, 1930.
Valves, Water and steam. E. H. Ruppert. 270,594; May 6; Serial No. 293,557; published Feb. 18, 1930.

CLASS 14

Castings, Steel. Birdsboro Steel Foundry Machine Company. 270,503; May 6; Serial No. 294,793; published Feb. 25, 1930.
Grinding elements or bodies, Metal. Coates Steel Products Co. 270,343; May 6; Serial No. 259,538; published Feb. 25, 1930.
Metals, Plated polished nonferrous. Apollo Metal Works. 270,424; May 6; Serial No. 290,232; published Jan. 28, 1930.
Welding rods. Steel Sales Corporation. 270,502; May 6; Serial No. 294,864; published Feb. 25, 1930.

CLASS 15

Gasoline, motor-fuel oils, naphtha, etc. Continental Oil Company. 270,389; May 6; Serial No. 287,524; published Feb. 25, 1930.
Grease and lubricating-oil compounds. Oil-Kraft, Inc. 270,481; May 6; Serial No. 293,282; published Feb. 25, 1930.
Kerosene, gasoline, heating oil, etc. Independent Oil and Gas Company. 270,378; May 6; Serial No. 292,992; published Feb. 25, 1930.
Oil fuel, Motor-. Red Indian Oil Company Incorporated. 270,381; May 6; Serial No. 292,048; published Feb. 25, 1930.
Oil, Insulating and dash-pot. General Electric Company. 270,355; May 6; Serial No. 294,002; published Feb. 18, 1930.
Oils and greases. Pure Oils Company. 270,318; May 6; Serial No. 278,605; published Apr. 16, 1929.
Oils and greases and gasoline, Lubricating. J. A. Chambers. 270,301; May 6; Serial No. 284,261; published Feb. 18, 1930.
Oils and greases and gasoline, Lubricating. J. A. Chambers. 270,410; May 6; Serial No. 287,867; published Feb. 18, 1930.

CLASS 16

Cleaning and polishing preparation. F. E. Barton. 270,393; May 6; Serial No. 291,754; published Feb. 18, 1930.
Paint enamel. Allentown Paint Manufacturing Company. 270,408; May 6; Serial No. 289,074; published Feb. 18, 1930.
Paint, Waterproof. E. Fritsch. 270,347; May 6; Serial No. 294,510; published Feb. 18, 1930.
Paints and paste colors, Ready-mixed. S. H. French & Co. 77,992; renewed May 24, 1930.
Polish for automobiles, etc. Nu-Enamel Paint Company. 270,407; May 6; Serial No. 289,534; published Feb. 18, 1930.

CLASS 17

Cigars. J. Aguiló. 270,506; May 6; Serial No. 294,609; published Feb. 25, 1930.
Cigars. M. I. Thompson. 270,514; May 6; Serial No. 294,032; published Feb. 18, 1930.

CLASS 19

Flying machines. Consolidated Aircraft Corporation. 270,418; May 6; Serial No. 292,396; published Feb. 25, 1930.
Motors, motor cars, carriages, etc. G. Daimler. 34,351; renewed Mar. 20, 1930.
Propeller wheels. Stannus Propeller Corporation. 270,541; May 6; Serial No. 293,239; published Feb. 18, 1930.
Propellers. Air Propellers, Inc. 270,591; May 6; Serial No. 293,813; published Feb. 18, 1930.
Wheels and casters for hand trucks. Eames Company. 270,400; May 6; Serial No. 287,458; published Feb. 25, 1930.
Window and windshield attachments, Automobile. Flour City Specialty Mfg. Co. 270,598; May 6; Serial No. 293,420; published Feb. 18, 1930.

CLASS 21

Batteries. Goodyear Tire & Rubber Company. 270,412; May 6; Serial No. 287,467; published Feb. 18, 1930.
Beaters, Electrically-operated. Landers, Frary & Clark. 270,472; May 6; Serial No. 293,882; published Feb. 25, 1930.
Electric-circuit breakers. Westinghouse Electric & Manufacturing Company. 270,470; May 6; Serial No. 293,946; published Feb. 25, 1930.
Electric discharge apparatus, High-tension. J. Simons. 270,403; May 6; Serial No. 292,597; published Feb. 18, 1930.
Electric transformers and coils. Jefferson Electric Company. 270,385; May 6; Serial No. 290,904; published Feb. 25, 1930.
Electrical insulation, Products for. M. L. Woodard. 270,471; May 6; Serial No. 293,908; published Feb. 25, 1930.
Electrical signal devices. Radiotype Corporation. 270,306; May 6; Serial No. 282,715; published Feb. 18, 1930.
Lighters, Cigar. C. E. Vawter. 270,307; May 6; Serial No. 282,582; published Feb. 25, 1930.
Radio receiving sets, loud-speakers, transformers, etc. Transformer Corporation of America. 270,394; May 6; Serial No. 291,367; published Feb. 18, 1930.
Spark plugs, electric headlights, lamps, etc. P. Marchal. 270,340–1; May 6; Serial Nos. 273,874–5; published Feb. 18, 1930.
Switches and phasing transformers, Combined meter-test. Superior Switchboard & Devices Company. 270,360; May 6; Serial No. 293,699; published Feb. 18, 1930.
Vacuum or electron tubes. Economic Lamp Company. 270,406; May 6; Serial No. 290,457; published Feb. 18, 1930.
Wire and cables, electrical windings, coils, and transformers. Inca Manufacturing Corporation. 270,478; May 6; Serial No. 293,470; published Feb. 25, 1930.

CLASS 22

Golf balls. Ken-Wel Sporting Goods Company. 270,315; May 6; Serial No. 280,400; published June 11, 1929.
Golf balls. Pacific Golf Ball, Ltd. 270,409; May 6; Serial No. 289,040; published Feb. 18, 1930.
Toy animals and dolls, Sponge rubber. Lee Rubber & Tire Corporation. 270,358; May 6; Serial No. 293,781; published Feb. 18, 1930.
Toy houses. Sametz and McLean. 270,342; May 6; Serial No. 259,647; published Feb. 18, 1930.

CLASS 23

Box-strapping machines and special tools for stretching and sealing metal bands on a box. Wire & Steel Products Co. 270,466; May 6; Serial No. 294,284; published Feb. 25, 1930.
Cup-dispensing machines. Lily-Tulip Cup Corporation. 270,379; May 6; Serial No. 292,812; published Feb. 25, 1930.
Engines and their parts, Internal-combustion. Pratt & Whitney Aircraft Company. 270,465; May 6; Serial No. 294,439; published Feb. 25, 1930.
Grinding machines, Metal. Fitchburg Grinding Machine Corporation. 270,386; May 6; Serial No. 290,780; published Feb. 25, 1930.
Hoes and shovels of metal. Chillington Tool Company. 79,468; renewed Sept. 13, 1930.
Picks, kitchen forks, cake turners, spatulas, can openers, etc., Ice. Utility Manufacturing Co. 270,467; May 6; Serial No. 294,101; published Feb. 25, 1930.
Picks, kitchen forks, cake turners, spatulas, can openers, etc., Ice. Utility Manufacturing Co. 270,468; May 6; Serial No. 294,099; published Feb. 25, 1930.
Shaft couplings. Bond Foundry and Machine Company. 79,400; renewed Sept. 6, 1930.
Sprayers. S. H. Kress & Co. 270,463; May 6; Serial No. 294,809; published Feb. 25, 1930.
Tools and cutlery, and kitchen utensils. Compo-Site, Inc. 270,325; May 6; Serial No. 258,571; published Feb. 18, 1930.
Tools and parts thereof, Portable two-hand cutting-off metal-working. H. K. Porter, Inc. 270,480; May 6; Serial No. 293,108; published Feb. 25, 1930.
Tools, Builders' and other. Joseph Tyzack & Son, Limited. 270,311; May 6; Serial No. 281,579; published Feb. 25, 1930.
Wrenches, wrench sets, wrench sockets, tool handles, screw drivers, etc. Blue Point Tool Company. 270,479; May 6; Serial No. 293,363; published Feb. 25, 1930.

CLASS 24

Clothespins. Diamond Match Company. 270,579; May 6; Serial No. 294,213; published Feb. 25, 1930.
Clothespins. Diamond Match Company. 270,580; May 6; Serial No. 294,209; published Feb. 18, 1930.
Clothes-washing machines. H. Bohn. 270,589; May 6; Serial No. 293,868; published Feb. 18, 1930.
Clothes-washing machines and parts therefor. Electrolux, Inc. 270,297; May 6; Serial No. 284,975; published Feb. 18, 1930.
Extractors for removing moisture of cleaning fluids from fabrics, clothing. American Laundry Machinery Company. 270,575; May 6; Serial No. 294,876; published Feb. 25, 1930.
Garment pressers, Steam. Dry Steam Appliance Co. 270,542; May 6; Serial No. 293,030; published Feb. 25, 1930.
Ironing and drying machines. National Laundry Machinery Company. 270,395–6; May 6; Serial Nos. 291,465–6; published Feb. 18, 1930.

CLASS 25

Locks. Crown Lock Company. 270,397; May 6; Serial No. 291,156; published Feb. 25, 1930.

CLASS 26

Cameras. Fairchild Aviation Corporation. 270,476; May 6; Serial No. 293,530; published Feb. 25, 1930.
Cameras. Fairchild Aviation Corporation. 270,477; May 6; Serial No. 293,527; published Feb. 25, 1930.
Glasses, barometric tubes, and barometers, Weather. Swift & Anderson, Inc. 270,462; May 6; Serial No. 294,000; published Feb. 25, 1930.

CLASS 27

Watches, clocks, and parts thereof. Forstner Chain Corp. 270,508; May 6; Serial No. 294,349; published Feb. 25, 1930.

CLASS 28

Clasps, Shoulder strap. Comfort Clasp Company. 270,300; May 6; Serial No. 381,941; published Feb. 25, 1930.
Lavallières, pendants, necklaces, etc. Martin-Copeland Company. 270,312; May 6; Serial No. 281,012; published May 14, 1929.
Lockets and bracelets. Attleboro Chain Company. 76,957; renewed Mar. 1, 1930.
Necklaces, bracelets, earrings, etc. Samstag & Hilder Bros., Inc. 270,336; May 6; Serial No. 275,413; published Feb. 18, 1930.
Pins, Fraternity emblem. Sigma Delta Chi. 270,383; May 6; Serial No. 291,798; published Feb. 25, 1930.
Rings, Finger. B. F. Brogan. 270,475; May 6; Serial No. 293,615; published Feb. 25, 1930.
Rings, Finger. Ciner Manufacturing Co. 270,302; May 6; Serial No. 283,664; published Aug. 6, 1929.
Spoons, forks, knives, and ladles. American Silver Company. 270,330; May 6; Serial No. 225,691; published Mar. 23, 1926.

CLASS 29

Powder puffs. Western Bottle Manufacturing Company. 270,507; May 6; Serial No. 294,453; published Feb. 25, 1930.

CLASS 30

Ceramics. B. Tomby & Co. Inc. 270,545; May 6; Serial No. 294,650; published Feb. 18, 1930.

CLASS 32

Cabinet for the display and sale of blotting paper. Wrenn Paper Company. 270,473; May 6; Serial No. 293,703; published Feb. 25, 1930.
Chairs, Folding. Louis Rastetter & Sons. 270,331; May 6; Serial No. 276,986; published Feb. 25, 1930.
Files and file cases, Desk. Press Products Company. 270,474; May 6; Serial No. 293,690; published Feb. 25, 1930.
Furniture—viz. invalid tables. L. W. Huntington. 270,380; May 6; Serial No. 292,266; published Feb. 25, 1930.
Sofas, davenports, love seats, settees, chaise longues, chairs, rockers, and ottomans. R. N. Cardozo & Bro. 270,387; May 6; Serial No. 288,417; published Feb. 25, 1930.
Undercushion for floor coverings. American Hair & Felt Company. 270,469; May 6; Serial No. 294,049; published Feb. 25, 1930.

CLASS 34

Doors for furnaces, Inspection. M. Liptak. 270,597; May 6; Serial No. 293,436; published Feb. 25, 1930.
Stovepipe, heaters, camp stoves, and rain caps. Jackes-Evans Manufacturing Company. 270,398; May 6; Serial No. 290,577; published Feb. 18, 1930.

CLASS 35

Belting and hose, Rubber. Goodyear Rubber Company. 270,388; May 6; Serial No. 287,924; published Sept. 10, 1929.
Belting, Leather. Chas. A. Schieren Company. 78,646; renewed June 28, 1930.

CLASS 36

Needles for sound-reproducing machines. British Needle Company Limited. 270,384; May 6; Serial No. 291,757; published Feb. 25, 1930.
Phonographs adapted for combination with radio receiving sets. Superior Cabinet Corporation. 270,382; May 6; Serial No. 291,846; published Feb. 25, 1930.
Piston rings. Duoflex Piston Ring Company. 270,464; May 6; Serial No 294,750; published Feb. 25, 1930.
Talking machines and supplies therefor. Homophon Company, G. m. b. H. 78,099; renewed May 31, 1930.
Tubing, windshield rubber wiper tubing, and rubber gaskets, Rubber lamp. Eno Rubber Corporation. 270,305; May 6; Serial No. 282,776; published Feb. 25, 1930.

CLASS 37

Binders, sectional post binders, prong binders, memo books, etc., Ledger. Wilson-Jones Company. 270,327–8; May 6; Serial Nos. 256,498–9; published Feb. 18, 1930.
Books, Blank. Corliss, Macy & Company. 77,185; renewed Mar. 15, 1930.
Envelopes, paper. May Department Stores Company. 270,593; May 6; Serial No. 293,627; published Feb. 25, 1930.
Forms, Paper. Gilman Fanfold Corporation, Limited. 270,299; May 6; Serial No. 284,730; published Feb. 25, 1930.
Paper. Orono Pulp & Paper Company. 270,592; May 6; Serial No. 293,745; published Feb. 25, 1930.
Paper board, Corrugated. Hinde & Dauch Paper Company. 270,349; May 6; Serial No. 294,426; published Feb. 18, 1930.
Paper, Greaseproof. Mountain Mill Company. 270,351; May 6; Serial No. 294,314; published Feb. 18, 1930.
Paper handkerchiefs. National Cellulose Corporation. 270,416; May 6; Serial No. 285,931; published Feb. 18, 1930.
Paper, Kraft. Nekoosa-Edwards Paper Company. 270,596; May 6; Serial No. 293,441; published Feb. 25, 1930.
Paper padding or cushioning material. Kimberly-Clark Corporation. 270,350; May 6; Serial No. 294,390; published Feb. 18, 1930.
Paper, Tissue. Crown Willamette Paper Company. 270,348; May 6; Serial No. 294,509; published Feb. 18, 1930.
Paper, Toilet. S. H. Kress & Co. 270,392; May 6; Serial No. 291,882; published Feb. 18, 1930.
Paper, Wrapping. Wax Paper Products Co. 270,415; May 6; Serial No. 286,810; published Oct. 8, 1929.
Paper, Writing and printing. Lasher & Lathrop Inc. 78,110; renewed May 31, 1930.
Pencils, Copying. Koh-I-Noor Bleistiftfabrik L. & C. Hardtmuth. 270,345; May 6; Serial No. 294,673; published Feb. 18, 1930.
Pencils, letter openers, crayons, etc. Koh-I-Noor Bleistiftfabrik L. & C. Hardtmuth. 270,346; May 6; Serial No. 294,672; published Feb. 18, 1930.
Registers, Autographic. American Sales Book Company, Limited. 270,303; May 6; Serial No. 293,307; published Feb. 18, 1930.
Stencil sheets. A. S. Daneman Art Works. 270,581; May 6; Serial No. 294,009; published Feb. 25, 1930.
Stencil sheets, writing paper, letter paper, etc. D. Gestetner Limited. 270,411; May 6; Serial No. 287,701; published Feb. 18, 1930.
Trimming board, Upholstery foundation. Arvey Corporation. 270,353; May 6; Serial No. 294,200; published Feb. 18, 1930.

CLASS 38

Books. Garden City Publishing Company. 270,356; May 6; Serial No. 293,966; published Feb. 25, 1930.
Magazine. Fashion-Limited, Inc. 270,399; May 6; Serial No. 289,378; published Feb. 25, 1930.
Magazine. Sigma Delta Chi. 270,410; May 6; Serial No. 292,232; published Feb. 25, 1930.
Newspaper section. NEA Service, Inc. 270,405; May 6; Serial No. 290,660; published Dec. 17, 1929.
Photographic prints and enlargements. Aurora Photo Finishing Co. 270,390; May 6; Serial No. 292,481; published Feb. 25, 1930.
Printed directories. Reuben H. Donnelley Corporation. 270,357; May 6; Serial No. 270,357; published Feb. 25, 1930.
Publication. Breskin & Charlton Publishing Corporation. 270,354; May 6; Serial No. 294,141; published Feb. 25, 1930.
Publication. National Trade Journals, Inc. 270,413; May 6; Serial No. 287,359; published Feb. 25, 1930.
Puzzles. G. G. Gallagher. 270,391; May 6; Serial No. 292,441; published Feb. 25, 1930.

CLASS 39

Boots and shoes. International Shoe Co. 270,442; May 6; Serial No. 291,164; published Feb. 18, 1930.
Shoes. Bona Allen, Inc. 270,436; May 6; Serial No. 292,088; published Feb. 18, 1930.
Shoes, Athletic. Servus Rubber Company. 270,574; May 6; Serial No. 293,074; published Feb. 18, 1930.

CLASS 42

Cotton piece goods. Pacific Mills. 270,552; May 6; Serial No. 293,843; published Feb. 18, 1930.
Handkerchiefs. Marshall Field & Company. 270,547; May 6; Serial No. 294,584; published Feb. 18, 1930.
Sheets, Cotton-flannel. Minot, Hooper & Co. 270,339; May 6; Serial No. 275,234; published Feb. 18, 1930.
Silk piece goods. Cohn-Hall-Marx Co. 270,538; May 6; Serial No. 291,115; published Feb. 18, 1930.
Textile fabrics, Filled. Williams, Brown and Earle. 78,752; renewed July 5, 1930.
Toweling, Linen-crash. Stevens Linen Works. 34,572–82; renewed May 1, 1930.
Woolen fabrics. Worumbo Manufacturing Company. 270,548; May 6; Serial No. 294,550; published Feb. 18, 1930.
Woolen fabrics. Worumbo Manufacturing Company. 270,549; May 6; Serial No. 294,548; published Feb. 18, 1930.
Woolen fabrics. Worumbo Manufacturing Company. 270,550; May 6; Serial No. 294,198; published Feb. 18, 1930.
Woolen piece goods. Forstmann & Huffmann Company. 270,555; May 6; Serial No. 293,552; published Feb. 18, 1930.
Woolen piece goods. Forstmann & Huffmann Company. 270,556; May 6; Serial No. 293,543; published Feb. 18, 1930.
Woolen piece goods. Forstmann & Huffmann Company. 270,557; May 6; Serial No. 293,540; published Feb. 18, 1930.

CLASS 43

Thread and artificial spinning fibers. Artificial-silk. I. G. Farbenindustrie Aktiengesellschaft. 270,551; May 6; Serial No. 294,071; published Feb. 18, 1930.
Thread, Linen. Lindsay Thompson & Co. 78,011–12; renewed May 24, 1930.
Thread, Linen. Lindsay Thompson & Co. Limited. 78,470; renewed June 14, 1930.
Yarns and threads. A. & H. Shillman Company. 270,558; May 6; Serial No. 293,449; published Feb. 18, 1930.

CLASS 44

Artificial teeth. Dentists' Supply Company of New York. 270,344; May 6.
Breathing apparatus. Mine Safety Appliances Company. 270,361; May 6; Serial No. 293,630; published Feb. 11, 1930.
Devices and appliances and parts thereof for use in anesthesia, resuscitation, and induced or artificial breathing. Safety Equipment Service Company. 270,404; May 6; Serial No. 290,860; published Feb. 11, 1930.
Pads and electrically-heated blankets, Electrically-heated. W. H. Turver. 270,362; May 6; Serial No. 293,453; published Feb. 11, 1930.
Toothpicks. Diamond Match Company. 270,352; May 6; Serial No. 294,214; published Feb. 18, 1930.

CLASS 45

Beverages. California Crushed Fruit Corporation. 270,313; May 6; Serial No. 280,890; published Feb. 25, 1930.
Beverages and syrups, extracts, and concentrates for preparing the same. California Crushed Fruit Corporation. 270,543; May 6; Serial No. 294,759; published Feb. 25, 1930.

CLASS 46

Bean oil used as a food, Refined. Edible Products Company. 78,873; renewed July 19, 1930.
Bread. Montana Flour Mills Company. 270,546; May 6; Serial No. 294,587; published Feb. 18, 1930.
Bread. C. A. Scheuch, jr. 270,501; May 6; Serial No. 294,895; published Feb. 25, 1930.
Bread. M. Shumofsky. 270,539; May 6; Serial No. 288,039; published Feb. 18, 1930.
Bread, Loaves of. Parkway Baking Company. 270,461; May 6; Serial No. 293,065; published Feb. 25, 1930.
Bread, rolls, buns, etc., Plain. Boettger Baking Co. Inc. 270,376; May 6; Serial No. 288,835; published Feb. 25, 1930.
Butter. Wm. Schluderberg-T. J. Kurdle Co. 270,452; May 6; Serial No. 294,742; published Feb. 25, 1930.
Cakes. Tasty Baking Company. 270,450; May 6; Serial No. 294,861; published Feb. 25, 1930.
Cakes and pies. E. O. Emery. 270,599; May 6.
Candies. Galmor Candy Corporation. 270,447; May 6; Serial No. 286,239; published Feb. 25, 1930.
Candies and ice cream. Maple Confectionery. 270,314; May 6; Serial No. 280,448; published Feb. 18, 1930.
Candy. Brandle & Smith Co. 270,563; May 6; Serial No. 294,756; published Feb. 25, 1930.
Candy. Connery Candy Company. 270,438; May 6; Serial No. 291,908; published Feb. 25, 1930.
Candy. Robt. F. Mackenzie Co. 270,562; May 6; Serial No. 294,815; published Feb. 25, 1930.
Candy. A. R. Moulin. 270,427; May 6; Serial No. 289,528; published Feb. 25, 1930.
Candy. Red Sun Products Company. 270,430; May 6; Serial No. 292,750; published Feb. 25, 1930.
Candy bars. Dedes Candy Company. 270,428; May 6; Serial No. 289,312; published Feb. 25, 1930.
Canned and bottled fruits and vegetables. G. B. Raffetto, Inc. 270,571; May 6; Serial No. 293,380; published Feb. 25, 1930.
Canned fruits, canned vegetables, and canned fish, etc. Red & White Corp'n. 270,459; May 6; Serial No. 293,692; published Feb. 25, 1930.
Canned grapefruit and grapefruit juice. East Coast Preserving Company. 270,433–4; May 6; Serial Nos. 292,261–2; published Feb. 25, 1930.
Canned olive oil. Vezos Brothers. 270,303; May 6; Serial No. 283,651; published Feb. 18, 1930.
Canned shrimp and canned oysters. Mississippi Coast Packing Co. 270,565; May 6; Serial No. 294,677; published Feb. 25, 1930.
Cereal breakfast food and a flavoring base. W. E. Brobst, jr. 270,554; May 6; Serial No. 293,712; published Feb. 18, 1930.
Cheese. E. Bauer. 270,373; May 6; Serial No. 289,495; published Feb. 25, 1930.
Cheese. S. A. Egidio Galbani. 270,320–1; May 6; Serial Nos. 273,560–1; published Feb. 25, 1930.
Cheese. Ingersoll Cream Cheese Company, Limited. 270,296; May 6; Serial No. 284,984; published Feb. 25, 1930.
Chicks, Baby. W. B. Hewitt. 270,298; May 6; Serial No. 283,908; published Feb. 25, 1930.
Chocolate bars and chocolate-covered fruit bars. International Candy Co. 270,435; May 6; Serial No. 292,169; published Feb. 25, 1930.
Chop suey, Imitation. O. H. Willard. 270,323; May 6; Serial No. 273,088; published Feb. 25, 1930.
Cocoa preparations rich in vitamines A and D. Vicao A/S. 270,426; May 6; Serial No. 289,609; published Feb. 18, 1930.
Coffee. Wilson Coffee Company. 270,304; May 6; Serial No. 283,636; published June 18, 1929.
Confectionery. George Close Company. 34,908; renewed July 17, 1930.
Cookies. Food Makers of Sunland. 270,536; May 6; Serial No. 291,386; published Feb. 18, 1930.
Dairy products. Southwest Dairy Products Company. 270,540; May 6; Serial No. 286,559; published Feb. 11, 1930.
Dessert. Snow King Baking Powder Company. 270,573; May 6; Serial No. 293,115; published Feb. 18, 1930.
Doughnuts. R. C. Sugden. 270,456; May 6; Serial No. 294,189; published Feb. 25, 1930.
Doughnuts, crullers, jelly fills, etc. Prewitt Brothers. 270,531; May 6; Serial No. 292,749; published Feb. 18, 1930.
Eggs. Pacific Egg Producers Cooperative, Inc. 270,451; May 6; Serial No. 294,823; published Feb. 25, 1930.
Extracts and concentrates for beverage purposes. Hollywood Dry Corporation. 270,530; May 6; Serial No. 292,875; published Feb. 25, 1930.
Feed and wheat flour. Henry Feed & Supply Co. 270,535; May 6; Serial No. 291,663; published Feb. 18, 1930.
Feeds for poultry, hogs, and cattle, Supplemental. Murphy Products Company. 270,544; May 6; Serial No. 294,679; published Feb. 18, 1930.
Feeds of all kinds, hog and pig feeds, dairy feeds, etc., Poultry. Nebraska Consolidated Mills Co. 270,458; May 6; Serial No. 293,888; published Feb. 25, 1930.
Fig bars. W. G. Voliva. 270,455; May 6; Serial No. 294,244; published Feb. 25, 1930.
Flour, corn meal, biscuit flour, etc., Wheat. Charles O. Etzler & Son. 270,559; May 6; Serial No. 293,214; published Feb. 18, 1930.
Flour, rolled oats, rye meal, etc., Pancake and waffle. Sperry Flour Co. 270,308; May 6; Serial No. 282,200; published July 23, 1929.
Flour, Wheat. Albers Bros. Milling Company. 270,310; May 6; Serial No. 281,643; published Feb. 18, 1930.
Flour, Wheat. A. B. McCrillis & Son, Inc. 79,141; renewed Aug. 9, 1930.
Flour, Wheat. Minneapolis Milling Company. 270,333; May 6; Serial No. 278,271; published July 23, 1929.
Food, Bird. C. A. Shabel. 270,537; May 6; Serial No. 291,360; published Feb. 18, 1930.
Food preparation consisting of orange juice, honey, and yeast. Citro Laboratories, Inc. 270,369; May 6; Serial No. 292,925; published Feb. 25, 1930.
Fruit and jams. California Prune & Apricot Growers Association. 270,425; May 6; Serial No. 290,450; published Feb. 25, 1930.
Fruits. Duckwall Bros. Inc. 270,437; May 6; Serial No. 292,034; published Feb. 25, 1930.
Fruits, Fresh. Woodhouse Bros. 270,337; May 6; Serial No. 275,328; published Sept. 3, 1929.
Fruits, fresh vegetables, and fresh cantaloupes, Fresh citrus. D. B. Smith. 270,429; May 6; Serial No. 292,911; published Feb. 25, 1930.
Grapes and deciduous fruits, Fresh. Deer Creek Orchards. 270,326; May 6; Serial No. 256,916; published Feb. 25, 1930.
Horse-radish, pickles, cheese, etc. Conrad Kiel & Son. 270,374; May 6; Serial No 289,027; published Feb. 25, 1930.
Jelly, jams, coffee, etc., Wine. Val Bros. 270,372; May 6; Serial No. 292,063; published Feb. 25, 1930.
Lard. Anglo-American Provision Company. 34,735; renewed June 5, 1930.
Lettuce. G. E. Mathews. 270,441; May 6; Serial No 291,461; published Feb. 25, 1930.
Materials to be used in place of sugar. E. D. Tipton. 270,370; May 6; Serial No. 292,762; published Feb. 25, 1930.
Milk, cream, butter, etc Western Maryland Dairy Corporation. 270,377; May 6; Serial No. 288,626; published Feb. 25, 1930.
Nut coating, Chocolate. L. G. Zuckerman. 270,338; May 6; Serial No. 274,863; published Feb. 25, 1930.
Olive oil. Genovesi Bros., Zappelli & Co 270,375; May 6; Serial No. 289,016; published Feb. 25, 1930.
Peanut butter, salted nuts. C. S. Marston, jr. 270,453; May 6; Serial No. 294,431; published Feb. 25, 1930.
Pickles, sweet relishes, mustard, etc. Sunny-Field Packing Co 270,572; May 6; Serial No. 293,196; published Feb. 18, 1930.
Pretzels. Palmyra Pretzel Co. 270,460; May 6; Serial No. 293,445; published Feb. 25, 1930.
Salad dressing. H. Erickson. 270,454; May 6; Serial No. 294,296; published Feb. 25, 1930.
Salad dressing, sweet pickles, honey, etc Carlstrom Cheese Co. 270,443; May 6; Serial No. 290,550; published Feb. 18, 1930.
Sandwiches, pies, cakes, etc. J. M. Bickler. 270,317; May 6; Serial No. 279,591; published Feb. 25, 1930.
Spaghetti sauce. L. De Credaro 270,371; May 6; Serial No. 292,203; published Feb. 25, 1930.
Stew, Concentrated. O. H. Willard. 270,322; May 6; Serial No. 273,090; published Feb. 25, 1930.
Syrup. Oelerich & Berry Company 270,431; May 6; Serial No. 292,747; published Feb. 18, 1930.
Syrup, Concentrated malt. Miller High Life Company. 270,432; May 6; Serial No. 292,678; published Feb. 18, 1930.
Syrup, Malt. C. Andrews. 270,457; May 6; Serial No. 294,188; published Feb. 25, 1930
Syrup, Malt. Ideal Food Products Co. 270,316; May 6; Serial No. 280,118; published Feb. 18, 1930.

Tea. New Orleans Coffee Co. 270,564; May 6; Serial No. 294,683; published Feb. 25, 1930.
Yeast. Fleischmann Company. 270,324; May 6; Serial No 271,645; published Feb. 18, 1930.

CLASS 48

Beverages, Nonalcoholic, cereal, malt. Peter Doelger Brewing Corporation. 270,440; May 6; Serial No. 291,608; published Feb. 25, 1930.

CLASS 49

Whiskey. A. Overholt & Company. 270,439; May 6; Serial No. 291,783; published Feb. 25, 1930.

CLASS 50

Cord and square woven fabrics coated with compounded unvulcanized rubber. Federal Rubber Company 270,516–18; May 6; Serial Nos. 294,010–12; published Feb. 25, 1930.
Scaffolding and parts thereof. American Safety Device Co. 270,521; May 6; Serial No. 293,814; published Feb. 25, 1930.
Trestles and tables for paper hangers and paste boards. Hyde Manufacturing Company. 270,520; May 6; Serial No. 293,837; published Feb 25, 1930.

ALPHABETICAL LIST OF LABELS

Apollos. For Prophylactic Membranous Articles for the Prevention of Contagious Diseases. M. Soybel. 37,410; May 6.
Capree. For Salad Dressing. Ralph H. Jones Company. 37,407; May 6.
Elysian Spring Water—"The Water You Like to Drink." For Spring Water. Elysian Springs Water Company. 37,406; May 6.
Frozen Fresh Fruits. For Frozen Fresh Fruit. Lily-Tulip Cup Corporation. 37,408; May 6.
Majestic. For Bird Food. H. L. Borini. 37,405; May 6.
Nux-Vitol. For Medicine for Treating Disorders of the Stomach. Nux-Vitol Company. 37,409; May 6.
Orchidea Cleansing Cream. For Cleansing Cream. R. Thornton. 37,411; May 6.

ALPHABETICAL LIST OF PRINTS

Adjusto Pressure Pad Truss. For Trusses. Ohio Truss Company. 12,525; May 6.
City or Country There's a Radiola Suited to Your Needs. For Radios. R C A Victor Company. 12,526; May 6.
Only On Genuine Gold Seal Congoleum Rugs. For Congoleum Rugs. Congoleum-Nairn Inc. 12,523; May 6.
Tricolator Gives Drip Coffee Maximum Flavor. For Tricolators (Percolators). Tricolator Company. 12,527; May 6.
Your Search (ad form 102). For Coffee. Hills Bros. 12,524; May 6.

ALPHABETICAL LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 6TH DAY OF MAY, 1930

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

A C Spark Plug Company. (See Champion, Albert, assignor.)
A C Spark Plug Company. (See Kamrath, Herbert B., assignor.)
Aalborg, Christian, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Circuit-breaker-operating mechanism. 1,756,930; May 6.
Adams, James L., jr., assignor of nine-tenths to Graver Corporation, East Chicago, Ind. Metal-spinning machine. 1,757,824; May 6.
Addressograph Company. (See Schaefer, George W., assignor.)
Agar, John C., assignor to Swift and Company, Chicago, Ill. Carcass-chilling support. 1,757,070; May 6.
Ainsworth Manufacturing Corporation. (See Potter, Albert T., assignor.)
Aktiebolaget Bästa. (See Heijkenskjöld, Gustaf O. W., assignor.)
Albach, Frank, assignor to Fred Medart Manufacturing Company, St. Louis, Mo. Straddle stand or support. 1,757,825; May 6.
Albertson & Company. (See Albertson, F. O., and Olsen, assignors.)
Albertson, Frans O., and G. Olsen, assignors to Albertson & Company, Sioux City, Iowa. Polishing device. 1,757,228; May 6.
Alcorn, William B., Detroit, Mich. Making bricks. 1,757,229; May 6.
Alden Manufacturing Company, The. (See Alden, Milton, assignor.)
Alden, Milton, Springfield, assignor to The Alden Manufacturing Company, Brockton, Mass. Electromagnetic pick-up. 1,756,966; May 6.
Alemite Corporation. (See Davis, Ernest W., assignor.)
Alexander, Harry H., Westfield, N. J. Metallurgy of metals. 1,756,967; May 6.
Alland, Maurice, Atlantic City, N. J. Mucilage dispenser for bottle tops. 1,756,935; May 6.
Allen, Clyde, assignor to C. B. Erickson Company, Inc., Des Moines, Iowa. Multicolor-printing press. 1,757,697; May 6.
Allen, Frank B., Lower Marion Township, Montgomery County, assignor, by mesne assignments, to The Allen-Sherman-Hoff Company, Philadelphia, Pa. Side-wall seal. 1,757,698; May 6.
Allen, Lavont C. (See Cowley, J. T., and Allen.)
Allen-Sherman-Hoff Company, The. (See Allen, Frank B., assignor.)
Alstrup, Carl, and V. Jensen, Copenhagen, Denmark. Color screen. 1,757,852; May 6.
Aluminum Plant & Vessel Company, Limited, The. (See Seligman, Richard, assignor.)
American Bank Note Company. (See Marquardt, Frank C., assignor.)
American Brake Materials Corporation. (See Thompson, James S., assignor.)
American Can Company. (See Hothersall, John M., assignor.)
American Can Company. (See Nicholls, Henry M., assignor.)
American Chain Company. (See Conner, Edward A., assignor.)
American Dairy Supply Company. (See Norwood, Harry G., assignor.)
American Floor Surfacing Machine Company, The. (See Myers, Harry L., assignor.)
American Flyer Mfg. Co. (See Mize, Fred, assignor.)
American Manganese Steel Company. (See Mullally, Walter J., assignor.)
American Metal Molding Co. (See Johnson, Gustave A., assignor.)
American Pine Products Corpn. (See Schaffer, John C., assignor.)
American Radiator Company. (See Maier, George M., assignor.)
American Telephone and Telegraph Company. (See Dingman, J. E., and Engelbert, assignors.)
American Telephone and Telegraph Company. (See Espenschied, Lloyd, assignor.)
American Telephone and Telegraph Company. (See Hotopp, Alfred H., assignor.)
American Telephone and Telegraph Company. (See Rhodes, William A., assignor.)
American Telephone and Telegraph Company. (See Singer, Fred J., assignor.)
American Valve and Meter Company, The. (See Umholtz, R. B., and Birmingham, assignors.)
American Woolen Company. (See Garth, H., Longbottom, Burns, and Just, assignors.)
Anderson-Barngrover Mfg. Co. (See Thompson, Albert R., assignor.)
Anderson Co., The. (See Smulski, Theodore J., assignor.)
Anderson, Sidney E., Brooklyn, assignor to Western Electric Company, Incorporated, New York, N. Y. Loop antenna. 1,756,931; May 6.
Anderson, William T., jr., and L. F. Bird, assignors to Hanovia Chemical and Manufacturing Company, Newark, N. J. Forming copper copper-oxide rectifier plates. 1,757,284; May 6.
Anglo Display Fixture Co. (See Brownstein, Jacob.)
Animated Book Match Corporation. (See Goldberg, Maurice M., assignor.)
Anschicks, Rudolph J., assignor to Protectoseal Company of America, Chicago, Ill. Venting device. 1,757,285; May 6.
Apex Products Corporation, The. (See Keim, Melville, assignor.)
Apple, Vincent G., Dayton, Ohio. Power washing machine. 1,757,106; May 6.
Archea, Walter D. (See Binns, G. W., and Archea.)
Arico, Joseph, assignor of one-half to N. Maida and S. Sciaulino, New York, N. Y. Brush for barbers. 1,757,650; May 6.
Armstrong, Percy A. E., Loudonville, assignor to Ludlum Steel Company, Watervliet, N. Y. Making reenforced noncorrosive steel. 1,757,790; May 6.
Arrow-Hart & Hegeman Electric Company. (See Guett, Monroe, assignor.)
Arvastsson, Otto, et al. (See Ottosson, Ernst J., assignor.)
Asch, Andrew J., New York, N. Y. Electric furnace. 1,757,895; May 6.
Askania-Werke Aktiengesellschaft vormals Centralwerkstatt Dessau und Carl Bamberg-Friedenau. (See Klopfer, Carl A., assignor.)
Associated Telephone & Telegraph Company. (See Sharpe, Harry D., assignor.)
Astrom, Carl P., East Orange, N. J., assignor to M. H. Treadwell Company, Inc., New York, N. Y. Hot-metal car. 1,757,000; May 6.
Atlantic Refining Company, The. (See Ehlers, Carl H., assignor.)
Auberschek, Joseph, Milwaukee, Wis. Filter. 1,757,554; May 6.
Automatic Electric Inc. (See Ostline, John E., assignor.)
Auto Prime Pump Company. (See Ferguson, Gale L., assignor.)
Auto Prime Pump Company. (See Wood, Clarence G., assignor.)
Axelson Machine Company. (See Platenberg, Herman W., assignor.)
Bacher, Rollin L., Cleveland Heights, assignor to United States Air Compressor Company, Cleveland, Ohio. Motor base. 1,756,932; May 6.
Bachofen, Theodor J., Westbrook, Me. Process and apparatus for making double pile fabrics. 1,757,555; May 6.
Baddiley, James, assignor to British Dyestuffs Corporation Limited, Manchester, England. Dyeing of regenerated cellulose material. 1,757,158; May 6.
Baddiley, James, assignor to British Dyestuffs Corporation Limited, Blackley, Manchester, England. Relating to manufacture of new secondary disazo dyes from 1:8-aminonaphthol sulphonic acid. 1,757,500; May 6.
Baddiley, James, assignor to British Dyestuffs Corporation Limited, Blackley, Manchester, England. Application of secondary disazo dyes. 1,757,501; May. 6.
Baddiley, James, assignor to British Dyestuffs Corporation Limited, Blackley, Manchester, England. Dyeing. 1,757,502; May 6.
Baddiley, James, assignor to British Dyestuffs Corporation Limited, Blackley, Manchester, England. Application of azo dyes. 1,757,503; May 6.
Baddiley, James, Blackley, Manchester, assignor to British Dyestuffs Corporation Limited, Manchester, England. Dyeing. 1,757,505; May 6.
Baddiley, James, assignor to British Dyestuffs Corporation Limited, Blackley, Manchester, England. Manufacture of new secondary disazo dyes and their application. 1,757,506; May 6.
Baddiley, James, P. Chorley, and R. Brightman, assignors to British Dyestuffs Corporation Limited, Manchester, England. Manufacture of new azo dyes. 1,757,496; May 6.
Baddiley, James, P. Chorley, and R. Brightman, assignors to British Dyestuffs Corporation Limited, Manchester, England. Dyeing with azo dyes. 1,757,497; May 6.
Baddiley, James, P. Chorley, and R. Brightman, Blackley, Manchester, assignors to British Dyestuffs Corporation Limited, Manchester, England. Dyeing with azo dyes. 1,757,498; May 6.

Baddiley, James, P. Chorley, and R. Brightman, assignors to British Dyestuffs Corporation Limited, Blackley, Manchester, England. New secondary disazo dyes. 1,757,409; May 6.

Baddiley, James, P. Chorley, and R. Brightman, assignors to British Dyestuffs Corporation Limited, Blackley, Manchester, England. Dyeing regenerated cellulose silk. 1,757,504; May 6.

Badger Manufacturing Corporation. (See Starck, William A., assignor.)

Bagnall, Edwin, Kenosha, Wis. Vehicle spring. 1,757,405; May 6.

Bagnall, Edwin, Kenosha, Wis. Reflex spring. 1,757,406; May 6.

Baird, John L., assignor to Television Limited, London, England. Facsimile telegraphy. 1,757,352; May 6.

Baker, Bert F. (See Knox, H. A., and Baker.)

Baker Ice Machine Co., Inc. (See Hoffman, John F., assignor.)

Baker, John H. E. (See Wright, E. P. G., Baker, and Cameron.)

Baker Perkins Company. (See Engels, Eugene O., assignor.)

Baker Perkins Company Incorporated. (See Harber, L. S., and Pointon, assignors.)

Baker-Rauling Company, The. (See Stoner, Frank, assignor.)

Baldwin, Wilbur M., administrator. (See Parsons, Ernest P.)

Baltzley, Louis E., Glen Ridge, N. J. Sound reproducer. 1,757,107; May 6.

Balzano, Oresto. (See Eddy, N., Carmichael, Thurber, and Balzano.)

Bamford, Walter R., Detroit, and H. W. Hamilton, deceased, Detroit, Mich., by C. B. Camp, Oak Park, Ill., trustee and assignee, said Bamford and said Hamilton assignors, by mesne assignments, to C. B. Camp, Oak Park, Ill., trustee. Vacuum system for internal-combustion engines. Re17,657; May 6.

Bannister, William J., assignor to Commercial Solvents Corporation, Terre Haute, Ind. Purification of gaseous mixtures. 1,757,826; May 6.

Banton, Madison W., Chicago, Ill., assignor to General Chemical Company, New York, N. Y. Rabble for Mannheim furnaces. 1,757,286; May 6.

Barber-Greene Company. (See Barber, H. H., and Smith, assignors.)

Barber, Harry H., and P. A. Smith, assignor to Barber-Greene Company, Aurora, Ill. Flight conveyer. 1,757,608; May 6.

Bardsley, Samuel B., assignor to Woodward-Wanger Company, Philadelphia, Pa. Float-valve-operating mechanism for flush tanks. 1,757,159; May 6.

Barker, George A., Rochester, N. Y. Piston. 1,757,230; May 6.

Barker, Maurice E., U. S. Army, Cambridge, Mass., assignor of one-fifth to H. H. Semmes, Washington, D. C. Alloy. 1,757,507; May 6.

Barker, Maurice E., U. S. Army, Cambridge, Mass., assignor of one-fifth to H. H. Semmes, Washington, D. C. Alloy. 1,757,508; May 6.

Barnard, Maxwell K., Seminole, assignor to Gypsy Oil Company, Tulsa, Okla. Safety attachment for internal-combustion engines. 1,757,353; May 6.

Baron, Edna, Chicago, Ill. Automobile window screen. 1,757,896; May 6.

Barre, Herbert A. (See Sorensen, R. W., and Barre.)

Barrett Company, The. (See Yeager, F. W., and Schuls, assignors.)

Bateholts, Clinton, assignor to Specialty Insulation Manufacturing Company, Inc., Hoosick Falls, N. Y. Plug socket for electrical connections. 1,756,933; May 6.

Bates, Arthur, and F. B. Keall, Leicester, England, assignors to United Shoe Machinery Corporation, Paterson, N. J. Machine and method for flap splitting and heel-seat tonguing. 1,757,160; May 6.

Bath, John, Worcester, Mass. Grinding machine. 1,757,161; May 6.

Battey, Sumter B., New York, N. Y. Pocket lighter and the like. 1,757,231; May 6.

Bauer, Gustav, R. Wilde, Hamburg, and H. Kluge, Hamburg-Gr. Borstel, Germany. Arrangement for filling and maintaining filled hydraulic clutches or gears. 1,757,827; May 6.

Bayerische Eggenfabrik Akt.-Ges. (See Jensen, Jens, assignor.)

Bay State Fishing Company. (See Gallison, Ernest A., assignor.)

Beacham, Thomas E. (See Hele-Shaw, H. S., and Beacham.)

Beardsley, Charles E., and E. P. Wallace, assignors to The Beardsley & Wolcott Manufacturing Company, Waterbury, Conn. Fruit-juice extractor. 1,757,609; May 6.

Beardsley & Wolcott Manufacturing Company, The. (See Beardsley, C. E., and Wallace, assignors.)

Beaver Machine & Tool Co. (See Slade, Harold E., assignor.)

Bechert, Fred J., Stamford, assignor to The Fafnir Bearing Company, New Britain, Conn. Spring-end connection. 1,757,699; May 6.

Bechert, Fred J., Stamford, assignor to The Fafnir Bearing Company, New Britain, Conn. Spring-end connection. 1,757,700; May 6.

Beck, Rudolph H. (See Price, W. F., and Beck.)

Becker, Joseph, assignor to The Koppers Company, Pittsburgh, Pa. Gas producer. 1,757,232; May 6.

Beckert, Reinhard W., Nesselwang, Allgau, Germany. Punching machine. 1,757,828; May 6.

Beckman, Herman C., Chicago, Ill., assignor to The De Laval Separator Company, New York, N. Y. Apparatus for cleaning teat cups. 1,757,035; May 6.

Beekley, John S., Charleston, W. Va., assignor to Du Pont Ammonia Corporation, Wilmington, Del. Producing hydrogen. 1,756,934; May 6.

Beeman, Leon J., Lancaster, N. Y. Flag for rural mail boxes. 1,571,162; May 6.

Behrman, Marcus B., assignor to The Lox Seal Corporation, Brooklyn, N. Y. Pile wire. 1,757,509; May 6.

Beidler, George C., Rochester, N. Y. Photographic apparatus. 1,757,001; May 6.

Belanger, Victor E. A., Montreal, Quebec, Canada. Internal-combustion engine. 1,756,968; May 6.

Bell, John E., deceased; L. R. Bell, executrix, Brooklyn, assignor to Sinclair Refining Company, New York, N. Y. Apparatus for condensing hydrocarbon vapors. 1,757,108; May 6.

Bell, Lola R., executrix. (See Bell, John E.)

Bell Telephone Laboratories, Incorporated. (See Curtis, Austen M., assignor.)

Bell Telephone Laboratories, Incorporated. (See Elmen, Gustaf W., assignor.)

Bell Telephone Laboratories, Incorporated. (See Everett, Samuel H., assignor.)

Bell Telephone Laboratories, Incorporated. (See Harrison, Henry C., assignor.)

Bell Telephone Laboratories, Incorporated. (See Marrison, Warren A., assignor.)

Bell Telephone Laboratories, Incorporated. (See Melick, John M., assignor.)

Bell Telephone Laboratories, Incorporated. (See Moore, Charles R., assignor.)

Bell Telephone Laboratories, Incorporated. (See Pritchard, William T., assignor.)

Bellhouse, Robert L., Manchester, assignor to The Fine Cotton Spinners & Doublers Association Limited, Lancaster, England. Slubbing, roving, and like frame for spinning or twisting cotton and other fibers. 1,757,407; May 6.

Benbinisti, Albert, assignor to N. Gershon, New York, N. Y. Ice-cream-cone-baking machine. 1,757,556; May 6.

Bendix Brake Company. (See Bendix, Vincent, assignor.)

Bendix Brake Company. (See Dodge, Adiel Y., assignor.)

Bendix Brake Company. (See Dodge, A. Y., and Sanford, assignors.)

Bendix Brake Company. (See Hunt, George H., assignor.)

Bendix Brake Company. (See LaBrie, Ludger E., assignor.)

Bendix Brake Company. (See McConkey, Montgomery W., assignor.)

Bendix Brake Company. (See Sanford, Roy S., assignor.)

Bendix Brake Company. (See Sanford, Roy S., assignor.) (See Sanford, R. S., and Clark, assignors.)

Bendix Brake Company. (See Van Buskirk, Robert N., assignor.)

Bendix, Vincent, assignor to Bendix Brake Company, Chicago, Ill. Brake shoe. 1,756,936; May 6.

Bendix, Vincent, assignor to Bendix Brake Company, Chicago, Ill. Fluid-operated brake. 1,757,071; May 6.

Benedict, T. N., Mfg. Co. (See Saunders, Albert F., assignor.)

Benioff, Hugo, Pasadena, Calif., assignor to Carnegie Institution of Washington, Washington, D. C. Polyphase oscillator. 1,757,354; May 6.

Benjamin, Victor C., and P. W. Prutzman, Los Angeles, assignors to Contact Filtration Company, San Francisco, Calif. Multidisk suction filter. 1,757,355; May 6.

Bergdal, Eyvind, Seattle, Wash. Sawyer's hook. 1,757,610; May 6.

Bergfeld, Karl, Berlin, Germany. Coal-carbonizing apparatus for the extraction of bituminous materials. 1,756,969; May 6.

Bernholtz, Kenneth A., Sylvania, Ohio. Lamp base. Des. 81,081; May 6.

Berthold, Lee F., and W. Louden, assignors to The Louden Machinery Company, Fairfield, Iowa. Elevated trackway. 1,757,651; May 6.

Bertleff, Viktor, Zilina, Czechoslovakia. Pickling of metals. 1,757,829; May 6.

Bertram, Jacob P., and I. Sunstrom, Rochester, assignors to Shur-On Standard Optical Company, Inc., Geneva, N. Y. Eyeglass guard. 1,757,036; May 6.

Bertrand, Frederic E., Lynn, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Heel-attaching machine. 1,757,163; May 6.

Bethke, Leo, assignor to Miller Manufacturing Company, Bainbridge, Ga. Metal belt conveyer. 1,757,652; May 6.

Betsler, Paul, Jackson, N. Y. Interlocking-unit construction. 1,757,763; May 6.

Biermann, Gottfried, Berlin-Charlottenburg, and C. Niemann, Berlin, assignors to Siemens & Halske, Aktiengesellschaft, Siemansstadt, near Berlin, Germany. X-ray device. 1,757,037; May 6.

Bildstein, Alfred, Elisabeth, N. J. Perpetual pad. 1,757,287; May 6.

Binney, Eric A., San Diego, Calif. Current-collecting mechanism. 1,757,611; May 6.

Binns, George W., Cincinnati, and W. D. Archea, Norwood, assignors, by mesne assignments, to Cincinnati Grinders Incorporated, Cincinnati, Ohio. Centerless grinding machinery. 1,757,612; May 6.

Bird, Lester F. (See Anderson, W. T., Jr., and Bird.)

Birmingham, Raymond A. (See Umholtz, R. B., and Birmingham.)

Blaisdell Pencil Company. (See O'Sullivan, Patrick J., assignor.)

Blake, Eli J., Buffalo, and C. I. Lusink, Rochester, assignors, by mesne assignments, to Simplex Equipment Company, Inc., New York, N. Y. Belt-tensioning device. 1,757,164; May 6.

Blake, Frank R. (See Jenkins, Howard O., assignor.)

Bleecker, Warren F., Boulder, Colo. System for shooting wells by radio. 1,757,288; May 6.

Blunt, James G., Schenectady, N. Y. Locomotive trailing truck. 1,757,701; May 6.

Bobroff, Bornett L., Racine, Wis. Vehicle lamp. Des. 81,082; May 6.

Boegehold, Alfred L., and C. R. Short, assignors to General Motors Research Corporation, Detroit, Mich. Friction material. 1,757,408; May 6.

Bol, Cornelis, Eindhoven, Netherlands, assignor, by mesne assignments, to Radio Corporation of America, New York N. Y. Discharge tube. 1,757,233; May 6.

Boland, Charles R., Baltimore, Md. Milk-bottle-cap remover and reinserter. 1,757,510; May 6.

Booth, William N., assignor to Kelsey-Hayes Wheel Corporation, Detroit, Mich. Work chuck. 1,756,970; May 6.

Borgfeldt, Geo., & Co. (See Ehmer, Johann, M., assignor.)

Bosch Aktiengesellschaft. (See Schmid, Anton, assignor.)

Boushear, Henry, Fort William, Ontario, Canada. Portable turnout. 1,757,165; May 6.

Bowman, Abram B., San Diego, Calif. Dish and utensil washing machine. 1,757,356; May 6.

Boyd, Charles J., Amarillo, Tex. Aeroplane. 1,757,109; May 6.

Boyd, Frederic R. C., Boston, Mass., assignor to The De Laval Separator Company, New York, N. Y. Oil-purifying means for turbine, etc. 1,757,289; May 6.

Boyer, Frederick G. L., assignor to Dayton Scale Company, Dayton, Ohio. Electrical controlling device. 1,757,072; May 6.

Boyle, Charles H., New Haven, Conn. Culinary knife. 1,757,073; May 6.

Brady, Edward J., Philadelphia, Pa. Apparatus for and method of obtaining power from ocean waves. 1,757,166; May 6.

Brandt Automatic Cashier Co. (See Brandt, Edward J., assignor.)

Brandt, Edward J., assignor to Brandt Automatic Cashier Co., Watertown, Wis. Coin tray. 1,757,613; May 6.

Brewer, Roy C., Blackfalds, Alberta Canada. Cultivator reel. 1,757,511; May 6.

Brewton, Joseph L., Ruston, La. Harrow. 1,757,512; May 6.

Breyer, Robert, Milwaukee, Wis. Stocking-ankle-machine attachment. 1,757,167; May 6.

Bricker, Carl H., Des Moines, Iowa. Liquid-dispensing comb. 1,757,290; May 6.

Briede, Charles B., and H. L. Kutter, Hamilton, Ohio. Paper-making machine. 1,757,291; May 6.

Brightman, Rainald. (See Baddiley, J., Chorley, and Brightman.)

British Dyestuffs Corporation Limited. (See Baddiley, James, assignor.)

British Dyestuffs Corporation Limited. (See Baddiley, J., Chorley, and Brightman, assignors.)

Brittain, Harold A., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Humidity-control apparatus. 1,757,931; May 6.

Brown, Bruce K., assignor to Commercial Solvents Corporation, Terra Haute, Ind. Production of ketones. 1,757,830; May 6.

Brown, Carl D., assignor to Draper Corporation, Hopedale, Mass. Warper. 1,757,409; May 6.

Brown, Chester B., Morrill, Nebr. Harvester. 1,757,897; May 6.

Brown, Gra C., and G. F. McNulty, assignors to The Reynolds Machine Company, Massillon, Ohio. Screw-driving machine. 1,757,614; May 6.

Brown, John L., Verona, Pa., assignor to Westinghouse Electric & Manufacturing Company. Plunger overflow for sealed sleeve bearings. 1,757,615; May 6.

Brown-Lipe Gear Company. (See Eaton, Ernest E., assignor.)

Brown, Robert L., assignor to Harnischfeger Corporation, Milwaukee, Wis. Trenching machine. 1,756,971; May 6.

Brown, Roy H., Chester, Ill. Toy. 1,757,002; May 6.

Brownstein, Jacob, Brooklyn, assignor to S. Messer, doing business as Anglo Display Fixture Co., New York, N. Y. Ensemble display stand. Des. 81,083; May 6.

Brownstein, Jacob, Brooklyn, assignor to S. Messer, doing business as Anglo Display Fixture Co., New York, N. Y. Ensemble display stand. Des. 81,084; May 6.

Brunell, Fred E., Plattsburg, N. Y. Collapsible basket. 1,757,168; May 6.

Brunswick-Balke-Collender Company, The. (See Nystrom, Martin, assignor.)

Bryant Electric Company, The. (See Thomas, George B., assignor.)

Bunce, John P., Greenford, England. Hopper, drier, and roaster. 1,757,616; May 6.

Burch, Donald D., near Earlsboro, Okla. Deep-well pump. 1,757,791; May 6.

Burda, John L. (See Palmer, R. C., Burda, and Oliver.)

Burke, Elmer H. (See Ryan, G. F., and Burke.)

Burke, Robert J. (See Ferguson, A. W., and Burke.)

Burner, William L., Koppel, assignor, by mesne assignments, to Pressed Steel Car Company, Pittsburgh, Pa. Dump car. 1,757,038; May 6.

Burns, Frank. (See Garth, H., Longbottom, Burns, and Just.)

Burns, Walter W. (See Mott, George E., assignor.)

Burroughs Adding Machine Company. (See Muller, Robert L., assignor.)

Burrows, Eastman A., assignor to T. D. Huff, Chicago, Ill. Display apparatus. 1,757,764; May 6.

Bushman, Frank, and R. McFarlane, Brandon, Manitoba, Canada. Gas burner and ventilator. 1,757,898; May 6.

Bushnell, Charles S., assignor to General Railway Signal Company, Rochester, N. Y. Train control. 1,757,410; May 6.

Butler, Charles R., Indianapolis, Ind. Piston. 1,757,169; May 6.

Caldwell, Frank W., Dayton, Ohio. Cooling fan. 1,757,292; May 6.

California Institute of Technology et al. (See Sorensen, R. W., and Barre, assignors.)

Callier, Frank J., San Antonio, Tex. Tailpiece for stringed musical instruments. 1,757,170; May 6.

Calvano, William, New York, N. Y. Stamp magazine. 1,757,560; May 6.

Cambay, Charles A., Paris, France. Automatic coin-controlled telephone apparatus. 1,757,003; May 6.

Cameron, Alan H. (See Wright, E. P. G., Baker, and Cameron.)

Camp, Curtis B. (See Bamford, W. R., and Hamilton, assignors.)

Carbone, Natale J., jr., Long Branch, N. J. Paper hair duster. 1,757,858; May 6.

Card, Earl J., and V. A. Gronberg, assignors to Jamestown Metal Equipment Co., Inc., Jamestown, N. Y. Drawer. 1,757,293; May 6.

Carlin Comforts, Inc. (See May, Janet, assignor.)

Carlson, Clara. (See Wikman, E. G., and Carlson.)

Carlson, Nils G., South Bend, Ind. Movable lamp support. 1,757,617; May 6.

Carlstedt, Fredrik. (See Engberg, A. O., and Carlstedt.)

Carmichael, Andrew J. (See Eddy, N., Carmichael, Thurber, and Balzano.)

Carmichael, Andrew J., assignor to The Greist Manufacturing Company, New Haven, Conn. Lamp-shade holder. 1,756,937; May 6.

Carnegie Institution of Washington. (See Benioff, Hugo, assignor.)

Carson, William H., Norman, Okla. Mixing, heating, and distributing unit for confections. 1,757,234; May 6.

Carter, Clarence W., Minneapolis, Minn., assignor, by mesne assignments, to Hart-Carter Company, Peoria, Ill. Liquid-flow regulator. 1,757,171; May 6.

Caruso, Romeo O., Reading, Pa. Hair-waving device. 1,757,557; May 6.

Cary, Perry G., Blacks Ferry, Ky. Wagon. 1,757,899; May 6.

Case, Arthur F., assignor to The Wellman Engineering Company, Cleveland, Ohio. Car dumper. 1,757,932; May 6.

Castagne, Charles H., Chicago, Ill. Parachute. 1,757,854; May 6.

Cazel, Cassius E., Covington, Ky., and C. H. Longman, Norwood, Ohio. Aerial. 1,757,172; May 6.

Celanese Corporation of America. (See Dreyfus, C., and Platt, assignors.)

Celanese Corporation of America. (See Ellis, George H., assignor.)

Celluloid Corporation. (See Frankl, Paul T., assignor.)

Central Mine Equipment Company. (See Ormsby, Erle, assignor.)

Chaffee, Edward F., assignor to The O. M. Edwards Company, Inc., Syracuse, N. Y. Window-sash holder. 1,757,513; May 6.

Challenge Company. (See Lund, John A., assignor.)

Champion, Albert, assignor to A C Spark Plug Company, Flint, Mich. Speedometer case. 1,757,411; May 6.

Chapin, William H., Atlantic City, N. J. Massaging apparatus. 1,757,004; May 6.

Chapman, Ralph W., assignor to T. M. Chapman's Sons Co., Oldtown, Me. Electrical therapeutic apparatus. 1,757,110; May 6.

Chapman's, T. M., Sons Co. (See Chapman, Ralph W., assignor.)

Chatillon, George E., New York, N. Y., and R. B. Wasson, Cranford, N. J., assignors to John Chatillon & Sons, New York, N. Y. Scale dial. Des. 81,085; May 6.

Chatillon, John & Sons. (See Chatillon, G. E., and Wasson, assignors.)

Cheslock, Frank J., and C. A. Yares, St. Paul, Minn. Ash-tray holder. 1,757,792; May 6.

Chicago, Burlington & Quincy Railroad Company. (See Walker, Paul P., assignor.)

Chicago Pneumatic Tool Company. (See Fey, Charles, assignor.)

Chicago Pneumatic Tool Company. (See Stevens, Edward W., assignor.)

Chicago Railway Signal & Supply Company. (See McCarthy, Daniel J., assignor.)
Chicago Telephone Supply Company. (See Diener, Riley M., assignor.)
Chiles, George S. (See Dreibuss, H. C., and Chiles.)
Chilowsky, Constantin, Paris, France. Making oil-gas mixtures. 1,757,855; May 6.
Chirol, Maurice, Paris, assignor to Compagnie Pour La Fabrication Des Compteurs Et Materiel D'Usines A. Gaz, Montrouge, Seine, France. Device for impressing signaling currents on electrical power-distributing lines. 1,757,900; May 6.
Chorley, Percy. (See Baddiley, J., Chorley, and Brightman.)
Christensen, Norman V., and W. M. Hanneman, assignors to Union Special Machine Company, Chicago, Ill. Filled-bag-sewing machine. 1,756,938; May 6.
Christenson, George, North Plainfield, N. J., assignor to Johns-Manville Corporation, New York, N. Y. Heavy-duty swab. 1,757,005; May 6.
Cincinnati Grinders Incorporated. (See Binns, G. W., and Archea, assignors.)
Clark, Carl L., assignor to The Youngstown Pressed Steel Company, Warren, Ohio. Storage box. 1,757,618; May 6.
Clark, Clarence W. (See Halldin, Gustaf, assignor.)
Clark, Farley G. (See Clark, F. G., and Smith, assignors.)
Clark, Farley G., and J. N. Smith, Toronto, Ontario, Canada, assignors, by mesne assignments, to F. G. Clark. Electrolytic apparatus. 1,757,235; May 6.
Clark, Otto B. (See Sanford, R. S., and Clark.)
Clark, Robert G., Brooklyn, N. Y. Feeder and sorter. 1,757,793; May 6.
Clements, Albert F., assignor to Waite Carpet Company, Oshkosh, Wis. Stranding machine. 1,757,653; May 6.
Cleveland, Ralph E. (See Nickl, E. F., and Cleveland.)
Cleveland Trust Company, The. (See McCoy, William C., assignor.)
Cloutier, Arthur N. (See Lawson, R. H., and Cloutier.)
Coady, Bartine J., Norwood, Pa. Laundry apparatus. 1,757,702; May 6.
Cobb, Charles A. (See Weaver, E. D., and Cobb.)
Coblens, George E. (See Morris, Albert W., assignor.)
Cochrane, Donald. (See Garbut, A. E., Cochrane, and Watkins.)
Coddington, Harry W., and H. F. Cunning, Roanoke, Va. Journal-box lubricator. 1,757,619; May 6.
Cole, Elwyn Z., Philadelphia, Pa. Nut lock. 1,757,024; May 6.
Cole, Norman W. (See Stoody, Winston F. and S. M., and Cole.)
Collins, John L., assignor to The Warner Corporation, Syracuse, N. Y. Lever. 1,757,412; May 6.
Collins, John L., assignor to The Warner Corporation, Syracuse, N. Y. Lever. 1,757,413; May 6.
Collins, John L., assignor to The Warner Corporation, Syracuse, N. Y. Power-transmission gearing. 1,757,414; May 6.
Columbus Handle & Tool Corporation. (See Webster, Lewis E., assignor.)
Commercial National Bank, executor. (See Craig, Edward, assignor.)
Commercial Shearing & Stamping Company, The. (See Proctor, R. V., and Schaab, assignors.)
Commercial Solvents Corporation. (See Bannister, William J., assignor.)
Commercial Solvents Corporation. (See Brown, Bruce K., assignor.)
Compagnie Pour La Fabrication Des Compteurs Et Material D'Usines A. Gaz. (See Chirol, Maurice, assignor.)
Comstock, Charles C., assignor of one-half to A. B. Matlock, Seattle, Wash. Hamburger mold. 1,757,447; May 6.
Comstock, William P. (See Souto, B. V., and Comstock.)
Concealed Door Check Company. (See Simmous, Herbert G., assignor.)
Cone, Charles N. (See Laucks, I. F., and Cone.)
Conner, Edward A., Stratford, Conn., assignor to American Chain Company, Inc. Wire strand. 1,756,972; May 6.
Conner, Edward A., Stratford, Conn., assignor to American Chain Company, Inc. Threading wire strands. 1,756,973; May 6.
Consolidated Machine Tool Corporation of America. (See Roberts, R. R., and Forward, assignors.)
Consolidation Coal Products Company. (See McIntire, Charles V., assignor.)
Constantin, Louis, Paris, assignor of one-half to P. Fortier-Beaulieu, Roanne, Loire, France. Control mechanism for air turbines. 1,757,039; May 6.
Contact Filtration Company. (See Benjamin, V. C., and Prutzman, assignors.)
Conway, Bert, assignor to General Motors Corporation, Detroit, Mich. Machine for cutting brake linings. 1,757,415; May 6.
Cook, Stanley S. (See Parsons, C. A., and Cook.)
Cook, William E., assignor to General Cable Corporation, New York, N. Y. Braiding machine. 1,757,794; May 6.
Cooling & Air Conditioning Corporation, The. (See Fleisher, Walter L., assignor.)
Cooper, Elisha H. (See Searles, R. R., and Cooper.)
Cooper, John P., Tofino, British Columbia, Canada. Food container. 1,757,448; May 6.
Cooper, Simon. (See Douglass, G. L., and Cooper.)
Copeland Products Incorporated. (See Mason, George W., assignor.)
Copeland, William A., Boston, Mass., assignor to International Shoe Company, St. Louis, Mo. Sole-waxing machine. 1,757,449; May 6.
Copeman Laboratories Company. (See Copeman, Lloyd G., assignor.)
Copeman, Lloyd G., assignor to Copeman Laboratories Company, Flint, Mich. Method of refrigerator manufacture. 1,757,450; May 6.
Coulombe, Joseph C., Kokomo, Ind. Oil pump for internal-combustion engines. 1,757,514; May 6.
Cowley, James T., assignor to The Lamson Company, Syracuse, N. Y. Laundering apparatus. 1,757,417; May 6.
Cowley, James T., and L. C. Allen, assignors to The Lamson Company, Syracuse, N. Y. Automatic conveyer. 1,757,416; May 6.
Cox, Joseph L., assignor of one-half to P. F. Cox, Chicago, Ill. Web printing press. 1,757,901; May 6.
Cox, Paul F. (See Cox, Joseph L., assignor.)
Craig, Edward, deceased, St. Joseph, Mich.; The Commercial National Bank, executor. Machinery and method for making receptacles. 1,757,294; May 6.
Cramer, Russell E. (See Cramer, Stanley S. and R. E.)
Cramer, Stanley S., Haddon Heights, and R. E. Cramer, Audubon, assignors to Radio Condenser Company, Camden, N. J. Electrical condenser. 1,757,357; May 6.
Crane, Newton, assignor to Craneway Diaphragm Company, Boston, Mass. Suppressing secondary vibrations in diaphragms and the like. 1,757,451; May 6.
Craneway Diaphragm Company. (See Crane, Newton, assignor.)
Crawford, David F. (See Lower, N. M., Crawford, and Turner.)
Crawford, Frank E., York, Nebr. Differential. 1,756,939; May 6.
Creamette Company, The. (See Quiggle, Arthur W., assignor.)
Cressey, Victor H., et al. (See Geffken, Claus, assignor.)
Crossley, Alfred, Washington, D. C., assignor, by mesne assignments, to Federal Telegraph Company. Protective device for balloons. 1,757,111; May 6.
Crowe, Orley J., assignor to Motor Products Corporation, Detroit, Mich. Molding or finish-strip assembly. 1,757,515; May 6.
Crown Cork & Seal Company. (See McManus, Charles E., assignor.)
Cunning, Harry F. (See Coddington, H. W., and Cunning.)
Cunningham, James M., assignor to The Tabulating Machine Company, Endicott, N. Y. Commutator. 1,757,112; May 6.
Curtis, Austen M., East Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Electrical contact device. 1,757,703; May 6.
Curtis, Austen M., East Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Contact-drive vibratory fork. 1,757,704; May 6.
Cutler-Hammer, Inc. (See Fleet, Arthur H., assignor.)
Cutler-Hammer, Inc. (See Seeger, Edwin W., assignor.)
Cynthia Mills. (See English, Analdo M., assignor.)
Dahlen, Charles A., Duluth, Minn. Tufting machine. 1,757,795; May 6.
Daloze, René, Uccle, Belgium. Manufacture of pure lead hydroxide starting from impure sulphate of lead. 1,757,902; May 6.
Daniels, Franklin M., Salina, Kans. Valve tool. 1,757,006; May 6.
Davidson, Frederick L., Halifax, Nova Scotia, Canada. Dishwashing machine. 1,757,831; May 6.
Davis, Arthur J., Comanche, Okla. Mulcher. 1,757,418; May 6.
Davis, Dred W., assignor of one-half to K. B. Nickerson, Siluria, Ala. Automatic stop motion for spinning frames. 1,757,295; May 6.
Davis, Ernest W., Oak Park, assignor to Alemite Corporation, Chicago, Ill. Lubricant compressor. 1,757,236; May 6.
Davis & Furber Machine Company. (See Owen, Henry A., assignor.)
Davis, Harry A., assignor to Draper Corporation, Hopedale, Mass. Warp stop mechanism. 1,757,940; May 6.
Davis, Joel D., Smithfield, Va. Peanut digger. 1,757,654; May 6.
Dayton Scale Company. (See Boyer, Frederick G. L., assignor.)
Decker, John, and A. B. Green, Middletown, Ohio, and V. E. Nunez, assignors to Nashua Gummer & Coated Paper Company, Nashua, N. H. Method of and apparatus for producing transparent waxed paper. 1,757,020; May 6.
De Forest Radio Company. (See Nickl, E. F., and Cleveland, assignors.)
Degener, Gustave O., Brooklyn, assignor to Royal Typewriter Company, Inc., New York, N. Y. Typewriting machine. 1,757,516; May 6.
De Laval Separator Company, The. (See Beckman, Herman C., assignor.)
De Laval Separator Company, The. (See Boyd, Frederic R. C., assignor.)

Delco-Remy Corporation. (See Dyer, John B., assignor.)
De Lisle, Harold L., Chicago, Ill. Binder for down-hanging sheets. 1,757,705; May 6.
Dellinger, Abraham M., Lancaster, Pa. Hammer-mill rotor. 1,757,452; May 6.
De Lorenzi, Otto, Maplewood, N. J., assignor to International Combustion Engineering Corporation, New York, N. Y. Economizer. 1,757,621; May 6.
De Marquez, Daniel E., Medellin, assignor to Robert Wesselhoeft, Barranquilla, Colombia, South America. Money package. 1,756,974; May 6.
Denham, Humphrey J., assignor to Henry Simon, Limited, Manchester, England. Machine for purifying cereal products or removing brainy material therefrom. 1,757,007; May 6.
Dennis, William J., Chicago, Ill. Screen-frame material. 1,757,706; May 6.
Desautels, Charles H., Springfield, assignor to The Fisk Rubber Company, Chicopee Falls, Mass. Tire-finishing machine. 1,757,113; May 6.
Det Norske, Aktieselskab for Electrokemisk Industrie of Norway. (See Westly, Jens, assignor.)
Detwiler, Forest V., Grand Rapids, Mich. Vapor burner. 1,757,296; May 6.
Deutsch, Leo, Beaver, Pa., assignor, by mesne assignments, to The Wayne Pump Company, Baltimore, Md. Sight-valve assembly. 1,757,237; May 6.
Dew, John R., South Jacksonville, Fla., and R. Guffey, Somerset, Ky. Fernery stand. Des. 81,086; May 6.
Diener, Riley M., assignor, by mesne assignments, to Chicago Telephone Supply Company, Elkhart, Ind. Automatic plug. 1,756,940; May 6.
Dietzgen, Eugene, Company. (See Langsner, Adolph, assignor.)
Dillow, Alma, Seattle, Wash. Cake and pie pan. 1,757,655; May 6.
Dillow, George F., Seattle, Wash. Cooking utensil. 1,757,656; May 6.
Dingman, James E., Brooklyn, and R. F. Engelbert, Woodhaven, N. Y., assignor to American Telephone and Telegraph Company. Combined cutter and pressure roller device. 1,757,173; May 6.
Dinsmoor, John L., New York, N. Y. Salt shaker. 1,757,297; May 6.
Dippman, Fred R. (See Moore, E. D., and Dippman.)
Doble, Ralph N., Bayside, N. Y. Coin holder. 1,757,008; May 6.
Dodge, Adiel Y., South Bend, Ind., assignor to Bendix Brake Company, Chicago, Ill. Brake. 1,756,975; May 6.
Dodge, Adiel Y., South Bend, Ind., assignor to Bendix Brake Company, Chicago, Ill. Brake-operating shaft and its mounting. 1,757,074; May 6.
Dodge, Adiel Y., and R. S. Sanford, assignors to Bendix Brake Company, South Bend, Ind. Brake. 1,757,558; May 6.
Doherty, Russell, Oak Park, Ill. Boiler construction. 1,757,358; May 6.
Donnelley, R. R., & Sons Co. (See Frazier, Philip A., assignor.)
Douglas, Homer C., Liberal, Kans. Vessel. 1,757,174; May 6.
Douglass, Gibson L., New York, and S. Cooper, Brooklyn, N. Y. Cargo-unloading apparatus. 1,757,453; May 6.
Doutt, Owen, Detroit, Mich., assignor, by mesne assignments, to General Spring Bumper Corporation. Grinding machine. 1,757,175; May 6.
Doutt, Owen, Chicago, Ill., assignor, by mesne assignments, to General Spring Bumper Corporation. Grinding machine. 1,757,559; May 6.
Dow Chemical Company, The. (See Strosacker, Charles J., assignor.)
Draper, Clare H., assignor to Draper Corporation, Hopedale, Mass. Automatically-threading loom shuttle. 1,757,941; May 6.
Draper Corporation. (See Brown, Carl D., assignor.)
Draper Corporation. (See Davis, Harry A., assignor.)
Draper Corporation. (See Draper, Clare H., assignor.)
Draper Corporation. (See Snow, Isaac, assignor.)
Dreffein, Henry A., Chicago, Ill. Heating furnace. 1,757,707; May 6.
Dreibuss, Harry C., and G. S. Chiles, assignors to Scullen Steel Company, St. Louis, Mo. Truck bolster. 1,757,765; May 6.
Dressel Railway Lamp & Signal Company. (See Eichner, Laurits C., assignor.)
Dreyfus, Camille, New York, N. Y., and H. Platt, Cumberland, Md., assignors to Celanese Corporation of America. Delustering fabric and product thereof. 1,756,941; May 6.
Drubba, Otto K. L., Hamburg, Germany. Air moistener and cleaner. 1,757,856; May 6.
Dubilier Condenser Corporation. (See Dubilier, William, assignor.)
Dubilier Condenser Corporation. (See Edenburg, Ludwig, assignor.)
Dubilier Condenser Corporation. (See Vawter, Charles E., assignor.)
Dubilier, William, New Rochelle, assignor to Dubilier Condenser Corporation, New York, N. Y. Electrical condenser. 1,757,657; May 6.
Dubilier, William, New Rochelle, assignor to Dubilier Condenser Corporation, New York, N. Y. Electric sadiron. 1,757,658; May 6.
Duisberg, Walter, Leverkusen, W. Hentrich and L. Zeh, Wiesdorf, near Cologne, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Monoazo dyestuffs produced from amino-benzyl--sulphonic acids. 1,757,419; May 6.
Dumond, Julien, St. Julien-Du-Sault, France. Coupling. 1,757,009; May 6.
Duncan, Robert D., jr., East Orange, N. J., assignor, by mesne assignments, to Federal Telegraph Company. Duplex high-frequency telephone system. 1,757,114; May 6.
Dunne, William H., Toronto, Ontario, Canada. Roller skate. 1,757,115; May 6.
Dunne, William H., Toronto, Ontario, Canada. Roller-skate wheel. 1,757,116; May 6.
Dunning, Fitzgerald, assignor to Hynson, Westcott, & Dunning, Inc., Baltimore, Md. Mercury derivative of diiodo resorcin sulphon-phthalein. 1,757,176; May 6.
Du Pont Ammonia Corporation. (See Beekley, John S., assignor.)
Du Pont, E. I., de Nemours & Company. (See Hahn, Frederick C., assignor.)
Du Pont, E. I., de Nemours & Company. (See Schwartz, George L., assignor.)
Dyckerhoff, Eduard. (See Schmidt, E., and Dyckerhoff.)
Dyer, Harry W., New York, N. Y. Water cooler. Des. 81,087; May 6.
Dyer, John B., Anderson, Ind., assignor to Delco-Remy Corporation, Dayton, Ohio. Engine-starting apparatus. 1,757,238; May 6.
Earhart, Albert C., Cleveland Heights, Ohio. Door check or stop. 1,757,075; May 6.
Earl, Otis A. (See Maxwell, William H., assignor.)
Earle, Francis. (See Spilsbury, Hugh G., assignor.)
Earon, Orville D., Montclair, N. J., assignor to The Hardright Company. Brush handle or the like. Des. 81,088; May 6.
Eastman Kodak Company. (See Ord, Percy R., assignor.)
Eastman Kodak Company. (See Seel, Paul C., assignor.)
Eastman Kodak Company. (See Tosier, George H., assignor.)
Eaton, Ernest E., assignor to Brown-Lipe Gear Company, Syracuse, N. Y. Vibrationless multiple-disk clutch. 1,757,517; May 6.
Eckerly, Edward W., assignor to Wm. Wrigley, Jr. Company, Chicago, Ill. Display stand for packaged confections. 1,757,076; May 6.
Eddy, Norman, A. J. Carmichael, H. F. Thurber, and O. Baizano, assignors to The Greist Manufacturing Company, New Haven, Conn. Portable lamp. 1,756,942; May 6.
Edenburg, Ludwig, Mount Vernon, assignor to Dubilier Condenser Corporation, New York, N. Y. Electrical indicating instrument. 1,757,659; May 6.
Edwards, James H., Passaic, N. J. Steel building-frame construction. 1,757,359; May 6.
Edwards, O. M., Company, The. (See Chaffee, Edward F., assignor.)
Ehlers, Carl H., Penfield, assignor to The Atlantic Refining Company, Philadelphia, Pa. Closure apparatus. 1,756,976; May 6.
Ehmer, Johann M., Beierfeld, Germany, assignor to Geo. Borgfeldt & Co., New York, N. Y. Casing for talking machines. 1,757,518; May 6.
Ehrenzweig, Gustav, New York, N. Y. Textile fabric. Des. 81,089; May 6.
Eichenberger, Erwin, Detroit, Mich. Information-display mechanism. 1,757,360; May 6.
Eichner, Laurits C., Bloomfield, assignor to Dressel Railway Lamp & Signal Company, Arlington, N. J. Switch and lamp support. 1,757,177; May 6.
Eisenhut, Otto, Heidelberg, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Valuable products from coal, tars, mineral oils, and the like. 1,757,454; May 6.
Eisenloh, Mathias, Cleveland, Ohio. Building construction. 1,757,077; May 6.
Electrolux Servel Corporation. (See Lenning, Alvar, assignor.)
Electrolux Servel Corporation. (See Lenning, A., and Knight, assignors.)
Elliott-Fisher Company, The. (See Walter, Edward C., assignor.)
Ellis-Foster Company. (See Weber, Harry M., assignor.)
Ellis, George H., Spondon, near Derby, England, assignor to Celanese Corporation of America. Treatment of materials made of or containing cellulose derivatives. 1,757,519; May 6.
Elmen, Gustaf W., Leonia, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Magnetic material. 1,757,178; May 6.
Elwood, Ward P. (See Streich, P., and Elwood.)
Elwood, Ward P., assignor to Union Machinery Company, Joliet, Ill. Loaf-inverting mechanism for proofers. 1,757,078; May 6.
Emmons, William W., Newark, N. J. Insulating joint. 1,757,561; May 6.
Empire Level Manufacturing Company. (See Zipman, Harry J., assignor.)
Emulsion Process Corporation, The. (See Halvorsen, A. L., and Travis, assignors.)
Emulsion Process Corporation, The. (See Travis, P. M., and Halvorsen, assignors.)

Engberg, Axel O., and F. Carlstedt, Stockholm, Sweden, assignors to Inventia Patent-Verwertungs-Gesellschaft, Schaffhausen, Switzerland. Cleaning and air-conditioning apparatus. 1,757,239; May 6.

Engberg, Axel O., and F. Carlstedt, Stockholm, Sweden, assignors to Inventia Patent-Verwertungs-Gesellschaft, Schaffhausen, Switzerland. Coupling for cleaners. 1,757,240; May 6.

Engelbert, Robert F. (See Dingman, J. E., and Engelbert.)

Engelcke, August, Morristown, S. Dak. Detachable rim for containers. 1,757,179; May 6.

Engels, Eugene O., assignor to Baker Perkins Company, Inc., Saginaw, Mich. Exhaust device for indirect-heated gas-fired ovens and the like. 1,757,361; May 6.

English, Analdo M., Brookline, assignor to Cynthia Mills, East Boston, Mass. Band feeder. 1,757,079; May 6.

Enlind, Kanute A., Jamaica, N. Y. Fluid drive for automobiles. 1,756,977; May 6.

Erickson, C. E., Company. (See Allen, Clyde, assignor.)

Erickson, Edward, deceased, by M. E. Erickson, executrix., Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Fluid-applying machine. 1,757,180; May 6.

Erickson, Mary E., executrix. (See Erickson, Edward.)

Espenschied, Lloyd, Kew Gardens, N. Y., assignor to American Telephone and Telegraph Company. Privacy system for telephone transmission. 1,757,181; May 6.

Evans Case Company. (See Lawrence, Cecil H., assignor.)

Everett, Samuel H., Teaneck, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Telephone-exchange system. 1,757,708; May 6.

Eversharp Lawnmower Company. (See Gratiot, Chester A., assignor.)

Everstam, Johan G., Sundsvall, Sweden. Lifting jack. 1,757,182; May 6.

Everstam, Johan G., Sundsvall, Sweden. Lifting jack. 1,757,183; May 6.

Fafnir Bearing Company, The. (See Bechert, Fred J., assignor.)

Fafnir Bearing Company, The. (See Searles, Raymond R., assignor.)

Fafnir Bearing Company, The. (See Searles, R. R., and Cooper, assignors.)

Fahrenwald, Frank A., Chicago Heights, Ill. Producing low-carbon alloys. 1,757,208; May 6.

Fair, Albert E. H., Belmont, assignor to A. D. Little, Incorporated, Cambridge, Mass. Sheet material and making. 1,757,010; May 6.

Faige, Robert N., assignor to General Motors Research Corporation, Detroit, Mich. Head lamp. 1,757,420; May 6.

Federal Telegraph Company. (See Crossley, Alfred, assignor.)

Federal Telegraph Company. (See Duncan, Robert D., jr., assignor.)

Federal Telegraph Company. (See Hough, Clinton W., assignor.)

Feldermann, Leroy G. W., Galena, Ill. Tractor control. 1,757,660; May 6.

Fenton, Paul E., Thomaston, assignor to Scovill Manufacturing Company, Waterbury, Conn. Resilient snap-fastener member. 1,757,421; May 6.

Ferguson, Andrew W., and R. J., Burke, assignors to Lincoln Scale Corporation, Latrobe, Pa. Indicator for scales. 1,757,766; May 6.

Ferguson, Gale L., assignor, by mesne assignments, to Auto Prime Pump Company, Cleveland, Ohio. Apparatus for compressing air. 1,757,299; May 6.

Ferguson, Gale L., assignor, by mesne assignments, to Auto Prime Pump Company, Cleveland, Ohio. Pumping apparatus. 1,757,300; May 6.

Ferguson, Helen J., Omaha, Nebr. Curtain holder. 1,757,301; May 6.

Ferguson and Lange Foundry Company. (See Pfender, Adolph, assignor.)

Ferrara, Edward, Mittineague, Mass. Air purifier for closed cars. 1,757,080; May 6.

Fey, Charles, Detroit, Mich., assignor to Chicago Pneumatic Tool Company, New York, N. Y. Cushion shoe for rammer and tamper butts. 1,757,562; May 6.

Fine Cotton Spinners & Doublers Association Limited, The. (See Bellhouse, Robert L., assignor.)

Finnegan, John J., Port Stanley, Ontario, Canada. Anti-skid device for motor vehicles. 1,757,362; May 6.

Firestone Steel Products Company, The. (See Swain, J. G., and Mitchell, assignors.)

Firestone Tire and Rubber Company, The. (See Martin, John I., assignor.)

Firestone Tire & Rubber Company, The. (See Pade, Max H., assignor.)

Firestone Tire & Rubber Company, The. (See Stevens, Horace D., assignor.)

Fischbach, John M., El Monte, Calif. Hydraulic socket. 1,757,363; May 6.

Fisher, Charles J. (See Jameson, J. L., and Fisher.)

Fisher, James, New Orleans, La. Roller mill used for manufacturing sugar. 1,757,903; May 6.

Fisk Rubber Company, The. (See Desautels, Charles H., assignor.)

Fisk Rubber Company, The. (See Maynard, Charles E., assignor.)

Fisk Rubber Company, The. (See Wikle, George F., assignor.)

Fitzgerald, John J., Everett, Mass. Necktie holder and stretcher. 1,757,622; May 6.

Flanigan, E. B., Incorporated. (See Flanigan, Edwin B., assignor.)

Flanigan, Edwin B., assignor to E. B. Flanigan, Incorporated, Wilkes-Barre, Pa. Vehicle brake. 1,757,011; May 6.

Fleet, Arthur H., Milwaukee, Wis., assignor, by mesne assignments, to Cutler-Hammer, Inc. Electric switch. 1757,709; May 6.

Fleisher, Walter L., assignor to The Cooling & Air Conditioning Corporation, New York, N. Y. Wet-bulb thermostat. 1,757,081; May 6.

Flexible Truck Corporation. (See Taylor, Howard D., assignor.)

Flintkote Company, The. (See Rahr, Chester E., assignor.)

Florang, Emil A., Burlington, Iowa. Portable refrigerator. 1,757,520; May 6.

Fondiller, William, Yonkers, assignor to Western Electric Company, Incorporated, New York N. Y. Electromagnetic circuits and apparatus. 1,757,710; May 6.

Foote, Edward B., assignor to Taylor Instrument Companies, Rochester, N. Y. Recording mechanism. 1,757,012; May 6.

Ford Motor Company. (See Wharam, John J., assignor.)

Forest City-Walworth Run Foundries Company, The. (See Hendricks, Roy G., assignor.)

Forline, Hamilton. (See Segar, Elzie C., assignor.)

Forse, Harry De, Anderson, Ind. Fabric anchorage. 1,757,241; May 6.

Fortier-Beaulieu, Paul. (See Constantin, Louis, assignor.)

Forward, Worthy J. F. (See Roberts, R. R., and Forward.)

Foxboro Company, The. (See Hall, Malcolm B., assignor.)

Frankenburger Walter, and C. Steigerwald, Ludwigshafen-on-the-Rhine, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Artificial compositions, especially those resembling rubber. 1,756,943; May 6.

Frankl, Paul T., New York, N. Y., assignor to Celluloid Corporation. Toilet-article holder or similar article. Des. 81,090; May 6.

Franklin, Arthur G., et al. (See Geffken, Claus, assignor.)

Franklin Railway Supply Company. (See Martin, F. W., and Peters, assignors.)

Franklin Simon & Company. (See Long, Dorothy, assignor.)

Franks, Lewis W., Port Neches, Tex. Closure hanger. 1,757,422; May 6.

Franzen, Hans, and M. Luther, Mannheim, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Bleaching and deodorizing oxidation products of high-molecular hydrocarbons. 1,757,455; May 6.

Fraser, James W., Cleveland, Ohio. Asphaltic concrete paving. 1,757,661; May 6.

Fraser, William W., New York, N. Y. Turbine locomotive. 1,757,242; May 6.

Frazier, Pearl G., Ankeny, Iowa. Engine and valve structure. 1,757,302; May 6.

Frazier, Philip A., Chicago, Ill., assignor to R. R. Donnelley & Sons Co. Book-trimming machine. 1,757,628; May 6.

Free, Chester A., Attica, Ind. Self-adjusting arch support. 1,757,904; May 6.

Frey, Ralph W., Mount Rainier, Md., assignor to the Government and the people of the United States of America. Tanning preparation and process. 1,757,040; May 6.

Freygang, Walter H., Weehawken, N. J., assignor to Walter Kidde & Company, Inc., New York, N. Y. Manual release for fire-extinguishing apparatus. 1,757,563; May 6.

Fried. Krupp Aktiengesellschaft. (See Schröter, K., and Wolff, assignors.)

Friedemann, Matthew M., New York, N. Y. Show case or the like. Des. 81,091; May 6.

Frieder, Alfred F., et al. (See Mead, George J., assignor.)

Frieder, Oscar E., et al. (See Mead, George J., assignor.)

Friendly, Herbert M., Portland, Oreg. Telephone system. 1,757,564; May 6.

Frigidaire Corporation. (See King, Jesse G., assignor.)

Frooks, Donald L., Lynbrook, N. Y. Time-controlled switch apparatus. 1,757,456; May 6.

Fuller, Charles W. (See Groeneveld, G. C., and Fuller.)

Furey, Frederick M., Los Angeles, Calif. Container holder. 1,757,184; May 6.

G. C. A. Manufacturing Company, The. (See Grinnell, Harold D., assignor.)

Gaess, Albert H., assignor to The E. J. Manville Machine Company, Waterbury, Conn. Punch transfer slide for multiple-stroke headers. 1,757,303; May 6.

Gall, George W., Ruxton, Md., and A. J. Kusel, Bridgeport, Conn., assignors to Kulair Corporation, Baltimore, Md. Evaporator element. 1,757,041; May 6.

Galbraith, Joseph B., Kaysville, Utah. Centering and aligning device. 1,757,457; May 6.

Gallison, Ernest A., Watertown, assignor, by mesne assignments, to Bay State Fishing Company, Boston, Mass. Fish-filleting machine. 1,757,013; May 6.

Gammeter, Harry C., Cleveland Heights, Ohio. Sign. 1,757,662; May 6.

Garbut, Albert E., Winnipeg; D. Cochrane, St. Boniface; and J. E. Watkins, Winnipeg, Manitoba, assignors to Winnipeg Brass Limited, Winnipeg, Canada. Street indicator for street cars. 1,757,458; May 6.

Garrett, George K., Bryn Mawr, assignor to National Umbrella Frame Company, Philadelphia, Pa. Nonentangling lock washer. 1,757,857; May 6.

Garth, Hollan, Andover; J. Longbottom and F. Burns, Lawrence; and W. C. Just, Methuen, assignors to American Woolen Company, Boston, Mass. Spinning machine. 1,757,796; May 6.

Gathmann, Emil, Baltimore, Md. Ingot mold and ingot. 1,757,663; May 6.

Gebhards, William H., Phelps City, Mo. Milk-bottle holder. 1,757,521; May 6.

Geffken, Claus, Burlington, Wash., assignor of twenty-four and one-half per cent to A. G. Franklin and twenty-four and one-half per cent to V. H. Cressey. Combination hoe and rake. 1,757,942; May 6.

General Aniline Works, Inc. (See Duisberg, W., Hentrich, and Zeh, assignors.)

General Aniline Works, Inc. (See Kalischer, G., and Zerweck, assignors.)

General Aniline Works, Inc. (See Thauss, Alfred, assignor.)

General Cable Corporation. (See Cook, William E., assignor.)

General Chemical Company. (See Banton, Madison W., assignor.)

General Motors Corporation. (See Conway, Bert, assignor.)

General Motors Corporation. (See Hebert, Fred C., assignor.)

General Motors Corporation. (See Jones, Joseph W., assignor.)

General Motors Corporation. (See Schwarze, Herman, assignor.)

General Motors Corporation. (See Stevens, H. C. M., and Hutchinson.)

General Motors Corporation. (See Taub, Alex, assignor.)

General Motors Corporation. (See Wilson, John F., assignor.)

General Motors Research Corporation. (See Boegehold, A. L., and Short, assignors.)

General Motors Research Corporation. (See Faige, Robert N., assignor.)

General Motors Research Corporation. (See Hallett, George E. A., assignor.)

General Railway Signal Company. (See Bushnell, Charles S., assignor.)

General Railway Signal Company. (See Howe, Winthrop K., assignor.)

General Spring Bumper Corporation. (See Doutt, Owen, assignor.)

General Steel Castings Corporation. (See Sheehan, William M., assignor.)

General Steel Castings Corporation. (See Travilla, James C., jr., assignor.)

Gerbold, Charles M., New York, N. Y. Smoke-washing apparatus. 1,757,522; May 6.

Gerrond, James C., Hugoton, Kans. Swing. 1,757,428; May 6.

Gershon, Nissin. (See Benbinisti, Albert, assignor.)

Gesellschaft für Drahtlose Telegraphie m. b. H. (See Michelssen, Fritz, assignor.)

Gesellschaft für Drahtlose Telegraphie m. b. H. (See Moser, Wilhelm, assignor.)

Gesellschaft für Drahtlose Telegraphie m. b. H. Hallesches. (See Leib, August, assignor.)

Gesellschaft für Drahtlose Telegraphie m. b. H. Hallesches. (See Osnos, Mendel, assignor.)

Gilbert, Neville W., and A. E. Jabet, Birmingham, England. Oscillating electric fan. 1,757,797; May 6.

Gilman, George H., Belmont, Mass. Pneumatic hammer. 1,757,767; May 6.

Glidden, Harvey L., Lexington, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Bin. 1,757,185; May 6.

Godwin, William S., Baltimore, Md. Paved or similar railway structure. 1,757,565; May 6.

Goebels, Paul, assignor to the firm G. Polysius, Dessau, Germany. Conveyer. 1,757,832; May 6.

Goerz, C. P., optische Anstalt Aktiengesellschaft, Akciova Spolecnost K. P. Goerz opticky ustav. (See Petschenig, Karl, assignor.)

Goetsch, Hermann. (See Thiery, F., and Goetsch.)

Goetz, Julius J., Shorewood, assignor to Western Metal Specialty Co., Milwaukee, Wis. Heater. 1,757,042; May 6.

Gohmann Bros. and Kahler Company. (See Gohmann, Charles L., assignor.)

Gohmann, Charles L., assignor to Gohmann Bros. and Kahler Company, New Albany, Ind. Joining metal sections together. 1,757,664; May 6.

Goldberg, Maurice M., assignor to Animated Book Match Corporation, New York, N. Y. Toy box wagon. 1,757,243; May 6.

Goldsmith, Alfred N., and L. Shapiro, New York, N. Y., assignors to Radio Corporation of America. Combined radio and phonograph cabinet. 1,757,804; May 6.

Goodspeed Machine Company. (See Witt, John J., assignor.)

Goodyear Tire & Rubber Company, The. (See Brittain, Harold A., assignor.)

Goodyear Tire & Rubber Company, The. (See Maas, Elov F., assignor.)

Goodyear Tire & Rubber Company, The. (See Rowland, Ben W., assignor.)

Goodyear Tire & Rubber Company, The. (See Sebrell, Lorin B., assignor.)

Goodyear Tire & Rubber Company, The. (See Teppema, Jan, assignor.)

Goodyear-Zeppelin Corporation. (See Klemperer, Wolfgang B., assignor.)

Gortner, Ross A., and W. F. Hoffman, St. Paul, assignors to The Northwest Paper Company, Cloquet, Minn. Purified fiber. 1,757,768; May 6.

Gorton, Thomas S., jr., Evanston, Ill. Label. 1,756,944; May 6.

Goss, John H., assignor to Scovill Manufacturing Company, Waterbury, Conn. Floating trim stud. 1,757,424; May 6.

Gough, Frederick W. (See Warsop, H. E., and Gough.)

Government and the People of the United States of America. (See Frey, Ralph W., assignor.)

Grab, Gustav A., assignor, by mesne assignments, to Willamette-Ersted Company, Portland, Oreg. Traversing hoist. 1,757,798; May 6.

Graham, Matthew P., Detroit, Mich., assignor to Thompson Products, Incorporated, Cleveland, Ohio. Rod coupling. 1,757,305; May 6.

Grange, Leo O., assignor to W. J. Jarratt, Chicago, Ill. Vulcanizer. 1,757,624; May 6.

Gratiot, Chester A., Portland, Oreg., assignor, by mesne assignments, Eversharp Lawnmower Company. Resiliently-mounted ledger blade for lawn mowers. 1,757,186; May 6.

Graver Corporation. (See Adams, James L., jr., assignor.)

Great Northern Paper Company. (See Whitcomb, William A., assignor.)

Green, Arthur B. (See Decker, J., Green, and Nunes.)

Green, Samuel G., Gray, Ga. Mount for guns. 1,757,244; May 6.

Gregorieff, Nicholas, Scotia, Calif. Control switch for direction signals. 1,757,014; May 6.

Gregory, James M., New York, N. Y. Automatic signal service. 1,757,571; May 6.

Greibach, Emil H., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Electrical measuring instrument. 1,757,625; May 6.

Greist Manufacturing Company, The. (See Carmichael, Andrew J., assignor.)

Greist Manufacturing Company, The. (See Eddy, N., Carmichael, Thurber, and Balsano, assignors.)

Griffin, Joseph F., Teaneck, N. J., and A. Williams, Flushing, N. Y., assignors to The Superheater Company, New York, N. Y. Exhaust-steam injector. 1,757,566; May 6.

Griffith, Charles R., South Manchester, Conn. Sedimentation tank. 1,757,187; May 6.

Grim, Louie E. (See Haynes, Ernest A., assignor.)

Grimm, Max F., San Antonio, Tex. Toy gas cannon. 1,757,523; May 6.

Grinnell, Harold D., assignor to The G. C. A. Manufacturing Company, Pittsfield, Mass. Attachment for lamp-bulb-replacing apparatus. 1,757,711; May 6.

Griscom-Russell Company. (See Pabodie, Robert J., assignor.)

Groeneveld, Govert C., and C. W. Fuller, Hanford, Calif. Weed cutter. 1,757,858; May 6.

Gronberg, Victor A. (See Card, E. J., and Gronberg.)

Grotnes, Carl C., Chicago, Ill. Metal-working machine. 1,757,626; May 6.

Guenther, Rudolph H., Chicago, Ill. Heating device. 1,757,905; May 6.

Guerini, Annibale A., New York, N. Y. Wall-plastering machine. 1,757,627; May 6.

Guett, Monroe, assignor, by mesne assignments, to The Arrow-Hart & Hegeman Electric Company, Hartford, Conn. Switch structure. 1,757,859; May 6.

Guffey, Roy. (See Dew, J. R., and Guffey.)

Guiss, John D., Seattle, Wash. Headlight positioning apparatus. 1,757,665; May 6.

Günther, Otto, Esslingen-on-the-Neckar, Germany, assignor to Albert T. Otto & Sons, New York, N. Y. Driving gear for locomotives. 1,756,978; May 6.

Gypsy Oil Company. (See Barnard, Maxwell K., assignor.)

Hadfield, Robert A., Westminster, England. Manufacture of hollow metal rods, bars, and the like. 1,757,524; May 6.

Haegler, Henri, Geneva, Switzerland. Filter. 1,757,834; May 6.

Haegler, Henry, Geneva, Switzerland. Air cleaner. 1,757,835; May 6.

Haegler, Henry W., Geneva, Switzerland. Carburetor. 1,757,833; May 6.

Hahn, Frederick C., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Colloided cellulose and indurated fiber. 1,757,755; May 6.

Haight, Harry V., Sherbrooke, Quebec, Canada, assignor to Ingersoll-Rand Company, Jersey City, N. J. Piston rod. 1,757,082; May 6.

Halbig, Frederick G., Chepachet, R. I. Windshield. 1,757,769; May 6.

Hall, Arthur, Oak Park, assignor to Yaxley Manufacturing Company, Chicago, Ill. Rheostat. 1,757,043; May 6.

Hale, Arthur B., Tampa, Fla. Spray device. 1,757,628; May 6.

Hall, John R., K. C. McLeod, and O. B. Heatley, Melbourne, Victoria, Australia. Side screen or curtain for motor vehicles. 1,757,860; May 6.

Hall, Malcolm B., assignor to The Foxboro Company, Foxboro, Mass. Dry kiln. 1,757,629; May 6.

Hall, Richard L. (See Robinson, Earl M., assignor.)

Halldin, Gustaf, assignor of one-half to C. W. Clark, Indiana, Pa. Sustaining attachment for airplanes. 1,757,630; May 6.

Hallett, George E. A., assignor to General Motors Research Corporation, Detroit, Mich. Hydraulic valve mechanism. 1,757,425; May 6.

Halperin, Morris I., Brooklyn, N. Y. Collar. 1,757,861; May 6.

Halvorsen, Arthur L. (See Travis, P. M., and Halvorsen.)

Halvorsen, Arthur L., New York, N. Y., and P. M. Travis, Ridgewood, assignors to The Emulsion Process Corporation, Jersey City, N. J. Asphalt emulsion. 1,757,083; May 6.

Ham, R. C., & Company. (See Ham, Robert C., assignor.)

Ham, Robert C., West Haven, assignor to R. C. Ham & Company, Inc., New Haven, Conn. Flower holder. Des. 91,094; May 6.

Hamann, William, Irondequoit, N. Y., assignor to United Shoe Machinery Corporation, Paterson, N. J. Finishing machine. 1,757,188; May 6.

Hamilton, Harry W. (See Bamford, W. R., and Hamilton.)

Hamlin, Cyril, Newark, N. J. Signal reminding mechanism. 1,757,631; May 6.

Hammer, Samuel, Brooklyn, assignor to United Metal Box Co., Inc., Long Island City, N. Y. Metal receptacle. 1,757,945; May 6.

Hanneman, Walter M. (See Christensen, N. V., and Hanneman.)

Hanovia Chemical and Manufacturing Company. (See Anderson, W. T., Jr., and Bird, assignors.)

Hänsel, Günther. (See Hosenfeld, M., and Hänsel.)

Hansen, Charles C., assignor to Refrigerating Specialties Co., Chicago, Ill. Controlling device for refrigerating systems. 1,757,044; May 6.

Hansen, Charles C., Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Air-line oiler. 1,757,084; May 6.

Hanson-Van Winkle-Munning Company. (See Hogaboom, George B., assignor.)

Harber, Laurence, S., and J. E. Pointon, Peterborough, England, assignors to Baker Perkins Company Incorporated, New York, N. Y. Dough-molding machine. 1,757,306; May 6.

Harbison, Clarence B., assignor to The Ohio Steel Foundry Company, Lima, Ohio. Tender-frame structure. 1,757,117; May 6.

Harder Refrigerator Corporation. (See Ryder, Frank H., assignor.)

Hardright Company, The. (See Earon, Orville D., assignor.)

Harkins, Harry, Montpelier, Iowa. Sound-reproducing horn. 1,757,307; May 6.

Harm, Frederick H., La Sueur Center, Minn. Ice-cream-form device. 1,757,799; May 6.

Harnischfeger Corporation. (See Brown, Robert L., assignor.)

Harnischfeger Corporation. (See Harry, Geoffrey M., assignor.)

Harris, Frank E., Bellingham, Wash. Soldering flux. 1,757,118; May 6.

Harrison, Henry C., Port Washington, assignor to Western Electric Company, Incorporated, New York, N. Y. Sound-translating system. 1,757,459; May 6.

Harrison, Henry C., Port Washington, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Acoustic device. 1,757,712; May 6.

Harry, Geoffrey M., assignor to Harnischfeger Corporation, Milwaukee, Wis. Hoe. 1,757,572; May 6.

Hart-Carter Company. (See Carter, Clarence W., assignor.)

Hart, Frank A., New York, N. Y. Condiment holder. 1,757,525; May 6.

Hart, William E., San Jose, Calif. Liquid-fuel-feeding device for motor vehicles. 1,757,666; May 6.

Hartman, Frank E. (See Jarratt, W. J., and Hartman.)

Hatch, George H., Lynn, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Channel-opening machine. 1,757,189; May 6.

Havel, Frank, Chicago, Ill., assignor to S. Karpen & Bros. Davenport or similar article. Des. 81,095; May 6.

Hawes, Charles L., assignor to C. Strassheim, Chicago, Ill. Automobile radiator ornament. 1,757,567; May 6.

Hayes, Harvey C., Washington, D. C. Acoustic instrument. 1,757,938; May 6.

Haynes, Ernest A., assignor of forty-five per cent to L. E. Grim, Comstock, Nebr. Pig creep gate. 1,757,426; May 6.

Hazell, Eardley, New York, N. Y., assignor to The Naugatuck Chamical Company, Naugatuck, Conn. Treatment of latex. 1,757,632; May 6.

Hazeltine Corporation. (See Wheeler, Harold A., assignor.)

Headington, Susanna C., New York, N. Y. Device for waving hair. 1,757,245; May 6.

Heatley, Owen B. (See Hall, J. R., McLeod, and Heatley.)

Hebert, Fred C., Jackson, assignor to General Motors Corporation, Detroit, Mich. Rim tool. 1,757,427; May 6.

Hebler, Felix, Hanover, Germany. Coated phosphide and process for making. 1,757,713; May 6.

Hedgepeth, Levi L., Elizabeth City, assignor to W. C. Olsen, Wake County, N. C. Purifying water. 1,757,526; May 6.

Hefti, Fritz, Altstetten, near Zurich, Switzerland. Barbituric-acid compound. 1,757,906; May 6.

Hefti, Wilhelm, assignor to the firm Sulzer Frères Société Anonyme, Winterthur, Switzerland. Ship with aeroplane deck. 1,757,770; May 6.

Hegg, Edward C., Buffalo, N. Y., assignor to Mojonnier Bros. Co. Combined machine pedestal, casing, and table. Des. 81,096; May 6.

Heghinian, Garabed G., Baltimore, Md. Molding press. 1,757,119; May 6.

Heibig, Edouard, Paris, France. Dialyzing apparatus. 1,757,364; May 6.

Heijkenskjöld, Gustaf O. W., assignor to Aktiebolaget Büsta, Stockholm, Sweden. Preparation of yeast. 1,757,568; May 6.

Heinrich, Jean M., assignor to Société des Moteurs Salmson Systeme Canton-Unné, Paris, France. Construction of internal-combustion engines. 1,757,862; May 6.

Heinrich, Walter A., assignor, by mesne assignments, to W. N. Matthews Corporation, St. Louis, Mo. Making spray guns. 1,757,573; May 6.

Hele-Shaw, Henry S., and T. E. Beacham, London, England. Hydraulic transmission of power. 1,757,483; May 6.

Helfgott, Solomon, New York, N. Y. Jewel-setting tool. 1,757,120; May 6.

Hemphill Company. (See Lawson, R. H., and Cloutier, assignors.)

Henderson, James B., Blackheath, England. Ballistic apparatus. 1,757,800; May 6.

Hendricks, Roy G., Lakewood, assignor to The Forest City-Walworth Run Foundries Company, Cleveland, Ohio. Warm-air-heating register. 1,757,085; May 6.

Hengst, Frederick A., Racine, Wis. Method of and apparatus for straightening and solidifying electrotype plates and the like. 1,757,569; May 6.

Hennessy, Daniel E., Cambridge, assignor of sixty per cent to Lewis-Shepard Company, Watertown, Mass. Protective wrapper for springs and the like. 1,757,033; May 6.

Henningsen, Poul, Charlottenlund, near Copenhagen, assignor to Messrs. Louis Poulsen & Company, Copenhagen, Denmark. Reflector for incandescent lamps. 1,757,527; May 6.

Hentrich, Winfrid. (See Duisberg, W., Hentrich, and Zeh.)

Herthel, Eugene C. (See Pelzer, F. L., and Herthel.)

Hertzberg, Harry, Brooklyn, N. Y. Oil mop. 1,757,365; May 6.

Hertzberg, Harry, Brooklyn, N. Y. Cleaning and polishing implement. 1,757,366; May 6.

Hertzberg, William, Brooklyn, N. Y. Machine for making tufts on wire brushes. 1,757,367; May 6.

Hesse, Erich, Insterburg, Germany. Device for regulating wind wheels. 1,757,667; May 6.

Hewitt, Edward R., Midvale, N. J., assignor to International Motor Company, New York, N. Y. Solid-injection otto-cycle engine. 1,757,246; May 6.

Hickok Manufacturing Company. (See Shields, Lowell W., assignor.)

Hickok Manufacturing Company. (See Valsey, Harold C., assignor.)

Hicks, William W. (See Kercher, A. J., and Hicks.)

Higgins, Clark F., Melrose, Mass. Dumping vehicle. 1,757,190; May 6.

Higgins, Clark F., Melrose, Mass. Dumping vehicle hoist. 1,757,191; May 6.

Higgins, Henry B., jr., Denver, Colo. Control for dispensing apparatus. 1,757,801; May 6.

Hill, William D., Alliance, Ohio. Lubricating system. 1,757,086; May 6.

Hitchings & Company. (See King, Thomas E., assignor.)

Hitzeman, Arnold P., assignor to Wayne Company, Fort Wayne, Ind. Liquid-dispensing apparatus. 1,757,836; May 6.

Hochschild, Richard, assignor to the firm Aug. Schmidtmann, Barmen, Germany. Card unit for visible card systems. 1,757,368; May 6.

Hockley, Claude C., Portland, Oreg. Method and apparatus for making paper. 1,757,948; May 6.

Hoerr, Louis A., assignor to Western Railway Equipment Company, St. Louis, Mo. Pipe clamp. 1,757,570; May 6.

Hoffman, Edward L., Dayton, Ohio. Parachute. 1,757,247; May 6.

Hoffman, Elmer. (See Weinheimer, T. A., and Hoffman.)

Hoffman, John F., assignor to Baker Ice Machine Co. Inc., Omaha, Nebr. Automatic control valve. 1,757,248; May 6.

Hoffman, Walter F. (See Gortner, R. A., and Hoffman.)

Hoffmann, Ulrich. (See Meyer, K. H., Müller, and Hoffmann.)

Hoffmann, Ulrich. (See Müller, J., and Hoffmann.)

Hogaboom, George B., assignor to Hanson-Van Winkle-Munning Company, Matawan, N. J. Nickel anode. 1,757,714; May 6.

Holbrook, Frederick C., Dummerston, Vt. Packing case. 1,757,087; May 6.

Holmberg, Anders, Stockholm, Sweden. Sintering apparatus. 1,757,863; May 6.

Holmes, Elizabeth B. (See Holmes, Sydney V., assignor.)

Holmes, George A., Newton, assignor, by mesne assignments, to United-Carr Fastener Corporation, Cambridge, Mass. Envelope fastener. 1,756,746; May 6.

Holmes, Sydney V., assignor to E. B. Holmes, St. Paul, Minn. Game apparatus. 1,757,088; May 6.

Holzwarth Gas Turbine Co. (See Holzwarth, Hans, assignor.)

Holzwarth, Hans, Dusseldorf, Germany, assignor to Holzwarth Gas Turbine Co., San Francisco, Calif. Multistage combustion turbine. 1,757,045; May 6.

Holzwarth, Hans, Dusseldorf, Germany, assignor to Holzwarth Gas Turbine Co., San Francisco, Calif. Explosion turbine. 1,757,574; May 6.

Horine, Merrill C., assignor to International Motor Company, New York, N. Y. Variable nose cam. 1,757,046; May 6.

Hosenfeld, Martin, Berlin-Siemensstadt, and G. Hänsel, Berlin-Charlottenburg, assignors to Siemens & Halske Aktiengesellschaft, Siemensstadt, near Berlin, Germany. Electrolytically refining copper or copper alloys. 1,757,047; May 6.

Hotchkiss, E. H., Company, The. (See Polzer, Fridolin, assignor.)

Hothersall, John M., Brooklyn, assignor to American Can Company, New York, N. Y. Compartment can. 1,757,192; May 6.

Hotopp, Alfred H., Hollis, N. Y., assignor to American Telephone and Telegraph Company. Current-measuring device. 1,757,193; May 6.

Hott, Ion V. K., assignor to The Joyce-Cridland Company, Dayton, Ohio. Lifting jack. 1,757,249; May 6.

Hough, Clinton W., Boonville, N. Y., assignor, by mesne assignments, to Federal Telegraph Company. Transmission system. 1,757,121; May 6.

Howe, James M., Cleveland Heights, assignors to The Murray Products Company, Cleveland, Ohio. Vehicle body. 1,757,194; May 6.

Howe, Samuel P., Pine Valley, Clementon, N. J. Clutch-facing material and its production. 1,757,089; May 6.

Howe, Winthrop K., assignor to General Railway Signal Company, Rochester, N. Y. Car-retarder system. 1,757,428; May 6.

Huff, Thomas D. (See Burrows, Eastman A., assignor.)

Hughes, William H., Pampa, Tex. Fluid elevator. 1,757,460; May 6.

Hull, John C., Gasport, N. Y. Spray gun. 1,757,195; May 6.

Humphries, Albert H., Tisdale, Saskatchewan, Canada. Cuff button. 1,757,369; May 6.

Hunt, George H., South Bend, assignor to Bendix Brake Company, Chicago, Ill. Brake-applying means. 1,756,979; May 6.

Hunter, David E., assignor to Shaw-Walker Company, Muskegon, Mich. Guide card for index systems. 1,757,122; May 6.

Hunter, Philip V. (See Watson, J. F., Hunter, and Wilson.)

Hurlbrink, Ernst, Berlin, and M. Ludwig, Paderborn, assignors to the firm Martini & Hüneke Maschinenbau-Aktiengesellschaft, Berlin, Germany. Hydraulic fuel-dispensing system. 1,757,715; May 6.

Hurst, Albert E., New York, N. Y. Radiator cover. 1,757,090; May 6.

Husk, Joseph W., and R. L. Olson, Tacoma, Wash., assignors to Syracuse Washing Machine Corporation, Syracuse, N. Y. Rinsing device for washing machines. 1,757,250; May 6.

Hutchinson, Roland V. (See Stevens, H. C. M., and Hutchinson.)

Hutchinson, William V., La Mesa, Calif. Scraper. 1,757,251; May 6.

Hyman, Henry. (See Muldoon, Bernard F., assignor.)

Hynson, Westcott & Dunning, Inc. (See Dunning, Fitzgerald, assignor.)

I. G. Farbenindustrie Aktiengesellschaft. (See Eisenhut, Otto, assignor.)

I. G. Farbenindustrie Aktiengesellschaft. (See Frankenburger, W., and Steigerwald, assignors.)

I. G. Farbenindustrie Aktiengesellschaft. (See Franzen, H., and Luther, assignors.)

I. G. Farbenindustrie Aktiengesellschaft. (See Meyer, K. H. Müller, and Hoffmann, assignors.)

I. G. Farbenindustrie Aktiengesellschaft. (See Müller, J., and Hoffman, assignors.)

I. G. Farbenindustrie Aktiengesellschaft. (See Pungs, Wilhelm, assignor.)

I. G. Farbenindustrie Aktiengesellschaft. (See Schepss, W., Tietze, and Ossenbeck, assignors.)

Ideus, Siebend H., Beatrice, Nebr. Mud scraper. 1,757,771; May 6.

Independent Pneumatic Tool Company. (See Levedahl, Axel, assignor.)

Independent Pneumatic Tool Company. (See Norling, Reinhold A., assignor.)

Ingersoll-Rand Company. (See Haight, Harry V., assignor.)

Ingersoll-Rand Company. (See Hansen, Charles C., assignor.)

Ingersoll-Rand Company. (See Kirgan, John, assignor.)

Ingraham, Harry A., Zillah, Wash. Fruit Cleaner. 1,757,308; May 6.

Inman, Harry A., Newark, N. Y. Dusting device. 1,757,528; May 6.

International Combustion Engineering Corporation. (See De Lorenzi, Otto, assignor.)

International Combustion Engineering Corporation. (See Jacques, Stanley A., assignor.)

International Harvester Company. (See Pearson, Charles, assignor.)

International Motor Company. (See Hewitt, Edward R., assignor.)

International Motor Company. (See Horine, Merrill C., assignor.)

International Shoe Company. (See Copeland, William A., assignor.)

Inventia Patent-Verwertungs-Gesellschaft. (See Engberg, A. O., and Carlstedt, assignors.)

Isenberg, David, Miami, Fla. Paint 1,757,864; May 6.

Ishibashi, Shojiro, Kurume, Fukuoka Ken, Japan. Shoe or boot for laborers. 1,757,575; May. 6.

Jabet, Arthur E. (See Gilbert, N. W., and Jabet.)

Jacobsen Manufacturing Co. (See Pol, John B., assignor.)

Jacques, Stanley A., Chicago, Ill., assignor to International Combustion Engineering Corporation, New York, N. Y. Pulverized-coal distributor. 1,757,634; May 6.

Jameson, Joseph L. and C. J. Fisher, Surrey, England. Internal-combustion engine. 1,757,907; May 6.

Jamestown Metal Equipment Co. (See Card, E. J., and Gronberg, assignors.)

Jandasek, Joseph, Cicero, Ill. Method and apparatus for compressing gases. 1,757,802; May 6.

Janeczko, Lawrence, Hegewisch, Ill. Window. 1,757,048; May 6.

Janiszewski, Kasimir, assignor to Superior Tool and Die Company, Milwaukee, Wis. 1,757,309; May 6.

Jantsch, Victor, assignor to Yellow Truck & Coach Company, Poutiac, Mich. Gasoline-tank mounting. 1,757,429; May 6.

Jaques, Cloyce A., Chicago, Ill. Manhole construction. 1,757,196; May 6.

Jarratt, Walter J. (See Grange, Leo O., assignor.)

Jarratt, Walter J., and F. E. Hartman, Chicago, Ill. Vulcanizing apparatus. 1,757,635; May 6.

Jarvis, Charles W., Courtland, Calif. Rake. 1,757,668; May 6.

Jeffrey Manufacturing Company, The. (See Levin, Nils D., assignor.)

Jenkins, Howard O., assignor to F. R. Blake, Baltimore, Md. Ring. Des. 81,092; May 6.

Jensen, Jens, Sonderhav Post Holbol, Denmark, assignor to Bayerische Eggenfabrik Akt.-Ges., Nuremberg, Germany. Harrow. 1,757,865; May 6.

Jensen, Viggo. (See Alstrup, C., and Jensen.)

Johantgen, Oliver D., Lake Bluff, Ill., assignor to Victor Adding Machine Co. Flexible handle connection for calculating machines. 1,757,669; May 6.

Johns, Carl O., Elizabeth, N. J., assignor to Standard Oil Development Company. Motor fuel. 1,757,837; May 6.

Johns, Carl O., Elizabeth, N. J., assignor to Standard Oil Development Company. Liquid fuel. 1,757,838; May 6.

Johns-Manville Corporation. (See Christenson, George, assignor.)

Johnson, Axel, Stavely, Alberta, Canada. Portable heater for drying grain. 1,757,716; May 6.

Johnson, Edward G., New Philadelphia, assignor of one-half to F. G. Kraum, Dover, Ohio. Chock. 1,757,866; May 6.

Johnson, Gustave A., Irvington, N. J., assignor to American Metal Molding Co. Armored electric cable. 1,757,049; May 6.

Johnson, Jay M., Chicago, Ill., assignor, by mesne assignments, to P. J. Nagle, Rochester, N. Y. Repair link for nonskid tire chains. 1,757,252; May 6.

Johnson, John, Maplewood, N. J., assignor to The Turbo-Mixer Corporation, New York, N. Y. Mixer. 1,757,197; May 6.

Johnson, John E., assignor to Speedaumat Manufacturing Company, Chicago, Ill. Automatic stop for printing machines. 1,757,310; May 6.

Johnson, Lane, Ingram, assignor to United Engineering & Foundry Company, Pittsburgh, Pa. Apparatus for transferring coiled material. 1,757,772; May 6.

Johnson, Otto E., Menominee, Mich. Traffic signal. 1,757,050; May 6.

Johnston, Carlton C., Sweetwater, Tex. Excavating machine. 1,757,908; May 6.

Johnston, John, New Haven, Conn., assignor to Western Electric Company, Incorporated, New York, N. Y. Insulated conductor and manufacturing the same. 1,757,717; May 6.

Johnston, Robert T., New Brunswick, N. J., assignor, by mesne assignments, to The Patent and Licensing Corporation, Boston, Mass. Cooling method and mechanism. 1,756,947; May 6.

Jones, Joseph W., Flint, assignor to General Motors Corporation, Detroit, Mich. Automatic fuel-shut-off valve. 1,757,430; May 6.

Jones & Laughlin Steel Corporation. (See Rendleman, Norman C., assignor.)

Jones, Lewis, Youngstown, Ohio. Vacuum punch-press feeder. 1,757,529; May 6.

Jones, Rolland R., Minneapolis, Minn. Agitator for dental molds. 1,757,803; May 6.

Jonsson, Gustaf E., Halmstead, Sweden. Pulsator for milking machines and the like. 1,757,198; May 6.

Joplin, William A., Norfolk Downs, assignor to Pneumatic Scale Corporation, Limited, Quincy, Mass. Box-making machine. 1,757,804; May 6.
Joy, Henry W., New York, N. Y. Advertising device. 1,756,980; May 6.
Joyce-Cridland Company, The. (See Hott, Ion V. K., assignor.)
Junkin, John R., Whittier, assignor to Six Wheel Corporation, Los Angeles, Calif. Running gear. 1,757,758; May 6.
Jurrissen, Alphonsus, Martinez, Calif., assignor to Simplex Refining Company. Eliminating colloidal asphaltenes and carbenes from fuel oil. 1,756,981; May 6.
Jury, Alfred E., Rutherford, N. J., assignor to Morgan & Wright, Detroit, Mich. Method and apparatus for making weftless fabrics. 1,757,636; May 6.
Just, William C. (See Garth, H., Longbottom, Burns, and Just.)
Kahle, Eugene C., Venus, Pa. Stuffing box. 1,757,311; May 6.
Kahn, Felix, San Francisco, Calif. Adjustable shore for concrete forms. 1,757,312; May 6.
Kaiser, Wilhelm. (See Pfisterer, C. F., Krueger, and Kaiser.)
Kalischer, Georg, Frankfort-on-the-Main, and W. Zerweck, Fechenheim, near Frankfort-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Condensation product and making same. 1,757,431; May 6.
Kamrath, Herbert G., assignor to A C Spark Plug Company, Flint, Mich. Air cleaner. 1,757,432; May 6.
Karpen, S., & Bros. (See Havel, Frank, assignor.)
Katte, Frank J., and B. L. Minturn, assignors of one-third to J. M. Silver, Springfield, Ohio. Direction signal for motor vehicles. Des. 81,093; May 6.
Kauffmann, John W., Chicago, Ill. Illuminator, defroster, deheater, and display device for windows, show cases, and other places. 1,757,718; May 6.
Kaufman, Godfrey, Detroit, Mich. Extension for indicators. 1,757,313; May 6.
Kazazian, Krikor H., Chicago, Ill. Utensil-cleaning machine. 1,757,909; May 6.
Keall, Frank B. (See Bates, A., and Keall.)
Keck, Christian, Crescent Springs, Ky. Vehicle suspension means. 1,757,839; May 6.
Keim, Melville, assignor, by mesne assignments, to The Apex Products Corporation, Chicago, Ill. Chemical container. 1,757,530; May 6.
Keller Mechanical Engineering Corporation. (See Shaw, John C. and R. D., assignors.)
Kelley, Bolden S., Crockett, Tex. Line rack for cultivators. 1,757,433; May 6.
Kellogg, M. W., Company, The. (See Stanley, George C., assignor.)
Kelsey-Hayes Wheel Corporation. (See Booth, William N., assignor.)
Kelvinator Corporation. (See Spreen, Charles C., assignor.)
Kent, Arthur A., Ardmore, Pa. Loud-speaker mounting. 1,757,719; May 6.
Kercher, Arthur J., Berkeley, Calif. Control switch. 1,757,314; May 6.
Kercher, Arthur J., Berkeley, and W. W. Hicks, assignors to Wesix National Company, San Francisco, Calif. Hot plate. 1,757,315; May 6.
Keun, Herman L., Chicago, Ill. Centrifugal pump. 1,757,670; May 6.
Khetah Corporation et al. (See Sartakoff, Jack D., assignor.)
Kidde, Walter, & Company. (See Freygang, Walter H., assignor.)
Kilian, Fritz, Berlin-Lichtenberg, Germany. Apparatus for pressing pulverulent substances into boxes. 1,757,370; May 6.
Killian, Albert T., Upper Darby, assignor to Killian Roller Bearing Company, Philadelphia, Pa. Roller bearing. 1,757,199; May 6.
Killian Roller Bearing Company. (See Killian, Albert T., assignor.)
King, Andrew. (See Koronski, André.)
King, C. G., & Co. (See Smith, Walter E., assignor.)
King, Jesse G., Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation. Refrigerating apparatus. 1,757,316; May 6.
King, Thomas E., Westfield, assignor to Hitchings & Company, Elizabeth, N. J. Sash-operating apparatus. 1,757,720; May 6.
Kingston, Allan R., Somerville, Mass. Put log. 1,757,015; May 6.
Kinkela, Louis, Bessemer, Pa. Linoleum cutter. 1,757,531; May 6.
Kirgan, John, Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Centrifugal pump. 1,757,576; May 6.
Kirk, Walter I., Chicago, Ill. Stringed musical instrument. 1,757,577; May 6.
Kirkpatrick, John M., Huntingdon Valley, Pa. Post spade and earth drill. 1,757,925; May 6.
Klein, Clarence J., Bellevue, assignor to United Engineering & Foundry Company, Pittsburgh, Pa. Control mechanism. 1,757,773; May 6.
Klemm, Emil R., jr., Chicago, Ill. Tappet. 1,757,721; May 6.
Klemperer, Wolfgang B., assignor to Goodyear-Zeppelin Corporation, Akron, Ohio. Tensiometer. 1,757,033; May 6.
Klopfer, Carl A., Berlin-Steglitz, assignor to Askania-Werke Aktiengesellschaft vormals Centralwerkstatt Dessau und C. Bamberg-Friedenau, Berlin-Friedenau, Germany. Apparatus for the regulation of combustion in furnaces. 1,757,051; May 6.
Kluge, Hans. (See Bauer, G., Walde, and Kluge.)
Knapton, Ezra. (See Morgan, W. D., and Knapton.)
Knight, B. B. & R., Corporation. (See Watson, John C., assignor.)
Knight, Donald B. (See Lenning, A., and Knight.)
Knight, Harley, Shadyside, Ohio. Joint for steering mechanisms. 1,757,371; May 6.
Knox, Harry A., and B. F. Baker, Davenport, Iowa. Transmission. 1,757,052; May 6.
Kny-Scheerer Corporation. (See Okun, Joseph H., assignor.)
Koch, Gustav H., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Circuit-controlling mechanism. 1,757,637; May 6.
Koehler Manufacturing Company. (See Wheat, Grant, assignor.)
Koomans, Nicolaas, The Hague, Netherlands, assignor to Radio Corporation of America, New York, N. Y. Neutrodyne circuit arrangement. 1,757,910; May 6.
Koppers Company, The. (See Becker, Joseph, assignor.)
Koronski, André, now by judicial change of name A. King, Narberth, Pa. Weight reading and printing mechanism for scales. 1,757,722; May 6.
Kothny, Gottdank L., Strafford, assignor to C. H. Wheeler Manufacturing Company, Philadelphia, Pa. Fluid-condensing system. 1,757,723; May 6.
Kramer, Andrew A., Kansas City, Mo. Siphon outlet for truck tanks. 1,757,317; May 6.
Kramer, Owen, Dayton, Ohio. Spring winder. 1,757,911; May 6.
Kraum, Frank G. (See Johnson, Edward G., assignor.)
Kriegsheim, Heinrich, New York, and W. Vaughan, Brooklyn, assignors to The Permutit Company, New York, N. Y. Water purifying material and making the same. 1,757,372; May 6.
Kriegsheim, Heinrich, New York, and W. Vaughan, Brooklyn, assignors to The Permutit Company, New York, N. Y. Improving glauconite. 1,757,373; May 6.
Kriegsheim, Heinrich, New York, and W. Vaughan, Brooklyn, assignors to The Permutit Company, New York, N. Y. Obtaining pure glauconite. 1,757,374; May 6.
Kropp, Walter. (See Schulemann, W., and Kropp.)
Krueger, Otto. (See Pfisterer, C. F., Krueger, and Kaiser.)
Kucher, Andrew A., Chester, Pa., assignor to Westinghouse Electric & Manufacturing Company. Liquid cooler. 1,757,638; May 6.
Kulair Corporation. (See Gail, G. W., and Kusel, assignors.)
Kusel, Abraham J. (See Gail, G. W., and Kusel.)
Kutter, Herman L. (See Briede, C. B., and Kutter.)
Kutzner, Gustave, Courbevoie, France. Sliding window for vehicles. 1,757,639; May 6.
La Brie, Ludger E., South Bend, Ind., assignor to Bendix Brake Company, Chicago, Ill. Brake. 1,756,982; May 6.
La Brie, Ludger E., South Bend, Ind., assignor to Bendix Brake Company, Chicago, Ill. Brake. 1,756,983; May 6.
La Chapelle, Fred N., Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Fastening-inserting machine. 1,757,200; May 6.
Lacy, Frank R., Chicago, Ill. Electrically-heated utensil. 1,757,253; May 6.
La Forge, Albert W., Chino, Calif. Hand rake. 1,757,201; May 6.
Lake, Clair D., and R. E. Page, Binghamton, assignors to The Tabulating Machine Company, Endicott, N. Y. Tabulating machine. 1,757,123; May 6.
La Lux Manufacturing Company. (See Underwood, Western, assignor.)
Lamb, Wius, Blair, Okla. Aeroplane. 1,757,202; May 6.
Lamson Company, The. (See Cowley, James T., assignor.)
Lamson Company, The. (See Cowley, J. T., and Allen, assignors.)
Langdon, Jesse D., Los Angeles, Calif. Piston. 1,757,016; May 6.
Langer, John J., River Falls, Wis. Hosiery-run-mending frame. 1,757,375; May 6.
Langford, George, assignor to McKenna Process Company of Illinois, Joliet, Ill. Rail joint and bar. 1,757,774; May 6.
Langlois, Arthur A., Klamath Falls, Oreg. Detachable extension guard rail. 1,757,912; May 6.
Langseth, Axel O., assignor to The Ohio Brass Company, Mansfield, Ohio. Electroplating. 1,757,671; May 6.
Langsner, Adolph, assignor to Eugene Dietzgen Company, Chicago, Ill. Developing apparatus. 1,757,672; May 6.
Larson, Clas S., assignor to A. O. Smith Corporation, Milwaukee, Wis. Packing appliance for pipe testing. 1,757,724; May 6.
Latour, Marius, San Sebastian, Spain. Electrocapillary device. 1,757,775; May 6.
Laucks, I. F., Inc. (See Laucks, I. F., and Cone, assignors.)
Laucks, Irving F., and C. N. Cone, assignors to I. F. Laucks, Inc., Seattle, Wash. Manufacture of glue and the product thereof. 1,757,805; May 6.

Laursen, Laurits A., Eau Claire, Wis., assignor of one-fourth to P. L. Laursen, Akron, Ohio. Rubber-tire mold. 1,757,376; May 6.
Laursen, Pearl L. (See Laursen, Laurits A., assignor.)
Lauterbur, Edward J. (See Lauterbur, Frank X. and E. J.)
Lauterbur, Frank X., and E. J. Lauterbur, Sidney, Ohio. Speed-controlling device. 1,757,124; May 6.
Lawrence, Cecil H., Attleboro, assignor to Evans Case Company, North Attleboro, Mass. Bag ornament. Des. 81,097; May 6.
Lawrence, Christopher J., Graff, Minn. Door latch. 1,757,913; May 6.
Lawson, Robert H., Pawtucket, and A. N. Cloutier, Lonsdale, assignors to Hemphill Company, Central Falls, R. I. Yarn controlling mechanism for knitting machines. 1,757,434; May 6.
Lazar, Alexander, Port Arthur, Ontario, Canada. Smoking-pipe filler. 1,757,673; May 6.
Lea, John M., Detroit, Mich. Electric-motor mechanism. 1,757,840; May 6.
Lefevre, Peter, Detroit, Mich. Air controller for aeroplanes. 1,757,435; May 6.
Leib, August, assignor to Gesellschaft für Drahtlose Telegraphie m. b. H. Hallesches, Berlin, Germany. Vacuum-tube cathode-supply circuit. 1,757,318; May 6.
Lelong, Arthur D., Verona, N. J. Pad support. 1,757,532; May 6.
Lenning, Alvar, assignor to Electrolux Servel Corporation, New York, N. Y. Refrigeration. 1,757,254; May 6.
Lenning, Alvar, New York, and D. B. Knight, Brooklyn, assignors to Electrolux Servel Corporation, New York, N. Y. Refrigeration. 1,757,578; May 6.
Lenthall, Charles B., Southport, England. Diaphragm for acoustic instruments or apparatus. 1,757,091; May 6.
Leopold, Joseph, New York, N. Y. Valve and regulating movement for engines. 1,757,841; May 6.
Leopold, Joseph, New York, N. Y. Safety aeroplane. 1,757,842; May 6.
Lesko, Paul, Jessup, Pa. Miner's drill. 1,757,725; May 6.
Lettman, Louis, jr., Paterson, N. J. Shuttle-box motion for looms. 1,757,319; May 6.
Levedahl, Axel, Aurora, assignor to Independent Pneumatic Tool Company, Chicago, Ill. Screw or nut driving device for portable power-driven rotary tools. 1,757,125; May 6.
Levin, Nils D., assignor to The Jeffrey Manufacturing Company, Columbus, Ohio. Contact brush and holder therefor. 1,757,203; May 6.
Levinson, David, assignor to Wilson-Western Sporting Goods Company, Chicago, Ill. Protective apparatus for athletes. 1,757,640; May 6.
Lewellen, Darcy E., Columbus, Ind. Control mechanism for paper-making machines. 1,757,867; May 6.
Lewis, Hugh G., Mont Alto, Pa. Fly exit. 1,757,868; May 6.
Lewis, Lloyd M., and A. Sezekoff, Sacramento, Calif. Signaling system. 1,757,674; May 6.
Lewis-Shepard Company. (See Hennessy, Daniel E., assignor.)
Lewis, Warren B., Seekonk, Mass. Seal for preventing the flow of material between relatively-moving surfaces. 1,757,533; May 6.
Libbey Glass Manufacturing Company, The. (See Parker, Alvah C., assignor.)
Liberty, Harry L., Chicago, Ill. Pipe-bending machine. 1,757,806; May 6.
Lide, Martin J., Birmingham, Ala. Actuating machanism for concentrating machinery. 1,757,320; May 6.
Liebscher, Paul, Chemnitz-Gablenz, Germany. Swiveling arbor support. 1,757,726; May 6.
Lilly, William, New York, N. Y. Gasoline vaporizer. 1,757,641; May 6.
Lincoln Scale Corporation. (See Ferguson, A. W., and Burke, assignors.)
Lindsay Wire Weaving Company, The. (See Steinhart, Ferdinand, assignor.)
Lindström, Arthur F. H., and C. D. Segerström, Eskilstuna, Sweden. Heat radiator. 1,757,534; May 6.
Lippeatt, Thomas, Sr., Dugger, Ind. Car-replacing rail. 1,757,403; May 6.
Lipsky, William, New York, N. Y. Vehicular signal. 1,757,869; May 6.
Liquid Carbonic Corporation. (See Minor, Henry R., assignor.)
Liquid Carbonic Corporation, The. (See Oslund, Charles H., assignor.)
Little, Arthur D., Incorporated. (See Fair, Albert E. H., assignor.)
Long, Dorothy, assignor to Franklin Simon & Company, Inc., New York, N. Y. Dress. Des. 81,098; May 6.
Long, Dorothy, assignor to Franklin Simon & Company, Inc., New York, N. Y. Dress. Des. 81,099; May 6.
Long, Dorothy, assignor to Franklin Simon & Company, Inc., New York, N. Y. Suit. Des. 81,100; May 6.
Long, John E., Multnomah, Oreg. Perforator. 1,757,914; May 6.
Longbottom, Joseph. (See Garth, Longbottom, Burns, and Just.)
Longman, Cecil H. (See Cazel, C. E., and Longman.)
Loomis, Nathaniel E., Elizabeth, N. J., assignor to Standard Oil Development Company. Pressure distillation 1,757,579; May 6.
Losey, North H., Akron, Ohio. Vacuum cleaner. 1,757,461; May 6.
Loucks, Albert H. (See Mitchell, W., and Loucks.)
Louden Machinery Company, The. (See Berthold, L. F., and Louden, assignors.)
Louden, William. (See Berthold, L. F., and Louden.)
Lower, Nathan M., D. F. Crawford, and E. A. Turner, Pittsburgh, Pa., assignors, by mesne assignments, to The Standard Stoker Company Inc., New York, N. Y. Inside-feed stoker. 1,757,581; May 6.
Lower, Nathan M., L. E. Osborne, and E. A. Turner, Pittsburgh, Pa., assignors, by mesne assignments, to The Standard Stoker Company Inc., New York, N. Y. Inside-feed stoker. 1,757,580; May 6.
Lox Seal Corporation, The. (See Behrman, Marcus B., assignor.)
Lubecker Maschinenbau-Gesellschaft. (See Zickerow, K., and C. Warnatz, assignors.)
Ludlum Steel Company. (See Armstrong, Percy A. E., assignor.)
Ludwig, Max. (See Hurlbrink, E., and Ludwig.)
Lumiere, Louis, Lyon, France. Talking machine. 1,757,535; May 6.
Lund, John A., Batavia, Ill., assignor to Challenge Company. Oiling mechanism. 1,757,642; May 6.
Lusink, Clarence I. (See Blake, E. J., and Lusink.)
Luther, Martin. (See Franzen, H., and Luther.)
Maas, Elov F., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Centrifugal tire-forming machine. 1,757,934; May 6.
Maas, Elov F., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Fabric-feeding device. 1,757,935; May 6.
MacDonald, Alan, San Francisco, Calif. Concrete-form joist hanger. 1,757,321; May 6.
Machinefabriek Reineveld. (See Stoffel, Simon H., assignor.)
Machlett, Raymond R., New York, N. Y., assignor to Rainbow Light, Inc. Starting and operating circuits for luminous tubes. 1,757,776; May 6.
Mack, Charles W., Seattle, Wash. Douche-bag support. 1,757,807; May 6.
Mack, William M., South Paris, Me. Fastener. 1,757,462; May 6.
MacNeill, John B., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Circuit interrupter. 1,757,643; May 6.
MacNeill, John B., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Circuit interrupter. 1,757,915; May 6.
Magill, Vaughan N., St. Albans, N. Y. Method of and mechanism for watermarking and cutting paper. 1,757,204; May 6.
Mahan, Charles B., assignor to F. A. Smith Manufacturing Company, Inc., Rochester, N. Y. Electric cigar lighter. 1,757,255; May 6.
Mahr, Carl E., Root, N. Y. Game. 1,757,870; May 6.
Maida, Nicolo, et al. (See Arico, Joseph, assignor.)
Maier, George M., Pelham, assignor to American Radiator Company, New York, N. Y. Gas valve. 1,757,126; May 6.
Manville, E. J., Machine Company, The. (See Gaess, Albert H., assignor.)
Marion Machine Foundry & Supply Company. (See Mitchell, W., and Loucks, assignors.)
Marquardt, Frank C., Brooklyn, assignor to American Bank Note Company, New York, N. Y. Inking mechanism for printing machines. 1,757,808; May 6.
Marquette Tool & Mfg. Company. (See Rode, Fredrich J., assignor.)
Marrison, Warren A., Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Electric control device. 1,757,727; May 6.
Martin, Frederick W., Brooklyn, and F. R. Peters, New York, N. Y., assignors to Franklin Railway Supply Company. Axle box and its lubrication. 1,757,582; May 6.
Martin, George W., Fort Worth, Tex. Vacuum cleaner and condenser. 1,757,256; May 6.
Martin, John L., assignor to The Firestone Tire and Rubber Company, Akron, Ohio. Rim for vehicle wheels. 1,757,728; May 6.
Martin, Philip J., Elizabeth, N. J. Cleaning device. 1,757,777; May 6.
Martini & Hüneke Maschinenbau-Aktiengesellschaft. (See Hurlbrink, E., and Ludwig, assignors.)
Mason, Arthur C., Hawthorne, N. J. Fabric-treating machine. 1,757,536; May 6.
Mason, George W., assignor to Copeland Products Incorporated, Detroit, Mich. Refrigerator cabinet. 1,756,984; May 6.
Mathes, Robert C., Wyoming, N. J., assignor, by mesne assignments, to Western Electric Company, Incorporated. Wave transmission system. 1,757,729; May 6.
Matheson, William A., assignor to Roll-A-Way Bed Corporation, Chicago, Ill. Portable bed or the like. 1,757,377; May 6.
Mathewson, John E., Avalon, Calif. Oarlock. 1,757,378; May 6.
Matlock, Alfred R. (See Comstock, Charles C., assignor.)
Matovits, Stephen E., St. Paul, Minn. Shade slat. 1,757,017; May 6.
Matthews, W. N., Corporation. (See Heinrich, Walter A., assignor.)

Maxwell, William H., assignor to O. A. Earl, Kalamazoo, Mich. Tablet armchair. 1,757,322; May 6.
May, Janet, assignor to Carlin Comforts, Inc., New York, N. Y. Comforter. Des. 81,101; May 6.
May, Janet, assignor to Carlin Comforts, Inc., New York, N. Y. Comforter. Des. 81,102; May 6.
Maynard, Charles E., Northampton, assignor to The Fisk Rubber Company, Chicopee Falls, Mass. Tire trimmer. 1,757,127; May 6.
Maynard, Charles E., Northampton, assignor to The Fisk Rubber Company, Chicopee Falls, Mass. Mandrel-cementing apparatus. 1,757,128; May 6.
McBridge, Arthur C., et al. (See Remondino, Charles H. E., assignor.)
McCabe, Ira E., Chicago, Ill. Mercury-tube switch. 1,757,436; May 6.
McCann, Edward, New York, N. Y. Telephone appliance. 1,757,463; May 6.
McCann, George M., Newcastle, Del. Breech structure of guns. 1,757,257; May 6.
McCarthy, Daniel J., Elgin, assignor to Chicago Railway Signal & Supply Company, Carpentersville, Ill. Mount for focus finders in signal lamps. 1,756,948; May 6.
McClure, William L., Boston, Mass. Atraumatic re-threadable surgical needle. 1,757,129; May 6.
McConkey, Montgomery W., South Bend, Ind., assignor to Bendix Brake Company, Chicago, Ill. Brake shoe. 1,756,985; May 6.
McCowan, David A., Toronto, Ontario, Canada. Photographic disk. 1,757,130; May 6.
McCoy, William C., Shaker Heights, assignor to The Cleveland Trust Company, Cleveland, Ohio. Piston. 1,757,131; May 6.
McCullough, Paul J., assignor to Scullin Steel Company, St. Louis, Mo. Car support. 1,757,323; May 6.
McCullough, Paul J., assignor to Scullin Steel Company, St. Louis, Mo. Car truck. 1,757,936; May 6.
McCullough, Paul J., assignor to Scullin Steel Company, St. Louis, Mo. Shim-holding device for car trucks. 1,757,937; May 6.
McFarlane, Robert. (See Bushman, F., and McFarlane.)
McGonegal, Err S., Rutherford, N. J. Portable grinding tool. 1,756,949; May 6.
McIntire, Charles V., East Orange, N. J., assignor to Consolidation Coal Products Company, Wilmington, Del. Retort furnace. 1,757,644; May 6.
McKellen, Samuel D., London, England. Registering apparatus. 1,757,324; May 6.
McKenna Process Company of Illinois. (See Langford, George, assignor.)
McKeon, Charles H. (See Quiggin, H., and Wood, assignors.)
McKlebeck, Steve, Fairbank, Pa. Table. Des. 81,103; May 6.
McLeod, Kenneth C. (See Hall, J. R., McLeod, and Heatley.)
McManus, Charles E., assignor to Crown Cork & Seal Company, Inc., New York, N. Y. Laminated cork sheet and making same. 1,756,950; May 6.
McNulty, Gregory F. (See Brown, G. C., and McNulty.)
McPike, John H., Alton, Ill. Box folding and taping machine. 1,757,730; May 6.
Mead, George J., Milwaukee, Wis., assignor of one-half to O. E. Frieder, and one-half to A. F. Frieder, Chicago, Ill. Moving display sign. 1,757,379; May 6.
Medart, Fred, Manufacturing Company. (See Albach, Frank, assignor.)
Mehlum, Casper, Waltham, Mass. Internal-combustion engine. 1,757,778; May 6.
Melick, John M., Cresskill, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Coin-collection apparatus. 1,757,464; May 6.
Mellor, Joseph W., Stoke-on-Trent, England. Glazed non-vitreous pottery and the manufacture of the same. Re17,656; May 6.
Merritt, Ericsson H. (See Merritt, Louis G. and E. H., and Stanley.)
Merritt, Louis G. and E. H., and R. W. Stanley, Lockport, N. Y., assignors to said Louis G. Merritt. Drying machine. 1,757,092; May 6.
Mesa, Maria L., New York, N. Y. Artificial flower. 1,757,943; May 6.
Messer, Syd. (See Brownstein, Jacob, assignor.)
Methlin, Nichalas E., assignor to Schneider & Cie, Paris, France. Combined projectile and breech block for ordnance. 1,757,676; May 6.
Meyer, Kurt H., Mannheim, J. Müller, Eppstein, and U. Hoffmann, Ludwigshafen-on-the-Rhine, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Printing colors. 1,756,951; May 6.
Michelsen, William O., Woodhaven, N. Y. Internal-combustion engine. 1,757,645; May 6.
Michelssen, Fritz, assignor to Gesellschaft für Drahtlose Telegraphie m. b. H., Berlin, Germany. Receiver for undamped oscillations. 1,757,325; May 6.
Miller, Abraham, Los Angeles, Calif. Fruit-juice separator. 1,757,326; May 6.
Miller, Charles H., Detroit, Mich. Button. 1,756,952; May 6.
Miller, Frank P., Meadville, Pa. Inserted-blade cutter. 1,756,986; May 6.
Miller, George L., Boston, Mass. Ligature. 1,757,871; May 6.
Miller, George W., Rochester, N. Y. Making shoes. 1,757,537; May 6.
Miller Manufacturing Company. (See Bethke, Leo, assignor.)
Miller, William G., Cumberland, Md. Hatchet. 1,757,538; May 6.
Miller, William J., Swissvale, Pa. Machine for use in the manufacture of pottery ware. 1,757,132; May 6.
Mills, Albert W., East Orange, N. J., assignor to The Tabulating Machine Company, Endicott, N. Y. Printing mechanism. 1,757,133; May 6.
Minor, Burt S., assignor to Regan Forge and Engineering Company, San Pedro, Calif. Lubricating device for cables. 1,757,539; May 6.
Minor, Henry R., Ossining, N. Y., assignor, by mesne assignments, to The Liquid Carbonic Corporation. Method of and apparatus for curing rubber articles by the circulation of heated gases. 1,757,053; May 6.
Minturn, Barton L. (See Katte, F. J., and Minturn.)
Mitchell, Erastus B., Blackfoot, Idaho. Siphon. 1,757,872; May 6.
Mitchell, Marion W. (See Swain, J. G., and Mitchell.)
Mitchell, William, Ponca City, Okla., and A. H. Loucks, Marion, assignors to Marion Machine Foundry & Supply Company, Marion, Ind. Pitman. 1,757,258; May 6.
Mitton, Robert E., Salt Lake City, Utah. Valve for controlling fluids. 1,757,259; May 6.
Mize, Fred, assignor to American Flyer Mfg. Co., Chicago, Ill. Motor control for toy electric locomotives. 1,757,676; May 6.
Modo, Michel, Luxemburg-Ville, Luxemburg. Automobile door latch. 1,757,916; May 6.
Moeller, Henry, Columbus, Ohio. Watch dial or similar article. Des. 81,104; May 6.
Mojonnier Bros. Co. (See Hegg, Edward C., assignor.)
Molins, Walter E., London, England. Cigarette-making machine. 1,757,380; May 6.
Montuori, Felix C., Washington, D. C. Hypodermic syringe. 1,757,809; May 6.
Moody, Lewis F., Philadelphia, Pa. Hydraulic-power plant. 1,757,926; May 6.
Moody, Lewis F., Philadelphia, Pa. Hydraulic-power plant. 1,757,927; May 6.
Moore, Charles R., Maplewood, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Acoustic device. 1,757,465; May 6.
Moore, Edgar D., and F. R. Dippman, assignors to The Ohio Brass Company, Mansfield, Ohio. Conduct support 1,757,677; May 6.
Morgan, David W. R., Swarthmore, Pa., assignor to Westinghouse Electric & Manufacturing Company. Heat-balance condensing plant. 1,756,987; May 6.
Morgan, Howard, and W. Stephenson, assignors, by direct and mesne assignments, to The Tun-A-Motor Company. Ordway, Colo. Trouble finder. 1,757,917; May 6.
Morgan, Oliver, and H. W. Strait, Wewoka, Okla. Fluid elevator. 1,757,381; May 6.
Morgan, William D., and E. Knapton, Victoria, British Columbia, Canada. Direction indicator. 1,757,678; May 6.
Morgan & Wright. (See Jury, Alfred E., assignor.)
Morris, Albert W., Philadelphia, Pa., assignor to G. E. Coblens, New York, N. Y. Drying articles. 1,757,205; May 6.
Morris, Walter R., Winston-Salem, N. C. Accelerator. 1,757,018; May 6.
Morrison, John A., Seattle, Wash., assignor to Safety Signal Company. Crossing signal. 1,757,206; May 6.
Mortland, Herbert E., Glendale, assignor to Pevely Dairy Company, St. Louis, Mo. Treating milk. 1,757,464; May 6.
Moser, Wilhelm, assignor to Gesellschaft für Drahtlose Telegraphie m. b. H., Berlin, Germany. Arrangement for multistage audio amplification. 1,757,466; May 6.
Moser, Wilhelm, assignor to Gesellschaft für Drahtlose Telegraphie m. b. H., Berlin, Germany. Arrangement for wireless telegraphy and telephony. 1,757,467; May 6.
Mosher, Charles D., Hyde Park, Mass. Tubular air heater. 1,757,327; May 6.
Motor Products Corporation. (See Crowe, Orley J., assignor.)
Motor Wheel Corporation. (See Van Halteren, Andrew S., assignor.)
Mott, George E., Malden, Mass., assignor to W. W. Burns, Washington, D. C. Pneumatic protector for athletes. 1,757,019; May 6.
Moxter, Ernst and H., St. Louis, Mo. Electric switch. 1,757,054; May 6.
Moxter, Herman. (See Moxter, Ernst and H.)
Mueller, Moritz L., Seattle, Wash. Kiln. 1,757,647; May 6.
Muir, James A., Detroit, Mich. Apparatus for welding. 1,757,540; May 6.
Muldoon, Bernard F., Mountainview, N. J., assignor to H. Hyman, Brooklyn, N. Y. Plug socket. 1,757,437; May 6.
Mullally, Walter J., Chicago Heights, assignor to American Manganese Steel Company, Chicago, Ill. Excavating dipper. 1,757,328; May 6.
Müller, Johannes. (See Meyer, K. H., Müller, and Hoffmann.)
Müller, Johannes, Eppstein, and U. Hoffman, Ludwigshafen-on-the-Rhine, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Dehydration product of sorbitol and making it. 1,757,468; May 6.

Muller, Robert L., assignor to Burroughs Adding Machine Company, Detroit, Mich. Accounting machine. 1,757,134; May 6.
Mulzer, Charles J., Evanston, Ind. Aircraft. 1,757,918; May 6.
Murdock, David, Brooklyn, N. Y. Typewriter line indicator. 1,757,541; May 6.
Murray, John J., Arlington, Mass. Mechanism for spraying cards. 1,757,648; May 6.
Murray Products Company, The. (See James M., assignor.)
Musaus, Hans, Brooklyn, N. Y. Ice skate. 1,757,649; May 6.
Myers, Harry L., assignor to The American Floor Surfacing Machine Company, Toledo, Ohio. Clamping device. 1,757,679; May 6.
Myers, L. A., jr., Inc. (See Myers, William L., assignor.)
Myers, William L., assignor to L. A. Myers, jr., Inc., Newark, N. J. Buckle. Des. 81,105; May 6.
Naamlooze Vennootschap Internationale Oxygenium Maatschappij Novadel. (See Smit, Jan A. B., assignor.)
Nagle, Peter J. (See Johnson, Jay M., assignor.)
Nashua Gummed & Coated Paper Company. (See Decker, J. Green, and Nunez, assignors.)
National Brass Manufacturing Company. (See Wray, Charles F., assignor.)
National Brick Company. (See Therrien, Arthur J., assignor.)
National Umbrella Frame Company. (See Garrett, George K., assignor.)
Naugatuck Chemical Company, The. (See Hazell, Eardley, assignor.)
Navratil, Vaclav, Berwyn, Ill. Bending device. 1,757,779; May 6.
Neal, James L. (See Wagner, Henry H. and C. L., assignors.)
Neikirk, Samuel B., Troy, Mo. Sand-blast nozzle. 1,757,207; May 6.
Neil, James B., Knoxville, Tenn. Needle-locking device for syringes. 1,757,680; May 6.
Nelson, Karl P., Long Beach, Calif. Oil-well flow device. 1,757,329; May 6.
Nelson, Herman, Corportion, The. (See Shurtleff, Wilfred, assignor.)
Nelson, James M. (See Smith, A. W., and Nelson.)
New England Wood Heel Co. (See Shaw, Wesley J., assignor.)
Newman, John P., and V. Thomas, Phoenix, Ariz. Dry-ore concentrator. 1,757,810; May 6.
Newport Company, The. (See Palmer, R. C., Burda, and Oliver, assignors.)
Nichols, Henry M., Chicago, Ill., assignor to American Can Company, New York, N. Y. Container. 1,757,208; May 6.
Nichols, Flowel, Chino, Calif. Feeder for baling presses. 1,756,988; May 6.
Nickerson, K. B. (See Davis, Dred W., assignor.)
Nickl, Edwin F., Newark, and R. E. Cleveland, East Orange, assignors to De Forest Radio Company, Jersey City, N. J. Side-pinning machine. 1,757,542; May 6.
Niemann, Carl. (See Biermann, G., and Niemann.)
Norling, Reinhold A., Aurora, assignor to Independent Pneumatic Tool Company, Chicago, Ill. Chisel-retainer lock. 1,757,093; May 6.
Norling, Reinhold A., Aurora, assignor to Independent Pneumatic Tool Company, Chicago, Ill. Balanced throttle valve for pneumatic tools. 1,757,731; May 6.
Northern Equipment Company. (See Veenschoten, Vincent V., assignor.)
Northwest Paper Company. (See Gortner, R. A., and Hoffman, assignors.)
Norwood, Harry G., Baltimore, Md., assignor to American Dairy Supply Company, Washington, D. C. Bottle stopper. 1,757,438; May 6.
Novotny, Ferdinand. New York, N. Y. Coffee receptacle. 1,757,583; May 6.
Nuebling, Emil L., assignor to Reading Meter Repair Company, Reading, Pa. Service-pipe curb box. 1,757,055; May 6.
Nunez, Vasco E. (See Decker, J., Green & Nunez.)
Nystrom, Martin, assignor to The Brunswick-Balke-Collender Company, Chicago, Ill. Suspension arm for an electrical pickup. Des. 81,106; May 6.
O'Brien, William, Washington, Pa. Bull-wheel post or bearing support. 1,757,780; May 6.
Odell, Earl H., Chicago, Ill. Vacuum-cup energizer. 1,757,135; May 6.
Ohio Brass Company, The. (See Langseth, Axel O., assignor.)
Ohio Brass Company, The. (See Moore, E. D., and Dippman, assignors.)
Ohio Foundry & Manufacturing Company, The. (See Sharp, William L., assignor.)
Ohio Steel Foundry Company, The. (See Harbison, Clarence B., assignor.)
O'Kelley, John F., Itasca, Tex. Stalk cutter. 1,757,873; May 6.
Okun, Joseph H., Brooklyn, assignor to Kny-Scheerer Corporation, New York, N. Y. Bedpan washer. Des. 81,120; May 6.
Olin, John M., Alton, assignor to Western Cartridge Company, East Alton, Ill. Shot shell. 1,757,584; May 6.
Oliver, Anthony F. (See Palmer, R. C., Burda, and Oliver.)
Olsen, Gustav. (See Albertson, F. O., and Olsen.)
Olsen, William C. (See Hedgepeth, Levi L., assignor.)
Olson, Robert L. (See Husk, J. W., and Olson.)
Ord, Percy R., assignor to Eastman Kodak Company, Rochester, N. Y. Making lenticular-film-embossing rollers. 1,757,543; May 6.
Ormsby, Erle, assignor to Central Mine Equipment Company, St. Louis, Mo. Blasting cartridge. 1,757,382; May 6.
Orr, William V., Cleveland Heights, Ohio. Centrifugal drier. 1,757,585; May 6.
Osborne, Lonnie E. (See Lower, N. M., Osborne, and Turner.)
Oslund, Charles H., Worcester, Mass., assignor to The Liquid Carbonic Corporation, Chicago, Ill. Labeldating device. 1,757,209; May 6.
Osnos, Mendel, assignor to Gesellschaft für Drahtlose Telegraphie m. b. H. Hallesches, Berlin, Germany. Wireless system. 1,757,330; May 6.
Ossenbeck, A. (See Schepss, W., Tietze, and Ossenbeck.)
Ostertag, Julius, Stuttgart, Germany. Purification system for boilers. Re17,658; May 6.
Ostline, John E., Liverpool, England, assignor to Automatic Electric Inc., Chicago, Ill. Rotary line switch. 1,757,681; May 6.
Ostrander, John E., Greenwich, Conn. Ice creeper. 1,757,919; May 6.
O'Sullivan, Patrick J., New York, N. Y., assignor to Blaisdell Pencil Company, Philadelphia, Pa. Pencil. 1,756,953; May 6.
Oswald, Arthur A., East Orange, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Space-discharge system. 1,757,469; May 6.
Otto, Albert T., & Sons. (See Günther, Otto, assignor.)
Ottosson, Ernst J., Ystad, assignor to Otto A. Arvastsson, Malmo, and A.-B. Ernst J. Ottossons Elementfabrik, Ystad, Sweden. Preheating device for carburetors. 1,757,920; May 6.
Ottossons, A.-B. Ernst J. Elementfabrik, et al. (See Ottosson, Ernst J., assignor.)
Overbury, Frederick C., Hillsdale, N. J., assignor, by mesne assignments, to The Patent and Licensing Corporation, Boston, Mass. Thick-butt shingle strip. 1,756,989; May 6.
Owen, Henry A., Foxboro, assignor to Davis & Furber Machine Company, North Andover, Mass. Draft-roll construction for spinning frames. 1,757,586; May 6.
Oxendorf, Louis O., Milwaukee, Wis. Swinging bed. 1,757,544; May 6.
Pabodie, Robert J., Maywood, Ill., assignor to The Griscom-Russell Company, New York, N. Y. Heat exchanger. 1,757,136; May 6.
Packer, Ezra J., assignor to The Pooley Company, Philadelphia, Pa. Cabinet. 1,757,811; May 6.
Pade, Max H., assignor to The Firestone Tire & Rubber Company, Akron, Ohio. Conveyer system for use in handling rubber-tube mandrels. 1,757,782; May 6.
Page, Ralph E. (See Lake, C. D., and Page.)
Palm, Robert, Fairfield, Ala. Furnace-arch support. 1,757,682; May 6.
Palmer, Alphonso T., Chicago, Ill. Rail joint. 1,757,137; May 6.
Palmer, Harry A. (See Rohn, Walter S., assignor.)
Palmer, John F., Milwaukee, Wis. Eraser cleaner. 1,757,545; May 6.
Palmer, Robert C., J. L. Burda, and A. F. Oliver, Pensacola, Fla., assignors to The Newport Company, Carrollville, Wis. Purifying rosins. 1,757,588; May 6.
Pankey, Amos V., Harrisonburg, Va. Temporarily arresting the melting of ice. 1,757,883; May 6.
Pankey, Samuel M., Emmett, Ark. Oscillating motor. 1,757,210; May 6.
Park, Robert T., Windsor, Ontario, Canada. Mold for forming coated confections. 1,757,083; May 6.
Parker, Alvah C., Toledo, Ohio, assignor to The Libbey Glass Manufacturing Company. Rotary burn-off machine. 1,757,211; May 6.
Parsons, Charles A., and S. S. Cook, Newcastle-on-Tyne, England; said Cook assignor to said Parsons. Shaft packing suitable for steam turbines. 1,757,212; May 6.
Parsons, Ernest P., deceased; W. M. Baldwin, administrator, assignor to The Parsons & Parsons Company, Cleveland, Ohio. Waterproof collar. 1,756,990; May 6.
Parsons & Parsons Company, The. (See Parsons, Ernest P., assignor.)
Partlow, Howard W., Utica, N. Y. Automatic fire extinguisher. 1,757,213; May 6.
Patent and Licensing Corporation, The. (See Johnston, Robert T., assignor.)
Patent and Licensing Corporation, The. (See Overbury, Frederick C., assignor.)
Pauling, Thomas R., Andrews, Ind. Shelf bracket. 1,756,954; May 6.
Pearson, Charles, Chicago, Ill., assignor to International Harvester Company. Mower attachment for tractors. 1,757,214; May 6.
Pearson, Waldemar, Chicago, Ill. Siphon starter. 1,757,056; May 6.
Peebles, George B., Newark, N. J. Heat-insulating material. 1,757,470; May 6.

Pelzer, Harry L., and E. C. Herthel, assignors to Sinclair Refining Company, Chicago, Ill. Cracking heavy hydrocarbons to produce lighter hydrocarbons and coke. 1,757,843; May 6.
Pendleton, Frank E., Montclair, N. J. Electrical timing device. 1,757,733; May 6.
Permutit Company, The. (See Kriegsheim, H., and Vaughan, assignors.)
Perry, William R., assignor to Reeves Pulley Company, Columbus, Ind. Synchronous variable-speed electric machine drive. 1,757,734; May 6.
Pescara, Raul P., Paris, France. Air compressor. 1,757,215; May 6.
Peters, Frank R. (See Martin, F. W., and Peters.)
Petschenig, Karl, Vienna, Austria, assignor to the firm C. P. Goerz optische Anstalt Aktiengesellschaft, Akciova Spolecnost K. P. Goerz opticky ustav, Bratislava, Czechoslovakia. Apparatus for determining the course of aircraft. 1,757,874; May 6.
Pevely Dairy Company. (See Mortland, Herbert E., assignor.)
Pfender, Adolph, assignor to Ferguson and Lange Foundry Company, Chicago, Ill. Water-heating apparatus. 1,757,138; May 6.
Pfisterer, Chris F., O. Krueger, and W. Kaiser, Chicago, Ill. Portable toilet for children. 1,757,684; May 6.
Phelps, Levi, Mayflower, Tex. Washing machine. 1,757,472; May 6.
Pieper, Alphonse F., Rochester, N. Y. Syringe. 1,757,473; May 6.
Platenberg, Herman W., assignor to Axelson Machine Company, Los Angeles, Calif. Valve for oil pumps. 1,757,139; May 6.
Platt, Cornelius E., Windsor, Ontario, Canada. Automatic foldable stand for golf bags. 1,757,471; May 6.
Platt, Herbert. (See Dreyfus, C., and Platt.)
Pneumatic Scale Corporation. (See Joplin, William A., assignor.)
Pointon, John E. (See Harber, L. S., and Pointon.)
Pol, John B., assignor to Jacobsen Manufacturing Co., Racine, Wis. Lawn mower and accessory therefor. 1,757,844; May 6.
Pollak Manufacturing Company. (See Schlesinger, Carl, assignor.)
Pollak, Victor F., San Francisco, Calif. Insurance-policy form. 1,757,094; May 6.
Polysius, Firm G. (See Goebels, Paul, assignor.)
Polser, Fridolin, assignor to The E. H. Hotchkiss Company, Norwalk, Conn. Staple-driving machine. 1,757,812; May 6.
Pönisch, Max, Leipzig-Leutzsch, Germany. Machine for kneading and turning upside down sugar mass. 1,757,384; May 6.
Poole & Duff, Inc. (See Poole, Thomas S., assignor.)
Poole, Thomas S., Staten Island, N. Y., assignor to Poole & Duff, Inc., Newark, N. J. Coin-controlled device. 1,757,921; May 6.
Pooley Company, The. (See Packer, Esra J., assignor.)
Porter, William J., Spokane, Wash. Automobile disposal and withdrawal structure. 1,757,331; May 6.
Potaufeux, Emile, Cormicy, France. Portable conveyer. 1,757,216; May 6.
Potter, Albert T., assignor, by mesne assignments, to Ainsworth Manufacturing Corporation, Detroit, Mich. Windshield-operating device. 1,757,474; May 6.
Potthoff, Kurt T., Brooklyn, N. Y., assignor to U. S. Galvanizing & Plating Equipment Corporation. Apparatus for treating material. 1,757,735; May 6.
Poulsen, Messrs. Louis, & Company. (See Henningsen, Poul, assignor.)
Pratt, Seely F., assignor to Union Tool Chest Company, Inc., Rochester, N. Y. Tray. 1,757,475; May 6.
Preator, Frederick, and D. R. Seely, assignors to The Utah Radio Products Company, Salt Lake City, Utah. Assembling vibratory systems. 1,757,385; May 6.
Preator, Frederick, and D. R. Seely, assignors to The Utah Radio Products Company, Salt Lake City, Utah. Dynamic loud-speaker. 1,757,386; May 6.
Presnell, Elmer. (See Richardson, Allen C., assignor.)
Press, Abraham, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Thermal relay. 1,757,589; May 6.
Pressed Steel Car Company. (See Burner, William L., assignor.)
Price, William F., Bala, and R. H. Beck, Upper Darby, Pa.; said Beck assignor to said Price. Battery-plate-filling machine. 1,757,546; May 6.
Pritchard, William T., Maplewood, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Lubricating device. 1,757,736; May 6.
Protectoseal Company of America. (See Anschicks, Rudolph J., assignor.)
Proctor, Robert V., and H. M. Schaab, assignors to The Commercial Shearing & Stamping Company, Youngstown, Ohio. Tunnel liner. 1,757,813; May 6.
Prutsman, Paul W. (See Benjamin, V. C., and Prutsman.)
Puening, Franz, O'Hara Township, Allegheny County, Pa. Preheater. 1,756,991; May 6.
Pulkingborn, William R., assignor to Spra-O-Sal Products, Inc., Los Angeles, Calif. Water-impregnating device. 1,757,140; May 6.
Pungs, Wilhelm, Ludwigshafen-on-the-Rhine, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Cleansing and emulsifying agent. 1,757,441; May 6.
Pusey, William A., Chicago, Ill. Collar. 1,757,057; May 6.
Putnam, Alden L., Dearborn, assignor, by mesne assignments, to Steel Wheel Corporation, Lansing, Mich. Wheel spoke and rim connection. 1,757,332; May 6.
Putnam, Thomas M., Cedar Grove, Wis. Electric stove. Des. 81,107; May 6.
Quartier, Emile, Neuchatel, Switzerland. Magnetic stepping motor. 1,757,922; May 6.
Quiggin, Harry, and J. Wood, assignors to C. H. McKeon, Cleveland, Ohio. Container. 1,757,814; May 6.
Quiggle, Arthur W., assignor to The Creamette Company, Minneapolis, Minn. Drying macaroni and other products made from a paste of flour and water. 1,756,992; May 6.
Quinn, Paul W., Brooklyn, N. Y. License-plate holder. 1,757,587; May 6.
Rabkin, William, New York, N. Y. Coin-slot guard. 1,757,387; May 6.
Radio Condenser Company. (See Cramer, Stanley S., and R. E., assignors.)
Radio Corporation of America. (See Bol, Cornelis, assignor.)
Radio Corporation of America. (See Goldsmith, A. N., and Shapiro, assignors.)
Radio Corporation of America. (See Koomans, Nicolaas, assignor.)
Radio Corporation of America. (See Ranger, Richard H., assignor.)
Radio Corporation of America. (See Sice, John A., assignor.)
Rahr, Chester E., Brookline, assignor to The Flintkote Company, Boston, Mass. Making pancake or built-up sheet leather. 1,756,993; May 6.
Rainbow Light, Inc. (See Machlett, Raymond R., assignor.)
Rainey, Thomas S., New Orleans, La. Suspension hook. 1,757,875; May 6.
Ramey, John G., Rome, Ga. Indicator lock. 1,757,020; May 6.
Ranger, Richard H., Brooklyn, N. Y., assignor to Radio Corporation of America. Frequency trap for radio signaling apparatus. 1,757,333; May 6.
Rankin, William A., assignor to The Swartzbaugh Manufacturing Company, Toledo, Ohio. Waffle iron. 1,757,334; May 6.
Raster, Walther, Chicago, Ill. Knockdown receptacle. 1,757,141; May 6.
Reading Meter Repair Company. (See Neubling, Emil L., assignor.)
Reeves Pulley Company. (See Perry, William R., assignor.)
Refrigerating Specialties Co. (See Hansen, Charles C., assignor.)
Regan Forge and Engineering Company. (See Minor, Burt S., assignor.)
Reid, John H., Jamestown, N. Dak. Manifolding carbon paper. 1,757,876; May 6.
Reinert, John N., Bird Island, Minn. Milk and cream cooler. 1,757,058; May 6.
Remondino, Charles H. E., assignor of one-third to F. W. Renworth and one-third to A. C. McBride, San Diego, Calif. Automobile hood-retaining means. 1,757,021; May 6.
Rendleman, Norman C., Dormont, assignor to Jones & Laughlin Steel Corporation, Pittsburgh, Pa. Rolled-metal beam. 1,757,388; May 6.
Renner, Harold G., Detroit, Mich. Rivetable nut. 1,757,142; May 6.
Renner, Harold G., Detroit, Mich. Nut mounted upon sheet metal. 1,757,143; May 6.
Rennerfelt, Ture G., Stockholm, Sweden. Friction gearing. 1,757,476; May 6.
Renworth, Frederick W., et al. (See Remondino, Charles H. E., assignor.)
Reserve Holding Company. (See Tharp, Victor S., assignor.)
Reynolds Machine Company, The. (See Brown, G. C., and McNulty, assignors.)
Rhodes, William A., New York, N. Y., assignor to American Telephone and Telegraph Company. Telephone system. 1,757,217; Mar. 6.
Richards, Alfred E. (See Ricks, F., and Richards.)
Richardson, Allen C., Shelbyville, assignor of one-half to E. Presnell, Pana, Ill. Animal trap. 1,757,218; May 6.
Rickenberg, Frederick B., Pittsburgh, Pa. Valve. 1,757,059; May 6.
Ricks, Fred, and A. E. Richards, Leicester, England, assignors to United Shoe Machinery Corporation, Paterson, N. J. Heel-seat-fitting machine. 1,757,219; May 6.
Rieth, Albert, Providence, R. I. Massaging device. 1,757,060; May 6.
Rife, John, Detroit, Mich. Cutting tool. 1,756,955; May 6.
Riker, Samuel M., Chester, N. J. Shoe buckle. Des. 81,108; May 6.
Rikert, Clark S., San Jose, Calif. Grave vault. 1,757,389; May 6.
Roberts, Fisher H., El Paso, Tex. Piston ring. 1,757,877; May 6.
Roberts, Roland R., and W. J. F. Forward, assignors to Consolidated Machine Tool Corporation of America, Rochester, N. Y. Hydraulic-feed mechanism for radial drill spindles. 1,757,685; May 6.

Robinson, Earl M., assignor to R. L. Hall, Waterloo, Iowa. Ice-cream-shipping case. 1,757,335; May 6.
Roca, Pietro, Flushing, N. Y. Sanitary attachment for telephone mouthpieces. 1,757,781; May 6.
Rode, Fredrich J., assignor to Marquette Tool & Mfg. Company, Chicago, Ill. Cushion for sheet-metal presses. 1,757,737; May 6.
Rode, Fredrich J., assignor to Marquette Tool & Mfg. Company, Chicago, Ill. Cushion for sheet-metal presses. 1,757,738; May 6.
Rohn, Walter S., Needham, assignor of one-half to H. A. Palmer, Boston, Mass. Internal-combustion engine. 1,757,815; May 6.
Roll-A-Way Bed Corporation. (See Matheson, William A., assignor.)
Rolls Royce Limited. (See Royce, Frederick H., assignor.)
Ronk, George T., Fairfield, assignor to Speeder Machinery Corporation, Cedar Rapids, Iowa. Transmission mechanism for excavators. 1,757,336; May 6.
Rooney, Matthew J., New York, N. Y. Portable soap holder. 1,757,590; May 6.
Root, Carl H., Detroit, Mich. Furnace. 1,757,878; May 6.
Root, Ralph R., Lakewood, Ohio. Controlling device for gas burners. 1,757,591; May 6.
Rosenbaum, Gad, Detroit, Mich. Stair and baluster railing. 1,757,686; May 6.
Rosenblum, Samuel, New York, N. Y. Picture hanger. 1,757,739; May 6.
Rosenhoch, Samuel, Bremen, Germany. Process and device for ozonizing tobacco. 1,757,477; May 6.
Rosner, Max, New York, N. Y. Ash-can cover. 1,757,740; May 6.
Ross, David E., assignor to Ross Gear & Tool Company, La Fayette, Ind. Steering-gear control-lever assembly. 1,756,994; May 6.
Ross Gear & Tool Company. (See Ross, David E., assignor.)
Rowland, Ben W., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Manufacturing rubber articles. 1,757,928; May 6.
Royal Typewriter Company. (See Degener, Gustave O., assignor.)
Royce, Frederick H., West Wittering, Chichester, assignor to Rolls Royce Limited, Derby, England. Resilient driving gear, particularly for half-speed shafts of internal-combustion engines. 1,757,337; May 6.
Roye, Richard T., Houston, Tex. Fluid controller. 1,757,439; May 6.
Rubel, Charles F., assignor to Union Special Machine Company, Chicago, Ill. Folder mounting for sewing machines. 1,756,956; May 6.
Ruben, Samuel, New York, N. Y. Phonograph pick-up. 1,757,547; May 6.
Rumidor Corporation, The. (See Weinberg, Fred, assignor.)
Russ, John B., Shelton, Conn. Webbing buckle or garters. 1,757,845; May 6.
Russell, James, Boiler Works Co. (See Russell, Warren K., assignor.)
Russell, Warren K., Newton, assignor to James Russell Boiler Works Co., Boston, Mass. Storage tank. 1,757,928; May 6.
Ryan, George F., and E. H. Burke, Lynn, Mass., assignors, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Grading mechanism for pattern-copying machines. 1,757,220; May 6.
Ryan, George F., and E. H. Burke, Lynn, Mass., assignors, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Pattern-copying machine. 1,757,221; May 6.
Rydberg, John T., Harrison, N. J. Aeroplane. 1,757,879; May 6.
Ryder, Frank H., Cobleskill, N. Y., assignor to Harder Refrigerator Corporation. Refrigerator. 1,757,390; May 6.
Ryder, Frank H., Cobleskill, N. Y., assignor to Harder Refrigerator Corporation. Refrigerator. 1,757,391; May 6.
Sachs, Joseph, West Hartford, Conn. Electric-circuit-controlling appliance. 1,757,741; May 6.
Sachs, Joseph, West Hartford, Conn. Electric-circuit-controlling appliance. 1,757,742; May 6.
Sachs, Joseph, West Hartford, Conn. Electric-meter service appliance. 1,757,743; May 6.
Sachs, Joseph, West Hartford, Conn. Electric-meter service appliance. 1,757,744; May 6.
Safety Signal Company. (See Morrison, John A., assignor.)
Safir, Leo C., New York, N. Y. Slipper-display container. 1,757,478; May 6.
St. Hilaire, Frank L., Cincinnati, Ohio. Stapling machine. 1,757,883; May 6.
Sanford, Roy S. (See Dodge, A. Y., and Sanford.)
Sanford, Roy S., South Bend, Ind., assignor to Bendix Brake Company, Chicago, Ill. Brake. 1,756,996; May 6.
Sanford, Roy S., and O. B. Clark, South Bend, Ind., assignors to Bendix Brake Company, Chicago, Ill. Lubricant guard for brakes. 1,756,995; May 6.
Sartakoff, J. D., Corporation, et al. (See Sartakoff, Jack D., assignor.)
Sartakoff, Jack D., assignor of one-half to J. D. Sartakoff Corporation and one-half to Khetah Corporation, New York, N. Y. Liquid-level-indicating system. 1,757,061; May 6.
Sasser, Edward C., Washington, D. C. Shaving mug. 1,756,957; May 6.
Saunders, Albert F., Syracuse, assignor to T. N. Benedict Mfg. Co., East Syracuse, N. Y. Teapot or similar article. Des. 81,109; May 6.
Schaab, Harry M. (See Proctor, R. V., and Schaab.)
Schaefer, George W., South Braintree, Mass., assignor to Addressograph Company, Chicago, Ill. Index tab. 1,757,338; May 6.
Schaer, Charles, Langenthal, assignor to the firm Sulzer Freres Societe Anonyme, Winterthur, Switzerland. High-pressure piston or reciprocating compressor. 1,757,782; May 6.
Schaffer, John C., Pittsburgh, Pa., assignor to American Pine Products Corpn., Reno, Nav. Distilling resinous woods. 1,757,144; May 6.
Schepss, Wilhelm, Leverkusen-on-the-Rhine, E. Tietze, Cologne-on-the-Rhine, and A. Ossenbeck, Cologne Mulheim, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Mothproof material and making same. 1,757,222; May 6.
Schieferstein, Georg H., Berlin-Charlottenburg, Germany. Power transmission. 1,757,392; May 6.
Schissler, William P., Milwaukee, Wis. Vise. 1,757,548; May 6.
Schlaich, Herman, Frankfort-on-the-Main, Germany. Indicator for distance-type thermometers. 1,757,949; May 6.
Schleicher Corporation, The. (See Schleicher, Frederick L., assignor.)
Schleicher, Frederick L., St. Louis, Mo., assignor to The Schleicher Corporation, Wilmington, Del. Machine for descaling boilers. 1,757,745; May 6.
Schleicher, Henry M., Monterey, Mex. Autoclave and operating same. 1,757,592; May 6.
Schleiffers, Ernest H., Montreal, Quebec, Canada. Sound distributor. 1,757,145; May 6.
Schlesinger, Carl, assignor to Pollak Manufacturing Company, Arlington, N. J. Cowl construction. 1,757,783; May 6.
Schmid, Anton, assignor to Bosch Aktiengesellschaft, Stuttgart, Germany. Commutator. 1,757,393; May 6.
Schmidt, Ernst, Dantzig-Langfuhr, and E. Dyckerhoff, Schloss Blumenau, near Wunstorf, Germany. Heat insulation. 1,757,479; May 6.
Schmidt, Henry F., Lansdowne, Pa., assignor to Westinghouse Electric & Manufacturing Company. Elastic-fluid turbine. 1,756,958; May 6.
Schmidtmann, firm Aug. (See Hochschild, Richard, assignor.)
Schneider & Cie. (See Methlin, Nicholas E., assignor.)
Schofield, John C., Los Angeles, Calif. Laundry tool. 1,757,146; May 6.
Scholz, Karl. (See von Ehrenthal, B. P., and Scholz.)
Schröter, Fritz, assignor to Telefunken Gesellschaft für Drahtlose Telegraphie m. b. H., Berlin, Germany. Fading elimination in radio picture-transmission systems. 1,757,480; May 6.
Schröter, Karl, Berlin-Lichtenberg, and H. Wolff, Berlin, assignors to Fried. Krupp Aktiengesellschaft, Essen/Ruhr, Germany. Manufacture of bodies for tools and the like from materials such as carbides, the alloys thereof, and the like. 1,757,846; May 6.
Schulemann, Werner, Vohwinkel, and W. Kropp, Elberfeld, Germany, assignors to Winthrop Chemical Company, Inc., New York, N. Y. Aminoalkylamino derivative of aromatic aminohydroxy or polyamino compounds. 1,757,394; May 6.
Schulz, William P. (See Yeager, F. W., and Schulz.)
Schwalge, William, Elmhurst, Ill. Device for separating gasoline from lubricating oils. 1,757,223; May 6.
Schwartz, George L., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Absorbent paper. 1,757,756; May 6.
Schwartz, George L., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Producing porous paper. 1,757,757; May 6.
Schwarze, Herman, Birmingham, assignor to General Motors Corporation, Detroit, Mich. Instrument-panel assembly. 1,757,395; May 6.
Schweiker, Roy W., Lansdale, Pa. Lamp shade. Des. 81,110; May 6.
Sciaulino, Salvatore, et al. (See Arico, Joseph, assignor.)
Scorelle, Frank, Brooklyn, assignor to Stern Brothers, New York, N. Y. Glove. 1,757,095; May 6.
Scovill Manufacturing Company. (See Fenton, Paul E., assignor.)
Scovill Manufacturing Company. (See Goss, John H., assignor.)
Scullin Steel Company. (See Dreibuss, H. C., and Chiles, assignors.)
Scullin Steel Company. (See McCullough, Paul J., assignor.)
Searles, Raymond R., assignor to The Fafnir Bearing Company, New Britain, Conn. Spring shackle. 1,757,747; May 6.
Searles, Raymond R., and E. H. Cooper, assignors to The Fafnir Bearing Company, New Britain, Conn. Vehicle-spring bearing. 1,757,746; May 6.
Sehrell, Lorin B., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Vulcanizing caoutchouc. 1,757,944; May 6.

Sebrell, Lorin B., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Reaction product of mercaptothiazole and a Schiff's base, and producing same. 1,757,945; May 6.
Seeger, Edwin W., Wauwatosa, assignor, by mesne assignments, to Cutler-Hammer, Inc., Milwaukee, Wis. Motor controller. 1,757,339; May 6.
Seel, Paul C., assignor to Eastman Kodak Company, Rochester, N. Y. Reducing the viscosity of nitrocellulose. 1,757,481; May 6.
Seel, Paul C., assignor to Eastman Kodak Company, Rochester, N. Y. Gelatino silver-halide emulsion. 1,757,482; May 6.
Seely, Don R. (See Preator, F., and Seely.)
Segar, Elzie C., Santa Monica, assignor to Hamilton Forline, Los Angeles, Calif. Animal figure. Des. 81,111; May 6.
Segerström, Carl D. (See Lindström, A. F. H., and Segerström.)
Seligman, Richard, Wandsworth, London, assignor to The Aluminum Plant & Vessel Company, Limited, London, England. Sterilizing and preserving liquids. 1,757,880; May 6.
Semmes, Harry H. (See Barker, Maurice E., assignor.)
Seymour, Joseph A., Fabyans, N. H. Blade holder. 1,757,881; May 6.
Sezekoff, Andrew. (See Lewis, L. M., and Sezekoff.)
Shapiro, Lazarus. (See Goldsmith, A. N., and Shapiro.)
Sharp, Herbert C., Kingston, Ontario, Canada. Card holder. 1,757,440; May 6.
Sharp, William L., assignor to The Ohio Foundry & Manufacturing Company, Steubenville, Ohio. Stove. 1,757,593; May 6.
Sharpe, Harry D., Liverpool, England, assignor, by mesne assignments, to Associated Telephone & Telegraph Company, Kansas City, Mo. Rotary line-switch circuit. 1,757,224; May 6.
Shaw, John C., and R. D., assignors to Keller Mechanical Engineering Corporation, Brooklyn, N. Y. Work-positioning mechanism for machine tools. 1,757,929; May 6.
Shaw, Robert D. (See Shaw, John C., and R. D.)
Shaw-Walker Company. (See Hunter, David E., assignor.)
Shaw, Wesley J., assignor to New England Wood Heel Co., Haverhill, Mass. Repaired last. 1,757,594; May 6.
Sheehan, William M., St. Louis, Mo., assignor, by mesne assignments, to General Steel Castings Corporation, Granite City, Ill. Locomotive mud ring. 1,757,340; May 6.
Sheer, H. M., Company. (See Williams, Robert T., assignor.)
Shelgren, Walter F., Bradford, Pa. Vanity case. 1,757,946; May 6.
Shields, Lowell W., assignor to Hickok Manufacturing Company, Inc., Rochester, N. Y. Suspender buckle or the like. Des. 81,112; May 6.
Shoemaker, George, Philadelphia, Pa. Rotary engine. 1,757,484; May 6.
Short, Charles R. (See Boegehold, A. L., and Short.)
Shoup, Ralph L., Independence, Mo. Vehicle signal. 1,757,816; May 6.
Shur-On Standard Optical Company. (See Bertram, J. P., and Sundstrom, assignors.)
Shurtleff, Wilfred, assignor to The Herman Nelson Corporation, Moline, Ill. Heating and ventilating unit. 1,756,997; May 6.
Shutt, William F., Laredo, Tex. Gas burner. 1,757,847; May 6.
Siegel, Louis R., Cleveland, Ohio. Dental root-canal point. 1,757,595; May 6.
Siemens & Halske, Aktiengesellschaft. (See Biermann, G., and Niemann, assignors.)
Siemens & Halske, Aktiengesellschaft. (See Hosenfeld, M., and Hänsel, assignors.)
Siemens & Halske Aktiengesellschaft, Wernerwerk. (See Thiery, F., and Goetsch, assignors.)
Sill, Alfred. (See Sill, Ernest F., and A.)
Sill, Ernest F. and A., Dillon, Mont. Hoe. 1,757,882; May 6.
Silva, Frank N., jr., Santa Maria, Calif. Wheel attachment for seaplanes. 1,757,687; May 6.
Silver, John M. (See Katte, F. J., and Minturn, assignors.)
Silverman, Joseph, Chicago, Ill. Folding table. 1,757,260; May 6.
Simjian, Luther G., New Haven, Conn. Pose-reflecting system for photographic apparatus. 1,756,959; May 6.
Simmons, Herbert G., assignor to Concealed Door Check Company, Kokomo, Ind. Doorcheck. 1,757,261; May 6.
Simon, Henry, Limited. (See Denham, Humphrey J., assignor.)
Simonis, Otto, London, England. Liquid-air oxygen-producing plant. 1,757,022; May 6.
Simplex Equipment Company. (See Blake, E. J., and Lusink, assignors.)
Simplex Refining Company. (See Jurrissen, Alphonsus, assignor.)
Simpson, Dwight M., Charleston, S. C. Bale-tying mechanism. 1,757,817; May 6.
Sims, Thomas B., Cleburne, Tex. Treatment of sludge. 1,757,263; May 6.
Sims, Thomas B., Cleburne, Tex. Sewage-disposal system. 1,757,264; May 6.
Sims, Thomas B., Cleburne, assignor to L. J. Wardlaw, Tarrant County, Tex. Sewage-disposal plant. 1,757,262; May 6.
Sinclair Refining Company. (See Bell, John E., assignor.)
Sinclair Refining Company. (See Pelzer, H. L., and Herthel, assignors.)
Singer, Fred J., Rockville Center, N. Y., assignor to American Telephone and Telegraph Company. Telegraph alarm circuit. 1,757,225; May 6.
Singer, Samuel, San Francisco, Calif. Changeable price tag. 1,757,485; May 6.
Six Wheel Corporation. (See Junkin, John R., assignor.)
Six Wheel Corporation. (See Van Leuven, David L., assignor.)
Slade, Harold E., Glen Ridge, assignor to Beaver Machine & Tool Co., Inc., Newark, N. J. Dual electrical outlet device. 1,757,748; May 6.
Slagle, Everett R., Sayre, Pa. Generator and battery protective means. 1,757,486; May 6.
Slagter, Arthur J., Muskogee, Okla., assignor to Transcontinental Oil Company, Pittsburgh, Pa. Method and apparatus for processing heavy oils. 1,757,596; May 6.
Slee, John A., London, England, assignor to Radio Corporation of America. Indicating angular position particularly applicable to wireless direction finding apparatus. 1,757,265; May 6.
Smerk, Samuel L., Cleveland, Ohio. Casement-window scaffold. 1,757,396; May 6.
Smit, Jan A. B., assignor to Naamlooze Vennootschap Internatfonale Oxygenium Maatschappij, Novadel, Deventer, Netherlands. Screw conveyer. 1,757,341; May 6.
Smith, A. O., Corporation. (See Larson, Clas S., assignor.)
Smith, Albert W., and J. M. Nelson, Youngstown, Ohio. Method of and apparatus for casting metal. 1,757,549; May 6.
Smith, Alfred B. and C. R., Wolverhampton, England. Foundry molding box. 1,757,226; May 6.
Smith, Alta L., Chester, Va. Protecting banks. 1,757,688; May 6.
Smith, Benjamin H., Swissvale, Pa., assignor to Westinghouse Electric & Manufacturing Company. Measuring instrument. 1,757,597; May 6.
Smith, Clifford R. (See Smith, Alfred B. and C. R.)
Smith, F. A., Manufacturing Company. (See Mahan, Charles B., assignor.)
Smith, George E., Baltimore, Md. Gas cock. 1,757,550; May 6.
Smith, Ira E., Stockton, Calif. Oil burner. 1,757,023; May 6.
Smith, James N. (See Clark, F. G., and Smith.)
Smith, Jesse A. B., Stamford, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y. Typewriting machine. 1,757,442; May 6.
Smith, Jesse A. B., Stamford, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y. Manifolding sheet. 1,757,598; May 6.
Smith, Paul A. (See Barber, H. H., and Smith.)
Smith, Walter E., Warwick Downs, assignor to C. G. King & Co., Inc., Providence, R. I. Shoe buckle. Des. 81,113; May 6.
Smith, Walter E., Warwick Downs, assignor to C. G. King & Co., Inc., Providence, R. I. Shoe buckle. Des. 81,114; May 6.
Smith, Walter E., Warwick Downs, assignor to C. G. King & Co., Inc., Providence, R. I. Shoe buckle. Des. 81,115; May 6.
Smith, Walter E., Warwick Downs, assignor to C. G. King & Co., Inc., Providence, R. I. Shoe buckle. Des. 81,116; May 6.
Smoot, Lon C., Dallas, Tex. Wheel-mounted adjustable frame crutch. 1,757,784; May 6.
Smulski, Theodore J., Chicago, Ill., assignor to The Anderson Co., Gary, Ind. Timer. 1,757,342; May 6.
Snow, Isaac, Lawrence, assignor to Draper Corporation, Hopedale, Mass. Leno or cross weaving loom. 1,757,947; May 6.
Société des Moteurs Salmson Systeme Canton-Unné. (See Heinrich, Jean M., assignor.)
Solis, Crisoforo, Rio Grande, Tex. Cattle guard. 1,757,024; May 6.
Somers, Elward B., Darby, Pa., assignor to Tybon Corporation, Camden, N. J. Ribboner. 1,757,147; May 6.
Sorensen, Royal W., Pasadena, and H. A. Barre, Los Angeles, Calif., assignors of one-half to California Institute of Technology and one-half to Southern California Edison Company. High-voltage fuse. 1,757,397; May 6.
Soss, Joseph, Brooklyn, N. Y. Hinge. 1,757,599; May 6.
Soulé, Edward L., Berkeley, Calif. Concrete form. 1,757,487; May 6.
Southern California Edison Company et al. (See Sorensen, R. W., and Barre, assignors.)
Souto, Baldomero V., New York, N. Y., and W. P. Comstock, Newark, N. J. Parlor-car chair. 1,757,551; May 6.
Specialty Insulation Manufacturing Company. (See Batehoits, Clinton, assignor.)
Speedaumat Manufacturing Company. (See Johnson, John E., assignor.)
Speeder Machinery Corporation. (See Ronk, George T., assignor.)
Sperry Gyroscope Company. (See Sperry, Lawrence B., assignor.)

Sperry, Lawrence B., assignor, by mesne assignments to Sperry Gyroscope Company, Inc., Brooklyn, N. Y. Gyroscopic pilot for aeroplanes. 1,757,096; May 6.
Spilsbury, Hugh G., Cranford, assignor, by mesne assignments, to F. Earle Montclair, N. J. Rail-welding apparatus. 1,757,148; May. 6.
Sprague, Clarence A., East Orange, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Submarine cable. 1,757,443; May 6.
Spra-O-Sal Products, Inc. (See Pulkington, William R., assignor.)
Spreen, Charles C., assignor to Kelvinator Corporation, Detroit, Mich. Mechanical refrigeration. 1,757,062; May 6.
Sprowle, William J., Hudson, N. H. Gun rack. 1,757,600; May 6.
Squires, Arleigh N., Milan, Mich. Furniture. 1,757,398; May 6.
Stackhouse, George A., Oakland, Calif., assignor to L. A. Young Spring and Wire Corporation, Detroit, Mich. Spring structure for bed bottoms and the like. 1,757,266; May 6.
Standard Oil Development Company. (See Johns, Carl O., assignor.)
Standard Oil Development Company. (See Loomis, Nathanial E., assignor.)
Standard Stoker Company, The. (See Lower, N. M., Crawford, and Turner, assignors.)
Standard Stoker Company, The. (See Lower, N. M., Osborne, and Turner, assignors.)
Stanley, George C., New York, N. Y., assignors to The M. W. Kellogg Company. Gas-oil separator. 1,757,267; May 6.
Stanley, Richard W. (See Merritt, Louis G. and E. H., and Stanley.)
Starck, William A., assignor to Badger Manufacturing Corporation, Milwaukee, Wis. Automobile bumper. 1,757,268; May 6.
Starck, William A., assignor to Badger Manufacturing Corporation, Milwaukee, Wis. Automobile bumper. 1,757,749; May 6.
Stearman Aircraft Company, The. (See Stearman, Lloyd, assignor.)
Stearman, Lloyd, assignor to The Stearman Aircraft Company, Inc., Wichita, Kans. Air-intake heater. 1,757,488; May 6.
Stebbins, Albert H., Los Angeles, Calif. Air classifier. 1,756,960; May 6.
Steel Wheel Corporation. (See Putnam, Alden L., assignor.)
Steigerwald, Christian. (See Frankenburger, W., and Steigerwald.)
Steinhart, Ferdinand, assignor, by mesne assigments, to The Lindsay Wire Weaving Company, Cleveland, Ohio. Treating wire fabric. 1,757,489; May 6.
Steinmüller, L. & C. (See Steinmüller, Lebrecht, assignor.)
Steinmüller, Lebrecht, Gummersbach, assignor to firm L. & C. Steinmüller, Gummersbach, Rhineland, Germany. Supporting water-tube boilers. 1,757,343; May 6.
Stephenson, William. (See Morgan, H., and Stephenson.)
Stern Brothers. (See Scorelle, Frank, assignor.)
Stevens, Edward W., Detroit, Mich., assignor to Chicago Pneumatic Tool Company, New York, N. Y. Tool retainer. 1,757,444; May 6.
Stevens, Herbert C. M., Paris, France, and R. V. Hutchinson, Lansing, assignors to General Motors Corporation, Detroit, Mich. Crank-case ventilation. 1,757,149; May 6.
Stevens, Horace D., assignor to The Firestone Tire & Rubber Company, Akron, Ohio. Expanding machine. 1,757,750; May 6.
Stewart-Warner Corporation. (See Wood, Andrew C., assignor.)
Stickney, Burnham C., Hillside, N. J., assignor to Underwood Elliott Fisher Company, New York, N. Y. Typewriting machine. 1,756,961; May 6.
Stickney, Burnham C., Hillside, N. J., assignor to Underwood Elliott Fisher Company, New York, N. Y. Typewriting machine. 1,757,269; May 6.
Stiles, Marvin, Hamilton, Tex. Harvester. 1,757,848; May 6.
Stinner, Otto, Eichwalde, near Berlin, Germany. Device for generating and utilizing centrifugal forces. 1,757,270; May 6.
Stoffel, Simon H., assignor to Machinefabrik Reineveld, Delft, Netherlands. Laundry ironing machine. 1,757,344; May 6.
Stoner, Frank, Lakewood, assignor to The Baker-Rauling Company, Cleveland, Ohio. Load-handling mechanism. 1,757,150; May 6.
Stoody Company. (See Stoody, Winston F. and S. M., and Cole, assignors.)
Stoody, Shelley M. (See Stoody, Winston F. and S. M., and Cole, assignors.)
Stoody, Winston F. and S. M., and N. W. Cole, assignors to Stoody Company, Whittier, Calif. Welding rod. 1,757,601; May 6.
Storaasli, Oscar A., Toppenish, Wash. Link hook. 1,757,097; May 6.
Strait, Howard W. (See Morgan, O., and Strait.)
Strassheim, Christopher. (See Hawes, Charles L., assignor.)
Strauss, Joseph B., Chicago, Ill. Prison-door operator. 1,757,751; May 6.
Streich, Frank, assignor to Union Machinery Company, Joliet, Ill. Dough divider. 1,757,099; May 6.
Streich, Frank, and W. P. Elwood, assignors to Union Machinery Company, Joliet, Ill. Mixing machine. 1,757,098; May 6.
Streich, Frank, and W. P. Elwood, assignors to Union Machinery Company, Joliet, Ill. Mixing machine. 1,757,818; May 6.
Strickland, John W., Nashville, N. C. Combination cup and cone holder. 1,757,689; May 6.
Strindberg, Richard, Bradford, Pa. Filter mat. 1,757,690; May 6.
Stringfellow, John S., Lindsay, Va. Gate. 1,757,025; May 6.
Stripling, Luke S., Amarillo, Tex. Windmill. 1,757,849; May 6.
Strobel, Howard M., Oak Park, Ill. Radiotube. 1,757,345; May 6.
Strosacker, Charles J., assignor to The Dow Chemical Company, Midland, Mich. Manufacture of aliphatic chlor compounds. 1,757,100; May 6.
Strouse, Samuel W., St. Johns, Mich. Toy block. Des. 81,117; May 6.
Stuesse, Oscar, St. Louis, Mo. Rat trap. 1,757,063; May 6.
Stuewe, Waldemar F., Milwaukee, Wis. Apparatus for forming manhole tops. 1,757,552; May 6.
Sullenberger, Charles E., Dallas, Tex. Band sawing machine. 1,757,785; May 6.
Sulzer Frères Société Anonyme. (See Hefti, Wilhelm, assignor.)
Sulzer Frères Société Anonyme. (See Schaer, Charles, assignor.)
Sundstrom, Ivar. (See Bertram, J. P., and Sundstrom.)
Sunt, John B., Rhinelander, Wis. Position-indicating and air-supplying device for sunken submarines. 1,757,151; May 6.
Superheater Company, The. (See Griffin, J. F., and Williams, assignors.)
Superior Tool and Die Company. (See Janiszewski, Kasimir, assignor.)
Surber, John, Whittier, Calif. Pump piston. 1,757,271; May 6.
Swain, Joseph G., and M. W. Mitchell, Akron, Ohio, assignors to The Firestone Steel Products Company. Rim-collapsing tool. 1,757,752; May 6.
Swartzbaugh Manufacturing Company, The. (See Rankin, William A., assignor.)
Swift and Company. (See Agar, John C., assignor.)
Swift Electric Welder Company. (See Woofter, Herbert A., assignor.)
Swift, George W., jr., Inc. (See Swift, George W., jr., assignor.)
Swift, George W., jr., assignor to George W. Swift, jr., Inc., Bordentown, N. J. Web-cutting machine. 1,757,445; May 6.
Swinney Brothers Limited. (See Thompson, Herbert A., assignor.)
Syracuse Washing Machine Corporation. (See Husk, J. W., and Olson, assignors.)
Tabulating Machine Company, The. (See Cunningham, J. M., assignor.)
Tabulating Machine Company, The. (See Lake, C. D., and Page, assignors.)
Tabulating Machine Company, The. (See Mills, Albert W., assignor.)
Tarlow, Isidor, Brockton, Mass. Sport-shoe heel-attaching apparatus. 1,757,152; May 6.
Taub, Alex, assignor to General Motors Corporation, Detroit, Mich. Cylinder-head combustion chamber. 1,757,399; May 6.
Tauschek, Gustav, Vienna, Austria. Machine for shuffling cards. 1,757,553; May 6.
Taussig, Joseph, Chicago, Ill. Lamp-socket support for show-case reflectors. 1,757,346; May 6.
Taylor, Francis M., Columbus, Ohio. Elevating conveyer. 1,757,819; May 6.
Taylor, Howard D., New York, N. Y., assignor to Flexible Truck Corporation, Philadelphia, Pa. Car truck. 1,757,272; May 6.
Taylor Instrument Companies. (See Foote, Edward B., assignor.)
Taylor, Scott V. E., Anaconda, Mont. Hydraulic gear. 1,757,850; May 6.
Telefunken Gesellschaft für Drahtlose Telegraphie m. b. H. (See Schröter, Fritz, assignor.)
Television Limited. (See Baird, John L., assignor.)
Teppema, Jan, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Accelerator of vulcanization. 1,757,930; May 6.
Terry, Mattson C., Philadelphia, Pa., assignor to Westinghouse Electric & Manufacturing Company. Control device. 1,757,602; May 6.
Tharp, Victor S., Elmhurst, assignor to Reserve Holding Company, Chicago, Ill. Telephone system. 1,757,101; May 6.
Thauss, Alfred, Cologne-Deutz, Germany, assignor to General Aniline Works, Inc., New York, N. Y. Sulphurized compounds of phenols. 1,757,400; May 6.
Thermo-Ice Corporation. (See Wolcott, Neil B., assignor.)
Therrien, Arthur J., Northbrook, assignor to National Brick Company, Chicago, Ill. Making bricks. 1,757,786; May 6.

Thiery, Fritz, Berlin-Siemensstadt, and H. Goetsch, Berlin-Charlottenburg, assignors to Siemens & Halske Aktiengesellschaft, Wernerwerk, Siemensstadt, near Berlin, Germany. Cartridge fuse. 1,757,753; May 6.

Thomas, Charles W., East Cleveland, assignor to The Thomas Stoker Company, Cleveland, Ohio. Apparatus for feeding fuel. 1,757,401; May 6.

Thomas Elevator Company. (See Wilson, Alexander H., assignor.)

Thomas, George B., assignor to The Bryant Electric Company, Bridgeport, Conn. Electric switch. 1,757,820; May 6.

Thomas, Nicolas F., Detroit, Mich. Submarine rescue device. 1,756,962; May 6.

Thomas Stoker Company, The. (See Thomas, Charles W., assignor.)

Thomas, Victor. (See Newman, J. P., and Thomas.)

Thompson, Albert R., assignor to Anderson-Barngrover Mfg. Co., San Jose, Calif. Fruit pitter. Re17,659; May 6.

Thompson, Carl G., St. Louis, Mo. Airplane construction. 1,757,603; May 6.

Thompson, Herbert A., assignor to Swinney Brothers Limited, Morpeth, England. Filtering or like device. 1,757,153; May 6.

Thompson, James S., assignor to American Brake Materials Corporation, New York, N. Y. Friction brake. 1,757,273; May 6.

Thompson Products, Incorporated. (See Graham, Matthew P., assignor.)

Thompson, Robert A., New Orleans, La. Method of and apparatus for building improved roads. 1,757,691; May 6.

Thurber, Harry F. (See Eddy, N., Carmichael, Thurber, and Balzano.)

Tibbetts, Cyrus R., Colton, Calif. Hand truck. 1,757,490; May 6.

Tietze, Ernst. (See Schepss, W., Tietze, and Ossenbeck.)

Towne, Amos C. (See Vock, W. A., and Towne.)

Tozier, George H., assignor to Eastman Kodak Company, Rochester, N. Y. Reducing the viscosity of nitrocellulose. 1,757,491; May 6.

Transcontinental Oil Company. (See Slagter, Arthur J., assignor.)

Traville, James C., jr., University City, Mo., assignor, by mesne assignments, to General Steel Castings Corporation, Granite City, Ill. Locomotive structure. 1,757,347; May 6.

Travis, Pierce M. (See Halvorsen, A. L., and Travis.)

Travis, Pierce M., Ridgewood, and A. L. Halvorsen, Perth Amboy, assignors to The Emulsion Process Corporation, Jersey City, N. J. Asphalt emulsion. 1,757,102; May 6.

Treadwell, M. H., Company. (See Astrom, Carl P., assignor.)

Trumpler, William E., New York, N. Y., assignor to Westinghouse Electric & Manufacturing Company. Pivot structure. 1,757,604; May 6.

Tuggle, Edgar C., Sharon, Pa. Mechanical pencil. 1,757,884; May 6.

Tun-A-Motor Company, The. (See Morgan, H., and Stephenson, assignors.)

Turbo-Mixer Corporation, The. (See Johnson, John, assignor.)

Turner, Edwin A. (See Lower, N. M., Crawford, and Turner.)

Turner, Edwin A. (See Lower, N. M., Osborne, and Turner.)

Tuttle, Henry A., deceased, Upton, Mass.; J. L. Tuttle, executrix. Gearing mechanism. 1,757,026; May 6.

Tuttle, Henry A., deceased, Upton, Mass.; J. L. Tuttle, executrix. Clutch mechanism. 1,757,027; May 6.

Tuttle, Jennie L., executrix. (See Tuttle, Henry A.)

Tybon Corporation. (See Somers, Elward B., assignor.)

Ulrey, Dayton, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Mercury arc rectifier. 1,757,605; May 6.

Umboltz, Robert B., and R. A. Birmingham, Buena Vista, Va., assignors to The American Valve and Meter Company, Cincinnati, Ohio. Lubricating device for car wheels and tracks. 1,757,402; May 6.

Underwood Elliott Fisher Company. (See Smith, Jesse A. B., assignor.)

Underwood Elliott Fisher Company. (See Stickney, Burnham C., assignor.)

Underwood, Western, Santa Monica, assignor to La Lux Manufacturing Company, Los Angeles, Calif. Mold-rotating machine. 1,757,274; May 6.

Union Machinery Company. (See Elwood, Ward P., assignor.)

Union Machinery Company. (See Streich, Frank, assignor.)

Union Machinery Company. (See Streich, F., and Elwood, assignors.)

Union Special Machine Map. (See Christensen, N. V., and Hanneman, assignors.)

Union Special Machine Company. (See Rubel, Charles F., assignor.)

Union Tool Chest Company. (See Pratt, Seely F., assignor.)

United-Carr Fastener Corporation. (See Holmes, George A., assignor.)

United Engineering & Foundry Company. (See Johnson, Lane, assignor.)

United Engineering & Foundry Company. (See Klein, Clarence J., assignor.)

United Metal Box Co. Inc. (See Hammer, Samuel, assignor.)

United Shoe Machinery Corporation. (See Bates, A., and Keall, assignors.)

United Shoe Machinery Corporation. (See Bertrand, Frederic E., assignor.)

United Shoe Machinery Corporation. (See Erickson, Edward, assignor.)

United Shoe Machinery Corporation. (See Glidden, Harvey L., assignor.)

United Shoe Machinery Corporation. (See Hamann, William, assignor.)

United Shoe Machinery Corporation. (See Hatch, George H., assignor.)

United Shoe Machinery Corporation. (See La Chapelle, Fred N., assignor.)

United Shoe Machinery Corporation. (See Ricks, F., and Richards, assignors.)

United Shoe Machinery Corporation. (See Ryan, G. F., and Burke, assignors.)

United States Air Compressor Company. (See Bacher, Rollin L., assignor.)

U. S. Galvanizing & Plating Equipment Corporation. (See Potthoff, Kurt T., assignor.)

Utah Radio Products Company, The. (See Preator, F., and Seely, assignors.)

Vaisey, Harold C., assignor to Hickok Manufacturing Company, Inc., Rochester, N. Y. Suspender buckle or the like. Des. 81,118; May 6.

Van Buskirk, Robert N., Detroit, Mich., assignor to Bendix Brake Company, South Bend, Ind. Brake-adjusting device. 1,757,348; May 6.

Van Halteren, Andrew S., East Lansing, assignor to Motor Wheel Corporation, Lansing, Mich. Steel felly and rim construction. 1,757,275; May 6.

Van Leuven, David L., assignor to Six Wheel Corporation, Los Angeles, Calif. Running gear. 1,757,759; May 6.

Vaughan, William. (See Kriegsheim, H., and Vaughan.)

Vaughn, Clyde, Pasadena, Calif. Fumigating trees. 1,757,276; May 6.

Vawter, Charles E., Philadelphia, Pa., assignor to Dubilier Condenser Corporation, New York, N. Y. Apparatus for making electrical condensers. 1,757,692; May 6.

Veenschoten, Vincent V., assignor to Northern Equipment Company, Erie, Pa. Method of and apparatus for feeding water to boilers. 1,757,028; May 6.

Vester, Alfred, Sons, Inc. (See Wightman, Thomas H., assignor.)

Victor Adding Machine Co. (See Johantgen, Oliver D., assignor.)

Visker, Simon G., Amsterdam, Netherlands. Spark arrester. 1,757,760; May 6.

Vivenoy, Guillaume N., Brussels, Belgium. Combination tool. 1,757,029; May 6.

Vock, William A., Long Beach, and A. C. Towne, Lomita, Calif. Well tool. 1,757,064; May 6.

Voigt, Albert P. J., Galveston, Tex. Separator. 1,757,103; May 6.

Von Ehrenthal, Bruno, Cothen, Anhalt, Germany, and Karl Scholz, Tetschen-on-the-Elbe, Czechoslovakia. Apparatus for extracting fibers from plant stalks. 1,757,349; May 6.

Wagner, Charles L. (See Wagner, Henry H. and C. L.)

Wagner, Henry H. and C. L., assignors of one-third to J. L. Neal, Pickering, Mo. Chain-applying device. 1,757,851; May 6.

Waite Carpet Company. (See Clements, Albert F., assignor.)

Wilde, Rudolf. (See Bauer, G., Walde, and Kluge.)

Walker, Paul P., Downers Grove, Ill., assignor to Chicago, Burlington & Quincy Railroad Company, Chicago, Ill. Painting apparatus. 1,756,998; May 6.

Wallace, Edward B. (See Beardsley, C. E., and Wallace.)

Wallace, William, La Fayette, Ind. Basket-ball-basket suspension. 1,757,350; May 6.

Walter, Edward C., Orange, N. J., assignor to The Elliott-Fisher Company, New York, N. Y. Triple-hinge index unit. 1,757,154; May 6.

Wardlaw, L. J. (See Sims, Thomas B., assignor.)

Ware, Lola J., Hollywood, Calif. Reversible serving dish. 1,756,963; May 6.

Warnatz, Curt. (See Zickerow, K., and Warnatz.)

Warner Corporation, The. (See Collins, John L., assignor.)

Warsitz, Robert, Hattingen-Ruhr, Germany. Industrial furnace. 1,757,492; May 6.

Warsop, Henry E., Nottingham, and F. W. Gough, Grimsby, England. Machines for emulsifying bitumen, other materials, and the like. 1,757,065; May 6.

Wasson, Robert B. (See Chatillon, G. E., and Wasson.)

Waterfall, Harold, New York, N. Y. Antisplash tire. 1,757,754; May 6.

Waters, Edward T., Omaha, Nebr. Adjusting-rod-locking means. 1,757,787; May 6.

Watkins, John E. (See Barbut, A. E., Cochrane, and Watkins.)

Watson, John C., Attleboro, Mass., assignor to B. B. & R. Knight Corporation, Providence, R. I. Cross-dyeing cellulose fabrics. 1,757,066; May 6.

Watson, John F., Abbey Wood, V. Hunter, London, and A. E. Wilson, Bromley, England. Electric cable. 1,757,030; May 6.

Wayne Company. (See Hitzeman, Arnold P., assignor.)

Wayne Pump Company, The. (See Deutsch, Leo, assignor.)

Weaver, Earl D., Halfway, and C. A. Cobb, Detroit, Mich. Stock remover. 1,757,067; May 6.

Weaver, Grant, La Fayette, Ind. Pump. 1,757,885; May 6.

Weber, Harry M., Newton, Mass., assignor to Ellis-Foster Company. Composition of matter comprising resin esters. 1,757,104; May 6.

Webster, Lewis E., Wyoming, Pa., assignor, by mesne assignments, to Columbus Handle & Tool Corporation, Columbus, Ind. Shovel handle. 1,757,693; May 6.

Wegner, Emil, Milwaukee, Wis. Swimming device. 1,757,277; May 6.

Weichold, Charles, Cincinnati, Ohio. Concrete reenforcement. 1,757,694; May 6.

Weidman, John H., Marcellus, N. Y. Mechanical dishwasher. 1,757,278; May 6.

Weinberg, Fred, New York, N. Y., assignor, to The Rumidor Corporation. Cigarette snuffer. 1,757,279; May 6.

Weinheimer, Theodore A., and E. Hoffman, Pittsburgh, Pa. Ventilator. 1,757,886; May 6.

Wellman Engineering Company, The. (See Case, Arthur F., assignor.)

Wendt, William H., Little Falls, Minn. Propeller attachment. 1,757,761; May 6.

Wesix National Company. (See Kercher, A. J., and Hicks, assignor.)

Wesselhoeft, Robert. (See de Marquez, Daniel E., assignor.)

West, Charles P., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Motor-starting system. 1,757,606; May 6.

West, Erasmus G., Carmichaels, Pa. Antiaircraft shell. 1,757,788; May 6.

Western Cartridge Company. (See Olin, John M., assignor.)

Western Electric Company. (See Anderson, Sidney E., assignor.)

Western Electric Company. (See Fondiller, William, assignor.)

Western Electric Company. (See Harrison, Henry C., assignor.)

Western Electric Company. (See Johnston, John, assignor.)

Western Electric Company. (See Mathes, Robert C., assignor.)

Western Electric Company. (See Oswald, Arthur A., assignor.)

Western Electric Company. (See Sprague, Clarence A., assignor.)

Western Electric Company. (See Wright, E. P. G., Baker, and Cameron, assignors.)

Western Metal Specialty Co. (See Goetz, Julius J., assignor.)

Western Railway Equipment Company. (See Hoerr, Louis A., assignor.)

Westinghouse Electric & Manufacturing Company. (See Aalborg, Christian, assignor.)

Westinghouse Electric & Manufacturing Company. (See Brown, John L., assignor.)

Westinghouse Electric & Manufacturing Company. (See Greibach, Emil H., assignor.)

Westinghouse Electric & Manufacturing Company. (See Koch, Gustav H., assignor.)

Westinghouse Electric & Manufacturing Company. (See Kucher, Andrew A., assignor.)

Westinghouse Electric & Manufacturing Company. (See MacNeill, John B., assignor.)

Westinghouse Electric & Manufacturing Company. (See Morgan, David W. R., assignor.)

Westinghouse Electric & Manufacturing Company. (See Press, Abraham, assignor.)

Westinghouse Electric & Manufacturing Company. (See Schmidt, Henry F., assignor.)

Westinghouse Electric & Manufacturing Company. (See Smith, Benjamin H., assignor.)

Westinghouse Electric & Manufacturing Company. (See Terry, Matson C., assignor.)

Westinghouse Electric & Manufacturing Company. (See Trumpler, William E., assignor.)

Westinghouse Electric & Manufacturing Company. (See Ulrey, Dayton, assignor.)

Westinghouse Electric & Manufacturing Company. (See West, Charles P., assignor.)

Westly, Jens, Kristiansand, assignor to Det Norske, Aktieselskab for Elektrokemisk Industri of Norway, Oslo, Norway. Electrode. 1,757,695; May 6.

Wharam, John J., Detroit, assignor to Ford Motor Company, Fordson, Mich. Dial illumination. 1,757,493; May 6.

Wheary, George H., assignor to Wheary Trunk Company, Racine, Wis. Locking device for drawer sections. 1,757,227; May 6.

Wheary Trunk Company. (See Wheary, George H., assignor.)

Wheat, Grant, assignor to Koehler Manufacturing Company, Marlboro, Mass. Miner's lamp. 1,757,887; May 6.

Wheat, Grant, assignor to Koehler Manufacturing Company, Marlboro, Mass. Miner's lamp. 1,757,888; May 6.

Wheat, Grant, assignor to Koehler Manufacturing Company, Marlboro, Mass. Electric lamp. 1,757,889; May 6.

Wheeler, C. H., Manufacturing Company. (See Kothny, Gottdank L., assignor.)

Wheeler, Harold A., Washington, D. C., assignor to Hazeltine Corporation, Jersey City, N. J. Eliminating capacitive coupling. 1,757,494; May 6.

Whitcomb, William A., Dedham, Mass., assignor to Great Northern Paper Company, Millinocket, Me. Wood-pulp-grinding machine. 1,757,031; May 6.

Wightman, Thomas H., assignor to Alfred Vester Sons, Inc., Providence, R. I. Clasp or similar article. Des. 81,119; May 6.

Wikle, George F., Milwaukee, Wis., assignor to The Fisk Rubber Company, Chicopee Falls, Mass. Tire-building machine. 1,757,105; May 6.

Wikman, Erick, and C. Carlson, Chicago, Ill. Living-room folding bed. 1,757,068; May 6.

Wille, Fredrik, Chicago, Ill. Furnace for treating sheet metal or the like. 1,757,789; May 6.

Willamette-Ersted Company. (See Grab, Gustav A., assignor.)

Williams, Arthur. (See Griffin, J. F., and Williams.)

Williams, Robert T., assignor to H. M. Sheer Company, Quincy, Ill. Canopy or hover for brooders. 1,757,890; May 6.

Williams, Samuel, Elk City, Okla. Machine for extracting hulls of cotton bolls from seed cotton. 1,757,762; May 6.

Wilson, Alexander H., Oak Park, assignor to Thomas Elevator Company, Chicago, Ill. Clutch-operating means. 1,756,964; May 6.

Wilson, Alfred E. (See Watson, J. F., Hunter, and Wilson.)

Wilson Hat Steaming & Blocking Machine Company. (See Wilson, William, assignor.)

Wilson, Helena, Houston, Tex. Easel. 1,757,032; May 6.

Wilson J Pearl, assignor to Wilson-Otwell & Cone, Inc., Jacksonville, Fla. Drying lumber. 1,757,891; May 6.

Wilson, J Pearl, assignor to Wilson-Otwell & Cone, Inc., Jacksonville, Fla. Drying lumber. 1,757,892; May 6.

Wilson, John F., assignor to General Motors Corporation, Detroit, Mich. Radiator-filler cap. 1,757,404; May 6.

Wilson-Otwell & Cone, Inc. (See Wilson, J Pearl, assignor.)

Wilson-Western Sporting Goods Company. (See Levinson, David, assignor.)

Wilson, William, Selma, Ala., assignor to Wilson Hat Steaming & Blocking Machine Company, Inc. Hat-cleaning apparatus. 1,757,821; May 6.

Wine, William E., Toledo, Ohio. Car-door mechanism. 1,757,893; May 6.

Winnipeg Brass Limited. (See Garbut, A. E., Cochrane, and Watkins, assignors.)

Winthrop Chemical Company. (See Schulemann, W., and Kropp, assignors.)

Wirkkala, Oscar A., Glendale, Oreg. Flexible wire rope. 1,757,156; May 6.

Withrow, Floyd G., Grand Rapids, Mich. Rear-view mirror. 1,757,280; May 6.

Witt, John J., assignor to Goodspeed Machine Company, Winchendon, Mass. Variety lathe. 1,757,155; May 6.

Wolcott, Neil B., Washington, D. C., assignor to Thermo-Ice Corporation, Auburn, N. Y. Ice-forming apparatus. 1,757,033; May 6.

Wolff, Hans. (See Schröter, K., and Wolff.)

Wood, Andrew C., assignor to Stewart-Warner Corporation, Chicago, Ill. Commutator brush. 1,757,696; May 6.

Wood, Clarence G., Muncie, Ind., assignor, by mesne assignments, to Auto Prime Pump Company, Cleveland, Ohio. Centrifugal pump. 1,757,281; May 6.

Wood, Clarence G., assignor, by mesne assignments, to Auto Prime Pump Company, Cleveland, Ohio. Centrifugal pump. 1,757,282; May 6.

Wood, Henry A. W., assignor to Wood Newspaper Machinery Corporation, New York, N. Y. Triplex web press. 1,757,157; May 6.

Wood, Jack. (See Quiggin, H., and Wood.)

Wood Newspaper Machinery Corporation. (See Wood, Henry A. W., assignor.)

Woodward-Wanger Company. (See Bardsley, Samuel B., assignor.)

Woofter, Herbert A., Kenton, Ohio, assignor to Swift Electric Welder Company, Detroit, Mich. Electrical lead. 1,757,822; May 6.

Wray, Charles F., assignor to National Brass Manufacturing Company, Rochester, N. Y. Check-valve construction. 1,757,823; May 6.

Wright, Esmond P. G., Croydon, J. H. E. Baker, Hampstead, and A. H. Cameron, Brondesbury, England, assignors to Western Electric Company, Incorporated, New York, N. Y. Telephone-exchange system. 1,757,446; May 6.

Wright, George S., Ottawa, Ill. Pump connection. 1,757,034; May 6.

Wrigley, Wm., jr., Company. (See Eckerly, Edward W., assignor.)

Wyman, Frank E., Faunce, Minn. Differential mechanism. 1,757,069; May 6.

Yares, Clement A. (See Cheslock, F. J., and Yares.)
Yaxley Manufacturing Company. (See Hall, Arthur, assignor.)
Yeager, Frank W., Grantwood and W. P. Schulz, Guttenberg, N. J., assignors to The Barrett Company. Shingle-locking device. 1,757,351; May 6.
Yellow Truck & Coach Company. (See Jantsch, Victor, assignor.)
Young, L. A., Spring and Wire Corporation. (See Stackhouse, George A., assignor.)
Young, W. J., Machinery Company. (See Young, William J., assignor.)
Young, William J., assignor to W. J. Young Machinery Company, Lynn, Mass. Heel-nailing machine. 1,756,999; May 6.
Youngstown Pressed Steel Company, The. (See Clark, Carl L., assignor.)
Zademach, Erich R., Elizabeth, N. J. Nozzle construction. 1,756,965; May 6.
Zeb, Ludwig. (See Dulsberg, W., Hentrich, and Zeb.)
Zerweck, Werner. (See Kalischer, G., and Zerweck.)
Zickerow, Karl, Lubeck, and C. Warnatz, Bad Schwartau, near Lubeck, assignors to Lubecker Maschinenbau-Gesellschaft, Lubeck, Germany. Tilting barge. 1,757,495; May 6.
Zieman, Harry J., assignor to Empire Level Manufacturing Company, Milwaukee, Wis. Level. 1,757,283. May 6.
Zullo, Samuel, Jersey City, N. J. Cigar cutter 1,757,607; May 6.
Zvirblis, Antanas J., Barberton, Ohio. Current motor. 1,757,894; May 6.

ALPHABETICAL LIST OF INVENTIONS

FOR WHICH

PATENTS WERE ISSUED ON THE 6TH DAY OF MAY, 1930

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

Accelerator. W. R. Morris. 1,757,018; May 6.
Accelerator of vulcanization. J. Teppema. 1,757,930; May 6.
Accounting machine. R. L. Muller. 1,757,134; May 6.
Acid compound, Barbituric. F. Hefti. 1,757,906; May 6.
Acoustic device. H. C. Harrison. 1,757,712; May 6.
Acoustic device. C. R. Moore. 1,757,465; May 6.
Acoustic instrument. H. C. Hayes. 1,757,938; May 6.
Advertising device. H. W. Joy. 1,756,980; May 6.
Aerial. C. E. Cazel. 1,757,172; May 6.
Aeroplane. C. J. Boyd. 1,757,109; May 6.
Aeroplane. W. Lamb. 1,757,202; May 6.
Aeroplane. J. T. Rydberg. 1,757,879; May 6.
Aeroplane, Safety. J. Leopold. 1,757,842; May 6.
Aeroplanes, Air controller for. P. Lefevre. 1,757,435; May 6.
Aeroplanes, Gyroscopic pilot for. L. B. Sperry. 1,757,096; May 6.
Air, Apparatus for compressing. G. L. Ferguson. 1,757,299; May 6.
Air classifier. A. H. Stebbins. 1,756,960; May 6.
Air cleaner. H. Haegler. 1,757,835; May 6.
Air cleaner. H. G. Kamrath. 1,757,432; May 6.
Air compressor. R. P. Pescara. 1,757,215; May 6.
Aircraft. C. J. Mulzer. 1,757,918; May 6.
Aircraft, Apparatus for determining the course of. K. Petschenig. 1,757,874; May 6.
Air heater, Tubular. C. D. Mosher. 1,757,327; May 6.
Air-intake heater. L. Stearman. 1,757,488; May 6.
Air-line oiler. C. C. Hansen. 1,757,084; May 6.
Air moistener and cleaner. O. K. L. Drubba. 1,757,856; May 6.
Airplane construction. C. G. Thompson. 1,757,603; May 6.
Airplanes, Sustaining attachment for. G. Halldin. 1,757,630; May 6.
Air purifier for closed cars. E. Ferrara. 1,757,080; May 6.
Alloy. M. E. Barker. 1,757,507–8; May 6.
Alloys, Producing low-carbon. F. A. Fahrenwald. 1,757,298; May 6.
Aminoalkylamino derivative of aromatic aminohydroxy or polyamino compounds. W. Schulemann and W. Kropp. 1,757,394; May 6.
Animal figure. E. C. Segar. Des. 81,111; May 6.
Animal trap. A. C. Richardson. 1,757,218; May 6.
Antenna, Loop. S. E. Anderson. 1,756,931; May 6.
Asphalt emulsion. A. L. Halvorsen and P. M. Travis. 1,757,083; May 6.
Asphalt emulsion. P. M. Travis and A. L. Halvorsen. 1,757,102; May 6.
Asphaltenes and carbenes from fuel oil, Eliminating colloidal. A. Jurrissen. 1,756,981; May 6.
Audio amplification, Arrangement for multistage. W. Moser. 1,757,466; May 6.
Autoclave and operating same. H. M. Schleicher. 1,757,592; May 6.
Automobile disposal and withdrawal structure. W. J. Porter. 1,757,331; May 6.
Automobile, Fluid drive for. K. A. Enlind. 1,756,977; May 6.
Automobile hood-retaining means. C. H. E. Remondino. 1,757,021; May 6.
Axle box and its lubrication. F. W. Martin and F. R. Peters. 1,757,582; May 6.
Baking machine, Ice-cream-cone-. A. Benbinisti. 1,757,556; May 6.
Ballistic apparatus. J. B. Henderson. 1,757,800; May 6.
Balloons, Protective device for. A. Crossley. 1,757,111; May 6.
Band feeder. A. M. English. 1,757,079; May 6.
Banks, Protecting. A. L. Smith. 1,757,688; May 6.
Barge, Tilting. K. Zickerow and C. Warnatz. 1,757,495; May 6.
Basket-ball-basket suspension. W. Wallace. 1,757,350; May 6.
Basket, Collapsible. F. E. Brunell. 1,757,168; May 6.
Battery plate-filling machine. W. F. Price and R. H. Beck. 1,757,546; May 6.
Beam, Rolled-metal. N. C. Rendleman. 1,757,388; May 6.
Bearing, Roller. A. T. Killian. 1,757,199; May 6.
Bearing, Vehicle spring. R. R. Searles and E. H. Cooper. 1,757,746; May 6.
Bearings, Plunger overflow for sealed sleeve. J. L. Brown. 1,757,615; May 6.
Bed, Living-room folding. E. G. Wikman and C. Carlson. 1,757,068; May 6.
Bed or the like, Portable. W. A. Matheson. 1,757,877; May 6.
Bedpan washer. J. H. Okun. Des. 81,120; May 6.
Bed, Swinging. L. O. Oxendorf. 1,757,544; May 6.
Belt-tensioning device. E. J. Blake and C. I. Lusink. 1,757,164; May 6.
Bending device. V. Navratil. 1,757,779; May 6.
Bin. H. L. Glidden. 1,757,185; May 6.
Binder for down-hanging sheets. H. L. De Lisle. 1,757,705; May 6.
Bitumen, other materials, and the like, Machine for emulsifying. H. E. Warsop and F. W. Gough. 1,757,065; May 6.
Blade cutter, Inserted. F. P. Miller. 1,756,986; May 6.
Boiler construction. R. Doherty. 1,757,358; May 6.
Boilers, Means for supporting water-tube. L. Steinmüller. 1,757,343; May 6.
Book-trimming machine. P. A. Frazier. 1,757,623; May 6.
Bottle-cap remover and reinserter, Milk-. C. R. Boland. 1,757,510; May 6.
Bottle stopper. H. G. Norwood. 1,757,438; May 6.
Box: *See*—
Pipe curb box.
Stuffing box.
Storage box.
Box folding and taping machine. J. H. McPike. 1,757,730; May 6.
Box-making machine. W. A. Joplin. 1,757,804; May 6.
Bracket: *See*—
Shelf bracket.
Braiding machine. W. E. Cook. 1,757,794; May 6.
Brake: *See*—
Fluid-operated brake.
Vehicle brake.
Friction brake.
Brake. A. Y. Dodge. 1,756,975; May 6.
Brake. A. Y. Dodge and R. S. Sanford. 1,757,558; May 6.
Brake. L. E. La Brie. 1,756,982–3; May 6.
Brake. R. S. Sanford 1,756,996; May 6.
Brake-adjusting device. R. N. Van Buskirk. 1,757,348; May 6.
Brake-applying means. G. H. Hunt. 1,756,979; May 6.
Brake shoe. V. Bendix. 1,756,936; May 6.
Brake shoe. M. W. McConkey. 1,756,985; May 6.
Brakes, Lubricant guard for. R. S. Sanford and O. B. Clark. 1,756,995; May 6.
Bricks, Making. W. B. Alcorn. 1,757,229; May 6.
Bricks, Making. A. J. Therrien. 1,757,736; May 6.
Brush and holder therefor, Contact. N. D. Levin. 1,757,203; May 6.
Brush, Commutator. A. C. Wood. 1,757,696; May 6.
Brush for barbers. J. Arico. 1,757,650; May 6.
Brush handle or the like. O. D. Earon. Des. 81,088; May 6.
Buckle. W. L. Myers. Des. 81,105; May 6.
Buckle for garters, Webbing. J. B. Russ. 1,757,845; May 6.
Buckle or the like, Suspender. L. W. Shields. Des. 81,112; May 6.
Buckle or the like, Suspender. H. C. Vaisey. Des. 81,118; May 6.
Buckle, Shoe. S. M. Riker. Des. 81,108; May 6.
Buckle, Shoe. W. E. Smith. Des. 81,113–16; May 6.
Building construction. M. Elserloh. 1,757,077; May 6.
Bumper, Automobile. W. A. Starck. 1,757,268; May 6.
Bumper, Automobile. W. A. Starck. 1,757,749; May 6.
Burner: *See*—
Gas burner.
Vapor burner.
Oil burner.
Burner and ventilator, Gas. F. Bushman and R. McFarlane. 1,757,398; May 6.
Burners, Controlling device for gas. R. R. Root. 1,757,591; May 6.
Burn-off machine, Rotary. A. C. Parker. 1,757,211; May 6.
Button. C. H. Miller. 1,756,952; May 6.
Button, Cuff. A. H. Humphries. 1,757,369; May 6.
Cabinet. E. J. Packer. 1,757,811; May 6.
Cabinet, Combined radio and phonograph. A. N. Goldsmith and L. Shapiro. 1,757,804; May 6.
Cabinet, Refrigerator. G. W. Mason. 1,756,984; May 6.
Cable, Armored electric. G. A. Johnson. 1,757,049; May 6.
Cable, Electric. J. F. Watson, P. V. Hunter, and A. E. Wilson. 1,757,080; May 6.
Cable, Submarine. C. A. Sprague. 1,757,443; May 6.
Cake and pie pan. A. Dillow. 1,757,655; May 6.
Cam, Variable nose. M. C. Horine. 1,757,046; May 6.
Can: *See*—
Compartment can.
Canopy or hover for brooders. R. T. Williams. 1,757,890; May 6.
Caoutchouc, Vulcanizing. L. B. Sebrell. 1,757,944; May 6.
Car, Dump. W. L. Burner. 1,757,038; May 6.
Car dumper. A. F. Case. 1,757,932; May 6.
Car, Hot-metal. C. P. Astrom. 1,757,000; May 6.

Car replacing rail. T. Lippeatt, sr. 1,757,403; May 6.
Car-retarder system. W. K. Howe. 1,757,428; May 6.
Carburetor. H. W. Haegler. 1,757,833; May 6.
Carburetors, Preheating device for. E. J. Ottosson. 1,757,920; May 6.
Card for index systems, Guide. D. E. Hunter. 1,757,122; May 6.
Card unit for visible card systems. R. Hochschild. 1,757,368; May 6.
Cargo-unloading apparatus. G. L. Douglass and S. Cooper. 1,757,453; May 6.
Cartridge, Blasting. E. Ormsby. 1,757,382; May 6.
Case: *See*—
Packing case. Speedometer case
Shipping case. Vanity case.
Casing for talking machines. J. M. Ehmer. 1,757,518; May 6.
Cellulose material, Dyeing of regenerated. J. Baddiley. 1,757,158; May 6.
Cementing apparatus, Mandrel-. C. E. Maynard. 1,757,128; May 6.
Centering and aligning device. J. B. Galbraith. 1,757,457; May 6.
Centrifugal drier. W. V. Orr. 1,757,585; May 6.
Centrifugal forces, Devices for generating and utilizing. O. Stinner. 1,757,270; May 6.
Chain-applying device. H. H. and C. L. Wagner. 1,757,851; May 6.
Chair: *See*—
Parlor-car chair.
Channel-opening machine. G. H. Hatch. 1,757,189; May 6.
Chisel-retainer-lock. R. A. Norling. 1,757,093; May 6.
Chlor compounds, Manufacture of aliphatic. C. J. Strosacker. 1,757,100; May 6.
Chock. E. G. Johnson. 1,757,866; May 6.
Chuck, Work. W. N. Booth. 1,757,970; May 6.
Cigar cutter. S. Zullo. 1,757,607; May 6.
Cigarette-making machine. W. E. Molins. 1,757,380; May 6.
Cigarette snuffer. F. Weinberg. 1,757,279; May 6.
Circuit arrangement, Neutrodyne. N. Koomans. 1,757,910; May 6.
Circuit-breaker-operating mechanism. C. Aalborg. 1,756,930; May 6.
Circuit-controlling appliance, Electric-. J. Sachs. 1,757,741–2; May 6.
Circuit-controlling mechanism. G. H. Koch. 1,757,637; May 6.
Circuit interrupter. J. B. MacNeill. 1,757,643; May 6.
Circuit interrupter. J. B. MacNeill. 1,757,915; May 6.
Circuit, Rotary line-switch. H. D. Sharpe. 1,757,224; May 6.
Circuit, Telegraph alarm. F. J. Singer. 1,757,225; May 6.
Circuits and apparatus, Electromagnetic. W. Fondiller. 1,757,710; May 6.
Circuits for luminous tubes, Starting and operating. R. R. Machlett. 1,757,776; May 6.
Clamp: *See*—
Pipe clamp.
Clamping device. H. L. Myers. 1,757,679; May 6.
Clasp or similar article. T. H. Wightman. Des. 81,119; May 6.
Cleaner: *See*—
Air cleaner. Fruit cleaner.
Eraser cleaner. Vacuum cleaner.
Cleaning and air conditioning apparatus. A. O. Engberg and F. Carlstedt. 1,757,239; May 6.
Cleaning and polishing implement. H. Hertzberg. 1,757,366; May 6.
Cleaning device. P. J. Martin. 1,757,777; May 6.
Cleansing and emulsifying agent. W. Pungs. 1,757,441; May 6.
Closure apparatus. C. H. Ehlers. 1,756,976; May 6.
Closure hanger. L. W. Franks. 1,757,422; May 6.
Clutch-facing material and its production. S. P. Howe. 1,757,089; May 6.
Clutch mechanism. H. A. Tuttle. 1,757,027; May 6.
Clutch-operating means. A. H. Wilson. 1,756,964; May 6.
Clutch, Vibrationless multiple-disk. E. E. Eaton. 1,757,517; May 6.
Clutches or gears, Arrangement for filling and maintaining filled hydraulic. G. Bauer, R. Wälde, and H. Kluge. 1,757,827; May 6.
Coal-carbonizing apparatus for the extraction of bituminous materials. K. Bergfeld. 1,756,969; May 6.
Coal distributor, Pulverized-. S. A. Jacques. 1,757,634; May 6.
Coal, tars, mineral oils, and the like, Valuable products from. O. Eisenhut. 1,757,454; May 6.
Coiled material, Apparatus for transferring. L. Johnson. 1,757,772; May 6.
Coin-collection apparatus. J. M. Melick. 1,757,464; May 6.
Coin-controlled device. T. S. Poole. 1,757,921; May 6.
Collar. M. I. Halperin. 1,757,861; May 6.
Collar. W. A. Pusey. 1,757,057; May 6.
Collar, Waterproof. E. P. Parsons. 1,756,990; May 6.
Color screen. C. Alstrup and V. Jensen. 1,757,852; May 6.
Comb: *See*—
Liquid-dispensing comb.
Comforter. J. May. Des. 81,101–2; May 6.
Commutator. J. M. Cunningham. 1,757,112; May 6.
Commutator. A. Schmid. 1,757,393; May 6.
Compartment can. J. M. Hothersall. 1,757,192; May 6.
Compositions, especially those resembling rubber, Artificial. W. Frankenburger and C. Steigerwald. 1,756,943; May 6.
Compressor, Lubricant. E. W. Davis. 1,757,236; May 6.
Concrete form. E. L. Soulé. 1,757,487; May 6.
Concrete forms, Adjustable shore for. F. Kahn. 1,757,312; May 6.
Concrete reenforcement. C. Weichold. 1,757,694; May 6.
Condensation product and making same. G. Kallscher and W. Zerweck. 1,757,431; May 6.
Condenser, Electrical. S. S. and R. E. Cramer. 1,757,357; May 6.
Condenser, Electrical. W. Dubilier. 1,757,657; May 6.
Condensing plant, Heat-balance. D. W. R. Morgan. 1,756,987; May 6.
Conductor and manufacturing the same, Insulated. J. Johnston. 1,757,717; May 6.
Confections, Mixing, heating, and distributing unit for. W. H. Carson. 1,757,234; May 6.
Container. H. M. Nicholls. 1,757,208; May 6.
Container. H. Quiggin and J. Wood. 1,757,814; May 6.
Container, Chemical. M. Keim. 1,757,530; May 6.
Container, Food. J. P. Cooper. 1,757,448; May 6.
Container, Slipper-display. L. C. Sadr. 1,757,478; May 6.
Control device. M. C. Terry. 1,757,602; May 6.
Control mechanism. C. J. Klein. 1,757,773; May 6.
Control switch. A. J. Kercher. 1,757,314; May 6.
Controller, Fluid. R. T. Roye. 1,757,489; May 6.
Conveyer. P. Goebels. 1,757,832; May 6.
Conveyer, Automatic. J. T. Cowley and L. C. Allen. 1,757,416; May 6.
Conveyer, Flight. H. H. Barber and P. A. Smith. 1,757,608; May 6.
Conveyer, Metal-belt. L. Bethke. 1,757,652; May 6.
Conveyer, Portable. E. Potaufeux. 1,757,216; May 6.
Conveyer, Screw. J. A. B. Smit. 1,757,841; May 6.
Conveyer system for use in handling rubber-tube mandrels. M. H. Pade. 1,757,732; May 6.
Cooler: *See*—
Liquid cooler.
Cooling method and mechanism. R. T. Johnston. 1,756,947; May 6.
Copper copper-oxide rectifier plates, Forming. W. T. Anderson, jr., and L. F. Bird. 1,757,284; May 6.
Copper or copper alloys, Electrolytically refining. M. Hosenfeld and G. Hänsel. 1,757,047; May 6.
Cork sheet and making same, Laminated. C. E. McManus. 1,756,950; May 6.
Coupling: *See*—
Rod coupling.
Coupling. J. Dumond. 1,757,009; May 6.
Coupling, Eliminating capacitive. H. A. Wheeler. 1,757,494; May 6.
Coupling for cleaners. A. O. Engberg and F. Carlstedt. 1,757,240; May 6.
Cover, Ash-can. M. Rosner. 1,757,740; May 6.
Cover, Radiator. A. E. Hurst. 1,757,090; May 6.
Cowl construction. C. Schlesinger. 1,757,783; May 6.
Crank-case ventilation. H. C. M. Stevens and R. V. Hutchinson. 1,757,149; May 6.
Crossing signal. J. A. Morrison. 1,757,206; May 6.
Crutch, Wheel-mounted adjustable-frame. L. C. Smoot. 1,757,784; May 6.
Cultivator reel. R. C. Brewer. 1,757,511; May 6.
Cultivators, Line rack for. B. S. Kelley. 1,757,433; May 6.
Cup and cone holder, Combination. J. W. Strickland. 1,757,689; May 6.
Cups, Apparatus for cleaning teat. H. C. Beckman. 1,757,035; May 6.
Current-collecting mechanism. E. A. Binney. 1,757,611; May 6.
Current-measuring device. A. H. Hotopp. 1,757,193; May 6.
Current motor. A. J. Zvirblis. 1,757,894; May 6.
Cushion for sheet-metal presses. F. J. Rode. 1,757,737–8; May 6.
Cutter: *See*—
Blade cutter. Stalk cutter.
Cigar cutter. Weed cutter.
Linoleum cutter.
Cylinder-head combustion chamber. A. Taub. 1,757,399; May 6.
Davenport or similar article. F. Havel. Des. 81,095; May 6.
Dental molds, Agitator for. R. R. Jones. 1,757,803; May 6.
Dental root-canal point. L. R. Siegel. 1,757,595; May 6.
Developing apparatus. A. Langsner. 1,757,672; May 6.
Dial illumination. J. J. Wharam. 1,757,493; May 6.
Dial or similar article, Watch. H. Moeller. Des. 81,104; May 6.
Dial, Scale. G. E. Chatillon and R. B. Wasson. Des. 81,085; May 6.
Dialyzing apparatus. E. Heibig. 1,757,364; May 6.
Diaphragm for acoustic instruments or apparatus. C. B. Lenthall. 1,757,091; May 6.
Die set. K. Janiszewski. 1,757,309; May 6.
Differential. F. E. Crawford. 1,756,939; May 6.

Differential mechanism. F. B. Wyman. 1,757,069; May 6.
Digger: *See*—
Peanut digger.
Direction indicator. W. D. Morgan and E. Knapton. 1,757,678; May 6.
Discharge tube. C. Bol. 1,757,233; May 6.
Dish and utensil washing machine. A. B. Bowman. 1,757,356; May 6.
Dish, Reversible serving. L. J. Ware. 1,756,963; May 6.
Dishwasher, Mechanical. J. H. Weidman. 1,757,278; May 6.
Dishwashing machine. F. L. Davidson. 1,757,881; May 6.
Dispensing apparatus, Control for. H. B. Higgins, jr. 1,757,801; May 6.
Dispensing apparatus, Liquid-. A. P. Hitzeman. 1,757,836; May 6.
Display apparatus. E. A. Burrows. 1,757,764; May 6.
Display mechanism, Information-. E. Eichenberger. 1,757,360; May 6.
Display stand, Ensemble. J. Brownstein. Des. 81,083–4; May 6.
Display stand for packaged confections. E. W. Eckerly. 1,757,076; May 6.
Doorcheck. H. G. Simmons. 1,757,261; May 6.
Door check or stop. A. C. Earhart. 1,757,075; May 6.
Door mechanism, Car-. W. E. Wine. 1,757,893; May 6.
Door operator, Prison-. J. B. Strauss. 1,757,751; May 6.
Dough divider. F. Streich. 1,757,099; May 6.
Dough-molding machine. L. S. Harber and J. E. Pointon. 1,757,306; May 6.
Drawer. E. J. Card and V. A. Gronberg. 1,757,293; May 6.
Dress. D. Long. Des. 81,098–9; May 6.
Drier: *See*—
Centrifugal drier.
Drill: *See*—
Miner's drill.
Drill spindles, Hydraulic feed mechanism for radial. R. R. Roberts and W. J. F. Forward. 1,757,685; May 6.
Drive vibratory fork, Contact-. A. M. Curtis. 1,757,704; May 6.
Drying articles. A. W. Morris. 1,757,205; May 6.
Drying macaroni and other products made from a paste of flour and water. A. W. Quiggle. 1,756,992; May 6.
Drying machine. L. G. and E. H. Merritt and R. W. Stanley. 1,757,092; May 6.
Duster, Paper hair. N. J. Carbone, jr. 1,757,853; May 6.
Dusting device. H. A. Inman. 1,757,528; May 6.
Dyeing. J. Baddiley. 1,757,502; May 6.
Dyeing. J. Baddiley. 1,757,505; May 6.
Dyeing regenerated cellulose silk. J. Baddiley, P. Chorley, and R. Brightman. 1,757,504; May 6.
Dyeing with azo dyes. J. Baddiley, P. Chorley, and R. Brightman. 1,757,497–8; May 6.
Dyes and their application, Manufacture of new secondary disazo. J. Baddiley. 1,757,506; May 6.
Dyes, Application of azo. J. Baddiley. 1,757,503; May 6.
Dyes, Application of secondary disazo. J. Baddiley. 1,757,501; May 6.
Dyes from 1:8-aminonaphthol sulphonic acid, Relating to manufacture of new secondary disazo. J. Baddiley. 1,757,500; May 6.
Dyes, Manufacture of new azo. J. Baddiley, P. Chorley, and R. Brightman. 1,757,496; May 6.
Dyes, New secondary disazo. J. Baddiley, P. Chorley, and R. Brightman. 1,757,499; May 6.
Dyestuffs produced from amino-benzyl-w-sulphonic acids, Monazo. W. Duisberg, W. Hentrich, and L. Zeh. 1,757,419; May 6.
Easel. H. Wilson. 1,757,032; May 6.
Economizer. O. de Lorenzi. 1,757,621; May 6.
Electric control device. W. A. Marrison. 1,757,727; May 6.
Electric fan, oscillating. N. W. Gilbert and A. E. Jabet. 1,757,797; May 6.
Electric furnace. A. J. Asch. 1,757,895; May 6.
Electric machine drive, Synchronous variable-speed. W. R. Perry. 1,757,734; May 6.
Electric switch. A. H. Fleet. 1,757,709; May 6.
Electric switch. E. and H. Moxter. 1,757,054; May 6.
Electric switch. G. B. Thomas. 1,757,820; May 6.
Electrical conductors, Apparatus for making. C. E. Vawter. 1,757,692; May 6.
Electrical contact device. A. M. Curtis. 1,757,703; May 6.
Electrical controlling device. F. G. L. Boyer. 1,757,072; May 6.
Electrical indicating instrument. L. Edenburg. 1,757,659; May 6.
Electrical outlet device, Dual. H. E. Slade. 1,757,748; May 6.
Electrical therapeutic apparatus. R. W. Chapman. 1,757,110; May 6.
Electrical timing device. F. E. Pendleton. 1,757,733; May 6.
Electrocapillary device. M. Latour. 1,757,775; May 6.
Electrode. J. Westly. 1,757,695; May 6.
Electrolytic apparatus. F. G. Clark and J. N. Smith. 1,757,235; May 6.
Electromagnetic pick-up. M. Alden. 1,756,966; May 6.
Electroplating. A. O. Langseth. 1,757,671; May 6.
Electrotype plates and the like, Method of and apparatus for straightening and solidifying. F. A. Hengst. 1,757,569; May 6.
Elevating conveyer. F. M. Taylor. 1,757,819; May 6.
Elevator: *See*—
Fluid elevator.
Engine: *See*—
Internal-combustion engine. Rotary engine.
Otto-cycle engine.
Engine and valve structure. P. G. Frazier. 1,757,302; May 6.
Engines, Construction of internal-combustion. J. M. Heinrich. 1,757,862; May 6.
Engines, Safety attachment for internal-combustion. M. K. Barnard. 1,757,353; May 6.
Eraser cleaner. J. F. Palmer. 1,757,545; May 6.
Evaporator element. G. W. Gall and A. J. Kusel. 1,757,041; May 6.
Excavating dipper. W. J. Mullally. 1,757,328; May 6.
Excavating machine. C. C. Johnston. 1,757,908; May 6.
Exhaust device for indirect-heated gas-fired ovens and the like. E. O. Engels. 1,757,361; May 6.
Exhaust-steam injector. J. F. Griffin and A. Williams. 1,757,566; May 6.
Expanding machine. H. D. Stevens. 1,757,750; May 6.
Extractor: *See*—
Fruit-juice extractor.
Eyeglass guard. J. P. Bertram and I. Sundstrom. 1,757,036; May 6.
Fabric anchorage. H. D. Forse. 1,757,241; May 6.
Fabric and product thereof, Delustering. C. Dreyfus and H. Platt. 1,756,941; May 6.
Fabric-feeding device. E. F. Maas. 1,757,935; May 6.
Fabric, Textile. G. Ehrenzweig. Des. 81,089; May 6.
Fabric-treating machine. A. C. Mason. 1,757,536; May 6.
Fabric, Treating wire. F. Steinhart. 1,757,489; May 6.
Fabrics, Cross-dyeing cellulose. J. C. Watson. 1,757,066; May 6.
Fabrics, Method and apparatus for making weftless. A. E. Jury. 1,757,636; May 6.
Fabrics, Process and apparatus for making double pile. T. J. Bachofen. 1,757,555; May 6.
Fan, Cooling. F. W. Caldwell. 1,757,292; May 6.
Fastener. W. M. Mack. 1,757,462; May 6.
Fastener, Envelope. G. A. Holmes. 1,756,946; May 6.
Fastening-inserting machine. F. N. La Chapelle. 1,757,200; May 6.
Feeder and sorter. R. G. Clark. 1,757,793; May 6.
Fernery stand. J. R. Dew and R. Guffey. Des. 81,086; May 6.
Fiber, Colloided cellulose and indurated. F. C. Hahn. 1,757,755; May 6.
Fiber, Purified. R. A. Gortner and W. F. Hoffman. 1,757,768; May 6.
Fibers from plant stalks, Apparatus for extracting. B. P. von Ehrenthal and K. Scholz. 1,757,349; May 6.
Film-embossing rollers, Making lenticular. P. R. Ord. 1,757,443; May 6.
Filter, J. Auberschek. 1,757,554; May 6.
Filter. H. Haegler. 1,757,834; May 6.
Filter mat. R. Strindberg. 1,757,690; May 6.
Filter, Multidisk suction. V. C. Benjamin. 1,757,355; May 6.
Filtering or like device. H. A. Thompson. 1,757,153; May 6.
Finishing machine. W. Hamann. 1,757,188; May 6.
Fire extinguisher, Automatic. H. W. Partlow. 1,757,213; May 6.
Fire-extinguishing apparatus, Manual release for. W. H. Freygang. 1,757,563; May 6.
Fish-filleting machine. E. A. Gallison. 1,757,013; May 6.
Flag for rural mail boxes. L. J. Beeman. 1,757,162; May 6.
Flower, Artificial. M. L. Mess. 1,757,943; May 6.
Fluid-applying machine. E. Erickson. 1,757,180; May 6.
Fluid-condensing system. G. L. Kothny. 1,757,723; May 6.
Fluid elevator. W. H. Hughes. 1,757,460; May 6.
Fluid elevator. O. Morgan and H. W. Strait. 1,757,381; May 6.
Fluid-operated brake. V. Bendix. 1,757,071; May 6.
Flux, Soldering. F. E. Harris. 1,757,118; May 6.
Fly exit. H. G. Lewis. 1,757,868; May 6.
Folding table. J. Silverman. 1,757,260; May 6.
Fork: *See*—
Drive vibratory fork.
Frame: *See*—
Mending frame.
Frame structure, Tender-. C. B. Harbison. 1,757,117; May 6.
Frames for spinning or twisting cotton and other fibers, slubbing, roving, and like. R. L. Bellhouse. 1,757,407; May 6.
Friction brake. J. S. Thompson. 1,757,273; May 6.
Friction material. A. L. Boegehold and C. R. Short. 1,757,408; May 6.
Fruit cleaner. H. A. Ingraham. 1,757,308; May 6.
Fruit-juice extractor. C. E. Beardsley and E. P. Wallace. 1,757,609; May 6.
Fruit-juice separator. A. Miller. 1,757,326; May 6.
Fruit pitter. A. R. Thompson. Re17,659; May 6.
Fuel, Apparatus for feeding. C. W. Thomas. 1,757,401; May 6.
Fuel-dispensing system, Hydraulic. E. Hurlbrink and M. Ludwig. 1,757,715; May 6.
Fuel, Liquid. C. O. Johns. 1,757,838; May 6.

Fuel, Motor. C. O. Johns. 1,757,837; May 6.
Furnace: *See*—
Electric furnace. Industrial furnace.
Heating furnace. Retort furnace.
Furnace. C. H. Root. 1,757,878; May 6.
Furnace for treating sheet metal or the like. F. Wille. 1,757,789; May 6.
Furnaces, Apparatus for the regulation of combustion in. C. A. Klopker. 1,757,051; May 6.
Furnaces, Rabble for Mannheim. M. W. Banton. 1,757,286; May 6.
Furniture. A. N. Squires. 1,757,398; May 6.
Fuse, Cartridge. F. Thiery and H. Goetsch. 1,757,753; May 6.
Fuse, High-voltage. R. W. Sorensen and H. A. Barre. 1,757,397; May 6.
Game. C. E. Mahr. 1,757,870; May 6.
Game apparatus. S. V. Holmes. 1,757,088; May 6.
Gas burner. W. F. Shutt. 1,757,847; May 6.
Gas cock. G. E. Smith. 1,757,550; May 6.
Gas-oil separator. G. C. Stanley. 1,757,267; May 6.
Gas producer. J. Becker. 1,757,232; May 6.
Gases, Method of and apparatus for compressing. J. Jandasek. 1,757,802; May 6.
Gaseous mixtures, Purification of. W. J. Bannister. 1,757,826; May 6.
Gasoline from lubricating oils, Device for separating. W. Schwalge. 1,757,223; May 6.
Gate: *See*—
Pig creep gate.
Gate. J. S. Stringfellow. 1,757,025; May 6.
Gear for locomotives, Driving. O. Günther. 1,756,978; May 6.
Gear, Hydraulic. S. V. E. Taylor. 1,757,850; May 6.
Gear, particularly for half-speed shafts of internal-combustion engines, Resilient driving. F. H. Royce. 1,757,337; May 6.
Gear, Running. J. R. Junkin. 1,757,758; May 6.
Gear, Running. D. L. Van Leuven. 1,757,759; May 6.
Gearing, Friction. T. G. Rennerfelt. 1,757,476; May 6.
Gearing mechanism. H. A. Tuttle. 1,757,026; May 6.
Gearing, Power-transmission. J. L. Collins. 1,757,414; May 6.
Generator and battery protective means. E. R. Slagle. 1,757,486; May 6.
Glauconite, Improving. H. Kriegsheim and W. Vaughan. 1,757,373; May 6.
Glauconite, Obtaining pure. H. Kriegsheim and W. Vaughan. 1,757,374; May 6.
Glove. F. Scorelle. 1,757,095; May 6.
Glue and the product thereof, Manufacture of. I. F. Laucks and C. N. Cone. 1,757,805; May 6.
Grinding machine. J. Bath. 1,757,161; May 6.
Grinding machine. O. Doutt. 1,757,175; May 6.
Grinding machine. O. Doutt. 1,757,559; May 6.
Grinding machine, Wood-pulp. W. A. Whitcomb. 1,757,031; May 6.
Grinding machinery, Centerless. G. W. Binns and W. D. Archea. 1,757,612; May 6.
Guard, Cattle. C. Solis. 1,757,024; May 6.
Guard, Coin-slot. W. Rabkin. 1,757,887; May 6.
Gun mount. S. G. Green. 1,757,244; May 6.
Gun rack. W. J. Sprowle. 1,757,600; May 6.
Guns, Breech structure of. G. M. McCann. 1,757,257; May 6.
Hair-waving device. R. O. Caruso. 1,757,557; May 6.
Hamburger mold. C. C. Comstock. 1,757,447; May 6.
Hammer, Pneumatic. G. H. Gilman. 1,757,767; May 6.
Hand rake. A. W. LaForke. 1,757,201; May 6.
Handle: *See*—
Shovel handle.
Handle connection for calculating machines, Flexible. O. D. Johantgen. 1,757,669; May 6.
Hanger: *See*—
Closure hanger. Picture hanger.
Joist hanger.
Harrow. J. L. Brewton. 1,757,512; May 6.
Harrow. J. Jensen. 1,757,865; May 6.
Harvester. C. B. Brown. 1,757,897; May 6.
Harvester. M. Stiles. 1,757,848; May 6.
Hat-cleaning apparatus. W. Wilson. 1,757,821; May 6.
Hatchet. W. C. Miller. 1,757,538; May 6.
Headlight-positioning apparatus. J. D. Guiss. 1,757,665; May 6.
Heat exchanger. R. J. Pabodie. 1,757,136; May 6.
Heat-insulating material. G. B. Peebles. 1,757,470; May 6.
Heat insulation. E. Schmidt and E. Dyckerhoff. 1,757,479; May 6.
Heater: *See*—
Air heater. Air-intake heater.
Heater. J. J. Goetz. 1,757,042; May 6.
Heater for drying grain, Portable. A. Johnson. 1,757,716; May 6.
Heating and ventilating unit. W. Shurtleff. 1,756,997; May 6.
Heating apparatus, Water-. A. Pfender. 1,757,138; May 6.
Heating device. R. H. Guenther. 1,757,905; May 6.
Heating furnaces. H. A. Dreffein. 1,757,707; May 6.
Heating register, Warm-air. R. G. Hendricks. 1,757,085; May 6.
Heel-attaching apparatus, Sport-shoe. I. Tarlow. 1,757,152; May 6.
Heel-attaching machine. F. E. Bertrand. 1,757,168; May 6.
Heel-nailing machine. W. J. Young. 1,756,999; May 6.
Heel-seat-fitting machine. F. Ricks and A. E. Richards. 1,757,219; May 6.
Hinge. J. Soss. 1,757,599; May 6.
Hinge index unit, Triple-. E. C. Walter. 1,757,154; May 6.
Hoe. G. M. Harry. 1,757,572; May 6.
Hoe. E. F. and A. Sill. 1,757,882; May 6.
Hoe and rake, Combination. C. Geffken. 1,757,942; May 6.
Hoist, Dumping-vehicle. C. F. Higgins. 1,757,191; May 6.
Hoist, Traversing. G. A. Grab. 1,757,798; May 6.
Holder and stretcher, Necktie. J. J. Fitzgerald. 1,757,622; May 6.
Holder, Ash-tray. F. J. Cheslock 1,757,792; May 6.
Holder, Blade. J. A. Seymour. 1,757,881; May 6.
Holder, Card. H. C. Sharp. 1,757,440; May 6.
Holder, Coin. R. N. Doble. 1,757,008; May 6.
Holder, Condiment. F. A. Hart. 1,757,525; May 6.
Holder, Container. F. M. Furey. 1,757,184; May 6.
Holder, Curtain. H. J. Ferguson. 1,757,301; May 6.
Holder, Flower. R. C. Ham. Des. 81,094; May 6.
Holder, Lamp-shade. A. J. Carmichael. 1,756,937; May 6.
Holder, License-plate. P. W. Quinn. 1,757,587; May 6.
Holder, Milk-bottle. W. H. Gebhards. 1,757,521; May 6.
Holder or similar article, Toilet article. P. T. Frankl. Des. 81,090; May 6.
Holder, Portable soap. M. J. Rooney. 1,757,590; May 6.
Holder, Window-sash. E. F. Chaffee. 1,757,513; May 6.
Hook: *See*—
Link hook. Suspension hook.
Sawyer's hook.
Hopper, drier, and roaster. J. P. Bunce. 1,757,616; May 6.
Horn, Sound-reproducing. H. Harkins. 1,757,307; May 6.
Hot plate. A. J. Kercher and W. W. Hicks. 1,757,315; May 6.
Humidity-control apparatus. H. A. Brittain. 1,757,931; May 6.
Hydrocarbon vapors, Apparatus for condensing. J. E. Bell. 1,757,108; May 6.
Hydrocarbons to produce lighter hydrocarbons and coke, Cracking heavy. H. L. Pelzer and E. C. Herthel. 1,757,843; May 6.
Hydrogen, Producing. J. S. Beckley. 1,756,934; May 6.
Ice-cream-form device. F. H. Harm. 1,757,799; May 6.
Ice creeper. J. E. Ostrander. 1,757,919; May 6.
Ice-forming apparatus. N. B. Wolcott. 1,757,033; May 6.
Ice, Temporarily arresting the melting of. A. V. Pankey. 1,757,883; May 6.
Illuminator, defroster, deheater, and display device for windows, show cases, and other places. J. W. Kauffmann. 1,757,718; May 6.
Index tab. G. W. Schaefer. 1,757,338; May 6.
Indicator: *See*—
Direction indicator. Typewriter line indicator.
Indicator for distance-type thermometers. H. Schlaich. 1,757,949; May 6.
Indicator lock. J. G. Ramey. 1,757,020; May 6.
Indicators, Extension for. G. Kaufman. 1,757,818; May 6.
Industrial furnace. R. Warsitz. 1,757,492; May 6.
Ingot mold and ingot. E. Gathmann. 1,757,663; May 6.
Inking mechanism for printing machines. F. C. Marquardt. 1,757,808; May 6.
Insulating joint. W. V. Emmons. 1,757,561; May 6.
Insurance-policy form. V. F. Poliak. 1,757,094; May 6.
Internal-combustion engine. V. E. A. Belanger. 1,756,968; May 6.
Internal-combustion engine. J. L. Jameson and C. J. Fisher. 1,757,907; May 6.
Internal-combustion engine. C. Mehlum. 1,757,778; May 6.
Internal-combustion engine. W. O. Michelsen. 1,757,645; May 6.
Internal-combustion engine. W. S. Rohn. 1,757,815; May 6.
Iron: *See*—
Waffle iron.
Ironing machine, Laundry. S. H. Stoffel. 1,757,344; May 6.
Jack: *See*—
Lifting jack.
Joint: *See*—
Insulating joint. Rail joint.
Joint for steering mechanisms. H. Knight. 1,757,371; May 6.
Joist hanger, Concrete form. A. MacDonald. 1,757,321; May 6.
Journal-box lubricator. H. W. Coddington and H. F. Cunning. 1,757,619; May 6.
Ketones, Production of. B. K. Brown. 1,757,830; May 6.
Kiln. M. L. Mueller. 1,757,647; May 6.
Kiln, Dry. M. B. Hall. 1,757,629; May 6.
Knife, Culinary. C. H. Boyle. 1,757,073; May 6.
Knitting-machines, Yarn-controlling mechanism for. R. H. Lawson and A. N. Cloutier. 1,757,434; May 6.
Label. T. S. Gorton, jr. 1,756,944; May 6.
Label-dating device. C. H. Oslund. 1,757,209; May 6.
Lamp base. K. A. Bernholtz. Des. 81,081; May 6.
Lamp-bulb-replacing apparatus, Attachment for. H. D. Grinnell. 1,757,711; May 6.

Lamp, Electric. G. Wheat. 1,757,889; May 6.
Lamp, Head. R. N. Paige. 1,757,420; May 6.
Lamp, Miner's. G. Wheat. 1,757,887–8; May 6.
Lamp, Portable. N. Eddy, A. J. Carmichael, H. F. Thurber, and O. Balzano. 1,756,942; May 6.
Lamp-socket support for show-case reflectors. J. Taussig. 1,757,346; May 6.
Lamp support, Movable. N. G. Carlson. 1,757,617; May 6.
Lamp, Vehicle. B. L. Bobroff. Des. 81,082; May 6.
Lamps, Mount for focus finders in signal. D. J. McCarthy. 1,756,948; May 6.
Last, Repaired. W. J. Shaw. 1,757,594; May 6.
Latch, Automobile door. M. Modo. 1,757,916; May 6.
Latch, Door. C. J. Lawrence. 1,757,913; May 6.
Latex, Treatment of. F. Hazell. 1,757,632; May 6.
Lathe, Variety. J. J. Witt. 1,757,155; May 6.
Laundering apparatus. J. T. Cowley. 1,757,417; May 6.
Laundry apparatus. B. J. Coady. 1,757,702; May 6.
Lead, Electrical. H. A. Woofter. 1,757,822; May 6.
Lead hydroxide starting from impure sulphate of lead, Manufacture of pure. R. Dalose. 1,757,902; May 6.
Leather, Making pancake or built-up sheet. C. E. Rahr. 1,756,993; May 6.
Level. H. J. Zieman. 1,757,283; May 6.
Lever. J. L. Collins. 1,757,412–13; May 6.
Lever assembly, Steering-gear control-. D. E. Ross. 1,756,994; May 6.
Lifting jack. J. G. Everstam. 1,757,182–3; May 6.
Lifting jack. I. V. K. Hott. 1,757,249; May 6.
Ligature. G. L. Miller. 1,757,871; May 6.
Lighter and the like, Pocket. S. B. Battey. 1,757,231; May 6.
Lighter, Electric cigar. C. B. Mahan. 1,757,255; May 6.
Link for nonskid tire chains, Repair. J. M. Johnson. 1,757,252; May 6.
Link hook. O. A. Storaasli. 1,757,097; May 6.
Linoleum cutter. L. Kinkela. 1,757,531; May 6.
Liquid cooler. A. A. Kucher. 1,757,638; May 6.
Liquid-dispensing comb. C. H. Bricker. 1,757,290; May 6.
Liquid-flow regulator. C. W. Carter. 1,757,171; May 6.
Liquid-level-indicating system. J. D. Sartakoff. 1,757,061; May 6.
Liquids, Sterilizing and preserving. R. Seligman. 1,757,880; May 6.
Load-handling mechanism. F. Stoner. 1,757,150; May 6.
Loaf-inverting mechanism for proofers. W. P. Elwood. 1,757,078; May 6.
Lock: *See*—
Chisel retainer lock. Nut lock.
Indicator lock.
Lock washer, Nonentangling. G. K. Garrett. 1,757,857; May 6.
Locking device for drawer sections. G. H. Wheary. 1,757,227; May 6.
Locking means, Adjusting-rod-. E. T. Waters. 1,757,787; May 6.
Locomotive mud ring. W. M. Sheehan. 1,757,340; May 6.
Locomotive structure. J. C. Travilla, jr. 1,757,347; May 6.
Locomotive trailing truck. J. G. Blunt. 1,757,701; May 6.
Locomotive, Turbine. W. W. Eraser. 1,757,242; May 6.
Loom, Leno or cross-weaving. I. Snow. 1,757,947; May 6.
Looms, Shuttle-box motion for. L. Lettman, jr. 1,757,319; May 6.
Loud-speaker, Dynamic. F. Preator and D. R. Seeley. 1,757,386; May 6.
Loud-speaking mounting. A. A. Kent. 1,757,719; May 6.
Lubricating device. W. T. Pritchard. 1,757,736; May 6.
Lubricating device for cables. B. S. Minor. 1,757,539; May 6.
Lubricating device for car wheels and tracks. R. B. Umholtz and R. A. Birmingham. 1,757,402; May 6.
Lubricating system. W. D. Hill. 1,757,086; May 6.
Lubricator: *See*—
Journal-box lubricator.
Lumber, Drying. J. P. Wilson. 1,757,891–2; May 6.
Machine and method for flap splitting and heel-seat tonguing. A. Bates and F. B. Keall. 1,757,160; May 6.
Machine for cutting brake linings. B. Conway. 1,757,415; May 6.
Machine for descaling boilers. F. L. Schleicher. 1,757,745; May 6.
Machine for extracting bulls of cotton bolls from seed cotton. S. Williams. 1,757,762; May 6.
Machine for kneading and turning upside down sugar mass. M. Pönisch. 1,757,384; May 6.
Machine for purifying cereal products or removing branny material therefrom. H. J. Denham. 1,757,007; May 6.
Machine for shuffling cards. G. Tauschek. 1,757,553; May 6.
Machine for use in the manufacture of pottery ware. W. J. Miller. 1,757,132; May 6.
Machine pedestal, casing, and table, Combined. E. C. Hegg. Des. 81,096; May 6.
Machinery, Actuating mechanism for concentrating. M. J. Lide. 1,757,320; May 6.
Machinery and method for making receptacles. E. Craig. 1,757,294; May 6.
Magnetic material. G. W. Elmen. 1,757,178; May 6.
Magnetic stepping motor. E. Quartier. 1,757,922; May 6.
Manhole construction. C. A. Jaques. 1,757,196; May 6.
Manifolding sheet. J. A. B. Smith. 1,757,598; May 6.
Massaging apparatus. W. H. Chapin. 1,757,004; May 6.
Massaging device. A. Reith. 1,757,060; May 6.
Mat: *See*—
Filter mat.
Materials made of or containing cellulose derivatives, Treatment of. G. H. Ellis. 1,757,519; May 6.
Measuring instrument. B. H. Smith. 1,757,597; May 6.
Measuring instrument, Electrical. E. H. Greibach. 1,757,625; May 6.
Mending frame, Hosiery run-. J. J. Langer. 1,757,375; May 6.
Mercaptothiazole and a Schiff's base and producing the same, Reaction product. L. B. Sebrell. 1,757,945; May 6.
Mercury arc rectifier. D. Ulrey. 1,757,605; May 6.
Mercury derivative of di-iodo resorcin sulfon-phthalein. F. Dunning. 1,757,176; May 6.
Mercury-tube switch. I. E. McCabe. 1,757,436; May 6.
Metal, Method of and apparatus for casting. A. W. Smith and J. M. Nelson. 1,757,549; May 6.
Metal rods, bars, and the like, Manufacture of hollow. R. A. Hadfield. 1,757,524; May 6.
Metal sections together, Joining. C. L. Gohmann. 1,757,664; May 6.
Metal-working machine. C. C. Grotnes. 1,757,626; May 6.
Metals, Metallurgy of. H. H. Alexander. 1,76,967; May 6.
Metals, Pickling of. V. Bertieff. 1,757,829; May 6.
Meter service appliance, Electric-. J. Sachs. 1,757,743–4; May 6.
Milk and cream cooler. J. N. Reinert. 1,757,058; May 6.
Milk, Treating. H. E. Mortland. 1,757,646; May 6.
Mill used for manufacturing sugar, Roller. J. Fisher. 1,757,903; May 6.
Miner's drill. P. Lesko. 1,757,725; May 6.
Mirror, Rear-view. F. G. Withrow. 1,757,280; May 6.
Mixer. J. Johnson. 1,757,197; May 6.
Mixing machine. F. Streich and W. P. Elwood. 1,757,098; May 6.
Mixing machine. F. Streich and W. P. Elwood. 1,757,818; May 6.
Mold: *See*—
Hamburger mold. Tire mold.
Mold for forming coated confections. R. T. Park. 1,757,683; May 6.
Mold-rotating machine. W. Underwood. 1,757,274; May 6.
Molding box, Foundry. A. B. Smith and C. R. Smith. 1,757,226; May 6.
Molding or finish-strip assembly. O. J. Crowe. 1,757,515; May 6.
Molding press. G. G. Heghinian. 1,757,119; May 6.
Money package. D. E. de Marquez. 1,756,974; May 6.
Mothproof material and making same. W. Schepss, E. Tietze, and A. Ossenbeck. 1,757,222; May 6.
Motor: *See*—
Current motor. Oscillating motor.
Magnetic stopping motor.
Motor base. R. L. Bacher. 1,756,932; May 6.
Motor controller. E. W. Seeger. 1,757,389; May 6.
Motor mechanism, Electric-. J. M. Lea. 1,757,840; May 6.
Motor-starting system. C. P. West. 1,757,606; May 6.
Motor vehicles, Antiskid device for. J. J. Finnegan. 1757,362; May 6.
Mower and accessory therefor, Lawn. J. B. Pol. 1,757,844; May 6.
Mowers, Resiliently-mounted ledger blade for lawn. C. A. Gratiot. 1,757,186; May 6.
Mucilage dispenser for bottle tops. M. Alland. 1,756,935; May 6.
Mulcher. A. J. Davis. 1,757,418; May 6.
Musical instrument, Stringed. W. I. Kirk. 1,757,577. May 6.
Musical instruments, Tailpiece for stringed. F. J. Callier. 1,757,170; May 6.
Needle, Atraumatic rethreadable surgical. W. L. McClure. 1,757,129; May 6.
Nickel anode. G. B. Hogaboom. 1,757,714; May 6.
Nitrocellulose, Reducing the viscosity of. P. C. Seel. 1,757,481; May 6.
Nitrocellulose, Reducing the viscosity of. G. H. Tozier. 1,757,491; May 6.
Nozzle construction. E. R. Zademach. 1,756,965; May 6.
Nozzle, Sand-blast. S. B. Neikirk. 1,757,207; May 6.
Nut lock. E. Z. Cole. 1,757,924; May 6.
Nut mounted upon sheet metal. H. G. Renner. 1,757,143; May 6.
Nut, Rivetable. H. G. Renner. 1,757,142; May 6.
Oarlock. J. E. Mathewson. 1,757,378; May 6.
Oil burner. I. E. Smith. 1,757,023; May 6.
Oil-gas mixtures, Making. C. Chilowsky. 1,757,855; May 6.
Oil mop. H. Hertzberg. 1,757,365; May 6.
Oil-purifying means for turbines, etc. F. R. C. Boyd. 1,757,289; May 6.
Oil-well flow device. K. P. Neilsen. 1,757,329; May 6.
Oiling mechanism. J. A. Lund. 1,757,642; May 6.
Oils, Method and apparatus for processing heavy. A. J. Slagter. 1,757,596; May 6.

Ordnance, Combined projectile and breech block for. N. E. Methlin. 1,757,675; May 6.
Ore concentrator, Dry. J. P. Newman and V. Thomas. 1,757,810; May 6.
Ornament, Automobile radiator. C. L. Hawes. 1,757,567; May 6.
Ornament, Bag. C. H. Lawrence. Des. 81,097; May 6.
Oscillating motor. S. M. Pankey. 1,757,210; May 6.
Oscillations, Receiver for undamped. F. Michelssen. 1,757,325; May 6.
Oscillator, Polyphase. H. Benioff. 1,757,354; May 6.
Otto-cycle engine, Solid-injection. E. R. Hewitt. 1,757,246; May 6.
Oxidation products of high molecular hydrocarbons, Bleaching and deodorizing. H. Franzen and M. Luther. 1,757,455; May 6.
Oxygen-producing plant, Liquid-air. O. Simonis. 1,757,022; May 6.
Packing appliance for pipe testing. C. S. Larson. 1,757,724; May 6.
Packing case. F. C. Holbrook. 1,757,087; May 6.
Packing suitable for steam turbines, Shaft. C. A. Parsons and S. S. Cook. 1,757,212; May 6.
Pad: *See*—
Perpetual pad.
Paint. D. Isenberg. 1,757,864; May 6.
Painting apparatus. P. P. Walker. 1,756,998; May 6.
Pan: *See*—
Cake and pie pan.
Panel assembly, Instrument. H. Schwarze. 1,757,395; May 6.
Paper, Absorbent. G. L. Schwartz. 1,757,756; May 6.
Paper-making machine. C. B. Briede and H. L. Kutter. 1,757,291; May 6.
Paper-making machines, Control mechanism for. D. E. Lewellen. 1,757,867; May 6.
Paper, Manifolding carbon. J. H. Reid. 1,757,876; May 6.
Paper, Method and apparatus for making. C. C. Hockley. 1,757,948; May 6.
Paper, Method of and apparatus for producing transparent waxed. J. Decker, A. B. Green, and V. E. Nunez. 1,757,620; May 6.
Paper, Method of and mechanism for water-marking and cutting. V. N. Magill. 1,757,204; May 6.
Paper, Producing porous. G. L. Schwartz. 1,757,757; May 6.
Parachute. C. H. Castagne. 1,757,854; May 6.
Parachute. E. L. Hoffman. 1,757,247; May 6.
Parlor-car chair. B. V. Souto and W. P. Comstock. 1,757,551; May 6.
Pattern-copying machine. G. F. Ryan and E. H. Burke. 1,757,221; May 6.
Pattern-copying machines, Grading mechanism for. G. F. Ryan and E. H. Burke. 1,757,220; May 6.
Paving, Asphaltic concrete. J. W. Fraser. 1,757,661; May 6.
Peanut digger. J. D. Davis. 1,757,654; May 6.
Pencil. P. J. O'Sullivan. 1,756,953; May 6.
Pencil, Mechanical. E. C. Tuggle. 1,757,884; May 6.
Perforator. J. E. Long. 1,757,914; May 6.
Perpetual pad. A. Bildstein. 1,757,287; May 6.
Phenols, Sulphurized compounds of. A. Thauss. 1,757,400; May 6.
Phonograph pick-up. S. Ruben. 1,757,547; May 6.
Phosphide and process for making, Coated. F. Hebler. 1,757,713; May 6.
Photographic apparatus. G. C. Beidler. 1,757,001; May 6.
Photographic apparatus, Pose-reflecting system for. L. G. Simjian. 1,756,959; May 6.
Photographic disk. D. A. McCowan. 1,757,130; May 6.
Picture hanger. S. Rosenblum. 1,757,739; May 6.
Pig creep gate. E. A. Haynes. 1,757,426; May 6.
Pipe-bending machine. H. L. Liberty. 1,757,806; May 6.
Pipe clamp. L. A. Hoerr. 1,757,570; May 6.
Pipe curb box, Service-. E. L. Nuebling. 1,757,055; May 6.
Pipe filler, Smoking-. A. Lazar. 1,757,673; May 6.
Piston. G. A. Barker. 1,757,230; May 6.
Piston. C. R. Butler. 1,757,169; May 6.
Piston. J. D. Langdon. 1,757,016; May 6.
Piston. W. C. McCoy. 1,757,131; May 6.
Piston or reciprocating compressor, High-pressure. C. Schaer. 1,757,782; May 6.
Piston, Pump. J. Surber. 1,757,271; May 6.
Piston ring. F. H. Roberts. 1,757,877; May 6.
Piston rod. H. V. Haight. 1,757,082; May 6.
Pitman. W. Mitchell and A. H. Loucks. 1,757,258; May 6.
Pivot structure. W. E. Trumpler. 1,757,604; May 6.
Plug, Automatic. R. M. Diener. 1,756,940; May 6.
Plug socket. B. F. Muldoon. 1,757,437; May 6.
Plug socket for electrical connections. C. Batcholts. 1,756,933; May 6.
Pneumatic protector for athletes. G. E. Mott. 1,757,019; May 6.
Polishing device. F. O. Albertson and G. Olsen. 1,757,228; May 6.
Pottery and the manufacture of the same, Glazed non-vitreous. J. Mellor. Re17,656; May 6.
Power from ocean waves, Apparatus for and method of obtaining. E. J. Brady. 1,757,166; May 6.
Power, Hydraulic transmission of. H. S. Hele-Shaw and T. E. Beacham. 1,757,483; May 6.
Power plant, Hydraulic-. L. F. Moody. 1,757,926–7; May 6.
Power transmission. G. H. Schieferstein. 1,757,892; May 6.
Preheater. F. Puening. 1,756,991; May 6.
Press: *See*—
Molding press.
Printing press.
Triplex web press.
Press feeder, Vacuum punch-. L. Jones. 1,757,529; May 6.
Presses, Feeder for baling. F. Nichols. 1,756,988; May 6.
Pressure distillation. N. E. Loomis. 1,757,579; May 6.
Printing colors. K. H. Meyer, J. Müller, and U. Hoffmann. 1,756,951; May 6.
Printing machines, Automatic stop for. J. E. Johnson. 1,757,310; May 6.
Printing mechanism. A. W. Mills. 1,757,133; May 6.
Printing press, Multi-color-. C. Allen. 1,757,697; May 6.
Printing press, Web-. J. L. Cox. 1,757,901; May 6.
Propeller attachment. W. H. Wendt. 1,757,761; May 6.
Protective apparatus for athletes. D. Levinson. 1,757,640; May 6.
Pulsator for milking machines and the like. G. E. Jonsson. 1,757,198; May 6.
Pulverulent substances into boxes, Apparatus for pressing. F. Kilian. 1,757,370; May. 6.
Pump. G. Weaver. 1,757,885; May 6.
Pump, Centrifugal. H. L. Keun. 1,757,670; May 6.
Pump, Centrifugal. J. Kirgan. 1,757,576; May 6.
Pump, Centrifugal. C. G. Wood. 1,757,281–2; May 6.
Pump connection. G. S. Wright. 1,757,034; May 6.
Pump, Deep-well. D. D. Burch. 1,757,791; May 6.
Pump for internal-combustion engines, Oil. J. C. Coulombe. 1,757,514; May 6.
Pumping apparatus G. L. Ferguson. 1,757,300; May 6.
Punch-transfer slide for multiple-stroke headers. A. H. Gaess. 1,757,303; May 6.
Punching machine. R. W. Beckert. 1,757,828; May 6.
Purification system for boilers. J. Ostertag. Re17,658; May 6.
Putlog. A. R. Kingston. 1,757,015; May 6.
Rack: *See*—
Gun rack.
Radiator filler cap. J. F. Wilson. 1,757,404; May 6.
Radiator, Heat. A. Lindström and C. D. Segerström. 1,757,534; May 6.
Radio picture-transmission systems, Fading elimination in. F. Schröter. 1,757,480; May 6.
Radio signaling apparatus, Frequency trap for. R. H. Ranger. 1,757,333; May 6.
Radio tube. H. M. Strobel. 1,757,345; May 6.
Rail, Detachable extension guard. A. A. Langlois. 1,757,912; May 6.
Rail joint. A. T. Palmer. 1,757,137; May 6.
Rail joint and bar. G. Langford. 1,757,774; May 6.
Rail-welding apparatus. H. G. Spilsbury. 1,757,148; May 6.
Railing, Stair and baluster. G. Rosenbaum. 1,757,686; May 6.
Railway structure, Paved or similar. W. S. Godwin. 1,757,565; May 6.
Rake: *See*—
Hand rake.
Rake. C. W. Jarvis. 1,757,669; May 6.
Rat trap. O. Stuesse. 1,757,063; May 6.
Receptacle, Coffee. F. Novotny. 1,757,583; May 6.
Receptacle, Knockdown. W. Raster. 1,757,141; May 6.
Receptacle, Metal. S. Hammer. 1,756,945; May 6.
Recording mechanism. E. B. Foote. 1,757,012; May 6.
Reel: *See*—
Cultivator reel.
Reflector for incandescent lamps. P. Henningsen. 1,757,527; May 6.
Reflex spring. E. Bagnall. 1,757,406; May 6.
Refrigerating apparatus. J. G. King. 1,757,316; May 6.
Refrigerating systems, Controlling device for. C. C. Hansen. 1,757,044; May 6.
Refrigeration. A. Lenaing. 1,757,254; May 6.
Refrigeration. A. Lenning. 1,757,578; May 6.
Refrigeration, Mechanical. C. C. Spreen. 1,757,062; May 6.
Refrigerator. F. H. Ryder. 1,757,390–1; May 6.
Refrigerator manufacture. L. G. Copeman. 1,757,450; May 6.
Refrigerator, Portable. E. A. Florang. 1,757,520; May 6.
Register: *See*—
Heating register.
Registering apparatus. S. D. McKellen. 1,757,324; May 6.
Regulator: *See*—
Liquid-flow regulator.
Relay, Thermal. A. Press. 1,757,589; May 6.
Resin esters, Composition of matter comprising. H. M. Weber. 1,757,104; May 6.
Retort furnace. C. V. McIntire. 1,757,644; May 6.
Rheostat. A. Hall. 1,757,043; May 6.
Ribboner. E. B. Somers. 1,757,147; May 6.
Rim for containers, Detachable. A. Engelcke. 1,757,179; May 6.
Rim for vehicle wheels. J. I. Martin. 1,757,728; May 6.
Ring: *See*—
Locomotive mud ring.
Piston ring.
Ring. H. O. Jenkins. Des. 81,092; May 6.

Roads, Methods and apparatus for building improved. R. A. Thompson. 1,757,691; May 6.
Rod: *See*—
Piston rod.
Welding rod.
Rod coupling. M. P. Graham. 1,757,305; May 6.
Roller device, Combined cutter and pressure. J. E. Dingman and B. F. Engelbert. 1,757,173; May 6.
Rope, Flexible wire. O. A. Wirkkala. 1,757,156; May 6.
Rosins, Purifying. R. C. Palmer, J. L. Burda, and A. F. Oliver. 1,757,588; May 6.
Rotary engine. G. Shoemaker. 1,757,484; May 6.
Rotary line switch. J. E. Ostline. 1,757,681; May 6.
Rotor, Hammer-mill. A. M. Dellinger. 1,757,452; May 6.
Rubber articles by the circulation of heated gases, Method of and apparatus for curing. H. R. Minor. 1,757,053; May 6.
Rubber articles, Manufacturing. B. W. Rowland. 1,757,928; May 6.
Sadiron, Electric. W. Dubilier. 1,757,658; May 6.
Salt shaker. J. L. Dinsmoor. 1,757,297; May 6.
Sash-operating apparatus. T. E. King. 1,757,720; May 6.
Sawing machine, Band-. C. E. Sullenberger. 1,757,785; May 6.
Sawyer's hook. E. Bergdal. 1,757,610; May 6.
Scaffold, Casement-window. S. L. Smerk. 1,757,396; May 6.
Scales, Indicator for. A. W. Ferguson and R. J. Burke. 1,757,766; May 6.
Scales, Weight reading and printing mechanism for. A. Koronski. 1,757,722; May 6.
Scraper. W. V. Hutchison. 1,757,251; May 6.
Scraper, Mud. S. H. Ideus. 1,757,771; May 6.
Screen: *See*—
Color screen.
Window screen.
Screen-frame material. W. J. Dennis. 1,757,706; May 6.
Screen or curtain for motor vehicles, Side. J. R. Hall, K. C. McLeod, and O. B. Heatley. 1,757,860; May 6.
Screw-driving machine. G. C. Brown and G. F. McNulty. 1,757,614; May 6.
Screw or nut driving device for portable power-driven rotary tools. A. Levedahl. 1,757,125; May 6.
Seal for preventing the flow of material between relatively moving surfaces. W. B. Lewis. 1,757,533; May 6.
Seaplanes, Wheel attachment for. F. N. Silva, jr. 1,757,687; May 6.
Sedimentation tank. C. R. Griffith. 1,757,187; May 6.
Separator: *See*—
Fruit-juice separator.
Gas-oil separator.
Separator. A. P. J. Voigt. 1,757,103; May 6.
Sewage-disposal plant. T. B. Sims. 1,757,262; May 6.
Sewage-disposal system. T. B. Sims. 1,757,264; May 6.
Sewing machine, Filled-bag-. N. V. Christensen and W. M. Hanneman. 1,756,938; May 6.
Sewing machines, Folder mounting for. C. F. Rubel. 1,756,956; May 6.
Shade, Lamp. R. W. Schweiker. Des. 81,110; May 6.
Shade slat. S. E. Matovitz. 1,757,017; May 6.
Shaft and its mounting, Brake-operating. A. Y. Dodge. 1,757,074; May 6.
Shaving mug. E. C. Sasser. 1,756,957; May 6.
Sheet material and method of making. A. E. H. Fair. 1,757,010; May 6.
Shelf bracket. T. R. Pauling. 1,756,954; May 6.
Shell, Antiaircraft. E. G. West. 1,757,788; May 6.
Shell, Shot. J. M. Olin. 1,757,584; May 6.
Shim-holding device for car trucks. P. J. McCullough. 1,757,937; May 6.
Shingle-locking device. F. W. Yeager and W. P. Schulz. 1,757,351; May 6.
Shingle strip, Thick-butt. F. C. Overbury. 1,756,989; May 6.
Ship with aeroplane deck. W. Hefti. 1,757,770; May 6.
Shipping case, Ice-cream-. E. M. Robinson. 1,757,335; May 6.
Shoe for rammer and tamper butts, Cushion. C. Fey. 1,757,562; May 6.
Shoe or boot for laborers. S. Ishibashi. 1,757,575; May 6.
Shoes, Making. G. W. Miller. 1,757,537; May 6.
Shovel handle. L. E. Webster. 1,757,693; May 6.
Show case or the like. M. M. Friedemann. Des. 81,091; May 6.
Shuttle, Automatically-threading loom. C. H. Draper. 1,757,941; May 6.
Side-planing machine. E. F. Nicki and R. E. Cleveland. 1,757,542; May 6.
Sign. H. C. Gammeter. 1,757,662; May 6.
Sign, Moving display. G. J. Mead. 1,757,379; May 6.
Signal: *See*—
Crossing signal.
Traffic signal.
Vehicle signal.
Vehicular signal.
Signal for motor vehicles, Direction. F. J. Katte and B. L. Minturn. Des. 81,093; May 6.
Signal reminding mechanism. C. Hamlin. 1,757,631; May 6.
Signal service, Automatic. J. M. Gregory. 1,757,571; May 6.
Signaling currents on electrical power-distributing lines, Device for impressing. M. Chirol. 1,757,900; May 6.
Signaling system. L. M. Lewis and A. Sezekoff. 1,757,674; May 6.
Silver halide emulsion, Gelatino. P. C. Seel. 1,757,482; May 6.
Sintering apparatus. A. Holmberg. 1,757,863; May 6.
Siphon. E. B. Mitchell. 1,757,872; May 6.
Skate, Ice. H. Musaus. 1,757,649; May 6.
Skate, Roller. W. H. Dunne. 1,757,115; May 6.
Skate wheel, Roller-. W. H. Dunne. 1,757,116; May 6.
Sludge, Treatment of. T. B. Sims. 1,757,263; May 6.
Smoke-washing apparatus. C. M. Gerhold. 1,757,522; May 6.
Snap-fastener member, Resilient. P. E. Fenton. 1,757,421; May 6.
Socket, Hydraulic. J. M. Fischbach. 1,757,363; May 6.
Sole-waxing machine. W. A. Copeland. 1,757,449; May 6.
Sorbitol and making it, Dehydration product of. J. Müller and U. Hoffmann. 1,757,468; May 6.
Sound distributor. E. H. Schleiffers. 1,757,145; May 6.
Sound reproducer. L. E. Baltzley. 1,757,107; May 6.
Sound-translating system. H. C. Harrison. 1,757,459; May 6.
Space-discharge system. A. A. Oswald. 1,757,469; May 6.
Spade and earth drill, Post. J. M. Kirkpatrick. 1,757,925; May 6.
Spark arrester. S. G. Visker. 1,757,760; May 6.
Speed-controlling device. F. X. and E. J. Lauterbur. 1,757,124; May 6.
Speedometer case. A. Champion. 1,757,411; May 6.
Spinning frames, Automatic stop motion for. D. W. Davis. 1,757,295; May 6.
Spinning frames, Draft-roll construction for. H. A. Owen. 1,757,586; May 6.
Spinning machine. H. Garth, J. Longbottom, F. Burns, L. and W. C. Just. 1,757,796; May 6.
Spinning machine, Metal-. J. L. Adams, jr. 1,757,824; May 6.
Spray device. A. B. Hale. 1,757,628; May 6.
Spray gun. J. C. Hull. 1,757,195; May 6.
Spray guns, Making. W. A. Heinrich. 1,757,573; May 6.
Spraying cards, Mechanism for. J. J. Murray. 1,757,648; May 6.
Spring: *See*—
Bedex spring.
Vehicle spring.
Spring-end connection. F. J. Bechert. 1,757,699–700; May 6.
Spring shackle. R. Searles. 1,757,747; May 6.
Spring structure for bed bottoms and the like. G. A. Stack house. 1,757,266; May 6.
Spring winder. O. Kramer. 1,757,911; May 6.
Stalk cutter. J. F. O'Kelley. 1,757,873; May 6.
Stamp magazine. W. Calvano. 1,757,560; May 6.
Stand for golf bags, Automatic foldable. C. E. Platt. 1,757,471; May 6.
Stand or support, Straddle. F. Albach. 1,757,825; May 6.
Staple-driving machine. F. Polzer. 1,757,812; May 6.
Stapling machine. F. L. St. Hilaire. 1,757,883; May 6.
Starter, Siphon. W. Pearson. 1,757,056; May 6.
Starting apparatus, Engine-. J. B. Dyer. 1,757,238; May 6.
Steel building-frame construction. J. H. Edwards. 1,757,359; May 6.
Steel felly and rim construction. A. S. Van Halteren. 1,757,275; May 6.
Steel, Making reenforced noncorrosive. P. A. E. Armstrong. 1,757,790; May 6.
Stock remover. E. D. Weaver and C. A. Cobb. 1,757,067; May 6.
Stocking-ankle-machine attachment. R. Breyer. 1,575,167; May 6.
Stoker, Inside feed. N. M. Lower, D. F. Crawford, and E. A. Turner. 1,757,581; May 6.
Stoker, Inside feed. N. M. Lower, L. E. Osborne, and E. A. Turner. 1,757,580; May 6.
Stopper: *See*—
Bottle stopper.
Storage box. C. L. Clark. 1,757,618; May 6.
Storage tank. W. K. Russell. 1,757,923; May 6.
Stove. W. L. Sharp. 1,757,593; May 6.
Stove, Electric. T. M. Putnam. Des. 81,107; May 6.
Stranding machine. A. F. Clements. 1,757,653; May 6.
Street indicator for street cars. A. E. Garbut, D. Cochrane, and J. E. Watkins. 1,757,458; May 6.
Stud, Floating trim. J. H. Goss. 1,757,424; May 6.
Stuffing box. E. C. Kahle. 1,757,311; May 6.
Submarine rescue device. N. F. Thommes. 1,756,962; May 6.
Submarines, Position-indicating and air-supplying device for sunken. J. B. Sunt. 1,757,151; May 6.
Suit. D. Long. Des. 81,100; May 6.
Support, Car. P. J. McCullough. 1,757,323; May 6.
Support, Carcass-chilling. J. C. Agar. 1,757,070; May 6.
Support, Conductor. E. D. Moore and F. R. Dippman. 1,757,677; May 6.
Support, Douche-bag. C. W. Mack. 1,757,807; May 6.
Support, Furnace-arch. R. Palm. 1,757,682; May 6.
Support, Pad. A. D. Lelong. 1,757,532; May 6.
Support, Self-adjusting arch. C. A. Free. 1,757,904; May 6.
Support, Switch and lamp. L. C. Eichner. 1,757,177; May 6.
Support, Swiveling arbor. P. Liebscher. 1,757,726; May 6.
Suspension arm for an electrical pick-up. N. Nystrom. Des. 81,106; May 6.
Suspension hook. T. S. Rainey. 1,757,875; May 6.
Swab, Heavy-duty. G. Christenson. 1,757,605; May 6.
Swimming device. E. Wegner. 1,757,277; May 6.

Swing. J. C. Gerrond. 1,757,423; May 6.
Switch: *See*—
Control switch. Mercury-tube switch.
Electric switch. Rotary line switch.
Switch apparatus, Time-controlled. D. L. Frooks. 1,757,455; May 6.
Switch for direction signals, Control. N. Gregorieff. 1,757,014; May 6.
Switch structure. M. Guett. 1,757,859; May 6.
Syringe. A. F. Pieper. 1,757,473; May 6.
Syringe, Hypodermic. F. C. Montuori. 1,757,809; May 6.
Syringes, Needle-locking device for. J. B. Nell. 1,757,680; May 6.
Table: *See*—
Folding table.
Table. S. McKlebeck. Des. 81,103; May 6.
Tablet armchair. W. H. Maxwell. 1,757,322; May 6.
Tabulating machine. C. D. Lake and R. E. Page. 1,757,123; May 6.
Tag, Changeable price. S. Singer. 1,757,485; May 6.
Talking machine. L. Lumiere. 1,757,535; May 6.
Tank: *See*—
Sedimentation tank. Storage tank.
Tank mounting, Gasoline. V. Jantsch. 1,757,429; May 6.
Tanks, Float-valve-operating mechanism for flush. S. B. Bardsley. 1,757,159; May 6.
Tanning preparation and process. R. W. Frey. 1,757,040; May 6.
Tappet. E. R. Klemm. 1,757,721; May 6.
Teapot or similar article. A. F. Saunders. Des. 81,109; May 6.
Telegraphy and telephony, Arrangement for wireless. W. Moser. 1,757,467; May 6.
Telegraphy, Facsimile. J. L. Baird. 1,757,352; May 6.
Telephone apparatus, Automatic coin-controlled. C. A. Cambay. 1,757,03; May 6.
Telephone appliance. E. McCann. 1,757,463; May 6.
Telephone-exchange system. S. H. Everett. 1,757,708; May 6.
Telephone-exchange system. E. P. G. Wright, J. H. E. Baker, and A. H. Cameron. 1,757,446; May 6.
Telephone mouthpieces, Sanitary attachment for. P. Roca. 1,757,781; May 6.
Telephone system. H. M. Friendly. 1,757,564; May 6.
Telephone system. W. A. Rhodes. 1,757,217; May 6.
Telephone system. V. S. Tharp. 1,757,101; May 6.
Telephone system, Duplex high-frequency. R. D. Duncan, jr. 1,757,114; May 6.
Telephone transmission, Privacy system for. L. Espenschied. 1,757,181; May 6.
Tensiometer. W. B. Klemperer. 1,757,933; May 6.
Thermostat, Wet-bulb. W. L. Fleisher. 1,757,081; May 6.
Timer. T. J. Smulski. 1,757,342; May 6.
Tire, Antisplash. H. Waterfall. 1,757,754; May 6.
Tire-building machine. G. F. Wikle. 1,757,105; May 6.
Tire-finishing machine. C. H. Desautels. 1,757,113; May 6.
Tire-forming machine, Centrifugal. E. F. Maas. 1,757,934; May 6.
Tire mold, Rubber-. L. A. Laursen. 1,757,376; May 6.
Tire trimmer. C. E. Maynard. 1,757,127; May 6.
Tobacco, Process and device for ozonizing. S. Rosenhoch. 1,757,477; May 6.
Toilet for children, Portable. C. F. Pfisterer, O. Krueger, and W. Kaiser. 1,757,084; May 6.
Tool, Combination. G. N. Vivenoy. 1,757,029; May 6.
Tool, Cutting. J. Rife. 1,756,955; May 6.
Tool, Jewel-setting. S. Helfgott. 1,757,120; May 6.
Tool, Laundry. J. C. Schofield. 1,757,146; May 6.
Tool, Portable grinding. E. S. McGonegal. 1,756,949; May 6.
Tool retainer. E. W. Stevens. 1,757,444; May 6.
Tool, Rim. F. C. Hebert. 1,757,427; May 6.
Tool, Rim-collapsing. J. G. Swain and M. W. Mitchell. 1,757,752; May 6.
Tool, Valve. F. M. Daniels. 1,757,006; May 6.
Tool, Well. W. A. Vock and A. C. Towne. 1,757,064; May 6.
Tools and the like from materials such as carbides, the alloys thereof, and the like, Manufacture of bodies for. K. Schröter and H. Wolff. 1,757,846; May 6.
Tools, Work-positioning mechanism for machine. J. C. and R. D. Shaw. 1,757,929; May 6.
Tops, Apparatus for forming manhole. W. F. Stuewe. 1,757,562; May 6.
Toy. R. H. Brown. 1,757,002; May 6.
Toy block. S. W. Strouse. Des. 81,117; May 6.
Toy box wagon. M. M. Goldberg. 1,757,243; May 6.
Toy electric locomotives, Motor control for. F. Mize. 1,757,676; May 6.
Toy gas cannon. M. F. Grimm. 1,757,523; May 6.
Trackway, Elevated. L. F. Berthold and W. Louden. 1,757,651; May 6.
Tractor control. L. G. W. Fellermann. 1,757,660; May 6.
Tractors, Mower attachment for. C. Pearson. 1,757,214; May 6.
Traffic signal. O. E. Johnson. 1,757,050; May 6.
Train control. C. S. Bushnell. 1,757,410; May 6.
Transmission. H. A. Knox and B. F. Baker. 1,757,052; May 6.
Transmission mechanism for excavators. G. T. Ronk. 1,757,336; May 6.
Transmission system. C. W. Hough. 1,757,121; May 6.
Trap: *See*—
Animal trap.
Tray. S. F. Pratt. 1,757,475; May 6.
Tray, Coin. E. J. Brandt. 1,757,613; May 6.
Treating material, Apparatus for. K. T. Potthoff. 1,757,735; May 6.
Trees, Fumigating. C. Vaughn. 1,757,276; May 6.
Trenching machine. R. L. Brown. 1,756,971; May 6.
Trimmer: *See*—
Tire trimmer.
Triplex web press. H. A. W. Wood. 1,757,157; May 6.
Trouble finder. H. Morgan and W. Stephenson. 1,757,917; May 6.
Truck bolster. H. C. Dreibuss and G. S. Chiles. 1,757,765; May 6.
Truck, Car. P. J. McCullough. 1,757,936; May 6.
Truck, Car. H. D. Taylor. 1,757,272; May 6.
Truck, Hand. C. R. Tibbetts. 1,757,490; May 6.
Truck tanks, Siphon outlet for. A. A. Kramer. 1,757,317; May 6.
Tube: *See*—
Discharge tube. Radio tube.
Tufting machine. C. A. Dahlen. 1,757,795; May 6.
Tufts on wire brushes, Machine for making. W. Hertzberg. 1,757,367; May 6.
Tunnel liner. R. V. Proctor and H. M. Schaab. 1,757,813; May 6.
Turbine, Elastic-fluid. H. F. Schmidt. 1,756,958; May 6.
Turbine, Explosion. H. Holzwarth. 1,757,574; May 6.
Turbine, Multistage combustion. H. Holzwarth. 1,757,045; May 6.
Turbines, Control mechanism for air. L. Constantin. 1,757,039; May 6.
Turnout, Portable. H. Boushear. 1,757,165; May 6.
Tying mechanism, Bale-. D. M. Simpson. 1,757,817; May 6.
Typewriter line indicator. D. Murdock. 1,757,541; May 6.
Typewriting machine. G. O. Degener. 1,757,516; May 6.
Typewriting machine. J. A. B. Smith. 1,757,442; May 6.
Typewriting machine. B. C. Stickney. 1,756,961; May 6.
Typewriting machine. B. C. Stickney. 1,757,269; May 6.
Unit construction, Interlocking-. P. Betzler. 1,757,763; May 6.
Utensil-cleaning machine. K. H. Kazazian. 1,757,909; May 6.
Utensil, Cooking. G. F. Dillow. 1,757,656; May 6.
Utensil, Electrically-heated. F. R. Lacy. 1,757,253; May 6.
Vacuum cleaner. N. H. Losey. 1,757,461; May 6.
Vacuum cleaner and condenser. G. W. Martin. 1,757,256; May 6.
Vacuum-cup energizer. E. H. Odell. 1,757,135; May 6.
Vacuum system for internal-combustion engines. W. R. Bamford and H. W. Hamilton. Re17,657; May 6.
Vacuum-tube cathode-supply circuit. A. Leib. 1,757,318; May 6.
Valve. F. B. Rickenberg. 1,757,059; May 6.
Valve and regulating movement for engines. J. Leopold. 1,757,841; May 6.
Valve assembly, Sight-. L. Deutsch. 1,757,237; May 6.
Valve, Automatic control. J. F. Hoffman. 1,757,248; May 6.
Valve, Automatic fuel-shut-off. J. W. Jones. 1,757,430; May 6.
Valve construction, Check-. C. F. Wray. 1,757,823; May 6.
Valve for controlling fluids. R. E. Mitton. 1,757,259; May 6.
Valve for oil pumps. H. W. Platenberg. 1,757,139; May 6.
Valve for pneumatic tools, Balanced throttle. R. A. Norling. 1,757,731; May 6.
Valve, Gas. G. M. Maier. 1,757,126; May 6.
Valve, mechanism, Hydraulic. G. E. A. Hallett. 1,757,425; May 6.
Vanity case. W. F. Shelgren. 1,757,946; May 6.
Vapor burner. F. V. Detwiler. 1,757,296; May 6.
Vaporizer, Gasoline. W. Lilly. 1,757,641; May 6.
Vault, Grave. C. S. Rikert. 1,757,389; May 6.
Vehicle body. J. M. Howe. 1,757,194; May 6.
Vehicle brake. E. B. Flanigan. 1,757,011; May 6.
Vehicle, Dumping. C. F. Higgins. 1,757,190; May 6.
Vehicle signal. R. L. Shoup. 1,757,816; May 6.
Vehicle spring. E. Bagnall. 1,757,405; May 6.
Vehicle suspension means. C. Keck. 1,757,839; May 6.
Vehicles, Liquid-fuel-feeding device for motor. W. E. Hart. 1,757,666; May 6.
Vehicular signal. W. Lipsky. 1,757,869; May 6.
Ventilator. T. A. Weinheimer and E. Hoffman. 1,757,886; May 6.
Venting device. R. J. Anschicks. 1,757,285; May 6.
Vessel. H. C. Douglas. 1,757,174; May 6.
Vibrations in diaphragms and the like, Suppressing secondary. N. Crane. 1,757,451; May 6.
Vibratory systems, Assembling. F. Preator and D. R. Scely. 1,757,385; May 6.
Vise. W. P. Schissler. 1,757,548; May 6.
Vulcanizer. L. O. Grange. 1,757,624; May 6.

Vulcanizing apparatus. W. J. Jarratt and F. E. Hartman. 1,757,635; May 6.
Waffle iron. W. A. Rankin. 1,757,334; May 6.
Wagon. P. G. Cary. 1,757,899; May 6.
Wall-plastering machine. A. A. Guerini. 1,757,627; May 6.
Wall seal, Side-. F. B. Allen. 1,757,698; May 6.
Warp stop mechanism. H. A. Davis. 1,757,940; May 6.
Warper. C. D. Brown. 1,757,409; May 6.
Washer: *See*—
Lock washer.
Washing machine. L. Phelps. 1,757,472; May 6.
Washing machine, Power. V. G. Apple. 1,757,106; May 6.
Washing machines, Rinsing device for. J. W. Husk and R. L. Olson. 1,757,250; May 6.
Water cooler. H. W. Dyer. Des. 81,087; May 6.
Water-impregnating device. W. R. Pulkinghorn. 1,757,140; May 6.
Water, Purifying. L. L. Hedgepeth. 1,757,526; May 6.
Water-purifying material and making same. H. Kriegsheim and W. Vaughan. 1,757,372; May 6.
Water to boilers, Method of and apparatus for feeding. V. V. Veenschoten. 1,757,028; May 6.
Wave-transmission system. R. C. Mathes. 1,757,729; May 6.
Waving hair, Device for. S. C. Headington. 1,757,245; May 6.
Web-cutting machine. G. W. Swift, jr. 1,757,445; May 6.
Weed cutter. C. C. Groeneveld and C. W. Fuller. 1,757,858; May 6.
Welding, Apparatus for. J. A. Muir. 1,757,540; May 6.
Welding rod. W. F. and S. M. Stoody and N. W. Cole. 1,757,601; May 6.
Wells by radio, System of shooting. W. F. Bleecker. 1,757,288; May 6.
Wheel: *See*—
Skate wheel.
Wheel post or bearing support, Bull-. W. O'Brien. 1,757,780; May 6.
Wheel spoke and rim connection. A. L. Putnam. 1,757,332; May 6.
Wheels, Device for regulating wind. E. Hesse. 1,757,667; May 6.
Windmill. L. S. Stripling. 1,757,849; May 6.
Window. L. Janeczko. 1,757,048; May 6.
Window for vehicles, Sliding. G. Kutzner. 1,757,639; May 6.
Window screen, Automobile. E. Baron. 1,757,896; May 6.
Windshield. F. G. Halbig. 1,757,769; May 6.
Windshield-operating device. A. T. Potter. 1,757,474; May 6.
Wire, Pile. M. B. Behrman. 1,757,509; May 6.
Wire strand. E. A. Conner. 1,756,972; May 6.
Wire strands, Threading. E. A. Conner. 1,756,973; May 6.
Wireless direction-finding apparatus, Indicating angular position, particularly applicable to. J. A. Slee. 1,757,265; May 6.
Wireless system. M. Osnos. 1,757,330; May 6.
Woods, Distilling resinous. J. C. Schaffer. 1,757,144; May 6.
Wrapper for springs and the like, Protective. D. E. Hennessy. 1,757,633; May 6.
X-ray device. G. Biermann and C. Niemann. 1,757,037; May 6.
Yeast, Preparation of. G. O. W. Heijkenskjöld. 1,757,568; May 6.

CLASSIFICATION OF PATENTS

ISSUED MAY 6, 1930

NOTE—First number—class, second number—subclass, third number—patent number.

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U. S. GOVERNMENT PRINTING OFFICE, 1930

ALPHABETICAL LIST OF REGISTRANTS OF TRADE-MARKS

A. & A. Company. (See Aronson, Leah.)

Abseck, Louis, doing business as Louis Abseck Co., Brooklyn, N. Y. Adhesive liquid cements. 270,842; May 13; Serial No. 289,260; published Mar. 4, 1930. Class 5.

Adams, Jean, Inc., New York, N. Y. Ladies' dresses, blouses, hats, etc. 270,768; May 13; Serial No. 294,046; published Mar. 4, 1930. Class 39.

Allen-Oliver Co., Los Angeles, Calif. Oil-well tools. 270,867; May 13; Serial No. 290,536; published Mar. 4, 1930. Class 23.

Aluminum Industries, Inc., Cincinnati, Ohio. Piston pins, engine valves, oil and water pumps, etc. 270,872; May 13; Serial No. 286,098; published Mar. 4, 1930. Class 23.

Alward-Anderson-Southard Co., Chicago, Ill. Canvas carriers for harvesting machines. 270,686; May 13; Serial No. 294,132; published Mar. 4, 1930. Class 23.

American Air Compressor Works, Inc., Brooklyn, N. Y. Air compressors, vacuum pumps, and receiving tanks for compressed air. 270,895; May 13. Class 23.

American Chatillon Corporation, New York, N. Y. Artificial silk. 270,613; May 13; Serial No. 294,048; published Feb. 25, 1930. Class 43.

American Creosoting Company, Louisville, Ky. Railroad crossties, poles, piles, etc. 270,678; May 13; Serial No. 293,254; published Feb. 11, 1930. Class 12.

American Encaustic Tiling Company, Ltd., New York, N. Y. Tiles. 270,677; May 13; Serial No. 293,460; published Mar. 4, 1930. Class 12.

American Paint Journal Company, St. Louis, Mo. Periodicals. 270,785; May 13; Serial No. 294,837; published Mar. 4, 1930. Class 38.

American Paint Journal Company, St. Louis, Mo. Periodicals. 270,803; May 13; Serial No. 294,836; published Mar. 4, 1930. Class 38.

American Platinum Works, Newark, N. J. Platinum, osmium, and ruthenium metals, etc. 270,848; May 13; Serial No. 288,310; published Mar. 4, 1930. Class 14.

American Racing Record Corporation. (See Carter, Albert H., assignor.)

Amid Duron Company, New York, N. Y. Chemical preparation. 270,820; May 13; Serial No. 293,574; published Feb. 25, 1930. Class 6.

Amiesite Asphalt Company of America, Camden, N. J., and Philadelphia, Pa. Paving material. 270,675–6; May 13; Serial Nos. 293,461–2; published Feb. 11, 1930. Class 12.

Amtorg Trading Corporation, New York, N. Y. Matches. 270,639; May 13; Serial No. 288,173; published Mar. 4. 1930. Class 9.

Anderson Box Company, Indianapolis, Ind. Brooders for chicks and the like. 270,628; May 13; Serial No. 292,148; published Mar. 4, 1930. Class 50.

Animal Trap Company of America, Lititz, Pa. Garden tools. 270,864; May 13; Serial No. 291,602; published Mar. 4, 1930. Class 23.

Apple Jack Company, The. (See Cornetz, Morris A.)

Arnold, Constable & Company, Incorporated, New York, N. Y. Hand bags. 270,741; May 13; Serial No. 294,559; published Mar. 4, 1930. Class 3.

Aronson, Leah, doing business as A. & A. Company, Chicago, Ill. Antiseptic and germicidal medicament. 270,709; May 13; Serial No. 293,767; published Feb. 25, 1930. Class 6.

Artloom Corporation, Artloom Rug Mills Division, Philadelphia, Pa Seamless rugs. 270,696; May 13; Serial No. 295,111; published Mar. 4, 1930. Class 42.

Associated Dry Goods Corporation of New York, New York, N. Y. Publications. 270,813; May 13; Serial No. 294,381; published Mar. 4, 1930. Class 38.

Atkins, E. C., and Company, Indianapolis, Ind. Circular saws and saw sets. 270,691; May 13; Serial No. 293,655; published Mar. 4, 1930. Class 23.

Baash-Ross Tool Company, Incorporated, Los Angeles, Calif. Crown blocks for gas and oil drilling derricks. 270,857; May 13; Serial No. 292,782; published Mar. 4, 1930. Class 23.

Babbitt, B. T., Inc., New York, N. Y. Lye. 270,619; May 13; Serial No. 294,505; published Apr. 22, 1930. Class 6.

Babbitt, B. T., Inc., New York, N. Y. Lye. 270,701; May 13; Serial No. 294,562; published Feb. 25, 1930. Class 6.

Babbitt, B. T., Inc., New York, N. Y. Lye. 270,809; May 13; Serial No. 294,610; published Feb. 25, 1930. Class 6.

Bamberger, L., & Co., Newark, N. J. Awning cloth, batiste, gingham, etc. 270,881; May 13; Serial No. 290,296; published Feb. 18, 1930. Class 42.

Barker, Minnie, Chicago, Ill. Hair grower, pressing oil, and shampoo. 270,622; May 13; Serial No. 285,806; published Mar. 4, 1930. Class 6.

Baron, H., & Co., Inc., Brooklyn, N. Y. Flavoring extracts and syrups for flavoring soft drinks. 270,890; May 13. Class 45.

Best & Co., Inc., New York, N. Y. Luggage. 270,784; May 13; Serial No. 294,953; published Mar. 4, 1930. Class 3.

Bethlehem Steel Company, Bethlehem, Pa. Steel castings. 270,668; May 13; Serial No. 279,309; published Mar. 4, 1930. Class 14.

Bigelow-Clark, Inc., New York, N. Y. Fluid preparation for the treatment of simple irritations of the scalp, dandruff, etc. 270,801; May 13; Serial No. 294,911; published Feb. 25, 1930. Class 6.

Bloomington Milling Company. (See Zimmerman, Joseph C.)

Boott Mills, Lowell, Mass. Curtains. 270,615; May 13; Serial No. 293,819; published Feb. 25, 1930. Class 42.

Borras, Anton, doing business as Mon-Joie, Philadelphia, Pa. Hair-waving lotion. 270,658; May 13; Serial No. 289,781; published Feb. 25, 1930. Class 6.

Bostwick Steel Lath Company, The, Niles, Ohio. Metal lath. 270,733; May 13; Serial No. 275,863; published Mar. 4, 1930. Class 12.

Boyd-Welsh Shoe Company, St. Louis, Mo. Shoes. 270,626; May 13; Serial No. 292,792; published Feb. 25, 1930. Class 39.

Boye Needle Co., The, Chicago, Ill. Display cabinets. 270,907; May 13. Class 32.

Branca, Fratelli, Milan, Italy. Bitters. 270,734; May 13; Serial No. 272,394; published Feb. 25, 1930. Class 6.

Brandle & Smith Co., Philadelphia, Pa. Candies. 270,671; May 13; Serial No. 294,757; published Mar. 4, 1930. Class 46.

Bray, Charles T., doing business as The Slag Paving Brick & Products Company, Globe, Ariz. Bricks and tiles. 270,664; May 13; Serial No. 280,163; published Feb. 18, 1930. Class 12.

Britt, Morgan C., Winter Garden, Fla. Fresh berries and vegetables. 270,891; May 13. Class 46.

Brown & Williamson Tobacco Corporation, Winston-Salem, N. C. Tobacco. 270,718; May 13; Serial No. 250,371; published Jan. 31, 1928. Class 17.

Brown & Williamson Tobacco Corporation, Winston-Salem, N. C. Tobacco. 270,719; May 13; Serial No. 250,379; published Jan. 31, 1928. Class 17.

Brown & Williamson Tobacco Corporation, Winston-Salem, N. C. Tobacco. 270,720; May 13; Serial No. 250,384; published Jan. 31, 1928. Class 17.

Brown & Williamson Tobacco Corporation, Winston-Salem, N. C. Tobacco. 270,721–2; May 13; Serial Nos. 250,391–2; published Jan. 31, 1928. Class 17.

Bryan, Sally, doing business as Denver Radium Service, Denver, Colo. Radium-containing ointment, solutions, and tablets. 270,816; May 13; Serial No. 294,053; published Mar. 4, 1930. Class 6.

Butcher Polish Co., The, Boston, Mass. Floor waxing and polishing hand tools. 270,860; May 13; Serial No. 292,575; published Mar. 4, 1930. Class 23.

Byrd, Charles P., Atlanta, Ga. Nonalcoholic, noncereal, maltless beverage. 270,736; May 13; Serial No. 272,197; published Mar. 4, 1930. Class 45.

Caillard, Zoe, London, England. Pills, tablets for digestive purposes, and capsules for the treatment of influenza and catarrh. 270,667; May 13; Serial No. 279,724; published Feb. 25, 1930. Class 6.

Camden Woolen Co., Camden, Me. Piece goods of woolen. 270,607; May 13; Serial No. 294,339; published Feb. 25, 1930. Class 42.

Canada Cream Co. (See Frames, Parker W.)

Carnrick, G. W., Co., Newark, N. J. Coating for tablets. 270,808; May 13; Serial No. 294,064; published Feb. 25, 1930. Class 6.

Carter, Albert H., assignor to American Racing Record Corporation, Chicago, Ill. Horse and other animal rating tables. 270,739; May 13; Serial No. 284,164; published Mar. 4, 1930. Class 38.

Cavanagh, John, Ltd., New York, N. Y. Headwear for men and women. 270,725; May 13; Serial No. 293,571; published Mar. 4. 1930. Class 39.

Celanese Corporation of America, New York, N. Y. Fabrics. 270,600; May 13; Serial No. 294,761; published Feb. 25. 1930. Class 42.

Celanese Corporation of America, New York, N. Y. Fabrics. 270,699; May 13; Serial No. 294,764; published Feb. 25. 1930. Class 42.

Celanese Corporation of America, New York, N. Y. Fabrics. 270,700; May 13; Serial No. 294,762; published Feb. 25, 1930. Class 42.

Central Atlantic States Service Corporation, Newark, N. J. Ice, coal, and fuel wood. 270,746; May 13; Serial No. 293,089; published Mar. 4, 1930. Class 1.

Chicago Mail Order Company, Chicago, Ill. Face powder. 270,799; May 13; Serial No. 294,956; published Mar. 4, 1930. Class 6.

Child Welfare Guild, Inc., New Haven, Conn. Liquid preparation to prevent people from biting their finger nails. 270,703; May 13; Serial No. 294,290; published Feb. 18, 1930. Class 6.

Chilton Class Journal Company, Philadelphia, Pa. Publications. 270,789–90; May 13; Serial Nos. 295,150–1; published Mar. 4, 1930. Class 38.

Cino Chemical Products Company, The, Cincinnati, Ohio. Fluid extract of pyrethrum. 270,702; May 13; Serial No. 294,291; published Feb. 18, 1930. Class 6.

Cole Chemical Company, Wilmington, Del., and St. Louis, Mo. Expectorant cough sedative. 270,843; May 13; Serial No. 289,182; published Feb. 18, 1930. Class 6.
Cole Chemical Company, Wilmington, Del., and St. Louis, Mo. Preparation for the treatment of cystitis, etc. 270,854; May 13; Serial No. 286,035; published Feb. 18, 1930. Class 6.
Cordova Company, The. (See Franklin, John L.)
Cornel Drug Stores Inc., New York, N. Y. Preparation for burns and chapped skin. 270,732; May 13; Serial No. 276,304; published Feb. 25, 1930. Class 6.
Cornetz, Morris A., doing business as The Apple Jack Company, Boston, Mass. Maltless beverages and syrups, extracts, and concentrates for preparing the same. 270,889; May 13. Class 45.
Coty, Inc., Wilmington, Del., and New York, N. Y. Manicure preparations. 270,823; May 13; Serial No. 293,091; published Mar. 4, 1930. Class 6.
Couch Bros. Manufacturing Co., East Point, Ga. Horse collars. 270,781–2; May 13; Serial Nos. 295,020–1; published Mar. 4, 1930. Class 3.
Crowell Publishing Company, The, New York, N. Y. Magazine. 270,791; May 13; Serial No. 295,117; published Mar. 4, 1930. Class 38.
Curran & Joyce Company, Incorporated, doing business as Triplepac Bottlers, Lawrence, Mass. Ginger ale and nonalcoholic, noncereal, maltless beverages. 270,873; May 13; Serial No. 285,339; published Mar. 4, 1930. Class 45.
Daily Local News Company, West Chester, Pa. Newspaper. 270,776; May 13; Serial No. 294,712; published Mar. 4, 1930. Class 38.
Da Rocha, Joao M., doing business as J. M. da Rocha Co., Firecracker Division, San Francisco, Calif. Firecrackers and fireworks. 270,760; May 13; Serial No. 294,207; published Mar. 4, 1930. Class 9.
Dealers Sales Corporation, St. Louis, Mo. Hairdressing. 270,711–12; May 13; Serial Nos. 293,722–3; published Feb. 18, 1930. Class 6.
Dealers Sales Corporation, St. Louis, Mo. Hair tonic. 270,713; May 13; Serial No. 293,721; published Feb. 25, 1930. Class 6.
Dealers Sales Corporation, St. Louis, Mo. Hair tonic. 270,714; May 13; Serial No. 293,720; published Feb. 18, 1930. Class 6.
Demilo Copmany, The. (See Gleghorn, James S.)
Denver Radium Service. (See Bryan, Sally.)
De Sanno, Albert P., jr., doing business as A. P. de Sanno & Son, Philadelphia, Pa. Hypodermic needles, scalers, probes, etc. 270,896; May 13. Class 44.
Dewey Alburton A., Bristol, Conn. Neutralizing mixture and a cough and croup syrup. 270,661; May 13; Serial No. 281,274; published Mar. 4, 1930. Class 6.
Dewey & Almy Chemical Company, North Cambridge, Mass. Outer, inner, and mid soles, heels, etc., for boots and shoes. 270,767; May 13; Serial No. 294,061; published Mar. 4 1930. Class 39.
Dieterich, Francis L., New York, N. Y. Packing gaskets. 270,869; May 13; Serial No. 289,712; published Mar. 4, 1930. Class 35.
Doughnut Machine Corporation, New York, N. Y. Doughnuts. 270,742; May 13; Serial No. 294,495; published Mar. 4, 1930. Class 46.
Du Pont, E. I., de Nemours and Company, Wilmington, Del. Textile fabric. 270,763; May 13; Serial No. 293,414; published Mar. 4, 1930. Class 50.
Editor & Publisher Co., The, New York, N. Y. Newspaper journals. 270,786; May 13; Serial No. 294,766; published Mar. 4, 1930. Class 38.
Eisenhut, Harry C., Richmond Hill, N. Y. Bird food. 270,780; May 13; Serial No. 295,022; published Mar. 4, 1930. Class 46.
Elco Distributing Company, Chicago, Ill. Nonalcoholic, noncereal, maltless carbonated beverages and syrups, etc. 270,683; May 13; Serial No. 294,062; published Mar. 4, 1930. Class 45.
Elliott Varnish Co., Chicago, Ill. Paints, paint enamels, and varnishes. 270,828; May 13; Serial No. 292,661; published Feb. 25, 1930. Class 16.
Elmo, Incorporated, Philadelphia, Pa. Astringents, astringent cerates, bleach creams, etc. 270,807; May 13; Serial No. 294,715; published Feb. 25, 1930. Class 6.
Enterprise Publishing Co., Brockton, Mass. Newspaper. 270,775; May 13; Serial No. 294,717; published Mar. 4, 1930. Class 38.
Esmond Mills, The, Esmond, Smithfield, R. I. Textile blankets. 270,698; May 13; Serial No. 294,767; published Feb. 25, 1930. Class 42.
Estare Laboratories, Memphis, Tenn. Hair straightener. 270,806; May 13; Serial No. 294,718; published Feb. 25, 1930. Class 6.
Etablissements André Gillier, Societe Anonyme, Troyes, France. Face powder, rouge, cosmetics, and lotions for the hair, etc. 270,656; May 13; Serial No. 291,211; published Feb. 25, 1930. Class 6.
Faichney Instrument Corporation, Watertown, N. Y. Thermometers. 270,897; May 13. Class 26.
Fairchild Aviation Corporation, New York, N. Y. Internal-combustion engines. 270,689–90; May 13; Serial Nos. 293,823–4; published Mar. 4, 1930. Class 23.
Fairchild Bros. & Foster, New York, N. Y. Gastric gland extract. 270,756; May 13; Serial No. 294,346; published Feb. 18, 1930. Class 6.
Falkingham, Percival E., New York, N. Y. Astringents, astringent cerates, bleach creams, etc. 270,835; May 13; Serial No. 291,869; published Feb. 25, 1930. Class 6.
Feeders Supply and Manufacturing Co., Kansas City, Mo. Poultry feed. 270,646; May 13; Serial No. 291,055; published Mar. 4, 1930. Class 46.
Feinefeld, David, doing business as French Bootery, Birmingham, Ala. Shoes. 270,635; May 13; Serial No. 289,888; published Feb. 25, 1930. Class 39.
Felters Company, The, Boston, Mass. Felt. 270,904; May 13. Class 50.
Finkovitch-Levine Shoe Company, Boston, Mass. Shoes. 270,627; May 13; Serial No. 292,776; published Feb. 25, 1930. Class 39.
Florentine, Mary, Boston, Mass. Toilet preparations. 270,708; May 13; Serial No. 293,826; published Feb. 25, 1930. Class 6.
Forest Chemical Company, Registered, The, Franquelin and Montreal, Quebec, Canada. Insecticides. 270,620; May 13; Serial No. 287,812; published Feb. 25, 1930. Class 6.
Forstmann & Huffmann Company, Passaic, N. J. Woolen piece goods. 270,899; May 13. Class 42.
Fox, M. Ewing, Co., Inc., New York, N. Y. Dry white powder to be mixed with water. 270,901; May 13. Class 16.
Frames, Parker W., doing business as Canada Cream Co., Baltimore, Md. Preparation for use in the treatment of irritated conditions of the nose and throat. 270,758; May 13; Serial No. 294,299; published Feb. 18, 1930. Class 6.
Frankfort Distillery, Inc., The, Louisville, Ky. Malt whiskey. 270,685; May 13; Serial No. 294,579; published Mar. 4, 1930. Class 49.
Franklin, John L., doing business as Cordova Company, The, Atlanta, Ga. Ginger ale. 270,688; May 13; Serial No. 293,965; published Mar. 4, 1930. Class 45.
French Bootery. (See Feinefeld, David.)
Fritzsche Brothers, Inc., New York, N. Y. Natural and synthetic essential oils. 270,805; May 13; Serial No. 294,719; published Feb. 25, 1930. Class 6.
Fulton, E. E., Co., Chicago, Ill. Adhesive cement. 270,783; May 13; Serial No. 294,969; published Mar. 4, 1930. Class 5.
Gearench Manufacturing Company, Houston, Tex. Tongs. 270,687; May 13; Serial No. 294,034; published Mar. 4, 1930. Class 23.
General Fruit Packing Corporation, San Francisco, Calif. Grape products. 270,871; May 13; Serial No. 287,814; published Mar. 4, 1930. Class 45.
Gettelman, Sydney H., doing business as Market Review Publishing Company, Chicago, Ill. Periodical publication. 270,814; May 13; Serial No. 294,131; published Mar. 4, 1930. Class 38.
Gibbs Boardtile Corporation, Chicago, Ill. Compact pressed-wood fiber board. 270,874; May 13; Serial No. 292,988; published Feb. 18, 1930. Class 12.
Gleghorn, James S., doing business as The Demilo Company, Detroit, Mich. Cosmetics. 270,839; May 13; Serial No. 290,893; published Feb. 25, 1930. Class 6.
Goldstein-Wilkins Corporation, New York, N. Y. Silk dress goods in the piece. 270,825–6; May 13; Serial Nos. 287,063–4; published Feb. 18, 1930. Class 42.
Goodrich, B. F., Company, The, New York, N. Y. Belts and belting. 270,862; May 13; Serial No. 292,529; published Feb. 18, 1930. Class 35.
Gottfried & Marshall, New York, N. Y. Eggs. 270,649; May 13; Serial No. 290,462; published Mar. 4, 1930. Class 46.
Grand Rapids Trust Company, Grand Rapids, Mich. Asphalt roofing. 270,878; May 13; Serial No. 285,300; published Feb. 18, 1930. Class 12.
Graphic Arts Corporation, Minneapolis, Minn. Magazines. 270,771; May 13; Serial No. 294,422; published Mar. 4, 1930. Class 38.
Grean, Alexandre M., doing business as Grean Company, New York, N. Y. Fabric scarfs and scarfs combined with hatbands and turbans. 270,636; May 13; Serial No. 289,352; published Feb. 25, 1930. Class 39.
Greene, June S., Cleveland, Ohio. Bath salts. 270,818; May 13; Serial No. 293,064; published Mar. 4, 1930. Class 6.
Grunewald Novick Company, Chicago, Ill. Silk piece goods. 270,608; May 13; Serial No. 294,251; published Feb. 18, 1930. Class 42.
Harris, Oscar O., doing business as Peerless Food Products, Philadelphia, Pa. Malt syrup. 270,684; May 13; Serial No. 294,634; published Feb. 25, 1930. Class 46.
Heller, David, doing business as Heller & Long, New York, N. Y. Handkerchiefs. 270,604; May 13; Serial No. 294,530; published Feb. 25, 1930. Class 42.
Henkel Edge-Lite Corporation, Chicago, Ill. Bathroom cabinets and mirrors. 270,861; May 13; Serial No. 292,531; published Mar. 4, 1930. Class 32.
Herold, Harry, doing business as Herold Drug Co., Petaluma, Calif. Preparation for the removal of callous and corns. 270,729; May 13; Serial No. 268,865; published Aug. 28, 1928. Class 6.
Hewitt-Gutta Percha Rubber Corporation, Buffalo, N. Y. Fire hose. 270,680; May 13; Serial No. 295,172; published Mar. 4, 1930. Class 35.
Hill, Mrs. Lucy J., Indianapolis, Ind. Medicine. 270,841; May 13; Serial No. 290,752; published Feb. 25, 1930. Class 6.

Hodshon-Berg, Incorporated, Danbury, Conn., and New York, N. Y. Caps and hats for men. 270,765; May 13; Serial No. 293,274; published Feb. 25, 1930. Class 39.
Hodshon-Berg, Incorporated, Danbury, Conn., and New York, N. Y. Caps and hats. 270,770; May 13; Serial No. 293,580; published Mar. 4, 1930. Class 39.
Hoe, R., & Co., Inc., New York, N. Y. Rotary printing machines. 270,893; May 13. Class 23.
Hoefling Bros. Inc., Chico, Calif. Portable cleaning and treating machines for seed and grain. 270,858–9; May 13; Serial Nos. 292,668–9; published Mar. 4, 1930. Class 23.
Hoffman-La Roche, F., & Co. Aktiengesellschaft, Basel, Switzerland. Pharmaceutical preparation. 270,704; May 13; Serial No. 294,259; published Feb. 18, 1930. Class 6.
Hollywood Dry Corporation, doing business as Purity-bonded Products, Inc., Los Angeles, Calif. Extracts, flavorings, concentrates, fruit colorings, etc. 270,850; May 13; Serial No. 292,876; published Mar. 4, 1930. Class 45.
Hookless Fastener Company, Meadville, Pa. Hand bags, pocketbooks, money belts, etc. 270,773; May 13; Serial No. 294,252; published Mar. 4, 1930. Class 8.
House of Tre-Jur, Inc., New York, N. Y. Face powder, talcum powder, compact powder, etc. 270,830; May 13; Serial No. 292,578; published Feb. 18, 1930. Class 6.
Hubbard, Silas, Company, East Limington, Me. Building lumber. 270,648; May 13; Serial No. 290,703; published Feb. 18, 1930. Class 12.
Humitube Mfg. Co., Peoria, Ill. Containers. 270,633; May 13; Serial No. 291,620; published Mar. 4, 1930. Class 2.
I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Fabrics. 270,612; May 13; Serial No. 294,155; published Feb. 25, 1930. Class 42.
I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Medicinal preparation for disinfection of the mouth and throat. 270,727; May 13; Serial No. 258,220; published Feb. 25, 1930. Class 6.
I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Medicine for use against cholangitis, cholecystitis, etc. 270,728; May 13; Serial No. 258,218; published Feb. 25, 1930. Class 6.
Ideal Pharmacal Co., The. (See Levin, Benjamin.)
Imperial Valley Grapefruit Growers, El Centro, Calif. Grapefruit. 270,882; May 13. Class 46.
Indianapolis Paint & Color Co., Indianapolis, Ind. Paints and paint enamels. 270,618; May 13; Serial No. 294,924; published Feb. 25, 1930. Class 16.
Inland Milling Company, Des Moines, Iowa. Wheat flour. 270,788; May 13; Serial No. 295,224; published Mar. 4, 1930. Class 46.
Ironsides Company, The, Columbus, Ohio. Paint and paint thinner. 270,717; May 13; Serial No. 240,658; published Feb. 25, 1930. Class 16.
Isothermos Corporation of America, New York, N. Y. Lubricators and parts thereof. 270,865; May 13; Serial No. 291,092; published Mar. 4, 1930. Class 23.
James Manufacturing Company, Fort Atkinson, Wis. Paint enamel and oil paint. 270,716; May 13; Serial No. 293,535; published Feb. 25, 1930. Class 16.
Juilliard, A. D., & Co., Inc., New York, N. Y. Printed corduroys. 270,695; May 13; Serial No. 295,181; published Mar. 4, 1930. Class 42.
Kasser, Samuel, doing business as Union Products Co., Philadelphia, Pa. Bottle caps and stoppers. 270,885; May 13. Class 50.
Klein, L., Inc., Chicago, Ill. Ice skates. 270,617; May 13; Serial No. 293,224; published Mar. 4, 1930. Class 22.
Klein, L., Inc., Chicago, Ill. Shoes. 270,724; May 13; Serial No. 293,222; published Mar. 4, 1930. Class 39.
Kline Brothers Co., doing business as J. G. Kline Company, New York, N. Y. Bed sheets, sheeting, etc. 270,603; May 13; Serial No. 294,535; published Mar. 4, 1930. Class 42.
Kny-Scheerer Corporation, New York, N. Y. Glass graduates, glass measuring cylinders, and glass pipettes. 270,868; May 13; Serial No. 290,260; published Mar. 4, 1930. Class 26.
Koppers Coal Company, The, Pittsburgh, Pa. Coal. 270,652; May 13; Serial No. 285,922; published Mar. 4, 1930. Class 1.
Koppers Products Company, Pittsburgh, Pa. Sulphur. 270,852; May 13; Serial No. 286,944; published Feb. 18, 1930. Class 6.
Koppers Products Company, Pittsburgh, Pa. Disinfectants. 270,853; May 13; Serial No. 286,943; published Feb. 18, 1930. Class 6.
Kwong Cheung Lung & Co., San Francisco, Calif. Melon seed. 270,745; May 13; Serial No. 293,185; published Mar. 4, 1930. Class 1.
"La Compagnie des Produits Exki Limitee" ("Exki Products Company, Limited"), Montreal, Quebec, Canada. Perfumes, preparations for toilet, hygiene, and beauty. 270,621; May 13; Serial No. 287,667; published Mar. 4, 1930. Class 6.
Lady Godiva Hats, Inc., New York, N. Y. Ladies' hats. 270,766; May 13; Serial No. 294,117; published Mar. 4, 1930. Class 39.
Lamicel Products Inc., New York, N. Y. Laminated yarns. 270,601; May 13; Serial No. 294,641; published Mar. 4, 1930. Class 43.

Lawrence Portland Cement Company, Northampton, Pa. Building cement. 270,877; May 13; Serial No. 286,121; published Mar. 4, 1930. Class 12.
Lee Laboratories Incorporated, Cambridge, Mass. Pharmaceutical preparation. 270,751; May 13; Serial No. 294,429; published Feb. 18, 1930. Class 6.
Levin, Benjamin, doing business as The Ideal Pharmacal Co., St. Albans, N. Y. Sedative and expectorant. 270,815; May 13; Serial No. 294,118; published Mar. 4, 1930. Class 6.
Lionel Trading Co. Inc., New York, N. Y. Perfumes, toilet waters, face lotions, etc. 270,653; May 13; Serial No. 292,813; published Mar. 4, 1930. Class 6.
Lord & Taylor, New York, N. Y. Sheets and pillowcases, blankets, and towels. 270,665; May 13; Serial No. 280,130; published Feb. 25, 1930. Class 42.
Loughlin & Company, Washington, D. C. Hair restorer. 270,829; May 13; Serial No. 292,586; published Feb. 18, 1930. Class 6.
Lowe, Joe, Corporation, Brooklyn, N. Y. Doughnuts. 270,735; May 13; Serial No. 269,734; published Aug. 28, 1928. Class 46.
Macy, R. H., & Co., Inc., New York, N. Y. Honey, mustard, olives, etc. 270,884; May 13. Class 46.
Malt-Diastase Company, Brooklyn, N. Y. Malt extract. 270,738; May 13; Serial No. 284,617; published Feb. 11, 1930. Class 6.
Market Review Publishing Company, (See Gettelman, Sydney H.)
Martin Dennis Company, The, Newark, N. J. Oil or grease for use in the leather industry. 270,850–1; May 13; Serial Nos. 287,083–4; published Feb. 25, 1930. Class 6.
Mawer-Gulden-Annis Inc., Brooklyn, N. Y. Preserved cherries. 270,888; May 13. Class 46.
McCann, F. J., Packing Co., Inc., Salinas, Calif. Fresh vegetables. 270,679; May 13; Serial No. 293,189; published Mar. 4, 1930. Class 46.
McKnight, Thomas E., Lindale, Tex. Fresh sweet potatoes. 270,726; May 13; Serial No. 260,456; published Mar. 4, 1930. Class 46.
Meadows, V. E., Inc., New York, N. Y. Astringents, astringent cerates, bleach creams, etc. 270,710; May 13; Serial No. 293,741; published Feb. 18, 1930. Class 6.
Meikrantz, W. H., Scranton, Pa. Cleaning polish. 270,705; May 13; Serial No. 293,980; published Feb. 25, 1930. Class 16.
Mennie, Fred L., doing business as Mennie Manufacturing Co., Omaha, Nebr. Composition of matter. 270,625; May 13; Serial No. 293,148; published Feb. 18, 1930. Class 6.
Miller, A. D., Sons' Company, Pittsburgh, Pa. Liquid preparation for use in radiators to prevent water from freezing. 270,892; May 13. Class 6.
Miller High Life Co., Milwaukee, Wis. Malt syrup. 270,692; May 13; Serial No. 293,377; published Feb. 4, 1930. Class 46.
Milwaukee Lubricants Co., Milwaukee, Wis. Household liquid insect killer. 270,748; May 13; Serial No. 294,551; published Feb. 25, 1930. Class 6.
Mon-Joie. (See Borras, Anton.)
Montgomery Ward & Co., Incorporated, Chicago, Ill. Tennis rackets, golf clubs, footballs, etc. 270,824; May 13; Serial No. 289,360; published Mar. 4, 1930. Class 22.
Musgrove, Floyd L., Topeka, Kans. Tourist park equipment. 270,644; May 13; Serial No. 291,782; published Feb. 18, 1930. Class 12.
National Brokerage Company, Inc., Chicago, Ill. Medicinal whiskey. 270,681; May 13; Serial No. 295,079; published Mar. 4, 1930. Class 49.
National Lumberman Publishing Co., Inc., St. Louis, Mo. Periodical. 270,804; May 13; Serial No. 294,818; published Mar. 4, 1930. Class 38.
National Tourist Home Guild, Auburn, N. Y. Periodical publication. 270,817; May 13; Serial No. 293,743; published Mar. 4, 1930. Class 38.
National Weeklies, Inc., Winona, Minn. Publication. 270,821; May 13; Serial No. 293,439; published Mar. 4, 1930. Class 38.
Nelson, Ira I., doing business as The Stack Heater Company, Boston, Mass. Reducing and relief valves. 270,660; May 13; Serial No. 283,295; published Mar. 4, 1930. Class 13.
Niblett-Jeffries Corporation, New York, N. Y. Golf clubs, iron clubs and heads, and golf bags. 270,908; May 13. Class 22.
Ninety Six Cotton Mill, Ninety Six, S. C. Cotton piece goods. 270,611; May 13; Serial No. 294,170; published Mar. 4, 1930. Class 42.
No Name Hat Company, The, Danbury, Conn., and New York, N. Y. Hats. 270,629; May 13; Serial No. 292,119; published Mar. 4, 1930. Class 39.
No Name Hat Company, The, Danbury, Conn., and New York, N. Y. Hats. 270,630–1; May 13; Serial Nos. 292,117–18; published Feb. 25, 1930. Class 39.
Novel Magazine Corp, New York, N. Y. Periodical. 270,666; May 13; Serial No. 280,035; published Apr. 16, 1929. Class 38.
Oesterling, P. J., & Son, Inc., Butler, Pa. Egg mash, growing mash, etc. 270,779; May 13; Serial No. 295,132; published Mar. 4, 1930. Class 46.
Oklahoma City Scenic Company, Oklahoma City, Okla. Stage equipment. 270,883; May 13. Class 50.

Owens-Illinois Glass Company, Toledo, Ohio. Bottles, jars, jugs, etc. 270,609; May 13; Serial No. 294,238; published Mar. 4, 1930. Class 33.
Pacific Mills, Boston, Mass. Cotton piece goods. 270,903; May 13. Class 42.
Paas Dye Company, Newark, N. J. Dyes. 270,840; May 13; Serial No. 290,792; published Dec. 17, 1929. Class 6.
Parke, Davis & Company, Detroit, Mich. Antianemic substance. 270,811; May 13; Serial No. 294,591; published Feb. 25, 1930. Class 6.
Parke, Davis & Company, Detroit, Mich. Alkalizing salts. 270,812; May 13; Serial No. 294,590; published Feb. 25, 1930. Class 6.
Peerless Food Products. (See Harris, Oscar O.)
Phi Kappa Sigma, Philadelphia, Pa. Periodical. 270,795; May 13; Serial No. 295,048; published Mar. 4, 1930. Class 38.
Philadelphia Inquirer Co., The, Philadelphia, Pa. Daily newspaper. 270,787; May 13; Serial No. 294,739; published Mar. 4, 1930. Class 38.
Pioneer Rubber Mills, San Francisco, Calif. Belting, rubber hose, and piston packing. 270,693; May 13; Serial No. 293,068; published Mar. 4, 1930. Class 35.
Polly Shoppe, Inc., New Orleans, La. Ladies' wearing apparel. 270,687; May 13; Serial No. 289,249; published Mar. 4, 1930. Class 39.
Portable Electric Tool Company, Fitchburg, Mass. Small portable power-driven cutting and sawing machines. 270,866; May 13; Serial No. 290,794; published Mar. 4, 1930. Class 23.
Price, John A., doing business as Price Drug Company, New York, N. Y. Tooth paste, cold cream, analgesic balm, etc. 270,838; May 13; Serial No. 291,356; published Feb. 18, 1930. Class 6.
Publicker Incorporated, Philadelphia, Pa. Medicated alcohol. 270,715; May 13; Serial No. 293,691; published Feb. 18, 1930. Class 6.
Purity Oats Company, Keokuk, Iowa. Rolled oats or oat flakes and a breakfast food. 270,663; May 13; Serial No. 280,195; published Mar. 4, 1930. Class 46.
Puritybonded Products, Inc. (See Hollywood Dry Corporation.)
Queen Valley Fabrics, Inc., Providence, R. I. Goods in the piece. 270,614; May 13; Serial No. 294,039; published Feb. 25, 1930. Class 42.
Raffy, Marcel J., New York, N. Y. Astringents, astringent cerates, bleach creams, etc. 270,755; May 13; Serial No. 294,363; published Feb. 18, 1930. Class 6.
Rathbun, Ralph K., Hastings, Nebr. Hair tonic and shampoo. 270,798; May 13; Serial No. 294,994; published Feb. 25, 1930. Class 6.
Ready Sharp Chalk Corp., New York, N. Y. Chalk. 270,900; May 13. Class 37.
Reed Laboratories, Inc., Kew Gardens, N. Y. Combined lip stick and face rouge. 270,905; May 13. Class 6.
Rehthaler, Louis M., Battle Creek, Mich. Canopy beds. 270,863; May 13; Serial No. 292,010; published Mar. 4, 1930. Class 32.
Riedel-de Haen, Inc., New York, N. Y. Hypnotic in tablet form. 270,750; May 13; Serial No. 294,488; published Feb. 25, 1930. Class 6.
Riker Company, The, Newark, N. J. Buckles. 270,761–2; May 13; Serial Nos. 293,984–5; published Feb. 25, 1930. Class 40.
Roseville Pottery Company, The, Zanesville, Ohio. Earthenware articles. 270,606; May 13; Serial No. 294,402; published Feb. 25, 1930. Class 30.
Ross, Sydney, Co., The, Newark, N. J. Talcum powder. 270,819; May 13; Serial No. 293,641; published Feb. 25, 1930. Class 6.
Ross, Sydney, Co., The, Newark, N. J. Talcum powder. 270,822; May 13; Serial No. 293,347; published Mar. 4, 1930. Class 6.
Rossman Brothers & Messner, Inc., New York, N. Y. Cotton goods, cotton and silk goods, and artificial-silk goods. 270,879; May 13; Serial No. 292,906; published Feb. 25, 1930. Class 42.
Royal Baking Powder Company, Jersey City, N. J., and New York, N. Y. Baking powder. 270,837; May 13; Serial No. 291,530; published Feb. 25, 1930. Class 6.
Royal Knitwear Co., Buffalo, N. Y. Men's, women's, and children's knit wear. 270,632; May 13; Serial No. 291,793; published Feb. 25, 1930. Class 39.
Royal Manufacturing Company of Duquesne, Duquesne, Pa. Deodorants, insecticides, and disinfectants. 270,655; May 13; Serial No. 291,841; published Mar. 4, 1930. Class 6.
Russeks Fifth Avenue Inc., New York, N. Y. Hand bags. 270,650; May 13; Serial No. 287,773; published Mar. 4, 1930. Class 3.
Sandoz Chemical Works, Incorporated, New York, N. Y. Aniline dyes. 270,794; May 13; Serial No. 295,084; published Mar. 4, 1930. Class 6.
Schaffer, Harry H., doing business as So-Lether Manufacturing Co., St. Paul, Minn. Liquid leather in the nature of an adhesive. 270,778; May 13; Serial No. 294,648; published Mar. 4, 1930. Class 5.
Scher, Morris M., Baltimore, Md. Woolen suiting in piece. 270,880; May 13; Serial No. 292,342; published Mar. 4, 1930. Class 42.
Schulze Baking Company, Kansas City, Mo., and Chicago, Ill. Bread and cake. 270,774; May 13; Serial No. 293,751; published Mar. 4, 1930. Class 46.
Schwarzwaelder Company, Philadelphia, Pa. Waterproof fabrics. 270,898; May 13; Class 50.
Sears, Roebuck and Co., Chicago, Ill. Shoes. 270,769; May 13; Serial No. 293,693; published Mar. 4, 1930. Class 39.
Service Equipment Company, Sough Gate, Calif. Air and water vehicle service towers, tire and inflating valves. 270,640; May 13; Serial No. 287,891; published Mar. 4, 1930. Class 13.
Shalit, Abraham, New York, N. Y. Canned fruits. 270,672; May 13; Serial No. 294,489; published Mar. 4, 1930. Class 46.
Sheba Pistachio Corporation, Paterson, N. J. Salted pistachios. 270,669; May 13; Serial No. 277,641; published Mar. 4, 1930. Class 46.
Silver Moon Co., Inc., New Orleans, La. Astringents, astringent cerates, bleach creams, etc. 270,800; May 13; Serial No. 294,928; published Feb. 25, 1930. Class 6.
Simons, Robert J., Springfield, Mass. Kitchen cabinets. 270,682; May 13; Serial No. 295,061; published Mar. 4, 1930. Class 32.
Sinclair Manufacturing Co., Toledo, Ohio. Bleaching compound for fabrics. 270,834; May 13; Serial No. 292,055; published Feb. 25, 1930. Class 6.
Sir, Harry, & Son, Inc., New York, N. Y. Boots and shoes. 270,723; May 13; Serial No. 293,011; published Feb. 25, 1930. Class 39.
Slag Paving Brick & Products Company, The. (See Bray, Charles T.)
Smith Brothers, Inc., Poughkeepsie, N. Y. Cough syrup. 270,802; May 13; Serial No. 294,898; published Feb. 25, 1930. Class 6.
Société Anonyme M. Naef & Cie., Geneva, Switzerland. Perfumes, essential oils. 270,793; May 13; Serial No. 295,088; published Mar. 4, 1930. Class 6.
So-Lether Manufacturing Co. (See Schaffer, Harry H.)
Southwest Dairy Products Company, Dallas, Tex. Dairy products. 270,651; May 13; Serial No. 286,360; published Mar. 4, 1930. Class 46.
Spear, J. W., & Sons, Inc., New York, N. Y. Hand knitting devices. 270,694; May 13; Serial No. 293,012; published Mar. 4, 1930. Class 23.
Sperry & Hutchinson Company, The, New York, N. Y. Trading stamps. 270,772; May 13; Serial No. 294,281; published Mar. 4, 1930. Class 38.
Squibb, E. R., & Sons, New York, N. Y. Stable solution of an organic bismuth preparation. 270,731; May 13; Serial No. 276,346; published Feb. 4, 1930. Class 6.
Squibb, E. R., & Sons, New York, N. Y. Vitamin concentrates. 270,757; May 13; Serial No. 294,323; published Feb. 18, 1930. Class 6.
Stack Heater Company, The. (See Nelson, Ira I.)
Stadler Products Company, The, Cleveland, Ohio. Fertilizers and plant foods. 270,894; May 13. Class 10.
Standard Brands Incorporated, Dover, Del., and Cincinnati, Ohio. Frozen eggs. 270,642; May 13; Serial No. 292,467; published Mar. 4, 1930. Class 46.
Standard Corset Company, The, New York, N. Y. Body supports. 270,902; May 13. Class 44.
Star-Etts Products Company, Inc., The, New York, N. Y. Laxative preparation. 270,749; May 13; Serial No. 294,492; published Feb. 25, 1930. Class 6.
Stark, Essie M., Farmington, N. Mex. Hair tonic. 270,906; May 13. Class 6.
Stein, S., & Co., New York, N. Y. Woolen goods. 270,610; May 13; Serial No. 294,188; published Feb. 25, 1930. Class 42.
Sterli Manufacturing Company, Omaha, Nebr. Portable arbors. 270,674; May 13; Serial No. 294,035; published Feb. 25, 1930. Class 12.
Sterling Remedy Company, Wheeling, W. Va. Inhalant. 270,754; May 13; Serial No. 294,367; published Feb. 18, 1930. Class 6.
Stern Brothers, New York, N. Y. Junior misses' wearing apparel. 270,634; May 13; Serial No. 290,046; published Feb. 25, 1930. Class 39.
Stetson, John B., Company, Philadelphia, Pa. Hats and caps. 270,764; May 13; Serial No. 293,387; published Mar. 4, 1930. Class 39.
Stirn, L. & E., New York, N. Y. Chiffon and silk piece goods. 270,616; May 13; Serial No. 293,607; published Feb. 25, 1930. Class 42.
Stoffel & Co., New York, N. Y. Piece goods of rayon and cotton. 270,697; May 13; Serial No. 294,932; published Feb. 25, 1930. Class 42.
Storfer Laboratories Inc., New York, N. Y. Bath salts. 270,659; May 13; Serial No. 288,822; published Mar. 4, 1930. Class 6.
Storms, H. M., Company, Brooklyn, N. Y. Typewriter ribbons and carbon papers. 270,759; May 13; Serial No. 294,279; published Mar. 4, 1930. Class 11.
Sullivan Machinery Company, Boston, Mass., and Chicago, Ill. Periodical publications. 270,797; May 13; Serial No. 294,999; published Mar. 4, 1930. Class 38.
Sunnybrook Coal Co., Detroit, Mich. Bituminous coal. 270,645; May 13; Serial No. 291,701; published Mar. 4, 1930. Class 1.
Super-Power Arc Lamp Company, The, Geneva, Ohio. Arc lamps designed for therapeutic purposes. 270,624; May 13; Serial No. 293,162; published Feb. 11, 1930. Class 44.
Swan-Myers Company, Indianapolis, Ind. Laxatives. 270,657; May 13; Serial No. 290,159; published Dec. 10, 1929. Class 6.
Tacoma Brewing Co., San Francisco, Calif. Cereal malt beverages. 270,886; May 13. Class 48.

Tacoma Brewing Co., San Francisco, Calif. Cereal malt syrups. 270,887; May 13. Class 46.
Tasco Asphalt Co., Newark, N. J. Asphaltic compounds. 270,744; May 13; Serial No. 293,493; published Mar. 4, 1930. Class 1.
Tawiks Grate Bar Company, Everett, Wash. Grate bars. 270,641; May 13; Serial No. 286,520; published Mar. 4, 1930. Class 34.
Thermo Service, Inc., New York, N. Y. Heating boilers. 270,747; May 13; Serial No. 294,601; published Mar. 4, 1930. Class 34.
Tilden Company, The, New Lebanon, N. Y. Alterative, resolvent, aperient medicine. 270,832; May 13; Serial No. 292,237; published Feb. 25, 1930. Class 6.
Timme, E. F., & Son, New York, N. Y. Pile fabrics. 270,602; May 13; Serial No. 294,602; published Mar. 4, 1930. Class 42.
Tischer, Dr. H., Corporation, Chicago, Ill. Face creams, preparations in cream and lotion for use on the face, etc. 270,623; May 13; Serial No. 293,199; published Feb. 25, 1930. Class 6.
Titchener, E. H., & Company, Binghamton, N. Y. Nailing machines. 270,870; May 13; Serial No. 288,674; published Mar. 4, 1930. Class 23.
Tootie-Campbell Dry Goods Company, St. Joseph, Mo. Cotton batting. 270,743; May 13; Serial No. 293,494; published Mar. 4, 1930. Class 1.
Toxo-Sene Company. (See Wallace, Oran W.)
Tremco Manufacturing Company, The, Cleveland, Ohio. Paints and painters' materials. 270,849; May 13; Serial No. 288,292; published Feb. 25, 1930. Class 16.
Triplepac Bottlers. (See Curran & Joyce Company, Incorporated.)
Tropical Paint and Oil Company, The, Cleveland, Ohio. Paint and varnish. 270,831; May 13; Serial No. 292,559; published Feb. 18, 1930. Class 16.
Truscon Steel Company, doing business as The Truscon Laboratories, Detroit and Hamtramck, Mich. Material for adding to concrete mixtures. 270,673; May 13; Serial No. 294,041; published Feb. 25, 1930. Class 12.
Union Products Co. (See Kasser, Samuel.)
United Christian Missionary Society, Indianapolis, Ind. Periodical. 270,796; May 13; Serial No. 295,009; published Mar. 4, 1930. Class 38.
United States Gypsum Company, Chicago, Ill. Wall coating. 270,833; May 13; Serial No. 292,081; published Feb. 25, 1930. Class 16.
Universal Portland Cement Company, Chicago, Ill. Building cement. 270,876; May 13; Serial No. 286,346; published Mar. 4, 1930. Class 12.
Universal Traffic Control Company, St. Louis, Mo. Highway and pavement markers, nonelectrical road and street signs, and nonelectrical traffic-control signals. 270,737; May 13; Serial No. 284,883; published Mar. 4, 1930. Class 50.
Vadsco Sales Corporation, New York, N. Y. Astringents, astringent cerates, bleach creams, etc. 270,753; May 13; Serial No. 294,368; published Feb. 18, 1930. Class 6.
Vermitox Laboratories, Inc., Newark, N. J. Aromatic crystals, moth cakes, camphor cakes, etc. 270,836; May 13; Serial No. 291,534; published Feb. 18, 1930. Class 6.
Victoria Elevator Co., Minneapolis, Minn. Wheat flour. 270,647; May 13; Serial No. 290,769; published Mar. 4, 1930. Class 46.
Viking Gasoline Corporation, Charleston, W. Va. Chemicals and chemical preparations. 270,662; May 13; Serial No. 280,813; published May 14, 1929. Class 6.
Vollrath Company, The, Sheboygan, Wis. Enameled metal ware. 270,740; May 13; Serial No. 283,474; published Mar. 4, 1930. Class 13.
Vyo Laboratories, Inc., Washington, D. C. Medicinal preparation. 270,706–7; May 13; Serial Nos. 293,854–5; published Feb. 18, 1930. Class 6.
Wallace, Oran W., doing business as Toxo-Sene Company, Houston, Tex. Liquid preparation for use in treating mouth diseases. 270,752; May 13; Serial No. 294,369; published Feb. 18, 1930. Class 6.
Warren-Allen Carpet Company, Boston, Mass. Sets of folding baseboard sections and cabinets therefor. 270,855; May 13; Serial No. 292,958; published Mar. 4, 1930. Class 23.
Webster, William A., Company, The, Memphis, Tenn. Dental cream, beef, iron, and wine tonic, etc. 270,654; May 13; Serial No. 292,142; published Mar. 4, 1930. Class 6.
Weeks, P. L., Brooksville, Fla. Preparation for the treatment of corns, callouses, and bunions. 270,810; May 13; Serial No. 294,604; published Feb. 25, 1930. Class 6.
Wellington Laboratories, Inc., Baltimore, Md. Cosmetics. 270,827; May 13; Serial No. 292,695; published Feb. 25, 1930. Class 6.
Wellington, Sears & Company, Boston, Mass. Cotton piece goods. 270,605; May 13; Serial No. 294,452; published Feb. 25, 1930. Class 42.
Wettersol Dyestuff Corporation, New York, N. Y. Publication. 270,777; May 13; Serial No. 294,700; published Mar. 4, 1930. Class 38.
Wilson-Western Sporting Goods Company, Chicago, Ill. Golf balls. 270,670; May 13; Serial No. 277,472; published Feb. 25, 1930. Class 22.
Wintbrop Chemical Company, Inc., New York, N. Y. Analgesic. 270,792; May 13; Serial No. 295,107; published Mar. 4, 1930. Class 6.
Woodbury Shoe Mfg. Co., Derry, N. H. Boots, shoes, and slippers. 270,638; May 13; Serial No. 288,264; published Mar. 4, 1930. Class 39.
Worthington Ball Company, The, Elyria, Ohio. Golf balls. 270,844–7; May 13; Serial Nos. 288,365–8; published Feb. 18, 1930. Class 22.
Young, Robert J., Everett, Wash. Photographic prints. 270,730; May 13; Serial No. 276,673; published Mar. 4, 1930. Class 38.
Youngstown Pressed Steel Company, The, Warren, Ohio. Metal coalhole doors, metal corner beads, and steel window sash. 270,875; May 13; Serial No. 291,649; published Feb. 18, 1930. Class 12.
Zimmerman, Joseph C., doing business as Bloomington Milling Company, Bloomington, Ill. Prepared feed. 270,643; May 13; Serial No. 292,346; published Mar. 4, 1930. Class 46.

ALPHABETICAL LIST OF REGISTRANTS OF LABELS

Ace Chemical Company. (See Dilworth, Clark.)
American Pecan & Nut Co., San Antonio, Tex. Original Mexican Sugared (Chocolate) Pecans. For Sugared Pecans. 37,412; May 13.
American Pecan & Nut Co., San Antonio, Tex. Original Mexican Sugared (Piloncillo) Pecans. For Sugared Pecans. 37,413; May 13.
American Pecan & Nut Co., San Antonio, Tex. Original Mexican Sugared (Vanilla) Pecans. For Sugared Pecans. 37,414; May 13.
Begley, George, jr., Chicago, Ill. Donna. For Chile con Carne. 37,415; May 13.
Benjamin, Philip G., doing business as Hauck Malt Extract Company, Cincinnati, Ohio. Haucks Certified Hop Flavor Malt Extract. For Malt Extract. 37,416; May 13.
Brown & Haley, Tacoma, Wash. Purple & Gold Package Elegant. For Candy. 37,417; May 13.
Campfire Corporation, The, Chicago, Ill. Campfire. For Marshmallows. 37,418; May 13.
Croce, Louis P., Inc., Asbury Park, N. J. Croce's Scotch Dry Beverages. For Fruit Beverages. 37,419; May 13.
Dannemiller Grocery Company, The, Canton, Ohio. Dannemiller's Golden Blend Coffee. For Coffee. 37,420; May 13.
Dilworth, Clark, doing business as Ace Chemical Company, San Antonio, Tex. Ace Prophylactic. For Prophylactic. 37,421; May 13.
Doty, Arthur M., Inc., New York, N. Y. Bogardus. For Cigars. 37,422; May 13.
Fruit Belt Pres. Company, East Williamson, N. Y. Pixie Strained Green Beans. For Strained Green Beans. 37,423; May 13.
Harper, James A., Supply Company, The, Kansas City, Mo. American Beauty. For Cake. 37,424; May 13.
Hauck Malt Extract Company. (See Benjamin, Philip G.)
Kessel, Jno. A., Buffalo, N. Y. Laxine. For Laxative. 37,425; May 13.
Kramo Manufacturing Corporation, Philadelphia, Pa. Kramo Caps. For Bottle Caps. 37,426; May 13.
Neoderm Company, Los Angeles, Calif. Epiplasm. For a Medical Preparation Designed to Protect the Body Surface and to Retard Early Decay and Degeneration of the Skin. 37,427; May 13.
Neumann, Morton G., Chicago, Ill. Sweet Georgia Brown Marvelous Face Powder. For Face Powder. 37,428; May 13.
Von Munz Co., Minneapolis, Minn. Munz 77. For Medical Preparation for the Treatment of Pyorrhea and Trench Mouth. 37,429; May 13.
Von Munz Co., Minneapolis, Minn. A to Z. For Medical Preparation for the Treatment of Any Skin Affliction Such as Itch, Blotches, Boils, Pimples, Cold Sores, Bumps, Frost Bite, and Bruises. 37,430; May 13.
Von Munz Co., Minneapolis, Minn. Klichigers. For Medical Preparation for Chiggers, Mites, Poison Ivy, Insect Bites, or Stings. 37,431; May 13.
Wallpaper Association of the United States, New York, N. Y. Insignia of The Wallpaper Association of The United States. For Wall Paper. 37,432; May 13.
Wessels Baking Company, The, Seattle, Wash. $1000 Loaf. For Bread. 37,433; May 13.

ALPHABETICAL LIST OF REGISTRANTS OF PRINTS

Anestex Laboratories De-Ce Products Co. of N. Y. (See Curtis, David.)
Curtis, David, doing business as Anestex Laboratories De-Ce Products Co. of N. Y., New York, N. Y. Anestex Injectubes. For Local Anesthetic. 12,528; May 13.
Halverson, Orris H., Waukesha, Wis. Lem-En-Coke. For Soft Drinks. 12,529; May 13.
Hutchinson, Shelley B., New York, N. Y. "Little Post Office" Stamp Vending Machines. For Postage-Stamp-Vending Machines. 12,530; May 13.
Phillips, Chas. H., Chemical Co., The, New York, N. Y. A Dentifrice. For a Dentifrice. 12,531; May 13.
Phoenix-American Pipe Works, Boonville, Mo. The Genuine Missouri Corn Cob Pipe. For Corncob Pipes. 12,532; May 13.
Stearns & Foster Co., The, Lockland, Cincinnati, Ohio. The Windblown Tulip. For Quilting Cotton. 12,533; May 13.
Stearns & Foster Co., The, Lockland, Cincinnati, Ohio. The Cornucopia. For Quilting Cotton. 12,534; May 13.
Stearns & Foster Co., The, Lockland, Cincinnati, Ohio. Tumbling Blocks. For Quilting Cotton. 12,535; May 13.

ALPHABETICAL LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb, 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Abraham & Straus, Inc., Brooklyn, N. Y. Soap. 281,716; May 13. Class 4.
Advertising Publications, Inc., Chicago, Ill. Periodical. 295,451; May 13. Class 38.
Alabama Mills Company, Birmingham, Ala. Drills, sheetings, jeans, etc. 294,786; May 13. Class 42.
Allen, S. L., & Co., Inc., Philadelphia, Pa. Coasting sleds. 298,130; May 13. Class 22.
American Colloid Co., Lead, S. Dak., and Chicago, Ill. Species of clay. 297,049; May 13. Class 1.
American Delight Food Product Co. (See Reingewirtz, Moses.)
American Hard Rubber Company. Jars, cells, covers, vents, and separators. 296,247; May 13. Class 21.
American Radiator Company, New York, N. Y. Magazine or periodical. 297,509; May 13. Class 38.
American Safety Razor Corporation, Brooklyn, N. Y. Razors and blades. 297,510; May 13. Class 23.
American Tar Products Company, Pittsburgh, Pa. Crude or raw coal-tar distillates. 288,311; May 13. Class 1.
Ardath Tobacco Company, Limited, London, England. Cigarettes. 297,574; May 13. Class 17.
Armand Company, The, Des Moines, Iowa. Massage implement. 295,989; May 13. Class 44.
Armbrust Chain Company, Providence, R. I. Bracelets and wrist-watch bracelets. 297,840; May 13. Class 28.
Armour and Company, Chicago, Ill. Gut strings for tennis and like rackets. 289,435; May 13. Class 22.
Auto Rain Protection Company, Inc., New York, N. Y. Rumble-seat weatherprooof fabric protectors. 288,632; May 13. Class 19.
Baker, Charles F., & Co. Inc., Boston, Mass. Golf tees. 297,354; May 13. Class 22.
Baldwin Hosiery Company, New York, N. Y. Hosiery. 297,577; May 13. Class 39.
Barron-Anderson Co., Boston, Mass. Men's topcoats, overcoats, suits, vests, and trousers. 297,293; May 13. Class 39.
Baxter-Lane Paper Corporation, New York, N. Y. Reels and sample holders. 241,803; May 13. Class 2.
Beaver Chemical Works, Beaver Dam, Wis. Mechanic's hand soap. 296,170; May 13. Class 4.
Belgau, Robert C., Miami, Fla. Sound-moving-picture machines and parts thereof, cameras, etc. 289,177; May 13. Class 26.
Bell, James A., doing business as James A. Bell Co., Minneapolis, Minn. Automotive direction signals. 296,948; May 13. Class 21.
Biltrite Collar Company, New York, N. Y. Men's collars. 296,462; May 13. Class 39.
Binney & Smith Co., New York, N. Y. Pigments. 297,294; May 13. Class 12.
Black Manufacturing Co., The, Seattle, Wash. Underwear, hosiery, sweaters, etc. 295,602; May 13. Class 39.
Booth-Kelly Lumber Company, The, Eugene, Oreg. Lumber products. 284,887–8; May 13. Class 12.
Bosworth, Harry J., Company, Chicago, Ill. Toothbrush. 297,058; May 13. Class 29.
Bottum & Torrance Co., Bennington, Vt. Hosiery. 297,580; May 13. Class 39.
Bowers, Charles E., doing business as The Camel Products Company, Shreveport, La. Hair tonics and dressings. 289,817; May 13. Class 6.
Bowers, Edward C., and Charles L. Feldman, receivers for Wickwire Spencer Steel Company, New York, N. Y. Card clothing. 296,046; May 13. Class 23.
Brilliant, Samuel & Company, Boston, Mass. Leather shoes. 282,102; May 13. Class 39.
Brohman Company New York, N. Y. Children's dresses. 297,889; May 13. Class 39.
Brown, William M., doing business as Yardmasters of America, Kansas City, Mo. Blank account books. 261,373; May 13. Class 37.
Brunswick-Balke-Collender Company, The, Wilmington, Del., and Chicago, Ill. Polish. 285,327; May 13. Class 16.
Bunte Brothers, doing business as Bunte, Chicago, Ill. Candy. 297,955; May 13. Class 46.
Buscher, Julius C., St. Cloud, Minn. Corn medicine. 297,359; May 13. Class 6.
California Packing Corporation, San Francisco, Calif. Baking powder and salt. 294,464; May 13. Class 6.
California Packing Corporation, San Francisco, Calif. Fruit juices and ginger ale. 294,465; May 13. Class 45.
California Packing Corporation, San Francisco, Calif. Fruit juices and ginger ale. 294,468; May 13. Class 45.
Camel Products Company, The. (See Bowers, Charles E.)
Campbell, John, & Co. Inc., New York, N. Y. Chemical product. 297,659; May 13. Class 6.
Canadian Fisheries, Ltd., The, Halifax, Nova Scotia, Canada, and Portland, Me. Canned lobster. 290,739; May 13. Class 46.
Carbex Chemical Company, West End, N. J. Attachment applicable to spark plugs. 293,516; May 13. Class 21.
Carbide & Carbon Chemicals Corporation, New York, N. Y. Fumigants, germicides, fungicides, and insecticides. 298,077; May 13. Class 6.
Carnitt-Rostschutz- und Farbstoff-Gesellschaft mit beschrankter Haftung, Breslau, Germany. Paints and varnish. 289,783; May 13. Class 16.
Carter, J. W., Company, Nashville, Tenn. Shoes. 295,360; May 13. Class 39.
Caruso, Pasquale, Newark, N. J. Salves, ointments, and balms. 289,180; May 13. Class 6.
Caruthers, Henry T., doing business as Zenith Cleaner Products Company, Memphis, Tenn. Combined cleaner and polish. 294,621; May 13. Class 16.
Certified Personal Needs, Inc., New York, N. Y. Soaps, soap preparations, and shaving cream. 297,234; May 13. Class 4.
Certified Personal Needs, Inc., New York, N. Y. Soaps, soap preparations, and shaving cream. 297,237; May 13. Class 4.
Champion Washer Company, Ltd., San Francisco, Calif. Laundry washing machines. 293,958; May 13. Class 24.
Chemicals & Drugs, Inc., Baltimore, Md. General tonic. 296,514; May 13. Class 6.
Chicago Glass Novelty Corporation, Marion, Ind. Sign letters. 297,794; May 13. Class 50.
Churchill Mfg. Co., Sioux City, Iowa. Deodorant. 295,466; May 13. Class 6.
Clean-Bright Products Co., New York, N. Y. Automobile polish. 258,252; May 13. Class 16.
Clear Lake Cannery, Inc., San Francisco and Upper Lake, Calif. Canned vegetables. 295,557; May 13. Class 46.
Coffee-King Mfg. Co. (See Phelps, Richardson.)
Cohen, Sidney, New York, N. Y. Insecticides and insect repellents. 297,410; May 13. Class 6.
Columbia University Press, New York, N. Y. Magazine. 296,584; May 13. Class 38.
Consumers Biscuit Company, New Orleans, La. Cakes and biscuits. 297,059; May 13. Class 46.
Continental Steel Corporation, Kokomo and Indianapolis, Ind., and Canton, Ohio. Barbed wire. 296,516–17; May 13. Class 13.
Cooke & Cobb Company, The, Brooklyn, N. Y. Piper binders. 297,241; May 13. Class 37.
Crawford, Bertram C., doing business as Dri-Juce Bottling Co., Detroit, Mich. Ginger ale. 286,366; May 13. Class 45.
Crookes Laboratories, Incorporated, The, New York, N. Y. Preparations used specifically for blood regeneration and general metabolism. 296,107; May 13. Class 6.
Crookes Laboratories, Incorporated, The, New York, N. Y. Preparations used specifically for blood regeneration and metabolism. 296,586; May 13. Class 6.
Curtis-Helmick-Pugsley Company, Minneapolis, Minn. Candy. 297,124; May 13. Class 46.
D & M Candy Corporation, Chenango Bridge, N. Y. Candy. 281,272; May 13. Class 46.

PUBLISHED FOR OPPOSITION

[Act of Feb, 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Danger Trail, Inc. (See Publishers Fiscal Corporation, The.)
Dans & Dans, Hackettstown, N. J. Gasoline, lubricating oils and greases, and kerosene. 294,148; May 13. Class 15.
Dassonville, Michel, Paris, France. Thread. 296,635; May 13. Class 43.
Davidson, Eugene, Washington, D. C. Candies. 297,471; May 13. Class 46.
Davis, William, & Co., St. Louis, Mo. Malt syrup. 297,799; May 13. Class 46.
De Haven, Chris, doing business as White Palace Restaurants, Sioux City, Iowa. Sandwiches, rolls, and doughnuts. 292,719; May 13. Class 46.
Di Santo, Joseph, doing business as Di Santo & Co., Duluth, Minn. Honeydew melons, carrots, cabbage, etc. 297,472; May 13. Class 46.
Dolgeville Slipper Company, Inc., Dolgeville, N. Y. Slippers. 295,210; May 13. Class 39.
Doo Dad Company, New York, N. Y. Window and shower curtain tie-backs. 296,859; May 13. Class 40.
Downee Products Company, Sioux City, Iowa. Removable sanitary pads for diapers and the like. 297,802; May 13. Class 44.
Dri-Juce Bottling Co. (See Crawford, Bertram C.)
Du Bois Soap Co., The, Cincinnati, Ohio. Preparation for cleaning terrazzo, marble, tile, etc. 298,020; May 13. Class 4.
Dudley Lock Corporation, Chicago, Ill. Locks. 277,792; May 13. Class 25.
Duluth Show Case Company, Duluth, Minn. Refrigerators. 298,088–90; May 13. Class 31.
Eddy's Steam Bakery, Inc., Helena, Mont. Bread. 296,327; May 13. Class 46.
Emerson & Stevens Mfg. Co. Inc., Oakland, Me. Wedge axes. 297,422; May 13. Class 23.
Endicott Johnson Corporation, Endicott, N. Y. Golf balls. 297,896–7; May 13. Class 22.
Exolon Company, The, Blasdell, N. Y. Silicon-carbide grains. 295,894; May 13. Class 4.
Fairchild Bros. & Foster, New York, N. Y. Product obtained by the direct extraction of the entire fresh calf stomach. 297,004; May 13. Class 46.
Fashion Park Associates, Inc., Rochester, N. Y. Men's coats, vests, pants, and overcoats. 297,250–1; May 13. Class 39.
Feder, Leo, & Son, Brooklyn, N. Y. Canned tomato paste and olive oil. 289,672; May 13. Class 46.
Federal Pillow Company, New York, N. Y. Pillows. 297,064; May 13. Class 32.
Firth-Sterling Steel Company, McKeesport, Pa. Tools. 296,412; May 13. Class 23.
Fleming, Kathryn, Minneapolis, Minn. Facial cream, skin tissue cream, muscle oil, perfumery. 297,861; May 13.
Foxboro Company, The, Foxboro, Mass. Charts for recording instruments. 298,095; May 13. Class 26.
Franco-Italian Packing Co., Terminal, Calif. Canned tuna fish. 288,791; May 13. Class 46.
French, Shriner & Urner, Boston, Mass. Boots and shoes. 292,491; May 13. Class 39.
G-M Laboratories, Inc., Chicago, Ill. Neon tubes, gaseous discharge tubes, and variable luminosity tubes. 297,907; May 13. Class 21.
G-M Laboratories, Inc., Chicago, Ill. Photo-electric cell. 297,908; May 13. Class 21.
Gamine de Paris, New York. (See Kaye, Bessie.)
Gerdts, Gustav F., Bremen, Germany. Valves, steam traps, nozzles, etc. 287,136; May 13. Class 13.
Gilmore Oil Company, Los Angeles, Calif. Gasoline, lubricating oils and greases. 294,418; May 13. Class 15.
Goodell-Pratt Company, Greenfield, Mass. Drills, chucks, screw drivers, etc. 296,699; May 13. Class 23.
Goodell-Pratt Company, Greenfield, Mass. Steel rules. 296,700; May 13. Class 26.
Grasselli Chemical Company, The, Cleveland, Ohio. Insecticidal spray products. 298,175; May 13. Class 6.
Grinnell Washing Machine Corporation, Grinnell, Iowa. Laundry washing machines. 294,923; May 13. Class 24.
Groub, John C., Company, The, doing business as The Jay C Stores, Seymour, Ind. Nut margarin. 298,176; May 13. Class 46.
Guaranty Packers, Inc., San Antonio, Tex. Canned dog food. 290,407; May 13. Class 46.
Gustin-Bacon Manufacturing Co., Kansas City, Mo. Tires and tubes. 297,428; May 13. Class 35.
Halper, Victor, doing business as Remogland Chemical Co., New York, N. Y. General glandular tonic. 296,185; May 13. Class 6.
H-A-P-I-A Company, The, Seattle, Wash. Medicinal preparation. 292,932; May 13. Class 6.
Harris Manufacturing Company, Inc., New York, N. Y. Sport coats and jackets. 297,076; May 13. Class 39.
Harrower Laboratory, Inc., The, Glendale, Calif. Preparation comprising an extract of endocrine tissue. 297,128; May 13. Class 6.
Helwig & Leitch Corporation, Baltimore, Md. Turpentine, bluing, peroxide, ammonia, etc. 297,669; May 13. Class 6.
Hiller, Carlotta E., doing business as The Sal-Tassia Co., Seattle, Wash. Blood purifier and stabilizer. 298,181; May 13. Class 6.
Hofferd, Leo J., doing business as White Cross Laboratories, Cedar Rapids, Iowa. Medicinal preparation. 295,120; May 13. Class 6.
Hollywood Dry Corporation, doing business as Purity Bonded Products, Inc., Los Angeles, Calif. Maltless fruit-juice syrup and bottler's concentrate. 297,673; May 13. Class 45.
Hood Rubber Company, Inc., Watertown, Mass. Rubber boots and shoes, overshoes, and rubber-soled canvas shoes. 289,628; May 13. Class 39.
Hooper, George M., Fremont, Nebr. Oil-baked peanuts. 284,002; May 13. Class 46.
Hosiery Guild, Inc., Troy, N. Y. Hosiery. 296,598; May 13. Class 39.
Houghton, E. F., & Co., Philadelphia, Pa. Compounds of an oily nature for treating textile fibres. 298,101–2; May 13. Class 6.
Housing Company, The, Boston, Mass. Fiber thermal insulating material. 297,433; May 13. Class 12.
Humbert, Alfred, & Son, Philadelphia, Pa. Wedding rings and finger rings. 297,969; May 13. Class 28.
Ideal Battery Co. (See Marshall-Wells Company.)
Illinois Shade Cloth Corporation, Chicago Heights, Ill. Window-shade cloth in piece goods. 296,938; May 13. Class 42.
Imperial Upholstering Company, Lowell and Boston, Mass. Upholstered parlor and living-room furniture, davenport beds, and occasional chairs. 295,127; May 13. Class 32.
Indian Refining Company, Lawrenceville, Ill. Lubricating oils and greases. 294,305; May 13. Class 15.
International Vitamine Corporation, New York, N. Y. Vitamin concentrates. 297,367; May 13. Class 6.
Intertype Corporation, New York, N. Y. Matrices for use in typographical machines. 294,849; May 13. Class 50.
Italian Supply Co., The, Lock Haven, Pa. Malt syrup. 297,741; May 13. Class 46.
Jacobs, David, Corporation, New York, N. Y. Hosiery. 297,742; May 13. Class 39.
Jay C Stores, The. (See Groub, John C., Company, The.)
Jones, Ralph H., Company, The, Cincinnati, Ohio. Bottled salad dressing. 296,872; May 13. Class 46.
Kake Mfg. Co., The, Philadelphia, Pa., assignor, by mesne assignments, to Zellig Sterling, trading as The Kake Mfg. Co. Laxatives. 289,629; May 13. Class 6.
Karitane Products Society Limited, Wellington, New Zealand. Infants' food. 277,762–3; May 13. Class 46.
Kaye, Bessie, doing business as Gamine de Paris, New York, New York, N. Y. Lip stick, cold cream, lemon cream, vanishing cream, nail polish, and massage cream. 297,917; May 13. Class 6.
Kirk, James S., & Company, Chicago, Ill. Soap. 296,652; May 13. Class 4.
Klauer Manufacturing Company, Dubuque, Iowa. Shingles, tiles, ceilings and sidings, steel brick siding, etc. 280,718; May 13. Class 12.
Klenzmotor Corporation, Fort Wayne, Ind. Greases and oils. 294,731; May 13. Class 15.
Kohnstamm, H., & Co., Inc., New York, N. Y. Soap. 297,018; May 13. Class 4.
Kress, S. H., & Co., New York, N. Y. Chocolates. 297,973; May 13. Class 46.
Kroger Grocery & Baking Co., The, Cincinnati, Ohio. Toothpicks. 297,088; May 13. Class 44.
Lane, Chas. E. & Company, St. Louis, Mo. Pills. 297,748; May 13. Class 6.
Lane Publishing Company, San Francisco, Calif. Section of a printed publication. 297,089; May 13. Class 38.
Lederer, Henry, & Bro., Inc., Providence, R. I. Money clips. 295,948; May 13. Class 37.
Leonard, Crosset & Riley, Inc., Moorhead, Minn. Potatoes. 295,904; May 13. Class 46.
L'Hommedieu, Chas. F., & Sons Co., Chicago, Ill. Electroplating dynamos, rheostats, polishing lathes, etc. 277,310; May 13. Class 21.
Liberty Engineering Corp., Mount Vernon, N. Y. Piston rings. 284,237; May 13. Class 35.
Lightfoot Schultz Company, Hoboken, N. J. Astringents, astringent cerates, bleach and beauty creams, etc. 297,812; May 13. Class 6.
Mabry, Edward R., doing business as Mabry Guano Company, Angier, N. C. Guano. 297,312; May 13. Class 10.
Magnolia Metal Company, New York, N. Y. Babbitt metals, antifriction metals, and metallic alloys. 297,921; May 13. Class 14.
Manhattan Shirt Co., The, New York, N. Y. Knit underwear and cut and sewn underwear. 297,022; May 13. Class 39.
Mantefur, Harry, doing business as Mantefur Mattress Company, Philadelphia, Pa. Mattresses. 296,971; May 13. Class 32.
Marblehead Lime Co., Chicago, Ill. White lime and hydrated lime. 295,490; May 13. Class 12.
Marconi Manufacturing Company, The, Seattle, Wash. Batteries, flash lights, radio receiving sets, etc. 294,608; May 13. Class 21.
Mark Jewelry Co., The, New York, N. Y. Finger rings, bracelets, and brooches. 297,195; May 13. Class 28.
Marshall-Wells Company, doing business as Ideal Battery Co., Duluth, Minn. Automobile storage batteries. 297,608; May 13. Class 21.

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Mayer, Sol, and Son, San Angelo, Tex. Cattle, sheep, and goats. 297,142; May 13. Class 46.
McLaren-Consolidated Cone Corporation, Dayton, Ohio. Ice-cream cones. 294,482; May 13. Class 46.
Melrose Hospital Uniform Co. (See Tames, Peter.)
Merrell-Hellman Laboratory, St. Louis, Mo. Toilet articles and preparations. 298,195; May 13. Class 6.
Mid-States Gummed Paper Company, Chicago, Ill. Gummed papers. 297,690; May 13. Class 37.
Mitchell Tire & Tube Corp., Brooklyn, N. Y. Rubber tires and tubes. 297,199; May 13. Class 35.
Mosaic Tile Company, The, Zanesville, Ohio. Publication. 280,932; May 13. Class 38.
Motor Power Equipment Co., St. Paul, Minn. Snow plows. 297,978; May 13. Class 23.
Mutch, George A., assignor to New-H-Man Corporation, Miami, Fla. Water softener. 289,686; May 13. Class 13.
Myers, Anna, Pure Food Inc., Newark, N. J. Mayonnaise, relish spread, jams, etc. 291,309; May 13. Class 46.
Myers Chemicals Corporation, Weeping Water, Nebr. Dental preparation. 298,198; May 13; Class 6.
National Confection Corporation, Detroit, Mich. Chocolate-coated ice-cream bricks. 294,316; May 13. Class 46.
National Macaroni Manufacturers Association, Braidwood, Ill. Macaroni, spaghetti, and noodles. 298,036; May 13. Class 46.
National Mill Supply Company, doing business as The National Radio and Television Corp., Fort Wayne, Ind. Radio apparatus. 294,776; May 13. Class 21.
Natural Humus Company, The. (See Wolverton, William M.)
Neustadter Bros., San Francisco, Calif. Men's and boys' coats, vests, blouses, etc. 297,027; May 13. Class 39.
New-H-Man Corporation. (See Mutch, George A., assignor.)
Obrock, August, White Plains, N. Y. Treatment of blood poison, piles, open sores, etc. 296,435; May 13. Class 6.
Pabst Corporation, Milwaukee, Wis. Malt syrup. 295,692; May 13. Class 46.
Page, Rowland B., doing business as Page Milk Co., Merrill, Wis. Canned evaporated milk, condensed milk, and milk powder. 291,020; May 13; Class 46.
Pair-O-Dice Company, Tampa, Fla. Hairdressing. 297,757–8; May 13. Class 6.
Paraffine Companies, Inc., The, San Francisco, Calif. Cigarettes. 297,761; May 13. Class 17.
Paraffine Companies, Inc., The, San Francisco, Calif. Prepared roofing, building paper, and insulating paper. 297,763; May 13. Class 12.
Paschos, Antonios D., Detroit, Mich. Gonorrhœa medicine. 296,286; May 13. Class 6.
Pe Co Pop Co. of Baltimore City, Baltimore, Md. Confection. 296,768; May 13. Class 46.
Pep Boys-Manny, Moe & Jack, The, Philadelphia, Pa. Automobile seat covers, side curtains, top boots, etc. 296,195; May 13. Class 19.
Phelps, Richardson, doing business as Coffee-King Mfg. Co., Minneapolis, Minn. Electrical beverage-making machines. 293,788; May 13. Class 21.
Philippe, Louis, New York, N. Y. Lipstick, rouges, face powders, and toilet creams. 297,325; May 13. Class 6.
Pierce Hardware Company, Taunton, Mass. Shovels, spades, scoops, etc. 293,342; May 13. Class 23.
Pincus Brothers Incorporated, Philadelphia, Pa. Suits, topcoats, reefers, and overcoats. 296,560; May 13. Class 39.
Pine Oil Products Company, Harrison, N. J. Soap. 298,040; May 13. Class 4.
Pinson, Claude R., Hazen, Ark. Cereal breakfast food. 295,636; May 13. Class 46.
Pioneer Cooperage Co., St. Louis, Mo. Wooden kegs and barrels. 296,440; May 13. Class 2.
Pittsburgh Steel Company, Pittsburgh, Pa. Wire fencing. 298,041–2; May 13. Class 13.
Pittsburgh Steel Company, Pittsburgh, Pa. Wire fencing. 298,044; May 13. Class 13.
Polakoff, Joseph G., doing business as Polly Brand Products Company, Newark, N. J. Syrup or syrups for making maltless beverages. 294,241; May 13. Class 45.
Pollack, Max, & Co., Inc., New York, N. Y. Sewing threads. 297,932–4; May 13. Class 43.
Polly Brand Products Company. (See Polakoff, Joseph G.)
Procter & Gamble Company, The, Cincinnati, Ohio. Soap. 296,981; May 13. Class 4.
Publishers Fiscal Corporation, The, doing business as Danger Trail, Inc., New York, N. Y. Magazine. 287,595; May 13. Class 38.
Puritan Mills, Atlanta, Ga. Dairy feeds. 296,147; May 13. Class 46.
Purity Bonded Products, Inc. (See Hollywood Dry Corporation.)
Quaker Products Company, Philadelphia, Pa. Cleansing powders. 274,477; May 13. Class 4.
R K O Productions, Inc., New York, N. Y. Films. 296,445; May 13. Class 20.
Radio Corporation of America, New York, N. Y. Phonograph and talking machine apparatus. 283,055; May 13. Class 36.
Radio Corporation of America, New York, N. Y. Electrical and mechanical phonographs and talking machines. 283,056; May 13. Class 36.
Rap-I-Dol Distributing Corporation, New York, N. Y. Hair colorings. 295,235; May 13. Class 6.
Reingewirtz, Moses, doing business as American Delight Food Product Co., New York, N. Y. Chocolate beverage. 291,890; May 13. Class 46.
Remogland Chemical Co. (See Halper, Victor.)
Rice-Neuman Co., Milwaukee, Wis. Ladies' hosiery. 275,631; May 13. Class 39.
Rino Laboratories Co., Los Angeles, Calif. Effervescent orange salt compound. 297,874; May 13. Class 6.
Royal Curtain Manufacturing Co., Boston, Mass. Marquisette curtain. 296,201; May 13. Class 42.
Sal-Tassia Co., The. (See Hiller, Carlotta E.)
Sanford Oviedo Truck Growers, Inc., Sanford, Fla. Fresh vegetables. 227,426; May 13. Class 46.
San-I-Way Shredder Co., Seattle, Wash. Vegetable shredders and slicers. 298,050; May 13. Class 23.
Schechter & Co., New York, N. Y. Facial cream. 296,212; May 13. Class 6.
Schimmel & Co., Aktiengesellschaft, Miltitz, near Leipzig, Germany. Concentrated alcoholic essences. 277,224; May 13. Class 45.
Schimmel & Co., Aktiengesellschaft, Miltitz, near Leipzig, Germany. Concentrated alcoholic essences. 283,007; May 13. Class 45.
Schneider, Clarence A., doing business as Schneider's Laboratories, Detroit, Mich. Medicine. 286,597; May 13. Class 6.
Scognamillo, Salvatore, New York, N. Y. Oil burners. 297,939; May 13. Class 34.
Scovill Manufacturing Company, Waterbury, Conn. Dispensing boxes or cases. 295,443; May 13. Class 23.
Self & Dalbey, Los Angeles, Calif. Refrigerators. 297,208; May 13. Class 31.
Selig Company, The, Atlanta, Ga. Liquid soap. 297,989; May 13. Class 4.
Seymour Perfection Electrical Company, Kansas City, Mo. Electric transformers. 296,203; May 13. Class 21.
Sibbett, W. R., Co. Inc., Oakland, Calif. Wiping rags and sterilized wiping rags. 295,578; May 13. Class 29.
Siegel, B., Co., Detroit, Mich. Ladies' wearing apparel. 281,568–9; May 13. Class 39.
Silmo Chemical Company, Inc., Vineland, N. J. Preparation for treatment of poultry ailments. 295,086; May 13. Class 6.
Simmons Hardware Company, St. Louis, Mo. Safety-razor blades. 297,623; May 13. Class 23.
Simon, E., & Sons, New Orleans, La. Play suits. 294,780; May 13. Class 39.
Smidth, F. L., & Co., New York, N. Y. Pneumatic conveying apparatus. 295,867; May 13. Class 23.
Smith & Nichols, Inc., New York, N. Y. Candles. 296,295; May 13. Class 15.
Societe Anonyme des Laboratoires du Docteur Debat, Paris, France. Medicinal preparation. 297,385; May 13. Class 6.
Société Industrielle de Lorient, Anciens Etablissements A. Gillet & Cie. et Ouizille & Cie., Maison fondée en 1834, Lorient, France. Sardines in oil. 294,931; May 13. Class 46.
Sofskin Manufacturing Co. (See Taylor, Carter.)
Solvay Process Company, The, Solvay, N. Y. Alkali and alkali-carbonate cleansing preparations. 298,053; May 13. Class 4.
Spark Jewelry Cleaning Powder Co., New York, N. Y. Preparation for cleaning genuine jewelry. 294,366; May 13. Class 4.
Squibb, E. R., & Sons, New York, N. Y. Cod-liver-oil preparation. 297,879; May 13. Class 6.
Stanco Incorporated, Wilmington, Del., and New York, N. Y. Detergents. 290,625; May 13. Class 4.
Stanco Incorporated, Wilmington, Del., and New York, N. Y. Oils and greases. 296,831; May 13. Class 15.
Standard Statistics Company, Inc., The, New York, N. Y. Publication. 283,519; May 13. Class 38.
Stearns & Foster Company, The, Lockland, Ohio. Ticking piece goods. 281,575; May 13. Class 42.
Sterling, Zeilig. (See Kake Mfg. Co., The, assignor.)
Stevens, Dr., Inc., Minneapolis, Minn. Water jars which are used for therapeutic purposes. 294,846; May 13. Class 44.
Stewart Inso Board Company, St. Joseph and South St. Joseph, Mo. Insulating building board. 298,122; May 13. Class 12.
Strunbel, C. A., Company, Green Bay, Wis. Cheese. 291,070; May 13. Class 46.
Stuhr-Seidl Company, Minneapolis, Minn. Feed concentrates. 296,988; May 13. Class 46.
Tames, Peter, doing busines as Melrose Hospital Uniform Co., New York. Hospital garments. 264,264; May 13. Class 44.
Taylor, Carter, doing busines as Sofskin Manufacturing Co., Fort Worth, Tex., and New York, N. Y. Lotion. 297,706; May 13. Class 6.
Thayer, Abbott A., St. Bernard, Cincinnati, Ohio. Publication. 297,339; May 13. Class 38.

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Theiler, Dr. Karl, Munich, Germany. Skin emollients, toilet waters, bath salts, etc. 283,153; May 13. Class 6.
Thoma Glass Inc., Fairfield, Iowa. Glass. 296,886–9; May 13. Class 33.
Thompson Products, Inc., Cleveland, Ohio. Shock absorbers and other vehicle spring-return controlling devices. 296,088; May 13. Class 19.
Timme, E. F., & Son, New York, N. Y. Pile fabrics in the piece. 295,817–18; May 13. Class 42.
Tork Clocks, Inc., New York, N. Y. Clocks. 291,249; May 13. Class 27.
Tork Clocks, Inc., New York, N. Y. Motors for time-controlled devices. 297,551; May 13. Class 21.
Tower Magazines, Incorporated, Wilkes-Barre, Pa., and New York, N. Y. Magazine or periodical. 296,209–10; May 13. Class 38.
Tremco Manufacturing Company, The, Cleveland, Ohio. Construction materials. 288,291; May 13. Class 12.
Trip-O Sales Company, Hannaford, N. Dak. Tractor-wheel scrapers and scrapers for the wheels of other machines. 297,460; May 13. Class 23.
Tyree, J. S., Chemist, Inc., Washington, D. C. Antiseptic and medicinal powders, and liquid medicinal preparations. 297,502; May 13. Class 6.
Ucoline Products Company, Chicago, Ill. Medicinal preparation for the treatment of dental caries and malnutrition. 297,553; May 13. Class 6.
Ucoline Products Company, Chicago, Ill. Cod-liver-oil preparation. 297,556; May 13. Class 6.
United States Gypsum Company, Chicago, Ill. Calcined gypsum. 297,826; May 13. Class 12.
Vereinigte Papierwerke Aktiengesellschaft, Nuremberg, Germany. Sanitary towels, cellulose wadding, etc. 296,993; May 13. Class 44.
Vogel, Rozalia B., New York, N. Y. Hair dye. 295,499; May 13. Class 6.
Vulcan Proofing Company, Brooklyn, N. Y. Imitation leather used for belts, shoe linings, bags, pocketbooks, etc. 295,965; May 13. Class 50.
Waddey, Everett, Co., Inc., Richmond, Va. Periodical. 297,067; May 13. Class 38.
Wards, Edgar T., Sons Company, Pittsburgh, Pa. Strip steel. 266,569; May 13. Class 14.
White Cross Laboratories. (See Hofferd, Leo J.)
White Palace Restaurants. (See De Haven, Chris.)
White Star Refining Company, Detroit, Mich. Petroleum products. 293,648–9; May 13. Class 15.
Wickels Metallpapier-Werke Gesellschaft mit beschränkter Haftung, Furth, near Nuremberg, Germany. Metal-paper leaves and metal papers. 293,356; May 13. Class 37.
Wickwire Spencer Steel Company. (See Bowers, E. C., and Feldman, receivers.)
Wise, J. M., Co. Inc., New York, N. Y. Men's lounging apparel. 297,342; May 13. Class 39.
Wolfe, Harry M., New York, N. Y. Milk food powder. 281,536; May 13. Class 46.
Wolverton, William M., doing business as The Natural Humus Company, Chestnut Hill, Philadelphia, Pa. Natural humus. 297,832; May 13. Class 10.
Worthy Manufacturing Company, Chicago, Ill. Children's play suits and overalls. 297,109; May 13. Class 39.
Yardmasters of America. (See Brown, William M.)
Zenith Cleaner Products Company. (See Caruthers, Henry T.)

CLASSIFIED LIST OF TRADE-MARKS REGISTERED

CLASS 1

Asphaltic compounds. Tasco Asphalt Co. 270,744; May 13; Serial No. 293,493; published Mar. 4, 1930.
Coal. Koppers Coal Company. 270,652; May 13; Serial No. 285,922; published Mar. 4, 1930.
Coal, Bituminous. Sunnybrook Coal Co. 270,645; May 13; Serial No. 291,701; published Mar. 4, 1930.
Cotton batting. Tootle-Campbell Dry Goods Company. 270,743; May 13; Serial No. 293,494; published Mar. 4, 1930.
Ice, coal, and fuel wood. Central Atlantic States Service Corporation. 270,746; May 13; Serial No. 293,089; published Mar. 4, 1930.
Seed, Melon. Kwong Cheung Lung & Co. 270,745; May 13; Serial No. 293,185; published Mar. 4, 1930.

CLASS 2

Containers. Humitube Mfg. Co. 270,633; May 13; Serial No. 291,620; published Mar. 4, 1930.

CLASS 3

Bags, Hand. Arnold, Constable & Company. 270,741; May 13; Serial No. 294,559; published Mar. 4, 1930.
Bags, Hand. Russeks Fifth Avenue Inc. 270,650; May 13; Serial No. 287,773; published Mar. 4, 1930.
Bags, pocketbooks, money bags, etc., Hand. Hookless Fastener Company. 270,773; May 13; Serial No. 294,252; published Mar. 4, 1930.
Horse collars. Couch Bros. Manufacturing Co. 270,781–2; May 13; Serial Nos. 295,020–1; published Mar. 4, 1930.
Luggage. Best & Co. 270,784; May 13; Serial No. 294,953; published Mar. 4, 1930.

CLASS 5

Cement, Adhesive. E. E. Fulton Co. 270,783; May 13; Serial No. 294,969; published Mar. 4, 1930.
Cement, Adhesive liquid. L. Abseck. 270,842; May 13; Serial No. 289,260; published Mar. 4, 1930.
Liquid leather in the nature of an adhesive. H. H. Schaffer. 270,778; May 13; Serial No. 294,648; published Mar. 4, 1930.

CLASS 6

Analgesic. Winthrop Chemical Company. 270,792; May 13; Serial No. 295,107; published Mar. 4, 1930.
Antianemic substance. Parke, Davis & Company. 270,811; May 13; Serial No. 294,591; published Feb. 25, 1930.
Antiseptic and germicidal medicament. L. Aronson. 270,709; May 13; Serial No. 293,767; published Feb. 25, 1930.
Aromatic crystals, moth cakes, camphor cakes, etc. Vemitox Laboratories, Inc. 270,836; May 13; Serial No. 291,534; published Feb. 18, 1930.
Astringents, astringent cerates, bleach creams, etc. Elmo, Incorporated. 270,807; May 13; Serial No. 294,715; published Feb. 25, 1930.
Astringents, astringent cerates, bleach creams, etc. F. E. Falkingham. 270,835; May 13; Serial No. 291,869; published Feb. 25, 1930.
Astringents, astringent cerates, bleach creams, etc. V. E. Meadows, Inc. 270,710; May 13; Serial No. 293,741; published Feb. 18, 1930.
Astringents, astringent cerates, bleach creams, etc. M. J. Raffy. 270,755; May 13; Serial No. 294,363; published Feb. 18, 1930.
Astringents, astringent cerates, bleach creams, etc. Silver Moon Co. 270,800; May 13; Serial No. 294,928; published Feb. 25, 1930.
Astringents, astringent cerates, bleach creams, etc. Vadsco Sales Corporation. 270,753; May 13; Serial No. 294,368; published Feb. 18, 1930.
Baking powder. Royal Baking Powder Company. 270,837; May 13; Serial No. 291,530; published Feb. 25, 1930.
Bath salts. Storfer Laboratories Inc. 270,659; May 13; Serial No. 288,822; published Mar. 4, 1930.
Bitters. F. Branca. 270,734; May 13; Serial No. 272,394; published Feb. 25, 1930.
Bleaching compound. Sinclair Manufacturing Co. 270,834; May 13; Serial No. 292,055; published Feb. 25, 1930.
Chemical preparation. Amid Duron Company. 270,820; May 13; Serial No. 293,574; published Feb. 25, 1930.
Chemicals and chemical preparations. Viking Gasoline Corporation. 270,662; May 13; Serial No. 280,813; published May 14, 1929.
Composition of matter. F. L. Mennie. 270,625; May 13; Serial No. 293,148; published Feb. 18, 1930.
Concentrates, Vitamin. E. R. Squibb & Sons. 270,757; May 13; Serial No. 294,323; published Feb. 18, 1930.
Cosmetics. J. S. Gleghorn. 270,839; May 13; Serial No. 290,893; published Feb. 25, 1930.
Cosmetics. Wellington Laboratories, Inc. 270,827; May 13; Serial No. 292,695; published Feb. 25, 1930.
Cough sedative, Expectorant. Cole Chemical Company. 270,843; May 13; Serial No. 289,182; published Feb. 18, 1930.
Cough syrup. Smith Brothers, Inc. 270,802; May 13; Serial No. 294,898; published Feb. 25, 1930.
Creams, preparations for use on the face, etc. Dr. H. Tischer Corporation. 270,023; May 13; Serial No. 293,199; published Feb. 25, 1930.
Dental cream, tonic, and aspirin tablets. William A. Webster Company. 270,654; May 13; Serial No. 292,142; published Mar. 4, 1930.
Deodorants, insecticides, and disinfectants. Royal Manufacturing Company of Duquesne. 270,655; May 13; Serial No. 291,841; published Mar. 4, 1930.
Disinfectants. Koppers Products Company. 270,853; May 13; Serial No. 286,943; published Feb. 18, 1930.
Dyes. Paas Dye Company. 270,840; May 13; Serial No. 290,792; published Dec. 17, 1929.
Dyes, Aniline. Sandoz Chemical Works, Incorporated. 270,794; May 13; Serial No. 295,084; published Mar. 4, 1930.

Extract of pyrethrum, Fluid. Cino Chemical Products Company. 270,702; May 13; Serial No. 294,291; published Feb. 18, 1930.
Face powder, rouge, cosmetics, and lotions for the hair, etc. Etablissements André Gillier, Societe Anonyme. 270,656; May 13; Serial No. 291,211; published Feb. 25, 1930.
Face powder, talcum powder, compact powder, etc. House of The-Jur, Inc. 270,830; May 13; Serial No. 292,578; published Feb. 18, 1930.
Gastric-gland extract. Fairchild Bros. & Foster. 270,756; May 13; Serial No. 294,346; published Feb. 18, 1930.
Hairdressing. Dealers Sales Corporation. 270,711–12; May 13; Serial Nos. 293,722–3; published Feb. 18, 1930.
Hair grower, pressing oil, and shampoo. M. Barker. 270,622; May 13; Serial No. 285,806; published Mar. 4, 1930.
Hair restorer. Loughn & Company. 270,829; May 13; Serial No. 292,586; published Feb. 18, 1930.
Hair straightener. Estarc Laboratories. 270,806; May 13; Serial No. 294,718; published Feb. 25, 1930.
Hair tonic. Dealers Sales Corporation. 270,713; May 13; Serial No. 293,721; published Feb. 25, 1930.
Hair-waving lotion. A. Borras. 270,658; May 13; Serial No. 289,781; published Feb. 25, 1930.
Hypnotic in tablet form. Riedel-de Haen, Inc. 270,750; May 13; Serial No. 294,488; published Feb. 25, 1930.
Inhalant. Sterling Remedy Company. 270,754; May 13; Serial No. 294,367; published Feb. 18, 1930.
Insecticides. Forest Chemical Company. Registered. 270,620; May 13; Serial No. 287,812; published Feb. 25, 1930.
Laxative preparation. Star-Etts Products Company. 270,749; May 13; Serial No. 294,492; published Feb. 25, 1930.
Laxatives. Swan-Myers Company. 270,657; May 13; Serial No. 290,159; published Dec. 10, 1929.
Lip stick and face rouge, Combined. Reed Laboratories, Inc. 270,905; May 13.
Liquid insect killer, Household. Milwaukee Lubricants Co. 270,748; May 13; Serial No. 294,551; published Feb. 25, 1930.
Lye. B. T. Babbitt, Inc. 270,610; May 13; Serial No. 294,565; published Feb. 25, 1930.
Lye. B. T. Babbitt, Inc. 270,701; May 13; Serial No. 294,562; published Feb. 25, 1930.
Lye. B. T. Babbitt, Inc. 270,809; May 13; Serial No. 294,610; published Feb. 25, 1930.
Malt extract. Malt-Diastase Company. 270,738; May 13; Serial No. 284,617; published Feb. 11, 1930.
Manicure preparations. Coty, Inc. 270,823; May 13; Serial No. 293,091; published Mar. 4, 1930.
Medicated alcohol. Publicker Incorporated. 270,715; May 13; Serial No. 293,691; published Feb. 18, 1930.
Medicinal preparation. I. G. Farbenindustrie Aktiengesellschaft. 270,727; May 13; Serial No. 258,220; published Feb. 25, 1930.
Medicinal preparation. Vyo Laboratories, Inc. 270,706–7; May 13; Serial Nos. 293,854–5; published Feb. 18, 1930.
Medicine. Mrs. Lucy J. Hill. 270,841; May 13; Serial No. 290,752; published Feb. 25, 1930.
Medicine. I. G. Farbenindustrie Aktiengesellschaft. 270,728; May 13; Serial No. 258,218; published Feb. 25, 1930.
Medicine, Alterative, resolvent, aperient. Tilden Company. 270,832; May 13; Serial No. 292,237; published Feb. 25, 1930.
Neutralizing mixture and a cough and croup syrup. A. A. Dewey. 270,661; May 13; Serial No. 281,274; published Mar. 4, 1930.
Oil or grease for use in the leather industry. Martin Dennis Company. 270,850–1; May 13; Serial Nos. 287,083–4; published Feb. 25, 1930.
Oils, Natural and synthetic essential. Fritzsche Brothers, Inc. 270,805; May 13; Serial No. 294,719; published Feb. 25, 1930.
Perfumes, essential oils. Société Anonyme M. Naef & Cie. 270,793; May 13; Serial No. 295,088; published Mar. 4, 1930.
Perfumes, preparations for toilet, hygiene, and beauty. "La Compagnie des Produits Exki Limitee" (Exki Products Company Limited"). 270,621; May 13; Serial No. 287,667; published Mar. 4, 1930.
Perfumes, toilet waters, face lotions, etc. Lionel Trading Co. Inc. 270,653; May 13; Serial No. 292,813; published Mar. 4, 1930.
Pharmaceutical preparation. F. Hoffmann-La Roche & Co. Aktiengesellschaft. 270,704; May 13; Serial No. 294,259; published Feb. 18, 1930.
Pharmaceutical preparation. Lee Laboratories Incorporated. 270,751; May 13; Serial No. 294,429; published Feb. 18, 1930.
Pills, tablets for digestive purposes, and capsules for the treatment of influenza and catarrh. Z. Caillard. 270,667; May 13; Serial No. 279,724; published Feb. 25, 1930.
Powder, Face. Chicago Mail Order Company. 270,799; May 13; Serial No. 294,956; published Mar. 4, 1930.
Powder, Talcum. Sydney Ross Co. 270,819; May 13; Serial No. 293,641; published Feb. 25, 1930.
Powder, Talcum. Sydney Ross Co. 270,822; May 13; Serial No. 293,347; published Mar. 4, 1930.
Preparation for burns and chapped skin. Cornel Drug Stores Inc. 270,732; May 13; Serial No. 276,304; published Feb. 25, 1930.
Preparation for the removal of callous and corns. H. Herold. 270,729; May 13; Serial No. 268,865; published Aug. 28, 1928.
Preparation for the treatment of corns, callouses, and bunions. P. L. Weeks. 270,810; May 13; Serial No. 294,604; published Feb. 25, 1930.
Preparation for the treatment of cystitis, etc. Cole Chemical Company. 270,854; May 13; Serial No. 286,035; published Feb. 18, 1930.
Preparation for the treatment of simple irritations of the scalp, dandruff, etc., Fluid. Bigelow-Clark, Inc. 270,801; May 13; Serial No. 294,911; published Feb. 25, 1930.
Preparation for use in radiators, Liquid. A. D. Miller Sons' Company. 270,892; May 13.
Preparation for use in the treatment of irritated conditions of the nose and throat. P. W. Frames. 270,758; May 13; Serial No. 294,299; published Feb. 18, 1930.
Preparation for use in treating mouth diseases, Liquid. O. W. Wallace. 270,752; May 13; Serial No. 294,369; published Feb. 18, 1930.
Preparation, Liquid. Child Welfare Guild, Inc. 270,703; May 13; Serial No. 294,290; published Feb. 18, 1930.
Radium containing ointment, solutions, and tablets. S. Bryan. 270,816; May 13; Serial No. 294,055; published Mar. 4, 1930.
Salts, Alkalizing. Parke, Davis & Company. 270,812; May 13; Serial No. 294,590; published Feb. 25, 1930.
Salts, Bath. J. S. Green. 270,818; May 13; Serial No. 293,664; published Mar. 4, 1930.
Sedative and expectorant. B. Levin. 270,815; May 13; Serial No. 294,118; published Mar. 4, 1930.
Solution of an organic bismuth preparation, Stable. E. R. Squibb & Sons. 270,731; May 13; Serial No. 276,346; published Feb. 4, 1930.
Sulphur. Koppers Products Company. 270,852; May 13; Serial No. 286,944; published Feb. 18, 1930.
Tablets, Coating for. G. W. Carnrick Co. 270,808; May 13; Serial No. 294,664; published Feb. 25, 1930.
Toilet preparations. M. Florentine. 270,708; May 13; Serial No. 293,826; published Feb. 25, 1930.
Tonic and shampoo, Hair. R. K. Rathbun. 270,798; May 13; Serial No. 294,994; published Feb. 25, 1930.
Tonic, Hair. Dealers Sales Corporation. 270,714; May 13; Serial No. 293,720; published Feb. 18, 1930.
Tonic, Hair. E. M. Stark. 270,906; May 13.
Tooth paste, cold cream, analgesic balm, etc. J. A. Price. 270,838; May 13; Serial No. 291,356; published Feb. 18, 1930.

CLASS 9

Firecrackers and fireworks. J. M. da Rocha. 270,760; May 13; Serial No. 294,207; published Mar. 4, 1930.
Matches. Amtorg Trading Corporation. 270,639; May 13; Serial No. 288,173; published Mar. 4, 1930.

CLASS 10

Fertilizers and plant foods. Stadler Products Company. 270,894; May 13.

CLASS 11

Typewriter ribbons and carbon papers. H. M. Storms Company. 270,759; May 13; Serial No. 294,279; published Mar. 4, 1930.

CLASS 12

Arbors, Portable. Steril Manufacturing Company. 270,674; May 13; Serial No. 294,035; published Feb. 25, 1930.
Asphalt roofing. Grand Rap'ds Trust Company. 270,678; May 13; Serial No. 285,300; published Feb. 18, 1930.
Bricks and tiles. C. T. Bray. 270,664; May 13; Serial No. 280,163; published Feb. 18, 1930.
Cement, Building. Lawrence Portland Cement Company. 270,877; May 13; Serial No. 286,121; published Mar. 4, 1930.
Cement, Building. Universal Portland Cement Company. 270,876; May 13; Serial No. 286,346; published Mar. 4, 1930.
Concrete mixtures, Material for adding to. Truscon Steel Company. 270,673; May 13; Serial No. 294,041; published Feb. 25, 1930.
Fiber board, Compact pressed-wood. Gibbs Boardtile Corporation. 270,874; May 13; Serial No. 292,988; published Feb. 18, 1930.
Lath, Metal. Bostwick Steel Lath Company. 270,733; May 13; Serial No. 275,863; published Mar. 4, 1930.
Lumber, Building. Silas Hubbard Company. 270,648; May 13; Serial No. 290,703; published Feb. 18, 1930.
Metal coal-hole doors, metal corner beads, and steel window sash. Youngstown Pressed Steel Company. 270,875; May 13; Serial No. 291,649; published Feb. 18, 1930.
Park equipment, Tourist. F. L. Musgrove. 270,644; May 13; Serial No. 291,782; published Feb. 18, 1930.
Paving material. Amiesite Asphalt Company of America. 270,675–6; May 13; Serial Nos. 293,461–2; published Feb. 11, 1930.
Railroad crossties, poles, etc. American Creosoting Company. 270,678; May 13; Serial No. 293,254; published Feb. 11, 1930.
Tiles. American Encaustic Tiling Company. 270,677; May 13; Serial No. 293,460; published Mar. 4, 1930.

CLASS 13

Metal ware, Enameled. Vollrath Company. 270,740; May 13; Serial No. 283,474; published Mar. 4, 1930.
Towers, tire and inflating valves, Air and water vehicle service. Service Equipment Company. 270,640; May 13; Serial No. 287,891; published Mar. 4, 1930.
Valves. I. I. Nelson. 270,660; May 13; Serial No. 283,295; published Mar. 4, 1930.

CLASS 14

Platinum, ossinum, and ruthenium metals, etc. American Platinum Works. 270,848; May 13; Serial No. 288,310; published Mar. 4, 1930.
Steel castings. Bethlehem Steel Company. 270,668; May 13; Serial No. 279,300; published Mar. 4, 1930.

CLASS 16

Coating, Wall. United States Gypsum Company. 270,833; May 13; Serial No. 292,081; published Feb. 25, 1930.
Enamel and oil paint, Paint. James Manufacturing Company. 270,716; May 13; Serial No. 293,535; published Feb. 25, 1930.
Paint and paint thinner. Ironsides Company. 270,717; May 13; Serial No. 240,658; published Feb. 25, 1930.
Paint and varnish. Tropical Paint and Oil Company. 270,831; May 13; Serial No. 292,559; published Feb. 18, 1930.
Paints and paint enamels. Indianapolis Paint & Color Co. 270,618; May 13; Serial No. 294,924; published Feb. 25, 1930.
Paints and painters' materials. Tremo Manufacturing Company. 270,849; May 13; Serial No. 288,292; published Feb. 25, 1930.
Paints, paint enamels, and varnishes. Elliott Varnish Co. 270,828; May 13; Serial No. 292,661; published Feb. 25, 1930.
Polish, Cleaning. W. H. Meikrantz. 270,705; May 13; Serial No. 293,980; published Feb. 25, 1930.
Powder to be mixed with water, Dry white. M. Ewing Fox Co. 270,901; May 13.

CLASS 17

Tobacco. Brown & Williamson Tobacco Corporation. 270,718; May 13; Serial No. 250,371; published Jan. 31, 1928.
Tobacco. Brown & Williamson Tobacco Corporation. 270,719; May 13; Serial No. 250,379; published Jan. 31, 1928.
Tobacco. Brown & Williamson Tobacco Corporation. 270,720; May 13; Serial No. 250,384; published Jan. 31, 1928.
Tobacco. Brown & Williamson Tobacco Corporation. 270,721–2; May 13; Serial Nos. 250,301–2; published Jan. 31, 1928.

CLASS 22

Golf balls. Wilson-Western Sporting Goods Company. 270,670; May 13; Serial No. 277,472; published Feb. 25, 1930.
Golf balls. Worthington Ball Company. 270,844–7; May 13; Serial Nos. 288,365–8; published Feb. 18, 1930.
Golf clubs, iron clubs and heads, and golf bags. Niblett-Jeffries Corporation. 270,908; May 13.
Skates, Ice. L. Klein, Inc. 270,617; May 13; Serial No. 293,224; published Mar. 4, 1930.
Tennis rackets, golf balls, footballs, etc. Montgomery Ward & Co. 270,824; May 13; Serial No. 289,360; published Mar. 4, 1930.

CLASS 23

Air compressors, vacuum pumps, and receiving tanks for compressed air. American Air Compressor Works, Inc. 270,895; May 13.
Baseboard sections and cabinets therefor, Sets of folding. Warren-Allen Carpet Company. 270,855; May 13; Serial No. 292,958; published Mar. 4, 1930.
Canvas carriers for harvesting machines. Alward-Anderson-Southard Co. 270,680; May 13; Serial No. 294,132; published Mar. 4, 1930.
Cleaning and treating machines for seed and grain, Portable. Hoefling Bros. Inc. 270,858–59; May 13; Serial Nos. 292,668–9; published Mar. 4, 1930.
Crown blocks for gas and oil drilling derricks. Baash-Ross Tool Company. 270,857; May 13; Serial No. 292,782; published Mar. 4, 1930.
Cutting and sawing machines, Small, portable power-driven. Portable Electric Tool Company. 270,866; May 13; Serial No. 290,794; published Mar. 4, 1930.
Engines, Internal-combustion. Fairchild Aviation Corporation. 270,689–90; May 13; Serial Nos. 293,823–4; published Mar. 4, 1930.
Hand knitting devices. J. W. Spear & Sons, Inc. 270,694; May 13; Serial No. 293,012; published Mar. 4, 1930.
Lubricators and parts thereof, Automatic. Isothermos Corporation of America. 270,865; May 13; Serial No. 291,092; published Mar. 4, 1930.
Nailing machines. E. H. Titchener & Company. 270,870; May 13; Serial No. 288,674; published Mar. 4, 1930.
Piston pins, engine valves, oil and water pumps, etc. Aluminum Industries, Inc. 270,872; May 13; Serial No. 286,098; published Mar. 4, 1930.
Printing machines, Rotary. R. Hoe & Co. 270,893; May 13.
Saws and saw sets, Circular. E. C. Atkins and Company. 270,691; May 13; Serial No. 293,655; published Mar. 4, 1930.
Tongs. Gearench Manufacturing Company. 270,687; May 13; Serial No. 294,034; published Mar. 4, 1930.
Tools, Floor waxing and polishing. Butcher Polish Co. 270,860; May 13; Serial No. 292,575; published Mar. 4, 1930.
Tools, Garden. Animal Trap Company of America. 270,864; May 13; Serial No. 291,602; published Mar. 4, 1930.
Tools, Oil-well. Allen-Oliver Co. 270,867; May 13; Serial No. 290,536; published Mar. 4, 1930.

CLASS 26

Glass graduates, glass measuring cylinders, and glass pipettes. Kny-Scheerer Corporation. 270,868; May 13; Serial No. 290,260; published Mar. 4, 1930.
Thermometers. Faichney Instrument Corporation. 270,897; May 13.

CLASS 30

Earthenware articles. Roseville Pottery Company. 270,606; May 13; Serial No. 294,402; published Feb. 25, 1930.

CLASS 32

Beds, Canopy. L. M. Rebthaler. 270,863; May 13; Serial No. 292,010; published Mar. 4, 1930.
Cabinets and mirrors, Bathroom. Henkel Edge-Lite Corporation. 270,861; May 13; Serial No. 292,531; published Mar. 4, 1930.
Cabinets, Display. Boye Needle Co. 270,907; May 13.
Cabinets, Kitchen. R. J. Simons. 270,682; May 13; Serial No. 295,061; published Mar. 4, 1930.

CLASS 33

Bottles, jars, jugs. Owens-Illinois Glass Company. 270,609; May 13; Serial No. 294,238; published Mar. 4, 1930.

CLASS 34

Boilers, Heating. Thermo Service, Inc. 270,747; May 13; Serial No. 294,601; published Mar. 4, 1930.
Grate bars. Tawiks Grate Bar Company. 270,641; May 13; Serial No. 286,520; published Mar. 4, 1930.

CLASS 35

Belting, rubber hose, and piston packing. Pioneer Rubber Mills. 270,693; May 13; Serial No. 293,068; published Mar. 4, 1930.
Belts and belting. B. F. Goodrich Company. 270,862; May 13; Serial No. 292,529; published Feb. 18, 1930.
Hose, Fire. Hewitt-Gutta Percha Rubber Corporation. 270,680; May 13; Serial No. 295,172; published Mar. 4, 1930.
Packing gaskets. F. L. Dieterich. 270,869; May 13; Serial No. 289,712; published Mar. 4, 1930.

CLASS 37

Chalk. Ready Sharp Chalk Corp. 270,900; May 13.

CLASS 38

Magazine. Crowell Publishing Company. 270,791; May 13; Serial No. 295,117; published Mar. 4, 1930.
Magazines. Graphic Arts Corporation. 270,771; May 13; Serial No. 294,422; published Mar. 4, 1930.
Newspaper. Daily Local News Company. 270,776; May 13; Serial No. 294,712; published Mar. 4, 1930.
Newspaper. Enterprise Publishing Co. 270,775; May 13; Serial No. 294,717; published Mar. 4, 1930.
Newspaper. Philadelphia Inquirer Co. 270,787; May 13; Serial No. 294,739; published Mar. 4, 1930.
Newspaper journals. Editor & Publisher Co. 270,786; May 13; Serial No. 294,766; published Mar. 4, 1930.
Periodical. National Lumberman Publishing Co. 270,804; May 13; Serial No. 294,818; published Mar. 4, 1930.
Periodical. Novel Magazine Corp. 270,666; May 13; Serial No. 280,035; published Apr. 16, 1929.
Periodical. Phi Kappa Sigma. 270,795; May 13; Serial No. 295,048; published Mar. 4, 1930.
Periodical. United Christian Missionary Society. 270,796; May 13; Serial No. 295,009; published Mar. 4, 1930.
Periodicals. American Paint Journal Company. 270,785; May 13; Serial No. 294,837; published Mar. 4, 1930.
Periodicals. American Paint Journal Company. 270,803; May 13; Serial No. 294,836; published Mar. 4, 1930.
Photographic prints. R. J. Young. 270,730; May 13; Serial No. 276,673; published Mar. 4, 1930.
Publication. National Weeklies, Inc. 270,821; May 13; Serial No. 293,439; published Mar. 4, 1930.
Publication. Sullivan Machinery Company. 270,797; May 13; Serial No. 294,999; published Mar. 4, 1930.
Publication. Wettersol Dyestuff Corporation. 270,777; May 13; Serial No. 294,700; published Mar. 4, 1930.
Publication, Periodical. S. H. Gettelman. 270,814; May 13; Serial No. 294,131; published Mar. 4, 1930.
Publication, Periodical. National Tourist Home Guild. 270,817; May 13; Serial No. 293,743; published Mar. 4, 1930.

Publications. Associated Dry Goods Corporation of New York. 270,813; May 13; Serial No. 294,381; published Mar. 4, 1930.
Publications. Chilton Class Journal Company. 270,789–90; May 13; Serial Nos. 295,150–1; published Mar. 4, 1930.
Rating tables. A. H. Carter. 270,739; May 13; Serial No. 284,164; published Mar. 4, 1930.
Stamps, Trading. Sperry & Hutchinson Company. 270,772; May 13; Serial No. 294,281; published Mar. 4, 1930.

CLASS 39

Apparel, Junior misses' wearing. Stern Brothers. 270,634; May 13; Serial No. 290,046; published Feb. 25, 1930.
Boots and shoes. Harry Sir & Son, Inc. 270,723; May 13; Serial No. 293,011; published Feb. 25, 1930.
Boots, shoes, and slippers. Woodbury Shoe Mfg. Co. 270,638; May 13; Serial No. 288,264; published Mar. 4, 1930.
Caps and hats. Hodshon-Berg, Incorporated. 270,770; May 13; Serial No. 293,580; published Mar. 4, 1930.
Caps and hats for men. Hodshon-Berg, Incorporated. 270,765; May 13; Serial No. 293,274; published Feb. 25, 1930.
Dresses, blouses, hats, etc., Ladies'. Jean Adams Inc. 270,768; May 13; Serial No. 294,046; published Mar. 4, 1930.
Hats. No Name Hat Company. 270,629; May 13; Serial No. 292,119; published Mar. 4, 1930.
Hats. No Name Hat Company. 270,630–1; May 13; Serial Nos. 292,117–18; published Feb. 25, 1930.
Hats and caps. J. B. Stetson Company. 270,764; May 13; Serial No. 293,387; published Mar. 4, 1930.
Hats, Ladies'. Lady Godiva Hats, Inc. 270,766; May 13; Serial No. 294,117; published Mar. 4, 1930.
Headwear. John Cavanagh, Ltd. 270,725; May 13; Serial No. 293,571; published Mar. 4, 1930.
Knitwear. Royal Knitwear Co. 270,632; May 13; Serial No. 291,793; published Feb. 25, 1930.
Scarfs and scarfs combined with hatbands and turbans, Fabric. A. M. Grean. 270,636; May 13; Serial No. 289,352; published Feb. 25, 1930.
Shoes. Boyd-Welsh Shoe Company. 270,626; May 13; Serial No. 292,792; published Feb. 25, 1930.
Shoes. D. Feinefeld. 270,635; May 13; Serial No. 289,888; published Feb. 25, 1930.
Shoes. Finkovitch-Levine Shoe Company. 270,627; May 13; Serial No. 292,776; published Feb. 25, 1930.
Shoes. L. Klein, Inc. 270,724; May 13; Serial No. 293,222; published Mar. 4, 1930.
Shoes. Sears, Roebuck and Co. 270,769; May 13; Serial No. 293,693; published Mar. 4, 1930.
Soles, heels, counters, etc., for boots and shoes. Dewey & Almy Chemical Company. 270,767; May 13; Serial No. 294,061; published Mar. 4, 1930.
Wearing apparel, Ladies'. Polly Shoppe, Inc. 270,637; May 13; Serial No. 289,249; published Mar. 4, 1930.

CLASS 40

Buckles. Riker Company. 270,761–2; May 13; Serial Nos. 293,984–5; published Feb. 25, 1930.

CLASS 42

Blankets, Textile. Esmond Mills. 270,698; May 13; Serial No. 294,767; published Feb. 25, 1930.
Chiffon and silk piece goods. L. & E. Stirn. 270,616; May 13; Serial No. 293,607; published Feb. 25, 1930.
Cloth, batiste, gingham, etc., Awning. L. Bamberger & Co. 270,881; May 13; Serial No. 290,296; published Feb. 18, 1930.
Corduroys, Printed. A. D. Juilliard & Co. 270,695; May 13; Serial No. 295,181; published Mar. 4, 1930.
Cotton, cotton and silk, and artificial-silk goods in the piece. Rossman Brothers & Messner, Inc. 270,879; May 13; Serial No. 292,906; published Feb. 25, 1930.
Cotton piece goods. Ninety Six Cotton Mill. 270,611; May 13; Serial No. 294,170; published Mar. 4, 1930.
Cotton piece goods. Pacific Mills. 270,903; May 13.
Cotton piece goods. Wellington, Sears & Company. 270,605; May 13; Serial No. 294,452; published Feb. 25, 1930.
Curtains. Boott Mills. 270,615; May 13; Serial No. 293,819; published Feb. 25, 1930.
Fabrics. Celanese Corporation of America. 270,600; May 13; Serial No. 294,761; published Feb. 25, 1930.
Fabrics. Celanese Corporation of America. 270,699; May 13; Serial No. 294,764; published Feb. 25, 1930.
Fabrics. Celanese Corporation of America. 270,700; May 13; Serial No. 294,762; published Feb. 25, 1930.
Fabrics. I. G. Farbenindustrie Aktiengesellschaft. 270,612; May 13; Serial No. 294,155; published Feb. 25, 1930.
Goods in the piece. Queen Valley Fabrics, Inc. 270,614; May 13; Serial No. 294,039; published Feb. 25, 1930.
Handkerchiefs. D. Heller. 270,604; May 13; Serial No. 294,530; published Feb. 25, 1930.
Pile fabrics. E. F. Timme & Son. 270,602; May 13; Serial No. 294,602; published Mar. 4, 1930.
Rayon and cotton, Piece goods of. Stoffel & Co. 270,697; May 13; Serial No. 294,932; published Feb. 25, 1930.
Rugs, Seamless. Artloom Corporation, Artloom Rug Mills Division. 270,696; May 13; Serial No. 295,111; published Mar. 4, 1930.
Sheets and pillowcases, blankets, and towels. Lord & Taylor. 270,665; May 13; Serial No. 280,180; published Feb. 25, 1930.
Sheets, sheeting, etc., Cotton and linen bed. Kline Brothers Co. 270,603; May 13; Serial No. 294,535; published Mar. 4, 1930.
Silk dress goods in the piece. Goldstein-Wilkins Corporation. 270,825–6; May 13; Serial Nos. 287,063–4; published Feb. 18, 1930.
Silk piece goods. Grunewald Novick Company. 270,608; May 13; Serial No. 294,251; published Feb. 18, 1930.
Woolen goods. S. Stein & Co. 270,610; May 13; Serial No. 294,188; published Feb. 25, 1930.
Woolen piece goods. Camden Woolen Co. 270,607; May 13; Serial No. 294,339; published Feb. 25, 1930.
Woolen piece goods. Forstmann & Huffmann Company. 270,899; May 13.
Woolen suiting in piece. M. M. Scher. 270,880; May 13; Serial No. 292,342; published Mar. 4, 1930.

CLASS 43

Silk, Artificial. American Chatillon Corporation. 270,613; May 13; Serial No. 294,048; published Feb. 25, 1930.
Yarns, Laminated. Lamicel Products Inc. 270,601; May 13; Serial No. 294,641; published Mar. 4, 1930.

CLASS 44

Hypodermic needles, scalers, probes, etc. A. P. de Sanno, jr. 270,896; May 13.
Lamps designed for therapeutic purposes, Arc. Super-Power Arc Lamp Company. 270,624; May 13; Serial No. 293,162; published Feb. 11, 1930.
Supports, Body. Standard Corset Company. 270,902; May 13.

CLASS 45

Ale and nonalcoholic, noncereal, maltless beverages, Ginger. Curran & Joyce Company. 270,873; May 13; Serial No. 285,339; published Mar. 4, 1930.
Ale, Ginger. J. L. Franklin. 270,688; May 13; Serial No. 293,965; published Mar. 4, 1930.
Beverage, Nonalcoholic, noncereal, maltless. C. P. Byrd. 270,736; May 13; Serial No. 272,197; published Mar. 4, 1930.
Beverages and syrups, etc., Nonalcoholic, noncereal, maltless carbonated. Elco Distributing Company. 270,683; May 13; Serial No. 294,962; published Mar. 4, 1930.
Beverages and syrups, extracts, and concentrates for preparing the same, Maltless. M. A. Cornetz. 270,889; May 13.
Extracts and syrups for flavoring soft drinks, Flavoring. H. Baron & Co. 270,890; May 13.
Extracts, flavorings, concentrates, fruit colorings, etc. Hollywood Dry Corporation. 270,856; May 13; Serial No. 292,876; published Mar. 4, 1930.
Grape products—namely, grape juice and frozen grape beverages. General Fruit Packing Corporation. 270,871; May 13; Serial No. 287,814; published Mar. 4, 1930.

CLASS 46

Berries and vegetables, Fresh. M. C. Britt. 270,891; May 13.
Bread and cake. Schulze Baking Company. 270,774; May 13; Serial No. 293,751; published Mar. 4, 1930.
Butter, cheese, milk, and ice cream. Southwest Dairy Products Company. 270,651; May 13; Serial No. 286,360; published Mar. 4, 1930.
Candies. Brandle & Smith Co. 270,671; May 13; Serial No. 294,757; published Mar. 4, 1930.
Canned fruits. A. Shalit. 270,672; May 13; Serial No. 294,489; published Mar. 4, 1930.
Cherries, Preserved. Mawer-Guiden-Annis Inc. 270,888; May 13.
Doughnuts. Doughnut Machine Corporation. 270,742; May 13; Serial No. 294,495; published Mar. 4, 1930.
Doughnuts. Joe Lowe Corporation. 270,735; May 13; Serial No. 269,734; published Aug. 28, 1928.
Eggs, Gottfried & Marshall. 270,649; May 13; Serial No. 290,462; published Mar. 4, 1930.
Eggs, Frozen. Standard Brands Incorporated. 270,642; May 13; Serial No. 292,467; published Mar. 4, 1930.
Feed, Poultry. Feeders Supply and Manufacturing Co. 270,646; May 13; Serial No. 291,055; published Mar. 4, 1930.
Feed, Prepared. J. C. Zimmerman. 270,643; May 13; Serial No. 292,346; published Mar. 4, 1930.
Flour, Wheat. Inland Milling Company. 270,788; May 13; Serial No. 295,224; published Mar. 4, 1930.
Flour, Wheat. Victoria Elevator Co. 270,647 May 13; Serial No. 290,769; published Mar. 4, 1930.
Food, Bird. H. C. Eisenhut. 270,780; May 13; Serial No. 295,022; published Mar. 4, 1930.
Grapefruit. Imperial Valley Grapefruit Growers. 270,882; May 13.
Honey, mustard, olives, etc. R. H. Macy & Co. 270,884; May 13.
Mash, growing mash, etc., Egg. P. J. Oesterling & Son, Inc. 270,779; May 13; Serial No. 295,132; published Mar. 4, 1930.

Oats or oat flakes and a breakfast food, Rolled. Purity Oats Company. 270,663; May 13; Serial No. 280,195; published Mar. 4, 1930.
Pistachios, Salted. Sheba Pistachio Corporation. 270,669; May 13; Serial No. 277,641; published Mar. 4, 1930.
Potatoes, Fresh sweet. T. E. McKnight. 270,726; May 13; Serial No. 260,456; published Mar. 4, 1930.
Syrup, Malt. O. O. Harris. 270,684; May 13; Serial No. 294,634; published Feb. 25, 1930.
Syrup, Malt. Miller High Life Co. 270,692; May 13; Serial No. 293,377; published Feb. 4, 1930.
Syrups, Cereal malt. Tacoma Brewing Co. 270,887; May 13.
Vegetables, Fresh. F. J. McCann Packing Co. 270,679; May 13; Serial No. 293,189; published Mar. 4, 1930.

CLASS 48

Malt beverages, Cereal. Tacoma Brewing Co. 270,886; May 13.

CLASS 49

Whiskey, Malt. Frankfort Distillery, Inc. 270,685; May 13; Serial No. 294,579; published Mar. 4, 1930.
Whiskey, Medicinal. National Brokerage Company. 270,681; May 13; Serial No. 295,079; published Mar. 4, 1930.

CLASS 50

Bottle caps and stoppers. S. Kasser. 270,885; May 13.
Brooders for chicks and the like. Anderson Box Company 270,628; May 13; Serial No. 292,148; published Mar. 4 1930.
Felt. Felters Company. 270,904; May 13.
Markers, nonelectrical road and street signs, and non-electrical traffic-control signals, Highway and pavement. Universal Traffic Control Company. 270,737; May 13; Serial No. 284,883; published Mar. 4, 1930.
Stage equipment. Oklahoma City Scenic Company. 270,883; May 13.
Textile fabric. E. I. du Pont de Nemours and Company. 270,763; May 13; Serial No. 293,414; published Mar. 4, 1930.
Waterproof fabrics. Schwarzwaelder Company. 270,898; May 13.

ALPHABETICAL LIST OF LABELS

A to Z. For Medical Preparation for the Treatment of Any Skin Affliction Such as Itch, Blotches, Boils, Pimples, Cold Sores, Bumps, Frostbite, and Bruises. Von Munz Co. 37,430; May 13.
Ace Prophylactic. For Prophylactic. C. Dilworth. 37,421; May 13.
American Beauty. For Cake. James A. Harper Supply Company. 37,424; May 13.
Bogardus. For Cigars. Arthur M. Doty, Inc. 37,422; May 13.
Campfire. For Marshmallows. Campfire Corporation. 37,418; May 13.
Croce's Scotch Dry Beverages. For Fruit Beverages. Louis P. Croce, Inc. 37,419; May 13.
Dannemiller's Golden Blend Coffee. For Coffee. Dannemiller Grocery Company. 37,420; May 13.
Donna. For Chile con Carne. G. Begley, jr. 37,415; May 13.
Epiplasm. For a Medical Preparation Designed to Protect the Body Surface and to Retard Early Decay and Degeneration of the Skin. Neoderm Company. 37,427; May 13.
Haucks Certified Hop Flavor Malt Extract. For Malt Extract. P. G. Benjamin. 37,416; May 13.
Insignia of The Wallpaper Association of the United States. For Wall Paper. Wallpaper Association of the United States. 37,432; May 13.
Kilchigers. For Medical Preparation for Chiggers, Mites, Poison Ivy, Insect Bites or Stings. Von Munz Co. 37,431; May 13.
Kramo Caps. For Bottle Caps. Kramo Manufacturing Corporation. 37,426; May 13.
Laxine. For Laxative. J. A. Kessel. 37,425; May 13.
Munz 77. For Medical Preparation for the Treatment of Pyorrhea and Trench Mouth. Von Munz Co. 37,429; May 13.
$1000 Loaf. For Bread. Wessels Baking Company. 37,433; May 13.
Original Mexican Sugared (Chocolate) Pecans. For Sugared Pecans. American Pecan & Nut Co. 37,412; May 13.
Original Mexican Sugared (Piloncillo) Pecans. For Sugared Pecans. American Pecan & Nut Co. 37,413; May 13.
Original Mexican Sugared (Vanilla) Pecans. For Sugared Pecans. American Pecan & Nut Co. 37,414; May 13.
Pixie Strained Green Beans. For Strained Green Beans. Fruit Belt Pres. Company. 37,423; May 13.
Purple & Gold Package Elegant. For Candy. Brown & Haley. 37,417; May 13.
Sweet Georgia Brown Marvelous Face Powder. For Face Powder. M. G. Neumann. 37,428; May 13.

ALPHABETICAL LIST OF PRINTS

A Dentifrice. For a Dentifrice. Chas H. Phillips Chemical Co. 12,531; May 13.
Anestex Injectubes. For Local Anesthetic. D. Curtis. 12,528; May 13.
Lem-En-Coke. For Soft Drinks. O. H. Halverson. 12,529; May 13.
"Little Post Office" Stamp Vending Machines. For Postage-Stamp-Vending Machines. S. B. Hutchinson. 12,530; May 13.
The Cornucopia. For Quilting Cotton. Stearns & Foster Co. 12,534; May 13.
The Genuine Missouri Corn Cob Pipe. For Corn-Cob Pipes. Phoenix-American Pipe Works. 12,532; May 13.
The Windblown Tulip. For Quilting Cotton. Stearns & Foster Co. 12,533; May 13.
Tumbling Blocks. For Quilting Cotton. Stearns & Foster Co. 12,535; May 13.

ALPHABETICAL LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 13TH DAY OF MAY, 1930

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). **Includes patents, reissues, and designs.**

Aaron, Harry, Scranton, Pa., assignor to The Pinzit Company, Inc., New York, N. Y. Pinning sheets. 1,758,679; May 13.

Abbott, Charles C., Pittsfield, Mass., assignor to General Electric Company. Heat-dissipating device. 1,758,775; May 13.

Abbott, Charles C., Pittsfield, Mass., assignor to General Electric Company. Self-contained heated device. 1,758,815; May 13.

Abramson, John H., assignor to Greenlee Bros. & Co., Rockford, Ill. Bit extension. 1,758,069; May 13.

Acheson Graphite Company. (See Koethen, Frederick L., assignor.)

Acton, Clare S., assignor to Wolverine Tube Company, Detroit, Mich. Cooking receptacle. 1,757,989; May 13.

Adams, John F., Philadelphia, Pa. Adjusting mechanism for motion-picture-film framing means. 1,758,639; May 13.

Adams, Lytle S., Seattle, Wash., assignor to Airways Patent Corporation. Retarding device for aircraft. 1,758,880; May 13.

Adamson, Charles E., Muncie, Ind. Retort burner for self-heating sadirons. 1,758,345; May 13.

Aderer, Julius, New York, N. Y. Soldering tweezers. 1,758,490; May 13.

Advance Machine Company. (See Richardson, M. H., and Antoine, assignors.)

Advance Machine Company. (See Richardson, M. H., and Gebert, assignors.)

Ahlm, Charles E. F., Cleveland, Ohio, assignor to The Twin High Transmission Company, Syracuse, N. Y. Transmission gearing. 1,758,386; May 13.

Ahrens, Fritz, Bockenem-on-the-Harz, assignor of one-half to Harzer Achsenwerke, G. m. b. H., Bornum Am Harz, Konigsdablum (Post Bornum-on-the-Harz), Germany. Producing a coating stable toward acids and alkalis on metallic articles. 1,758,420; May 13.

Agee, William P., jr., assignor to Specialty Advertising Company, Little Rock, Ark. Price card and sign exhibitor. 1,758,904; May 13.

Agfa Ansco Corporation. (See Matthies, O., and Wendt, assignors.)

Agfa Ansco Corporation. (See Reddelien, G., and Müller, assignors.)

Aikman, Joseph M., Stillwater, Minn. Automatic bleeder valve for auxiliary reservoirs of air-brake systems. 1,758,136; May 13.

Airship Guarantee Company. (See Burney, C. D., Wallis, and Temple, assignors.)

Airways Patent Corporation. (See Adams, Lytle S., assignor.)

Aitken, Andrew W., assignor to The Buffalo-Springfield Roller Co., Springfield, Ohio. Grader attachment for road rollers. 1,758,491; May 13.

Akers, William McK. (See Miller, A., and Akers.)

Alemite Corporation. (See Davis, Ernest W., assignor.)

Alexander, Daniel N. (See Allen, P. S., and Alexander.)

Allbright-Nell Company. (See Kohlhepp, John W., assignor.)

Allen, Andrews. (See Holmes, G., and Allen.)

Allen, Frank B., Lower Merion Township, Montgomery County, assignor, by mesne assignments, to The Allen-Sherman-Hoff Company, Philadelphia, Pa. Furnace construction. 1,758,421; May 13.

Allen, Philip S., and D. N. Alexander, Avalon, Calif. Fluid-dispensing apparatus. 1,758,552; May 13.

Allen-Sherman-Hoff Company, The. (See Allen, Frank B., assignor.)

Allen-Sherman-Hoff Company, The. (See Dunbar, Frank H., assignor.)

Allen-Sherman-Hoff Company, The. (See Fairchild, Frederick P., assignor.)

Allen, William C., Compton, assignor, by mesne assignments, to The Sharpe Manufacturing Co., Los Angeles, Calif. Air compressor. 1,758,211; May 13.

Allgemeine Gesellschaft fur Chemische Industrie m. b. H. (See Cattaneo, Giuseppe, assignor.)

Allin, Richard F., New York, N. Y., assignor to Eugene Dietzgen Company, Chicago, Ill. Developing apparatus. 1,757,950; May 13.

Alsaker, Alfred. (See Van Ryan, T., and Alsaker.)

Alton Barium Products Company. (See Bonnington, Alexander, assignor.)

American Air Filter Company. (See Birkholz, Hans E., assignor.)

American Brass Company, The. (See Coe, James R., assignor.)

American Chemical Paint Company. (See Gravell, James H., assignor.)

American Cyanamid Company. (See Barsky, G., and Griffith, assignors.)

American Incubators, Inc. (See Watson, Harold L., assignor.)

American Laundry Machinery Company, The. (See Carroll, Emil J., assignor.)

American Laundry Machinery Company, The. (See Garvey, James M., assignor.)

American Smelting and Refining Company. (See Hasche, Rudolph L., assignor.)

American Smelting and Refining Company. (See Labbe, Armand L., assignor.)

American Stay Company. (See Merrick, Frank W., assignor.)

American Steel Products Co. (See Harvey, William D., assignor.)

American Swiss Company, The. (See McCarthy, Charles S., assignor.)

American Telephone and Telegraph Company. (See Bolin, Carleton H., assignor.)

American Telephone and Telegraph Company. (See Cole, O. R., and Garlinger, assignors.)

American Telephone and Telegraph Company. (See Hoyt, Ray S., assignor.)

American Telephone and Telegraph Company. (See Niles, Eliot W., assignor.)

American Telephone and Telegraph Company. (See Potter, Ralph K., assignor.)

Amiesite Asphalt Company of America. (See Sadtler, Samuel S., assignor.)

Anderson, Abner L. (See Heston, L. R., and Anderson.)

Anderson, Anton E., London, England; G. Maiuri, Turin, Italy; and R. F. Bossini, Hayes, England. Refrigerating apparatus. 1,758,099; May 13.

Anderson, Ernst G. K., Evanston, Ill., assignor to Appleton Electric Company. Fastening elements to walls. 1,758,387; May 13.

Anderson, Raymond T., assignor to The V. D. Anderson Company, Cleveland, Ohio. Producing cereal foods. 1,758,272; May 13.

Anderson, Robert, New York, N. Y. Apparatus for separating comminuted matter. 1,758,422; May 13.

Anderson, Samuel D., Grundy Center, Iowa. Check-wire guide for corn planters. 1,757,990; May 13.

Anderson, V. D., Company, The. (See Anderson, Raymond T., assignor.)

André, Henri G., Paris, France. Rectifying apparatus. 1,758,680; May 13.

Andrews, George W., jr., Vernon, Conn. Machine for lapping and the like. 1,758,100; May 13.

Andrews, Paul D., Schenectady, N. Y., assignor to General Electric Company. Radio transmitting system. 1,758,816; May 13.

Antoine, Alfred D. (See Richardson, M. H., and Antoine.)

Anton, Frederick A., Topeka, Kans. Automatic window awning. 1,758,244; May 13.

Anton, Frederick A., and C. W. Harvey; said Harvey assignor to Topeka Tent & Awning Company, Topeka, Kans. Window awning. 1,758,245; May 13.

Appleton Electric Company. (See Anderson, Ernst G. K., assignor.)

Arnou, Gabriel. (See Bauchère, A., and Arnou.)

Arutunoff, Armais, Los Angeles, Calif. Oil-well pump. 1,758,346; May 13.

Asiatic Petroleum Company. (See Lawson, Joseph, assignor.)

Aske, Irving E., Minneapolis, Minn. Vaporizer. 1,758,020; May 13.

Atkinson, Cyril J. (See Batenburg, P. J. F., and Atkinson.)

Atterholt, Oliver S., Frostburg, assignor to Sloan Brothers, Lonaconing, Md. Goblet or similar article. Des. 81,121; May 13.

Atterholt, Oliver S., Frostburg, assignor to Sloan Brothers, Lonaconing, Md. Goblet or similar article. Des. 81,122; May 13.

Aubry, Emile, Paris, and G. Boreau, Versailles, France. Synchronizing device for musical instruments or other apparatus. 1,758,776; May 13.

Augstein, S., & Co. (See Egerer, August, assignor.)

Austin, John, and H. Smith, Liverpool, England. Method of and in apparatus for treating the tubes of surface containers and the like to prevent corrosive action. 1,758,810; May 13.

Automatic Electric Company. (See Wagner, Ralph W., assignor.)

Automatic Electric Inc. (See Hudd, Alfred E., assignor.)

Automatic Motor Control Corporation. (See Zitzmann, George, assignor.)

Automatic Transmission Corporation of America. (See Gardner, Cummings, assignor.)

Avery, W. & T., Limited. (See Bradley, Leslie C., assignor.)

Avery, William H. (See Schauman, Karl O., assignor.)

Ayres, Virginia D., Berlin, Md. Rag doll. Des. 81,123; May 13.
Babbitt, Elwin J., Holland, Mich. Fish lure. 1,758,817; May 13.
Badger, E. B., & Sons Company. (See Campbell, Charles L., assignor.)
Baetz, Henry, St. Louis, Mo. Air heater. 1,758,643; May 13.
Baird, William F. (See Smith, Albert C., assignor.)
Baker Perkins Company. (See Harber, Laurence S., assignor.)
Baker Perkins Co. Inc. (See Head, Ronald, assignor.)
Baker Perkins Company. (See Prescott, William E., assignor.)
Baker Perkins Company. (See Thurm, Richard, assignor.)
Baker-Perkins Company. (See Thurm, R., and Engels, assignor.)
Baker Perkins Company. (See Tugendhat, Robert G., assignor.)
Baker, S. N. (See Lines, Grant, assignor.)
Bales, James E., assignor to Lyon Metal Products, Incorporated, Aurora, Ill. Shelf construction. 1,758,307; May 13.
Ballard, Frank L., Ankeny, and W. A. Robson, Scranton, Iowa. Multiple thumb stall. 1,758,681; May 13.
Balle, Gerhard. (See Daimler, K., and Balle.)
Balze, Paul. (See Mersfelder, F. J., and Balze.)
Banigan, Thomas F. (See Bassett, H. P., and Banigan.)
Banks, Charles M., Philadelphia, Pa. Hydraulic jack. 1,758,640; May 13.
Bansfield, Thomas M., Chicago, Ill. Pictorial reproduction in plaque. 1,758,876; May 13.
Barakauskas, Peter D., Chicago, Ill. Adjustable mirror for barbers' chairs and the like. 1,758,021; May 13.
Barbieri, Cesare, New York, N. Y., assignor to Vortex Cup Company. Conical-cup dispenser. Re17,664; May 13.
Bard, Francis N., Highland Park, Ill. Crosshead. 1,758,212; May 13.
Barnes, Anna C., et al. (See Crannell, Charles W., assignor.)
Barnett, Charles M. (See Vandegrift, James N., assignor.)
Barrows, Allen S., Los Angeles, Calif., assignor to The Youngstown Steel Door Company, Cleveland, Ohio. Locking mechanism for doors. 1,758,070; May 13.
Barsky, George, New York, N. Y., and P. W. Griffith, Elizabeth, N. J., assignors to American Cyanamid Company, New York, N. Y. Producing urea. 1,758,641; May 13.
Bartholomew, Harry G., London, England. Phototelegraphy. 1,758,388; May 13.
Bartik, Josef, Vienna, Austria. Electrical heating apparatus. 1,758,213; May 13.
Bartlett, Andrew A., et al. (See Miller, William A., assignor.)
Barton, Frederick C., Schenectady, N. Y., assignor to General Electric Company. Condenser microphone. 1,758,777; May 13.
Basinger, Americus D., assignor of one-half to R. P. Walker, Plymouth, N. C. Veneer knife. 1,758,423; May 13.
Bassett, Harry P., Cynthiana, Ky., and T. F. Banigan, Clifton Heights, Pa., assignors, by mesne assignments, to Meigs, Bassett & Slaughter, Inc., Philadelphia, Pa. Mercerizing. 1,758,553; May 13.
Bassett, J. Colby, et al, executors. (See Chapin, Howard G.)
Bassick Company, The. (See Herold, Walter F., assignor.)
Bassick Company, The. (See Moore, Raymond G., assignor.)
Bassick Company, The. (See Moore, R. G., and Claud-Mantle, assignors.)
Batenburg, Peter J. F., Racine, and C. J. Atkinson, Milwaukee, Wis.; said Atkinson assignor to said Batenburg. Pad for electroplating devices. 1,758,682; May 13.
Bates, Adelmer M., Chicago, Ill., assignor, by mesne assignments, to St. Regis Paper Company, New York, N. Y. Sewing. 1,758,101; May 13.
Bauchère, Antoine, and G. Arnou, Paris, France. Kiln for the manufacture of fused cement. 1,758,778; May 13.
Bauer, Sigmund, deceased, by R. Lowy, administratrix, Oberwurth, Burgenland, Austria, assignor to J. Lowy, New York, N. Y. Roofing construction. 1,758,683; May 13.
Bauman, Frank, assignor to Wayne Manufacturing Company, Honesdale, Pa. Thread cleaner. 1,758,424; May 13.
Bayer, Otto. (See von Braun, J., and Bayer.)
Bayles, Lewis C., Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Blowing device for rock drills. 1,758,492; May 13.
Bayles, Lewis C., Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Bit punch. 1,758,493; May 13.
Beck, William M., assignor of one-half to W. L. Hibberd, Elwood, Ind. Electric train control. 1,758,308; May 13.
Becker, Julius, H. Just, and H. Hort, Essen, assignors to Fried. Krupp Aktiengesellschaft, Essen-on-the-Ruhr, Germany. Sighting device for guns. 1,758,273; May 13.
Beckers, Arnold. (See Wilhelm, Rudolf, assignor.)
Beckwith, Harry H. (See Jennings, Melvin O., assignor.)
Beebe, Harwood, Spartanburg, S. C. Roadway and constructing the same. 1,758,022; May 13.
Behr, Leo, Ithaca, N. Y., assignor to Leeds & Northrup Company, Philadelphia, Pa. Relative-humidity recorder. 1,758,494; May 13.
Beibin, Morris, assignor of one-half to S. Beibin, Brooklyn, N. Y. Container for moth balls. 1,758,347; May 13.
Beibin, Samuel. (See Beibin, Morris, assignor.)
Bell, Harvey W., Ardsley-on-Hudson, assignor to The Beloyt Corporation, New York, N. Y. Flexible connection. 1,758,554; May 13.
Bell & Howell Company, The. (See Howell, Albert S., assignor.)
Bell, John E., deceased, L. R. Bell, Brooklyn, executrix, and E. W. Isom, Locust Valley, assignors to Sinclair Refining Company, New York, N. Y. Cracking hydrocarbon oils. 1,758,818; May 13.
Bell, Lola R., executrix. (See Bell, J. E., and Isom.)
Bell Telephone Laboratories, Incorporated. (See Hinrichsen, Edward E., assignor.)
Beloyt Corporation, The. (See Bell, Harvey W., assignor.)
Benda, Louis, Frankfort-on-the-Main-Fechenheim, Germany, assignor to Winthrop Chemical Company, Inc., New York, N. Y. Stable and sterilized solution of salts of paradialkylaminoaryl-phosphinous acids. 1,758,425; May 13.
Bendelari, Mary E., assignor to Sandalari, Inc., New York, N. Y. Producing raised designs on the surface of articles made from leather or the like. 1,758,186; May 13.
Bendix Brake Company. (See Bendix, Vincent, assignor.)
Bendix Brake Company. (See Blackmore, Lloyd, assignor.)
Bendix, Vincent, assignor to Bendix Brake Company, Chicago, Ill. Brake drum. 1,758,731; May 13.
Benedetti, Frederick L., Black Diamond, Wash. Composition for soldering aluminum ware. 1,758,348; May 13.
Benjamin Electric Manufacturing Company. (See Benjamin, Reuben B., assignor.)
Benjamin, Reuben B., assignor to Benjamin Electric Manufacturing Company, Chicago, Ill. Panel-board construction. 1,758,642; May 13.
Berger, Friedrich W. F., Berlin, Germany, assignor to The National Cash Register Company, Dayton, Ohio. Cash register. 1,758,819; May 13.
Berger, Joseph, Utica, N. Y., and W. M. Hanneman, Oak Park, assignors to Union Special Machine Company, Chicago, Ill. Presser-foot lifter and thread-tension release. 1,758,349; May 13.
Bergh, Philip, assignor to Jantzen Knitting Mills, Portland, Oreg. Swimming trunk. Des. 81,124; May 13.
Bernady, Raoul, Neuilly sur Seine, assignor to Société d'Etudes et de Construction d'appareile de télémécanique, Seine, France. Auxiliary piloting device chiefly for aircraft. 1,758,592; May 13.
Berthon, Rodolphe, Neuilly, assignor, by mesne assignments, to Societe Francaise Cinechromatique (Procedes R. Berthon), Paris, France. Apparatus for printing reticulated films. 1,758,137; May 13.
Bethmann, Gustav, and O. Muthig, Jasenitz, near Stettin, assignors to the firm Feldmühle, Papier- und Zellstoffwerke Aktiengesellschaft, Scholwin, near Stettin, Germany. Apparatus for the treatment of a viscose film. 1,758,593; May 13.
Bettex, William L., and C. L. Brenner, Idalia, Colo. Bean harvester. 1,758,555; May 13.
Betts, Arthur L., and P. S. Shield, assignors to A. Davis, jr., Cincinnati, Ohio. Tank valve. 1,758,644; May 13.
Betts, Arthur L., deceased, and P. S. Shield; M. T. Betts, administratrix; said M. T. Betts assignor to A. Davis, jr., Cincinnati, Ohio. Tank valve. 1,758,645; May 13.
Betts, Mary T., administratrix. (See Betts, A. L., and Shield.)
Biermanns, Josef, Karlshorst, Germany, assignor to General Electric Company. Electrical-induction apparatus. 1,758,820; May 13.
Binmore, George B. (See McGavack, J., and Binmore.)
Birchfield, Roy R., Holly Ridge, assignor of one-half to I. F. Cryer, Bossier Parish, La. Rail-sanding device and cleaner therefor. 1,758,821; May 13.
Birdsong, John W., assignor of one-half to N. S. Williamson and W. L. Clayton, Meridian, Miss. Pneumatic hammer attachment. 1,758,822; May 13.
Birkholz, Hans E., Chicago, Ill., assignor, by mesne assignments, to American Air Filter Company, Inc., Louisville, Ky. Filtration medium. 1,758,881; May 13.
Bishop, Joseph T., and R. W. Christy, Toledo, Ohio. Cranking device. 1,758,138; May 13.
Bjorklund, Arvid, Minneapolis, Minn. Lathe. 1,758,023; May 13.
Black, Lee J., Beaumont, Tex. Locking device for drive bushings. 1,758,426; May 13.
Blackmore, Benjamin, Akron, Ohio. Radiator. 1,758,684; May 13.
Blackmore, Lloyd, Highland Park, Mich., assignor, by mesne assignments, to Bendix Brake Company, Chicago, Ill. Booster brake. 1,758,139; May 13.
Blaga, Marcel, Vireux-Molhain, France. Ingot mold. 1,758,823; May 13.
Blake, George E., assignor to Forsyth Metal Goods Company Inc., East Aurora, N. Y. Automobile heater. 1,758,214; May 13.

Blasdell, John L., and C. H. Derringer, Ventura, Calif. Combined lamp and smoking stand. Des. 81,125; May 13.
Bleustein, Benjamin, New York, N. Y. Bathtub. 1,758,071; May 13.
Blevins, Thomas B. (See Pittam, G. R., Blevins, and Brandt.)
Block, Leslie W., Webster Groves, Mo. Holder for casement windows, doors, or the like. 1,758,309; May 13.
Blomquist, Jean K., Berkeley, Calif. Hot-water bottle. 1,758,024; May 13.
Bolin, Carleton H., Seattle, Wash., assignor to American Telephone and Telegraph Company. Pole planer. 1,758,025; May 13.
Bollweg, Bernhard. (See Kramer, E., Toth, and Bollweg.)
Bonnington, Alexander, assignor to Alton Barium Products Company, Alton, Ill. Manufacturing bricks. 1,758,026; May 13.
Boreau, Gabriel. (See Aubry, E., and Boreau.)
Bossini, Raoul F. (See Anderson, A. E., Maiuri, and Bossini.)
Bossini, Raoul F., and G. Maiuri, London, England. Continuous absorption refrigerating apparatus. 1,758,215; May 13.
Bosworth, Frederic M., Lakewood, assignor to The Midland Steel Products Company, Cleveland, Ohio. Brake control. 1,758,027; May 13.
Boyd, Charles A., assignor to The Oil Conservation Engineering Company, Cleveland, Ohio. Condenser construction. 1,758,495; May 13.
Boyd, Martin, Toronto, Ontario, assignor to E. Schluecke and P. Zink, Toronto, Canada. Vise stand. 1,758,140; May 13.
Boye, James H., Manufacturing Company. (See Boye, James H., assignor.)
Boye, James H., assignor to James H. Boye Manufacturing Company, Chicago, Ill. Curtain ring. 1,758,685; May 13.
Boynton, Arthur J., assignor to H. A. Brassert, Inc., Chicago, Ill. Handling sinter. 1,758,496; May 13.
Brackett, Edward M. and F. M., Topeka, Kans. Belt guide. 1,758,246; May 13.
Brackett, Fred M. (See Brackett, Edward M. and F. M.)
Bradbury, Burke, Schenectady, N. Y., assignor to General Electric Company. High-frequency amplifier circuits. 1,758,779; May 13.
Bradley, Leslie C., assignor to W. & T. Avery Limited, Soho Foundry, Birmingham, England. Coin-freed weighing apparatus. 1,758,141; May 13.
Brandt, Purl F. (See Pittam, G. R., Blevins, and Brandt.)
Brassert, H. A., Inc. (See Boynton, Arthur J., assignor.)
Braun, William F. H., Philadelphia, Pa. Lawn mower. 1,758,497; May 13.
Breese, James L., jr., assignor to Oil Devices Corporation, Chicago, Ill. Thermostat. 1,757,951; May 13.
Brenner, Charles L. (See Bettex, W. L., and Brenner.)
Brewer, John W., Magna, Utah. Rail joint. 1,758,072; May 13.
Brey, Harold E., assignor to Koehring Company, Milwaukee, Wis. Traction driving mechanism. 1,758,216; May 13.
Breyer, Archibald C., Burlingame, Calif. Automobile tire-rim lug. 1,758,310; May 13.
Briggs Manufacturing Company. (See Hoskyns, William J., assignor.)
Brogden, Joah, Melrose Park, assignor to David Lupton's Sons Company, Philadelphia, Pa. Hinge. 1,758,905; May 13.
Bromm, William F., Chicago, Ill. Making stone-planer tools. 1,758,780; May 13.
Brooker, William H., Bismark, N. Dak. Hat ventilator. 1,758,142; May 13.
Brown, Alexander P., Long Island City, N. Y., assignor to Queens Typewriter & Stationery Corp. Fastener for typewriters. 1,758,646; May 13.
Brown, Edward C. (See Rindge, Fulton, assignor.)
Brown, George, New York, N. Y., assignor to Craig and Brown Inc. Corrugated structure. 1,758,311; May 13.
Brown, George H. (See McFalls, F. M., and Brown.)
Brown, Harry C., et al. (See Brown, Jacob S., assignor.)
Brown, Jack E., Brooklyn, N. Y. Ice-cream dispenser. 1,758,028; May 13.
Brown, Jacob S., assignor of one-half to H. C. Brown and one-half to E. A. Wiley, Compton, Calif. Rotary-disk underreamer. 1,758,187; May 13.
Brown-Lipe Gear Company. (See Fawick, Thomas L., assignor.)
Brown Lynch Scott Co. (See Flatley, J. H., and Hoy, assignors.)
Bruce, Peter M., Lochhill, Auldgirth, Scotland. Flying machine. 1,758,556; May 13.
Bruninghaus & Co. (See Kohler, Wilhelm, assignor.)
Bryant Electric Company, The. (See Hogan, Jay J., assignor.)
Buckeye Steel Castings Company, The. (See Bush, Samuel P., assignor.)
Buckeye Steel Castings Company, The. (See Orr, Claude L., assignor.)
Buffalo-Springfield Roller Co., The. (See Aitken, Andrew W., assignor.)
Bullington Engine Heads. (See Bullington, Frank A., assignor.)
Bullington, Frank A., assignor to Bullington Engine Heads, Kansas City, Mo. Combustion-pressure-distributing means for internal-combustion engines. 1,758,686; May 13.
Bullock, Fred J., assignor to Papec Machine Company, Shortsville, N. Y. Feeding device for ensilage cutters and the like. 1,758,557; May 13.
Burdett, Horace H., assignor to Draper Corporation, Hopedale, Mass. Intermittent thread-cutting temple 1,758,882; May 13.
Burgard, Louise C., Louisville, Ky. Dental casting machine. 1,757,991; May 13.
Burger, Erasmus J., and A. H. Carey, Napa, Calif. Pressure-applying tool. 1,758,781; May 13.
Burger, William J., Shaker Heights, assignor to The Warner & Swasey Company, Cleveland, Ohio. Indicating device. 1,758,427; May 13.
Burgoyne, William J. (See Cordy, H. J., and Burgoyne.)
Burn, John F., Westminster, London, and J. Lancaster, Leamington Spa; said Lancaster assignor to Winget Limited, Winget House Grosvenor Gardens, Westminster, London, S. W. 1, England. Mixing machine. 1,758,732; May 13.
Burnelli, Vincent J., Lincoln, Nebr.; assignor to R. B. Patent Corporation, New York, N. Y. Airplane. 1,758,498; May 13.
Burney, Charles D., B. N. Wallis, and J. E. Temple, Westminster, London, assignors to Airship Guarantee Company, Limited, Westminster, England. Rigid airship. 1,758,143; May 13.
Burrell, Edward P., Shaker Heights, and N. C. Hunt, Salem, assignors to The Rotor Air Tool Company, Cleveland, Ohio. Surfacing unit. 1,758,647; May 13.
Bush, Samuel P., assignor to The Buckeye Steel Castings Company, Columbus, Ohio. Car truck. 1,758,350; May 13.
Bushnell, James E., North Plainfield, assignor to Ransome Concrete Machinery Company, Plainfield, N. J. Erecting masts. 1,758,389; May 13.
Butcher, John H. (See Young, A. P., and Butcher.)
Butenkoff, George S., Detroit, Mich. Torsional vibration eliminator. 1,758,274; May 13.
Calco Chemical Company, The. (See Sleeper, Robert R., assignor.)
Caldwell, Johnston E. (See Schubert, J. L., and Caldwell.)
Calkins, Ernest, and A. Nielsen, Brighton, Colo. Cultivator tool. 1,758,217; May 13.
Cameron, Hugh M., Woodhaven, N. Y., assignor to John Chatillon & Sons, New York, N. Y. Counting device for scales. 1,758,648; May 13.
Camerota, Louis A., Burlington, N. J., assignor to W. Wood, Philadelphia, Pa. Apparatus for freeing and extracting castings from molds. 1,758,883; May 13.
Campbell, Charles L., assignor to E. B. Badger & Sons Company, Boston, Mass. Chlorination. 1,758,351; May 13.
Campbell, Leon J., Buchanan, Mich. Power take-off unit for tractors. 1,758,352; May 13.
Campbell, Milton C., Chicago, Ill. Machine for cutting unbreakable watch crystals. 1,757,952; May 13.
Campbell, Robert G., New York Mills, N. Y. Card. 1,758,428; May 13.
Campbell, Thomas P., et al., trustees. (See Sherrick, Samuel T., assignor.)
Candee, Allan H., assignor to Gleason Works, Rochester, N. Y. Apparatus for relieving hobs. 1,758,102; May 13.
Candee, Allan H., E. C. Head, and L. D. Nadel, assignors to Gleason Works, Rochester, N. Y. Apparatus for gashing and sharpening hobs. 1,758,103; May 13.
Carey, Asa H. (See Burger, E. J., and Carey.)
Carichoff, Eugene R., Schenectady, N. Y., assignor to General Electric Company. Electromagnet. 1,758,782; May 13.
Carlson, Carl B., Los Angeles, Calif. Electrical connecter. 1,758,218; May 13.
Carr Chain Works, Inc. (See Woodhouse, John S., assignor.)
Carr, Fred S., Newton, Mass., assignor, by mesne assignments, to United-Carr Fastener Corporation, Cambridge, Mass. Fastener. 1,758,884; May 13.
Carr, Moses F., Lexington, assignor, by mesne assignments, to United-Carr Fastener Corporation, Cambridge, Mass. Separable snap-fastener element. 1,758,906; May 13.
Carr, Moses F., Lexington, assignor, by mesne assignments, to United-Carr Fastener Corporation, Cambridge, Mass. Separable snap-fastener element. 1,758,907; May 13.
Carr, Moses F., Lexington, assignor to United-Carr Fastener Corporation, Cambridge, Mass. Separable fastener. 1,758,908; May 13.
Carroll, Emil J., assignor to The American Laundry Machinery Company, Norwood, Ohio. Laundry machinery. 1,758,594; May 13.
Caselman, Everett E., Kansas City, Kans. Combination bag and parcel rack and dolly. 1,758,144; May 13.
Cattaneo, Giuseppe, Hilversum, Netherlands, assignor to Allgemeine Gesellschaft fur Chemische Industrie m. b. H., Berlin-Schoneberg, Germany. Recovery of sulphur dioxide from oils containing same. 1,758,595; May 13.
Cave, Fred C., Des Moines, Iowa. Tire structure. 1,758,353; May 13.
Cayo, Julius N., Buchanan, Mich. Drill-press vise. 1,758,733; May 13.

Ceramic Machinery Company, The. (See Yingling, Frank B., assignor.)
Champion Folding Furniture Company. (See Harter, Noah S., assignor.)
Chapin, G. Edwin, et al., executors. (See Chapin, Howard G.)
Chapin, Howard G., deceased, Boston; G. E. Chapin and J. C. Bassett, executors, assignors to Universal Safety Tread Inc., Lowell, Mass. Safety tread. 1,757,992; May 13.
Chapin, R. E., M'f'g Works, The. (See Mayled, Herbert, assignor.)
Chapman, William H., Montclair, N. J., assignor to General Motors Corporation, Detroit, Mich. Grinding machine. 1,758,649; May 13.
Chase Foundry and Manufacturing Company. (See Chase, Sherwood M., assignor.)
Chase, Sherwood M., assignor to The Chase Foundry and Manufacturing Company, Columbus, Ohio. Truck. 1,757,953; May 13.
Chatillon, John, & Sons. (See Cameron, Hugh M., assignor.)
Chicago Pneumatic Tool Company. (See Davenport, Ransom W., assignor.)
Chorlton, Alan E. L., London, England. Governor-pump aggregate. 1,758,687; May 18.
Christensen, Christen, assignor to Electrical Engineers Equipment Co., Chicago, Ill. Switch-locking mechanism. 1,758,499; May 13.
Christmas, William W., Ridgefield Park, N. J., assignor of one-third to C. C. Hines, Washington, D. C. Casein containing plastic composition. 1,758,500; May 13.
Christy, Reynold W. (See Bishop, J. T., and Christy.)
Chrysler Corporation. (See Henderson, Herbert V., assignor.)
Cirelli, Francesco, Philadelphia, Pa. Transmitter. 1,758,650; May 13.
Clapp, Albert L., Danvers, Mass. Utilizing spent lime cooking liquors in the manufacture of paper. 1,758,247; May 13.
Clark, Emery E., Topeka, Kans. Rotary riding mechanism. 1,758,558; May 13.
Clark, Frederick W., Vaucluse, near Sydney, New South Wales, Australia. Car-suspension-spring damper. 1,758,596; May 13.
Clark, Milton T., and J. R. Montgomery, assignors to Truscon Steel Company, Youngstown, Ohio. Window frame. 1,758,885; May 13.
Clarke, Bruce E., Kansas City, Mo., and A. Danciger, Tulsa, Okla. Capping and sediment-retaining device for bottled beverages. 1,758,219; May 13.
Claud-Mantle, Arthur. (See Moore, R. G., and Claud-Mantle.)
Clayton, W. Luther, et al. (See Birdsong, John W., assignor.)
Cleaveland, Earl C., et al. (See Tune, Thomas P., assignor.)
Cleveland Planer Company, The. (See Jenne, Jacob, assignor.)
Cleveland Trust Company, The, trustee. (See Jehle, F., and Jardine, assignors.)
Clutterbuck, William H., Salford, England. Preventing the settling out of paste dyestuffs. 1,758,145; May 13.
Coal and Oil Products Corporation. (See Schwarz, Alfred, assignor.)
Cochran, Albert W., and H. W. Dewey, Portland, Oreg. Treating dry stereotype matrices. 1,758,248; May 13.
Coe, James R., Waterbury, assignor to The American Brass Company, New Haven, Conn. Trunnion for barrels or other articles. 1,758,824; May 13.
Coffey, Barton H., Elizabeth, N. J. Refrigeration. 1,758,501; May 13.
Coffield, James L., Dayton, Ohio. Washing machine. 1,758,354; May 13.
Coffin, Herbert B., Roselle Park, N. J., assignor to Standard Oil Development Company. Tube closure or header. 1,758,909; May 13.
Cogito, Joseph, and B. Ingrassia, Cleveland, Ohio. Shiplap joint. 1,758,886; May 13.
Cole, Orange R., Los Gatos, and M. T. Garlinger, San Francisco, Calif., assignors to American Telephone and Telegraph Company. Pole planer. 1,758,029; May 13.
Columbian Rope Company. (See Dodge, Milo C., assignor.)
Conger, Kenyon B., jr. (See Sersen, F. J., and Conger.)
Conover, John R., Upper Darby, assignor to The Laboratory of Research Chemotherapy, Philadelphia, Pa. Chemical emulsion. 1,758,651; May 13.
Conrad, Edward, Toppenish, Wash. Sweeping compound. 1,758,735; May 13.
Continental-Diamond Company. (See Tarr, Lester W., assignor.)
Cordy, Henry J., and W. J. Burgoyne, Sulphide, Ontario, Canada, assignors to General Chemical Company, New York, N. Y. Roasting fines. 1,758,188; May 13.
Cornstalk Products Company. (See Dorner, Béla, assignor.)
Cory, Marcus M., San Diego, Calif. Internal-combustion engine. 1,758,429; May 13.
Cottrell, William F., and J. McAuliffe, Denver, Colo. Airplane wing. 1,758,355; May 13.
Couratin, Julien, Par Clion, France. Spring suspension for cycle and motor-cycle saddles. 1,758,736; May 13.
Cowley, James A., Springfield, Mass., assignor to B. F. Perkins & Son, Inc., Holyoke, Mass. Testing machine. 1,758,688; May 13.
Cox, Clarion G. (See Jarvis, Henry M., assignor.)
Cox, Paul F., assignor to The Goss Printing Press Company, Chicago, Ill. Smut remover for traveling-cylinder web-printing presses. 1,758,430; May 13.
Craig and Brown Inc. (See Brown, George, assignor.)
Crain, Harrison U., St. Louis, Mo. Closetable folding bed. 1,758,275; May 13.
Cramer, Albert M., assignor to Horn and Hardart Baking Company, Philadelphia, Pa. Coin mechanism for coin-controlling vending machines. 1,758,652; May 13.
Cramer, Raymond H., Newark, N. J., assignor to General Motors Corporation, Detroit, Mich. Machine for assembling bearings. 1,758,653; May 13.
Crane Co. (See Zinkil, Roy H., assignor.)
Crannell, Charles W., assignor of one-third to A. C. Barnes, Big Springs, and one-third to A. A. Wolf, Chappell, Nebr. Rack for trucks or wagons. 1,758,431; May 13.
Cricchio, Paul, assignor to Wrought Iron & Art Glass Fixture Co., Inc., New York, N. Y. Table lamp or article of similar nature. Des. 81,126; May 13.
Croll, William F., London, England. Sound recording and reproducing apparatus. 1,758,559; May 13.
Cross Coal-O-Matic Company. (See Cross, Walter M., assignor.)
Cross, Walter M., assignor to Cross Coal-O-Matic Company, Kansas City, Mo. Domestic heating system. 1,758,140; May 13.
Cross, Walter M., assignor to Cross Coal-O-Matic Company, Kansas City, Mo. Heating-system control. 1,758,147; May 13.
Crosser, David H., assignor of one-half to H. A. Dormeyer, Chicago, Ill. Pincushion. 1,758,737; May 13.
Crow, James T., Arkadelphia, Ark. Vending machine. 1,758,432; May 13.
Crowell, Charles H., Fairville, Pa. Making fiber-filled woven product. 1,758,502; May 13.
Cryer, I. F. (See Birchfield, Roy R., assignor.)
Cuddihy, Edward, Tooele, Utah. Lubricating device. 1,757,954; May 13.
Culp, William E., Monon, Ind. Jar and cap holder. 1,758,276; May 13.
Cunningham, George E. (See Sherling, E. L., and Cunningham.)
Curle, George L., assignor to The Monomelt Company, Minneapolis, Minn. Portable scoop rack. 1,758,148; May 13.
Currie, Gail G., assignor of one-half to E. R. Just, Los Angeles, Calif. Aircraft propeller. 1,758,560; May 13.
Currivan, John F., Milton, Mass. Window-curtain control. 1,758,220; May 13.
Curtis, Charles H., Wheatridge, Colo. Vending machine. 1,758,390; May 13.
Cutler-Hammer, Inc. (See Kuhn, Clarence W., assignor.)
Cutler-Hammer, Inc. (See Wiegand, Henry J., assignor.)
Daimler-Benz Aktiengesellschaft. (See Porsche, Ferdinand, assignor.)
Daimler, Karl, and G. Balle, Hochst-on-the-Main, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Substituted arylsulphonic acids and making same. 1,758,277; May 13.
Daimer, Karl, and G. Balle, Hochst-on-the-Main, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Preparing nuclear-substituted arylsulphonic acids. 1,758,356; May 13.
Danciger, Abraham. (See Clarke, B. E., and Danciger.)
Danker, Gerhard, Oradell, N. J., assignor to Grandoller Lighting Fixture Co., New York, N. Y. Lighting-fixture base or article of similar nature. Des. 81,127; May 13.
Darlington, John B., Bellefonte, Pa. Headlight. 1,758,825; May 13.
Dautrick, Owen L., Detroit, Mich. Overhead swingable door for garages and the like. 1,757,955; May 13.
Davenport, Ransom W., Detroit, Mich., assignor to Chicago Pneumatic Tool Company, New York, N. Y. Refrigerating and ice-making cabinets. 1,758,073; May 13.
Davenport, Ransom W., Detroit, Mich., assignor to Chicago Pneumatic Tool Company, New York, N. Y. Heat-transforming apparatus. 1,758,074; May 13.
Davies, Arthur S., Cleveland, Ohio. Protector for curtains. 1,758,249; May 13.
Davies, Leonard G., Weidstone, England. Capsuling apparatus. 1,758,433; May 13.
Davis, Augustine, jr. (See Betts, A. L., and Shield, assignor.)
Davis, Ernest W., Oak Park, assignor to Alemite Corporation, Chicago, Ill. Lubricating system. 1,758,250; May 13.
Davis, Ernest W., Oak Park, assignor to Alemite Corporation, Chicago, Ill. Lubricating system. 1,758,251; May 13.
Day, Fred A., assignor to The Day Wood Heel Company, Cincinnati, Ohio. Heel-breasting machine. 1,758,030; May 13.
Day Wood Heel Company, The. (See Day, Fred A., assignor.)
Debrie, André L. V. C., Paris, France. Transportable apparatus for projecting moving pictures. 1,758,783; May 13.
De Castro, Adolphe D., New York, N. Y. Incandescent lamp. 1,758,434; May 13.
De Christo, Francisco I., deceased, Horta, Fayal, Azores Islands, Portugal, by de Christo Rodrigues, administratrix, Oakland, Calif. Flying machine. 1,758,031; May 13.

D Iano Land Company. (See Goodwin, Norris, assignor.)
Delaux, Paul, assignor to Société Anonyme: Société des Phares et Equipments Electriques, Fontenay-sous-Bois, France. Headlight for motor or like vehicles. 1,758,561; May 13.
DeLaval Separator Company, The. (See Jansson, Ernst T., assignor.)
Delco-Light Company. (See Lee, Ralph L., assignor.)
Dellert, Louis, Brooklyn, N. Y. Nested chair. 1,758,826; May 13.
Del Riccio, Lorenzo, New York, N. Y., assignor to Paramount Famous Lasky Corporation, Los Angeles, Calif. Heat-protection means for motion-picture projectors. 1,758,689; May 13.
Delta Star Electric Company, The. (See Van Ryan, T., and Alsaker, assignors.)
Deltox Rug Company. (See Steiger, Carl E., assignor.)
Demnitz, Albert, Dresden, Germany. Sole-setting machine. 1,758,784; May 13.
Denoyer-Geppert Company. (See Meyer, R. M., and Denoyer, assignors.)
Denoyer, Levinus P. (See Meyer, R. M., and Denoyer.)
De Right, Elon J., St. Louis, Mo. Electrical line apparatus. 1,758,312; May 13.
Derringer, Coburn H. (See Blasdell, John L., assignor.)
De Vilbiss Company, The. (See Mueller, Godfrey A., assignor.)
De Vry, Herman A., assignor to Q. R. S.-De Vry Corporation, Chicago, Ill. Motion-picture camera. 1,758,221; May 13.
Dewey, Henry W. (See Cochran, A. W., and Dewey.)
De Witt, William J., Auburn, assignor to Shoe Form Co. Inc., Auburn, N. Y. Shoe form. 1,758,278; May 13.
Dexter, Elliott, New York, N. Y. Fastener for roller window shades. 1,758,690; May 13.
Dickehage, Henry, West Allis, Wis. Potato digger. 1,758,562; May 13.
Dickman, John T., Los Angeles, Calif. Spring trap for throwing disk targets. 1,758,032; May 13.
Diehl, Harry L. (See Matthews, Guy L., assignor.)
Dietzgen, Eugene, Company. (See Allin, Richard F., assignor.)
Dietzgen, Eugene, Company. (See Langsner, Adolph, assignor.)
Dilworth, Timothy J., Boston, Mass. Body drag. 1,758,149; May 13.
Distler, Otto, and E. Klein, New York, N. Y. Locking button. 1,758,503; May 13.
Dodge Manufacturing Corporation. (See Gilderman, George W., assignor.)
Dodge Manufacturing Corporation. (See Strong, Arthur P., assignor.)
Dodge, Milo C., assignor to Columbian Rope Company, Auburn, N. Y. Tape and making same. 1,758,033; May 13.
Dodge, William L., Dover, N. H. Curtain-operating means. 1,758,034; May 13.
Doherty Research Company. (See Fisher, J. P., Greenfield, and Hutchinson, assignors.)
Dolliens, Gaston, Paris, assignor to Etablissements Ch. Pierson & A. Poyet, Clichy, Seine, France. Hermetic slip-type closure for metallic boxes. 1,758,691; May 13.
Donner, William H., Buffalo, N. Y. Die-rolling process and apparatus. 1,758,563; May 13.
Dormeyer, Albert F., Chicago, Ill. Muffler. 1,758,654; May 13.
Dormeyer, Henry A. (See Crosser, David H., assignor.)
Dorn, Harry P., Cleveland, assignor to R. S. Gehr, Shaker Heights, Ohio. Electric phonograph motor. 1,758,189; May 13.
Dorn, Harry P., Cleveland, assignor to R. S. Gehr, Shaker Heights, Ohio. Electric phonograph motor. 1,758,190; May 13.
Dorn, Harry P., Cleveland, assignor to R. S. Gehr, Shaker Heights, Ohio. Electric phonograph motor. 1,758,191; May 13.
Dorner, Béla, Budapest, Hungary, assignor, by mesne assignments, to Cornstalk Products Company. Producing cellulosic material. 1,758,655; May 13.
Draper, Clare H., assignor to Draper Corporation, Hopedale, Mass. Let-off mechanism for looms. 1,758,738; May 13.
Draper Corporation. (See Burdett, Horace H., assignor.)
Draper Corporation. (See Draper, Clare H., assignor.)
Dresner, S., & Son, Inc. (See Plotkin, Oscar H., assignor.)
Dublin, Edward B. (See Girardi, Frank, assignor.)
Duckham, Arthur McD., assignor to Woodall-Duckham (1920) Limited, London, England. Tunnel kiln. 1,758,785; May 13.
Dudley, Colon J., Hamburg, N. Y., assignor to J. S. Rice, Biglerville, Pa. Basket-lining device. 1,758,827; May 13.
Dunbar, Frank H., Cleveland, Ohio, assignor, by mesne assignments, to The Allen-Sherman-Hoff Company, Philadelphia, Pa. Ash-gate hopper. 1,758,435; May 13.
Duncan, William M., Alton, Ill. Mechanical stoker. 1,758,075; May 13.
Dunford, Ernest, assignor to Landis Machine Company, St. Louis, Mo. Gauge for shoe-stapler machines or the like. 1,758,279; May 13.
Dunham, George W., assignor to Whirldry Corporation, Utica, N. Y. Pump-impeller mounting for laundry machines. 1,758,391; May 13.
Dunham, Orson W., Webb City, Mo., assignor to Wertzberger Derrick Company. Bearing and shaft assembly. 1,758,357; May 13.
Duo-Tor Manufacturing Company, The. (See Epstein, William C., assignor.)
Durkee, Ernest W., Lynn, Mass. Boot or shoe. 1,757,993; May 13.
E. M. S. Industrial Processes Limited. (See Salerni, Edoardo M., assignor.)
Eagles, George A., Chesham, England. Airship. 1,758,076; May 13.
Eckert, Wilhelm, Frankfort-on-the-Main-Hochst, and W. Kirst, Frankfort-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Azo dyestuffs and material dyed therewith. 1,758,313; May 13.
Eclipse Machine Company. (See Lansing, Raymond P., assignor.)
Eclipse Machine Company. (See McGrath, William L., assignor.)
Eclipse Machine Company. (See Richards, Julius H., assignor.)
Eclipse Machine Company. (See Van Ness, Henry E., assignor.)
Edmiston, Hugh C. (See Parkinson, George L., assignor.)
Edwards, W. H. L., et al. (See Grover, George E., assignor.)
Egerer, August, Great Neck, assignor to S. Augstein & Co., New York, N. Y. Sweater or article of similar nature. Des. 81,128; May 13.
Ehrenreich, Alfred, London, England. Leather and process for obtaining same. 1,758,564; May 13.
Eichwede, Heinz. (See Wagner, H., Eichwede, and Fischer.)
Eisel, Ralph C., assignor to Pittsburgh Garter Company, Pittsburgh, Pa. Man's garter. 1,758,392; May 13.
Ekelund, Sven C. G., Karskrona, Sweden. Process of and furnace for extracting metals from ores. 1,758,786; May 13.
Electric Service Supplies Company. (See Osborne, David H., assignor.)
Electrical Engineers Equipment Co. (See Christensen, Christen, assignor.)
Electro Metallurgical Company. (See Read, William C., assignor.)
Elliott, William S., Pittsburgh, Pa. Twin strainer. 1,758,565; May 13.
Elliott, William S., Pittsburgh, Pa. Method and apparatus for deaerating and evaporating liquid. 1,758,566; May 13.
Elston, William H., Marietta, Ohio. Metal nailing strip. 1,758,150; May 13.
Ely, Hiram B., Philadelphia, Pa. Sound-locating apparatus. 1,758,393; May 13.
Emmerich, Louis C., New York, N. Y. Mold for vulcanizing flanges on pipe ends. 1,757,994; May 13.
Emrick, George W., assignor, by mesne assignments, to Ettco Tool Co. Inc., Brooklyn, N. Y. Tapping attachment. 1,758,656; May 13.
Emsco Derrick & Equipment Company. (See Goeser, Edwin W., assignor.)
Engels, Eugene O. (See Thurm, R., and Engels.)
England, Alexander, Wilkinsburg, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Gear construction. 1,758,692; May 13.
English, Frank, Detroit, Mich. Flexible-handled tool. 1,758,504; May 13.
Ennis, Henry E., Thayer, W. Va. Safety blasting-powder stick. 1,758,358; May 13.
Epstein, William C., assignor to The Duo-Tor Manufacturing Company, Dayton, Ohio. Combined water heater and incinerator. 1,758,505; May 13.
Ernst, Charles K., Buffalo, N. Y. Time-switch mechanism. 1,758,222; May 13.
Escher, Arnold, Raleigh, N. C. Thermostat. 1,758,787; May 13.
Etablissements Ch. Pierson & A. Poyet. (See Dolliens, Gaston, assignor.)
Ettco Tool Co. Inc. (See Emrick, George W., assignor.)
Evans, David T., Toronto, Ontario, Canada. Roller for traveling conveyers. 1,758,280; May 13.
Evans, Earle W., Linden, N. J., assignor to Standard Oil Development Company. Apparatus for supplying anti-knock liquids. 1,758,897; May 13.
Evans, Harry L. (See Olson, C. P., and Evans.)
Evans, Ray C., North River, Va. Antiskid tire chain. 1,758,739; May 13.
Fabbro, Antonio, Tampa, Fla. Bench or similar article. Des. 81,129; May 13.
Fahr, Emil, Detroit, Mich. Artist's kit. 1,758,223; May 13.
Fairchild, Frederick P., White Plains, N. Y., assignor to The Allen Sherman Hoff Company. Self-cooling furnace bottom. 1,758,394; May 13.
Falconer, Allen. (See Wilkins, Thomas M., assignor.)
Fanner Manufacturing Company, The. (See Schane, Edward H., assignor.)
Fantle, Willard E. (See Rentz, F. B., and Fantle.)
Farnsworth, Philo T., Berkeley, assignor, by mesne assignments, to Television Laboratories, Inc., San Francisco, Calif. Electric oscillator system. 1,758,359; May 13.

Fawick, Thomas L., Racine, Wis., assignor to Brown-Lipe Gear Company, Syracuse, N. Y. Transmission. 1,757,995; May 13.
Federal Telegraph Company. (See Gauthier, Crosby R., assignor.)
Feldmühle Papier-und Zellstoffwerke Aktiengesellschaft. (See Bethmann, G., and Muthig, assignors.)
Fensky, Charles, and H. J. Rendey, deceased, St. Louis, Mo.; A. K. Rendey administratrix. Automatic spacer. 1,758,657; May 13.
Fentress, James, Chicago, Ill. Liquid-tank-level gauge. 1,758,077; May 13.
Fernandez, Frank C., Tucson, Ariz. Method and apparatus for making frozen confections. 1,758,567; May 13.
Finley, Alden E., Groton, Conn. Combined container and testing base for electrical instruments. 1,758,568; May 13.
Fischer, Erich. (See Wagner, H., Eichwede, and Fischer.)
Fisher, David, assignor to Paden City Glass Manufacturing Company, Paden City, W. Va. Compartment tray. Des. 81,130; May 13.
Fisher, James P., Bartlesville, Okla., B. Greenfield, Jackson Heights, N. Y., and N. M. Hutchinson, Oil Hill, Kans., assignors to Doherty Research Company, New York, N. Y. Gas-burning device. 1,758,790; May 13.
Fisher, James P., B. Greenfield, and N. M. Hutchinson, Bartlesville, Okla., assignors to Doherty Research Company, New York, N. Y. Combined burner and regulator unit. 1,758,828; May 13.
Fisher, Lee F., St. Louis, Mo. Heater. 1,758,658; May 13.
Fitzgerald, Fred, Lawrence, Mass. Numbering-machine attachment. 1,758,436; May 13.
Flatley, John H., Little York, and F. C. Hoy, Monmouth, assignors to Brown Lynch Scott Co., Monmouth, Ill. Wheeled barrow-frame adjustment. 1,757,956; May 13.
Fleischer, Charles, assignor to R. O. Kussat, Brooklyn, N. Y. Lock-releasing game apparatus. 1,757,957; May 13.
Fletcher, Abbott L., et al. (See Kean, Gilbert P., assignor.)
Florence Stove Company. (See Ruttiman, Alfred, assignor.)
Flury, Richard, assignor to Gemmer Manufacturing Company, Detroit, Mich. Bushing. 1,758,659; May 13.
Folker, Howard S., Mill Valley, Calif., assignor, by mesne assignments, to National Safety Appliance Company, Reno, Nev. Magnet. 1,758,104; May 13.
Folkerts, Henry, and C. L. Yost, Bristow, Iowa. Combined water-circulating pump and throttle control. 1,758,569; May 13.
Ford, Bruce, Philadelphia, Pa. Storage battery. 1,758,506; May 13.
Ford, Henry, assignor to Ford Motor Company, Dearborn, Mich. Transmission. 1,758,597; May 13.
Ford Motor Company. (See Ford, Henry, assignor.)
Forsyth Metal Goods Company Inc. (See Blake, George E., assignor.)
Fort Pitt Bedding Company. (See Wolf, Harry E., assignor.)
Foster, Frank A., assignor, by mesne assignments, to Sprage-Sells Corporation, Hoopeston, Ill. Machine for filling cans. 1,758,507; May 13.
Foster, Frank A., assignor, by mesne assignments, to Sprague-Sells Corporation, Hoopeston, Ill. Can-filling machine. 1,758,508; May 13.
Foster, Walter W., Wichita Falls, Tex. Road tamping and maintenance machine. 1,758,281; May 13.
Foster Wheeler Corporation. (See Primrose, John, assignor.)
Fox, Emiel R., Oakwood, N. Y. Lock. 1,758,395; May 13.
Fox, Julius S., Cleveland, Ohio. Aeroplane-wing structure. 1,758,360; May 13.
France, Antoine, Liege, Belgium. Process of and apparatus for washing coal and other minerals. 1,758,035; May 13.
France, Edward E., Greeley, Colo. Arm rest for motor vehicles. 1,758,693; May 13.
Frank, Alexander H., Columbia, Pa. Attachment for gas water heaters. 1,758,788; May 13.
Franklin Simon & Company. (See Long, Dorothy, assignor.)
French, Louis O., Milwaukee, Wis. Electromagnetic valve. 1,758,105; May 13.
French, Steve. (See Gilmore, F. M., and French.)
Fried. Krupp Aktiengesellschaft. (See Becker, J., Just, and Hort, assignors.)
Frier, James H., jr., Webster Groves, assignor to J. L. Mesker, St. Louis, Mo. Toy house. 1,758,314; May 13.
Frigidaire Corporation. (See Keighley, Lloyd M., assignor.)
Frigidaire Corporation. (See King, Jesse G., assignor.)
Frister, Fritz. (See Kalischer, G., Salkowski, and Frister.)
Frizell, De Ralph, Watson, assignor, by mesne assignments, to Richfield Oil Company of California, Los Angeles, Calif. Product for treating drill-stem joints. 1,758,598; May 13.
Frost, John A., Carthage, N. Y., assignor to National Paper Products Company, San Francisco, Calif. Lock for paper containers. 1,758,361; May 13.
Fullerton, Ernest M., Stoughton, Mass. Last for attaching wood heels. 1,757,996; May 13.
G. C. A. Manufacturing Company, The. (See Grinnell, Harold D., assignor.)
Galley, Florence L., and J. K., Eagle Rock, Calif. Merchandising booth. Des. 81,131; May 13.
Galley, John K. (See Galley, Florence L. and J. K.)
Gale, Mae E., Owosso, Mich. Garment. 1,758,740; May 13.
Gans, Robert S., Detroit, Mich. Mechanism for controlling brakes or the like. 1,758,694; May 13.
Gans, Robert S., Detroit, Mich. Lockable lever-control mechanism. 1,758,695; May 13.
Gardner, Cummings, Inglewood, Calif., assignor to Automatic Transmission Corporation of America, Wilmington, Del. Variable-speed-transmission mechanism. 1,758,252; May 13.
Garlinger, Marshall T. (See Cole, O. R., and Garlinger.)
Garrison, William J., Ridgway, Pa. Screening apparatus. 1,758,509; May 13.
Garvey, James M., New York, N. Y., assignor to The American Laundry Machinery Company, Cincinnati, Ohio. Laundry-marking tag. 1,758,599; May 13.
Gaskill, Earl C., Red Bank, N. J. Making zinc sulphide. 1,758,741; May 13.
Gasmesserfabrik Mainz, Elster & Co. (See Meyer, Georg, assignor.)
Gatch, Joseph D., Wiggins, S. C. Rail chair. 1,758,282; May 13.
Gauthier, Crosby R., Ridgewood, N. J., assignor, by mesne assignments, to Federal Telegraph Company. Electrical communicating system. 1,758,570; May 13.
Gaylord, John F., Flint, Mich. Transmission-declutching mechanism. 1,758,106; May 13.
Gebauer, Oscar E., Scottsbluff, Nebr. Combination wrist compact and mirror. Des. 81,132; May 13.
Gebert, Albert E. (See Richardson, M. H., and Gebert.)
Gehr, Ray S. (See Dorn, Harry P., assignor.)
Gemmer Manufacturing Company. (See Flury, Richard, assignor.)
General Aniline Works, Inc. (See Eckert, W., and Kirst, assignors.)
General Aniline Works, Inc. (See Hentrich, W., and Hardtmann, assignors.)
General Aniline Works, Inc. (See Kalischer, G., Salkowski, and Frister, assignors.)
General Aniline Works, Inc. (See Keller, F., and Schnitzspahn, assignors.)
General Aniline Works, Inc. (See Kramer, E., Zeh, and Bollweg, assignors.)
General Aniline Works, Inc. (See Kunz, M. A., and Köberle, assignors.)
General Aniline Works, Inc. (See Schmidt, R. E., and Stein, assignors.)
General Aniline Works, Inc. (See von Braun, J., and Bayer, assignors.)
General Aniline Works, Inc. (See Wagner, H., Eichwede, and Fischer, assignors.)
General Aniline Works, Inc. (See Wagner, H., Kuchenbecker, and Huss, assignors.)
General Aniline Works, Inc. (See Zerweck, Werner, assignor.)
General Chemical Company. (See Cordy, H. J., and Burgoyne, assignors.)
General Electric Company. (See Abbott, Charles C., assignor.)
General Electric Company. (See Andrews, Paul D., assignor.)
General Electric Company. (See Barton, Frederick C., assignor.)
General Electric Company. (See Biermanns, Josef, assignor.)
General Electric Company. (See Bradbury, Burke, assignor.)
General Electric Company. (See Carichoff, Eugene R., assignor.)
General Electric Company. (See Heisler, Charles L., assignor.)
General Electric Company. (See Hendry, Johnson F., assignor.)
General Electric Company. (See Hoxie, Charles A., assignor.)
General Electric Company. (See Kellogg, Edward W., assignor.)
General Electric Company. (See Pike, Otis W., assignor.)
General Electric Company. (See Young, A. P., and Butcher, assignors.)
General Iron Works Company, The. (See Reuss, Arthur E., assignor.)
General Motors Corporation. (See Chapman, William H., assignor.)
General Motors Corporation. (See Cramer, Raymond H., assignor.)
Gesellschaft für Elektrodenzerstaubung m. b. H. (See Pfanhauser, Wilhelm A. F., assignor.)
Geyer, Harvey D., assignor to The Inland Manufacturing Company, Dayton, Ohio. Rubber spring shackle. 1,758,107; May 13.
Gilbert, A. C., Company. (See Gilbert, Alfred C., assignor.)
Gilbert, Alfred C., Hamden, assignor, by mesne assignments, to A. C. Gilbert Company, New Haven, Conn. Toy building construction. 1,758,887; May 13.
Gilbert, Edward L., Fort Bayard, N. Mex. Internal-combustion engine. 1,758,829; May 13.
Gilderman, George W., assignor to Dodge Manufacturing Corporation, Mishawaka, Ind. Apparatus for making cores. 1,758,888; May 13.

Gilderman, George W., assignor to Dodge Manufacturing Corporation, Mishawaka, Ind. Core. 1,758,889; May 13.
Gilderman, George W., assignor to Dodge Manufacturing Corporation, Mishawaka, Ind. Making cores. 1,758,890; May 13.
Gill Manufacturing Company. (See Smith, Alba J., assignor.)
Gillinder Brothers, Inc. (See Reed, William F., assignor.)
Gillinder, Edgar A., assignor to Gillinder & Sons, Inc., Philadelphia, Pa. Gasoline-service-station globe and support therefor. 1,758,660; May 13.
Gillinder & Sons, Inc. (See Gillinder, Edgar A., assignor.)
Gillingham, Charles A., Lakewood, Ohio, assignor to National Carbon Company, Inc. Electric battery. 1,758,362; May 13.
Gilmore, Fred M., and S. French, Seattle, Wash. Turning lathe. 1,758,283; May 13.
Girardi, Frank, assignor to E. B. Dublin, Chicago, Ill., and himself. Gear-change mechanism for automotive vehicles. 1,758,315; May 13.
Gleason Works. (See Candee, Allan H., assignor.)
Gleason Works. (See Candee, A. H., Head, and Nadel, assignors.)
Gleason Works. (See Head, Ernest C., assignor.)
Glennon, James, sr., Rochester, Minn. Dirigible headlight. 1,758,437; May 13.
Glidden, Alfred A., and T. M. Knowland, Watertown, Mass., assignors, by mesne asignments, to Hood Rubber Company, Inc., Wilmington, Del. Manufacturing molded extension tops and molded boots. 1,758,438; May 13.
Glintenkamp, William P., Bellaire, assignor to May Manufacturing Co. Inc., New York, N. Y. Bridge member for an optical mounting. Des. 81,133; May 13.
Goeser, Edwin W., assignor to Emsco Derrick & Equipment Company, Los Angeles, Calif. Slip construction. 1,758,108; May 13.
Going, George G., Middletown, Conn., assignor to Remington Typewriter Company, Ilion, N. Y. Typewriting machine. 1,758,109; May 13.
Goldkopf, Morris, Brighton Beach, Brooklyn, N. Y. Sleeve form. 1,758,742; May 13.
Goldschmidt, Rudolf, Berlin, Germany. Shaft coupling with power storage. 1,758,439; May 13.
Goldwyn, George I., assignor of one-half to H. Goldwyn, Chicago, Ill. Treating used burlap bags. 1,757,958; May 13.
Goldwyn, Herman. (See Goldwyn, George I., assignor.)
Golinick, Naomi. (See Golinick, Paul A. and N.)
Golinick, Paul A. and N., assignors, by mesne assignments, to Selectograph Company, Chicago, Ill. Stencil sheet and preparing coating therefor. 1,758,789; May 13.
Goodrich, B. F., Company, The. (See Howey, George R., assignor.)
Goodrich, B. F., Company, The. (See Wilson, George F., assignor.)
Goodwin, Edwin B., Denver, Colo. Rotating filter. 1,758,910; May 13.
Goodwin, James R., deceased, by P. E. Goodwin and W. C. Goodwin, administrators, assignors to The Steel Scaffolding Company, Evansville, Ind. Adjustable post bracket. 1,758,440; May 13.
Goodwin, Norris, Los Angeles, Calif., assignor, by mesne assignments, to Delano Land Company. Vulcanizable plastic composition. 1,758,151; May 13.
Goodwin, Norris, Long Beach, Calif., assignor, by mesne assignments, to Delano Land Company. Producing a finely-divided carbon. 1,758,152; May 13.
Goodwin, Percy E., et al., administrators. (See Goodwin, James R.)
Goodwin, Walter C., et al., administrators. (See Goodwin, James R.)
Gordon, Samuel W., Canal Fulton, Ohio. Lathe center. 1,758,717; May 13.
Goss Printing Press Company, The. (See Cox, Paul F., assignor.)
Gould Storage Battery Company. (See Klock, Raymond A., assignor.)
Graham, Ralph A., Kansas City, Mo. Bottle closure. 1,758,696; May 13.
Grand Rapids Brass Company. (See Roedding, Gordon E., assignor.)
Grandolier Lighting Fixture Co. (See Danker, Gerhard, assignor.)
Granger, Paul H., Los Angeles, Calif. Pumping liquid. 1,758,153; May 13.
Grantham, Bessie H., executrix. (See Grantham, Jesse G.)
Grantham, Jesse G., deceased, Jacksonville, Ill.; B. H. Grantham, executrix. Corn-husking peg. 1,758,363; May 13.
Grassi, Serafino, Waterbury, Conn. Chain portière. 1,758,600; May 13.
Gravell, James H., Elkins Park, assignor to American Chemical Paint Company, Ambler, Pa. Foam-producing process and material for acid metal-cleaning baths. 1,757,959; May 13.
Greenfield, Benjamin. (See Fisher, J. P., Greenfield, and Hutchinson.)
Greenlee Bros. & Co. (See Abramson, John H., assignor.)
Greenstreet, Milfred L., St. Louis, Mo. Convertible bench. 1,757,960; May 13.
Greenwald, Harold A., Detroit, Mich. Compressor. 1,757,997; May 13.
Greenwood, Talma T., East Templeton, Mass. Brake. 1,758,253; May 13.
Griffith, Palmer W. (See Barsky, G., and Griffith.)
Grinnell, Harold D., assignor to The G. C. A. Manufacturing Company, Pittsfield, Mas. Device for placing and removing lamp bulbs. 1,758,078; May 13.
Grob, Hugo, Berlin, Germany. Carbon resistance. 1,757,961; May 13.
Groehn, Otto J., Grosse Pointe Park, assignor to Hudson Motor Car Company, Detroit, Mich. Automobile body. 1,758,396; May 13.
Grønning, Alfred, Hellerup, near Copenhagen, Denmark. Filter for liquids. 1,758,284; May 13.
Gross, Ralph A., assignor to Simplex Paper Box Co., Lititz, Pa. Paper box. 1,758,510; May 13.
Gross, Ralph A., assignor to Simplex Paper Box Company, Lititz, Pa. Collapsible extension top and bottom box. 1,758,511; May 13.
Gross, Ralph A., assignor to Simplex Paper Box Company, Lititz, Pa. Collapsible paper box. 1,758,512; May 13.
Gross, Ralph A., assignor to Simplex Paper Box Company, Lititz, Pa. Collapsible paper box. 1,758,513; May 13.
Grover, George E., New York, assignor to F. T. Towne, Port Chester, J. S. Hedges and W. H. L. Edwards, New York, N. Y. Multiple-coin-controlled turnstile. 1,758,514; May 13.
Grubman, Leo J., Belle Harbor, N. Y. Making artificial eyes for dolls. 1,758,192; May 13.
Guillet, Albert M., Charlotte, N. C. Leveling and lining spinning frames. Re17,665; May 13.
Guillet, Albert M., Charlotte, N. C. Adjustable flyer-grinding device. 1,758,791; May 13.
Gulf Oil Corporation of Pennsylvania. (See McKibben, Charles W., assignor.)
Gunderman, Lester C., Pittsburgh, Pa. Game. 1,757,998; May 13.
Haberman, Charles. (See Schmidt, W. O., and Haberman.)
Hagen, Charles F., Geneva, N. Y. Purifying benzol. 1,758,661; May 13.
Hagen, Christoph, San Francisco, Calif. Combination brush, comb, and mirror. 1,757,999; May 13.
Hager, Eugen, Oerlikon, near Zurich, Switzerland. Baking and roasting apparatus. 1,758,571; May 13.
Halliwell-Shelton Electric Corporation. (See Hendry, William F., assignor.)
Hallwood, Nathan A., Columbus, Ohio. Weighing scale. 1,758,036; May 13.
Hallwood, Nathan A., Columbus, Ohio. Computing scale. 1,758,037; May 13.
Hamel, Eugene, Brockton, Mass. Baby carriage. 1,758,110; May 13.
Hamilton, John H., Holyoke, Mass., and J. H. Williams, Providence, R. I.; said Hamilton assignor to B. F. Perkins & Son, Inc., Holyoke, Mass. Tenter machine. 1,758,697; May 13.
Hamilton, William E., Columbus, Ohio. Deep-sea anchor. 1,758,911; May 13.
Hammerly, Herman J., Wallingford, assignor to The Trumbull Electric Manufacturing Company, Plainville, Conn. Inclosed safety switch. 1,758,441; May 13.
Hancock, Horace G., assignor to The O. B. North & Co., New Haven, Conn. Snap hook. 1,758,038; May 13.
Hanneman, Walter M. (See Berger, J., and Hanneman.)
Hansen, Charles C., Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Portable universal drill mounting. 1,758,316; May 13.
Harber, Laurence S., Peterborough, England, assignor to Baker Perkins Company, Saginaw, Mich. Traveling conveyer for ovens. 1,758,397; May 13.
Hardesty, Francis D., Ferndale, Mich. Locking device for automotive vehicles. 1,758,698; May 13.
Hardtmann, Max. (See Hentrich, W., and Hardtmann.)
Hardy, Steven, New York, N. Y. Cleaning and polishing fluid. 1,758,317; May 13.
Harmon, Jay F., Reno, Nev. Oil and water separator. 1,758,743; May 13.
Harris, John, Sheffield, England. Mechanical ore-roasting furnace. 1,758,154; May 13.
Harter, Noah S., assignor to Champion Folding Furniture Company, Waukegan, Ill. Automatically-folding bed-bottom fabric. 1,758,830; May 13.
Hartford-Empire Company. (See Willetts, Paul G., assignor.)
Harvey, Charles W. (See Anton, F. A., and Harvey.)
Harvey, William D., assignor to American Steel Products Co., Macomb, Ill. Coal-burning brooder. 1,758,155; May 13.
Harzer Achsenwerke, G. m. b. H., Bornum Am Harz. (See Ahrens, Fritz, assignor.)
Hasche, Rudolph L., Elizabeth, N. J., assignor to American Smelting and Refining Company, New York, N. Y. Separation and recovery of gases. 1,758,398; May 13.
Hassinger, Louis. (See Trageser, A. H., and Hassinger.)
Haubert, Leo, Tulsa, assignor of one-eighth to L. L. Roller, Muskogee, Okla. Load binder. 1,758,039; May 13.
Haubert, Leo, assignor of one-eighth to L. L. Roller, Tulsa, Okla. Combination hook. 1,758,744; May 13.
Haubert, Leo, assignor of one-eighth to L. L. Roller, Tulsa, Okla. Load binder. 1,758,831; May 13.
Haynrt, Lucien, Lyon, France. Compressor. 1,758,601; May 13.
Hayley, Harry, Hurdman's Bridge, Ontario, Canada. Catch basin. 1,758,318; May 13.
Haywood, Glasgow W. (See Williamson, G. M., and Haywood.)
Hazeltine, Benjamin P., Baltimore, Md. Straightening machine. 1,758,699; May 13.

Hazen, Josephine W., Portland, Oreg. Piano-keyboard instruction chart. 1,758,254; May 13.
Head, Ernest C. (See Candee, A. H., Head, and Nadel.)
Head, Ernest C., assignor to Gleason Works, Rochester, N. Y. Machine for generating gears. 1,758,193; May 13.
Head, Ronald, Luton, England, assignor to Baker Perkins Co. Inc., Saginaw, Mich. Method and apparatus for preparing cream fondant and the like. 1,758,602; May 13.
Heap, Walter. (See Shaw, J. S., and Heap.)
Heath, Chad N., Tacoma, Wash. Silo. 1,758,662; May 13.
Hedges, James S., et al. (See Grover, George E., assignor)
Hedglon, Mead, assignor to M. L. Oberdorfer Brass Company, Syracuse, N. Y. Fire trap for internal-combustion engines. 1,758,442; May 13.
Heenan & Froude Limited. (See James, Arthur E. W., assignor.)
Heenan & Froude Limited. (See Walker, George H., assignor.)
Heiermann, Hugo, Frankfort-on-the-Main, Germany. Wrist-pin construction. 1,758,515; May 13.
Heisler, Charles L., Schenectady, N. Y., assignor to General Electric Company. Film-driving apparatus. 1,758,832; May 13.
Helenbolt, George S., assignor to Niagara Sprayer & Chemical Co., Inc., Middleport, N. Y. Fruit and vegetable grading machine. 1,758,603; May 13.
Hemphill Company. (See Lawson, Robert H., assignor.)
Henderson Corporation. (See Henderson, Frederick W., assignor.)
Henderson, Frederick W., Seattle, Wash., assignor to Henderson Corporation. Mixing device. 1,758,111; May 13.
Henderson, Herbert V., assignor to Chrysler Corporation, Detroit, Mich. Robe rail. Des. 81,134; May 13.
Hendry, Johnson F., Schenectady, N. Y., assignor to General Electric Company. Thermo-electronic device. 1,758,833; May 13.
Hendry, William F., Ossining, N. Y., assignor to Manhattan Electrical Supply Company, Inc. Gas-filled tube. 1,758,516; May 13.
Hendry, William F., Ossining, assignor to Halliwell-Shelton Electric Corporation, New York, N. Y. Massaging machine. 1,758,663; May 13.
Hendryx, Andrew B., Company, The. (See Leon, Lewicki J., assignor.)
Hendryx, Andrew B., Company, The. (See Tullis, Ross L., assignor.)
Hentrich, Winfrid, and M. Hardtmann, Wiesdorf-on-the-Rhine, Germany, assignor to General Aniline Works, Inc., New York, N. Y. Condensation product of the benzodiazine series. 1,758,792; May 13.
Herman, Joseph M., Shoe Company. (See O'Donnell, Francis J., assignor.)
Herold, Walter F., Upper Montclair, N. J., assignor to The Bassick Company, Bridgeport, Conn. Furniture slide or shoe. 1,757,962; May 13.
Herold, Walter F., Upper Montclair, N. J., assignor to The Bassick Company, Bridgeport, Conn. Furniture rest or shoe. 1,757,963; May 13.
Herold, Walter F., Upper Montclair, N. J., assignor to The Bassick Company, Bridgeport, Conn. Caster-bracket socket. 1,758,000; May 13.
Herold, Walter F., Upper Montclair, N. J., assignor to The Bassick Company, Bridgeport, Conn. Caster. 1,758,001; May 13.
Hess, Arthur, assignor of one-half to S. L. Marsh, Los Angeles, Calif. Pipe hanger. 1,758,040; May 13.
Hess, Heinrich O., assignor to the firm Joh. Jacob Reiter & Co., Limited, Winterthur, Switzerland. Feeding apparatus with carding device for carding machines. 1,758,517; May 13.
Heston, Lorenzo R., and A. L. Anderson, Fairfield, Iowa. Machine to shape flooring blocks. 1,758,734; May 13.
Hewitt, Jessamine A., Berkeley, Calif. Baby-carriage top. 1,758,112; May 13.
Heymann, Bruno, San Francisco, Calif. Light projector. 1,758,041; May 13.
Hibberd, Wilton L. (See Beck, William M., assignor.)
Hillman, Joseph, New York, N. Y. Soft collar. 1,758,224; May 13.
Hime, Clint T., assignor of one-third to P. H. Long, San Antonio, Tex. Flash light. 1,758,735; May 13.
Hines, C. C. (See Christmas, William W., assignor.)
Hinrichsen, Edward E., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Telephone system. Re17,666; May 13.
Hintze, Walter B. (See Sheller, John C., assignor.)
Hodgdon, Theodore A., Springfield, Mass. Toy airplane. 1,758,399; May 13.
Hoelper, Hugo, Tacony, Pa. Nut and pipe wrench. 1,758,664; May 13.
Hoffman, Harry E., Williamsport, Pa. Loom attachment. 1,758,042; May 13.
Hoffmeister, Halesia D., Los Angeles, Calif. Device for correlating the staff with the keyboard of pianos. 1,758,043; May 13.
Höfner, Jakob, Thum im Erzgebirge, Germany. Method of and apparatus for finishing textile goods. 1,758,665; May 13.
Hogan, Jay J., Stratford, assignor to The Bryant Electric Company, Bridgeport, Conn. Electric switch. 1,758,793; May 13.
Hollingsworth, Ardent, Portland, Oreg. Bathing suit or similar article. Des. 81,135; May 13.
Holmes, Grant, Danville, and A. Allen, Glencoe, Ill., assignors to Robt. Holmes & Bros., Inc., Danville, Ill. Car-retarding device. 1,758,836; May 13.
Holmes, Robt. H., & Bros., Inc. (See Holmes, G., and Allen, assignors.)
Holmes, William B., Hammonton, N. J. Ladder-jack-supporting device. 1,758,319; May 13.
Hood Rubber Company. (See Glidden, A. A., and Knowland, assignors.)
Horn and Hardart Baking Company. (See Cramer, Albert M., assignor.)
Hort, Hermann. (See Becker, J., Just, and Hort.)
Hoskyns, William J., assignor to Briggs Manufacturing Company, Detroit, Mich. Trimming-material assembly. 1,758,666; May 13.
Hoss, Ray C., McClelland, Iowa. Internal-combustion engine. 1,758,320; May 13.
Houghton, John M., et al. (See Houghton, Lewis T., assignor.)
Houghton, Lewis T., deceased, Worcester, Mass.; J. M. Houghton and O. M. Lambert, executors, assignors to J. M. Houghton and O. M. Lambert, Worcester, Mass. Attachment for spooler guide rods. 1,758,604; May 13.
Houtz, Alfred B., Elizabeth City, N. C. Apparatus for applying hoops and/or liners to barrels. 1,758,837; May 13.
Howard, Frank A., Elizabeth, N. J., assignor to Standard Oil Development Company. Preparing motor fuels. 1,758,898; May 13.
Howe, Thomas. (See Peteler, Adolph, assignor.)
Howell, Albert S., assignor to The Bell & Howell Company, Chicago, Ill. Photographic-printing machine. 1,758,700; May 13.
Howey, George R., Barberton, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Spring suspension device. 1,758,701; May 13.
Hoxie, Charles A., Schenectady, N. Y., assignor to General Electric Company. Film driving. 1,758,794; May 13.
Hoy, Fred C. (See Flatley, J. H., and Hoy.)
Hoyt, Milton A., East Orange, N. J., assignor to Westinghouse Lamp Company. Machine and method for producing coil-forming dies. 1,758,002; May 13.
Hoyt, Ray S., River Edge, N. J., assignor to American Telephone and Telegraph Company. Wave antenna. 1,758,044; May 13.
Huber, Frederick W., Riverside, Calif. Cementing oil wells. 1,758,156; May 13.
Hudd, Alfred E., Wallasey, England, assignor, by mesne assignments, to Automatic Electric Inc., Chicago, Ill. Electrolytic cell. 1,758,255; May 13.
Hudson Motor Car Company. (See Groehn, Otto J., assignor.)
Huff, J. N. (See Stockton, George W., assignor.)
Hughes, Frederick G., assignor to The New Departure Manufacturing Company, Bristol, Conn. Bearing mounting. 1,758,667; May 13.
Hunt, Nathan C. (See Burrell, E. P., and Hunt.)
Hunt, Rodney, Machine Company. (See Riggs, Homer C., assignor.)
Hupp Motor Car Corporation. (See Punke, John J., assignor.)
Hurst, Albert E., New York, N. Y. Advertising or price ticket. 1,757,964; May 13.
Huss, Richard. (See Wagner, H., Kuchenbecker, and Huss.)
Hutchinson, Noble M. (See Fisher, J. P., Greenfield, and Hutchinson.)
Huyben, Theo, Temsche, Belgium. Reenforcement for wicker chairs. 1,758,045; May 13.
Hydraulic Brake Company. (See Houghead, M., and Loweke, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Daimer, K., and Balle, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Suchy, Robert, assignor.)
Ilson, Edward L., Patchogue, N. Y. Ornamental metallic log combination for building construction. 1,758,046; May 13.
Indiana Lamp Corporation. (See Neuner, Frederick W. C., assignor.)
Industrial Associates, Incorporated. (See Jones, Arthur B., assignor.)
Ingersoll-Rand Company. (See Bayles, Lewis C., assignor.)
Ingersoll-Rand Company. (See Hansen, Charles C., assignor.)
Ingersoll-Rand Company. (See Redfield, Snowden B., assignor.)
Ingraham, E., Company, The. (See Simpson, John O., assignor.)
Ingrassia, Biagio. (See Cogito, J., and Ingraasia.)
Inland Manufacturing Company, The. (See Geyer, Harvey D., assignor.)
International Motor Company. (See Reid, Josiah E., assignor.)
Irvin, Leslie L., assignor to Irving Airchute Company, Inc., Buffalo, N. Y. Parachute-rip-cord construction. 1,758,795; May 13.
Irving Airchute Company. (See Irvin, Leslie L., assignor.)
Irving Airchute Company, Inc. (See Waite, George, assignor.)
Isom, Edward W. (See Bell, J. E., and Isom.)
Ives Corporation, The. (See Thorn, William E., assignor.)

Ives Manufacturing Corporation, The. (See Thorn, William E., assignor.)
Jackson, Joseph R., jr., Boston, Mass. Elevator. 1,758,605; May 13.
Jacobs, Jacob, Copley, Ohio. Marine foundation and making the same. 1,758,606; May 13.
Jacobson, Howard C., Minneapolis, Minn. Grinding machine with screen. 1,758,702; May 13.
Jacuzzi, Rachelle, Berkeley, Calif. Pumping system. 1,758,400; May 13.
Jakob, Johann, Seebach-Zurich, Switzerland, assignor to Albert T. Otto & Sons, Inc., New York, N. Y. Production of artificial stones. 1,758,518; May 13.
James, Arthur E. W., assignor to Heenan & Froude Limited, Worcester, England. Refuse destructor. 1,758,157; May 13.
James, Robert F., Garrett, Ind. Automobile window screen. 1,758,158; May 13.
Jampol, Howard M., New York, N. Y. Combination bundling and delivery table. 1,757,965; May 13.
Jansson, Ernst T., Stockholm, Sweden, assignor to The DeLaval Separator Company, New York, N. Y. Milking machine. 1,758,443; May 13.
Jantzen Knitting Mills. (See Bergh, Philip, assignor.)
Janville, Henry M., Maybrook, N. Y. Protective switch member. 1,758,519; May 13.
Jardine, Frank. (See Jehle, F., and Jardine.)
Jarvis, Henry M., assignor of three-fourths to C. G. Cox, Winfield, Kans. Pumping jack. 1,758,838; May 13.
Jeffrey Manufacturing Company, The. (See Van Slyke, Frederick E., assignor.)
Jehle, Ferdinand, Cleveland, Ohio, and F. Jardine, Detroit, Mich., assignors, by mesne assignments, to The Cleveland Trust Company, Cleveland, Ohio, as trustee. Piston. 1,758,444; May 13.
Jenne, Jacob, assignor to The Cleveland Planer Company, Cleveland, Ohio. Rail-adjusting mechanism. 1,758,321; May 13.
Jennings, Melvin O., Arlington, assignor to H. H. Beckwith, Brookline, Mass. Shoe heater. 1,758,256; May 13.
Jensen, Bertel M., Redondo Beach, Calif. Fishing tool. 1,758,364; May 13.
Jensen, Danes, Dunedin, New Zealand. Mining or dredging plant. 1,758,047; May 13.
Johnson, Dolphus L., Glendora, Miss. Planter. 1,758,607; May 13.
Johnson, Frank L., Akron, Ohio. Turning lathe. 1,758,520; May 13.
Johnson, Jack A., Robbinsdale, Minn. Windshield. 1,758,703; May 13.
Johnson, Jack A., Robbinsdale, Minn. Circuit wiring for windshields and the like. 1,758,704; May 13.
Johnson, Sidney P., assignor to Standard Oil Company of California, San Francisco, Calif. Floating-roof tank. 1,758,225; May 13.
Johnson, William J., Oakland, Calif. Edge-finishing machine. 1,758,401; May 13.
Jones, Arthur B., Plainfield, N. J., assignor to Industrial Associates, Incorporated, New York, N. Y. Method and apparatus for obtaining solids from liquids. 1,758,745; May 13.
Jones, Charles E., Philadelphia, Pa. Skiving machine. 1,758,402; May 13.
Joseph, Alfred, assignor to Societe Internationale des Procèdes Prudhomme Houdry, Paris, France. Producing liquid fuels. 1,758,796; May 13.
Joyce, Harold L., South Orange, assignor to The Tiffany Manufacturing Co., Newark, N. J. Indicating gauge for liquids. 1,758,403; May 13.
Judd, H. L., Co. (See Vroom, Robert D. W., assignor.)
Julin, Victor T., Djursholm-Danderyd, Sweden. Permutation lock. 1,758,608; May 13.
Jung, Christiaan J. (See Versteeg, Hendrik J., assignor.)
Just, E. Richard. (See Currie, Gail G., assignor.)
Just, Heinrich. (See Becker, J., Just, and Hort.)
Kadel, Byers W., Baltimore, Md., assignor, by mesne assignments, to The Symington Company. Draft rigging. 1,758,285; May 13.
Kadow, August, assignor of one-half to W. and C. W. Owen, Toledo, Ohio. Forming metal castings. 1,758,113; May 13.
Kadow, August, assignor to The Vacuum Casting Company, Toledo, Ohio. Filling molds with molten metal. 1,758,114; May 13.
Kalischer, Georg, Frankfort-on-the-Main; H. Salkowski, Mainkur, near Frankfort-on-the-Main; and Fritz Frister, Fechenheim, near Frankfort-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Producing sulphurized vat dyestuffs containing chlorine. 1,758,365; May 13.
Kalle & Co. Aktiengesellschaft. (See Schmidt, M. P., and Krieger, assignors.)
Kalman Steel Company. (See White, William E., assignor.)
Kammerer, George, Whittier, Calif. Pump-operating mechanism. 1,758,609; May 13.
Kaplansky, Abram A., Moscow, Union of Socialist Soviet Republics. Oil pump. 1,758,159; May 13.
Kaplick, Max, New York, N. Y. Acoustic device. 1,757,966; May 13.
Kappes, George W., Milwaukee, Wis., assignor to Standard-Trump Bros. Machine Company, Wilmington, Del. Needle cylinder for circular-knitting machines. 1,758,079; May 13.
Kaskouras, Thomas, Chicago, Ill. Butter dispenser and cutter. 1,758,257; May 13.
Kassler, Edwin S., jr., et al., trustees. (See Sherrick, Samuel T., assignor.)
Katzinger, Edward, Company. (See Leucht, Mella, assignor.)
Kaufman, Tobias J., Chicago, Ill. Waste-valve fitting. 1,758,226; May 13.
Kay, Norman, Jobos, P. R. Cane-milling apparatus. 1,758,445; May 13.
Kean, Gilbert P., assignor of one-fourth to A. L. Fletcher and one-fourth to P. J. Thompson, Minneapolis, Minn. Circulating heated air in the closed bodies of automobiles. 1,758,705; May 13.
Keighley, Lloyd M., Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation. Refrigerating apparatus. 1,758,227; May 13.
Keighley, Lloyd M., Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation. Refrigerating apparatus. 1,758,258; May 13.
Keller, Ferdinand, and K. Schnitzspahn, Offenbach-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Diazo-salt preparation. 1,758,912; May 13.
Kellner, Anton, Karlsbad, Czechoslovakia. Vehicle headlight. 1,758,746; May 13.
Kellogg, Edward W., Schenectady, N. Y., assignor to General Electric Company. Loud-speaker. 1,758,797; May 13.
Kelly, James W., Chicago, Ill. Adjustable shower fixture. 1,758,115; May 13.
Kelly, William H., Pittsburg, Kans. Hair clipper. 1,758,747; May 13.
Kelnhofer, Franz, Vienna, Austria. Last. 1,758,706; May 13.
Kelsey, Theodore, Brooklyn, N. Y. Plant support. 1,758,839; May 13.
Kermis, Andrew A., assignor to Kermis Tent & Awning Co., Rochester, N. Y. Funeral furniture. 1,758,116; May 13.
Kermis Tent & Awning Co. (See Kermis, Andrew A., assignor.)
Kerrigan, Philip P., Fortress Monroe, Va. Combined pipe-cutting and bur-removing tool. 1,758,521; May 13.
Kershaw, William E., Gwynedd Valley, Pa. Charge cut-off for storage batteries. 1,758,522; May 13.
Kertz, James J., assignor to National Wiring & Protective Co. Inc., Brooklyn, N. Y. Burglar-alarm system. 1,758,523; May 13.
King, C. G., & Co. (See Smith, Walter E., assignor.)
King, Jesse G., assignor to Frigidaire Corporation, Dayton, Ohio. Refrigerating apparatus. 1,758,228; May 13.
King, Jesse G., Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation. Refrigerating apparatus. 1,758,259; May 13.
Kirk & Blum Manufacturing Company, The. (See Kirk, S. W., and Meuttman, assignors.)
Kirk, Sylvester W., and W. R. Meuttman, assignor to The Kirk & Blum Manufacturing Company, Cincinnati, Ohio. Dust-collecting system. 1,758,668; May 13.
Kirst, Werner. (See Eckert, W., and Kirst.)
Kiser, Henry L., Adrian, Mich. Coin-actuated mechanism. 1,758,748; May 13.
Klein, Eugene. (See Distler, O., and Klein.)
Klein, Karl, St. Louis, Mo. Electrical instrument. 1,758,322; May 13.
Klein, Myer S., assignor to Panco Rubber Company, Chelsea, Mass. Shoe sole. Des. 81,136; May 13.
Kleinschmidt, Edward E., Long Island City, N. Y., assignor, by mesne assignments, to Teletype Corporation, Chicago, Ill. Telegraph system and apparatus therefor. 1,758,194; May 13.
Klemm, Emil R., jr., Chicago, Ill. Governor. 1,758,080; May 13.
Klock, Raymond A., Closter, N. J., assignor to Gould Storage Battery Company, Inc., New York, N. Y. Radio apparatus. 1,758,003; May 13.
Kneen, Everett H., Ansonia, Conn. Spool or reel. 1,758,229; May 13.
Knight, George W., Milwaukee, Wis. Voltage cut-out device. 1,758,749; May 13.
Knischewsky, Emil O., Hamilton, Ontario, Canada. Hockey pad. 1,758,260; May 13.
Knowland, Thomas M. (See Glidden, A. A., and Knowland.)
Knowles, Silas A., Denver, Colo. Material-handling apparatus. 1,758,750; May 13.
Köberle, Karl. (See Kunz, M. A., and Köberle.)
Koehring Company. (See Brey, Harold E., assignor.)
Koethen, Frederick L., assignor to Acheson Graphite Company, Niagara Falls, N. Y. Lubricant. 1,758,446; May 13.
Köhler, August, assignor to the firm of Carl Zeiss, Jena, Germany. Illuminating device. 1,758,049; May 13.
Kohler, Wilhelm, Elberfeld, assignor to Bruninghaus & Co., Barmen-Wichlinghausen, Germany. Method of and apparatus for sealing the ends of fastening strings, wires, and the like. 1,758,669; May 13.
Kohlhepp, John W., assignor to The Allbright-Nell Company, Chicago, Ill. Apparatus for dehairing hogs. 1,758,048; May 13.
Kolar, Anthony, New York, N. Y. Ash receptacle. Des. 81,137; May 13.
Koppers Company, The. (See van Ackeren, Joseph, assignor.)

Koppers, Heinrich, Essen-Ruhr, Germany. Producing coke and apparatus therefor. 1,758,524; May 13.
Koppitz, Carl G., assignor to Railway and Industrial Engineering Company, Greensburg, Pa. High-tension-switch mechanism. 1,758,751; May 13.
Korff, Arnold, New York, N. Y., assignor of one-half to C. A. Loeb. Combination spread and garment. 1,758,323; May 13.
Kraft, Gustav F., Kansas City, Mo. Individual salt and pepper receptacle. 1,758,117; May 13.
Kramer, Erwin, Cologne-Deutz, L. Zeh, Wiesdorf-on-the-Rhine, and B. Bollweg, Leverkusen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Sulphur dyestuffs. 1,758,324; May 13.
Krell, Therese, Milwaukee, Wis. Rescue whistle. 1,758,840; May 13.
Krieger, Wilhelm. (See Schmidt, M. P., and Krieger.)
Kuchenbecker, Adolf. (See Wagner, H., Kichenbecker, and Huss.)
Kuhn, Clarence W., Milwaukee, Wis., assignor, by mesne assignments, to Cutler-Hammer, Inc. Protecting contacts of electric switches. 1,758,752; May 13.
Kummeth, Frank J., Heron Lake, Minn. Hen's nest. 1,758,753; May 13.
Kunstdünger-Patent-Verwertungs-Aktiengesellschaft. (See Liljenroth, Frans G., assignor.)
Kunz, Eric C., Montclair, N. J. Stabilized aldehyde or aldehyde-containing compound and making the same. 1,757,967; May 13.
Kunz, Max A., Mannheim, Switzerland, and K. Köberle, Ludwigshafen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Trihalogenated ms-benzdianthrones. 1,758,841; May 13.
Kussat, Rudolf O. (See Fleischer, Charles, assignor.)
Labbe, Armand L., Murray, Utah, assignor to American Smelting and Refining Company, New York, N. Y. Apparatus for removing dust from electrodes. 1,758,404; May 13.
Laboratory of Research Chemotherapy, The. (See John R., assignor.)
Lambert, Olive M., et al. (See Houghton, Lewis T., assignor.)
Lambert, Olive M., et al., executors. (See Houghton, Lewis T.)
Lamkins, William C., Newport, Ark. End gate. 1,758,325; May 13.
Lancaster, John. (See Burn, J. F., and Lancaster.)
Landers, Frary & Clark. (See Skinner, Sherrod E., assignor.)
Landis & Gyr, A.-G. (See Mettler, Josef, assignor.)
Landis Machine Company. (See Dunford, Ernest, assignor.)
Landsberg, Maurice A., Toronto, Ontario, Canada. Spool-holding device. 1,758,707; May 13.
Lange, Berthold A., St. Louis, Mo. Box corner. 1,758,230; May 13.
Lange, Louvern G., Passaic, N. J. Adhesive backing. 1,758,610; May 13.
Langsner, Adolph, assignor to Eugene Dietzgen Company, Chicago, Ill. Developing apparatus. 1,758,326; May 13.
Langsner, Adolph, assignor to Eugene Dietzgen Company, Chicago, Ill. Developing apparatus. 1,758,611; May 13.
Langsner, Adolph, assignor to Eugene Dietzgen Company, Chicago, Ill. Attachment for printing machines. 1,758,612; May 13.
Lansing, Raymond P., Montclair, N. J., assignor to Eclipse Machine Company, Elmira, N. Y. Engine starter. 1,758,118; May 13.
Larson, Theodore H., Chicago, Ill. Face-treating device. 1,758,286; May 13.
Laverdiere, Arthur J., assignor to Tilton & Cook Co., Leominster, Mass. Device for curling or waving hair. 1,758,050; May 13.
La Vigne, Jerome R., assignor to Waterbury Buckle Company, Waterbury, Conn. Buckle. Des. 81,138; May 13.
Lawry, Rolla C., Webster Groves, Mo., assignor, by mesne assignments, to Neet, Incorporated, Wilmington, Del. Vaginal irrigator. 1,758,670; May 13.
Lawson, Joseph, assignor to Asiatic Petroleum Company, Limited, London, England. Fluid-tight motion-transmitting device. 1,758,287; May 13.
Lawson, Robert H., Pawtucket, assignor to Hemphill Company, Central Falls, R. I. Means and instrumentality for effecting reverse plating. 1,758,899; May 13.
Leddon, Harry C., Cleveland, Ohio. Cover for faucets, etc. 1,758,708; May 13.
Ledoux, John W., Swarthmore, assignor, by mesne assignments, to Simplex Valve & Meter Company, Philadelphia, Pa. Fluid meter. 1,757,968; May 13.
Lee, Ammie L., Panama City, Fla. Fishing lure. 1,758,160; May 13.
Lee, Ralph L., assignor to Delco-Light Company, Dayton, Ohio. Domestic appliance. 1,758,161; May 13.
Leeds & Northrup Company. (See Behr Leo, assignor.)
Leland, John A., assignor to Millers Falls Company, Millers Falls, Mass. Tool and article holder. 1,758,261; May 13.
Lemieux, Archibald R., Worcester, Mass. Screw driver. 1,758,162; May 13.
Le Moon, Axel R., Chicago, Ill. Lawn-sprinkler nozzle. 1,758,119; May 13.
Leon, Lewicki J., Chicago, Ill., assignor, by mesne assignments, to The Andrew B. Hendryx Company. Bird cage. 1,758,525; May 13.
Leucht, Mella, Terra Haute, Ind., assignor to Edward Katzinger Company, Chicago, Ill. Cake pan. 1,758,288; May 13.
Lewis, Fred K., Ashtabula, Ohio. Top for vehicles and the like. 1,758,195; May 13.
Lewis, George H., Baltimore, Md. Plant puller. 1,758,526; May 13.
Libeck, Auguste, Paris, France. Luminous and animated advertising device. 1,758,120; May 13.
Liebergeld, Paul, Bad Thal, Thuringia, Germany. Mechanical time fuse. 1,758,842; May 13.
Liebs, Louis H., Woodhaven, N. Y. Finger ring. 1,758,447; May 13.
Lierg, Friedrich, Vienna, Austria. Producing pictures consisting of dyes in photographic manner. 1,758,572; May 13.
Liljenroth, Frans G., Stockholm, Sweden. Producing ammonium phosphate or mixed fertilizers containing ammonium phosphate by leaching of raw phosphate. 1,758,448; May 13.
Liljenroth, Frans G., Stockholm, Sweden, assignor to Kunstdünger-Patent-Verwertungs-Aktiengesellschaft, Glarus, Switzerland. Ammonium sulphate manufacture. 1,758,449; May 13.
Lindgren, Bror J., assignor to Niagara Machine & Tool Works, Buffalo, N. Y. Bed-adjusting mechanism for stamping presses. 1,758,231; May 13.
Line Material Company. (See Steinmayer, Alwin G., assignor.)
Lines, Grant, assignor of one-third to S. N. Baker, Fort Worth, Tex. Sandwich-toasting machine. 1,758,121; May 13.
Liquid Carbonic Corporation. (See Traxel, William J., assignor.)
Livingston, Frank S. (See Marshall, Frank M., assignor.)
Lizotte, Louis P., Holyoke, Mass. Cabinet. 1,758,843; May 13.
Lockwood, Paul M., Irvington, N. J. Advertising device. 1,758,232; May 13.
Loeb, Carl A. (See Korff, Arnold, assignor.)
Long, Dorothy, assignor to Franklin Simon & Company, Inc., New York, N. Y. Ensemble suit. Des. 81,139; May 13.
Long, Fred R., Catawissa, Pa. Combined chuck and brake mechanism. 1,758,844; May 13.
Long, John L., and R. Owen, Madisonville, Ky. Pressure-arm attachment for bread-wrapping machines. 1,758,754; May 13.
Long, P. H. (See Hime, Clint T., assignor.)
Lopez, Joaquin A., Habana, Cuba. Wrapping machine. 1,758,798; May 13.
Lotter, Adolph G., assignor to Stationers Loose Leaf Co., Milwaukee, Wis. Loose-leaf binder. 1,758,327; May 13.
Loughead, Malcolm, and E. F. Loweke, assignors to Hydraulic Brake Company, Detroit, Mich. Presure mechanism for brake systems. 1,758,671; May 13.
Loweke, Erwin F. (See Loughead, N., and Loweke.)
Lowell Machine Company. (See Reynolds, F. A., and Turcotte, assignors.)
Lowy, Julia. (See Bauer, Sigmund, assignor.)
Lowy, Regina, administratrix. (See Bauer, Sigmund.)
Loy, James W., Long Beach, Calif. Buoyant bathing appliance. 1,758,280; May 13.
Lucke, Henry J., East Orange, N. J. Ventilating device for automobiles and other vehicles. 1,758,573; May 13.
Luhr, Otto, Chicago, Ill. Refrigerator car. Re17,660; May 13.
Lundahl, Fred A., Moline, Ill. Toy dump cart. 1,758,755; May 13.
Lupton's, David, Sons Company. (See Brogden, Joab, assignor.)
Lusse, Robert J., Philadelphia, Pa. Amusement vehicle. 1,758,799; May 13.
Lyon Metal Products, Incorporated. (See Bales, James E., assignor.)
M. & B. Manufacturing Co. (See Mersfelder, F. J., and Balze, assignors.)
Mable Todd & Co. (See Most, Lucifer J., assignor.)
Machlet, George F., Elizabeth, N. J. Regulator. 1,758,450; May 13.
MacKinnon, Archibald, New York, N. Y. Table. 1,758,196; May 13.
Madden, Harry D., Montclair, N. J., assignor to Westinghouse Lamp Company. Heat treating electrical devices. 1,758,004; May 13.
Mahler, Johann, assignor to the firm: Maschinenfabrik Augsburg-Nuernberg, Aktiengesellschaft, Augsburg, Germany. Injection piping for internal-combustion engines with solid-fuel injection. 1,758,366; May 13.
Mahoney, Frank D., San Anselmo, Calif. Portable elevator. 1,758,262; May 13.
Maine, Elmer S., Chicago, Ill. Power drive attachment. 1,758,527; May 13.
Maiuri, Guido. (See Anderson, A. E., Maiuri, and Bossini.)
Maiuri, Guido. (See Bossini, R. F., and Maiuri.)
Mallory, Edward B., Tenafly, N. J. Refrigerator unit. Des. 81,140; May 13.
Mallory, Edward B., Tenafly, N. J. Refrigerator unit. Des. 81,141; May 13.
Mallory, Edward B., Tenafly, N. J. Refrigerator unit. Des. 81,142; May 13.
Mangold, William B., assignor, by mesne assignments, to Vortex Cup Company, Chicago, Ill. Cup-dispenser support. 1,758,005; May 13.

Manhattan Electrical Supply Company. (See Hendry, William F., assignor.)
Manley Manufacturing Company. (See Manley, Robert E., assignor.)
Manley, Robert E., assignor to Manley Manufacturing Company, York, Pa. Press table. 1,758,451; May 13.
Manson, Leon B., Corona, assignor to Noma Electric Corporation, New York, N. Y. Christmas-tree-lighting outfit. 1,757,969; May 13.
Marcus, Samuel, Riverdale, assignor to Markon Manufacturing Co., Inc., New York, N. Y. Tongue and teeth for dolls' heads. 1,758,163; May 13.
Marcus, Samuel, Riverdale, assignor to Markon Manufacturing Co. Inc., New York, N. Y. Tongue and teeth set for dolls and the like. 1,758,164; May 13.
Maris, James C., Glen Olden, Pa. Steam pipe for simple articulated locomotives. 1,758,845; May 13.
Mark, Clayton, & Company. (See Markle, D Lafal, assignor.)
Markle, D Lafal, Evanston, assignor to Clayton Mark & Company, Chicago, Ill. Thread protector for pipes. 1,758,613; May 13.
Markon Manufacturing Co. Inc. (See Marcus, Samuel, assignor.)
Marsh, Samuel L. (See Hess, Arthur, assignor.)
Marshall, Frank M., assignor of one-half to F. S. Livingston, Los Angeles, Calif. Container closure. 1,758,574; May 13.
Marshall, Laurence K., Cambridge, Mass., assignor, by mesne assignments, to Old Colony Trust Company. Electron-discharge device. 1,758,710; May 13.
Marshall, Lewis C., Walpole, Mass. Making piston rings. 1,758,575; May 13.
Martin, Richard H., assignor to Norton Company, Worcester, Mass. Refractory article and protecting the same. Re17,661; May 13.
Martocello, Joseph A., Philadelphia, Pa. Air supply for can baskets. 1,758,614; May 13.
Maschinenfabrik Augsburg-Nuernberg, Aktiengesellschaft. (See Mahler, Johann, assignor.)
Maschinenfabrik Augsburg-Nuernberg Aktiengesellschaft. (See Riehm, Wilhelm, assignor.)
Masters, Clarence W. (See Masters, Marjorie C. and C. W.)
Masters, Marjorie C. and C. W., Wynnewood, Pa. Child's garment. 1,758,081; May 13.
Matthews, Guy L., Chicago, Ill., assignor to H. L. Diehl. Polishing apparatus. 1,758,006; May 13.
Matthews, Guy L., Chicago, Ill., assignor to H. L. Diehl. Apparatus for and method of twisting gut or the like. 1,758,007; May 13.
Matthies, Otto, and B. Wendt, Dessau in Anhalt, Germany, assignors to Agfa Ansco Corporation, Binghamton, N. Y. Light-sensitive silver-halide emulsions and manufacturing the same. 1,758,576; May 13.
Matthies, Otto, and B. Wendt, Dessau in Anhalt, Germany, assignors to Agfa Ansco Corporation, Binghamton, N. Y. Light-sensitive silver-halide emulsions and manufacturing the same. 1,758,577; May 13.
Matthiessen, Conrad H., New York, N. Y. Slide-valve mechanism. 1,758,672; May 13.
Maunz, Eugene, Detroit, Mich. Vehicle signal. 1,758,547; May 13.
Max, George J., assignor to Trumbull Manufacturing Company, Warren, Ohio. Outlet leg and valve for tank cars. 1,758,165; May 13.
Maxson, Louis A., Claremont, N. H., assignor to Sullivan Machinery Company. Hole-opening punch. 1,758,846; May 13.
May Manufacturing Co. (See Glintenkamp, William P., assignor.)
Mayer, Daniel J., Belleville, assignor to Metal Textile Corporation, Orange, N. J. Scouring device. 1,758,452; May 13.
Mayer, Hans. (See Straub, F., Mayer, and Schneider.)
Mayled, Herbert, assignor to The R. E. Chapin M'f'g Works, Batavia, N. Y. Metal receptacle. 1,758,615; May 13.
Mays, Charles P., El Dorado, Ark. Oil-well apparatus. 1,758,453; May 13.
McAuliffe, Joseph. (See Cottrell, W. F., and McAuliffe.)
McCabe, Ira E., Chicago, Ill. Mercury-tube switch. 1,757,970; May 13.
McCarthy, Charles S., assignor to The American Swiss Company, Toledo, Ohio. Locking mechanism for latches. 1,758,122; May 13.
McClellan, Ernest S. (See McClellan, Harry V., assignor.)
McClellan, Harry V., Seattle, Wash., assignor to E. S. McClellan, Crawfordsville, Ind. Insecticide. 1,758,734; May 13.
McCormack, William E., Strand, London, England. Lantern body for cinematograph and other projection apparatus. 1,758,290; May 13.
McCune, Joseph C., Edgewood, Pa., assignor to The Westinghouse Air Brake Company, Hamilton, Ontario, Canada. Signal-valve device. 1,758,711; May 13.
McFalls, Fred M., and G. H. Brown, Fort Worth, Tex. Miniature interurban train. 1,758,123; May 13.
McGavack, John, Jackson Heights, and G. B. Binmore, Long Island City, N. Y., assignors to The Naugatuck Chemical Company, Naugatuck, Conn. Recovering quebrachitol from rubber latex serum. 1,758,616; May 13.
McGill, Andrew D. (See Wright, S. M., and McGill.)
McGowan, Alden L., Dayton, Ohio. Gynecological instrument. 1,758,082; May 13.
McGrath, William L., assignor to Eclipse Machine Company, Elmira, N. Y. Engine starter. 1,758,233; May 13.
McIntosh, Amos C., Eureka, Calif. Ship-propelling means. 1,758,847; May 13.
McKibben, Charles W., Houston, Tex., assignor to Gulf Oil Corporation of Pennsylvania, Pittsburgh, Pa. Balancing electric circuits. 1,757,971; May 13.
McKnew, Richard T., Washington, D. C. Wardrobe or the like structure. 1,758,291; May 13.
McShane, Phelan, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Control system. 1,758,709; May 13.
McThompson, George W., Haw River, N. C. Collapsible extension table. 1,758,578; May 13.
McWane Cast Iron Pipe Company. (See McWane, James R., assignor.)
McWane, James R., assignor to McWane Cast Iron Pipe Company, Birmingham, Ala. Cast-iron pipe. 1,758,454; May 13.
McWane, James R., assignor to McWane Cast Iron Pipe Company, Birmingham, Ala. Pipe joint. 1,758,455; May 13.
Mead, George A., assignor to The Ohio Brass Company, Mansfield, Ohio. Making rail joints. 1,757,972; May 13.
Mead, George A., assignor to The Ohio Brass Company, Mansfield, Ohio. Electrically connecting rails. 1,757,973; May 13.
Mecklenburg, Werner, Moscow, Union of Socialist Soviet Republics. Production of titanium dioxide. 1,758,528; May 13.
Meigs, Bassett & Slaughter, Inc. (See Bassett, H. P., and Banigan, assignors.)
Menicocci, August V., New York, N. Y. Sign flasher. 1,758,456; May 13.
Merrick, Frank W., assignor to American Stay Company, Boston, Mass. Welt guide for sewing machines. 1,758,051; May 13.
Mersfelder, Frederick J., and P. Balze, assignors to M. & B. Manufacturing Co., Inc., Leonia, N. J. Clean-out plug. Re17,667; May 13.
Merz, Otto H., West Allis, Wis. Fastening means. 1,758,263; May 13.
Mesker, John L. (See Frier, James H., jr., assignor.)
Metal Textile Corporation. (See Mayer, Daniel J., assignor.)
Mettler, Josef, Zug, Switzerland, assignor to Landis & Gyr, A.-G. Induction meter. 1,758,673; May 13.
Meuttman, William R. (See Kirk, S., and Meuttman.)
Meyer, Georg, assignor to Gasmesserfabrik Mainz Elster & Co., Mainz, Germany. Gas meter. 1,758,083; May 13.
Meyer, Roy M., and L. P. Denoyer, assignors to Denoyer-Geppert Company, Chicago, Ill. Support for maps and analogous devices. 1,758,292; May 13.
Mickelson, Frederick P., assignor of one-half to R. A. Sorrell, Durham, N. C. Telephone cabinet. Des. 81,143; May 13.
Midland Steel Products Company, The. (See Bosworth, Frederic M., assignor.)
Midland Steel Products Company, The. (See Sneed, John, assignor.)
Mijer, Pieter, assignor, by mesne assignments, to The Two-Tone Corporation, New York, N. Y. Process of and apparatus for dyeing textile fabrics. 1,758,234; May 13.
Miller, Andrew and W. M. Akers, Newport News, Va. Bulb mount for headlights. 1,758,166; May 13.
Miller, William A., Lorain, assignor of three-eighths to A. C. Ryan and three-eighths to A. A. Bartlett, Lakewood, Ohio. Unloading device. 1,758,457; May 13.
Miller, William J., Swissvale, Pa. Automatic safety device for pottery machines. 1,758,084; May 13.
Millers Falls Company. (See Leland, John A., assignor.)
Millspaugh, William H., assignor to The Paper & Textile Machinery Company, Sandusky, Ohio. Paper-making machine. 1,758,167; May 13.
Missman, Glenn E., Council, Idaho. Basket-lidding tool. 1,758,052; May 13.
Mock, Hugo, New York, N. Y. Refrigerating unit. 1,758,008; May 13.
Moffat, Frederick W., Weston, Ontario, Canada. Cooking top of electric ranges. 1,758,579; May 13.
Moffitt, George W., Oakland, Calif. Fire extinguisher. 1,758,458; May 13.
Molins, Walter E., London, England. Cigarette machinery. 1,758,800; May 13.
Monomelt Company, The. (See Curle, George L., assignor.)
Montgomery, John R. (See Clark, M. T., and Montgomery.)
Mooney, Thomas F., Morristown, N. J. Fireplace. 1,758,459; May 13.
Moore, Alfred E., Winsted, Conn. Traveling crane. 1,758,580; May 13.
Moore, Raymond G., assignor to The Bassick Company, Bridgeport, Conn. Hood catch. 1,758,368; May 13.
Moore, Raymond G., and A. Claud-Mantle, assignors to The Bassick Company, Bridgeport, Conn. Latch. 1,758,367; May 13.
Morch, Jacob J., Toronto, Ontario, Canada. Golf game. 1,758,581; May 13.
Morgan, Edmund C., deceased; O. E. Morgan, executrix, New York, N. Y. Loading machine. 1,758,197; May 13.

Morgan, Edmund C., deceased, New York, N. Y.; O. E. Morgan, executrix. Loading machine. 1,758,198; May 13.
Morgan, Hopkin, Scranton, Pa. Coal and refuse tester. 1,758,756; May 13.
Morgan, Olive E., executrix. (See Morgan, Edmund C.)
Morgenstern, Ronald V., Metuchen, N. J., assignor to The Western Union Telegraph Company, New York, N. Y. Superimposed telegraph circuits. 1,758,900; May 13.
Morris, Fred C., San Francisco, Calif. Antirattling bushing. 1,758,712; May 13.
Morton, Charles, Philadelphia, Pa. Bird bath. 1,758,674; May 13.
Moses, Bertram, Garden City, Kans. Optical device. 1,758,801; May 13.
Moses, Kirke L., Brookline, Mass. Laminated sheet material. 1,758,053; May 13.
Most, Lucifer J., assignor to Mabie Todd & Co., New York, N. Y. Pen desk set. 1,758,199; May 13.
Mott, George T., Pearl River, N. Y. Apparatus for heat exchanging. 1,758,582; May 13.
Moulton, Albert B., Riverhead, N. Y., assignor to Radio Corporation of America. Method and apparatus for combining a plurality of signals. 1,758,617; May 13.
Mueller, Godfrey A., Point Place, assignor to The De Vilbiss Company, Toledo, Ohio. Spray head. 1,758,124; May 13.
Müller, Werner. (See Reddelien, G., and Müller.)
Mulvey, John J., Seattle, Wash. Flour agitator for exposing flour to the action of a bleaching gas. 1,758,713; May 13.
Murch, John H., East Orange, N. J., assignor, by mesne assignments, to Thermokept Corporation. Closing machine. 1,758,369; May 13.
Murray, William S., Utica, assignor to Oneida Community Limited, Oneida, N. Y. Tarnish-resisting silver and silver plate and producing the same. 1,758,293; May 13.
Muthig, Otto. (See Bethmann, G., and Muthig.)
Myers, L. A., jr., Inc. (See Myers, William L., assignor.)
Myers, William L., assignor to L. A. Myers, jr., Inc., Newark, N. J. Buckle. Des. 81,144; May 13.
Nachtsheim, Peter, Barnsdall, Okla. Cracking petroleum and mineral oils and their different fractions. 1,758,618; May 13.
Nadel, Louis D. (See Candee, A. H., Head, and Nadel.)
Nagy, Joseph, Long Island City, N. Y. Welding torch. 1,758,054; May 13.
Nanfeldt, William, New Haven, Conn., assignor to World Bestos Corporation, New York, N. Y. Friction and heat resisting article and manufacturing the same. 1,758,055; May 13.
Nash, Charles J., Chicago, Ill., assignor to Universal Draft Gear Attachment Co. Template for forming key openings in railway draft rigging. 1,758,235; May 13.
National Carbon Company. (See Gillingham, Charles A., assignor.)
National Cash Register Company, The. (See Berger, Friedrich W. F., assignor.)
National Cash Register Company, The. (See Shipley, Bernis M., assignor.)
National Paper Products Company. (See Frost, John A., assignor.)
National Refrigeration Corporation. (See Wishart, William, assignor.)
National Safety Appliance Company. (See Folker, Howard S., assignor.)
National Smelting Company, The. (See Weil, Walter M., assignor.)
National Wiring & Protective Co. Inc. (See Kertz, James J., assignor.)
Naugatuck Chemical Company, The. (See McGavack, J., and Binmore, assignors.)
Neet, Incorporated. (See Lawry, Rolla C., assignor.)
Neuner, Frederick W. C., assignor to Indiana Lamp Corporation, Connersville, Ind. Head lamp. Des. 81,145; May 13.
New Departure Manufacturing Company, The. (See Hughes, Frederick G., assignor.)
New England Trawler Equipment Co. (See Symonds, Ralph F., assignor.)
Newsbaum, Iva A., Detroit, Mich. Roller knife. 1,758,328; May 13.
Niagara Machine & Tool Works. (See Lindgren, Bror J., assignor.)
Niagara Sprayer & Chemical Co. (See Helenbolt, George S., assignor.)
Nielsen, Andrew. (See Calkins, E., and Nielsen.)
Nielsen, Christian A., Aabyskov Pr Skaarup, Denmark. Cultivator-steering attachment. 1,757,974; May 13.
Niemann, Henry H., Muskogee, Okla. Building block or tile. 1,758,757; May 13.
Niles, Eliot W., Bloomfield, N. J., assignor to American Telephone and Telegraph Company. Signaling circuit. 1,758,056; May 13.
Noma Electric Corporation. (See Manson, Leon B., assignor.)
North, O. B., & Co., The. (See Hancock, Horace G., assignor.)
Norton Company. (See Martin, Richard H., assignor.)
Norwood, Harry G., assignor to T. F. Von Dorn, New York, N. Y. Spring nut-locking device for rail joints. 1,758,848; May 13.
Oberdorfer, M. L., Brass Company. (See Hedgion, Mead, assignor.)
Oberhaensli, Friedrich, Bregenz-Lochau, Austria, assignor to "Omo" Aktiengesellschaft, Zurich, Switzerland. Internal-combustion engine and operating the same. 1,758,460; May 13.
O'Brien, John O. (See Thornton, John E., assignor.)
O'Brien, William J., Baltimore, Md. Making bleached white barytes. 1,758,009; May 13.
O'Donnell, Francis J., Medway, assignor to Joseph M. Herman Shoe Company, Boston, Mass. Shoe. 1,758,405; May 13.
Ogden, Jacob W., assignor to Pitney-Bowes Postage Meter Company, Stamford, Conn. Registering mechanism. 1,758,461; May 13.
Ogden, Richard A., New York, N. Y. End or side closure for cigarette packages. 1,758,406; May 13.
Ohio Brass Company, The. (See Mead, George A., assignor.)
Oil Conservation Engineering Company, The. (See Boyd, Charles A., assignor.)
Oil Devices Corporation. (See Breese, James L., jr., assignor.)
Old Colony Trust Company. (See Marshall, Laurence K., assignor.)
Olin, Louis B., Chicago, Ill. Refrigerator vehicle. 1,758,529; May 13.
Olivaux, Francis, Paris, France. Distributing apparatus for cigarettes and other articles. 1,758,168; May 13.
Olsen, Fredrich, Dover, N. J. Explosive composition. 1,758,169; May 13.
Olsen, Reuben A., and R. H. Shadrick, assignors of one-third to E. T. Swanson, Minneapolis, Minn. Hydraulically-controlled variable-speed device. 1,758,370; May 13.
Olson, Cora P., and H. L. Evans, Rochester, Minn. Prostatectomy urinal. 1,758,236; May 13.
"Omo" Aktiengesellschaft. (See Oberhaensli, Friedrich, assignor.)
Oneida Community Limited. (See Murray, William S., assignor.)
O'Neill, Frank, Toledo, Ohio. Glassware-forming apparatus. 1,758,085; May 13.
O'Neill, Timothy J., New York, N. Y. Window cleaner. 1,758,530; May 13.
Orr, Claude L., assignor to The Buckeye Steel Castings Company, Columbus, Ohio. Six-wheel-truck construction. 1,758,329; May 13.
Osborne, David H., Jeffersonville, Pa., assignor, by mesne assignments, to Electric Service Supplies Company, Philadelphia, Pa. Insulator. 1,758,462; May 13.
Osborne, George W., North Kansas City, Mo. Sales-indicating mechanism. 1,758,330; May 13.
Otto, Albert T., & Sons, Inc. (See Jakob, Johann, assignor.)
Owen, Charles W., et al. (See Kadow, August, assignor.)
Owen, Robert. (See Long, J. L., and Owen.)
Owen, Wilber, et al. (See Kadow, August, assignor.)
Owens-Illinois Glass Company. (See Walker, Walter T., assignor.)
Owens, Robert J., Philadelphia, Pa. Emergency-light connecter. 1,758,125; May 13.
Owens, William P., Cresco, Iowa. Street sign and light. 1,758,714; May 13.
Paden City Glass Manufacturing Company. (See Fisher, David, assignor.)
Page, Herbert E., Syracuse, assignor to United States Hoffman Machinery Corporation, New York, N. Y. Automatic boiler water feeder. 1,758,294; May 13.
Paine, Mathew H., Glen Ellyn, Ill. Bending press. 1,758,237; May 13.
Palm, Victor H., Butler, Pa. Fuel-injector pump. 1,758,371; May 13.
Panco Rubber Company. (See Klein, Myer S., assignor.)
Papec Machine Company. (See Bullock, Fred J., assignor.)
Paper & Textile Machinery Company, The. (See Millspaugh, William H., assignor.)
Paramount Famous Lasky Corporation. (See Del Riccio, Lorenzo, assignor.)
Parker, Harry E., sr., San Diego, Calif. Parachute container. 1,758,170; May 13.
Parker, John Q., Sandusky, Ohio. Shoe reel. 1,758,583; May 13.
Parkes, William N., Brooklyn, N. Y., assignor to The Singer Manufacturing Company, Elizabeth, N. J. Loop taker for sewing machines. 1,758,715; May 13.
Parkinson, George L., Eastwood, England, assignor to H. C. Edmiston, New York, N. Y. Teapot. 1,758,407; May 13.
Parrett, Dent, Springfield, Ohio. Steering mechanism for tractors. 1,758,758; May 13.
Parsons, Morgan, Moylan, assignor to The U. G. I. Contracting Company, Philadelphia, Pa. Automatic oil control for carbureted water gas sets. 1,758,891; May 13.
Patent and Licensing Corporation, The. (See Rahr, Chester E., assignor.)
Peek, Horace H., Chattanooga, Tenn. Sectional heating boiler. 1,758,171; May 13.
Penn, Frederick H., Dallas, Tex. Resolving oil emulsions and reagents therefor. 1,758,802; May 13.
Perkins, B. F., & Son, Inc. (See Cowley, James A., assignor.)
Perkins, B. F., & Sons, Inc. (See Hamilton, J. H., assignor, and Williams.)

Perkins, Louis E., New York, N. Y. Lamp. 1,757,975; May 13.
Perkins, Paul G., Sauquoit, N. Y. Attachment for spring-beard knitting machines. 1,758,716; May 13.
Perkins, Ralph N., Omaha, Nebr. Filtering system. 1,758,331; May 13.
Perron, Gabriel W., Willimansett, Mass. Automobile door screen. 1,758,849; May 13.
Peteler, Adolph, Freeport, assignor to T. Howe, White Plains, N. Y. Adjustment-indicating means. 1,758,086; May 13.
Peterson, Abdel J., Chicago, Ill. Outlet locator. 1,758,126; May 13.
Peterson, Charles E., Minneapolis, Minn. Coin-counting machine. 1,758,057; May 13.
Peterson, Roland E., Gary, Ind. Wall cabinet. 1,758,238; May 13.
Petersson, Ernst, Orebro, Sweden. Furnace for casting iron and other difficult fusible metals under pressure. 1,758,463; May 13.
Pettinos, George F., Philadelphia, Pa. Grinding mill. 1,758,010; May 13.
Pfanhauser, Wilhelm A. F., Leipzig, assignor to Gesellschaft für Elektrodenzerstaubung m. b. H., Bohlitz-Ehrenberg, near Leipzig, Germany. Vacuum dispersion coating process. 1,758,531; May 13.
Pfeffer, Frederic D., and F. Trotter, Fort Dodge, Iowa, assignors to United States Gypsum Company, Chicago, Ill. Wet mixing method and apparatus. 1,758,200; May 13.
Pfnaum, Emil, Pender, Nebr. Animal-loading device. 1,758,372; May 13.
Phillips, David, Daytona Beach, Fla. Tellurian. 1,758,759; May 13.
Phillips, Jim C. (See Pittam, G. R., Blevins, and Brandt, assignors.)
Phillips, Ross M. G., New Haven, Conn., assignor, by mesne assignments, to Standard Gas Equipment Corporation. Timer for automatically controlling electric stoves. 1,758,619; May 13.
Phinney, Edward D., Mount Vernon, N. Y. Temperature-measuring device. 1,758,532; May 13.
Pierce Arrow Motor Car Company, The. (See Sheppy, Charles L., assignor.)
Pierce Arrow Motor Car Company, The. (See Wise, Karl M., assignor.)
Pierce, George L., and H. V. Rau, Brooklyn, assignor to A. G. Spalding & Bros., New York, N. Y. Cleat for sport shoes. 1,758,408; May 13.
Pike, Otis W., Schenectady, N. Y., assignor to General Electric Company. Vacuum tube. 1,758,803; May 13.
Pinaud Incorporated. (See Riegel, George F., assignor.)
Pinzit Company, The. (See Aaron, Harry, assignor.)
Pitney-Bowes Postage Meter Company. (See Ogden, Jacob W., assignor.)
Pittam, George R., T. B. Blevins, and P. F. Brandt, assignors of one-fourth to J. C. Phillips, Long Beach, Calif. Colonic and vaginal irrigating apparatus. 1,758,332; May 13.
Pittsburgh Garter Company. (See Eisel, Ralph C., assignor.)
Pittsburgh Rolls Corporation. (See Wilson, Albert, assignor.)
Piotkin, Oscar H., assignor to S. Dresner & Son, Inc., Chicago, Ill. Catch for traveling-bag and Gladstone-bag frames. 1,758,087; May 13.
Poole, Arthur F., Pelham Manor, assignor to Remington Accounting Machine Corporation, New York, N. Y. Computing machine. 1,758,172; May 13.
Porsche, Ferdinand, Stuttgart-Unterturkheim, assignor, by mesne assignments, to Daimler-Benz Aktiengesellschaft, Berlin, Germany. Dynamo-electric driving set for vehicles. 1,758,533; May 13.
Portable Machinery Company. (See Wentz, Jere L., assignor.)
Porter, William E., Los Angeles, Calif. Glass-polishing machine. 1,758,534; May 13.
Post, Claude L., Chicago, Ill. Printing apparatus. 1,758,535; May 13.
Post, Claude L., Chicago, Ill. Printing mechanism. 1,758,536; May 13.
Potter, Ralph K., New York, N. Y., assignor to American Telephone and Telegraph Company. High-frequency communication system. 1,758,058; May 13.
Prescott, William E., Harrow, England, assignor to Baker Perkins Company, Incorporated, Saginaw, Mich. Apparatus for producing refined cocoa liquor from cocoa nibs and the like. 1,758,804; May 13.
Pressed Steel Car Company. (See Schmohl, Alfred C., assignor.)
Price, William W., and C. W. Ripsch, Dayton, Ohio; said Ripsch assignor to said Price. Air-driven implement or tool. 1,758,760; May 13.
Primrose, John, Dongan Hills, N. Y., assignor to Foster Wheeler Corporation. Heating apparatus. 1,758,239; May 13.
Punke, John J., assignor to Hupp Motor Car Corporation, Detroit, Mich. Combined horn button and control lever. Des. 81,146; May 13.
Purvis, Charles A., Long Beach, Calif. Mop. 1,758,464; May 13.
Q. R. S.-De Vry Corporation. (See De Vry, Herman A., assignor.)
Queens Typewriter & Stationery Corp. (See Brown, Alexander P., assignor.)
Quinn, Nelson J. (See Rakestraw, Lawrence M., assignor.)
Quita, Arthur J., Syracuse, N. Y., assignor to E. Rickersberg. Spraying apparatus. 1,758,761; May 13.
R. B. Patent Corporation. (See Burnelli, Vincent J., assignor.)
Radio Corporation of America. (See Moulton, Albert B., assignor.)
Rahr, Chester E., Brookline, assignor, by mesne assignments, to The Patent and Licensing Corporation, Boston, Mass. Multicolor strip shingle and making the same. 1,758,059; May 13.
Railway and Industrial Engineering Company. (See Koppitz, Carl G., assignor.)
Rakestraw, Lawrence M., assignor of one-half to N. J. Quinn, Toledo, Ohio. Sterilizer for bottles. 1,758,537; May 13.
Ransome Concrete Machinery Company. (See Bushnell, James E., assignor.)
Rarig, Weldon C., Robstown, Tex. Tractor. 1,758,584; May 13.
Rau, Henry V. (See Pierce, G. L., and Rau.)
Reach, William F., Springfield, Mass., assignor to A. G. Spalding & Bros., New York, N. Y. Golf-ball washer. 1,758,011; May 13.
Read, William C., Scarsdale, N. Y., assignor to Electro Metallurgical Company. Silico-thermic metallurgy. 1,758,465; May 13.
Readey, Anna K., administratrix. (See Fensky, C., and Ready.)
Ready, Harvey J. (See Fensky, C., and Ready.)
Rebori, Atilio, Buenos Aires, Argentina. Lock. 1,758,620; May 13.
Reddelien, Gustav, and W. Müller, Leipzig, Germany, assignors to Agfa Ansco Corporation, Binghamton, N. Y. Developing photographic materials and new photographic developers. 1,758,762; May 13.
Reddelien, Gustav, and W. Müller, Leipzig, Germany, assignors, by mesne assignments, to Agfa Ansco Corporation, Binghamton, N. Y. Developing photographic materials and new photographic developers. 1,758,892; May 13.
Redfield, Snowden B., Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Water-cooling device for compressors. 1,758,538; May 13.
Reed, Charles M., Kabletown, W. Va. Animal trap. 1,758,763; May 13.
Reed, William F., Camden, N. J., assignor to Gilfinder Brothers, Inc., Port Jervis, N. Y. Light-diffusing globe. Des. 81,147; May 13.
Reel, Herbert W., assignor to United States Gypsum Company, Chicago, Ill. Ceiling construction. 1,758,201; May 13.
Reeves, Ralph M. (See Robison, James E., assignor.)
Reichel, Hugo, Chicago, Ill. Bead cutter. 1,758,409; May 13.
Reichel, Hugo, Chicago, Ill. Shingle-strip machine. 1,758,410; May 13.
Reid, Josiah E., assignor to International Motor Company, New York, N. Y. Spring suspension. 1,758,411; May 13.
Reifschneider, Conrad, St. Louis, Mo. Coupling or holding attachment for sash-weight cords. 1,758,850; May 13.
Reilly, William, White Plains, N. Y. Automatic fish scaler. 1,758,675; May 13.
Reinmuth, Harry G., Philadelphia, Pa. Rolling pin. 1,758,060; May 13.
Remington Accounting Machine Corporation. (See Poole, Arthur F., assignor.)
Remington Rand Inc. (See Wigginton, George P., assignor.)
Remington Rand Inc. (See Wolters, Carl F., assignor.)
Remington Typewriter Company. (See Going, George G., assignor.)
Rentschler, Harvey C., East Orange, N. J., assignor to Westinghouse Lamp Company. Vacuum device and method of manufacture. 1,757,976; May 13.
Rentz, Frank B., and W. E. Fantle, Yankton, S. Dak. Mechanical toy. 1,758,061; May 13.
Replogle, Daniel B., Berkeley, Calif. Centrifugal fan and making the same. 1,758,062; May 13.
Reuss, Arthur E., assignor to The General Iron Works Company, Cincinnati, Ohio. Heating device. 1,758,466; May 13.
Reynolds, Frank A., and L. F. L. Turcotte, Lowell, Mass., assignors, by mesne assignments, to Lowell Machine Company. Seed-celling machine. 1,758,621; May 13.
Reynolds, Nelson E. (See Sawyer, Wilfred D., assignor.)
Rhodes, Jesse T., Brooklyn, N. Y. Clock case. Des. 81,148; May 13.
Rice, Edgar W., Yonkers, N. Y. Method of and apparatus for reactivating charcoal. 1,758,202; May 13.
Rice, John S. (See Dudley, Colon J., assignor.)
Rice, John S., Biglerville, Pa., and J. W. Trew, Baltimore, Md.; said Trew assignor to said Rice. Basket liner. 1,758,851; May 13.
Richards, Julius H., Springfield, Mass., assignor, by mesne assignments, to Eclipse Machine Company, Elmira Heights, N. Y. Engine starter. 1,758,173; May 13.
Richardson, Myron H., and A. D. Antoine, assignors to Advance Machine Company, Chicago, Ill. Vending machine. 1,758,333; May 13.

Richardson, Myron H., Chicago, and A. E. Gebert, Wilmette, assignors to Advance Machine Company, Chicago, Ill. Vending machine. 1,758,373; May 13.
Richersberg, Emanuel. (See Quilia, Arthur J., assignor.)
Richfield Oil Company of California. (See Frizell, De Ralph, assignor.)
Ricker, Chester S., Indianapolis, Ind. Vibration eliminator. 1,758,467; May 13.
Ridge, Harry M., London, England. Apparatus for subjecting a mass of powdered or granular material to the action of gases, particularly applicable to the calcining and roasting of ores and similar materials. 1,758,805; May 13.
Riegel, George F., assignor to Pinaud Incorporated, New York, N. Y. Carton for dermatological and epidermical cream. 1,758,585; May 13.
Riehm, Wilhelm, assignor to the firm Maschinenfabrik Augsburg-Nuernberg Aktiengesellschaft, Augsburg, Germany. Combustion engine. 1,758,374; May 13.
Riehm, Wilhelm, assignor to the firm Maschinenfabrik Augsburg-Nuernberg Aktiengesellschaft, Augsburg, Germany. Internal-combustion engine. 1,758,375; May 13.
Rieter, Joh. Jacob, & Co. (See Hess, Heinrich O., assignor.)
Riggs, Homer C., assignor to Rodney Hunt Machine Company, Orange, Mass. Slack-loop washing machine and method. 1,758,174; May 13.
Riker, Samuel M., Chester, N. J. Shoe ornament. Des. 81,149; May 13.
Riker, Samuel M., Chester, N. J. Shoe ornament. Des. 81,150; May 13.
Riker, Samuel M., Chester, N. J. Shoe ornament. Des. 81,151; May 13.
Riker, Samuel M., Chester, N. J. Shoe buckle. Des. 81,152; May 13.
Riker, Samuel M., Chester, N. J. Shoe buckle. Des. 81,153; May 13.
Riker, Samuel M., Chester, N. J. Shoe buckle. Des. 81,154; May 13.
Rindge, Fulton, Ware, assignor of one-half to E. C. Brown, Watertown, Mass. Textile. 1,758,622; May 13.
Ripsch, Charles W. (See Price, W. W., and Ripsch.)
Roach, Otto, assignor of two-thirds to Staples Studio, Incorporated, South Bend, Ind. Camera support. 1,758,240; May 13.
Robert, Eugene W., Atlanta, Ga. Football game. 1,758,063; May 13.
Roberts, Eugene, assignor to The Western States Machine Company, Salt Lake City, Utah. Automatically controlling centrifugal machines. 1,758,901; May 13.
Robinson, Lucille T., New York, N. Y. Retaining mattresses. 1,758,718; May 13.
Robison, James E., Boulder, assignor of one-eighth to R. M. Reeves, Denver, Colo. Ground-gripping chain for automobile tires. 1,758,902; May 13.
Robson, William A. (See Ballard, F. L., and Robson.)
Roby, Edward R., Troy, assignor to S. and R. Folding Machine Company, Inc., Green Island, N. Y. Folding machine. 1,758,127; May 13.
Rodrigues, Florinda de C., administratrix. (See de Christo, Francisco I.)
Roedding, Gordon E., assignor to Grand Rapids Brass Company, Grand Rapids, Mich. Latch. Des. 81,155; May 13.
Roettges, Frederick W., assignor to Wrought Iron & Art Glass Fixture Co., Inc., New York, N. Y. Table lamp or article of similar nature. Des. 81,156; May 13.
Roller, Lyman L. (See Haubert, Leo, assignor.)
Rose, Alfred G., Gainsborough, assignor to Rose Brothers, Gainsborough, Limited, Albion Works, Gainsborough, England. Machine for wrapping caramels or like articles. 1,758,468; May 13.
Rose Brothers, Gainsborough, Limited. (See Rose, Alfred G., assignor.)
Rosen, Martin, assignor to Sun Goods Corporation, Chicago, Ill. Package. Re17,668; May 13.
Rosenblad, Curt, Sundsvall, Sweden. Steam-heated apparatus. 1,758,295; May 13.
Rosenblatt, Louis C., New York, N. Y. Rear yoke for dresses. 1,758,852; May 13.
Rosenthal China Corporation, The. (See Wesp, George, assignor.)
Rosevear, William B., Toledo, Ohio. Propagating sugar beets. 1,758,128; May 13.
Roth, Stanley A., and G. F. Tonner, Tallicum, Wash. Power-operated miter saw. 1,758,623; May 13.
Rotor Air Tool Company, The. (See Burrell, E. P., and Hunt, assignors.)
Roxburg, Alvina C., McPherson, Kans. Bandage. 1,758,764; May 13.
Ruttiman, Alfred, assignor to Florence Stove Company, Gardner, Mass. Ignition device. 1,758,853; May 13.
Ryan, Allan C., et al. (See Miller, William A., assignor.)
S. and R. Folding Machine Company. (See Roby, Edward B., assignor.)
Sadtler, Samuel S., Springfield Township, Montgomery County, Pa., assignor to Amiesite Asphalt Company of America, Camden, N. J. Road-building material and making the same. 1,758,913; May 13.
Sadtler, Samuel S., Springfield Township, Montgomery County, Pa., assignor to Amiesite Asphalt Company of America, Camden, N. J. Road-building material and making the same. 1,758,914; May 13.
St. Regis Paper Company. (See Bates, Adelmer M., assignor.)
Saives, Leon, assignor to Société Anonyme des Usines Renault, Billancourt, France. Steering of endless-track vehicles. 1,758,806; May 13.
Salerni, Edoardo M., Paris, France, assignor to E. M. S. Industrial Processes Limited, London, England. Apparatus for removing dust from gases or vapors. 1,758,624; May 13.
Salkowski, Heinrich. (See Kalischer, G., Salkowski, and Frister.)
Salvatore, John, East Orange, N. J. Strainer. 1,757,977; May 13.
Sandalari, Inc. (See Bendelari, Mary E., assignor.)
Sansburn, Alexander W., Pilares de Nacozari, Mex. Lamp bracket. 1,758,469; May 13.
Saul, Siegfried, Aachen, Germany. Air valve for inflating hollow bodies. 1,758,625; May 13.
Sawyer, Wilfred D., Long Beach, Calif., assignor of one-half to N. E. Reynolds, Greeley, Colo. Method and means to pump oil with fluids. 1,758,376; May 13.
Schacht, G. A., Motor Truck Company, The. (See Schacht, Gustave A., assignor.)
Schacht, Gustave A., assignor to The G. A. Schacht Motor Truck Company, Cincinnati, Ohio. Brake. 1,758,012; May 13.
Schaer, Charles, Langental, assignor to the firm Sulzer Frères Société Anonyme, Winterthur, Switzerland. Borehole pump. 1,758,175; May 13.
Schaffert, Adolf H., assignor to Truscon Steel Company, Youngstown, Ohio. Window structure. 1,758,893; May 13.
Schaffert, Adolf H., assignor to Truscon Steel Company, Youngstown, Ohio. Window structure. 1,758,894; May 13.
Schane, Edward H., assignor to The Fanner Manufacturing Company, Cleveland, Ohio. Apparatus for forming metallic retaining members. 1,758,470; May 13.
Schauman, Bror M., Highlands, N. J., assignor, by mesne assignments, to Thord-Gray Holding Corporation, New York, N. Y. Aircraft. 1,758,377; May 13.
Schauman, Karl O., New York, N. Y., assignor to W. H. Avery, San Francisco, Calif. Vehicle control means. 1,758,854; May 13.
Schaumann, Alfred, Berlin-Friedenau, Germany. Body armor. 1,758,296; May 13.
Schick, Jacob, Stamford, Conn. Shaving machine. 1,757,978; May 13.
Schleifer, Wilhelm, Vienna, Austria. Rider for registration cards. 1,758,334; May 13.
Schlosberg, Sallie A., Henrietta, Tex. Bread box. Des. 81,157; May 13.
Schluecke, Erich, et al. (See Boyd, Martin, assignor.)
Schlumpf, Jacques, Horcheim, near Coblenz, Germany. Device for subdividing liquid containers. 1,758,335; May 13.
Schmick, Hans, Greifswald, assignor to Siemens & Halske, Aktiengesellschaft, Siemensstadt, near Berlin, Germany. Determining a constituent in a mixture of substances. 1,758,088; May 13.
Schmid, Emil, Washington, D. C. Ornamental treatment of wood. 1,758,336; May 13.
Schmidt, Georg J., Swelbrucken, Germany. Valve. 1,758,471; May 13.
Schmidt, John, assignor to Sprague-Sells Corporation, Hoopeston, Ill. Apparatus for treating food materials. 1,758,064; May 13.
Schmidt, Maximilian P., and W. Krieger, assignors to Kalle & Co. Aktiengesellschaft, Wiesbaden-Biebrich, Germany. Light-sensitive layers and preparing them. 1,758,676; May 13.
Schmidt, Oscar, Inc. (See Schmidt, W. O., and Haberman, assignors.)
Schmidt, Robert E., and B. Stein, Elberfeld, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Manufacture of 2-7 dinitro-anthraquinone. 1,758,855; May 13.
Schmidt, Walter O., Hackensack, and C. Haberman, North Bergen, assignors to Oscar Schmidt, Inc., Jersey City, N. J. Stringed musical instrument. 1,758,626; May 13.
Schmitt, Charles J., Algoma, Wis. Folding table. 1,758,856; May 13.
Schmitz, Carl, Oelde, Germany. Separator. 1,758,586; May 13.
Schmohl, Alfred C., Beaver Falls, assignor to Pressed Steel Car Company, Pittsburgh, Pa. Car construction. 1,758,857; May 13.
Schneider, Hermann. (See Straub, F., Mayer, and Schneider.)
Schnell, William, assignor to Ternstedt Manufacturing Company, Detroit, Mich. Outside door handle or similar article for an automotive vehicle. Des. 81,158; May 13.
Schnetka, Moritz, Leverkusen-on-the-Rhine, Germany, assignor to Titanium Pigment Co., Inc., New York, N. Y. Production of titanic oxide. 1,758,472; May 13.
Schnitzspahn, Karl. (See Keller, F., and Schnitzspahn.)
Schonhofer, Fritz. (See Schulemann, W., Schonhofer, and Wingler.)
Schoop, Max U., Hoengg, Switzerland. Coating articles, particularly with metals. 1,758,473; May 13.
Schrader's, A., Son, Incorporated. (See Spill, Charles J., assignor.)

Schubart, Benno, Nuremberg, Germany, assignor to the firm Vereinigte Schuhfabriken Bernois-Wessels, A. G., Augsburg-Oberhausen, Germany. Baby's shoe box. Des. 81,159; May 13.
Schubert, John L., Hillsboro, and J. E. Caldwell, Mount Hamill, Iowa. Adjustable wrench. 1,758,013; May 13.
Schuchardt, August, Winona, Minn. Attrition mill. 1,758,539; May 13.
Schulemann, Werner, Vohwinkel, near Elberfeld, F. Schonhofer and A. Wingler, Elberfeld, Germany, assignors to Winthrop Chemical Company, Inc., New York, N. Y. 6-alkoxy-8-aminoquinolines. 1,758,378; May 13.
Schwarz, Alfred, Montclair, N. J., assignor to Coal and Oil Products Corporation. Gas-making apparatus. 1,758,858; May 13.
Schweyer, Daniel H., Easton, Pa. Automatic train control. 1,758,765; May 13.
Scott, David J., et al., executors. (See Scott, Walter C., assignor.)
Scott, Isabella, et al., executors. (See Scott, Walter C., assignor.)
Scott, Walter C., deceased, assignor to I. and D. J. Scott, executors, doing business as Walter Scott & Company, Plainfield, N. J. Web-replenishing mechanism. 1,758,176; May 13.
Scott, Walter, & Company. (See Scott, Walter C.)
Scott, William, et al. (See Tune, Thomas P., assignor.)
Scovill Manufacturing Company. (See Wild, Henry W., assignor.)
Sears, Roebuck and Co. (See Shively, Walter E., assignor.)
Seehaus, Paul, Zurich, Switzerland. Storage and utilization of electrically-generated heat. 1,758,474; May 13.
Segal Automatic Tweezer Corporation. (See Segal, Samuel, assignor.)
Segal Lock & Hardware Co. (See Segal, Samuel, assignor.)
Segal, Samuel, assignor, by mesne assignments, to Segal Lock & Hardware Co., Inc., New York, N. Y. Lock. 1,758,203; May 13.
Segal, Samuel, assignor to Segal Automatic Tweezer Corporation, New York, N. Y. Tweezers. 1,758,475; May 13.
Selectograph Company. (See Gollnick, Paul A. and N., assignors.)
Senger, Albert C., Hamilton, Ohio. Tire-changing machine. 1,758,264; May 13.
Serpess, Therese, Washington, D. C. Garment hanger. 1,758,807; May 13.
Sersen, Fred J., Brooklyn, and K. B. Conger, jr., Ardsley-on-Hudson, N. Y. Acoustical correction and sound deadening. 1,758,808; May 13.
Shadrick, Richard H. (See Olsen, R. A., and Shadrick.)
Shapiro, Philip C., assignor to Siegel Manufacturing Company, Philadelphia, Pa. Electric fixture. 1,758,129; May 13.
Sharpe Manufacturing Co., The. (See Allen, William C., assignor.)
Shaw, Harold F., assignor to F. A. Whitney Carriage Company, Leominster, Mass. Baby carriage. 1,758,895; May 13.
Shaw, John F., London, England. Attachment for umbrellas, walking sticks, handles of tennis bats, and the like. 1,758,379; May 13.
Shaw, John S., Fazakerley, and W. Heap, West Derby, Liverpool, England. Speed-varying gear. 1,758,859; May 13.
Shaw, Noble C., assignor to The Union Switch & Signal Company, Swissvale, Pa. Relay system. 1,758,540; May 13.
Shaw, William S., Boise, Idaho. Street indicator. 1,758,476; May 13.
Sheller, John C., Maywood, assignor to W. B. Hintze, Chicago, Ill. Locking device. 1,758,337; May 13.
Sheppy, Charles L., assignor to The Pierce Arrow Motor Car Company, Buffalo, N. Y. Liquid filter. 1,758,412; May 13.
Sherling, Emmet L., and G. E. Cunningham, Macon, Ga. Dusting machine. 1,758,065; May 13.
Sherrick, Samuel T., assignor to E. S. Kassler, jr., and T. P. Campbell, trustees, Denver, Colo. Lubricant. 1,758,265; May 13.
Shibly, Nassif E., Wheeling, W. Va. Aeroplane. 1,758,204; May 13.
Shied, Michael F., Rochester, N. Y. Miniature floor furnace. 1,758,860; May 13.
Shield, Paul S. (See Betts, A. L., and Shield.)
Shipley, Bernis M., assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio. Cash register. 1,758,861; May 13.
Shirriff, Colin H., et al. (See Shirriff, Francis W., assignor.)
Shirriff, Francis W., Toronto, Ontario, assignor of one-third to W. M. Shirriff and one-third to C. H. Shirriff, Toronto, Canada. Food product and method of preparing. 1,758,089; May 13.
Shirriff, William M., et al. (See Shirriff, Francis W., assignor.)
Shively, Walter E., Akron, Ohio, assignor to Sears, Roebuck and Co., Chicago, Ill. Tire. Des. 81,160; May 13.
Shoe Form Co. Inc. (See De Witt, William J., assignor.)
Shoemaker, Walter J., Hamburg, N. Y. Traffic-signal reflector for motor vehicles. 1,758,809; May 13.
Shoemaker, William D., Chevy Chase, Md. Ornamental wall fixture. 1,758,130; May 13.
Siegel Manufacturing Company. (See Shapiro, Philip C., assignor.)
Siemens & Halske, Aktiengesellschaft. (See Schmick, Hans, assignor.)
Siemens & Halske Aktiengesellschaft. (See Wiessner, Paul, assignor.)
Simon, Charles W., Detroit, Mich. Hollow-plug connection. 1,758,541; May 13.
Simos, Nick, Philadelphia, Pa. Kit box. 1,758,338; May 13.
Simplex Paper Box Co. (See Gross, Ralph A., assignor.)
Simplex Valve & Meter Company. (See Ledoux, John W., assignor.)
Simpson, John O., assignor to The E. Ingraham Company, Bristol, Conn. Clock base. Des. 81,161; May 13.
Sinclair Refining Company. (See Bell, J. E., and Isom, assignors.)
Singer Manufacturing Company, The. (See Parkes, William N., assignor.)
Skinner, Sherrod E., assignor to Landers, Frary & Clark, New Britain, Conn. Electrically-heated pad. 1,758,177; May 13.
Sleeper, Robert R., Boundbrook, N. J., assignor, by mesne assignments, to The Calco Chemical Company, Inc. Dyeing. 1,758,877; May 13.
Slinn, James B., Bonaparte, Iowa. Flying machine. 1,758,178; May 13.
Sloan Brothers. (See Atterholt, Oliver S., assignor.)
Smith, Alba J., assignor to Gill Manufacturing Company, Chicago, Ill. Making piston rings. 1,758,719; May 13.
Smith, Albert C., Winthrop, assignor to W. F. Baird, Boston, Mass. Refrigerating truck. 1,758,477; May 13.
Smith, Harry. (See Austin, J., and Smith.)
Smith, Henry J., Minneapolis, Minn. Machine for cutting seed potatoes. 1,758,587; May 13.
Smith, Roland L., Belmont, Mass. Heat-exchange apparatus. 1,758,266; May 13.
Smith, Walter E., Warwick Downs, assignor to C. G. King & Co., Inc., Providence, R. I. Shoe buckle. Des. 81,162; May 13.
Smith, Walter E., Warwick Downs, assignor to C. G. King & Co., Inc., Providence, R. I. Shoe buckle. Des. 81,163; May 13.
Smith, Walter E., Warwick Downs, assignor to C. G. King & Co., Providence, R. I. Shoe buckle. Des. 81,164; May 13.
Smith, Walter E., Warwick Downs, assignor to C. G. King & Co., Inc., Providence, R. I. Shoe buckle. Des. 81,165; May 13.
Smith, Willard D., Maplewood, Mo. Viscosimeter and display device. 1,758,677; May 13.
Snavely, Clarence S., Pittsburgh, assignor to The Union Switch & Signal Company, Swissvale, Pa. Light signal. 1,758,179; May 13.
Sneed, John, Detroit, Mich., assignor to The Midland Steel Products Company, Cleveland, Ohio. Brake structure. 1,758,066; May 13.
Snyder, Jacob R., Cleveland, Ohio. Shock absorber. 1,758,090; May 13.
Snyder, Vern C., Portland, Oreg. Water-cooled comminuted-fuel burner. 1,758,478; May 13.
Societe Anonyme des Usines Renault. (See Saives, Leon, assignor.)
Société Anonyme "La Combustion" Rationnelle. (See Stein, Charles M., assignor.)
Société Anonyme: Société des Phares et Equipments Electriques. (See Delaux, Paul, assignor.)
Société d'Etudes et de Construction d'appareils de télémécanique. (See Bernady, Raoul, assignor.)
Société Francaise Cinechromatique (Procedes R. Berthon). (See Berthon, Rodolphe, assignor.)
Societe Internationale Des Procedes Prudhomme Houdry. (See Joseph, Alfred, assignor.)
Society of Chemical Industry in Basle. (See Straub, F., Mayer, and Schneider, assignors.)
Sodergren, John E., Minneapolis, Minn. Screen. 1,758,720; May 13.
Sommer, Karl, Steinenberg, Germany. Device for uniformly moving on a paper strip for closet seats. 1,758,862; May 13.
Sorrell, Raymond A. (See Mickelson, Frederick P., assignor.)
Souczek, Ferdinand, Reichenberg, Czechoslovakia. Shuttle for looms. 1,758,811; May 13.
Spalding, A. G., & Bros. (See Pierce, G. L., and Rau, assignors.)
Spalding, A. G., & Bros. (See Reach, William F., assignor.)
Spawton, Richard A., Brookfield, Nova Scotia, Canada. Safety milk-bottle holder. 1,758,863; May 13.
Specialty Advertising Company. (See Agree, William P., jr., assignor.)
Spill, Charles J., Freeport, assignor to A. Schrader's Son, Incorporated, Brooklyn, N. Y. Leak-detecting apparatus. Re17,662; May 13.
Spiro, Harry, Chicago, Ill. Casting machine. 1,758,380; May 13.
Sprague & Carleton. (See Whitcomb, Edson G., assignor.)
Sprague-Sells Corporation. (See Foster, Frank A., assignor.)
Sprague-Sells Corporation. (See Schmidt, John, assignor.)
Staley, Guy W., Robbinsdale, Minn. Machine for printing photographs. 1,758,588; May 13.
Standard Gas Equipment Corporation. (See Phillips, Ross M. G., assignor.)

Standard Oil Company. (See Wilson, Robert E., assignor.)
Standard Oil Company of California. (See Johnson, Sidney P., assignor.)
Standard Oil Development Company. (See Coffin, Herbert B., assignor.)
Standard Oil Development Company. (See Evans, Earle W., assignor.)
Standard Oil Development Company. (See Howard, Frank A., assignor.)
Standard-Trump Bros. Machine Company. (See Kappes, George W., assignor.)
Stanley, Leopold G., Maplewood, N. J., assignor to Stanley & Stanley, Incorporated, New York, N. Y. Combination case. 1,758,297; May 13.
Stanley & Stanley, Incorporated. (See Stanley, Leopold assignor.)
Stapel, Justin P., Owen, Wis. Manure loader. 1,758,014; May 13.
Staples Studio, Incorporated. (See Roach, Otto, assignor.)
Staples, Thomas E., Burkeville, Va. Neckband. 1,758,766; May 13.
Stationers Loose Leaf Co. (See Lotter, Adolph G., assignor.)
Steel Scaffolding Company, The. (See Goodwin, James R., assignor.)
Steffen, Carl, jr., Vienna, Austria. Continuous washing of tricalcium saccharate. 1,757,979; May 13.
Steiger, Carl E., assignor to Deltox Rug Company, Oshkosh, Wis. Woven material and producing the same. 1,757,980; May 13.
Stein, Berthold. (See Schmidt, R. E., and Stein.)
Stein, Charles M., assignor to Société Anonyme "La Combustion," Rationnelle, Paris, France. Demountable rotary crusher. 1,758,180; May 13.
Steinmayer, Alwin G., Milwaukee, assignor, by mesne assignments, to Line Material Company, South Milwaukee, Wis. Lightning arrester. 1,758,181; May 13.
Stephenson, William B., Chicago, Ill. Towel rack. 1,757,981; May 13.
Stern, Emerich, Temiscara, Roumania. Spark plug. 1,758,542; May 13.
Stickney, Burnham C., Hillside, N. J., assignor to Underwood Elliott Fisher Company, New York, N. Y. Typewriting machine. 1,758,015; May 13.
Stiefel, Ralph C., Ellwood City, Pa. Mandrel-bar-supporting apparatus for piercing mills. 1,758,413; May 13.
Stirdivant, Clarence J., Huntington Park, Calif. Service tower. 1,758,131; May 13.
Stockton, George W., assignor to J. N. Huff, Denver, Colo. Ditching machine. 1,758,132; May 13.
Strader, Alfred, Columbus, Ohio. Spinning machine. 1,758,864; May 13.
Straub, Fritz, and H. Mayer, Basel, and H. Schneider, Riehen, near Basel, assignors to Society of Chemical Industry in Basel, Basel, Switzerland. Dyestuffs containing sulphur and chromium and making same. 1,758,865; May 13.
Strempel, Julius J., assignor of one-half to J. H. Kahn, Haskell, Tex. Adjustable roller bearing. 1,758,479; May 13.
Strong, Arthur P., assignor to Dodge Manufacturing Corporation, Mishawaka, Ind. Pulley. 1,758,182; May 13.
Suchy, Robert, Bitterfeld, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Production of phosphorus and alumina cement. 1,758,241; May 13.
Sullivan Machinery Company. (See Maxson, Louis A., assignor.)
Sulzer, Frères Société Anonyme. (See Schaer, Charles, assignor.)
Sunderland, Sam, Keighley, England. Machine for cutting or generating the teeth of wheels. 1,758,067; May 13.
Sundstrand Corporation, The. (See Sundstrand, Oscar J., assignor.)
Sundstrand, Oscar J., Rockford, Ill., assignor, by mesne assignments, to The Sundstrand Corporation, Wilmington, Del. Transfer mechanism. 1,758,016; May 13.
Sun Goods Corporation. (See Rosen, Martin, assignor.)
Swanson, Ellsworth T. (See Olsen, R. A., and Shadrack, assignors.)
Swartz, Jack. (See Swartz, Saul. M., and J.)
Swartz, Meyer. (See Swartz, Saul. M. and J.)
Swartz, Saul. M., and J., Cambridge, Mass. Convertible chair and folding bed. 1,758,721; May 13.
Sweet, Hell V., Buffalo, N. Y. Tandem-motored monoseaplane. 1,758,866; May 13.
Sweitzer, William S., Commodore, Pa. Automobile license plate. 1,758,627; May 13.
Symington Company, The. (See Kadel, Byers W., assignor.)
Symonds, Ralph F., Harblehead, assignor to New England Trawler Equipment Co., Everett, Mass. Towing block. 1,758,722; May 13.
Taggart, Louis E., near Palo Alto, Calif. Sprinkler. 1,758,767; May 13.
Tagler, Joseph, Los Angeles, Calif. Shoe attachment. 1,758,091; May 13.
Talbot, Ernest, Lowestoft, England. Piston for fluid-pressure engines. 1,758,543; May 13.
Tarr, Lester W., assignor, by mesne assignments, to Continental-Diamond Fibre Company, Newark, Del. Track insulation. 1,758,867; May 13.
Tauber, Hyman, East Liverpool, Ohio. Lighting fixture. Des. 81,166; May 13.
Taylor, Edward C., Yonkers, N. Y. Traffic signal. 1,758,205; May 13.
Teague, Walter D., Forest Hill, N. Y., assignor to Turner Glass Corporation, Terra Haute, Ind. Jar or similar container. Des. 81,167; May 13.
Teater, Hiram, Cleveland, Ohio. Cooking retort. 1,758,183; May 13.
Teesdale, John B., Grand Rapids, Mich. Rotary pump. 1,758,208; May 13.
Telander, William, Milaca, Minn. Bag-holding apparatus. 1,758,868; May 13.
Teletype Corporation. (See Kleinschmidt, Edward E., assignor.)
Television Laboratories, Inc. (See Farnsworth, Philo T., assignor.)
Temple, John E. (See Burney, C. D., Wallis, and Temple.)
Templeton, Walter B., Chicago, Ill. Lifting jack. 1,757,982; May 13.
Ternstedt Manufacturing Company. (See Schnell, William, assignor.)
Thatcher, Charles J., New York, N. Y. Window cleaner. 1,758,723; May 13.
Thermokept Corporation. (See Murch, John H., assignor.)
Thomas & Betts Co., The. (See Thomas, George C., jr., assignor.)
Thomas, George C., jr., assignor to The Thomas & Betts Co., Elizabeth, N. J. Cable connecter. 1,758,092; May 13.
Thomas, Thomas H., Edgewood, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Electropneumatic brake. 1,758,724; May 13.
Thompson, Paul J., et al. (See Kean, Gilbert P., assignor.)
Thomsen, Alfred M., San Francisco, Calif. Manufacture of paper pulp. 1,758,896; May 13.
Thord-Gray Holding Corporation. (See Schauman, Bror M., assignor.)
Thorn, William E., assignor to The Ives Corporation, Bridgeport, Conn. Toy railway track. 1,758,093; May 13.
Thorn, William E., assignor to The Ives Manufacturing Corporation, Bridgeport, Conn. Lamp-socket-fastening means. 1,758,299; May 13.
Thornton, John E., West Hampstead, London, England. Multicolor cinematograph and other film. 1,758,769; May 13.
Thornton, John E., West Hampstead, London, assignor to J. O. O'Brien, Manchester, England. Manufacture of multicolor cinematograph films. 1,758,184; May 13.
Thornton, John E., West Hampstead, London, assignor to J. O. O'Brien, Manchester, England. Cinematograph color film and method of manufacture. 1,758,185; May 13.
Thornton, John E., London, assignor to J. O. O'Brien, Manchester, England. Multicolor cinematograph and other film. 1,758,768; May 13.
Thornton, Renée, New York, N. Y. Bottle. Des. 81,173; May 13.
Thurm, Richard, assignor to Baker Perkins Company, Incorporated, Saginaw, Mich. Tubular burner. 1,758,414; May 13.
Thurm, Richard, and E. O. Engels, Saginaw, Mich., assignors to Baker-Perkins Company, Inc., New York, N. Y. Tubular burner. 1,758,628; May 13.
Tiffany Manufacturing Co., The. (See Joyce, Harold L., assignor.)
Tilton & Cook Co. (See Laverdiere, Arthur J., assignor.)
Timmons, William H., Jackson, Tenn. Battery-lifting device. 1,758,480; May 13.
Titanium Pigment Co. (See Schnetka, Moritz, assignor.)
Toner, Glen F. (See Roth, S. A., and Toner.)
Topeka Tent & Awning Company. (See Anton, F. A., and Harvey, assignors.)
Torrence, Jo M. (See Torrence, Leo M., assignor.)
Torrence, Leo M., Arrington, Kans., assignor to J. M. Torrence, Arlington, Kans. Traffic signal. 1,758,481; May 13.
Towne, Frederick T., et al. (See Grover, George E., assignor.)
Trageser, Albert H., and L. Hassinger, New York, N. Y. Copper-boiler outlet. 1,758,869; May 13.
Traxel, William J., assignor, by mesne assignments, to Liquid Carbonic Corporation, Chicago, Ill. Electric switch. 1,758,629; May 13.
Trent Process Corporation. (See Trent, Walter E., assignor.)
Trent, Walter E., assignor to Trent Process Corporation, New York, N. Y. Process and apparatus for generating gases for power development. 1,758,630; May 13.
Trent, Walter E., assignor to Trent Process Corporation, New York, N. Y. Improving flowing characteristics of coal. 1,758,631; May 13.
Trew, James W. (See Rice, J. S., and Trew.)
Trotter, Fred. (See Pfeffer, F. D., and Trotter.)
Trumbull Electric Manufacturing Company, The. (See Hammerly, Herman J., assignor.)
Trumbull Manufacturing Company. (See Max, George J., assignor.)
Truscon Steel Company. (See Clark, M. T., and Montgomery, assignors.)
Truscon Steel Company. (See Schaffert, Adolf H., assignor.)
Tugendhat, Robert G., Brunn, Czechoslovakia, assignor to Baker Perkins Company, Saginaw, Mich. Electrically-heated baking machine. 1,757,983; May 13.

Tullis, Ross L., assignor to The Andrew B. Hendryx Company, New Haven, Conn. Bird cage. 1,758,415; May 13.
Tune, Thomas P., Mesilla Park, N. Mex., assignor of one-tenth to E. C. Cleaveland and one-tenth to W. Scott, El Paso, Tex. Engine. 1,758,482; May 13.
Turcotte, Lucien F. L. (See Reynolds, F. A., and Turcotte.)
Turner Glass Corporation. (See Teague, Walter D., assignor.)
Turney, Eugene T., Holmes, N. Y. Film pack and holder. 1,757,984; May 13.
Twin High Transmission Company, The. (See Ahlm, Charles E. F., assignor.)
Two-Tone Corporation, The. (See Mijer, Pieter, assignor.)
U. G. I. Contracting Company, The. (See Parsons, Morgan, assignor.)
Uehling, Fritz F., Passaic, N. J. Recording galvanometer. 1,758,416; May 13.
Ughi, James, New Boston, Ohio. Diver's bell. 1,758,094; May 13.
Uhrig, John H., Beverly, N. J., assignor to United States Cast Iron Pipe & Foundry Company, Burlington, N. J. Casting pipes. 1,758,483; May 13.
Underwood Elliott Fisher Company. (See Stickney, Burnham C., assignor.)
Union Special Machine Company. (See Berger, J., and Hanneman, assignors.)
Union Switch & Signal Company, The. (See Shaw, Noble C., assignor.)
Union Switch & Signal Company, The. (See Snavely, Clarence S., assignor.)
United-Carr Fastener Corporation. (See Carr, Fred S., assignor.)
United-Carr Fastener Corporation. (See Carr, Moses F., assignor.)
United Shoe Machinery Corporation. (See Williams, Frederick P., assignor.)
United States Cast Iron Pipe & Foundry Company. (See Uhrig, John H., assignor.)
United States Gypsum Company. (See Pfeffer, F. D., and Trotter, assignors.)
United States Gypsum Company. (See Reel, Herbert W., assignor.)
United States Hoffman Machinery Corporation. (See Page, Herbert E., assignor.)
Universal Draft Gear Attachment Co. (See Nash, Charles J., assignor.)
Universal Engineering Company. (See Zublin, John A., assignor.)
Universal Safety Tread Inc. (See Chapin, Howard G., assignor.)
Vacuum Casting Company, The. (See Kadow, August, assignor.)
Valverde, Robert, New York, N. Y. Synchronous electric motor. 1,758,417; May 13.
Van Ackeren, Joseph, assignor to The Koppers Company, Pittsburgh, Pa. Recuperative coking retort oven. 1,758,544; May 13.
Vandegrift, James N., assignor to C. M. Barnett, New York, N. Y. Retort. 1,758,770; May 13.
Van Dresser, Almon J., New Orleans, La. Track-oiling device. 1,758,300; May 13.
Van Ness, Henry E., assignor to Eclipse Machine Company, Elmira, N. Y. Engine starter. 1,758,301; May 13.
Van Ryan, Tony, and A. Alsaker, assignors to The Delta Star Electric Company, Chicago, Ill. Rotary switch. 1,758,206; May 13.
Van Slyke, Frederick E., assignor to The Jeffrey Manufacturing Company, Columbus, Ohio. Conveyer. 1,758,484; May 13.
Vartanian, Frank D., Portland, Me. Power shears. 1,758,485; May 13.
Veall, Arthur J., Melbourne, Victoria, Australia. Quick-action electric switch. 1,758,870; May 13.
Vereinigte Schuhfabriken Bernels-Wessels, A. G. (See Schubart, Benno, assignor.)
Versteeg, Hendrik J., Diemen, Netherlands, assignor to C. J. Jung, Amsterdam, Netherlands. Apparatus for spraying molten substances. 1,758,878; May 13.
Vincent, Frank J., Little Falls, N. Y. Bat. 1,758,418; May 13.
Von Braun, Julius, and O. Bayer, Frankfort-on-the-Main, Germany, assignors to General Aniline Works, Inc., New New York, N. Y. Catalytically reducing anthraquinone compounds and new hydrogenized products derived therefrom. 1,758,381; May 13.
Von Braun, Julius and O. Bayer, Frankfort-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Catalytically reducing anthraquinone compounds and new hydrogenized products derived therefrom. 1,758,382; May 13.
Von Dorn, Theodore F. (See Norwood, Harry G., assignor.)
Von Frommer, Rudolf, Budapest, Hungary. Automatic firearm. 1,758,486; May 13.
Vortex Cup Company. (See Barbieri, Cesare, assignor.)
Vortex Cup Company. (See Mangold, William B., assignor.)
Vroom, Guysbert B., Washington, D. C., assignor to Vroom Rotary Packing Corporation. Stuffing-box assembly. 1,758,725; May 13.
Vroom, Robert D. W., Wallingford, Conn., assignor to H. L. Judd Co., Inc., New York, N. Y. Suspension bracket. Des. 81,168; May 13.
Vroom Rotary Packing Corporation. (See Vroom, Guysbert B., assignor.)
Wach, Hans, Wesermunde-Lehe, Germany. Reciprocating steam engine. 1,758,267; May 13.
Wager, Robert H., Jersey City, N. J. Air register. 1,758,339; May 13.
Wagner, Edwin R., St. Louis, Mo. Brush. 1,758,632; May 13.
Wagner, Hermann, Soden-on-the-Taunus, H. Eichwede and E. Fischer, Hochst-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Azo dyestuffs and preparing them. 1,758,383; May 13.
Wagner, Hermann, Soden-on-the-Taunus, A. Kuchenbecker and R. Huss, Frankfort-on-the-Main-Hochst, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Azo dyestuffs and material dyed therewith. 1,758,340; May 13.
Wagner, Ralph W., assignor, by mesne assignments, to Automatic Electric Company, Chicago, Ill. Measuring and sorting device. 1,758,268; May 13.
Waite, George, assignor to Irving Airchute Company, Inc., Buffalo, N. Y. Parachute rip cord. 1,758,871; May 13.
Walker, Clinton L., Piedmont, Calif. Piston. 1,758,302; May 13.
Walker, George H., assignor to Heenan & Froude Limited, Worcester, England. Hydraulic heat-generating system. 1,758,207; May 13.
Walker, Robert P. (See Basinger, Americus D., assignor.)
Walker, Walter T., Ottawa Hills, assignor to Owens-Illinois Glass Company, Toledo, Ohio. Bottle. Des. 81,169; May 13.
Wallace, Benjamin F., Brooklyn, N. Y. Parting-facing product for casting metals. 1,758,095; May 13.
Wallace, Curtis C., Philadelphia, Pa. Vent for storage batteries. 1,758,545; May 13.
Wallace, William S., Charlotte, N. C. Tableting press. 1,758,133; May 13.
Wallis, Barnes N. (See Burney, C. D., Wallis, and Temple.)
Walliser, Robert E., Chicago, Ill. Fringe-tasseling machine. 1,757,985; May 13.
Walsh, James J., Philadelphia, Pa. Burglarproof lock. 1,758,096; May 13.
Ward, Harry L., Long Beach, Calif. Gripping clothes washer. 1,758,633; May 13.
Wardan, Charles M., Kirkwood, Mo. Shirt construction. 1,758,341; May 13.
Warnecke, Charles W., Maywood, N. J. Coal chute for delivery wagons. 1,758,208; May 13.
Warner Gear Company. (See White, Samuel O., assignor.)
Warner & Swasey Company, The. (See Burger, William J., assignor.)
Warren, Harry L., Alhambra, Calif. Domestic incinerator. 1,758,487; May 13.
Wartmann, Karl, Atlantic City, N. J. Signal. 1,758,546; May 13.
Waterbury Buckle Company. (See La Vigne, Jerome R., assignor.)
Watson, Harold L., assignor, by mesne assignments, to American Incubators, Inc., New Brunswick, N. J. Method of and apparatus for controlling the temperature of mammoth incubators. 1,758,017; May 13.
Wayne Manufacturing Company. (See Bauman, Frank, assignor.)
Webb, Herbert C., Baltimore County, Md. Combined shelf and folding table. 1,758,726; May 13.
Wecker, Ernst, Heilbronn-on-the-Neckar, Germany. Manufacture of esters of fatty acids and of mixtures containing fatty acids. 1,758,634; May 13.
Wehr Motor Company, The. (See Wehr, Rudolph, assignor.)
Wehr, Rudolph, Los Angeles, Calif., assignor to The Wehr Motor Company. Internal-combustion engine. 1,758,242; May 13.
Weil, Walter M., assignor to The National Smelting Company, Cleveland, Ohio. Mold. 1,758,488; May 13.
Weingärtner, Eduard, Leipzig, Germany. Sheet delivering and stacking device for printing machines. 1,758,134; May 13.
Weir, Bertha M., San Luis Obispo, Calif. Shoe having separable sole and upper. 1,758,342; May 13.
Wendt, Bruno. (See Matthies, O., and Wendt.)
Wentz, Jere L., assignor to Portable Machinery Company, Inc., Passaic, N. J. Conveyer. Re17,663; May 13.
Werner, Erhard, New York, N. Y. Treadle switch. 1,758,548; May 13.
Wertzberger Derrick Company. (See Dunham, Orson W., assignor.)
Wesp, George, assignor to The Rosenthal China Corporation, New York, N. Y. Plate or similar article. Des. 81,170; May 13.
Wesp, George, assignor to The Rosenthal China Corporation, New York, N. Y. Plate or similar article. Des. 81,171; May 13.
Westbrook, Roy E., Emmett, Idaho. Packing fruit. 1,758,771; May 13.
Western States Machine Company, The. (See Roberts, Eugene, assignor.)
Western Union Telegraph Company, The. (See Morgenstern, Ronald V., assignor.)
Westinghouse Air Brake Company, The. (See England, Alexander, assignor.)

Westinghouse Air Brake Company. (See McCune, Joseph C., assignor.)
Westinghouse Air Brake Company, The. (See Thomas, Thomas H., assignor.)
Westinghouse Air Brake Company, The. (See Wildin, George W., assignor.)
Westinghouse Electric & Manufacturing Company. (See McShane, Phelan, assignor.)
Westinghouse Lamp Company. (See Hoyt, Milton A., assignor.)
Westinghouse Lamp Company. (See Madden, Harry D., assignor.)
Westinghouse Lamp Company. (See Rentschler, Harvey C., assignor.)
Wheat, Frank B., Los Angeles, Calif. Portable partition. 1,758,489; May 13.
Wheaton, A. W., Brass Works. (See Wheaton, Abram W., assignor.)
Wheaton, Abram W., Maplewood, assignor to A. W. Wheaton Brass Works, Newark, N. J. Valve. 1,758,419; May 13.
Wheeler, Robert, Wellsburg, W. Va. Lock. 1,758,872; May 13.
Whirldry Corporation. (See Dunham, George W., assignor.)
Whitcomb, Edson G., assignor to Sprague & Carleton, Keene, N. H. Chair or similar article. Des. 81,172; May 13.
White, Samuel O., assignor to Warner Gear Company, Muncie, Ind. Oiling means for transmissions. 1,758,879; May 13.
White, William E., assignor to Kalman Steel Company, Chicago, Ill. Bridging. 1,758,678; May 13.
Whitney, F. A., Carriage Company. (See Shaw, Harold F., assignor.)
Whittier, Albert E., Bristol, Conn. Thermostatic control for electrically-heated apparatus. 1,757,986; May 13.
Whittier, Albert E., Bristol, Conn. Oven ventilator. 1,757,987; May 13.
Wickes, Harvey O., Castella, Calif. Holding device. 1,758,873; May 13.
Wiegand, Henry J., assignor, by mesne assignments, to Cutler-Hammer, Inc., Milwaukee, Wis. Vacuum-tube socket. 1,758,269; May 13.
Wieser, Hans, Werden, Germany. Highly-sensitive head-impact fuse. 1,758,635; May 13.
Wiessner, Paul, Berlin, assignor to Siemens & Halske Aktiengesellschaft, Siemensstadt, near Berlin, Germany. Dynamometric measuring instrument. 1,758,097; May 13.
Wigginton, George P., Kalamazoo, Mich., assignor, by mesne assignments, to Remington Rand Inc., New York, N. Y. Temporary binder. 1,758,549; May 13.
Wilcox, Edgar M., Hammond, Ind. Control means for railway-switch mechanism. 1,758,018; May 13.
Wild, Henry W., assignor to Scovill Manufacturing Company, Waterbury, Conn. Lip-stick holder. 1,758,303; May 13.
Wildin, George W., Pittsburgh, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Angle-cock device. 1,758,727; May 13.
Wiley, E. A., et al. (See Brown, Jacob S., assignor.)
Wilfred, Thomas, Forest Hills, N. Y. Light-projection display. 1,758,589; May 13.
Wilhelm, Rudolf, Essen-Altenessen, assignor to A. Beckers, Cologne-Kalk, Germany. Insulating means for coke-oven heads. 1,757,988; May 13.
Wilkins, Thomas M., Sugar Grove, Pa., assignor of one-half to A. Falconer, Jamestown, N. Y. Well-drilling rig. 1,758,728; May 13.
Wilkinson, Jabez, Fall River, Mass. Warp beam. 1,758,343; May 13.
Willetts, Paul G., Berlin, assignor to Hartford-Empire Company, Hartford, Conn. Refractory block. 1,758,903; May 13.
Williams, Dick B., Larchmont, N. Y. Display-tray system and trays therefor. 1,758,098; May 13.
Williams, Frederick P., Lynn, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Manufacture of shoes. 1,758,135; May 13.
Williams, John H. (See Hamilton, J. H., and Williams.)
Williams, Thomas D., Cleveland, Ohio. Shears. 1,758,019; May 13.
Williamson, George M., and G. W. Haywood, Shreveport, La. Aspirating head for flowing liquids. 1,758,812; May 13.
Williamson, Nate S., et al. (See Birdsong, John W., assignor.)
Wilson, Albert, assignor to Pittsburgh Rolls Corporation, Pittsburgh, Pa. Heater. 1,758,209; May 13.
Wilson, George F., Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Method and apparatus for severing elastic tubular articles. 1,758,729; May 13.
Wilson, Robert E., assignor to Standard Oil Company, Chicago, Ill. Distillation of hydrocarbon oils. 1,758,590; May 13.
Wine, William E., Toledo, Ohio. Car-door mechanism. 1,758,591; May 13.
Winfield, Edward A., La Canada, Calif. Carburetor reservoir. 1,758,068; May 13.
Winget Limited. (See Burn, J. F., and Lancaster, assignor.)
Wingler, August. (See Schulemann, W., Schonhofer, and Wingler.)
Winkler, Auguste, Bordeaux, France. Smokeless heat-economizing apparatus for furnaces of all kinds. 1,758,304; May 13.
Winters, Edward B., Coffeyville, Kans. Pump unit. 1,758,730; May 13.
Winthrop Chemical Company. (See Benda, Louis, assignor.)
Winthrop Chemical Company. (See Schulemann, W., Schonhofer, and Wingler, assignors.)
Wise, Karl M., assignor to The Pierce-Arrow Motor Car Company, Buffalo, N. Y. Headlight mounting. 1,758,305; May 13.
Wise, Karl M., assignor to The Pierce-Arrow Motor Car Company, Buffalo, N. Y. Headlight mounting. 1,758,306; May 13.
Wishart, William, assignor to National Refrigeration Corporation, Beloit, Wis. Refrigerating apparatus. 1,758,243; May 13.
Wolf, Ada A., et al. (See Crannell, Charles W., assignor.)
Wolf, Harry E., assignor to Fort Pitt Bedding Company, Pittsburgh, Pa. Mattress. 1,758,636; May 13.
Wolters, Carl F., Marietta, Ohio, assignor, by mesne assignments, to Remington Rand Inc., New York, N. Y. Supporting means for drawers for articles of furniture. 1,758,550; May 13.
Wolverine Tube Company. (See Acton, Clare S., assignor.)
Wood, Walter. (See Camerota, Louis A., assignor.)
Woodall-Duckham (1920) Limited. (See Duckham, Arthur M., assignor.)
Woodbridge, Joseph L., Philadelphia, Pa. Vent opening and plug for storage batteries. 1,758,551; May 13.
Woodhouse, John S., assignor to Carr Chain Works, Inc., Troy, N. Y. Tire-chain connecter. 1,758,210; May 13.
World Bestos Corporation. (See Nanfeldt, William, assignor.)
Wright, Stanley M., and A. D. McGill, Denver, Colo. Spinner for fish lures. 1,758,344; May 13.
Wright, Thomas T., Macon, Mo. Weeder. 1,758,384; May 13.
Wrought Iron & Art Glass Fixture Co. (See Cricchio, Paul, assignor.)
Wrought Iron & Art Glass Fixture Co. (See Roettges, Frederick W., assignor.)
Wynn-Williams, Llewelyn, Darlington, England. Railway-switch mechanism. 1,758,637; May 13.
Yingling, Frank B., assignor to The Ceramic Machinery Company, Hamilton, Ohio. Friction tile press. 1,758,772; May 13.
Yost, Charles L. (See Folkerts, H., and Yost.)
Young, Arthur P., Kenilworth, and J. H. Butcher, Rugby, England, assignors to General Electric Company. Telephone device. 1,758,813; May 13.
Young, Fred M., Racine, Wis. Radiator. 1,758,638; May 13.
Youngstown Steel Door Company, The. (See Barrows, Allen S., assignor.
Zahn, John H. (See Strempel, Julius J., assignor.)
Zahradnik, Eustach, Vienna, Austria. Dirigible headlight. 1,758,874; May 13.
Zeh, Ludwig. (See Kramer, E., Zeh, and Bollweg.)
Zeiss, Firm of Carl. (See Köhler, August, assignor.)
Zerweck, Werner, Fechenheim, near Frankfort-on-the-Main, Germany, assignor to General Aniline Works, Inc., New York, N. Y. Azo dyestuffs and making same. 1,758,385; May 13.
Zink, Paul, et al. (See Boyd, Martin, assignor.)
Zinkil, Roy H., Oak Park, assignor to Crane Co., Chicago, Ill. Waste mechanism for plumbing fixtures. 1,758,270; May 13.
Zitzmann, George, Yonkers, assignor to Automatic Motor Control Corporation, New York, N. Y. Engine-testing gauge. 1,758,271; May 13.
Zublin, John A., assignor to Universal Engineering Company, Los Angeles, Calif. Method of and bit for cutting a hole larger than the bit. 1,758,773; May 13.
Zublin, John A., Torrance, assignor, by mesne assignments, to Universal Engineering Company, Los Angeles, Calif. Bit having vertical hammering action. 1,758,774; May 13.
Zublin, John A., assignor to Universal Engineering Company, Los Angeles, Calif. Rotary bit having reciprocating motion. 1,758,814; May 13.
Zublin, John A., assignor to Universal Engineering Company, Los Angeles, Calif. Cutter for rotary bits. 1,758,875; May 13.

ALPHABETICAL LIST OF INVENTIONS

FOR WHICH

PATENTS WERE ISSUED ON THE 13TH DAY OF MAY, 1930

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). **Includes patents, reissues, and designs.**

Acids and alkalis on metallic articles, Producing a coating stable toward. F. Ahrens. 1,758,420; May 13.
Acids and making same, Substituted arylsulphonic. K. Daimler and G. Balle. 1,758,277; May 13.
Acids, Preparing nuclear substituted arylsulphonic. K. Daimler and G. Balle. 1,758,356; May 13.
Acoustic device. M. Kaplick. 1,757,906; May 13.
Acoustical correction and sound deadening. F. J. Sersen and K. B. Conger, jr. 1,758,808; May 13.
Adhesive backing. L. G. Lange. 1,758,610; May 13.
Adjustable wrench. J. L. Schubert and J. E. Caldwell. 1,758,013; May 13.
Adjustment-indicating means. A. Peteler. 1,758,086; May 13.
Advertising device. P. M. Lockwood. 1,758,232; May 13.
Advertising device, Luminous and animated. A. Libeck. 1,758,120; May 13.
Aeroplane. N. E. Shibly. 1,758,204; May 13.
Aeroplane wing structure. J. S. Fox. 1,758,360; May 13.
Aircraft. B. M. Schauman. 1,758,377; May 13.
Aircraft propeller. G. G. Currie. 1,758,560; May 13.
Aircraft, Retarding device for. L. S. Adams. 1,758,880; May 13.
Air heater. H. Baetz. 1,758,643; May 13.
Airplane. V. J. Burnelli. 1,758,498; May 13.
Airplane wing. W. F. Cottrell and J. McAuliffe. 1,758,355; May 13.
Air register. R. H. Wager. 1,758,339; May 13.
Airship. G. A. Eagles. 1,758,076; May 13.
Airship, Rigid. C. D. Burney, B. N. Wallis, and J. E. Temple. 1,758,143; May 13.
Air supply for can baskets. J. A. Martocello. 1,758,614; May 13.
Alarm system, Burglar-. J. J. Kertz. 1,758,523; May 13.
Aldehyde or aldehyde-containing compound and making the same, Stabilized. E. C. Kunz. 1,757,967; May 13.
Ammonium phosphate or mixed fertilizers containing ammonium phosphate by leaching of raw phosphate, Producing. F. G. Liljenroth. 1,758,448; May 13.
Ammonium-sulphate manufacture. F. G. Liljenroth. 1,758,449; May 13.
Amplifier circuits, High-frequency. B. Bradbury. 1,758,779; May 13.
Anchor, Deep-sea. W. E. Hamilton. 1,758,911; May 13.
Angle-cock device. G. W. Wildin. 1,758,727; May 13.
Animal trap. C. M. Reed. 1,758,763; May 13.
Antenna, Wave. R. S. Hoyt. 1,758,044; May 13.
Anthraquinone compounds and new hydrogenized products derived therefrom, Catalytically reducing. J. von Braun and O. Bayer. 1,758,381–2; May 13.
Arm rest for motor vehicles. E. E. France. 1,758,693; May 13.
Armor, Body. A. Schaumann. 1,758,296; May 13.
Ash-gate hopper. F. H. Dunbar. 1,758,435; May 13.
Aspirating head for flowing liquids. G. McW. Williamson and G. W. Haywood. 1,758,812; May 13.
Attrition mill. A. Schuchardt. 1,758,539; May 13.
Automobile door screen. G. W. Perron. 1,758,849; May 13.
Automobile heater. G. E. Blake. 1,758,214; May 13.
Automobile window screen. R. F. James. 1,758,158; May 13.
Awning, Automatic window. F. A. Anton. 1,758,244; May 13.
Awning, Window. F. A. Anton and C. W. Harvey. 1,758,245; May 13.
Bag and parcel rack and dolly, Combination. E. E. Caselman. 1,758,144; May 13.
Bags, Treating used burlap. G. I. Goldwyn. 1,757,958; May 13.
Baking and roasting apparatus. E. Hager. 1,758,571; May 13.
Baking machine, Electrically-heated. R. G. Tugendhat. 1,757,983; May 13.
Bandage. A. C. Roxburg. 1,758,764; May 13.
Barytes, Making bleached white. W. J. O'Brien. 1,758,009; May 13.
Basin, Catch. H. Harley. 1,758,318; May 13.
Basket liner. J. S. Rice and J. W. Trew. 1,758,851; May 13.
Basket-lining device. C. J. Dudley. 1,758,827; May 13.
Bat. F. J. Vincent. 1,758,418; May 13.
Bathing appliance, Buoyant. J. W. Loy. 1,758,289; May 13.
Bathing suit or similar article. A. Hollingsworth. Des. 81,135; May 13.
Bathtub, B. Bleustein. 1,758,071; May 13.
Batteries, Charge-cut-off for storage. W. E. Kershaw. 1,758,522; May 13.
Batteries, Vent for storage. C. C. Wallace. 1,758,545; May 13.
Battery: *See*—
Storage battery.
Battery-lifting device. W. H. Timmons. 1,758,480; May 13.
Bead cutter. H. Reichel. 1,758,409; May 13.
Bearing, Adjustable roller. J. J. Strempel. 1,758,479; May 13.
Bearing and shaft assembly. O. W. Dunham. 1,758,357; May 13.
Bearing mounting. F. G. Hughes. 1,758,667; May 13.
Bed-bottom fabric, Automatically-folding. N. S. Harter. 1,758,830; May 13.
Bed, Closetable folding. H. U. Crain. 1,758,275; May 13.
Beets, Propagating sugar. W. B. Rosevear. 1,758,128; May 13.
Bell, Diver's. J. Ughi. 1,758,094; May 13.
Belt guide. E. M. and F. M. Brackett. 1,758,246; May 13.
Bench: *See*—
Convertible bench.
Bench or similar article. A. Fabbro. Des. 81,129; May 13.
Bending press. M. H. Paine. 1,758,237; May 13.
Benzol, Purifying. C. F. Hagen. 1,758,661; May 13.
Binder, Load. L. Haubert. 1,758,039; May 13.
Binder, Load. L. Haubert. 1,758,831; May 13.
Binder, Loose-leaf. A. G. Lotter. 1,758,327; May 13.
Binder, Temporary. G. P. Wigginton. 1,758,549; May 13.
Bird bath. C. Morton. 1,758,674; May 13.
Bit extension. J. H. Abramson. 1,758,069; May 13.
Bit for cutting a hole larger than the bit, Method of and. J. A. Zublin. 1,758,773; May 13.
Bit having reciprocating motion, Rotary. J. A. Zublin. 1,758,814; May 13.
Bit having vertical hammering action. J. A. Zublin. 1,758,774; May 13.
Blasting-powder stick, Safety. H. E. Ennis. 1,758,358; May 13.
Block: *See*—
Towing block.
Body, automobile. O. J. Groehn. 1,758,396; May 13.
Boiler: *See*—
Heating boiler.
Boiler outlet, Copper-. A. H. Trageser and L. Hassinger. 1,758,869; May 13.
Boiler water feeder, Automatic. H. E. Page. 1,758,294; May 13.
Booster brake. L. Blackmore. 1,758,139; May 13.
Boot or shoe. E. W. Durkee. 1,757,993; May 13.
Booth, Merchandising. F. L. and J. K. Galley. Des. 81,131; May 13.
Bottle. R. Thornton. Des. 81,173; May 13.
Bottle. W. T. Walker. Des. 81,169; May 13.
Bottle, Hot-water. J. K. Blomquist. 1,758,024; May 13.
Bottled beverages, Capping and sediment-retaining device for. B. E. Clarke and A. Danciger. 1,758,219; May 13.
Bottom, Self-cooling furnace. F. P. Fairchild. 1,758,394; May 13.
Box: *See*—
Kit box. Top and bottom box.
Paper box.
Box corner. B. A. Lange. 1,758,230; May 13.
Bracket: *See*—
Lamp bracket. Post bracket.
Brake: *See*—
Booster brake. Electropneumatic brake.
Brake. T. T. Greenwood. 1,758,253; May 13.
Brake. G. A. Schact. 1,758,012; May 13.
Brake control. F. M. Bosworth. 1,758,027; May 13.
Brake drum. V. Bendix. 1,758,731; May 13.
Brake structure. J. Sneed. 1,758,066; May 13.
Brakes or the like, Mechanism for controlling. R. S. Gans. 1,758,694; May 13.
Bread box. S. A. Schlosberg. Des. 81,157; May 13.
Bread-wrapping machines, Pressure-arm attachment for. J. L. Long and R. Owen. 1,758,754; May 13.
Bricks, Manufacturing. A. Bonnington. 1,758,026; May 13.
Bridge member for an optical mounting. W. P. Glintenkamp. Des. 81,133; May 13.
Bridging. W. E. White. 1,758,678; May 13.
Brooder, Coal-burning. W. D. Harvey. 1,758,155; May 13.
Brush. E. R. Wagner. 1,758,632; May 13.
Brush, comb, and mirror, Combination. C. Hagen. 1,757,999; May 13.
Buckle. J. R. La Vigne. Des. 81,138; May 13.
Buckle. W. L. Myers. Des. 81,144; May 13.
Buckle, Shoe. S. M. Riker. Des. 81,152–4; May 13.
Buckle, Shoe. W. E. Smith. Des. 81,162–5; May 13.
Building block or tile. H. H. Niemann. 1,758,757; May 13.
Building construction, Ornamental metallic log combination for. E. L. Ilson. 1,758,040; May 13.
Building material and making the same, Road-. S. S. Sadtler. 1,758,913–4; May 13.
Bundling and delivery table, Combination. H. M. Jampol. 1,757,965; May 13.

Burglerproof lock. J. J. Walsh. 1,758,096; May 13.
Burner: *See*—
Fuel burner. Tubular burner.
Burner and regulator unit, Combined. J. P. Fisher, B. Greenfield, and N. M. Hutchinson. 1,758,828; May 13.
Bushing. R. Flury. 1,758,059; May 13.
Bushing, Antirattling. F. C. Morris. 1,758,712; May 13.
Button, Locking. O. Distler and E. Klein. 1,758,503; May 13.
Cabinet. L. P. Lizotte. 1,758,843; May 13.
Cabinet, Refrigerating and ice-making. R. W. Davenport. 1,758,073; May 13.
Cabinet, Telephone. F. P. Mickelson. Des. 81,143; May 13.
Cabinet, Wall. R. E. Peterson. 1,758,238; May 13.
Cable connecter. G. C. Thomas, jr. 1,758,092; May 13.
Cage, Bird. L. J. Leon. 1,758,525; May 13.
Cage, Bird. R. L. Tullis. 1,758,415; May 13.
Cake pan. M. Leucht. 1,758,288; May 13.
Camera, Motion-picture. H. A. de Vry. 1,758,221; May 13.
Can-filling machine. F. A. Foster. 1,758,508; May 13.
Capsuling apparatus. L. G. Davies. 1,758,433; May 13.
Car construction. A. C. Schmohl. 1,758,857; May 13.
Car, Refrigerator. O. Luhr. Re17,660; May 13.
Car-retarding device. G. Holmes and A. Allen. 1,758,836; May 13.
Cars, Outlet leg and valve for tank. G. J. Max. 1,758,165; May 13.
Carbon, Producing a finely-divided. N. Goodwin. 1,758,152; May 13.
Carbon resistance. H. Grob. 1,757,961; May 13.
Carburetor reservoir. E. A. Winfield. 1,758,068; May 13.
Card. R. G. Campbell. 1,758,428; May 13.
Card and sign exhibitor, Price. W. P. Agee, jr. 1,758,904; May 13.
Carding machines, Feeding apparatus with carding device for. H. O. Hess. 1,758,517; May 13.
Carriage, Baby. E. Hamel. 1,758,110; May 13.
Carriage, Baby. H. F. Shaw. 1,758,895; May 13.
Carton for dermatological and epidermical cream. G. F. Riegel. 1,758,585; May 13.
Case: *See*—
Combination case.
Case, Clock. J. T. Rhodes. Des. 81,148; May 13.
Casein-containing plastic composition. W. W. Christmas. 1,758,500; May 13.
Cash register. F. W. F. Berger. 1,758,810; May 13.
Cash register. B. M. Shipley. 1,758,861; May 13.
Cast-iron pipe. J. R. McWane. 1,758,454; May 13.
Caster. W. F. Herold. 1,758,001; May 13.
Casting machine. H. Spiro. 1,758,380; May 13.
Casting machine, Dental. L. C. Burgard. 1,757,991; May 13.
Castings, Forming metal. A. Kadow. 1,758,113; May 13.
Castings from molds, Apparatus for freeing and extracting. L. A. Camerota. 1,758,883; May 13.
Catch for traveling-bag and Gladstone-bag frames. O. H. Plotkin. 1,758,087; May 13.
Catch, Hood. R. G. Moore. 1,758,368; May 13.
Ceiling construction. H. W. Reel. 1,758,201; May 13.
Cellulosic material, Producing. B. Dorner. 1,758,655; May 13.
Cement, Production of phosphorous and alumina. R. Suchy. 1,758,241; May 13.
Cementing oil wells. F. W. Huber. 1,758,156; May 13.
Centrifugal machines, Automatically controlling. E. Roberts. 1,758,901; May 13.
Cereal foods, Producing. R. T. Anderson. 1,758,272; May 13.
Chain, Antiskid tire. R. C. Evans. 1,758,739; May 13.
Chain for automobile tires, Ground-gripping. J. E. Robison. 1,758,902; May 13.
Chair: *See*—
Nested chair. Rail chair.
Chair and folding bed, Convertible. S. Swartz, M. Swartz, and J. Swartz. 1,758,721; May 13.
Chair or similar article. E. G. Whitcomb. Des. 81,172; May 13.
Chairs, Reenforcement for wicker. T. Huyben. 1,758,045; May 13.
Charcoal, Method of and apparatus for reactivating. E. W. Rice. 1,758,202; May 13.
Chart, Piano-keyboard-instruction. J. W. Hazen. 1,758,254; May 13.
Chemical emulsion. J. R. Conover. 1,758,651; May 13.
Chlorination. C. L. Campbell. 1,758,351; May 13.
Chuck and brake mechanism, Combined. F. R. Long. 1,758,844; May 13.
Chute for delivery wagons, Coal. C. W. Warnecke. 1,758,208; May 13.
Cigarette machinery. W. E. Molins. 1,758,800; May 13.
Cinematograph and other projection apparatus, Lantern body for. W. E. McCormack. 1,758,290; May 13.
Circuit, Signaling. E. W. Niles. 1,758,050; May 13.
Circuit wiring for windshields and the like. J. A. Johnson. 1,758,704; May 13.
Circuits, Balancing electric. C. W. McKibben. 1,757,971; May 13.
Cleaner: *See*—
Thread cleaner. Window cleaner.
Cleaning and polishing fluid. S. Hardy. 1,758,317; May 13.
Cleat for sport shoes. G. L. Pierce and H. V. Rau. 1,758,408; May 13.
Clock base. J. O. Simpson. Des. 81,161; May 13.
Closing machine. J. H. Murch. 1,758,369; May 13.
Closure, Bottle. R. A. Graham. 1,758,696; May 13.
Closure, Container. F. M. Marshall. 1,758,574; May 13.
Closure for cigarette packages, End or side. R. A. Ogden. 1,758,406; May 13.
Closure for metallic boxes, Hermetic slip-type. G. Dolliens. 1,758,691; May 13.
Clothes washer, Gripping. H. L. Ward. 1,758,633; May 13.
Coal and other minerals. Process of and apparatus for washing. A. France. 1,758,035; May 13.
Coal and refuse tester. H. Morgan. 1,758,756; May 13.
Coal, Improving flowing characteristics of. W. E. Trent. 1,758,631; May 13.
Coating articles, particularly with metals. M. U. Schoop. 1,758,473; May 13.
Coating process, Vacuum dispersion. W. A. F. Pfanhauser. 1,758,531; May 13.
Cocoa liquor from cocoa nibs and the like, Apparatus for producing refined. W. E. Prescott. 1,758,804; May 13.
Coin-actuated mechanism. H. L. Kiser. 1,758,748; May 13.
Coin-counting machine. C. E. Peterson. 1,758,057; May 13.
Coin mechanism for coin-controlling vending machines. A. M. Cramer. 1,758,652; May 13.
Coke and apparatus therefor, Producing. H. Koppers. 1,758,524; May 13.
Collar, Soft. Hillman. 1,758,224; May 13.
Combination case. L. G. Stanley. 1,758,297; May 13.
Combination hook. L. Haubert. 1,758,744; May 13.
Combustion engine. W. Riehm. 1,758,374; May 13.
Comminuted matter, Apparatus for separating. R. Anderson. 1,758,422; May 13.
Communication system, High-frequency. R. K. Potter. 1,758,058; May 13.
Compact and mirror, Combination wrist. O. E. Gebauer. Des. 81,132; May 13.
Composition for soldering aluminum ware. F. L. Benedetti. 1,758,348; May 13.
Compressor. H. A. Greenwald. 1,757,997; May 13.
Compressor. L. Hayart. 1,758,601; May 13.
Compressor, Air. W. C. Allen. 1,758,211; May 13.
Compressors, Water-cooling device for. S. B. Redfield. 1,758,538; May 13.
Computing machine. A. F. Poole. 1,758,172; May 13.
Condensation product of the benzodiazine series. W. Hentrich and M. Hardtmann. 1,758,792; May 13.
Condenser construction. C. A. Boyd. 1,758,495; May 13.
Confections, Method and apparatus for making frozen. F. C. Fernandez. 1,758,567; May 13.
Connecter, Electrical. C. B. Carlson. 1,758,218; May 13.
Connecter, Tire-chain. J. S. Woodhouse. 1,758,210; May 13.
Connection, Flexible. H. W. Bell. 1,758,554; May 13.
Contacts of electric switches, Protecting. C. W. Kuhn. 1,758,752; May 13.
Container and testing base for electrical instruments, Combined. A. E. Finley. 1,758,568; May 13.
Container for moth balls. M. Beibin. 1,758,347; May 13.
Container, Parachute. H. E. Parker. 1,758,170; May 13.
Control system. P. McShane. 1,758,709; May 13.
Control, Window-curtain. J. F. Currivan. 1,758,220; May 13.
Convertible bench. M. L. Greenstreet. 1,757,900; May 13.
Conveyer. F. E. Van Slyke. 1,758,484; May 13.
Conveyer. J. L. Wentz. Re17,663; May 13.
Core. G. W. Gilderman. 1,758,889; May 13.
Cores, Apparatus for making. G. W. Gilderman. 1,758,888; May 13.
Cores, Making. G. W. Gilderman. 1,758,890; May 13.
Corn-husking peg. J. G. Grantham. 1,758,363; May 13.
Correlating the staff with the keyboard of pianos, Device for. H. D. Hoffmeister. 1,758,043; May 13.
Corrugated structure. G. Brown. 1,758,311; May 13.
Coupling or holding attachment for sashweight cords. C. Reifschneider. 1,758,850; May 13.
Coupling with power storage, Shaft. R. Goldschmidt. 1,758,439; May 13.
Cover for faucets, etc. H. C. Leddon. 1,758,708; May 13.
Crane, Traveling. A. E. Moore. 1,758,580; May 13.
Crankling device. J. T. Bishop and R. W. Christy. 1,758,138; May 13.
Crosshead. F. N. Bard. 1,758,212; May 13.
Crusher: *See*—
Rotary crusher.
Cup dispenser, Conical. C. Barbieri. Re17,664; May 13.
Curling or waving hair, Device for. A. J. Laverdiere. 1,758,050; May 13.
Curtain-operating means. W. L. Dodge. 1,758,034; May 13.
Curtain ring. J. H. Boye. 1,758,685; May 13.
Cushion: *See*—
Pin cushion.
Cutter: *See*—
Bead cutter.
Cutter for rotary bits. J. A. Zublin. 1,758,875; May 13.
Cutters and the like, Feeding device for ensilage. F. J. Bullock. 1,758,557; May 13.
Damper, Car-suspension-spring. F. W. Clark. 1,758,596; May 13.
Dehairing hogs, Apparatus for. J. W. Kohlhepp. 1,758,048; May 13.
Designs on the surface of articles made from leather or the like, Method of producing raised. M. E. Bendelari. 1,758,186; May 13.

Desk set, Pen. L. J. Most. 1,758,199; May 13.
Destructor, Refuse. A. E. W. James. 1,758,157; May 13.
Determining a constituent in a mixture of substances. H. Schmick. 1,758,088; May 13.
Developing apparatus. R. F. Allin. 1,757,950; May 13.
Developing apparatus. A. Langsner. 1,758,826; May 13.
Developing apparatus. A. Langsner. 1,758,611; May 13.
Die-rolling process and apparatus. W. H. Donner. 1,758,563; May 13.
Digger: *See*—
Potato digger.
Disk underreamer, Rotary. J. S. Brown. 1,758,187; May 13.
Dispenser and cutter, Butter. T. Kaskouras. 1,758,257; May 13.
Dispensing apparatus, Fluid. P. S. Allen and D. N. Alexander. 1,758,552; May 13.
Display-tray system and trays therefor. D. B. William. 1,758,098; May 13.
Distributing apparatus for cigarettes and other articles. F. Olivaux. 1,758,168; May 13.
Ditching machine. G. W. Stockton. 1,758,132; May 13.
Doll, Rag. V. D. Ayres. Des. 81,123; May 13.
Dolls, Making artificial eyes for. L. J. Gruhman. 1,758,192; May 13.
Domestic appliance. R. L. Lee. 1,758,161; May 13.
Door for garages and the like, Overhead swingable. O. L. Dautrick. 1,757,955; May 13.
Door mechanism, Car. W. E. Wine. 1,758,591; May 13.
Draft rigging. B. W. Kadel. 1,758,285; May 13.
Drag, Body. T. J. Dilworth. 1,758,149; May 13.
Drill mounting, Portable Universal. C. C. Hansen. 1,758,316; May 13.
Drill-press vise. J. N. Cayo. 1,758,733; May 13.
Drill-stem joints, Product for treating. De R. Frizell. 1,758,598; May 13.
Drilling rig, Well. T. M. Wilkins. 1,758,728; May 13.
Drills, Blowing device for rock. L. C. Bayles. 1,758,492; May 13.
Dust-collecting system. S. W. Kirk and W. R. Meuttman. 1,758,668; May 13.
Dust from gases or vapors, Apparatus for removing. E. M. Salerni. 1,758,624; May 13.
Dusting machine. E. L. Sherling and G. E. Cunningham. 1,758,065; May 13.
Dyeing. R. R. Sleeper. 1,758,877; May 13.
Dyestuffs and making same, Azo. W. Zerweck. 1,758,385; May 13.
Dyestuffs and material dyed therewith, Azo. W. Eckert and W. Kirat. 1,758,313; May 13.
Dyestuffs and material dyed therewith, Azo. H. Wagner, A. Kuchenbecker, and R. Huss. 1,758,340; May 13.
Dyestuffs and preparing them, Azo. H. Wagner, H. Elchwede, and E. Fischer. 1,758,388; May 13.
Dyestuffs containing chlorine, Producing sulphurized vat. G. Kalischer, H. Salkowski, and F. Frister. 1,758,365; May 13.
Dyestuffs containing sulphur and chromium and making same. F. Straub, H. Mayer, and H. Schneider. 1,758,865; May 13.
Dyestuffs, Preventing the settling out of paste. W. H. Clutterbuck. 1,758,145; May 13.
Dyestuffs, Sulphur. E. Kramer, L. Zeh, and B. Bollweg. 1,758,324; May 13.
Elastic tubular articles, Method and apparatus for severing. G. F. Wilson. 1,758,729; May 13.
Electric battery. C. A. Gillingham. 1,758,362; May 13.
Electric fixture. P. C. Shapiro. 1,758,129; May 13.
Electric motor, Synchronous. R. Valverde. 1,758,417; May 13.
Electric oscillator system. P. T. Farnsworth. 1,758,359; May 13.
Electric switch. J. J. Hogan. 1,758,793; May 13.
Electric switch. W. J. Traxel. 1,758,629; May 13.
Electric switch, Quick-action. A. J. Veall. 1,758,870; May 13.
Electrical communicating system. C. R. Gauthier. 1,758,570; May 13.
Electrical devices, Heat treating. H. D. Madden. 1,758,004; May 13.
Electrical induction apparatus. J. Biermanns. 1,758,820; May 13.
Electrical instrument. K. Klein. 1,758,322; May 13.
Electrical line apparatus. E. J. De Right. 1,758,312; May 13.
Electrically-heated pad. S. E. Skinner. 1,758,177; May 13.
Electrodes, Apparatus for removing dust from. A. L. Labbe. 1,758,404; May 13.
Electrolytic cell. A. E. Hudd. 1,758,255; May 13.
Electromagnet. E. R. Carichoff. 1,758,782; May 13.
Electron-discharge device. L. K. Marshall. 1,758,710; May 13.
Electropneumatic brake. T. H. Thomas. 1,758,724; May 13.
Elevator: *See*—
Portable elevator.
Elevator. J. R. Jackson, jr. 1,758,605; May 13.
End gate. W. C. Lamkins. 1,758,325; May 13.
Engine: *See*—
Combustion engine. Steam engine.
Internal-combustion engine.
Engine. T. P. Tune. 1,758,482; May 13.
Engine and operating the same, Internal-combustion. F. Oberhaensli. 1,758,460; May 13.
Engine-testing gauge. G. Zitzmann. 1,758,271; May 13.
Esters of fatty acids and of mixtures containing fatty acids, Manufacture of. E. Wecker. 1,758,634; May 13.
Explosive composition. F. Olsen. 1,758,169; May 13.
Extension table, Collapsible. G. W. McThompson. 1,758,578; May 13.
Fabric: *See*—
Bed-bottom fabric.
Face-treating device. T. H. Larson. 1,758,286; May 13.
Fan and making the same, Centrifugal. D. B. Replogle. 1,758,062; May 13.
Fastener. F. S. Carr. 1,758,884; May 13.
Fastener element, Separable snap. M. F. Carr. 1,758,906–7; May 13.
Fastener for roller window shades. E. Dexter. 1,758,690; May 13.
Fastener for typewriters. A. P. Brown. 1,758,646; May 13.
Fastener, Separable. M. F. Carr. 1,758,908; May 13.
Fastening means. O. H. Merz. 1,758,263; May 13.
Film and manufacture, Cinematograph color. J. E. Thornton. 1,758,185; May 13.
Film, Apparatus for the treatment of a viscose. G. Bethmann and O. Muthig. 1,758,593; May 13.
Film driving. C. A. Hoxie. 1,758,794; May 13.
Film-driving apparatus. C. L. Heisler. 1,758,882; May 13.
Film, Multicolor cinematograph and other. J. E. Thornton. 1,758,768–9; May 13.
Film pack and holder. E. T. Turney. 1,757,984; May 13.
Films, Apparatus for printing reticulated. R. Berthon. 1,758,137; May 13.
Films, Manufacture of multicolor cinematograph. J. E. Thornton. 1,758,184; May 13.
Filter for liquids. A. Grønning. 1,758,284; May 13.
Filter, Liquid. C. L. Sheppy. 1,758,412; May 13.
Filter, Rotating. E. B. Goodwin. 1,758,910; May 13.
Filtering system. R. N. Perkins. 1,758,331; May 13.
Filtration medium. H. E. Birkholz. 1,758,881; May 13.
Fines, Roasting. H. J. Cordy and W. J. Burgoyne. 1,758,188; May 13.
Finger ring. L. H. Liebs. 1,758,447; May 13.
Finishing machine, Edge. W. J. Johnson. 1,758,401; May 13.
Firearm, Automatic. R. von Frommer. 1,758,486; May 13.
Fire extinguisher. G. W. Moffitt. 1,758,458; May 13.
Fireplace. T. F. Mooney. 1,758,459; May 13.
Fire trap for internal-combustion engines. M. Hedglon. 1,758,442; May 13.
Fish lure. E. J. Babbitt. 1,758,817; May 13.
Fish scaler, Automatic. W. Reilly. 1,758,675; May 13.
Fishing lure. A. L. Lee. 1,758,160; May 13.
Fishing tool. B. M. Jensen. 1,758,364; May 13.
Flash light. C. T. Hime. 1,758,735; May 13.
Floating roof tank. S. P. Johnson. 1,758,225; May 13.
Floor furnace, Miniature. M. F. Shied. 1,758,860; May 13.
Flour agitator for exposing flour to the action of a bleaching gas. J. J. Mulvey. 1,758,713; May 13.
Fluid meter. J. W. Ledoux. 1,757,968; May 13.
Flying machine. P. McG. Bruce. 1,758,556; May 13.
Flying machine. F. I. de Christo. 1,758,031; May 13.
Flying machine. J. B. Slinn. 1,758,178; May 13.
Foam-producing process and material for acid metal-cleaning baths. J. H. Gravell. 1,757,959; May 13.
Folding machine. E. B. Roby. 1,758,127; May 13.
Folding table. C. J. Schmitt. 1,758,856; May 13.
Fondant and the like, Method and apparatus for preparing cream. R. Head. 1,758,602; May 13.
Food materials, Apparatus for treating. J. Schmidt. 1,758,064; May 13.
Food product and method of preparing. F. W. Shirriff. 1,758,089; May 13.
Frame: *See*—
Spinning frame. Window frame.
Friction and heat resisting article and manufacturing the same. W. Nanfeldt. 1,758,055; May 13.
Friction tile press. F. B. Yingling. 1,758,772; May 13.
Fringe-tasseling machine. R. E. Walliser. 1,757,985; May 13.
Fruit and vegetable grading machine. G. S. Helenbolt. 1,758,603; May 13.
Fruit, Packing. R. E. Westbrook. 1,758,771; May 13.
Fuel burner, Water-cooled comminuted. V. C. Snyder. 1,758,478; May 13.
Fuels, Producing liquid. A. Joseph. 1,758,796; May 13.
Furnace: *See*—
Floor furnace. Ore-roasting furnace.
Furnace construction. F. B. Allen. 1,758,421; May 13.
Furnace for casting iron and other difficult fusible metals under pressure. E. Peterson. 1,758,463; May 13.
Furniture, Funeral. A. A. Kermis. 1,758,116; May 13.
Furniture rest or shoe. W. F. Herold. 1,757,963; May 13.
Furniture slide or shoe. W. F. Herold. 1,757,962; May 13.
Fuse, Highly-sensitive head-impact. H. Wieser. 1,758,635; May 13.
Fuse, Mechanical time. P. Liebergeld. 1,758,842; May 13.
Galvanometer, Recording. F. F. Uehling. 1,758,416; May 13.
Game. L. C. Gunderman. 1,757,998; May 13.

Game apparatus, Lock-releasing. C. Fleischer. 1,757,957; May 13.
Game, Football. E. W. Robert. 1,758,063; May 13.
Garment. M. E. Gale. 1,758,740; May 13.
Garment, Child's. M. C. and C. W. Masters. 1,758,081; May 13.
Garment hanger. T. Serposs. 1,758,807; May 13.
Garter, Man's. R. C. Eisel. 1,758,392; May 13.
Gas burning device. J. P. Fisher, B. Greenfield, and N. M. Hutchinson. 1,758,790; May 13.
Gas-filled tube. W. F. Hendry. 1,758,516; May 13.
Gas-making apparatus. A. Schwarz. 1,758,858; May 13.
Gas meter. G. Meyer. 1,758,083; May 13.
Gases for power development, Process and apparatus for generating. W. B. Trent. 1,758,630; May 13.
Gases, Separation and recovery of. R. L. Hasche. 1,758,398; May 13.
Gate: *See*—
End gate.
Gauge: *See*—
Engine-testing gauge. Liquid-tank-level gauge.
Gauge for liquids, Indicating. H. L. Joyce. 1,758,403; May 13.
Gauge for shoe-stapler machines or the like. E. Dunford. 1,758,279; May 13.
Gear-change mechanism for automotive vehicles. F. Girardi. 1,758,315; May 13.
Gear construction. A. England. 1,758,692; May 13.
Gear, Speed-varying. J. S. Shaw. 1,758,859; May 13.
Gearing, Transmission. C. E. F. Ahlm. 1,758,386; May 13.
Glass-polishing machine. W. E. Porter. 1,758,534; May 13.
Glassware-forming apparatus. F. O'Neill. 1,758,085; May 13.
Globe and support therefor, Gasoline-service-station. E. A. Gillinder. 1,758,660; May 13.
Globe, Light-diffusing. W. F. Reed. Des. 81,147; May 13.
Goblet or similar article. O. S. Atterholt. Des. 81,121–2; May 13.
Golf-ball washer. W. F. Reach. 1,758,011; May 13.
Golf game. J. J. Morch. 1,758,581; May 13.
Governor. E. R. Klemm. 1,758,080; May 13.
Grader attachment for road rollers. A. W. Aitken. 1,758,491; May 13.
Grinding device, Adjustable flyer-. A. M. Guillet. 1,758,791; May 13.
Grinding machine. W. H. Chapman. 1,758,649; May 13.
Grinding machine with screen. H. C. Jacobson. 1,758,702; May 13.
Grinding mill. G. F. Pettinos. 1,758,010; May 13.
Guns, Sighting device for. J. Becker, H. Just, and H. Hort. 1,758,273; May 13.
Gut or the like, Apparatus for and method of twisting. G. L. Matthews. 1,758,007; May 13.
Gynecological instrument. A. L. McGowan. 1,758,082; May 13.
Hair clipper. W. H. Kelly. 1,758,747; May 13.
Hammer attachment, Pneumatic. J. W. Birdsong. 1,758,822; May 13.
Handle or similar article for an automotive vehicle, Outside door. W. Schnell. Des. 81,158; May 13.
Hanger: *See*—
Garment hanger. Pipe hanger.
Harrow-frame adjustment, Wheeled. J. H. Flatley and F. C. Hoy. 1,757,956; May 13.
Harvester, Bean. W. L. Bettex and C. L. Brenner. 1,758,555; May 13.
Hat ventilator. W. H. Brooker. 1,758,142; May 13.
Headlight. J. B. Darlington. 1,758,825; May 13.
Headlight, Dirigible. J. Glennon, sr. 1,758,437; May 13.
Headlight, Dirigible. E. Zabradnik. 1,758,874; May 13.
Headlight for motor or like vehicles. P. Delaux. 1,758,561; May 13.
Headlight mounting. K. M. Wise. 1,758,305–6; May 13.
Headlight, Vehicle. A. Kellner. 1,758,746; May 13.
Heat-dissipating device. C. C. Abbott. 1,758,775; May 13.
Heat-economizing apparatus for furnaces of all kinds, Smokeless. A. Winkler. 1,758,304; May 13.
Heat-exchange apparatus. R. L. Smith. 1,758,266; May 13.
Heat exchanging, Apparatus for. G. T. Mott. 1,758,582; May 13.
Heat-generating system, Hydraulic. G. H. Walker. 1,758,207; May 13.
Heat-protection means for motion-picture projectors. L. Del Riccio. 1,758,689; May 13.
Heat, Storage and utilization of electrically-generated. P. Seehaus. 1,758,474; May 13.
Heat-transforming apparatus. R. W. Davenport. 1,758,074; May 13.
Heated air in the closed bodies of automobiles, Circulating. G. P. Kean. 1,758,705; May 13.
Heated device, Self-contained. C. C. Abbott. 1,758,815; May 13.
Heater: *See*—
Air heater. Shoe heater.
Automobile heater.
Heater. L. F. Fisher. 1,758,658; May 13.
Heater. A. Wilson. 1,758,209; May 13.
Heater and incinerator, Combined water. W. C. Epstein. 1,758,505; May 13.
Heaters, Attachment for gas water. A. H. Frank. 1,758,788; May 13.
Heating apparatus. J. Primrose. 1,758,239; May 13.
Heating apparatus, Electrical. J. Bartik. 1,758,213; May 13.
Heating boiler, Sectional. H. H. Peek. 1,758,171; May 13.
Heating device. A. E. Reuss. 1,758,466; May 13.
Heating-system control. W. M. Cross. 1,758,147; May 13.
Heating system, Domestic. W. M. Cross. 1,758,146; May 13.
Heel-breasting machine. F. A. Day. 1,758,030; May 13.
Heel, Shoe. J. Q. Parker. 1,758,588; May 13.
Hinge. J. Brogden. 1,758,905; May 13.
Hobs, Apparatus for gashing and sharpening. A. H. Candee. 1,758,103; May 13.
Hobs, Apparatus for relieving. A. H. Candee. 1,758,102; May 13.
Hockey pad. E. O. Knischewsky. 1,758,260; May 13.
Holder for casement windows, doors, or the like. L. W. Block. 1,158,309; May 13.
Holder, Jar and cap. W. E. Culp. 1,758,276; May 13.
Holder, Lip-stick. H. W. Wild. 1,758,303; May 13.
Holder, Safety milk-bottle. R. A. Spawton. 1,758,863; May 13.
Holder, Tool and article. J. A. Leland. 1,758,261; May 13.
Holding apparatus, Bag-. W. Telander. 1,758,868; May 13.
Holding device. H. O. Wickes. 1,758,873; May 13.
Hook: *See*—
Combination hook. Snap hook.
Hoops and/or liners to barrels, Apparatus for applying. A. B. Houtz. 1,758,837; May 13.
Horn button and control lever, Combined. J. J. Punke. Des. 81,140; May 13.
House: *See*—
Toy house.
Humidity recorder, Relative-. L. Behr. 1,758,494; May 13.
Hydraulic jack. C. M. Banks. 1,758,640; May 13.
Ice-cream dispenser. J. E. Brown. 1,758,028; May 13.
Ignition device. A. Ruttiman. 1,758,853; May 13.
Illuminating device. A. Köhler. 1,758,049; May 13.
Implement or tool, Air-driven. W. W. Price and C. W. Ripsch. 1,758,760; May 13.
Incinerator, Domestic. H. L. Warren. 1,758,487; May 13.
Incubators, Method of and apparatus for controlling the temperature of mammoth. H. L. Watson. 1,758,017; May 13.
Indicating device. W. J. Burger. 1,758,427; May 13.
Indicator: *See*—
Street indicator.
Induction meter. J. Mettler. 1,758,673; May 13.
Ingot mold. M. Blage. 1,758,823; May 13.
Insecticide. H. V. McClellan. 1,758,734; May 13.
Insulating means for coke-oven heads. R. Wilhelm. 1,757,988; May 13.
Insulator. D. H. Osborne. 1,758,462; May 13.
Internal-combustion engine. M. M. Cory. 1,758,429; May 13.
Internal-combustion engine. E. L. Gilbert. 1,758,829, May 13.
Internal-combustion engine. R. C. Hoss. 1,758,320, May 13.
Internal-combustion engine. W. Riehm. 1,758,375; May 13.
Internal-combustion engine. R. Wehr. 1,758,242; May 13.
Irrigating apparatus, Colonic and vaginal. G. R. Pittam, T. B. Blevins, and B. F. Brandt. 1,758,332; May 13.
Jack: *See*—
Hydraulic jack. Pumping jack.
Lifting jack.
Jar or similar container. W. D. Teague. Des. 81,167; May 13.
Joint: *See*—
Pipe joint. Ship-lap joint.
Rail joint.
Kiln for manufacture of fused cement. A. Bauchère and G. Arnou. 1,758,778; May 13.
Kit, Artist's. E. Fahr. 1,758,223; May 13.
Kit box. N. Simos. 1,758,338; May 13.
Knife, Roller. I. A. Newsbaum. 1,758,828; May 13.
Knife, Veneer. A. D. Basinger. 1,758,423; May 13.
Knitting machines, Attachment for spring-beard. P. G. Perkins. 1,758,716; May 13.
Knitting machines, Needle cylinder for circular-. G. W. Kappes. 1,758,079; May 13.
Ladder-jack-supporting device. W. B. Holmes. 1,758,319; May 13.
Laminated sheet material. K. L. Moses. 1,758,053; May 13.
Lamp. L. E. Perkins. 1,757,975; May 13.
Lamp and smoking stand, Combined. J. L. Blasdell and C. H. Derringer. Des. 81,125; May 13.
Lamp bracket. A. W. Sansburn. 1,758,469; May 13.
Lamp bulbs, Device for placing and removing. H. D. Grinnell. 1,758,078; May 13.
Lamp, Head. F. W. C. Neuner. Des. 81,145; May 13.
Lamp, Incandescent. A. D. De Castro. 1,758,434; May 13.
Lamp or article of similar nature, Table. P. Cricchio. Des. 81,126; May 13.
Lamp or article of similar nature, Table. F. W. Roettges. Des. 81,156; May 13.
Lamp-socket-fastening means. W. E. Thorn. 1,758,299; May 13.
Last. F. Keinhofer. 1,758,706; May 13.
Last for attaching wood heels. E. M. Fullerton. 1,757,996; May 13.

Latch. R. G. Moore and A. Claud-Mantle. 1,758,367; May 13.
Latch. G. E. Roedding. Des. 81,155; May 13.
Latches, Locking mechanism for. C. S. McCarthy. 1,758,122; May 13.
Lathe. A. Bjorklund. 1,758,023; May 13.
Lathe center. S. W. Gordon. 1,758,717; May 13.
Lathe, Turning. F. M. Gilmore and S. French. 1,758,283; May 13.
Lathe, Turning. F. L. Johnson. 1,758,520; May 13.
Laundry machinery. E. J. Carroll. 1,758,594; May 13.
Laundry machines, Pump-impeller mounting for. G. W. Dunham. 1,758,391; May 13.
Leak detecting apparatus. C. J. Spill. Re17,662; May 13.
Leather and process for obtaining same. A. Ehrenreich. 1,758,564; May 13.
Lever-control mechanism, Lockable. R. S. Gans. 1,758,695; May 13.
License plate, Automobile. W. S. Sweitzer. 1,758,627; May 13.
Lifting jack. W. B. Templeton. 1,757,982; May 13.
Light connecter, Emergency-. R. J. Owens. 1,758,125; May 13.
Light-projection display. T. Wilfred. 1,758,589; May 13.
Light projector. B. Heymann. 1,758,041; May 13.
Light-sensitive layers and preparing them. M. P. Schmidt and W. Krieger. 1,758,676; May 13.
Light signal. C. S. Snavely. 1,758,179; May 13.
Lighting fixture. H. Tauber. Des. 81,166; May 13.
Lighting-fixture base or article of similar nature. G. Danker. Des. 81,127; May 13.
Lighting outfit, Christmas-tree-. L. B. Manson. 1,757,969; May 13.
Lightning arrester. A. G. Steinmayer. 1,758,181; May 13.
Lime cooking liquors in the manufacture of paper, Utilizing spent. A. L. Clapp. 1,758,247; May 13.
Liquid containers, Device for subdividing. J. Schlumpf. 1,758,335; May 13.
Liquid, Method and apparatus for deaerating and evaporating. W. S. Elliott. 1,758,566; May 13.
Liquid-tank-level gauge. J. Fentress. 1,758,077; May 13.
Liquids, Apparatus for supplying antiknock. E. W. Evans. 1,758,897; May 13.
Loader, Manure. J. P. Stapel. 1,758,014; May 13.
Loading device, Animal-. E. Pflaum. 1,758,372; May 13.
Loading machine. E. C. Morgan. 1,758,197–8; May 13.
Locater, Outlet. A. J. Peterson. 1,758,126; May 13.
Lock: *See*—
Burglarproof lock. Permutation lock.
Lock. E. R. Fox. 1,758,395; May 13.
Lock. A. Reborl. 1,758,620; May 13.
Lock. S. Segal. 1,758,203; May 13.
Lock. R. Wheeler. 1,758,872; May 13.
Lock for paper containers. J. A. Frost. 1,758,361; May 13.
Locking device. J. C. Sheller. 1,758,337; May 13.
Locking device for automotive vehicles. F. D. Hardesty. 1,758,698; May 13.
Locking device for drive bushings. L. J. Black. 1,758,426; May 13.
Locking mechanism for doors. A. S. Barrows. 1,758,070; May 13.
Locking mechanism, Switch-. C. Christensen. 1,758,499; May 13.
Locomotives, Steam pipe for simple articulated. J. C. Maris. 1,758,845; May 13.
Loom attachment. H. E. Hoffman. 1,758,042; May 13.
Looms, Let-off mechanism for. C. H. Draper. 1,758,738; May 13.
Loud speaker. E. W. Kellogg. 1,758,797; May 13.
Lubricant. F. L. Koethen. 1,758,446; May 13.
Lubricant. S. T. Sherrick. 1,758,265; May 13.
Lubricating device. E. Cuddihy. 1,757,954; May 13.
Lubricating system. E. W. Davis. 1,758,250; May 13.
Lubricating system. E. W. Davis. 1,758,251; May 13.
Machine and method for producing coiled forming dies. M. A. Hoyt. 1,758,002; May 13.
Machine for assembling bearings. R. H. Cramer. 1,758,653; May 13.
Machine for cutting or generating the teeth of wheels. S. Sunderland. 1,758,067; May 13.
Machine for cutting seed potatoes. H. J. Smith. 1,758,587; May 13.
Machine for cutting unbreakable watch crystals. M. C. Campbell. 1,757,952; May 13.
Machine for filling cans. F. A. Foster. 1,758,507; May 13.
Machine for generating gears. E. C. Head. 1,758,193; May 13.
Machine for lapping and the like. G. W. Andrews, jr. 1,758,100; May 13.
Machine for printing photographs. G. W. Staley. 1,758,588; May 13.
Machine for wrapping caramels or like articles. A. G. Rose. 1,758,468; May 13.
Machine to shape flooring blocks. L. R. Heston and A. L. Anderson. 1,758,734; May 13.
Magnet. H. S. Folker. 1,758,104; May 13.
Marine foundation and making the same. J. Jacobs. 1,758,606; May 13.
Mass of powdered or granular material to the action of gases, particularly applicable to the calcining and roasting of ores and similar materials, Apparatus for subjecting a. H. M. Ridge. 1,758,805; May 13.
Massaging machine. W. F. Hendry. 1,758,663; May 13.
Masts, Erecting. J. E. Bushnell. 1,758,389; May 13.
Material-handling apparatus. S. A. Knowles. 1,758,750; May 13.
Mattress. H. E. Wolf. 1,758,636; May 13.
Mattress, Retaining. L. T. Robinson. 1,758,718; May 13.
Measuring and sorting device. R. W. Wagner. 1,758,268; May 13.
Measuring instrument, Dynamometric. P. Wiessner. 1,758,097; May 13.
Mercerizing. H. P. Bassett and T. F. Banigan. 1,758,553; May 13.
Mercury-tube switch. I. E. McCabe. 1,757,970; May 13.
Metal nailing strip. W. H. Elston. 1,758,150; May 13.
Metallic retaining members, Apparatus for forming. E. H. Schane. 1,758,470; May 13.
Metals from ores, Process of and furnace for extracting. S. C. G. Ekelund. 1,758,786; May 13.
Metals, Parting-facing product for casting. B. F. Wallace. 1,758,095; May 13.
Meter: *See*—
Fluid meter. Induction meter.
Gas meter.
Microphone, Condenser. F. C. Barton. 1,758,777; May 13.
Milking machine. E. T. Jansson. 1,758,443; May 13.
Mill: *See*—
Attrition mill. Grinding mill.
Milling apparatus, Cane-. N. Kay. 1,758,445; May 13.
Mining or dredging plant. D. Jensen. 1,758,047; May 13.
Mirror for barbers' chairs and the like, Adjustable. P. D. Barakauskas. 1,758,021; May 13.
Mixing device. F. W. Henderson. 1,758,111; May 13.
Mixing machine. J. F. Burn and J. Lancaster. 1,758,732; May 13.
Mold: *See*—
Ingot mold.
Mold. W. M. Weil. 1,758,488; May 13.
Mold for vulcanizing flanges on pipe ends. L. C. Emmerich. 1,757,994; May 13.
Molded extension tops and molded boots, Manufacturing. A. A. Glidden and T. M. Knowland. 1,758,438; May 13.
Molds with molten metal, Filling. A. Kadow. 1,758,114; May 13.
Monoseaplane, Tandem-motored. H. V. Sweet. 1,758,866; May 13.
Mop. C. A. Purvis. 1,758,464; May 13.
Motion-transmitting device, Fluid-tight. J. Lawson. 1,758,287; May 13.
Motor: *See*—
Electric motor. Phonograph motor.
Motor fuels, Preparing. F. A. Howard. 1,758,898; May 13.
Mount for headlights, Buib. A. Miller and W. M. Akers. 1,758,166; May 13.
Mower, Lawn. W. F. H. Braun. 1,758,497; May 13.
Muffler. A. F. Dormeyer. 1,758,654; May 13.
Musical instrument, Stringed. W. O. Schmidt and C. Haberman. 1,758,626; May 13.
Neckband. T. E. Staples. 1,758,766; May 13.
Nest, Hen's. F. J. Kummeth. 1,758,753; May 13.
Nested chair. L. Dellert. 1,758,826; May 13.
Nozzle, Lawn-sprinkler. A. R. Le Moon. 1,758,119; May 13.
Numbering-machine attachment. F. Fitzgerald. 1,758,436; May 13.
Nut and pipe wrench. H. Hoelper. 1,758,664; May 13.
Nut-locking device for rail joints, Spring. H. C. Norwood. 1,758,848; May 13.
Oil and water separator. J. F. Harmon. 1,758,743; May 13.
Oil control for carbureted water-gas sets, Automatic. M. Parsons. 1,758,891; May 13.
Oil emulsions and reagents therefor, Resolving. F. H. Penn. 1,758,802; May 13.
Oiling device, Track-. A. J. Van Dresser. 1,758,300; May 13.
Oiling means for transmissions. S. O. White. 1,758,879; May 13.
Oils, Cracking hydrocarbon. J. E. Bell and E. W. Isom. 1,758,818; May 13.
Oils, Distillation of hydrocarbon. R. E. Wilson. 1,758,590; May 13.
Optical device. B. Moses. 1,758,801; May 13.
Ore-roasting furnace, Mechanical. J. Harris. 1,758,154; May 13.
Ornament, Shoe. S. M. Riker. Des. 81,149–51; May 13.
Ornamental treatment of wood. E. Schmid. 1,758,336; May 13.
Oven, Recuperative coking retort. J. van Ackeren. 1,758,544; May 13.
Oven ventilator. A. E. Whittier. 1,757,987; May 13.
Ovens, Traveling conveyer for. L. S. Harber. 1,758,397; May 13.
Package. M. Rosen. Re17,668; May 13.
Pad: *See*—
Electrically-heated pad. Hockey pad.
Pad for electroplating devices. P. J. F. Batenburg and C. J. Atkinson. 1,758,682; May 13
Pan: *See*—
Cake pan.
Panel-board construction. R. B. Benjamin. 1,758,642; May 13.
Paper box. R. A. Gross. 1,758,510; May 13.
Paper box, Collapsible. R. A. Gross. 1,758,512–13; May 13.
Paper-making machine. W. H. Millspaugh. 1,758,167; May 13.

Paper pulp, Manufacture of. A. M. Thomsen. 1,758,896; May 13.
Paper strip for closet seats, Device for uniformly moving on. K. Sommer. 1,758,862; May 13.
Parachute rip-cord. G. Waite. 1,758,871; May 13.
Parachute-rip-cord construction. L. L. Irvin. 1,758,795; May 13.
Partition, Portable F. B. Wheat. 1,758,489; May 13.
Permutation lock. V. T. Julin. 1,758,608; May 13.
Petroleum and mineral oils and their different fractions. Cracking. P. Nachtsheim. 1,758,618; May 13.
Phonograph motor, Electric. H. P. Dorn. 1,758,189-91; May 13.
Photographic materials and new photographic developers, Developing. G. Reddelien and W. Müller. 1,758,762; May 13.
Photographic materials and new photographic developers, Developing. G. Reddelien and W. Müller. 1,758,892; May 13.
Photographic-printing machine. A. S. Howell. 1,758,700; May 13.
Phototelegraphy. H. G. Bartholomew. 1,758,388; May 13.
Pictorial reproduction in plaque. T. M. Bansfield. 1,758,876; May 13.
Picture-film framing means, Adjusting mechanism for motion-. J. F. Adams. 1,758,639; May 13.
Pictures consisting of dyes in photographic manner, Producing. F. Lierg. 1,758,572; May 13.
Piloting device chiefly for aircraft, Auxiliary. R. Bernady. 1,758,592; May 13.
Pin: *See*—
Rolling pin.
Pin construction, Wrist-. H. Heiermann. 1,758,515; May 13.
Pin cushion. D. H. Crosser. 1,758,737; May 13.
Pinning sheets. H. Aaron. 1,758,679; May 13.
Pipe: *See*—
Cast-iron pipe.
Pipe hanger. A. Hess. 1,758,040; May 13.
Pipe joint. J. R. McWane. 1,758,455; May 13.
Pipes, Casting. J. H. Ubrig. 1,758,483; May 13.
Pipes, Thread protector for. D. L. Markle. 1,758,613; May 13.
Piping for internal-combustion engines with solid-fuel injection, Injection. J. Mahler. 1,758,366; May 13.
Piston. F. Jehle and F. Jardine. 1,758,444; May 13.
Piston. C. L. Walker. 1,758,302; May 13.
Piston for fluid-pressure engines. E. Talbot. 1,758,543; May 13.
Piston rings, Making. L. C. Marshall. 1,758,575; May 13.
Piston rings, Making. A. J. Smith. 1,758,719; May 13.
Plant puller. G. H. Lewis. 1,758,526; May 13.
Planter. D. L. Johnson. 1,758,607; May 13.
Planters, Check-wire guide for corn. S. D. Anderson. 1,757,990; May 13.
Plastic composition, Vulcanizable. N. Goodwin. 1,758,151; May 13.
Plate or similar article. G. Wesp. Des. 81,170–1; May 13.
Plating, Means and instrumentality for effecting reverse. R. H. Lawson. 1,758,899; May 13.
Plug connection, Hollow-. C. W. Simon. 1,758,541; May 13.
Plug connection, Hollow-. C. W. Simon. 1,758,541; May 13.
Plumbing fixtures, Waste mechanism for. R. H. Zinkil. 1,758,270; May 13.
Pole planer. C. H. Bolin. 1,758,025; May 13.
Pole planer. O. R. Cole and M. T. Garlinger. 1,758,029; May 13.
Polishing apparatus. G. L. Matthews. 1,758,006; May 13.
Portable elevator. F. D. Mahoney. 1,758,262; May 13.
Portière, Chain. S. Grassi. 1,758,600; May 13.
Post bracket, Adjustable. J. R. Goodwin. 1,758,440; May 13.
Potato digger. H. Dickehage. 1,758,562; May 13.
Power drive attachment. E. S. Maine. 1,758,527; May 13.
Power shears. F. D. Vartanian. 1,758,485; May 13.
Power take-off unit for tractors. L. J. Campbell. 1,758,352; May 13.
Press: *See*—
Friction tile press. Tableting press.
Press table. R. E. Manley. 1,758,451; May 13.
Presser-foot lifter and thread-tension release. J. Berger and W. M. Hanneman. 1,758,349; May 13.
Pressure-distributing means for internal-combustion engines, Combustion-. F. A. Bullington. 1,758,686; May 13.
Pressure mechanism for brake systems. M. Loughead and E. F. Loweke. 1,758,671; May 13.
Printing apparatus. C. L. Post. 1,758,535; May 13.
Printing machines, Attachment for. A. Langaner. 1,758,612; May 13.
Printing machines, Sheet delivering and stacking device for. E. Weingartner. 1,758,134; May 13.
Printing mechanism. C. L. Post. 1,758,536; May 13.
Printing presses, Smut remover for traveling-cylinder web-. P. F. Cox. 1,758,430; May 13.
Protector for curtains. A. S. Davies. 1,758,249; May 13.
Puller: *See*—
Plant puller.
Pulley. A. P. Strong. 1,758,182; May 13.
Pump aggregate, Governor-. A. E. L. Chorlton. 1,758,687; May 13.
Pump and throttle control, Combined water-circulating. H. Folkerts and C. L. Yost. 1,758,569; May 13.
Pump, Bore-hole. C. Schaer. 1,758,175; May 13.
Pump, Fuel-injector. V. H. Palm. 1,758,371; May 13.
Pump, Oil. A. A. Kaplansky. 1,758,159; May 13.
Pump, Oil-well. A. Arutunoff. 1,758,346; May 13.
Pump oil with fluids, Method and means to. W. D. Sawyer. 1,758,376; May 13.
Pump-operating mechanism. G. Kammerer. 1,758,609; May 13.
Pump, Rotary. J. B. Teesdale. 1,758,298; May 13.
Pump unit. E. B. Winters. 1,758,730; May 13.
Pumping jack. H. M. Jarvis. 1,758,838; May 13.
Pumping liquid. P. H. Granger. 1,758,153; May 13.
Pumping system. R. Jacuszl. 1,758,400; May 13.
Punch, Bit. L. C. Bayles. 1,758,493; May 13.
Punch, Hole-opening. L. A. Maxson. 1,758,846; May 13.
Rack: *See*—
Scoop rack. Towel rack.
Rack for truck or wagons. C. W. Crannell. 1,758,431; May 13.
Radiator. B. Blackmore. 1,758,684; May 13.
Radiator. F. M. Young. 1,758,638; May 13.
Radio apparatus. R. A. Klock. 1,758,003; May 13.
Radio transmitting system. P. D. Andrews. 1,758,816; May 13.
Rail-adjusting mechanism. J. Jenne. 1,758,321; May 13.
Rail chair. J. D. Gatch. 1,758,282; May 13.
Rail joint. J. W. Brewer. 1,758,072; May 13.
Rail joints, Making. G. A. Mead. 1,757,972; May 13.
Rail, Robe. H. V. Henderson. Des. 81,134; May 13.
Rail-sanding device and cleaner therefor. R. R. Birchfield. 1,758,821; May 13.
Rails, Electrically connecting. G. A. Mead. 1,757,973; May 13.
Railway-switch mechanism, Control means for. E. M. Wilcox. 1,758,018; May 13.
Receptacle, Ash. A. Kolar. Des. 81,137; May 13.
Receptacle, Cooking. C. S. Acton. 1,757,989; May 13.
Receptacle, Individual salt and pepper. G. F. Kraft. 1,758,117; May 13.
Receptacle, Metal. H. Mayled. 1,758,615; May 13.
Recorder: *See*—
Humidity recorder.
Rectifying apparatus. H. G. André. 1,758,680; May 13.
Reflector for motor vehicles, Traffic-signal. W. J. Shoemaker. 1,758,809; May 13.
Refractory article and protecting the same. R. H. Martin. Re17,661; May 13.
Refractory block. P. G. Willetts. 1,758,903; May 13.
Refrigerating apparatus. A. E. Anderson, G. Maiuri, and R. F. Bossini. 1,758,099; May 13.
Refrigerating apparatus. L. M. Keighley. 1,758,227; May 13.
Refrigerating apparatus. L. M. Keighley. 1,758,258; May 13.
Refrigerating apparatus. J. G. King. 1,758,228; May 13.
Refrigerating apparatus. J. G. King. 1,758,259; May 13.
Refrigerating apparatus. W. Wiebart. 1,758,243; May 13.
Refrigerating apparatus, Continuous absorption. R. F. Bossini and G. Maiuri. 1,758,215; May 13.
Refrigerating unit. H. Mock. 1,758,008; May 13.
Refrigeration. B. H. Coffey. 1,758,501; May 13.
Refrigerator unit. E. B. Mallory. Des. 81,140–2; May 13.
Register: *See*—
Air register. Cash register.
Registering mechanism. J. W. Ogden. 1,758,461; May 13.
Regulator. G. F. Machlet. 1,758,450; May 13.
Relay system. N. C. Shaw. 1,758,540; May 13.
Retort. J. N. Vandegrift. 1,758,770; May 13.
Retort burner for self-heating sadirons. C. E. Adamson. 1,758,345; May 13.
Retort, Coking. H. Teater. 1,758,183; May 13.
Rider for registration cards. W. Schleifer. 1,758,334; May 13.
Riding mechanism, Rotary. E. E. Clark. 1,758,558; May 13.
Ring: *See*—
Curtain ring. Finger ring.
Road tamping and maintenance machine. W. W. Foster. 1,758,281; May 13.
Roadway and constructing the same. H. Beebe. 1,758,022; May 13.
Roller for traveling conveyers. D. T. Evans. 1,758,280; May 13.
Rolling pin. H. G. Reinmuth. 1,758,060; May 13.
Roofing construction. S. Bauer. 1,758,683; May 13.
Rotary crusher, Demountable. C. M. Stein. 1,758,180; May 13.
Rotary switch. T. Van Ryan and A. Alaaker. 1,758,206; May 13.
Rubber-latex serum, Recovering quebrachitol from. J. McGavack and G. B. Binmore. 1,758,616; May 13.
Safety device for pottery machines, Anutomatic. W. J. Miller. 1,758,084; May 13.
Safety switch, Inclosed. H. J. Hammerly. 1,758,441; May 13.
Sales indicating mechanism. G. W. Osborne. 1,758,330; May 13.
Salt preparation, Diazo. F. Keller and K. Schnitzspahn. 1,758,012; May 13.
Salts of paradialkylaminoaryl-phosphinous acids, Stable and sterilized solution of. L. Benda. 1,758,425; May 13.
Saw, Power-operated miter. S. A. Roth and G. F. Toner. 1,758,623; May 13.
Scale, Computing. N. A. Hallwood. 1,758,037; May 13.
Scale, Weighing. N. A. Hallwood. 1,758,036; May 13.
Scales, Counting device for. H. M. Cameron. 1,758,648; May 13.

Scoop rack, Portable. G. L. Curle. 1,758,148; May 13.
Scouring device. D. J. Mayer. 1,758,452; May 13.
Screen: *See*—
Automobile door screen. Automobile window screen.
Screen. J. E. Sodergren. 1,758,720; May 13.
Screening apparatus. W. J. Garrison. 1,758,509; May 13.
Screw driver. A. R. Lemieux. 1,758,162; May 13.
Sealing the ends of fastening strings, wires, and the like, Method of and apparatus for. W. Kohler. 1,758,669; May 13.
Seed-celling machine. F. A. Reynolds and L. F. L. Turcotte. 1,758,621; May 13.
Separator: *See*—
Oil and water separator.
Separator. C. Schmits. 1,758,586; May 13.
Sewing. A. M. Bates. 1,758,101; May 13.
Sewing machines, Loop taker for. W. N. Parkes. 1,758,715; May 13.
Sewing machines, Welt guide for. F. W. Merrick. 1,758,051; May 13.
Shackle, Rubber spring. H. D. Geyer. 1,758,107; May 13.
Shaving machine. J. Schick. 1,757,978; May 13.
Shears: *See*—
Power shears.
Shears. T. D. Williams. 1,758,019; May 13.
Shelf and folding table, Combined. H. C. Webb. 1,758,726; May 13.
Shelf construction. J. E. Bales. 1,758,307; May 13.
Shingle and making the same, Multicolor strip. C. E. Rahr. 1,758,059; May 13.
Shingle-strip machine. H. Reichel. 1,758,410; May 13.
Ship-lap joint. J. Cogito and B. Ingrassia. 1,758,886; May 13.
Ship-propelling means. A. C. McIntosh. 1,758,847; May 13.
Shirt construction. C. M. Wardan. 1,758,341; May 13.
Shock absorber. J. R. Snyder. 1,758,090; May 13.
Shoe. F. J. O'Donnell. 1,758,405; May 13.
Shoe attachment. J. Tagler. 1,758,091; May 13.
Shoe box, Baby's. B. Schubart. Des. 81,159; May 13.
Shoe form. W. J. DeWitt. 1,758,278; May 13.
Shoe having separable sole and upper. B. M. Weir. 1,758,342; May 13.
Shoe heater. M. O. Jennings. 1,758,256; May 13.
Shoe manufacture. F. P. Williams. 1,758,135; May 13.
Shower fixture, Adjustable. J. W. Kelly. 1,758,115; May 13.
Shuttle for looms. F. Souczek. 1,758,811; May 13.
Sign and light, Street. W. P. Owens. 1,758,714; May 13.
Sign flasher. A. V. Menicocci. 1,758,456; May 13.
Signal: *See*—
Light signal. Vehicle signal.
Traffic signal.
Signal. K. Wartmann. 1,758,546; May 13.
Signal valve device. J. C. McCune. 1,758,711; May 13.
Signals, Method and apparatus for combining a plurality of. A. B. Moulton. 1,758,617; May 13.
Silico-thermic metallurgy. W. C. Read. 1,758,465; May 13.
Silo. C. N. Heath. 1,758,662; May 13.
Silver and silver plate and producing the same, Tarnish-resisting. W. S. Murray. 1,758,293; May 13.
Silver-halide emulsions and manufacturing the same, Light-sensitive. O. Matthies and B. Wendt. 1,758,576–7; May 13.
Sinter, Handling. A. J. Boynton. 1,758,496; May 13.
6-alkoxy-8-aminoquinolines. W. Schulemann, F. Schonhofer, and A. Wingler. 1,758,378; May 13.
Skiving machine. C. E. Jones. 1,758,402; May 13.
Sleeve form. M. Goldkopf. 1,758,742; May 13.
Slip construction. E. W. Goeser. 1,758,108; May 13.
Snap hook. H. G. Hancock. 1,758,038; May 13.
Socket, Caster-bracket. W. F. Herold. 1,758,000; May 13.
Socket, Vacuum-tube. H. J. Wiegand. 1,758,269; May 13.
Sole-setting machine. A. Demnitz. 1,758,784; May 13.
Sole, Shoe. M. S. Klein. Des. 81,136; May 13.
Solids from liquids, Method and apparatus for obtaining. A. B. Jones. 1,758,745; May 13.
Sound-locating apparatus. H. B. Ely. 1,758,393; May 13.
Sound recording and reproducing apparatus. W. F. Croll. 1,758,559; May 13.
Spacer, Automatic. C. Fensky and H. J. Readey. 1,758,657; May 13.
Spark plug. E. Stern. 1,758,542; May 13.
Speed device, Hydraulically-controlled variable-. R. A. Olsen and R. H. Shadrick. 1,758,370; May 13.
Spinner for fish lures. S. M. Wright and A. D. McGill. 1,758,344; May 13.
Spinning frames, Leveling and lining. A. M. Guillet. Re17,665; May 13.
Spinning machine. A. Strader. 1,758,864; May 13.
Spool-holding device. M. A. Landsberg. 1,758,707; May 13.
Spool or reel. E. H. Kneen. 1,758,229; May 13.
Spooler guide rods, Attachment for. L. T. Houghton. 1,758,604; May 13.
Spray head. G. A. Mueller. 1,758,124; May 13.
Spraying apparatus. A. J. Qulia. 1,758,761; May 13.
Spraying molten substances, Apparatus for. H. J. Versteeg. 1,758,878; May 13.
Spread and garment, Combination. A. Korff. 1,758,323; May 13.
Spring suspension. J. E. Reid. 1,758,411; May 13.
Spring suspension device. G. R. Howey. 1,758,701; May 13.
Spring suspension for cycle and motorcycle saddles. J. Couratin. 1,758,786; May 13.
Spring trap for throwing disk targets. J. T. Dickman. 1,758,032; May 13.
Sprinkler. L. E. Taggart. 1,758,767; May 13.
Stall, Multiple thumb. F. L. Ballard and W. A. Robson. 1,758,681; May 13.
Stamping presses, Bed-adjusting mechanism for. B. J. Lindgren. 1,758,231; May 13.
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Starter, Engine. R. P. Lansing. 1,758,118; May 13.
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Starter, Engine. J. H. Richards. 1,758,173; May 13.
Starter, Engine. H. E. Van Ness. 1,758,301; May 13.
Steam engine, Reciprocating. H. Wach. 1,758,267; May 13.
Steam-heated apparatus. C. Rosenblad. 1,758,295; May 13.
Steering attachment, Cultivator-. C. A. Nielsen. 1,757,974; May 13.
Steering mechanism for tractors. D. Parrett. 1,758,758; May 13.
Steering of endless-track vehicles. L. Saives. 1,758,806; May 13.
Stencil sheet and preparing coating therefor. P. A. and N. Golinick. 1,758,789; May 13.
Stereotype matrices, Treating dry. A. W. Cochran and H. W. Dewey. 1,758,248; May 13.
Sterilizer for bottles. L. M. Rakestraw. 1,758,537; May 13.
Stoker, Mechanical. W. M. Duncan. 1,758,075; May 13.
Stones, Production of artificial. J. Jakob. 1,758,518; May 13.
Storage battery. B. Ford. 1,758,506; May 13.
Straightening machine. B. P. Hazeltine. 1,758,699; May 13.
Strainer. J. Salvatore. 1,757,977; May 13.
Strainer, Twin. W. S. Elliott. 1,758,565; May 13.
Street indicator. W. S. Shaw. 1,758,476; May 13.
Stuffing-box assembly. G. B. Vroom. 1,758,725; May 13.
Suit, Ensemble. D. Long. Des. 81,139; May 13.
Sulphur dioxide from oils containing same, Recovery of. G. Cattaneo. 1,758,595; May 13.
Support, Camera. O. Roach. 1,758,240; May 13.
Support, Cup-dispenser. W. B. Mangold. 1,758,005; May 13.
Support for maps and analogous devices. R. M. Meyer and L. P. Denoyer. 1,758,292; May 13.
Support, Plant. T. Kelsey. 1,758,839; May 13.
Supporting apparatus for piercing mills, Mandrel-bar-. R. C. Stiefel. 1,758,413; May 13.
Supporting means for drawers for articles of furniture. C. F. Wolters. 1,758,550; May 13.
Surfacing unit. E. P. Burrell and N. C. Hunt. 1,758,647; May 13.
Suspension bracket. R. D. W. Vroom. Des. 81,168; May 13.
Sweater or article of similar nature. A. Egerer. Des. 81,128; May 13.
Sweeping compound. E. Conrad. 1,758,735; May 13.
Swimming trunk. P. Bergh. Des. 81,124; May 13.
Switch: *See*—
Electric switch. Safety switch.
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Rotary switch.
Switch mechanism, High-tension. C. G. Koppitz. 1,758,751; May 13.
Switch mechanism Railway-. L. Wynn-Williams. 1,758,637; May 13.
Switch member, Protective. H. M. Janville. 1,758,519; May 13.
Synchronizing device for musical instruments or other apparatus. E. Aubry and G. Boreau. 1,758,776; May 13.
Table: *See*—
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Extension table.
Table. A. MacKinnon. 1,758,196; May 13.
Tableting press. W. S. Wallace. 1,758,133; May 13.
Tag, Laundry-marking. J. M. Garvey. 1,758,599; May 13.
Tank: *See*—
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Tape and making same. M. C. Dodge. 1,758,033; May 13.
Tapping attachment. G. W. Emrick. 1,758,656; May 13.
Teapot. G. L. Parkinson. 1,758,407; May 13.
Telegraph circuits, Superimposed. R. V. Morgenstern. 1,758,900; May 13.
Telegraph system and apparatus therefor. E. E. Kleinschmidt. 1,758,194; May 13.
Telephone device. A. P. Young and J. H. Butcher. 1,758,813; May 13.
Telephone system. E. E. Hinrichsen. Re17,666; May 13.
Tellurian. D. Phillips. 1,758,759; May 13.
Temperature-measuring device. E. D. Phinney. 1,758,532; May 13.
Template for forming key openings in railway draft rigging. C. J. Nash. 1,758,235; May 13.
Tenter machine. J. H. Hamilton and J. H. Williams. 1,758,697; May 13.
Testing machine. J. A. Cowley. 1,758,688; May 13.
Textile. F. Rindge. 1,758,622; May 13.
Textile fabrics, Process of and apparatus for dyeing. P. Mijer. 1,758,234; May 13.

Textile goods, Method of and apparatus for finishing. J. Höfner. 1,758,665; May 13.
Thermoelectronic device. J. F. Hendry. 1,758,833; May 13.
Thermostat. J. L. Breese, jr. 1,757,951; May 13.
Thermostat. A. Escher. 1,758,787; May 13.
Thermostatic control for electrically heated apparatus. A. E. Whittier. 1,757,986; May 13.
Thread cleaner. F. Bauman. 1,758,424; May 13.
Thread-cutting temple, Intermittent. H. H. Burdett. 1,758,882; May 13.
Ticket, Advertising or price. A. E. Hurst. 1,757,964; May 13.
Time-switch mechanism. G. K. Ernst. 1,758,222; May 13.
Timer for automatically controlling electric stoves. R. M. G. Phillips. 1,758,619; May 13.
Tire. W. E. Shively. Des. 81,160; May 13.
Tire-changing machine. A. C. Senger. 1,758,264; May 13.
Tire-rim lug, Automobile. A. C. Breyer. 1,758,310; May 13.
Tire structure. F. C. Cave. 1,758,353; May 13.
Titanic oxide, Production of. M. Schnetka. 1,758,472; May 13.
Titanium dioxide, Production of. W. Mecklenburg. 1,758,528; May 13.
Toasting machine, Sandwich-. G. Lines. 1,758,121; May 13.
Tongue and teeth for dolls' heads. S. Marcus. 1,758,163; May 13.
Tongue and teeth set for dolls and the like. S. Marcus. 1,758,164; May 13.
Tool, Basket-lidding. G. E. Missman. 1,758,052; May 13.
Tool, Combined pipe-cutting and bur-removing. P. P. Kerrigan. 1,758,521; May 13.
Tool, Cultivator. E. Calkins and A. Nielsen. 1,758,217; May 13.
Tool, Flexible-handled. F. English. 1,758,504; May 13.
Tool, Pressure-applying. E. J. Burger and A. H. Carey. 1,758,781; May 13.
Tools, Making stone-planer. W. F. Bromm. 1,758,780; May 13.
Top and bottom box, Collapsible extension. R. A. Gross. 1,758,511; May 13.
Top, Baby-carriage. J. A. Hewitt. 1,758,112; May 13.
Top for vehicles and the like. F. K. Lewis. 1,758,195; May 13.
Top of electric ranges, Cooking. F. W. Moffat. 1,758,579; May 13.
Torch, Welding. J. Nagy. 1,758,054; May 13.
Towel rack. W. B. Stephenson. 1,757,981; May 13.
Tower, Service. C. J. Stirdivant. 1,758,131; May 13.
Towing block. R. F. Symonds. 1,758,722; May 13.
Toy airplane. T. A. Hodgdon. 1,758,399; May 13.
Toy building construction. A. C. Gilbert. 1,758,887; May 13.
Toy dump cart. F. A. Lundahl. 1,758,755; May 13.
Toy house. J. H. Frier, jr. 1,758,314; May 13.
Toy, Mechanical. F. B. Rentz. 1,758,061; May 13.
Toy railway track. W. E. Thorn. 1,758,093; May 13.
Track insulation. L. W. Tarr. 1,758,867; May 13.
Traction driving mechanism. H. E. Brey. 1,758,216; May 13.
Tractor. W. C. Rarig. 1,758,584; May 13.
Traffic signal. E. C. Taylor. 1,758,205; May 13.
Traffic signal. L. M. Torrence. 1,758,481; May 13.
Train control, Automatic. D. H. Schweyer. 1,758,765; May 13.
Train control, Electric. W. M. Beck. 1,758,308; May 13.
Train, Miniature interurban. F. M. McFalls and G. H. Brown. 1,758,123; May 13.
Transfer mechanism. O. J. Sundstrand. 1,758,016; May 13.
Transmission. T. L. Fawick. 1,757,995; May 13.
Transmission. H. Ford. 1,758,507; May 13.
Transmission-declutching mechanism. J. F. Gaylord. 1,758,106; May 13.
Transmission mechanism, Variable-speed-. C. Gardner. 1,758,252; May 13.
Transmitter. F. Cirelli. 1,758,650; May 13.
Transportable apparatus for projecting moving pictures. A. L. V. C. Debrie. 1,758,783; May 13.
Trap: *See*—
Animal trap.
Tray, Compartment. D. Fisher. Des. 81,130; May 13.
Tread, Safety. H. G. Chapin. 1,757,992; May 13.
Treadle switch. E. Werner. 1,758,548; May 13.
Tricalcium saccharate, Continuous washing of. C. Steffen, jr. 1,757,979; May 13.
Trihalogenated ms-benzdianthrones. M. A. Kunz and K. Köberle. 1,758,841; May 13.
Trimming-material assembly. W. J. Hoskyns. 1,758,666; May 13.
Truck. S. M. Chase. 1,757,953; May 13.
Truck, Car. S. P. Bush. 1,758,350; May 13.
Truck construction, Six-wheel-. C. L. Orr. 1,758,329; May 13.
Truck, Refrigerating. A. C. Smith. 1,758,477; May 13.
Trunnion for barrels or other articles. J. R. Coe. 1,758,824; May 13.
Tube: *See*—
Gas-filled tube. Vacuum tube.
Tube closure or header. H. B. Coffin. 1,758,909; May 13.
Tubes of surface condensers and the like to prevent corrosive action, Method of and in apparatus for treating the. J. Austin and H. Smith. 1,758,810; May 13.
Tubular burner. R. Thurm. 1,758,414; May 13.
Tubular burner. R. Thurm and E. O. Engels. 1,758,628; May 13.
Tunnel kiln. A. McD. Duckham. 1,758,785; May 13.
Turnstile, Multiple-coin-controlled. G. E. Grover. 1,758,514; May 13.
Tweezers. S. Segal. 1,758,475; May 13.
Tweezers, Soldering. J. Aderer. 1,758,490; May 13.
2 7 dinitro-anthraquinone, Manufacture of. R. E. Schmidt and B. Stein. 1,758,855; May 13.
Typewriting machine. G. G. Going. 1,758,109; May 13.
Typewriting machine. B. C. Stickney. 1,758,015; May 13.
Umbrellas, walking sticks, handles of tennis bats, and the like, Attachment for. J. F. Shaw. 1,758,379; May 13.
Unloading device. W. A. Miller. 1,758,457; May 13.
Urea, Producing. G. Barsky and P. W. Griffith. 1,758,641; May 13.
Urinal, Prostatectomy. C. P. Olson and H. L. Evans. 1,758,236; May 13.
Vacuum device and method of manufacture. H. C. Rentschler. 1,757,976; May 13.
Vacuum tube. O. W. Pike. 1,758,803; May 13.
Vaginal irrigator. R. C. Lawry. 1,758,670; May 13.
Valve. G. J. Schmidt. 1,758,471; May 13.
Valve. A. W. Wheaton. 1,758,419; May 13.
Valve, Electromagnetic. L. O. French. 1,758,105; May 13.
Valve fitting, Waste-. T. J. Kaufman. 1,758,226; May 13.
Valve for auxiliary reservoirs of air-brake systems, Automatic bleeder. J. M. Aikman. 1,758,136; May 13.
Valve for inflating hollow bodies, Air. S. Saul. 1,758,625; May 13.
Valve mechanism, Slide-. C. H. Matthiessen. 1,758,672; May 13.
Valve, Tank. A. L. Betts and P. S. Shield. 1,758,644–5; May 13.
Vaporizer. I. E. Aske. 1,758,020; May 13.
Vehicle, Amusement. R. J. Lusse. 1,758,799; May 13.
Vehicle control means. K. O. Schauman. 1,758,854; May 13.
Vehicle, Refrigerator. L. B. Olin. 1,758,529; May 13.
Vehicle signal. E. Maunz. 1,758,547; May 13.
Vehicles, Dynamo-electric driving set for. F. Porsche. 1,758,533; May 13.
Vending machine. J. T. Crow. 1,758,432; May 13.
Vending machine. C. H. Curtis. 1,758,390; May 13.
Vending machine. M. H. Richardson and A. D. Antoine. 1,758,833; May 13.
Vending machine. M. H. Richardson and A. E. Gebert. 1,758,373; May 13.
Vent opening and plug for storage batteries. J. L. Woodbridge. 1,758,551; May 13.
Ventilating device for automobiles and other vehicles. H. J. Lucke. 1,758,573; May 13.
Ventilator: *See*—
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Vibration eliminator. C. S. Ricker. 1,758,467; May 13.
Vibration eliminator, Torsional-. G. S. Butenkoff. 1,758,274; May 13.
Viscosimeter and display device. W. D. Smith. 1,758,677; May 13.
Vise stand. M. Boyd. 1,758,140; May 13.
Voltage cut-out device. G. W. Knight. 1,758,749; May 13.
Wall fixture, Ornamental. W. D. Shoemaker. 1,758,130; May 13.
Walls, Fastening elements to. E. G. K. Anderson. 1,758,387; May 13.
Wardrobe or the like structure. R. T. McKnew. 1,758,291; May 13.
Warp beam. J. Wilkinson. 1,758,343; May 13.
Washer: *See*—
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Washing machine. J. L. Coffield. 1,758,354; May 13.
Washing machine and method, Slack-loop. H. C. Riggs. 1,758,174; May 13.
Web-replenishing mechanism. W. C. Scott. 1,758,176; May 13.
Weeder. T. T. Wright. 1,758,384; May 13.
Weighing apparatus, Coin-freed. L. C. Bradley. 1,758,141; May 13.
Well apparatus, Oil-. C. P. Mays. 1,758,453; May 13.
Wet mixing method and apparatus. F. D. Pfeffer and F. Trotter. 1,758,200; May 13.
Whistle, Rescue. T. Kreill. 1,758,840; May 13.
Window cleaner. T. J. O'Neill. 1,758,530; May 13.
Window cleaner. C. J. Thatcher. 1,758,723; May 13.
Window frame. M. T. Clark and J. R. Montgomery. 1,758,885; May 13.
Window structure. A. H. Schaffert. 1,758,893–4; May 13.
Windshield. J. A. Johnson. 1,758,703; May 13.
Woven material and producing the same. C. E. Steiger. 1,757,980; May 13.
Woven products, Making fiber-filled. C. H. Crowell. 1,758,502; May 13.
Wrapping machine. J. A. Lopez. 1,758,798; May 13.
Wrench: *See*—
Adjustable wrench. Nut and pipe wrench.
Yoke for dresses, Rear. L. C. Rosenblatt. 1,758,852; May 13.
Zinc sulphide, Making. E. C. Gaskill. 1,758,741; May 13.

CLASSIFICATION OF PATENTS

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NOTE—First number = class, second number = subclass, third number = patent number

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19: 1,758,279
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110: 1,758,112
116: 1,758,195
298— 19: 1,758,755
299— 61: 1,758,119
77: 1,758,131
84: 1,758,761
141: 1,758,767
301— 24: 1,758,310
302— 17: 1,758,668
303— 15: 1,758,724
80: 1,758,136
304— 4: 1,758,140
33: 1,758,440
34: 1,758,319
308— 3: 1,758,212
15: 1,758,257
189: 1,758,667
208: 1,757,953
236: 1,758,479
238: 1,758,659
1,758,712
312— 43: R. 17,664
48: 1,758,333
66: 1,758,373
67: 1,758,390
140: 1,758,843
186: 1,758,291

U. S. GOVERNMENT PRINTING OFFICE: 1930

ALPHABETICAL LIST OF REGISTRANTS OF TRADE-MARKS

Advertising Displays, Inc., Covington, Ky. Advertising display devices. 271,014; May 20; Serial No. 293,912; published Mar. 11, 1930. Class 32.

Alitak Fish Company, Bellingham, Wash., and Kodia Island, Alaska. Canned salmon. 270,981; May 20; Serial No. 294,557; published Mar. 11, 1930. Class 46.

Alitak Fish Company, Bellingham, Wash., and Kodia Island, Alaska. Canned salmon. 270,982; May 20; Serial No. 294,555; published Mar. 11, 1930. Class 46.

American Bureau of Chiropractic, New York, N. Y. Publication. 270,933; May 20; Serial No. 286,968; published Mar. 11, 1930. Class 38.

American Coffee Corporation, New York, N. Y. Coffee. 270,987; May 20; Serial No. 295,202; published Mar. 11, 1930. Class 46.

American Loose Leaf Corporation, New York, N. Y. Loose-leaf binders. 270,921; May 20; Serial No. 292,607; published Mar. 11, 1930. Class 37.

American Steel and Wire Company of New Jersey, The, Cleveland, Ohio; Chicago, Ill.; Pittsburgh, Pa.; New York, N. Y.; Worcester, Mass.; and Hoboken, N. J. Stapling wire. 271,059; May 20. Class 14.

Arnold Bros., Chicago, Ill. Hams. 270,979; May 20; Serial No. 293,567; published Mar. 11, 1930. Class 46.

Aunt Nellie's Farm Kitchen, Inc., Hartford, Wis. Canned fruits and sweet potatoes. 270,935; May 20; Serial No. 293,204; published Mar. 4, 1930. Class 46.

Baker & Company, Inc., Newark, N. J. Metals of the platinum group. 270,941; May 20; Serial No. 294,335; published Mar. 11, 1930. Class 14.

Ballantine, P., & Sons, Newark, N. J. Ale, beer, and other malt liquors. 79,462; renewed Sept. 13, 1930.

Barry Food Products, Inc., Buffalo, N. Y. Canned baked beans, spaghetti, cake mixes, etc. 271,049; May 20; Serial No. 291,960; published Mar. 11, 1930. Class 46.

Baxley Dress Manufacturing Company, Seattle, Wash. Dresses and aprons. 271,002; May 20; Serial No. 273,281; published Feb. 19, 1929. Class 39.

Bedford, Johnson Co., Inc., New York, N. Y. Trousers. 271,037; May 20; Serial No. 290,873; published Feb. 25, 1930. Class 39.

Bedford Johnson Co., Inc., New York, N. Y. Dress and work trousers. 271,038; May 20; Serial No. 290,877; published Feb. 25, 1930. Class 39.

Belknap Hardware & Manufacturing Company, Louisville, Ky. Mattresses. 270,929; May 20; Serial No. 288,635; published Mar. 11, 1930. Class 32.

Bellmore Manufacturing Company, Gainesville, Ga. Overalls, overall union suits, work shirts, pants. 270,949; May 20; Serial No. 293,207; published Mar. 4, 1930. Class 39.

Berlitz, M. D., Published, New York, N. Y. Printed books and charts. 270,919; May 20; Serial No. 292,791; published Mar. 11, 1930. Class 38.

Billings & Spencer Company, The, Hartford, Conn. Tools and machinery. 270,927; May 20; Serial No. 290,647; published Mar. 11, 1930. Class 23.

Bonan, Salvator, New York, N. Y. Cravats. 270,954; May 20; Serial No. 293,762; published Mar. 4, 1930. Class 39.

Bonnie-Lou Inc., Cleveland, Ohio. Pajamas. 270,957; May 20; Serial No. 294,053; published Feb. 25, 1930. Class 39.

Bradshaw-Praeger & Co., Chicago, Ill. Prepared shellac. 271,051; May 20. Class 16.

Braunstein, Jacob., doing business as Woventex Co., Philadelphia, Pa. Suits, topcoats, and overcoats, etc. 270,943; May 20; Serial No. 293,820; published Feb. 25, 1930. Class 39.

Brennan, Daniel A., Chicago, Ill. Fasteners and binders for binding and holding loose papers together. 270,912; May 20; Serial No. 290,114; published Mar. 11, 1930. Class 37.

Briquet Company of America. (See Nicholas, Richmond.)

Brüder, Böhm, Vienna, Austria. Hair, wool, or velour felts and felts of other material. 270,926; May 20; Serial No. 291,756; published Mar. 11, 1930. Class 50.

Buerger, Franz B., doing business as Western Dental Products Company, Los Angeles, Calif. Dental compound. 270,945; May 20; Serial No. 293,464; published Mar. 4, 1930. Class 44.

Butler Brothers, Chicago, Ill. Women's hosiery. 271,035; May 20; Serial No. 289,502; published Mar. 4, 1930. Class 39.

California Rex Spray Co., Benicia, Calif. Preparation for destroying ground pests. 271,056; May 20. Class 6.

Calsodent Company, Inc., New York, N. Y. Toothbrushes. 270,961; May 20; Serial No. 284,899; published Mar. 11, 1930. Class 29.

Cavanagh, John, Ltd., New York, N. Y. Hatboxes, hat trunks, and traveling cases for canes. 270,983; May 20; Serial No. 294,340; published Mar. 11, 1930. Class 3.

Celanese Corporation of America, New York, N. Y. Dresses. 270,956; May 20; Serial No. 293,918; published Feb. 25, 1930. Class 39.

Chemical Foundation, Incorporated, The. (See Rosalowsky, Firm of A., assignor.)

Christopher, George C., & Son, Wichita, Kans. Concrete mixers and concrete stone machines. 77,155; renewed Mar. 15, 1930.

Christy, Thos., & Co. (See Olson, Martin C., assignor.)

Clean-Ite Company, The, Charlton, Iowa. Silver and metal polishes, soaps, and toilet-bowl cleaners. 270,951; May 20; Serial No. 294,797; published Feb. 25, 1930. Class 4.

Colgate-Palmolive-Peet Company, Chicago, Ill. Soap. 271,032; May 20; Serial No. 288,317; published Mar. 11, 1930. Class 4.

Colman, J. & J., Limited, London, England. Prepared condiment of spices. 271,043; May 20; Serial No. 288,548; published Mar. 4, 1930. Class 46.

Continental Typefounders Association, Inc., New York, N. Y. Matrices for the production of printer's type. 271,018; May 20; Serial No. 294,147; published Mar. 11, 1930. Class 50.

Crane, Z. & W. M., Inc., Dalton, Mass. Writing paper. 271,064; May 20. Class 37.

Dalley Weaver Company, Inc., Birmingham, Ala. Chemically-saturated pad. 271,034; May 20; Serial No. 288,847; published Mar. 4, 1930. Class 44.

Dewey & Almy Chemical Company, North Cambridge, Mass. Adhesives. 270,939; May 20; Serial No. 294,065; published Mar. 11, 1930. Class 5.

Dorman, Benjamin, Brooklyn, N. Y. Olive oil. 270,965; May 20; Serial No. 283,181; published Mar. 11, 1930. Class 46.

Dormeyer, A. F., Mfg. Co. (See MacLeod Manufacturing Co., Inc., assignor.)

Eagle Pencil Company, assignor to Eagle Pencil Company, New York, N. Y. Penholders. 79,197; renewed Aug. 16, 1930.

Eastman Kodak Company, Rochester, N. Y. Photographic cameras, films, and printing frames, etc. 271,021; May 20; Serial No. 294,960; published Mar. 11, 1930. Class 26.

Enggass Jewelry Company, Detroit, Mich. Watches. 271,057–8; May 20. Class 27.

Evansville Packing Company, Evansville, Ind. Prepared, smoked, and dried beef; prepared and smoked pork; butter, etc. 271,025; May 20; Serial No. 294,917; published Mar. 4, 1930. Class 46.

Everett Fruit Products Company, Everett, Wash. Canned fruits and vegetables, jams, jellies, etc. 271,044; May 20; Serial No. 288,788; published Mar. 11, 1930. Class 46.

Excelsior Mills, Union, S. C. Hosiery. 270,946; May 20; Serial No. 293,417; published Feb. 25, 1930. Class 39.

Federal Cigar Company, Inc., Red Lion, Pa. Cigars. 270,962; May 20; Serial No. 284,845; published July 16, 1929. Class 17.

Federal Cigar Company, Inc., Red Lion, Pa. Cigars. 270,997–8; May 20; Serial No. 268,362–3; published June 4, 1929. Class 17.

Federal Cigar Company, Inc., Red Lion, Pa. Cigars. 271,004; May 20; Serial No. 269,836; published July 23, 1929. Class 17.

Fehrenbach, Alfons, Union City, N. J. Soap. 271,033; May 20; Serial No. 288,700; published Mar. 4, 1930. Class 4.

Feibusch, M., San Francisco, Calif. Canned fruits, vegetables, fish. 271,003; May 20; Serial No. 270,122; published Mar. 11, 1930. Class 46.

Fergus & Palmer, Cleveland, Ohio. Coin-controlled or slug-controlled merchandise-dispensing devices and parts of such devices. 270,910; May 20; Serial No. 290,506; published Mar. 11, 1930. Class 23.

Fisher-Governor Company, The, Marshalltown, Iowa. Valves. 78,698; renewed July 5, 1930.

Fleischmann Company, The, Cincinnati, Ohio, and New York, N. Y., assignor to Standard Brands Incorporated, Dover, Del. Vinegar. 270,971; May 20; Serial No. 278,391; published Mar. 4, 1930. Class 46.

Forest Hills Company, doing business as Old Colony Brewing Co., Boston, Mass. Malt extracts. 270,993; May 20; Serial No. 257,865; published Jan. 22, 1929. Class 46.

Fries, Harold H., New York, N. Y. Beverage. 79,334; renewed Aug. 30, 1930.

Frink, Carl H., Clayton, N. Y. Snowplows. 271,054; May 20. Class 23.

General Printing Ink Corporation, New York, N. Y. Periodical publication. 271,012; May 20; Serial No. 293,827; published Mar. 11, 1930. Class 38.

Georges, J. J., & Son, Inc., Washington, D. C. Preparation for eradicating warts. 77,733; renewed May 3, 1930.

Ghose, Satish C., Chicago, Ill. Incense. 271,069; May 20. Class 6.

Goodyear Tire & Rubber Company, The, Akron, Ohio. Pneumatic and solid tires. 271,000; May 20; Serial No. 276,417; published Mar. 11, 1930. Class 35.

Greenebaum, J., Tanning Company, Milwaukee, Wis. Leather. 271,050; May 20; Serial No. 285,456; published Mar. 11, 1930. Class 1.

Grocers & Producers Co., The, Cleveland, Ohio. Cornstarch, soups, macaroni, rice, etc. 271,042; May 20; Serial No. 286,763; published Mar. 4, 1930. Class 46.

Gudebrod Bros. Co., New York, N. Y., to Gudebrod Bros. Silk Co., Inc., Philadelphia, Pa., successor. Sewing threads. 79,122; renewed Aug. 9, 1930.

Haas, Baruch & Company, Los Angeles, Calif. Canned fruits, canned vegetables, canned fish, etc. 271,026; May 20; Serial No. 295,161; published Mar. 11, 1930. Class 46.

Hammond Clock Company, The, Chicago, Ill. Electric clocks. 271,068; May 20. Class 27.

Harrison's Orange Huts, Inc., Chicago, Ill. Sandwiches, candy, buns, etc. 270,975–7; May 20; Serial Nos. 277,626–8; published Mar. 11, 1930. Class 46.

Hartsdale Research Laboratories, Inc., Hartsdale, N. Y. Cleansing compound. 270,944; May 20; Serial No. 293,731; published Mar. 11, 1930. Class 4.

Heilbrunn Bros., assignor to Heilbrunn Bros., Inc., New York, N. Y. Candies and chocolates. 271,070; May 20. Class 46.

Henderson, W. K., Iron Works and Supply Co., Ltd., The, Shreveport, La. Canned coffee. 270,969; May 20; Serial No. 281,290; published Mar. 11, 1930. Class 46.

Hilliard's Glass House Goodies, Inc., Boston and West Roxbury, Mass. Chocolates, hard candies, and bonbons. 271,063; May 20. Class 46.

Hills Brothers Company, The, New York, N. Y. Currants. 79,670; renewed Sept. 27. 1930.

Hirsch, Herman J., doing business as Hollow Tree Pantry, Milwaukee, Wis. Nut candies. 270,984; May 20; Serial No. 294,223; published Mar. 11, 1930. Class 46.

Holeproof Hosiery Co., Milwaukee, Wis. Hosiery. 270,952; May 20; Serial No. 294,671; published Mar. 4, 1930. Class 39.

Hollow Tree Pantry. (See Hirsch, Herman J.)

Holloway, M. J., & Company, Chicago, Ill. Candy. 270,988; May 20; Serial No. 294,724; published Mar. 11, 1930. Class 46.

Hooper Paper & Twine Co., Inc., Philadelphia, Pa. Paper products. 271,071; May 20. Class 37.

Housh Company, Inc., The, Boston, Mass. Picture frames. 271,020; May 20; Serial No. 294,773; published Mar. 11, 1930. Class 32.

Howard Paper Company, Inc., Boston, Mass. Die-wiping paper. 270,990; May 20; Serial No. 295,029; published Mar. 11, 1930. Class 37.

Hugo, Walter E., Hammond, Ind. Raw and popped pop corn, salted peanuts, etc. 271,045; May 20; Serial No. 289,460; published Mar. 4, 1930. Class 46.

Hyde Manufacturing Company, Southbridge, Mass. Plumb bobs, straightedges, rules, and chalk lines. 271,013; May 20; Serial No. 293,834; published Mar. 11, 1930. Class 26.

Ingrassia, Leon, doing business as I. Leon Company, New York, N. Y. Pads for use in permanent-hair-waving machines. 270,994; May 20; Serial No. 242,593; published Mar. 4, 1930. Class 44.

Ivy, Francis B., New York, N. Y. Fountain pens and parts thereof. 270,937; May 20; Serial No. 295,225; published Mar. 11, 1930. Class 37.

Jarisch, Henry, jr., Holyoke, Mass. Toilet paper, paper towels, paper napkins. 271,016; May 20; Serial No. 293,975; published Mar. 11, 1930. Class 37.

Jenson & Nicholson Limited. (See Nicholson, John C.)

Johnson & Johnson, New Brunswick, N. J Ligatures. 270,970; May 20; Serial No. 279,404; published Feb. 25, 1930. Class 44.

Josey-Miller Company, Beaumont, Tex. Stock feed. 270,917; May 20; Serial No. 289,191; published Mar. 11, 1930. Class 46.

Kansas City Macaroni & Importing Co., Kansas City, Mo. Alimentary pastes. 270,963; May 20; Serial No. 283,503; published Aug. 6, 1929. Class 46.

Kaufmann Bros. & Bondy, Inc., West New York, N. J. Fountain pens. 271,009; May 20; Serial No. 293,051; published Mar. 11, 1930. Class 37.

Keller Mechanical Engineering Corporation, Brooklyn, N. Y. Shaft bench grinders and parts thereof. 271,015; May 20; Serial No. 293,924; published Mar. 11, 1930. Class 23.

Kellogg Box Board Company, Chicago, Ill. Waterproofed paper. 270,925; May 20; Serial No. 292,111; published Mar. 11, 1930. Class 37.

Kiefer Stewart Company, Indianapolis, Ind. Display stand. 270,928; May 20; Serial No. 288,655; published Mar. 11, 1930. Class 32.

Klein, L., Inc., Chicago, Ill. Men's suits. 270,948; May 20; Serial No. 293,223; published Mar. 4, 1930. Class 39.

Krim, Max, doing business as Krim Beverage Company, Lebanon, Pa. Soft drinks. 270,934; May 20; Serial No. 293,330; published Mar. 11, 1930. Class 45.

Kroger Grocery & Baking Co., The, Cincinnati, Ohio. Canned corn. 79,589; renewed Sept. 20, 1930.

Kroger Grocery & Baking Co., The, Cincinnati, Ohio. Canned sugar corn, stringless beans, and pumpkin, hominy, etc. 271,048; May 20; Serial No. 292,810; published Mar. 4, 1930. Class 46.

La Teste Home Made Candies, Chicago, Ill. Home-made candies. 270,940; May 20; Serial No. 293,736; published Mar. 11, 1930. Class 46.

Lentini, Ignasio, doing business as North Star Malt Co., Woburn, Mass. Malt extracts. 270,972; May 20; Serial No. 278,299; published Mar. 11, 1930. Class 46.

Leon, I., Company. (See Ingrassia, Leon.)

Levin, Simon, & Sons Co., The, Baltimore, Md. Suits and overcoats. 270,996; May 20; Serial No. 233,129; published Aug. 17, 1926. Class 39.

Lilienthal, Richard, S., New York, N. Y. Cotton knit, woolen knit, rayon, glove silk, and nainsook underwear. 270,947; May 20; Serial No. 293,376; published Mar. 4, 1930. Class 39.

Ludlow Laboratories Inc., Chicago, Ill. Paste cleaner. 271,073; May 20. Class 4.

MacLeod Manufacturing Co., Inc., The, assignor to A. F. Dormeyer Mfg. Co., Chicago, Ill. Scrapers for glass, wood, metal, etc. 270,913; May 20; Serial No. 289,468; published Mar. 11, 1930. Class 23.

Malt-Diastase Company, New York, to Malt-Diastase Company, Brooklyn, N. Y. Malt extracts. 79,352; renewed Aug. 30, 1930.

Maneval, Rex W., doing business as The Maneval Chickeries, Frankfort, Kans. Chicks. 270,989; May 20; Serial No. 294,585; published Mar. 11, 1930. Class 46.

Mannlon Muller Co., Union City, N. J. Underwaists and drawers. 270,995; May 20; Serial No. 242,484; published Apr. 16, 1929. Class 39.

Marabate, Arthur, doing business as Marabate Products Company, Detroit, Mich. Metal polishes and refinishers. 271,029; May 20; Serial No. 287,148; published Mar. 11, 1930. Class 4.

Mark, Clayton, & Company, Chicago, Ill. Rubber packers. 271,060; May 20. Class 35.

McAleer Manufacturing Company, Detroit, Mich. Polishing and cleaning compound. 271,036; May 20; Serial No. 290,714; published Mar. 4, 1930. Class 16.

McKesson & Robbins, Incorporated, Bridgeport, Conn. Periodical. 270,911; May 20; Serial No. 290,138; published Mar. 11, 1930. Class 38.

McKimmie Motor Co. Inc., Richmond, Va. Covers for the spare tires. 271,001; May 20; Serial No. 275,534; published Mar. 11, 1930. Class 35.

Milbrooks Restaurants Inc., New York, N. Y. Coffee, cookies, cake, etc. 271,027; May 20; Serial No. 293,929; published Mar. 11, 1930. Class 46.

Milwaukee Lubricants Co., Milwaukee, Wis. Detergent washing powder and powdered soap. 271,040; May 20; Serial No. 291,682; published Mar. 4, 1930. Class 4.

Milwaukee Lubricants Co., Milwaukee, Wis. Toilet soap and scrubbing soap. 271,041; May 20; Serial No. 291,684; published Mar. 4, 1930. Class 4.

Morgan, Albert C. F., to Morgan Brothers (London) Limited, London, England, successor. Compound of Port wine and extract of meat. 78,893; renewed July 19, 1930.

Mosaic Tile Company, The, Zanesville, Ohio. Tiles. 271,053; May 20. Class 12.

National Foods Inc., New Orleans, La. Oleomargarine. 271,005; May 20; Serial No. 269,479; published Mar. 11, 1930. Class 46.

National Grocer Company, Detroit, Mich. Canned fruits and vegetables, canned fish, etc. 270,999; May 20; Serial No. 265,491; published Mar. 4, 1930. Class 46.

National Trade Journals, Inc., New York, N. Y. Monthly publication. 270,931; May 20; Serial No. 287,358; published Mar. 11, 1930. Class 38.

Neitzel Manufacturing Co., Inc., Waterford, N. Y. Nurses' apparel. 271,072; May 20. Class 39.

Nettleton, A. E., Co., Syracuse, N. Y. Leather shoes. 271,065; May 20. Class 39.

New York Automobile Club, Inc., New York, N. Y. Periodical publications. 271,017; May 20; Serial No. 294,038; published Mar. 11, 1930. Class 38.

Niagara Envelope Manufactory, Inc., Buffalo, N. Y. Envelopes. 271,061; May 20. Class 37.

Nicholas, Richmond, doing business as Briquet Company of America, Chicago, Ill. Briquets of coal and coke. 271,011; May 20; Serial No. 293,538; published Mar. 11, 1930. Class 1.

Nicholson, John C., to Jenson & Nicholson Limited, Stratford, England, successor. Liquid paints and varnishes. 79,511; renewed Sept. 13, 1930.

North Platte Valley Co-Operative Cheese Company, Scottsbluff, Nebr. Dressed poultry, eggs, butter, and cheese. 271,046; May 20; Serial No. 285,532; published Mar. 11, 1930. Class 46.

North Star Malt Co. (See Lentini, Ignasio.)

Northwestern Upholstering Company, The, Minneapolis, Minn. Davenports, chairs, benches, etc. 271,019; May 20; Serial No. 294,317; published Mar. 11, 1930. Class 32.

Old Colony Brewing Co. (See Forest Hills Company.)

Old Colony Envelope Company, Westfield, Mass. Envelopes. 270,923; May 20; Serial No. 292,546; published Mar. 11, 1930. Class 37.

Olson, Martin C., Chicago, Ill., assignor to Thos. Christy & Co., London, England. Antiseptic tartar-remover in the form of a pencil. 76,372; renewed Jan. 11, 1930.

Ousrud Machine Works, Inc., Chicago, Ill. Woodworking machinery. 270,922; May 20; Serial No. 292,548; published Mar. 11, 1930. Class 23.

Orrsell Company, The, New York, N. Y.; Philadelphia, Pa.; and Vancouver, Wash. Adhesive compounds. 270,978; May 20; Serial No. 293,684; published Mar. 11, 1930. Class 5.

Osborne, Owen, Inc., Philadelphia, Pa. Silk hosiery and ladies' full-fashioned silk hosiery. 271,039; May 20; Serial No. 291,099; published Feb. 25, 1930. Class 39.

Ottenheimer Co., Salt Lake City, Utah. Underwear and sweaters. 270,992; May 20; Serial No. 258,037; published Mar. 12, 1929. Class 39.

Palestine Industrials, Inc., New York, N. Y. Honey. 271,047; May 20; Serial No. 290,591; published Mar. 4, 1930. Class 46.

Pardee, C., Works, The, Philadelphia, Pa. Tile. 271,055; May 20. Class 12.

Phillips, Godfrey, & Sons, to Godfrey Phillips, Limited, London, England, successor. Smoking tobacco, cigars, and cigarettes. 77,485; renewed Apr. 12, 1930.

Pilling, John, Shoe Company, Lowell, Mass. Leather boots and shoes. 79,689; renewed Sept. 27, 1930.

Pillsbury Flour Mills Company, Minneapolis, Minn. Prepared composition for the making of doughnuts. 270,986; May 20; Serial No. 295,273; published Mar. 11, 1930. Class 46.

Priscilla Sears Confectionery Company, Boston, Mass. Candy. 270,974; May 20; Serial No. 277,964; published Mar. 11, 1930. Class 46.

Puritan Soap Company, Rochester, N. Y. Soap. 79,365; renewed Aug. 30, 1930.

Pyro Proof Products Company, Everett, Wash. Paints. 270,960; May 20; Serial No. 294,318; published Mar. 4, 1930. Class 16.

Raybestos-Manhattan, Inc. (See United States Asbestos Co., assignor.)

Reily-Taylor Company, The, to Wm. B. Reily & Company, Inc., New Orleans, La., successor. Compound of coffee and chicory. 77,957; renewed May 17, 1930.

Rickel, Walter J., doing business as United Purchasing Co., Chicago, Ill. Chocolate frosting for food purposes. 271,024; May 20; Serial No. 294,893; published Mar. 11, 1930. Class 46.

Rosalowsky, The firm of A., Berlin, Germany, assignor, by mesne assignments, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y. Polishing compound. 34,951; renewed July 24, 1930.

Rosenau Bros. Inc., Philadelphia, Pa. Children's dresses. 271,030; May 20; Serial No. 287,545; published Mar. 4, 1930. Class 39.

Roth, Louis, & Co. Inc., Los Angeles, Calif. Outer clothing. 270,950; May 20; Serial No. 293,193; published Feb. 25, 1930. Class 39.

Royal Typewriter Company, Inc., New York, N. Y. Typewriting machines and parts thereof. 270,930; May 20; Serial No. 295,305; published Mar. 11, 1930. Class 23.

Ruble Blade Corporation. (See Spring, Edwin W., assignor.)

Sabine Garment Company, Beaumont, Tex. Dresses. 270,958–9; May 20; Serial Nos. 294,182–3; published Mar. 4, 1930. Class 39.

Salinas Produce Company, Salinas, Calif. Fresh vegetables. 271,067; May 20. Class 46.

Sandeman, Geo. G., Sons & Co., Ltd., London, England. Distilled alcoholic spirits. 270,973; May 20; Serial No. 278,141; published Mar. 11, 1930. Class 49.

Saunders, Julia G., San Francisco, Calif. Stretchers. 271,031; May 20; Serial No. 288,090; published Feb. 25, 1930. Class 44.

Schrader's, A., Son, Incorporated, New York, to A. Schrader's Son, Incorporated, Brooklyn, N. Y. Fluid-pressure gages, indicators, and regulators. 79,620; renewed Sept. 20, 1930.

Scott Paper Company, Chester, Pa. Toilet paper, paper towels, and napkins. 270,909; May 20; Serial No. 285,477; published Mar. 11, 1930. Class 37.

Scott Paper Company, Chester, Pa. Toilet paper, paper towels, and paper napkins. 271,008; May 20; Serial No. 285,478; published Mar. 11, 1930. Class 37.

Sharp & Dohme, Baltimore, Md. Remedy for the treatment of malaria. 79,610; renewed Sept. 20, 1930.

Shasteen, Charles J., Toledo, Ohio. Potato chips. 270,968; May 20; Serial No. 282,572; published May 28, 1929. Class 46.

Shlansky, Philip, & Co., Inc., New York, N. Y. Cloth. 271,066; May 20. Class 42.

Smoky Hollow Coal Co., Albia, Iowa. Coal. 271,010; May 20; Serial No. 293,114; published Mar. 11, 1930. Class 1.

Societa Prodotti Chimico Farmaceutici A. Bertelli & C., Milan, Italy. Composition of cod-liver oil and tar oil. 79,464; renewed Sept. 13, 1930.

Southern Belting Company of New Orleans, New Orleans, La. Leather belting. 78,543; renewed June 21, 1930.

Sprague, Warner & Company, Chicago, Ill. Canned fruit. 271,007; May 20; Serial No. 269,057; published Oct. 2, 1928. Class 46.

Spring, Edwin W., London, England, assignor to Ruble Blade Corporation, New York, N. Y. Razors and razor blades. 78,212; renewed May 31, 1930.

Standard Brands Incorporated. (See Fleischmann Company, The, assignor.)

Statman & Rosen Garment Company, St. Louis, Mo. Coats and dresses, suits, waists, and skirts. 270,942; May 20; Serial No. 294,029; published Feb. 25, 1930. Class 39.

Stearns, Frederick, & Co. (See Zymole Company, The, assignor.)

Steinberger Bros. Glove Corp., San Francisco, Calif. Gloves. 271,062; May 20. Class 39.

Steuart, Son & Company, Incorporated, Baltimore, Md. Table syrup and molasses. 270,991; May 20; Serial No. 293,606; published Mar. 4, 1930. Class 46.

Strathmore Paper Company, Mittineague, Mass. Paper and mailing envelopes. 270,932; May 20; Serial No. 287,024; published Mar. 4, 1930. Class 37.

Strawsons & Company, to Strawson Chemical Co. Limited, London, England, successor. Sticky insect banding for fruit trees. 78,464; renewed June 14, 1930.

Stuhr-Seidl Company, Minneapolis, Minn. Food concentrates for fowls and animals. 270,914; May 20; Serial No. 291,805; published Mar. 11, 1930. Class 46.

Swan Pencil Co. Inc., New York, N. Y. Pencils and penholders. 270,938; May 20; Serial No. 295,350; published Mar. 11, 1930. Class 37.

Swavely, Daniel T., doing business as The Swavely Varnish Works, Flint, Mich. Vehicle top dressings. 271,075; May 20. Class 4.

Tanenbaum, Jacob, Brooklyn, N. Y. Permanent-hair-waving pads. 270,953; May 20; Serial No. 294,447; published Mar. 4, 1930. Class 44.

Tichenor, James R., doing business as J. R. Tichenor & Sons, Louisville, Ky. Mayonnaise, sandwich spread, and Thousand Island dressing. 271,022; May 20; Serial No. 294,863; published Mar. 4, 1930. Class 46.

Torb, Inc., Allentown, Pa. Healing and soothing balm. 270,967; May 20; Serial No. 282,717; published Oct. 15, 1929. Class 6.

Trepel, Casper C., Farmingdale, N. Y. Cut flowers and shrubs. 270,920; May 20; Serial No. 292,763; published Mar. 11, 1930. Class 1.

Triangle Traveling Bag Works, Inc., Cincinnati, Ohio. Trunks, traveling bags, over-night bags, etc. 270,916; May 20; Serial No. 290,096; published Mar. 11, 1930. Class 3.

Turco Products Inc., Los Angeles, Calif. Soaps and detergent cleaning compounds. 270,966; May 20; Serial No. 282,886; published Mar. 4, 1930. Class 4.

Twin Coupler Company, Inc., Poughkeepsie, N. Y. Fruit-juice extractors. 270,930; May 20; Serial No. 287,600; published Mar. 11, 1930. Class 23.

United Markets, Inc., Boston, Mass. Nonfattening mayonnaise. 271,028; May 20; Serial No. 293,990; published Mar. 4, 1930. Class 46.

United Purchasing Co. (See Rickel, Walter J.)

United States Asbestos Co., Manheim, Pa., assignor to Raybestos-Manhattan, Inc., Passaic, N. J. Certain asbestos products. 78,050; renewed May 24, 1930.

Victor Manufacturing & Gasket Company, Chicago, Ill. Gaskets. 270,924; May 20; Serial No. 292,238; published Mar. 11, 1930. Class 35.

Villa Rica Mills, Inc., Villa Rica, Ga. Hosiery. 270,955; May 20; Serial No. 293,905; published Feb. 25. 1930. Class 39.

Viviano, Salvatore, doing business as Viviano Macaroni Manufacturing Company, Carnegie, Pa. Alimentary pastes. 270,964; May 20; Serial No. 283,315; published Mar. 4, 1930. Class 46.

West Florida Preserving Company, Inc., Bradenton, Fla. Canned grapefruit juice and canned tomato juice. 271,023; May 20; Serial No. 294,865; published Mar. 11, Class 46.

Western Dental Products Company. (See Buerger, Franz B.)

Whitman, Stephen F., & Son, Inc., Philadelphia, Pa. Candy. 270,915; May 20; Serial No. 291,749; published Mar. 11, 1930. Class 46.

Whitman, Stephen F., & Son, Inc., Philadelphia, Pa. Candy. 271,006; May 20; Serial No. 269,166; published Aug. 21, 1928. Class 46.

Wickes, W. Wirt, & Son, New York, N. Y. Molasses. 271,074; May 20. Class 46.

Williams Gold Refining Co., Inc., The, Buffalo, N. Y. Dental golds. 271,052; May 20. Class 44.

Witt's Market House, Minneapolis, Minn. Dressed poultry. 270,985; May 20; Serial No. 295,287; published Mar. 11, 1930. Class 46.

Woventex Co. (See Braunstein, Jacob.)

Yaqui Fruit Co., Los Angeles, Calif. Fruits and vegetables. 270,980; May 20; Serial No. 294,102; published Mar. 11, 1930. Class 46.

Zierer, Alfred, Vienna, Austria. Dietetic milk and milk products. 270,918; May 20; Serial No. 285,763; published Mar. 11, 1930. Class 46.

Zymole Company, The, New York, N. Y., assignor to Frederick Stearns & Co., Detroit, Mich. Antiseptic and astringent mouth-wash. 79,622; renewed Sept. 20, 1930.

ALPHABETICAL LIST OF REGISTRANTS OF LABELS

American Cone & Pretzel Company. (See Koch, R., assignor.)

American Popcorn Company, Sioux City, Iowa. Jolly Time Brand Pop Corn. For Pop Corn. 37,434; May 20.

Bachman's, Inc., Reading, Pa. Bachman's Original Butter Thin Pretzels. For Pretzels. 37,435; May 20.

Bachrach-Feld Co., The, doing business as Old Wurzburg Malt Co., Cincinnati, Ohio. Old Wurzburg. For Malt Syrup. 37,436; May 20.

Banfield, Charles C., Portland, Oreg. "Pep-O-Lime". For Beverage. 27,437; May 20.

Cudahy Bros. Company. (See Menasha Products Co., The, assignor.)

Fletcher, Stanley J., Tampa, Fla. Eagle—"The Choice of a Nation". For Cigarettes. 37,438; May 20.
Good, James, Inc., Philadelphia, Pa. Glosster Wax. For Liquid Wax. 37,439; May 20.
Halferty, G. P., & Co., Seattle, Wash. That's Mine. For Canned Salmon. 37,440; May 20.
Hanson-Van Winkle-Munning Company, Matawan, N. J. Fotopor Paper. For Paper. 37,441; May 20.
Hoague-Sprague Corporation, Lynn, Mass. Mary Chilton. For Boxes. 37,442; May 20.
Hoague-Sprague Corporation, Lynn, Mass. Betty Gale. For Boxes. 37,443; May 20.
Hoague-Sprague Corporation, Lynn, Mass. G. R. Kinney Co., Inc. For Boxes. 37,444; May 20.
Hoague-Sprague Corporation, Lynn, Mass. Deys. For Boxes. 37,445; May 20.
Hoague-Sprague Corporation, Lynn, Mass. Hochschild, Kohn & Co. For Boxes. 37,446; May 20.
Hoague-Sprague Corporation, Lynn, Mass. Entroth's. For Boxes. 37,447; May 20.
Hoague-Sprague Corporation, Lynn, Mass. Supreme Footwear. For Boxes. 37,448; May 20.
Hoague-Sprague Corporation, Lynn, Mass. S and K. For Boxes. 37,449; May 20.
Hoke, Harry H., jr., doing business as Hoke Manufacturing Co., Washington, D. C. Foot Ball Mints. For Candy Mints. 37,450; May 20.
Hoke Manufacturing Co. (See Hoke, Harry H., jr.)
Koch, R., assignor to American Cone & Pretzel Company, Philadelphia, Pa. Golden Maid Slender Butter Pretzels. For Pretzels. 37,451; May 20.
Larvex Corporation, The, New York, N. Y. Larvex. For Mothproofing Compound. 37,452; May 20.
Maillard, Henry, Inc., Long Island City, N. Y. Maillard's Sans Rival Chocolates. For Chocolate Candy. 37,453; May 20.
Mead Johnson & Company, Evansville, Ind. Mead's Dextri-Maltose with Vitamin B. For Prepared Food in Powdered Form Containing Vitamin B for Infants, and Invalids. 37,454; May 20.
Mechling Brothers Chemical Company, Camden, N. J. Drain Pipe Cleaner. For a Preparation for Cleaning Drainpipes. 37,455; May 20.
Mechling Brothers Chemical Company, Camden, N. J. Hydroxicide. For Insecticide and Fungicide Powder. 37,456; May 20.
Mechling Brothers Chemical Company, Camden, N. J. New Jersey Dry Mix. For Mixture of Sulphur Lime and Calcium Caseinate. 37,457; May 20.
Mechling Brothers Chemical Company, Camden, N. J. Arsenate of Lead. For Arsenate-of-Lead Powder. 37,458; May 20.
Mechling Brothers Chemical Company, Camden, N. J. Calcium Caseinate. For Calcium Caseinate. 37,459; May 20.
Mechling Brothers Chemical Company, Camden, N. J. Arsenate of Calcium. For Arsenate-of-Calcium Powder. 37,460; May 20.
Mechling Brothers Chemical Company, Camden, N. J. Bordeaux Mixture. For Bordeaux-Mixture Powder. 37,461; May 20.
Menasha Products Co., The, Chicago, Ill., assignor to Cudahy Bros. Company, Cudahy, Wis. Rainbow. For Butter. 37,462; May 20.
Menasha Products Company, The, Chicago, Ill. Real Potato Bread. For Bread. 37,463; May 20.
Menasha Products Company, The, Chicago, Ill. Modern Bread. For Bread. 37,464; May 20.
Menasha Products Company, The, Chicago, Ill. Rolls. For Rolls. 37,465; May 20.
Menasha Products Company, The, Chicago, Ill. Buns. For Buns. 37,466; May 20.
Menasha Products Company, The, Chicago, Ill. Delicious Modern Bread. For Bread. 37,467; May 20.
Milwaukee Macaroni Co., Milwaukee, Wis. Red Arrow. For Egg Noodles. 37,468; May 20.
Milwaukee Malt Syrup Company, Milwaukee, Wis. Garibaldi. For Malt Syrup. 37,469; May 20.
Milwaukee Malt Syrup Company, Milwaukee, Wis. Old Milwaukee. For Malt Syrup. 37,470; May 20.
Neoderm Company, Los Angeles, Calif. Neoderm. For Medicinal Preparation a Preparation for the Skin. 37,471; May 20.
Old Wurzburg Malt Co. (See Bachrach-Feld Co., The.)
Overmyer Company, The, Toledo, Ohio. Overmyer's 100% Pure Malt Syrup. For Malt Syrup. 37,472; May 20.
Pearce, S. J., & Sons, Medford, Mass. Radiator-Stop-a-Leak Dam-It. For Material for Stopping Leaks in Automobile Radiators and Cracked Engine Blocks. 37,473; May 20.
Richfield Oil Company of California, Los Angeles, Calif. Aviation Motor Oil. For Motor Oil. 37,474; May 20.
Richfield Oil Company of California, Los Angeles, Calif. Rocker Arm Grease. For Grease. 37,475; May 20.
Runnymede Finance Company, doing business as Runnymede, Los Angeles and Reseda, Calif. Savoree Pak. For Canned Chicken. 37,476; May 20.
Saniwax Paper Co., Kalamazoo, Mich. Apex Loaf. For Bread. 37,477; May 20.
Southwestern Portland Cement Company, Dayton, Ohio. Richmortar Masonry Cement. For Cement Products. 37,478; May 20.
Walco Company, The, Los Angeles, Calif. Walco. For Garments. 37,479; May 20.
Whittler, M. H., Company, Ltd., Los Angeles, Calif. Good Morning. For Grapefruit. 37,480; May 20.

ALPHABETICAL LIST OF REGISTRANTS OF PRINTS

A. B. C. Book of the Bible Publishing Co., Washington, D. C. A. B. C. Book of the Bible. For Bibles. 12,536; May 20.
Cream of Wheat Corporation, The, Minneapolis, Minn. She Can do Anything a Boy Can—This Little Bettina Belmont. For Wheat Breakfast Food. 12,537; May 20.
Reynolds, R. J. Tobacco Company, Winston-Salem, N. C. Sophisticate. For Cigarettes. 12,538; May 20.
Reynolds, R. J., Tobacco Company, Winston-Salem, N. C. Entr'acte. For Cigarettes. 12,539; May 20.
Reynolds, R. J., Tobacco Company, Winston-Salem, N. C. If Winter Comes. For Cigarettes. 12,540; May 20.
Reynolds, R. J., Tobacco Company, Winston-Salem, N. C. When Critical Smokers Get Together. For Cigarettes. 12,541; May 20.
Reynolds, R. J., Tobacco Company, Winston-Salem, N. C. Cues. For Cigarettes. 12,542; May 20.
Reynolds, R. J., Tobacco Company, Winston-Salem, N. C. Camels Are Pleasure Punctuation Marks. For Cigarettes. 12,543; May 20.
Reynolds, R. J., Tobacco Company, Winston-Salem, N. C. A Pleasant Breathing Spell—Have a Camel. For Cigarettes. 12,544; May 20.
Reynolds, R. J., Tobacco Company, Winston-Salem, N. C. When the Table Talk Turns to Cigarettes—. For Cigarettes. 12,545; May 20.
Reynolds, R. J., Tobacco Company, Winston-Salem, N. C. Heights of Pleasure. For Cigarettes. 12,546; May 20.
Reynolds, R. J., Tobacco Company, Winston-Salem, N. C. Curtain. For Cigarettes. 12,547; May 20.
Reynolds, R. J., Tobacco Company, Winston-Salem, N. C. Intermission. For Cigarettes. 12,548; May 20.
Reynolds, R. J., Tobacco Company, Winston-Salem, N. C. Enjoy Yourself. For Cigarettes. 12,549; May 20.
Reynolds, R. J., Tobacco Company, Winston-Salem, N. C. Real Cigarette Pleasure. For Cigarettes. 12,550; May 20.
Reynolds, R. J., Tobacco Company, Winston-Salem, N. C. Turn This Package Over and Read the Back. For Cigarettes. 12,551; May 20.
Reynolds, R. J., Tobacco Company, Winston-Salem, N. C. Charming. For Cigarettes. 12,552; May 20.
Reynolds, R. J., Tobacco Company, Winston-Salem, N. C. You're Going Somewhere When You Go With Camels. For Cigarettes. 12,553; May 20.
Southern Furniture Company, Tulsa, Okla. Babyland. For Baby Furniture. 12,554; May 20.
Stearns & Foster Co., The, Lockland, Cincinnati, Ohio. Basket of Flowers. For Quilting Cotton. 12,555; May 20.
Stearns & Foster Co., The, Lockland, Cincinnati, Ohio. The Windblown Tulip. For Quilting Cotton. 12,556; May 20.
Waughrine Medicine Company, The, Washington, D. C. Waughrine, The Champion Pain Killer. For Medicinal Preparation for Treating Rheumatism, Lumbago, Neuritis, and All Pains and Aches. 12,557; May 20.

ALPHABETICAL LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Aeppler, C. W., doing business as Wisconsin Honey Farm, Oconomowoc, Wis. Honey. 298,298; May 20. Class 46.
Allegro Company, Newark, N. J. Razor hones and strops, abrasive cakes, razor-strop coatings and softeners. 296,794; May 20. Class 4.
Amalgamated Roofing Company, Chicago, Ill. Shingles. 297,507; May 20. Class 12.
American Forestry Company. (See Borst, Theodore F.)
American Hair & Felt Company, Chicago, Ill. Hair-felt products. 298,303; May 20. Class 12.

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

American Hard Rubber Company, Hempstead and New York, N. Y. Baths, bibb cocks, bushings, caps, etc. 296,250; May 20. Class 13.
American Malt Company, The, Baltimore, Md. Malt syrup. 294,657; May 20. Class 46.
American Manganese Bronze Company, Holmesburg, Philadelphia, Pa. Cast-bronze machinery bushings. 266,294; May 20. Class 23.
American Manufacturing Company, Brooklyn, N. Y. Bales and rolls of bagging for covering cotton. 298,304; May 20. Class 42.
American Music Co., Inc., San Francisco, Calif. Sheet music. 297,050; May 20. Class 38.
American Paint Journal Company, St. Louis, Mo. Supplement to a periodical. 294,838; May 20. Class 38.
Anderson Manufacturing Company, Cambridge, Mass. Vehicle spring covers. 297,115; May 20. Class 19.
Apta Corporation, New York, N. Y. Overalls. 297,790; May 20. Class 39.
Aratin Products Company. (See Kahlo, Harry C.)
Archer, A. W., Co., Inc., New York, N. Y. Braided cord. 297,053; May 20. Class 7.
Arcweld Manufacturing Company, Inc., Seattle, Wash. Furnaces and furnace bodies. 296,213; May 20. Class 34.
Armstrong Cork Company, Lancaster, Pa. Linoleum, felt base, and similar floor coverings. 298,479; May 20. Class 20.
Armstrong Cork Company, Lancaster, Pa. Linoleum, felt base, and similar floor coverings. 298,481; May 20. Class 20.
Atkins, E. C., and Company, Indianapolis, Ind. Cane knives. 292,781; May 20. Class 23.
B. & R. Clothing Co. Inc., New York, N. Y. Suits and overcoats. 292,572; May 20. Class 39.
B. V. D. Company, Inc., The, Baltimore, Md. Bathing suits. 298,222; May 20. Class 39.
Barton Manufacturing Company, St. Louis, Mo. Shoe dressings. 296,386; May 20. Class 4.
Basch, S., Import Corporation, New York, N. Y. Porcelain bathroom accessories. 296,572; May 20. Class 13.
Beissel, Steph., sel Wwe. & Sohn, Aix-la Chapelle, Germany. Sewing-machine needles. 294,093; May 20. Class 23.
Best, Carl L., Cleveland, Ohio. Baked goods. 290,811; May 20. Class 46.
Best Foods, Inc., The, New York, N. Y. Booklets. 297,226; May 20. Class 38.
Black Star Coal Company, Louisville, Ky. Coal. 298,371; May 20. Class 1.
Blue Diamond Coal Company, Knoxville, Tenn. Coal 297,724; May 20. Class 1.
Borst, Theodore F., doing business as American Forestry Company, Framingham Center, Mass. Garden furniture. 283,370; May 20. Class 12.
Borst, Theodore F., doing business as American Forestry Company, Framingham Center, Mass. Arbors, pergolas, wooden fences, etc. 283,374; May 20. Class 12.
Bradford, James, Co., Wilmington, Del. Paints, paint enamels, paint oils, etc. 297,232; May 20. Class 16.
Brady, Edward F., jr., doing business as The Miller Products Company, Gary, Ind. Liquid glass cleaner. 298,010; May 20. Class 4.
Brown Durrell Co., Boston, Mass., and New York, N. Y. Hosiery and underwear. 297,725; May 20. Class 39.
Brüder Böhm, Vienna, Austria. Hats and hat bodies. 294,794; May 20. Class 39.
Bryan, Sally, doing business as Denver Radium Service, Denver, Colo. Radium-containing ointment, solutions, and tablets, also for suppositories. 294,054; May 20. Class 6.
Butler Brothers, Chicago, Ill. Corset brassières, girdles, and brassières. 296,729; May 20. Class 39.
Caldor, Earl S., doing business as Packaine, or Paqain, New York, N. Y. Bust bodies. 280,319; May 20. Class 39.
California Crushed Fruit Corporation, Los Angeles, Calif. Beverages, concentrates, compounds, and syrups for making the same. 297,726; May 20. Class 45.
Cambern Corporation, Spokane, Wash. Butter and ice cream. 288,061; May 20. Class 46.
Carboloy Company, Inc., New York, N. Y. Publication. 298,271; May 20. Class 38.
Castles Ice Cream Company, Irvington, N. J. Ice cream. 298,227; May 20. Class 46.
Chapman & Chapman, Paterson, N. J. Toy automobiles. 297,793; May 20. Class 22.
Chicago Rubber Clothing Co., Racine, Wis. Outer coats. 293,262; May 20. Class 39.
Chock-Horowitz Company, New York, N. Y. Pajamas and night robes. 297,661; May 20. Class 39.
Church Mfg. Co., The, sometimes doing business as Church Grape Juice Company, Kennewick, Wash. Grape juice, beverages, and syrups for making the same, ginger ale. 298,790; May 20. Class 45.
Clayton, Herbert D., Hill City, Kans. Merry-go-rounds. 297,240; May 20. Class 22.
Climax Hosiery Mills, Athens, Ga. Hosiery. 258,678; May 20. Class 39.
Coats, J. & P. (R. I.) Inc., Pawtucket, R. I. Thread 298,380; May 20. Class 43.
Cohen, Goldman & Co. Inc., New York, N. Y. Outer garments, underwear, and uppers for shoes. 297,835; May 20. Class 39.
Cohen, S., & Co., New York, N. Y. Silk piece goods, rayon, silk and rayon, and cotton piece goods. 280,474; May 20. Class 42.
Corning Glass Works, Corning, N. Y. Glass lantern and lamp globes and chimneys. 298,313; May 20. Class 33.
Cutler Mail Chute Co., Rochester, N. Y. Mail chutes and mail boxes. 295,468–9; May 20. Class 2.
Daggett & Ramsdell, New York, N. Y. Cold cream. 292,846; May 20. Class 6.
Davies, Henry K., & Co., Inc., New York, N. Y. Rubber-coated metal dippers, trays, pipes, and tubes. 285,499; May 20. Class 13.
Delphian Food Products, Inc., Long Island City, N. Y. Powder preparations. 291,383; May 20. Class 46.
Dental Manufacturing Company Limited, The, London, England. Dental cement. 295,931; May 20. Class 44.
Denver Radium Service. (See Bryan, Sally.)
Dexter, John L., Mariposa, Calif. Weekly newspaper. 298,086; May 20. Class 38.
Dexto Company. (See Taylor, Carrie C.)
Dietz, R. E., Company, New York, N. Y. Fuel-burning lamps and lanterns and the burners and metal parts thereof. 282,977; May 20. Class 34.
Dollfus-Mieg & Cie., Societe Anonyme, Mulhouse, France. Braids, articles of passementerie, and needlework. 290,559; May 20. Class 40.
Dunleavy, James F., Boston, Mass. Filing supplies. 295,937–8; May 20. Class 37.
Duplan Silk Corporation, New York, N. Y. Ladies' dresses. 298,091; May 20. Class 39.
Efron and Novik, Passaic, N. J. Hot peppers, sweet peppers, dill pickles, etc. 281,725; May 20. Class 46.
Enterprise Manufacturing Company, The, Akron, Ohio. Spinners. 298,231; May 20. Class 22.
Enterprise Manufacturing Company, The, Akron, Ohio. Artificial bait. 298,232; May 20. Class 22.
Enterprise Manufacturing Company, The, Akron, Ohio. Fishhooks. 298,233; May 20. Class 22.
Fair, The. (See Traugott Brothers, Inc.)
Fairyland Manufacturing Company, Chattanooga, Tenn. Materials for constructing miniature golf courses and apparatus for use in connection therewith. 297,590; May 20. Class 22.
Fall River Herald News Publishing Company, Fall River, Mass. Daily newspaper. 296,961; May 20. Class 38.
Faunce, Benjamin R., Riverside, N. J. Cough syrup. 296,913; May 20. Class 6.
Fawcett Publications, Inc., Robbinsdale, Minn. Magazines. 298,158–60; May 20. Class 38.
Feast, Samuel, and Sons Company, Inc., The, Center, Colo. Fresh potatoes. 293,909; May 20. Class 46.
Federal Seaboard Terra Cotta Corporation, New York, N. Y. Terra cotta. 298,381; May 20. Class 12.
Fillor Famous Facial Corporation, Long Island City, N. Y. Massage apparatus, hair driers, etc. 296,271; May 20. Class 44.
Forstmann & Huffmann Company, Passaic, N. J. Woolen piece goods. 298,383; May 20. Class 42.
Forstmann & Huffmann Company, Passaic, N. J. Woolen piece goods. 298,385; May 20. Class 42.
Garr Mfg. Corp., The, Newark, N. J. Drinking straws. 291,331; May 20. Class 50.
Gasau-Thompson Bedding Company, Incorporated, Brooklyn and New York, N. Y. Chair couches. 271,027; May 20. Class 32.
Gilchrist, Frank, doing business as Lucky Number Confections, Philadelphia, Pa. Candy. 298,172; May 20. Class 46.
Glassman, Maurice H., Boston, Mass. Storage cabinets for furs. 297,424; May 20. Class 32.
Goldenberg Bros. & Co., New York, N. Y. All-silk flat chiffon cloth in the piece. 296,644; May 20. Class 42.
Gomez, Pedro A., Los Angeles, Calif. Malt syrup. 298,173; May 20. Class 46.
Good Story Magazine Company, Inc., New York, N. Y. Magazine. 294,580; May 20. Class 38.
Good Story Magazine Company, Inc., New York, N. Y. Magazine. 298,625; May 20. Class 38.
Good Story Magazine Company, Inc., New York, N. Y. Magazine. 298,627; May 20. Class 38.
Goyer Company, The, Greenville, Miss. Spaghetti, macaroni, and evaporated milk. 297,478; May 20. Class 46.
Grange Silo Company. (See Mott, Maurice W.)
Great Falls Meat Company, Great Falls, Mont. Ham, bacon, sausage, etc. 294,806; May 20. Class 46.
Great States Corporation, Richmond, Ind. Lawn mowers. 298,324; May 20. Class 23.
Gross, Milt, New York, N. Y. Cartoon strip. 298,629; May 20. Class 38.
Groub, John C., Company, The, Seymour and Mitchell, Ind. Wheat flour. 298,177; May 20. Class 46.
Ground Gripper Shoe Company, Inc., Boston, Mass. Children's shoes. 291,725; May 20. Class 39.
Hall Electric Heating Company, Inc., Philadelphia, Pa. Building and water heaters. 295,897; May 20. Class 34.

ALPHABETICAL LIST OF TRADE-MARK APPLICANTS

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[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Hamel, L. H., Leather Co., Haverhill, Mass. Leather. 298,240; May 20. Class 1.
Hansen Specialty Company, Sioux City, Iowa. Trading stamps and coupons. 297,910; May 20. Class 38.
Heaton, Thomas, Wallasey, Cheshire, England. Medicated preparations. 298,098; May 20. Class 6.
Heko-Werk Chemische Fabrik Aktiengesellschaft, Berlin-Templehof, Germany. Salves free from grease. 289,318; May 20. Class 6.
Heredia, David, New York, N. Y. Preparation for the treatment of the hair. 297,482; May 20. Class 6.
Hirsch Shirt Corporation, Chicago, Ill. Shirts. 296,274; May 20. Class 39.
Hitt Fireworks Co., Seattle, Wash. Pyrotechnique novelties. 298,327–9; May 20. Class 9.
Holeproof Hosiery Co., Milwaukee, Wis. Hosiery. 298,099; May 20. Class 39.
Holgate Brothers Company, Kane, Pa. Toy building blocks. 298,026; May 20. Class 22.
Hookless Fastener Company, Meadville, Pa. Trunks for gym suits or swimming suits, boots and shoes, etc. 294,256; May 20. Class 39.
House Beautiful Publishing Corporation, The, Boston, Mass. Periodical. 296,190. May 20. Class 38.
Hynes & Cox Electric Corporation, Albany, N. Y. Electrical domestic waterheaters. 272,494–5; May 20. Class 34.
Ideal Trading Co. (See Lichtenstein, William.)
Indian Motocycle Company, Springfield, Mass. Outboard motors, parts, and accessories therefor. 296,917; May 20. Class 23.
Jakubiak, William W., Brooklyn, N. Y. Cake, sandwiches, pies, ice cream, etc. 295,518; May 20. Class 46.
Johnson, Emil, doing business as Emil Johnson's, St. Paul, Minn. Shoe and leather preserver, polish, and waterproofing compound. 297,743; May 20. Class 4.
Jones Hat Company, St. Joseph, Mo. Hats and caps. 296,871; May 20. Class 39.
Kahlo, Harry C., doing business as Aratin Products Company, Indianapolis, Ind. Medical preparation. 296,601; May 20. Class 6.
Kamen-Blair, Inc., Kansas City, Mo. Magazines. 288,651–2; May 20. Class 38.
Kapstein, Edward M., doing business as Pincho Hair Pin Co., Boston, Mass. Hairpins. 297,137; May 20. Class 40.
Karreth, August, doing business as Luitpold-Werk Chemisch-Pharmazeutische Fabrik, Munich, Germany. Healing, disinfecting, and protecting preparations. 294,388; May 20. Class 6.
King Fuller Crandell Co., Chicago, Ill. Prepared mustard, olives, peanut butter, and pickles. 298,186; May 20. Class 46.
King, John C., Flooring Company, The, Cleveland, Ohio, and Detroit, Mich. Cleaning preparation for block floors. 298,336; May 20. Class 4.
Kle Klo Products Company, Inc., The, Blackwell, Okla. Cloth-cleaning compound. 298,188; May 20. Class 4.
Lancaster Shoe Company, Elizabethtown, Pa. Shoes, oxfords, and boots. 297,440; May 20. Class 39.
Lance Packing Company, Charlotte, N. C. Sandwiches. 297,019; May 20. Class 46.
Lance Packing Company, Charlotte, N. C. Peanut-butter sandwiches. 298,107; May 20. Class 46.
Lee, Frank H., Company, The, Danbury, Conn. Hats and caps. 298,032; May 20. Class 39.
Lelong, Lucien, Inc., Chicago, Ill. Filled powder and rouge vanity cases. 291,675; May 20. Class 6.
Lemire, Paul, Berlin, N. H. Medical preparation. 295,903; May 20. Class 6.
Lev Wern Publishing Company, Louisville, Ky. Weekly newspaper. 297,686; May 20. Class 38.
Lichtenstein, William, doing business as Ideal Trading Co., New York, N. Y. Dried foods. 298,343; May 20. Class 46.
Lindahl, Anders, Stockholm, Sweden. Lemonade, soft drinks, and essences and extracts. 297,090; May 20. Class 45.
Littleford Brothers, Cincinnati, Ohio. Tar and asphalt heating apparatus and road-repair heating apparatus. 291,990; May 20. Class 34.
Lone Star Exterminating Co., New York, N. Y. Insecticides. 293,841; May 20. Class 6.
Lovranich, John, San Diego, Calif. Health food. 297,374; May 20. Class 46.
Lucky Number Confections. (See Gilchrist, Frank.)
Luitpold-Werk Chemisch-Pharmazeutische Fabrik. (See Karreth, August.)
Lyon, Alvine W., doing business as The Lyon Specialty Co., Hollywood, Calif. Adhesive mending tissue. 297,976; May 20. Class 5.
Major, Harlan W., New York, N. Y. Fishing reels, lines and rods, spears, tackle boxes, etc. 297,751; May 20. Class 22.
Mallory Hat Company, The, Danbury, Conn. Men's hats. 272,822; May 20. Class 39.
Marathon Paper Mills Company, Rothschild, Wis. Bond paper. 296,537; May 20. Class 37.
Mayer & Schmidt, Schleifmaschinen & Schmiergelwerke, A.-G., Offenbach-on-the-Main, Germany. Aluminous artificial abrasives. 256,357; May 20. Class 4.
McCullagh, S. J., Inc., Buffalo, N. Y. Coffee. 295,228; May 20. Class 46.
McJohnston, Harrison, Chicago, Ill. Publication. 298,505; May 20. Class 38.
Mergenthaler Linotype Company, New York and Brooklyn, N. Y. Machines for producing type bars and parts thereof. 298,033; May 20. Class 23.
Millard, Gerhardt A., Chicago, Ill. Adhesive coatings. 283,692; May 20. Class 16.
Miller Products Company, The. (See Brady, Edward F., jr.)
Milson Company, The, Cincinnati, Ohio. Skin lotions. 263,776; May 20. Class 6.
Min Marceau, Société à Responsabilité Limitée, Bordeaux, France. Wines. 298,451–2; May 20. Class 47.
Mitchell, John H., Chicago, Ill. Artificial lumber, wall board, and artificial thermal insulation. 296,134; May 20. Class 12.
Monza Mills, Inc., New York, N. Y. Hats. 297,449; May 20. Class 39.
Mott, Maurice W., doing business as Grange Silo Co., Red Creek, N. Y. Wooden and cement silos. 297,203; May 20. Class 2.
N. V. Potash Export Maatschappij, New York, N. Y. Potash for fertilizers. 271,940; May 20. Class 10.
N. Y. Cotton Stores Inc., doing business as Ruby Lane Stores, New York, N. Y. Cotton piece goods and household linen. 297,494; May 20. Class 42.
National Ink & Chemical Co. (See Thompson, Ben W.)
Nelson, O. A., doing business as The Winners Packing Co. Ltd., San Francisco, Calif. Canned dog and cat food. 298,508; May 20. Class 46.
Nicholson, C. B., Printing Company, doing business as Tourist Publishing Co., St. Louis, Mo. Periodical publication. 296,099; May 20. Class 38.
Nightingale Products. (See Small, Abbas.)
Northern Jobbing Company, Chicago, Ill.; New York, N. Y.; and St. Paul, Minn. Bed coverlets, sheets, bed blankets, etc. 287,587; May 20. Class 42.
Oberman, D. M., Mfg. Co., Jefferson City, Mo., and New York, N. Y. Coats, trousers, riding breeches, and lumber jacks. 295,438; May 20. Class 39.
Once Over Razor Blade Co. (See Wolfertz, Richard.)
Pacific Golf Ball, Ltd., San Francisco, Calif. Golf balls. 289,041; May 20. Class 22.
Packaine, or Pagain. (See Caldor, Earl S.)
Paraffine Companies, Inc., The, San Francisco, Calif. Wood preservative compound, chemical cleaner, and denatured alcohol. 297,768; May 20. Class 6.
Pharis Tire and Rubber Company, The, Newark, Ohio. Motor-vehicle tires, casings, and tubes. 298,038; May 20. Class 35.
Pincho Hair Pin Co. (See Kapstein, Edward M.)
Pond's Extract Company, New York, N. Y. Skin-freshener preparation. 295,387; May 20. Class 6.
Pratt & Whitney Company, New York, N. Y. Gear-burnishing gears. 277,178; May 20. Class 23.
Price, Irving, New York, N. Y. Lemon squeezers. 298,115; May 20. Class 23.
Puget Sound & Alaska Powder Company, Seattle, Wash. High explosives. 282,251; May 20. Class 9.
Puritan Garment Co. Inc., New York, N. Y. Dresses. 294,542; May 20. Class 39.
Rana Products Co. Inc., New York, N. Y. Coffees. 296,984; May 20. Class 46.
Raven Manufacturing Company, Council Bluffs, Iowa. Hog feed. 296,826; May 20. Class 46.
Reardon Company, The, St. Louis, Mo. Paints. 296,611; May 20. Class 16.
Red Arrow Bottling Works. (See Seput, Alexander P.)
Ruby Lane Stores. (See N. Y. Cotton Stores Inc.)
S. & H. Novelty Company, The, Atlantic City, N. J. Dolls. 297,990; May 20. Class 22.
Sackman Brothers Company, New York, N. Y. Play suits, fancy costumes, and masquerade suits. 297,985; May 20. Class 39.
Schmertz, Joseph, & Son, Inc., New York, N. Y. Coats, suits, and topcoats. 296,465; May 20. Class 39.
Scholastic Publishing Company, The, Pittsburgh, Pa., and Mount Morris, Ill. Magazine. 297,988; May 20. Class 38.
Schweppes (Colonial & Foreign) Limited, London, England. Beverage. 296,718; May 20. Class 45.
Scioto Petroleum Company, The, Columbus, Ohio. Motor-fuel compound. 297,498; May 20. Class 6.
Searidge Inc., New York, N. Y. Hosiery. 295,550; May 20. Class 39.
Sears, Roebuck and Co., Chicago, Ill. Shoes. 296,776–7; May 20. Class 39.
Sears, Roebuck and Co., Chicago, Ill. Charcoal incubators. 297,620; May 20. Class 50.
Selig Company, The, Atlanta, Ga. Metal polish. 297,697; May 20. Class 4.
Seput, Alexander P., doing business as Red Arrow Bottling Works, Detroit, Mich. Ginger ale. 298,051; May 20. Class 45.
Small, Abbas, doing business as Nightingale Products, Brooklyn, N. Y. Liquid and powder cleanser and stain remover. 296,926; May 20. Class 4.

PUBLISHED FOR OPPOSITION

[Act of Feb, 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Societe Anonyme pour l'Expansion des Marques de Fabrique et Commerce, Courbevoie, France. Granulated laxative pharmaceutical product. 297,386; May 20. Class 6.
Societe Cadum S. A., Courbevoie, France. Toilet and bath soaps, shaving soap and cream, and soap shampoos. 295,959; May 20. Class 4.
South Bend Bait Co., South Bend, Ind. Bows, arrows, targets, etc. 296,362; May 20. Class 22.
Stewart, Genevieve F., New York, N. Y. Paper aprons. 296,243; May 20. Class 37.
Suchar Process Corporation, New York, N. Y. Sugars. 291,417; May 20. Class 46.
Superior Laboratories. (See Weinberger Drug Stores, Inc.)
Superior Wynco Laboratories. (See Weinberger Drug Stores, Inc.)
Syverson, Salma, Hibbing, Minn. Bread. 298,472; May 20. Class 46.
Tagit Company, The, Rockford, Ill. Laundry-marking tags. 290,277; May 20. Class 24.
Taylor, Carrie C., doing business as Dexto Company, Richmond, Va. Cleansing liquid. 296,554; May 20. Class 4.
Terry, Paul H., Long Island City, N. Y. Motion-picture films. 297,102; May 20. Class 26.
Thiokol Corporation, Kansas City, Mo. Sulfur-containing plastic material. 298,519; May 20. Class 1.
Thompson, Ben W., doing business as National Ink & Chemical Co., Los Angeles, Calif. Writing ink. 296,501; May 20. Class 11.
Tourist Publishing Co. (See Nicholson, C. B., Printing Company.)
Traugott Brothers, Inc., doing business as The Fair, Indianapolis, Ind. Men's clothing. 296,990; May 20. Class 39.
Tucker, D. S., Company, Cleveland, Ohio. Boiler-tube cleaners. 297,162; May 20. Class 23.
Tumbler, Joseph A., assignor to J. A. Tumbler Laboratories, Baltimore, Md. Cleaner and polish. 296,370; May 20. Class 16.
Visco Products Company, Houston, Tex. Solution of sodium compound. 286,093; May 20. Class 6.
Wabash Portland Cement Company, Stroh, Ind.; Osborn, Ohio; and Detroit, Mich. Brick mortar. 283,242–3; May 20. Class 12.
Waber, Morris, New York, N. Y. Toys and parts thereof. 297,107; May 20. Class 22.
Walker Manufacturing Company, St. Joseph, Mo. Oil burners and equipment therefor. 295,821; May 20. Class 34.
Walsh, Christy, New York, N. Y. Heading for a series of articles. 298,261; May 20. Class 38.
Ware, Herbert M., London, England. Food bottles, boxes, cartons, etc. 291,189; May 20. Class 2.
Waterman Brick and Tile Company, Inc., Waskom, Tex. Building brick. 297,391; May 20. Class 12.
Webster, William A., Company, The, Memphis, Tenn. Shaving cream. 298,219; May 20. Class 4.
Weinberger Drug Stores, Inc., doing business as Superior Laboratories, Cleveland, Ohio. Shampoo compound or mixture. 288,406; May 20. Class 6.
Weinberger Drug Stores, Inc., doing business as Superior Wynco Laboratories, Cleveland, Ohio. Antiseptic foot powder, hematic syrup, cold cream, etc. 291,190; May 20. Class 6.
Westcott Hosiery Mills, Dalton, Ga. Hosiery. 297,503; May 20. Class 39.
Williamson Candy Company, Chicago, Ill. Candy. 294,701; May 20. Class 46.
Winners Packing Co., Ltd., The. (See Nelson, O. A.)
Wisconsin Honey Farm. (See Aeppler, C. W.)
Wolfertz, Richard, doing business as Once Over Razor Blade Co., Buffalo, N. Y. Razor blades. 276,817; May 20. Class 28.
World Paint & Varnish Corp., The, New York, N. Y. Ready-mixed paints and varnishes. 296,040; May 20. Class 16.
Wright, Chester I., Seattle, Wash. Prepared chili, tamales, Spanish hamburger. 291,750; May 20. Class 46.
Yawman and Erbe Mfg. Co., Rochester, N. Y. Stationery and supplies. 297,345; May 20. Class 37.
York Heating & Ventilating Corporation, Bridgeport and Philadelphia, Pa. Air-conditioning apparatus. 298,058; May 20. Class 34.
York Heating & Ventilating Corporation, Bridgeport and Philadelphia, Pa. Air-conditioning apparatus. 298,060; May 20. Class 34.
Yuchtman, Norman M., Brooklyn, N. Y. Neckties. 296,580; May 20. Class 39.
Zell, David H., Inc., New York, N. Y. Portable coin banks. 297,346; May 20. Class 25.
Zig-Zag Sandwich Shop, The, Tulsa, Okla. Sandwiches, pies, and cakes. 255,366; May 20. Class 46.

CLASSIFIED LIST OF TRADE-MARKS REGISTERED

CLASS 1

Coal. Smoky Hollow Coal Co. 271,010; May 20; Serial No. 293,114; published Mar. 11, 1930.
Coal and coke, Briquets of. R. Nicholas. 271,011; May 20; Serial No. 293,538; published Mar. 11, 1930.
Flowers and shrubs, Cut. C. C. Trepel. 270,920; May 20; Serial No. 292,763; published Mar. 11, 1930.
Leather. J. Greenebaum Tanning Company. 271,050; May 20; Serial No. 285,456; published Mar. 11, 1930.

CLASS 3

Hatboxes, hat trunks, and traveling cases for canes. John Cavanaugh, Ltd. 270,983; May 20; Serial No. 294,340; published Mar. 11, 1930.
Trunks, traveling bags, overnight bags, etc. Triangle Traveling Bag Works, Inc. 270,916; May 20; Serial No. 290,096; published Mar. 11, 1930.

CLASS 4

Cleaner, Paste. Ludlow Laboratories Inc. 271,073; May 20.
Cleansing compound. Hartsdale Research Laboratories. 270,944; May 20; Serial No. 293,731; published Mar. 11, 1930.
Dressings, Vehicle top. D. T. Swavely. 271,075; May 20.
Polishes and refinishers, Metal. A. Marabate. 271,029; May 20; Serial No. 287,148; published Mar. 11, 1930.
Polishes, soaps, and toilet-bowl cleaners, Silver and metal. Clean-Ite Company. 270,951; May 20; Serial No. 294,797; published Feb. 25, 1930.
Polishing compound. Firm of A. Rosalowsky. 34,951; renewed Jnly 24, 1930.
Soap. Colgate-Palmolive-Peet Company. 271,032; May 20; Serial No. 288,317; published Mar. 11, 1930.
Soap. A. Fehrenbach. 271,033; May 20; Serial No. 288,700; published Mar. 4, 1930.
Soap. Milwaukee Lubricants Co. 271,041; May 20; Serial No. 291,684; published Mar. 4, 1930.
Soap. Puritan Soap Company. 79,365; renewed Aug. 30, 1930.
Soaps and detergent cleaning compounds. Turco Products Inc. 270,966; May 20; Serial No. 282,886; published Mar. 4, 1930.
Washing powder and powdered soap. Milwaukee Lubricants Co. 271,040; May 20; Serial No. 291,682; published Mar. 4, 1930.

CLASS 5

Adhesive compounds. Orrsell Company. 270,978; May 20; Serial No. 293,684; published Mar. 11, 1930.
Adhesives. Dewey & Almy Chemical Company. 270,939; May 20; Serial No. 294,065; published Mar. 11, 1930.

CLASS 6

Antiseptic tartar remover. M. C. Olson. 76,372; renewed Jan. 11, 1930.
Balm, Healing and soothing. Torb, Inc. 270,967; May 20; Serial No. 282,717; published Oct. 15, 1929.
Cod-liver oil and tar oil, Composition of. Societa Prodotti Chimico Farmaceutici A. Bertelli & C. 79,464; renewed Sept. 13, 1930.
Compound of port wine and extract of meat. A. C. F. Morgan. 78,893; renewed July 19, 1930.
Incense. S. C. Ghose. 271,069; May 20.
Mouth wash, Antiseptic and astringent. Zymole Company. 79,622; renewed Sept. 20, 1930.
Preparation for destroying ground pests. California Rex Spray Co. 271,056; May 20.
Preparation for eradicating warts. J. J. Georges & Son, Inc. 77,733; renewed May 3, 1930.
Remedy for the treatment of malaria. Sharp & Dohme. 79,610; renewed Sept. 20, 1930.

CLASS 12

Tile. C. Pardee Works. 271,055; May 20.
Tiles. Mosaic Tile Company. 271,053; May 20.

CLASS 13

Valves. Fisher-Governor Company. 78,698; renewed July 5, 1930.

CLASS 14

Metals of the platinum group. Baker & Company, Inc. 270,941; May 20; Serial No. 294,335; published Mar. 11, 1930.
Wire, Stapling. American Steel and Wire Company of New Jersey. 271,059; May 20.

CARNEGIE LIBRARY OF ATLANTA

CLASS 16

Paints. Pyro Proof Products Company. 270,960; May 20; Serial No. 294,318; published Mar. 4, 1930.
Paints and varnishes, Liquid. J. C. Nicholson. 79,511; renewed Sept. 13, 1930.
Polishing and cleaning compound. McAleer Manufacturing Company. 271,036; May 20; Serial No. 290,714; published Mar. 4, 1930.
Shellac, Prepared. Bradshaw-Praeger & Co. 271,051; May 20.

CLASS 17

Cigars. Federal Cigar Company. 270,962; May 20; Serial No. 284,845; published July 16, 1929.
Cigars. Federal Cigar Company. 270,997–8; May 20; Serial Nos. 268,362–3; published June 4, 1929.
Cigars. Federal Cigar Company. 271,004; May 20; Serial No. 269,836; published July 23, 1929.
Tobacco, cigars, and cigarettes, Smoking. Godfrey Phillips & Sons. 77,485; renewed Apr. 12, 1930.

CLASS 23

Concrete mixers and concrete stone machines. George C. Christopher & Son. 77,155; renewed Mar. 15, 1930.
Dispensing devices and parts of such devices, Merchandise. Fergus & Palmer. 270,910; May 20; Serial No. 290,506; published Mar. 11, 1930.
Extractors, Fruit-juice. Twin Coupler Company. 270,930; May 20; Serial No. 287,600; published Mar. 11, 1930.
Grinders and parts thereof, Shaft bench. Keller Mechanical Engineering Corporation. 271,015; May 20; Serial No. 293,924; published Mar. 11, 1930.
Razors and razor blades. E. W. Spring. 78,212; renewed May 31, 1930.
Scrapers for glass, wood, etc. MacLeod Manufacturing Co. 270,913; May 20; Serial No. 289,468; published Mar. 11, 1930.
Snowplows. C. H. Frink. 271,054; May 20.
Tools and machinery. Billings & Spencer Company. 270,927; May 20; Serial No. 290,647; published Mar. 11, 1930.
Typewriting machines and parts thereof. Royal Typewriting Company. 270,936; May 20; Serial No. 295,305; published Mar. 11, 1930.
Woodworking machinery. Onsrud Machine Works, Inc. 270,922; May 20; Serial No. 292,548; published Mar. 11, 1930.

CLASS 26

Cameras, films, printing frames, etc., Photographic. Eastman Kodak Company. 271,021; May 20; Serial No. 294,960; published Mar. 11, 1930.
Gages, Indicators, and regulators, Fluid-pressure. A. Schrader's Son, Incorporated. 79,620; renewed Sept. 20, 1930.
Plumb bobs, straightedges, rules, and chalk lines. Hyde Manufacturing Company. 271,013; May 20; Serial No. 293,834; published Mar. 11, 1930.

CLASS 27

Clocks, Electric. Hammond Clock Company. 271,068; May 20.
Watches. Enggass Jewelry Company. 271,057–8; May 20

CLASS 29

Toothbrushes. Calsodent Company. 270,961; May 20; Serial No. 284,899; published Mar. 11, 1930.

CLASS 32

Davenports, chairs, benches, etc. Northwestern Upholstering Company. 271,019; May 20; Serial No. 294,317; published Mar. 11, 1930.
Display devices, Advertising. Advertising Displays, Inc. 271,014; May 20; Serial No. 293,012; published Mar. 11, 1930.
Frames, Picture. Housh Company. 271,020; May 20; Serial No. 294,773; published Mar. 11, 1930.
Mattresses. Belknap Hardware & Manufacturing Company. 270,929; May 20; Serial No. 288,635; published Mar. 11, 1930.
Stand, Display. Kiefer Stewart Company. 270,928; May 20; Serial No. 288,655; published Mar. 11, 1930.

CLASS 35

Asbestos products. United States Asbestos Co. 78,050; renewed May 24, 1930.
Belting, Leather. Southern Belting Company of New Orleans. 78,543; renewed June 21, 1930.
Gaskets. Victor Manufacturing & Gasket Company. 270,924; May 20; Serial No. 292,238; published Mar. 11, 1930.
Rubber packers. Clayton Mark & Company. 271,060; May 20.
Tires. Goodyear Tire & Rubber Company. 271,000; May 20; Serial No. 276,417; published Mar. 11, 1930.
Tires, Covers for the spare. McKimmie Motor Co. Inc. 271,001; May 20; Serial No. 275,534; published Mar. 11, 1930.

CLASS 37

Binders, Loose-leaf. American Loose Leaf Corporation. 270,921; May 20; Serial No. 292,607; published Mar. 11, 1930.
Envelopes. Niagara Envelope Manufactory, Inc. 271,061; May 20.
Envelopes. Old Colony Envelope Company. 270,923; May 20; Serial No. 292,546; published Mar. 11, 1930.
Fasteners and binders for binding and holding loose papers together. D. A. Brennan. 270,912; May 20; Serial No. 290,114; published Mar. 11, 1930.
Paper and mailing envelopes. Strathmore Paper Company. 270,932; May 20; Serial No. 287,024; published Mar. 4, 1930.
Paper, Die-wiping. Howard Paper Company. 270,990; May 20; Serial No. 295,029; published Mar. 11, 1930.
Paper, paper towels and napkins, Toilet. H. Jarisch, jr. 271,016; May 20; Serial No. 293,975; published Mar. 11, 1930.
Paper, paper towels and napkins, Toilet. Scott Paper Company. 270,909; May 20; Serial No. 285,477; published Mar. 11, 1930.
Paper, paper towels and napkins, Toilet. Scott Paper Company. 271,008; May 20; Serial No. 285,478; published Mar. 11, 1930.
Paper products. Hooper Paper & Twine Co. 271,071; May 20.
Paper, Waterproofed. Kellogg Box Board Company. 270,925; May 20; Serial No. 292,111; published Mar. 11, 1930.
Paper, Writing. Z. & W. M. Crane, Inc. 271,064; May 20.
Pencils and penholders. Swan Pencil Co. Inc. 270,938; May 20; Serial No. 295,350; published Mar. 11, 1930.
Penholders. Eagle Pencil Company. 79,197; renewed Aug. 16, 1930.
Pens and parts thereof, Fountain. F. B. Ivy. 270,937; May 20; Serial No. 295,225; published Mar. 11, 1930.
Pens, Fountain. Kaufmann Bros. & Bondy, Inc. 271,009; May 20; Serial No. 293,051; published Mar. 11, 1930.

CLASS 38

Books and charts. M. D. Berlitz, Publisher. 270,919; May 20; Serial No. 292,791; published Mar. 11, 1930.
Periodical. McKesson & Robbins, Incorporated. 270,911; May 20; Serial No. 290,138; published Mar. 11, 1930.
Publication. American Bureau of Chiropractic. 270,933; May 20; Serial No. 286,968; published Mar. 11, 1930.
Publication. National Trade Journals, Inc. 270,931; May 20; Serial No. 287,358; published Mar. 11, 1930.
Publication, Periodical. General Printing Ink Corporation. 271,012; May 20; Serial No. 293,827; published Mar. 11, 1930.
Publications, Periodical. New York Automobile Club, Inc. 271,017; May 20; Serial No. 294,038; published Mar. 11, 1930.

CLASS 39

Apparel, Nurses'. Neitzel Manufacturing Co. 271,072; May 20.
Boots and shoes, Leather. John Pilling Shoe Company. 79,689; renewed Sept. 27, 1930.
Clothing, Outer. Louis Roth & Co. Inc. 270,950; May 20; Serial No. 293,193; published Feb. 25, 1930.
Coats and dresses, suits, waists, and skirts. Statman & Rosen Garment Company. 270,942; May 20; Serial No. 294,029; published Feb. 25, 1930.
Cravats. S. Bonan. 270,954; May 20; Serial No. 293,762; published Mar. 4, 1930.
Dresses. Celanese Corporation of America. 270,956; May 20; Serial No. 293,918; published Feb. 25, 1930.
Dresses. Sabine Garment Company. 270,958–9; May 20; Serial Nos. 294,182–3; published Mar. 4, 1930.
Dresses and novelty aprons. Baxley Dress Manufacturing Company. 271,002; May 20; Serial No. 273,281; published Feb. 19, 1929.
Dresses, Children's. Rosenau Bros. Inc. 271,030; May 20; Serial No. 287,545; published Mar. 4, 1930
Gloves. Steinberger Bros. Glove Corp. 271,062; May 20.
Hosiery. Excelsior Mills. 270,946; May 20; Serial No. 293,417; published Feb. 25, 1930.
Hosiery. Holeproof Hosiery Co. 270,952; May 20; Serial No. 294,071; published Mar. 4, 1930.
Hosiery. Villa Rica Mills, Inc. 270,955; May 20; Serial No. 293,605; published Feb. 25, 1930.
Hosiery and ladies' full-fashioned silk hosiery, Silk. Owen Osborne, Inc. 271,039; May 20; Serial No. 291,099; published Feb. 25, 1930.
Hosiery, Women's. Butler Brothers. 271,035; May 20; Serial No. 289,502; published Mar. 4, 1930.
Overalls, overall union suits, work shirts, pants. Bellmore Manufacturing Company. 270,949; May 20; Serial No. 293,207; published Mar. 4, 1930.
Pajamas. Bonnie-Lou Inc. 270,957; May 20; Serial No. 294,053; published Feb. 25, 1930.
Shoes, Leather. A. E. Nettleton Co. 271,065; May 20.
Suits and overcoats. Simon Levin & Sons Co. 270,996; May 20; Serial No. 233,129; published Aug. 17, 1926.
Suits, Men's. L. Klein, Inc. 270,948; May 20; Serial No. 293,223; published Mar. 4, 1930.
Suits, topcoats, and overcoats, etc. J. Braunstein. 270,943; May 20; Serial No. 293,820; published Feb. 25, 1930.
Trousers. Bedford Johnson Co. 271,037; May 20; Serial No. 290,873; published Feb. 25, 1930.
Trousers, Dress and work. Bedford Johnson Co. 271,038; May 20; Serial No. 290,877; published Feb. 25, 1930.

Underwaists and drawers. Mannion Muller Co. 270,995; May 20; Serial No. 242,484; published Apr. 16, 1929.
Underwear. R. S. Lilienthal. 270,947; May 20; Serial No. 293,376; published Mar. 4, 1930.
Underwear and sweaters. Ottenheimer Co. 270,992; May 20; Serial No. 258,037; published Mar. 12, 1929.

CLASS 42

Cloth. Philip Shlansky & Co. 271,066; May 20.

CLASS 43

Threads, Sewing. Gudebrod Bros. Co. 79,122; renewed Aug. 9, 1930.

CLASS 44

Compound, Dental. F. B. Buerger. 270,945; May 20; Serial No. 293,464; published Mar. 4, 1930.
Dental golds. Williams Gold Refining Co. 271,052; May 20.
Hair-waving pads, Permanent-. J. Tanenbaum. 270,953; May 20; Serial No. 294,447; published Mar. 4, 1930.
Ligatures. Johnson & Johnson. 270,970; May 20; Serial No. 279,404; published Feb. 25, 1930.
Pad, Chemically-saturated. Dalley Weaver Company. 271,034; May 20; Serial No. 288,847; published Mar. 4, 1930.
Pads for use in permanent hair-waving machines. L. Ingrassia. 270,994; May 20; Serial No. 242,593; published Mar. 4, 1930.
Stretchers. J. G. Saunders. 271,031; May 20; Serial No. 288,090; published Feb. 25, 1930.

CLASS 45

Beverage. H. H. Fries. 79,334; renewed Aug. 30, 1930.
Drinks, Soft. M. Krim. 270,934; May 20; Serial No. 293,330; published Mar. 11, 1930.

CLASS 46

Alimentary pastes. Kansas City Macaroni & Importing Co. 270,963; May 20; Serial No. 283,503; published Aug. 6, 1929.
Alimentary pastes. S. Viviano. 270,964; May 20; Serial No. 283,315; published Mar. 4, 1930.
Beef, prepared and smoked pork; sausage, dressed poultry, lard, butter, cheese, and eggs, Prepared, smoked, and dried. Evansville Packing Company. 271,025; May 20; Serial No. 294,917; published Mar. 4, 1930.
Candies and chocolates. Heilbrunn Bros. 271,070; May 20.
Candies, Homemade. La Teste Home Made Candies. 270,940; May 20; Serial No. 293,736; published Mar. 11, 1930.
Candies, Nut. H. J. Hirsch. 270,984; May 20; Serial No. 294,223; published Mar. 11, 1930.
Candy. M. J. Holloway & Company. 270,988; May 20; Serial No. 294,724; published Mar. 11, 1930.
Candy. Priscilla Sears Confectionery Company. 270,974; May 20; Serial No. 277,964; published Mar. 11, 1930.
Candy. Stephen F. Whitman & Son, Inc. 270,915; May 20; Serial No. 291,749; published Mar. 11, 1930.
Candy. Stephen F. Whitman & Son, Inc. 271,006; May 20; Serial No. 269,166; published Aug. 21, 1928.
Canned baked beans, spaghetti, cake mixes, etc. Barry Food Products, Inc. 271,049; May 20; Serial No. 291,960; published Mar. 11, 1930.
Canned coffee. W. K. Henderson Iron Works and Supply Co. 270,969; May 20; Serial No. 281,290; published Mar. 11, 1930.
Canned corn. Kroger Grocery & Baking Co. 79,589; renewed Sept. 20, 1930.
Canned fruit. Sprague, Warner & Company. 271,007; May 20; Serial No. 269,057; published Oct. 2, 1928.
Canned fruits and sweet potatoes. Aunt Nelle's Farm Kitchen, Inc. 270,935; May 20; Serial No. 293,204; published Mar. 4, 1930.
Canned fruits and vegetables, canned fish. National Grocer Company. 270,999; May 20; Serial No. 265,491; published Mar. 4, 1930.
Canned fruits and vegetables, jams, jellies, etc. Everett Fruit Products Company. 271,044; May 20; Serial No. 288,788; published Mar. 11, 1930.
Canned fruits, canned vegetables, chili sauces, etc. Haas, Baruch & Company. 271,026; May 20; Serial No. 295,161; published Mar. 11, 1930.
Canned fruits, vegetables, fish. M. Feibusch. 271,003; May 20; Serial No. 270,122; published Mar. 11, 1930.
Canned grapefruit juice and canned tomato juice. West Florida Preserving Company. 271,023; May 20; Serial No. 294,865; published Mar. 11, 1930.
Canned salmon. Alitak Fish Company. 270,981; May 20; Serial No. 294,557; published Mar. 11, 1930.
Canned salmon. Alitak Fish Company. 270,982; May 20; Serial No. 294,555; published Mar. 11, 1930.
Canned sugar corn, stringless beans, and pumpkin, hominy, etc. Kroger Grocery & Baking Co. 271,048; May 20; Serial No. 292,810; published Mar. 4, 1930.
Chicks. R. W. Maneval. 270,989; May 20; Serial No. 294,585; published Mar. 11, 1930.
Chocolate frosting. W. J. Rickel. 271,024; May 20; Serial No. 294,893; published Mar. 11, 1930.
Chocolates, hard candies, and bonbons. Hilliard's Glass House Goodies, Inc. 271,063; May 20.
Coffee. American Coffee Corporation. 270,987; May 20; Serial No. 295,202; published Mar. 11, 1930.
Coffee and chicory, Compound of. Reily-Taylor Company. 77,957; renewed May 17, 1930.
Coffee, cookies, cake, etc. Milbrooks Restaurants Inc. 271,027; May 20; Serial No. 293,929; published Mar. 11, 1930.
Condiment of spices, Prepared. J. & J. Colman, Limited. 271,043; May 20; Serial No. 288,548; published Mar. 4, 1930.
Cornstarch, soups, macaroni, rice, etc. Grocers & Producers Co. 271,042; May 20; Serial No. 286,763; published Mar. 4, 1930.
Currants. Hills Brothers Company. 79,670; renewed Sept. 27, 1930.
Doughnuts, Prepared composition for the making of. Pillsbury Flour Mills Company. 270,986; May 20; Serial No. 295,273; published Mar. 11, 1930.
Extracts, Malt. Forest Hills Company. 270,993; May 20; Serial No. 257,865; published Jan. 22, 1929.
Extracts, Malt. I. Lentini. 270,972; May 20; Serial No. 278,299; published Mar. 11, 1930.
Extracts, Malt. Malt-Diastase Company. 79,352; renewed Aug. 30, 1930.
Feed, Stock. Josey-Miller Company. 270,917; May 20; Serial No. 289,191; published Mar. 11, 1930.
Food concentrates for fowls and animals. Stuhr-Seidl Company. 270,914; May 20; Serial No. 291,805; published Mar. 11, 1930.
Fruits and vegetables. Yaqui Fruit Co. 270,980; May 20; Serial No. 294,102; published Mar. 11, 1930.
Hams. Arnold Bros. 270,979; May 20; Serial No. 293,567; published Mar. 11, 1930.
Honey. Palestine Industrials Inc. 271,047; May 20; Serial No. 290,591; published Mar. 4, 1930.
Mayonnaise, Nonfattening. United Markets, Inc. 271,028; May 20; Serial No. 293,990; published Mar. 4, 1930.
Mayonnaise, sandwich spread, and Thousand Island dressing. J. R. Tichenor. 271,022; May 20; Serial No. 294,863; published Mar. 4, 1930.
Milk and milk products, Dietetic. A. Zierer. 270,918; May 20; Serial No. 285,763; published Mar. 11, 1930.
Molasses. W. Wirt Wickes & Son. 271,074; May 20.
Oleomargarine. National Foods Inc. 271,005; May 20; Serial No. 269,479; published Mar. 11, 1930.
Olive oil. B. Dorman. 270,965; May 20; Serial No. 283,181; published Mar. 11, 1930.
Pop corn, salted peanuts, etc., Raw and popped. W. E. Hugo. 271,045; May 20; Serial No. 289,460; published Mar. 4, 1930.
Potato chips. C. J. Shasteen. 270,968; May 20; Serial No. 282,572; published May 28, 1929.
Poultry, Dressed. Witt's Market House. 270,985; May 20; Serial No. 295,287; published Mar. 11, 1930.
Poultry, eggs, butter and cheese, Dressed. North Platte Valley Co-Operative Cheese Company. 271,046; May 20; Serial No. 289,532; published Mar. 11, 1930.
Sandwiches, candy, buns, etc. Harrison's Orange Huts, Inc. 270,975–7; May 20; Serial Nos. 277,626–8; published Mar. 11, 1930.
Syrup and molasses, Table. Steuart, Son & Company. 270,991; May 20; Serial No. 293,606; published Mar. 4, 1930.
Vegetables, Fresh. Salinas Produce Company. 271,067; May 20.
Vinegar. Fleischmann Company. 270,971; May 20; Serial No. 278,391; published Mar. 4, 1930.

CLASS 48

Ale, beer, and other malt liquors. P. Ballantine & Sons. 79,462; renewed Sept. 13, 1930.

CLASS 49

Alcoholic spirits, Distilled. Geo. G. Sandeman, Sons & Co. 270,973; May 20; Serial No. 278,141; published Mar. 11, 1930.

CLASS 50

Felts and felts of other material, Hair, wool, or velour. Brüder Böhm. 270,926; May 20; Serial No. 291,756; published Mar. 11, 1930.
Insect banding for fruit trees, Sticky. Strawsons & Company. 78,464; renewed June 14, 1930.
Matrices for the production of printer's type. Continental Typefounders Association, Inc. 271,018; May 20; Serial No. 294,147; published Mar. 11, 1930.

ALPHABETICAL LIST OF LABELS

Apex Loaf. For Bread. Saniwax Paper Co. 37,477; May 20.
Arsenate of Calcium. For Arsenate of Calcium Powder. Mechling Brothers Chemical Company. 37,460; May 20.
Arsenate of Lead. For Arsenate of Lead Powder. Mechling Brothers Chemical Company. 37,458; May 20.
Aviation Motor Oil. For Motor Oil. Richfield Oil Company of California. 37,474; May 20.

Bachman's Original Butter Thin Pretzels. For Pretzels. Bachman's, Inc. 37,435; May 20.
Betty Gale. For Boxes. Hoague-Sprague Corporation. 37,443; May 20.
Bordeaux Mixture. For Bordeaux-Mixture Powder. Mechling Brothers Chemical Company. 37,461; May 20.
Buns. For Buns. Menasha Products Company. 37,466; May 20.
Calcium Caseinate. For Calcium Caseinate. Mechling Brothers Chemical Company. 37,459; May 20.
Delicious Modern Bread. For Bread. Menasha Products Company. 37,467; May 20.
Deys. For Boxes. Hoague-Sprague Corporation. 37,445; May 20.
Drain Pipe Cleaner. For a Preparation for Cleaning Drainpipes. Mechling Brothers Chemical Company. 37,455; May 20.
Eagle—"The Choice of a Nation." For Cigarettes. S. J. Fletcher. 37,438; May 20.
Entroth's. For Boxes. Hoague-Sprague Corporation. 37,447; May 20.
Foot Ball Mints. For Candy Mints. H. H. Hoke, jr. 37,450; May 20.
Fotopor Paper. For Paper. Hanson-Van Winkle-Munning Company. 37,441; May 20.
G. R. Kinney Co., Inc. For Boxes. Hoague-Sprague Corporation. 37,444; May 20.
Garibaldi. For Malt Syrup. Milwaukee Malt Syrup Company. 37,469; May 20.
Glosster Wax. For Liquid Wax. James Good, Inc. 37,439; May 20.
Golden Maid Slender Butter Pretzels. For Pretzels. R. Koch. 37,451; May 20.
Good Morning. For Grapefruit. M. H. Whittier Company, Ltd. 37,480; May 20.
Hochschild, Kohn & Co. For Boxes. Hoague-Sprague Corporation. 37,446; May 20.
Hydroxcide. For Insecticide and Fungicide Powder. Mechling Brothers Chemical Company. 37,456; May 20.
Jolly Time Brand Pop Corn. For Pop Corn. American Popcorn Company. 37,434; May 20.
Larvex. For Mothproofing Compound. Larvex Corporation. 37,452; May 20.
Maillard's Sans Rival Chocolates. For Chocolate Candy. Henry Maillard, Inc. 37,453; May 20.
Mary Chilton. For Boxes. Hoague-Sprague Corporation. 37,442; May 20.
Mead's Dextri-Maltose with Vitamin B. For Prepared Food in Powdered Form Containing Vitamin B for Infants and Invalids. Mead Johnson & Company. 37,454; May 20.
Modern Bread. For Bread. Menasha Products Company. 37,464; May 20.
Neoderm. For Medicinal Preparation, a Preparation for the Skin. Neoderm Company. 37,471; May 20.
New Jersey Dry Mix. For Mixture of Sulphur Lime and Calcium Caseinate. Mechling Brothers Chemical Company. 37,457; May 20.
Old Milwaukee. For Malt Syrup. Milwaukee Malt Syrup Company. 37,470; May 20.
Old Wurzburg. For Malt Syrup. Bachrach-Feld Co. 37,436; May 20.
Overmyer's 100% Pure Malt Syrup. For Malt Syrup. Overmyer Company. 37,472; May 20.
"Pep-O-Lime." For Beverage. C. C. Banfield. 37,437; May 20.
Radiator-Stop-a-Leak Dam-It. For Material for Stopping Leaks in Automobile Radiators and Cracked Engine Blocks. S. J. Pearce & Sons. 37,473; May 20.
Rainbow. For Butter. Menasha Products Co. 37,462; May 20.
Real Potato Bread. For Bread. Menasha Products Company. 37,463; May 20.
Red Arrow. For Egg Noodles. Milwaukee Macaroni Co. 37,468; May 20.
Richmortar Masonry Cement. For Cement Products. Southwestern Portland Cement Company. 37,478; May 20.
Rocker Arm Grease. For Grease. Richfield Oil Company of California. 37,475; May 20.
Rolls. For Rolls. Menasha Products Company. 37,465; May 20.
S and K. For Boxes. Hoague-Sprague Corporation. 37,449; May 20.
Savoree Pak. For Canned Chicken. Runnymede Finance Company. 37,476; May 20.
Supreme Footwear. For Boxes. Hoague-Sprague Corporation. 37,448; May 20.
That's Mine. For Canned Salmon. G. P. Halferty & Co. 37,440; May 20.
Walco. For Garments. Walco Company. 37,479; May 20.

ALPHABETICAL LIST OF PRINTS

A. B. C. Book of the Bible. For Bibles. A. B. C. Book of the Bible Publishing Co. 12,536; May 20.
A Pleasant Breathing Spell—Have a Camel. For Cigarettes. R. J. Reynolds Tobacco Company. 12,544; May 20.
Babyland. For Baby Furniture. Southern Furniture Company. 12,554; May 20.
Basket of Flowers. For Quilting Cotton. Stearns & Foster Co. 12,555; May 20.
Camels are Pleasant Punctuation Marks. For Cigarettes. R. J. Reynolds Tobacco Company. 12,543; May 20.
Charming. For Cigarettes. R. J. Reynolds Tobacco Company. 12,552; May 20.
Cues. For Cigarettes. R. J. Reynolds Tobacco Company. 12,542; May 20.
Curtain. For Cigarettes. R. J. Reynolds Tobacco Company. 12,547; May 20.
Enjoy yourself. For Cigarettes. R. J. Reynolds Tobacco Company. 12,549; May 20.
Entr'acte. For Cigarettes. R. J. Reynolds Tobacco Company. 12,539; May 20.
Heights of Pleasure. For Cigarettes. R. J. Reynolds Tobacco Company. 12,546; May 20.
If Winter Comes. For Cigarettes. R. J. Reynolds Tobacco Company. 12,540; May 20.
Intermission. For Cigarettes. R. J. Reynolds Tobacco Company. 12,548; May 20.
Real Cigarette Pleasure. For Cigarettes. R. J. Reynolds Tobacco Company. 12,550; May 20.
She Can do Anything a Boy Can—This Little Bettina Belmont. For Wheat Breakfast Food. Cream of Wheat Corporation. 12,537; May 20.
Sophisticate. For Cigarettes. R. J. Reynolds Tobacco Company. 12,538; May 20.
The Windblown Tulip. For Quilting Cotton. Stearns & Foster. Co. 12,556; May 20.
Turn This Package Over and Read the Back. For Cigarettes. R. J. Reynolds Tobacco Company. 12,551; May 20.
Waughrine, The Champion Pain Killer. For Medicinal Preparation for Treating Rheumatism, Lumbago, Neuritis, and All Pains and Aches. Waughrine Medicine Company. 12,557; May 20.
When Critical Smokers Get Together. For Cigarettes. R. J. Reynolds Tobacco Company. 12,541; May 20.
When the Table Talk Turns to Cigarettes—. For Cigarettes. R. J. Reynolds Tobacco Company. 12,545; May 20.
You're Going Somewhere When you Go With Camels. For Cigarettes. R. J. Reynolds Tobacco Company. 12,553; May 20.

ALPHABETICAL LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 20TH DAY OF MAY, 1930

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). **Includes patents, reissues, and designs.**

Aaron, Emanuel, Bronx, N. Y. Razor-blade sharpener. 1,758,915; May 20.
Abrate, Attilio, Rio de Janeiro, Brazil. Carburetor. 1,759,498; May 20.
Acoustic Products Company. (See Hutchison, Miller R., assignor.)
Acro Aktiengesellschaft. (See Lang, Franz, assignor.)
Adamson, Charles E., Muncie, Ind., assignor of one-third to J. L. Zorbaugh, Fort Wayne, Ind. Portable oven. 1,759,773; May 20.
Adlake Company, The. (See Greist, Raymond L., assignor.)
Advance Machine Company. (See Antoine, A. D., and Gebert, assignors.)
Agli, Anthony. (See Wolf, C. E., and Agli.)
Aktiengesellschaft Brown Boveri & Cie. (See Van Rijswijk, Willem, assignor.)
Aldridge, Blair G. (See Gard, E. W., Aldridge, Multer, and Howes.)
Alexander, Lewis, Clinton, Ill. Toy or amusement vehicle. 1,759,180; May 20.
Aljac Art Metal Products Corporation. (See Cricchio, Paul, assignor.)
Aljac Art Metal Products Corporation. (See Roettges, Frederick W., assignor.)
Allen, Frank M., Summit, N. J., assignor to Congoleum-Nairn, Inc. Work-supporting member for printing machines. 1,759,476; May 20.
Allen, Robert C., Swarthmore, Pa., assignor to Westinghouse Electric & Manufacture Company. Coupling. 1,759,338; May 20.
Allen, Roy O., Athens, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Implement retainer for pneumatic tools. 1,759,562; May 20.
Allentown Knit Fabrics Company. (See Schreiber, Moses, assignor.)
Alsaker, Alfred, assignor to The Delta-Star Electric Company, Chicago, Ill. Rotary insulator. 1,759,149; May 20.
Alter, Joseph. (See Bell, David M., assignor.)
Altorfer, Alpheus W., Peoria, Ill. Wringer. 1,759,215; May 20.
Aluminum Company of America, The. (See Jardine, Frank, assignor.)
American Arch Company. (See Doble, Bradley, assignor.)
American Brown Boveri Electric Corporation. (See Rump, Sigurd, assignor.)
American Electric Motor Company. (See Perlesz, Hugo, assignor.)
American Gasaccumulator Company. (See Eskilson, Sven A., assignor.)
American Lurgi Corporation. (See Job, Wolfgang, assignor.)
American Manganese Steel Company. (See Brayton, Corey C., assignor.)
American Telephone and Telegraph Company. (See Chapman, Arthur G., assignor.)
American Telephone and Telegraph Company. (See Murphy, John B., assignor.)
American Telephone and Telegraph Company. (See Schirmer, August H., assignor.)
American Telephone and Telegraph Company. (See Terriberry, Warren S., assignor.)
American Tobacco Company, The. (See Penn, Charles A., assignor.)
Anderson, Fred O., Minneapolis, Minn. Brush. 1,759,216; May 20.
Anderson, John K., Midwest, Wyo. Valve construction. 1,759,081; May 20.
Andren, Birger T., assignor to A. O. Smith Corporation, Milwaukee, Wis. Threaded nut for securing metal parts. 1,759,339; May 20.
Andren, Birger T., assignor to A. O. Smith Corporation, Milwaukee, Wis. Electrically-welded pipe and manufacturing the same. 1,759,427; May 20.
Andresen, George, Chicago, Ill. Refrigerating apparatus. 1,759,534; May 20.
Andrew, Richard E., Philadelphia, Pa. Toy. 1,759,181; May 20.
Andrews-Hammond Corporation. (See Hammond, Laurens, assignor.)
Andriulli, Angelo, Jersey City, N. J. Electric water heater. 1,759,774; May 20.
Antoine, Alfred D., Chicago, and A. E. Gebert, Wilmette, assignors to Advance Machine Company, Chicago, Ill. Display device for vending machines. 1,759,031; May 20.
Apco Mossberg Corporation. (See Jackson, Alfred F., assignor.)
Apeldorn, Guy S., Philadelphia, Pa. Method of and apparatus for softening water. 1,759,601; May 20.
Aqua Systems Incorporated. (See Peter, William J., assignor.)
Aqua Systems Incorporated. (See Reed-Hill, William, assignor.)
Arcade Manufacturing Company. (See Tscherning, Henry, assignor.)
Arcturus Radio Tube Company. (See Heany, John A., assignor.)
Arenton, Henry R. (See Gerlach, G. R., and Arenton.)
Armamenti Militari S. A. (See Revelli, Bethel-Abiel, assignor.)
Armstrong Cork Company. (See Grupe, William F., assignor.)
Armstrong, John C., Fillmore, and J. E. Wallis, Los Angeles, Calif. Tubing cleaner and protector. 1,758,995; May 20.
Armstrong, Percy A. E., Loudonville, and R. P. De Vries, Newtonville, assignors to Ludlum Steel Company, Watervliet, N. Y. Alloy of high surface stability comprising nickel and silicon. 1,759,477; May 20.
Arndt, Melvin J., assignor to The Stromberg-Carlson Telephone Manufacturing Company, Rochester, N. Y. Cabling arrangement for telephone systems. 1,758,919; May 20.
Arnold, Albert W., Charlotte, N. C., assignor to E. C. Bowers and C. L. Feldman, receivers for Wickwire Spencer Steel Company, New York, N. Y. Apparatus for carding cotton. 1,759,563; May 20.
Aronson, Louis V., Newark, N. J., assignor to Art Metal Works, Inc. Lighter. 1,759,340; May 20.
Arthur, James L., Anderson, Ind., assignor to Delco-Remy Corporation, Dayton, Ohio. Ignition system. 1,759,428; May 20.
Art Metal Works, Inc. (See Aronson, Louis V., assignor.)
Asbury, Dorsey F., Broomes Island, Md. Radio apparatus. 1,759,678; May 20.
Aschenbach, Walter J., East Orange, N. J. Punctureproof pneumatic inner tube. 1,759,602; May 20.
Atkinson, Gordon E., Niagara Falls, N. Y. Signal. 1,759,291; May 20.
Atlas Press Company. (See Collins, James G., assignor.)
Aulbach, Charles J., Passaic, assignor to Continental Can Company, Inc., New York, N. Y. Dual nozzle closure for containers. 1,758,916; May 20.
Automatic Washer Company. (See Schroeder, Simon E., assignor.)
Bacca, Joseph P. (See Mainello, J., and Bacca.)
Baccich, Marco, Fiume, and C. De-Filippi, Milan, Italy. Hydropneumatic reservoir for petrol fuels and the like. 1,759,727; May 20.
Bach, Carl L., Limbach, Germany. Driving mechanism for intermittently-rotating shafts. 1,759,535; May 20.
Bachon, Roger, assignor of one-half to Société Anonyme Des Usines De Rosieres, Bourges, France. Molding machine. 1,759,728; May 20.
Backman, Alfred, Halifax, Nova Scotia, Canada. Exhaust muffler. 1,759,679; May 20.
Bacon, Chester A., assignor to Bowen Products Corporation, Auburn, N. Y. Lubricating system. 1,759,429; May 20.
Baggstrom, Elias L., Mangere, Auckland, assignor to The Baggstrom Patent Motor Rim Company Limited, Touranga, New Zealand. Tire rim of motor and like vehicles. 1,759,386; May 20.
Baggstrom Patent Motor Rim Company Limited, The. (See Baggstrom, Elias L., assignor.)
Bailey, Daniel, Hasbrouck Heights, N. J., assignor to Merritt, Chapman & Scott Corporation, New York, N. Y. Marine steering gear. 1,759,082; May 20.
Balls, Arnold K., Philadelphia, Pa., assignor of one-third to M. Nilsson, deceased, Peekskill, N. Y., and one-third to A. W. Hixson, Leonia, N. J.; The National City Bank of New York, executor. Manufacturing yeast. 1,759,536; May 20.
Banham, Frank D. (See Schultz, E. W., and Banham.)
Banning, Ephraim. (See Edelman, Philip E., assignor.)
Barclay, John S., New Malden, England. Hoisting apparatus. 1,759,292; May 20.
Barrett Company, The. (See MacCubbin, A. A., and Zavertnik, assignors.)
Barrett, Joseph O., Rydal, Kans. Door or gate operating mechanism. 1,759,293; May 20.
Bartlett Hayward Company, The. (See Kuehn, Paul M., assignor.)
Barton, Silas J., Chicago, Ill. Car wheel. 1,759,083; May 20.
Bateholts, Clinton, assignor to Specialty Insulation Manufacturing Company, Inc., Hoosick Falls, N. Y. Acoustic diaphragm and its manufacture. 1,759,387; May 20.
Battery Containers, Inc. (See Lindenborg, John A., assignor.)

Baudisch, Karl, Berlin-Wilmersdorf, assignor to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany. Testing and starting high-tension lines. 1,758,996; May 20.

Bauer, Frank, Williamsville, N. Y. Airplane. 1,759,032; May 20.

Baum, Fred T., Marion, and C. G. Norris, Sweetser, Ind. Toy pistol. 1,759,084; May 20.

Baum, Gustav, Weissenstein-on-the-Drau, assignor to Chemische Fabrik Weissenstein G. m. b. H., Carinthia, Austria. Stabilized peroxide solution. 1,758,920; May 20.

Baum, Gustav, Weissenstein-on-the-Drau, Austria, assignor to The Niagara Electric Chemical Company, Inc, New York, N. Y. Bleaching. 1,759,341; May 20.

Baumgartner, Otto, Durrenast, near Thun, Switzerland, assignor to A. Haefell, Munich, Germany. Carburetor. 1,759,294; May 20.

Bayles, Lewis C., Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Valve for pneumatic displacement pumps. 1,758,921; May 20.

Bazzoni, Lewis J., Swampscott, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Heel-cover-trimming machine. 1,759,150; May 20.

Bean, William L., West Haven, Conn. Locomotive smoke-box-spark netting. 1,759,151; May 20.

Beardslee, Francis C., Los Angeles, Calif., assignor to B. M. Huffine, J. I. Huffine, and himself, as joint trustees. Apparatus for treatment of foodstuffs. 1,759,680; May 20.

Beardsley, Elmer O., and W. F. Piper, assignors to The Beardsley & Piper Company, Chicago, Ill. Molding machine. 1,759,217; May 20.

Beardsley & Piper Company, The. (See Beardsley, E. O., and Piper, assignors.)

Beardsley & Piper Company, The. (See Naylor, Walter E., assignor.)

Beaver Manufacturing Company. (See Slade, Harold E., assignor.)

Bebinger, Charles N., assignor to Northern Conveyor & Mfg Co., Janesville, Wis. Conveyer. 1,759,085; May 20.

Beck, Walter, Frankfort-on-the-Main, Germany, assignor to Deutsche Gold & Silber Scheideanstalt, vormals Roessler, Frankfort-on-the-Main, Germany. Smoke device. 1,759,033; May 20.

Bertrup, Edward F., Jersey City, N. J., assignor to Metal and Thermit Corporation, Carteret, N. J. Aluminothermic welding of rails and the like. Re17,671; May 20.

Bell, David M., Sandwich, Ontario, Canada, assignor of one-half to J. Alter, Wayne, Mich. Internal combustion compressor engine. 1,759,342; May 20.

Bell Telephone Laboratories Incorporated. (See Bjornson, Bjorn G., assignor.)

Bell Telephone Laboratories, Incorporated. (See Fisher, George H., assignor.)

Bell Telephone Laboratories, Incorporated. (See Given, F. J., Greenidge, and Weeks, assignors.)

Bell Telephone Laboratories, Incorporated. (See Gray, Frank, assignor.)

Bell Telephone Laboratories, Incorporated. (See Mathes, Robert C., assignor.)

Bell Telephone Laboratories, Incorporated. (See Whittle, H., and Grimley, assignors.)

Bell, William H. (See Patten, R. W., Vrabel, Gombar, and Bell.)

Belloch, Morris, Brooklyn, N. Y. Buckle. 1,759,639; May 20.

Bender, William A., and H. G. Loesch, Rochester, N. Y., assignors, by mesne assignments, to General Foods Corporation. Medicinal preparation. 1,759,182; May 20.

Bendix Brake Company. (See Sanford, Roy S., assignor.)

Benjamin, David, Cleveland Heights, assignor to The Gabriel Company, Cleveland, Ohio. Ball and socket connection. 1,759,430; May 20.

Benner, Harry P. (See Egloff, G., and Benner.)

Bennett, Morris H., and W. Colina, Waterbury, Conn., assignors to Scovill Manufacturing Company, Waterbury, Conn. Variable condenser. 1,759,564; May 20.

Bennington, Earl T., Cleveland Heights, assignor to The Cleveland Crane and Engineering Company, Wickliffe, Ohio. Suspended carrier. 1,759,183; May 20.

Bentley, Percival A., Leicester, England. Circular-knitting machine. 1,759,295; May 20.

Berg, Alexander M., assignor to Precision Scientific Company, Chicago, Ill. Automatic cut-off mechanism for electric stills. 1,758,922; May 20.

Berger, Joseph, Lake View, Nev. Device for removing eggs from fish hatcheries. 1,759,729; May 20.

Bergstrom, Carl G. G., St. Paul, Minn. Skinning and fatting machine. 1,759,478; May 20.

Berry, Hiram N., assignor to Cotton Harvester Corporation of America, Greenville, Miss. Cotton picker. 1,759,086; May 20.

Bersted, Alfred and M., Chicago, Ill. Electric cooking appliance. 1,759,431; May 20.

Bersted, Martin. (See Bersted, Alfred, and M.)

Bines, William H., Akron, and W. A. Corlett, Kenmore, assignors to The Firestone Tire and Rubber Company, Akron, Ohio. Device for inserting air bags in tires. 1,759,681; May 20.

Birdsall, Albert L., assignor to Keeler Brass Company, Grand Rapids, Mich. Knob for furniture. 1,759,087; May 20.

Birdseye, Clarence, Gloucester, Mass., assignor, by mesne assignments, to Frosted Foods Company, Inc., Dover, Del. Preparing consumer packages. 1,759,682; May 20.

Bishop, Joseph W., Muskegon Heights, Mich., assignor to The Brunswick-Balke-Collender Company, Chicago, Ill. Hinge for toilet seats. 1,758,923; May 20.

Bissell, Richard E., Cleveland Heights, assignor to Thompson Products Inc., Cleveland, Ohio. Heat treatment. 1,759,603; May 20.

Bjornson, Bjorn G., assignor to Bell Telephone Laboratories Incorporated, New York, N. Y. Indicating device. 1,759,604; May 20.

Black, Harold M., Butler, Pa., assignor to Hartford-Empire Company, Hartford, Conn. Apparatus for cleaning glass-polishing pads. 1,759,820; May 20.

Black, John C., Los Angeles, and J. R. McConnell, Whittier, assignors, by mesne assignments, to Richfield Oil Company of California, Los Angeles, Calif. Purifying hydrocarbons. 1,759,730; May 20.

Black, Lester C., Los Angeles, Calif. Shroud for multistage pump plungers. 1,759,088; May 20.

Black, Lester C., Los Angeles, Calif. Transmission chain. 1,759,089; May 20.

Blair, Robert S., Stamford, Conn. Shoe construction. 1,759,034; May 20.

Blakeslee, Henry J., West Hartford, Conn. Bolt anchor. 1,758,924; May 20.

Blattner, Emil H. (See Bouché, W. F., and Blattner.)

Blauhorn, Emanuel, Vienna, Austria. Exhaust-steam injector. 1,759,218; May 20.

Block, Isaac D. (See Horsley, Robert L., assignor.)

Bockhoff, Harry W., assignor to The National Automatic Tool Company, Richmond, Ind. Drill-head adapter plate. 1,759,388; May 20.

Bogard, Frank T., Oakland, Calif. Air purifier and cooler. 1,758,997; May 20.

Bogdanffy, George W., Clifton, N. J., assignor, by mesne assignments, to Sipp Eastwood Corporation, Paterson, N. J. Warping-machine indicator. 1,759,090; May 20.

Bohl, Hugo, Westfield, N. J., assignor to Radiant Lighting Fixture Co., Inc., New York, N. Y. Lighting fixture or article of similar nature. Des. 81,174; May 20.

Bollweg, Bernhard. (See Kramer, E., Bollweg, and Zeh.)

Bonnar-Vawter Fanform Company. (See Fulk, George L., assignor.)

Booth, Charles F., A. B. Gerber, Anniston, Ala., and P. Logue, St. Louis, Mo., assignors to Federal Phosphorus Company, Birmingham, Ala. Sodium borate tri-sodium phosphate compound and process for its manufacture. 1,759,152; May 20.

Boswell, James G., assignor of one-half to W. L. Russ, Freeport, Tex. Core trap or retainer. 1,759,775; May 20.

Bosworth, Harry J., Chicago, Ill. Light fixture. 1,758,925; May 20.

Bouché, William F., and E. H. Blattner, Rochester, assignors, by mesne assignments, to Simplex Equipment Company, Inc., New York, N. Y. Generator-cover band. 1,759,035; May 20.

Bowen, Kenneth H., Auburn, N. Y. Heating device. 1,759,389; May 20.

Bowen Products Corporation. (See Bacon, Chester A., assignor.)

Bowers, Edward C., et al., receivers. (See Arnold, Albert W., assignor.)

Bowlus, Glenn H., Los Angeles, Calif. Extensometer. 1,759,219; May 20.

Boyd, Charles H. (See Bratt, J. E., and Boyd.)

Boye Needle Company, The. (See Carlson, Gustav A., assignor.)

Boylan, Matthew R., Jersey City, assignor to Public Service Coordinated Transport, Newark, N. J. Fare token. Des. 81,175; May 20.

Brandt, Edgar W., Paris, France. Support for phials, flasks, bottles, and like containers. 1,759,390; May 20.

Brantingham, Alan, assignor to Emerson-Brantingham Corporation, Rockford, Ill. Welding fixture. 1,759,036; May 20.

Bratt, James E., and C. H. Boyd, Syracuse, assignors to Continental Can Company, Inc., New York, N. Y. Mechanism for notching and feeding body blanks to body makers. 1,759,683; May 20.

Brayton, Corey C., Berkeley, Calif., assignor to American Manganese Steel Company, Chicago, Ill. Nigger bar. 1,759,037; May 20.

Brecht, Carl F., Indianapolis, Ind. Picture frame. 1,759,432; May 20.

Brewster, Charles L., and W. P. Henry, Huntington Beach, Calif. Holding tool for use in wells. 1,758,998; May 20.

British Dyestuffs Corporation Limited. (See Horsfall, R. S. Lawrie, and Henderson, assignors.)

Brodie, Ralph N., Company. (See Granberg, Albert J., assignor.)

Brons, Jan, assignor to Naamlooze Vennootschap Appingedammer Bronsmotorenfabriek, Appingedam, Netherlands. Multicylinder combustion motor. 1,759,776; May 20.

Brooke, George A., Jr., Germantown, Pa. Volume-flow regulator. 1,758,926; May 20.

Brooks, Claud J., and R. M. Brooks, Oklahoma City, Okla. Brush attachment. 1,759,091; May 20.

Brooks, Lewis C., assignor to National Paper Can Company, Milwaukee, Wis. Fibrous container. 1,758,917; May 20.

Brooks, Ross M. (See Brooks, Claud J., and R. M.)

Brown, Isaac W., Eldorado Springs, Mo. Blind for bridles. 1,759,296; May 20.

Brown, Wilbur F., assignor to Libbey-Owens Glass Company, Toledo, Ohio. Leer roll. 1,759,220; May 20.

Brownlee, Dalmar T., assignor to L. G. S. Devices Corporation, Indianapolis, Ind. Antireverse safety clutch. 1,759,684; May 20.

Brucker, Ferdinand F., assignor to The Miller Rubber Company, Akron, Ohio. Applying packing gaskets and analogous articles. 1,759,685; May 20.

Brunner, Albert. (See Dick, B., and Bruner.)

Brunner, Harold E., Larchmont, and R. F. Runge, Forest Hills Gardens, N. Y., assignors to The Skayef Ball Bearing Company, Hartford, Conn. Sheet-metal adapter. 1,759,640; May 20.

Bruno, Michele, Chicago, Ill. Rail anchor. 1,759,499; May 20.

Brunswick-Balke-Collender Company, The. (See Bishop, Joseph W., assignor.)

Brunswick-Balke-Collender Company, The. (See Nystrom, Martin, assignor.)

Brush, George S., Zanesville, Ohio. Statue. Des. 81,176; May 20.

Bryce, Chalmers K., Short Hills, and H. W. Jones, Newark, N. J., assignors to National Carbon Company, Inc. Flash light. 1,758,918; May 20.

Buckbee, Arthur R. (See Buckbee, Walter C. and A. R.)

Buckbee, Walter C. and A. R., Whittier, Calif. Fluid-operated circuit controller. 1,759,537; May 20.

Buckley, John P., Washington, D. C., and A. E. Nesbitt, Chevy Chase, Md. Aircraft signal. 1,758,927; May 20.

Bucyrus-Erie Company. (See Fykse, Mitchell L., assignor.)

Bullinger, Frederic H., Yonkers, N. Y., assignor to Ward Leonard Electric Company. Resistance unit. 1,759,184; May 20.

Burger, Frederick W. (See Mogford, E. C., and Burger.)

Burn, Walter S., Hartlepool, England. Nozzle for engines working with airless fuel injection. 1,759,297; May 20.

Burns Bottling Machine Works, Inc. (See Burns, William L., assignor.)

Burns, William L., assignor to Burns Bottling Works, Inc., Baltimore, Md. Bottle carrier. 1,758,928; May 20.

Burrell, D. H., & Co. (See Feldmeier, H., and Dalzell, assignors.)

Byrnes, Clarence P., trustee. (See James, Joseph H., assignor.)

Byworth, Cecil Assur, & Company. (See Friedlander, Cecil A., assignor.)

Cain, John J., Bayonne, N. J. Making metal barrels and the like. 1,758,929; May 20.

Cameron, Archibald D., Fort Screven, Ga. Stirrup. 1,758,930; May 20.

Cameron, James A., Brooklyn, N. Y., and G. B. Rickard, Glen Rock, N. J., assignors to Cameron Machine Company, Brooklyn, N. Y. Winding machine. 1,759,538; May 20.

Cameron Machine Company. (See Cameron, J. A., and Rickard, assignors.)

Campbell, Layard, New York, N. Y. Packing device. 1,759,185; May 20.

Cananea Consolidated Copper Company, S. A., The. (See Wilkinson, Alan D., assignor.)

Candas, Gaston, Paris, France. Hinge for jewelry. 1,758,931; May 20.

Canton Culvert and Silo Company, The. (See Van Horne, Perry, assignor.)

Caps, Arthur W., Rochester, N. Y., assignor to Photostat Corporation, Providence, R. I. Apron drier. 1,759,092; May 20.

Caracristi, Virginius Z., Bronxville, N. Y., assignor to Combustion Engineering Corporation. Apparatus for burning pulverized fuel. 1,759,038; May 20.

Carlitz, Joseph S. (See Thews, K. B., and Carlitz.)

Carlson, Arthur W., assignor to A. O. Smith Corporation, Milwaukee, Wis. Weld rod for electric-arc welding. 1,759,686; May 20.

Carlson, Gustav A., assignor to The Boye Needle Company, Chicago, Ill. Coring and peeling device. 1,759,539; May 20.

Carmosin, Carl, Great Neck, N. Y. Safety gas cock. 1,759,433; May 20.

Carns, Elliott, New York, N. Y. Dispensing device. 1,758,999; May 20.

Carpenter, Irving C., New York, N. Y., and A. R. Moorman, Tulsa, Okla., assignors, by mesne assignments, to Contact Filtration Company, San Francisco, Calif. Decolorization of hydrocarbons. 1,759,343; May 20.

Carroll, John E., Chicago, Ill. Motion-translating device. 1,759,039; May 20.

Carson, Hiram J., Cedar Rapids, Iowa. Shut-off cock. 1,759,221; May 20.

Carson, Jesse F., East Cleveland, assignor to Electric Vacuum Cleaner Company, Inc., Cleveland, Ohio. Floor polisher. 1,759,731; May 20.

Carter, Otto B., New York, N. Y. Garment hanger. 1,758,932; May 20.

Carter, Walter M., Greenwood, Miss. Road magnet. 1,759,687; May 20.

Case Research Laboratory Inc. (See Case, Theodore W., assignor.)

Case, Theodore W., assignor to Case Research Laboratory Inc., Auburn, N. Y. Apparatus for producing photographic records. 1,759,434; May 20.

Casner, Thaddeus S., Plainfield, N. J., assignor to Radio Electric Clock Corporation, New York, N. Y. Selector. 1,759,540; May 20.

Cawley, Aloysius J., Pittston, Pa. Projection system. 1,759,777; May 20.

Cellulose Utilities Corporation. (See McDaniel, Alonzo S., assignor.)

Central Flatiron Manufacturing Company. (See Heckmann, Harry G., assignor.)

Chadeloid Chemical Company. (See Ellis, Carleton, assignor.)

Chapline-Mayer Shoe Company. (See Herbster, Benjamin H., assignor.)

Chapman, Arthur G., East Orange, N. J., assignor to American Telephone and Telegraph Company. Transposed and tapered antenna. 1,758,933; May 20.

Chapman, Arthur G., Upper Montclair, N. J., assignor to American Telephone and Telegraph Company. Radio signaling system. 1,759,000; May 20.

Chapman, Penrose E., St. Louis, Mo. Testing instrument. 1,759,479; May 20.

Chapman, William A., Lithonia, Ga. Grease gun. 1,759,298; May 20.

Charlot, Moise A., Paris, France. Cooking pot of the self-closing type for the cooking of food and for other uses. 1,759,732; May 20.

Chase, Reyburn T., Camden, N. J. Can opener. 1,759,345; May 20.

Chemische Fabrik Weissenstein G. m. b. H. (See Baum, Gustav, assignor.)

Cherry, Chester, Canal Winchester, and G. A. Froggatt, Columbus, Ohio. Heat distributor. 1,759,001; May 20.

Chessman, Cedric S., assignor of two-thirds to A. J. Davis and C. D. Davis, Pittsburgh, Pa. Sheet-paper cutter. 1,759,344; May 20.

Chicago Mica Company. (See Frederick, Louis T., assignor.)

Childress, Thomas J., Waynesboro, Va. Combined ruler square and miter square. 1,759,541; May 20.

Christie, Webster. (See Yohe, P. P., and Christie.)

Christopherson, Alfred C., assignor to Hacker Manufacturing Company, Chicago, Ill. Printing press. 1,759,542; May 20.

Chryst, William A., assignor, by mesne assignments, to Delco-Remy Corporation, Dayton, Ohio. Ignition system. 1,759,435; May 20.

Chryst, William A., assignor, by mesne assignments, to Delco-Remy Corporation, Dayton, Ohio. Ignition apparatus. 1,759,436; May 20.

Chryst, William A., assignor to Delco-Remy Corporation, Dayton, Ohio. Ignition apparatus. 1,759,437; May 20.

Chuprin, Charles V., and I. J. Chuprin, Mount Carmel, Pa. Light for motor vehicles. 1,759,299; May 20.

Chuprin, Ignatius J. (See Chuprin, Charles V. and I. J.)

Circle F. Mfg. Co. (See Petersen, Carl M., assignor.)

Citron, William J., assignor to The Trailograf Company, Inc., San Francisco, Calif. Device for projecting films. 1,759,391; May 20.

Clarinda Manufacturing Company. (See Olson, Carl A., assignor.)

Clark Equipment Company. (See Mogford, E. C., and Burger, assignors.)

Claus, Emil L., assignor, by mesne assignments, to Claus Manufacturing Co., Milwaukee, Wis. Oven-heat regulator. 1,759,222; May 20.

Claus Manufacturing Co. (See Claus, Emil L., assignor.)

Clausen, Andrew J., San Francisco, Calif. Scraper mechanism. 1,759,251; May 20.

Clawson, Monroe S., Upper Montclair, N. J. Collapsible lamp shade. 1,759,093; May 20.

Clay, Harry C., and C. L. Irwin, assignors to Reeves Pulley Company, Columbus, Ind. Veneer-cutter speed control. 1,759,438; May 20.

Cleveland Crane and Engineering Company, The. (See Bennington, E. T., assignor.)

Cleveland Crane & Engineering Company, The. (See Wehr, William G., assignor.)

Cleveland Pneumatic Tool Company, The. (See Wallace, John F., assignor.)

Climax Engineering Company. (See Wishart, William, assignor.)

Cluchey, George L. (See Cluchey, Julius G. and G. L.)

Cluchey, Julius G. and G. L., Flint, Mich. Condenser for automobile radiators. 1,759,778; May 20.

Coburn, William H., and C. Kiernan, assignors of one-third to E. H. Gilbert, Morgantown, W. Va. Pump truck. 1,759,252; May 20.

Cohen, Samuel, Brooklyn, N. Y. Amplification system. 1,759,094; May 20.

Coker, Charles W., assignor to Sonoco Products Company, Hartsville, S. C. Spindle for engaging and winding textile fabric. 1,759,095; May 20.

Cole, Harry R., assignor to Tile and Mantel Contractors Association of America, Wilmington, Del. Sign. Des. 81,177; May 20.

Cole, Lyndon C., assignor, by mesne assignments, to General Machinery Corporation, Hamilton, Ohio. Tool head for radial drills. 1,759,543; May 20.

Coles, Walter H., assignor to The Skinner Irrigation Company, Troy, Ohio. Lawn sprinkler. 1,759,439; May 20.

Collins, William. (See Bennett, M. H., and Collins.)
Collins, Charles H., deceased, Amsterdam, M. Collins, executrix, Cranesville, and E. D. Jansen, deceased, Albany, A. C. Jansen, administratrix, assignors to Collins Loom Works, Inc., Amsterdam, N. Y. Spool winder. 1,759,002; May 20.
Collins, James G., assignor to Atlas Press Company, Kalamazoo, Mich. Spanner wrench. 1,759,186; May 20.
Collins Loom Works, Inc. (See Collins, C. H., and Jansen, assignors.)
Collins, Mary, executrix. (See Collins, C. H., and Jansen.)
Columbia Phonograph Company. (See Prescott, John O., assignor.)
Combustion Engineering Corporation. (See Caracristi, Virginius Z., assignor.)
Commerce Guardian Trust & Savings Bank, The, trustee. (See Replogle, Daniel B., assignor.)
Concealo Fixture Company. (See Noack, William A., assignor.)
Congoleum-Nairn, Inc. (See Allen, Frank M., assignor.)
Conn, C. G., Ltd. (See Gulick, Edward J., assignor.)
Conner Crouse Corporation. (See Crouse, George B., assignor.)
Connersville Blower Company, The. (See Wilkins, J. T., and Houghton, assignors.)
Conrath, Almon E., La Grange, Ill. Hook. 1,758,934; May 20.
Contact Filtration Company. (See Carpenter, I. C., and Moorman, assignors.)
Continental Can Company. (See Aulbach, Charles J., assignor.)
Continental Can Company. (See Bratt, J. E., and Boyd, assignors.)
Continental Can Company. (See O'Brien, Frank J., assignor.)
Cook, Hal L., Cleveland Heights, assignor to The Rotor Air Tool Company, Cleveland, Ohio. Governor for fluid-pressure motors. 1,759,641; May 20.
Cook, William B., Mexico, Mo. Motor-vehicle holddown. 1,759,733; May 20.
Copeland Products, Inc. (See Litle, Thomas J., jr., assignor.)
Cordley, Christopher M., Greenwich, Conn., assignor to Cordley & Hayes, New York, N. Y. Liquid-dispensing apparatus. Des. 81,178; May 20.
Cordley & Hayes. (See Cordley, Christopher M., assignor.)
Corlett, William A. (See Bines, W. H., and Corlett.)
Cornell, Fritz G., jr., Caldwell, assignor, by mesne assignments, to Jensen Creamery Machinery Company, Inc., Bloomfield, N. J. Apparatus for heating and cooling liquids. 1,759,440; May 20.
Cotton Harvester Corporation of America. (See Berry, Hiram N., assignor.)
Coulter, Clarence D., assignor to Southwestern Engineering Corporation, Los Angeles, Calif. Absorption process. 1,759,346; May 20.
Covert, Martin B., Holland, Mich. Reconditioning poppet-valve engines. 1,759,096; May 20.
Craig, Alexander, London, England. Device for use in hair waving and curling. 1,759,097; May 20.
Craig, Ollison. (See Riley, R. S., and Craig.)
Cram, Harry O., Bridgeport, Conn. Carburetor. 1,759,040; May 20.
Crater, Willard de C., Succasunna, N. J., assignor to Hercules Powder Company, Wilmington, Del. Charge for blasting caps. 1,759,565; May 20.
Cricchio, Paul, Bronx, assignor to Aljac Art Metal Products Corporation, Brooklyn, N. Y. Lamp. Des. 81,179; May 20.
Crocker, John C., Pittsburgh, Pa. Wheel chuck. 1,759,098; May 20.
Croes, Charles W., Aberdeen, S. Dak. Map holder. 1,759,544; May 20.
Crouse, George B., Woodcliff, N. J., assignor, by mesne assignments, to Conner Crouse Corporation. Eliminating effect of variations in current supplied to audions. 1,759,545; May 20.
Crouse-Hinds Company. (See Pearson, J. T., and Olley, assignors.)
Crouse, Laurence W., Lincoln, Nebr. Two-row lister. 1,759,546; May 20.
Crowell, Preston, jr. (See Sease, Chester A., assignor.)
Crozier, Robert H., London, England. Process of and apparatus for destructive distillation. 1,759,821; May 20.
Cunningham, Roy H., assignor to Reynolds Spring Company, Jackson, Mich. Dustproof toggle switch. 1,759,300; May 20.
Curie, George L., Minneapolis, Minn. Rack for matrix magazines. 1,759,688; May 20.
Cutler-Hammer, Inc. (See Neustedter, Walter J., assignor.)
Dailey, John A., Burlington, and L. W. Gerth, Wapello, Iowa. Metallic railway crossing. 1,758,935; May 20.
Dainton, Edgar H. (See Miller, H. C., and Dainton.)
Dake, Charles W., assignor to The Pyle-National Company, Chicago, Ill. Manufacturing reflectors. 1,759,099; May 20.
Dale, John, trustee. (See Porter, Finley R., assignor.)
Dalzell, Charles B. (See Feldmeier, H., and Dalzell.)
Dami, Ernesto, New York, N. Y. Shoe form. 1,759,566; May 20.
Danco, Leon A., Fairfield, assignor to McKesson & Robbins, Incorporated, Bridgeport, Conn. Display stand. Des. 81,180; May 20.
Daniel, John, assignor to Koehring Company, Milwaukee, Wis. Discharge chute and deflector. 1,759,807; May 20.
Daniel, John, assignor to Koehring Company, Milwaukee, Wis. Automatic control for concrete-mixing machines. 1,759,808; May 20.
Daniels, Fred H., assignor to Riley Stoker Corporation, Worcester, Mass. Apparatus for pulverizing materials. 1,759,100; May 20.
Daniels, Joseph E., Clifton, N. J. Adjustable floating tool holder. 1,759,101; May 20.
Davenport, Arthur E., Maywood, Ill. Means to prevent substitution of oil and the like products. 1,759,734; May 20.
Davidson, Clinton, San Francisco, Calif. Internal-combustion engine. 1,759,187; May 20.
Davidson & Company Limited. (See Whitmore, John, assignor.)
Davidson, Frank A., Pasadena, Calif. Conveyer for mixers. 1,759,003; May 20.
Davidson, William A., Aberdeen, Wash. Slab-debarking machine. 1,759,188; May 20.
Davies, W. Sanders, et al., trustees. (See Davis, Kenneth, assignor.)
Davis, Arthur J., et al. (See Chessman, Cedric S., assignor.)
Davis, Charles D., et al. (See Chessman, Cedric S., assignor.)
Davis, Kenneth, St. Benedict, Pa., assignor, by mesne assignments, to R. Penic, W. S. Davies, and W. S. Wallace, trustees. Sizing mechanism. 1,759,480; May 20.
Dawes, Roy A., Seattle, Wash. Eye shade. 1,759,041; May 20.
Day, Percy C., assignor to The Falk Corporation, Milwaukee, Wis. Gear set. 1,759,689; May 20.
Dayton Paper Novelty Company, The. (See Neumann, Theodore L., assignor.)
Deale, Robert C. (See Greenleaf, G. E., and Deale.)
Deale, Robert C., Plainfield, N. J., assignor, by mesne assignments, to General Machinery Corporation, Hamilton, Ohio. Electric circuits for planers. 1,759,547; May 20.
Deale, Robert C., Plainfield, N. J., assignor, by mesne assignments, to General Machinery Corporation, Hamilton, Ohio. Planer-control system. 1,759,548; May 20.
Debski, Frank, New York, N. Y. Chair. Des. 81,181; May 20.
De Carle, Felix O., Los Angeles, Calif. Incinerator. 1,759,042; May 20.
Deere & Company. (See Neighbour, Leonard B., assignor.)
Deere & Company. (See Paul, William L., assignor.)
De-Filippi, Carlo. (See Baccich, M., and De-Filippi.)
De Laney, Imogene, New York, N. Y., assignor to Otis Company, Inc., Boston, Mass. Textile fabric. Des. 81,182; May 20.
Delco-Light Company. (See Fehr, John R., assignor.)
Delco-Remy Corporation. (See Arthur, James L., assignor.)
Delco-Remy Corporation. (See Chryst, William A., assignor.)
Delcroix, Pierre. (See Thiriet, A., and Delcroix.)
Della Riccia, Angelo, Brussels, Belgium. Direct-current pressure-splitting device. 1,759,759; May 20.
De Long, William H. (See Ingram, B. L., and De Long.)
Delta-Star Electric Company, The. (See Alsaker, Alfred, assignor.)
Depew, Richard H., jr., Forest Hills, assignor to Fairchild Airplane Manufacturing Corporation, New York, N. Y. Control-surface-operating mechanism. 1,759,442; May 20.
Derby, Norman L., Long Island City, N. Y., assignor to S. R. Rott, Philadelphia, Pa. Storage-battery-terminal connection. 1,759,043; May 20.
Derossi, Carlo, Turin, Italy. Automatic apparatus for preparing aerated water. 1,759,735; May 20.
Desha, Orville U., assignor of one-fifth to The Desha Typelex Trust Estate, Fort Collins, Colo. Key action for typewriters and other machines. 1,759,393; May 20.
Desha, Orville U., assignor of one-fifth to The Desha Typelex Trust Estate, Fort Collins, Colo. Key action for typewriters and other machines. 1,759,441; May 20.
Desha Typelex Trust Estate, The. (See Desha, Orville U., assignor.)
Detroit and Security Trust Company. (See Wasserfallen, Charles F., assignor.)
Deutsch, Hans, Vienna, Austria. Exhaust-steam injector. 1,759,223; May 20.
Deutsche Gold & Silber Scheideanstalt, vormals Roessler. (See Beck, Walter, assignor.)
De Vlieg, Gerard A., Rockford, Ill. Clearance-setting mechanism. 1,759,044; May 20.
DeVries, Ralph. (See Armstrong, P. A. E., and DeVries.)
De Vries, Ralph P., Newtonville, assignor to Ludlum Steel Company, Watervliet, N. Y. Stable-surface alloy steel. 1,759,605; May 20.
De Vries, Ralph P., Newtonville, assignor to Ludlum Steel Company, Watervliet, N. Y. Stable-surface alloy steel. 1,759,606; May 20.
DeWolf, Ernest A., Cranston, R. I., assignor to Universal Winding Company, Boston, Mass. Cop holder. 1,759,392; May 20.
Dibner, Abraham B., New York, N. Y. Slide joint for electrical conductors. 1,759,567; May 20.

Dick, Burns and A. Brunner, assignors to Wagner Electric Corporation, St. Louis, Mo. Attachment of hose fittings. 1,759,224; May 20.
Dictaphone Corporation. (See Lucarelle, J. M., and Renholdt, assignors.)
Dietzgen, Eugene, Company. (See Langsner, Adolph, assignor.)
Ditto, Inc. (See Moll, Wilhelm K., assignor.)
Dixie Machinery Manufacturing Company. (See Frickey, Edward H., assignor.)
Doble, Bradley, Elmhurst, N. Y., assignor to American Arch Company. Furnace-arch construction. 1,759,045; May 20.
Doble, Bradley, Ridgewood, N. J., assignor to American Arch Company, New York, N. Y. Arch structure. 1,759,102; May 20.
Dobmaier, Karl, Leverkusen-on-the-Rhine, Germany, assignor to Winthrop Chemical Company, Inc., New York, N. Y. Combating and exterminating of vermin and insect pests. 1,758,936; May 20.
Dodson, James. (See Dodson, Leonard and J.)
Dodson, Leonard and J., Chicago, Ill. String musical instrument. 1,759,736; May 20.
Dodson, Leonard and J., Chicago, Ill. Stringed musical instrument. 1,759,779; May 20.
Dorsey, Farnum F., assignor, by mesne assignments, to North East Appliance Corporation, Rochester, N. Y. Electromagnetic horn. 1,759,443; May 20.
Dougherty, Robert S. A., and N. Greenwell, Bethlehem, Pa. Metal rolling. 1,759,481; May 20.
Drake, John L., assignor to Libbey-Owens Glass Company, Toledo, Ohio. Width-maintaining wheel. 1,759,225; May 20.
Drake, John L., assignor to Libbey-Owens Glass Company, Toledo, Ohio. Operating sheet-glass coolers. 1,759,226; May 20.
Drake, John L., assignor to Libbey-Owens Glass Company, Toledo, Ohio. Operating sheet-glass coolers. 1,759,227; May 20.
Drake, John L., assignor to Libbey-Owens Glass Company, Toledo, Ohio. Process and apparatus for producing molten glass. 1,759,228; May 20.
Drake, John L., assignor to Libbey-Owens Glass Company, Toledo, Ohio. Method and apparatus for drawing sheet glass. 1,759,229; May 20.
Draper Corporation. (See Thatcher, Harry W., assignor.)
Dubilier Condenser Corporation. (See Dubilier, William, assignor.)
Dubilier, William, New Rochelle, N. Y., assignor to Dubilier Condenser Corporation. Electrical structure. 1,759,230; May 20.
Duclos, Hiram J., New Rochelle, N. Y. Book end. Des. 81,183; May 20.
Duffy, Maurice F., Chicago, Ill. Automatic regulator for internal-combustion-engine fuel mixers. 1,759,153; May 20.
Dunlap, William J., Long Beach, Calif. Gas anchor and sand separator. 1,759,004; May 20.
Dunn, Franklin M., Overlea, Md. Garden implement. 1,759,607; May 20.
Dunn, Irwin L., and J. O. Lewis, Tulsa, Okla. Apparatus for cooling compressor valves and compressed fluids. 1,759,301; May 20.
Dunn, Retta H. (See Dunn, W. D., assignor, and Jefferys.)
Dunn, William D., E. and R. Jefferys, Carteret; said Dunn assignor to R. H. Dunn, Elizabeth, N. J. Sample thief. 1,759,444; May 20.
Dutchess Tool Company. (See Van Houten, John M., assignor.)
Duvall, Stanley, Breckenridge, Tex. Meter for lubricant-dispensing apparatus. 1,759,302; May 20.
Eames Company. (See Merle, Isidore A., assignor.)
Earp-Thomas, George H., Glen Ridge, N. J. Lactobacteria product. 1,758,937; May 20.
Eaton Axle and Spring Company, The. (See Reid, James S., assignor.)
Ebersol, Charles E., and R. Grieve, Lansing, Mich. Check-stub holder. 1,759,103; May 20.
Eckerbom, Gustaf, assignor to Stockholms Benmjolsfabriks Aktiebolag, Sandvik, near Stockholm, Sweden. Method to provide glue in small pieces in the shape of granules or drops with a coating of a powder as well as glue manufactured according to said method. 1,759,737; May 20.
Eclipse Machine Company. (See Whitney, Maurice P., assignor.)
Eclipse Textile Devices, Inc. (See Garey, J. P., and Hasbrouck, assignors.)
Eclipse Textile Devices Incorporated. (See Gere, Ward N., assignor.)
Edelman, Philip E., assignor to E. Banning, Chicago, Ill. Acoustic condenser. 1,759,809; May 20.
Edelman, Philip E., assignor to E. Banning, Chicago, Ill. Condenser reproducer. 1,759,810; May 20.
Edelman, Philip E., assignor to E. Banning, Chicago, Ill. Push-pull condenser speaker. 1,759,811; May 20.
Edelmann, Otto, Oak Park, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Control device. 1,759,046; May 20.
Edelstein, Arnold, and G. Kis, Budapest, Hungary. Harness-controlling mechanism for looms. 1,759,047; May 20.
Edwards, Henry J., assignor to The Willys-Overland Company, Toledo, Ohio. Sleeve valve. 1,759,445; May 20.
Edwards, William K., Big Spring, Tex. Grip tester. 1,759,394; May 20.
Egloff, Gustav, and H. P. Benner, assignors to Universal Oil Products Company, Chicago, Ill. Apparatus for cracking oil. 1,759,446; May 20.
Ehrhart, William, Lancaster, Pa. Apparatus for treating pretzels, crackers, and the like. 1,759,608; May 20.
Elder & Robinson Co. (See Morrison, Robert F., assignor.)
Electric Vacuum Cleaner Company. (See Carson, Jesse F., assignor.)
Elliott-Fisher Company. (See Steele, Herzert H., assignor.)
Ellis, Carleton, Montclair, N. J., assignor to Chadeloid Chemical Company, New York, N. Y. Paint and varnish remover and making same. 1,759,154; May 20.
Embrayage Automatique Bolch Servon Société à Responsabilite Limitee. (See Servon, Jean L., assignor.)
Emerson-Brantingham Corporation. (See Brantingham, Alan, assignor.)
Erario, Joseph, New York, N. Y. Head guard. 1,759,738; May 20.
Ergle, Bertie W., assignor of one-half to R. N. Murray, Aiken, S. C. Electric hand sanding machine. 1,759,104; May 20.
Eskilson, Sven A., Stockholm, Sweden, assignor to American Gasaccumulator Company, Elizabeth, N. J. Optical signal device. 1,759,609; May 20.
Etablissements Aera. (See Mercier, René, assignor.)
Evans, George S., Bronxville, assignor to The Mathieson Alkali Works, New York, N. Y. Iron refining. 1,759,347; May 20.
Evans, Joseph E., Bedford, Ind., assignor of one-fourth to C. S. Knight, Chicago, Ill. Die for laying wire rope and wire-rope strands. 1,759,105; May 20.
Everedy Company, The. (See Lebherz, Harry J., assignor.)
Exchange Lumber Company. (See Goodloe, Alfred M., assignor.)
Fairchild Airplane Manufacturing Corporation. (See Depew, Richard H., jr., assignor.)
Falk Corporation, The. (See Day, Percy C., assignor.)
Fanner Manufacturing Company, The. (See Schane, Edward H., assignor.)
Farrington, Bruce B., Berkeley, assignor, by mesne assignments, to Standard Oil Company of California, San Francisco, Calif. Cleaning fluid and producing the same. 1,759,155; May 20.
Federal Phosphorus Company. (See Booth, C. F., Berber, and Logue, assignors.)
Federal Telegraph Company. (See Kolster, Frederick A., assignor.)
Fehr, John R., assignor to Delco-Light Company, Dayton, Ohio. Electrical apparatus. 1,759,106; May 20.
Feldman, Charles L., et al., receivers. (See Arnold, Albert W., assignor.)
Feldmeier, Harvey, and C. B. Dalzell, assignors to D. H. Burrell & Co., Inc., Little Falls, N. Y. Liquid distributor. 1,759,231; May 20.
Feldner, Friedrich, assignor, by mesne assignments, to P. Planer, Vienna, Austria. Arrangement for producing immovable or movable projected images of plastic appearance. 1,758,938; May 20.
Ferris, Fannie, New York, N. Y. Bird-cage-perch cleaner. 1,759,739; May 20.
Ferris, Howard J., assignor to Hunt, Helm, Ferris & Company, Harvard, Ill. Hay carrier. 1,759,549; May 20.
Fervers, Carl, Cologne-on-the-Rhine, Germany. Feeder or teats for feeding bottles. 1,759,568; May 20.
Fiedler, Sebastian O. A., assignor to L'Auxiliaire Des Chemins De Fer Et De L'Industrie, Paris, France. Hot-water feeding for boilers. 1,759,107; May 20.
Figari, Francesco, Genoa, Italy. Rigid joint, pipe, and its manufacture. 1,759,780; May 20.
Firestone Tire and Rubber Company, The. (See Bines, W. H., and Corlett, assignors.)
Firestone Tire and Rubber Company, The. (See Ritchey, Roscoe V., assignor.)
Firestone Tire and Rubber Company, The. (See Stevens, William C., assignor.)
Fish, Fred O., Winchester, Mass. Golf practice apparatus or game. 1,759,156; May 20.
Fisher, Dewey L. Z., Crystal Springs, Ark. Animal trap. 1,759,048; May 20.
Fisher, George H., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Radio receiving set. 1,759,610; May 20.
Fisher, Walter S., assignor to The Willys-Overland Company, Toledo, Ohio. Internal-combustion-engine oil strainer. 1,759,447; May 20.
Fishman, Aaron, Chicago, Ill. Display insert. 1,759,189; May 20.
Fishman, Morris, Detroit, Mich. Bathtub cushion and mat. 1,759,348; May 20.
Fleckenstein, George A., Stratford; E. M. Hanf, Bridgeport; and M. L. Waterman, Fairfield, Conn., assignors to The Singer Manufacturing Company, Elizabeth, N. J. Metal-hardening process. 1,759,690; May 20.
Fleming, August L. N., Carthage, N. Y., assignor to Superior Linking Machine Corporation, Wilmington, Del. Linking machine. 1,759,822; May 20.
Fleming, August L. N., Carthage, N. Y., assignor to Superior Linking Machine Corporation, Wilmington, Del. Linking machine. 1,759,823; May 20.
Florida Citrus Machinery Company. (See Skinner, Bronson C., assignor.)

Foch, Christian P., Oakland, Calif. Awning. 1,758,939; May 20.
Foltz, Dale E., Granville, Pa. Toy horse. 1,759,740; May 20.
Fontannaz, Louis, New York, N. Y. Price tag or sign holder. 1,759,781; May 20.
Forsberg, Daniel, Brooklyn, N. Y. Grass cutter. 1,759,560; May 20.
Foster Wheeler Corporation. (See Lonsdale, William, assignor.)
Fowler, Charles H., Matherton, Mich. Vine cutter or bean puller. 1,759,741; May 20.
Fox, John J., Saginaw, Mich. Illuminated sign. 1,759,782; May 20.
Frederick, Louis T., Valparaiso, Ind. Commutator assembly apparatus. 1,759,500; May 20.
Frederick, Louis T., assignor to Chicago Mica Company, Valparaiso, Ind. Commutator assembly mechanism. 1,759,501; May 20.
Freeman and Sweet. (See Hall, Harry E., assignor.)
French Electric Company. (See French, George B., assignor.)
French, George B., Southampton, N. Y., assignor to French Electric Company, Inc. Telephone-transmitter case. Des. 81,184; May 20.
Frickey, Edward H., assignor to Dixie Machinery Manufacturing Company, St. Louis, Mo. Grinder. 1,759,448; May 20.
Fried. Krupp Aktiengesellschaft. (See Jacobs, Werner, assignor.)
Friedlander, Cecil A., assignor to Cecil Assur Byworth & Company, London, England. Spring catch. 1,759,550; May 20.
Friedrich, Max. (See Salomon, H., and Friedrich.)
Friedrich, Robert, Philadelphia, Pa. Hosiery. Des. 81,185; May 20.
Friendly, Herbert M., Chicago, Ill. Automatic telephone system. 1,759,190; May 20.
Froggatt, George A. (See Cherry, C., and Froggatt.)
Frosted Foods Company. (See Birdseye, Clarence, assignor.)
Fulk, George L., assignor, by mesne assignments, to Bonnar-Vawter Fanform Company, Inc., Cleveland, Ohio. Folding machine. 1,759,191; May 20.
Fulk, George L., assignor, by mesne assignments, to Bonnar-Vawter Fanform Company, Inc., Cleveland, Ohio. Printing-press cylinder. 1,759,192; May 20.
Fuller, Claud E., assignor to New York Brick Handling Corporation, New York, N. Y. Loading station and drier car. 1,759,005; May 20.
Fulton, Otho, Bromley, England. Transmission of pictures and the like. 1,759,303; May 20.
Fykse, Mitchell L., assignor to Bucyrus-Erie Company, South Milwaukee, Wis. Creeping traction unit. 1,759,049; May 20.
Gabriel Company, The. (See Benjamin, David, assignor.)
Gage, Edward G., assignor to Radio Corporation of America, New York, N. Y. Separating undesired from desired electric currents. 1,758,940; May 20.
Gail, John F., Evanston, Ill., assignor to Simmons Company, New York, N. Y. Method of and machine for assembling springs. 1,759,050; May 20.
Galizi, Adriano. (See Galizi, Eugenio and A.)
Galizi, Eugenio and A., New York, N. Y. Bass strap for accordions and the like. 1,759,611; May 20.
Galizia, Vito, Plainfield, N. J. Automatic railroad-crossing gate. 1,759,742; May 20.
Gallian, Charles L. (See Murphy, S. E., and Gallian.)
Gambaccini, Gioacchino, Kent, Ohio. Car truck. 1,759,743; May 20.
Gammeter, John R., Akron, Ohio. Band-folding apparatus. 1,759,232; May 20.
Gard, Earle W., B. G. Aldridge, H. J. Multer, and R. T. Howes, Los Angeles County, Calif. Refining hydrocarbon oils. 1,759,744; May 20.
Garey, John P., Elmira Heights, and L. B. Hasbrouck, assignors to Eclipse Textile Devices, Inc., Elmira, N. Y. Centrifugal extractor. 1,759,570; May 20.
Gebert, Albert E. (See Antoine, A. D., and Gebert.)
Gebr. Eickhoff Maschinenfabrik. (See Stroedter, Karl, assignor.)
Gemex Company. (See Prestinari, Eugen, assignor.)
Gendron, Joseph A., Los Angeles, Calif. Angle-recording attachment for transits. 1,759,482; May 20.
General Aniline Works, Inc. (See Greune, Heinrich, assignor.)
General Aniline Works, Inc. (See Henle, F., and Vossen, assignors.)
General Aniline Works, Inc. (See Hentrich, W., Hardtmann, and Tietze, assignors.)
General Aniline Works, Inc. (See Hoffa, E., and Müller, assignors.)
General Aniline Works, Inc. (See Kalischer, G., and Ritter, assignors.)
General Aniline Works, Inc. (See Kramer, E., Bollweg, and Zeh, assignors.)
General Aniline Works, Inc. (See Nawiasky, Paul, assignor.)
General Aniline Works, Inc. (See Nawiasky, P., and Kraiise, assignors.)
General Aniline Works, Inc. (See Wilke, K., and Stock, assignors.)
General Electric Company. (See Hillebrand, Franz, assignor.)
General Electric Company. (See Nerad, Anthony J., assignor.)
General Electric Company. (See Smith, Arthur R., assignor.)
General Electric Company. (See Standerwick, Reginald G., assignor.)
General Electric Company. (See Summerhayes, Henry R., assignor.)
General Electric Company. (See Thomson, Elihu, assignor.)
General Electric Company. (See Young, A. P., and Hutt, assignors.)
General Foods Corporation. (See Bender, W. A., and Loesch, assignors.)
General Machinery Corporation. (See Cole, Lyndon C., assignor.)
General Machinery Corporation. (See Deale, Robert C., assignor.)
General Machinery Corporation. (See Greenleaf, G. E., and Deale, assignors.)
General Railway Signal Company. (See Howe, Winthrop K., assignor.)
General Railway Signal Company. (See Wight, Sedgwick N., assignor.)
General Rubber Company. (See Hopkinson, E., and Gibbons, assignors.)
George, James S. and R. S. Sperry, assignors to Scovill Manufacturing Company, Waterbury, Conn. Method of and apparatus for coating articles. 1,759,502; May 20.
Gerber, Arthur B. (See Booth, C. F., Gerber, and Logue.)
Gere, Ward N., Syracuse, assignor, by mesne assignments to Eclipse Textile Devices Incorporated, Elmira Heights, N. Y. Apparatus for treating yarn in hollow mass formation. 1,759,157; May 20.
Gergele, Louis, Chicago, Ill. Cleansing composition. 1,759,783; May 20.
Gerhardt, Roy C., Lockport, N. Y. Insulator. 1,759,253; May 20.
Gerlach, George R., and H. R. Arenton, Spokane, Wash. Float switch. 1,759,503; May 20.
Gerth, Lewis W. (See Dailey, J. A., and Gerth.)
Getchell, Benjamin E., assignor to The Trumbull Electric Manufacturing Company, Plainville, Conn. Automatic safety switch. 1,759,395; May 20.
Geyer, Harvey D., assignor to The Inland Manufacturing Company, Dayton, Ohio. Spring shackle. 1,759,449; May 20.
Gibbons, Willis A. (See Hopkinson, E., and Gibbons.)
Giblin, Charles A., Westfield, assignor to Henry B. Newhall Corporation, Garwood, N. J. Method and apparatus for treating hot-galvanized articles. 1,759,450; May 20.
Gibson, Victor L., Los Angeles, Calif. Citrus-production device. 1,758,941; May 20.
Gilbert, Ernest H. (See Coburn, W. H., and Kiernan, assignors.)
Gits, Remi J., Chicago, Ill. Multiple oiler. 1,759,254; May 20.
Given, Frederick J., East Orange, R. M. C. Greenidge, Orange, and J. R. Weeks, jr., East Orange, N. J., assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y. Producing magnetic bodies. 1,759,612; May 20.
Gleason, C. Roy. (See Soderberg, V. L., and Gleason.)
Gleason, Clifford J., assignor to M. S. Wright Company, Worcester, Mass. Vacuum dry mop. 1,759,691; May 20.
Gleason, Clifford J., assignor to M. S. Wright Company, Worcester, Mass. Vacuum dry mop. 1,759,692; May 20.
Gombar, John F. (See Patten, R. W., Vrabel, Gombar, and Bell.)
Goodloe, Alfred M., assignor to Exchange Lumber Company, Roanoke, Va. Toy machine gun. 1,759,304; May 20.
Goodwin, Leland S., and W. A. Michaud, Salem, Mass. Leather-spraying machine. 1,759,349; May 20.
Goodwin, Loomis McA., Raleigh, N. C. Insect-destroying device. 1,759,693; May 20.
Gordon, Fannie B., Chicago, Ill. Cosmetic appliance. 1,759,451; May 20.
Goss, Samuel F., Portland, Oreg. Primer valve. 1,759,826; May 20.
Gotham Knitbac Machine Corporation. (See Parlini, Alexander C., assignor.)
Gottlieb, Israel, and S. J. T. Stout, Philadelphia, Pa. Machine for forming fish cakes and the like. 1,758,942; May 20.
Granberg, Albert J., Berkeley, assignor to Ralph N. Brodie Company, Oakland, Calif. Shut-off and indicator control for oil-dispensing apparatus. 1,759,396; May 20.
Granstedt, Johan A., Sjalevad, Sweden. Cooling apparatus for motor vehicles. 1,759,305; May 20.
Granstedt, Johan A., Sjalevad, Sweden. Cooling apparatus. 1,759,306; May 20.
Graves, Ethel S., administratrix. (See Graves, Harry S.)
Graves, Harry S., deceased, Detroit, Mich.: E. S. Graves, administratrix. Making piston-ring patterns. 1,759,108; May 20.
Graves, Harry S., deceased, Highland Park, Mich.; E. S. Graves, administratrix. Piston and connecting-rod assembly. 1,759,109; May 20.
Graves, Harry S., deceased, Highland Park, Mich.; E. S. Graves, administratrix. Piston. 1,759,110; May 20.
Gray, Frank, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Electrooptical transmission. 1,759,504; May 20.

Gray, Frank L., Shelburne Falls, Mass. Hay-loading wagon. 1,758,943; May 20.
Gray Processes Corporation, The. (See Gray, Thomas T., assignor.)
Gray, Thomas T., Elizabeth, N. J., assignor to The Gray Processes Corporation. Purifying hydrocarbon compounds. 1,759,812; May 20.
Gray, Thomas T., Elizabeth, assignor to Gray Processes Corporation, Newark, N. J. Process and apparatus for treating hydrocarbons. 1,759,813; May 20.
Gray, Thomas T., Elizabeth, assignor to Gray Processes Corporation, Newark, N. J. Refining of hydrocarbons. 1,759,814; May 20.
Green & Green Company, The. (See Green, Robert C., assignor.)
Green, Leslie P., Chicago, assignor, by mesne assignments, to I. J. Wilson, Winnetka, Ill. Scraper. 1,759,505; May 20.
Green, Robert C., assignor to The Green & Green Company, Dayton, Ohio. Carton. 1,759,613; May 20.
Greenhaus, Abraham S., assignor, by mesne assignments, to Majestic Mills Paper Co. Inc., New York, N. Y. Filing receptacle. 1,759,255; May 20.
Greenidge, Ralph M. C. (See Given, F. J., Greenidge, and Weeks.)
Greenleaf, George E., and R. C. Deale, Plainfield, N. J., assignors, by mesne assignments, to General Machinery Corporation. Hamilton, Ohio. Control system. 1,759,551; May 20.
Greenstreet, Oliver P., Owensville, Mo. Mop wringer. 1,759,397; May 20.
Greenwell, Nevil. (See Dougherty, R. S. A., and Greenwell.)
Greenwood, Peter, Sawyer, Wis. Seat-back rest. 1,759,694; May 20.
Gregg, David, Dayton, Ohio. Automatic valve. 1,759,006; May 20.
Greist, Raymond L., assignor to The Adlake Company, Chicago, Ill. Sash guide. 1,759,571; May 20.
Greune, Heinrich, Hochst-on-the-Main, Germany, assignor to General Aniline Works, Inc., New York, N. Y. Cyclic ketonic compounds and preparing them. 1,759,111; May 20.
Greve, Edgar E., Bellevue, assignor to Oil Well Supply Company, Pittsburgh, Pa. Temper screw. 1,759,350; May 20.
Grieve, Robert. (See Ebersol, C. E., and Grieve.)
Grimditch, William H., assignor to Philadelphia Storage Battery Company, Philadelphia, Pa. Current-rectifying system. 1,759,745; May 20.
Grimley, Donald G. (See Whittle, H., and Grimley.)
Grimm, George E., assignor to The Willys-Overland Company, Toledo, Ohio. Vehicle door. 1,759,193; May 20.
Grimmer, William E., et al. (See Vaught, Le Roy, assignor.)
Grob, Hugo, Berlin, Germany, assignor to Naamlooze Vennootschap Machinerieen en Apparaten Fabrieken, Utrecht, Netherlands. Transmitting energy between shafts. 1,759,784; May 20.
Grosch, Carl E., Sturgis, S. Dak. Nonskid chain. 1,758,944; May 20.
Grube, James L., Cleveland, Ohio. Screw driver. 1,758,945; May 20.
Grupe, William F., Rutherford, N. J., assignor to Armstrong Cork Company, Lancaster, Pa. Forming products from cork and the resulting product thereof. 1,758,946; May 20.
Guldman, Roy H., North Tarrytown, N. Y. Loud-speaker envelope. 1,759,785; May 20.
Gulick, Edward J., assignor to C. G. Conn, Ltd., Elkhart, Ind. Tuning-slide-actuating mechanism. 1,759,824; May 20.
Gund, John J., Cleveland, assignor to Lakewood Storage, Inc., Lakewood, Ohio. Combined tractor and trailer. Des. 81,186; May 20.
Gundersen, Rudolph G., New York, and A. Struthers, Yonkers, assignors to New York Engineering Company, New York, N. Y. Heat-exchanging apparatus. 1,759,351; May 20.
Guy, Archie C., et al. (See Vaught, Le Roy, assignor.)
Hacker Manufacturing Company. (See Christopherson, Alfred C., assignor.)
Haddow, William, Ossining, N. Y. Lapping dies. 1,759,112; May 20.
Haefeli, Arnold. (See Baumgartner, Otto, assignor.)
Hall, Harry E., St. Charles, assignor to Freeman and Sweet, Chicago, Ill. Accoustic amplifier. 1,759,614; May 20.
Hall, Ralph E., Pittsburgh, assignor to J. M. Hopwood, Dormont Borough, Pa. Treatment of steam-boiler water. 1,759,615; May 20.
Hall, Ray E., assignor to Hall Research Corporation, Chicago, Ill. Tank gauge. 1,759,572; May 20.
Hall Research Corporation. (See Hall, Ray E., assignor.)
Hall, W. M. (See West, William L., assignor.)
Halpern, Max, Bronx, and W. Mayer, Brooklyn, N. Y. Necktie structure. 1,759,007; May 20.
Hamilton Beach Mfg. Co. (See Nielsen, Emanuel, assignor.)
Hamilton, John R., Yonkers, N. Y., assignor to Ohio Automatic Sprinkler Company, Youngstown, Ohio. Dry-pipe sprinkler mechanism. 1,759,158; May 20.
Hammond, Laurens, assignor to Andrews-Hammond Corporation, Chicago, Ill. Battery eliminator. 1,758,947; May 20.
Hanf, Edward M. (See Fleckenstein, G. A., Hanf, and Waterman.)
Hann, Frank L. (See Yates, H. C., and Hann.)
Hansen, Charles C., Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Driving device for pipes. 1,759,573; May 20.
Hansen, Paul E., Riverside, Calif. Recording device for motor vehicles. 1,759,194; May 20.
Harder, Arthur, Warnemunde, Germany. Dental spoon. 1,759,746; May 20.
Hardin, Eugene A., Detroit, Mich. Pile. 1,759,786; May 20.
Hardtmann, Max. (See Hentrich, W., Hardtmann, and Tietze.)
Hari, Alex, et al. (See Kovács, Balint, assignor.)
Harn, Sherman A., Waterville, Wash. Straw-spreading attachment. 1,759,552; May 20.
Harrison, Burt S., Brooklyn, N. Y. Lumber drier. 1,759,195; May 20.
Hart, Lee, Independence, Mo. Poultry feeder. 1,759,352; May 20.
Hart, Marjorie, Vancouver, Wash. Egg holder. 1,759,398; May 20.
Harter, Noah S., Waukegan, Ill. Triangular-mesh fabric. 1,759,256; May 20.
Hartford-Empire Company. (See Black, Harold M., assignor.)
Hartford-Empire Company. (See Howard, George E., assignor.)
Hartinger, Hans, Jena, assignor, by mesne assignments, to Zeiss Ikon A.-G., Berlin, Germany. Bell-shaped reflector for illuminating show windows. 1,759,307; May 20.
Hartmann, Otto H., Cassel-Wilhelmshohe, and F. Wempe, Cassel, assignors to Schmidt'sche Heissdampf, G. m. b. H., Cassel-Wilhelmshohe, Germany. Process and apparatus for regulating multistage steam engines of the high-pressure type. 1,759,452; May 20.
Harvey, Leo M., Los Angeles, Calif. Gripper for box-strapping mechanism. 1,759,257; May 20.
Harwick, Henry K., Darby, Pa. Locomotive center plate. 1,759,695; May 20.
Hasbrouck, Louis B. (See Garey, J. P., and Hasbrouck.)
Hasenstab, Bernhard, assignor to Markel Electric Products, Inc., Buffalo, N. Y. Brace for an electric-light fixture. Des. 81,187; May 20.
Hasenstab, Bernhard, assignor to Markel Electric Products, Inc., Buffalo, N. Y. Brace for an electric-light fixture. Des. 81,188; May 20.
Hasenstab, Bernhard, assignor to Markel Electric Products, Inc., Buffalo, N. Y. Medallion for an electric-light fixture. Des. 81,189; May 20.
Haug, John S., assignor to United Engineers & Constructors Inc., Philadelphia, Pa. Gas condenser. 1,759,453; May 20.
Hauk, Joseph, assignor to Rice & Adams Corporation, Buffalo, N. Y. Bottle-washing machine. 1,759,506; May 20.
Hawbaker, Levi, Elmore, Minn. Wire stretcher. 1,759,642; May 20.
Hawkinson, Paul E., assignor to Kehawke Manufacturing Co., Minneapolis, Minn. Machine for making tire patches. 1,759,507; May 20.
Head, Thomas W., Bridgnorth, and E. J. Perry, Birmingham, England. Loom for weaving carpets and like tufted pile fabrics. 1,759,308; May 20.
Heany, John A., New Haven, Conn., assignor, by mesne assignments, to Arcturus Radio Tube Company, Newark, N. J. Uranium metal and product and making the same. 1,759,454; May 20.
Hearl, John W., assignor to A. Weiskittel & Son Co., Baltimore, Md. Balance for oven doors. 1,759,696; May 20.
Heckmann, Harry G., Binghamton, assignor to Central Flatiron Manufacturing Company, Johnson City, N. Y. Electric toaster. Des. 81,190; May 20.
Hegarty, John J., Medford, Mass. Laundry drying apparatus. 1,759,113; May 20.
Heimgartner, Walter F., Lincoln Township, Plymouth County, Iowa. Corn-sheller feed chain. 1,759,309; May 20.
Heinze, Adolf, Coswig Anhalt, Germany. Roller terrace tower as place of amusement and recreation. 1,759,008; May 20.
Heitel, Harry, and J. Heitel, assignors of one-third to H. Jacobson, New York, N. Y. Vanity case. 1,759,616; May 20.
Heitel, Joseph. (See Heitel, Harry and J.)
Heitlage, Henry, St. Bernard, assignor to The Procter & Gamble Company, Cincinnati, Ohio. Can. 1,759,009; May 20.
Helenberg, John, Houston, Tex. Steam-valve gear. 1,759,399; May 20.
Helm, Harry E., Huntington, Ind. Anchor-rod clamp. 1,758,948; May 20.
Henault, Nellie O., Butte, Mont. Milliner's shears. 1,759,553; May 20.
Henderson, James A. R. (See Horsfall, R. S., Lawrie, and Henderson.)
Henderson, John, Opal City, Oreg. Combination smoker's tray. 1,759,051; May 20.
Henle, Franz, and B. Vossen, Hochst-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Preparing 6-chloro-2-nitro-1-methylbenzene-4-sulphonic acid. 1,759,554; May 20.

Henry, William P. (See Brewster, C. L., and Henry.)
Hentrich, Winfrid, M. Hardtmann, Wiesdorf-on-the-Rhine, and E. Tietze, Cologne-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Preparing dyeings on the fiber. 1,759,258; May 20.
Herbster, Benjamin H., assignor to Chapline-Mayer Shoe Company, Milwaukee, Wis. Forming back-heel seams for footwear. 1,759,643; May 20.
Hercules Powder Company. (See Crater, Willard de C., assignor.)
Hickok Manufacturing Company. (See Vaisey, Harold C., assignor.)
Hill, David J., Grey Lynn, Auckland, assignor of one-half to J. E. Hill, Auckland, New Zealand. Attachment to scrapers and scoops for earth and the like. 1,759,697; May 20.
Hill, John E. (See Hill, David, assignor.)
Hillebrand, Franz, Niederschonhausen, Berlin, Germany, assignor to General Electric Company. Protective device for rotary converters. 1,759,787; May 20.
Hinkley, Milton, Benton Harbor, Mich. Carton. 1,759,455; May 20.
Hixson, Arthur W., et al. (See Balls, Arnold K., assignor.)
Hlavacek, Jan, Chicago, Ill. Aeroplane. 1,759,698; May 20.
Hobart Manufacturing Company. (See Zademach, Erich R., assignor.)
Hobbs, Elbert R., Castleford, Idaho. Ear-tagging apparatus for stock. 1,759,400; May 20.
Hoerbiger, Alfred, assignor to the firm Hoerbiger & Co., Mauer, near Vienna, Austria. Gas compressor. 1,759,617; May 20.
Hoerbiger & Co. (See Hoerbiger, Alfred, assignor.)
Hoey, Clayton L., Frederica, Del. Spinning pot or centrifuge. 1,759,699; May 20.
Hoffa, Erwin and F. Müller, Hoechst-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Azo dyestuffs and preparing them. 1,759,259; May 20.
Hoffmann, Oswald, Neugersdorf, Germany. Spinning process for polychromatic yarns, devices for said process, and the products of said process. 1,759,260; May 20.
Hofseth, Bjarne, Leirbotn, Norway. Extracting useful elements from their ores by the aid of gases. 1,759,456; May 20.
Hogan, John R., Altavista, Va., assignor to The Lane Company, Inc. Lock. 1,759,401; May 20.
Hogan, John, Altavista, Va., assignor to The Lane Company, Inc. Lock. 1,759,402; May 20.
Hohenzollern Aktiengesellschaft fur Lokomotivbau. (See Lindner, Walther, assignor.)
Hohn, Max P. E., assignor to "Universelle" Cigarettenmaschinenfabrik J. C. Muller & Co., Dresden, Germany. Cigarette-making machine. 1,759,747; May 20.
Hollenweger, Max, Bonn, Germany. Water-closet pan. 1,759,574; May 20.
Holmström, Axel, Viggbyholm, Sweden. Air-cooling system. 1,759,575; May 20.
Holophane Company. (See Rolph, Thomas W., assignor.)
Holveck, Alpha O., jr., Victoria, Tex. Oil-gauge wiper. 1,759,788; May 20.
Holzverkohlungs-Industrie Aktien-Gesellschaft. (See Querfurth, Wilhelm, assignor.)
Holzworth, Ernest H., Buffalo, N. Y. Tuyère for blast furnaces. 1,759,114; May 20.
Hooey, William C., Palmerton, Pa., assignor to The New Jersey Zinc Company, New York, N. Y. Manufacture of lithopone. 1,759,115; May 20.
Hooey, William C., Palmerton, Pa., assignor to The New Jersey Zinc Company, New York, N. Y. Manufacture of lithopone. 1,759,116; May 20.
Hopkins, Arthur C., assignor to National-Standard Company, Niles, Mich. Tire-spreading machine. 1,759,052; May 20.
Hopkins, Harry S., White Plains, N. Y. Doll. Des. 81,191; May 20.
Hopkinson, Ernest, New York, and W. A. Gibbons, Little Neck, assignors to General Rubber Company, New York, N. Y. Manufacture of rubber articles. 1,759,618; May 20.
Hopp, George, New York, N. Y. Canopy. 1,759,117; May 20.
Hopwood, John M. (See Hall, Ralph E., assignor.)
Hormel, August, Hudson Heights, N. J. Clothes-washing device. 1,759,353; May 20.
Horsfall, Ronald S., L. G. Lawrie, and J. A. R. Henderson, assignors to British Dyestuffs Corporation Limited, Manchester, England. Dyeing acetate silk. 1,759,010; May 20.
Horsley, Robert L., assignor of one-half to I. D. Block, Memphis, Tenn. Mop. 1,759,403; May 20.
Hough, Edward B., Providence, R. I. Cigarette case. 1,759,576; May 20.
Hough, Edward B., Providence R. I. Cigarette case. 1,759,577; May 20.
Houghton, Alexis C. (See Miller, J. G., and Houghton.)
Houghton, Carl R. (See Wilkin, J. T., and Houghton.)
Howard, Charles E., Ypsilanti, Mich. Advertising device. 1,759,789; May 20.
Howard, George E., Butler, Pa., assignor to Hartford-Empire Company, Hartford, Conn. Apparatus for handling glassware. Re17,669; May 20.
Howe, Winthrop K., assignor to General Railway Signal Company, Rochester, N. Y. Train control. 1,759,404; May 20.
Howell, William R., Philadelphia, Pa. Toy animal. Des. 81,192; May 20.
Howes, Raymond T. (See Gard, E. W., Aldridge, Multer, and Howes.)
Hubbard Heel Company. (See Hubbard, William, assignor.)
Hubbard, William, assignor to Hubbard Heel Company, Inc., Dolgeville, N. Y. Machine for shaping wooden blocks. 1,759,118; May 20.
Huet, André, Paris, France, assignor to The Superheater Company, New York, N. Y. Reheater. 1,759,011; May 20.
Huffine, B. M., et al., trustees. (See Beardslee, Francis C., assignor.)
Huffine, J. I., et al., trustees. (See Beardslee, Francis C., assignor.)
Huguenin, Albert, Paris, France. Cooling of compressors of the piston type. 1,759,748; May 20.
Hultquist, Charles A., Los Angeles, Calif. Drill-steel-retaining device. 1,758,949; May 20.
Humes, Ernest E., Cambridge Springs, Pa. Engine-valve mechanism. 1,759,555; May 20.
Hunecke, Walter P., Frontenac, Minn. Chimney cleaner. 1,758,950; May 20.
Hunt, Helm, Ferris & Company. (See Ferris, Howard J., assignor.)
Hutchings, Urban W., Sam Fordyce, Tex. Auto tire protector. 1,759,159; May 20.
Hutchinson, Edward, jr., Philadelphia, Pa. Fireplace screen. 1,759,619; May 20.
Hutchison, Clare E., administratrix. (See Hutchison, Maurice F.)
Hutchison, Maurice F., deceased, Herndon, Va.; C. E. Hutchison, administratrix. Modulator for heating systems. 1,759,310; May 20.
Hutchison, Miller R., West Orange, N. J., assignor, by mesne assignments, to Acoustic Products Company, New York, N. Y. Loud-speaker. 1,759,556; May 20.
Hutchison, Miller R., jr., Madison, N. J., assignor, by mesne assignments, to Acoustic Products Company, New York, N. Y. Plural-conductor actuating unit. 1,759,557; May 20.
Hutson, Del. (See Ike, L. E., Langren, Hutson, and Latta.)
Hutt, Cecilia E., executrix. (See Young, A. P., and Hutt.)
Hutt, Joseph. (See Young, A. P., and Hutt.)
I. G. Farbenindustrie Aktiengesellschaft. (See Mittasch, A., and Müller, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Mittasch, A., Müller, and Linckh, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Mittasch, A., Müller, and Schubardt, assignors.
I. G. Farbenindustrie Aktiengesellschaft. (See Müller, C., and Schubardt, assignors.)
Ike, Lester E., Plainview, Nebr., A. Langren, D. Hutson, Le Mars, and L. H. Latta, Sioux City, Iowa. Windshield screen. 1,759,311; May 20.
Industrial Associates, Incorporated. (See Riley, Champlain L., assignor.)
Ingalls, Ralph T. (See Rasmussen, Charles, assignor.)
Ingersoll-Rand Company. (See Allen, Roy O., assignor.)
Ingersoll-Rand Company. (See Bayles, Lewis C., assignor.)
Ingersoll-Rand Company. (See Hansen, Charles C., assignor.)
Ingram, Benjamin L., and W. H. De Long, Menard, Ill. Window. 1,759,790; May 20.
Inland Manufacturing Company, The. (See Geyer, Harvey D., assignor.)
Insley Manufacturing Company. (See Rasmussen, Alvin C., assignor.)
Irvin, William C., assignor to Yager Sheet Metal Company, Oakland, Calif. Bending machine. 1,759,053; May 20.
Irwin, Charles L. (See Clay, H. C., and Irwin.)
Jackson, Alfred F., assignor to Apco Mossberg Corporation, Attleboro, Mass. Carburetor control. 1,759,354; May 20.
Jackson, Thaddeus A., Brooklyn, N. Y. Drill grinder. 1,759,196; May 20.
Jacobs, Werner, Essen, assignor to Fried. Krupp Aktiengesellschaft, Essen-on-the-Ruhr, Germany. Variable-speed gear. 1,759,558; May 20.
Jacobson, Harry. (See Heitel, Harry and J., assignors.)
Jaeger, Gebhard, assignor to The Jaeger Machine Company, Columbus, Ohio. Loader agitator for concrete-mixing machines. Re17,670; May 20.
Jaeger Machine Company, The. (See Jaeger, Gebhard, assignor.)
Jaffe, D. B., et al. (See Ritter, Harry C., assignor.)
James, Joseph H., Pittsburgh, Pa., assignor to C. P. Byrnes, trustee. Treating hydrocarbons including hydrocarbon derivatives. 1,759,620; May 20.
James, Wathen M., Denver, Colo. Refreshment stand. Des. 81,193; May 20.
Janke, Albert, Alden, Iowa. Shelf bracket. 1,759,312; May 20.
Janke, Alfred H. (See Janke, Elizabeth W. and A. H.)
Janke, Elizabeth W. and A. H., Plainfield, N. J.; said A. H. Janke assignor to said Elizabeth W. Janke. Multiple-unit plate rack. 1,759,645; May 20.
Jansen, Agnes C., administratrix. (See Collins, C., and Jansen.)
Jansen, Ernest D. (See Collins, C. H., and Jansen.)
Jardine, Frank, Cleveland, Ohio, assignor, by mesne assignments, to The Aluminum Company of America, Pittsburgh, Pa. Piston. 1,759,508; May 20.

Jardine, Frank, Cleveland, Ohio, assignor, by mesne assignments, to The Aluminum Company of America, Pittsburgh, Pa. Making pistons. 1,759,509; May 20.
Jauch, Martin, assignor to New Jersey Clock Company, Newark, N. J. Clock casing. Des. 81,194; May 20.
Jefferys, Robert. (See Dunn, W. D., and Jefferys.)
Jennings, Irving C., assignor to Nash Engineering Company, South Norwalk, Conn. Centrifugal water pump. 1,759,313; May 20.
Jensen, Aage, Los Angeles, Calif. Portable liquid-treating apparatus. 1,759,405; May 20.
Jensen Creamery Machinery Company. (See Cornell, Fritz G., jr., assignor.)
Jessen, Charles C., Passaic, assignor to Napon Rayon Corporation, Clifton, N. J. Apparatus for treating articles with liquid. 1,759,646; May 20.
Job, Wolfgang, Berlin-Dahlem, Germany, assignor to American Lurgi Corporation, New York, N. Y. Blast furnace for reduction and recovery of volatilizable metals as oxides and operating the same. 1,759,559; May 20.
Jobes, Wilmot, Atlantic City, N. J. Portable crane. 1,759,406; May 20.
Johnson, Alvin L., Worcester, Mass., assignor to Walker Manufacturing Company, Racine, Wis. Double-screw jack. 1,759,621; May 20.
Johnson, David W., Chicago, Ill. Check writer. 1,759,815; May 20.
Johnson, Elmo W., Hicksville, N. Y. Tractor hitch. 1,758,951; May 20.
Johnson, Jonas G., Baltimore, Md. Fireplace. Des. 81,195; May 20.
Johnson, Jonas G., Baltimore, Md. Fireplace. Des. 81,196; May 20.
Johnson-Stephens & Shinkle Shoe Company. (See Martin, Frank J., assignor.)
Jones, Charles W., Glen Ridge, N. J., assignor to Sons-Cunningham Reed & Rattan Co., Inc., New York, N. Y. Frame of a chair or settee. Des. 81,197; May 20.
Jones, Homer W. (See Bryce, C. K., and Jones.)
Jones, Walter I., Arlington, Mass., assignor, by mesne assignments, to United-Carr Fastener Corporation, Cambridge, Mass. Separable fastener. 1,759,560; May 20.
Kahn, Maurice, Paris; E. Le Breton and G. Schaeffer, Strasbourg, France. Product for tanning and tawing industries and its manufacture. 1,759,700; May 20.
Kallscher, Georg, Frankfort-on-the-Main, and H. Ritter, Dietesheim-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Manufacturing sulphur dyestuffs. 1,759,261; May 20.
Kalle & Co. Aktiengesellschaft. (See Voss, Julius, assignor.)
Kamin, Albert A., Chicago, Ill. Screen slide. 1,759,457; May 20.
Kampman, Frederick H., Detroit, Mich. Auto accelerator-regulating device. 1,759,355; May 20.
Karitzky, John. (See Pleister, H. W., and Karitzky.)
Kattwinkel, Hans, Coswig, Saxe, Germany. Power-transmitting means. 1,759,356; May 20.
Kauch, Robert, and C. L. Paulus, Dayton, Ohio. Range finder and gun sight. 1,759,012; May 20.
Keck, Carl F., Pleasant Unity, Pa. Safety block for mine cars. 1,759,791; May 20.
Keeler Brass Company. (See Birdsall, Albert L., assignor.)
Keen, John S., Philadelphia, Pa. Valve gear. 1,759,701; May 20.
Kehawke Manufacturing Co. (See Hawkinson, Paul E., assignor.)
Kelso, William C., Rushville, assignor to W. J. Wilson and P. Wilson, Rush County, Ind. Milk-cooling device. 1,759,578; May 20.
Kennedy, Julian, Pittsburgh, Pa. Rolling mill. 1,759,262; May 20.
Kenney, John J., Pittsburgh, Pa. Attachment for golf clubs. 1,759,622; May 20.
Kenney Manufacturing Company. (See Smith, Walter E., assignor.)
Kesselring, Fritz, Hermsdorf, near Berlin, assignor to Dr. Paul Meyer A. G., Berlin, Germany. Selective relay. 1,759,792; May 20.
Kiernan, Charles. (See Coburn, W. H., and Kiernan.)
Kincannon, Leo T., Bucyrus, Ohio, assignor to Marion Machine, Foundry & Supply Company, Marion, Ind. One-man road grader. 1,759,647; May 20.
Kindervater, Julius, Richmond, Va. Resizing crank arms and crank pins. 1,759,233; May 20.
Kingsbury, Harold P., Northampton, Mass. Paper container. 1,759,407; May 20.
Kinquist, John, Sioux City, Iowa. Bracket for highway use and the like. 1,759,314; May 20.
Kis, Georg. (See Edelstein, A., and Kis.)
Klein, Albert, New York, N. Y. Animal figure. Des. 81,198; May 20.
Klein, Oscar H., New York, N. Y. Cartridge pocket. 1,759,579; May 20.
Kness, Austin E., assignor to C. Kness, Audubon, Iowa. Animal trap. 1,758,952; May 20.
Kness, Clara. (See Kness, Austin E., assignor.)
Kniep, Henry F., and A. List, Buhl, Idaho. Harvester. 1,759,263; May 20.
Knight American Patents Company, The. (See Knight, Charles Y., assignor.)
Knight, Charles S. (See Evans, Joseph E., assignor.)
Knight, Charles Y., Pasadena, Calif., assignor to The Knight American Patents Company, Chicago, Ill. Piston for motors. 1,759,510; May 20.
Knight, Chester, New York, N. Y. Serving table. 1,759,749; May 20.
Koehring Company. (See Daniel, John, assignor.)
Koehring Company. (See Yohe, P. P., and Christie, assignors.)
Kolster, Frederick A., Palo Alto, assignor to Federal Telegraph Company, San Francisco, Calif. Radiocompass. 1,759,119; May 20.
Koon, Arta M. (See Koon, Arthur W., assignor.)
Koon, Arthur W., Thibodaux, La., assignor to A. M. Koon, New Orleans, La. Process, and system of apparatus, for desiccating foodstuffs. 1,759,702; May 20.
Koppers Company, The. (See McIntosh, James, assignor.)
Kort, Ludwig, Hanover, Germany. Combined ship and propeller. 1,759,511; May 20.
Kotzebue, Meinhard H., Tulsa, Okla. Gas and liquid contact apparatus. 1,759,750; May 20.
Kovács, Balint, assignor of one-third to C. K. Sabo, Castalia, and one-third to A. Harl, Baybridge, Ohio. Match box. 1,759,751; May 20.
Kramer, Erwin, Cologne-Deutz, B. Bollweg, Leverkusen-on-the-Rhine, and L. Zeh, Wiesdorf-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Sulphur dyestuffs. 1,759,264; May 20.
Kramer, Heinrich, Frankfort-on-the-Main-Hedderheim, and A. van Rossum, Frankfort-on-the-Main-Eschersheim, Germany. Egg separator. 1,759,512; May 20.
Kraüse, Artur. (See Nawiasky, P., and Kraüse.)
Krause, Frederick, Jersey City, N. J. Apparatus for polishing dies. 1,758,953; May 20.
Kuehn, Paul M., assignor to The Bartlett Hayward Company, Baltimore, Md. Centrifugal scrubber. 1,759,315; May 20.
Kuenstler, Walter E., New York, N. Y. Radiator. 1,759,120; May 20.
Kunberger, Albert F., Swarthmore, assignor to The United Gas Improvement Company, Philadelphia, Pa. Purifying gas from hydrogen sulphide with production of zinc sulphide. 1,759,408; May 20.
Kunin, Paul, and I. E. McElroy, Minneapolis, Minn.; said McElroy assignor to said Kunin. Winding device. 1,759,265; May 20.
Kunze, Willy, Bremen, Germany, assignor to Submarine Signal Company, Boston, Mass. Measuring short intervals of time. 1,759,648; May 20.
Kwartin, Bernard, Philadelphia, Pa. Apparatus for and method of photographically recording sounds. 1,759,580; May 20.
Kwartin, Bernard, Philadelphia, Pa. Method and apparatus for recording and reproducing sound waves. 1,759,581; May 20.
L. G. S. Devices Corporation. (See Brownlee, Dalmar T., assignor.)
Lacey, Wilbur E., Isleton, Calif. Canning apparatus. 1,759,357; May 20.
Lacey, Wilbur E., Isleton, Calif. Resilient vehicle wheel. 1,759,358; May 20.
Lakewood Storage, Inc. (See Gund, John J., assignor.)
Lambrecth, Jean J., Nieppe, France. Manufacture of vegetable wool. 1,759,752; May 20.
Lamplota, Hubert, Brno, Czechoslovakia. Coffee percolator. 1,759,121; May 20.
Lancaster, Carl B., Alameda, Calif. Filter. 1,759,013; May 20.
Landis & Gyr, A.-G. (See Pudelko, Riccard, assignor.)
Lane Company, The. (See Hogan, John R., assignor.)
Lang, Franz, Munich-Nymphenburg, Germany, assignor to Acro Aktiengesellschaft, Küssnacht am Rigi, Switzerland. Combustion power engine. 1,759,160; May 20.
Lang, Franz, Stuttgart, Germany, assignor to Acro Aktiengesellschaft, Küssnacht am Rigi, Switzerland. Oil engine with fuel injection. 1,759,161; May 20.
Lang, Franz, Munich-Nymphenburg, Germany, assignor to Acro Aktiengesellschaft, Küssnacht am Rigi, Switzerland. Oil motor. 1,759,162; May 20.
Lang, Franz, Munich, Germany, assignor to Acro Aktiengesellschaft, Küssnacht am Rigi, Switzerland. Oil engine with fuel injection. 1,759,163; May 20.
Langford, George, assignor to McKenna Process Company of Illinois, Joliet, Ill. Rail joint and bar. 1,759,458; May 20.
Langren, Arthur. (See Ike, L. E., Langren, Hutson, and Latta.)
Langsner, Adolph, assignor to Eugene Dietzgen Company, Chicago, Ill. Developing apparatus. 1,759,483; May 20.
Langsner, Adolph, assignor to Eugene Dietzgen Company, Chicago, Ill. Developing apparatus. 1,759,484; May 20.
Lassiter, Leon Y., Tulsa, Okla. Automatic reminder. 1,759,409; May 20.
Latta, Lynn H. (See Ike, L. E., Langren, Hutson, and Latta.)
Laub, William H., New Richmond, Ohio. Animal catching and holding tool. 1,759,054; May 20.
L'Auxiliaire Des Chemins De Fer Et De L'Industrie. (See Fiedler, Sebastien O. A., assignor.)
Lawrence, Edward G. (See McClintock, O. B., and Lawrence.)
Lawrie, Leslie G. (See Horsfall, R. S., Lawrie, and Henderson.)

Layne & Bowler Corporation. (See Layne, Mahlon E., assignor.)
Layne, Mahlon E., Houston, Tex., assignor to Layne & Bowler Corporation, Los Angeles, Calif. Thrust-bearing-aligning method. 1,759,234; May 20.
Lebherz, Harry J., assignor to The Everedy Company, Frederick, Md. Pneumatic door closer. 1,759,649; May 20.
Le Breton, Eliane. (See Kahn, M., Le Breton, and Schaeffer.)
Ledeboer, Antoinette E. M. G., administratrix. (See Ledeboer, Pierre H.)
Ledeboer, Pierre H., deceased, by A. E. M. G. Ledeboer, administratrix, Paris, France, assignor to Staalsyndicaat Dr. Ledeboer II, The Hague, Netherlands. Working up iron ores in a direct way. 1,759,753; May 20.
Lengel-Fencil Co., The. (See Leugel, William L., assignor.)
Lengel, William L., assignor to The Lengel-Fencil Co., Reading, Pa. Split-foot stocking. 1,759,754; May 20.
Lennox, Eva M., Hartford, Conn. Insect catcher. 1,759,359; May 20.
LePage, Albert L., Oakville, Conn. Line clamp. 1,759,485; May 20.
Leu, Edward E., Chicago, Ill. Display board. 1,759,486; May 20.
Lewis, James O. (See Dunn, I. L., and Lewis.)
Lewis, Wilfred, Haverford, Pa., assignor to The Tabor Manufacturing Company, Philadelphia, Pa. Roll-over traversing mechanism for molding machines. 1,759,825; May 20.
Libbey-Owens Glass Company. (See Brown, Wilbur F., assignor.)
Libbey-Owens Glass Company. (See Drake, John L., assignor.)
Libbey-Owens Glass Company. (See Mambourg, Leopold, assignor.)
Lichtenthaeler, Frank E., Newton Highland, Mass. Making alcohol. 1,759,122; May 20.
Lifur, Gregory H., Los Angeles, Calif. Heat exchanger. 1,759,360; May 20.
Linckh, Eduard. (See Mittasch, A., Müller, and Linckh.)
Lindenborg, John A., Indianapolis, Ind., assignor, by mesne assignments, to Battery Containers, Inc., Boston, Mass. Battery-box press. 1,759,703; May 20.
Lindner, Walther, assignor to the Firm Hohenzollern Aktiengesellschaft für Lokomotivbau, Dusseldorf-Grafenberg, Germany. Pneumatic coupling. 1,759,755; May 20.
Linn, William J., Pittsburgh, Pa. Carburetor. 1,758,954; May 20.
List, Armin. (See Knlep, H. F., and List.)
Litle, Thomas J., jr., assignor to Copeland Products, Inc., Detroit, Mich. Refrigerator. 1,759,513; May 20.
Littler, Martha E. (See Littler, Robert, sr., assignor.)
Littler, Robert, sr., assignor to M. E. Littler, Philadelphia, Pa. Safety device for cranking and electric starter for automobiles. 1,759,650; May 20.
Livesay, Everett G., Dayton, Ohio. Lifting device. 1,759,651; May 20.
Lockwood Lockwood Goldsmith & Galt, trustees. (See McWilliams, Homer, assignor.)
Loeb, Carolyn H., San Francisco, Calif. Crib sheet holder. 1,759,487; May 20.
Loening Aeronautical Engineering Corporation. (See Loening, Grover, assignor.)
Loening, Grover, New York, N. Y., assignor to Loening Aeronautical Engineering Corporation. Retractable landing gear. 1,759,197; May 20.
Loening, Grover, New York, N. Y. Retractable landing gear. 1,759,652; May 20.
Loesch, Hugo G. (See Bender, W. A., and Loesch.)
Logue, Paul. (See Booth, C. F., Gerber, and Logue.)
Lomar, Louis L., Houston, Tex. Snubber. 1,759,266; May 20.
Lonsdale, William, Roselle, N. J., assignor to Foster Wheeler Corporation, New York, N. Y. Heat exchanger. 1,759,582; May 20.
Loose, Eli E., Findlay, Ohio. Adjuster for osteopathic use. 1,759,514; May 20.
Love, James, jr., assignor of one-half to T. Powell, Wilkes-Barre, Pa. Sieve-operating mechanism. 1,759,653; May 20.
Lovejoy, Andrew W., Kansas City, Mo. Window screen. 1,758,955; May 20.
Lovejoy, Ralph M., Boston, Mass. Shock absorber. 1,759,123; May 20.
Lucarelle, Joseph M., Bridgeport, and J. E. Renboldt, Stratford, assignors to Dictaphone Corporation, Bridgeport, Conn. Phonograph. 1,759,054; May 20.
Luce, Louis L., Oakland, Calif. Combined intake valve and vaporizer. 1,759,055; May 20.
Ludlum Steel Company. (See Armstrong, P. A. E., and De Vries, assignors.)
Ludlum Steel Company. (See De Vries, Ralph P., assignor.)
Lund, Bart, Hammond, Ind. Fender construction for vehicles. 1,759,793; May 20.
Lyles, Thomas B., Terre Haute, Ind. Switch lock. 1,759,655; May 20.
Lyons, James G., Stockton, Calif. Aeroplane. 1,759,164; May 20.
MacCubbin, Alexander A., Montclair, and J. Zavertnik, jr., Harrington Park, N. J., assignors to The Barrett Company, New York, N. Y. Distillation of tar. 1,759,816; May 20.
MacLaurin, John, Ware, Mass. Sealing tape and manufacturing same. 1,759,124; May 20.
Mac-Roh Sales & Mfg. Company. (See Rohwedder, Otto F., assignor.)
Madden, Wyndham R., Bamberton, Vancouver Island, British Columbia, Canada. Stirrup for concrete reenforcing unit. 1,759,316; May 20.
Mainello, Julie, and J. P. Bacca, Trinidad, Colo. Wire guard. 1,759,125; May 20.
Majestic Mills Paper Co. Inc. (See Greenhaus, Abraham S., assignor.)
Malcom, Robert, Chicago, Ill. Shield. 1,759,317; May 20.
Mambourg, Leopold, Lancaster, assignor to Libbey-Owens Glass Company, Toledo, Ohio. Sheet-glass apparatus. 1,759,235; May 20.
Mambourg, Leopold, Lancaster, assignor to Libbey-Owens Glass Company, Toledo, Ohio. Sheet-glass apparatus. 1,759,236; May 20.
Maneval, Rex W., Frankfort, Kans. Ventilation-controlling means for chicken brooders. 1,759,515; May 20.
Mansfield, Ralph G., La Salle, N. Y., assignor to Union Carbide Company. Heat interchanger. 1,759,126; May 20.
Mantle, Gregory D., Pittsburgh, Pa., assignor, by mesne assignments, to Surface Combustion Company, Toledo, Ohio. Heat-exchange apparatus. 1,759,656; May 20.
Mares, Joseph R., assignor to The Willys-Overland Company, Toledo, Ohio. Sleeve valve lubrication system. 1,759,198; May 20.
Margeson, Francis, Bolivar, N. Y. Disconnecting hook. 1,759,127; May 20.
Marion Machine, Foundry & Supply Company. (See Kincannon, Leo T., assignor.)
Markel Electric Products, Inc. (See Hasenstab, Bernhard, assignor.)
Markem Machine Company. (See Putnam, Fred A., assignor.)
Marshall, Norman, Bridgeport, Conn. Bead chain. 1,759,488; May 20.
Marston, Harold B., Philadelphia, Pa. Pneumatic tire. 1,759,410; May 20.
Martin, Frank J., assignor to Johnson-Stephens & Shinkle Shoe Company, St. Louis, Mo. Lady's boot. 1,759,583; May 20.
Marx, Louis, New York, N. Y. Toy repeating gun. 1,759,128; May 20.
Maskery, Edgar J., Paterson, N. J. Crate for use in weighting fabrics. 1,758,956; May 20.
Mathes, Robert C., Wyoming, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Signaling system. 1,759,623; May 20.
Mathieson Alkali Works, The. (See Evans, G. S., assignor.)
Matthes, Samuel S., assignor to The Ohio Brass Company, Mansfield, Ohio. Conductor support. 1,759,704; May 20.
Mayer, Gustav R., Buffalo, N. Y. Plate supporter. 1,759,165; May 20.
Mayer, William. (See Halpern, M., and Mayer.)
Mayo, John, Fairmont, W. Va., assignor to Thermal Engineering Corporation, Long Island City, N. Y. Leer. 1,759,624; May 20.
McClintock, O. B., Company. (See McClintock, O. B., and Lawrence, assignors.)
McClintock, O. B., and E. G. Lawrence, assignors to O. B. McClintock Company, Minneapolis, Minn. Afterhour depository. 1,759,129; May 20.
McClure, Rodney N., Inglewood, Calif. Hinge. 1,759,237; May 20.
McConnell, John R. (See Black, J. C., and McConnell.)
McConway & Torley Company, The. (See Regan, William J., assignor.)
McDade, William, Selbyville, W. Va. Safety barrier for roadways. 1,759,794; May 20.
McDaniel, Alonzo S., New York, N. Y., assignor to Cellulose Utilities Corporation. Production of cellulose ester compounds. 1,759,489; May 20.
McElroy, Charles F., Brooklyn, N. Y. Telegraphic transmitter. 1,759,584; May 20.
McElroy, Isaac E. (See Kunin, P., and McElroy.)
McGall, Albert, Orange, N. J. Collapsible table. 1,759,199; May 20.
McIntosh, James, Pittsburgh, Pa., assignor to The Koppers Company. Door-cleaning apparatus. 1,759,014; May 20.
McIntosh, James, Pittsburgh, Pa., assignor to The Koppers Company. Doorframe-cleaning apparatus. 1,759,015; May 20.
McIntyre, Elmer L., Detroit, Mich., assignor to The Studebaker Corporation, South Bend, Ind. Brake. 1,759,585; May 20.
McKay, Robert G., Indiana Harbor, Ind. Vehicle. 1,758,957; May 20.
McKenna Process Company of Illinois. (See Langford, George, assignor.)
McKesson & Robbins, Incorporated. (See Danco, Leon A., assignor.)
McLeod, John D., Saskatoon, Saskatchewan, Canada. Duplicating device. 1,759,795; May 20.
McLeod, Warren H., Boulder, Colo. Golf tee. 1,759,657; May 20.
McMillan Book Company. (See Unger, Paul O., assignor.)
McQuaid, Howard S., Lakewood, Ohio, assignor to H. W. Walker, Edgewood, Md. Wood preservation. 1,758,958; May 20.
McWilliams, Homer, assignor to Lockwood Lockwood Goldsmith & Galt, trustees, Indianapolis, Ind. Severable egg carton. 1,759,056; May 20.

Medin, Harry A., Minneapolis, Minn. Ribbon for use in making infusions of coffee and other material. 1,759,166; May 20.
Meem, James C., Brooklyn, N. Y. Girder. 1,759,057; May 20.
Meesel, Henry W., Newark, N. J. Layout centering tool. 1,758,959; May 20.
Melind, Louis, Chicago, Ill. Printing kit. 1,759,016; May 20.
Mendelson, Abraham, Yardville, N. J., and S. Pearl, Brooklyn, N. Y. Gas-valve protector. 1,758,960; May 20.
Mendler, Charles, San Francisco, Calif. Shade-roller latch. 1,758,961; May 20.
Mercier, René, assignor to Etablissements Aera, Paris, France. Device for the distant transmission of orders. 1,759,318; May 20.
Merk, Friedrich, Frankfort-on-the-Main, Germany. Automatic telephone system. 1,759,267; May 20.
Merle, Isidore A., Alameda, assignor to Eames Company, San Francisco, Calif. Wheel. 1,759,238; May 20.
Merritt, Chapman & Scott Corporation. (See Bailey, Daniel, assignor.)
Merritt, Louis G., Lockport, N. Y. Drier. 1,759,130; May 20.
Metal and Thermit Corporation. (See Begtrup, Edward F., assignor.)
Meyer, Dr. Paul, A. G. (See Kesselring, Fritz, assignor.)
Michaud, Wilfred A. (See Goodwin, L. S., and Michaud.)
Miles, Albert R., Indianapolis, Ind. Safety valve for tires. 1,759,796; May 20.
Miller, Carl, San Francisco, Calif. Massage device. 1,758,962; May 20.
Miller, George J., Douglas, Ariz. Reclaiming rubber. 1,759,017; May 20.
Miller, Henry C., and E. H. Dainton, London, England. Hydraulic jack. 1,759,517; May 20.
Miller, Henry C., and G. P. Sumner, deceased, London; M. Sumner, executor, Middlesex, England; said M. Sumner, executor, assignor to said Henry C. Miller. Hydraulic jack. 1,759,516; May 20.
Miller, James G., Lone Pine, and A. C. Houghton, Bartlett, Calif. Treating natural alkaline waters or brines to obtain therefrom commercially-useful substances. 1,759,361; May 20.
Miller Rubber Company, The. (See Brucker, Ferdinand F., assignor.)
Miller, William H., Fairbank, Iowa. Stock-feeding trough. 1,759,131; May 20.
Miller, William J., Swissvale, Pa. Producing pottery. 1,759,058; May 20.
Miner, W. H., Inc. (See O'Connor, John F., assignor.)
Mink, Daniel N., Fresno, Calif. Gun-discharging means. 1,759,132; May 20.
Minnesota Mining & Manufacturing Company. (See Okie, Francis G., assignor.)
Mittasch, Alwin, Ludwigshafen-on-the-Rhine, and C. Müller, Mannheim, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Manufacture of iron carbonyl. 1,759,268; May 20.
Mittasch, Alwin, Ludwigshafen-on-the-Rhine, C. Müller, Mannheim, and E. Linckh, Ludwigshafen-on-the-Rhine, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Manufacture of pure iron. 1,759,658; May 20.
Mittasch, Alwin, Ludwigshafen-on-the-Rhine, C. Müller, Mannheim, and W. Schubardt, Ludwigshafen-on-the-Rhine, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Manufacture of pure iron. 1,759,659; May 20.
Mittasch, Alwin, C. Müller, Mannheim, and E. Linckh, Ludwigshafen-on-the-Rhine, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Production of pure iron. 1,759,660; May 20.
Modine, Arthur B., assignor to Modine Manufacturing Company, Racine, Wis. Radiator. 1,759,167; May 20.
Modine Manufacturing Company. (See Modine, Arthur B., assignor.)
Mogford, Edmund C., Buchanan, and F. W. Burger, Niles, assignors to Clark Equipment Company, Buchanan, Mich. Making metal wheels. 1,759,059; May 20.
Molins, Walter E., Deptford, London, England. Cutting mechanism. 1,759,018; May 20.
Moll, Wilhelm K., assignor to Ditto, Inc., Chicago, Ill. Paper-stop device for duplicating machines. 1,759,200; May 20.
Monroe, Lawless E., Lakedale, N. C. Dot-filling retainer. 1,759,518; May 20.
Monroe, William S., Chicago, Ill. Towel rack. 1,759,319; May 20.
Monteith, John C., assignor to Sterling Spring Company, Cleveland, Ohio. Vehicle bumper construction. 1,759,201; May 20.
Montreuil, Frank H., Philadelphia, Pa., assignor to Warren Webster & Company. Steam-heating system. 1,759,586; May 20.
Moore, Emmett B., Evanston, Ill. Valve. 1,759,060; May 20.
Moore, Thomas F., New York, N. Y. Display device. 1,759,519; May 20.
Moore & White Company, The. (See White, Joseph A., assignor.)
Moorman, Arthur R. (See Carpenter, I. C., and Moorman.)
Moravek, Frank J., Holyrood, Kans. Can holder. 1,759,797; May 20.
Morris, Harry, Atlanta, Ga. Detonating toy. 1,759,756; May 20.
Morris, James W., Oakland, and J. L. Ruddick, Berkeley, Calif. Mop handle. 1,759,061; May 20.
Morris, Robert E., Salisbury, Md. Window construction. 1,759,705; May 20.
Morrison, Frederick C., Syracuse, N. Y. Apparatus for casting molten metal or other fluent or semifluent material. 1,759,269; May 20.
Morrison, Montford, Chicago, Ill. Flow meter and making same. 1,759,239; May 20.
Morrison, Robert F., Oak Park, assignor to Elder & Robinson Co., Chicago, Ill. Plastic-candy-forming machine. 1,759,411; May 20.
Morse Andrews Company. (See Morse, William J., assignor.)
Morse, William J., assignor to Morse Andrews Company, Attleboro, Mass. Buckle. Des. 81,199; May 20.
Mosel, Charles, Kerrville, Tex. Chicken feeder. 1,759,320; May 20.
Mosher, Claud J., assignor of forty-nine per cent to S. C. Taylor, Seattle, Wash. Tire-alarm valve. 1,759,362; May 20.
Mudrick, Morris, Los Angeles, Calif. Fiber-rope picker. 1,759,240; May 20.
Müller, Carl. (See Mittasch, A., and Müller.)
Müller, Carl. (See Mittasch, A., Müller, and Linckh.)
Müller, Carl. (See Mittasch, A., Müller, and Schubardt.)
Müller, Carl, Mannheim, and W. Schubardt, Ludwigshafen-on-the-Rhine, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Finely-divided metals from metal carbonyls. 1,759,661; May 20.
Müller, Franz E., Dresden, assignor to E. Vorwerk, Hamburg, Germany. Producing an artificial skating ground. 1,759,270; May 20.
Müller, Fritz. (See Hoffa, E., and Müller.)
Multer, Hugh J. (See Gard, E. W., Aldridge, Multer, and Howes.)
Murdock, James A., Tulsa, Okla. Dispensing top for bottled carbonated liquids. 1,759,459; May 20.
Muros, Joseph, New York, N. Y. Safety razor. 1,758,963; May 20.
Murphy, John B., Los Angeles, Calif., assignor to American Telephone and Telegraph Company. Electrical-testing system. 1,759,019; May 20.
Murphy, Sylvester E., and C. L. Gallian, Russell, Ky. Automatic cut-off. 1,759,798; May 20.
Murray, John H. (See Rose, F. G., and Murray.)
Murray, Roland N. (See Ergle, Bertie W., assignor.)
Myers, John, Oroville, Calif. Parking device for motor vehicles. 1,758,964; May 20.
Myers, Lewis E., Valparaiso, Ind., assignor, by mesne assignments, to The Northern Trust Company and H. H. Rockwell, as trustees. Educational device for interchangeable topics. 1,729,241; May 20.
Naamlooze Vennootschap Algemeene Norit Maatschappij. (See Sauer, Johan N. A., assignor.)
Naamlooze Vennootschap Appingedammer Bronsmotorenfabriek. (See Brons, Jan, assignor.)
Naamlooze Vennootschap Machinerieen en Apparaten Fabrieken. (See Grob, Hugo, assignor.)
Nagin, Harry, assignor to Tri-Lok Company, Pittsburgh, Pa. Grating structure. 1,759,271; May 20.
Napon Rayon Corporation. (See Jessen, Charles C., assignor.)
Nash Engineering Company. (See Jennings, Irving C., assignor.)
Naterman, Henry C., Los Angeles, Calif. Shingle. Des. 81,200; May 20.
National Automatic Tool Company, The. (See Bockhoff, Harry W., assignor.)
National Carbon Company. (See Bryce, C. K., and Jones, assignors.)
National Carbon Company. (See Smith, Ralph R., assignor.)
National City Bank of New York, executor, The. (See Balls, Arnold K.)
National Paper Can Company. (See Brooks, Lewis C., assignor.)
National-Standard Company. (See Hopkins, Arthur C., assignor.)
Nawiasky, Paul, Ludwigshafen-on-the-Rhine, Germany, assignor, by mesne assignments, to General Aniline Works, Inc., New York, N. Y. Acyl-amino-dibenzanthrones and products resulting therefrom by treatment with alkylating agents. 1,759,272; May 20.
Nawiasky, Paul, and A. Kraüse, Ludwigshafen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Manufacture of dyestuffs. 1,759,273; May 20.
Naylor, Walter E., assignor to The Beardsley & Piper Company, Chicago, Ill. Apparatus for handling sand in foundries. 1,759,625; May 20.
Neighbour, Leonard B., assignor to Deere & Company, Moline, Ill. Windlass. 1,759,062; May 20.
Nelson, Lloyd F., Seattle, Wash. Collar and necktie cabinet. 1,759,202; May 20.
Nerad, Anthony J., Schenectady, N. Y., assignor to General Electric Company. Mercury boiler. 1,759,133; May 20.
Nesbitt, Arthur E. (See Buckley, J. P., and Nesbitt.)
Neumann, Theodore L., assignor to The Dayton Paper Novelty Company, Dayton, Ohio. Display carton. 1,759,203; May 20.

Neustedter, Walter J., North Milwaukee, Wis., assignor, by mesne assignments, to Cutler-Hammer, Inc. Motor-control system. 1,759,204; May 20.
Neveling, Aloys, Chicago, Ill. Hydraulic dredging system. 1,759,490; May 20.
Newhall, Henry B., Corporation. (See Giblin, Charles A., assignor.)
Newhall, Henry B., Corporation. (See Pleister, H. W., and Karitzky, assignors.)
New Jersey Clock Company. (See Jauch, Martin, assignor.)
New Jersey Zinc Company, The. (See Hooey, William C., assignor.)
New York Brick Handling Corporation. (See Fuller, Claud E., assignor.)
New York Engineering Company. (See Gundersen, R. G., and Struthers, assignors.)
Niagara Electric Chemical Company, The. (See Baum, Gustav, assignor.)
Nickerl, Adolf, Inzersdorf, near Vienna, Austria. Incubator. 1,759,799; May 20.
Nicoletta, Joseph. (See Spino, L., and Nicoletta.)
Nielsen, Emanuel, assignor to Hamilton Beach Mfg. Co., Racine, Wis. Removable cover-plate mounting. 1,759,242; May 20.
Nielsen Laboratories, Inc. (See Nielsen, Niels D., assignor.)
Nielsen, Niels D., assignor to Nielsen Laboratories, Inc., Elyria, Ohio. Lactic citrus product. 1,759,706; May 20.
Nilsson, Martin, et al. (See Balls, Arnold K., assignor.)
Noack, William A., Oakland, Calif., assignor to Concealo Fixture Company, Inc. Built-in furniture. 1,759,800; May 20.
Noble and Harris. (See Piron, Emil H., assignor.)
Noble, Warren, Detroit, Mich. Bearing. 1,759,412; May 20.
Nock, Cecil J. (See Nock, John R. and C. J.)
Nock, John R. and C. J., Brooklyn, N. Y. Phonograph starting and stopping device. 1,759,460; May 20.
Norris, Clarence G. (See Baum, F. T., and Norris.)
Norrlin, Charles H., Philadelphia, Pa. Fluid-controlled-transmission mechanism. 1,759,801; May 20.
Nornable, William H., Leeds, England. Polish and like tin. 1,759,020; May 20.
North East Appliance Corporation. (See Dorsey, Farnum F., assignor.)
Northern Conveyor & Mfg. Co. (See Behlinger, Charles N., assignor.)
Northern Equipment Company. (See Veenschoten, Vincent V., assignor.)
Northern Trust Company, The, et al., trustees. (See Myers, Lewis E., assignor.)
Norviel, Harry E., Anderson, Ind. Ignition apparatus. 1,759,461; May 20.
Norviel, Harry E., Anderson, Ind., assignor to Delco-Remy Corporation, Dayton, Ohio. Ignition coil and lock switch. 1,759,462; May 20.
Nutting, Ernest, Marshalltown, Iowa. Rinse tub. 1,759,413; May 20.
Nystrom, Martin, assignor to The Brunswick-Balke-Collender Company, Chicago, Ill. Cabinet. Des. 81,201; May 20.
O'Brien, Frank J., Baltimore, Md., assignor, by mesne assignments, to Continental Can Company, Inc., New York, N. Y. Receptacle closure. 1,759,274; May 20.
Ockels, Theodore H., Torrance, Calif. Centering reenforcing construction for columns. 1,759,626; May 20.
O'Connor, John F., assignor to W. H. Miner, Inc., Chicago, Ill. Antifriction bearing. 1,758,965; May 20.
O'Connor, John F., assignor to W. H. Miner, Inc., Chicago, Ill. Friction shock-absorbing mechanism. 1,758,966; May 20.
O'Connor, John F., assignor to W. H. Miner, Inc., Chicago, Ill. Friction shock-absorbing mechanism. 1,758,967; May 20.
Ohio Automatic Sprinkler Company. (See Hamilton, John R., assignor.)
Ohio Brass Company, The. (See Matthes, Samuel S., assignor.)
Ohlson, Fred N. J., Pierson, Fla. Ball-game apparatus. 1,759,802; May 20.
Oildraulic Lift Company. (See Stukenborg, Louis C., assignor.)
Oil Well Supply Company. (See Greve, Edgar E., assignor.)
Okie, Francis G., assignor to Minnesota Mining & Manufacturing Company, St. Paul, Minn. Abrasive article and making the same. 1,759,168; May 20.
Oldfield, William H., Rochester, N. Y. Combination T Y connection. 1,759,321; May 20.
Olley, Raymond H. (See Pearson, J. T., and Olley.)
Olsen, Jens J., San Antonio, Tex. Metal alloy and forming the same. 1,759,169; May 20.
Olson, Carl A., assignor to Clarinda Manufacturing Company, Clarinda, Iowa. Lawn mower. 1,759,412; May 20.
Optische Anstalt C. P. Goerz Aktiengesellschaft. (See von Hofe, Christian, assignor.)
Osgood, Charles F., Claremont, N. H., assignor to Sullivan Machinery Company. Feed mechanism. 1,759,021; May 20.
Osgood, Robert C., Claremont, N. H., assignor to Sullivan Machinery Company. Lubricator. 1,759,463; May 20.
Otis Company. (See De Lancy, Imogene, assignor.)
Owens-Illinois Glass Company. (See Soubier, Leonard D., assignor.)
Packard Motor Car Company. (See Vincent, Jesse G., assignor.)
Paddock, George H., Superior, Wis. Window-sash stop. 1,759,707; May 20.
Parker, Foster H., Chicago, Ill. Sausage stuffing and linking machine. 1,759,587; May 20.
Parks & Woolson Machine Company. (See Richardson, Charles G., assignor.)
Parkyn, W. B. (See Andresen, George, assignor.)
Parlini, Alexander C., Woodside, assignor to Gotham Knitbac Machine Corporation, New York, N. Y. Knitting needle. 1,759,363; May 20.
Parsons, Frank T., jr., Washington, D. C. Method and article for wiping inky surfaces. 1,759,520; May 20.
Parsons, Philip D., Philadelphia, Pa., assignor to Scott Paper Company. Slitting and winding paper from paper-making machines. 1,759,627; May 20.
Patchen, John C., et al. (See Ritter, Harry C., assignor.)
Patten, Ralph W., Olyphant, M. A. Vrabel and J. F. Gombar, Throop, and W. H. Bell, Clarks Summit, Pa. Car-unloading device. 1,759,757; May 20.
Paul, William L., Berkeley, Calif., assignor to Deere & Company, Moline, Ill. Draft attachment for tractors. 1,759,063; May 20.
Paulus, Charles L. (See Kauch, R., and Paulus.)
Peale, Rembrandt, et al., trustees. (See Davis, Kenneth, assignor.)
Pearl, Sam. (See Mendelson, A., and Pearl.)
Pearson, John T., and R. H. Olley, assignors to Crouse-Hinds Company, Syracuse, N. Y. Adapter member for conduit outlet boxes. 1,759,365; May 20.
Pellegrino, Vincenzo, Rye, N. Y. Suspended cover. 1,759,628; May 20.
Pelletier, Frank, New York, N. Y. Ice retainer for water pitchers. 1,759,588; May 20.
Penn, Charles A., assignor to The American Tobacco Company, New York, N. Y. Cigarette package. 1,759,366; May 20.
Perlesz, Hugo, Cedarsburg, assignor to American Electric Motor Company, Milwaukee, Wis. Totally inclosed and ventilated electric machine. 1,759,415; May 20.
Perry, Ernest J. (See Head, T. W., and Perry.)
Perry, Ernest J., Birmingham, England. Loom for weaving carpets and like fabrics. 1,759,322; May 20.
Persinger, Clarence A., Sioux City, Iowa. End gate. 1,759,323; May 20.
Peter, William J., assignor to Aqua Systems Incorporated, New York, N. Y. Pressure control for hydraulic oil storing and delivering systems. 1,759,662; May 20.
Peter, William J., assignor to Aqua Systems Incorporated, New York, N. Y. Controlling the flow in hydraulic oil storing and dispensing systems. 1,759,663; May 20.
Peter, William J., assignor to Aqua Systems Incorporated, New York, N. Y. System for storing and dispensing oil. 1,759,708; May 20.
Peters, John J., New York, N. Y. Pie plate. 1,759,589; May 20.
Peters, Louis G., New York, N. Y. Skidless tire. 1,759,590; May 20.
Petersen, Carl A., Evanston, Ill. Bottle. Des. 81,202; May 20.
Petersen, Carl M., assignor to Circle F. Mfg. Co., Trenton, N. J. Push-switch socket. 1,759,521; May 20.
Petersen, Ove, Hellerup, near Copenhagen, Denmark. Injection valve for internal-combustion engines. 1,759,367; May 20.
Peterson, Andrew J., Isanti, Minn. Feeding mechanism for thrashing machines. 1,759,709; May 20.
Peyton, Frank L., Dallas, Tex. Dial lighting device for automatic telephones. 1,759,205; May 20.
Philadelphia Storage Battery Company. (See Grimditch, William H., assignor.)
Phillips, Edward H., Kensington, assignor to Phillips Volatilisor Syndicate Company, Limited, Sydney, New South Wales, Australia. Carburetor. 1,759,758; May 20.
Phillips, Philip, Orlando, Fla. Preserving citrus fruit. 1,759,464; May 20.
Phillips, Volatilisor Syndicate Company (See Phillips, Edward H., assignor.)
Photostat Corporation. (See Caps Arthur W., assignor.)
Pickard, Greenleaf W., Newton Center, assignor to Wireless Specialty Apparatus Company, Boston, Mass. Electrical condenser. 1,758,968; May 20.
Pieron, Otto, assignor to the firm Rudolph & Kühne G. m. b. H., Berlin, Germany. Device for drying textures. 1,759,804; May 20.
Piper, Walter F. (See Beardsley, E. O., and Piper.)
Piron, Emil H., assignor to Nobel and Harris, Detroit, Mich. Traffic signal. 1,759,368; May 20.
Pirsch, Peter and Sons Co. (See Pirsch, Peter, assignor.)
Pirsch, Peter, assignor to Peter Pirsch and Sons Co., Kenosha, Wis. Floating-lap ladder. 1,758,969; May 20.
Planer, Paul. (See Feldner, Friedrich, assignor.)
Pleister, Henry W., Westfield, and J. Karitzky, assignors to Henry B. Newhall Corporation, Garwood, N. J. Manufacturing forged percussion masonry twist drill. 1,759,416; May 20.

Pleister, Henry W., Westfield, and J. Karitzky, assignors to Henry B. Newhall Corporation, Garwood, N. J. Drop-wire support. 1,759,591; May 20.
Pohjonen, Väinö H., Porl, Finland. Baling press. 1,758,970; May 20.
Pohl, Edwin L., Hartford, Wis. Closure for collapsible tubes. 1,759,206; May 20.
Pohland, August F. (See Pohland, Edmund C., A. F., and C.)
Pohland, Charles, sr. (See Pohland, Edmund C., A. F., and C.)
Pohland, Edmund C., A. F., and C. sr., Latrobe, Pa. Window-sash mullion. 1,759,710; May 20.
Polgar, William, New York, N. Y. Demountable conveying device. 1,759,465; May 20.
Pollock, Earle E. (See Pollock, Martin C. and E. E.)
Pollock, Martin C. and E. E., assignors of one-fourth to J. Weiss and one-fourth to R. S. Shannon, Denver, Colo. Electrical connection plug. 1,759,805; May 20.
Porter, Finley R., Port Jefferson, N. Y., assignor to J. Dale, Trustee. Automatic speed-change mechanism. 1,759,466; May 20.
Potter, Rossiter R. (See Russell, S. G., and Potter.)
Powell, Charles, Los Angeles, Calif. Gripping device. 1,759,275; May 20.
Powell, Thomas. (See Love, James, jr., assignor.)
Powell, Winfred T., assignor to The Stromberg-Carlson Telephone Manufacturing Company, Rochester, N. Y. Frequency changer. 1,758,971; May 20.
Precision Scientific Company. (See Berg, Alexander M., assignor.)
Prescott, John O., Glenbrook, assignor to Columbia Phonograph Company, Inc., Bridgeport, Conn. Selector tuning device. 1,759,664; May 20.
Pressley, Charles W., Hollywood, Calif. Piano. 1,758,972; May 20.
Prestinari, Eugen, Irvington, assignor to Gemex Company, Newark, N. J. Bracelet. Des. 81,203; May 20.
Price, Osborne I., Frederick, Md. Swimming appliance. 1,759,711; May 20.
Procédés Navarre. (See Thiriet, A., and Delcroix, assignors.)
Proctor & Gamble Company, The. (See Heitlage, Henry, assignor.)
Prouty, Willis O., Hermosa Beach, Calif. Display sign. Re17,672; May 20.
Public Service Coordinated Transport. (See Boylan, Matthew R., assignor.)
Pudelko, Riccard, Zug, Switzerland, assignor to Landis & Gyr, A.-G. Electric meter mechanism. 1,759,491; May 20.
Putnam, Fred A., Keene, N. H., assignor to Markem Machine Company, Boston, Mass. Type chase. 1,759,022; May 20.
Pyle-National Company, The. (See Dake, Charles W., assignor.)
Pyle-National Company, The. (See Wulle, William A., assignor.)
Pysher, Fred L. (See Pysher, Maurice W. and Fred L.).
Pysher, Maurice W. and F. L., Walla Walla, Wash. Pipe cleant-out fitting. 1,759,803; May 20.
Querfurth, Wilhelm, Bruchhausen, near Arnsberg, assignor to Holzverkohlungs-Industrie Aktien-Gesellschaft, Konstanz (Badenia), Germany. Refining wood-spirit oils. 1,759,369; May 20.
Quigg, Richard M., Miami, Fla. Can opener. 1,759,304; May 20.
Rabsilber, William, New York, N. Y., assignor to C. Roberts, Naugatuck, Conn. Electrical-cord support. 1,759,417; May 20.
Radiant Lighting Fixture Co. (See Bohl, Hugo, assignor.)
Radio Corporation of America. (See Gage, Edward G., assignor.)
Radio Corporation of America. (See Roberts, Walter Van B., assignor.)
Radio Corporation of America, The. (See Round, Henry J., assignor.)
Radio Corporation of America. (See Thomas, Adolph A., assignor.)
Radio Corporation of America. (See Wolff, Irving, assignor.)
Radio Electric Clock Corporation. (See Casner, Thaddeus S., assignor.)
Rasmussen, Alvin C., assignor to Insley Manufacturing Company, Indianapolis, Ind. Building-material-hoisting apparatus. 1,759,324; May 20.
Rasmussen, Charles, assignor of one-half to R. T., Ingalls, Racine, Wis. Pipe-threading machine. 1,758,973; May 20.
Reed-Hill, William, Whitestone, N. Y., assignor, by mesne assignments, to Aqua Systems Incorporated, New York, N. Y. Oil-carrying marine vessel. 1,759,644; May 20.
Reeves, Donald H., Dayton, Ohio. Liquid-level gauge. 1,758,975; May 20.
Reeves Pulley Company. (See Clay, H. C., and Irwin, assignors.)
Regan, William J., Wilkinsburg, assignor to The McConway & Torley Company, Pittsburgh, Pa. Draft appliance for railway vehicles. 1,758,974; May 20.
Reichart, James H., Muncie, Ind. Smoking-stand body. Des. 81,204; May 20.
Reid, James S., assignor to The Eaton Axle and Spring Company, Cleveland, Ohio. Bayonet-joint closure. 1,759,243; May 20.
Reid, James S., assignor to The Eaton Axle and Spring Company, Cleveland, Ohio. Closure. 1,759,244; May 20.
Reiter, Daniel I., New York, N. Y. Snap fastener. 1,759,418; May 20.
Renhoidt, John E. (See Lucarelle, J. M., and Renhoidt.)
Replogle, Daniel B., Berkeley, Calif., assignor to The Commerce Guardian Trust & Savings Bank, Toledo, Ohio, as trustee. Airway dust filter and connections therefor. 1,759,276; May 20.
Revelli, Bethel-Abiel, assignor to Armamenti Militari S. A., Turin, Italy. Automatic firearm. 1,759,277; May 20.
Reynolds Spring Company. (See Cunningham, Roy H., assignor.)
Rhodin, Carl J., Oakland, Calif. Combination radius rod and torque arm. 1,759,370; May 20.
Rice & Adams Corporation. (See Hauk, Joseph, assignor.)
Rice, Charles P., New York, N. Y. Display stand. 1,758,976; May 20.
Richardson, Charles G., assignor to Parks & Woolson Machine Company, Springfield, Vt. Machine for applying transfer stamps to fabric. 1,759,712; May 20.
Richfield Oil Company of California. (See Black, J. C., and McConnell, assignors.)
Richter, Curt. (See Stricker, Willy, assignor.)
Rickard, George B. (See Cameron, J. A., and Rickard.)
Rideout, William E., Crookston, Minn. Tub stand. 1,759,371; May 20.
Riley, Champlain L., North Plainfield, N. J., assignor to Industrial Associates, Incorporated, New York, N. Y. Nebulization of fluids. 1,759,629; May 20.
Riley, Robert S., and O. Craig, assignors to Riley Stoker Corporation, Worcester, Mass. Pulverizing apparatus. 1,759,134; May 20.
Riley Stoker Corporation. (See Daniels, Fred H., assignor.)
Riley Stoker Corporation. (See Riley, R. S., and Craig, assignors.)
Rinaldy, Edward S., Rockville Center, N. Y. Cinema apparatus. 1,759,630; May 20.
Ringwald, Clarence, North Hampton, assignor to Robbins & Myers, Inc., Springfield, Ohio. Combined juice extractor and mixer. 1,759,760; May 20.
Ritchey, Roscoe V., assignor to The Firestone Tire and Rubber Company, Akron, Ohio. Tire expander. 1,759,713; May 20.
Ritchie, Gavin, & Sons, Inc. (See Ritchie, Harold G., assignor.)
Ritchie, Harold G., assignor to Gavin Ritchie & Sons, Inc., Battle Creek, Mich. Pressure-regulating device. 1,759,064; May 20.
Ritter, Harry C., assignor of one-half to J. C. Patchen and one-fourth to D. B. Jaffe, Jersey Shore, Pa. Air-reserve tank. 1,759,287; May 20.
Ritter, Heinrich. (See Kalischer, G., and Ritter.)
Robbins & Myers, Inc. (See Ringwald, Clarence, assignor.)
Roberts, Clara. (See Rabsilber, William, assignor.)
Roberts, Walter V., Bronxville, N. Y., assignor to Radio Corporation of America. Amplifying electrical currents of audible frequencies. 1,759,631; May 20.
Robinson, Joseph, New York, N. Y. Automatic train-pipe connecter. 1,759,372; May 20.
Rockwell, Edward A., Long Island City, N. Y., assignor to Stewart-Warner Corporation, Chicago, Ill. Liquid-level indicator. 1,759,806; May 20.
Rockwell, Harold H., et al., trustees. (See Myers, Lewis E., assignor.)
Rode, Frank S., Jeannette, Pa. Brake tester. 1,759,714; May 20.
Röder, Karl, Hanover, Germany. Steam turbine. 1,759,817; May 20.
Roettges, Frederick W., assignor to Aljac Art Metal Products Corporation, Brooklyn, N. Y. Lamp. Des. 81,205; May 20.
Roettges, Frederick W., assignor to Aljac Art Metal Products Corporation, Brooklyn, N. Y. Lamp. Des. 81,206; May 20.
Rognon, Jules A., Levallois Perret, France. Material for the low-temperature soldering of metals. 1,759,279; May 20.
Rohm & Haas Company. (See Thompson, Arthur R., jr., assignor.)
Rohwedder, Otto F., assignor to Mac-Roh Sales & Mfg. Company, Davenport, Iowa. Retainer for sliced bread. 1,759,592; May 20.
Rolph, Thomas W., Newark, Ohio, assignor to Holophane Company, Inc., New York, N. Y. Reflecting prism. 1,758,977; May 20.
Romaniuk, Alexsey P., Detroit, Mich. Land and water vehicle. 1,759,280; May 20.
Root, Stanley R. (See Derby, Norman L., assignor.)
Rose, Fred G., and J. H. Murray, Rock Ford, Colo. Automatically-operated fence gate. 1,759,207; May 20.
Rosen, Louis W., Brooklyn, N. Y. Binding device for flexible linear connections. 1,758,978; May 20.
Rosenberger, Valentine, Philadelphia, Pa. Electric water heater. 1,759,281; May 20.
Rosenbahn, Leopold A., Los Angeles, Calif. Carbon feed for arc lamps. 1,758,979; May 20.
Ross, Justus J., Huntington, W. Va. Metallic tie and alignment lug therefor. 1,759,135; May 20.
Ross, Justus J., Huntington, W. Va. Extension-rail clip. 1,759,136; May 20.

Ross, Samuel, North Bergen, N. J. Jar. Des. 81,207; May 20.

Rossiter, Wayne F., San Francisco, Calif. Adjustable furniture. 1,758,980; May 20.

Rotor Air Tool Company, The. (See Cook, Hal L., assignor.)

Rotor, Air Tool Company, The. (See Van Hamersveld, John J. N., assignor.)

Round, Henry J., Muswell Hill, London, England, assignor to The Radio Corporation of America, New York, N. Y. Thermionic receiving device for wireless telegraphy and telephony. 1,759,593; May 20.

Round, Henry J., Westfield, Muswell Hill, London, England, assignor to Radio Corporation of America. Picture telegraphy. 1,759,594; May 20.

Rubin, Hyman, Roxbury, Mass. Store-front construction. 1,759,818; May 20.

Ruddick, Jacob L. (See Morris, J. W., and Ruddick.)

Rudolph & Kühne G. m. b. H. (See Pieron, O., assignor.)

Rump, Sigurd, Boston, Mass., assignor to American Brown Boveri Electric Corporation, New York, N. Y. Condenser bushing. 1,759,419; May 20.

Runge, Robert F. (See Brunner, H. E., and Runge.)

Russ, Walter L. (See Boswell, James G., assignor.)

Russell, Burdsall & Ward Bolt and Nut Company. (See Ward, William L., assignor.)

Russell, Samuel G., and R. R. Potter, assignors to Shakespeare Company, Kalamazoo, Mich. Fishing reel. 1,759,065; May 20.

Sabo, Charles K., et al. (See Kovács, Balint, assignor.)

Sachs, Joseph, West Hartford, Conn. Electric-meter service installation. 1,758,981; May 20.

Salomon, Hans, Berlin-Halensee, and M. Friedrich, Berlin, Germany. Apparatus for inducing sleep. 1,759,761; May 20.

Sanford, Roy S., assignor to Bendix Brake Company, South Bend, Ind. Brake. 1,759,420; May 20.

Sarazin, Robert, Neuilly-sur-Seine, France. Arc welding. 1,759,373; May 20.

Sartor, Richard, Wahlbach, near Burbach, Westphalia, Germany. Dough-kneading machine. 1,759,137; May 20.

Sauer, Johan N. A., deceased; H. A. P. M. Tervooren, representative, assignor to Naamlooze Vennootschap Algemeene Norit Maatschappij, Amsterdam, Netherlands. Apparatus for producing active carbon. 1,759,138; May 20.

Schaefer, Josef, Dortmund, Germany. Washer. 1,759,282; May 20.

Schaeffer, Georges. (See Kahn, M., Le Breton, and Schaeffer.)

Schaer, Charles, Langenthal, assignor to the firm of Sulzer Frères, Société Anonyme, Winterthur, Switzerland. Steam trap. 1,759,066; May 20.

Schane, Edward H., assignor to The Fanner Manufacturing Company, Cleveland, Ohio. Awning bracket. 1,759,715; May 20.

Schench, William A., Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Acoustic diaphragm. 1,759,632; May 20.

Schinscholl, Erich, Cincinnati, Ohio. Egg carton. 1,759,716; May 20.

Schirmer, August H., Newark, N. J., assignor to American Telephone and Telegraph Company. Electrical protective device. 1,759,023; May 20.

Schlage Lock Co. (See Schlage, Walter R., assignor.)

Schlage, Walter R., assignor to Schlage Lock Co., San Francisco, Calif. Latch-face-plate mounting. 1,759,374; May 20.

Schlage, Walter R., assignor to Schlage Lock Co., San Francisco, Calif. Split spindle for door latches. 1,759,375; May 20.

Schmidt, Carl A., Brooklyn, N. Y. Securing means for hookless fasteners for receptacles. 1,759,283; May 20.

Schmidt, Carl A., New York, N. Y. Locking means for hookless fasteners for receptacles. 1,759,284; May 20.

Schmidt, Friedrich W., Berlin-Mariendorf, Germany. Rail-machining device. 1,759,325; May 20.

Schmidt, John P., Baltimore, Md. Combination ventilator and shade for vehicles. 1,759,421; May 20.

Schmidt'sche Heissdampf, G. m. b. H. (See Hartmann, O. H., and Wempe, assignors.)

Schmitz, Carl, Oelde in Westfalen, Germany. Centrifugal separator. 1,759,522; May 20.

Scholler, Frederick C., Philadelphia, Pa. Oiler for threads. 1,759,326; May 20.

Schreiber, Moses, assignor to Allentown Knit Fabrics Company, New York, N. Y. Knitted fabric. Des. 81,208; May 20.

Schreiber, Moses, assignor to Allentown Knit Fabrics Company, New York, N. Y. Knitted fabric. Des. 81,209; May 20.

Schroeder, Simon E., assignor, by mesne assignments, to Automatic Washer Company, Newton, Iowa. Wringer. 1,759,208; May 20.

Schubardt, Walter. (See Mittasch, A., Müller, and Schubardt.)

Schubardt, Walter. (See Müller, C., and Schubardt.)

Schulte, William H., Trenton, N. J. Flush tank. 1,759,492; May 20.

Schultz, Edwin W., and F. D. Banham, Palo Alto, Calif.; said Banham assignor to said Schultz. Grinder and disintegrator. 1,759,245; May 20.

Schultz, Hermann, Berlin-Lankwitz, Germany. Apparatus for machining welded rail joints. 1,759,327; May 20.

Scott Paper Company. (See Parsons, Philip D., assignor.)

Scovill Manufacturing Company. (See Bennett, M. H., and Colina, assignors.)

Scovill Manufacturing Company. (See George, J. S., and Sperry, assignors.)

Sease, Chester A., assignor of one-half to P. Crowell, jr., Harrisburg, Pa. Bushing removing and replacing tool. 1,759,285; May 20.

Seasholtz, Emory, Waycross, Ga. Adjustable side bearing. 1,759,717; May 20.

Seghers, Emiel P., Chicago, Ill. Decorative wiring. 1,758,982; May 20.

Seignol, Edouard, Paris, France. Carburetor. 1,759,666; May 20.

Selbach, Christian, Kitano-Machi, Kobe, Japan. Film winder. 1,759,024; May 20.

Seligman, Richard, Wandsworth, London, England. Removing incrustation formed on metallic surfaces. 1,759,762; May 20.

Servon, Jean L., Bayonne, assignor to Embrayage Automatique Bloch Servon Société à Responsabilité Limitee, Paris, France. Automatic clutch and change-speed mechanism. 1,759,665; May 20.

Seymour, James M., Newark, N. J., Cooling tower. 1,758,983; May 20.

Seyter, William C., Union City, N. J., assignor to The Torsion Balance Company, New York, N. Y. Balance. 1,759,139; May 20.

Shakespeare Company. (See Russell, S. G., and Potter, assignors.)

Shannon, Richard S., et al. (See Pollock, Martin C. and E. E., assignors.)

Sharp, Cecil D. (See Steen, W. B., and Sharp.)

Sherry, James A., Fall River, Mass. Amusement device. 1,759,170; May 20.

Siemens-Schuckertwerke Aktiengesellschaft. (See Baudisch, Karl, assignor.)

Silberger, Rae, Arroyo Sanatorium, Calif. Spice-container rack. 1,759,140; May 20.

Simmons Company. (See Gail, John F., assignor.)

Simplex Equipment Company. (See Bouché, W. F., and Blattner, assignors.)

Sims, James E., Santa Ana, Calif. Abrading tool. 1,759,523; May 20.

Singer Manufacturing Company, The. (See Fleckenstein, G. A. Hanf, and Waterman, assignors.)

Sipp Eastwood Corporation. (See Bogdanffy, George W., assignor.)

Skayef Ball Bearing Company, The. (See Brunner, H. E., and Runge, assignors.)

Skinner, Bronson C., assignor, by mesne assignments, to Florida Citrus Machinery Company, Dunedin, Fla. Apparatus for sizing globular articles. 1,759,067; May 20.

Skinner Irrigation Company, The. (See Coles, Walter H., assignor.)

Slade, Harold E., Glen Ridge, N. J. Lamp-socket casing. 1,759,422; May 20.

Slade, Harold E., Glen Ridge, assignor to Beaver Manufacturing Company, Newark, N. J. Electric outlet device. 1,759,595; May 20.

Slocum, Joseph H., Los Angeles, Calif. System and means of elevating fluid. 1,759,467; May 20.

Smalley, Henry R., The United States Army, Washington, D. C. Gaiting harness. 1,759,172; May 20.

Smith, A. O., Corporation. (See Andren, Birger T., assignor.)

Smith, A. O., Corporation. (See Carlson, Arthur W., assignor.)

Smith, Arthur R., Schenectady, N. Y., assignor to General Electric Company. Power installation. 1,759,718; May 20.

Smith, Charles E., Oroville, Calif. Aeroplane propeller. 1,759,468; May 20.

Smith, Harold W., Port Huron, Mich. Instrument illuminator. 1,759,469; May 20.

Smith, Irving W., Niagara, Wis. Device for lifting goods from shelves. 1,759,524; May 20.

Smith, Paul C., Western Springs, assignor to Swift & Company, Chicago, Ill. Preparing animal meats for the market. 1,759,286; May 20.

Smith, Ralph R., Jackson Heights, N. Y., assignor to National Carbon Company, Inc. Hand lamp. 1,759,246; May 20.

Smith, Russell, Gosport, Ind. Tire. Des. 81,210; May 20.

Smith, Walter E., Providence, assignor to Kenney Manufacturing Company, Cranston, R. I. Center ornament for drapery rods or the like. Des. 81,211; May 20.

Smith, Walter E., Providence, assignor to Kenney Manufacturing Company, Cranston, R. I. End ornament for drapery rods or the like. Des. 81,212; May 20.

Smith, William H., Detroit, Mich. Method of and apparatus for reducing metallic oxides without melting. 1,759,173; May 20.

Smith, William R. (See Spencer, H. B., and Smith.)

Smogrovics, Eugen, Pezinok, Czechoslovakia. Shock-absorbing shackled suspension for car springs. 1,759,633; May 20.

Smythe, Edwin H., Evanston, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Sound reproducer. 1,759,328; May 20.

Société Anonyme des Usines de Rosieres. (See Bachon, Roger, assignor.)

Soderberg, Victor L., Detroit, Mich., and C. R. Gleason, Chicago, Ill. Electroplating tubes internally and externally. 1,759,171; May 20.

Sonoco Products Company. (See Coker, Charles W., assignor.)

Sons-Cunningham Reed & Rattan Co. (See Jones, Charles W., assignor.)

Soubier, Leonard D., assignor to Owens-Illinois Glass Company, Toledo, Ohio. Glass feeder. 1,759,209; May 20.

Soubier, Leonard D., assignor to Owens-Illinois Glass Company, Toledo, Ohio. Machine for forming hollow glassware. 1,759,210; May 20.

Southwestern Engineering Corporation. (See Coulter, C. D., assignor.)

Specialty Insulation Manufacturing Company. (See Batcholts, Clinton, assignor.)

Specialty Papers Company, The. (See Wilshire, Van H., assignor.)

Spencer, Hugh B., Duluth, Minn., and W. R. Smith, Winnipeg, Manitoba, Canada. Grease cup. 1,759,211; May 20.

Sperry, Roger S. (See George, J. S., and Sperry.)

Spino, Leon, and J. Nicoletta, Clyde, N. Y. Elastic tension device. 1,759,719; May 20.

Stanisyndicaat Dr. Ledeboer II. (See Ledeboer, Pierre H., assignor.)

Standard Oil Company of California. (See Farrington, Bruce B., assignor.)

Standerwick, Reginald G., Marblehead, Mass., assignor to General Electric Company. Turbine-regulating means. 1,759,763; May 20.

Standish, John F., Winthrop, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Nail-transferring mechanism. 1,759,174; May 20.

Stanley, George F., assignor to The Stanley Manufacturing Company, Dayton, Ohio. Label. Des. 81,213; May 20.

Stanley Manufacturing Company, The. (See Stanley, George F., assignor.)

Stay, Peter, Reedley, Calif. Mail box. 1,759,667; May 20.

Steel, Charles D., London, England. Pump for inflating pneumatic tires. 1,759,287; May 20.

Steele, Herbert H., Lynbrook, assignor, by mesne assignments, to Elliott-Fisher Company, New York, N. Y. Combined typewriting and computing machine. 1,759,329; May 20.

Steen, William B., and C. D. Sharp, Stahl, Ohio. Washing machine. 1,759,376; May 20.

Sterling Spring Company. (See Monteith, John C., assignor.)

Steudte, Richard, New York, N. Y. Blotter attachment for fountain pens. 1,759,596; May 20.

Stevens, William C., assignor to The Firestone Tire and Rubber Company, Akron, Ohio. Apparatus for making multiple-ply fabrics. 1,759,668; May 20.

Stevens, William C., assignor to The Firestone Tire and Rubber Company, Akron, Ohio. Method and apparatus for building tire beads. 1,759,669; May 20.

Stewart-Warner Corporation. (See Rockwell, Edward A., assignor.)

Stitzer, George W., Mahanoy City, Pa. Headlight. 1,759,720; May 20.

Stock, Josef. (See Wilke, K., and Stock.)

Stockholms Benmjolsfabriks Aktiebolag. (See Eckerbom, Gustaf, assignor.)

Stout, Samuel J. T. (See Gottlieb, I., and Stout.)

Strain, Leslie M., Mitchell, S. Dak. Purifier for cisterns. 1,759,141; May 20.

Straus, Alexander H., New York, N. Y. Apron. 1,759,423; May 20.

Strauss, Edward E. (See Strauss, Emil A., assignor.)

Strauss, Emil A., assignor to E. E. Strauss, Wilmette, Ill. Stepladder. 1,759,424; May 20.

Street, Joshua H., Chattanooga, Tenn. Slack-line excavator. 1,759,525; May 20.

Stricker, Willy, assignor to C. Richter, Hanover, Germany. Apparatus for spraying heavy oils. 1,758,984; May 20.

Stroedter, Karl, assignor to the firm Gebr. Eickhoff Maschinenfabrik, Bochum, Germany. Shaking conveyer. 1,759,764; May 20.

Stromberg-Carlson Telephone Manufacturing Company, The. (See Arndt, Melvin J., assignor.)

Stromberg-Carlson Telephone Manufacturing Company, The. (See Powell, Winfred T., assignor.)

Stroud, Thomas L., Rosslyn, Va. Brush-making machine. 1,759,008; May 20.

Struthers, Archibald. (See Gundersen, R. G., and Struthers.)

Studebaker Corporation, The. (See McIntyre, Elmer L., assignor.)

Stukenborg, Louis C., assignor to Oildraulic Lift Company, Memphis, Tenn. Lifting jack. 1,759,670; May 20.

Submarine Signal Company. (See Kunze, Willy, assignor.)

Suekoff, Samuel, Chicago, Ill. Internal-combustion engine. 1,759,425; May 20.

Sullivan Machinery Company. (See Osgood, Charles F., assignor.)

Sullivan Machinery Company. (See Osgood, Robert C., assignor.)

Sulzer Frères, Société Anonyme. (See Schaer, Charles, assignor.)

Summerhayes, Henry B., Schenectady, N. Y., assignor to General Electric Company. Protective system. 1,759,765; May 20.

Sumner, George P. (See Miller, H. C., and Sumner.)

Sumner, May, executor. (See Miller, H. C., and Sumner.)

Sundstrand Corporation. (See Sundstrand, Oscar J., assignor.)

Sundstrand, Oscar J., Rockford, Ill., assignor, by mesne assignments, to Sundstrand Corporation, Wilmington, Del. Cash register or similar machine. 1,759,069; May 20.

Superheater Company, The. (See Huet, André, assignor.)

Superior Linking Machine Corporation. (See Fleming, August L. N., assignor.)

Surface Combustion Company. (See Mantle, Gregory D., assignor.)

Sutherland, Alfred W. (See Sutherland, Holton J., J. H., and A. W.)

Sutherland, Holton J., J. H., and A. W., Swampscott, Mass. Miter cutting machine for pattern binding. 1,759,025; May 20.

Sutherland, John H. (See Sutherland, Holton J., J. H., and A. W.)

Swanser, Lawrence A., Brusett, Mont. Harrow hitch for gang plows. 1,759,597; May 20.

Swift & Company. (See Smith, Paul C., assignor.)

Sz'geti Dezsö, New York, N. Y. Support for violins, violin bows and the like. 1,758,985; May 20.

Szmukler, Constantin, Grenoble, France. Combined pump and electric motor. 1,759,766; May 20.

Tabis, Mihály, Montreal, Quebec, Canada. Water motor. 1,759,671; May 20.

Tabor Manufacturing Company, The. (See Lewis, Wilfred, assignor.)

Tainton, Urlyn C., East St. Louis, Ill. Electrolysis. 1,759,493; May 20.

Tainton, Urlyn C., Johannesburg, Transvaal, South Africa. Recovery of lead and other metals from ores or other lead-bearing materials. 1,759,494; May 20.

Talisman, Samuel, San Bernardino, Calif. Paper clip. 1,759,142; May 20.

Tanner, Arnold J., North Haven, Conn. Folding packing and display container. 1,759,470; May 20.

Tantlinger, Don V., Sherman, Calif. Boomerang-throwing device. 1,759,471; May 20.

Tappan, Harry D., Philadelphia, Pa. Automobile brake. 1,759,377; May 20.

Taylor, Samuel C. (See Mosher, Claud J., assignor.)

Teachout, Felix W., Huntingdon, Tenn. Display rack. 1,759,721; May 20.

Tellier, Jeremie, New Bedford, Mass. Paper punch. 1,759,672; May 20.

Temple, James, Portland, Oreg. Cutting-torch holder. 1,759,288; May 20.

Tengstedt, Karl H., Chicago, Ill. Element for masonry construction. 1,759,070; May 20.

Terriberry, Warren S., San Leandro, Calif., assignor to American Telephone and Telegraph Company. Telegraph apparatus. 1,759,026; May 20.

Tervooren, Honore A. P. M., representative. (See Sauer, Johan N. A.)

Thatcher, Harry W., assignor to Draper Corporation, Hopedale, Mass. Harness-frame-leveling mechanism. 1,759,673; May 20.

Thermal Engineering Corporation. (See Mayo, John, assignor.)

Thews, Karl B., Drexel Hill, and J. S. Carlitz, Philadelphia, Pa.; said Carlitz assignor to said Thews. Treatment of iron or steel. 1,759,634; May 20.

Thews, Karl B., Drexel Hill, and J. S. Carlitz, Philadelphia, Pa.; said Carlitz assignor to said Thews. Treatment of iron or steel. 1,759,635; May 20.

Thiriet, André, and P. Delcroix, Voiron, assignors, by mesne assignments, to Procédés Navarre, Lyon, France. Preparation of rosin solutions. 1,759,526; May 20.

Thomas, Adolph A., assignor to Radio Corporation of America, New York, N. Y. Sound-amplifying apparatus. 1,758,986; May 20.

Thomas, Adolph A., assignor to Radio Corporation of America, New York, N. Y. Combined phonograph and radio receiving cabinet. 1,759,143; May 20.

Thompson, Arthur R., jr., Charlotte, N. C., assignor to Rohm & Haas Company. Application of vat dyes to textile fibers. 1,759,071; May 20.

Thompson Products Inc. (See Bissell, Richard E., assignor.)

Thompson, Roscoe H., Wausaukee, Wis. Overhead conveyer. 1,759,378; May 20.

Thomson, David, London, England. Treatment of animal matter. 1,758,987; May 20.

Thomson, Elihu, Swampscott, Mass., assignor to General Electric Company. Liquid-level gauge for boilers. 1,759,767; May 20.

Thomson, John F., Chicago, Ill. Loading machine. 1,759,072; May 20.

Thomson, John F., Chicago, Ill. Shock loader. 1,759,073; May 20.

Tice, Percival S., Chicago, Ill. Pressure-controlled radiator shutter. 1,759,527; May 20.

Tietze, Ernst. (See Hentrich, W., Hardtmann, and Tietze.)

Tile and Mantel Contractors Association of America. (See Cole, Harry R., assignor.)

Torsion Balance Company, The. (See Seyter, William C., assignor.)

Tracy, Daniel E., Ashtabula, Ohio. Stay member for coat necks. 1,759,528; May 20.

Trallograf Company, The. (See Citron, William J., assignor.)

Trautman, Frederick, Freeport, N. Y. Signal. 1,759,247; May 20.

Tri-Lok Company. (See Nagin, Harry, assignor.)
Trumbull Electric Manufacturing Company, The. (See Getchell, Benjamin E., assignor.)
Tscherning, Henry, assignor to Arcade Manufacturing Company, Freeport, Ill. Mop head. 1,759,768; May 20.
Turner, Edward T., Dayton, Ohio. Water-softening apparatus. 1,759,636; May 20.
Turnwald, Wolfgang, Syracuse, N. Y. Automobile hood clamp. 1,758,988; May 20.
Tuttle, Henry A., deceased, Upton, Mass.; J. L. Tuttle, executrix. Reversing mechanism. 1,759,472; May 20.
Tuttle, Jennie L., executrix. (See Tuttle, Henry A.)
Unger, Paul O., assignor to McMillan Book Company, Syracuse, N. Y. Lock for loose-leaf binders. 1,759,426; May 20.
Union Carbide Company.. (See Mansfield, Ralph G., assignor.)
United-Carr Fastener Corporation. (See Jones, Walter I., assignor.)
United Engineers & Constructors Inc. (See Haug, John S., assignor.)
United Gas Improvement Company, The. (See Kunberger, Albert F., assignor.)
United Shoe Machinery Corporation. (See Bazzoni, Lewis J., assignor.)
United Shoe Machinery Corporation. (See Standish, John F., assignor.)
United Shoe Machinery Corporation. (See Winkley, Erastus E., assignor.)
Universal Oil Products Company. (See Egloff, G., and Benner, assignors.)
Universal Winding Company. (See DeWolf, Ernest A., assignor.)
"Universelle" Cigarettenmaschinenfabrik J. C. Muller & Co. (See Hohn, Max P. E., assignor.)
Valsey, Harold C., assignor to Hickok Manufacturing Company, Inc., Rochester, N. Y. Suspender buckle or the like. Des. 81,214; May 20.
Van Hamersveld, John J. N., Cleveland Heights, assignor to The Rotor Air Tool Company, Cleveland, Ohio. Rotary motor tool. 1,759,473; May 20.
Van Horne, Perry, assignor to The Canton Culvert and Silo Company, Canton, Ohio. Drainage culvert. 1,759,330; May 20.
Van Houten, John M., assignor to Dutchess Tool Company, Beacon, N. Y. Mixing dough. 1,759,289; May 20.
Van Houten, John M., assignor to Dutchess Tool Company, Beacon, N. Y. Dough-mixing apparatus. 1,759,290; May 20.
Van Ness, Henry E., Elmira, N. Y. Dyeing apparatus. 1,759,144; May 20.
Van Ness, Henry E., Elmira, N. Y. Dyeing apparatus. 1,759,145; May 20.
Van Rijswijk, Willem, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland. Blade for rotary blowers and compressors. 1,759,027; May 20.
Van Rijswijk, Willem, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland. Liquid sealed gland for machine shafts. 1,759,074; May 20.
Van Rossum, Alfons. (See Kramer, H., and van Rossum.)
Van Schaack Bros. Chemical Works, Inc. (See Van Schaack, Robert H., jr., assignor.)
Van Schaack, Robert H., jr., Evanston, assignor to Van Schaack Bros. Chemical Works, Inc., Chicago, Ill. Derivative of alkoxy-fatty acids. 1,759,331; May 20.
Vaught, Le Roy, Kansas City, assignor of one-third to A. C. Guy and one-third to W. E. Grimmer, North Kansas City, Mo. Valve holder and bushing ejector. 1,759,175; May 20.
Veenschoten, Vincent V., assignor to Northern Equipment Company, Erie, Pa. Feed-water valve. 1,759,146; May 20.
Vincent, Jesse G., assignor to Packard Motor Car Company, Detroit, Mich. Internal-combustion engine. 1,729,147; May 20.
Vogl, Otto, Chicago, Ill. Ribbon-spool holder or the like. Des. 81,215; May 20.
Volquardsen, Leland J., San Francisco, Calif. Spring hinge for ice-box doors. 1,759,474; May 20.
Von Hofe, Christian, Berlin-Zehlendorf, assignor to the firm Optische Anstalt C. P. Goerz Aktiengesellschaft, Berlin, Germany. Ocular. 1,759,529; May 20.
Voorhees, Gardner T., Boston, Mass. Container. 1,759,176; May 20.
Vorwerk, Edgar. (See Müller, Franz E., assignor.)
Voss, Julius, assignor to Kalle & Co. Aktiengesellschaft, Wiesbaden-Biebrich, Germany. Process and device for drying tubular bodies. 1,759,495; May 20.
Vossen, Bartholomäus. (See Henle, F., and Vossen.)
Vrabel, Michael A. (See Patten, R. W., Vrabel, Gombar, and Bell.)
Vuillaume, Cyprien, Lyon, France. Blowpipe. 1,759,769; May 20.
Wager, Robert H., Jersey City, N. J. Lather-forming device. 1,759,248; May 20.
Wagner Electric Corporation. (See Dick, B., and Brunner, assignors.)
Wahl, Carl C., Glasgow, Mo. Tooth-cleaning device. 1,759,075; May 20.
Walker, Harold W. (See McQuaid, Howard S., assignor.)
Walker, Hervey S., Ardmore, Pa. Underfloor duct system and method of making. 1,758,989; May 20.
Walker Manufacturing Company. (See Johnson, Alvin L., assignor.)
Walker, Titus S., Memphis, Tenn. Corn popper. 1,759,475; May 20.
Wallace, John F., Shaker Heights, assignor to The Cleveland Pneumatic Tool Company, Cleveland, Ohio. Shock absorber for landing gears for aeroplanes. 1,759,674; May 20.
Wallace, William S., et al., trustees. (See Davis, Kenneth, assignor.)
Wallis, Joseph E. (See Armstrong, J. C., and Wallis.)
Ward Leonard Electric Company. (See Bullinger, Frederic H., assignor.)
Ward, William L., assignor to Russell, Burdsall & Ward Bolt and Nut Company, Port Chester, N. Y. Making nuts. 1,758,990; May 20.
Wasserfallen, Charles F., assignor, by mesne assignments, to Detroit and Security Trust Company, Detroit, Mich. Carrier for disk wheels. 1,759,212; May 20.
Waterman, Max L. (See Fleckenstein, G. A., Hanf, and Waterman.)
Watson, John W., Wayne, Pa. Multiple-leaf spring. 1,759,722; May 20.
Webb, George F., Hamilton, Ontario, Canada. Bow-facing oar. 1,759,598; May 20.
Webb, Jervis B., Detroit, Mich. Overhead conveyer. 1,759,213; May 20.
Webster, Warren, Company. (See Montreuil, Frank H., assignor.)
Weeks, John R., jr. (See Given, F. J., Greenidge, and Weeks.)
Wehr, William G., East Cleveland, assignor to The Cleveland Crane & Engineering Company, Wickliffe, Ohio. Tractor for overhead carrier systems. 1,759,177; May 20.
Weinberg, Joseph, New Castle, Pa. Spring heel. 1,759,379; May 20.
Weintraub, Edward, Brooklyn, N. Y. Covered elastic cord. 1,759,496; May 20.
Weintraub, Edward, Brooklyn, N. Y. Covered elastic cord. 1,759,497; May 20.
Weiskittel, A., & Son Co. (See Hearl, John W., assignor.)
Weiss, Jacob, et al. (See Pollock, Martin C. and E. E., assignors.)
Weld, Ivan C., Sandy Spring, Md. Cabinet for the reception of dairy products. 1,759,723; May 20.
Weldon, Everett D., Hastings upon Hudson, N. Y. Desk tables. 1,759,178; May 20.
Wells, William S., Los Angeles, Calif., assignor, by mesne assignments, to Wonder Weave, Inc., Boston, Mass. Loom shedding mechanism. 1,759,530; May 20.
Wells, William S., Los Angeles, Calif., assignor, by mesne assignments, to Wonder Weave, Inc., Boston, Mass. Let-off mechanim for looms. 1,759,531; May 20.
Wells, William S., Los Angeles, Calif., assignor, by mesne assignments, to Wonder Weave, Inc., Boston, Mass. Needle loom. 1,759,532; May 20.
Wells, William S., Los Angeles, Calif., assignor, by mesne assignments, to Wonder Weave, Inc., Boston, Mass. Shuttle-operating mechanism. 1,759,533; May 20.
Wempe, Friedrich. (See Hartmann, O. H., and Wempe.)
Wentworth, Pearl J., Fort Thomas, Ky. Machine for trimming sole margins. 1,759,380; May 20.
Werber, Max, Beacon, N. Y. Coat. Des. 81,216; May 20.
Werst, Charles W., Philadelphia, Pa. Locomotive frame. 1,759,675; May 20.
West, William L., assignor of one-half to W. M. Hall, Belmont, N. C. Electrical float for fishlines. 1,759,381; May 20.
Westcott Hosiery Mills. (See Young, David H., assignor.)
Western Electric Company. (See Edelmann, Otto, assignor.)
Western Electric Company. (See Schench, William A., assignor.)
Western Electric Company. (See Smythe, Edwin H., assignor.)
Westinghouse Electric & Manufacturing Company. (See Allan, Robert C., assignor.)
Whetstone, Trimble J., Hutchinson, Kans. Poultry trap. 1,759,770; May 20.
White, Joseph A., Melrose Park, assignor to The Moore & White Company, Philadelphia, Pa. Driven slitter for paper-slitting machines. 1,759,676; May 20.
White, Joseph A., Melrose Park, assignor to The Moore & White Company, Philadelphia, Pa. Flushing valve. 1,759,724; May 20.
Whitmore, John, assignor to Davidson & Company Limited, Belfast, Ireland. Apparatus for separating and collecting dust. 1,759,382; May 20.
Whitney, Maurice P., assignor to Eclipse Machine Company, Elmira, N. Y. Engine starter. 1,759,076; May 20.
Whitney, Maurice P., assignor to Eclipse Machine Company, Elmira, N. Y. Engine starter. 1,759,077; May 20.
Whittle, Horace, Maplewood, and D. G. Grimley, Ridgewood, N. J., assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y. Wave-transmission circuit. 1,759,332; May 20.
Wicks, Zeno W., Fort Worth, Tex. Gas purifier. 1,759,819; May 20.
Wickwire Spencer Steel Company. (See Arnold, Albert W.)
Wiesman, Jerome, Denver, Colo. Garment drier. 1,759,179; May 20.
Wight, Sedgwick N., assignor to General Railway Signal Company, Rochester, N. Y. Train-dispatching system for railroads. 1,759,383; May 20.

Wilcox, Lewis T., Peekskill, N. Y. Grate for oil and gas stoves. 1,759,148; May 20.
Wildhaber, Ernest, Brooklyn, N. Y. Forming gears. 1,759,333; May 20.
Wilke, Karl, and J. Stock, Hochst-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Vat dyestuffs of anthracene series containing nitrogen and preparing same. 1,759,249; May 20.
Wilkin, John T., and C. R. Houghton, assignors to The Connersville Blower Company, Inc., Connersville, Ind. Gas-metering system. 1,759,384; May 20.
Wilkinson, Alan D., Cananea, assignor to The Cananea Consolidated Copper Company, S. A., Cananea, Sonora, Mexico. Smelting copper. 1,759,078; May 20.
Will, Otto B., Montgomery City, Mo. Knob-attaching device. 1,759,771; May 20.
Williams, Edgar A., Upper Black Eddy, Pa. Rifle-barrel attachment and ammunition for shotgun barrels. 1,759,772; May 20.
Willis, Robert L., Youngstown, Ohio. Making producer gas. 1,758,991; May 20.
Willys-Overland Company. (See Edwards, Henry J., assignor.)
Willys-Overland Company, The. (See Fisher, Walter S., assignor.)
Willys-Overland Company, The. (See Grimm, George E., assignor.)
Willys-Overland Company, The. (See Mares, Joseph R., assignor.)
Wilshire, Van H., assignor to The Specialty Papers Company, Dayton, Ohio. Method and apparatus for treating coated material. 1,759,600; May 20.
Wilson, Frederick E., Buffalo, N. Y. Septic tank. 1,759,334; May 20.
Wilson, Iro J. (See Green, Leslie P., assignor.)
Wilson, Pearl, et al. (See Kelso, William C., assignor.)
Wilson, William J., et al. (See Kelso, William C., assignor.)
Winans, Joseph D., West Timber, Oreg. Rotary internal-combustion engine. 1,759,028; May 20.
Wine, William E., Toledo, Ohio. Door mechanism for railway cars. 1,759,677; May 20.
Winkley, Erastus E., Lynn, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Leveling machine. 1,758,992; May 20.
Winters, Russell A., Chicago, Ill. Sadiron holder. 1,759,214; May 20.
Winthrop Chemical Company. (See Dobmaier, Karl, assignor.)
Wireless Specialty Apparatus Company. (See Pickard, Greenleaf W., assignor.)
Wishart, William, assignor to Climax Engineer Company, Clinton, Iowa. Stuffing-box packing. 1,759,029; May 20.
Witham, George S., jr., Hudson Falls, N. Y. Pulping machine. 1,759,385; May 20.
Wolf, Charles E., and A. Agli, Hackensack, N. J. Sample book. 1,759,079; May 20.
Wolff, Irving, New York, N. Y., assignor to Radio Corporation of America. Sound reproducer. 1,758,993; May 20.
Wolkoff, John, Newark, N. J. Power-transmitting device. 1,759,335; May 20.
Wolik, Joseph S., New York, N. Y. Life-saving swimming belt. 1,759,336; May 20.
Wolik, Joseph S., New York, N. Y. Swimmer's life-saving belt. 1,759,637; May 20.
Wonder Weave, Inc. (See Wells, William S., assignor.)
Wright, Edward A., Fresno, Calif. Vehicle top. 1,759,250; May 20.
Wright, M. S. Company. (See Gleason, Clifford J., assignor.)
Wulle, William A., assignor to The Pyle-National Company, Chicago, Ill. Classification lamp. 1,759,030; May 20.
Yager Sheet Metal Company. (See Irvin, William C., assignor.)
Yates, Horace C., and F. L. Hann, Mount Vernon, Iowa. Adhesive-tape dispenser. 1,759,599; May 20.
Yeomans, Lucien I., assignor to Lucien I. Yeomans, Incorporated, Chicago, Ill. Conveyer. 1,758,994; May 20.
Yeomans, Lucien I., Incorporated. (See Yeomans, Lucien I., assignor.)
Yohe, Perry P., and W. Christie, Windom, Minn., assignor to Koehring Company, Milwaukee, Wis. Timing device. 1,759,638; May 20.
Young, Arthur P., and J. Hutt, deceased; C. E. Hutt, Kenilworth, England, executrix, assignors to General Electric Company. Sound-reproducing device. 1,759,725; May 20.
Young, David H., assignor to Westcott Hosiery Mills, Dalton, Ga. Knitted fabric. 1,759,561; May 20.
Youngblodt, William F., Denver, Colo. Radio program reminder. 1,759,080; May 20.
Youngblood, David F., San Antonio, Tex. Combination lavatory and toilet seat. Des. 81,217; May 20.
Zademach, Erich R., Elizabeth, N. J., assignor, by mesne assignments, to Hobart Manufacturing Company, Troy, Ohio. Washing machine. Re17,673; May 20.
Zavertnik, Joseph, jr. (See MacCubbin, A. A., and Zavertnik.)
Zeh, Ludwig. (See Kramer, E., Bollweg, and Zeh.)
Zeiss Ikon A-G. (See Hartinger, Hans, assignor.)
Zigenheim, Conrad, Hamilton, Ontario, Canada. Portable boring tool. 1,759,726; May 20.
Zorbaugh, Josephine L. (See Adamson, Charles E., assignor.)
Zublin, John A., Los Angeles, Calif. Twist-off preventer. 1,759,337; May 20.

ALPHABETICAL LIST OF INVENTIONS

FOR WHICH

PATENTS WERE ISSUED ON THE 20TH DAY OF MAY, 1930

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). **Includes patents, reissues, and designs.**

Abrasive article and making the same. F. G. Okie. 1,759,168; May 20.
Absorption process. C. D. Coulter. 1,759,340; May 20.
Accelerator-regulating device, Auto. F. H. Kampman. 1,759,355; May 20.
Accordions and the like, Bass strap for. E. and A. Galizi. 1,759,611; May 20.
Acids, Derivative of alkoxy-fatty. R. H. Van Schaack, jr. 1,759,331; May 20.
Acoustic diaphragm. W. A. Scheuch. 1,759,632; May 20.
Acoustic diaphragm and its manufacture. C. Bateholts. 1,759,387; May 20.
Acyl-amino-dibenzanthrones and products resulting therefrom by treatment with alkylating agents. P. Nawiasky. 1,759,272; May 20.
Adjuster for osteopathic use. E. E. Loose. 1,759,514; May 20.
Advertising device. C. E. Howard. 1,759,789; May 20.
Aeroplane. J. Hlavacek. 1,759,698; May 20.
Aeroplane. J. G. Lyons. 1,759,164; May 20.
Aeroplane propeller. C. E. Smith. 1,759,468; May 20.
After-hour depository. O. B. McClintock and E. G. Lawrence. 1,759,129; May 20.
Air bags in tires, Device for inserting. W. H. Bines and W. A. Corlett. 1,759,681; May 20.
Aircraft signal. J. P. Buckley and A. E. Nesbit. 1,758,927; May 20.
Airplane. F. Bauer. 1,759,032; May 20.
Air purifier and cooler. F. T. Bogard. 1,758,997; May 20.
Air-reserve tank. H. C. Ritter. 1,759,278; May 20.
Alcohol, Making. F. E. Lichtenthaeler. 1,759,122; May 20.
Alkaline waters or brines to obtain therefrom commercially-useful substances, Treating natural. J. G. Miller and A. C. Houghton. 1,759,361; May 20.
Alloy and forming the same, Metal. J. J. Olsen. 1,759,169; May 20.
Alloy of high surface stability comprising nickel and silicon. P. A. E. Armstrong and R. P. De Vries. 1,759,477; May 20.
Amplification system. S. Cohen. 1,759,094; May 20.
Amplifier, Acoustic. H. E. Hall. 1,759,614; May 20.
Amusement device. J. A. Sherry. 1,759,170; May 20.
Anchor, Bolt. H. J. Blakeslee. 1,758,924; May 20.
Anchor, Rail. M. Bruno. 1,759,499; May 20.
Anchor-rod clamp. H. E. Heim. 1,758,948; May 20.
Animal figure. A. Klein. Des. 81,198; May 20.
Animal matter, Treatment of. D. Thomson. 1,758,987; May 20.
Animal meats for the market, Preparing. P. C. Smith. 1,759,286; May 20.
Animal trap. D. L. Z. Fisher. 1,759,048; May 20.
Animal trap. A. E. Kness. 1,758,952; May 20.
Antenna, Transposed and tapered. A. G. Chapman. 1,758,933; May 20.
Apron. A. H. Straus. 1,759,423; May 20.
Apron drier. A. W. Caps. 1,759,092; May 20.
Arch structure. B. Dobie. 1,759,102; May 20.
Articles, Method of and apparatus for coating. J. S. George and R. S. Sperry. 1,759,502; May 20.
Articles with liquid, Apparatus for treating. C. C. Jessen. 1,759,646; May 20.
Automobile brake. H. D. Tappan. 1,759,377; May 20.
Awning. C. P. Foch. 1,758,939; May 20.
Awning bracket. E. H. Schane. 1,759,715; May 20.
Balance. W. C. Seyter. 1,759,139; May 20.
Baling press. V. H. Pohjonen. 1,758,970; May 20.
Ball-game apparatus. F. N. J. Ohlson. 1,759,802; May 20.
Band-folding apparatus. J. R. Gammeter. 1,759,232; May 20.
Bar: *See*—
  Nigger bar.
Barrels and the like, Making metal. J. J. Cain. 1,758,929; May 20.
Battery-box press. J. A. Lindenborg. 1,759,703; May 20.
Battery eliminator. L. Hammond. 1,758,947; May 20.
Battery terminal connection, Storage-. N. L. Derby. 1,759,043; May 20.
Bearing. W. Noble. 1,759,412; May 20.
Bearing, Adjustable side. E. Seasholtz. 1,759,717; May 20.
Bearing-aligning method, Thrust-. M. E. Layne. 1,759,284; May 20.
Bearing, Antifriction. J. F. O'Connor. 1,758,965; May 20.
Belt, Life-saving swimming. J. S. Wolik. 1,759,336; May 20.
Bending machine. W. C. Irvin. 1,759,053; May 20.
Binding device for flexible linear connections. L. W. Rosen. 1,758,978; May 20.

Blade for rotary blowers and compressors. W. Van Rijswijk. 1,759,027; May 20.
Bleaching. G. Baum. 1,759,341; May 20.
Blind for bridles. I. W. Brown. 1,759,296; May 20.
Blowpipe. C. Vuillaume. 1,759,769; May 20.
Board: *See*—
  Display board.
Body blanks to body makers, Mechanism for notching and feeding. J. E. Bratt and C. H. Boyd. 1,759,683; May 20.
Boiler: *See*—
  Mercury boiler.
Boilers, Hot-water feeding for. S. O. A. Fiedler. 1,759,107; May 20.
Book end. H. J. Duclos. Des. 81,183; May 20.
Book, Sample. C. E. Wolf and A. Agil. 1,759,079; May 20.
Boomerang-throwing device. D. V. Tantlinger. 1,759,471; May 20.
Boot, Lady's. F. J. Martin. 1,759,583; May 20.
Bottle. C. A. Petersen. Des. 81,202; May 20.
Bottle carrier. W. L. Burns. 1,758,928; May 20.
Bottle-washing machine. J. Hauk. 1,759,506; May 20.
Bottles, Feeder or teat for feeding. C. Fervers. 1,759,568; May 20.
Box: *See*—
  Mail box.
  Match box.
Box packing, Stuffing-. W. Wishart. 1,759,029; May 20.
Brace for an electric light fixture. B. Hasenstab. Des. 81,187–9; May 20.
Bracelet. E. Prestinari. Des. 81,203; May 20.
Bracket: *See*—
  Awning bracket.
  Shelf bracket.
Bracket for highway use and the like. J. Kinquist. 1,759,314; May 20.
Brake. *See*—
  Automobile brake.
Brake. E. L. McIntyre. 1,759,585; May 20.
Brake. R. S. Sanford. 1,759,420; May 20.
Brake tester. F. S. Rode. 1,759,714; May 20.
Brush. F. O. Anderson. 1,759,216; May 20.
Brush attachment. C. J. and R. M. Brooks. 1,759,091; May 20.
Brush-making machine. T. L. Stroud. 1,759,068; May 20.
Buckle. M. Belloch. 1,759,639; May 20.
Buckle. W. J. Morse. Des. 81,199; May 20.
Buckle or the like, Suspender. H. C. Valsey. Des. 81,214; May 20.
Bumper construction, Vehicle. J. C. Monteith. 1,759,201; May 20.
Bushing, Condenser. S. Rump. 1,759,419; May 20.
Cabinet. M. Nystrom. Des. 81,201; May 20.
Cabinet, Collar and necktie. L. F. Nelson. 1,759,202; May 20.
Cabinet, Combined phonograph and radio receiving. A. A. Thomas. 1,759,143; May 20.
Cabinet for the reception of dairy products. I. C. Weld. 1,759,723; May 20.
Cabling arrangement for telephone systems. M. J. Arndt. 1,758,919; May 20.
Can. H. Heitlage. 1,759,009; May 20.
Can opener. R. T. Chase. 1,759,345; May 20.
Can opener. R. M. Quigg. 1,759,364; May 20.
Candy-forming machine, Plastic. R. F. Morrison. 1,759,411; May 20.
Canning apparatus. W. E. Lacey. 1,759,357; May 20.
Canopy. G. Hopp. 1,759,117; May 20.
Car springs, Shock-absorbing shackled suspension for. E. Smogrovics. 1,759,633; May 20.
Car-unloading device. R. W. Patten, M. A. Vrabel, J. F. Gombar, and W. H. Bell. 1,759,757; May 20.
Car wheel. S. J. Barton. 1,759,083; May 20.
Carbon, Apparatus for producing active. J. N. A. Sauer. 1,759,138; May 20.
Carbon feed for arc lamps. L. A. Rosenhahn. 1,758,979; May 20.
Carburetor. A. Abrate. 1,759,498; May 20.
Carburetor. O. Baumgartner. 1,759,294; May 20.
Carburetor. H. O. Cram. 1,759,040; May 20.
Carburetor. W. J. Linn. 1,758,954; May 20.
Carburetor. E. H. Phillips. 1,759,758; May 20.
Carburetor. E. Seignol. 1,759,666; May 20.
Carburetor control. A. F. Jackson. 1,759,354; May 20.
Carrier: *See*—
  Bottle carrier.
  Suspended carrier.
  Hay carrier.
Carrier for disk wheels. C. F. Wasserfallen. 1,759,212; May 20.
Carton. R. C. Green. 1,759,613; May 20.
Carton. M. Hinkley. 1,759,455; May 20.

Carton, Display. T. L. Neumann. 1,759,203; May 20.
Carton, Egg. E. Schinscholl. 1,759,716; May 20.
Carton, Severable egg. H. McWilliams. 1,759,056; May 20.
Case: *See*—
  Cigarette case.
  Vanity case.
Cash register or similar machine. O. J. Sundstrand. 1,759,069; May 20.
Cellulose-ester compounds, Production of. A. S. McDaniel. 1,759,489; May 20.
Centrifugal extractor. J. P. Garey and L. B. Hasbrouck. 1,759,570; May 20.
Centrifugal separator. C. Schmitz. 1,759,522; May 20.
Chain, Bead. N. Marshall. 1,759,488; May 20.
Chain, Corn-sheller feed. W. F. Heimgartner. 1,759,309; May 20.
Chain, Nonskid. C. E. Grosch. 1,758,944; May 20.
Chain, Transmission. L. C. Black. 1,759,089; May 20.
Chair. F. Debski. Des. 81,181; May 20.
Charge for blasting caps. W. De C. Crater. 1,759,565; May 20.
Check writer. D. W. Johnson. 1,759,815; May 20.
Chicken feeder. C. Mosel. 1,759,320; May 20.
Chimney cleaner. W. P. Hunecke. 1,758,950; May 20.
Chute and deflector, Discharge. J. Daniel. 1,759,807; May 20.
Cigarette case. E. B. Hough. 1,759,576–7; May 20.
Cigarette-making machine. M. P. E. Hohn. 1,759,747; May 20.
Cigarette package C. A. Penn. 1,759,366; May 20.
Cinema apparatus. E. S. Rinaldy. 1,759,630; May 20.
Circuit controller, Fluid-operated. W. C. Buckbee. 1,759,537; May 20.
Circuit, Wave-transmission. H. Whittle and D. G. Grimley. 1,759,332; May 20.
Circuits for planers, Electric. R. C. Deale. 1,759,547; May 20.
Citrus product, Lactic. N. D. Nielsen. 1,759,706; May 20.
Citrus-production device. V. L. Gibson. 1,758,941; May 20.
Clamp: *See*—
  Anchor-rod clamp.
  Line clamp.
  Hood clamp.
Cleaner: *See*—
  Chimney cleaner.
  Porch cleaner.
Cleaning fluid and producing the same. B. B. Farrington. 1,759,155; May 20.
Cleansing composition. L. Gergele. 1,759,783; May 20.
Clearance-setting mechanism. G. A. De Vleg. 1,759,044; May 20.
Clock casing. M. Jauch. Des. 81,194; May 20.
Closure. J. S. Reid. 1,759,244; May 20.
Closure. Bayonet-joint. J. S. Reid. 1,759,243; May 20.
Closure for collapsible tubes. E. L. Pohl. 1,759,206; May 20.
Closure for containers, Dual-nozzle. C. J. Aulbach. 1,758,916; May 20.
Closure, Receptacle. F. J. O'Brien. 1,759,274; May 20.
Clothes-washing device. A. Hormel. 1,759,353; May 20.
Clutch and change-speed mechanism, Automatic. J. L. Servon. 1,759,665; May 20.
Clutch, Antireverse safety. D. T. Brownlee. 1,759,084; May 20.
Coat. M. Werber. Des. 81,216; May 20.
Coated material, Method and apparatus for treating. V. H. Wilshire. 1,759,600; May 20.
Cock, Safety gas. C. Carmosin. 1,759,433; May 20.
Cock, Shut-off. H. J. Carson. 1,759,221; May 20.
Collapsible table. A. McGall. 1,759,199; May 20.
Combustion motor, Multicylinder. J. Brons. 1,759,776; May 20.
Combustion power engine. F. Lang. 1,759,160; May 20.
Commutator-assembly apparatus. L. T. Frederick. 1,759,500; May 20.
Commutator-assembly mechanism. L. T. Frederick. 1,759,501; May 20.
Compressor engine, Internal-combustion. D. M. Bell. 1,759,342; May 20.
Compressor, Gas. A. Hoerbiger. 1,759,617; May 20.
Compressor valves and compressed fluids, Apparatus for cooling. I. L. Dunn and J. O. Lewis. 1,759,301; May 20.
Compressors of the piston type, Cooling of. A. Huguenin. 1,759,748; May 20.
Condenser, Acoustic. P. E. Edelman. 1,759,809; May 20.
Condenser, Electrical. G. W. Pickard. 1,758,968; May 20.
Condenser for automobile radiators. J. G. and G. L. Cluchey. 1,759,778; May 20.
Condenser, Gas. J. S. Haug. 1,759,453; May 20.
Condenser reproducer. P. E. Edelman. 1,759,810; May 20.
Condenser speaker, Push-pull. P. E. Edelman. 1,759,811; May 20.
Condenser, Variable. M. H. Bennett and W. Colina. 1,759,564; May 20.
Conductor actuating unit, Plural-. M. R. Hutchison, jr. 1,759,557; May 20.
Conduit outlet boxes, Adapter member for. J. T. Pearson and R. H. Olley. 1,759,365; May 20.
Connection, Ball-and-socket. D. Benjamin. 1,759,430; May 20.
Consumer packages, Preparing. C. Birdseye. 1,759,682; May 20.
Container. G. T. Voorhees. 1,759,176; May 20.
Container, Fibrous. L. C. Brooks. 1,758,917; May 20.
Container, Folding, packing, and display. A. J. Tanner. 1,759,470; May 20.

Container, Paper. H. P. Kingsbury. 1,759,407; May 20.
Control device. O. Edelmann. 1,759,046; May 20.
Control for concrete-mixing machines, Automatic. J. Daniel. 1,759,808; May 20.
Control-surface-operating mechanism. R. H. Depew, jr. 1,759,442; May 20.
Control system. G. E. Greenleaf and R. C. Deale. 1,759,551; May 20.
Control system, Motor-. W. J. Neustedter. 1,759,204; May 20.
Conveyer. C. N. Behinger. 1,759,085; May 20.
Conveyer. L. I. Yeomans. 1,758,994; May 20.
Conveyer for mixers. F. A. Davidson. 1,759,003; May 20.
Conveyer, Overhead. J. B. Webb. 1,759,213; May 20.
Conveyer, Shaking. K. Stroedter. 1,759,764; May 20.
Conveying device, Demountable. W. Polgar. 1,759,465; May 20.
Cooling apparatus. J. A. Granstedt. 1,759,306; May 20.
Cooling device, Milk-. W. C. Kelso. 1,759,578; May 20.
Cooling system, Air-. A. Holmström. 1,759,575; May 20.
Cooling tower. J. M. Seymour. 1,758,983; May 20.
Copper, Smelting. A. D. Wilkinson. 1,759,078; May 20.
Cord, Covered elastic. E. Weintraub. 1,759,496–7; May 20.
Core trap or retainer. J. G. Boswell. 1,759,775; May 20.
Coring and peeling device. G. A. Carlson. 1,759,539; May 20.
Cork and the resulting product thereof, Forming products from. W. F. Grupe. 1,758,946; May 20.
Corn popper. T. S. Walker. 1,759,475; May 20.
Cosmetic appliance. F. B. Gordon. 1,759,451; May 20.
Cotton, Apparatus for carding. A. W. Arnold. 1,759,563; May 20.
Cotton picker. H. N. Berry. 1,759,086; May 20.
Coupling: *See*—
  Pneumatic coupling.
Coupling. R. C. Allen. 1,759,338; May 20.
Cover, Suspended. V. Pellegrino. 1,759,628; May 20.
Crane, Portable. W. Jobes. 1,759,406; May 20.
Crank arms and crank pins, Resizing. J. Kindervater. 1,759,233; May 20.
Crate for use in weighting fabrics. E. J. Maskery. 1,758,956; May 20.
Crossing gate, Automatic railroad-. V. Galizia. 1,759,742; May 20.
Culvert, Drainage. P. Van Horne. 1,759,330; May 20.
Cup: *See*—
  Grease cup.
Current pressure-splitting device, Direct-. A. Della Riccia. 1,759,759; May 20.
Current-rectifying system. W. H. Grimditch. 1,759,745; May 20.
Current supplied to audions, Eliminating effect of variations in. G. B. Crouse. 1,759,545; May 20.
Currents of audible frequencies, Amplifying electrical. W. V. B. Roberts. 1,759,631; May 20.
Cushion and mat, Bathtub. M. Fishman. 1,759,348; May 20.
Cut-off, Automatic. S. E. Murphy and C. L. Gallian. 1,759,798; May 20.
Cut-off mechanism for electric stills, Automatic. A. M. Berg. 1,758,922; May 20.
Cutter: *See*—
  Grass cutter.
  Paper cutter.
Cutter or bean puller, Vine. C. H. Fowler. 1,759,741; May 20.
Cutting machine for pattern binding, Miter-. H. J., J. H., and A. W. Sutherland. 1,759,025; May 20.
Cutting mechanism. W. E. Molins. 1,759,018; May 20.
Cylinder, Printing-press. G. L. Fulk. 1,759,192; May 20.
Desk table. E. D. Weldon. 1,759,178; May 20.
Detonating toy. H. Morris. 1,759,756; May 20.
Developing apparatus. A. Langsner. 1,759,483–4; May 20.
Dial-lighting device for automatic telephones. F. L. Peyton. 1,759,205; May 20.
Die for laying wire rope and wire-rope strands. J. E. Evans. 1,759,105; May 20.
Dies, Apparatus for polishing. F. Krause. 1,758,953; May 20.
Dies, Lapping. W. Haddow. 1,759,112; May 20.
Disconnecting hook. F. Margeson. 1,759,127; May 20.
Dispenser, Adhesive-tape. H. C. Yates and F. L. Hann. 1,759,599; May 20.
Dispensing apparatus, Liquid-. C. M. Cordley. Des. 81,178; May 20.
Dispensing device. E. Carns. 1,758,999; May 20.
Display board. E. E. Leu. 1,759,486; May 20.
Display device. T. F. Moore. 1,759,519; May 20.
Display insert. A. Fishman. 1,759,189; May 20.
Display rack. F. W. Teachout. 1,759,721; May 20.
Display stand. L. A. Danco. Des. 81,180; May 20.
Display stand. C. P. Rice. 1,758,976; May 20.
Distillation, Process of and apparatus for destructive. R. H. Crozier. 1,759,821; May 20.
Doll. H. S. Hopkins. Des. 81,191; May 20.
Door-cleaning apparatus. J. McIntosh. 1,759,014; May 20.
Door closer, Pneumatic. H. J. Lebherz. 1,759,649; May 20.
Door mechanism for railway cars. W. E. Wine. 1,759,677; May 20.
Door or gate operating mechanism. J. O. Barrett. 1,759,293; May 20.

Door, Vehicle. G. E. Grimm. 1,759,193; May 20.
Dot-filling retainer. L. E. Monroe. 1,759,518; May 20.
Double-screw jack. A. L. Johnson. 1,759,621; May 20.
Dough-kneading machine. R. Sartor. 1,759,137; May 20.
Dough, Mixing. J. M. Van Houten. 1,759,289; May 20.
Dough-mixing apparatus. J. M. Van Houten. 1,759,290; May 20.
Dredging system, Hydraulic. A. Neveling. 1,759,490; May 20.
Drier: *See*—
Apron drier. Lumber drier.
Garment drier.
Drier. L. G. Merritt. 1,759,130; May 20.
Drill-head adapter plate. H. W. Bockhoff. 1,759,388; May 20.
Drill, Manufacturing forged percussion masonry twist. H. W. Pleister and J. Karitzky. 1,759,416; May 20.
Driving mechanism for intermittently-rotating shafts. C. L. Bach. 1,759,535; May 20.
Drying apparatus, Laundry. J. J. Hegarty. 1,759,113; May 20.
Duplicating device. J. D. McLeod. 1,759,795; May 20.
Duplicating machines, Paper-stop device for. W. K. Moll. 1,759,200; May 20.
Dust, Apparatus for separating and collecting. J. Whitmore. 1,759,382; May 20.
Dyeing acetate silk. R. S. Horsfall, L. G. Lawrie, and J. A. R. Henderson. 1,759,010; May 20.
Dyeing apparatus. H. E. Van Ness. 1,759,144–5; May 20.
Dyeings on the fiber, Preparing. W. Heutrich, M. Hardtmann, and E. Tietze. 1,759,258; May 20.
Dyes to textile fibers, Application of vat. A. R. Thompson, jr. 1,759,071; May 20.
Dyestuffs and preparing them, Azo. E. Hoffa and F. Müller. 1,759,259; May 20.
Dyestuffs, Manufacture of. P. Nawiasky and A. Kraüse. 1,759,273; May 20.
Dyestuffs, Manufacturing sulphur. G. Kalischer and H. Ritter. 1,759,261; May 20.
Dyestuffs of anthracene series containing nitrogen and preparing same, Vat. K. Wilke and J. Stock. 1,759,249; May 20.
Dyestuffs, Sulphur. E. Kramer, B. Bollweg, and L. Zeh. 1,759,264; May 20.
Educational device for interchangeable topics. L. E. Myers. 1,729,241; May 20.
Egg separator. H. Kramer. 1,759,512; May 20.
Eggs from fish hatcheries, Device for removing. J. Berger. 1,759,729; May 20.
Elastic tension device. L. Spino and J. Nicoletta. 1,759,719; May 20.
Electric cooking appliance. A. and M. Bersted. 1,759,431; May 20.
Electric currents, Separating undesired from desired. E. G. Gage. 1,758,940; May 20.
Electric machine, Totally inclosed and ventilated. H. Periesz. 1,759,415; May 20.
Electric outlet device. H. E. Slade. 1,759,595; May 20.
Electrical apparatus. J. R. Fehr. 1,759,106; May 20.
Electrical protective device. A. H. Schirmer. 1,759,023; May 20.
Electrical structure. W. Dubilier. 1,759,230; May 20.
Electrical testing system. J. B. Murphy. 1,759,019; May 20.
Electrolysis. U. C. Tainton. 1,759,493; May 20.
End gate. C. A. Persinger. 1,759,323; May 20.
Engine: *See*—
Combustion power engine. Internal-combustion engine.
Engine with fuel injection, Oil. F. Lang. 1,759,161; May 20.
Engine with fuel injection, Oil. F. Lang. 1,759,163; May 20.
Engines of the high-pressure type, Process and apparatus for regulating multistage steam. O. H. Hartmann and F. Wempe. 1,759,452; May 20.
Excavator, Slackline. J. H. Street. 1,759,525; May 20.
Extensometer. G. H. Bowins. 1,759,219; May 20.
Extractor: *See*—
Centrifugal extractor.
Extractor and mixer, Combined juice. C. Ringwald. 1,759,760; May 20.
Fabric: *See*—
Knitted fabric. Mesh fabric.
Fabrics, Apparatus for making multiple-ply. W. C. Stevens. 1,759,668; May 20.
Fare token. M. R. Boylan. Des. 81,175; May 20.
Fastener, Separable. W. I. Jones. 1,759,560; May 20.
Fastener, Snap. D. I. Reiter. 1,759,418; May 20.
Fasteners for receptacles, Securing means for hookless. C. A. Schmidt. 1,759,283; May 20.
Feed mechanism. C. F. Osgood. 1,759,021; May 20.
Fence gate, Automatically-operated. F. G. Rose and J. H. Murray. 1,759,207; May 20.
Fender construction for vehicles. B. Lund. 1,759,793; May 20.
Film winder. C. Selbach. 1,759,024; May 20.
Films, Device for projecting. W. J. Citron. 1,759,391; May 20.
Filter. C. B. Lancaster. 1,759,013; May 20.
Filter and connections therefor, Airway dust. D. B. Replogle. 1,759,276; May 20.
Firearm, Automatic. B.-A. Revelli. 1,759,277; May 20.
Fireplace. J. G. Johnson. Des. 81,195–6; May 20.
Fireplace screen. E. Hutchinson, jr. 1,759,619; May 20.
Fishing reel. S. G. Russell and R. R. Potter. 1,759,065; May 20.
Flash light. C. K. Bryce and H. W. Jones. 1,758,918; May 20.
Float for fishlines, Electrical. W. L. West. 1,759,381; May 20.
Float switch. G. R. Gerlach and H. R. Arenton. 1,759,503; May 20.
Floor polisher. J. F. Carson. 1,759,781; May 20.
Fluid, System and means of elevating. J. H. Slocum. 1,759,467; May 20.
Fluids, Nebulization of. C. L. Riley. 1,759,629; May 20.
Flush tank. W. H. Schulte. 1,759,492; May 20.
Folding machine. G. L. Fulk. 1,759,191; May 20.
Foodstuffs, Apparatus for treatment of. F. C. Beardslee. 1,759,680; May 20.
Foodstuffs, Process and system of apparatus for desiccating. A. W. Koon. 1,759,702; May 20.
Footwear, Forming back heel seams for. B. H. Herbster. 1,759,643; May 20.
Frame: *See*—
Locomotive frame. Picture frame.
Frame-cleaning apparatus, Door-. J. McIntosh. 1,759,015; May 20.
Frame of a chair or settee. C. W. Jones. Des. 81,197; May 20.
Frequency changer. W. T. Powell. 1,758,971; May 20.
Fruit, Preserving citrus. P. Phillips. 1,759,464; May 20.
Fuel, Apparatus for burning pulverized. V. Z. Caracristi. 1,759,038; May 20.
Furnace-arch construction. B. Dobie. 1,759,045; May 20.
Furniture, Adjustable. W. F. Rossiter. 1,758,980; May 20.
Furniture, Built-in. W. A. Noack. 1,759,800; May 20.
Galvanized articles, Method and apparatus for treating hot. C. A. Giblin. 1,759,450; May 20.
Garden implement. F. M. Dunn. 1,759,607; May 20.
Garment drier. J. Wiesman. 1,759,179; May 20.
Garment hanger. O. B. Carter. 1,758,932; May 20.
Gas anchor and sand separator. W. J. Dunlap. 1,759,004; May 20.
Gas and liquid contact apparatus. M. H. Kotzebue. 1,759,750; May 20.
Gas from hydrogen sulphide with production of zinc sulphide, Purifying. A. F. Kunberger. 1,759,408; May 20.
Gas, Making producer. R. L. Willis. 1,758,991; May 20.
Gas-metering system. J. T. Wilkin and C. R. Houghton. 1,759,384; May 20.
Gas purifier. Z. W. Wicks. 1,759,819; May 20.
Gate: *See*—
Crossing gate. Fence gate.
End gate.
Gauge: *See*—
Liquid-level gauge. Tank gauge.
Gauge for boilers, Liquid-level. E. Thomson. 1,759,767; May 20.
Gear, Retractable landing. G. Loening. 1,759,197; May 20.
Gear, Retractable landing. G. Loening. 1,759,652; May 20.
Gear set. P. C. Day. 1,759,689; May 20.
Gear, Steam-valve. J. Helenberg. 1,759,399; May 20.
Gear, Valve. J. S. Keen. 1,759,701; May 20.
Gear, Variable-speed. W. Jacobs. 1,759,558; May 20.
Gears, Forming. E. Wildhaber. 1,759,333; May 20.
Generator-cover band. W. F. Bouché and E. H. Blattner. 1,759,035; May 20.
Girder. J. C. Meem. 1,759,057; May 20.
Glass apparatus, Sheet-. L. Mambourg. 1,759,235–6; May 20.
Glass coolers, Operating sheet-. J. L. Drake. 1,759,226–7; May 20.
Glass feeder. L. D. Soubier. 1,759,209; May 20.
Glass, Method and apparatus for drawing sheet. J. L. Drake. 1,759,229; May 20.
Glass-polishing pads, Apparatus for cleaning. H. M. Black. 1,759,820; May 20.
Glass, Process and apparatus for producing molten. J. L. Drake. 1,759,228; May 20.
Glassware, Apparatus for handling. G. E. Howard. Re17,669; May 20.
Globular articles, Apparatus for sizing. B. C. Skinner. 1,759,067; May 20.
Glue in small pieces in the shape of granules or drops with a coating of a powder as well as glue manufactured according to said method, Method to provide. G. Eckerbom. 1,759,737; May 20.
Golf clubs, Attachment for. J. J. Kenney. 1,759,622; May 20.
Golf-practice apparatus or game. F. O. Fish. 1,759,156; May 20.
Golf tee. W. H. McLeod. 1,759,657; May 20.
Goods from shelves, Device for lifting. I. W. Smith. 1,759,524; May 20.
Governor for fluid-pressure motors. H. L. Cook. 1,759,641; May 20.
Grader, One-man road. L. T. Kincannon. 1,759,647; May 20.
Grass cutter. D. Forsberg. 1,759,569; May 20.
Grate for oil and gas stoves. L. T. Wilcox. 1,759,148; May 20.
Grating structure. H. Nagin. 1,759,271; May 20.
Grease cup. H. B. Spencer and W. R. Smith. 1,759,211; May 20.
Grease gun. W. A. Chapman. 1,759,298; May 20.
Grinder. E. H. Frickey. 1,759,448; May 20.
Grinder and disintegrator. E. W. Schultz and F. D. Banham. 1,759,245; May 20.

Grinder, Drill. T. A. Jackson. 1,759,196; May 20.
Grip tester. W. K. Edwards. 1,759,394; May 20.
Gripper for box-strapping mechanism. L. M. Harvey. 1,759,257; May 20.
Gripping device. C. Powell. 1,759,275; May 20.
Gun-discharging means. D. N. Mink. 1,759,132; May 20.
Hair waving and curling, Device for use in. A. Craig. 1,759,097; May 20.
Handle: *See*—
Mop handle.
Hanger: *See*—
Garment hanger.
Harness-frame-leveling mechanism. H. W. Thatcher. 1,759,673; May 20.
Harness, Galting. H. R. Smalley. 1,759,172; May 20.
Harvester. H. F. Kniep and A. List. 1,759,263; May 20.
Hay carrier. H. J. Ferris. 1,759,549; May 20.
Head guard. J. Erario. 1,759,738; May 20.
Headlight. G. W. Stitzer. 1,759,720; May 20.
Heat distributor. C. Cherry and G. A. Froggatt. 1,759,001; May 20.
Heat-exchange apparatus. G. D. Mantle. 1,759,656; May 20.
Heat exchanger. G. H. Lifur. 1,759,360; May 20.
Heat exchanger. W. Lonsdale. 1,759,582; May 20.
Heat-exchanging apparatus. R. G. Gundersen and A. Struthers. 1,759,351; May 20.
Heat interchanger. R. G. Mansfield. 1,759,126; May 20.
Heat regulator, Oven-. E. L. Claus. 1,759,222; May 20.
Heat treatment. R. E. Bissell. 1,759,603; May 20.
Heater: *See*—
Water heater.
Heating device. K. H. Bowen. 1,759,389; May 20.
Heating system, Steam-. F. H. Montreuil. 1,759,586; May 20.
Heel-cover-trimming machine. L. J. Bazzoni. 1,759,150; May 20.
Heel, Spring. J. Weinberg. 1,759,379; May 20.
High-tension lines, Testing and starting. K. Baudisch. 1,758,996; May 20.
Hinge. R. N. McClure. 1,759,237; May 20.
Hinge for ice-box doors, Spring. L. J. Volquardsen. 1,759,474; May 20.
Hinge for jewelry. G. Candas. 1,758,931; May 20.
Hinge for toilet seats. J. W. Bishop. 1,758,923; May 20.
Hoisting apparatus. J. S. Barclay. 1,759,292; May 20.
Hoisting apparatus, Building-material-. A. C. Rasmussen. 1,759,324; May 20.
Holder, Adjustable floating tool. J. E. Daniels. 1,759,101; May 20.
Holder and bushing ejector, Valve. L. Vaught. 1,759,175; May 20.
Holder, Can. F. J. Moravek. 1,759,797; May 20.
Holder, Check-stub. C. E. Ebersol and R. Grieve. 1,759,103; May 20.
Holder, Cop. E. A. De Wolf. 1,759,392; May 20.
Holder, Crib sheet. C. H. Loeb. 1,759,487; May 20.
Holder, Cutting-torch. J. Temple. 1,759,288; May 20.
Holder, Egg. M. Hart. 1,759,398; May 20.
Holder, Map. C. W. Croes. 1,759,544; May 20.
Holder or the like, Ribbon-spool. O. Vogl. Des. 81,215; May 20.
Holder, Price-tag or sign. L. Fontannaz. 1,759,781; May 20.
Holder, Sadiron. R. A. Winters. 1,759,214; May 20.
Hood clamp, Automobile. W. Turnwald. 1,758,988; May 20.
Hook: *See*—
Disconnecting hook.
Hook. A. E. Conrath. 1,758,934; May 20.
Horn, Electromagnetic. F. F. Dorsey. 1,759,443; May 20.
Hose fittings, Attachment of. B. Dick and A. Brunner. 1,759,224; May 20.
Hosiery. R. Friedrich. Des. 81,185; May 20.
Hydraulic jack. H. C. Miller and E. H. Dainton. 1,759,517; May 20.
Hydraulic jack. H. C. Miller and G. P. Sumner. 1,759,516; May 20.
Hydrocarbon compounds, Purifying. T. T. Gray. 1,759,812; May 20.
Hydrocarbons, Decolorization of. I. C. Carpenter and A. R. Moorman. 1,759,343; May 20.
Hydrocarbons including hydrocarbon derivatives, Treating. J. H. James. 1,759,620; May 20.
Hydrocarbons, Process and apparatus for treating. T. T. Gray. 1,759,813; May 20.
Hydrocarbons, Purifying. J. C. Black and J. R. McConnell. 1,759,730; May 20.
Hydrocarbons, Refining of. T. T. Gray. 1,759,814; May 20.
Ice retainer for water pitchers. F. Pelletier. 1,759,588; May 20.
Ignition apparatus. W. A. Chryst. 1,759,436; May 20.
Ignition apparatus. H. E. Norviel. 1,759,461; May 20.
Ignition coil and lock switch. H. E. Norviel. 1,759,462; May 20.
Ignition system. J. L. Arthur. 1,759,428; May 20.
Ignition system. W. A. Chryst. 1,759,435; May 20.
Images of plastic appearance, Arrangement for producing immovable or movable projected. F. Feldner. 1,758,938; May 20.
Incinerator. F. O. De Carle. 1,759,042; May 20.
Incubator. A. Nickerl. 1,759,799; May 20.
Indicating device. B. G. Bjornson. 1,759,604; May 20.
Indicator: *See*—
Liquid-level indicator. Warping-machine indicator.
Inky surfaces, Method and article for wiping. F. T. Parsons, jr. 1,759,520; May 20.
Inner tube, Punctureproof pneumatic. W. J. Aschenbach. 1,759,602; May 20.
Insect catcher. E. M. Lennox. 1,759,359; May 20.
Insect destroying device. L. McA. Goodwin. 1,759,693; May 20.
Instrument illuminator. H. W. Smith. 1,759,469; May 20.
Insulator. R. C. Gerhardt. 1,759,253; May 20.
Insulator, Rotary. A. Alsaker. 1,759,149; May 20.
Internal-combustion engine. S. Suekoff. 1,759,425; May 20.
Internal-combustion engine. J. G. Vincent. 1,759,147; May 20.
Internal-combustion engine, Rotary. J. D. Winans. 1,759,028; May 20.
Iron carbonyl, Manufacture of. A. Mittasch and C. Müller. 1,759,268; May 20.
Iron, Manufacture of pure. A. Mittasch, C. Müller, and E. Linckh. 1,759,658; May 20.
Iron, Manufacture of pure. A. Mittasch, C. Müller, and W. Schubardt. 1,759,659; May 20.
Iron or steel, Treatment of. K. B. Thews and J. S. Carlitz. 1,759,634–5; May 20.
Iron ores in a direct way, Working up. P. H. Ledeboer. 1,759,753. May 20.
Iron, Production of pure. A. Mittasch, C. Müller, and E. Linckh. 1,759,660. May 20.
Iron refining. G. S. Evans. 1,759,347; May 20.
Jack: *See*—
Double-screw jack. Lifting jack.
Hydraulic jack.
Jar. S. Ross. Des. 81,207; May 20.
Joint for electrical conductors, Slide. A. B. Dibner. 1,759,567; May 20.
Joint, pipe, and its manufacture, Rigid. F. Figari. 1,759,780; May 20.
Ketonic compound and preparing it, Cyclic. H. Greune. 1,759,111; May 20.
Kit, Printing. L. Melind. 1,759,016; May 20.
Knitted fabric. M. Schreiber. Des. 81,208–9; May 20.
Knitted fabric. D. H. Young. 1,759,561; May 20.
Knitting machine, Circular-. P. A. Bentley. 1,759,295; May 20.
Knob-attaching device. O. B. Willi. 1,759,771; May 20.
Knob for furniture. A. L. Birdsall. 1,759,087; May 20.
Label. G. F. Stanley. Des. 81,213; May 20.
Lactobacteria product. G. H. Earp-Thomas. 1,758,937; May 20.
Ladder, Floating-lap. P. Pirsch. 1,758,969; May 20.
Lamp. P. Cricchio. Des. 81,179; May 20.
Lamp. F. W. Roettges. Des. 81,205–6; May 20.
Lamp, Classification. W. A. Wulle. 1,759,030; May 20.
Lamp, Hand. R. R. Smith. 1,759,246; May 20.
Lamp-socket casing. H. E. Slade. 1,759,422; May 20.
Latch, Shade-roller. C. Mendler. 1,758,961; May 20.
Lather-forming device. R. H. Wager. 1,759,248; May 20.
Lavatory and toilet seat, Combination. D. F. Youngblood. Des. 81,217; May 20.
Lawn sprinkler. W. H. Coles. 1,759,439; May 20.
Lead and other metals from ores or other lead-bearing materials, Recovery of. U. C. Tainton. 1,759,494; May 20.
Leer. J. Mayo. 1,759,624; May 20.
Leer roll. W. F. Brown. 1,759,220; May 20.
Leveling machine. E. E. Winkley. 1,758,992; May 20.
Life-saving belt, Swimmer's. J. S. Wollk. 1,759,637; May 20.
Lifting device. E. G. Livesay. 1,759,651; May 20.
Lifting jack. L. C. Stukenborg. 1,759,670; May 20.
Light: *See*—
Flash light.
Light fixture. H. J. Bosworth. 1,758,925; May 20.
Light for motor vehicles. C. V. and I. J. Chuprin. 1,759,299; May 20.
Lighter. L. V. Aronson. 1,759,340; May 20.
Lighting fixture or article of similar nature H. Bohl. Des. 81,174; May 20.
Line clamp. A. L. Le Page. 1,759,485; May 20.
Linking machine. A. L. N. Fleming. 1,759,822–3; May 20.
Liquid distributor. H. Feldmeier and C. B. Dalzell. 1,759,231; May 20.
Liquid-level gauge. D. H. Reeves. 1,758,975; May 20.
Liquid-level indicator. E. A. Rockwell. 1,759,806; May 20.
Liquid-treating apparatus, Portable. A. Jensen. 1,759,405; May 20.
Liquids, Apparatus for heating and cooling. F. G. Cornell, jr. 1,759,440; May 20.
Lithopones, Manufacture of. W. C. Hooey. 1,759,115–16; May 20.
Loader agitator for concrete-mixing machines. G. Jaeger. Re17,670; May 20.
Loading machine. J. F. Thomson. 1,759,072; May 20.
Lock: *See*—
Switch lock.
Lock. J. R. Hogan. 1,759,401–2; May 20.
Lock for loose-leaf binders. P. O. Unger. 1,759,426; May 20.

Locking means for hookless fasteners for receptacles. C. A. Schmidt. 1,759,284; May 20.
Locomotive center plate. H. K. Harwick. 1,759,695; May 20.
Locomotive frame. C. W. Werst. 1,759,675; May 20.
Loom for weaving carpets and like fabrics. E. J. Perry. 1,759,322; May 20.
Loom for weaving carpets and like tufted-pile fabrics. T. W. Head and E. J. Perry. 1,759,308; May 20.
Loom, Needle. W. S. Wells. 1,759,532; May 20.
Loom-shedding mechanism. W. S. Wells. 1,759,530; May 20.
Looms, Harness-controlling mechanism for. A. Edelstein and G. Kis. 1,759,047; May 20.
Looms, Let-off mechanism for. W. S. Wells. 1,759,531; May 20.
Loud-speaker. M. R. Hutchison. 1,759,556; May 20.
Loud-speaker envelope. R. H. Guidman. 1,759,785; May 20.
Lubricating system. C. A. Bacon. 1,759,429; May 20. May 20.
Lubrication system, Sleeve-valve-. J. R. Mares. 1,759,198; May 20.
Lubricator. R. C. Osgood. 1,759,463; May 20.
Lumber drier. B. S. Harrison. 1,759,195; May 20.
Machine for applying transfer stamps to fabric. C. G. Richardson. 1,759,712; May 20.
Machine for forming fish cakes and the like. I. Gottlieb and S. J. T. Stout. 1,758,942; May 20.
Machine for forming hollow glassware. L. D. Soubier. 1,759,210; May 20.
Machine for making tire patches. P. E. Hawkinson. 1,759,507; May 20.
Machine for shaping wooden blocks. W. Hubbard. 1,759,118; May 20.
Machine for trimming sole margins. P. J. Wentworth 1,759,380; May 20.
Machine shafts, Liquid-sealed gland for. W. Van Rijswijk. 1,759,074; May 20.
Magnet, Road. W. M. Carter. 1,759,687; May 20.
Magnetic bodies, Producing. F. J. Given, R. M. C. Greenidge, and J. R. Weeks, jr. 1,759,612; May 20.
Mail box. P. Stay. 1,759,667; May 20.
Marine vessel, Oil-carrying. W. Reed-Hill. 1,759,644; May 20.
Masonry construction, Element for. K. H. Tengstedt. 1,759,070; May 20.
Massage device. C. Miller. 1,758,962; May 20.
Match box. B. Kovács. 1,759,751; May 20.
Measuring short intervals of time. W. Kunze. 1,759,648; May 20.
Medicinal preparation. W. A. Bender and H. G. Loesch. 1,759,182; May 20.
Mercury boiler. A. J. Nerad. 1,759,133; May 20.
Mesh fabric, Triangular. N. S. Harter. 1,759,256; May 20.
Metal adapter, Sheet-. H. E. Brunner and R. F. Runge. 1,759,640; May 20.
Metal-hardening process. G. A. Fleckenstein, E. M. Hanf, and M. L. Waterman. 1,759,690; May 20.
Metal or other fluent or semifluent material, Apparatus for casting molten. F. C. Morrison. 1,759,269; May 20.
Metal rolling. R. S. A. Dougherty and N. Greenwell. 1,759,481; May 20.
Metallic surfaces, Removing incrustation formed on. R. Seligman. 1,759,762; May 20.
Metallic tie and alignment lug therefor. J. J. Ross. 1,759,135; May 20.
Metals as oxides and operating the same, Blast furnace for reduction and recovery of volatilizable. W. Job. 1,759,559; May 20.
Metals from metal carbonyls, Finely-divided. C. Müller and W. Schubardt. 1,759,661; May 20.
Metals, Material for the low-temperature soldering of. J. A. Rognon. 1,759,279; May 20.
Meter and making same, Flow. M. Morrison. 1,759,239; May 20.
Meter for lubricant-dispensing apparatus. S. Duvall. 1,759,302; May 20.
Meter mechanism, Electric-. R. Pudelko. 1,759,401; May 20.
Meter service installation, Electric-. J. Sachs. 1,758,981; May 20.
Mill: *See*—
Rolling mill.
Milliner's shears. N. O. Henault. 1,759,553; May 20.
Modulator for heating systems. M. F. Hutchison. 1,759,310; May 20.
Molding machine. R. Bachon. 1,759,728; May 20.
Molding machine. E. O. Beardsley and W. F. Piper. 1,759,217; May 20.
Molding machines, Roll over traversing mechanism for. W. Lewis. 1,759,825; May 20.
Mop. R. L. Horsley. 1,759,403; May 20.
Mop handle. J. W. Morris and J. L. Ruddick. 1,759,061; May 20.
Mop head. H. Tschernitz. 1,759,768; May 20.
Mop, Vacuum dry. C. J. Gleason. 1,759,691-2; May 20.
Mop wringer. O. P. Greenstreet. 1,759,397; May 20.
Motion-translating device. J. E. Carroll. 1,759,039; May 20.
Motor: *See*—
Combustion motor. Water motor.
Oil motor.
Mounting, Removable-cover-plate. E. Nielsen. 1,759,242; May 20.
Mower, Lawn. C. A. Olson. 1,759,414; May 20.
Muffler, Exhaust. A. Backman. 1,759,679; May 20.
Multiple-leaf spring. J. W. Watson. 1,759,722; May 20.
Musical instrument, String. L. and J. Dodson. 1,759,736; May 20.
Musical instrument, Stringed. L. and J. Dodson. 1,759,779; May 20.
Nail-transferring mechanism. J. F. Standish. 1,759,174; May 20.
Necktie structure. M. Halpern and W. Mayer. 1,759,007; May 20.
Needle, Knitting. A. C. Parlini. 1,759,363; May 20.
Netting, Locomotive-smoke-box spark. W. L. Bean. 1,759,151; May 20.
Nigger bar. C. C. Brayton. 1,759,037; May 20.
Nozzle for engines working with airless fuel injection. W. S. Burn. 1,759,297; May 20.
Nut for securing metal parts, Threaded. B. T. Andren. 1,759,339; May 20.
Nuts, Making. W. L. Ward. 1,758,990; May 20.
Oar, Bow-facing. G. F. Webb. 1,759,598; May 20.
Ocular. C. von Hofe. 1,759,529; May 20.
Oil and the like products, Means to prevent substitution of. A. E. Davenport. 1,759,734; May 20.
Oil, Apparatus for cracking. G. Egloff and H. P. Benner. 1,759,446; May 20.
Oil motor. F. Lang. 1,759,162; May 20.
Oil storing and dispensing systems, Controlling the flow in hydraulic. W. J. Peter. 1,759,663; May 20.
Oil, System for storing and dispensing. W. J. Peter. 1,759,708; May 20.
Oiler for threads. F. C. Scholler. 1,759,326; May 20.
Oiler, Multiple. R. J. Gits. 1,759,254; May 20.
Oils, Apparatus for spraying heavy. W. Stricker. 1,758,984; May 20.
Oils, Refining hydrocarbon. E. W. Gard, B. G. Aldridge, H. J. Multer, and R. T. Howes. 1,759,744; May 20.
Oils, Refining wood-spirit. W. Querfurth. 1,759,369; May 20.
Ores by the aid of gases, Extracting useful elements from their. B. Hofseth. 1,759,456; May 20.
Ornament for drapery rods or the like, Center. W. E. Smith. Des. 81,211; May 20.
Ornament for drapery rods or the like, End. W. E. Smith. Des. 81,212; May 20.
Oven doors, Balance for. J. W. Hearl. 1,759,696; May 20.
Oven, Portable. C. E. Adamson. 1,759,773; May 20.
Overhead conveyer. R. H. Thompson. 1,759,378; May 20.
Oxides without melting, Method of and apparatus for reducing metallic. W. H. Smith. 1,759,173; May 20.
Packing device. L. Campbell. 1,759,185; May 20.
Packing gaskets and analogous articles, Applying. F. F. Brucker. 1,759,685; May 20.
Paint and varnish remover and making same. C. Ellis. 1,759,154; May 20.
Pan: *See*—
Water-closet pan.
Paper clip. S. Talisman. 1,759,142; May 20.
Paper cutter, Sheet-. C. S. Chessman. 1,759,344; May 20.
Paper from paper-making machines, Slitting and winding. P. D. Parsons. 1,759,627; May 20.
Paper-slitting machines, Driven slitter for. J. A. White. 1,759,676; May 20.
Parking device for motor vehicles. J. Myers. 1,758,964; May 20.
Pens, Blotter attachment for fountain. R. Steudte. 1,759,596; May 20.
Perch cleaner, Bird-cage-. F. Ferris. 1,759,739; May 20.
Percolator, Coffee. H. Lamplota. 1,759,121; May 20.
Peroxide solution, Stabilized. G. Baum. 1,758,920; May 20.
Phonograph. J. M. Lucarelle and J. E. Renholdt. 1,759,654; May 20.
Phonograph starting and stopping device. J. R. Nock and C. J. Nock. 1,759,460; May 20.
Photographic records, Apparatus for producing. T. W. Case. 1,759,434; May 20.
Piano. C. W. Pressley. 1,758,972; May 20.
Picker: *See*—
Cotton picker. Rope picker.
Picture frame. C. F. Brecht. 1,759,432; May 20.
Picture telegraphy. H. J. Round. 1,759,594; May 20.
Pictures and the like, Transmission of. O. Fulton. 1,759,303; May 20.
Pile. E. A. Hardin. 1,759,786; May 20.
Pipe and manufacturing the same, Electrically-welded. B. T. Andren. 1,759,427; May 20.
Pipe clean-out fitting. M. W. Pysher and F. L. Pysher. 1,759,803; May 20.
Pipe connecter, Automatic train-. J. Robinson. 1,759,372; May 20.
Pipe-threading machine. C. Rasmussen. 1,758,978; May 20.
Pipes, Driving device for. C. C. Hansen. 1,759,573; May 20.
Piston. H. S. Graves. 1,759,110; May 20.
Piston. F. Jardine. 1,759,508; May 20.
Piston and connecting-rod assembly. H. S. Graves. 1,759,109; May 20.
Piston for motors. C. Y. Knight. 1,759,510; May 20.
Piston-ring patterns, Making. H. S. Graves. 1,759,108; May 20.
Pistons, Making. F. Jardine. 1,759,509; May 20.
Planer-control system. R. C. Deale. 1,759,548; May 20.

Plate mounting, Latch-face-. W. R. Schlage. 1,759,374; May 20.
Plate, Pie. J. J. Peters. 1,759,589; May 20.
Plows, Harrow hitch for gang. L. A. Swanser. 1,759,597; May 20.
Plug, Electrical connection. M. C. Pollock and E. E. Pollock. 1,759,805; May 20.
Pneumatic coupling. W. Lindner. 1,759,755; May 20.
Pocket, Cartridge. O. H. Klein. 1,759,579; May 20.
Polish and like tin. W. H. Normable. 1,759,020; May 20.
Pot of the self-closing type for the cooking of food and for other uses, Cooking. M. A. Charlot. 1,759,732; May 20.
Pottery ware, Producing. W. J. Miller. 1,759,058; May 20.
Poultry feeder. L. Hart. 1,759,352; May 20.
Poultry trap. T. J. Whetstone. 1,759,770; May 20.
Power installation. A. R. Smith. 1,759,718; May 20.
Power-transmitting device. J. Wolkoff. 1,759,335; May 20.
Power-transmitting means. H. Kattwinkel. 1,759,356; May 20.
Press: *See*—
Baling press. Printing press.
Battery-box press.
Pressure control for hydraulic oil storing and delivering systems. W. J. Peter. 1,759,662; May 20.
Pressure-regulating device. H. G. Ritchie. 1,759,064; May 20.
Pretzels, crackers, and the like, Apparatus for treating. W. Ehrhart. 1,759,608; May 20.
Printing machines, Work-supporting member for. F. M. Allen. 1,759,476; May 20.
Printing press. A. C. Christopherson. 1,759,542; May 20.
Prism, Reflecting. T. W. Rolph. 1,758,977; May 20.
Projection system. A. J. Cawley. 1,759,777; May 20.
Protective device for rotary converters. F. Hillebrand. 1,759,787; May 20.
Protective system. H. R. Summerhayes. 1,759,765; May 20.
Pulping machine. G. S. Witham, jr. 1,759,385; May 20.
Pulverizing apparatus. R. S. Riley and O. Craig. 1,759,134; May 20.
Pulverizing materials, Apparatus for. F. H. Daniels. 1,759,100; May 20.
Pump and electric motor, Combined. C. Szmukler. 1,759,766; May 20.
Pump, Centrifugal water. I. C. Jennings. 1,759,313; May 20.
Pump for inflating pneumatic tires. C. D. Steel. 1,759,287; May 20.
Pump plungers, Shroud for multistage. L. C. Black. 1,759,088; May 20.
Punch, Paper. J. Tellier. 1,759,672; May 20.
Purifier for cisterns. L. M. Strain. 1,759,141; May 20.
Rack: *See*—
Display rack. Towel rack.
Spice-container rack. Unit plate rack.
Rack for matrix magazines. G. L. Curle. 1,759,688; May 20.
Radiator. W. E. Kuenstler. 1,759,120; May 20.
Radiator. A. B. Modine. 1,759,167; May 20.
Radiator shutter, Pressure-controlled. P. S. Tice. 1,759,527; May 20.
Radio apparatus. D. F. Asbury. 1,759,678; May 20.
Radiocompass. F. A. Kolster. 1,759,119; May 20.
Radio program reminder. W. F. Youngblodt. 1,759,080; May 20.
Radio receiving set. G. H. Fisher. 1,759,610; May 20.
Radio signaling system. A. G. Chapman. 1,759,000; May 20.
Radius rod and torque arm, Combination. C. J. Rhodin. 1,759,370; May 20.
Rail clip, Extension-. J. J. Ross. 1,759,136; May 20.
Rail joint and bar. G. Langford. 1,759,458; May 20.
Rail joints, Apparatus for machining welded. H. Schultz. 1,759,327; May 20.
Rail-machining device. F. W. Schmidt. 1,759,325; May 20.
Railway crossing, Metallic. J. A. Dailey and L. W. Gerth. 1,758,935; May 20.
Range finder and gun sights. R. Kauch and C. L. Paulus. 1,759,012; May 20.
Razor, Safety. J. Muros. 1,758,963; May 20.
Receptacle, Filing. A. S. Greenhaus. 1,759,255; May 20.
Recording device for motor vehicles. P. E. Hansen. 1,759,194; May 20.
Reel: *See*—
Fishing reel.
Reenforcing construction for columns, Centering. T. H. Ockels. 1,759,626; May 20.
Reflector for illuminating show windows, Bell-shaped. H. Hartinger. 1,759,307; May 20.
Reflectors, Manufacturing. C. W. Dake. 1,759,099; May 20.
Refreshment stand. W. M. James. Des. 81,193; May 20.
Refrigerating apparatus. G. Andresen. 1,759,534; May 20.
Refrigerator. T. J. Litle, jr. 1,759,513; May 20.
Regulator: *See*—
Heat regulator. Vacuum flow regulator.
Regulator for internal-combustion engine fuel mixers, Automatic. M. F. Duffy. 1,759,153; May 20.
Reheater. A. Huet. 1,759,011; May 20.
Relay, Selective. F. Kesselring. 1,759,792; May 20.
Reminder, Automatic. L. Y. Lassiter. 1,759,409; May 20.
Reservoir for petrol fuels and the like, Hydropneumatic. M. Baccich and C. De-Filippi. 1,759,727; May 20.
Resistance unit. F. H. Bullinger. 1,759,184; May 20.
Retainer for sliced bread. O. F. Rohwedder. 1,759,592; May 20.
Reversing mechanism. H. A. Tuttle. 1,759,472; May 20.
Ribbon for use in making infusions of coffee and other material. H. A. Medin. 1,759,166; May 20.
Rifle-barrel attachment and ammunition for shot-gun barrels. E. A. Williams. 1,759,772; May 20.
Rim of motor and like vehicles, Tire. E. L. Baggstrom. 1,759,386; May 20.
Rinse tub. E. Nutting. 1,759,413; May 20.
Roadways, Safety barrier for. W. McDade. 1,759,794; May 20.
Roller terrace tower as place of amusement and recreation. A. Heinze. 1,759,008; May 20.
Rolling mill. J. Kennedy. 1,759,262; May 20.
Rope picker, Fiber. M. Mudrick. 1,759,240; May 20.
Rosin solutions, Preparation of. A. Thiriet and P. Delcroix. 1,759,526; May 20.
Rubber articles, Manufacture of. E. Hopkinson and W. A. Gibbons. 1,759,618; May 20.
Rubber, Reclaiming. G. J. Miller. 1,759,017; May 20.
Ruler square and miter square, Combined. T. J. Childress. 1,759,541; May 20.
Safety block for mine cars. C. F. Keck. 1,759,791; May 20.
Safety device for cranking and electric starter for automobiles. R. Littler, sr. 1,759,650; May 20.
Safety switch, Automatic. B. E. Getsbell. 1,759,395; May 20.
Sample thief. W. D. Dunn and R. Jefferys. 1,759,444; May 20.
Sand in foundries, Apparatus for handling. W. E. Naylor. 1,759,625; May 20.
Sanding machine, Electric hand. B. W. Ergle. 1,759,104; May 20.
Sash guide. R. L. Greist. 1,759,571; May 20.
Sash mullion, Window. E. C., A. F., and C. Pobland, sr. 1,759,710; May 20.
Sausage stuffing and linking machine F. H. Parker. 1,759,587; May 20.
Scraper. L. P. Green. 1,759,505; May 20.
Scraper mechanism. A. J. Clausen. 1,759,251; May 20.
Scrapers and scoops for earth and the like, Attachment to. D. J. Hill. 1,759,697; May 20.
Screen: *See*—
Fireplace screen. Windshield screen.
Window screen.
Screen slide. A. A. Kamin. 1,759,457; May 20.
Screw driver. J. L. Grube. 1,758,945; May 20.
Screw, Temper. E. E. Greve. 1,759,350; May 20.
Scrubber, Centrifugal. P. M. Kuehn. 1,759,315; May 20.
Sealing tape and manufacturing same. J. MacLaurin. 1,759,124; May 20.
Seat-back rest. P. Greenwood. 1,759,694; May 20.
Selector. T. S. Casner. 1,759,540; May 20.
Separator: *See*—
Centrifugal separator. Egg separator.
Septic tank. F. E. Wilson. 1,759,334; May 20.
Serving table. C. Knight. 1,759,749; May 20.
Shade. Collapsible lamp. M. S. Clawson. 1,759,093; May 20.
Shade, Eye. R. A. Dawes. 1,759,041; May 20.
Sharpener, Razor-blade. E. Aaron. 1,758,915; May 20.
Shears: *See*—
Milliner's shears.
Shelf bracket. A. Janke. 1,759,312; May 20.
Shield. R. Malcom. 1,759,317; May 20.
Shingle. H. C. Naterman. Des. 81,200; May 20.
Ship and propeller, Combined. L. Kort. 1,759,511; May 20.
Shock absorber. R. M. Lovejoy. 1,759,123; May 20.
Shock absorber for landing gears for aeroplanes. J. F. Wallace. 1,759,674; May 20.
Shock-absorbing mechanism, Friction. J. F. O'Connor. 1,758,966-7; May 20.
Shock loader. J. F. Thomson. 1,759,073; May 20.
Shoe construction. R. S. Blair. 1,759,034; May 20.
Shoe form. E. Dami. 1,759,566; May 20.
Shut-off and indicator control for oil-dispensing apparatus. A. J. Granberg. 1,759,396; May 20.
Shuttle-operating mechanism. W. S. Wells. 1,759,533; May 20.
Sieve-operating mechanism. J. Love, jr. 1,759,653; May 20.
Sign. H. R. Cole. Des. 81,177; May 20.
Sign, Display. W. O. Prouty. Re17,672; May 20.
Sign, Illuminated. J. J. Fox. 1,759,782; May 20.
Signal: *See*—
Aircraft signal. Traffic signal.
Signal. G. E. Atkinson. 1,759,291; May 20.
Signal. F. Trautman. 1,759,247; May 20.
Signal device, Optical. S. A. Eskilson. 1,759,609; May 20.
Signaling system. R. C. Mathes. 1,759,623; May 20.
6-chloro-2-nitro-1-methylbenzene-4-sulphonic acid, Preparing. F. Henle and B. Vossen. 1,759,554; May 20.
Sizing mechanism. K. Davis. 1,759,480; May 20.
Skating ground, Producing an artificial. F. E. Müller. 1,759,270; May 20.
Skinning and fatting machine. C. G. G. Bergstrom. 1,759,478; May 20.
Slab-debarking machine. W. A. Davidson. 1,759,188; May 20.

Sleep, Apparatus for inducing. H. Salomon and M. Friedrich. 1,759,761; May 20.
Smoke device. W. Beck. 1,759,033; May 20.
Smoking-stand body. J. H. Reichart. Des. 81,204; May 20.
Snubber. L. L. Lomar. 1,759,266; May 20.
Socket, Push-switch. C. M. Petersen. 1,759,521; May 20.
Sodium borate tri-sodium phosphate compound and its manufacture. C. F. Booth, A. B. Gerber, and P. Logue. 1,759,152; May 20.
Sound-amplifying apparatus. A. A. Thomas. 1,758,986; May 20.
Sound-producing device. A. P. Young and J. Hutt. 1,759,725; May 20.
Sound reproducer. E. H. Smythe. 1,759,328; May 20.
Sound reproducer. I. Wolff. 1,758,993; May 20.
Sound waves, Method and apparatus for recording and reproducing. B. Kwartin. 1,759,581; May 20.
Sounds, Apparatus for and method of photographically recording. B. Kwartin. 1,759,580; May 20.
Spanner wrench. J. G. Collins. 1,759,186; May 20.
Speed-change mechanism, Automatic. F. R. Porter. 1,759,466; May 20.
Speed control, Veneer-cutter. H. C. Clay and C. L. Irwin. 1,759,438; May 20.
Spice-container rack. R. Silberger. 1,759,140; May 20.
Spindle for door latches, Split. W. R. Schlage. 1,759,375; May 20.
Spindle for engaging and winding textile fabric. C. W. Coker. 1,759,095; May 20.
Spinning pot or centrifuge. C. L. Hoey. 1,759,699; May 20.
Spinning process for polychromatic yarns, Device for said process, and the product of said process. O. Hoffmann. 1,759,260; May 20.
Spool winder. C. H. Collins and E. D. Jansen. 1,759,002; May 20.
Spoon, Dental. A. Harder. 1,759,746; May 20.
Spraying machine, Leather-. L. S. Goodwin and W. A. Michaud. 1,759,349; May 20.
Spring: *See*—
Multiple-leaf spring.
Spring catch. C. A. Friedlander. 1,759,550; May 20.
Spring shackle. H. D. Geyer. 1,759,449; May 20.
Springs, Method of and machine for assembling. J. F. Gall. 1,759,050; May 20.
Sprinkler: *See*—
Lawn sprinkler.
Sprinkler mechanism, Dry-pipe. J. R. Hamilton. 1,759,158; May 20.
Stand: *See*—
Display stand. Tub stand.
Starter, Engine. M. P. Whitney. 1,759,076–7; May 20.
Station and drier car, Loading. C. E. Fuller. 1,759,005; May 20.
Statue. G. S. Brush. Des. 81,176; May 20.
Stay member for coat necks. D. E. Tracy. 1,759,528; May 20.
Steam injector, Exhaust-. E. Blauhorn. 1,759,218; May 20.
Steam injector, Exhaust-. H. Deutsch. 1,759,223; May 20.
Steam trap. C. Schaer. 1,759,066; May 20.
Steel-retaining device, Drill-. C. A. Hultquist. 1,758,949; May 20.
Steel, Stable-surface alloy. R. P. De Vries. 1,759,605–6; May 20.
Steering gear, Marine. D. Bailey. 1,759,082; May 20.
Stepladder. E. A. Strauss. 1,759,424; May 20.
Stirrup. A. D. Cameron. 1,758,930; May 20.
Stirrup for concrete reenforcing unit. W. R. Madden. 1,759,316; May 20.
Stocking, Split-foot. W. L. Lengel. 1,759,754; May 20.
Stop, Window-sash. G. H. Paddock. 1,759,707; May 20.
Store-front construction. H. Rubin. 1,759,818; May 20.
Strainer, Internal-combustion-engine oil. W. S. Fisher. 1,759,447; May 20.
Straw-spreading attachment. S. A. Harn. 1,759,552; May 20.
Stretcher, Wire. L. Hawbaker. 1,759,642; May 20.
Support, Conductor. S. S. Matthes. 1,759,704; May 20.
Support, Drop-wire. H. W. Pleister and J. Karitzky. 1,759,591; May 20.
Support, Electrical cord. W. Rabsilber. 1,759,417; May 20.
Support for phials, flasks, bottles, and like containers. E. W. Brandt. 1,759,390; May 20.
Support for violins, violin bows, and the like. D. Szigeti. 1,758,985; May 20.
Supporter, Plate. G. R. Mayer. 1,759,165; May 20.
Suspended carrier. E. T. Bennington. 1,759,183; May 20.
Swimming appliance. O. I. Price. 1,759,711; May 20.
Switch: *See*—
Float switch. Toggle switch.
Safety switch.
Switch lock. T. B. Lyles. 1,759,655; May 20.
T Y Connection, Combination. W. H. Oldfield. 1,759,321; May 20.
Table: *See*—
Collapsible table. Serving table.
Desk table.
Tagging apparatus for stock, Ear-. E. R. Hobbs. 1,759,400; May 20.
Tank: *See*—
Air-reserve tank. Septic tank.
Flush tank.
Tank gauge. R. E. Hall. 1,759,572; May 20.
Tanning and tawing industries and its manufacture, Product for. M. Kahn, E. Le Breton, and G. Schaeffer. 1,759,700; May 20.
Tar distillation. A. A. MacCubbin and J. Zavertnik, jr. 1,759,816; May 20.
Telegraph apparatus. W. S. Terriberry. 1,759,026; May 20.
Telegraphic transmitter. C. F. McElroy. 1,759,584; May 20.
Telephone system, Automatic. H. M. Friendly. 1,759,190; May 20.
Telephone system, Automatic. F. Merk. 1,759,267; May 20.
Testing instrument. P. E. Chapman. 1,759,479; May 20.
Textile fabric. I. De Lancey. Des. 81,182; May 20.
Textures, Device for drying. O. Pieron. 1,759,804; May 20.
Thermionic receiving device for wireless telegraphy and telephony. H. J. Round. 1,759,593; May 20.
Thrashing machines, Feeding mechanism for. A. J. Peterson. 1,759,709; May 20.
Timing device. P. P. Yohe and W. Christie. 1,759,638; May 20.
Tire. R. Smith. Des. 81,210; May 20.
Tire beads, Method and apparatus for building. W. C. Stevens. 1,759,669; May 20.
Tire expander. R. V. Ritchey. 1,759,713; May 20.
Tire, Pneumatic. H. B. Marston. 1,759,410; May 20.
Tire protector, Auto. U. W. Hutchings. 1,759,159; May 20.
Tire, Skidless. L. G. Peters. 1,759,590; May 20.
Tire-spreading machine. A. C. Hopkins. 1,759,052; May 20.
Toaster, Electric. H. G. Heckmann. Des. 81,190; May 20.
Toggle switch, Dustproof. R. H. Cunningham. 1,759,300; May 20.
Tool, Abrading. J. E. Sims. 1,759,523; May 20.
Tool, Animal catching and holding. W. H. Lamb. 1,759,054; May 20.
Tool, Bushing removing and replacing. C. A. Sease. 1,759,285; May 20.
Tool for use in wells, Holding. C. L. Brewster and W. P. Henry. 1,758,998; May 20.
Tool head for radial drills. L. C. Cole. 1,759,543; May 20.
Tool, Layout centering. H. W. Meesel. 1,758,959; May 20.
Tool, Portable boring. C. Zigenheim. 1,759,726; May 20.
Tool, Rotary motor. J. J. N. Van Hamersveld. 1,759,473; May 20.
Tools, Implement retainer for pneumatic. R. O. Allen. 1,759,562; May 20.
Tooth-cleaning device. C. C. Wahl. 1,759,075; May 20.
Top for bottled carbonated liquids, Dispensing. J. A. Murdock. 1,759,459; May 20.
Top, Vehicle. E. A. Wright. 1,759,250; May 20.
Towel rack. W. S. Monroe. 1,759,319; May 20.
Toy. R. E. Andrew. 1,759,181; May 20.
Toy animal. W. R. Howell. Des. 81,192; May 20.
Toy horse. D. E. Foltz. 1,759,740; May 20.
Toy machine gun. A. M. Goodloe. 1,759,304; May 20.
Toy or amusement vehicle. L. Alexander. 1,759,180; May 20.
Toy pistol. F. T. Baum and C. G. Norris. 1,759,084; May 20.
Toy repeating gun. L. Marx. 1,759,128; May 20.
Traction unit, Creeping. M. L. Fykse. 1,759,049; May 20.
Tractor and trailer, Combined. J. J. Gund. Des. 81,180; May 20.
Tractor for overhead carrier systems. W. G. Wehr. 1,759,177; May 20.
Tractor hitch. E. W. Johnson. 1,758,951; May 20.
Tractors, Draft attachment for. W. L. Paul. 1,759,063; May 20.
Traffic signal. E. H. Piron. 1,759,368; May 20.
Train control. W. K. Howe. 1,759,404; May 20.
Train-dispatching system for railroads. S. N. Wight. 1,759,383; May 20.
Transits, Angle-recording attachment for. J. A. Gendron. 1,759,482; May 20.
Transmission, Electrooptical. F. Gray. 1,759,504; May 20.
Transmission mechanism, Fluid-controlled. C. H. Norrlin. 1,759,801; May 20.
Transmission of orders, Device for the distant. R. Mercier. 1,759,318; May 20.
Transmitter case, Telephone-. G. B. French. Des. 81,184; May 20.
Transmitting energy between shafts. H. Grob. 1,759,784; May 20.
Trap: *See*—
Animal trap. Steam trap.
Poultry trap.
Tray, Combination smoker's. J. Henderson. 1,759,051; May 20.
Trough, Stock-feeding. W. H. Miller. 1,759,131; May 20.
Truck, Car. G. Cambaccini. 1,759,743; May 20.

Truck, Pump. W. H. Coburn and C. Kiernan. 1,759,252; May 20.
Tub: *See*—
Rinse tub.
Tub stand. W. E. Rideout. 1,759,371; May 20.
Tube: *See*—
Inner tube.
Tubes internally and externally, Electroplating. V. L. Soderberg and C. R. Gleason. 1,759,171; May 20.
Tubing cleaner and protector. J. C. Armstrong and J. E. Wallis. 1,758,995; May 20.
Tubular bodies, Process and device for drying. J. Voss. 1,759,495; May 20.
Tuning device, Selector. J. O. Prescott. 1,759,664; May 20.
Tuning-slide-actuating mechanism. E. J. Gulick. 1,759,824; May 20.
Turbine-regulating means. R. G. Standerwick. 1,759,763; May 20.
Turbine, Steam. K. Röder. 1,759,817; May 20.
Tuyère for blast furnaces. E. H. Holzworth. 1,759,114; May 20.
Twist-off preventer. J. A. Zublin. 1,759,337; May 20.
Two-row lister. L. W. Crouse. 1,759,546; May 20.
Type chase. F. A. Putnam. 1,759,022; May 20.
Typewriters and other machines, Key action for. O. U. Desha. 1,759,393; May 20.
Typewriters and other machines, Key action for. O. U. Desha. 1,759,441; May 20.
Typewriting and computing machine, Combined. H. H. Steele. 1,759,329; May 20.
Underfloor duct system and method of making. H. S. Walker. 1,758,989; May 20.
Unit plate rack, Multiple-. E. W. and A. H. Janke. 1,759,645; May 20.
Uranium metal and product and making the same. J. A. Heany. 1,759,454; May 20.
Valve. E. B. Moore. 1,759,060; May 20.
Valve and vaporizer, Combined intake. L. L. Luce. 1,759,055; May 20.
Valve, Automatic. D. Gregg. 1,759,006; May 20.
Valve construction. J. K. Anderson. 1,759,081; May 20.
Valve engines, Reconditioning poppet-. M. B. Covert. 1,759,096; May 20.
Valve, Feed-water. V. V. Veenschoten. 1,759,146; May 20.
Valve, Flushing. J. A. White. 1,759,724; May 20.
Valve for internal-combustion engines, Injection. O. Petersen. 1,759,367; May 20.
Valve for pneumatic displacement pumps. L. C. Bayles. 1,758,921; May 20.
Valve for tires, Safety. A. R. Miles. 1,759,796; May 20.
Valve mechanism, Engine-. E. E. Humes. 1,759,555; May 20.
Valve, Primer. S. F. Goss. 1,759,826; May 20.
Valve protector, Gas-. A. Mendelson and S. Pearl. 1,758,960; May 20.
Valve, Sleeve. H. J. Edwards. 1,759,445; May 20.
Valve, Tire-alarm. C. J. Mosher. 1,759,362; May 20.
Vanity case. H. and J. Heitel. 1,759,616; May 20.
Vehicle. R. G. McKay. 1,758,957; May 20.
Vehicle holddown, Motor-. W. B. Cook. 1,759,733; May 20.
Vehicle, Land and water. A. P. Romaniuk. 1,759,280; May 20.
Vehicle wheel, Resilient. W. E. Lacey. 1,759,358; May 20.
Vehicles, Cooling apparatus for motor. J. A. Granstedt. 1,759,305; May 20.
Vehicles, Draft appliance for railway. W. J. Regan. 1,758,974; May 20.
Vending machines, Display device for. A. D. Antoine and A. E. Gebert. 1,759,031; May 20.
Ventilation-controlling means for chicken brooders. R. W. Maneval. 1,759,515; May 20.
Ventilator and shade for vehicles, Combination. J. P. Schmidt. 1,759,421; May 20.
Vermin and insect pests, Combating and exterminating of. K. Dobmaier. 1,758,936; May 20.
Volume-flow regulator. G. A. Brooke, jr. 1,758,926; May 20.
Wagon, Hay loading. F. L. Gray. 1,758,943; May 20.
Warping-machine indicator. G. W. Bogdanffy. 1,759,090; May 20.
Washer. J. Schaefer. 1,759,282; May 20.
Washing machine. W. B. Steen and C. D. Sharp. 1,759,376; May 20.
Washing machine. E. R. Zademach. Re17,673; May 20.
Water, Automatic apparatus for preparing aerated. C. Derossi. 1,759,735; May 20.
Water-closet pan. M. Hollenweger. 1,759,574; May 20.
Water heater, Electric. A. Andriulli. 1,759,774; May 20.
Water heater, Electric. V. Rosenberger. 1,759,281; May 20.
Water, Method of and apparatus for softening. G. S. Apeldorn. 1,759,601; May 20.
Water motor. M. Tabis. 1,759,671; May 20.
Water-softening apparatus. E. T. Turner. 1,759,636; May 20.
Water, Treatment of steam-boiler. R. E. Hall. 1,759,615; May 20.
Weld rod for electric-arc welding. A. W. Carlson. 1,759,686; May 20.
Welding, Arc. R. Sarazin. 1,759,373; May 20.
Welding fixture. A. Brantingham. 1,759,036; May 20.
Welding of rails and the like, Alumino-thermic. E. F. Begtrup. Re17,671; May 20.
Wheel: *See*—
Car wheel. Width-maintaining wheel.
Vehicle wheel.
Wheel. I. A. Merle. 1,759,238; May 20.
Wheel chuck. J. C. Crocker. 1,759,098; May 20.
Wheels, Making metal. E. C. Mogford and F. W. Burger. 1,759,059; May 20.
Width-maintaining wheel. J. L. Drake. 1,759,225; May 20.
Winding device. P. Kunin and I. E. McElroy. 1,759,265; May 20.
Winding machine. J. A. Cameron and G. B. Rickard. 1,759,538; May 20.
Windlass. L. B. Neighbour. 1,759,062; May 20.
Window. B. L. Ingram and W. H. De Long. 1,759,790; May 20.
Window construction. R. E. Morris. 1,759,705; May 20.
Window screen. A. W. Lovejoy. 1,758,955; May 20.
Windshield screen. L. E. Ike, A. Langren, D. Hutson, and L. H. Latta. 1,759,311; May 20.
Wiper, Oil-gauge. A. O. Holveck, jr. 1,759,788; May 20.
Wire guard. J. Mainello and J. P. Bacca. 1,759,125; May 20.
Wiring, Decorative. E. P. Seghers. 1,758,982; May 20.
Wood preservation. H. S. McQuaid. 1,758,958; May 20.
Wool, Manufacture of vegetable. J. J. Lambreth. 1,759,752; May 20.
Wrench: *See*—
Spanner wrench.
Wringer: *See*—
Mop wringer.
Wringer. A. W. Altorfer. 1,759,215; May 20.
Wringer. S. E. Schroeder. 1,759,208; May 20.
Yarn in hollow mass formation, Apparatus for treating. W. N. Gere. 1,759,157; May 20.
Yeast, Manufacturing. A. K. Balls. 1,759,536; May 20.

CLASSIFICATION OF PATENTS

ISSUED MAY 20, 1930

NOTE—First number=class, second number=subclass, third number=patent number.

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U. S. GOVERNMENT PRINTING OFFICE: 1930

ALPHABETICAL LIST OF REGISTRANTS OF TRADE-MARKS

A-P Laboratories. (See Pruitt, A. H.)
Abbott Laboratories, Chicago, Ill. Nose and throat spray. 271,168; May 27; Serial No. 295,243; published Mar. 11, 1930. Class 6.
Adler, Morris, New York, N. Y. Preparations for the relief of epilepsy and nervousness. 271,246; May 27; Serial No. 292,191; published Mar. 4, 1930. Class 6.
Albany Door Company, Albany, N. Y. Tables, table tops, chairs, etc. 271,215; May 27; Serial No. 283,837; published Mar. 18, 1930. Class 32.
Alltex Piston Ring Company, Brooklyn, N. Y. Piston rings. 271,136; May 27; Serial No. 295,201; published Mar. 18, 1930. Class 35.
Alpha Tank & Sheet Metal Mfg. Co., The, St. Louis, Mo. Metal storage tanks, bins, vats. 271,275; May 27; Serial No. 290,732; published Mar. 11, 1930. Class 2.
Andrews, George, Winter Haven, Fla. Fresh oranges and grapefruit. 271,111; May 27; Serial No. 294,379; published Mar. 18, 1930. Class 46.
Andrews, O. B., Company, Chattanooga, Tenn. Wood and fiber packing boxes and cartons. 271,281; May 27; Serial No. 288,049; published Mar. 11, 1930. Class 2.
Andy's Chocolate Shops, Inc., Chicago, Ill. Candies. 271,099; May 27; Serial No. 295,500; published Mar. 18, 1930. Class 46.
Ansonia O & C Company, The, Ansonia, Conn. Hose supporters and hose-supporter grips. 271,213; May 27; Serial No. 284,433; published Mar. 11, 1930. Class 39.
Arab Chemical and Engineering Corp., Gloucester City, N. J. Compounds for removing scale, rust, corrosion, and the like from boilers, etc. 271,199; May 27; Serial No. 294,334; published Mar. 4, 1930. Class 6.
Assembled Products Company, Inc., New York, N. Y. Bias binding. 271,114–16; May 27; Serial Nos. 293,948–50; published Mar. 11, 1930. Class 40.
Aviation Accessories Corporation, San Francisco, Calif. Device for heating the oil in internal-combustion engines in circulating electric heaters. 271,177; May 27; Serial No. 293,810; published Mar. 11, 1930. Class 21.
Baker Brush Co., Inc., New York, N. Y. Artists' brushes. 271,305; May 27. Class 29.
Baldwin Company, The, Cincinnati, Ohio. Radio receiving sets and loud-speakers, antennæ, transformers, etc. 271,228; May 27; Serial No. 278,924; published Mar. 11, 1930. Class 21.
Baldwin Perfumery Company, doing business as Baldwin, Chicago, Ill. Perfume, toilet water, sachet, face creams, etc. 271,206; May 27; Serial No. 294,051; published Mar. 11, 1930. Class 6.
Barker, John J., doing business as Boston Coupling Company, Boston, Mass. Fire-hose couplings, nozzles, hose spray pipes, etc. 271,296; May 27. Class 13.
Barnum, Kenneth R., doing business as Nightingale Laboratories, Kansas City, Mo. Cleansing cream, massage cream, face powder, etc. 271,217; May 27; Serial No. 283,654; published Mar. 4, 1930. Class 6.
Beacon Falls Rubber Shoe Company, The, Beacon Falls, Conn. Arctics. 271,112; May 27; Serial No. 294,202; published Mar. 11, 1930. Class 39.
Bearfoot Sole Company, Inc., The, Boston, Mass. Soles of rubber composition, etc., for boots and shoes. 271,106; May 27; Serial No. 294,660; published Mar. 11, 1930. Class 39.
Berg Heating and Ventilating Co., Los Angeles, Calif. Heating systems, ventilating systems, cooling systems, etc. 271,173; May 27; Serial No. 293,311; published Mar. 11, 1930. Class 34.
Bernat, Emile, & Sons Co., Jamaica Plain, Mass. Yarn. 271,145; May 27; Serial No. 294,909; published Mar. 11, 1930. Class 43.
Biggs & Black, Inc., New York, N. Y. Rubber tires. 271,214; May 27; Serial No. 284,159; published Mar. 18, 1930. Class 35.
Bluo Manufacturing Co. (See Caples, Edward D.)
Böhme, H. Th., A. G., Chemnitz, Germany. Chemical dye aids. 271,154; May 27; Serial No. 294,303; published Mar. 4, 1930. Class 6.
Böhme, H. Th., A. G., Chemnitz, Germany. Chemical dye aids. 271,201; May 27; Serial No. 294,302; published Mar. 4, 1930. Class 6.
Boston Coupling Company. (See Barker, John J.)
Boswell, Paul W., doing business as Boswell Oil Company, Cincinnati, Ohio. Publication. 271,102; May 27; Serial No. 295,292; published Mar. 18, 1930. Class 38.
Bouy Incorporated, New York, N. Y. Electric floor lamps, table lamps, and ceiling fixtures. 271,081; May 27; Serial No. 268,910; published Mar. 11, 1930. Class 21.
Bradley, Smith Company, The, New Haven, Conn. Candy bars. 271,226; May 27; Serial No. 279,442; published Feb. 18, 1930. Class 46.
Bradstone Rubber Company, Woodbine, N. J. Rubber heels. 271,091; May 27; Serial No. 294,612; published Mar. 11, 1930. Class 39.
Brooks, Burleigh, New York, N. Y. Cameras. 271,192; May 27; Serial No. 294,844; published Mar. 18, 1930. Class 26.
Brownell & Field Co., Providence, R. I. Canned vegetables and canned fish. 271,312; May 27. Class 46.
Bulova Watch Company, Inc., New York, N. Y. Ladies' wrist watches. 271,234; May 27; Serial No. 276,831; published Feb. 12, 1929. Class 27.
Burdick, Austin F., doing business as The Snugfit Eye Patch Co., Lansing, Mich. Surgical bibs. 271,306; May 27. Class 39.
Bush-Brown, Lydia, New York, N. Y. Silk wall drapes. 271,140; May 27; Serial No. 295,457; published Mar. 11, 1930. Class 42.
C. M. R. Mfg. Co. (See Rosenbaum, Charles M.)
Canfield Oil Company, The, Cleveland, Ohio. Lubricating oils. 271,188; May 27; Serial No. 294,472; published Mar. 11, 1930. Class 15.
Caples, Edward D., doing business as Bluo Manufacturing Co., Somerville, Mass. Laundry and toilet soap. 271,259; May 27; Serial No. 289,335; published Nov. 12, 1929. Class 4.
Chain Belt Company, Milwaukee, Wis. Mechanism for automatically controlling the sequence of operation of concrete mixers. 271,191; May 27; Serial No. 295,115; published Mar. 18, 1930. Class 23.
Chajud, Salomon, Las Juntas, Abangares, Costa Rica. Salve or ointment. 271,225; May 27; Serial No. 281,259; published Mar. 11, 1930. Class 6.
Charabot, Inc., New York, N. Y. Perfumes, aldehydes, alcohols, etc. 271,232; May 27; Serial No. 278,028; published Mar. 4, 1930. Class 6.
Checker Cab Manufacturing Corporation, Chicago, Ill., assignor to Checker Cab Manufacturing Corporation, Kalamazoo, Mich. Automobile cabs and trucks. 271,085; May 27; Serial No. 271,085; published Apr. 17, 1923. Class 19.
Chemical Compounding Corporation, Brooklyn, N. Y. Insecticides, disinfectants, etc. 271,244; May 27; Serial No. 288,585; published Mar. 11, 1930. Class 6.
Chrysler Corporation, Detroit, Mich. Automobiles and their structural parts. 271,219; May 27; Serial No. 283,553; published Mar. 11, 1930. Class 19.
Clay & Abraham Ltd., Liverpool, England. Preparation of iodine, preparation of hydrogen peroxide, and a preparation for application to corns. 271,161; May 27; Serial No. 293,265; published Mar. 11, 1930. Class 6.
Colgate-Palmolive-Peet Company, Chicago, Ill. Perfume, toilet water, talc powder, etc. 271,285; May 27; Serial No. 292,485; published Feb. 25, 1930. Class 6.
Columbia Cable & Electric Co., Long Island City, N. Y. Armored electric cable and flexible steel conduit. 271,304; May 27. Class 21.
Conde Nast Publications, Inc., The, New York, N. Y. Paper dress patterns. 271,198; May 27; Serial No. 294,341; published Mar. 18, 1930. Class 26.
Consolidated Factories, Ltd., Santa Ana, Calif. Glass drawer knobs and pulls and glass door knobs. 271,170; May 27; Serial No. 293,028; published Mar. 11, 1930. Class 13.
Container Sales Company, Inc., New York, N. Y. Jars. 271,297–8; May 27. Class 33.
Continent Import Co. (See Granitz, Leopold.)
Corduroy Tire Company, Grand Rapids, Mich. Vehicle tires. 271,132; May 27; Serial No. 295,558; published Mar. 18, 1930. Class 35.
Cotton Belt Drug Company, Augusta, Ga. Preparation for the relief of pain. 271,272; May 27; Serial No. 292,524; published Mar. 11, 1930. Class 6.
Coty, Inc., Wilmington, Del., and New York, N. Y. Nail polish. 271,195; May 27; Serial No. 294,623; published Mar. 11, 1930. Class 6.
Crescent Metal Works, Inc., Newark, N. J. Ornamental articles made of molded metal. 271,224; May 27; Serial No. 281,990; published Mar. 18, 1930. Class 50.
Crescent Novelty Co., North Bergen, N. J., and New York, N. Y. Net laces, silk laces, and Venice laces in the piece. 271,314; May 27. Class 42.
Crown Willamette Paper Company, San Francisco, Calif. Sulfite paper for printing. 271,108; May 27; Serial No. 294,508; published Mar. 18, 1930. Class 37.
Crown Willamette Paper Company, San Francisco, Calif. Sulfite wrapping paper. 271,109; May 27; Serial No. 294,506; published Mar. 18, 1930. Class 37.
Crystal Products Co., Inc., New York, N. Y. Deodorant and insecticide. 271,249; May 27; Serial No. 291,206; published Dec. 10, 1929. Class 6.
Daily Graphic, Inc., New York, N. Y. Series of cartoons or comic strips. 271,163; May 27; Serial No. 295,424; published Mar. 18, 1930. Class 38.
Da-Lee Chemical Co. Inc., Baltimore, Md. Tooth paste and a liquid antiseptic. 271,252; May 27; Serial No. 289,341; published Mar. 4, 1930. Class 6.
De Coursey Creamery Company, Kansas City, Kans. Ice cream. 271,264; May 27; Serial No. 287,455; published Mar. 18, 1930. Class 46.
Delta Chi Fraternity, The, Iowa City, Iowa. Buttons of precious metal. 271,236; May 27; Serial No. 276,307; published Mar. 11, 1930. Class 28.
Dewey & Almy Chemical Company, North Cambridge, Mass. Separator plates for storage batteries. 271,165; May 27; Serial No. 295,294; published Mar. 11, 1930. Class 21.

CARNEGIE LIBRARY OF ATLANTA

Diamond Full Fashioned Hosiery Company, High Point, N. C. Hosiery. 271,308; May 27. Class 39.
Dilling & Company, Indianapolis, Ind. Candy. 271,233; May 27; Serial No. 277,057; published Mar. 18, 1930. Class 46.
Dorman, Benjamin, Brooklyn, N. Y. Olive oil. 271,220; May 27; Serial No. 283,182; published Mar. 18, 1930. Class 46.
Dulch, John, Madison, Ill. Cleaning and polishing compound. 271,293; May 27. Class 16.
Ebrey Chemical Works, Inc., New York, N. Y. Medicine. 271,210; May 27; Serial No. 293,415; published Mar. 11, 1930. Class 6.
Economy Stoker Company, Salt Lake City, Utah. Stokers. 271,178; May 27; Serial No. 293,877; published Mar. 11, 1930. Class 34.
Empire Stamp Company, Imperial, Calif. Trading stamps and coupons. 271,094; May 27; Serial No. 295,837; published Mar. 18, 1930. Class 38.
Eny Art, Inc., New York, N. Y. Glass valances and pieces of decorated and carved glass. 271,288; May 27; Serial No. 289,884; published Mar. 11, 1930. Class 33.
Everwine, Charles L., Newark, N. J. Mechanical device for use for the removal of carbon from combustion chambers and valves thereof. 271,204; May 27; Serial No. 294,151; published Mar. 18, 1930. Class 23.
Exclusive Chemicals, Inc., Dallas, Tex. Mouth wash and gargle. 271,120; May 27; Serial No. 295,511; published Mar. 11, 1930. Class 6.
F O R Laboratories. (See Ringnell, Frank O.)
Fagley & Halpen, Philadelphia, Pa. Combination utensils. 271,274; May 27; Serial No. 290,943; published Mar. 11, 1930. Class 13.
Fahrney, Dr. Peter, & Sons Co., Chicago, Ill. Periodical. 271,100; May 27; Serial No. 295,368; published Mar. 18, 1930. Class 38.
Fawcett Publications, Inc., Robbinsdale, Minn. Magazines. 271,093; May 27; Serial No. 295,840; published Mar. 18, 1930. Class 38.
Field & Flint Co., Brockton, Mass. Boots and shoes. 271,260; May 27; Serial No. 288,745; published Mar. 11, 1930. Class 39.
Field Publications, Inc., New York; N. Y. Periodical. 271,110; May 27; Serial No. 294,475; published Mar. 18, 1930. Class 38.
First National Stores Inc., Boston and Somerville, Mass. Clotheslines. 271,124; May 27; Serial No. 295,663; published Mar. 18, 1930. Class 7.
First National Stores Inc., Boston and Somerville, Mass. Ginger ale, vanilla soda, root beer, etc. 271,131; May 27; Serial No. 295,665; published Mar. 18, 1930. Class 45.
Forhan Company, assignor, by mesne assignments, to Forhan Company, Inc., New York, N. Y. Pyorrhea preparation. 271,209; May 27; Serial No. 293,422; published Mar. 11, 1930. Class 6.
Franklin Simon & Co. Inc., New York, N. Y. Furnishings, undergarments, and clothing. 271,105; May 27; Serial No. 294,929; published Mar. 11, 1930. Class 39.
Fromm Brothers, Berlin, Germany. Perfumes, gygienic and cosmetic articles. 271,082; May 27; Serial No. 268,540; published Mar. 4, 1930. Class 6.
Garske, Leo G., Minneapolis, Minn. Preparations for the treatment of ailments in the stomach. 271,194; May 27; Serial No. 294,668; published Mar. 11, 1930. Class 6.
General Motors Corporation, Detroit, Mich. Radio receiving sets and parts thereof. 271,167; May 27; Serial No. 295,258; published Mar. 11, 1930. Class 21.
Glezen, Ralph H., doing business as Peerless Chemical Company, Los Angeles, Calif. Stomach medicine. 271,307; May 27. Class 6.
Godde, Albert, Bedin, Inc., New York, N. Y. Dress fabrics of silk. 271,231; May 27; Serial No. 278,592; published Mar. 11, 1930. Class 42.
Goldenberg, Morton H., doing business as "Goldenberg's", Washington, D. C. Textile bath mats and awning fabrics. 271,235; May 27; Serial No. 276,693; published Mar. 11, 1930. Class 42.
Gorman, R. P., & Cobbe, Ltd., Belfast, North Ireland. Cotton handkerchiefs. 271,150; May 27; Serial No. 294,522; published Mar. 11, 1930. Class 42.
Graham-Paige Motors Corporation, Dearborn, Mich. Commercial motor cars, chassis, and constructive parts. 271,187; May 27; Serial No. 294,421; published Mar. 11, 1930. Class 19.
Granitz, Leopold, doing business as Continent Import Co., New York, N. Y. Pine-needle extract combined with bath salts. 271,119; May 27; Serial No. 294,875; published Mar. 11, 1930. Class 6.
Great Council of the United States of the Improved Order of Red Men, Philadelphia, Pa. Badges, emblems, finger rings, etc. 271,269; May 27; Serial No. 292,804; published Mar. 11, 1930. Class 28.
Great Falls Meat Company, Great Falls, Mont. Hams and bacon and luncheon meat. 271,309; May 27. Class 46.
Hädensa Gesellschaft m. b. H., Berlin-Lichterfelde, Germany. Salve. 271,123; May 27; Serial No. 294,525; published Mar. 11, 1930. Class 6.
Hädensa Gesellschaft m. b. H., Berlin-Lichterfelde, Germany. Preparation for treating eczema. 271,197; May 27; Serial No. 294,526; published Mar. 11, 1930. Class 6.
Hand, Mollie R., Norwich, N. Y. Mustard. 271,087; May 27; Serial No. 293,622; published Mar. 18, 1930. Class 46.
Harley-Davidson Motor Company, Milwaukee, Wis. Motor cycles. 271,164; May 27; Serial No. 295,371; published Mar. 11, 1930. Class 19.
Hector, Etta, Brooklyn, N. Y. Liniment. 271,196; May 27; Serial No. 294,527; published Mar. 4, 1930. Class 6.
Henske, Edward A., doing business as Kin-Septic Company, St. Louis, Mo. Skin antiseptic. 271,248; May 27; Serial No. 291,983; published Dec. 24, 1929. Class 6.
Herbert & Company, Detroit, Mich. Nail and cuticle brushes. 271,162; May 27; Serial No. 295,477; published Mar. 18, 1930. Class 29.
Hilliard's Glass House Goodies, Inc., Boston and West Roxbury, Mass. Chocolates, hard candies, and bonbons. 271,263; May 27; Serial No. 287,925; published Mar. 18, 1930. Class 46.
Hills, William, Jr., & Co., Incorporated, New York, N. Y. Canned salmon. 271,313; May 27. Class 46.
Hinde & Dauch Paper Company, The, Sandusky and Delphos, Ohio; Chicago, Ill.; Philadelphia, Pa.; New York, N. Y.; Muncie, Ind.; Gloucester, N. J.; and Toronto, Canada. Boxes and cartons. 271,216; May 27; Serial No. 283,770; published Mar. 11, 1930. Class 2.
Hookless Fastener Company, Meadville, Pa. Separable fasteners. 271,179; May 27; Serial No. 293,880; published Mar. 11, 1930. Class 13.
Hooper Paper & Twine Co., Inc., Philadelphia, Pa. Cotton twines, sash cord, ropes, and twines. 271,294; May 27. Class 7.
Huegel-Nugent Petroleum Company, Chicago, Ill. Lubricating oil. 271,117; May 27; Serial No. 294,973; published Mar. 11, 1930. Class 15.
I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Underwear, hats, gloves, etc. 271,265; May 27; Serial No. 287,180; published Mar. 11, 1930. Class 39.
Industrial Home for the Blind, The, Brooklyn, N. Y. Mops. 271,291; May 27; Class 29.
Ingalls Iron Works Co., The, Birmingham, Ala. Babbitt and bearing metals. 271,271; May 27; Serial No. 292,568; published Mar. 18, 1930. Class 14.
International Printing Ink Corporation, The, New York, N. Y. Ink, stamp pads, and inking ribbons. 271,122; May 27; Serial No. 294,533; published Mar. 18, 1930. Class 11.
Jakopec-Samu Company, Chicago, Ill. Game. 271,155; May 27; Serial No. 294,261; published Mar. 11, 1930. Class 22.
Jarson Hairenu Co., Detroit, Mich. Hair restorer. 271,239; May 27; Serial No. 272,104; published Mar. 19, 1929. Class 6.
Kent, Louise, Inc., Brooklyn, N. Y. Cosmetics. 271,207; May 27; Serial No. 293,734; published Mar. 11, 1930. Class 6.
Kestenman Bros. Mfg. Co., Providence, R. I. Wrist-watch bracelets. 271,282; May 27; Serial No. 287,256; published Mar. 11, 1930. Class 28.
Kin-Septic Company. (See Henske, Edward A.)
Kleer-A-Kold Co., Milwaukee, Wis. Pharmaceutical preparation for the treatment of colds. 271,169; May 27; Serial No. 295,226; published Mar. 11, 1930. Class 6.
Knoppel, F. O., doing business as Nectartone Laboratories, Chicago, Ill. Laxative medicinal tonic. 271,218; May 27; Serial No. 283,647; published Mar. 4, 1930. Class 6.
Knox Hat Company, Inc., New York, N. Y. Handkerchiefs and veils. 271,211; May 27; Serial No. 284,911; published Mar. 11, 1930. Class 42.
Knox Hat Company, Inc., New York, N. Y. Handkerchiefs and veils. 271,245; May 27; Serial No. 285,159; published Mar. 11, 1930. Class 42.
Kohrs Packing Company, Iowa City and Davenport, Iowa. Pork link sausage. 271,097; May 27; Serial No. 295,680; published Mar. 18, 1930. Class 46.
Kohvakka, Otto, San Francisco, Calif. Medicinal preparation. 271,247; May 27; Serial No. 292,040; published Mar. 11, 1930. Class 6.
Koppers Products Company, Pittsburgh, Pa. Insecticides. 271,243; May 27; Serial No. 286,942; published Mar. 11, 1930. Class 6.
Kowalski, Kasimir, Chicago, Ill. Hair grower. 271,203; May 27; Serial No. 294,266; published Mar. 4, 1930. Class 6.
Krafft & Schüll, Duren, Germany. Hooks, eyes, and buckles. 271,240; May 27; Serial No. 285,276; published Mar. 18, 1930. Class 40.
Laboratoires G. Beytout, Societe a Responsabilite Limitee, Paris, France. Medicine. 271,152–3; May 27; Serial Nos. 294,478–9; published Mar. 4, 1930. Class 6.
La Mark, Georgia G. (See Lewis, Edna J., assignor.)
Leaksville Woolen Mills, Inc., The, Charlotte, N. C. All-wool blankets. 271,160; May 27; Serial No. 293,474; published Mar. 11, 1930. Class 42.
Leather Finish Fabrics, Inc., Newark, N. J. Leather substitutes. 271,184; May 27; Serial No. 294,268; published Mar. 18, 1930. Class 50.
Leventhal, I., and Sons, West Brighton, N. Y. Boots and shoes. 271,255; May 27; Serial No. 292,453; published Mar. 11, 1930. Class 39.

Lewis, Edna J., doing business as Lewis Laboratories, Hollywood, assignor to G. G. La Mark, Los Angeles, Calif. Preparation for the treatment of leucorrhœa, etc. 271,200; May 27; Serial No. 294,310; published Mar. 4, 1930. Class 6.
Lightfoot Schultz Company, Hoboken, N. J. Astringents, astringent cerates, bleach creams, etc. 271,193; May 27; Serial No. 294,311; published Mar. 4, 1930. Class 6.
Luyna. (See Parfumerie Monpelas, Steinfels Freres & Cie., Societe a Responsabilite Limitee.)
Macbeth-Evans Glass Company, Charleroi, Pa. Glass globes. 271,125; May 27; Serial No. 295,525; published Mar. 11, 1930. Class 33.
Mackintosh, John, and Sons, Limited, Halifax, England. Coffee. 271,257; May 27; Serial No. 290,171; published Dec. 24, 1929. Class 46.
Maier, Bertram B., doing business as Windsor Park Chemical Company, Chicago, Ill. Liquid medicinal preparation. 271,241; May 27; Serial No. 287,082; published Mar. 11, 1930. Class 6.
Maison de Paris. (See Paskin, Ruth.)
Manufacture Metallurgique de Tournus, Tournus, France. Knives, forks, spoons, etc. 271,251; May 27; Serial No. 291,992; published Mar. 18, 1930. Class 23.
Massachusetts Duck Growers Association, Boston, Mass. Dressed ducklings. 271,310; May 27. Class 46.
Mercurio Bros. Spaghetti Mfg. Co., St. Louis, Mo. Alimentary products. 271,278; May 27; Serial No. 290,715; published Mar. 18, 1930. Class 46.
Mettler, Lee B., doing business as Lee B. Mettler Co., Los Angeles, Calif. Gas and oil burners, fire pots, etc. 271,181; May 27; Serial No. 294,079; published Mar. 11, 1930. Class 34.
Meyers, A., & Sons, New York, N. Y. Pins. 271,266; May 27; Serial No. 286,375; published Mar. 18, 1930. Class 40.
Miller, George L., doing business as Miller Dental Laboratory, Boston, Mass. Ligatures or clamps for mouthpieces of musical instruments. 271,283; May 27; Serial No. 286,647; published Mar. 11, 1930. Class 36.
Milson Company, The, Cincinnati, Ohio. Beauty, cream, cold cream, face powder, hair tonic, etc. 271,222; May 27; Serial No. 282,741; published Aug. 27, 1929. Class 6.
Mohawk Rubber Company, The, Akron, Ohio. Vehicle tires and inner tubes. 271,128; May 27; Serial No. 295,744; published Mar. 18, 1930. Class 35.
Motologue Advertising Corporation, New York, N. Y. Advertising signs. 271,171; May 27; Serial No. 293,062; published Mar. 18, 1930. Class 50.
Mount Airy Overall Co., Mount Airy, N. C. Work shirts, work pants, and overalls. 271,083; May 27; Serial No. 267,852; published Sept. 4, 1928. Class 39.
Musick's, Richard B., Compound Company, Los Angeles, Calif. Medical compound. 271,157; May 27; Serial No. 294,037; published Mar. 11, 1930. Class 6.
National Spring Clip Co. Inc., Montpelier, Vt. Spring clothespins. 271,300; May 27. Class 24.
Nectartone Laboratories. (See Koppel, F. O.)
New England Wood Heel Co., Haverhill, Mass. Wood heels. 271,103; May 27; Serial No. 295,129; published Mar. 11, 1930. Class 39.
New Metropolitan Fiction, Inc., New York, N. Y. Magazine. 271,104; May 27; Serial No. 295,081; published Mar. 18, 1930. Class 38.
Newton, Frank H., Los Angeles, Calif. Cosmetic for the hair and scalp. 271,284; May 27; Serial No. 292,591; published Mar. 11, 1930. Class 6.
Nightingale Laboratories. (See Barnum, Kenneth R.)
Obex Corporation, New York, N. Y. Tablets for treating obesity. 271,139; May 27; Serial No. 295,131; published Mar. 4, 1930. Class 6.
Obex Corporation, New York, N. Y. Tablets for treating obesity. 271,190; May 27; Serial No. 295,130; published Mar. 4, 1930. Class 6.
Ohio Wax Paper Company, The, Columbus, Ohio. Wrapping paper. 271,113; May 27; Serial No. 294,082; published Mar. 18, 1930. Class 37.
Pabst Corporation, Milwaukee, Wis. Cereal malt beverages. 271,202; May 27; Serial No. 294,274; published Mar. 18, 1930. Class 48.
Pacent Reproducer Corporation, New York, N. Y. Electric sound-reproduction apparatus. 271,301; May 27. Class 21.
Pacific Golf Ball, Ltd., San Francisco, Calif. Golf balls. 271,289; May 27; Serial No. 289,039; published Feb. 18, 1930. Class 22.
Parfumerie Monpelas Steinfels Freres & Cie., Societe a Responsabilite Limitee, and doing business as Luyna, Vincennes, France. Perfumes, toilet water, face creams, etc. 271,189; May 27; Serial No. 294,483; published Mar. 11, 1930. Class 6.
Paskin, Ruth, doing business as Maison de Paris, New York, N. Y. Astringents, astringent cerates, bleach creams, etc. 271,127; May 27; Serial No. 295,493; published Mar. 11, 1930. Class 6.
Peabody and Company, Chicago, Ill. Publications. 271,101; May 27; Serial No. 295,346; published Mar. 18, 1930. Class 38.
Pearson Remedy Company, Inc., Burlington, N. C. Liniment for sprains, etc. 271,267; May 27; Serial No. 292,416; published Feb. 4, 1930. Class 6.
Peerless Chemical Company. (See Glezen, Ralph H.)
Pharis Tire and Rubber Company, The, Newark, Ohio. Rubber tires, casings, and tubes. 271,138; May 27; Serial No. 295,134; published Mar. 18, 1930. Class 35.
Pierce Petroleum Corporation, Wilmington, Del., and St. Louis, Mo. Lubricating oils. 271,311; May 27. Class 15.
Pittsburgh Waterproof Company, Pittsburgh, Pa. Tarpaulins. 271,183; May 27; Serial No. 294,240; published Mar. 18, 1930. Class 50.
Pohlenz & Salcedo, Mexico, Mexico. Medicine used in the treatment of tuberculosis. 271,172; May 27; Serial No. 293,154; published Mar. 11, 1930. Class 6.
Pond's Extract Company, New York, N. Y. Tissue paper. 271,092; May 27; Serial No. 294,593; published Mar. 11, 1930. Class 37.
Porcelain Products, Inc., Findlay, Ohio. Refractory insulating parts. 271,084; May 27; Serial No. 259,638; published June 4, 1929. Class 21.
Porzellanfabrik Waldershof Aktiengesellschaft vormals Johann Haviland, Waldershof, Germany. Porcelain ware. 271,242; May 27; Serial No. 286,952; published Mar. 11, 1930. Class 30.
Powell & Goldstein, Inc., Oneida, N. Y. Tobacco. 271,273; May 27; Serial No. 292,508; published Mar. 18, 1930. Class 17.
Presto Electric Roaster Company, Pittsburgh, Pa. Electric meat roasters. 271,277; May 27; Serial No. 291,175; published Mar. 11, 1930. Class 21.
Priddy, Chas. W., & Company, Incorporated, Norfolk, Va. Fertilizer. 271,229; May 27; Serial No. 278,807; published Mar. 18, 1930. Class 10.
Procter & Gamble Company, The, Cincinnati, Ohio. Material composed of saturated fatty acids. 271,221; May 27; Serial No. 283,004; published Mar. 11, 1930. Class 6.
Pruitt, A. H., doing business as A-P Laboratories, Wichita, Kans. Lice powder, tablets for purifying drinking water for poultry, and worm capsules. 271,146; May 27; Serial No. 294,825; published Mar. 11, 1930. Class 6.
Quaker Silver Company, Attleboro, Mass. Salt and pepper shakers, candlesticks, vases, etc. 271,180; May 27; Serial No. 293,896; published Mar. 11, 1930. Class 28.
Reed Tobacco Company, Richmond, Va. Cigarettes. 271,295; May 27. Class 17.
Regar, H. K., & Sons, Inc., Bridgeport, Pa. Hosiery, underwear, and sweaters. 271,089; May 27; Serial No. 293,447; published Feb. 25, 1930. Class 39.
Reynier & Co., New York, N. Y. Gloves. 271,107; May 27; Serial No. 294,543; published Mar. 11, 1930. Class 39.
Rhoads, J. E., & Sons, Philadelphia, Pa. U leathers, cup, hat, or flange leathers. 271,135; May 27; Serial No. 295,389; published Mar. 18, 1930. Class 35.
Richards, Elmer, Company, Chicago, Ill. Radio receiving sets. 271,302; May 27. Class 21.
Rickel, Walter J., Chicago, Ill. Materials to be used in place of sugar. 271,270; May 27; Serial No. 292,751; published Mar. 18, 1930. Class 46.
Ringnell, Frank O., doing business as F O R Laboratories, Glendale, Calif. Skin cream. 271,205; May 27; Serial No. 294,086; published Mar. 11, 1930. Class 6.
Rodale Manufacturing Company, New York, N. Y. Electrical wiring devices, electrical specialties and heating devices, push buttons, etc. 271,280; May 27; Serial No. 289,304; published Mar. 11, 1930. Class 21.
Roethel, John H., Brooklyn, N. Y. Shades or dimmers for automobile headlights. 271,292; May 27. Class 34.
Roozendaal, Siegfried, New York, N. Y. Adhesive patching material. 271,133; May 27; Serial No. 295,495; published Mar. 25, 1930. Class 5.
Rosenbaum, Charles M., doing business as C. M. R. Mfg. Co., New York, N. Y. Medicine. 271,147; May 27; Serial No. 294,779; published Mar. 11, 1930. Class 6.
Rosenbaum, Charles M., doing business as C. M. R. Mfg. Co., New York, N. Y. Medicinal preparations for the treatment of coughs, colds, etc. 271,148; May 27; Serial No. 294,778; published Mar. 11, 1930. Class 6.
Roze-In-Ize, Inc., Boston, Mass. Preparation for treating cut soles to produce longer life. 271,149; May 27; Serial No. 294,545; published Mar. 11, 1930. Class 6.
Russell, W. A., & Co., New York, N. Y. Air valves for steam radiators. 271,185; May 27; Serial No. 294,321; published Mar. 11, 1930. Class 13.
Schicht, Georg, A. G., Aussig, Czechoslovakia. Perfumeries, cologne waters, bath salts, face creams, etc. 271,227; May 27; Serial No. 279,388; published Mar. 11, 1930. Class 6.
Schlosser, M. & F., Paper Corporation, New York, N. Y. Writing paper, correspondence cards, and envelopes. 271,256; May 27; Serial No. 292,052; published Mar. 18, 1930. Class 37.
Schwarz, Louis, Chicago, Ill. Safety-razor blades. 271,238; May 27; Serial No. 274,574; published Dec. 11, 1928. Class 23.
Sears, Roebuck and Co., Chicago, Ill. Electric sadirons. 271,166; May 27; Serial No. 295,280; published Mar. 11, 1930. Class 21.
Seeck & Kade, Inc., New York, N. Y. Medicinal preparation. 271,212; May 27; Serial No. 284,748; published Nov. 5, 1929. Class 6.
Selectric Phonograph and Radio Corporation, Grand Rapids, Mich. Radio receiving sets adapted for combination with phonographs. 271,268; May 27; Serial No. 292,833; published Mar. 11, 1930. Class 21.

Seltzer, Leonard A., doing business as Seltzer, Detroit, Mich. Medicinal solution. 271,158; May 27; Serial No. 294,026; published Mar. 11, 1930. Class 6.
Serval System. (See Stiles, Dudley H.)
Shelby Canning Co., Shelbyville, Ind. Canned vegetables. 271,096; May 27; Serial No. 295,696; published Mar. 18, 1930. Class 46.
Simmons-Boardman Publishing Co., New York, N. Y. Magazine. 271,230; May 27; Serial No. 278,754; published Mar. 18, 1930. Class 38.
Simons Brothers, Charleston and Johns Island, S. C. Grape juice. 271,253; May 27; Serial No. 287,020; published Mar. 18, 1930. Class 45.
Skinner, C. A., Council Bluffs, Ia. Oils and greases. 271,237; May 27; Serial No. 276,277; published Apr. 9, 1929. Class 15.
Slothower Bros. & Sons, Harrisburg, Pa. Liniment, corn salve, white-pine cough syrup, etc. 271,208; May 27; Serial No. 293,605; published Mar. 11, 1930. Class 6.
Smith, Carroll Dunham, Pharmacal Co., New York, N. Y. Alterative, analgesic, antacid, etc. 271,080; May 27; Serial No. 270,014; published Mar. 11, 1930. Class 6.
Smith & Nichols, Inc., New York, N. Y. Wax lamps and candlesticks. 271,182; May 27; Serial No. 294,091; published Mar. 11, 1930. Class 34.
Snugfit Eye Patch Co., The. (See Burdick, Austin F.)
Société Anonyme des Manufactures des Glaces et Produits Chimiques de St.-Gobain, Chauny & Cirey, Paris, France. Glassware, sheet and plate glass, and glass used for paving. 271,156; May 27; Serial No. 294,092; published Feb. 18, 1930. Class 33.
Société Anonyme M. Naef & Cie., Geneva, Switzerland. Perfumes, essential oils. 271,143; May 27; Serial No. 295,089; published Mar. 11, 1930. Class 6.
Société Anonyme M. Naef & Cie., Geneva, Switzerland. Artificial and synthetic perfumes, essential oils. 271,144; May 27; Serial No. 295,087; published Mar. 11, 1930. Class 6.
Société des Magnétos R. B., Paris, France. Electric battery. 271,118; May 27; Serial No. 294,897; published Mar. 11, 1930. Class 21.
Spann & Tomlin Seaside Mfg. Co., The, Tulsa, Okla. Complexion cream and face lotion. 271,286; May 27; Serial No. 291,700; published Mar. 11, 1930. Class 6.
Spiehler, Adolph, Inc., Rochester, N. Y. Perfumes, toilet water, face powder, etc. 271,223; May 27; Serial No. 282,576; published Sept. 10, 1929. Class 6.
Sprague & Carleton, Inc., Keene, N. H. Settees and chairs. 271,134; May 27; Serial No. 295,440; published Mar. 18, 1930. Class 32.
Squibb, E. R., & Sons, New York, N. Y. Antiseptic. 271,137; May 27; Serial No. 295,195; published Mar. 4, 1930. Class 6.
Standard Brands Incorporated, Dover, Del.; Cincinnati, Ohio; and New York, N. Y. Phosphate and lactate mixture. 271,141; May 27; Serial No. 295,397; published Mar. 11, 1930. Class 6.
Stiles, Dudley H., doing business as Serval System, Kansas City, Kans. Portable accounting records, individual record sheets, and tables of figures. 271,261; May 27; Serial No. 288,402; published Mar. 18, 1930. Class 37.
Strawbridge & Clothier, Philadelphia, Pa. Gloves. 271,086; May 27; Serial No. 293,904; published Mar. 11, 1930. Class 39.
Strohmeyer & Arpe Company, doing business as United Pure Food Co., New York, N. Y. Canned fish, canned vegetables, olives in bulk, and antipasto. 271,088; May 27; Serial No. 293,608; published Mar. 18, 1930. Class 46.
Superior Paper Products Company, Carnegie, Pa. Corrugated-paper cases for shipping burial coffins. 271,176; May 27; Serial No. 293,754; published Feb. 25, 1930. Class 2.
Texas Coffee Company, Incorporated, Beaumont, Tex. Coffee. 271,090; May 27; Serial No. 293,198; published Mar. 18, 1930. Class 46.
Thomson-Gibb Electric Welding Company, Lynn, Mass. Electric metal-working apparatus and parts for such apparatus. 271,174; May 27; Serial No. 293,388; published Mar. 11, 1930. Class 21.
Thornton, Renée, New York, N. Y. Perfumes. 271,151; May 27; Serial No. 294,494; published Mar. 11, 1930. Class 6.
Time-O-Stat Controls Company, Elkhart, Ind. Automatic electric temperature, pressure, float, and time responsive devices and replacement parts thereof, etc. 271,279; May 27; Serial No. 289,425; published Mar. 11, 1930. Class 21.
Tuttle & Bailey Manufacturing Company, New York, N. Y. Heating registers. 271,186; May 27; Serial No. 294,324; published Mar. 11, 1930. Class 34.
United Pure Food Co. (See Strohmeyer & Arpe Company.)
United States Playing Card Co., The, Norwood, Ohio. Playing cards. 271,142; May 27; Serial No. 295,809; published Mar. 11, 1930. Class 22.
United States Power Squadrons, Inc., Washington, D. C. Magazines and instruction sheets. 271,254; May 27; Serial No. 292,913; published Mar. 11, 1930. Class 38.
United States Refining Company, Los Angeles, Calif. Oils and greases or petroleum products. 271,175; May 27; Serial No. 293,390; published Mar. 11, 1930. Class 15.
Van Camp Packing Company, Incorporated, The, Indianapolis, Ind. Canned tomato juice. 271,120; May 27; Serial No. 294,654; published Mar. 18, 1930. Class 46.
Van Camp Packing Company, Incorporated, The, Indianapolis, Ind. Canned foods and canned vegetable juices. 271,121; May 27; Serial No. 294,653; published Mar. 18, 1930. Class 46.
Van Dyk, James, Company, New York, N. Y. Coffee. 271,098; May 27; Serial No. 295,587; published Mar. 18, 1930. Class 46.
Vaskos, Mike H., Beloit, Wis. Powder preparation for use in the treatment of piles. 271,250; May 27; Serial No. 291,034; published Mar. 11, 1930. Class 6.
Vassar Swiss Underwear Company, Chicago, Ill. Union suits. 271,299; May 27. Class 39.
Verdon, William P., sr., Hoboken, N. J. Electric nonglare fog-penetrating lights. 271,276; May 27; Serial No. 291,371; published Mar. 11, 1930. Class 21.
Vulcan Match Co., Inc., New York, N. Y. Matches. 271,287; May 27; Serial No. 291,643; published Mar. 18, 1930. Class 9.
Watkins, R. L., Company, The, New York, N. Y. Dentifrice. 271,076; May 27; Serial No. 271,671; published Mar. 11, 1930. Class 6.
Watkins, R. L., Company, The, New York, N. Y. Dentifrice. 271,077; May 27; Serial No. 271,631; published Mar. 11, 1930. Class 6.
Watkins, R. L., Company, The, New York, N. Y. Dentifrice. 271,078; May 27; Serial No. 271,462; published Mar. 11, 1930. Class 6.
Watkins, R. L., Company, The, New York, N. Y. Dentifrice. 271,079; May 27; Serial No. 271,415; published Mar. 11, 1930. Class 6.
Waukesha Pure Spring Water Company, Mukwonago, Wis. Spring water. 271,129; May 27; Serial No. 295,705; published Mar. 18, 1930. Class 45.
Waukesha Pure Spring Water Company, Mukwonago, Wis. Medicated spring water. 271,130; May 27; Serial No. 295,704; published Mar. 18, 1930. Class 45.
Whaley-Eaton Service, Inc., Washington, D. C. Publication. 271,095; May 27; Serial No. 295,822; published Mar. 18, 1930. Class 38.
White, R. H., Company, Boston, Mass. Suits, coats, overcoats, etc. 271,315; May 27. Class 39.
Wilcox Novelty Company, The, Athol, Mass. Bob sets, buttonhooks, combs, etc. 271,262; May 27; Serial No. 288,042; published Mar. 11, 1930. Class 40.
Wilder, Anna S., Sherwood, Mich. Preparation used in the treatment of the eyes. 271,303; May 27. Class 6.
Windsor Park Chemical Company. (See Maier, Bertram B.)
Winkler, Gustav, doing business as the Firm Gustav Winkler, Berlin, Germany. Pocket handkerchiefs. 271,159; May 27; Serial No. 293,859; published Feb. 25, 1930. Class 42.
Wright & Ditson, Boston, Mass. Golf balls. 271,290; May 27; Serial No. 288,629; published Feb. 11, 1930. Class 22.
Wyoming Valley Paper Mill, Northumberland, N. H. Toilet paper. 271,258; May 27; Serial No. 289,432; published Dec. 31, 1929. Class 37.

ALPHABETICAL LIST OF REGISTRANTS OF LABELS

Central Plumbing Supply Company. (See Schmerling, Abraham.)
Feinberg, M. A., New York, N. Y. Elixir Aspiral. For Pharmaceutical Preparation. 37,481; May 27.
Follmer Clogg & Co., New York, N. Y., Lancaster and Philadelphia, Pa., San Francisco, Calif. Pansipetal. For Silk Textile Fabrics. 37,482; May 27.
Gelfand Mfg. Company of Calif., Inc., The, Los Angeles, Calif. Salad Bowl. For Sandwich Spread. 37,483; May 27.
Haffner, Edward J., St. Louis, Mo. Sunny Boy. For Soda. 37,484; May 27.
Hamilton, John D., Company, The, Tacoma, Wash. K-K-O. For Candy. 37,485; May 27.
Lambooy Label & Wrapper Company, Kalamazoo, Mich. No. C B—317. For Tea Rolls. 37,486; May 27.
Maintenance Specialties Supply Co., Inc., Brooklyn, N. Y. Cedar Wood Oil Paint. For Paint. 37,487; May 27.
Mannings Inc., San Francisco, Calif. Mannings Sun-Dar Tea. For Tea. 37,488; May 27.
Mannings Inc., San Francisco, Calif. Mannings Jo-To Tea. For Tea. 37,489; May 27.
Mannings Inc., San Francisco, Calif. Mannings Kohl-Stan Tea. For Tea. 37,490; May 27.

Ray-Brown Company, Inc., Woodburn, Oreg. Fresh Seal. For Sliced Peaches. 37,491; May 27.
Rosenzweig, Henry & Co., Inc., New York, N. Y. Superyarn Fabrics. For Fabrics, Crepes and Georgettes. 37,492; May 27.
Schmerling, Abraham, doing business as Central Plumbing Supply Company, Philadelphia, Pa. Last Long, Plastic Roof Coating. For Liquid Plastic Roof Coating. 37,493; May 27.
Shy-N Products Co., Morgantown, W. Va. Shy-N Auto Polish. For Automobile and Furniture Polish. 37,494; May 27.
United Drug Company, Boston, Mass. Aspiroids. For Relieving Colds. 37,495; May 27.

ALPHABETICAL LIST OF REGISTRANTS OF PRINTS

Arcturus Radio Tube Company, Newark, N. J. Arcturus Photolytic Cell. For Photo-Electric Devices. 12,558; May 27.
Arden, Elizabeth, Inc., doing business as Elizabeth Arden, New York, N. Y. There is a Key to Beauty. For Cleansing Cream, Skin Tonic, and Cleansing Tissues. 12,559; May 27.
Arden, Elizabeth, Inc., doing business as Elizabeth Arden, New York, N. Y. Love. For Perfume. 12,560; May 27.
Bonita Company, The, Fond du Lac, Wis. Hello World. For Candy. 12,561; May 27.
Bradford Milling Company, Denver, Colo. Chubb, The Wheatall Chef. For a Breakfast Cereal. 12,562; May 27.
Brooks, Pauline G., Corsicana, Tex. Dand Er-Go. For Treating Dandruff. 12,563; May 27.
Hansen, William, Chicago, Ill. Dentees. For Dentifrice. 12,564; May 27.
Kay, J. Roland, Chicago, Ill. A Camel Can Go 11 Days Without a Drink, But! I Can't Go 1 Day Without a Camel. For Cigarettes. 12,565; May 27.
King of Clubs, Inc., Newark, N. J. It Reigns When It's Poured. For Ginger Ale, Lime and Lithia, Sarsaparilla, and Carbonated Beverages. 12,566; May 27.
National Union Radio Corp., New York, N. Y. Bombarded With Energy. For Radiotubes. 12,567; May 27.
Reynolds, R. J., Tobacco Company, Winston-Salem, N. C. Overtures. For Cigarettes. 12,568; May 27.
Reynolds, R. J., Tobacco Company, Winston-Salem, N. C. It's The Camel Blend. For Cigarettes. 12,569; May 27.
Reynolds, R. J., Tobacco Company, Winston-Salem, N. C. Better From Than Last Year. For Cigarettes. 12,570; May 27.
Reynolds, R. J., Tobacco Company, Winston-Salem, N. C. The Luxury of Camels Costs No More. For Cigarettes. 12,571; May 27.
Reynolds, R. J., Tobacco Company, Winston-Salem, N. C. Look At It This Way. For Cigarettes. 12,572; May 27.
Reynolds, R. J., Tobacco Company, Winston-Salem, N. C. Better And Here's Why. For Cigarettes. 12,573; May 27.
Reynolds, R. J., Tobacco Company, Winston-Salem, N. C. Standing Out as the Better Cigarette. For Cigarettes. 12,574; May 27.
Rice, Jerome B., Seed Co., Cambridge, N. Y. Rice's Giant Summer Straight Neck Squash. For Squash Seeds. 12,575; May 27.

ALPHABETICAL LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Aikin, Frank W., doing business as International Oil Burner Co., Watertown, N. Y. Oil burners. 297,222; May 27. Class 34.
Alabama Dry Goods Company, Birmingham, Ala. Hosiery. 298,064; May 27. Class 39.
Alabama Dry Goods Company, Birmingham, Ala. Hosiery. 298,300; May 27. Class 39.
Allen, John R., Gary, Ind. Preparation for the treatment of rheumatism. 298,476; May 27; Class 6.
All-Fair, Incorporated, Churchville, N. Y. Horse game, shooting game, automobile games, etc. 285,137; May 27. Class 22.
Aluminum Industries, Inc., Cincinnati, Ohio. Vehicle and machinery bolts. 288,462; May 27. Class 13.
American Abrasive Metals Company, New York, N. Y. Surface layer of hard granular mineral elements. 297,167; May 27. Class 12.
American Aeronautical Corporation, New York, N. Y. Aeroplanes, seaplanes, flying boats, etc. 281,390; May 27. Class 19.
American Chemical Manufacturing Co. (See Cohen, Dan.)
American Coffee Company, Inc, New Orleans, La. Coffee and tea. 297,948; May 27. Class 46.
American Crayon Company, The, Sandusky, Ohio. Textile fabrics. 296,895; May 27. Class 40.
American Electric Company, Inc., Chicago, Ill. Operator's telephone switchboards. 298,368; May 27. Class 21.
American Hosiery Company, New Britain, Conn. Undershirts, underdrawers, bathing suits, etc. 298,735; May 27. Class 39.
American Laundry Machinery Company, The, Norwood Station, Cincinnati, Ohio. Drying machines for removing moisture or cleaning fluids from fabrics, clothing, and the like. 294,377; May 27. Class 24.
American Lead Company, Indianapolis, Ind. Soft lead and Babbitt metal. 297,998; May 27. Class 14.
American Steel and Wire Company of New Jersey, The, Cleveland, Ohio; Chicago, Ill.; Pittsburgh, Pa.; New York, N. Y.; Worcester, Mass.; Hoboken, N. J. Wire. 297,940; May 27. Class 14.
Antidolor Mfg. Co., Inc., The, Springville, N. Y. Contact anesthetic. 288,601; May 27. Class 6.
Armbrust Chain Company, Providence, R. I. Bracelets, watch chains, fob chains, etc. 297,841; May 27. Class 28.
Arranbee Doll Co., New York, N. Y. Doll bodies. 297,403; May 27. Class 22.
Asbestos Shingle, Slate & Sheathing Company, Ambler, Pa. Fireproof roofing covering, roofing, slate, shingles. 281,890; May 27. Class 12.
Asia Commercial Company, The. (See Lain, Chin.)
Autolox Sign Company, Boston, Mass. Advertising signs. 297,575; May 27. Class 50.
Automatic Signal Corporation, New Haven, Conn. Automatic electric traffic-control systems. 291,262; May 27. Class 21.
Automobile Club of Missouri, The., St. Louis, Mo. Periodical publication. 297,055; May 27. Class 38.
Babbitt, B. T., Inc., New York, N. Y. Drain-pipe solvent. 297,652; May 27. Class 6.
Badger Paper Mills, Inc., Peshtigo, Wis. Writing and tissue paper. 298,067; May 27. Class 37.
Baker, Howard H., Buffalo, N. Y. Incense. 298,002; May 27. Class 6.
Ballard, Page D., doing business as The Crest Playing Card Co., Chicago, Ill. Playing cards. 298,068; May 27. Class 22.
Bamberger, L., & Co., Newark, N. J. Sanitary articles. 297,887; May 27. Class 44.
Bancroft, Joseph, & Sons Co., Wilmington, Del. Shade cloth in the piece. 296,626; May 27. Class 42.
Barnes Emulsion Co., San Francisco, Calif. Medicinal preparation. 296,314; May 27. Class 6.
Bartcraft Studios, The. (See Bartholomew, Walter H.)
Bartholomew, Walter H., doing business as The Bartcraft Studios, Nyack, N. Y. Photographs, photograph enlargements, and photograph art reproductions, etc. 290,397; May 27. Class 38.
Barton Corporation, The, West Bend, Wis. Laundry washing machines. 294,789; May 27. Class 24.
Barton Corporation, The, West Bend, Wis. Laundry washing machines. 294,791; May 27. Class 24.
Beacon Oil Company, Boston, Mass. Oils and greases. 295,419; May 27. Class 15.
Bedell, George T., Detroit, Mich. Chocolate-coated ice cream. 298,422; May 27. Class 46.
Bennett Manufacturing Company. (See Hinckley, Harriet A.)
Berkeley Company, Chicago, Ill. Sanitary napkins. 297,654; May 27. Class 44.
Bentect Company, The. (See Palmer, Wallace G., jr.)
Blackstone Silver Company, Inc., Stratford, Conn. Silver-plated flat tableware. 297,952; May 27. Class 28.
Block, Louis I., Chicago, Ill. Facial creams, hair grower, etc. 292,651; May 27. Class 6.
Bluementhal, Sidney, & Co. Inc., New York, N. Y. Pile fabrics in the piece. 296,796-8; May 27. Class 42.
Bluementhal, Sidney, & Co. Inc., New York, N. Y. Pile fabrics in the piece. 296,800; May 27. Class 42.
Blumenthal, Sidney, & Co. Inc., New York, N. Y. Pile fabrics in the piece. 298,927; May 27. Class 42.
Böhme, H. Th., A. G., Chemnitz, Germany. Chemical dye aids. 298,737; May 27. Class 6.
Böhme, H. Th., A. G., Chemnitz, Germany. Soap preparations. 298,738; May 27. Class 4.

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[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Böhme, H. Th., A. G., Chemnitz, Germany. Chemical dye aids. 298,739; May 27. Class 6.
Böhme, H. Th., A. G., Chemnitz, Germany. Chemical dye a.ds. 298,741; May 27. Class 6.
Bonded Materials Company, Louisville, Ky. Roof coating and waterproofing asphaltic compounds. 292,863; May 27. Class 12.
Bonide Chemical Co. Inc., Utica, N. Y. Poisoned seed for killing mice. 298,783; May 27. Class 6.
Bonnar-Vawter Fanform Company, Inc., Cleveland, Ohio. Printed blank forms. 298,614; May 27. Class 37.
Brach, E. J., & Sons, Chicago, Ill. Periodical. 289,096; May 27. Class 38.
Bradley Knitting Company, Milwaukee, Wis. Bathing suits. 295,359; May 27. Class 39.
Buegeleisen & Jacobson, New York, N. Y. Accordions. 294,383; May 27. Class 36.
Buenaventura Company of Cuba, The, Chicago, Ill. Fresh citrus fruits. 298,374; May 27. Class 46.
California and Hawaiian Sugar Refining Corporation, Ltd., San Francisco, Calif. Granulated sugar tablets. 297,516; May 27. Class 46.
California Packing Corporation, San Francisco, Calif. Canned fruits and vegetables, jams, jellies, olives, etc. 294,466–7; May 27. Class 46.
Calumet Electrical Casteel Co., Hammond, Ind. Steel castings. 297,893; May 27. Class 14.
Car-Bis-Sal, Inc. (See De Mott, Jerome, assignor.)
Carew Manufacturing Company, South Hadley Falls, Mass. Paper. 297,847; May 27. Class 37.
Caswell, Geo. W., Company, San Francisco, Calif. Coffee. 298,788; May 27. Class 46.
Celanese Corporation of American, New York, N. Y. Fabrics. 298,012; May 27. Class 42.
Cento, Anthony, doing business as A. Cento, St. Louis, Mo. Toilet preparations. 298,272; May 27. Class 6.
Certified Hosiery, Inc., Clifton, N. J. Hosiery. 298,149; May 27. Class 39.
Champion Knitting Mills, Chattanooga, Tenn. Hosiery. 296,174; May 27. Class 39.
Cheney Brothers, South Manchester, Conn. Cravats and neckties. 298,529; May 27. Class 39.
Chicago Faucet Co., The, Chicago, Ill. Bath faucets. 291,815; May 27. Class 13.
Cluett, Peabody & Co., Inc., Troy, N. Y. Shirts. 298,379; May 27. Class 39.
Cohen, Dan, doing business as American Chemical Manufacturing Co., Memphis, Tenn. Hairdressing, skin bleach. 294,944; May 27. Class 6.
Columbus Coated Fabrics Corporation, Columbus, Ohio. pyroxylin-coated fabrics. 295,726; May 27. Class 50.
Continental Mfg. Co. (See Kottle, Isidor.)
Continental Optical Company, Indianapolis, Ind. Spectacle frames. 296,691; May 27. Class 26.
Continental Typefounders Association, Inc., New York, N. Y. Printer's type. 296,904–5; May 27. Class 14.
Continental Typefounders Association, Inc., New York, N. Y. Printer's type. 296,907–8; May 27. Class 14.
Converse Rubber Company, Malden, Mass. Boots and shoes. 297,061; May 27. Class 39.
Cosmetic Distributors, Inc., New York, N. Y. Salves. 282,344; May 27. Class 6.
Coty, Inc., Wilmington, Del., and New York, N. Y. Nail files, emery boards, manicure sticks, etc. 298,079; May 27. Class 44.
Coty, Inc., Wilmington, Del., and New York, N. Y. Nailbrushes. 298,080; May 27. Class 29.
Crest Playing Card Co., The. (See Ballard, Page D.)
Crowe, E. R., & Company, Inc., New York, N. Y. Magazine. 297,522; May 27. Class 38.
Crown Jewel Groves, Redlands, Calif. Fresh citrus fruits. 297,937; May 27. Class 46.
Czecho-Slovak Products Co. (See Krizanovic, John.)
Daggett & Ramsdell, New York, N. Y. Soap and shaving cream. 292,847–8; May 27. Class 4.
Daggett & Ramsdell, New York, N. Y. Toilet creams, lotions, and powders, perfumes, bath salts, etc. 292,849–50; May 27. Class 6.
Daggett & Ramsdell, New York, N. Y. Powder puffs and absorbent powder puffs. 292,851; May 27. Class 29.
Daggett & Ramsdell, New York, N. Y. Cleansing tissue. 292,853–4; May 27. Class 37.
Daggett & Ramsdell, New York, N. Y. Toil creams, lotions, and powders, perfumes, bath salts, etc. 292,855; May 27. Class 6.
Daggett & Ramsdell, New York, N. Y. Soap and shaving cream. 292,856; May 27. Class 4.
Daggett & Ramsdell, New York, N. Y. Cleansing tissue. 292,858; May 27. Class 37.
Daggett & Ramsdell, New York, N. Y. Cleansing puffs and absorbent puffs. 298,274; May 27. Class 29.
Daily Telegraph Printing Company, Bluefield, W. Va. Newspaper. 297,415–16; May 27. Class 38.
Dassonville, Michel, Paris, France. Socks and stockings, dresses, coats, etc. 296,636; May 27. Class 39.
Davega, Inc., New York, N. Y. Golf balls. 295,364; May 27. Class 22.
Davega, Inc., New York, N. Y. Fishing-tackle outfits. 296,801; May 27. Class 22.
Deckel, Friedrich, doing business as Prazisionsmechanik und Maschinenbau, Munich, Germany. Transmission gears and fuel-injection devices for Diesel engines. 287,525; May 27. Class 23.
De Koven, Isaac, doing business as De Koven Pharmaceutical Company, not Inc., Chicago, Ill. Liquid preparation to be externally applied. 298,156; May 27. Class 6.
Dell, Samuel M., & Co., Inc., Baltimore, Md. Paintbrushes. 297,419; May 27. Class 29.
De Mott, Jerome, assignor to Car-Bis-Sal, Inc., New York, N. Y. Pharmaceutical preparation. 291,554; May 27. Class 6.
Disney, Walter E., Hollywood, Calif. Motion pictures reproduced in copies. 285,411–12; May 27. Class 26.
D'Ormont Laboratories. (See Goldberg, Samuel.)
Dreher Bros. & Wider, New York, N. Y. Synthetic semiprecious stones. 297,063; May 27. Class 28.
Duplex Silk Mills, Inc., New York, N. Y. Silks in the piece. 298,690; May 27. Class 42.
Du Pont, E. I., de Nemours and Company, Wilmington, Del. Rubber-coated fabric. 298,022; May 27. Class 50.
Edmond Process. (See Pausser, A. Edmond.)
Egyptian Lacquer Manufacturing Company, The, New York, N. Y. Lacquer. 298,983; May 27. Class 16.
Enterprise Manufacturing Company, The, Akron, Ohio. Artificial bait. 298,602–3; May 27. Class 22.
Eureka Electric Company. (See Rosinger, Mannie.)
Excelsior Supply Company. (See Mulherin, William F.)
Faber, A. W., Inc., Newark, N. J. Pencils. 297,125; May 27. Class 37.
Fairchild Bros. & Foster, New York, N. Y. Gastric extract. 297,363; May 27. Class 6.
Fairchild Bros. & Foster, New York, N. Y. Preparation of beef muscle and stomach substance. 298,434; May 27. Class 6.
Fairchild Bros. & Foster, New York, N. Y. Preparation of the liver. 298,435; May 27. Class 6.
Fields, A. Madie, De Land, Fla. Liniment. 296,641; May 27. Class 6.
First National Stores Inc., Boston and Somerville, Mass. Shoe polish and metal and glass polishes. 295,661; May 27. Class 4.
Fleischer, Joseph, doing business as Fleischer & Co., New York, N. Y. Combs. 297,006; May 27. Class 40.
Fleming, Kathryn, Minneapolis, Minn. Cream used for cleansing the skin, etc. 297,860; May 27. Class 6.
Foremost Fabrics Corporation, New York, N. Y. Silk piece goods. 282,538; May 27. Class 42.
Forstner Chain Corp., Irvington, N. J. Pocket case. 294,348; May 27. Class 2.
Fortune, Oliver C., doing business as Kurth, Darland & Fortune, Kansas City, Mo. Table syrup. 291,970; May 27. Class 46.
French & Ward, New York, N. Y. Piece goods of woolen and cotton mixtures. 296,806; May 27. Class 42.
Friedman Ring Company, Chicago, Ill. Finger rings. 297,364; May 27. Class 28.
Fulton Bag & Cotton Mills, Atlanta, Ga. Waterproof cotton goods. 296,737; May 27. Class 50.
Gagnier Fibre Products Company, doing business as The Super-Visor Company, Detroit, Mich. Antiglare shield. 297,477; May 27. Class 19.
Gambill, Wm. M., doing business as Ogene Co., Abilene, Tex. Mouth wash and dentifrice. 298,623; May 27. Class 6.
General-Direktion der österr. Tabakregie, Vienna, Austria. Cigarette paper, tubes, and holders, cigar holders, and tobacco pipes. 298,164; May 27. Class 8.
General Market House Company, Chicago, Ill. Bacon. 278,218; May 27. Class 46.
Goeller, Lawrence E., Circleville, Ohio. Racks for holding neckties. 296,862; May 27. Class 50.
Goldberg, Samuel, doing business as d'Ormont Laboratories, Philadelphia, Pa. Powder in capsule form. 296,698; May 27. Class 6.
Goslin-Birmingham Manufacturing Co., Inc., Birmingham, Ala. Filters. 298,023; May 27. Class 31.
Graf, John, Company, Milwaukee, Wis. Malt beverage. 298,174; May 27. Class 48.
Granat, Joseph, doing business as Granat Bros., San Francisco, Calif. Finger rings. 297,426; May 27. Class 28.
Gray, Dorothy, Bloomfield, N. J. Skin lotion. 298,569; May 27. Class 6.
Gretsch, Fred., Mfg. Co., The, New York, N. Y. Harmonicas. 236,481; May 27. Class 36.
Grinnell Washing Machine Corporation, Grinnell, Iowa. Laundry washing machines. 294,922; May 27. Class 24.
Grounds, Charles H., doing business as The MacGregor Company, Pittsfield, Mass. Sleeve holders of precious metal. 294,385; May 27. Class 28.
Hamilton, Janice, New York, N. Y. Laundry lists. 297,596; May 27. Class 38.
Harrison Wholesale Company, Chicago, Ill. Storage batteries. 297,190; May 27. Class 21.
Harrower Laboratory, Inc., The, Glendale, Calif. Endocrine solution. 297,481; May 27. Class 6.
Hart-Albin Company, Billings, Mont. Ladies' coats and suits. 298,444; May 27. Class 39.
Harwin Heater Co., Inc., New Haven, Conn. Coal, gas, or oil burning steam heating systems. 297,306; May 27. Class 34.

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[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Health Products Corporation, Newark, N. J. Cod-liver-oil concentrate. 298,025; May 27. Class 6.
Hearn, James A., & Son, Inc., New York, N. Y. Dresses, coats, sweaters, etc. 298,536; May 27. Class 39.
Henry & Henry, Inc., New York, N. Y. Insecticides. 298,631; May 27. Class 6.
Herman, Pauline. (See Hirsch, Pauline H.)
Hertzwig, Olaf, Trading Company, Inc., New York, N. Y. Canned-herring products. 266,135; May 27. Class 46.
Hess, Dr., & Clark, Inc., Ashland, Ohio. Poultry astringent and antiseptic tablets, etc. 295,734; May 27. Class 6.
Hinckley, Harriet A., doing business as Bennett Manufacturing Company, Springfield, Mass. Cleaning preparation. 291,920; May 27. Class 4.
Hirsch, Pauline H., doing business as Pauline Herman, Philadelphia, Pa. Hats. 297,430; May 27. Class 39.
Holeproof Hosiery Co., Milwaukee, Wis. Hosiery. 298,182; May 27. Class 39.
Holgate Brothers Company, Kane, Pa. Toy building blocks and bricks, Jerry blocks, etc. 298,027; May 27. Class 22.
Hopkins, J. L., & Co., New York, N. Y. Rat and mouse poison. 296,867; May 27. Class 6.
Hosiery Guild, Inc., Troy, N. Y. Hosiery. 298,100; May 27. Class 39.
House of Tre-Jur, Inc., New York, N. Y. Face and talcum powder, rouge, hair wash, etc. 279,277; May 27. Class 6.
Hunt, C. Howard, Pen Company, Camden, N. J. Ink. 297,599; May 27. Class 11.
I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Anesthetic. 298,750; May 27. Class 6.
I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Hypnotic. 298,751; May 27. Class 6.
I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Hypnotic and sedative. 298,752; May 27. Class 6.
Illes, Arpad E., doing business as A. E. Illes Company, Dallas, Tex. Medicinal preparations. 292,212; May 27. Class 6.
Illinois Pacific Glass Corporation, San Francisco, Calif. Cardboard or paper liners for fruit boxes. 297,079; May 27. Class 37.
International Harvest Hat Co., St. Louis, Mo. Men's hats. 298,183; May 27. Class 39.
International Oil Burner Co. (See Aikin, Frank W.)
Jantzen Knitting Mills, Portland, Oreg. Swimming suits. 298,334; May 27. Class 39.
Johnson, Charles Eneu, & Company, Philadelphia, Pa. Carbon black. 295,262; May 27. Class 16.
Just Born, Inc., Brooklyn, N. Y. Chocolate candy bars. 297,081; May 27. Class 46.
Kann, Sydney, doing business as Sydney Kann and Company, Detroit, Mich. Goggles and sun glasses. 297,369; May 27. Class 26.
Kay Laboratories, Inc., West Haverstraw, N. Y. Agricultural insecticides. 298,704; May 27. Class 6.
Kay Laboratories, Inc., West Haverstraw, N. Y. Agricultural insecticides. 298,706; May 27. Class 6.
Keegan, George F., Cincinnati, Ohio. Spark-plug protectors. 296,528; May 27. Class 21.
Klauer Manufacturing Company, Dubuque, Iowa. Corn shellers, vises, road scarifiers, etc. 280,710; May 27. Class 23.
Kolynos Company, The, New Haven, Conn. Toilet preparations and cosmetics. 295,521; May 27. Class 6.
Kotex Company, Chicago, Ill. Paper handkerchiefs. 297,254; May 27. Class 37.
Kottle, Isidor, doing business as Continental Mfg. Co., New York, N. Y. Silverware. 296,428; May 27. Class 28.
Krizanovic, John, doing business as Czecho-Slovak Products Co., Newark, N. J. Malt syrup. 298,502; May 27. Class 46.
Kurth, Darland & Fortune. (See Fortune, Oliver C.)
Lady Janis, Inc., Chicago, Ill. Astringents, astringent crates, bleach and beauty creams, etc. 293,672; May 27. Class 6.
La France Garment Co. (See Watinsky, David.)
Lain, Chin, doing business as The Asia Commercial Company, Shanghai, China, and San Francisco, Calif. Tea. 298,897; May 27. Class 46.
Lamella Company. (See Wetzstein, Irving V.)
Lanair Company, Chicago, Ill. Sanitary packs or sanitary napkins. 296,065; May 27. Class 44.
Lang, Raymond M., doing business as Lang Manufacturing Company, Hoffman, Minn. Musical jugs. 280,650; May 27. Class 36.
Lebanon Shirt Company, Lebanon, Lititz, Lexington, and Hebron, Pa., and New York, N. Y. Shirts. 297,683; May 27. Class 39.
Lee, Guy, Leather Company, Philadelphia, Pa. Leather strips and sole leather. 291,674; May 27. Class 1.
Lepage, George A., Sedan, France. Woolen piece goods. 289,525; May 27. Class 42.
Lewis, Edgar P., & Sons, Inc., Boston, Mass. Candy. 298,405; May 27. Class 46.
Lionel Trading Co. Inc., New York, N. Y. Perfumes, toilet waters, face lotions, etc. 298,247; May 27. Class 6.
Lozoraitis, Peter, doing business as National Bottling Company, Worcester, Mass. Maltless beverages. 298,947; May 27. Class 45.
Lynchburg Foundry Company, Lynchburg, Va. Cast-iron pipe and fittings. 298,579; May 27. Class 13.
MacGregor Company, The. (See Grounds, Charles H.)
MacMonnies, Frank, Inc., doing business as Societe Agaric, Paris, France, and as Pennsylvania Mushroom Co., Philadelphia, U. S. A., and New York, N. Y. Canned mushrooms. 298,949; May 27. Class 46.
Macy, R. H., & Co., Inc., New York, N. Y. Hosiery. 298,642; May 27. Class 39.
Manville Jenckes Company, Pawtucket, R. I. Cotton cord. 298,249; May 27. Class 7.
Markley, Thomas E., Los Angeles, Calif. Metal fixtures. 296,129; May 27. Class 13.
Markmann, Albert, & Co., Langenberg, Germany. Paper streamers and confetti. 295,718; May 27. Class 37.
Marvo-Lin Products Co., Newark, N. J. Nonrubbing liniment. 291,397; May 27. Class 6.
McClure & Wheat, Rock Rapids, Iowa. Tissue rolls. 297,924; May 27. Class 37.
McMath, John N., Upper Montclair, N. J. Lip sticks, refills, rouge, etc. 291,731; May 27. Class 6.
Medina, J. A., Company, New York, N. Y. Green coffee. 298,951; May 27. Class 46.
Mendel & Henle, Cincinnati, Ohio. Men's neckties. 298,285; May 27. Class 39.
Meol Co., Inc., Los Angeles, Calif. Lacquers. 282,307; May 27. Class 16.
Merrish, J. C., doing business as Oralee Freres, New York, N. Y. Perfumes. 298,757; May 27. Class 6.
Metasap Chemical Company, Harrison, N. J. Grease bases. 297,869; May 27. Class 15.
Milwaukee Lubricants Co., Milwaukee, Wis. Cleaning powder. 297,612; May 27. Class 4.
Minatolwerke A.-G., Lucerne, Switzerland. Liquid antiseptic soap. 295,435; May 27. Class 4.
Mobile Barber and Beauty Supply House. (See Myers, Harry H.)
Mock, Judson, Voehringer Co. Inc., New York and Long Island City, N. Y. Hosiery. 298,708; May 27. Class 39.
Monocacy Valley Canning Company, Frederick, Md. Canned fruits and vegetables. 298,348; May 27. Class 46.
Moskowitz Bros. Inc., New York, N. Y. Curtains. 295,040; May 27. Class 42.
Mulherin, William F., doing business as Excelsior Supply Company, Syracuse, N. Y. Barley-malt syrup. 295,685; May 27. Class 46.
Myers, Harry H., doing business as Mobile Barger and Beauty Supply House, Mobile, Ala. Preparation for the treatment of dandruff. 298,197; May 27. Class 6.
N. C. R. Laboratories. (See Rose, Norton C.)
National Bottling Company. (See Lozoraitis, Peter.)
Neuman, Nathan, Philadelphia, Pa. Sweaters, knitted jackets, and knitted bathing suits. 293,679; May 27. Class 39.
New Century Company, Chicago, Ill. Wheat and rye flour. 292,545; May 27. Class 46.
New England Confectionery Company, Cambridge, Mass. Candy. 298,655; May 27. Class 46.
New Jersey Bonded Floor Co., Garfield, N. J. Linoleum floor covering. 296,064; May 27. Class 20.
Northwestern Barb Wire Company, Sterling, Ill. Wire bale ties. 294,684–5; May 27. Class 13.
Novelty Advertising Company. (See Read, Frank H.)
Nyanza Color & Chemical Co. Inc., New York, N. Y. Chemical product. 298,586; May 27. Class 6.
Ogene Co. (See Gambill, Wm. M.)
Oralee Freres. (See Merrish, J. C.)
Oregon Distributing Company, Nogales, Ariz. Fresh green peas. 298,409; May 27. Class 46.
Palmer, Wallace G., jr., doing business as The Beutect Company, North Tonawanda, N. Y. Lumber and fasteners used in connection with the lumber. 296,023; May 27. Class 12.
Parazin Printing Plate, Inc., Rochester, N. Y. Printing plates. 296,078; May 27. Class 50.
Park, William G., Hanover, Conn. Textile fabrics. 298,412–13; May 27. Class 42.
Parker-Brawner Company, Rossiyn, Va. Publication. 297,774; May 27; Class 39.
Pausser, A. Edmond, doing business as Edmond Process, Philadelphia, Pa. Textile strips used in hair waving. 297,981; May 27. Class 44.
Pennsylvania Mushroom Co., Philadelphia, U. S. A. (See MacMonnies, Frank, Inc.)
Petroleum Conversion Corporation, New York, N. Y., and Texas City, Tex. Motor-fuel oils. 293,483; May 27. Class 15.
Phantom Stoker Company, The, Cleveland, Ohio. Domestic coal stokers. 294,891; May 27. Class 34.
Polefsky, Jacob S., New York, N. Y. Extract for flavoring soft drinks. 293,070–1; May 27. Class 45.
Pollack, Max, & Co. Inc., New York, N. Y. Sewing threads. 297,456; May 27. Class 43.
Polley, Harry, doing business as Virgee Cosmetic Company, Cleveland, Ohio. Compound for the hair. 293,230; May 27. Class 6.

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Prashker, Sohn & Co., New York, N. Y. Shirts. 298,513; May 27. Class 39.
Prazisionsmechanik and Maschinenbau. (See Deckel, Friedrich.)
Publicker Incorporated, Philadelphia, Pa. Solidified carbon dioxide. 298,658; May 27. Class 6.
Quality Products, Inc., Salisbury, Md. Canned and raw fruits and vegetables. 288,723; May 27. Class 46.
Radio Products Co., The, Dayton, Ohio. Radio tube testing devices. 297,539; May 27. Class 26.
Ramsey Accessories Manufacturing Corporation, St. Louis, Mo. Piston rings. 298,045; May 27. Class 35.
Rayner Decalcomania Co., Chicago, Ill. Decalcomania transfers. 298,459; May 27. Class 38.
Read, Frank H., doing business as Novelty Advertising Company, Los Angeles, Calif. Toy airplanes and toy-airplane catapults. 291,489; May 27. Class 22.
Reed, E. P., & Co., Rochester, N. Y. Boots and shoes. 294,486–7; May 27. Class 39.
Rice's Inc., Norfolk, Va. Hosiery, gowns, slips, etc. 296,820; May 27. Class 39.
Richards, C. A., Inc., New York, N. Y. Phonographs. 293,192; May 27. Class 36.
Richards, G. Whitfield, Philadelphia, Pa. Metal drawing compound lubricant. 297,272; May 27. Class 15.
Rose, Norton C., doing business as N. C. R. Laboratories, Minneapolis, Minn. Hair-color restorer. 298,205; May 27. Class 6.
Rosinger, Mannie, doing business as Eureka Electric Company, Chicago, Ill. Hats and caps. 297,277; May 27. Class 39.
Rosinger, Mannie, doing business as Eureka Electric Company, Chicago, Ill. Hats and caps. 297,279; May 27. Class 39.
Royal Lace Paper Works, Inc., The, Brooklyn, N. Y. Paper products. 298,662; May 27. Class 37.
Salarnier, Jean B., Crepieux-Rillieux, France. Perfumery and toilet cream. 293,488; May 27. Class 6.
Sandler, Abraham, Boston, Mass. Boots, shoes, and slippers. 293,642; May 27. Class 39.
Schellberg Manufacturing Corporation, New York, N. Y. Apparatus for use in colonic therapy. 297,543; May 27. Class 44.
Schneider, Clarence A., doing business as Schneider's Laboratories, Detroit, Mich. Cold capsules. 298,515; May 27. Class 6.
Schoeneman, J., Incorporated, Baltimore, Md. Coats, vests, trousers, etc. 298,361; May 27. Class 39.
Selby Shoe Co., The, Portsmouth, Ohio. Shoes. 285,224; May 27. Class 39.
Service Hat Lining Corp., New York, N. Y. Hats. 298,257; May 27. Class 39.
Seuthe, Hugo, Richrath, near Dusseldorf, Germany. Flash-light powder for photography. 295,541; May 27. Class 9.
Sherbrooke Undergarment Co., Inc., New York, N. Y. Garments, undergarments, and clothing. 295,057; May 27. Class 39.
Siegel-Lyttle, Inc., New York, N. Y. Women's dresses. 298,465; May 27. Class 39.
Silverice Inc., New York, N. Y. Appliances for massaging and application of creams, lotions, etc. 298,052; May 27. Class 44.
Simonin's, C. F., Sons, Inc., Philadelphia, Pa. Salad oil. 298,549; May 27. Class 46.
Smith, Roy R., Red Lion, Pa. Cigars. 298,118; May 27. Class 17.
Soabar Company, Philadelphia, Pa. Power pin-ticketing machines, power gummed-label-marking machines, power sew-ticketing machines, etc. 298,670; May 27. Class 23.
Societe Agaric, Paris, France. (See MacMonnies, Frank, Inc.)
Societe Anonyme des Anciens Etablissements Braunstein Freres, Paris, France. Cigarette paper. 266,103; May 27. Class 8.
Societe Anonyme Etablissements André Gillier, Troyes, France. Hosiery and underwear, chemises, etc. 291,246; May 27. Class 39.
Societe Anonyme Etablissements Gamma, Lyon, France. Thread and yarn. 298,912; May 27. Class 43.
Southwest Baking Company, Dallas, Tex. Rolls. 277,980; May 27. Class 46.
Sperry Sun Well Surveying Company, Philadelphia, Pa. Instruments for surveying the courses of bore holes. 297,940; May 27. Class 26.
Spilladis, B., & Company, Inc., New York, N. Y. Canned tomatoes with purée, canned tomato paste, and canned tuna fish. 286,344; May 27. Class 46.
Spooner, Inc., New York, N. Y. Perfumes, toilet waters, face lotions, etc. 298,721; May 27. Class 6.
Stanco Incorporated, Wilmington, Del., and New York, N. Y. Nose and throat spray. 298,722–3; May 27. Class 6.
Standard Products Corporation, New York, N. Y. Tissue paper. 281,861; May 27. Class 37.
Stark, William J., Lincoln, Mo. External compound for hogs. 296,365; May 27. Class 6.
State Wholesale Grocers, Chicago, Ill. Canned vegetables. 298,862; May 27. Class 46.
Sterling Company, The, Chicago, Ill. Dresses. 298,727; May 27. Class 39.
Stevens, Chas. A., & Bros., Chicago, Ill. Playing cards. 276,103; May 27. Class 22.
Stone Fog Light Corporation, Los Angeles, Calif. Headlights, searchlights, and lenses for the same. 297,213; May 27. Class 21.
Summit Sweets Inc., Jersey City, N. J. Candy. 298,767; May 27. Class 46.
Sun Publishing Company, Jackson, Tenn. Daily newspaper. 296,989; May 27. Class 38.
Superset Brush Co., Inc., New York, N. Y. Paintbrushes. 297,783; May 27. Class 29.
Super-Visor Company, The. (See Gagnier Fibre Products Company.)
Sutter, E. L., St. Paul, Minn. Apparatus utilizing engine heat. 298,213; May 27. Class 19.
Swan-Finch Oil Corporation, New York, N. Y. Soluble textile oils. 290,981; May 27. Class 6.
Swift Electric Welder Company, Detroit, Mich. Electric welding machinery. 296,456; May 27. Class 21.
Swisrose Dresses, Inc., New York, N. Y. Dresses. 297,708; May 27. Class 39.
Tar Products Corporation, Providence, R. I. Insecticides. 295,000; May 27. Class 6.
Taylor-Travers Corporation, Ltd., Los Angeles, Calif. Radio circuit time switches. 295,908; May 27. Class 21.
Taylor, Winslow B., Company, Boston, Mass. Chocolates. 287,270; May 27. Class 46.
Teutonophone, Inc., New York, N. Y. Instruments for assisting the hearing of the deaf. 292,956; May 27. Class 44.
Thermadaire Corporation, New York, N. Y. Electric room heaters. 297,628; May 27. Class 21.
Thermo Instrument Company, Norfolk, Va. Service-recording attachments for automobiles and the like. 294,901; May 27. Class 19.
Thoma Glass Inc., Fairfield, Iowa. Glass. 297,629–30; May 27. Class 33.
Tissue Company, The, Saugerties, N. Y. Paper napkins and towels. 298,260; May 27. Class 37.
Tobacco Export Company, Inc., The, Clarksville, Tenn. Prepared leaf tobacco. 297,632; May 27. Class 17.
Tropical Vitamin Co., Inc., The, Orlando, Fla. Candy confection. 295,874–5; May 27. Class 46.
United Color & Pigment Co., Newark, N. J. Paint pigment. 295,702; May 27. Class 16.
Vereinigte Papierwerke Aktiengesellschaft, Nuremberg, Germany. Paper face cloth of cellulose. 296,991; May 27. Class 37.
Violet Ray Corporation, Chicago, Ill. High-frequency violet-ray apparatus, and ultra-violet lamp. 295,912; May 27. Class 44.
Virgee Cosmetic Company. (See Polley, Harry.)
Vogue Brassiere Mfg. Co., Newark, N. J. Corsets, brassières, girdles, etc. 295,406; May 27. Class 39.
Watinsky, David, doing business as La France Garment Co., New York, N. Y. Dresses. 297,288; May 27. Class 39.
Weinberger Drug Stores, Inc., Cleveland, Ohio. Cleansing cream, preparation for removing cuticle and for bleaching the nails, double astringent, etc. 293,856–7; May 27. Class 6.
West Steel Casting Company, The, Cleveland, Ohio. Ferrous castings. 298,732; May 27. Class 14.
Western States Grocery Company, Oakland, Calif. Peanut butter, canned fruits, jellies, minced clams, etc. 293,201; May 27. Class 46.
Westphal & Sohn Gesellschaft mit beschränkter Haftung, Frankfort-on-the-Main, Germany. Preparation for diabetes. 294,042; May 27. Class 6.
Wetzstein, Irving V., doing business as Lamella Company, New York, N. Y. Hand bags. 294,454; May 27. Class 3.
Wixom Bros., Seeley, Calif. Sweet potatoes. 298,873; May 27. Class 46.
Worthy Manufacturing Company, Chicago, Ill. Shirts. 275,760; May 27. Class 39.
Worumbo Manufacturing Company, Bath, Me. Woolen fabrics. 298,524; May 27. Class 42.
Wrigley, Edward, doing business as The Wrigley Mfg. Co., Philadelphia, Pa. Paste cleanser. 297,343; May 27. Class 4.
Yale & Towne Mfg. Co., The, Stamford, Conn. Door stops, transom centers, butts, etc. 298,475; May 27. Class 13.
Yawman and Erbe Mfg. Co., Rochester, N. Y. Transverse partition plates for filing-cabinet drawers. 297,714; May 27. Class 32.
Young's Candy Products Co., Inc., Philadelphia, Pa. Candy. 298,607; May 27. Class 46.
Zenker Sons, Columbus, Ohio. Memorials, monuments, and grave markers. 292,239; May 27. Class 50.

CLASSIFIED LIST OF TRADE-MARKS REGISTERED

CLASS 2

Boxes and cartons, Pasteboard. Hinde & Dauch Paper Company. 271,216; May 27; Serial No. 283,770; published Mar. 11, 1930.
Boxes and cartons, Wood and fiber packing. O. B. Andrews Company. 271,281; May 27; Serial No. 288,049; published Mar. 11, 1930.
Cases for shipping burial coffins, Corrugated paper. Superior Paper Products Company. 271,176; May 27; Serial No. 293,754; published Feb. 25, 1930.
Tanks, bins, vats, Metal storage. Alpha Tank & Sheet Metal Mfg. Co. 271,275; May 27; Serial No. 290,732; published Mar. 11, 1930.

CLASS 4

Soap. E. D. Caples. 271,259; May 27; Serial No. 289,335; published Nov. 12, 1929.

CLASS 5

Adhesive patching material. S. Roozendaal. 271,133; May 27; Serial No. 295,495; published Mar. 25, 1930.

CLASS 6

Alterative, analgesic, antacid, etc. Carroll Dunham Smith Pharmacal Co. 271,080; May 27; Serial No. 270,014; published Mar. 11, 1930.
Antiseptic. E. R. Squibb & Sons. 271,137; May 27; Serial No. 295,195; published Mar. 4, 1930.
Antiseptic, Skin. Edward A. Henske. 271,248; May 27; Serial No. 291,983; published Dec. 24, 1929.
Astringents, astringent cerates, bleach creams, etc. Lightfoot Schultz Company. 271,193; May 27; Serial No. 294,811; published Mar. 4, 1930.
Astringents, astringent cerates, bleach creams, etc. R. Paskin. 271,127; May 27; Serial No. 295,493; published Mar. 11, 1930.
Chemical dye aids. H. Th. Böhme A.-G. 271,154; May 27; Serial No. 294,303; published Mar. 4, 1930.
Chemical dye aids. H. Th. Böhme A.-G. 271,201; May 27; Serial No. 294,802; published Mar. 4, 1930.
Compounds for removing scale, rust, corrosion, and the like from boilers, etc. Arab Chemical and Engineering Corp. 271,199; May 27; Serial No. 294,334; published Mar. 4, 1930.
Cosmetic for the hair and scalp. F. H. Newton. 271,284; May 27; Serial No. 292,591; published Mar. 11, 1930.
Cosmetics. Louise Kent, Inc. 271,207; May 27; Serial No. 293,734; published Mar. 11, 1930.
Cream and face lotion, Complexion. Spann & Tomlin Seaside Mfg. Co. 271,286; May 27; Serial No. 291,700; published Mar. 11, 1930.
Cream, face powder, hair tonic, etc., Beauty and cold. Milson Company. 271,222; May 27; Serial No. 282,741; published Aug. 27, 1929.
Cream, massage cream, face powder, etc., Cleansing. K. R. Barnum. 271,217; May 27; Serial No. 283,654; published Mar. 4, 1930.
Cream, Skin. F. O. Ringnell. 271,205; May 27; Serial No. 294,086; published Mar. 11, 1930.
Dentifrice. R. L. Watkins Company. 271,076; May 27; Serial No. 271,671; published Mar. 11, 1930.
Dentifrice. R. L. Watkins Company. 271,077; May 27; Serial No. 271,631; published Mar. 11, 1930.
Dentifrice. R. L. Watkins Company. 271,078; May 27; Serial No. 271,462; published Mar. 11, 1930.
Dentifrice. R. L. Watkins Company. 271,079; May 27; Serial No. 271,415; published Mar. 11, 1930.
Deodorant and insecticide, Crystal Products Co. 271,249; May 27; Serial No. 291,206; published Dec. 10, 1929.
Hair grower. K. Kowalski. 271,203; May 27; Serial No. 294,266; published Mar. 4, 1930.
Hair restorer. Jarson Hairenu Co. 271,239; May 27; Serial No. 272,104; published Mar. 19, 1929.
Insecticides. Koppers Products Company. 271,243; May 27; Serial No. 286,942; published Mar. 11, 1930.
Insecticides, disinfectants, etc. Chemical Compounding Corporation. 271,244; May 27; Serial No. 288,585; published Mar. 11, 1930.
Liniment. E. Hector. 271,196; May 27; Serial No. 294,527; published Mar. 4, 1930.
Liniment. Pearson Remedy Company. 271,267; May 27; Serial No. 292,416; published Feb. 4, 1930.
Liniment, corn salve, cough syrup, etc. Slothower Bros. & Sons. 271,208; May 27; Serial No. 293,605; published Mar. 11, 1930.
Material composed of saturated fatty acids. Procter & Gamble Company. 271,221; May 27; Serial No. 283,004; published Mar. 11, 1930.
Medical compound. Richard B. Musick's Compound Company. 271,157; May 27; Serial No. 294,037; published Mar. 11, 1930.
Medicinal preparation. O. Kohvakka. 271,247; May 27; Serial No. 292,040; published Mar. 11, 1930.
Medicinal preparation. Seeck & Kade, Inc. 271,212; May 27; Serial No. 284,748; published Nov. 5, 1929.
Medicinal preparations. C. M. Rosenbaum. 271,148; May 27; Serial No. 294,778; published Mar. 11, 1930.
Medicinal preparations, Liquid. B. B. Maier. 271,241; May 27; Serial No. 287,082; published Mar. 11, 1930.
Medicinal solution. L. A. Seltzer. 271,158; May 27; Serial No. 294,026; published Mar. 11, 1930.
Medicinal tonic, Laxative. F. O. Knoppel. 271,218; May 27; Serial No. 283,647; published Mar. 4, 1930.
Medicine. Ebrey Chemical Works, Inc. 271,210; May 27; Serial No. 293,415; published Mar. 11, 1930.
Medicine. R. H. Giezen. 271,307; May 27.
Medicine. Laboratories G. Beytout, Societe a Responsabilite Limitee. 271,152–3; May 27; Serial No. 294,478–9; published Mar. 4, 1930.
Medicine. C. M. Rosenbaum. 271,147; May 27; Serial No. 294,779; published Mar. 11, 1930.
Medicine used in the treatment of tuberculosis. Pohlenz & Salcedo. 271,172; May 27; Serial No. 293,154; published Mar. 11, 1930.
Mouth wash and gargle. Exclusive Chemicals, Inc. 271,126; May 27; Serial No. 295,511; published Mar. 11, 1930.
Nail polish. Coty, Inc. 271,195; May 27; Serial No. 294,623; published Mar. 11, 1930.
Perfume, toilet water, sachet, etc. Baldwin Perfumery Company. 271,206; May 27; Serial No. 294,051; published Mar. 11, 1930.
Perfume, toilet water, talc powder, etc. Colgate-Palmolive-Peet Company. 271,285; May 27; Serial No. 292,485; published Feb. 25, 1930.
Perfumeries, cologne waters, bath salts, face creams, etc. Georg Schicht A. G. 271,227; May 27; Serial No. 279,388; published Mar. 11, 1930.
Perfumes. R. Thornton. 271,151; May 27; Serial No. 294,494; published Mar. 11, 1930.
Perfumes, aldehydes, alcohols, etc. Charabot, Inc. 271,232; May 27; Serial No. 278,028; published Mar. 4, 1930.
Perfumes and essential oils. Société Anonyme M. Naef & Cie. 271,144; May 27; Serial No. 295,087; published Mar. 11, 1930.
Perfumes, essential oils. Société Anonyme M. Naef & Cie. 271,143; May 27; Serial No. 295,089; published Mar. 11, 1930.
Perfumes, hygienic and cosmetic articles. Fromm Brothers. 271,082; May 27; Serial No. 268,540; published Mar. 4, 1930.
Perfumes, toilet water, face powder, etc. Parfumerie Monpelas Steinfels Freres & Cie., Societe a Responsabilite Limitee. 271,189; May 27; Serial No. 294,483; published Mar. 11, 1930.
Perfumes, toilet water, face powder, etc. Adolph Spiebler, Inc. 271,223; May 27; Serial No. 282,576; published Sept. 10, 1929.
Pharmaceutical preparation for the treatment of colds. Kleer-A-Kold Co. 271,169; May 27; Serial No. 295,226; published Mar. 11, 1930.
Phosphate and lactate mixture. Standard Brands Incorporated. 271,141; May 27; Serial No. 295,397; published Mar. 11, 1930.
Pine-needle extract combined with bath salts. L. Granitz. 271,119; May 27; Serial No. 294,875; published Mar. 11, 1930.
Powder, tablets for purifying drinking water for poultry, and worm capsules. A. H. Pruitt. 271,146; May 27; Serial No. 294,825; published Mar. 11, 1930.
Preparation for the relief of pain. Cotton Belt Drug Company. 271,272; May 27; Serial No. 292,524; published Mar. 11, 1930.
Preparation for the treatment of leucorrhœa, etc. E. J. Lewis. 271,200; May 27; Serial No. 294,310; published Mar. 4 1930.
Preparation for treating cut soles to produce longer life. Roz-In-Ize, Inc. 271,149; May 27; Serial No. 294,545; published Mar. 11, 1930.
Preparation for treating eczema. Hädensa Gesellschaft m. b. H. 271,197; May 27; Serial No. 294,526; published Mar. 11, 1930.
Preparation for use in the treatment of piles, Powder. M. H. Vaskos. 271,250; May 27; Serial No. 291,034; published Mar. 11, 1930.
Preparation of iodine, a preparation of hydrogen peroxide, and a preparation for application to corns. Clay & Abraham Ltd. 271,161; May 27; Serial No. 293,265; published Mar. 11, 1930.
Preparation, Pyorrhea. Forhan Company. 271,209; May 27; Serial No. 293,422; published Mar. 11, 1930.
Preparation used in the treatment of the eyes. A. S. Wilder. 271,303; May 27.
Preparations for the relief of epilepsy and nervousness. M. Adler. 271,246; May 27; Serial No. 292,191; published Mar. 4, 1930.
Preparations for the treatment of ailments in the stomach. L. G. Garske. 271,194; May 27; Serial No. 294,668; published Mar. 11, 1930.
Salve. Hädensa Gesellschaft m. b. H. 271,123; May 27; Serial No. 294,525; published Mar. 11. 1930.
Salve or ointment. S. Chajnd. 271,225; May 27; Serial No. 291,259; published Mar. 11, 1930.

Spray, Nose and throat. Abbott Laboratories. 271,168; May 27; Serial No. 295,243; published Mar. 11, 1930.
Tablets for treating obesity. Obex Corporation. 271,139; May 27; Serial No. 295,131; published Mar. 4, 1930.
Tablets for treating obesity. Obex Corporation. 271,190; May 27; Serial No. 295,130; published Mar. 4, 1930.
Tooth paste and a liquid antiseptic. Da-Lee Chemical Co. Inc. 271,252; May 27; Serial No. 289,341; published Mar. 4, 1930.

CLASS 7

Clothesllnes. First National Stores Inc. 271,124; May 27; Serial No. 295,663; published Mar. 18, 1930.
Twines, sash cord, ropes, and twines, Cotton. Hooper Paper & Twine Co. 271,294; May 27.

CLASS 9

Matc'es. Vulcan Match Co. 271,287; May 27; Serial No. 291,643; published Mar. 18, 1930.

CLASS 10

Fertilizer. Chas. W. Priddy & Company. 271,229; May 27; Serial No. 278,807; published Mar. 18, 1930.

CLASS 11

Ink, stamp pads, and inking ribbons. International Printing Ink Corporation. 271,122; May 27; Serial No. 294,533; published Mar. 18, 1930.

CLASS 13

Coupllngs, nozzles, hose spray pipes, etc., Fire-hose. J. J. Barker. 271,296; May 27.
Drawer knobs and pulls and glass door knobs, Glass. Consolidated Factories, Ltd. 271,170; May 27; Serial No. 293,028; published Mar. 11, 1930.
Fasteners, Separable. Hookless Fastener Company. 271,179; May 27; Serial No. 293,880; published Mar. 11, 1930.
Utensils, Combination. Fagley & Halpen. 271,274; May 27; Serial No. 290,943; published Mar. 11, 1930.
Valves for steam radiators, Air. W. A. Russell & Co. 271,185; May 27; Serial No. 294,321; published Mar. 11, 1930.

CLASS 14

Metals, Babbitt and bearing. Ingalls Iron Works Co. 271,271; May 27; Serial No. 292,568; published Mar. 18, 1930.

CLASS 15

Oil, Lubricating. Huegel-Nugent Petroleum Company. 271,117; May 27; Serial No. 294,973; published Mar. 11, 1930.
Oils and greases. C. A. Skinner. 271,237; May 27; Serial No. 276,277; published Apr. 9, 1929.
Oils and greases or petroleum products. United States Refining Company. 271,175; May 27; Serial No. 293,390; published Mar. 11, 1930.
Oils, Lubricating. Canfield Oil Company. 271,188; May 27; Serial No. 294,472; published Mar. 11, 1930.
Oils, Lubricating. Pierce Petroleum Corporation. 271,311; May 27.

CLASS 16

Cleaning and polishing compound. J. Dutch. 271,293; May 27.

CLASS 17

Cigarettes. Reed Tobacco Company. 271,295; May 27.
Tobacco. Powell & Goldstein, Inc. 271,273; May 27; Serial No. 292,508; published Mar. 18, 1930.

CLASS 19

Automobiles and their structural parts. Chrysler Corporation. 271,219; May 27; Serial No. 283,553; published Mar. 11, 1930.
Cabs and trucks, Automobile. Checker Cab Manufacturing Corporation. 271,085; May 27; Serial No. 271,085; published Apr. 17, 1923.
Cars, chassis, and constructive parts, Commercial motor. Graham-Paige Motors Corporation. 271,187; May 27; Serial No. 294,421; published Mar. 11, 1930.
Motor cycles. Harley-Davidson Motor Company. 271,164; May 27; Serial No. 295,371; published Mar. 11, 1930.

CLASS 21

Battery, Electric. Société des Magnétos R. B. 271,118; May 27; Serial No. 294,897; published Mar. 11, 1930.
Cable and flexible steel conduit, Armored electric. Columbia Cable & Electric Co. 271,304; May 27.
Device for heating oil. Aviation Accessories Corporation. 271,177; May 27; Serial No. 293,810; published Mar. 11, 1930.
Electric metal-working apparatus and parts for such apparatus. Thomson-Gibb Electric Welding Company. 271,174; May 27; Serial No. 293,388; published Mar. 11, 1930.
Electric temperature, pressure float, and time responsive devices and replacement parts thereof. Time-O-Stat Controls Company. 271,279; May 27; Serial No. 289,425; published Mar. 11, 1930.
Electrical wiring devices, electrical specialities, etc. Rodale Manufacturing Company. 271,280; May 27; Serial No. 289,304; published Mar. 11, 1930.
Lamps and ceiling fixtures, Electric floor and table. Bouy Incorporated. 271,081; May 27; Serial No. 268,910; published Mar. 11, 1930.
Lights, Electric nonglare fog-penetrating. W. P. Vernon, sr. 271,276; May 27; Serial No. 291,371; published Mar. 11, 1930.
Radio receiving sets. Elmer Richards Company. 271,302; May 27.
Radio receiving sets. Selectric Phonograph and Radio Corporation. 271,268; May 27; Serial No. 292,833; published Mar. 11, 1930.
Radio receiving sets and loud-speakers, antennæ, etc. Baldwin Company. 271,228; May 27; Serial No. 278,924; published Mar. 11, 1930.
Radio receiving sets and parts thereof. General Motors Corporation. 271,167; May 27; Serial No. 295,258; published Mar. 11, 1930.
Refractory insulating parts. Porcelain Products, Inc. 271,084; May 27; Serial No. 259,638; published June 4, 1929.
Roasters, Electric meat. Presto Electric Roaster Company. 271,277; May 27; Serial No. 291,175; published Mar. 11, 1930.
Sadirons, Electric. Sears, Roebuck and Co. 271,166; May 27; Serial No. 295,280; published Mar. 11, 1930.
Separator plates. Dewey & Almy Chemical Company. 271,165; May 27; Serial No. 295,294; published Mar. 11, 1930.
Sound-reproduction apparatus, Electric. Pacent Reproducer Corporation. 271,301; May 27.

CLASS 22

Cards, Playing. United States Playing Card Co. 271,142; May 27; Serial No. 295,309; published Mar. 11, 1930.
Game. Jakopec-Samu Company. 271,155; May 27; Serial No. 294,261; published Mar. 11, 1930.
Golf balls. Pacific Golf Ball, Ltd. 271,289; May 27; Serial No. 289,039; published Feb. 18, 1930.
Golf balls. Wright & Ditson. 271,290; May 27; Serial No. 288,629; published Feb. 11, 1930.

CLASS 23

Blades, Safety-razor. L. Schwarz. 271,238; May 27; Serial No. 274,574; published Dec. 11, 1928.
Knives, forks, spoons, etc. Manufacture Metallurgique de Tournus. 271,251; May 27; Serial No. 291,992; published Mar. 18, 1930.
Mechanical device for use for the removal of carbon from combustion chambers and valves thereof. C. L. Everwine. 271,204; May 27; Serial No. 294,151; published Mar. 18, 1930.
Mechanism for automatically controlling the sequence of operation of concrete mixers. Chain Belt Company. 271,191; May 27; Serial No. 295,115; published Mar. 18, 1930.

CLASS 24

Clothespins, Spring. National Spring Clip Co. Inc. 271,300; May 27.

CLASS 26

Cameras. B. Brooks. 271,192; May 27; Serial No. 294 844; published Mar. 18, 1930.
Patterns, Paper dress. Conde Nast Publications, Inc. 271,198; May 27; Serial No. 294,341; published Mar. 18, 1930.

CLASS 27

Watches, Ladie's wrist. Bulova Watch Company. 271,234; May 27; Serial No. 276,831; published Feb. 12, 1929.

CLASS 28

Badges, emblems, finger rings, etc. Great Council of the United States of the Improved Order of Red Men. 271,269; May 27; Serial No. 292,804; published Mar. 11, 1930.
Bracelets. Kestenman Bros. Mfg. Co. 271,282; May 27; Serial No. 287,256; published Mar. 11, 1930.
Buttons of precious metal. Delta Chi Fraternity. 271,236; May 27; Serial No. 276,307; published Mar. 11, 1930.
Shakers, candlesticks, vases, etc., Salt and pepper. Quaker Silver Company. 271,180; May 27; Serial No. 293,896; published Mar. 11, 1930.

CLASS 29

Brushes, Artists'. Baker Brush Co. 271,305; May 27.
Brushes, Nail and cuticle. Herbert & Company. 271,162; May 27; Serial No. 295,477; published Mar. 18, 1930.
Mops. Industrial Home For The Blind. 271,291; May 27.

CLASS 30

Porcelain ware. Porzellanfabrik Waldershof Aktiengesellschaft vormals Johann Haviland. 271,242; May 27; Serial No. 286,952; published Mar. 11, 1930.

CLASS 32

Settees and chairs. Sprague & Carleton, Inc. 271,134; May 27; Serial No. 295,446; published Mar. 18, 1930.
Tables, table tops, chairs, etc. Albany Door Company. 271 215; May 27; Serial No. 283,837; published Mar. 18, 1930.

CLASS 33

Glass globes. Macbeth-Evans Glass Company. 271,125; May 27; Serial No. 295,525; published Mar. 11, 1930.
Glass valances and pieces of decorated and carved glass. Eny Art, Inc. 271,288; May 27; Serial No. 289,884; published Mar. 11, 1930.
Glassware, sheet and plate glass, and glass used for paving. Société Anonyme des Manufactures des Glaces et Produits Chimiques de St.-Gobain, Chauny & Cirey. 271,156; May 27; Serial No. 294,092; published Feb. 18, 1930.
Jars. Container Sales Company. 271,297; May 27.
Jars. Container Sales Company. 271,298; May 27.

CLASS 34

Burners, fire pots, etc., Gas and oil. L. B. Mettler. 271,181; May 27; Serial No. 294,079; published Mar. 11, 1930.
Heating systems, ventilating systems, cooling systems, etc. Berg Heating and Ventilating Co. 271,173; May 27; Serial No. 293,311; published Mar. 11, 1930.
Lamps and candlesticks, Wax. Smith & Nichols, Inc. 271,182; May 27; Serial No. 294,091; published Mar. 11, 1930.
Registers, Heating. Tuttle & Bailey Manufacturing Company. 271,186; May 27; Serial No. 294,324; published Mar. 11, 1930.
Shades or dimmers for automobile headlights. J. H. Roethel. 271,292; May 27.
Stokers, Economy Stoker Company. 271,178; May 27; Serial No. 293,877; published Mar. 11, 1930.

CLASS 35

Piston rings. Alitex Piston Ring Company. 271,136; May 27; Serial No. 295,201; published Mar. 18, 1930.
Tires and inner tubes, Vehicle. Mohawk Rubber Company. 271,128; May 27; Serial No. 295,744; published Mar. 18, 1930.
Tires, casings, and tubes, Rubber. Pharis Tire and Rubber Company. 271,138; May 27; Serial No. 295,134; published Mar. 18, 1930.
Tires, Rubber. Biggs & Black, Inc. 271,214; May 27; Serial No. 284,159; published Mar. 18, 1930.
Tires, Vehicle. Corduroy Tire Company. 271,132; May 27; Serial No. 295,558; published Mar. 18, 1930.
U leathers, cap, hat, or flange leathers. J. E. Rhoads & Sons. 271,135; May 27; Serial No. 295,389; published Mar. 18, 1930.

CLASS 36

Ligatures or clamps for musical instruments. G. L. Miller. 271,283; May 27; Serial No. 286,647; published Mar. 11, 1930.

CLASS 37

Paper, correspondence cards, and envelopes, Writing. M. & F. Schlosser Paper Corporation. 271,256; May 27; Serial No. 292,052; published Mar. 18, 1930.
Paper for printing, Sulfite. Crown Willamette Paper Company. 271,108; May 27; Serial No. 294,508; published Mar. 18, 1930.
Paper, Sulfite wrapping. Crown Willamette Paper Company. 271,109; May 27; Serial No. 294,506; published Mar. 18, 1930.
Paper, Tissue. Pond's Extract Company. 271,092; May 27; Serial No. 294,593; published Mar. 11, 1930.
Paper, Toilet. Wyoming Valley Paper Mill. 271,258; May 27; Serial No. 289,432; published Dec. 31, 1929.
Paper, Wrapping. Ohio Wax Paper Company. 271,113; May 27; Serial No. 294,082; published Mar. 18, 1930.
Records, individual record sheets, and tables of figures, Portable accounting. D. H. Stiles. 271,261; May 27; Serial No. 288,402; published Mar. 18, 1930.

CLASS 38

Cartoons or comic strips, Series of. Daily Graphic, Inc. 271,163; May 27; Serial No. 295,424; published Mar. 18, 1930.
Magazine. New Metropolitan Fiction, Inc. 271,104; May 27; Serial No. 295,081; published Mar. 18, 1930.
Magazine. Simmons-Broadman Publishing Co. 271,230; May 27; Serial No. 278,754; published Mar. 18, 1930.
Magazines. Fawcett Publications, Inc. 271,093; May 27; Serial No. 295,840; published Mar. 18, 1930.
Magazines and instruction sheets. United States Power Squadrons, Inc. 271,254; May 27; Serial No. 292,913; published Mar. 11, 1930.
Periodical. Dr. Peter Fahrney & Sons Co. 271,100; May 27; Serial No. 295,368; published Mar. 18, 1930.
Periodical. Field Publications, Inc. 271,110; May 27; Serial No. 294,475; published Mar. 18, 1930.
Publication. P. W. Boswell. 271,102; May 27; Serial No. 295,292; published Mar. 18, 1930.
Publication. Whaley-Eaton Service, Inc. 271,095; May 27; Serial No. 295,822; published Mar. 18, 1930.
Publications. Peabody and Company. 271,101; May 27; Serial No. 295,346; published Mar. 18, 1930.
Stamps and coupons, Trading. Empire Stamp Company. 271,094; May 27; Serial No. 295,837; published Mar. 18, 1930.

CLASS 39

Arctics. Beacon Falls Rubber Shoe Company. 271,112; May 27; Serial No. 294,202; published Mar. 11, 1930.
Bibs, Surgical. A. F. Burdick. 271,306; May 27.
Boots and shoes. Field & Flint Co. 271,260; May 27; Serial No. 288,745; published Mar. 11, 1930.
Boots and shoes. I. Leventhal and Sons. 271,255; May 27; Serial No. 292,453; published Mar. 11, 1930.
Furnishings, undergarments, and clothing. Franklin Simon & Co. Inc. 271,105; May 27; Serial No. 294,929; published Mar. 11, 1930.
Gloves. Reynier & Co. 271,107; May 27; Serial No. 294,543; published Mar. 11, 1930.
Gloves. Strawbridge & Clothier. 271,086; May 27; Serial No. 293,904; published Mar. 11, 1930.
Heels, Rubber. Bradstone Rubber Company. 271,091; May 27; Serial No. 294,612; published Mar. 11, 1930.
Heels, Wood. New England Wood Heel Co. 271,103; May 27; Serial No. 295,129; published Mar. 11, 1930.
Hose supporters and hose-supporter grips. Ansonia O & C Company. 271,213; May 27; Serial No. 284,433; published Mar. 11, 1930.
Hosiery. Diamond Full Fashioned Hosiery Company. 271,308; May 27.
Hosiery, underwear, and sweaters. H. K. Regar & Sons, Inc. 271,089; May 27; Serial No. 293,447; published Feb. 25, 1930.
Shirts, pants, and overalls, Work. Mount Airy Overall Co. 271,083; May 27; Serial No. 267,852; published Sept. 4, 1928.
Soles for boots and shoes. Bearfoot Sole Company. 271,106; May 27; Serial No. 294,660; published Mar. 11, 1930.
Suits, coats, overcoats, etc. R. H. White Company. 271,315; May 27.
Underwear, hats, gloves, etc. I. G. Farbenindustrie Aktiengesellschaft. 271,265; May 27; Serial No. 287,180; published Mar. 11, 1930.
Union suits. Vassar Swiss Underwear Company. 271,299; May 27.

CLASS 40

Binding, Bias. Assembled Products Company. 271,114–16; May 27; Serial Nos. 293,948–50; published Mar. 11, 1930.
Bob sets, buttonhooks, combs, etc. Wilcox Novelty Company. 271,262; May 27; Serial No. 288,042; published Mar. 11, 1930.
Hooks, eyes, and buckles. Krafft & Schüll. 271,240; May 27; Serial No. 285,276; published Mar. 18, 1930.
Pins. A. Meyers & Sons. 271,266; May 27; Serial No. 286,375; published Mar. 18, 1930.

CLASS 42

Blankets. All-Wool. Leaksville Woolen Mills, Inc. 271,160; May 27; Serial No. 293,474; published Mar. 11, 1930.
Handkerchiefs and veils. Knox Hat Company. 271,211; May 27; Serial No. 284,911; published Mar. 11, 1930.
Handkerchiefs and veils. Knox Hat Company. 271,245; May 27; Serial No. 285,159; published Mar. 11, 1930.
Handkerchiefs, Cotton. R. P. Gorman & Cobbe, Ltd. 271,150; May 27; Serial No. 294,522; published Mar. 11, 1930.
Handkerchiefs, Pocket. G. Winkler. 271,159; May 27; Serial No. 293,859; published Feb. 25, 1930.
Laces in the piece. Crescent Novelty Co. 271,314; May 27.
Silk dress fabrics. Albert Godde, Bedin, Inc. 271,231; May 27; Serial No. 278,592; published Mar. 11, 1930.
Silk wall drapes. Lydia Bush-Brown. 271,140; May 27; Serial No. 295,457; published Mar. 11, 1930.
Textile bath mats and awning fabrics. M. H. Goldenberg. 271,235; May 27; Serial No. 276,693; published Mar. 11, 1930.

CLASS 43

Yarn. Emile Bernat & Sons Co. 271,145; May 27; Serial No. 294,909; published Mar. 11, 1930.

CLASS 45

Ginger ale, vanilla soda, root beer, etc. First National Stores Inc. 271,131; May 27; Serial No. 295,665; published Mar. 18, 1930.
Grape juice. Simons Brothers. 271,253; May 27; Serial No. 287,020; published Mar. 18, 1930.
Spring water. Waukesha Pure Spring Water Company. 271,129; May 27; Serial No. 295,705; published Mar. 18, 1930.
Spring water, Medicated. Waukesha Pure Spring Water Company. 271,130; May 27; Serial No. 295,704; published Mar. 18, 1930.

CLASS 46

Candies. Andy's Chocolate Shops, Inc. 271,099; May 27; Serial No. 295,500; published Mar. 18, 1930.
Candy. Dilling & Company. 271,233; May 27; Serial No. 277,057; published Mar. 18, 1930.
Candy bars. Bradley Smith Company, The. 271,226; May 27; Serial No. 279,442; published Feb. 18, 1930.
Canned fish, canned vegetables, olives in bulk, and antipasto. Strohmeyer & Arpe Company. 271,088; May 27; Serial No. 293,608; published Mar. 18, 1930.
Canned foods and canned vegetables juices. Van Camp Packing Company. 271,121; May 27; Serial No. 294,653; published Mar. 18, 1930.
Canned salmon. William Hills, Jr. Co. 271,313; May 27.

Canned tomato juice. Van Camp Packing Company. 271,120; May 27; Serial No. 294,654; published Mar. 18, 1930.
Canned vegetables. Shelby Canning Co. 271,096; May 27; Serial No. 295,696; published Mar. 18, 1930.
Canned vegetables and canned fish. Brownell & Field Co. 271,312; May 27.
Chocolates, hard candies, and bonbons. Hilliard's Glass House Goodies, Inc. 271,263; May 27; Serial No. 287,925; published Mar. 18, 1930.
Coffee. John Mackintosh and Sons, Limited. 271,257; May 27; Serial No. 290,171; published Dec. 24, 1929.
Coffee. Texas Coffee Company. 271,090; May 27; Serial No. 293,198; published Mar. 18, 1930.
Coffee. James Van Dyk Company. 271,098; May 27; Serial No. 295,587; published Mar. 18, 1930.
Ducklings, Dressed. Massachusetts Duck Growers Association. 271,310; May 27.
Hams and bacon and luncheon meat. Great Falls Meat Company. 271,309; May 27.
Ice cream. De Coursey Creamery Company. 271,264; May 27; Serial No. 287,455; published Mar. 18, 1930.
Macaroni, spaghetti, and noodles. Mercurio Bros. Spaghetti Mfg. Co. 271,278; May 27; Serial No. 290,715; published Mar. 18, 1930.
Malt beverages, Cereal. Pabst Corporation. 271,202; May 27; Serial No. 294,274; published Mar. 18, 1930.
Mustard. M. R. Hand. 271,087; May 27; Serial No. 293,622; published Mar. 18, 1930.
Olive oil. B. Dorman. 271,220; May 27; Serial No. 283,182; published Mar. 18, 1930.
Oranges and grapefruit, Fresh. G. Andrews. 271,111; May 27; Serial No. 294,379; published Mar. 18, 1930.
Sausage, Pork link. Kohrs Packing Company. 271,097; May 27; Serial No. 295,680; published Mar. 18, 1930.
Sugar, Materials to be used in place of. W. J. Rickel. 271,270; May 27; Serial No. 292,751; published Mar. 18, 1930.

CLASS 50

Leather substitutes. Leather Finish Fabrics, Inc. 271,184; May 27; Serial No. 294,268; published Mar. 18, 1930.
Signs, Advertising. Motologue Advertising Corporation. 271,171; May 27; Serial No. 293,062; published Mar. 18, 1930.
Statuettes. Crescent Metal Works, Inc. 271,224; May 27; Serial No. 281,990; published Mar. 18, 1930.
Tarpaulins. Pittsburgh Waterproof Company. 271,183; May 27; Serial No. 294,240; published Mar. 18, 1930.

ALPHABETICAL LIST OF LABELS

Aspiroids. For Relieving Colds. United Drug Company. 37,495; May 27.
Cedar Wood Oil Paint. For Paint. Maintenance Specialties Supply Co. 37,487; May 27.
Elixir Aspiral. For Pharmaceutical Preparation. M. A. Feinberg. 37,481; May 27.
Fresh Seal. For Sliced Peaches. Ray-Brown Company. 37,491; May 27.
Last Long, Plastic Roof Coating. For Liquid Plastic Roof Coating. A. Schmerling. 37,493; May 27.
Mannings Jo-To Tea. For Tea. Mannings Inc. 37,489; May 27.
Maunings Kobi-Stan Tea. For Tea. Mannings Inc. 37,490; May 27.
Mannings Sun-Dar Tea. For Tea. Mannings Inc. 37,488; May 27.
No. C B—317. For Tea Rolls. Lambooy Label & Wrapper Company. 37,486; May 27.
Pansipetal. For Silk Textile Fabrics. Follmer Clogg & Co. 37,482; May 27.
R-K-O. For Candy. John D. Hamilton Company. 37,485; May 27.
Salad Bowl. For Sandwich Spread. Gelfand Mfg. Company of Calif. 37,483; May 27.
Shy-N Auto Polish. For Automobile and Furniture Polish. Shy-N Products Co. 37,494; May 27.
Sunny Boy. For Soda. H. E. J. Haffner. 37,484; May 27.
Superyarn Fabrics. For Fabrics, Crepes, and Georgettes. Henry Rosenzweig & Co. 37,492; May 27.

ALPHABETICAL LIST OF PRINTS

A Camel Can Go 11 Days Without a Drink, But I Can't Go 1 Day Without a Camel. For Cigarettes. J. R. Kay. 12,565; May 27.
Arcturus Photolytic Cell. For Photo-Electric Devices. Arcturus Radio Tube Company. 12,558; May 27.
Better And Here's Why. For Cigarettes. R. J. Reynolds Tobacco Company. 12,573; May 27.
Better Prom Than Last Year. For Cigarettes. R. J. Reynolds Tobacco Company. 12,570; May 27.
Bombarded With Energy. For Radio Tubes. National Union Radio Corp. 12,567; May 27.
Chubb The Wheatall Chef. For a Breakfast Cereal. Bradford Milling Company. 12,562; May 27.
Dand Er-Go. For Treating Dandruff. P. G. Brooks. 12,563; May 27.
Dentees. For Dentifrice. W. Hansen. 12,564; May 27.
Hello World. For Candy. Bonita Company. 12,561; May 27.
It Reigns When It's Poured. For Ginger Ale, Lime and Lithia, Sarsaparilla, and Carbonated Beverages. King of Clubs, Inc. 12,566; May 27.
It's The Camel Blend. For Cigarettes. R. J. Reynolds Tobacco Company. 12,569; May 27.
Look At It This Way. For Cigarettes. R. J. Reynolds Tobacco Company. 12,572; May 27.
Love. For Perfume. Elizabeth Arden Inc. 12,560; May 27.
Overtures. For Cigarettes. R. J. Reynolds Tobacco Company. 12,568; May 27.
Rice's Giant Summer Straight Neck Squash. For Squash Seeds. Jerome B. Rice Seed Co. 12,575; May 27.
Standing Out As The Better Cigarette. For Cigarettes. R. J. Reynolds Tobacco Company. 12,574; May 27.
The Luxury Of Camels Costs No More. For Cigarettes. R. J. Reynolds Tobacco Company. 12,571; May 27.
There is a Key to Beauty. For Cleansing Cream, Skin Tonic and Cleansing Tissues. Elizabeth Arden Inc. 12,559; May 27.

ALPHABETICAL LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 27TH DAY OF MAY, 1930

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). **Includes patents, reissues, and designs.**

A C Spark Plug Company. (See Babitch, Abraham M., assignor.)
A C Spark Plug Company. (See Berdon, Albert E., assignor.)
A C Spark Plug Company. (See Berg, Louis, assignor.)
A C Spark Plug Company. (See Clason, Ragnar, assignor.)
A C Spark Plug Company. (See Helgeby, Ralph O., assignor.)
A C Spark Plug Company. (See Stern, Marc, assignor.)
A C Spark Plug Company. (See Wedin, Ivar T., assignor.)
A C Spark Plug Company. (See Zubaty, J., and Keeney, assignors.)
Abenanti, Joseph, assignor to Crown Rheostat & Supply Co., Chicago, Ill. Preventing oil leakage. 1,760,463; May 27.
Achtmeyer, William, Orange, Conn., assignor to Sidney Blumenthal & Co. Inc., New York, N. Y. Making imitation animal fur. 1,760,464; May 27.
Ackerman, Ernest W., and G. C. Nicholson, assignors to The Hydro-Check Corporation, Monroe, Mich. Rebound device. 1,759,879; May 27.
Addison, Thomas. (See Gillham, R., Addison, Wetzel, and Langen.)
Agfa Ansco Corporation. (See Goldhammer, Leo, assignor.)
Air Preheater Corporation, The. (See Riley, Robert S., assignor.)
Aktiebolaget C. E. Johansson. (See Pehrsson, Erik G., assignor.)
Aktiengesellschaft der Maschinenfabriken Escher Wyss & Cie. (See Lüthi, Albert, assignor.)
Albers, Harry J., Cleveland, Ohio. Vehicle. 1,760,620; May 27.
Albert, Ruth F., New York, N. Y. Undergarment. Des. 81,220; May 27.
Albright, Edward C., assignor to Indiana Lamp Corporation, Connersville, Ind. Lamp socket and contact. 1,759,929; May 27.
Aldrich, Forrest M., and C. L. Hansen, Seattle, Wash. Dough brake. 1,760,185; May 27.
Alger, Harley C., assignor to R. R. Donnelley & Sons Company, Chicago, Ill. Machine for pressing books. 1,760,030; May 27.
Allbright-Nell Company, The. (See Johnson, Walter J. O., assignor.)
Allen, Arthur S., New York, N. Y., assignor to Pac-Kups Incorporated, Easton, Pa. Paper cup or similar article. Des. 81,218; May 27.
Allen, Charles H. (See McKinney, F. B., and Allen.)
Allen, Grosvenor N., Oneida, and L. V. M. Helander, Niagara Falls, N. Y., assignors to Oneida Community, Limited, Oneida, N. Y. Spoon or similar article. Des. 81,219; May 27.
Allen, Howard G., assignor to H. R. Bliss Company, Inc., Niagara Falls, N. Y. Stitcher head. 1,760,031; May 27.
Allen, Samuel, Jonesboro, Ill. Nozzle structure. 1,759,928; May 27.
Allen, W. D., Manufacturing Company. (See Ryerson, Thorval L., assignor.)
Altenbach, Otto, Los Angeles, Calif. Rumble-seat top. 1,760,334; May 27.
Amatel, Harold, East Orange, N. J., assignor to Westinghouse Lamp Company. Locking carton. 1,760,678; May 27.
Ambro, Jerome G., et al. (See Giudice, Charles, assignor.)
Amco Incorporated. (See Morton, William A., assignor.)
American Arch Company. (See Dohle, Bradley, assignor.)
American Brown Boveri Electric Corporation. (See MacLean, Margaret L., assignor.)
American Can Company. (See Mueller, Edward C., assignor.)
American Car and Foundry Company. (See Dietrichson, William F., assignor.)
American Car and Foundry Company. (See Folmsbee, Clyde H., assignor.)
American Car and Foundry Company. (See Kassler, Adolph, assignor.)
American Car and Foundry Company. (See Mayer, William J., assignor.)
American Car and Foundry Company. (See van Hoorn, Albert W. W., assignor.)
American Car and Foundry Motors Company. (See Hall, Elbert J., assignor.)
American Car and Foundry Motors Company. (See Mackie, Robert A., assignor.)
American Car and Foundry Motors Company. (See Walker, Hubert, assignor.)
American Fibre Corporation. (See Baldwin, E. F., and Woods, assignors.)
American LaFrance and Foamite Corporation. (See Witter, Willis D., assignor.)
American Laundry Machinery Company, The. (See Johnston, Henry P., assignor.)
American Machine & Foundry Company. (See Hawkins, W. J., assignor.)
American Machine & Foundry Company. (See Milliring, Edwin R., assignor.)
American Radiator Company. (See Courtot, Louis, assignor.)
American Sheet and Tin Plate Company. (See McArthur, A. R., and McIlvried, assignors.)
American Steel and Wire Company of New Jersey, The. (See Howe, James F., assignor.)
American Steel and Wire Company of New Jersey, The. (See Morrison, Max. P., assignor.)
American Swiss Company, The. (See Grund, F. D., and Rightmyer, assignors.)
American Telephone and Telegraph Company. (See Bonell, Ralph K., assignor.)
American Telephone and Telegraph Company. (See Dean, Samuel W., assignor.)
American Telephone and Telegraph Company. (See Matte, Andrew L., assignor.)
American Telephone and Telegraph Company. (See McCurdy, Ralph G., assignor.)
American Telephone and Telegraph Company. (See Potter, Ralph K., assignor.)
American Valve and Meter Company, The. (See McGarry, John T., assignor.)
Ames, Warren, Newton, Mass. Gauge. Des. 81,221; May 27.
Amon, Joseph, Rahway, N. J. Thread-moistening device. 1,760,032; May 27.
Amsler, Alfred J., Schauffhausen, Switzerland. Machine for generating torsional moments, particularly for testing purposes. 1,760,033; May 27.
Anderson Company, The. (See Lach, John J., assignor.)
Anderson, David E., St. Paul, Minn. Frog point. 1,760,465; May 27.
Anderson, Ernest D., assignor to Troy Laundry Machinery Company, Inc., New York, N. Y. Garment press. 1,760,679; May 27.
Anderson, Fritz A., assignor to The Burdick Corporation, Milton, Wis. Exercising and massaging machine casing. Des. 81,222; May 27.
Anderson, John E., Minneapolis, Minn. Switch for door operators. 1,760,466; May 27.
Anderson, Swan F., Rockford, Ill. Refrigerating apparatus. 1,760,621; May 27.
Andersson, Ringhald, P. A., Taby, Stockholm, Sweden. Adjustable slicing knife. 1,760,575; May 27.
Ansel, Harry R. (See Creamer, S. B., and Ansel.)
Apex Electrical Manufacturing Company, The. (See Frantz, Walter A., assignor.)
Appleby, James P., assignor to Frank Graves Sash, Door and Mill Company, Los Angeles, Calif. Sash balance. 1,760,226; May 27.
Appleby, James P., assignor to Frank Graves Sash, Door and Mill Company, Los Angeles, Calif. Friction shoe for window sashes. 1,760,227; May 27.
Arminger, Elmer L., Chicago, Ill. Apparatus for plucking poultry. 1,760,392; May 27.
Armstrong, Charles E., Washington, D. C. Milk strainer. 1,760,228; May 27.
Arndt, Charles, Los Angeles, Calif. Separator to clarify waste waters. 1,760,229; May 27.
Aronson, Louis V., Newark, N. J., assignor to Art Metal Works, Inc. Sparking toy. 1,760,622; May 27.
Arsem, William C., Schenectady, N. Y., assignor to General Electric Company. Treating oils and other glycerides. 1,760,535; May 27.
Art Metal Works Inc. (See Aronson, Louis V., assignor.)
Asher, Allen P., Sandpoint, Idaho. Fender roller. 1,760,467; May 27.
Ashworth, George B., Amsterdam, N. Y. Steam-boiler smoke box. 1,760,680; May 27.
Asmussen, Heinrich. (See Loebe, W.-W., Ledig, and Asmussen.)
Atkins, Alfred C., London, England. Suitcase. 1,759,930; May 27.
Atlantic Coast Fisheries Company, The. (See Taylor, Harden F., assignor.)
Atrax Gesellschaft mit beschrankter Haftung. (See Müller, George G., assignor.)
Atwater Kent Manufacturing Company. (See Lodge, Edmund G., assignor.)
Anfiero, John M., assignor to E. A. Laboratories, Inc., Brooklyn, N. Y. Pneumatic horn. 1,760,295; May 27.
Aurig, Max, Munich, Germany. Apparatus for treating gases. 1,760,623; May 27.

Austin, Arthur O., Barberton, assignor, by mesne assignments, to The Ohio Brass Company, Mansfield, Ohio. Apparatus for controlling breathing of oil-containing housings. 1,759,971; May 27.
Auto Brakeometer Corporation. (See McKinney, F. B., and Allen, assignors.)
Automatic Electric Inc. (See Bellamy, John I., assignor.)
Automatic Electric Inc. (See Gohorel, Fernand P. A., assignor.)
Automatic Electric Inc. (See Hudd, Alfred E., assignor.)
Automatic Electric Inc. (See Richardson, Rodney G., assignor.)
Auto Specialties Manufacturing Co. (See Peteler, Adolph, assignor.)
Avey Drilling Machine Co., The. (See Mirrielees, James F., assignor.)
Ayers, Augustine R., Cleveland, Ohio. Bridge for steam-engine-exhaust nozzles. 1,760,576; May 27.
B R E Manufacturing Co. (See Leslie, Howard C., assignor.)
B. S. & M. Scale Company Limited, The. (See Barrett, K. E., and Fuller, assignors.)
Babcock Manufacturing Company, The. (See Reynolds, Arthur W., assignor.)
Babitch, Abraham M., assignor to A C Spark Plug Company, Flint, Mich. Oil-filter by-pass. 1,759,827; May 27.
Back, Robert, assignor to The Wahl Company, Chicago, Ill. Fountain pen. Des. 81,223; May 27.
Badertscher, Otto J., Zurich, Switzerland. Servo-brake mechanism. 1,760,624; May 27.
Bailey, Charles F., assignor to W. H. Sommer, Peoria, Ill. Twisting tool. 1,760,468; May 27.
Baker, Howard H., assignor to Ready Heat Products, Inc., Buffalo, N. Y. Composition for chemical heaters. 1,760,102; May 27.
Baker Perkins Company. (See Engels, Eugene O., assignor.)
Baldwin, Earl F., and F. E. Woods, assignors to American Fibre Corporation, Gardner, Mass. Machine for making fiber reed. 1,760,536; May 27.
Ball, Harry V., Concord, Mass., assignor to R. Hoe and Co., Inc., New York, N. Y. Roller-supporting device. 1,760,188; May 27.
Bandhauer, Franz, assignor to the firm S. Rothmüller A. G., Vienna, Austria. Pendulum weigher. 1,760,034; May 27.
Banff, Peter S., Chicago, Ill., assignor, by mesne assignments, to Sanitary Food Machine Corporation. Electrical cooking apparatus. 1,759,832; May 27.
Banschbach, Edward A., Chicago, Ill. Record file. 1,760,103; May 27.
Banta, Clifford. (See Cole, P. J., and Banta.)
Bany, Herman, Yeadon, Pa., and G. R. McDonald, Schenectady, N. Y., assignors to General Electric Company. Regulating system. 1,760,537; May 27.
Barber-Colman Company. (See Edgar, John, assignor.)
Barberon, Pierre, Le Fayet, France. Ever-pointed pencil. 1,759,931; May 27.
Bardwell, Francis N., Passaic, N. J. Flexible driving means. 1,759,833; May 27.
Barker, Donald J., Cowansville, Quebec, Canada. Advertising structure. 1,760,186; May 27.
Barnard, Herbert E., et al. (See Steiner, Martin, assignor.)
Barnhart, James A., Constantine, Mich. Steering gear. 1,760,733; May 27.
Barol, Hugo, Philadelphia, Pa. Lady's hand bag. 1,760,681; May 27.
Barrett Company, The. (See Cole, P. J., and Banta, assignors.)
Barrett Company, The. (See Talbott, Charles G., assignor.)
Barrett, Karl E., and G. K. Fuller, Sherbrooke, Quebec, assignors to The B. S. & M. Scale Company Limited, Sherbrooke, Canada. Weighing scale. 1,759,880; May 27.
Barrows, Donald S., Rochester, N. Y., assignor, by mesne assignments, to The Symington Company. Dust guard. 1,760,105; May 27.
Barry, James J., Gloucester, Mass., assignor to Frosted Foods Company, Inc., Dover, Del. Filtering machine. 1,759,828; May 27.
Bartholomew, Scott C., Pittsburgh, Pa., assignor, by mesne assignments, to Remington Rand, Inc., New York, N. Y. Card-group control for tabulating machines. 1,760,393; May 27.
Basch, David. (See Fuller, T. S., and Basch.)
Batchelder, Vera C. (See Thomas, Leslie J., assignor.)
Baum, Leopold A., Newark, N. J. Rumble-seat top. 1,759,932; May 27.
Bay State Optical Company. (See Nerney, G. E., and Siddall, assignors.)
Beach & Arthur, Inc. (See Beach, Richard W., assignor.)
Beach, Richard W., Indianapolis, Ind., assignor to Beach & Arthur, Inc., Chicago, Ill. Display package for paper napkins or the like. 1,760,106; May 27.
Bead Chain Manufacturing Company, The. (See Gaguon, William J., assignor.)
Beck, Johnse H., assignor to Geo. F. Cram Company, Indianapolis, Ind. Map holder. 1,759,829; May 27.
Becker, Howard I., Schenectady, N. Y., assignor to General Electric Company. Assembly of cables. 1,760,538; May 27.
Becker, Joseph, Pittsburgh, Pa., assignor to The Koppers Company. Removal of benzol and its homologues from fuel gases. 1,760,335; May 27.
Beckerman, Mollie. (See Marinsky, Davis, assignor.)
Beckwith, Harry H., Brookline, Mass. Apparatus for heating counter portions of shoes. 1,760,104; May 27.
Bedard, Georges, Montreal, Quebec, Canada. Conductor terminal. 1,760,035; May 27.
Beidler, George C., Rochester, N. Y. Copyholder. 1,760,734; May 27.
Bell, James H. (See Remington, Joseph P., assignor.)
Bell Telephone Laboratories, Incorporated. (See Mathes, Robert C., assignor.)
Bellamy, John I., Brookfield, assignor, by mesne assignments, to Automatic Electric Inc., Chicago, Ill. Telephone system. 1,760,625; May 27.
Bellamy, John I., Brookfield, Ill., assignor to Reserve Holding Company, Kansas City, Mo. Telephone system. 1,760,626; May 27.
Bellows, Warren S., Worcester, Mass. Table. 1,760,036; May 27.
Bender, August. (See Ecker, Will J., jr., assignor.)
Bendix-Cowdrey Brake Tester, Inc. (See Cowdrey, Charles F., assignor.)
Benjamin, Bert R., Oak Park, Ill., assignor to International Harvester Company. Tractor cultivator. 1,760,336; May 27.
Benson, Ernst J., Los Angeles, assignor of fifty-one one-hundredths to E. Westberg, Glendale, Calif. Plaster-scoring tool. 1,760,107; May 27.
Bentley, Garfield, Highland Park, Mich. Floor scrubbing and drying device. 1,759,881; May 27.
Berdon, Albert E., Detroit, assignor to A C Spark Plug Company, Flint, Mich. Liquid-fuel pump. 17,60,856; May 27.
Berg, Louis, assignor to A C Spark Plug Company, Flint, Mich. Hair-spring-securing means for instruments. 1,760,857; May 27.
Bergmann, Philip, assignor to Columbia Steel Equipment Company, Philadelphia, Pa. Posting tray. 1,760,805; May 27.
Bernard, William A., assignor to The William Schollhorn Company, New Haven, Conn. Hand tool. 1,760,627; May 27.
Bernardin, Alphonse, Santa Monica, Calif. Flagpole-rope tightener. 1,760,337; May 27.
Berthold, Hermann, Leverkusen-on-the-Rhine, Germany, assignor to General Aniline Works, Inc., New York, N. Y. B-mercapto-propionic acid anthraquinone dye. 1,760,806; May 27.
Best, Frank E., Inc. (See Best, F. E., and Evensen, assignors.)
Best, Frank E., Seattle, and C. Evensen, Seabold, assignors to Frank E. Best, Inc., Seattle, Wash. Catch plate for knob latches. 1,760,394; May 27.
Bethlehem Steel Company. (See Brookes, Joseph, assignor.)
Billmyer, William S., jr., Moline, Ill. Adjustable semi-socket wrench. 1,760,338; May 27.
Bility, Charles H., Milwaukee, Wis. Locomotive fire-door fastener. 1,759,882; May 27.
Binnier, Frederick, and G. E. Underwood, Royal Oak, Mich. Incense burner. Des. 81,224; May 27.
Birket, William E., Peoria, Ill. Signaling mechanism. 1,760,807; May 27.
Bishop, Harry G., Fort Hoyle, Md. Hanger for towels, ties, and similar articles. 1,760,339; May 27.
Bishop, John R., Charlottesville, Va. Band-saw guide. 1,760,577; May 27.
Bishop, Lucius L., Chicago, Ill. Motor vehicle. 1,760,108; May 27.
Biszantz, Fred, assignor to The Central Ohio Steel Products Company, Galion, Ohio. Lifting mechanism for dump bodies. 1,760,808; May 27.
Bixby, Walter. (See Hathaway, E. F., and Bixby.)
Bixby, Walter, assignor to Shawmut Engineering Company, Boston, Mass. Yarn spool for tube frames and the like. 1,760,809; May 27.
Bizzarri, Anthony, New York, N. Y. Independently-mounted vehicle wheel. 1,760,109; May 27.
Black, Millard S. (See McCullough, I. J., and Black.)
Blackmore, Charles C., Dayton, Ohio. Oil filter. 1,760,340; May 27.
Blackstone Silver Company. (See Ittig, George P., assignor.)
Blanchard, Lester L., Dover Foxcroft, Me., assignor to H. Crepeau, Montreal, Canada. Chimney-cap heater. 1,759,830; May 27.
Blaski, Benjamin P., Chicago, Ill. Skylight-actuating mechanism. 1,760,110; May 27.
Bliss, H. R., Company. (See Allen, Howard G., assignor.)
Bliss, James E., Faust, N. Y. Rail tie. 1,760,735; May 27.
Block, Hiram, Baltimore, Md. Permanent-waving tube. 1,760,736; May 27.
Blomquist, August E. R., Cleveland, Ohio. Vibrating machine. 1,760,578; May 27.
Blumenthal, Sidney & Co. Inc. (See Achtmeyer, William, assignor.)
Boattenhamer, Loyd H., Oklahoma City, Okla. Cracker container. Des. 81,225; May 27.
Bock, Herman, East Orange, N. J. Key container. 1,760,469; May 27.
Boden, Georg, Leipzig-Bohlis, Germany. Two-stroke-cycle internal-combustion engine. 1,760,737; May 27.

Bodine, Alfred V., Fairfield, assignor to Dictaphone Corporation, Bridgeport, Conn. Phonograph. 1,760,628; May 27.
Boegehold, Alfred L., assignor to General Motors Research Corporation, Detroit, Mich. Mold for metallic castings. 1,759,831; May 27.
Boggs, Charles R., Waban, assignor to Simplex Wire and Cable Company, Boston, Mass. Electric cable. 1,759,883; May 27.
Bohlman, Ernest A., assignor to Kellogg Switchboard and Supply Company, Chicago, Ill. Switch mechanism. 1,759,834; May 27.
Böhm, Erich, Vienna, Austria. Increasing the luster of goods made of animal hair and wool. 1,760,738; May 27.
Bolinger, Charles M., St. Louis, Mo. Clothes hanger. 1,760,739; May 27.
Bond, Joseph T. (See Wright, W. L., and Bond.)
Bonell, Ralph K., East Orange, N. J., assignor to American Telephone and Telegraph Company. Contact-making device. 1,759,933; May 27.
Bonell, Ralph O., Kenosha, Wis. Voice builder. 1,759,972; May 27.
Boschuetz, William, Milwaukee, Wis. Hame fastener. 1,760,111; May 27.
Bouillon, Emile C. J., assignor to Societe Bouillon Frères, Paris, France. Fire-alarm signal. 1,760,470; May 27.
Bousfield, Alfred, assignor to E. and T. Fairbanks and Company, St. Johnsbury, Vt. Platform scale. 1,759,884; May 27.
Bousfield, Alfred, assignor to E. and T. Fairbanks and Company, St. Johnsbury, Vt. Scale. 1,759,885; May 27.
Bousfield, Alfred, assignor to E. and T. Fairbanks and Company, St. Johnsbury, Vt. Scale. 1,759,886; May 27.
Bowser, S. F., & Company. (See Marvel, Harvey E., assignor.)
Boyer, Sylvester, Lynn, Mass., assignor to General Electric Company. Oil treatment. 1,760,539; May 27.
Boynton, Stanley E., Oak Park, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Material-feeding apparatus. 1,759,835; May 27.
Boysen, Friedrich A., Leipzig, Germany. Collecting conduit for the exhaust pipes of internal-combustion engines. 1,760,682; May 27.
Bradford, Winslow P., Buffalo, N. Y. Faucet. 1,760,810; May 27.
Bramson, Mogens L., Hendon, London, England. Control of aeroplanes and the like. 1,760,740; May 27.
Brand, Frederick F., Pittsfield, Mass., assignor to General Electric Company. Transformer. 1,760,540; May 27.
Bray, Mellen N., assignor to Tubular Rivet & Stud Company, Boston, Mass. Hook-setting machine. 1,759,836; May 27.
Brenne, Arild M., Grand Rapids, Mich., assignor to W. H. Miner, Inc., Chicago, Ill. Refrigerator-car-door fastener. 1,760,187; May 27.
Brennen, John B., Atlanta, Ga. Attachment for cotton-cleaning machines. 1,760,037; May 27.
Brewton, Joseph L., Ruston, La. Harrow-tooth holder. 1,760,341; May 27.
Briggs, Arthur J. (See Newkirk, E. D., and Briggs.)
Brindle, Robert, jr., West Orange, N. J., assignor to Westinghouse Lamp Company. Threading bases. 1,760,629; May 27.
Brinkerhoff, Frederic H., Belleville, N. J. Testing coins. 1,760,579; May 27.
Bristol, Wm. H., Talking Picture Corporation. (See Thompson, Lincoln, assignor.)
Brock, Heinrich, Cologne, Germany, assignor to Det Norske Aktieselskab for Elektrokemisk Industri of Norway, Oslo, Norway. Electrode holder. 1,760,395; May 27.
Brogan, James A., Lawrence, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Lining-trimming machine. 1,760,112; May 27.
Broido, Benjamin, assignor to The Superheater Company, New York, N. Y. Power plant. 1,760,471; May 27.
Bronander, Wilhelm B., Montclair, N. J., assignor to Standard Tobacco Stemmer Company. Scraper blade and hardening the same. 1,760,630; May 27.
Brookes, Joseph, Sparrows Point, Md., assignor to Bethlehem Steel Company. Skewback block. 1,760,296; May 27.
Brooks, William H., assignor to Carnation Company, Oconomowoc, Wis. Stamping machine. 1,759,973; May 27.
Brosnan, John J., Worcester, Mass. Portable boring machine. 1,760,189; May 27.
Brown, H. Brainard, assignor to Taylor Instrument Companies, Rochester, N. Y. Thermometer. Des. 81,226; May 27.
Brown, Herbert D., Schenectady, N. Y., assignor to General Electric Company. System of distribution. 1,760,580; May 27.
Brown, Irving E., and N. Hoffman, Perth Amboy, N. J. Control mechanism for movable elements. 1,760,472; May 27.
Brown, James H., Denver, Colo. Lock nut. 1,760,113; May 27.
Brown, Raymond W., and C. Paulson, Chicago, Ill., assignors to Western Electric Company, Incorporated, New York, N. Y. System and apparatus for testing impulses and impulse devices. 1,759,837; May 27.
Brückel, Waldemar, Berlin, Germany, assignor to General Electric Company. Protective arrangement. 1,760,541; May 27.
Bruehl, Walter J., Buffalo, N. Y. Necktie and method of tying same. 1,760,473; May 27.
Bryce, James W., Bloomfield, N. J., assignor to International Time Recording Company of New York, Endicott, N. Y. Self-regulating clock system. 1,760,631; May 27.
Buck, Alonzo L., Langley, S. C. Weighing scale. 1,760,342; May 27.
Buckeye Steel Castings Company, The. (See Hansen, Merritt R., assignor.)
Buckeye Steel Castings Company, The. (See Large, George E., assignor.)
Buckeye Steel Castings Company, The. (See Stertzbach, H. W., and McPherson, assignors.)
Buckeye Traction Ditcher Company, The. (See George, Charles L., assignor.)
Bucklus, Albert O., assignor to National Malleable and Steel Castings Company, Cleveland, Ohio. Shock-absorbing mechanism. 1,760,396; May 27.
Buckle, Horace L. T., Iver Heath, England, assignor to Victor Talking Machine Company, Camden, N. J. Talking machine. 1,760,190; May 27.
Buckles, Winfred G., assignor to Parco Development Company, Parco, Wyo. Treating clay. 1,760,191; May 27.
Bundy, Harry W., assignor, by mesne assignments, to Bundy Tubing Company, Detroit, Mich. Finned tube. 1,760,038; May 27.
Bundy, Harry W., assignor, by mesne assignments, to Bundy Tubing Company, Detroit, Mich. Forming finned tube into shapes. 1,760,039; May 27.
Bundy Tubing Company. (See Bundy, Harry W., assignor.)
Bunet, Paul E., Versailles, assignor to Societe Acieries de Gennevilliers, Gennevilliers, Seine, France. Magnetic-core induction furnace. 1,760,741; May 27.
Bunker, William G., Augusta, Me. Grader for vegetables, fruits, and the like. 1,760,742; May 27.
Burch, Donald D., Shawnee, Okla. Oil-well pump. Re-17,674; May 27.
Burdick Corporation, The. (See Anderson, Fritz A., assignor.)
Burger, Frederick W. (See Stockfleth, B., and Burger.)
Burgess Battery Company. (See Staley, Wayne D., assignor.)
Burgess Battery Co. (See Zurian, Philip D., assignor.)
Burgess, George A., Waukegan, assignor to Chicago Hardware Foundry Company, North Chicago, Ill. Pedal-operated switch. 1,760,683; May 27.
Burke, William J., Bronx, N. Y. Fire-alarm switch. 1,759,887; May 27.
Burn, Lewis, Longparish, England. Reversing gear. 1,760,040; May 27.
Burnett, Tom G., Social Hill, Ark. Riveting machine. 1,760,743; May 27.
Burns, Leonard C., Portland, Oreg. Expansible piston. 1,760,581; May 27.
Bustin, Lepold, New York, N. Y., and F. Pravda, Dunellen, N. J. Occupant-propelled carrousel. 1,760,811; May 27.
Butler, George H., assignor to Nadle, Ltd., Los Angeles, Calif. Casing for combined weighing and insurance-vending machines. Des. 81,227; May 27.
Caffrey, James F. (See Stalder, Merle D., assignor.)
California Packing Corporation. (See Muller, Wesley A., assignor.)
Callier, Frank J., San Antonio, Tex. Tailpiece for stringed musical instruments. 1,760,343; May 27.
Cameron Machine Company. (See Johnstone, Robert M., assignor.)
Campbell, Charles S., and A. E. Hunt, New Haven, Conn assignors, by mesne assignments, to Remington Rand Inc., New York, N. Y. Record card or like member for indexes or files. 1,760,474; May 27.
Campbell, Sydney A., Brighton, and L. I. Van Buskirk, Newtonville, Mass. Toy handkerchief case and purse. 1,759,974; May 27.
Capps, Frank L., Milford, Conn., and H. A. Summers, Brooklyn, N. Y., assignors to Columbia Phonograph Company, Inc., Bridgeport, Conn. Pick-up. 1,760,114; May 27.
Carlson, Theodore, Seattle, Wash. Clamshell bucket. 1,760,812; May 27.
Carmichael, Mead S., Sparta, Wis., assignor to Scott-Viner Company, Columbus, Ohio. Cleaning and washing device. 1,760,041; May 27.
Carnation Company. (See Brooks, William H., assignor.)
Carnelli, Francis J. (See Jones, Louis W., assignor.)
Carnelli, Francis J., Jamaica, N. Y. Vise. 1,760,192; May 27.
Carr, Fred S., deceased, Newton, ; M. F. Carr, executor, assignor, by mesne assignments, to United-Carr Fastener Corporation, Cambridge, Mass. Trimming installation. 1,760,265; May 27.
Carr, Fred S., deceased, Newton; M. F. Carr, executor, assignor, by mesne assignments, to United-Carr Fastener Corporation, Cambridge, Mass. Trimming installation. 1,760,266; May 27.
Carr, Fred S., deceased, Newton; M. F. Carr, executor, assignor, by mesne assignments, to United-Carr Fastener Corporation, Cambridge, Mass. Upholstery installation. 1,760,267; May 27.
Carr, Fred S., Newton; M. F. Carr, executor, assignor, by mesne assignments, to United-Carr Fastener Corporation, Cambridge, Mass. Nut and screw fastening. 1,760,834; May 27.

Carr, Moses F., executor. (See Carr, Fred S.)
Carr, Moses F., Lexington, assignor to United-Carr Fastener Corporation, Cambridge, Mass. Tack-attached button. 1,760,835; May 27.
Carrier Construction Company. (See Lea, Edward S., assignor.)
Carrier Engineering Corporation. (See Carrier, Willis H., assignor.)
Carrier, Willis H., Essex Fells, assignor to Carrier Engineering Corporation, Newark, N. J. Fluid pump or compressor. 1,760,475; May 27.
Carrillo, Jesus L., assignor of one-half to M. Cherry, Wilmington, Calif. Cash register. 1,760,744; May 27.
Carter, Charles R., et al. (See Congdon, Walter L., assignor.)
Cartlidge, Frank, assignor to Cincinnati Mine Machinery Co., Cincinnati, Ohio. Mine cutter chain. 1,760,816; May 27.
Casablancas, Fernando, Sabadell, Spain. Mechanism for drawing textile roving. 1,760,745; May 27.
Casavant, Samuel, J. Hevey, and A. Letiecq, St. Hyacinthe, Quebec, Canada. Combination organ-stop action. 1,760,813; May 27.
Case, Frank E., Erie, Pa., assignor to General Electric Company. Circuit controller. 1,760,814; May 27.
Caskey, Albert B. (See Nell, D. W., jr., and Caskey.)
Caswell, Geo. W., Co. (See Quinn, Joseph F., assignor.)
Cave, Henry, assignor to The Fuller Brush Company, Hartford, Conn. Sink-cleaning implement. 1,760,268; May 27.
Cazel, Cassius E., Covington, Ky., assignor to The Metal Bound Brush & Broom Co., Cincinnati, Ohio. Shoe cleaner. 1,760,815; May 27.
Celanese Corporation of America. (See Kinsella, Edward, assignor.)
Central Ohio Steel Products Company, The. (See Biszantz, Fred, assignor.)
Central Trust Company, executor. (See Minnier, C. F., and Daniel.)
Chanin, Aaron. (See Nisenson, Julius, assignor.)
Chanter, Arthur J., assignor to The Studebaker Corporation, South Bend, Ind. Brake. 1,759,934; May 27.
Chanter, Arthur J., assignor to The Studebaker Corporation, South Bend, Ind. Brake. 1,759,935; May 27.
Chapin, Herbert L., Swampscott, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Blacking machine. 1,760,115; May 27.
Chapman, Melville C., Framingham, Mass. Advertising device. 1,760,746; May 27.
Charavay, Frederick, Piqua, Ohio, assignor, by mesne assignments, of one-half to Hartzell Industries, Inc., Wilmington, Del. Spray booth. 1,760,344; May 27.
Chartres, Francis A., et al. (See McBride, V. R., and Ward, assignors.)
Chartres, Sydney L., et al. (See McBride, V. R., and Ward, assignors.)
Chastenay, Norman A., Ozone Park, N. Y. Foot appliance for swimmers. 1,760,476; May 27.
Chéron, Pierre J., Stratford, Conn., assignor to Moto Meter Gauge & Equipment Corporation, Long Island City, N. Y. Medallion. Des. 81,228; May 27.
Cherry, Mary. (See Carrillo, Jesus L., assignor.)
Chicago Hardware Foundry Company. (See Burgess, George A., assignor.)
Chicago Mica Company. (See Frederick, Louis T., assignor.)
Chicago Pneumatic Tool Company. (See Nell, Gustave M., assignor.)
Christophel, Carl E., Pearl River, assignor to Dexter Folder Company, New York, N. Y. Folding machine. 1,760,819; May 27.
Christopher, Harold S., Los Angeles, Calif., assignor, by mesne assignments, to The Paraffin Companies, Inc. Machine for treating pipes and the like. Re17,675; May 27.
Chrysler Corporation. (See Woolson, Harry T., assignor.)
Chryst, William A., assignor, by mesne assignments, to Delco Products Corporation, Dayton, Ohio. Shock absorber. 1,759,888; May 27.
Churchill, Ralph A., Spokane, Wash. Motor-vehicle semaphore. 1,759,838; May 27.
Cincinnati Mine Machinery Co. (See Cartlidge, Frank, assignor.)
Cincinnati Patent Engineering Company, The. (See Cornish, Guy S., assignor.)
Cincinnati Planer Company, The. (See Gillham, R., Addison, Wetzel, and Langen, assignors.)
Cincinnati Time Recorder Company, The. (See Streckfuss, Elmer G., assignor.)
Cirimele, Peter M., Los Banos, Calif. Indicator for wrecked submerged crafts. 1,759,839; May 27.
Clark, Harry W., Wyandotte County, Kans. Inking fountain. 1,759,889; May 27.
Clark, Meredith, Hempstead, N. Y. Lamp socket. 1,760,477; May 27.
Clark, Omar E., Denver, Colo., assignor, by mesne assignments, to The Gardner-Denver Company, Quincy, Ill. Hole-cleaning apparatus. 1,760,582; May 27.
Clark Tructractor Company. (See Stockfleth, B., and Burger, assignors.)
Clark, Wallace S., Schenectady, N. Y., assignor to General Electric Company. Method and apparatus for treating insulated conductors. 1,760,583; May 27.
Clason, Ragnar, assignor to A C Spark Plug Company, Flint, Mich. Crank-case ventilation. 1,760,836; May 27.
Clayton & Lambert Manufacturing Co. (See Ironside, James, assignor.)
Cleveland Graphite Bronze Company, The. (See Kerruish, Edward P., assignor.)
Cleveland Graphite Bronze Company. (See Klocke, William H., assignor.)
Cleveland Heater Company, The. (See Doen, Loren F., assignor.)
Cleveland Welding Company, The. (See Kranz, H. W., and Fenzel, assignors.)
Clifford, Hobbs E., Knightstown, Ind. Air-mail exchange. 1,760,684; May 27.
Clouse, William L., assignor to The National Machinery Co., Tiffin, Ohio. Feed for bolt-trimming machines. 1,759,890; May 27.
Coats, Allan, Paisley, Scotland. Rotary mechanism for the transmission of power. 1,760,397; May 27.
Coats, Allan, Paisley, Scotland. Rotary power-transmission mechanism. 1,760,480; May 27.
Coffman, Robert B., New Alexandria, Pa. Drag scoop. 1,760,116; May 27.
Cohn, Alfred, Berlin, Germany, assignor to General Electric Company. Electroresponsive device. 1,760,542; May 27.
Cole, Percy J., and C. Banta, Philadelphia, Pa., assignors to The Barrett Company, New York, N. Y. Pickling compound. 1,759,840; May 27.
Coleman, Clarence E., Buffalo, assignor, by mesne assignments, to Du Pont Rayon Company, New York, N. Y. Locking device for spinning-bucket covers. 1,760,398; May 27.
Colgate-Palmolive-Peet Company. (See Schwantes, Julius A., assignor.)
Collins, Thomas, Timperley, assignor to Cook & Co., Manchester, Limited, Manchester, England. Knotting appliance. 1,760,297; May 27.
Collins, William A., Toledo, Ohio, assignor to Moto Meter Gauge & Equipment Corporation, New York, N. Y. Electrical apparatus. 1,760,837; May 27.
Colman, Howard D. (See Stewart, Duncan J., assignor.)
Colman, Howard D., Rockford, Ill. Selective signaling apparatus. 1,760,478; May 27.
Colman, Howard D., Rockford, Ill. Radiant-energy control system. 1,760,479; May 27.
Columbia Axle Company, The. (See Harper, George W., assignor.)
Columbia Phonograph Company. (See Capps, F. L., and Summers, assignors.)
Columbia Ribbon & Carbon Manufacturing Company. (See Dixon, Harold W. A., assignor.)
Columbia Steel Equipment Company. (See Bergmann, Philip, assignor.)
Cone, Howard M., Longview, Wash., assignor of one-half to The Long-Bell Lumber Company, Kansas City, Mo. Thermostatic control of a vent in a chamber. Re17,676; May 27.
Congdon, Walter L., assignor of one-fourth to J. H. Waldman and one-fourth to C. R. Carter, El Paso, Tex. Power device for applying vehicle brakes. 1,760,345; May 27.
Conor, George H., Buenos Aires, Argentina. Automatic loading transporter. 1,759,975; May 27.
Conover Company, The. (See Stoddard, Edgar S., assignor.)
Consolidated Car-Heating Company. (See Hawley, Cornell S., assignor.)
Consolidated Car-Heating Company. (See Hynes, Lee P., assignor.)
Cook, Calvin, assignor to Pierce Governor Company, Anderson, Ind. Automatic governor. 1,759,936; May 27.
Cook & Co., Manchester, Limited. (See Collins, Thomas, assignor.)
Cooke, Samuel B. (See Gray, C. E., and Cooke.)
Cooley, John L. (See Maker, F. L., Cooley, and Tuttle.)
Cooper, Dexter P., Eastport, Me. System and utilizing tidal energy. 1,760,632; May 27.
Cormay, Walter J., Anburndale, Mass. Fixture support and making the same. 1,760,117; May 27.
Corning Glass Works. (See Hood, Harrison P., assignor.)
Corning Glass Works. (See Smith, Rowland D., assignor.)
Cornish, Gus S., assignor to The Cincinnati Patent Engineering Company, Cincinnati, Ohio. Radiocircuits. 1,759,937; May 27.
Cornog, Adelaide V. E., et al. (See Spicer, John P., assignor.)
Cornog, Albin H., et al. (See Spicer, John P., assignor.)
Correa, Frank M., Honolulu, Hawaii. Bedding clamp. 1,760,346; May 27.
Corrigan, George W., Los Angeles, Calif. Railway crosstie. 1,760,231; May 27.
Coryell, Charles N., Mamaroneck, N. Y. Polygon vanity case. 1,760,481; May 27.
Courtot, Louis, Paris, France, assignor to American Radiator Company, New York, N. Y. Low-pressure boiler. 1,760,399; May 27.
Cowdrey, Charles F., Fitchburg, Mass., assignor, by mesne assignments, to Bendix-Cowdrey Brake Tester, Inc. Brake-testing device for automobiles. Re17,677; May 27.
Cox, John L., and B. M. Fine, Philadelphia, Pa. Projectile. 1,760,685; May 27.
Cox, Nostrand & Gunnison, Inc. (See Gunnison, Foster, assignor.)

Craddock, Frederick L., assignor to Mixing Equipment Company, Inc., Rochester, N. Y. Mixing device. Re17,683; May 27.
Craig, Alvin M., New Haven, Conn., assignor to Universal Gear Shift Corporation. Valve-control handle and lock for motor cars. 1,760,347; May 27.
Craig, David A., assignor of one-half to G. H. D. Sutherland, Ludington, Mich. Antisplash guard. 1,760,198; May 27.
Cram, Geo. F., Company. (See Beck, Johnse H., assignor.)
Crane, Joseph R., Pittsburgh, Pa., assignor to Ladd Water Tube Boiler Company, New York, N. Y. Boiler furnace. 1,760,118; May 27.
Crawford, Robert A., Chamberlain, S. Dak. Humidifier. 1,760,633; May 27.
Crawley, Mansfield C., Croton, N. Y., assignor to C. D. Davis, Washington, D. C., and W. R. Davis, Westfield, N. J. Automatic electric water heater. 1,760,230; May 27.
Creamer, Sylvester B., and H. R. Ansel, assignors to The International Derrick & Equipment Company, Columbus, Ohio. Building structure. 1,760,817; May 27.
Crepeau, Henri. (See Blanchard, Lester L., assignor.)
Crespi, Emilio, Crespi-sur-l'Adda, Italy, and M. P. Otto, Paris, France. Bleaching textile fibers by means of ozone. 1,760,042; May 27.
Crofoot, John B., Mount Prospect, Ill. Cushion cap for tools. Re17,684; May 27.
Croft, Arthur G., Boise, Idaho. Twine cutter. 1,760,043; May 27.
Croft, Lorenzo E., assignor to Gardner-Denver Company, Denver, Colo. Bore-opening apparatus. 1,760,584; May 27.
Crosby, Gorham. (See Gunn, Thomas M., assignor.)
Crosman, George A., Seattle, Wash. Remote-controlled door-operating mechanism. 1,760,298; May 27.
Cross Development Corporation. (See Cross, Roy, assignor.)
Cross, Frank L., Port Washington, N. Y., and H. Hallstream, Braintree, Mass., assignors to Cross Paper Feeder Company. Paper-feeding machine. 1,760,119; May 27.
Cross Paper Feeder Company. (See Cross, F. L., and Hallstream, assignors.)
Cross, Roy, Kansas City, Mo., assignor to Cross Development Corporation. Refining hydrocarbons. 1,760,585; May 27.
Crowe, Paul L., Baltimore, Md. Combined fuel blower and pulverizer. 1,760,120; May 27.
Crown Cork & Seal Company. (See Derby, William V., assignor.)
Crown Rheostat & Supply Co. (See Abenanti, Joseph, assignor.)
Cuddy, Loftus B., Cleveland, Ohio. Oil-cracking still. 1,760,400; May 27.
Cummings, David P., Newton Center, Mass. Flexible sheet material. 1,759,976; May 27.
Curtis & Marble Machine Company. (See Jebsen, Erik G., assignor.)
Cutler-Hammer, Inc. (See Hunter, Richard B., assignor.)
Cutler-Hammer, Inc. (See Lockett, Ralph G., assignor.)
Cutler-Hammer, Inc. (See Seeger, Edwin W., assignor.)
Daderko, Michael, Summit Hill, Pa. Portable hand-operated power-driven plane. 1,760,818; May 27.
Dalpini, Ugo. (See Swanson, Swan J., assignor.)
Dalrymple, Horace A., Haverhill, Mass. Shoe ornament. Re81,229; May 27.
Daniel, Benjamin M. (See Minnier, C. F., and Daniel.)
Date, William E. (See Newlin, H. S. and Date.)
Davidson & Company Limited. (See Whitmore, John, assignor.)
Davis, Albert J., New York, N. Y. Pasteurizing apparatus. 1,760,686; May 27.
Davis, Annie A. (See Francisco, George H., assignor.)
Davis, Charles D., et al. (See Crawley, Mansfield C., assignor.)
Davis, Horace A., Erie, Pa., assignor to General Electric Company. Brake system. 1,760,543; May 27.
Davis, Nathan H., Philadelphia, Pa., assignor to Keystone Lantern Company. Bail holder. 1,760,687; May 27.
Davis, William R., et al. (See Crawley, Mansfield C., assignor.)
Dawsett, George. (See Knapp, William D., assignor.)
Dawson, George H., Cambridge, Mass., assignor, by mesne assignments, to Remington Rand Inc., New York, N. Y. Hinge member for cards. 1,760,401; May 27.
Dayton Scale Company. (See Strachan, Thomas H., assignor.)
Deagan, J. C., Inc. (See Jones, Murvin L., assignor.)
Dean, Samuel W., Brooklyn, N. Y., assignor to American Telephone and Telegraph Company. Coordination of direction-finder observations. 1,759,938; May 27.
De Ayestaran, Luis, Zarauz, Spain. Insulating composition. 1,760,044; May 27.
Delco-Light Company. (See Lee, Ralph L., assignor.)
Delco-Light Company. (See Schmieding, Warren H. F., assignor.)
Delco Products Corporation. (See Chryst, William A., assignor.)
Delco Products Corporation. (See Elsey, George W., assignor.)
Demag Aktiengesellschaft. (See Idel, Hermann, assignor.)
Denton, John W., Ponca City, Okla. Camp cot for automobiles. 1,759,977; May 27.
Derby, William V., Baltimore, Md., assignor, by mesne assignments, to Crown Cork & Seal Company, Inc., New York, N. Y. Packaging machine. 1,760,482; May 27.
Derrick, William I., assignor to Westco-Chippewa Pump Company, Davenport, Iowa. Pump. 1,760,402; May 27.
Desha, Orville U., assignor of one-fifth to The Desha Typelex Trust Estate, Fort Collins, Colo. Key action for typewriters and other machines. 1,760,269; May 27.
Desha Typelex Trust Estate, The. (See Desha, Orville U., assignor.)
Det Norske Aktieselskab for Elektrokemisk Industri of Norway. (See Brock, Heinrich, assignor.)
Detroit Brass and Malleable Works. (See Whitmarsh, Ernest B., assignor.)
Devers, Philip K., Lynn, Mass., assignor to General Electric Company. Spark plug. 1,760,586; May 27.
De Vilbiss Company, The. (See Perrin, James E., assignor.)
Dexter Folder Company. (See Christophel, Carl E., assignor.)
Diamond Power Specialty Corporation. (See Snow, N. L., and Howse, assignors.)
Dibelka, Henry G., assignor to The Kingsley-Miller Company, Chicago, Ill. Vehicle wheel hub cap. Des. 81,230; May 27.
Dickerson, Alexander B., Newark, N. J. Stocking protector. 1,760,299; May 27.
Dickson, Frank H., Auburn, N. Y. Wrench. 1,760,544; May 27.
Dictaphone Corporation. (See Bodine, Alfred V., assignor.)
Dietrichson, Frederick, New Rochelle, N. Y. Massage attachment for shaving brushes. 1,760,747; May 27.
Dietrichson, William F., Webster Groves, Mo., assignor to American Car and Foundry Company, New York, N. Y. Hatch-cover-supporting means. 1,760,688; May 27.
Dietzgen, Eugene, Company. (See Langsner, Adolph, assignor.)
Dillon, Wallace M., Washington, D. C. Strainer. Re17,685; May 27.
Dim-Dazzle (Parent) Company Limited. (See John, Arthur S., assignor.)
Dixon, Harold W. A., Hollis, N. Y., assignor to Columbia Ribbon & Carbon Manufacturing Company, Inc., Glen Cove, N. Y. Apparatus for manufacturing carbon paper. 1,760,045; May 27.
Dixon, John W., Maywood, Ill. Tin-edging machine. 1,760,046; May 27.
Dobie, Bradley, Elmhurst, N. Y., assignor to American Arch Company. Refractory arch construction. 1,760,121; May 27.
Doen, Loren F., assignors to The Cleveland Heater Company, Cleveland, Ohio. Valve. 1,759,891; May 27.
Doen, Loren F., assignor to The Cleveland Heater Company, Cleveland, Ohio. Valved coupling. 1,759,892; May 27.
Doen, Loren F., assignor to The Cleveland Heater Company, Cleveland, Ohio. Valve. 1,759,893; May 27.
Domler, Charles A., assignor to The Hadley Company, Inc., Providence, R. I. Bracelet for watches or the like. 1,760,689; May 27.
Donaldson, Frank A., Minneapolis, Minn. Spring implement seat. 1,759,978; May 27.
Donnelley, R. R., & Sons Company. (See Alger, Harley C., assignor.)
Donohue, A. J., Corporation, The. (See Jacobs, Joseph, assignor.)
Donovan, Alfred F., Boston, Mass. Insole for shoes. 1,760,300; May 27.
Doran, John H., Schenectady, N. Y., assignor to General Electric Company. Elastic-fluid-turbine assemblage. 1,760,545; May 27.
Dorst, Paul W. (See Reed, R. F., and Dorst.)
Dougherty, H. D., & Company. (See Dougherty, Laurence R., assignor.)
Dougherty, Laurence R., Penfield, assignor to H. D. Dougherty & Company, Incorporated, Philadelphia, Pa. Bassinet. 1,760,301; May 27.
Dougherty, Laurence R., Penfield, assignor to H. D. Dougherty & Company, Incorporated, Philadelphia, Pa. Adjusting articulated bedsprings. 1,760,302; May 27.
Dougherty, Laurence R., Penfield, assignor to H. D. Dougherty & Company, Incorporated, Philadelphia, Pa. Attachment for beds. 1,760,303; May 27.
Douglass, Leon F., Menlo Park, Calif. Amplifying and reproducing system. 1,760,821; May 27.
Dow, Alexander, New York, N. Y., assignor to Dow Patents Holding Corporation. Method and apparatus for power transmission release. 1,760,483; May 27.
Dow Patents Holding Corporation. (See Dow, Alexander, assignor.)
Drake, Alden M., assignor to Greenfield Tap & Die Corporation, Greenfield, Mass. Work holder for grinding machines. 1,760,587; May 27.
Drake, Charles R., assignor to The Line-A-Time Mfg. Co. Inc., Rochester, N. Y. Copyholder for billing machines. 1,760,403; May 27.
Drangeid, Ragnvald, assignor to General Motors Corporation, Detroit, Mich. Antisqueak strip. 1,760,838; May 27.
Dredge, William, Manchester, England. Apparatus for the manufacture of biscuits or the like. 1,760,047; May 27.

Drevitson, Carl B., Somerville, Mass. Engine piston. 1,760,122; May 27.
Drew, Harold, Lansing, assignor to General Motors Corporation, Detroit, Mich. Combined differential and reversing gear. 1,760,839; May 27.
Drew, Richard G., assignor to Minnesota Mining & Manufacturing Company, St. Paul, Minn. Adhesive tape. 1,760,820; May 27.
Drury, William W., London, England, assignor to Radio Corporation of America. Variable electric condenser. 1,759,979; May 27.
Dudley, Paul K., Fitchburg, Mass. Aerospeed boat. 1,760,484; May 27.
Dufay, Louis, Versailles, France, assignor to H. Wade, London, England. Apparatus for making mosaic screens for color photography. 1,760,048; May 27.
Dunham, George W., assignor to Whirldry Corporation, Utica, N. Y. Gearing for laundry machines. 1,760,123; May 27.
Dunn, Irwin L., Tulsa, Okla. Apparatus for extracting combustible vapors from liquid petroleum. 1,760,124; May 27.
Dunn, William G., Clarinda, Iowa. Awning-structure support and tensioning mechanism. 1,760,348; May 27.
Dunn, William G., Clarinda, Iowa. Accessory mounting. 1,760,349; May 27.
Du Pont Rayon Company. (See Coleman, Clarence E., assignor.)
E. A. Laboratories, Inc. (See Auflero, John M., assignor.)
E. M. F. Electric Company Proprietary Limited. (See Whiting, G. A., and Holland, assignors.)
Eagle Pencil Company. (See Grennan, Benjamin F., assignor.)
Eastern Tool & Manufacturing Company. (See Peterson, Carl E., assignor.)
Eaton Axle & Spring Company, The. (See Reid, James S., assignor.)
Ebihara, Keikichi. (See Okochi, M., and Ebihara.)
Eby, Eugene D., Pittsfield, Mass., assignor to General Electric Company. Insulating joint for cable sheaths. 1,760,546; May 27.
Eby, Ivan D., Richmond, N. Y. Boiler attachment. 1,760,588; May 27.
Eby, Ivan D., Richmond, N. Y. Boiler attachment. 1,760,589; May 27.
Ecker, Will J., jr., St. Louis, Mo. Card case. 1,759,980; May 27.
Ecker, Will J., jr., assignor of one-half to A. Bender, St. Louis, Mo. Engraving-press attachment. 1,760,049; May 27.
Eclipse Machine Company. (See Mylius, Walter G., assignor.)
Edgar, John, assignor to Barber-Colman Company, Rockford, Ill. Hob. 1,760,125; May 27.
Edge, Walter S., Pittsburgh, Pa. Device for the installation of steel reenforcement in concrete pavements. 1,760,350; May 27.
Ehret, John E., Berkeley, Calif. Drain trap. 1,760,126; May 27.
Eickworth, Regnier, Essen, Germany. Gas burner. 1,760,050; May 27.
Elliott, Harold H., Glencoe, assignor to Halsam Products Company, Chicago, Ill. Bottle stopper. 1,760,127; May 27.
Ellis, Ruby K., et al., administrators. (See Koenig, Joseph.)
Elsey, George W., assignor, by mesne assignments, to Delco Products Corporation, Dayton, Ohio. Shock absorber. 1,759,894; May 27.
Elsey, George W., Anderson, Ind., assignor, by mesne assignments, to Delco Products Corporation, Dayton, Ohio. Shock absorber. 1,759,895; May 27.
Elsey, George W., assignor, by mesne assignments, to Delco Products Corporation, Dayton, Ohio. Shock absorber. 1,759,939; May 27.
Eltz, George J., jr., assignor to Chas. Freshman Co. Inc., New York, N. Y. Adjusting electrical apparatus. 1,759,841; May 27.
Elzinga, Peter. (See Elzinga, Robert F. and P.)
Elzinga, Robert F. and P., Holland, Mich.; said Robert F. Elzinga assignor to said P. Elzinga. Razor. 1,759,981; May 27.
Embossing Company, The. (See Graham, Tom C., assignor.)
Enard, Hans, assignor to The Maine Electric Company, Portland, Me. Power rake. 1,760,840; May 27.
Endter, Waldemar A., Long Beach, Calif. Airplane construction. 1,760,485; May 27.
Engels, Eugene O., assignor to Baker Perkins Company, Inc., Saginaw, Mich. Fuel system for enclosed-burner bake ovens. 1,760,486; May 27.
Enz, Charles A., Fort Wayne, Ind. Farm-implement attachment for tractors. 1,760,128; May 27.
Ericson, Gunnar F. (See Jacobson, G., and Ericson.)
Erie Malleable Iron Company. (See Selah, Howard A., assignor.)
Erie Malleable Iron Company. (See Waite, Lorenzo E., assignor.)
Estorge, Julian L., New Orleans, La. Meter protector. 1,760,194; May 27.
Etta, Inc. (See Kidd, Etta D., assignor.)
Evans Auto Loading Co. Inc., The. (See Snyder, Clifford L., assignor.)
Evans, Edwin R., Detroit, Mich. Air cleaner. 1,760,351; May 27.
Evenheat Manufacturing Company. (See Fliss, August, jr., assignor.)
Evensen, Carl. (See Best, F. E., and Evensen.)
Fairbanks, E. and T., and Company. (See Bousfield, Alfred, assignor.)
Fairbanks, E. and T., and Company. (See Fuller, Clyde E., assignor.)
Fairbanks, E. and T., and Company. (See Hadley, Harlan A., assignor.)
Fairbanks, E. and T., and Company. (See Howard, Alfred C., assignor.)
Fanning, Robert B., Thurber, Tex. Gas burner for furnaces. 1,760,858; May 27.
Farrel-Birmingham Company. (See Farrel, Franklin, jr., assignor.)
Farrel, Franklin, jr., New Haven, assignor, by mesne assignments, to Farrel-Birmingham Company, Incorporated, Ansomia, Conn. Mill shredder. 1,759,896; May 27.
Faulkner, David S. (See Spalding, J. D., and Faulkner.)
Federal Telegraph Company. (See Hough, Clinton W., assignor.)
Federal Telegraph Company. (See Nicolson, Alexander M., assignor.)
Fehely, Ralph C., and R. F. Stevenson, Jacksonville, Oreg.; said Stevenson, assignor to said Fehely. Ore concentrator. 1,760,590; May 27.
Feigelman, Herman A., Paterson, N. J. Garment hanger. 1,760,352; May 27.
Feldin, Emil, Everett, Wash. Lumber-loading roll. 1,760,804; May 27.
Fenzel, Jacob S. (See Kranz, H. W., and Fenzel.)
Fildes, Frederick K., Altoona, Pa. Drop-bottom shipping container. 1,760,305; May 27.
Fine, Bernard M. (See Cox, J. L., and Fine.)
Finken, Hermann, Rodenkirchen, near Cologne, Germany. Pruning shears. 1,760,232; May 27.
Fintel, Henry, Hardy, Nebr. Chicken roost. 1,760,748; May 27.
Firing, Ludvig. (See Monk, R. H., and Firing.)
Fischer, Herbert G. M., Westfield, N. J., assignor to Standard Oil Development Company. Removing ash-forming constituents from oil. 1,760,129; May 27.
Fisher, Frederick E., Sudbrook Park, Md., assignor to General Electric Company. Operating mechanism for electric switches. 1,760,547; May 27.
Fleming, Joseph P. (See Wakefield, C. E., Fleming, and Oliver.)
Flentye, Laura, Wilmette, Ill. Handkerchief-drying frame. 1,760,548; May 27.
Fletcher, Harold W., and R. Neuhaus, assignors to Hughes Tool Company, Houston, Tex. Quick-operating valve. 1,760,051; May 27.
Fletcher Works, Incorporated. (See Schaum, Carl, assignor.)
Flint, Dutee W., Cranston, assignor to Swingrite Company, Inc., Providence, R. I. Sectional golf shaft. 1,760,353; May 27.
Fliss, August, jr., assignor to Evenheat Manufacturing Company, Chicago, Ill. Water heater. 1,760,634; May 27.
Flood, Walter H., Chicago, Ill. Pavement and process of laying. 1,760,690; May 27.
Florence Stove Company. (See White, F. E., and Ruttiman, assignors.)
Fogelqvist, Gunnar P. O. (See Grandstedt, Johan A., assignor.)
Folmsbee, Clyde H., Cranford, N. J., assignor to American Car and Foundry Company, New York, N. Y. Valve mechanism for car tanks. 1,760,635; May 27.
Food Machinery Corporation. (See Moe, Andrew O., assignor.)
Forbes, Allan W., Worcester, Mass. Frequency changer. 1,760,591; May 27.
Forbes, Jas. H., Tea & Coffee Company. (See Gibson, Marshall D., assignor.)
Forbes, Jas. H., Tea & Coffee Company. (See Hornaday, Waller C., assignor.)
Forman, Paris R., Rahway, N. J., assignor to National Pneumatic Company, New York, N. Y. Expander. 1,760,052; May 27.
Forrest, Elbert E., Gary, Ind., assignor, by mesne assignments, to Line Material Company, South Milwaukee, Wis. Pole hitch. 1,760,130; May 27.
Fortune, John A., and D. E. Whitson, St. Louis, Mo., assignors of one-half to E. Schaaf, St. Marys, Mo. Refrigerant compressor. 1,760,636; May 27.
Fossa, Joseph, Danvers, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Cutting device. 1,759,842; May 27.
Foster, Edward S. (See Kauffman, Walter B., assignor.)
Foukes, Joseph P., assignor to Lee C. Moore & Company, Incorporated, Pittsburgh, Pa. Reenforcing leg and clamp for angle-iron derricks. 1,760,691; May 27.
Foulke, Roland R., Philadelphia, Pa. Automatically-operable railway switch. 1,759,843; May 27.
Fox, Gordon. (See Rowan, J. S., and Fox.)
Fox, Gordon, assignor to Freyn Engineering Company, Chicago, Ill. Hydraulic electric bell hoist. 1,760,637; May 27.
Fox, Maud C. (See Scott, I. G. and Fox.)

France, Antoine, Liege, Belgium. Apparatus for washing minerals by means of liquid streams. 1,759,940; May 27.
Francisco, George H., assignor of one-half to A. A. Davis, Los Angeles, Calif. Garment. 1,759,897; May 27.
Frankart, Inc. (See von Frankenberg, Arthur, assignor.)
Franklin Simon & Company. (See Long, Dorothy, assignor.)
Frantz, Walter A., Cleveland Heights, assignor to The Apex Electrical Manufacturing Company, Cleveland, Ohio. Washing machine. 1,760,822; May 27.
Frederick, Louis T., assignor, by mesne assignments, to Chicago Mica Company, Valparaiso, Ind. Mica-laying machine. 1,760,233; May 27.
Frederick, Louis T., assignor to Chicago, Mica Company, Valparaiso, Ind. Molding materials. 1,760,234; May 27.
Freeman, Michael N., Racine, Wis. Boiler. 1,760,487; May 27.
Freshman, Chas., Co. Inc. (See Eltz, George J., jr., assignor.)
Frey, Andrew C., Jackson, Mich. Grinder shield. 1,759,941; May 27.
Freyn Engineering Company. (See Fox, Gordon, assignor.)
Freyn Engineering Company. (See Rowan, J. S., and Fox, assignors.)
Fried. Krupp Aktiengesellschaft. (See Stäblein, Fritz, assignor.)
Friendly, Herbert M., Chicago, Ill. Automatic telephone system. 1,760,823; May 27.
Frigidaire Corporation. (See Hull, Harry B., assignor.)
Frigidaire Corporation. (See Schweller, Sylvester M., assignor.)
Frigidaire Corporation. (See Stock, Anthony T., assignor.)
Fritsch, Rockel A., assignor to J. Lawrie, Chicago, Ill. Fountain pen. 1,760,824; May 27.
Frosted Foods Company. (See Barry, James J., assignor.)
Fruth, Hal F., Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Transmitter. 1,759,898; May 27.
Fuld & Co., Telephon und Telegraphenwerke A. G. (See Schneider, J., and Heckmann, assignors.)
Fuller Brush Company, The. (See Cave, Henry, assignor.)
Fuller, Clyde E., assignor to E. and T. Fairbanks and Company, St. Johnsbury, Vt. Weather shield for track scales. 1,759,899; May 27.
Fuller, Glenn K. (See Barrett, K. E., and Fuller.)
Fuller, Truman S., and D. Basch, Schenectady, N. Y., assignors to General Electric Company. Aluminum alloy. 1,760,549; May 27.
Funk, Frank M., Detroit, Mich. Soft-soap dispenser. 1,760,404; May 27.
Gagnon, William J., assignor to The Bead Chain Manufacturing Company, Bridgeport, Conn. Ring attachment for chains. 1,760,825; May 27.
Gallinant, Raphael C., Ridgefield Park, N. J. Vehicle signal switch. 1,760,488; May 27.
Gans, Bernard W., Piedmont, S. Dak. Finger-nipple calf feeder. 1,760,053; May 27.
Gardner-Denver Company, The. (See Clark, Omar E., assignor.)
Gardner-Denver Company. (See Croft, Lorenzo E., assignor.)
Gardner-Denver Company. (See Rover, Walter H., assignor.)
Garhart Dental Specialty Co. (See Garhart, Nathan K., assignor.)
Garhart, Nathan K., Watertown, assignor to Garhart Dental Specialty Co., Somerville, Mass. Bottle. 1,760,841; May 27.
Gartin, Elmer G., Claremont, N. H., assignor to Sullivan Machinery Company. Rock-drilling mechanism. 1,760,354; May 27.
Garvie, James, London, England. Liquid measuring and delivering apparatus. 1,760,826; May 27.
Gates, Samuel, Brooklyn, N. Y. Combination pajama jacket and dicky. Des. 81,231; May 27.
Gemex Company. (See Prestinari, Eugen, assignor.)
General Aniline Works, Inc. (See Berthold, Hermann, assignor.)
General Aniline Works, Inc. (See Korten, Ernst, assignor.)
General Aniline Works, Inc. (See Neelmeier, W., and Nocken, assignors.)
General Aniline Works, Inc. (See Thiess, K., Meissner, and Müller, assignors.)
General Electric Company. (See Arsem, William C., assignor.)
General Electric Company. (See Bany, H., and McDonald, assignors.)
General Electric Company. (See Becker, Howard I., assignor.)
General Electric Company. (See Boyer, Sylvester, assignor.)
General Electric Company. (See Brand, Frederick F., assignor.)
General Electric Company. (See Brown, Herbert D., assignor.)
General Electric Company. (See Brückel, Waldemar, assignor.)
General Electric Company. (See Case, Frank E., assignor.)
General Electric Company. (See Clark, Wallace S., assignor.)
General Electric Company. (See Cohn, Alfred, assignor.)
General Electric Company. (See Davis, Horace A., assignor.)
General Electric Company. (See Devers, Philip K., assignor.)
General Electric Company. (See Doran, John H., assignor.)
General Electric Company. (See Eby, Eugene D., assignor.)
General Electric Company. (See Fisher, Frederick E., assignor.)
General Electric Company. (See Fuller, T. S., and Basch, assignors.)
General Electric Company. (See Gosling, Joseph W., assignor.)
General Electric Company. (See Hahn, William C., assignor.)
General Electric Company. (See Hilliard, John D., assignor.)
General Electric Company. (See Hoare, Stephen C., assignor.)
General Electric Company. (See Janisch, L., and Welsch, assignors.)
General Electric Company. (See Loebe, W.-W., Ledig, and Asmussen, assignors.)
General Electric Company. (See Lund, H., Laub, and Hirt, assignors.)
General Electric Company. (See Neubert, Hans, assignor.)
General Electric Company. (See Palmer, Robert, assignor.)
General Electric Company. (See Payne, John H., assignor.)
General Electric Company. (See Petch, H. S., and Wheatcroft, assignors.)
General Electric Company. (See Rankin, William K., assignor.)
General Electric Company. (See Robinson, Lewis T., assignor.)
General Electric Company. (See Schwennker, Charles F., assignor.)
General Electric Company. (See Traver, Oliver C., assignor.)
General Electric Company. (See Walle, Ludwig S., assignor.)
General Electric Company. (See Whitaker, Frank P., assignor.)
General Motors Corporation. (See Drangeid, Ragnvald, assignor.)
General Motors Corporation. (See Drew, Harold, assignor.)
General Motors Corporation. (See McCuen, Charles L., assignor.)
General Motors Research Corporation. (See Boegehold, Alfred L., assignor.)
General Motors Research Corporation. (See Kettering, C. E., and Short, assignors.)
General Motors Research Corporation. (See Short, Charles R., assignor.)
General Motors Research Corporation. (See Williams, H. M., and Suman, assignors.)
General Motors Research Corporation. (See Wood, Walter A., assignor.)
George, Charles L., assignor to The Buckeye Traction Ditcher Company, Findlay, Ohio. Bucket chain for ditching machines and the like. 1,760,489; May 27.
George, Elgy J., Gary, Ind., assignor of one-half to C. T. Howland, Baltimore, Md. Ingot stripper. 1,760,054; May 27.
Gesellschaft für Drahtlose Telegraphie m. b. H. (See Schaffer, Walter, assignor.)
Gibson, Marshall G., Webster Groves, assignor to Jas. H. Forbes Tea & Coffee Company, St. Louis, Mo. Display stand. 1,760,131; May 27.
Gift, Glen E., Fairmount, Ind. Holding device for fishing poles or rods. 1,760,592; May 27.
Gilbert, A. C., Company, The. (See Gilbert, Alfred C., assignor.)
Gilbert, Alfred C., Hamden, Conn., assignor, by mesne assignments, to The A. C. Gilbert Company, New Haven, Conn. Construction toy. 1,760,638; May 27.
Gillespie, John F. P., Montgomery, Ala. Steering gear. 1,760,749; May 27.
Gillham, Robert, T. Addison, F. Wetzel, and G. Langen, assignors to The Cincinnati Planer Company, Cincinnati, Ohio. Control mechanism for metal planers. 1,760,639; May 27.
Giudice, Charles, assignor of two-thirds to M. Stockman, M. Stockman, and J. G. Ambro, Brooklyn, N. Y. Airship. 1,760,692; May 27.
Gleason Works. (See Trbojevich, Nikola, assignor.)
Goerz, C. P., Optische Anstalt Aktiengesellschaft, Akciova Spolecnost K. P. Goerz, Opticky Ustav. (See von Hofe, Christian, assignor.)
Gohorel, Fernand P. A., Paris, France, assignor to Automatic Electric Inc., Chicago, Ill. Semiautomatic telephone system. 1,760,640; May 27.
Going, George G., Middletown, Conn., assignor to Remington Typewriter Company, Ilion, N. Y. Typewriting machine. 1,760,641; May 27.
Goldhammer, Leo, Munich, Germany, assignor, by mesne assignments, to Agfa Ansco Corporation, Binghamton, N. Y. Lens mounting. 1,760,827; May 27.
Golding Bros. Company. (See Haug, Herman, assignor.)
Golding Bros. Company. (See Hoffman, Christian, assignor.)

Golding Bros. Company. (See Mack, Joseph H., assignor.)
Golding Bros. Company. (See Ramsay, William, assignor.)
Goldsmith, Alfred N., Mount Vernon, N. Y., assignor to Radio Corporation of America. Reproducer arm. 1,760,306; May 27.
Goodman, Patrick, Brooklyn, N. Y. Stopper for gas and water mains. 1,760,750; May 27.
Goodman, William, et al. (See Howard, John, assignor.)
Gorbutt, Sidney B., assignor to Willamette Iron and Steel Works, Portland, Oreg. Logging engine. 1,760,828; May 27.
Gorbutt, Sidney B., assignor to Willamette Iron and Steel Works, Portland, Oreg. Steam boiler. 1,760,829; May 27.
Gorlup, Frank J., assignor to Wolverine Supply & Manufacturing Company, Pittsburgh, Pa. Water-mill toy. Des. 81,232; May 27.
Gosling, Joseph W., Schenectady, N. Y., assignor to General Electric Company. Lighting device. Des. 81,233; May 27.
Gosparlin, Frederick, Chicago, Ill. Combination chin rest and shoulder pad. 1,760,593; May 27.
Gould Pumps, Inc. (See Pomeroy, William D., assignor.)
Goutal, Elouard. (See Hennebutte, H., and Goutal.)
Grabowski, Frank J., Philadelphia, Pa. Velocipede construction. 1,760,830; May 27.
Graham, Tom C., assignor to The Embossing Company, Albany, N. Y. Game outfit. 1,760,642; May 27.
Granstedt, Johan A., Sjalevad, assignor of one-half to Gunnar P. O. Fogelqvist, Sundsvall, Sweden. Turning device for motor vehicles. 1,760,643; May 27.
Grasselli Chemical Company, The. (See Howard, Henry, assignor.)
Graves, Frank, Sash, Door and Mill Company. (See Appleby, James P., assignor.)
Graves, George E., Oklahoma City, Okla. Ray absorber and deflector for automobile headlights. 1,760,055; May 27.
Gray, Clayton E., and S. B. Cooke, assignors to Universal Bed Company, Portland, Oreg. Brace-leg opening apparatus for folding beds. 1,760,235; May 27.
Greenberg, Sigmund, et al. (See Howard, John, assignor.)
Greene, Frederick E. (See Thurber, H. F., and Greene.)
Greenfield Tap & Die Corporation. (See Drake, Alden M., assignor.)
Greenwood, Fergus, London, England, assignor to H. Thruston, Beechhurst, N. Y. Apparatus for producing theatrical illusions. 1,760,842; May 27.
Greist Manufacturing Company, The. (See Thurber, H. F., and Greene, assignors.)
Grennan, Benjamin F., assignor to Eagle Pencil Company, New York, N. Y. Flat drop knife. 1,760,405; May 27.
Grider, Richard L., Lawrence, Kans. Convertible automobile seat. 1,759,942; May 27.
Griffin, John J., and Sons Limited. (See Jenkins, Charles E., assignor.)
Griswold, Frank W., Minneapolis, Minn. Yielding self-arighting lamp or signal device. 1,760,270; May 27.
Groff, Emory L. (See Hoffman, Charles T., assignor.)
Grose, Ralph L., Findlay, Ohio. Manure spreader. 1,760,490; May 27.
Grund, Fletcher D., Weston, and H. W. Rightmyer, assignors to The American Swiss Company, Toledo, Ohio. Remote control for door latches. 1,760,491; May 27.
Gudge, Augustus W., Newark, N. J., and E. Wensley, Cicero, Ill., assignors to Western Electric Company, Incorporated, New York, N. Y. Producing articles from sheet material. 1,759,844; May 27.
Guenard, José L. M., Ponce, P. R. Womb medical applicator. 1,760,751; May 27.
Gunn, Thomas M., Brooklyn, assignor of one-sixth to G. Crosby, Glen Ridge, N. J. Refrigerating system. 1,760,195; May 27.
Gunnison, Foster, Bronxville, assignor to Cox, Nostrand & Gunnison, Inc., Brooklyn, N. Y. Chandelier. Des. 81,234; May 27.
Gustin, Daniel S., East Orange, N. J., assignor to Westinghouse Lamp Company. Prefocused incandescent electric lamp. 1,760,693; May 27.
Gyro Process Company. (See Weaver, Joseph B., assignor.)
Haddow, William, Ossining, N. Y. Die-lapping machine. 1,760,406; May 27.
Hadley Company, The. (See Domler, Charles A., assignor.)
Hadley Company, The. (See Tost, Charles R., assignor.)
Hadley, Harlan A., St. Johnsbury, Vt., assignor to E. and T. Fairbanks and Company. Scale. 1,759,900; May 27.
Hahn, William C., Chicago, Ill., assignor to General Electric Company. Protective arrangement. 1,760,550; May 27.
Hale, Edward E., Buffalo, N. Y. Egg carton. 1,760,132; May 27.
Hall, Charles W., Larchmont, N. Y. Landing gear for airplanes. 1,760,644; May 27.
Hall, Elbert J., Detroit, Mich., assignor to American Car and Foundry Motors Company, New York, N. Y. Coupling. 1,760,492; May 27.
Hall, Ernest A., assignor to The Hall Manufacturing Co., Toledo, Ohio. Portable grinding tool. 1,760,493; May 27.
Hall Manufacturing Co., The. (See Hall, Ernest A., assignor.)
Hallstream, Henning. (See Cross, F. L., and Hallstream.)
Halsam Products Company. (See Elliott, Harold H., assignor.)
Hamilton, Brown Shoe Company. (See Spathelf, David E., assignor.)
Hammer, Edna H. (See Hammer, Newton T. and E. H.)
Hammer, Newton T. and E. H., Washington, D. C. Sanitary cabinet. 1,760,494; May 27.
Hammond, William P. (See Vernet, Sergius, assignor.)
Hansen, Anton, Newark, N. J. Apparatus for removing cores from castings. 1,760,495; May 27.
Hansen, Carl L. (See Aldrich, F. M., and Hansen.)
Hansen, Merritt R., assignor to The Buckeye Steel Castings Company, Columbus, Ohio. Car truck. 1,760,196; May 27.
Happer, George D., Norfolk, Va. Article support. 1,760,752; May 27.
Hardy, Charles R., Mount Vernon, assignor to The Superheater Company, New York, N. Y. Automatic control valve. 1,760,355; May 27.
Harper, George W., assignor to The Columbia Axle Company, Cleveland, Ohio. Axle. 1,760,356; May 27.
Harris, Eleanor M., Chicago, Ill. Sales-record book. 1,759,845; May 27.
Harrison, Harold C., Columbus, Ohio, assignor to McLanahan-Watkins Co., Hollidaysburg, Pa. Refractory and making the same. 1,760,133; May 27.
Harshberger, Norman P., Chicago, Ill. Composition shingle. 1,759,901; May 27.
Harshberger, Russell P., Chicago, Ill. Safety razor. 1,760,496; May 27.
Hartford-Empire Company. (See Peller, Karl E., assignor.)
Hartley, Henry J., assignor to Nichols Copper Company, New York, N. Y. Roasting-furnace construction. 1,760,694; May 27.
Hartmann, Günther, Vietz, Germany. Drying frame with transverse laths. 1,760,056; May 27.
Hartzell Industries, Inc. (See Charavay, Frederick, assignor.)
Hasbrouck, Augustus, New Haven, Conn. Removable valve cage for internal-combustion engines. 1,760,497; May 27.
Hasting, Homer, Detroit, Mich. Twin-body tire valve. 1,760,551; May 27.
Hasty-Johnson Corporation. (See Hasty, Otis R., assignor.)
Hasty, Otis R., assignor to Hasty-Johnson Corporation, Elgin, Ill. Drive for rotating brushes, wheels, etc. 1,760,843; May 27.
Hathaway, Edgar F., Wellesley, assignor to Shawmut Engineering Company, Dorchester, Mass. Yarn carrier or tube frame. 1,760,271; May 27.
Hathaway, Edgar F., Wellesley, and W. Bixby, assignors to Shawmut Engineering Company, Boston, Mass. Weft needle. 1,760,831; May 27.
Haug, Herman, Scarsdale, N. Y., assignor to Golding Bros. Company, New York, N. Y. Textile fabric or similar article of manufacture. Des. 81,235; May 27.
Haug, Herman, Scarsdale, N. Y., assignor to Golding Bros. Company, New York, N. Y. Textile fabric or similar article of manufacture. Des. 81,236; May 27.
Haugh, James G., Bascom, Ohio. Ironing board. 1,760,552; May 27.
Hauser, Albert B., Stockton, Calif. Hydraulically-controlled leveler. 1,759,982; May 27.
Hawkins, Wilford J., Claiborne, Md., assignor to American Machine & Foundry Company. Metal foil. 1,760,645; May 27.
Hawley, Cornell S., assignor, by mesne assignments, to Consolidated Car-Heating Company, Inc., Albany, N. Y. Electric resistance. 1,760,057; May 27.
Hayden, Robert P., assignor to Johnson & Johnson, New Brunswick, N. J. Carton or box. 1,760,753; May 27.
Hayden, Robert P., assignor to Johnson & Johnson, New Brunswick, N. J. Plaster-roll package. 1,760,754; May 27.
Haywood, Hubert, Wirksworth, England. Let-off motion for narrow fabric looms. 1,760,236; May 27.
Heavey, John C., Chicago, Ill. Stoker. 1,760,594; May 27.
Hebebrand, George H., Florissant, Mo. Percentage feeder. 1,760,407; May 27.
Heckmann, Georg. (See Schneider J., and Heckmann.)
Heide, William A., Detroit, Mich. Carburetor. 1,760,595; May 27.
Helander, Lillian V. M. (See Allen, G. N., and Helander.)
Helgeby, Ralph O., assignor to A C Spark Plug Company, Flint, Mich. Speedometer. 1,760,844; May 27.
Heltzel, Joseph W., Warren, Ohio. Finishing concrete surfaces. 1,760,596; May 27.
Hendrich, M. W. (See Schaller, William F., assignor.)
Hendry, William F., Ossining, assignor to Manhattan Electrical Supply Company, Inc., New York, N. Y. Door-check. 1,759,846; May 27.
Henebry, Leo F., assignor to Norfolk & Western Veterans Association, Roanoke, Va. Lapel button. Des. 81,237; May 27.
Hennebutte, Henri, and E. Goutal, Paris, assignors to Société Anonyme "La Carbobite", St. Denis-sur-Seine, France. Tar-separating apparatus. 1,760,058; May 27.
Henschel, Georg. (See Specketer, H., and Henschel.)
Herrmann, Charles A., Penn Yan, N. Y. Boat. 1,760,696; May 27.

Herrmann, Karl L., assignor to The Studebaker Corporation, South Bend, Ind. Transmission. 1,759,943; May 27.
Herthel, Eugene C., and T. De C. Tifft, Chicago, Ill., assignor to Sinclair Refining Company, New York, N. Y. Cracking hydrocarbon oils. 1,760,357; May 27.
Hertz, Jürgen, Copenhagen, Denmark. Coffee mill. 1,760,755; May 27.
Hertzberg, Harry, Brooklyn, N. Y. Wringer mop. 1,760,695; May 27.
Hertzer, Carl G., Tiffin, Ohio. Ice-cream dipper. 1,760,358; May 27.
Herz, Alfred, Chicago, Ill. Meter. 1,760,646; May 27.
Hevey, Joseph. (See Casavant, S., Hevey, and Letiecq.)
Hewitt, Edward R., Midvale, N. J., and W. B. Jupp, New York, assignors to International Motor Company, New York, N. Y. Muffler manifold. 1,760,553; May 27.
Hickok, Arthur S. (See Myers, Hubert A., assignor.)
Hiller, Stanley, Oakland, Calif. Rendering process. 1,760,059; May 27.
Hilliard, John D., Schenectady, N. Y., assignor to General Electric Company. Electric switch. 1,760,554; May 27.
Hirshfield, Morris, Brooklyn, N. Y. Shoe. 1,760,197; May 27.
Hirt, Franz. (See Lund, H., Laub, and Hirt.)
Hiss, George C., East Orange, N. J., assignor to Walter Kidde & Company, Inc., New York, N. Y. Extinguishing fire. 1,760,359; May 27.
Hoare, Stephen C., Lynn, Mass., assignor to General Electric Company. Thermionic measuring device. 1,760,597; May 27.
Hochstadter, Frank. (See Hochstadter, Roy B., and F.)
Hochstadter, Roy B. and F., Brooklyn, N. Y. Egg candler. 1,760,697; May 27.
Hoe, R., and Co. (See Ball, Harry V., assignor.)
Hoffman, Charles T., assignor of one-half to E. L. Groff, Washington, D. C. Toy electric motor. 1,760,498. May 27.
Hoffman, Christian, Rutherford, N. J., assignor to Golding Bros. Company, New York, N. Y. Textile fabric or similar article of manufacture. Des. 81,238; May 27.
Hoffman, Nicholas. (See Brown, I. E., and Hoffman.)
Hofmann, Victor E., Toledo, Ohio. Method of and apparatus for drawing sheet glass. 1,760,499; May 27.
Holland, Roy A. (See Whiting, G. A., and Holland.)
Holmes, George A., Newton, assignor, by mesne assignments to United-Carr Fastener Corporation, Cambridge, Mass. Fastener plate. 1,759,847; May 27.
Holophane Company. (See Jenkins, Howard LeR., assignor.)
Holtzman, John, New York, N. Y. Razor-blade ejector. 1,760,060; May 27.
Homolka, Benno, deceased; Rosenthal, executor, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Desensitizing silver bromide emulsions and plates or films covered with such emulsions. 1,760,756; May 27.
Hood, Harrison P., assignor to Corning Glass Works, Corning, N. Y. Refractory product. 1,760,360; May 27.
Hooper, Rebecca E., Half Moon Bay, Calif. Memory pad. 1,760,408; May 27.
Hopkins Corporation. (See Hopkins, Marcus C., assignor.)
Hopkins, George W., Cleveland, Ohio. Arc-lamp hanger. 1,760,134; May 27.
Hopkins, Marcus C., Washington, D. C., assignor to Hopkins Corporation, New York, N. Y. Electrical pick-up. 1,760,647; May 27.
Horn, John P., Lancaster, Pa. Insecticide container. 1,760,598; May 27.
Hornaday, Waller C., University City, assignor to Jas. H. Forbes Tea & Coffee Company, St. Louis, Mo. Display rack. 1,760,135; May 27.
Horni, Paul P., Newark, N. J. Parachute safety suspension for aeroplanes. 1,760,061; May 27.
Hoth, Charles, Postville, Iowa. Hay mower. 1,760,698; May 27.
Hough, Clinton W., Boonville, N. Y., assignor, by mesne assignments, to Federal Telegraph Company. Television apparatus. 1,760,198; May 27.
Houston, Henry B., Dallas, Tex. Screen for flotation processes. 1,759,983; May 27.
Howard, Alfred C., East Moline, Ill., assignor to E. and T. Fairbanks and Company, St. Johnsbury, Vt. Platform scale. 1,759,902; May 27.
Howard, Frank A., Elizabeth, N. J. assignor to Standard Oil Development Company. Control of pyrolytic conversion. 1,760,136; May 27.
Howard, Henry, assignor, by mesne assignments, to The Grasselli Chemical Company, Cleveland, Ohio. Production of sodium thiosulphate. 1,760,137; May 27.
Howard, John, Montreal, Quebec, Canada, assignor of three-eighths to S. Greenberg, and one-eighth to W. Goodman and M. S. Wolfson, New York, N. Y. Making tire casings. 1,759,848; May 27.
Howe, James F., Worcester, Mass., assignor to The American Steel and Wire Company of New Jersey. Cable. 1,760,409; May 27.
Howland, Casca T. (See George, Elgy J., assignor.)
Howse, Curtis L. (See Snow, N. L., and Howse.)
Hudd, Alfred E., Long Park, Chesham Bois, England, assignor, by mesne assignments, to Automatic Electric Inc., Chicago, Ill. Train-control system. Re17,678; May 27.
Hueseman, William M., Dillsboro, Ind. Combined buckle and button loop. 1,759,944; May 27.
Huggins, Melville. (See Macdonald, A. S., Waite, and Huggins.)
Hughes, Charles A. and E. J. Thole, Evansville, Ind. Burglar-proof window guard. Des. 81,239; May 27.
Hughes, James R., South Bend, Ind., assignor to The Pierce-Arrow Motor Car Company, Buffalo, N. Y. Combined fender and tail-lamp casing for vehicles. Des. 81,240. May 27.
Hughes Tool Company. (See Fletcher, H. W., and Neuhaus, assignors.)
Hull, Harry B., Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation. Refrigerating apparatus. 1,759,945; May 27.
Hult, Carl A., Stockholm, Sweden. Rotary compressor, pump, or motor. 1,760,699; May 27.
Hult, Carl J., Tureberg, Sweden. Press-casting machine. 1,760,555; May 27.
Humeston, Frederick L., New Haven, Conn., assignor, by mesne assignments, to Winchester Repeating Arms Company. Battery hand lamp. 1,760,410; May 27.
Humphrey, Walter E., assignor to The Mason Tire & Rubber Corporation, Kent, Ohio. Bead-cutting mechanism. 1,760,411; May 27.
Hunt, Alfred E. (See Campbell, C. S., and Hunt.)
Hunt, Allan F., Burlingame, Calif. Combination electric plug and switch. 1,760,138; May 27.
Hunter, Richard B., assignor, by mesne assignments, to Cutler-Hammer, Inc., Milwaukee, Wis. Operating mechanism for dimmer rheostats. 1,759,903; May 27.
Husak, Joseph L., Schuyler, Nebr. Tire tool. 1,759,849; May 27.
Hussong Dyeing Machine Company. (See Thompson, James H., assignor.)
Hydro-Check Corporation, The. (See Ackerman, E. W., and Nicholson, assignors.)
Hynes, Lee P., assignor, by mesne assignments, to Consolidated Car-Heating Company, Inc., Albany, N. Y. Car-door operation. 1,760,062; May 27.
Hynes, Lee P., assignor, by mesne assignments, to Consolidated Car-Heating Company, Inc., Albany, N. Y. Electric door-operating mechanism. 1,760,063; May 27.
Hynes, Lee P., assignor, by mesne assignments, to Consolidated Car-Heating Company, Inc., Albany, N. Y. Safety device for electric heaters. 1,760,064; May 27.
Hynes, Lee P., assignor, by mesne assignments, to Consolidated Car-Heating Company, Inc., Albany, N. Y. Electric heater. 1,760,065; May 27.
Hynson, Westcott & Dunning, Inc. (See Twiss, Daniel, assignor.)
Ideal Novelty & Toy Co. (See Rommer, Isaac A., assignor.)
Idel, Hermann, assignor to Demag Aktiengesellschaft, Duisburg, Germany. Pilgering rolling mill. 1,760,757; May 27.
I. G. Farbenindustrie Aktiengesellschaft. (See Homolka, Benno, assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Specketer, H., and Henschel, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Stoewener, F., and Münzing, assignors.)
Indiana Brass Company. (See Williams, C. E., and Johnson, assignors.)
Indiana Lamp Corporation. (See Albright, Edward C., assignor.)
Ingersoll, Howard L., Stamford, Conn. Locomotive. 1,760,139; May 27.
Insolo Holding Company. (See Skolnik, Max, assignor.)
International Cigar Machinery Company. (See Wheeler, Henry H., assignor.)
International Combustion Engineering Corporation. (See Jacques, Stanley A., assignor.)
International Combustion Engineering Corporation. (See Kreisinger, Henry, assignor.)
International Combustion Engineering Corporation. (See Mittendorf, Harvey C., assignor.)
International Derrick & Equipment Company, The. (See Creamer, S. B., and Ansel, assignors.)
International Harvester Company. (See Benjamin, Bert R., assignor.)
International Motor Company. (See Hewitt, E. R., and Jupp, assignors.)
International Motor Company. (See Jupp, William B., assignor.)
International Motor Company. (See Kohlberger, Frank, assignor.)
International Motor Company. (See Masury, Alfred F., assignor.)
International Motor Company. (See Schantz, Gordon M., assignor.)
International Time Recording Company of New York. (See Bryce, James W., assignor.)
Ironside, James, assignor, by mesne assignments, to Clayton & Lambert Manufacturing Co., Detroit, Mich. Combined starting and mixing chamber for liquid-fuel burners. 1,760,412; May 27.
Irwin, John. (See Monk, R. H., and Firing, assignors.)
Ittig, George P., assignor to Blackstone Silver Company, Incorporated, Bridgeport, Conn. Spoon or similar article. Des. 81,241; May 27.

Iversen, Poul A. S., Copenhagen, Denmark. Pump. 1,760,237; May 27.

Ives, Jesse E., Danbury, Conn. Presser-foot welt gauge. 1,760,500; May 27.

Jacobs, Joseph, assignor to The A. J. Donohue Corporation, Milford, Conn. Man's garter. 1,760,501; May 27.

Jacobson, Gustav, and G. F. Ericson, assignors to Superior Floor Surfacing Machine Corporation, New York, N. Y. Floor-surfacing machine. 1,760,832; May 27.

Jacques, Stanley A., Chicago, Ill., assignor to International Combustion Engineering Corporation, New York, N. Y. Powdered-fuel-burning boiler furnace. 1,760,140; May 27.

James, Lewis A. (See Schmidt, A. B., and James.)

Janicki, John, Oak Park, Ill., assignor to Western Electric Company Incorporated, New York, N. Y. Strand-coating apparatus. 1,759,850; May 27.

Janik, Eduard, Vienna, Austria. Automatic variable speed gear. 1,760,700; May 27.

Janisch, Leopold, Berlin, and W. Welsch, Berlin-Niederschonhausen, Germany, assignors to General Electric Company. Electric braking. 1,760,556; May 27.

Janssen, Friedrich, assignor to G. Kromschröder Aktiengesellschaft, Osnabruck, Germany. Thermostatic regulator valve. 1,760,199; May 27.

Jebsen, Erik G., Kristiansand, Norway, assignor to Curtis & Marble Machine Company, Worcester, Mass. Fabric-trade-marking device. 1,760,361; May 27.

Jenkins, Charles E., Manchester, assignor to John J. Griffin and Sons Limited, London, England. Filter. 1,759,984; May 27.

Jenkins, Howard L., Newark, Ohio, assignor to Holophane Company, Inc., New York, N. Y. Shade holder. 1,759,985; May 27.

John, Arthur S., Stanton, South Wales, assignor to Dim-Dazzle (Parent) Company Limited, London, England. Antiglare attachment for windshields of automobiles. Des. 81,242; May 27.

Johns, Herman S., Ada, Okla. Scraper-blade attachment for brooms. 1,760,648; May 27.

Johnson, Alfred K., assignor to The Alfred Johnson Skate Co., Chicago, Ill. Skate clamp. 1,760,238; May 27.

Johnson, Alfred, Skate Co., The. (See Johnson, Alfred K., assignor.)

Johnson, Gustav, West Roxbury, assignor, by mesne assignments, to United-Carr Fastener Corporation, Cambridge, Mass. Separable fastener. 1,760,833; May 27.

Johnson, John A. (See Williams, C. E., and Johnson.)

Johnson & Johnson. (See Hayden, Robert P., assignor.)

Johnson, Walter J. O., assignor to The Allbright-Nell Company, Chicago, Ill. Sausage-linking mechanism. 1,759,851; May 27.

Johnston, Henry P., Canton, assignor to The American Laundry Machinery Company, Cincinnati, Ohio. Carpet-cleaning machine. 1,760,599; May 27.

Johnstone, Robert McC., Summit, N. J. assignor to Cameron Machine Company, Brooklyn, N. Y. Interconnected controlling device for winding and roll-ejecting mechanism. 1,760,362; May 27.

Jones, Charles W., Glen Ridge, N. J., assignor to Sons-Cunningham Reed & Rattan Co., Inc., New York, N. Y. Frame of a chair or settee. Des. 81,243; May 27.

Jones, John L., Weymouth, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Work support for fastening-inserting machines. 1,759,852; May 27.

Jones, Louis W., New York, assignor of one-half to F. J. Carnelli, Jamaica, N. Y. Stock and die. 1,760,502; May 27.

Jones, Murvin L., assignor to J. C. Deagan, Inc., Chicago, Ill. Musical instrument. 1,760,141; May 27.

Jones, Samuel J., Bronx, N. Y. Safety holding device. 1,760,066; May 27.

Jorgensen, Bernhardt, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Upper-pulling machine. 1,760,142; May 27.

Joseph, Norbert G. (See Pease, O. E., and Joseph.)

Joyce, Roy E., Los Angeles, Calif. Pressure relief valve. 1,760,067; May 27.

Juergens, John, assignor of one-half to S. J. Kosteling, jr., and one-half to N. H. Rasmussen, Chicago, Ill. Lantern. 1,760,143; May 27.

Juliusburger, Paul, Charlottenburg, Berlin, Germany. Change-over device for boiler feed-water heaters and similar apparatus, especially applicable for locomotives. 1,759,986; May 27.

Jupp, William B. (See Hewitt, E. R., and Jupp.)

Jupp, William B., assignor to International Motor Company, New York, N. Y. Exhaust manifold. 1,760,557; May 27.

Kalenoff, Godel, Brooklyn, N. Y. Curtain holder. 1,760,701; May 27.

Kalle & Co., Aktiengesellschaft. (See Schmidt, M. P., and Krieger, assignors.)

Kaner, Abraham, St. Louis, Mo. Rumble-seat enclosure. 1,760,144; May 27.

Kann, Daniel J., Eau Claire, Wis. Holder for sanitary covers for toilet seats. 1,760,363; May 27.

Kasley, Alexander T., Moore, Pa., assignor to Westinghouse Electric & Manufacturing Company. Internal-combustion engine. 1,759,946; May 27.

Kass, Samuel M., Philadelphia, Pa. Plumber's bib. 1,759,904; May 27.

Kassler, Adolph, assignor to American Car and Foundry Company, New York, N. Y. Hopper car. 1,760,601; May 27.

Kauffman, Walter B., assignor, by mesne assignments, to E. S. Foster, Boston, Mass. Metal dish tray for dish-washing machines. 1,760,307; May 27.

Kaufmann, John J., Elkins Park, assignor to Steel Heddle Manufacturing Company, Philadelphia, Pa. Combined heddle and lingo and making the same. 1,760,649; May 27.

Keeney, Don E. (See Zubaty, J., and Keeney.)

Keith, Charles W., assignor to D. K. Stephenson, Denver, Colo. Ensilage cutter and grinder. 1,759,905; May 27.

Kellogg, Leroy D., assignor to Kellogg Switchboard and Supply Company, Chicago, Ill. Receiving circuit. 1,759,853; May 27.

Kellogg, M. W., Company, The. (See Newlin, H. S., assignor, and Date.)

Kellogg Switchboard and Supply Company. (See Bohlman, Ernest A., assignor.)

Kellogg Switchboard and Supply Company. (See Kellogg, Leroy D., assignor.)

Kellogg Switchboard and Supply Company. (See Kiner, Glenn, assignor.)

Kemmerling, Arthur E., Wilkinsburg, Pa. Predatory-bird decoy. 1,760,364; May 27.

Kendall, Harry C., assignor to Rex Paper Company, Kalamazoo, Mich. Sorting machine. 1,760,068; May 27.

Kennedy, James P., Brooklyn, N. Y. Radiocalendar. 1,760,069; May 27.

Kent, Arthur A., Ardmore, Pa. Ignition-timing apparatus. 1,760,145; May 27.

Kerruish, Edward P., Cleveland Heights, assignor to The Cleveland Graphite Bronze Company, Cleveland, Ohio. Making bearings. 1,759,906; May 27.

Kershaw, John T., Haverhill, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Machine for use in making heels. 1,760,146; May 27.

Kershaw, John T., Haverhill, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Making covered heels. 1,760,147; May 27.

Kettering, Charles F., Dayton, Ohio, and C. R. Short, Detroit, Mich., assignors to General Motors Research Corporation, Dayton, Ohio. Drive-shaft connection for motor-driven vehicles. 1,760,845; May 27.

Keystone Lantern Company. (See Davis, Nathan H., assignor.)

Kidd, Etta D, Pelham Manor, assignor to Etta, Inc., New York, N. Y. Display head. Des. 81,244; May 27.

Kidd, Samuel L., Listowel, Ontario, Canada. Cultivator. 1,759,854; May 27.

Kidde, Walter, & Company. (See Hiss, George C., assignor.)

Kidde, Walter, & Company. (See Minor, Henry R., assignor.)

Kiernan, William P., East Orange, N. J., assignor to Westinghouse Lamp Company. Zirconium and preparation thereof. 1,760,413; May 27.

Kiner, Glenn, assignor to Kellogg Switchboard and Supply Company, Chicago, Ill. Telephone system. 1,759,855; May 27.

King, Carlton V., Corry, Pa. Chair. 1,760,365; May 27.

King, Carlton V., Corry, Pa. Chair. 1,760,414; May 27.

Kingsley-Miller Company, The. (See Dibelka, Henry G., assignor.)

Kinsella, Edward, Spondon, near Derby, England, assignor to Celanese Corporation of America. Pumping apparatus. 1,760,070; May 27.

Klein, Sliard, New York, N. Y. Driving and speed-varying mechanism. 1,759,856; May 27.

Klocke, William H., Woodhaven, N. Y., assignor to The Cleveland Graphite Bronze Company, Cleveland, Ohio. Making cylindrical articles from flat blanks. 1,760,558; May 27.

Klocke, William H., Woodhaven, N. Y., assignor to The Cleveland Graphite Bronze Company, Cleveland, Ohio. Bearing and making same. 1,760,559; May 27.

Kloes, F. J., Inc. (See Pease, O. E., and Joseph, assignors.)

Knape, Joseph J., assignor to Knape & Vogt Manufacturing Company, Grand Rapids, Mich. Bracket. 1,760,503; May 27.

Knape & Vogt Manufacturing Company. (See Knape, Joseph, J., asignor.)

Knapp, Frederick E., San Diego, Calif. Radio frequency transformer. 1,759,987; May 27.

Knapp, Mildred C., Chicago, Ill. Candy doll. Des. 81,245; May 27.

Knapp, William D., assignor of one-half to G. Dawsett, San Francisco, Calif. Spraying machine. 1,759,988; May 27.

Koehring Company. (See Robb, John F., assignor.)

Koehring Company. (See Yohe, Perry P., assignor.)

Koenig, Joseph, deceased, Manitowoc, Wis.; R. Koenig and R. K. Ellis, administrators. Hot-air engine. 1,760,415; May 27.

Koenig, Remus, et al., administrators. (See Koenig, Joseph.)

Koepke, Henry G., Chicago, Ill., assignor by mesne assignments to Standard Brands Incorporated, Dover, Del. Centrifugal separator. 1,760,071; May 27.

Kohlberger, Frank, Whitestone, L. I., assignor to International Motor Company, New York, N. Y. Track for tracklaying vehicles. 1,760,504; May 27.

Kolano, Lawrence, and T. Palka, Wyandotte, Mich. Window screen. 1,760,416; May 27.

Koppers Company, The. (See Becker, Joseph, assignor.)

Korten, Ernst, Fechenheim near Frankfort-on-the-Main, Germany, assignor to General Aniline Works, Inc., New York, N. Y. Manufacturing condensation products from hydroxy-benzenes and hydroaromatic ringketones. 1,760,758; May 27.

Kosfeld, Friedrich W., Brackwede, Germany. Nut-tapping device. 1,760,702; May 27.

Kosteling, Stephen J., jr., et al. (See Juergens, John, assignor.)

Kran, Harry W., Lakewood, and J. S. Fenel, Cleveland, assignors to The Cleveland Welding Company, Cleveland, Ohio. Making hub shells and like tubular metal articles. 1,760,560; May 27.

Krebs, Carlos, Boston, Mass. Reproducing mechanism. 1,759,857; May 27.

Kreisinger, Henry, Piermont, assignor to International Combustion Engineering Corporation, New York, N. Y. Drying coal in the mill. 1,760,148; May 27.

Krieger, Wilhelm. (See Schmidt, M. P., and Krieger.)

Kritchevsky, Wolf, and K. A. Schultz, Chicago, Ill. Plastic composition. 1,759,907; May 27.

Kromschröder, G., Aktiengesellschaft. (See Janssen, Friedrich, assignor.)

Kruening, Karl, Jamaica, N. Y. Goggles. 1,760,650; May 27.

Kühl, Theodor. (See Pfeiffer, F., and Kühl.)

Kutz, William, Ravenna, Nebr. Grain-spout holder. 1,759,858; May 27.

Lach, John J., Chicago, Ill., assignor to The Anderson Company, Gary, Ind. Can-capping machine. 1,760,859; May 27.

LaCourt, Peter, Boston, Mass. Machine for melting snow. 1,759,859; May 27.

Ladd Water Tube Boiler Company. (See Crane, Joseph B., assignor.)

Lagerfeldt, Wilfred E., Iron Mountain, Mich. Spring tractor wheel. 1,759,860; May 27.

Lake, Clair D., assignor to The Tabulating Machine Company, Endicott, N. Y. Detachable record card. 1,760,417; May 27.

Lampert, Henry H., Chicago, Ill. Joist connection. 1,759,908; May 27.

Landis Machine Company. (See Shearer, Harry T., assignor.)

Langen, George. (See Gillham, R., Addison, Wetzel, and Langen.)

Langsner, Adolph, assignor to Eugene Dietzgen Company, Chicago, Ill. Developing apparatus with tubular gas discharge. 1,760,149; May 27.

Large, George E., assignor to The Buckeye Steel Castings Company, Columbus, Ohio. Step for freight cars. 1,760,200; May 27.

Larsen, Charles F., New York, N. Y. Igniter. 1,760,418; May 27.

Larsen, Gabriel, Springfield, N. J., assignor to L. E. Waterman Company, New York, N. Y. Clip for a fountain pen or the like. Des. 81,246; May 27.

Larsen, Gabriel, Springfield, N. J., assignor to L. E. Waterman Company, New York, N. Y. Clip for a fountain pen or the like. Des. 81,247; May 27.

Larsen, Gabriel, Springfield, N. J., assignor to L. E. Waterman Company, New York, N. Y. Fountain pen. Des. 81,248; May 27.

Laub, Hans. (See Lund, H., Laub, and Hirt.)

Lauenstein, Carl F., and N. M. Waterbury, Indianapolis, Ind., assignors to Link-Belt Company, Chicago, Ill. Treating malleableized cast iron. 1,760,239; May 27.

Lauenstein, Carl F., Indianapolis, Ind., assignor to Link-Belt Company, Chicago, Ill. Heat treating of metals. 1,760,240; May 27.

Lauenstein, Carl F., Indianapolis, Ind., assignor to Link-Belt Company, Chicago, Ill. Metal. 1,760,241; May 27.

Laurent, Louis C., assignor to H. J. Lenicheck, Denver, Colo. Sea-salt soap. 1,760,759; May 27.

Lauterer, Anton, Berlin-Schoneberg, assignor to C. Lorenz Aktiengesellschaft, Berlin-Tempelhof, Germany. Transmitter. 1,760,242; May 27.

Lawrence, John D., San Diego, Calif. Multicable, extension hoist conveyer. 1,760,150; May 27.

Lawrie, John. (See Fritsch, Rockel A., assignor.)

Lawson, Lindley S., Pittsburgh, Pa. Portable electric room heater. Des. 81,249; May 27.

Lea, Edward S., Morrisville, Pa., assignor to Carrier Construction Company, Inc., Newark, N. J. Radiator and the like. 1,760,505; May 27.

Lea, William C., Los Angeles, Calif. Double-hung reversible metal window construction. 1,760,072; May 27.

Leaman, Thomas P., Bridgeport, Conn. Drafting implement. 1,759,989; May 27.

Leavitt, Maurice. (See Luce, Matthew, jr., assignor.)

Lechler, Emil E. (See Rutter, M., and Lechler.)

Lederer, Ernest A. (See Sproesser, W. C., and Lederer.)

Ledig, Willy. (See Loebe, W.-W., Ledig, and Asmussen.)

Lee, Ralph L., assignor to Delco-Light Company, Dayton, Ohio. Domestic appliance. 1,759,947; May 27

Leeds & Northrup Company. (See Parker, Henry C., assignor.)

Lehmann, Anton, Flawil, Switzerland. Packing cotton wool for dressing purposes. 1,760,419; May 27.

Lenicheck, Herbert J. (See Laurent, Louis C., assignor.)

Leslie, Howard C., Milton, assignor to B R E Manufacturing Co., Hyde Park, Mass. Hinge connection for water-closet seats and covers. 1,759,990; May 27.

Letiecq, Arthur. (See Casavant, S., Hevey, and Letiecq.)

Le Tourneau, Robert G., Stockton, Calif. Fluid-control valve. 1,760,308; May 27.

Leustig, Benno B., Cleveland, Ohio. Spring cover. 1,760,651; May 27.

Libby, George W., Portland, Me. Device for controlling the action of vehicle springs. 1,759,948; May 27.

Lieberknecht, Paul, assignor to Maschinenfabrik Einsiedel Gesellschaft mit beschränkter Haftung, Chemnitz, Germany. Straight-knitting machine. 1,760,703; May 27.

Lindenberg, Frank H., Columbus, Ohio. Internal-combustion engine. 1,760,073; May 27.

Lindgren, Bror J., assignor to Niagara Machine & Tool Works, Buffalo, N. Y. Blank-holding and clutch-operating mechanism for presses. 1,760,151; May 27.

Lindstrom, John T., Allentown, Pa. Sink-pipe cleaner. 1,760,704; May 27.

Line-A-Time Mfg. Co. Inc. (See Drake, Charles R., assignor.)

Line Material Company. (See Forrest, Elbert E., assignor.)

Link-Belt Company. (See Lauenstein, Carl F., assignor.)

Link-Belt Company. (See Lauenstein, C. F., and Waterbury, assignors.)

Lipman, Michael, New Canaan, Conn. Font of type. Des. 81,250; May 27.

Lithographic Technical Foundation, Inc., The. (See Reed, R. F., and Dorst, assignors.)

Locke, James N., Long Beach, Calif. Removable thread for oil savers. 1,759,909; May 27.

Lockett, Ralph G., Wauwatosa, Wis., assignor, by mesne assignments, to Cutler-Hammer, Inc. Control means for motor-driven devices. 1,760,600; May 27.

Lodding, Frederick W., assignor to Rice, Barton & Fales, Incorporated, Worcester, Mass. Slitter. 1,760,243; May 27.

Lodge, Edmund G., assignor to Atwater Kent Manufacturing Company, Philadelphia, Pa. Radio receiving apparatus. 1,760,506; May 27.

Loebe, Walther-Winfried, Waidmannslut, Berlin, W. Ledig, Berlin, and H. Asmussen, Charlottenburg, Berlin, Germany, assignors to General Electric Company. Basing machine for incandescent lamps and similar devices. 1,760,507; May 27.

Lokaford Company. (See Svenson, Sven, assignor.)

Long-Bell Lumber Company, The. (See Cone, Howard M., assignor.)

Long, Dorothy, assignor to Franklin Simon & Company, Inc., New York, N. Y. Ensemble suit. Des. 81,251; May 27.

Long, Kenneth D., Centerville, Iowa. Timepiece. 1,760,760; May 27.

Loomis, Crawford C., Ilion, N. Y., assignor to Remington Arms Company, Inc. Air gun. 1,760,652; May 27.

Loomis, Walter A., Long Beach, Calif. Oil-recovery method and apparatus. 1,760,420; May 27.

Lorentzen, Hans K., New York, N. Y. Duplicator. 1,760,152; May 27.

Lorenz, C., Aktiengesellschaft. (See Lauterer, Anton, assignor.)

Lowe, Henry, Tecumseh, Ontario, Canada. Liquid-reserve device. 1,759,861; May 27.

Luce, Matthew, jr., Brookline, assignor to M. Leavitt, Chelsea, Mass. Detachable base for telephone transmitters. 1,760,153; May 27.

Ludlam, Warren V., Meridian, Miss. Air cleaner or filter for carburetors. 1,760,705; May 27.

Luhrs, Otto, assignor to Zellstoffabrik Waldof, Mannheim-Waldof, Germany. Apparatus for obtaining yeast. 1,760,706; May 27.

Lund, Hans, Berlin-Schoneberg, H. Laub, Berlin-Tegeland, and F. Hirt, Berlin-Friedenau, Germany, assignors to General Electric Company. Signaling system. 1,760,508; May 27.

Lüthi, Albert, assignor to the firm Aktiengesellschaft der Maschinenfabriken Escher Wyss & Cie., Zurich, Switzerland. Speed-regulating device for prime movers. 1,760,421; May 27.

Lykken, Henry G., Minneapolis, Minn. Heat-treatment kiln. 1,760,244; May 27.

Lykken, Henry G., Minneapolis, Minn. Device for reducing and feeding reduced materials. 1,760,245; May 27.

Lynch, Charles W., Perry, Okla., assignor to Pickering Lumber Company, Kansas City, Mo. Girt construction for compression-type derricks. 1,760,154; May 27.

Macdonald, Angus S., Great Neck, N. Y., C. C. Waite, Roselle Park, N. J., and E. M. Huggins, New York, N. Y., assignors to Snead & Company, Jersey City, N. J. Electric heating apparatus. 1,760,155; May 27.

Mack, Joseph H., Passaic, N. J., assignor to Golding Bros. Company, New York, N. Y. Textile fabric or similar article of manufacture. Des. 81,252; May 27.

Mackie, Robert A., Detroit, Mich., assignor to American Car and Foundry Motors Company, New York, N. Y. Emergency exit for vehicles. 1,760,422; May 27.

Mackin, Samuel, Laredo, Tex. Well-testing device. 1,760,707; May 27.

MacLean, Margaret L., Niles, Ohio, assignor, by mesne assignments, to American Brown Boveri Electric Corporation, New York, N. Y. Tap changer. 1,759,991; May 27.
Macomber, Walter G., Los, Angeles, Calif. Sprinkler head. 1,760,201; May 27.
Maedgen, Nannie E., Troy, Tex. Washing-machine appliance. 1,760,202; May 27.
Magnet-Werk G. m. b. H. Eisenach Spezialfabrik für Elektromagnet-Apparate. (See Schünemann, Paul, assignor.)
Magnet-Werk G. m. b. H., Eisenach Spezialfabrik für Elektromagnet Apparate. (See Wittkuhns, Bruno, assignor.)
Maine Electric Company, The. (See Enard, Hans, assignor.)
Maker, Frank L., J. L. Cooley, Berkeley, and C. F. Tuttle, Richmond, assignors to Standard Oil Company of California, San Francisco, Calif. Apparatus for hydrolyzing acid sludge. 1,760,246; May 27.
Mallard, Logan L., Norfolk, Va. Tractor toy. 1,760,423; May 27.
Mandeltort, Saul. (See Paull, S., and Mandeltort.)
Manhattan Electrical Supply Company. (See Hendry, William F., assignor.)
Mann, Ned H., Los Angeles, Calif. Motion-picture photography. 1,760,156; May 27.
Marcellus, Aaron, Ballston Lake, N. Y. Typewriter attachment. 1,760,366; May 27.
March, Carl, Chicago, Ill. Bread box. 1,760,761; May 27.
Marden, John W. (See Rentschler, H. C., Marden, and Ulrey.)
Marden, John W., and M. N. Rich, East Orange, N. J., assignors to Westinghouse Lamp Company. Ductile chromium and producing the same. 1,760,367; May 27.
Margolin, George, New York, N. Y., assignor to O. Ussing, East Rockaway, N. Y. Changeable display sign. 1,760,157; May 27.
Marinsky, Davis, assignor to M. Beckerman, New York, N. Y. Fastener and suspending device. 1,759,949; May 27.
Marrits, Murray J., New York, N. Y. Collapsible display stand. 1,760,309; May 27.
Marsack, Max, Sheboygan, Wis. Mattress. 1,760,424; May 27.
Marsh, Esli A., Chicago, Ill., assignor, by mesne assignments, to St. Regis Paper Company, New York, N. Y. Discharging propeller. 1,760,425; May 27.
Martenson, Harry M., and F. W. Peterson, White Rock, Minn. Gravel-loading device. 1,760,158; May 27.
Martin, Philip J., Elizabeth, N. J. Cable grip. 1,760,074; May 27.
Marvel, Harvey E., assignor to S. F. Bowser & Company, Inc., Fort Wayne, Ind. Self-dumping rag catcher. 1,760,509; May 27.
Marvel, Harvey E., assignor to S. F. Bowser & Company, Inc., Fort Wayne, Ind. Spraying apparatus for rag catchers. 1,760,510; May 27.
Marvel, Harvey E., assignor to S. F. Bowser & Company, Fort Wayne, Ind. Rag-catching apparatus for beater tubs. 1,760,511; May 27.
Maschinenfabrik Einsiedel Gesellschaft mit beschränkter Haftung. (See Lieberknecht, Paul, assignor.)
Mason Tire & Rubber Corporation, The. (See Humphrey, Walter E., assignor.)
Masury, Alfred F., assignor to International Motor Company, New York, N. Y. Paneling with flexible connections. 1,760,426; May 27.
Mathes, Robert C., Wyoming, N. J., assignor to Bell Telephone Laboratories Incorporated, New York, N. Y. Electrooptical image production. 1,760,159; May 27.
Matlock, Robert C., jr., Bloomfield, N. J., assignor to Westinghouse Lamp Company. Preventing weathering of glass. 1,760,427; May 27.
Matte, Andrew L., Summit, N. J., assignor to American Telephone and Telegraph Company. Alternating-current telegraph system. 1,759,950; May 27.
Matthews, Bryan H. C., Cambridge, England. Device for measuring electrical quantities. 1,759,951; May 27.
Maxwell, Ralph E., Modesto, Calif. Device for stirring frozen desserts. 1,760,654; May 27.
May, Adam J., assignor, by mesne assignments, to The Ritter Dental Manufacturing Company, Inc., Rochester, N. Y. Electric-circuit-control means. 1,760,763; May 27.
Mayer, William J., Philadelphia, Pa., assignor, by mesne assignments, to American Car and Foundry Company, New York, N. Y. Car seat. 1,760,653; May 27.
McArthur, Arthur R., Gary, Ind., and H. G. McIlvried, McCandless Township, assignors to American Sheet and Tin Plate Company, Pittsburgh, Pa. Heating furnace. 1,760,762; May 27.
McBride, Vivian R., and H. R. Ward, Melbourne, assignors of one-fourth to F. A. Chartres, and one-fourth to S. L. Chartres, Melbourne, Victoria, Australia. Diving dress. 1,760,512; May 27.
McCarthy, Charles M., Minneapolis, Minn. Measuring device for wire cloth. 1,759,992; May 27.
McCuen, Charles L., Lansing, assignor to General Motors Corporation, Detroit, Mich. Air cleaner. 1,760,272; May 27.
McCullough, Frederick S., Edgewood, Pa. Circuits for thermionic tubes. 1,759,910; May 27.
McCullough, Ira J., and M. S. Black, Huntington Park, Calif. Perforating machine. 1,760,075; May 27.
McCurdy, Ralph G., Englewood, N. J., assignor to American Telephone and Telegraph Company. Electrical transmission system. 1,759,952; May 27.
McDonald, Gordon R. (See Bany, H., and McDonald.)
McGarry, John T., assignor to The American Valve and Meter Company, Cincinnati, Ohio. Railway-switch mechanism. 1,760,846; May 27.
McGill, Thurston, Chicago, Ill. Dish basket. 1,759,993; May 27.
McGrath, John T., Bloomington, Ill. Corn trimmer. 1,759,911; May 27.
McIlvried, Howard G. (See McArthur, A. R., and McIlvried.)
McKenzie, Theressia, Seattle, Wash. Corset. 1,760,247; May 27.
McKinney, Francis B., Baldwin Township, Allegheny County, and C. H. Allen, Pittsburgh, assignors to Auto Brakeometer Corporation, Pittsburgh, Pa. Pressure applying and indicating device for brake pedals. 1,760,602; May 27.
McKissick, William H., Tulsa, Okla. Axle mounting for safety sheave blocks. 1,760,273; May 27.
McLanahan-Watkins Co. (See Harrison, Harold C., assignor.)
McNeill, James A., Bradford, Mass. Heel-rounding machine. 1,760,160; May 27.
McPherson, John S. (See Stertzbach, H. W., and McPherson.)
Meissner, Theodor. (See Thiess, K., Meissner, and Müller.)
Menke, Karl H., Owatonna, Minn. Quack-grass digger. 1,760,203; May 27.
Merrell, Irving S., and O. E. Merrell, Syracuse, assignors, by mesne assignments, to Merrell-Soule Company, Inc., New York, N. Y. Collector for finely-divided solids. 1,760,764; May 27.
Merrell, Oliver E. (See Merrell, Irving S. and O. E.)
Merrell-Soule Company. (See Merrell, Irving S. and O. E., assignors.)
Merrymon, William W. (See Rentschler, H. C., and Merrymon.)
Metal Bound Brush & Broom Co., The. (See Cazel, Cassius E., assignor.)
Metzner, Albert W., assignor to The Standard Register Company, Dayton, Ohio. Multiplex autographic register. 1,760,847; May 27.
Meves, Charles W., assignor to Sheboygan Couch Company, Sheboygan, Wis. Bed davenport. 1,760,161; May 27.
Meyer, John F., Chicago, Ill. Check-controlled switch mechanism. 1,760,655; May 27.
Miller, Charles F., Moore, Pa., assignor to Westinghouse Electric & Manufacturing Company. Stoker-grate agitator. 1,760,248; May 27.
Miller, Edward E., El Paso, Tex., assignor to Sullivan Machinery Company. Rock drill. 1,760,310; May 27.
Miller, George W., Wagoner, Okla. Combination awning and shade. 1,760,428; May 27.
Miller, George W., Wichita, Kans. Sun and rain shield. 1,760,429; May 27.
Miller, Monroe E., Washington, D. C. Dipper for semi-solid materials. 1,760,561; May 27.
Miller, Monroe E., Washington, D. C. Dipper for semi-solid materials. 1,760,562; May 27.
Miller, William, Dunston-on-Tyne, England. Roller clutch. 1,760,708; May 27.
Miller, William, Dunston-on-Tyne, England. Roller clutch. 1,760,709; May 27.
Miller, William, Dunston-on-Tyne, England. Roller clutch. 1,760,765; May 27.
Millheam, Christian C., Beloit, Wis. Wire pliers. 1,760,368; May 27.
Milliring, Edwin R., New York, N. Y., assignor to American Machine & Foundry Company. Coating metals. 1,760,603; May 27.
Mills, George F., Michigan City, Ind., assignor to Sullivan Machinery Company. Forging machine. 1,760,311; May 27.
Miner, Carl S., assignor to The Quaker Oats Company, Chicago, Ill. Dye solution. 1,760,076; May 27.
Miner, W. H., Inc. (See Brenne, Arild M., assignor.)
Miner, W. H., Inc. (See O'Connor, John F., assignor.)
Miner, W. H., Inc. (See Schulz, Ernest R., assignor.)
Minnesota Mining & Manufacturing Company. (See Drew, Richard G., assignor.)
Minnier, Charles F., deceased, and B. M. Daniel; said Daniel assignor to said Minnier; Central Trust Company, executor, Harrisburg, Pa. Feed finger. 1,760,860; May 27.
Minnium, Byron B., assignor, by mesne assignments, to Story & Clark Radio Corp., Chicago, Ill. Radio tuning means. 1,760,162; May 27.
Minor, Henry R., Ossining, assignor, by mesne assignments, to Walter Kidde & Company, Inc., New York, N. Y. Fire extinguisher. 1,760,274; May 27.
Minter, Charles R., Gordon, Ga. Bedstead and bed bottom. 1,760,766; May 27.
Mirrielees, James F., assignor to The Avey Drilling Machine Co., Cincinnati, Ohio. Drilling machine. 1,760,480; May 27.
Mitchell, Jesse J., Chattanooga, Tenn. Multiple-control device. 1,760,710; May 27.
Mitchell, John E., St. Louis, Mo. Cotton-harvesting machine. 1,760,312; May 27.

Mittendorf, Harvey C., East Orange, N. J., assignor to International Combustion Engineering Corporation, New York, N. Y. Bin indicator. 1,760,204; May 27.
Mixing Equipment Company. (See Craddock, Frederick L., assignor.)
Moe, Andrew O., Toppenish, Wash., assignor to Food Machinery Corporation, San Jose, Calif. Conveyer for fruits and vegetables. 1,760,369; May 27.
Moneyron, Marcel, Chicago, Ill. Electrical apparatus. 1,760,656; May 27.
Monge, Manuel, Greenwood, Mass. Toy projectile. 1,760,657; May 27.
Monk, Reginald H., and L. Firing, Montreal, Quebec; said Firing assignor to J. Irwin, Montreal, Canada. Production of alkaline-earth titanates. 1,760,513; May 27.
Moore Fabric Company. (See Norden, Svan, assignor.)
Moore, Frank V., Holton, Kans. Display holder. 1,759,862; May 27.
Moore, George L., and J. R. Steele, Owego, N. Y. Rail anchor. 1,760,275; May 27.
Moore, John T., Reading, Pa., assignor, by mesne assignments, to Rex-Watson Corporation, Canastota, N. Y. Detachable wheel guide for tractor-chain links. 1,760,249; May 27.
Moore, Kenneth L. (See Moore, Willard A. and K. L.)
Moore, Lee C., & Company. (See Fonkes, Joseph P., assignor.)
Moore, Willard A. and K. L., Muncie, Ind. Molder's flask. 1,760,711; May 27.
Morgan, Ralph L., Worcester, Mass. Automatic primer for centrifugal pumps. 1,760,313; May 27.
Morgan, William E., East Lansing, assignor to Novo Engine Company, Lansing, Mich. Reversing-gear attachment for drum hoists. 1,760,514; May 27.
Morimoto, Tatsuji, Paia, Hawaii. Variable-speed mechanism. 1,760,712; May 27.
Morris, Edwin B., Clayton, Mo. Outer covering for the moistening and inking form rollers of lithographic offset-printing machines. 1,760,370; May 27.
Morris, William C., Langley Field, Va. Flight-altitude indicator. 1,760,163; May 27.
Morrison, Curtis R., Marshfield, Oreg. Aeroplane. 1,760,164; May 27.
Morrison, Max P., Worcester, Mass., assignor to The American Steel and Wire Company of New Jersey. Aerial tramway. 1,760,077; May 27.
Morton, William A., assignor, by mesne assignments, to Amco Incorporated, Pittsburgh, Pa. Apparatus for melting glass and the like. 1,760,371; May 27.
Moser, Franz R., Bussum, Netherlands. Treating dispersions. 1,759,913; May 27.
Moss, Joseph, Woonsocket, assignor to Woonsocket Machine & Press Co., Inc., Woonsocket, R. I. Mechanism for handling and distributing fibers. 1,760,848; May 27.
Moto Meter Gauge & Equipment Corporation. (See Chéron, Pierre J., assignor.)
Moto Meter Gauge & Equipment Corporation. (See Collins, William A., assignor.)
Mount, William H., Summit, N. J. Antiaircraft offensive and defensive means. 1,759,912; May 27.
Mueller, Edward C., Toledo, Ohio, assignor to American Can Company, New York, N. Y. Can-spraying machine. 1,760,165; May 27.
Muhlfeld, John E., Scarsdale, N. Y. Side brick for firebox arches. 1,760,431; May 27.
Müller, Carl J. (See Thiess, K., Meissner, and Müller.)
Müller, Flora, inheritress. (See Müller, Georg G.)
Müller, Georg G., deceased, Berlin-Wilmersdorf; F. Müller, inheritress, assignor to Atrax Gesellschaft mit beschrankter Haftung, Berlin, Germany. Illuminating structure. 1,760,767; May 27.
Muller, Wesley A., Monterey, assignor to California Packing Corporation, San Francisco, Calif. Drainer. 1,760,205; May 27.
Münzing, Ernst. (See Stoewener, F., and Münzing.)
Murphy, Daniel H., West Hartford, assignor to The Wiremold Company, Hartford, Conn. Braiding machine. 1,760,768; May 27.
Murray, Thomas J., Beacon, N. Y. Machine for shaping conical metal forms. 1,760,432; May 27.
Murrey, Ed, College View, Nebr. Drainage system. 1,760,314; May 27.
Myers, Hubert A., assignor of one-half to A. S. Hickok, Toledo, Ohio. Confection musical toy. 1,759,953; May 27.
Myers, Hubert A., assignor of one-half to A. S. Hickok, Toledo, Ohio. Sound instrument. 1,759,954; May 27.
Myers, L. A., jr., Inc. (See Myers, William L., assignor.)
Myers, William L., assignor to L. A. Myers, jr., Inc., Newark, N. J. Buckle. Des. 81,253; May 27.
Mylius, Walter G., Wilkinsburg, Pa., assignor, by mesne assignments, to Eclipse Machine Company, Elmira Heights, N. Y. Starting mechanism for automobiles. Re17,679; May 27.
Nacket, Richard, Vancouver, British Columbia, Canada. Aeration device for internal-combustion engines. 1,760,315; May 27.
Nadic, Ltd. (See Butler, George H., assignor.)
National Aniline & Chemical Co. (See Pepper, Russell J., assignor.)
National Biscuit Company. (See Turnbull, Werd W., assignor.)
National Cash Register Company, The. (See Shipley, Bernis M., assignor.)
National Machinery Co., The. (See Clouse, William L., assignor.)
National Malleable and Steel Castings Company. (See Buckius, Albert O., assignor.)
National Pneumatic Company. (See Forman, Paris R., assignor.)
National Supply Company, The. (See Spalding, J. D., and Faulkner, assignors.)
National Supply Company, The. (See Timbs, Edward, assignor.)
Neelmeier, Wilhelm, Leverkusen, near Cologne-on-the-Rhine, and T. Nocken, Wiesdorf, near Cologne-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Vat dyestuffs of the indigoid series. 1,760,769; May 27.
Neil, Daniel W., jr., and A. B. Caskey, Ponca City, Okla. Vehicle window shade-or awning. 1,760,250; May 27.
Neli, Gustave M., Detroit, Mich., assignor to Chicago Pneumatic Tool Company, New York, N. Y. Steel puller. 1,760,276; May 27.
Neli, Gustave M., Detroit, Mich., assignor to Chicago Pneumatic Tool Company, New York, N. Y. Fluid-pressure tool. 1,760,277; May 27.
New Haven Clock Co., The. (See Porter, Wilson E., assignor.)
Newlin, Henry S., Jersey City, and W. E. Date, East Orange, N. J.; said Newlin assignor to The M. W. Kellogg Company, New York, N. Y. Method and apparatus for rolling tubular articles. 1,760,278; May 27.
Nerney, George E., and W. H. Siddall, assignors to Bay State Optical Company, Attleboro, Mass. Eyeglass construction. 1,759,863; May 27.
Neubert, Hans, Annaberg, Germany, assignor to General Electric Company. Electrical connecter. 1,760,515; May 27.
Neuhaus, Ralph. (See Fletcher, H. W., and Neuhaus.)
Newbill, Carl V., The Dalles, Oreg. Bolt lock. 1,759,994; May 27.
Newkirk, Edgar D. (See Snyder, F. H., and Newkirk.)
Newkirk, Edgar D., and A. J. Briggs, Syracuse, N. Y. Low-temperature reduction of iron ores. 1,760,078; May 27.
Ningara Machine & Tool Works. (See Lindgren, Bror J., assignor.)
Nichol Manufacturing Company. (See Nichol, Orr T., assignor.)
Nichol, Orr T., Omaha, Nebr., assignor to Nichol Manufacturing Company. Tractor guide. 1,760,079; May 27.
Nichols Copper Company. (See Hartley, Henry J., assignor.)
Nichols, Harry J., Washington, D. C. Method and apparatus for synchronizing two or more disconnected elements. 1,759,864; May 27.
Nicholson, Griffith C. (See Ackerman, E. W., and Nicholson.)
Nicolson, Alexander M., New York, N. Y., assignor, by mesne assignments, to Federal Telegraph Company. Apparatus for producing electric oscillations. 1,760,251; May 27.
Nicolson, Alexander M., New York, N. Y., assignor, by mesne assignments, to Federal Telegraph Company. Multiple resonant acoustic device. 1,760,252; May 27.
Nisenson, Julius, Brooklyn, assignor of one-half to A. Chanin, New York, N. Y. Device for controlling radio apparatus. 1,760,080; May 27.
Nocken, Theodor. (See Neelmeier, W., and Nocken.)
Norden, Svan, Cranston, assignor to Moore Fabric Company, Pawtucket, R. I. Drying and finishing machine. 1,760,516; May 27.
Nordstrom, Edgar, Detroit, Mich. Extracting tool. 1,760,433; May 27.
Norfolk & Western Veterans Association. (See Henebry, Leo F., assignor.)
Novo Engine Company. (See Morgan, William E., assignor.)
O'Brien, John O. (See Thornton, John E., assignor.)
Ochs, George F. A., Newark, N. J. Composition block. 1,760,713; May 27.
O'Connor, Daniel J., jr. (See Sledge, C. B., and O'Connor.)
O'Connor, Jerome F., San Francisco, Calif. Imprint-testing device. 1,760,714; May 27.
O'Connor, John F., Chicago, Ill., assignor, by mesne assignments, to W. H. Miner, Inc. Antifriction roller side bearing. 1,760,206; May 27.
Ohio Brass Company, The. (See Austin, Arthur O., assignor.)
Okochi, Masatosi, and K. Ebihara, Shitaya-ku, Tokyo, assignors, to Zaidan Hojin Rikgaku Kenkyujo, Tokyo, Japan. Apparatus for measuring piston-ring pressure exerting upon cylinder walls. 1,760,518; May 27.
Oliver, Joseph F. (See Wakefield, C. E., Fleming, and Oliver.)
Oneida Community, Limited. (See Allen, G. N., and Helander, assignors.)
O'Neill, Frank, jr., New York, N. Y. Disk-form bottle closure. 1,760,279; May 27.
Orlow, Ernest M., Wauwatosa, Wis. Sleeve construction for coats. 1,760,434; May 27.

Osgood, Charles F., Claremont, N. H., assignor, to Sullivan Machinery Company. Drilling mechanism. 1,760,316; May 27.
Oswego Falls Corporation. (See Wright, W. L., and Bond, assignors.)
Otto, Carl, Essen-Ruhr, Germany. Coke oven. 1,760,770; May 27.
Otto, Marius P. (See Crespi, E., and Otto.)
Otwell, Walter E., Linn, Kans. Radiator cap. 1,760,715; May 27.
Overbury, Frederick C., Hillsdale, N. J., assignor, by mesne assignments, to The Patent and Licensing Corporation, Boston, Mass. Roofing element. 1,759,995; May 27.
Pac-Kups Incorporated. (See Allen, Arthur S., assignor.)
Page, Harry W., Wauwatosa, Wis. Unit ventilator. 1,760,166; May 27.
Paisseau, Jean, Paris, France. Purifying pearl essence. 1,760,771; May 27.
Palka, Thomas. (See Kolano, L., and Palka.)
Palmer, John B., Long Beach, Calif. Spinning tongs. 1,760,167; May 27.
Palmer, Robert, Niskayuna, N. Y., assignor to General Electric Company. Soldering iron. 1,760,519; May 27.
Pampe, Joseph, Homer City, Pa. Egg-testing device. 1,760,658; May 27.
Paraffin Companies, The. (See Christopher, Harold S., assignor.)
Parco Development Company. (See Buckles, Winfred G., assignor.)
Parker, George W., St. Louis, Mo. Making refractory blocks. 1,760,861; May 27.
Parker, Henry C., assignor to Leeds & Northrup Company, Philadelphia, Pa. System for alternately recording and controlling. 1,759,906; May 27.
Parker, Kenneth S., assignor to The Parker Pen Company, Janesville, Wis. Fountain pen. Des. 81,254; May 27.
Parker Pen Company, The. (See Parker, Kenneth S., assignor.)
Parks, Paul B., Oak Park, assignor to Vapor Car Heating Company, Inc., Chicago, Ill. Thermostat control. 1,760,081; May 27.
Parks, Paul B., Oak Park, assignor to Vapor Car Heating Company, Inc., Chicago, Ill. Thermostat control. 1,760,082; May 27.
Parrish, James I., Dallas, Tex. Advertising clock dial and means for illuminating the same. 1,760,253; May 27.
Parsons, Edward T., Upper Montclair, N. J., assignor to Thomson Machine Company. Roll-molding machine. 1,760,280; May 27.
Parsons, Fred J., Tacoma, Wash. Hill lock for automobiles. 1,760,207; May 27.
Pasman, Abram N., assignor to Scovill Manufacturing Company, Waterbury, Conn. Waste-pipe fitting. 1,760,659; May 27.
Pass & Seymour, Inc. (See Russell, Mark N., assignor.)
Pass & Seymour, Inc. (See Thompson, Don N., assignor.)
Patent and Licensing Corporation, The. (See Overbury, Frederick C., assignor.)
Patent and Licensing Corporation, The. (See Rahr, Chester E., assignor.)
Paull, Samuel, and S. Mandeltort, New York, N. Y., assignor to Waterproof Pocket Corporation. Safety container. 1,760,604; May 27.
Paulson, Christian. (See Brown, R. W., and Paulson.)
Pawlikowski, Rudolf, Goerlitz, Germany. Material-shaking mechanism. 1,760,563; May 27.
Payne, John H., Ballston Spa, N. Y., assignor to General Electric Company. Temperature-regulating apparatus. 1,760,520; May 27.
Pearmain, William J., assignor to Twin Disc Clutch Company, Racine, Wis. Clutch. 1,760,605; May 27.
Pease, Orville E., Baldwin, N. Y., and N. G. Joseph, Bogota, N. J., assignors to F. J. Kloes, Inc., New York, N. Y. Journal and guide bracket. 1,760,772; May 27.
Pedersen, Waldemar J., Floral Park, Long Island, N. Y. Building-wall section. 1,760,281; May 27.
Pedersen, Waldemar J., Floral Park, Long Island, N. Y. Concrete mold. 1,760,282; May 27.
Pedersen, Waldemar J., Floral Park, Long Island, N. Y. Concrete mold. 1,760,283; May 27.
Peet, Ed E., Chetek, Wis. Milking stool. 1,760,716; May 27.
Peglow, Albert F., Grosse Pointe Park, Mich. Gauge. 1,760,717; May 27.
Pehrsson, Erik G., assignor to Aktiebolaget C. E. Johansson, Eskilstuna, Sweden. Micrometer or the like. 1,760,372; May 27.
Peiler, Karl E., West Hartford, assignor to Hartford-Empire Company, Hartford, Conn. Apparatus for feeding molten glass. 1,760,254; May 27.
Peiler, Karl E., West Hartford, assignor to Hartford-Empire Company, Hartford, Conn. Cooling mechanism for glass-feeder shear blades. 1,760,255; May 27.
Peiler, Karl E., West Hartford, assignor to Hartford-Empire Company, Hartford, Conn. Shear mechanism for glass feeders. 1,760,435; May 27.
Peltier, Frank D., Evansville, Ind., assignor, by mesne assignments, to Servel, Inc., New York, N. Y. Refrigeration. 1,760,168; May 27.
Penney, Clarence J., New York, N. Y. Container or tube for dentifrice. 1,760,773; May 27.
Pepper, Russell J., Kenmore, assignor to National Aniline & Chemical Co., Inc., New York, N. Y. Material agitation. 1,760,374; May 27.
Perrin, James E., assignor to The De Vilbiss Company, Toledo, Ohio. Sprayhead. 1,760,373; May 27.
Perryman Electric Co. (See Perryman George H., assignor.)
Perryman, George H., Woodcliff, N. J., assignor to Perryman Electric Co., Inc. Vacuum tube. 1,759,865; May 27.
Petch, Herbert S., London, and E. L. E. Wheatcroft, Cambridge, England, assignors to General Electric Company. Protective arrangement. 1,760,521; May 27.
Peteler, Adolph, Freeport, N. Y., assignor to Auto Specialties Mfg. Co., San Francisco, Calif. Lifting jack. 1,760,436; May 27.
Peteler, Adolph, Freeport, N. Y., assignor to Auto Specialties Manufacturing Co., San Francisco, Calif. Lifting jack. 1,760,437; May 27.
Peters, William G., Peoria, Ill. Fuel-oil burner. 1,760,774; May 27.
Peters, William G., Peoria, Ill. Rotary or spinning extractor. 1,760,775; May 27.
Peterson, Adolphe C., Minneapolis, Minn. Constant-compression engine. 1,760,083; May 27.
Peterson, Carl E., Upper Montclair, assignor to Eastern Tool & Manufacturing Company, Bloomfield, N. J. Rake. 1,760,660; May 27.
Peterson, Fred W. (See Martenson, H. M., and Peterson.)
Peterson, John E. (See Streitwieser, Henry E., assignor.)
Pfeiffer, Franklin, assignor to the firm of Carl Zeiss, Jena, Germany. Refractometer for liquids. 1,760,209; May 27.
Pfeiffer, Franklin, and T. Kühl, assignors to the firm Carl Zeiss, Jena, Germany. Camera for photographing the eyeball. 1,760,208; May 27.
Phelps, Arthus S., assignor to Pratt & Letchworth Company, Buffalo, N. Y. Manufacturing springs. 1,760,109; May 27.
Pickering Lumber Company. (See Lynch, Charles W., assignor.)
Pickin, Rowland O., Los Angeles, Calif. Drill bit. 1,760,317; May 27.
Pieper, Alphonse F., Rochester, N. Y. Transformer container. 1,759,997; May 27.
Pierce-Arrow Motor Car Company, The. (See Hughes, James R., assignor.)
Pierce, George L., Brooklyn, assignor to A. G. Spalding & Bros., New York, N. Y. Shoe cleat. 1,760,084; May 27.
Pierce Governor Company. (See Cook, Calvin, assignor.)
Pike, Neal C., Blanton, Fla., assignor to The Richardson Company, Lockland, Ohio. Saturated fiber web. 1,760,606; May 27.
Pilny, Alexander, Zurich, Switzerland. Producing films for color cinematography. 1,759,914; May 27.
Pineschi, Lamberto. (See Quintiliani, A., and Pineschi.)
Platt, Lester B., Caldwell, N. J. Device for distributing powdery substances. 1,759,998; May 27.
Plum, William T., jr., Oakhurst, N. J. Reproducing device. 1,760,085; May 27.
Pomeroy, William D., assignor to Gould Pumps, Inc., Seneca Falls, N. Y. Car-washing apparatus. 1,760,849; May 27.
Poore, John C., Utica, N. Y. Dirigible eye structure for dolls and manikins. 1,760,318; May 27.
Pope, Elmer R., Hamilton, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Fastening supplying apparatus. 1,760,438; May 27.
Porter, John L., et al. (See Steiner, Martin, assignor.)
Porter, Wilson E., assignor to The New Haven Clock Co., New Haven, Conn. Contact mechanism for electric clocks. 1,760,661; May 27.
Potter, Ralph K., New York, N. Y., assignor to American Telephone and Telegraph Company. Photo-electric cell. 1,759,915; May 27.
Pratt & Letchworth Company. (See Phelps, Arthur S., assignor.)
Pravada, Frank. (See Bustin, L., and Pravda.)
Prestinari, Eugen, Irvington, assignor to Gemex Company, Newark, N. J. Bracelet chain. 1,760,662; May 27.
Prudhomme, Eugene A., Neuilly-sur-Seine, assignor to Societe Internationale Des Procedes Prudhomme (S. I. P. P.), Paris, France. Process and apparatus for purifying gases. 1,760,522; May 27.
Putnam, Israel L., Yuba City, Calif. Heater. 1,760,086; May 27.
Quaker Oats Company, The. (See Miner, Carl S., assignor.)
Quaker Oats Company, The. (See Reddy, Charles S., assignor.)
Quinn, Joseph F., Burlingame, assignor to Geo. W. Caswell Co., San Francisco, Calif. Coffee-roasting machine. 1,759,955; May 27.
Quintiliani, Arturo, and L. Pineschi, Rome, Italy. Method and apparatus for the simultaneous recording or reproduction of motion and sound. 1,760,718; May 27.
Raab, Owen E., Seattle, Wash. Bottle. 1,759,866; May 27.
Rabel, Anthony G. (See Witzal, A., Rabel, and Stevens.)
Radio Corporation of America. (See Drury, William W., assignor.)

Radio Corporation of America. (See Goldsmith, Alfred N., assignor.)
Radio Corporation of America. (See Rehfield, Grover G., assignor.)
Radio Corporation of America. (See Weinberger, J., and Wolff, assignors.)
Rahr, Chester E., Brookline, assignor, by mesne assignments, to The Patent and Licensing Corporation, Boston, Mass. Roofing. 1,759,999; May 27.
Ramer, Ralph J. (See Stribling, Jesse C., assignor.)
Ramsay, William, Dunfermline, Scotland, assignor to Golding Bros. Company, New York, N. Y. Textile fabric or similar article of manufacture. Des. 81,255; May 27.
Rankin, William K., Scotia, N. Y., assignor to General Electric Company. Electric-switch-operating mechanism. 1,760,523; May 27.
Ransohoff, Nathan, Cincinnati, Ohio. Transmission device. 1,760,210; May 27.
Rasmussen, Nels H., et al. (See Juergens, John, assignor.)
Ray, Eugene J., Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Heel trimming and compressing machine. 1,759,867; May 27.
Rea, George, Brooklyn, N. Y. Watchcase. Des. 81,256; May 27.
Ready Heat Products, Inc. (See Baker, Howard H., assignor.)
Reddy, Charles S., Ames, Iowa, assignor to The Quaker Oats Company, Chicago, Ill. Fungicidal product for seed treatment. 1,760,000; May 27.
Reed, Robert F., Norwood, and P. W. Dorst, Cincinnati, Ohio, assignors to The Lithographic Technical Foundation, Inc., New York, N. Y. Planographic printing surface. 1,759,956; May 27.
Rehfield, Grover G., Chicago, Ill., assignor, by mesne assignments, to Radio Corporation of America, New York, N. Y. Duplex horn for sound reproducers. 1,760,284; May 27.
Rehfus-Oberländer, Carl H., Kehl-on-the-Rhine, Germany. Felting and fulling machine. 1,760,517; May 27.
Reichart, James H., Muncie, Ind. Electric and fireless cooker. 1,759,957; May 27.
Reid, James S., assignor, by mesne assignments, to The Eaton Axle & Spring Company, Cleveland, Ohio. Closure structure. 1,760,439; May 27.
Reid, Robert. (See Thibault, O., and Reid.)
Rekenthaler, Joseph A., Cushing, Iowa. Tire spreader. 1,760,719; May 27.
Remington Arms Company. (See Loomis, Crawford C., assignor.)
Remington, Joseph P., assignor to J. H. Bell, Philadelphia, Pa. Variable-speed gearing. 1,760,850; May 27.
Remington Rand, Inc. (See Bartholomew, Scott C., assignor.)
Remington Rand Inc. (See Campbell, C. S., and Hunt, assignors.)
Remington Rand Inc. (See Dawson, George H., assignor.)
Remington Typewriter Company. (See Going, George G., assignor.)
Rengmann, Thure, Berlin-Charlottenburg, Germany. Paper file. 1,760,776; May 27.
Rentschler, Harvey C., East Orange, N. J., assignor to Westinghouse Lamp Company. Electric discharge device. 1,760,524; May 27.
Rentschler, Harvey C., East Orange, N. J., assignor to Westinghouse Lamp Company. Electrode. 1,760,526; May 27.
Rentschler, Harvey C., J. W. Marden, and C. T. Ulrey, East Orange, N. J., assignors to Westinghouse Lamp Company. Electron-emission material. 1,760,440; May 27.
Rentschler, Harvey C., East Orange, and W. W. Merrymon, Glen Ridge, N. J., assignors to Westinghouse Lamp Company. Rectifier. 1,760,525; May 27.
Reserve Holding Company. (See Bellamy, John I., assignor.)
Reserve Holding Company. (See Saunders, Norman H., assignor.)
Rex Paper Company. (See Kendall, Harry C., assignor.)
Rex-Watson Corporation. (See Moore, John T., assignor.)
Reynolds, Arthur W., assignor to The Babcock Manufacturing Company, Leonardsville, N. Y. Cultivator. 1,760,001; May 27.
Reynolds, Frederick N., Amarillo, Tex. Check holder. Des. 81,257; May 27.
Reynolds, Lynus C., Sweetwater, Tenn. Sheet binder. 1,760,564; May 27.
Riccia, Angelo D., Brussels, Belgium. Electric installation in combination with pressure-splitting device. 1,760,777; May 27.
Rice, Barton & Fales, Incorporated. (See Lodding, Frederick W., assignor.)
Rich, Malcolm N. (See Marden, J. W., and Rich.)
Richardson Company, The. (See Pike, Neal C., assignor.)
Richardson, Rodney G., assignor, by mesne assignments, to Automatic Electric Inc., Chicago, Ill. Automatic Telephone system. 1,760,851; May 27.
Ries, Henry J., Iowa City, Iowa. Comb. 1,760,778; May 27.
Rightmyer, Holden W. (See Grund, F. D., and Rightmyer.)
Riker, Samuel M., Chester, N. J. Shoe ornament. Des. 81,258; May 27.
Riley, Robert S., Worcester, Mass., assignor, by mesne assignments, to The Air Preheater Corporation, New York, N. Y. Furnace air preheater. 1,759,916; May 27.
Riley, Robert S., assignor to Riley Stoker Corporation, Worcester, Mass. Underfeed stoker. 1,760,256; May 27.
Riley Stoker Corporation. (See Riley, Robert S., assignor.)
Risinger, Frank V., Lakewood, Ohio. Liquid-fuel radiant heater. 1,760,319; May 27.
Risser, Arthur I., assignor to U. S. Bottlers Machinery Co., Chicago, Ill. Cork-feeding device. 1,760,441; May 27.
Ritter Dental Manufacturing Company, The. (See May, Adam J., assignor.)
Robb, John F., Cleveland Heights, Ohio, assignor to Koehring Company, Milwaukee, Wis. Finishing machine. 1,760,442; May 27.
Robertson, Nathaniel G., Wyoming, Pa. Making shovels. 1,760,607; May 27.
Robinson, Lewis T., Niskayuna, N. Y., assignor to General Electric Company. Electrical device. 1,760,527; May 27.
Roderick, Richard D., Jermyn, Pa. Obstetrical forceps. 1,760,720; May 27.
Rommer, Isaac A., assignor to Ideal Novelty & Toy Co., Brooklyn, N. Y. Attaching dolls' eyes to dolls' heads. 1,760,002; May 27.
Rosenfield, Edward M., New York, N. Y. Bushing-clamp-connecting device. 1,760,663; May 27.
Rosenfield, Edward M., New York, N. Y. Electrically-operated sign. 1,760,664; May 27.
Rosenmiller, Joseph L., assignor to York Ice Machinery Corporation, York, Pa. Insulated structural unit. 1,760,211; May 27.
Rosenthal, Rudolf, executor. (See Homolka, Benno.)
Ross, Hugh G., Wilkinsburg, Pa. Football-game-indicating advertising novelty. 1,760,608; May 27.
Ross, Oscar A., New York, N. Y. Seal. 1,759,917; May 27.
Ross, Percy C., Columbus, Ind. Picture frame. Des. 81,259; May 27.
Rothmüller, S., A. G. (See Bandhauer, F., assignor.)
Rover, Walter H., assignor to Gardner-Denver Company, Denver, Colo. Chuck structure. 1,760,565; May 27.
Rowan Controller Company. (See Rowan, J. S., assignor, and Fox.)
Rowan, John S., Baltimore, Md., and G. Fox, Chicago, Ill.; said Rowan assignor to Rowan Controller Company, Baltimore, Md., and said Fox assignor to Freyn Engineering Company, Chicago, Ill. Stock indicator. 1,760,609; May 27.
Roy, James R., Winnipeg, Manitoba, Canada. Window. 1,760,170; May 27.
Ruble, Roland O., Rosedale, Kans. Automobile signal switch. 1,760,212; May 27.
Russell, Mark N., assignor to Pass & Seymour, Inc., Syracuse, N. Y. Switch and fixture support. 1,760,003; May 27.
Rutter, Mont, and E. E. Lechler, Atglen, Pa. Torpedo and making same. 1,760,004; May 27.
Ruttiman, Alfred. (See White, F. E., and Ruttiman.)
Ryder, Elmer, Elgin, Ill. Heater for motor vehicles. 1,760,005; May 27.
Ryder, Elmer, Elgin, Ill. Shock absorber. 1,760,006; May 27.
Ryerson, Thorval L., Park Ridge, assignor to W. D. Allen Manufacturing Company, Chicago, Ill. Lawn sprinkler. 1,760,375; May 27.
Sadtler, Helena S., Erdenheim, Pa. Transfer for multi-colored designs and markings. 1,759,868; May 27.
St. Regis Paper Company. (See Marsh, Esli A., assignor.)
Sanitary Food Machine Corporation. (See Banff, Peter S., assignor.)
Santurello, Peter, Columbus, Ohio. Hair-curling apparatus. 1,760,320; May 27.
Sargent & Company. (See Thomas, William N., assignor.)
Saunders, Norman H., Homewood, Ill., assignor, to Reserve Holding Company, Kansas City, Mo. Telephone-switching syatem. 1,759,869; May 27.
Schaaf, Edward. (See Fortune, J. A., and Whitson, assignors.)
Schaer, Charles, Langenthal, assignor, to the firm Sulzer Frères Société Anonyme, Winterthur, Switzerland. High-pressure piston or reciprocating compressor or the like. 1,760,213; May 27.
Schaffer, Walter, Berlin, assignor, to Gesellschaft für Drahtlose Telegraphie m. b. H., Berlin, Germany. Modulation circuit. 1,760,285; May 27.
Schaller, William F., Alameda, Calif., assignor, to M. W. Hendrich, New York, N. Y. Oil burner. 1,760,007; May 27.
Schantz, Gordon M., Allentown, Pa., assignor, to International Motor Company, New York, N. Y. Door-operating mechanism. 1,760,528; May 27.
Schaum, Carl, Germantown, assignor, to Fletcher Works, Incorporated, Philadelphia, Pa. Centrifugal. 1,760,286; May 27.
Scheidegger, Fred. Monroe, Wis. Device for lifting invalids. 1,760,443; May 27.
Schermerhorn, George D., Reading, Mich. Folding chair. 1,760,008; May 27.
Schettler, Gustav A. Leeds, England, assignor, to The Turner Tanning Machinery Company, Portland, Me. Machine for operating on hides, skins, and leather. 1,759,871; May 27.

Schippers, Francis J., Brooklyn, N. Y. Game. 1,760,287; May 27.

Schmidt, Albert B., and L. A. James, Independence, Kans. Dishwashing machine. 1,760,779; May 27.

Schmidt, Maximilian P., and W. Krieger, Wiesbaden-Biebrich, Germany, assignors, to Kalle & Co., Aktiengesellschaft. Light-sensitive layers and preparing them. 1,760,780; May 27.

Schmieding, Warren H. F., assignor, to Delco-Light Company, Dayton, Ohio. Electrical apparatus. 1,759,958; May 27.

Schneider, Johann, and G. Heckmann, assignors, to the Firm Fuld & Co., Telephon und Telegraphenwerke A. G., Frankfort-on-the-Main, Germany, Microtelephone. 1,760,566; May 27.

Schoene, Kurt, Hamburg, Germany. Pump and compressor. 1,760,171; May 27.

Schoene, Kurt, Hamburg, Germany. Valve gear for pumps and compressors. 1,760,172; May 27.

Schollhorn, William, Company, The. (See Bernard, William A., assignor.)

Schönhöfer, Fritz. (See Schulemann, W., Schönhöfer, and Wingler.)

Schroeder, Henry L., Chicago, Ill. Score board or similar article. Des. 81,260; May 27.

Schubert, Richard, Bremen, Germany. Producing waterproof concrete specially for pavings. 1,760,214; May 27.

Schulemann, Werner, Vohwinkel, near Elberfeld, F. Schönhöfer and A. Wingler, Elberfeld, Germany, assignors, to Winthrop Chemical Company, Inc., New York, N. Y. Manufacture of new pharmaceutical products. 1,760,781; May 27.

Schultz, Emil, Streator, Ill. Window scaffold. 1,760,009; May 27.

Schultz, Hermann, Lankwitz, near Berlin, Germany. Casting mold for alumino-thermic welding. 1,760,010; May 27.

Schultz, Karl A. (See Kritchevsky, W., and Schultz.)

Schulz, Ernest R., assignor, to W. H. Miner, Inc., Chicago, Ill. End-door construction for railway cars and locking means therefor. 1,760,173; May 27.

Schünemann, Paul, assignor to Magnet-Werk G. m. b. H. Eisenach Spezialfabrik für Elektromagnet-Apparate, Eisenach, Germany. Electromagnetically-operated friction coupling. 1,760,174; May 27.

Schussler, John H., Chicago, Ill. Inking mechanism for printing presses. 1,760,721; May 27.

Schwabe, Edwin J., Far Rockaway, Long Island, N. Y. Vanity case. 1,760,015; May 27.

Schwantes, Julius A., Wauwatosa, Wis., assignor to Colgate-Palmolive-Peet Company, Chicago, Ill. Soap-cutting apparatus. 1,760,087; May 27.

Schwarting, Grace C. (See Schwarting, Walter W.)

Schwarting, Walter W., deceased, Minneapolis, Minn.; Grace C. Schwarting, owner by decree of distribution of estate. Oil-base insulating pan for internal-combustion engines. 1,760,376; May 27.

Schwartz, Max C., Washington, D. C. Game signaling apparatus. 1,759,918; May 27.

Schweller, Sylvester M., Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation. Refrigerating apparatus. 1,760,175; May 27.

Schweller, Sylvester M., Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation. Refrigerating apparatus. 1,760,176; May 27.

Schwennker, Charles F., Schenectady, N. Y., assignor to General Electric Company. Electric switch. 1,760,529; May 27.

Schwimmer, Oscar, Los Angeles, Calif. Safety gas fitting. 1,759,872; May 27.

Scott, Irving G., and M. C. Fox, New York, N. Y. Wall pot holder. Des. 81,262; May 27.

Scott, Stewart, jr., Ferguson, Mo. Paper-feeding rack. 1,760,177; May 27.

Scott-Viner Company. (See Carmichael, Mead S., assignor.)

Scovill Manufacturing Company. (See Pasman, Abram N., assignor.)

Secord, Frederick A., Portland, Me. Drying materials. 1,760,444; May 27.

Seeger, Edwin W., Wauwatosa, assignor, by mesne assignments, to Cutler-Hammer, Inc., Milwaukee, Wis. Generator control. 1,760,088; May 27.

Seeley, Asa, Owosso, Mich. Gas-producing apparatus. 1,760,782; May 27.

Seigheim, Fritz, New York, N. Y. Vacuum container. 1,760,321; May 27.

Seitz, Louis J., jr., Elizabeth, N. J., assignor to Weston Electrical Instrument Corporation, Newark, N. J. Weston standard cell. 1,760,178; May 27.

Selah, Howard A., assignor to Erie Malleable Iron Company, Erie, Pa. Conduit coupling. 1,760,011; May 27.

Selby, Dwight E., Balboa, Calif. Fuel-injection valve for Diesel engines. 1,760,322; May 27.

Servel, Inc. (See Peltier, Frank D., assignor.)

Shackelford, Roy V., Long Beach, Calif. Clothespin. 1,760,445; May 27.

Sharke, Emil O., Schulenburg, Tex. Wrench. 1,760,784; May 27.

Shaw Crane-Putnam Machine Company. (See Skidmore, R. P., and Voedisch, assignors.)

Shaw, Frederick R., Armstrong, British Columbia, Canada. Radio loud-speaker. 1,760,377; May 27.

Shawmut Engineering Company. (See Bixby Walter, assignor.)

Shawmut Engineering Company. (See Hathaway, Edgar F., assignor.)

Shawmut Engineering Company. (See Hathaway, E. F., and Bixby, assignors.)

Shearer, Harry T., assignor to Landis Machine Company, Waynesboro, Pa. Die head. 1,760,567; May 27.

Shearer, Harry T., assignor to Landis Machine Company, Waynesboro, Pa. Die head. 1,760,568; May 27.

Sheboygan Couch Company. (See Meves, Charles W., assignor.)

Shelton, Charles F., Los Angeles, Calif. Hose connection for air gauges. 1,760,323; May 27.

Shewmon, Dan D., Oak Park, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Apparatus for measuring the liquid contents of vessels. 1,759,873; May 27.

Shipley, Bernis M., assignor to The National Cash Register Company, Dayton, Ohio. Cash register. 1,760,783; May 27.

Short, Charles R. (See Kettering, C. F., and Short.)

Short, Charles R., assignor to General Motors Research Corporation, Detroit, Mich. Flexible coupling. 1,760,852; May 27.

Shuter, Alfred D. (See Smith, W. S., and Shuter.)

Siddall, Wilbur H. (See Nerney, G. E., and Siddall.)

Sieghelm, Fritz, New York, N. Y. Vacuum-walled container. 1,760,378; May 27.

Sill, Harry, Mineola, N. Y. Attachment for paint buckets. 1,760,722; May 27.

Simplex Sampling Association, Inc. (See Stenz, Bernard F., assignor.)

Simplex Wire and Cable Company. (See Boggs, Charles R., assignor.)

Sinclair Refining Company. (See Herthel, E. C., and Tifft, assignors.)

Singer, Felix, Berlin-Charlottenburg, Germany. Artificial plagioclase compound. 1,759,919; May 27.

Skidmore, Russell P., and A. Voedisch, assignors to Shaw Crane-Putnam Machine Company, Inc., Fitchburg, Mass. Center-pin-turning attachment. 1,760,530; May 27.

Skolnik, Max, assignor to Insolo Holding Company, Minneapolis, Minn. Making building blocks. 1,760,446; May 27.

Slaker, Joseph H., assignor to Western Wheeled Scraper Company, Aurora, Ill. Earth scraper. 1,760,016; May 27.

Slater, Samuel P., Atlanta, Ga. Rat trap. 1,760,324; May 27.

Sledge, Cecil B., and D. J. O'Connor, jr., Augusta, Ga. Holder for maps, etc. 1,760,785; May 27.

Sleeman, Harold P., assignor to The R. Thomas & Sons Company, Lisbon, Ohio. Coupling for insulators. 1,760,786; May 27.

Slinn, James B., Bonaparte, Iowa. Airplane wing. 1,760,787; May 27.

Small, Milton, Brooklyn, N. Y. Fibrous container. 1,760,325; May 27.

Smékal, Josef, Josefuv Dul, Czechoslovakia. Steam plant. 1,760,215; May 27.

Smelker, Le Roy, Dayton, Ohio. Automobile seat and the like. Re17,680; May 27.

Smith, Botsford S., Fort Fairfield, Me. Vine protector. 1,760,179; May 27.

Smith, John A., Bellevue, Ky., assignor to The United States Electrical Tool Company, Cincinnati, Ohio. Switch. 1,760,257; May 27.

Smith, Rowland D., assignor to Corning Glass Works, Corning, N. Y. Frosting glass articles. Re17,082; May 27.

Smith, Willoughby S., Newton Poppleford, and A. D. Shuter, Harrow-on-the-Hill, England. Manufacture of telegraph and telephone cables. 1,760,012; May 27.

Smoot, Daisy E., Apopka, Fla. Animal bath. 1,760,017; May 27.

Snead & Company. (See Macdonald, A. S., Walte, and Huggins, assignors.)

Snow, Norman L., and C. L. Howse, assignors to Diamond Power Specialty Corporation, Detroit, Mich. Boiler cleaner. 1,759,870; May 27.

Snyder, Arthur N. (See Snyder, John G. and A. N.)

Snyder, Clifford L., Detroit, Mich., assignor to The Evans Auto Loading Co, Inc. Shipping device. 1,760,089; May 27.

Snyder, Francis H., and E. D. Newkirk, Syracuse, N. Y. Process of and apparatus for making ammonia. 1,760,013; May 27.

Snyder, Francis H., and E. D. Newkirk, Syracuse, N. Y. Preparing ammonia factor gases. 1,760,014; May 27.

Snyder, John G. and A. N., New York, N. Y. Rail fastening. 1,760,723; May 27.

Societe Acieries de Gennevilliers. (See Bunet, Paul E., assignor.)

Société Anonyme "La Carbonite." (See Hennebutte, H., and Goutal, assignors.)

Societe Bouillon Frères. (See Bouillon, Emile C. J., assignor.)

Societe Internationale Des Procedes Prudhomme (S. I. P. P.) (See Prudhomme, Eugene A., assignor.)

Sommer, William H. (See Bailey, Charles F., assignor.)

Sommer, William H., Peoria, Ill. Wire fabric. 1,760,447; May 27.

Sons-Cunningham Reed & Rattan Co. (See Jones, Charles W., assignor.)

Soss, Mark, Spokane, Wash. Fountain brush. 1,760,018; May 27.

Spalding, A. G., & Bros. (See Pierce, George L., assignor.)

Spalding, John D., Crafton, Pa., and D. S. Faulkner, Los Angeles, Calif., assignors to The National Supply Company of Delaware, New York, N. Y. Differential and straight brake equalizer for rotary draw works. 1,760,180; May 27.

Spathelf, David E., University City, assignor to Hamilton, Brown Shoe Company, St. Louis, Mo. Shoe. 1,760,665; May 27.

Specketer, Heinrich, and G. Henschel, Griesheim-on-the-Main, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Production of chromates with simultaneous recovery of alumina. 1,760,788; May 27.

Sperduti, John, Pleasantville, N. Y. Stringed musical instrument. 1,760,789; May 27.

Spicer, John P., et al. (See Spicer, John P., assignor.)

Spicer, John P., Philadelphia, Pa., assignor, by mesne assignments, of one-half to J. P. Spicer, one-fourth to A. H. Cornog, and one-fourth to A. V. E. Cornog. Safety emergency attachment for wheels. 1,760,666; May 27.

Sproesser, William C., and E. A. Lederer, East Orange, N. J., assignors to Westinghouse Lamp Company. Multifilament lamp. 1,760,667; May 27.

Stäblein, Fritz, Essen, assignor to Fried. Krupp Aktiengesellschaft, Essen-on-the-Ruhr, Germany. Iron-nickel alloy. 1,760,326; May 27.

Stacey, Ernest W., Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Machine for cutting sheet stock. 1,760,019; May 27.

Stalder, Merle D., assignor of one-fourth to J. F. Caffrey, Cleveland, Ohio. Trolley bearing. 1,760,020; May 27.

Staley, Wayne D., assignor to Burgess Battery Company, Madison, Wis. Dry cell. 1,760,090; May 27.

Standard Brands Incorporated. (See Koepke, Henry G., assignor.)

Standard Oil Company of California. (See Maker, F. L., Cooley, and Tuttle, assignors.)

Standard Oil Development Company. (See Fischer, Herbert G. M., assignor.)

Standard Oil Development Company. (See Howard, Frank A., assignor.)

Standard Oil Development Company. (See Ward, Clarence A., assignor.)

Standard Register Company, The. (See Metzner, Albert W., assignor.)

Standard Stoker Company, The. (See Turner, Edwin A., assignor.)

Standard Tobacco Steamer Company. (See Bronander, Wilhelm B., assignor.)

Stanley, Joseph W., Johnstown, Pa. Switch stand. 1,760,790; May 27.

Stanley, Joseph W., Johnstown, Pa. Switch stand. 1,760,791; May 27.

Stearns, Harry C., Oak Park, Ill., assignor to Western Electric Company, New York, N. Y. Power-transmitting apparatus. 1,759,874; May 27.

Stebbins, Albert H., Los Angeles, Calif. Operating mechanism. 1,759,875; May 27.

Stebbins, Albert H., Los Angeles, Calif. Air classifier. 1,759,959; May 27.

Stebbins, Albert H., Los Angeles, Calif. Concentrator table. 1,759,960; May 27.

Steel Heddle Manufacturing Company. (See Kaufmann, John J., assignor.)

Steele, James R. (See Moore, G. L., and Steele.)

Steiner, Martin, Belleville, Ill., assignor of forty per cent to J. L. Porter, W. Vogt, and H. E. Barnard, St. Louis, Mo. Acetylene-gas generator. 1,760,724; May 27.

Steinschneider, Abraham, Berlin, Germany. Case for books or the like. 1,760,448; May 27.

Stenz, Bernard F., assignor to Simplex Sampling Association, Inc., New York, N. Y. Display device. 1,760,792; May 27.

Stephens, Thomas C., St. Louis, Mo. Smoke-consuming device. 1,759,961; May 27.

Stephenson, D. K. (See Keith, Charles W., assignor.)

Stern, Marc, assignor to A C Spark Plug Company, Flint, Mich. Die-casting machine. 1,760,258; May 27.

Stern, Marc, assignor to A C Spark Plug Company, Flint, Mich. Die-casting machine. 1,760,610; May 27.

Stertzbach, Harry W., and J. S. McPherson, assignors to The Buckeye Steel Castings Company, Columbus, Ohio. Side frame. 1,760,181; May 27.

Stevens, Harry F. (See Witzal, A., Rabel, and Stevens.)

Stevens, Leslie, Glen Ridge, N. J., assignor to Stevens Manufacturing Corporation, New York, N. Y. Apparatus for making containers. 1,760,288; May 27.

Stevens Manufacturing Corporation. (See Stevens, Leslie, assignor.)

Stevenson, Raymond F. (See Fehely, R. C., and Stevenson.)

Stewart, Duncan J., assignor to H. D. Colman, Rockford, Ill. Selector. 1,760,379; May 27.

Stewart, James S., Redlands, assignor, by mesne assignments, to G. Voss, San Bernardino, Calif. Agricultural machine. 1,760,569; May 27.

Stinson, Edward A., Wayne, Mich. Aeroplane. Des. 81,261; May 27.

Stock, Anthony T., assignor to Frigidaire Corporation, Dayton, Ohio. Refrigerating apparatus. 1,759,962; May 27.

Stockfleth, Berger, Berrien Springs, and F. W. Burger, Niles, assignors to Clark Tructractor Company, Buchanan, Mich. Brake mechanism for vehicles. 1,759,963; May 27.

Stockholder, John H., assignor to M. Stockholder, New Orleans, La. Liquid-purifying device. 1,760,216; May 27.

Stockholder, Mary. (See Stockholder, John H., assignor.)

Stockman, Martin, et al. (See Giudice, Charles, assignor.)

Stockman, Murray, et al. (See Giudice, Charles, assignor.)

Stoddard, Edgar S., Berwyn, assignor to The Conover Company, Chicago, Ill. Dishwashing machine. 1,760,668; May 27.

Stoewener, Fritz, Ludwigshafen-on-the-Rhine, and E. Münzing, Neurossen, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Highly-active absorbent and catalytic mass. 1,760,289; May 27.

Stone, Lawrence, jr., Denver, Colo. Voice-recording apparatus. 1,760,021; May 27.

Stone, Walter C., Webster Groves, Mo. Refrigerator car. 1,760,182; May 27.

Story & Clark Radio Corp. (See Minnium, Byron B., assignor.)

Stover, Russell, Denver, Colo. Bungalow box. Des. 81,263; May 27.

Stover, Russell, Denver, Colo. Apparatus and method for maintaining chocolate in melted condition. 1,759,964; May 27.

Stowe, Herbert L., Bridgeport, Conn. Novelty noise maker. 1,760,022; May 27.

Strachan, Thomas H., assignor to Dayton Scale Company, Dayton, Ohio. Scale. 1,760,611; May 27.

Streckfuss, Elmer G., assignor to The Cincinnati Time Recorder Company, Cincinnati, Ohio. Meat clamp. 1,760,669; May 27.

Streckfuss, Elmer G., assignor to The Cincinnati Time Recorder Company, Cincinnati, Ohio. Meat slicer. 1,760,670; May 27.

Streitwieser, Henry E., Worden, assignor of one-half to J. E. Peterson, Huntley, Mont. Coal carrier. 1,760,793; May 27.

Stribling, Jesse C., assignor of one-half to R. J. Ramer, Anderson, S. C. Valve tool. 1,760,725; May 27.

Studebaker Corporation, The. (See Chanter, Arthur J., assignor.)

Studebaker Corporation, The. (See Herrmann, Karl L., assignor.)

Sullivan, Edward F., South Portland, Me. Feed-water heating apparatus for boilers. 1,760,794; May 27.

Sullivan Machinery Company. (See Gartin, Elmer G., assignor.)

Sullivan Machinery Company. (See Miller, Edward E., assignor.)

Sullivan Machinery Company. (See Mills, George F., assignor.)

Sullivan Machinery Company. (See Osgood, Charles F., assignor.)

Sullivan Machinery Company. (See Wineman, Wade H., assignor.)

Sullivan, Michael L., Sandberg, Calif. Head wall for drain pipes. 1,760,380; May 27.

Sullivan, Patrick J., Botson, Mass. Hoist for automobiles and the like. 1,760,671; May 27.

Sulzer Frères Société Anonyme. (See Schaer, Charles, assignor.)

Suman, Robert G. (See Williams, H. M., and Suman.)

Summers, Harry A. (See Capps, F. L., and Summers.)

Sun Oil Company. (See Wait, Justin F., assignor.)

Superheater Company, The. (See Broido, Benjamin, assignor.)

Superheater Company, The. (See Hardy, Charles R., assignor.)

Superior Floor Surfacing Machine Corporation. (See Jacobson, G., and Ericson, assignors.)

Sutherland, George H. D. (See Craig, David A., assignor.)

Svancara, Lumir, Buhl, Idaho. Harrow. 1,759,965; May 27.

Svenson, Sven, Fond du Lac, Wis., assignor, by mesne assignments, to Lokaford Company, Springfield, Ill. Vehicle locking mechanism. 1,760,381; May 27.

Swanson, Swan J., St. Louis, assignor of one-half to U. Dalpini, St. Louis County, Mo. Coin-control mechanism for vending machines. 1,760,449; May 27.

Swift, Edwin H., Brooklyn, N. Y. Air inducer and preheater for furnaces. 1,760,183; May 27.

Swingrite Company. (See Flint, Dutee W., assignor.)

Swinney, Paul M., Los Angeles, Calif. Date-picking platform. 1,759,966; May 27.

Sydnor, Thomas G., Richmond, Va. Weed cutter. 1,760,024; May 27.

Symington Company, The. (See Barrows, Donald S., assignor.)

Syntron Company. (See Weyandt, Carl S., assignor.)

Szalay, Ferenc, Budapest, Hungary. Device for the prevention of the tilting movement of current-collector bows. 1,760,795; May 27.

Szmukler, Constantin, Grenoble, France. Machine for treating hides, skins, leather, and other similar pieces of work. 1,760,796; May 27.

Tabulating Machine Company, The. (See Lake, Clair D., assignor.)
Talbott, Charles G., Stamford, Conn., assignor to The Barrett Company. Bitumen spreader. 1,759,920; May 27.
Tammarazzo, Anthony, Arlington, N. J.. Clothes-hanging device. 1,760,290; May 27.
Tarpley, James N., Oklahoma City, Okla. Vessel for submerged baking of pies. 1,759,921; May 27.
Taylor, Charles, Buffalo, N. Y., assignor to Taylor Freezer Corporation, Beloit, Wis. Ice-cream-freezing system. 1,760,217; May 27.
Taylor Freezer Corporation. (See Taylor, Charles, assignor.)
Taylor, Harden F., Bronx, assignor to The Atlantic Coast Fisheries Company, New York, N. Y. Treatment of comestibles with smoke. 1,760,091; May 27.
Taylor Instrument Companies. (See Brown, H. Brainard, assignor.)
Taylor, Mae M., Hollywood, Calif. Arm rest. 1,760,450; May 27.
Teesdale, Clyde H., assignor to Teesdale Manufacturing Company, Grand Rapids, Mich. Controlling means for electric switches. 1,760,382; May 27.
Teesdale Manufacturing Company. (See Teesdale, Clyde H., assignor.)
Templeton, Clifford M., Detroit, Mich. Adjustable seat support. 1,759,922; May 27.
Tenbrook, John, Glenwood Springs, Colo. Vehicle-operated garage door. 1,760,023; May 27.
Thibault, Onésime, and R. Reid, San Diego, Calif. Dry-cleaning machine. 1,760,218; May 27.
Thiess, Karl, T. Meissner, and C. J. Müller, Hoechst-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Indigoid vat dyestuffs. 1,760,797; May 27.
Thole, Edward J. (See Hughes, C. A., and Thole.)
Thomas, Adolph A., New York, N. Y. Electric sound transmitter. 1,759,967; May 27.
Thomas, Adolph A., New York, N. Y. Electric phonograph reproducer. 1,760,092; May 27.
Thomas, Adolph A., New York, N. Y. Indicating device. 1,760,291; May 27.
Thomas, Adolph A., New York, N. Y. Apparatus for transmitting and amplifying electric impulses. 1,760,383; May 27.
Thomas, James A., Albert Lea, Minn. Pilot headlight. 1,760,327; May 27.
Thomas, Leslie J., assignor to V. C. Batchelder, Arlington Heights, Mass. Piston. 1,760,451; May 27.
Thomas, R., & Sons Company, The. (See Sleeman, Harold P., assignor.)
Thomas, William N., assignor to Sargent & Company, New Haven, Conn. Plate for casket handles or the like. Des. 81,264; May 27.
Thompson, Don N., deceased, by E. C. Thompson, executrix, assignor to Pass & Seymour, Inc., Syracuse, N. Y. Convenience outlet for fixtures. 1,760,570; May 27.
Thompson, Eva C., executrix. (See Thompson, Don N.)
Thompson, Howard A., Edgewood Borough, assignor to The Union Switch & Signal Company, Swissvale, Pa. Electrical apparatus. 1,759,923; May 27.
Thompson, James H., Trenton, assignor to Hussong Dyeing Machine Company, Groveville, N. J. Dyeing machine. 1,760,798; May 27.
Thompson, Lincoln, Naugatuck, assignor, by mesne assignments, to Wm. H. Bristol Talking Picture Corporation, Waterbury, Conn. Combined microphonic transmitter and amplifier therefor. 1,760 672; May 27.
Thomson Machine Company. (See Parsons, Edward T., assignor.)
Thorn, Percy M., Long Island City, N. Y. Coal-truck body. 1,760,093; May 27.
Thornton, John E., West Hampstead, London, assignor to J. O. O'Brien, Manchester, England. Cinematograph projection apparatus. 1,760,219; May 27.
Thornton, John E., West Hampstead, London, assignor to J. O. O'Brien, Manchester, England. Cinematograph spool case. 1,760,220; May 27.
Thurber, Harry F., and F. E. Greene, assignors to The Greist Manufacturing Company, New Haven, Conn. Desk lamp. Des. 81,266; May 27.
Thurber, Harry F., and F. E. Greene, assignors to The Greist Manufacturing Company, New Haven, Conn. Desk lamp. Des. 81,267; May 27.
Thurston, Howard. (See Greenwood, Fergus, assignor.)
Tifft, Thomas De C. (See Herthel, E. C., and Tifft.)
Timbs, Edward, Los Angeles, Calif., assignor to The National Supply Company of Delaware, New York, N. Y. Two-post, three-speed, three-shaft large-drum draw works. 1,760,184; May 27.
Tolman, Edgar B., jr., Chicago, Ill. Storage tank. 1,760,094; May 27.
Tost, Charles R., Centerdale, assignor to The Hadley Company, Providence, R. I. Fastener for watch bracelets. 1,760,384; May 27.
Traver, Oliver C., Schenectady, N. Y., assignor to General Electric Company. Protective arrangement. 1,760,531; May 27.
Travis, Simeon E., jr., Hattiesburg, Miss. Truck body. 1,759,876; May 27.
Trbojevich, Nikola, Detroit, Mich., assignor to Gleason Works, Rochester, N. Y. Worm gearing. 1,759,968; May 27.
Triplett, William F., Grand Junction, Colo. Aeroplane wing. 1,760,726; May 27.
Troth, Walter A., Brooklyn, N. Y. Household-waste baler. 1,760,292; May 27.
Trott, Harvey B., McKeesport, Pa. Window screen. 1,760,612; May 27.
Troy Laundry Machinery Company. (See Anderson, Ernest D., assignor.)
Tubular Rivet & Stud Company. (See Bray, Mellen N., assignor.)
Turnbull, Werd W., Dayton, Ohio, assignor to National Biscuit Company, New York, N. Y. Mold for baking cup pastry and the like. 1,759,924; May 27.
Turner, Edwin A., New York, N. Y., assignor to The Standard Stoker Company, Incorporated. Locomotive stoker. 1,760,221; May 27.
Turner Tanning Machinery Company, The. (See Schettler, Gustav A., assignor.)
Turnwald, Wolfgang, Syracuse, N. Y. Engine heater. 1,759,969; May 27.
Tusting, Goodwin O., Alameda, Calif. Luggage carrier. 1,760,452; May 27.
Tuttle, Charles F. (See Maker, F. L., Cooley, and Tuttle.)
Twin Disc Clutch Company. (See Pearmain, William J., assignor.)
Twiss, Daniel, assignor to Hynson, Westcott & Dunning, Inc., Baltimore, Md. Halogenated ortho-sulpho-benzoic acid compounds. 1,760,328; May 27.
Uhlig, Paul, Paterson, and W. Ulrich, Little Falls, N. J. Thread guide. 1,760,453; May 27.
Ulrey, Clayton T. (See Rentschler, H. C., Marden, and Ulrey.)
Ulrey, Clayton T., East Orange, N. J., assignor to Westinghouse Lamp Company. Manufacture of electron-emitting devices and the like. 1,760,454; May 27.
Ulrich, Walter. (See Uhlig, P., and Ulrich.)
Underwood, George E. (See Binnier, F., and Underwood.)
Union Swith & Signal Company, The. (See Thompson, Howard A., assignor.)
United-Carr Fastener Corporation. (See Carr, Fred S., assignor.)
United-Carr Fastener Corporation. (See Carr, Moses F., assignor.)
United-Carr Fastener Corporation. (See Holmes, George A., assignor.)
United-Carr Fastener Corporation. (See Johnson, Gustav, assignor.)
United-Carr Fastener Corporation. (See Walters, Rollo F., assignor.)
United Shoe Machinery Corporation. (See Brogan, James A., assignor.)
United Shoe Machinery Corporation. (See Chapin, Herbert L., assignor.)
United Shoe Machinery Corporation. (See Fossa, Joseph, assignor.)
United Shoe Machinery Corporation. (See Jones, John L., assignor.)
United Shoe Machinery Corporation. (See Jorgensen, Bernhardt, assignor.)
United-Shoe Machinery Corporation. (See Kershaw, John T., assignor.)
United Shoe Machinery Corporation. (See Pope, Elmer R., assignor.)
United Shoe Machinery Corporation. (See Ray, Eugene J., assignor.)
United Shoe Machinery Corporation. (See Stacey, Ernest W., assignor.)
U. S. Bottlers Machinery Co. (See Risser, Arthur I., assignor.)
United States Electrical Tool Company, The. (See Smith, John A., assignor.)
Universay Bed Company. (See Gray, C. E., and Cooke, assignors.)
Universal Gear Shift Corporation. (See Craig, Alvin M., assignor.)
Ussing, Olaf. (See Margolin, George, assignor.)
Valente, Antonio, West Albany, N. Y. Fire-extinguishing system. 1,760,385; May 27.
Van Buskirk, Lothair I. (See Campbell, S. A., and Van Buskirk.)
Van Gelderen, Frederick, M., Enschede, Netherlands. Cigar or cigarette extinguisher. 1,759,925; May 27.
Van Hoorn, Albert W. W., Wilmington, Del., assignor to American Car and Foundry Company, New York, N. Y. Boat construction. 1,760,678; May 27.
Van Valkenburg, Percy M., Adrain, Mich. Material spreader. 1,760,455; May 27.
Van Vliet, John D., San Francisco, Calif. Flying machine. 1,760,386; May 27.
Vapor Car Heating Company. (See Parks, Paul B., assignor.)
Venzie, Frederick M., Philadelphia, Pa. Building structure. 1,760,025; May 27.
Venzie, Frederick M., Philadelphia, Pa. Building construction. 1,760,026; May 27.
Venzie, Frederick M., Philadelphia, Pa. Building structure. 1,760,027; May 27.
Vernet, Sergius, Brooklyn, assignor of one-half to W. P. Hammond, Scarsdale, N. Y. Inertia pump for supplying gasoline to carburetors. 1,760,387; May 27.
Vickers (Aviation) Limited. (See Wibault, Michel, assignor.)
Victor Talking Machine Company. (See Buckle, Horace L. T., assignor.)

Voedisch, Alfred. (See Skidmore, R. P., and Voedisch.)
Vogt, Clarence C., Pittsburgh, Pa. Dental cement. 1,760,388; May 27.
Vogt, Wilmer, et al. (See Steiner, Martin, assignor.)
Von Frankenberg, Arthur, assignor to Frankart, Inc., New York, N. Y. Lamp or similar article. Des. 81,265; May 27.
Von Frantzius, Peter, Chicago, Ill. Pistol. 1,760,674; May 27.
Von Hofe, Christian, Vienna, Austria, assignor to the Czechoslovak Company: C. P. Goerz, Optische Anstalt Aktiengesellschaft, Akciova Spolecnost K. P. Goerz, Opticky Ustav, Bratislava, Czechoslovakia. Focus water level. 1,760,727; May 27.
Von Palmenberg, Raymond T., New York, N. Y. Clip. 1,760,456; May 27.
Voorhees, Daniel W., jr., Peru, Ill. Axle assembly. 1,760,613; May 27.
Voss, George. (See Stewart, James S., assignor.)
Wachs, Murray A., Brooklyn, N. Y. Mounting anchor. 1,760,728; May 27.
Wade, Harold. (See Dufay, Louis, assignor.)
Wadsten, Sten, Bloomfield, N. J., assignor to Westinghouse Lamp Company. Forming dies. 1,760,675; May 27.
Wadsworth, David T., Cold Springs, assignor to The Wadsworth Electric Manufacturing Company, Covington, Ky. Safety switch box. 1,760,571; May 27.
Wadsworth Electric Manufacturing Company, The. (See Wadsworth, David T., assignor.)
Wahl Company, The. (See Back, Robert, assignor.)
Waidelich, John F., jr., Jackson, Mich. Toe plate. 1,760,676; May 27.
Wait, Justin F., New York, N. Y., assignor to Sun Oil Company, Philadelphia, Pa. Heating process. 1,760,095; May 27.
Waite, Charles C. (See Macdonald, A. S., Waite, and Huggins.)
Waite, Lorenzo E., assignor to Erie Malleable Iron Company, Erie, Pa. Wheel. 1,760,329; May 27.
Wakefield All-Steel Wrench Company. (See Wakefield, C. E., Fleming, and Oliver, assignors.)
Wakefield, Clarence E., J. P. Fleming, and J. F. Oliver, assignors to Wakefield All-Steel Wrench Company, Inc., Worcester, Mass. Socket-wrench set. 1,760,799; May 27.
Waldman, John H., et al. (See Congdon, Walter L., assignor.)
Walker, Hubert, Royal Oak, Mich., assignor to American Car and Foundry Motors Company, New York, N. Y. Liquid-fuel-tank support. 1,760,457; May 27.
Walle, Ludwig S., Scotia, N. Y., assignor to General Electric Company. Switch-operating mechanism. 1,760,532; May 27.
Walters, Rollo F., Detroit, Mich., assignor, by mesne assignments, to United-Carr Fastener Corporation, Cambridge, Mass. Upholstery installation. 1,760,259; May 27.
Walters, Rollo F., Detroit, Mich., assignor, by mesne assignments, to United-Carr Fastener Corporation, Cambridge, Mass. Upholstery installation. 1,760,260; May 27.
Walters, Rollo F., Detroit, Mich., assignor, by mesne assignments, to United-Carr Fastener Corporation, Cambridge, Mass. Upholstery installation. 1,760,261; May 27.
Walters, Rollo F., Detroit, Mich., assignor, by mesne assignments, to United-Carr Fastener Corporation, Cambridge, Mass. Separable fastener. 1,760,262; May 27.
Walters, Rollo F., Detroit, Mich., assignor, by mesne assignments, to United-Carr Fastener Corporation, Cambridge, Mass. Separable fastener. 1,760,263; May 27.
Wambsgans, William H., Peoria, Ill. Joint for artificial limbs. 1,760,800; May 27.
Ward, Clarence A., Linden, N. J., assignor to Standard Oil Development Company. Manufacturing paraffin. 1,760,096; May 27.
Ward, Harry R. (See McBride, V. R., and Ward.)
Warner, Dan D., Jamestown, N. Dak. Box-shaped cage rat trap. 1,760,729; May 27.
Waterbury, Neil M. (See Lauenstein, C. F., and Waterbury.)
Waterman, L. E., Company. (See Larsen, Gabriel, assignor.)
Waterproof Pocket Corporation. (See Paull, S., and Mandeltort, assignors.)
Watson, Thomas A., Toronto, Ontario, Canada. Sight for firearms. 1,760,389; May 27.
Weaver, Joseph B., Toledo, Ohio, assignor, by mesne assignments, to Gyro Process Company. Treating hydrocarbon oils. Re17,681; May 27.
Webb, Earl A., Whitman, Nebr. Automatic train-order and message hoop holder. 1,760,730; May 27.
Weber, Adolph B., Wadena, Iowa. Pipe support. 1,760,458; May 27.
Weck, Alexander E., Dolau, Germany. Mechanically-operated grate-feeding means. 1,760,572; May 27.
Wedin, Ivar T., assignor to A C Spark Plug Company, Flint, Mich. Attachment for odometers. 1,760,264; May 27.
Weed, Harry D., Southport, Conn. Furnace. 1,760,459; May 27.
Weinberger, Julius, and I. Wolff, New York, N. Y., assignors to Radio Corporation of America. Loud-speaker. 1,760,862; May 27.
Weintraub, Samuel, New York, N. Y. Cleaning device. 1,760,614; May 27.
Weislow, George, Chicago, Ill. Self-locking mailing circular. 1,760,460; May 27.
Welk, Frederick W., Markesan, Wis. Hog tongs. 1,759,970; May 27.
Welland, Bardenes P., Albert Lea, Minn. Horseshoe fastener. 1,759,926; May 27.
Welsch, Wilhelm. (See Janisch, L., and Welsch.)
Wensley, Earl. (See Gudge, A. W., and Wensley.)
West, Howard W., Portsmouth, Va. Furnace or heater construction. 1,760,330; May 27.
Westberg, Edward. (See Benson, Ernest J., assignor.)
Westco-Chippewa Pump Company. (See Derrick, William I., assignor.)
Western Electric Company. (See Boynton, Stanley E., assignor.)
Western Electric Company. (See Brown, R. W., and Paulson, assignors.)
Western Electric Company. (See Fruth, Hal F., assignor.)
Western Electric Company. (See Gudge, A. W., and Wensley, assignors.)
Western Electric Company. (See Shewmon, Dan D., assignor.)
Western Electric Company. (See Stearns, Harry C., assignor.)
Western Electric Company Incorporated. (See Janicki, John, assignor.)
Western Wheeled Scraper Company. (See Slaker, Joseph H., assignor.)
Westinghouse Electric & Manufacturing Company. (See Kasley, Alexander T., assignor.)
Westinghouse Electric & Manufacturing Company. (See Miller, Charles F., assignor.)
Westinghouse Lamp Company. (See Amatel, Harold, assignor.)
Westinghouse Lamp Company. (See Brindle, Robert, jr., assignor.)
Westinghouse Lamp Company. (See Gustin, Daniel S., assignor.)
Westinghouse Lamp Company. (See Kiernan, William P., assignor.)
Westinghouse Lamp Company. (See Marden, J. W., and Rich, assignors.)
Westinghouse Lamp Company. (See Matlock, Robert C., jr., assignor.)
Westinghouse Lamp Company. (See Rentschler, H. C., Marden, and Ulrey, assignors.)
Westinghouse Lamp Company. (See Rentschler, H. C., and Merrymon, assignors.)
Westinghouse Lamp Company. (See Rentschler, Harvey C., assignor.)
Westinghouse Lamp Company. (See Sproesser, W. C., and Lederer, assignors.)
Westinghouse Lamp Company. (See Ulrey, Clayton T., assignor.)
Westinghouse Lamp Company. (See Wadsten, Sten, assignor.)
Weston Electrical Instrument Corporation. (See Seitz, Louis J., jr., assignor.)
Wetzel, Charles H., Wayne, Pa. Grandstand. 1,760,801; May 27.
Wetzel, Frank. (See Gillham, R., Addison, Wetzel, and Langen.)
Weyandt, Carl S., Pittsburgh, Pa., assignor to Syntron Company. System of electrical precipitation. 1,760,461; May 27.
Wheatcroft, Edward I. E. (See Petch, H. S., and Wheatcroft.)
Wheeler, Henry H., Brooklyn, N. Y., assignor to International Cigar Machinery Company. Banding attachment for cigar-enveloping machines. 1,760,615; May 27.
Whirldry Corporation. (See Dunham, George W., assignor.)
Whitaker, Frank P., Rugby, England, assignor to General Electric Company. Vapor-discharge device. 1,760,533; May 27.
Whitcomb, Geo. D., Company. (See Whitcomb, William C., assignor.)
Whitcomb, William C., assignor to Geo. D. Whitcomb Company, Rochelle, Ill. Hydraulic conveyer. 1,760,616; May 27.
White, Fred E., and A. Ruttiman, assignors to Florence Stove Company, Boston, Mass. Pressure burner. 1,760,390; May 27.
White, Halbert E., Tampa, Fla. Building. 1,760,331; May 27.
Whiting, George A., Windsor, Victoria, and R. A. Holland, West Brunswick, Victoria, assignors to E. M. F. Electric Company Proprietary Limited, South Melbourne, Victoria, Australia. Arc welding. 1,760,534; May 27.
Whitmarsh, Ernest B., assignor to Detroit Brass and Malleable Works, Detroit, Mich. Valve and cock. 1,760,222; May 27.
Whitmore, John, assignor to Davidson & Company Limited, Belfast, Ireland. Apparatus for separating and collecting dust. 1,760,617; May 27.
Whitson, David E. (See Fortune, J. A., and Whitson.)
Wibault, Michel, Paris, France, assignor to Vickers (Aviation) Limited, Westminster, England. Aeroplane wing and the like. 1,760,332; May 27.
Wiedenboeft, Alfred F., Chicago, Ill. Lamp. 1,760,677; May 27.

Wild, Karl F., Peoria, Ill. Safety catch for pins. 1,760,802; May 27.
Willamette Iron and Steel Works. (See Gorbutt, Sidney B., assignor.)
Williams, Charles E., and J. A. Johnson, assignors to Indiana Brass Company, Frankfort, Ind. Tank-filling apparatus. 1,760,391; May 27.
Williams, Edgar A., Upper Black Eddy, Pa. Interchangeable barrel for guns. 1,760,731; May 27.
Williams, Harry M., and R. G. Suman, assignors to General Motors Research Corporation, Dayton, Ohio. Producing metal sheets by electrodeposition. 1,760,028; May 27.
Williams, Oliver J., Burlingame, Calif. Rotary pivoted hammer. 1,760,097; May 27.
Willoughby, Lively B., Bowling Green, Ky. Biscuit package. 1,760,732; May 27.
Wilt, Elmer E., assignor to Wilt Trunk Company, Chicago, Ill. Wardrobe suitcase. 1,760,098; May 27.
Wilt Trunk Company. (See Wilt, Elmer E., assignor.)
Winchester Repeating Arms Company. (See Humeston, Frederick L., assignor.)
Wineman, Wade H., Michigan City, Ind., assignor to Sullivan Machinery Company. Punching mechanism. 1,760,333; May 27.
Wing, Roy E., Highland Park, Mich. Brine and erosion control for railroads. 1,760,099; May 27.
Wingler, August. (See Schulemann, W., Schönhöfer, and Wingler.)
Winthrop Chemical Company. (See Schulemann, W., Schönhöfer, and Wingler, assignors.)
Wiremold Company, The. (See Murphy, Daniel H., assignor.)
Wirth, John, New York, N. Y. Combination ladder step and support. 1,760,803; May 27.
Witter, Willis D., Catonsville, Md., assignor, by mesne assignments, to American La France and Foamite Corporation. Fire extinguisher. 1,760,294; May 27.
Wittkuhns, Bruno, New York, N. Y., assignor to the firm: Magnet-Werk G. m. b. H., Eisenach Spezialfabrik für Elektromagnet-Apparate, Eisenach, Thuringia, Germany. Friction coupling. 1,760,223; May 27.
Wittliff, Theodore H., Cleveland, Ohio. Furniture brace. 1,760,100; May 27.
Witzal, Andrew, Scranton, A. G. Rabel, Throop, and H. F. Stevens, Dunmore, Pa. Coal-washing apparatus. 1,760,293; May 27.
Wolff, Irving. (See Weinberger, J., and Wolff.)
Wolfson, Max S., et al. (See Howard, John, assignor.)
Wolverine Supply & Manufacturing Company. (See Gorlup, Frank J., assignor.)
Wood, Henry A. W., assignor to Wood Newspaper Machinery Corporation, New York, N. Y. Page cut-off for ink fountains. 1,760,573; May 27.
Wood Newspaper Machinery Corporation. (See Wood, Henry A. W., assignor.)
Wood, Walter A., Flint, assignor to General Motors Research Corporation, Detroit, Mich. Engine-valve-operating means. 1,760,853; May 27.
Woodhead, Daniel, Chicago, Ill. Lamp-guard handle. 1,760,018; May 27.
Woods, Frank E. (See Baldwin, E. F., and Woods.)
Woolson, Harry T., Detroit, assignor to Chrysler Corporation, Highland Park, Mich. Clutch-plate connection. 1,760,619; May 27.
Woonsocket Machine & Press Co. (See Moss, Joseph, assignor.)
Wray, James A., Los Angeles, Calif. Swivel. 1,760,224; May 27.
Wright Company, The. (See Wright, Max, assignor.)
Wright, Max, assignor to The Wright Company, Atlanta, Ga. Vender's cart. 1,760,854; May 27.
Wright, Wilbur L., Fulton, and J. T. Bond, Phoenix, assignors to Oswego Falls Corporation, Fulton, N. Y. Exterior slip cover for containers. 1,760,029; May 27.
Wright, William J., Overlea, Baltimore, Md. Book-identification device. 1,760,574; May 27.
Wynne, Thomas N., Indianapolis, Ind. Coal spreader. 1,759,877; May 27.
Yeo, Samuel P., Philadelphia, Pa. Depository device. 1,760,462; May 27.
Yohe, Perry P., Minneapolis, Minn., assignor to Koehring Company, Milwaukee, Wis. Mixing machine. 1,760,101; May 27.
York Ice Machinery Corporation. (See Rosenmiller, Joseph L., assignor.)
Young, Frederick N., Claremont, N. H. Staple and nail extractor. 1,760,804; May 27.
Zaidan Hojin Rikgaku Kenkyujo. (See Okochi, M., and Ebihara, assignors.)
Zeiss, The firm Carl. (See Pfeiffer, F., and Kühl, assignors.)
Zeiss, firm of Carl. (See Pfeiffer, Franklin, assignor.)
Zellstoffabrik Waldof. (See Luhrs, Otto, assignor.)
Zizzo, Charles, Newark, N. J. Folding seat for automobile doors. 1,759,878; May 27.
Zubaty, Joseph, and D. E. Keeney, assignors to A C Spark Plug Company, Flint, Mich. Instrument panel. 1,760,855; May 27.
Zurian, Philip D., assignor, by mesne assignments, to Burgess Battery Co., Madison, Wis. Radiotransmitter. 1,760,225; May 27.
Zwicky, Jean, Maidenhead, England. Filter. 1,759,927; May 27.

ALPHABETICAL LIST OF INVENTIONS

FOR WHICH

PATENTS WERE ISSUED ON THE 27TH DAY OF MAY, 1930

NOTE.--Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). **Includes patents, reissues, and designs.**

Absorbent and catalytic mass, Highly-active. F. Stoewener. 1,760,289; May 27.
Acid compounds, Halogenated ortho-sulpho-benzoic. D. Twiss. 1,760,328; May 27.
Acid sludge, apparatus for hydrolyzing. F. L. Maker, J. L. Cooley, and C. F. Tuttle. 1,760,246; May 27.
Acoustic device, Multiple resonant. A. McL. Nicolson. 1,760,252; May 27.
Advertising device. M. C. Chapman. 1,760,746; May 27.
Advertising novelty, Football-game indicating. H. G. Ross. 1,760,608; May 27.
Advertising structure. D. J. Barker. 1,760,186; May 27.
Aeration device for internal-combustion engines. R. Nacket. 1,760,315; May 27.
Aeroplane. C. R. Morrison. 1,760,164; May 27.
Aeroplane. E. A. Stinson. Des. 81,261; May 27.
Aeroplane wing. W. F. Triplett. 1,760,726; May 27.
Aeroplane wing and the like. M. Wibault. 1,760,332; May 27.
Agricultural machine. J. S. Stewart. 1,760,569; May 27.
Air classifier. A. H. Stebbins. 1,759,959; May 27.
Air cleaner. E. R. Evans. 1,760,351; May 27.
Air cleaner. C. L. McCuen. 1,760,272; May 27.
Air gun. C. C. Loomis. 1,760,652; May 27.
Airplane construction. W. A. Endter. 1,760,485; May 27.
Airplane wing. J. B. Slinn. 1,760,787; May 27.
Airship. C. Giudice. 1,760,692; May 27.
Alkaline-earth titanates, Production of. R. H. Monk and L. Firing. 1,760,513; May 27.
Alloy, Aluminum. T. S. Fuller and D. Basch. 1,760,549; May 27.
Alloy, Iron-nickel. F. Stäblein. 1,760,326; May 27.
Ammonia-factor gases, Preparing. F. H. Snyder and E. D. Newkirk. 1,760,014; May 27.
Ammonia, Process of and apparatus for making. F. H. Snyder and E. D. Newkirk. 1,760,013; May 27.
Amplifying and reproducing system. L. F. Douglass. 1,760,821; May 27.
Anchor, Mounting. M. A. Wachs. 1,760,728; May 27.
Anchor, Rail. G. L. Moore and J. R. Steele. 1,760,275; May 27.
Animal bath. D. E. Smoot. 1,760,017; May 27.
Antiaircraft offensive and defensive means. W. H. Mount. 1,759,912; May 27.
Antiglare attachment for wind shields of automobiles. A. S. John. Des. 81,242; May 27.
Antisqueak strip. R. Drangeid. 1,760,838; May 27.
Apparatus for plucking poultry. E. L. Arminger. 1,760,392; May 27.
Apparatus for separating and collecting dust. J. Whitmore. 1,760,617; May 27.
Arch construction, Refractory. B. Doble. 1,760,121; May 27.
Arm rest. M. M. Taylor. 1,760,450; May 27.
Articles from sheet material, Producing. A. W. Gudge. 1,759,844; May 27.
Ash-forming constituents from oil, Removing. H. G. M. Fischer. 1,760,129; May 27.
Autographic register, Multiplex. A. W. Metzner. 1,760,847; May 27.
Automobile seat, Convertible. R. L. Grider. 1,759,942; May 27.
Awning and shade, Combination. G. W. Miller. 1,760,428; May 27.
Axle. G. W. Harper. 1,760,356; May 27.
Axle assembly. D. W. Voorhees, jr. 1,760,613; May 27.
Axle mounting for safety sheave blocks. W. H. McKissick. 1,760,273; May 27.
Bag: *See*—
Hand bag.
Baler, Household-waste. W. A. Troth. 1,760,292; May 27.
Bases, Threading. R. Brindle, jr. 1,760,629; May 27.
Basing machine for incandescent lamps and similar devices. W.-W. Loebe, W. Ledig, and H. Asmussen. 1,760,507; May 27.
Basket, Dish. T. McGill. 1,759,993; May 27.
Bassinet. L. R. Dougherty. 1,760,301; May 27.
Bath: *See*—
Animal bath.
Bead-cutting mechanism. W. E. Humphrey. 1,760,411; May 27.
Bearing and making same. W. H. Klocke. 1,760,559; May 27.
Bearing, Antifriction roller side. J. F. O'Connor. 1,760,206; May 27.
Bearing, Trolley. M. D. Stalder. 1,760,020; May 27.
Bearings, Making. E. P. Kerruish. 1,759,906; May 27.
Bed attachment. L. R. Dougherty. 1,760,303; May 27.
Bedding clamp. F. M. Correa. 1,760,346; May 27.
Bedsprings, Adjusting articulated. L. R. Dougherty. 1,760,302; May 27.
Bedstead and bed bottom. C. R. Minter. 1,760,766; May 27.
Beds, Brace-leg opening apparatus for folding. C. E. Gray and S. B. Cooke. 1,760,235; May 27.
Benzol and its homologues from fuel gases, Removal of. J. Becker. 1,760,835; May 27.
Bib, Plumber's. S. M. Kass. 1,759,904; May 27.
Billing machines, Copyholder for. C. R. Drake. 1,760,403; May 27.
Bin indicator. H. C. Mittendorf. 1,760,204; May 27.
Binder, Sheet. L. C. Reynolds. 1,760,564; May 27.
Biscuit package. L. B. Willoughby. 1,760,732; May 27.
Biscuits or the like, Apparatus for the manufacture of. W. Dredge. 1,760,047; May 27.
Bit: *See*—
Drill bit.
Bitumen spreader. C. G. Talbott. 1,759,920; May 27.
Blacking machine. H. L. Chapin. 1,760,115; May 27.
Block: *See*—
Composition block. Skewback block.
Blocks, Making refractory. G. W. Parker. 1,760,861; May 27.
Board: *See*—
Ironing board.
Boat. C. A. Herrmann. 1,760,696; May 27.
Boat, Aero speed. P. K. Dudley. 1,760,484; May 27.
Boat construction. A. W. W. van Hoorn. 1,760,673; May 27.
Boiler: *See*—
Low-pressure boiler. Steam boiler.
Boiler. M. N. Freeman. 1,760,487; May 27.
Boiler attachment. I. D. Eby. 1,760,588–9; May 27.
Boiler cleaner. N. L. Snow and C. L. Howse. 1,759,870; May 27.
Boiler furnace. J. B. Crane. 1,760,118; May 27.
Boiler furnace, Powdered-fuel-burning. S. A. Jacques. 1,760,140; May 27.
Bolt lock. C. V. Newbill. 1,759,994; May 27.
Bolt-trimming machines, Feed for. W. L. Clouse. 1,759,890; May 27.
Book-identification device. W. J. Wright. 1,760,574; May 27.
Bore-opening apparatus. L. E. Croft. 1,760,584; May 27.
Boring machine, Portable. J. J. Brosnan. 1,760,189; May 27.
Bottle. N. K. Garhart. 1,760,841; May 27.
Bottle. O. E. Raab. 1,759,866; May 27.
Bottle stopper. H. H. Elliott. 1,760,127; May 27.
Box: *See*—
Bread box. Switch box.
Smoke box.
Brace: *See*—
Furniture brace.
Bracelet chain. E. Prestinari. 1,760,662; May 27.
Bracelet for watches or the like. C. A. Domler. 1,760,689; May 27.
Bracket: *See*—
Journal and guide bracket.
Bracket. J. J. Knape. 1,760,503; May 27.
Braiding machine. D. H. Murphy. 1,760,768; May 27.
Brake: *See*—
Dough brake.
Brake. A. J. Chanter. 1,759,934–5; May 27.
Brake equalizer for rotary draw works, Differential and straight. J. D. Spalding and D. S. Faulkner. 1,760,180; May 27.
Brake mechanism for vehicles. B. Stockfleth and F. W. Burger. 1,759,963; May 27.
Brake pedals, Pressure applying and indicating device for. F. B. McKinney and C. H. Allen. 1,760,602; May 27.
Brake system. H. A. Davis. 1,760,543; May 27.
Brake testing device for automobiles. C. F. Cowdrey. Re17,677; May 27.
Bread box. C. March. 1,760,761; May 27.
Brick for firebox arches, Side. J. E. Muhlfeld. 1,760,431; May 27.
Bridge for steam-engine exhaust nozzles. A. R. Ayers. 1,760,576; May 27.
Brine and erosion control for railroads. R. E. Wing. 1,760,099; May 27.
Brooms, Scraper-blade attachment for. H. S. Johns. 1,760,648; May 27.
Brush, Fountain. M. Soss. 1,760,018; May 27.
Brushes, Massage attachment for shaving. F. Dietrichson. 1,760,747; May 27.
Bucket, Clamshell. T. Carlson. 1,760,812; May 27.
Buckets, Attachment for paint. H. Sill. 1,760,722; May 27.

Buckle. W. L. Myers. Des. 81,253; May 27.
Buckle and button loop, Combined. W. M. Hueseman. 1,759,944; May 27.
Building. H. E. White. 1,760,331; May 27.
Building blocks, Making. M. Skolnik. 1,760,446; May 27.
Building construction. F. M. Venzie. 1,760,026; May 27.
Building structure. S. B. Creamer and H. R. Ansell. 1,760,817; May 27.
Building structure. F. M. Venzie. 1,760,025; May 27.
Building structure. F. M. Venzie. 1,760,027; May 27.
Bungalow box. R. Stover. Des. 81,263; May 27.
Burner: *See*—
Gas burner. Pressure burner.
Oil burner.
Burner for furnaces, Gas. R. B. Fanning. 1,760,858; May 27.
Burners, Combined starting and mixing chamber for liquid-fuel. J. Ironsides. 1,760,412; May 27.
Button, Lapel. L. F. Henebry. Des. 81,237; May 27.
Button, Tack-attached. M. F. Carr. 1,760,835; May 27.
Cabinet, Sanitary. N. T. and E. H. Hammer. 1,760,494; May 27.
Cable. J. F. Howe. 1,760,409; May 27.
Cable, Electric. C. R. Boggs. 1,759,883; May 27.
Cable grip. P. J. Martin. 1,760,074; May 27.
Cables, Assembly of. H. I. Becker. 1,760,538; May 27.
Cables, Manufacture of telegraph and telephones. W. Smith and A. D. Shuter. 1,760,012; May 27.
Cage rat trap, Box-shaped. D. D. Warner. 1,760,729; May 27.
Camera for photographing the eyeball. F. Pfeiffer and T. Kühl. 1,760,208; May 27.
Capping machine, Can-. J. J. Lach. 1,760,859; May 27.
Car, Hopper. A. Kassler. 1,760,601; May 27.
Car, Refrigerator. W. C. Stone. 1,760,182; May 27.
Car seat. W. J. Mayer. 1,760,653; May 27.
Car-washing apparatus. W. D. Pomeroy. 1,760,849; May 27.
Carbon paper, Apparatus for manufacturing. H. W. A. Dixon. 1,760,045; May 27.
Carburetor. W. A. Heide. 1,760,595; May 27.
Card case. W. J. Ecker, jr. 1,759,980; May 27.
Card, Detachable record. C. D. Lake. 1,760,417; May 27.
Card or like member for indexes or files, Record. C. S. Campbell and A. E. Hunt. 1,760,474; May 27.
Carousel, Occupant-propelled. L. Bustin and F. Prava. 1,760,811; May 27.
Carpet-cleaning machine. H. P. Johnston. 1,760,599; May 27.
Carrier: *See*—
Coal carrier. Luggage carrier.
Cart, Vender's. M. Wright. 1,760,854; May 27.
Carton, Egg. E. E. Hale. 1,760,132; May 27.
Carton, Locking. H. Amatel. 1,760,678; May 27.
Carton or box. R. P. Hayden. 1,760,753; May 27.
Case: *See*—
Card case. Vanity case.
Case for books or the like. A. Steinschneider. 1,760,448; May 27.
Cash register. J. L. Carrillo. 1,760,744; May 27.
Cash register. B. M. Shipley. 1,760,783; May 27.
Casing, Exercising and massaging machine. F. A. Anderson. Des. 81,222; May 27.
Casing for combined weighing and insurance-vending machines. G. H. Butler. Des. 81,227; May 27.
Casing for vehicles, Combined fender and tail-lamp. J. R. Hughes. Des. 81,240; May 27.
Catch for pins, Safety. K. F. Wild. 1,760,802; May 27.
Catch plate for knob latches. F. E. Best and C. Evensen. 1,760,394; May 27.
Centrifugal. C. Schaum. 1,760,286; May 27.
Centrifugal separator. H. G. Koepke. 1,760,071; May 27.
Chain, Mine cutter. F. Cartlidge. 1,760,816; May 27.
Chair: *See*—
Folding chair.
Chair. C. V. King. 1,760,365; May 27.
Chair. C. V. King. 1,760,414; May 27.
Chandelier. F. Gunnison. Des. 81,234; May 27.
Change-over device for boiler-feed-water heaters and similar apparatus, especially applicable for locomotives. P. Jullusburger. 1,759,986; May 27.
Chimney-cap heater. L. L. Blanchard. 1,759,830; May 27.
Chin rest and shoulder pad, Combination. F. Gosparlin. 1,760,593; May 27.
Chocolate in melted condition, Apparatus and method for maintaining. 1,759,964; May 27.
Chromates with simultaneous recovery of alumina, Production of. H. Specketer and G. Henschel. 1,760,788; May 27.
Chromium and producing the same, Ductile. J. W. Marden and M. N. Rich. 1,760,367; May 27.
Chuck structure. W. H. Rover. 1,760,565; May 27.
Cigar-enveloping machines, Banding attachment for. H. H. Wheeler. 1,760,615; May 27.
Cigar or cigarette extinguisher. F. M. Van Gelderen. 1,759,925; May 27.
Cinematograph projection apparatus. J. E. Thornton. 1,760,219; May 27.
Cinematograph spool case. J. E. Thornton. 1,760,220; May 27.
Circuit controller. F. E. Case. 1,760,814; May 27.
Circuit, Modulation. W. Schaffer. 1,760,285; May 27.
Circuit, Receiving. L. D. Kellogg. 1,759,853; May 27.
Circuits for thermionic tubes. F. S. McCullough. 1,759,910; May 27.
Clamp: *See*—
Bedding clamp. Skate clamp.
Meat clamp.
Clamp-connecting device, Bushing-. E. M. Rosenfield. 1,760,663; May 27.
Clay, Treating. W. G. Buckles. 1,760,191; May 27.
Cleaner: *See*—
Air cleaner. Pipe cleaner.
Boiler cleaner. Shoe cleaner.
Cleaner or filter for carburetors, Air. W. V. Ludlam. 1,760,705; May 27.
Cleaning and washing device. M. S. Carmichael. 1,760,041; May 27.
Cleaning device. S. Weintraub. 1,760,614; May 27.
Cleaning implement, Sink-. H. Cave. 1,760,268; May 27.
Cleat, Shoe. G. L. Pierce. 1,760,084; May 27.
Clip. R. T. von Palmenberg. 1,760,456; May 27.
Clip for a fountain pen or the like. G. Larsen. Des. 81,246–7; May 27.
Clock dial and illuminating the same, Advertising. J. I. Parrish. 1,760,253; May 27.
Clock system, Self-regulating. J. W. Bryce. 1,760,631; May 27.
Closure, Disk-form bottle. F. O'Neill, jr. 1,760,279; May 27.
Closure structure. J. S. Reid. 1,760,439; May 27.
Clothes hanger. C. M. Bolinger. 1,760,739; May 27.
Clothes-hanging device. A. Tammarazzo. 1,760,290; May 27.
Clothespin. R. V. Shackelford. 1,760,445; May 27.
Clutch. W. J. Pearmain. 1,760,605; May 27.
Clutch, Roller. W. Miller. 1,760,708–9; May 27.
Clutch, Roller. W. Miller. 1,760,765; May 27.
Coal carrier. H. E. Streitwieser. 1,760,793; May 27.
Coal in the mill, Drying. H. Kreisinger. 1,760,148; May 27.
Coal spreader. T. N. Wynne. 1,759,877; May 27.
Coal-washing apparatus. A. Witzal, A. G. Rabel, and H. F. Stevens. 1,760,293; May 27.
Coffee mill. J. Hertz. 1,760,755; May 27.
Coffee-roasting machine. J. F. Quinn. 1,759,955; May 27.
Coins, Testing. F. H. Brinkerhoff. 1,760,579; May 27.
Collector for finely-divided solids. I. S. and O. E. Merrell. 1,760,764; May 27.
Comb. H. J. Ries. 1,760,778; May 27.
Comestibles with smoke, Treatment of. H. F. Taylor. 1,760,091; May 27.
Composition block. G. F. A. Ochs. 1,760,713; May 27.
Compound, Pickling. P. J. Cole and C. Banta. 1,759,840; May 27.
Compression engine, Constant-. A. C. Peterson. 1,760,083; May 27.
Compressor, pump, or motor, Rotary. C. A. Hult. 1,760,699; May 27.
Compressor, Refrigerant. J. A. Fortune and D. E. Whitson. 1,760,636; May 27.
Concentrator table. A. H. Stebbins. 1,759,060; May 27.
Concrete especially for pavings, Producing waterproof. R. Schubert. 1,760,214; May 27.
Concrete mold. W. J. Pedersen. 1,760,282–3; May 27.
Concrete surfaces, Finishing. J. W. Heltzel. 1,760,596; May 27.
Condensation products from hydroxybenzenes and hydroaromatic ringketones, Manufacturing. E. Korten. 1,760,758; May 27.
Condenser, Variable electric. W. W. Drury. 1,759,979; May 27.
Conductor terminal. G. Bedard. 1,760,035; May 27.
Conductors, Method and apparatus for treating insulated. W. S. Clark. 1,760,583; May 27.
Conduit coupling. H. A. Selah. 1,760,011; May 27.
Conduit for the exhaust pipes of internal-combustion engines, Collecting. F. A. Boysen. 1,760,682; May 27.
Connecter, Electrical. H. Neubert. 1,760,515; May 27.
Connection, Clutch-plate. H. T. Woolson. 1,760,619; May 27.
Connection for motor-driven vehicles, Drive-shaft. C. F. Kettering and C. R. Short. 1,760,845; May 27.
Connection, Joist. H. H. Lampert. 1,759,908; May 27.
Construction toy. A. C. Gilbert. 1,760,638; May 27.
Contact-making device. R. K. Bonell. 1,759,933; May 27.
Contact mechanism for electric clocks. W. E. Porter. 1,760,661; May 27.
Container, Cracker. L. H. Boattenhamer. Des. 81,225; May 27.
Container, Drop-bottom shipping. F. K. Fildes. 1,760,305; May 27.
Container, Fibrous. M. Small. 1,760,325; May 27.
Container, Insecticide. J. P. Horn. 1,760,598; May 27.
Container, Key. H. Bock. 1,760,469; May 27.
Container or tube for dentifrice. C. J. Penney. 1,760,773; May 27.
Container, Safety. S. Paull and S. Mandeltort. 1,760,604; May 27.
Container, Transformer. A. F. Pieper. 1,759,997; May 27.
Container, Vacuum. F. Seigheim. 1,760,321; May 27.
Container, Vacuum-walled. F. Siegheim. 1,760,378; May 27.
Containers, Apparatus for making. L. Stevens. 1,760,288; May 27.

Control device, Multiple-. J. J. Mitchell. 1,760,710; May 27.
Control for door latches, Remote. F. D. Grund and H. W. Rightmyer. 1,760,491; May 27.
Control, Generator. E. W. Seeger. 1,760,088; May 27.
Control means, Electric-circuit-. A. J. May. 1,760,763; May 27.
Control means for motor-driven devices. R. G. Lockett. 1,760,600; May 27.
Control mechanism for metal planers. R. Gillham, T. Addison, F. Wetzel, and G. Langen. 1,760,039; May 27.
Control mechanism for movable elements. I. E. Brown and N. Hoffman. 1,760,472; May 27.
Control of aeroplanes and the like. M. L. Bramson. 1,760,740; May 27.
Control system, Radiant-energy. H. D. Colman. 1,760,479; May 27.
Controlling device for winding and roll-ejecting mechanism, Interconnected. R. McC. Johnstone. 1,760,362; May 27.
Controlling means for electric switches. C. H. Teesdale. 1,760,382; May 27.
Conveyer for fruits and vegetables. A. O. Moe. 1,760,369; May 27.
Conveyer, Hydraulic. W. C. Whitcomb. 1,760,616; May 27.
Cooker, Electric and fireless. J. H. Reichart. 1,759,957; May 27.
Cooking apparatus, Electrical. P. S. Banff. 1,759,832; May 27.
Cooling mechanism for glass-feeder shear blades. K. E. Peilrel. 1,760,255; May 27.
Cores from castings, Apparatus for removing. A. Hansen. 1,760,495; May 27.
Cork-feeding device. A. I. Risser. 1,760,441; May 27.
Corn trimmer. J. T. McGrath. 1,759,911; May 27.
Corset. T. McKenzie. 1,760,247; May 27.
Cot for automobiles, Camp. J. W. Denton. 1,759,977; May 27.
Cotton-cleaning machines, Attachment for. J. B. Brennen. 1,760,037; May 27.
Cotton wool for dressing purposes, Packing. A. Lehmann. 1,760,419; May 27.
Coupling: *See*—
Conduit coupling. Friction coupling.
Flexible coupling. Valved coupling.
Coupling. E. J. Hall. 1,760,492; May 27.
Coupling for insulators. H. P. Sleeman. 1,760,786; May 27.
Cover for containers, Exterior slip. W. L. Wright and J. T. Bond. 1,760,029; May 27.
Cover, Spring. B. B. Leustig. 1,760,651; May 27.
Crank-case ventilation. R. Clason. 1,760,836; May 27.
Cultivator. S. L. Kidd. 1,759,854; May 27.
Cultivator. A. W. Reynolds. 1,760,001; May 27.
Cup or similar article, Paper. A. S. Allen. Des. 81,218; May 27.
Current collector bows, Device for the prevention of the tilting movement of. F. Szalay. 1,760,795; May 27.
Cushion cap for tools. J. B. Crofoot. Re17,684; May 27.
Cutter: *See*—
Twine cutter. Weed cutter.
Cutter and grinder, Ensilage. C. W. Keith. 1,759,905; May 27.
Cutting device. J. Fossa. 1,759,842; May 27.
Cylindrical articles from flat blanks, Making. W. H. Klocke. 1,760,558; May 27.
Davenport, Bed. C. W. Meves. 1,760,161; May 27.
Decoy, Predatory-bird. A. E. Kemmerling. 1,760,364; May 27.
Dental cement. C. C. Vogt. 1,760,388; May 27.
Depository device. S. P. Yeo. 1,760,462; May 27.
Derricks, Reenforcing leg and clamp for angle-iron. J. P. Foukes. 1,760,691; May 27.
Developing apparatus with tubular gas discharge. A. Langsner. 1,760,149; May 27.
Device for lifting invalids. F. Scheidegger. 1,760,443; May 27.
Device for stirring frozen desserts. R. E. Maxwell. 1,760,654; May 27.
Die-casting machine. M. Stern. 1,760,258; May 27.
Die-casting machine. M. Stern. 1,760,610; May 27.
Die head. H. T. Shearer. 1,706,567–8; May 27.
Die-lapping machine. W. Haddow. 1,760,406; May 27.
Dies, Forming. S. Wadsten. 1,760,675; May 27.
Digger: *See*—
Grass digger.
Dipper for semisolid materials. M. E. Miller. 1,760,561–2; May 27.
Dipper, Ice-cream. C. G. Hertzer. 1,760,358; May 27.
Direction-finder observations, Coordination of. S. W. Dean. 1,759,938; May 27.
Dishwashing machine. A. B. Schmidt and L. A. James. 1,760,779; May 27.
Dishwashing machine. E. S. Stoddard. 1,760,668; May 27.
Dispenser, Soft-soap. F. M. Funk. 1,760,404; May 27.
Display device. B. F. Stenz. 1,760,792; May 27.
Display head. E. D. Kidd. Des. 81,244; May 27.
Display package for paper napkins or the like. R. W. Beach. 1,760,106; May 27.
Display rack. W. C. Hornaday. 1,760,135; May 27.
Display stand. M. G. Gibson. 1,760,131; May 27.
Display stand, Collapsible. M. J. Marrits. 1,760,309; May 27.
Distribution system. H. D. Brown. 1,760,580; May 27.
Ditching machines and the like, Bucket chain for. C. L. George. 1,760,489; May 27.
Dress, Diving. V. R. McBride and H. R. Ward. 1,760,512; May 27.
Doll, Candy. M. C. Knapp. Des. 81,245; May 27.
Dolls' eyes to dolls' heads, Attaching. I. A. Rommer. 1,760,002; May 27.
Domestic appliance. R. L. Lee. 1,759,947; May 27.
Doorcheck. W. F. Hendry. 1,759,846; May 27.
Door construction for railway cars and locking means therefor, End-. E. R. Schulz. 1,760,173; May 27.
Door-operating mechanism. G. M. Schantz. 1,760,528; May 27.
Door-operating mechanism, Electric. L. P. Hynes. 1,760,063; May 27.
Door-operating mechanism, Remote-controlled. G. A. Crosman. 1,760,298; May 27.
Door operation, Car-. L. P. Hynes. 1,760,062; May 27.
Door, Vehicle-operated garage. J. Tenbrook. 1,760,023; May 27.
Dough brake. F. M. Aldrich and C. L. Hansen. 1,760,185; May 27.
Drafting implement. T. P. Leaman. 1,759,989; May 27.
Drain trap. J. E. Ehret. 1,760,126; May 27.
Drainage system. E. Murrey. 1,760,314; May 27.
Drainer. W. A. Muller. 1,760,205; May 27.
Drainpipes, Headwall for. M. L. Sullivan. 1,760,380; May 27.
Draw works, Two-post, three-speed, three-shaft large-drum. E. Timbs. 1,760,184; May 27.
Drill: *See*—
Rock drill.
Drill bit. R. O. Pickin. 1,760,317; May 27.
Drilling machine. J. F. Mirrielees. 1,760,430; May 27.
Drilling mechanism. C. F. Osgood. 1,760,316; May 27.
Drive for rotating brushes, wheels, etc. O. R. Hasty. 1,760,843; May 27.
Driving and speed-varying mechanism. S. Klein. 1,759,856; May 27.
Driving means, Flexible. F. N. Bardwell. 1,759,833; May 27.
Dry cell. W. D. Staley. 1,760,090; May 27.
Dry-cleaning machine. O. Thibault and R. Reid. 1,760,218; May 27.
Drying and finishing machine. S. Norden. 1,760,516; May 27.
Drying frame, Handerchief-. L. Flentye. 1,760,548; May 27.
Drying materials. F. A. Secord. 1,760,444; May 27.
Duplicator. H. K. Lorentzen. 1,760,152; May 27.
Dust guard. D. S. Barrows. 1,760,105; May 27.
Dye, β-mercapto-propionic acid anthraquinone. H. Berthold. 1,760,806; May 27.
Dye solution. C. S. Miner. 1,760,076; May 27.
Dyeing machine. J. H. Thompson. 1,760,798; May 27.
Dyestuffs, Indigoid vat. K. Thiess, T. Meissner, and C. J. Müller. 1,760,797; May 27.
Dyestuffs of the indigoid series, Vat. W. Neelmeier and T. Nocken. 1,760,769; May 27.
Egg candler. R. B. Hochstadter and F. Hochstadter. 1,760,697; May 27.
Egg-testing device. J. Pampe. 1,760,658; May 27.
Electric braking. L. Janisch and W. Welsch. 1,760,556; May 27.
Electric-discharge device. H. C. Rentschler. 1,760,524; May 27.
Electric heater. L. P. Hynes. 1,760,065; May 27.
Electric installation in combination with pressure-splitting device. A. D. Riccia. 1,760,777; May 27.
Electric oscillations, Apparatus for producing. A. M. Nicolson. 1,760,251; May 27.
Electric resistance. C. S. Hawley. 1,760,057; May 27.
Electric switch. J. D. Hilliard. 1,760,554; May 27.
Electric switch. C. F. Schwennker. 1,760,529; May 27.
Electric switches, Operating mechanism for. F. E. Fisher. 1,760,547; May 27.
Electrical apparatus. W. A. Collins. 1,760,837; May 27.
Electrical apparatus. M. Moneyron. 1,760,656; May 27.
Electrical apparatus. W. H. F. Schmieding. 1,759,958; May 27.
Electrical apparatus. H. A. Thompson. 1,759,923; May 27.
Electrical apparatus, Adjusting. G. J. Elix, jr. 1,759,841; May 27.
Electrical device. L. T. Robinson. 1,760,527; May 27.
Electrical pick-up. M. C. Hopkins. 1,760,647; May 27.
Electrical precipitation, System of. C. S. Weyandt. 1,760,461; May 27.
Electrode. H. C. Rentschler. 1,760,526; May 27.
Electron-emission material. H. C. Rentschler, J. W. Marden, and C. T. Ulrey. 1,760,440; May 27.
Electron-emitting devices and the like, Manufacture of. C. T. Ulrey. 1,760,454; May 27.
Electrooptical-image production. R. C. Mathes. 1,760,159; May 27.
Electroresponsive device. A. Cohn. 1,760,542; May 27.
Engine: *See*—
Compression engine. Internal-combustion engine.
Hot-air engine. Logging engine.
Engine heater. W. Turnwald. 1,759,969; May 27.
Engines, Removable valve cage for internal-combustion. A. Hasbrouck. 1,760,497; May 27.
Engraving-press attachment. W. J. Ecker, jr. 1,760,049; May 27.

Ensemble suit. D. Long. Des. 81,251; May 27.
Expander. P. R. Forman. 1,760,052; May 27.
Extractor: *See*—
  Rotary or spinning extractor. Staple and nail extractor.
Eyeglass construction. G. E. Nerney and W. H. Siddall. 1,759,863; May 27.
Eye structure for dolls and manikins, Dirigible. J. C. Poore. 1,760,318; May 27.
Fabric: *See*—
  Wire fabric.
Fabric-trade-marking device. E. G. Jebsen. 1,760,361; May 27.
Fastener and suspending device. D. Marinsky. 1,759,949; May 27.
Fastener for watch bracelets. C. R. Tost. 1,760,384; May 27.
Fastener, Hame. W. Boschuetz. 1,760,111; May 27.
Fastener, Horseshoe. B. P. Welland. 1,759,926; May 27.
Fastener, Locomotive-fire-door. C. H. Bilty. 1,759,882; May 27.
Fastener plate. G. A. Holmes. 1,759,847; May 27.
Fastener, Refrigerator-car-door. A. M. Brenne. 1,760,187; May 27.
Fastener, Separable. G. Johnson. 1,760,833; May 27.
Fastener, Separable. R. F. Walters. 1,760,262–3; May 27.
Fastening, Nut and screw. F. S. Carr. 1,760,834; May 27.
Fastening, Rail. J. G. and A. N. Snyder. 1,760,723; May 27.
Fastening-supplying apparatus. E. R. Pope. 1,760,438; May 27.
Faucet. W. P. Bradford. 1,760,810; May 27.
Feed finger. C. F. Minnier and B. M. Daniel. 1,760,860; May 27.
Felting and fulling machine. C. H. Rehfus-Oberländer. 1,760,517; May 27.
Fender roller. A. P. Asher. 1,760,467; May 27.
Fiber web, Saturated. N. C. Pike. 1,760,606; May 27.
Fibers, Mechanism for handling and distributing. J. Moss. 1,760,848; May 27.
File, Paper. T. Rengmann. 1,760,776; May 27.
File, Record. E. A. Banschbach. 1,760,103; May 27.
Filleting machine. J. J. Barry. 1,759,828; May 27.
Films for color cinematography, Producing. A. Pilny. 1,759,914; May 27.
Filter. C. E. Jenkins. 1,759,984; May 27.
Filter. J. Zwicky. 1,759,927; May 27.
Filter by-pass, Oil. A. M. Babitch. 1,759,827; May 27.
Filter, Oil. C. C. Blackmore. 1,760,340; May 27.
Finishing machine. J. F. Robb. 1,760,442; May 27.
Finned tube. H. W. Bundy. 1,760,038; May 27.
Finned tube into shapes, Forming. H. W. Bundy. 1,760,039; May 27.
Fire-alarm signal. E. C. J. Bouillon. 1,760,470; May 27.
Fire-alarm switch. W. J. Burke. 1,759,887; May 27.
Firearms, Sight for. T. A. Watson. 1,760,389; May 27.
Fire extinguisher. H. R. Minor. 1,760,274; May 27.
Fire extinguisher. W. D. Witter. 1,760,294; May 27.
Fire, Extinguishing. G. C. Hiss. 1,760,359; May 27.
Fire-extinguishing system. A. Valente. 1,760,385; May 27.
Flask: *See*—
  Molder's flask.
Flexible coupling. C. R. Short. 1,760,852; May 27.
Flight-attitude indicator. W. C. Morris. 1,760,163; May 27.
Floor-surfacing machine. G. Jacobson and G. F. Ericson. 1,760,832; May 27.
Flying machine. J. D. Van Vliet. 1,760,386; May 27.
Focus water level. C. von Hofe. 1,760,727; May 27.
Folding chair. G. D. Schermerhorn. 1,760,008; May 27.
Folding machine. C. E. Christophel. 1,760,819; May 27.
Font of type. M. Lipman. Des. 81,250; May 27.
Foot appliance for swimmers. N. A. Chastenay. 1,760,476; May 27.
Forceps, Obstetrical. R. D. Roderick. 1,760,720; May 27.
Forging machine. G. F. Mills. 1,760,311; May 27.
Frame: *See*—
  Drying frame. Side frame.
Frame of a chair or settee. C. W. Jones. Des. 81,243; May 27.
Frame with transverse laths, Drying. G. Hartmann. 1,760,056; May 27.
Frequency changer. A. W. Forbes. 1,760,591; May 27.
Friction coupling. B. Wittkuhns. 1,760,223; May 27.
Friction coupling, Electromagnetically-operated. P. Schünemann. 1,760,174; May 27.
Frog point. D. E. Anderson. 1,760,465; May 27.
Fuel blower and pulverizer, Combined. P. L. Crowe. 1,760,120; May 27.
Fuel system for inclosed-burner bake ovens. E. O. Engels. 1,760,486; May 27.
Fungicidal product for seed treatment. C. S. Reddy. 1,760 000; May 27.
Fur, Making imitation animal. W. Achtmeyer. 1,760,464; May 27.
Furnace: *See*—
  Boiler furnace. Induction furnace.
  Heating furnace.
Furnace. H. D. Weed. 1,760,459; May 27.
Furnace air preheater. R. S. Riley. 1,759,916; May 27.
Furnace construction, Roasting-. H. J. Hartley. 1,760,694; May 27.
Furnace or heater construction. H. W. West. 1,760,330; May 27.
Furnaces, Air inducer and preheater for. E. H. Swift. 1,760,183; May 27.
Furniture brace. T. H. Wittliff. 1,760,100; May 27.
Game. F. J. Schippers. 1,760,287; May 27.
Game outfit. T. C. Graham. 1,760,642; May 27.
Game signaling apparatus. M. C. Schwartz. 1,759,918; May 27.
Garment. G. H. Francisco. 1,759,897; May 27.
Garment hanger. H. A. Feigelman. 1,760,352; May 27.
Garment press. E. D. Anderson. 1,760,679; May 27.
Garter, Man's. J. Jacobs. 1,760,501; May 27.
Gas burner. R. Eickworth. 1,760,050; May 27.
Gas fitting, Safety. O. Schwimmer. 1,759,872; May 27.
Gas generator, Acetylene-. M. Steiner. 1,760,724; May 27.
Gas-producing apparatus. A. Seeley. 1,760,782; May 27.
Gases, Apparatus for treating. M. Aurig. 1,760,623; May 27.
Gases, Process and apparatus for purifying. E. A. Prudhomme. 1,760,522; May 27.
Gauge: *See*—
  Welt gauge.
Gauge. W. Ames. Des. 81,221; May 27.
Gauge. A. F. Peglow. 1,760,717; May 27.
Gear attachment for drum hoists, Reversing. W. E. Morgan. 1,760,514; May 27.
Gear, Automatic variable-speed. E. Janik. 1,760,700; May 27.
Gear, Combined differential and reversing. H. Drew. 1,760,830; May 27.
Gear for airplanes, Landing. C. W. Hall. 1,760,644; May 27.
Gear for pumps and compressors, Valve. K. Schoene. 1,760,172; May 27.
Gear, Reversing. L. Burn. 1,760,040; May 27.
Gearing for laundry machines. G. W. Dunham. 1,760,123; May 27.
Gearing, Variable-speed. J. P. Remington. 1,760,850; May 27.
Gearing, Worm. N. Trbojevich. 1,759,968; May 27.
Generator: *See*—
  Gas generator.
Girt construction for compression-type derricks. C. W. Lynch. 1,760,154; May 27.
Glass and the like, Apparatus for melting. W. A. Morton. 1,760,371; May 27.
Glass, Apparatus for feeding molten. K. E. Peiler. 1,760,254; May 27.
Glass articles, Frosting. R. D. Smith. Re17,682; May 27.
Glass, Method of and apparatus for drawing sheet. V. E. Hofmann. 1,760,499; May 27.
Glass, Process for preventing weathering of. R. C. Matlock, jr. 1,760,427; May 27.
Goggles. K. Kruening. 1,760,650; May 27.
Golf shaft, Sectional. D. W. Flint. 1,760,353; May 27.
Goods made of animal hair and wool, Increasing the luster of. E. Böhm. 1,760,738; May 27.
Governor, Automatic. C. Cook. 1,759,936; May 27.
Grader for vegetables, fruits, and the like. W. G. Bunker. 1,760,742; May 27.
Grandstand. C. H. Wetzel. 1,760,801; May 27.
Grass digger, Quack-. K. H. Menke. 1,760,203; May 27.
Grate-feeding means, Mechanically-operated. A. E. Weck. 1,760,572; May 27.
Gravel-loading device. H. M. Martenson and F. W. Peterson. 1,760,158; May 27.
Grinder shield. A. C. Frey. 1,759,941; May 27.
Guard, Antisplash. D. A. Craig. 1,760,193; May 27.
Guns, Interchangeable barrel for. E. A. Williams. 1,760,731; May 27.
Hair-curling apparatus. P. Santurello. 1,760,320; May 27.
Hairspring-securing means for instruments. L. Berg. 1,760,857; May 27.
Hammer, Rotary pivoted. O. J. Williams. 1,760,097; May 27.
Hand bag, Lady's. H. Barol. 1,760,681; May 27.
Handle: *See*—
  Lamp-guard handle.
Handle and lock for motor cars, Valve-control. A. M. Craig. 1,760,347; May 27.
Hanger: *See*—
  Clothes hanger. Lamp hanger.
  Garment hanger.
Hanger for towels, ties, and similar articles. H. G. Bishop. 1,760,339; May 27.
Harrow. L. Svancara. 1,759,965; May 27.
Harvesting machine, Cotton-. J. E. Mitchell. 1,760,312; May 27.
Headlight, Pilot. J. A. Thomas. 1,760,327; May 27.
Heat treating of metals. C. F. Lauenstein. 1,760,240; May 27.
Heater: *See*—
  Chimney-cap heater. Radiant heater.
  Electric heater. Water heater.
  Engine heater.
Heater. I. L. Putnam. 1,760,086; May 27.
Heater for motor vehicles. E. Ryder. 1,760,005; May 27.
Heaters, Composition for chemical. H. H. Baker. 1,760,102; May 27.
Heating apparatus, Electric. A. S. Macdonald, C. C. Waite, and E. M. Huggins. 1,760,155; May 27.
Heating apparatus for boilers, Feed-water-. E. F. Sullivan. 1,760,794; May 27.

Heating furnace. A. R. McArthur and H. G. McIlvried. 1,760,762; May 27.
Heating process. J. F. Wait. 1,760,095; May 27.
Heddle and lingo and making the same, Combined. J. U. Kaufmann. 1,760,640; May 27.
Heel-rounding machine. J. A. McNeill. 1,760,160; May 27.
Heel trimming and compressing machine. E. J. Ray. 1,759,867; May 27.
Heels, Making covered. J. T. Kershaw. 1,760,147; May 27.
Hinge connection for water-closet seats and covers. H. C. Leslie. 1,759,990; May 27.
Hinge member for cards. G. H. Dawson. 1,760,401; May 27.
Hob. J. Edgar. 1,760,125; May 27.
Hoist conveyer, Multicable, extension. J. D. Lawrence. 1,760,150; May 27.
Hoist for automobiles and the like. P. J. Sullivan. 1,760,671; May 27.
Hoist, Hydraulic electric-bell. G. Fox. 1,760,637; May 27.
Holder, Automatic train-order and message-hoop. E. A. Webb. 1,760,730; May 27.
Holder, Bail. N. H. Davis. 1,760,687; May 27.
Holder, Check. F. N. Reynolds. Des. 81,257; May 27.
Holder, Copy. G. C. Beidler. 1,760,734; May 27.
Holder, Curtain. G. Kalenoff. 1,760,701; May 27.
Holder, Display. F. V. Moore. 1,759,862; May 27.
Holder, Electrode. H. Brock. 1,760,395; May 27.
Holder for grinding machines, Work. A. M. Drake. 1,760,587; May 27.
Holder for maps, etc. C. B. Sledge and D. J. O'Connor, jr. 1,760,785; May 27.
Holder for sanitary covers for toilet seats. D. J. Kann. 1,760,363; May 27.
Holder, Grain-spout. W. Kutz. 1,759,858; May 27.
Holder, Harrow-tooth. J. L. Brewton. 1,760,341; May 27.
Holder, Map. J. H. Beck. 1,759,829; May 27.
Holder, Shade. H. Le R. Jenkins. 1,759,985; May 27.
Holder, Wall-pot. I. G. Scott and M. C. Fox. Des. 81,262; May 27.
Holding device for fishing poles or rods. G. E. Gift. 1,760,592; May 27.
Holding device, Safety. S. J. Jones. 1,760,066; May 27.
Hole-cleaning apparatus. O. E. Clark. 1,760,582; May 27.
Hook-setting machine. M. N. Bray. 1,759,836; May 27.
Horn for sound reproducers, Duplex. G. G. Rehfeld. 1,760,284; May 27.
Horn, Pneumatic. J. M. Anfiero. 1,760,295; May 27.
Hose connection for air gauges. C. F. Shelton. 1,760,323; May 27.
Hot-air engine. J. Koenig. 1,760,415; May 27.
Housings, Apparatus for controlling breathing of oil-containing. A. O. Austin. 1,759,971; May 27.
Hub cap, Vehicle wheel. H. G. Dibelka. Des. 81,230; May 27.
Hub shells and like tubular metal articles, Making. H. W. Kranz and J. S. Fenzel. 1,760,560; May 27.
Humidifier. R. A. Crawford. 1,760,633; May 27.
Hydrocarbons, Refining. R. Cross. 1,760,585; May 27.
Ice-cream-freezing system. C. Taylor. 1,760,217; May 27.
Igniter. C. F. Larsen. 1,760,418; May 27.
Ignition-timing apparatus. A. A. Kent. 1,760,145; May 27.
Illuminating structure. G. G. Müller. 1,760,767; May 27.
Impluses and impluse devices, System and apparatus for testing. R. W. Brown and C. Paulson. 1,759,837; May 27.
Imprint-testing device. J. F. O'Connor. 1,760,714; May 27.
Incense burner. F. Binnier and G. E. Underwood. Des. 81,224; May 27.
Indicating device. A. A. Thomas. 1,760,291; May 27.
Indicator: *See*—
  Bin indicator. Stock indicator.
  Flight-altitude indicator.
Indicator for wrecked submerged crafts. P. M. Cirimele. 1,759,839; May 27.
Induction furnace, Magnetic-core. P. E. Bunet. 1,760,741; May 27.
Ingot stripper. E. J. George. 1,760,054; May 27.
Ink fountains, Page cut-off for. H. A. W. Wood. 1,760,573; May 27.
Inking fountain. H. W. Clark. 1,759,889; May 27.
Inking mechanism for printing presses. J. H. Schussler. 1,760,721; May 27.
Insole for shoes. A. F. Donovan. 1,760,300; May 27.
Instrument panel. J. Zubaty and D. E. Keeney. 1,760,855; May 27.
Insulated structural unit. J. L. Rosemiller. 1,760,211; May 27.
Insulating composition. L. de Ayestaran. 1,760,044; May 27.
Internal-combustion engine. A. T. Kasley. 1,759,946; May 27.
Internal-combustion engine. F. H. Lindenberg. 1,760,073; May 27.
Internal-combustion engine, Two-stroke-cycle. G. Boden. 1,760,737; May 27.
Iron: *See*—
  Soldering iron.
Iron, Treating malleableized cast. C. F. Lauenstein and N. M. Waterbury. 1,760,239; May 27.
Ironing board. J. G. Haugh. 1,760,552; May 27.
Jack: *See*—
  Lifting jack.
Joint for artificial limbs. W. H. Wambsgans. 1,760,800; May 27.
Joint for cable sheaths, Insulating. E. D. Eby. 1,760,546; May 27.
Journal and guide bracket. O. E. Pease and N. G. Joseph. 1,760,772; May 27.
Key action for typewriters and other machines. O. U. Desha. 1,760,269; May 27.
Kiln, Heat-treatment. H. G. Lykken. 1,760,244; May 27.
Knife, Adjustable slicing. R. P. A. Andersson. 1,760,575; May 27.
Knife, Flat drop. B. F. Grennan. 1,760,405; May 27.
Knitting machine, Straight-. P. Lieberknecht. 1,760,703; May 27.
Knotting appliance. T. Collins. 1,760,297; May 27.
Ladder step and support, Combination. J. Wirth. 1,760,803; May 27.
Lamp. A. F. Wiedenhoeft. 1,760,677; May 27.
Lamp, Battery hand. F. L. Humeston. 1,760,410; May 27.
Lamp, Desk. H. F. Thurber and F. E. Greene. Des. 81,266–7; May 27.
Lamp-guard handle. D. Woodhead. 1,760,618; May 27.
Lamp hanger, Arc-. G. W. Hopkins. 1,760,134; May 27.
Lamp, Multifilament. W. C. Sproesser and E. A. Lederer. 1,760,667; May 27.
Lamp or signal device, Yielding self-arighting. F. W. Griswold. 1,760,270; May 27.
Lamp or similar article. A. von Frankenberg. Des. 81,265; May 27.
Lamp, Prefocused incandescent electric. D. S. Gustin. 1,760,693; May 27.
Lantern. J. Juergens. 1,760,143; May 27.
Lawn sprinkler. T. L. Ryerson. 1,760,875; May 27.
Lens mounting. L. Goldhammer. 1,760,827; May 27.
Leveler, Hydraulically-controlled. A. B. Hauser. 1,759,982; May 27.
Lifting jack. A. Peteler. 1,760,436–7; May 27.
Lifting mechanism for dump bodies. F. Biszantz. 1,760,808; May 27.
Light-sensitive layers and preparing them. M. P. Schmidt and W. Krieger. 1,760,780; May 27.
Lighting device. J. W. Gosling. Des. 81,233; May 27.
Lining-trimming machine. J. A. Brogan. 1,760,112; May 27.
Liquid contents of vessels, Apparatus for measuring the. D. D. Shewmon. 1,759,873; May 27.
Liquid-purifying device. J. H. Stockholder. 1,760,216; May 27.
Liquid-reserve device. H. Lowe. 1,759,861; May 27.
Lock: *See*—
  Bolt lock.
Lock for automobiles, Hill. F. J. Parsons. 1,760,207; May 27.
Locking device for spinning bucket covers. C. E. Coleman. 1,760,398; May 27.
Locking mechanism, Vehicle. S. Svenson. 1,760,381; May 27.
Locomotive. H. L. Ingersoll. 1,760,139; May 27.
Logging engine. S. B. Gorbutt. 1,760,828; May 27.
Looms, Let-off motion for narrow-fabric. H. Haywood. 1,760,236; May 27.
Loud-speaker. J. Weinberger and I. Wolff. 1,760,862; May 27.
Low-pressure boiler. L. Courtot. 1,760,399; May 27.
Luggage carrier. G. O. Tusting. 1,760,452; May 27.
Lumber-loading roll. E. Feldin. 1,760,304; May 27.
Machine for cutting sheet stock. E. W. Stacey. 1,760,019; May 27.
Machine for generating torsional moments, particularly for testing purposes. A. J. Amsler. 1,760,033; May 27.
Machine for making fiber reed. E. F. Baldwin and F. E. Woods. 1,760,536; May 27.
Machine for melting snow. P. La Court. 1,759,859; May 27.
Machine for operating on hides, skins, and leather. G. A. Schettler. 1,759,871; May 27.
Machine for pressing books. H. C. Alger. 1,760,030; May 27.
Machine for shaping conical metal forms. T. J. Murray. 1,760,432; May 27.
Machine for treating hides, skins, leather, and other similar pieces of work. C. Szmukler. 1,760,796; May 27.
Machine for treating pipes and the like. H. S. Christopher. Re17,675; May 27.
Machine for use in making heels. J. T. Kershaw. 1,760,146; May 27.
Mail exchange, Air-. H. E. Clifford. 1,760,684; May 27.
Manifold, Exhaust. W. B. Jupp. 1,760,557; May 27.
Manifold, Muffler. E. R. Hewitt and W. B. Jupp. 1,760,553; May 27.
Manure spreader. R. L. Grose. 1,760,490; May 27.
Material agitation. R. J. Pepper. 1,760,374; May 27.
Material-feeding apparatus. S. E. Boynton. 1,759,835; May 27.
Material-shaking mechanism. R. Pawlikowski. 1,760,563; May 27.
Material spreader. P. M. Van Valkenburg. 1,760,455; May 27.
Mattress. M. Marsack. 1,760,424; May 27.
Measuring and delivering apparatus, Liquid. J. Garvie. 1,760,826; May 27.
Measuring device for wire cloth. C. M. McCarthy. 1,759,992; May 27.
Measuring device, Thermionic. S. C. Hoare. 1,760,597; May 27.
Measuring electrical quantities, Device for. B. H. C. Matthews. 1,759,951; May 27.

Meat clamp. E. G. Streckfuss. 1,760,669; May 27.
Medallion. P. J. Chéron. Des. 81,228; May 27.
Medical applicator, Womb. J. L. M. Guenard. 1,760,751; May 27.
Memory pad. R. E. Hooper. 1,760,408; May 27.
Metal. C. F. Lauenstein. 1,760,241; May 27.
Metal foil. W. J. Hawkins. 1,760,645; May 27.
Metal sheets by electrodeposition, Producing. H. M. Williams and R. G. Suman. 1,760,028; May 27.
Metals, Coating. E. R. Millring. 1,760,603; May 27.
Meter. A. Herz. 1,760,646; May 27.
Mica-laying machine. L. T. Frederick. 1,760,233; May 27.
Micrometer or the like. E. G. Pehrsson. 1,760,372; May 27.
Microphonic transmitter and amplifier therefor, Combined. L. Thompson. 1,760,672; May 27.
Microtelephone. J. Schneider and G. Heckmann. 1,760,506; May 27.
Mill: *See*—
Coffee mill. Rolling mill.
Milling circular, Self-locking. G. Weislow. 1,760,460; May 27.
Minerals by means of liquid streams, Apparatus for washing. A. France. 1,759,940; May 27.
Mixing device. F. L. Craddock. Re17,683; May 27.
Mixing machine. P. P. Yohe. 1,760,101; May 27.
Mold for alumino-thermic welding, Casting. H. Schultz. 1,760,010; May 27.
Mold for baking cup pastry and the like. W. W. Turnbull. 1,759,924; May 27.
Mold for metallic castings. A. L. Boegehold. 1,759,831; May 27.
Molder's flask. W. A. and K. L. Moore. 1,760,711; May 27.
Molding machine, Roll-. E. T. Parsons. 1,760,280; May 27.
Molding materials. L. T. Frederick. 1,760,234; May 27.
Mop, Wringer. H. Hertzberg. 1,760,695; May 27.
Mosaic screens for color photography, Apparatus for making. L. Dufay. 1,760,048; May 27.
Motion and sound, Method and apparatus for the simultaneous recording or reproduction of. A. Quintiliani and L. Pineschi. 1,760,718; May 27.
Motor: *See*—
Toy electric motor.
Mounting, Accessory. W. G. Dunn. 1,760,349; May 27.
Mower, Hay. C. Hoth. 1,760,698; May 27.
Musical instrument. M. L. Jones. 1,760,141; May 27.
Musical instrument, Stringed. J. Sperduti. 1,760,789; May 27.
Musical instruments, Tailpiece for stringed. F. J. Callier. 1,760,343; May 27.
Necktie and tying same. W. J. Bruehl. 1,760,473; May 27.
Needle, Weft-. E. F. Hathaway and W. Bixby. 1,760,831; May 27.
Nipple calf feeder, Finger-. B. W. Gans. 1,760,053; May 27.
Noise maker, Novelty. H. L. Stowe. 1,760,022; May 27.
Nozzle structure. S. Allen. 1,759,928; May 27.
Nut, Lock. J. H. Brown. 1,760,113; May 27.
Nut-tapping device. F. W. Kosfeld. 1,760,702; May 27.
Odometers, Attachment for. I. T. Wedin. 1,760,264; May 27.
Oil burner. W. F. Schaller. 1,760,007; May 27.
Oil burner, Fuel-. W. G. Peters. 1,760,774; May 27.
Oil leakage, Preventing. J. Abenanti. 1,760,463; May 27.
Oil-recovery method and apparatus. W. A. Loomis. 1,760,420; May 27.
Oil treatment. S. Boyer. 1,760,539; May 27.
Oils and other glycerides, Treating. W. C. Arsem. 1,760,535; May 27.
Oils, Cracking hydrocarbon. E. C. Herthel and T. DeC. Tifft. 1,760,357; May 27.
Oils, Treating hydrocarbon. J. B. Weaver. Re17,681; May 27.
Operating mechanism. A. H. Stebbins. 1,759,875; May 27.
Ore concentrator. R. C. Fehely and R. F. Stevenson. 1,760,590; May 27.
Ores, Low-temperature reduction of iron. E. D. Newkirk and A. J. Briggs. 1,760,078; May 27.
Organ-stop action, Combination. S. Casavant, J. Hevey, and A. Letiecq. 1,760,813; May 27.
Ornament, Shoe. H. A. Dalrymple. Des. 81,229; May 27.
Ornament, Shoe. S. M. Riker. Des. 81,258; May 27.
Outlet for fixtures, Convenience. D. N. Thompson. 1,760,570; May 27.
Oven, Coke. C. Otto. 1,760,770; May 27.
Packaging machine. W. V. Derby. 1,760,482; May 27.
Pad: *See*—
Memory pad.
Pajama jacket and dicky, Combination. S. Gates. Des. 81,231; May 27.
Pan for internal-combustion engines, Oil-base insulating. W. W. Schwarting. 1,760,376; May 27.
Paneling with flexible connections. A. F. Masury. 1,760,426; May 27.
Paper-feeding machine. F. L. Cross and H. Hallstream. 1,760,119; May 27.
Paper-feeding rack. S. Scott, jr. 1,760,177; May 27.
Parachute safety suspension for aeroplanes. P. P. Horni. 1,760,061; May 27.
Paraffin, Manufacturing. C. A. Ward. 1,760,096; May 27.
Pasteurizing apparatus. A. J. Davis. 1,760,686; May 27.
Pavement and process of laying. W. H. Flood. 1,760,690; May 27.
Pearl essence, Purifying. J. Paisseau. 1,760,771; May 27.
Pedal-operated switch. G. A. Burgess. 1,760,683; May 27.
Pen, Fountain. R. Back. Des. 81,223; May 27.
Pen, Fountain. R. A. Fritsch. 1,760,824; May 27.
Pen, Fountain. G. Larsen. Des. 81,248; May 27.
Pen, Fountain. K. S. Parker. Des. 81,254; May 27.
Pencil, Ever-pointed. P. Barberon. 1,759,931; May 27.
Pendulum weigher. F. Bandbauer. 1,760,034; May 27.
Percentage feeder. G. H. Hebebrand. 1,760,407; May 27.
Perforating machine. I. J. McCullough and M. S. Black. 1,760,075; May 27.
Permanent-waving tube. H. Block. 1,760,736; May 27.
Pharmaceutical products, Manufacture of new. W. Schulemann, F. Schönhöfer, and A. Wingler. 1,760,781; May 27.
Phonograph. A. V. Bodine. 1,760,628; May 27.
Phonograph reproducer, Electric. A. A. Thomas. 1,760,092; May 27.
Photo-electric cell. R. K. Potter. 1,759,915; May 27.
Photography, Motion-picture. N. H. Mann. 1,760,156; May 27.
Pick-up. F. L. Capps and H. A. Summers. 1,760,114; May 27.
Picture frame. P. C. Ross. Des. 81,259; May 27.
Pin-turning attachment, Center-. R. P. Skidmore and A. Voedisch. 1,760,530; May 27.
Pipe cleaner, Sink-. J. T. Lindstrom. 1,760,704; May 27.
Pipe fitting, Waste-. A. N. Pasman. 1,760,659; May 27.
Pistol. P. von Frantzius. 1,760,674; May 27.
Piston. L. J. Thomas. 1,760,451; May 27.
Piston, Engine. C. B. Drevitson. 1,760,122; May 27.
Piston, Expansible. L. C. Burns. 1,760,581; May 27.
Piston or reciprocating compressor or the like, High-pressure. C. Schaer. 1,760,213; May 27.
Piston-ring pressure exerting upon cylinder walls, Apparatus for measuring. M. Okochi and K. Ebihara. 1,760,518; May 27.
Plagioclase compound, Artificial. F. Singer. 1,759,919; May 27.
Plane, Portable hand-operated power-driven. M. Daderko. 1,760,818; May 27.
Planographic-printing surface. R. F. Reed and P. W. Dorst. 1,759,956; May 27.
Plaster-roll package. R. P. Hayden. 1,760,754; May 27.
Plastic composition. W. Kritchevsky and K. A. Schultz. 1,759,907; May 27.
Plate for casket handles or the like. W. N. Thomas. Des. 81,264; May 27.
Platform, Date-picking. P. M. Swinney. 1,759,966; May 27.
Pliers, Wire. C. C. Millheam. 1,760,368; May 27.
Plug and switch, Combination electric. A. F. Hunt. 1,760,188; May 27.
Pole hitch. E. E. Forrest. 1,760,130; May 27.
Powder device for applying vehicle brakes. W. L. Congdon. 1,760,345; May 27.
Powdery substances, Device for distributing. L. B. Platt. 1,759,998; May 27.
Power plant. B. Broido. 1,760,471; May 27.
Power rake. H. Enard. 1,760,840; May 27.
Power, Rotary mechanism for the transmission of. A. Coats. 1,760,397; May 27.
Power transmission and release, Method and apparatus for. A. Dow. 1,760,483; May 27.
Power-transmission mechanism, Rotary. A. Coats. 1,760,480; May 27.
Power-transmitting apparatus. H. C. Stearns. 1,759,874; May 27.
Press: *See*—
Garment press.
Press-casting machine. C. J. Hult. 1,760,555; May 27.
Presses, Blank-holding and clutch-operating mechanism for. B. J. Lindgren. 1,760,151; May 27.
Pressure burner. F. E. White and A. Ruttiman. 1,760,390; May 27.
Primer for centrifugal pumps, Automatic. R. L. Morgan. 1,760,313; May 27.
Printing machines, Outer covering for the moistening and inking form rollers of lithographic offset. E. B. Morris. 1,760,370; May 27.
Projectile. J. L. Cox and B. M. Fine. 1,760,685; May 27.
Propeller, Discharging. E. A. Marsh. 1,760,425; May 27.
Protective arrangement. W. Brückel. 1,760,541; May 27.
Protective arrangement. W. C. Hahn. 1,760,550; May 27.
Protective arrangement. H. S. Petch and E. L. E. Wheatcroft. 1,760,521; May 27.
Protective arrangement. O. C. Traver. 1,760,531; May 27.
Protector, Meter. J. L. Estorge. 1,760,194; May 27.
Protector, Stocking. A. B. Dickerson. 1,760,299; May 27.
Protector, Vine. B. S. Smith. 1,760,179; May 27.
Pruning shears. H. Finken. 1,760,232; May 27.
Puller: *See*—
Steel puller.
Pump. W. I. Derrick. 1,760,402; May 27.
Pump. P. A. S. Iversen. 1,760,237; May 27.
Pump and compressor. K. Schoene. 1,760,171; May 27.
Pump for supplying gasoline to carburetors, Inertia. S. Vernet. 1,760,387; May 27.
Pump, Liquid-fuel. A. E. Berdon. 1,760,856; May 27.

Pump, Oil-well. D. D. Burch. Re17,674; May 27.
Pump or compressor, Fluid. W. H. Carrier. 1,760,475; May 27.
Pumping apparatus. E. Kinsella. 1,760,070; May 27.
Punching mechanism. W. H. Wineman. 1,760,333; May 27.
Pyrolytic conversion, Control of. F. A. Howard. 1,760,136; May 27.
Rack: *See*—
Display rack. Paper-feeding rack.
Radiant heater, Liquid-fuel. F. V. Risinger. 1,760,319; May 27.
Radiator and the like. E. S. Lea. 1,760,505; May 27.
Radiator cap. W. E. Otwell. 1,760,715; May 27.
Radio apparatus, Device for controlling. J. Nisenson. 1,760,080; May 27.
Radio calendar. J. P. Kennedy. 1,760,069; May 27.
Radio circuits. G. S. Cornish. 1,759,937; May 27.
Radio frequency transformer. F. E. Knapp. 1,759,987; May 27.
Radio loud-speaker. F. R. Shaw. 1,760,377; May 27.
Radio receiving apparatus. E. G. Lodge. 1,760,506; May 27.
Radio transmitter. P. D. Zurlan. 1,760,225; May 27.
Radio tuning means. B. B. Minnium. 1,760,162; May 27.
Rag catcher, Self-dumping. H. E. Marvel. 1,760,509; May 27.
Rag-catching apparatus for beater tubs. H. E. Marvel. 1,760,511; May 27.
Rail tie. J. E. Bliss. 1,760,735; May 27.
Railway crosstie. G. W. Corrigan. 1,760,231; May 27.
Railway switch, Automatically-operable. R. R. Foulke. 1,759,843; May 27.
Rake: *See*—
Power rake.
Rake. C. E. Peterson. 1,760,660; May 27.
Rat trap. S. P. Slater. 1,760,324; May 27.
Ray absorber and deflector for automobile headlights. G. E. Graves. 1,760,055; May 27.
Razor. R. F. and P. Elzinga. 1,759,981; May 27.
Razor-blade ejector. J. Holtzman. 1,760,060; May 27.
Razor, Safety. R. P. Harshberger. 1,760,496; May 27.
Rebound device. E. W. Ackerman and G. C. Nicholson. 1,759,879; May 27.
Record book, Sales-. E. M. Harris. 1,759,845; May 27.
Recording and controlling, System for alternately. H. C. Parker. 1,759,996; May 27.
Rectifier. H. C. Rentschler and W. W. Merrymon. 1,760,525; May 27.
Reduced materials, Device for reducing and feeding. H. G. Lykken. 1,760,245; May 27.
Refractometer for liquids. F. Pfeiffer. 1,760,209; May 27.
Refractory and making the same. H. C. Harrison. 1,760,133; May 27.
Refractory product. H. P. Hood. 1,760,360; May 27.
Refrigerating apparatus. S. F. Anderson. 1,760,621; May 27.
Refrigerating apparatus. H. B. Hull. 1,759,945; May 27.
Refrigerating apparatus. S. M. Schweller. 1,760,175–6; May 27.
Refrigerating apparatus. A. T. Stock. 1,759,962; May 27.
Refrigerating system. T. M. Gunn. 1,760,195; May 27.
Refrigeration. F. D. Peltier. 1,760,168; May 27.
Register: *See*—
Autographic register. Cash register.
Regulating system. H. Bany and G. R. McDonald. 1,760,537; May 27.
Rendering process. S. Hiller. 1,760,059; May 27.
Reproducer arm. A. N. Goldsmith. 1,760,306; May 27.
Reproducing device. W. T. Plum, jr. 1,760,085; May 27.
Reproducing mechanism. C. Krebs. 1,759,857; May 27.
Rheostats, Operating mechanism for dimmer. R. B. Hunter. 1,759,903; May 27.
Ring attachment for chains. W. J. Gagnon. 1,760,825; May 27.
Riveting machine. T. G. Burnett. 1,760,743; May 27.
Rock drill. E. E. Miller. 1,760,310; May 27.
Rock-drilling mechanism. E. G. Gartin. 1,760,354; May 27.
Roller: *See*—
Fender roller.
Roller-supporting device. H. V. Ball. 1,760,188; May 27.
Rolling mill, Pilgering. H. Idel. 1,760,757; May 27.
Roofing. C. E. Rahr. 1,759,999; May 27.
Roofing element. F. C. Overbury. 1,759,995; May 27.
Room heater, Portable electric. L. S. Lawson. Des. 81,249; May 27.
Roost, Chicken. H. Fintel. 1,760,748; May 27.
Rope tightener, Flagpole-. A. Bernardin. 1,760,337; May 27.
Rotary or spinning extractor. W. G. Peters. 1,760,775; May 27.
Safety device for electric heaters. L. P. Hynes. 1,760,064; May 27.
Sash balance. J. P. Appleby. 1,760,226; May 27.
Sashes, Friction shoe for window. J. P. Appleby. 1,760,227; May 27.
Sausage-linking mechanism. W. J. O. Johnson. 1,759,851; May 27.
Saw guide, Band-. J. R. Bishop. 1,760,577; May 27.
Scaffold, Window. E. Schultz. 1,760,009; May 27.
Scale. A. Bousfield. 1,759,885–6; May 27.
Scale. H. A. Hadley. 1,759,900; May 27.
Scale. T. H. Strachan. 1,760,611; May 27.
Scale, Platform. A. Bousfield. 1,759,884; May 27.
Scale, Platform. A. C. Howard. 1,759,902; May 27.
Scale, Weighing. K. E. Barrett and G. K. Fuller. 1,759,880; May 27.
Scale, Weighing. A. L. Buck. 1,760,342; May 27.
Scales, Weather shield for track. C. E. Fuller. 1,759,899; May 27.
Scoop, Drag-. R. B. Coffman. 1,760,116; May 27.
Score board or similar article. H. L. Schroeder. Des. 81,260; May 27.
Scraper blade and hardening the same. W. B. Bronander. 1,760,630; May 27.
Scraper, Earth. J. H. Slaker. 1,760,016; May 27.
Screen: *See*—
Window screen.
Screen for flotation processes. H. B. Houston. 1,759,983; May 27.
Scrubbing and drying device, Floor. G. Bentley. 1,759,881; May 27.
Seal. O. A. Ross. 1,759,917; May 27.
Seat: *See*—
Automobile seat. Spring implement seat.
Car seat.
Seat and the like, Automobile. L. R. Smelker. Re17,680; May 27.
Seat for automobile doors, Folding. C. Zizzo. 1,759,878; May 27.
Seat inclosure, Rumble-. A. Kaner. 1,760,144; May 27.
Selector. D. J. Stewart. 1,760,379; May 27.
Semaphore, Motor vehicle. R. A. Churchill. 1,759,838; May 27.
Semisocket wrench, Adjustable. W. S. Billmyer, jr. 1,760,338; May 27.
Separator: *See*—
Centrifugal separator.
Separator to clarify waste waters. C. Arndt. 1,760,229; May 27.
Servo-brake mechanism. O. J. Badertscher. 1,760,624; May 27.
Shade or awning, Vehicle window. D. W. Neil, jr. and A. B. Caskey. 1,760,250; May 27.
Shear mechanism for glass feeders. K. E. Peiler. 1,760,435; May 27.
Shears: *See*—
Pruning shears.
Sheet material, Flexible. D. P. Cummings. 1,759,976; May 27.
Shield, Sun and rain. G. W. Miller. 1,760,429; May 27.
Shingle, Composition. N. P. Harshberger. 1,759,901; May 27.
Shipping device. C. L. Snyder. 1,760,089; May 27.
Shock absorber. W. A. Chryst. 1,759,888; May 27.
Shock absorber. G. W. Elsey. 1,759,894–5; May 27.
Shock absorber. G. W. Elsey. 1,759,939; May 27.
Shock absorber. E. Ryder. 1,760,006; May 27.
Shock-absorbing mechanism. A. O. Buckius. 1,760,396; May 27.
Shoe. M. Hirshfield. 1,760,197; May 27.
Shoe. D. E. Spathelf. 1,760,665; May 27.
Shoe cleaner. C. E. Cazel. 1,760,815; May 27.
Shoes, Apparatus for heating counter portions of. H. H. Beckwith. 1,760,104; May 27.
Shovels, Making. N. G. Robertson. 1,760,607; May 27.
Shredder, Mill. F. Farrell, jr. 1,759,896; May 27.
Side frame. H. W. Stertzbach and J. S. McPherson. 1,760,181; May 27.
Sign, Changeable display. G. Margolin. 1,760,157; May 27.
Sign, Electrically-operated. E. M. Rosenfield. 1,760,664; May 27.
Signal: *See*—
Fire-alarm signal.
Signal switch, Automobile. R. O. Ruble. 1,760,212; May 27.
Signal switch, Vehicle. R. C. Gallinant. 1,760,488; May 27.
Signaling apparatus, Selective. H. D. Colman. 1,760,478; May 27.
Signaling mechanism. W. E. Birket. 1,760,807; May 27.
Signaling system. H. Lund, H. Luab, and F. Hirt. 1,760,508; May 27.
Silver-bromide emulsions and plates or films covered with such emulsions, Desensitizing. B. Homolka. 1,760,756; May 27.
Skate clamp. A. K. Johnson. 1,760,238; May 27.
Skewback block. J. Brookes. 1,760,296; May 27.
Skylight-actuating mechanism. B. P. Blaski. 1,760,110; May 27.
Sleeve construction for coats. E. M. Orlow. 1,760,434; May 27.
Slicer, Meat. E. G. Streckfuss. 1,760,670; May 27.
Slitter. F. W. Lodding. 1,760,243; May 27.
Smoke box, Steam-boiler. G. B. Ashworth. 1,760,680; May 27.
Smoke-consuming device. T. C. Stephens. 1,759,961; May 27.
Soap-cutting apparatus. J. A. Schwantes. 1,760,087; May 27.
Soap, Sea-salt. L. C. Laurent. 1,760,759; May 27.
Socket and contact, Lamp. E. C. Albright. 1,759,929; May 27.
Socket, Lamp. M. Clark. 1,760,477; May 27.
Socket-wrench set. C. E. Wakefield, J. P. Fleming, and J. F. Oliver. 1,760,799; May 27.
Sodium thiosulphate, Production of. H. Howard. 1,760,137; May 27.
Soldering iron. R. Palmer. 1,760,519; May 27.

Sorting machine. H. C. Kendall. 1,760,068; May 27.
Sound instrument. H. A. Myers. 1,759,954; May 27.
Sound transmitter, Electric. A. A. Thomas. 1,759,967; May 27.
Spark plug. P. K. Devers. 1,760,586; May 27.
Sparking toy. L. V. Aronson. 1,760,622; May 27.
Speed mechanism, Variable-. T. Morimoto. 1,760,712; May 27.
Speedometer. R. O. Helgeby. 1,760,844; May 27.
Speed-regulating device for prime movers. A. Lüthi. 1,760,421; May 27.
Spinning tongs. J. B. Palmer. 1,760,167; May 27.
Spool for tube frames and the like, Yarn. Walter Bixby. 1,760,809; May 27.
Spoon or similar article. G. N. Allen and L. V. M. Helander. Des. 81,219; May 27.
Spoon or similar article. G. P. Ittig. Des. 81,241; May 27.
Spray booth. F. Charavay. 1,760,344; May 27.
Spray head. J. E. Perrin. 1,760,373; May 27.
Spraying apparatus for rag catchers. H. E. Marvel. 1,760,510; May 27.
Spraying machine. W. D. Knapp. 1,759,988; May 27.
Spraying machine, Can-. E. C. Mueller. 1,760,165; May 27.
Spring implement seat. F. A. Donaldson. 1,759,978; May 27.
Springs, Manufacturing. A. S. Phelps. 1,760,169; May 27.
Sprinkler: *See*—
Lawn sprinkler.
Sprinkler head. W. G. Macomber. 1,760,201; May 27.
Stamping machine. W. H. Brooks. 1,759,973; May 27.
Stand: *See*—
Display stand. Switch stand.
Staple and nail extractor. F. N. Young. 1,760,804; May 27.
Starting mechanism for automobiles. W. G. Mylius. Re17,679; May 27.
Steam boiler. S. B. Gorbutt. 1,760,829; May 27.
Steam plant. J. Smékal. 1,760,215; May 27.
Steel puller. G. M. Neil. 1,760,276; May 27.
Steel reenforcement in concrete pavements, Device for the installation of. W. S. Edge. 1,760,350; May 27.
Steering gear. J. A. Barnhart. 1,760,733; May 27.
Steering gear. J. F. P. Gillespie. 1,760,749; May 27.
Step for freight cars. G. E. Large. 1,760,200; May 27.
Still, Oil-cracking. L. B. Cuddy. 1,760,400; May 27.
Stitcher head. H. G. Allen. 1,760,031; May 27.
Stock and die. L. W. Jones. 1,760,502; May 27.
Stock indicator. J. S. Rowan and G. Fox. 1,760,609; May 27.
Stoker. J. C. Heavey. 1,760,594; May 27.
Stoker-grate agitator. C. F. Miller. 1,760,248; May 27.
Stoker, Locomotive. E. A. Turner. 1,760,221; May 27.
Stoker, Underfeed. R. S. Riley. 1,760,256; May 27.
Stool, Milking. E. E. Peet. 1,760,716; May 27.
Stopper: *See*—
Bottle stopper.
Stopper for gas and water mains. P. Goodman. 1,760,750; May 27.
Storage tank. E. B. Tolman, jr. 1,760,094; May 27.
Strainer. W. M. Dillon. Re17,685; May 27.
Strainer, Milk. C. E. Armstrong. 1,760,228; May 27.
Strand-coating apparatus J. Janicki. 1,759,850; May 27.
Suitcase. A. C. Atkins. 1,759,930; May 27.
Suitcase, Wardrobe. E. E. Wilt. 1,760,098; May 27.
Support, Adjustable seat. C. M. Templeton. 1,759,922; May 27.
Support and making the same, Fixture. W. J. Cormay. 1,760,117; May 27.
Support and tensioning mechanism, Awning-structure. W. G. Dunn. 1,760,348; May 27.
Support, Article. G. D. Happer. 1,760,752; May 27.
Support for fastening inserting machines, Work. J. L. Jones. 1,759,852; May 27.
Support, Liquid-fuel-tank. H. Walker. 1,760,457; May 27.
Support, Pipe. A. B. Weber. 1,760,458; May 27.
Support, Switch and fixture. M. N. Russell. 1,760,003; May 27.
Supporting means, Hatch-cover-. W. F. Dietrichson. 1,760,688; May 27.
Switch: *See*—
Electric switch. Railway switch.
Fire-alarm switch. Signal switch.
Pedal-operated switch.
Switch. J. A. Smith. 1,760,257; May 27.
Switch box, Safety. D. T. Wadsworth. 1,760,571; May 27.
Switch for door operators. J. E. Anderson. 1,760,466; May 27.
Switch mechanism. E. A. Bohlman. 1,759,834; May 27.
Switch mechanism, Check-controlled. J. F. Meyer. 1,760,655; May 27.
Switch mechanism, Railway-. J. T. McGarry. 1,760,846; May 27.
Switch-operating mechanism. L. S. Walle. 1,760,532; May 27.
Switch-operating mechanism, Electric. W. K. Rankin. 1,760,523; May 27.
Switch stand. J. W. Stanley. 1,760,790–1; May 27.
Swivel. J. A. Wray. 1,760,224; May 27.
Synchronizing two or more disconnected elements, Method and apparatus for. H. J. Nichols. 1,759,864; May 27.
Table: *See*—
Concentrator table.
Table, W. S. Bellows. 1,760,036; May 27.
Tabulating machines, Card group control for. S. C. Bartholomew. 1,760,393; May 27.
Talking machine. H. L. T. Buckle. 1,760,190; May 27.
Tank: *See*—
Storage tank.
Tank-filling apparatus. C. E. Williams and J. A. Johnson. 1,760,391; May 27.
Tap changer. M. L. MacLean. 1,759,991; May 27.
Tape, Adhesive. R. G. Drew. 1,760,820; May 27.
Tar-separating apparatus. H. Hennebutte and E. Goutal. 1,760,058; May 27.
Telegraph system, Alternating-current. A. L. Matte. 1,759,950; May 27.
Telephone switching system. N. H. Saunders. 1,759,869; May 27.
Telephone system. J. I. Bellamy. 1,760,625–6; May 27.
Telephone system. G. Kiner. 1,759,855; May 27.
Telephone system, Automatic. H. M. Friendly. 1,760,823; May 27.
Telephone system, Automatic. R. G. Richardson. 1,760,851; May 27.
Telephone system, Semiautomatic. F. P. A. Gohorel. 1,760,640; May 27.
Telephone transmitters, Detachable base for. M. Luce, jr. 1,760,153; May 27.
Television apparatus. C. W. Hough. 1,760,198; May 27.
Temperature-regulating apparatus. J. H. Payne. 1,760,520; May 27.
Textile fabric or similar article of manufacture. H. Hang. Des. 81,235–6; May 27.
Textile fabric or similar article of manufacture. C. Hoffman. Des. 81,238; May 27.
Textile fabric or similar article of manufacture. J. H. Mack. Des. 81,252; May 27.
Textile fabric or similar article of manufacture. W. Ramsay. Des. 81,255; May 27.
Textile fibers by means of ozone, Bleaching. E. Crespi and M. P. Otto. 1,760,042; May 27.
Textile roving, Mechanism for drawing. F. Casablancas. 1,760,745; May 27.
Theatrical illusions, Apparatus for producing. F. Greenwood. 1,760,842; May 27.
Thermometer. H. B. Brown. Des. 81,262; May 27.
Thermostat control. P. B. Parks. 1,760,081–2; May 27.
Thermostatic control of a vent in a chamber; H. M. Cone. Re17,676; May 27.
Thread for oil savers, Removable. J. N. Locke. 1,759,909; May 27.
Thread guide. P. Uhlig and W. Ulrich. 1,760,453; May 27.
Thread-moistening device. J. Amon. 1,760,032; May 27.
Tidal energy, System and method of utilizing. D. P. Cooper. 1,760,632; May 27.
Tie: *See*—
Rail tie.
Timepiece. K. D. Long. 1,760,760; May 27.
Tin-edging machine. J. W. Dixon. 1,760,046; May 27.
Tire casings, Making. J. Howard. 1,759,848; May 27.
Tire spreader. J. A. Rekenthaler. 1,760,719; May 27.
Toe plate. J. F. Waldelich, jr. 1,760,676; May 27.
Tongs, Hog. F. W. Welk. 1,759,970; May 27.
Tool, Extracting. E. Nordstrom. 1,760,433; May 27.
Tool, Fluid-pressure. G. M. Neil. 1,760,277; May 27.
Tool, Hand. W. A. Bernard. 1,760,627; May 27.
Tool, Plaster-scoring. E. J. Benson. 1,760,107; May 27.
Tool, Portable grinding. E. A. Hall. 1,760,493; May 27.
Tool, Tire. J. L. Husak. 1,759,849; May 27.
Tool, Twisting. C. F. Bailey. 1,760,468; May 27.
Tool, Valve. J. C. Stribling. 1,760,725; May 27.
Top, Rumble-seat. O. Altenbach. 1,760,334; May 27.
Top, Rumble-seat. L. A. Baum. 1,759,932; May 27.
Torpedo and making same. M. Rutter and E. E. Lechler. 1,760,004; May 27.
Toy, Confection musical. H. A. Myers. 1,759,953; May 27.
Toy electric motor. C. T. Hoffman. 1,760,498; May 27.
Toy handkerchief case and purse. S. A. Campbell and L. I. Van Buskirk. 1,759,974; May 27.
Toy projectile. M. Monge. 1,760,657; May 27.
Track for tracklaying vehicles. F. Kohlberger. 1,760,504; May 27.
Tractor-chain links, Detachable wheel guide for. J. T. Moore. 1,760,249; May 27.
Tractor cultivator. B. R. Benjamin. 1,760,336; May 27.
Tractor guide. O. T. Nichol. 1,760,079; May 27.
Tractor toy. L. L. Mallard. 1,760,423; May 27.
Tractor wheel, Spring. W. E. Lagerfeldt. 1,759,860; May 27.
Tractors, Farm implement attachment for. C. A. Enz. 1,760,128; May 27.
Train-control system. A. E. Hudd. Re17,678; May 27.
Tramway, Aerial. M. P. Morrison. 1,760,077; May 27.
Transfer for multicolored designs and markings. H. S. Sadtler. 1,759,868; May 27.
Transformer. F. F. Brand. 1,760,540; May 27.
Transmission. K. L. Herrmann. 1,759,943; May 27.
Transmission device. N. Ransohoff. 1,760,210; May 27.
Transmission system, Electrical. R. G. McCurdy. 1,759,952; May 27.

Transmitter. H. F. Fruth. 1,759,898; May 27.
Transmitter. A. Lauterer. 1,760,242; May 27.
Transmitting and amplifying electric impulses, Apparatus for. A. A. Thomas. 1,760,383; May 27.
Transport, Automatic loading. G. H. Conor. 1,759,975; May 27.
Trap: *See*—
Cage rat trap. Rat trap.
Tray for dishwashing machines, Metal dish. W. B. Kauffmann. 1,760,307; May 27.
Tray, Posting. P. Bergmann. 1,760,805; May 27.
Treating dispersions. F. R. Moser. 1,759,913; May 27.
Trimming installation. F. S. Carr. 1,760,265–6; May 27.
Truck body. S. E. Travis, jr. 1,759,876; May 27.
Truck body, Coal-. P. M. Thorn. 1,760,093; May 27.
Truck, Car. M. R. Hansen. 1,760,196; May 27.
Tube: *See*—
Finned tube. Vacuum tube.
Permanent-waving tube.
Tubular articles, Method and apparatus for rolling. H. S. Newlin and W. E. Date. 1,760,278; May 27.
Turbine assemblage, Elastic-fluid-. J. H. Doran. 1,760,545; May 27.
Twine cutter. A. G. Croft. 1,760,043; May 27.
Typewriter attachment. A. Marcellus. 1,760,366; May 27.
Typewriting machine. G. G. Going. 1,760,641; May 27.
Undergarment. R. F. Albert. Des. 81,220; May 27.
Unit ventilator. H. W. Page. 1,760,166; May 27.
Upholstery installation. F. S. Carr. 1,760,267; May 27.
Upholstery installation. R. F. Walters. 1,760,259–61; May 27.
Upper-pulling machine. B. Jorgensen. 1,760,142; May 27.
Vacuum tube. G. H. Perryman. 1,759,865; May 27.
Valve. L. F. Doen. 1,759,891; May 27.
Valve. L. F. Doen. 1,759,893; May 27.
Valve and cock. E. B. Whitmarsh. 1,760,222; May 27.
Valve, Automatic control. C. R. Hardy. 1,760,355; May 27.
Valve, Fluid-control. R. G. Le Tourneau. 1,760,308; May 27.
Valve for Diesel engines, Fuel-injection. D. E. Selby. 1,760,322; May 27.
Valve mechanism for car tanks. C. H. Folmsbee. 1,760,635; May 27.
Valve-operating means, Engine-. W. A. Wood. 1,760,853; May 27.
Valve, Pressure-relief. R. E. Joyce. 1,760,067; May 27.
Valve, Quick-operating. H. W. Fletcher and R. Neuhaus. 1,760,051; May 27.
Valve, Thermostatic regulator. F. Janssen. 1,760,199; May 27.
Valve, Twin-body tire. H. Hasting. 1,760,551; May 27.
Valved coupling. L. F. Doen. 1,759,892; May 27.
Vanity case. E. J. Schwabe. 1,760,015; May 27.
Vanity case, Polygon. C. N. Coryell. 1,760,481; May 27.
Vapor-discharge device. F. P. Whitaker. 1,760,533; May 27.
Vapors from liquid petroleum, Apparatus for extracting combustible. I. L. Dunn. 1,760,124; May 27.
Vehicle. H. J. Albers. 1,760,620; May 27.
Vehicle, Motor. L. L. Bishop. 1,760,108; May 27.
Vehicle springs, Device for controlling the action of. G. W. Libby. 1,759,948; May 27.
Vehicle wheel, Independently-mounted. A. Bizzarri. 1,760,109; May 27.
Vehicles, Emergency exit for. R. A. Mackie. 1,760,422; May 27.
Vehicles, Turning device for motor. J. A. Granstedt. 1,760,643; May 27.
Velocipede construction. F. J. Grabowski. 1,760,830; May 27.
Vending machines, Coin-control mechanism for. S. J. Swanson. 1,760,449; May 27.
Ventilator: *See*—
Unit ventilator.
Vessel for submerged baking of pies. J. N. Tarpley. 1,759,921; May 27.
Vibrating machine. A. E. R. Blomquist. 1,760,578; May 27.
Vise. F. J. Carnelli. 1,760,192; May 27.
Voice builder. R. O. Bonell. 1,759,972; May 27.
Voice-recording apparatus. L. Stone, jr. 1,760,021; May 27.
Wall section, Building-. W. J. Pedersen. 1,760,281; May 27.
Washing machine. W. A. Frantz. 1,760,822; May 27.
Washing-machine appliance. N. E. Maedgen. 1,760,202; May 27.
Watchcase. G. Rea. Des. 81,256; May 27.
Water heater. A. Fliss, jr. 1,760,634; May 27.
Water heater, Automatic electric. M. C. Crawley. 1,760,230; May 27.
Water-mill toy. F. J. Goriup. Des. 81,232; May 27.
Weed cutter. T. G. Sydnor. 1,760,024; May 27.
Welding, Arc. G. A. Whiting. 1,760,534; May 27.
Well-testing device. S. Mackin. 1,760,707; May 27.
Welt gauge, Presser-foot. J. E. Ives. 1,760,500; May 27.
Weston standard cell. L. J. Seitz, jr. 1,760,178; May 27.
Wheel: *See*—
Tractor wheel. Vehicle wheel.
Wheel. L. E. Waite. 1,760,329. May 27.
Wheels, Safety emergency attachment for. J. P. Spicer. 1,760,666; May 27.
Window. J. R. Roy. 1,760,170; May 27.
Window construction, Double-hung reversible metal-. W. C. Lea. 1,760,072; May 27.
Window guard, Burglar-proof. C. A. Hughes and E. J. Thole. Des. 81,239; May 27.
Window screen. L. Kolano and T. Palka. 1,760,416; May 27.
Window screen. H. B. Trott. 1,760,612; May 27.
Wire fabric. W. H. Sommer. 1,760,447; May 27.
Wrench: *See*—
Semisocket wrench.
Wrench. F. H. Dickson. 1,760,544; May 27.
Wrench. E. O. Skarke. 1,760,784; May 27.
Yarn carrier or tube frame. E. F. Hathaway. 1,760,271; May 27.
Yeast, Apparatus for obtaining. O. Luhrs. 1,760,706; May 27.
Zirconium and preparation thereof. W. P. Kiernan. 1,760,413; May 27.

CLASSIFICATION OF PATENTS

ISSUED MAY 27, 1930

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173: 1,760,169
30— 9: 1,760,024
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67: 1,759,892
279— 1: 1,760,587
89: 1,760,310
91: 1,760,354
280— 5: 1,760,457
33. 44: 1,760,130
96: 1,760,749
106. 5: 1,760,108
1,760,620
15. 3: 1,760,838
166: 1,760,422
281— 2: 1,760,417
38: 1,759,845
282— 21: 1,760,847
284— 13: 1,759,872
285— 44: 1,760,704
147: 1,759,909
286— 5: 1,760,463
6: 1,760,105
287— 101: 1,760,800
109: 1,760,845
289— 3: 1,760,297
290— 30: 1,759,958
292— 76: 1,760,227
93: 1,760,023
139: 1,760,491
210: 1,759,882
262: 1,760,688
359: 1,760,394
294— 78: 1,760,671
82: 1,760,840
296— 3: 1,759,876
24: 1,760,854
29: 1,760,426
98: 1,760,334
99: 1,759,932
1,760,144
298— 8: 1,760,093
22: 1,760,808
299— 24: 1,760,598
42: 1,759,988
69: 1,760,201
126: 1,760,375
301— 51: 1,760,666
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129: 1,760,613
302— 16: 1,760,616
303— 3: 1,760,543
304— 24: 1,760,009
28: 1,759,966
34: 1,760,803
305— 10: 1,760,249
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306— 15: 1,760,066
308— 148: 1,760,822
226: 1,760,206
312— 113: 1,760,494
140: 1,760,456

U. S. GOVERNMENT PRINTING OFFICE: 1930

Patents Nos. 1,756,930 to 1,757,949

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Labels	7	No. 37,405 to No. 37,411, inclusive.
Prints	5	No. 12,523 to No. 12,527, inclusive.
Reissues	4	No. 17,636 to No. 17,639, inclusive.
Designs	40	No. 81,081 to No. 81,120, inclusive.
Patents	1,020	No. 1,756,930 to No. 1,757,949, inclusive.
Total	1,428	

Adjudicated Patents

(C. C. A. Calif.) Perkins and Double patent, No. 1,011,484, for method of cementing oil wells, claim 2 *Held* valid and infringed. *Owen v. Perkins Oil Well Cementing Co.*, 38 F. (2d) 30.

(C. C. A. N. Y.) Wachs patent, No. 1,535,068, for metal-binding machine, claims 1 and 2 *Held* infringed. *Wachs v. Balsam*, 38 F. (2d) 50.

(C. C. A. N. Y.) Slate patent, No. 1,595,426, for refrigerating apparatus, *Held* valid and infringed. *American Patents Development Corporation v. Carbice Corporation of America*, 38 F. (2d) 62.

(C. C. A. Calif.) Carter patent, No. 1,601,469, for an air register, *Held* invalid. *Waterloo Register Co. v. Atherton*, 38 F. (2d) 75.

Adverse Decisions in Interference

In interferences involving the indicated claims of the following patents final decisions have been rendered that the respective patentees were not the first inventors with respect to the claims listed:

Pat. 1,669,458, J. C. Devick, Pallets and grates for sintering machine, decided March 11, 1930, claims 1, 2, 8, 14, and 15.

Pat. 1,674,539, C. R. Albertus, Loud-speaking telephone, decided March 11, 1930, claims 1, 2, 5, 8, 9, and 11.

Pat. 1,690,636, G. A. Jamerson, Lubricator, decided March 19, 1930, claims 8, 9, and 10.

Pat. 1,701,886, G. J. Mucher, Resistance, decided March 18, 1930, claims 2 and 3.

NOTICE—CHANGES IN PATENT OFFICE FEES—EFFECTIVE JUNE 1, 1930

The act of Congress approved April 11, 1930, amends section 4934, Revised Statutes, so as to provide that, except in design cases, the fee for filing each original application for patent and the fee for issuing each original patent shall each be $25.00 and $1.00 for each claim in excess of 20, instead of the present fees of $20.00 and $1.00 for each claim in excess of 20; and amends the trade-mark acts of 1905 and 1920 so as to provide that the fee for registration of trade-marks and for renewals of registrations shall be $15.00 instead of the present fee of $10.00.

The act also provides that the fees for recording assignments or other papers shall be, if the paper does not exceed six pages, $3.00; for each additional two pages or less $1.00, and for each additional patent or application where more than one is included or involved in such writing 50 cents additional.

These new fees are effective on and after June 1, 1930.

Applications for patents, except in design cases, received on and after June 1, 1930, with only the present $20.00 fee will not be entered but will be given a filing date and serial number as of the day the full fee of $25.00 and the additional fee of $1.00 for each claim in excess of 20 is received by the Patent Office.

Condition of Applications Under Examination at Close of Business April 25, 1930

(Total number of applications awaiting action, excluding Trade-Mark Division, 116,926; Trade-Mark Division, 1,685. Oldest new case, June 10, 1920; oldest amended, June 17, 1929. The dates given are 1929 except where † indicates 1930.)

Room No.	Divisions, Examiners, and Subjects of Inventions.	Oldest new application and oldest action by applicant awaiting office action: New	Amended	No. of applications awaiting action
112	1. LOEFFLER, F. A., Closure Operators; Fences; Gates; Tillage; Scattering Unloaders; Handling and Hoist Line Implements.	Aug. 26	Sept. 14	1, 314
126	2. HADEN, C. F., Bee Culture; Dairy; Presses; Tobacco	July 22	July 25	1, 010
331	3. LINDSEY, A., Heating; Metal Founding; Metallurgy; Metal Treatment	Aug. 7	Dec. 3	1, 539
234	4. MERRITT, A. D., Conveyers; Hoists; Handling Apparatus; Excavating	Oct. 1	Oct. 10	1, 242
108*	5. MACNAB, J. F., Harvesters; Music; Acoustics; Sound Recording; Knotters	Aug. 5	Aug. 6	1, 493
318	6. LEWERS, A. M., Carbon Chemistry	June 15	June 27	2, 512
106	7. JARBOE, C. G., Optics; Photography	July 12	July 16	2, 558
133	8. HENRY, C. C., Beds; Chairs; Kitchen and Table Articles; Racks and Cabinets	July 3	Oct. 24	1, 646
221	9. ADAMS, R. E., Pumps; Fluid and Fluid-Current Motors	Oct. 5	Oct. 2	1, 482
118	10. HUNTER, O. F., Land Vehicles—Animal Draft Appliances, Bodies and Tops	July 24	Aug. 28	1, 792
148*	11. ARMSTRONG, H. C., Boots, Shoes, and Leggings; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Whip Apparatus.	Oct. 21	Nov. 2	1, 021
380	12. PIERCE, P. P., Machine Elements	Sept. 10	Sept. 15	1, 531
154*	13. CLIFT, J. W., Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Working; Needle and Pin Making; Turning; Boring and Drilling.	July 10	July 19	1, 658
102*	14. BRUMBAUGH, N. J., Farriery; Metal Bending; Metal Tools and Implements, Making; Sheet-Metal Ware, Making; Wire Fabrics; Wire Working; Metal Working, Assembling, and Blanks and Processes.	July 26	July 29	1, 442
329	15. WORRELL, L. W., Glass; Plastic Block and Earthenware Apparatus; Plastics	July 5	July 8	3, 048
242*	16. SPENCER, C. J., Telegraphy; Telephony	Aug. 12	Sept. 30	1, 241
307	17. RAFTER, G. S., Label Pasting and Paper Hanging; Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet-Material Associating or Folding; Sheet or Web Feeding; Type Setting.	July 10	Aug. 22	1, 635
229	18. PORTER, M. E., Motors, Expansible-Chamber Type; Power Plants; Speed-Responsive Devices	Aug. 30	Sept. 3	1, 505
236	19. GLASCOCK, E. S., Furnaces; Heating Systems; Liquid and Gaseous Fuel Burners; Stoves and Furnaces.	July 16	July 22	2, 194
179	20. GROVE, S. D., Miscellaneous Hardware; Closure Fasteners; Locks and Latches; Safes; Undertaking.	Aug. 26	Aug. 30	1, 634
212	21. THOMPSON, T. J., Textiles; Cloth Finishing	Aug. 29	Nov. 23	918
244*	22. COLWELL, J. H., Aeronautics; Firearms, Ordnance, and Explosive Devices; Air Guns, Catapults, and Targets; Boats and Buoys; Ships; Marine Propulsion.	Sept. 17	Oct. 17	1, 673
217	23. GROESBECK, W. D., Coin Handling; Recorders; Registers	July 5	July 8	1, 199
147*	24. DURAS, C. O., Apparel; Apparel Apparatus; Garment Supporters; Sewing Machines	July 2	July 13	1, 308
202*	25. LIGHTFOOT, J. H., Agitating; Butchering; Classifying Solids; Centrifugal-Bowl Separators; Mills; Threshing; Vegetable and Meat Cutters and Comminutors.	Aug. 24	Sept. 5	1, 600
228*	26. HODGES, J. S., Electricity, Generation; Motive Power	July 19	Aug. 9	1, 227
214	27. ANDERSON, L. S., Brush, Broom, and Mop Making; Brushing, Scrubbing, and General Cleaning; Laundry; Washing Apparatus.	July 8	July 13	1, 662
225	28. BENSON, A. R., Internal-Combustion Engines	Aug. 20	Aug. 22	2, 127
160*	29. MORRIS, B. N., Woodworking; Tools; Compound Tools	Nov. 4	Nov. 13	751
248	30. SHIPMAN, J. L., Automatic Temperature and Humidity Regulation; Illuminating Burners; Illumination; Thermostats and Humidostats.	Aug. 2	Jan. 8	1, 233
312	31. HOLMES, W. N., Distillation; Gas, Heating and Illuminating; Mineral Oils	Aug. 2	Aug. 7	2, 584
249	32. BARTHOLOMEW, J. A., Gas and Liquid Contact Apparatus; Heat Exchange; Gas Separation	Sept. 25	Sept. 19	1, 761
152	33. WYMAN, W. I., Bridges; Masonry and Concrete Structures; Metallic Building Structures; Roads and Pavements; Roofs; Wooden Buildings.	June 29	June 29	2, 612
304	34. SIMPSON, G. R., Electricity, Transmission to Vehicles; Pneumatic Dispatch; Railways, Rolling Stock, Switches, and Signals; Store Service; Vehicle Fenders.	Aug. 14	Sept. 4	1, 170
116*	35. REYNOLDS, E. C., Buckles, Buttons, Clasps, Etc.; Card and Sign Exhibiting; Signals; Toilet	Oct. 2	Oct. 29	1, 809
105	36. MORTON, G. L., Automatic Weighers; Geometrical and Measuring Instruments; Force Measuring	Aug. 15	Sept. 10	2, 338
224*	37. WEAVER, M. E., Electricity, Circuit Makers and Breakers	Aug. 1	Aug. 2	2, 125
145	38. KRAFFT, C. F., Animal Husbandry; Earth Boring; Hydraulic and Earth Engineering; Mining, Quarrying, and Ice Harvesting; Stoneworking; Wells.	July 10	July 11	2, 097
220	39. COWLES, A. W., Fluid-Pressure Regulators; Multiple Valves; Valves; Water Distribution	June 25	June 29	1, 998
262*	40. OBERLIN, J. J., Bottles and Jars; Receptacles	June 28	Sept. 30	3, 219
125	41. BROWN, J. I., Land Vehicles, Wheels, and Axles; Resilient Tires and Wheels; Wheel Substitutes; Railway Draft Appliances.	Sept. 3	Sept. 12	1, 414
223*	42. CUTTING, H. O., Electric Signaling	Sept. 3	Sept. 23	1, 628
124*	43. HOPKINS, F. M., Baths, Closets, Sinks, and Spittoons; Sewerage; Electricity, Medical and Surgical; Medicines; Surgery; Dentistry; Artificial Body Members.	July 2	July 2	2, 273
253	44. SHAFFER, C. H., Dispensing; Filling and Closing Portable Receptacles; Refrigeration	June 26	June 28	2, 348
379	45. GILES, A. H., Pulleys and Shafting; Lubrication; Bearings and Guides; Spring Devices	July 25	July 29	2, 521
233	46. WOLCOTT, C. L., Concentrating Evaporators; Fluid Sprinkling, Spraying, and Diffusing; Fire Extinguishers; Liquid Heaters and Vaporizers.	Sept. 3	Sept. 5	1, 658
264	47. BARKER, H, Clutches and Power Stops; Brakes and Motors	July 9	Aug. 9	2, 586
212*	48. ROEPKE, O. B., Electricity, General Applications	July 29	Aug. 1	1, 389
239	49. EDINBURG, F. P., Check-Controlled Apparatus; Domestic Cooking Vessels; Ventilation; Driers; Liquid Separation or Purification.	Oct. 21	Oct. 30	1, 194
322	50. BLAKE, C. L., Plastic and Liquid Coating Compositions; Coating	July 22	July 24	2, 940
240*	51. BACKUS, C. D., Radiant Energy, Wave Transmission	July 29	July 29	2, 359
144	52. MORGAN, E. T., Supports; Chucks; Joint Packing; Pipe and Rod Joints or Couplings; Tool-Handle Fastenings.	Sept. 7	Sept. 12	2, 690
201*	53. PECK, M. K., Books; Manifolding; Printed Matter; Stationery, Educational Appliances; Paper Files and Binders; Tents, Canopies, Umbrellas, and Canes; Curtains, Shades, and Screens.	Nov. 1	Oct. 29	1, 314
241	54. LANE, C. H., Electric Lamps; Conductors; Vapor Electric Devices; Space Discharge Tubes	July 6	July 10	2, 871
102	55. BOWEN, S. T., Bread, Pastry, and Confection Making; Cutlery / Designs	Jan. 23	Jan. 18	428
309	56. PORTER, F. J., Electrochemistry; Laminated Fabrics; Paper Making; Substance Preparation	†Mar. 27	†Apr. 12	351
257*	57. NICOLSON, G. D. G., Cutting and Punching; Bolt, Nut, Rivet, Nail, Screw, Chain, and Horseshoe Making; Driven and Screw Fastenings; Jewelry; Nut and Bolt Locks.	July 23	July 24	2, 548
270*	58. DOWELL, E. F., Abrading; Typewriting	July 5	July 23	1, 237
315	59. RICHARD, V. I., Chemistry; Alcohol; Fertilizers; Cement and Lime; Hides, Skins, and Leather; Fuel	June 10	June 17	1, 527
213*	60. GLASS, R. L., Electricity, Heating, and Welding; Batteries; Resistances and Rheostats; Prime Mover Dynamo Plants; Conduits and Housings.	July 2	July 2	2, 303
269	61. PARKS, G. E., Elevators; Winding and Reeling; Pushing and Pulling; Fire Escapes; Ladders; Scaffolds; Velocipedes; Horology; Time-Controlling Apparatus.	July 25	Aug. 2	21460
245*	62. COCHRAN, W. W., Toys; Amusement Devices; Furniture; Fishing and Trapping; Baggage; Package and Article Carriers.	June 27	June 29	2, 696
300	63. WINKELSTEIN, A. H., Bleaching and Dyeing; Explosive, Pyrotechnic, and Match Compositions; Oils, Fats, and Glue; Preserving; Sugar, Starch, and Carbohydrates.	July 26	July 24	2, 825
163	Trade-Marks, Labels, and Prints: F. A. RICHMOND.. Trade-Marks	June 27	June 26	2, 488
	Labels and Prints	†Mar. 26	†Apr. 14	1, 530
		†Mar. 26	†Apr. 12	155

* Refers to room numbers in the annex.

DECISIONS IN PATENT AND TRADE-MARK CASES

U. S. Court of Customs and Patent Appeals

ROSENBERG BROS. & CO. *v.* WETHERBY-KAYSER SHOE CO.

No. 2,151. Decided February 6, 1930

[37 F. (2d) 437]

TRADE-MARKS—SIMILARITY—"FASHION PARK," FASHION LANE."

The term "Fashion Lane" as applied to articles of footwear *Held* not confusingly similar to "Fashion Park" as applied to men's clothing.

APPEAL from the Patent Office. Affirmed.

Mr. Clarence G. Campbell for Rosenberg Bros. & Co.

No appearance for Wetherby-Kayser Shoe Company.

GRAHAM, *P. J.*:

On March 16, 1926, the appellee, Wetherby-Kayser Shoe Co., presented its application to the Patent Office for the purpose of registering its trade-mark "Fashion Lane." Afterward, on July 3, 1926, an opposition to the registration of said proposed trade-mark was filed by Rosenberg Bros. & Co., the appellant. It appears in said opposition that the appellant is the registered owner of the following three registrations: No. 130,566, dated April 27, 1920; No. 131,225, dated May 4, 1920; and No. 160,277, dated October 17, 1922, each of said registrations covering men's coats, vests, and pants.

The first of these registered trade-marks consists of the words "Fashion Park Clothes," the word "Park" being superimposed upon a small cut or representation of two persons on horseback. The second consists of the words "Fashion Park" upon a shield shaped background over which words appear the figures of two persons on horseback. The third consists of words "Tailored at Fashion Park," surmounted by a similar cut representing two persons on horseback. The applicant and appellee here is attempting to register his trade-mark consisting of the two words "Fashion Lane" to be used on men's, women's, and children's footwear, namely, shoes, slippers, mules, and spats of leather, rubber, fabric, or combinations thereof. The Examiner of Interferences and the Commissioner both held that the opposition should be dismissed, and from the decision of the Commissioner the appellant brings the case here.

Certain evidence was taken before the Examiner of Interferences in this matter. From this evidence it fairly appears that the appellant manufactures large quantities of clothing upon which it uses its registered marks, and which clothing is sold throughout the United States in clothing and furnishing stores; that it has been using the trade-mark "Fashion Park" since January 1, 1915, and has carried on an extensive and widespread campaign of advertising by means of which it has advertised its said trade-marks throughout the trade; that 98 per cent of the dealers who sell applicant's goods sell, also, shoes, hats, neckwear, and other similar furnishings; that appellant's goods are also sold in Los Angeles, Calif., where the appellee conducts a large store for the sale of its goods.

As we view the matter, the only question necessary to be determined on this record is whether the trade-mark of appellee, which it proposes to register, so nearly resembles the registered trade-marks owned and used by the appellant as to be likely to cause confusion or mistake in the mind of the public, or to deceive purchasers.

In considering this matter it will be borne in mind that the goods upon which the opposer uses its trade-marks are men's coats, vests, pants, and overcoats, and that the goods upon which the appellee applicant uses its mark are men's, women's, and children's footwear, such as shoes, etc. Whether these be considered goods of the same descriptive properties or not, their similarity or lack of similarity is a very proper matter to be considered in determining whether such confusion or mistake in the mind of the public is liable to occur by the registration of the appellant's mark.

The principal point of similarity between the respective marks is the use of the word "Fashion." It has been held, and we think properly so, that this word being descriptive, there can be no exclusive right to its use. *Franklin Knitting Mills* v. *Kassman & Kessner*, 56 App. D. C. 348, 348 O. G. 530.

The only remaining question is whether the words "Park" and "Lane" in combination with the word "Fashion," and the other elements of the respective marks, as applied to the various goods upon which they are used, are so similar as to cause confusion. We do not think so. The proposed mark of appellee is the two words "Fashion Lane," while the marks of opposer, in addition to the words used, are each accompanied by a distinctive cut of two persons on horseback. This design is of such a character as to strike the eye of even the casual observer, at first glance. Nor is there, in our opinion, such a similarity between the words "Park" and "Lane" as justifies, in this case, the sustaining of this opposition.

The decision of the Commissioner is affirmed. Affirmed.

U. S. Court of Customs and Patent Appeals

FRITZ *v.* HAWN

No. 2,214. Decided February 6, 1930

[37 F. (2d) 430]

INTERFERENCE—PRIORITY—EMPLOYER AND EMPLOYEE.

Evidence reviewed and *Held* to establish that the relation of employer and employee existed between F. and H. and that all that H. did was to make suggestions ancillary to the plan and design which F. had conceived and that F. was entitled to the award of priority.

APPEAL from the Patent Office. Reversed.

Mr. Frank E. Liverance, jr., and *Mr. John Boyle, jr.*, for Fritz.

Mr. F. L. Chappell and *Mr. O. A. Earl* for Hawn.

GRAHAM, *P. J.*:

Philip Fritz, of Grand Rapids, Mich., presented his application to the Patent Office on May 18, 1925, for a patent on certain improvements in ice-cream cabinets. On January 5, 1926, United States Patent No. 1,568,216 was issued to him thereon.

On February 21, 1925, Harold A. Hawn filed his application, Serial No. 10,778, for a similar invention. On March 6, 1926, an interference proceeding [No. 53,490] was instituted and declared between said patent and said application, and is one of the matters now involved here. The subject matter of said interference is set forth in two counts, which are as follows:

1. In a construction of the class described, a cabinet having sides and ends and an interior space adapted to receive ice cream holding containers, said space at the lower portion thereof being relatively narrow and of a width to receive a single ice cream container and of a length to receive a plurality thereof, and at its upper portion being widened whereby an elongated space is left between a side of the cabinet and containers for ice cream placed therein, and a plurality of refrigerant holding receptacles located end to end in said last mentioned space and adapted to be freely placed therein or removed therefrom.

2. In a construction of the class described, a cabinet having sides and ends and an interior space, said space at its lower portion comprising a relatively narrow and elongated rectangular well and at its upper portion being widened, a plurality of ice cream containers of substantially cylindrical form located in said interior space of the cabinet with their lower portions received in said well and with their upper portions spaced from an inner side of the cabinet, and a plurality of refrigerant holding receptacles located between the said inner side of the cabinet, and the upper portions of said containers, each of said receptacles being freely removable from the cabinet independently of any other receptacle or of any ice cream container, and freely placed therein, substantially as described.

Thereafter, on the 16th day of March, 1927, the case having been submitted to the Examiner of Interferences, a decision awarding priority to Hawn was rendered, which decision thereafter, on March 23, 1928, was affirmed by the Board of Appeals.

On January 19, 1926, Hawn presented another application [No. 82,244] for improvements in ice cream cabinets to the Patent Office, and thereafter, on March 6, 1926, an interference proceeding [No. 53,491] was instituted and declared between his said application and the patent to Philip Fritz, heretofore mentioned, No. 1,568,216. The subject matter of this interference consisted of one count, which is as follows:

In a construction of the class described, a cabinet having sides and ends and an elongated interior space in which ice cream holding containers are adapted to be placed, said space at its lower portion being in the form of an elongated relatively narrow rectangular well and at its upper portion being widened at both sides of the well whereby elongated spaces are left between ice cream containers placed in alinement in the well and the inner sides of the cabinet, and a plurality of refrigerant holding receptacles located end to end in each of said last mentioned spaces at each side of and above the well and adapted to be freely placed therein or removed therefrom.

Afterwards, the case having been submitted, the Examiner of Interferences awarded priority to Hawn, which decision, on appeal to the Board of Appeals, was reversed on March 23, 1928, and priority was awarded by said Board to Fritz.

Both interferences are now before us on appeal by the respective parties. It has been stipulated that the same record shall be used in both cases, the cases have been heard together, and the points in issue in both will be, therefore, fully discussed herein.

It will be observed, from what has been said, that priority has been awarded to Hawn upon counts covering ice-cream cabinets with refrigerant-holding receptacles to be located on one side of the ice-cream containers to be placed in said cabinet, while priority is awarded to Fritz on similar cabinets with refrigerant-holding receptacles to be placed on both sides of the ice-cream containers.

The main and only controversy here is a question of fact as to the origin of the idea which finally led to the invention in question.

The facts, as they appear from the record, are substantially as follows:

Philip Fritz is a man 70 years of age, has been engaged in manufacturing since 1882, at Grand Rapids, Mich., and about 28 years before the hearing herein began the manufacture of refrigerators. This business has increased from year to year and at the time of hearing amounted to perhaps half a million dollars a year. Fritz, during his business experience, has had active charge of the business of his factory, and has made several inventions. From the record it is obvious that all details of the business were submitted to him and had his personal supervision. In 1923, when mechanical refrigeration began, he and his son, who was then engaged in business with him, together with others of the company, sold and manufactured to some extent mechanical or iceless refrigerators. He stated that in December, 1922, he first began to experiment with an ice-cream cabinet similar to that here involved, and at that time built a cabinet.

Up to that time ice-cream containers had been manufactured with the refrigerating material placed in the chamber with the containers and immediately surrounding them. The effort of Fritz was to produce a form of cabinet where the refrigeration might be applied through receptacles in the side or sides of the cabinet, which receptacles might be removed and filled elsewhere than in the place of business.

In 1924 and 1925 The Fritz Company made and sold a considerable number of ice-cream cabinets with a removable refrigerating tray placed between two ice-cream containers in the cabinet. These trays were originally full length, but later were shortened and placed on a rack. In January, 1925, The Fritz Company began to sell cabinets constructed according to the design embodied in Patent No. 1,568,216 here involved, and in 1925, 2,800 of these cabinets were sold by the company.

During this experimental stage, the party, Hawn, was employed by The Fritz Company, being employed originally to introduce a system of cost accounting and production efficiency in the plant. His employment continued from March 24, 1919, to October 12, 1925. He had had some experience as a draftsman, and was the only person in the Fritz establishment who had had training along this line. The party, Philip Fritz, on many occasions

made rough sketches, several of which are in evidence, on work which he desired to have done in his factory, but made no pretense of being able to make a finished drawing. The evidence shows that Hawn, from time to time, made drawings for the company, as requested by Mr. Fritz.

There is a sharp conflict in the evidence as regards the making of the drawing which is known as Fritz Exhibit A, and from which it is agreed that the first test cabinet made by The Fritz Company was constructed.

Philip Fritz and his son, Edward M. Fritz, testified that the elder Fritz had made a small, rough sketch of a cabinet to be constructed as the one here in issue, and called in Hawn and asked him to prepare a drawing, following the sketch, and at that time explained to him what the device was. Hawn testified, on his part, that he was called into conference with the elder Fritz and asked if he had any suggestions, and at that time he suggested the device in question; that after having done so he went to his home and prepared the drawing, Exhibit A, and delivered it to Mr. Fritz on the next morning, December 4, 1924. Thereupon the necessary instructions were given by Mr. Fritz to the factory superintendent, Mr. Thomas, to prepare the necessary specifications, and to construct test cabinets. These were constructed, and, on January 10, 1925, the first cabinets were ready and offered for sale, according to the new method of construction. The construction of these cabinets was admittedly made under the supervision of the elder Fritz.

The party, Hawn, who was 30 years of age at the time of hearing, had been engaged, since leaving school, in work for various companies in ascertaining production costs and in purchasing. He had never had any experience with refrigerating devices, nor had he ever made any inventions of any kind. He testified that in November and December, 1924, and in January and February, 1925, he conceived the idea of using frozen ice and salt in removable trays, and that, during November, 1924, at his home, he drew the sketch which afterwards became Exhibit A, and which embodies the ideas of the device here in question. He further stated that he did not show this sketch to his employer, Fritz, at the time he first prepared it, but showed it only to one A. G. Woodman, who was at that time employed by The Fritz Company. Afterwards, when requested by the elder Fritz to give suggestions, he procured the drawing from his home and showed it to him, having completed some details on the night before so offering it. Woodman testified that he saw this sketch at Hawn's home about the last of November, 1924.

As has been stated, Hawn filed his first application on February 21, 1925. He continued in the employ of Fritz until October 12, 1925. Before leaving this employment he organized a co-partnership to be known as the Consolidated Cabinet Corporation, and in this co-partnership engaged Frank W. Thomas, superintendent, Mr. Thome, auditor and office manager, Mr. Schmeiser, foreman of the machine room, Mr. Woodman, shop superintendent, all employees at that time of The Fritz Company, with the purpose of engaging in the manufacture of ice-cream cabinets such as those involved here and which, at that time, were being produced by the Fritz company. Hawn at no time protested against the using by The Fritz Company of the device suggested by said Exhibit A, but does state that he brought it to the attention of the elder Fritz that he, Hawn, was the inventor of the device. The witness, Frank W. Thomas, called by Hawn, testified that Mr. Fritz showed him a sketch of an ice-cream cabinet, told him he was going to have Hawn make a drawing of it, and that the next day Hawn showed him Exhibit A which he had prepared and which he then used to prepare further specifications for the cabinet.

As to the cabinet with refrigerating containers on one side only, Hawn testified that none were made by The Fritz Company while he was in their employ, and that he made a drawing of such a cabinet shortly after he prepared Exhibit A; that he did not show this drawing to the Fritzes, and thereafter built a cabinet along these lines.

It further appears from the evidence that Philip Fritz had, prior to November, 1924, manufactured ice-cream cabinets with tapered sides of the opening for ice-cream containers, with refrigeration means extending only part way down alongside of the ice-cream containers, and as early as 1923 had made removable full-length tapered trays for such cabinets. He also stated, with some corroboration, that he had built such removable trays, prior to that time, which were shorter than the ice-cream containers with which they were used.

These interferences were decided by the Board of Appeals upon the theory that the junior party, in neither case, had sustained the burden cast upon him by law and that, therefore, priority should be awarded in each case, to the senior party. It is vigorously insisted that the Patent Office failed to take into account, in coming to such conclusion, the relationship of employer and employee existing between Fritz and Hawn, and that, under the law, because of such relationship, the burden of proof was upon Hawn; that, therefore, if it be true, as found by the Board, that neither party hereto sustained his burden of proof, award of priority should be made to Fritz. This contention we shall briefly examine.

We are of opinion that the Board of Appeals did not give sufficient consideration to this phase of the subject. It is argued that Hawn was not employed to help design cabinets. Nevertheless the nature of his duties were such as to bring him in contact with the details of such work. He was obliged to compute, for his employer, the cost and efficiency of each detail of construction. He was called upon to make estimates and drawings for such construction and performed these functions constantly. We therefore hold that the relationship of employer and employee did exist between Fritz and Hawn in this work.

Under such circumstances, the law is well settled. It was expressed by Smith, J., in *Larson* v. *Crowther*, 1 F. (2d), 761–767:

But, however that may be, Crowther was assigned to the duty of making apparatus required by Larson for his experiments, and that relation between the parties imposed upon Crowther, notwithstanding his status as senior party, the burden of proving by competent credible evidence that the conception definitely evolved by those experiments was his, and not that of his employer. *Winslow* v. *Austin*, 14 App. D. C. 137, 143, 144.

To the same effect are *Sendelbach* v. *Gillette*, 22 App. D. C. 168; *Gallagher* v. *Hastings*, 21 App. D. C. 68; *Laughlin* v. *Burry*, 50 App. D. C. 273; *Miller* v. *Kelley*, 18 App. D. C. 163.

Perhaps the most illuminating discussion of the principles of law involved in such cases may be found in the opinion rendered by Mr. Justice Clifford in *Agawam Company* v. *Jordan*, 7 Wall. 583 (602). At the risk of perhaps unduly extending this opinion, we quote it:

No one is entitled to a patent for that which he did not invent unless he can show a legal title to the same from the inventor or by operation of law; but where a person has discovered an improved principle in a machine, manufacture, or composition of matter, and employs other persons to assist him in carrying out that principle, and they, in the course of experiments arising from that employment, make valuable discoveries ancillary to the plan and preconceived design of the employer, such suggested improvements are in general to be regarded as the property of the party who discovered the original improved principle, and may be embodied in his patent as a part of his invention.

Suggestions from another, made during the progress of such experiments, in order that they may be sufficient to defeat a patent subsequently issued, must have embraced the plan of the improvement, and must have furnished such information to the person to whom the communication was made that it would have enabled an ordinary mechanic, without the exercise of any ingenuity and special skill on his part, to construct and put the improvement in successful operation.

Persons employed, as much as employers, are entitled to their own independent inventions, but where the employer has conceived the plan of an invention and is engaged in experiments to perfect it, no suggestions from an employee, not amounting to a new method or arrangement, which, in itself is a complete invention, is sufficient to deprive the employer of the exclusive property in the perfected improvement. But where the suggestions go to make up a complete and perfect machine, embracing the substance of all that is embodied in the patent subsequently issued to the party to whom the suggestions were made, the patent is invalid, because the real invention or discovery belonged to another.

Guided by the principles thus announced, we have no hesitation in concluding priority in both these interferences should have been awarded to the party, Fritz. It is quite evident from the evidence which we have herein set out at some length, that, even taking Hawn's testimony at its face value, all he did was to make suggestions to Fritz ancillary to the plan and design which Fritz had conceived and was then engaged in working out and for which he had in his mind at that time the basic ideas. For years Fritz had lived with the ice-cream cabinet business; he had constantly made improvements and many inventions, building his business up until he outstripped his competitors. Every idea employed in the later cabinets, whether they had refrigerating trays on one or both sides, whether the trays were long or short, had been conceived and utilized, in some degree, by him. On the other hand Hawn was not an inventor. If he did conceive, without outside suggestion, the invention here in question, it would be remarkable. On the other hand, the more reasonable conclusion is that from his contact with Fritz and Fritz's business, and from the suggestions thus received, he evolved the idea which he thought was his own conception but which was, in fact, the creature of his employer's brain. In order to succeed here, it must be apparent, from the record, that he was the inventor of the device in question; that the basic conception was his. This, we believe, he has not shown.

This being our conclusion, the decision of the Board of Appeals should be affirmed as to interference No. 53,491, and reversed as to interference No. 53,490, and priority should be awarded in said last numbered interference to Philip Fritz.

The decision of the Board of Appeals is therefore, in this appeal, reversed, and priority is awarded to the party, Philip Fritz.

Reversed.

U. S. Court of Customs and Patent Appeals

HAWN *v.* FRITZ

No. 2,215. Decided February 6, 1930

[37 F. (2d) 434]

INTERFERENCE—PRIORITY.

Priority *Held* properly awarded to F.

APPEAL from the Patent Office. Affirmed.

Mr. F. L. Chappell and *Mr. O. A. Earl* for Hawn.

Mr. Frank E. Liverance, jr., and *Mr. John Boyler, jr.*, for Fritz.

GRAHAM, *P. J.*:

The issues in this matter have been fully considered in No. 2,214, *Philip Fritz* v. *Harold A. Hawn*, decided concurrently herewith, and no further discussion thereof is required. In accordance with our conclusion expressed in the opinion filed in said No. 2,214, the decision of the Board of Appeals is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

JUNG, JR., *v.* SCHOLL

No. 2,203. Decided February 6, 1930

[37 F. (2d) 761]

1. INTERFERENCE—PRIORITY—PRIOR CONCEPTION—PROOF OF.

In order to establish prior conception it is not necessary that the conception be proven as of a definite date. It is sufficient that it be proven within a period prior to the conception of the other party.

2. SAME—SAME.

Testimony reviewed and *Held* to establish that S., who was the last to reduce the invention to practice, had established a conception prior to the conception of J. and was diligent in reducing the invention to practice, and priority was therefore properly awarded to him.

APPEAL from the Patent Office. Affirmed.

Mr. Walter F. Murray and *Mr. Frank L. Zugelter* for Jung, jr.

Mr. Charles W. Hills, Mr. A. C. Mabee, and *Mr. Myron G. Clear* for Scholl.

BLAND, *J.*:

Appeal is here taken from the decision of the Board of Appeals of the Patent Office, awarding priority of invention to William M. Scholl.

The subject matter of the invention is a brace or support, referred to as a "metatarsal arch support" for treatment of foot troubles, such as weak or fallen arches. The device comprises an annular band of elastic or webbing for encircling the human foot between the toes and ankle, and a pocket forming means is carried by the annular band. Pads of various kinds, thicknesses, and shapes, of rubber, felt, cotton, or other material, required for supporting the bones of the foot, may be inserted in the pocket.

The interference was declared after Jung's patent issued. Scholl filed his application seven days before the issuance of Jung's patent. The Board of Appeals and the Examiner of Interferences found that Jung conceived the invention and reduced the same to practice on June 30, 1923. While Scholl expresses some disbelief of the fact that Jung did so conceive and reduce to practice on that date, he does not dispute but that the evidence in the record justifies that conclusion. Scholl calls special attention to the fact that Jung—

did not file his application until June 18, 1924, over three months after Scholl had sold his pads in Cincinnati, Jung's home city, and that Jung's pads did not go on the market until early in 1925, about a year after Scholl's pads were on the market.

Scholl claims he conceived the patent in the year 1922 and reduced it to practice in January, 1923. Scholl is a physician and surgeon and an orthopedic specialist, has been engaged in orthopedic work since 1904, and is president of the Scholl Manufacturing Co., Inc., which was and is engaged in the manufacture and sale of foot appliances, remedies, and specialties. Scholl's testimony shows that several of the pads were made experimentally in 1922; that in January, 1923, Exhibit No. 2, around which there is considerable controversy in the case, was made, dated, and signed by the witness, Samuel Berman; and that this exhibit was displayed to a number of persons on or about that date. Doctor Scholl made several pads like Scholl Exhibit No. 2 and delivered them early in 1923 to the Illinois College of Chiropody for use in the clinic maintained by that school. Three witnesses, Samuel Berman, John G. O'Malley, and Edward J. Hartung, testified on behalf of Scholl, and their testimony supports different phases of Scholl's testimony.

The Examiner of Interferences, while expressing some dissatisfaction as to the Scholl proof, stated:

On the ground that Scholl was first to conceive and was diligently engaged in reducing his invention to practice at the time when Jung entered the field and until Scholl's own reduction to practice was completed, it is held that Scholl is the prior inventor.

The Board of Appeals agreed with all the findings of the Examiner of Interferences and affirmed his decision.

Before the Examiner, the Board of Appeals, and this court, Jung has contended that, under the rule laid down in *Ball* v. *Flora*, 26 App. D. C. 394, 121 O. G. 2668, Scholl, being the junior party, was required to "fix definitely a date of conception" and must "satisfactorily establish the fact of the conception" prior to June 30, 1923. He contends that since the Examiner expressed dissatisfaction with the character of proof offered by Scholl, he should have found against Scholl, and we are asked to go into the testimony, which has been discussed and analyzed with great care by Jung, and hold that Scholl did not "fix definitely" a date of conception, and award priority to appellant herein.

The testimony is long and, in places, somewhat conflicting or at least confusing. In the testimony of several witnesses, testifying to dates and circumstances surrounding them, which are three or four years removed from the date of giving testimony, discrepancies are not unusual. Their existence need not necessarily require the rejection of the testimony. In spite of discrepancies testimony, ofttimes, is amply sufficient to prove essential facts.

The testimony was sufficient basis for the tribunals below to award conception to Scholl some time in January, 1923, or at least prior to June 30, 1923, which is the date of conception and reduction to practice of Jung, and in the view of the Examiner and the Board, the testimony was sufficient to show that Scholl, in his reduction to practice, had diligently proceeded from the date of conception.

[1] We do not think *Ball* v. *Flora*, supra, is authority for requiring Scholl to fix one particular date in January. It is sufficient if the evidence definitely fixes the fact that his conception was prior to June 30 and that from that date he was diligent. This is in accordance with the views expressed by the Board of Appeals as follows:

The words of the court "failed to fix definitely" merely mean that the testimony was not definite and are in no way a ruling that the conception must be proven as of a definite date. If it can be shown that conception occurred sometime in January, that is sufficient where the dates of the other party are long after any day in January.

[2] We do not regard it as necessary or helpful to discuss the evidence in detail. We think it abundantly supports the views taken by the tribunals below and certainly we can not say that their views in regard to it are clearly erroneous.

The decision of the Board of Appeals is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE APPELBURG AND GILLIVER

No. 2,320. Decided February 6, 1930

[37 F. (2d) 620]

1. PATENTS—APPEAL—AMENDMENT OF CLAIM BEFORE THE COURT.

"We know of no applicable law or rule of practice to justify the allowance in this court of the amendment of a claim which would substantially change the character of the same from what it was before the Board of Appeals. No such law or practice has been called to our attention."

2. PATENTABILITY—AGGREGATION.

"Where a given number of elements, which produce a known result when functioning separately, is assembled and the assembly produces only a combination of the results found in the individual units, no invention is shown and amounts to an aggregation."

3. SAME—COMMERCIAL SUCCESS—NOT CONCLUSIVE.

"If appellants by their assembly or combination have produced a flash-light lamp, popular with the public (which probably, they have done), they are entitled to a commercial success from its manufacture and sale. Patent law, however, is not alone concerned with use and salability. The law was intended, in part, to stimulate and reward inventive genius. This praiseworthy motive on the part of the legislature would hardly be promoted by the granting of a monopoly upon a mere aggregation of things already invented or known when no new inventive genius is displayed."

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4. SAME—INCANDESCENT FLASH-LIGHT LAMP.

Claims for an incandescent flash-light lamp *held* unpatentable over the prior art.

APPEAL from the Patent Office. Affirmed.

Messrs. Marks and Clerk and *Mr. James T. Newton* for Appelburg and Gilliver.

Mr. T. A. Hostetler for the Commissioner of Patents.

BLAND, *J.*:

Appellants' five claims for patent for an incandescent flash-light lamp were rejected by the Examiner and the Board of Appeals, and from the decision of the latter, appeal is taken to this court.

The subject matter of the application is an incandescent flash-light lamp, having inserted in the hollow cap of the lamp base a hermetically-sealed closed glass receptacle, and enclosed in the receptacle is a thermostatic self-interrupting device which consists of two resilient contact tongues molten into the receptacle, one or both of said tongues being composed of thermostat metal or else being bimetallic thermostat strips of the usual structure. Wrapped around one of the resilient contact tongues is a heating winding connected in series with the filament. The contact tongues are provided with break contacts of tungsten. When the thermostat is under the direct control of radiation of heat from the filaments, the same will be brought into operation to close the current through the lamp so that the current is interrupted every few seconds in the break contacts. When, on account of the interrupting current, the thermostat again cools down, the current circuit is again closed and the filament begins to glow anew. The repetition of these functions produces a flash-light result without any external relay devices. It is said that the device may be attached to or used in connection with sadirons, curling irons, soldering irons, cooking plates and other similar electrical devices, where it is essential that overheating does not occur.

The five claims are as follows:

1. An incandescent flash-light lamp having inserted in the hollow cap of the lamp base a detachable, hermetically closed glass receptacle, and a self interrupting device enclosed in said receptacle and arranged to close and break the lamp circuit periodically.
2. An incandescent flash-light lamp having inserted in the hollow cap of the lamp base a detachable, hermetically closed evacuated glass receptacle, and a thermostatic switch enclosed in said receptacle and arranged to close and break the lamp circuit periodically, said switch consisting of a bi-metallic tongue provided with a heating winding connected in series with the filament.
3. An incandescent flash-light lamp having inserted axially in the hollow cap of the lamp base a detachable, hermetically closed evacuated glass receptacle, and a thermostatic switch enclosed in said receptacle and arranged to close and break the lamp circuit periodically, said switch consisting of a bi-metallic tongue provided with a heating winding connected in series with the filament.
4. An incandescent flash-light lamp having inserted in the hollow cap of the lamp base a detachable hermetically closed evacuated glass receptacle, and a thermostatic switch enclosed in said receptacle and arranged to close and break the lamp circuit periodically, said switch consisting of a bi-metallic tongue provided with a heating winding connected in series with the filament, and break contacts consisting of tungsten.
5. An incandescent flash-light lamp having inserted in the hollow cap of the lamp base a detachable, hermetically closed glass receptacle filled with inert gas, and a thermostatic switch enclosed in said receptacle and arranged to close and break the lamp circuit periodically.

The claims were rejected on the following references: Phelps, 976,287, November 22, 1910; Houchin, 1,280,227, October 1, 1918; Birbeck, British, 13,156, of 1905; Graham et al., British, 136,101, of 1919.

In this court, appellants call attention to the fact that the Board of Appeals in its decision comments upon the "removable" feature in the first four claims and states that there was confusion before the Board concerning the word "detachable," and here request that they be allowed to withdraw the "appeal as to all claims except claim 2" and that "this claim be considered with this word 'detachable' left out."

In the brief of the Solicitor for the Patent Office, after stating this request on the part of appellants, it is said: "With the approval of the court, no objection is made." The Solicitor's brief then proceeds upon the theory that there is but one claim, claim 2, with the word "detachable" omitted.

[1] We know of no applicable law or rule of practice to justify the allowance in this court of the amendment of a claim which would substantially change the character of the same from what it was before the Board of Appeals. No such law or practice has been called to our attention.

It seems to us, however, that regardless of whether the word "detachable" is in or out of the claim, the decision of the Board rejecting the five claims must be affirmed. As far as we have been able to observe, every material element in applicant's device is fully disclosed in the references. Certainly nothing new of a patentable character has been suggested in this court.

Appellants' counsel, both in brief and argument before this court, has very earnestly and forcefully urged the patentability of their device on the grounds that it is a new combination of old elements producing new results, which is patentable. Appellants' learned counsel argues that appellants are the—

> first to have produced a flash-light lamp with enclosed thermostatic switch which has stood the practical test and which is actually a commercial lamp that has found an extensive sale. * * * This result has been attained by using, in a lamp of the kind in question, a thermostatic switch of a type known, but which heretofore has not been used in this combination.

It is not contended that either the thermostatic switch, the heating winding device, or the hermetically sealed glass receptacle filled with inert gas, is new. Nor is it contended that the principle of resilient contact tongues is new. It is urged that taking these different known devices and assembling them together in the form of a flash-light lamp is such a combination as produces a new result and requires invention.

[2, 3, 4] It is a well settled principle of patent law that a combination of old devices which produces no other result than the sum of the results produced by each of the devices is not patentable. Where a given number of elements, which produce a known result when functioning separately, is assembled and the assembly produces only a combination of the results found in the individual units, no invention is shown and amounts to an aggregation. While decreasing or increasing the size of the known units or making a rearrangement of them may produce a valuable and efficiently working mechanism which is conducive to commercial success, this fact does not necessarily suggest invention. If appellants by their assembly or combination have produced a flash-light lamp, popular with the public (which, probably, they have done), they are entitled to a commercial success from its manufacture and sale. Patent law, however, is not alone concerned with use and salability. The law was intended, in part, to stimulate and reward inventive genius. This praiseworthy motive on the part of the legislature would hardly be promoted by the granting of a monopoly upon a mere aggregation of things already invented or known when no new inventive genius is displayed. *In re Vissering*, 24 F. (2d) 1013, 374 O. G. 703; *In re Smith*, 57 App. D. C. 204, 19 F. (2d) 678; *Elite Manufacturing Company* v. *Ashland Manufacturing Company*, 235 Fed. 393, 1917 C. D. 238.

The decision of the Board of Appeals is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

MULHENS & KROPFF, INC., v. ONNEN (DOING BUSINESS AS THE ARMOL CHEMICAL CO.)

No. 2,258. Decided February 6, 1930

[37 F. (2d) 435]

TRADE-MARKS—GOODS OF THE SAME DESCRIPTIVE PROPERTIES—LIQUID TONIC AND TOILET ARTICLES NOT.

A liquid medicinal preparation for the treatment of colds, etc., *Held* not of the same descriptive properties as antiseptic mouth wash, cold cream, etc., cologne, and toilet soap.

APPEAL from the Patent Office. Affirmed.

Messrs. Emery, Booth, Janney & Varney, Mr. Lucius E. Varney, Mr. Edward G. Curtis, and *Mr. Nichol M. Sandoe* for Mulhens & Kropff, Inc.

Mr. John W. Darley for Onnen.

GARRETT, *J.*:

This is an appeal from the decision of the Commissioner of Patents sustaining the action of the Examiner of Trade-Mark Interferences dismissing an opposition filed by Mulhens and Kropff to the application of Onnen for the registration as a trade-mark of the numerals "7—11" applied to certain liquid medicinal preparations, for the treatment of colds, grippe, chills, and fever, malaria and biliousness and for use as a blood builder.

Appellant (opposer) claims ownership of the mark "4711" which has been registered as follows:

No. 9,405, issued May 23, 1882; No. 45,617, issued August 22, 1905, renewed May 5, 1925; No. 50,685, issued March 27, 1906; No. 143,100, issued May 24, 1901; No. 143,408, issued May 31, 1921; and No. 144,207, issued June 28, 1921.

The decision of the Commissioner recites that appellant has used the mark upon various preparations as follows:

Antiseptic mouth wash and scalp remedies, cold cream, vanishing cream, honey-jelly cream, sachet powder, toilet powder, face powder, bath salts, smelling salts, dental preparations, finger-nail preparations, hair tonic, cologne and toilet soap.

The case was heard before the tribunals of the Patent Office upon a stipulation of facts, from which it appears that opposer and its predecessor have used the mark "4711" upon some or all of the goods mentioned continuously since about 1878, advertising and distributing them throughout the United States, and that these goods and the mark are extensively and favorably known. It further appears that opposer has never used the mark upon any internal remedies adapted to the uses for which applicant's goods are manufactured, or in fact upon any internal remedies or preparations, but it is argued that since both kinds of goods are largely handled by the same retail dealers or druggists, together with other goods of the same character as those of applicant, confusion of origin would likely result in a manner which should cause registration to be refused to appellee (applicant), particularly in view of the fact that the numerals "7—11" are the same as three of those in the mark "4711".

It appears that applicant's mark "7—11" was first used upon tonic to a very limited extent by his predecessor in business, beginning about 1897, but it was not used to any appreciable extent in interstate commerce prior to 1923.

An examination of the respective design drawings on file as a part of the record in the case does not show any similarity of arrangement. Opposer's mark as registered is simply the four numerals, "4711," except that in No. 9,405 there are several adornments in the nature of designs, arranged in circular inclosures, and also several words, and, in No. 50,685, the numerals are inclosed in a somewhat circular design, the letters "No" being so printed in connection with the circular line as to precede the numerals. Applicant's design consists of the figures seven and one, one, arranged thus: 7—11. These numerals so arranged are on a black background, inclosed within a lozenge-shaped panel.

Nevertheless the dominant portion of applicant's mark appears to be the numerals, and they are the same as three of the four numerals which constitute the dominant feature of the mark of opposer. If, therefore, they were applied to goods of the same descriptive properties, notwithstanding the differences in arrangement and style, we should think that such confusion might result as to bring the application under the bar of the statute, although there are numerous authorities that seem to support applicant's insistence to the contrary. However, it does not appear to be important definitely to determine that question in this case, because we think the Commissioner was clearly right in concluding that the goods are not of the same descriptive properties in the sense of the statute. Their appearance and uses are quite different; they are manufactured for and applied to entirely different purposes. It is true that opposer states that certain of his soaps are medicinal in character. Accepting this as true, the fact remains that applicant's tonic is liquid in form and not solid as is the soap. The one is for internal and the other for external use and they are for the treatment of entirely different ailments or afflictions.

It was shown in the case that the numerals 7—11 have been registered in connection with other goods by other persons without opposition by opposer.

We would not give undue weight to this fact without a more careful scrutiny of the goods for which the registrations were made. We take it that opposer did not regard the articles upon which those marks were applied as being of the same descriptive properties with its own articles. Such is our opinion of the materials here involved. The decision of the Commissioner is affirmed.

Affirmed.

Patent Suits

[Notices under sec. 4921, R. S., as amended Feb. 18, 1922]

923,121, F. W. Hillard, Typewriting machine, appeal filed Feb. 28, 1930, C. C. A., 2d Cir., Doc. 10828, *Typewriters Hillardized, Inc.*, v. *Corona Typewriter Co., Inc.*

1,078,982, J. Banwell, Street paving, D. C., N. D. Ohio (E. Div.), Doc. 1909, *R. L. Beck et al.* v. *Servicised Products Corp. et al.* Dismissed without prejudice Feb. 26, 1930.

1,184,979, H. C. Miller, Flexible binder post for loose-leaf binders, filed Mar. 3, 1930, D. C., E. D. Wis. (Milwaukee), Doc. 2873, *Stationers Loose Leaf Co.* v. *Siekert & Baum Stationery Co.*

1,221,389, A. E. Strippel, Stencil, D. C., S. D. N. Y., Doc. E 44/76, *Wallace Addressing Machine Co., Inc.*, v. *Rapid Addressing Machine Co. et al.* Dismissed Feb. 25, 1930.

1,227,139, G. Hoepner, Labeling machine, D. C., Del., Doc. E 660, *Pneumatic Scale Corp., Ltd.*, v. *Mapl-Flake Mills, Inc.* Patent held valid and infringed Feb. 20, 1930.

1,236,217, G. B. Shaw, Rug and carpet fastener, filed Feb. 26, 1930, D. C., S. D. N. Y., Doc. E 52/110, *W. A. McHorney Co., Inc.*, v. *Gould Merseneau Co., Inc.*

1,271,529, M. C. Hopkins, Acoustic device, D. C., Del., Doc. E 712, *Lektorphone Corp.* v. *Miller Bros. Co.* Patent held valid and infringed Feb. 12, 1930.

1,334,787, O. F. Palmer, Machine for making metallic conduits, filed Dec. 27, 1929, D. C., N. J., Doc. E 3967, *Triangle Conduit Co., Inc.*, v. *Crescent Armored Wire Co., Inc.*

1,351,599, F. J. Wolff, Art or method of casting articles of clay, filed Dec. 2, 1929, D. C., N. J., Doc. E 3960, *F. J. Wolff* v. *Woodridge Ceramic Corp.*

1,388,364, M. A. Miller, Cake-baking pan, D. C., E. D. Wis. (Milwaukee), Doc. 2717, *M. A. Miller et al.* v. *Geuder, Paeschke & Frey Co.* Decree for plaintiff Feb. 19, 1930.

1,404,539, C. K. Nelson, Confection, D. C., Kans. (Wichita), Doc. E N-440, *Eskimo Pie Corp.* v. *Steffen Ice & Ice Cream Co.* Dismissed without prejudice Feb. 21, 1930.

1,411,227, L. A. Suekoff, Spring cushion construction, D. C., N. J., Doc. E 3481, *L. A. Suekoff et al.* v *Trenton Spring Products Co.* Injunction Nov. 19, 1929.

1,447,000, J. E. Langsdorf, Necktie, D. C., S. D. N. Y., Doc. E 50/398, *Franc-Strohmenger & Cowan, Inc.*, v. *Sabator Bonan et al.* Consent decree for plaintiff Mar. 3, 1930.

1,493,687, W. Lowell, Golfing tee, C. C. A., 2d Cir., Doc. 10714, *The Nieblo Mfg. Co., Inc., et al.* v. *R. Preston et al.* Decree affirmed (notice Mar. 3, 1930).

1,495,570, G. H. Blakeley, Series of I beams, D. C., N. J., Doc. E 3814, *Bethlehem Steel Co.* v. *U. S. Steel Corp. et al.* Discontinued Nov. 29, 1929.

1,512,888, L. Haft, Lightning set, D. C., S. D. N. Y., Doc. E 43/314, *Norma Electric Corp. et al.* v. *Rainbow Electrical Mfg. Corp.* Consent decree for plantiff Feb. 28, 1930.

1,540,006, F. S. Hodson, Metallic alloy, filed Dec. 20, 1929, D. C., N. J., Doc. E 3966, *F. S. Hodson* v. *New Jersey Zinc Co.*

1,560,248, H. E. Kerr, Gas burner, C. C. A., 8th Cir. (St. Louis), Doc. 8634, *The Cleveland Gas Burner & Appliance Co.* v. *American Heater Corp.* Decree affirmed Feb. 14, 1930.

1,592,129, F. J. Stokes, Tube-closing machinery, filed Feb. 11, 1930, D. C., Del., Doc. E 771, *F. J. Stokes Machine Co.* v. *Lambert Pharmacal Co.*

1,598,819, J. B. Hill, Apparatus for removing ink from printing-press inking rolls, C. C. A., 8th Cir. (St. Louis), Doc. 8635, *Commercial Lithographing Co.* v. *Clean-A-Press Machine Co.* Decree reversed, patent held not infringed, Feb. 20, 1930.

1,604,739, C. R. Downs, Apparatus for promoting catalytic reactions, appeal filed Dec. 5, 1929, C. C. A., 3d Cir., Doc. 4316, *The Selden Co.* v. *The Barett Co.*

1,613,055, G. I. Ray, Composition for stopping leaks in hot-water-circulating systems, C. C. A., 3d Cir., Doc. 4215, *Radiator Specialty Co.* v. *W. H. Buhot.* Patent held valid and infringed Feb. 27, 1930.

1,620,116, D. A. Maanum, Can washer, filed Feb. 24, 1930, D. C., E. D. Mo. (St. Louis), Doc. 8958, *Cherry-Burrell Corp.* v. *Meyer-Blanke Co.*

1,636,770, Fox & Stark, Thermostatic pilot-control system for burners, D. C., N. D. Ohio (E. Div.), Doc. 2672, *The Bryant Heater & Mfg. Co.* v. *B-Line Boiler Co.* Dismissed Dec. 11, 1929.

1,646,226, C. B. White, Fire extinguisher, filed Jan. 31, 1930, D. C., N. J., Doc. E 3084, *American-La France & Foamite Corp.* v. *American Fomon Co.*

1,675,165, L. L. Custer, Automatic starting and stopping device for motor-propelled vehicles, D. C., N. J., Doc. E 3694, *Custer Specialty Co.* v. *Automotive Standards, Inc.* Dismissed without prejudice Dec. 6, 1929.

1,677,998, C. T. Bliss, Electrical Christmas candle, filed Mar. 3, 1930, D. C., S. D. N. Y., Doc. E 52/132, *Royal Electric Co. et al* v. *Norma Electric Corp.*

1,690,558, E. B. Staley, Trailer hitch, D. C., Wash. (Seattle), Doc. 604, *E. B. Staley* v. *Washington Co-Operative Egg & Poultry Ass'n. et al.* Decree for plaintiff Feb. 21, 1930.

1,707,013, J. A. Hoegger, Wall cabinet, filed Nov. 20, 1929, D. C., N. J., Doc. E 3956, *J. Hoegger* v. *R. Hartshorne.*

1,709,741, R. T. Romine, Industrial truck, filed Mar. 1, 1930, D. C., S. D. Ohio (W. Div.), Doc. E 658, *R. T. Romine* v. *The American Rolling Mill Co.*

1,721,481, J. N. Collins, Collar, filed Mar. 1, 1930, D. C., S. D. N. Y., Doc. E 52/130, *Oriole Shirt Mfg. Corp.* v. *Abbey Shirt Co., Inc., et al.*

1,725,516, B. L. Hirshon, Shoe form, filed Feb. 25, 1930, D. C., S. D. N. Y., Doc. E 52/99, *New York Vocational Adjustment Bureau, Inc.*, v. *H. A. Enrich.*

Des. 79,313, L. Zweig, Clock case, D. C., S. D. N. Y., Doc. E 50/207, *Sun Rise Lamp Mfg. Co., Inc.*, v. *Metropolitan Lamp Co., Inc.* Consent decree for plaintiff Feb. 24, 1930.

Trade-Marks Canceled

39,190. Food and condition powders for stock and poultry. Longwell and Watters, Wellman, Iowa. Registered November 4, 1902. Canceled April 4, 1930.

77,800. Rice. Geo. P. Eastman, New Orleans, La. Registered May 10, 1910. Canceled April 21, 1930.

115,491. Ground lime. Chemical Lime & Sand Company, Huntington, W. Va., and Lawton, Ky. Registered February 20, 1917. Canceled April 21, 1930.

125,760. Lubricating oils. The Schofield Oil Co., Inc., New York, N. Y. Registered June 10, 1919. Canceled April 4, 1930.

127,643. Dyes for the hair. Louis Mottard, London, England. Registered November 18, 1919. Canceled April 4, 1930.

129,393. Lubricating oils. The Schofield Oil Co., Inc., New York, N. Y. Registered February 17, 1920. Canceled April 4, 1930.

133,108. Certain named cutlery, machinery, and tools, and parts thereof. Chicago Pneumatic Tool Company, Chicago, Ill. Registered July 13, 1920. Canceled April 21, 1930.

148,241. Malt extract used as an ingredient of food. M. C. Rosenfeld Company, Boston, Mass. Registered November 8, 1921. Canceled March 24, 1930.

172,852. Certain named medical preparations. Cole Chemical Company, St. Louis, Mo. Registered September 11, 1923. Canceled April 21, 1930.

246,606. Dress, negligee, and work shirts. M. H. Raab Co., Philadelphia, Pa. Registered September 11, 1928. Canceled March 7, 1930.

253,904. Vehicle wheels. Budd Wheel Company, Philadelphia, Pa. Registered March 5, 1929. Canceled April 21, 1930.

257,884. Wheat flour. Walter E. Fuller, doing business as Walter E. Fuller Flour Company, Boston, Mass. Registered June 18, 1929. Canceled March 24, 1930.

262,302. Malt syrup. Max S. Hinden, doing business as Happiness Malt Supplies, Jamaica, N. Y. Registered October 1, 1929. Canceled April 21, 1930.

263,270. Razor blades. Probak Corporation, Jersey City, N. J., and New York, N. Y. Registered November 5, 1929. Canceled April 21, 1930.

Label Canceled

36,093. Malt syrup. The A. Sherman Mfg. Co. Inc., Stamford, Conn. Registered July 23, 1929. Canceled April 21, 1930.

Disclaimers

1,432,937.—*William H. Wood*, Cleveland, Ohio. STORAGE BATTERY. Patent dated October 24, 1922. Disclaimer filed April 10, 1930, by the *patentee*.

Therefore enters the following disclaimer in relation to certain of said claims as follows:

Petitioner disclaims from the scope of claim 1 all processes involving the use of "finely divided granular substances consisting of or containing essentially cellulose" except those wherein the cellulose material has been digested in sulphuric acid prior to being incorporated with the lead oxide.

Petitioner disclaims from the scope of claim 2 all substances excepting those which, in addition to the other characteristics recited in that claim, have been digested with an alkali solution, and also, subsequently to such alkali solution, with sulphuric acid solution, before being mixed with the lead oxide.

Petitioner disclaims from the scope of claim 3 all processes involving the use of "a finely divided granular substance which is insoluble in water and soluble in sulphuric acid" except those wherein the substance in question is a vegetable substance such as sawdust, paper, cotton, or rags, containing a high proportion of cellulose and wherein that substance has been treated with plurality of liquids, one of said liquids being of a character to remove pitch, resin, and wood acids, and another of said liquids being sulphuric acid, the treatment with the sulphuric acid being the last treatment prior to the mixing of the substance with the lead oxide.

Petitioner disclaims from the scope of claim 4 all processes involving the use of "a finely divided carbohydrate which is soluble in sulphuric acid and insoluble in water" except those wherein the carbohydrate in question is essentially cellulose free from pitchy, resinous, and acid substances and wherein said carbohydrate has actually been digested with sulphuric acid prior to its incorporation with the lead oxide.

1,550,769.—*Samuel B. Williams*, Brooklyn, N. Y. TELEPHONE-EXCHANGE SYSTEM. Patent dated August 25, 1925. Disclaimer filed April 19, 1930, by the assignee, *Western Electric Company, Incorporated*.

Hereby enters this disclaimer to the said claims of said Letters Patent which are in the following words to wit:

"1. In a telephone system, a selective switch, means for extending a connection to said switch, a recording device responsive to impulses sent over said connection for storing designations, a plurality of equivalent switch controlling mechanisms, means independent of the extended connection for connecting any one of said mechanisms with the recording device, and means controlled by such mechanism for selectively operating the switch.

"2. In a telephone system, a line, a selective switch, means for extending a connection from said line to said switch, a recording device controlled over said line for storing designations, a plurality of equivalent switch controlling mechanisms, means independent of the extended connection for connecting any one of said mechanisms with the recording device, means for connecting such mechanism with the switch, and means controlled by the connected mechanism for selectively operating the switch.

"3. In a telephone system, a selective switch, means for extending a connection to said switch, a plurality of recording senders, means for sending impulses over the extended connection to set said senders, a plurality of equivalent switch controlling markers, means independent of the extended connection for connecting any one of said markers with any one of said senders, and means controlled by the connected marker for selectively operating said switch.

"4. In a telephone system, a selective switch, automatic means for extending a connection to said switch, a plurality of senders for recording line designations, a plurality of equivalent switch controlling markers for cooperating with said senders, a multicontact relay device for connecting any sender to any one of said markers, and means controlled by the connected marker for selectively operating the switch to further extend the connection.

"5. In a telephone system, a plurality of equivalent switches at a selective switching stage, means for extending a telephone connection to one of said switches, a plurality of recording senders each controlled over the extended connection for storing designations, a plurality of switch controlling markers, means independent of the extended connection for connecting any one of said markers to one of the senders, and means controlled by the marker for selectively operating the particular switch to which said connection has been extended."

"9. In a telephone system, a plurality of succeeding switches for building up a connection, means for extending a connection to the first of said switches, a recording sender responsive to impulses sent over the extended connection for recording designations, a plurality of equivalent switch controlling markers, means independent of the extended connection for connecting any one of said markers to the recording sender, and means controlled by such marker for selectively operating each of said switches to further extend the connection."

"11. In a telephone system, a selective switch, means for extending a connection to said switch, a recording device, a pair of equivalent markers arranged to be taken for use in alternation, means independent of the extended connection for connecting said recording device to one of said markers if idle and a succeeding marker if the first marker is busy, and means controlled by the connected marker for selectively operating said switch."

"13. In a telephone system, a selective switching stage having a plurality of switches thereat, means for extending connections to said switches, a number of recording senders, a plurality of equivalent switch controlling markers, means for connecting any sender to any marker, means separate from the extended connection for connecting any marker to any one of said switches, and means controlled by the marker for selectively operating the switch to which it is connected.

"14. In a telephone system, a plurality of selective switches, means for extending a connection to said switches, a plurality of recording senders, a plurality of equivalent switch controlling markers, means separate from the extended connection for connecting any one of said markers to any one of said senders, means separate from the extended connection for connecting any one of said markers which is connected to a sender to any one of said switches, and means controlled by the connected marker for operating the switch."

Changes in Classification

Order No. 3,148, April 22, 1930, directs:

In *class 179, Telephony* (Division 16), establish the following subclass and definitions:

Telephones
Magnetic
Diaphragm
115.5 Movable actuating coil.

115.5. TELEPHONES, MAGNETIC, DIAPHRAGM, MOVABLE ACTUATING COIL. Receivers wherein a current-carrying actuating coil is permanently attached to and movable with the diaphragm. The coil may be closed and have the current induced therein.

Note.—For the diaphragm per se see this class, subclasses 115 and 181, and class 181, Acoustics, subclasses 31, Diaphragms and mountings, and 32, Diaphragms.

The patents contained in this subclass have been taken for the most part from various subclasses in class 179, Telephony.

In *class 230, Gas Pumps and Fans* (Division 9), establish the following subclass and definition:

Fans
Combined devices
249.5 With illuminating means.

249.5. FANS, COMBINED DEVICES, WITH ILLUMINATING MEANS. Fans combined with illuminating means when invention is claimed in the fan, its mounting, or the combination of fan and illuminating means.

Note.—If the invention lies in the illuminating means, see class 240, Illumination.

The patents contained in this subclass have been taken for the most part from class 240, Illumination, subclass 2, Combined light and structure.

Interference Notices

U. S. PATENT OFFICE, *Washington, Apr. 8, 1930.*

Frank T. Brown, his assigns or legal representatives, take notice:

An interference has been declared by this Office between the applications for patent of Frank T. Brown, 114 Stimson St., Detroit, Mich., and of Joseph Lashenick, 171 McKibben St., Brooklyn, N. Y. A notice of such declaration sent to Solomon Dunn, assignee of said Brown, has been returned by the post office as undeliverable, and counsel for Brown states that he has been unable to ascertain the present whereabouts of said Brown or of his assignee. Notice is hereby given that unless said Frank T. Brown, his assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the interference will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

U. S. PATENT OFFICE, *Washington, Apr. 23, 1930.*

Joseph A. O'Neill, his assigns or legal representatives, take notice:

An interference having been declared by this Office between the application for patent of Harry E. Chipman, 97 Suffolk Street, Springfield, Mass., and Patent No. 1,653,467, granted December 20, 1927, to Joseph A. O'Neill, 2626 Broadway, New York, N. Y., and the notice of such declaration sent by registered mail to said O'Neill at said address having been returned by the post office undeliverable, notice is hereby given that unless said O'Neill, his assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the interference will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

Notices of Cancellation

U. S. PATENT OFFICE, *Washington, Apr. 22, 1930.*

John Harris Griffith, his assigns or legal representatives, take notice:

A cancellation proceeding having been instituted by this Office upon the application of The American Products Company, of 3265 Colerain Avenue, Cincinnati, Ohio, to effect the cancellation of the trade-mark registration of John Harris Griffith, of Marietta, Ga., No. 144,406, dated July 5, 1921, and the notice of such proceeding sent by registered mail to the said Griffith at the said address having been returned by the post-office as undeliverable, notice is hereby given that unless said Griffith, his assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the cancellation will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

U. S. PATENT OFFICE, *Washington, Apr. 19, 1930.*

Alice R. Meller, her assigns or legal representatives, take notice:

A cancellation proceeding having been instituted by this Office upon the application of The American Products Company, 3265 Colerain Avenue, Cincinnati, Ohio, to effect the cancellation of the trade-mark registration of Alice R. Meller, 3500 Louisa Street, Pittsburgh, Pa., No. 169,768, dated July 3, 1923, and the notice of such proceeding sent by registered mail to the said Meller at the said address having been returned by the post office as undeliverable, notice is hereby given that unless said Meller, her assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the cancellation will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

U. S. PATENT OFFICE, *Washington, Apr. 7, 1930.*

Rex-Tone Laboratories, Inc., its assigns or legal representatives, take notice:

A cancellation proceeding has been instituted by this Office upon the application of United Drug Company, 43 Leon Street, Boston, Mass., to effect the cancellation of trade-mark registration No. 183,225, issued April 22, 1924, to William T. Ellison, 115 E. Liberty Street, Savannah, Ga., which registration, the assignment records of the Office show, has been transferred to Rex-Tone Laboratories, Inc., Tampa, Fla. The notice of such proceeding sent by registered mail to Rex-Tone Laboratories, Inc., at the said address having been returned by the post office as undeliverable, notice is hereby given that unless Rex-Tone Laboratories, Inc., its assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the cancellation will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM A. KINNAN,
First Assistant Commissioner.

U. S. PATENT OFFICE, *Washington, Apr. 7, 1930.*

The Smile Company, its assigns or legal representatives, take notice:

A cancellation proceeding has been instituted by this Office upon the application of The William Boardman & Sons Co., 53–59 Edwards Street, Hartford, Conn., to effect the cancellation of trade-mark registration No. 162,022, issued November 28, 1922, to The Smile Company, 221–223 East Fourth Street, Topeka, Kans. The Office having been unable to secure satisfactory service upon The Smile Company at the said address, notice is hereby given that unless The Smile Company, its assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the cancellation will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

TRADE-MARKS

OFFICIAL GAZETTE, MAY 6, 1930

[VOL. 394. No. 1]

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this publication.

Marks applied for " under the ten-year proviso " are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 1 of said act, a fee of ten dollars must accompany each notice of opposition.

CLASS 1

Raw or Partly-Prepared Materials

Ser. No. 292,610. HENRY BARTELS, New York, N. Y. Filed Nov. 20, 1929.



For Canary Birds.
Claims use since July 10, 1929.

Ser. No. 296,325. E. I. DU PONT DE NEMOURS AND COMPANY, Wilmington, Del. Filed Feb. 21, 1930.



No claim is made to the word "Resins" appearing on the attached drawing apart from the mark shown.
For Resins.
Claims use since Oct. 10, 1929.

Ser. No. 296,612. SAMUEL SHAPIRO, New York, N. Y. Filed Feb. 27, 1930.

RÜG-SHA

For Leather.
Claims use since July 15, 1929.

Ser. No. 296,772. RISING SUN RANCHES, Chicago, Ill. Filed Mar. 3, 1930.



For Livestock for Breeding Purposes.
Claims use since 1890.

Ser. No. 296,861. WM. FLACCUS OAK LEATHER COMPANY, Pittsburgh, Pa. Filed Mar. 5, 1930.



The word "Oak" is disclaimed apart from the trade-mark as shown in the drawing.
For Oak Sole Leather.
Claims use since Feb. 14, 1930.

CLASS 2

Receptacles

Ser. No. 295,561. DEMPSTER MILL MANUFACTURING COMPANY, Beatrice, Nebr. Filed Feb. 4, 1930. Under 10-year proviso.

DEMPSTER

For Stock Tanks, Dipping Tanks, House Tanks, Cisterns, Storage Tanks, and Portable Tanks.
Claims use since 1886.

Ser. No. 296,492. OLDMILL PAPER PRODUCTS CORP., Brooklyn, N. Y. Filed Feb. 25, 1930.

OLDMILL

For Paper Cups and Dishes—Namely, Bonbon Cups, Baking Cups, Finger-Bowl Liners, Shaving Cups, Butter Chips.
Claims use since Jan. 16, 1930.

CLASS 3

Baggage, Animal Equipments, Portfolios, and Pocketbooks

Ser. No. 292,953. REVELATION SUIT CASE COMPANY LIMITED, London, England. Filed Nov. 26, 1929.

REVELEX

For Trunks, Suitcases, Attaché Cases of Leather, Compressed Fiber, or Similar Material, Including Expanding Suitcaselike Containers and Brief Bags.
Claims use since Nov. 13, 1928.

Ser. No. 297,032. PERKIOMEN TRUNK & BAG CO., INC., Pennsburg, Pa. Filed Mar. 8, 1930.

Zipock

For Suitcases, Week-End Bags, and Trunks, Having Pockets Therein.
Claims use since Feb. 24, 1930.

CLASS 4

Abrasive, Detergent, and Polishing Materials

Ser. No. 286,234. THE ENERGINE COMPANY, Cleveland, Ohio. Filed June 27, 1929.



The vertical line in the drawing is intended to indicate the color red, the diagonal lining indicates green, and the crosshatching yellow.
For Liquid Dry Cleaners.
Claims use since Feb. 3, 1903.

Ser. No. 288,388. GUIDO MAZZETTI, Rome, Italy. Filed Aug. 10, 1929.

VELTENE

For Benzo-Alcoholic Soap in the Form of Paste.
Claims use since July 1, 1929.

Ser. No. 296,660. MILWAUKEE LUBRICANTS CO., Milwaukee, Wis. Filed Feb. 28, 1930.

TERMATILE

For Detergent Soap Compound for Tile, Terrazzo, Marble Floors.
Claims use since about Feb. 5, 1930.

Ser. No. 296,672. HARRY SHARP, doing business as U. S. Waterproof Mfg. Co., Ypsilanti, Mich. Filed Feb. 28, 1930.

FOOTDRY
KEEPS WATER OUT
ADDS NEW LIFE TO
— LEATHER —

No claim is made to the words "Keep Water Out, Adds New Life to Leather" apart from the mark as shown on the drawing.
For Preparation Applied to Boots and Shoes and Other Leather Goods Rendering Them Waterproof.
Claims use since Jan. 1, 1930.

Ser. No. 296,795. APEX SOAP AND SANITARY CORP., Pittsburgh, Pa. Filed Mar. 4, 1930.

APEX

For Soaps and Soap Powders.
Claims use since July 8, 1921.

Ser. No. 297,402. ACE SOLVENT CO., INC., New York, N. Y. Filed Mar. 17, 1930.

RACER

For Hand Cleansers.
Claims use since Mar. 10, 1930.

Ser. No. 297,698. THE SELIG COMPANY, Atlanta, Ga. Filed Mar. 21, 1930.

SCRUBZOL

For Liquid Scrubbing Soap.
Claims use since Apr. 16, 1928.

CLASS 5

Adhesives

Ser. No. 297,822. ST. LOUIS SURFACER & PAINT COMPANY, St. Louis, Mo. Filed Mar. 24, 1930.

METALHESIVE

For Adhesive Mixture in Liquid Form Particularly Adapted for Attaching Metal Foil to Various Surfaces.
Claims use since Oct. 8, 1929.

CLASS 6

Chemicals, Medicines, and Pharmaceutical Preparations

Ser. No. 265,805. PERFUMERIA GAL, SOCIEDAD ANÓNIMA, Madrid, Spain. Filed May 2, 1928.



For Chemical Compound for Use on the Hair to Make it Straight and Glossy.
Claims use since Mar. 25, 1927.

Ser. No. 276,215. T. NOONAN & SONS COMPANY, Boston, Mass. Filed Dec. 3, 1928.



The portrait which forms a feature of said mark is fanciful. Applicant is the owner of registered Trade-Mark No. 159,463 covering the name "Noonan's" effected on the ground of actual and exclusive use of the mark for 10 years next preceding Feb. 20, 1905.
For Cream Ointment for Relieving Pain.
Claims use since on or about Apr. 1, 1928.

Ser. No. 281,248. JOHN AQUINO, INC., New York, N. Y. Filed Mar. 25, 1929.

CENTERBA

For Tonic for General Use.
Claims use since Mar. 18, 1929.

Ser. No. 281,772. FOREST HILLS COMPANY, doing business as Kings Pure Malt Co., Boston, Mass. Filed Apr. 3, 1929. Under section 5b of the act of 1905 as amended in 1920.

KING'S PUREMALT

Applicant is the owner of registered Trade-Mark No. 113,275, dated Oct. 10, 1916, effected on the ground of actual and exclusive use by the registrant of the mark shown therein on the goods recited in said registration as a trade-mark for 10 years next preceding Feb. 20, 1905.

For Malt Tonic for Medical Purposes.

Claims use since Mar. 26, 1929.

Ser. No. 285,542. SHERMAN WILLIAMSON, doing business as the High Ball Mfg. Co., Detroit, Mich. Filed June 13, 1929.

HIGH-BALL MFG. CO. PILE SALVE HB TRADE MARK

The words "Pile Salve" and "Trade Mark" are disclaimed apart from the mark shown.

For Ointment for Treating Piles.

Claims use since May 6, 1929.

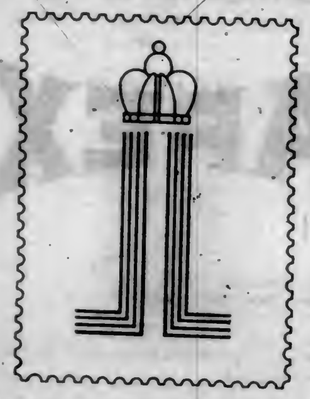
Ser. No. 286,779. HY-TONE LABORATORIES, Nashville, Tenn. Filed July 8, 1929.

HYTONE LABORATORIES

For Cosmetics and Toilet Preparations—Namely, Hairdressing Preparation, Preparation for Treating Dandruff, Hair Pomade, Hair Shampoo, Hair Oil, Quinine Hair Tonic, Olive Shampoo, Wave Set and Curling Lotion, Preparation for Treating the Skin, Nail Enamel, Perfumes and Toilet Water; Medicines—Namely, a General Tonic, Cough Syrup, and Liniment for Treating Muscular Pains, Neuralgic Pains, Stiff Neck, Backache, Muscle Strain, Toothache, Sprains, Bruises, and Burns; and Vapor Ointment for Treating Colds, Catarrh, Sore Throat, Croup, and Whooping Cough; and Insecticides.

Claims use since Apr. 19, 1924.

Ser. No. 286,886. LENTHERIC, INCORPORATED, New York, N. Y. Filed July 10, 1929.



For Perfumes, Toilet Water, Face Powder, and Talcum Powder, Lip Sticks, Rouge, Bath Salts, Brilliantine, Sachet Powder, Face Creams, and Lotions for the Skin and Hair.

Claims use since July 8, 1929.

Ser. No. 291,761. CARL CRONQUIST, Malmo, Sweden. Filed Oct. 30, 1929.

SANOCRIN

For Hair and Scalp Preparation.

Claims use since Feb. 14, 1928.

Ser. No. 291,799. ABRAHAM SKALINSKY, doing business as Wonder Remedy Co., Sheboygan, Wis. Filed Oct. 30, 1929.

WONDER

For Horse Medicine for the Disease Known as Heaves.

Claims use since May 1, 1929.

Ser. No. 293,106. PHILIPP PALM, doing business as Palm'sche Apotheke, Schorndorf, Germany. Filed Nov. 30, 1929.



All the wording appearing on the drawing with the exception of "Palm'sche Apotheke" and "Pasta Palm" is disclaimed apart from the mark shown on the drawing.

For Cathartic and Aperient Preparations.

Claims use since 1913.

Ser. No. 293,134. FIRST TEXAS CHEMICAL MFG. CO., Dallas, Tex. Filed Dec. 2, 1929.

GONO-COL

For Medicinal Preparation Used in the Treatment of Diseases of the Mucous Membranes, More Particularly Those Lining the Human Genito-Urinary Tract.

Claims use since Nov. 9, 1929.

Ser. No. 293,719. THE CRAMER CHEMICAL CO., Gardner, Kans., and Detroit, Mich. Filed Dec. 16, 1929.

ATHLETIC

For Foot Ointment for the Treatment of Athlete's Foot, Moisture-Absorbing Compound for the Hands, and Athletic Devices Comprising a Compound of Powdered Rosin and Siliceous Earth; a Germicide and Disinfectant for Treating Cuts, Wounds, and Open Sores; an Inhalant for the Relief of Head Colds; and a Remover for Surgical Tape Comprising a Liquid Solvent for the Adhesive on Such Tape.

Claims use since Sept. 1, 1929.

Ser. No. 294,057. BUFORD C. CLIFTON, doing business as The Honey Lu Company, Memphis, Tenn. Filed Dec. 26, 1929.

HONEY LU

For Hair Shampoos, Hair Oils, Hair Tonics, and Hair Dressings; Face Creams, Face Powders, and Face Lotions; Talcum Powders, Perfumes, Deodorant Creams, and Bath Crystals.

Claims use since Oct. 19, 1929.

Ser. No. 294,945. DAN COHEN, doing business as American Chemical Manufacturing Company, Memphis, Tenn. Filed Jan. 17, 1930.

QUICK-O

Applicant hereby disclaims the word "Quick" in the statement apart from the mark as shown upon the drawings and specimens filed herewith.

For Hair Straightener.

Claims use since Nov. 20, 1919.

Ser. No. 295,183. LOUISE LEIGHTON, INC., New York, N. Y. Filed Jan. 23, 1930.



No claim is herein made to the words "Créme, London, New York," and "Paris," or to the words "For Removing Hair" apart from the mark as shown.

For Cream Depilatory.

Claims use since Nov. 20, 1929.

Ser. No. 295,303. LEDERLE ANTITOXIN LABORATORIES, Pearl River and New York, N. Y., assignor to Lederle Laboratories, Inc., a Corporation of Delaware. Filed Jan. 28, 1930.

Liv-Vita

For Medicinal Food Containing Vitamins and Mineral Matter for Veterinary Use.

Claims use since Nov. 5, 1929.

Ser. No. 295,571. OXO, LIMITED, London, England. Filed Feb. 4, 1930.

LIVEROID

For Concentrated Preparation of the Uncoagulated Juice of Liver, Suitable for the Treatment of All Forms of Anæmia.

Claims use since 1904.

Ser. No. 295,622. IRVING CHARLES LICHTENSTEIN, doing business as Irving's Perfume Shop, New York, N. Y. Filed Feb. 5, 1930.

L'HEURE D'AMOUR (HOUR OF LOVE) IRVING PERFUME SHOP NEW YORK

The geographical name or term "New York" is disclaimed apart from the mark as shown on the drawing.

For Perfumes, Face Powder, Lip Sticks, Cold Creams, Facial Creams, Rouges, Perfume Extracts, and Sachets.

Claims use since Dec. 14, 1929.

Ser. No. 296,472. A. W. BETHEL, Richmond, Va. Filed Feb. 25, 1930.

a W Bethels

OLD DOMINION

The trade-mark consists of a facsimile of applicant's signature. The words "Old Dominion" are disclaimed apart from the mark as shown.

For Chill and Malaria Capsules.

Claims use since 1929.

Ser. No. 296,490. THE MON-ARK MEDICINE CORPORATION, INC., Cincinnati, Ohio. Filed Feb. 25, 1930.

Mon-Ark Rx

For General Tonic.

Claims use since Jan. 17, 1930.

Ser. No. 296,536. F. M. TROTTER, doing business as Cal-Em-Best Company, Brinkley, Ark. Filed Feb. 26, 1930.

Cal-Em-Best

The word "Best" is disclaimed apart from the mark as shown in the drawings.

For Tablets for Biliousness, Colds, Constipation, Headache, and Dizziness.

Claims use since June 28, 1928.

Ser. No. 296,655. LENTHERIC, INCORPORATED, New York, N. Y. Filed Feb. 28, 1930.

SUNPLEXION

For Face, Bath, and Talcum Powders.

Claims use since Feb. 21, 1930.

Ser. No. 296,661. MILWAUKEE LUBRICANTS CO., Milwaukee, Wis. Filed Feb. 28, 1930.

CARBOSAN

For Liquid Coal-Tar Disinfectant and Deodorant, also Animal Dip.

Claims use since Feb. 15, 1930.

Ser. No. 296,812. LABORATOIRES G. BEYTOUT, SOCIETE A RESPONSABILITE LIMITEE, Paris, France. Filed Mar. 4, 1930.

CISBEY

For a Medicine for Constipation, Menopause, Vertigo, Difficult Digestion, Sick Headache, Erythema, Congestion, Heart Affections, Hemorrhoids, Itching, Pains in the Side, Affections of the Skin, Pains, and Rheumatism.

Claims use since 1913.

Ser. No. 296,868. J. L. HOPKINS & CO., New York, N. Y. Filed Mar. 5, 1930.



An Up-to-date Bug Hunter

No claim being made to the exclusive use of the words "Brand" and "Insect Powder" and the representation of the can of powder per se apart from the mark shown on the drawing.

For Insect Powder.

Claims use since April, 1907.

Ser. No. 296,927. E. R. SQUIBB & SONS, New York, N. Y. Filed Mar. 6, 1930.

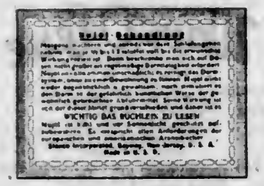
DI-PHEN

For Home and Hospital Antiseptic.

Claims use since Feb. 26, 1930.

Ser. No. 296,929. STANCO INCORPORATED, Wilmington, Del., and New York, N. Y. Filed Mar. 6, 1930.

Kryställklar Nujol SCHUTZ-MARKE Gegen Verstopfung Absolut rein und unschädlich



The drawing is lined for shading purposes only. No claim is made to the printed matter appearing on the label with the exception of the words "Nujol" and "Stanco Incorporated." No claim is made to the representation of the label per se.

For White Mineral Oil for Chemical, Medicinal, and Pharmaceutical Purposes.

Claims use since Jan. 18, 1930.

Ser. No. 297,005. FAIRCHILD BROS. & FOSTER, New York, N. Y. Filed Mar. 8, 1930.

ULTAMIN

For a Preparation of the Cleavage Products of the Physiological Conversion of Proteins of Beef, Milk, Gluten, and Other Substances. Designed as an Alimentary Material in the Treatment of Disorders of Nutrition and as a General Tonic.

Claims use since Feb. 1, 1930.

Ser. No. 297,015. DOROTHY E. JOHNSON, Detroit, Mich. Filed Mar. 8, 1930.

Chapola FOR CHAPS

The words "For Chaps" are disclaimed apart from the mark shown.

For Skin Creams and Skin Lotions.

Claims use since Feb. 24, 1930.

Ser. No. 297,036. E. R. SQUIBB & SONS, New York, N. Y. Filed Mar. 8, 1930.

ORIDYL

For Mouth Washes.

Claims use since Feb. 26, 1930.

Ser. No. 297,117. EDWIN DANIEL WOLFF, doing business as The Diamond Chemical Works, Rochester, N. Y. Filed Mar. 10, 1930.

PODENE

For Foot Powder.

Claims use since Dec. 18, 1929.

Ser. No. 297,160. F. H. STRONG COMPANY, New York, N. Y. Filed Mar. 11, 1930.

Chologestin

For Preparation Having Antacid, Antiseptic, Digestive, and Cholagogue Properties Intended for Gaseous or Fermentative Intestinal Indigestion.

Claims use since January, 1906.

Ser. No. 297,177. WILLIAM M. DAVIS, doing business as Da-Gly-Tone Remedies Co., Wheeling, W. Va. Filed Mar. 12, 1930.

DA-GLY-TONE

For General Tonic.
Claims use since Jan. 2, 1930.

Ser. No. 297,235. CERTIFIED PERSONAL NEEDS, INC., New York, N. Y. Filed Mar. 13, 1930.

FYNTONE

For Toilet Preparations, Cosmetics, and Dentifrices—Namely, Lotions, Disinfectants, Bicarbonate of Soda, Perfumery, Cleansing Cream, Rubbing Alcohol, Rouge, Antiseptic, Bay Rum, Deodorizers, Toilet Powder, Mouth Wash, Pomades, Cold Cream, Face Powders, Massage Cream, Shampoo Preparations.
Claims use since Feb. 27, 1930.

Ser. No. 297,245. CLARA DUTTON, doing business as Ye What Not Studio, Burlington, Iowa. Filed Mar. 13, 1930.

Darn Quick

For Preparation for Use in Mending Hosiery.
Claims use since Apr. 10, 1928.

Ser. No. 297,344. WYETH CHEMICAL COMPANY, Jersey City, N. J. Filed Mar. 14, 1930.



For Medicine for Use in Treating Affections of the Throat and Chest.
Claims use since 1874.

Ser. No. 297,358. BOURJOIS, INC., New York, N. Y. Filed Mar. 15, 1930.

Spirit of Paris

For Perfume and Face Powder.
Claims use since Feb. 22, 1930.

Ser. No. 297,435. HYNSON, WESTCOTT & DUNNING, INC., Baltimore, Md. Filed Mar. 17, 1930.

THANTIS

For Liquid Oral Antiseptic.
Claims use since about Jan. 22, 1930.

Ser. No. 297,442. GEORGE PATRICK MCSHERRY, doing business as McSherry Drug Co., Hillsdale, Mich. Filed Mar. 17, 1930.

McSherry's ASSIMILENE

For Medicinal Preparation for the Treatment of Stomach, Liver, Kidney, and Bowel Complaints.
Claims use since Nov. 11, 1929.

Ser. No. 297,443. MELROSE MANUFACTURING CO., INC., St. Louis, Mo. Filed Mar. 17, 1930.

Wave O-Lene

For Hairdressing.
Claims use since February, 1925.

Ser. No. 297,444. MELROSE MANUFACTURING CO., INC., St. Louis, Mo. Filed Mar. 17, 1930.

DANDRUFF DESTROYER

Applicant disclaims the use of the words "Dandruff Destroyer" apart from the mark shown in the drawing.
For Preparation for Destroying Dandruff.
Claims use since December, 1924.

Ser. No. 297,489. SANDOZ CHEMICAL WORKS, INC., New York, N. Y. Filed Mar. 18, 1930.

CAGLUCON

For Chemical Preparations Containing Calcium for Oral, Intramuscular, and Intravenous Use for the Production of Sedative Action on the Nervous System, to Decrease the Permeability of Cells and Transudation Phenomena, for the Prevention or Treatment of Carbon-Tetrachloride Intoxication, for Increasing the Supply of Calcium to Tissues, for Shortening the Time of Blood Coagulation Prior to Operations, and for Dermatosis Conditions.
Claims use since Mar. 10, 1930.

Ser. No. 297,490. SANDOZ CHEMICAL WORKS, INC., New York, N. Y. Filed Mar. 18, 1930.

CALC-GLUCON

For Chemical Preparations Containing Calcium for Oral, Intramuscular, and Intravenous Use for the Production of Sedative Action on the Nervous System, to Decrease the Permeability of Cells and Transudation Phenomena, for the Prevention or Treatment of Carbon-Tetrachloride Intoxication, for Increasing the Supply of Calcium to Tissues, for Shortening the Time of Blood Coagulation Prior to Operations, and for Dermatosis Conditions.
Claims use since Mar. 10, 1930.

Ser. No. 297,491. SANDOZ CHEMICAL WORKS, INC., New York, N. Y. Filed Mar. 18, 1930.

CA-GLUCON

For Chemical Preparations Containing Calcium for Oral, Intramuscular, and Intravenous Use for the Production of Sedative Action on the Nervous System, to Decrease the Permeability of Cells and Transudation Phenomena, for the Prevention or Treatment of Carbon-Tetrachloride Intoxication, for Increasing the Supply of Calcium to Tissues, for Shortening the Time of Blood Coagulation Prior to Operations, and for Dermatosis Conditions.
Claims use since Mar. 10, 1930.

Ser. No. 297,492. SANDOZ CHEMICAL WORKS, INC., New York, N. Y. Filed Mar. 18, 1930.

CALGLUCON

For Chemical Preparations Containing Calcium for Oral, Intramuscular, and Intravenous Use for the Production of Sedative Action on the Nervous System, to Decrease the Permeability of Cells and Transudation Phenomena, for the Prevention or Treatment of Carbon-Tetrachloride Intoxication, for Increasing the Supply of Calcium to Tissues, for Shortening the Time of Blood Coagulation Prior to Operations, and for Dermatosis Conditions.
Claims use since Mar. 10, 1930.

Ser. No. 297,501. E. R. SQUIBB & SONS, New York, N. Y. Filed Mar. 18, 1930.

BOROPYRIN

For Antipyretic and Analgesic.
Claims use since Mar. 11, 1930.

CLASS 8

Smokers' Articles, Not Including Tobacco Products

Ser. No. 266,104. SOCIETE ANONYME DES ANCIENS ETABLISSEMENTS BRAUNSTEIN FRERES, Paris, France. Filed May 8, 1928.



No claim of exclusive right to the use of the notations and the representations on the labels being made with the exception of the words "Zig-Zag Braunstein Freres" apart from the manner in which said notations and representations are shown in the accompanying drawing.
For Cigarette Paper.
Claims use since Oct. 25, 1898.

Ser. No. 297,335. SOCIÉTÉ NOUVELLE DU VALDOR, Paris, France. Filed Mar. 14, 1930.



Applicant disclaims any right to the exclusive use of the words "Papier à Cigarettes" and "Paris" except in the precise relation and association in which they appear herein.
For Cigarette Paper.
Claims use since Feb. 18, 1927.

Ser. No. 297,336. SOCIÉTÉ NOUVELLE DU VALDOR, Paris, France. Filed Mar. 14, 1930.

VALDOR

For Cigarette Papers, Pipes and Parts Thereof, Cigarette Cases, Cigar Cases, Cigar Holders, Cigarette Holders, and Tobacco Pouches.
Claims use since 1921.

Ser. No. 297,467. GEORGE G. CAMPANA, Brooklyn, N. Y. Filed Mar. 18, 1930.

THE ESKIMO PIPE

No claim being made to the exclusive use of the word "Pipe" apart from the mark as shown in the drawing.
For Pipes.
Claims use since Mar. 7, 1930.

Ser. No. 297,476. E. J. GASS PIPE CO., INC., New York, N. Y. Filed Mar. 18, 1930.

DOUBLE-CHECK

For Cigarette Holders and Smoking Pipes.
Claims use since Mar. 13, 1930.

CLASS 12

Construction Materials

Ser. No. 258,493. REPUBLIC PAINT & VARNISH WORKS, Chicago, Ill. Filed Dec. 5, 1927.

KAR-TITE

For Mastic Cement for Waterproofing and Airproofing Window Sashes, Channels, Top-Rails, and Other Parts of Automobile Bodies; Also Used as an Adherent Between Joints of Body Parts.
Claims use since Nov. 18, 1918.

Ser. No. 260,516. THE MOSAIC TILE COMPANY, Zanesville, Ohio. Filed Jan. 23, 1928.

GRANITEX

For Ceramic Cap, Wall, Floor, and Ceiling Tiles.
Claims use since Mar. 1, 1927.

Ser. No. 260,517. THE MOSAIC TILE COMPANY, Zanesville, Ohio. Filed Jan. 23, 1928.

AVENTINE CERAMICS

Applicant hereby disclaims the exclusive use of the word "Ceramics" apart from the mark as shown.
For Ceramic Cap, Wall, Floor, and Ceiling Tiles.
Claims use since Mar. 1, 1927.

Ser. No. 277,938. THE CARTER-WATERS CORPORATION, Kansas City, Mo. Filed Jan. 14, 1929.

BIT-U-CRETE

For Bituminous Concrete.
Claims use since Nov. 28, 1928.

Ser. No. 289,401. THE EMULSION PROCESS CORPORATION, Jersey City, N. J. Filed Sept. 6, 1929.

PARAFALT

For Asphalt Emulsion for Waterproof Coatings and General Coating, Cementing or Binding, and Similar Uses.
Claims use since July 25, 1929.

Ser. No. 291,475. RAIN-ON PRODUCTS COMPANY, Chicago, Ill. Filed Oct. 23, 1929.

CRETEX

For Emulsified Asphalt.
Claims use since July, 1923.

Ser. No. 292,443. JOSEPH C. DICKERSON, Lucedale, Miss. Filed Nov. 15, 1929.



TRADE MARK

The trade-mark shown includes the representation of the trade or business signature of applicant. No claim is made to the words "Trade Mark" nor to the representation of a cross section of roadbed apart from the other features of the mark.
For Hard-Surface Road Materials—Namely, Mixed Clay and Gravel, Mixed Clay and Crushed Rock, and Asphalt.
Claims use since Sept. 10, 1929.

Ser. No. 293,181. I. G. FARBENINDUSTRIE AKTIENGESELLSCHAFT, Frankfort-on-the-Main, Germany. Filed Dec. 3, 1929.



For Construction Materials of Metal Slag, Calking and Packing Materials for Walls and Containers of Concrete or Masonry, Mastic and Plastic Roofing Compounds, and Acid-Proof Roofing Cement.
Claims use since about Aug. 10, 1928.

Ser. No. 293,862. BENJAMIN M. WISE, doing business as Wise Products Co., New York, N. Y. Filed Dec. 18, 1929.

WISEKAULK

For Glazing and Caulking Compounds.
Claims use since Jan. 1, 1925.

Ser. No. 293,863. BENJAMIN M. WISE, doing business as Wise Products Co., New York, N. Y. Filed Dec. 18, 1929.

WISEKOTE

For Liquid and Plastic Asphalts and Asbestos-Fibre Roof Compound Used for Roof Coatings.
Claims use since Jan. 1, 1905.

Ser. No. 295,654. THE AMERICAN GYPSUM CO., Port Clinton, Ohio. Filed Feb. 6, 1930.



The American Indian

The portrait shown in the drawing being merely the fanciful representation of the American Indian.
For Line of Gypsum Products—Namely, Gypsum Wall Board, Gypsum Sheathing Board, Gypsum Lath, Gypsum Roof Tile, and Gypsum Insulation Material; Plaster Material—Namely, Stucco, Plaster Paris, Cement Plaster, Wood Fibre Plaster, Ganging Plaster, Patching Plaster, Bond Plaster, Decorative Plaster, Sanded Wall Plaster, Sanded Wood Fibre Plaster, Sand Float Finish, and Prepared Trowel Finish.
Claims use since Jan. 8, 1930.

Ser. No. 296,122. JAY K. GRUNER, St. Louis, Mo. Filed Feb. 17, 1930.

JOINTITE

For Dressed Jointed Lumber.
Claims use since about Jan. 1, 1930.

Ser. No. 296,582. CHICAGO MILL AND LUMBER CORPORATION, Chicago, Ill. Filed Feb. 27, 1930.

Weatherwood

For Fibre Boards in Sheet Form to be Used as Insulating Board and/or Wall Board and as a Substitute for Wood, Metal, or Other Construction Materials.
Claims use since on or about Apr. 1, 1929.

Ser. No. 296,793. ROBERT C. REEVES CO., New York, N. Y. Filed Mar. 3, 1930.

Provincial

For Wire-Bound Wooden Fences.
Claims use since Jan. 2, 1930.

Ser. No. 296,842. UNFADING SLATE ASSOCIATION OF VERMONT, INC., Fair Haven, Vt. Filed Mar. 4, 1930.

UNFADING SLATE ASSOCIATION OF VERMONT INC. 19 28

For Natural Roofing Slate.
Claims use since Feb. 25, 1930.

Ser. No. 297,136. THE HOUSING COMPANY, Boston, Mass. Filed Mar. 11, 1930.

THERMATEX

For Fiber Thermal Insulating Material.
Claims use since Mar. 5, 1930.

Ser. No. 297,544. SOULE STEEL COMPANY, San Francisco, Calif. Filed Mar. 19, 1930.

FLEXO

For Forms for Concrete Construction.
Claims use since on or about Mar. 1, 1927.

Ser. No. 297,547. THE STOWE-FULLER REFRACTORIES COMPANY, Cleveland, Ohio. Filed Mar. 19, 1930.

NATIONAL

For Refractory Bricks and Blocks.
Claims use since October, 1899.

Ser. No. 297,549. THE STOWE-FULLER REFRACTORIES COMPANY, Cleveland, Ohio. Filed Mar. 19, 1930.

F R C

For Refractory Bricks and Blocks.
Claims use since March, 1905.

CLASS 13

Hardware and Plumbing and Steam-Fitting Supplies

Ser. No. 291,993. MANUFACTURE METALLURGIQUE DE TOURNUS, Tournus, France. Filed Nov. 4, 1929.

"ACINOX"

For Household, Kitchen, and Table Utensils Made of Base Metal—to wit, Frying Pans, Baking Pans, Stewing Pans, Saucepans, Jam Pans, Coffeepots, Milk Boilers, Bowls, Plates, Dishes, Kettles, Skimmers, Covers, Cover Stands, Kitchen Slabs, Ladles, Funnels, Molds, Strainers, Colanders, Kitchen Rods, Egg Cups, Knife Rests, Trays, Filters, Napkin Rings, Soup Tureens, Shaving Mugs, and Wash Basins.
Claims use since on or about Feb. 1, 1929.

Ser. No. 296,052. THE EDWARD VALVE AND MANUFACTURING CO., East Chicago, Ind. Filed Feb. 15, 1930.

EVALNITE

For Metal Plumbing and Steam-Fitting Valves and Parts Thereof—Namely, Seats, Seat Rings, Disks, Disk Rings, Plugs, Wedges, Stems, Spindles, Bushings, Sleeves, Packing Rings for Metal Valves, Dashpots, Bolts, Studs, Nuts, Glands, Union Nuts, Disk Nuts, Gland Nuts, Pipe Plugs, Bodies, Bonnet Pillars, Bonnets, and Cross Yokes.
Claims use since Jan. 20, 1930.

Ser. No. 296,425. KENNEY MANUFACTURING COMPANY, Cranston, R. I. Filed Feb. 24, 1930.

Artcraft

For Curtain Rods and Drapery Hardware.
Claims use since Feb. 17, 1928.

CLASS 14

Metals and Metal Castings and Forgings

Ser. No. 258,561. VEREINIGTE STAHLWERKE AKTIENGESELLSCHAFT, Dusseldorf, Germany. Filed Dec. 6, 1927.



For Crude and Partly-Treated Base Metals, Metal Alloys; Semimanufactured Products, Such as Ingots, Rolled Ingots, and Rolled Blooms, Billets, and Tubular Castings for Tube Fabrication; Bar Iron, Steel Bars, Iron Castings; Metal Castings of All Kinds, More Particularly Bearing Bushes for Roll Housings, Hydraulic Cylinders, Heavy Flywheel Bearings (Bronze, Brass, White Metal); High-Quality and Special Steel, Drawn Steel, Steel Castings, Iron and Steel Stampings and Pressings, Pig Iron; Shaped, Bar, and Universal Iron, More Particularly Narrow Metal Sheets of from 100–1100 mm. Width and with Trimmed Edges; Sheet Metal, Galvanized Rod and Shaped Iron of All Kinds, Galvanized Band Iron of All Kinds and Types, Band or Hoop Iron, Welded Castings, Siemens-Martin Steel Castings; Bessemer Steel Castings, Electrosteel Castings, Shaped Steel Castings, Malleable Castings for All Purposes, Open-Hearth Pig, Telegraph and Telephone Wire, Cold-Rolled Band Steel, Wire, and Tin Plate; Sheet-Piling Irons, Rails, Metal Ties, and Fishplates, Horseshoe Iron; Railway Switches for Various Types of Rails, Anchors, and Locomotive Frames.
Claims use since July 8, 1918.

Ser. No. 292,801. FUSION WELDING CORPORATION, Chicago, Ill. Filed Nov. 23, 1929.

CARB-O-FLUX

The word "Flux" is disclaimed apart from the mark as shown on the drawing.
For Welding Rods and Electrodes.
Claims use since October, 1929.

Ser. No. 295,881. ARCOS, INC., La Crosse, Wis. Filed Feb. 11, 1930.

ARCOS

For Electrodes for Welding Purposes, and Particularly Electrodes for Electric-Arc-Welding Machines.
Claims use since October, 1928.

Ser. No. 295,882. ARCOS, INC., La Crosse, Wis. Filed Feb. 11, 1930.



For Electrodes for Welding Purposes, and Particularly Electrodes for Electric-Arc-Welding Machines.
Claims use since October, 1928.

Ser. No. 296,167. ALLOYS AND PRODUCTS, INC., New York, N. Y. Filed Feb. 18, 1930.

DEOXOLOY

For Metallic Alloy for Deoxidizing Purposes.
Claims use since Nov. 1, 1928.

CLASS 15

Oils and Greases

Ser. No. 297,499. THE SCIOTO PETROLEUM COMPANY, Columbus, Ohio. Filed Mar. 18, 1930.

ZOOM-GAS

The word "Gas" is disclaimed except in association with the other features of the mark.
For Gasoline.
Claims use since Feb. 10, 1930.

CLASS 16

Paints and Painters' Materials

Ser. No. 285,006. THE ASPHALT PRODUCTS CO., INC., Syracuse, N. Y. Filed June 4, 1929.

Silver-Seal

For Aluminum Paint.
Claims use since about May 1, 1926.

Ser. No. 295,868. JOSEPH STENGER, doing business as Bet Products Company, Philadelphia, Pa. Filed Feb. 10, 1930.

"A Safe Bet"

BET



Cleans As It Polishes

POLISH

Manufactured only by
BET PRODUCTS CO.
PHILADELPHIA, PA., U. S. A.

All the wording appearing on the drawing with the exception of the words "A Safe Bet, Bet," and "Bet Products Co.," are hereby disclaimed apart from the mark as shown on the drawing.
For Automobile Polish and Furniture Polish.
Claims use since Jan. 2, 1930.

CLASS 19

Vehicles, Not Including Engines

Ser. No. 285,194. CHRYSLER CORPORATION, Detroit, Mich. Filed June 7, 1929.

CHRYSLER

For Automobiles and Their Structural Parts.
Claims use since Jan. 1, 1924.

Ser. No. 288,573. STANDARD MOTOR TRUCK COMPANY, Detroit, Mich. Filed Aug. 15, 1929.

Fisher Junior Express

For Motor Delivery Trucks and Chassis.
Claims use since April, 1927.

Ser. No. 289,407. LIBERTY FOUNDRIES COMPANY, Rockford, Ill. Filed Sept. 6, 1929.



For Automobile Heaters and Parts or Accessories Therefor.
Claims use since Oct. 28, 1927.

Ser. No. 290,587. RUSSELL M. MOONEY, Seattle, Wash. Filed Oct. 3, 1929.

DREAM BOAT

No claim is made to the word "Boat" apart from the mark shown in the drawings.
For Power-Operated Pleasure Cruiser.
Claims use since May 1, 1927.

Ser. No. 294,625. DEVELOPMENT OF INDUSTRIES (AUTODIP) LIMITED, London, England. Filed Jan. 10, 1930.

SWIP

For Dipping and Swivelling Devices for Vehicle Lamps.
Claims use since Nov. 15, 1929.

Ser. No. 295,848. THE HOWELL INDUSTRIAL TRUCK COMPANY, Cleveland, Ohio. Filed Feb. 10, 1930.

LAST MINUTE

For Industrial Motor Trucks.
Claims use since on or about Feb. 1, 1930.

CLASS 20

Linoleum and Oiled Cloth

Ser. No. 296,975. NAAMLOOZE VENNOOTSCHAP NEDERLANDSCHE LINOLEUMFABRIEK, Krommenie, Netherlands. Filed Mar. 7, 1930.

WINDMILL BRAND



Applicant disclaims any exclusive right to the words "Brand, Linoleum, Krommenie," and "Holland" apart from the mark shown in the drawing.
For All Kinds of Linoleum.
Claims use since 1915.

CLASS 21

Electrical Apparatus, Machines, and Supplies

Ser. No. 266,373. WILLIAM WESLEY HICKS, San Francisco, Calif., assignor to Wesix National Company, San Francisco, Calif., a Corporation of Delaware. Filed May 14, 1928.

CENTAWATT

For Electric Heaters—Namely, Individual Room Heaters.
Claims use since May 1, 1928.

Ser. No. 275,840. NATIONAL COMPANY, INC., Malden, Mass. Filed Nov. 26, 1928.

VELVET VERNIER

Applicant disclaims any attempt to cover in this registration the word "Vernier" except in the precise relation and association in which the same appears in the accompanying drawing.
For Dials for Use in Connection with Electrical Apparatus.
Claims use since October, 1924.

Ser. No. 287,223. AMERICAN SAFETY HEADLIGHT CORPORATION, Louisville, Ky. Filed July 17, 1929.

<INVISOLITE>

For Illuminating Devices—Namely, Headlights for Automobiles, Locomotives, Aeroplanes, and the Like, and Supplies Therefor, Consisting of Reflectors, Lenses, and Headlight Parts, Using Electricity for Illumination.
Claims use since May 1, 1929.

Ser. No. 293,261. CLARENCE L. ANSTINE, doing business as Ansco Radio Manufacturing Co., Baltimore, Md. Filed Dec. 5, 1929.

AnsCo RADIO

The word "Radio" appearing in the drawing is disclaimed apart from the other features of the mark therein shown.
For Radio Receiving Sets and Parts Thereof.
Claims use since June 1, 1928.

Ser. No. 295,515. W. WESLEY HICKS, Los Angeles, Calif. Filed Feb. 3, 1930.

SOUTHWESIX

For Electric Air Heaters—Namely, Individual Room Heaters.
Claims use since about January, 1928.

Ser. No. 296,092. WESTERN ELECTRIC COMPANY, INCORPORATED, New York, N. Y. Filed Feb. 15, 1930.

Western Electric

For Electrical Systems for Reproducing, Amplifying, and Projecting Sound from Records of the Phonograph Type or Films, and Parts Thereof—Namely, Assembled Amplifier Units, Synchronizing Motors, Inverted Converters, Photoelectric Cells, Electromagnetic Pick-Ups, Amplifying Horns and Magnets Thereof, Sound Gate Consisting of an Apertured Plate and Pressure Pad, Apparatus Units Consisting of Equalizers and Attenuators, and Sound Units Comprising a Source of Light, a Lens Tube, Drive Sprockets, an Apertured Film Guide, and a Photoelectric Cell.
Claims use since Mar. 11, 1929.

Ser. No. 296,246. AMERICAN HARD RUBBER COMPANY, Hempstead and New York, N. Y. Filed Feb. 20, 1930.

FLEXOR

For Jars, Cells, Covers, Vents, and Separators Made of Hard Rubber or Other Plastic Materials, Not Including Glass for Storage Batteries.
Claims use since Feb. 1, 1930.

Ser. No. 296,398. COLUMBIA RADIO CORPORATION, Chicago, Ill. Filed Feb. 24, 1930.

ADMIRAL

For Radio Receiving Sets, Vacuum or Electron Tubes, and Radio Speakers.
Claims use since October, 1929.

Ser. No. 297,052. ANTENNON RADIO COMPANY, Buffalo, N. Y. Filed Mar. 10, 1930.

ANTENNON



No claim is made to the exclusive use of the symbols enclosed within the diamond-shaped figure apart from the mark shown in the drawing.
For Antennæ.
Claims use since about Feb. 1, 1930.

Ser. No. 297,198. MILLER TRAIN CONTROL CORPORATION, Staunton, Va. Filed Mar. 12, 1930.

TRAFILATOR

For Electrically-Operated Highway Vehicle Traffic-Light-Control-System Apparatus and Parts Thereof.
Claims use since on or about Apr. 20, 1929.

Ser. No. 297,224. THE AMERICAN STEEL AND WIRE COMPANY OF NEW JERSEY, Cleveland, Ohio. Filed Mar. 13, 1930.

RELIANCE

For Iron and Copper Wire and Cable for Electrical Purposes.
Claims use since 1900.

CLASS 22

Games, Toys, and Sporting Goods

Ser. No. 288,302. LILLIAN RADCLIFF LADD, Mobile, Ala. Filed Aug. 8, 1929.

NO-BLO



No claim is made to the term "Card Anchors" apart from the mark as shown.
For Contrivance for Holding the Cards in a Bridge Game to Prevent the Wind from Blowing Them.
Claims use since June 28, 1929.

Ser. No. 292,173. A. H. LEATHERS, doing business as A. H. Leathers Manufacturing Co., Dickson, Tenn. Filed Nov. 8, 1929.

A. H. LEATHERS MAN'F'G. CO. MODEL DIXIE SWATTER MADE IN U.S.A. DICKSON, TENN

No claim is made to the words "Model, Made in U. S. A.," and "Dickson, Tenn." apart from the mark shown on the drawing.
For Baseball Bats.
Claims use since Nov. 1, 1927.

Ser. No. 295,640. THE ROCHESTER FOLDING BOX CO., Rochester, N. Y. Filed Feb. 5, 1930.

JACKBILT

For Toy Playhouses, Theaters, Wayside Stores, and Doll Houses.
Claims use since Nov. 12, 1928.

Ser. No. 295,871. THE SUPERIOR TYPE COMPANY, Chicago, Ill. Filed Feb. 10, 1930.

STAMPERKRAFT

For Games and Toys—Namely, Rubber-Faced-Stamp Toys.
Claims use since Jan. 5, 1930.

Ser. No. 296,717. PARKER BROTHERS INC., Portland, Me., and Salem, Mass. Filed Mar. 1, 1930.

CAM

For Board Game.
Claims use since Feb. 24, 1930.

Ser. No. 296,792. WILSON-WESTERN SPORTING GOODS CO., Chicago, Ill. Filed Mar. 3, 1930.

DORMIE

For Golf Balls, Golf Clubs, and Caddy Bags.
Claims use since Feb. 12, 1930.

Ser. No. 297,133. HILLERICH & BRADSBY CO., Louisville, Ky. Filed Mar. 11, 1930.

Al. K. Simmons

The trade-mark is the facsimile signature of Al. Simmons.
For Baseball Bats.
Claims use since June 16, 1924.

Ser. No. 297,621. SEARS, ROEBUCK AND CO., Chicago, Ill. Filed Mar. 20, 1930.

ARISTO

For Golf Balls.
Claims use since Jan. 29, 1929.

CLASS 23

Cutlery, Machinery, and Tools, and Parts Thereof

Ser. No. 269,585. J. A. HENCKELS, Solingen, Germany. Filed July 14, 1928.

TWIN

For Pocketknives Made of Base Metal—Namely, Penknives, Jackknives, Pruning Knives, Budding Knives, Grafting Knives, Hunting Knives, Office Knives; Knife Erasers; Camp Companions Composed of Knife, Fork, and Spoon Contained in a Leather Case, Used in Camping; Knife Letter Openers; Scissors—Namely, Ladies' Scissors, Embroidery Scissors, Lace Scissors, Buttonhole Scissors, Folding Scissors, Wire Scissors, Cigar Scissors, Grape or Flower Scissors, Lamp Scissors; Shears—Namely, Paper Shears, Tailor Shears, Horse Shears, Bandage Shears, Pruning Shears, Poultry Shears, Barber Shears; Razors, Safety Razors, Safety-Razor Blades; Knives Made of Base Metal—Namely, Cook Knives, Bone Knives, Bread Knives, Lard Knives, Kitchen Knives, Lemon Knives, Grapefruit Knives, Bean Knives, Scallop Knives, Fish Knives, Butcher Knives, Wood-Carving Knives, Baker Knives, Shoe Knives, Linoleum Knives, Feather-Curling Knives, Nursery Knives, Furriers' Knives, Fruit Knives, Cigar-Makers' Knives, Bookbinders' Knives, Paper-Box-Makers' Knives, Table Knives, Carving Knives, Velvet-Cutting Knives, Dessert Knives; Forks Made of Base Metal—Namely, Kitchen Forks, Cold-Meat Forks, Table Forks, Dessert Forks, Carving Forks; Butcher Steels, Carving Steels, Can Openers, Cleavers, Nutcrackers, Knife Sharpeners, Corkscrews, Spatulas, Hair Clippers, Cake Turners, Cigar Cutters, Scissor Sets, Razor Sets; Wood-Carving Tools—Namely, Wood-Carving Knives and Chisels.
Claims use since January, 1927.

Ser. No. 289,553. TRAVIS PROCESS CORPORATION, Jersey City, N. J. Filed Sept. 9, 1929.

DISPER

For Machines for Mixing, Homogenizing, Disintegrating, and Similarly Treating Solids, Plastics, and Liquids.
Claims use since Sept. 5, 1929.

CARNEGIE LIBRARY OF ATLANTA

Ser. No. 293,914. AMERICAN AIR COMPRESSOR WORKS, INC., Brooklyn, N. Y. Filed Dec. 20, 1929.

AF

For Air Compressors, Vacuum Pumps, and Receiving Tanks for Compressed Air.
Claims use since Jan. 15, 1914.

Ser. No. 295,233. PURE EXHAUST & ECONOMY VALVE CORP., Buffalo, N. Y. Filed Jan. 25, 1930.

MONOLATER

For Auxiliary Air-Inlet Valves for Internal-Combustion Engines.
Claims use since Oct. 4, 1929.

Ser. No. 295,886. BYRON JACKSON CO., Los Angeles, Calif. Filed Feb. 11, 1930.

BJ

For Oil-Well Tools—Namely, Bits, Drills, Well Elevators, Tubing Catches, Underreamers, Well Hooks, Pipe Slips, Pistons, Tool Joints, Links, and Parts Therefor.
Claims use since on or about Feb. 1, 1929.

Ser. No. 296,675. SUPER MOLD CORPORATION, Lodi, Calif. Filed Feb. 28, 1930.

SUPERTREADER

For Vulcanizing Molds and Parts Thereof.
Claims use since on or about Dec. 1, 1928.

Ser. No. 296,723. WHITMAN & BARNES, INC., Detroit, Mich. Filed Mar. 1, 1930.

HERCULES MAJOR

For Twist Drills, Reamers, and Cutters for Cutting Wood and Metal.
Claims use since Feb. 10, 1930.

Ser. No. 296,771. THE PORTER-CABLE MACHINE CO., Syracuse, N. Y. Filed Mar. 3, 1930.

CARBO-LATHE

No claim is made to the word "Lathe" apart from the mark as shown.
For Lathes.
Claims use since Jan. 15, 1930.

Ser. No. 296,788. VORTOX MANUFACTURING COMPANY, Claremont, Calif. Filed Mar. 3, 1930.

VORTOX

For Air Cleaners and Crankcase Breathers for Internal-Combustion Engines.
Claims use since July 6, 1920.

Ser. No. 297,270. O. M. POOCK, doing business as City Machine & Tool Works, Dayton, Ohio. Filed Mar. 13, 1930.

CM&T PEERLESS

No claim being made to the word "Peerless" apart from the other feature of the mark.
For Tooth-Chamfering Machine.
Claims use since Apr. 17, 1927.

Ser. No. 297,275. O. M. POOCK, doing business as City Machine & Tool Works, Dayton, Ohio. Filed Mar. 13, 1930.

CM&T BOLENDER

No claim being made to the word "Bolender" apart from the other feature of the trade mark.
For Grinding Chucks.
Claims use since Apr. 17, 1927.

Ser. No. 297,744. KELLER MECHANICAL ENGINEERING CORPORATION, Brooklyn, N. Y. Filed Mar. 22, 1930.

KELLOCATER

For Portable, Compact, Electrically-Controlled Locating or Layout Unit, Designed for Use on a Drill Press or Similar Tool.
Claims use since October, 1927.

CLASS 24

Laundry Appliances and Machines

Ser. No. 294,770. G. F. MACHINE MFG. CORPORATION, New York, N. Y. Filed Jan. 14, 1930.

EZ

For Limited-Movement Balanced Pressing Irons.
Claims use since May 15, 1929.

Ser. No. 295,922. ALBERT E. BERDON, doing business as Berdon Uneek Products Co., East Orange, N. J. Filed Feb. 12, 1930.

UneeK

For Clothes-Drying Racks.
Claims use since Nov. 1, 1929.

Ser. No. 297,165. H. W. RETTEW, Philadelphia, Pa. Filed Mar. 8, 1930.

Electrolid

For Laundry Tubs and Washing Machines.
Claims use since June 1, 1929.

CLASS 26

Measuring and Scientific Appliances

Ser. No. 290,253. CLAYTON T. HUTCHINSON, doing business as Hutchinson Brothers, Detroit, Mich. Filed Sept. 26, 1929.

Radiodont

For Photographic Films, Including Films for X-Ray Photographs.
Claims use since Aug. 15, 1928.

Ser. No. 294,123. THE SCIENTIFIC GLARE ELIMINATOR CO., Charleroi, Pa. Filed Dec. 27, 1929.

The Lash

For Scientific Eyelash Glare Eliminators.
Claims use since Oct. 24, 1929.

Ser. No. 295,012. BUILDERS IRON FOUNDRY, Providence, R. I. Filed Jan. 21, 1930.

ORIFLO

For Fluid Meters and Fluid-Rate Controllers.
Claims use since Dec. 2, 1929.

Ser. No. 296,457. TIME-O-STAT CONTROLS COMPANY, Elkhart, Ind. Filed Feb. 24, 1930.

TIME-O-STAT

For Corrugated-Metal Bellows and Temperature, Pressure, Float, and Time-Responsive Devices and Replacement Parts Thereof, for Controlling Gas, Oil, and Coal Burners, and for Controlling Electric Refrigerators, Mechanical Stokers, Furnace Fans, Industrial Ovens, Ice Machines, Unit Heaters, and Water Heaters.
Claims use since June 16, 1923.

Ser. No. 297,622. SELO, LIMITED, Warley, England. Filed Mar. 20, 1930.

SELO

For Sensitized Cinematographic and Photographic Films.
Claims use since 1923.

CLASS 27

Horological Instruments

Ser. No. 282,330. M. WINTERHALDER & HOFMEIER G. M. B. H., Neustadt, Germany, and New York, N. Y. Filed Apr. 12, 1929.

W.& H.
Sch.

For Clocks, Clock Movements and Parts.
Claims use since July 1, 1864.

Ser. No. 297,457. SCHWOB FRERES & CIE. S. A., La Chaux-de-Fonds, Switzerland. Filed Mar. 17, 1930.

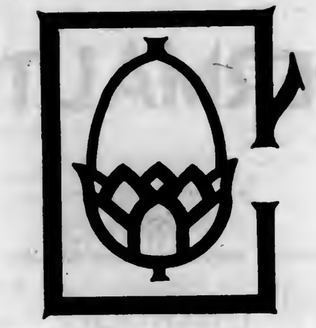
CAPTIVE

For All Kinds of Watches and Parts Thereof.
Claims use since Feb. 15, 1929.

CLASS 28

Jewelry and Precious-Metal Ware

Ser. No. 280,335. INTERNATIONAL SILVER COMPANY, Meriden, Conn. Filed Mar. 6, 1929.



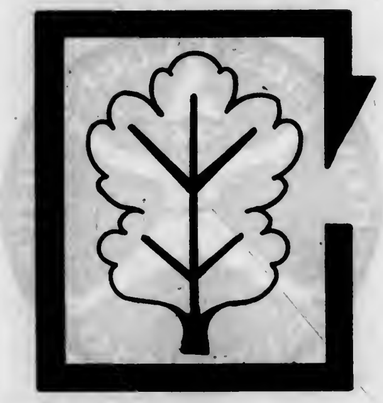
For Sterling-Silver Hollow Ware.
Claims use since Feb. 18, 1929.

Ser. No. 282,602. GLASTONBURY SILVER COMPANY, Chicago, Ill. Filed Apr. 18, 1929.

GEE-ESCO PLATE

No claim is made herein to the word "Plate" apart from the mark as shown in the drawing.
For Silver-Plated Flat Ware and Cutlery.
Claims use since Jan. 15, 1916.

Ser. No. 295,738. INTERNATIONAL SILVER COMPANY, Meriden, Conn. Filed Feb. 7, 1930.



For Sterling-Silver Tableware.
Claims use since Dec. 18, 1929.

CLASS 32

Furniture and Upholstery

Ser. No. 288,603. CENTRAL STATES PAPER & BAG COMPANY, INC., St. Louis, Mo. Filed Aug. 16, 1929.

PRO-TEK-TAR

For Tailored Furniture Covers.
Claims use since on or about May 1, 1929.

Ser. No. 297,112. YAWMAN AND ERBE MFG. CO., Rochester, N. Y. Filed Mar. 10, 1930.

"Y and E"

For Furniture and Filing Equipment of Steel and Wood—Namely, Record and Office Desks, Tables, Chairs, Filing Cabinets, Caster and Truck Bases Therefor; File Compressors for Filing Drawers and Trays, Storage Cabinets, Swinging Gates for Cabinet Counters, Bank Counters and Fixtures, Arch-Type Paper-Filing Equipment, Sectional Bookcases, Card and Paper Trays, Desk Trays, Detachable and Swinging Shelves for Dishes and Cabinets, Costumers, Ledger Desks, Stationery Racks, Check-Sorting Compartments, Storage Shelving; Vertical Filing Cabinets for Blue Prints, Etc.; Stools; Visible-Index Systems Comprising Pivoted Overlapped Cards Removably Held by Holders Arranged Transversely of Supporting Trays, and Cabinets and Parts Therefor; Library Equipment—Namely, Charging Desks, Periodical Racks, and Book Trucks; and Fabricated Linoleum Tops for Desks and Cabinets.
Claims use since July 1, 1901.

Ser. No. 297,636. H. C. WHITE COMPANY, North Bennington, Vt. Filed Mar. 20, 1930.

EZYREST

For Folding Chairs.
Claims use since Feb. 1, 1930.

CLASS 34

Heating, Lighting, and Ventilating Apparatus, Not Including Electrical Apparatus

Ser. No. 280,714. KLAUER MANUFACTURING COMPANY, Dubuque, Iowa. Filed Mar. 14, 1929.



For Louver, Deflector, and Grille Ventilators; Dampers, Ash-Pit Doors, Ash Dumps, Solid and Liquid Fuel Refrigerator-Car Heaters, Chimney Caps, Exhaust Flues, Intake Flues, Furnace Blast Fans, and Fans and Diffusers for Ventilation Purposes.
Claims use since January, 1886.

Ser. No. 296,701. HAYES-STEVENS FIREPLACE FURNACE CO. INC., New York, N. Y. Filed Mar. 1, 1930.



No claim being made to the exclusive use of the word "Heatr," the drawing being lined to indicate the color red.
For Furnaces and Fireplaces for the Burning of Wood, Coal, Gas, Oil, or Other Fuels.
Claims use since Oct. 1, 1929.

CLASS 35

Belting, Hose, Machinery Packing, and Non-metallic Tires

Ser. No. 284,811. KELSO MANUFACTURING CO., Trenton, N. J. Filed May 29, 1929.



For Brake Linings.
Claims use since June 8, 1925.

Ser. No. 297,159. SOUTHERN BELTING CO. OF NEW ORLEANS, New Orleans, La. Filed Mar. 11, 1930.



For Leather Belting.
Claims use since July 1, 1929.

Ser. No. 297,839. ALUMINUM INDUSTRIES, INC., Cincinnati, Ohio. Filed Mar. 25, 1930.



For Piston Rings.
Claims use since on or about Jan. 1, 1930.

CLASS 36

Musical Instruments and Supplies

Ser. No. 289,361. O. G. NEEDHAM & CO., Fort Worth, Tex. Filed Sept. 5, 1929.



For Phonographs.
Claims use since Aug. 31, 1929.

CLASS 37

Paper and Stationery

Ser. No. 295,923. BROWNIE'S BLOCKPRINTS, INC., New York, N. Y. Filed Feb. 12, 1930.

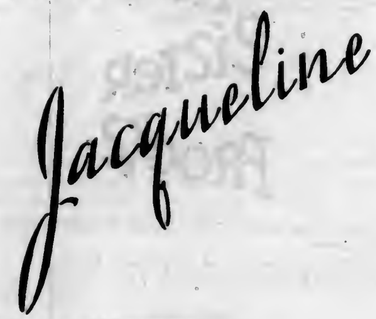


For Greeting Cards.
Claims use since July 1, 1924.

CLASS 38

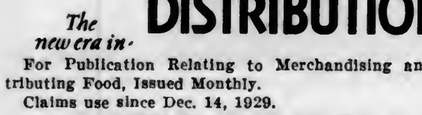
Prints and Publications

Ser. No. 293,468. THE EVENING NEWS COMPANY, Baltimore, Md. Filed Dec. 10, 1929.



For Section of a Newspaper.
Claims use since June 21, 1929.

Ser. No. 294,260. THE FOOD TRADES PUBLISHING COMPANY, Chicago, Ill. Filed Dec. 31, 1929.



For Publication Relating to Merchandising and Distributing Food, Issued Monthly.
Claims use since Dec. 14, 1929.

Ser. No. 295,621. INDUSTRIAL INFORMATION BUREAU, INC., doing business as Home Manager's Institute, Milwaukee, Wis. Filed Feb. 5, 1930.

HOME MANAGER'S INSTITUTE

For Daily Newspapers and Magazines.
Claims use since Dec. 9, 1929.

Ser. No. 296,206. TIME-FORTUNE CORPORATION, New York, N. Y. Filed Feb. 18, 1930.



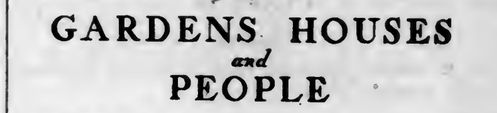
The lining shown in the accompanying drawing is merely for the purpose of shading.
For Monthly Magazine.
Claims use since Jan. 25, 1930.

Ser. No. 296,508. CLAYTON E. BROOKE, New York, N. Y. Filed Feb. 25, 1930.



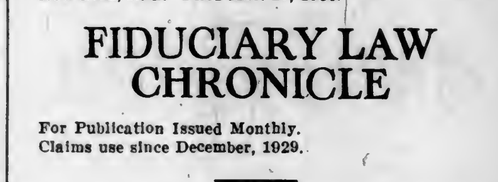
For Magazine.
Claims use since June, 1923.

Ser. No. 297,149. THE ROLAND PARK COMPANY, Baltimore, Md. Filed Mar. 11, 1930.



For Monthly Magazine.
Claims use since Mar. 5, 1930.

Ser. No. 297,458. STATE TITLE AND MORTGAGE COMPANY, New York, N. Y. Filed Mar. 17, 1930.



For Publication Issued Monthly.
Claims use since December, 1929.

Ser. No. 297,530. WILLIAM E. GROSE, New York, N. Y. Filed Mar. 19, 1930.



For Columns or Articles for Newspapers and/or Other Periodicals.
Claims use since Mar. 6, 1930.

Ser. No. 297,667. THE GRAY LINE, INC., Baltimore, Md. Filed Mar. 21, 1930.



For Monthly Publications.
Claims use since Mar. 12, 1930.

Ser. No. 297,770. THE PARAFFINE COMPANIES, INC., San Francisco, Calif. Filed Mar. 22, 1930.



For Bimonthly Periodical.
Claims use since January, 1925.

Ser. No. 297,957. THE CHAMPION COATED PAPER COMPANY, Hamilton, Ohio. Filed Mar. 27, 1930.

The Champion

For Trade Magazine Published from Time to Time.
Claims use since Feb. 3, 1930.

CLASS 39

Clothing

Ser. No. 260,874. CERTIFIED SHOE CORPORATION, Rockford, Ill. Filed Jan. 30, 1928.



No claim being made to the exclusive use of the representation of the bottom of a shoe shown in the drawing
For Shoes of Leather and of Leather and Fabric Combinations.
Claims use since February, 1924.

Ser. No. 266,252. JULIUS KARANT, doing business as Modern Cap Company, Chicago, Ill. Filed May 11, 1928.



For Caps of Any Suitable Fabric Other Than Rubber or Oiled Fabric to be Worn by Men, Women, or Children.
Claims use since July 1, 1927.

Ser. No. 280,445. JUNIOR DRESS MFG. CO., Dallas, Tex. Filed Mar. 8, 1929.

Kid Sister Frocks

No claim being made to the word "Frocks" apart from the mark shown.
For Children's Cotton and Silk Wash Frocks.
Claims use since Feb. 1, 1929.

Ser. No. 282,430. THE PRAY COMPANY, Omaha, Nebr. Filed Apr. 15, 1929.

Silver Strand

For Silk Hosiery.
Claims use since June 25, 1928.

Ser. No. 285,567. INTERNATIONAL SHOE CO., St. Louis, Mo. Filed June 14, 1929.

VITALITY

For Boots and Shoes of Leather.
Claims use since May 13, 1929.

Ser. No. 287,774. RUSSEKS FIFTH AVENUE INC., New York, N. Y. Filed July 27, 1929.

MARYLIN

For Women's and Misses' and Children's Shoes of Leather, Calfskin, Satin, Brocade, and Kid; Fabric, Leather, and Wool Gloves; Knitted, Netted, and Textile Underwear; Lingerie—Namely, Drawers, Step-Ins, Bloomers, Vests, Chemises, Corset Covers, Dancing Sets; Costume Slips, Negligees, Petticoats, and Pajamas.
Claims use since Jan. 1, 1929.

Ser. No. 288,357. SLIPPER SHOP, INCORPORATED, Dallas, Tex. Filed Aug. 9, 1929.

Artcraft

For Footwear—Namely, Ladies' and Misses' Shoes of Leather, Fabric, and Combinations Thereof.
Claims use since Apr. 1, 1929.

Ser. No. 289,033. HUGH A. MARTI COMPANY, Long Beach, Calif. Filed Aug. 26, 1929.



For Boys' Wool Suits, Boys' Cotton and Wool Pants, Boys' Leather Coats and Waterproof Raincoats Made of Waterproof Material or Imitation Leathers, Boys' Wool Overcoats, and Boys' Wool and Cotton Caps.
Claims use since Aug. 1, 1929.

Ser. No. 289,297. SLIPPER SHOP, INC., Dallas, Tex. Filed Sept. 3, 1929.



No exclusive claim being made to the word "Comfort" apart from the mark shown.
For Footwear—Namely, Shoes of Leather, Fabric, and Combinations Thereof.
Claims use since Aug. 1, 1927.

Ser. No. 291,727. LANE BRYANT, INC., New York, N. Y. Filed Oct. 29, 1929.

ABDO-LIFT

For Garter and Corset Belts and Corsets.
Claims use since Mar. 1, 1923.

Ser. No. 291,866. COMMONWEALTH SHOE AND LEATHER COMPANY, Boston, Mass. Filed Nov. 1, 1929.



No claim being made to the words "Style Approval" apart from the mark shown on the drawing.
For Leather Boots and Shoes.
Claims use since Sept. 1, 1929.

Ser. No. 292,255. COMMONWEALTH SHOE AND LEATHER COMPANY, Boston, Mass. Filed Nov. 11, 1929.



No claim being made to the words "Seven Selected Styles" and to the pictorial representation of the shoes apart from the mark shown on said drawing.
For Leather Boots and Shoes.
Claims use since Sept. 1, 1929.

Ser. No. 293,087. RED RAVEN RUBBER COMPANY, Newark, N. J. Filed Nov. 30, 1929.



Applicant hereby disclaims all wording appearing on the drawing with the exception of the word "Butterfly."
For Rubber Baby Pants.
Claims use since May 18, 1927.

Ser. No. 294,068. SAMUEL WILLIAM GUYES, Greensboro, N. C. Filed Dec. 26, 1929.



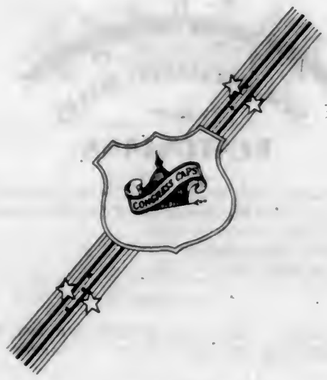
For Ladies' Hats and Caps.
Claims use since about Aug. 1, 1929.

Ser. No. 294,656. B. ABRAMSON & BRO., New York, N. Y. Filed Jan. 11, 1930.

BAB-FROCKS

The word "Frocks" is disclaimed apart from the other features of the mark shown in the drawing.
For Infants' and Children's Dresses and Coats.
Claims use since Dec. 1, 1928.

Ser. No. 295,505. HARRY CONGRESS, New Orleans, La. Filed Feb. 3, 1930.



No claim being made to the exclusive use of the word "Caps" apart from the mark as shown.
For Hats and Caps for Men, Boys, and Children.
Claims use since Jan. 1, 1928.

Ser. No. 295,535. REXFORD & KELDER, Chicago, Ill. Filed Feb. 3, 1930.

Gray-Hall

For Suits of Clothes for Men, Topcoats, Overcoats, Fur Coats, House Coats, Smoking Coats, Blazers, Bath Robes, Dressing Gowns, Tuxedos, Men's Dress Suits, Full-Dress Suits, Vests, Pants, Trousers for Men and Boys; Neckwear—Namely, Scarfs and Mufflers, Neckties, Dress, Negligee, and Work Shirts and Undershirts of Knitted, Netted, and Textile Fabrics; Collars, Pajamas, Gloves of Cloth and Leather, Socks, and Underwear of Knitted, Netted, and Textile Fabrics for Men, Women, and Children.
Claims use since Aug. 1, 1929.

Ser. No. 295,677. KIRBY, BLOCK & FISCHER, INC., New York, N. Y. Filed Feb. 6, 1930.

Charmaine

For Men's and Women's Hosiery, Men's and Women's Knitted and Textile Underwear, and for Men's, Women's, and Children's Leather and Fabric Gloves.
Claims use since Jan. 31, 1930.

Ser. No. 296,205. JOHN B. STETSON COMPANY, Philadelphia, Pa. Filed Feb. 18, 1930.



The trade-mark consists of the word "Premier" accompanied by the representation of the medals shown and the name "John B. Stetson Company." No claim is made to the other notations apart from the mark shown on the drawing.
For Soft and Stiff Felt Hats and Caps for Men and Boys.
Claims use since Sept. 22, 1902.

Ser. No. 296,259. THE WILLIAM CARTER COMPANY, Needham Heights, Mass. Filed Feb. 20, 1930.

MOULDETTE

For Ladies' Underwear of Knitted or Textile Fabric, Corsets, Brassières, Girdles, and a Combination of Girdle and Brassière.
Claims use since 1916.

Ser. No. 296,268. ENID MANUFACTURING COMPANY, New York, N. Y. Filed Feb. 20, 1930.

Ves-T-Lace

The word "Lace" not being claimed apart from the other features of the mark.
For Brassières, Corsets, and Girdles for Women's Wear.
Claims use since Jan. 2, 1929.

Ser. No. 296,297. SWANN-ABRAM HAT COMPANY, INC., Louisville, Ky. Filed Feb. 20, 1930.



No claim is herein made to the exclusive use of the word "Style" apart from the mark as shown.
For Men's Hats and Caps.
Claims use since Feb. 10, 1930.

Ser. No. 296,441. PROFESSIONAL SHOE CORPORATION, Chicago, Ill. Filed Feb. 24, 1930.

Tempo

For Shoes and Slippers Made of Leather and Fabric.
Claims use since Aug. 5, 1928.

Ser. No. 296,506. VICTOR PRODUCTS CORPORATION, Gettysburg, Pa. Filed Feb. 25, 1930.

SERVICE

The word "Service" not being claimed apart from the other features of the mark.
For Rubber Heels and Soles to be Attached to Boots, Shoes, and Slippers.
Claims use since Dec. 18, 1929.

Ser. No. 296,596. HIGH ROCK KNITTING CO., Philmont, N. Y. Filed Feb. 27, 1930.

POLOVER SHIRT

No claim is made to the word "Polo" or the word "Shirt" apart from the mark as shown.
For Knit Sport Shirts.
Claims use since about Feb. 5, 1930.

Ser. No. 297,063. DEMARINIS & LORIE, INC., New York, N. Y. Filed Mar. 10, 1930.

London Mist

For Ladies' Felt Hats.
Claims use since Feb. 15, 1930.

Ser. No. 297,163. THE UNIQUE GLOVE COMPANY, INC., Gloversville, N. Y. Filed Mar. 11, 1930.

MADE UNIQUE FOR YOU

For Women's, Children's, Men's Gloves and Mittens of Leather, Silk, and Cotton.
Claims use since 1911.

Ser. No. 297,166. ASSOCIATED APPAREL INDUSTRIES, INC., Chicago, Ill. Filed Mar. 12, 1930.

Abdóminòff

For Reducing Corsets, Reducing Belts, and Abdominal Belts.
Claims use since Mar. 3, 1930.

Ser. No. 297,172. MILLARD W. CHRISTIE, New York, N. Y. Filed Mar. 12, 1930.



No claim being made to the exclusive use of the words "Washable, All-Ways the Same" apart from the mark as shown in the drawing.
For Leather Gloves.
Claims use since Mar. 4, 1930.

Ser. No. 297,255. LOGAN HAT STORES, INC., New York, N. Y. Filed Mar. 13, 1930.



The word "Hats" is disclaimed except in association with the other features of the mark.
For Men's Hats and Caps.
Claims use since January, 1929.

Ser. No. 297,310. KOPS BROS. INC., New York, N. Y. Filed Mar. 14, 1930.

Figure Trainer

For Corsets, Brassières, and Girdles and Combinations of Same.
Claims use since Feb. 1, 1930.

Ser. No. 297,473. ENDICOTT JOHNSON CORPORATION, Endicott, N. Y. Filed Mar. 18, 1930.

HAPPY DAN

For Boots, Shoes, and Slippers Constructed of Leather, Fabric, and/or Rubber or any Combinations Thereof Having Rubber Soles.
Claims use since about Mar. 12, 1930.

Ser. No. 297,474. ENDICOTT JOHNSON CORPORATION, Endicott, N. Y. Filed Mar. 18, 1930.

ENDICOTT
HAPPY DAN
JOHNSON
AMERICA'S STANDARD

No claim is herein made to the words "America's Standard" apart from the mark shown.
For Boots, Shoes, and Slippers Constructed of Leather, Fabric, and/or Rubber or any Combinations Thereof Having Leather Soles.
Claims use since about Mar. 12, 1930.

Ser. No. 297,475. FISHER HOSIERY COMPANY, INC., Reading, Pa. Filed Mar. 18, 1930.

NeaTō

For Hosiery.
Claims use since Mar. 10, 1930.

Ser. No. 297,570. ALDERWOOD KNITTING MILLS, Portland, Oreg. Filed Mar. 20, 1930.

Featherwool

For Men's, Women's, and Children's Sweaters, Hosiery and Caps, and Women's and Children's Dresses.
Claims use since Nov. 20, 1929.

CLASS 41

Canes, Parasols, and Umbrellas

Ser. No. 296,181. THE FINK & EASTER COMPANY, Baltimore, Md. Filed Feb. 18, 1930.

SERVABELLE

For Umbrellas and Parasols.
Claims use since Jan. 27, 1930.

CLASS 42

Knitted, Netted, and Textile Fabrics

Ser. No. 280,183. MANVILLE JENCKES COMPANY, Pawtucket, R. I. Filed Mar. 2, 1929.

SPRINGTIME

For Bedspreads and Curtains of Cotton, Silk, Rayon, or Lace.
Claims use since Feb. 1, 1928.

Ser. No. 296,844. WINKLER-THOMPSON CO. INC., New York, N. Y. Filed Mar. 4, 1930.

LINTONG

For Cotton, Linen, and Silk Piece Goods.
Claims use since Dec. 15, 1928.

Ser. No. 297,017. KATTERMANN AND MITCHELL COMPANY, New York, N. Y. Filed Mar. 8, 1930.

"KAMICO"

For Piece Goods of Silk and Mixtures of Silk and Rayon.
Claims use since Feb. 24, 1930.

Ser. No. 297,119. ISRAEL BELSKY, New York, N. Y. Filed Mar. 11, 1930.

BELGEM

For Cotton Piece Goods—Namely, Sheets and Pillowcases.
Claims use since Feb. 15, 1930.

Ser. No. 297,158. SOCIETE A RESPONSABILITE LIMITEE RODIER, Paris, France. Filed Mar. 11, 1930.

GRANELLIC

For Piece Goods of Wool, Cotton, and Silk and Mixtures of the Same.
Claims use since Oct. 5, 1929.

Ser. No. 297,505. WINKLER-THOMPSON CO. INC., New York, N. Y. Filed Mar. 18, 1930.

BASQUE BANDAY

For Cotton, Linen, and Silk Piece Goods.
Claims use since Dec. 15, 1928.

Ser. No. 297,682. JOHN R. LANKENAU CO., Boston, Mass. Filed Mar. 21, 1930.

WINSOME

For Card-Table Covers Made of Cloth Woven of Cotton with a Pile.
Claims use since Mar. 14, 1930.

Ser. No. 297,707. E. F. TIMME & SON, New York, N. Y. Filed Mar. 21, 1930.

Lla-Paca

For Pile Fabrics in the Piece.
Claims use since Jan. 30, 1930.

Ser. No. 297,731. FOREMOST FABRICS CORPORATION, New York, N. Y. Filed Mar. 22, 1930.

Parian

For Silk Piece Goods.
Claims use since Jan. 30, 1930.

Ser. No. 297,738. ISAAC FRED HARVEY, Bradford, England. Filed Mar. 22, 1930.

"MOHVEL"

For Silk Piece Goods.
Claims use since Dec. 10, 1921.

Ser. No. 297,739. ISAAC FRED HARVEY, Bradford, England. Filed Mar. 22, 1930.

"WOVEL"

For Woolen or Worsted Piece Goods.
Claims use since Aug. 31, 1925.

Ser. No. 297,796. B. COHEN & CO., INC., New York, N. Y. Filed Mar. 24, 1930.

Margot Crepe

No claim is made to the exclusive use of the word "Crepe" apart from the mark shown in the drawing.
For Silk, Rayon, and Imitation-Silk in the Piece.
Claims use since Mar. 3, 1929.

Ser. No. 297,836. COHEN, GOLDMAN & CO. INC., New York, N. Y. Filed Mar. 25, 1930.

MID-TEX

For Woven Fabric Made from Wool.
Claims use since Mar. 1, 1930.

Ser. No. 297,850. CARSON PIRIE SCOTT & CO., Chicago, Ill. Filed Mar. 25, 1930.



Jenny Wren

For Cotton Piece Goods.
Claims use since about Mar. 5, 1928.

Ser. No. 297,875. ROUSMANIERE WILLIAMS CORPORATION, New York, N. Y. Filed Mar. 25, 1930.

LINCOLN MILLS ★ FABRICS ★

Applicant disclaims any exclusive right to the word "Fabrics" apart from the mark shown on the drawing.
For Cotton Piece Goods.
Claims use since Jan. 1, 1913.

CLASS 43

Thread and Yarn

Ser. No. 297,732. FRANKLIN RAYON CORPORATION, Providence, R. I. Filed Mar. 22, 1930.

SUPERCOVER

For Rayon Yarns of Artificial and Synthetic Fibers.
Claims use since June 29, 1929.

CLASS 44

Dental, Medical, and Surgical Appliances

Ser. No. 296,125. FUERCHTEGOTT WILLY JAEGER, doing business as Jaeger-Bigelow Company, Boston, Mass. Filed Feb. 17, 1930.

MERCOSAN

For Catgut Material for Surgical and Medical Purposes.
Claims use since Feb. 1, 1930.

Ser. No. 296,983. WILLARD H. REED, doing business as W. H. Reed & Co., Atlanta, Ga. Filed Mar. 7, 1930.

W·H·R·PRODUCT

Exclusive right to the word "Product" as disclaimed apart from the mark shown in the drawing.
For Sanitary Rubber Protectors for the Prevention of Disease and Rubber Finger Cots.
Claims use since Feb. 21, 1930.

Ser. No. 297,362. THE ELECTRIC MFG. CO., San Francisco, Calif. Filed Mar. 15, 1930.

SOLAR COMET

For Electric Hair Dryers.
Claims use since Mar. 6, 1930.

Ser. No. 297,578. PAUL DEEGAN BERRISFORD, doing business as "Dee" Medical Supply Co., St. Paul, Minn. Filed Mar. 20, 1930.

DEE

For Therapeutic Appliances Adapted to Produce Suction, Aspiration, Irrigation, and Massage.
Claims use since Feb. 1, 1930.

CLASS 45

Beverages, Nonalcoholic

Ser. No. 295,746. CHAD NICHOLS, Newark, N. J. Filed Feb. 7, 1930.

RED ELEPHANT

For Nonalcoholic, Noncereal, Maltless Beverages Sold as Soft Drinks and Syrups, Extracts, and Concentrates for Making the Same.
Claims use since May 1, 1929.

Ser. No. 296,048. CLOVERDALE SPRING COMPANY, Baltimore, Md. Filed Feb. 15, 1930.

LITH-A-LIMES

Applicant disclaims the exclusive right to the use of the word "Limes."
For Carbonated, Maltless, Nonalcoholic Beverage Sold as a Soft Drink.
Claims use since on or about Jan. 16, 1930.

Ser. No. 296,126. MARTHA H. LEWIS, doing business as Martha Lewis Fruit Products Company, Denver, Colo. Filed Feb. 17, 1930.

POM

For Powdered Form of Fruit and Sugar Ingredients for Making Nonalcoholic, Noncereal, Maltless Beverages Sold as Soft Drinks.
Claims use since about Aug. 1, 1928.

Ser. No. 297,231. BLUE RIDGE BOTTLING CO., St. Louis, Mo. Filed Mar. 13, 1930.

UR-WAY

For Carbonated Nonalcoholic, Noncereal, Maltless Beverages Sold as Soft Drinks.
Claims use since Jan. 2, 1930.

Ser. No. 297,480. T. E. HAMILTON, Jamesport, Mo. Filed Mar. 18, 1930.

SHO'ME

For Mineral Water.
Claims use since Oct. 7, 1929.

Ser. No. 297,778. THE PURITY WATER CO., Toledo, Ohio. Filed Mar. 22, 1930.

University Club

For Ginger Ale.
Claims use since May 2, 1929.

Ser. No. 297,984. REGENT SQUARE BOTTLING WORKS, Swissvale, Pa. Filed Mar. 27, 1930.

REGENT

For Carbonated, Nonalcoholic, Noncereal, Maltless Beverages Sold as Soft Drinks.
Claims use since on or about Jan. 1, 1926.

CLASS 46

Foods and Ingredients of Foods

Ser. No. 270,134. MCCORMICK & CO., INCORPORATED, Baltimore, Md. Filed July 25, 1928.

BEE BRAND

For Spices and Mustard, Whole and Ground.
Claims use since about Sept. 1, 1897.

Ser. No. 277,014. MITSUBISHI SHOJI KAISHA, LTD., Marunouchi, Tokyo, Japan. Filed Dec. 20, 1928.

SAMPAN BRAND

Applicant hereby disclaims the exclusive use of the word "Brand" apart from the mark shown in the drawing.
For Canned Crab Meat.
Claims use since June 9, 1928.

Ser. No. 284,805. S. GALLI & CO., New York, N. Y. Filed May 29, 1929.



The drawing is lined for shading. The wording, except the expression "Swiss Beauty," is disclaimed apart from the mark shown on the drawing.
For Cheese.
Claims use since Jan. 1, 1928.

Ser. No. 288,727. FRANKLIN SANFORD, doing business as The Cornhoney Co., Cincinnati, Ohio. Filed Aug. 19, 1929.

CORNHONEY

For Table Syrup.
Claims use since Aug. 10, 1929.

Ser. No. 292,307. YODER BROTHERS, Barberton, Ohio. Filed Nov. 11, 1929.

MOONLIGHT ★

For Fresh Mushrooms.
Claims use since on or about Oct. 19, 1929.

Ser. No. 293,652. "ALPA S. A.," Prilly, near Lausanne, Switzerland. Filed Dec. 14, 1929.



All words and notations except "Alpa S. A." are disclaimed apart from the mark as shown on the drawing.
For Cheese in Boxes and Cheese.
Claims use since Aug. 1, 1929.

Ser. No. 293,663. FLORIDA FRUIT CANNERS, INC., Frostproof, Fla. Filed Dec. 14, 1929.

SINGING TOWER



For Fresh Citrus Fruits and Fresh Vegetables and Canned Grapefruit.
Claims use since Mar. 26, 1929.

Ser. No. 294,162. JOHN LAYTON & CO. LTD., London, England. Filed Dec. 28, 1929.



For Liquid Eggs in a Frozen State.
Claims use since Dec. 20, 1926.

Ser. No. 295,678. KOHRS PACKING COMPANY, Davenport, Iowa. Filed Feb. 6, 1930.



The conventional lining for colors shown on the drawing is hereby disclaimed.
For Sausage and Cottage Butts.
Claims use since about Apr. 1, 1880.

Ser. No. 295,885. DONALD H. BAIN, LTD., Winnipeg, Fort William, Regina, Canada. Filed Feb. 11, 1930.

Crest DHB Brand

The expression "Brand" is disclaimed apart from the other features of the mark shown in the drawing.
For Shelled Almonds in Boxes, Almonds in Shell in Bags, Shelled Brazil Nuts in Boxes or Bags, Shelled Walnuts in Boxes, Walnuts in Shell, Filberts in Shell in Bags, Dried Beans in Bags, Dates in Boxes, Peanuts in Shell in Bags, Shelled Peanuts in Bags.
Claims use since 1923.

Ser. No. 296,017. DYSART L. MACONACHIE, Bloomington, Ill. Filed Feb. 14, 1930.

SCOTTY'S CHILI

The word "Chili" is hereby disclaimed apart from the trade-mark shown.
For Compressed Chili Con Carne.
Claims use since on or about Dec. 1, 1920.

Ser. No. 296,184. GOLDEN RULE POULTRY FARMS, Sedalia, Mo. Filed Feb. 18, 1930.

Golden Rule



Poultry Farms

No claim being made to the words "Blood-Tested Accredited Chicks" and/or the representation of chicks apart from the mark shown.
For Eggs in the Shell and Live Chicks and Poultry.
Claims use since Jan. 1, 1925.

Ser. No. 296,834. JAMES VAN DYK COMPANY, New York, N. Y. Filed Mar. 4, 1930.



The drawing is lined vertically to indicate the color red and diagonally to indicate the color green. No claim is made to the words "New York, Net Weight One Pound, The Name Means Quality, Since 1760," and the reading matter beginning with "More Than" and ending "in the Cup" and beginning "Suggestions" and ending "Keep Hot" apart from the mark as shown.
For Coffee.
Claims use since November, 1929.

Ser. No. 296,848. AMERICAN MILLING COMPANY, Peoria, Ill. Filed Mar. 5, 1930.

ALFAL-FAT

The word "Fat" is disclaimed apart from the mark as shown in the drawing.
For Stock Food.
Claims use since Dec. 1, 1904.

Ser. No. 297,069. GOLDEN BEAR COOKIE CO. INC., Long Island City, N. Y. Filed Mar. 10, 1930.

GOLDEN BEAR



COOKIES

The word "Cookies" forms a part of the registration sought only in combination with the other features of the mark shown in the drawing.
For Cookies.
Claims use since Feb. 4, 1930.

Ser. No. 297,104. TYRRELL & GARTH, Highlands, Tex. Filed Mar. 10, 1930.



The shading of the margin indicating gold and that of the lower panel indicating the color pink.
For Preserved Figs.
Claims use since Sept. 11, 1929.

Ser. No. 297,123. CONTINENTAL BAKING COMPANY, Wilmington, Del., and New York, N. Y. Filed Mar. 11, 1930.

WONDER-CUT

No claim is made to the word "Cut" except in combination with the trade-mark as shown.
For Bread.
Claims use since on or about Feb. 3, 1930.

Ser. No. 297,528. GRAND RIVER CANNING COMPANY, Marksan, Wis. Filed Mar. 19, 1930.

LITTLE GREEN



No claim is made to the words "Little Green" except as shown in the drawing.
For Canned Vegetables.
Claims use since Oct. 1, 1917.

Ser. No. 297,576. FRANKLIN BAKER COMPANY, New York, N. Y. Filed Mar. 20, 1930. Under 10-year proviso.

BRAZIL

For Prepared Coconut.
Claims use since 1894.

Ser. No. 297,591. GEORGE V. FOLTZ, doing business as Foltz Tea and Coffee Co., New Orleans, La. Filed Mar. 20, 1930.

ZODIAC

For Coffee, Tea, Cocoa, and Spices.
Claims use since June 4, 1929.

Ser. No. 297,702. SWIFT AND COMPANY, Chicago, Ill. Filed Mar. 21, 1930.



For Butter and Cheese.
Claims use since on or about 1920 on butter and since on or about 1923 on cheese.

Ser. No. 297,730. MICHAEL FEINBERG, doing business as Feinberg Kosher Sausage Company, (Not Inc.), Minneapolis, Minn. Filed Mar. 22, 1930.

Beef-n-Ette

The descriptive word "Beef" is herewith disclaimed apart from the mark shown in the drawing.
For Beef Product Made the Same as Bacon.
Claims use since Feb. 5, 1930.

Ser. No. 297,756. WILLIAM C. O'SULLIVAN, doing business as O'Sullivan's, Casper, Wyo. Filed Mar. 22, 1930.

KARMELKORN

For Pop-Corn Candy.
Claims use since Jan. 1, 1930.

Ser. No. 297,954. BUNTE BROTHERS, doing business as Bunte, Chicago, Ill. Filed Mar. 27, 1930.

BRIERGATE

For Candy.
Claims use since Feb. 15, 1930.

Ser. No. 297,958. CLARENCE A. CRANE, doing business as The Crane Co., Cleveland, Ohio. Filed Mar. 27, 1930.

SUNNY SIDE UP

For Candy.
Claims use since Mar. 2, 1930.

CLASS 50

Merchandise Not Otherwise Classified

Ser. No. 296,443. REYNOLDS METALS COMPANY, Louisville, Ky. Filed Feb. 24, 1930.

REYFLASH

For Reflecting Signs.
Claims use since about July 17, 1929.

Ser. No. 297,289. CHESEBRO, WHITMAN CO. INC., Long Island City, N. Y. Filed Mar. 13, 1930.

AUTO-STEP

For Stepladders.
Claims use since Feb. 3, 1930.

TRADE-MARK REGISTRATIONS GRANTED

[ACT OF FEBRUARY 20, 1905]

MAY 6, 1930

270,296. CHEESE. INGERSOLL CREAM CHEESE COMPANY, LIMITED, Ingersoll, Ontario, Canada.
Filed June 3, 1929. Serial No. 284,984. PUBLISHED FEBRUARY 25, 1930. Class 46.

270,297. CLOTHES-WASHING MACHINES AND PARTS THEREFOR. ELECTROLUX, INC., New York, N. Y.
Filed June 3, 1929. Serial No. 284,975. PUBLISHED FEBRUARY 18, 1930. Class 24.

270,298. BABY CHICKS. W. B. HEWITT, doing business as Hewitt Hatchery, Van Nuys, Calif.
Filed June 1, 1929. Serial No. 284,908. PUBLISHED FEBRUARY 25, 1930. Class 46.

270,299. PAPER FORMS. GILMAN FANFOLD CORPORATION, LIMITED, Toronto, Ontario, Canada, and Niagara Falls, N. Y.
Filed May 28, 1929. Serial No. 284,730. PUBLISHED FEBRUARY 25, 1930. Class 37.

270,300. SANITARY WASHING CONTAINERS MADE OF FLEXIBLE WATERPROOF FABRIC IN SUCH SHAPES THAT THE CONTAINERS MAY BE REMOVABLY FITTED IN WASHING RECEPTACLES, BASINS AND THE LIKE TO FORM PROTECTIVE SHIELDS. SERPHY TERRY, Oakland, Calif.
Filed May 21, 1929. Serial No. 284,429. PUBLISHED FEBRUARY 18, 1930. Class 2.

270,301. LUBRICATING OILS AND GREASES AND GASOLINE. JOSEPH ANDREW CHAMBERS, Memphis, Tenn.
Filed May 18, 1929. Serial No. 284,261. PUBLISHED FEBRUARY 18, 1930. Class 15.

270,302. FINGER RINGS OF PRECIOUS METAL. CINER MANUFACTURING CO., New York, N. Y.
Filed May 8, 1929. Serial No. 283,664. PUBLISHED AUGUST 6, 1929. Class 28.

270,303. CANNED OLIVE OIL. VEZOS BROTHERS, Buffalo, N. Y.
Filed May 8, 1929. Serial No. 283,651. PUBLISHED FEBRUARY 18, 1930. Class 46.

270,304. COFFEE. WILSON COFFEE COMPANY, Tampa, Fla.
Filed May 7, 1929. Serial No. 283,636. PUBLISHED JUNE 18, 1929. Class 46.

270,305. RUBBER LAMP TUBING, WINDSHIELD RUBBER WIPER TUBING, AND RUBBER GASKETS. ENO RUBBER CORPORATION, Los Angeles, Calif.
Filed April 22, 1929. Serial No. 282,776. PUBLISHED FEBRUARY 25, 1930. Class 35.

270,306. ELECTRICAL SIGNAL DEVICES—NAMELY, STOCK TICKERS, KEYBOARD TRANSMITTERS, TELEGRAPH PRINTERS, AND ELECTRICAL STOCK-BOARD SIGNALLING TRANSMITTERS. RADIOTYPE CORPORATION, New York, N. Y.
Filed April 20, 1929. Serial No. 282,715. PUBLISHED FEBRUARY 18, 1930. Class 21.

270,307. ELECTRICAL LIGHTERS—NAMELY, CIGAR LIGHTERS. CHARLES E. VAWTER, Philadelphia, Pa.
Filed April 17, 1929. Serial No. 282,582. PUBLISHED FEBRUARY 25, 1930. Class 21.

270,308. PANCAKE AND WAFFLE FLOUR, ROLLED OATS, CEREAL BREAKFAST FOODS, RYE MEAL, RYE FLOUR, WHOLE-WHEAT FLOUR, AND CORN MEAL. SPERRY FLOUR CO., San Francisco, Calif., assignor to General Mills, Inc., a Corporation of Delaware.
Filed April 10, 1929. Serial No. 282,200. PUBLISHED JULY 23, 1929. Class 46.

270,309. SHOULDER STRAP PLATED WITH PRECIOUS METAL. THE COMFORT CLASP COMPANY, Hollywood, Calif.
Filed April 6, 1929. Serial No. 281,941. PUBLISHED FEBRUARY 25, 1930. Class 28.

270,310. WHEAT FLOUR. ALBERS BROS. MILLING COMPANY, San Francisco, Calif.
Filed April 1, 1929. Serial No. 281,643. PUBLISHED FEBRUARY 18, 1930. Class 46.

270,311. BUILDERS' AND OTHER TOOLS. JOSEPH TYZACK & SON, LIMITED, Sheffield, England.
Filed March 29, 1929. Serial No. 281,579. PUBLISHED FEBRUARY 25, 1930. Class 23.

270,312. LAVALLIÈRES, PENDANTS, NECKLACES, NECK CHAINS, BRACELETS, AND EARRINGS. MARTIN-COPELAND COMPANY, Providence, R. I.
Filed March 19, 1929. Serial No. 281,012. PUBLISHED MAY 14, 1929. Class 28.

270,313. NONALCOHOLIC, NONCEREAL, MALTLESS BEVERAGES USED AS SOFT DRINKS. CALIFORNIA CRUSHED FRUIT CORPORATION, Los Angeles, Calif.
Filed March 18, 1929. Serial No. 280,890. PUBLISHED FEBRUARY 25, 1930. Class 45.

270,314. CANDIES AND ICE CREAM. THE MAPLE CONFECTIONERY, Ukiah, Calif.
Filed March 8, 1929. Serial No. 280,448. PUBLISHED FEBRUARY 18, 1930. Class 46.

270,315. GOLF BALLS. KEN-WEL SPORTING GOODS COMPANY, INC., Utica, N. Y.
Filed March 7, 1929. Serial No. 280,400. PUBLISHED JUNE 11, 1929. Class 22.

270,316. MALT PRODUCTS—NAMELY, MALT SYRUP. IDEAL FOOD PRODUCTS CO., Cedar Rapids, Iowa.
Filed March 1, 1929. Serial No. 280,118. PUBLISHED FEBRUARY 18, 1930. Class 46.

270,317. SANDWICHES, PIES, CAKES, DOUGHNUTS, ICE CREAM, FRESH MILK, COOKIES. JOHN M. BICKLER, Linton, N. Dak.
Filed February 19, 1929. Serial No. 279,591. PUBLISHED FEBRUARY 25, 1930. Class 46.

270,318. HYDROCARBON MOTOR-FUEL OILS, LUBRICATING OILS, AND LUBRICATING GREASES. THE PURE OIL COMPANY, Chicago, Ill.
Filed January 29, 1929. Serial No. 278,605. PUBLISHED APRIL 16, 1929. Class 15.

270,319. MEDICINAL TONIC RECOMMENDED FOR PERSONS IN WEAK AND RUN-DOWN CONDITION, NURSING MOTHERS, AGED PERSONS, DELICATE CHILDREN, AND CONVALESCENTS. S. PFEIFFER MFG. CO., St. Louis, Mo.
Filed January 10, 1929. Serial No. 277,815. PUBLISHED FEBRUARY 18, 1930. Class 6.

270,320. CHEESE. S. A. EGIDIO GALBANI, Melzo, Milan, Italy.
Filed October 9, 1928. Serial No. 273,561. PUBLISHED FEBRUARY 25, 1930. Class 46.

270,321. CHEESE. S. A. EGIDIO GALBANI, Melzo, Milan, Italy.
Filed October 9, 1928. Serial No. 273,560. PUBLISHED FEBRUARY 25, 1930. Class 46.

270,322. A CONCENTRATED STEW CONSISTING OF A HYDRATED OR DRY COMPOUND OF VEGETABLES, MEATS OR NUTS, AND EGGS AT PRESENT SOLD IN METAL CONTAINERS HAVING REMOVABLE TOPS. OTTO H. WILLARD, doing business as The Indian Products Company, Chicago, Ill.
Filed September 27, 1928. Serial No. 273,090. PUBLISHED FEBRUARY 25, 1930. Class 46.

270,323. IMITATION CHOP SUEY IN CONCENTRATED FORM AND CONSISTING OF A HYDRATED OR DRY COMPOUND OF VEGETABLES, MEATS OR NUTS, AND EGGS AT PRESENT SOLD IN METAL CONTAINERS HAVING REMOVABLE TOPS. OTTO H. WILLARD, doing business as The Indian Products Company, Chicago, Ill.
Filed September 27, 1928. Serial No. 273,088. PUBLISHED FEBRUARY 25, 1930. Class 46.

270,324. YEAST. THE FLEISCHMANN COMPANY, Cincinnati, Ohio, and New York, N. Y., assignor to Standard Brands Incorporated, Dover, Del., a Corporation of Delaware.
Filed August 28, 1928. Serial No. 271,645. PUBLISHED FEBRUARY 18, 1930. Class 46.

270,325. TOOLS AND CUTLERY—NAMELY, SCREW DRIVERS, PUTTY KNIVES, SCRAPERS, AND SPATULAS; AND KITCHEN UTENSILS OF BASE METAL—NAMELY, PARING KNIVES AND BREAD KNIVES. COMPO-SITE, INC., Newark, N. J.
Filed December 7, 1927. Serial No. 258,571. PUBLISHED FEBRUARY 18, 1930. Class 23.

270,326. FRESH GRAPES, FRESH DECIDUOUS FRUITS. DEER CREEK ORCHARDS, Porterville, Calif.
Filed November 2, 1927. Serial No. 256,916. PUBLISHED FEBRUARY 25, 1930. Class 46.

270,327. LEDGER BINDERS, SECTIONAL-POST BINDERS, PRONG BINDERS, ETC. WILSON-JONES COMPANY, Chicago, Ill.
Filed October 22, 1927. Serial No. 256,499. PUBLISHED FEBRUARY 18, 1930. Class 37.

270,328. LEDGER BINDERS, SECTIONAL-POST BINDERS, PRONG BINDERS, ETC. WILSON-JONES COMPANY, Chicago, Ill.
Filed October 22, 1927. Serial No. 256,498. PUBLISHED FEBRUARY 18, 1930. Class 37.

270,329. WARDROBE BAGS. CLOSGARD WARDROBE CO., INC., Washington, D. C., and South Washington, Va.
Filed May 17, 1926. Serial No. 231,724. PUBLISHED NOVEMBER 9, 1926. Class 2.

270,330. PLATED TABLEWARE—NAMELY, SPOONS, FORKS, KNIVES, AND LADLES. THE AMERICAN SILVER COMPANY, Bristol, Conn.
Filed January 9, 1926. Serial No. 225,601. PUBLISHED MARCH 23, 1926. Class 28.

270,331. FOLDING CHAIRS SUITABLE FOR USE IN THE HOUSEHOLD, ASSEMBLY HALLS, ETC. LOUIS RASTETTER & SONS, Fort Wayne, Ind.
Filed December 19, 1928. Serial No. 276,986. PUBLISHED FEBRUARY 25, 1930. Class 32.

270,332. BLOOD, NERVE, AND BODY-BUILDING TONIC. CORNEL DRUG STORES INC., New York, N. Y.
Filed December 5, 1928. Serial No. 276,301. PUBLISHED FEBRUARY 18, 1930. Class 6.

270,333. WHEAT FLOUR. MINNEAPOLIS MILLING COMPANY, Minneapolis, Minn.
Filed December 4, 1928. Serial No. 276,271. PUBLISHED JULY 23, 1929. Class 46.

270,334. FLOW TANKS AND FLUID-SEPARATOR TANKS FOR USE IN OIL FIELDS. NATIONAL TANK COMPANY, Tulsa, Okla.
Filed December 3, 1928. Serial No. 276,213. PUBLISHED FEBRUARY 25, 1930. Class 2.

270,335. WOOD, METAL, PAPER, AND COMPOSITION BOXES FOR CONTAINING, STORING, AND DISPLAYING PLAYING CARDS, CIGARETTES, CANDY, AND OTHER PACKAGES AND ARTICLES. LOUISE H. HURD, New York, N. Y.
Filed November 27, 1928. Serial No. 275,899. PUBLISHED FEBRUARY 25, 1930. Class 2.

270,336. NECKLACES, BRACELETS, BROOCHES, FINGER RINGS, EARRINGS, AND PENDANTS. SAMSTAG & HILDER BROS., INC., New York, N. Y.
Filed November 16, 1928. Serial No. 275,413. PUBLISHED FEBRUARY 18, 1930. Class 28.

270,337. FRESH FRUITS—NAMELY, FRESH GRAPEFRUIT, FRESH DATES, FRESH FIGS; AND FRESH VEGETABLES. WOODHOUSE BROS., Indio, Calif.
Filed November 14, 1928. Serial No. 275,323. PUBLISHED SEPTEMBER 3, 1929. Class 46.

270,338. CHOCOLATE NUT COATING FOR ICE-CREAM BARS. LILLYE G. ZUCKERMAN, doing business as Frozen Lolly Coating Company, Detroit, Mich.
Filed November 5, 1928. Serial No. 274,863. PUBLISHED FEBRUARY 25, 1930. Class 46.

270,339. COTTON-FLANNEL SHEETS. MINOT, HOOPER & CO., New York, N. Y.
Filed November 13, 1928. Serial No. 275,234. PUBLISHED FEBRUARY 18, 1930. Class 42.

270,340. SPARK PLUGS, ELECTRIC HEADLIGHTS FOR MOTOR VEHICLES, ELECTRIC LAMPS AND LANTERNS. PIERRE MARCHAL, Neuilly-sur-Seine, France.
Filed October 16, 1928. Serial No. 273,875. PUBLISHED FEBRUARY 18, 1930. Class 21.

270,341. SPARK PLUGS, ELECTRIC HEADLIGHTS FOR MOTOR VEHICLES, ELECTRIC LAMPS AND LANTERNS. PIERRE MARCHAL, Neuilly-sur-Seine, France.
Filed October 16, 1928. Serial No. 273,874. PUBLISHED FEBRUARY 18, 1930. Class 21.

270,342. MINIATURE MODEL TOY HOUSES. SAMETZ AND MCLEAN, Wilmington, N. C.
Filed January 3, 1928. Serial No. 259,647. PUBLISHED FEBRUARY 18, 1930. Class 22.

270,343. METAL GRINDING ELEMENTS OR BODIES FOR GRINDING OR PULVERIZING ROCK, CEMENT, METALLIC ORES, GYPSUM, AND SILICA. COATES STEEL PRODUCTS CO., Greenville, Ill.
Filed December 31, 1927. Serial No. 259,533. PUBLISHED FEBRUARY 25, 1930. Class 14.

270,344. ARTIFICIAL TEETH. THE DENTISTS' SUPPLY COMPANY OF NEW YORK, New York, N. Y.
Filed March 1, 1930. Serial No. 297,047. Class 44.

270,345. COPYING PENCILS. KOH-I-NOOR BLEISTIFTFABRIK L. & C. HARDTMUTH, Budweis, Czechoslovakia.
Filed January 11, 1930. Serial No. 294,673. PUBLISHED FEBRUARY 18, 1930. Class 37.

270,346. PENCILS OF ALL KINDS, INCLUDING THOSE WITH FIXED OR REMOVABLE LEADS, REFILLS, POINT PROTECTORS, LETTER OPENERS, CRAYONS, RUBBER BANDS, AND PENHOLDERS. KOH-I-NOOR BLEISTIFTFABRIK L. & C. HARDTMUTH, Budweis, Czechoslovakia.
Filed January 11, 1930. Serial No. 294,672. PUBLISHED FEBRUARY 18, 1930. Class 37.

270,347. WATERPROOF PAINT. EMMA FRITSCH, doing business as American Chemical & Engineering Co., Hawthorne, N. J.
Filed January 8, 1930. Serial No. 294,510. PUBLISHED FEBRUARY 18, 1930. Class 16.

270,348. TISSUE PAPER. CROWN WILLAMETTE PAPER COMPANY, San Francisco, Calif.
Filed January 8, 1930. Serial No. 294,509. PUBLISHED FEBRUARY 18, 1930. Class 37.

270,349. CORRUGATED PAPER BOARD. THE HINDE & DAUCH PAPER COMPANY, Sandusky, Ohio.
Filed January 6, 1930. Serial No. 294,426. PUBLISHED FEBRUARY 18, 1930. Class 37.

270,350. PAPER PADDING OR CUSHIONING MATERIAL FOR PACKING PURPOSES. KIMBERLY-CLARK CORPORATION, Neenah, Wis.
Filed January 4, 1930. Serial No. 294,390. PUBLISHED FEBRUARY 18, 1930. Class 37.

270,351. GREASEPROOF PAPER. MOUNTAIN MILL COMPANY, Lee, Mass., and New York, N. Y.
Filed January 2, 1930. Serial No. 294,314. PUBLISHED FEBRUARY 18, 1930. Class 37.

270,352. TOOTHPICKS. THE DIAMOND MATCH COMPANY, Chicago, Ill.
Filed December 30, 1929. Serial No. 294,214. PUBLISHED FEBRUARY 18, 1930. Class 44.

270,353. UPHOLSTERY-FOUNDATION TRIMMING BOARD. ARVEY CORPORATION, Chicago, Ill.
Filed December 30, 1929. Serial No. 294,200. PUBLISHED FEBRUARY 18, 1930. Class 37.

270,354. ANNUAL PUBLICATION. BRESKIN & CHARLTON PUBLISHING CORPORATION, New York, N. Y.
Filed December 28, 1929. Serial No. 294,141. PUBLISHED FEBRUARY 25, 1930. Class 38.

270,355. INSULATING OIL AND DASH-POT OIL. GENERAL ELECTRIC COMPANY, Schenectady, N. Y.
Filed December 21, 1929. Serial No. 294,002. PUBLISHED FEBRUARY 18, 1930. Class 15.

270,356. BOOKS. GARDEN CITY PUBLISHING COMPANY, INC., Garden City, N. Y.
Filed December 21, 1929. Serial No. 293,966. PUBLISHED FEBRUARY 25, 1930. Class 38.

270,357. PRINTED DIRECTORIES PUBLISHED PERIODICALLY. THE REUBEN H. DONNELLEY CORPORATION, Chicago, Ill.
Filed December 19, 1929. Serial No. 293,873. PUBLISHED FEBRUARY 25, 1930. Class 38.

270,358. SPONGE-RUBBER TOY ANIMALS AND DOLLS. LEE RUBBER & TIRE CORPORATION, Conshohocken, Pa.
Filed December 17, 1929. Serial No. 293,781. PUBLISHED FEBRUARY 18, 1930. Class 22.

270,359. DRY-CLEANING DETERGENT SOAPS. PRESTON T. RHODES Philadelphia, Pa.
Filed December 16, 1929. Serial No. 293,747. PUBLISHED FEBRUARY 11, 1930. Class 4.

270,360. COMBINED METER TEST SWITCHES AND PHASING TRANSFORMERS FOR REACTIVE COMPONENT METERING. THE SUPERIOR SWITCHBOARD & DEVICES COMPANY, Canton, Ohio.
Filed December 14, 1929. Serial No. 293,699. PUBLISHED FEBRUARY 18, 1930. Class 21.

270,361. BREATHING APPARATUS FOR USE IN ATMOSPHERES CONTAINING POISONOUS OR NOXIOUS GASES. MINE SAFETY APPLIANCES COMPANY, Pittsburgh, Pa.
Filed December 13, 1929. Serial No. 293,630. PUBLISHED FEBRUARY 11, 1930. Class 44.

270,362. ELECTRICALLY-HEATED PADS AND BLANKETS USED FOR THERAPEUTIC PURPOSES. WILLIAM H. TURVER, doing business as Electrolife Manufacturing Company, Los Angeles, Calif.
Filed December 9, 1929. Serial No. 293,453. PUBLISHED FEBRUARY 11, 1930. Class 44.

270,363. AUTOGRAPHIC REGISTERS. AMERICAN SALES BOOK COMPANY, LIMITED, Toronto, Ontario, Canada, and Niagara Falls and Elmira, N. Y.
Filed December 6, 1929. Serial No. 293,307. PUBLISHED FEBRUARY 18, 1930. Class 37.

270,364. GRANITE CLEANER. LEE C. GOODNIGHT, Landis, N. C.
Filed November 14, 1929. Serial No. 292,401. PUBLISHED FEBRUARY 25, 1930. Class 4.

270,365. WASHING AND CLEANING POWDERS. CLARENCE E. CROWDER, doing business as Hac Products, Paynesville, Minn.
Filed November 11, 1929. Serial No. 292,256. PUBLISHED FEBRUARY 18, 1930. Class 4.

270,366. BRAKE-BAND DRESSINGS. ISAAC H. GRANCELL, Los Angeles, Calif.
Filed August 24, 1929. Serial No. 288,957. PUBLISHED FEBRUARY 25, 1930. Class 4.

270,367. DRESSING AND POLISH FOR VEHICLE TOPS, COATED TEXTILE GOODS, AND LEATHER. KARL L. TEUBNER, doing business as Tech Laboratories, Asheville, N. C.
Filed August 17, 1929. Serial No. 288,673. PUBLISHED FEBRUARY 18, 1930. Class 4.

270,368. FABRIC-CLEANSING SOAP COMPOUND. U. S. SANITARY SPECIALTIES CORPORATION, Chicago, Ill.
Filed July 22, 1929. Serial No. 287,508. PUBLISHED FEBRUARY 18, 1930. Class 4.

270,369. A FOOD PREPARATION CONSISTING OF ORANGE JUICE, HONEY, AND YEAST. CITRO LABORATORIES, INC., Los Angeles, Calif.
Filed November 26, 1929. Serial No. 292,925. PUBLISHED FEBRUARY 25, 1930. Class 46.

270,370. MATERIALS TO BE USED IN PLACE OF SUGAR FOR BEVERAGES. E. D. TIPTON, doing business as U-Neek Products Co., Chicago, Ill.
Filed November 22, 1929. Serial No. 292,762. PUBLISHED FEBRUARY 25, 1930. Class 46.

270,371. SPAGHETTI SAUCE. LINO DE CREDARO, doing business as Lino Italian Foods Company, Jacksonville, Fla.
Filed November 9, 1929. Serial No. 292,203. PUBLISHED FEBRUARY 25, 1930. Class 46.

270,372. WINE JELLY; COOKING WINE, BEING WINE TO WHICH SALT HAS BEEN ADDED, USED FOR FOOD PURPOSES ONLY; JAMS, JELLIES, FRUIT PRESERVES, FRUITS PRESERVED IN WINE SYRUP, ICE CREAM, MALT SYRUP, COFFEE, TEAS, SPICES, FLAVORING EXTRACTS FOR FOODS, FRUIT SYRUPS USED IN THE PREPARATION OF FOODS, TABLE SYRUPS. VAI BROS., doing business as California Medicinal Wine Co., Los Angeles, Calif.
Filed November 5, 1929. Serial No. 292,063. PUBLISHED FEBRUARY 25, 1930. Class 46.

270,373. CHEESE. ERNST BAUER, Hamburg, Germany.
Filed September 9, 1929. Serial No. 289,495. PUBLISHED FEBRUARY 25, 1930. Class 46.

270,374. HORSE-RADISH, PICKLES, CHEESE, BUTTER, AND EGGS. CONRAD KIEL & SON, Jersey City, N. J.
Filed August 26, 1929. Serial No. 289,027. PUBLISHED FEBRUARY 25, 1930. Class 46.

270,375. OLIVE OIL. GENOVESI BROS., ZAPPELLI & CO., San Jose, Calif.
Filed August 26, 1929. Serial No. 289,016. PUBLISHED FEBRUARY 25, 1930. Class 46.

270,376. PLAIN BREAD; WHOLE-WHEAT, POTATO, RAISIN, AND FANCY BREADS; ROLLS, BUNS, DOUGHNUTS, FRIED CAKES, CAKES, COOKIES, PIES, TARTS, AND PASTRIES. BOETTGER BAKING CO. INC., Pleasant Ridge, Mich.
Filed August 22, 1929. Serial No. 288,835. PUBLISHED FEBRUARY 25, 1930. Class 46.

270,377. MILK, CREAM, BUTTER, BUTTERMILK, COTTAGE CHEESE, AND BREAD. WESTERN MARYLAND DAIRY CORPORATION, Baltimore, Md.
Filed August 16, 1929. Serial No. 288,626. PUBLISHED FEBRUARY 25, 1930. Class 46.

270,378. KEROSENE, GASOLINE, FURNACE OIL, HEATING OIL, AND LUBRICATING OILS AND GREASES. INDEPENDENT OIL AND GAS COMPANY, Tulsa, Okla.
Filed November 27, 1929. Serial No. 292,992. PUBLISHED FEBRUARY 25, 1930. Class 15.

270,379. CUP-DISPENSING MACHINES. LILY-TULIP CUP CORPORATION, New York, N. Y.
Filed November 23, 1929. Serial No. 292,812. PUBLISHED FEBRUARY 25, 1930. Class 23.

270,380. FURNITURE—VIZ, INVALID TABLES. LELAND W. HUNTINGTON, Oakland, Calif.
Filed November 11, 1929. Serial No. 292,266. PUBLISHED FEBRUARY 25, 1930. Class 32.

270,381. MOTOR OIL FUEL. RED INDIAN OIL COMPANY INCORPORATED, Detroit, Mich.
Filed November 5, 1929. Serial No. 292,048. PUBLISHED FEBRUARY 25, 1930. Class 15.

270,382. PHONOGRAPHS ADAPTED FOR COMBINATION WITH RADIO RECEIVING SETS. SUPERIOR CABINET CORPORATION, New York, N. Y.
Filed October 31, 1929. Serial No. 291,846. PUBLISHED FEBRUARY 25, 1930. Class 36.

270,383. FRATERNITY EMBLEM PINS. SIGMA DELTA CHI, Chicago, Ill.
Filed October 30, 1929. Serial No. 291,798. PUBLISHED FEBRUARY 25, 1930. Class 28.

270,384. NEEDLES FOR SOUND-REPRODUCING MACHINES. THE BRITISH NEEDLE COMPANY LIMITED, Redditch, England.
Filed October 30, 1929. Serial No. 291,757. PUBLISHED FEBRUARY 25, 1930. Class 36.

270,385. ELECTRIC TRANSFORMERS AND ELECTRIC COILS FOR TRANSFORMERS AND MAGNETS. JEFFERSON ELECTRIC COMPANY, Chicago, Ill.
Filed October 10, 1929. Serial No. 290,904. PUBLISHED FEBRUARY 25, 1930. Class 21.

270,386. METAL-GRINDING MACHINES. FITCHBURG GRINDING MACHINE CORPORATION, Fitchburg, Mass.
Filed October 8, 1929. Serial No. 290,780. PUBLISHED FEBRUARY 25, 1930. Class 23.

270,387. UPHOLSTERED SOFAS, DAVENPORTS, LOVE SEATS, SETTEES, CHAISE LONGUES, CHAIRS, ROCKERS, AND OTTOMANS. R. N. CARDOZO & BRO., St. Paul, Minn.
Filed August 12, 1929. Serial No. 288,417. PUBLISHED FEBRUARY 25, 1930. Class 32.

270,388. RUBBER BELTING AND HOSE. GOODYEAR RUBBER COMPANY, San Francisco, Calif.
Filed July 31, 1929. Serial No. 287,924. PUBLISHED SEPTEMBER 10, 1929. Class 35.

270,389. GASOLINE, MOTOR-FUEL OILS, NAPHTHA, KEROSENE, DISTILLATE FOR BURNING IN INTERNAL-COMBUSTION ENGINES, GAS OIL, FURNACE-FUEL OILS, LUBRICATING OILS, PETROLEUM GREASES, AND ROAD-DRESSING OIL. CONTINENTAL OIL COMPANY, New York, N. Y.
Filed July 23, 1929. Serial No. 287,524. PUBLISHED FEBRUARY 25, 1930. Class 15.

270,390. PHOTOGRAPHIC PRINTS AND ENLARGEMENTS. AURORA PHOTO FINISHING CO., Aurora, Ill.
Filed November 16, 1929. Serial No. 292,481. PUBLISHED FEBRUARY 25, 1930. Class 38.

270,391. PUZZLES PRINTED SERIALLY IN NEWSPAPERS. GILBERT G. GALLAGHER, Windber, Pa.
Filed November 15, 1929. Serial No. 292,441. PUBLISHED FEBRUARY 25, 1930. Class 38.

270,392. TOILET PAPER. S. H. KRESS & CO., New York, N. Y.
Filed November 1, 1929. Serial No. 291,882. PUBLISHED FEBRUARY 18, 1930. Class 37.

270,393. CLEANING AND POLISHING PREPARATION FOR AUTOMOBILES, FURNITURE, AND WOODWORK. FRANK EDWARD BARTON, Los Angeles, Calif.
Filed October 30, 1929. Serial No. 291,754. PUBLISHED FEBRUARY 25, 1930. Class 16.

270,394. RADIO RECEIVING SETS, LOUD-SPEAKERS, TRANSFORMERS, CHOKE COILS, AND POWER PACKS. TRANSFORMER CORPORATION OF AMERICA, Chicago, Ill.
Filed October 21, 1929. Serial No. 291,367. PUBLISHED FEBRUARY 18, 1930. Class 21.

270,395. IRONING AND DRYING MACHINES. NATIONAL LAUNDRY MACHINERY COMPANY, INC., Syracuse, N. Y.
Filed October 23, 1929. Serial No. 291,466. PUBLISHED FEBRUARY 18, 1930. Class 24.

270,396. IRONING AND DRYING MACHINES. NATIONAL LAUNDRY MACHINERY COMPANY, INC., Syracuse, N. Y.
Filed October 23, 1929. Serial No. 291,465. PUBLISHED FEBRUARY 18, 1930. Class 24.

270,397. LOCKS. THE CROWN LOCK COMPANY, New York, N. Y.
Filed October 17, 1929. Serial No. 291,156. PUBLISHED FEBRUARY 25, 1930. Class 25.

270,398. STOVEPIPE, INCLUDING ELBOWS, T JOINTS, REDUCERS, AND FLUE THIMBLES; HEATERS—NAMELY, WOOD, GAS, AND COAL BURNING TYPES, OVENS, HEATING DRUMS, CAMP STOVES; AND RAIN CAPS, COMPRISING CHIMNEY AND STACK COWLS. JACKES-EVANS MANUFACTURING COMPANY, St. Louis, Mo.
Filed October 3, 1929. Serial No. 290,577. PUBLISHED FEBRUARY 18, 1930. Class 34.

270,399. MEN'S-WEAR FASHION MAGAZINE. FASHION-LIMITED, INC., New York, N. Y.
Filed September 5, 1929. Serial No. 289,378. PUBLISHED FEBRUARY 25, 1930. Class 38.

270,400. WHEELS AND CASTERS FOR HAND TRUCKS. EAMES COMPANY, San Francisco, Calif.
Filed July 22, 1929. Serial No. 287,458. PUBLISHED FEBRUARY 25, 1930. Class 19.

270,401. MARINE AND INDUSTRIAL HARDWARE. MAINE STEEL PRODUCTS CO., South Portland, Me.
Filed June 24, 1929. Serial No. 286,068. PUBLISHED FEBRUARY 18, 1930. Class 13.

270,402. BOXES, CANISTERS, AND CANS MADE WHOLLY OR PARTLY OF SHEET METAL OF RELATIVELY LIGHT GAGE AND ADAPTED FOR FLOUR, SUGAR, COFFEE, TEA, SPICES, TYPEWRITER RIBBONS, OINTMENTS, MEDICINES, ETC. J. L. CLARK MANUFACTURING COMPANY, Rockford, Ill.
Filed June 10, 1929. Serial No. 285,334. PUBLISHED FEBRUARY 25, 1930. Class 2.

270,403. HIGH-TENSION ELECTRIC DISCHARGE APPARATUS FOR SETTING INK AND FOR REMOVING STATIC CHARGES FROM THE MATERIAL BEING PROCESSED. JULIUS SIMONS, doing business as Simcoe Manufacturing Co., Philadelphia, Pa.
Filed November 19, 1929. Serial No. 292,597. PUBLISHED FEBRUARY 18, 1930. Class 21.

270,404. DEVICES AND APPLIANCES FOR USE IN ANESTHESIA, RESUSCITATION, AND ARTIFICIAL BREATHING. THE SAFETY EQUIPMENT SERVICE COMPANY, Cleveland, Ohio.
Filed October 9, 1929. Serial No. 290,860. PUBLISHED FEBRUARY 11, 1930. Class 44.

270,405. NEWSPAPER SECTION PUBLISHED WEEKLY. NEA SERVICE, INC., Cleveland, Ohio.
Filed October 4, 1929. Serial No. 290,660. PUBLISHED DECEMBER 17, 1929. Class 38.

270,406. VACUUM OR ELECTRON TUBES. ECONOMIC LAMP COMPANY, Malden, Mass.
Filed October 1, 1929. Serial No. 290,457. PUBLISHED FEBRUARY 18, 1930. Class 21.

270,407. POLISH FOR AUTOMOBILES AND FURNITURE. NU-ENAMEL PAINT COMPANY, INC., Dallas, Tex.
Filed September 9, 1929. Serial No. 289,534. PUBLISHED FEBRUARY 18, 1930. Class 16.

270,408. PAINT ENAMEL. THE ALLENTOWN PAINT MANUFACTURING COMPANY, Allentown, Pa.
Filed August 27, 1929. Serial No. 289,074. PUBLISHED FEBRUARY 18, 1930. Class 16.

270,409. GOLF BALLS. PACIFIC GOLF BALL, LTD., San Francisco, Calif.
Filed August 26, 1929. Serial No. 289,040. PUBLISHED FEBRUARY 18, 1930. Class 22.

270,410. LUBRICATING OILS AND GREASES AND GASOLINE. JOSEPH ANDREW CHAMBERS, Memphis, Tenn.
Filed July 30, 1929. Serial No. 287,867. PUBLISHED FEBRUARY 18, 1930. Class 15.

270,411. STENCIL SHEETS, WRITING PAPER, LETTER PAPER, AND LIKE PAPERS, USED FOR CORRESPONDING PURPOSES; CORRECTING FLUIDS—NAMELY, VARNISH USED FOR OBLITERATING MISTAKES MADE IN STENCIL SHEETS AND FOR REPAIRING DEFECTS THEREIN; DEVELOPING FLUIDS—NAMELY, LIQUIDS APPLIED TO THE STENCILS FOR ENLARGING OPENINGS CUT IN THE STENCIL SHEETS IN THE STENCILIZING OPERATION, AND PENS AND STYLES ADAPTED FOR USE IN STENCILIZING STENCIL SHEETS. D. GESTETNER LIMITED, London, England.
Filed July 26, 1929. Serial No. 287,701. PUBLISHED FEBRUARY 18, 1930. Class 37.

270,412. STORAGE BATTERIES. THE GOODYEAR TIRE & RUBBER COMPANY, Akron, Ohio.
Filed July 22, 1929. Serial No. 287,467. PUBLISHED FEBRUARY 18, 1930. Class 21.

270,413. MONTHLY PUBLICATION. NATIONAL TRADE JOURNALS, INC., New York, N. Y.
Filed July 10, 1929. Serial No. 287,359. PUBLISHED FEBRUARY 25, 1930. Class 38.

270,414. SHOE DRESSING. MANHATTAN-KREOLE PRODUCTS, INC., Brooklyn, N. Y.
Filed July 17, 1929. Serial No. 287,258. PUBLISHED FEBRUARY 11, 1930. Class 4.

270,415. WRAPPING PAPER. WAX PAPER PRODUCTS CO., Omaha, Nebr.
Filed July 8, 1929. Serial No. 286,810. PUBLISHED OCTOBER 8, 1929. Class 37.

270,416. PAPER HANDKERCHIEFS. NATIONAL CELLULOSE CORPORATION, New York, N. Y.
Filed June 21, 1929. Serial No. 285,931. PUBLISHED FEBRUARY 18, 1930. Class 37.

270,417. LOCK NUTS AND LOCK WASHERS FOR USE IN CONNECTION THEREWITH. INTERNATIONAL SAFETY LOCK NUT CORPORATION, New York, N. Y.
Filed November 20, 1929. Serial No. 292,632. PUBLISHED FEBRUARY 25, 1930. Class 13.

270,418. FLYING MACHINES. CONSOLIDATED AIRCRAFT CORPORATION, Buffalo, N. Y.
Filed November 14, 1929. Serial No. 292,396. PUBLISHED FEBRUARY 25, 1930. Class 19.

270,419. A MONTHLY MAGAZINE. SIGMA DELTA CHI, Chicago, Ill.
Filed November 9, 1929. Serial No. 292,232. PUBLISHED FEBRUARY 25, 1930. Class 38.

270,420. MEDICINE FOR THE TREATMENT OF ARTERIOSCLEROSIS AND ATTENDING AILMENTS. ALFRED BRUNO HENRY DETLOFF, London, England.
Filed November 23, 1929. Serial No. 292,798. PUBLISHED FEBRUARY 18, 1930. Class 6.

270,421. PHARMACEUTICAL PREPARATION. EDWARD MCEVOY, doing business as Cascarol Laboratories, Dongan Hills, N. Y.
Filed November 22, 1929. Serial No. 292,775. PUBLISHED FEBRUARY 18, 1930. Class 6.

270,422. INHALANT. F. W. HAMPSHIRE & CO. (1927) LIMITED, Derby, England.
Filed November 16, 1929. Serial No. 292,497. PUBLISHED FEBRUARY 18, 1930. Class 6.

270,423. PROPRIETARY MEDICINE FOR USE IN THE TREATMENT OF COLDS, INFLUENZA, AND LA GRIPPE. STENOL COMPANY, Cincinnati, Ohio.
Filed November 15, 1929. Serial No. 292,470. PUBLISHED FEBRUARY 18, 1930. Class 6.

270,424. PLATED HIGHLY-POLISHED NONFERROUS METALS IN SHEETS AND STRIPS. APOLLO METAL WORKS, La Salle, Ill.
Filed September 26, 1929. Serial No. 290,282. PUBLISHED JANUARY 28, 1930. Class 14.

270,425. FRESH CITRUS FRUIT, FRESH DECIDUOUS FRUIT, CANNED FRUIT, DRIED FRUIT, AND JAMS. CALIFORNIA PRUNE & APRICOT GROWERS ASSOCIATION, San Jose, Calif.
Filed October 1, 1929. Serial No. 290,450. PUBLISHED FEBRUARY 25, 1930. Class 46.

270,426. COCOA PREPARATION RICH IN VITAMINES A AND D. VICAO A/S, Oslo, Norway.
Filed September 10, 1929. Serial No. 289,609. PUBLISHED FEBRUARY 18, 1930. Class 46.

270,427. CANDY. A. RICHARD MOULIN, Chicago, Ill.
Filed September 9, 1929. Serial No. 289,528. PUBLISHED FEBRUARY 25, 1930. Class 46.

270,428. CANDY BARS. DEDES CANDY COMPANY, Newburyport, Mass.
Filed September 4, 1929. Serial No. 289,312. PUBLISHED FEBRUARY 25, 1930. Class 46.

270,429. FRESH CITRUS FRUITS—NAMELY, ORANGES; FRESH DECIDUOUS FRUITS—NAMELY, APPLES AND GRAPES; FRESH VEGETABLES; FRESH CANTALOUPES. DAVID BRENTS SMITH, Mercedes, Tex.
Filed November 25, 1929. Serial No. 292,911. PUBLISHED FEBRUARY 25, 1930. Class 46.

270,430. CANDY. RED SUN PRODUCTS COMPANY, Chicago, Ill.
Filed November 22, 1929. Serial No. 292,750. PUBLISHED FEBRUARY 25, 1930. Class 46.

270,431. CANE AND MAPLE SYRUP. OELERICH & BERRY COMPANY, Chicago, Ill.
Filed November 22, 1929. Serial No. 292,747. PUBLISHED FEBRUARY 18, 1930. Class 46.

270,432. CONCENTRATED MALT SYRUP. MILLER HIGH LIFE COMPANY, Milwaukee, Wis.
Filed November 21, 1929. Serial No. 292,678. PUBLISHED FEBRUARY 18, 1930. Class 46.

270,433. CANNED GRAPEFRUIT AND GRAPEFRUIT JUICE. EAST COAST PRESERVING COMPANY, Jacksonville, Fla.
Filed November 11, 1929. Serial No. 292,262. PUBLISHED FEBRUARY 25, 1930. Class 46.

270,434. CANNED GRAPEFRUIT AND GRAPEFRUIT JUICE. EAST COAST PRESERVING COMPANY, Jacksonville, Fla.
Filed November 11, 1929. Serial No. 292,261. PUBLISHED FEBRUARY 25, 1930. Class 46.

270,435. CHOCOLATE BARS AND CHOCOLATE-COVERED FRUIT BARS. INTERNATIONAL CANDY CO., Chicago, Ill.
Filed November 8, 1929. Serial No. 292,169. PUBLISHED FEBRUARY 25, 1930. Class 46.

270,436. SHOES MADE WHOLLY OF LEATHER. BONA ALLEN, INC., Buford, Ga.
Filed November 7, 1929. Serial No. 292,088. PUBLISHED FEBRUARY 18, 1930. Class 39.

270,437. FRESH DECIDUOUS FRUITS. DUCKWALL BROS. INC., Hood River, Oreg.
Filed November 5, 1929. Serial No. 292,034. PUBLISHED FEBRUARY 25, 1930. Class 46.

270,438. CANDY. CONNERY CANDY COMPANY, INC., Albany, N. Y.
Filed November 2, 1929. Serial No. 291,908. PUBLISHED FEBRUARY 25, 1930. Class 46.

270,439. WHISKEY. A. OVERHOLT & COMPANY, Broad Ford, Pa.
Filed October 30, 1929. Serial No. 291,783. PUBLISHED FEBRUARY 25, 1930. Class 49.

270,440. NONALCOHOLIC, CEREAL, MALT BEVERAGES. PETER DOELGER BREWING CORPORATION, New York, N. Y.
Filed October 26, 1929. Serial No. 291,608. PUBLISHED FEBRUARY 25, 1930. Class 48.

270,441. FRESH LETTUCE. G. E. MATHEWS, doing business as G. E. Mathews Co., Salinas, Calif.
Filed October 23, 1929. Serial No. 291,461. PUBLISHED FEBRUARY 25, 1930. Class 46.

270,442. BOOTS AND SHOES OF LEATHER. INTERNATIONAL SHOE CO., St. Louis, Mo.
Filed October 17, 1929. Serial No. 291,164. PUBLISHED FEBRUARY 18, 1930. Class 39.

270,443. SALAD DRESSING, SWEET PICKLES, HONEY, ETC. CARLSTROM CHEESE CO., St. Louis, Mo.
Filed October 3, 1929. Serial No. 290,550. PUBLISHED FEBRUARY 18, 1930. Class 46.

270,444. PREPARATION FOR THE TREATMENT OF VENEREAL DISEASES. MIKE WHITE, Houston, Tex.
Filed September 10, 1929. Serial No. 289,610. PUBLISHED FEBRUARY 18, 1930. Class 6.

270,445. INSECTICIDE. JOSEPH URBAN, doing business as Urbanco Laboratories, Chicago, Ill.
Filed September 7, 1929. Serial No. 289,485. PUBLISHED FEBRUARY 18, 1930. Class 6.

270,446. A TONIC AND TISSUE BUILDER. BERNABÉ FERNÁNDEZ SÁNCHEZ, Malaga, Spain.
Filed August 8, 1929. Serial No. 288,309. PUBLISHED FEBRUARY 18, 1930. Class 6.

270,447. CHOCOLATE AND CHOCOLATE-COVERED CANDIES. GALMOR CANDY CORPORATION, Chicago, Ill.
Filed June 27, 1929. Serial No. 286,239. PUBLISHED FEBRUARY 25, 1930. Class 46.

270,448. MEDICINE USED AS A MEANS FOR CURING RHEUMATISM AND CERTAIN FORMS OF KIDNEY TROUBLE. LILLIAN TILLOTSON, Painesville, Ohio.
Filed November 25, 1929. Serial No. 292,912. PUBLISHED FEBRUARY 18, 1930. Class 6.

270,449. ASTRINGENT PREPARATION FOR THE TREATMENT OF BLACKHEADS AND ENLARGED PORES. JOHN L. THOMAS, doing business as Thomas Chemical Company, McKeesport, Pa.
Filed November 23, 1929. Serial No. 292,835. PUBLISHED FEBRUARY 18, 1930. Class 6.

270,450. CAKES. TASTY BAKING COMPANY, Philadelphia, Pa.
Filed January 16, 1930. Serial No. 294,861. PUBLISHED FEBRUARY 25, 1930. Class 46.

270,451. EGGS. PACIFIC EGG PRODUCERS COOPERATIVE, INC., New York, N. Y.
Filed January 15, 1930. Serial No. 294,823. PUBLISHED FEBRUARY 25, 1930. Class 46.

270,452. BUTTER. THE WM. SCHLUDERBERG-T. J. KURDLE CO., Baltimore, Md.
Filed January 13, 1930. Serial No. 294,742. PUBLISHED FEBRUARY 25, 1930. Class 46.

270,453. PEANUT BUTTER, SALTED NUTS. C. S. MARSTON, Jr., doing business as C. S. Marston, Jr. Co., Los Angeles, Calif.
Filed January 6, 1930. Serial No. 294,431. PUBLISHED FEBRUARY 25, 1930. Class 46.

270,454. SALAD DRESSING. HUGO ERICKSON, doing business as Hugo Food Products Co., Chicago, Ill.
Filed January 2, 1930. Serial No. 294,296. PUBLISHED FEBRUARY 25, 1930. Class 46.

270,455. FIG BARS. WILBUR GLENN VOLIVA, doing business as Zion Baking Industry, Zion, Ill.
Filed December 30, 1929. Serial No. 294,244. PUBLISHED FEBRUARY 25, 1930. Class 46.

270,456. DOUGHNUTS. RICHARD C. SUGDEN, doing business as The Wichita Donut Company, Wichita, Kans.
Filed December 28, 1929. Serial No. 294,189. PUBLISHED FEBRUARY 25, 1930. Class 46.

270,457. MALT SYRUP. CARL ANDREWS, doing business as Andrews Products Co., Chicago, Ill.
Filed December 28, 1929. Serial No. 294,138. PUBLISHED FEBRUARY 25, 1930. Class 46.

270,458. POULTRY FEEDS OF ALL KINDS, HOG AND PIG FEEDS, DAIRY FEEDS, STOCK FEEDS, AND WHEAT FLOUR. NEBRASKA CONSOLIDATED MILLS CO., Omaha, Nebr.
Filed December 19, 1929. Serial No. 293,888. PUBLISHED FEBRUARY 25, 1930. Class 46.

270,459. CANNED FRUITS, VEGETABLES, FISH, ETC. RED & WHITE CORP'N, Buffalo, N. Y.
Filed December 14, 1929. Serial No. 293,692. PUBLISHED FEBRUARY 25, 1930. Class 46.

270,460. PRETZELS. PALMYRA PRETZEL CO., INC., Palmyra, Pa.
Filed December 9, 1929. Serial No. 293,445. PUBLISHED FEBRUARY 25, 1930. Class 46.

270,461. LOAVES OF BREAD. PARKWAY BAKING COMPANY, Philadelphia, Pa.
Filed November 29, 1929. Serial No. 293,065. PUBLISHED FEBRUARY 25, 1930. Class 46.

270,462. WEATHER GLASSES, BAROMETRIC TUBES, AND BAROMETERS. SWIFT & ANDERSON, INC., Boston, Mass.
Filed January 17, 1930. Serial No. 294,900. PUBLISHED FEBRUARY 25, 1930. Class 26.

270,463. INSECTICIDE AND GARDEN LIQUID SPRAYERS. S. H. KRESS & Co., New York, N. Y.
Filed January 15, 1930. Serial No. 294,809. PUBLISHED FEBRUARY 25, 1930. Class 23.

270,464. PISTON RINGS. DUOFLEX PISTON RING COMPANY, Philadelphia, Pa.
Filed January 13, 1930. Serial No. 294,750. PUBLISHED FEBRUARY 25, 1930. Class 35.

270,465. INTERNAL-COMBUSTION ENGINES AND THEIR PARTS. THE PRATT & WHITNEY AIRCRAFT COMPANY, Hartford, Conn.
Filed January 6, 1930. Serial No. 294,439. PUBLISHED FEBRUARY 25, 1930. Class 23.

270,466. BOX-STRAPPING MACHINES AND SPECIAL TOOLS FOR STRETCHING AND SEALING METAL BANDS ON A BOX. THE WIRE & STEEL PRODUCTS CO., INC., Brooklyn, N. Y.
Filed December 31, 1929. Serial No. 294,284. PUBLISHED FEBRUARY 25, 1930. Class 23.

270,467. ICE PICKS, KITCHEN FORKS, CAKE TURNERS, SPATULAS, CAN OPENERS, ETC. UTILITY MANUFACTURING CO., INC., Baltimore, Md.
Filed December 26, 1929. Serial No. 294,101. PUBLISHED FEBRUARY 25, 1930. Class 23.

270,468. ICE PICKS, KITCHEN FORKS, CAKE TURNERS, SPATULAS, CAN OPENERS, ETC. UTILITY MANUFACTURING CO., INC., Baltimore, Md.
Filed December 26, 1929. Serial No. 294,099. PUBLISHED FEBRUARY 25, 1930. Class 23.

270,469. UNDERCUSHION FOR FLOOR COVERINGS SUCH AS CARPETS AND LINOLEUM. AMERICAN HAIR & FELT COMPANY, Chicago, Ill.
Filed December 26, 1929. Serial No. 294,049. PUBLISHED FEBRUARY 25, 1930. Class 32.

270,470. ELECTRIC-CIRCUIT BREAKERS. WESTINGHOUSE ELECTRIC & MANUFACTURING COMPANY, East Pittsburgh, Pa.
Filed December 20, 1929. Serial No. 293,946. PUBLISHED FEBRUARY 25, 1930. Class 21.

270,471. PRODUCTS FOR ELECTRICAL INSULATION—NAMELY, INSULATING CLOTH, INSULATING TAPE, INSULATING PAPER, FIBRE, LAMINATED PHENOLIC INSULATION, INSULATING VARNISH, MICA PLATE, LINEN TAPE, AND WEBBING. MARTIN L. WOODARD, doing business as Martin Woodard Co., Seattle, Wash.
Filed December 19, 1929. Serial No. 293,908. PUBLISHED FEBRUARY 25, 1930. Class 21.

270,472. ELECTRICALLY-OPERATED BEATERS FOR USE FOR BEATING EGGS, CAKE BATTER, AND THE LIKE. LANDERS, FRARY & CLARK, New Britain, Conn.
Filed December 19, 1929. Serial No. 293,882. PUBLISHED FEBRUARY 25, 1930. Class 21.

270,473. CABINET FOR THE DISPLAY AND SALE OF BLOTTING PAPER. THE WRENN PAPER COMPANY, Middletown, Ohio.
Filed December 14, 1929. Serial No. 293,703. PUBLISHED FEBRUARY 25, 1930. Class 32.

270,474. DESK FILES AND FILE CASES FOR FILING PAPERS, LETTERS, AND THE LIKE. THE PRESS PRODUCTS COMPANY, Derby, Conn.
Filed December 14, 1929. Serial No. 293,690. PUBLISHED FEBRUARY 25, 1930. Class 32.

270,475. FINGER RINGS. BYARD F. BROGAN, Philadelphia, Pa.
Filed December 13, 1929. Serial No. 293,615. PUBLISHED FEBRUARY 25, 1930. Class 28.

270,476. CAMERAS. FAIRCHILD AVIATION CORPORATION, New York, N. Y.
Filed December 11, 1929. Serial No. 293,530. PUBLISHED FEBRUARY 25, 1930. Class 26.

270,477. CAMERAS. FAIRCHILD AVIATION CORPORATION, New York, N. Y.
Filed December 11, 1929. Serial No. 293,527. PUBLISHED FEBRUARY 25, 1930. Class 26.

270,478. PLAIN, ENAMEL, AND INSULATED WIRE AND CABLES FOR ELECTRICAL USES, ELECTRICAL WINDINGS, COILS, AND TRANSFORMERS. INCA MANUFACTURING CORPORATION, Fort Wayne, Ind.
Filed December 10, 1929. Serial No. 293,470. PUBLISHED FEBRUARY 25, 1930. Class 21.

270,479. WRENCHES, WRENCH SETS, WRENCH SOCKETS, TOOL HANDLES, SCREW DRIVERS, GAUGES, CHISELS, VALVE-LIFTING TOOLS, AND RIM TOOLS. BLUE POINT TOOL COMPANY, Chicago, Ill.
Filed December 7, 1929. Serial No. 293,363. PUBLISHED FEBRUARY 25, 1930. Class 23.

270,480. PORTABLE TWO-HAND CUTTING-OFF METAL-WORKING TOOLS AND PARTS THEREOF. H. K. PORTER, INC., Everett, Mass.
Filed November 30, 1929. Serial No. 293,108. PUBLISHED FEBRUARY 25, 1930. Class 23.

270,481. GREASE AND LUBRICATING-OIL COMPOUNDS FOR GEARS. OIL-KRAFT, INC., Cincinnati, Ohio.
Filed December 5, 1929. Serial No. 293,282. PUBLISHED FEBRUARY 25, 1930. Class 15.

270,482. MIXTURES OF OILS FOR THE TREATMENT OF LEATHER. H. TH. BÖHME A. G., Chemnitz, Germany.
Filed January 15, 1930. Serial No. 294,807. PUBLISHED FEBRUARY 25, 1930. Class 4.

270,483. SOAP. THE CLEAN-ITE COMPANY, Chariton, Iowa.
Filed January 15, 1930. Serial No. 294,798. PUBLISHED FEBRUARY 25, 1930. Class 4.

270,484. DRY-CLEANING FLUID. UNION OIL COMPANY OF CALIFORNIA, Los Angeles, Calif.
Filed January 13, 1930. Serial No. 294,747. PUBLISHED FEBRUARY 25, 1930. Class 4.

270,485. TOILET SOAP. LESQUENDIEU, INCORPORATED, New York, N. Y.
Filed January 13, 1930. Serial No. 294,733. PUBLISHED FEBRUARY 25, 1930. Class 4.

270,486. SOAP FOR USE IN CLEANING SURFACES COATED WITH PAINT, AND DUCO LACQUER. A. H. RATTERREE, Sr., Charlotte, N. C.
Filed January 11, 1930. Serial No. 294,704. PUBLISHED FEBRUARY 25, 1930. Class 4.

270,487. LIQUID CLOTHES CLEANER. R. R. STREET & Co., INC., Chicago, Ill.
Filed January 11, 1930. Serial No. 294,696. PUBLISHED FEBRUARY 25, 1930. Class 4.

270,488. HAND SOAP. SAMUEL SKOLNICK, doing business as Graf-Zep Specialty Co., Detroit, Mich.
Filed December 28, 1929. Serial No. 294,185. PUBLISHED FEBRUARY 25, 1930. Class 4.

270,489. GLASS-CLEANING SOLUTION. JAMES-MCCULLIN, INC., Los Angeles, Calif.
Filed December 28, 1929. Serial No. 294,160. PUBLISHED FEBRUARY 25, 1930. Class 4.

270,490. GLASS-CLEANING SOLUTION. JAMES-MCCULLIN, INC., Los Angeles, Calif.
Filed December 28, 1929. Serial No. 294,159. PUBLISHED FEBRUARY 25, 1930. Class 4.

270,491. GLASS-CLEANING SOLUTION. JAMES-MCCULLIN, INC., Los Angeles, Calif.
Filed December 28, 1929. Serial No. 294,158. PUBLISHED FEBRUARY 25, 1930. Class 4.

270,492. GLASS-CLEANING SOLUTION. JAMES-MCCULLIN, INC., Los Angeles, Calif.
Filed December 28, 1929. Serial No. 294,157. PUBLISHED FEBRUARY 25, 1930. Class 4.

270,493. STAINS, DRESSINGS, AND FINISHES FOR LEATHER, ARTIFICIAL LEATHER, AND IMITATION LEATHER. DEWEY & ALMY CHEMICAL COMPANY, North Cambridge, Mass.
Filed December 26, 1929. Serial No. 294,062. PUBLISHED FEBRUARY 25, 1930. Class 4.

270,494. POWDERED HAND SOAP. FRED J. HAGERLING, St. Louis, Mo.
Filed December 16, 1929. Serial No. 293,728. PUBLISHED FEBRUARY 25, 1930. Class 4.

270,495. ABRASIVE PAPERS AND CLOTHS. AMERICAN GLUE COMPANY, Boston, Mass.
Filed December 16, 1929. Serial No. 293,709. PUBLISHED FEBRUARY 18, 1930. Class 4.

270,496. SHAVING SOAP, INCLUDING SHAVING CREAM. THE J. B. WILLIAMS COMPANY, Glastonbury, Conn.
Filed December 10, 1929. Serial No. 293,500. PUBLISHED FEBRUARY 25, 1930. Class 4.

270,497. TREATED CLEANING AND POLISHING CLOTHS. FLOWER CITY SPECIALTY CO., Rochester, N. Y.
Filed December 7, 1929. Serial No. 293,366. PUBLISHED FEBRUARY 18, 1930. Class 4.

270,498. CLEANER FOR DISHES, GLASSWARE, TABLE SILVERWARE, OILED FLOORS AND PAINTED SURFACES. MIDLAND CHEMICAL LABORATORIES, INC., Dubuque, Iowa.
Filed December 6, 1929. Serial No. 293,336. PUBLISHED FEBRUARY 18, 1930. Class 4.

270,499. CLEANER FOR WOOD, METAL, OR RUBBER SURFACES AND TILE, ENAMEL, OR GLASS. MIDLAND CHEMICAL LABORATORIES, INC., Dubuque, Iowa.
Filed December 6, 1929. Serial No. 293,333. PUBLISHED FEBRUARY 18, 1930. Class 4.

270,500. CLEANING PREPARATION FOR GENERAL USE. MARY ANN JONES, Wilder, Idaho.
Filed December 6, 1929. Serial No. 293,327. PUBLISHED FEBRUARY 18, 1930. Class 4.

270,501. BREAD. CHARLES A. SCHEUCH, Jr., doing business as Charles Scheuch's Bakery, Washington, D. C.
Filed January 17, 1930. Serial No. 294,895. PUBLISHED FEBRUARY 25, 1930. Class 46.

270,502. WELDING RODS. STEEL SALES CORPORATION, Chicago, Ill.
Filed January 16, 1930. Serial No. 294,864. PUBLISHED FEBRUARY 25, 1930. Class 14.

270,503. STEEL CASTINGS. BIRDSBORO STEEL FOUNDRY AND MACHINE COMPANY, Birdsboro, Pa.
Filed January 15, 1930. Serial No. 294,793. PUBLISHED FEBRUARY 25, 1930. Class 14.

270,504. INSECTICIDES AND INSECT POWDER OR DUST. MCCORMICK & Co., INCORPORATED, Baltimore, Md.
Filed January 14, 1930. Serial No. 294,775. PUBLISHED FEBRUARY 18, 1930. Class 6.

270,505. COUGH MEDICINE. LOUISE WILLIAMS, doing business as Williams Cold Snap Co., Chicago, Ill.
Filed January 13, 1930. Serial No. 294,749. PUBLISHED FEBRUARY 18, 1930. Class 6.

270,506. CIGARS. JOSÉ AGUILÓ, Brooklyn, N. Y.
Filed January 10, 1930. Serial No. 294,609. PUBLISHED FEBRUARY 25, 1930. Class 17.

270,507. POWDER PUFFS. WESTERN BOTTLE MANUFACTURING COMPANY, doing business as The Western Company, Chicago, Ill.
Filed January 6, 1930. Serial No. 294,453. PUBLISHED FEBRUARY 25, 1930. Class 29.

270,508. WATCHES, CLOCKS, AND PARTS THEREOF. FORSTNER CHAIN CORP., Irvington, N. J.
Filed January 8, 1930. Serial No. 294,849. PUBLISHED FEBRUARY 25, 1930. Class 27.

270,509. TOBACCO POUCHES, CIGARETTE CASES, AND CIGAR CASES. HOOKLESS FASTENER COMPANY, Meadville, Pa.
Filed December 31, 1929. Serial No. 294,258. PUBLISHED FEBRUARY 25, 1930. Class 8.

270,510. IRON TONIC. PETER KASTANIS, Cleveland, Ohio.
Filed December 30, 1929. Serial No. 294,226. PUBLISHED FEBRUARY 18, 1930. Class 6.

270,511. PREPARATION FOR USE AS A DOUCHE. THE WM. S. MERRELL COMPANY, Cincinnati, Ohio.
Filed December 27, 1929. Serial No. 294,119. PUBLISHED FEBRUARY 18, 1930. Class 6.

270,512. IMPREGNATING AND BACKING COMPOUNDS FOR USE IN THE PAPER, TEXTILE, AND OTHER INDUSTRIES, AND SOLDERING FLUXES. DEWEY & ALMY CHEMICAL COMPANY, North Cambridge, Mass.
Filed December 26, 1929. Serial No. 294,004. PUBLISHED FEBRUARY 18, 1930. Class 6.

270,513. CHEMICAL PREPARATION TO BE USED IN FIXING COLOR IN DYES. THE CALCO CHEMICAL COMPANY, INC., Boundbrook, N. J.
Filed December 26, 1929. Serial No. 294,056. PUBLISHED FEBRUARY 18, 1930. Class 6.

270,514. CIGARS. MINA ISLER THOMPSON, Tampa, Fla.
Filed December 23, 1929. Serial No. 294,032. PUBLISHED FEBRUARY 18, 1930. Class 17.

270,515. COLD CAPSULES. R & F PHARMACEUTICAL COMPANY, Wichita, Kans.
Filed December 23, 1929. Serial No. 294,024. PUBLISHED FEBRUARY 18, 1930. Class 6.

270,516. CORD AND SQUARE-WOVEN FABRICS COATED WITH COMPOUNDED UNVULCANIZED RUBBER. THE FEDERAL RUBBER COMPANY, Chicago, Ill.; Cudahy, Wis.; and Chicopee Falls, Mass.
Filed December 23, 1929. Serial No. 294,012. PUBLISHED FEBRUARY 25, 1930. Class 50.

270,517. CORD AND SQUARE-WOVEN FABRICS COATED WITH COMPOUNDED UNVULCANIZED RUBBER. THE FEDERAL RUBBER COMPANY, Chicago, Ill.; Cudahy, Wis.; and Chicopee Falls, Mass.
Filed December 23, 1929. Serial No. 294,011. PUBLISHED FEBRUARY 25, 1930. Class 50.

270,518. CORD AND SQUARE-WOVEN FABRICS COATED WITH COMPOUNDED UNVULCANIZED RUBBER. THE FEDERAL RUBBER COMPANY, Chicago, Ill.; Cudahy, Wis.; and Chicopee Falls, Mass.
Filed December 23, 1929. Serial No. 294,010. PUBLISHED FEBRUARY 25, 1930. Class 50.

270,519. ANTISEPTIC SUPPOSITORIES, FACE CREAM, ETC. THE MARAT COMPANY, New York, N. Y.
Filed December 21, 1929. Serial No. 293,979. PUBLISHED FEBRUARY 18, 1930. Class 6.

270,520. TRESTLES AND TABLES FOR PAPER HANGERS AND PASTE BOARDS. HYDE MANUFACTURING COMPANY, Southbridge, Mass.
Filed December 18, 1929. Serial No. 293,837. PUBLISHED FEBRUARY 25, 1930. Class 50.

270,521. SCAFFOLDING AND PARTS THEREOF. AMERICAN SAFETY DEVICE CO., New York, N. Y.
Filed December 18, 1929. Serial No. 293,814. PUBLISHED FEBRUARY 25, 1930. Class 50.

270,522. WATER-TREATMENT MATERIALS FOR THE PREVENTION OF BOILER SCALE AND CORROSION. MCAVOY PRODUCTS CO., Chicago, Ill.
Filed December 16, 1929. Serial No. 293,739. PUBLISHED FEBRUARY 18, 1930. Class 6.

270,523. OPAQUING AGENTS AND PIGMENTS USED IN THE MANUFACTURE OF ENAMELS AND GLAZES. THE TITANIUM ALLOY MANUFACTURING COMPANY, Niagara Falls, N. Y.
Filed December 13, 1929. Serial No. 293,645. PUBLISHED FEBRUARY 18, 1930. Class 6.

270,524. AMELIORATIVE FOR RHEUMATISM. KATALIN EVANS, Chicago, Ill.
Filed December 12, 1929. Serial No. 293,575. PUBLISHED FEBRUARY 18, 1930. Class 6.

270,525. BATH CRYSTALS, PERFUME SCENT STRIPS, SOLID SACHET, AND CAKE SACHET. BOAG, INCORPORATED, River Forest, Ill.
Filed December 11, 1929. Serial No. 293,514. PUBLISHED FEBRUARY 18, 1930. Class 6.

270,526. CHEMICAL SOLUTION USED FOR DETERMINING THE AVAILABLE PHOSPHATES IN SOILS. ALBERT LEMUEL WHITING, doing business as The Urbana Laboratories, Urbana, Ill.
Filed December 9, 1929. Serial No. 293,457. PUBLISHED FEBRUARY 18, 1930. Class 6.

270,527. CIGARETTE CONTAINER AND DISPENSER. JOSEPH N. M. KEYZER, Miami, Fla.
Filed December 9, 1929. Serial No. 293,438. PUBLISHED FEBRUARY 25, 1930. Class 8.

270,528. PERFUME, TOILET POWDER, ROUGE, ETC. NINA KOVENKO, New York, N. Y.
Filed December 6, 1929. Serial No. 293,329. PUBLISHED FEBRUARY 18, 1930. Class 6.

270,529. PREPARATION INDICATED IN CASES OF DYSMENORRHEA, ALSO IN SOME CONDITIONS DUE TO THE MENOPAUSE. THE DRUG PRODUCTS CO. INC., Long Island City, N. Y.
Filed November 30, 1929. Serial No. 293,094. PUBLISHED FEBRUARY 18, 1930. Class 6.

270,530. FRUIT FLAVORING EXTRACTS AND CONCENTRATES FOR BEVERAGE PURPOSES. HOLLYWOOD DRY CORPORATION, Los Angeles, Calif.
Filed November 25, 1929. Serial No. 292,875. PUBLISHED FEBRUARY 25, 1930. Class 45.

270,531. DOUGHNUTS, CRULLERS, JELLY FILLS, AND PERSHINGS—NAMELY, YEAST DOUGHNUTS FILLED WITH CINNAMON. PREWITT BROTHERS, Indianapolis, Ind.
Filed November 22, 1929. Serial No. 292,749. PUBLISHED FEBRUARY 18, 1930. Class 46.

270,532. NURSERY STOCK AND HORTICULTURAL GROWTHS—NAMELY, EVERGREENS, VINES, SHRUBS, ROSEBUSHES, BOXBUSHES, FRUIT BUSHES, FLOWERING PLANTS FOR INDOOR AND OUTDOOR USE, FOREST SEEDLINGS, SHADE AND ORNAMENTAL TREES FOR LAWN AND LANDSCAPES, PERENNIALS; AND FIELD, GARDEN, AND LAWN SEEDS. FRANK P. STEWART, Cushing, Okla.
Filed November 18, 1929. Serial No. 292,557. PUBLISHED FEBRUARY 18, 1930. Class 1.

270,533. GLADIOLUS FLOWERS AND OTHER PARTS OF THE GLADIOLUS PLANT. FORMAN T. MCLEAN, Bronxville, N. Y.
Filed November 16, 1929. Serial No. 292,504. PUBLISHED FEBRUARY 18, 1930. Class 1.

270,534. TRUNKS AND CASES OF THE NATURE OF HAND BAGGAGE. FIBRE SPECIALTY MANUFACTURING COMPANY, Kennett Square, Pa.
Filed November 1, 1929. Serial No. 291,871. PUBLISHED FEBRUARY 18, 1930. Class 3.

270,535. DAIRY FEED, HORSE AND MULE FEED, WHEAT FLOUR, AND CREAM MEAL. THE HENRY FEED & SUPPLY CO., Kosciusko, Miss.
Filed October 28, 1929. Serial No. 291,663. PUBLISHED FEBRUARY 18, 1930. Class 46.

270,536. COOKIES. FOOD MAKERS OF SUNLAND, San Francisco, Calif.
Filed October 22, 1929. Serial No. 291,386. PUBLISHED FEBRUARY 18, 1930. Class 46.

270,537. BIRD FOOD, CONSISTING OF BIRDSEED AND BIRD GRAVEL. CARL A. SHABEL, doing business as Mello Bird Co., Grand Rapids, Mich.
Filed October 21, 1929. Serial No. 291,360. PUBLISHED FEBRUARY 18, 1930. Class 46.

270,538. SILK PIECE GOODS. COHN-HALL-MARX CO., New York, N. Y.
Filed October 16, 1929. Serial No. 291,115. PUBLISHED FEBRUARY 18, 1930. Class 42.

270,539. BREAD. MORRIS SHUMOFSKY, Bridgeport, Conn.
Filed August 2, 1929. Serial No. 288,039. PUBLISHED FEBRUARY 18, 1930. Class 46.

270,540. DAIRY PRODUCTS—NAMELY, ICE CREAM. SOUTHWEST DAIRY PRODUCTS COMPANY, Dallas, Tex.
Filed June 29, 1929. Serial No. 286,359. PUBLISHED FEBRUARY 11, 1930. Class 46.

270,541. PROPELLER WHEELS. STANNUS PROPELLER CORPORATION, Detroit, Mich.
Filed December 4, 1929. Serial No. 293,239. PUBLISHED FEBRUARY 18, 1930. Class 19.

270,542. STEAM GARMENT PRESSERS. DRY STEAM APPLIANCE CO., INC., San Francisco, Calif.
Filed November 29, 1929. Serial No. 293,030. PUBLISHED FEBRUARY 25, 1930. Class 24.

270,543. NONALCOHOLIC, MALTLESS, NONCEREAL BEVERAGES SOLD AS SOFT DRINKS AND SYRUPS, EXTRACTS, AND CONCENTRATES FOR PREPARING THE SAME. CALIFORNIA CRUSHED FRUIT CORPORATION, Los Angeles, Calif.
Filed January 14, 1930. Serial No. 294,759. PUBLISHED FEBRUARY 25, 1930. Class 45.

270,544. SUPPLEMENTAL FEEDS FOR POULTRY, HOGS, AND CATTLE, CONTAINING VITAMINS, MINERALS, AND VEGETABLE AND ANIMAL PROTEINS, TO BE MIXED WITH ORDINARY FEED. MURPHY PRODUCTS COMPANY, Burlington, Wis.
Filed January 11, 1930. Serial No. 294,679. PUBLISHED FEBRUARY 18, 1930. Class 46.

270,545. CERAMICS—NAMELY, CHINAWARE, PORCELAIN WARE, AND EARTHENWARE. B. TOMBY & CO. INC., New York, N. Y.
Filed January 10, 1930. Serial No. 294,650. PUBLISHED FEBRUARY 18, 1930. Class 30.

270,546. BREAD. MONTANA FLOUR MILLS COMPANY, Great Falls, Mont.
Filed January 9, 1930. Serial No. 294,587. PUBLISHED FEBRUARY 18, 1930. Class 46.

270,547. HANDKERCHIEFS. MARSHALL FIELD & COMPANY, Chicago, Ill.
Filed January 9, 1930. Serial No. 294,584. PUBLISHED FEBRUARY 18, 1930. Class 42.

270,548. WOOLEN FABRICS. WORUMBO MANUFACTURING COMPANY, Bath, Me.
Filed January 8, 1930. Serial No. 294,550. PUBLISHED FEBRUARY 18, 1930. Class 42.

270,549. WOOLEN FABRICS. WORUMBO MANUFACTURING COMPANY, Bath, Me.
Filed January 8, 1930. Serial No. 294,548. PUBLISHED FEBRUARY 18, 1930. Class 42.

270,550. WOOLEN FABRICS. WORUMBO MANUFACTURING COMPANY, Bath, Me.
Filed December 28, 1929. Serial No. 294,198. PUBLISHED FEBRUARY 18, 1930. Class 42.

270,551. ARTIFICIAL-SILK THREAD AND ARTIFICIAL SPINNING FIBERS. I. G. FARBENINDUSTRIE AKTIENGESELLSCHAFT, Frankfort-on-the-Main, Germany.
Filed December 26, 1929. Serial No. 294,071. PUBLISHED FEBRUARY 18, 1930. Class 43.

270,552. COTTON PIECE GOODS. PACIFIC MILLS, Lawrence and Boston, Mass.
Filed December 18, 1929. Serial No. 293,843. PUBLISHED FEBRUARY 18, 1930. Class 42.

270,553. LADIES' TRAVELING CASES. NEW PROCESS COMPANY, Warren, Pa.
Filed December 17, 1929. Serial No. 293,787. PUBLISHED FEBRUARY 18, 1930. Class 3.

270,554. CEREAL BREAKFAST FOOD AND A FLAVORING BASE. WILLIAM E. BROBST, Jr., doing business as W. E. Brobst Company, Noblesville, Ind.
Filed December 16, 1929. Serial No. 293,712. PUBLISHED FEBRUARY 18, 1930. Class 46.

270,555. WOOLEN PIECE GOODS. FORSTMANN & HUFFMANN COMPANY, Passaic, N. J.
Filed December 11, 1929. Serial No. 293,552. PUBLISHED FEBRUARY 18, 1930. Class 42.

270,556. WOOLEN PIECE GOODS. FORSTMANN & HUFFMANN COMPANY, Passaic, N. J.
Filed December 11, 1929. Serial No. 293,543. PUBLISHED FEBRUARY 18, 1930. Class 42.

270,557. WOOLEN PIECE GOODS. FORSTMANN & HUFFMANN COMPANY, Passaic, N. J.
Filed December 11, 1929. Serial No. 293,540. PUBLISHED FEBRUARY 18, 1930. Class 42.

270,558. YARNS AND THREADS FOR NEEDLEWORK. A. & H. SHILLMAN COMPANY, Baltimore, Md.
Filed December 9, 1929. Serial No. 293,449. PUBLISHED FEBRUARY 18, 1930. Class 48.

270,559. WHEAT FLOUR, CORN MEAL, BISCUIT FLOUR, ETC. CHARLES O. ETZLER & SON, Verona, Ohio.
Filed December 4, 1929. Serial No. 293,214. PUBLISHED FEBRUARY 18, 1930. Class 46.

270,560. PLANTS, BALLS OF PLANTS, AND FIELD, GARDEN, AND VEGETABLE SEEDS. JOHN T. LOVETT, Jr., Little Silver, N. J.
Filed November 29, 1929. Serial No. 293,055. PUBLISHED FEBRUARY 18, 1930. Class 1.

270,561. SHOTGUN SHELLS AND METALLIC CARTRIDGES. THE PETERS CARTRIDGE COMPANY, Cincinnati, Ohio.
Filed January 16, 1930. Serial No. 294,857. PUBLISHED FEBRUARY 25, 1930. Class 9.

270,562. CANDY. THE ROBT. F. MACKENZIE CO., Cleveland, Ohio.
Filed January 15, 1930. Serial No. 294,815. PUBLISHED FEBRUARY 25, 1930. Class 46.

270,563. CANDY. BRANDLE & SMITH CO., Philadelphia, Pa.
Filed January 14, 1930. Serial No. 294,756. PUBLISHED FEBRUARY 25, 1930. Class 46.

270,564. TEA. NEW ORLEANS COFFEE CO., LTD., New Orleans, La.
Filed January 11, 1930. Serial No. 294,683. PUBLISHED FEBRUARY 25, 1930. Class 46.

270,565. CANNED SHRIMP AND CANNED OYSTERS. MISSISSIPPI COAST PACKING CO., East Beach, Biloxi, Miss.
Filed January 11, 1930. Serial No. 294,677. PUBLISHED FEBRUARY 25, 1930. Class 46.

270,566. HEMP SAIL OR SEWING TWINE. HANOVER CORDAGE COMPANY, Hanover, Pa.
Filed December 30, 1929. Serial No. 294,220. PUBLISHED FEBRUARY 25, 1930. Class 7.

270,567. SACK-SEWING TWINE. RICHARD C. HYLAND, doing business as The Diamond (H) Bag Company, San Francisco, Calif., assignor to Pacific Bag Company, San Francisco, Calif., a Corporation of California.
Filed December 23, 1929. Serial No. 294,017. PUBLISHED FEBRUARY 25, 1930. Class 7.

270,568. SACK-SEWING TWINE. RICHARD C. HYLAND, doing business as The Diamond (H) Bag Company, San Francisco, Calif., assignor to Pacific Bag Company, San Francisco, Calif., a Corporation of California.
Filed December 23, 1929. Serial No. 294,016. PUBLISHED FEBRUARY 25, 1930. Class 7.

270,569. MATCHES. COLUMBIA MATCH COMPANY, Cleveland, Ohio.
Filed December 16, 1929. Serial No. 293,718. PUBLISHED FEBRUARY 25, 1930. Class 9.

270,570. MATCHES. COLUMBIA MATCH COMPANY, Cleveland, Ohio.
Filed December 16, 1929. Serial No. 293,715. PUBLISHED FEBRUARY 25, 1930. Class 9.

270,571. CANNED AND BOTTLED FRUITS AND VEGETABLES. G. B. RAFFETTO, INC., New York, N. Y.
Filed December 7, 1929. Serial No. 293,380. PUBLISHED FEBRUARY 25, 1930. Class 46.

270,572. PICKLES, SWEET RELISHES, MUSTARD, ETC. SUNNY-FIELD PACKING CO., Los Angeles, Calif.
Filed December 3, 1929. Serial No. 293,196. PUBLISHED FEBRUARY 18, 1930. Class 46.

270,573. CHOCOLATE-FLAVORED DESSERT. THE SNOW KING BAKING POWDER COMPANY, Cincinnati, Ohio.
Filed November 30, 1929. Serial No. 293,115. PUBLISHED FEBRUARY 18, 1930. Class 46.

270,574. ATHLETIC SHOES MADE PARTLY OF RUBBER AND PARTLY OF WOVEN FABRIC. THE SERVUS RUBBER COMPANY, Rock Island, Ill.
Filed November 29, 1929. Serial No. 293,074. PUBLISHED FEBRUARY 18, 1930. Class 39.

270,575. EXTRACTORS FOR REMOVING MOISTURE OR CLEANING FLUIDS FROM FABRICS, CLOTHING. THE AMERICAN LAUNDRY MACHINERY COMPANY, Cincinnati, Ohio.
Filed January 4, 1930. Serial No. 294,376. PUBLISHED FEBRUARY 25, 1930. Class 24.

270,576. STUCCO NAILS. THE YOUNGSTOWN PRESSED STEEL COMPANY, Warren, Ohio.
Filed January 2, 1930. Serial No. 294,331. PUBLISHED FEBRUARY 25, 1930. Class 13.

270,577. METALLIC TANKS FOR THE STORAGE OF LIQUIDS, GASES, AND OTHER PRODUCTS. PITTSBURGH-DES MOINES STEEL COMPANY, Pittsburgh, Pa.
Filed December 31, 1929. Serial No. 294,275. PUBLISHED FEBRUARY 25, 1930. Class 2.

270,578. FLEXIBLE OR HINGED BELT FASTENERS. FLEXIBLE STEEL LACING COMPANY, Chicago, Ill.
Filed December 30, 1929. Serial No. 294,217. PUBLISHED FEBRUARY 25, 1930. Class 13.

270,579. CLOTHESPINS. THE DIAMOND MATCH COMPANY, Chicago, Ill.
Filed December 30, 1929. Serial No. 294,213. PUBLISHED FEBRUARY 25, 1930. Class 24.

270,580. CLOTHESPINS. THE DIAMOND MATCH COMPANY, Chicago, Ill.
Filed December 30, 1929. Serial No. 294,209. PUBLISHED FEBRUARY 18, 1930. Class 24.

270,581. STENCIL SHEETS USED IN THE REPRODUCTION OF MULTICOLORED DESIGNS. A. S. DANEMAN ART WORKS, Dayton, Ohio.
Filed December 23, 1929. Serial No. 294,009. PUBLISHED FEBRUARY 25, 1930. Class 37.

270,582. WROUGHT-STEEL BUTT HINGES. THE STANLEY WORKS, New Britain, Conn.
Filed December 20, 1929. Serial No. 293,943. PUBLISHED FEBRUARY 18, 1930. Class 13.

270,583. WROUGHT-STEEL BUTT HINGES. THE STANLEY WORKS, New Britain, Conn.
Filed December 20, 1929. Serial No. 293,942. PUBLISHED FEBRUARY 18, 1930. Class 13.

270,584. WROUGHT-STEEL BUTT HINGES. THE STANLEY WORKS, New Britain, Conn.
Filed December 20, 1929. Serial No. 293,941. PUBLISHED FEBRUARY 18, 1930. Class 13.

270,585. WROUGHT-STEEL BUTT HINGES. THE STANLEY WORKS, New Britain, Conn.
Filed December 20, 1929. Serial No. 293,940. PUBLISHED FEBRUARY 18, 1930. Class 13.

270,586. WROUGHT-STEEL BUTT HINGES. THE STANLEY WORKS, New Britain, Conn.
Filed December 20, 1929. Serial No. 293,939. PUBLISHED FEBRUARY 18, 1930. Class 13.

270,587. STEEL HINGES. THE STANLEY WORKS, New Britain, Conn.
Filed December 20, 1929. Serial No. 293,938. PUBLISHED FEBRUARY 25, 1930. Class 13.

270,588. WROUGHT-STEEL BUTT HINGES. THE STANLEY WORKS, New Britain, Conn.
Filed December 20, 1929. Serial No. 293,937. PUBLISHED FEBRUARY 18, 1930. Class 13.

270,589. CLOTHES-WASHING MACHINES. HARRY BOHN, doing business as The Cofield Washer Company, Dayton, Ohio.
Filed December 19, 1929. Serial No. 293,868. PUBLISHED FEBRUARY 18, 1930. Class 24.

270,590. PLUMBING TRAPS, SHOWER HEADS, DRINKING FOUNTAINS, BUBBLERS, AND THE CONSTITUENT PARTS OF PLUMBING TRAPS, SHOWER HEADS, DRINKING FOUNTAINS, AND BUBBLERS. PROVIDENCE STEAM TRAP COMPANY, Providence, R. I.
Filed December 18, 1929. Serial No. 293,851. PUBLISHED FEBRUARY 18, 1930. Class 13.

270,591. WOOD PROPELLERS FOR PROPELLING AIRPLANES. AIR PROPELLERS, INC., Hagerstown, Md.
Filed December 18, 1929. Serial No. 293,813. PUBLISHED FEBRUARY 18, 1930. Class 19.

270,592. WRAPPING PAPER, ENVELOPE PAPER, AND TISSUE PAPER. ORONO PULP & PAPER COMPANY, Bangor, Me.
Filed December 16, 1929. Serial No. 293,745. PUBLISHED FEBRUARY 25, 1930. Class 37.

270,593. CORRESPONDENCE AND MAILING ENVELOPES, BOND PAPER, WRITING PAPER. THE MAY DEPARTMENT STORES COMPANY, New York, N. Y.
Filed December 13, 1929. Serial No. 293,627. PUBLISHED FEBRUARY 25, 1930. Class 37.

270,594. WATER AND STEAM VALVES. EDWARD H. RUPPERT, Brooklyn, N. Y.
Filed December 11, 1929. Serial No. 293,557. PUBLISHED FEBRUARY 18, 1930. Class 13.

270,595. STEAM TRAPS. ARMSTRONG MACHINE WORKS, Three Rivers, Mich.
Filed December 11, 1929. Serial No. 293,509. PUBLISHED FEBRUARY 25, 1930. Class 13.

270,596. KRAFT PAPER. NEKOOSA-EDWARDS PAPER COMPANY, Port Edwards, Wis.
Filed December 9, 1929. Serial No. 293,441. PUBLISHED FEBRUARY 25, 1930. Class 37.

270,597. INSPECTION DOORS FOR FURNACES. MICHAEL LIPTAK, St. Paul, Minn.
Filed December 9, 1929. Serial No. 293,436. PUBLISHED FEBRUARY 25, 1930. Class 34.

270,598. AUTOMOBILE WINDOW AND WINDSHIELD ATTACHMENTS—NAMELY, WINDOW FROST SHIELDS. FLOUR CITY SPECIALTY MFG. CO., Minneapolis, Minn.
Filed December 9, 1929. Serial No. 293,420. PUBLISHED FEBRUARY 18, 1930. Class 19.

[ACT OF MARCH 19, 1920, SEC. 1 (b)]

THESE REGISTRATIONS ARE NOT SUBJECT TO OPPOSITION.

270,599. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) ELMER O. EMERY, doing business as Sally Lynn Kitchen, Washington, D. C. Filed Mar. 14, 1930. Serial No. 297,300.

Sally Lynn

For Cakes and Pies.
Claims use since August, 1926.

TRADE-MARK REGISTRATIONS RENEWED

34,316. OINTMENTS AND LOTIONS. Registered March 13, 1900. BENJAMIN GOLDSTEIN, Allegheny, Pa. Renewed March 18, 1930, to Harry S. Goldstein, executor of the estate of Benjamin Goldstein, Atlantic City, N. J., assignee.

34,351. MOTORS, MOTOR CARS, CARRIAGES, CYCLES, AND PARTS OF SAME. Registered March 20, 1900. GOTTLIEB DAIMLER, Cannstadt, Germany. Renewed March 20, 1930, to Daimler-Benz Aktiengesellschaft, Stuttgart-Unterturkheim, Germany, a Corporation of Germany, successor.

34,403. DYED FUR SKINS. Registered April 3, 1900. HERMAN F. BINDSEIL, New York, N. Y. Renewed April 3, 1930, to H. F. Bindseil & Son, Inc., Long Island City, N. Y., a Corporation of New York, successor.

34,572. LINEN-CRASH TOWELING. Registered May 1, 1900. STEVENS LINEN WORKS, Dudley and Boston, Mass. Renewed May 1, 1930, to Stevens Linen Works, Boston, Mass., a Corporation of Massachusetts.

34,573. LINEN-CRASH TOWELING. Registered May 1, 1900. STEVENS LINEN WORKS, Dudley and Boston, Mass. Renewed May 1, 1930, to Stevens Linen Works, Boston, Mass., a Corporation of Massachusetts.

34,574. LINEN-CRASH TOWELING. Registered May 1, 1900. STEVENS LINEN WORKS, Dudley and Boston, Mass. Renewed May 1, 1930, to Stevens Linen Works, Boston, Mass., a Corporation of Massachusetts.

34,575. LINEN-CRASH TOWELING. Registered May 1, 1900. STEVENS LINEN WORKS, Dudley and Boston, Mass. Renewed May 1, 1930, to Stevens Linen Works, Boston, Mass., a Corporation of Massachusetts.

34,576. LINEN-CRASH TOWELING. Registered May 1, 1900. STEVENS LINEN WORKS, Dudley and Boston, Mass. Renewed May 1, 1930, to Stevens Linen Works, Boston, Mass., a Corporation of Massachusetts.

34,577. LINEN-CRASH TOWELING. Registered May 1, 1900. STEVENS LINEN WORKS, Dudley and Boston, Mass. Renewed May 1, 1930, to Stevens Linen Works, Boston, Mass., a Corporation of Massachusetts.

34,578. LINEN-CRASH TOWELING. Registered May 1, 1900. STEVENS LINEN WORKS, Dudley and Boston, Mass. Renewed May 1, 1930, to Stevens Linen Works, Boston, Mass., a Corporation of Massachusetts.

34,579. LINEN-CRASH TOWELING. Registered May 1, 1900. STEVENS LINEN WORKS, Dudley and Boston, Mass. Renewed May 1, 1930, to Stevens Linen Works, Boston, Mass., a Corporation of Massachusetts.

34,580. LINEN-CRASH TOWELING. Registered May 1, 1900. STEVENS LINEN WORKS, Dudley and Boston, Mass. Renewed May 1, 1930, to Stevens Linen Works, Boston, Mass., a Corporation of Massachusetts.

34,581. LINEN-CRASH TOWELING. Registered May 1, 1900. STEVENS LINEN WORKS, Dudley and Boston, Mass. Renewed May 1, 1930, to Stevens Linen Works, Boston, Mass., a Corporation of Massachusetts.

34,582. LINEN-CRASH TOWELING. Registered May 1, 1900. STEVENS LINEN WORKS, Dudley and Boston, Mass. Renewed May 1, 1930, to Stevens Linen Works, Boston, Mass., a Corporation of Massachusetts.

34,631. MEDICINES. Registered May 8, 1900. MCKESSON & ROBBINS, New York, N. Y. Renewed May 8, 1930, to McKesson & Robbins, Incorporated, Bridgeport, Conn., a Corporation of Connecticut, successor.

34,735. LARD. Registered June 5, 1900. ANGLO-AMERICAN PROVISION COMPANY, Chicago, Ill., a Corporation of Illinois. Renewed June 5, 1930.

34,755. GUANO. Registered June 5, 1900. TENNESSEE CHEMICAL COMPANY, Nashville, Tenn. Renewed June 5, 1930, to Tennessee Chemical Company, Chicago, Ill., a Corporation of Delaware, assignee.

34,772. CERTAIN NAMED MEDICINAL ANTISEPTIC PREPARATIONS. Registered June 12, 1900. JOHN WYETH & BROTHER, INCORPORATED, Philadelphia, Pa., a Corporation of Pennsylvania. Renewed June 12, 1930.

34,908. CERTAIN NAMED CONFECTIONERY. Registered July 17, 1900. THE GEORGE CLOSE COMPANY, Cambridge, Mass., a Corporation of Massachusetts. Renewed July 17, 1930.

34,962. CHAINS, CHAIN ACCESSORIES, AND FORGINGS. Registered July 24, 1900. HENRY B. NEWHALL, New York, N. Y. Renewed July 24, 1930, to Henry B. Newhall Corporation, Garwood, N. J., a Corporation of New Jersey, assignee, by mesne assignments.

34,972. PHOTOGRAPHIC DEVELOPERS. Registered July 31, 1900. THE FIRM OF G. GENNERT, New York, N. Y. Renewed July 31, 1930, to Hauff-Leonar A.-G., Wandsbek, Germany, a Corporation of Germany, assignee, by mesne assignments.

34,988. A REMEDY FOR CERTAIN NAMED DISEASES. Registered July 31, 1900. JUDGE & DOLPH PHARMACEUTICAL COMPANY, St. Louis, Mo. Renewed July 31, 1930, to Cystogen Chemical Company, Brooklyn, N. Y., a Corporation of Missouri, successor.

76,360. MATCHES. Registered January 11, 1910. GRANTORPETS TÄNDSTICKSFABRIKS AKTIEBOLAG, Westervik, Sweden. Renewed January 11, 1930, to Jonkopings och Vulcans Tandsticksfabriksaktiebolag, Jonkoping, Sweden, a Corporation of Sweden, assignee, by mesne assignments.

76,957. LOCKETS AND BRACELETS. Registered March 1, 1910. ATTLEBORO CHAIN COMPANY. Renewed March 1, 1930, to Marathon Co., Attleboro, Mass., a Corporation of Massachusetts, successor.

77,109. VETERINARY EMBROCATIONS. Registered March 8, 1910. THE S. R. FEIL COMPANY. Renewed March 8, 1930, to The Sal-Vet Products Co., Cleveland, Ohio, a Corporation of Ohio, assignee, by mesne assignments.

77,185. BLANK BOOKS. Registered March 15, 1910. CORLIES, MACY & COMPANY, INC., New York, N. Y., a Corporation of New York. Renewed March 15, 1930.

77,295. HINGES. Registered March 29, 1910. CHICAGO SPRING BUTT COMPANY. Renewed March 29, 1930, to Chicago Spring Hinge Company, Chicago, Ill., a Corporation of Illinois, by change of name.

77,480. TOBACCO PIPES. Registered April 12, 1910. A. OPPENHEIMER & Co. Renewed April 12, 1930, to Oppenheimer Pipes, Limited, London, England, a Corporation of Great Britain, assignee.

77,492. VETERINARY VERMIFUGES, MEDICATED SALTS, AND TONICS. Registered April 12, 1910. THE S. R. FEIL COMPANY. Renewed April 12, 1930, to The Sal-Vet Products Co., Cleveland, Ohio, a Corporation of Ohio, assignee, by mesne assignments.

77,862. PLUMBERS' FITTINGS. Registered May 10, 1910. CENTRAL FOUNDRY CO. Renewed May 10, 1930, to The Central Foundry Company, New York, N. Y., a Corporation of Maine, assignee.

77,930. TOOTH POWDER AND AN ANTISEPTIC MOUTH WASH. Registered May 17, 1910. KARL AUGUST LINGNER, Dresden, Germany. Renewed May 17, 1930, to Lingner Corporation, New York, N. Y., a Corporation of Delaware, assignee, by mesne assignments.

77,992. READY-MIXED PAINTS AND PASTE COLORS. Registered May 24, 1910. SAMUEL H. FRENCH & Co. Renewed May 24, 1930, to Samuel French & Co., Philadelphia, Pa., a Corporation of Pennsylvania, assignee.

78,011. LINEN THREAD. Registered May 24, 1910. LINDSAY THOMPSON & CO., LIMITED, Belfast, Ireland. Renewed May 24, 1930, to Lindsay Thompson & Co. Ltd., Belfast, Ireland, and New York, N. Y., a Corporation of Great Britain.

78,012. LINEN THREAD. Registered May 24, 1910. LINDSAY THOMPSON & CO., LIMITED, Belfast, Ireland. Renewed May 24, 1930, to Lindsay Thompson & Co. Ltd., Belfast, Ireland, and New York, N. Y., a Corporation of Great Britain.

78,099. TALKING MACHINES AND SUPPLIES THEREFOR. Registered May 31, 1910. HOMOPHON COMPANY, G. M. B. H., Berlin, Germany, a Corporation of Germany. Renewed May 31, 1930.

78,110. WRITING AND PRINTING PAPER. Registered May 31, 1910. LASHER & LATHROP INC., New York, N. Y. Renewed May 31, 1930, to Parsons Paper Company, Holyoke, Mass., a Corporation of Massachusetts, assignee.

78,283. VALVES AND PARTS THEREOF. Registered May 31, 1910. STAR BRASS MANUFACTURING COMPANY, Boston, Mass., a Corporation of Massachusetts. Renewed May 31, 1930.

78,323. A REMEDY FOR CERTAIN DISEASES. Registered June 7, 1910. HELLEN GAREY, Salt Lake City, Utah. Renewed June 7, 1930.

78,470. LINEN THREAD. Registered June 14, 1910. LINDSAY THOMPSON & CO., LIMITED, Belfast, Ireland. Renewed June 14, 1930, to Lindsay Thompson & Co. Ltd., Belfast, Ireland, and New York, N. Y., a Corporation of Great Britain.

78,646. LEATHER BELTING. Registered June 28, 1910. CHAS. A. SCHIEREN COMPANY, New York, N. Y., a Corporation of New York. Renewed June 28, 1930.

78,752. FILLED TEXTILE FABRICS. Registered July 5, 1910. WILLIAMS, BROWN AND EARLE. Renewed July 5, 1930, to Williams, Brown & Earle, Inc., Philadelphia, Pa., a Corporation of Pennsylvania, assignee.

78,873. REFINED BEAN OIL USED AS A FOOD. Registered July 19, 1910. EDIBLE PRODUCTS COMPANY, Jersey City, N. J., and New York, N. Y. Renewed July 19, 1930, to The Southern Cotton Oil Company, New Orleans, La., a Corporation of New Jersey, assignee.

79,133. SOLID SOAP, LIQUID SOAP, AND POWDERED SOAP. Registered August 9, 1910. KARL AUGUST LINGNER, Dresden, Germany. Renewed August 9, 1930, to Lingner Corporation, New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

79,141. WHEAT FLOUR. Registered August 9, 1910. A. B. MCCRILLIS & SON, INC., Providence, R. I. Renewed August 9, 1930, to The Southwestern Milling Company, Inc., New York, N. Y., a Corporation of New York, assignee.

79,390. SOAP. Registered September 6, 1910. B. T. BABBITT, Jersey City, N. J., and New York, N. Y. Renewed September 6, 1930, to Armour and Company of Delaware, Chicago, Ill., a Corporation of Delaware, assignee.

79,400. SHAFT COUPLINGS. Registered September 6, 1910. BOND FOUNDRY AND MACHINE COMPANY, Manheim, Pa., a Corporation of Pennsylvania. Renewed September 6, 1930.

79,413. CLEANSING COMPOUNDS AND SOAPS. Registered September 6, 1910. EMPIRE SOAP COMPANY, New York, N. Y., a Corporation of New York. Renewed September 6, 1930.

79,468. HOES AND SHOVELS OF METAL. Registered September 13, 1910. THE CHILLINGTON TOOL COMPANY, LIMITED, Wolverhampton, England, a Corporation of Great Britain. Renewed September 13, 1930.

LABELS

REGISTERED MAY 6, 1930

37,405.—*Title:* MAJESTIC. For Bird Food. HENRY LOUIS BOBINI, Brooklyn, N. Y. Published January 3, 1930.

37,406.—*Title:* ELYSIAN SPRING WATER—"THE WATER YOU LIKE TO DRINK." For Spring Water. ELYSIAN SPRINGS WATER COMPANY, Los Angeles, Calif. Published December 20, 1929.

37,407.—*Title:* CAPREE. For Salad Dressing. THE RALPH H. JONES COMPANY, Cincinnati, Ohio. Published March 4, 1930.

37,408.—*Title:* FROZEN FRESH FRUITS. For Frozen Fresh Fruits. LILY-TULIP CUP CORPORATION, New York, N. Y. Published October 21, 1929.

37,409.—*Title:* NUX-VITOL. For Medicine for Treating Disorders of the Stomach. THE NUX-VITOL COMPANY, Joplin, Mo. Published December 5, 1929.

37,410.—*Title:* APOLLOS. For Prophylactic Membranous Articles for the Prevention of Contagious Diseases. MEYER SOYBEL, North Bergen, N. J. Published April 26, 1929.

37,411.—*Title:* ORCHIDEA CLEANSING CREAM. For Cleansing Cream. RENÉE THORNTON, New York, N. Y. Published January 10, 1929.

PRINTS

REGISTERED MAY 6, 1930

12,523.—*Title:* ONLY ON GENUINE GOLD SEAL CONGOLEUM RUGS. For Congoleum Rugs. CONGOLEUM-NAIRN INC., New York, N. Y., and Kearny, N. J. Published January 31, 1930.

12,524.—*Title:* YOUR SEARCH (AD FORM 102). For Coffee. HILLS BROS., San Francisco, Calif. Published March 1, 1930.

12,525.—*Title:* ADJUSTO PRESSURE PAD TRUSS. For Trusses. THE OHIO TRUSS COMPANY, Cincinnati, Ohio. Published November 15, 1929.

12,526.—*Title:* CITY OR COUNTRY THERE'S A RADIOLA SUITED TO YOUR NEEDS. For Radios. R C A VICTOR COMPANY, INC., New York, N. Y. Published January 28, 1930.

12,527.—*Title:* TRICOLATOR GIVES DRIP COFFEE MAXIMUM FLAVOR. For Tricolators (Percolators). TRICOLATOR COMPANY, INC., New York, N. Y. Published February 2, 1930.

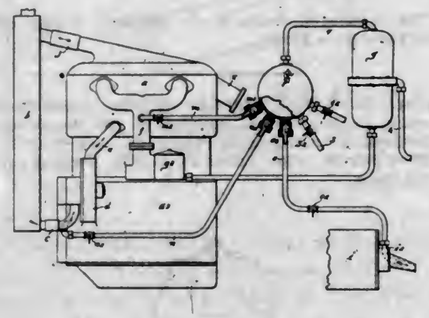
REISSUES

MAY 6, 1930

17,656. GLAZED NONVITREOUS POTTERY AND PROCESS FOR THE MANUFACTURE OF THE SAME. JOSEPH WILLIAM MELLOR, Stoke-on-Trent, England. Filed Aug. 15, 1929. Serial No. 386,478. Original No. 1,666,828, dated Apr. 17, 1928, Serial No. 81,310, filed Jan. 14, 1926, and in Great Britain Mar. 9, 1925. 12 Claims. (Cl. 25—156.)

1. A process for the manufacture of glazed non-vitreous pottery and particularly glazed porous bodied tiles and glazed porous bodied electric fittings which consists in forming the body of the usual composition, adding thereto a flux which acts at a temperature below that represented by Seger cone 01A (1080° C.) and in quantity not exceeding the equivalent of 3% of the weight of the unfired body, applying to the unfired body a glaze normal for making glazed porous bodied tiles, glazed porous bodied electric fittings, and firing the product in a glost kiln.

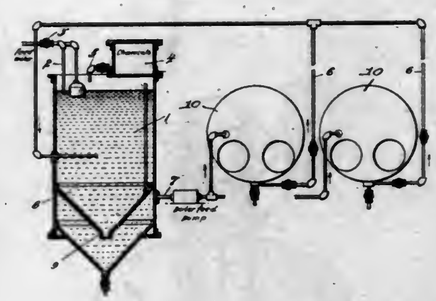
17,657. VACUUM SYSTEM FOR INTERNAL-COMBUSTION ENGINES. WALTER R. BAMFORD, Detroit, and HARRY W. HAMILTON, deceased, Detroit, Mich., by Curtis B. Camp, Oak Park, Ill., trustee and assignee. Filed July 21, 1927. Serial No. 207,556. Original No. 1,244,686, dated Oct. 30, 1917, Serial No. 150,079, filed Feb. 21, 1917. 4 Claims. (Cl. 158—36.1.)



1. The combination with a vacuum actuated apparatus of an internal combustion engine having an intake passage and a water circulating system, a circulating pump in said water circulating system actuated by said engine, a passage communicating with said circulating system on the suction side of said pump and with said vacuum actuated apparatus, and a passage communicating with said intake passage and said vacuum actuated apparatus.

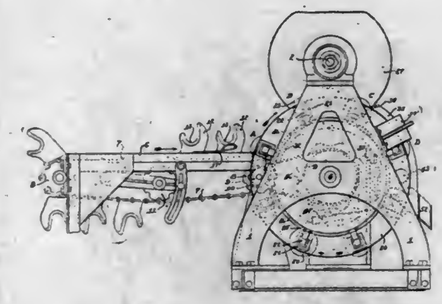
17,658. PURIFICATION SYSTEM FOR BOILERS. JULIUS OSTERTAG, Stuttgart, Germany. Filed Nov. 19, 1929. Serial No. 408,400. Original No. 1,700,715, dated Jan. 29, 1929, Serial No. 573,415, filed July 7, 1922, and in Poland Feb. 8, 1922. 4 Claims. (Cl. 122—398.)

1. In a method for continuously purifying boiler feed water during operation of a boiler, the steps of continuously blowing off sludge-containing water from the boiler, conducting the boiler blow-off water into a region of lower pressure while maintaining its heat content, and there commingling it with boiler feed water containing make-up



water, the reduction in pressure of the blow-off water imparting heat to the make-up water for precipitating impurities, freeing the feed water from the impurities and sludge, and feeding said purified feed water to the boiler.

17,659. FRUIT PITTER. ALBERT R. THOMPSON, San Jose, Calif., assignor to Anderson-Barngrover Mfg. Co., San Jose, Calif., a Corporation of California. Filed Jan. 25, 1927. Serial No. 163,545. Original No. 1,545,216, dated July 7, 1925, Serial No. 699,751, filed Mar. 17, 1924. 32 Claims. (Cl. 146—28.)

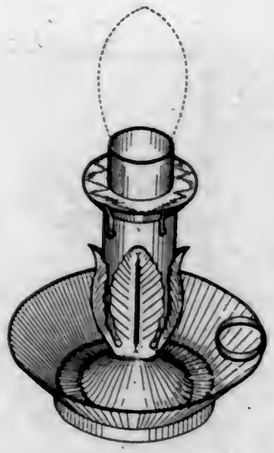


31. A fruit pitter including pitting means shaped to conform approximately to a substantial portion of the pit in the plane of its suture, and mechanism to cause said pitting means to rotate about said pit comprising means independent of the sides of the pit to cause the pitting means to follow a predetermined path approximating the cross-sectional contour of the pit in a plane transverse to the axis of rotation of the pitting means.

DESIGNS

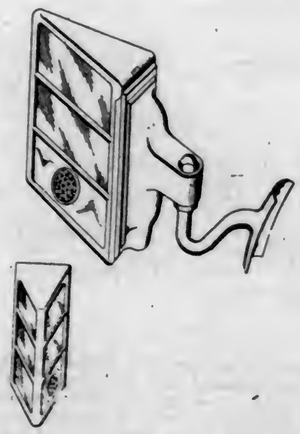
MAY 6, 1930

81,081. LAMP BASE. KENNETH A. BERNHOLTZ, Sylvania, Ohio. Filed Sept. 18, 1929. Serial No. 82,788. Term of patent 3½ years.



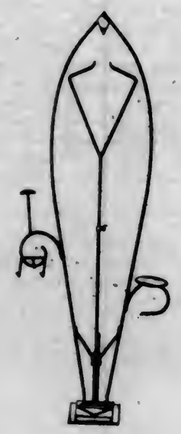
The ornamental design for a lamp base, substantially as shown.

81,082. VEHICLE LAMP. BORNETT L. BORROFF, Racine, Wis. Filed Dec. 7, 1929. Serial No. 33,698. Term of patent 14 years.



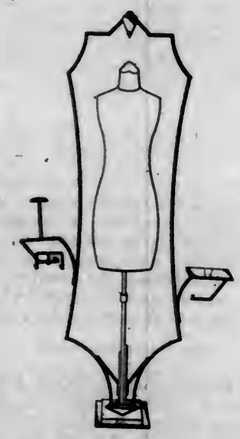
The ornamental design for a vehicle lamp, as shown.

81,083. ENSEMBLE DISPLAY STAND. JACOB BROWNSTEIN, Brooklyn, N. Y., assignor to Syd Messer, doing business as Anglo Display Fixture Co., New York, N. Y. Filed Feb. 26, 1930. Serial No. 34,652. Term of patent 3½ years.



The ornamental design for an ensemble display stand substantially, as shown.

81,084. ENSEMBLE DISPLAY STAND. JACOB BROWNSTEIN, Brooklyn, N. Y., assignor to Syd Messer, doing business as Anglo Display Fixture Co., New York, N. Y. Filed Feb. 26, 1930. Serial No. 34,653. Term of patent 3½ years.



The ornamental design for an ensemble display stand substantially, as shown.

81,085. SCALE DIAL. GEORGE E. CHATILLON, New York, N. Y., and ROBERT BINGHAM WASSON, Cranford, N. J., assignors to John Chatillon & Sons, New York, N. Y., a Corporation of New York. Filed Apr. 4, 1929. Serial No. 30,763. Term of patent 14 years.



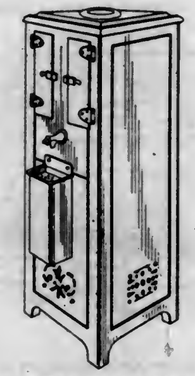
The ornamental design for a scale dial as shown.

81,086. FERNERY STAND. JOHN ROY DEW, South Jacksonville, Fla., and ROY GUFFEY, Somerset, Ky. Filed Jan. 6, 1930. Serial No. 34,035. Term of patent 14 years.



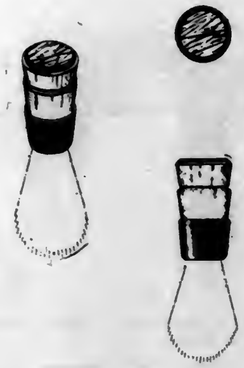
The ornamental design for a fernery stand, as shown.

81,087. WATER COOLER. HARRY W. DYER, New York, N. Y. Filed July 18, 1929. Serial No. 32,117. Term of patent 7 years.



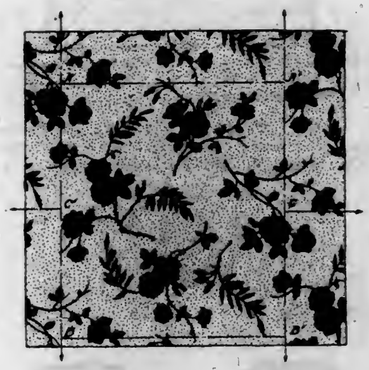
The ornamental design for a water cooler as shown.

81,088. BRUSH HANDLE OR THE LIKE. ORVILLE D. EARON, Montclair, N. J., assignor to The Hardright Company, a Corporation of New Jersey. Filed Feb. 15, 1930. Serial No. 34,559. Term of patent 14 years.



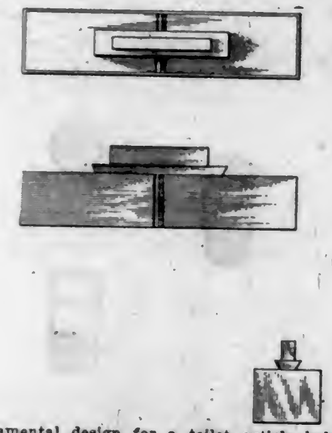
The ornamental design for a brush handle or the like substantially as shown.

81,089. TEXTILE FABRIC. GUSTAV EHRENZWEIG, New York, N. Y. Filed July 10, 1929. Serial No. 31,996. Term of patent 3½ years.



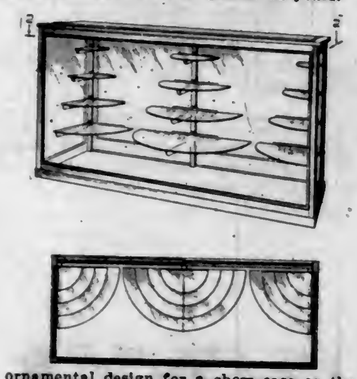
The ornamental design for a textile fabric, as shown and described.

81,090. TOILET-ARTICLE HOLDER OR SIMILAR ARTICLE. PAUL T. FRANKL, New York, N. Y., assignor to Celluloid Corporation, a Corporation of New Jersey. Filed Dec. 22, 1928. Serial No. 29,379. Term of patent 3½ years.



The ornamental design for a toilet article holder or similar article, as shown.

81,091. SHOW CASE OR THE LIKE. MATTHEW M. FRIEDEMANN, New York, N. Y. Filed May 28, 1929. Serial No. 31,434. Term of patent 14 years.



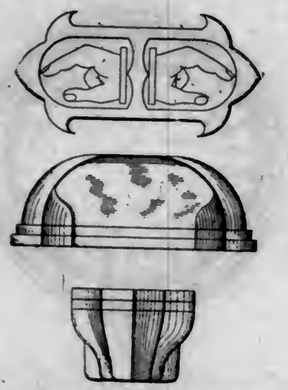
The ornamental design for a show case or the like as shown.

81,092. RING. HOWARD O. JENKINS, Baltimore, Md., assignor to Frank R. Blake, Baltimore, Md. Filed Dec. 4, 1929. Serial No. 33,635. Term of patent 14 years.



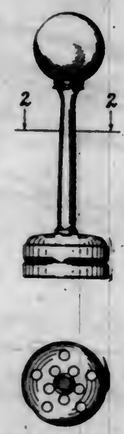
The ornamental design for a ring, as shown.

81,093. DIRECTION SIGNAL FOR MOTOR VEHICLES. FRANK J. KATTS and BARTON L. MINTURN, Springfield, Ohio, assignors of one-third to John M. Silver, Springfield, Ohio. Filed Dec. 3, 1929. Serial No. 33,630. Term of patent 8½ years.



The ornamental design for a direction signal for motor vehicles as shown.

81,094. FLOWER HOLDER. ROBERT C. HAM, West Haven, Conn., assignor to R. C. Ham & Company, Inc., New Haven, Conn., a Corporation of Connecticut. Filed Feb. 11, 1930. Serial No. 34,488. Term of patent 14 years.



The ornamental design for a flower holder substantially as shown and described.

81,095. DAVENPORT OR SIMILAR ARTICLE. FRANK HAVEL, Chicago, Ill., assignor to S. Karpen & Bros., a Corporation of Illinois. Filed Mar. 7, 1930. Serial No. 34,780. Term of patent 3½ years.



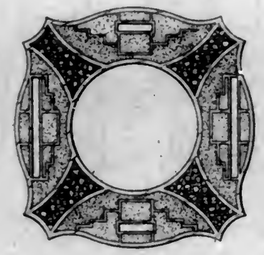
The ornamental design for a davenport or similar article, as shown.

81,096. COMBINED MACHINE PEDESTAL, CASING, AND TABLE. EDWARD C. HEGG, Buffalo, N. Y., assignor to Mojonnier Bros. Co., a Corporation of Illinois. Filed Sept. 16, 1929. Serial No. 32,767. Term of patent 14 years.



The ornamental design for a combined machine pedestal, casing and table, as shown.

81,097. BAG ORNAMENT. CECIL H. LAWRENCE, Attleboro, Mass., assignor to Evans Case Company, North Attleboro, Mass., a Corporation of Massachusetts. Filed July 1, 1929. Serial No. 31,905. Term of patent 3½ years.



The ornamental design for a bag ornament as shown and described.

81,098. DRESS. DOROTHY LONG, New York, N. Y., assignor to Franklin Simon & Company, Inc., New York, N. Y., a Corporation of New York. Filed Jan. 10, 1930. Serial No. 34,073. Term of patent 3½ years.



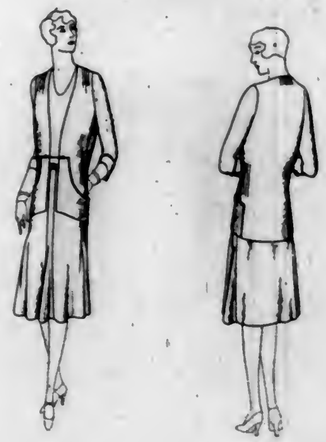
The ornamental design for a dress substantially as shown and described.

81,099. DRESS. DOROTHY LONG, New York, N. Y., assignor to Franklin Simon & Company, Inc., New York, N. Y., a Corporation of New York. Filed Jan. 10, 1930. Serial No. 34,076. Term of patent 8½ years.



The ornamental design for a dress substantially as shown and described.

81,100. SUIT. DOROTHY LONG, New York, N. Y., assignor to Franklin Simon & Company, Inc., New York, N. Y., a Corporation of New York. Filed Jan. 10, 1930. Serial No. 34,078. Term of patent 3½ years.



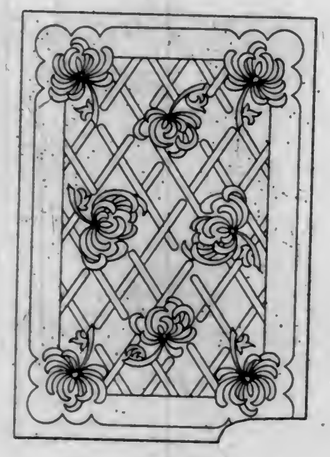
The ornamental design for a suit substantially as shown and described.

81,101. COMFORTER. JANET MAY, New York, N. Y., assignor to Carlin Comforts, Inc., New York, N. Y., a Corporation of New York. Filed Jan. 29, 1929. Serial No. 29,832. Term of patent 3½ years.



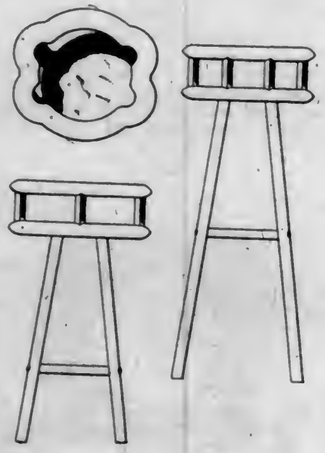
The ornamental design for a comforter, as shown.

81,102. COMFORTER. JANET MAY, New York, N. Y., assignor to Carlin Comforts, Inc., New York, N. Y., a Corporation of New York. Filed Jan. 29, 1929. Serial No. 29,835. Term of patent 3½ years.



The ornamental design for a comforter, as shown.

81,103. TABLE. STEVE MCKLEBECK, Fairbank, Pa. Filed Mar. 2, 1929. Serial No. 30,299. Term of patent 14 years.



The ornamental design for a table, as shown.

81,104. WATCH DIAL OR SIMILAR ARTICLE. HENRY MOELLER, Columbus, Ohio. Filed Feb. 27, 1930. Serial No. 34,670. Term of patent 7 years.



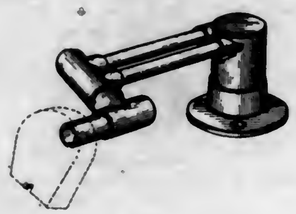
The ornamental design for a watch dial or similar article as shown.

81,105. BUCKLE. WILLIAM L. MYERS, Newark, N. J., assignor to L. A. Myers, Jr., Inc., Newark, N. J., a Corporation of New Jersey. Filed Jan. 16, 1930. Serial No. 34,154. Term of patent 7 years.



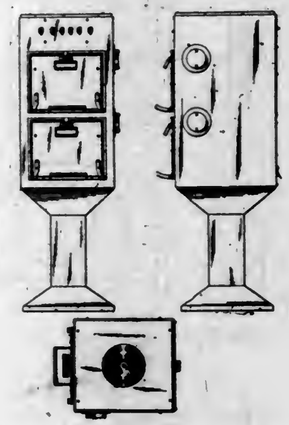
The ornamental design for a buckle substantially as shown.

81,106. SUSPENSION ARM FOR AN ELECTRICAL PICK-UP. MARTIN NYSTROM, Chicago, Ill., assignor to The Brunswick-Balke-Collender Company, Chicago, Ill., a Corporation of Delaware. Filed June 21, 1929. Serial No. 31,795. Term of patent 7 years.



The ornamental design for a suspension arm for an electrical pickup substantially as shown.

81,107. ELECTRIC STOVE. THOMAS M. PUTNAM, Cedar Grove, Wis. Filed Feb. 21, 1930. Serial No. 34,619. Term of patent 14 years.



The ornamental design for an electric stove as shown.

81,108. SHOE BUCKLE. SAMUEL M. RIKER, Chester, N. J. Filed Mar. 3, 1930. Serial No. 34,725. Term of patent 7 years.



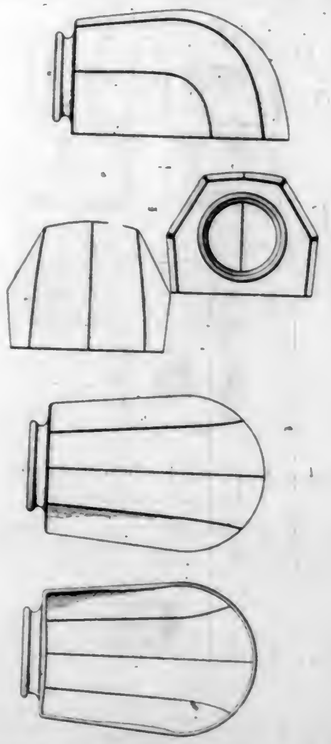
The ornamental design for a shoe buckle, as shown.

81,109. TEAPOT OR SIMILAR ARTICLE. ALBERT F. SAUNDERS, Syracuse, N. Y., assignor to T. N. Benedict Mfg. Co., East Syracuse, N. Y., a Corporation of New York. Filed Mar. 13, 1929. Serial No. 30,449. Term of patent 7 years.



The ornamental design for a tea pot or similar article, as shown.

81,110. LAMP SHADE. ROY W. SCHWEIKER, Lansdale, Pa. Filed Nov. 22, 1929. Serial No. 33,525. Term of patent 7 years.



The ornamental design for a lamp shade, as shown.

81,111. ANIMAL FIGURE. ELZIE C. SEGAR, Santa Monica, Calif., assignor to Hamilton Forline, Los Angeles, Calif. Filed Aug. 17, 1929. Serial No. 32,426. Term of patent 7 years.



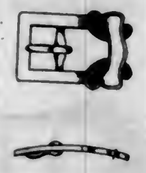
The ornamental design for an animal figure, as shown.

81,112. SUSPENDER BUCKLE OR THE LIKE. LOWELL W. SHIELDS, Rochester, N. Y., assignor to Hickok Manufacturing Company, Inc., Rochester, N. Y., a Corporation of New York. Filed Sept. 3, 1929. Serial No. 32,654. Term of patent 3½ years.



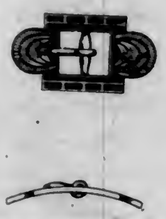
The ornamental design for a suspender buckle or the like, as shown.

81,113. SHOE BUCKLE. WALTER EDWARD SMITH, Warwick Downs, R. I., assignor to C. G. King & Co., Inc., Providence, R. I. Filed Feb. 26, 1930. Serial No. 34,660. Term of patent 3½ years.



The ornamental design for a shoe buckle as shown.

81,114. SHOE BUCKLE. WALTER EDWARD SMITH, Warwick Downs, R. I., assignor to C. G. King & Co., Inc., Providence, R. I. Filed Feb. 26, 1930. Serial No. 34,661. Term of patent 3½ years.



The ornamental design for a shoe buckle as shown.

81,115. SHOE BUCKLE. WALTER EDWARD SMITH, Warwick Downs, R. I., assignor to C. G. King & Co., Inc., Providence, R. I. Filed Feb. 26, 1930. Serial No. 34,663. Term of patent 3½ years.



The ornamental design for a shoe buckle as shown.

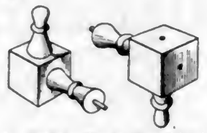
81,116. SHOE BUCKLE. WALTER EDWARD SMITH, Warwick Downs, R. I., assignor to C. G. King & Co., Inc., Providence, R. I. Filed Feb. 26, 1930. Serial No. 34,667. Term of patent 3½ years.





The ornamental design for a shoe buckle as shown.

81,117. TOY BLOCK. SAMUEL W. STROUSE, St. Johns, Mich. Filed Apr. 15, 1929. Serial No. 30,910. Term of patent 14 years.



The ornamental design for a toy block, as shown.

81,118. SUSPENDER BUCKLE OR THE LIKE. HAROLD C. VAISEY, Rochester, N. Y., assignor to Hickok Manufacturing Company, Inc., Rochester, N. Y., a Corporation of New York. Filed Sept. 9, 1929. Serial No. 32,696. Term of patent 3½ years.



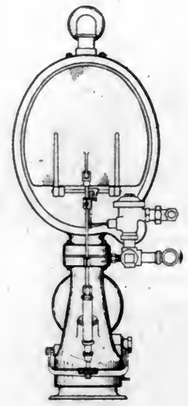
The ornamental design for a suspender buckle or the like, as shown.

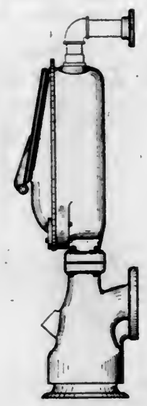
81,119. CLASP OR SIMILAR ARTICLE. THOMAS H. WIGHTMAN, Providence, R. I., assignor to Alfred Vester Sons, Inc., Providence, R. I., a Corporation of Rhode Island. Filed June 28, 1929. Serial No. 31,857. Term of patent 3½ years.



The ornamental design for a clasp or similar article, substantially as shown.

81,120. BEDPAN WASHER. JOSEPH H. OKUN, Brooklyn, N. Y., assignor to Kny-Scheerer Corporation, New York, N. Y., a Corporation of New York. Filed Oct. 7, 1929. Serial No. 32,963. Term of patent 14 years.



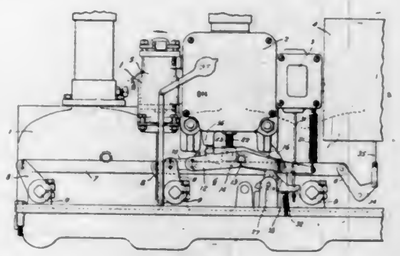


The ornamental design for a bedpan washer as shown.

PATENTS

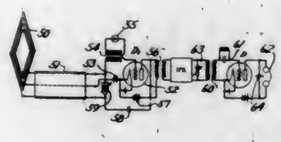
GRANTED MAY 6, 1930

1,756,930. CIRCUIT-BREAKER-OPERATING MECHANISM. CHRISTIAN AALBORG, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Sept. 7, 1926. Serial No. 133,780. 10 Claims. (Cl. 200—89.)



1. In an actuating device, motor means, a lever connected to the motor means and to a fixed fulcrum, a second lever mounted intermediate its ends on the first lever between the connections to the motor means and the fixed fulcrum, mechanism connected to the second lever, and restraining means for releasably holding one end of the second lever in a definite relation to the shaft of the first lever, whereby upon the release of the restraining means the second lever is free to turn with respect to the first lever under the influence of the connected mechanism, and the motor means is thereafter adapted to turn the first lever about its shaft to bring the second lever into engagement with the restraining means.

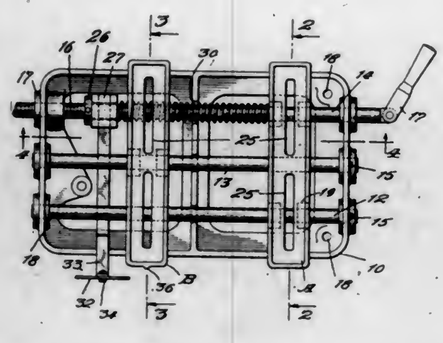
1,756,931. LOOP ANTENNA. SIDNEY E. ANDERSON, Brooklyn, N. Y., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed May 10, 1923. Serial No. 637,941. 14 Claims. (Cl. 250—33.)



2. A radio receiving system comprising a space discharge amplifier having a cathode, anode and control electrode, a rotatable loop antenna having a plurality of slip rings through which its outer terminals are connected to said anode and control electrode and an intermediate terminal connected to said cathode, the portion of said loop connected between the cathode and anode being electrically balanced with respect to the portion included between the cathode and control electrode.

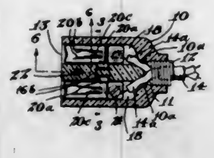
1,756,932. MOTOR BASE. ROLLIN L. BACHER, Cleveland Heights, Ohio, assignor to United States Air Compressor Company, Cleveland, Ohio, a Corporation of Ohio. Filed June 26, 1925. Serial No. 39,666. 12 Claims. (Cl. 308—11.)

1. In combination, a driving pulley, a driven pulley, a belt connecting said pulleys, a base for one of said pulleys, a carriage slidably supported in said base, spring means for urging said carriage against the tension of the belt and means for varying the tension of said spring means,



means for indicating when said spring means is under a predetermined tension whereby said spring means may be reset to said predetermined tension upon stretching of said belt.

1,756,933. PLUG SOCKET FOR ELECTRICAL CONNECTIONS. CLINTON BATEHOLT, Hoosick Falls, N. Y., assignor to Specialty Insulation Manufacturing Company, Inc., Hoosick Falls, N. Y., a Corporation of New York. Filed Apr. 16, 1927. Serial No. 184,267. 2 Claims. (Cl. 173—332.)

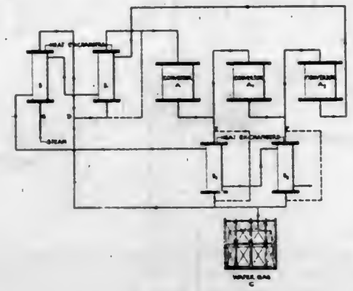


1. A plug receptacle comprising, in combination, a cup moulded as a single piece of insulating material, with an opening for conductors through the bottom of the cup; a wedge of insulating material set across the hollow of the cup, dividing said hollow non-rotatably, and being thrustable longitudinally and non-rotatably into the said opening; terminal elements set in the divisions of the hollow; conductors extending thence out through said opening and individually clamped tight therein by the said wedge; and a pin transfixing the wedge and cup in the in-thrust, clamping position of the wedge, with the pin sustaining the pressure of wedge on conductors, and permanently locking the clamp.

1,756,934. PROCESS OF PRODUCING HYDROGEN. JOHN S. BEEKLEY, Charleston, W. Va., assignor to Du Pont Ammonia Corporation, Wilmington, Del., a Corporation of Delaware. Filed Dec. 19, 1927. Serial No. 240,968. 6 Claims. (Cl. 23—213.)

6. The process of producing hydrogen, which comprises subjecting steam, together with a portion of the carbon monoxide with which it is ultimately to react, to the action of a heated catalyst, and thereafter subjecting the resulting gaseous mixture to one or more additional reaction

stages in which the gaseous mixture is cooled, to substantially the temperature at which the reactants were first



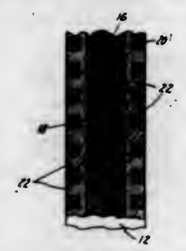
introduced to the catalyst, by the addition of carbon monoxide, and thereafter the resulting mixture is subjected to reaction in contact with a heated catalyst.

1,756,935. MUCILAGE DISPENSER FOR BOTTLE TOPS. MAURICE ALLAND, Atlantic City, N. J. Filed Nov. 26, 1927. Serial No. 235,887. 3 Claims. (Cl. 91—67.4.)



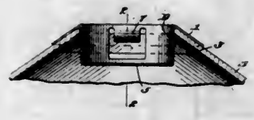
1. The combination of a container, with a closure, a tubular extension of said closure of substantially elliptical cross section having major and minor axes, and having an end wall provided with an aperture, and a roller rotatably mounted within said extension and projecting freely through said aperture, said end wall operating to wipe the lateral sides of the roller, the periphery of the roller comprising a central groove bounded laterally by radially extending roughened flanges adapted to frictionally engage an extraneous surface to insure rotation of said roller, shallow side portions of said extension along the minor axis permitting liquid to flow towards and into contact with the sides of said roller, which operates to churn the liquid into the deeper portions of said extension along the major axis, which latter being unopposed by the end wall permit the flow of a cord- or ribbon-like stream of liquid to the oppositely positioned portions of said roller groove.

1,756,936. BRAKE SHOE. VINCENT BENDIX, Chicago, Ill., assignor to Bend'x Brake Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 8, 1927. Serial No. 224,791. 9 Claims. (Cl. 188—249.)



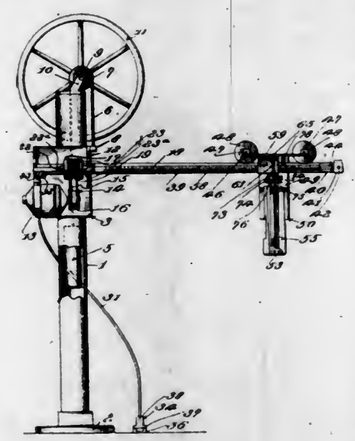
1. A metallic brake element, having a friction lining including adjacent each side edge a metallic insert, each insert being welded to the edge of said element.

1,756,937. LAMP-SHADE HOLDER. ANDREW J. CARMICHAEL, New Haven, Conn., assignor to The Greist Manufacturing Company, New Haven, Conn., a Corporation of Connecticut. Filed Aug. 20, 1928. Serial No. 300,735. 1 Claim. (Cl. 240—128.)



A shade holder, comprising a cup-shaped body member provided with a central aperture in its bottom to receive a lamp standard, and an inclined flange extending downwardly from its upper edge to overlay a lamp shade about the central opening thereof, of a slidable, downwardly inclined ring arranged parallel to said flange, to fit over said body and engage the shade within the opening thereof, and bendable tongues extending down from the upper portion of the side of the body member to a point above the bottom thereof, and arranged to be pressed outwardly against said ring for clamping the parts together.

1,756,938. FILLED-BAG-SEWING MACHINE. NORMAN V. CHRISTENSEN and WALTER M. HANNEMAN, Chicago, Ill., assignors to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 18, 1924. Serial No. 738,411. 28 Claims. (Cl. 112—11.)

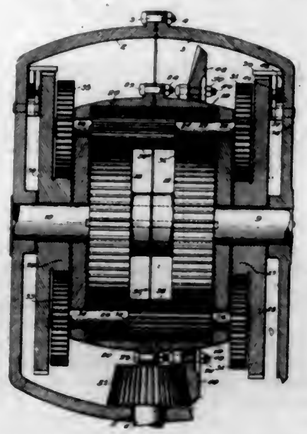


1. In a filled bag sewing machine, the combination of a support, a vertically adjustable bracket carried thereby, tracks mounted on said bracket and projecting laterally therefrom, a carrier movable back and forth on said tracks, a sewing head mounted on said carrier, a motor mounted on said bracket, and devices operated by said motor for moving said carrier back and forth on said tracks and for operating the sewing head when the carrier is moving in one direction only.

1,756,939. DIFFERENTIAL. FRANK E. CRAWFORD, York, Nebr. Filed Aug. 31, 1927. Serial No. 216,653. 11 Claims. (Cl. 74—99.)

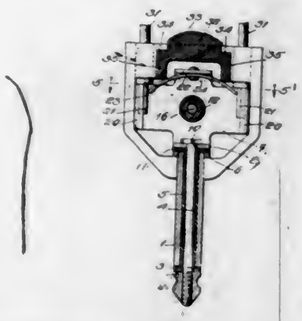
1. In a differential provided with planetary gears, in combination, a rotatably mounted differential gear carrier, gears loosely mounted outside said carrier, means to

automatically prevent rotation of said gears in a direction reverse to the direction of rotation of said carrier,



and accelerating gear wheels rotatively mounted on said carrier, connecting the planetary gears of said differential with said first named gears.

1,756,940. AUTOMATIC PLUG. RILEY M. DIENER, Elkhart, Ind., assignor, by mesne assignments, to Chicago Telephone Supply Company, Elkhart, Ind., a Corporation of Delaware. Filed Dec. 8, 1924. Serial No. 754,476. 19 Claims. (Cl. 173—334.)

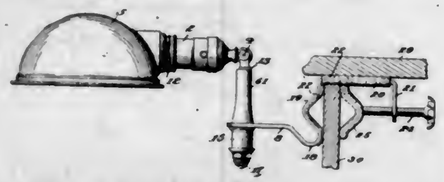


1. In combination, a terminal comprising a metal plate having a longitudinal seat formed along one edge thereof by bending of the margin of the plate, and a spring arm secured to said plate and extending diagonally toward said seat and having its end disposed adjacent said seat to clutch a conductor which is inserted endwise into the seat, said diagonal spring arm being disposed at such an angle to said seat that movement of the conductor in a given direction will cause the end of the spring to bite more firmly into the surface of the conductor.

1,756,941. METHOD OF DELUSTERING FABRIC AND PRODUCT THEREOF. CAMILLE DREYFUS, New York, N. Y., and HERBERT PLATT, Cumberland, Md., assignors to Celanese Corporation of America, a Corporation of Delaware. Filed Dec. 27, 1928. Serial No. 328,847. 10 Claims. (Cl. 8—13.)

1. Method of treating textile materials containing organic derivatives of cellulose comprising precipitating zinc sulphide within the fibres of such textile materials.

1,756,942. PORTABLE LAMP. NORMAN EDDY, ANDREW J. CARMICHAEL, HARRY F. THURBER, and ORESTO BALZANO, New Haven, Conn., assignors to The Greist Manufacturing Company, New Haven, Conn., a Corporation of Connecticut. Filed Oct. 12, 1927. Serial No. 225,796. 5 Claims. (Cl. 240—52.)



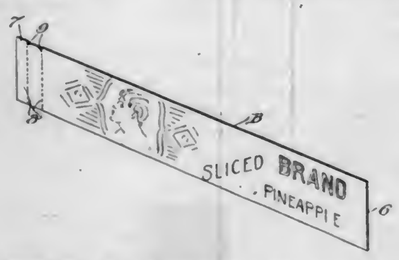
2. In a device of the class described, a bracket having an extended arm, a stem supported for axial adjustment thereon, a lamp pivotally supported from said stem, a clamping member extending angularly from said arm, an angular extension from said clamping member arranged for insertion between the vertical and horizontal elements of an article of furniture, a member bent angularly from said extension arranged to be housed within the article of furniture and provided with a threaded opening, a screw threaded to said opening, and a clamp carried by said screw and arranged to cooperate with said first named clamping member in holding the bracket to said vertical element.

1,756,943. ARTIFICIAL COMPOSITIONS ESPECIALLY THOSE RESEMBLING RUBBER. WALTER FRANKENBURGER and CHRISTIAN STEIGERWALD, Ludwigshafen-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed July 5, 1928, Serial No. 290,694, and in Germany July 23, 1927. 10 Claims. (Cl. 260—2.)

1. As a new article of manufacture a polymerized derivative of vinyl alcohol, also containing a proteid, which is capable of being stretched and thereafter reassuming its original shape.

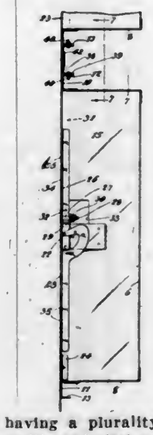
3. A process for the production of artificial compositions especially compositions resembling rubber in which a derivative of vinyl alcohol is polymerized in the presence of a proteid.

1,756,944. LABEL. THOMAS S. GORTON, Jr., Evanston, Ill. Filed Aug. 20, 1927. Serial No. 214,402. 1 Claim. (Cl. 40—21.)



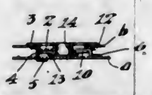
In combination with a container, a label having display matter on opposite faces thereof adapted to surround the container with one label end overlapping the other, a connection between one label end only and the container and another connection between the label and the opposite end thereof whereby the label is held in place upon the container, there being means extended transversely across the label for facilitating the severance thereof whereby to detach the label from the container at one point, the label edge adjacent said means being formed with a notch and a projection extending into said notch by which to facilitate such detachment with the fingers, substantially as described.

1,756,945. METAL RECEPTACLE. SAMUEL HAMMER, Brooklyn, N. Y., assignor to United Metal Box Co. Inc., Long Island City, N. Y., a Corporation of New York. Filed Jan. 13, 1925. Serial No. 2,152. 12 Claims. (Cl. 232—25.)



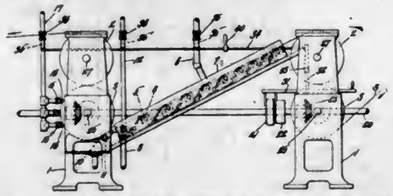
1. A mail box having a plurality of compartments, a series of doors controlling admission to the respective compartments and hingedly mounted within the box adjacent their lower ends, a bar rigidly secured to the inner sides of the doors below the hinge pivot thereof and connecting said doors for movement as a unit to open and closed positions, and means within the box engaged by said connecting bar to limit pivotal movement of the doors to their open positions.

1,756,946. ENVELOPE FASTENER. GEORGE A. HOLMES, Newton, Mass., assignor, by mesne assignments, to United-Carr Fastener Corporation, Cambridge, Mass., a Corporation of Massachusetts. Filed Sept. 11, 1928. Serial No. 305,242. 2 Claims. (Cl. 229—78.)



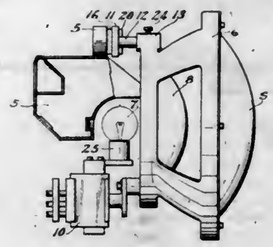
1. An envelope fastener comprising a stud member having a base adapted to be secured to an envelope and a head connected with said base by a neck; and a socket member including a metal shell adapted to be fastened to an envelope and provided with a slot into which said stud may be entered with the head in an edgewise position only, and a resiliently supported member in said shell arranged to be pushed out of the way by the movement of said stud into said slot and cooperating with the wall of said shell to lock said stud against movement out of the slot.

1,756,947. COOLING METHOD AND MECHANISM. ROBERT T. JOHNSTON, New Brunswick, N. J., assignor, by mesne assignments, to The Patent and Licensing Corporation, Boston, Mass., a Corporation of Massachusetts. Filed Mar. 31, 1923. Serial No. 629,225. 13 Claims. (Cl. 91—55.)



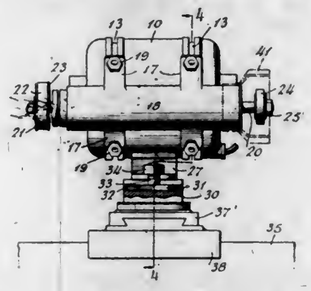
13. A cooling mechanism comprising means for projecting a cooling liquid against one face only of said sheet, a guide roll, means for leading said sheet so that its unwetted face engages a substantial arc of said roll, and means for projecting an air-blast against the wetted face of said sheet substantially tangential to said roll.

1,756,948. MOUNT FOR FOCUS FINDERS IN SIGNAL LAMPS. DANIEL J. MCCARTHY, Elgin, Ill., assignor to Chicago Railway Signal & Supply Company, Carpentersville, Ill., a Corporation of Illinois. Filed Nov. 14, 1927. Serial No. 232,981. 3 Claims. (Cl. 88—14.)



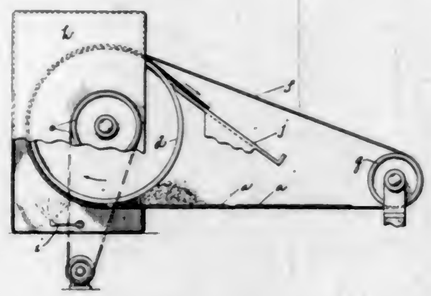
1. A mount for a focus finder, on a lamp unit, a plate, plate supporting means on the unit, means on the plate registering in the plate supporting means to permit fore and aft motion of the plate and arranged at the same line to prevent lateral motion thereof, a plate, means permitting the shifting of the second plate on the first named plate to selected position thereon, means to lock said plates together when said position has been found, a focus finder, registering means between said finder and said shiftable plate, and means to secure said finder on said shiftable plate.

1,756,949. PORTABLE GRINDING TOOL. ERA S. MCGONEGAL, Rutherford, N. J. Filed Nov. 10, 1927. Serial No. 232,213. 4 Claims. (Cl. 51—259.)



1. A portable grinding tool comprising a motor including a motor casing, a supporting bracket fixed to said motor casing and constituting a fixed support for supporting the motor in a predetermined operative position, a grinding spindle housing mounted on said motor casing in external parallel relation thereto and adjustable circumferentially about said motor casing, a grinding spindle journaled in said grinding spindle housing and adjustable therewith to different operative positions in external radial relation to said motor casing, and a driving connection between said motor and said grinding spindle effective in all adjustments of the latter.

1,756,950. LAMINATED CORK SHEET AND THE METHOD OR ART OF MAKING SAME. CHARLES E. MCMANUS, New York, N. Y., assignor to Crown Cork & Seal Company, Inc., New York, N. Y., a Corporation of New York. Filed Apr. 8, 1924. Serial No. 704,958. 3 Claims. (Cl. 154—2.)



2. The herein described method or art of making laminated cork sheets consisting in progressively subjecting succeeding portions of a lamina comprising composition cork sheet, and a surface lamina of natural cork, to the simultaneous application of heat and pressure, whereby said laminæ will have their contiguous surfaces brought into accurate conformity, and firmly bonded together and finally relieving the pressure thereon while subjecting the sheet to a normal temperature.

1,756,951. PRINTING COLORS. KURT H. MEYER, Mannheim, JOHANNES MÜLLER, Eppstein, and ULRICH HOFFMANN, Ludwigshafen-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Jan. 7, 1928, Serial No. 245,259, and in Germany Jan. 7, 1927. 5 Claims. (Cl. 8—6.)

1. As new compositions of matter printing colors comprising a coloring matter and sorbitol.

1,756,952. BUTTON. CHARLES H. MILLER, Detroit, Mich. Filed Feb. 23, 1929. Serial No. 342,062. 4 Claims. (Cl. 24—103.)



1. A button of the class described having a recess formed in one of its faces communicating at one side with a socket and at the other side with a passage, said passage communicating with a recess on said face, said second mentioned recess communicating through a passage with another recess on said face; a pin projected through said first mentioned passage and engageable in said socket.

1,756,953. PENCIL. PATRICK J. O'SULLIVAN, New York, N. Y., assignor to Blaisdell Pencil Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Oct. 29, 1927. Serial No. 229,636. 7 Claims. (Cl. 120—83.)

1. A pencil comprising a piece of marking material, a cover therefor comprising a rolled sheet of spirally disposed strips fastened at their outer ends, and a flexible element extending lengthwise of the pencil under the outer layer



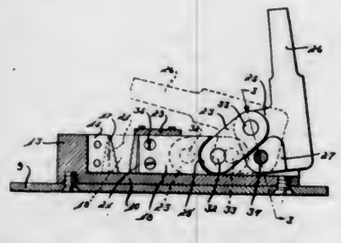
of the cover operable to free the outer ends of the aforesaid strips for removal as fresh portions of the marking material are needed.

1,756,954. SHELF BRACKET. THOMAS R. PAULING, Andrews, Ind. Filed Aug. 19, 1927. Serial No. 214,045. 2 Claims. (Cl. 248—18.)



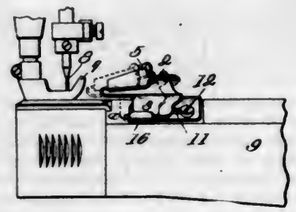
1. A shelf bracket formed of sheet metal having a central shelf engaging portion and rearwardly and outwardly extending top and bottom flange portions; the top flange being adapted to be attached to a support and the bottom flange resiliently spacing the shelf engaging portion from the support.

1,756,955. CUTTING TOOL. JOHN RIFE, Detroit, Mich. Filed Nov. 7, 1927. Serial No. 231,537. 2 Claims. (Cl. 164—57.)



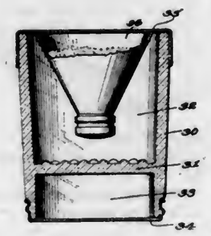
1. A cutting tool of the class described comprising: a base; a pair of guide plates integral with and projecting upwardly from opposite sides of said base, adjacent the rearward end thereof; an abutment block integral with and projecting upwardly from said base adjacent its forward end; a rearwardly extending plate on the rear side of said abutment block adjacent one edge thereof; a cutting element secured to the inner face of said rearwardly projecting plate and engaging at its forward edge said abutment block; a thrust member slidably mounted between said plates, the forward end thereof being cut away; a cooperating cutting element secured on said thrust member at said cut away portion, the rear edge thereof engaging the main body of said thrust member; a reduced portion on the rear end of said thrust member, said thrust member having shoulders at opposite sides thereof; a link pivotally connected at one end at opposite sides of said reduced portion; a lever rockingly mounted between said guide plates at the rear end thereof; a shoulder forming projection on opposite faces of said lever, said links being pivoted to said lever at their opposite ends and adapted for engaging said shoulder forming projections upon rocking movement of said lever in one direction, said links, upon said rocking movement, engaging the shoulders formed at opposite sides of said reduced portion.

1,756,956. FOLDER MOUNTING FOR SEWING MACHINES. CHARLES F. RUBEL, Chicago, Ill., assignor to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 26, 1927. Serial No. 235,893. 4 Claims. (Cl. 112—142.)



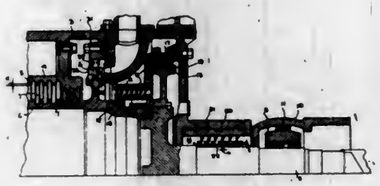
1. In a sewing machine, a folder having means for interfolding fabric sections, a mounting for said folder, means for securing the mounting to the sewing machine, and means for removably securing the folder to the mounting, said last-named means including inter-engaging parts formed integral with the folder and the mounting, said inter-engaging parts including an arm integral with the folder and a sleeve integral with the mounting adapted to receive said arm, said arm having a pivotal and a sliding engagement with said sleeve.

1,756,957. SHAVING MUG. EDWARD C. SASSER, Washington, D. C. Filed Aug. 4, 1928. Serial No. 297,472. 6 Claims. (Cl. 132—80.)



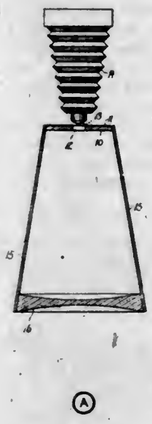
1. A shaving mug, a partitioned wall roughened on its upper surface and dividing the mug into two chambers, one of which is substantially air-tight whereby the air in the one chamber will be heated when a heating agent is applied to the partition wall and adapted to keep particles adhering to said partition wall in heated condition.

1,756,958. ELASTIC-FLUID TURBINE. HENRY F. SCHMIDT, Lansdowne, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Continuation of application Serial No. 362,773, filed Mar. 2, 1920. This application filed Oct. 3, 1928. Serial No. 310,123. 5 Claims. (Cl. 253—39.)



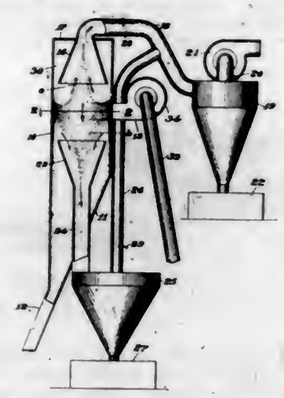
1. In an elastic fluid turbine, the combination of a casing, an axially movable spindle within the casing and carrying radially-extending blades whose outer ends are disposed in close proximity to a part carried by said casing, cooperating packing elements carried by said casing and said spindle and, in one axial position of the rotor relative to the casing, providing normal radial packing clearances less than those between the outer ends of said blades and the adjacent part of the casing and in another axial position of the spindle providing a clearance greater than that between the outer ends of said blades and the adjacent part of said casing.

1,756,959. POSE-REFLECTING SYSTEM FOR PHOTOGRAPHIC APPARATUS. LUTHER G. SIMJIAN, New Haven, Conn. Filed July 26, 1928. Serial No. 295,565. 3 Claims. (Cl. 88—1.)



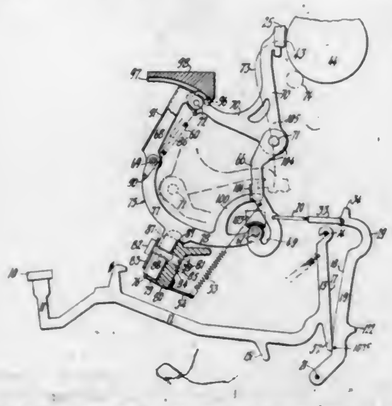
1. A pose-reflecting system for photographic apparatus comprising a pose-reflecting mirror; an image-reducing lens interposed between the said mirror and a poser; and a camera having its lens-system directed at the said image-reducing lens and arranged to photograph an image therefrom; whereby a poser may observe in the said mirror a reduced-scale reflection of the image of himself which the said camera will record from the said image-reducing lens, and whereby the lens-system of the said camera is so reduced in apparent size as to be rendered unobtrusive by the reducing action of the said image-reducing lens.

1,756,960. AIR CLASSIFIER. ALBERT H. STEBBINS, Los Angeles, Calif. Filed Mar. 21, 1928. Serial No. 263,365. 6 Claims. (Cl. 209—144.)



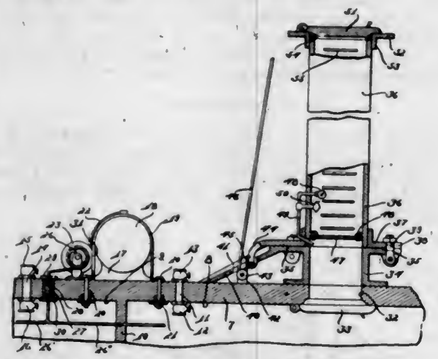
2. A classifier comprising in combination, a receptacle, means for delivering material laden air into the receptacle with a whirling movement to cause the heavier particles to move outward by centrifugal force against the walls of the receptacle and the lighter particles to move inward toward the central axis of the receptacle, a central exhaust pipe extending downwardly within the receptacle from the upper portion thereof and having its lower end open, a container mounted in the receptacle in spaced relation to the walls of said receptacle and below and in spaced relation to the end of said pipe, and means for exhausting air from the receptacle upwardly through said pipe so that the lighter particles within the air approaching the exhaust pipe will fall into said container as they settle out of the air.

1,756,961. TYPEWRITING MACHINE. BURNHAM C. STICKNEY, Hillside, N. J., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Filed Dec. 3, 1927. Serial No. 237,368. 37 Claims. (Cl. 197—24.)



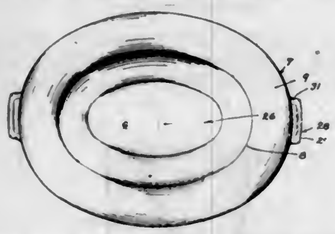
1. In a front-strike typewriting machine, the combination with a platen, of a system of type-keys, a system of rearwardly-extending key-levers whereon the keys are mounted, said key-levers in the form of elbows which at their rear portions turn upwardly and are pivoted at their upper portions, a system of pivoted sub-levers which extend up and down and against which the upwardly-extending arms of the key-levers swing edgewise, and a system of type-linkages to which the sub-levers are connected by means of links extending forwardly from the sub-levers to the type-linkages, the vertical arms of the key-levers being arranged to roll upon the sub-levers, each type-linkage including a rear drive-link connected by an adjustable connection to its sub-lever, and also including a forward upstanding guide-link, and also including a type-carrier pivoted upon said links and normally in folded cumbent position.

1,756,962. SUBMARINE RESCUE DEVICE. NICOLAS F. THOMMES, Detroit, Mich. Filed July 14, 1928. Serial No. 292,812. 3 Claims. (Cl. 114—16.5.)



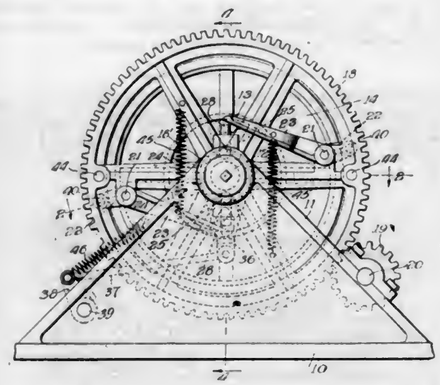
1. In a submarine rescue device of the class described adapted for use with a submarine boat having an upper deck, provided with an opening formed therein, comprising: a closure for said opening operable from the interior of said submarine; a cylindrical member projecting upwardly from the deck of said submarine and surrounding said opening; an inclined guide strip extending downwardly from the upper end of said cylindrical member into engagement with the upper surface of said deck at one side of said cylindrical member; a tower mountable on said cylindrical member; and a laterally projecting arm on the lower end of said tower having an angularly turned portion engageable in a slot formed in said guide strip.

1,756,963. REVERSIBLE SERVING DISH. LULU J. WARE, Hollywood, Calif. Filed Jan. 26, 1929. Serial No. 335,253. 2 Claims. (Cl. 65—15.)



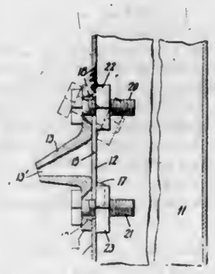
1. A dish comprising a bottom, a flange extending downwards from the periphery thereof to support the bottom in elevated position, the under side of said bottom being hollow, said flange curving outwards and upwards to define a depression encircling the bottom, and the outermost edge of said flange extending beyond the plane of said bottom to support the dish when inverted, webs extending across said depression dividing it into a plurality of receptacles, and a bead extending upwards from said bottom adjacent the edge thereof and separating the bottom from certain of said receptacles, said bead terminating between two adjacent webs to permit said bottom to drain into the receptacle therebetween, and said bottom having grooves therein leading into the drain receptacle.

1,756,964. CLUTCH-OPERATING MEANS. ALEXANDER H. WILSON, Oak Park, Ill., assignor to Thomas Elevator Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 18, 1927. Serial No. 234,180. 4 Claims. (Cl. 192—80.)



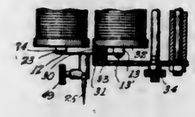
1. In a clutch operating means of the type described, the combination of a shaft, a driven member on said shaft formed with a circular head, a driving member formed with a hub mounted on said shaft adjacent to said head, a clutch band anchored at one end to said driving member and overlying the periphery of said head, a lever fulcrumed on said driving member with one arm thereof attached to the other end of said clutch band, a sliding cam in the hub of said driving member movable axially of said shaft, a radial thrust rod slidably mounted in said hub with its inner end engaged with said cam and its outer end engaged with the other arm of said lever, manually operable means for effecting the working movement of said cam, a thrust spring in said hub for effecting the return movement of said cam, and a spring for moving said lever to band releasing position.

1,756,965. NOZZLE CONSTRUCTION. ERICH R. ZADEMACH, Elizabeth, N. J. Filed July 27, 1927. Serial No. 208,799. 7 Claims. (Cl. 299—75.)



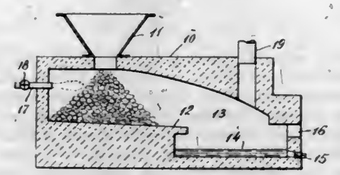
1. In combination, a chest including a wall having a circular aperture therein, a nozzle member having a flange fitted in sealing engagement with the outer face of the wall bordering the aperture, and having its outer face positioned by such engagement in substantial parallelism with the rear wall surface bordering the aperture, lugs carried by the nozzle member and extending rearwardly through the aperture, the nozzle member having holes through the flange thereof adjacent the lugs, and clamping couples each including a bolt passed through one of the holes and a nut threaded thereon at the opposite side of the flange from the head of the bolt, the facing surfaces of the bolt head and the nut being substantially parallel, each couple being tiltable in its hole to permit passing the portions of the couples to the rear of the nozzle through the aperture in the plate, whereby such portions may be projected through the aperture and then behind the rear surface of the supporting plate, the nozzle may be oriented, and the parts may be directly clamped together by tightening of the clamping couples.

1,756,966. ELECTROMAGNETIC PICK-UP. MILTON ALDEN, Springfield, Mass., assignor to The Alden Manufacturing Company, Brockton, Mass., a Corporation of Massachusetts. Filed Jan. 17, 1927. Serial No. 161,620. 6 Claims. (Cl. 179—100.41.)



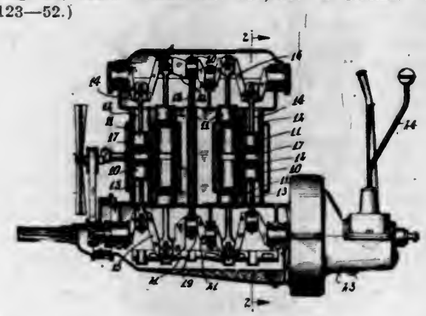
1. A double pole magnet having an armature pivotally supported by one of said poles normally out of engagement with the other pole and a stylus directly attached to the armature near its pivoted end and between the two poles.

1,756,967. METALLURGY OF METALS. HARRY H. ALEXANDER, Westfield, N. J. Filed July 21, 1926. Serial No. 123,886. 5 Claims. (Cl. 75—62.)



1. The method of refining a body of molten copper which comprises maintaining a molten protective cover consisting at least in part of soda glass having a melting point not higher than that of the copper over the copper bath, and introducing pulverized carbonaceous reducing material under pressure into the body of molten copper.

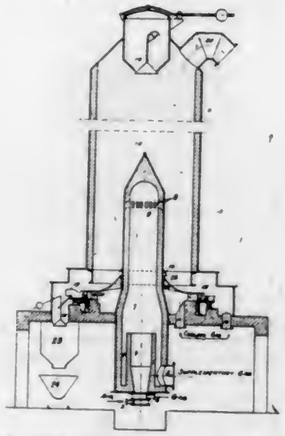
1,756,968. INTERNAL-COMBUSTION ENGINE. VICTOR E. A. BELANGER, Montreal, Quebec, Canada. Filed Aug. 24, 1926. Serial No. 131,139. 3 Claims. (Cl. 123—52.)



3. In an internal combustion engine, a plurality of vertical cylinders, oppositely disposed pistons within each cylinder, upper and lower rotatable crank shafts carrying

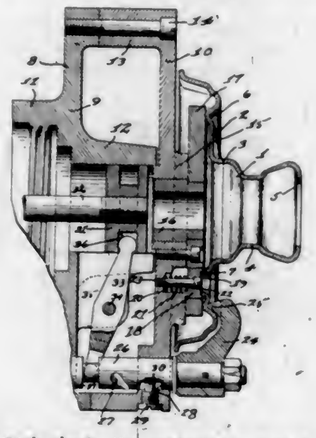
connecting rods connecting each of said pistons to one of said crank shafts, and a connecting rod centrally arranged in respect to said cylinders journaled at one end to the center of the crank portion on said upper crank shaft and at the other end to the center of a crank portion on said lower crank shaft, said connecting rod adapted to be disposed in inclined position when either of the said crank portions are in their uppermost positions.

1,756,969. COAL-CARBONIZING APPARATUS FOR THE EXTRACTION OF BITUMINOUS MATERIALS. KARL BERGFELD, Berlin, Germany. Filed Mar. 7, 1927, Serial No. 173,339, and in Germany Nov. 30, 1923. 3 Claims. (Cl. 202—99.)



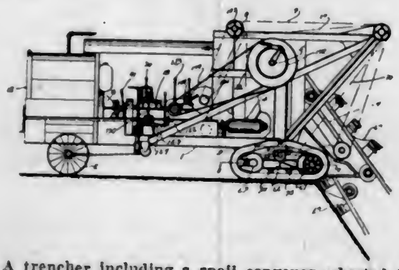
1. In a coal carbonizing apparatus for the distillation of bituminous materials; a vertical distillation chamber, an internal combustion furnace disposed axially of and beneath the said chamber, means for circulating cold supplementary gas around the walls of said internal combustion furnace; and a mixing chamber receiving the combustion and supplementary gas, said mixing chamber having a perforated hood extending up into the distillation chamber.

1,756,970. WORK CHUCK. WILLIAM N. BOOTH, Detroit, Mich., assignor to Kelsey-Hays Wheel Corporation, Detroit, Mich., a Corporation of New York. Filed May 23, 1927. Serial No. 193,692. 6 Claims. (Cl. 279—1.)



1. In a work chuck, the combination with a head, of means upon said head for clamping the work thereto, including a clamp adapted to swing from a position clearing the work to a position registering with the work and also adapted to move toward said head into clamping engagement with the work, a rod upon said head and carrying said clamp and provided with a cam groove having a portion inclined relative to its axis, a reciprocable member and a lever pivotally mounted upon said head for connecting said reciprocable member to said rod to longitudinally move the latter upon movement of the former.

1,756,971. TRENCHING MACHINE. ROBERT L. BROWN, Milwaukee, Wis., assignor to Harnischfeger Corporation, Milwaukee, Wis., a Corporation of Wisconsin. Filed July 8, 1927. Serial No. 204,225. 16 Claims. (Cl. 37—90.)



9. A trencher including a spoil conveyor adapted to be reversely driven and laterally shifted, a power plant, a change speed gear set of the selective type operatively connected to the power plant, a reversing clutch arrangement operatively connected to the change speed gear set, and selective means for reversely driving the conveyor and for reversely shifting the same from the reversing clutch arrangement.

11. A trencher including the usual instrumentalities adapted to be driven during the operation of the trencher, and a main machinery unit containing the gearing and shafting through which the instrumentalities are driven and having a single piece casting adapted to provide the support and an element of the enclosure for the gearing and shafting whereby to maintain the same in proper alinement and to insure rigidity and the elimination of vibration.

16. A trencher comprising a frame, traction means therefor, digging means carried by the frame, a power plant, high and low traction change speed gear sets of the selective type operatively connected to the power plant, releasable means for establishing a driving connection between said high traction gear set and said traction means or between said low traction gear set and said traction means whereby the traction means may be actuated with a variable speed and power ratios over a comparatively high speed range when traveling from place to place and may be actuated with variable speed and power ratios over a low speed range to impart feeding movement to the trencher during digging, and means operated from the high traction gear set for receiving a variable speed drive therefrom and connected to the digging means for actuating the same at variable speeds.

1,756,972. WIRE STRAND. EDWARD A. CONNER, Stratford, Conn., assignor to American Chain Company, Inc., a Corporation of New York. Filed Mar. 12, 1926. Serial No. 94,353. 3 Claims. (Cl. 244—31.)



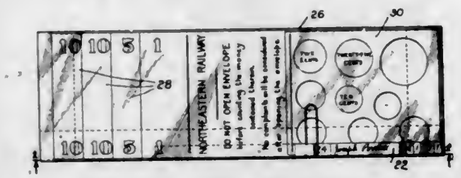
1. A structural element of the class described comprising a strand formed of a plurality of wires laid together and having a periphery of streamline contour.

1,756,973. THREADING WIRE STRANDS. EDWARD A. CONNER, Stratford, Conn., assignor to American Chain Company, Inc., a Corporation of New York. Filed Mar. 12, 1926. Serial No. 94,354. 4 Claims. (Cl. 29—148.)



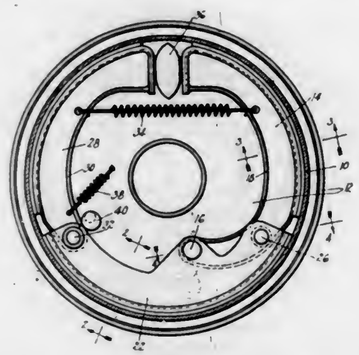
1. In the preparation of wire strand for attachment, the step which comprises working the periphery of the strand to form a thread upon the component wires thereof, said component wires retaining all of the material possessed prior to working.

1,756,974. MONEY PACKAGE. DANIEL E. DE MARQUEZ, Medellin, Colombia, assignor to Robert Wesselhoeft, Barranquilla, Colombia, South America. Filed Nov. 9, 1926. Serial No. 147,242. 5 Claims. (Cl. 206—46.)



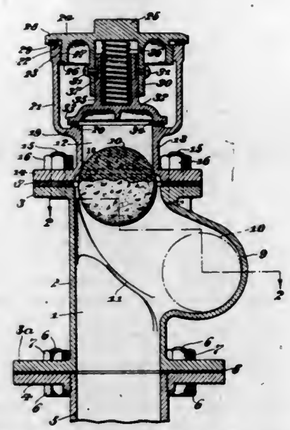
1. A sealed money envelope having transparent portions and containing money bills in overlapping arrangement with the value indications of each and all of the bills displayed through the transparent portions of the envelope to permit visual determination of the total amount of paper money within the envelope to be made while the envelope remains sealed, said envelope containing also a coin card having coin-receiving pockets exposed to the transparent portions of said envelope to permit visual determination of the total value of all of the coins contained in the coin card in the package to be made while the envelope remains sealed.

1,756,975. BRAKE. ADIEL Y. DODGE, South Bend, Ind., assignor to Bendix Brake Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 4, 1926. Serial No. 85,945. 16 Claims. (Cl. 188—78.)



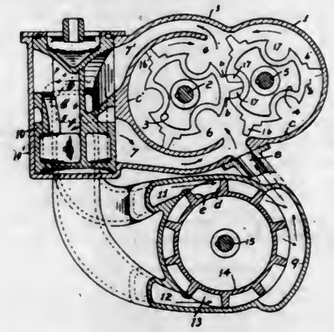
16. A brake comprising, in combination, a drum, a pair of brake shoes arranged therein with overlapping ends engaging radially and circumferentially separated torque taking members, one of which is a fixed anchor and the other a pivot connecting the two shoes, said anchor being located substantially nearer the periphery of the drum than the pivot.

1,756,976. CLOSURE APPARATUS. CARL H. EHLERS, Penfield, Pa., assignor to The Atlantic Refining Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Aug. 10, 1925. Serial No. 49,477. 6 Claims. (Cl. 220—86.)



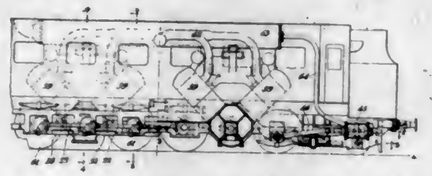
1. In apparatus for dispensing liquid under pressure, valve structure comprising a conduit communicating with a liquid supply, a valve housing secured to said conduit and communicating therewith, liquid actuated valve means for closing said conduit in a region adjacent said housing, and additional closure means for closing said housing in a plurality of regions spaced from each other.

1,756,977. FLUID DRIVE FOR AUTOMOBILES. KANUTE A. ENLIND, Jamaica, N. Y. Filed June 6, 1925. Serial No. 35,338. 4 Claims. (Cl. 103—126.)



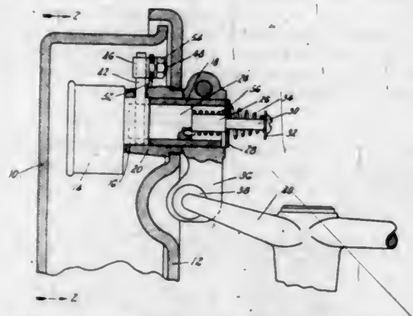
1. In a pump for a transmission mechanism, a pair of intermeshing impeller members, each member having a series of peripheral, radial, wedge-shaped teeth substantially of the width of such impeller, each tooth having an abrupt shoulder adjacent the base thereof and extending the entire length of said base and each impeller having a series of peripheral circular recesses adapted to coact with the teeth on the opposing intermeshed impeller during the rotation thereof, said recesses being each of a width at the mouth thereof corresponding to the extreme distance between the upper edges of two opposing shoulders or any one of said teeth and said recesses described from a center in the common radius which includes the centers of the two impeller members when an impeller tooth is in a position that its axis coincides with such radius, whereby said impellers when mounted so that their peripheries are in close close proximity to each other will have two points of sealing contact during the entire period their respective impeller teeth are passing through a recess in an opposing impeller.

1,756,978. DRIVING GEAR FOR LOCOMOTIVES. OTTO GÜNTHER, Esslingen-on-the-Neckar, Germany, assignor to Albert T. Otto & Sons, New York, N. Y., a Corporation of New York. Filed Oct. 16, 1926, Serial No. 142,031, and in Germany Oct. 28, 1925. 9 Claims. (Cl. 105—62.)



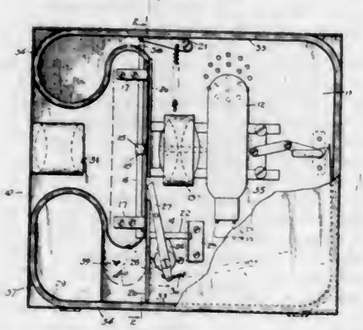
1. A locomotive driving gear, including a motor crank shaft having end shaft sections and an intermediate crank section, said shaft sections having axial bores, separate driven shafts journaled in said bores, and separate friction clutches for connecting said shaft sections and said driven shafts.

1,756,979. BRAKE-APPLYING MEANS. GEORGE H. HUNT, South Bend, Ind., assignor to Bendix Brake Company, Chicago, Ill., a Corporation of Illinois. Filed July 16, 1927. Serial No. 206,162. 12 Claims. (Cl. 188—196.)



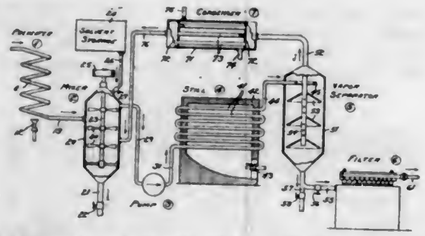
1. Brake-applying means comprising, in combination, a hollow shaft arranged to be operated to apply the brake, an applying device operated by the hollow shaft and having a part extending into the hollow shaft, and means acting on said part for automatically causing relative turning movement of said device angularly with respect to the hollow shaft to compensate for wear of the brake.

1,756,980. ADVERTISING DEVICE. HENRY W. JOY, New York, N. Y. Filed June 22, 1926. Serial No. 117,657. 4 Claims. (Cl. 88—28.)



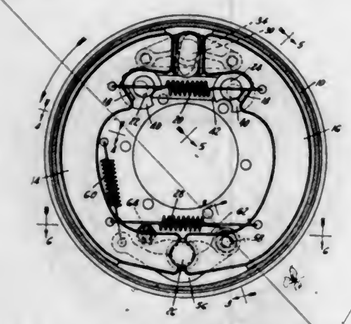
1. In a picture projection apparatus, mechanism for intermittently transmitting a continuous loop of picture bearing film so that successive parts of the film will be exposed to the lens, a casing completely enclosing the mechanism, and a substantially continuous enclosed film guide comprising a metal tunnel adapted to maintain the film in unwound closely protected condition throughout its travel in the apparatus, said tunnel being provided with a pocket adjacent one side of the lens to accommodate a loop in the film, and a removable closure for an opening in the tunnel projecting before the lens.

1,756,981. METHOD OF ELIMINATING COLLOIDAL ASPHALTENES AND CARBENES FROM FUEL OIL. ALPHONSUS JURRISSEN, Martinez, Calif., assignor to Simplex Refining Company, a Corporation of California. Filed Jan. 24, 1925. Serial No. 4,537. 6 Claims. (Cl. 196—13.)



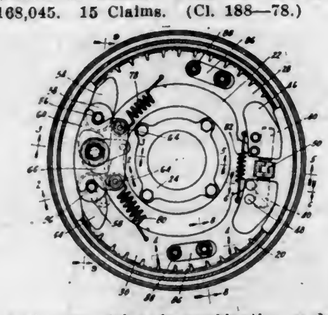
1. A process of treating cracking residues of petroleum oils, containing particles of substantially free carbon, which tend to adsorb liquid hydrocarbons in the nature of colloidal asphaltenes and carbenes, and to settle out from the residue in the form of sludge, for the purpose of reducing the quantity of material so adsorbed or liable to be adsorbed, comprising: adding to the cracking residue a sufficient quantity of a lighter petroleum distillate capable of dissolving asphaltenes and carbenes, mixing both materials and keeping the mixture at an elevated temperature, not over the boiling point of the lighter petroleum distillate, for a sufficient time to remove most of the asphaltenes and carbenes from the free carbon, dissolving them in the balance of the cracking residue, and removing the mixture to storage.

1,756,982. BRAKE. LUDGER E. LA BRIE, South Bend, Ind., assignor to Bendix Brake Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 29, 1926. Serial No. 151,375. 25 Claims. (Cl. 188—78.)



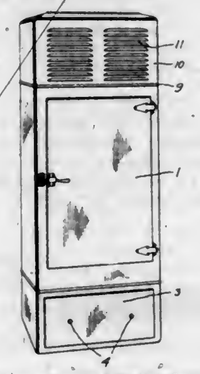
1. A brake comprising, in combination, a drum, a friction device engageable with the drum and anchoring at one end when the drum is turning in one direction and at the other end when the drum is turning in the other direction and having a positioning part midway between said ends, a positioning bar inside said part and having a projecting portion engageable with the positioning part and which is cut away on opposite sides of said portion, and means yieldingly urging said part radially inward against the projecting portion of the bar.

1,756,983. BRAKE. LUDGER E. LA BRIE, South Bend, Ind., assignor to Bendix Brake Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 14, 1927. Serial No. 168,045. 15 Claims. (Cl. 188—78.)



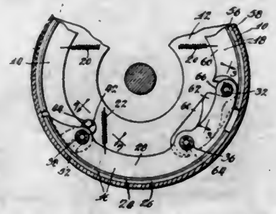
4. A brake comprising, in combination, a drum, a pair of pivotally-connected friction devices engageable with the drum, and a frictionally-clamped positioning device for each friction device.

1,756,984. REFRIGERATOR CABINET. GEORGE W. MASON, Detroit, Mich., assignor to Copeland Products Incorporated, Detroit, Mich., a Corporation of Michigan. Filed July 19, 1926. Serial No. 123,267. 2 Claims. (Cl. 45—71.)



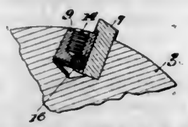
1. In combination, a compartment for storage provided with an open top and a ventilated side wall, horizontally extending supports secured adjacent the top of said compartment, and a refrigerator cabinet having a heat insulated imperforate bottom received on said supports.

1,756,985. BRAKE SHOE. MONTGOMERY W. MCCONKEY, South Bend, Ind., assignor to Bendix Brake Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 11, 1927. Serial No. 182,684. 12 Claims. (Cl. 188—78.)



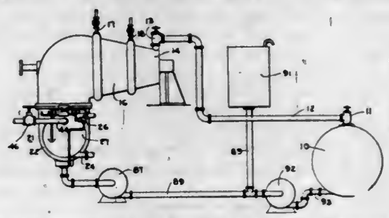
1. A brake shoe comprising a stiffening web extending at one end of the shoe beyond the friction face as a projecting arm, and reinforcing means for said arm from substantially the end of the arm back past the end of the friction face, said arm being formed with a radially-arranged open slot for direct engagement with a pivot.

1,756,986. INSERTED-BLADE CUTTER. FRANK P. MILLER, Meadville, Pa. Filed May 16, 1925. Serial No. 30,783. 7 Claims. (Cl. 29—105.)



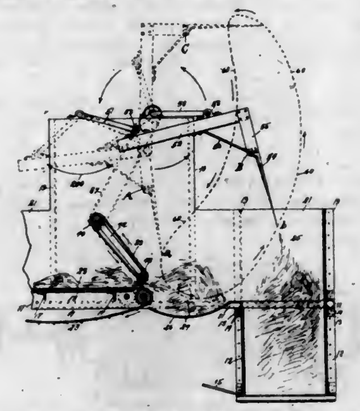
1. A cutter comprising a body, a blade and a block carried thereby, a pin engaged with the blade, and a screw having threaded engagement with the block and engaging and forcing the pin into binding engagement with the blade and simultaneously forcing the block outwardly, there being means whereby the block is moved into flat and uniform pressure engagement with the blade to brace the blade and hold the same in adjusted position.

1,756,987. HEAT-BALANCE CONDENSING PLANT. DAVID W. R. MORGAN, Swarthmore, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 30, 1927. Serial No. 179,625. 15 Claims. (Cl. 257—40.)



1. A condensing plant comprising a shell structure having an inlet for gaseous media to be condensed, a tube nest within the shell structure and forming a surface condensing element, means for conveying extraneous cooling water through the tube nest, means for spraying make-up water to be heated into a portion of the shell structure which is separate from the portion containing the surface condensing element and which is in the path of the gaseous media entering the shell structure, said separated portion of the shell structure forming a jet condensing element, and means for commingling all of the condensate formed by the surface and jet condensing elements and the heated make-up water derived from the jet condensing element.

1,756,988. FEEDER FOR BALING PRESSES. FLOWEL NICHOLS, Chino, Calif. Filed Apr. 12, 1927. Serial No. 183,089. 4 Claims. (Cl. 100—25.)



1. A feeder for a baling press, including a conveyor driven at an intermediate speed to continually move material toward a bale press, a fork, means for mounting and

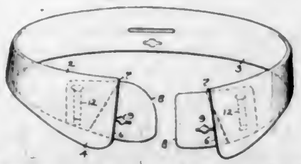
moving said fork at high speed in an irregular ellipse toward and from the baling press for intermittently separating and delivering a charge of material from said conveyor to said baling press, and means actuated by the baling press for operating said conveyor and fork moving means.

1,756,989. THICK-BUTT SHINGLE STRIP. FREDERICK C. OVERBURY, Hillsdale, N. J., assignor, by mesne assignments, to The Patent and Licensing Corporation, Boston, Mass., a Corporation of Massachusetts. Filed Apr. 10, 1926. Serial No. 101,090. 1 Claim. (Cl. 108—7.)



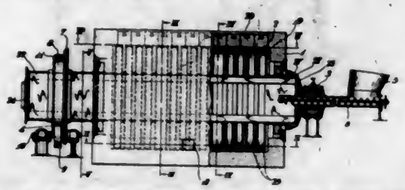
A strip shingle comprising a base of felted sheet material having tab-defining slots, a coating of waterproof compound of substantially uniform thickness covering the entire front surface of the strip, a coating of waterproofing compound of tapering thickness covering the butt portion only of the rear face of the strip, said rear face coating being thickest at the butt edge of the strip, a waterproofing coat covering the butt edge and the slot edges and uniting with the front and rear coatings to envelop completely the butt portion of the shingle, and a layer of grit adhering to and covering the coating on said front and rear faces and edges.

1,756,990. WATERPROOF COLLAR. ERNEST P. PARSONS, Cleveland, Ohio; Wilbur M. Baldwin, administrator of said Ernest P. Parsons, deceased, assignor to The Parsons & Parsons Company, Cleveland, Ohio. Filed Apr. 12, 1926. Serial No. 101,276. 2 Claims. (Cl. 2—135.)



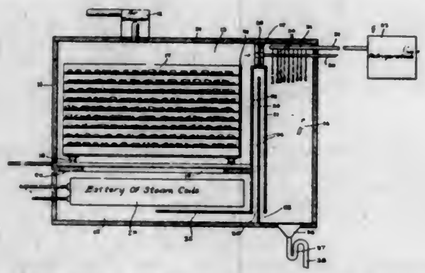
1. A waterproof collar, comprising a collar band having horizontal slots vertically arranged above each other, button-hole tabs having similar slots adapted to register with the slots in the band and narrow flexible locking strips adapted to extend through the registering slots in said parts, each strip having an enlargement at one end adapted to prevent release of the strip in one direction and said strip being extended through said registering slots to openly expose its middle portion at the inside wall of said collar band.

1,756,991. PREHEATER. FRANZ PUENING, O'Hara Township, Allegheny County, Pa. Filed June 9, 1927. Serial No. 197,544. 4 Claims. (Cl. 34—6.)



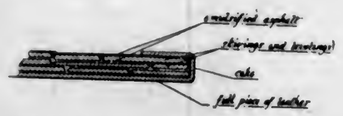
1. Heating apparatus comprising a central hollow girder structure, a hollow container surrounding said girder, spaced therefrom, and supported thereby and comprising a plurality of spaced hollow disks, and means for heating said container.

1,756,992. PROCESS OF DRYING MACARONI AND OTHER PRODUCTS MADE FROM A PASTE OF FLOUR AND WATER. ARTHUR W. QUIGGLE, Minneapolis, Minn., assignor to The Creamette Company, Minneapolis, Minn., a Corporation. Filed Dec. 7, 1925. Serial No. 73,580. 5 Claims. (Cl. 34—24.)



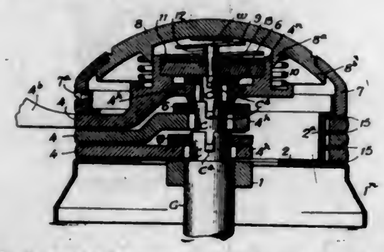
1. The process of drying macaroni and other paste products which consists in positioning the macaroni within a closed chamber, reducing the pressure of the air content of said chamber by exhaustion of a portion of the air therefrom, continuously circulating the residual air in the chamber so as to cause it to pass through the macaroni, and when the macaroni is sufficiently dried cooling the same in the closed chamber without circulation of air.

1,756,993. PROCESS OF MAKING PANCAKE OR BUILT-UP SHEET LEATHER. CHESTER E. RAHR, Brookline, Mass., assignor to The Flintkote Company, Boston, Mass., a Corporation of Massachusetts. Filed May 29, 1925. Serial No. 33,827. 5 Claims. (Cl. 154—40.)



1. A process of making built-up or "pan-cake leather" from thin leather, which comprises applying a coating of a dispersion of a thermoplastic binder in water to the surfaces of the thin leather and building up a plurality of layers of such coated leather tempered and softened by the water composed of said dispersion.

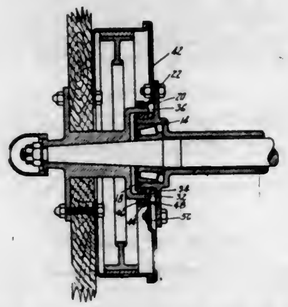
1,756,994. STEERING-GEAR-CONTROL LEVER ASSEMBLY. DAVID E. ROSS, La Fayette, Ind., assignor to Ross Gear & Tool Company, La Fayette, Ind., a Corporation of Indiana. Filed Dec. 27, 1926. Serial No. 157,158. 8 Claims. (Cl. 74—39.)



7. In a control assembly a control tube provided with projecting lugs and slots above the lugs; a control lever

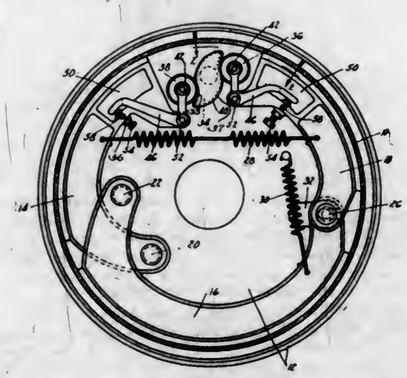
arm having a head provided with a bore to receive the upper end of the tube; and with slots in the bore corresponding in position with the lugs on the tube and with recesses in its upper face corresponding in position with the lugs on the tube and in which recesses the lugs are adapted to be seated; a retainer adapted to be secured to the head to retain the lugs in position in the recesses and provided with lugs engaging the slots in the tube above the lugs; and means for clamping the retainer to the head.

1,756,995. LUBRICANT GUARD FOR BRAKES. ROY S. SANFORD and OTTO B. CLARK, South Bend, Ind., assignors to Bendix Brake Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 8, 1926. Serial No. 79,954. 2 Claims. (Cl. 286—7.)



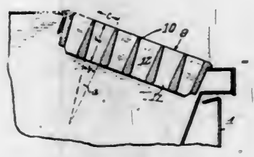
1. A drive wheel having a brake, and driving and supporting means for the wheel comprising, in combination, an axle housing having a radial flange a short distance from its end, a backing plate for the brake secured to said flange, the plate and flange being constructed and arranged to provide a passage between them below the axle from the side of the plate next the wheel to the side opposite the wheel, a live axle in the housing, a wheel hub on the end of the live axle having a cup-shaped flange encircling the end of the housing to catch oil dripping from the housing and direct it to said passage, a sealing gasket between the interior of the cup-shaped flange and the end of the housing beyond said radial flange, and a sealing gasket between the outer surface of the cup-shaped flange and the backing plate, the passage for the oil being between the two gaskets.

1,756,996. BRAKE. ROY S. SANFORD, South Bend, Ind., assignor to Bendix Brake Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 25, 1926. Serial No. 131,350. 13 Claims. (Cl. 188—78.)



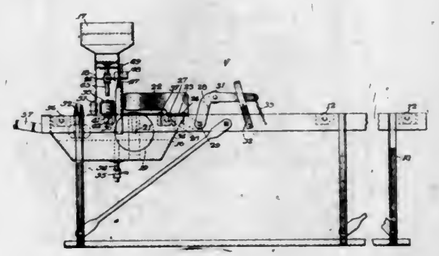
1. A brake comprising, in combination, a drum, a friction device engageable with the drum, a brake-applying device adjacent the ends of the friction device, rollers carried by one of said devices and engaging the other, and a device carried entirely by each of said ends for bodily shifting the corresponding roller to adjust for wear of the friction device.

1,756,997. HEATING AND VENTILATING UNIT. WILFRED SHURTLEFF, Moline, Ill., assignor to The Herman Nelson Corporation, Moline, Ill., a Corporation of Illinois. Filed Aug. 12, 1926. Serial No. 128,761. 1 Claim. (Cl. 98—39.)



As an article of manufacture, a discharge grille adapted to occupy an elongated discharge opening of a ventilating unit containing means for directing air therethrough, said grille having a plurality of orifices of rectangular outline defined by louvers extending longitudinally and transversely of the grille and of the discharge opening, each of the rectangular walls defining each of said orifices being flared away from each other from the entrance end of each orifice to the discharge end thereof at angles of at least 7½ degrees, thereby increasing the velocity of air issuing from said orifices.

1,756,998. PAINTING APPARATUS. PAUL P. WALKER, Downers Grove, Ill., assignor to Chicago, Burlington & Quincy Railroad Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 5, 1927. Serial No. 181,216. 5 Claims. (Cl. 91—20.)

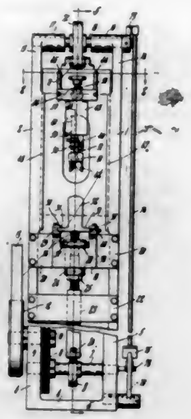


1. In a painting machine an upper paint reservoir, a lower paint reservoir, mechanism for guiding an article to be painted between said reservoirs, a rotary brush for removing paint from the lower reservoir and applying it to a portion of the article, a pair of side rollers adapted to apply paint to other portions of the article, and means for supplying paint to the side rollers from the upper reservoir only when the article is passing therethrough.

1,756,999. HEEL-NAILING MACHINE. WILLIAM J. YOUNG, Lynn, Mass., assignor to W. J. Young Machinery Company, Lynn, Mass., a Corporation of Massachusetts. Filed Mar. 10, 1927. Serial No. 174,145. 4 Claims. (Cl. 1—32.)

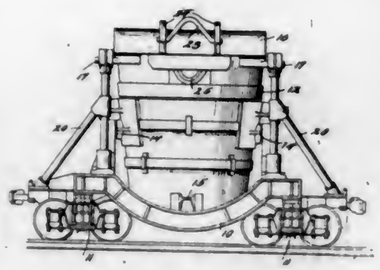
1. A machine for attaching heels to shoes comprising nail driving mechanism, a rest for sustaining a heel against the force applied by said nail driving mechanism, a slide carrying said rest and movable to place the rest in and

out of its sustaining position, a cam for placing and holding the slide and rest in said sustaining position, and



operator-actuated means for so moving said cam, the cam having means for transmitting to the machine structure substantially all of the reaction of the rest.

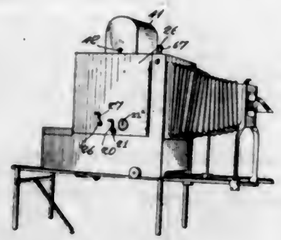
1,757,000. HOT-METAL CAR. CARL P. ASTROM, East Orange, N. J., assignor to M. H. Treadwell Company, Inc., New York, N. Y., a Corporation of New York. Original application filed Mar. 8, 1928, Serial No. 260,141. Divided and this application filed Jan. 25, 1929. Serial No. 335,012. 13 Claims. (Cl. 22—81.)



1. The combination with the wheeled frame of a hot metal car, of vertical supporting members rigidly mounted thereon, a canopy supported on said members, a ladle tiltably supported on the frame beneath the canopy, the canopy normally covering the charging and discharging opening of the ladle, the vertical supporting members being provided with open bearing supports for the reception of portions of the canopy whereby the canopy may be readily removed.

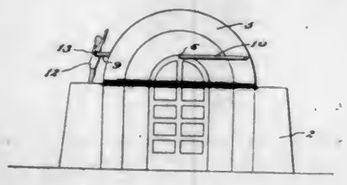
1,757,001. PHOTOGRAPHIC APPARATUS. GEORGE C. BEIDLER, Rochester, N. Y. Filed Apr. 4, 1924. Serial No. 704,275. 11 Claims. (Cl. 95—34.)

1. In a camera having an exposing chamber and light admitting means, a film holder rotatively mounted in the camera in position to expose the sides of the film successively to light, means for retaining the film holder in its adjusted positions, film drawing means and film cutting means carried by the holder, manually operated means



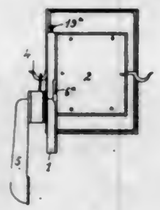
externally of the camera connected to actuate the film drawing means, and manually operated means externally of the camera operative to actuate the film cutting means.

1,757,002. TOY. ROY H. BROWN, Chester, Ill. Filed Apr. 26, 1929. Serial No. 358,311. 5 Claims. (Cl. 46—40.)



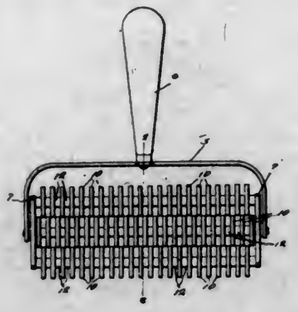
1. A toy comprising a tank, a shaft rotatably mounted and extending across said tank, an arm extending from said shaft and having a head at its free end, a figure pivotally carried by said head and limited in its pivotal movement by engagement with a portion of the head, said figure having movement in a circular path over and through the tank when the shaft is rotated, and means to rotate said shaft.

1,757,003. AUTOMATIC COIN-CONTROLLED TELEPHONE APPARATUS. CHARLES AMÉDÉE CAMBAY, Paris, France. Filed Oct. 27, 1927, Serial No. 229,071, and in France Nov. 4, 1926. 5 Claims. (Cl. 194—49.)



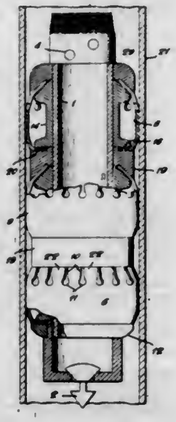
1. In a pay attachment for telephones having a receiver supporting hook; a coin chute, a lever having one end projecting into said chute and operated by a coin, a pivoted, spring-retracted locking bolt for engaging said hook and held and released by said lever, a pivoted temporary coin receiver in the chute below the aforesaid lever, two actuating pins on the receiver, a part for connection to and movable with the hook, means on said part to engage one of the pins and tilt the coin receiver in one direction, and timing means operated to tilt said receiver in the opposite direction after the hook has been raised, and means on said part to return the locking bolt to locking position when the hook is lowered.

1,757,004. MASSAGING APPARATUS. WILLIAM H. CHAPIN, Atlantic City, N. J. Filed Nov. 26, 1928. Serial No. 322,041. 4 Claims. (Cl. 128—57.)



1. A massaging apparatus of the class described including a bail, a frame rockable in the bail including a pair of bars and three shafts journaled transversely between the bars, the center shaft being journaled in the ends of the bail for pivotally mounting the frame therein, a plurality of disks, on each shaft.

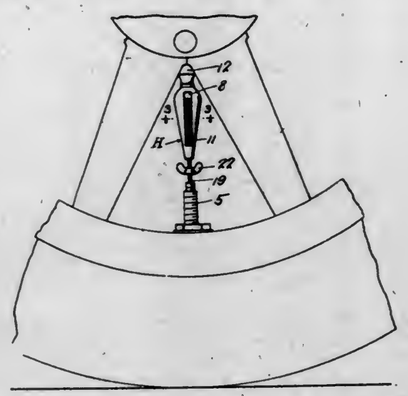
1,757,005. HEAVY-DUTY SWAB. GEORGE CHRISTENSON, North Plainfield, N. J., assignor to Johns-Manville Corporation, New York, N. Y., a Corporation of New York. Filed Apr. 18, 1928. Serial No. 270,901. 8 Claims. (Cl. 74—109.)



1. In a swab, a central support, a cup formed of flexible sheet material, means upon the support securing the upper and lower portions of the cup wall to the support, the wall between said portions being spaced from the support, and openings in said cup wall near the upper portion thereof, said openings communicating with the space provided between the same and the support, and being arranged to admit liquid to the space between the cup wall and support, thereby flexing outwardly the portion of the cup wall below said openings.

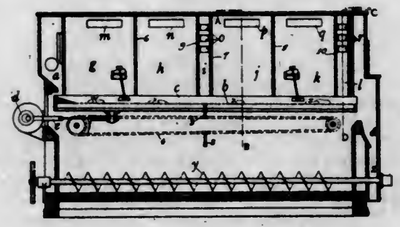
1,757,006. VALVE TOOL. FRANKLIN M. DANIELS, Salina, Kans. Filed Dec. 20, 1928. Serial No. 327,380. 2 Claims. (Cl. 81—3.)

1. A valve tool of the class described, comprising a handle adapted for disposition within the spokes of a wheel, a shank having one end threaded into the handle, and the other end of said shank being of non-circular cross section forming edges to grip a valve plug, said other end of the shank merging into a point to admit the same within the opening of the valve plug, heads swivelly mounted upon the handle at the end remote from the shank



and adapted to be received in the adjacent spokes, and a wing nut threadedly engaged on the shank adjacent the pointed end, whereby the shank may be rotated to unthread the plug from the valve casing.

1,757,007. MACHINE FOR PURIFYING CEREAL PRODUCTS OR REMOVING BRANNY MATERIAL THEREFROM. HUMPHREY JOHN DENHAM, Manchester, England, assignor to Henry Simon Limited, Manchester, England, a British Company. Filed Jan. 21, 1927, Serial No. 162,640, and in Great Britain Feb. 1, 1926. 1 Claim. (Cl. 209—29.)

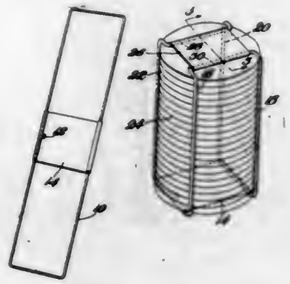


In machines for purifying cereal products by aspiration, in combination, a continuous longitudinally reciprocatory sieve comprising a plurality of sections of different mesh, a casing enclosing a space above said sieve, a longitudinal series of transverse divisions dividing said casing into as many compartments as there are different mesh sections of sieve, a division wall across some of said compartments transverse to the direction of reciprocation dividing said compartments into relatively large and small divisions, and independent valves upon each compartment and each division of a compartment controlling the aspirating action in each compartment to give a strong aspiration in the small divisions and a less strong aspiration in the large divisions and compartments, whereby tail aspiration at the end of the sieve is obviated and the efficiency of separation increased.

1,757,008. COIN HOLDER. RALPH N. DOBLE, Bayside, N. Y. Filed July 21, 1926. Serial No. 123,973. 3 Claims. (Cl. 133—9.)

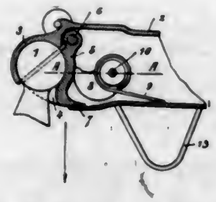
2. A coin holder for a stack of coins comprising a single piece of wire bent to form two frames of substantially U-shape spaced apart and arranged in substantially par-

allel planes, each frame having a bottom member and two side members, the upper portions of the side members of said frames extending across the top of the stack of coins in a direction at substantially right angles to the



plane of the frames, a plate permanently connecting the bottom members of said frames and a locking plate pivotally attached to one of said upper portions and having a loop adapted to releasably engage the upper portion of the opposite frame to secure the coin stack in said holder.

1,757,009. COUPLING. JULIEN DUMOND, St.-Julien-Du-Sault, France. Filed Nov. 15, 1928, Serial No. 319,651, and in France Nov. 28, 1927. 3 Claims. (Cl. 280—33.15.)



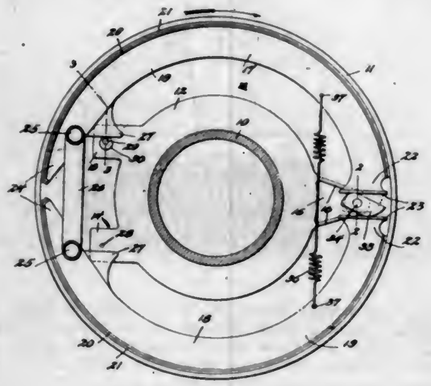
1. A coupling including an element formed with a ball terminal, a cooperating element formed as a hollow fitting and provided with an opening for the entrance of the ball terminal and with a portion rigid with the fitting to partly embrace the ball terminal, a movable section mounted wholly within the fitting and formed to partly embrace the ball terminal, a spring-operated cam mounted within the fitting to hold the movable section in operative relation, and means operative from beyond the fitting for moving the cam to inoperative position.

1,757,010. SHEET MATERIAL AND METHOD OF MAKING. ALBERT E. H. FAIR, Belmont, Mass., assignor to Arthur D. Little, Incorporated, Cambridge, Mass., a Corporation of Massachusetts. Filed July 1, 1929. Serial No. 375,344. 14 Claims. (Cl. 92—3.)

1. Method of making dielectric sheet material for condensers and the like, comprising as steps preparing a high alpha cellulose wood pulp and a sulphate pulp, mixing said pulps, and forming the resulting mixture into a sheet of paper.

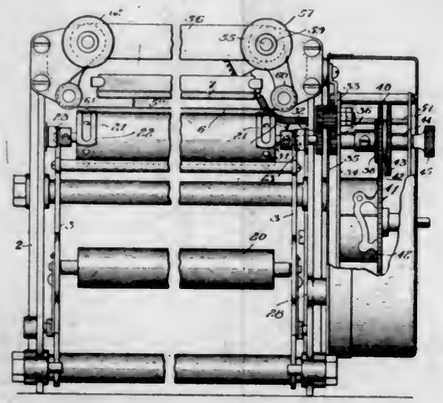
1,757,011. VEHICLE BRAKE. EDWIN B. FLANIGAN, Wilkes-Barre, Pa., assignor to E. B. Flanigan, Incorporated, Wilkes-Barre, Pa., a Corporation of Pennsylvania. Filed Feb. 16, 1926. Serial No. 88,634. 2 Claims. (Cl. 188—78.)

1. In a vehicle brake, in combination, a rotatable brake drum, a relatively stationary brake spider, a pair of oppositely disposed identical brake members within said drum, said members being spaced apart at their ends and arranged one above and one below the horizontal axis of said drum, a free link pivotally connecting a pair of adjacent ends of said members, an extension on said spider toward the opposite ends of said brake members, combined operating and stop means carried by said extension, said extension engaging the sides of said members,



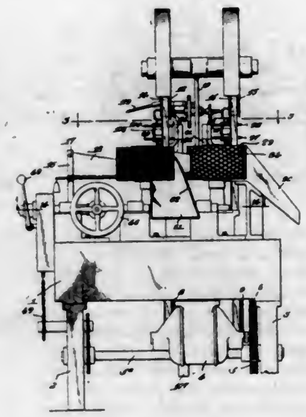
the opposite side of said spider having a pair of ears symmetrically arranged in respect to said horizontal axis and each engaging the side of one of said members, adjustable support means adapted to be secured to either ear to support the link ends of said members and a spring between the opposite ends of said members to support the lower one.

1,757,012. RECORDING MECHANISM. EDWARD B. FOOTE, Rochester, N. Y., assignor to Taylor Instrument Companies, Rochester, N. Y., a Corporation of New York. Filed July 23, 1923. Serial No. 653,081. 8 Claims. (Cl. 234—11.)



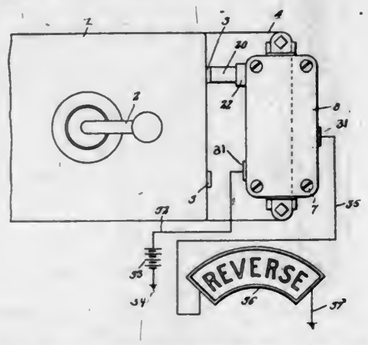
1. In a recording mechanism having a main frame, an auxiliary frame movably mounted thereon, a movable support for a record sheet on the auxiliary frame, a pointer movable in a plane spaced from said support, a recording element beneath the pointer and adjacent the record support, a rock shaft, and means on the rock shaft for moving the pointer into engagement with the recording element to move it into position to make an impression on a sheet carried by the support, an arm on the rock shaft, a continuously driven device engaged by the arm for rocking the shaft, and means controlled by the auxiliary frame for moving the arm out of engagement with said continuously driven device.

1,757,013. FISH-FILLETING MACHINE. ERNEST A. GALLISON, Watertown, Mass., assignor, by mesne assignments, to Bay State Fishing Company, Boston, Mass., a Corporation of Massachusetts. Filed Jan. 25, 1928. Serial No. 249,259. 19 Claims. (Cl. 17—4.)



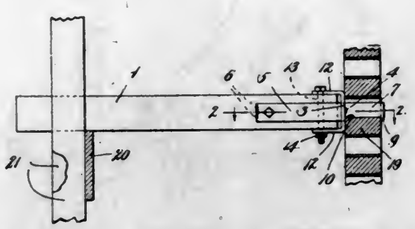
1. Apparatus of the class described, comprising means for successively removing a fillet from each side of a fish, and means for automatically delivering the two fillets and the median slice at different points.

1,757,014. CONTROL SWITCH FOR DIRECTION SIGNALS. NICHOLAS GREGORIEFF, Scotia, Calif. Filed Nov. 15, 1926. Serial No. 148,502. 1 Claim. (Cl. 200—59.)



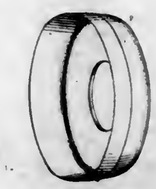
A circuit closer, comprising a casing, an insulating block mounted in said casing, a stationary contact member mounted on one end portion of said insulating block and provided with a beveled edge, a switch lever, a supporting block pivotally supporting one end of the switch member and secured to the opposite end portion of said insulating block, said stationary contact and said supporting block having terminals providing circuit wire attaching means, said switch member being arranged with its free end engageable with the stationary contact and adapted to ride upon the beveled edge thereof, a plunger slidable in the casing and operable outwardly thereof, said plunger being composed of inner and outer sections, an insulation coupling for said sections, a lateral projection on said inner section, means pivotally connecting said projection to the free end of the switch lever for operating said lever by the movement of the plunger and resilient means mounted on said insulating block engaging the lever for yieldably maintaining the lever out of engagement with said stationary contact with the plunger projected outwardly of the casing.

1,757,015. PUTLOG. ALLAN R. KINGSTON, Somerville, Mass. Filed Mar. 10, 1927. Serial No. 174,186. 9 Claims. (Cl. 304—39.)



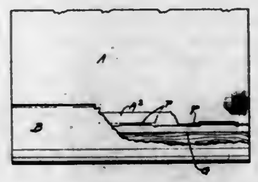
8. A putlog anchor attachment comprising a metal wall-engaging member adapted to be inserted between two bricks of a wall and means for attaching said member to a putlog comprising a strap with opposite portions that extend parallel with one another and engage opposite sides of the putlog and a strap extending parallel with said portions and lying between them that engages another side of the putlog, said straps being attached to said wall-engaging member and having means for attachment to the putlog.

1,757,016. PISTON. JESSE D. LANGDON, Los Angeles, Calif. Filed Sept. 11, 1928. Serial No. 305,150. 1 Claim. (Cl. 74—109.)



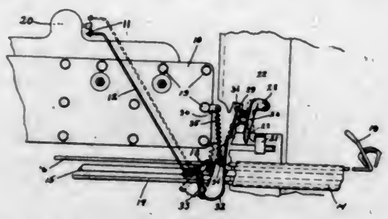
A piston comprising a sheet metal cup having a rim wherein the metal is folded by compression, and said rim being machined off across and lengthwise said folds to produce splits with the split portions adapted to interlap when the piston is compressed into a cylinder.

1,757,017. SHADE SLAT. STEPHEN E. MATOVITZ, St. Paul, Minn. Filed Aug. 1, 1928. Serial No. 296,697. 1 Claim. (Cl. 156—31.)



A shade slat for the movable free end of a window shade, said slat comprising an elongated bar provided with a longitudinal slit throughout its length and said slit being widest at its bottom and tapered to a narrow opening at the exterior of the slat, and means for retaining said end part of the shade in said slit, said means consisting of a flap formed by folding the free edge of said shade, and a number of headed pins inserted longitudinally in the shade material at the crease of said fold, substantially as shown and described.

1,757,018. ACCELERATOR. WALTER R. MORRIS, Winston-Salem, N. C. Filed Feb. 28, 1927. Serial No. 171,653. 4 Claims. (Cl. 74—39.)



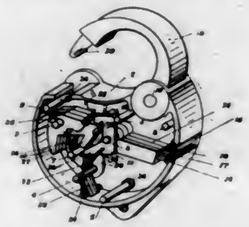
3. An accelerator for automobiles comprising a pedal pivoted in close proximity to the brake pedal for lateral movement, oppositely extending lateral portions on the upper end of the pedal, one portion extending to the operator's right and being adapted to be pressed to increase the flow of gasoline to the engine of the automobile, the other lateral portion extending behind the brake pedal and being adapted to be pressed when the brakes are applied to insure the lessening of the amount of gasoline fed to the engine.

1,757,019. PNEUMATIC PROTECTOR FOR ATHLETES. GEORGE ERNEST MOTT, Malden, Mass., assignor to Walter W. Burns, Washington, D. C. Filed June 16, 1924, Serial No. 720,438. Renewed Sept. 20, 1929. 3 Claims. (Cl. 2—2.)



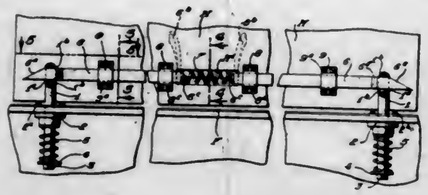
1. An athletic protector comprising a body portion having an edge of a shape to fit the neck of the wearer, a continuous pneumatic means secured to the body portion in a spaced position from the neck-engaging edge and in position to lie above and slightly outside the shoulder and collar bone of the wearer.

1,757,020. INDICATOR LOCK. JOHN GARLINGTON RAMEY, Rome, Ga. Filed July 15, 1927. Serial No. 206,037. 6 Claims. (Cl. 70—111.)



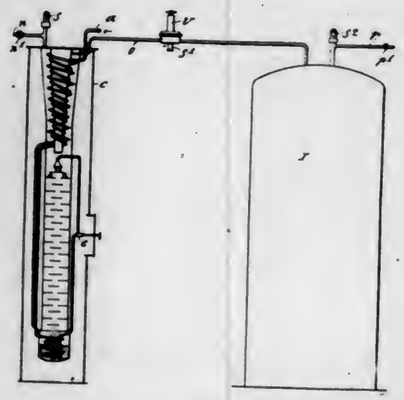
1. In an indicating lock, the combination with a casing, of a lock mechanism, a plurality of indicating tumblers adapted to be locked one at a time in an indicating position, a reset plate having an arm thereon to release the tumblers from locked position, springs one for each tumbler to return said tumblers to normal position, and a spring for returning said reset plate to normal position.

1,757,021. AUTOMOBILE HOOD-RETAINING MEANS. CHARLES H. E. REMONDINO, San Diego, Calif., assignor of one-third to Frederick W. Renworth and one-third to Arthur C. McBride, San Diego, Calif. Filed Feb. 7, 1927. Serial No. 166,401. 5 Claims. (Cl. 292—42.)



1. In a device of the class described, the combination with the hood and frame member of an automobile, of a horizontal latch member having a beveled end portion slidably mounted on the inner side of said hood, a lug member rigidly secured to said latch member and adapted to extend through said hood and operate said latch member, and a substantially vertically extending resiliently restrained keeper connected to said frame and adapted to be engaged by said beveled portion and raised over said latch member for securing said hood relative to said frame.

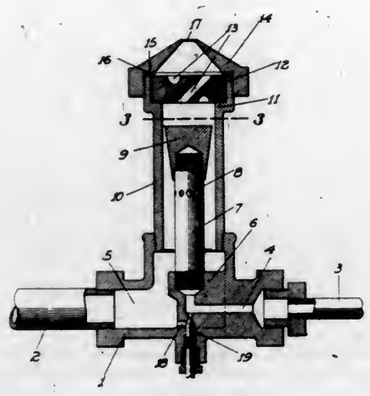
1,757,022. LIQUID-AIR OXYGEN-PRODUCING PLANT. OTTO SIMONIS, London, England. Filed Apr. 9, 1926, Serial No. 100,972, and in Great Britain Jan. 21, 1926. 11 Claims. (Cl. 62—122.)



1. In air liquefaction apparatus including a rectification column and delivering rectified gases under pressure above atmospheric pressure, the combination with said column of a gas outlet thereon comprising valve means for pre-determining the pressure of the gas above atmospheric pressure delivered from said column, a second gas outlet thereon, said second gas outlet comprising an automatic regulator valve for ensuing a pre-determined delivery, a pressure reservoir charged from said outlet under control of said regulator valve, and safety valve means for limiting the pressure of the charge in said reservoir, substantially as set forth.

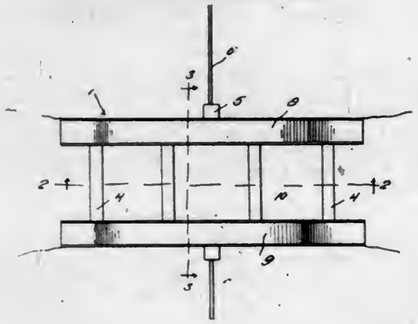
1,757,023. OIL BURNER. IRA E. SMITH, Stockton, Calif. Filed Oct. 20, 1926. Serial No. 142,814. 1 Claim. (Cl. 299—120.)

An oil burner including a straight-sided casing, a disc across the same adjacent its outer end, said disc having angularly disposed passages therethrough inwardly of its periphery, an oil pipe extending into the casing, a cap on the pipe terminating in spaced relation to the disc, the cap diverging outwardly from the pipe in a continuous straight line to its outer end and terminating in close but



spaced relation to the wall of the casing to form a restricted passage, the pipe having openings under the cap, and a nozzle member mounted on the casing outwardly of the disc.

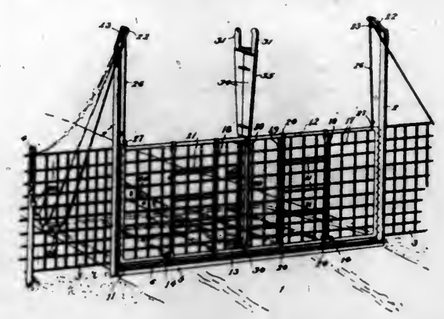
1,757,024. CATTLE GUARD. CRISOFORO SOLIS, Riogrande, Tex. Filed July 23, 1928. Serial No. 294,918. 2 Claims. (Cl. 256—14.)



1. A cattle guard comprising a pair of spaced base members, cross bars extending between said base members, arched tracks arranged above the respective base members, supporting means for said tracks, said supporting means comprising inverted U-shaped members extending transversely between the intermediate portions of the arched tracks and secured to the under side thereof and to the respective base members.

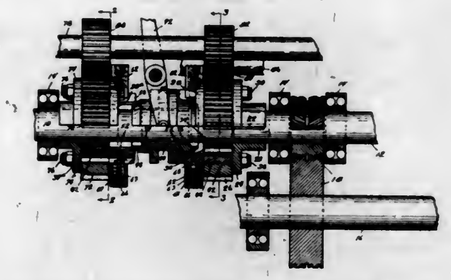
1,757,025. GATE. JOHN S. STRINGFELLOW, Lindsay, Va. Filed Oct. 25, 1928. Serial No. 314,962. 7 Claims. (Cl. 39—5.)

5. In a gate structure, the combination of a gate mounted for swinging movement in a vertical plane, a check device secured to the gate and adapted to be engaged by a passing vehicle to resist closing movement of the gate, said checking device comprising diverging pole



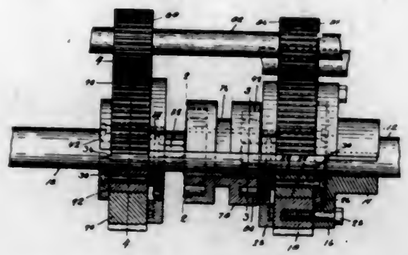
elements, means for yieldably holding said elements apart, and means for checking the movement of said elements from each other.

1,757,026. GEARING MECHANISM. HENRY A. TUTTLE, Upton, Mass.; Jennie L. Tuttle executrix of said Henry A. Tuttle, deceased. Filed Apr. 4, 1927. Serial No. 180,702. 1 Claim. (Cl. 74—59.)



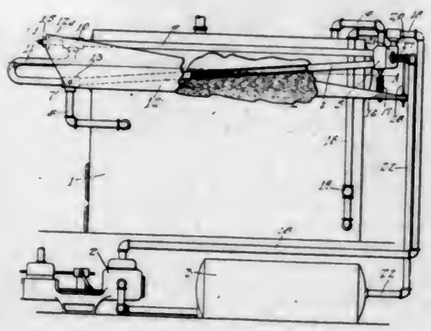
Reversing mechanism comprising the combination of aligned driving and driven shafts, a transmission shaft parallel with the aforesaid shafts, a pair of axially spaced sleeves on and fixed to said driving shaft, a loose gear surrounding one of said sleeves, reverse-drive clutch mechanism establishing a disengageable driving connection between said gear and sleeve, a second gear surrounding said other sleeve and fixed to said driven shaft, forward-drive clutch mechanism establishing a disengageable driving connection between said last gear and driving shaft, gears fixed to said transmission shaft connected with the aforesaid gears, a reversing gear meshing with said second gear and with one of said transmission shaft gears, said clutch mechanisms both having clutch dogs which rock in axially-extended passages in said gears and fit in notches in said sleeves to connect said gears and sleeves, housing plates overlying the opposite sides of both gears and constituting means to retain said dogs in operative position in said passages in said gears, said dogs of each clutch mechanism having arms which extend loosely through the confronting ones of said housing plates toward the other clutch mechanism and overlie and are spaced from said driving shaft, and a collar slidable on said shaft between said sleeves and under said arms of said dogs having tapered ends that engage said arms and move them outwardly to free the clutch mechanisms, said collar having such length that when in mid-position between said clutch mechanisms it is in engagement with the arms of all the dogs and holds them out of driving engagement with the driving shaft, thereby permitting the shafts to rotate independently of each other.

1,757,027. CLUTCH MECHANISM. HENRY A. TUTTLE, Upton, Mass.; Jennie L. Tuttle executrix of said Henry A. Tuttle, deceased. Filed Apr. 4, 1927. Serial No. 180,703. 16 Claims. (Cl. 192—71.)



1. Clutch mechanism comprising the combination of a driving member, a driven member, a pair of rocking keys carried by one of said members adapted to engage abutments of said other member and lock both members for conjoint rotation, means common to both keys constantly urging them for movement toward the aforesaid relation, and clutch-operating means comprising a sliding sleeve independently engageable with said keys to hold both of them out of locking position at the same time and also to release them for locking movement under action of said urging means.

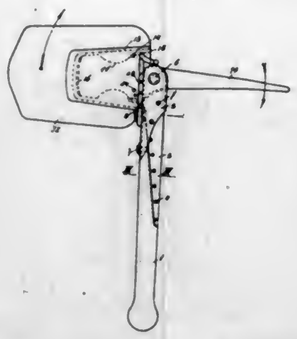
1,757,028. METHOD OF AND APPARATUS FOR FEEDING WATER TO BOILERS. VINCENT V. VEENSCHOTEN, Erie, Pa., assignor to Northern Equipment Company, Erie, Pa., a Corporation of Pennsylvania. Filed May 17, 1922. Serial No. 561,726. 7 Claims. (Cl. 122—451.1.)



2. In an apparatus for feeding water to boilers, the combination of a boiler; an inclined expansion tube connected to the water and steam spaces of the boiler, the tube crossing the water line of the boiler; a comparatively static element in the form of a tube operatively connected at one end to the expansion tube and connected to the steam space of the boiler, said tubes having expansion coefficients and relative water and steam exposures to neutralize variations incident to variations in steam pressure; a feed water device; and means actuated by the relative movement of said tubes controlling said device.

1,757,029. COMBINATION TOOL. GUILLAUME NESTOR VIVENOT, Brussels, Belgium. Filed Feb. 10, 1928, Serial No. 253,408, and in Belgium Aug. 6, 1927. 2 Claims. (Cl. 7—16.)

1. A composite tool including a handle, a pick, an axe, said pick and axe being connected as a unit and pivotally supported with respect to the handle, said pick being housed in the handle when the axe is in inoperative relation to and in alignment with the handle, a shovel blade formed to present a sheath to receive the axe, whereby



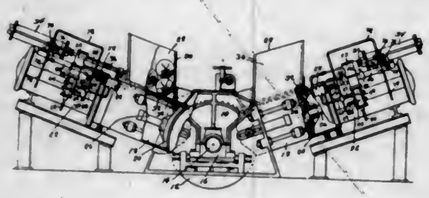
the shovel blade is removably supported on the axe, and means for fixing the unit tool in operative or inoperative relation to the handle, said means cooperating with the shovel blade when the latter is in position on the axe.

1,757,030. ELECTRIC CABLE. JOHN FRANCIS WATSON, Abbey Wood, PHILIP VASSAR HUNTER, London, and ALFRED EDGAR WILSON, Bromley, England. Filed Jan. 12, 1928, Serial No. 246,292, and in Great Britain Apr. 25, 1927. 2 Claims. (Cl. 173—264.)



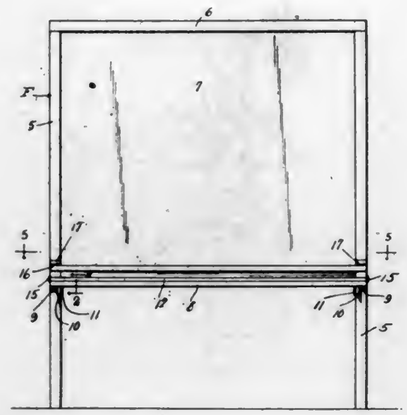
1. A method of manufacturing an electric cable which consists in laying up the strands of the conductor so that its diameter can be reduced by applying tension to it, applying a covering of di-electric around the conductor and then applying tension to the conductor to reduce its diameter and form a space between it and the surrounding di-electric.

1,757,031. WOOD-PULP-GRINDING MACHINE. WILLIAM A. WHITCOMB, Dedham, Mass., assignor to Great Northern Paper Company, Millinocket, Me., a Corporation of Maine. Filed Jan. 15, 1926. Serial No. 81,542. 10 Claims. (Cl. 83—75.)



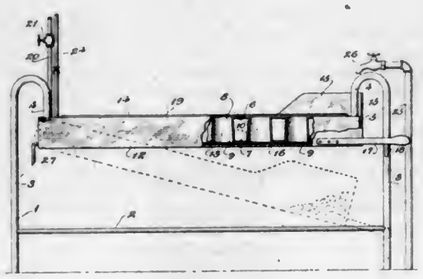
1. A wood pulp grinding machine having a grinding pocket, a pressure element movable forwardly and backwardly within said pocket, a hopper associated with said pocket, a door controlling communication between said hopper and pocket, means controlled by said pressure element to operate said door, and means controlled by said door to operate said pressure element.

1,757,032. EASEL. HELENA WILSON, Houston, Tex. Filed Aug. 22, 1928. Serial No. 301,329. 1 Claim. (Cl. 35—12.)



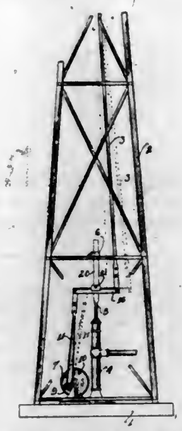
An easel of the class described comprising a pair of frames, said frames hingedly connected together at their upper ends, a supporting panel in each of the frames and said panels terminating a distance from the other ends of the frame, jointed braces secured to the frames for limiting the swinging of the frames, a hingedly mounted shelf on each frame at the lower edges of the panels, and means on the frames for holding the shelves in extended position, a pan on each of the shelves, eyelets on each pan, and hooks swingably mounted on the frames to engage the eyelets to prevent displacement of the pans, a plate disposed on each frame above the pans, means for hingedly mounting the plates on the sides of each frame and said plates provided with openings to provide lateral support for objects resting on the pan.

1,757,033. ICE-FORMING APPARATUS. NEIL B. WOLCOTT, Washington, D. C., assignor to Thermo-Ice Corporation, Auburn, N. Y. Filed Aug. 13, 1927. Serial No. 212,733. 5 Claims. (Cl. 62—108.)



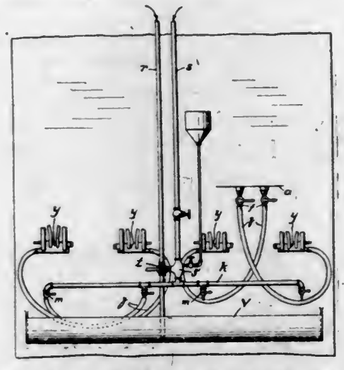
1. An ice forming apparatus including a pan provided with a plurality of compartments open at the top and bottom, and a tray pivoted at one end of said pan and forming a closure for the bottom of said compartments.

1,757,034. PUMP CONNECTION. GEORGE S. WRIGHT, Ottawa, Ill. Filed Jan. 27, 1928. Serial No. 249,811. 8 Claims. (Cl. 74—14.)



1. In combination, a windmill rod, a pump jack, a pitman connected to said jack, a pump rod, a cross-bar connected adjacent the opposite ends thereof to said windmill rod and said pitman, and means carried by said pump rod and engaging said cross-bar between its ends, said cross-bar being adjustable relative to said means.

1,757,035. APPARATUS FOR CLEANING TEAT CUPS. HERMAN C. BECKMAN, Chicago, Ill., assignor to The De Laval Separator Company, New York, N. Y., a Corporation of New Jersey. Filed Apr. 18, 1928. Serial No. 270,853. 2 Claims. (Cl. 141—1.)



1. A device for use in cleaning the teat cups and milk tubes of milking machines, which comprises a rack adapted to support the teat cups with their milk tubes depending therefrom, a header, means on the header to receive the milk tubes, a tank, a cold water pipe having a discharge end extending into the tank and an admission end, a steam pipe communicating with the header, and a three-way valve on the cold water pipe adapted to be operated to connect either the admission end or discharge end of the cold water pipe with the steam supply.

1,757,036. EYEGLASS GUARD. JACOB P. BERTRAM and IVAR SUNDSTROM, Rochester, N. Y., assignors to Shur-On Standard Optical Company, Inc., Geneva, N. Y., a Corporation of New York. Filed Nov. 24, 1928. Serial No. 321,696. 3 Claims. (Cl. 88—48.)

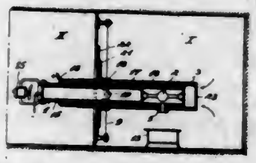
1. In a spectacle, the combination with a frame, and an elongated flat metal pad having free ends and fixedly

mounted on the frame by means of an arm of relatively small cross section, of a zylonite covering over the front,



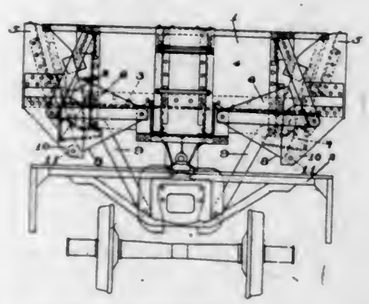
back and edges of the pad except where the arm is connected thereto, the covering being so supported on the pad as to permit endwise bending of the pad and covering.

1,757,037. X-RAY DEVICE. GOTTFRIED BIERMANN, Berlin-Charlottenburg, and CARL NIEMANN, Berlin, Germany, assignors to Siemens & Halske Aktiengesellschaft, Siemensstadt, near Berlin, Germany, a Corporation of Germany. Filed Mar. 13, 1926, Serial No. 94,578, and in Germany Mar. 14, 1925. 8 Claims. (Cl. 250—34.)



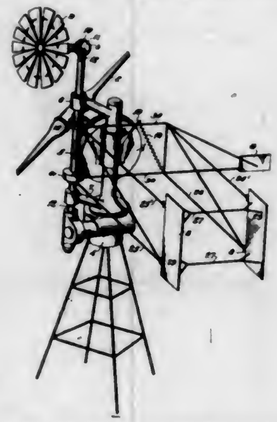
3. In an X-ray device, a chamber adapted to contain apparatus to supply high tension current for X-ray production, another chamber for the reception of the patient, a wall separating said chambers, a carrier movable up and down adjacent to said wall, a container extending from one of said chambers into the other, the middle portion of said container being supported on said carrier movably to allow the container to turn about its longitudinal axis, and an X-ray tube mounted within said container.

1,757,038. DUMP CAR. WILLIAM L. BURNER, Koppel, Pa., assignor, by mesne assignments, to Pressed Steel Car Company, Pittsburgh, Pa., a Corporation of New Jersey. Filed June 5, 1926. Serial No. 113,847. 8 Claims. (Cl. 105—276.)



1. In a dump car, an underframe, a body tiltably mounted on said underframe, a door hinged adjacent its lower edges to said body, said door in its closed position forming a side wall for said body, a downwardly depending arm on said door, a member pivotally mounted on the end wall of said body having surfaces with which said arm cooperates to control the opening movement of said door when the body is being tilted and to close said door when said body is being righted, and means for maintaining said member in its proper position relative to said body.

1,757,039. CONTROL MECHANISM FOR AIR TURBINES. LOUIS CONSTANTIN, Paris, France, assignor of one-half to Paul Fortier-Beaulieu, Roanne, Loire, France. Filed Dec. 16, 1927, Serial No. 240,500, and in France Dec. 16, 1926. 6 Claims. (Cl. 170—41.)

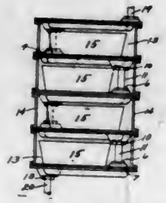


1. In a device having a main turbine mounted upon a head rotatable with reference to a fixed member and an auxiliary turbine adapted to control the rotation of said movable head and mounted in a casing which is pivoted with reference to said movable head, a collapsible quadrilateral, orientating surfaces on said quadrilateral, means for connecting said quadrilateral with the pivoted casing of the auxiliary turbine and means in combination with said quadrilateral for effecting the disappearing of the main turbine when the speed of the wind considerably increases.

1,757,040. TANNING PREPARATION AND PROCESS. RALPH W. FREY, Mount Rainier, Md., assignor to the Government and the People of the United States of America. Original application filed Apr. 28, 1927, Serial No. 187,418. Divided and this application filed July 31, 1928. Serial No. 296,623. 12 Claims. (Cl. 149—5.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928, 370 O. G., 757.)

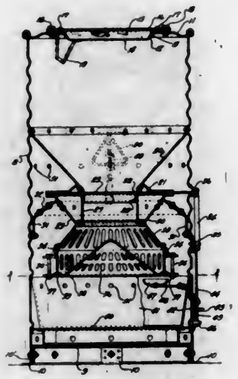
12. The steps in the process of making chrome-iron leather comprising the tanning of hides and skins with a solution of ferro-chrome dissolved in hydrochloric acid and water and rendered basic, followed during the tanning by the addition to the solution of an oxidizing agent to oxidize the iron salts present to the ferric state.

1,757,041. EVAPORATOR ELEMENT. GEORGE W. GAIL, Ruxton, Md., and ABRAHAM J. KUSEL, Bridgeport, Conn., assignors to Kulair Corporation, Baltimore, Md., a Corporation of Delaware. Filed Jan. 13, 1927. Serial No. 160,960. 11 Claims. (Cl. 62—95.)



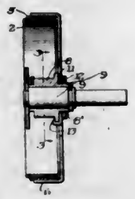
1. An expander element for refrigerating machines, comprising a series of individually formed substantially flat plate-like heat exchange units superimposed one upon the other and rigidly secured one to the other in spaced relation, and conduits connecting the respective units.

1,757,042. HEATER. JULIUS J. GOETZ, Shorewood, Wis., assignor to Western Metal Specialty Co., Milwaukee, Wis., a Corporation of Wisconsin. Filed Jan. 12, 1927. Serial No. 160,630. 1 Claim. (Cl. 126—144.)



In a heater, a sectional and readily detachable and removable fire pot comprising a downwardly and outwardly inclined fire pot top, brackets carried by the lower periphery of said fire pot top, a conical grate member disposed below said fire pot top, said grate member having an annular grooved flange, bolts extending from said brackets through said flange, and a circular, vertically positioned fire pot side having its lower edge disposed within the groove of said flange and supported by the grate member and overlapping at its upper edge portion the lower edge portion of said fire pot top.

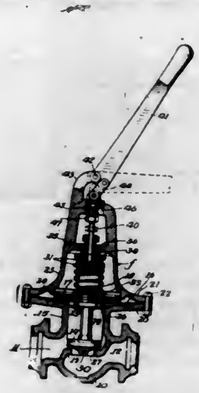
1,757,043. RHEOSTAT. ARTHUR HALL, Oak Park, Ill., assignor to Yaxley Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed July 5, 1929. Serial No. 376,106. 3 Claims. (Cl. 201—55.)



3. A rheostat structure including a resistance unit; a cup surrounding the resistance unit; a bearing sleeve disposed at the central portion of the cup perpendicularly to the cup end wall and also contained in the cup; a shaft journaled in said sleeve; and a contact arm upon the shaft and electrically engageable with the resistance unit, the end wall of said cup having a plurality of prongs inwardly struck therefrom and equidistant from the center of the cup, said bearing sleeve having a polygonal flange whose sides are closely engaged by said prongs.

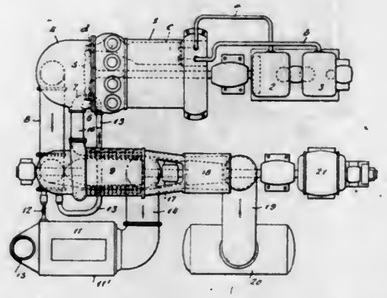
1,757,044. CONTROLLING DEVICE FOR REFRIGERATING SYSTEMS. CHARLES C. HANSEN, Chicago, Ill., assignor to Refrigerating Specialties Co., Chicago, Ill., a Corporation of Illinois. Filed Feb. 14, 1927. Serial No. 167,981. 6 Claims. (Cl. 62—8.)

1. In a controlling device for refrigerating systems, the combination of a casing, a valve plunger in the casing, a diaphragm exposed to the pressure of fluid in the casing connected to operate the plunger, a spring applied to resist the movement of the diaphragm, an abutment screw



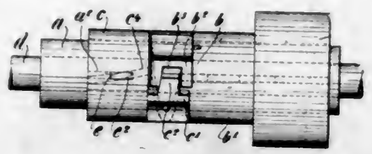
for the spring, and a device for adjusting the spring independently of the screw so the diaphragm will be operable by different predetermined pressures.

1,757,045. MULTISTAGE COMBUSTION TURBINE. HANS HOLZWARTH, Dusseldorf, Germany, assignor to Holzwarth Gas Turbine Co., San Francisco, Calif., a Corporation of Delaware. Filed Aug. 17, 1926, Serial No. 129,739. Renewed Aug. 24, 1929. 4 Claims. (Cl. 60—49.)



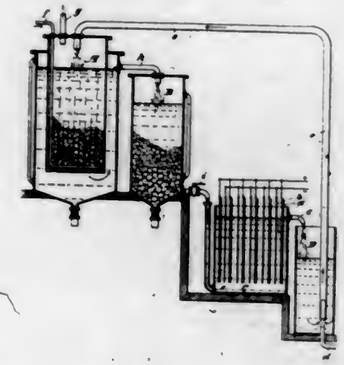
1. A multiple stage turbine arrangement comprising a high-pressure explosion turbine having an explosion chamber and connections for delivering the gases therefrom to the rotor of said turbine, devices, driven by said turbine, for feeding fuel and air under pressure to said chamber, a discharge nozzle arranged adjacent to the path of said rotor, on one side of said path, a catch nozzle arranged on the other side of said path, to receive the medium issuing from said discharge nozzle, an intermediate pressure turbine arranged to rotate independently of said explosion turbine and having two kinds of discharge nozzles in operative relation to its rotor, a connection leading from said catch nozzle to the discharge nozzle of one kind, another connection for leading the exhaust combustion gases from the high pressure turbine to the discharge nozzles of the other kind, a boiler heated by the exhaust combustion gases from the intermediate pressure turbine, a connection for leading the steam generated in said boiler to the discharge nozzle of the high pressure turbine, and a low pressure turbine coupled with said intermediate pressure turbine and driven by the exhaust steam of the same.

1,757,046. VARIABLE NOSE CAM. Merrill C. Hobine, New York, N. Y., assignor to International Motor Company, New York, N. Y., a Corporation of Delaware. Filed Feb. 27, 1929. Serial No. 343,043. 6 Claims. (Cl. 74—1.)



5. A variable nose cam comprising a hollow driving member, an axially extending slot therein, a cam formed of a plurality of relatively movable elements mounted on the driving member, one of said elements being keyed to the driving member, an operating rod in the driving member, a movable key in the slot and engaging the rod, and a curved groove in the other element receiving the key.

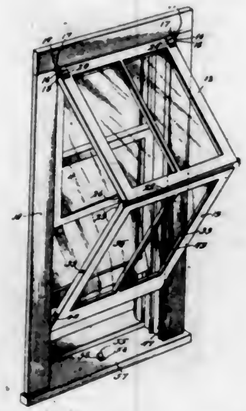
1,757,047. PROCESS OF ELECTROLYTICALLY REFINING COPPER OR COPPER ALLOYS. Martin Hosenfeld, Berlin-Siemensstadt, and Günther Hänsel, Berlin-Charlottenburg, Germany, assignors to Siemens & Halske Aktiengesellschaft, Siemensstadt, near Berlin, Germany, a German Corporation. Filed July 24, 1926, Serial No. 124,754, and in Germany Jan. 6, 1926. 6 Claims. (Cl. 204—57.)



1. The process of electrolytically refining copper or copper alloys which comprises using an electrolyte containing cuprous chloride, passing an electric current through said electrolyte, said copper or alloys being used as the anode, converting the cuprous chloride after completion of the electrolysis into cupric chloride solution, acting thereon with metallic copper for reducing the cupric chloride substantially completely to cuprous chloride solution, and re-using the latter as electrolyte.

1,757,048. WINDOW. Lawrence Janeczko, Hegewisch, Ill. Filed Sept. 22, 1928. Serial No. 307,612. 1 Claim. (Cl. 25—55.)

In a storm window construction of the type having a frame and a pair of superposed sashes hingedly connected at their meeting edges and in their closed position seating within the window frame substantially flush with the outside surface of said frame to bring the upper rail of the upper sash beneath and against the window frame, the bottom of the lower sash pivotally and slidably connected with the window frame, hook connections formed to extend out from the window frame and each having a vertical slot in the outside end to receive pins carried by each end of the upper sash thereby connecting the top of the upper sash with the window frame to permit disengagement of the upper sash from the frame by movement of the sash outwardly substantially clear of the



frame and upwardly when cleared in a substantially vertical direction only, said hook connections normally maintained in engagement solely by the weight of the sash and by engagement of the upper rail of the upper sash with the window frame to retain the sash on the frame.

1,757,049. ARMORED ELECTRIC CABLE. Gustave A. Johnson, Irvington, N. J., assignor to American Metal Molding Co., a Corporation of New Jersey. Filed Sept. 20, 1926. Serial No. 136,461. 3 Claims. (Cl. 173—267.)



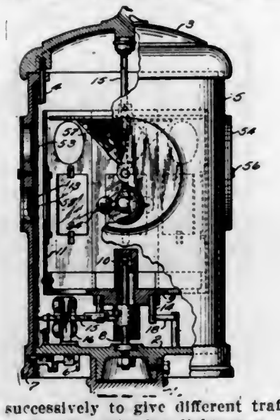
1. As a new article of manufacture, an electric cable having a plurality of wire conductors laid side by side, each conductor having a primary insulation comprising a covering sheath of rubber next thereto, a plurality of paper wrappings spirally wound over said rubber sheath in such manner that the convolutions of one wrapping lie crosswise relative to the convolutions of an underlying wrapping, said wrappings being bonded together and to said rubber sheath by intermediate layers of a non-drying and non-hardening tacky substance; a secondary insulation common to and enveloping the thus primarily insulated conductors, comprising a plurality of enclosing paper wrappings spirally wound thereupon in such manner that the convolutions of one wrapping lie crosswise relative to the convolutions of an underlying wrapping, said enveloping wrappings being also bonded together and to said primary insulation by intermediate layers of a non-drying and non-hardening tacky substance; and an exterior metallic armor applied over all.

1,757,050. TRAFFIC SIGNAL. Otto E. Johnson, Menominee, Mich. Filed Mar. 15, 1928. Serial No. 261,743. 3 Claims. (Cl. 177—329.)

3. In a signal device of the class described, comprising a housing having a pair of apertures in each side thereof, a drum rotatably mounted in said housing comprising a plurality of differently colored transparent plates arranged to register with one aperture of each side of said housing, and having spaced apertures therein arranged

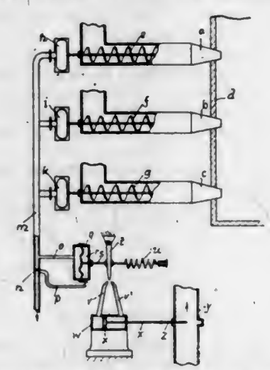
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to register with the other aperture of each side of said housing, windows of a uniform color in said last-mentioned apertures, illuminating means in said housing, means for rotating said screen for projecting differently colored light rays through one aperture of each side of



said housing successively to give different traffic signals, and for intermittently projecting light rays of a single color through the other aperture on each side to give a stop signal, and an adjustable cover on each side of said housing for alternatively concealing the light rays projected through one of the apertures thereof.

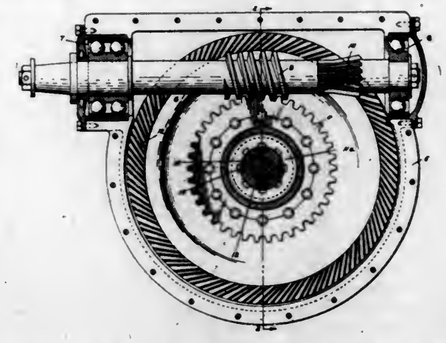
1,757,051. APPARATUS FOR THE REGULATION OF COMBUSTION IN FURNACES. Carl Albert Klopfer, Berlin-Steglitz, Germany, assignor to Askaniawerke Aktiengesellschaft vormals Centralwerkstatt Dessau und Carl Bamberg-Friedenau, Berlin-Friedenau, Germany. Filed Mar. 14, 1928, Serial No. 261,571, and in Germany Mar. 16, 1927. 5 Claims. (Cl. 110—72.)



1. An apparatus for the regulation of combustion in furnaces comprising in combination a plurality of burners; a plurality of feed devices supplying the fuel to said burners; a plurality of means each controlled by one of the feed devices in accordance with the quantities of fuel supplied by them and producing a regulating effect; and regulating means for the combustion controlled by the total effect produced by said first mentioned means.

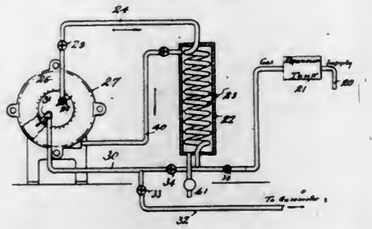
1,757,052. TRANSMISSION. Harry A. Knox and Bert F. Baker, Davenport, Iowa. Refiled for abandoned application Serial No. 100,764, filed Apr. 8, 1926. This application filed Nov. 5, 1928. Serial No. 317,454. 5 Claims. (Cl. 74—57.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928, 370 O. G., 757.)

1. In a motor vehicle, a rear axle housing, a pair of axle shafts, a differential mechanism, a skew bevel wheel and a worm wheel mounted on the differential housing, a ring gear secured to the worm wheel, pinions carried by the axle housing and meshing with the ring gear, a sun wheel concentric with the worm wheel and meshing with



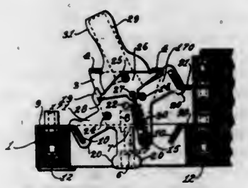
the pinions, a drive shaft carrying a worm and a skew bevel pinion, and a clutch slidably keyed to the differential housing and adapted to internally engage the skew, worm and sun wheels.

1,757,053. METHOD OF AND APPARATUS FOR CURING RUBBER ARTICLES BY THE CIRCULATION OF HEATED GASES. Henry R. Minor, Ossining, N. Y., assignor, by mesne assignments, to The Liquid Carbonic Corporation, a Corporation of Delaware. Filed Aug. 28, 1926. Serial No. 132,140. 10 Claims. (Cl. 18—53.)



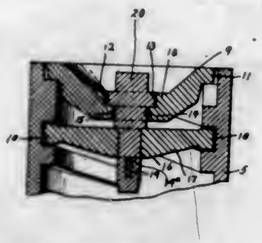
6. The method of curing rubber by circulating hot gases thereto and which consists in heating the curing gas supplied from a supply source under uniform pressure, then causing the heated gas to be recirculated to the rubber to supply additional heat units thereto, and accelerating said recirculation by causing a pressure difference to be set up in the circulating system.

1,757,054. ELECTRIC SWITCH. Ernst Moxter and Herman Moxter, St. Louis, Mo. Filed Sept. 19, 1927 Serial No. 220,314. 10 Claims. (Cl. 200—15.)



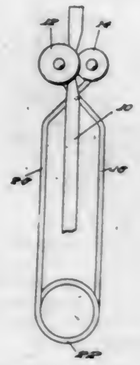
1. An electric switch comprising, a base, a pair of terminals consisting of flat bars, a movable conductor comprising a pair of parallel blades in spaced relation positioned and adapted to contact with the narrower sides of said terminals, and means for operating said conductor.

1,757,035. SERVICE-PIPE CURB BOX. EMIL L. NUEBLING, Reading, Pa., assignor to Reading Meter Repair Company, Reading, Pa., a Corporation of Pennsylvania. Filed June 6, 1927. Serial No. 196,770. 1 Claim. (Cl. 137—13.)



In combination, a cylindrical curb box having an inner surface provided adjacent its upper end with a cover seat and spaced opposed helical flanges extending beneath said seat, a centrally apertured cover adapted to rest on said seat, a stem extending rotatably and slidably through said aperture and having a flange thereon resting on the upper side of the cover, arms fixed to and extending laterally from the stem a distance sufficient to interengage with said helical flanges, said arms being located a distance beneath the cover sufficient to permit appreciable relative sliding movement between the cover and stem.

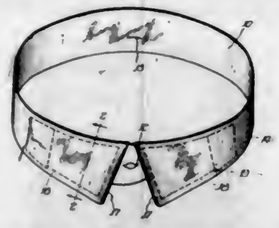
1,757,056. SIPHON STARTER. WALDEMAR PEARSON, Chicago, Ill. Filed Apr. 9, 1928. Serial No. 268,788. 1 Claim. (Cl. 137—20.)



A siphon starting device including in combination, a pair of tongs, comprising a rod bent double upon itself, the central portion of which forms a helical spring, the upper ends of the arms of which are bent to cross at right angles to each other, and hence back-turned inwardly to a parallel relation, and co-operating rollers mounted on the inturned ends of the arms of the tongs, one roller having a concave rolling surface and the other roller having a convex rolling surface, the rolling surface of each roller registering with the rolling surface of the other, the concave roller being provided with a radial flange at either end thereof.

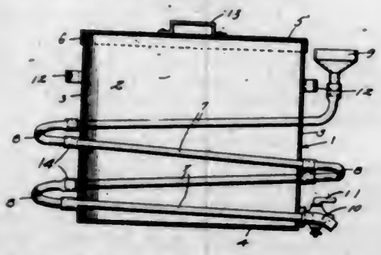
1,757,057. COLLAR. WILLIAM ALLEN PUSEY, Chicago, Ill. Filed Oct. 24, 1927. Serial No. 228,186. 7 Claims. (Cl. 2—132.)

1. In a soft turn down collar, the combination of a neckband, an outer flap secured thereto, holders secured to the flap and neckband adjacent the front of said collar, said holders each having open ends, flexible stiffeners conforming substantially to the shape of the collar and being



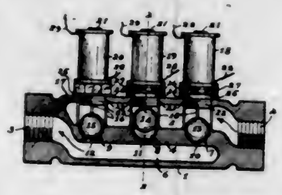
insertable through and into said holders, and means on the stiffeners adapted to engage a portion of the holders for maintaining said stiffeners in operative position.

1,757,058. MILK AND CREAM COOLER. JOHN N. REINERT, Bird Island, Minn. Filed July 6, 1928. Serial No. 290,856. 1 Claim. (Cl. 257—206.)



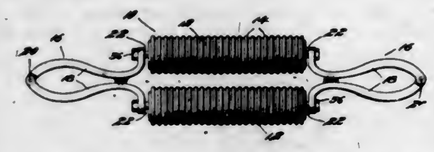
A milk cooling device of the character described, comprising a receptacle, a plurality of tubes extending through said receptacle between and through opposite walls and arranged in vertically spaced relation and further being inclined in the receptacle, a plurality of tubes arranged at one side of the first mentioned tubes and arranged in vertically spaced relation in and extending at their ends through said opposite walls and inclined oppositely to the first mentioned tubes, the upper one of said first mentioned tubes having its highest end turned to extend vertically exteriorly of the receptacle, means connected with said upturned end to facilitate introduction of liquid to the tube, return bends connecting the ends of the first mentioned tubes with the adjacent ends of the second mentioned tubes, said bends having frictional slip connection with the tubes, and a lead-off tube connected to the lower end of the lowest one of the last mentioned tubes.

1,757,059. VALVE. FREDERICK B. RICKENBERG, Pittsburgh, Pa. Filed Apr. 28, 1928. Serial No. 273,703. 2 Claims. (Cl. 137—139.)



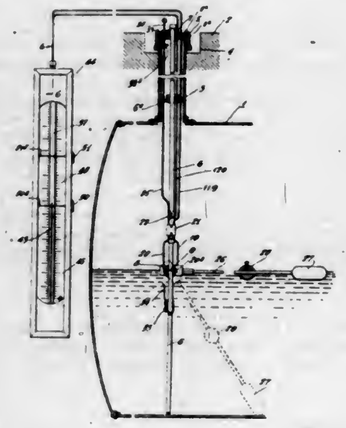
1. In combination, a valve of the character described comprising a hollow valve casing provided with a partition forming an inlet chamber and an outlet chamber in said valve casing, a plurality of valve seats formed in said partition, each of said valve seats provided with an outlet port establishing communication between said inlet and outlet chambers, a valve member for each of said valve seats, electro-magnetic means for selectively actuating any of said valve members to open and close respective outlet ports, said outlet ports varying in area relatively to each other.

1,757,060. MASSAGING DEVICE. ALBERT RIETH, Providence, R. I. Filed Aug. 1, 1927. Serial No. 209,827. 5 Claims. (Cl. 128—57.)



1. A massaging device comprising cylindrical flexible massaging means and handles for each end thereof, each comprising two members hinged together at their outer ends and having mounting means for the ends of the massaging means at their inner ends.

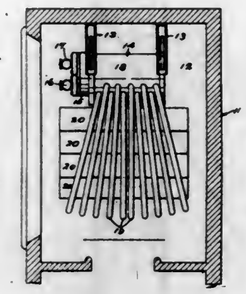
1,757,061. LIQUID-LEVEL-INDICATING SYSTEM. JACK D. SARTAKOFF, New York, N. Y., assignor of one-half to J. D. Sartakoff Corporation, New York, N. Y., a Corporation of New York, and one-half to Khetah Corporation, New York, N. Y., a Corporation of New York. Filed Mar. 15, 1926. Serial No. 94,650. 6 Claims. (Cl. 73—82.)



6. In a liquid level indicating system, an underground tank, a pipe leading from the surface of the ground down to the tank and secured to the wall thereof, a tubular post extending downwardly through the pipe to substantially the bottom of the tank and through which post liquid can be removed from the tank, and liquid level indicating means, a portion of which is positioned within the tank and is supported on and carried by the tubular post.

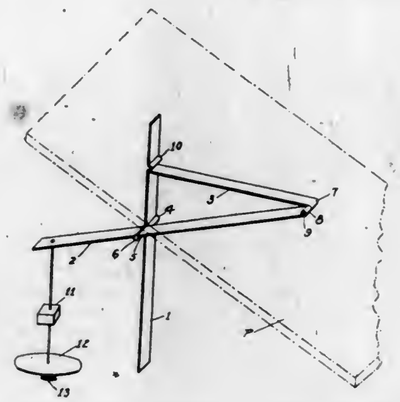
1,757,062. MECHANICAL REFRIGERATION. CHARLES C. SPREER, Detroit, Mich., assignor to Kelvinator Corporation, Detroit, Mich., a Corporation of Michigan. Filed June 3, 1926. Serial No. 113,472. Renewed Mar. 6, 1930. 7 Claims. (Cl. 62—95.)

4. A refrigerant expansion unit comprising an elongated header, a plurality of conduits having end portions communicating with the header and having aligned portions disposed transversely to the longitudinal axis there-



of in a region bounded by planes parallel to said axis, said end portions and said aligned portions being distributed throughout unequal expanses of space.

1,757,063. RAT TRAP. OSCAR STUESSE, St. Louis, Mo. Filed July 27, 1929. Serial No. 381,473. 4 Claims. (Cl. 43—81.)

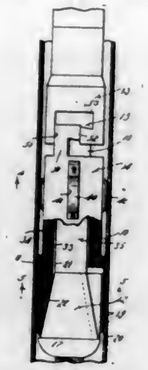


1. A rat trap comprising an upright element adapted to be mounted on a supporting surface and support a heavy plate at its upper end, a second element having one end removably abutting the first element, and a third element movably pivoted to said first element and operably connected to the second element to actuate the latter longitudinally to move the first element out of supporting contact with the plate to release the latter.

1,757,064. WELL TOOL. WILLIAM A. VOCK, Long Beach, and AMOS C. TOWNE, Lomita, Calif. Filed June 25, 1928. Serial No. 288,170. 4 Claims. (Cl. 294—86.)

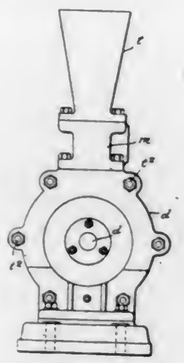
1. A well tool of the character described including a body, a wedge carried by the body, slips to be expanded by the wedge, and means operable to control operation of the slips including a releasable connection between the body and slips including a member carrying the slips and mounted on the body for rotation and longitudinal movement, and means controlled by relative rotation between

the body and said member for releasably holding said member against longitudinal movement with the slips



unactuated, and including a projection on the member extending into a guideway on the body and a lug on the projection to cooperate with a recess in the guideway.

1,757,065. MACHINE FOR EMULSIFYING BITUMEN, OTHER MATERIALS, AND THE LIKE. HENRY ERNEST WARSOP, Nottingham, and FREDERICK WILLIAM GOUGH, Grimsby, England. Filed Feb. 16, 1929, Serial No. 340,572, and in Great Britain Feb. 18, 1928. 6 Claims. (Cl. 259—9.)

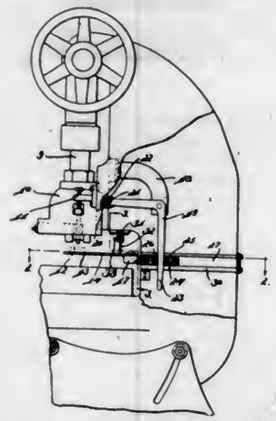


1. The combination, in an emulsifying or mixing machine, of a casing, a driving shaft therein, two rotary concaved feeding impellers on said shaft, each of said impellers having radial ribs and an annular rim, said ribs and rims facing in opposite directions, two fixed breaking-up perforated plates between the impellers, a delivery impeller formed with a perforated rim fixed on the driving shaft and rotatable between the breaking-up plates, said casing having inlet means communicating with the feeding impellers and having outlet means to receive the material from the delivery impeller.

1,757,066. CROSS-DYEING CELLULOSE FABRICS. JOHN C. WATSON, Attleboro, Mass., assignor, by direct and mesne assignments, to B. B. & R. Knight Corporation, Providence, R. I., a Corporation of Rhode Island. Filed July 20, 1926. Serial No. 123,801. 6 Claims. (Cl. 8—5.)

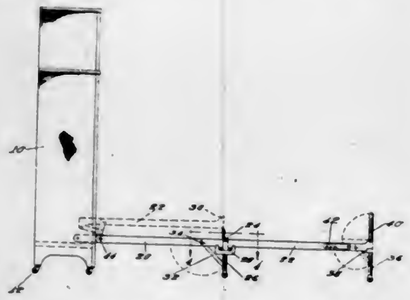
1. The herein described improved process of manufacturing an all cellulose textile fabric having component sets of warp and filling threads of contrasting colors, which comprises treating before weaving one of said component sets of threads with the first step of a two step dyeing process, treating before weaving the other component set of threads with a different first step of a similar two step dyeing process, then weaving said prepared component sets to form the fabric, and after-treating the fabric with the second common step of the two step dyeing process which acts upon the one prepared component set to form a dye thereon and which acts upon the other differently prepared component set to form a dye of a different shade and color thereon.

1,757,067. STOCK REMOVER. EARL D. WEAVER, Halfway, and CHARLES A. COBB, Detroit, Mich. Filed May 4, 1928. Serial No. 274,980. 5 Claims. (Cl. 164—33.)



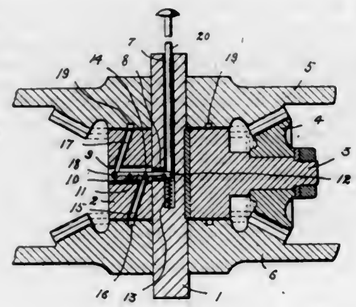
1. A stock remover of the class described adapted for use with a machine having a movable part operating on a workpiece, comprising: a member constructed and arranged to be rocked by the movable part of said machine; a workpiece receiving member constructed and arranged to be reciprocated by said rockable member, said workpiece receiving member, upon rocking of said rockable member into one position, being located in the path of the movable part of said machine and adapted for receiving a workpiece therefrom; and a stripper plate engageable with said workpiece for removing the same from said workpiece receiving member upon rocking of said rockable member in the opposite direction.

1,757,068. LIVING-ROOM FOLDING BED. ERICK GOTTFRID WIKMAN and CLARA CARLSON, Chicago, Ill. Filed Dec. 13, 1926. Serial No. 154,536. 1 Claim. (Cl. 5—155.)



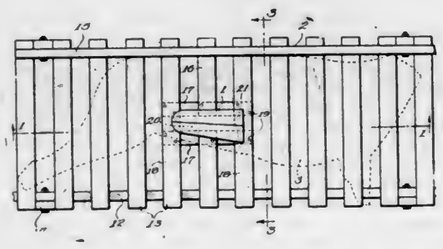
A folding bed frame comprising at each side a pair of rigid side bars, means hingedly connecting together adjacent ends of the side bars, lugs depending from each of said adjacent ends, a socket detachably receiving the lugs and preventing their separation, a supporting leg rigid with the socket, a pivoted link connecting the leg foldably with one of the side bars, the hinge means comprising resilient extensible elements whereby when the lugs are removed from the sockets the frames may be folded upon each other in spaced relation to receive a mattress therebetween.

1,757,069. DIFFERENTIAL MECHANISM. FRANK E. WYMAN, Faunce, Minn. Filed Feb. 10, 1930. Serial No. 427,147. 5 Claims. (Cl. 74—100.)



1. The combination with differential gear mechanism including a driving shaft, a hub thereupon, having radially disposed gears intermediate of and driving separate disc gears, of means carried within the hub and selectively operable axially of the shaft for locking said differential.

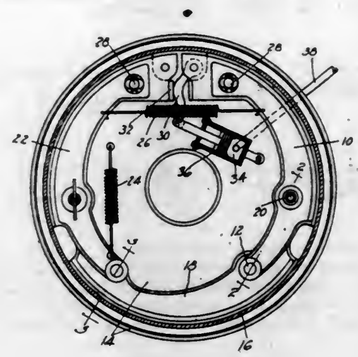
1,757,070. CARCASS-CHILLING SUPPORT. JOHN C. AGAR, Chicago, Ill., assignor to Swift and Company, Chicago, Ill., a Corporation of Illinois. Filed June 28, 1929. Serial No. 374,346. 6 Claims. (Cl. 17—44.)



1. As a packing house accessory, a flank support comprising a pair of complementary members correlated for mutual adjustment horizontally.

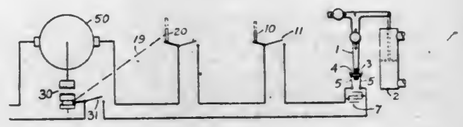
1,757,071. FLUID-OPERATED BRAKE. VINCENT BENDIX, Chicago, Ill., assignor to Bendix Brake Company, Chicago, Ill., a Corporation of Illinois. Filed June 15, 1925. Serial No. 37,180. 7 Claims. (Cl. 188—152.)

1. A brake comprising, in combination, a drum, a support, an expansible friction device within the drum, having separated free ends, operating mechanism disposed within substantially a 90° segment of the drum comprising a pair of pivotally connected arms, one arm extending between the ends of the friction device and pivotally connected at its outer end to one end of the friction device and engaging directly the other end of the friction device, and a fluid piston and cylinder assembly arranged at the outer end of



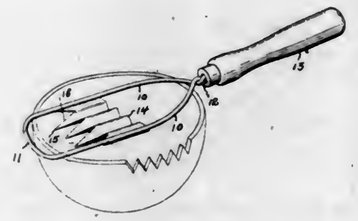
the other arm, said cylinder being pivoted to the support and said piston pivotally connected with the outer end of the arm.

1,757,072. ELECTRICAL CONTROLLING DEVICE. FREDERICK G. L. BOYER, Dayton, Ohio, assignor to Dayton Scale Company, Dayton, Ohio, a Corporation of New Jersey. Filed Mar. 16, 1922. Serial No. 544,126. 24 Claims. (Cl. 265—5.)



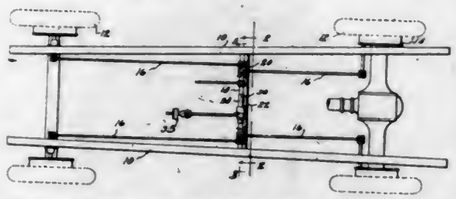
1. In an automatic scale: electrically operated mechanism a controlling circuit therefor; and means, automatically operating controlled by moving parts of the scale, for preventing closing of the operating circuit until a load has been placed upon the scale and the scale has attained a condition of equilibrium.

1,757,073. CULINARY KNIFE. CHARLES H. BOYLE, New Haven, Conn. Filed Feb. 26, 1929. Serial No. 342,795. 4 Claims. (Cl. 146—206.)



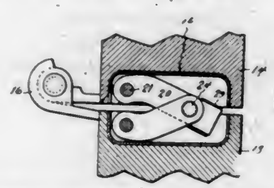
1. A device of the character described, having side portions connected by an end portion in a different plane than the side portion; and a blade connected with the side portions at a point distant from the end portion.

1,757,074. BRAKE-OPERATING SHAFT AND ITS MOUNTING. ADIEL Y. DODGE, South Bend, Ind., assignor to Bendix Brake Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 16, 1926. Serial No. 141,949. 16 Claims. (Cl. 188—204.)



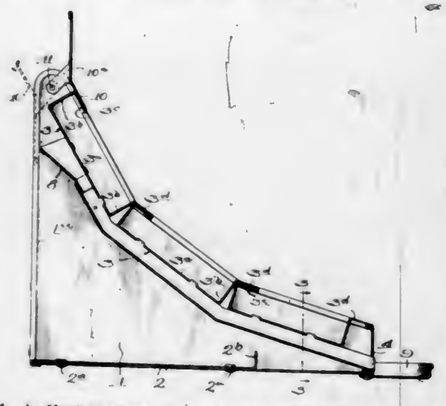
15. Brake operating mechanism for a vehicle having wheels provided with brakes including an operating shaft connected with the brakes, said shaft being rotatably supported intermediate its ends upon a bearing adapted to also permit limited universal rockable movement of the shaft.

1,757,075. DOOR CHECK OR STOP. ALBERT C. EARHART, Cleveland Heights, Ohio. Filed Aug. 6, 1929. Serial No. 383,805. 2 Claims. (Cl. 16—86.)



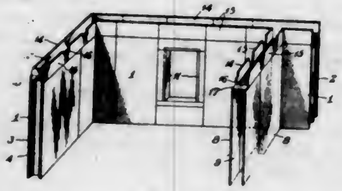
1. A door check comprising a pair of attaching members, a pair of links, one pivoted to each member, a pivot pin secured in one of said links, the other link having a slot through which said pivot pin passes, and a resilient member held in said slotted link against which the pin strikes as it moves in its slot when the links are extended to their limit.

1,757,076. DISPLAY STAND FOR PACKAGED CONFECTIONS. EDWARD W. ECKERLY, Chicago, Ill., assignor to Wm. Wrigley Jr. Company, Chicago, Ill., a Corporation of Delaware. Filed May 27, 1929. Serial No. 366,149. 7 Claims. (Cl. 211—128.)



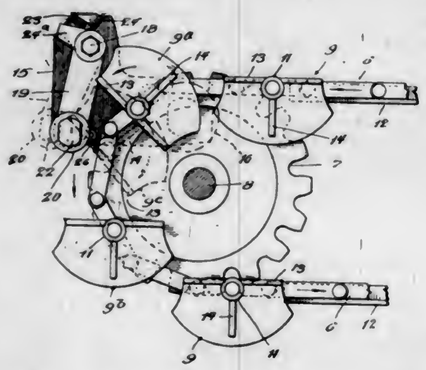
1. A display stand comprising a tray supported in inclined position and adapted to contain the goods displayed for sale, and a coin chute extending lengthwise along the bottom of said tray and having an entrance behind and a discharge in front of said tray.

1,757,077. BUILDING CONSTRUCTION. MATHIAS EISERLOH, Cleveland, Ohio. Filed Jan. 20, 1927. Serial No. 162,301. 7 Claims. (Cl. 72—1.)



1. A building construction comprising the combination of a pair of spaced walls, fashioned above as a trough, the nearer walls of said troughs respectively being provided each with a pair of apertures, a pair of solid precast beams having their ends occupying said apertures respectively with its upper surface flush with the tops of said troughs, said beams being fashioned with opposed relatively depressed flanges, floor slabs resting crosswise of said pair of beams upon the flanges thereof and so as to have their upper surfaces likewise flush with the upper surfaces of said beams and so as to constitute flooring capable of supporting laborers and concrete filling said troughs and level with the tops of said beams and slabs.

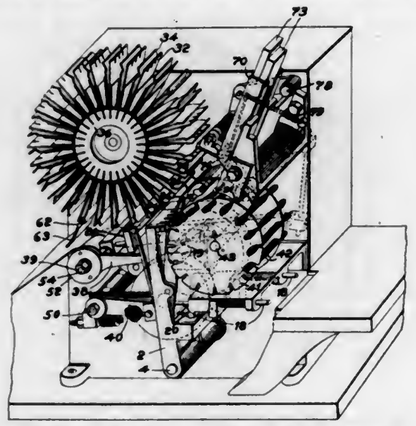
1,757,078. LOAF-INVERTING MECHANISM FOR PROOFERS. WARD P. ELWOOD, Joliet, Ill., assignor to Union Machinery Company, Joliet, Ill., a Corporation of Illinois. Filed Dec. 15, 1928. Serial No. 326,265. 7 Claims. (Cl. 198—145.)



1. In loaf inverting mechanism for proofers, the combination with a conveyor chain, invertible buckets suspended therefrom each having a vertical rib on an end wall thereof, and a sprocket wheel over which said conveyor chain is trained, of a stationarily mounted bucket inverting member lying in the path of movement taken by the ribs of the buckets over the sprocket wheel, and a yieldably mounted bucket righting element lying in the downward path of movement taken by the buckets around the sprocket wheel and yielding to permit the buckets to pass between the bucket inverting member and the bucket righting element.

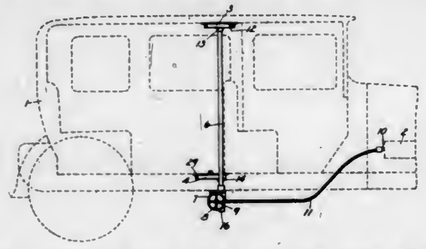
1,757,079. BAND FEEDER. ANALDO M. ENGLISH, Brookline, Mass., assignor to Cynthia Mills, East Boston, Mass., a Corporation of Massachusetts. Filed Feb. 7, 1928. Serial No. 252,452. 10 Claims. (Cl. 271—10.)

1. In a package wrapping machine, having means to receive a band and assemble it with a package, a reservoir holding a stack of bands, means adapted to resist the lateral displacement of at least two of the bands at one end, of said stack, mechanical means adapted to laterally displace a band from said end of the stack, and means for



taking the band thus displaced, and moving same in the direction of displacement to free the band from the stack, and then reversing the movement to carry said band to the receiving means.

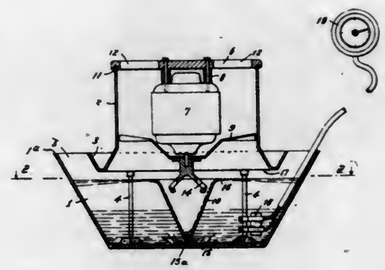
1,757,080. AIR PURIFIER FOR CLOSED CARS. EDWARD FERRARA, Mittineague, Mass. Filed Apr. 21, 1928. Serial No. 271,896. 1 Claim. (Cl. 98—2.)



The combination with a closed automobile body having a floor and roof, of air purifying apparatus comprising, separate suction boxes in the under and upper sides respectively of said roof and floor, each of said boxes having a greater length than width, a side wall of each of said boxes being perforated with transverse slots disposed in spaced relation to provide inlets, the said boxes being disposed crosswise of said roof and floor so that said perforated side walls thereof are directed towards one another and extend laterally with respect to said floor and roof, plates associated with the perforated side walls of said boxes which are provided with spaced slots and are movable relative to said walls whereby the inlet thereof may be opened or closed, outlet ports for each of said boxes, a suction fan casing disposed below said floor and provided with suction and discharge ports, a fan member rotatable therein, driving mechanism for said fan, and pipe connections extending between the roof and floor of said body connected to the outlet ports of said boxes and the suction port of said fan casing.

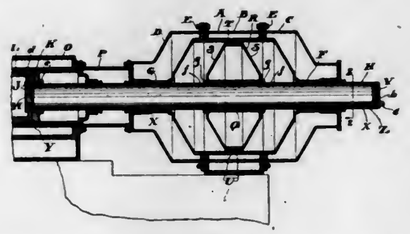
1,757,081. WET-BULB THERMOSTAT. WALTER L. FLEISHER, New York, N. Y., assignor to The Cooling & Air Conditioning Corporation, New York, N. Y., a Corporation of New York. Filed Nov. 23, 1927. Serial No. 235,357. 9 Claims. (Cl. 236—44.)

5. An apparatus of the character described including, in combination, a container for a body of water of such small volume as to respond readily to temperature changes, an atomizer on the container for circulating the water therein in a closed circuit including a spray, means on the container for operating the atomizer and for causing an



air stream to circulate in intimate contact with said spray whereby the spray readily assumes the wet bulb temperature of the air stream, and means for measuring the temperature of the water within said container.

1,757,082. PISTON ROD. HARRY V. HAIGHT, Sherbrooke, Quebec, Canada, assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed Feb. 17, 1927. Serial No. 169,040. 4 Claims. (Cl. 74—17.)



1. A hollow piston rod having end heads, and means extending through one side of the piston rod exerting a force on the end heads to prevent curvature of the piston rod, said means contacting with the piston rod only at the extremities of said piston rod.

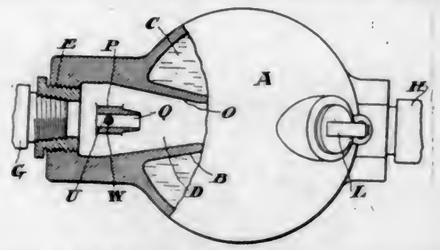
1,757,083. ASPHALT EMULSION. ARTHUR L. HALVORSEN, New York, N. Y., and PIERCE M. TRAVIS, Ridgewood, N. J., assignors to The Emulsion Process Corporation, Jersey City, N. J., a Corporation of Delaware. Original application filed Mar. 3, 1928, Serial No. 258,992. Divided and this application filed Dec. 29, 1928. Serial No. 329,309. 9 Claims. (Cl. 134—1.)

1. An asphalt-water emulsion containing tri-sodium phosphate as an emulsifying agent in amount not exceeding 0.75% Na_3PO_4 by weight on the emulsion.

1,757,084. AIR-LINE OILER. CHARLES C. HANSEN, Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed Mar. 24, 1927. Serial No. 177,954. 2 Claims. (Cl. 184—55.)

1. An air line oiler comprising a casing having an internal tubular wall dividing the casing into a reservoir and a passageway, said passageway being flared at one end, a bridge transversely through the passageway having a passage for conveying oil from the reservoir into the passageway, a needle valve associated with the passage for controlling the flow of oil therethrough, a passage in the

casing for admitting pressure fluid from the passageway into the reservoir, a spring pressed valve for closing the last said passage whenever the pressure in the reservoir



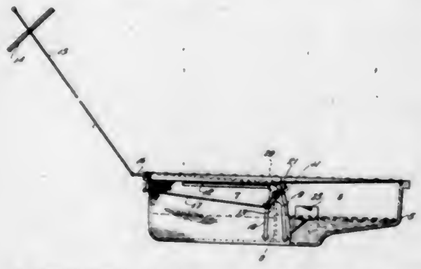
substantially equals that in the passageway, and a conduit in the casing constantly supplying pressure fluid to the last said passage rearwardly of the valve.

1,757,085. WARM-AIR HEATING REGISTER. ROY G. HENDRICKS, Lakewood, Ohio, assignor to The Forest City-Walworth Run Foundries Company, Cleveland, Ohio. Filed Dec. 29, 1927. Serial No. 243,229. 2 Claims. (Cl. 98—106.)



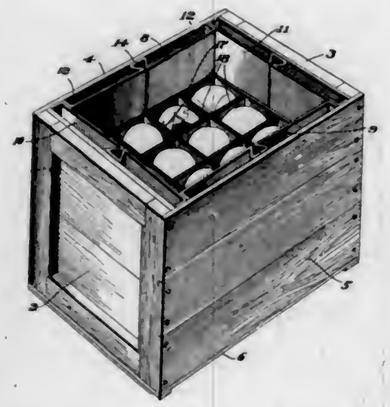
1. In a register, the combination of a frame, a structure including a resilient rearwardly extending flange arranged for detachable fitting against the inner margin of said frame, said flange including struck-out hinge pin sockets and a shutter including complementary hinge pin sockets.

1,757,086. LUBRICATING SYSTEM. WILLIAM D. HILL, Alliance, Ohio. Filed Feb. 13, 1928. Serial No. 253,960. 5 Claims. (Cl. 184—105.)



1. A lubricating system of the character described comprising a plurality of oil chambers, communicating means between said chambers, valves for closing off said communication, and means for opening said communication when the oil in any chamber falls below a pre-determined level.

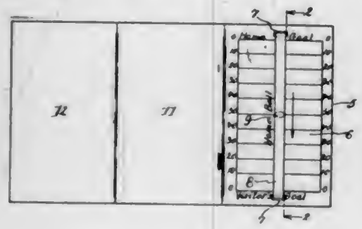
1,757,087. PACKING CASE. FREDERICK CABOT HOLBROOK, Dummerston, Vt. Filed Dec. 18, 1926. Serial No. 155,637. 4 Claims. (Cl. 217—3.)



1. A packing case of the character described, comprising a box, and a plurality of corrugated paper board spacing members inside said box, located closely adjacent to and parallel with the walls thereof, said members having flanges at the ends thereof and also between said ends serving to space the main body of each member from the walls of said box, whereby said members form an inner chamber in the box for the reception of the material to be shipped said intermediate flanges consisting of a portion of the member folded into approximately triangular cross-sectional form with the base of the triangular flange bearing against the wall of the box and connected to said member by the diagonal members of the triangle.

2. A packing case of the character described, comprising a box, and a plurality of paper board spacing members inside said box, located closely adjacent to and parallel with the walls thereof, said members having flanges both at the ends and also at the central part thereof, said central flanges being wider than the end flanges, whereby the main body of each member is spaced from the adjacent wall of the box, and the central part of each member is spaced farther from said wall than the end portions thereof.

1,757,088. GAME APPARATUS. SYDNEY V. HOLMES, St. Paul, Minn., assignor to Elizabeth B. Holmes, St. Paul, Minn. Filed Jan. 11, 1930. Serial No. 420,113. 4 Claims. (Cl. 116—120.)

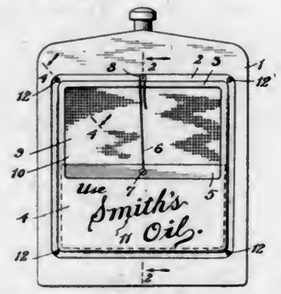


1. In game apparatus for use in connection with audible reports of foot ball games or the like, a card or the like having representations thereon of substantially duplicate fields of play for different contestants, an indicator for the progress of the play on each of said fields and means connecting said indicators for movement in unison.

1,757,089. CLUTCH-FACING MATERIAL AND PROCESS FOR ITS PRODUCTION. SAMUEL P. HOWE, Pine Valley, Clementon, N. J. Filed Dec. 12, 1928, Serial No. 325,669. Renewed Mar. 20, 1930. 9 Claims. (Cl. 117—53.)

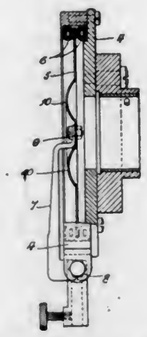
1. A clutch facing which consists of a fabric containing mica and asbestos fibre.

1,757,090. RADIATOR COVER. ALBERT E. HURST, New York, N. Y. Filed Nov. 16, 1927. Serial No. 233,529. 1 Claim. (Cl. 189—60.)



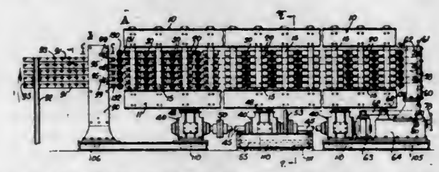
A radiator cover composed of a sheet of cardboard, said sheet having a flat marginal edge portion adapted to lie flat against the front face of the radiator, and an outwardly distorted panel about which the marginal edge portion extends, said outwardly distorted panel co-operating with the front of the radiator to form a pocket between them, an open area formed in the sheet adjacent the upper part of the panel, a movable closure panel normally fitted in the pocket formed by the distorted panel and the front face of the radiator, and capable of being vertically raised out of said pocket to vary the open area, means for holding said closure panel in any desired position over the open area, said means comprising a flexible securing member attached to the closure panel and passing upward and outward through the open area, and an attaching projection to which said securing member is adapted to be connected, said projection being attached to a part of the flat marginal edge of the sheet above the upper end of the open area.

1,757,091. DIAPHRAGM FOR ACOUSTIC INSTRUMENTS OR APPARATUS. CHARLES BERTRAM LENTHALL, Southport, England. Filed Dec. 9, 1922, Serial No. 605,818, and in Great Britain Apr. 18, 1922. 3 Claims. (Cl. 181—32.)



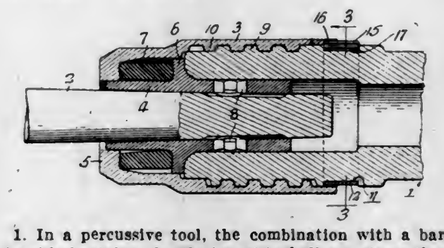
1. For acoustic instruments or apparatus, a vibratory diaphragm provided with a single substantially wide and substantially concentric annular groove the cross sectional arc of which is a segment of a circle, and the radial chord of the curvature, of which is approximately one-third of the radius of the diaphragm.

1,757,092. DRYING MACHINE. LOUIS G. MERRITT, ERICSSON H. MERRITT, and RICHARD W. STANLEY, Lockport, N. Y., assignors to said Louis G. Merritt. Filed Mar. 5, 1928, Serial No. 259,106. Renewed Mar. 13, 1930. 33 Claims. (Cl. 34—16.)



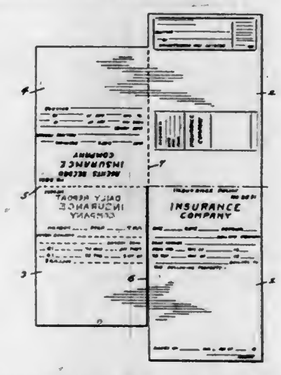
1. In a drying machine, in combination, relatively movable frame members, drying means supported by said frame members and adapted to be moved by said frame members to grip and release alternately sheet material to be dried, and means adapted intermittently to advance the released sheet material through said machine in but one direction.

1,757,093. CHISEL-RETAINER LOCK. REINHOLD A. NOELING, Aurora, Ill., assignor to Independent Pneumatic Tool Company, Chicago, Ill., a Corporation of Delaware. Filed June 28, 1923. Serial No. 648,283. 5 Claims. (Cl. 279—9.)



1. In a percussive tool, the combination with a barrel, of a chisel retainer for the barrel including a sleeve threaded on said barrel, and a split spring clip extending about the barrel beneath a portion of said sleeve, said clip tightly gripping the barrel and having one end in fixed engagement therewith and the other end in engagement with said sleeve, the portion of the sleeve at the clip closely surrounding the same and being engaged by the clip in a manner to expand the clip into tight contact with the sleeve for locking the latter on the barrel on turning the sleeve in a direction to unscrew it from the barrel.

1,757,094. INSURANCE-POLICY FORM. VICTOR F. POLLAK, San Francisco, Calif. Filed Aug. 9, 1928. Serial No. 298,485. 2 Claims. (Cl. 282—27.)



1. An insurance policy form comprising a body portion having a line of fold coincident with its transverse center-

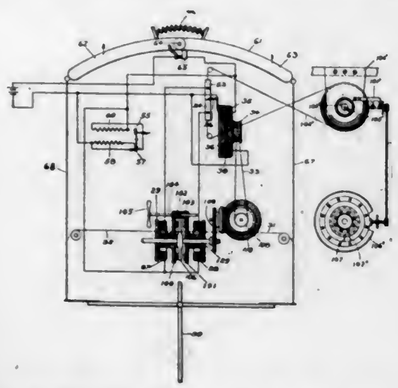
line to form face and back portions of the policy and printed with suitable subject matter including an entry form printed upon the face to provide entry spaces; and a lateral extension formed upon one side of the body and joined thereto along a perforated line of fold extending along one side of the back portion of the body, said extension being severed from the matching edge of the face portion and having a perforated line of fold coinciding with the transverse centerline of the extension and forming a continuation of the transverse centerline of the body; and entry forms printed upon the extension upon opposite faces thereof and having entry spaces disposed and designated similarly to the entry spaces of the policy face and being foldable to matching relation to each other and to the policy face for duplicating entries by means of interposed carbon material.

1,757,095. GLOVE. FRANK SCOBELLE, Brooklyn, N. Y., assignor to Stern Brothers, New York, N. Y., a Corporation of New York. Filed Oct. 2, 1929. Serial No. 396,628. 14 Claims. (Cl. 2—161.)



1. A glove of gauntlet or long arm type, having at one side of the arm a series of puckered formations producing in the glove arm as a whole when in use, loose transverse folds or puckers.

1,757,096. GYROSCOPIC PILOT FOR AEROPLANES. LAWRENCE B. SPERRY, Brooklyn, N. Y., assignor, by mesne assignments, to Sperry Gyroscope Company, Inc., Brooklyn, N. Y., a Corporation of New York. Filed Aug. 1, 1916, Serial No. 112,505. Renewed Jan. 2, 1930. 27 Claims. (Cl. 172—282.)

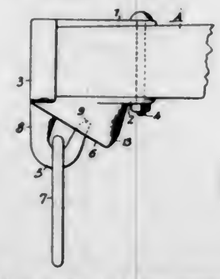


1. In an automatic pilot for aircraft, the combination with the vertical rubber, of a gyroscope for normally controlling the same to maintain the craft on a course, means for altering the course of the craft including means for temporarily locking the gyroscope, and means for turning the rudder to bring the craft to a new course.

18. In an automatic pilot for aircraft, the combination with the vertical rudder, of a gyroscope for normally controlling the same to maintain the craft on a predetermined course, means for altering the course of the craft, including means for temporarily rendering the gyroscope control ineffective and centralizing said gyroscope, and, means for turning the rudder to bring the craft to a new course.

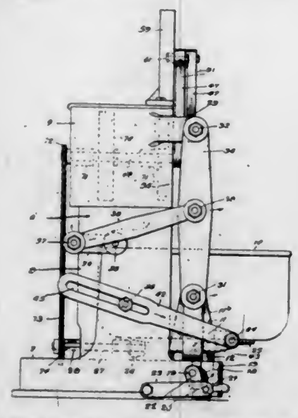
27. In gyroscopic apparatus for use in navigating aircraft, the combination with a ground observing sight, means for turning the same, a gyroscope, an indicating means connected to said gyroscope, and means operated from said first named means for altering said indicating means when it is desired to change the course.

1,757,097. LINK HOOK. OSCAR A. STORAASLI, Toppenish, Wash. Filed Nov. 27, 1929. Serial No. 410,166. 3 Claims. (Cl. 24—230.5.)



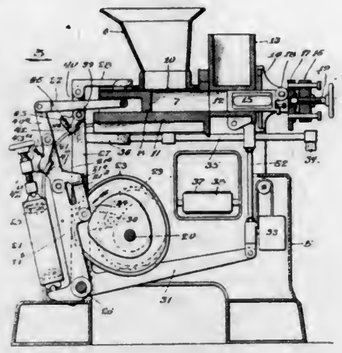
1. A link hook embodying a hook member and a guard member, the latter comprising side plates forming side passages on opposite sides of the hook member and a curved hood connecting said side plates at their inner ends and forming a cross passage connecting said side passages, said passages being of less width than the width of the link to be connected to the hook, the hood being open at its side facing the hook and arranged to enclose and overhang the bill of the hook and the side plates being of triangular form and having their outer edges beveled to gradually increase their depth between the base of the hook and the hood.

1,757,098. MIXING MACHINE. FRANK STREICH and WARD P. ELWOOD, Joliet, Ill., assignors to Union Machinery Company, Joliet, Ill., a Corporation of Illinois. Filed Mar. 14, 1929. Serial No. 346,843. 11 Claims. (Cl. 259—83.)



1. In a mixing machine, the combination of a supporting frame, a mixing bowl, suspended, supporting means for said mixing bowl pivotally suspended from said frame upon a fixed fulcrum, and means for moving said supporting means on its fulcrum.

1,757,099. DOUGH DIVIDER. FRANK STREICH, Joliet, Ill., assignor to Union Machinery Company, Joliet, Ill., a Corporation of Illinois. Filed July 29, 1929. Serial No. 381,769. 15 Claims. (Cl. 107—15.)

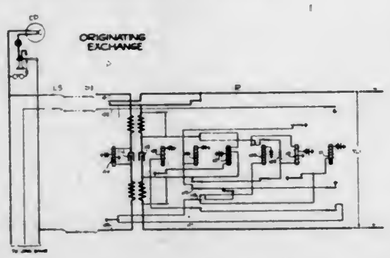


1. In a dough divider, the combination of a hopper, a dough receiving chamber opening thereto, regulatable means for controlling the size of the opening between the hopper and dough receiving chamber, a member having a measuring pocket adapted to receive dough from said receiving chamber, means for regulating the capacity of said measuring pocket, a plunger adapted to operate in the dough receiving chamber and adapted on its rearward stroke to draw dough from the hopper into said measuring chamber and on its forward stroke to force dough from said chamber into said measuring pocket, and means for actuating said plunger.

1,757,100. MANUFACTURE OF ALIPHATIC CHLOR COMPOUNDS. CHARLES J. STROSACKER, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Dec. 9, 1924. Serial No. 754,858. 5 Claims. (Cl. 260—113.)

1. The steps which consist in chlorinating acetic acid in the presence of a chlorinating catalyst to form monochlor acetic acid, and continuing such chlorination at successively higher temperatures until the tri-chlor compound is obtained.

1,757,101. TELEPHONE SYSTEM. VICTOR S. THARP, Elmhurst, Ill., assignor to Reserve Holding Company, Chicago, Ill., a Corporation of Delaware. Filed Apr. 6, 1929. Serial No. 353,017. 6 Claims. (Cl. 179—27.)

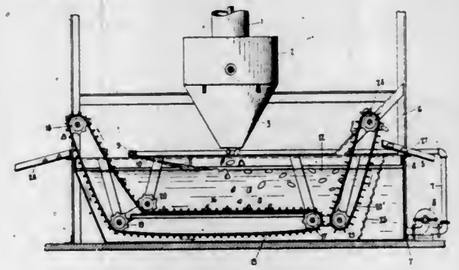


5. In a telephone system, an inter-exchange trunk line extending from a first exchange to a second exchange, means for seizing said trunk line and for setting up a current flow thereover, means in the first exchange for interrupting the current flow, automatic switching apparatus in the second exchange responsive to said interruptions to extend a connection from the trunk line to a called line, means for stopping the current flow over said trunk line after the connection has been extended, means responsive to further current flow over said trunk line controlled from the first exchange for releasing the automatic switching apparatus in the second exchange, and means controlled over the called line for preventing the said release of the automatic switches.

1,757,102. ASPHALT EMULSION. PIERCE M. TRAVIS, Ridgewood, and ARTHUR L. HALVORSEN, Perth Amboy, N. J., assignors to The Emulsion Process Corporation, Jersey City, N. J., a Corporation of Delaware. Filed Jan. 10, 1928. Serial No. 245,804. 5 Claims. (Cl. 134—1.)

1. The improvement in the manufacture of asphalt-water emulsions which comprises effecting the emulsification of the asphalt and water with sodium silicate in amount not exceeding 1% by weight on the emulsion and in the presence of a fatty acid in amount not exceeding 0.5% by weight on the asphalt employed.

1,757,103. SEPARATOR. ALBERT P. J. VOIGT, Galveston, Tex. Filed July 25, 1927. Serial No. 208,129. 1 Claim. (Cl. 209—173.)



A floatation separator comprising in combination a tank, a plurality of endless conveyor belts disposed therein and adapted to discharge at opposite ends of said tank, one of said belts being positioned along the bottom and one side of said tank, a liquid in said tank, means above said tank and arranged to discharge material to be separated into said liquid, means to circulate the liquid including an intake at the bottom of said tank and discharge nozzles adjacent the top and adapted to cause circulation longitudinally of the tank, another of said belts arranged to receive the kernels carried by said liquid and elevate them therefrom, and a screen protecting said circulating means.

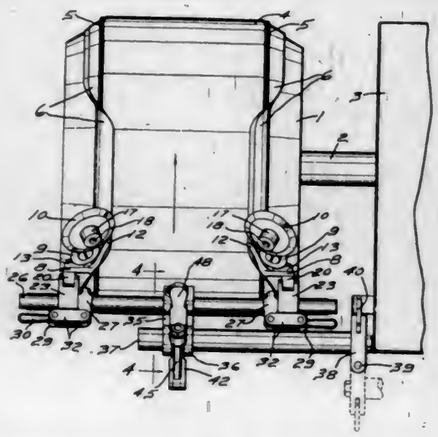
1,757,104. COMPOSITION OF MATTER COMPRISING RESIN ESTERS. HARRY M. WEBER, Newton, Mass., assignor to Ellis-Foster Company, a Corporation of New Jersey. Original application filed Oct. 20, 1922, Serial No. 595,862. Divided and this application filed June 14, 1929. Serial No. 371,054. 16 Claims. (Cl. 134—26.)

1. A composition of matter comprising a congo resin phthalic glyceride resin soluble in nitrocellulose solvents, admixed with nitrocellulose.

1,757,105. TIRE-BUILDING MACHINE. GEORGE F. WIKLE, Milwaukee, Wis., assignor to The Fisk Rubber Company, Chicopee Falls, Mass., a Corporation of Massachusetts. Filed Oct. 17, 1927. Serial No. 226,534. 5 Claims. (Cl. 154—10.)

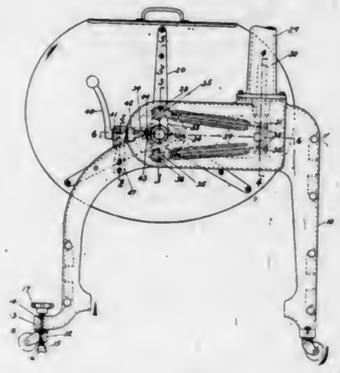
1. A device of the character described comprising a plow mounted to be positioned in operative relation with a tire

carcass supported on a rotatable drum, said plow being formed with an upwardly and inwardly extending finger adapted to engage an edge of the carcass plies and turn said edge around the bead core of the carcass, a contoured



roll associated with the plow to engage the plies at the point where they are turned about the bead core, and a stitcher disc positioned to engage the turned edge of the plies inwardly of the bead.

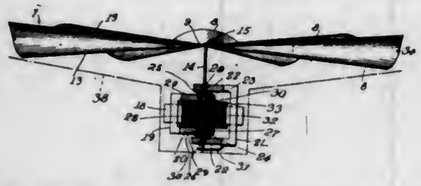
1,757,106. POWER WASHING MACHINE. VINCENT G APPLE, Dayton, Ohio. Filed June 14, 1928. Serial No. 285,371. 14 Claims. (Cl. 259—101.)



1. In a power washer of the oscillating type, a tub oscillation means comprising a revolvable shaft, two oppositely disposed crank pins carried thereon and driven thereby, two studs associated with the tub positioned oppositely away from the center of oscillation, bearings carried on the studs and the crank pins, and coil springs having at their ends hooks which partly encircle the bearings to connect said crank pins to said studs with said springs under resilient tension.

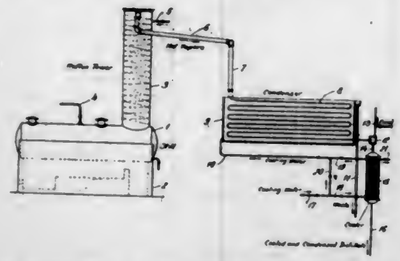
1,757,107. SOUND REPRODUCER. LOUIS E. BALTZLEY, Glen Ridge, N. J. Filed Mar. 24, 1926. Serial No. 96,967. 10 Claims. (Cl. 181—32.)

1. In a sound generator, a tympanum having undulations extending from the central portion to the rim of the tympanum and gradually increasing in depth and width from such central portion outwardly toward the rim portion of the same and a connection for bodily vibrating said tympanum, said connection being rigidly engaged



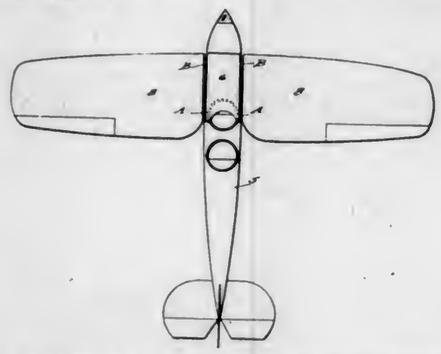
with an intermediate portion of the tympanum and supporting the tympanum for vibration in free air responsive to the movements of said connection.

1,757,108. APPARATUS FOR CONDENSING HYDROCARBON VAPORS. JOHN E. BELL, deceased, Brooklyn, N. Y., by Lola R. Bell, executrix, Brooklyn, N. Y., assignor to Sinclair Refining Company, New York, N. Y., a Corporation of Maine. Filed Jan. 22, 1925. Serial No. 3,986. 3 Claims. (Cl. 257—32.)



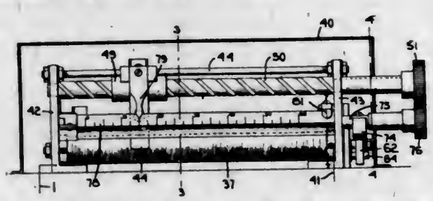
1. In combination in an apparatus for condensing and cooling vapors and distillates from oil stills, a condenser and a cooler, connections therebetween including a separator arranged to discharge liquid condensate to the cooler and to separate fixed gases, and means for supplying cooling water to the cooler and for supplying cooling water to the condenser from the cooler.

1,757,109. AEROPLANE. CHARLES J. BOYD, Amarillo, Tex. Filed Nov. 3, 1928. Serial No. 316,973. 4 Claims. (Cl. 244—12.)



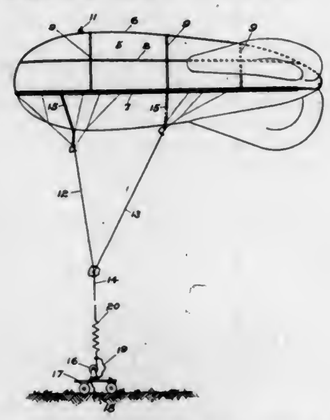
1. In an aeroplane, a fuselage, a wing structure across the fuselage including a central section and a pair of end sections, means for rigidly mounting the central section on the fuselage, universal hinge connections between the rear end of the inner sides of the end sections and the rear side edges of the central section and detachable connections between the forward ends of the inner side edges of the end sections and the forward side edges of the center section, struts having universal connections with the fuselage and with the end sections.

1,757,110. ELECTRICAL THERAPEUTIC APPARATUS. RALPH W. CHAPMAN, Oldtown, Me., assignor to T. M. Chapman's Sons Co., Oldtown, Me., a Corporation of Maine. Filed Oct. 3, 1927, Serial No. 223,579. Renewed Sept. 23, 1929. 8 Claims. (Cl. 174—177.)



1. In an electrical therapeutic apparatus, the combination with means to rectify alternating current, said means having an input circuit and an output circuit, of a condenser and choke coil in the output circuit, a variable resistance in the input circuit, and means to discharge the condenser when the variable resistance is in starting position.

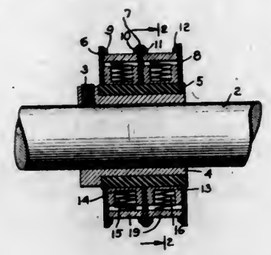
1,757,111. PROTECTIVE DEVICE FOR BALLOONS. ALFRED CROSSLEY, Washington, D. C., assignor, by mesne assignments, to Federal Telegraph Company, a Corporation of California. Filed Jan. 17, 1922. Serial No. 529,977. 5 Claims. (Cl. 173—31.)



2. In a system for protecting kite balloons from destructive atmospheric disturbances, a discharger for attachment to the kite balloon, a flexible metallic bridle embracing said kite balloon and connected at one end to said discharger and a connection between the other end of said metallic bridle and the ground, and a concentrated and dissipative resistance having one end connected to said bridle and the other end connected to ground interposed in said last mentioned connection for preventing oscillatory currents therein.

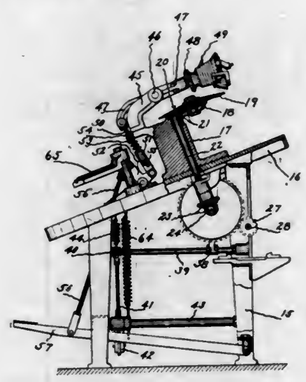
5. In a protective system, a balloon, a bridle of conductors surrounding said balloon, a discharger comprising an insulated conical shaped member, means for securing said member at its base adjacent the top of said balloon, a metallic tip carried by said insulated conical member, a connection extending downwardly along one side of said insulated conical member and anchored thereto, said connection being connected to said bridle of conductors surrounding said balloon and a connection between said bridle and a body at substantially zero electrical potential.

1,757,112. COMMUTATOR. JAMES M. CUNNINGHAM, Endicott, N. Y., assignor to The Tabulating Machine Company, Endicott, N. Y., a Corporation of New Jersey. Filed Aug. 3, 1928. Serial No. 297,132. 6 Claims. (Cl. 200—28.)



2. A commutator consisting of a plurality of contact segments formed on a complex cylinder by intermediate cuts, a plurality of plate glass inserts, means for assembling said contact segments and said plate glass inserts, spring means to press the glass inserts in a radial direction against the periphery of the commutator, said plate glass inserts and spring means being located within said grooves.

1,757,113. TIRE-FINISHING MACHINE. CHARLES H. DESAUTELS, Springfield, Mass., assignor to The Fisk Rubber Company, Chicopee Falls, Mass., a Corporation of Massachusetts. Filed May 22, 1926. Serial No. 110,878. 6 Claims. (Cl. 154—9.)

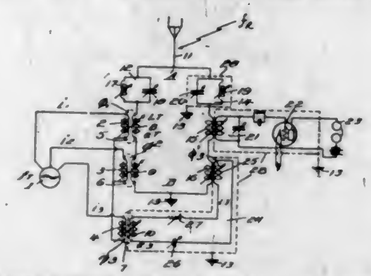


1. A tire finishing machine comprising a plurality of rollers arranged in one plane with their axes radiating from a common point and adapted to support a tire casing on one side, a plurality of rollers arranged with their axes at right angles to said plane and adapted to contact with the outer periphery of the tire casing, a cone-faced disk mounted with its axis substantially at right angles to said plane in such a position as to extend into the inside of the tire casing and furnish support to one interior wall thereof, and a roller bearing upon the outer surface of the tire wall opposite said disk.

1,757,114. DUPLEX HIGH-FREQUENCY TELEPHONE SYSTEM. ROBERT D. DUNCAN, Jr., East Orange, N. J., assignor, by mesne assignments, to Federal Telegraph Company, a Corporation of California. Filed Dec. 23, 1925. Serial No. 77,290. 4 Claims. (Cl. 250—9.)

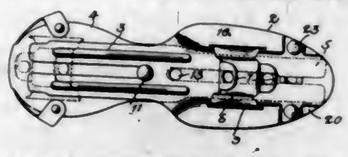
1. In a simultaneous transmission and reception system of radio telephony, the combination of an antenna-ground system, two branch circuits connected in parallel, one of

said branch circuits containing a parallel tuned circuit, said parallel connected branch circuits connected in series with said antenna-ground system, a signal receiving system, said signal receiving system connected with said branch circuit containing said parallel tuned circuit, a source of three phase high frequency electrical energy, said second branch circuit connected with two phases of said three phase source, said parallel tuned circuit of one



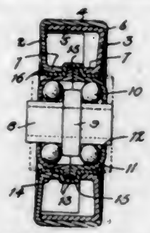
of said branch circuits adjusted substantially to resonance for the frequency of said three phase source, a linking circuit connected with the third remaining phase of said three phase source and with said branch circuit containing said parallel tuned circuit, said combination providing means for eliminating interfering signals produced in said receiving system by said source of three phase high frequency energy.

1,757,115. ROLLER SKATE. WILLIAM HAMILTON DUNNE, Toronto, Ontario, Canada. Filed Aug. 25, 1928. Serial No. 301,986. 3 Claims. (Cl. 208—175.)



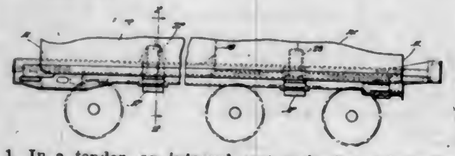
1. A skate body comprising a heel plate longitudinally provided with spaced shank extensions; a toe plate also longitudinally provided with spaced shank extensions, and further provided with spaced side wings extending from approximately the shank forwardly for the desired distance, and a pair of spaced lugs, which lugs are also spaced apart from said wings, the said wings and lugs being stamped above the rest of the surface of said toe plate, thus forming a channel longitudinally thereof substantially in the same plane as the top sides of said toe-plate shank-extensions, and the underside of the shank extensions of said heel plate, the latter extensions occupying said channel and having contact with the inner sides of said wings and lugs, and means for clamping said plates in adjusted position.

1,757,116. ROLLER-SKATE WHEEL. WILLIAM HAMILTON DUNNE, Toronto, Ontario, Canada. Filed Aug. 25, 1928. Serial No. 301,987. 3 Claims. (Cl. 208—181.)



1. A roller skate wheel comprising a support provided substantially centrally with a radial flange; a pair of centrally-apertured cups housing said radial flange and each provided at its inner side with a radial flange, the said cup flanges being placed together; balls mounted between each side of said radial flange and said cups; a locking sleeve embracing said cups and having a central channel in which is snugly located the flanges of said cups so as to lock said cups against lateral displacement, and a wheel consisting of two interfitting members one of which is provided with a tread, and each member being provided with an inner flange whereby it is mounted on said sleeve at opposite sides of the channel thereof in contact therewith, the ends of said locking sleeves being rolled or flanged outwardly against their associated members of the wheel, the whole arranged for the purpose specified.

1,757,117. TENDER-FRAME STRUCTURE. CLARENCE B. HARRISON, Lima, Ohio, assignor to The Ohio Steel Foundry Company, Lima, Ohio, a Corporation of Ohio. Filed July 25, 1927. Serial No. 208,141. 3 Claims. (Cl. 105—231.)

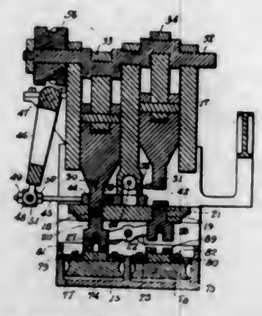


1. In a tender, an integral cast main frame including longitudinal and transverse frame members having openings therebetween, upright walls connected to said members to form the sides of the tender tank, horizontally disposed flanged members surrounding said openings countersunk adjacent their margins, and sheet metal pieces fitting in said countersunk flanges and welded thereto to form with said main frame casting the bottom of said tank.

1,757,118. SOLDERING FLUX. FRANK E. HARRIS, Bellingham, Wash. Filed Mar. 2, 1929. Serial No. 343,892. 5 Claims. (Cl. 148—25.)

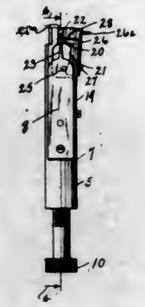
1. A soldering flux embodying zinc stearate mixed with an oil and a light petroleum derivative.

1,757,119. MOLDING PRESS. GARABED G. HEGHINIAN, Baltimore, Md. Filed Aug. 28, 1926. Serial No. 132,240. 16 Claims. (Cl. 25—83.)



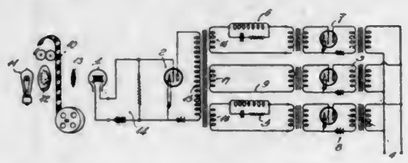
1. A molding press comprising a die bed having a recess, a lower molding plunger relatively movable in said recess and formed of at least two parts one of which has an upper molding surface which is normally below the upper molding surface of the other part so as to provide room for a greater depth of moldable material over one part than over the other part, an upper plunger movable into said recess from above and spring means between the two parts of the lower plunger for allowing the molding surfaces of the two parts of the lower plunger to move relative to each other.

1,757,120. JEWEL-SETTING TOOL. SOLOMON HELFGOTT, New York, N. Y. Filed Jan. 15, 1927. Serial No. 161,407. 2 Claims. (Cl. 81—7.)



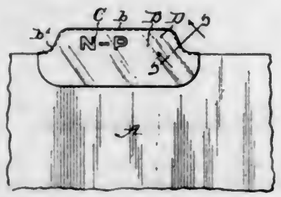
1. A jewel setting instrument comprising a tool body cut away to form a surface to receive a sliding plate and a rabbeted recess adjacent one end thereof for receiving an individual roller jewel therein, a spreader plate attached to one side of the body, one end of said plate having a side extension forming a clamping means for a jewel positioned within the said recess, a cam surface on the side extension, a plate sliding on the cut away surface cooperating with the spreader plate for opening the same, one end of said slidable plate engaging the end of the jewel and a feed screw for advancing the slidable plate whereby the jewel may be forced outwardly beyond the end of the body and into the setting of a roller or pallet of a watch movement.

1,757,121. TRANSMISSION SYSTEM. CLINTON W. HOUGH, Boonville, N. Y., assignor, by mesne assignments, to Federal Telegraph Company, a Corporation of California. Filed May 12, 1928. Serial No. 277,303. 10 Claims. (Cl. 178—6.)



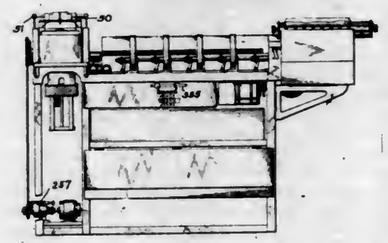
1. In a system for transmission of motion pictures, the combination of light-sensitive apparatus producing variations of current, means for amplifying said current variations, and means for delaying the current through a plurality of circuits from said amplifier to a plurality of equalizing amplifiers.

1,757,122. GUIDE CARD FOR INDEX SYSTEMS. DAVID E. HUNTER, Muskegon, Mich., assignor to Shaw-Walker Company, Muskegon, Mich., a Corporation of Michigan. Filed Jan. 20, 1927. Serial No. 162,235. 3 Claims. (Cl. 129—16.8.)



1. A sheath for the tab and adjacent edge portion of a guide card consisting of a piece of ductile transparent material folded double to fit over a straight edge portion of the card, and having the material along its folded edge drawn backwardly from said edge to provide a cavity conforming to the shape of the tab and the adjacent portions of the card.

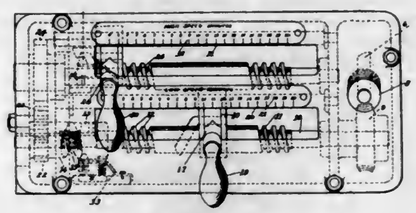
1,757,123. TABULATING MACHINE. CLAIR D. LAKE and RALPH E. PAGE, Binghamton, N. Y., assignors to The Tabulating Machine Company, Endicott, N. Y., a Corporation of New Jersey. Filed Feb. 5, 1925. Serial No. 6,981. 34 Claims. (Cl. 235—58.)



1. A card-controlled printing tabulating machine for printing on record sheets data gathered from groups of cards, comprising in combination, a feeding device for said record sheets, means for first printing card group designations thereon, means for subsequently printing correlated totals of items from said groups of cards, and means for controlling the aforesaid feeding device so that said subsequently printed totals will be printed in alignment with said card group designations on said record sheet.

15. A tabulating device, a printing device, means comprising a two-speed driving motor for operating said devices conjointly or operating the tabulating device alone, a resistance for controlling the speed and torque characteristics of said motor, and a plurality of contact devices operable by said tabulator and printing devices for controlling the coaction of said resistance and said motor to obtain the desired speed for each device.

1,757,124. SPEED-CONTROLLING DEVICE. FRANK X. LAUTERBUR and EDWARD J. LAUTERBUR, Sidney, Ohio. Filed Nov. 1, 1928. Serial No. 316,592. 9 Claims. (Cl. 172—239.)



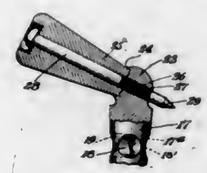
6. In combination with a machine and a plural speed electric motor for driving said machine, a mechanically operative control for said motor comprising means for controlling the operation of the machine at a predetermined rate of operation for a predetermined interval and for automatically changing the rate of operation to a different speed for a subsequent interval, said mechanically operative control comprising a plurality of screws with setting means one for each screw adapted to engage predetermined portions of said screws.

1,757,125. SCREW OR NUT DRIVING DEVICE FOR PORTABLE POWER-DRIVEN ROTARY TOOLS. AXEL LEVEDAHL, Aurora, Ill., assignor to Independent Pneumatic Tool Company, Chicago, Ill., a Corporation of Delaware. Filed Sept. 23, 1927. Serial No. 221,603. 8 Claims. (Cl. 81—54.)



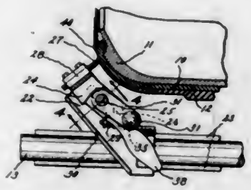
1. In a portable power driven rotary tool, the combination with the rotary spindle of the tool, of a screw or nut driving shaft having its inner end slidably and rotatably mounted in said spindle, a pair of opposed jaw clutch members, one fixed on the spindle and the other slidable on the shaft for rotation therewith, spring means acting on the spindle and shaft for normally holding the clutch members disengaged, a shoulder on the shaft between the clutch members, and a spring about the shaft and engaging the slidable clutch member thereon for normally holding the same against said shoulder.

1,757,126. GAS VALVE. GEORGE M. MAIER, Pelham, N. Y., assignor to American Radiator Company, New York, N. Y., a Corporation of New Jersey. Filed July 27, 1928. Serial No. 295,707. 9 Claims. (Cl. 116—125.)



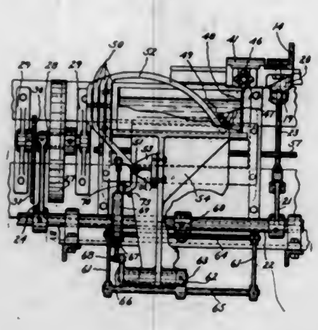
1. In a valve, a stem, a handle, and means for securing said handle to said stem; said securing means extending beyond said stem and serving as a pointer, substantially as specified.

1,757,127. TIRE TRIMMER. CHARLES EDGAR MAYNARD, Northampton, Mass., assignor to The Fisk Rubber Company, Chicopee Falls, Mass., a Corporation of Massachusetts. Filed Aug. 10, 1928. Serial No. 298,738. 3 Claims. (Cl. 164—36.)



1. In a machine of the character described, a trimming unit adapted to be positioned adjacent a tire building drum, said unit comprising a blade, a holder for carrying the blade, a stud adapted to act as a pivot for the holder, and a spring controlled member also carried by the stud adapted to be locked behind the holder to thereby force the said blade into yielding contact with the tire.

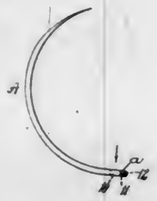
1,757,128. MANDREL-CEMENTING APPARATUS. CHARLES EDGAR MAYNARD, Northampton, Mass., assignor to The Fisk Rubber Company, Chicopee Falls, Mass., a Corporation of Massachusetts. Filed Feb. 14, 1927. Serial No. 167,946. 5 Claims. (Cl. 91—18.)



1. In a mandrel cementing machine, a cement tank, a plurality of cement carrying rods, means for shifting the rods from the tank to position to transfer cement to the mandrel, and means for separating the rods from each other during the period of shifting.

3. In a mandrel cementing machine, a cement carrying surface, means for depositing a mandrel in cement-transferring rolling contact with that surface at a point intermediate the length of said surface in the direction of the travel of the mandrel, and a device for adjusting the position of the point of contact.

1,757,129. ATRAUMATIC RETHREADABLE SURGICAL NEEDLE. WILLIAM L. MCCLURE, Boston, Mass. Filed Feb. 16, 1928. Serial No. 254,863. 3 Claims. (Cl. 128—339.)



1. A surgical needle provided with an eye extending transversely through the head portion thereof and having an enclosed passage extending longitudinally through said head portion upon the median line from the extremity thereof and communicating with said eye, the outer end portion of said passage flaring outwardly where it emerges from said head.

1,757,130. PHOTOGRAPHIC DISK. DAVID A. MCCOWAN, Toronto, Ontario, Canada. Filed Dec. 17, 1927. Serial No. 240,801. 4 Claims. (Cl. 95—8.)



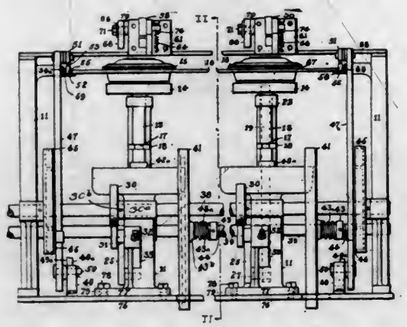
1. A photographic disk formed of sheet metal having the marginal edge portion displaced from the plane of the disk, and a rigid bead formation formed at the outward edge extremity of said displaced marginal edge portion.

1,757,131. PISTON. WILLIAM C. MCCOY, Shaker Heights, Ohio, assignor to The Cleveland Trust Company, Cleveland, Ohio, a Corporation of Ohio. Filed Nov. 19, 1927. Serial No. 234,398. 7 Claims. (Cl. 74—108.)



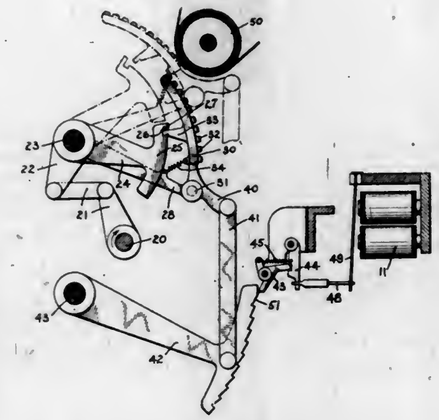
1. A piston comprising a relatively highly expansive body portion, a bearing ring groove in the head portion thereof, a bearing ring having its ends interlocked against separation, a relatively stiff wave ring mounted between the body of the piston and the bearing ring, the working thrust face of the piston being ground to substantially the same radius as the bearing ring, said piston body being relieved from a point adjacent one boss, completely past the boss, around the other working face of the piston, and past the other boss in the zone of the bearing ring to a point below the boss, and an inextensible control ring adjacent the open end of the skirt adapted to control the circumferential dimension of the skirt in accordance with the temperature coefficient of expansion of said control ring, said control ring being seated in a groove in the piston skirt of no greater depth than the thickness of the control ring and said control ring being transversely split and having its ends interlocked.

1,757,132. MACHINE FOR USE IN THE MANUFACTURE OF POTTERY WARE. WILLIAM J. MILLER, Swissvale, Pa. Filed Nov. 17, 1926. Serial No. 148,872. 43 Claims. (Cl. 25—24.)



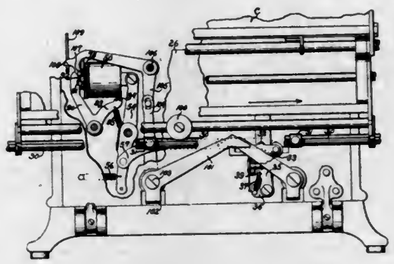
1. A machine of the class specified including a profile, mold carriers having molds thereon, a track adapted to support and guide a plurality of said carriers, and means for imparting movement to said carriers to bring the molds successively into alinement with the profile.

1,757,133. PRINTING MECHANISM. ALBERT W. MILLS, East Orange, N. J., assignor to The Tabulating Machine Company, Endicott, N. Y., a Corporation of New Jersey. Filed Aug. 16, 1928. Serial No. 299,942. 9 Claims. (Cl. 101—93.)



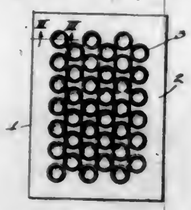
1. A printing mechanism comprising a type carrier having a plurality of type thereon and a driving element, means for releasably attaching the carrier to the driving element and means for interrupting the movement of the type carrier to effect release of the releasable attaching means for projecting one of the several type for printing.

1,757,134. ACCOUNTING MACHINE. ROBERT L. MULLEA, Detroit, Mich., assignor to Burroughs Adding Machine Company, Detroit, Mich., a Corporation of Michigan. Filed July 23, 1928. Serial No. 294,637. 5 Claims. (Cl. 197—64.)



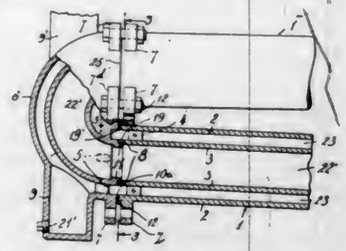
4. The combination in a machine of the class described, of a traveling paper carriage, mechanism for tabulating the carriage from one columnar position to another, cushioning means for cushioning the shock of stopping the carriage in the columnar positions to which it is moved, said cushioning means including a dash pot having a vent, and means conditioned automatically as an incident to the movement of the carriage to predetermined columnar positions for partially closing said vent.

1,757,135. VACUUM-CUP ENERGIZER. EARL H. ODELL, Chicago, Ill. Filed June 27, 1927. Serial No. 201,570. 3 Claims. (Cl. 128—62.)



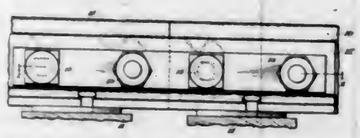
1. An energizing device, comprising a board having apertures therein and a plurality of rubber vacuum cups having rearwardly extending hollow flanged portions adapted to extend through said apertures with said flanges engaging the rear side of said board, the rims of said vacuum cups lying in the same plane and presenting a surface for supporting a person's body.

1,757,136. HEAT EXCHANGER. ROBERT JEWETT PARODIE, Maywood, Ill., assignor to The Griscom-Russell Company, New York, N. Y., a Corporation of Delaware. Filed Sept. 4, 1926. Serial No. 133,525. 13 Claims. (Cl. 257—247.)



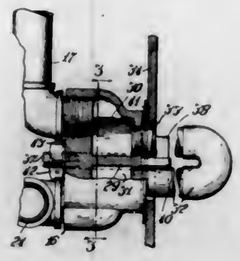
1. A heat exchanger, comprising a plurality of flow-sections, said sections being formed into an upper arm and a lower arm connected by a return bend in such a manner that the flow through each section at its outlet end is substantially opposite in direction to that at its inlet end, each of said sections having an inner conduit and an outer enclosure therefor, said inner conduit and said outer enclosure being integrally connected near each end of each section to form an annular space between said inner conduit and said outer enclosure; an upper inlet and outlet connection; a lower inlet and outlet connection; and on the outside of each section and on each return bend, at the ends thereof means for connecting together said sections and bends in a continuous vertical arrangement.

1,757,137. RAIL JOINT. ALPHONSO T. PALMER, Chicago, Ill. Filed Sept. 11, 1926, Serial No. 134,881. Renewed Oct. 4, 1929. 7 Claims. (Cl. 238—259.)



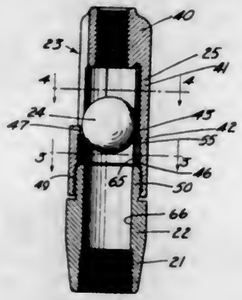
1. A rail joint spring comprising an elongated spring plate having four spaced perforations therethrough, said plate being curved throughout its length about an axis extending longitudinally thereof and also being curved about spaced transverse axes to provide undulations, the undulations being extended outwardly toward the convex side of said plate at each of said perforations.

1,757,138. WATER-HEATING APPARATUS. ADOLPH PFENDER, Chicago, Ill., assignor to Ferguson and Lange Foundry Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 31, 1927. Serial No. 216,548. 8 Claims. (Cl. 257—248.)



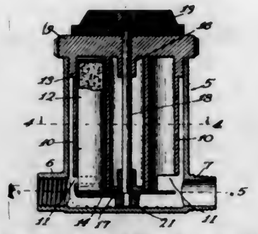
1. A water heating apparatus, comprising in combination a head adapted by engagement with the outer face of the wall of a receptacle for hot water about an opening in the wall effectively to close said opening, bolts extending through said opening in spaced relation to each other adapted by operative engagement with the inner face of the wall and with the head to hold the head securely in operative position, and a heating coil connected with said head and extending through said opening between said bolts for taking a stream of water from the head and returning it thereto, being insertable into operative position in said opening after said bolts are in place therein.

1,757,139. VALVE FOR OIL PUMPS. HERMAN W. PLATENBERG, Los Angeles, Calif., assignor to Axelson Machine Company, Los Angeles, Calif., a Corporation of California. Filed Oct. 14, 1926. Serial No. 141,528. 3 Claims. (Cl. 251—121.)



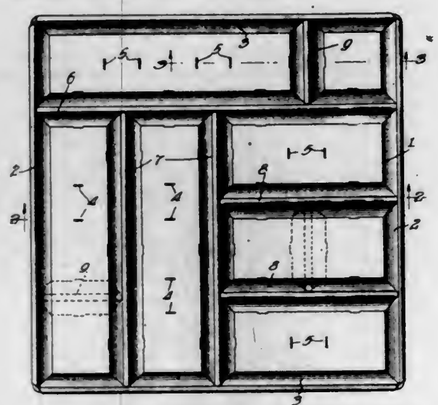
1. In a deep well pump valve, the combination of: a member provided at its lower end with an annular collar of a relatively soft metal; a spherical ball adapted to be retained in said member, there being a central bore formed in said collar larger than the diameter of said ball, and a counter-bore formed in said collar to provide an inner, annular shoulder at its upper end, said counter-bore being threaded at its lower end; an annular seat member formed of a relatively hard, brittle metal, and having an upper radial face adapted to engage the lower face of said annular shoulder, an outer face adapted to fit the upper portion of said counter-bore, said collar exerting an inward pressure against said outer face, a lower radial face, and a central bore slightly smaller in diameter than said ball; and a male threaded member adapted to screw into the threads of said counter-bore and having a face which tightly engages the lower radial face of said seat member, thus placing said seat member in axial compression, and which has a bore in register with the bore of said seat member.

1,757,140. WATER-IMPREGNATING DEVICE. WILLIAM R. PULKINGHORN, Los Angeles, Calif., assignor to Spra-O-Sal Products, Inc., Los Angeles, Calif., a Corporation of California. Filed July 25, 1927. Serial No. 208,226. 7 Claims. (Cl. 299—84.)



1. A device of the class described comprising a casing having fluid inlet and outlet openings, the inlet opening adapted for connection to a source of fluid under pressure, a chemical container formed of a fibrous material mounted in said casing, and rotatable cutter means for forming an opening in said container to release the chemicals contained therein to impregnate the fluid as it passes through said casing.

1,757,141. KNOCKDOWN RECEPTACLE. WALTHER RASTER, Chicago, Ill. Filed May 19, 1927. Serial No. 192,649. 4 Claims. (Cl. 220—22.)



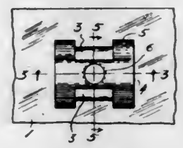
1. A receptacle provided in its bottom with rows of slots extending transversely of each other, the slots of each row being equidistant from each other and arranged with respect to the other row midway between points of intersection of said rows, the latter being spaced from each other a distance equal to the spacing of the perforations from each other, and partition walls provided at their lower edges with bendable tongues passed through said slots and bent over upon the lower face of the receptacle bottom, said partition walls being lengths constituting multiples of the spacing of said rows of slots from each other.

1,757,142. RIVETABLE NUT. HAROLD G. RENNER, Detroit, Mich. Filed Aug. 15, 1927. Serial No. 212,921. 5 Claims. (Cl. 85—32.)



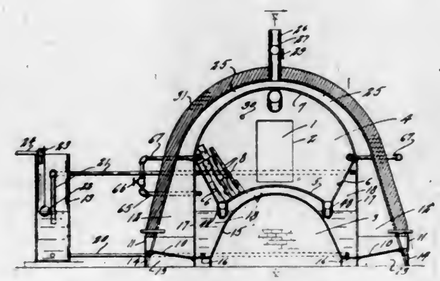
1. A nut blank comprising a rectangular metallic member formed with a pair of spaced parallel ribs projecting from one surface of such blank to form riveting projections and extending completely across said blank, the adjacent faces of said ribs being beveled to adapt said ribs to be upset oppositely responsive to a pressure applied to said ribs transversely to such surface.

1,757,143. NUT MOUNTED UPON SHEET METAL. HAROLD G. RENNER, Detroit, Mich. Filed Oct. 14, 1927. Serial No. 226,233. 3 Claims. (Cl. 85—1.)



1. The combination with a nut having a pair of notches formed in opposite edges thereof, of a sheet metal member seating said nut, and having a pair of tongues struck up therefrom and engaging in said notches, said tongues being terminally bent down upon the outer face of said nut to hold the nut in a definite position upon said member.

1,757,144. METHOD OF DISTILLING RESINOUS WOODS. JOHN C. SCHAFFER, Pittsburgh, Pa., assignor to American Pine Products Corpn., Reno, Nev., a Corporation of Nevada. Filed Oct. 11, 1926. Serial No. 140,870. 2 Claims. (Cl. 202—29.)

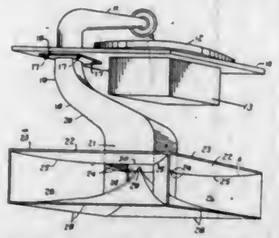


1. The method of distilling resinous wood in a retort which has the wall of the upper portion of the retort externally heated by hot products of combustion and the wall of the lower portion of the retort externally heated by a temperature controlled water jacket at the temperature of steam generation comprising stacking the wood in the form of elongated sticks within the retort so that its grain extends in an upward direction, progressively heating the sticks first at its upper surface by indirect heating of hot combustion gases to remove the highly volatile constituents therefrom, increasing the temperature of the upper surface of the sticks by indirect heating of hot combustion gases to effect charring of the wood, simultaneously heating the lower portion of the wood at the temperature of the water and steam in the temperature controlled water jacket for promoting the rosin exudations from the wood.

1,757,145. SOUND DISTRIBUTOR. ERNEST HENRY SCHLEIFFERS, Montreal, Quebec, Canada. Filed Dec. 13, 1926, Serial No. 154,542. Renewed Sept. 30, 1929. 5 Claims. (Cl. 274—2.)

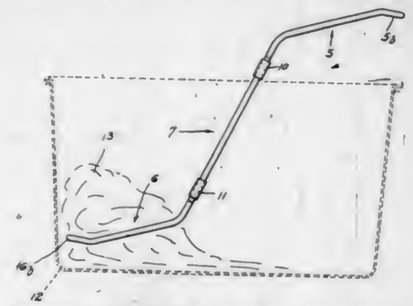
5. A sound distributor, a conveyer tube adapted to communicate with a tone arm of a sound reproducing machine

and offset and downwardly turned and forming a central support, a bell secured to said tube and having a bottom extending upwardly in the centre to form a deflector di-



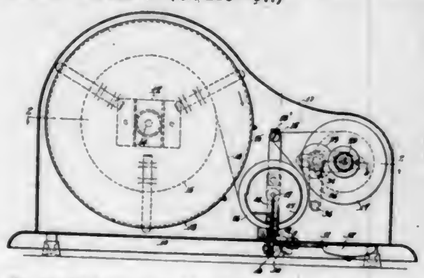
recting the vibrating air to a plurality of shallow and flaring resonating chambers having their outlets from all sides.

1,757,146. LAUNDRY TOOL. JOHN C. SCHOFIELD, Los Angeles, Calif. Filed Jan. 12, 1929. Serial No. 332,036. 3 Claims. (Cl. 68—6.)



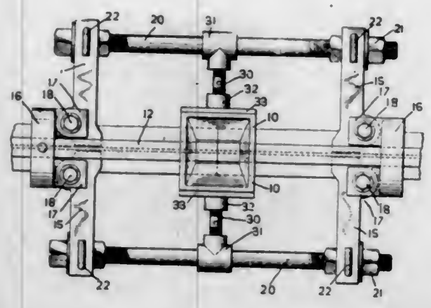
2. A laundry tool having a body portion which consists of the central portion of a wire reinforced by rebent overlapping end portions of such wire and means which bind together said central portion and overlapping end portions of said wire into three wire runs of which the two outer runs contact with the central run throughout the overlap, such wire portion of said tool being looped at each end of said body portion of the tool, the loops thus formed being disposed angularly with relation thereto.

1,757,147. RIBBONER. EDWARD B. SOMERS, Darby, Pa., assignor to Tybon Corporation, Camden, N. J., a Corporation of New Jersey. Filed Mar. 23, 1928. Serial No. 264,019. 3 Claims. (Cl. 116—67.)



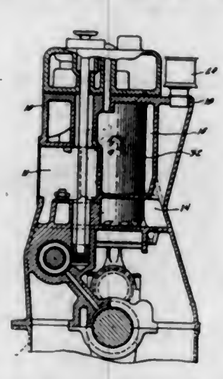
1. In mechanism for rewinding ribbon from a roll, a drum adapted to be rotated by the ribbon, a face gear carried by the drum, a gear engaging the face gear and spring-pressed against it and movable away from it to permit withdrawal from its engagement and resetting of the gear, an alarm operated by movement of the gear and fixed indicating means cooperating with the gear to indicate the extent of ribbon to be wound before operation of the alarm.

1,757,148. RAIL-WELDING APPARATUS. HUGH G. SPILSBURY, Cranford, N. J., assignor, by mesne assignments, to Francis Earle, Montclair, N. J. Filed Aug. 6, 1927. Serial No. 211,213. 6 Claims. (Cl. 22—156.)



1. A device for applying a mold to a rail in the aluminothermic welding process which comprises a pair of rail clamps having members extending longitudinally of said rails and spaced therefrom, a pair of mold sections adapted to be positioned about said rails and holding means therefor co-operating with said members comprising compression members having oppositely inclined threads.

1,757,149. CRANK-CASE VENTILATION. HERBERT C. M. STEVENS, Paris, France, and ROLAND V. HUTCHINSON, Lansing, Mich., assignors to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Oct. 10, 1927. Serial No. 225,216. 10 Claims. (Cl. 123—119.)

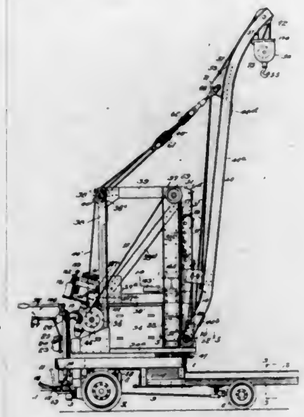


1. In an internal combustion engine including a plurality of cylinders and a crankcase, conduits located between the cylinders and open on one side to the air and on the other side connecting with engine air intake, the cylinders being provided with apertures adjacent the lower part of each piston at its lowest position and communicating with said conduits.

1,757,150. LOAD-HANDLING MECHANISM. FRANK STONER, Lakewood, Ohio, assignor to The Baker-Rauling Company, Cleveland, Ohio, a Corporation of Ohio. Filed Aug. 8, 1924. Serial No. 730,931. 5 Claims. (Cl. 212—57.)

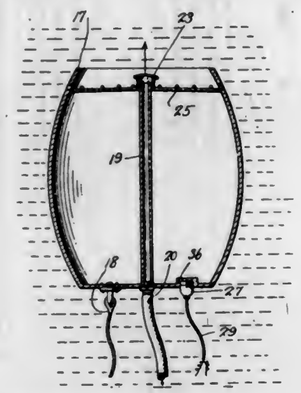
1. In apparatus of the class described, the combination of a frame, a vertically arranged guide, a boom, a support adjustably secured to said guide for supporting the lower end of said boom thereon, a flexible member extending downwardly from the outer portion of said boom and carrying an element arranged to engage a load or be

anchored, sheaves around which said member reeves, one of said sheaves being supported above the upper limit of adjustment of said support along said guide and the other sheave being mounted on said support, and mechanism for



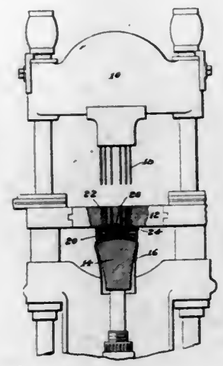
winding up or paying out said flexible member, whereby a load may be engaged and moved or, upon anchoring of the load engaging element, the boom support may be adjusted to another position.

1,757,151. POSITION-INDICATING AND AIR-SUPPLYING DEVICE FOR SUNKEN SUBMARINES. JOHN B. SUNT, Rhinelander, Wis. Filed Mar. 19, 1928. Serial No. 262,905. 1 Claim. (Cl. 114—61.5.)



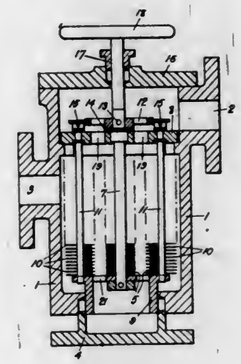
In a means for supplying air to the interior of a sunken submarine, a buoy normally attached to the submarine and adapted to float to the surface when released from the submerged vessel, said buoy comprising top and bottom walls, and an interconnecting side wall, the upper edge of the side wall projecting above the top wall, the upper portion of the side wall directly above the top wall being formed with water outlet openings, an air pipe extending through the top and bottom walls, the upper end providing an air inlet and projecting above the water outlet openings in the side wall, a cylindrical cap secured at its lower end on the upper end of the air pipe, the top of the cap being closed, the side of the cap above the upper end of the air pipe being formed with air inlet openings, and a hose affording communication between the lower end of the air pipe and the interior of the sunken submarine.

1,757,152. SPORT-SHOE HEEL-ATTACHING APPARATUS. ISIDOR TARLOW, Brockton, Mass. Filed Jan. 3, 1929. Serial No. 330,021. 4 Claims. (Cl. 1—32.)



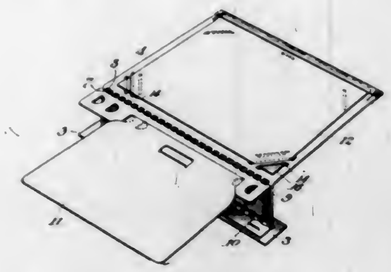
1. Spiked heel attaching apparatus comprising a shoe support, a gang of nail drivers, and a die block situated between the shoe support and the nail drivers, having nail passages to guide said drivers, said die block having provision for receiving and housing the spikes on a heel to be attached whereby the heel stock lies flush against said die block.

1,757,153. FILTERING OR LIKE DEVICE. HERBERT ALEXANDER THOMPSON, Morpeth, England, assignor to Swinney Brothers Limited, Morpeth, England, a Corporation of Great Britain. Filed Jan. 12, 1929, Serial No. 332,076, and in Great Britain July 31, 1928. 8 Claims. (Cl. 210—152.)



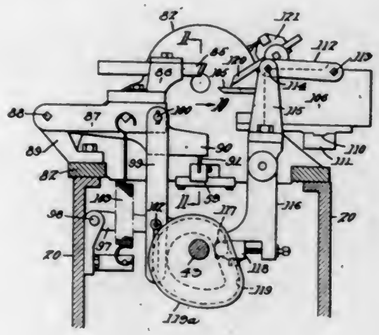
1. In a filter device, the combination of a plurality of annular laminations spaced along a main spindle, said laminations being movable axially of but rotatable with said main spindle, a subsidiary parallel spindle having scraper elements which are movable axially thereof but rotatable therewith, said scraper elements being arranged to extend into the spaces between said laminations, a spring-washer disposed on the main spindle and a spring-washer on the subsidiary spindle to maintain the annular laminations and scraper elements in close and resilient assemblage, a toothed gear on said main spindle, and a gear on said subsidiary spindle meshing therewith to provide synchronous rotational movement of the main and subsidiary spindles.

1,757,154. TRIPLE-HINGE INDEX UNIT. EDWARD CLAXTON WALTER, Orange, N. J., assignor to The Elliott-Fisher Company, New York, N. Y., a Corporation of Delaware. Filed Apr. 24, 1925. Serial No. 24,773. 12 Claims. (Cl. 129—16.)



1. The combination with a tray, having a guide, of an index device engaging the guide and having an axis movement adjacent said guide, said device including a plurality of record portions mounted to space them from said axis and having individual swinging movement.

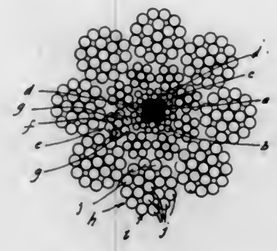
1,757,155. VARIETY LATHE. JOHN J. WITT, Winchendon, Mass., assignor to Goodspeed Machine Company, Winchendon, Mass., a Corporation of Massachusetts. Filed Dec. 27, 1927. Serial No. 242,770. 2 Claims. (Cl. 142—38.)



1. In a variety lathe, a bed, a stock feeding cross head mounted for longitudinal movement on said bed, and having a feed bar having a step by step engagement therewith, work forming and finishing tools mounted for successive operation on said stock as it is fed longitudinally of the bed, and means to move said cross head and actuate said tools in synchronized relation comprising a cam shaft having cams thereon effective respectively to engage said feed bar to actuate said cross head and to engage said tools, and said feed bar having a cam thereon effective to move said forming tool toward and from the work, the cam on said cam shaft which controls the forming tool shifting said tool toward and from operative position with relation to the work and with relation to the cam on said feed bar.

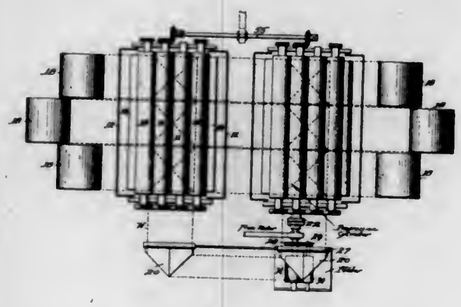
1,757,156. FLEXIBLE WIRE ROPE. OSCAR A. WIRKKALA, Glendale, Oreg. Filed Mar. 26, 1928. Serial No. 264,702. 2 Claims. (Cl. 117—59.)

1. A wire cable consisting of a core, an innermost lay, an intermediate lay and an outermost lay, the lays being composed of an equal number of strands, the strands composing the lays consisting of a relative greater number of wires from the innermost lay outwardly in the ratio of 3, 7 and 19, and the diameters of the wires composing the strands being relatively increased from the innermost lay outwardly in the ratio of 7, 9 and 11 approximately,



whereby the wires composing the strands and the strands will lie closely together with practically no interstices between them and form a substantially homogeneous rope adapted to sustain lateral compression and to support longitudinal strains as a unit.

1,757,157. TRIPLEX WEB PRESS. HENRY A. WISE WOOD, New York, N. Y., assignor to Wood Newspaper Machinery Corporation, New York, N. Y., a Corporation of Virginia. Filed Aug. 4, 1923. Serial No. 655,776. Renewed Apr. 6, 1929. 13 Claims. (Cl. 270—8.)

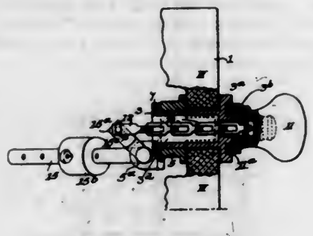


1. In a perfecting web press, the combination with two sets of printing couples, each set comprising two pairs of printing cylinders, all of said cylinders being of a length to receive and print three separate newspaper webs simultaneously, and means for feeding three webs side by side to either set of couples separately, of a pair of folding, collecting and delivering devices, and means whereby each web from either set of couples can be directed to either folding, collecting and delivering device.

1,757,158. DYEING OF REGENERATED CELLULOSE MATERIAL. JAMES BADDILEY, Blackley, Manchester, England, assignor to British Dyestuffs Corporation Limited, Manchester, England. Original application filed May 21, 1927, Serial No. 193,387, and in Great Britain Dec. 10, 1926. Divided and this application filed Mar. 8, 1928, Serial No. 260,249. Renewed July 6, 1929. 11 Claims. (Cl. 8—5.)

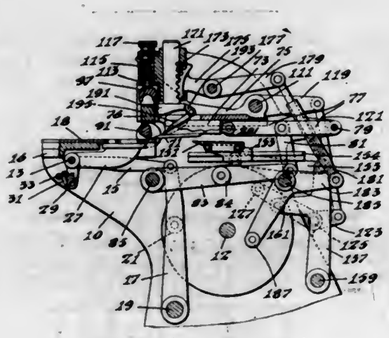
1. The process of dyeing regenerated cellulose materials in even level shades which comprises applying thereto disazo dyes obtained by coupling the diazo compound of a *p*-nitro arylamine containing at least one solubilizing acidic group which with a primary arylamine which is capable of being diazotized after being coupled, rediazotizing and coupling with an amino naphthol sulphonic acid in which the shortest chain between the nitrogen atom and the oxygen of the hydroxyl group comprises less than five carbon atoms.

1,757,159. FLOAT-VALVE OPERATING MECHANISM FOR FLUSH TANKS. SAMUEL BREWARD BARDSLEY, Philadelphia, Pa., assignor to Woodward-Wanger Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed July 4, 1927. Serial No. 203,284. 11 Claims. (Cl. 4—67.)



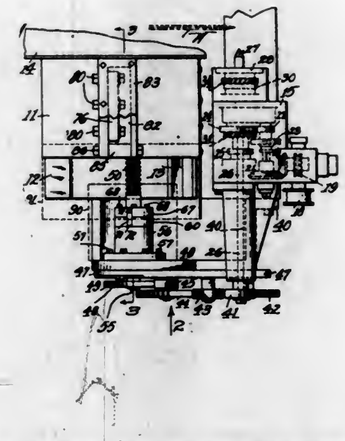
1. The combination of a sleeve secured to the wall of a flush tank, a lever, a fulcrum for the latter carried by said sleeve, a flexible connection passing thru said sleeve for actuating said lever, an operating member disposed externally of the tank and secured to said flexible connection, said operating member being mounted for rocking movement relative to said sleeve, and means for imparting tension to said flexible connection to return the lever and operating member to inoperative position.

1,757,160. MACHINE AND METHOD FOR FLAP SPLITTING AND HEEL-SEAT TONGUING. ARTHUR BATES and FRANK BYCROFT KEALL, Leicester, England, assignors to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed July 10, 1928, Serial No. 291,569, and in Great Britain July 20, 1927. 44 Claims. (Cl. 12—17.)



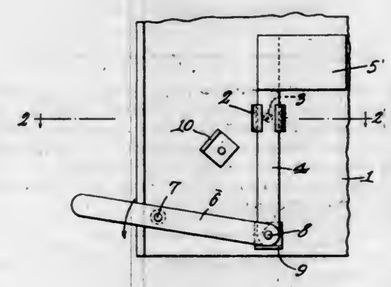
2. A machine for operating on soles, having in combination, a splitting knife, means to present a sole thereto for forming a heel-seat flap therein, and a tongue-cutting knife operative thereafter to form a tongue in the remaining portion of the heel-seat.

1,757,161. GRINDING MACHINE. JOHN BATH, Worcester, Mass. Filed Apr. 4, 1927. Serial No. 180,741. 10 Claims. (Cl. 51—165.)



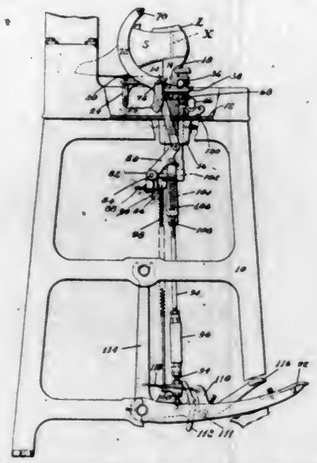
1. In a grinding machine, a base, a wheel table slidable thereon, a lead screw for said wheel table, a nut for said lead screw, a bearing bracket for said nut, means to detachably secure said bracket on said wheel table, and means for adjusting said nut relative to said bracket and to said lead screw thereby to take up wear.

1,757,162. FLAG FOR RURAL MAIL BOXES. LEON J. BEEMAN, Lancaster, N. Y. Filed Dec. 6, 1927. Serial No. 238,181. 2 Claims. (Cl. 232—34.)



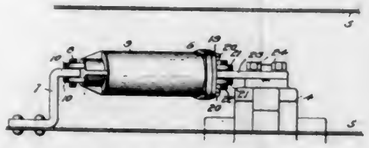
1. The combination with a mail box or the like, of a guide pivotally connected to said box, a lever pivotally connected to the box, a flag, a shank extending therefrom and pivotally connected to the lever and slidable within the guide, and stop means on the box at opposite sides of the lever for limiting the movement of the lever and shank when in either of two extreme positions at opposite sides of the dead center, thereby to hold the flag in either extended or retracted position relative to the box to which it is connected.

1,757,163. HEEL-ATTACHING MACHINE. FREDERIC E. BERTRAND, Lynn, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Aug. 4, 1926, Serial No. 127,034, and in Great Britain Apr. 24, 1926. 18 Claims. (Cl. 12—125.)



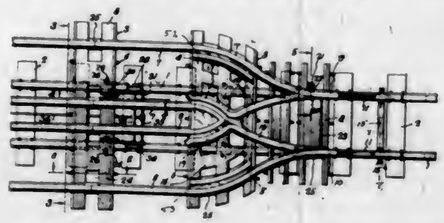
1. In a shoe supporting device, the combination with a pivoted tread plate for engaging and supporting the tread face of the heel of a shoe, of a toe plate yieldingly mounted upon said tread plate for engaging and supporting the tread face of the sole at the forepart of the shoe.

1,757,164. BELT-TENSIONING DEVICE. ELI J. BLAKE, Buffalo, and CLARENCE I. LUSINK, Rochester, N. Y., assignors, by mesne assignments, to Simplex Equipment Company, Inc., New York, N. Y., a Corporation of Delaware. Filed Sept. 14, 1926. Serial No. 135,357. 15 Claims. (Cl. 105—106.)



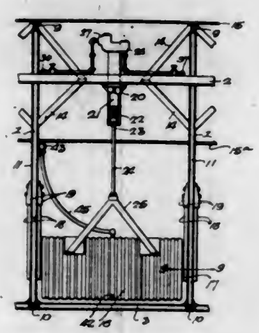
1. In combination with a railway car, a generator, a belt adapted for driving the generator, means for pivotally suspending said generator and a spring for tensioning said belt, said spring being adapted during a portion of its operating range to add tension to said belt and during another portion of its operating range to restrict undue motion of said generator.

1,757,165. PORTABLE TURNOUT. HENRY BOUSHEAR, Fort William, Ontario, Canada. Filed Nov. 19, 1928. Serial No. 320,466. 1 Claim. (Cl. 238—12.)



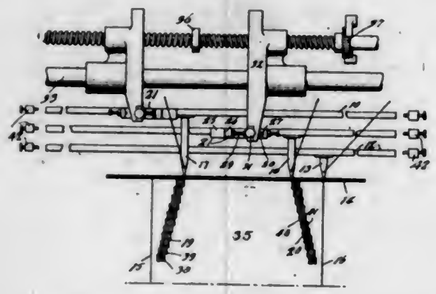
The combination of a main track and a turnout resting thereon, said turnout including rails comprising spaced tracks, switch members between the inner and outer rails at the ends of the turnout, tapered rail extensions fixed to the rails of the turnout resting on the main track and removably secured thereto, transverse ties supporting the rails of the turnout, rail engaging means carried by said ties for holding the rails thereon, each of said ties having flanged sides, a grooved shoe for each of said sides, keys securing the shoes to the flanges, means for removably fixing the turnout on the main track for balancing said turnout, swingable wheels carried by the turnout movable to engage with the main track, and rod operated means for swinging said wheels to bodily elevate the turnout to permit of the longitudinal movement thereof on the main track, after the securing means for the turnout is released.

1,757,166. APPARATUS FOR AND METHOD OF OBTAINING POWER FROM OCEAN WAVES. EDWARD J. BRADY, Philadelphia, Pa. Filed Dec. 14, 1925. Serial No. 75,283. 14 Claims. (Cl. 253—5.)



1. In an apparatus for obtaining power from waves, the combination of a rigid, open and unbuoyant framework having a length equal to or exceeding two wave lengths, a series of floats substantially uniformly distributed along the framework and serving as the sole means of support therefor, the said series comprising a plurality of parallel longitudinal rows and each float in the series being independently movable by the waves vertically with respect to the framework, and power mechanism on the framework connected to be operated by the relative vertical movements of the several floats.

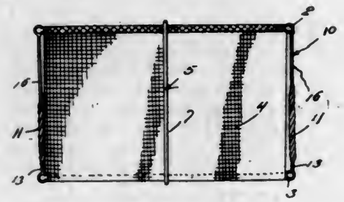
1,757,167. STOCKING-ANKLE-MACHINE ATTACHMENT. ROBERT BREYER, Milwaukee, Wis. Filed Jan. 24, 1927. Serial No. 163,295. 7 Claims. (Cl. 66—129.)



1. In a straight bar knitting machine, the combination of means complete for knitting a full fashioned stocking

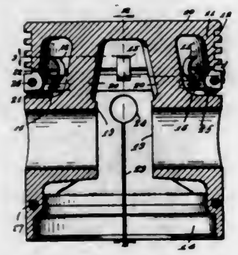
and including a plurality of reciprocating bars, each provided with the usual stops and equipped with a thread carrier adapted for knitting a stocking part from one to the other of its selvedge edges, mechanism for knitting a design into the stocking, said mechanism including two of said bars, one for forming the part of the completed design adjacent one of the selvedge edges and the other for forming the part thereof adjacent the other edge, a control for each of said two bars distinct from the usual stops for limiting the throw of said bars when knitting conventionally from one to the other selvedge edge, each control including a pair of stops carried by its associated bar and provided with means adapted to be fixedly spaced apart for defining the length of reciprocatory movement of its associated bar and thus defining the width in each course of the design part, a pair of relatively fixed abutments one for each control adapted to be positioned between its associated spacing means when it is desired to use said bars for feeding yarn in knitting the design into the blank, and a single step-by-step means for progressively shifting said abutments towards each other thus causing said two controls progressively to move towards each other, each away from its contiguous selvedge edge and thus progressively and uniformly shift the controls as the knitting progresses and thus shift the location of the design parts during the progress of the knitting of the stocking blank.

1,757,168. COLLAPSIBLE BASKET. FRED E. BRUNELL, Plattsburg, N. Y. Filed Aug. 30, 1928. Serial No. 303,052. 1 Claim. (Cl. 150—49.)



In a collapsible basket, spaced top and bottom frames, a covering for the bottom, sides and ends of the basket, end units pivotally connected to the respective ends of the top and bottom frames, and an additional unit for association with the intermediate portions of the sides of the top and bottom frames, said last mentioned unit comprising a U-shaped structure having the base portion thereof extending across the bottom frame at the intermediate portion thereof, the arms of the U-shaped structure extending upwardly from the sides of the frame, the upper ends of the arms being slidably and pivotally associated with intermediate portions of the respective sides of the top frame.

1,757,169. PISTON. CHARLES R. BUTLER, Indianapolis, Ind. Filed July 28, 1928. Serial No. 295,995. 8 Claims. (Cl. 74—108.)



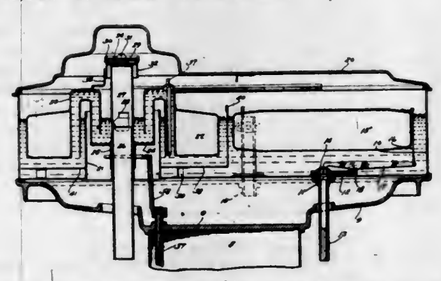
1. A piston construction having various parts provided for mechanical strength, and which parts are capable of slight movement relative to and independent of one another, and in addition heat conductors applied to the piston structure to carry heat between portions of the piston over other paths than those available in the body of the piston, said heat conductors being flexible and of such shape that they bend readily upon relative movement between the piston parts which they connect.

1,757,170. TAILPIECE FOR STRINGED MUSICAL INSTRUMENTS. FRANK J. CALLIER, San Antonio, Tex. Filed Jan. 30, 1928. Serial No. 250,530. 1 Claim. (Cl. 84—302.)



In a tail-piece for stringed musical instruments, a body having a recess and a transverse rib, a clamping head in said recess and provided with separate, laterally spaced openings and with a threaded opening at right angles to said laterally spaced openings and intersecting the same, a cable having terminal portions extending through said laterally spaced openings, and a fastening screw secured in said threaded opening and extending into said laterally spaced openings for pressure engagement with the terminal portions of said cable, said fastening screw constituting the sole means to secure said cable to the head.

1,757,171. LIQUID-FLOW REGULATOR. CLARENCE W. CARTER, Minneapolis, Minn., assignor, by mesne assignments, to Hart-Carter Company, Peoria, Ill., a Corporation of Delaware. Filed July 30, 1925. Serial No. 47,148. 17 Claims. (Cl. 73—167.)



1. A liquid flow regulator comprising a liquid container and a floating weir controlling the flow of liquid from said container, and means for varying the flow controlled by said weir said parts being combined as a complete self-contained structure.

1,757,172. AERIAL. CASSIUS EDGAR CAZEL, Covington, Ky., and CECIL HERBERT LONGMAN, Norwood, Ohio. Filed June 23, 1927. Serial No. 200,958. 5 Claims. (Cl. 250—33.)

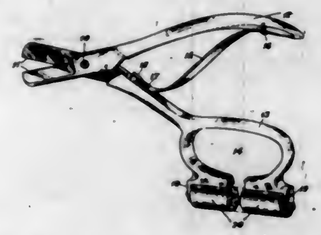
4. An aerial comprising a substantially cylindrical body including a central core from which fine wires project

radially in all directions and in closely spaced relation, said wires being secured to said core midway between their ends, a mast having a longitudinal bore in the outer end



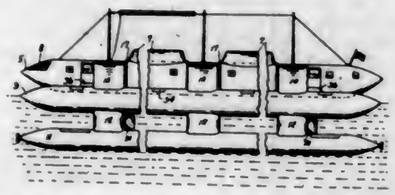
of which the core fits and is frictionally held and a conducting wire connected with the core and extending through the mast.

1,757,173. COMBINED CUTTER AND PRESSURE ROLLER DEVICE. JAMES E. DINGMAN, Brooklyn, and ROBERT F. ENGELBERT, Woodhaven, N. Y., assignors to American Telephone and Telegraph Company, a Corporation of New York. Filed May 10, 1928. Serial No. 276,709. 3 Claims. (Cl. 7—6.)



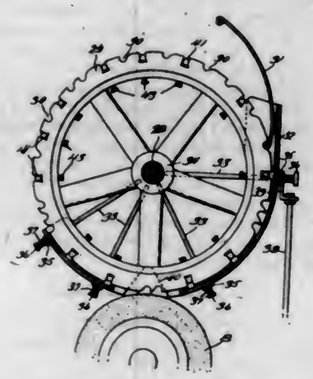
1. In a cutter and pressure device for strips, the combination of cutting blades and handle members, and a roller attached to one of the handle members, said roller having its axis in the plane of motion of the cutting blades, whereby the handle member to which the roller is attached constitutes a fulcrum about which a blade may be rotated during the operation of cutting a strip, said handle member also serving to apply pressure to the roller to cause adhesion of the severed strip of paper to a surface.

1,757,174. VESSEL. HOMER C. DOUGLAS, Liberal, Kans. Filed Mar. 15, 1929. Serial No. 347,297. 4 Claims. (Cl. 114—61.)



1. A vessel of the class described including a central pontoon, a pair of water line pontoons one to each side of and below the center pontoon, arcuate tubes interconnecting the water line pontoon with the center pontoon, a pair of power pontoons one below each water line pontoon, and vertical tubular members connecting the water line pontoons with the power pontoons.

1,757,175. GRINDING MACHINE. OWEN DOUTT, Detroit, Mich., assignor, by mesne assignments, to General Spring Bumper Corporation, a Corporation of Michigan. Filed Sept. 7, 1927. Serial No. 217,951. 10 Claims. (Cl. 51—108.)

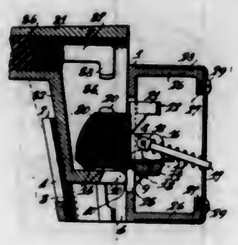


7. In a grinding machine for curved bars, the combination with a rotary grinding element, of a rotary feed wheel the periphery of which has the same curvature as the bars to be ground, means on the periphery of said feed wheel for engaging the ends of said bars, spring means for engaging said bars to urge them toward said feed wheel, and spring means on the periphery of said wheel against which said bars are yieldingly held.

1,757,176. MERCURY DERIVATIVE OF DI-IODO RESORCIN SULFON-PHTHALEIN. FITZGERALD DUNNING, Baltimore, Md., assignor to Hynson, Westcott & Dunning, Inc., Baltimore, Md., a Corporation of Maryland. Filed Dec. 8, 1928. Serial No. 324,809. 8 Claims. (Cl. 260—13.)

1. As a new product a hydroxy-mercuri derivative of di-iodo resorcin sulfon-phthalein, free of extraneous alkali metal salt, and complex organic mercurial containing an acid radical bound to mercury.

1,757,177. SWITCH AND LAMP SUPPORT. LAURITS C. EICHNER, Bloomfield, N. J., assignor to Dressel Railway Lamp & Signal Company, Arlington, N. J., a Corporation of Maine. Filed Jan. 6, 1928. Serial No. 244,989. 13 Claims. (Cl. 173—338.)



1. In an apparatus of the character described, a socket member, a bracket member removably associated with said

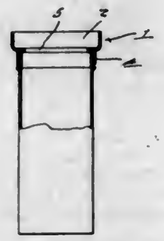
socket member, said bracket member having electric circuit terminals, said socket member having electric circuit terminals, a movable switch having circuit closer elements, and means operative upon bringing said bracket and socket members together for first throwing said switch to close the circuit between its closer elements and the circuit terminals of said socket and thereafter to close the circuit between said bracket member's circuit terminals and said circuit closer.

1,757,178. MAGNETIC MATERIAL. GUSTAF W. ELMEN, Leonia, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 2, 1929. Serial No. 352,052. 2 Claims. (Cl. 175—21.)

1. A magnetic composition having between 30 and 70% nickel, an amount greater than an impurity and less than 20% of material for increasing the resistivity and the balance iron, with a negligible or zero content of metals of atomic weight under 30, characterized by a specific resistance of not less than 50 microhm cms., an initial permeability in excess of 500, and a constancy of permeability such that the permeability at a magnetizing force of .01 gauss does not differ by as much as 6% from the initial value.

2. A composition in accordance with claim 1 in which the resistance increasing material includes not in excess of 12% of the total composition of material selected from a group of elements including chromium, molybdenum and tungsten.

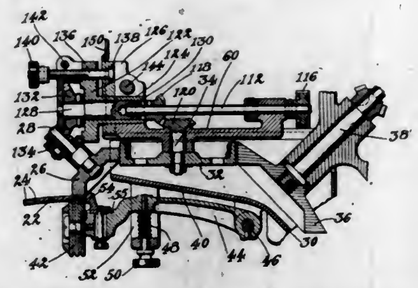
1,757,179. DETACHABLE RIM FOR CONTAINERS. AUGUST ENGELCKE, Morristown, S. Dak. Filed July 2, 1928. Serial No. 289,728. 1 Claim. (Cl. 220—85.)



A detachable rim for containers comprising a cylindrical structure open at each end and being of a diameter at one end portion substantially greater than the diameter of the container upon which the same is to be attached, the other end portion of said cylindrical structure being of a diameter sufficient to permit the snug engagement around the outer side of the open end portion of the container, said cylindrical structure being constructed to provide an inwardly disposed shoulder at its intermediacy adapted for rest upon the top of the container.

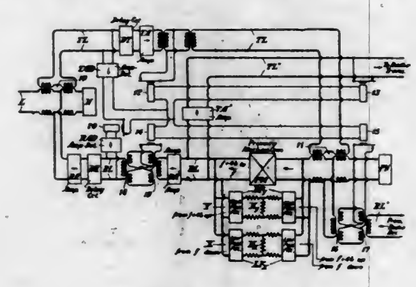
1,757,180. FLUID-APPLYING MACHINE. EDWARD ERICKSON, deceased, Beverly, Mass., by Mary E. Erickson, executrix, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Feb. 26, 1927. Serial No. 171,317. 24 Claims. (Cl. 91—50.)

1. In a machine for applying fluid to a shoe part, an applying roll rotatable about an inclined axis having a lowermost face exposed for the application of work thereto, a fluid receptacle, means for taking up fluid from said receptacle and delivering it to a point upon said applying roll remote from the point of application of the work, said means comprising a member dipping in the fluid in the receptacle, and a transfer member positioned above the fluid in the receptacle and arranged to carry the fluid from said latter member to the applying member.



15. In a cementing machine for the parts of boots and shoes, a frusto-conical fluid-applying roll disposed at the front of the machine with its lowermost face exposed for the application of work thereto and having its axis inclined downwardly toward the rear, a fluid receptacle disposed at the rear of the applying roll, a fluid-supplying roll dipping in said receptacle arranged to take fluid therefrom, and a transfer roll mounted for rotation about said receptacle upon an upright axis, said transfer roll being interposed between the applying roll and the supplying roll and constructed and arranged to take fluid from the supplying roll and deliver it to the applying roll.

1,757,181. PRIVACY SYSTEM FOR TELEPHONE TRANSMISSION. LLOYD ESPENSCHIED, Kew Gardens, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Dec. 4, 1928. Serial No. 323,698. 8 Claims. (Cl. 179—1.)

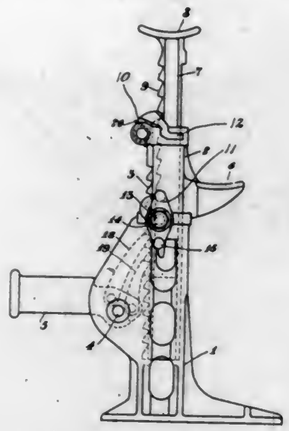


1. In a telephone system, a transmission circuit, a privacy apparatus associated therewith, said privacy apparatus comprising means to divide the important range of telephone frequencies from the standpoint of intelligibility into a plurality of sub-bands of such width as to be substantially unintelligible when received alone, means to variably transpose the sub-bands, and a by-pass for selecting and transmitting without transposition telephone frequencies of small intelligibility lying without the range of the privacy apparatus.

1,757,182. LIFTING JACK. JOHAN GUNNAR EVERSTAM, Sundsvall, Sweden. Filed Dec. 24, 1925, Serial No. 77,577, and in Sweden Aug. 5, 1925. 8 Claims. (Cl. 254—109.)

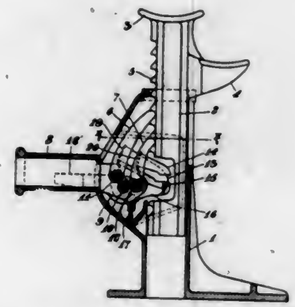
1. In a lifting jack, the combination of a frame, a member vertically guided and movable up and down in said frame, a jack mechanism for effecting the up and down movement of said member in said frame, a rod slidable vertically in said member and provided with a vertical row of teeth free from engagement with said jack

mechanism, a catch device on said up and down movable member adapted to engage said row of teeth on said vertically slidable rod and thereby to lock said rod to said member in a number of different positions, said



catch device having a projection, and a stop on said frame located in the path of movement of said projection and adapted upon lowering of said member to engage said projection to move said catch device out of engagement.

1,757,183. LIFTING JACK. JOHAN GUNNAR EVERSTAM, Sundsvall, Sweden. Filed Dec. 24, 1925, Serial No. 77,578, and in Sweden Aug. 13, 1925. 3 Claims. (Cl. 254—110.)



1. In a lifting jack, the combination of a frame, a toothed rack movable in said frame and adapted to support the load, a lever pivoted in said frame, two feeding pawls pivoted to said lever on opposite sides of the fulcrum of said lever and adapted to engage said toothed rack, each of said pawls being provided with a rigid arm, both said arms projecting forward to one and the same side of said rack, and an adjustable switch lever having a shoulder adapted in one position of adjustment of said switch lever to cooperate with said rigid arms on said pawls to move said pawls alternately out of engagement with said rack during the operation of said pawls through said lever.

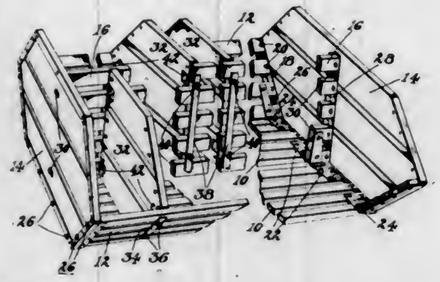
1,757,184. CONTAINER HOLDER. FREDERICK M. FUREY, Los Angeles, Calif. Filed Jan. 9, 1928. Serial No. 245,593. 5 Claims. (Cl. 221—60.)

1. A container holder comprising: a holding device having a support; a cylindrical portion slidable on said support; and a pair of jaws associated with said holding device for gripping said container, said jaws being below



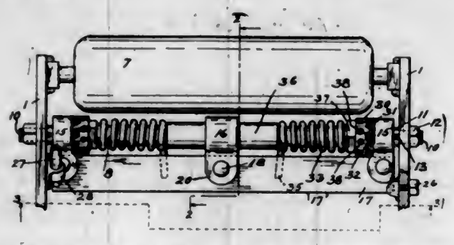
said support when said holding device is in retracted position and extending beyond the end of said support when said holding device is in extended position.

1,757,185. BIN. HARVEY L. GLIDDEN, Lexington, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Jan. 8, 1926. Serial No. 80,128. 6 Claims. (Cl. 20—1.2.)



5. A last bin comprising a partition, bottom members connected to the partition and swingable into planes parallel to the plane of the partition, and side members connected to the bottom members and swingable into planes parallel to said bottom members and said partition.

1,757,186. RESILIENTLY-MOUNTED LEDGER BLADE FOR LAWN MOWERS. CHESTER A. GRATIOT, Portland, Oreg., assignor, by mesne assignments, to Eversharp Lawnmower Company, a Corporation of Nevada. Filed Dec. 15, 1927. Serial No. 240,196. 4 Claims. (Cl. 56—294.)



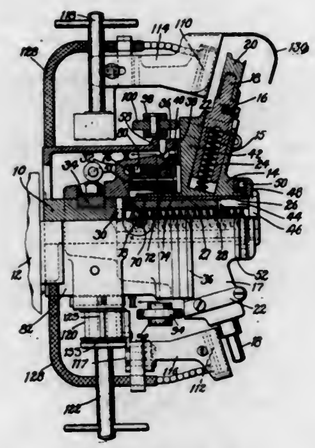
1. In a lawn mower, a revolving cutting reel, a pivotally mounted lower blade extending transversely of the mower, means to resiliently urge said blade toward said reel, stops at one end of the mower to limit the movement of said blade in either rotary direction, and a set screw at the opposite end of the mower to depress the end of the blade to the desired amount.

1,757,187. SEDIMENTATION TANK. CHARLES R. GRIFFITH, South Manchester, Conn. Filed May 10, 1928. Serial No. 276,683. 3 Claims. (Cl. 210—2.)



1. Apparatus for the purpose set forth comprising a tank having means at one end for separately drawing off liquor and sludge, inlets extending through the opposite end of the tank, a weir adjacent said end, a shallow trough between the inlets and the weir and a by-pass in the lateral side of the tank around the end of the weir and establishing communication between an end of the trough and the main settling chamber of the tank.

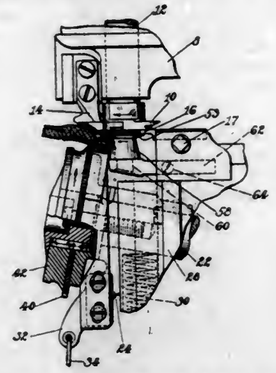
1,757,188. FINISHING MACHINE. WILLIAM HAMANN, Irondequoit, N. Y., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed July 27, 1927. Serial No. 208,828. Renewed Nov. 26, 1928. 21 Claims. (Cl. 12—78.)



1. A shoe finishing machine having, in combination, an oscillating rock shaft, a tool holder connected to the shaft to oscillate therewith, said tool holder being rotatably mounted on the shaft but normally held against rotating movement relatively to the shaft, means for releasing said tool holder for rotating movement relatively to the shaft, said last-named means being constructed and arranged to impart to the tool holder an initial rotary movement relatively to the shaft, and means for imparting to the tool holder a further rotary movement relatively to the shaft when the tool holder is released for such movement.

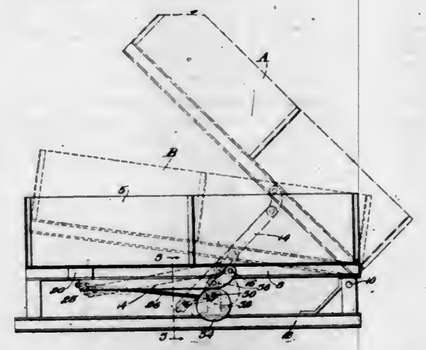
1,757,189. CHANNEL-OPENING MACHINE. GEORGE H. HATCH, Lynn, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of Massachusetts. Filed Nov. 17, 1928. Serial No. 320,165. 10 Claims. (Cl. 12—30.)

1. A machine for turning sole channel lips, having in combination, a rotary wiper, and means for guiding a sole thereto including a feed wheel underlying the margin of the sole, an edge gauge roll contacting with the edge of



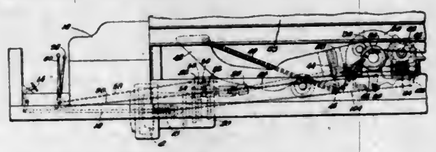
the sole and having a projecting flange overlying the margin of the sole, and a channel gauge located above said flange.

1,757,190. DUMPING VEHICLE. CLARK F. HIGGINS, Melrose, Mass. Filed Oct. 9, 1923. Serial No. 667,445. 4 Claims. (Cl. 298—19.)



1. A dumping vehicle having, in combination, a dumping body, a pair of normally horizontal hoisting arms for the body, a shaft, connections from the shaft to the hoisting arms for lifting the body upon rotation of the shaft, and cams carried by the shaft and engaging with the hoisting arms for giving an initial upward thrust to the body.

1,757,191. DUMPING VEHICLE HOIST. CLARK F. HIGGINS, Melrose, Mass. Filed Apr. 3, 1925. Serial No. 20,379. 2 Claims. (Cl. 298—21.)



1. A dumping-vehicle hoist having, in combination, a body, a power-operated shaft, a winding shaft, a clutch member on the power-operated shaft, gearing adapted to engage with the clutch member to drive the winding shaft in either direction, a clutch shifter for causing engagement of the clutch member with the gearing to drive the winding shaft, the clutch shifter having offset projections, a manual control for the clutch shifter, timing gearing

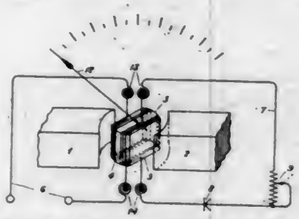
operated by the winding shaft, and a pair of offset lugs carried by the timing gearing to engage with the projections of the shifter, one of which lugs is adapted to throw the clutch into neutral position as the body approaches the limit of its movement in one direction, and the other of which is adapted to throw the clutch into neutral as the body approaches the limit of its movement in the other direction.

1,757,192. COMPARTMENT CAN. JOHN M. HOTHERSALL, Brooklyn, N. Y., assignor to American Can Company, New York, N. Y., a Corporation of New Jersey. Filed May 16, 1927. Serial No. 191,706. 13 Claims. (Cl. 220—20.)



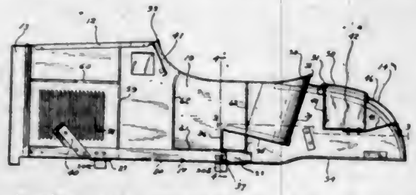
13. A compartment can, comprising containers of substantially the same cross-section and a clamping disc interposed between them having a radially cut flange projecting beyond the ends of the containers and forming bendable clamping segments for engagement alternately over the end beads of the containers, the edges of the segments being turned outwardly after clamping engagement with the end seams to provide means for the engagement of a tool in disengaging the segments from clamping engagement with the end seam.

1,757,193. CURRENT-MEASURING DEVICE. ALFRED H. HOTOPP, Hollis, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Apr. 23, 1929. Serial No. 357,543. 2 Claims. (Cl. 171—95.)



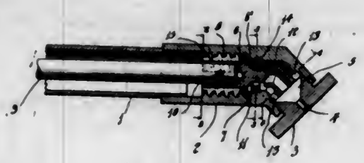
1. A current measuring device comprising an armature deflectible between magnetic pole pieces, a circuit including a moving coil on said armature, said circuit being connected to the source of current to be measured, a second circuit including an auxiliary coil on said armature, and a directional impedance device in said second circuit.

1,757,194. VEHICLE BODY. JAMES M. HOWE, Cleveland Heights, Ohio, assignor to The Murray Products Company, Cleveland, Ohio, a Corporation of Michigan. Filed Sept. 6, 1924. Serial No. 736,226. 3 Claims. (Cl. 296—28.)



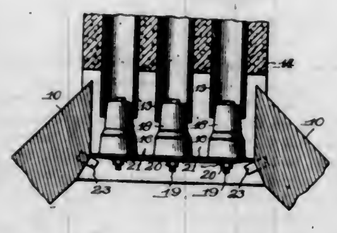
1. A vehicle body comprising two pressed metal members forming the hood, cowl and side walls of the body, a pair of laterally flanged substantially straight sill members substantially uniform in cross section and secured to the lower edges of said side pressed metal members and terminating substantially midway between the ends of the said pressed metal members, said sill members diverging toward the rear of the body, a flanged seat member connecting the said pressed metal members above the rear ends of the sill members to substantially complete the body bracing, said pressed metal members converging toward the rear of the body from the ends of the sill members to form a stream line effect and means joining the rear ends of said pressed metal members rearwardly of the seat to close the body.

1,757,195. SPRAY GUN. JOHN C. HULL, Gasport, N. Y. Filed Feb. 18, 1927. Serial No. 169,351. 5 Claims. (Cl. 299—116.)



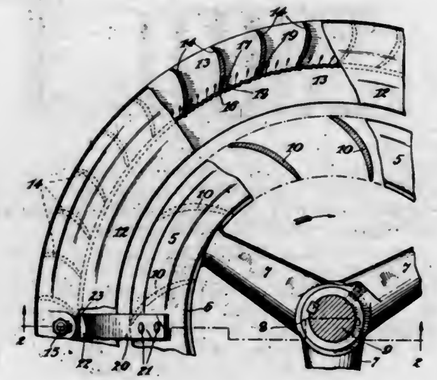
1. In a spray gun, the combination with a pressure chamber, a nozzle body secured thereto, a rotatable valve spindle disposed within said pressure chamber and extending into said nozzle body, an externally screw-threaded valve member secured to said spindle, a valve seat therefor, screw threads on the interior of said nozzle body and coacting with the threads on the valve member, said valve member having a plurality of longitudinally disposed slots formed in the surface thereof and of a depth greater than that of said screw-threads, a cap secured to the outer end of said nozzle body and having a discharge aperture therein, a tubular conduit disposed intermediate said cap and valve body and communicating with said discharge aperture and forming with said nozzle body a by-pass around said conduit which is also in communication with said discharge aperture, and means formed on said valve body for controlling the flow of fluid through said conduit and by-pass, said valve member arranged to engage said conduit in advance of its engagement with said valve seat.

1,757,196. MANHOLE CONSTRUCTION. CLOYCE A. JAQUES, Chicago, Ill. Filed Apr. 30, 1927. Serial No. 187,766. 5 Claims. (Cl. 25—118.)



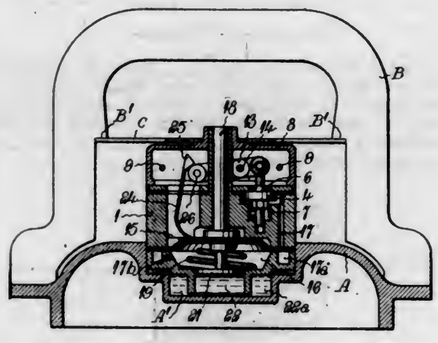
4. Molding apparatus for enclosing the open end of a conduit in hardenable plastic material comprising a form adapted to be inserted in said conduit in sealing engagement therewith and extending forwardly from the end thereof, a plate against which said form bears at its outer end whereby when the end of said conduit and said form have been enclosed in such material the form will define an opening the walls of which will in effect be an uninterrupted extension of the inner walls of said conduit and which will terminate in the plane of the inner surface of said plate.

1,757,197. MIXER. JOHN JOHNSON, Maplewood, N. J., assignor to The Turbo-Mixer Corporation, New York, N. Y., a Corporation of New York. Filed Nov. 14, 1928. Serial No. 319,201. 10 Claims. (Cl. 259—96.)



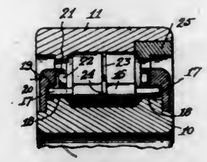
1. In mixing apparatus of the class described, a rotary bladed impeller and a stationary deflector about the impeller, the deflector having blades for discharging material radially, and a disintegrator associated with the deflector for disintegrating or dividing solid materials in a liquid circulated by the impeller and passing through the deflector.

1,757,198. PULSATOR FOR MILKING MACHINES AND THE LIKE. GUSTAF EMIL JONSSON, Halmstad, Sweden. Filed Feb. 1, 1929. Serial No. 336,769. 6 Claims. (Cl. 31—62.)



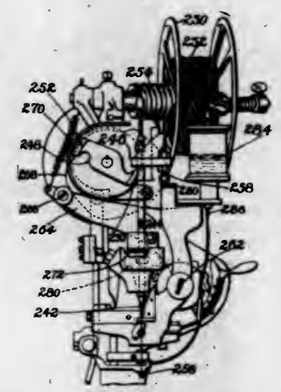
1. In a pulsator of the character described, two valve members positioned in separate valve chambers provided each with a high pressure inlet and a low pressure outlet and adapted alternately to close said inlet and outlet respectively, interconnection means between the valve members and controlling them so that they take a reverse position in their chambers, a diaphragm subjected at one side to the lower pressure, spring means acting upon the diaphragm in opposition to the higher pressure, means for intermittently subjecting the opposite side of the diaphragm to the lower pressure, a leaf spring connected with the diaphragm, a triangular head carried by the free end of said leaf spring, an antifriction means connected with the inter-connection means between the valves and positioned in the path of movement of the said triangular head, and dash-pot means connected with the diaphragm and adapted for controlling the action of the leaf spring causing the reversal of the valves by the intermediary of said antifriction means.

1,757,199. ROLLER BEARING. ALBERT T. KILLIAN, Upper Darby, Pa., assignor to Killian Roller Bearing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Oct. 30, 1926. Serial No. 145,219. 1 Claim. (Cl. 308—206.)



A roller bearing embodying an outer ring provided with a load-roller-track, an inner ring provided with a companion load-roller-track, the tracks and the load-roller having co-acting bevel surfaces to take up end-thrust, a series of spacing-rollers one between each pair of load-rollers and each provided with a pair of trunnions, and means affording a pair of companion tracks for said trunnions, the tracks being so located that the spacing-rollers will be held each with its axis in a straight line with the axes of the two adjoining load-rollers, each of said load-rollers being provided with an annular groove rectangular in cross-section, and each of the spacing-rollers being provided with a similarly-shaped rib fitting and running in the grooves in the adjacent load-rollers.

1,757,200. FASTENING-INSERTING MACHINE. FRED N. LA CHAPELLE, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Original application filed June 4, 1925, Serial No. 34,838. Divided and this application filed Sept. 27, 1927. Serial No. 222,360. 12 Claims. (Cl. 1—29.)

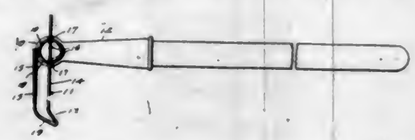


5. A fastening inserting machine having a tool acting alternately as an awl and as a driver, means for reciprocating said tool twice during each cycle of operation of the machine, and a stop arranged for movement into and out of the path of a portion of the machine reciprocating with said tool arranged to permit the tool at its first reciprocation during each cycle to move through a path long enough to cause it to punch a hole in the work and to cause the tool during its second reciprocation of each cycle to move through a shorter path at which time it acts as a driver.

1,757,201. HAND RAKE. ALBERT W. LA FORGE, Chino, Calif. Filed Nov. 27, 1928. Serial No. 322,191. 1 Claim. (Cl. 55—10.)

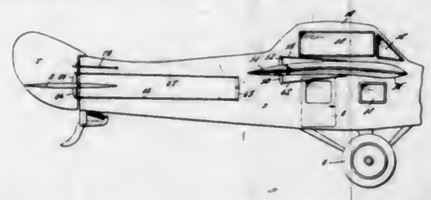
In a rake, a socket, a cross bar mounted on the socket, and a plurality of tines on said cross bar, said cross bar

having spaced openings therethrough, said tines comprising a V-shaped wire foot, an inner arm upstanding from said foot and being adapted to extend upwardly through the openings in said cross bar, an outer arm upstanding from said foot, said outer arm being adapted to be secured to said cross bar at the forward edge thereof, said outer



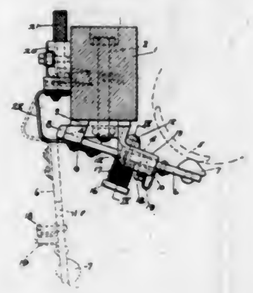
arm being arranged in parallel relation to said inner arm and providing a brace for said inner arm, said socket having forwardly extending spaced lip members for engaging the cross bar and being provided with openings therethrough for engaging one of said tines whereby to prevent turning of the cross bar between the lips.

1,757,202. AEROPLANE. WIUS LAMB, Blair, Okla. Filed June 8, 1928. Serial No. 283,902. 6 Claims. (Cl. 244—29.)



1. An aeroplane of the class described comprising a fuselage, wings extending laterally from the fuselage, a shaft journaled transversely through the fuselage, said wings being fixed to said shaft and said fuselage having slots concentric about the shaft, ailerons on the wings, connections to the ailerons extending through said slots, and means for rocking the shaft to change the angle of incidence of said wings.

1,757,203. CONTACT BRUSH AND HOLDER THEREFOR. NILS D. LEVIN, Columbus, Ohio, assignor to The Jeffrey Manufacturing Company, Columbus, Ohio, a Corporation of Ohio. Filed Dec. 26, 1923. Serial No. 682,790. 3 Claims. (Cl. 200—166.)



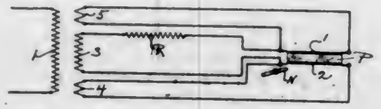
1. In an electric controller, the combination with a brush holder, of a brush comprising an elongated metallic bar, a stud projecting from said brush holder transversely of said bar, an abutment removably attached to said stud by a bayonet joint, and a spring interposed between said stud and said bar to hold the latter in operative position upon said brush holder.

1,757,204. METHOD OF AND MECHANISM FOR WATERMARKING AND CUTTING PAPER. VAUGHAN N. MAGILL, St. Albans, N. Y. Filed Dec. 11, 1928. Serial No. 325,344. 7 Claims. (Cl. 92—48.)



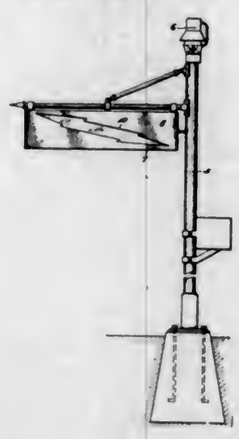
1. A method of cutting water-marked paper which consists in forming irregularities in a web of paper while the water-marks are being impressed, and then causing said irregularities to control the cutting operation.

1,757,205. METHOD OF DRYING ARTICLES. ALBERT W. MORRIS, Philadelphia, Pa., assignor to George E. Coblens, New York, N. Y. Filed Mar. 27, 1928. Serial No. 265,137. 4 Claims. (Cl. 34—24.)



1. A method of forming a dehydrated coherent sheet of cellulose which consists in compressing wet cellulose to form a wet sheet, passing an electric current through said wet sheet from one face thereof to the opposite face thereof to produce a movement of the water in said sheet to the exterior thereof, said water being permitted to escape while directly heating said material by an electric current other than the previously mentioned current.

1,757,206. CROSSING SIGNAL. JOHN A. MORRISON, Seattle, Wash., assignor to Safety Signal Company, a Corporation of Washington. Original application filed Dec. 4, 1926, Serial No. 152,622. Divided and this application filed Dec. 20, 1927. Serial No. 241,279. 15 Claims. (Cl. 177—329.)

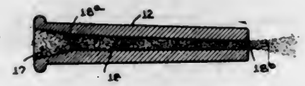


1. A distinctive signal for railroad crossings, comprising a casing having side walls, the major portions of which are opaque, and sight openings therein extending diagonally of said side walls, said sight openings being of zig zag formation in simulation of a lightning flash,

a plurality of partitions in said casing dividing the same into a plurality of compartments longitudinally thereof, electric lamps in said compartments, and means for energizing said lamps successively, the said lightning flash simulation constituting the only illumination in conjunction with said signal.

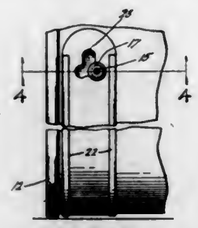
2. A distinctive signal for railroad crossings, comprising a casing having side walls, a sight opening of zig zag formation formed in one of said side walls simulating the conventional representation of a lightning flash, and extending diagonally of said casing substantially from end to end thereof, electric lamps within the casing, disposed at spaced intervals there-along, and means for energizing said lamps successively, the lightning flash produced by the successive energization of said lamps constituting the sole illumination employed in connection with said signal.

1,757,207. SAND-BLAST NOZZLE. SAMUEL B. NEIKIRK, Troy, Mo. Filed Nov. 18, 1927. Serial No. 234,132. 1 Claim. (Cl. 51—11.)



A nozzle for sand blast apparatus having an unobstructed elongated inlet chamber having a length greater than the diameter at its mouth and provided with a conical wall gradually inclined to the axis of the nozzle and a bore extending therefrom and having a slight taper from the inner end to the discharge opening of the nozzle, the converging walls of the conical inlet chamber causing the gradual convergence of the mixture of sand and air entering at the mouth of the nozzle, thereby preventing any separation of the sand particles or accumulation of sand at the juncture of the inlet chamber and bore of the nozzle.

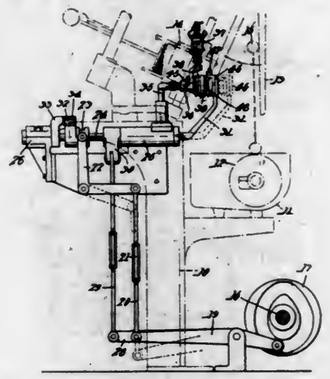
1,757,208. CONTAINER. HENRY M. NICHOLLS, Chicago, Ill., assignor to American Can Company, New York, N. Y., a Corporation of New Jersey. Filed May 9, 1927. Serial No. 189,811. 6 Claims. (Cl. 220—94.)



1. A bail for containers consisting of a sheet metal strip having longitudinal slots 23 formed in its end portions; said slots having lateral extensions of a width to receive the shanks of the bail pivot lugs, said extensions locking the bail relative to the lug, and holding the bail against outward movement when it is nested against the side of the container to which said bail is applied, the sheet metal of the bail being yieldable to permit the ends of the bail to slide edgewise into engagement under the heads of said lugs.

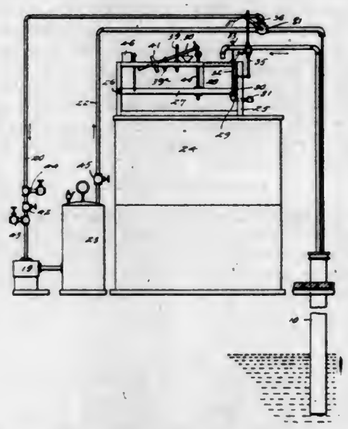
1,757,209. LABEL-DATING DEVICE. CHARLES H. OSLUND, Worcester, Mass., assignor to The Liquid Carbonic Corporation, Chicago, Ill., a Corporation of Delaware. Filed May 11, 1929. Serial No. 362,359. 8 Claims. (Cl. 216—2.)

1. In a dating device for a labeling machine, the combination with a label holder, of an ink pad, a dating stamp, means for moving the dating stamp against the ink pad longitudinally, means for swinging the dating stamp away from the ink pad and into alignment with the holder,



and means for then moving the dating stamp forward against the front label in the holder and for then moving it back, said swinging means then acting to move the dating stamp back into registration with the ink pad.

1,757,210. OSCILLATING MOTOR. SAMUEL M. PANKEY, Emmet, Ark. Filed Sept. 20, 1928. Serial No. 307,295. 5 Claims. (Cl. 253—19.)

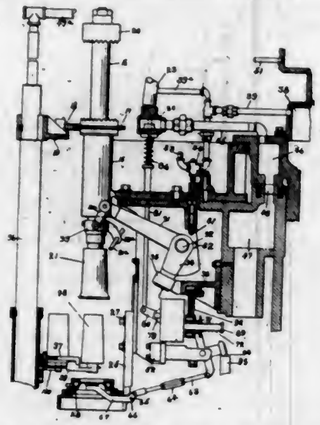


1. In combination, a reservoir, a frame mounted on the reservoir, a receptacle hingedly mounted on said frame, discharging means for said receptacle, said discharging means comprising a discharge outlet connected to said receptacle, a valve in said outlet, a valve stem secured to said valve, said stem having slidable engagement with said frame, and a stop on said stem engageable with said frame whereby to open the valve when the receptacle has reached a predetermined point in line of its movement in the frame, a fluid line discharging into said receptacle and operating means for said discharging means.

1,757,211. ROTARY BURN-OFF MACHINE. ALVAH C. PARKER, Toledo, Ohio, assignor to The Libbey Glass Manufacturing Company, a Corporation of Ohio. Filed Oct. 24, 1928. Serial No. 314,558. 20 Claims. (Cl. 49—50.)

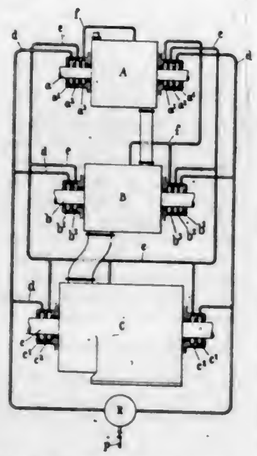
20. In apparatus of the character described, an annular series of annular burners, the axes of the burners being

vertical, a rotatable vacuum chuck vertically reciprocable above each burner and in axial alinement therewith, means for revolving said burners and chucks about the axis of the series, means for rotating the chucks about their several axes, means for reciprocating the chucks towards and from the burners, an exhaust pipe connected with each chuck, a valve governing each exhaust pipe, two supply valves for each burner, means for automatically opening one of the paid supply valves when the associated chuck is lowered to cooperative relation with the asso-



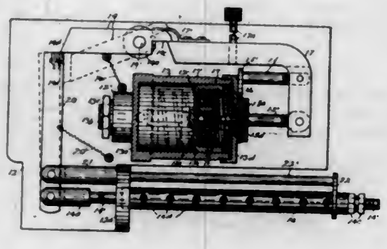
ciated burner, a trip beneath each burner, connections between the trip and the other supply valve of the associated burner to open said valve when the trip is pressed downward by an article in a chuck and means closing the valve in the exhaust pipe upon the lowering of the chuck when the trip is not actuated by an article, a take-off device having arms adapted to enter in succession between successive chucks and burners when the chucks are raised and antomatic means for closing the valve in the exhaust pipe when the associated chuck is in registry with the take-off device.

1,757,212. SHAFT PACKING SUITABLE FOR STEAM TURBINES. CHARLES ALGERNON PARSONS and STANLEY SMITH COOK, Newcastle-on-Tyne, England; said Cook assignor to said Parsons. Filed Apr. 21, 1927, Serial No. 185,629, and in Great Britain May 12, 1926. 2 Claims. (Cl. 60—64.)



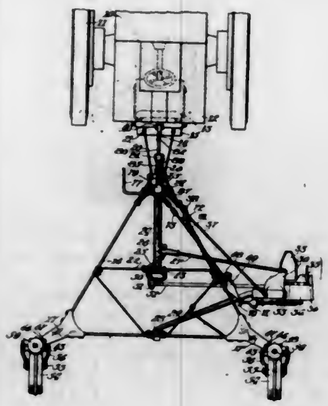
1. A rotary engine comprising in combination a plurality of pressure stages; engine shafting; glands for said shafting in connection with each of said plurality of stages, each gland having at least two axially-disposed gland pockets, an outer pocket and an inner pocket; a reservoir system at a pressure slightly above atmospheric to which all said outer gland pockets are connected; and a second reservoir system at a pressure below atmosphere to which all said inner gland pockets are connected.

1,757,213. AUTOMATIC FIRE EXTINGUISHER. HOWARD W. PARTLOW, Utica, N. Y. Filed Dec. 5, 1927. Serial No. 237,887. 4 Claims. (Cl. 169—27.)



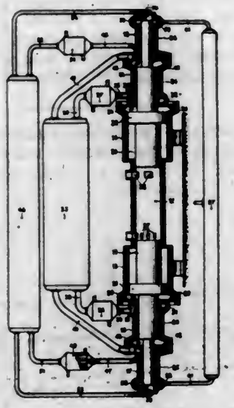
1. A device for operating a pressure responsive release mechanism of a fire extinguisher comprising an air pump including a cylinder, a spring pressed piston in the cylinder having a rod connected thereto and extending without the cylinder, a lever pivoted to the rod to move the piston against the tension of its spring, releasable means to hold said lever against movement; heat responsive means to actuate said lever holding means to release the lever, and means to conduct air compressed by the piston to said pressure responsive release mechanism to operate same.

1,757,214. MOWER ATTACHMENT FOR TRACTORS. CHARLES PEARSON, Chicago, Ill., assignor to International Harvester Company, a Corporation of New Jersey. Filed June 25, 1927. Serial No. 201,413. 13 Claims. (Cl. 56—25.)



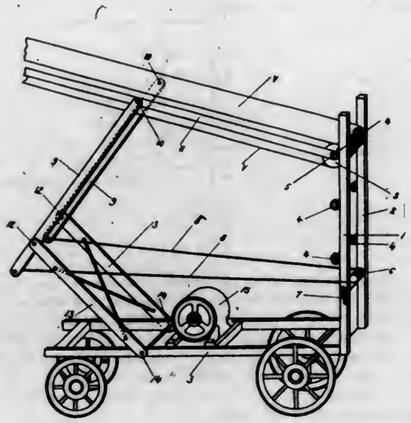
1. A mower attachment for tractors having a draw element, said mower comprising a frame adapted to be connected to said draw element, a cutting mechanism connected to the frame, means for driving the same, wheels carrying the frame, means normally locking said wheels against castering, and means causing said wheels to caster when the cutting mechanism encounters an obstruction with a predetermined force.

1,757,215. AIR COMPRESSOR. RAUL PATERAS PESCARA, Paris, France. Filed June 2, 1927, Serial No. 195,980, and in France June 5, 1926. 8 Claims. (Cl. 230—56.)



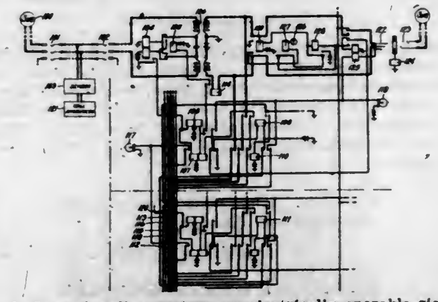
1. In a compound air compressor of the type described, the combination of a motor cylinder, a plurality of compressing cylinders of different diameters mounted coaxially with said motor cylinder at each extremity thereof, a multiple direct-acting free-flying piston fitted in each extremity of said motor cylinder and extending into said compressing cylinders and means associated with said compressing cylinders for producing compression in stages.

1,757,216. PORTABLE CONVEYER. EMILE POTAUFEUX, Cormicy, France. Filed July 28, 1928, Serial No. 296,049, and in France Aug. 2, 1927. 5 Claims. (Cl. 198—233.)



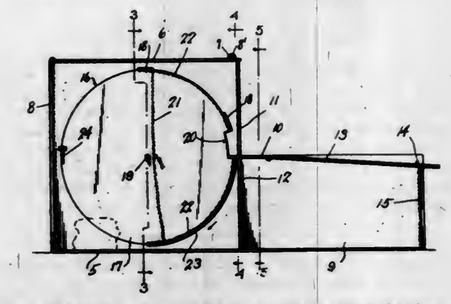
1. A conveyer of the type described comprising, a pivotally mounted conveyer belt, a pair of uprights adjacent the free end of said conveyer belt, a plurality of pairs of hooks on said upright adapted to receive the free end of said belt and a toggle for raising and lowering said belt.

1,757,217. TELEPHONE SYSTEM. WILLIAM A. RHODES, New York, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed July 2, 1927. Serial No. 203,051. 12 Claims. (Cl. 179—27.)



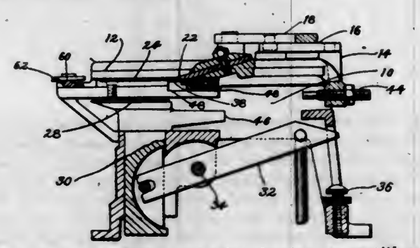
1. In a signaling system, an electrically operable signal connected at one of its terminals to battery of a given polarity, and means connected to another terminal of said signal to cause a characteristic operation of said signal by associating with said other terminal battery of the same or opposite polarity.

1,757,218. ANIMAL TRAP. ALLEN C. RICHARDSON, Shelbyville, Ill., assignor of one-half to Elmer Presnell, Pana, Ill. Filed Dec. 7, 1927. Serial No. 238,307. 3 Claims. (Cl. 43—72.)



1. An animal trap including a movable drum having an entrance opening therein, a compartment provided with an entrance opening with which the opening of the drum is registrable, a projection on said compartment for normal engagement within said entrance opening of the drum, to limit the movement of said drum.

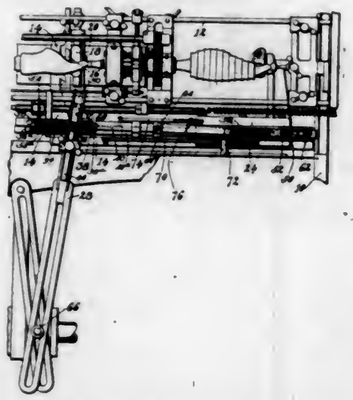
1,757,219. HEEL-SEAT-FITTING MACHINE. FRED RICKS and ALFRED EDWARD RICHARDS, Leicester, England, assignors to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Jan. 5, 1926, Serial No. 79,457, and in Great Britain Jan. 13, 1925. 18 Claims. (Cl. 12—17.)



2. A heel-seat fitting machine having a rectilinearly movable trimming knife, and work-positioning means at

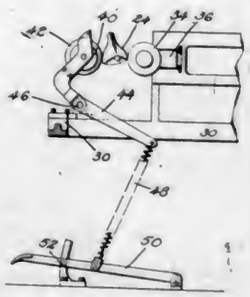
two different stations in the path of movement of the knife arranged to dispose the work relatively to the knife so that the knife trims the material from the periphery of the heel-seat portion of a sole positioned at one of said stations and severs the chip thus formed from the heel-seat portion of a sole positioned at the other station.

1,757,220. GRADING MECHANISM FOR PATTERN-COPYING MACHINES. GEORGE FRANCIS RYAN and ELMER HUNTON BURKE, Lynn, Mass., assignors, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Oct. 29, 1926. Serial No. 145,086. 29 Claims. (Cl. 142—15.)



1. In a pattern copying machine, a machine frame, model wheel and cutter carriages arranged to slide along the frame, and a grading mechanism having a plurality of grading controls arranged to come into action successively to effect a discontinuous change in relative speed of the carriages, whereby the speed of the cutter carriage relatively to the model wheel carriage may be different at the beginning than at the end of the copying operation.

1,757,221. PATTERN-COPYING MACHINE. GEORGE FRANCIS RYAN and ELMER HUNTON BURKE, Lynn, Mass., assignors, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Oct. 29, 1926. Serial No. 145,087. 3 Claims. (Cl. 142—15.)

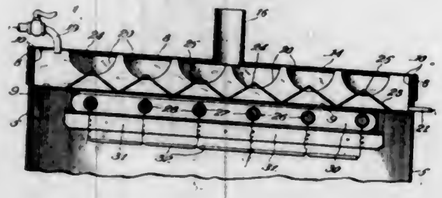


1. In a pattern copying machine, an oscillating frame arranged to carry and rotate a model, a model wheel carriage, a model wheel on the carriage arranged to contact with a model in the frame, a lever pivoted on the model wheel carriage, a rotary contact member on the lever arranged to roll on the model opposite the model wheel, and a manually operated member constructed and arranged to hold the contact member against the model, and to release it for removal to inoperative position.

1,757,222. MOTH-PROOF MATERIAL AND PROCESS OF MAKING SAME. WILHELM SCHEPSS, Leverkusen-on-the-Rhine, ERNST TIETZE, Cologne-on-the-Rhine, and ANTON OSSENBECK, Cologne-Mulheim, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Dec. 20, 1928, Serial No. 327,466, and in Germany Dec. 28, 1927. 11 Claims. (Cl. 167—37.)

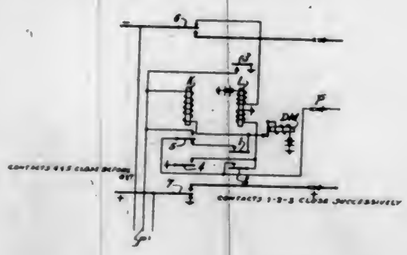
11. As a new moth proofing medium, a composition of matter comprising the addition compound of borontrifluoride and acetophenone, and benzine.

1,757,223. DEVICE FOR SEPARATING GASOLINE FROM LUBRICATING OILS. WILLIAM SCHWALGE, Elmhurst, Ill. Filed May 11, 1926. Serial No. 108,347. 6 Claims. (Cl. 196—16.)



6. An apparatus of the class described, comprising a pan, means for introducing oil into the pan, a plurality of spreaders arranged therein forming heating zones limited by the spreaders on the top and two opposite sides and on the bottom by the pan, a heating device beneath the pan, an outlet for discharge of oil from one end of the pan.

1,757,224. ROTARY LINE-SWITCH CIRCUIT. HARRY D. SHARPE, Liverpool, England, assignor, by mesne assignments, to Associated Telephone & Telegraph Company, Kansas City, Mo. Filed Dec. 6, 1926, Serial No. 152,796, and in Great Britain Mar. 5, 1926. Renewed May 2, 1929. 14 Claims. (Cl. 179—18.)

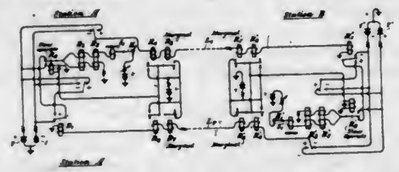


1. In a trunk selecting switch wherein a line relay is operated to initiate the trunk selecting movement and a switching relay is operated for seizing an idle trunk and for thereupon releasing the line relay, means for delaying the release operation of the line relay, said means including means for momentarily additionally energizing said line relay in parallel with said switching relay when the switch comes opposite an idle trunk.

1,757,225. TELEGRAPH ALARM CIRCUIT. FRED J. SINGER, Rockville Center, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Apr. 24, 1929. Serial No. 357,747. 7 Claims. (Cl. 178—69.)

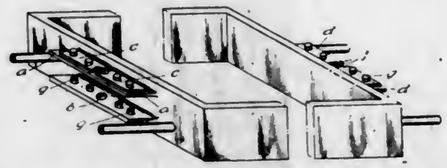
1. A telegraph circuit interconnecting two stations of the polar duplex type, a loop circuit at one of said stations

including a sounder and balanced sets of windings of a break relay and a sending relay, and means responsive to an abnormal current condition in said telegraph circuit



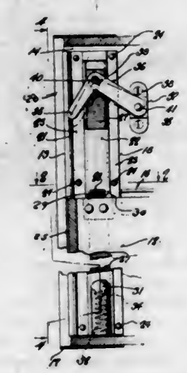
for reversing the polarity of the current connected to the junction point of said sets of relay windings in said loop circuit.

1,757,226. FOUNDRY MOLDING BOX. ALFRED BARTLETT SMITH and CLIFFORD ROSS SMITH, Wolverhampton, England. Filed Apr. 6, 1929, Serial No. 353,080, and in Great Britain Apr. 16, 1928. 3 Claims. (Cl. 22—96.)



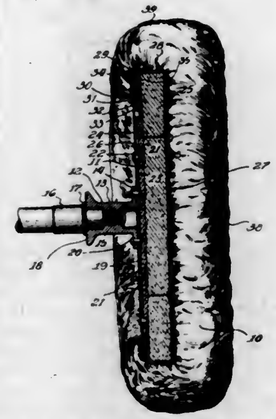
3. In foundry molding boxes or flasks of the kind in which a rectangular box like molding part is provided at opposite ends with perforated lugs which cooperate with cylindrical pins common to a plurality of the boxes to locate the boxes in proper molding relation one with another, the combination with said lugs of apertures which are clearances on the cylindrical pins with which the lugs are to cooperate in locating said boxes, plates adjustably secured on the lugs at each end of the box with the ends of the plates opposing each other and overlying the clearance apertures, said overlying opposed ends of said plates being formed with edges giving point contact on the cylindrical pins, and said plates at one end of said box part having V notches in their opposing edges the sides of which notches are knife edges, and said plates at the other end of said box part having straight opposed edges longitudinally directed, said straight edges being formed as knife edges.

1,757,227. LOCKING DEVICE FOR DRAWER SECTIONS. GEORGE HENRY WHEARY, Racine, Wis., assignor to Wheary Trunk Company, Racine, Wis., a Corporation of Wisconsin. Filed Sept. 14, 1923. Serial No. 662,634. 8 Claims. (Cl. 45—94.)



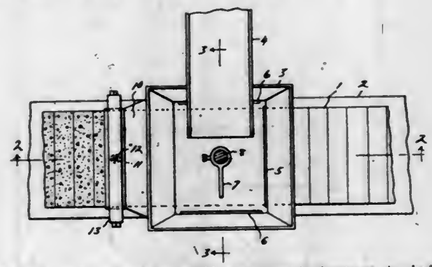
7. In a wardrobe trunk, having a drawer section and drawers slidably mounted therein for opening and closing movements, a finishing and reinforcing strip secured to the inner surface of one section side panel adjacent its outer marginal edge, a vertically extending shoulder carried by the finishing strip to cooperate with a lateral flange carried by the drawers to limit the movement of the drawers into the section, a vertical guide-way formed in the strip rearwardly of its stop, a bar slidably mounted in the guide-way and protected and concealed thereby, locking elements carried by the bar and projected outwardly of the finishing strip to engage with drawer carried means when the bar is in one position to lock the drawers against movement outwardly of the section, means connected with the bar exteriorly of the finishing strip and normally extended beyond the stop thereof to be engaged by the flange of one drawer as it closes to actuate said means and move the bar with its locking elements to lock the other drawers closed.

1,757,228. POLISHING DEVICE. FRANS O. ALBERTSON and GUSTAV OLSEN, Sioux City, Iowa, assignors to Albertson & Company, Sioux City, Iowa, a Corporation of Iowa. Filed Apr. 25, 1928. Serial No. 272,588. 5 Claims. (Cl. 15—230.)



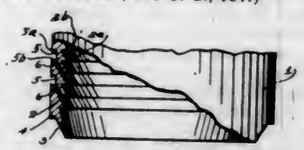
1. In a polishing wheel, the combination of a hub with a metal disc riveted to said hub, a layer of felt secured to said disc and projecting beyond the outer edge thereof, and a felt pad stitched to said felt layer beyond the edge of said disc.

1,757,229. METHOD OF MAKING BRICKS. WILLIAM B. ALCORN, Detroit, Mich. Filed July 2, 1928. Serial No. 289,648. 4 Claims. (Cl. 25—156.)



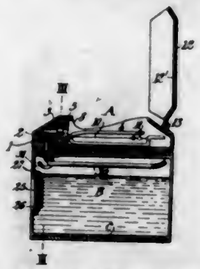
3. The method of imparting a rough texture to bricks consisting in longitudinally advancing a clay bar from which the bricks are to be cut, distributing particles of a combustible material to a top face and to the sides of said bar in the course of its advance, applying pressure to said particles through a further advance of said bar, to imbed them in said faces of the bar, and subsequently burning out said particles to secure a pitted effect upon the faces to which said particles were applied.

1,757,230. PISTON. GEORGE A. BARKER, Rochester, N. Y. Filed Jan. 3, 1930. Serial No. 418,386. 6 Claims. (Cl. 74—108.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928, 370 O. G., 757.)



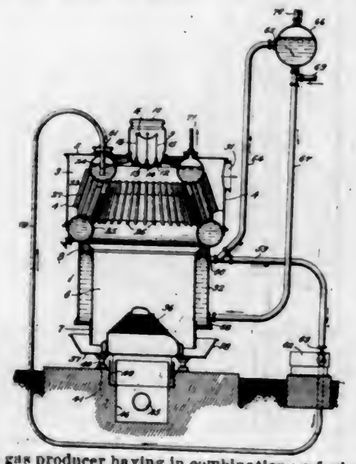
1. In a cylinder, a piston having annular projections on its interior, each projection embodying a normal side and an angular side whereby lubricant deposited on the projections is precluded from ascending the internal surface of the piston.

1,757,231. POCKET LIGHTER AND THE LIKE. SUMTER B. BATTEY, New York, N. Y. Filed Aug. 9, 1927. Serial No. 211,656. 12 Claims. (Cl. 67—7.)



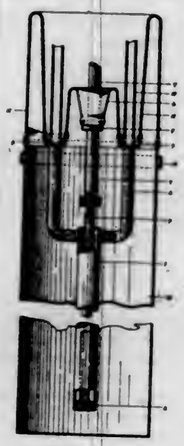
6. In a pocket lighter or the like, a closed reservoir for liquid fuel, a burner, an igniter within said burner, said igniter comprising metallic filaments and a catalytic agent which in the presence of the fuel vapor generate sufficient heat to ignite the fuel, a movable cover for said burner, a valve controlling the flow of fluid from said reservoir to said burner, a mechanical connection between said valve and said cover adapted to prevent the opening of the valve when said cover is closed, and manually operable means for ejecting fuel from said reservoir into said burner.

1,757,232. GAS PRODUCER. JOSEPH BECKER, Pittsburgh, Pa., assignor to The Koppers Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Oct. 24, 1923. Serial No. 670,537. 13 Claims. (Cl. 122—5.)



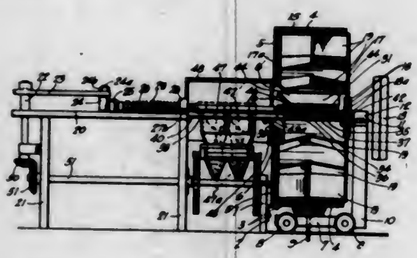
9. A gas producer having in combination: a fuel chamber, a cooling jacket surrounding said chamber, a low pressure steam drum, connections between said jacket and drum providing for thermo-syphonic circulation of heated cooling water therebetween; a high pressure boiler mounted within the upper portion of the producer above said chamber, means for effecting diversion of a portion of the cooling medium, after passing through said jacket, from said thermo-syphonic circulation system to said high pressure boiler, where said cooling medium is converted into high pressure steam.

1,757,233. DISCHARGE TUBE. CORNELIS BOL, Eindhoven, Netherlands, assignor, by mesne assignments, to Radio Corporation of America, New York, N. Y., a Corporation of New York. Filed Sept. 30, 1924, Serial No. 740,738, and in the Netherlands Oct. 17, 1923. 5 Claims. (Cl. 250—27.5.)



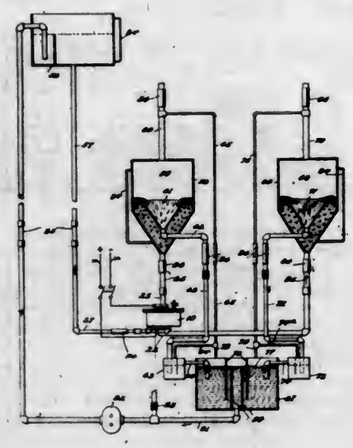
1. A discharge tube having a tubular incandescent cathode, a hollow conductor disposed substantially coaxially within said tubular cathode, said conductor and said tubular cathode being at one end in conductive connection with each other, and means for cooling the said hollow conductor.

1,757,234. MIXING, HEATING, AND DISTRIBUTING UNIT FOR CONFECTIONS. WILLIAM H. CARSON, Norman, Okla. Filed May 25, 1929. Serial No. 366,050. 6 Claims. (Cl. 107—16.)



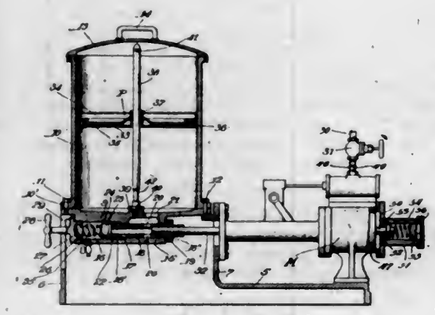
2. A device, as described, embodying a singly centrally perforated, vertically rotatable, interiorly baffled, hollow, cylindrical, mixing drum operatively mounted upon a manually portable wheeled truck, an open ended, singly centrally perforated, stationarily mounted housing for removably receiving said drum, a reciprocating conveyor block forming a plurality of cups, adapted to enter said drum, receive a portion of mixed confection and to withdraw from said drum and deposit said confection in desired containers, all as and for the purposes specified.

1,757,235. ELECTROLYTIC APPARATUS. FARLEY GRANGER CLARK and JAMES NORMAN SMITH, Toronto, Ontario, Canada, assignors, by mesne assignments, to Farley G. Clark. Filed Apr. 7, 1921, Serial No. 459,292. Renewed Feb. 8, 1927. 26 Claims. (Cl. 204—5.)



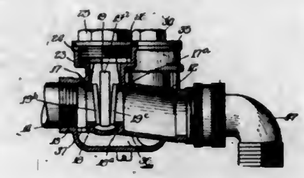
2. Electrolytic apparatus comprising the combination, with a pair of tubular electrode devices constituting a couple and having cooperating annular faces operatively spaced apart to provide an annular electrolyzing zone, of means for flowing electrolyte across said zone between said faces, and means adjacent said zone for dividing electrolyte leaving said zone into separate portions, said devices and surfaces being symmetrical to one another with respect to said electrolyzing zone to provide radial flow of the electrolyte toward the axis of the devices.

1,757,236. LUBRICANT COMPRESSOR. ERNEST W. DAVIS, Oak Park, Ill., assignor to Alemite Corporation, Chicago, Ill., a Corporation of Delaware. Filed Apr. 25, 1924. Serial No. 708,930. 8 Claims. (Cl. 221—47.1.)



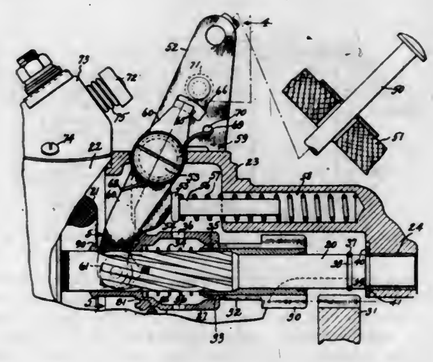
5. Compressing means comprising a cylinder having an intake port, a plunger movable to uncover said port, automatic resiliently driven means for reciprocating said plunger, and means for retarding the movement of said reciprocating means and plunger when said port is open.

1,757,237. SIGHT-VALVE ASSEMBLY. LEO DEUTSCH, Beaver, Pa., assignor, by mesne assignments, to The Wayne Pump Company, Baltimore, Md., a Corporation of Maryland. Filed July 18, 1927. Serial No. 206,572. 14 Claims. (Cl. 116—114.)



1. In a device of the character described, the combination of a valve chamber having a seat therein cooperating with a valve, means for closing communication regardless of the direction of flow through a passage through said valve chamber, and indicating means communicating with said passage and valve chamber.

1,757,238. ENGINE-STARTING APPARATUS. JOHN B. DYER, Anderson, Ind., assignor to Delco-Remy Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Jan. 11, 1928. Serial No. 245,886. 17 Claims. (Cl. 74—7.)

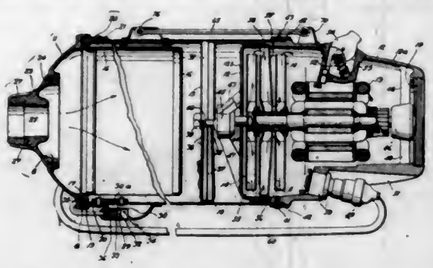


1. Engine starting apparatus comprising, in combination, a motor; a shaft operated by the motor; a pinion movable longitudinally of the shaft into mesh with an engine gear; a rotatable shifter member movable coaxially with said pinion; means for drivingly connecting the shifter member and pinion and permitting relative movement axially of the pinion between said members; means for so connecting the shifter member and shaft that movement of the member longitudinally of the shaft will effect rotation of the member; a spring for imparting movement from the shifter member to the pinion in a direction to mesh the pinion; a manually operable actuator for moving said member; and means for automatically disconnecting the actuator from the member before the engine starts.

1,757,239. CLEANING AND AIR-CONDITIONING APPARATUS. AXEL OLOF ENGBERG and FREDRIK CARLSTEDT, Stockholm, Sweden, assignors to Inventia Patent-Verwertungs-Gesellschaft, Schaffhausen, Switzerland, a Corporation of Switzerland. Filed June 15, 1926, Serial No. 116,123, and in Sweden Dec. 16, 1925. 9 Claims. (Cl. 15—14.)

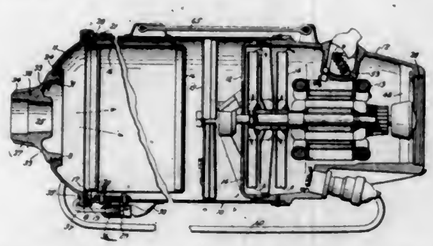
1. A cleaner comprising a casing of generally cylindrical formation, a shaft mounted axially in said casing,

a fan and a motor mounted on said shaft, said casing being formed with an air inlet at one end of said casing and an air outlet at the other end of said casing, said inlet and outlet being screw-threaded with similar threads and a



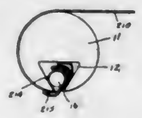
screw-threaded coupling fitting into either opening, said coupling having a central passageway of smaller diameter than the inlet or outlet for receiving the air hose of a cleaning device.

1,757,240. COUPLING FOR CLEANERS. AXEL OLOF ENGBERG and FREDRIK CARLSTEDT, Stockholm, Sweden, assignors to Inventia Patent-Verwertungs-Gesellschaft, Schaffhausen, Switzerland, a Corporation of Switzerland. Original application filed June 15, 1926, Serial No. 116,123, and in Sweden Dec. 16, 1925. Divided and this application filed Dec. 22, 1926. Serial No. 156,464. 1 Claim. (Cl. 285—55.)



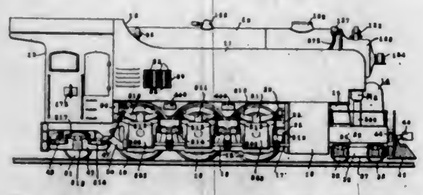
A coupling for use in vacuum cleaners comprising a ring portion, a central cylindrical portion of smaller diameter than the ring portion coaxial with the ring portion and an annular bridge section connecting the ring portion with the central portion and extending obliquely to the axis of the ring portion and the central portion, said central portion having a passageway therethrough, and said central cylindrical portion extending axially a substantial distance from the narrow part of the bridge section and providing a hand grip surface.

1,757,241. FABRIC ANCHORAGE. HARRY D. FORSE, Anderson, Ind. Filed Dec. 2, 1926. Serial No. 152,137. 2 Claims. (Cl. 242—68.)



1. In a construction of the character described, the combination of an elongated support having a narrow mouthed groove extending longitudinally thereof, said groove being widened beyond the mouth, a strip, a plurality of parallel positioned longitudinally extending loops formed near one end of the strip, at least one loop of which is nestingly receivable by said groove, said groove being of sufficient size to receive any or all of the loops and connecting strip portions, and a locking member positionable within one of the loops positioned within the groove and longitudinally receivable by said groove and having a suitable conformation preventing lateral escapement therefrom.

1,757,242. TURBINE LOCOMOTIVE. WILLIAM W. FRASER, New York, N. Y. Filed May 8, 1925. Serial No. 28,769. 19 Claims. (Cl. 105—38.)



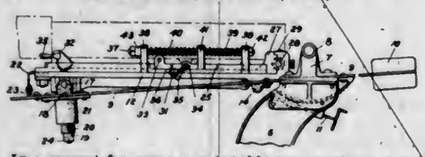
1. In a locomotive machine, the combination with a rigid frame having rail-adapted supporting wheels and provided with a stoker unit, of a boiler unit having a furnace adapted to be disposed over said stoker unit, a separable engine unit rigidly secured forwardly to said frame, driving connections formed as units operatively assembled and disposed between said engine unit and predetermined ones of said supporting wheels, and a condenser unit disposed adjacent said boiler unit on said frame and connected to said engine units; said units being arranged for assembly and disassembly in integral unit relation.

1,757,243. TOY BOX WAGON. MAURICE M. GOLDBERG, New York, N. Y., assignor to Animated Book Match Corporation, New York, N. Y., a Corporation of Delaware. Filed July 23, 1929. Serial No. 380,428. 3 Claims. (Cl. 46—37.)



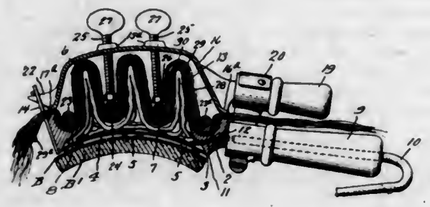
2. A blank foldable to represent a toy wagon or the like and comprising end sections, each end section adjoining a side section, and a bottom section adjoining the end sections and side sections, a top section extending from a side section opposite one of the bottom sections and cut for a substantial portion of its length where it adjoins the side section leaving a tongue integral with the side section, said top provided with a slit and said section being folded at one edge of the tongue to form a hinged top, said tongue having an integral portion at the side opposite from the hinged top supporting a figure, which portion when folded back and the figure passed through a slit in the hinged top will cause a movement of the figure in the slit when the top is moved between closed and open positions.

1,757,244. MOUNT FOR GUNS. SAMUEL G. GREEN, Gray, Ga. Filed Mar. 5, 1928. Serial No. 259,299. 10 Claims. (Cl. 89—44.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928, 370 O. G., 757.)



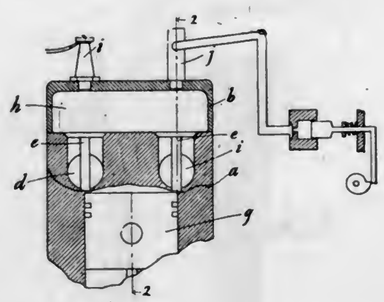
1. In a mount for guns, a rotatable top carriage, a cradle trunnioned thereon, a base frame trunnioned to the cradle forwardly of the cradle trunnion, means for elevating the forward end of the base frame, a guide plate overlying the base frame, a vertical pivot connecting the forward portions of the guide plate and base frame, means carried by the base frame for traversing the guide plate about its pivot, a recoil and counter-recoil mechanism carried by the guide plate and a recoil cradle slidable on the guide plate and connected to the recoil and counter recoil mechanism.

1,757,245. DEVICE FOR WAVING HAIR. SUSANNA COCROFT HEADINGTON, New York, N. Y. Filed Dec. 5, 1928. Serial No. 323,906. 14 Claims. (Cl. 132—32.)



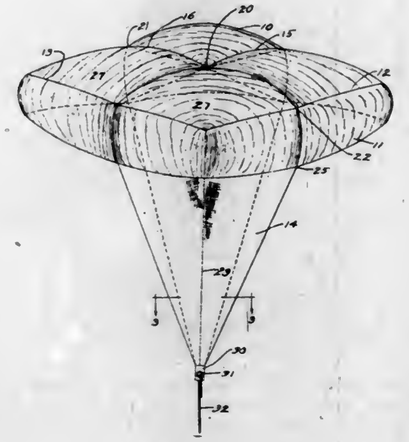
1. A device of the character described comprising a base member having its upper face provided with alternating depressions and ribs, a cover for said base member having members adapted to enter the said depressions, the base member being transversely curved, a support for said base member, the said support comprising a transversely curved plate of insulating material, a pad applied to the lower surface of such plate, and means securing the said plate to the base member, said means comprising spacers of insulating material between the base member and the plate, and means in said base member for heating the upper or operating surface thereof.

1,757,246. SOLID-INJECTION OTTO-CYCLE ENGINE. EDWARD R. HEWITT, Midvale, N. J., assignor to International Motor Company, New York, N. Y., a Corporation of Delaware. Filed June 28, 1927. Serial No. 202,058. 2 Claims. (Cl. 123—28.)



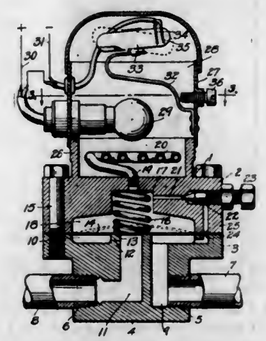
1. In an internal combustion engine, a cylinder, an intake valve, means to introduce a supply of air into the cylinder through the valve, and means centered over the intake valve to exert an impact on fuel to inject it into the engine, means to direct the fuel in a conical spray over the edges of the valve to strike the upward current of air therethrough, whereby an intimate mixture of air and fuel will result.

1,757,247. PARACHUTE. EDWARD L. HOFFMAN, Dayton, Ohio. Filed Aug. 28, 1929. Serial No. 389,056. 6 Claims. (Cl. 244—2.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928, 370 O. G., 757.)



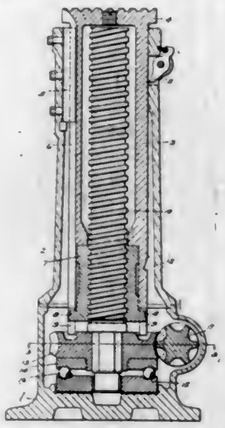
1. A parachute comprising a sustaining canopy and suspension element therefor, said suspension element consisting entirely of fabric panels, the entire upper edge of each panel being attached directly to said sustaining canopy.

1,757,248. AUTOMATIC CONTROL VALVE. JOHN F. HOFFMAN, Omaha, Nebr., assignor to Baker Ice Machine Co. Inc., Omaha, Nebr., a Corporation of Nebraska. Filed Feb. 23, 1928. Serial No. 256,455. 6 Claims. (Cl. 236—68.)



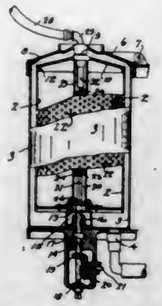
1. In a thermostatic control device, a housing having a fluid containing chamber and a chamber provided with inlet and outlet ports, a diaphragm separating said chamber and adapted to close one of said ports, said housing having a bore for conducting fluid to the fluid containing chamber, and means for heating the fluid to expand the same to urge the diaphragm toward port closing position.

1,757,249. LIFTING JACK. ION V. K. HOTT, Dayton, Ohio, assignor to The Joyce-Cridland Company, Dayton, Ohio, a Corporation of Ohio. Filed Sept. 18, 1924. Serial No. 738,555. 31 Claims. (Cl. 254—103.)



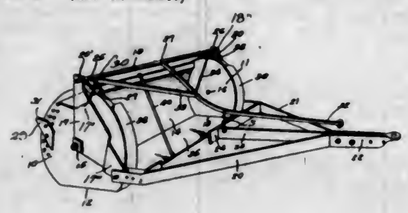
1. In a lifting jack, a base, a lifting screw, supported by said base, means for actuating said screw, said actuating means being of such a character that the load on said lifting screw may move downwardly under its own weight, means for retarding said downward movement of the load, and a main driving mechanism for said lifting screw, said driving mechanism operable in one direction to operate the actuating means to cause the lifting screw to elevate the load thereon and operable in the other direction to operate said retarding means to permit said downward movement of the load.

1,757,250. RINSING DEVICE FOR WASHING MACHINES. JOSEPH W. HUSK and ROBERT L. OLSON, Tacoma, Wash., assignors to Syracuse Washing Machine Corporation, Syracuse, N. Y., a Corporation of Delaware. Filed Jan. 24, 1927. Serial No. 162,961. 6 Claims. (Cl. 210—67.)



1. A rinsing device for washing machines, comprising a fixed container; a rotating basket having a perforated outer wall; an axial, perforated, tube secured to and rotating with said basket and extending from end to end thereof and leaving an annular space wherein the clothes to be rinsed may be packed; a water supply pipe, positioned axially within said tube, and closed at its lower end and provided with a plurality of lateral outlets, each adapted to direct a jet of water on the inside of said rotating perforated tube, whereby the clothes packed outside of the tube are uniformly wetted through its perforations and the water therein is driven outward through the mass of clothes by the continuous jets thrown thereon and by the centrifugal action developed therein; and means whereby selected ones of the series of lateral outlets may be closed.

1,757,251. SCRAPER. WILLIAM V. HUTCHISON, La Mesa, Calif. Filed Aug. 17, 1927. Serial No. 213,598. 8 Claims. (Cl. 37—140.)



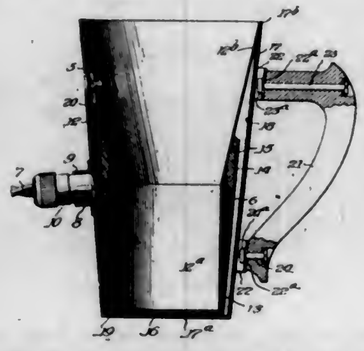
2. In a control device for revolving scrapers, a bowl, levers trunnioned on said bowl and relatively to which said bowl may rotate, a draft frame pivotally connected to one end of said levers to exert a pull thereon and thereby cause said bowl to pivot to loading position, and means for interlocking the other end of said levers with said bowl to maintain the bowl in loading position, and to move said bowl when loaded out of loading position.

1,757,252. REPAIR LINK FOR NONSKID TIRE CHAINS. JAY M. JOHNSON, Chicago, Ill., assignor, by mesne assignments, to Peter J. Nagle, Rochester, N. Y. Filed Sept. 17, 1926. Serial No. 136,091. 5 Claims. (Cl. 59—85.)



1. A repair link for an automobile nonskid chain, comprising, a piece of rod stock bent to provide a straight central portion and the ends thereof extending into loops in the same direction from said central portion, one of said ends extending toward the central portion and being longer than the other and spaced therefrom to permit insertion in the chain to be repaired and adapted under the weight of the automobile to be bent to the plane of the other end and in close proximity to the central portion to close both of the loops of said link.

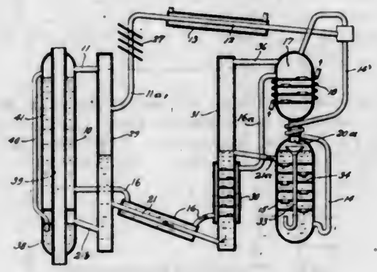
1,757,253. ELECTRICALLY-HEATED UTENSIL. FRANK R. LACY, Chicago, Ill. Filed Sept. 25, 1924. Serial No. 739,788. 4 Claims. (Cl. 219—44.)



1. A self heating cup, comprising an inner container, a heating element applied thereto, a wall surrounding but spaced from said heating element, and a cement mass solidly filling the entire space between said inner container and said wall; said heating element terminating a substantial distance from the bottom of the container and

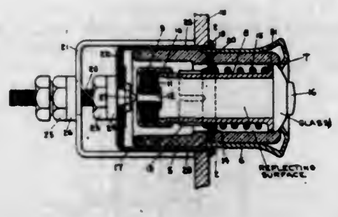
leaving the lower end of the latter free from direct heating influence; and said surrounding wall extending over the unheated lower end of said container and across the bottom thereof, but separated from said unheated lower end and bottom by said cement.

1,757,254. REFRIGERATION. ALVAR LENNING, New York, N. Y., assignor to Electrolux Servel Corporation, New York, N. Y., a Corporation of Delaware. Filed May 21, 1929. Serial No. 364,788. 9 Claims. (Cl. 62—119.5.)



1. Refrigerating apparatus comprising, in combination, a condenser, an absorber, an evaporator, means to supply the evaporator with a solution from the absorber and a condensed fluid from the condenser, means to conduct vapor from the evaporator to the absorber and means for receiving solution from the evaporator, separating the same and conducting gaseous fluid to the condenser and liquid to the absorber.

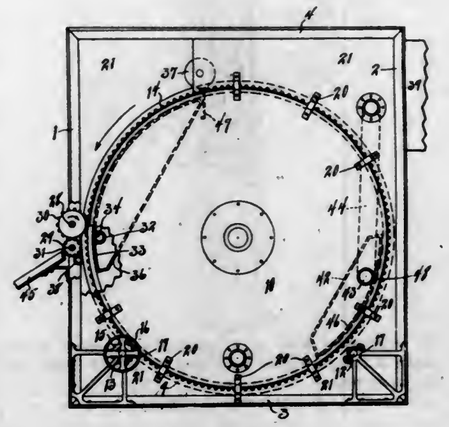
1,757,255. ELECTRIC CIGAR LIGHTER. CHARLES B. MAHAN, Rochester, N. Y., assignor to F. A. Smith Manufacturing Company, Inc., Rochester, N. Y., a Corporation of New York. Filed June 6, 1929. Serial No. 368,894. 12 Claims. (Cl. 219—32.)



1. In an electric cigar lighter of the wireless type, a removable member comprising a heating element, a body having, at one end, a recess in which the heating element is normally housed and guarded, and means, accessible for finger pressure at the opposite end of the body, for protruding the heating element from the body to facilitate the lighting of a pipe.

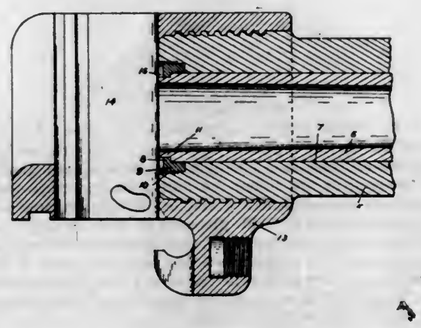
1,757,256. VACUUM CLEANER AND CONDENSER. GEORGE W. MARTIN, Fort Worth, Tex. Refiled for abandoned application Serial No. 65,960, filed Oct. 31, 1925. This application filed Nov. 25, 1929. Serial No. 409,694. 6 Claims. (Cl. 19—156.)

1. A condenser and cleaner comprising a revolving screen and a housing therefor, circular tracks rigid with said screen, a pair of shafts and trunnions on said shafts for supporting said screen, gear wheels rigid with said tracks, a pinion on one of shafts for driving said



screen, means for delivering material to said screen to be cleaned and condensed, and means for stripping the condensed material from said screen.

1,757,257. BREECH STRUCTURE OF GUNS. GEORGE M. MCCANN, New Castle, Del. Filed Jan. 24, 1929. Serial No. 334,804. 4 Claims. (Cl. 89—16.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928, 370 O. G., 757.)

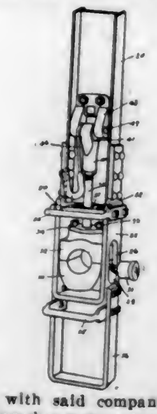


3. A gun comprising an outer tube, a liner, a retaining ring securable to the tube and engageable with the liner and a breech ring on the tube having a breech block recess dimensioned for removal of the ring and liner.

1,757,258. PITMAN. WILLIAM MITCHELL, Ponca City, Okla., and ALBERT H. LOUCKS, Marion, Ind., assignors to Marion Machine Foundry & Supply Company, Marion, Ind., a Corporation. Filed Oct. 3, 1927. Serial No. 223,802. 4 Claims. (Cl. 287—93.)

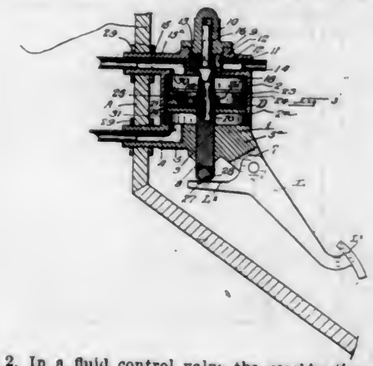
1. A pitman including a bar with a yoke secured thereto, said yoke having bearing openings in the opposite sides thereof, a main wrist pin bearing member having round gudgeons on the opposite ends thereof and extending transversely of the wrist pin and fitting in said openings, a companion bearing member in said yoke,

and means for holding said companion bearing member against said main bearing member, said means being



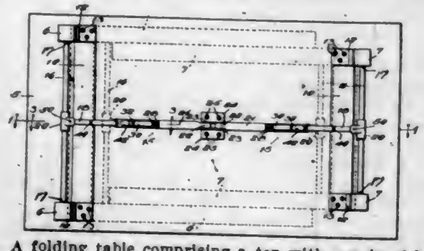
loosely connected with said companion member so that the main bearing member may rock to accommodate itself to the wrist pin.

1,757,259. VALVE FOR CONTROLLING FLUIDS. ROBERT E. MITTON, Salt Lake City, Utah. Filed Jan. 3, 1928. Serial No. 244,223. 4 Claims. (Cl. 303—50.)



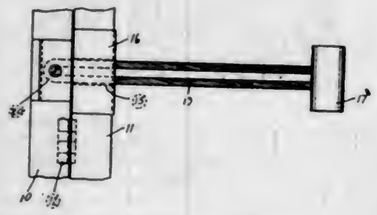
2. In a fluid control valve the combination of a cylindrical casing having inlet application and exhaust openings therein; a piston operable within said casing, having the top end of the piston rod hollow and in open connection with the space above and below said piston; means to manually move said piston and rod; a valve seat formed in the top end of said casing between the intake opening and the interior of said cylinder; and a valve adapted to close both said valve seat and the top end of the piston rod as necessary to control the flow of fluid to the application and the exhaust.

1,757,260. FOLDING TABLE. JOSEPH SILVERMAN, Chicago, Ill. Filed Aug. 12, 1926. Serial No. 128,738. 2 Claims. (Cl. 45—11.)



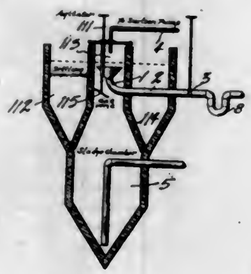
1. A folding table comprising a top with a pair of legs pivotally connected to each of the opposite ends thereof, bracket means attached to the intermediate portion of the table and having parallel depending flanges with an intervening space directed longitudinally of the table, a pair of rods one pivotally connected with each pair of legs, a pair of hollow rods both disposed wholly in a plane longitudinally of the table, one of said hollow rods telescoping over each of said first rods and said hollow rods having adjacent ends flattened and having fixed pivotal attachment between the depending flanges of said bracket means, an externally exposed leaf spring anchored at its upper end to the outer side of each of said hollow rods with its free end offset outwardly and terminating adjacent the end of the hollow rod to be engaged and sprung out by the finger, said spring having an inwardly projecting detent pin between its anchored and offset ends, and said first rods each having a pair of openings engageable with said pin in the open and folded position of the legs.

1,757,261. DOORCHECK. HERBERT G. SIMMONS, Kokomo, Ind., assignor to Concealed Door Check Company, Kokomo, Ind., a Corporation. Filed Jan. 10, 1929. Serial No. 331,536. 5 Claims. (Cl. 16—82.)



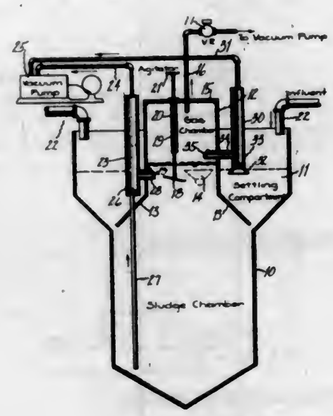
1. A door check comprising a cable folded intermediate its ends to provide a looped end and a pair of legs extending therefrom parallel to each other in spaced relation, and a metallic head plate having a pair of spaced apertures therein through which the free ends of said cable are adapted to extend, said head plate being folded to envelop the free ends extending therein and clamped in folded position for rigidly securing the free ends of said cable firmly therein.

1,757,262. SEWAGE-DISPOSAL PLANT. THOMAS BANKS SIMS, Cleburne, Tex., assignor to L. J. Wardlaw, Tarrant County, Tex. Filed Apr. 23, 1928. Serial No. 272,342. 12 Claims. (Cl. 210—2.)



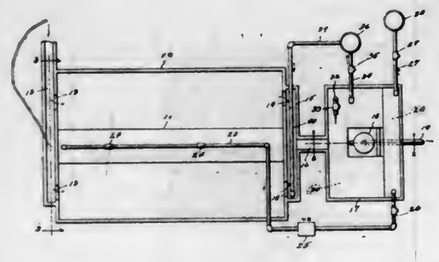
1. The method of treating sewage and impure liquids which comprises settling the heavier sludge in a sludge chamber, flowing the lighter sludge and scum upward to a separate chamber sealed against admission of air, and creating a vacuum in the separate chamber effective upon the liquid therein, whereby gases are induced to flow upward from the sludge chamber into the separate chamber, thus being deflected from the path of the influent and whereby sedimentation is increased.

1,757,263. TREATMENT OF SLUDGE. THOMAS B. SIMS, Cleburne, Tex. Filed Dec. 10, 1928. Serial No. 325,051. 9 Claims. (Cl. 210—2.)



1. The process herein described of promoting the decomposition and digestion of sewage sludge, which consists in settling sludge in a settling tank, maintaining a vacuum over a portion of the sludge so as to remove the gases generated, and elevating the settled digested sludge and mixing it with a portion of the sewage which is under vacuum.

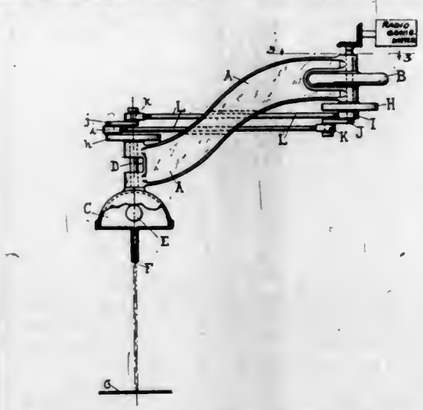
1,757,264. SEWAGE-DISPOSAL SYSTEM. THOMAS B. SIMS, Cleburne, Tex. Filed Apr. 29, 1929. Serial No. 358,947. 8 Claims. (Cl. 210—2.)



1. The system of treating sewage and impure liquids which comprises introducing the liquid into a settling chamber, conducting the liquid from the chamber to a dosing vat, utilizing the rise and fall of the liquid in the dosing vat to provide a supply of air, and introducing air into the liquid to aerate the same.

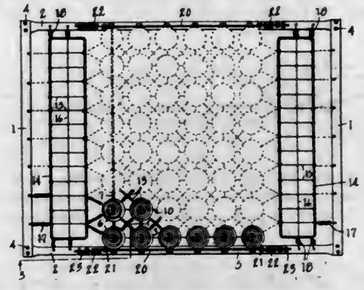
1,757,265. MEANS FOR INDICATING ANGULAR POSITION PARTICULARLY APPLICABLE TO WIRELESS DIRECTION-FINDING APPARATUS. JOHN AMBROSE SLEE, London, England, assignor to Radio Corporation of America, a Corporation of Delaware. Filed June 16, 1923, Serial No. 645,897, and in Great Britain June 27, 1922. 9 Claims. (Cl. 250—11.)

2. In a radio compass, the combination of directional receiving apparatus, a scale for indicating the position of said receiving apparatus with respect thereto, a bracket, a light projector carried by said bracket and adapted to project a narrow beam of light upon said scale, and means including a pair of parallel connecting links connecting said receiving apparatus and said projector to vary the



position of said beam with respect to said scale in accordance with the variation in directional characteristic of said receiver.

1,757,266. SPRING STRUCTURE FOR BED BOTTOMS AND THE LIKE. GEORGE A. STACKHOUSE, Oakland, Calif., assignor to L. A. Young Spring and Wire Corporation, Detroit, Mich. Filed Apr. 12, 1929. Serial No. 354,454. 6 Claims. (Cl. 5—248.)



1. In a spring structure, the combination with a main frame comprising end members and side rails, said side rails having downwardly offset central portions, cross bars having upwardly offset hangers at their ends secured to the downwardly offset portions of said side rails, upright, helically coiled body springs mounted on said cross bars, grid-like end bottom members disposed between said body springs and the main frame end members and comprising border frames and longitudinal end cross members, coiled supporting springs for said bottom members secured to their border frames and to said main frame end members and the end portions of said side rails, coiled spring ties connecting the top coils of the said body springs to each other and the end rows of body springs to said bottom member border frames, side bars disposed above the said downwardly offset portions of said side rails and secured to the top coils of the outer side rows of said body springs, and coiled springs connecting the ends of said top side bars to the end portions of said side rails.

1,757,267. GAS-OIL SEPARATOR. GEORGE C. STANLEY, New York, N. Y., assignor to The M. W. Kellogg Company, a Corporation of Delaware. Filed Dec. 23, 1926. Serial No. 156,637. 13 Claims. (Cl. 103—203.)

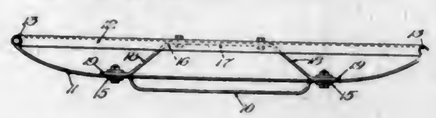
1. The method of separating oil from gas in an oil well which comprises flowing the gas-oil mixture in a vertical

stream, baffling the flow of the mixture and contacting it with an enlarged surface, discharging the gas rising from the mixture, permitting the oil to settle and collect in a



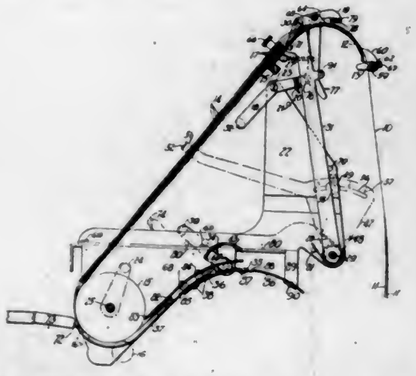
body, withdrawing the oil from said body, and maintaining a liquid seal between the point of gas discharge and the point of oil withdrawal.

1,757,268. AUTOMOBILE BUMPER. WILLIAM A. STARCK, Milwaukee, Wis., assignor to Badger Manufacturing Corporation, Milwaukee, Wis., a Corporation of Delaware. Filed Feb. 8, 1928. Serial No. 252,815. 19 Claims. (Cl. 293—55.)



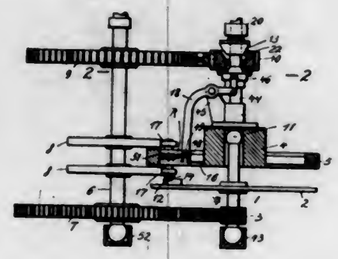
1. A bumper comprising a rigid supporting bar, spring impact bars connected thereto, and a front bar connected to said impact bars and spaced forwardly therefrom.

1,757,269. TYPEWRITING MACHINE. BURNHAM C. STICKNEY, Hillside, N. J., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Filed May 13, 1925, Serial No. 29,873. Renewed Nov. 27, 1928. 59 Claims. (Cl. 197—126.)



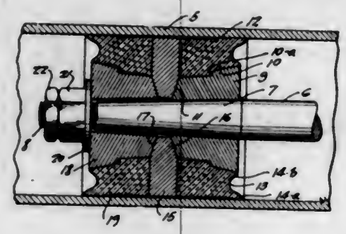
1. In a typewriting machine having a revoluble platen, a platen-frame and typing instrumentalities, and means for presenting to the platen a web comprising work-plies interleaved with carbons in a manner to afford typing of the bottom form on the web preparatory to severing the typed form and presenting the next form to the platen, said means having, in combination, a carrier overlying the platen, and a plurality of carbon-holding blades fast to the carrier.

1,757,270. DEVICE FOR GENERATING AND UTILIZING CENTRIFUGAL FORCES. OTTO STINNER, Eichwalde, near Berlin, Germany. Filed Mar. 16, 1928, Serial No. 262,244, and in Germany June, 1926. 9 Claims. (Cl. 185—27.)



1. In a device for generating and utilizing centrifugal forces, the combination of a mass arranged to be rotated, with a supplementary mass arranged upon an idle shaft, coupling means to couple temporarily the supplementary mass with the first mass for accelerating at certain moments the former by the latter, and coupling and force transmitting means to transmit at other moments accelerating force from the supplementary mass to the first mass.

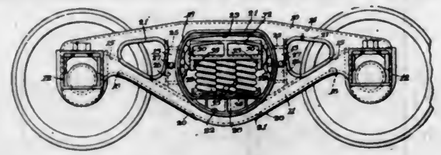
1,757,271. PUMP PISTON. JOHN SURBER, Whittier, Calif. Filed Nov. 2, 1929. Serial No. 404,308. 14 Claims. (Cl. 74—109.)



1. A piston assembly comprising a piston rod having an abutment surface at its inner end, core blocks with tapering peripheral surfaces mounted on said rod with their small ends facing one another, the inner of said blocks having an abutment surface cooperating with the abutment surface on the piston rod to position the block against outward movement on said rod, a disk interposed between said blocks and having its periphery substantially equal to the overall diameter of the piston, rings of elastic material closely fitted over the peripheries of said blocks and abutting said disk, and means to clamp the blocks and disk on said rod.

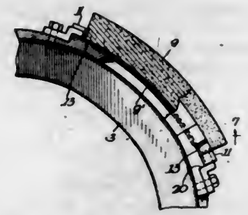
1,757,272. CAR TRUCK. HOWARD D. TAYLOR, New York, N. Y., assignor to Flexible Truck Corporation, Philadelphia, Pa., a Corporation of Delaware. Filed June 8, 1928. Serial No. 283,866. 6 Claims. (Cl. 105—208.)

1. A car truck comprising side frames having enlarged central bearings, chambered carriers journaled in said bearings and adapted to receive and interlock with the bolster ends and receive and support the bolster springs, the



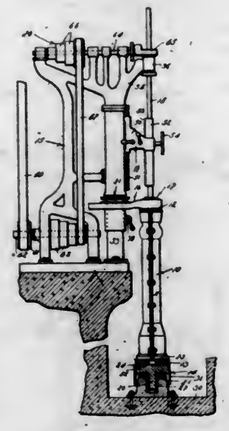
bearings and carriers having truncated upper portions permitting the relative rocking movement of the side frames.

1,757,273. FRICTION BRAKE. JAMES S. THOMPSON, New York, N. Y., assignor to American Brake Materials Corporation, New York, N. Y., a Corporation of New York. Filed Mar. 18, 1926. Serial No. 95,602. 9 Claims. (Cl. 188—234.)



1. The combination of a brake head, a friction shoe seated on the head and having a metal shell thereon, projections at the ends of the shell, and detachable means engaging said projections and the head for securing the shoe to the head.

1,757,274. MOLD-ROTATING MACHINE. WESTERN UNDERWOOD, Santa Monica, Calif., assignor to La Lux Manufacturing Company, Los Angeles, Calif., a Corporation of California. Filed Dec. 14, 1927. Serial No. 239,911. 10 Claims. (Cl. 25—30.)



1. A mold operating machine including a lower mold carrier for the lower end of the mold and having a vertical axis of rotation, a vertical drive spindle above and concentric with said carrier, and an upper mold carrier for the upper end of the mold and operable into and out of alinement with the lower carrier and spindle.

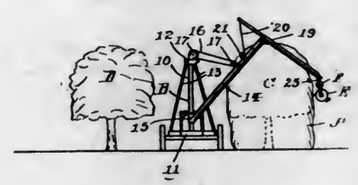
1,757,275. STEEL FELLY AND RIM CONSTRUCTION. ANDREW S. VAN HALTEREN, East Lansing, Mich., assignor to Motor Wheel Corporation, Lansing, Mich., a Corporation of Michigan. Filed Mar. 12, 1928. Serial No. 260,824. 5 Claims. (Cl. 301—97.)



1. In a wheel assembly, a spoke spider, an outwardly opening channel felly member encompassing the spider and accommodating the spoke tenons within apertures of its base, a tire-carrying rim having along its front edge an inwardly extending rib, the rear leg of the felly adapted to fit closely within the rim and the front leg bearing against and in stressed relationship with the rib, the rear leg of the felly being permanently secured to the rim.

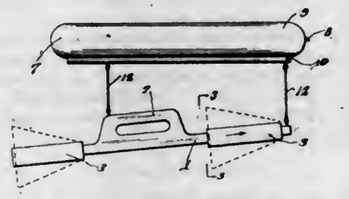
4. In a wheel assembly, a metallic felly, and a rim having an inwardly extending rib with an inclined face, the felly comprising a channel member having one leg permanently secured to the rim base and the other leg arranged to bear against the inclined face of the rib and in stressed relation thereto.

1,757,276. METHOD OF FUMIGATING TREES. CLYDE VAUGHN, Pasadena, Calif. Filed Apr. 27, 1927. Serial No. 186,962. 1 Claim. (Cl. 43—126.)



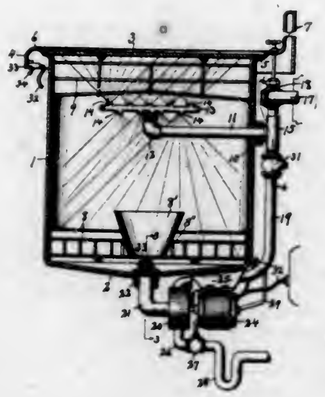
The method of transferring a flexible fumigating cover from one tree or plant to another, consisting in manipulating the cover at the far side of the covered tree or plant by lifting a portion of the cover at said side to take up said portion, then shifting the unlifted portion of the cover to partially envelope the other tree or plant, and finally releasing the lifted portion to complete the envelopment of said other tree or plant.

1,757,277. SWIMMING DEVICE. EMIL WEGNER, Milwaukee, Wis. Filed July 8, 1929. Serial No. 376,719. 5 Claims. (Cl. 9—21.)



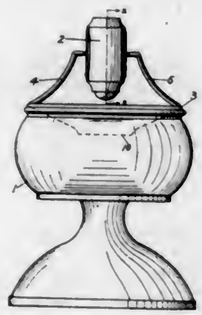
2. In a device of the class described, a buoyant member, a bar loosely suspended therefrom, a hand grip on the bar and parachute members carried by the bar.

1,757,278. MECHANICAL DISHWASHER. JOHN H. WEIDMAN, Marcellus, N. Y. Filed Mar. 29, 1927. Serial No. 179,249. 4 Claims. (Cl. 141—9.)



2. In a mechanical dishwasher, a vat having a water inlet and an outlet, a pump having its suction side connected to the outlet and its pressure side connected to said inlet for recirculating the water through said vat, means for introducing fresh water through the inlet independently of the pump and a check valve in the connection between the pump and inlet for allowing the flow of water from the pump to the inlet and for preventing the flow of the fresh water to the pump.

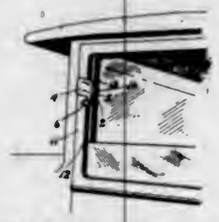
1,757,279. CIGARETTE SNUFFER. FRED WEINBERG, New York, N. Y., assignor to The Rumidor Corporation, a Corporation of New Jersey. Filed June 19, 1928. Serial No. 286,678. 12 Claims. (Cl. 131—51.)



1. In a device for the purpose described, a support, a member having a hollow interior to receive a cigarette or the like, said member being carried by the support for rotation thereon, and a cylindrically-shaped member adapted to close either end of said member depending on the position of said member.

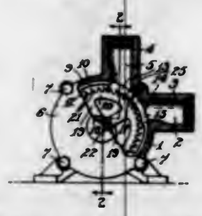
1,757,280. REAR-VIEW MIRROR. FLOYD G. WITHROW, Grand Rapids, Mich. Filed June 20, 1927. Serial No. 199,875. 1 Claim. (Cl. 45—97.)

The combination with a window casing having a groove and a window having its edge mounted into said groove, of an integral member having a portion lying within said groove beneath the edge of said window and a portion extending outside of said groove, said outer portion having



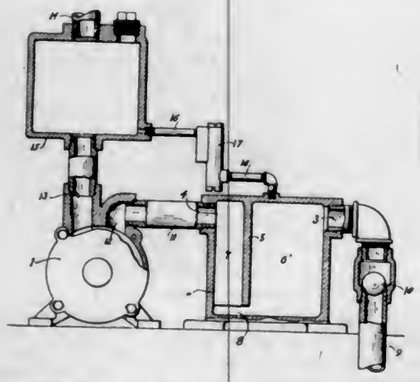
a vertical reflecting surface and an inclined reflecting surface located below and to the rear of the vertical reflecting surface and extending angularly upward and rearwardly from its lower edge.

1,757,281. CENTRIFUGAL PUMP. CLARENCE G. WOOD, Muncie, Ind., assignor, by mesne assignments, to Auto Prime Pump Company, Cleveland, Ohio, a Corporation of Ohio. Filed June 24, 1926. Serial No. 118,150. 6 Claims. (Cl. 103—96.)



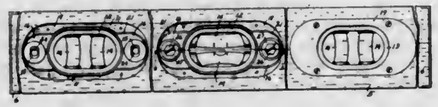
1. In a centrifugal pump the combination with a casing, of a pair of removable rings mounted in said casing and formed to provide an annular impeller channel, an impeller wheel operating in said casing, impeller blades at the periphery of said wheel operating in said channel, said channel having peripheral intake ports arranged to deliver fluid into said channel and into contact with said blades, and means blocking direct radial flow between the inlet and the impeller wheel pockets.

1,757,282. CENTRIFUGAL PUMP. CLARENCE G. WOOD, Cleveland, Ohio, assignor, by mesne assignments, to Auto Prime Pump Company, Cleveland, Ohio, a Corporation of Ohio. Filed July 11, 1927. Serial No. 204,769. 5 Claims. (Cl. 103—113.)



1. A priming chamber for use with pumps comprising a casing, and means dividing said casing into two communicating chambers having a common imperforate floor, each of said chambers being provided with a port adjacent its upper end, and said ports being substantially aligned, but separated by said means.

1,757,283. LEVEL. HARRY JOHN ZIEMAN, Milwaukee, Wis., assignor to Empire Level Manufacturing Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Jan. 10, 1927. Serial No. 160,086. 1 Claim. (Cl. 33—213.)

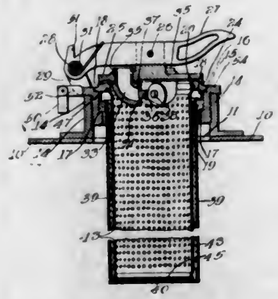


In a device of the character described, the combination with a level frame having an aperture, and channels in its opposite faces communicating therewith, the channels in one face having circular sides converging toward said aperture, of a vial case fitting within said aperture and having ears extending into one set of channels, crescent shaped nuts in the channels having converging sides, and clamping bolts extending through said frame and engaging said ears and nuts, said frame being provided with cover plates for said channels having inner margins corresponding to the margins of said vial case.

1,757,284. METHOD OF FORMING COPPER COPPER-OXIDE RECTIFIER PLATES. WILLIAM THEODORE ANDERSON, Jr., and LESTER FLETCHER BIRD, Newark, N. J., assignors to Hanovia Chemical and Manufacturing Company, Newark, N. J., a Corporation of New Jersey. Filed Aug. 30, 1928. Serial No. 303,122. 5 Claims. (Cl. 148—1.)

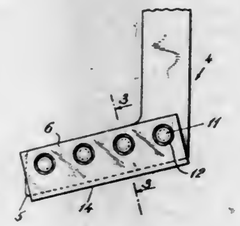
2. A bath for reducing copper oxide, comprising paraffine and a vapor of a hydrocarbon reducing substance, the paraffine serving as an inert vehicle to hold and distribute the reducing substance.

1,757,285. VENTING DEVICE. RUDOLPH J. ANSCHICKS, Chicago, Ill., assignor to Protectoseal Company of America, Chicago, Ill., a Corporation of Illinois. Filed Mar. 25, 1927. Serial No. 178,309. 5 Claims. (Cl. 220—83.)



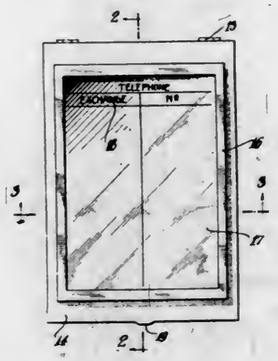
1. Apparatus of the kind described for receptacles holding volatile liquids said apparatus comprising an elbow-shaped fitting projecting into said receptacle and having a passage therethrough communicating with the atmosphere and with the interior of the receptacle, and a valve pivoted upon the inner end of said fitting for controlling the flow of air therethrough, said valve making a relatively large angle with the horizontal when it is in its closed position.

1,757,286. RABBLE FOR MANNHEIM FURNACES. MADISON W. BANTON, Chicago, Ill., assignor to General Chemical Company, New York, N. Y., a Corporation of New York. Filed Oct. 25, 1927. Serial No. 228,560. 3 Claims. (Cl. 259—106.)



1. In a furnace for manufacturing muriatic acid and salt cake, a rabble for agitating the reaction materials, said rabble having a protective facing of carborundum over the region of the rabble which makes contact with said reaction materials.

1,757,287. PERPETUAL PAD. ALFRED BILDSTEIN, Elizabeth, N. J. Filed June 28, 1927. Serial No. 201,980. 1 Claim. (Cl. 35—10.)

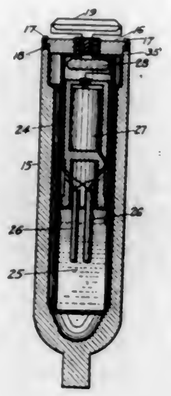


In a memorandum pad including a rear plate and carbon held thereon, a front or cover plate hinged to said rear plate and having a central opening, a frame integral with said cover plate and raised with respect to same, a sheet of celluloid fixed to the underside of said frame, a rear frame member co-operating with said frame to hold said celluloid sheet in place, and a flexible translucent sheet adapted to be interposed between said cover plate and carbon.

1,757,288. SYSTEM FOR SHOOTING WELLS BY RADIO. WARREN F. BLEECKER, Boulder, Colo. Filed Sept. 7, 1926. Serial No. 133,994. 3 Claims. (Cl. 102—4.)

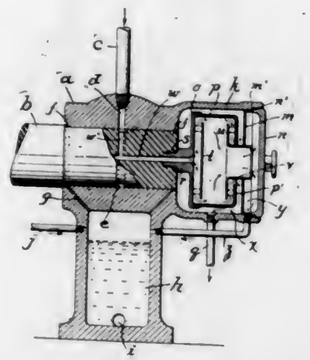
1. A device for shooting wells comprising a torpedo having a casing, a detonator carried by the casing, an

antenna detachably mounted on the casing and having a water proof enclosure therefor, and means in the casing



to effect operation of the detonator by electro-magnetic waves transmitted to the antenna from a distant point of wave production.

1,757,289. OIL-PURIFYING MEANS FOR TURBINES, ETC. FREDERIC R. C. BOYD, Boston, Mass., assignor to The De Laval Separator Company, New York, N. Y., a Corporation of New Jersey. Filed Feb. 24, 1926. Serial No. 90,289. 5 Claims. (Cl. 184—6.)



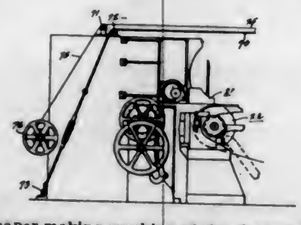
5. In an oil purifying system for turbines and other engines, the combination with the main shaft, a stationary frame carrying a shaft bearing, an oil reservoir, and means to circulate oil from the reservoir through said bearing and back to the reservoir; of a by-pass for oil comprising a channel extending longitudinally within the shaft, a casing carried by the shaft bearing, a pipe connecting the casing and reservoir, and a centrifugal purifier on the end of the shaft within the casing and having an oil inlet communicating with said channel and a purified oil outlet communicating with said casing.

1,757,290. LIQUID-DISPENSING COMB. CARL H. BRICKER, Des Moines, Iowa. Filed Jan. 23, 1929. Serial No. 334,518. 4 Claims. (Cl. 132—13.)



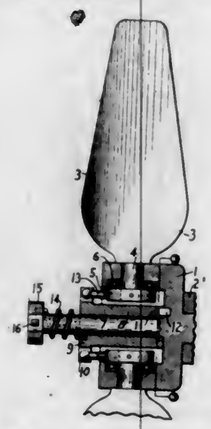
1. In a device of the class described, an elongated base member, two spaced apart parallel shoulders formed on said base member, teeth formed on the bottom of said base member, a compressible member secured to said base member and having its two marginal edges engaging said two shoulders, respectively; said shoulders designed to aid in holding said compressible member on said base member and to prevent the complete collapse of said compressible member, and a passageway in each of said teeth having one end communicating with said base member at a point between said two shoulders and its other end communicating with the outside atmosphere.

1,757,291. PAPER-MAKING MACHINE. CHARLES B. BRIEDE and HERMAN L. KUTTER, Hamilton, Ohio. Filed Aug. 12, 1926. Serial No. 128,810. 25 Claims. (Cl. 92—44.)



1. In a paper-making machine of the character described, a couch roll adapted to be moved frontwise out of normal operating position, said roll having a front carriage and track means therefor, a rear carriage and overhead track means for said rear carriage.

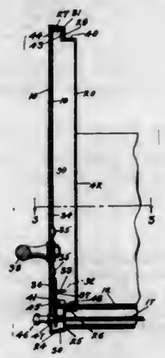
1,757,292. COOLING FAN. FRANK W. CALDWELL, Dayton, Ohio. Filed Nov. 3, 1921. Serial No. 512,408. 12 Claims. (Cl. 170—162.)



1. In a fan, a rotatable supporting structure, a blade mounted on said structure for movement by the action of centrifugal force thereon about an axis extending lengthwise of said blade and held against longitudinal movement,

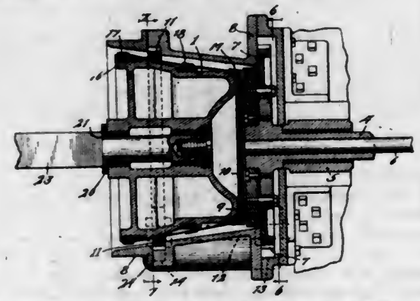
a member rotatable with relation to said supporting structure about an axis extending transversely to said axis of said blade, an operative connection between said blade and said member, and a spring acting on said member to resist its rotation by said blade.

1,757,293. DRAWER. EARL JAMES CARD and VICTOR ADOLPH GRONBERG, Jamestown, N. Y., assignors to Jamestown Metal Equipment Co., Inc., Jamestown, N. Y., a Corporation of New York. Filed Dec. 17, 1925. Serial No. 76,062. 4 Claims. (Cl. 45—7.)



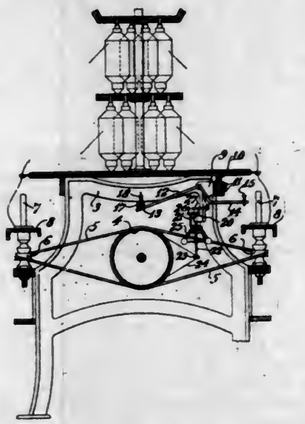
1. In a drawer, a head comprising an outer plate, an intermediate plate and an inner plate, the edges of said outer plate being formed to provide recesses, the side and bottom edges terminating in rearwardly extending flanges behind said recesses, the side edges of said intermediate plate terminating in rearwardly extending flanges, a clip rigidly secured to the lower portion of said intermediate plate, means for securing said intermediate plate to said outer plate with the upper edge of said intermediate plate extending into the recess at the upper edge of said outer plate, said clip extending into the recess at the lower edge of said outer plate, and the flanges of said intermediate plate parallel to and separated from the side flanges of said outer plate to form spaces which the front ends of the side walls of the drawer proper enter when said head is applied thereto, the bottom wall of said drawer being in surface contact with the bottom flange of said outer plate, said inner plate having outwardly extending side flanges which when said inner plate is assembled with said outer and intermediate plates after the drawer proper is secured, rest against the inner faces of the side flanges of said intermediate plate.

1,757,294. MACHINERY AND METHOD FOR MAKING RECEPTACLES. EDWARD CRAIG, St. Joseph, Mich.; The Commercial National Bank executor of the Estate of said Edward Craig, deceased. Filed May 23, 1927. Serial No. 193,449. 17 Claims. (Cl. 147—47.)



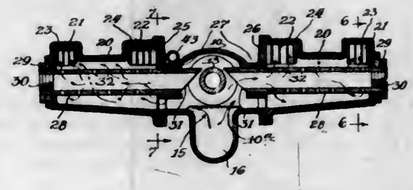
1. In a machine for making a basket or similar receptacle, the combination of a reciprocating and rotary basket form for engaging the inside of the receptacle, a stationary mold into which the form is movable, the form having a gradual taper from its top to its bottom, whereby the basket is tapered accordingly, rotary means for pressing the bottom of the basket against the end of the form, a stationary body forming with said mold a housing for said rotary means, a ring gear rotatably mounted in the mold, having its inner periphery adapted to grip the outer surface of the basket, means within said housing and whereby said ring gear is rotated by the operation of said rotary means, means for feeding outside top and bottom hoops to the basket, and stapling mechanism for driving staples through the hoops and the side walls of the basket.

1,757,295. AUTOMATIC STOP MOTION FOR SPINNING FRAMES. DRED W. DAVIS, Siluria, Ala., assignor of one-half to K. B. Nickerson, Siluria, Ala. Filed Oct. 28, 1927. Serial No. 229,497. 5 Claims. (Cl. 118—5.)



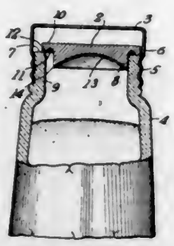
1. An automatic stop mechanism for spinning, winding and twisting frames, comprising a shift element for operating the stop mechanism, spring means tending to move said shift element to stop the frame, latch means to restrain said means from moving said shift element, and two independent mechanisms respectively, responsive to the filling of the yarn carriers and to any stoppage of the drive for the frame, which are adapted to trip said latch.

1,757,296. VAPOR BURNER. FOREST V. DETWILER, Grand Rapids, Mich. Filed June 3, 1927. Serial No. 196,222. 13 Claims. (Cl. 158—65.)



1. A burner including a tubular head of substantially straight bore and having an inlet for the fuel, and hollow raised portions on the head, there being a plurality of slits within each of said portions for the escape of fuel, said portions being spaced from each other in directions lengthwise of the head to form air passages therebetween, the slits in said portions remote from said inlet being narrower than the slits in said portions adjacent said inlet.

1,757,297. SALT SHAKER. JOHN L. DINSMOOR, New York, N. Y. Filed Jan. 2, 1929. Serial No. 329,746. 5 Claims. (Cl. 65—57.)

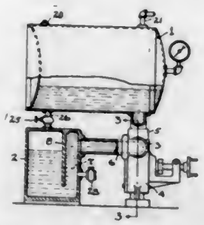


1. In a device of the character specified the combination of a container having a neck, a covering cap removably attached to said neck, said cap having a plurality of vents and a hammer having a body normally seated within the upper end of said neck, said hammer having a flange extending over the opening of the upper end of said neck and normally resting on the edge thereof and said hammer flange having a circumferential groove thereinunder, adjacent the hammer body, whereby that portion of said flange which engages the container top, is made relatively narrow.

1,757,298. PROCESS OF PRODUCING LOW CARBON ALLOYS. FRANK ALFRED FAHRENWALD, Chicago Heights, Ill. Filed May 29, 1926. Serial No. 112,692. 2 Claims. (Cl. 75—45.)

1. The process of producing low carbon silicon containing ferro-alloys and incorporating the same into a mass of steel to be alloyed, which consists in subjecting the mass of steel together with the high carbon ferro-alloy to a temperature materially in excess of the fusing point of the bath while in the presence of silica, and thereby causing the oxygen of the silica to combine with carbon in the bath and the silicon to be added to the bath, and to cause ebullition throughout the mass of steel; oxygen from external sources being excluded from the bath during the procedure.

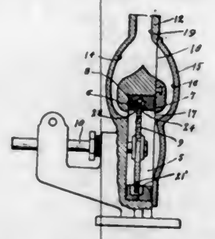
1,757,299. APPARATUS FOR COMPRESSING AIR. GALE L. FERGUSON, Cleveland, Ohio, assignor, by mesne assignments, to Auto Prime Pump Company, Cleveland, Ohio, a Corporation of Ohio. Filed Oct. 13, 1927. Serial No. 225,888. 6 Claims. (Cl. 230—75.)



1. In a device of the class described, a centrifugal pump, a pressure tank having communication with the outlet of said pump, and a priming chamber connected to the inlet of said pump, said chamber being provided with an air inlet.

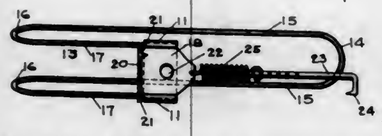
1,757,300. PUMPING APPARATUS. GALE L. FERGUSON, Cleveland, Ohio, assignor, by mesne assignments, to Auto Prime Pump Company, Cleveland, Ohio, a Corporation of Ohio. Filed Dec. 12, 1927. Serial No. 239,367. 5 Claims. (Cl. 103—113.)

1. In a pump, a casing providing a chamber and an inlet and outlet communicating therewith, and means forming a pump channel within said chamber, said pump channel being provided with an inlet port registering



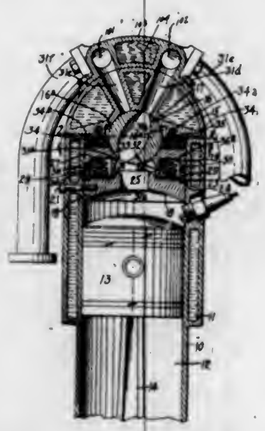
with said casing inlet and said pump channel being further provided with an outlet port opening into the interior of said chamber.

1,757,301. CURTAIN HOLDER. HELEN J. FERGUSON, Omaha, Nebr. Filed Aug. 20, 1928. Serial No. 300,913. 3 Claims. (Cl. 156—33.)



2. In a curtain holder, a metallic supporting-plate, an ornamental sheath, a metallic clamping-device for supporting the supporting-plate at the front of a window casing, and a metallic strand secured at its ends to the supporting-plate and bent to provide an elongated recess and loop at the front of said plate and clamping-plate, said recess providing an area for receiving the curtain and said loop providing a mounting for the ornamental sheath.

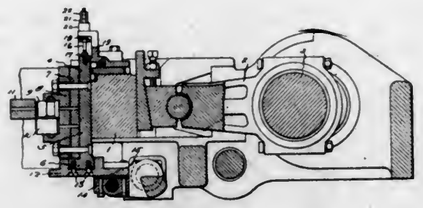
1,757,302. ENGINE AND VALVE STRUCTURE. PEARL G. FRAZIER, Ankeny, Iowa. Filed Aug. 2, 1926. Serial No. 126,446. 6 Claims. (Cl. 123—190.)



1. In a structure of the class described, an engine cylinder, a head thereon having formed in it the upper portion of a valve casing, a rotary valve projected into said casing, a shield in the cylinder provided with an opening, said cylinder and shield having respectively a groove and an adjacent rabbet, a resilient ring in the rabbet and groove, for preventing movement of the shield away from the cylinder.

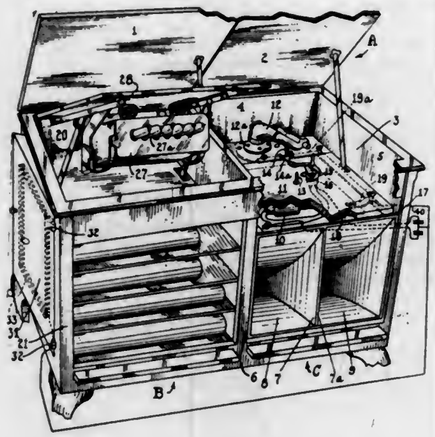
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1,757,303. PUNCH-TRANSFER SLIDE FOR MULTIPLE-STROKE HEADERS. ALBERT H. GAESS, Waterbury, Conn., assignor to The E. J. Manville Machine Company, Waterbury, Conn., a Corporation of Connecticut. Filed Sept. 27, 1927. Serial No. 222,283. 2 Claims. (Cl. 10—26.)



1. The combination in a multiple stroke header of a horizontally reciprocating gate, a punch transfer slide vertically movable at the front of said gate, a cap fastened to the gate and extending over said slide, a sleeve adjustable vertically in said cap, a stud extending upward from the center of the top of the slide and having a movable fit through said sleeve, and means on said stud adapted to engage said sleeve for determining the upward and downward limits of the vertical movements of said slide.

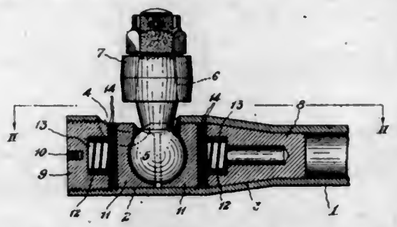
1,757,304. COMBINED RADIO AND PHONOGRAPH CABINET. ALFRED N. GOLDSMITH and LAZARUS SHAPIRO, New York, N. Y., assignors to Radio Corporation of America, a Corporation of Delaware. Filed Apr. 14, 1925. Serial No. 22,954. 6 Claims. (Cl. 250—14.)



4. In a radio cabinet the combination of a radio receiving circuit, an antenna circuit for said receiving circuit, a plurality of metallic masses in said cabinet and electrical conductors connecting said metallic masses to said antenna circuit.

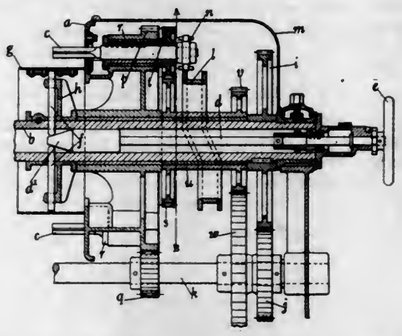
1,757,305. ROD COUPLING. MATTHEW P. GRAHAM, Detroit, Mich., assignor to Thompson Products, Incorporated, Cleveland, Ohio, a Corporation of Ohio. Filed Dec. 19, 1925. Serial No. 76,449. 1 Claim. (Cl. 287—90.)

In a rod coupling, a rod having a hollow end forming a ball joint housing, the wall of said housing having an opening, a ball seat abutment at the inner end of said housing and an adjustable retaining plug at the outer end, said abutment and plug having recesses in their opposing faces, ball seats in said housing in effective solid contact with said faces respectively, a ball of a ball stud between



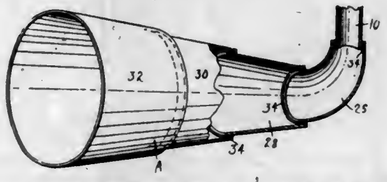
said ball seats and substantially enveloped thereby with its shank extending through said wall opening and resilient means under compression within said recesses acting against said ball seats to prevent rattle of the joint.

1,757,306. DOUGH-MOLDING MACHINE. LAURENCE SEYMOUR HARBER and JOHN EDWARD POINTON, Peterborough, England, assignors to Baker Perkins Company Incorporated, New York, N. Y. Filed July 23, 1928, Serial No. 294,779, and in Great Britain Aug. 9, 1927. 7 Claims. (Cl. 107—9.)



1. In a dough molding machine a rotatable main shaft, two spaced disks thereon each equipped with a plurality of rotatable and longitudinally slidable dough-coiling spindle members, rotating gears on the spindle members of each disk, a guide cam for imparting sliding movement to each spindle member to project and retract opposed spindle members toward and from each other during rotation, sheeting rolls, a directing chute from the rolls to the spindles, an end abutment for said chute disposed between the paths of travel of the ends of opposed spindle members when retracted, an annulus within the circular path of the spindles and constituting an adjustable track upon which the dough coils on said spindle members partake of circular transporting movement.

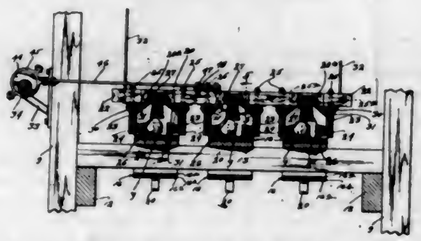
1,757,307. SOUND-REPRODUCING HORN. HARRY HARKINS, Montpelier, Iowa. Filed Feb. 28, 1927. Serial No. 171,568. 1 Claim. (Cl. 181—27.)



A horn of the character disclosed comprising the combination of a plurality of conical shaped horn sections,

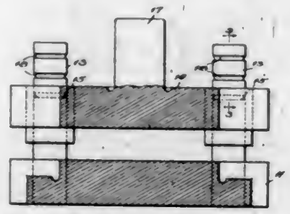
the external diameter of the large end of each section being smaller than the internal diameter of the small end of the next succeeding horn section and arranged therein whereby there is a peripheral space between said ends and a vibration non-conductor filler in each of said spaces, said fillers being of equal thickness throughout their length and adapted to seal said spaces but allow independent vibration of each horn section.

1,757,308. FRUIT CLEANER. HARRY A. INGRAHAM, Zillah, Wash. Filed Jan. 19, 1927. Serial No. 162,023. 8 Claims. (Cl. 146—202.)



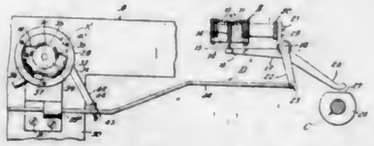
1. In a fruit-cleaning machine, an endless traveling belt having positively acting projecting fruit-spacing cleats, opposed brushes spaced adjacent to said belt and affording a runway through which the fruit will be passed for cleaning, and means for vibrating said brushes transversely of said runway to produce the cleaning action.

1,757,309. DIE SET. KASIMIR JANISZEWSKI, Milwaukee, Wis., assignor to Superior Tool and Die Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Dec. 15, 1926. Serial No. 154,991. 1 Claim. (Cl. 164—118.)



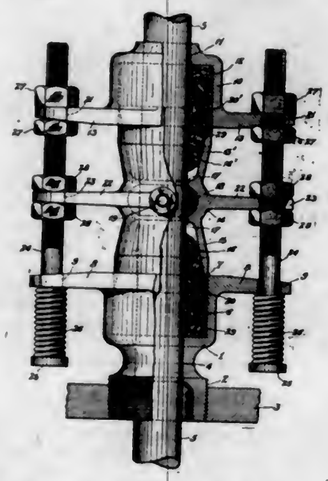
A die set comprising a punch holder, a die shoe, and non-perforated leader pins carried by the die shoe for slidably journaling the punch holder, said leader pins being provided with inwardly and downwardly extending annular pockets for holding a lubricant for the bearing surfaces of the pins and the holder.

1,757,310. AUTOMATIC STOP FOR PRINTING MACHINES. JOHN E. JOHNSON, Chicago, Ill., assignor to Speedaumat Manufacturing Company, Chicago, Ill., a Corporation of Delaware. Filed Jan. 20, 1923. Serial No. 613,806. 2 Claims. (Cl. 192—125.)



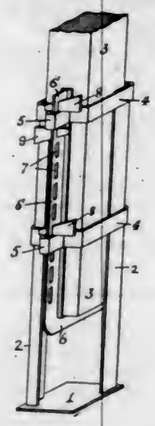
1. A device for automatically stopping an addressing machine comprising an address plate guideway, a bell crank, a needle member supported on said bell crank and normally urged by said bell crank into said guideway at a point anterior of the address printing position, switching means connected to said bell crank, and a rotating cam for contacting directly with said bell crank at predetermined times for withdrawing said needle from said guideway or for preventing the entrance of said needle into said guideway.

1,757,311. STUFFING BOX. EUGENE C. KAHLE, Venus, Pa. Filed Apr. 15, 1925. Serial No. 23,301. 3 Claims. (Cl. 286—30.)



1. A stuffing-box for piston rods for the like comprising two alined, spaced main members each formed with a cylindrical packing chamber; an intermediate member having at each end a frusto-conical packing chamber and an outer cylindrical surface fitting within the packing chamber of the adjacent main member; and means for adjusting said main and intermediate members relatively to each other, said means including a device resiliently maintaining the intermediate member in adjusted position relative to one of said main members.

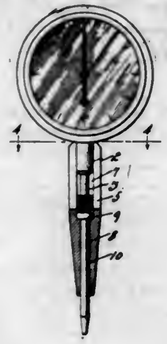
1,757,312. ADJUSTABLE SHORE FOR CONCRETE FORMS. FELIX KAHN, San Francisco, Calif. Filed July 23, 1928. Serial No. 294,764. 4 Claims. (Cl. 254—104.)



1. An adjustable shore for concrete forms comprising a post; a guide in which said post is fitted for linear adjustment; outwardly projecting lugs fixed to said guide;

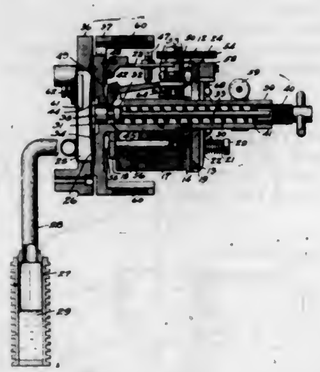
a U-shaped stirrup carrying the post the arms of said stirrup being slidable in said lugs, and having wedge-seats; and wedges adapted, in association with said seats and lugs, for linearly adjusting the post.

1,757,313. EXTENSION FOR INDICATORS. GODFREY KAUFMAN, Detroit, Mich. Filed May 27, 1927. Serial No. 194,725. 2 Claims. (Cl. 33—172.)



1. In combination with an indicator having a stem and needle, an extension therefor adapted for frictional engagement with the stem of the indicator, a bore in the extension member adapted to receive the stem and the needle of the indicator, an extension needle reciprocable in said bore and means to limit the downward movement of said extension needle.

1,757,314. CONTROL SWITCH. ARTHUR J. KERCHER, Berkeley, Calif. Filed June 12, 1922. Serial No. 567,876. 6 Claims. (Cl. 200—83.)



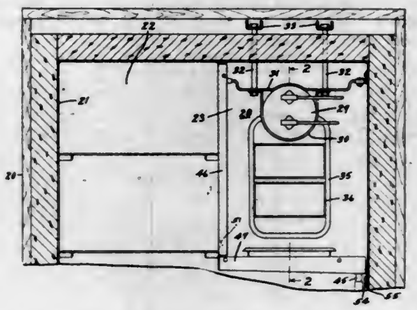
1. In a control switch, a stationary contact, an oscillatable arm, a contact carried by the arm coacting with the stationary contact, an electromagnet, an armature for the magnet, said armature being coaxially pivoted with the arm, a resilient connection between the armature and the arm, said contacts being arranged to short circuit the electromagnet, means for locking the armature in its attracted position at its free end and a weight carried by the armature at its free end for causing it to continue to travel with appreciable momentum after the electromagnet is short-circuited.

1,757,315. HOT PLATE. ARTHUR J. KERCHER, Berkeley, and WILLIAM WESLEY HICKS, San Francisco, Calif., assignors to Wesix National Company, San Francisco, Calif., a Corporation of Delaware. Filed Nov. 9, 1926. Serial No. 147,228. 3 Claims. (Cl. 126—214.)



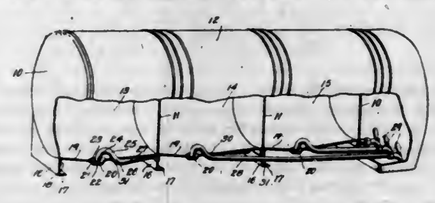
1. A device for fuel cooking stoves adapted to transmit heat to the bottom of a cooking utensil comprising a relatively flat metal plate having a plurality of spaced parallel ribs substantially covering its upper surface to provide an augmented heat transmitting area, and a plurality of integral ribs substantially covering the lower surface of the same to provide an augmented heat absorbing area, the ribs upon the lower surface being arranged at an angle to the ribs on the upper surface whereby buckling and cracking of the plate is prevented, substantially all of said lower ribs extending in nonradial directions with respect to the center of the plate whereby said ribs serve to baffle flame directed upon said lower surface.

1,757,316. REFRIGERATING APPARATUS. JESSE G. KING, Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation, a Corporation of Delaware. Filed Nov. 24, 1925. Serial No. 71,169. 3 Claims. (Cl. 62—95.)



1. A refrigerator cabinet comprising a substantially vertical wall, a substantially horizontal wall, said walls providing a cooling compartment within the cabinet, said vertical wall having an opening therethrough adjacent the horizontal wall and having an inwardly formed portion for directing the water of condensation from the outside of said wall into the cooling compartment.

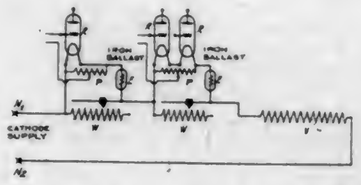
1,757,317. SIPHON OUTLET FOR TRUCK TANKS. ANDREW A. KRAMER, Kansas City, Mo. Filed June 21, 1926. Serial No. 117,405. 3 Claims. (Cl. 137—21.)



1. In a device of the character described, a support including transverse bolsters and a horizontally elongated

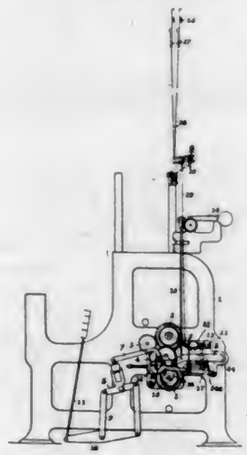
tank including a bottom wall having an inclined portion forming a sump, and a conduit comprising a straight portion extending longitudinally of the tank in an inclined position between the lower edges of the bolsters and the bottom of the tank, and a curved portion extending upwardly through said bottom wall into the tank and downwardly into said sump.

1,757,318. VACUUM-TUBE CATHODE-SUPPLY CIRCUIT. AUGUST LEIB, Berlin, Germany, assignor to Gesellschaft für Drahtlose Telegraphie m. b. H. Hallesches, Berlin, Germany, a Corporation of Germany. Filed Dec. 5, 1922, Serial No. 605,001, and in Germany Dec. 23, 1921. 9 Claims. (Cl. 250—27.)



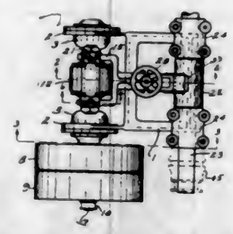
9. In radio apparatus a plurality of groups of thermionic tubes each having input and output electrodes including a control grid and a filament, a source of current for the filaments of said tubes, means for connecting the filaments of said tubes in series with said source, a ballast resistance in series with each of said groups of tubes, a resistance in parallel with each of said groups of tubes, means for applying biasing potential to the control electrodes of each group of said tubes including means for connecting the control electrodes of each group to a point on one of said parallel resistances, and a protective resistance shunting the filaments and ballast resistance of each group of tubes.

1,757,319. SHUTTLE-BOX MOTION FOR LOOMS. LOUIS LETTMAN, Jr., Paterson, N. J. Filed Apr. 17, 1928. Serial No. 270,678. 2 Claims. (Cl. 139—180.)



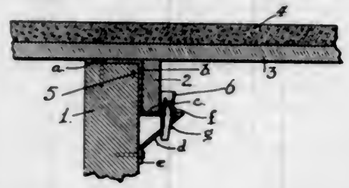
1. A shuttle-box motion of the class described comprising a fulcrumed vibrator mechanism movable to either of two positions and normally held in one of them, an actuating means including a back-and-forth-moving lever, an impact member pivoted to the lever, means to guide the impact member substantially rectilineally, a motion-transmitting connection movable into and out of connecting relation to said mechanism and member, and means to control the movement of said connection.

1,757,320. ACTUATING MECHANISM FOR CONCENTRATING MACHINERY. MARTIN J. LIDE, Birmingham, Ala. Filed Mar. 10, 1926. Serial No. 93,603. 6 Claims. (Cl. 74—14.)



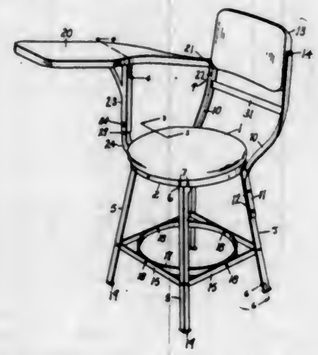
1. A thrust drive for concentrating tables embodying a bell crank and a cam roller carried by the bell crank characterized by the fact that the lower end of the bell crank comprises a fork in the sides of which the cam roller is mounted and which are slotted out to form open slots, there being a shaft provided for the cam roller which is fixedly mounted in said slots, the roller and its shaft being removable from said slots while assembled.

1,757,321. CONCRETE-FORM JOIST HANGER. ALAN MACDONALD, San Francisco, Calif. Filed July 5, 1928. Serial No. 291,185. 2 Claims. (Cl. 25—131.5.)



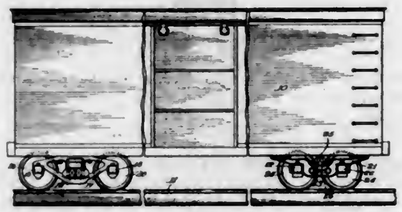
2. In concrete-forms of the type described, and in combination with the posts, joists and planking thereof, a hanger comprising an approximately Z-shaped bracket member hung from and secured to the post top by its head section, with its body section bearing against the side of the post and its foot section supporting the joist, said foot section being formed with an underlying extension secured to the post side; and a wedge member seated in said foot section and its underlying extension, adapted to tighten the joist against the body section of the bracket-member.

1,757,322. TABLET ARMCHAIR. WILLIAM H. MAXWELL, Kalamazoo, Mich., assignor to Otis A. Earl, Kalamazoo, Mich. Filed May 21, 1927. Serial No. 193,240. 3 Claims. (Cl. 155—194.)



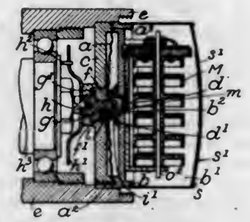
1. In a chair, the combination of a seat provided with angle iron legs disposed with their angles facing diagonally inward, angle iron back supporting bars disposed in facing relation with their angles opening forwardly and with their lower portions forwardly and inwardly offset and twisted to present the angles of their lower ends in a diagonal relation to embrace the rear legs to which they are secured, and a back disposed between the forwardly projecting arms of the upper ends of said back supporting bars and pivotally mounted thereon, the inwardly projecting arms of said back supports constituting stops limiting the rearward movement of the lower edge of the back on its pivots, the pivots being positioned at the upper ends of the arms so that the rearward movement of the upper edge of the back is not restricted by the ends of the projecting arms of the back supports.

1,757,323. CAR SUPPORT. PAUL J. MCCULLOUGH, St. Louis, Mo., assignor to Scullin Steel Company, St. Louis, Mo., a Corporation of Delaware. Filed July 22, 1929. Serial No. 380,213. 5 Claims. (Cl. 105—179.)



5. In combination, a railway car body, means supporting one end of said car at a single point and independent means supporting the other end of said car at two spaced points, each of said supporting points comprising a bearing pivoted about an axis perpendicular to the plane of the bottom of said car.

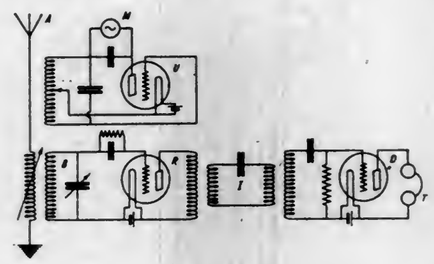
1,757,324. REGISTERING APPARATUS. SAMUEL DUNSEITH MCKELLEN, London, England. Filed Oct. 19, 1929, Serial No. 400,897, and in Great Britain Oct. 17, 1928. 5 Claims. (Cl. 235—95.)



2. In an odometer, a registering mechanism, a cam means for changing rotary motion into reciprocating motion, a diaphragm, means rigid with and sealed to said diaphragm for conveying said reciprocating motion through said diaphragm to said mechanism.

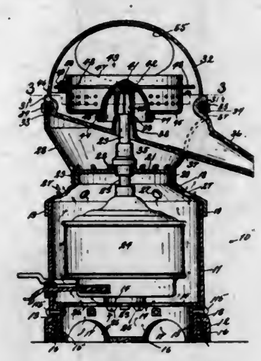
1,757,325. RECEIVER FOR UNDAMPED OSCILLATIONS. FRITZ MICHELSSEN, Berlin, Germany, assignor to Gesellschaft für Drahtlose Telegraphie m. b. H., Berlin, Germany, a Corporation of Germany. Filed June 22, 1926, Serial No. 117,684, and in Germany Aug. 24, 1925. 1 Claim. (Cl. 250—20.)

In a heterodyne receiver the combination of a tuned antenna, a local oscillator comprising mutually coupled grid and plate circuits, said plate circuit including an inductance and a condenser connected in series therewith, and a generator of alternating potential connected to said plate circuit in parallel with said condenser, said generator acting to modulate the oscillations produced in said local oscillator, a beat producing circuit coupled to said antenna and to said local oscillator for combining the incoming signals with the modulated local oscillations, a



circuit tuned to the beat frequency coupled to said beat producing circuit, and a circuit coupled to said last mentioned circuit for detecting said beats, said circuit tuned to the beat frequency operating to prevent the modulated local oscillations from reaching the detector circuit when they are not combined with an incoming signal.

1,757,326. FRUIT-JUICE SEPARATOR. ABRAHAM MILLER, Los Angeles, Calif. Filed June 25, 1927. Serial No. 201,440. 2 Claims. (Cl. 146—3.)



1. A fruit juice separator including a stationary bowl with an inclined bottom and fluid outlet and a hand opening in the upper part of said bowl, a rotatable fruit disintegrator therein on which fruit may be held by hand, a centrifugal perforated wall surrounding the disintegrator and rotatable therewith, and a splash board secured in the upper part of said wall, whereby the fruit can be placed and held on the disintegrator without the juice being thrown up on the person holding the fruit thereon.

1,757,327. TUBULAR AIR HEATER. CHARLES D. MOSHER, Hyde Park, Mass. Filed Dec. 31, 1927. Serial No. 243,894. 5 Claims. (Cl. 257—224.)

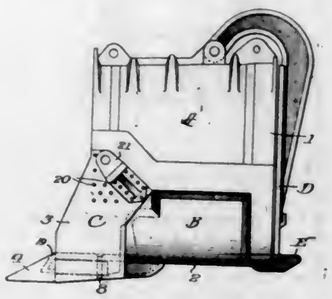
1. An air heater comprising a vertically elongated air-conducting casing composed of wall portions constituting the body of the casing, and tube sheets at opposite ends of the body, and constituting the ends or heads of the casing, the wall being provided at one end with an air inlet adjacent one of the tube sheets, and at its opposite end with an air outlet adjacent the other tube sheet, heat-conducting tubes extending vertically through the casing and fixed at their opposite ends to the tube sheets, means at one end of the casing for delivering hot gases to the

receiving ends of the tubes, the gases passing through the tubes and escaping from the opposite ends thereof, and baffle-plates associated with the tubes within the casing, and arranged to cause air entering the air inlet to pass in a sinuous course to the air outlet and contact with all of the tubes, one tube sheet being fixed to the casing, and the other sheet being free to rise and fall, to permit free



expansion and contracting of the tubes, the casing being provided with a seat on which the margin of the movable tube sheet normally bears loosely, the casing and the movable tube sheet being provided with slip joint elements constituting a stuffing-box preventing leakage of air around the movable sheet when it is separated from said seat by longitudinal expansion of the tubes.

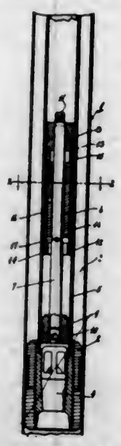
1,757,328. EXCAVATING DIPPER. WALTER J. MULLALLY, Chicago Heights, Ill., assignor to American Manganese Steel Company, Chicago, Ill., a Corporation of Maine. Filed Apr. 15, 1927. Serial No. 183,970. 6 Claims. (Cl. 37—141.)



1. In a device of the character described, the combination of a dipper front, an auxiliary front, said auxiliary front having reinforcing ribs or spacers abutting the main front, means formed integral with said auxiliary front for protecting the forward edge of the main front and removable scraping means disposed between the front and auxiliary front.

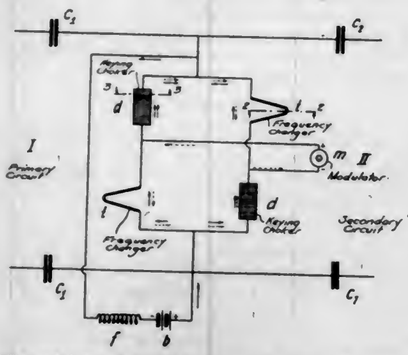
1,757,329. OIL-WELL FLOW DEVICE. KARL P. NEILSEN, Long Beach, Calif. Filed Feb. 9, 1927. Serial No. 166,967. 7 Claims. (Cl. 103—46.)

1. A well flow device including a casing, packer means in said casing, a flow pipe in the casing, piston means reciprocally mounted in said flow pipe, said pipe having ports provided therein through which fluid under pressure is adapted to flow, and means operable by said reciprocally mounted means adapted to control said ports, and said



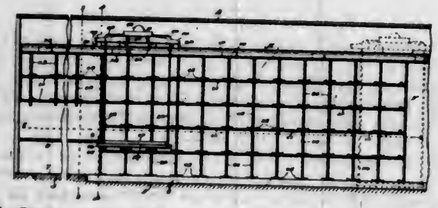
reciprocally mounted piston means having ports therein through which the fluid under pressure is relieved into the flow pipe.

1,757,330. WIRELESS SYSTEM. MENDEL OSNOS, Berlin, Germany, assignor to Gesellschaft für Drahtlose Telegraphie m. b. H. Hallesches, Berlin, Germany, a Corporation of Germany. Filed Nov. 30, 1925. Serial No. 72,132, and in Germany Dec. 17, 1924. 9 Claims. (Cl. 250—17.)



1. The method of increasing sensitivity in wireless systems comprising series connected frequency changers and keying chokes which includes impressing a saturating direct current on said frequency changers and keying chokes, and simultaneously and oppositely changing the saturation of said frequency changers and keying chokes.

1,757,331. AUTOMOBILE DISPOSAL AND WITHDRAWAL STRUCTURE. WILLIAM JAMES PORTER, Spokane, Wash. Filed Sept. 12, 1928. Serial No. 305,433. 5 Claims. (Cl. 214—16.1.)



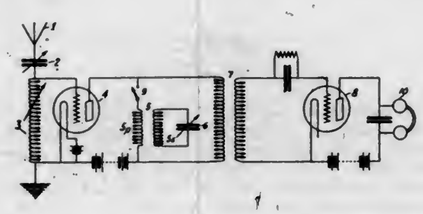
1. In an automobile storage disposal and withdrawal structure, opposed banks of car berths with the berths of opposed banks opening toward each other and said banks being spaced apart to form an intervening aisle, vertically disposed guide rails on opposite sides of said aisle, a receiving floor for ingressing and egressing cars adjacent said aisle, and a floatingly suspended platform movable longitudinally and vertically in said aisle for effecting transfer of a car from said floor into a position of disposal relation to any berth of either bank or from any berth of either bank back to said floor, said platform having horizontally disposed elongated shoes coacting with said rails.

1,757,332. WHEEL SPOKE AND RIM CONNECTION. ALDEN L. PUTNAM, Dearborn, Mich., assignor, by mesne assignments, to Steel Wheel Corporation, Lansing, Mich., a Corporation of Michigan. Filed Oct. 2, 1926. Serial No. 139,141. 2 Claims. (Cl. 29—174.)



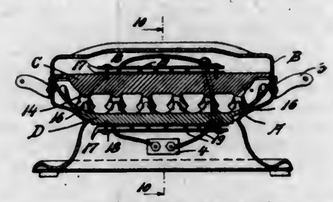
1. A method of connecting the outer end of a metal spoke to a metal rim, which consists in providing the rim with apertures having a width slightly less than the over-all width of the spokes, placing the outer end of the spoke in register with the aperture at its widest face, and simultaneously applying heat and pressure to bring the adjacent edges of the spoke and aperture to a welding temperature and force the spokes into the apertures with their edges in welding contact and with the faces of the rim and spoke substantially flush.

1,757,333. FREQUENCY TRAP FOR RADIO SIGNALING APPARATUS. RICHARD HOWLAND RANGER, Brooklyn, N. Y., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Aug. 31, 1922. Serial No. 585,352. 4 Claims. (Cl. 250—20.)



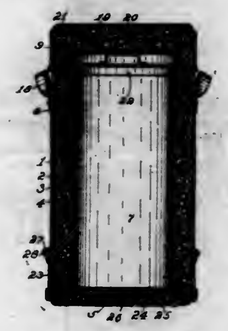
1. In a radio signaling system, an antenna circuit, means for tuning said circuit to predetermined signaling frequencies, means for detecting and receiving said predetermined signaling frequencies, a trap circuit including a transformer having a variable capacity element connected in shunt with the secondary winding thereof for eliminating interference effects in said detecting and receiving means, and a substantially non-reactive coupling connecting said trap circuit and said antenna system.

1,757,334. WAFFLE IRON. WILLIAM A. RANKIN, Toledo, Ohio, assignor to The Swartzbaugh Manufacturing Company, Toledo, Ohio, a Corporation. Filed Jan. 24, 1929. Serial No. 334,712. 5 Claims. (Cl. 53—10.)



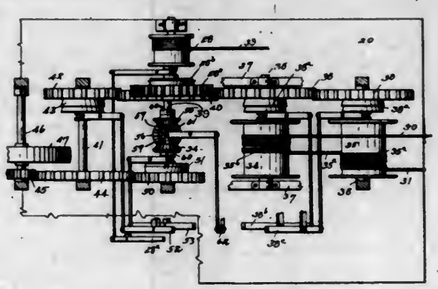
1. In a cooking construction of the class described, the combination, with mold members adapted to cook a pair of unconnected batter products, of instrumentalities carried by the mold members for forming means on the products for interlocking said products together.

1,757,335. ICE-CREAM-SHIPPING CASE. EARL M. ROBINSON, Waterloo, Iowa, assignor to Richard L. Hall, Waterloo, Iowa. Filed Nov. 9, 1928. Serial No. 318,110. 3 Claims. (Cl. 150—52.)



1. A device of the character described, comprising in combination, a rigid hollow container, a flexible case surrounding said container, a cupped flexible wear-cap removably fitted upon the lower end part of the case, said wear-cap having its upper marginal part shaped and secured together to provide a hollow annular spring-case around the first-mentioned case, and a helical spring mounted annularly in said spring-case with ends connected together to tensionally clasp the first-mentioned case on the first-mentioned case and container releasably.

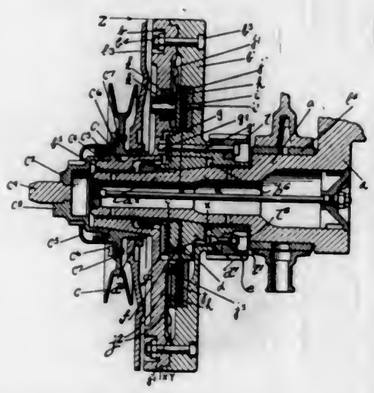
1,757,336. TRANSMISSION MECHANISM FOR EXCAVATORS. GEORGE T. RONK, Fairfield, Iowa, assignor to Speeder Machinery Corporation, Cedar Rapids, Iowa, a Corporation of Iowa. Filed Jan. 27, 1926. Serial No. 84,256. 1 Claim. (Cl. 254—185.)



In a device of the class described, a driving shaft having a pinion gear, a second shaft parallel with the driving

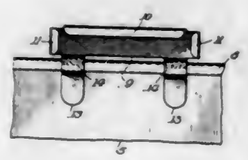
shaft having a gear in mesh with said pinion and a loosely mounted gear, a clutch mechanism for operatively connecting said second shaft and said loosely mounted gear, a pair of drum shafts parallel with said second shaft, a drum rotatively mounted on each of said drum shafts, a gear for each of said drum shafts, said gears being operatively connected, a clutch device operatively connecting each of said gears with its respective drum, an intermediate gear connecting one of the gears of said drum shafts with the loosely mounted gear of said second shaft, a third drum shaft, a drum for said third drum shaft, a gear operatively connected with said intermediate gear, and a clutch device for operatively connecting said last drum with the last said gear.

1,757,337. RESILIENT DRIVING GEAR, PARTICULARLY FOR HALF-SPEED SHAFTS OF INTERNAL-COMBUSTION ENGINES. FREDERICK HENRY ROYCE, West Wittering, Chichester, England, assignor to Rolls Royce Limited, Derby, England. Filed May 3, 1929, Serial No. 360,047, and in Great Britain Apr. 10, 1928. 1 Claim. (Cl. 64—99.)



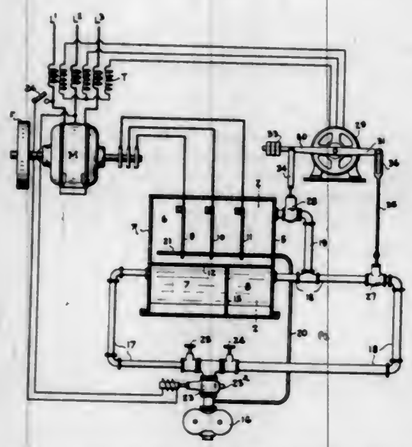
A friction clutch of the character described, comprising driving and driven axially movable plates, a disc of resilient metal to which one set of plates is secured, and which is provided with corrugated outwardly extending, radial, axially flexible, extensions, secured to the periphery of one of the supporting members with which said plates are associated, and elastic means for pressing said plates together.

1,757,338. INDEX TAB. GEORGE W. SCHAEFER, South Braintree, Mass., assignor to Addressograph Company, Chicago, Ill., a Corporation of Delaware. Original application filed Oct. 1, 1925, Serial No. 59,825. Divided and this application filed May 8, 1928. Serial No. 276,053. 8 Claims. (Cl. 129—16.8.)



4. The combination of a printing device having an integral recessed bead at one edge, and a tab comprising an elongated leg extending downwardly over the face of the printing device and bent intermediately to slidably interengage with said bead.

1,757,339. MOTOR CONTROLLER. EDWIN W. SEEGER, Wauwatosa, Wis., assignor, by mesne assignments, to Cutler-Hammer, Inc., Milwaukee, Wis., a Corporation of Delaware. Filed Sept. 17, 1928. Serial No. 306,374. 8 Claims. (Cl. 172—274.)



1. The combination with an induction motor and a fluid rheostat for controlling the secondary circuit thereof, of pneumatic means for raising the level of the electrolyte of said rheostat at a relatively slow rate for starting of said motor, and pneumatic means adapted to act independently of said former means to effect relatively quick variations of the level of the electrolyte of said rheostat for slip regulation of said motor.

3. In a fluid rheostat, the combination with an electrolyte tank having a plurality of displacement chambers in communication therewith, of a plurality of electrodes within said tank and means for supplying compressed air to said chambers to expel the electrolyte therefrom for immersion of said electrodes, said means providing for admission of air to one of said chambers at a given rate and to the other of said chambers at an increased rate.

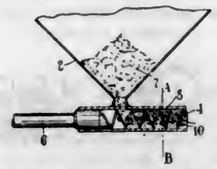
1,757,340. LOCOMOTIVE MUD RING. WILLIAM M. SHEEHAN, St. Louis, Mo., assignor, by mesne assignments, to General Steel Castings Corporation, Granite City, Ill., a Corporation of Delaware. Original application filed Dec. 16, 1926, Serial No. 155,323. Divided and this application filed Nov. 17, 1927. Serial No. 233,836. 5 Claims. (Cl. 122—369.)



1. A locomotive mud ring of substantially hollow cross section having an opening in its lower surface, an inclined shoulder on the upper surface of said mud ring, a firebox sheet having its lower edge bent to engage said inclined shoulder, and means extending through said shoulder for the rigid attachment of said firebox sheet to said mud ring, said means being accessible interiorly of said mud ring.

1,757,341. SCREW CONVEYER. JAN ADRIAAN BARTEL SMIT, Deventer, Netherlands, assignor to Naamlooze Vennootschap Internationale Oxygenium Maatschappij Novadel, Deventer, Netherlands. Filed Nov. 3, 1927, Serial No. 230,855, and in the Netherlands May 13, 1927. 1 Claim. (Cl. 198—64.)

A device for feeding powderous material, comprising in combination, a receptacle containing the said material, and having a discharge opening, a rotating helical wire conveyer adjacent such opening, and one or more cylindrical pins at one end of the said wire arranged within the envel-



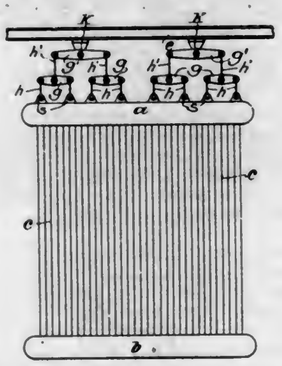
oping surface of said helical wire and parallel with the axis thereof, for the purpose of delivering the powderous material in uniform and regular quantity.

1,757,342. TIMER. THEODORE J. SMULSKI, Chicago, Ill., assignor to The Anderson Co., Gary, Ind., a Corporation of Indiana. Filed Feb. 2, 1923. Serial No. 616,545. 10 Claims. (Cl. 200—26.)



3. A timer comprising a rigid rotary contact, means for removably securing said rotary contact to a rotatable shaft, a plurality of contacts disposed around said rotary contact, each of said plurality of contacts lying in a common plane normal to said axis of rotation of said rotary contact, means for loosely pivoting one end of each of said plurality of contacts to prevent engagement of said end by said rotary contact and to permit engagement and displacement of the other end by said rotary contact, each of said plurality of contacts being arranged to roll in a plane normal to the first-mentioned plane, and yielding means for preventing displacement of said plurality of contacts by said rotary contact.

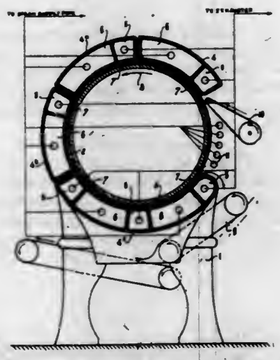
1,757,343. MEANS FOR SUPPORTING WATER-TUBE BOILERS. LEBRECHT STEINMÜLLER, Gummersbach, Germany, assignor to Firm: L. & C. Steinmüller, Gummersbach, Rheinland. Filed Sept. 10, 1925, Serial No. 55,588, and in Germany Aug. 11, 1925. 3 Claims. (Cl. 122—510.)



1. A suspension for water tube boilers having upper and lower drums connected by water tubes comprising, a plu-

rality, greater than two, of suspension eyes fixed to the upper side of the upper drum to one side of a central vertical plane thereof, a similar and parallel plurality of suspension eyes similarly fixed on the other side of said central vertical plane, a girder structure located over the upper drum, suspension members having their ends secured to said girder support, each of said suspension members being operatively associated with a pair of suspension eyes, one on each side of the upper drum, whereby the distribution of the load is equalized.

1,757,344. LAUNDRY IRONING MACHINE. SIMON HENRI STOFFEL, Delft, Netherlands, assignor to Machinefabriek Reineveld, Delft, Netherlands, a Company of the Netherlands. Filed Dec. 22, 1927. Serial No. 241,951. 5 Claims. (Cl. 68—9.)



1. In a laundry ironing machine, a clothed roller, a circular series of segmental sections together forming a concave polishing bed in which said roller is adapted to rotate, a circular series of compartments formed in said sections, means for creating suction, means for supplying heat, means for connecting said suction creating means with recurrent compartments, means for connecting said heat supplying means with the remaining compartments, and perforated face plates for the compartments connected with the suction applying means.

1,757,345. RADIO TUBE. HOWARD M. STROBEL, Oak Park, Ill. Filed Sept. 20, 1928. Serial No. 307,159. 4 Claims. (Cl. 250—27.5.)

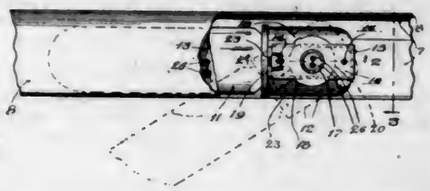


1. A radio tube comprising a casing, a filament within the casing for emitting electronic rays, means for directing the rays to form a beam, means for deflecting the beam, and a plate element for receiving the beam, said plate element consisting of a pair of plates spaced apart and insulated from one another, one of said plates having an elongated opening to permit a portion of the beam to impinge on the other plate, a portion of said opening having converging edges whereby the shifting of the beam toward the narrower end of the opening will cause more of the electrons to impinge on the plate having the opening and less on the other plate.

1,757,346. LAMP-SOCKET SUPPORT FOR SHOW-CASE REFLECTORS. JOSEPH TAUSSIG, Chicago, Ill. Filed Apr. 15, 1929. Serial No. 355,103. 5 Claims. (Cl. 240—6.)

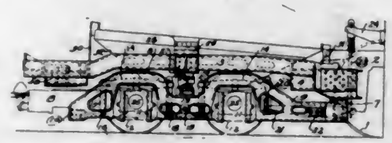
5. The combination with a channeled reflector having a conduit for electric conductors, and a lamp socket having

a rib formed on its wall, of a supporting plate formed with two spaced lugs projecting from its side edges, a movable plate having a spring tongue bearing against said first mentioned plate and two spaced lugs projecting from its side edges and embracing the rib of the lamp socket, a washer interposed between said plates, and a



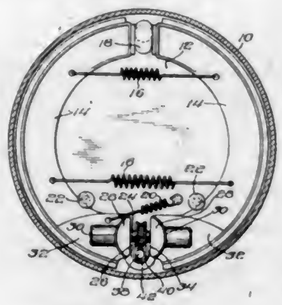
tubular rivet extending through the rib of said lamp socket and through said plates and securing said parts together, said tubular rivet forming an outlet between the interior of the lamp socket and interior of the conduit for the passage of electric conductors from said socket to said conduit.

1,757,347. LOCOMOTIVE STRUCTURE. JAMES C. TRAVILLA, Jr., University City, Mo., assignor, by mesne assignments, to General Steel Castings Corporation, Granite City, Ill., a Corporation of Delaware. Filed Feb. 10, 1928. Serial No. 253,378. 28 Claims. (Cl. 105—174.)



1. In a locomotive, a truck with spaced axles, a truck frame mounted on said axles and provided with side bearings intermediate said axles, framing members supported on said bearings, and superstructure supported on said members over said bearings said bearings and members being in substantially the same vertical plane.

1,757,348. BRAKE-ADJUSTING DEVICE. ROBERT N. VAN BUSKIRK, Detroit, Mich., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Apr. 14, 1928. Serial No. 270,018. 16 Claims. (Cl. 188—79.5.)



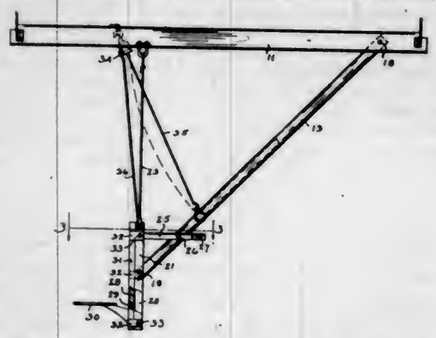
1. A brake comprising, in combination, a pair of friction members, an expansible floating joint including a threaded member adjustably connecting said members and a device extending laterally from said members and which floats with said joint and which is operable to turn said threaded member to make the adjustment.

1,757,349. APPARATUS FOR EXTRACTING FIBERS FROM PLANT STALKS. BRUNO POSSANNER VON EHRENTHAL, Cothen, Anhalt, Germany, and KARL SCHOLZ, Tetschen-on-the-Elbe, Czechoslovakia. Filed June 29, 1926, Serial No. 119,465, and in South Africa July 1, 1925. 5 Claims. (Cl. 19—7.)



1. Apparatus for extracting fibers from plant stalks and dividing the fibers into their natural individual elements comprising pairs of intermeshing toothed rolls for breaking the woody substance of the plant stalks, revolving spiked bodies for combing and deshiving the fibers from which the woody substance has been loosened by said toothed rolls, an open vat containing hot liquid for softening the gluey matter in the fibers, conveyor belts for conveying the fibers from said spiked bodies to said vat and in a zig-zag path through the liquid in said vat, anvils and a hammer for each anvil for beating the fibers, liquid jets between the hammers, pairs of stretching rolls each of which has a higher peripheral speed than the preceding pair, a conveyor belt for conveying the fibers from said hot liquid vat to said hammers and liquid jets and then to the first pair of said stretching rolls, finishing liquid jets for washing the individual fiber elements, into which the fibers are divided by said stretching rolls, and a reticulated conveyor belt for conveying the fiber elements from the last pair of stretching rolls past said finishing jets.

1,757,350. BASKET-BALL-BASKET SUSPENSION. WILLIAM WALLACE, La Fayette, Ind. Filed Feb. 27, 1929. Serial No. 343,216. 6 Claims. (Cl. 273—1.)



1. In a basket-ball basket suspension, overhead beams, a brace hingedly supported to swing downwardly from said beams, a bank-board hinged to the lower end of said brace, and spaced apart flexible cables of a fixed length supporting the lower end of the brace and limiting the downward swing of said brace.

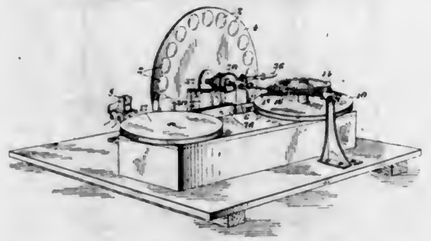
1,757,351. SHINGLE-LOCKING DEVICE. FRANK W. YEAGER, Grantwood, and WILLIAM P. SCHULZ, Guttenberg, N. J., assignors to The Barrett Company, a Corporation of New Jersey. Filed July 18, 1924. Serial No. 726,660. 10 Claims. (Cl. 108—7.)



1. A flexible shingle having two notches in two adjacent edges thereof forming one intermediate and two

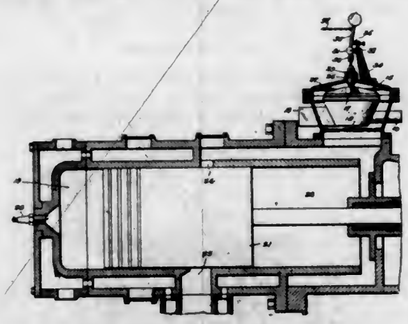
side tabs, one side of each of said notches being substantially perpendicular to the edge in which it is formed, and the other sides being substantially parallel to each other the intermediate tab being turned under to form a fastener engaging hook and the side tabs extending in the plane of the body of the shingle.

1,757,352. FACSIMILE TELEGRAPHY. JOHN LOGIE BAIRD, London, England, assignor to Television Limited, London, England, a British Company. Filed June 7, 1928, Serial No. 283,695, and in Great Britain June 20, 1927. 3 Claims. (Cl. 178—11.)



1. A method of transmitting pictures which comprises separating the picture into a plurality of parts, arranging the parts in contiguous relation to form a strip, moving the strip in the direction of its length and simultaneously scanning the strip in a direction transverse thereof, and converting the resulting light waves into electrical energy.

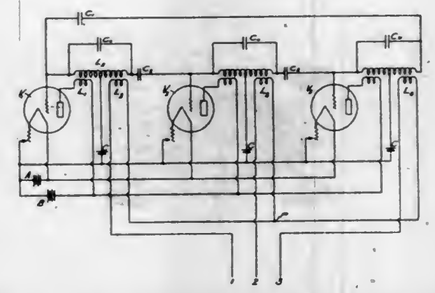
1,757,353. SAFETY ATTACHMENT FOR INTERNAL-COMBUSTION ENGINES. MAXWELL K. BARNARD, Seminole, Okla., assignor to Gypsy Oil Company, Tulsa, Okla., a Corporation of Oklahoma. Filed Nov. 30, 1927. Serial No. 236,811. 6 Claims. (Cl. 137—140.)



1. In an actuating mechanism for the valve controlling the supply of fuel to an engine, means normally disengaged from said valve and including a weighted pivoted arm operable by vibrations of the engine for effecting engagement of said means with the valve for closing and holding said valve closed by gravity upon operation of the engine above a predetermined speed.

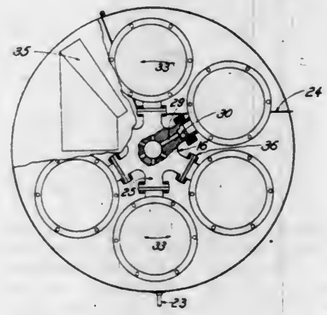
1,757,354. POLYPHASE OSCILLATOR. HUGO BENIOFF, Pasadena, Calif., assignor to Carnegie Institution of Washington, Washington, D. C., a Corporation of the United States. Filed Feb. 24, 1927. Serial No. 170,716. 2 Claims. (Cl. 250—36.)

1. A three phase vacuum tube oscillator comprising three networks adapted to oscillate at substantially the same frequency, and a coupling between the grid circuit of each of said networks and the grid circuit of the other two networks, the coupling of any two networks being between a point in one which is at substantially grid potential of



that network to a point in the other network which is at a potential differing materially from the grid potential of said other network.

1,757,355. MULTIDISK SUCTION FILTER. VICTOR C. BENJAMIN and PAUL W. PRUTZMAN, Los Angeles, Calif., assignors to Contact Filtration Company, San Francisco, Calif., a Corporation of Delaware. Filed Jan. 4, 1928. Serial No. 244,537. 6 Claims. (Cl. 210—200.)

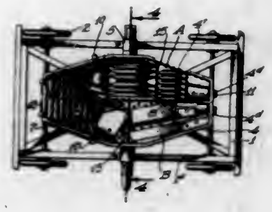


1. A vacuum filtering device comprising: a tank for holding the suspension to be separated by the filter; a hollow horizontal shaft entering the side of said tank and arranged to rotate therein; means for rotating said shaft; means for connecting said rotating shaft with a means for exhausting its interior; a spider mounted on said shaft; a plurality of filtering disks mounted on said spider; means for scraping separated solids from said disks; a channel connecting the interior of each of said disks with the interior of said shaft, said channel passing through said spider, and automatic valves mounted in said channels, each said valve comprising a seat formed around said channel; a ball adapted to fit and close said seat; a cage adapted to retain said ball; a stop on the leading side of said cage adapted to prevent said ball from overrunning said seat, said stop being substantially perpendicular to said seat, and a shoulder on the trailing side of said cage, said shoulder being substantially in the plane of said seat and adapted to direct said ball into said seat when said seat during rotation passes beyond a horizontal position.

1,757,365. OIL MOP. HARRY HERTZBERG, Brooklyn, ABRAAM B. BOWMAN, San Diego, Calif. Filed Aug. 26, 1924. Serial No. 734,230. 11 Claims. (Cl. 141—9.)

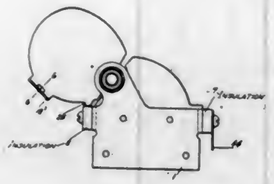
1. In a dish and cooking utensil washing machine, a supporting frame and a relatively long narrow dish supporting receptacle rotatably mounted thereon on a hori-

zontal axis, said axis extending transversely to the longitudinal axis of said receptacle, said receptacle being provided with a substantially vertical, water tight partition



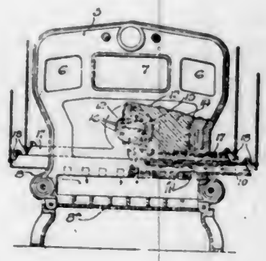
wall positioned perpendicular to the axis of rotation within the receptacle providing separate longitudinal water tight compartments therein.

1,757,357. ELECTRICAL CONDENSER. STANLEY S. CRAMER, Haddon Heights, and RUSSELL E. CRAMER, Audubon, N. J., assignors to Radio Condenser Company, Camden, N. J. Filed Dec. 6, 1926. Serial No. 152,786. 13 Claims. (Cl. 175—41.5.)



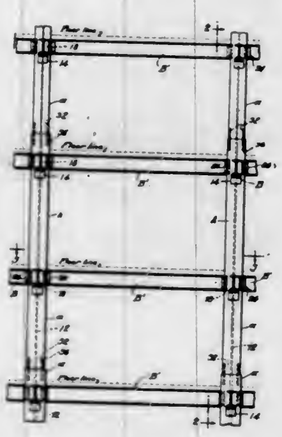
1. A variable condenser comprising: a group of stator plates having at least two fixed anchorages, and a floating anchorage intermediate the fixed anchorages, a group of rotor plates each having a projecting boss a shaft passing through a hole in the boss of each plate and a floating anchorage for said rotor plates, disposed arcuately thereof a distance measured on the shortest arc, less than half the arcuate length of the rotor plate, but so as to permit full cooperation between said rotor and stator.

1,757,358. BOILER CONSTRUCTION. RUSSELL DOHERTY, Oak Park, Ill. Filed Feb. 24, 1925. Serial No. 11,223. 7 Claims. (Cl. 110—64.)



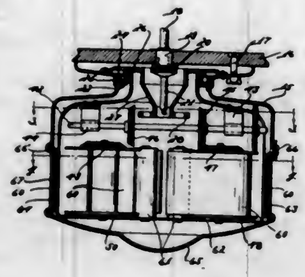
1. In a boiler having a throat passage and a superposed passage, means for admitting air about said superposed passage and to the upper part of said throat passage, wherein parallel intakes are provided for independently conducting air to the superposed and throat passages.

1,757,359. STEEL BUILDING-FRAME CONSTRUCTION. JAMES H. EDWARDS, Passaic, N. J. Filed June 5, 1928. Serial No. 283,018. 15 Claims. (Cl. 189—36.)



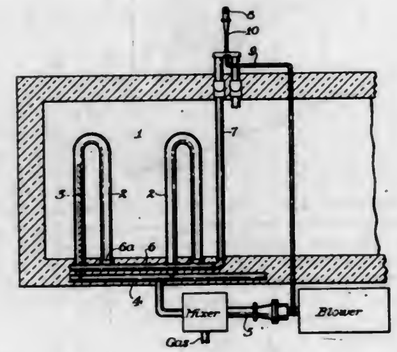
1. A column comprising a plurality of contiguous unit sections, each having a web and spaced flanges perpendicular thereto, connection plates secured between said flanges in planes parallel to and spaced equidistant from the center line of said webs, and splice plates disposed in planes parallel to said webs and engaging said connection plates and uniting said unit sections end to end.

1,757,360. INFORMATION-DISPLAY MECHANISM. ERWIN EICHENBERGER, Detroit, Mich. Filed Feb. 13, 1928. Serial No. 254,090. 4 Claims. (Cl. 40—53.)



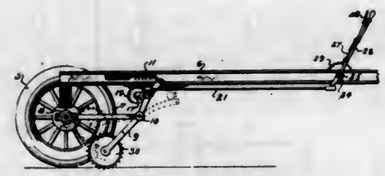
1. A display mechanism of the class described comprising: a housing; a flexible display member in said housing, a portion of the same being visible at the same time from opposite sides of said housing; and means for effecting the traveling of said flexible member in said housing to display one side of said flexible member through one side of said housing and the other side of said flexible member through the other side of said housing; and means for effecting a rotation of said housing.

1,757,361. EXHAUST DEVICE FOR INDIRECT-HEATED GAS-FIRED OVENS AND THE LIKE. EUGENE OSCAR ENGELS, Saginaw, Mich., assignor to Baker Perkins Company, Inc., Saginaw, Mich., a Corporation of New York. Filed Oct. 13, 1928. Serial No. 312,288. 3 Claims. (Cl. 126—19.)



1. In combination, a bake oven, an enclosed gas burner heating system therein, a source of non-inflammable gas under pressure, a pipe connecting said source with the exhaust pipe from said burner system, a second pipe connecting said source, through a gas-air mixer, with the various burners of said oven heating system.

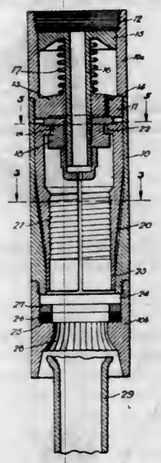
1,757,362. ANTISKID DEVICE FOR MOTOR VEHICLES. JOHN J. FINNEGAN, Port Stanley, Ontario, Canada. Filed May 10, 1929. Serial No. 361,903. 4 Claims. (Cl. 188—5.)



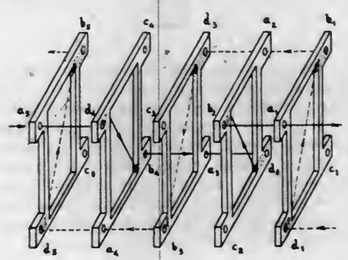
1. In an antiskid device of the class described, a forked bracket mounted on the rear axle, a perforation at the free end of said bracket, an arm having a perforation about medially thereof, a pin passing through the perforation of said bracket and said arm, an antiskid wheel mounted at the lower end of said arm, a spring mounted at the upper end of said arm positioned so as to press said antiskid wheel on the road, and means to lower and raise said wheel.

1,757,363. HYDRAULIC SOCKET. JOHN M. FISCHBACH, El Monte, Calif. Filed Mar. 6, 1929. Serial No. 344,683. 5 Claims. (Cl. 294—102.)

1. A device of the character described comprising a shell adapted to be connected to a hydraulic line, gripping slips mounted within the bore of said shell to be movable longitudinally, there being coacting surfaces on said slips and the inner wall of said shell so that longitudinal movement of said slips causes contraction and expansion to grip or release a body disposed between said slips, a piston within said shell movable longitudinally and connected to said slips whereby hydraulic pressure exerted on said piston will cause said slips to be moved and contracted.



1,757,364. DIALYZING APPARATUS. EDOUARD HEIBIG, Paris, France. Filed June 13, 1928, Serial No. 285,168, and in the Netherlands Feb. 2, 1927. 2 Claims. (Cl. 23—252.)

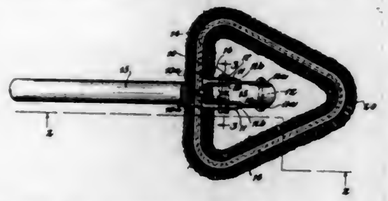


1. A dialyzing unit, consisting of a multiplicity of alternating skeleton frames and permeable diaphragms conjointly providing a series of chambers, said frames being disposed face to face, with the chambers of alternate frames connected to form two separate series through which the liquid to be dialyzed and the dialyzing liquid are caused to circulate in counter-current; each odd-numbered frame being provided at two diagonally-opposite corners with a pair of internal passages, one leading into and the other from the interior of the respective chamber; and each even-numbered frame being provided at two diagonally-opposite corners, other than the two of the odd-numbered frames, with a pair of internal passages, one leading into and the other from the interior of the respective chamber; certain odd-numbered frames being provided at one of their remaining corners with a hole which establishes direct communication between adjacent passages of the even-numbered frames, and certain even-numbered frames having holes establishing similar communication between adjacent passages of the odd-numbered frames.

1,757,365. OIL MOP. HARRY HERTZBERG, Brooklyn, N. Y. Filed Feb. 20, 1928. Serial No. 255,823. 4 Claims. (Cl. 15—229.)

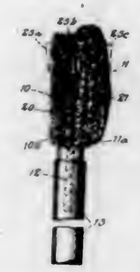
1. In a mop of the kind described, an open frame having the shape of a loop, a break in said frame, a pair of parallel plates integral with said frame extending towards

the center of the loop at either end of the break in said frame, mop material surrounding said frame, means to hold a mop-stick between the free ends of said plates and



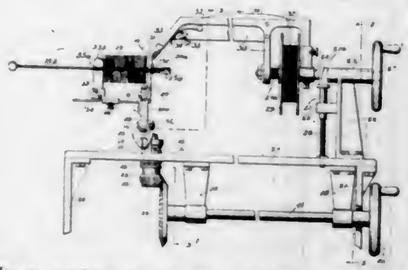
other means for increasing the distance between said plates gradually, to expand said frame against said mop material.

1,757,366. CLEANING AND POLISHING IMPLEMENT. HARRY HERTZBERG, Brooklyn, N. Y. Filed Feb. 27, 1929. Serial No. 343,074. 3 Claims. (Cl. 15—114.)



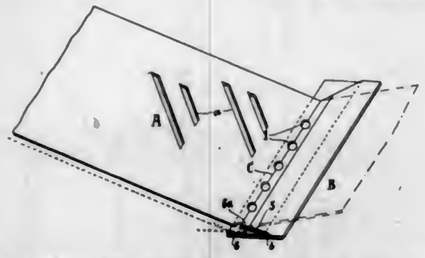
1. In a device of the kind described a pair of frames arranged parallel to each other one of said frames supporting hard scrubbing material on opposite sides thereof and the other frame supporting soft textile material on opposite sides thereof, resilient means on said frames pressing adjacent sides of said scrubbing material and said soft material against each other forming means for cleaning one side of a plate inserted between said frames and for simultaneously polishing the opposite side thereof in one operation.

1,757,367. MACHINE FOR MAKING TUFTS ON WIRE BRUSHES. WILLIAM HERTZBERG, Brooklyn, N. Y. Filed Oct. 3, 1927. Serial No. 223,732. 13 Claims. (Cl. 300—1.)



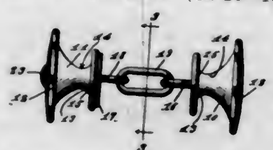
1. In a machine of the kind described, a frame, a holder adapted to support a brush having a stem and brush material surrounding the stem, a shaft on said frame, the stem of a brush in said holder being in axial alinement with said shaft, and means on said holder for dividing the brush material into parts and for shaping a tuft from one part of the brush material and means on said shaft for coiling wire upon the tuft shaped by said holder.

1,757,368. CARD UNIT FOR VISIBLE CARD SYSTEMS. RICHARD HOCHSCHILD, Barmen, Germany, assignor to the Firm Aug. Schmidtmann, Barmen, Germany. Filed Aug. 8, 1928, Serial No. 298,292, and in Germany Feb. 17, 1928. 6 Claims. (Cl. 129—16.7.)



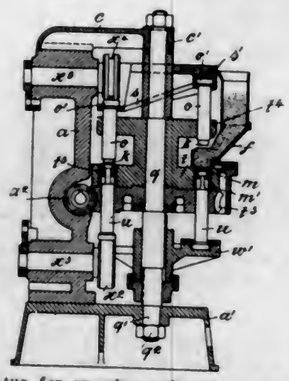
6. An index card or card holder for visible card filing systems or indexes having at one end a multifolded guide strip, said strip embodying a unitary bottom ply, overlapping top plies united to each other, and an intermediate ply forming with one of said plies a card-receiving pocket.

1,757,369. CUFF BUTTON. ALBERT H. HUMPHRIES, Tisdale, Saskatchewan, Canada. Filed June 3, 1929. Serial No. 368,047. 2 Claims. (Cl. 24—102.)



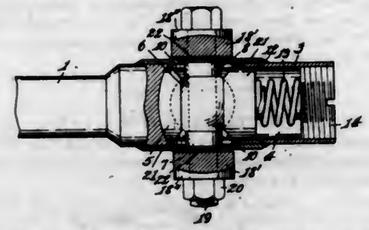
1. A cuff button fastening comprising complemental complete and sectional button bodies to be individually carried by the component portions of a cuff, a disk having detachable connection with the sectional body, rings permanently attached to the complete body and disk respectively, and a link establishing connection between the rings.

1,757,370. APPARATUS FOR PRESSING PULVERULENT SUBSTANCES INTO BOXES. FRITZ KIRIAN, Berlin-Lichtenberg, Germany. Filed July 12, 1927, Serial No. 205,224, and in Germany July 28, 1926. 8 Claims. (Cl. 226—71.)



1. Apparatus for pressing pulverulent substances into boxes, comprising a revolving moulding table, and filling matrices mounted upon said moulding table, each filling matrix comprising an upper and a lower ram, and each of said upper rams being formed with a box-shaped end cavity adapted to receive a box with its mouth downwards.

1,757,371. JOINT FOR STEERING MECHANISMS. HARLEY KNIGHT, Shadyside, Ohio. Filed Nov. 14, 1927. Serial No. 233,125. 1 Claim. (Cl. 287—90.)



In combination with a member having an integral tubular part and having an integral wall at the inner end of said tubular part, a ball socket abutting said wall, a ball in the socket, a second ball socket opposite to said first socket and disposed in the outer end of the tubular part, a threaded plug at the terminal of said outer end of the tubular part, a coil spring between the second ball socket and the plug, said ball having a diametrical bore and opposed tubular extensions alined with the bore, one of which tubular extensions is integral with the ball and the other of which is removably connected to the ball, said tubular part being formed with openings to receive said ball extensions therethrough, a forked element embracing the tubular part, and a bolt connected to the forks of said element and extending through the bore and the extensions of the ball.

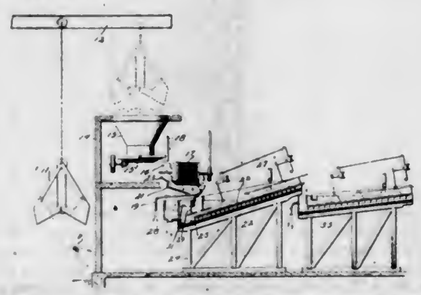
1,757,372. WATER-PURIFYING MATERIAL AND PROCESS OF MAKING THE SAME. HEINRICH KRIEGSHEIM, New York, and WILLIAM VAUGHAN, Brooklyn, N. Y., assignors to The Permutit Company, New York, N. Y., a Corporation of Delaware. Filed Sept. 19, 1922. Serial No. 589,276. 19 Claims. (Cl. 23—112.)

1. In the improvement of glauconite as a water-softening agent the process which comprises treating glauconite granules with a solution containing dissolved alkali silicate and then with an acid-reacting solution.

1,757,373. METHOD OF IMPROVING GLAUCONITE. HEINRICH KRIEGSHEIM, New York, and WILLIAM VAUGHAN, Brooklyn, N. Y., assignors to The Permutit Company, New York, N. Y., a Corporation of Delaware. Filed May 4, 1925, Serial No. 28,011. Renewed Oct. 23, 1929. 13 Claims. (Cl. 23—112.)

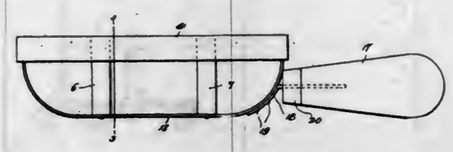
12. In the improvement of natural glauconite the process which comprises treating such glauconite with a solution of caustic alkali.

1,757,374. METHOD OF OBTAINING PURE GLAUCONITE. HEINRICH KRIEGSHEIM, New York, and WILLIAM VAUGHAN, Brooklyn, N. Y., assignors to The Permutit Company, New York, N. Y., a Corporation of Delaware. Filed Feb. 4, 1928. Serial No. 251,799. 3 Claims. (Cl. 23—112.)



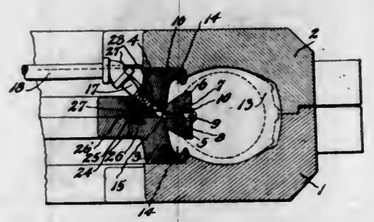
1. The method of recovering glauconite in the form of pure, clean and unaltered natural grains of normal composition, which comprises sizing and mechanically scrubbing greensand in a series of successive flows of water and of chemical solutions adapted to remove absorbed and adsorbed impurities.

1,757,375. HOSIERY-RUN-MENDING FRAME. JOHN JOSEPH LANGER, River Falls, Wis. Filed Mar. 26, 1929. Serial No. 350,106. 4 Claims. (Cl. 223—14.)



1. In a device of the class described, a pair of oval shaped open frames having the adjacent edges frictionally engaging each other in demountable relation, a pair of arcuate straps having the ends thereof secured to the inner oval frame and the crowns of each strap projecting beyond said frame, a third arcuate strap having the ends secured to the inner frame and having the crown thereof projecting beyond said frame from the same side as said pair of straps, and a handle secured to the latter strap extending laterally of said frames and in a plane spaced from and parallel to the plane of said pair of frames.

1,757,376. RUBBER-TIRE MOLD. LAURITS A. LAURSEN, Eau Claire, Wis., assignor of one-fourth to Pearl Lucile Laursen, Akron, Ohio. Filed June 22, 1925. Serial No. 38,828. 10 Claims. (Cl. 18—45.)

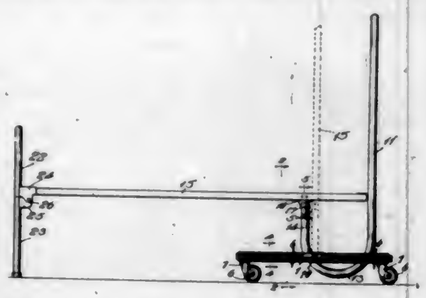


3. In combination, a rubber tire mold, a bull ring therefor, and a pressure member surrounding the bull ring and adapted to be received in the mold so as to engage with the base portions of the tire disposed therein, said pressure member comprising complemental parts, one of the parts having a groove and the other part having a tongue entering said groove, fastenings slidably connecting these said parts of the pressure member, and means for expanding said parts of the pressure member, comprising springs disposed at intervals between the parts of the pressure member, permitting yielding together of said parts and normally expanding them into hard engagement with the adjacent base portions of the tire with which they cooperate.

1,757,377. PORTABLE BED OR THE LIKE. WILLIAM A. MATHESON, Chicago, Ill., assignor to Roll-A-Way Bed Corporation, Chicago, Ill., a Corporation of Illinois. Filed May 11, 1923. Serial No. 638,180. 5 Claims. (Cl. 5—162.)

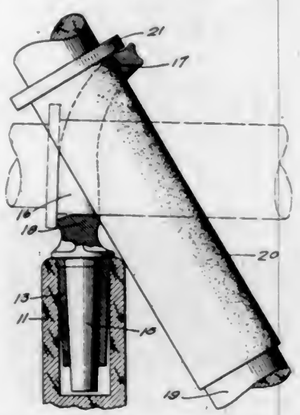
1. In combination, a truck frame having casters thereon, and a bed having a head-frame rigidly secured thereto, side rails and a foot-frame tiltably secured to said head-frame so as to lie entirely within the bounding edges of the truck when tilted to its upright position, said truck frame comprising a pair of oppositely facing J-shaped end bar for portions spaced apart, and straight front and rear

bar portions connecting the J-shaped end bar portions across their upper and shorter legs to form an enclosed



figure, and said head-frame having its ends bent to form J-shaped portions lying parallel to and secured to the longer legs of said J-shaped portions of the truck.

1,757,378. OARLOCK. JOHN E. MATHEWSON, Avalon, Calif. Filed May 15, 1929. Serial No. 363,218. 10 Claims. (Cl. 9—26.)



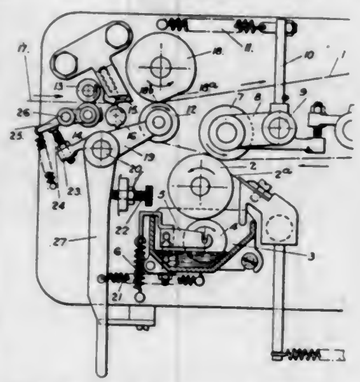
1. An oarlock having a closed eye, the opening of which is adapted to freely receive the shank of an oar, the upper portion of the eye being offset laterally for the purpose described.

1,757,379. MOVING DISPLAY SIGN. GEORGE J. MEAD, Milwaukee, Wis., assignor of one-half to Oscar E. Frieder and one-half to Alfred E. Frieder, Chicago, Ill. Filed Sept. 17, 1928. Serial No. 306,562. 17 Claims. (Cl. 40—36.)



1. In a display sign device, the combination with a housing provided with guideways for guiding individual display plates through an exhibiting zone; of a storage hopper for said plates at each end of said zone; guide means between the bottoms of the hoppers; means for removing plates, one at a time, from the top of one of said hoppers; means for feeding said plates with continuous motion and in procession from said hopper along said guides through the exhibiting zone and depositing the same in the top of the other hopper; and means for feeding the plates from the bottom of one hopper to the bottom of the other hopper along said guides connecting the bottoms of said hoppers.

1,757,380. CIGARETTE-MAKING MACHINE. WALTER EVERETT MOLINS, London, England. Filed Dec. 7, 1925. Serial No. 73,799, and in Great Britain Dec. 31, 1924. 5 Claims. (Cl. 131—39.)



1. A device for use in securing at regular intervals cork or like tips to a traveling web of cigarette paper which comprises an engraved roller for applying periodically a predetermined quantity of adhesive to a traveling web of cigarette paper, means for continuously feeding a web of cork in the direction of the traveling web of cigarette paper in such a manner that the leading edge of the cork web registers with the leading edge of the gummed portion of the cigarette paper, and means adapted to receive and press the leading edge of the cork web upon the traveling web of cigarette paper as a tip is being severed therefrom without interrupting the constant continuous travel of the cigarette paper or the cork web and thereafter press the severed tip upon the gummed portion of the cigarette paper.

1,757,381. FLUID ELEVATOR. OLIVER MORGAN and HOWARD W. STRAIT, Wewoka, Okla. Filed Jan. 14, 1928. Serial No. 246,777. 2 Claims. (Cl. 103—232.)



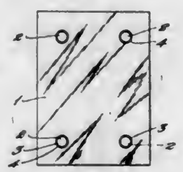
1. In a fluid elevator, a casing, a liquid eduction pipe arranged therein having liquid openings in the lower portion thereof, and passages to permit a fluid under pressure to enter the pipe and lift the liquid upwardly therethrough, a packer surrounding the duction pipe at a point below the fluid inlet passage, said packer being normally contracted and out of tight engagement with the casing, said packer being expanded and forced outwardly against the casing to provide a liquid seal by the action of the lifting fluid under pressure acting on the packer.

1,757,382. BLASTING CARTRIDGE. ERLE ORMSBY, St. Louis, Mo., assignor to Central Mine Equipment Company, St. Louis, Mo., a Corporation of Missouri. Filed June 21, 1928. Serial No. 287,160. 4 Claims. (Cl. 102—6.)



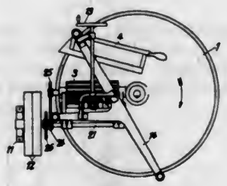
1. A blasting cartridge for insertion in a hole in the mineral to be blasted, comprising a tubular shell having its inner end opening longitudinally and laterally, and means in connection with the outer end of the shell for engagement with the inner end of a device extended longitudinally into the hole in which the shell is mounted for turning the shell to adjusted positions in the hole and permitting outward longitudinal withdrawal of said device from engagement with said shell and from the hole in which the shell is mounted.

1,757,383. MEANS FOR TEMPORARILY ARRESTING THE MELTING OF ICE. AMOS V. PANKEY, Harrisonburg, Va. Filed Apr. 24, 1929. Serial No. 357,805. 3 Claims. (Cl. 62—170.)



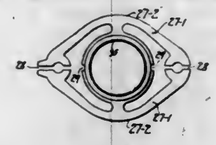
1. A cake of ice or the like formed with cavities, a solidified refrigerant having a lower freezing point than ice to be received in said cavities, and a wrapper for the refrigerant.

1,757,384. MACHINE FOR KNEADING AND TURNING UPSIDE DOWN SUGAR MASS. MAX PÖNISCH, Leipzig-Leutzsch, Germany. Filed June 17, 1929, Serial No. 371,635, and in Germany June 25, 1928. 1 Claim. (Cl. 107—33.)



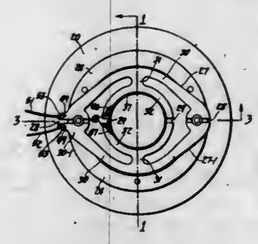
A machine for kneading and turning sugar mass, comprising in combination a rotary table plate, a cooling device for cooling said table plate, a kneading roll adjustable in vertical direction, and an oscillatable turning knife constructed like a plow share, said roll and turning knife arranged above said table plate.

1,757,385. METHOD OF ASSEMBLING VIBRATORY SYSTEMS. FREDERICK PREATOR and DON R. SEELY, Salt Lake City, Utah, assignors to The Utah Radio Products Company, Salt Lake City, Utah, a Corporation of Illinois. Filed Mar. 2, 1929. Serial No. 343,941. 3 Claims. (Cl. 179—115.)



3. The method of assembling a vibratory system, consisting in forming a one-piece spider having independent attaching portions, bifurcating one of said attaching portions securing a contiguous member to said bifurcated attaching portion, bifurcating another of said attaching portions and securing the latter bifurcated attaching portion to another contiguous member.

1,757,386. DYNAMIC LOUD-SPEAKER. FREDERICK PREATOR and DON R. SEELY, Salt Lake City, Utah, assignors to The Utah Radio Products Company, Salt Lake City, Utah, a Corporation of Illinois. Filed Mar. 2, 1929. Serial No. 343,942. 10 Claims. (Cl. 179—115.)



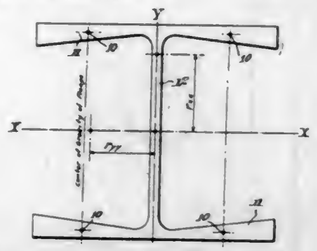
3. A vibratory system comprising a spider composed of semi-hubs spaced apart from each other and semi-rims spaced apart from each other and from said semi-hubs, a vibrating member supported in said semi-hubs, and a support for said semi-rims.

1,757,387. COIN-SLOT GUARD. WILLIAM RARKIN, New York, N. Y. Filed Aug. 13, 1928. Serial No. 299,262. 1 Claim. (Cl. 194—100.)



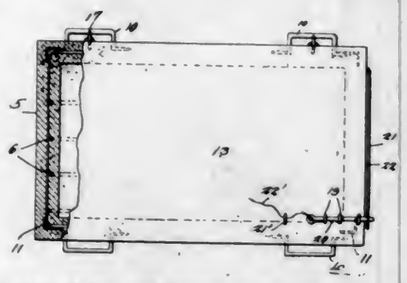
Means for the purpose set forth comprising a plate having a coin slot formed therethrough, jaws pivotally mounted upon said plate, the pivots being located at the opposite ends of the slot and alined therewith and the jaws including obliquely disposed members increasing in width toward their free ends and having opposed side edges meeting diagonally across the slot to cover the same, said edges being beveled inwardly on their outer faces whereby to be separated by an entering coin, and resilient means bearing upon the outer edges of the jaws to normally hold them together to close the slot.

1,757,388. ROLLED-METAL BEAM. NORMAN C. RENDLEMAN, Dormont, Pa., assignor to Jones & Laughlin Steel Corporation, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Mar. 4, 1927. Serial No. 172,860. 9 Claims. (Cl. 189—37.)



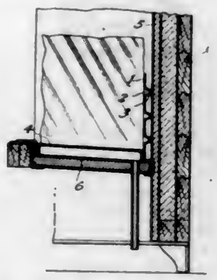
1. A solid completely rolled metal I-beam or H-section having a median web, the flanges being thicker at points remote from the web than at the web, the thickness of the flanges at the web being as great as but not greatly exceeding the thickness of the web at points adjacent to its junction with the flanges.

1,757,389. GRAVE VAULT. CLARK S. RIKERT, San Jose, Calif. Filed Aug. 19, 1929. Serial No. 386,930. 5 Claims. (Cl. 72—7.)



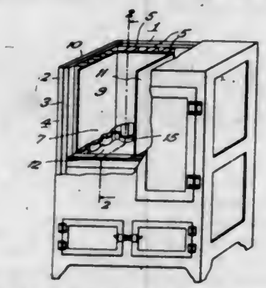
1. A vault of the class described, comprising a box-like body portion having an inwardly inclined upper edge, a cover having a beveled edge, hingedly connected with the body portion, the beveled edge of the cover adapted to rest on the inclined edge of the body portion to provide a fluid tight connection between the cover and body portion, a cover brace connected with the body portion and cover for holding the cover in its open position, and means for releasing the brace to allow the cover to move to its closed position.

1,757,390. REFRIGERATOR. FRANK H. RYDER, Cobleskill, N. Y., assignor to Harder Refrigerator Corporation, a Corporation of New York. Filed Feb. 14, 1929. Serial No. 339,958. 2 Claims. (Cl. 62—89.)



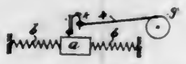
1. For the ice chamber of a refrigerator a separate and unattached metallic plate adapted to stand upright against a wall of the chamber constituting a spacing baffle for supporting a cake of ice and having on its rear face a plurality of spacing projections of comparatively small area, the height of the baffle being proportioned to the critical volume of the ice chamber, the baffle being readily removable for cleaning and being an indicator of the sufficiency of the ice supply in the chamber.

1,757,391. REFRIGERATOR. FRANK H. RYDER, Cobleskill, N. Y., assignor to Harder Refrigerator Corporation, a Corporation of New York. Filed Mar. 1, 1929. Serial No. 343,590. 3 Claims. (Cl. 62—89.)



1. A refrigerator comprising a wall including a heat insulated lining absorptive to moisture, vertical spacing strips secured to the inner face of the wall, a drip pan for the ice chamber having the side wall adjacent said lining sloping outwardly into contiguity with the spacing strips, and a metallic chamber wall supported at its top against the spacing strips and sloping inwardly toward its bottom away from the strips and resting with its bottom edge upon the said inclined side wall of the drip pan.

1,757,392. POWER TRANSMISSION. GEORG HEINRICH SCHIEFERSTEIN, Berlin-Charlottenburg, Germany. Filed Jan. 26, 1924. Serial No. 688,876, and in Germany Jan. 27, 1923. 8 Claims. (Cl. 74—14.)



1. An oscillating system comprising a reciprocable driven means, means to reciprocate the same, at least one of said means being a mass mounted for free oscillation and both means being substantially in tune, and a yielding connection between said means to energize and maintain the oscillations of the driven means, said yielding connecting means dimensioned to only transfer at each oscillation period an amount of energy equal to the product of the force multiplied by the distance over which the force is applied and only a fraction of the kinetic energy of the oscillating mass.

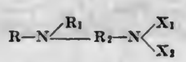
1,757,393. COMMUTATOR. ANTON SCHMID, Stuttgart, Germany, assignor to Robert Bosch Aktiengesellschaft, Stuttgart, Germany. Filed July 18, 1927, Serial No. 206,777, and in Germany July 22, 1926. 4 Claims. (Cl. 171—320.)



1. A commutator comprising a disk-shaped hub of insulating material, a commutator segment, a lug on the segment substantially wholly imbedded in the hub, and another lug on the segment extending through and out of the hub parallel to the axis and near the periphery to form a circuit connecting post.

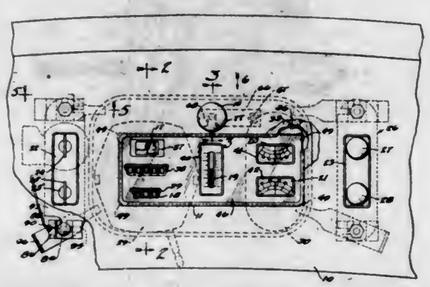
1,757,394. AMINOALKYLAMINO DERIVATIVE OF AROMATIC AMINOHYDROXY OR POLYAMINO COMPOUNDS. WERNER SCHULEMANN, Vohwinkel, and WALTER KNOPP, Elberfeld, Germany, assignors to Winthrop Chemical Company, Inc., New York, N. Y. Filed June 30, 1927, Serial No. 202,741, and in Germany July 8, 1926. 7 Claims. (Cl. 260—128.)

1. As new products the aromatic compounds of the general formula:



in which R designates an aromatic radicle of the group including the benzene and naphthalene series substituted by at least one amino-, alkylamino-, hydroxy- or alkoxy-group, R_1 stands for hydrogen, alkyl, alkyl-amino, alkyl-aminoalkyl or dialkylamino-alkyl, R_2 stands for an alkylene group, the carbon atom chain of which may be interrupted by oxygen, sulphur or nitrogen, or for the residue of an isocyclic or heterocyclic compound, X_1 and X_2 stand for alkyl groups one of which may be substituted by hydrogen, or for the carbon chain of a heterocyclic compound in which case the outermost N will be part of the ring, which compounds are generally viscous oils of a high boiling point and possess valuable pharmaceutical properties, especially a high efficiency against blood parasites.

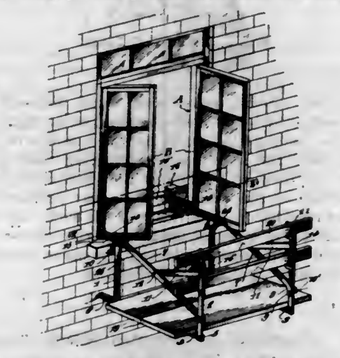
1,757,395. INSTRUMENT-PANEL ASSEMBLY. HERMAN SCHWARZE, Birmingham, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Aug. 24, 1928. Serial No. 301,908. 9 Claims. (Cl. 180—90.)



1. In an instrument panel assembly, a board element provided with a main observation aperture and with means for supporting therefrom both an assembly case and subsidiary units spaced from said case, said supporting means comprising concealed bolts, secured to said board near the respective ends of said subsidiary units, and releasable means, on said bolts, for so pressing said case and said subsidiary units toward said board as normally to retain the same in said spaced relationship although permitting any of said units to be separately removed.

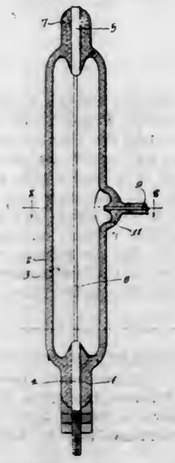
1,757,396. CASEMENT-WINDOW SCAFFOLD. SAMUEL L. SMERK, Cleveland, Ohio. Filed Nov. 27, 1928. Serial No. 322,231. 1 Claim. (Cl. 304—27.)

A window washer's scaffold comprising a pair of spaced platform supporting rails, a pair of front and a pair of rear vertically disposed uprights, the pair of rear uprights being secured to the extreme outer ends of the rails, the pair of front uprights being secured to said rails inward of the inner ends thereof for engagement with the outer face of a window sill, the projecting ends of the rails engaging the outer face of the wall below the window sill, a platform on said side rails between the front and rear pairs of uprights, supporting hooks on said rear pair of uprights, outer guard rails detachably supported by the hooks, a pair of spaced upper side rails each including a horizontal window engaging supporting portion projecting beyond the inner ends of



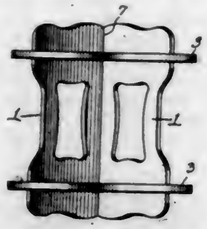
the lower rails and downwardly and outwardly inclined guard portions, means securing the upper side rails to the front pair of uprights at the point of meeting of the horizontal window engaging portions with the downwardly and outwardly inclined guard portions, means securing the extreme outer ends of the guard portions with the rear pair of uprights, anchoring blocks adjustably mounted on the horizontal window engaging portions of the side rails, and a bridge bar of polygonal shape in cross section for spanning the window at the inner side thereof and engaged by said anchor blocks.

1,757,397. HIGH-VOLTAGE FUSE. ROYAL W. SORENSEN, Pasadena, and HERBERT A. BARRE, Los Angeles, Calif., assignors of one-half to California Institute of Technology, Pasadena, Calif., and one-half to Southern California Edison Company, a Corporation of California. Filed Apr. 1, 1925. Serial No. 19,840. 1 Claim. (Cl. 200—131.)



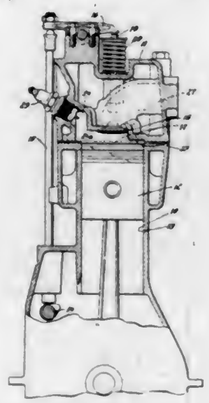
A high-voltage fuse comprising means providing a chamber evacuated beyond the conducting point, leads connected to a fuse wire disposed within said chamber, and a test lead extending into the said chamber.

1,757,398. FURNITURE. ARLEIGH N. SQUIRES, Milan, Mich. Filed Feb. 14, 1928. Serial No. 254,275. 2 Claims. (Cl. 211—90.)



1. A corner bracket comprising walls disposed at an angle to each other, and a shelf arranged at right angles to the walls, each of the walls having a notch in its forward edge, and the shelf having diverging notches in its rear edge, the forward portion of the shelf being received in the notches of the walls, and the rear portions of the walls being received in the notches of the shelf, the notches of the walls being of equal depth, and the notches of the shelf being of equal depth, whereby the inner longitudinal edges of the walls will meet along a line.

1,757,399. CYLINDER-HEAD COMBUSTION CHAMBER. ALEX TAUB, Detroit, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Sept. 21, 1927. Serial No. 221,073. 6 Claims. (Cl. 123—191.)

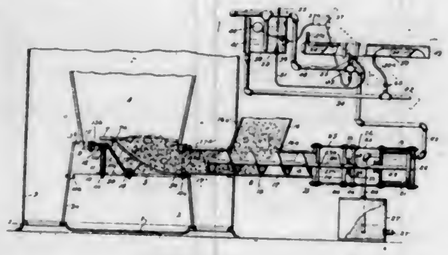


1. An engine cylinder having a combustion chamber provided with a portion having intake and exhaust ports disposed in its roof over the cylinder bore, an ignition bay offset upward from the ported portion at one side of the axis of the cylinder bore, and a thin cooling space opposite the ignition bay at the other side of the axis of the cylinder bore, said cooling space having a large ratio of wall surface to included volume, relative to the other portions of the chamber, for the purpose of maintaining the last unburned portion of the burning gas below the temperature at which detonation takes place.

1,757,400. SULPHURIZED COMPOUNDS OF PHENOLS. ALFRED THAUSS, Cologne-Deutz, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed July 7, 1927, Serial No. 204,142, and in Germany July 15, 1926. 4 Claims. (Cl. 260—20.)

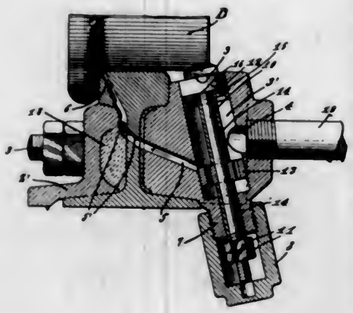
1. The process for preparing sulphurized compounds of phenols being mordants for fixing basic dyes on cotton which consists in heating a phenol with sulphur and a small amount of a neutral salt of a weak acid.

1,757,401. APPARATUS FOR FEEDING FUEL. CHARLES W. THOMAS, East Cleveland, Ohio, assignor to The Thomas Stoker Company, Cleveland, Ohio, a Corporation of Ohio. Filed May 24, 1926, Serial No. 111,272. Renewed Sept. 27, 1929. 10 Claims. (Cl. 198—226.)



1. In a feeding mechanism, the combination of a delivery member, a conduit connected to said member, a device reciprocable endwise of said conduit, means for rotating said device as it moves in one direction, and means for reciprocating said device.

1,757,402. LUBRICATING DEVICE FOR CAR WHEELS AND TRACKS. ROBERT B. UMHOLTZ and RAYMOND A. BIRMINGHAM, Buena Vista, Va., assignors to The American Valve and Meter Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Dec. 20, 1927. Serial No. 241,437. 2 Claims. (Cl. 184—3.)

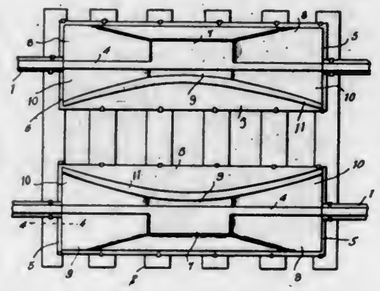


1. Lubricating means for the rails of a track comprising a member adapted to be fastened to a rail and having a chamber therein and an outlet passage, means connected with the outlet passage for leading the lubricant to a point where it will be deposited upon a part of the rail head and a part of the car wheel, means for introducing lubricating material under pressure into the chamber, a plunger in the chamber adapted to be struck and depressed by the wheels of a train passing over the rail and a valve connected with the plunger and arranged in the chamber and normally covering the outlet passage due to the pressure exerted by the material on the plunger, said valve uncovering the outlet passage when the plunger is depressed.

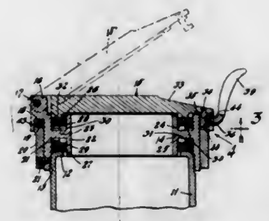
1,757,403. CAR-REPLACING RAIL. THOMAS LIPPEATT, Sr., Dugger, Ind. Filed Sept. 25, 1928. Serial No. 308,325. 1 Claim. (Cl. 104—267.)

A car replacing rail adapted to be interposed in the length of track rail to form in effect a part thereof, the

same comprising a base, a rail rising from the top of the base intermediate the sides thereof, and a lift upon the base at each side of the rail and comprising a middle flat portion and oppositely inclined end portions, the flat portion of one lift being in the plane of the top of the rail and the flat portion of the other lift being in a lower plane, the oppositely inclined end portions of the lifts flaring towards their outer extremities, and a guard rail at the outer side of the lift including the lower intermediate flat portion, and said base having its end portions projecting slightly to underlap the contiguous ends of the main rail sections,



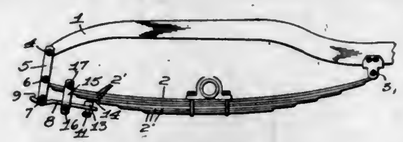
1,757,404. RADIATOR-FILLER CAP. JOHN F. WILSON, Detroit, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Mar. 2, 1929. Serial No. 344,008. 10 Claims. (Cl. 220—24.)



1. A radiator filler cap comprising: a body member; a closure plate member pivoted thereto; a threadless locking ring member peripherally carried by one of said members and provided with means to hold the other of said members thereto,—said last mentioned member being provided with a hook and said ring member being provided with a notch through which said hook may extend and also with a cam surface adjacent said notch.

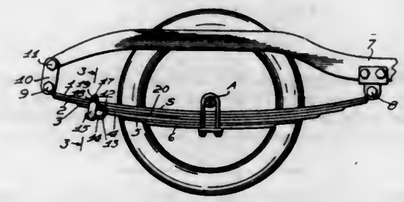
1,757,405. VEHICLE SPRING. EDWIN BAGNALL, Kenosha, Wis. Filed Oct. 18, 1926. Serial No. 142,465. 4 Claims. (Cl. 267—48.)

1. The combination with a vehicle spring comprising a series of spring leaves, of a counterflexing lever, shackles disposed in parallel relation and pivotally connected to one end of said spring, means connecting one end of said



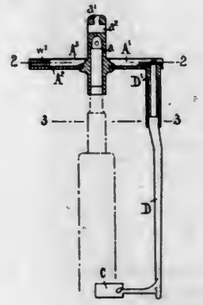
shackles and adapted to slidably engage a portion of said counterflexing lever, and a spring clip constituting a fulcrum for said counterflexing lever.

1,757,406. REFLEX SPRING. EDWIN BAGNALL, Kenosha, Wis. Filed Dec. 2, 1927. Serial No. 237,269. 15 Claims. (Cl. 267—48.)



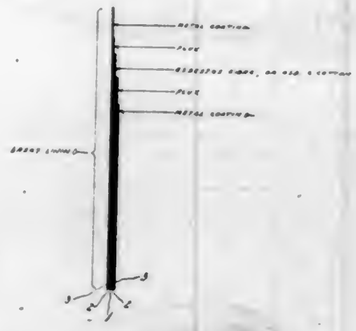
1. The combination of a vehicle spring comprising a series of spring leaves disposed in frictional engagement with each other, one of said leaves being formed to provide a lever and a fulcrum for the latter, and means secured to the lever and engaging a portion of said spring leaves for causing a reflex action when said spring recoils.

1,757,407. SLUBBING, ROVING, AND LIKE FRAME FOR SPINNING OR TWISTING COTTON AND OTHER FIBERS. ROBERT LESLIE BELLHOUSE, Manchester, England, assignor to The Fine Cotton Spinners & Doublers Association Limited, Lancaster, England. Filed Oct. 15, 1928, Serial No. 312,658, and in Great Britain Oct. 31, 1927. 2 Claims. (Cl. 118—57.)



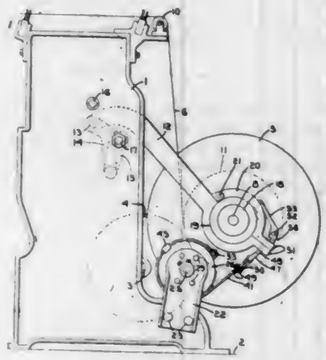
1. In a slubbing, roving or like frame the combination with a bobbin carrying spindle of a boss mounted thereon, a circular cover carried by the boss, a single cranked solid leg depending from the edge of the cover, a passage through the boss to direct the roving over the top of the cover to the solid leg, a fixed counterweight carried on the cover to balance the solid leg and a presser finger at the bottom of the solid leg to direct the roving on to the bobbin.

1,757,408. FRICTION MATERIAL. ALFRED L. BORGHOLD and CHARLES R. SHORT, Detroit, Mich., assignors to General Motors Research Corporation, Detroit, Mich., a Corporation of Delaware. Filed Feb. 23, 1927. Serial No. 170,336. 2 Claims. (Cl. 91—70.1.)



1. The method of making a brake lining consisting of using a fibrous base, applying a metal to said base, heating the metal so as to cause it to flow into the interstices of the base, and then pressing or rolling the product.

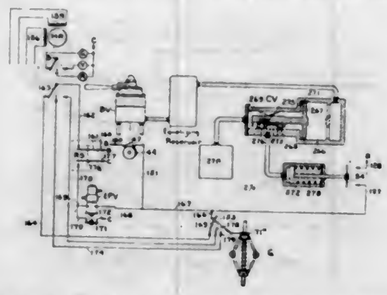
1,757,409. WARPER. CARL D. BROWN, Hopedale, Mass., assignor to Draper Corporation, Hopedale, Mass., a Corporation of Maine. Filed Dec. 21, 1928. Serial No. 327,547. 9 Claims. (Cl. 28—32.)



1. A warper comprising a driving drum, a warp beam supported to rest against the drum and to move away from the drum as the yarn is wound on the beam by the frictional engagement of the drum therewith, a fixedly mounted friction drum, an anchor movable circumferentially of the friction drum, a friction band connected at one end to the beam, encircling the friction drum and connected at the other end to the anchor, and means for yieldingly moving the anchor in a direction opposite to the pull exerted by the beam on the friction band.

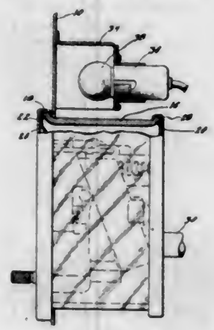
1,757,410. TRAIN CONTROL. CHARLES S. BUSHNELL, Rochester, N. Y., assignor to General Railway Signal Company, Rochester, N. Y. Original application filed May 10, 1924, Serial No. 712,269. Divided and this application filed June 30, 1927. Serial No. 202,613. 6 Claims. (Cl. 246—63.)

1. In an automatic brake control apparatus in combination with the usual air brake system, a brake control device automatically actuated if the speed of the train is excessive and effective to cause an application of the brakes by said system, a penalty inflicting device for inflicting a penalty if the engineer allows the speed of the train to exceed a predetermined value, and means for suppressing actuating of said penalty inflicting device effective if an adequate brake application has been initiated



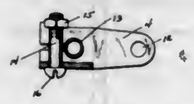
comprising, a miniature auxiliary reservoir, a miniature brake cylinder and a control valve connected between the brake pipe of the usual air brake system and said reservoir and cylinder whereby air is conducted from said reservoir to said cylinder until the pressure in said reservoir is equal to that in the brake pipe when a reduction in the brake pipe pressure is being made, whereby the condition of said miniature brake cylinder may be used to determine when an adequate brake application has been initiated.

1,757,411. SPEEDOMETER CASE. ALBERT CHAMPION, Flint, Mich., assignor to A C Spark Plug Company, Flint, Mich., a Company of Michigan. Filed Sept. 2, 1927. Serial No. 217,288. 2 Claims. (Cl. 240—8.16.)



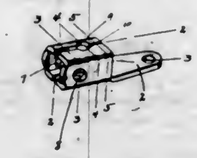
2. In combination, an instrument board including a source of light, an indicating instrument mounted in said board, said instrument including a transparent casing provided with front and rear flanges, front and rear covers secured to said flanges, said front flange being of a larger diameter than the rear flange and abutting against said instrument board.

1,757,412. LEVER. JOHN L. COLLINS, Syracuse, N. Y., assignor to The Warner Corporation, Syracuse, N. Y., a Corporation of Indiana. Filed May 7, 1928. Serial No. 275,858. 5 Claims. (Cl. 74—33.)



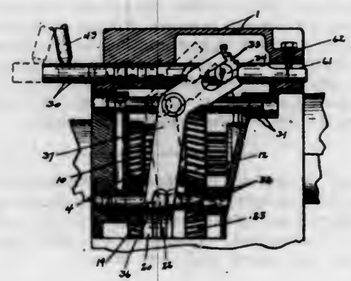
1. In a lever of sheet material, a U-shaped end, a shank formed by an extension of one of the sides of the U-shaped end, opposed apertures in the sides of the U-shaped end, a slot extending from each of the apertures, and an aperture in the bottom of the U-shaped end disposed on an axis in angular relation to the axis on which the apertures in the side of the U-shaped end are disposed.

1,757,413. LEVER. JOHN L. COLLINS, Syracuse, N. Y., assignor to The Warner Corporation, Syracuse, N. Y., a Corporation of Indiana. Filed May 7, 1928. Serial No. 275,859. 4 Claims. (Cl. 74—5.)



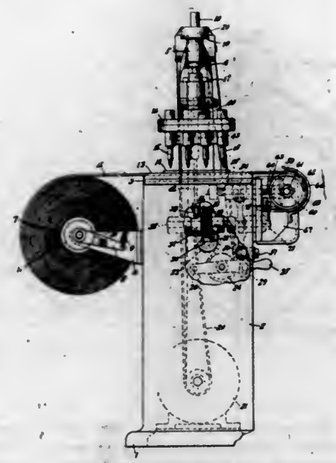
1. A lever of sheet material having a flat end and a hollow rectangular end, said rectangular end being formed by bending the material on itself, the free edges of the bent up portions being in contact at their inner ends and being in spaced relation at their outer ends, an aperture in the side of the lever which has the free edges and positioned between the portions of such edges which are in contact and the portions which are in spaced relation, a second aperture in the opposite side of the lever alined with the first named aperture, a slot extending from the second named aperture to the end of the lever, and a second pair of opposed apertures in the hollow end of the lever and disposed on an axis which traverses the slot and which is normal to the axis on which the two first named apertures are disposed.

1,757,414. POWER-TRANSMISSION GEARING. JOHN L. COLLINS, Syracuse, N. Y., assignor to The Warner Corporation, Syracuse, N. Y., a Corporation of Indiana. Filed June 11, 1928. Serial No. 284,441. 6 Claims. (Cl. 74—57.)



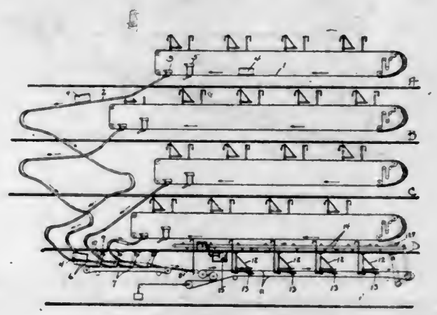
1. A gearing comprising a reciprocably actuating shaft, a pair of clutch members, an additional pair of shafts for actuating respective clutch members, a crank having a pivotal mounting with respect to each of the last named shafts, means in connection with the actuating shaft for locking said crank in opposite directions as said actuating shaft is reciprocated, means for causing said crank to rock about both of said pivots when the actuating shaft moves in one direction and to rock about both of said pivots when the actuating shaft moves in the opposite direction, and means for holding alternate ones of said clutch actuating shafts stationary as the crank is rocked in opposite directions.

1,757,415. MACHINE FOR CUTTING BRAKE LININGS. BERT CONWAY, Detroit, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Mar. 22, 1928. Serial No. 263,724 7 Claims. (Cl. 29—34.)



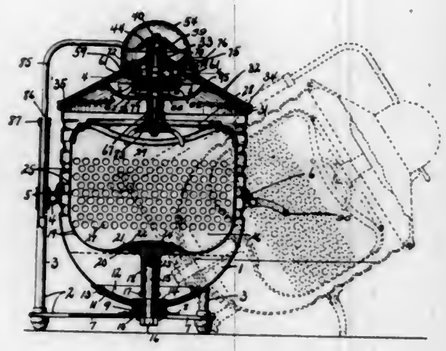
1. An automatically operated machine for forming brake lining strips, including a table over which passes the material to be operated upon, a reciprocatory spindle head carrying a tool for forming holes in the strip, an intermittently operated drum for feedeing the material across the table, a movable knife for cutting the material to predetemined lengths, and a drive shaft having a series of cam elements which control the actuation of the several operating elements in timed relation with each other.

1,757,416. AUTOMATIC CONVEYER. JAMES T. COWLEY and LAVONT C. ALLEN, Syracuse, N. Y., assignors to The Lamson Company, Syracuse, N. Y., a Corporation of Massachusetts. Filed Nov. 19, 1927. Serial No. 234,530. 16 Claims. (Cl. 214—11.)



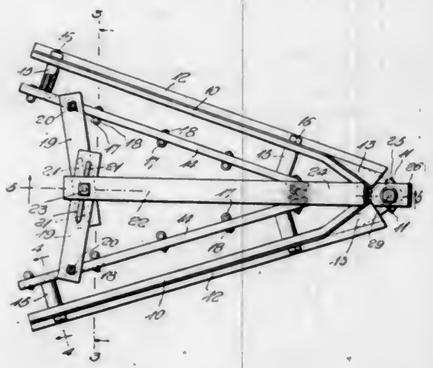
1. In a conveying system, a means for delivering articles to selected parts of the conveying system comprising merchandise containers, a feeder conveyer, a distributing conveyer, means for delivering the merchandise containers from the feeder conveyer to the distributing conveyer, branch conveyers leading from the distributing conveyer, a movable deflector at each branch conveyer, an auxiliary belt, and means on said auxiliary belt for selectively actuating said deflectors.

1,757,417. LAUNDERING APPARATUS. JAMES T. COWLEY, Syracuse, N. Y., assignor to The Lamson Company, Syracuse, N. Y., a Corporation of Massachusetts. Filed Feb. 10, 1926. Serial No. 87,349. 8 Claims. (Cl. 68—18.)



1. An apparatus of the class described comprising a tub, a clothes container rotatably supported within the tub, a framework for supporting the tub in a substantially vertical position and an additional support extending laterally from the tub and adapted to assist in supporting the apparatus in a tilted position.

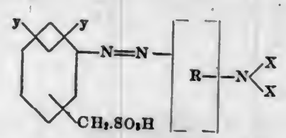
1,757,418. MULCHER. ARTHUR JAMES DAVIS, Comanche, Okla. Filed Oct. 4, 1928. Serial No. 310,408. 2 Claims. (Cl. 97—9.)



1. A mulcher comprising two outer forwardly converging bars, a pivot connecting the front ends of said bars, spacers fixed to and projecting inwardly from said outer bars, an inner pair of forwardly converging bars secured solely to the inner ends of said spacers and by the latter held in inwardly spaced relation with said outer bars, scraping blades extending longitudinally of and secured to said outer bars, earth-working teeth secured to said inner bars, a central longitudinal bar connected at its front end with the aforesaid pivot and free of direct connection with said inner bars, and adjustable means connecting the rear end of said central bar with only the rear ends of said inner bars, permitting inward and outward adjustment of said inner and outer bars.

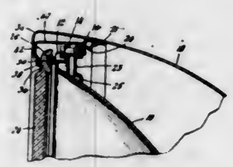
1,757,419. MONOAZO DYESTUFFS PRODUCED FROM AMINO-BENZYL-ω-SULPHONIC ACIDS. WALTER DUISBERG, Leverkusen, and WINFRID HENTRICH and LUDWIG ZEH, Wiesdorf, near Cologne, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Feb. 12, 1926, Serial No. 87,959, and in Germany Feb. 13, 1925. 18 Claims. (Cl. 260—90.)

1. As new products the compounds of the general formula:



wherein R represents a nucleus of the group including the benzene and naphthalene series not substituted by a substituent of the group including the sulphonic acid, carboxylic acid and hydroxyl groups, X represents hydrogen, alkyl, aryl or aralkyl, and *y* represents hydrogen or the nitro group.

1,757,420. HEAD LAMP. ROBERT N. FALGE, Detroit, Mich., assignor to General Motors Research Corporation, Detroit, Mich., a Corporation of Delaware. Filed Oct. 29, 1927. Serial No. 229,684. 1 Claim. (Cl. 240—41.)



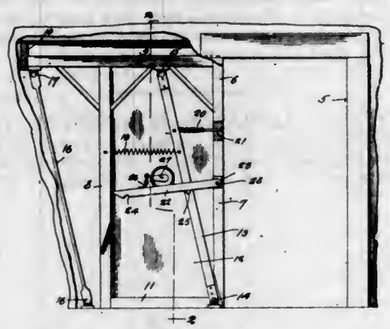
An automobile headlamp comprising a casing, a reflector in the casing, a lens fitted over the reflector and provided with a peripheral groove for receiving a sealing gasket, a gasket in the groove, said reflector being provided with a narrow outturned flange having a plane surface adapted to engage the sealing gasket throughout substantially its entire length to prevent entrance of dust and moisture, said flange being provided with discontinuous countersunk portions outwardly of the line of contact with said gasket, means engaging said countersunk portions and the casing for securing the reflector to the casing, and means for clamping the lens to the reflector and casing.

1,757,421. RESILIENT SNAP-FASTENER MEMBER. PAUL E. FENTON, Thomaston, Conn., assignor to Scovill Manufacturing Company, Waterbury, Conn., a Corporation of Connecticut. Filed Nov. 30, 1928. Serial No. 322,916. 4 Claims. (Cl. 24—213.)



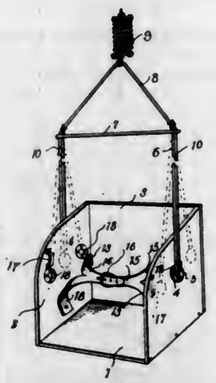
1. A snap fastener member, having an outer rim composed of a series of spaced-apart members and an inner solid and non-resilient rim, and intervening upstanding walls composed of a series of arms spaced apart from one another and rising from and connecting the outer and inner rims, the spacings in the walls and the outer rim serving to impart resilience to the walls and the outer rim.

1,757,422. CLOSURE HANGER. LEWIS W. FRANKS, Port Neches, Tex. Filed June 22, 1928. Serial No. 287,608. 1 Claim. (Cl. 16—92.)



In a device of the class described, a closure, said closure including an upper bar of a length to extend an appreciable distance beyond one edge of the closure, a pair of pivoted hangers, one of the hangers having pivotal connection with the upper bar at a point adjacent to the free end thereof, and the opposite hanger being pivotally supported at a point laterally of the closure and having its upper end pivotally connected with the closure at a point intermediate the side edges of the closure.

1,757,423. SWING. JAMES C. GERROND, Hugoton, Kans. Filed Aug. 20, 1927. Serial No. 214,355. 1 Claim. (Cl. 155—58.)



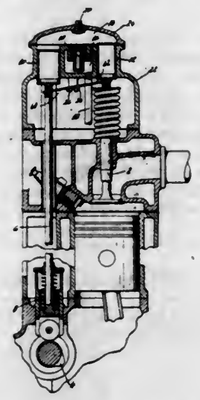
A swing capable of being oscillated or rotated, comprising a seat and sides, each side having a pair of studs extending from its inner face in spaced relation to each other transversely thereof and a single stud extending from the outer face of the side intermediate the pair of studs, pair of suspension cables extending along each side, and each being provided with a bearing, said bearings being adapted to be selectively engaged with the single stud to permit rotation of the swing, or with a stud of each pair to support the swing in a horizontal position and permit oscillation of the swing.

1,757,424. FLOATING TRIM STUD. JOHN H. GOSS, Waterbury, Conn., assignor to Scovill Manufacturing Company, Waterbury, Conn., a Corporation of Connecticut. Original application filed Oct. 1, 1927, Serial No. 223,378. Divided and this application filed Oct. 8, 1928, Serial No. 311,023. 4 Claims. (Cl. 24—213.)

1. A stud, comprising a socket-engaging head and a bottom flange, and an attaching base within which the said flange is located and having an opening of greater diameter than the head of the stud through which such head extends outwardly, said base having a peripheral downturned flange provided with inturned fingers for supporting the flanged head in a laterally movable manner within the base, and also provided with laterally projecting outwardly extending wings adapted to rest on the surface of a support to prevent the base from sinking into the support.

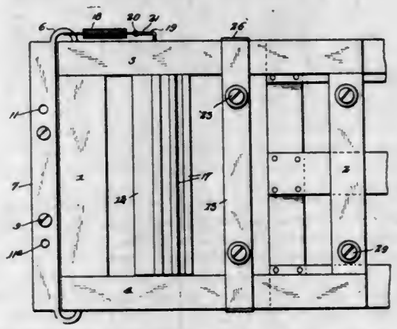


1,757,425. HYDRAULIC VALVE MECHANISM. GEORGE E. A. HALLETT, Detroit, Mich., assignor to General Motors Research Corporation, Detroit, Mich., a Corporation of Delaware. Filed Apr. 11, 1927. Serial No. 182,935. 19 Claims. (Cl. 123—90.)



1. The combination of an operating plunger, an operated plunger, an hydraulic chamber containing a body of fluid interposed between said plungers for transmitting movement from one to the other and a rocker spring engaging said plungers, said spring being normally under stress so as to continuously urge said plungers outwardly of the chamber.

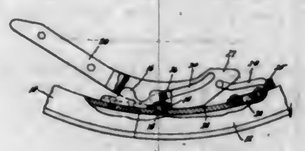
1,757,426. PIG CREEP GATE. ERNEST A. HAYNES, Comstock, Nebr., assignor of forty-five per cent to Louie E. Grim, Comstock, Nebr. Filed July 2, 1927. Serial No. 203,115. 6 Claims. (Cl. 119—155.)



1. A gate of the character described comprising a gate frame forming an opening, a vertically disposed roller

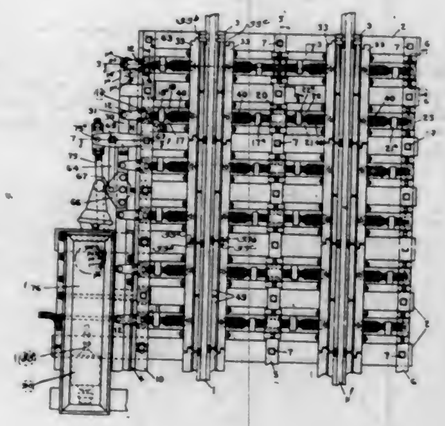
eccentrically mounted in the opening of the gate frame and arranged at an angle to the said gate frame and forming one side of a passageway through the gate frame and movable towards the gate frame to constrict the passage, and means for yielding maintaining the roller in such projecting position, the roller being provided with vertical strips forming a corrugated surface.

1,757,427. RIM TOOL. FRED C. HEBERT, Jackson, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed June 13, 1927. Serial No. 198,457. 3 Claims. (Cl. 157—1.)



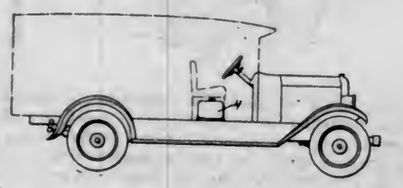
1. A rim tool comprising a lever formed with a forked end, a bail pivotally connected with said forked end, said end being formed with registering lengthwise extending slots, and a pin extending through said slots for connecting said lever with a rim, said slots being so arranged as to make a pivotal connection with a part rigid with one end of the rim while the free end of the lever projects into engagement with the other end of the rim so that the first movement of the lever is pivotal to break the rim and the further sliding pivotal motion of the lever laps the rim ends.

1,757,428. CAR-RETARDER SYSTEM. WINTHROP K. HOWE, Rochester, N. Y., assignor to General Railway Signal Company, Rochester, N. Y. Filed Nov. 21, 1925. Serial No. 70,599. 24 Claims. (Cl. 188—62.)



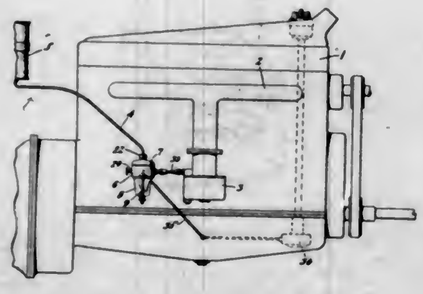
20. A car retarder of the type engaging the sides of passing car wheels for railroads comprising, a plurality of parallelly arranged pairs of girder beams, brake shoes arranged transversely to said girder beams and on opposite sides of a track rail, means for connecting one beam of each pair to a brake shoe on one side of such rail and the other beam of such pair to a brake shoe on the other side of said rail, a double angle lever for each pair of girder beams so connected to such beams that operation of said double angle lever operates said girder beams in opposite directions, and power operated mechanism including a chain of reduction gears driven by motor, one gear of which has a crank pin associated therewith, said crank pin being operatively connected to said double angle levers in a manner so that force exerted on said angle levers per unit torque delivered by said motor increases as the brake shoes get closer together.

1,757,429. GASOLINE-TANK MOUNTING. VICTOR JANTSCH, Pontiac, Mich., assignor to Yellow Truck & Coach Company, Pontiac, Mich., a Corporation of Maine. Filed Sept. 26, 1927. Serial No. 222,126. 4 Claims. (Cl. 280—5.)



3. In a motor vehicle, the combination of chassis frame members and a fuel tank to be mounted thereon, of a spring plate secured at an intermediate point to one of the frame members, means to secure the tank adjacent one end to the opposite ends of said plate, and means to rigidly fasten the opposite end of the tank to another of said members.

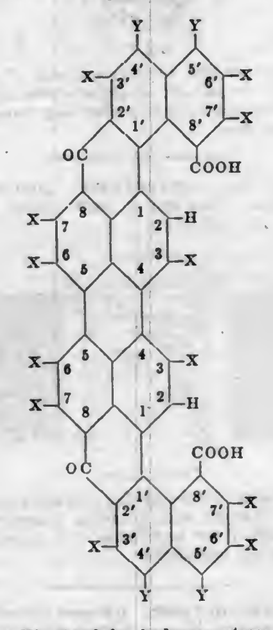
1,757,430. AUTOMATIC FUEL SHUT-OFF VALVE. JOSEPH W. JONES, Flint, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Apr. 9, 1928. Serial No. 268,668. 6 Claims. (Cl. 123—196.)



1. In combination, a head member having inlet and outlet passages, a dirt receptacle removably secured on the underside of said head, a filter element in said receptacle interposed between the inlet and outlet passages, a cap member removably secured on the upper side of said head, having a passageway therein communicating with and forming a part of said inlet passage, a flexible diaphragm held between the head and cap and co-operating with a cavity in the head to form a pressure chamber, a lubricating pressure system communicating with said chamber, a valve element controlling the flow of liquid through the inlet passage, having a portion bearing on said diaphragm, and spring means adapted to urge the valve to closed position, the pressure in said lubricating system being adapted to flex said diaphragm and oppose the tension of said spring means to open the valve.

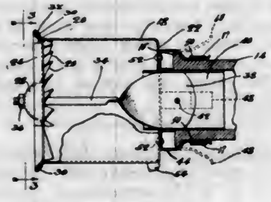
1,757,431. CONDENSATION PRODUCT AND PROCESS OF MAKING SAME. GEORG KALISCHER, Frankfort-on-the-Main, and WERNER ZERWECK, Fechenheim, near Frankfort-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Original application filed July 8, 1926, Serial No. 121,283, and in Germany July 20, 1925. Divided and this application filed Jan. 31, 1928. Serial No. 250,952. 4 Claims. (Cl. 260—61.)

1. As new products the compounds of the general formula:



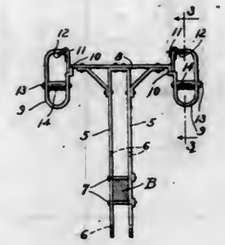
(wherein the X's stand for hydrogen atoms of which one or more may be replaced by a monovalent substituent, the Y's stand for hydrogen atoms, which may be replaced by halogens) which are when dry dark blue to dark green powders, insoluble in water, easily soluble in alkalies to a blue to greenish blue solution, soluble in concentrated sulfuric acid to a greenish solution and soluble in an alkaline hydrosulfite solution to a blue to greenish blue solution.

1,757,432. AIR CLEANER. HERBERT GEORGE KAMRATH, Flint, Mich., assignor to A C Spark Plug Company, Flint, Mich., a Company of Michigan. Filed Apr. 23, 1927. Serial No. 186,083. 2 Claims. (Cl. 183—108.)



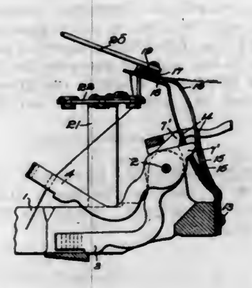
1. An air cleaner comprising a cylindrical casing having an open end and a closed end, a member closing the open end of the cleaner and comprising a central imperforate portion and an annular series of helical blades surrounding the imperforate portion and adapted to impart a whirling motion to the entering air, an axial clean air outlet extending into the casing through the closed end, and a relatively short aperture in the side wall of the casing adjacent the closed end and opening into the atmosphere, and a shield for said aperture, and an air straightener arranged in the casing adjacent the outlet tube for removing the whirl from the outgoing air.

1,757,433. LINE RACK FOR CULTIVATORS. BOLDEN S. KELLEY, Crockett, Tex. Filed Sept. 7, 1928. Serial No. 304,579. 2 Claims. (Cl. 280—183.)



1. In a line rack for cultivators wherein the cultivator includes a forwardly extending draw bar, a member adapted to be secured to the bar and to extend vertically thereabove and guide members arranged at the upper end of said first member at opposite sides thereof whereby to receive said reins, each guide member consisting of a loop having an opening therein to facilitate the arrangement of the line into the loop and means normally closing said opening.

1,757,434. YARN-CONTROLLING MECHANISM FOR KNITTING MACHINES. ROBERT H. LAWSON, Pawtucket, and ARTHUR N. CLOUTIER, Lonsdale, R. I., assignors to Hemphill Company, Central Falls, R. I., a Corporation of Massachusetts. Filed Nov. 25, 1927. Serial No. 235,427. 8 Claims. (Cl. 66—146.)

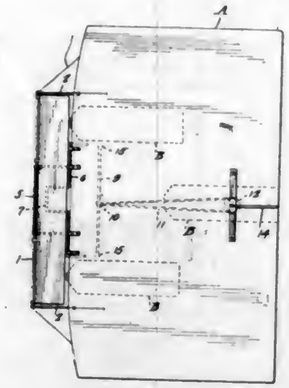


5. In a yarn feeding and tensioning means for knitting machines, a movable yarn finger, a spring tending to move said yarn finger into feeding position, a tension device, and means whereby said spring serves to tension a withdrawn yarn against said tension device.

1,757,435. AIR CONTROLLER FOR AEROPLANES. PETER LEFEVRE, Detroit, Mich. Filed Jan. 14, 1929. Serial No. 332,532. 1 Claim. (Cl. 244—29.)

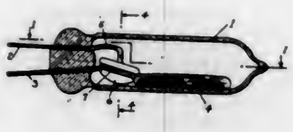
In an aeroplane, supporting means extending forwardly from the front edge of a wing of the plane, a shaft sup-

ported at the front end of such means, a pair of flaps hingedly connected with the shaft and extending rear-



wardly, manually operated means for lowering one flap and raising the other flap and spring means for normally holding the flaps in parallel relation and in closed condition.

1,757,436. MERCURY-TUBE SWITCH. IRA E. MCCABE, Chicago, Ill. Filed Dec. 5, 1927. Serial No. 237,632. 6 Claims. (Cl. 200—152.)



1. A liquid contact switch comprising a sealed tube containing a quantity of electrical conducting fluid with two electric terminals sealed and supported in the walls thereof, and a cup of insulating material therein supported at an angle to the axis of the tube by one terminal so that the cup is slightly tilted in the direction of the opposite end with the other terminal entering the interior of said cup.

1,757,437. PLUG SOCKET. BERNARD F. MULDOON, Mountainview, N. J., assignor to Henry Hyman, Brooklyn, N. Y. Filed Dec. 8, 1925. Serial No. 73,968. 1 Claim. (Cl. 173—332.)



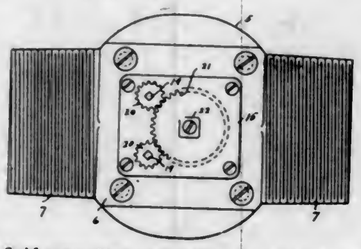
In a device of the class described, a socket adapted to receive a plug therein and to be expanded by said plug, casing parts enclosing said socket and tending to be forced apart by the expansion of said socket, a single centrally disposed fastening means holding together said parts against said tendency, and means disposed in recesses in said parts and adapted to prevent rotation of said parts about said fastening means.

1,757,438. BOTTLE STOPPER. HARRY G. NORWOOD, Baltimore, Md., assignor to American Dairy Supply Company, Washington, D. C., a Corporation of Maine. Filed Oct. 23, 1926. Serial No. 143,761. 6 Claims. (Cl. 215—51.)



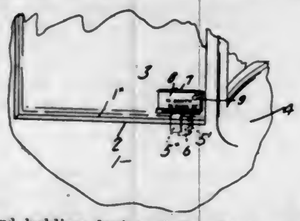
1. A stopper for jars, comprising a disk of paper or the like having an annular slit of inappreciable width adjacent its margin, said slit extending part way through the disk from the upper face.

1,757,439. FLUID CONTROLLER. RICHARD T. ROYE, Houston, Tex. Filed Mar. 5, 1929. Serial No. 344,570. 6 Claims. (Cl. 137—75.)



1. A fluid controller comprising a housing having a fluid conduit therethrough and including independent rollers about the conduit for restricting said conduit, some of said rollers being adjustable.

1,757,440. CARD HOLDER. HERBERT CRAWFORD SHARP, Kingston, Ontario, Canada. Filed Jan. 22, 1929. Serial No. 334,263. 2 Claims. (Cl. 40—11.)

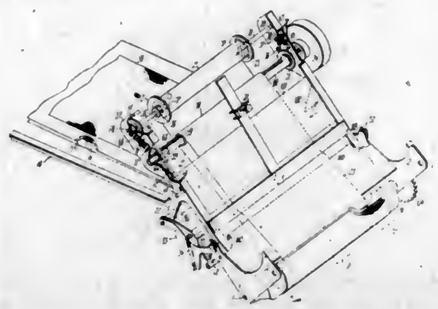


1. In a card holding device of the character described, a spring clipping member whereby the device is attached comprising a unitary spring strip bent substantially into the form of a right angle triangle and having its hypotenuse side bent back inwardly upon itself so that such bent back portion forms a spring contact member along the major portion of its entire length, and a card holding plate secured to the spring clip member intermediately of its width.

1,757,441. CLEANSING AND EMULSIFYING AGENT. WILHELM PUNGS, Ludwigshafen-on-the-Rhine, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Oct. 16, 1926, Serial No. 142,154, and in Germany Oct. 21, 1925. 2 Claims. (Cl. 87—5.)

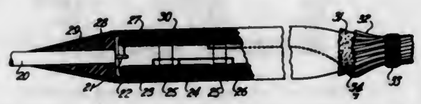
2. An emulsifying and cleansing composition comprising the oily hydrogenation products of oxids of carbon substantially insoluble in water comprising in the main oxygen-containing organic compounds, a soap, an aliphatic alcohol of low boiling point and a hydrocarbon boiling at a temperature above 20° C.

1,757,442. TYPEWRITING MACHINE. JESSE A. B. SMITH, Stamford, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Filed Mar. 9, 1927. Serial No. 173,821. 25 Claims. (Cl. 197—182.)



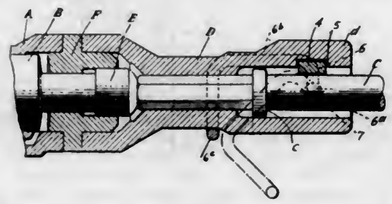
1. A tally-mechanism for a web-manifolding typewriting machine having a forwardly-displaceable platen-frame and a platen thereon, said mechanism including a supply-spool and a take-up spool which are both carried by the platen-frame and simultaneously displaceable forwardly therewith, permitting a tally-strip extending from the supply-spool about the platen to the take-up spool to remain upon the platen during displacement of the latter, the tally-strip normally overlying the web and rendering it inaccessible, and means for moving the tally-strip up and off from the web as a unit with the spools, to afford access to the web.

1,757,443. SUBMARINE CABLE. CLARENCE A. SPRAGUE, East Orange, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Sept. 11, 1926. Serial No. 134,819. 15 Claims. (Cl. 178—63.)



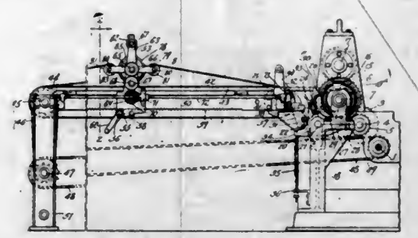
1. A terminal arrangement for a submarine signaling cable comprising a plurality of auxiliary cables extending from shore and joined to the terminal of the main cable at sea and a submersed electric wave filter containing inductance and capacity elements in at least one of said auxiliary cables.

1,757,444. TOOL RETAINER. EDWARD W. STEVENS, Detroit, Mich., assignor to Chicago Pneumatic Tool Company, New York, N. Y., a Corporation of New Jersey. Filed Apr. 29, 1927. Serial No. 187,472. 5 Claims. (Cl. 121—32.)



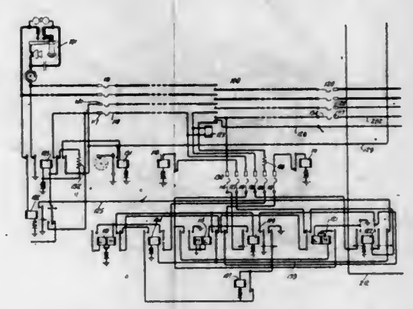
1. The combination with a percussive machine having a chuck for receiving a collared working tool, said chuck having a transverse bore, of means for retaining the working tool within said chuck comprising a member within said bore to be engaged by the collar on the tool, and a keeper in the form of a ball straddling said chuck to present a barrier at the opposite ends of said bore, said ball being pivotally mounted on said chuck in the transverse plane of said bore.

1,757,445. WEB-CUTTING MACHINE. GEORGE W. SWIFT, Jr., Bordentown, N. J., assignor to George W. Swift, Jr., Inc., Bordentown, N. J., a Corporation of New Jersey. Filed Nov. 30, 1928. Serial No. 322,935. 18 Claims. (Cl. 164—68.)



1. In web-cutting mechanism, the combination with web-cutting mechanism, of a clutch-controlling block, means for normally holding said block in clutch-holding position, a friction-driven pulley, operating connections between said friction-driven pulley and said block-holding means, and means for holding said pulley against rotation, said pulley-holding means including a web-controlled trip.

1,757,446. TELEPHONE-EXCHANGE SYSTEM. ESMOND P. G. WRIGHT, Croydon, JOHN H. E. BAKER, Hampstead, and ALAN H. CAMERON, Brondesbury, England, assignors to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed May 10, 1928, Serial No. 276,734, and in Great Britain May 10, 1927. 22 Claims. (Cl. 179—18.)

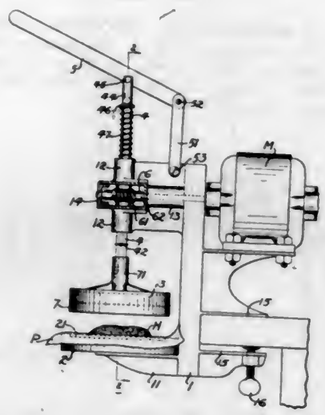


1. In a telephone exchange system, a group of selector switches each having a bank of terminals divided into groups, an auxiliary switch common thereto, means for transmitting impulses for positioning said auxiliary switch to mark a group of terminals in any one of said banks, and means effective only after said group has been marked for causing one of said selector switches to hunt for an idle terminal in the group marked.

1,757,447. HAMBURGER MOLD. CHARLES C. COMSTOCK, Seattle, Wash., assignor of one-half to Alfred R. Matlock, Seattle, Wash. Filed Mar. 5, 1928. Serial No. 259,133. 13 Claims. (Cl. 107—15.)

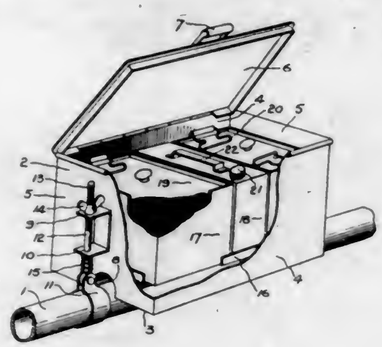
4. In a hamburger mold, in combination, a base, a cup, and a rotative presser plate within said cup, means for

rotating said plate, means for advancing said cup and plate towards the base, the cup being normally held against rotation by contact with the base, but the plate being



free to continue its rotation, and means associated with the presser plate to prevent the sticking of hamburger thereon when the plate is retracted.

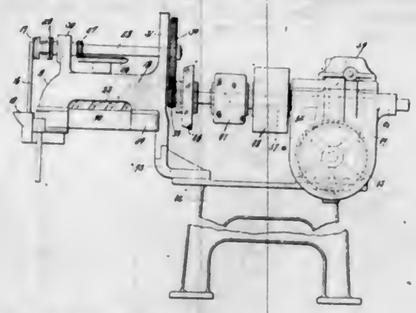
1,757,448. FOOD CONTAINER. JOHN PIRIE COOPER, Tofino, British Columbia, Canada. Filed July 11, 1928. Serial No. 291,914. 3 Claims. (Cl. 126—20.)



1. The combination of an exhaust pipe, container supporting members secured to said pipe and extending upwardly therefrom, a container having projections slidably receiving said members therethrough, springs surrounding said members between the exhaust pipe and said projections and serving to resiliently support said container and means for adjusting the container downwardly against the resistance of said springs.

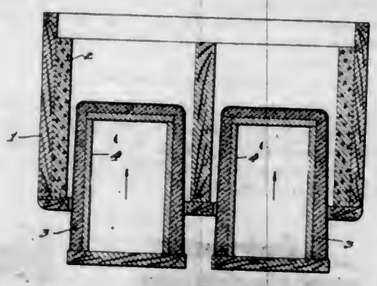
1,757,449. SOLE-WAXING MACHINE. WILLIAM A. COPELAND, Boston, Mass., assignor to International Shoe Company, St. Louis, Mo., a Corporation of Delaware. Filed Dec. 9, 1925, Serial No. 74,377. Renewed Nov. 8, 1929. 11 Claims. (Cl. 12—79.5.)

1. In a device of the class described, a liquid container, means for lifting liquid from said container, resiliently mounted members with rigid faces successively contacting with said lifting means to receive liquid therefrom, and



means for spreading said received liquid over a portion of each member, said portions being adapted to apply said liquid to the surface of work held thereagainst.

1,757,450. METHOD OF REFRIGERATOR MANUFACTURE. LLOYD G. COPEMAN, Flint, Mich., assignor to Copeman Laboratories Company, Flint, Mich., a Corporation of Michigan. Filed Feb. 26, 1926. Serial No. 91,000. 4 Claims. (Cl. 25—155.)



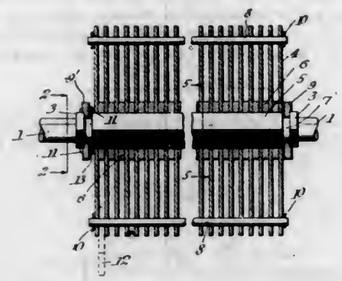
2. The method of casting a stone casting which consists in applying a parting material to the core, covering the core with an enamel, or finishing material, applying a filler to the enameled surface of the core, and then pouring the mix in the mould and around the core whereby the filler and enamel surface of the core may be transferred to the surface of the stone casting whose contour is formed by the core.

1,757,451. MEANS FOR SUPPRESSING SECONDARY VIBRATIONS IN DIAPHRAGMS AND THE LIKE. NEWTON CRANE, Boston, Mass., assignor to Craneway Diaphragm Company, Boston, Mass., a Corporation of Massachusetts. Filed Feb. 15, 1926. Serial No. 88,456. 5 Claims. (Cl. 181—32.)



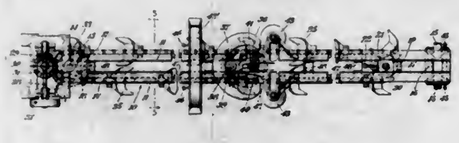
1. A diaphragm for the purpose described, pierced with separated holes so spaced and having such dimensions that they interrupt substantially all circular lines concentric with the diaphragm, and at least one of the related lines of any other symmetrical figure, on which audible secondary or harmonic vibrations of the diaphragm may occur, the diaphragm being elsewhere intact.

1,757,452. HAMMER-MILL ROTOR. ABRAHAM M. DELLINGER, Lancaster, Pa. Filed Oct. 29, 1928. Serial No. 315,816. 10 Claims. (Cl. 83—11.)



1. A hammer-mill rotor comprising a rotary shaft having a medial portion non-circular in cross-section, and two radially extending portions respectively axially spaced from the respective end portions of said medial portion, in combination with a plurality of discs, means extending through said discs for pivotally mounting the usual hammers, and retaining means respectively fitting between the respective radially extending portions and the respective adjacent end portions of said medial portion and respectively in interlocking engagement with their said radially extending portions, said retaining means between them confining said discs to the medial portion of the shaft, said discs respectively having central openings corresponding in shape and size to the cross-sectional shape and size of said shaft medial portion and making a tight snug fit thereon.

1,757,453. CARGO-UNLOADING APPARATUS. GIBSON L. DOUGLASS, New York, and SIMON COOPER, Brooklyn, N. Y. Filed Feb. 23, 1924. Serial No. 694,477. 8 Claims. (Cl. 198—109.)



7. In conveyor apparatus, an endless flexible conveyor member arranged to move material along a level surface, an elongated supporting member for the conveyor member made up of sections articulated to move laterally over said surface, said conveyor supporting member being mounted for lateral pivotal movement about one end.

1,757,454. VALUABLE PRODUCTS FROM COAL, TARS, MINERAL OILS, AND THE LIKE. OTTO EISENHUT, Heidelberg, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Jan. 18, 1927, Serial No. 161,968, and in Germany Jan. 19, 1926. 7 Claims. (Cl. 204—31.)

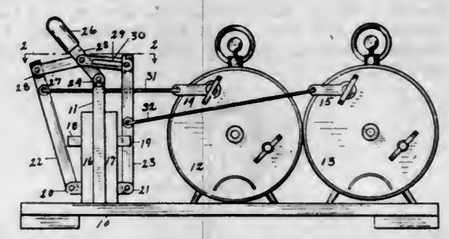
1. A process for the production of acetylene from coal, tars or oils, which comprises distributing the said initial material in a suspension agent comprising water vapor present only in an amount not sufficient to lead to the production of water gas alone, and exposing the mixture to the action of an electric arc.

1,757,455. BLEACHING AND DEODORIZING OXIDATION PRODUCTS OF HIGH-MOLECULAR HYDROCARBONS. HANS FRANZEN and MARTIN LUTHER, Mannheim, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Jan. 5, 1929, Serial No. 330,628, and in Germany Feb. 4, 1928. 6 Claims. (Cl. 87—12.)

1. The process of bleaching and deordorizing oxidation products of high molecular hydrocarbons which comprises treating a colored and bad smelling oxidation product of high-molecular hydrocarbons with hydrogen.

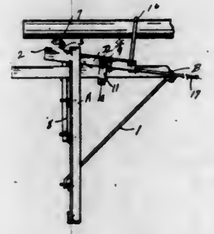
6. The process of bleaching and deodorizing oxidation products of paraffin wax which comprises treating a colored and bad smelling oxidation product of paraffin wax with a mixture of a metal and an acid furnishing nascent hydrogen.

1,757,456. TIME-CONTROLLED SWITCH APPARATUS. DONALD L. FROOKS, Lynbrook, N. Y. Filed Sept. 6, 1928. Serial No. 304,215. 2 Claims. (Cl. 200—35.)



1. In combination with a multiple time release mechanism, an electric switch comprising oppositely mounted blade members, opposite contact elements conductively connected with each other, an operating lever mounted between the said blades and connected thereto by insulated link members, one of which members is slidable over the pivot connection to its respective blade element, and the said blade elements operatively connected to the aforesaid release mechanism.

1,757,457. CENTERING AND ALIGNING DEVICE. JOSEPH B. GALBRAITH, Kaysville, Utah. Filed Aug. 23, 1927. Serial No. 214,832. 3 Claims. (Cl. 82—38.)



1. In a centering device of the class described, the combination of a supporting frame consisting of an upright frame and a horizontal member secured to the machine on which the device is to be used; a pivoted frame secured pivotally to said horizontal member, having two spaced apart cross members thereon near one end thereof and between which two spaced apart rollers are rotatably carried on suitable bearings; rollers provided on the pivot pins on which said pivoted frame is carried; and a U-shaped member secured through the other end of said pivoted frame to engage over the top side of the material to be centered.

1,757,458. STREET INDICATOR FOR STREET CARS. ALBERT E. GARBUT, Winnipeg, DONALD COCHRANE, St. Boniface, and JOHN E. WATKINS, Winnipeg, Manitoba, Canada, assignors to Winnipeg Brass Limited, Winnipeg, Canada, a Corporation of Manitoba, Canada. Filed Dec. 17, 1928. Serial No. 326,548. 11 Claims. (Cl. 40—95.)



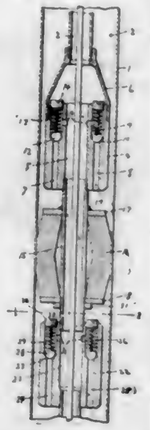
1. In a street indicator for street cars, a box like casing having a demountable back and a transparent sight opening in the front thereof and an exteriorly driven winding blind visible through the sight opening and contained within the box and totally carried by the back thereof and freely withdrawable from the box with the back.

1,757,459. SOUND-TRANSLATING SYSTEM. HENRY C. HARRISON, Port Washington, N. Y., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed May 2, 1923, Serial No. 636,088. Renewed Aug. 18, 1927. 16 Claims. (Cl. 181—27.)



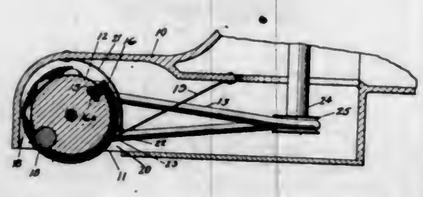
1. A sound translating member comprising a horn having a plurality of diaphragms of low elasticity spaced along a portion of the length of said horn and in contact with the inner surfaces of said horn.

1,757,460. FLUID ELEVATOR. WILLIAM HENRY HUGHES, Pampa, Tex. Filed Feb. 28, 1928. Serial No. 257,673. 1 Claim. (Cl. 103—232.)



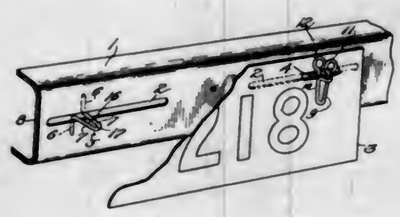
Valve means for fluid elevators including a casing with an eduction tube passing therethrough and a packing on the tube for engaging the casing; a head structure on the eduction pipe below the packing, said head being spaced from the casing and provided with a central bore for registry with the eduction pipe, said head being further provided with vertical bores, said head being provided with counter bores extending downwardly from its upper end and communicating with the first-mentioned bores, the said counter-bores communicating with the central bore at their intermediate portions, valve elements in the counter bores, said elements being adapted to seat at the lower ends of the counter bores to close the said first-mentioned bores, threads within the upper portion of each counter bore, a threaded plug for the threaded portion of each counter-bore, a spring for interposition between each plug and its corresponding valve element, said plug adapted to be fed inwardly of the head structure to vary the tension of the spring.

1,757,461. VACUUM CLEANER. NORTH H. LOSEY, Akron, Ohio. Filed Apr. 30, 1926. Serial No. 105,780. 1 Claim. (Cl. 15—8.)



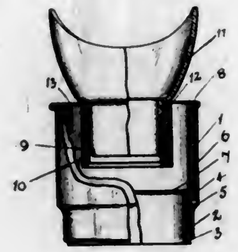
A vacuum cleaner comprising a nozzle having an opening in the bottom thereof, a horizontal drum rotating in the opening, a helical brush on the periphery of the drum, a helical series of freely rotatable beaters rollers in the periphery of the drum, the brush and rollers being operable by the drum to contact with the surface over which the cleaner is operated, said brush extending radially beyond said rollers an element arranged in the nozzle to provide with the adjacent nozzle wall a constricted suction inlet adjacent the rear of the opening, and a comb carried by said element adjacent the inlet arranged to engage in the outer portion of the brush and to clear the beater elements.

1,757,462. FASTENER. WILLIAM M. MACK, South Paris, Me. Filed June 4, 1928. Serial No. 282,811. 5 Claims. (Cl. 40—125.)



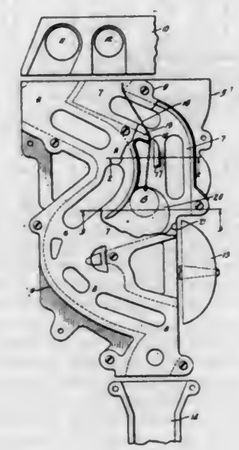
1. A fastener comprising a bolt member consisting of a length of metal wire bent upon itself near its middle into U-shape and having its end portions bent oppositely at right angles to the plane of the body portion of said member, and a V-shaped spring bow latch member consisting of a length of metal wire bent upon itself near its middle adapted to be inserted under compression within said first member, so that its spring pressure is exerted longitudinally of the bolt member thereby to clamp together the parts to which the fastener is applied, one leg of said spring bow latch member being formed with a notch to engage said first member thereby to hold said spring bow latch member in position within said first member.

1,757,463. TELEPHONE APPLIANCE. EDWARD MCCANN, New York, N. Y. Filed June 12, 1928. Serial No. 284,731. 9 Claims. (Cl. 179—187.)



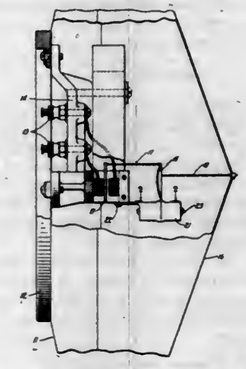
1. A device of the character described comprising a casing one end of which is adapted to be fitted over a telephone mouthpiece, a tubular sound conduit extending partly through the interior of said casing, a mouthpiece fitting into said conduit, and a reticulated membrane or diaphragm extending transversely of said casing.

1,757,464. COIN-COLLECTION APPARATUS. JOHN M. MELICK, Cresskill, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Mar. 15, 1928. Serial No. 261,792. 7 Claims. (Cl. 194—97.)



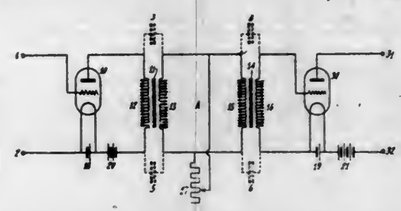
1. A coin chute for collecting coins comprising a curved channel through which deposited coins travel having an opening in one wall thereof, a signal associated with said chute adjacent said opening adapted to be operated by deposited coins, and a trap in said chute for preventing coins attached to a string from being retracted comprising a sloped projection in said channel spaced from one wall of said channel to form a slot and a recessed portion in said channel.

1,757,465. ACOUSTIC DEVICE. CHARLES R. MOORE, Maplewood, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed June 23, 1927. Serial No. 200,780. 9 Claims. (Cl. 179—108.)



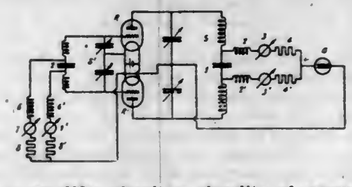
7. An acoustic device comprising a diaphragm, driving means for actuating said diaphragm, means to which said diaphragm and driving means are connected at different positions, respectively, and means variably movable in response to variable frequencies for supporting one end of said connecting means.

1,757,466. ARRANGEMENT FOR MULTISTAGE AUDIO AMPLIFICATION. WILHELM MOSER, Berlin, Germany, assignor to Gesellschaft für Drahtlose Telegraphie m. b. H., Berlin, Germany. Filed Apr. 6, 1925, Serial No. 20,886, and in Germany Apr. 7, 1924. 9 Claims. (Cl. 179—171.)



1. The combination of two adjacent amplifying tubes and an audio frequency coupling between said tubes, said audio frequency coupling comprising two audio frequency transformers and a circuit connecting said transformers in series for reducing the capacity coupling between said amplifying tubes.

1,757,467. ARRANGEMENT FOR WIRELESS TELEGRAPHY AND TELEPHONY. WILHELM MOSER, Berlin, Germany, assignor to Gesellschaft für Drahtlose Telegraphie m. b. H., Berlin, Germany, a Corporation of Germany. Filed Dec. 29, 1927, Serial No. 243,251, and in Germany Feb. 5, 1927. 4 Claims. (Cl. 179—171.)



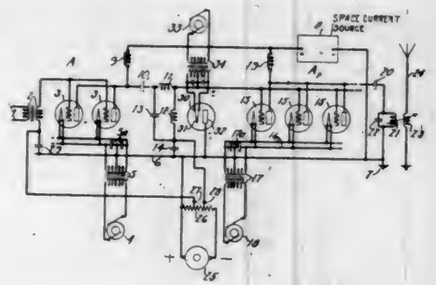
1. In an amplifier circuit, a plurality of vacuum tubes arranged in push pull, an input circuit and an output

circuit, said output circuit including an inductance coil, a condenser circuit for dividing said coil into two equal parts, a potential source and means comprising a pair of conducting branches for connecting said potential source to both sides of said condenser, each of said branches including a choke coil and a resistance in series, the value of the resistance in each of said branches being so chosen that operating conditions in all of the vacuum tubes will be approximately constant.

1,757,468. DEHYDRATION PRODUCT OF SORBITOL AND THE PROCESS OF MAKING IT. JOHANNES MÜLLER, Eppstein, and ULRICH HOFFMANN, Ludwigshafen-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Jan. 7, 1928, Serial No. 245,256, and in Germany June 7, 1927. 5 Claims. (Cl. 260—156.)

5. As a new article of manufacture the dehydration product of sorbitol which is poorer in water than sorbitol by two molecules per molecule of sorbitol and which has the boiling point of about 157° centigrade under 3 millimeters of pressure.

1,757,469. SPACE-DISCHARGE SYSTEM. ARTHUR A. OSWALD, East Orange, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Dec. 31, 1924. Serial No. 758,988. 10 Claims. (Cl. 179—171.)



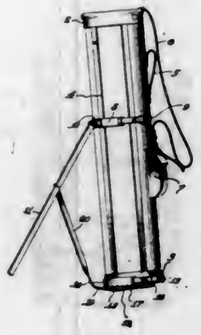
1. A repeater system comprising a space discharge device, including a control electrode or grid, and a cathode, an input circuit therefor including an impedance which is substantially equal to the grid-cathode impedance of the device when the positive peak of an impressed wave is applied thereto.

1,757,470. HEAT-INSULATING MATERIAL. GEORGE B. PEEBLES, Newark, N. J. Filed Aug. 8, 1928. Serial No. 298,413. 1 Claim. (Cl. 106—19.)

A fire-resisting and heat-insulating composition comprising the precipitated waste products from the manufacture of sodium compounds by the ammonia-soda process, with the addition of magnesium oxide and silicate of soda.

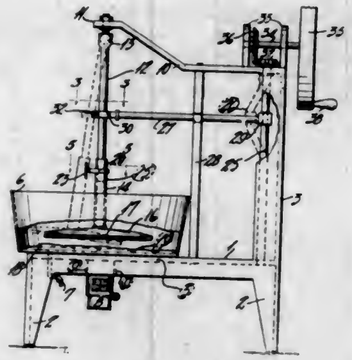
1,757,471. AUTOMATIC FOLDABLE STAND FOR GOLF BAGS. CORNELIUS E. PLATT, Windsor, Ontario, Canada. Filed Dec. 3, 1926. Serial No. 152,340. 4 Claims. (Cl. 150—1.5.)

1. An automatic foldable stand for a golf bag comprising two swingable legs attached to said bag intermediate the ends thereof, a brace connecting said legs, and ground engaging means connecting said brace to the bottom of said bag adapted by contact with the ground to actuate said brace and distend said legs for support of said bag at an inclination to the horizontal, said means



including a shield mounted on the bottom of said bag, and a bottom plate hingedly connecting said brace to said shield.

1,757,472. WASHING MACHINE. LEVI PHELPS, Mayflower, Tex. Filed June 6, 1928. Serial No. 283,165. 1 Claim. (Cl. 68—24.)



In a device of the kind described, a frame including a base and a top supported thereupon, a tub secured to the base below the top, a longitudinally adjustable agitator rod loosely pivotally hung by its upper end to the top over the base with the lower end thereof depending within the tub, a rubbing disk mounted at the lower end of the agitator rod within the tub, a crank vertically journaled through the top and base and spaced from the said agitator rod, an upright mounted upon the base intermediate of the agitator rod and the crank, the said upright having an opening extended transversely through its upper portion and a connecting rod loosely passed through the opening of the said upright and having its ends operatively connected with the said crank and an intermediate portion of the said agitator rod, whereby the latter will be swung about its pivotal support to impart to the said rubbing disk a planetary movement within the said tub.

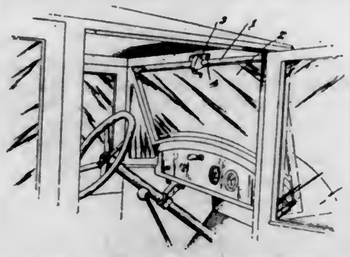
1,757,473. SYRINGE. ALPHONSE F. PIEPER, Rochester, N. Y. Filed July 3, 1928. Serial No. 290,177. 25 Claims. (Cl. 128—257.)

1. In combination, a syringe comprising a pair of tubular members mounted for movement one relative to the other, a nozzle carried by one of said members, the other having an inlet for fluid under pressure, a valve for controlling the passage of fluid through said members having a part normally spaced from one of the members arranged



to be engaged and operated thereby upon effecting relative movement between said members and means by which said relative movement is effected.

1,757,474. WINDSHIELD-OPERATING DEVICE. ALBERT T. POTTER, Detroit, Mich., assignor, by mesne assignments, to Ainsworth Manufacturing Corporation, Detroit, Mich., a Corporation of Michigan. Filed Jan. 21, 1928. Serial No. 248,364. 1 Claim. (Cl. 296—84.)



A device of the character described comprising a worm segment adapted to be secured to a pivoted windshield panel, a casing adapted to be secured over said segment, a worm shaft in said casing in engagement with said segment, a ball shaped enlargement on said shaft, bearing cup members mounted in the walls of said casing and fitted against opposite sides of said enlargement to provide a socket for said enlargement, and bearing means at another point on said shaft.

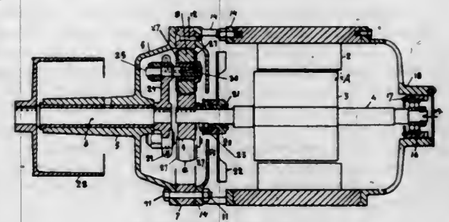
1,757,475. TRAY. SEELY F. PRATT, Rochester, N. Y., assignor to Union Tool Chest Company, Inc., Rochester, N. Y., a Corporation of New York. Filed Oct. 31, 1928. Serial No. 316,329. 2 Claims. (Cl. 206—72.)



1. A tray having a partition formed of two upwardly converging walls with their upper portions connected at

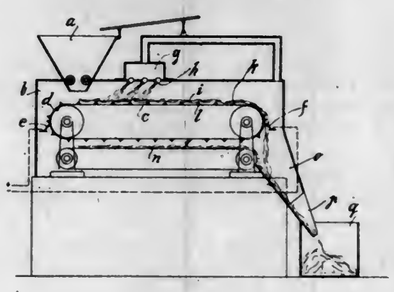
the upper edge of the partition, said walls being spaced apart below the partition and the upper edge of the partition being provided with two spaced openings, and a handle formed of a strip of material of substantially uniform diameter throughout and having a grip portion adapted to rest on the upper edge of the partition and two arms slidable in the openings and between the two walls, the ends of the handle being turned laterally in the direction of the length of the partition to engage the under side of the upper portion of the partition to limit the outward movement of the handle, the thickness of the upper portion of the partition being such that the fingers of a hand pressed against opposite sides of the partition will engage the handle and permit the latter to be elevated on the tray.

1,757,476. FRICTION GEARING. TURE GUSTAF RENNERFELT, Stockholm, Sweden. Filed May 28, 1928, Serial No. 281,171, and in Sweden Nov. 26, 1927. 10 Claims. (Cl. 74—34.)



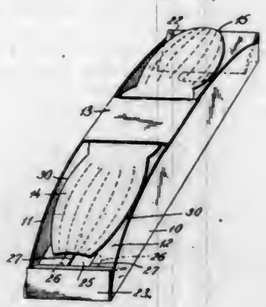
1. In a friction gearing the combination of a frame, two shafts journaled therein, a concave pinion mounted on one of the shafts, a concave race ring held within the frame, a plurality of convex rollers pressed between the pinion and the race ring, a plurality of studs fastened to the other shaft, a hub journalled on a stud within a roller, the hub formed with cheeks in contact with the ends of the roller, and means for rotating one of the shafts.

1,757,477. PROCESS AND DEVICE FOR OZONIZING TOBACCO. SAMUEL ROSENHOCH, Bremen, Germany. Filed July 9, 1928, Serial No. 291,283, and in Germany July 11, 1927. 8 Claims. (Cl. 131—60.)



1. A process of treating tobacco with ozone consisting in brushing the rib ends so as to clear them of foreign matter, moistening the rib ends with sterilized water, at room temperature, separating the tobacco leaves from one another, clearing away foreign plant matter, moistening the leaves in their entirety with sterilized water, leaving them in the moisture for 10 to 16 hours, treating the leaves with an electric current so as to break up the cells, passing the electrically treated leaves in a thin layer through and in opposite direction to an ozone current, and regulating the ozone supply in accordance with the nicotine contents on the treated tobacco.

1,757,478. SLIPPER-DISPLAY CONTAINER. LEO C. SAFIR, New York, N. Y. Filed Aug. 30, 1928. Serial No. 302,915. 10 Claims. (Cl. 12—128.)



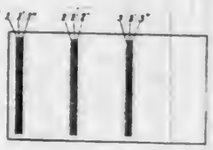
1. A display container for slippers or the like comprising a body portion including a bottom and side walls, a longitudinal member between the side walls and formed with oppositely extending tongues for receiving the toe portions of a pair of slippers and supporting said slippers in telescoped relation to one another with their toe portions extending in opposite directions and their central portions concealed, and a support extending upwardly from the bottom of the container for elevating the toe of the lower slipper to substantially the same level as the toe of the upper slipper.

1,757,479. HEAT INSULATION. ERNST SCHMIDT, Dantzig-Langfuhr, and EDUARD DYCKERHOFF, Schloss Blumenau, near Wunstorf, Germany. Filed Feb. 25, 1928, Serial No. 257,099, and in Germany July 3, 1926. 4 Claims. (Cl. 154—45.)



1. Heat insulation for an object, consisting of a sheet of paper or the like, having a bright metallic coating deposited thereon and adapted to enclose the object so as to leave an air space between it and said sheet.

1,757,480. FADING ELIMINATION IN RADIO PICTURE-TRANSMISSION SYSTEMS. FRITZ SCHRÖTER, Berlin, Germany, assignor to Telefunken Gesellschaft für Drahtlose Telegraphie m. b. H., Berlin, Germany, a Corporation of Germany. Filed June 19, 1928, Serial No. 286,617, and in Germany May 21, 1927. 1 Claim. (Cl. 178—5.)



The method of transmitting and receiving pictures by radio which includes exploring and reassembling a picture along a number of lines separated one from the other a distance amounting to several times the width of a single exploring line, exploring and reassembling the picture along lines adjacent said first named set of lines at widely interrupted time intervals from said first exploration and reassembling, and continuing the exploring and reassembling of adjacent lines until the entire space between the first named separated lines of exploration and reassemblage has been explored and reassembled by separating each successive adjacent exploration and reassemblage by time intervals of a duration greater than that of the duration of fading conditions, whereby successive lines of the transmitted picture as reassembled are reproduced at widely separated time intervals so as to be uninfluenced by fading and a reproduction of the transmitted picture is satisfactorily obtained.

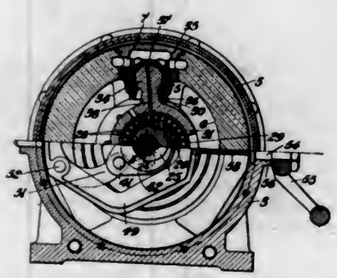
1,757,481. PROCESS OF REDUCING THE VISCOSITY OF NITROCELLULOSE. PAUL C. SEEL, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Nov. 6, 1926. Serial No. 146,667. 5 Claims. (Cl. 260—148.)

4. In the process of reducing the solution viscosity of nitrocellulose by boiling in water under pressure in an autoclave, for at least eight hours, the steps of circulating the water into and out of the autoclave, and injecting from time to time into the water stream an alkaline agent.

1,757,482. GELATINO SILVER HALIDE EMULSION. PAUL C. SEEL, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Feb. 23, 1929. Serial No. 342,320. 6 Claims. (Cl. 95—7.)

1. A gelatino silver halide emulsion containing ethylene glycol.

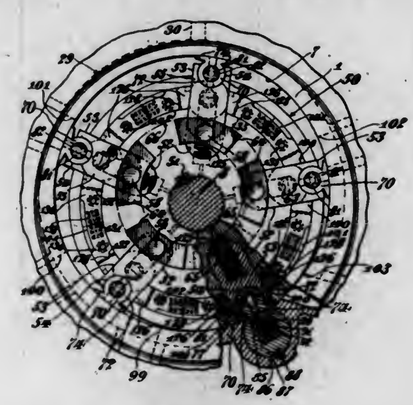
1,757,483. MEANS FOR THE HYDRAULIC TRANSMISSION OF POWER. HENRY SELBY HELE-SHAW and THOMAS EDWARD BEACHAM, London, England. Filed Oct. 4, 1924, Serial No. 741,577, and in Great Britain Oct. 12, 1923. Renewed Sept. 19, 1928. 9 Claims. (Cl. 103—161.)



1. A pump or motor comprising in combination a rotor including diverging cylinders, pistons therein, supporting means for the rotor, a valve adjacent one side of the rotor having a substantially smaller diameter than the rotor and located within said rotor, fluid passages in the rotor between the valve and the cylinder outer ends, bearings for the rotor arranged one on each side of said cylinders, and means passing through one of said bearings for adjusting the stroke of said pistons.

1,757,484. ROTARY ENGINE. GEORGE SHOEMAKER, Philadelphia, Pa. Filed Jan. 17, 1928. Serial No. 247,300. 4 Claims. (Cl. 123—16.)

2. In a rotary engine, the combination of a cylinder, a shaft extending through said cylinder and being located eccentrically thereof, a rotor mounted upon said shaft and being connected therewith, said rotor being of cylindrical cross section and of a diameter less than the internal diameter of the said cylinder and in contact with the inner cylindrical surface of the said cylinder along a line parallel with the axis thereof, the said rotor and cylinder coacting to form a space of crescent shape within the cylinder, and the said rotor being provided with radial pockets, pistons mounted within said pockets to move radially therein, which pistons respectively comprise a body portion and a wearing portion pivotally connected to the outer end thereof, the said two portions each consisting of two parts axially adjustable with relation to each other, the said parts being of different length and the



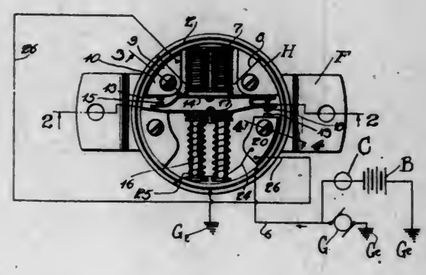
longer parts of the wearing portion extending across the joint between the two parts of the main portion of the said piston, yielding means interposed between the two parts of the respective portions which tends to hold them in separated relation with respect to each other, a plurality of wearing members movably mounted upon the portions of the rotor intermediate the said pockets and extending around the said portions, yielding means tending to cause movement of said members transversely of the said pockets, yielding means tending to cause movement of said members in directions parallel with the axis of the rotor so as to hold their outer ends in contact with the opposite ends of the cylinder, and blocks extending across and breaking the joints between adjoining portions of the said wearing members.

1,757,485. CHANGEABLE PRICE TAG. SAMUEL SINGER, San Francisco, Calif. Filed May 22, 1928. Serial No. 279,686. 7 Claims. (Cl. 40—5.)



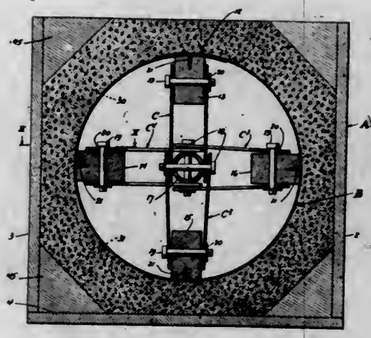
1. A price tag comprising a windowed housing; a plurality of slides provided with price designating characters mounted within the housing, said slides being slidably movable from display positions registering with a window, to concealed positions within the housing; and a plate mounted within the housing and having spring fingers struck therefrom to normally hold the slides in desired positions.

1,757,486. GENERATOR AND BATTERY PROTECTIVE MEANS. EVERETT R. SLAGLE, Sayre, Pa. Filed June 27, 1925. Serial No. 40,088. 7 Claims. (Cl. 200—98.)



1. A device of the character described including a casing, electro-magnets mounted therein, and wound for successive actuation, movable armatures for the electro-magnets, each of said armatures having one end fixed and the opposite end free and movable, resilient means connecting the fixed end of one of said armatures with the movable end of the other, and contact blocks fixed in the casing and insulated therefrom to be engaged by the movable ends of the armatures.

1,757,487. CONCRETE FORM. EDWARD L. SOULÉ, Berkeley, Calif. Filed Feb. 14, 1927. Serial No. 167,926. 2 Claims. (Cl. 25—128.)

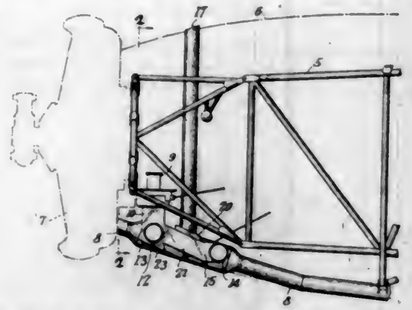


1. A collapsible mold core comprising a flexible tubular shell having overlapping edges; a centrally disposing supporting member extending through the mold core; a plurality of arms pivoted to the supporting member and to the shell; and additional arms pivoted to the supporting member and having a pin and slot connection with the shell.

1,757,488. AIR-INTAKE HEATER. LLOYD STEARMAN, Wichita, Kans., assignor to The Stearman Aircraft Company, Inc., Wichita, Kans., a Corporation of Kansas. Filed Sept. 12, 1929. Serial No. 392,063. 9 Claims. (Cl. 244—31.)

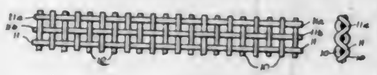
8. In combination, an air box having a neck portion for connection with a carbureter intake, said air box having

means at opposite ends of the same for enabling connection with an air heater and having means intermediate its ends for enabling the connection of an air intake and a



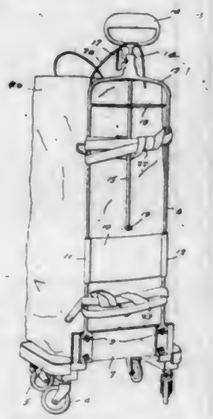
swing valve mounted in said air box opposite said air intake for directing intaken air toward one end or the other of the air box.

1,757,489. METHOD OF TREATING WIRE FABRIC. FERDINAND STEINHART, Cleveland, Ohio, assignor, by mesne assignments, to The Lindsay Wire Weaving Company, Cleveland, Ohio, a Corporation of Ohio. Filed Nov. 26, 1928, Serial No. 321,898, and in Germany Aug. 16, 1928. 12 Claims. (Cl. 140—3.)



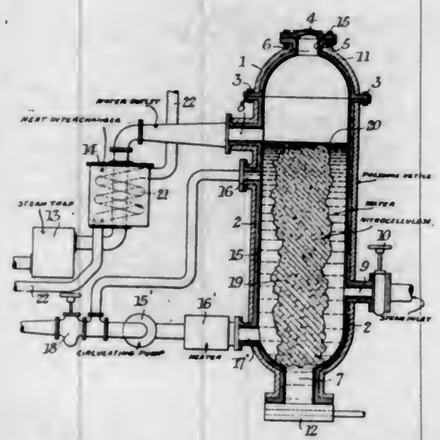
1. A method of joining together the thread ends of a woven wire fabric, comprising inclining the thread ends in opposite directions until adjacent threads cross each other, and then progressively applying heat to the crossed ends to weld them together.

1,757,490. HAND TRUCK. CYRUS R. TIBBETTS, Colton, Calif. Filed May 29, 1929. Serial No. 367,040. 2 Claims. (Cl. 280—49.)



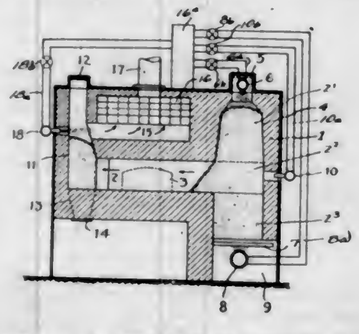
1. A hand truck of the character described comprising a horizontal platform, a plurality of rollers swivelled to the platform, a frame mounted on one side of the platform and extending vertically therefrom and provided with a sleeve at the upper end thereof, an adjustable handle slidably mounted in the sleeve and means on the sleeve for securing the handle in fixed relation with respect to the frame, said frame provided with a pair of oppositely disposed eyelets and straps secured to the eyelets for securing a receptacle to the platform, and a plurality of angular cleats slidably mounted on the straps to overlap corners of the receptacle to prevent the movement thereof with respect to the platform, said frame provided with a reinforcing bar and said handle slidably supported in said reinforcing bar to relieve the strain on the supporting sleeve.

1,757,491. METHOD OF REDUCING THE VISCOSITY OF NITROCELLULOSE. GEORGE H. TOZIER, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Nov. 6, 1926. Serial No. 146,668. 5 Claims. (Cl. 260—148.)



1. The process of reducing the viscosity of nitrocellulose that comprises completely immersing a quantity of nitrocellulose in water in a closed vessel, introducing super-heated steam under pressure below the water level during the continuance of the process, maintaining the contents of the vessel under high temperature and pressure conditions and at the same time throughout the process withdrawing any excess of water including any products of decomposition whereby the nitrocellulose is constantly and completely immersed in water at a constant level under high temperature and pressure conditions.

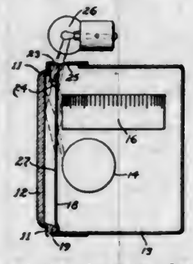
1,757,492. INDUSTRIAL FURNACE. ROBERT WARSITZ, Hattingen-Ruhr, Germany. Filed July 3, 1928, Serial No. 290,207, and in Germany June 15, 1927. 8 Claims. (Cl. 263—15.)



2. A furnace of the class described comprising a shaft adapted to contain and burn solid fuel, a flame chamber

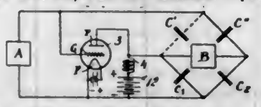
connected to and extending from said shaft, a second shaft connected to the other end of the flame chamber for receiving the waste gases therefrom, said second shaft containing a solid fuel adapted to radiate heat to the flame chamber, and an air conduit for supplying air to said first shaft, said conduit being located substantially midway of said first shaft and projecting toward said flame chamber.

1,757,493. DIAL ILLUMINATION. JOHN J. WHARAM, Detroit, Mich., assignor to Ford Motor Company, Fordson, Mich., a Corporation of Delaware. Filed May 31, 1928. Serial No. 281,683. 4 Claims. (Cl. 240—8.16.)



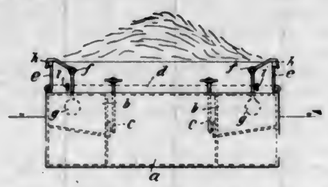
4. In a device of the character described, an instrument case, a cover glass enclosing the front of said case, a dial disposed within said case, a dial plate mounted between said dial and cover glass, and a window formed in said case in position so that light from an oustide source projected through the window will strike the back of the dial plate and be reflected onto the dial and will strike the back of the cover glass and be reflected onto the front of the dial plate.

1,757,494. METHOD AND MEANS FOR ELIMINATING CAPACITIVE COUPLING. HAROLD A. WHEELER, Washington, D. C., assignor to Hazeltine Corporation, Jersey City, N. J., a Corporation of Delaware. Filed Feb. 27, 1925. Serial No. 11,973. 33 Claims. (Cl. 179—171.)



17. An electric system including an input circuit, an output circuit, an audion capacitively coupling said circuits, and a balanced network of pure capacities only, including the coupling capacity as one arm of said network and a capacity between the plate and filament electrodes of said audion as another arm of said network, said input and output circuits being connected respectively as conjugate arms of said network.

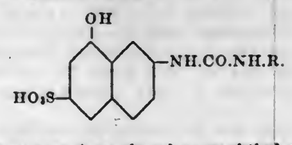
1,757,495. TILTING BARGE. KARL ZICKERROW, Lubeck, and CURT WARNATZ, Bad Schwartau, near Lubeck, Germany, assignors to Lubecker Maschinenbau-Gesellschaft, Lubeck, Germany. Filed Nov. 15, 1929, Serial No. 407,521, and in Germany Dec. 24, 1928. 5 Claims. (Cl. 114—27.)



1. A tilting barge or skute, comprising a closed water tank or tanks for heeling over purposes, side railings or breast-walls pivotally attached to the deck so as to be capable of turning out and down, means for securing or locking the said railings or breast-walls in upright position, a valve-controlled opening in the said tank or tanks, and means for automatically disengaging the said locking means upon the opening of the said valve.

1,757,496. MANUFACTURE OF NEW AZO DYES. JAMES BADDILEY, PERCY CHORLEY, and RAINALD BRIGHTMAN, Manchester, England, assignors to British Dyestuffs Corporation Limited, Manchester, England, a Corporation of Great Britain. Filed Mar. 2, 1927, Serial No. 172,199, and in Great Britain June 25, 1926. Renewed Sept. 6, 1929. 6 Claims. (Cl. 260—92.)

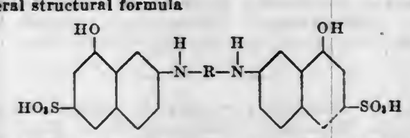
1. A process of manufacture of new dyestuffs consisting in combining a diazo compound with a new urea represented by the general formula:



in which R represents a phenyl or naphthyl residue, said residue being nonhydroxylated.

1,757,497. DYEING WITH AZO DYES. JAMES BADDILEY, PERCY CHORLEY, and RAINALD BRIGHTMAN, Manchester, England, assignors to British Dyestuffs Corporation Limited, Manchester, England, a Company of Great Britain and Ireland. Filed Mar. 16, 1927, Serial No. 175,925, and in Great Britain Apr. 16, 1926. 10 Claims. (Cl. 8—5.)

1. The process of dyeing regenerated cellulose materials in even, level shades which comprises applying to the said regenerated cellulose materials the azo dyes obtained by coupling X molecular proportions of a diazo compound with one molecular proportion of a compound having the general structural formula



wherein R represents a —CO— or —CS— group, or a straight chain composed of two methylene or carbonyl groups or a combination of a carbonyl group with one or two methylene groups, and X is 1 or 2.

1,757,498. DYEING WITH AZO DYES. JAMES BADDILEY, PERCY CHORLEY, and RAINALD BRIGHTMAN, Blackley, Manchester, England, assignors to British Dyestuffs Corporation Limited, Manchester, England, a Company of Great Britain and Ireland. Filed Mar. 16, 1927, Serial No. 175,926, and in Great Britain Sept. 7, 1926. 6 Claims. (Cl. 8—5.)

4. The process of dyeing regenerated cellulose materials in level shades comprising the application of monoazo dyes obtained by coupling a sulphonated 2-amino-8-naphthol with a diazo compound.

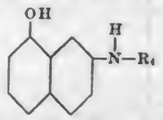
1,757,499. NEW SECONDARY DISAZO DYES. JAMES BADDILEY, PERCY CHORLEY, and RAINALD BRIGHTMAN, Blackley, Manchester, England, assignors to British Dyestuffs Corporation Limited, Blackley, Manchester, England. Filed May 21, 1927, Serial No. 193,376, and in Great Britain Sept. 8, 1926. 6 Claims. (Cl. 260—84.)

1. As new secondary disazo dyes suitable for dyeing regenerated cellulose in even level shades, the dyestuffs having the formula

$$R-N=N-R-N=N-R_2$$

wherein R represents a benzene or naphthalene residue free

from hydroxyl groups and R_3 represents a coupled 2-amino-8-naphthol sulphonic acid of the type



wherein R_4 represents alkyl or acyl group or benzene or naphthalene residue which are free from amino substituents, the said dyestuff dyeing regenerated cellulose in even level shades.

1,757,500. RELATING TO MANUFACTURE OF NEW SECONDARY DISAZO DYES FROM 1:8-AMINONAPHTHOL SULPHONIC ACID. JAMES BADDILEY, Blackley, Manchester, England, assignor to British Dyestuffs Corporation Limited, Blackley, Manchester, England. Filed May 21, 1927, Serial No. 193,387, and in Great Britain Dec. 10, 1926. Renewed Dec. 16, 1929. 11 Claims. (Cl. 260—84.)

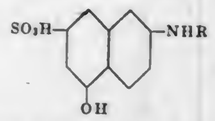
1. The process for the manufacture of new secondary disazo dyes which comprises coupling the diazo compound of a p-nitro aryl amine containing at least one solubilizing acidic group with a primary aryl amine which is capable of being diazotized after being coupled, rediazotizing and coupling with a 1:8-amino naphthol sulphonic acid.

1,757,501. APPLICATION OF SECONDARY DISAZO DYES. JAMES BADDILEY, Blackley, Manchester, England, assignor to British Dyestuffs Corporation Limited, Blackley, Manchester, England. Filed May 21, 1927, Serial No. 193,388, and in Great Britain Dec. 13, 1926. Renewed Sept. 6, 1929. 18 Claims. (Cl. 8—5.)

1. The process of dyeing regenerated cellulose material in level shades which comprises immersing the material in a bath containing a dye obtained by coupling a diazotized nitroaryl amine free from sulphonic and carboxylic groups with a middle component, rediazotizing and coupling with a sulphonated periaminonaphthol in alkaline solution.

1,757,502. PROCESS OF DYEING. JAMES BADDILEY, Blackley, Manchester, England, assignor to British Dyestuffs Corporation Limited, Blackley, Manchester, England. Filed May 26, 1927, Serial No. 194,542, and in Great Britain Sept. 7, 1926. Renewed Sept. 24, 1929. 5 Claims. (Cl. 8—5.)

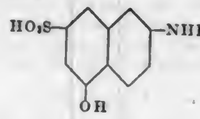
2. The process of dyeing regenerated cellulose material in level shades characterized by the application to the said material of monoazo dyestuffs obtained by coupling a sulphonated amino naphthol of the following structure



where R represents hydrogen, an alkyl or acyl group, or a phenyl or naphthyl residue, with a diazo compound.

1,757,503. APPLICATION OF AZO DYES. JAMES BADDILEY, Blackley, Manchester, England, assignor to British Dyestuffs Corporation, Limited, Blackley, Manchester, England. Filed Dec. 3, 1927, Serial No. 237,592, and in Great Britain Dec. 10, 1926. 7 Claims. (Cl. 8—5.)

1. The process of dyeing regenerated cellulose silks in level blue shades, which comprises dyeing such a silk with secondary disazo dyes obtained by coupling diazotized para-nitro aniline-ortho-sulphonic acid with an amine having the following formula H_2N-R_1 wherein R_1 represents a naphthyl or phenyl residue, the said amine being capable of coupling with diazo compounds to form a diazotizable amino azo compound, rediazotizing and coupling with a compound of the type



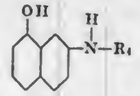
in which hydrogen, alkyl, aryl and acyl groups are all represented by R.

1,757,504. DYEING REGENERATED CELLULOSE SILK. JAMES BADDILEY, PERCY CHORLEY, and RAINALD BRIGHTMAN, Blackley, Manchester, England, assignors to British Dyestuffs Corporation Limited, Blackley, Manchester, England. Original application filed May 21, 1927, Serial No. 193,376, and in Germany May 2, 1927. Divided and this application filed July 6, 1928. Serial No. 290,882. 8 Claims. (Cl. 8—5.)

1. The process of dyeing regenerated cellulose materials in even level shades, which comprises applying to the said regenerated cellulose materials the secondary disazo dyestuffs having the following general formula

$$R-N=N-R-N=N-R_3$$

wherein R represents a benzene or naphthalene residue and R_3 represents a coupled 2:amino-8-naphthol sulphonic acid of the type



wherein R_4 represents alkyl or acyl group or benzene or naphthalene residue which are free from an amino substituent, the said regenerated cellulose materials being thereby dyed in even level shades.

1,757,505. PROCESS OF DYEING. JAMES BADDILEY, Blackley, Manchester, England, assignor to British Dyestuffs Corporation Limited, Manchester, England. Filed May 26, 1927, Serial No. 194,542, and in Great Britain Sept. 7, 1926. Divided and this application filed Dec. 11, 1928, Serial No. 325,397. Renewed Sept. 24, 1929. 3 Claims. (Cl. 8—5.)

2. The process of dyeing regenerated cellulose material in level shades characterized by the application to the material of monoazo dyestuffs obtained in coupling benzoylated 2-amino-5-naphthol-7-sulphonic acid with a diazo compound.

1,757,506. MANUFACTURE OF NEW SECONDARY DISAZO DYES AND THEIR APPLICATION. JAMES BADDILEY, Blackley, Manchester, England, assignor to British Dyestuffs Corporation Limited, Blackley, Manchester, England. Filed May 3, 1929, Serial No. 360,314, and in Great Britain Dec. 13, 1926. 18 Claims. (Cl. 8—5.)

3. The process of dyeing regenerated cellulose materials in even level shades which comprises applying to said regenerated cellulose material the secondary disazo dyes having the general formula

$$H_2N-R_6-N=N-R_2-N=N-R_4$$

wherein R_6 represents a divalent benzene residue free from sulphonic or carboxylic groups, R_2 represents a divalent benzene or naphthalene residue and R_4 represents a coupled 1:8-aminonaphthol sulphonic acid.

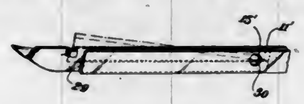
1,757,507. ALLOY. MAURICE E. BARKER, U. S. Army, Cambridge, Mass., assignor of one-fifth to Harry H. Semmes, Washington, D. C. Filed Sept. 5, 1928. Serial No. 304,160. 4 Claims. (Cl. 75—1.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928, 370 O. G., 757.)

1. An alloy containing 55% to 65% nickel, 27% to 37% copper and 3% to 13% silver.

1,757,508. ALLOY. MAURICE E. BARKER, U. S. Army, Cambridge, Mass., assignor of one-fifth to Harry H. Semmes, Washington, D. C. Filed Sept. 5, 1928. Serial No. 304,161. 4 Claims. (Cl. 75—1.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928, 370 O. G., 757.)

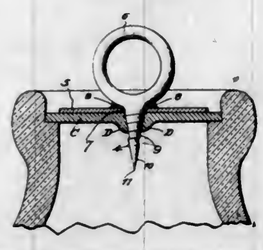
1. An alloy containing 37% to 47% nickel, 45% to 55% iron and 3% to 13% silver.

1,757,509. PILE WIRE. MARCUS B. BEHRMAN, Brooklyn, N. Y., assignor to The Lox Seal Corporation, Brooklyn, N. Y., a Corporation of New York. Filed Apr. 19, 1928. Serial No. 271,150. 3 Claims. (Cl. 139—44.)



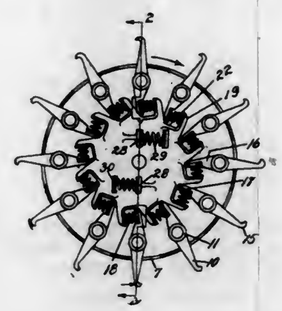
1. In a pile wire head comprising a channelled element adapted to receive a blade, a blade-supporting extension lying forwardly of the channel and comprising a forward extension of one wall of the channel, said extension being provided with means for engaging the forward edge of an accommodated blade, and the extremity of said extension being turned into substantially the plane of the blade when accommodated in the channel and being provided with an auxiliary normally inoperative cutting edge lying wholly in advance of the blade.

1,757,510. MILK-BOTTLE-CAP REMOVER AND REINSERTER. CHARLES ROYAL BOLAND, Baltimore, Md. Filed Oct. 14, 1929. Serial No. 399,540. 1 Claim. (Cl. 15—47.)



A milk bottle cap removing and re-inserting device comprising a disk to lie upon the cap, a straight shank projecting downwardly from the central portion of said disk, and a handle fixed with respect to the disk and shank, said shank having its upper portion provided with a coarse screw thread and having its lower portion smooth and downwardly tapered to a sharp penetration point, downward thrusting of said shank through the cap causing said tapered end thereof to outwardly crowd the displaced material, thereby placing said displaced material under tension and causing it to snap inwardly into tenacious engagement with said coarse screw thread, whereby slight rotation of the device by means of the handle will cause said screw thread to tightly clamp the cap and disk together, allowing said cap to be repeatedly removed and inserted by means of the device without breaking the connection between said cap and device.

1,757,511. CULTIVATOR REEL. ROY C. BREWER, Blackfalds, Alberta, Canada. Filed Mar. 12, 1928. Serial No. 261,122. 3 Claims. (Cl. 97—216.)



1. The combination with a rotary drum having longitudinal rows of arcuate slots and a rigid main shaft, of an annular series of parallel rock shafts about the main shaft and journaled in the drum, spaced teeth fixed to the rock shafts and protruding through the slots, a pair of relatively movable disks mounted on the main shaft within the drum and means including springs between the teeth and disks for limiting this relative movement, and resilient means between the disks and drum.

1,757,512. HARROW. JOSEPH L. BREWTON, Ruston, La. Filed Nov. 30, 1927. Serial No. 236,808. 1 Claim. (Cl. 55—125.)

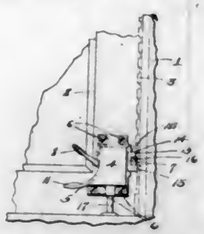


A harrow comprising a central beam, laterally extending channeled brackets having their central webs extended forwardly and rigidly secured to said beam adjacent the front end thereof, side beams having their front ends reduced and formed into vertically extending eyes disposed between the upper and lower flanges of the respective brackets, bolts inserted through the flanges of the brackets and passing loosely through said eyes to pivotally secure the beams and permit a limited vertical rocking movement thereof, handles carried by the central beam, overlapping straps attached to the rear ends of the outer beams and adjustably attached to the rear end of the central beam, and hangers adjustably connected at their upper ends with the handles and having their lower ends pivoted to the overlapping straps adjacent the side beams.

1,757,513. WINDOW-SASH HOLDER. EDWARD F. CHAFFEE, Syracuse, N. Y., assignor to The O. M. Edwards Company Inc., Syracuse, N. Y., a Corporation of New York. Filed Nov. 2, 1926. Serial No. 145,777. 6 Claims. (Cl. 292—173.)

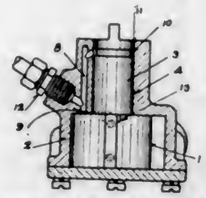
1. In a window construction, the combination of a frame, a sash movable in the frame, a rack along the frame and a

sash holder carried by the sash, the sash holder comprising a spring pressed member coacting with the rack and the rack and said spring pressed member having means



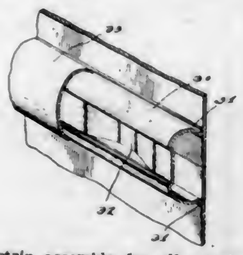
arranged to act inclined plane fashion and to engage when the sash is in nearly closed position, whereby said means wedge the sash into fully closed position.

1,757,514. OIL PUMP FOR INTERNAL-COMBUSTION ENGINES. JOSEPH C. COULOMBE, Kokomo, Ind. Filed Oct. 6, 1926. Serial No. 139,884. 2 Claims. (Cl. 103—7.)



1. A rotary pump having two inlets, means for continuously creating a suction through one inlet and means for creating a suction at intervals through the other inlet, the suction from the second inlet being segregated from that of the first.

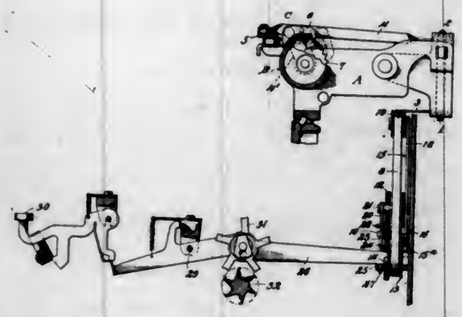
1,757,515. MOLDING OR FINISH-STRIP ASSEMBLY. ORLEY J. CROWE, Detroit, Mich., assignor to Motor Products Corporation, Detroit, Mich., a Corporation of New York. Filed Mar. 10, 1930. Serial No. 434,756. 6 Claims. (Cl. 296—29.)



1. A finish strip assembly for all metal vehicle bodies including an anchorage strip having flanged edge portions, said strip also being provided with centrally disposed struck-in portions forming straps projecting inwardly between the aforesaid edge portions and adapted to be welded to said metal body, and a cover strip having snap-on engagement with said anchorage strip and concealing said securing means.

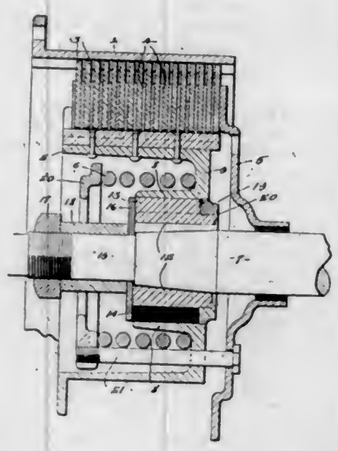
1,757,516. TYPEWRITING MACHINE. GUSTAVE O. DEGENER, Brooklyn, N. Y., assignor to Royal Typewriter Company, Inc., New York, N. Y., a Corporation of New York. Filed Oct. 31, 1928. Serial No. 316,261. 7 Claims. (Cl. 197—114.)

1. In a line spacing mechanism for typewriting machines having a line spacing mechanism and an operating lever therefor, the combination with said operating lever, of a winding drum, a draw band connecting the operating



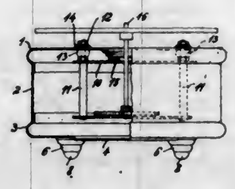
lever and drum, and means for locking the drum against rotation and for exerting a pull on the band between the operating lever and the drum while the drum is locked for actuating said operating lever.

1,757,517. VIBRATIONLESS MULTIPLE-DISK CLUTCH. ERNEST E. EATON, Syracuse, N. Y., assignor to Brown-Lipe Gear Company, Syracuse, N. Y., a Corporation of New York. Filed Oct. 22, 1927. Serial No. 228,034. 2 Claims. (Cl. 192—69.)



2. In a clutch construction, the combination of an inner member, a clutch shaft, said member having a hub, a second hub mounted on the shaft within the former hub, the former hub having internal spaced apart projections terminating short of one end of the hub providing an annular recess, the hub on the shaft having peripheral projections extending between and spaced from the former projections, blocks of yielding material between the projections on said hub, a plate on the shaft and abutting against like ends of the hubs and forming one end wall for the space between the hubs, a retaining ring mounted on the inner hub in said annular recess and forming the other end wall for the space between the hubs.

1,757,518. CASING FOR TALKING MACHINES. JOHANN MICHAEL EHMER, Beierfeld, Germany, assignor to Geo. Borgfeldt & Co., New York, N. Y., a Corporation of New Jersey. Filed Aug. 29, 1927. Serial No. 216,279. 3 Claims. (Cl. 312—8.)

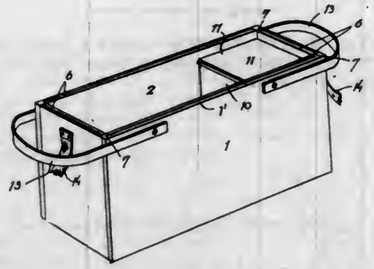


1. A metal casing for talking machines comprising a barrel, a base plate permanently secured to said barrel, a lid detachably mounted on said barrel, a motor support secured to said lid, a central flange extending inwardly from said lid, and a sound-deadening washer inserted between said flange and said support.

1,757,519. TREATMENT OF MATERIALS MADE OF OR CONTAINING CELLULOSE DERIVATIVES. GEORGE HOLLAND ELLIS, Spondon, near Derby, England, assignor to Celanese Corporation of America, a Corporation of Delaware. Filed Mar. 25, 1927, Serial No. 178,505, and in Great Britain Oct. 30, 1926. 2 Claims. (Cl. 8—13.)

1. A process of mordanting materials comprising organic substitution derivatives of cellulose, which comprises applying the metallic mordants thereto in the form of thiocyanates, the concentration of thiocyanate radicle present being in excess of that chemically equivalent to the mordant metal radicle.

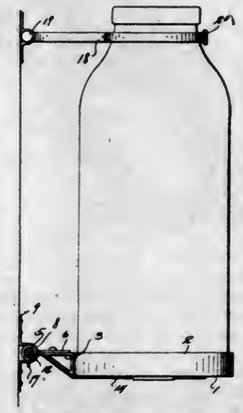
1,757,520. PORTABLE REFRIGERATOR. EMIL A. FLORANG, Burlington, Iowa. Filed Nov. 29, 1926. Serial No. 151,388. 2 Claims. (Cl. 217—5.)



1. In a portable refrigerator, a quadrangular body having straight vertical sides and a top horizontal peripheral edge, a metal lining having straight vertical sides, each side of said lining having at the top thereof an outwardly extending straight spring top flange integral therewith and separate and spaced at its ends from the adjacent top flange and consisting of a curved upstanding ridge and an outer reversely curved free edge resting slidingly upon the related horizontal top edge of a side of said body, and a cover, said spring top flange being adapted to be compressed against its spring tension under pressure of said cover to make a tight joint therewith.

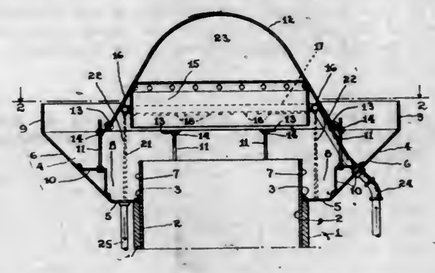
1,757,521. MILK-BOTTLE HOLDER. WILLIAM H. GERHARDS, Phelps City, Mo. Filed May 24, 1928. Serial No. 280,255. 2 Claims. (Cl. 248—61.)

1. A bottle holder comprising, in combination, a member having a side flange to provide a cup-like formation to receive the base portion of a bottle, an outstanding arm carried by the upper portion of the flange, a pivot bolt, means for engaging the outer end portion of the arm to the pivot bolt, members with which the pivot bolt is engaged, the arm being positioned between said members, a frame contacting with the bottom of the cup-like member



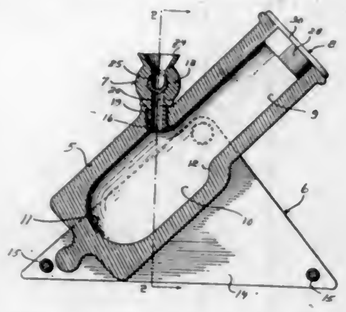
and having spaced extremities, coil springs carried by said extremities of the frame and encircling the pivot bolt at opposite sides of the arm, said springs being operatively engaged with the supporting members for the bolt, said springs exercising a tension for automatically raising the cup-like member when free of load, and means for limiting the downward swinging movement of the arm.

1,757,522. SMOKE-WASHING APPARATUS. CHARLES M. GERHOLD, New York, N. Y. Filed Aug. 9, 1929. Serial No. 384,730. 3 Claims. (Cl. 183—8.)



3. A device of the character described comprising a supporting collar mounted in the emitting end of a chimney, an inverted conically shaped reservoir mounted on said collar, a sludge receiving chamber in said reservoir, supporting brackets mounted on the inside conically shaped walls of said reservoir, a series of supporting bolts mounted in said brackets, an accumulator hood mounted on said bolts and adjustable vertically to and away from the exhaust end of said collar to vary the vent between said reservoir and hood, an annular baffle sleeve mounted in the dome of said hood, a water head mounted in said hood and disposed around the outer wall of said baffle sleeve adapted to project a water curtain across the vent between said reservoir and hood to the chamber in said reservoir, a plurality of nipples mounted in said water head provided with emitting apertures arranged to project said water curtain in an annular uninterrupted column circumferentially around the exhaust end of said chimney to clarify the smoke passing through said vent, a pipe connection forming means for supplying water to said water head, and an exhaust pipe connection mounted in said reservoir in the receiving chamber thereof arranged to carry off the sludge precipitated therein.

1,757,523. TOY GAS CANNON. MAX F. GRIMM, San Antonio, Tex. Filed July 6, 1929. Serial No. 376,478. 5 Claims. (Cl. 42—55.)

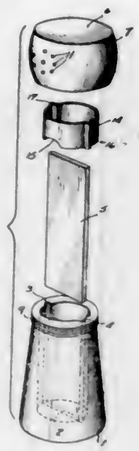


1. A cannon comprising a barrel provided with a bore closed at its inner end providing a liquid chamber, means for mounting the barrel in an angular position, a plug frictionally insertable into the outer end of the bore for closing the same, and rotatable loading means opening downwardly through the upper side of the barrel for admitting predetermined quantities of a gas generating substance into the liquid chamber, said loading means at all times closing the chamber against the escape of gas thru the loading means.

1,757,524. MANUFACTURE OF HOLLOW METAL RODS, BARS, AND THE LIKE. ROBERT ABBOTT HADFIELD, Westminster, England. Filed Jan. 24, 1929, Serial No. 334,850, and in Great Britain July 7, 1927. 8 Claims. (Cl. 80—62.)

1. In the manufacture of a hollow metal rod by working a billet provided with a metal core into a solid compound rod of the desired length and cross-section and afterwards removing the core from the outer rod, using as the core, a core formed of manganese steel of the kind herein referred to.

1,757,525. CONDIMENT HOLDER. FRANK A. HART, New York, N. Y. Filed Mar. 2, 1929. Serial No. 343,025. 7 Claims. (Cl. 65—45.)

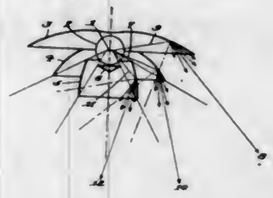


1. A condiment holder, comprising a container, means for dividing the container into compartments, a cap for the container having discharge openings extending normal to the axis of the container, certain of said discharge openings communicating with each compartment, and a control ring coacting with the container, the cap, and the division means for preventing the discharge of any of the condiments from any compartment until the holder is in a substantially horizontal position.

1,757,526. PURIFYING WATER. LEVI L. HEDGEPETH, Elizabeth City, N. C., assignor to William C. Olsen, Wake County, N. C. Filed Apr. 17, 1928. Serial No. 270,793. 85 Claims. (Cl. 210—23.)

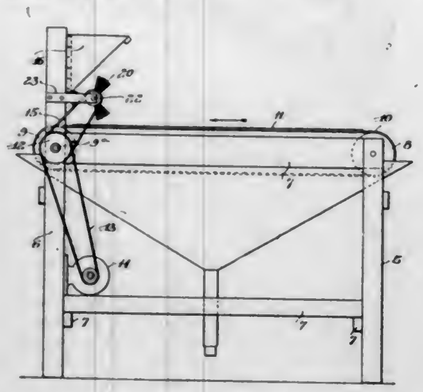
1. The process of purifying water of the class described which comprises treating the water to form a floc and then forming a second floc without causing peptization of the first floc.

1,757,527. REFLECTOR FOR INCANDESCENT LAMPS. POUL HENNINGSEN, Charlottenlund, near Copenhagen, Denmark, assignor to Messrs. Louis Poulsen & Company, Copenhagen, Denmark. Filed Nov. 13, 1926, Serial No. 148,164, and in Denmark Dec. 4, 1925. 1 Claim. (Cl. 240—103.)



A reflector for diffusing the light of incandescent lamps comprising a plurality of concentric downwardly concave shades disposed above and below the plane of the source of light, the inner surfaces of said shades being directed toward the source of light, the surfaces of said shades making at all points angles of less than 45° with a line to the source of light, the inner surfaces of the shades being dulled.

1,757,528. DUSTING DEVICE. HARRY A. INMAN, Newark, N. Y. Filed Sept. 25, 1925. Serial No. 58,679. 5 Claims. (Cl. 91—44.)



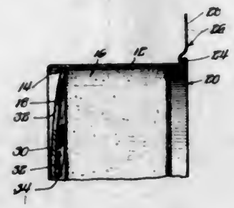
1. In apparatus of the character described, the combination with work supporting means, of a container for a dusting material having a foraminous dispensing portion, and a brushing device rotatable in engagement with said dispensing portion and in unobstructed relation to said supporting means, to obtain material from said container and disperse the same over the work on said supporting means.

1,757,529. VACUUM PUNCH-PRESS FEEDER. LEWIS JONES, Youngstown, Ohio. Filed Aug. 4, 1928. Serial No. 297,417. 2 Claims. (Cl. 294—64.)



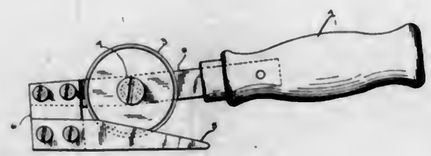
1. A device for lifting and carrying sheet material comprising a pair of spaced suction cups engageable with the surface of said material, a cylinder connected to each of said cups, means arranged within said cylinder for creating a vacuum in said cups, and means carried by said cylinder and engageable with the surface of said material at a point spaced from the engagement points of said cups with said material whereby said cups and said means provide substantially a three point engagement for said device with said material to prevent accidental release of the vacuum.

1,757,530. CHEMICAL CONTAINER. MELVILLE KEIM, Chicago, Ill., assignor, by mesne assignments, to The Apex Products Corporation, Chicago, Ill., a Corporation of Illinois. Filed Sept. 19, 1928. Serial No. 306,859. 16 Claims. (Cl. 23—240.)



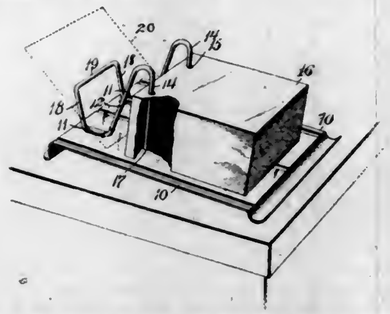
1. In a container of the class described, a casing open at one end, and an impervious wrapper within the casing and arranged normally to sealingly enclose a chemical compound, said wrapper being exposed at the open end of the casing so as to permit the removal of a portion thereof to provide a vent through which vapors from the contained compound may readily pass.

1,757,531. LINOLEUM CUTTER. LOUIS KINKELA, Bessemer, Pa. Filed May 20, 1929. Serial No. 364,533. 1 Claim. (Cl. 164—84.)



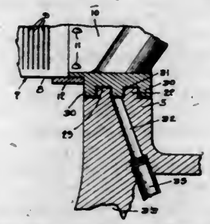
In a device of the kind described, a handle, a supporting arm projecting forwardly from said handle, a disk cutter rotatably mounted on said arm, a combined guard and guide member secured to the free end portion of said arm and extending rearwardly beyond said disk cutter, said member having a slotted portion into which an arc of the cutter extends, and said member being tapered to readily pass under the stock.

1,757,532. PAD SUPPORT. ARTHUR D. LELONG, Verona, N. J. Filed Jan. 14, 1929. Serial No. 332,352. 2 Claims. (Cl. 40—120.)



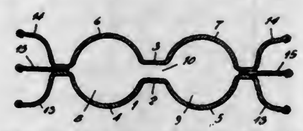
1. A pad support comprising a base with opposed lips on its top face, a wire clip having its central portion formed of side arms that engage the lips by lateral resiliency and having its two ends raised forming on one end hair-pin portions for engaging a pad and on the other end including a raised cross-bar to support raised leaves of the pad.

1,757,533. SEAL FOR PREVENTING THE FLOW OF MATERIAL BETWEEN RELATIVELY MOVING SURFACES. WARREN B. LEWIS, Seekonk, Mass. Filed July 12, 1928. Serial No. 292,253. 8 Claims. (Cl. 92—36.)



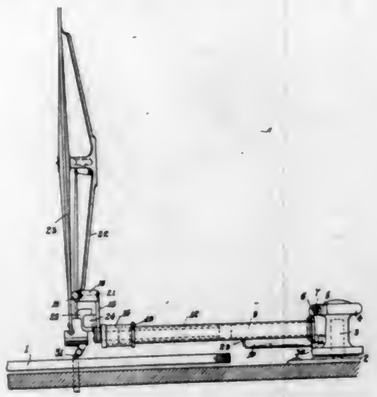
3. In a mechanism of the character described, a fluid container provided with partition walls separating said container into sections, a screen rotatably supported in proximity to said container and separating certain of said sections from the others, means for preventing free flow of fluid material past the end portions of said screen comprising interfitting ribs carried by the end portions of said screen and said partition walls respectively, and means for forcing fluid into the spaces between said interfitting ribs.

1,757,534. HEAT RADIATOR. ARTHUR FREDRIK HILMER LINDSTRÖM and CARL DANIEL SEGERSTRÖM, Eskilstuna, Sweden. Filed Nov. 14, 1927, Serial No. 233,267, and in Sweden Nov. 19, 1926. 2 Claims. (Cl. 257—140.)



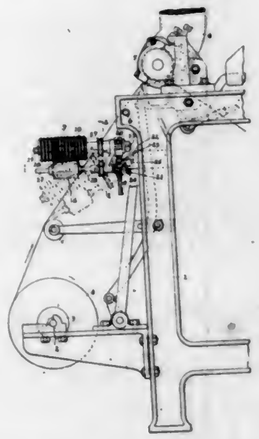
1. A radiator for the interchange of heat between mediums comprising a plurality of transversely disposed elements each of which consists of two plates connected together adjacent their edges to provide a passage for one of the mediums, the opposed and free marginal edge portion of the plates being extended outwardly and separate from each other so that both sides of the extensions constitute heat transmitting surfaces for the purpose of increasing the heating effect of the element and the heat transmitting surfaces thereof.

1,757,535. TALKING MACHINE. LOUIS LUMIÈRE, Lyon, France. Filed Apr. 30, 1925, Serial No. 27,023, and in Great Britain May 26, 1924. 8 Claims. (Cl. 274—24.)



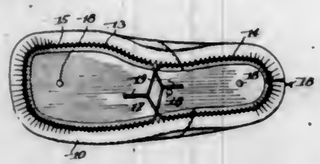
1. In a talking machine of the type having a record tablet and a diaphragm of large diameter adapted to operate without a sound arm and operatively connected to a stylus, a support, a carrying member mounted on said support and capable of swinging across the record tablet under the action of the stylus moving in the sound groove, means for mounting said diaphragm on the carrying member whereby said diaphragm lies during playing in a plane substantially at right angles to the longitudinal axis of the carrying member, and means pivotally connecting said diaphragm to said carrying means whereby said diaphragm may be moved about a horizontal axis to occupy a non-playing position substantially parallel with the carrying member.

1,757,536. FABRIC-TREATING MACHINE. ARTHUR C. MASON, Hawthorne, N. J. Filed Jan. 17, 1928. Serial No. 247,311. 9 Claims. (Cl. 26—12.)



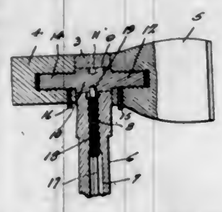
1. Supporting means in which the fabric to be treated is stretched, in combination with a rotary element journaled in said means with its periphery close to the fabric and having at its said periphery a series of float-catching portions extending around its periphery and means, coactive with each such portion, to sever a float when caught thereby.

1,757,537. METHOD OF MAKING SHOES. GEORGE W. MILLER, Rochester, N. Y. Filed Apr. 29, 1929. Serial No. 358,860. 5 Claims. (Cl. 12—142.)



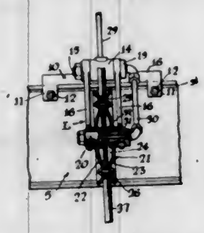
1. The method of making shoes comprising securing ligature means to the edges of a shoe upper by means of stitches, drawing said upper over a last and insole, tensioning said ligature means to draw said upper into lasted position with an adhesive applied between said upper and insole to secure said parts together, releasing said stitches and removing said ligature means, and attaching an outsole.

1,757,538. HATCHET. WILLIAM G. MILLER, Cumberland, Md. Filed Mar. 19, 1929. Serial No. 348,273. 2 Claims. (Cl. 306—2.)



1. A hatchet of the class described comprising a hasp having a bore, a spindle rotatable in the bore, threaded extensions on opposite ends of the spindle, a blade on one threaded end and a poll on the other threaded end, a handle projecting from the hasp, said spindle having an annular series of notches, and a bolt in the handle to engage said notches, said handle being hollow to form a bore at right angles to the bore of the hasp, said bolt having a threaded portion engaged in the handle so that it may be turned to engage or disengage in respect to the notches of the spindles.

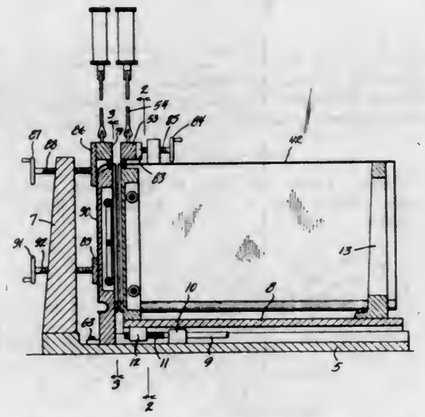
1,757,539. LUBRICATING DEVICE FOR CABLES. BURT S. MINOR, San Pedro, Calif., assignor to Regan Forge and Engineering Company, San Pedro, Calif., a Corporation of California. Filed Apr. 14, 1928. Serial No. 269,976. 8 Claims. (Cl. 184—15.)



5. A cable lubricating device comprising a base member mounted for sliding movement, means to detachably secure the base member to a supporting structure, a bearing formed integral with said base member, a fixed bearing pin mounted in said bearing having a bore therein, a pair of sheave supporting arms hingedly secured to the ends of said pin, a second fixed bearing pin mounted in the free ends of said arms, having a bore extending inwardly from

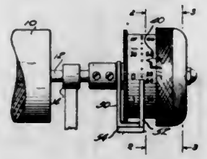
one end, an oil line pipe connecting the bores of the two bearing pins, a cable sheave having a lubricant chamber mounted for rotation on said second bearing pin, the inner end of the bore of said pin communicating with said chamber, means to feed the lubricant from the chamber to the groove of the cable sheave, and means to feed a lubricant to the sheave chamber.

1,757,540. APPARATUS FOR WELDING. JAMES A. MUIR, Detroit, Mich. Filed May 11, 1927. Serial No. 190,404. 7 Claims. (Cl. 219—4.)



1. Apparatus for welding the ends of sheet metal together comprising substantially non-deformable forms adapted to have sheets of metal disposed thereon, a plurality of electrodes, means for applying pressure thru the electrodes on the forms and the sheets which may be positioned thereon, means for passing electrical current into said electrodes, whereby it may pass into the sheets, and means for moving certain of the forms and electrodes relative to others, whereby sheets of metal held between them may be brought into end to end contact.

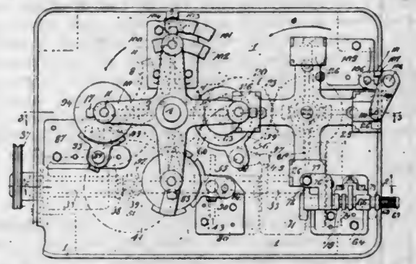
1,757,541. TYPEWRITER LINE INDICATOR. DAVID MURDOCK, Brooklyn, N. Y. Filed Oct. 27, 1928. Serial No. 315,371. 5 Claims. (Cl. 197—189.)



1. In a device of the type described, a shaft adapted to be attached to the platen shaft of a typewriter as a continuation thereof, an indicating wheel carried by said shaft and in frictional engagement therewith, and an indicating point suspended from said shaft and adapted to remain in substantially constant position by the action of gravity.

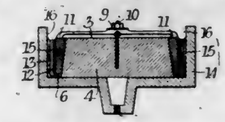
1,757,542. SIDE PINNING MACHINE. EDWIN F. NICKL, Newark, and RALPH E. CLEVELAND, East Orange, N. J., assignors to De Forest Radio Company, Jersey City, N. J., a Corporation of Delaware. Filed Mar. 17, 1926. Serial No. 95,216. 20 Claims. (Cl. 29—33.)

1. In a machine of the character described the combination of a rotatable member carrying a plurality of vacuum tube bases, each base having an opening to receive a pin, a support carrying a stock of pin material, means for cutting said material to predetermined lengths, means for intermittently rotating said support to bring the cut



material successively into registry with the openings in said bases, and means effective upon each of said registries to rivet said cut material in the base opening.

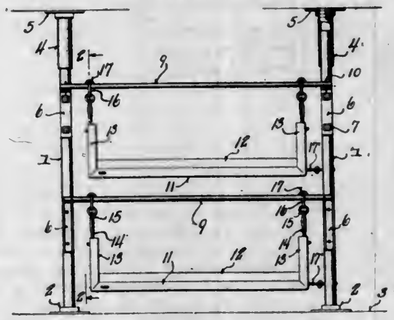
1,757,543. METHOD OF MAKING LENTICULAR-FILM-EMBOSSING ROLLERS. PERCY R. OAD, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Sept. 28, 1928. Serial No. 309,028. 9 Claims. (Cl. 76—107.)



1. A method of making lenticular film embossing rollers comprising winding a coil of wire on a temporary support located on the inside of the coil, plating the outside of the coil, removing the inside temporary support, plating the inside of the coil, forming a hub inside of the inside plating and removing the outside plating and wire.

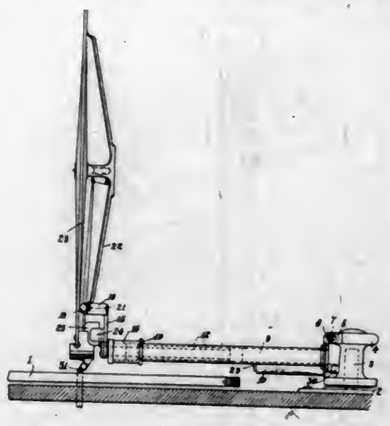
9. A method of making a lenticular film embossing roller including winding a coil of copper wire of approximately .05 mm. in diameter upon an expanding mandrel, electrically depositing a layer of copper over the copper wire, removing the mandrel, increasing the radius of the wires by depositing a thin layer of copper on the exposed sides thereof, depositing a comparatively thick layer of nickel on the copper, and finishing the inner surface thereof true, attaching an inner hub member to the nickel, etching away the copper, and electrodepositing a thin chromium layer over the nickel, whereby a cylinder having a series of grooves spaced .05 mm. apart will result.

1,757,544. SWINGING BED. LOUIS O. OXENDORF, Milwaukee, Wis. Filed Jan. 25, 1929. Serial No. 334,951. 1 Claim. (Cl. 114—192.)



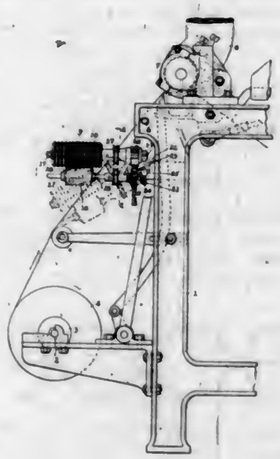
A swinging bed structure comprising spaced tubular uprights, brackets secured to the lower end of said up-

1,757,535. TALKING MACHINE. LOUIS LUMIÈRE, Lyon, France. Filed Apr. 30, 1925, Serial No. 27,023, and in Great Britain May 26, 1924. 8 Claims. (Cl. 274—24.)



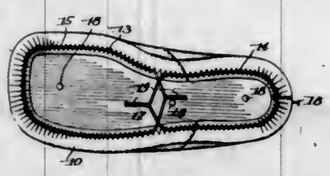
1. In a talking machine of the type having a record tablet and a diaphragm of large diameter adapted to operate without a sound arm and operatively connected to a stylus, a support, a carrying member mounted on said support and capable of swinging across the record tablet under the action of the stylus moving in the sound groove, means for mounting said diaphragm on the carrying member whereby said diaphragm lies during playing in a plane substantially at right angles to the longitudinal axis of the carrying member, and means pivotally connecting said diaphragm to said carrying means whereby said diaphragm may be moved about a horizontal axis to occupy a non-playing position substantially parallel with the carrying member.

1,757,536. FABRIC-TREATING MACHINE. ARTHUR C. MASON, Hawthorne, N. J. Filed Jan. 17, 1928. Serial No. 247,311. 9 Claims. (Cl. 26—12.)



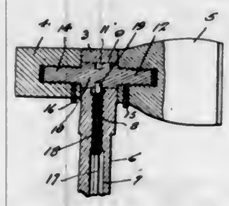
1. Supporting means in which the fabric to be treated is stretched, in combination with a rotary element journaled in said means with its periphery close to the fabric and having at its said periphery a series of float-catching portions extending around its periphery and means, coactive with each such portion, to sever a float when caught thereby.

1,757,537. METHOD OF MAKING SHOES. GEORGE W. MILLER, Rochester, N. Y. Filed Apr. 29, 1929. Serial No. 358,860. 5 Claims. (Cl. 12—142.)



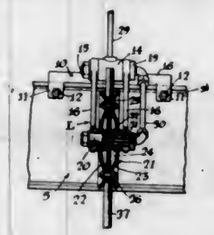
1. The method of making shoes comprising securing ligature means to the edges of a shoe upper by means of stitches, drawing said upper over a last and insole, tensioning said ligature means to draw said upper into lasted position with an adhesive applied between said upper and insole to secure said parts together, releasing said stitches and removing said ligature means, and attaching an outsole.

1,757,538. HATCHET. WILLIAM G. MILLER, Cumberland, Md. Filed Mar. 19, 1929. Serial No. 348,273. 2 Claims. (Cl. 306—2.)



1. A hatchet of the class described comprising a hasp having a bore, a spindle rotatable in the bore, threaded extensions on opposite ends of the spindle, a blade on one threaded end and a poll on the other threaded end, a handle projecting from the hasp, said spindle having an annular series of notches, and a bolt in the handle to engage said notches, said handle being hollow to form a bore at right angles to the bore of the hasp, said bolt having a threaded portion engaged in the handle so that it may be turned to engage or disengage in respect to the notches of the spindles.

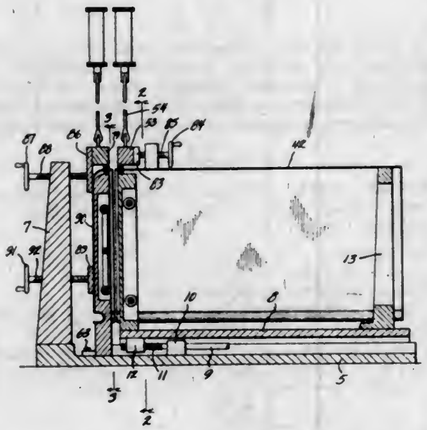
1,757,539. LUBRICATING DEVICE FOR CABLES. BURT S. MINOR, San Pedro, Calif., assignor to Regan Forge and Engineering Company, San Pedro, Calif., a Corporation of California. Filed Apr. 14, 1928. Serial No. 269,976. 8 Claims. (Cl. 184—15.)



5. A cable lubricating device comprising a base member mounted for sliding movement, means to detachably secure the base member to a supporting structure, a bearing formed integral with said base member, a fixed bearing pin mounted in said bearing having a bore therein, a pair of sheave supporting arms hingedly secured to the ends of said pin, a second fixed bearing pin mounted in the free ends of said arms, having a bore extending inwardly from

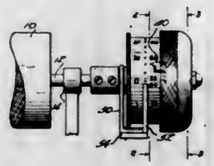
one end, an oil line pipe connecting the bores of the two bearing pins, a cable sheave having a lubricant chamber mounted for rotation on said second bearing pin, the inner end of the bore of said pin communicating with said chamber, means to feed the lubricant from the chamber to the groove of the cable sheave, and means to feed a lubricant to the sheave chamber.

1,757,540. APPARATUS FOR WELDING. JAMES A. MUIR, Detroit, Mich. Filed May 11, 1927. Serial No. 190,404. 7 Claims. (Cl. 219—4.)



1. Apparatus for welding the ends of sheet metal together comprising substantially non-deformable forms adapted to have sheets of metal disposed thereon, a plurality of electrodes, means for applying pressure thru the electrodes on the forms and the sheets which may be positioned thereon, means for passing electrical current into said electrodes, whereby it may pass into the sheets, and means for moving certain of the forms and electrodes relative to others, whereby sheets of metal held between them may be brought into end to end contact.

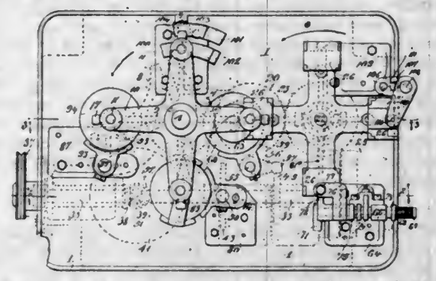
1,757,541. TYPEWRITER LINE INDICATOR. DAVID MURDOCK, Brooklyn, N. Y. Filed Oct. 27, 1928. Serial No. 315,371. 5 Claims. (Cl. 197—189.)



1. In a device of the type described, a shaft adapted to be attached to the platen shaft of a typewriter as a continuation thereof, an indicating wheel carried by said shaft and in frictional engagement therewith, and an indicating point suspended from said shaft and adapted to remain in substantially constant position by the action of gravity.

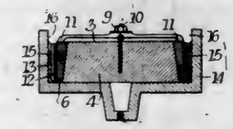
1,757,542. SIDE PINNING MACHINE. EDWIN F. NICKL, Newark, and RALPH E. CLEVELAND, East Orange, N. J., assignors to De Forest Radio Company, Jersey City, N. J., a Corporation of Delaware. Filed Mar. 17, 1926. Serial No. 95,216. 20 Claims. (Cl. 29—33.)

1. In a machine of the character described the combination of a rotatable member carrying a plurality of vacuum tube bases, each base having an opening to receive a pin, a support carrying a stock of pin material, means for cutting said material to predetermined lengths, means for intermittently rotating said support to bring the cut



material successively into registry with the openings in said bases, and means effective upon each of said registries to rivet said cut material in the base opening.

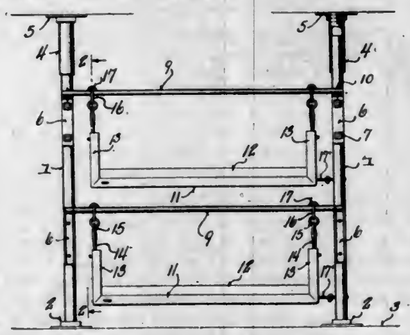
1,757,543. METHOD OF MAKING LENTICULAR-FILM-EMBOSSING ROLLERS. PERCY R. ORD, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Sept. 28, 1928. Serial No. 309,028. 9 Claims. (Cl. 76—107.)



1. A method of making lenticular film embossing rollers comprising winding a coil of wire on a temporary support located on the inside of the coil, plating the outside of the coil, removing the inside temporary support, plating the inside of the coil, forming a hub inside of the inside plating and removing the outside plating and wire.

9. A method of making a lenticular film embossing roller including winding a coil of copper wire of approximately .05 mm. in diameter upon an expanding mandrel, electrically depositing a layer of copper over the copper wire, removing the mandrel, increasing the radius of the wires by depositing a thin layer of copper on the exposed sides thereof, depositing a comparatively thick layer of nickel on the copper, and finishing the inner surface thereof true, attaching an inner hub member to the nickel, etching away the copper, and electrodepositing a thin chromium layer over the nickel, whereby a cylinder having a series of grooves spaced .05 mm. apart will result.

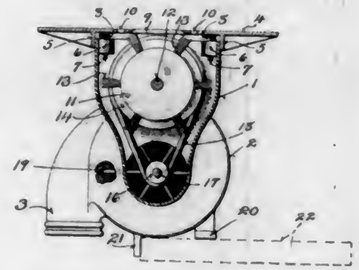
1,757,544. SWINGING BED. LOUIS O. OXENDORF, Milwaukee, Wis. Filed Jan. 25, 1929. Serial No. 334,951. 1 Claim. (Cl. 114—192.)



A swinging bed structure comprising spaced tubular uprights, brackets secured to the lower end of said up-

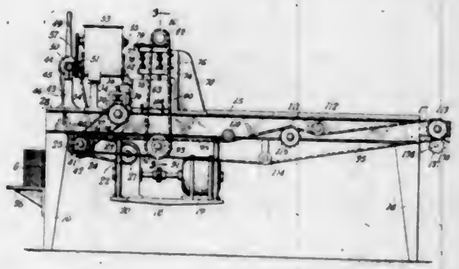
rights for attachment to the floor, tubular sections telescoping with the upper ends of said uprights, brackets carried by said sections for attachment to a ceiling, screw members detachably secured to the end uprights, longitudinal bars detachably supported upon said screw members, bed frame structures, hangers at each end of said bed frame structures having loops formed at their immediate portions, links loosely mounted upon said longitudinal bars and loosely engaged with the loops for supporting said bed frame structures, means to prevent longitudinal shifting of said links on said bars, and means for locking the beds against swinging motion with relation to said uprights.

1,757,545. ERASER CLEANER. JOHN FREDERICK PALMER, Milwaukee, Wis. Filed Dec. 12, 1927. Serial No. 239,471. 4 Claims. (Cl. 15—7.)



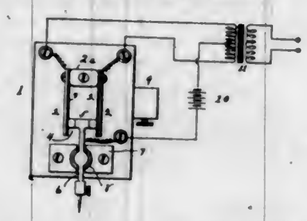
3. A cleaner of the class described, including a main casing, internally threaded lugs carried by the casing adjacent its upper end, a removable cover plate, downturned flanges on the plate embracing the open end of the casing, screw members passing through the plate and engaged with the lugs for adjusting the plate toward and away from the open end of the casing, and coil springs mounted upon the screws and disposed between the cover plate and the lugs.

1,757,546. BATTERY-PLATE-FILLING MACHINE. WILLIAM F. PRICE, Bala, and RUDOLPH H. BECK, Upper Darby, Pa.; said Beck assignor to said Price. Filed Apr. 17, 1929. Serial No. 355,744. 21 Claims. (Cl. 226—39.)



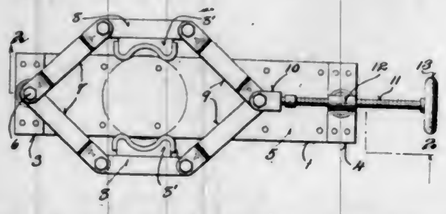
1. A storage battery grid filling machine comprising a bed having raised guides at its lateral edges, a level platen at the front end of said bed, an adjustable gage bar under which the grids are moved, feed rolls to advance the grids, a distributing chamber for the filling material, spaced helical blades rotated in reverse relation in said chamber to force them aterial into the openings in said grids as they advance over the platen, a track on said bed beyond the platen, and means to drive said rolls and blades, whereby the filled grids are moved along the track.

1,757,547. PHONOGRAPH PICK-UP. SAMUEL RUBEN, New York, N. Y. Filed June 12, 1929. Serial No. 370,448. 12 Claims. (Cl. 179—100.41.)



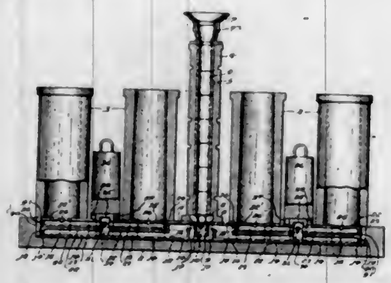
1. A device for translating mechanically recorded vibrations into electrical oscillations comprising a base supporting a rotatably mounted stylus, constituting a vibration-responsive electrode and a cooperating cuprous oxide electrode in surface contact with the other electrode.

1,757,548. VISE. WILLIAM P. SCHISSLER, Milwaukee, Wis. Filed Aug. 2, 1920. Serial No. 383,063. 2 Claims. (Cl. 81—3.3.)



1. A vise comprising a base, a pair of links pivoted horizontally upon said base, gripping jaws carried by said links, a block pivotally mounted on said base, a screw threaded into said block, a block swivelly carried on one end of said screw, and links connecting said gripping jaws with said swivel block.

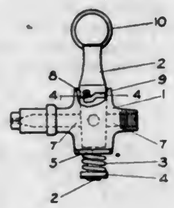
1,757,549. METHOD OF AND APPARATUS FOR CASTING METAL. ALBERT W. SMITH and JAMES M. NELSON, Youngstown, Ohio. Filed Sept. 17, 1928. Serial No. 306,305. 21 Claims. (Cl. 22—141.)



11. An apparatus for casting metal comprising a stool having in its surface a plurality of channels symmetrically arranged with respect to each other and converging to a central sump and a plurality of other channels respectively intersecting said first mentioned channels and of one-half the depth thereof, a pouring fountain disposed above said sump, a plurality of ingot molds disposed about said fountain at different distances therefrom, and refractory material disposed in said channels and forming superimposed passages adapted to conduct molten metal from the sump through said first mentioned channels to certain

of said molds and other passages operative to conduct metal through said second mentioned channels from the first mentioned passages to others of said molds, the passages being so arranged as to cause the metal flowing to each of the molds to traverse the same distance from the sump.

1,757,550. GAS COCK. GEORGE E. SMITH, Baltimore, Md. Filed Nov. 29, 1926. Serial No. 151,311. 2 Claims. (Cl. 251—163.)



1. A cock provided with a barrel and a plug operating therein, a stop secured to said barrel and operating on a cam within said plug, said cam at one portion thereof being parallel to the axis of said plug to latch the same in closed position and at another portion thereof being inclined to lift said plug from its seat and meeting said first portion to permit said stop to lock said plug while operating in said cam.

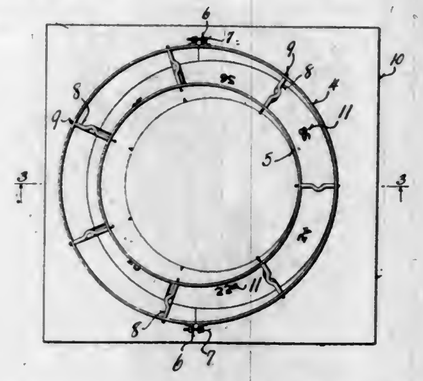
1,757,551. PARLOR-CAR CHAIR. BALDOMERO VIRGILIO SOUTO, New York, N. Y., and WILLIAM PHILLIPS COMSTOCK, Newark, N. J. Filed Mar. 23, 1929. Serial No. 349,400. 15 Claims. (Cl. 155—6.)



6. A parlor car seat comprising in combination, an upholstered seat and upholstered side arms, vertically slidable hinge members connecting the arms with the seats, and toggle levers connecting the seat with the arms to slide the hinges downward as the arms are swung outward on the hinges.

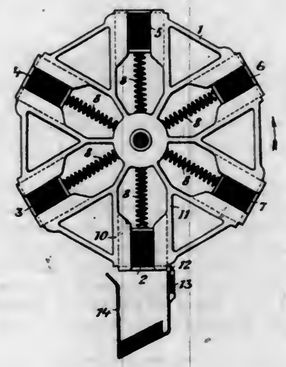
1,757,552. APPARATUS FOR FORMING MANHOLE TOPS. WALDEMAR F. STUEWE, Milwaukee, Wis. Filed July 20, 1928. Serial No. 294,257. 7 Claims. (Cl. 25—124.)

2. A mold for concrete blocks comprising an inner and an outer ring-like member arranged in spaced relation, substantially radial division plates located between said members in spaced relation to each other, and means for temporarily holding said plates in position, both said ring-like members being conical and said outer ring-like member being split, said division plates having a flute therein to produce a depression at one end of one block and a corresponding projection at the other end of the next adjacent block.



3. A mold for concrete blocks comprising an outer and an inner ring-like member having sides making different angles with reference to the vertical, division plates between said ring-like members, and base plates upon which said ring-like members are adapted to rest, said base plates having means thereon for forming a different insignia in each block cast between the ring-like members and the division plates.

1,757,553. MACHINE FOR SHUFFLING CARDS. GUSTAV TAUSCHEK, Vienna, Austria. Filed Aug. 9, 1928, Serial No. 298,458, and in Austria Aug. 13, 1927. 2 Claims. (Cl. 270—58.)

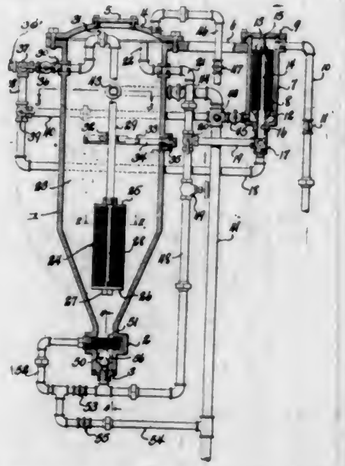


1. A card shuffling machine comprising a card feeding device, including a plurality of card magazines, a card collecting magazine, mechanism associated with said collecting magazine for removing cards from said card magazines, said mechanism and said card magazines being movable relatively to each other whereby cards from different card magazines are removed by said mechanism and deposited in said collecting magazine, and means for automatically controlling the removal of cards in predetermined selectivity from said card magazines by said mechanism.

1,757,554. FILTER. JOSEPH AUBERSCHEK, Milwaukee, Wis. Filed Feb. 27, 1928. Serial No. 257,312. 2 Claims. (Cl. 210—145.)

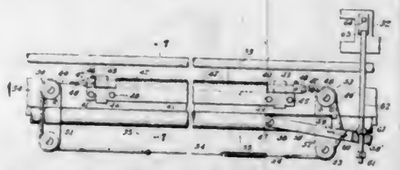
1. A water filter comprising a casing adapted to contain a filtering agent, means for introducing water above said filtering agent, a head located within the casing and

imbedded within the filtering agent, an outlet pipe connected with the interior of the head, a normally rigid member removably connected to the casing and embracing the



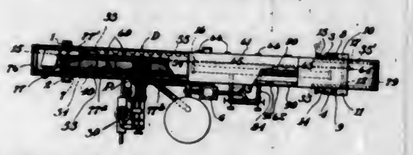
outlet pipe at a point above the filtering agent to break up the filtering agent upon displacement and a waste pipe communicating with the interior of the casing above the filtering agent.

1,757,555. PROCESS AND APPARATUS FOR MAKING DOUBLE PILE FABRICS. THEODOR J. BACHOFEN, Westbrook, Me. Filed May 10, 1929. Serial No. 361,879. 2 Claims. (Cl. 139—21.)



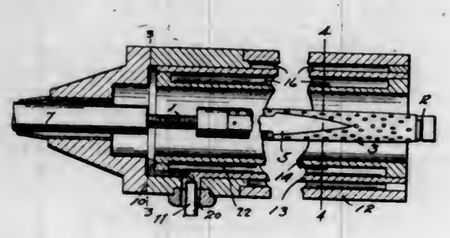
1. In a loom for weaving a double web pile fabric, a knife disposed over the breast-beam of the loom to enter between the webs of the fabric for severing the pile, means for guiding, guarding and supporting said knife, means for maintaining the knife under tension, means actuated by the lay of the loom to transmit reciprocative motion to said knife, and means to adjust the movement of the knife in timed relation to the strokes of said lay.

1,757,556. ICE-CREAM-CONE-BAKING MACHINE. ALBERT BENBINISTI, New York, N. Y., assignor to Nissin Gershon, New York, N. Y. Filed Apr. 27, 1928. Serial No. 273,193. 7 Claims. (Cl. 107—58.)



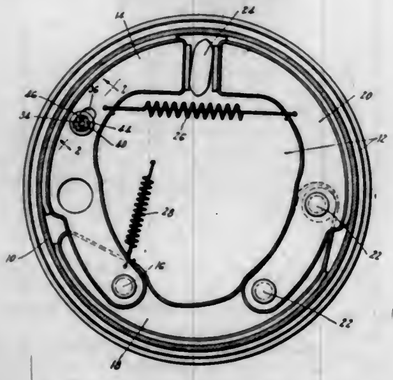
1. In a baking machine, the combination with two sets of rail members, one set disposed adjacent to the other, two sets of transferring rotors rotatable about horizontal axes, a plurality of sets of mold plates, each set being removable independent of each other set and exclusively controlled by said rail members and the engagement with its adjacent sets, the mold plates of each set being connected to one another, one set of rotors being operatively associated with said sets of rail members to engage one of the mold plates of a set to transfer the mold plates from one set of rail members to the second set of rail members, the other set of rotors being operatively associated with said rail members to engage one of the mold plates of a set to transfer the mold plates from the second set of rail members back to the first set of rail members, the sets of mold plates engaging adjacent sets of mold plates when disposed on said rail members so that the actuation by said rotors will cause the advancement of said sets of mold plates along said rail members, and heating chambers associated with said rail members so that the movement of said mold plates along said rail members will cause said mold plates to pass through said heating chambers.

1,757,557. HAIR-WAVING DEVICE. ROMEO O. CARUSO, Reading, Pa. Filed Apr. 6, 1929. Serial No. 352,964. 4 Claims. (Cl. 132—36.)



1. A hair waving device comprising in combination a hollow, perforated curling pin with a liquid absorbent material located therein, and a pair of hair securing clamps pivotally attached to the outer surface thereof and a magnetic induction heater adapted to receive said curling pin, said heater comprising a plurality of tubular casing members located one within the other and having air spaces between them and an induction coil wound around the outer surface of the innermost tubular members.

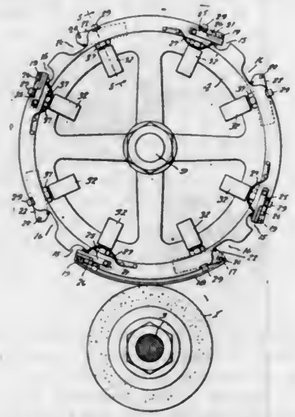
1,757,558. BRAKE. ADIEL Y. DODGE and ROY S. SANFORD, South Bend, Ind., assignors to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Nov. 17, 1927. Serial No. 233,754. 9 Claims. (Cl. 188—78.)



1. A brake comprising, in combination, a drum, a shoe which has a fixed anchor and which is engageable with the drum, an unanchored shoe arranged to force the anchored shoe against the drum in applying the brake,

one of the shoes having a guide part and a device engaging said part and with said anchor arranged to insure substantially simultaneous engagement of the two shoes with the drum.

1,757,559. GRINDING MACHINE. OWEN DOUTT, Chicago, Ill., assignor, by mesne assignments, to General Spring Bumper Corporation, a Corporation of Michigan. Filed Apr. 2, 1928. Serial No. 266,555. 13 Claims. (Cl. 51—108.)



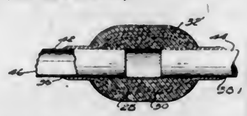
9. A work feeder for a grinding or buffing machine comprising a wheel adapted to support the work on its peripheral surface, and means carried by said wheel for resiliently retaining said work on the surface of the wheel.

1,757,560. STAMP MAGAZINE. WILLIAM CALVANO, New York, N. Y. Filed Jan. 8, 1929. Serial No. 331,134. 3 Claims. (Cl. 206—39.)



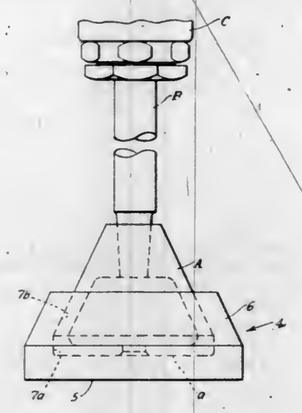
1. In a stamp magazine, a tubular casing, having a slit therein, a spindle rotatably mounted within said casing, means outside the casing for revolving the spindle, a flexible lead strip wound around the spindle and having an end portion made resilient so that, as the spindle is turned, the said end will snap out of said slit.

1,757,561. INSULATING JOINT. WILLIAM W. EMMONS, Newark, N. J. Filed June 27, 1923. Serial No. 647,984. 2 Claims. (Cl. 173—268.)



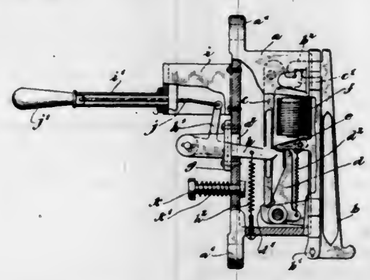
1. A device of the character described comprising a pair of members having flaring inner portions in spaced relation to each other and tubular outer portions of reduced cross-section in axial alignment with each other and adapted to receive conduits of corresponding cross-section, and an integral mass of molded, insulating material disposed exteriorly and interiorly about said flaring portions and connecting the same together; said flaring portions being permanently imbedded in said mass against movement to form therewith a unitary structure; and said mass of insulating material having a passage therethrough registering with the passages through said reduced portions.

1,757,562. CUSHION SHOE FOR RAMMER AND TAMPER BUTTS. CHARLES FEY, Detroit, Mich., assignor to Chicago Pneumatic Tool Company, New York, N. Y., a Corporation of New Jersey. Filed Oct. 4, 1928. Serial No. 310,268. 9 Claims. (Cl. 25—1.)



7. A cushion shoe for a rammer or tamper butt of substantially frustoconical form comprising a member shaped to fit over the exterior of the butt and having a tapered upper portion of elastic material providing a restricted opening, said portion being distortable to permit the insertion of the large end of the butt through said opening and retaining the member on the butt by its own resiliency.

1,757,563. MANUAL RELEASE FOR FIRE-EXTINGUISHING APPARATUS. WALTER H. FREYGANG, Weehawken, N. J., assignor to Walter Kidde & Company, Inc., New York, N. Y., a Corporation of New York. Filed Sept. 13, 1928. Serial No. 305,687. 4 Claims. (Cl. 74—93.)

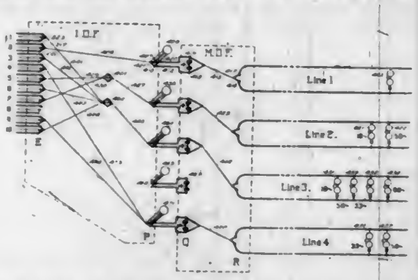


1. A device of the character described comprising a housing, a movable member normally urged to a releasing position, a latch normally preventing such movement, electromagnetic means for disengaging the latch from the movable member, a pivotal lever, an arm on the lever for engaging the latch, and manual means to move the lever to disengage the latch.

1,757,564. TELEPHONE SYSTEM. HERBERT M. FRIENDLY, Portland, Oreg. Filed June 18, 1923. Serial No. 646,119. 41 Claims. (Cl. 179—17.)

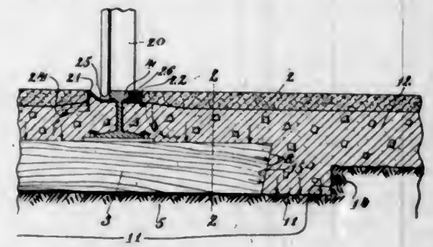
1. In a telephone system, a connector switch, line bank contacts for the connector, signaling contacts for the connector bank corresponding to the line contacts, a plurality of sources of different signaling currents, line and signaling wipers for the connector, a connecting rack for

interchangeably connecting said sources of signaling current and the bank signaling contacts, a connection extending from the signaling wiper to a line wiper for con-



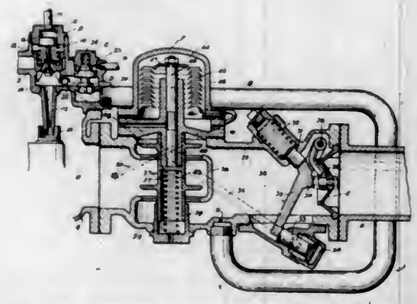
ducting signaling current from the selected bank signaling contact to said line wiper, telephone lines, and a second connecting rack for interchangeably connecting said lines and line contacts.

1,757,565. PAVED OR SIMILAR RAILWAY STRUCTURE. WILLIAM S. GODWIN, Baltimore, Md. Filed Apr. 27, 1929. Serial No. 358,522. 7 Claims. (Cl. 238—9.)



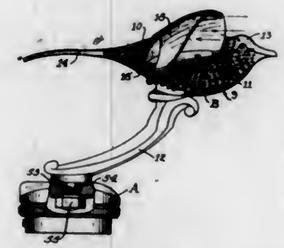
1. The combination in a paved railway structure of resilient ties having a downward taper, rails supported on the ties and concrete between the ties and conforming to the taper whereby the concrete is caused to support the ties, the load on the rails being transmitted through the ties to the concrete by the wedging action of the tapered ties.

1,757,566. EXHAUST-STEAM INJECTOR. JOSEPH F. GRIFFIN, Teaneck, N. J., and ARTHUR WILLIAMS, Flushing, N. Y., assignors to The Superheater Company, New York, N. Y. Filed Sept. 6, 1929. Serial No. 390,818. 11 Claims. (Cl. 103—265.)



1. In the operation of an injector having a high and low pressure element, supplying steam at low pressure to the low pressure element of the injector from the exhaust of a steam engine when it is working and from a steam generator when the engine is not working and regulating automatically the pressure of the steam supplied to the low pressure element of the injector from either the steam generator or exhaust to obtain a substantially constant pressure within the low pressure element irrespective of the higher pressure obtaining in the steam generator or of variation in exhaust pressure.

1,757,567. AUTOMOBILE RADIATOR ORNAMENT. CHARLES L. HAWES, Chicago, Ill., assignor to Christopher Strassheim, Chicago, Ill. Filed June 24, 1929. Serial No. 373,163. 6 Claims. (Cl. 46—40.)

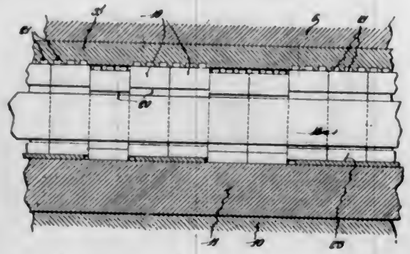


1. A device of the kind described comprising a casing, a pair of wings fastened to a pair of links, a pair of coacting racks pivotally mounted within said casing, and operatively connected to said respective links, a pair of plates within said casing, said plates having a pivotal connection with said respective links, and a slidable element within said casing pivotally connected to said plates.

1,757,568. PREPARATION OF YEAST. GUSTAF OLOF WOLFGANG HEIJKENSKJÖLD, Stockholm, Sweden, assignor to Aktiebolaget Bästa, a Joint Stock Company, Stockholm, Sweden. Filed Mar. 7, 1929, Serial No. 345,240, and in Sweden Mar. 14, 1928. 7 Claims. (Cl. 195—20.)

7. In cultivating yeast and utilizing sulphite waste liquor as main raw material, the method which comprises sowing seed yeast in a fermentation tank in a sugar solution which is more favorable for yeast cultivation than sulphite waste liquor, adding sulphite waste liquor successively and continuing the cultivation, withdrawing yeast containing solution from said tank, separating yeast from said solution and returning such yeast to said tank, while permitting the separated solution to run away.

1,757,569. METHOD OF AND APPARATUS FOR STRAIGHTENING AND SOLIDIFYING ELECTROTYPE PLATES AND THE LIKE. FREDERICK A. HENGST, Racine, Wis. Filed Aug. 9, 1928. Serial No. 298,580. 11 Claims. (Cl. 101—401.3.)

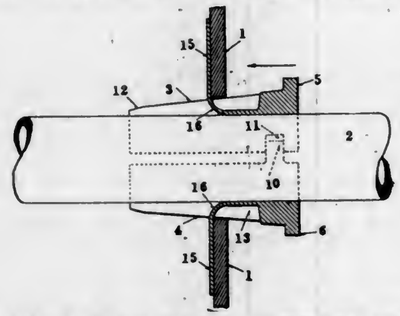


1. In a device of the character described, a plurality of pressure units arranged with their sides abutting to form

substantially a plate having parallel normally continuous surfaces, and means engageable with their abutting sides for retaining the units in said position and permitting a degree of unrestricted longitudinal movement with respect to each other.

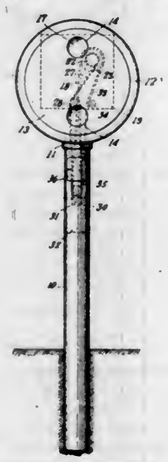
10. A device for use in straightening and solidifying printing plates, comprising a base plate, a frame movable over the base plate, a plurality of pressure units arranged side by side to completely fill the frame, means securing the pressure units in the frame whereby the units are permitted individual longitudinal movement, and means on opposite sides of the frame to align a printing plate engaging one face of the pressure units with a matrix engaging their opposite face, whereby pressure may be applied to the printing plate in accordance with the configuration of the matrix.

1,757,570. PIPE CLAMP. LOUIS A. HOERR, St. Louis, Mo., assignor to Western Railway Equipment Company, St. Louis, Mo., a Corporation of Missouri. Filed Mar. 16, 1928. Serial No. 262,253. 3 Claims. (Cl. 248—31.)



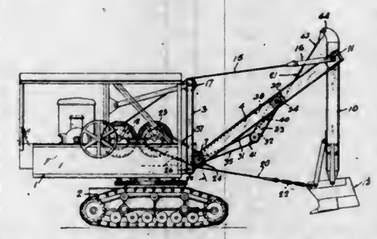
1. A device of class described comprising two members having engagement with each other to prevent relative longitudinal movement but capable of movement toward and away from each other, said members being adapted to surround a pipe and to be driven into an opening in a support, one of said members having an inclined face adapted to cooperate with the edge of the opening to clamp the pipe, and a finger adapted to be bent against the support to hold the device in varying positions in the opening.

1,757,571. AUTOMATIC SIGNAL SERVICE. JAMES M. GREGORY, New York, N. Y. Filed Feb. 6, 1929. Serial No. 337,743. 6 Claims. (Cl. 116—63.)



1. A signal apparatus comprising a hollow post, a cylindrical casing mounted on said post at a transverse axis thereto, a frame fixed in said casing, plates having transparently covered openings set in the ends of said casing, parti-colored discs revoluble in said frame adjacent said plates, mechanism carried by said frame for intermittently imparting a semi-rotation to said discs, and a gravity impelled device for actuating said mechanism.

1,757,572. HOE. GEOFFREY M. HARRY, Milwaukee, Wis., assignor to Harnischfeger Corporation, Milwaukee, Wis., a Corporation of Wisconsin. Filed Oct. 1, 1928. Serial No. 309,514. 15 Claims. (Cl. 214—138.)



1. A power hoe including a platform, a boom mounted on the platform for up and down movement, a dipper stick pivotally mounted on the boom for swinging movement and projecting above and below the same, an excavating bucket carried by the lower end of the dipper stick and facing downwardly toward the ground when the dipper stick is extended and facing toward the machine when the dipper stick is swung toward the machine, a boom hoisting drum mounted on the platform, a boom hoist line wound on the drum and directly connected with the boom for raising and lowering the boom and holding the same in position, a digging drum mounted on the platform, a digging line wound on the digging drum and connected to the excavating bucket, a dipper hoist drum driven from the digging drum, and a dipper hoist line actuated from the dipper hoist drum and connected to the upper end of the dipper stick.

15. An excavating machine of the character described including a boom mounted for up and down movement, a dipper stick mounted on the boom for swinging movement, an excavating bucket carried by the dipper stick, separate hoisting tackle for the boom, a digging line and a dipper hoist line connected with the dipper stick for swinging the same independently of the hoisting tackle for the boom, means for appropriately driving the digging line and the dipper hoist line, and a shiftable tensioning device supported for movement in a predetermined path and shiftable in response to variations in the angularity of the boom and dipper stick and co-operable with one of said lines to maintain the same uniformly taut in all phases of the operation.

1,757,573. METHOD OF MAKING SPRAY GUNS. WALTER A. HEINRICH, St. Louis, Mo., assignor, by mesne assignments, to W. N. Matthews Corporation, St. Louis, Mo., a Corporation of Missouri. Filed Mar. 7, 1921. Serial No. 450,252. 2 Claims. (Cl. 73—51.)

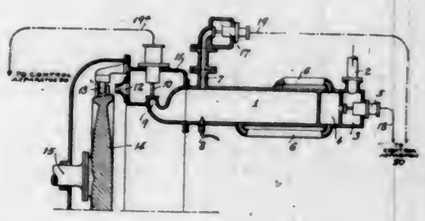


1. The method of ascertaining correct final positions for nozzles and teats of spray guns which comprises applying

a teat to a gun, applying a knife edged test nozzle thereto, connecting the material conduit of the gun to a vacuum register, connecting the air conduit to an air supply, adjusting the knife edged nozzle on the gun until temporary maximum conditions of vacuum are indicated on the register, whereby a correct position relationship is ascertained between the teat and the rear edge of the outlet of the final spraying nozzle to be used thereon, replacing said test nozzle with a final operating spraying nozzle of equivalent diameter and bore, and adjusting the latter to the position relationship as shown by the test nozzle.

2. The method of ascertaining correct final positions for nozzles and teats of spray guns which comprises supplying a teat to a gun, applying a knife edged test nozzle thereto, connecting the material conduit of the gun to a vacuum register, connecting the air conduit to an air supply, adjusting the knife edged nozzle on the gun until temporary maximum conditions of vacuum are indicated on the register, whereby the correct position relationship is ascertained between the teat and the rear edge of the outlet of the final spraying nozzle to be used thereon, replacing said test nozzle with a final operating spraying nozzle of equivalent diameter and bore, and adjusting the latter to the position relationship as shown by the test nozzle, and changing the length of at least one of the members of the final combination of nozzle and teat until further maximum conditions are indicated at said register.

1,757,574. EXPLOSION TURBINE. HANS HOLZWARTH, Dusseldorf, Germany, assignor to Holzwarth Gas Turbine Co., San Francisco, Calif., a Corporation of Delaware. Filed Oct. 2, 1926. Serial No. 139,174. 2 Claims. (Cl. 60—41.)



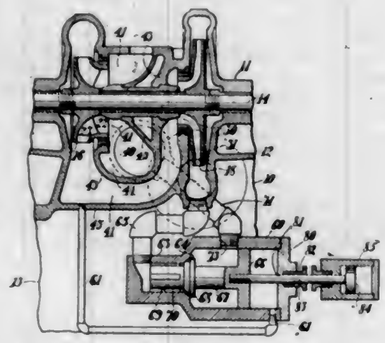
1. In a combustion gas turbine, an explosion chamber adapted to receive charges of air and fuel for explosion therein and provided with an ignition device and with a plurality of intermittently operable fuel inlets, one of which is located in the neighborhood of said ignition device, and regulating means, controlled by the operation of the turbine, for varying the supply of fuel to the other inlets, while the supply of fuel through the inlet in the neighborhood of the ignition device is constant, the ignition device and its associated source of constant fuel supply being located between said other fuel inlets and the outlet of the explosion chamber.

1,757,575. SHOE OR BOOT FOR LABORERS. SHOJIRI ISHIMASHI, Kurume, Fukuoka Ken, Japan. Filed May 5, 1928, Serial No. 275,526, and in Japan Dec. 9, 1927. 1 Claim. (Cl. 36—45.)

A shoe having a rubber sole and heel and a cloth upper, said cloth upper consisting of two side portions joined at their front edges by a medial seam running from the top down over the instep portion of the upper, a rubber foxing extending around the shoe immediately above the sole and heel and covering the lower edge of the upper, and rubber reinforcing strips extending across the lower part of said seam and covering the same above said foxing, one of said reinforcing strips being lunate in form and having its lower edge engaging under the upper edge of the forward part of the foxing and having its rear edge concavely curved, the other of said strips having its lower part formed to fit under the first strip and having its end edges engaging under the upper edge of said foxing at opposite sides of the shoe immediately behind the first strip.



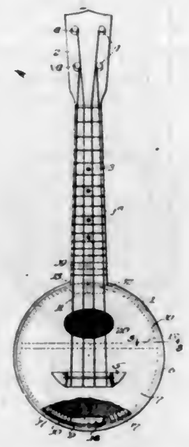
1,757,576. CENTRIFUGAL PUMP. JOHN KIRGAN, Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed Dec. 20, 1928. Serial No. 327,392. 3 Claims. (Cl. 103—97.)



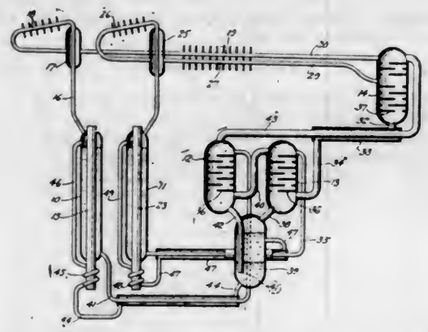
1. A multiple stage pumping system including a pair of impellers, each impeller operating to receive fluid from a fluid inlet and to discharge the same with increased head through a fluid outlet, a connection between the second stage outlet and the first stage inlet, a valve in said connection, said valve being automatically opened upon a reduction in pressure in the first stage fluid outlet to maintain a constant fluid head on the first stage impeller.

1,757,577. STRINGED MUSICAL INSTRUMENT. WALTER I. KIRK, Chicago, Ill. Filed Mar. 24, 1923. Serial No. 627,253. 6 Claims. (Cl. 84—271.)

1. A stringed musical instrument comprising a composite annular wooden body composed of continuous annular wooden rims, each extending through 360°, a flat wooden top secured to and in contact with the upper edge of the wooden rim, a wooden bottom secured to and in contact with the lower edge of the wooden rim, a neck having its end made concave to fit against the convex exterior of the body and mechanical securing means passing through the rim and into the neck to secure body and neck together.



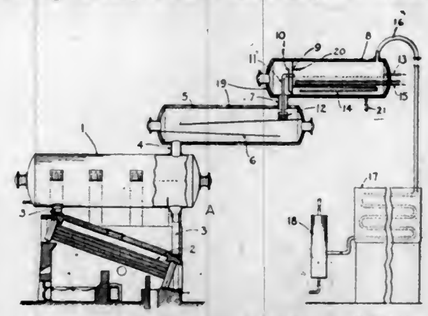
1,757,578. REFRIGERATION. ALVAR LENNING, New York, and DONALD BRANCH KNIGHT, Brooklyn, N. Y., assignors to Electrolux Servel Corporation, New York, N. Y., a Corporation of Delaware. Filed June 3, 1929. Serial No. 367,843. 11 Claims. (Cl. 62—119.5.)



1. That improvement in the art of refrigerating through the agency of an absorption system which comprises simultaneously expelling a plurality of refrigerants from different absorption liquids, simultaneously condensing the refrigerants, evaporating the refrigerants in the presence of each other and in the presence of an inert gas, conducting the gaseous mixture thus formed into the presence of the different absorption liquids to dissolve the refrigerants into the respective absorption liquids and again expelling the refrigerants from the absorption liquids.

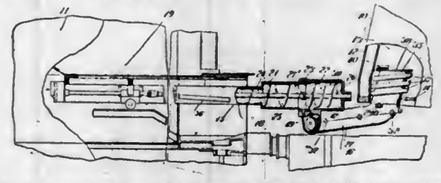
1,757,579. ART OF PRESSURE DISTILLATION. NATHANIEL E. LOOMIS, Elizabeth, N. J., assignor to Standard Oil Development Company, a Corporation of Delaware. Filed May 16, 1922. Serial No. 561,407. 10 Claims. (Cl. 196—48.)

1. A petroleum distilling apparatus which comprises a still, means for exposing films of incoming feed-oil to the outgoing vapors, a feed-oil container, means for bubbling the vapors through the oil in such container and means for controlling the temperature of the oil in said container.



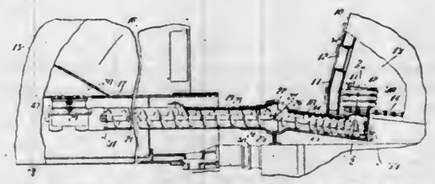
9. Improvement in the art of pressure distillation of petroleum oils for the purpose of producing lighter products which comprises passing the rising vapors over counter currently flowing films of oil, thereby separating out and refluxing the heaviest portions of the vapors, bubbling the remaining vapors through a body of oil, and positively cooling the said body of oil to control the character of vapors escaping therefrom.

1,757,580. INSIDE FEED STOKER. NATHAN M. LOWER, LONNIE EDWARD OSBORNE, and EDWIN ARCHER TURNER, Pittsburgh, Pa., assignors, by mesne assignments, to The Standard Stoker Company Inc., New York, N. Y., a Corporation of Delaware. Filed Jan. 8, 1926. Serial No. 79,976. 5 Claims. (Cl. 110—101.)



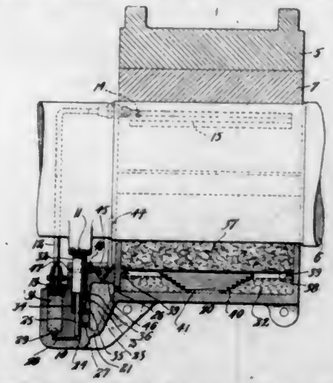
5. In combination, a locomotive having a firebox, means in a rear corner of said firebox for delivering fuel to said corner and elevating it to a substantial height above the normal level of the firebed in said firebox and a nozzle in said corner for scattering said fuel over the fire in aerial paths.

1,757,581. INSIDE FEED STOKER. NATHAN M. LOWER, DAVID F. CRAWFORD, and EDWIN ARCHER TURNER, Pittsburgh, Pa., assignors, by mesne assignments, to The Standard Stoker Company Inc., New York, N. Y., a Corporation of Delaware. Filed Jan. 8, 1926, Serial No. 79,977. Renewed Mar. 22, 1930. 5 Claims. (Cl. 122—4.)



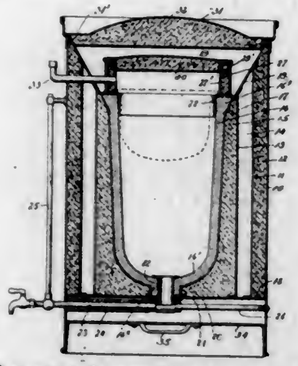
1. In combination, a locomotive having a firebox, a tender, a fuel conveyor for transferring fuel from said tender to said locomotive, a plurality of conduits for transferring the fuel from said conveyor to said firebox, the forward ends of said conduits extending into said firebox and a substantial distance above the grates thereof from which the fuel can be scattered over said grates in aerial paths, and water cooled means for protecting the exposed ends of said conduits from the heat of the burning fuel.

1,757,582. AXLE BOX AND ITS LUBRICATION. FREDERICK W. MARTIN, Brooklyn, and FRANK R. PETERS, New York, N. Y., assignors to Franklin Railway Supply Company, a Corporation of Delaware. Filed Feb. 27, 1923. Serial No. 621,533. 7 Claims. (Cl. 308—84.)



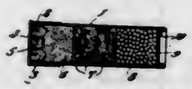
7. Lubricator equipment for locomotive driving box bearings including in combination a relatively narrow groove in the wearing face of the bearing extending substantially from end to end thereof and located along the line of high pressure for normal forward running of the locomotive and means for feeding lubricant under pressure thru said groove to the bearing.

1,757,583. COFFEE RECEPTACLE. FERDINAND NOVOTNY, New York, N. Y. Filed June 26, 1929. Serial No. 373,748. 5 Claims. (Cl. 53—3.)



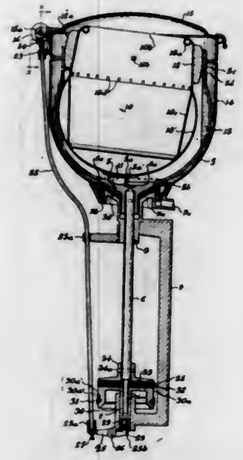
1. A coffee receptacle comprising an outer casing, a plurality of heat insulated walls spaced from each other inside said casing, supporting means for said walls, said walls increasing progressively in height towards the outer casing, covering means for the top edges of said walls, a container mounted interiorly of the innermost wall, heat insulated covering means for said container, inlet and outlet means to said container and an overall cover for said receptacle adapted to rest on said wall top covering means.

1,757,584. SHOT SHELL. JOHN M. OLIN, Alton, Ill., assignor to Western Cartridge Company, East Alton, Ill., a Corporation of Delaware. Filed Oct. 6, 1923, Serial No. 667,075. Renewed Nov. 9, 1925. 7 Claims. (Cl. 102—15.)



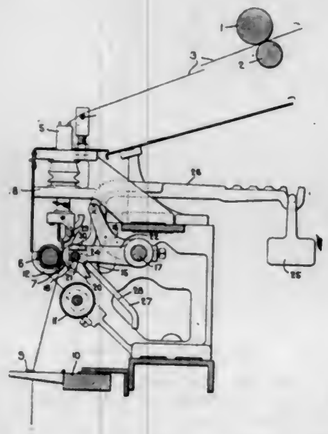
1. A shot shell containing a primer, a propellant charge of granular smokeless powder, a shot charge and wadding between the propellant and shot charges, the powder being subdivided to an extent sufficient and containing a deterrent but sufficiently primed and confined so as to burn progressively when fired in a shot gun.

1,757,585. CENTRIFUGAL DRIER. WILLIAM V. ORR, Cleveland Heights, Ohio. Filed May 6, 1929. Serial No. 360,665. 5 Claims. (Cl. 210—71.)



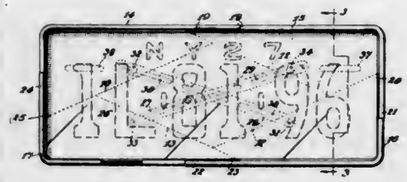
1. A centrifugal apparatus including a spherical vessel rotatable on a vertical axis, a receptacle supported for rotating with a limited tilting movement within the vessel, the vessel forming a spherical-zone channel for receiving liquid, and the exterior of the receptacle forming a spherical zone for displacing liquid in the channel when the receptacle is tilted in the vessel.

1,757,586. DRAFT-ROLL CONSTRUCTION FOR SPINNING FRAMES. HENRY A. OWEN, Foxboro, Mass., assignor to Davis & Furber Machine Company, North Andover, Mass., a Corporation of Massachusetts. Filed Dec. 16, 1929. Serial No. 414,307. 10 Claims. (Cl. 19—130.)



1. In a spinning frame, a draft mechanism comprising upper feed rolls, a lower driven draft roll, a removable presser roll, a stirrup acting yieldingly to move the presser roll into engagement with the draft roll, means to induce a false twist in the roving during the drawing operation, and fixed supports on the frame having downwardly and rearwardly extending bearing faces upon which the ends of the roll rest when in running position, and over which the roll moves by gravity when the pressure of the stirrup is relieved.

1,757,587. LICENSE-PLATE HOLDER. PAUL W. QUINN, Brooklyn, N. Y. Filed Aug. 28, 1928. Serial No. 302,454. 4 Claims. (Cl. 40—155.)

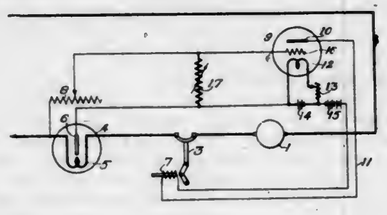


1. A license plate holder comprising four triangular sections each having two of its edges provided with a rolled rim, the end portion of the rolled rim edge of one section being adapted to telescope with the end portion of the rolled rim edge of another section whereby the sections are adjustable both longitudinally and transversely to receive a license plate within the rolled rim edges thereof, the license plate being held in position by the rolled rim edges of the sections of the holder.

1,757,588. PROCESS OF PURIFYING ROSINS. ROBERT C. PALMER, JOHN L. BURDA, and ANTHONY F. OLIVER, Pensacola, Fla., assignors to The Newport Company, Carrollville, Wis., a Corporation of Delaware. Filed Jan. 16, 1928. Serial No. 247,255. 6 Claims. (Cl. 87—2.)

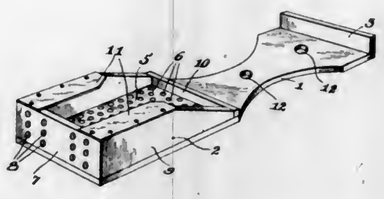
1. The process of decolorizing rosins, which comprises treating a solution of impure rosin in a relatively volatile hydrocarbon with a phenolic body previously acidified with a relatively small quantity of an acid chemically inactive towards the constituents of the solution to extract the impurities, separating the phenolic body containing dissolved impurities and recovering the purified rosin from the rosin solution.

1,757,589. THERMAL RELAY. ABRAHAM PRESS, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Aug. 30, 1920. Serial No. 407,008. 1 Claim. (Cl. 175—294.)



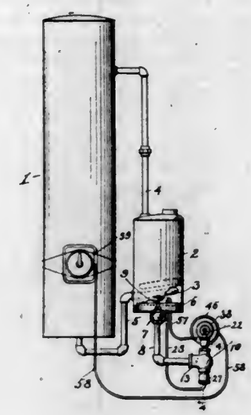
In combination, a thermionic device, means including an adjustable resistor having a negative temperature coefficient of resistance for controlling the energization of said device, a second thermionic device, means whereby a change in a condition of said first mentioned device produces a greater change in said second device, and a circuit interrupter controlled by said second device.

1,757,590. PORTABLE SOAP HOLDER. MATTHEW J. ROONEY, New York, N. Y. Filed June 21, 1928. Serial No. 287,113. 3 Claims. (Cl. 45—28.)



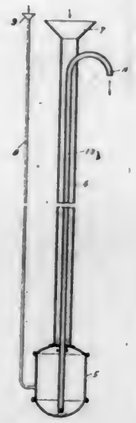
1. A portable soap holder having a perforated bottom plate a perforated end plate attached thereto, side plates attached to said bottom plate, and flexible retaining means attached to said side and end plates for retaining soap within said holder.

1,757,591. CONTROLLING DEVICE FOR GAS BURNERS. RALPH R. ROOT, Lakewood, Ohio. Filed Feb. 28, 1927. Serial No. 171,525. 6 Claims. (Cl. 236—79.)



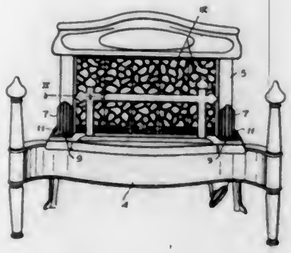
1. In combination with a burner having means for igniting gas supplied thereto, a pipe line for gas under pressure having an outlet passage leading to said burner and a waste outlet passage, a valve controlled by the pressure in the waste outlet passage for opening and closing the passage to the burner, and a thermally controlled device for varying the pressure in the waste outlet passage comprising a pair of diaphragms, one having an aperture and a valve seat surrounding the aperture and the other a valve member adapted to engage said seat and close said aperture, and pressure chambers on the sides of the diaphragms opposite the valve seat and valve, one communicating with the waste gas outlet and the other containing an expansible fluid medium responsive to changes in temperature.

1,757,592. AUTOCLAVE AND METHOD OF OPERATING SAME. HENRY M. SCHLEICHER, Monterrey, Mexico. Filed Nov. 6, 1925. Serial No. 67,225. 5 Claims. (Cl. 23—268.)



1. The method of conducting chemical reactions under pressure, which comprises continuously supplying a liquid to the reaction chamber, continuously withdrawing the product of the reaction in conductive heat-exchange relation with the entering liquid and maintaining the pressure in the chamber by a hydrostatic head of the liquid.

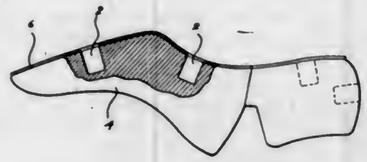
1,757,593. STOVE. WILLIAM L. SHARP, Steubenville, Ohio, assignor to The Ohio Foundry & Manufacturing Company, Steubenville, Ohio, a Corporation of Ohio. Filed Sept. 25, 1929. Serial No. 395,035. 6 Claims. (Cl. 126—92.)



1. Heater structure comprising a frame, a backwall supported on said frame and having horizontally offset portions, and clamping plates detachably secured to said frame and having horizontally offset portions in engagement with the first-named offset portions.

1,757,594. REPAIRED LAST. WESLEY J. SHAW, Haverhill, Mass., assignor to New England Wood Heel Co., Haverhill, Mass., a Corporation of Massachusetts. Filed Sept. 6, 1927. Serial No. 217,615. 1 Claim. (Cl. 12—140.)

A last having a recess and an elastic plug in the recess to provide a surface through which nails may be driven, the rubber being soft enough to permit nails to be driven thereinto, but sufficiently dense so that nails driven thereinto form holes of relatively small dimensions when withdrawn from the plug, and the elasticity of the rubber being



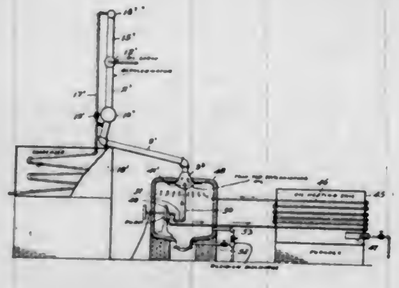
such that when a nail is removed therefrom the rubber of the plug closes up over the hole formed by the removal nail so as practically to destroy all traces of the hole.

1,757,595. DENTAL ROOT-CANAL POINT. LOUIS R. SIEGEL, Cleveland, Ohio. Filed Nov. 30, 1928. Serial No. 322,648. 3 Claims. (Cl. 32—32.)



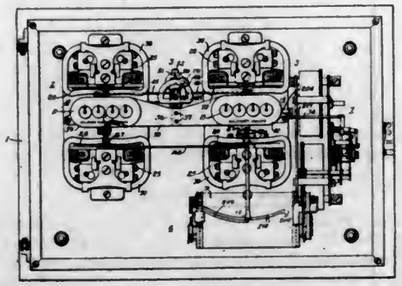
1. A root canal point provided with a groove.

1,757,596. METHOD AND APPARATUS FOR PROCESSING HEAVY OILS. ARTHUR J. SLAGTER, Muskogee, Okla., assignor to Transcontinental Oil Company, Pittsburgh, Pa., a Corporation of Delaware. Filed Mar. 28, 1924. Serial No. 702,565. 9 Claims. (Cl. 196—48.)



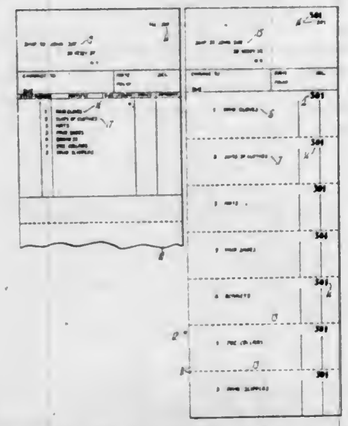
1. A method of treating petroleum oil which consists in heating a body of oil to a cracking temperature while subjecting it to pressure materially above atmospheric pressure, continuously withdrawing vaporous products resulting from said heating and slightly cooling the same while maintaining said pressure, continuously mixing said products with fresh oil and returning the liquid products of said mixing back to the body of oil forcing said liquid products to the hottest part of the body, and subjecting the vaporous products to gradual cooling while maintaining said pressure and further cooling said vaporous products after a reduction in pressure.

1,757,597. MEASURING INSTRUMENT. BENJAMIN H. SMITH, Swissvale, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Jan. 2, 1924. Serial No. 683,964. 29 Claims. (Cl. 234—5.5.)



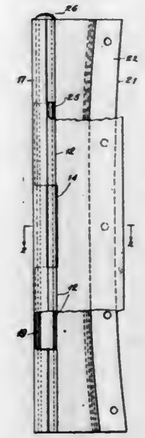
1. A measuring instrument comprising a plurality of actuating means responsive to different quantities, translating means operated by said means, and an indicating member periodically affected by said translating means and one of said actuating means.

1,757,598. MANIFOLDING SHEET. JESSE A. B. SMITH, Stamford, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Original application filed Sept. 5, 1922, Serial No. 586,064, now Patent No. 1,562,524, dated Nov. 24, 1925. Divided and this application filed July 14, 1925. Serial No. 43,498. 2 Claims. (Cl. 282—27.)



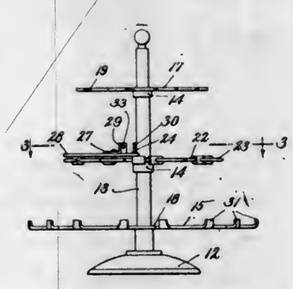
2. A sheet for use in type-manifolding both a bill of many items and a set of order-distributors and parcel-collectors, said sheet consisting of a long set of coupons joined to one another by weakened lines, and being appropriately identified by the same number upon each thereof to agree with the number on the bill, said coupon-sheet appropriately printed with account-identifying headings and data to agree with the heading on the bill, the height of each coupon being of many times the pitch of the line-spacing usually employed upon a bill, and being sufficiently ample to enable the coupon to be usable as a ticket for use in making up and then accompanying the parcel to which it belongs, to serve as an identifying slip thereon, said coupon-sheet having a top extension upon which its said heading is printed, said extension serving as a handhold to permit the sheet to be grasped thereby to advance it independently of the bill-sheet to effect wide spacing on the coupon-sheet of lines manifolded with ordinary spacing upon the bill-sheet.

1,757,599. HINGE. JOSEPH SOSS, Brooklyn, N. Y. Filed Sept. 20, 1927. Serial No. 220,676. 3 Claims. (Cl. 16—135.)



1. In a hinge, one of the butts of which is fashioned from two sheet metal bodies, one of said bodies being fashioned to form a plurality of cylindrical pintle bearings spaced longitudinally of one end thereof, the other body being fashioned to form a curved hood portion substantially encircling said pintle bearings to form of said bodies when secured together, a butt having a curved hood portion with bearings spaced longitudinally of the hood portion and recesses intermediate said bearings to receive the pintle bearings of the other butt of the hinge, means on said hood portion interposed between the same and the pintle bearings of said butt to offset the same with reference to said hood portion and to reinforce and strengthen the hood portion and said bearings, said means comprising flanges at the free edge of the hood portion and turned inwardly upon the inner face of said hood portion, both bodies of the butt extending to form an attaching plate portion, said attaching plate portion being offset with respect to the shank, and part of said offset portion being curved in the longitudinal plane of the butt.

1,757,600. GUN RACK. WILLIAM J. SPROWLE, Hudson, N. H. Filed June 24, 1929. Serial No. 373,210. 5 Claims. (Cl. 211—64.)



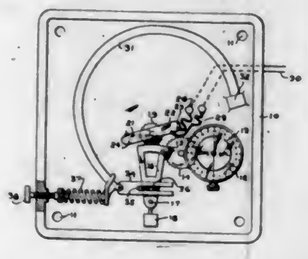
1. A rack of the character described, having an upper series of stationary sockets and a corresponding lower series of stationary sockets, and an intermediate rotatable member having means thereon to engage articles mounted in said sockets when said member is rotated in one direction.

1,757,601. WELDING ROD. WINSTON F. STOODY, SHELLEY M. STOODY, and NORMAN W. COLE, Whittier, Calif., assignors to Stoody Company, Whittier, Calif., a Corporation of California. Filed Jan. 30, 1928. Serial No. 250,697. 7 Claims. (Cl. 219—8.)



1. A welding rod comprising a tubular container closed at one end and made of mild steel, and pieces of a hard alloy having a higher melting point which will not be so materially affected by a welding temperature as to lose its original identity and mix with the mild steel, contained in said container.

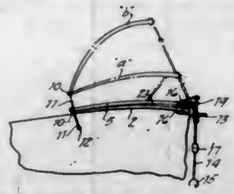
1,757,602. CONTROL DEVICE. MATSON C. TERRY, Philadelphia, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Sept. 8, 1924. Serial No. 736,658. 6 Claims. (Cl. 200—35.)



5. Controlling means for an electrical circuit comprising a single switch for the circuit, a mechanism movable in one direction to close the switch, time controlled means for positively actuating said mechanism to operate in the direction only for closing the switch, temperature responsive means, and one-way motion transmitting means between the temperature responsive means and the mechanism for causing said mechanism to operate to open the switch.

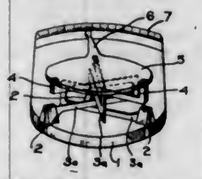
1,757,603. AIRPLANE CONSTRUCTION. CARL G. THOMPSON, St. Louis, Mo. Filed Aug. 26, 1927. Serial No. 215,574. 4 Claims. (Cl. 244—12.)

2. The combination with an airplane having a stationary wing, of an auxiliary wing movable relative thereto and normally superimposed thereon, and means for controlling the movement of the latter, said means comprising element interconnecting only the front and rear edges respectively



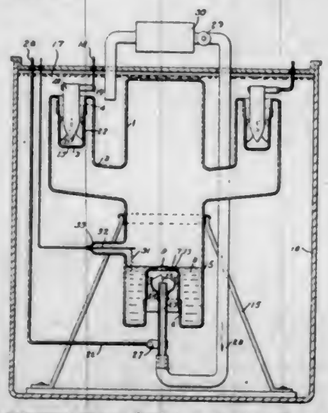
of the two wings but permitting a predetermined amount of separation between said front and rear edges of both wings.

1,757,604. PIVOT STRUCTURE. WILLIAM E. TRUMPLER, New York, N. Y., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 21, 1927. Serial No. 177,024. 8 Claims. (Cl. 73—151.)



1. The combination with a member, of means for supporting said member for oscillatory movement comprising a plurality of web-like, substantially U-shaped, resilient members disposed in intersecting planes and each freely assuming positions simulating arcs of a circle upon movement of said deflecting member.

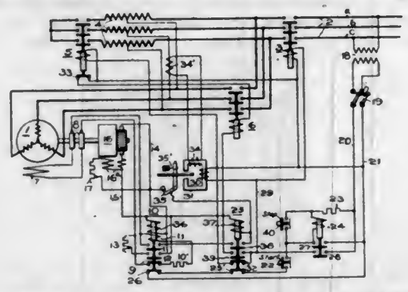
1,757,605. MERCURY ARC RECTIFIER. DAYTON ULREY, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Sept. 28, 1923. Serial No. 665,407. 7 Claims. (Cl. 250—27.5.)



1. In a mercury vapor device, a glass wall, an electrode comprising a portion welded to said glass wall, said portion having parts detrimentally affected upon exposure to mercury, and a plating of nickel covering said parts.

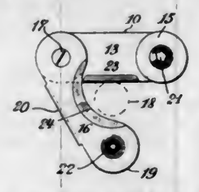
1,757,606. MOTOR-STARTING SYSTEM. CHARLES P. WEST, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Dec. 9, 1927. Serial No. 238,811. 11 Claims. (Cl. 172—289.)

1. In a starting system for an alternating-current motor, a source of current therefor having low-voltage and full-voltage taps, and means responsive to the power factor of the motor-starting current for automatically controlling



the transfer of the motor armature from the low-voltage taps to the full-voltage taps when the motor reaches synchronous speed.

1,757,607. CIGAR CUTTER. SAMUEL ZULLO, Jersey City, N. J. Filed Apr. 18, 1928. Serial No. 271,086. 1 Claim. (Cl. 131—64.)



A device of the character described comprising a blade provided with a curved cutting portion intermediate the ends thereof, a box for supporting said blade, means for pivoting the blade at its one end on the outside of the box flat against one end thereof, a cutting edge on the box cooperating with the cutting portion on the blade, a catch element on the box adapted to engage a cooperating catch element in the blade to maintain the latter in normal non-cutting position on the box and a stop on the blade adapted to engage the side of the box to cause the said two catch elements to engage each other and to serve as a finger rest on said blade during a cutting operation.

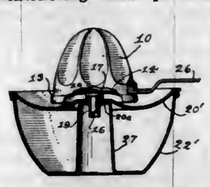
1,757,608. FLIGHT CONVEYER. HARRY H. BARBER and PAUL A. SMITH, Aurora, Ill., assignors to Barber-Greene Company, Aurora, Ill., a Corporation of Illinois. Filed Dec. 14, 1927. Serial No. 239,834. 3 Claims. (Cl. 198—195.)



1. In a conveyer comprising spaced chains, a lug projecting laterally from each chain, each lug having a vertical rib and a tapered pivot, a connector having apertures for engaging said pivots, and elevated ends with grooves for receiving said ribs, and angular pins extending thru said pivot studs above said connector for retaining the latter on said studs for swivelling action.

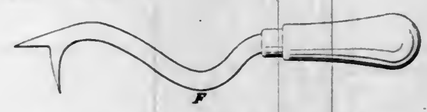
1,757,609. FRUIT-JUICE EXTRACTOR. CHARLES E. BEARDSLEY and EDWARD P. WALLACE, Waterbury, Conn., assignors to The Beardsley & Wolcott Manufacturing Company, Waterbury, Conn., a Corporation of Connecticut. Filed Mar. 13, 1928. Serial No. 261,243. 3 Claims. (Cl. 146—3.)

1. A fruit-juice extractor including a dish to receive the juice, a strainer adapted to rest on the top of said dish and having a raised central portion with an opening therein, a juice-extracting head pivotally supported at



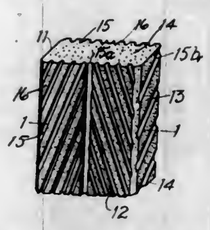
said opening, and a handle connected with the base of said head and projecting laterally therefrom beyond the edge of the strainer.

1,757,610. SAWYER'S HOOK. EYVIND BERGDAL, Seattle, Wash. Filed Apr. 14, 1928. Serial No. 270,110. 1 Claim. (Cl. 294—17.)



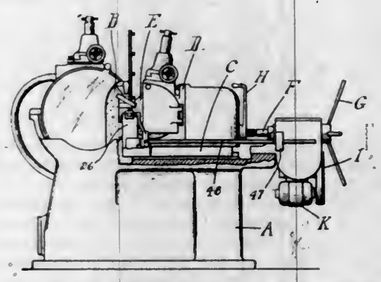
A sawyer's hook having a projection on the middle part of the stem of the said hook, said projection, when brought into contact with the material to which the said hook is applied, forming a fulcrum around which the said hook may rotate in the manner of a lever of the first class.

1,757,611. CURRENT-COLLECTING MECHANISM. ERIC ALTON BINNEY, San Diego, Calif. Filed July 27, 1926. Serial No. 125,304. 9 Claims. (Cl. 171—328.)



1. In an electric current collecting brush mechanism, a brush member provided with a plurality of superficial depressions in its outer surface for eliminating deleterious matter.

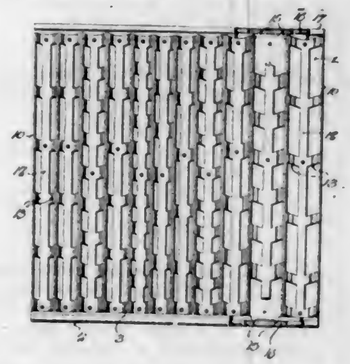
1,757,612. CENTERLESS GRINDING MACHINERY. GEORGE W. BINNS, Cincinnati, and WALTER D. ARCHEA, Norwood, Ohio, assignors, by mesne assignments, to Cincinnati Grinders Incorporated, Cincinnati, Ohio, a Corporation of Ohio. Filed Aug. 24, 1925. Serial No. 52,056. 11 Claims. (Cl. 51—103.)



1. A centerless grinder including a grinding wheel having a centrally recessed peripheral face with projecting side

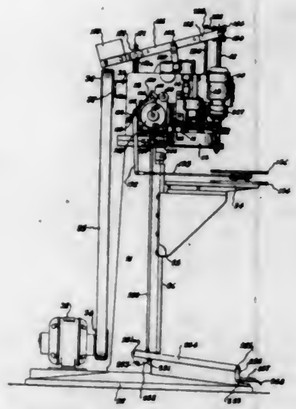
flanges and a regulating wheel having a plain portion opposing the centrally recessed face of the grinding wheel and having a beveled portion adjacent one of the flanges of the grinding wheel as an entrant guide for work introduced between the wheels and means for axially shifting a work piece transversely of the face of the wheels.

1,757,613. COIN TRAY. EDWARD J. BRANDT, Watertown, Wis., assignor to Brandt Automatic Cashier Co., Watertown, Wis. Filed Sept. 24, 1927. Serial No. 221,832. 8 Claims. (Cl. 133—11.)



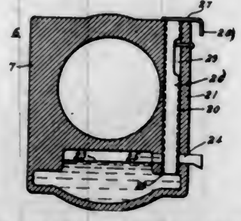
1. A coin tray comprising a plate, a plurality of readily detachable individual troughs for receiving stacks of coins of predetermined number, and means carried by said plates for detachably locking said troughs in various assembled positions on the plate.

1,757,614. SCREW-DRIVING MACHINE. GRA C. BROWN and GREGORY F. MCNULTY, Massillon, Ohio, assignors to The Reynolds Machine Company, Massillon, Ohio, a Corporation of Ohio. Filed Dec. 14, 1928. Serial No. 325,983. 16 Claims. (Cl. 144—32.)



1. A screw driving machine including a magazine for containing screws, an escapement mechanism immediately adjacent to the magazine for feeding screws from the magazine, a foot arranged to come to a position immediately adjacent to the escapement mechanism for receiving the screws from the escapement mechanism and conveying them directly to the work, a screw driver for driving the screws into the work, and means for lowering the foot and screw driver to the work immediately after the delivery of a screw to the foot.

1,757,615. PLUNGER OVERFLOW FOR SEALED SLEEVE BEARINGS. JOHN L. BROWN, Verona, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Aug. 25, 1927. Serial No. 215,344. 7 Claims. (Cl. 308—126.)



1. A bearing having an oil reservoir in the bottom thereof and having a wall member provided with a substantially vertical passageway extending from a top portion of the bearing housing to a point below the normal oil level within said reservoir, openings in the walls of said passageway communicating with the outside of the bearing and the inside of said reservoir, both of said openings being at the top of the normal oil level therein, and a vertically movable valve mechanism for substantially sealing both of said openings in one position and for uncovering both of said openings in another position.

1,757,616. HOPPER, DRIER, AND ROASTER. JOHN P. BUNCE, Greenford, England. Filed June 10, 1927. Serial No. 197,970. 5 Claims. (Cl. 34—23.)



1. Apparatus of the class described comprising a vertical cylindrical stack composed of a plurality of superimposed sections, apertured diaphragms separating the sections, the side walls of the lowermost section above the lowermost diaphragm being vertical and having openings therethrough, a jacket surrounding the opening, means to pass a heated gas into said jacket and through the opening into the lowermost section, means to withdraw gas from the uppermost section, an entrance for material into the uppermost section, a discharge duct disposed beneath the diaphragm of the lowermost section, and armed spiders rotatable over said diaphragms and the apertures therein.

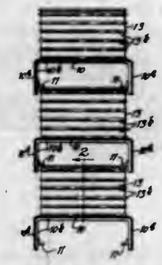
1,757,617. MOVABLE LAMP SUPPORT. NILS G. CARLSON, South Bend, Ind. Filed Mar. 20, 1928. Serial No 263,188. 1 Claim. (Cl. 240—52.)

A movable lamp support including in combination, a rail, a trolley member movably positioned on the rail, and means for suspending a lamp from the trolley member, said means comprising a pair of juxtaposed elements forming the trolley member, an electric duplex lead, also depending from the trolley member a manually operated depending switch at the end of the duplex lead, the said trolley member having two intersecting openings adapted to house the electric duplex lead, rivets permanently con-



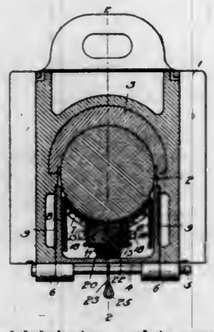
necting the two elements, one portion of said duplex lead supporting the lamp and the other portion supporting said manually operated switch, said last-named portion also comprising means for manually shifting the lamp along the rail.

1,757,618. STORAGE BOX. CARL L. CLARK, Warren, Ohio, assignor to The Youngstown Pressed Steel Company, Warren, Ohio, a Corporation of Ohio. Filed May 18, 1929. Serial No. 364,280. 2 Claims. (Cl. 220—97.)



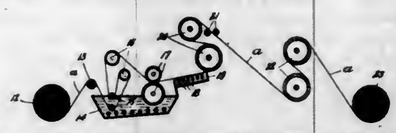
1. A unit, including a flat platform with opposite marginal edges bent downwardly and provided with inwardly projecting members on their inner sides, and a four-walled frame mounted on the platform, a plurality of said units adapted to be stacked one on another by resting said inwardly projecting members of one unit on the upper edges of the frame of another unit.

1,757,619. JOURNAL-BOX LUBRICATOR. HARRY W. CODDINGTON and HARRY F. CUNNING, Roanoke, Va. Filed Sept. 15, 1925. Serial No. 56,441. 16 Claims. (Cl. 308—88.)



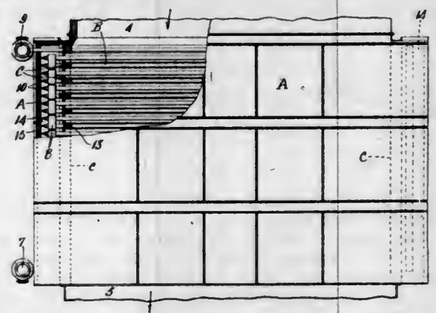
1. In a journal lubricator, a plate curved for surrounding the lower surface of a journal, a portion of said plate being foraminous for feeding lubricating material to the journal, and adjacent portions thereof being grooved for distributing said lubricating material.

1,757,620. METHOD OF AND APPARATUS FOR PRODUCING TRANSPARENT WAXED PAPER. JOHN DECKER and ARTHUR B. GREEN, Middletown, Ohio, and VASCO E. NUNEZ, Nashua, N. H., assignors to Nashua Gummed & Coated Paper Company, Nashua, N. H., a Corporation of Massachusetts. Filed Feb. 9, 1927, Serial No. 167,027. Renewed Mar. 10, 1930. 9 Claims. (Cl. 91—70.)



2. The method of treating waxed paper to increase its transparency and avoid a mottled appearance thereof, said method consisting in subjecting said paper to a degree of heat but little short of causing combustion, and then cooling the wax and paper.

1,757,621. ECONOMIZER. OTTO DE LORENZI, Maplewood, N. J., assignor to International Combustion Engineering Corporation, New York, N. Y., a Corporation of Delaware. Filed Oct. 1, 1927. Serial No. 223,301. 3 Claims. (Cl. 257—255.)



1. An economizer including a casing having a gas inlet and a gas outlet, a plurality of rows of tubes in said casing connected for back and forth traverse therethrough, and means for supporting the tubes of said rows comprising flanged and ribbed tube sheets located adjacent the ends of the tubes, together with filling material in the pockets provided by the flanges and ribs of the tube sheets.

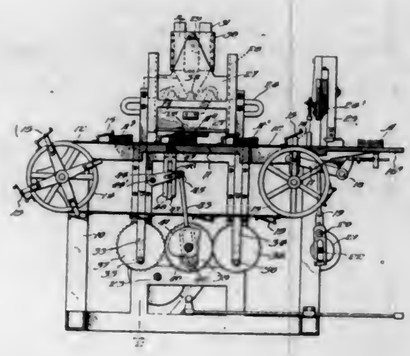
1,757,622. NECKTIE HOLDER AND STRETCHER. JOHN J. FITZGERALD, Everett, Mass. Filed Jan. 7, 1927. Serial No. 159,691. 1 Claim. (Cl. 223—19.)



A holder and stretcher for neckties comprising a member provided with longitudinal edges tapering toward an end

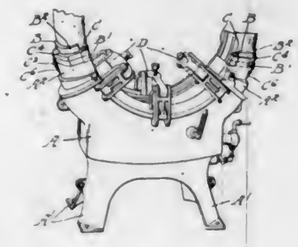
thereof and adapted to engage the longitudinal edge portions of a necktie upon the interior thereof and stretch said necktie, said member also embodying therein a plurality of co-operating enclosed parallel slots to hold a loose end portion of said necktie.

1,757,623. BOOK-TRIMMING MACHINE. PHILIP A. FRAZIER, Chicago, Ill., assignor to R. R. Donnelley & Sons Co., a Corporation of Illinois. Filed May 28, 1927. Serial No. 194,948. 5 Claims. (Cl. 164—54.)



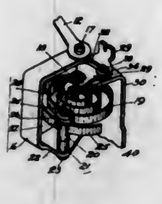
1. In a book-trimming machine, intermittently operating book-feeding means, a knife for trimming the book at an edge thereof extending at an angle to the bound edge of the book, a pressure-pad for holding the book while being trimmed, said pad having its presser face of such shape as to approximately fit the contour of the top of the book against which it is pressed, and means for accurately positioning the book beneath said pad.

1,757,624. VULCANIZER. LEO O. GRANGE, Chicago, Ill., assignor to Walter J. Jarratt, Chicago, Ill. Filed May 23, 1927. Serial No. 193,465. 8 Claims. (Cl. 18—18.)



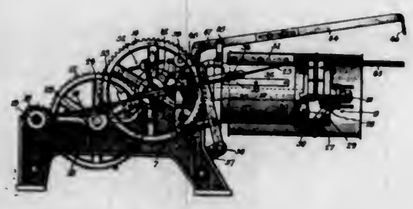
1. An end block for application to a retreading device and matrix, which includes a member composed of heat insulating material, and a body member secured thereto and insulated therefrom by an air space, headed abutment members fixed upon the retreading device, the end block being notched to receive them, an additional locking member positioned elsewhere upon the end block and a cooperating member positioned upon the retreading device.

1,757,625. ELECTRICAL MEASURING INSTRUMENT. EMIL H. GRIBACH, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Oct. 20, 1927. Serial No. 227,438. 5 Claims. (Cl. 171—95.)



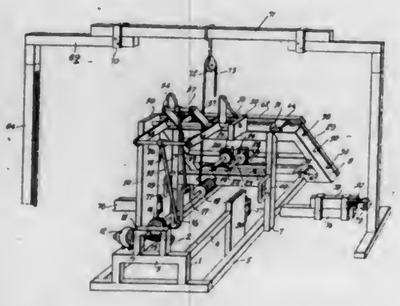
1. In combination, a plurality of relatively movable members, a spring for opposing motion between said members, and a freely rotatable binding post for securing said spring to one of said members.

1,757,626. METAL-WORKING MACHINE. CARL C. GROTNES, Chicago, Ill. Filed Jan. 6, 1928. Serial No. 244,817. 13 Claims. (Cl. 153—48.)



1. A machine for forming beads in a metallic drum having, in combination, means for supporting the drum, means operative in successive cycles to form beads at spaced points in the drum, means operating automatically on one end of the drum to move the drum after the first operating cycle, and means arranged to engage the other end of the drum for limiting such movement of the drum so as to position it for the second operating cycle.

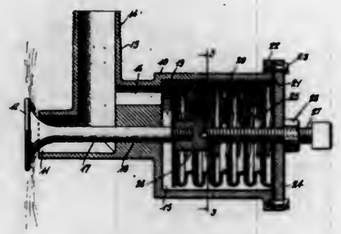
1,757,627. WALL-PLASTERING MACHINE. ANNIBALE A. GUERINI, New York, N. Y. Filed Apr. 4, 1927. Serial No. 180,680. 20 Claims. (Cl. 72—130.)



17. In a plastering machine, a plastering board, means for supporting the plastering board in inclined position in

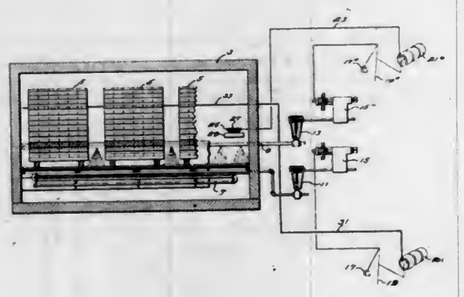
spaced relation to the wall to be plastered, and tamping devices reciprocating along a surface of the board toward and away from the wall to be covered for moving the plaster down the inclined board to the wall.

1,757,628. SPRAY DEVICE. ARTHUR B. HALE, Tampa, Fla. Filed Sept. 27, 1928. Serial No. 308,598. 5 Claims. (Cl. 299—123.)



1. A spray device comprising in combination, a spray orifice, a spray head slidably positioned therein, a piston rigidly secured to said spray head, means whereby increase of pressure within said device may act upon said piston to draw said head toward said orifice, and means to prevent the complete closure of the orifice by said head.

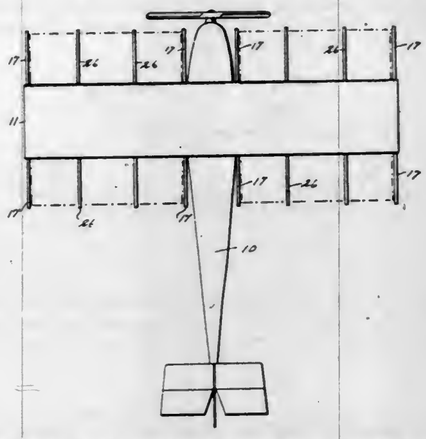
1,757,629. DRY KILN. MALCOLM B. HALL, Foxboro, Mass., assignor to The Foxboro Company, Foxboro, Mass., a Corporation of Massachusetts. Filed Sept. 7, 1927. Serial No. 217,977. 1 Claim. (Cl. 34—46.)



A dry kiln having means for manifesting humidity conditions therein comprising pressure-operated elements adapted to respond to the wet and dry bulb temperature respectively and including a fine-gage tube filled with liquid which vaporizes within the range of temperature which the kiln has in use and extending substantially throughout the length of the interior of the kiln and in communication with the second of said elements and constituting in itself the source of actuating pressure therefor.

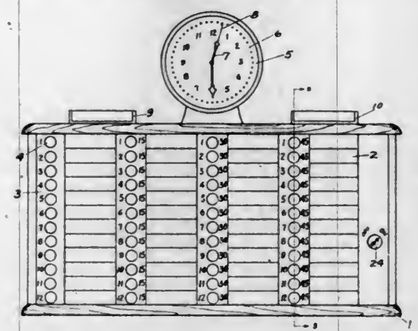
1,757,630. SUSTAINING ATTACHMENT FOR AIRPLANES. GUSTAF HALLDIN, Indiana, Pa., assignor of one-half to Clarence W. Clark, Indiana, Pa. Filed Aug. 28, 1928. Serial No. 302,561. 3 Claims. (Cl. 244—12.)

1. The combination with an airplane having a sustaining wing, of spring rollers mounted beneath the wing adjacent the entering and exit edges thereof, webs wound upon said rollers, fixed supports extending outward from beneath the wing, transversely extending bars attached



to the ends of the webs and guided upon said supports, and manually operable means for pulling said bars along the supports to thereby unroll and spread the webs.

1,757,631. SIGNAL REMINDING MECHANISM. CYRIL HAMLIN, Newark, N. J. Filed June 23, 1928. Serial No. 287,724. 5 Claims. (Cl. 161—3.)

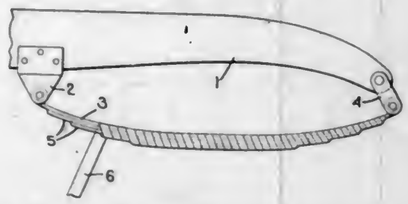


1. In a mechanism of the class described, a cabinet having a plurality of signals; a time-piece having stationary contacts in number at least as many as said signals, and a movable member carrying a contact to successively engage said stationary contacts; a switching device for each signal comprising; an elongated movable member carrying the signal at one end and switch contacts at the other end, said switch contacts being electrically connected with said signal; stationary contacts to engage said switch contacts when said movable member is in one set position and a source of current, said stationary contacts being connected to parts of a circuit which includes the source of current and the time-piece contacts as its said movable member successively engages said contacts.

1,757,632. TREATMENT OF LATEX. EARDLEY HAZELL, New York, N. Y., assignor to The Naugatuck Chemical Company, Naugatuck, Conn., a Corporation of Connecticut. Filed Oct. 5, 1928. Serial No. 310,676. 10 Claims. (Cl. 18—50.)

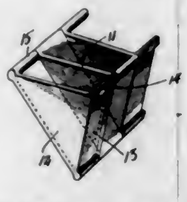
1. The method of treating latex which comprises adding to the latex M—Cl—O, wherein M is alkyl, alkali metal, alkali earth metal or hydrogen.

1,757,633. PROTECTIVE WRAPPER FOR SPRINGS AND THE LIKE. DANIEL E. HENNESSY, Cambridge, Mass., assignor of sixty per cent to Lewis-Shepard Company, Watertown, Mass., a Corporation of Massachusetts. Filed Dec. 16, 1927. Serial No. 240,484. 3 Claims. (Cl. 267—37.)



3. A spring cover comprising a homogeneously elastic sheet of uncured rubber composition presenting tacky surfaces spirally, under tension, the spring, with overlapping portions of successive spirals of said sheet united by cohesion.

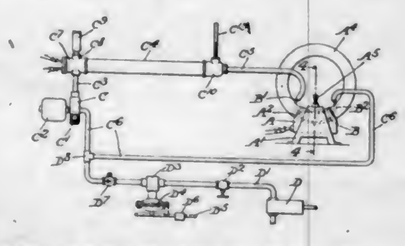
1,757,634. PULVERIZED COAL DISTRIBUTOR. STANLEY A. JACQUES, Chicago, Ill., assignor to International Combustion Engineering Corporation, New York, N. Y., a Corporation of New York. Filed Jan. 29, 1926. Serial No. 84,747. 7 Claims. (Cl. 193—31.)



1. A distributor mechanism for pulverized coal and the like comprising a branched conduit and a plurality of counterpart distributor elements, each with a single inclined directing flange, hung therein alternately in reversed relation to provide alternately inclined chutes.

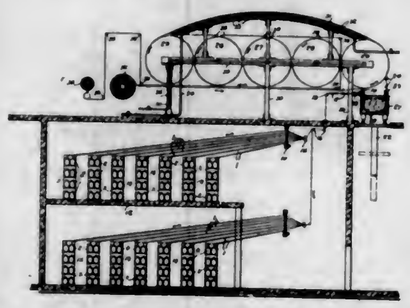
5. In distributor mechanism for pulverized coal or the like, a distributor element, shiftable in position, comprising a triangular plate adapted to act as a vertical division wall, and having a laterally projecting portion at an edge thereof adapted to act as a deflecting or guiding member, together with suspension means at the three corners of the element, at least one of which serves also as a spacer between the element and a like adjacent element.

1,757,635. VULCANIZING APPARATUS. WALTER J. JARRATT and FRANK E. HARTMAN, Chicago, Ill. Filed Dec. 10, 1927. Serial No. 239,016. 1 Claim. (Cl. 18—18.)



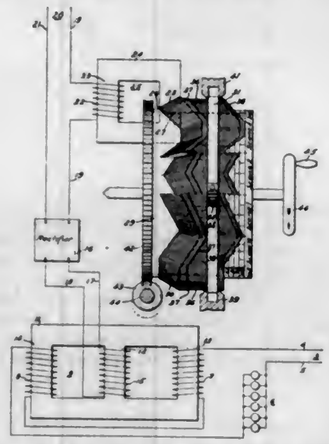
In an apparatus for applying heat for vulcanization and the like, an inflatable air receptacle adapted to be opposed to the work, a normally closed air circuit in communication with such receptacle, means for raising the pressure of said circuit to a predetermined normal, means for circulating the air in such circuit through said receptacle, including a fan chamber included in said circuit, a fan in said chamber, and means for imparting to it a generally constant rotation.

1,757,636. METHOD AND APPARATUS FOR MAKING WEFTLESS FABRICS. ALFRED E. JUAY, Rutherford, N. J., assignor to Morgan & Wright, Detroit, Mich., a Corporation of Michigan. Filed Dec. 15, 1922. Serial No. 607,021. 7 Claims. (Cl. 154—1.)



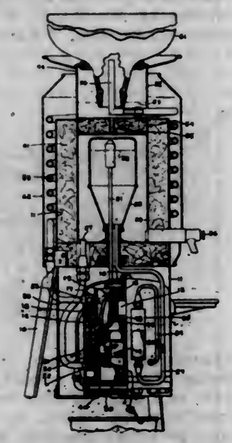
3. An apparatus for manufacturing weftless fabric, comprising in combination sources of cord supply, means for applying a rubber-containing liquid to the cords, means for guiding and arranging the cords parallel in sheet formation, means for drying the treated sheet of cords including a flexible carrier for directly engaging the sheet of treated cords, a series of drying cans, and preliminary drying and smoothing means in the form of a fixed arch intermediate one of said cans and the remainder of the series thereof over which the cords are drawn under tension to initially set the treated cords in sheet formation and while substantially flat.

1,757,637. CIRCUIT-CONTROLLING MECHANISM. GUSTAV H. KOCH, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 11, 1927. Serial No. 182,614. 10 Claims. (Cl. 171—242.)



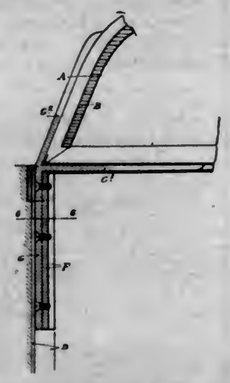
1. The combination with a reactor having a control winding, of a control reactor for the winding and means for varying the reluctance of the magnetic circuit of the control reactor for varying the potential of the control winding.

1,757,638. LIQUID COOLER. ANDREW A. KUCHER, Chester, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 11, 1925. Serial No. 22,417. 16 Claims. (Cl. 62—115.)



1. In a liquid cooler, the combination of a compression refrigerating apparatus including a compressor, a condenser and an evaporator, a container arranged in heat exchanging relation with the evaporator for effecting cooling of a body of liquid, means for withdrawing cooled liquid from the container, and means operating concurrently with the cooling process for utilizing liquid cooled in the container as a cooling medium in the condenser.

1,757,639. SLIDING WINDOW FOR VEHICLES. GUSTAVE KUTZNER, Courbevoie, France. Filed July 3, 1928, Serial No. 290,195, and in France Dec. 23, 1927. 3 Claims. (Cl. 296—48.)



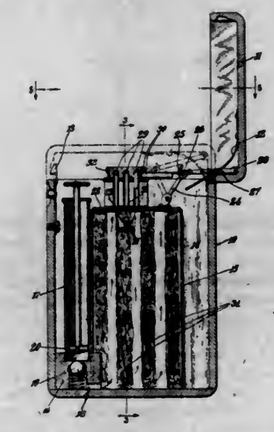
1. A vertically sliding window for vehicles, comprising a sash for a glass pane, constituted by a number of tubular elements joined together, each element being made by bending or drawing a seamless tube so as to obtain a channel between the flanges and against the bottom of which is set one edge of the glass pane, a tubular recess, the two lateral elements of the sash each receiving a flat iron, fitted in the tubular recess, and adapted to stiffen the sash and to connect it rigidly with a bracket having a vertical and horizontal arm for supporting the window and guiding it in the slide of the vehicle body or door, said bracket having its horizontal arm fitting in the tubular recess of the bottom element of the sash.

1,757,640. PROTECTIVE APPARATUS FOR ATHLETES. DAVID LEVINSON, Chicago, Ill., assignor to Wilson-Western Sporting Goods Company, Chicago, Ill., a Corporation of Delaware. Filed Feb. 14, 1927. Serial No. 167,976. 8 Claims. (Cl. 2—22.)



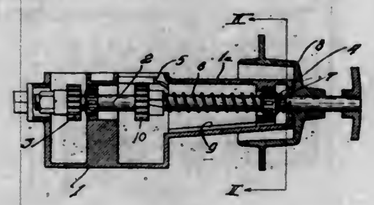
1. In a guard, a curved frame of fiber board of substantially oblong shape and having a plurality of apertures in its edge, a strip of felt curved about the edge of said frame, stitching passing through said apertures and both edges of said felt, and flexible means located within the arc of said felt, whereby said flexible means is maintained out of contact with the body of the wearer and tensioned between different points on the curved surface of said frame to reinforce the same.

1,757,641. GASOLINE VAPORIZER. WILLIAM LILLY, New York, N. Y. Filed Jan. 24, 1928. Serial No. 249,070. 7 Claims. (Cl. 67—7.1.)



2. In a device of the character described, a casing having a cover pivoted thereto, a chamber containing absorbent fibrous material, means for introducing air under pressure into said chamber, a tube leading from the top of said chamber, valve means operable by said cover for controlling said tube, and spark producing means adjacent one end of said tube.

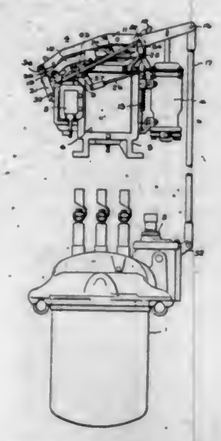
1,757,642. OILING MECHANISM. JOHN AUGUST LUND, Batavia, Ill., assignor to Challenge Company, a Corporation of Illinois. Filed Feb. 17, 1927. Serial No. 168,934. 1 Claim. (Cl. 308—98.)



In an oiling mechanism for windmills, a casing having an oil chamber in the bottom thereof, a bearing housed in

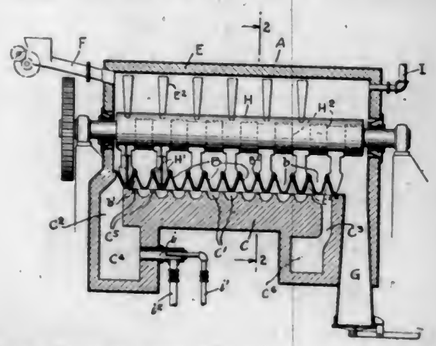
the casing, a shaft journaled in and extending through the bearing, a runway in the casing and positioned above the shaft, toothed gear means to elevate oil from the oil chamber to the said runway, a coil spring on the shaft adapted to receive oil dropped from the said runway and to carry it to the said bearing, and a coil spring of reversed pitch on the shaft and on the other side of the bearing adapted to return oil to the said chamber.

1,757,643. CIRCUIT INTERRUPTER. JOHN B. MACNEILL, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Feb. 18, 1925. Serial No. 10,032. 6 Claims. (Cl. 200—89.)



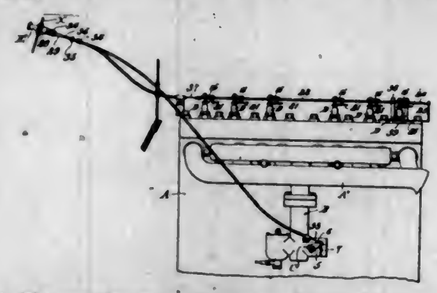
1. In an electrical actuating device, an operating lever and an actuating lever coaxially mounted, means for independently biasing said levers into an inoperative position, means attached to one of said levers for retrieving it from its inoperative position, means for latching said levers, electromagnetic tripping means for the latching means, a link for the latching means mounted coaxially with the levers and a linkage system supporting the coaxial end of the link and adapted to impart a motion to the link and, therefore, to the latch to release the levers anywhere in their path of movement when the tripping means is actuated.

1,757,644. RETORT FURNACE. CHARLES V. MCINTIRE, East Orange, N. J., assignor to Consolidation Coal Products Company, Wilmington, Del., a Corporation of Delaware. Filed Aug. 20, 1925. Serial No. 51,523. 8 Claims. (Cl. 202—220.)



1. A corrugated retort wall formed of arc-shaped metallic sections trough shaped in transverse section and arranged side by side with the adjacent side edges of adjacent sections shaped to form a tongue and groove joint for connecting said sections.

1,757,645. INTERNAL-COMBUSTION ENGINE. WILLIAM OTTO MICHELSEN, Woodhaven, N. Y. Filed Feb. 20, 1920. Serial No. 341,480. 5 Claims. (Cl. 123—179.)

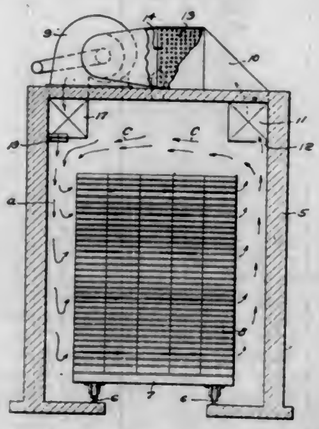


1. The combination of an internal combustion engine including a plurality of cylinders, a spark plug associated with each cylinder, each plug including two electrodes one being movable relative to the other to vary the spark gap therebetween, and an intake manifold, a carburetor including a normally inoperative priming device, and means for operating the priming device and for simultaneously actuating the movable electrodes in unison and in a direction to decrease the spark gap of the several plugs.

1,757,646. PROCESS OF TREATING MILK. HERBERT E. MORTLAND, Glendale, Mo., assignor to Pevely Dairy Company, St. Louis, Mo., a Corporation of Missouri. Filed Feb. 6, 1928. Serial No. 252,427. 5 Claims. (Cl. 99—11.)

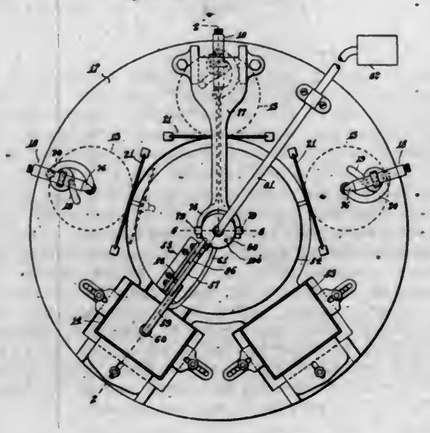
2. The process of treating milk which consists in raising the temperature thereof to approximately 145 degrees Fahrenheit, adding thereto in the cooled state a sugar syrup having an alkali ingredient, said syrup being added while cold, and then maintaining the mixture at an approximate temperature of 145 degrees Fahrenheit to reduce the specific gravity thereof to approximately seventeen and three-fourths Baumé.

1,757,647. KILN. MORITZ L. MUELLER, Seattle, Wash. Filed Mar. 12, 1929. Serial No. 346,368. 8 Claims (Cl. 34—46.)



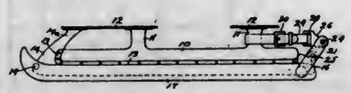
1. The combination with a kiln having a trackway therein for the reception of loads of lumber flat piled in spaced courses, of a continuous longitudinally extending discharge duct in one upper corner thereof, having a series of equi-distantly spaced discharge orifices extending substantially throughout its length and substantially throughout the length of the kiln, a suction duct in the other upper corner of the kiln, a housing upon the top of the kiln constituting a connection between the suction and pressure ducts, air heating means in said housing, a fan casing connected to said housing and located outside the kiln, and a fan in said casing, the discharge side of which is connected to the pressure duct, the discharge orifices of the pressure duct being located close to the side wall of the kiln and in a position to discharge directly downwardly adjacent said side wall, into the space between said wall and the piles of lumber, for the purposes set forth, the underside of the said pressure duct lying such a material distance above the lumber as to cause the jets discharged downwardly therefrom to draw induced air from the space above said lumber into the air stream.

1,757,648. MECHANISM FOR SPRAYING CARDS. JOHN J. MURRAY, Arlington, Mass. Filed May 7, 1929. Serial No. 361,228. 25 Claims. (Cl. 101—115.)



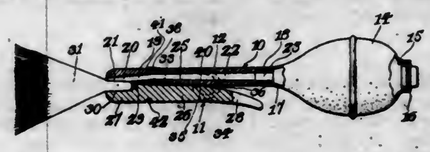
1. The combination of a fixed annular table; a spraying device thereon; a perforated screen in front of said spraying device; a revoluble disk within said annular table; a card support on said disk; means for intermittently rotating said disk and moving said card support to a position opposite said screen; and means for actuating said spraying device only while said disk is at rest whereby a color may be discharged through said screen onto the card carried by said support.

1,757,649. ICE SKATE. HANS MUSAUS, Brooklyn, N. Y. Filed May 7, 1928. Serial No. 275,812. 7 Claims. (Cl. 208—183.)



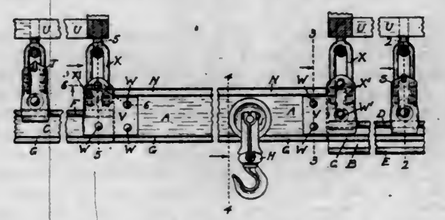
1. In a skate, a frame having a runner fixed thereto, an attachment runner, means for laterally supporting said runners with respect to each other, means connecting said runners together at their forward ends, means at their rearward ends for connecting the runners together and urging engagement between said forward end connections, said rearward end connecting means including a cam section on said fixed runner, and a lever pivotally mounted on said attachment runner in co-operative engagement with said cam section, and means for securing the free end of said lever to the frame of said skate.

1,757,650. BRUSH FOR BARBERS. JOSEPH ABICO, New York, N. Y., assignor of one-half to Nicolo Maida and Salvatore Sciaulino, New York, N. Y. Filed Feb. 23, 1929. Serial No. 342,253. 7 Claims. (Cl. 15—136.)



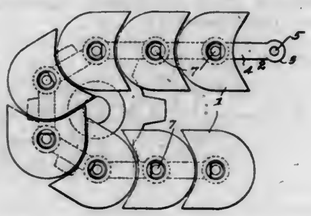
1. A brush handle comprising a pair of opposed handle sections, one fulcruming against the other, each of said sections having an end portion providing a clamping jaw, the inner face of one of said portions intermediate the sides of the latter being mortised to coact with the inner face of the other portion to provide a pocket opening at the outer end edge of said portions for removably receiving the rear end part of a brush head, and a clamping spring connecting said sections together and having a portion positioned between said sections and parts bearing on said sections for normally maintaining them in abutting relation and for maintaining said jaws in clamping position, one of said sections having as a part thereof means for discharging powder through the said end portion thereof upon one side of the said part of the brush head removably connected to the handle.

1,757,651. ELEVATED TRACKWAY. LEE F. BERTHOLD and WILLIAM LOUDEN, Fairfield, Iowa, assignors to The Louden Machinery Company, Fairfield, Iowa, a Corporation of Iowa. Filed Feb. 25, 1928. Serial No. 256,976. 8 Claims. (Cl. 104—109.)



1. In elevated trackways, the combination of different sizes of track-rails having their adjoining ends connected together to form a continuous trackway, the smaller track-rails being adapted to be placed where a series of overhead supports are available, and the larger and stronger track-rails being adapted to be placed where said overhead supports are not available.

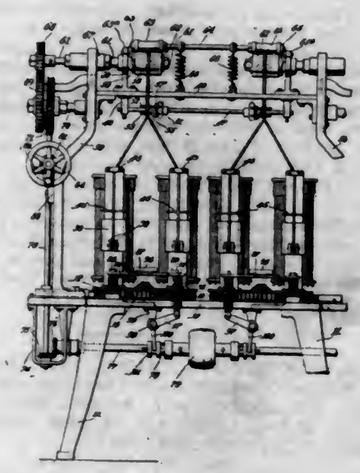
1,757,652. METAL-BELT CONVEYER. LEO BETHKE, Bainbridge, Ga., assignor to Miller Manufacturing Company, Bainbridge, Ga. Filed Dec. 1, 1925. Serial No. 72,482. 1 Claim. (Cl. 198—181.)



A conveyer comprising a plurality of one-piece links each having a head and furcations extending therefrom,

one furcation of each link having a horizontal crescent shaped bearing plate secured thereto at the outer end thereof, there being vertical openings in each of said plates and in the furcations and head of each link, said openings being designed to receive pivot elements whereby the links may be pivotally connected.

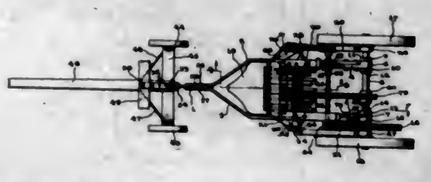
1,757,653. STRANDING MACHINE. ALBERT F. CLEMENTS, Oshkosh, Wis., assignor to Waite Carpet Company, Oshkosh, Wis., a Corporation of Wisconsin. Filed Sept. 13, 1927. Serial No. 219,249. 16 Claims. (Cl. 117—46.)



1. In a stranding machine, the combination of a turntable, rotating coiler heads carried by the turntable, spools mounted upon the coiler heads, escapement means carried by the coiler heads for intermittently releasing the spools to permit rotation thereof, means for rotating the turntable, and means for reversely rotating the coiler heads, substantially as described.

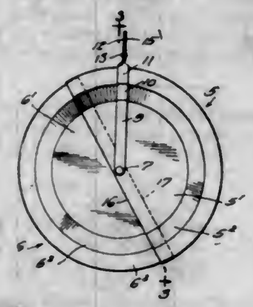
16. In a stranding machine, the combination of a rotatably mounted turntable, coiler heads rotatably mounted thereon and spools carried by said coiler heads and means for convergingly guiding a pair of strand constituent cables delivered from the spools, said guiding means including a pair of spaced tension fingers in offset relation to one another as respects the line of feed of the strand, said fingers being relatively adjustable to vary the degree to which they are offset with respect to the feeding line, and means located above said fingers for exerting a tension on the completed strand, said means including a toothed roller and a spring pressed roller for exerting pressure against said toothed roller, and means for positively rotating the toothed roller, substantially as described.

1,757,654. PEANUT DIGGER. JOEL DELSON DAVIS, Smithfield, Va. Filed Nov. 3, 1927. Serial No. 230,863. 1 Claim. (Cl. 55—55.)



A digger comprising a shaft and a pair of wheels secured to opposite ends of the shaft, a frame having one end journaled on said shaft, a wheeled support detachably and pivotally connected to the other end of said frame, a second frame having one end pivoted to said shaft and having a cutting blade pivoted on the other end thereof, means for raising and lowering the blade supporting end of said second frame relative to the first named frame and means connected to said shaft for oscillating said blade about its pivot axis on said second frame.

1,757,655. CAKE AND PIE PAN. ALMA DILLOW, Seattle, Wash. Filed May 7, 1928. Serial No. 275,610. 3 Claims. (Cl. 53—6.)



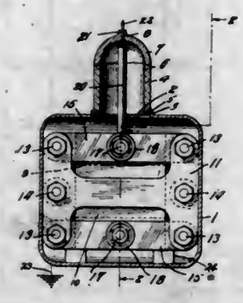
1. In a pan, means for removing pastry therefrom, said means comprising, in combination, a substantially semi-circular pan member having disposed centrally of the circumference thereof, a pin, a cooperating semi-circular pan member arranged below said first named member and engageable by said pin for rotary movement below said first named member, and a blade arranged above said first named member and having its inner end engageable by said pin for rotary movement above said first named member, said blade having at the outer portion thereof lever means for clamping said blade against the flanged circumferential portions of said pan members.

1,757,656. COOKING UTENSIL. GEORGE F. DILLOW, Seattle, Wash. Filed May 7, 1928. Serial No. 275,667. 3 Claims. (Cl. 53—6.)



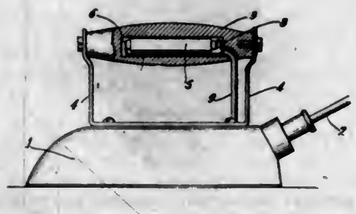
1. A cooking utensil consisting of an outer shell member of an inverted truncated conical shape, and an inner member consisting of a plurality of floor elements rigidly connected by partitions integral with said floor elements, the outer inclined ends of said partitions and the arcuate edges of the respective floor elements being adapted to rest against the inner peripheral surface of the outer member for supporting the inner member.

1,757,657. ELECTRICAL CONDENSER. WILLIAM DUBILIER, New Rochelle, N. Y., assignor to Dubilier Condenser Corporation, New York, N. Y., a Corporation of Delaware. Filed June 5, 1925. Serial No. 35,259. 6 Claims. (Cl. 175—41.)



1. A condenser comprising a casing, a frame in said casing and in contact therewith, electrically conductive elements supported in said frame and in contact therewith, electrically conductive elements cooperating with the first elements and supported in said frame and insulated therefrom, a terminal connected to the last named elements, the casing having an opening through which said terminal projects, an insulating sleeve sealed to the casing around the said terminal, the sleeve being spaced from the terminal, and a cap through which said terminal passes sealed to said sleeve.

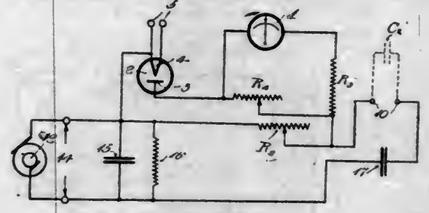
1,757,658. ELECTRIC SADIRON. WILLIAM DUBILIER, New Rochelle, N. Y., assignor to Dubilier Condenser Corporation, New York, N. Y., a Corporation of Delaware. Filed Apr. 29, 1926. Serial No. 105,599. 6 Claims. (Cl. 219—25.)



1. An electrically heated device comprising a heating means and a body to be heated, a heat insulating handle for the body, and an electrical condenser disposed in said handle in operative relation with the heating means.

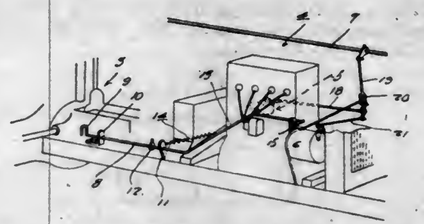
1,757,659. ELECTRICAL INDICATING INSTRUMENT. LUDWIG EDENBURG, Mount Vernon, N. Y., assignor to Dubilier Condenser Corporation, New York, N. Y., a Corporation of Delaware. Filed Mar. 11, 1926. Serial No. 93,948. 5 Claims. (Cl. 175—183.)

1. In an apparatus for visually determining the electrical capacity of condensers the combination of a circuit, a source of alternating current connected in said circuit, a visual measuring instrument and a rectifying device connected in series, a resistance shunted past said series in said circuit, a resistance shunted past said measuring instrument, and terminals for the connection of the capacity to be measured in the circuit whereby readings on



said visual measuring instrument may be taken directly in proportion to the capacity value of said condenser on test for determining the electrical capacity thereof.

1,757,660. TRACTOR CONTROL. LEROY G. W. FELDERMANN, Galena, Ill. Filed May 3, 1928. Serial No. 274,926. 1 Claim. (Cl. 180—77.)



A structure of the class described comprising in combination, a tractor embodying an engine, a carbureter, a governor, and a throttle shaft connected with the carbureter, a hand actuated throttle control device associated with said shaft; a foot actuated rod, said foot actuated rod at one end being formed to provide a substantially U-shaped extension extending laterally from said foot actuated rod, and constituting a foot pedal for the rod, brackets mounted on the frame of the tractor for slidably supporting said foot actuated rod, and an adjustable stop member carried by the last mentioned rod intermediate said brackets for engagement with one of the brackets for limiting the sliding movement of said rod in one direction, said rod adjacent its opposite end being offset, a return spring secured to one of said brackets and the offset end of said foot actuated rod, a bellcrank, a support for said bellcrank, a link connection between said throttle shaft and one arm of said bellcrank, a link connection between said throttle valve shaft and said governor, and the offset end of said foot actuated rod adapted to be connected to the other arm of said bellcrank lever, as and for the purpose specified.

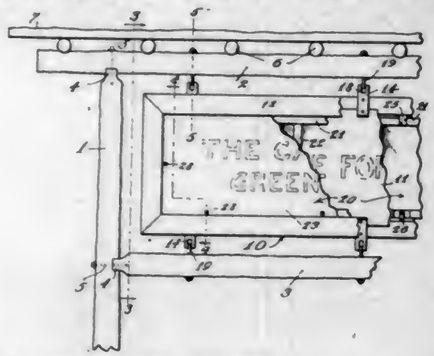
1,757,661. ASPHALTIC CONCRETE PAVING. JAMES W. FRASER, Cleveland, Ohio. Filed Jan. 24, 1927. Serial No. 163,313. 1 Claim. (Cl. 106—31.)

The method of making a paving mixture which consists in heating crushed stone to approximately 250 degrees Fahrenheit and mixing therewith two parts of cold "Kentucky" sand rock asphalt and then adding to and mixing therewith one part of asphalt cement, substantially as set forth.

1,757,662. SIGN. HARRY C. GAMMETER, Cleveland Heights, Ohio. Filed Oct. 7, 1927. Serial No. 224,540. 4 Claims. (Cl. 40—125.)

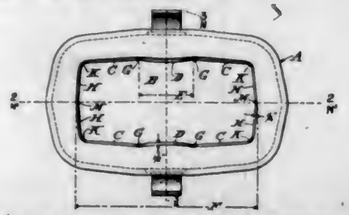
1. In a device of the character set forth, the combination of a sheet of suitable material, frame members applied to opposite sides of the marginal portion of said

sheet, hangers disposed between the opposed frame members and overlapping the edge of the sheet, fastening



means extending through the frame members, hangers and sheet, and a supporting structure to which the hangers are connected.

1,757,663. INGOT MOLD AND INGOT. EMIL GATHMANN, Baltimore, Md. Filed May 23, 1929. Serial No. 365,455. 6 Claims. (Cl. 22—139.)



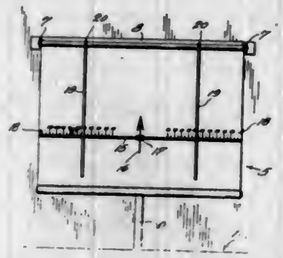
1. A slab-like ingot mold having a chamber of substantially rectangular cross sectional contour defined by a pair of oppositely disposed relatively wide primary side walls, and a pair of oppositely disposed relatively narrow secondary side walls connected to the primary side walls by outwardly arched corner walls, each of the primary side walls comprising two outwardly inclined portions connected by an inwardly curved salient, each of said inclined portions extending at an angle of from 2° to 10° to a line tangent to said inwardly curved salient and perpendicular to the inner axis of the mold chamber.

1,757,664. MEANS FOR JOINING METAL SECTIONS TOGETHER. CHARLES L. GOHMANN, New Albany, Ind., assignor to Gohmann Bros. and Kahler Company, New Albany, Ind., a Corporation of Indiana. Filed Dec. 21, 1927. Serial No. 241,601. 1 Claim. (Cl. 189—36.)



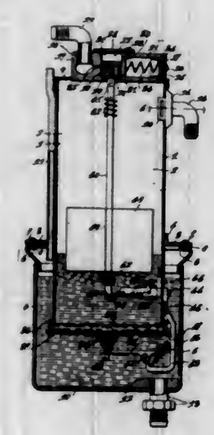
In means of the character described, a pair of spaced apart metal sections each having on its longitudinal edge an outwardly turned flange provided with a V-groove, a retaining member having on each longitudinal edge an inwardly turned flange forming a V-groove and adapted to receive the outwardly turned flanges on said sections, respectively, and a partition having integrally formed spaced apart arms on its edge disposed at right angles thereto and forming a key adapted to frictionally engage the bottoms of said V-grooves in said first-named flanges whereby said sections are detachably held in secure relation with each other and with said partition, substantially as set forth and for the purposes specified.

1,757,665. HEADLIGHT-POSITIONING APPARATUS. JOHN D. GUISS, Seattle, Wash. Filed Jan. 15, 1929. Serial No. 332,607. 4 Claims. (Cl. 33—180.)



1. In apparatus of the character described, a vertically adjustable curtain having horizontally arranged scales thereon, devices provided in spaced relation in front of said curtain and movable transversely thereof and adapted to cast shadows on the curtain and across the scales by means of the light beams from the headlights of an automobile, and means for supporting said devices.

1,757,666. LIQUID-FUEL-FEEDING DEVICE FOR MOTOR VEHICLES. WILLIAM E. HART, San Jose, Calif. Filed June 9, 1928. Serial No. 284,098. 15 Claims. (Cl. 103—236.)

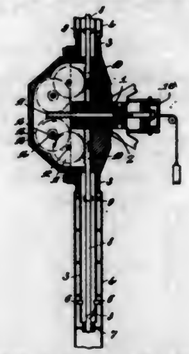


1. A device of the character described comprising a tank having separate liquid fuel chambers therein, a valve to control communication between the chambers, means providing for the introduction of liquid fuel into the tank and including a float controlled vacuum valve and a liquid fuel delivery head to deliver the liquid fuel into the tank above said first named valve and to one side of the float with a swirling motion to agitate the fuel in the tank and prevent clogging of the valve and means providing for the delivery of the fuel out of the tank.

1,757,667. DEVICE FOR REGULATING WIND WHEELS. ERICH HESSE, Insterburg, Germany. Filed May 16, 1928, Serial No. 278,305, and in Germany May 21, 1927. 4 Claims. (Cl. 170—68.)

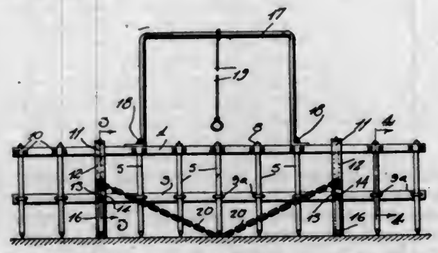
1. A device for regulating wind-wheels to obtain a uniform rotational speed, comprising, in combination with the main shaft, the hub of the wheel, and hollow arms projecting radially forth from the hub, vanes located upon

said arms and being adapted to be shifted and simultaneously therewith to be turned thereon, rods located in said hollow arms in the axis passing through the point of



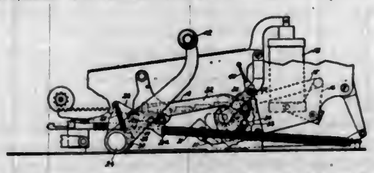
gravity of each vane, a rack at the inner end of each of said rods, a gearing meshing with said rack, and a common central rack meshing with all said gearings and subjected to the action of a counter-force.

1,757,668. RAKE. CHARLES W. JARVIS, Courtland, Calif. Filed May 10, 1929. Serial No. 362,001. 5 Claims. (Cl. 56—378.)



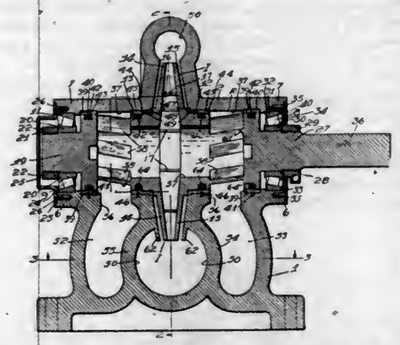
1. A rake of the character described, comprising a frame having a head bar and a supporting bar, rake teeth anchored to the two bars, skid irons carried by the two bars, a handle frame to effect tilting of the rake on the skids carried by the head bar, the connection between the rake teeth and bars including a threaded pin extension on each tooth passed through the head bar to receive a retaining nut, and anchor bolts securing the rake teeth to the two bars.

1,757,669. FLEXIBLE HANDLE CONNECTION FOR CALCULATING MACHINES. OLIVER D. JOHANTGEN, Lake Bluff, Ill., assignor to Victor Adding Machine Co., a Corporation of Illinois. Filed Sept. 25, 1922. Serial No. 590,885. 5 Claims. (Cl. 235—60.)



1. The combination with an oscillating shaft of a calculating machine, of an oscillating handle, said shaft and handle each having a fixed range of movement, yielding driving connection between the handle and the shaft, and means including a single pawl and ratchet mechanism initially operative upon forward movement of the handle only to prevent reverse movement of the handle at any intermediate position during its forward movement and until forward movement of the shaft has been completed.

1,757,670. CENTRIFUGAL PUMP. HERMAN L. KEUN, Chicago, Ill. Filed Sept. 23, 1927. Serial No. 221,506. 6 Claims. (Cl. 103—88.)



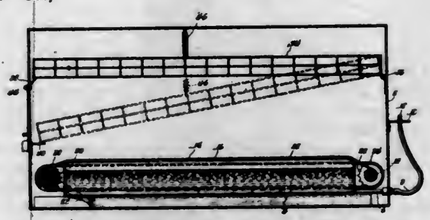
1. A centrifugal pump comprising a casing having a central chamber, inlet ports and an outlet port, a rotor having a chamber and a plurality of ports and disposed within said central chamber in said casing, sealing means mounted upon said rotor, sleeves disposed within the central chamber in said casing and arranged to bear against said sealing means, an impeller secured to said rotor, said impeller having vanes communicating with the chamber within said rotor, and bearing means for rotatably mounting the rotor and said impeller within said casing.

1,757,671. METHOD AND MEANS OF ELECTROPLATING. AXEL O. LANGSETH, Mansfield, Ohio, assignor to The Ohio Brass Company, Mansfield, Ohio, a Corporation of New Jersey. Filed Mar. 31, 1927. Serial No. 179,866. 10 Claims. (Cl. 204—4.)



1. An anode for plating valve seats comprising an exposed portion of spherical shape and composed of a metal unaffected by an electrolyte, means projecting from the exposed portion to connect it to a source of current supply and a covering of insulating material upon the projecting portion.

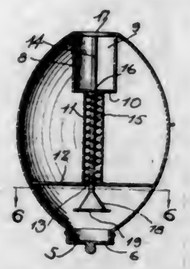
1,757,672. DEVELOPING APPARATUS. ADOLPH LANGSNER, Chicago, Ill., assignor to Eugene Dietzgen Company, Chicago, Ill., a Corporation of Delaware. Filed Feb. 20, 1928. Serial No. 255,636. 12 Claims. (Cl. 95—89.)



1. In a developing apparatus for light sensitive material adapted to be developed by the action of chemically active gases, the combination of a main frame formed to

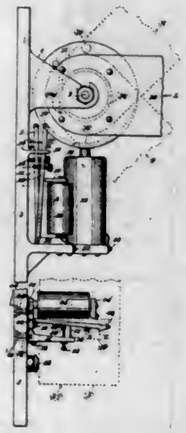
provide a developing station or housing, a container in said station adapted to hold a quantity of material adapted to evolve developing gas, said housing providing a gas retaining chamber located adjacent the pan, a support for holding light sensitive material, said chamber having an opening provided with a door considerably below its top, said support being mounted in said chamber and arranged to be raised and lowered from a position in the top of said chamber to a position opposite said door, and closing means for said container.

1,757,673. SMOKING-PIPE FILLER. ALEXANDER LAZAR, Port Arthur, Ontario, Canada. Filed Dec. 19, 1928. Serial No. 327,158. 3 Claims. (Cl. 206—41.)



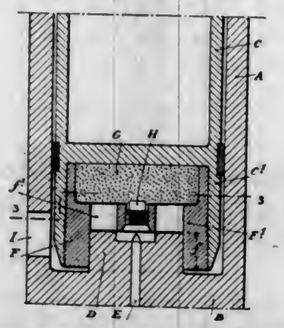
1. In a smoking pipe filler, a container for tobacco having a discharge opening therein, a closure cap for the opening, a tensioned plunger rod in the container alined with the opening, a tobacco agitator and tamper on the lower end of the rod, comprising a conical head, and a plurality of fingers radiating from the peripheral edge of the head.

1,757,674. SIGNALING SYSTEM. LLOYD M. LEWIS and ANDREW SEZEKOFF, Sacramento, Calif. Filed Nov. 18, 1924. Serial No. 750,562. 1 Claim. (Cl. 177—327.)



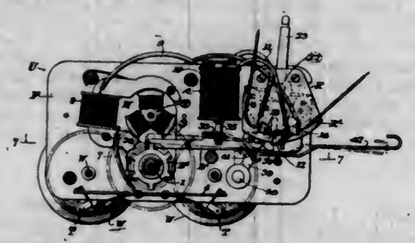
A signaling apparatus of the type described comprising a rotary hollow drum, a signal arm attached thereto, a spring located within said drum and connected thereto for rotating the drum to signaling position, electromagnetic means for rotating the drum in the opposite direction, automatically controlled electromagnetic detents for arresting the rotation of said drum under the action of said spring, at different predetermined positions, means for locking the signal arm in a non-signaling position, and electromagnetic means for releasing the locking means, said drum being formed with peripheral grooves spaced longitudinally thereof, of gradually increasing depth, providing shoulders at their inner ends for the engagement of said detents, said shoulders being spaced peripherally of the drum, means being provided for energizing one of the electro-magnets of the detents and the electro-magnet of the locking means.

1,757,675. COMBINED PROJECTILE AND BREECH BLOCK FOR ORDNANCE. NICOLAS EMILIEN METHLIN, Paris, France, assignor to Schneider & Cie., Paris, France, a Limited Joint-Stock Company of France. Filed Mar. 26, 1928, Serial No. 264,769, and in France Apr. 14, 1927. 9 Claims. (Cl. 89—1.)



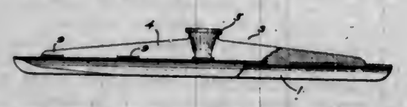
1. In combination, a gun, a projectile therefor having a substantially cylindrical base portion fitting the bore of said gun, cooperating telescoping means forming parts respectively of the closed end of said gun and of said cylindrical base portion, said means having a diameter substantially less than said cylindrical base portion and defining a closed combustion chamber, and a propelling charge in said chamber.

1,757,676. MOTOR CONTROL FOR TOY ELECTRIC LOCOMOTIVES. FRED MIZE, Chicago, Ill., assignor to American Flyer Mfg. Co., Chicago, Ill., a Corporation of Illinois. Filed June 4, 1926. Serial No. 113,796. 15 Claims. (Cl. 104—151.)



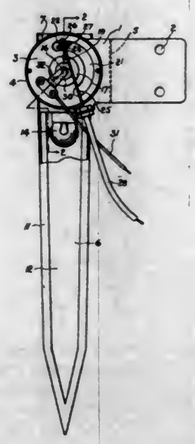
1. An electric locomotive including a driving motor, a reversing switch for the motor, an actuator including a rotatable and a slidable part for the switch, electromagnet means for raising and lowering said slidable part when the current to the motor is turned on and off.

1,757,677. CONDUCTOR SUPPORT. EDGAR D. MOORE and FRED R. DIPPMAN, Mansfield, Ohio, assignors to The Ohio Brass Company, Mansfield, Ohio, a Corporation of New Jersey. Filed June 27, 1929. Serial No. 374,073. 17 Claims. (Cl. 191—43.)



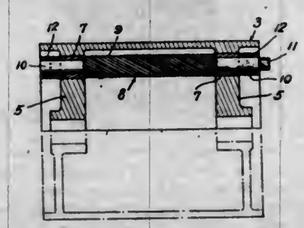
1. A conductor support comprising a U-shaped, grooved elongated member formed of sheet metal to receive the conductor and having lips bendable about the conductor to hold it on the U-member, a separably formed web member positioned exterior of the U-member and welded thereto and means to secure the web member to an overhead support.

1,757,678. DIRECTION INDICATOR. WILLIAM DAVIS MORGAN and EZRA KNAPTON, Victoria, British Columbia, Canada. Filed Nov. 4, 1927. Serial No. 231,091. 1 Claim. (Cl. 116—54.)



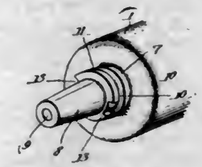
A direction indicator comprising a supporting plate, a signal arm secured to the plate by a pivot about which the arm is movable to and from indicating positions, a projecting pin having one terminal rotatably secured to said arm and the other terminal protruding through an arcuate slot formed in said supporting plate, said slot being concentric to said pivot, and means secured to the protruding terminal of said pin to move the pin longitudinally of said slot in order to effect swinging movement of said arm to a direction signalling position.

1,757,679. CLAMPING DEVICE. HARRY L. MYERS, Toledo, Ohio, assignor to The American Floor Surfacing Machine Company, Toledo, Ohio. Filed Jan. 26, 1928. Serial No. 249,649. 2 Claims. (Cl. 51—194.)



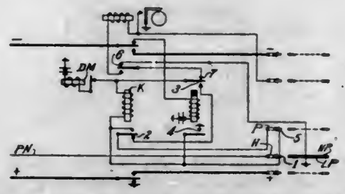
1. In a structure of the class described, a drum comprising a cylindrical shell provided with a longitudinal abrasive element slot extending through the opposite ends of said shell, end-heads carried by the shell and spaced inwardly from the ends of the shell and formed with radial slots communicating with the end portions of said longitudinal slot, a pair of bushing holes in each head on opposite sides of the complemental radial slot, bushings removably fitted in said holes, and abrasive element clamping means comprising a pair of spaced parallel abrasive clamping rods arranged within the shell and disposed in alinement with said bushings, the end portions of said rods being reduced in size and formed of cylindrical cross sectional shape and serving as journals, said journals being mounted for oscillation in said bushings, the end portions of the journals projecting beyond said bushings and the adjacent heads, and abrasive element clamping sleeves fastened to the projecting ends and cooperating with each other to grip the edge portions of said abrasive element.

1,757,680. NEEDLE-LOCKING DEVICE FOR SYRINGES. JAMES B. NEIL, Knoxville, Tenn. Filed Feb. 8, 1929. Serial No. 338,534. 15 Claims. (Cl. 128—221.)



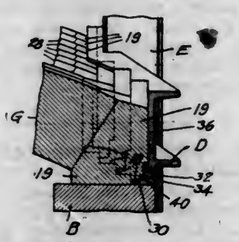
1. In a syringe, the combination of a barrel having a nipple provided with a groove between the barrel and the free end of said nipple, a needle carrier adapted to engage said nipple, and resilient groove-engaging means on said carrier to enter the groove when said carrier engages said nipple and hold the parts in operative position.

1,757,681. ROTARY LINE SWITCH. JOHN E. OSTLINE, Liverpool, England, assignor to Automatic Electric Inc., Chicago, Ill., a Corporation of Delaware. Filed June 7, 1926, Serial No. 114,189, and in Great Britain Sept. 28, 1925. Renewed Dec. 6, 1928. 23 Claims. (Cl. 179—18.)



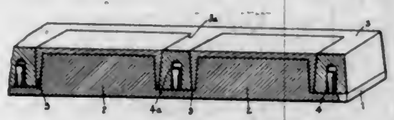
1. In a telephone system, a rotary line switch of the homing type, a cut-off relay and a driving magnet in said switch, an incoming test conductor, a circuit including said conductor, said magnet, and said cut-off relay, and means for opening said circuit for rendering said cut-off relay inoperable thereover whenever said switch is off-normal.

1,757,682. FURNACE-ARCH SUPPORT. ROBERT PALM, Fairfield, Ala. Filed May 18, 1928. Serial No. 278,746. 5 Claims. (Cl. 110—99.)



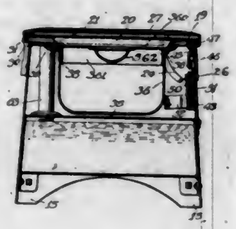
1. A furnace arch structure including bricks arranged in courses offset horizontally and vertically to form an inclined roof, and an arch supporting member having a series of adjacent bearing portions offset vertically and horizontally from one another.

1,757,683. MOLD FOR FORMING COATED CONFECTIONS. ROBERT T. PARK, Windsor, Ontario, Canada. Filed May 2, 1925. Serial No. 27,406. 1 Claim. (Cl. 107—1.)



A mold for forming confections comprising a core plate having a plurality of core members upstanding thereupon, a flask plate adapted to be mounted upon said core plate, and formed with openings proportioned to receive said core members, and to form a mold space surrounding said core members when the latter are centered in said openings, the core members having pyramidally inclined walls, and said openings having reversely inclined walls, and pins upstanding from said core plate between the core members thereof, said flask plate being formed with sockets engageable by said pins for accurately positioning the flask plate with respect to said core plate.

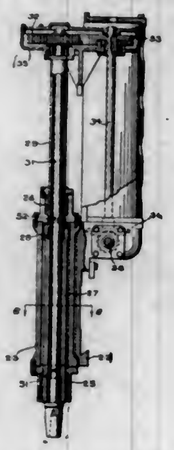
1,757,684. PORTABLE TOILET FOR CHILDREN. CHRIS F. PFISTERER, OTTO KRUEGER, and WILHELM KAISER, Chicago, Ill. Filed Oct. 31, 1927. Serial No. 229,871. 2 Claims. (Cl. 4—78.)



1. In a convertible spare seat and toilet device, the combination with upstanding walls providing a hollow enclosure, said enclosure having a main seat at its top formed with an opening and said enclosure having a side door opening thereinto; a receptacle adapted to be inserted into said enclosure through said door or removed from said enclosure through said door, as desired, said receptacle having a lid provided with means cooperating with the receptacle to seal the same when the lid is in position with respect thereto, said lid being removable and replaceable through the top opening in said main seat when the device is used as a toilet, and said receptacle being removable with reference to said enclosure with the lid in sealing position, through said door, when the receptacle is to be emptied; holding means for detachably maintaining said receptacle in position with respect to the opening in the main seat; and a hinged auxiliary seat adapted to conceal the main seat, said auxiliary seat being detachably connected to said enclosure and therewith providing a spare seat when not used as a toilet.

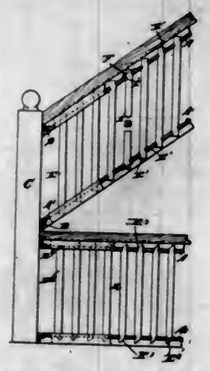
1,757,685. HYDRAULIC FEED MECHANISM FOR RADIAL DRILL SPINDLES. ROLAND RUSSELL ROBERTS and WORTHY J. F. FORWARD, Rochester, N. Y., assignors to Consolidated Machine Tool Corporation of America, Rochester, N. Y., a Corporation of Delaware. Filed July 26, 1928. Serial No. 295,601. 1 Claim. (Cl. 77—28.)

In a machine tool, the combination with a tool carrier, a sleeve movably mounted in said carrier, a tool spindle journalled in said sleeve, a piston mounted on the sleeve exteriorly thereof, a cylinder in which the piston is movable by fluid pressure to move the sleeve and the spindle, a driven shaft relatively to which the spindle moves, a gear rotated by the driven shaft and fixed to the spindle for driving the same, an arm, guideways on said arm arranged transversely to the feed movement of the spindle, a



drive shaft arranged parallel with said guideways, guides on the carrier slidably engaging said guideways, and gearing supported by the carrier and movable longitudinally of said drive shaft for establishing operative connection between the drive shaft and the driven shaft.

1,757,686. STAIR AND BALUSTER RAILING. GAD ROSENBAUM, Detroit, Mich. Filed Oct. 28, 1929. Serial No. 402,853. 4 Claims. (Cl. 20—10.)

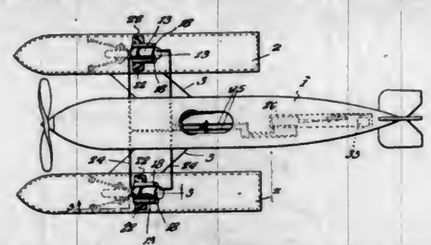


1. A baluster and railing structure formed from a pair of stringers and a plurality of balusters detachably connected and interlocked with one another; the upper and lower stringers having a plurality of holes spaced apart to receive the ends of the balusters when inserted through said holes at an arbitrary angle to the stringers; said balusters notched adjacent their ends to form shoulders, adapted upon entering the ends of the balusters through the openings of the stringers to overlap the wall surrounding the opening of the stringers and to interlock with said stringers upon changing the initial angle of said balusters in relation to said stringers.

1,757,687. WHEEL ATTACHMENT FOR SEAPLANES. FRANK N. SILVA, Jr., Santa Maria, Calif. Filed Mar. 14, 1929. Serial No. 347,054. 6 Claims. (Cl. 244—2.)

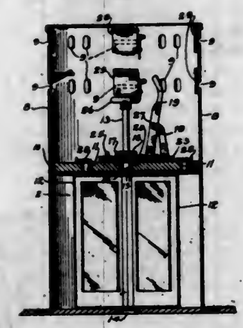
1. In a seaplane, the combination with a pontoon having a door opening in its bottom, of doors adapted to close said

opening, links pivotally mounted within the pontoon, a landing wheel carried by said links, means for lowering



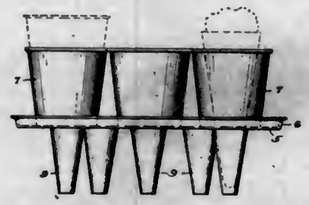
and raising the wheel, and flexible connections between the doors and said links whereby the doors will be closed as the wheel is raised.

1,757,688. MEANS FOR PROTECTING BANKS. ALTA L. SMITH, Chester, Va. Filed Apr. 28, 1928. Serial No. 273,714. 2 Claims. (Cl. 20—1.01.)



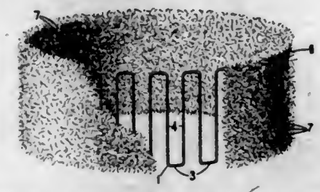
1. A thief trap for banking rooms or the like comprising doors fixed to a vertical shaft and revolving therewith, said doors controlling a door-way and being disposed at such an angle as to form a closed compartment when two of said doors are in juxtaposition to a side of said doorway, means forming a guard's chamber above said revolving doors into which the shaft of said doors extends, locking means including an element on the extended portion of said shaft for locking said doors in any incidentally assumed position of said doors, and selectively operable means related to said extended portion of said shaft and to said locking element for rotating said doors to a predetermined position before locking them.

1,757,689. COMBINATION CUP AND CONE HOLDER. JOHN W. STRICKLAND, Nashville, N. C. Filed Sept. 19, 1928. Serial No. 307,037. 1 Claim. (Cl. 224—48.)



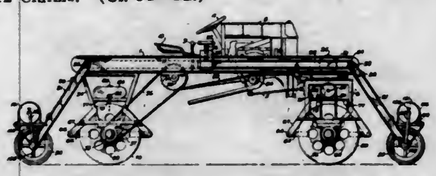
An ice cream cone holder comprising a tray, downwardly tapering tubular legs secured to the tray and projecting below the same and serving as the sole support for a portion of the tray, the bores of the tubular legs having their upper ends opened so that the lower ends of ice cream cones may be inserted within said tubular legs with the cones projecting above the trays, and tubular guards permanently secured to the tray and projecting above the same, said tubular guards surrounding the upper ends of the tubular legs in spaced relation, the bottoms of the tubular guards having openings so that the upper ends of the bores of the tubular legs are free from obstruction, said tubular guards serving to protect the upper portions of the cones and also being adapted to hold cups or the like.

1,757,690. FILTER MAT. RICHARD STRINDBERG, Bradford, Pa. Filed Mar. 16, 1928. Serial No. 262,174. 5 Claims. (Cl. 183—73.)



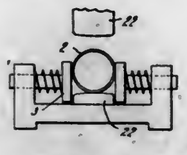
1. A filter mat for an air and gas filter comprising a zig-zag shaped frame composed of a continuous wire bent into a plurality of oppositely arranged U-shaped members connected to each other by their arms, and a filter medium in the form of a strand interwound in and around the arms to cover the frame.

1,757,691. METHOD OF AND APPARATUS FOR BUILDING IMPROVED ROADS. ROBERT A. THOMPSON, New Orleans, La. Filed May 15, 1928. Serial No. 277,954. 12 Claims. (Cl. 94—22.)



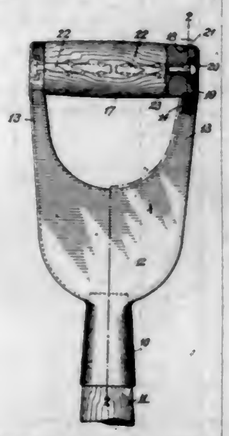
5. The method of constructing a road made up of layers of different materials which consists in positively applying to the particles of the material of each layer successive alternate pressures, the pressures applied to a superposed layer causing the particles thereof to create a transversely corrugated bond with the particles of the adjacent supporting layer; and substantially simultaneously applying additional pressure to the topmost layer.

1,757,692. APPARATUS FOR MAKING ELECTRICAL CONDENSERS. CHARLES E. VAWTER, Philadelphia, Pa., assignor to Dubilier Condenser Corporation, New York, N. Y., a Corporation of Delaware. Filed July 1, 1924. Serial No. 723,601. 11 Claims. (Cl. 29—84.)



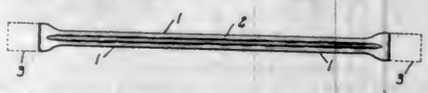
1. Apparatus for making electric condensers of the class described comprising means for supporting the condenser casing with the condenser elements assembled therein, means for subjecting the condenser casing to a blow to deform said casing into permanent engagement with said elements along sides of the casing which are slightly curved, means for regulating the force of said blow to a predetermined value and means for controlling the force of each successive blow to said predetermined value.

1,757,693. SHOVEL HANDLE. LEWIS E. WEBSTER, Wyoming, Pa., assignor, by mesne assignments, to Columbus Handle & Tool Corporation, Columbus, Ind. Filed Dec. 27, 1920. Serial No. 433,257. 11 Claims. (Cl. 294—57.)



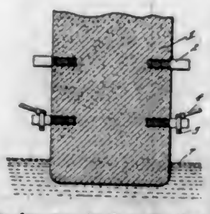
1. A shovel handle including a body portion formed from a single piece of sheet metal, having a seamless longitudinally edgeless shank portion and a pair of spaced arm portions of hollow box like section, a wooden grip extending between said arm portions, and means extending into the interior of said grip and engaging the fibre thereof and slots in the metal of the arm portions engaged by said means for preventing rotation of the grip relatively to the body portion of the handle.

1,757,694. CONCRETE REENFORCEMENT. CHARLES WEICHOLD, Cincinnati, Ohio. Filed Apr. 4, 1927. Serial No. 180,753. 5 Claims. (Cl. 72—109.)



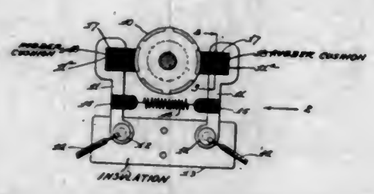
3. In concrete construction, bars imbedded in the concrete, each of said bars having an elongated U-shaped rib with lateral flanges at the base theerof, said rib being rounded, the ends of the bar having flat pliant extensions which may be readily bent downwardly to form legs of varying lengths for supporting the bar in proper position while it is being imbedded in the concrete.

1,757,695. ELECTRODE. JENS WESTLY, Kristiansand, Norway, assignor to Det Norske, Aktieselskab for Elektrokemisk Industri of Norway, Oslo, Norway. Filed Sept. 23, 1926, Serial No. 137,267, and in Norway Sept. 30, 1925. 11 Claims. (Cl. 266—1.5.)



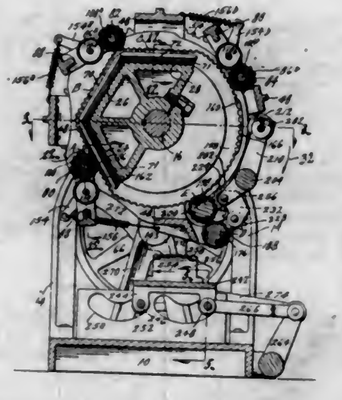
1. An electrode for use in introducing electric current into an electric furnace, comprising a rod of large cross-sectional area having a lower end composed of baked carbon, and having current-carrying inserts of relatively high specific conductivity inserted in said lower baked end, and projecting out of said electrode.

1,757,696. COMMUTATOR BRUSH. ANDREW C. WOOD, Chicago, Ill., assignor to Stewart-Warner Corporation, Chicago, Ill., a Corporation of Virginia. Filed July 6, 1926. Serial No. 120,679. 2 Claims. (Cl. 171—323.)



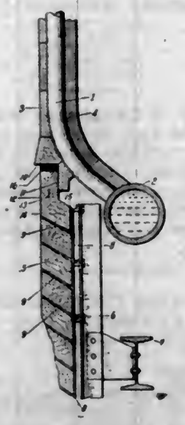
1. In a commutator, in combination with the rotor thereof, a fixed support, a brush, a brush holder, a carrier for the holder and spring means stressing the carrier in the direction for thrusting the brush into contact with the rotor; the brush being mounted in the holder slidably in the direction of said thrust, and the brush and holder having cooperating features preventing the brush from turning in the holder, and the carrier being mounted in the support slidably in said direction of thrust, the slidable mounting of the brush in the holder and of the carrier in the support being independent of each other; whereby the movement of the brush for pressing upon the rotor and being retracted therefrom is independent of any sliding movement of the brush in the holder.

1,757,697. MULTICOLOR-PRINTING PRESS. CLYDE ALLEN, Des Moines, Iowa, assignor to C. E. Erickson Company, Inc., Des Moines, Iowa. Filed Jan. 25, 1928. Serial No. 249,334. 13 Claims. (Cl. 101—171.)



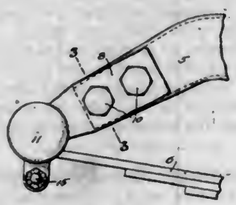
1. A multi-color printing press comprising a printing blanket adapted to travel in a circular path and to print an impression on a piece of work fed to the press at each revolution thereof, a plurality of cuts or the like supported in said press, an ink roll for each cut or form whereby each cut or form may be inked with a different color of ink, a transfer roll adapted to contact with each of said cuts or forms after they are inked and to thereafter contact with the printing blanket whereby all impressions received by the transfer roll are simultaneously deposited on said blanket, and means for rotating said transfer roll to synchronize with the rotation of the press whereby perfect register of the impressions received from the several cuts or forms results, said means comprising a series of teeth adjacent each cut and an anti-lash pinion on said transfer roll adapted to coact with said teeth.

1,757,698. SIDE-WALL SEAL. FRANK B. ALLEN, Lower Marion Township, Montgomery County, Pa., assignor, by mesne assignments, to The Allen-Sherman-Hoff Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Aug. 15, 1927. Serial No. 213,176. 7 Claims. (Cl. 72—102.)



1. A wall structure comprising upwardly extending relatively movable wall sections, the adjoining ends of which sections are spaced apart, and a complementary section freely supported on the lower wall section and having an upwardly extending portion adapted to be held in contact with the upper wall section by gravity.

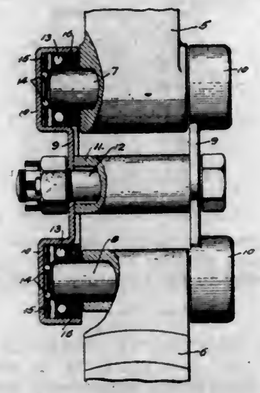
1,757,699. SPRING-END-CONNECTION. FRED J. BECHERT, Stamford, Conn., assignor to The Fafnir Bearing Company, New Britain, Conn., a Corporation of Connecticut. Filed June 15, 1928. Serial No. 285,578. 2 Claims. (Cl. 267—54.)



1. In a spring end connection, a frame, side plates rigidly secured to said frame and extending therefrom, said side plates having aligned bearing raceways thereon, pin means to be secured to a spring and projecting beyond the sides thereof, said pin means having raceways thereon complementary to said raceways on said side plates, antifriction bearing members seated on said raceways, and auxiliary means for securing said side plates together.

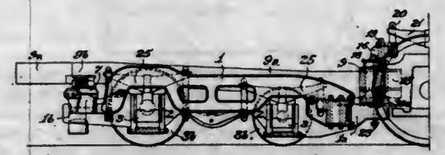
1,757,700. SPRING-END CONNECTION. FRED J. BECHERT, Stamford, Conn., assignor to The Fafnir Bearing Company, New Britain, Conn., a Corporation of Connecticut. Filed June 15, 1928. Serial No. 285,579. 8 Claims. (Cl. 267—54.)

1. In a spring end connection, a bearing member to be secured to a spring, a second bearing member to be secured to a frame, a pair of shackle links having bearing raceways, antifriction bearing members interposed between said shackle links and said bearing members on said spring and frame, and means between said shackle links and



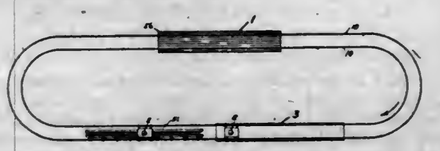
said bearing members on the spring and frame for resisting end thrust of said bearing means on said spring and frame.

1,757,701. LOCOMOTIVE TRAILING TRUCK. JAMES G. BLUNT, Schenectady, N. Y. Filed Oct. 12, 1928. Serial No. 312,046. 20 Claims. (Cl. 105—82.)



2. A locomotive trailing truck, comprising side frame members, having axle box pedestals and bearing upwardly through a cross member at their forward ends against a central spindle; and a detachable transverse frame member, at the rear extremities of the side frame members, and carrying the lower members of a centering device.

1,757,702. LAUNDRY APPARATUS. BARTINE J. COADY, Norwood, Pa. Filed Nov. 20, 1926. Serial No. 149,564. 1 Claim. (Cl. 68—18.)

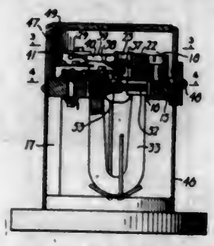


Apparatus of the character stated consisting of an overhead track for the travel thereover in a continuous direction of a clothes carrier which has a reciprocal plunger therein, a "suds" tub, a gate at each end of the tub operable to permit passage of said carrier, valved means for supplying liquid to the tub, and means for operating the plunger while said carrier is in said tub.

1,757,703. ELECTRICAL CONTACT DEVICE. AUSTEN M. CURTIS, East Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed July 24, 1926. Serial No. 124,595. 7 Claims. (Cl. 200—87.)

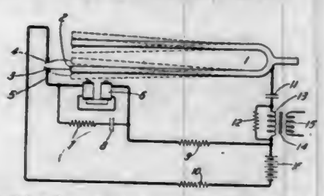
1. A relay including a base, massive stationary contacts secured to but insulated from said base, a carriage pivoted

to the base opposite the stationary contacts, a movable contact pivotally associated with the carriage, yieldable means to force the carriage laterally in one direction, and



means to move the carriage against the force of the yieldable means whereby the movable contact may be adjusted relative to the stationary contacts.

1,757,704. CONTACT-DRIVE VIBRATORY FORK. AUSTEN M. CURTIS, East Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Oct. 29, 1927. Serial No. 229,772. 6 Claims. (Cl. 175—373.)



3. In combination with a vibratory element, electrical driving means therefor, a source of electrical energy, a condenser, electrical switching means adapted to connect said source to said condenser when the vibratory element is near the end of its swing in one direction, and to connect said condenser to said driving means when the vibratory element is passing through its normal position of rest.

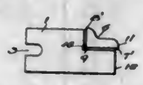
1,757,705. BINDER FOR DOWN-HANGING SHEETS. HAROLD L. DE LISLE, Chicago Ill. Filed July 16, 1928. Serial No. 293,069. 9 Claims. (Cl. 129—16.7.)



1. In a binder of the character described normally horizontally disposed for holding down-hanging sheets, the combination of a long and narrow back member, a long and narrow clamping member extending substantially from end to end of and overlying the back member, the back member having downwardly-and-forwardly extending means at its upper edge portion under which the clamping member loosely extends for rocking action relative to the back member and for ready removability of the clamping member from the back member, the back member and the clamping member being formed to provide a substantially deep longitudinally-extending space between them for the accommodation of sheets, the lower edge portion of the clamping member being opposite the lower edge portions of the back member, and means for forcing the clamping member toward the back member.

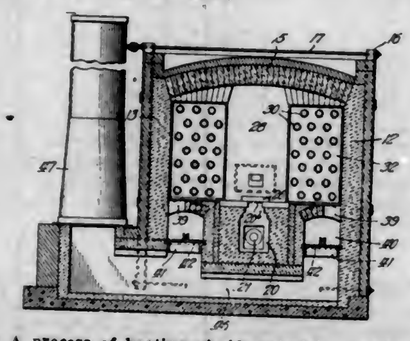
9. The combination with a binder of the character described comprising a long and narrow back member and a long and narrow clamping member with bolt means for drawing the clamping member toward the back member to clamp sheets between adjacent edges thereof, of a protective cover and means other than the sheet-clamping means for holding the protective cover to the clamping means whereby the sheets may be removed without removing the cover.

1,757,706. SCREEN-FRAME MATERIAL. WILLIAM J. DENNIS, Chicago, Ill. Filed Feb. 25, 1929. Serial No. 342,393. 3 Claims. (Cl. 156—14.)



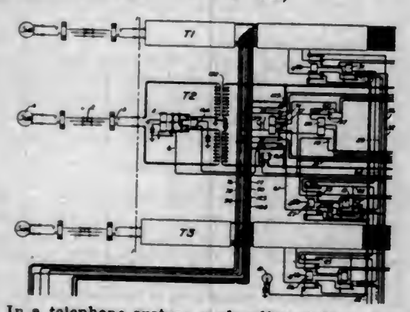
2. In an article of the character described, a body member provided with kerfs running at right angles to each other adjacent the arris thereof to define a detachably secured bead portion, of which a part projects beyond the edge of the body a distance substantially equal to the width of the kerf, whereby upon detaching and replacing the bead, the same may be adjusted flush with the edge of the body member.

1,757,707. HEATING FURNACE. HENRY A. DREFFEIN, Chicago, Ill. Filed Mar. 30, 1928. Serial No. 266,086. 11 Claims. (Cl. 196—116.)



1. A process of heating viscid materials, consisting in passing said materials through spaced runs of pipe in a heating chamber, introducing heating gases at one side of said pipes at substantial velocity and out of direct contact therewith, subjecting said pipes at said side to unobstructed radiated heat from said gases and thereafter changing the direction of flow of and circulating said gases around said pipes at the temperature as reduced by transmission of said radiated heat, whereby the tubes at said side will be subjected to the effect of substantially only radiant heat from the inflowing heating gases.

1,757,708. TELEPHONE-EXCHANGE SYSTEM. SAMUEL H. EVERETT, Teaneck, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed June 6, 1928. Serial No. 283,206. 12 Claims. (Cl. 179—44.)

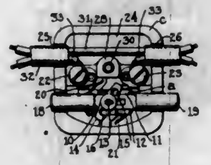


1. In a telephone system, a plurality of lines, a ringing key equipment and an operator's telephone set common to

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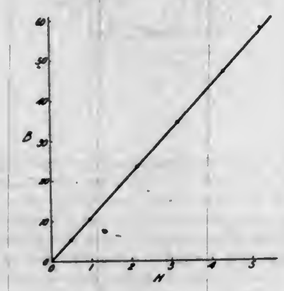
said lines, and means responsive to the initiation of a call over one of said lines for automatically associating the ringing key equipment and the operator's telephone set with said line.

1,757,709. ELECTRIC SWITCH. ARTHUR H. FLEET, Milwaukee, Wis., assignor, by mesne assignments, to Cutler-Hammer, Inc., a Corporation of Delaware. Filed Feb. 13, 1920. Serial No. 358,418. 2 Claims. (Cl. 200—168.)



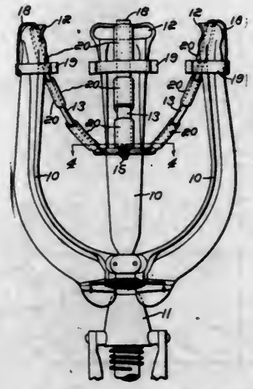
1. A feed through switch for attachment to connector cords, comprising an insulating casing medially divided in the plane of its greatest dimensions, a plurality of spaced semicircular grooves in opposite sides of each of the casing sections, said sections having recesses extending between each pair of opposed grooves to provide chambers at opposite ends of the assembled casing, said grooves forming pairs of openings in direct alinement with each other, one of said chambers and its alined openings permitting passage of an electrically continuous conductor through said casing in a straight line and of another wire the severed ends of which are respectively connected to terminals located intermediate said chambers, a snap switch mechanism positioned within the other of said chambers, push-buttons extending through said other pair of alined openings for operating said mechanism, and abutting portions located intermediate said terminals to provide for securement of said sections by a single fastening means.

1,757,710. ELECTROMAGNETIC CIRCUITS AND APPARATUS. WILLIAM FONDILLER, Yonkers, N. Y., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Dec. 17, 1926. Serial No. 155,513. 6 Claims. (Cl. 178—44.)



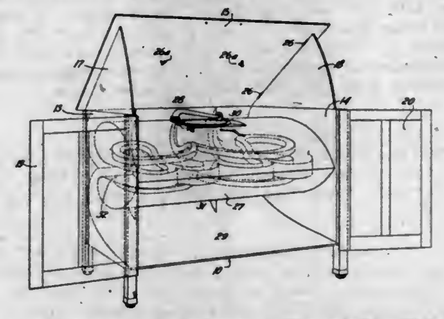
1. The combination with a magnetic material comprising a steel alloy consisting chiefly of iron and cobalt having substantially constant permeability at low magnetizing forces, of a magnetic circuit containing said material, and means for impressing upon said circuit a plurality of small magnetizing force components corresponding respectively to components of a composite signaling wave.

1,757,711. ATTACHMENT FOR LAMP-BULB-REPLACING APPARATUS. HAROLD D. GRINNELL, Pittsfield, Mass., assignor to The G. C. A. Manufacturing Company, Pittsfield, Mass., a Corporation of Massachusetts. Filed July 13, 1929. Serial No. 377,979. 9 Claims. (Cl. 294—20.)



1. In combination with apparatus for gripping a lamp socket and removing the same with or without the lamp bulb mounted therein, auxiliary means for non-locking association with said apparatus for gripping a lamp bulb and removing the same independently of its socket.

1,757,712. ACOUSTIC DEVICE. HENRY C. HARRISON, Port Washington, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed July 31, 1926. Serial No. 126,312. 17 Claims. (Cl. 181—27.)



1. A horn comprising a throat portion, a bell portion and at least three sound passages in multiple therebetween.

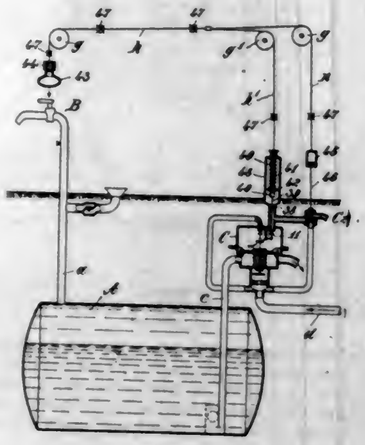
1,757,713. COATED PHOSPHIDE AND PROCESS FOR MAKING. FELIX HEBLER, Hanover, Germany. Filed July 23, 1927, Serial No. 208,048, and in Germany Aug. 14, 1925. 8 Claims. (Cl. 52—28.)

1. The process of regulating the development of gas with phosphides, which consists in enclosing the phosphide in an envelope capable of preventing the access of water to said phosphide until a relatively long period if time has elapsed after the immersion of said envelope into the water.

1,757,714. NICKEL ANODE. GEORGE B. HOGABOOM, Matawan, N. J., assignor to Hanson-Van Winkle-Munning Company, Matawan, N. J., a Corporation of New Jersey. Filed Feb. 28, 1929. Serial No. 343,543. 8 Claims. (Cl. 204—4.)

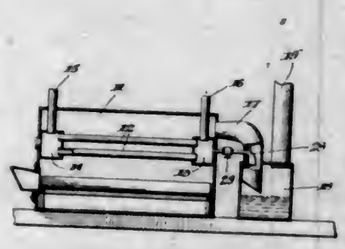
1. A substantially carbon-free nickel anode comprising substantially 98% to 99% + nickel, and substantially 1% to 2% of manganese and silicon.

1,757,715. HYDRAULIC FUEL-DISPENSING SYSTEM. ERNST HURLBAINX, Berlin, and MAX LUDWIG, Paderborn, Germany, assignors to the Firm Martini & Hüneke Maschinenbau-Aktiengesellschaft, Berlin, Germany. Filed Dec. 1, 1928, Serial No. 323,053, and in Germany Dec. 1, 1927. 43 Claims. (Cl. 221—67.)



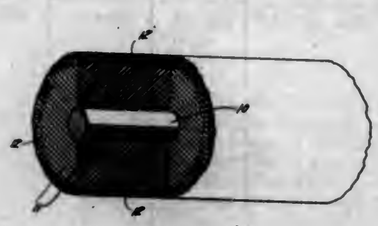
1. In a hydraulic fuel dispensing system, a storage tank fuel dispensing means comprising a tapping valve, pressure-water feed means, a pressure member adapted on being moved to put said storage tank into communication with said feed means, valve means adapted to cause said pressure member to be moved into one of its end positions, and hydraulic means to temporarily maintain the communication established by said pressure member independently from the position of said valve means.

1,757,716. PORTABLE HEATER FOR DRYING GRAIN. AXEL JOHNSON, Stavely, Alberta, Canada. Filed Oct. 26, 1927. Serial No. 228,936. 1 Claim. (Cl. 126—110.)



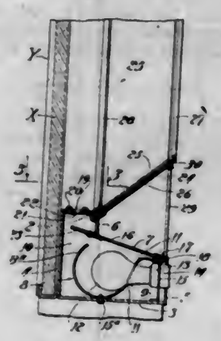
A portable heater for drying grain comprising a combustion chamber, a grate in said chamber, air compartments at each end of the chamber, air conducting tubes between the air compartments, an air inlet in connection with one compartment, and an air outlet in connection with the other compartment, a discharge conduit in connection with the chamber for the products of combustion, a draught inducing conduit connected with one of the air compartments and opening into the discharge conduit, valve means for regulating the draught inducing conduit, a blower connected to the air inlet and spark arresting means in connection with the discharge conduit.

1,757,717. INSULATED CONDUCTOR AND METHOD OF MANUFACTURING THE SAME. JOHN JOHNSTON, New Haven, Conn., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed June 5, 1923. Serial No. 643,506. 7 Claims. (Cl. 173—264.)



1. An insulated cable comprising an electrical conductor having a layer of rubber fashioned thereabout, and a water resistant material having high dielectric properties filling only the pores at and a comparatively short distance below the outer surface of the rubber formed during its fashioning.

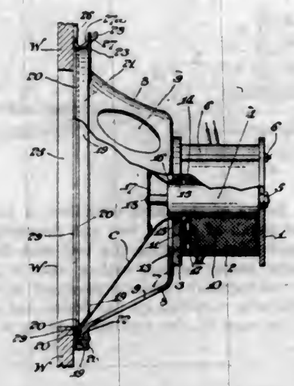
1,757,718. ILLUMINATOR, DEFROSTER, DEHEATER, AND DISPLAY DEVICE FOR WINDOWS, SHOW CASES, AND OTHER PLACES. JOHN W. KAUFFMANN, Chicago, Ill. Filed Aug. 7, 1929. Serial No. 384,217. 12 Claims. (Cl. 20—40.5.)



1. A hollow frame, a longitudinally extending partition in said frame arranged to obtain an air conduit and an additional conduit extending the length of said frame, said partition provided with apertures, electric light sockets secured in one of the walls of said air conduit, electric light bulbs extending through said apertures and mounted in said sockets, said bulbs fitting loosely in said apertures to permit the flow of air from said air conduit into said additional conduit, in combination with means whereby air is discharged from said additional conduit.

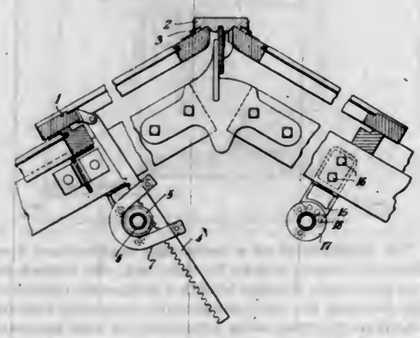
1,757,719. LOUD-SPEAKER MOUNTING. ARTHUR ATWATER KENT, Ardmore, Pa. Filed Apr. 23, 1929. Serial No. 357,459. 10 Claims. (Cl. 181—31.)

1. The combination with a substantially vertical wall having a sound opening, of a loud speaker unit, and means for detachably mounting said speaker unit upon said wall in operative register with said opening comprising hanger



structure disposed on that side of the center of gravity of said loud speaker unit that by its weight it thrusts against said wall.

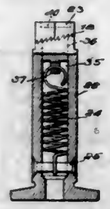
1,757,720. SASH-OPERATING APPARATUS. THOMAS E. KING, Westfield, N. J., assignor to Hitchings & Company, Elizabeth, N. J., a Corporation of New Jersey. Filed Feb. 6, 1928. Serial No. 252,069. 3 Claims. (Cl. 74—27.)



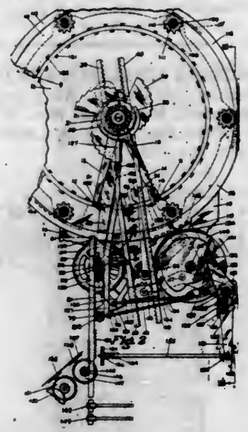
1. Apparatus of the class described comprising in combination a shaft, a pinion secured thereon, a rack engaging said pinion, and means for retaining said rack and pinion in effective engagement including a frame, anti-friction means mounted thereon to engage and take the thrust of said rack, and other anti-friction means mounted thereon to take the thrust of said shaft.

1,757,721. TAPPET. EMIL R. KLEMM, Jr., Chicago, Ill. Filed Sept. 10, 1928. Serial No. 305,069. 8 Claims. (Cl. 123—90.)

1. A tappet comprising a cylindrical shaped main member open at one end and a relatively shallow cap member seated on the open end of the main member for the purpose described, one semi-circumferential segment of the open end face of the main member being serrated and inclined to form a spiral and the other segment of the end face being similarly serrated and spiralled, said cap member serrated and spiralled to fit the open end of the main member and means adapted to hold the cap member seated on the main member.



1,757,722. WEIGHT READING AND PRINTING MECHANISM FOR SCALES. ANDRÉ KORONSKI, now, by judicial change of name, Andrew King, Narberth, Pa. Filed July 21, 1922. Serial No. 576,468. 25 Claims. (Cl. 234—1.)



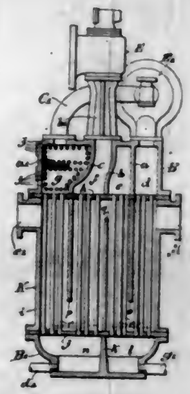
1. The combination of a mechanism provided with deflectible member, means for locking said member in any position, recording and registering means and means for transferring the reading as indicated by said member to said recording or registering means, said means including a reader for reading the position of said member, means for returning said reader to the last whole unit, two snails attached to said reader by which the whole units are transferred to said recording or registering means and a segment thrn which is transferred the fractions of a unit to said recording or registering means.

11. Means for reading a scale provided with a pointer, mechanically by one movement of an operating member, said means including a finger capable of assuming the position of the scale pointer, means for setting back said finger to the position of the last whole unit and means for recording or registering said scale reading as determined by the movement and position of said finger.

1,757,723. FLUID-CONDENSING SYSTEM. GOTTDANK L. KOTHNY, Strafford, Pa., assignor to C. H. Wheeler Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Oct. 23, 1926. Serial No. 143,567. 16 Claims. (Cl. 257—24.)

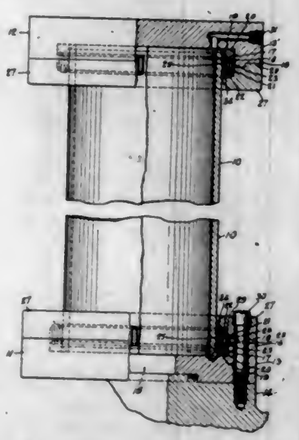
1. In a fluid-condensing system utilizing an ejector, a condenser shell, a plurality of groups of tubes in said

shell, the tubes of one of said groups communicating with the discharge of said ejector and passing the fluid to be



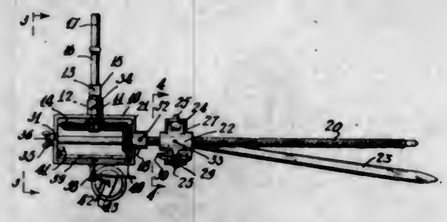
condensed into a region around the tubes of another of said groups, and means for passing a cooling medium through the tubes of said last-named group.

1,757,724. PACKING APPLIANCE FOR PIPE TESTING. CLAS S. LARSON, Milwaukee, Wis., assignor to A. O. Smith Corporation, Milwaukee, Wis., a Corporation of New York. Filed Feb. 17, 1928. Serial No. 254,958. 7 Claims. (Cl. 137—76.)



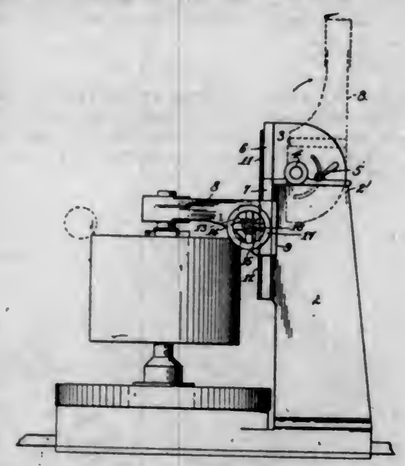
1. A packing appliance for pipes to be hydraulically tested, comprising a block adapted to be in proximity to an end of a pipe and having a shoulder surrounding the adjacent end portion of said pipe in spaced relation thereto to provide an annular chamber between said pipe end portion and an annular wall of said shoulder concentric with said pipe, an annular packing ring support associated with said block and situated at least partially in said chamber in spaced and concentric relation to said pipe and said annular shoulder wall, an annular packing ring of general U-shape in cross-section having the inside face of its base resting against said support and its legs situated in spaced apart relation to each other, the outer face of one of said legs snugly encircling said pipe and at least a part of the outer face of the other of said legs snugly engaging said annular wall of said chamber, and a retainer fixing said annular packing ring relatively to said pipe and said annular wall.

1,757,725. MINER'S DRILL. PAUL LESKO, Jessup, Pa. Filed July 10, 1928. Serial No. 291,610. 2 Claims. (Cl. 255—52.)



1. In a device of the class described, a frame for supporting the shank of a drill tool and provided at one side with a handle for operating the tool and the other side of the frame being formed with a slot, a peg for supporting a counterweight slidably mounted in the slot, and an arm pivotally mounted on the frame and arranged for engaging the rear of the peg for holding it in adjusted positions.

1,757,726. SWIVELING ARBOR SUPPORT. PAUL LIEBSCHER, Chemnitz-Gablenz, Germany. Filed Oct. 14, 1927. Serial No. 226,085. 13 Claims. (Cl. 90—1.)

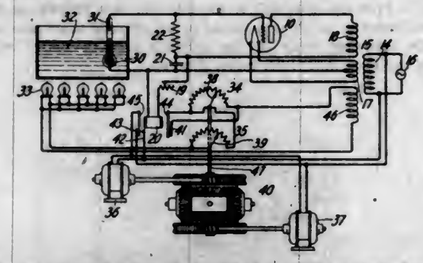


1. The combination of a supporting member and a supporting arm having a free forward end, the former comprising a two-part member having a horizontal pivotal connection whereby one part is swingable vertically relatively to the other, the arm being adjustable on said supporting member and shiftable with the swingable part of said supporting member in the direction of the length of said supporting member so as to free all of the sides of said supporting member of any transverse obstruction to the handling of the work.

1,757,727. ELECTRIC CONTROL DEVICE. WARREN A. MARRISON, Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Oct. 19, 1926. Serial No. 142,573. 10 Claims. (Cl. 250—27.)

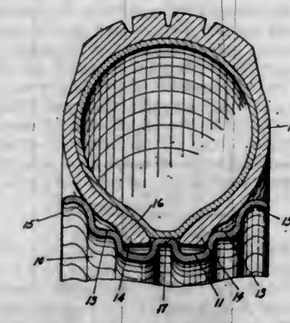
7. A temperature control system, comprising a vacuum tube having a grid, a cathode and an anode, a relay in said anode circuit operable upon variation of current therein, an electric heater, electrically actuated means for varying the current through said heater, means for normally supplying a biasing potential to said grid, temperature responsive means for altering said biasing potential, and a common source of alternating current for supplying the

cathode and anode current and the grid biasing potential of said vacuum tube, the current through said heater, and the current for operating the means whereby the heater current is varied.



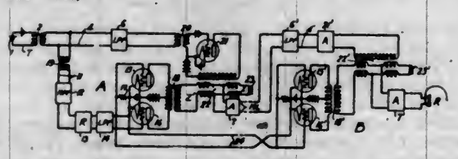
9. An electric relay comprising a vacuum tube having a cathode, grid and anode, a source of alternating current supplying said cathode and anode, an impedance in said anode circuit, a source of uni-directional potential for said grid obtained from the potential drop across said impedance, said impedance being common to the grid and anode circuits of said tube, and a shunt across said impedance for effectively eliminating said impedance from the grid circuit of said tube while effectively maintaining it in said anode circuit.

1,757,728. RIM FOR VEHICLE WHEELS. JOHN I. MARTIN, Akron, Ohio, assignor to The Firestone Tire and Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Mar. 8, 1926. Serial No. 93,042. 1 Claim. (Cl. 152—20.)



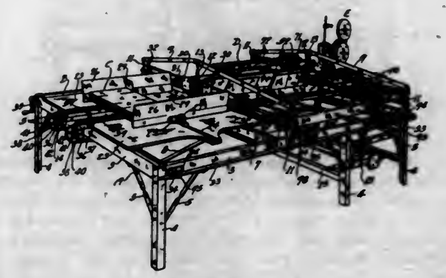
A drop center rim for vehicle wheels formed with a dropped center base portion adapted to receive a tire bead to facilitate the mounting of a tire upon, or its removal from, said rim and a raised bead seating shoulder and tire retaining flange on each side thereof, said rim having a circumferential rib projecting outwardly from said base portion and defining a bead receiving groove on each side thereof.

1,757,729. WAVE-TRANSMISSION SYSTEM. ROBERT C. MATHES, Wyoming, N. J., assignor, by mesne assignments, to Western Electric Company, Incorporated, a Corporation of New York. Filed Mar. 13, 1925, Serial No. 15,227. Renewed Oct. 17, 1929. 20 Claims. (Cl. 178—44.)



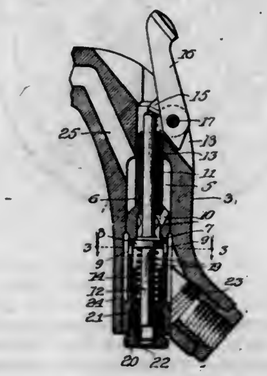
1. The method of controlling the volume of energy passing over a system, which comprises rectifying a portion of the energy input to the system, and continuously changing the volume in response to changes in the rectified energy below a preassigned frequency, while preventing more rapid changes in the rectified energy from affecting the volume.

1,757,730. BOX FOLDING AND TAPING MACHINE. JOHN H. MCPIKE, Alton, Ill. Filed May 10, 1924. Serial No. 712,223. 39 Claims. (Cl. 93—49.)



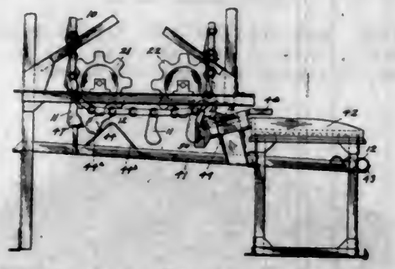
1. A box-folding machine including, in combination, means comprising oppositely disposed wings swingably and reciprocatorily movable for engaging and folding the stock, and continuous feeding means for conveying the stock to and from the folding-wings.

1,757,731. BALANCED THROTTLE VALVE FOR PNEUMATIC TOOLS. REINHOLD A. NOBLING, Aurora, Ill., assignor to Independent Pneumatic Tool Company, Chicago, Ill., a Corporation of Delaware. Filed Feb. 14, 1927. Serial No. 167,884. 5 Claims. (Cl. 121—35.)



1. A throttle valve mechanism for pneumatic tools, comprising in combination with the handle of the tool having an air supply passage and a bore therein with the bore extending across said passage, of a bushing fitting in said bore and dividing the same into upper and lower chambers in said passage, said bushing having a valve seat therein and air ports extending through said bushing on opposite sides of said seat and opening into the respective chambers, a puppet valve member in said bushing for said seat and having guide stems on opposite sides thereof and supported through the medium of said bushing, said stems having their outer ends of substantially equal area and exposed to the atmosphere to provide a balanced valve when off said seat, and means for moving the valve member on and off its seat.

1,757,732. CONVEYER SYSTEM FOR USE IN HANDLING RUBBER TUBE MANDRELS. MAX H. PADE, Akron, Ohio, assignor to The Firestone Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Feb. 26, 1925. Serial No. 11,741. 8 Claims. (Cl. 198—177.)



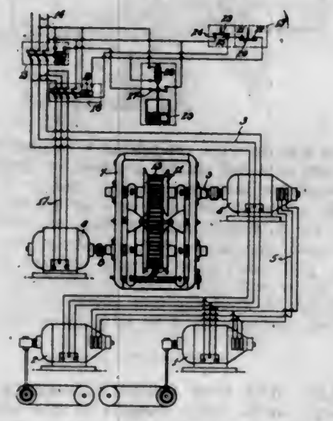
1. Apparatus for handling tube mandrels comprising a conveyer including spaced pivoted hooks for carrying the mandrels, a station past which the conveyer travels, and automatic means at the station for removing the mandrels from the conveyer, said means including an upwardly inclined track for engaging and tilting the hooks and a downwardly sloping track on which the mandrels can roll from said tilted hooks.

1,757,733. ELECTRICAL TIMING DEVICE. FRANK E. PENDLETON, Montclair, N. J. Original application filed Apr. 26, 1924, Serial No. 709,282, now Patent No. 1,731,436. Divided and this application filed Oct. 11, 1927. Serial No. 225,437. 8 Claims. (Cl. 200—37.)

2. A device of the type described, which comprises, a series of insulated posts, a rotating wiper contacting with said posts in succession, resilient contacts separately connected to separate posts of said series, an insulated plate rotatable to a number of positions, interconnected contacts on said plate brought into contact with the resilient contacts of different combinations of posts in different positions of said plate, said plate having notches in its periphery to correspond with said positions, a detent for said notches and means for manually rotating said plate.

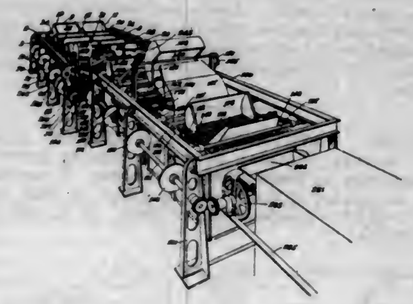
1,757,734. SYNCHRONOUS VARIABLE-SPEED ELECTRIC MACHINE DRIVE. WILLIAM R. PERRY, Columbus, Ind., assignor to Reeves Pulley Company, Columbus, Ind., a Corporation of Indiana. Filed June 4, 1928. Serial No. 282,527. 4 Claims. (Cl. 172—293.)

1. In a power system the combination with a plurality of induction machines having phase wound primaries and secondaries respectively electrically interconnected, a source of current supply for the primaries of said machines, means for driving the rotor of one of said machines in a direction opposite to the rotary magnetic field in the primary thereof, a switch for controlling a supply of current to the primaries of all of said machines and means insuring delay of the opening of said switch until after the said machines have stopped.



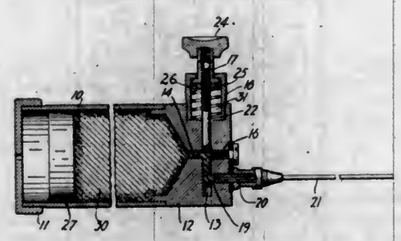
4. In a power system, the combination with a plurality of induction machines having phase-wound primaries and secondaries and having their rotors electrically interconnected, a source of current supply for the primaries of said machines, means for driving the rotor of one of said machines in a direction opposite to the rotary magnetic field in the primary thereof, a switch for controlling a supply of current to the primaries of all of said machines, and means for insuring delay of the initiation of said driving means until establishment of connection between the current source and the primaries of said induction machines.

1,757,735. APPARATUS FOR TREATING MATERIAL. KURT THEODORE POTTHOFF, Brooklyn, N. Y., assignor to U. S. Galvanizing & Plating Equipment Corporation, a Corporation of New York. Filed June 8, 1927. Serial No. 197,414. 68 Claims. (Cl. 266—7.)



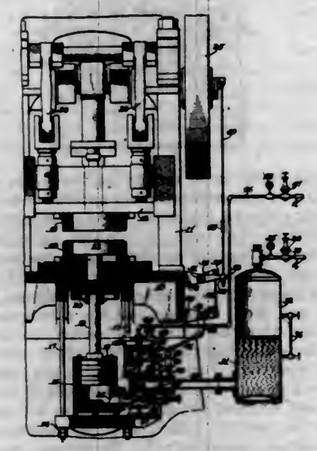
1. A machine of the class described comprising a basket, means for rocking the same a predetermined period of time, means for automatically imparting additional movement to said basket and power operating means for actuating both of said means.

1,757,736. LUBRICATING DEVICE. WILLIAM T. PRITCHARD, Maplewood, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Oct. 1, 1926. Serial No. 138,857. 2 Claims. (Cl. 221—47.3.)



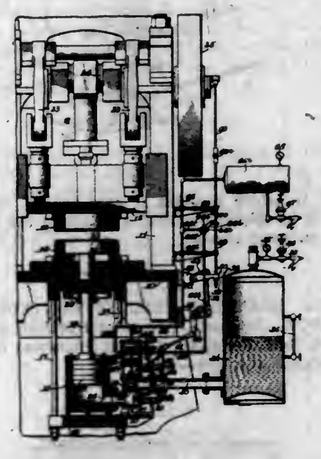
1. A lubricating device comprising a head having inlet and outlet ports and a cylindrical bore communicating with said ports and projecting at right angles thereto, said bore having a portion extending beyond said outlet port, a hollow casing connected to said head and adapted to supply a lubricant to said bore through said inlet port, a reciprocating plunger within said bore, resilient means within said head located in the end of said bore beyond said outlet port, and elongated means extending from said outlet port of such a diameter to prevent the lubricant from being withdrawn into said bore.

1,757,737. CUSHION FOR SHEET-METAL PRESSES. FREDRICH J. RODE, Chicago, Ill., assignor to Marquette Tool & Mfg. Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 9, 1929. Serial No. 338,816. 14 Claims. (Cl. 267—1.)



1. In a press, a pressure pad, an hydraulic cushion for resisting the movement of the pad in one direction and embodying a cylinder and piston movable relatively one with relation to the other, a liquid column for supplying liquid to the cushion, an outlet through which liquid is discharged from the cushion, variable resistance pressure creating means for controlling said outlet, and automatically controlled means for supplying liquid from said column to said cylinder around the said resistance pressure creating means.

1,757,738. CUSHION FOR SHEET-METAL PRESSES. FREDRICH J. RODE, Chicago, Ill., assignor to Marquette Tool & Mfg. Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 9, 1929. Serial No. 338,817. 14 Claims. (Cl. 267—1.)



1. In a sheet metal press a pressure pad, a cushion for resisting the movement of the pad in one direction, means for creating a variable resistance pressure in said cushion, said means embodying two fluid pressure controlled elements, and means for varying the fluid pressure in one of said elements independently of the other of said elements.

1,757,739. PICTURE HANGER. SAMUEL ROSENBLUM, New York, N. Y. Filed Dec. 21, 1927. Serial No. 241,595. 3 Claims. (Cl. 40—145.1.)

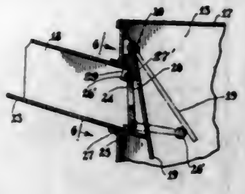


3. A picture hanger for use with an ornament or the like, including a body having its upper end formed with a rearwardly extending picture molding-engaging hook and having its lower end formed with a rearwardly extending cord engaging hook, the front face of the body being flat throughout the distance between the hooks, forwardly extending prongs on the body between the hooks, said prongs being formed by slits extending into the body from the side edges of the latter and each of said prongs having its free extremity formed to penetrate an ornament.

1,757,740. ASH-CAN COVER. MAX ROSNER, New York, N. Y. Filed May 12, 1928. Serial No. 277,187. 3 Claims. (Cl. 220—32.)

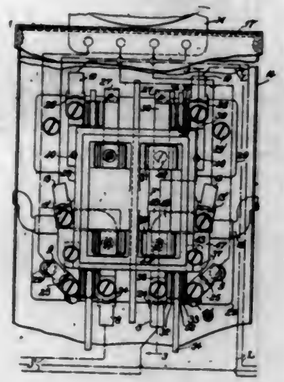
1. An ash can cover, comprising a body member, an inlet member extended thru the side of the body member, a cover hinged on the inner side of the body member and closing the inner end of the inlet member, an engaging member hingedly mounted on the lower portion of the inlet member and extending transversely in the inlet member, and having an open portion, a roller mounted on the free

edge of the engaging member, springs urging the engaging member into the said transverse position, and said engaging member being pivotable to a substantially horizontal



position, in which position it acts against the door for holding it in opened position, and covers the inner lower edge of the inlet member.

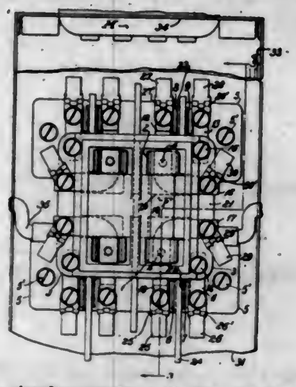
1,757,741. ELECTRIC-CIRCUIT-CONTROLLING APPLIANCE. JOSEPH SACHS, West Hartford, Conn. Filed Sept. 8, 1927, Serial No. 218,279. Renewed Dec. 7, 1929. 20 Claims. (Cl. 200—114.)



1. In a fused switch appliance, the combination of a pair of fuse contacts, two pairs of opposed stationary switch contacts in normally fixed relation to the fuse contacts, a movable switching member comprising two conducting elements respectively movable between the switch contacts of the corresponding pairs to make and break electrical connections between them, two wire terminals connected respectively with one switch contact of one pair and with one switch contact of the other pair, means whereby electrical connection may be established between one fuse contact and the remaining switch contact of one pair, and two other wire terminals connected respectively with the remaining switch contact of the other pair and with the remaining fuse contact.

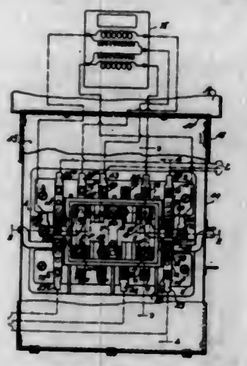
1,757,742. ELECTRIC-CIRCUIT-CONTROLLING APPLIANCE. JOSEPH SACHS, West Hartford, Conn. Filed July 12, 1927, Serial No. 205,207. Renewed Dec. 7, 1929. 5 Claims. (Cl. 200—114.)

1. In a fused switch appliance, the combination of a base, two fuse receiving contacts connected with the base, two switch devices each comprising two stationary switch contacts associated with the base and a movable switching member comprising a conducting element normally engaging the said stationary switch contacts to establish electrical connection between them, the said switch contacts being initially free from electrical connection with the said fuse contacts, manually operable means for moving the movable members of the two switching devices to open or close the circuit through both of the said devices



substantially simultaneously, and six wire receiving terminals connected respectively with the two fuse contacts and with the four stationary switch contacts of the two switch devices.

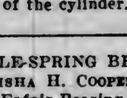
1,757,743. ELECTRIC METER SERVICE APPLIANCE. JOSEPH SACHS, West Hartford, Conn. Filed Sept. 20, 1927. Serial No. 220,807. 18 Claims. (Cl. 175—183.)



1. In an electric meter service appliance, the combination of two pairs of opposed stationary switch contacts, supporting elements for the respective contacts forming therewith switch contact structures, a movable switching member comprising two conducting elements respectively movable between the said contacts of the corresponding pairs to make and break electrical connections between them, service wire and load wire connectible terminals connected respectively with the stationary switch contacts at one side of the switching member, two other wire terminals electrically connected respectively with the remaining stationary switch contacts at the other side of the switching member and adapted for the connection between them of a coil of an electric meter, and two additional contact devices carried respectively by the service and load connectible contact structures and electrically connected therewith, the said devices being adapted for the holding of a by-pass member to electrically connect the service and load terminals independently of the switch contacts and independently of the meter coil.

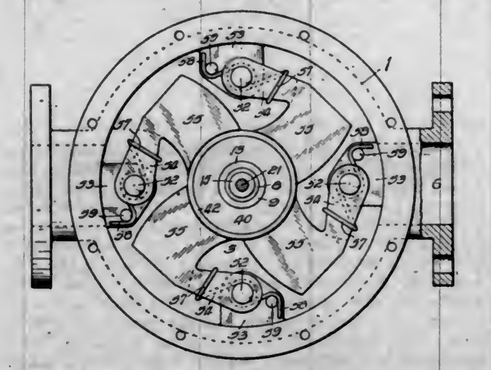
1,757,744. ELECTRIC METER SERVICE APPLIANCE. JOSEPH SACHS, West Hartford, Conn. Filed Jan. 11, 1928. Serial No. 246,013. 10 Claims. (Cl. 200—16.)

1. In an electric switch, the combination of a pair of stationary switch contacts, a movable switching member including a contact adapted to engage or disengage the said stationary contacts to normally make or break electrical connection between them, and means associable with the movable switching member and adapted at the option



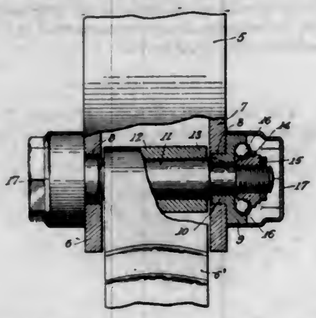
of the user to either permit or prevent the breaking of the electrical connection between the said stationary contacts upon movement of the switching member to a position corresponding to a disengaged position of the first said movable contact.

1,757,745. MACHINE FOR DESCALING BOILERS. FREDERICK L. SCHLEICHER, St. Louis, Mo., assignor to The Schleicher Corporation, Wilmington, Del., a Corporation of Delaware. Filed Dec. 27, 1927. Serial No. 242,551. 7 Claims. (Cl. 210—35.)



1. In a device for abrading material to be supplied to feed water to a boiler in a suspended state, a casing having opposed water inlet and outlet openings, a rotatable abradant cylinder suspended from the top wall of the casing and free of contact with the opposite wall of the casing, a plurality of horizontally disposed pivotally supported brushes of descaling material to be abraded by contacting with the side wall of the vertically disposed cylinder and resilient means for progressively feeding the brushes to the wall of the cylinder.

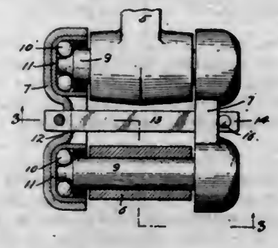
1,757,746. VEHICLE-SPRING BEARING. RAYMOND R. SEARLES and ELISHA H. COOPER, New Britain, Conn., assignors to The Fafnir Bearing Company, New Britain, Conn., a Corporation of Connecticut. Filed Mar. 10, 1925. Serial No. 14,395. 2 Claims. (Cl. 267—54.)



1. In a spring end connection, a frame having spaced apart side members with registering apertures therein,

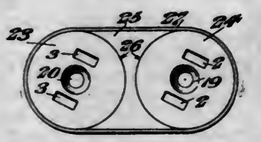
bearing member raceway means abutting the outside of said spaced apart side members, said bearing member raceway means having inwardly extending apertured bosses fitting within the apertures in said frame side members whereby said raceway means are sustained on said frame against axial and radial displacement, pin means extending through said bosses to the outside of said frame, said pin means having antifriction bearing member raceways at the ends thereof and complementary to the raceway portions of said first mentioned raceway means, and antifriction bearing members interposed between said complementary raceways.

1,757,747. SPRING SHACKLE. RAYMOND R. SEARLES, New Britain, Conn., assignor to The Fafnir Bearing Company, New Britain, Conn., a Corporation of Connecticut. Filed June 9, 1928. Serial No. 284,259. 5 Claims. (Cl. 267—54.)



1. An antifriction spring shackle construction including shackle links, antifriction bearing means for connecting an automobile frame and spring through said links, a spacing and tie-bar for spacing and connecting said links, said spacing and tie-bar having a shouldered portion for spacing said links apart, said links having openings therethrough and said spacing and tie-bar having ends projecting through said openings, said projecting ends on said spacing and tie-bar having transverse openings therein and wedge keys extending through said openings for drawing said links together on the shoulders of said spacing and tie-bar, said wedge keys being bent over the sides of said links for holding the same in place and forming a positive lock.

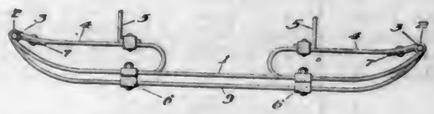
1,757,748. DUAL ELECTRICAL OUTLET DEVICE. HAROLD E. SLADE, Glen Ridge, N. J., assignor to Beaver Machine & Tool Co., Inc., Newark, N. J., a Corporation of New Jersey. Filed Mar. 28, 1927. Serial No. 178,943. 1 Claim. (Cl. 173—334.)



A dual electrical outlet comprising an elongated insulating housing including body and closure members having longitudinal grooves in the opposing surfaces thereof for the reception of a duplex electrical conductor, said body being formed of a pair of cylindrical outer portions and an intermediate saddle portion, a peripheral band surrounding said body members to maintain the same in assembled relation, a pair of angularly arranged oppositely disposed contact openings in each of said cylindrical outer body portions extending therethrough on either side of the axis of said grooves, angularly arranged blade engaging contacts disposed within said contact openings and adapted to receive corresponding contact blades through the outer ends of said openings, and integral clips

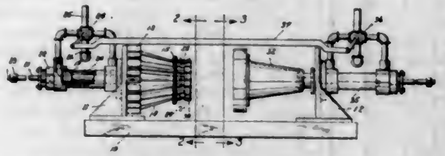
carried by the inner ends of said blade engaging contacts to engage the conductor wires of said duplex conductor, said wires being diverged within the housing and disposed on either side of the longitudinal axis thereof, and means for securing said body and closure members together to form a unitary structure.

1,757,749. AUTOMOBILE BUMPER. WILLIAM A. STARCK, Milwaukee, Wis., assignor to Badger Manufacturing Corporation, Milwaukee, Wis., a Corporation of Delaware. Original application filed Feb. 8, 1928, Serial No. 252,815. Divided and this application filed May 29, 1929. Serial No. 366,926. 20 Claims. (Cl. 293—55.)



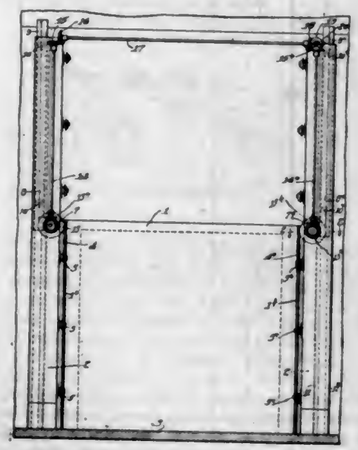
1. An automobile bumper comprising an impact bar, separate spring supporting bars connected to said impact bar intermediate the ends and the center thereof and pivoted to said ends to support said bar, and an advance bar spaced forwardly from said impact bar.

1,757,750. EXPANDING MACHINE. HORACE D. STEVENS, Akron, Ohio, assignor to The Firestone Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed June 20, 1928. Serial No. 287,031. 8 Claims. (Cl. 18—2.)



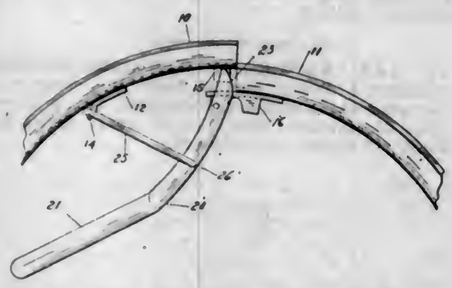
8. Apparatus of the class described comprising in combination, means for radially expanding an annular endless band and means for placing said band in expanded condition onto a retaining form.

1,757,751. PRISON-DOOR OPERATOR. JOSEPH B. STRAUSS, Chicago, Ill. Filed May 7, 1925. Serial No. 28,630. 8 Claims. (Cl. 268—59.)



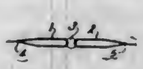
1. A prison door comprising a frame, a closing part adapted to slide along said frame, a motor located above said closing part, a vertical shaft at each side of said frame, a horizontal shaft connecting them, all of said shafts being connected with said motor, a driving connection between said vertical shafts and two sides of said closing part, whereby the closing part may be reciprocated along said frame.

1,757,752. RIM-COLLAPSING TOOL. JOSEPH G. SWAIN and MARION W. MITCHELL, Akron, Ohio, assignors to The Firestone Steel Products Company, Akron, Ohio, a Corporation of Ohio. Filed Nov. 1, 1926. Serial No. 145,414. 7 Claims. (Cl. 157—1.)



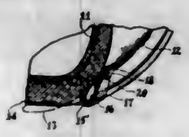
1. A bifurcated tool for collapsing and expanding transversely split rims, said tool comprising a handle portion, spaced arm portions each having a cam face on its end, a pivot lug provided on each of the arm portions adjacent said end and adapted to be positioned in apertures in one end of a tire rim, whereby said tool may be operable as a lever of the first class to draw said rim end radially inwardly of the other as said handle portion is swung inwardly and said cam faces are urged against said other rim end, and a bail pivoted on said arm portions at a point remote from said cam faces, the free end of said bail being engageable with said other rim end, whereby the tool may be operable as a lever of the second class to draw the other rim end circumferentially past the first-named rim end to reduce the circumference of said rim.

1,757,753. CARTRIDGE FUSE. FRITZ THIESS, Berlin-Siemensstadt, and HERMANN GOETSCH, Berlin-Charlottenburg, Germany, assignors to Siemens & Halske Aktiengesellschaft, Wernerwerk, Siemensstadt, near Berlin, Germany. Filed Sept. 16, 1927, Serial No. 220,025, and in Germany Nov. 9, 1926. 2 Claims. (Cl. 200—135.)



1. A fuse comprising two single turns of nickel alloy wire soldered together by means of low-melting-point solder, having a resistance of not more than 0.2 ohms and a static load capacity of 12 joules.

1,757,754. ANTISPLASH TIRE. HAROLD WATERFALL, New York, N. Y. Filed July 7, 1928. Serial No. 290,943. 1 Claim. (Cl. 152—13.)



In an anti-splash tire, a casing, an anti-splash mud guard consisting of a thin annular member integral therewith, the outer edge of said mud guard being rolled inwards, said mud guard projecting from the side of said casing near the outer periphery thereof and running around the circumference of the casing, a plurality of straps having hook-shaped parts at one end engaging said rolled edge to hold it in position, the other end lying flat against the side of the casing, and having a plurality of apertures, studs threaded at their free end projecting from the side of said casing, each of said studs engaging one of the apertures in the straps, and nuts engaging said studs at their threaded ends, whereby the straps may be adjusted radially of said casing and held against the side thereof.

1,757,755. COLLOIDED CELLULOSE AND INDURATED FIBER. FREDERICK C. HAHN, Wilmington, Del., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Feb. 8, 1928. Serial No. 252,942. 13 Claims. (Cl. 8—20.)

1. The process of gelatinizing cellulose which comprises preparing a gelatinizing reagent comprising fixed caustic alkali dissolved in water in the proportion of from 2 to 11 mols alkali per 100 mols water and treating said cellulose with said gelatinizing reagent at a temperature between the freezing point of the reagent and a point about 20° C. above said freezing point.

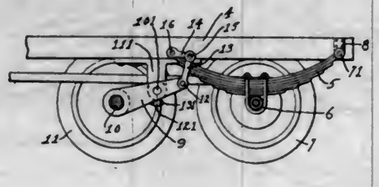
1,757,756. ABSORBENT PAPER. GEORGE L. SCHWARTZ, Wilmington, Del., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Nov. 9, 1927. Serial No. 232,192. 15 Claims. (Cl. 8—20.)

1. A process for producing a porous felted cellulose fibre product which comprises treating a cellulose fibre mat in the form of a sheet with a gelatinizing reagent comprising fixed caustic alkali and water in the proportion of 2 to 11 mols caustic per hundred mols water, at a temperature between the freezing point of the gelatinizing reagent and a temperature about 20° C. above said freezing point, until the cellulose fibre is superficially gelatinized, then removing the sheet from the gelatinizing reagent and washing the sheet to substantially free it from said reagent.

1,757,757. PROCESS OF PRODUCING POROUS PAPER. GEORGE L. SCHWARTZ, Wilmington, Del., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed June 6, 1928. Serial No. 283,446. 5 Claims. (Cl. 8—20.)

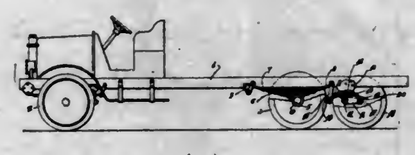
1. A process for producing a porous felted cellulose fibre product which comprises treating a cellulose fibre mat made from cooked cotton fabrics with aqueous caustic solution, at a temperature above the gelatinizing point of the fibres and less than 104° C.

1,757,758. RUNNING GEAR. JOHN R. JUNKIN, Whittier Calif., assignor to Six Wheel Corporation, Los Angeles, Calif., a Corporation of California. Filed Nov. 23, 1926, Serial No. 150,170. Renewed Aug. 16, 1929. 8 Claims. (Cl. 280—104.)



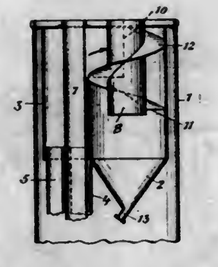
1. A running gear comprising a frame, leaf-springs connected at one end to the frame, an axle supporting the springs, wheels on said axle, levers pivotally connected with the frame, independent stub shafts carried by the levers, wheels mounted on the stub shafts, said wheels being unconnected otherwise than through the levers and frame so as to operate independently of one another relative to the frame, and links pivoted to the levers and pivotally connected with the other ends of the springs.

1,757,759. RUNNING GEAR. DAVID L. VAN LEUVEN, Los Angeles, Calif., assignor to Six Wheel Corporation, Los Angeles, Calif., a Corporation of California. Filed Oct. 1, 1927. Serial No. 223,338. 3 Claims. (Cl. 280—104.)



1. The combination with a motor vehicle chassis, including a frame, a pair of drive wheels, and means for suspending the drive wheels from the frame, of a second pair of wheels, separate trunnions upon which the second pair of wheels is journaled, springs fulcrumed intermediate their ends from the frame, means for connecting the springs with the drive wheel suspension means, and means for connecting the springs with the trunnions.

1,757,760. SPARK ARRESTER. SIMON GERARDUS VISKER, Amsterdam, Netherlands. Filed July 9, 1927, Serial No. 204,574, and in Switzerland Sept. 4, 1926. 4 Claims. (Cl. 183—84.)

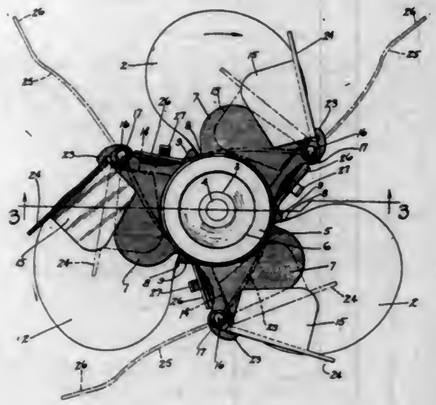


1. An exhaust device of the type described, comprising an exhaust gas receiving chamber, a whirl-imparting chamber having a closed funnel shaped lower end and an inlet opening near its upper end communicating with said receiving chamber, a discharge conduit extending downwardly into said whirl-imparting chamber from the upper end thereof, said conduit having a greater cross-sectional area than said inlet-opening, and means for directing a current of exhaust gases from said receiving chamber in a helically downward direction through said whirl-imparting chamber toward said funnel shaped lower end and up through said conduit, whereby the solid glowing particles entrained in said exhaust gases are maintained in constant whirling motion and not discharged through said conduit until they have been reduced to a completely burned and pulverized state.

1,757,761. PROPELLER ATTACHMENT. WILLIAM H. WENDT, Little Falls, Minn. Filed Sept. 17, 1928. Serial No. 306,388. 9 Claims. (Cl. 170—161.)

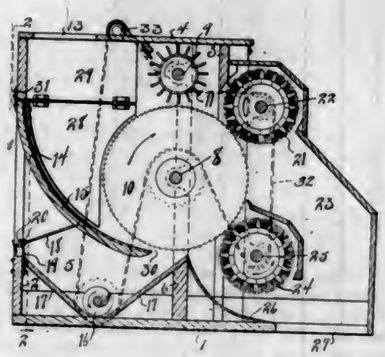
1. The combination with a propeller having relatively immovable blades, of a frame having means for demount-

ably securing it to said blades, a plurality of wing members pivotally mounted upon said frame and each normally positioned to conceal a portion of the effective surface



of a propeller blade to lessen the propelling effect of the propeller in the water, and means for yieldably retaining said wing members in normal operative positions.

1,757,762. MACHINE FOR EXTRACTING HULLS OF COTTON BOLLS FROM SEED COTTON. SAMUEL WILLIAMS, Elk City, Okla. Filed Nov. 1, 192[illegible] Serial No. 316,598. 6 Claims. (Cl. 19—37.)



1. A hull extracting machine having a picker roller and upper and lower brushes cooperating with said roller for removing cotton from the teeth of the picker, and means for driving said picker roller and brushes.

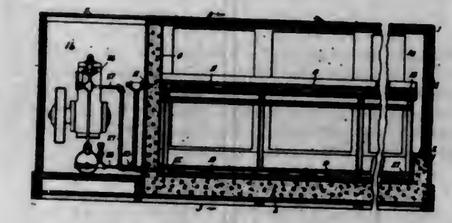
1,757,763. INTERLOCKING-UNIT CONSTRUCTION. PAUL BETZLER, Jackson, N. Y. Filed June 27, 1929. Serial No. 373,966. 10 Claims. (Cl. 72—39.)

1. A building unit of the character specified, including a web body having one of its longitudinal edges inwardly bent at an angle to the surface of said body, to form a rib integral therewith, and having its other longitudinal edge bent inwardly, laterally and outwardly to form a hook sectional beam or column member, the groove formed by the hook section thereof being wide enough to permit



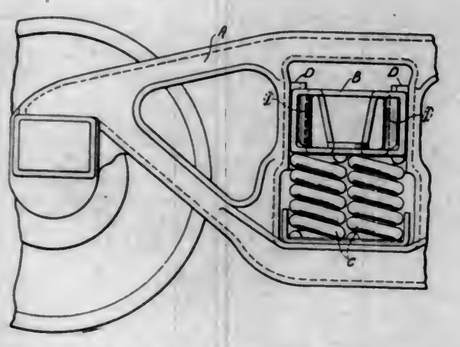
the insertion of a rib similar to that integral with the opposite edge of said unit, in a direction transversal of the surface of said web body.

1,757,764. DISPLAY APPARATUS. EASTMAN A. BURROWS, Chicago, Ill., assignor to Thomas D. Huff, Chicago, Ill. Filed Oct. 13, 1926. Serial No. 141,407. 8 Claims. (Cl. 62—S9.5.)



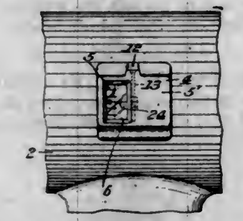
1. A display apparatus comprising a containing case and a plurality of cooling supports therein each comprising an ice mat structure and circulatory pipes.

1,757,765. TRUCK BOLSTER. HARRY C. DREIBUSS and GEORGE S. CHILES, St. Louis, Mo., assignors to Scullin Steel Company, St. Louis, Mo., a Corporation of Missouri. Filed Apr. 9, 1928. Serial No. 268,638. 4 Claims. (Cl. 105—197.)



1. In a car truck, the combination of a side frame, a bolster having one of its end portions positioned in an opening in said side frame, columns on the side frame for guiding said bolster, which are spaced apart a distance less than the width of the bolster, and supporting springs for said bolster arranged on the inside and on the outside of said columns.

1,757,766. INDICATOR FOR SCALES. ANDREW W. FERGUSON and ROBERT J. BURKE, Latrobe, Pa., assignors to Lincoln Scale Corporation, Latrobe, Pa., a Corporation of Delaware. Filed Jan. 7, 1929. Serial No. 330,727. 5 Claims. (Cl. 116—129.)



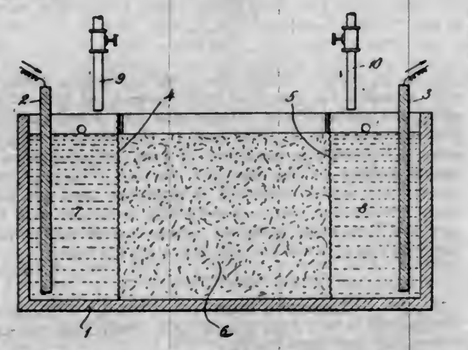
1. A drum scale having markings thereon, front and rear indicators, each indicator having an independent adjustment operable from the outside of the scale to cause the indicator to coincide with the markings on the drum.

1,757,767. PNEUMATIC HAMMER. GEORGE H. GILMAN, Belmont, Mass. Filed Jan. 10, 1922, Serial No. 528,272. Renewed Sept. 25, 1929. 28 Claims. (Cl. 121—7.)



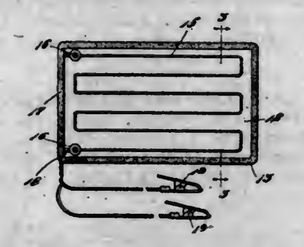
7. In a pneumatic hammer, a rotary chuck, a handle for rotating said chuck, and means for retaining the tool therein, said means operated by said handle.

1,757,768. PURIFIED FIBER. ROSS AIKEN GORTNER and WALTER FRED HOFFMAN, St. Paul, Minn., assignors to The Northwest Paper Company, Cloquet, Minn., a Corporation of Minnesota. Original application filed Sept. 2, 1925, Serial No. 54,003. Divided and this application filed Jan. 30, 1926. Serial No. 84,863. 16 Claims. (Cl. 92—3.)



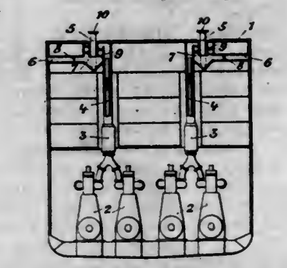
1. A purified wood fiber substantially free from adsorbed inorganic impurities except silica.

1,757,769. WINDSHIELD. FREDERICK G. HALBIG, Chepachet, R. I. Filed Feb. 2, 1929. Serial No. 336,954. 1 Claim. (Cl. 219—19.)



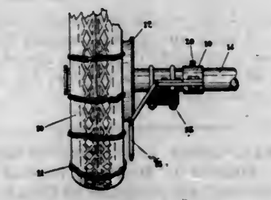
A device for preventing ice from forming on the outside surface of an automobile windshield or the like, comprising a sheet of glass, a felt border within which the edge of the glass is inset having a substantial thickness to space the glass from the inside surface of the windshield and form a hollow compartment therewith, a self supporting resistor mounted at its opposite ends on said glass and disposed in a zigzag relation within said compartment over and in contact with the inner surface of the windshield, connecting leads from the opposite ends of said wire and provided with clips adapted to be readily secured to portions of an automobile to connect the wire in an electric circuit, and readily removable suction cups having fingers to engage and hold said glass and border in position on the windshield.

1,757,770. SHIP WITH AEROPLANE DECK. WILHELM HEFTI, Winterthur, Switzerland, assignor to the Firm: Sulzer Frères Société Anonyme, Winterthur, Switzerland. Filed Sept. 29, 1928, Serial No. 309,146, and in Switzerland Nov. 25, 1927. 5 Claims. (Cl. 114—0.5.)



1. In a ship having an aeroplane deck the combination of the driving engines and telescopic funnels adapted with lateral branch funnels to be closed at will.

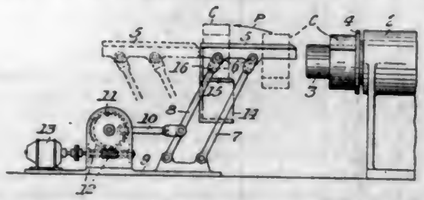
1,757,771. MUD SCRAPER. SIEBEND H. IDEUS, Beatrice, Nebr. Filed Apr. 13, 1929. Serial No. 354,874. 1 Claim. (Cl. 280—158.)



A mud scraper for an automobile wheel including a blade positioned in parallelism with the plane of the automobile wheel, said blade having a forwardly and inwardly

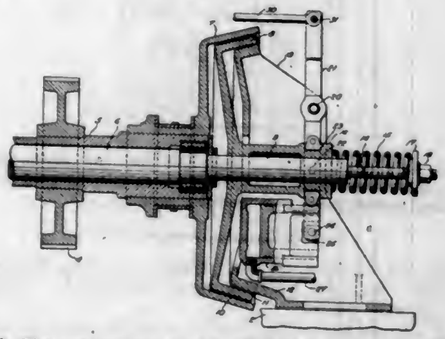
inclined shank and terminating in a horizontal portion adjacent the wheel axle and parallel thereto, a collar adapted to surround the wheel axle and adjustably slidable thereon, a connection between said collar and the horizontal portion of said shank, and a set screw for securing said collar in adjusted position on the wheel axle.

1,757,772. APPARATUS FOR TRANSFERRING COILED MATERIAL. LANE JOHNSON, Ingram, Pa., assignor to United Engineering & Foundry Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed July 21, 1928. Serial No. 294,374. 5 Claims. (Cl. 214—130.)



3. In combination with a reel having a drum with a horizontally extending axis and a stripper, a substantially horizontally extending arm capable of receiving and supporting a coil discharged from the drum, and in combination with a pair of substantially parallel links, pivotally connected to the arm, a base, the links being also pivotally connected to the base, and means for rocking the arm and the links, the links moving in the direction of movement of the arm, a receiver having horizontally and vertically extending portions and facing the reel and lying transversely of the direction of movement of the arm, the receiver having an opening therethrough through which the arm travels, the receiver being adapted to strip the coil from the traveling arm as it passes therethrough, and being inclined so as to cause the coil to be carried to a place of deposit.

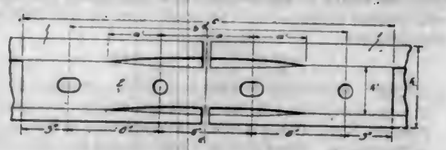
1,757,773. CONTROL MECHANISM. CLARENCE J. KLEIN, Bellevue, Pa., assignor to United Engineering & Foundry Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed May 15, 1928. Serial No. 277,976. 5 Claims. (Cl. 192—18.)



1. The combination with a reel driving shaft, of means for driving said shaft, means for checking the rotation of said shaft, means operable at will for stopping said shaft at any time, and other means effective for stopping said shaft only in predetermined position.

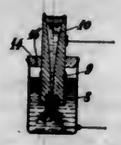
1,757,774. RAIL JOINT AND BAR. GEORGE LANGFORD, Joliet, Ill., assignor to McKenna Process Company of Illinois, Joliet, Ill., a Corporation of Illinois. Filed Nov. 8, 1929. Serial No. 405,604. 12 Claims. (Cl. 238—243.)

1. A four-bolt rail joint bar for use in railroads and with rails weighing from 60 pounds to 120 pounds per yard, said bar being adapted for bolting to T-rail ends, said bar having bearing surfaces adapted for bearing contact



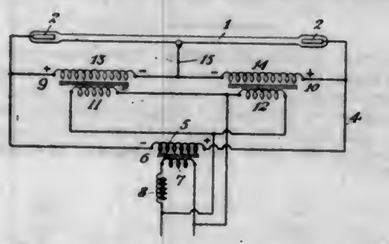
with the bearing surfaces of the rail ends at both the center and the ends of the bar, the length of the bar being less than six times its mean fishing height.

1,757,775. ELECTROCAPILLARY DEVICE. MARIUS LATOUR, San Sebastian, Spain. Filed Mar. 5, 1929, Serial No. 344,280, and in Great Britain Aug. 25, 1928. 9 Claims. (Cl. 179—139.)



1. Electrocapillary device adapted to be used either for the transformation of sound waves into electric currents, or conversely, or for the detection of electric oscillations, comprising in combination: a jar containing a good conducting liquid, a tube dipping, at its lower end, into said conducting liquid and containing an electrolyte the upper surface of which is substantially on a level with the upper edge of the tube and is free to vibrate, the inner section of this tube, which is capillary at the lower end, diverging towards the upper part according to an exponential law, and means for electrically connecting, to the external electric circuit, on the one hand, the conducting liquid, and, on the other hand, the electrolyte.

1,757,776. STARTING AND OPERATING CIRCUITS FOR LUMINOUS TUBES. RAYMOND ROBERT MACHLETT, New York, N. Y., assignor to Rainbow Light, Inc., a Corporation of New York. Filed July 9, 1927. Serial No. 204,477. 5 Claims. (Cl. 176—124.)



5. In an electric circuit, the combination of a luminous tube intended for operation with currents of high value, said tube containing a rarefied gas and being provided with electrodes at its ends and an electrode between its ends, a transformer connected to said end electrodes to supply current to the tube, the starting voltage of said transformer being insufficient to start the tube, and auxiliary transformer means permanently in circuit with the tube and furnishing sufficient voltage across said middle electrode and said end electrodes to start the tube.

1,757,777. CLEANING DEVICE. PHILIP J. MARTIN, Elizabeth, N. J. Filed Apr. 3, 1928. Serial No. 266,973. 1 Claim. (Cl. 15—104.19.)

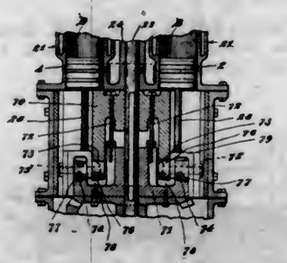
A cleaning device comprising a plurality of strands of substantially heavy resilient wire formed into an open

mesh cylindrically shaped and with the meshes being substantially identical, heads to which the ends of said strands of wire are secured, and means for moving said heads toward one another so that said meshes may be shortened axially and widened circumferentially, each of the strands



of said mesh being continuous in a spiral line from one head to the other so as to allow freedom of movement of the strands in relation to each other and the strands of said mesh being of sufficient strength to cause said mesh to be substantially rigid and self-supporting.

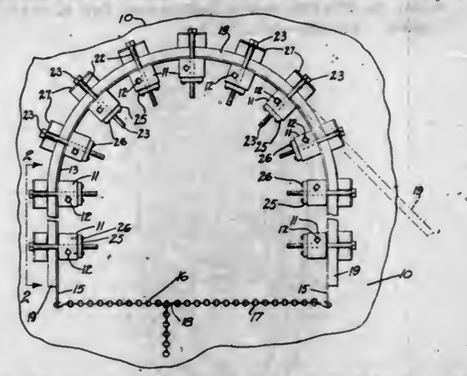
1,757,778. INTERNAL-COMBUSTION ENGINE. CASPER MEHLUM, Waltham, Mass. Filed Feb. 24, 1927. Serial No. 170,623. 1 Claim. (Cl. 74—14.)



In combination with a cylinder, its piston and piston rod, two cam members mounted in axial alinement with each other and spaced apart from each other, the operative faces of said two cams facing in opposite directions to each other, said piston rod being forked at its outer end, a stud passing through the branches of said fork and extending beyond one of said branches, a cam roll mounted on that portion of the said stud which is between said branches, a second cam roll mounted on said stud extension, one of said rolls having operative engagement at all times with one of said cam members and the other cam roll having at all times operative engagement with the other of said cam members.

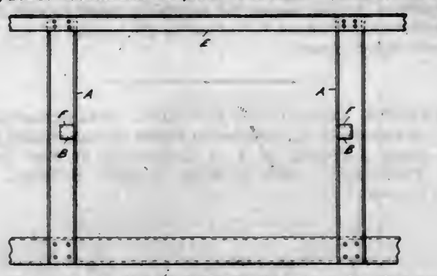
1,757,779. BENDING DEVICE. VACLAV NAVRATIL, Berwyn, Ill. Filed July 11, 1928. Serial No. 291,870. 2 Claims. (Cl. 144—259.)

1. A bending device including a flexible retaining element, a plurality of spaced retaining blocks for holding said element in desired position, said element being fixed to set blocks, a plurality of clamping blocks in alignment with said retaining blocks, and bolts connecting said retaining and clamping blocks, said clamping blocks being placed in position subsequent to said bolts, a chain secured to each end of said flexible retaining element, and a



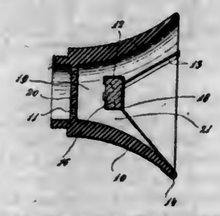
hook at the free end of one of said chains adapted to be engaged into a link of the other of said chains to thereby facilitate the retainment of said element in arcuate formation.

1,757,780. BULL-WHEEL POST OR BEARING SUPPORT. WILLIAM O'BRIEN, Washington, Pa. Filed June 11, 1928. Serial No. 284,339. 2 Claims. (Cl. 308—15.)



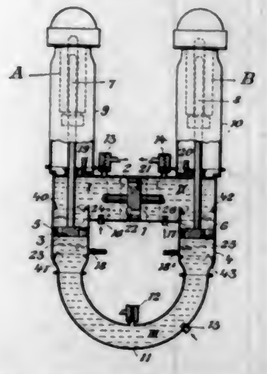
1. The improvements in bull-wheel posts or bearing supports formed from H-beam iron, having recesses in each end thereof and opposite to each other, a hole in one side and extending about half way through the center web into which is welded a journal-box, together with suitable holes drilled in each end of the posts or supports for securing same in position when in use, all substantially as and for the purposes described.

1,757,781. SANITARY ATTACHMENT FOR TELEPHONE MOUTHPIECES. PIETRO ROCA, Flushing, N. Y. Filed May 14, 1929. Serial No. 362,995. 6 Claims (Cl. 179—185.)



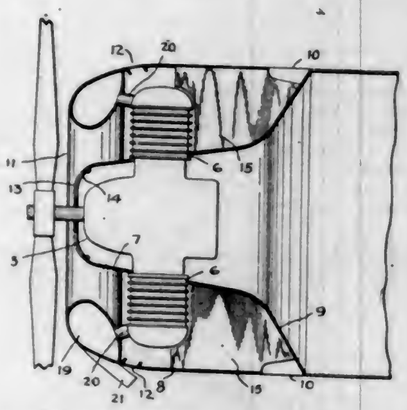
1. A device of the class described, consisting of a spider shaped metal blank having a plurality of radially extending arms, some of said arms being bent inwardly to form an open work receptacle adapted to retain a capsule of disinfectant material, and the other arms being bent outwardly to form hook shaped members adapted to retain the device on, and to position the same in relation to the mouthpiece to which the device is applied.

1,757,782. HIGH-PRESSURE PISTON OR RECIPROCATING COMPRESSOR. CHARLES SCHAER, Langenthal, Switzerland, assignor to the Firm Sulzer Freres Societe Anonyme, Winterthur, Switzerland. Filed Feb. 16, 1928, Serial No. 254,728, and in Switzerland Oct. 8, 1927. 4 Claims. (Cl. 230—49.)



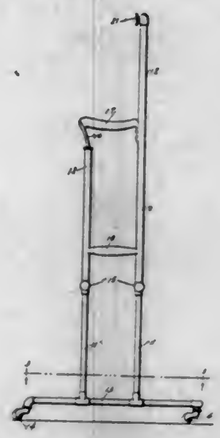
1. In a high pressure reciprocating compressor, the combination with a primary piston effecting a positive movement, of at least one intermediate piston, a compressor piston connected to said intermediate piston, an oscillating column of liquid between said primary and intermediate pistons, means for supplying liquid to said liquid column, and means for allowing the escape of air from said liquid column.

1,757,783. COWL CONSTRUCTION. CARL SCHLESINGER, Arlington, N. J., assignor to Pollak Manufacturing Company, Arlington, N. J., a Corporation of New Jersey. Filed Dec. 11, 1929. Serial No. 413,218. 6 Claims. (Cl. 244—31.)



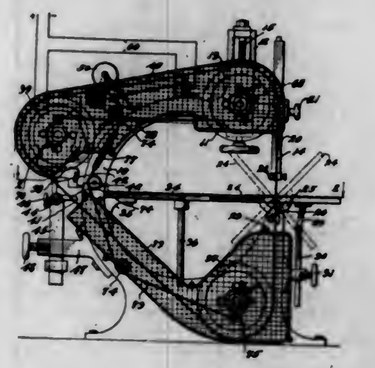
1. A cowl construction for aeroplanes provided with radial-type, air-cooled, internal combustion engines, said cowl construction having in combination a generally cone-shaped casing in proximity to the crank case of said engine and being apertured for the cylinders of said engine, an outer annular casing having openings aft of the engine cylinders, said cone-shaped casing and said outer annular casing being spaced apart so as to form an annular passage of stream-like formation through which air may be directed to cool the exposed cylinders of said engine, and other openings in the forward or leading edge of said annular outer casing, said openings being especially adapted for directing air over the portions of the engine cylinders requiring special cooling.

1,757,784. WHEEL-MOUNTED ADJUSTABLE FRAME CRUTCH. LON C. SMOOT, Dallas, Tex. Filed Sept. 24, 1928. Serial No. 307,361. 2 Claims. (Cl. 155—22.)



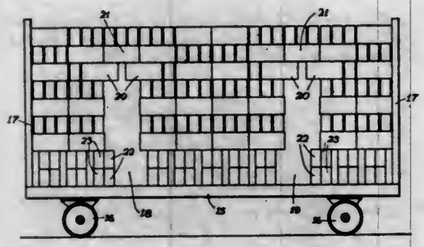
1. In a crutch of the character described, the combination of the frame member 13 mounted upon the casters 14, and to which member are connected the paired uprights 11, spaced apart centrally on the member 13; the paired hollow members 10 and 12 forming telescopic companion members for each crutch element, the hollow horizontal member 20 and the horizontal bar 19 telescopable therein and forming the overhead element; including the set screws 15 and 21 for adjusting the parts vertically and horizontally, with the hand-grips 18 and shoulder rests 17.

1,757,785. BAND SAWING MACHINE. CHARLES E. SULLENBERGER, Dallas, Tex. Filed June 2, 1928. Serial No. 282,329. 3 Claims. (Cl. 143—17.)



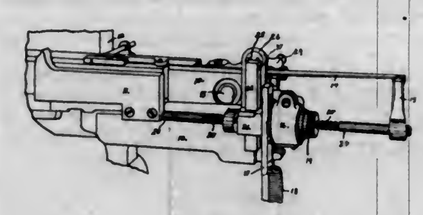
3. In band sawing machine, a series of carrier wheels rotatable thereon, a saw traversing said wheels, brake drums upon said wheels, shoes cooperating with said drums, cable connections from said shoes, a tensioned winding drum receiving one end of said connections and having a holding ratchet, a retaining pawl engaging said ratchet, a roller tensioned to contact with said saw, and a trip finger carried by a lever supporting said roller and disposed to engage and release the holding pawl upon breakage of the saw blade, whereby to actuate said brake shoes.

1,757,786. PROCESS OF MAKING BRICKS. ARTHUR J. THERRIEN, Northbrook, Ill., assignor to National Brick Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 23, 1926. Serial No. 83,342. 25 Claims. (Cl. 25—2.)



1. The process of setting bricks in a kiln which comprises forming a plurality of individual piles of unburned brick, each pile having a transverse arch therethrough, and assembling said piles with the arches in alignment.

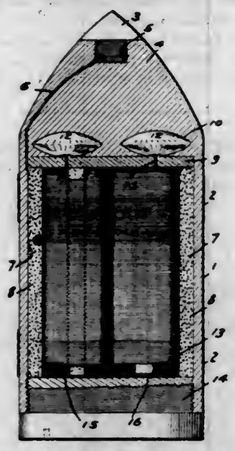
1,757,787. ADJUSTING-ROD-LOCKING MEANS. EDWARD T. WATERS, Omaha, Nebr. Filed Aug. 13, 1928. Serial No. 299,289. 11 Claims. (Cl. 199—50.)



1. In a structure of the class described, the combination with a transversely grooved adjusting-rod, and a block having a longitudinal opening through which said rod extends slidably, of a locking-pin extending slidably through a transverse opening in said block, said transverse opening intersecting the longitudinal opening for the adjusting-rod, and said locking-pin having an elongated opening through which the adjusting-rod passes, there being series of teeth at the opposite ends of said opening in the locking-pin, said series of teeth being alternatively engageable in the grooves of the adjusting-rod by movement of the locking-pin relative to said block, one series of said teeth being interspaced relative to the other series whereby to engage in the grooves of the rod when the same is at positions intermediate the positions at which the grooves are engaged by the teeth of the other series, and means for actuating said locking-pin.

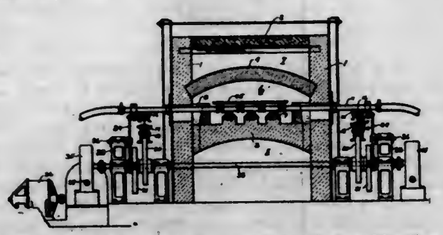
1,757,788. ANTIAIRCRAFT SHELL. ERASMUS G. WEST, Carmichaels, Pa. Filed Mar. 5, 1928. Serial No. 259,193. 11 Claims. (Cl. 102—29.)

1. An anti-aircraft shell comprising a casing or projectile and having a main compartment extending throughout the major portion of the length thereof, a container in said compartment and spaced from the wall thereof, a bursting charge in the space between the wall of said container and the wall of said compartment, the shell having means for igniting said bursting charge, said chamber terminating a substantial distance from the nose portion of said shell and the latter having a parachute receiving recess therein, a parachute in said recess, and impediments



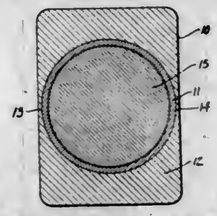
in said container and attached to said parachute, the bursting charge space or chamber being laterally spaced from the mouth of said parachute receiving recess.

1,757,789. FURNACE FOR TREATING SHEET METAL OR THE LIKE. FREDRIK WILLE, Chicago, Ill. Filed May 4, 1927. Serial No. 188,676. 8 Claims. (Cl. 263—6.)



1. A conveyor mechanism comprising in combination a plurality of work supports, a work carrier cooperating with said supports to transfer the work thereon, a track support for said carrier, a plurality of cams in cooperative engagement with said track support, and a plurality of cams cooperatively engaged with said carrier, said track and carrier operating cams being mounted for rotation on common drive shafts with their extended faces in opposed relation to successively raise said track, move the carrier thereon in one direction, lower the track, and return the carrier to its initial position on the track.

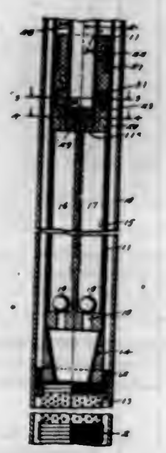
1,757,790. PROCESS OF MAKING REENFORCED NON-CORROSIVE STEEL. PERCY A. E. ARMSTRONG, Loudonville, N. Y., assignor to Ludlum Steel Company, Watervliet, N. Y., a Corporation of New Jersey. Filed Jan. 5, 1922. Serial No. 527,225. 1 Claim. (Cl. 29—188.)



In the process of making wrought re-inforced metallic products, the steps of casting non-corrosive alloy steel

about a thin tube of mild steel with heat non-conducting material in place in the tube whereby a weld union is secured between the unlike materials, removing the non-conducting material, inserting in the bore a bar of composition similar to the tube, and hot working the whole for elongation and reduction of cross section, as by rolling, whereby the bar portion is united to the tube portion.

1,757,791. DEEP-WELL PUMP. DONALD D. BURCH, near Earlsboro, Okla. Filed Feb. 26, 1929. Serial No. 342,753. 5 Claims. (Cl. 103—234.)



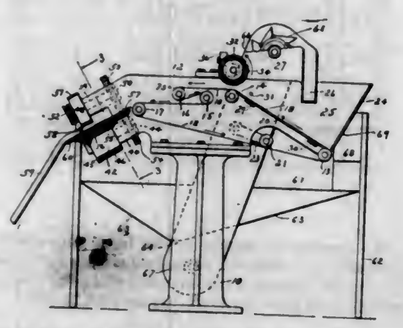
1. In a deep well pump and in combination, an assemblage adapted to be disposed at the bottom of a well comprising a tubing, a cylinder disposed within and secured to the tubing adjacent the lower end thereof and having a chamber therein, a check-valved opening for placing the lower end of the chamber in communication with the interior of the tubing below said cylinder, said cylinder having a port opening through the upper end thereof and communicating at its lower end with the chamber adjacent the lower end thereof, the upper wall of the chamber having ports communicating with the exterior of the tubing and with the interior of the tubing, a rotatable tube associated with the cylinder and having means controlling all of said ports to alternately place the port of the cylinder in communication with the interior of the rotatable tubing and to close the first named while opening the last named port of the chamber and to close the port of the cylinder while opening the last named port and closing the first named port of the chamber.

1,757,792. ASH-TRAY HOLDER. FRANK J. CHESLOCK and CLEMENT A. YARES, St. Paul, Minn. Filed Aug. 20, 1928. Serial No. 300,660. 1 Claim. (Cl. 248—20.)



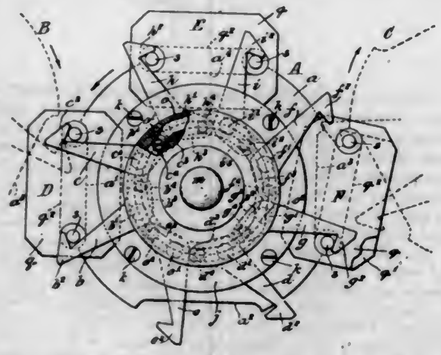
In a holder for trays of dish like form with an upper perimetral flange; a metal loop frame adapted to encircle such tray under its flange, a pair of integral parallel arms extending from said loop outwardly, thence bent inwardly toward each other and joined in a shallow V-shape formation pointed toward the center of the loop, an adjustable, flexible strap fixed to one of said parallel arms and means for engaging and pressing the free end of said strap toward the other of said parallel arms to clamp an upright object between said strap and the V-shaped part of the frame.

1,757,793. FEEDER AND SORTER. ROBERT G. CLARK, Brooklyn, N. Y. Filed Dec. 19, 1928. Serial No. 327,149. 5 Claims. (Cl. 198—29.)



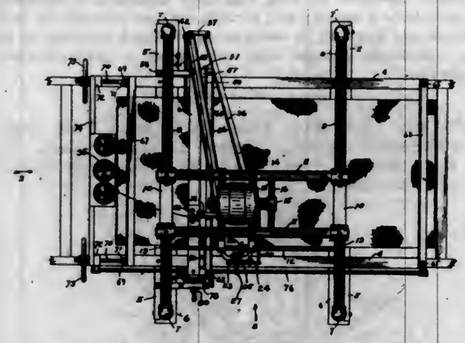
1. In a device of the class described, a pair of pulleys having their axes at an angle with the horizontal line, a conveying belt actuated by said pulleys, the conveying surface of said belt consisting of a fabric having a pile or nap, a stop extending along the lower edge of said belt and terminating in a discharge chute, means for feeding articles onto the upper edge of said belt, and means for actuating said pulleys.

1,757,794. BRAIDING MACHINE. WILLIAM E. COOK, New York, N. Y., assignor to General Cable Corporation, New York, N. Y., a Corporation of New Jersey. Filed Feb. 9, 1926. Serial No. 87,033. Renewed Oct. 1, 1929. 15 Claims. (Cl. 96—9.)



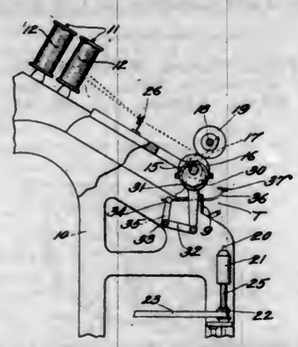
1. A braiding machine embodying therein a plurality of rotatable members each having about the perimeter thereof recesses, the forward and rear walls of which are adapted to receive and engage a carrier respectively, means whereby rotary movement is imparted to said members respectively, a plurality of transfer mechanisms carried by each of said members adjacent the forward and rear walls of said recesses respectively and adapted to co-operate with carriers being transported by said members, and means whereby said transfer mechanisms adjacent the forward and the rear walls of said recesses respectively are successively actuated to cause movement of a carrier from one of said members to the adjacent member, and said carriers are bodily transported by means of said members and are caused to follow a sinuous course.

1,757,795. TUFTING MACHINE. CHARLES ALFRED DAHLEN, Duluth, Minn. Filed Oct. 7, 1926. Serial No. 140,028. 6 Claims. (Cl. 112—79.)



1. A machine of the type described comprising in combination an upright power and loop forming mechanism support, a horizontally reciprocable carriage beneath said mechanism, rug holding mechanism upon the carriage, means for operating the power and loop forming mechanism transverse the carriage, said loop forming mechanism comprising a needle supported from above the rug, and a loop cutting means also operated from above the rug and cooperating with the needle beneath the rug.

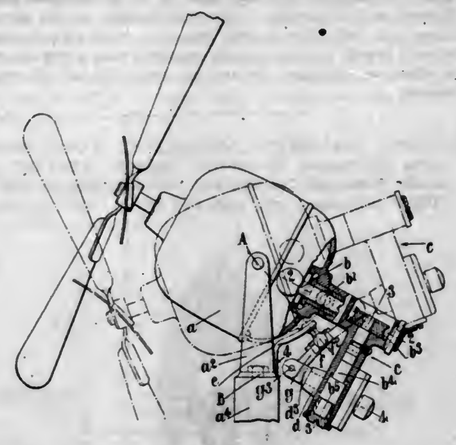
1,757,796. SPINNING MACHINE. HOLLAN GARTH, Andover, JOSEPH LONGBOTTOM and FRANK BURNS, Lawrence, and WILLIAM CHARLES JUST, Methuen, Mass., assignors to American Woolen Company, Boston, Mass., a Corporation of Massachusetts. Filed Sept. 21, 1928. Serial No. 307,888. 2 Claims. (Cl. 118—10.)



1. In a spinning machine having spaced cooperating pairs of draw rolls, each pair cooperating with similarly spaced spindles to supply a thread to each of said spindles, and means for rotating said spindles continuously to twist said threads separately, the combination therewith of a plate positioned between said threads and provided on its inner edge with a notch, and means for reciprocating said plate in a path substantially perpendicular to the plane of said threads to move the crotch of said notch inwardly towards said plane a limited amount to wedge therein a portion of one thread and hold it against rotation whereby said thread becomes broken solely by its own twisting action.

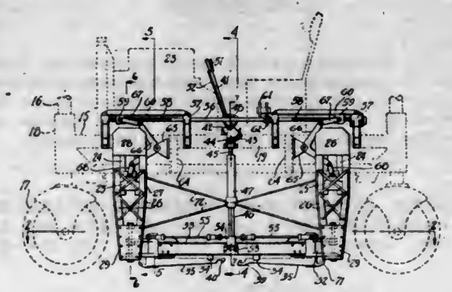
1,757,797. OSCILLATING ELECTRIC FAN. NEVILLE WALLACE GILBERT and ARTHUR EDWARD JABET, Birmingham, England. Filed Feb. 12, 1927. Serial No. 167,808. 2 Claims. (Cl. 230—256.)

1. An electric fan of the class described, comprising a base having a fulcrum thereon, and traversing mechanism including a motor-driven slow-motion shaft and a link hinged thereto to turn crankwise therewith, the link



being capable of simultaneously changing its angularity with respect to the shaft and being anchored by a universal joint to the fulcrum.

1,757,798. TRAVERSING HOIST. GUSTAV A. GRAB, Portland, Oreg., assignor, by mesne assignments, to Willamette-Ersted Company, Portland, Oreg. Filed May 4, 1927. Serial No. 188,796. 6 Claims. (Cl. 212—141.)



1. A traversing hoist having, in combination a wheeled frame adapted to straddle a load; pairs of horizontal swinging grapples hinged to the sides of said frame having means on their swinging ends for attaching said grapples to each other in a manner to place same in tension when a load is placed thereon.

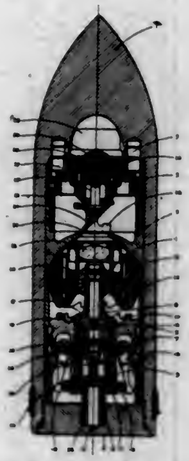
1,757,799. ICE-CREAM-FORM DEVICE. FREDERICK H. HARM, Le Sueur Center, Minn. Filed June 19, 1929. Serial No. 371,969. 4 Claims. (Cl. 107—48.)



1. A dispensing device for edibles of the class described comprising a tubular handle, a tubular scoop member fixed at the front end of said handle in angular relation to the latter, a removable cap closing the rear end of said handle, a reciprocable plunger in said scoop member and a plunger rod extending therefrom and outwardly of the scoop, a plunger actuating rod pivotally connected at its front end

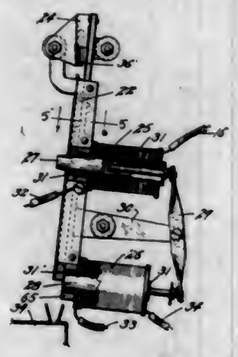
to the free end of said plunger rod and its rear end pivotally fixed within the tube and said actuating rod normally extending from said rear pivot in inclined plane forward and downward under said handle to the pivotal connection with the plunger rod, and reciprocable means on said handle for frictionally engaging said actuating rod to move the plunger toward an open end of the scoop member.

1,757,800. BALLISTIC APPARATUS. JAMES BLACKLOCK HENDERSON, Blackheath, England. Filed Oct. 18, 1924, Serial No. 744,466, and in Great Britain Aug. 9, 1922. 9 Claims. (Cl. 234—1.)



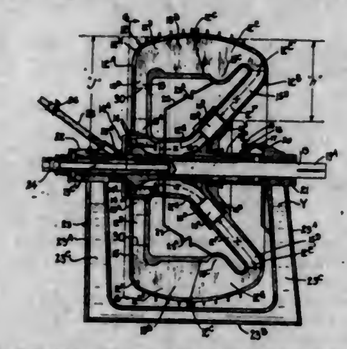
1. In combination, ballistic measuring apparatus, a gun projectile containing the same, said apparatus comprising a gyroscope and co-acting means respectively under the control of said gyroscope and projectile operable to measure changes in the movements of said projectile.

1,757,801. CONTROL FOR DISPENSING APPARATUS. HENRY B. HIGGINS, Jr., Denver, Colo. Filed Aug. 13, 1928. Serial No. 289,143. 11 Claims. (Cl. 194—6.)



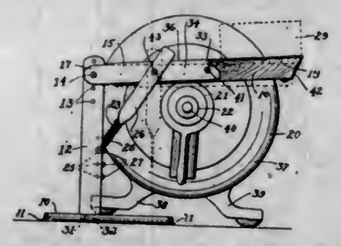
1. Means for closing a motor circuit by the deposit of a coin comprising: a coin passage; contact means extending into said coin passage and arranged to be contacted with by said coin; a motor control circuit embodying said contact means, said motor control circuit comprising: a first solenoid; a first core for said first solenoid adapted to obstruct the passage of and contact with said coin, said contact means acting to energize said solenoid so as to withdraw said core from said coin; a second solenoid; a second core adapted to obstruct the passage of said coin after it has been released from said first core; a second contact operable by said coin and arranged to energize a circuit to a motor; and a third contact operable by said motor and adapted to energize said second solenoid so as to completely release said coin after a predetermined interval.

1,757,802. METHOD AND APPARATUS FOR COMPRESSING GASES. JOSEPH JANDASEK, Cicero, Ill. Filed Mar. 15, 1926. Serial No. 94,846. 18 Claims. (Cl. 230—108.)



1. A compressor comprising a revolving drum, a liquid in said drum, means for conveying gas into said drum for admixture with said liquid during the rotation of said drum, means causing the circulation of said liquid in said drum during its rotation, means for separating said gas from said liquid under compression within said drum by the centrifugal force of said liquid, and means to permit the discharge of said compressed gas from said drum.

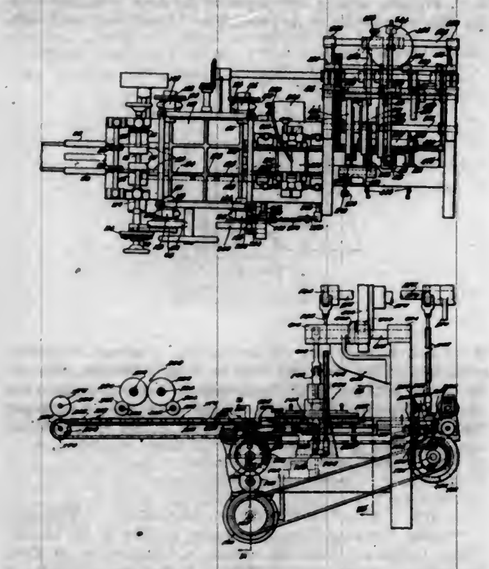
1,757,803. AGITATOR FOR DENTAL MOLDS. ROLLAND R. JONES, Minneapolis, Minn. Filed Nov. 16, 1928. Serial No. 319,853. 5 Claims. (Cl. 259—91.)



1. The combination of a motor having a cam on its shaft and of a vibrating device including a supporting structure and a vibratory member, mounted thereon, adapted to engage and be vibrated by said cam, said device being adapted to be brought into cooperative relation with said motor on a common supporting surface and to be assisted in being held in such relation by weight of the motor thereon.

1,757,804. BOX-MAKING MACHINE. WILLIAM A. JOPLIN, Norfolk Downs, Mass., assignor to Pneumatic Scale Corporation, Limited, Quincy, Mass., a Corporation of Massachusetts. Filed Sept. 3, 1927. Serial No. 217,450. 9 Claims. (Cl. 93—45.)

2. In a box or cover making machine, in combination, blank forming mechanism, box forming mechanism cooperating therewith including a rotatable spider provided with a plurality of box holding members, a plunger for forcing a box blank into one of the box holding members to form the box, and mechanism for folding the side forming portions of each box blank through an angle of more than ninety degrees prior to the movement of the box blank into said box holding member.

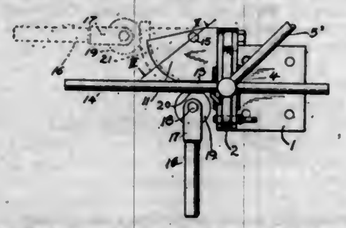


7. In a box or cover making machine, in combination, means for withdrawing a strip of box material from a supply roll thereof, means for applying a finishing sheet to the strip as it is withdrawn and for folding the sides of the finishing sheet over the side edges of the strip, cooperating die members between which the cover strip is passed for forming a box blank from the strip, a conveyor, means for intermittently moving the conveyor, connections between the conveyor and die members whereby the blanks are conveyed at the completion of the dieing operation, a gluing mechanism operative to apply adhesive to the end forming pieces of the box blank while the latter is supported upon said conveyor, and means for thereafter folding the sides and end pieces of the box blank to form the box.

1,757,805. PROCESS OF MANUFACTURE OF GLUE AND THE PRODUCT THEREOF. IRVING F. LAUCKS and CHARLES N. CONE, Seattle, Wash., assignors to I. F. Laucks, Inc., Seattle, Wash., a Corporation of Washington. Filed Sept. 13, 1924. Serial No. 737,576. 7 Claims. (Cl. 87—17.)

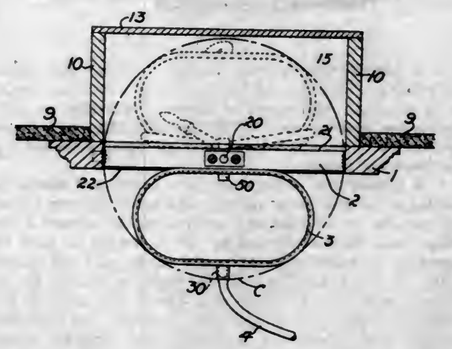
1. An adhesive material embodying vegetable protein containing material derived from oleaginous seeds, in aqueous alkaline media, and a manganese compound.

1,757,806. PIPE-BENDING MACHINE. HARRY L. LIBERTY, Chicago, Ill. Filed Apr. 16, 1928. Serial No. 270,217. 6 Claims. (Cl. 153—46.)



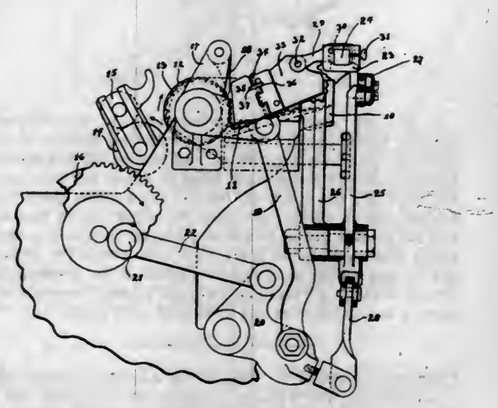
1. A bending machine comprising a vise adapted to clamp an article which is to be bent, a grooved cam rigidly secured to said vise and having a segment of one of the groove flanges thereof cut away to form an open guide segment in the cam, a lever pivotally mounted on said cam, and a grooved roller rotatably mounted on said lever, said roller having a segment of one of the groove flanges thereof cut away to form an open guide segment and adapted to be positioned opposite the open guide segment of the cam to afford an open guide passage for the article which is to be bent.

1,757,807. DOUCHE-BAG SUPPORT. CHARLES W. MACK, Seattle, Wash. Filed May 11, 1929. Serial No. 362,274. 8 Claims. (Cl. 128—227.)



1. In combination with a frame and a panel swiveled therein, a tank, a hose connected to the lower portion of said tank, means removably supporting the tank upon the inside of said panel, lying inside of the panel side edges, and within the path of swing of said edges, to leave a space for stowing said hose, coiled about the tank.

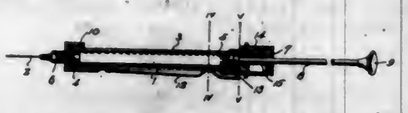
1,757,808. INKING MECHANISM FOR PRINTING MACHINES. FRANK C. MARQUARDT, Brooklyn, N. Y., assignor to American Bank Note Company, New York, N. Y., a Corporation of New York. Filed July 12, 1928. Serial No. 292,256. 9 Claims. (Cl. 101—364.)



1. An inking mechanism for printing machines, embodying therein in combination with an ink fount having a feed plate, an ink fount roll co-operating therewith, a ductor roll, and means for actuating said ink fount roll, of a reciprocatory member, means for actuating same, a plurality of supports movable with said reciprocatory mem-

ber, a paddle mounted upon and adapted to have free pivotal movement in relation to each of said supports, the lower edge of the paddle extending into close proximity to said plate, and the free edge thereof extending into close proximity to said ink fount roll, and means limiting the movement of each paddle about its pivotal connection with the support.

1,757,809. HYPODERMIC SYRINGE. FELIX C. MONTUORI, Washington, D. C. Filed Jan. 5, 1929. Serial No. 330,653. 16 Claims. (Cl. 128—218.)



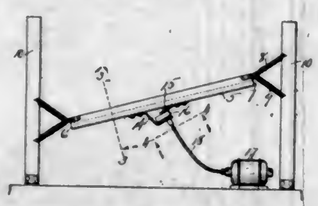
1. A hypodermic syringe having a barrel and means for holding a needle, said barrel having a loading opening in its side and constructed to receive a cartridge, movable means for holding an end of the cartridge, and means automatically to eject the cartridge upon movement of said movable means.

3. A hypodermic syringe having a barrel and means for holding a needle, and a piston, said barrel having a loading opening in its side and constructed to receive a cartridge, and means released by the cartridge to hold the cartridge in position between the needle and the piston.

10. In a side-loading syringe, movable means for retaining said load in place and means for holding said retaining means in inoperative position, said holding means being constructed to release said retaining means upon loading of the syringe.

12. In a syringe having a piston, means to position a cartridge for engagement by the piston, and means to eject the cartridge, said ejecting means being self-operative when the piston is pulled back to reload.

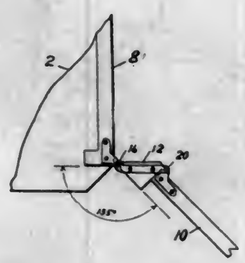
1,757,810. DRY ORE CONCENTRATOR. JOHN P. NEWMAN and VICTOR THOMAS, Phoenix, Ariz. Filed Feb. 18, 1926. Serial No. 89,169. 10 Claims. (Cl. 209—481.)



1. An ore concentrator comprising a longitudinally grooved table, springs connected with the corners of said table to resiliently support it, and means for imparting a vibrating movement to said table to cause the finer material with the ore concentrates to travel in an upward direction and be discharged from the upper end of the table and the coarser gravel and sand material to travel in an opposite direction and be discharged from the lower opposite end of the table, said means including an overbalanced weight having its axis disposed in an inclined position with respect to the plane of the bottom of said table.

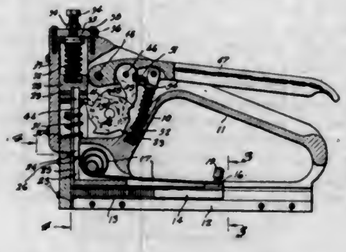
1,757,811. CABINET. EZRA J. PACKER, Philadelphia, Pa., assignor to The Pooley Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed June 16, 1928. Serial No. 286,023. 1 Claim. (Cl. 312—7.)

A cabinet comprising a plurality of walls and having an open side, a corner section hinged along the free edge of one of said walls at the open side of the cabinet, said corner section having an inner face arranged to engage the edge of said wall to limit closing movement of said section, and a door for the open side of the cabinet hinged to said corner section, said corner section having a second inner face disposed at substantially a right angle relatively to said first inner face and arranged to engage the edge of the door, whereby closing movement of the door is limited with the door substantially perpendicular to said wall and with



the outer face of the corner section disposed angularly relatively to the wall and door to form a beveled edge for the closed cabinet, said corner section being movable to a position bringing the hinges of the door closely adjacent the outer surface of that wall of the cabinet to which the corner section is hinged.

1,757,812. STAPLE-DRIVING MACHINE. FRIDOLIN POLZER, Norwalk, Conn., assignor to The E. H. Hotchkiss Company, Norwalk, Conn., a Corporation of Connecticut. Filed Aug. 3, 1927. Serial No. 210,301. 5 Claims. (Cl. 1—49.)



1. In a staple driving machine, a housing, a staple guide in the housing, a reciprocable plunger movable transversely of said guide for driving the staples, a spring for shifting the plunger to drive a staple, a rotatable wheel having teeth arranged to engage a shoulder connected to the plunger to shift said plunger against the action of the spring, and means for rotating said wheel with a step by step movement to alternately retract the plunger and then release it to permit operation thereof by said spring.

1,757,813. TUNNEL LINER. ROBERT V. PROCTOR and HARRY M. SCHAAB, Youngstown, Ohio, assignors to The Commercial Shearing & Stamping Company, Youngstown, Ohio, a Corporation of Ohio. Filed Feb. 25, 1927. Serial No. 170,827. 3 Claims. (Cl. 61—45.)



1. A wrought metal tunnel liner comprising a body portion having integral upstanding flanges, the flanges presenting a unitary unjointed structure at the corners of

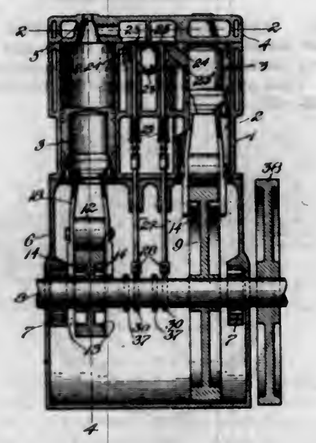
the body, the corners adjacent the edges of the flanges being relatively sharp, the flange metal at the corners being joined to the body portion by well-rounded corners.

1,757,814. CONTAINER. HARRY QUIGGIN and JACK WOOD, Cleveland, Ohio, assignors to Charles Henry McKeon, Cleveland, Ohio. Filed Aug. 17, 1927. Serial No. 213,608. 7 Claims. (Cl. 220—57.)



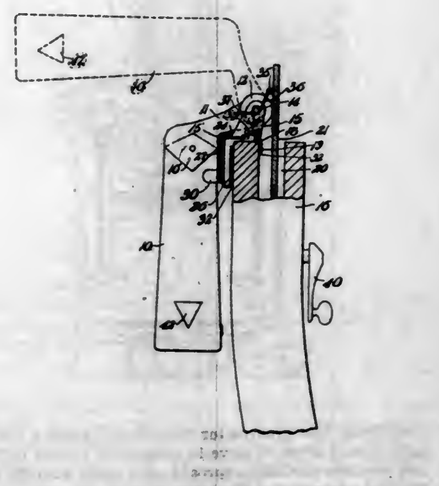
1. The combination of a metal container having an open top and having a pair of diametrically opposed openings adjacent the brim thereof, a closure member adapted to fit within the open top of the container and having a pair of diametrically aligned slots therein and a handle carrying pins passing through said slots, said handle being in slidable engagement with said closure member and adapted to extend through the openings adjacent the brim of the container.

1,757,815. INTERNAL-COMBUSTION ENGINE. WALTER S. ROHN, Needham, Mass., assignor of one-half to Harry A. Palmer, Boston, Mass. Filed Oct. 30, 1926. Serial No. 145,201. 3 Claims. (Cl. 74—14.)



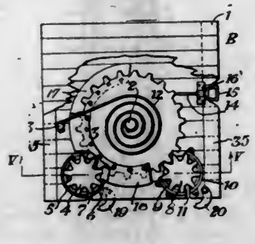
1. An internal combustion engine having in combination, a cylinder; a shaft provided with a piston-actuated and piston-actuating cam made upon one side face thereof with a flange; a piston withia said cylinder having an extension occupying a position alongside of said cam; cam rolls carried by said extension and engaging the inner and outer peripheries of said flange; a stud block slidably mounted in ways provided on said extension carrying one of said rolls and a screw journaled on said extension having threaded engagement with said block so as to rigidly connect said block with said extension with provision for adjustment of the block on the same.

1,757,816. VEHICLE SIGNAL. RALPH LEE SHOUP, Independence, Mo. Filed Apr. 7, 1928, Serial No. 268,160. Renewed Oct. 7, 1929. 7 Claims. (Cl. 116—52.)



1. A vehicle signal device comprising a signal arm carried at one side of the vehicle, and a two-part bracket including a pivot pin for the inner end of said arm and a screw connecting the parts of the bracket and operable to clamp the same in engagement with the door or window frame of the vehicle.

1,757,817. BALE-TYING MECHANISM. DWIGHT M. SIMPSON, Charleston, S. C. Filed Aug. 5, 1927. Serial No. 210,909. 8 Claims. (Cl. 100—20.)

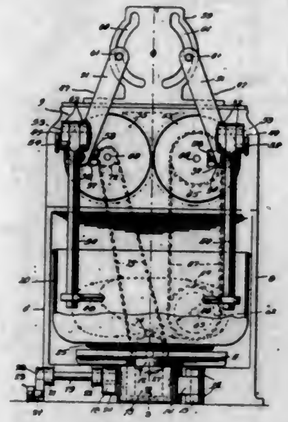


1. A division block for presses comprising a thin flat rectangular structure, a first gear rotatably mounted on said structure, a second gear meshing with said first gear and in the same plane therewith, said intermeshing gears being constructed and arranged to twist baling wires, a drum secured to said first gear, manually operable means carried wholly by said block for rotating said drum in one direction to perform the twisting operation, automatic means for rotating said drum in the other direction, and wire cutting means carried by said first gear.

1,757,818. MIXING MACHINE. FRANK STREICH and WARD P. ELWOOD, Joliet, Ill., assignors to Union Machinery Company, Joliet, Ill., a Corporation of Illinois. Original application filed Mar. 14, 1929, Serial No. 346,843. Divided and this application filed May 27, 1929. Serial No. 366,186. 10 Claims. (Cl. 259—83.)

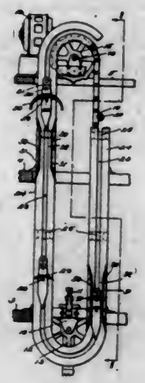
1. In a mixing machine, the combination of a supporting frame, a mixing bowl carried thereby, a pair of oppo-

sitely disposed unconnected mixing arms adapted to extend into said bowl, arm actuating crank members journaled in said frame, and a cam block having non-circular



curvilinear cam grooves for individually guiding the upper ends of said arms to move in irregularly curved paths, the end portions of which approach each other whereby to control the movement of the lower ends of the arms.

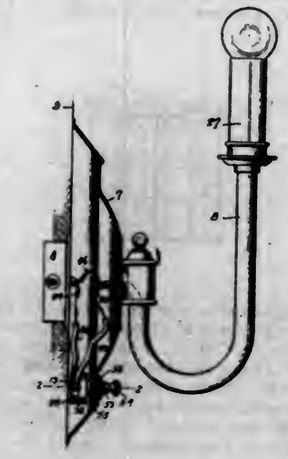
1,757,819. ELEVATING CONVEYER. FRANCIS M. TAYLOR, Columbus, Ohio. Filed Jan. 15, 1929. Serial No. 332,595. 4 Claims. (Cl. 198—157.)



1. In mechanism of the character described, a frame provided with an endless slot, spaced rollered supports movably guided by said slot, conveyer means connected with said supports for effecting their movement around said slot, an arm pivotally dependent from each of said supports, guides carried by said frame for maintaining said supports at desired periods of operation in substantially vertical positions, and a work receiving member pivotally carried by each of said arms and projecting laterally therefrom.

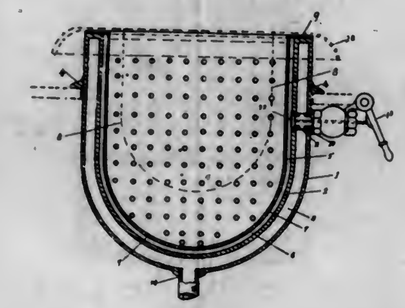
1,757,820. ELECTRIC SWITCH. GEORGE B. THOMAS, Bridgeport, Conn., assignor to The Bryant Electric Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Mar. 23, 1923. Serial No. 627,104. 2 Claims. (Cl. 200—168.)

1. In an electric switch, an insulating base comprising a group of juxtaposed plates of insulating sheet material, the outer plate of said group being of greater diameter than the others, a combined wire terminal and switch contact element secured against the face of an intermediate one of said plates and extending toward the margin thereof in the plane of an adjacent plate and thence over the margin to locate the switch contact portion thereof above said plates, said adjacent plate being notched to accommodate said wire



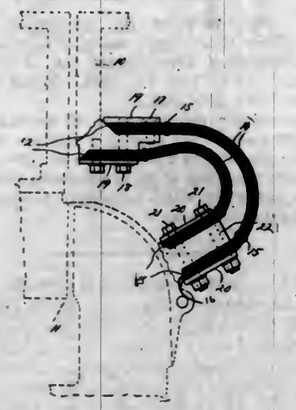
terminal, together with marginal lugs on the contact carrier and notched plates, and a switch cover resting on the projecting marginal area of said outer plate and surrounding the other plates, said cover being notched to receive said marginal lugs to hold the engaged plates in register and apartured to accommodate lead wires.

1,757,821. HAT-CLEANING APPARATUS. WILLIAM WILSON, Selma, Ala., assignor to Wilson Hat Steaming & Blocking Machine Company, Inc., a Corporation of Alabama. Filed Apr. 13, 1927. Serial No. 183,489. 1 Claim. (Cl. 223—26.)



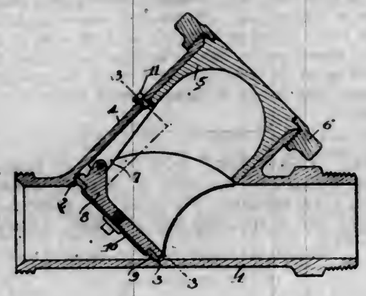
In a hat steaming apparatus, the combination with a suitable support of an inverted steaming bell for the reception of a hat with crown downward, said steaming bell comprising an imperforate bell-like chamber for the reception of steam from a source of supply, and a metal shell loosely mounted within said bell-like chamber and forming therewith an inner steaming chamber, with perforations for the metal shell, and means for delivering dry steam therein above the bottom thereof and a valve for controlling the supply of steam thereto, and a pipe connection at the bottom of said imperforate chamber to carry off any water of condensation therefrom.

1,757,822. ELECTRICAL LEAD. HERBERT A. WOOSTER, Kenton, Ohio, assignor to Swift Electric Welder Company, Detroit, Mich., a Corporation of Michigan. Filed May 24, 1926. Serial No. 111,403. 4 Claims. (Cl. 173—324.)



1. The combination with an element having an inclined surface formed on its side, of an electrical lead having a bevelled end, and means for clamping said electrical lead to the side of said element with the bevelled end of said lead in wedging engagement with the inclined surface on the element.

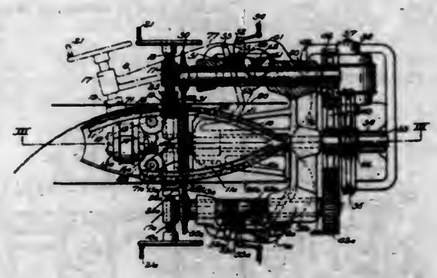
1,757,823. CHECK-VALVE CONSTRUCTION. CHARLES F. WRAY, Rochester, N. Y., assignor to National Brass Manufacturing Company, Rochester, N. Y., a Corporation of New York. Filed May 21, 1927. Serial No. 193,290. 5 Claims. (Cl. 251—123.)



3. The combination with a pipe section having a valve seat arranged transversely at an acute angle to its longitudinal axis, and a valve housing formed integral with the pipe section, of a removable cylindrical support positionable within the housing and having a closed outer end, a collar threaded on the housing and engaging the cylindrical support for holding it in place, positioning means for locating the support relatively to the housing as it is inserted therein, and a check valve pivoted to the support.

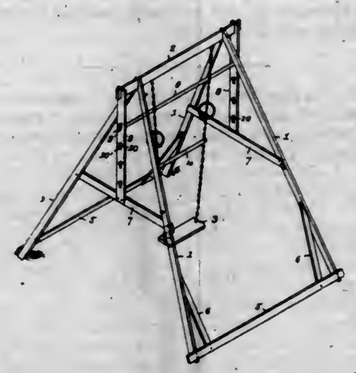
1,757,824. METAL-SPINNING MACHINE. JAMES L. ADAMS, Jr., East Chicago, Ind., assignor of nine-tenths to Graver Corporation, East Chicago, Ind., a Corporation of Illinois. Filed Feb. 23, 1928. Serial No. 256,324. 10 Claims. (Cl. 113—52.)

1. A machine for spinning dished articles from a metal sheet, comprising two rolls of substantial disc shape adapted to contact at their edges with opposite surfaces of the sheet, a mounting for the sheet for positioning it be-



tween the rolls, means for rotating the rolls to spin the sheet, and means for moving the sheet mounting in a curved path relative to the rolls.

1,757,825. STRADDLE STAND OR SUPPORT. FRANK ALBACH, St. Louis, Mo., assignor to Fred Medart Manufacturing Company, St. Louis, Mo., a Corporation of Missouri. Filed Aug. 10, 1928. Serial No. 298,795. 3 Claims. (Cl. 155—58.)

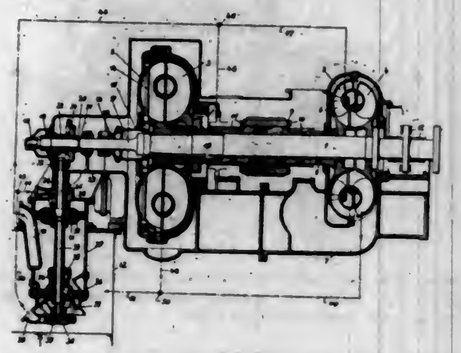


1. A stand for exercising appliances of the type described, comprising a horizontal top stringer, a pair of side supports in sloping relation and secured at the upper end to the top stringer at a distance from the ends thereof, the lower ends of the supports having a greater spread relation than the length of the top stringer, tie rails secured to said supports near their mid-height, and a pair of vertical bars secured at their upper ends to the respective outer ends of the aforesaid top stringer and at their lower ends to the tie rails aforesaid, said vertical bars having a spaced parallel relation adapting them to provide vertically adjustable means of attachment for exercising and like appliances.

1,757,826. PURIFICATION OF GASEOUS MIXTURES. WILLIAM J. BANNISTER, Terre Haute, Ind., assignor to Commercial Solvents Corporation, Terre Haute, Ind., a Corporation of Maryland. Filed Jan. 25, 1926. Serial No. 83,769. 3 Claims. (Cl. 23—3.)

1. The process of treating a gaseous mixture containing principally an oxide of carbon comprising passing the gaseous mixture over iron oxide at a temperature between 400 and 850° C. to remove the sulphur content of the gas in substantial entirety.

1,757,827. ARRANGEMENT FOR FILLING AND MAINTAINING FILLED HYDRAULIC CLUTCHES OR GEARS. GUSTAV BAUER and RUDOLF WILDE, Hamburg, and HANS KLUGE, Hamburg-Gr. Borstel, Germany. Filed Sept. 2, 1924, Serial No. 735,525, and in Germany Mar. 5, 1924. 4 Claims. (Cl. 60—54.)



1. An arrangement for filling and maintaining hydraulic clutches in filled condition, comprising the combination of a filling pump for filling the main hydraulic units of the clutch; an auxiliary pump for maintaining said hydraulic units filled in spite of unavoidable leakage; a common driving shaft for both of said pumps; and means for disconnecting said filling pump from said shaft to permit continuous operation of said auxiliary pump and intermittent operation of said filling pump.

1,757,828. PUNCHING MACHINE. REINHARD WILLY BECKERT, Nesselwang, Allgau, Germany. Filed Nov. 5, 1926, Serial No. 146,434, and in Germany Nov. 9, 1925. 6 Claims. (Cl. 164—85.)



1. A punching machine comprising a pair of roughing punches, each having a cutting edge at one end, means for imparting motion to each of said punches whereby their cutting edges are moved toward each other, a finishing punch slidably mounted within one of said roughing punches, and means for imparting motion to said finishing punch.

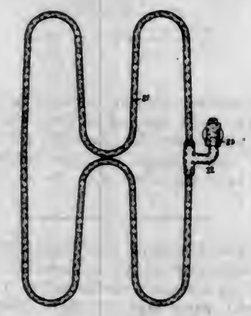
1,757,829. PICKLING OF METALS. VIKTOR BERTLEFF, Zilina, Czechoslovakia. Filed June 27, 1928, Serial No. 288,799, and in Austria July 9, 1927. 4 Claims. (Cl. 148—8.)

1. Process for the pickling of metals, consisting in preparing a pickling bath from a pickling liquor and reaction products obtained by heating coal-tar oils having their boiling point above 150° C. with a nearly equal weight of concentrated sulfuric acid until complete solubility in water has been attained, and dipping the metal into the so obtained pickling bath.

1,757,830. PRODUCTION OF KETONES. BRUCE K. BROWN, Terre Haute, Ind., assignor to Commercial Solvents Corporation, Terre Haute, Ind., a Corporation of Maryland. Filed July 31, 1926. Serial No. 126,347. 5 Claims. (Cl. 260—134.)

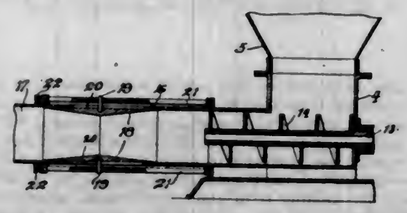
1. A process for the synthesis of ketones and hydrocarbons which comprises passing a mixture of olefine gas and acetone vapor at a temperature of 250°–550° C. and at a pressure in excess of 50 atmospheres over a catalyst comprising materials which accelerate hydrogenating and dehydrogenating reactions.

1,757,831. DISHWASHING MACHINE. FREDERICK LELAND DAVIDSON, Halifax, Nova Scotia, Canada. Filed Oct. 29, 1927. Serial No. 229,555. 1 Claim. (Cl. 141—9.)



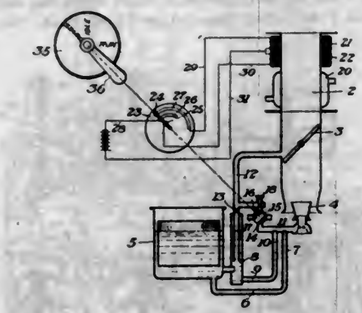
In a plate and dish washing machine, a container, a spraying tube swingingly mounted therein, said tube shaped to form a double loop, a T coupling connected to one side of said loop, an elbow forming part of said T coupling, a valve connected to said coupling, comprising a spigot disposed so as to close the valve when the spraying tube is raised, and means to connect said valve to a supply of water.

1,757,832. CONVEYER. PAUL GORBELS, Dessau, Germany, assignor to the Firm G. Polysius, Dessau, Germany, a Partnership. Filed Oct. 15, 1926, Serial No. 141,817, and in Germany May 18, 1926. 1 Claim. (Cl. 198—64.)



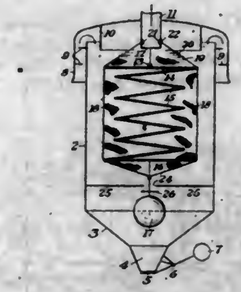
A worm conveyer for flour-like material, said conveyer comprising in combination, a driving shaft, a tube permanently connected with a conveyer worm, said tube together with said worm being adapted to be loosely pushed over said driving shaft, a conveying tube conduit arranged closely behind the end of said conveyer worm, a tube of reduced cross-sectional area mounted within said conveying tube, and means for adjusting said tube of reduced cross-sectional area longitudinally within said conveying tube.

1,757,833. CARBURETOR. HENRY WILLIAM HAEGLER, Geneva, Switzerland. Filed June 5, 1924, Serial No. 717,998, and in France July 28, 1923. 13 Claims. (Cl. 261—12.)



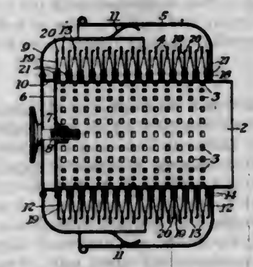
1. In a plain tube carburetor, an air-vented nozzle delivering a mixture of fuel and air, means independent of the throttle for varying at will the suction effective on said nozzle for varying the ratio of carburant to air delivered by said nozzle during the operating range of the engine, and means simultaneously operable with said first mentioned means for varying the heat effective to vaporise the resulting mixture.

1,757,834. FILTER. HENRI HAEGLER, Geneva, Switzerland. Filed Feb. 11, 1925, Serial No. 8,407, and in France Mar. 4, 1924. 10 Claims. (Cl. 183—52.)



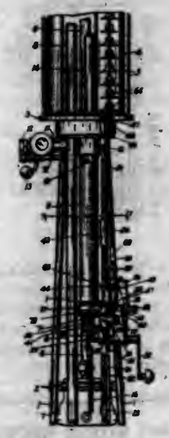
1. A cleaner, comprising a support, a filtering medium suspended from said support, a weight cooperating with the lower end of said medium to maintain the same in a stretched condition, an enclosing casing for said medium, and means cooperating with and carried by said casing for effecting preliminary cleaning of the air passing to the filtering medium, substantially as described.

1,757,835. AIR CLEANER. HENRY HAEGLER, Geneva, Switzerland. Filed May 7, 1925, Serial No. 28,579, and in France Jan. 28, 1925. 12 Claims. (Cl. 183—51.)



2. A filter, comprising a support, a plurality of separately removable filtering members mounted on said support, and separating and striking members alternating with said filtering members and clamped therebetween, substantially as described.

1,757,836. LIQUID-DISPENSING APPARATUS. ARNOLD P. HITZEMAN, Fort Wayne, Ind., assignor to Wayne Company, Fort Wayne, Ind., a Corporation of Indiana. Filed Apr. 2, 1929. Serial No. 351,846. 8 Claims. (Cl. 221—100.)



1. In a liquid dispensing apparatus, the combination of a visible elevated container from which liquid is dispensed, means for supplying liquid to said container, means for draining back to storage excess liquid so supplied, a conduit whose top is within said container and through which conduit the liquid flows from said container, a conduit through which liquid is served, a normally closed serve-valve for said conduit through which liquid is served, serve-valve opening means, a quantity stop whose lateral position may be changed, a supporting member to which said stop is secured, a resilient mounting for one end of said member, a reciprocable lug to engage said stop when said lug is moving toward said resilient mounting, means for changing the lateral position of said stop to bring it into or out of the path of said lug, means for preventing lateral re-adjustment of said stop when the lug has engaged said stop and forced its supporting member to rest in said resilient mounting, means for simultaneously adjusting the height of the top of said conduit and the vertical position of said lug, means for maintaining the conduit and lug reciprocating means in operative condition until the mechanism is adjusted to position to serve the correct quantity of liquid, and means operable by said serve-valve opening means for disengaging said conduit and lug height adjusting means when the mechanism is adjusted to serve correct quantities of liquid.

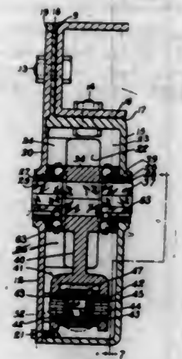
1,757,837. MOTOR FUEL. CARL O. JOHNS, Elizabeth, N. J., assignor to Standard Oil Development Company, a Corporation of Delaware. Filed May 21, 1924. Serial No. 714,809. 7 Claims. (Cl. 44—9.)

1. A motor fuel which comprises a mixture of about 80% of gasoline and 20% of benzol, and lead tetraethyl in the amount of about 1½ cc. per gallon of the mixture.

1,757,838. LIQUID FUEL. CARL O. JOHNS, Elizabeth, N. J., assignor to Standard Oil Development Company, a Corporation of Delaware. Filed May 21, 1924. Serial No. 714,810. 5 Claims. (Cl. 49—9.)

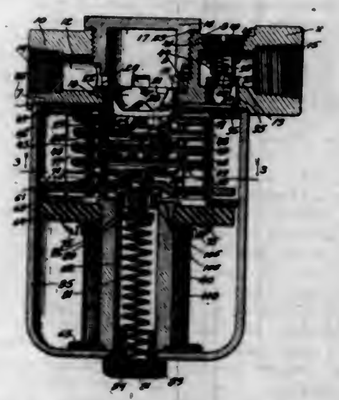
1. A motor fuel which comprises a mixture of about 95% of gasoline and 5% of ethyl alcohol, and lead tetraethyl in the amount of about 1½ cc. per gallon of the mixture.

1,757,839. VEHICLE-SUSPENSION MEANS. CHRISTIAN KECK, Crescent Springs, Ky. Filed Jan. 13, 1927. Serial No. 160,998. 1 Claim. (Cl. 308—2.)



In combination a lever, a knife-edged fulcrum non-rotatably mounted in said lever, a pair of rings supported on opposite sides of the lever on said knife-edged fulcrum, and a ball race operative between each side of the lever and an adjacent side of one of said rings and surrounding the knife-edged fulcrum.

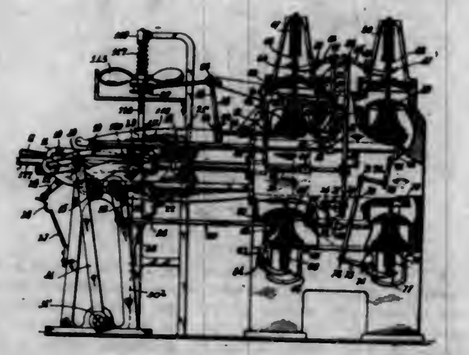
1,757,840. ELECTRIC MOTOR MECHANISM. JOHN M. LEA, Detroit, Mich. Filed July 19, 1924. Serial No. 726,992. 17 Claims. (Cl. 172—126.)



1. In an electromagnetic actuating device, a solenoid, an armature therefor, a circuit for supplying current to said solenoid, a fixed contact, a movable contact, a support for the movable contact actuable to break the circuit upon movement of said armature, a magnetic body connected to said support and influenced by the magnetic field of said solenoid to retain the contacts in engagement for a predetermined period and a short circuited coil surrounding said solenoid to reduce the E. M. F. therein upon separation of the contacts.

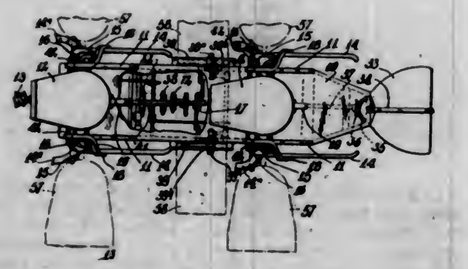
1,757,841. VALVE AND REGULATING MOVEMENT FOR ENGINES. JOSEPH LEOPOLD, New York, N. Y. Filed Apr. 22, 1926. Serial No. 103,764. 2 Claims. (Cl. 121—124.)

1. In an engine of the class described, inlet valves arranged for controlling the fuel supply to the engine, a U-shaped member slidably mounted on the engine, a governor operated by the engine and arranged for moving the U-shaped member forwards or rearwards according to the speed of the engine, a rod connected to each arm of the U-shaped member, and the top ends of these rods being connected for operating the said inlet valves upon movements of the rods, bellcranks pivotally mounted on the engine, and having slots in one of their arms, the bottoms of the said rods being engaged in these slots, the said



engine having a cross-head, cams connected for operating the cross head, valve operating rods connected with the cams, and blocks fixed on the valve operating rods and engageable upon motion against the free ends of the bellcranks for moving the rods of the U-shaped member thru distances as determined by the position of the U-shaped member.

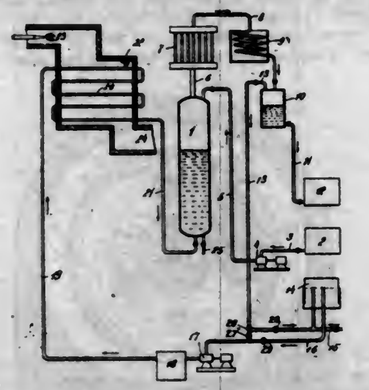
1,757,842. SAFETY AEROPLANE. JOSEPH LEOPOLD, New York, N. Y. Refiled for abandoned application Serial No. 217,361, filed Sept. 3, 1927. This application filed Mar. 15, 1929. Serial No. 347,412. 6 Claims. (Cl. 244—15.)



1. In a flying machine, a body, vertical standards projecting therefrom, motors with propellers, pivotally mounted in the standards by means of pintle rods, wings hingedly connected to the pintle rods, and capable of opening into horizontal position when the propellers are disposed in horizontal positions, arcuate tooth bars secured to the motors, a gear system connected with the tooth bars, and means for actuating the gears to raise or lower the motors so that the propellers dispose vertically or horizontally.

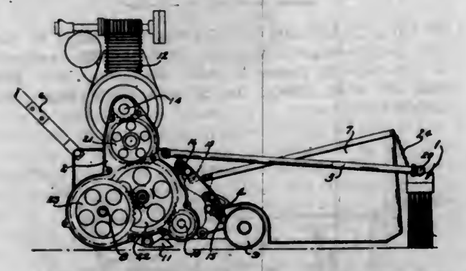
1,757,843. PROCESS FOR CRACKING HEAVY HYDROCARBONS TO PRODUCE LIGHTER HYDROCARBONS AND COKE. HARRY L. PELZER and EUGENE C. HERTHEL, Chicago, Ill., assignors to Sinclair Refining Company, Chicago, Ill., a Corporation of Maine. Filed Sept. 16, 1922. Serial No. 588,535. 4 Claims. (Cl. 196—66.)

1. In the cracking of heavier hydrocarbon oils to produce lighter hydrocarbon oils and coke therefrom, internally heating a substantial liquid body of the heavier oil at a cracking temperature without external application of heat by introducing directly into the liquid body of oil, at a point below the liquid level thereof and passing upwardly therethrough, hydrocarbon gases superheated to a



temperature above the cracking temperature of the oil in the liquid body and continuing the operation until the liquid body of oil is reduced to a dry coke-like residue.

1,757,844. LAWN MOWER AND ACCESSORY THEREFOR. JOHN BAPTISTE POL, Racine, Wis., assignor to Jacobsen Manufacturing Co., Racine, Wis., a Corporation of Wisconsin. Filed Sept. 20, 1928. Serial No. 307,266. 9 Claims. (Cl. 56—249.)



6. A device of the character described, comprising a mower, a brush arranged in advance of the mower, a frame having a mounting member pivotally supported on the lawn mower, a brush attaching member secured to the brush, and an adjustable connection between the outer attaching member and the mounting member of the frame whereby the angular position of the brush may be varied.

1,757,845. WEBBING BUCKLE FOR GARTERS. JOHN B. RUSS, Shelton, Conn. Filed Aug. 21, 1929. Serial No. 387,289. 10 Claims. (Cl. 24—184.)

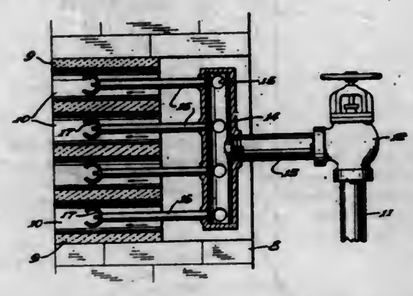


1. A webbing buckle comprising a link member through which the webbing may pass, and a plate member hinged to the link member and adapted to engage the undersurface of the webbing and clamp the same against the link member with the plate member substantially in the plane of the link member, and attaching portions for an end of the webbing on one of said members normally extending from the hinge connection upwardly toward the clamping side of the link member, the said portions being adapted to be swedged together to secure an end of the webbing therebetween.

1,757,846. MANUFACTURE OF BODIES FOR TOOLS AND THE LIKE FROM MATERIALS SUCH AS CARBIDES, THE ALLOYS THEREOF, AND THE LIKE. KARL SCHRÖTER, Berlin-Lichtenberg, and HANS WOLFF, Berlin, Germany, assignors to Fried. Krupp Aktiengesellschaft, Essen/Ruhr, Germany. Filed June 10, 1929, Serial No. 369,913, and in Germany June 15, 1928. 6 Claims. (Cl. 29—160.5.)

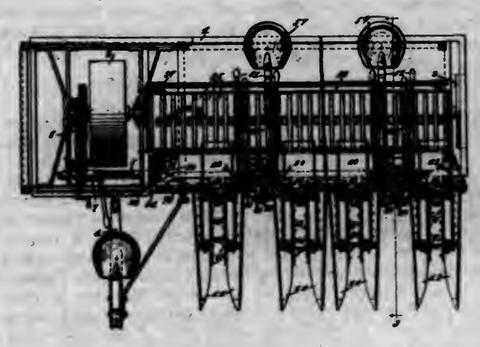
1. The herein described method of manufacturing bodies from material such as carbides, alloys thereof, and the like, which consists in producing a body composed of the powdered raw material and a binding medium adapted to bind the powdered raw material into a hard and coherent body, allowing the said body to harden, imparting thereto the desired shape by mechanical working, and thereafter subjecting the same to high sintering temperature.

1,757,847. GAS BURNER. WILLIAM F. SHUTT, Laredo, Tex. Filed June 13, 1928. Serial No. 285,130. 2 Claims. (Cl. 158—99.)



1. A gas burner comprising a cylindrical mixing chamber of uniform diameter throughout its length, a gas-supplying tube extending through one end of said chamber concentrically with the latter and terminating at a point approximately midway of the length of the chamber, a jet-supporting member carried by the forward end of said tube, a jet extending forwardly from and concentric with said member, and a plurality of jets extending forwardly from said member, each of the last-named jets being formed as the arc of a circle having the outlet end of the first-named jet as its center and each having its outlet so directed that the stream of gas issuing therefrom will be substantially tangent to the curvature of such jet.

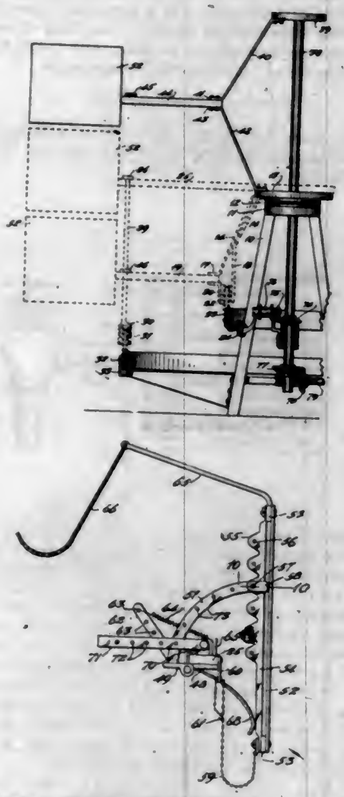
1,757,848. HARVESTER. MARVIN STILES, Hamilton, Tex. Filed Oct. 8, 1927. Serial No. 224,898. 19 Claims. (Cl. 56—106.)



1. An implement for heading crops planted in rows, comprising a wheel supported frame, a number of header

units thereon, each unit being adapted to head the plants of a row, means for operating the cutting means of each unit and manually operated means for raising and lowering portions of each unit so as to adjust the unit to cut heads off plants of varying heights, and means for tilting each unit forwardly or rearwardly.

1,757,849. WINDMILL. LUKE S. STRIPLING, Amarillo, Tex. Filed July 16, 1928. Serial No. 293,265. 16 Claims. (Cl. 170—20.)



1. In a windmill of the class described, a vane arm, vane brackets pivoted on said arm, springs holding said brackets in normal vane supporting positions, a vane pivoted on said brackets to swing between vertical active position and inclined inactive position, means for limiting the inclination of the vane in inactive position, and means to move the brackets against the action of the springs and thereby move the vane from said inactive to substantially horizontal position.

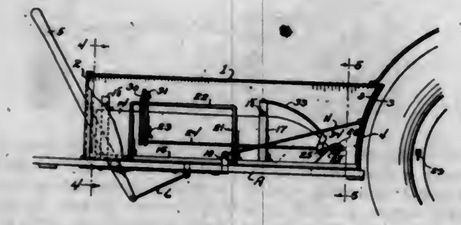
1,757,850. HYDRAULIC GEAR. SCOTT V. E. TAYLOR, Anaconda, Mont. Filed Mar. 15, 1926. Serial No. 94,956. 4 Claims. (Cl. 60—54.)

1. A hydraulic gear for transmitting power at a reduction comprising a revoluble driven section including means for rapidly rotating a body of liquid contained therein, a controlling section arranged concentrically with respect to and free of connection with said driving section and having means to provide for the flow of the liquid through it in a combined tangential and radial direction in relatively thin sheets, the longitudinal portions of said sheets being parallel to the longitudinal axis of the controlling section, said means of the controlling section providing for the revolving thereof, said controlling section arranged within said driving section, and a revoluble power transmitting driven section arranged concentrically to and within the controlling section and including means acted upon by the fluid driven from the driving section and conducted through the controlling section for operating said driven section and with the flow of the liquid with respect to said driven section being in the same direction



as the flow with respect to the controlling section, means for coupling said controlling and driven sections together as a unit to provide for the operation of the driven section in a forward direction, and further providing for the disconnection of the controlling and driven sections to allow the controlling section to revolve free of the driven section thus placing the drive in neutral.

1,757,851. CHAIN-APPLYING DEVICE. HENRY H. WAGNER and CHARLES L. WAGNER, Pickering, Mo., assignors of one-third to James L. Neal, Pickering, Mo. Filed Feb. 11, 1928. Serial No. 253,639½. 1 Claim. (Cl. 152—14.)

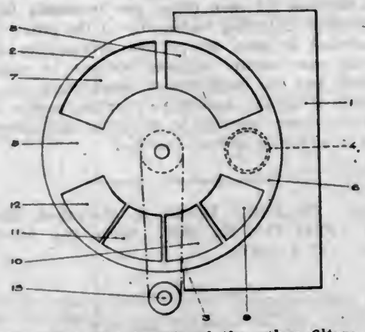


In a device for applying an anti-skid chain to the tire of a vehicle wheel, carrying means for said chain, end links on the side members of said chain and having inwardly extending eyes, rods mounted for rotation upon opposite sides of said carrying means, upright portions formed with one of the ends of said rods, cup-shaped members formed with the opposite ends thereof to accommodate the end links of the side members of the anti-skid chain, a cross rod resiliently connected to the upright portions to urge the cup-shaped members to their normal position, means for moving the carrying means, guide members, cam track portions formed with the guide members and arranged in the path of the upright portions to be engaged thereby when the carrying means is moved to rotate the rods for moving the cup-shape members to carry the end links of the side members around the bulged portion of the tire.

1,757,852. COLOR SCREEN. CARL ALSTRUP and VIGGO JENSEN, Copenhagen, Denmark. Filed Aug. 5, 1927, Serial No. 210,930, and in Denmark, Mar. 2, 1927. 1 Claim. (Cl. 88—164.)

In an apparatus for producing pictures in natural colors, a rotatable disc having a plurality of color filters and opposed shutter segments dividing the filters into two

groups, one group being composed of red and orange filters and the other group of yellow, green, blue and violet filters, the tangential lengths of the red and orange filters be-



ing greater than the length of the other filters in proportion to the optical effectiveness of the colors whereby the latter produce equal impressions upon the eye.

1,757,853. PAPER HAIR DUSTER. NATALE J. CARBONE, Jr., Long Branch, N. J. Filed Sept. 25, 1928. Serial No. 308,200. 1 Claim. (Cl. 300—21.)



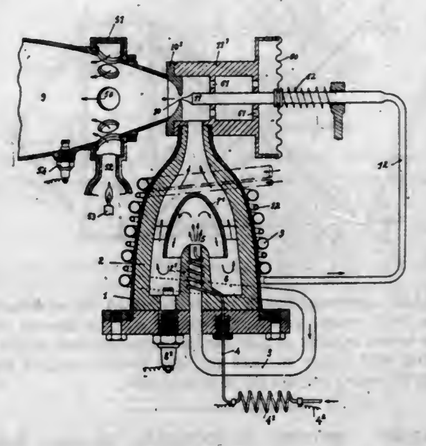
The method of making a hair dusting brush for barber shops comprising the taking of a rectangular sheet of paper and cutting the longitudinal edges of said sheet to provide a plurality of bristles; second, folding said sheet back upon itself on a central longitudinal line to dispose all the bristles one upon the other and to provide an imperforate back at one end, and third, rolling the sheets transversely to provide a handle at one end and bristles at the other.

1,757,854. PARACHUTE. CHARLES H. CASTAGNE, Chicago, Ill. Filed Feb. 21, 1928. Serial No. 256,001. 14 Claims. (Cl. 244—21.)



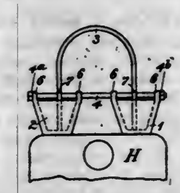
1. An aviation garment comprising a jacket, and an inflatable bag carried by the latter and extending above the wearer of the garment and having the openings thereof disposed at the back and sides of said jacket.

1,757,855. METHOD OF MAKING OIL-GAS MIXTURES. CONSTANTIN CHILOWSKY, Paris, France. Filed July 18, 1922, Serial No. 575,916, and in France July 27, 1921. 5 Claims. (Cl. 48—213.)



1. The method of making oil gas mixtures including a dispersed oil fog or cloud, which comprises burning a liquid fuel at high pressure to obtain products of combustion at a high temperature and a high pressure, forming a jet of said products and expanding to atmospheric pressure, and supplying heavy oil to said jet at a point of high temperature and high pressure.

1,757,856. AIR MOISTENER AND CLEANER. OTTO KARL LEOPOLD DRUBBA, Hamburg, Germany. Filed Mar. 2, 1928, Serial No. 258,600, and in Germany Mar. 25, 1927. 5 Claims. (Cl. 261—104.)



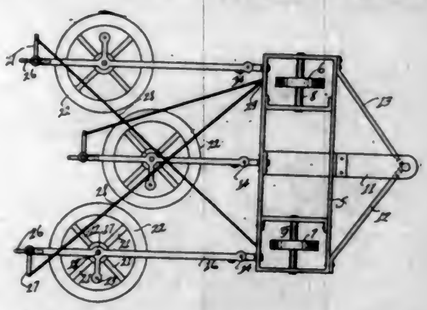
4. An air moistener and purifier, including independent liquid containers, a porous body terminally dipping into the respective containers, and extended above the containers in step-shaped outline, and means for permitting adjustment of the containers relative to each other and to the porous body.

1,757,857. NONENTANGLING LOCK WASHER. GEORGE K. GARRETT, Bryn Mawr, Pa., assignor to National Umbrella Frame Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed June 19, 1929. Serial No. 372,122. 5 Claims. (Cl. 151—36.)



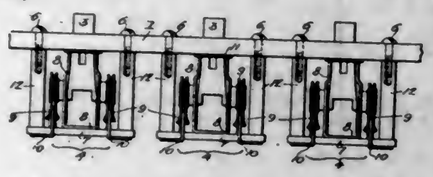
1. A lock washer comprising a helical segment having a pitch approximating the smallest diameter of the washer stock, one face of the washer being more than 360 degrees in circumference, the other face of the washer being less than 360 degrees in circumference.

1,757,858. WEED CUTTER. GOVERT C. GROENEVELD and CHARLES W. FULLER, Hanford, Calif. Filed Oct. 12, 1928. Serial No. 312,133. 3 Claims. (Cl. 97—144.1.)



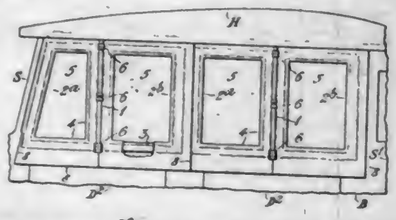
1. In a device of the character described the combination with draft means, of a bar pivotally secured thereto, a rotary cutter secured to said bar, weight controlled means for tilting said cutter so that one side thereof will be lower than the other for the purpose specified.

1,757,859. SWITCH STRUCTURE. MONROE GUETT, Hartford, Conn., assignor, by mesne assignments, to The Arrow-Hart & Hegeman Electric Company, Hartford, Conn., a Corporation of Connecticut. Filed Mar. 30, 1927. Serial No. 179,643. 3 Claims. (Cl. 200—168.)



1. Means for permitting a switch structure to be attached without detrimental distortion to a preformed cover plate having holes therein, comprising a switch structure mounted under the plate and having operating means projecting therethrough; a flexible base on the switch structure; posts secured to the base and extending to the underside of the cover plate; and means for securing the posts to the cover plate, the flexible base permitting the posts to be secured in holes in the cover plate even though the posts and holes might not have been originally in alignment.

1,757,860. SIDE SCREEN OR CURTAIN FOR MOTOR VEHICLES. JOHN RICHARD HALL, KENNETH CLARENCE MCLEOD, and OWEN BURGESS HEATLEY, Melbourne, Victoria, Australia. Filed June 26, 1928, Serial No. 288,397, and in Australia July 4, 1927. 1 Claim. (Cl. 296—45.)



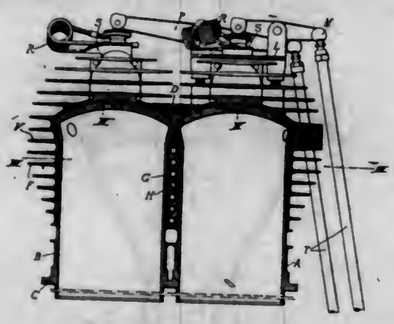
A side enclosure for touring cars having a body with side doors, a windshield and a top with a back section, comprising a socket on the inner side of each door, a pillar for each door having a flat inwardly offset foot piece detachably fitting in the respective socket with its angled portion seated across the top of the door to hold the pillar in outwardly offset relation to the door, a pair of closure sections for each pillar one extending forwardly and the other extending rearwardly of the pillar, the closure sections between the pillars overlapping and the front and rear closure sections adapted to engage the windshield and the back section respectively for closing in the side of the car, and hinge clamping means for supporting the closure sections on the pillar and securing the sections in adjusted position thereon.

1,757,861. COLLAR. MORRIS I. HALPERIN, Brooklyn, N. Y. Filed Feb. 20, 1929. Serial No. 341,465. 1 Claim. (Cl. 2—141.)



A soft collar folded at its upper edge to provide inner and outer flexible folds, the inner fold being provided near its front ends with button holes for engagement with a collar button, the front ends of the outer fold extending downwardly below the lower edge of the inner fold and being elongated circumferentially to permit these deepened elongated ends to overlap when the collar is worn, the edges of the ends of the outer fold being partially cut away downwardly from the upper edge of the collar to provide a space to receive the knot of a tie, and auxiliary means secured to the overlapped extremities of the outer fold, and positioned lower than said button holes for retaining said extremities in overlapped relation.

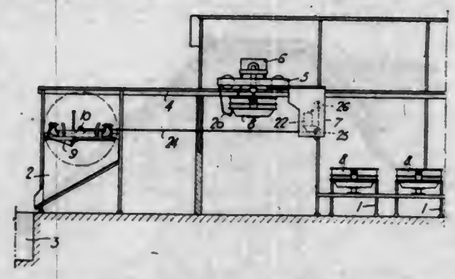
1,757,862. CONSTRUCTION OF INTERNAL-COMBUSTION ENGINES. JEAN MARIE HEINRICH, Paris, France, assignor to Société Des Moteurs Salmson Système Canton-Unné, Paris, France. Filed Nov. 9, 1927, Serial No. 232,175, and in France Nov. 15, 1926. 8 Claims. (Cl. 123—90.)



1. In an internal combustion engine, the combination of a pair of cylinders, distinct valves for each of said cylinders and control levers for said valves pivotally supported by one cylinder of the pair.

1,757,863. SINTERING APPARATUS. ANDERS HOLMBERG, Stockholm, Sweden. Filed Jan. 28, 1928. Serial No. 250,309. 7 Claims. (Cl. 214—1.1.)

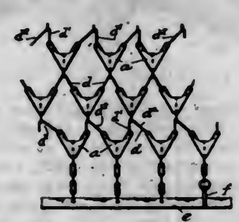
1. A mechanical tipping device for portable sintering vessels, which comprises in combination, a frame rotatable around a horizontal axis, a normally upwardly directed opening in said frame to receive a sintering vessel, means on said frame to guide a sintering vessel to proper position in said opening when lowered down thereinto, means to retain a vessel in engagement with the frame, and means to rotate the frame around said axis.



1,757,864. PAINT. DAVID ISENBERG, Miami, Fla. Filed Dec. 9, 1929. Serial No. 412,933. 1 Claim. (Cl. 134—50.)

A paint comprising zinc oxide, white hydraulic cement, carbonated white lead, casein glue, iron oxide, calcium hydroxide, sugar of lead, rapeseed oil, white banana oil, China-wood oil, ethyl alcohol, water, turpentine, oil dryers, oil varnish, and animal gall, in substantially the proportions specified.

1,757,865. HARROW. JENS JENSEN, Sonderhav Post Holbol, Denmark, assignor to Bayerische Eggenfabrik Akt.-Ges., Nuremberg, Germany. Filed Apr. 28, 1928, Serial No. 273,595, and in Sweden Feb. 13, 1928. 2 Claims. (Cl. 55—82.)

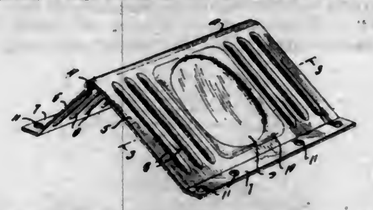


1. A unit for harrows and the like comprising a flat plate of substantially triangular form divided from its base portion in parallelism to its inclined edges, the intermediate portion between the divisions being turned at an angle to the plane of the plate to provide a cutting edge, and a piercing point removably secured to the plate in advance of and projecting from the plate in a direction opposite to the cutting edge.

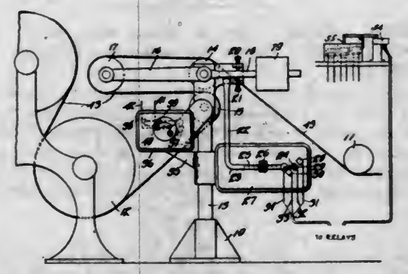
2. A harrow comprising a plurality of V-shaped units arranged in transverse rows with the base portions of the units towards the front of the harrow, connectors loosely joining the apexes of the units of one row with the extremities of the base portion of the units of the next row, and a drag bar connected to the final row of units, said drag bar being substantially T-shape in cross section, one edge of the bar forming a smooth dragging surface and the opposite edge of the bar having teeth.

1,757,866. CHOCK. EDWARD G. JOHNSON, New Philadelphia, Ohio, assignor of one-half to Frank G. Kraum, Dover, Ohio. Filed June 14, 1928. Serial No. 285,334. 1 Claim. (Cl. 188—32.)

A chock comprising a rectangular plate bent transversely near its middle to form two angularly disposed rectangular portions, flanges bent upwardly at each transverse end of the plate, a depression in one of the angularly disposed plates, strengthening ribs on each portion of the plate parallel to the depression and a rectangular bead around the depression.

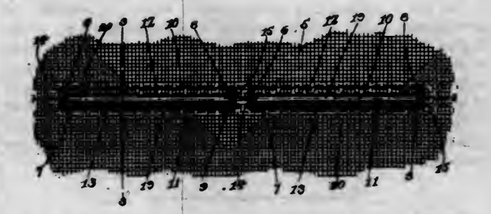


1,757,867. CONTROL MECHANISM FOR PAPER-MAKING MACHINES. DARCY E. LEWELLEN, Columbus, Ind. Filed Apr. 7, 1928. Serial No. 268,187. 14 Claims. (Cl. 92—42.)



1. In a paper machine, means operated when the weight of the paper overrides predetermined limits adapted to close circuits to cause operation of means to vary the weight of the paper, and means limiting the operation of the control means to predetermined intervals and predetermined durations, substantially as set forth.

1,757,868. FLY EXIT. HUGH G. LEWIS, Mont Alto, Pa. Filed Oct. 8, 1929. Serial No. 398,211. 6 Claims. (Cl. 156—37.)

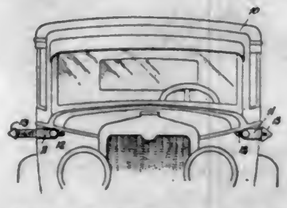


4. A reticulated element having plural slits and the inherent parts thereof freed by said slits directed outwardly to provide a fly exit opening and a fly exit channel leading from said opening, and a reinforcing medium filling the interstices of the walls of said channel and the interstices of the parts of said element bordering said opening, said reinforcing medium possessing a non-light emitting characteristic.

1,757,869. VEHICULAR SIGNAL. WILLIAM LIPSKY, New York, N. Y. Original application filed Feb. 21, 1929, Serial No. 341,721. Divided and this application filed Oct. 29, 1929. Serial No. 403,302. 2 Claims. (Cl. 116—50.)

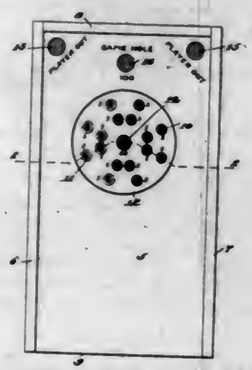
1. In a motor vehicle, the combination with signaling apparatus, of semi-flexible operating arms therefor, and

means for operating said arms, comprising operating shafts associated with the steering column and extending parallel thereto, the upper extremity of said operating shafts being angularly extended to provide operating handles adjacent to and below the periphery of



the steering wheel, the lower end of said shafts being provided with curved extensions lying in planes transverse to the axes of said shafts, whereby upon movement of said shafts, said extensions may partially surround the steering column.

1,757,870. GAME. CARL E. MAHR, Root, N. Y. Filed Dec. 12, 1929. Serial No. 413,612. 1 Claim. (Cl. 273—123.)



A game board of rectangular configuration, a raised border upon three sides thereof allowing projectiles to be projected at the other side, a series of recesses in said game board located within a circular border, receptacles located in said recesses for counters, flanges upon said receptacles resting upon the surface of said game board to prevent accidental reentry of said counters into said receptacles when said counters have been displaced therefrom, a series of hazard pockets in said game board located outside said circular border and a target pocket also located outside said circular border.

1,757,871. LIGATURE. GEORGE L. MILLER, Boston, Mass. Filed Nov. 15, 1928. Serial No. 319,598. 4 Claims. (Cl. 84—383.)



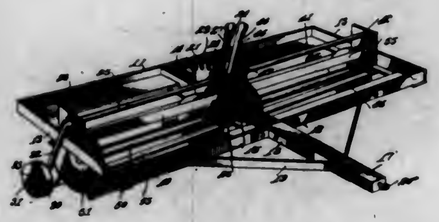
1. A ligature for the mouthpiece of a musical instrument comprising a split band having its ends disposed in overlapping relation, one end of the band being bent upwardly to provide a flange and a cam carried by the other end of the band adapted to contact with said flange, whereby the band will be contracted upon rotation of the cam.

1,757,872. SIPHON. ERASTUS B. MITCHELL, Blackfoot, Idaho. Filed Mar. 25, 1929. Serial No. 349,776. 1 Claim. (Cl. 137—20.)



A siphon for irrigating land comprising a short leg and a vertically inclined downwardly extending long leg, a horizontal pipe extending transversely of and secured to the outer extremity of the long leg and having communication therewith, one wall of the pipe being opposed to the extreme open end of the long leg, and valves within the pipe beyond the end of the long leg.

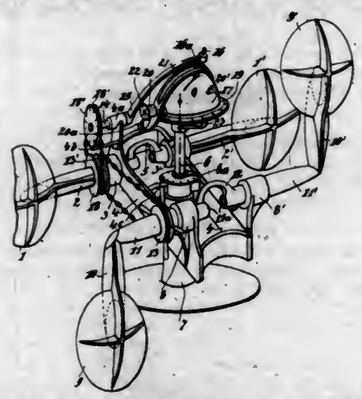
1,757,873. STALK CUTTER. JOHN FRANKLIN O'KELLEY, Itasca, Tex. Filed May 28, 1929. Serial No. 366,656. 2 Claims. (Cl. 55—61.)



1. A stalk cutter comprising a frame, a beam connected to the frame intermediate the ends thereof and dividing the frame into a plurality of sections, a plate secured to the frame and to the beam, brackets located upon opposite sides of the beam and connected to the plates, brackets projecting from the ends of the frame and disposed in alinement with the first-mentioned brackets, said brackets being provided with bearings, rock shafts carried by pairs of the bearings, an arm projecting downwardly from each shaft and carrying a roller, idler shafts supported beneath the frame, discs mounted on the opposite ends of the idler shafts, blades secured to the peripheries of the discs, means connected with the rock shafts for rotating the same and for elevating the rollers above the discs.

1,757,874. APPARATUS FOR DETERMINING THE COURSE OF AIRCRAFT. KARL PETSCHENIG, Vienna, Austria, assignor to the Firm C. P. Goerz Optische Anstalt Aktiengesellschaft, Akciova Spolecnost K. P. Goerz Opticky Ustav, Bratislava, Czechoslovakia. Filed Jan. 6, 1928, Serial No. 244,993, and in Germany May 6, 1927. 16 Claims. (Cl. 181—26.)

1. An apparatus for determining the instantaneous position of an invisible moving source of sound comprising means for mechanically representing, on a reduced scale, the triangle formed by the central observation station, the acoustic position and the true position of the source of sound, the constant length of one side of this represented triangle representing the straight line connecting the central observation station with the acoustic position of the source of sound corresponding to the velocity of propagation of sound waves, the other side of the represented triangle representing the straight line connecting the acoustic and the true position of the



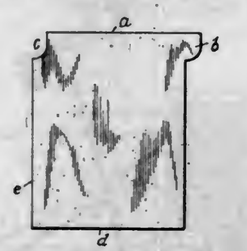
source of sound corresponding to the speed of the source of sound, and the third side of the represented triangle indicating the direction from the central station to the true position of the source of sound.

1,757,875. SUSPENSION HOOK. THOMAS S. RAINEY, New Orleans, La. Filed June 1, 1929. Serial No. 367,744. 5 Claims. (Cl. 40—145.2.)



1. A suspension hook comprising a body having parallel leg members, recesses formed upon the inner surfaces of said leg members, divergent slots extending from said recesses, and support means for said body.

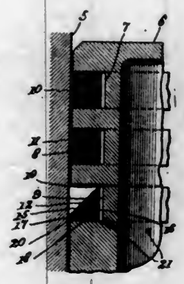
1,757,876. MANIFOLDING CARBON PAPER. JOHN HUTCHINSON REID, Jamestown, N. Dak. Filed Dec. 12, 1928. Serial No. 325,609. 1 Claim. (Cl. 282—28.)



A manifolding carbon sheet of rectangular shape, having an end portion thereof formed with a cut-out on one side and a grip-extension on the opposite side, said cut-out and grip-extension being identical in form and size.

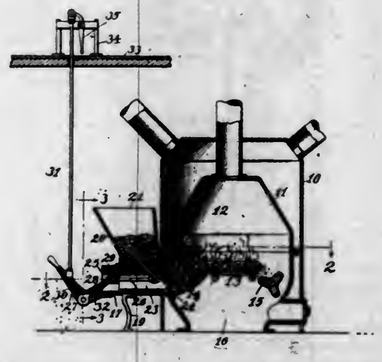
1,757,877. PISTON RING. FISHER H. ROBERTS, El Paso, Tex. Filed Oct. 1, 1928. Serial No. 309,634. 1 Claim. (Cl. 74—109.)

In combination with a piston having a ring groove and perforations at the base of the ring groove communicating with the interior space of the piston, an improved piston ring of less height than the height of the ring groove in the piston floatingly mounted in said groove and being a split circle of resilient material cut diagonally and having right angular base and



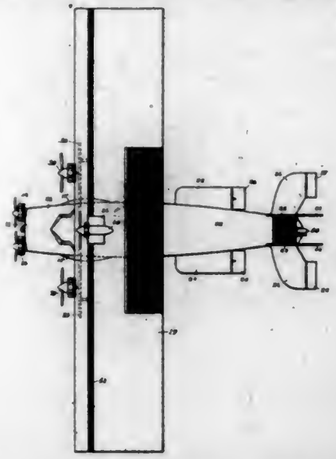
inner walls, the inner wall being joined by the diagonal wall at the upper inner edge of the ring, the lower edge of the diagonal wall terminating above the outer edge of the lower base wall, a narrow cylinder wall contacting surface between the diagonal wall and the base wall, the lower outer edge of said ring being sharpened.

1,757,878. FURNACE. CARL H. ROOT, Detroit, Mich. Filed May 13, 1927. Serial No. 191,128. 1 Claim. (Cl. 110—44.)



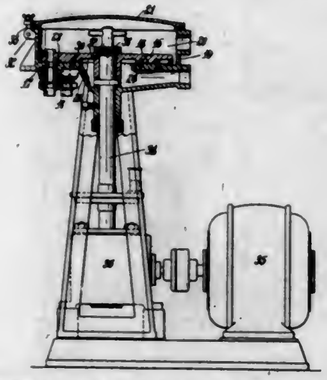
A furnace provided with a casing having a fuel feeding opening, a housing having one end in communication with the opening, a ram slidably mounted in the housing, means for reciprocating said ram, means for feeding fuel into the housing intermediate the ends thereof, a grate normally located in a horizontal plane above the lower edge of said opening and having its side edges spaced from the casing, a deflecting plate curved upwardly and inwardly from the lower edge of said opening and having its upper edge in close association with one edge of the grate, a shaker bar located within the casing and disposed adjacent the opposite edge of the grate to receive the burned fuel from the grate.

1,757,879. AEROPLANE. JOHN T. RYDBERG, Harrison, N. J. Original application filed Dec. 2, 1927, Serial No. 238,369. Divided and this application filed Nov. 8, 1928. Serial No. 318,049. 7 Claims. (Cl. 244—31.)



1. An aeroplane having a hollow wing, an oil distributing pipe supported on the top surface of the wing and a heat conducting exhaust pipe mounted adjacent the oil pipe to heat said pipe.

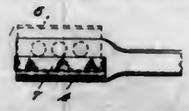
1,757,880. STERILIZING AND PRESERVING LIQUIDS. RICHARD SELIGMAN, Wandsworth, London, England, assignor to The Aluminium Plant & Vessel Company, Limited, London, England. Filed Mar. 31, 1926, Serial No. 98,837, and in Great Britain Feb. 17, 1926. 5 Claims. (Cl. 137—21.)



1. In combination with a tank, a casing connected to the tank and having separate vacuum and compressed air chambers, and a rotary valve in said casing having a port to initially place the tank in communication with the vacuum chamber, a second port to vent the tank to atmosphere, a third port to place the tank in communication with the compressed air chamber, and a fourth port to vent the tank to atmosphere, said fourth port being separate and distinct from the second port.

1,757,881. BLADE HOLDER. JOSEPH A. SEYMOUR, Fabyans, N. H. Filed Feb. 18, 1929. Serial No. 341,006. 1 Claim. (Cl. 30—25.)

A razor blade holder comprising a tubular handle part and a pair of flat extensions on the handle part, a tubular part connecting together adjacent side edges of the flat parts, said flat parts being provided with outwardly offset portions adjacent the tubular part for forming a wide space between the flat parts adjacent the tubular part and a narrow blade receiving space between those portions of



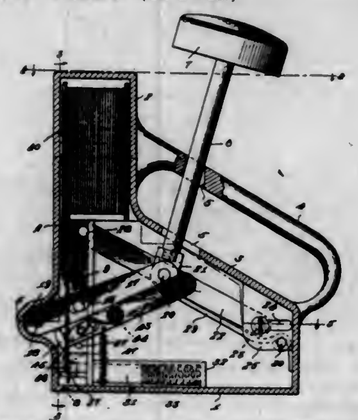
the flat parts which are not offset, a strip of soft material in the tubular part and a U-shaped blade holding member removably fitting in the wide space and having its ends bent to form loops to engage the outer ends of the flat parts.

1,757,882. HOE. ERNEST F. SILL and ALFRED SILL, Dillon, Mont. Filed Jan. 4, 1928. Serial No. 244,477. 1 Claim. (Cl. 306—45.)



In a device of the character described, a handle having a recess in one face adjacent one end, a flat relatively wide shank formed from a single length of metal extending longitudinally of one face of the handle and terminating at its inner end in a lateral extension which lies within the recess, the shank being bifurcated from its outer end to the lateral extension to provide a pair of arms and further provided with a transverse opening which passes through the bifurcation in the shank, and a removable fastening passing through the transverse opening and handle to secure the shank thereto.

1,757,883. STAPLING MACHINE. FRANK L. ST. HILAIRE, Cincinnati, Ohio. Filed Oct. 19, 1928. Serial No. 313,574. 1 Claim. (Cl. 1—48.)



A stapling machine comprising a casing having an opening in its bottom and a handle at its top, a plunger passing

through the top of the casing, a reel in the upper portion of the casing containing a length of wire, a spring actuated anvil member horizontally arranged in the bottom part of the casing and having a slot in its outer end for receiving a portion of the wire, a former member vertically movable in the casing and having an opening in its lower part for receiving the slotted end of the anvil member when the former member is in lowered position, the side walls of the opening acting to bend the wire passing through the slot in the anvil member into the form of a staple, said former member having grooves therein for receiving the limbs of the staple, said grooves being arranged in alignment with the opening in the bottom of the casing, a beveled projection on the anvil member, a part of the former member for engaging the same for retracting the anvil member as the former member moves downwardly, hammer sliding in the grooves in the former member, a lever pivoted in the casing and connected with the hammer, a second lever pivoted in the casing and connected with the former member, a wire feeding lever pivoted in the casing, means thereon for feeding the wire downwardly, holding means for the wire for preventing retrograde movement of the same, stationary cutting means for the wire in the lower part of the casing, cutting means on the former member cooperating with the stationary means for severing the wire on the downward movement of the former member, and means for actuating the levers by the plunger.

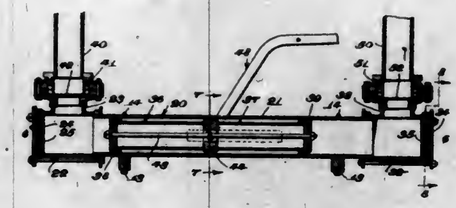
1,757,884. MECHANICAL PENCIL. EDGAR C. TUGGLE, Sharon, Pa. Filed June 21, 1928. Serial No. 287,073. 2 Claims. (Cl. 120—19.)



2. In a pencil, a pair of solid columns separated for a greater part of their length by a narrow slot and having a corresponding groove in each opposite wall to form a guide for a lead, a flat shank extending through the slot with means on each end for clamping upon said columns at any point along said slot, and lead pusher connected with the shank.

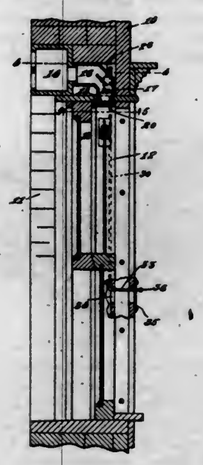
1,757,885. PUMP. GRANT WEAVER, La Fayette, Ind. Filed Mar. 23, 1928. Serial No. 264,229. 1 Claims. (Cl. 103—171.)

In a pump, a cylinder having a detachable inlet and outlet at each end and further provided with a pair of longitudinally extending slots at diametrically opposite points, a double acting piston slidably mounted in the cylinder, laterally extending lugs projecting therefrom at diametrically opposite points and extending through the slots, a rectilinear cross head mounted in said piston, projecting through said piston and providing an aperture, a rod extending transversely through the piston and the aperture of said block and passing through the lugs with the ends thereof extending beyond the lugs, a longitudinally



extending rod secured at the ends of said piston, extending through the aperture in said block and having an eye receiving said transverse rod and a forked lever secured on the ends of the transverse rod against the ends of the lug.

1,757,886. VENTILATOR. THEODORE A. WEINHEIMER and ELMER HOFFMAN, Pittsburgh, Pa. Filed Sept. 3, 1927. Serial No. 217,474. 1 Claim. (Cl. 99—88.)

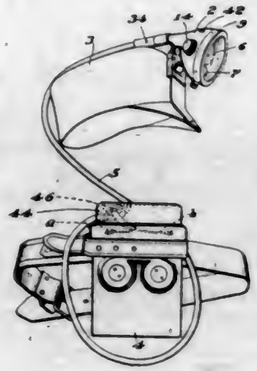


A ventilator comprising in combination with a window casing, an air conduit located adjacent to and extending transversely of the casing, a relatively large air inlet chamber communicating with the iner end of the conduit and opening at the inside of the casing, a damper mounted for pivotal movement in the conduit, a longitudinally movable operating rod mounted within the casing, means operatively connecting the damper and rod, and a right angularly disposed handle carried by the rod and extending through the window casing.

1,757,887. MINER'S LAMP. GRANT WHEAT, Marlboro, Mass., assignor to Koehler Manufacturing Company, Marlboro, Mass., a Corporation of Massachusetts. Filed Jan. 23, 1929. Serial No. 334,526. 18 Claims. (Cl. 240—17.5.)

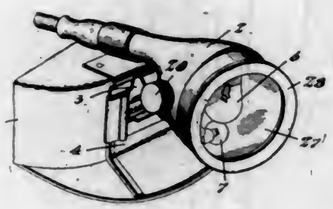
2. In a miner's lamp, the combination of a head piece, an electric lamp in said head piece, a storage battery, a cord connecting said battery and head piece and including electrical conductors for supplying current from said battery to said lamp, charging terminals on said head piece, a

switch in said head piece movable to close or open a charging circuit through said conductors and said terminals,



and means in said head piece operative automatically when said switch is moved out of its charging position to lock the switch out of said position.

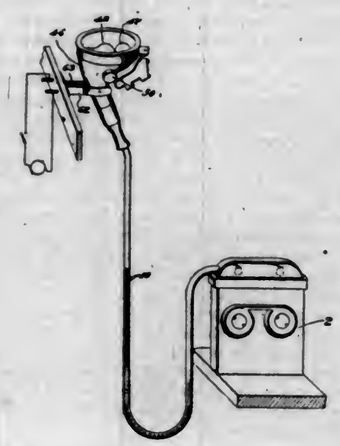
1,757,888. MINER'S LAMP. GRANT WHEAT, Marlboro, Mass., assignor to Koehler Manufacturing Company, Marlboro, Mass., a Corporation of Massachusetts. Filed Nov. 22, 1926. Serial No. 149,890. 6 Claims. (Cl. 240—17.5.)



4. In a miner's lamp, the combination of a head piece including a lamp casing, means for fastening said head piece to a cap or the like, a reflector in said casing, an incandescent lamp mounted in said casing in front of said reflector, said lamp extending transversely to the axis of the reflector, a socket mounted in one side of said casing for receiving the base of the lamp and arranged to release the base automatically upon the breaking of the lamp bulb, and an arm mounted in said head piece and arranged to engage the end of said bulb, said arm serving to press said bulb backwardly against said reflector and cooperating with the reflector to hold said lamp in a substantially centered relationship to said reflector.

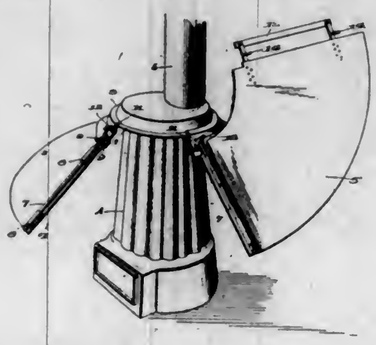
1,757,889. ELECTRIC LAMP. GRANT WHEAT, Marlboro, Mass., assignor to Koehler Manufacturing Company, Marlboro, Mass., a Corporation of Massachusetts. Filed Dec. 16, 1926. Serial No. 155,199. 3 Claims. (Cl. 240—17.5.)

1. A lamp apparatus designed to be carried on the person comprising, in combination, an electric lamp, a casing in which said lamp is mounted, a socket in said casing for operatively supporting said lamp, a storage battery including battery elements and a casing therefor, said casings being separate from and independent of each other and adapted to be independently supported, a flexible cord connecting said casings and including conductors for supplying current from said battery to said lamp, and charging terminals in said lamp casing, said casing protecting said terminals but having apertures through the wall thereof in which access to said terminals may be had, said charging terminals being adapted to cooperate with



the terminals of a charging circuit and with the conductors in said cord to charge said battery through said conductors.

1,757,890. CANOPY OR HOVER FOR BROODERS. ROBERT T. WILLIAMS, Quincy, Ill., assignor to H. M. Sheer Company, Quincy, Ill., a Corporation of Illinois. Filed May 7, 1927. Serial No. 189,637. 8 Claims. (Cl. 119—32.)



1. The combination with a heater, of a canopy including an open-sided ring or collar mounted for turning movement relative to the heater, a sheet-metal member secured thereto, reinforcing means for the edges of the sheet-metal member forming the open side, and a door for closing the opening in the side of the canopy, said canopy being mounted for turning movement with the door either opened or closed.

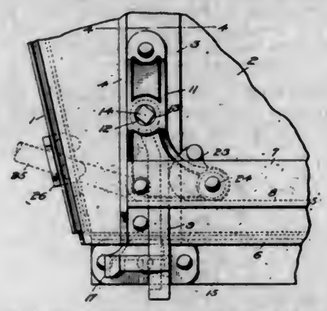
1,757,891. METHOD OF DRYING LUMBER. J PEARL WILSON, Jacksonville, Fla., assignor to Wilson-Otwell & Cone, Inc., Jacksonville, Fla., a Corporation of Florida. Filed Aug. 30, 1927. Serial No. 216,494. 8 Claims. (Cl. 34—24.)

8. A method of drying lumber including subjecting the lumber to artificial drying conditions before the pores of the lumber become closed.

1,757,892. METHOD OF DRYING LUMBER. J PEARL WILSON, Jacksonville, Fla., assignor to Wilson-Otwell & Cone, Inc., Jacksonville, Fla., a Corporation of Florida. Filed Oct. 6, 1927. Serial No. 224,528. 5 Claims. (Cl. 34—24.)

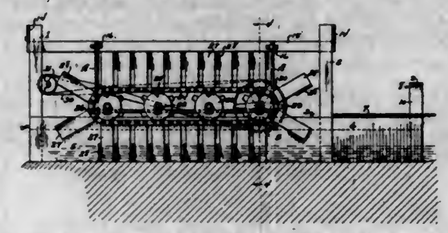
1. A method of drying lumber including immersing the lumber in a hot bath before the pores have become closed.

1,757,893. CAR-DOOR MECHANISM. WILLIAM E. WINE, Toledo, Ohio. Filed Oct. 1, 1925. Serial No. 59,871. 14 Claims. (Cl. 105—308.)



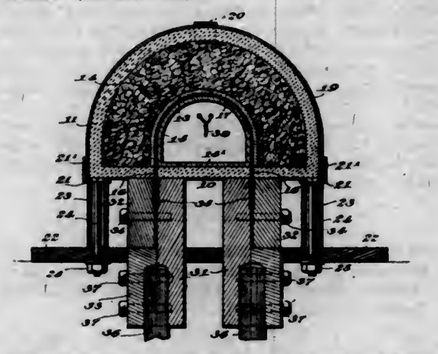
1. In car door mechanism, the combination with a hinged door, of a door stiffener having a plurality of flanges, said stiffener being secured to the door and extending at an angle to the hinge axis thereof, a latch movably mounted on said door outwardly of said stiffener, means overlapping said latch for maintaining the latter in operative relation to said door, said latch being interposed between said stiffener and said means, and means mounted on the car body for cooperating with said latch to retain said door in closed position.

1,757,894. CURRENT MOTOR. ANTANAS JANAS ZVIRBLIS, Barberton, Ohio. Filed Sept. 27, 1927. Serial No. 222,304. 1 Claim. (Cl. 170—84.)



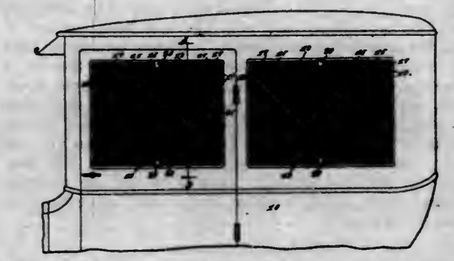
A current motor of the character described comprising a frame, uprights included in said frame and being arranged in pairs, spaced walls disposed between said uprights in parallel pairs with one wall of each pair cooperating to provide a sluice way, divergent walls having their adjacent ends in connection with the walls forming the sluice way, a platform supported by said divergent walls, uprights at the remote ends of the divergent walls, a top piece between the last mentioned uprights, outer walls upon opposite sides of the outer wall of the walls first mentioned and extending from the last mentioned uprights in parallelism with the first mentioned walls, longitudinally disposed members extending between the first mentioned uprights, rods depending from said longitudinally disposed members, horizontal rods connecting the depending rods, bearings secured to the horizontal rods, shafts mounted for rotation in said bearings, sprockets arranged in end and intermediate pairs on said shafts and being fixed thereto, endless chains trained about said sprockets, buckets movable through the sluice way and secured to said chains, a pulley secured to one of said shafts, and means driven from said pulley.

1,757,895. ELECTRIC FURNACE. ANDREW J. ASCH, New York, N. Y. Filed Jan. 5, 1928. Serial No. 244,676. 2 Claims. (Cl. 219—36.)



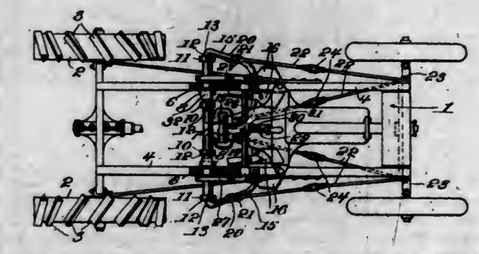
1. An electric furnace comprising an outer muffle, an inner muffle removably housed within the outer muffle, a resistance heating element having the form of a relatively thin sheet of platinum of substantially rectangular form interposed between the inner of the opposed walls of the outer and inner muffles and having the free end portions thereof projecting outwardly of a wall of the outer muffle, and circuit connectors engaged with the projected end portions of the resistance element.

1,757,896. AUTOMOBILE WINDOW SCREEN. EDNA BARON, Chicago, Ill. Filed Sept. 7, 1928. Serial No. 304,541. 1 Claim. (Cl. 156—14.)



A screen frame comprising inner and outer frames, means joining the marginal edges of a screening therebetween, ears formed upon one of the frames disposed in parallelism to the companion frame, adjusting elements carried by the companion frame having connection with the ears to expand and contract the assembled frame within a window opening, and U-shaped clamping members carried by the frames engageable with a window construction to retain the completed frame against displacement.

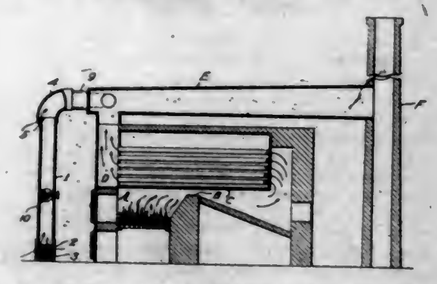
1,757,897. HARVESTER. CHESTER B. BROWN, Morrill, Nebr. Filed Jan. 24, 1927. Serial No. 163,195. 2 Claims. (Cl. 55—106.)



1. In a harvesting machine for beets or like vegetables planted in rows, a wheeled frame, upwardly extending

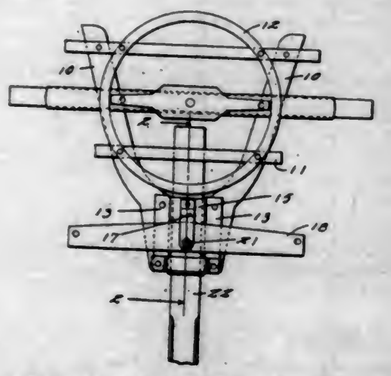
guides on the frame, a centrally notched tubular member received through the guides, stop means holding the tubular member from longitudinal movement, angularly disposed lifting blades arranged in cooperating pairs, supporting arms for the blades having upper angle ends received respectively through the ends and inserted in the notched portions of the tubular member and thereafter passed into the bore of said tubular member, adjustable means binding the angle ends of the arms in the tubular member, adjustable brace rods between the arms and the front of the frame, and means for vertically adjusting the tubular member in the guides and for sustaining said tubular member so adjusted.

1,757,898. GAS BURNER AND VENTILATOR. FRANK BUSHMAN and ROBERT MCFARLANE, Brandon, Manitoba, Canada. Filed Oct. 6, 1927. Serial No. 224,474. 4 Claims. (Cl. 110—147.)



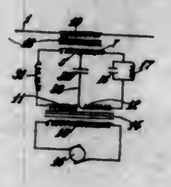
1. An attachment for a furnace, a flue for said furnace, said attachment comprising a vertically disposed pipe, legs supporting said pipe above a floor surface to allow the passage of air thereto, a screen secured to said pipe to prevent the passage of foreign matter therein, a damper in said pipe and making the same air tight when closed, an elbow secured to the upper end of said pipe, said pipe being provided with a depression formed at the juncture of the pipe with the elbow to provide an air passage, a second elbow in communication with the flue, and being provided with an opening in its top disposed in a line above the air passage, and a pipe connecting the respective elbows.

1,757,899. WAGON. PERRY G. CARY, Blacks Ferry, Ky. Filed June 19, 1928. Serial No. 286,575. 7 Claims. (Cl. 280—139.)



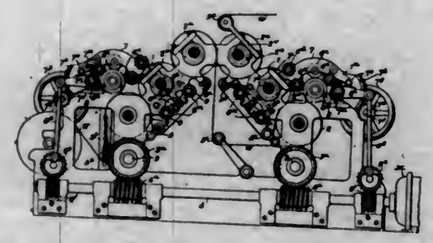
1. In a wagon, hounds, outwardly facing channel bars receiving the forward ends of the hounds and secured thereto, a yoke pivoted between the channel bars, a tongue directed through the yoke, a vertically extending pin directed through the yoke and interchangeably engageable in any one of a longitudinal series of openings formed in the tongue, a doubletree swiveled upon said pin, braces connecting the forward ends of the channel bars and limiting pivotal movement of the yoke, a further brace connecting the hounds rearwardly of the yoke adjacent which the tongue extends and a guide bracket carried by the last named brace in which the rear end of the tongue operates.

1,757,900. DEVICE FOR IMPRESSING SIGNALING CURRENTS ON ELECTRICAL POWER-DISTRIBUTING LINES. MAURICE CHIROL, Paris, France, assignor to Compagnie pour la Fabrication des Compteurs et Materiel d'Usines A. Gaz, Montrouge, Seine, France, a Joint Stock Company of France. Filed Oct. 7, 1927, Serial No. 224,753, and in France Oct. 26, 1926. 4 Claims. (Cl. 177—352.)



1. Device for superimposing currents of signaling frequency on a low frequency electric supply system comprising, in combination, a low frequency electric supply system, signaling current emitting apparatus, two electro-magnetic circuits inductively coupling said low frequency supply circuit and said signaling current apparatus together and both adapted to let through said low frequency current, means included in said electro-magnetic circuits for causing said low frequency current to produce two opposed and practically equal fluxes whereby practically no low frequency current is induced in said signaling current emitting apparatus, choke means included in one of said electro-magnetic circuits for preventing the flow of current of signaling frequency therethrough and means in the other of said two electro-magnetic systems for facilitating the flow of current of signaling frequency therein.

1,757,901. WEB-PRINTING PRESS. JOSEPH LEVI COX, Chicago, Ill., assignor of one-half to Paul F. Cox, Chicago, Ill. Filed Jan. 23, 1929. Serial No. 334,474. 16 Claims. (Cl. 101—221.)

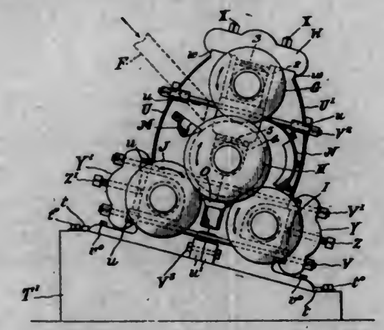


1. In a printing press, two units each comprising a plate cylinder and impression cylinders cooperating therewith to print and perfect a web, means to ink the plates between successive impressions therefrom; intermeshing gearing between all the cylinders; and means for directly and simultaneously driving the first impression cylinder of each unit.

1,757,902. MANUFACTURE OF PURE LEAD HYDROXIDE STARTING FROM IMPURE SULPHATE OF LEAD. RENÉ DALOZE, Uccle, Belgium. Filed Nov. 8, 1926, Serial No. 147,198, and in France Oct. 12, 1926. 3 Claims. (Cl. 23—146.)

1. A process for the manufacture of pure lead hydroxide starting with impure sulphate of lead comprising, effecting a double decomposition between the sulphate of lead and an excess of alkali-earth metal acetate in solution, said alkali-earth metal acetate being such as to give an insoluble sulphate, separating the stable solution containing lead from the insoluble matters comprising the alkali-earth metal sulphate, and decomposing with an alkali-earth metal base the neutral lead acetate in said stable solution to precipitate lead hydroxide.

1,757,903. ROLLER MILL USED FOR MANUFACTURING SUGAR. JAMES FISHER, New Orleans, La. Filed May 27, 1926. Serial No. 112,063. 2 Claims. (Cl. 100—47.)



1. In apparatus of the character described, the combination with a three-roller mill and housing therefor, of an upper roller mounted in said housing above the upper roller of said mill, with means for simultaneously rotating all of said rollers, and means for directing the crushed solid material from the two upper rollers back between the upper roller of the mill and the two lower rollers, whereby three separate crushings are secured in a four-roller mill, substantially as and for the purposes described.

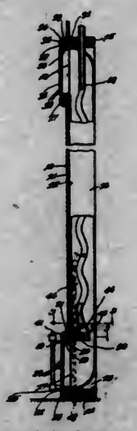
1,757,904. SELF-ADJUSTING ARCH SUPPORT. CHESTER A. FREE, Attica, Ind. Filed Sept. 17, 1928. Serial No. 306,408. 3 Claims. (Cl. 36—71.)



1. In a device of the character set forth, a pad member adapted to contain fluid, said pad member being provided with a flexible top wall and having a pre-determined fluid content which permits ready readjustment of said top wall of the pad member under pressure, and inserts below said pad member and secured thereto by an elastic band.

1,757,905. HEATING DEVICE. RUDOLPH H. GUENTHER, Chicago, Ill. Filed Nov. 22, 1927. Serial No. 235,107. 1 Claim. (Cl. 126—90.)

A heating device of the character stated including a substantially rectangular conduit adapted to be confined between adjacent studs and opposite faces of a wall, said conduit having an inlet opening at the lower end thereof and an outlet opening at the upper end thereof, said openings extending through one of the faces of said walls, a second conduit confined within said first named conduit and being of less thickness but of substantially the same width as said first named conduit and having serpentine convolutions formed therein, said second conduit extending throughout the extent thereof through the said first named conduit and terminating in a flue portion extended out through the upper end of said first named conduit,

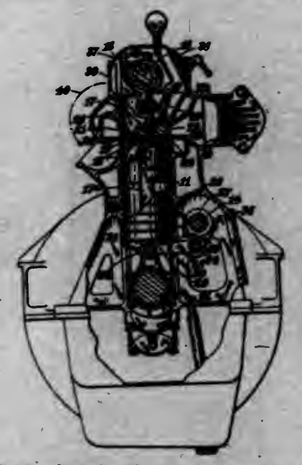


said second named conduit having an outwardly flared portion at the lower end thereof and having notches formed in the side walls of said outwardly flared portion, a heating element confined within said enlarged portion and extending out through said notches whereby the heat and fumes from said heating element will pass through said second conduit to heat the air surrounding the same in said first named conduit.

1,757,906. BARBITURIC-ACID COMPOUND. FRITZ HEFTI, Altstetten, near Zurich, Switzerland. Filed Aug. 2, 1928, Serial No. 297,118, and in Switzerland Mar. 9, 1928. 1 Claim. (Cl. 260—33.)

As a new compound the product of the interaction of phenyl-allylbarbituric acid and 1-phenyl-2,3-dimethyl-4-dimethylamine-5-pyrazolon which possess valuable hypotic and analgetic properties.

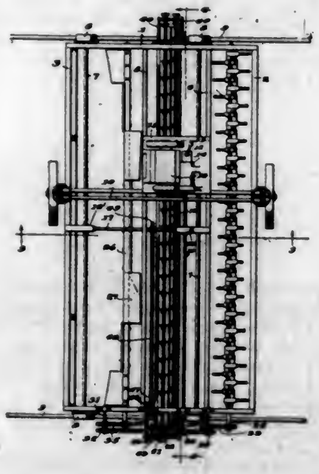
1,757,907. INTERNAL-COMBUSTION ENGINE. JOSEPH LAMBERG JAMESON and CHARLES JOHN FISHER, Surrey, England. Filed Sept. 15, 1927, Serial No. 219,757, and in Great Britain Apr. 11, 1927. 8 Claims. (Cl. 123—75.)



1. An internal-combustion engine comprising in combination a cylinder, a sleeve-valve therein, a main piston

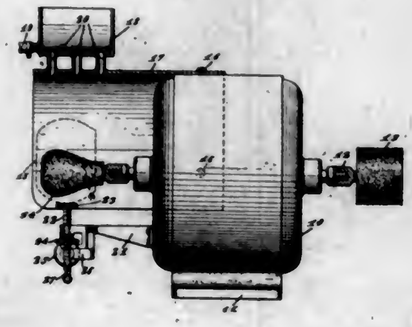
and head-piston within the sleeve-valve, means for reciprocating the pistons so that the head-piston approaches the main-piston closely once in each two complete reciprocations of the main-piston, a rocker pivoted upon the head-piston and operatively connected to the sleeve-valve, a transverse "half-time" shaft beyond the head-piston and operative connections between the rocker and the transverse "half-time" shaft.

1,757,908. EXCAVATING MACHINE. CARLTON C. JOHNSTON, Sweetwater, Tex. Filed July 6, 1927. Serial No. 203,729. 9 Claims. (Cl. 37—108.)



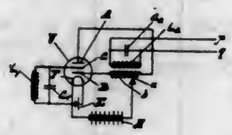
3. A road scraper comprising a wheeled frame, a scarifier carried by said frame, a rotary planer carried by said frame, a conveyor carried by said frame in advance of said rotary planer, a motor mounted upon said frame and means operatively connecting said rotary planer, conveyor and scarifier to said motor whereby they will be jointly operated.

1,757,909. UTENSIL-CLEANING MACHINE. KRIKOR H. KAZAZIAN, Chicago, Ill. Filed Feb. 15, 1929. Serial No. 340,164. 3 Claims. (Cl. 15—56.)



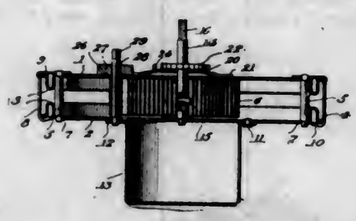
1. In a cleaning machine, a motor having a housing, a brush driven by the motor, means carried by the housing of the motor to support an article to be cleaned, means to adjust the article supporting means with respect to the brush, a guard secured to and extending from the housing around the brush, and means carried by the guard to supply a cleansing agent to the brush.

1,757,910. NEUTRODYNE CIRCUIT ARRANGEMENT. NICOLAAS KOOMANS, The Hague, Netherlands, assignor to Radio Corporation of America, New York, N. Y., a Corporation of Delaware. Filed Aug. 2, 1926, Serial No. 126,619, and in the Netherlands Aug. 19, 1925. 9 Claims. (Cl. 179—171.)



1. A device for the amplification of electric oscillations comprising at least one thermionic valve, the effect of the internal capacity between the plates and the controlling grids of such valves being reduced by the provision of a fourth electrode in each valve which is so connected in the circuit that the potential variations occurring at the anode are substantially 180° out of phase with those occurring at the said fourth electrode, in which the output circuit of each valve comprises an inductance, the terminals of which are connected to the plate and fourth electrode of said valve respectively, an intermediate point of said inductance being connected to a source of high tension direct current.

1,757,911. SPRING WINDER. OWEN KRAMER, Dayton, Ohio. Filed June 16, 1928. Serial No. 286,033. 3 Claims. (Cl. 81—7.5.)

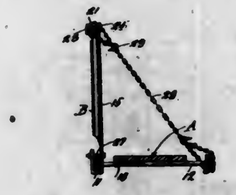


1. A device of the character described comprising a pair of cooperating disks, means for securing said disks together in face to face relation with respect to each other, a cylindrical handle secured to one of said disks, bails included in the disk securing means and being pivotally secured to one of said disks, hooks formed with said bails for receiving the other disk, spring winding and holding means associated with said disks, ratchet means included in the spring winding means and a handle for said spring winding means.

1,757,912. DETACHABLE EXTENSION GUARD RAIL. ARTHUR A. LANGLOIS, Klamath Falls, Oreg. Filed June 23, 1928. Serial No. 287,706. 3 Claims. (Cl. 304—38.)

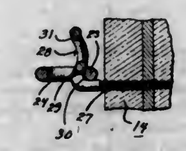
1. The combination with a scaffold including a body portion having longitudinally extending side rails and

connecting members, of a guard for the scaffold including a plurality of spaced posts, means detachably connecting the lower ends of said posts to one longitudinally extending side rail of the scaffold, an upper guard rail, means



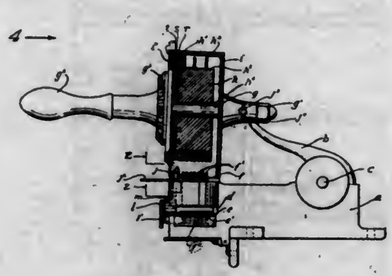
detachably connecting said upper guard rail to the posts, and bracing means for said guard including a plurality of spaced chains detachably engaging about said upper guard rail and the side rail of the scaffold opposite to the rail receiving the clamping means of said posts.

1,757,913. DOOR LATCH. CHRISTOPHER J. LAWRENCE, Graff, Minn. Filed Oct. 11, 1926. Serial No. 140,925. 2 Claims. (Cl. 292—205.)



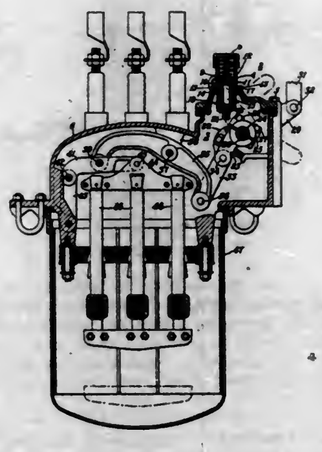
1. A door fastener comprising a latch proper embodying a latch arm pivotally carried by the door and having its free end projecting past the free edge of the door, and a keeper carried by the door jamb at the free edge of the door, embodying an upwardly extending inwardly convexed cam portion having an eye formed at its upper end and terminating at its lower end in a hook shaped pocket for receiving the projecting end of the latch arm.

1,757,914. PERFORATOR. JOHN E. LONG, Multnomah, Oreg. Filed Jan. 4, 1928. Serial No. 244,452. 8 Claims. (Cl. 164—111.)



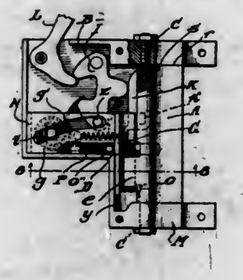
1. In a perforator of the character described, a base having a material receiving mouth formed therein, a pivoted arm, a rotatable head carried by the latter, such head having a plurality of die elements spaced about its periphery and cutting elements mounted in such base and arranged to be moved into cutting position in such mouth by the moving of such arm on its pivot, such die elements comprising a plurality of upstanding pins arranged in the form of the character to be marked.

1,757,915. CIRCUIT INTERRUPTER. JOHN B. MACNEILL, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Feb. 21, 1927. Serial No. 169,801. 12 Claims. (Cl. 200—150.)



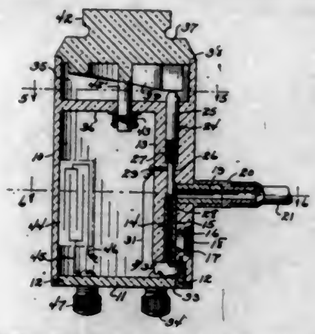
1. In a circuit interrupter, an operating mechanism, a tank and a normally open venting device mounted in the walls of said tank and a cam on the said operating mechanism for operating the said venting device.

1,757,916. AUTOMOBILE DOOR LATCH. MICHEL MODO, Luxemburg-Ville, Luxemburg. Filed May 31, 1927. Serial No. 195,546. 4 Claims. (Cl. 292—192.)



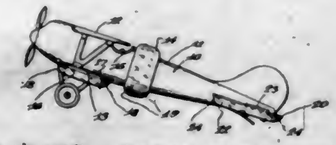
1. A latch for automobile and like doors comprising in combination a case, a pair of adjustable pins supported by the case, a keeper, a bolt pivotally carried by the pins and having a heel portion on one side of its pivoting axis and keeper-engaging portions on the opposite side, a movable wedge adapted to engage said bolt and hold it in closed position, a detent for retaining the wedge in open position, spring means for pulling back the bolt, and inner and outer levers for transmitting the knob impulses to the wedge.

1,757,917. TROUBLE FINDER. HOWARD MORGAN and WILLIAM STEPHENSON, Ordway, Colo., assignors, by direct and mesne assignments, to The Tun-A-Motor Company, Ordway, Colo., a Corporation of Colorado. Filed May 14, 1928. Serial No. 277,510. 5 Claims. (Cl. 175—183.)



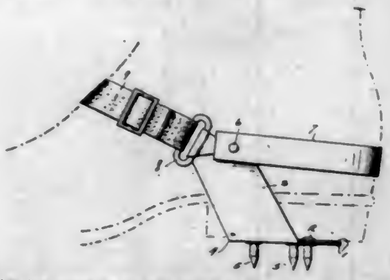
1. In a device for testing the ignition circuits of internal combustion engines, a glass tube within the container, spaced electrodes within the tube for connection in the ignition circuit to provide a spark gap, a sound tube having one of its ends in communication with the glass tube, and an ear piece at the end of the sound tube.

1,757,918. AIRCRAFT. CHARLES J. MULZER, Evanston, Ind. Filed Nov. 2, 1927. Serial No. 230,600. 1 Claim. (Cl. 244—2.)



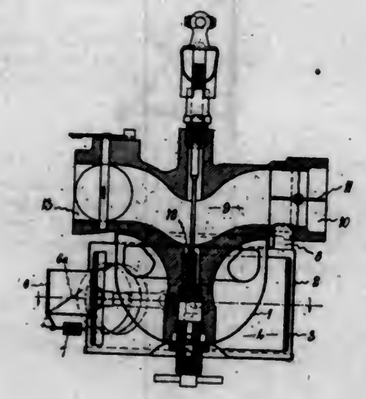
In an air craft, a fuselage, wings arranged adjacent the forward end of said fuselage, tail wings at the rear end of said fuselage, sections of buoyant material adapted to be disposed on the under side of said wings to substantially cover the area thereof, means for securing said sections of buoyant material to the under side of the wings, and a collar of buoyant material arranged on said fuselage adjacent and to the rear of the cock-pit in said fuselage.

1,757,919. ICE CREEPER. JOHN E. OSTRANDER, Greenwich, Conn. Filed June 8, 1929. Serial No. 369,427. 3 Claims. (Cl. 36—63.)



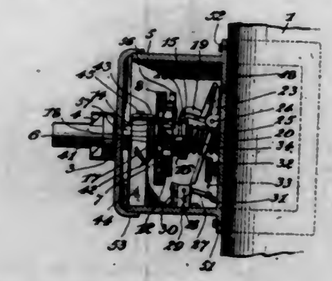
1. An ice creeper of the class described comprising calk carrying plates, an end portion of one plate being pivotally connected with the end portion of the second plate, upstanding side arms carried by the opposite end portions of the plates, a substantially U-shaped member having its extremities secured to the upper portions of the arms, said U-shaped member being disposed rearwardly with respect to the arms, and retaining means coacting with the arms.

1,757,920. PREHEATING DEVICE FOR CARBURETORS. ERNST JOHAN OTTOSSON, Ystad, Sweden, assignor to Otto Alfred Arvastsson, Malmo, Sweden, and A.-B. Ernst J. Ottossons Elementfabrik, Ystad, Sweden, a Corporation of Sweden. Filed Mar. 3, 1927, Serial No. 172,442, and in Sweden June 18, 1926. 1 Claim. (Cl. 261—12.)



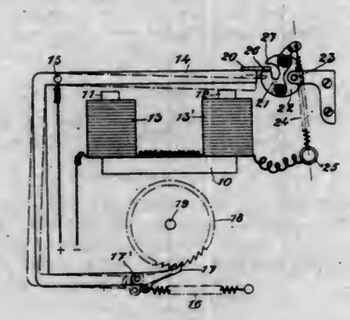
In a carburetor, a body having a float chamber formed with double walls, the space between the walls forming a conduit communicating at one point with atmosphere and at another point with the induction passage of the engine, said body being provided with a main air intake conduit in which is carbureted the liquid fuel supplied from said float chamber, said main air intake conduit also communicating with the said induction passage, an electric heater in the float chamber conduit having the dual function of heating the liquid in the float chamber and heating the air passing through said conduit, and a normally closed valve adjacent the atmospheric inlet in said float chamber conduit; opening responsive to a certain degree of vacuum in said conduit for automaticaly excluding flow of air through said conduit at low suction periods in the operation of the engine.

1,757,921. COIN-CONTROLLED DEVICE. THOMAS S. POOLE, Staten Island, N. Y., assignor to Poole & Duff, Inc., Newark, N. J., a Corporation of New Jersey. Filed Aug. 11, 1928. Serial No. 298,943. 10 Claims. (Cl. 194—43.)



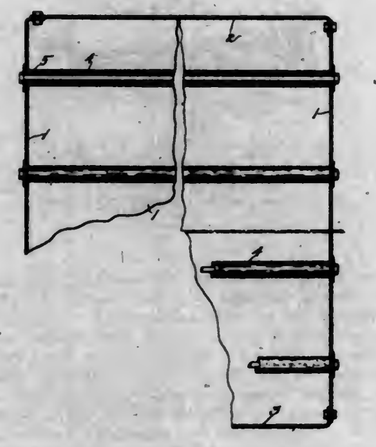
1. A vending device comprising a part to cause the delivery of a quantity of the commodity to be vended, a rotatable shaft, gearing between said shaft and said part, and coin controlled mechanism for enabling the shaft to be connected to said gearing to move said part and means for adjusting the extent of said movement.

1,757,922. MAGNETIC STEPPING MOTOR. EMILE QUARTIER, Neuchatel, Switzerland. Filed July 11, 1927, Serial No. 204,974, and in Switzerland Sept. 28, 1926. 2 Claims. (Cl. 185—40.)



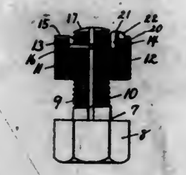
1. In an automatic controlling device for an electromagnetic winder, an armature for the electromagnet, a circuit closer, said armature and circuit closer being in circuit with said electro-magnet, said circuit closer including a plate oscillatably mounted, having abutments between which a portion of the armature acts for initiating the oscillatory movements of said plate in either direction, one only of said projections being a circuit terminal, the path of oscillation of said terminal being different from the path of movement of said armature, whereby the point of contact between said terminal and armature is shifted during the interval in which these parts are in contact, and a spring activated by said armature, through said circuit closer for suddenly moving the latter to break the circuit at the end of said interval of contact.

1,757,923. STORAGE TANK. WARREN K. RUSSELL, Newton, Mass., assignor to James Russell Boiler Works Co., Boston, Mass., a Corporation of Massachusetts. Filed June 15, 1927. Serial No. 199,102. 3 Claims. (Cl. 220—71.)



1. A pressure-tight storage tank whose opposite sides are provided with aligned perforations, tubular braces of substantially larger internal diameter than said perforations interposed between the sides with their opposite ends welded to said sides around a pair of aligned perforations, tie-rods inserted through said tubular braces with their opposite ends projecting through said perforations, thrust-supporting heads secured to the outer ends of said tie-rods, perforated centralizing washers surrounding said tie-rods and engaging the inside walls of the braces.

1,757,924. NUT LOCK. ELWYN Z. COLE, Philadelphia, Pa. Filed Sept. 17, 1928. Serial No. 306,328. 4 Claims. (Cl. 151—9.)



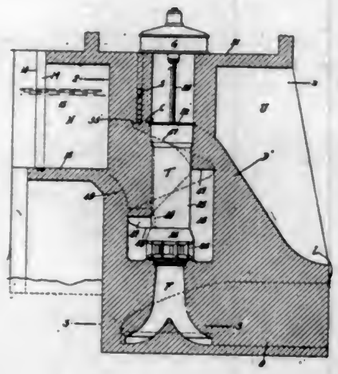
1. A nut lock including a bolt, a serrated nut provided with a threaded bore and a smooth counter bore at the outer end, the walls of said counter bore having a circular groove therein, a locking member including a spring bow fitted within the circular groove, a holding leg projecting into a longitudinal spline groove in the bolt, and a ratchet projecting from the spring bow outwardly through the counter bore and imposed on the serrations for coaction therewith to prevent retrograde action of the nut.

1,757,925. POST SPADE AND EARTH DRILL. JOHN M. KIRKPATRICK, Huntingdon Valley, Pa. Filed July 26, 1927. Serial No. 208,438. 3 Claims. (Cl. 294—49.)



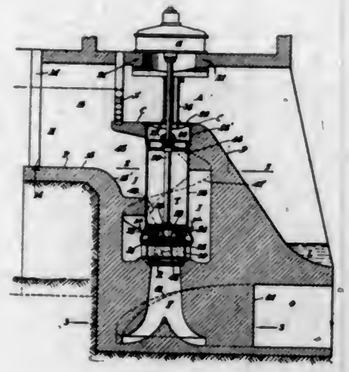
1. A tool comprising a staff, a handle removably mounted on one end thereof; a tool head removably mounted on the other end of the staff; and a cross piece removably and adjustably mounted on the staff to act as a foot rest and depth gauge, all of said parts being combined in a unitary structure capable of being disassembled.

1,757,926. HYDRAULIC-POWER PLANT. LEWIS FERRY MOODY, Philadelphia, Pa. Original application filed May 26, 1920, Serial No. 384,402, and in Canada Aug. 12, 1920. Divided and this application filed May 16, 1924, Serial No. 713,689. Renewed July 18, 1929. 25 Claims. (Cl. 61—19.)



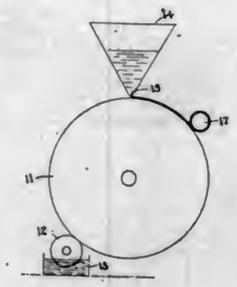
1. In a hydraulic turbine installation the combination with a dam, of a series of turbine units therein, vertical pits for said units, discharge passages leading from said units, and spillway passages each disposed entirely between successive units, said discharge and spillway passages having overlying portions.

1,757,927. HYDRAULIC-POWER PLANT. LEWIS FERRY MOODY, Philadelphia, Pa. Original application filed May 26, 1920, Serial No. 384,402, and in Canada Aug. 12, 1920. Divided and this application filed May 27, 1926. Serial No. 111,951. 18 Claims. (Cl. 61—19.)



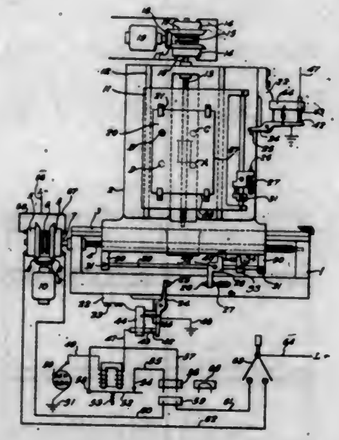
1. In a hydraulic turbine installation the combination with an inflow passage, of a turbine runner at the lowermost portion of said passage, a turbine head cover, means forming a pit above said head cover and through which said runner may be removed, said head cover substantially preventing entrance of water to said pit, a cover plate over said pit, a spillway above said cover plate, and gate operating mechanism in said pit.

1,757,928. METHOD OF MANUFACTURING RUBBER ARTICLES. BEN W. ROWLAND, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Nov. 10, 1928. Serial No. 318,385. 12 Claims. (Cl. 18—57.)



12. A method of forming rubber articles which comprises rotating a pair of cylinders in contact with each other, applying a coagulant to one of the cylinders, applying latex upon the coagulant and subsequently transferring the resulting coagulated film to the second cylinder.

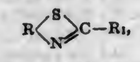
1,757,929. WORK-POSITIONING MECHANISM FOR MACHINE TOOLS. JOHN C. SHAW and ROBERT D. SHAW, Brooklyn, N. Y., assignors to Keller Mechanical Engineering Corporation, Brooklyn, N. Y., a Corporation of New York. Filed June 9, 1925. Serial No. 35,959. 10 Claims. (Cl. 90—58.)



1. A laying out system for machine tools wherein a work table is provided with feed mechanism adapted to be operated by an electro-magnetically controlled clutch in circuit with a contact which, when broken, is adapted to stop the feed, said contact and the work table being relatively movable by said feed mechanism; which comprises means for breaking said contact by relative movement between the work table and contact to establish the zero point, and means for adjustably moving said last named means a measured amount corresponding to the distance of the point to be located from the established zero, the arrangement being such that upon again breaking said contact by relative movement between the work table and contact the desired point is located.

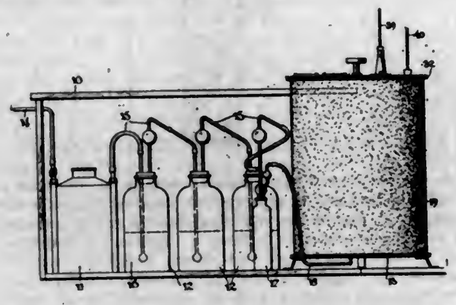
1,757,930. ACCELERATOR OF VULCANIZATION. JAN TEPPEMA, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Dec. 10, 1927. Serial No. 239,266. 21 Claims. (Cl. 18—53.)

3. A method of treating rubber compounds which comprises vulcanizing the compound in the presence of a material having the following structural formula



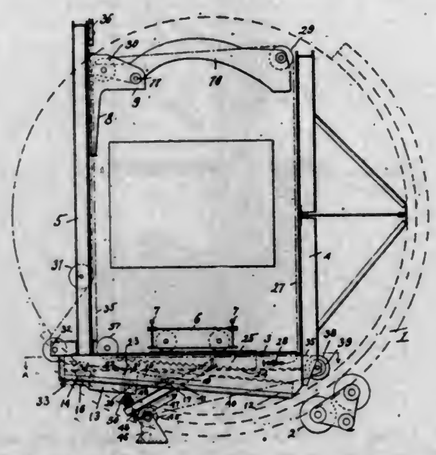
in which R represents an aryl group and R_1 represents a dithiocarbamate group.

1,757,931. HUMIDITY-CONTROL APPARATUS. HAROLD A. BRITTAIN, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed July 17, 1925. Serial No. 44,301. 3 Claims. (Cl. 73—51.)



1. A system for conditioning fabric samples comprising a tank adapted to receive a current of air at substantially predetermined relative humidity, a cover for the tank, a rotatable support in the tank provided with a knob extended from the cover and means for suspending a plurality of fabric samples from the support.

1,757,932. CAR DUMPER. ARTHUR F. CASE, Cleveland, Ohio, assignor to The Wellman Engineering Company, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 3, 1927. Serial No. 172,301. 16 Claims. (Cl. 214—55.)



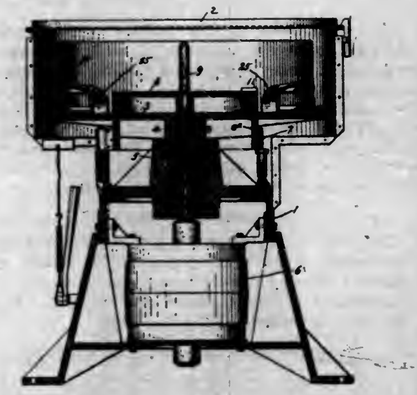
1. In a car dumper, a cradle adapted to receive a car and mounted for tilting movement to dump the same, a car clamp movably mounted on the cradle, means including a member movably mounted on the cradle and operatively connected to the clamp for controlling movements of the clamp toward and from car clamping position, separate means on the cradle for pressing the clamp against the car, and means controlled by tilting movements of the cradle for directly locking said separate means to the cradle to lock the clamp in car clamping position.

1,757,933. TENSIOMETER. WOLFGANG B. KLEMPERER, Akron, Ohio, assignor to Goodyear-Zeppelin Corporation, Akron, Ohio, a Corporation of Delaware. Filed June 12, 1928. Serial No. 284,827. 13 Claims. (Cl. 265—1.)



1. A device for measuring forces acting upon a tensioned member comprising supporting means for engaging the tensioned member, a resilient mechanism supported by said means for engaging and deflecting the tensioned member, an indicator actuated by the engagement of the mechanism with the deflected tensioned member and means having connections to the supporting means for compensating for relative stiffness of the tensioned member.

1,757,934. CENTRIFUGAL TIRE-FORMING MACHINE. ELOV F. MAAS, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Dec. 13, 1924. Serial No. 755,772. 14 Claims. (Cl. 154—10.)

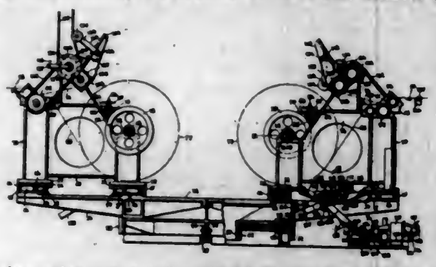


10. A machine for shaping flat built pneumatic tire casings which comprises a rotatable table having a centrally disposed raised portion, an annular raised flange disposed about the perimeter of said table, and means for rotating said table.

1,757,935. FABRIC-FEEDING DEVICE. ELOV F. MAAS, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed June 21, 1927. Serial No. 200,493. 9 Claims. (Cl. 242—55.)

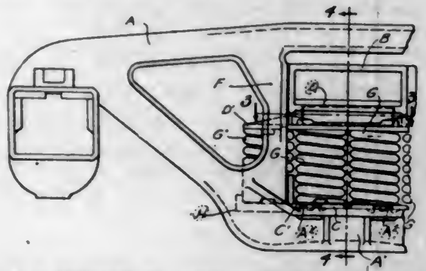
5. A fabric feeding device for a bias cutter comprising a rotatable support, a plurality of independently movable frame members mounted upon the support, each member being provided with means for unwinding a roll of material wound within the convolutions of a liner, means for rewinding the liner, fluid operated means having mecha-

nism for engaging the edge of the material, a fluid motor energized by movement of the material against the mechanism for adjusting the position of the frame member and



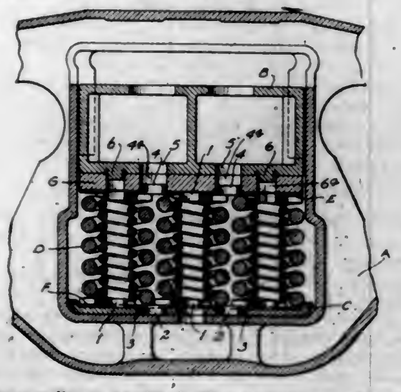
a relay valve connected to the fluid operated means and being responsive to actuation of the mechanism to control the operation of the motor.

1,757,936. CAR TRUCK. PAUL J. MCCULLOUGH, St. Louis, Mo., assignor to Scullin Steel Company, St. Louis, Mo., a Corporation of Missouri. Filed Nov. 5, 1928. Serial No. 317,264. 7 Claims. (Cl. 105—186.)



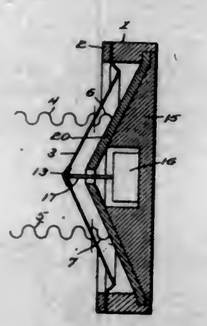
1. In a car truck, the combination of a side frame provided with a bolster opening, a bolster having an end portion that projects into said opening, a group of supporting springs for the bolster comprising end springs whose major portions are located outside of or beyond the side edges of the bolster, a cap at the upper end of the springs provided with extensions that bear upon said end springs, and rollers arranged so as to bear directly on said cap and on the underside of the bolster.

1,757,937. SHIM-HOLDING DEVICE FOR CAR TRUCKS. PAUL J. MCCULLOUGH, St. Louis, Mo., assignor to Scullin Steel Company, St. Louis, Mo., a Corporation of Delaware. Filed Mar. 6, 1929. Serial No. 344,668. 5 Claims. (Cl. 105—197.)



1. In a railway car truck, the combination of two opposed parts that are adapted to contact with each other or to be held in spaced relation by an interposed shim, a means on one of said parts that serves as a holding device for the other part or for the shim, and a separate means on the other part which serves as a holding device for said shim when said parts are separated.

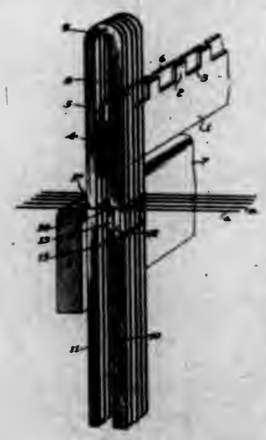
1,757,938. ACOUSTIC INSTRUMENT. HARVEY C. HAYES, Washington, D. C. Filed Apr. 13, 1925. Serial No. 22,637. 5 Claims. (Cl. 181—31.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928, 370 O. G., 757.)



1. In an acoustic instrument comprising a sound reproducing diaphragm, a driver for imparting sound vibrations to the diaphragm, a casing secured to the periphery of the diaphragm and forming a chamber enclosing one side of said diaphragm, and means associated with the chamber for regulating and apportioning through selective reactance the extent of the radiation of the various frequencies of the sound energy radiated from the exposed side of the diaphragm.

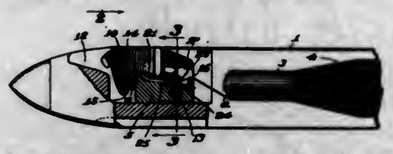
1,757,939. [WITHDRAWN.]

1,757,940. WARP STOP MECHANISM. HARRY A. DAVIS, Hopedale, Mass., assignor to Draper Corporation, Hopedale, Mass., a Corporation of Maine. Filed Aug. 2, 1928. Serial No. 297,006. 4 Claims. (Cl. 139—368.)



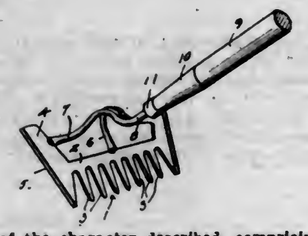
3. A drop wire for warp stop motions having two separated leg portions the side faces of which are in the same vertical plane, and one of said leg portions being provided with a warp opening having an offset wall at one side of the vertical plane passing through the corresponding side faces of the two leg portions that both leg portions shall bear upon the same side of a warp thread passed through said opening while the offset wall engages the opposite side of the thread.

1,757,941. AUTOMATICALLY-THREADING LOOM SHUTTLE. CLARE H. DRAPER, Hopedale, Mass., assignor to Draper Corporation, Hopedale, Mass., a Corporation of Maine. Filed May 10, 1929. Serial No. 361,901. 8 Claims. (Cl. 139—215.)



1. An automatically threading loom shuttle having a longitudinal thread passage and a side delivery eye communicating therewith, a scroll in the longitudinal thread passage through which the thread passes on its way to the side delivery eye, and a thread deflector extending transversely of and within the scroll to engage and deflect the thread between the entrance and exit ends of the scroll.

1,757,942. COMBINATION HOE AND RAKE. CLAUS GEFFKEN, Burlington, Wash., assignor of twenty-four and one-half per cent to Arthur G. Franklin and twenty-four and one-half per cent to Victor H. Cressey. Filed June 26, 1928. Serial No. 288,457. 1 Claim. (Cl. 55—10.)



A tool of the character described, comprising an elongated flat body formed to provide a plurality of tines each end of the body being enlarged and extending in a direction substantially parallel to said tines to form a hoe, the outer edge of each hoe being obliquely angled with respect to the longitudinal axis of said body and sharpened, a handle, and a plurality of arms connecting the handle to the body, two thereof being connected to and extending from the back edge of a hoe and one connected to the edge of the body intermediate its ends, said arms being brought together and joined at substantially the transverse center of the body.

1,757,943. ARTIFICIAL FLOWER. MARIA LUISA MESA, New York, N. Y. Filed Jan. 12, 1929. Serial No. 332,092. 3 Claims. (Cl. 41—13.)



1. In an artificial flower, a stem wire with a rearward bent forward end forming an anchorage, a loop of wire shaped for forming a shoulder bearing against the bent end of the stem wire, and means for securing the loop and stem wire in this position to each other.

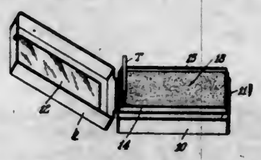
1,757,944. METHOD OF VULCANIZING CAOUTCHOUC. LORIN B. SEBRELL, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Sept. 17, 1925. Serial No. 57,021. 12 Claims. (Cl. 18—53.)

11. A method of treating rubber which comprises subjecting it to vulcanization in the presence of a reaction product of hydroquinone and a material selected from a group comprising isoamylamine, xylidine, dibenzylamine, dipropylamine, tri-butylamine and bis-amylamine.

1,757,945. REACTION PRODUCT OF MERCAPTOTHIAZOLE AND A SCHIFF'S BASE AND METHOD OF PRODUCING SAME. LORIN B. SEBRELL, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Original application filed Sept. 13, 1927, Serial No. 219,365. Divided and this application filed June 16, 1928. Serial No. 286,072. 8 Claims. (Cl. 260—2.)

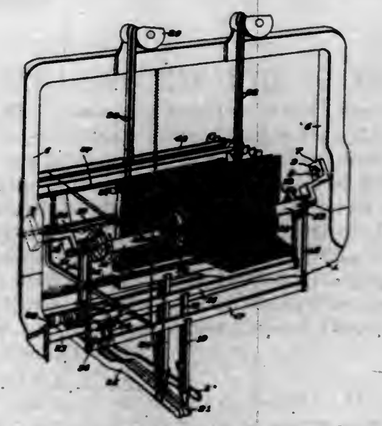
1. A method of producing a rubber vulcanization accelerator which comprises refluxing a mercaptothiazole and a Schiff base for a period of approximately two hours.

1,757,946. VANITY CASE. WALTER F. SHELGREN, Bradford, Pa. Filed Feb. 3, 1928. Serial No. 251,601. 12 Claims. (Cl. 132—83.)



1. A powder holder of the kind described comprising a powder containing chamber, an endless powder belt arranged over said chamber and held constantly taut and in engagement with the end walls of the chamber to close the latter, and a finger piece on said belt for reciprocating the same.

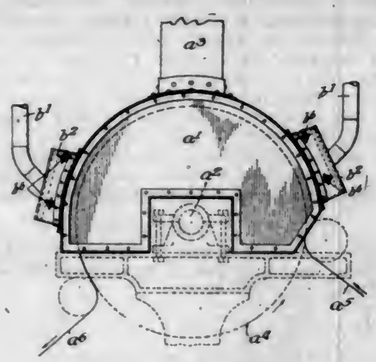
1,757,947. LENO OR CROSS-WEAVING LOOM. ISAAC SNOW, Lawrence, Mass., assignor to Draper Corporation, Hopedale, Mass., a Corporation of Maine. Filed Apr. 19, 1929. Serial No. 356,344. 12 Claims. (Cl. 139—50.)



1. In a leno or cross-weaving loom, the combination of a crossing plate mounted for rocking movement and pro-

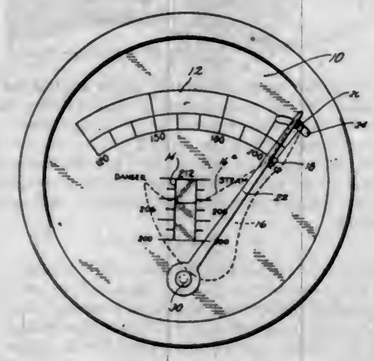
vided with an eye substantially in the axis of the rocking movement for the passage of a ground warp thread and an elongated slot at the side of the central eye for the passage of a jumper thread, means for rocking the crossing plate through an angle of 90° in either direction from the closed shed plane, and means for moving the jumper thread from its closed shed position as the crossing plate is moved in either direction from the closed shed plane to cross the jumper and ground warp threads.

1,757,948. METHOD AND APPARATUS FOR MAKING PAPER. CLAUDE C. HOCKLEY, Portland, Oreg. Refile of application Serial No. 717,945, filed June 5, 1924. This application filed June 26, 1928. Serial No. 288,367. 4 Claims. (Cl. 34—48.)



1. In a paper making machine, the combination with a dryer roll of means for promoting the drying of the web of paper passed over said roll, comprising a hood open at one end and arranged to inclose and form a low passageway over a circumferential section of said roll and means including a nozzle for blowing a transverse sheet of air into the other end of said hood at high velocity upon the web, in a plane which if produced would cut the circumferential surface of said dryer roll whereby to break up the film of insulating moisture enveloping the web of paper.

1,757,949. INDICATOR FOR DISTANCE-TYPE THERMOMETERS. HERMAN SCHLAICH, Frankfort-on-the-Main, Germany. Filed Sept. 27, 1927, Serial No. 222,383. Renewed Nov. 19, 1929. 8 Claims. (Cl. 116—129.)



1. In an indicating device, a main calibration, a main indicator therefor, an auxiliary calibration repeating on a magnified scale a portion only of the main calibration, an auxiliary indicator for said calibration last mentioned, and means for moving said auxiliary indicator to give a magnified movement of said main indicator when the latter traverses said portion of the main calibration.

Patents Nos. 1,757,950 to 1,758,914

THE
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Issue of May 13, 1930

Trade-Marks	309	No. 270,600 to No.	270,908, inclusive.
Labels	22	No. 37,412 to No.	37,433, inclusive.
Prints	8	No. 12,528 to No.	12,535, inclusive.
Reissues	9	No. 17,660 to No.	17,668, inclusive.
Designs	53	No. 81,121 to No.	81,173, inclusive.
Patents	965	No. 1,757,950 to No.	1,758,914, inclusive.
Total	1,366		

Disclaimer

1,688,172.—*Alonzo Aldrich* and *Earl E. Berry*, Beloit, Wis. STEAM FITTING FOR JOURNALS OF ROTARY STEAM CYLINDERS OR THE LIKE. Patent dated October 16, 1928. Disclaimer filed April 24, 1930, by the assignee, *Beloit Iron Works*.

Hereby disclaims from the scope of claim 1 of Letters Patent No. 1,688,172, any combination defined by said claim, in which the bellowslike element is other than an axially corrugated bellows conduit.

EXTENSION OF PATENTS

VETERANS

Patent No. 1,029,953, for cementitious materials. Granted June 18, 1912. Henry S. Spackman. The above entitled patent has been extended, under the provisions of the act of May 31, 1928, for five years, eleven months, and twenty-four days from the expiration of the original term thereof.

Patent No. 1,029,954, for cementitious materials. Granted June 18, 1912. Henry S. Spackman. The above entitled patent has been extended, under the provisions of the act of May 31, 1928, for five years, eleven months, and twenty-four days from the expiration of the original term thereof.

NOTICE—CHANGES IN PATENT OFFICE FEES—EFFECTIVE JUNE 1, 1930

The act of Congress approved April 11, 1930, amends section 4934, Revised Statutes, so as to provide that, except in design cases, the fee for filing each original application for patent and the fee for issuing each original patent shall each be $25.00 and $1.00 for each claim in excess of 20, instead of the present fees of $20.00 and $1.00 for each claim in excess of 20; and amends the trade-mark acts of 1905 and 1920 so as to provide that the fee for registration of trade-marks and for renewals of registrations shall be $15.00 instead of the present fee of $10.00.

The act also provides that the fees for recording assignments or other papers shall be, if the paper does not exceed six pages, $3.00; for each additional two pages or less $1.00, and for each additional patent or application where more than one is included or involved in such writing 50 cents additional.

These new fees are effective on and after June 1, 1930.

Applications for patents, except in design cases, received on and after June 1, 1930, with only the present $20.00 fee will not be entered but will be given a filing date and serial number as of the day the full fee of $25.00 and the additional fee of $1.00 for each claim in excess of 20 is received by the Patent Office.

Condition of Applications Under Examination at Close of Business May 2, 1930

(Total number of applications awaiting action, excluding Trade-Mark Division, 117,144; Trade-Mark Division, 1,658. Oldest new case, June 24, 1929; oldest amended, July 1, 1929. The dates given are 1929 except where † indicates 1930.)

Room No.	Divisions, Examiners, and Subjects of Inventions	Oldest new application awaiting office action	Oldest amended application awaiting office action	No. of applications awaiting action
112	1. LOEFFLER, F. A., Closure Operators; Fences; Gates; Tillage; Scattering Unloaders; Handling and Hoist Line Implements.	Aug. 26	Sept. 24	1,310
126	2. HADEN, C. F., Bee Culture; Dairy; Presses; Tobacco	July 31	Aug. 12	1,629
331	3. LINDSEY, A., Heating; Metal Founding; Metallurgy; Metal Treatment	Aug. 7	Dec. 5	1,546
234	4. MERRITT, A. D., Conveyers; Hoists; Handling Apparatus; Excavating	Oct. 2	Oct. 21	1,222
108*	5. MACNAB, J. F., Harvesters; Music; Acoustics; Sound Recording; Knotters	Aug. 8	Aug. 8	1,490
318	6. LEWERS, A. M., Carbon Chemistry	June 24	July 1	2,526
106	7. JARBOE, C. G., Optics; Photography	July 19	July 19	2,580
133	8. HENRY, C. C., Beds; Chairs; Kitchen and Table Articles; Racks and Cabinets	July 8	Nov. 13	1,660
221	9. ADAMS, R. E., Pumps; Fluid and Fluid-Current Motors	Oct. 14	Oct. 14	1,440
118	10. HUNTER, O. F., Land Vehicles—Animal Draft Appliances, Bodies and Tops	Aug. 1	Sept. 4	1,799
148*	11. ARMSTRONG, H. C., Boots, Shoes, and Leggings; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Whip Apparatus.	Oct. 24	Nov. 9	1,080
380	12. PIERCE, P. P., Machine Elements	Sept. 15	Sept. 20	1,567
154*	13. CLIFT, J. W., Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Working; Needle and Pin Making; Turning; Boring and Drilling	July 12	July 19	1,648
102*	14. BRUMBAUGH, N. J., Farriery; Metal Bending; Metal Tools and Implements, Making; Sheet-Metal Ware, Making; Wire Fabrics; Wire Working; Metal Working, Assembling, and Blanks and Processes.	July 30	Aug. 1	1,441
329	15. WORRELL, L. W., Glass; Plastic Block and Earthenware Apparatus; Plastics	July 15	July 20	3,034
242*	16. SPENCER, C. J., Telegraphy; Telephony	Aug. 13	Oct. 1	1,236
307	17. RAFTER, G. S., Label Pasting and Paper Hanging; Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet-Material Associating or Folding; Sheet or Web Feeding; Type Setting.	July 11	Sept. 3	1,629
229	18. PORTER, M. E., Motors, Expansible-Chamber Type; Power Plants; Speed-Responsive Devices	Sept. 10	Sept. 9	1,494
236	19. GLASCOCK, E. S., Furnaces; Heating Systems; Liquid and Gaseous Fuel Burners; Stoves and Furnaces.	July 16	July 22	2,201
179	20. GROVE, S. D., Miscellaneous Hardware; Closure Fasteners; Locks and Latches; Safes; Undertaking	Sept. 5	Sept. 5	1,642
212	21. THOMPSON, T. J., Textiles; Cloth Finishing	Aug. 29	Dec. 2	919
244*	22. COLWELL, J. H., Aeronautics; Firearms, Ordnance, and Explosive Devices; Air Guns, Catapults, and Targets; Boats and Buoys; Ships; Marine Propulsion.	Sept. 18	Oct. 22	1,687
217	23. GROESBECK, W. D., Coin Handling; Recorders; Registers	July 12	July 18	1,191
147*	24. DURAS, C. O., Apparel; Apparel Apparatus; Garment Supporters; Sewing Machines	July 6	July 15	1,285
302*	25. LIGHTFOOT, J. H., Agitating; Butchering; Classifying Solids; Centrifugal-Bowl Separators; Mills; Threshing; Vegetable and Meat Cutters and Comminutors.	Aug. 29	Sept. 7	1,624
228*	26. HODGES, J. S., Electricity, Generation; Motive Power	July 27	Aug. 9	1,234
214	27. ANDERSON, L. S., Brush, Broom, and Mop Making; Brushing, Scrubbing, and General Cleaning; Laundry; Washing Apparatus.	July 15	July 17	1,657
225	28. BENSON, A. R., Internal-Combustion Engines	Aug. 20	Aug. 22	2,143
160*	29. MORRIS, B. N., Woodworking; Tools; Compound Tools	Nov. 23	Nov. 27	743
248	30. SHIPMAN, J. L., Automatic Temperature and Humidity Regulation; Illuminating Burners; Illumination; Thermostats and Humidostats.	Aug. 10	†Jan. 27	1,226
312	31. HOLMES, W. N., Distillation; Gas, Heating and Illuminating; Mineral Oils	Aug. 2	Aug. 9	2,620
249	32. BARTHOLOMEW, J. A., Gas and Liquid Contact Apparatus; Heat Exchange; Gas Separation	Oct. 2	Oct. 2	1,736
152	33. WYMAN, W. I., Bridges; Masonry and Concrete Structures; Metallic Building Structures; Roads and Pavements; Roofs; Wooden Buildings.	July 5	July 2	2,605
304	34. SIMPSON, O. R., Electricity, Transmission to Vehicles; Pneumatic Dispatch; Railways, Rolling Stock, Switches, and Signals; Store Service; Vehicle Fenders.	Aug. 21	Sept. 11	1,169
116*	35. REYNOLDS, E. C., Buckles, Buttons, Clasps, Etc.; Card and Sign Exhibiting; Signals; Toilet	Sept. 20	Oct. 29	1,822
105	36. MORTON, G. L., Automatic Weighers; Geometrical and Measuring Instruments; Force Measuring	Aug. 21	Sept. 13	2,329
224*	37. WEAVER, M. E., Electricity, Circuit Makers and Breakers	Aug. 6	Aug. 8	2,137
145	38. KRAFFT, C. F., Animal Husbandry; Earth Boring; Hydraulic and Earth Engineering; Mining, Quarrying, and Ice Harvesting; Stoneworking; Wells.	July 12	July 16	2,114
220	39. COWLES, A. W., Fluid-Pressure Regulators; Multiple Valves; Valves; Water Distribution	July 8	July 8	1,997
262*	40. OBERLIN, J. J., Bottles and Jars; Receptacles	July 6	Oct. 11	3,226
125	41. BROWN, J. I., Land Vehicles, Wheels, and Axles; Resilient Tires and Wheels; Wheel Substitutes; Railway Draft Appliances.	Sept. 9	Sept. 12	1,406
223*	42. CUTTING, H. O., Electric Signaling	Sept. 6	Sept. 23	1,620
124*	43. HOPKINS, F. M., Baths, Closets, Sinks, and Spittoons; Sewerage; Electricity, Medical and Surgical; Medicines; Surgery; Dentistry; Artificial Body Members.	July 8	July 8	2,270
253	44. SHAFFER, C. H., Dispensing; Filling and Closing Portable Receptacles; Refrigeration	July 3	July 5	2,344
379	45. OILES, A. H., Pulleys and Shafting; Lubrication; Bearings and Guides; Spring Devices	Aug. 5	Aug. 5	2,532
233	46. WOLCOTT, C. L., Concentrating Evaporators; Fluid Sprinkling, Spraying, and Diffusing; Fire Extinguishers; Liquid Heaters and Vaporizers.	Sept. 3	Sept. 13	1,659
264	47. BARKER, H., Clutches and Power Stops; Brakes and Motors	July 15	Aug. 13	2,585
212*	48. ROEPKE, O. B., Electricity, General Applications	Aug. 2	Aug. 5	1,401
239	49. EDINBURG, F. P., Check-Controlled Apparatus; Domestic Cooking Vessels; Ventilation; Driers; Liquid Separation or Purification.	Oct. 23	Nov. 9	1,209
322	50. BLAKE, C. L., Plastic and Liquid Coating Compositions; Coating	Aug. 1	Aug. 1	2,936
240*	51. BACKUS, C. D., Radiant Energy, Wave Transmission	Aug. 5	Aug. 5	2,382
144	52. MORGAN, E. T., Supports; Chucks; Joint Packing; Pipe and Rod Joints or Couplings; Tool-Handle Fastenings.	Sept. 14	Sept. 19	2,701
201*	53. PECK, M. K., Books; Manifolding; Printed Matter; Stationery, Educational Appliances; Paper Files and Binders; Tents, Canopies, Umbrellas, and Canes; Curtains, Shades, and Screens.	Nov. 7	Nov. 7	1,322
241	54. LANE, C. H., Electric Lamps; Conductors; Vapor Electric Devices; Space Discharge Tubes	July 10	July 10	2,903
102	55. BOWEN, S. T.—Bread, Pastry, and Confection Making; Cutlery	†Feb. 10	†Feb. 3	409
309	56. PORTER, F. J., Electrochemistry; Laminated Fabrics; Paper Making; Substance Preparation	†Apr. 3	†Apr. 14	365
257*	57. NICOLSON, G. D. G., Cutting and Punching; Bolt, Nut, Rivet, Nail, Screw, Chain, and Horseshoe Making; Driven and Screw Fastenings; Jewelry; Nut and Bolt Locks.	July 25	July 27	2,561
270*	58. DOWELL, E. F., Abrading; Typewriting	July 22	July 23	1,226
315	59. RICHARD, V. I., Chemistry; Alcohol; Fertilizers; Cement and Lime; Hides, Skins, and Leather; Fuel	June 25	July 2	1,525
213*	60. GLASS, R. L., Electricity, Heating, and Welding; Batteries; Resistances and Rheostats; Prime Mover Dynamo Plants; Conduits and Housings.	July 10	July 10	2,298
269	61. PARKS, G. E., Elevators; Winding and Reeling; Pushing and Pulling; Fire Escapes; Ladders; Scaffolds; Velocipedes; Horology; Time-Controlling Apparatus.	July 31	Aug. 5	2,472
245*	62. COCHRAN, W. W., Toys; Amusement Devices; Furniture; Fishing and Trapping; Baggage; Package and Article Carriers.	July 3	July 17	2,585
300	63. WINKELSTEIN, A. H., Bleaching and Dyeing; Explosive, Pyrotechnic, and Match Compositions; Oils, Fats, and Glue; Preserving; Sugar, Starch, and Carbohydrates.	Aug. 2	Aug. 3	2,312
163	Trade-Marks, Labels, and Prints: F. A. RICHMOND.—Trade-Marks	July 20	July 22	2,513
	Labels and Prints	†Apr. 2	†Apr. 22	1,531
		†Apr. 2	†Apr. 16	127

* Refers to room numbers in the annex.

DECISIONS IN PATENT AND TRADE-MARK CASES

U. S. Court of Customs and Patent Appeals

IN RE HAMMOND, JR.

No. 2,202. Decided February 6, 1930

[37 F. (2d) 760]

PATENTABILITY—AUTOMATIC CONTROL OF A TORPEDO.

Claims relating to the automatic control of a torpedo *Held* unpatentable over the prior art.

APPEAL from the Patent Office. Affirmed.

Mr. Albert M. Austin, Mr. Harold F. Wilhelm, and *Mr. Nathaniel L. Leek* for Hammond, Jr.

Mr. T. A. Hostetler for the Commissioner of Patents.

BLAND, *J.:*

This appeal is from a decision of the Board of Appeals disallowing claims 1 and 10, reading as follows:

1. A vessel, a rudder attached to said vessel, means including a fin bodily connected to said vessel and arranged outside thereof to oscillate with respect thereto about a normally vertical axis for turning the rudder to port or to starboard when the vessel encounters a current transverse to its course, said means being operative to hold the rudder in such port or starboard position until the vessel encounters a current in the opposite direction relative to the course of the vessel.

10. The combination with a vessel, of a rudder attached to said vessel, and means including a fin positioned outside of said body and bodily connected thereto and arranged to oscillate about a normally substantially vertical axis, for turning the rudder to port or starboard in response to a current transverse to the course of said vessel, said means being operative to hold said rudder in said port or starboard position until the vessel encounters a current transverse to its course and flowing in a direction opposite to said first mentioned transverse course.

It is stated by appellant that his application—

relates particularly to the automatic control of a torpedo by the wake of an enemy vessel so that, if the torpedo misses its target but enters the wake, it will follow the wake, crossing it again and again until it strikes.

It is also stated in the brief and in argument by appellant that this result is—

accomplished by a small vane or fin located slightly forward of amidship and connected to a set of pneumatic cylinders through a peculiar valve structure. These cylinders are so connected to the rudder that, when once actuated, the torpedo will always thereafter move in a curved course instead of a straight course and the rudder will be automatically swung from port to starboard or vice versa according to the pressure of the current or wake on the steering vane or fin.

It is further stated in appellant's brief that—

an application disclosing the same invention was filed by appellant on March 12, 1913, (G/N 753,758) but said application became unintentionally abandoned through an inadvertance of applicant's then attorney, since deceased, and the benefit of this early filing date was lost.

This latter fact is shown by affidavit. We can not see how this fact has any bearing on the issues involved in the instant case.

The rejection of the two claims by the Examiner and the Board of Appeals is based on the fact that a single reference Patent No. 1,098,230, dated May 26, 1914, to J. J. Dallier for a torpedo-steering mechanism, discloses all called for in the disputed claims. The statement "said means being operative to hold the rudder in said port or starboard position, etc.," found in the disallowed claims, and relied upon by appellant to distinguish them from Dallier, is, according to the contention of the Solicitor, functional in character and adds nothing to the claims not disclosed in the reference.

The Dallier reference discloses a torpedo having devices thereon, including a fin responding to lateral pressures for the purpose of guiding the torpedo. The claims in controversy call for similar devices, but which are said to be a "means being operative to hold the rudder in said port or starboard position until the vessel encounters a current" in the opposite direction. It is at once obvious that there is nothing in the claim descriptive of the structure of the torpedo which brings about the result which the claims call for.

The Board of Appeals, as a reason for rejection, stated:

Regardless of whether or not Dallier's torpedo re-enters the wake, claims 1 and 10 fail to differentiate from this reference. The currents specified in the claims need not be the wake of a ship, nor one and the same current. If the claims were so limited they would fail to set forth any difference in structure over the reference, even assuming that Dallier's torpedo does not re-enter the wake. In view of the close similarity of the two devices, however, we believe Dallier's torpedo would re-enter the wake if appellant's torpedo does.

In appellant's brief and in argument before this court, counsel has pointed out that in appellant's structure, the fin, which is affected by cross currents and which then actuates the pneumatic cylinders, is arranged—

somewhat forward of the center of the torpedo body which is directly connected to a valve controlling the pneumatic cylinders which positively control the position of the rudder. This vane is only affected by major cross currents such as the wake of a ship. It operates slowly and it is turned only by a positive and steady external force independent of the wash or pressure caused by driving a vane or fin through the water.

Also in the brief and in the argument before this court, appellant's counsel goes into detail how with the vane or fin sitting forward of the center of the torpedo, his torpedo, having crossed the wake of the ship, will never again travel in a straight line but will continue to cross the wake until the ship is hit.

Appellant's structure may do this, and, as far as we know, Dallier's may do the same. The Board of Appeals thought if one did it the other would, but if either of them does, the particular mechanism or structure which brings about such a result or any arrangement of the structure that occasions such a result is not disclosed in the claims. Therefore, the proposition is laid down by Solicitor of the Patent Office that appellant seeks to patent a function or a movement of a machine rather than its mechanism.

The function or movement of a device is not patentable, but the mechanism which produces such movement may be patentable. *Mastoras* v. *Hildreth*, 264 F. 571, 576. In *In re Gardner*, 32 App. D. C. 249, 140 O. G. 258, it was held that a patent can not issue for a result sought to be accomplished by an inventor

of a machine, but a patent will issue only for the mechanical means or instrumentality by which that result is obtained.

In *In re Ballman and Evers*, 57 App. D. C. 146, 361 O. G. 428, a claim reading "and means for reflecting another part of the rays emitted by said source upon said reflector," was held not sufficient to define a patentable structure but had reference to function only and, therefore, could not be allowed. See also *In re Perlman*, 39 App. D. C. 447, 186 O. G. 560; *Risdon Iron & Locomotive Works* v. *Medart*, 158 U. S. 68, 71 O. G. 751.

We agree with the finding of the Board of Appeals that Dallier discloses everything which the claims here in controversy call for. The decision of the Board of Appeals is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE HOPKINS

No. 2,226. Decided February 6, 1930

1. PATENTABILITY—DECISIONS OF THE PATENT OFFICE TRIBUNALS REFERRING TO DIFFERENT REFERENCES—IMMATERIAL.

"The fact that the several tribunals of the Patent Office have seen fit to rely upon different references does not necessarily argue that the Commissioner's decision is erroneous. We can see pertinent application in most, if not all, of the references."

2. PATENTABILITY—DESIGNS—CONE-TYPE LOUD-SPEAKER.

A design for a loud-speaker of the cone type *Held* unpatentable in view of the prior art.

APPEAL from the Patent Office. Affirmed.

Messrs. Pennie, Davis, Marvin & Edmonds and *Mr. Arba B. Marvin*, *Mr. George J. Hesselman*, *Mr. Richard K. Stevens*, and *Mr. Clarence M. Fisher* for Hopkins.

Mr. T. A. Hostetler for the Commissioner of Patents.

BLAND, *J.*:

This is an appeal from the decision of the Commissioner of Patents, refusing applicant a patent for a design covering a loud-speaker. The Commissioner denied the application upon the references of Comer, 1,137,187, April 27, 1915, and the French patent to Ragonot, 570,746, applied for July 26, 1923, issued January 21, 1924, and published May 6, 1924.

Applicant's device is a loud-speaker of the cone type having an octagonal outline and a circular diaphragm.

Both the Comer and the Ragonot patents disclose loud-speakers having an octagonal shape. Comer's is not of the flat type but, viewed, from in front, it has substantially the same shape as applicant's design. The Ragonot patent is not only octagonal in shape, when viewed from in front, but it has a flat appearance when viewed from the side.

Applicant in this court stresses the point that the Primary Examiner rejected the application on one set of references, while the Board of Examiners in Chief rejected it upon another reference, and upon appeal to the Commissioner, his rejection was based upon entirely different references. The Primary Examiner's rejection was based upon Heylmann, 52,394, Sept. 10, 1918, and Peterson, 68,061, Aug. 25, 1925, while the rejection of the Board of Examiners in Chief was based upon there being no patentable difference between the design in this application, involving an octagonal panel, and a design formerly granted to applicant for an oval panel in Design Patent 72,262, Mar. 22, 1927.

Applicant had applied for a patent which involved appeal No. 2,128, involving a cone type of loud-speaker, mounted on a circular type of sound board. This was rejected on applicant's Patent No. 70,115, having a panel octagonal in outline. [For decision see 390 O. G. 5.]

In this court the Solicitor for the Patent Office argues that double patenting is not permissible in design patents any more than it is in mechanical patents and cites *Ex parte Whittington*, 347 O. G. 281.

[1] The fact that the several tribunals of the Patent Office have seen fit to rely upon different references does not necessarily argue that the Commissioner's decision is erroneous. We can see pertinent application in most, if not all, of the references. When all the references are considered, the lack of invention in applicant's design is emphasized.

[2] We agree with the Solicitor and the Patent Office that the application here under consideration does not show invention over the references cited and the other applications of applicant referred to. Every shape of panel that can be devised upon which a cone-type diaphragm or tympanum may be mounted is not necessarily patentable for cone-shape loud-speakers, which, since superseding the horn type, are shown to have a universal use and are quite common in the art.

In *Knapp* v. *Will and Baumer Co.*, 273 F. R. 380, 290 O. G. 645, the court, in referring to the shape of a candle as the subject matter of a design patent application, said:

The right to make any article round or square, or in any other standard form or shape, is inherently open to all, and novelty can not be predicated of a design for a square instead of the ordinary round one.

The decision of the Commissioner is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE BUTLER

No. 2,231. Decided February 6, 1930

1. PATENTABILITY—ALUMINUM PISTON.

Claims for an aluminum piston for automobile engines *Held* unpatentable over the prior art.

2. CLAIMS—DIVISION.

Division *Held* properly required between claims for an automobile piston, on the one hand, and claims for a mold for casting such pistons and claims for the method of making them, on the other.

3. SAME—METHOD—DEFINED IN PART BY PROCESS OF MAKING.

It is proper to define a claim for an article by the process of making it only where it is obvious that such article is new, useful, and amounts to invention, and can not be properly defined over the prior art otherwise than by reference to such process.

APPEAL from the Patent Office. Affirmed.

Mr. George B. Schley and *Mr. V. A. Trask* for Butler.

Mr. T. A. Hostetler for the Commissioner of Patents.

BLAND, *J.*:

Appellant in thirty-two claims asked for a patent relating to an aluminum piston for automobiles and engines.

Appellant's piston is claimed to overcome the difficulty in using aluminum pistons with cast iron or steel cylinders. The use of steel pistons in the ordinary cylinder was objectionable in so far as the piston was required to be too loose in order to avoid expansion and sticking. Aluminum pistons were found to be better, but, owing to the fact that aluminum and aluminum alloys are said to have a thermal coefficient of expansion approximately twice that of iron, the applicant sought by means of two steel rings or bars embedded in the aluminum piston and two wavy longitudinal expansion slots to control the expansion of the piston so as to conform to the expansion of the iron cylinder.

The Examiner rejected claims 1 to 15, inclusive, and required division between claims 1 to 15 and claims 16 to 32. The division was required in order that separate claims might be presented upon the apparatus or article and the method of production. Applicant refused to separate and the claims were rejected, from which action of the Examiner appellant appealed to the Board of Appeals, later withdrawing his appeal as to claims 8 and 15, which were dismissed. The Board of Appeals affirmed the action of the Examiner, from which decision of the Board of Appeals, appellant has appealed to this court.

While the appeal to this court does not involve all the claims, claim 1 is regarded as illustrative of the claims 1 to 15 for the piston, while claim 16 is illustrative of the claims 16 to 25 for the mold for making the piston, and claim 26 is an example of the method claims 26 to 36. Claims 1, 16, and 26 follow:

1. A piston, comprising a head and a skirt, said skirt having a longitudinal slot extending through the wall of said skirt, said slot being wave-shaped at the exterior surface of said skirt.

16. A mold for casting pistons, comprising a cylindrical shell having a bottom, a removable cover plate for said shell, and a sand core hung from said cover plate and joined thereto by a breech block joint.

26. The method of making a piston, which consists in casting it in a metal mold with a sand core so that all the outer surfaces of the piston will cool in contact with the metal mold.

Claims 1 to 15 were rejected on the following references: Martin, 1,394,926, October 25, 1921; Rautenbach, 1,396,341, November 8, 1921; Pope, 1,432,897, October 24, 1922; Austin, 1,522,709, January 13, 1925; which, we think, without detailed discussion here, disclose all claimed by appellant in his claims from 1 to 15. The pertinency of the references is fully set out in the decisions of the tribunals below.[1]

As is stated by appellant, this case involves three distinct reasons for appeal: First, whether certain of the claims claiming an invention of an apparatus were anticipated by the references (this question we have hereinbefore decided); second, whether or not this case presents an instance where the inventor, to secure the protection to which he claims he is entitled, is allowed to describe an article by reference to the process of its manufacture, it being claimed that there is no way to describe it except in that manner; third, the correctness of the ruling of the Patent Office requiring division between the claims calling for a patent on the article and the claims involving a process for making the article.

We will dispose of the third reason for appeal by stating that it is the rule and practice of the Patent Office, and so explained to appellant, to refer certain claims, such as claims drawn with reference to the mold for casting pistons, to Division 3, under Class 22, while claims for the methods would be referred elsewhere. The solicitor has called attention to the fact that the propriety of the division between the article and process claims is obvious, in view of the fact that it becomes a vital factor in determining infringement questions. We agree with this conclusion and find no error in requiring division.

The second ground of appeal is argued at great length and with considerable plausibility by appellant in this court. He not only insists that he should have his method patent for the method of producing the wavy slot, which slot is formed by compressible core bars in the casting of the piston, but that he should have a patent on the article or product also, although no claim can be referred to as distinguishing in any manner from a wavy slot sawed out of the piston and a wavy slot made in the molding, except in the difference that lies alone in the process of producing same. In other words, without disclosing any structural difference in the two articles, a piston with the sawed slot and a piston with the molded slot, it is contended that there is a structural difference and that that difference in the article is patentable upon a claim which refers only to the process of making same.

It is the position of the patent tribunals that as to the claim for patent for the wavy slot formed in the molding, applicant has made claim for nothing except the process of making it. That the wavy slot aside from the process of making same is old is conceded.

Appellant complains of the action of the tribunals as follows:

Those claims which describe appellant's piston by referring to the process of its manufacture were treated differently by the Primary Examiner and by the Board of Appeals. The Primary Examiner, completely ignoring facts demonstrated by appellant's tests, merely stated "it is immaterial in so far as the finished article is concerned whether the slot is formed in the casting of the piston by a compressible core bar or afterwards." The Board of Appeals contented itself with the statement that "we think this feature properly forms the basis for method rather than article claims."

Appellant frankly admits that there is nothing in his so-called product claims which structurally distinguishes the wavy slot sawed and the wavy slot formed in the molding, but argues strenuously that there is a very great difference between them, which

[1] Note by the Patent Office.—The decision of the Board of Appeals is printed at the end of this decision.

in the one instance results in a successful invention, and in the other a practically useless article, and argues that it is the law that where such a situation arises as that a new and useful invention has been brought about, and which is incapable of description except by reference to the process of its making, the patent law warrants the granting not only of a process patent but a patent upon the product of the process.

In appellant's brief we find the following:

> Although appellant knows that a piston with the slots formed during the casting operation differs from a piston the slots of which are later cut in, and although he can demonstrate this difference by test, he is unable to state what structural differences account for the difference in expansion between pistons of these two types. He has a theory, but has been unable directly to demonstrate its truth, although the manner in which the two types of pistons act when heated supports his theory.

He next announces the theory, which we will not quote here, and then says "this theory is plausible, but it has not been directly demonstrated to be the truth."

Appellant further argues that—

> Process claims are valuable, and appellant thinks he is entitled to them; but it is submitted that he should not be limited to control of the process when the article which that process produces is new and useful. The protection provided by process claims is of a different kind from that provided by article or product claims. If appellant is limited to process claims, he would be compelled, for instance, to stand idly by and see his novel and useful pistons imported into this country and sold and used on every hand without being able to exercise the exclusive right to which he, as the inventor of a new and useful article, is entitled.

He contends that his position in this particular is supported by the following decisions: *Globe Nail Co.* v. *United States Horse Nail Co.*, 19 Fed. 819; *Ex parte Painter*, 57 O. G. 999, 1891 C. D. 200; *Oval Wood Dish Co.* v. *Sandy Creek Co.*, 60 Fed. 285; *Ex parte Fesenmeier*, 302 O. G. 199, 1922 C. D. 18; and *In re Burt*, 369 O. G. 732, 24 Fed. (2d) 273, 58 App. D. C. 7.

We have analyzed these decisions and we find them to be some authority of law, in certain cases, for allowing claims for an article which is described by the process of making it, but, as we view it, the facts in the case at bar do not warrant the application of such a rule here.

In *Ex Parte Fesenmeier*, supra, the Commissioner of Patents had under consideration the following claim:

> 4. The herein described hop liquid product obtained by subjecting a mixture of fresh cured hops and liquid in a hermetically sealed container to a temperature sufficient to extract all the essential oils, essences, and aromas from the hops and disseminate same through the liquid.

This claim on its face indicates that it is a process claim. The Commissioner there said:

> The rule against allowing claims for a product defined by the steps of the process of producing it is well enough settled, and the objections to the violation of the rule are material and should not be lightly disregarded. Where it is possible to define a product by its characteristics, the practice is clearly settled that this should be done. Where, however, the product is novel and involves invention and can not be defined except by the steps of the process involved in its creation, there are cases holding that such a claim may be allowed, and it has been sustained by a Court. (Citing and quoting from *Ex parte Painter*, supra.)

A further examination of the decision discloses that the case involved the consideration of facts from which it was determinable that as a result of the process a new product resulted. The record at bar does not meet this requirement. In the Fesenmeier case the Commissioner said:

> In defining the characteristics of the product, so that it may be identified, it is not necessary that they be so defined that the general public, by a mere casual inspection, can determine the novel features of the product. It is sufficient that an expert can do this.

The record in the instant case does not disclose that an expert could determine the structural difference between the sawed wavy slot and the molded one.

The case of *In re Burt*, supra, in an opinion by Robb, Associate Justice, holds that a claim for a frozen confection product (ice cream), composed of a stick and granulated particles of ice cream which adhered to it at normal temperatures, was patentable. That decision holds that applicant was entitled to the allowance of a claim which would protect his product. In that case, however, the product, ice cream with a stick frozen in it, was easily distinguishable in its structural characteristics from ice cream without a stick and the case has little if any bearing on the issues involved here.

Oval Wood Dish Co. v. *Sandy Creek Co.*, supra, was an equity action involving three patents, one of which was a process patent. The process patent was declared to be invalid since there was no invention in the process not already patented in the machine patent. The court held that there could not be two patents for the same invention. It will be noticed that the decision does not hold that a patent for a process and a patent for a product can not issue, but that a patent with claims for a machine and a patent with claims for a product, both of which involved but one invention, could not issue. The court there said:

> Two patents cannot issue for the same invention. This is rudimentary. Where two such patents issue to the same person the second patent is void. The case of *Miller v. Eagle, etc., Co.* [66 O. G. 845, 151 U. S. 186], is the latest and the most pronounced case on this subject. By that decision the following propositions are established: A second patent cannot issue to the same party for an invention actually covered by an earlier patent, although the claims of the two patents may differ, the latter patent protecting certain features of the same invention not protected by the earlier patent. When a process and a product are so identical that the former creates the latter and only so, there are not two distinct and separable inventions. The subject matter of a second patent, in such circumstances, is so inseparably involved in the first as to render the second invalid.

Applying that case to the case at bar, we conclude first, that if the process is new, useful, and involves invention, appellant should be entitled to a patent for same, and, second, that if his process produces an article which in its structural characteristics is distinguishable from the prior art and which otherwise meets the requirements of the law, he would also be entitled to a patent on the article itself. Appellant has not complied with the order for separation, which resulted in the patent tribunals' failure to determine his right to a process patent, and the wording of the claims, when considered with the whole record, did not warrant the tribunals granting a patent on the article itself.

Globe Nail Co. v. *United States Horse Nail Co.*, supra, is especially relied upon. This is another equity case and, as we view it, it is a very logical decision when applied to the issues then before the court with respect to a process of making horseshoe nails. The case is easily distinguishable from the case at bar in so far as there the process itself disclosed the inherent nature of the article, which does not maintain in the instant case.

Ex parte Painter, supra, was decided in 1891 by Commissioner Simonds. The particular question involved is not very clearly set out in the opinion before us but, from what does appear, it would seem to be rather a general statement of what the Commissioner regarded to be the law, and may be regarded as in harmony with the viewpoint of the appellant herein. The Commissioner said:

> It requires no argument to establish the proposition that *as a rule* a claim for an article of manufacture should not be defined by the process of producing that article. On the other hand, when a man has made an invention his right to a patent for it, or his right to a claim properly defining it, is not to be determined by the limitations of the English language. When the case arises that an article of manufacture is a new thing, a useful thing, and embodies invention, and that article cannot be properly defined and discriminated from the prior art otherwise than by reference to the process of producing it, a case is presented which constitutes a proper exception to the rule. (Italics quoted.)

It may be the law that this rule has proper application in cases where it is obvious that the inventor has created an article of manufacture which is *a new thing*, a useful thing and embodies invention and where such an article can not be properly discriminated, in a claim, from the prior art otherwise than by reference to the process of producing it. The facts in the instant case do not disclose a situation where it is *obvious* that the applicant by molding a wavy slot instead of sawing it, has produced a new, useful thing embodying invention.

The decision of the Board of Appeals is affirmed.

Affirmed.

DECISION OF BOARD OF APPEALS, MARCH 19, 1928

[Claims quoted and references cited omitted. Same as in decision of the court.]

This is an appeal from the Examiner's action finally rejecting claims 1 to 15, inclusive, and requiring division between claims 1 to 15 and claims 16 to 32.

In his brief appellant has withdrawn his appeal as to claims 8 and 15 and the appeal as to said claims 8 and 15 will accordingly be dismissed.

In requiring division the Examiner points out that claims 1 to 15 for the piston are examinable and classifiable in Division 12 under class 74; and that claims 16 to 25 for a mold for casting pistons, and claims 26 to 32 for the method of making by casting in a mold, are examinable and classifiable in Division 3 under class 22. His action in requiring division was approved by the Examiner of Classification.

The Examiner's requirement for division is in accordance with the well-established practice where the subjects matter of the respective groups of claims have acquired separate and distinct status in the arts and are classifiable in different classes and divisions of this office.

Under rule 42 the applicant elected to prosecute the group of claims 1 to 15.

The Examiner rejected claims 1, 2, and 9 on Pope in view of Martin. Pope shows a straight instead of the wave-shaped slot called for in these claims. Appellant contends that with the straight slots of Pope there is a tendency to score the cylinder wall and that this is avoided by the wave-shaped slot which products a more even wear.

Concerning the Martin patent which the Examiner cited as showing the wave-shaped feature, appellant contends that it does not show a wave-slot in a piston skirt but merely in a wide piston ring. The outer sleeve of Martin is approximately the same length as the piston skirt and by contact with the cylinder wall forms the working surface between the cylinder and piston. The wave-shaped slot of Martin therefore functions similarly to appellant's slot. It would suggest making the slot of Pope wave-shaped. We concur in the Examiner's rejection of claims 1, 2, and 9 on these references.

The remainder of the appealed claims stand rejected on Austin, or Austin in view of Martin.

Claims 3, 4, 5, 6, 10, 11, and 12 include—

"one or more reinforcing rings of different material from the skirt and embedded in the skirt,"

or similar limitations. Austin casts bands 12 of steel in his aluminum alloy piston to control the expansion.

Appellant contends that in time the heads of Austin's bands will become loose and the band will cease to control the expansion which defect is not present in the ring of the applicant.

Pope shows rings 8 and 9 of the same metal as the cylinder walls, located in the same position, but not cast into the piston skirt, and for the same purpose as appellant's rings. If rings are superior to Austin's bands we see no invention in substituting therefor the rings of Pope.

Claims 3, 4, 5, 6, and 12 also specify that the longitudinal slots are "wavy" but for reasons stated in connection with claims 1, 2, and 9 we do not find that this limitation adds anything patentable to the claims.

Claims 4, 7, 13, and 14 specify that the longitudinal slot is formed in the skirt in casting, claims 4 and 13 further specifying that the slot is formed by a compressible core bar. The Examiner holds that appellant improperly defines the article or the longitudinal slot feature of the article by the process of forming it and that—

"it is immaterial in so far as the finished article is concerned whether the slot is formed in the casting of the piston by a compressible core bar or afterwards."

Appellant contends that he is able to produce a better casting by forming slots therein during the casting and that the degree of expansion is different when the slot is forming during casting from that possessed by the piston when the slot is formed after casting.

It is noted that appellant has method claims based on this same feature. For example, claim 27 specifies—

"forming longitudinal slots in the piston skirt by core bars positioned in the mold."

We think this feature properly forms the basis for method rather than article claims, and we accordingly sustain the position of the Examiner.

The appeal as to claims 8 and 15 is dismissed.

The action of the Examiner in requiring division between claims 1 to 15 and the remaining claims is sustained.

The rejection of claims 1 to 7 and 9 to 14 is affirmed.

U. S. Court of Customs and Patent Appeals

METZGER *v.* COOPER

No. 2,235. Decided February 6, 1930

[37 F. (2d) 434]

PRIORITY—RIGHT TO MAKE THE CLAIMS.

A composition for fumigating plants including matter "substantially free from alkali metal compounds" *Held* disclosed in the application of C. and that priority with respect thereto was properly awarded to him.

APPEAL from the Patent Office. Affirmed.

Messrs. Pennie, Davis, Marvin & Edmonds, Mr. D. S. Edmonds, Mr. E. R. Merchant, Mr. Richard K. Stevens, and *Mr. George J. Hesselman* for Metzger.

Mr. H. C. Bierman for Cooper.

BLAND, *J.*:

This is an appeal from the decision of the Board of Appeals, awarding priority of invention to Cooper. The decision of the Board affirmed the decision of the Examiner of Interferences, which in turn affirmed the decision of the Law Examiner.

The subject matter of the controversy involved in the interference counts is a composition of matter primarily intended for the fumigation of plants infested with insects. The active substance in the composition is calcium cyanide which is mixed with an inert substance such as talc, infusorial earth, or calcium carbonate. Each of the counts in issue requires that the active substance of the composition

shall be *free from alkali metal compounds* and the entire controversy revolves around this fact.

Metzger had received a patent upon a composition described with great particularity in his application. Cooper had a pending application which he claims is for the same thing and his amended claims were put in interference with the claims of Metzger's patent. Cooper's filing date was earlier than Metzger's. The counts in issue are:

1. As an article of manufacture, a composition of matter which comprises a mixture of inert material with a cyanogen compound of a metal, substantially free from alkali metal compounds.
2. As an article of manufacture, a composition of matter which comprises a mixture of inert material with a cyanogen compound of calcium substantially free from alkali metal compounds.

It was held by the tribunals below that Cooper's application and specification, together with the patent of Walter S. Landis, No. 1,359,357, disclosed the subject matter of Metzger's patent and that Cooper was entitled to priority. In the Cooper specification is found the following:

The invention when more particularly stated relates to a dusting material containing sodium cyanide, calcium cyanide, or a mixture of these compounds in a finely divided condition, suitable to be used in destroying various forms of plant and animal life with particular reference to insect pests.

* * * * * * *

As an illustration of this invention one may mix one part of a crude cyanide material of the nature of that disclosed in U. S. Patent to Walter S. Landis, No. 1,359,257, with from two to nine parts of a diluent such as talc, the whole being ground to an impalpable powder. This is dusted upon the plant foliage, or other surfaces on which the insects to be destroyed are located.

It is the contention of Metzger that Cooper had not disclosed a product substantially free from alkali metal compounds, while Cooper contends that the disclosure in his specification above referred to of "sodium cyanide, calcium cyanide, or a mixture of these compounds" was a disclosure of a cyanide containing alkali metal compounds and also a disclosure of a material free from alkali metal compounds. and that since one of the cyanides was free from alkali metal compounds, it amounted to a disclosure of a material free from alkali metal compounds. It seems to be conceded that if the mixture is made from calcium cyanide, it would be free of alkali metal compounds, but that if sodium cyanide was used, it would not be free from alkali metal compounds. It was argued by Cooper here that the disclosure of both materials was a disclosure of each of them and that this view was in accordance with the finding of the three tribunals below. Metzger contended that since Cooper did not say that he used pure calcium cyanide, but referred to the cyanides in their crude form, it would not necessarily show that either of them was free of an alkali metal compound.

It is conceded that if Cooper's disclosure is sufficient to support the subject matter of the counts, he is entitled to priority. Therefore, the only question in the case is as to whether or not Cooper's disclosure is sufficient to support the subject matter of the counts.

Under the above statement of facts, we conclude that Cooper's disclosure was sufficient to support the subject matter of the counts and that, therefore, he is entitled to priority.

The decision of the Board of Appeals is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE HOPKINS

No. 2,263. Decided February 6, 1930

PATENTABILITY—DESIGNS—LOUD-SPEAKER.

A design for a loud speaker *Held* unpatentable as containing no patentable distinction over a prior patent granted to applicant.

APPEAL from the Patent Office. Affirmed.

Messrs. Pennie, Davis, Marvin & Edmonds, Mr. Arba B. Marvin, Mr. George J. Hesselman, Mr. Richard K. Stevens, and *Mr. Clarence M. Fisher* for Hopkins.

Mr. T. A. Hostetler for the Commissioner of Patents.

BLAND, *J.:*

This is an appeal from the decision of the Commissioner of Patents, affirming the Board of Examiners in Chief, who, under rule 139, recommended the further rejection of applicant's design patent application which had been rejected by the Examiner.

The application calls for a patent for a design for a loud-speaker which design is comprised of a central tympanum of circular conical shape, surrounded by a relatively large circular panel ornamented to give it the appearance of wood.

The Examiner denied patentability in view of the patent to Peterson, No. 68,061, August 25, 1925, but the Board of Examiners in Chief held the applicant's design patentably distinguished from that disclosed in the reference. The appellant tribunal held, however, that the design was not patentably distinguished from that on which the applicant had already obtained a patent, No. 72,262, March 22, 1927, and recommended the denial of the claim in view of the latter patent.

The Commissioner's rejection rests upon there being no patentable distinction between the oval-shaped panel and the circular-shaped panel. With this conclusion we agree. Our reasons for such conclusion are more fully set out in *In re Hopkins*, patent appeal No. 2,226, decided concurrently herewith, 390 O. G. 5.

The decision of the Commissioner is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE SCOTT AND TURNER

No. 2,245. Decided February 6, 1930

[37 F. (2d) 441]

PATENTABILITY—AUTOMOBILE BUMPERS.

Claims for an automobile bumper specifying a plurality of upright shoes adjustably fastened to a horizontal bar *Held* unpatentable. The mere adjustability of the vertical pieces involves no invention since it would be the obvious thing for a mechanic to provide for such adjustments if deemed necessary.

APPEAL from the Patent Office. Affirmed.

Mr. Paul Carpenter, Mr. Ralph B. Stewart, and *Mr. Brendan J. McCann* for Scott and Turner.

Mr. T. A. Hostetler for the Commissioner of Patents.

BLAND, *J.:*

Appellant has appealed to this court from a decision of the Commissioner of Patents, affirming the decision of the Examiners in Chief, which in turn affirmed the decision of the Primary Examiner, denying patentability to claims 9, 10, 11, 12, and 13, of which claims 9 and 10 are representative and follow:

9. In combination, an automobile bumper comprising a horizontal bar and a plurality of upright shoes adjustably fastened thereto.
10. An automobile bumper, comprising a bar, a plurality of upright bumper shoes adapted to be fastened to the bar, and means for holding the bumper shoes in clamping engagement therewith.

The claims cover a bumper for automobiles which is made up of the usual horizontal spring bar extending across the front of the vehicle, the curved ends of which bar are secured to the spring ends, two vertically extending plates being adjustably attached to the horizontal portion of the bar. The plates are intended to prevent the bumper bar of one vehicle from passing above or below that of another when they are in slight collision. The vertically extending plates are intended to act so as to widen the area of contact of the bumper.

The claims were rejected upon the following references: Hoffman, 1,168,213, January 11, 1916; Olson, 1,180,418, August 25, 1916; Interference 46,142.

It is conceded in briefs and argument that if there is patentability in the device, it rests in the adjustable feature of the uprights; that is, in the fact that they are so arranged as to be moved along and adjusted to the horizontal bar at different places.

The adjustable feature was, by some of the patent tribunals, regarded as disclosed in the Olson reference. Whether it is or is not disclosed in any of the references, it is the position of the solicitor in this court, as was it the position of the Commissioner of Patents in his decision, that the adjustable feature of the vertical plates was not regarded as being patentable since it disclosed no useful function, involving invention, not disclosed in the references. With this conclusion we agree.

The mere adjustability of the vertical pieces, we think, involves no invention. It would be the obvious thing for any mechanic to provide for adjustments of same, if deemed necessary. We can well understand how adjustability of certain portions of some mechanisms might involve invention, but this certainly is not such a case. *In re Keller*, 51 App. D. C. 254, 278 Fed. Rep. 395, 298 O. G. 867.

The decision of the Commissioner of Patents is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

DURO PUMP & MFG. CO. *v.* THOMAS MADDOCK'S SONS CO.

No. 2,183. Decided January 27, 1930

[36 F. (2d) 1005]

TRADE MARKS—LIKELIHOOD OF CONFUSION.

Where the D. Company adopted and used the trade-mark "Duro" as a trade-mark for pneumatic water systems, electric motors, electric switches, pneumatic tanks, etc., and the M. Co. subsequently adopted the trade-mark "Durock" as a trade-mark for lavatories, drinking fountains, water-closet tanks, towel holders, and other plumbing articles, *Held* that in view of the difference in the marks and the dissimilarity of the goods of the respective parties, the use of the mark "Durock" by the M. Company would not be likely to cause confusion and that that company is entitled to the registration of that mark.

APPEAL from the Patent Office. Affirmed.

Mr. H. A. Toulmin and *Mr. H. A. Toulmin, jr.*, for Duro Pump & Mfg. Co.

Mr. C. J. O'Neill for Thomas Maddock's Sons Co.

HATFIELD, *J.:*

This is an appeal in a trade-mark opposition proceeding from the decision of the Commissioner of Patents affirming the decision of the Examiner of Interferences dismissing the opposition and holding that the applicant was entitled to have its trade-mark registered.

Appellee's application was filed on December 19, 1925, for the registration of its trade-mark "Durock" for use on "lavatories, drinking fountains, bidets, water-closets, water-closet tanks, robe hangers, towel holders, toilet-paper holders, shower heads, brackets, shelves, glass holders, sponge holders, comb and brush holders, soap holders, toothbrush holders, grab rails, bolt caps, and flush-pipe housings, in Class 13, Hardware and plumbing and steam-fitting supplies." Appellee has used the mark in question since December 1, 1925.

Appellant has used its trade-mark "Duro" since 1916 on "pneumatic water systems, electric motors, electric switches, pneumatic tanks, water filters, and water softeners." Since the filing of the notice of opposition, and due to the fact that it had been known and frequently referred to as the Duro Company, appellant had its name changed to "The Duro Company." It has extensively advertised its products under its trade-mark and its salesmen have frequently been called by the name "Duro."

Considerable evidence has been submitted by appellant for the purpose of establishing that the use by appellee of the mark "Durock" on the merchandise manufactured and sold by it, would cause confusion in the "mind of the public" and deceive purchasers. Officers and employees of appellant testified to certain incidents which they declared indicated that confusion had already occurred. We quote from the testimony of the witness, Shaffer—distributor and salesman for appellant:

Again in the shop of the Pontiac Plumbing & Heating Co., of Pontiac, Michigan, Mr. Mason, one of the partners, was confused by this Durock advertising, and asked when The Duro Company had started manufacturing enameled ware, which was being advertised by The Maddock's Sons Company under the name "Durock." * * * In most of these instances of confusion the *dealers wanted to know*

whether there was any connection between the two companies. (Italics ours.)

The quoted testimony is typical of the evidence in this regard.

No evidence was introduced by appellee. However, in its answer to the notice of opposition, attention was called to the fact that appellant was not the originator of the trade-mark "Duro," as evidenced by many registrations of that word by others, prior to its adoption and use by appellant, for use on "plumbers' supplies," "electrical apparatus and supplies," "metal trimmings for plumbers' supplies," "blow-off valves," and various other products.

In affirming the decision of the Examiner of Interferences, the Commissioner of Patents, among other things, said:

> It is apparent opposer did not originate the mark, Duro, nor was it the first to use it on this general class of water supplying apparatus, including the valves, fittings, electric motors, switches, etc. It must be held this long prior use by two separate companies of this mark Duro upon goods, some of which are identical with some of those of opposer, narrows the rights of the opposer and it is not entitled to exclude others from the broad or general class of water supplying apparatus, but only from the more specific class upon which it actually uses its mark.
>
> The applicant company uses its mark upon specifically different goods. The marks are not identical but differ to a considerable degree in appearance, sound and significance. While both marks are somewhat suggestive of durability, the applicant's mark is thought suggestive of rock-like durability.

Counsel for appellant contends that the mark, "Durock," sought to be registered by appellee, is in "substance and reality" the mark "Duro"; that the goods of the respective parties possess the same descriptive properties; that the use by appellee of the trade-mark "Durock" on its bathroom and other fixtures, will cause "confusion or mistake in the mind of the public" and deceive purchasers; and that appellant will be greatly damaged. Counsel insists that the right of appellant to the exclusive use of the mark "Duro" has been affirmatively declared by the courts, and the following cases are cited as authority for this contention: *Duro Pump & Mfg. Co.* v. *California Cedar Products Co.*, 344 O. G. 1058, 11 F. (2d) 205, 56 App. D. C. 156; *Duro Co.* v. *Duro Co.*, 17 T. M. Rep. 420, 27 F. (2d) 336.

In the case of *Duro Pump & Mfg. Co.* v. *California Cedar Products Co.*, supra, the Court of Appeals of the District of Columbia had under consideration the right of the applicant, the California Cedar Products Company, to the registration of the trade-mark "Duro," for use on "wall board." The court quoted at length from the decision of the Supreme Court in the case of *American Steel Foundries* v. *Robertson, Commissioner, et al.*, 342 O. G. 711, 269 U. S. 372, in which case the right of a company to appropriate as a trade-mark, all, or a portion only, of the corporate name of another company was considered and decided. The Supreme Court said in part:

> Where the appropriation of the corporate name is complete, the rule of the statute, by its own terms is absolute, and the proposed mark must be denied registration without more. But where less than the whole name has been appropriated, the right of registration will turn upon whether it appears that such partial appropriation is of such character and extent that, under the facts of the particular case, it is calculated to deceive or confuse the public to the injury of the corporation to which the name belongs.
>
> The fact, for example, that the articles upon which the mark is used are not of the same description as those put out by the corporation, is entitled to weight, since the probability of such confusion and injury in that situation obviously is more remote than where the articles are of like kind. The cases, naturally, present varying degrees of difficulty for the application of the rule.

After quoting the above language from the decision of the Supreme Court, the Court of Appeals, resting its decision upon the record before it, said that the word "Duro" had become so "identified with the particular corporation [The Duro Company] that, whenever used, it designated to the mind 'that particular corporation,'" and, although the goods of the respective parties were dissimilar, it was held that appellee was not entitled to have the word "Duro" registered as its trade-mark.

In concluding its opinion, however, the court said:

> Appellee's counsel refers in his brief to certain alleged registrations in the Patent Office not mentioned in the record. Obviously, this attempt to supplement the record cannot avail here, where the case must be decided upon the record made below. What effect, if any, these alleged registrations would have had upon our decision, had they been of record, we need not and do not determine.

This statement is not without significance, when the facts before us are considered. It appears that the word "Duro" has been registered as a trade-mark by many different parties upon various kinds of merchandise, including "electrical apparatus and supplies," "plumbers' supplies," and other somewhat similar articles sold by plumbers. It is obvious that appellant is not the originator of the trade-mark "Duro". Much more might be said, but, due to the views we hold of the issues, we refrain from further discussion of this particular subject.

The trade-marks of the parties are not the same. The one is "Duro," the other is "Durock." Obviously, then, unless the word "Durock" is likely to be confused with the word "Duro," this case is clearly distinguishable from the case of *The Duro Pump & Mfg. Co.* v. *California Cedar Products Co.*, and the case of *Duro Co.* v. *Duro Co.*, supra, relied upon by appellant.

It is true, as argued by counsel for appellant, that the word "Durock" is formed by adding the letters "ck" to the word "Duro." Frequently, such a slight addition to, or a modification of, a trade-mark is insufficient to properly distinguish the new mark from the old, and when this is so and the goods on which the two marks are used are so similar as to make confusion in the trade likely, registration of the modified word as a trade-mark will be denied. It does not necessarily follow, however, that a slight modification of a trade-mark will cause a correspondingly slight effect or result. Accordingly, in trade-mark proceedings, as in other cases, the issues must be determined in accordance with the facts and circumstances of the particular case before the court.

The trade-marks, "Duro" and "Durock," are different in appearance and in sound. Furthermore, the merchandise upon which the mark "Durock" is used by appellee is more than technically different from that upon which the mark "Duro" is used by appellant. To be sure, the goods of the respective parties may be sold and installed by the same plumbers, and they may be used in the same building. These facts should be considered and we have not overlooked them. However, taking into consideration the differences in the marks and the dissimilarity of the goods on which the respective marks are used, we are of opinion that the use of the mark "Durock" will not be likely to cause confusion or mistake in the mind of the public, and that appellee is entitled to have its mark registered.

For the reasons stated, the decision is affirmed.

Affirmed.

Patent Suits

[Notices under sec. 4921, R. S., as amended Feb. 18, 1922]

796,402, L. E. Curtis, Machine for expanding sheet metal; 799,299, O. Bradford, Machine for expanding slitted sheet metal; 1,125,526, C. J. Hayes, Machine for manufacturing expanded metal, D. C., N. D. Ohio (E. Div.), Doc. 749, *Northwestern Expanded Metal Co.* v. *The Truscon Steel Co.* Claims 3 and 9 of 796,402 held valid and infringed; bill dismissed as to claims 1, 2, and 3 of 799,299 and claims 1, 9, 11, and 14 of 1,125,526 Mar. 29, 1930.

799,299. (See 796,402.)

975,551, J. M. Maher, Riprapping system; 1,058,879, same, Current deflector, filed Apr. 5, 1930, D. C. Nebr. (Lincoln), Doc. E 317, *J. M. Maher* v. *Woods Bros. Construction Co.*

1,058,879. (See 975,551.)

1,076,198, J. T. Dickson, Vacuum brake; 1,321,150, H. C. Root, Controlling valve for vacuum-operated power means, D. C., S. D. N. Y., Doc. E 45/52, *Bragg-Kliesrath Corp.* v. *Westinghouse Air Brake Co. et al.* Consent decree for plaintiff Apr. 3, 1930.

1,107,193, 1,159,740, 1,179,068, J. R. Bray, Process of and apparatus for producing moving pictures; 1,143,542, E. Hurd, same, filed Apr. 2, 1930, D. C., S. D. N. Y., Doc. E 52/340, *Bray-Hurd Process Co., Inc.*, v. *Loucks & Norling.* Same, filed Apr. 2, 1930, D. C., W. D. N. Y., Doc. 209, *Bray-Hurd Process Co., Inc.*, v. *Eastman Kodak Co.*

1,125,526. (See 796,402.) 1,143,542. (See 1,107,193.)

1,159,740. (See 1,107,193.)

1,178,470, J. James, Switch mechanism for overhead tracks; 1,602,379, J. P. Lawrence, Switch for suspended conveyers, included by counterclaim Feb. 27, 1929, in suit filed Jan. 3, 1929, D. C., N. D. Ohio (E. Div.), Doc. 2799, *The Cleveland Crane & Engineering Co.* v. *The American MonoRail Co.* Bill and counterclaim dismissed Jan. 7, 1930. (To correct error in 393 O. G., page 791.)

1,179,068. (See 1,107,193.)

1,231,764, F. Lowenstein, Telephone relay; 1,353,976, E. R. Stoekle, Vacuum-tube device, filed Apr. 2, 1930, D. C., W. D. N. Y., Doc. 212, *Radio Corp. of America et al.* v. *Universal Wireless Communication Co., Inc.*

1,239,852. (See Re. 17,245.) 1,245,166. (See Re. 17,245.)

1,294,466, W. G. Houskeeper, Combined metal and glass structure and method of forming same; 1,536,855, same, Electron-discharge device, filed Apr. 2, 1930, D. C., W. D. N. Y., Doc. 210, *Radio Corp. of America et al.* v. *Universal Wireless Communication Co., Inc.*

1,307,733 (*a*), A. V. Guilborg, Lubricating apparatus; 1,307,734, same, Lubricating means, D. C., N. D. Calif. (San Francisco), Doc. E 2289, *Alemite Mfg. Corp.* v. *M. Bercovich.* Doc. 2294–L, *Alemite Mfg. Corp.* v. *D. S. Lerer et al.* Doc. E 2301, *Alemite Mfg. Corp.* v. *L. H. Jacobs (American Gera Co.).* Doc. E 2302, *Alemite Mfg. Corp.* v. *S. J. Cartman et al (Cartman Tire Co.).* Doc. E 2304 *Alemite Mfg. Corp.* v. *M. E. Morris (Little Auto Parts Co.).* Doc. E 2305, *Alemite Mfg. Corp.* v. *H. Alexander, et al. (Reliable Auto Parts & Supply Co.).* Claims 3, 4, and 5 of 1,307,733 and claims 1, 2, 3, 4, 8, 10, 14, and 15 of 1,307,734 held infringed Mar. 7, 1930, in each of above cases. Doc. 2290–L, *Alemite Mfg. Corp.* v. *Holden Auto Parts, Inc.* Decree as above, Sept. 5, 1929, Doc. 2298–L, *Alemite Mfg. Corp.* v. *H. C. Greene.* Decree as above Oct. 16, 1929.

1,307,733 (*b*), A. V. Guilborg, Lubricating apparatus; 1,307,734, same, Lubricating means, 1,475,980, O. Zerk, Lubricating apparatus, D. C., S. D. N. Y., Doc. E 42/164, *The Adams Mfg. Co.* v. *Adams Grease Gun Corp.* Decree for plaintiff Apr. 5, 1930. Same, D. C., W. D. N. Y., Doc. 2, *Alemite Mfg. Corp.* v. *F. W. Warnke.* Decree pro confesso Apr. 2, 1930.

1,307,734, A. V. Guilborg, Lubricating means; 1,475,980, O. Zerk, Lubricating apparatus, D. C., W. D. N. Y., Doc. 1131–F, *The Bassick Mfg. Co.* v. *Kellogg Mfg. Co.* Decree for plaintiff Apr. 1, 1930.

1,307,734. (See 1,307,733 (*a*) and (*b*).)

1,321,150. (See 1,076,198.) 1,353,976. (See 1,231,764.)

1,388,898, Schmidt & Schmidt, Carcass dehairing and cleaning machine; 1,388,899, O. C. Schmidt, same, D. C., Kans. (2d Div.), Doc. E 526–N, *The Cincinnati Butchers' Supply Co.* v. *J. Dold Packing Co.* Dismissed Mar. 26, 1930.

1,388,899. (See 1,388,898.)

1,421,113, D. M. Walters, Disk cultivator; 1,487,412, same, Cultivator, D. C., S. D. Calif. (Los Angeles), Doc. E I–97–J, *Killeger Mfg. Co.* v. *Brenneis Mfg. Co. et al.* Dismissed without prejudice on stipulation Mar. 18, 1930.

1,475,980. (See 1,307,733 (*b*) and 1,307,734.)

1,487,412. (See 1,421,113.)

1,507,016, L. de Forest, Radio signaling system; 1,507,017, same, Wireless telegraph and telephone system, filed Dec. 27, 1929, D. C. N. J., Doc. E 3968, *Radio Corp. of America et al.* v. *Universal Wireless Communication Co., Inc., et al.*

1,507,017. (See 1,507,016.) 1,536,855. (See 1,294,466.)

1,537,708. (See Re. 17,245.) 1,558,437. (See Re. 17,245.)

1,602,379. (See 1,178,470.)

1,615,147, R. M. Taylor, Combined muffler and cut-out; 1,697,839, J. E. Goerlich, Muffler, filed Apr. 2, 1930, D. C., N. D. Ohio (E. Div.), Doc. 3346, *R. M. Taylor et al.* v. *The Simmons Mfg. Co.*

1,673,942. (See Re. 17,393.) 1,683,531. (See Re. 17,393.)

1,696,066, 1,706,368, E. M. Wayland, Upedging means for fruit sizers, D. C., W. D. Va. (Charlottesville), Doc. 74–N. C., *E. M. Wayland* v. *MoSherry Lupton et al.* Dismissed on stipulation (notice Mar. 31, 1930).

1,697,839. (See 1,615,147.) 1,706,368. (See 1,696,066.)

Re. 16,474, L. Rosenstein, Method of producing alkali-metal xanthates, D. C. Nev. (Carson City), Doc. E 198, *Great Western Electro-Chemical Co.* v. *Nevada Consolidated Copper Co.* Dismissed Feb. 3, 1930.

Re. 17,245, Re. 17,247, W. G. Cady, Method of maintaining electric currents of constant frequency; Re. 17,355, same, Piezo-electric resonator; 1,537,708, W. Schottsky, Thermionic vacuum tube; 1,558,437, I. Langmuir, Electrical discharge apparatus; 1,239,852, F. K. Vreeland, Receivers of electrical impulses; 1,245,166, same, Method of transmitting and receiving high-frequency signal impulses, filed Apr. 2, 1930, D. C., W. D. N. Y., Doc. 211, *Radio Corp. of America et al.* v. *Universal Wireless Communication Co., Inc.*

Re. 17,247. (See Re. 17,245.) Re. 17,355. (See Re. 17,245.)

Re. 17,393, J. Mayer, Hair-waving appliance and method; Re. 17,585, same, Permanent-hair-waving appliance; 1,683,531, G. Decker, Hair-waving outfit, 1,673,942, D. Halpern, Permanent-waving attachment, filed Apr. 1, 1930, D. C., N. D. Ohio (E. Div.), Doc. 3345, *The Philad Co. et al.* v. *Naivette, Inc.*

Re. 17,585. (See Re. 17,393.)

Adverse Decisions in Interference

In interferences involving the indicated claims of the following patents final decisions have been rendered that the respective patentees were not the first inventors with respect to the claims listed:

Pat. 1,694,517, H. O. Ross, Indexes or records, decided March 17, 1930, claims 17, 19, and 26.

Pat. 1,711,827, B. F. Berry, Delivery apparatus for feeding mechanism, decided April 18, 1930, claims 1, 2, 3, 4, 6, and 7.

Final decision in interference has been rendered against the following trade-mark:

T. M. 235,980, Paint, Midland Paint and Products Co. of Midland Park, N. J. Registered November 29, 1927. Decided March 29, 1930.

Adjudicated Patents

(C. C. A. Calif.) Brennan patent, No. 1,264,770, for brake tester *Held* not infringed. *Rowen v. Brake Testing Equipment Corporation*, 38 F. (2d) 220.

(C. C. A. Okla.) Smith patent, No. 1,379,224, for dog-racing amusement *Held* not infringed. *Magic City Kennel Club v. Smith*, 38 F. (2d) 170.

(D. C. Md.) Hayduck patent, No. 1,449,102, for process for the manufacture of compressed yeast and the product *Held* not infringed. *Standard Brands v. Federal Yeast Corporation*, 38 F. (2d) 329.

(D. C. Md.) Hayduck patent, No. 1,449,105, for low-alcohol yeast process *Held* valid, at least as to claims aside from 1, 2, 3, 5, 6, and 7, and infringed. *Id.*

(D. C. Md.) Hayduck patent, No. 1,449,106, for low-alcohol yeast process, claims 1, 3, 4, 5, 6, 8, 12, and 13 *Held* valid and infringed. *Id.*

(C. C. A. Okla.) Smith patent, No. 1,507,440, for housing for conveyer cars and tracks, *Held* not infringed. *Magic City Kennel Club v. Smith*, 38 F. (2d) 170.

(C. C. A. and D. C. Pa.) Bennington patent, No. 1,577,606, for crane, claims 1 to 4 *Held* invalid. *Cleveland Crane & Engineering Co. v. Reading Chain & Block Corporation*, 38 F. (2d) 236 and 238.

(D. C. N. Y.) Johnson patent, No. 1,586,367, for electric-lamp socket *Held* valid and infringed. *John I. Paulding, Inc., v. Leviton*, 38 F. (2d) 242.

(C. C. A. Okla.) Smith patent, No. 1,630,812, for traction car and the like *Held* not infringed. *Magic City Kennel Club v. Smith*, 38 F. (2d) 170.

Interference Notice

U. S. PATENT OFFICE, *Washington, Apr. 23, 1930.*

Joseph A. O'Neill, his assigns or legal representatives, take notice:

An interference having been declared by this Office between the application for patent of Harry E. Chipman, 97 Suffolk Street, Springfield, Mass., and Patent No. 1,653,467, granted December 20, 1927, to Joseph A. O'Neill, 2626 Broadway, New York, N. Y., and the notice of such declaration sent by registered mail to said O'Neill at said address having been returned by the post office undeliverable, notice is hereby given that unless said O'Neill, his assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the interference will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

Notices of Cancellation

U. S. PATENT OFFICE, *Washington, Apr. 19, 1930.*

Alice R. Meller, her assigns or legal representatives, take notice:

A cancellation proceeding having been instituted by this Office upon the application of The American Products Company, 3265 Colerain Avenue, Cincinnati, Ohio, to effect the cancellation of the trade-mark registration of Alice R. Meller, 3500 Louisa Street, Pittsburgh, Pa., No. 169,768, dated July 3, 1923, and the notice of such proceeding sent by registered mail to the said Meller at the said address having been returned by the post office as undeliverable, notice is hereby given that unless said Meller, her assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the cancellation will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

U. S. PATENT OFFICE, *Washington, Apr. 22, 1930.*

John Harris Griffith, his assigns or legal representatives, take notice:

A cancellation proceeding having been instituted by this Office upon the application of The American Products Company, of 3265 Colerain Avenue, Cincinnati, Ohio, to effect the cancellation of the trade-mark registration of John Harris Griffith, of Marietta, Ga., No. 144,406, dated July 5, 1921, and the notice of such proceeding sent by registered mail to the said Griffith at the said address having been returned by the post-office as undeliverable, notice is hereby given that unless said Griffith, his assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the cancellation will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

U. S. PATENT OFFICE, *Washington, Apr. 28, 1930.*

Baruch Cerf, his assigns or legal representatives, take notice:

A cancellation proceeding having been instituted by this Office upon the application of the Epstein-Minster Co. Inc., 729–731 South 12th Street, Newark, N. J., to effect the cancellation of the trade-mark registration of Baruch Cerf, doing business at 204 27th Street, Milwaukee, Wis., and in Chicago, Ill., under the name of Czonable Products Co., No. 159,324, dated September 26, 1922, and the notice of such proceeding sent by registered mail to the said Cerf at the said addresses having been returned by the post office as undeliverable, notice is hereby given that unless said Cerf, his assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the cancellation will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

U. S. PATENT OFFICE, *Washington, D. C., Apr. 30, 1930.*

Cumalena Manufacturing Co., its assigns or legal representatives, take notice:

A cancellation proceeding having been instituted by this Office upon the application of the United Drug Company, of 43 Leon Street, Boston, Mass., to effect the cancellation of the trade-mark registration of the Cumalena Manufacturing Co., of Crafton, Pa., No. 42,070, dated February 16, 1904, and the notice of such proceeding sent by registered mail to the said Cumalena Manufacturing Co. at the said address having been returned by the post office as undeliverable, notice is hereby given that unless the Cumalena Manufacturing Co., its assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the cancellation will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

TRADE-MARKS

OFFICIAL GAZETTE, MAY 13, 1930

[VOL. 394. No. 2]

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this publication.

Marks applied for " under the ten-year proviso " are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 1 of said act, a fee of ten dollars must accompany each notice of opposition.

CLASS 1

Raw or Partly-Prepared Materials

Ser. No 288,311. AMERICAN TAR PRODUCTS COMPANY, Pittsburgh, Pa. Filed Aug. 9, 1929.

Bituwax

For Crude or Raw Coal-Tar Distillates.
Claims use since July 23, 1929.

Ser. No. 297,049. AMERICAN COLLOID CO., Lead, S. Dak., and Chicago, Ill. Filed Mar. 10, 1930.

VOLCLAY

For Species of Clay Sold in its Natural State or in a Dried or Pulverized State, or Both.
Claims use since Nov. 4, 1927.

CLASS 2

Receptacles

Ser. No. 241,803. BAXTER-LANE PAPER CORPORATION, New York, N. Y. Filed Dec. 22, 1926.



The use of the word "Samplsaver" is disclaimed apart from the mark as shown.

For Reels for Fabrics, Fabric Boards, and Combined Fabric Boards and Reels and Sample Holders, and for Sample Holders.
Claims use since Nov. 1, 1926.

Ser. No. 296,440. PIONEER COOPERAGE CO., St. Louis, Mo. Filed Feb. 24, 1930.

LIFE-TIME

For Wooden Kegs and Barrels.
Claims use since Aug. 30, 1928.

CLASS 4

Abrasive, Detergent, and Polishing Materials

Ser. No. 274,477. QUAKER PRODUCTS COMPANY, Philadelphia, Pa. Filed Oct. 29, 1928.



In the drawing the lining merely represents shading in order to contrast the background with the white silhouette of the letter "K".

For a Cleansing Powder for Scouring China, Enamel, Glass, Porcelain, and Metal Ware; Floors and Floor Coverings, Interior and Exterior Woodwork, and Articles of Interior and Exterior Use and Furnishing in General.
Claims use since June 1, 1928.

Ser. No. 281,716. ABRAHAM & STRAUS, INC., Brooklyn, N. Y. Filed Apr. 2, 1929.

MONTAUK

For Soap.
Claims use since Mar. 1, 1929.

Ser. No. 290,625. STANCO INCORPORATED, Wilmington, Del., and New York, N. Y. Filed Oct. 3, 1929.

STANCO INCORPORATED

For Detergents Used in Laundering Operations.
Claims use since May 25, 1928.

Ser. No. 294,366. SPARKL JEWELRY CLEANING POWDER CO., New York, N. Y. Filed Jan. 3, 1930.

SPARKL

For Preparation to be Used in Boiling Water for Cleaning Genuine Jewelry.
Claims use since Jan. 2, 1929.

Ser. No. 295,894. THE EXOLON COMPANY, Blasdell, N. Y. Filed Feb. 11, 1930.

SILCARBID

For Silicon Carbide Grains for Abrasive Purposes.
Claims use since Sept. 21, 1927.

Ser. No. 296,170. BEAVER CHEMICAL WORKS, Beaver Dam, Wis. Filed Feb. 18, 1930.

VOLCANIC



Applicant disclaims the right to the exclusive use of the words "Volcanic Clay" apart from the mark shown.
For Mechanics Hand Soap in Paste Form.
Claims use since May 1, 1928.

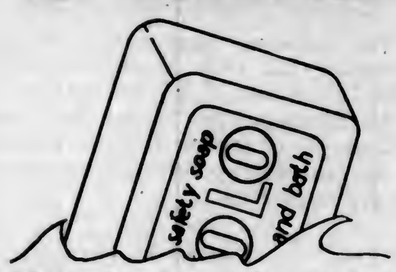
Ser. No. 296,652. JAMES S. KIRK & COMPANY, Chicago, Ill. Filed Feb. 28, 1930.

FANDANGO

For Soap.
Claims use since Feb. 3, 1930.

Ser. No. 296,981. THE PROCTER & GAMBLE COMPANY, Cincinnati, Ohio. Filed Mar. 7, 1930.

POLO



No claim is made for the words "Safety Soap" and "And Bath" apart from the mark as shown in the accompanying drawing.
For Toilet and Bath Soap.
Claims use since Sept. 23, 1929.

Ser. No. 297,018. H. KOHNSTAMM & CO., INC., New York, N. Y. Filed Mar. 8, 1930.

HOTSUDS SOAP 2011

No claim is made herein to the registration of the word "Soap" apart from the mark shown in the drawing.
For Soap.
Claims use since Dec. 26, 1929.

Ser. No. 297,234. CERTIFIED PERSONAL NEEDS, INC., New York, N. Y. Filed Mar. 13, 1930.

FYNTONE

For Soaps, Soap Preparations, and Shaving Cream.
Claims use since Feb. 27, 1930.

Ser. No. 297,237. CERTIFIED PERSONAL NEEDS, INC., New York, N. Y. Filed Mar. 13, 1930.

C.—P.

For Soaps, Soap Preparations, and Shaving Cream.
Claims use since Feb. 27, 1930.

Ser. No. 297,989. THE SELIG COMPANY, Atlanta, Ga. Filed Mar. 27, 1930.

SURGISOL

For Liquid Soap.
Claims use since Jan. 1, 1930.

Ser. No. 298,020. THE DU BOIS SOAP CO., Cincinnati, Ohio. Filed Mar. 28, 1930.

NEUTRALOID

For Preparation for Cleaning Terrazzo, Marble, Tile, Linoleum, and Rubber Floors, Painted Walls, and Woodwork.
Claims use since Feb. 19, 1929.

Ser. No. 298,040. PINE OIL PRODUCTS COMPANY, Harrison, N. J. Filed Mar. 28, 1930.

PINALGESIQUE

For Soap.
Claims use since about Nov. 1, 1929.

Ser. No. 298,053. THE SOLVAY PROCESS COMPANY, Solvay, N. Y. Filed Mar. 28, 1930.



The lining of the drawing is for the purpose of shading and is not intended to indicate that the trade-mark is displayed in color, nor is color an essential feature of the mark.
For Alkali and Alkali-Carbonate Cleansing Preparations Particularly for Cleansing Metals and Glass and for Scouring Textile Materials.
Claims use since Jan. 10, 1884.

CLASS 6

Chemicals, Medicines, and Pharmaceutical Preparations

Ser. No. 283,153. Dr. KARL THEILER, Munich, Germany. Filed Apr. 27, 1929.

EUFOSYL

For Skin Emollients, Toilet Waters, Collodion, Bath Salts, Mouth Wash, Oils for the Treatment of the Skin, Shampoo, Powders, and Solutions.
Claims use since November, 1924.

Ser. No. 286,597. CLARENCE A. SCHNEIDER, doing business as Schneider's Laboratories, Detroit, Mich. Filed July 3, 1929.

MAROL

For Medicine in Tablet Form for the Relief of Pain.
Claims use since May 14, 1929.

Ser. No. 289,180. PASQUALE CARUSO, Newark, N. J. Filed Aug. 30, 1929.



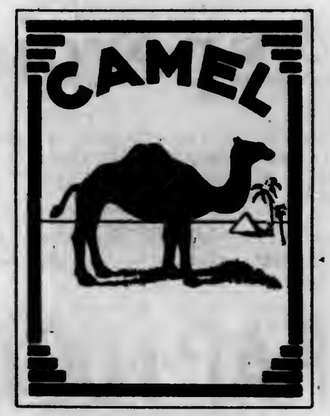
The words "Trade Mark" and "Skin Balm" being disclaimed apart from the mark as shown.
For Salves, Ointments, and Balms for the Alleviation of Skin Disorders, Wounds, and Sores.
Claims use since March, 1928.

Ser. No. 289,629. THE KAKE MFG., CO., Philadelphia, Pa., assignor, by mesne assignments, to Zellig Sterling, trading as The Kake Mfg. Co. Filed Sept. 11, 1929.

KAKE-LAX

No claim being made to the word "Kake" apart from the mark as shown.
For Laxatives.
Claims use since Aug. 21, 1929.

Ser. No. 289,817. CHARLES E. BOWERS, doing business as The Camel Products Company, Shreveport, La. Filed Sept. 16, 1929.



For Hair Tonics and Hairdressings.
Claims use since Aug. 15, 1929.

Ser. No. 292,932. THE H-A-P-I-A COMPANY, Seattle, Wash. Filed Nov. 26, 1929.

H-A-P-I-A



For Medicinal Preparation for Relief of Pain and Distress After Eating, Bloating, Heartburn, Sour Stomach, Bad Condition of the Blood, Localized Internal Inflammation, or Ulcerations.
Claims use since Nov. 1, 1929.

Ser. No. 294,464. CALIFORNIA PACKING CORPORATION, San Francisco, Calif. Filed Jan. 7, 1930.

Del Monte

For Baking Powder and Salt.
Claims use since Mar. 26, 1918.

Ser. No. 295,086. SILMO CHEMICAL COMPANY, INC., Vineland, N. J. Filed Jan. 22, 1930.

VAPO-CHLOR

For Preparation for Producing a Germicidal and Medicinal Vapor for Use in the Flock Treatment of Poultry for the Relief, Treatment, or Prevention of Colds, Roup, Bronchitis, and Similar Poultry Ailments.
Claims use since July, 1929.

Ser. No. 295,126. LEO J. HOFFERD, doing business as White Cross Laboratories, Cedar Rapids, Iowa. Filed Jan. 23, 1930.

Asperoid

For Medicinal Preparation for Treating Headaches, Neuralgia, Lumbago, Toothache, Colds, Rheumatic Pains, and Neuritis.
Claims use since Jan. 7, 1930.

Ser. No. 295,235. RAP-I-DOL DISTRIBUTING CORPORATION, New York, N. Y. Filed Jan. 25, 1930.

RAP-I-DOL

For Hair Colorings.
Claims use since Mar. 1, 1924.

Ser. No. 295,466. CHURCHILL MFG. CO., Sioux City, Iowa. Filed Feb. 1, 1930.

Aer'o-Way

For Deodorant.
Claims use since 1923.

Ser. No. 295,499. ROZALJA B. VOGEL, New York, N. Y. Filed Feb. 1, 1930.

"Локонъ Любви"

LOVELOX

HAIR DYE

No claim is made to the words "Hair Dye" apart from the mark shown on the drawing. The English translation of the words in Russian characters is "Lovelox".
For Hair Dye.
Claims use since Jan. 16, 1930.

Ser. No. 296,107. THE CROOKES LABORATORIES, INCORPORATED, New York, N. Y. Filed Feb. 17, 1930.

HYPOMIN

For Preparations Used Specifically for Blood Regeneration and General Metabolism and Given by Intravenous and Subcutaneous Injection.
Claims use since Jan. 25, 1930.

Ser. No. 296,185. VICTOR HALPER, doing business as Remogland Chemical Co., New York, N. Y. Filed Feb. 18, 1930.

Remogland

For General Glandular Tonic.
Claims use since about 1925.

Ser. No. 296,212. SCHECHTER & CO., New York, N. Y. Filed Feb. 18, 1930.



For Facial Cream Used in the Treatment of Pimples, Freckles, and Yellow Spots.
Claims use since June 3, 1926.

CARNEGIE LIBRARY OF ATLANTA

Ser. No. 296,286. ANTONIOS D. PASCHOS, Detroit, Mich. Filed Feb. 20, 1930.

RiZiKoN

For Gonorrhœa Medicine.
Claims use since Feb. 14, 1930.

Ser. No. 296,435. AUGUST OBROCK, White Plains, N. Y. Filed Feb. 24, 1930.

OBROCK'S OLD MISSION ANTISEPTIC SALVE

The term "Antiseptic Salve" is disclaimed apart from the mark shown.
For Treatment of Blood Poison, Eczema, Piles, Chafing, Open Sores, Flesh Wounds, Bites, Cuts, Bruises, Abrasions, Boils, Insect Stings, Acne, and Salt Rheum.
Claims use since Mar. 15, 1906.

Ser. No. 296,514. CHEMICALS & DRUGS, INC., Baltimore, Md. Filed Feb. 26, 1930.

Vitalex

For General Tonics.
Claims use since Feb. 1, 1930.

Ser. No. 296,586. THE CROOKES LABORATORIES, INCORPORATED, New York, N. Y. Filed Feb. 27, 1930.

VIVOMIN

For Preparations Used Specifically for Blood Regeneration and General Metabolism and Given by the Mouth.
Claims use since Feb. 1, 1930.

Ser. No. 297,128. THE HARROWER LABORATORY, INC., Glendale, Calif. Filed Mar. 11, 1930.

ACCRETIN

For Preparation Comprising an Extract of Endocrine Tissue (Anterior Pituitary and Thymus) Containing a Principle with a Specific Growth-Stimulating Influence.
Claims use since Feb. 28, 1930.

Ser. No. 297,325. LOUIS PHILIPPE, New York, N. Y. Filed Mar. 14, 1930.

SUNNY GIRL

For Lip Sticks, Rouges, Face Powders, and Toilet Creams.
Claims use since Jan. 6, 1930.

Ser. No. 297,359. JULIUS C. BUSCHER, St. Cloud, Minn. Filed Mar. 15, 1930.



The words "Corn Remover" and "Out by the Root" are disclaimed apart from the other features of the mark shown in the drawing.
For Corn Medicine.
Claims use since January, 1920.

Ser. No. 297,367. INTERNATIONAL VITAMIN CORPORATION, New York, N. Y. Filed Mar. 15, 1930.



No claim is made to the words "A Concentrate of All Vitamins from Cod-Liver Oil" and the words "Vitamin Pearls" apart from the mark shown on the drawing.
For Vitamin Concentrates for Use in Medicine and Pharmacy.
Claims use since Dec. 12, 1929.

Ser. No. 297,385. SOCIETE ANONYME DES LABORATOIRES DU DOCTEUR DEBAT, Paris, France. Filed Mar. 15, 1930.

PANCRINOL

For Medicinal Preparation for the Treatment of Anemia of All Kinds, Rickets, and Tubercular Ailments and for Use in General Convalescence.
Claims use since Aug. 22, 1929.

Ser. No. 297,410. SIDNEY COHEN, New York, N. Y. Filed Mar. 17, 1930.

MOTH-IT

For Insecticides and Insect Repellents.
Claims use since Feb. 1, 1930.

Ser. No. 297,502. J. S. TYREE, CHEMIST, INC., Washington, D. C. Filed Mar. 18, 1930.



The mark is a facsimile of the signature of Josiah S. Tyree, deceased.

For Antiseptic Powders; Also Medicinal Powders for Internal Use for All Conditions Where Hypophosphites are Indicated and for Enfeebled Conditions of the Digestive Tract; Also for Liquid Medicinal Preparations for Internal Use in Cases of Chronic Pyelitis, Subacute and Chronic Inflammation of the Kidneys, Catarrh and Chronic Inflammation and Irritation of the Bladder, Chronic Inflammation of the Urethra, Irritation from Enlargement of the Prostate Gland, Incontinence of Urine in Children Caused by Irritation of the Bladder, as a Preventive of the Formation or Deposition of Uric Acid in Uric-Acid Gravel and Uric-Acid Calculus, and in All Cases of Dropsy When It is Desired to Increase the Flow of Urine.
Claims use since about 1914.

Ser. No. 297,533. UCOLINE PRODUCTS COMPANY, Chicago, Ill. Filed Mar. 19, 1930.

VICAPEROL

For Medicinal Preparation for the Treatment of Dental Caries and Malnutrition.
Claims use since Nov. 13, 1929.

Ser. No. 297,536. UCOLINE PRODUCTS COMPANY, Chicago, Ill. Filed Mar. 19, 1930.

Vicodol

For Cod-Liver-Oil Preparation.
Claims use since Sept. 13, 1929.

Ser. No. 297,659. JOHN CAMPBELL & CO. INC., New York, N. Y. Filed Mar. 21, 1930.

PERMEKO

For Chemical Product to be Used as a Wetting-Out Agent, a Penetrant, and as a Levelling Agent in the Dyeing of All Kinds of Textile Fabrics—i. e., Cotton, Wool Silk, Rayon, Weighted Material, Jute, and Felt.
Claims use since Mar. 6, 1930.

Ser. No. 297,669. HELWIG & LEITCH CORPORATION, Baltimore, Md. Filed Mar. 21, 1930.

MAJESTIC

For Turpentine for Medicinal Purposes, Bluing, Peroxide, Ammonia, Castor Oil, Aspirin, Tincture of Iodine, and Epsom Salts.
Claims use since 1880.

Ser. No. 297,706. CARTER TAYLOR, doing business as Softskin Manufacturing Co., Fort Worth, Tex., and New York, N. Y. Filed Mar. 21, 1930.

Softskin

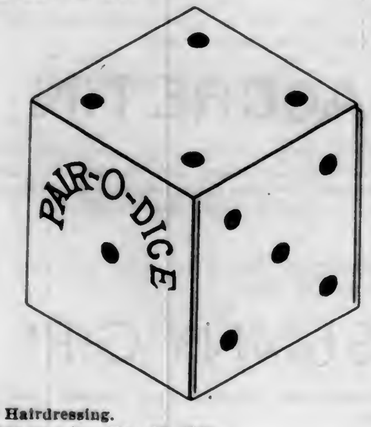
For Lotion for Treating the Hands, Face, and Skin.
Claims use since Jan. 1, 1928.

Ser. No. 297,748. CHAS. E. LANE & COMPANY, St. Louis, Mo. Filed Mar. 22, 1930.



For Pills for the Treatment of Biliousness, Constipation, Torpid Liver, and Disordered Stomach.
Claims use since 1899.

Ser. No. 297,757. PAIR-O-DICE COMPANY, Tampa, Fla. Filed Mar. 22, 1930.



For Hairdressing.
Claims use since Dec. 27, 1929

Ser. No. 297,758. PAIR-O-DICE COMPANY, Tampa, Fla. Filed Mar. 22, 1930.



For Hairdressing.
Claims use since Dec. 27, 1929.

Ser. No. 297,812. LIGHTFOOT SCHULTZ COMPANY, Hoboken, N. J. Filed Mar. 24, 1930.

TRANSOL

For Astringents, Astringent Cerates, Bleach Creams, Beauty Creams, Cold Creams, Cleansing Creams, Obesity Creams, Refreshing Creams, Obesity Astringents, Dry Rouges, Liquid Rouges, Face Bleaches, Face Packs, Eyebrow and Eyelash Grower, Eyedrops, Hand Lotions, Skin Lotions, Aftershaving Lotions, Pomades, Face Powders, Talcum Powders, Sachets, Hair Salves, Hair Elixirs, Dandruff Preparations, Hair Tonics, Hair Oils, Shampoos, Hair Dyes, Chemical Compounds to be Added to Shampoos to Neutralize the Free Alkali, Bath Salts, Smelling Salts, Lip Sticks, Incense, Tooth Powders, Mouth Washes, Dentifrices, Tooth Pastes, Nail Powders, Nail Creams, Nail Bleaches, Witch-Hazel, Peroxide, Petroleum Jellies, Witch-Hazel Salves, Camphor Creams, Foot Powders, Corn Salves, Deodorants, Disinfectants, Bay Rum, Perfumes, and Toilet Waters.
Claims use since Mar. 10, 1930.

Ser. No. 297,861. KATHRYN FLEMING, Minneapolis, Minn. Filed Mar. 25, 1930.



For Facial Cream, Skin Tissue Cream, Muscle Oil, Perfumery, Toilet Water, Face Powder, Powder Refills, Rouge in Powder Form, Rouge in Paste Form, Lip Rouge, Finger-Nail Finish, Preparation for Shadowing the Eye, Preparation for Painting the Eyebrows, Foot Powder, and Ointment for the Feet.
Claims use since January, 1915.

Ser. No. 297,874. RINO LABORATORIES CO., Los Angeles, Calif. Filed Mar. 25, 1930.



For Effervescent Orange Salt Compound for Use as a Laxative and as a Physic and for the Relief of Headaches, Colds, Lack of Appetite, Disorders of the Stomach and Liver, and for Indigestion.
Claims use since Feb. 28, 1930.

Ser. No. 297,879. E. R. SQUIBB & SONS, New York, N. Y. Filed Mar. 25, 1930.

VIADOL

For Cod-Liver-Oil Preparation.
Claims use since Mar. 20, 1930.

Ser. No. 297,917. BESSIE KAYE, doing business as Gamine de Paris, New York, New York, N. Y. Filed Mar. 26, 1930.

GAMINE
de PARIS

For Lip Stick, Cold Cream, Lemon Cream, Vanishing Cream, Nail Polish, and Massage Cream.
Claims use since Dec. 16, 1929.

Ser. No. 298,077. CARBIDE & CARBON CHEMICALS CORPORATION, New York, N. Y. Filed Mar. 29, 1930.

CARBOXIDE

For Fumigants, Germicides, Fungicides, and Insecticides.
Claims use since Feb. 17, 1930.

Ser. No. 298,101. E. F. HOUGHTON & Co., Philadelphia, Pa. Filed Mar. 29, 1930.

TALLOWLUBRIC

For Compounds of an Oily Nature for Treating Textile Fibres.
Claims use since July, 1928.

Ser. No. 298,102. E. F. HOUGHTON & Co., Philadelphia, Pa. Filed Mar. 29, 1930.

WARPLUBRIC

For Compounds of an Oily Nature for Treating Textile Fibres.
Claims use since Feb. 8, 1930.

Ser. No. 298,175. THE GRASSELLI CHEMICAL COMPANY, Cleveland, Ohio. Filed Mar. 31, 1930.

DUTOX

For Insecticidal Spray Products—Namely, Barium Silico Fluoride.
Claims use since about Mar. 24, 1930.

Ser. No. 298,181. CARLOTTA E. HILLER, doing business as The Sal-Tassia Co., Seattle, Wash. Filed Mar. 31, 1930.

"SAL-TASSIA"

For Blood Purifier and Stabilizer.
Claims use since January, 1927.

Ser. No. 298,195. MERRELL-HELLMAN LABORATORY, St. Louis, Mo. Filed Mar. 31, 1930.

Rose Dust

For Toilet Articles and Preparations—Namely, Nail White (Powder, Paste, and Liquid), Nail Polish (Powder, Paste, and Liquid), Cuticle Oil, Cuticle Remover, Liquid Remover, Nail Enamel, and Deodorant and Nonperspirant.
Claims use since Feb. 21, 1929.

Ser. No. 298,198. MYERS CHEMICALS CORPORATION, Weeping Water, Nebr. Filed Mar. 31, 1930.

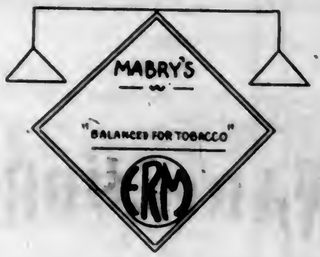
A-Trol

For Dental Preparation Placed in Cavities of Teeth Sockets for Relieving the Pain Caused by the Extracting of Teeth.
Claims use since Jan. 10, 1930.

CLASS 10

Fertilizers

Ser. No. 297,312. EDWARD R. MABRY, doing business as Mabry Guano Company, Angier, N. C. Filed Mar. 14, 1930.



The words "Balanced for Tobacco" are disclaimed apart from the other features of the mark shown in the drawing.
For Guano.
Claims use since Jan. 18, 1930.

Ser. No. 297,832. WILLIAM M. WOLVERTON, doing business as The Natural Humus Company, Chestnut Hill, Philadelphia, Pa. Filed Mar. 24, 1930.

D.M.F.

For Natural Humus.
Claims use since Nov. 1, 1923.

CLASS 12

Construction Materials

Ser. No. 280,718. KLAUER MANUFACTURING COMPANY, Dubuque, Iowa. Filed Mar. 14, 1929.



For Shingles, Tiles, Ceilings and Sidings, Steel Brick Siding, Rock-Faced Brick Siding, Rock-Faced Stone Siding, Corners and Pilasters, Window and Door Caps, Cornices, Metal Ceilings, Metal Lath, Roofing Cement, Furnace Cement, Cupolas, Asbestos Fibre Roof Cement, Bars for Concrete Construction, Corrugated Sheets, Corrugated Elevator Siding, Metal Gutters, Conductor Heads, Finials, Cornices and Belt Moldings, Built-In Coal Chutes, Irrigation Flumes, Valley, Corner Beads, and Metal Screens and Base Moldings.
Claims use since January, 1870.

Ser. No. 284,887. THE BOOTH-KELLY LUMBER COMPANY, Eugene, Oreg. Filed May 31, 1929.



For Lumber Products—i. e., Dressed and Undressed Lumber, Flooring, Siding, Shiplap, Lath, Shingles, Joists or Studding, and Lumber Materials Ready for Construction Use.
Claims use since June 1, 1927.

Ser. No. 284,888. THE BOOTH-KELLY LUMBER COMPANY, Eugene, Oreg. Filed May 31, 1929.



For Lumber Products—i. e., Dressed and Undressed Lumber, Flooring, Siding, Shiplap, Lath, Shingles, Joists or Studding, and Lumber Materials Ready for Construction Use.
Claims use since May 10, 1929.

Ser. No. 288,291. THE TAEMCO MANUFACTURING COMPANY, Cleveland, Ohio. Filed Aug. 8, 1929.

AQUANOX

For Construction Materials — Namely, Bituminous Waterproofing Products in Both Liquid and Plastic Form, Asphalt Emulsion Waterproofing Products in Semiliquid Form, Caulking, Glazing, and Pointing Compounds, Plastic Cements for Airproofing and Insulating Purposes, Cork and Plaster Bonding Compounds, and Liquid and Plastic Roof Coatings.
Claims use since Mar. 1, 1928.

Ser. No. 295,490. MARBLEHEAD LIME CO., Chicago, Ill. Filed Feb. 1, 1930.



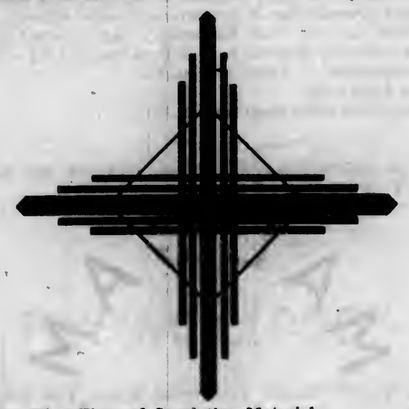
For White Lime and Hydrated Lime.
Claims use since on or about Jan. 1, 1895.

Ser. No. 297,294. BINNEY & SMITH CO., New York, N. Y. Filed Mar. 14, 1930.

COLOTEX

For Pigments for Use in Connection With Plastic Wall Texture Material.
Claims use since May, 1929.

Ser. No. 297,433. THE HOUSING COMPANY, Boston, Mass. Filed Mar. 17, 1930.



For Fiber Thermal Insulating Material.
Claims use since Mar. 5, 1930.

Ser. No. 297,763. THE PARAFFINE COMPANIES, INC., San Francisco, Calif. Filed Mar. 22, 1930.



For Prepared Roofing, Building Paper, and Insulating Paper, All of Which Comprise a Body of Fibrous Material in Sheet Form Which May or May Not Be Coated and/or Saturated in Whole or in Part with a Bituminous or Asphaltic Compound.
Claims use since about May, 1903.

Ser. No. 297,826. UNITED STATES GYPSUM COMPANY, Chicago, Ill. Filed Mar. 24, 1930.

HYDROCAL

For Calcined Gypsum.
Claims use since January, 1930.

Ser. No. 298,122. STEWART INSO BOARD COMPANY, St. Joseph and South St. Joseph, Mo. Filed Mar. 29, 1930.

INSOLATH

No claim is made to the trade-mark rights in the word "Lath" apart from the mark as shown in the drawing.
For Insulating Building Board.
Claims use since Apr. 25, 1929.

CLASS 13

Hardware and Plumbing and Steam-Fitting Supplies

Ser. No. 287,136. GUSTAV FRIEDRICH GERDTS, Bremen, Germany. Filed July 15, 1929.

Gestra

For Steam and Water Valves, Blow-Off Valves, Steam Traps, Nozzles, Piping, Unions, Couplings, Expansion Joints.
Claims use since Jan. 5, 1913.

Ser. No. 289,686. GEORGE A. MUTCH, Miami, Fla., assignor to New-H-Man Corporation, Miami, Fla. Filed Sept. 12, 1929.

NEW H MAN

For Water Softener in the Nature of a Container of Chemicals so Constructed as to Permit It to be Placed for Operation in a Domestic Water-Piping System or Line.
Claims use since July 1, 1929.

Ser. No. 296,516. CONTINENTAL STEEL CORPORATION, Kokomo and Indianapolis, Ind., and Canton, Ohio. Filed Feb. 26, 1930.

VICTORY

For Barbed Wire.
Claims use since February, 1929.

Ser. No. 296,517. CONTINENTAL STEEL CORPORATION, Kokomo and Indianapolis, Ind., and Canton, Ohio. Filed Feb. 26, 1930.

PIONEER

For Barbed Wire.
Claims use since March, 1928.

Ser. No. 298,041. PITTSBURGH STEEL COMPANY, Pittsburgh, Pa. Filed Mar. 28, 1930.

Custodian

For Wire Fencing.
Claims use since Feb. 20, 1930.

Ser. No. 298,042. PITTSBURGH STEEL COMPANY, Pittsburgh, Pa. Filed Mar. 28, 1930.

Guardian

For Wire Fencing.
Claims use since Feb. 20, 1930.

Ser. No. 298,044. PITTSBURGH STEEL COMPANY, Pittsburgh, Pa. Filed Mar. 28, 1930.

Sentinel

For Wire Fencing.
Claims use since Feb. 20, 1930.

CLASS 14.

Metals and Metal Castings and Forgings.

Ser. No. 266,569. EDGAR T. WARD'S SONS COMPANY, Pittsburgh, Pa. Filed May 17, 1928.



No claim is made to any representation of the goods apart from the mark shown. The lining on the drawing is intended for shading purposes only. The mark consists of the representation of two reversely coiled ribbons each partially uncoiled from the center, such uncoiled parts being fancifully disposed to constitute brackets for enclosing descriptive or advertising matter.
For Strip Steel.
Claims use since about Mar. 1, 1911.

Ser. No. 297,921. MAGNOLIA METAL COMPANY, New York, N. Y. Filed Mar. 26, 1930.

MALGAM

For Babbitt Metals, Antifriction Metals, and Metallic Alloys.
Claims use since Jan. 1, 1928.

CLASS 15

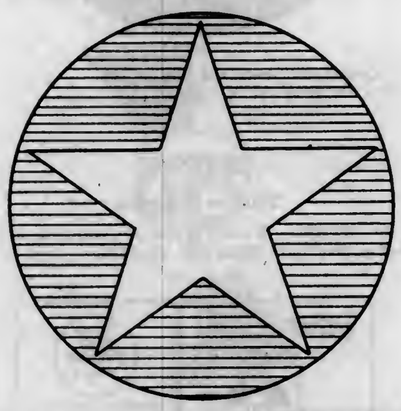
Oils and Greases

Ser. No. 293,648. WHITE STAR REFINING COMPANY, Detroit, Mich. Filed Dec. 13, 1929.

WHITE STAR

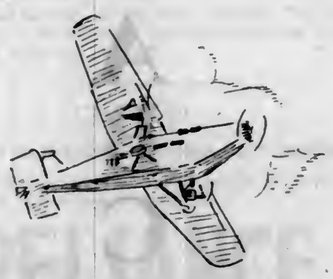
For Petroleum Products—Namely, Gasoline, Lubricating Oils, Lubricating Greases, Fuel Oil, Naphtha, Petroleum Distillates Other Than Kerosene and Illuminating Oils, and Motor Fuels in Which a Chief Constituent is Gasoline.
Claims use since 1876.

Ser. No. 293,649. WHITE STAR REFINING COMPANY, Detroit, Mich. Filed Dec. 13, 1929.



The drawing herein is lined to indicate a blue background for the white star; but the color or shape of the background or the presence of any background at all is not an essential feature of the mark.
For Petroleum Products—Namely, Gasoline, Lubricating Oils, Lubricating Greases, Fuel Oil, Naphtha, Petroleum Distillates Other Than Kerosene and Illuminating Oils, and Motor Fuels in Which a Chief Constituent is Gasoline.
Claims use since 1876.

Ser. No. 294,148. DANS & DANS, Hackettstown, N. J. Filed Dec. 28, 1929.



FLYING CLOUD

For Gasoline, Lubricating Oils and Greases, and Kerosene.
Claims use since Apr. 1, 1929.

Ser. No. 294,305. INDIAN REFINING COMPANY, Lawrenceville, Ill. Filed Jan. 2, 1930.

SAELUBE

For Lubricating Oils and Greases and Oils and Greases in the Nature of Lubricants.
Claims use since about July 1, 1929.

Ser. No. 294,418. GILMORE OIL COMPANY, Los Angeles, Calif. Filed Jan. 6, 1930.

GILMORENE

For Gasoline, Lubricating Oils, and Lubricating Greases.
Claims use since Sept. 2, 1929.

Ser. No. 294,731. KLENZMOTOR CORPORATION, Fort Wayne, Ind. Filed Jan. 13, 1930.

KLENZMOTOR

No claim is made herein to the name "Klenzmotor" apart from the mark shown in the drawing.
For Greases and Oils Used as a Cleaning Lubricant.
Claims use since Sept. 10, 1929.

Ser. No. 296,295. SMITH & NICHOLS, INC., New York, N. Y. Filed Feb. 20, 1930.

FORMALITES

For Candles.
Claims use since Dec. 13, 1929.

Ser. No. 296,831. STANCO INCORPORATED, Wilmington, Del., and New York, N. Y. Filed Mar. 4, 1930.

ACTO

For Refined, Semirefined, and Unrefined Oils and Greases Made from Petroleum Both with and without Admixture of Animal, Vegetable, or Mineral Substances for Illuminating, Burning, Power, Fuel, and Lubricating Purposes and Lubricating Greases.
Claims use since Oct. 19, 1918.

CLASS 16

Paints and Painters' Materials

Ser. No. 258,252. CLEAN-BRIGHT PRODUCTS CO., New York, N. Y. Filed Dec. 1, 1927.



For Automobile Polish.
Claims use since Jan. 1, 1927.

Ser. No. 285,327. THE BRUNSWICK-BALKE-COLLENDER COMPANY, Wilmington, Del., and Chicago, Ill. Filed June 10, 1929.

JIFFY BRIGHT

For Cleaner and Polish for Floors, Bowling Alleys, Woodwork, and Furniture.
Claims use since Jan. 1, 1912.

Ser. No. 289,783. CARNITT ROSTSCHUTZ- UND FARBSTOFF-GESELLSCHAFT MIT BESCHRANKTER HAFTUNG, Breslau, Germany. Filed Sept. 14, 1929.

Siroff

For Paints in Ready-Mixed Form and Varnish.
Claims use since September, 1928.

Ser. No. 294,621. HENRY T. CARUTHERS, doing business as Zenith Cleaner Products Company, Memphis, Tenn. Filed Jan. 10, 1930.



For Combined Cleaner and Polish.
Claims use since Jan. 6, 1930.

CLASS 17

Tobacco Products

Ser. No. 297,574. ARDATH TOBACCO COMPANY, LIMITED, London, England. Filed Mar. 20, 1930.



For Cigarettes.
Claims use since September, 1927.

Ser. No. 297,761. THE PARAFFINE COMPANIES, INC., San Francisco, Calif. Filed Mar. 22, 1930.

PABCO

For Cigarettes.
Claims use since Apr. 25, 1928.

CLASS 19

Vehicles, Not Including Engines

Ser. No. 288,632. AUTO RAIN PROTECTION COMPANY, INC., New York, N. Y. Filed Aug. 17, 1929.

Weatherall

For Rumble-Seat Weatherproof Fabric Protectors.
Claims use since July 24, 1929.

Ser. No. 296,088. THOMPSON PRODUCTS, INC., Cleveland, Ohio. Filed Feb. 15, 1930.



The words "Twin" and "Cycle" are hereby disclaimed.
For Shock Absorbers and Other Vehicle Spring-Return Controlling Devices.
Claims use since Oct. 1, 1929.

Ser. No. 296,195. THE PEP BOYS-MANNY, MOE & JACK, Philadelphia, Pa. Filed Feb. 18, 1930.

Piccadilly

For Automobile Seat Covers, Side Curtains, Top Coverings, Top Boots, Straw Seat Pads, and Radiator Covers.
Claims use since Jan. 1, 1929.

CLASS 21

Electrical Apparatus, Machines, and Supplies

Ser. No. 277,310. CHAS. F. L'HOMMEDIEU & SONS CO., Chicago, Ill. Filed Dec. 28, 1928.

RELIANCE

For Electroplating Dynamos, Rheostats for Electroplating, Polishing Lathes, Buffing Lathes, Motor Lathes, Plating Barrels, and Tumbling Barrels, the Various Lathes and Tumbling Barrels Being Electrically Operated and Driven.
Claims use since 1911.

Ser. No. 293,516. CARBEX CHEMICAL COMPANY, West End, N. J. Filed Dec. 11, 1929.

PALLOY

For Attachment Applicable to Spark Plugs for Intensifying the Spark Produced.
Claims use since Nov. 25, 1929.

Ser. No. 293,788. RICHARDSON PHELPS, doing business as Coffee-King Mfg. Co., Minneapolis, Minn. Filed Dec. 17, 1929.

COFFEE-KING

The word "Coffee" is disclaimed apart from the mark shown in the drawing.
For Electrical Beverage-Making Machines.
Claims use since about Oct. 15, 1929.

Ser. No. 294,608. THE MARCONI MANUFACTURING COMPANY, Seattle, Wash. Filed Jan. 9, 1930.



The words "Around The World" are disclaimed apart from the mark as shown.
For Electrical Batteries, Flash Lights, Radio Receiving Sets, Wet and Dry Electric Batteries, and Flash Lights.
Claims use since June, 1927.

Ser. No. 294,776. NATIONAL MILL SUPPLY COMPANY, doing business as The National Radio and Television Corp., Fort Wayne, Ind. Filed Jan. 14, 1930.

Minuet

For Radio Apparatus—Namely, Receiving Sets, Variable Condensers, Vernier Condensers, Molded Variometers, Molded Variocouplers, Dials, Knobs, Fixed Condensers, Grid-Leak Condensers, Rheostats, Inductance Coils, Panel Switches, Telephone Jacks, Assembled Amplifying Units, and Television Receiving Sets.
Claims use since 1911.

Ser. No. 296,203. SEYMOUR PERFECTION ELECTRICAL COMPANY, Kansas City, Mo. Filed Feb. 18, 1930.



The word "Efficiency" is disclaimed apart from the mark shown in the drawing.
For Electric Transformers.
Claims use since Nov. 1, 1929.

Ser. No. 296,247. AMERICAN HARD RUBBER COMPANY, Hempstead and New York, N. Y. Filed Feb. 20, 1930.

NAVY

For Jars, Cells, Covers, Vents, and Separators Made of Hard Rubber or Other Plastic Materials, Not Including Glass, for Storage Batteries.
Claims use since Feb. 1, 1930.

Ser. No. 296,948. JAMES A. BELL, doing business as James A. Bell Co., Minneapolis, Minn. Filed Mar. 7, 1930.

NEO-TURN

For Automotive Direction Signals Comprising a Fixed Neon Turn Indicated to be Applied to Automotive Vehicles and Operated by a Switch on the Instrument Board.
Claims use since on or about Feb. 1, 1930.

Ser. No. 297,551. TORK CLOCKS, INC., New York, N. Y. Filed Mar. 19, 1930.

KROTOR

For Motors for Time-Controlled Devices.
Claims use since Mar. 7, 1930.

Ser. No. 297,608. MARSHALL-WELLS COMPANY, doing business as Ideal Battery Co., Duluth, Minn. Filed Mar. 20, 1930.



For Automobile Storage Batteries.
Claims use since Mar. 8, 1930.

Ser. No. 297,907. G-M LABORATORIES, INC., Chicago, Ill. Filed Mar. 26, 1930.

NEOTRON

For Neon Tubes, Gaseous Discharge Tubes, and Variable Luminosity Tubes.
Claims use since Nov. 1, 1926.

Ser. No. 297,908. G-M LABORATORIES, INC., Chicago, Ill. Filed Mar. 26, 1930.

VISITRON

For Photo-Electric Cell.
Claims use since Nov. 1, 1926.

CLASS 22

Games, Toys, and Sporting Goods

Ser. No. 289,435. ARMOUR AND COMPANY, Chicago, Ill. Filed Sept. 7, 1929.



The trade-mark consists in a spiral red strand or stripe extending lengthwise of the string. No claim is made to the representation of the string.
For Gut Strings for Tennis and Like Rackets.
Claims use since July 15, 1929.

Ser. No. 297,354. CHARLES F. BAKER & CO. INC., Boston, Mass. Filed Mar. 15, 1930.

LIRANGE

Golf Tees.
Claims use since Mar. 1, 1930.

Ser. No. 297,896. ENDICOTT JOHNSON CORPORATION, Endicott, N. Y. Filed Mar. 26, 1930.

WHIZ

For Golf Balls.
Claims use since Mar. 18, 1930.

Ser. No. 297,897. ENDICOTT JOHNSON CORPORATION, Endicott, N. Y. Filed Mar. 26, 1930.

CRUSADER

For Golf Balls.
Claims use since Mar. 18, 1930.

Ser. No. 298,130. S. L. ALLEN & CO., INC., Philadelphia, Pa. Filed Mar. 31, 1930.

"WEE"

For Coasting Sleds.
Claims use since Mar. 19, 1930.

CLASS 23

Cutlery, Machinery, and Tools, and Parts Thereof

Ser. No. 293,342. PIERCE HARDWARE COMPANY, Taunton, Mass. Filed Dec. 6, 1929.

NEMASKET

For Shovels, Spades, Scoops, Hand-Operated Ditching Tools, Snow Pushers, Sidewalk Scrapers, Posthole Diggers, Tool Handles.
Claims use since Jan. 1, 1895.

Ser. No. 295,443. SCOVILL MANUFACTURING COMPANY, Waterbury, Conn. Filed Jan. 31, 1930.

Tak-a-pin

For Small Dispensing Boxes or Cases Suitable for Desk and the Like Use and Designed to Dispense Pins or Like Articles.
Claims use since Dec. 28, 1929.

Ser. No. 295,867. F. L. SMIDTH & CO., New York, N. Y. Filed Feb. 10, 1930.

FLUXO

For Pneumatic Conveying Apparatus for Portland Cement and Other Pulverulent Materials.
Claims use since about Nov. 1, 1929.

Ser. No. 296,046. EDWARD C. BOWERS and CHARLES L. FELDMAN, receivers for Wickwire Spencer Steel Company, New York, N. Y. Filed Feb. 15, 1930.



The mark consists of a red stripe formed of a woven thread, extending longitudinally of the clothing substantially at the center thereof, indicated by the lining in the drawing.
For Card Clothing.
Claims use since Dec. 4, 1929.

Ser. No. 296,412. FIRTH-STERLING STEEL COMPANY, McKeesport, Pa. Filed Feb. 24, 1930.

MECHANIGRIPT

For Tools for Turning, Boring, Planing, Slotting, Threading, Chasing, Broaching, Knurling, Drilling, Milling, Reaming, Punching, Shearing, Scratching, Filing, Scraping, Spinning, Rolling, Sawing, Stamping, Piercing, Extruding, Tapping, and Chiseling Primarily Intended for Application by Hand and Machine in the Usual Manner to the Workable Materials, Such as Metal, Wood, Natural and Artificial Stones, Glass, Bakelite, Rubber, Etc.
Claims use since Jan. 23, 1930.

Ser. No. 296,699. GOODELL-PRATT COMPANY, Greenfield, Mass. Filed Mar. 1, 1930.

Goodell-Pratt

For Metal and Woodworking Drills, Chucks, Screw Drivers, Cold Chisels, Nail Sets, Center Punches, Pin or Drift Punches, Vises, Tool Kits, Bench Grinders, Polishing and Grinding Heads, Bit Braces, Glass Cutters, Mitre Boxes, Bench Lathes, Hack-Saw Blades, Hack-Saw Frames, Ratchet Wrenches, Socket Wrenches, Valve Grinders, Automobile Valve-Spring Compressors, Automobile Valve Lifters, Bearing and Carbon Scrapers, Brake-Lining Cutters, Brass Hammers, Washer Cutters, Tap Wrenches, Saw Sets, Nail Pullers, Machinists' Clamps, Arbors, Motor-Attachment Arbors and Chucks, Bench Hack Saws and Scribers.
Claims use since 1916.

Ser. No. 297,422. EMERSON & STEVENS MFG. CO. INC., Oakland, Me. Filed Mar. 17, 1930.

THE LUMBERMAN'S PRIDE

For Wedge Axes.
Claims use since 1910.

Ser. No. 297,460. TRIP-O SALES COMPANY, Hannaford, N. Dak. Filed Mar. 17, 1930.

TRIP-O

For Tractor-Wheel Scrapers and Scrapers for the Wheels of Other Machines.
Claims use since May 28, 1929.

Ser. No. 297,510. AMERICAN SAFETY RAZOR CORPORATION, Brooklyn, N. Y. Filed Mar. 19, 1930.

micromatic

For Razors and Blades.
Claims use since July, 1929.

Ser. No. 297,623. SIMMONS HARDWARE COMPANY, St. Louis, Mo. Filed Mar. 20, 1930. Under section 5b of the act of 1905 as amended in 1920.

KEEN KUTTER

Applicant claims ownership of registered Trade-Mark No. 60,570 effected Feb. 12, 1907 under the 10-year proviso clause of the act of Feb. 20, 1905.
For Safety-Razor Blades.
Claims use since Mar. 10, 1928.

Ser. No. 297,978. MOTOR POWER EQUIPMENT CO., St. Paul, Minn. Filed Mar. 27, 1930.

VIKING

For Snow Plows Adapted to be Propelled by Motor-Driven Vehicles.
Claims use since on or about Feb. 7, 1930.

Ser. No. 298,050. SAN-I-WAY SHREDDER CO., Seattle, Wash. Filed Mar. 28, 1930.

SAN-I-WAY

For Vegetable Shredders and Slicers.
Claims use since Sept. 1, 1929.

CLASS 24

Laundry Appliances and Machines

Ser. No. 293,958. CHAMPION WASHER COMPANY, LTD., San Francisco, Calif. Filed Dec. 20, 1929.

CHAMPION

For Laundry Washing Machines.
Claims use since Nov. 1, 1926.

Ser. No. 294,923. GRINNELL WASHING MACHINE CORPORATION, Grinnell, Iowa. Filed Jan. 18, 1930.



The words "Washing Machine, Chicago, Illinois," are disclaimed apart from the mark as shown in the drawing. The drawing is lined for red and green.
For Laundry Washing Machines.
Claims use since Jan. 3, 1929.

CLASS 25

Locks and Safes

Ser. No. 277,792. DUDLEY LOCK CORPORATION, Chicago, Ill. Filed Jan. 10, 1929.



No claim is made to the representation of a dial apart from the mark shown.
For Locks.
Claims use since about January, 1922.

CLASS 26

Measuring and Scientific Appliances

Ser. No. 289,177. ROBERT C. BELGAU, Miami, Fla. Filed Aug. 30, 1929.

ARCOPHONE

For Coin-Operated Electric Sound-Moving-Picture Machines and Parts Thereof, Cameras, Projection Machines for Motion and Talking Picture Film, Magazines for Containing Films; Film for Still, Motion, and Talking Pictures; Sensitized Photographic Plates, Sensitized Photographic Paper, Photographic Lenses, Moving-Picture-Projection Screens.
Claims use since June 20, 1929.

Ser. No. 296,445. R K O PRODUCTIONS, INC., New York, N. Y. Filed Feb. 24, 1930.



Applicant claims ownership of trade-mark registration No. 251,895, issued Jan. 8, 1929, and No. 266,145, issued Jan. 14, 1930. The words "A, Picture," form a part of the registration sought only in combination and in association with the other features of the mark shown in the drawing.
For Films Adapted for Reproduction and Containing Recorded Images of Pictures and/or Recorded Sound.
Claims use since July 29, 1929.

Ser. No. 296,700. GOODELL-PRATT COMPANY, Greenfield, Mass. Filed Mar. 1, 1930.

Goodell-Pratt

For Steel Rules, Including Hook Rules, Combination Squares and Protractors, Micrometers, Gauges, Levels (Wood), Calipers, Machinists' Dividers, Butt Gauges, Roller Gauges, Plumb Bobs, Machinists' Steel Squares, Surface Gauges, Speed Indicators, Scratch Gauges, Bench Blocks or Parallels.
Claims use since 1916.

Ser. No. 298,095. THE FOXBORO COMPANY, Foxboro, Mass. Filed Mar. 29, 1930.

HUMITEX

For Charts for Recording Instruments.
Claims use since Apr. 5, 1929.

CLASS 27

Horological Instruments

Ser. No. 291,249. TORK CLOCKS, INC., New York, N. Y. Filed Oct. 18, 1929.

TELEMASTER

For Clocks.
Claims use since Oct. 4, 1929.

CLASS 28

Jewelry and Precious-Metal Ware

Ser. No. 297,195. THE MARK JEWELRY CO., New York, N. Y. Filed Mar. 12, 1930.

GEMS of ENCHANTMENT

Applicant disclaims the word "Gems" apart from the mark shown in the drawing.
For Finger Rings, Bracelets, and Broaches.
Claims use since Feb. 21, 1930.

Ser. No. 297,840. ARMBRUST CHAIN COMPANY, Providence, R. I. Filed Mar. 25, 1930.

AVIATOR

For Bracelets and Wrist-Watch Bracelets.
Claims use since on or about July 12, 1929.

Ser. No. 297,969. ALFRED HUMBERT & SON, Philadelphia, Pa. Filed Mar. 27, 1930.

Wild Rose

For Wedding Rings and Finger Rings.
Claims use since Mar. 18, 1930.

CLASS 29

Brooms, Brushes, and Dusters

Ser. No. 295,578. W. R. SIBBETT CO. INC., Oakland, Calif. Filed Feb. 4, 1930.

SANO-KLEEN

The descriptive word "Kleen" is disclaimed apart from the mark shown on the drawing.
For Wiping Rags and Sterilized Wiping Rags.
Claims use since 1915.

Ser. No. 297,658. HARRY J. BOSWORTH COMPANY, Chicago, Ill. Filed Mar. 21, 1930.

CONTRA-ANGLE

For Toothbrush.
Claims use since Dec. 16, 1929.

CLASS 31

Filters and Refrigerators

Ser. No. 297,208. SELF & DALBEY, Los Angeles, Calif. Filed Mar. 12, 1930.

OLD FROSTY

For Refrigerators.
Claims use since Sept. 2, 1929.

Ser. No. 298,088. DULUTH SHOW CASE COMPANY, Duluth, Minn. Filed Mar. 29, 1930.

COOLERATOR

For Refrigerators.
Claims use since on or about Feb. 10, 1930.

Ser. No. 298,089. DULUTH SHOW CASE COMPANY, Duluth, Minn. Filed Mar. 29, 1930.

Coolerator

For Refrigerators.
Claims use since on or about Feb. 10, 1930.

Ser. No. 298,090. DULUTH SHOW CASE COMPANY, Duluth, Minn. Filed Mar. 29, 1930.

Coolerator

For Refrigerators.
Claims use since on or about Feb. 10, 1930.

CLASS 32

Furniture and Upholstery

Ser. No. 295,127. IMPERIAL UPHOLSTERING COMPANY, Lowell and Boston, Mass. Filed Jan. 23, 1930.

IMPERIAL
In Design and Construction

No claim being made to the words "In Design and Construction" apart from the mark shown in the drawing.
For Upholstered Parlor and Living-Room Furniture, Davenport Beds, and Occasional Chairs.
Claims use since February, 1912.

Ser. No. 296,971. HARRY MANTEFUR, doing business as Mantefur Mattress Company, Philadelphia, Pa. Filed Mar. 7, 1930.



Applicant is not making claim to an exclusive appropriation of the words "Inner Spring Mattress, Best for Rest, Philadelphia, Pa., Mattress," or of the representations of the mattress except in the precise relation and association in which they appear on the drawing.
For Mattresses.
Claims use since Jan. 1, 1929.

Ser. No. 297,664. FEDERAL PILLOW COMPANY, New York, N. Y. Filed Mar. 21, 1930.

LORELEI

For Pillows.
Claims use since Mar. 6, 1930.

CLASS 33

Glassware

Ser. No. 296,886. THOMA GLASS INC., Fairfield, Iowa. Filed Mar. 5, 1930.



The drawing is lined to indicate the color blue. All the wording shown on the drawing except "Thoma" and "The Blue Seal" is disclaimed apart from the mark as shown.
For Glass.
Claims use since Jan. 1, 1930.

Ser. No. 296,887. THOMA GLASS INC., Fairfield, Iowa. Filed Mar. 5, 1930.



The drawing is lined to indicate the color blue. All the wording shown on the drawing except the words "Thoma" and "Firepol" and "The Blue Seal" is disclaimed apart from the mark as shown.
For Glass.
Claims use since Jan. 1, 1930.

Ser. No. 296,888. THOMA GLASS INC., Fairfield, Iowa. Filed Mar. 5, 1930.



The drawing is lined to indicate the color blue. All the wording shown on the drawing except "Thoma Glass, Inc." is disclaimed apart from the mark shown.
For Glass.
Claims use since Jan. 1, 1930.

Ser. No. 296,889. THOMA GLASS INC., Fairfield, Iowa. Filed Mar. 5, 1930.



The drawing is lined to indicate the color blue. The words "Glass, Quality, Size," and "Thickness" are disclaimed apart from the mark shown.
For Glass.
Claims use since Jan. 1, 1930.

CLASS 34

Heating, Lighting, and Ventilating Apparatus, Not Including Electrical Apparatus

Ser. No. 297,939. SALVATORE SCOGNAMILLO, New York, N. Y. Filed Mar. 26, 1930.

ELECTROMATIC

For Oil Burners.
Claims use since Feb. 1, 1929.

CLASS 35

Belting, Hose, Machinery Packing, and Non-metallic Tires

Ser. No. 284,237. LIBERTY ENGINEERING CORP., Mount Vernon, N. Y. Filed May 18, 1929.



The applicant hereby disclaims any right to the exclusive use of the representation of a piston ring apart from the mark shown in the drawing.

For Piston Rings.
Claims use since June 9, 1928.

Ser. No. 297,199. MITCHELL TIRE & TUBE CORP., Brooklyn, N. Y. Filed Mar. 12, 1930.

MITCHELL

For Rubber Tires and Tubes.
Claims use since December, 1928.

Ser. No. 297,428. GUSTIN-BACON MANUFACTURING CO., Kansas City, Mo. Filed Mar. 17, 1930.

Federated STORES

For Automobile Accessories—Namely, Tires and Tubes.
Claims use since Feb. 11, 1930.

CLASS 36

Musical Instruments and Supplies

Ser. No. 283,055. RADIO CORPORATION OF AMERICA, New York, N. Y. Filed Apr. 26, 1929.

RCA

For Electric and Mechanical Phonograph and Talking-Machine Apparatus.
Claims use since Aug. 21, 1925.

Ser. No. 283,056. RADIO CORPORATION OF AMERICA, New York, N. Y. Filed Apr. 26, 1929.

Radiola

For Electrical and Mechanical Phonographs and Talking Machines.
Claims use since Aug. 21, 1925.

CLASS 37

Paper and Stationery

Ser. No. 261,373. WILLIAM M. BROWN, doing business as Yardmasters of America, Kansas City, Mo. Filed Feb. 8, 1928.



For Blank Account Books.
Claims use since Feb. 8, 1928.

Ser. No. 293,356. WICKELS METALLPAPIER-WERKE GESELLSCHAFT MIT BESCHRÄNKTER HAFTUNG, Furth, near Nuremberg, Germany. Filed Dec. 6, 1929.

Algamyn

For Metal Paper Leaves and Metal Papers.
Claims use since April, 1903.

Ser. No. 295,948. HENRY LEDERER & BRO., INC., Providence, R. I. Filed Feb. 12, 1930.

The Scotchman

For Money Clips Made of Leather.
Claims use since Jan. 25, 1930.

Ser. No. 297,241. THE COOKE & COBB COMPANY, Brooklyn, N. Y. Filed Mar. 13, 1930.

"DUO-LOX"

For Paper Binders.
Claims use since Mar. 5, 1930.

Ser. No. 297,690. MID-STATES GUMMED PAPER COMPANY, Chicago, Ill. Filed Mar. 21, 1930.

Boncraft

For Gummed Papers.
Claims use since Feb. 1, 1930.

CLASS 38

Prints and Publications

Ser. No. 280,932. THE MOSAIC TILE COMPANY, Zanesville, Ohio. Filed Mar. 18, 1929.

The MOSAIC MESSENGER

For Printed Publication Issued Periodically.
Claims use since Jan. 1, 1929.

Ser. No. 283,519. THE STANDARD STATISTICS COMPANY, INC., New York, N. Y. Filed May 4, 1929.

Standard



The applicant hereby disclaims the word "Standard" apart from the trade-mark as shown.

For Monthly Publication.
Claims use since on or about January, 1906.

Ser. No. 287,595. THE PUBLISHERS FISCAL CORPORATION, doing business as Danger Trail, Inc., New York, N. Y. Filed July 24, 1929.

WIDE WORLD ADVENTURES

For Magazine.
Claims use since on or about May, 1929.

Ser. No. 295,451. ADVERTISING PUBLICATIONS, INC., Chicago, Ill. Filed Feb. 1, 1930.

Advertising Age

For Periodical.
Claims use since Jan. 11, 1930.

Ser. No. 296,209. TOWER MAGAZINES, INCORPORATED, Wilkes-Barre, Pa., and New York, N. Y. Filed Feb. 15, 1930.

the HOME MAGAZINE

For Magazine or Periodical.
Claims use since Nov. 13, 1929.

Ser. No. 296,210. TOWER MAGAZINES, INCORPORATED, Wilkes-Barre, Pa., and New York, N. Y. Filed Feb. 15, 1930.

The NEW MOVIE MAGAZINE

For Magazine or Periodical.
Claims use since Nov. 13, 1929.

Ser. No. 296,584. COLUMBIA UNIVERSITY PRESS, New York, N. Y. Filed Feb. 27, 1930.

The Germanic Review

For Magazine.
Claims use since January, 1926.

Ser. No. 297,067. EVERETT WADDEY CO., INC., Richmond, Va. Filed Mar. 10, 1930.

Contact by Mail

For Monthly Periodical Devoted to Methods of Advertising and Selling.
Claims use since Feb. 15, 1930.

Ser. No. 297,089. LANE PUBLISHING COMPANY, San Francisco, Calif. Filed Mar. 10, 1930.

The Kitchen Cabinet

For Section of a Printed Publication Published at Regular Intervals.
Claims use since on or about Jan. 15, 1929.

Ser. No. 297,339. ABBOTT A. THAYER, St. Bernard, Cincinnati, Ohio. Filed Mar. 14, 1930.

HAPPY LANDINGS

For Semimonthly Publication.
Claims use since Feb. 1, 1930.

Ser. No. 297,509. AMERICAN RADIATOR COMPANY, New York, N. Y. Filed Mar. 19, 1930.

The SOCIAL RADIATOR

For Magazine or Periodical Published Weekly.
Claims use since about Jan. 25, 1930.

CLASS 39

Clothing

Ser. No. 275,631. RICE-NEUMAN CO., Milwaukee, Wis. Filed Nov. 21, 1928.

Betty Rose
LADIES HOSE

No claim being made to the words "Ladies Hose."
For Ladies' Hosiery.
Claims use since Oct. 15, 1928.

Ser. No. 281,568. B. SIEGEL CO., Detroit, Mich. Filed Mar. 29, 1929.

CASTLEWOOD
FASHIONS for MADAME

No claim is made to the words "Fashions for Madam" apart from the mark shown.
For Ladies' Wearing Apparel—Namely, Corsets, Brassières, Girdles, Bandeaux, Corset Waists, Camisoles, Combinations of Brassières and Girdles, Brassières and Corsets, Brassières and Step-In Girdle, Brassière and Petticoats; Combinations of Brassières, Girdles, Vests, and Step-In Girdle; Brassières, Corsets, and Petticoats; Brassières, Girdles, and Bloomers; Brassières, Girdles, and Drawers; Ladies' Vests, Chemises, Step-In Girdle; Women's, Misses', and Children's Knitted and Woven Underwear in One, Two, and Three Piece Garments; Ladies' Wearing Apparel—Namely, Cloaks, Capes, Wraps, Coats, Dresses, Gowns, Hats, Boudoir Caps, Bath Robes, Gloves of Knitted or Textile Fabric or Leather, Negligees, Pajamas, Slips, Kimonos, Dressing Sacks, Petticoats, Tunics, Sport Skirts, Blouses, Middies, Scarfs, Sweaters, Garters, Bathing Suits, and Shoes Made of Leather or Fabric or Combinations Thereof.
Claims use since Feb. 1, 1929.

Ser. No. 281,569. B. SIEGEL CO., Detroit, Mich. Filed Mar. 29, 1929.

Sandra
FASHIONS for MADEMOISELLE

No claim is made to the words "Fashions for Mademoiselle" apart from the mark as shown.
For Ladies' Wearing Apparel—Namely, Corsets, Brassières, Girdles, Bandeaux, Corset Waists, Camisoles, Combinations of Brassières and Girdle, Brassières and Corsets, Brassières and Step-In Girdle, Brassières and Petticoats; Combinations of Brassières, Girdles, Vests, and Step-In Girdle; Brassières, Corsets, and Petticoats; Brassières, Girdles, and Bloomers; Brassières, Girdles and Drawers; Ladies' Vests, Chemises, Step-In Girdle; Women's, Misses', and Children's Knitted and Woven Underwear in One, Two, and Three Piece Garments; Ladies' Wearing Apparel—Namely, Cloaks, Capes, Wraps, Coats, Dresses, Gowns, Hats, Boudoir Caps, Bath Robes, Gloves of Knitted or Textile Fabric or Leather, Negligees, Pajamas, Slips, Kimonos, Dressing Sacks, Petticoats, Tunics, Sport Skirts, Blouses, Middies, Scarfs, Sweaters, Garters, Bathing Suits, and Shoes Made of Leather or Fabric or Combinations Thereof.
Claims use since Feb. 1, 1929.

Ser. No. 282,102. SAMUEL BRILLIANT & COMPANY, Boston, Mass. Filed Apr. 9, 1929.

Dr. Thomas
ARCH
COMFORT-HEALTH

No claim is made to the exclusive right to use the words "Comfort" and "Health" apart from the mark shown.
For Leather Shoes.
Claims use since October, 1928.

Ser. No. 289,628. HOOD RUBBER COMPANY, INC., Watertown, Mass. Filed Sept. 11, 1929.

FAIRWAY

For Rubber Boots and Shoes, Rubber Overshoes, and Rubber-Soled Canvas Shoes.
Claims use since Nov. 25, 1921.

Ser. No. 292,491. FRENCH, SHRINER & URNER, Boston, Mass. Filed Nov. 16, 1929.

DICTATOR
SHOES

No claim being made to the word "Shoes."
For Boots and Shoes of Leather, Fabric, or Combinations Thereof.
Claims use since Sept. 3, 1929.

Ser. No. 294,780. E. SIMON & SONS, New Orleans, La. Filed Jan. 14, 1930.

PLAY NOMIS SUITS

The words "Play Suits" are disclaimed apart from the other features of the mark shown in the drawing.
For Play Suits.
Claims use since Jan. 1, 1930.

Ser. No. 295,210. DOLGEVILLE SLIPPER COMPANY, INC., Dolgeville, N. Y. Filed Jan. 25, 1930.



For Slippers Composed of Satin, Felt, Leather, Printed Duck, or Like Material or Combinations Thereof.
Claims use since Nov. 4, 1929.

Ser. No. 295,360. J. W. CARTER COMPANY, Nashville, Tenn. Filed Jan. 30, 1930.

Quality Five

For Shoes Made Wholly or in Part of Leather, Calfskin, Kid Skin, or of Kangaroo Skin.
Claims use since Dec. 10, 1929.

Ser. No. 295,602. THE BLACK MANUFACTURING CO., Seattle, Wash. Filed Feb. 5, 1930.

WOLF RIVER

For Underwear, Hosiery, Union Suits, Sweaters, Bathing Suits, for Men and Boys.
Claims use since February, 1920.

Ser. No. 296,462. BILTRITE COLLAR COMPANY, New York, N. Y. Filed Feb. 24, 1930.

B
BRITAIN
MADE IN TROY, N.Y.

Applicant hereby disclaims the geographical terms "Britain" and "Made in Troy, N. Y." apart from the mark as shown on the drawing.
For Men's Collars.
Claims use since Mar. 5, 1925.

Ser. No. 296,560. PINCUS BROTHERS INCORPORATED, Philadelphia, Pa. Filed Feb. 21, 1930.

NORTHBROOKE

For Men's and Boys' Suits, Topcoats, Reefers, and Overcoats.
Claims use since Apr. 1, 1929.

Ser. No. 296,598. HOSIERY GUILD, INC., Troy, N. Y. Filed Feb. 27, 1930.

Guild Mode

Applicant hereby disclaims for the purpose of this registration the word "Mode" apart from the mark as shown in the drawing.
For Hosiery, Including Hosiery for Men, Women, Misses, Children, and Infants.
Claims use since Dec. 20, 1929.

Ser. No. 297,022. THE MANHATTAN SHIRT CO., New York, N. Y. Filed Mar. 8, 1930.

MANSCO

For Knit Underwear and Cut and Sewn Underwear, as Follows: Shirts, Drawers, and Union Suits; Athletic Drawers, Also Known as Running Pants or Track Pants, Sport Shirts, Dress Shirts, and Negligee Shirts, Pajamas, and Sweaters.
Claims use since June 16, 1915.

Ser. No. 297,027. NEUSTADTER BROS., San Francisco, Calif. Filed Mar. 8, 1930.

ENBEE

For Men's and Boys' Coats, Jerkins, Vests, Blouses, and Windbreakers Made of Leather, Knitted, and Woven Materials.
Claims use since Feb. 15, 1930.

Ser. No. 297,076. HARRIS MANUFACTURING COMPANY, INC., New York, N. Y. Filed Mar. 10, 1930.



The word "Kote" being disclaimed apart from the mark as shown in the drawing.
For Sport Coats and Jackets for Men, Women, and Children.
Claims use since Mar. 1, 1930.

Ser. No. 297,109. WORTHY MANUFACTURING COMPANY, Chicago, Ill. Filed Mar. 10, 1930.



For Children's Play Suits and Overalls.
Claims use since Sept. 27, 1929.

Ser. No. 297,250. FASHION PARK ASSOCIATES, INC., Rochester, N. Y. Filed Mar. 13, 1930.

TOWN WAY

For Men's Coats, Vests, Pants, and Overcoats.
Claims use since about Feb. 15, 1930.

Ser. No. 297,251. FASHION PARK ASSOCIATES, INC., Rochester, N. Y. Filed Mar. 13, 1930.

KASAMA

For Men's Coats, Vests, Pants, and Overcoats.
Claims use since about Jan. 2, 1930.

Ser. No. 297,293. BARRON-ANDERSON CO., Boston, Mass. Filed Mar. 14, 1930.

STONE-FACE

For Men's Topcoats, Overcoats, Suits, Vests, and Trousers.
Claims use since Feb. 10, 1930.

Ser. No. 297,342. J. M. WISE CO. INC., New York, N. Y. Filed Mar. 14, 1930.



No claim being made to the exclusive use of the word "Flannel" apart from the mark as shown in the drawing.
For Men's Lounging Apparel—Namely, Lounge Suits, Dressing Gowns, and Pajamas.
Claims use since Nov. 25, 1929.

Ser. No. 297,577. BALDWIN HOSIERY COMPANY, New York, N. Y. Filed Mar. 20, 1930.

STRONGTEX

For Hosiery for Men, Women, and Children.
Claims use since Feb. 15, 1930.

Ser. No. 297,580. BOTTUM & TORRANCE CO., Bennington, Vt. Filed Mar. 20, 1930.

MOLLY STARK

For Hosiery.
Claims use since Sept. 25, 1929.

Ser. No. 297,742. DAVID JACOBS CORPORATION, New York, N. Y. Filed Mar. 22, 1930.



For Hosiery.
Claims use since Jan. 1, 1930.

Ser. No. 297,889. BROHMAN COMPANY, New York, N. Y. Filed Mar. 26, 1930.

Bebe Clarté

For Children's Dresses.
Claims use since Jan. 10, 1930.

CLASS 40

Fancy Goods, Furnishings, and Notions

Ser. No. 296,859. DOO DAD COMPANY, New York, N. Y. Filed Mar. 5, 1930.

DOO DAD

THE ORIGINAL

For Window and Shower Curtain Tie-Backs for Curtains for Windows, Doors, and Showers, Said Tie-Backs Being Made of Oiled Cloth.
Claims use since Feb. 25, 1930.

CLASS 42

Knitted, Netted, and Textile Fabrics

Ser. No. 281,575. THE STEARNS & FOSTER COMPANY, Lockland, Ohio. Filed Mar. 29, 1929.

FABRAY

For Ticking Piece Goods.
Claims use since Mar. 20, 1929.

Ser. No. 294,786. ALABAMA MILLS COMPANY, Birmingham, Ala. Filed Jan. 15, 1930.



For Drills, Sheetings, Jeans, Hickory and Express Stripes, Flannels, and Other Goods Which May be Manufactured from Time to Time in the Piece or Bolt and Then put Up in Bales and Rolls.
Claims use since December, 1928.

Ser. No. 295,817. E. F. TIMME & SON, New York, N. Y. Filed Feb. 8, 1930.

Paca-Down

A Timme TUFT

No claim being made to the exclusive use of the words "Timme Tuft" apart from the mark as shown in the drawing.
For Pile Fabrics in the Piece.
Claims use since Mar. 16, 1929.

Ser. No. 295,818. E. F. TIMME & SON, New York, N. Y. Filed Feb. 8, 1930.

Paca-Krima

A Timme TUFT

No claim being made to the exclusive use of the words "Timme Tuft" apart from the mark as shown in the drawing.
For Pile Fabrics in the Piece.
Claims use since Sept. 26, 1929.

Ser. No. 296,201. ROYAL CURTAIN MANUFACTURING CO., Boston, Mass. Filed Feb. 18, 1930.

ROY-ART

For Marquisette Curtain.
Claims use since Jan. 1, 1925.

Ser. No. 296,938. ILLINOIS SHADE CLOTH CORPORATION, Chicago Heights, Ill. Filed Mar. 6, 1930.

DUROLIN

For Window-Shade Cloth in Piece Goods.
Claims use since Mar. 10, 1923.

CLASS 43

Thread and Yarn

Ser. No. 296,635. MICHEL DASSONVILLE, Paris, France. Filed Feb. 28, 1930.

MIKILAINE

For Thread of Artificial Vegetable Material and for Mixtures of the Same with Cotton, Silk, or Wool.
Claims use since Apr. 23, 1929.

Ser. No. 297,932. MAX POLLACK & CO., INC., New York, N. Y. Filed Mar. 26, 1930.

1/X

For Sewing Threads.
Claims use since about 1894.

Ser. No. 297,933. MAX POLLACK & CO., INC., New York, N. Y. Filed Mar. 26, 1930.

4/X

For Sewing Threads.
Claims use since about 1894.

Ser. No. 297,934. MAX POLLACK & CO., INC., New York, N. Y. Filed Mar. 26, 1930.

6/X

For Sewing Threads.
Claims use since about 1894.

CLASS 44

Dental, Medical, and Surgical Appliances

Ser. No. 264,264. PETER TAMES, doing business as Melrose Hospital Uniform Co., New York, N. Y. Filed Apr. 3, 1928.

MELROSE HOSPITAL LINENE

No claim is made to the exclusive use of the words "Hospital Linene" apart from the mark shown in the drawing.
For Hospital Garments—Namely, Operating Gowns, Nurses' Gowns, Patients' Examining Gowns, Contagious-Ward Gowns, Operating Caps, Sleeping Gowns, Bed Gowns, Dental Gowns, Dental Blouses, Bath Robes, Laboratory Gowns; Operating Suits, Coats, Pants; Porters' Uniforms, Children's Bed Gowns, Infants' Gowns, Orderlies' Uniforms.
Claims use since January, 1925.

Ser. No. 294,846. DR. STEVEN'ZS INC., Minneapolis, Minn. Filed Jan. 16, 1930.

HELTHWEL

For Water Jars Possessing Radioactive Properties, Which are Used for Therapeutic Purposes.
Claims use since Dec. 5, 1929.

Ser. No. 295,989. THE ARMAND COMPANY, Des Moines, Iowa. Filed Feb. 14, 1930.

CRYSTAL ICER

No claim is made to the use of the word "Crystal" apart from the mark shown in the drawing.
For Massage Implement.
Claims use since Jan. 2, 1930.

Ser. No. 296,993. VEREINIGTE PAPIERWERKE AKTIENGESELLSCHAFT, Nuremberg, Germany. Filed Mar. 7, 1930.

CAMELIA

For Sanitary Towels, Cellulose Wadding and Belts and Suspenders for Catamenial Appliances.
Claims use since Jan. 23, 1925.

Ser. No. 297,088. THE KROGER GROCERY & BAKING CO., Cincinnati, Ohio. Filed Mar. 10, 1930.

Country Club



For Toothpicks.
Claims use since July 1, 1929.

Ser. No. 297,802. DOWNER PRODUCTS COMPANY, Sioux City, Iowa. Filed Mar. 24, 1930.

DEE DEE

For Removable Sanitary Pads for Diapers and the Like.
Claims use since October, 1927.

CLASS 45

Beverages, Nonalcoholic

Ser. No. 277,224. SCHIMMEL & CO., AKTIENGESELLSCHAFT, Miltitz, near Leipzig, Germany. Filed Dec. 26, 1928.

KALISTAROM

For Concentrated Alcoholic Essences to be Used as Flavourings in the Making of Soft Drinks Such as Orangeades, Lemonades, Cola.
Claims use since June 16, 1928.

Ser. No. 283,007. SCHIMMEL & CO., AKTIENGESELLSCHAFT, Miltitz, near Leipzig, Germany. Filed Apr. 25, 1929.

OPTAROM

For Concentrated Alcoholic Essences to be Used as Flavourings in the Making of Soft Drinks Such as Orangeades, Lemonades, Cola.
Claims use since Dec. 15, 1928.

Ser. No. 286,366. BERTRAM C. CRAWFORD, doing business as Dri-Juce Bottling Co., Detroit, Mich. Filed June 29, 1929.

Cavalier

For Ginger Ale.
Claims use since December, 1927.

Ser. No. 294,241. JOSEPH G. POLAKOFF, doing business as Polly Brand Products Company, Newark, N. J. Filed Dec. 30, 1929.

JIN JOLA

For Syrup or Syrups for Making Nonalcoholic, Noncereal, Maltless Beverages.
Claims use since May 10, 1929.

Ser. No. 294,465. CALIFORNIA PACKING CORPORATION, San Francisco, Calif. Filed Jan. 7, 1930.

Del Monte

For Fruit Juices Sold as Soft Drinks and Ginger Ale.
Claims use since 1910, on fruit juices, since Dec. 28, 1926, on ginger ale.

Ser. No. 294,468. CALIFORNIA PACKING CORPORATION, San Francisco, Calif. Filed Jan. 7, 1930.



The lining on the drawing indicates the colors green, red, and gold.
For Fruit Juices Sold as Soft Drinks, and Ginger Ale.
Claims use since 1910 on fruit juices; since Dec. 18, 1926, on ginger ale.

Ser. No. 297,673. HOLLYWOOD DRY CORPORATION, doing business as Purity Bonded Products, Inc., Los Angeles, Calif. Filed Mar. 21, 1930.

TANGAREE

For Nonalcoholic Maltless Fruit Juice Syrup and Bottler's Concentrate Used in the Manufacture of Soft Drinks.
Claims use since Aug. 14, 1929.

CLASS 46

Foods and Ingredients of Foods

Ser. No. 227,426. SANFORD OVIEDO TRUCK GROWERS, INC., Sanford, Fla. Filed Feb. 17, 1926.

7-11 BOTH WINNERS

The drawing is lined for the colors blue and yellow.
For Fresh Vegetables—Namely, Hand Graded and Packed Corn, Beets, Beans, Celery, Chicory, Carrots, Cabbage, Cucumbers, Cauliflower, Chinese Cabbage, Onions, Squash, Lettuce, Peppers, Tomatoes, Romaine, Eggplant, Escarole, Irish Potatoes, and Sweet Potatoes.
Claims use since Feb. 10, 1926.

Ser. No. 277,762. KARITANE PRODUCTS SOCIETY LIMITED, Wellington, New Zealand. Filed Jan. 9, 1929.

KARIOL

For Infants' Food.
Claims use since February, 1927.

Ser. No. 277,763. KARITANE PRODUCTS SOCIETY LIMITED, Wellington, New Zealand. Filed Jan. 9, 1929.

KARILAC

For Infants' Food.
Claims use since September, 1927.

Ser. No. 281,272. D & M CANDY CORPORATION, Chenango Bridge, N. Y. Filed Mar. 25, 1929.



The words "Best Yet" and "Chocolate Covered" are hereby disclaimed apart from the mark as shown in the drawing.
For Candy.
Claims use since Mar. 16, 1929.

Ser. No. 281,536. HARRY M. WOLFE, New York, N. Y. Filed Mar. 28, 1929.

VITALAC

For Milk Food Powder Consisting of Dried Milk and Cereals.
Claims use since Mar. 1, 1929.

Ser. No. 284,002. GEORGE M. HOOPER, Fremont, Nebr. Filed May 14, 1929.

KEG'S KRUNCHES

For Oil-Baked Peanuts.
Claims use since July 1, 1928.

Ser. No. 288,791. FRANCO-ITALIAN PACKING CO., Terminal, Calif. Filed Aug. 21, 1929.

SEA ACE

For Canned Tuna Fish.
Claims use since July 17, 1929.

Ser. No. 289,672. LEO FEDER & SON, Brooklyn, N. Y. Filed Sept. 12, 1929.

LA PRIMADONNA

For Canned Tomato Paste and Olive Oil.
Claims use since Jan. 15, 1929.

Ser. No. 290,407. GUARANTY PACKERS, INC., San Antonio, Tex. Filed Sept. 30, 1929.



The drawing is lined to indicate red and black. No claim is made to the words "Dog Food For Dogs and All Carnivorous Animals" apart from the remainder of the mark as shown.
For Canned Dog Food.
Claims use since September, 1927.

Ser. No. 290,739. THE CANADIAN FISHERIES, LTD., Halifax, Nova Scotia, Canada, and Portland, Me. Filed Oct. 7, 1929.

SEASWEET

For Canned Lobster.
Claims use since July 18, 1929.

Ser. No. 291,020. ROWLAND B. PAGE, doing business as Page Milk Co., Merrill, Wis. Filed Oct. 12, 1929.

ELITE

For Canned Evaporated Milk, Condensed Milk, and Milk Powder.
Claims use since May, 1926.

Ser. No. 291,070. C. A. STRAUBEL COMPANY, Green Bay, Wis. Filed Oct. 14, 1929.

MAYFLOWER.

Applicant is the owner of registration No. 34,625.
For Cheese.
Claims use since 1885.

Ser. No. 291,899. ANNA MYERS PURE FOOD INC., Newark, N. J. Filed Oct. 22, 1929.

Mrs. Anna Myer's

The trade-mark shown in the drawing is a facsimile of the signature of Mrs. Anna Myers, originator of applicant's business.
For Mayonnaise, Relish Spread Made of Mayonnaise and Vegetables, Pickled Beets, Jams, and Jellies.
Claims use since Aug. 15, 1927.

Ser. No. 291,890. MOSES REINGEWIRTZ, doing business as American Delight Food Product Co., New York, N. Y. Filed Nov. 1, 1929.



Applicant disclaims the descriptive words "Brand" and "Egg Cream Chocolate."
For a Chocolate Beverage.
Claims use since Oct. 30, 1929.

Ser. No. 292,719. CHRIS. DE HAVEN, doing business as White Palace Restaurants, Sioux City, Iowa. Filed Nov. 22, 1929.

White Palace

For Sandwiches, Rolls, and Doughnuts.
Claims use since March, 1929.

Ser. No. 294,316. NATIONAL CONFECTION CORPORATION, Detroit, Mich. Filed Jan. 2, 1930.

CHOCLET COW

For Chocolate-Coated Ice-Cream Bricks.
Claims use since Sept. 1, 1929.

Ser. No. 294,482. MCLAREN-CONSOLIDATED CONE CORPORATION, Dayton, Ohio. Filed Jan. 7, 1930.



The representation of the ice-cream cone is disclaimed except as a part of the mark shown and the words "McLaren" and "Real Cake" are disclaimed as a part of the mark shown.
For Ice-Cream Cones.
Claims use since on or about Jan. 1, 1916.

Ser. No. 294,931. SOCIÉTÉ INDUSTRIELLE DE LORIENT, ANCIENS ETABLISSEMENTS A. GILLET & CIE. ET OUIZILLE & CIE., MAISON FONDÉE EN 1834, Lorient, France. Filed Jan. 18, 1930.



All reading matter except "Aug^te Gillet" are disclaimed apart from the mark as shown in the drawing.
For Sardines in Oil.
Claims use since Oct. 19, 1859.

Ser. No. 295,557. CLEAR LAKE CANNERY, INC., San Francisco and Upper Lake, Calif. Filed Feb. 4, 1930.



For Canned Vegetables.
Claims use since 1905.

Ser. No. 295,636. CLAUDE R. PINSON, Hasen, Ark. Filed Feb. 5, 1930.

Wholesome Whole Grain
SNOW CREME

The words "Wholesome Whole Grain" are disclaimed apart from the other features of the mark shown in the drawing.
For Cereal Breakfast Food.
Claims use since Dec. 28, 1929.

Ser. No. 295,692. PABST CORPORATION, Milwaukee, Wis. Filed Feb. 6, 1930.

MILWAUKEE BOY

For Malt Syrup.
Claims use since Oct. 3, 1928.

Ser. No. 295,904. LEONARD, CROSSET & RILEY, INC., Moorhead, Minn. Filed Feb. 11, 1930.



The descriptive word "Brand" is disclaimed apart from the other features of the mark shown in the drawing.
For Potatoes in Their Natural State.
Claims use since July 25, 1929.

Ser. No. 296,147. PURITAN MILLS, Atlanta, Ga. Filed Feb. 17, 1930.

BIG BOY

For Dairy Feeds.
Claims use since January, 1918.

Ser. No. 296,327. EDDY'S STEAM BAKERY, INC., Helena, Mont. Filed Feb. 21, 1930.

Eddy's



For Bread.
Claims use since June 6, 1916.

Ser. No. 296,768. PE CO POP CO. OF BALTIMORE CITY, Baltimore, Md. Filed Mar. 3, 1930.



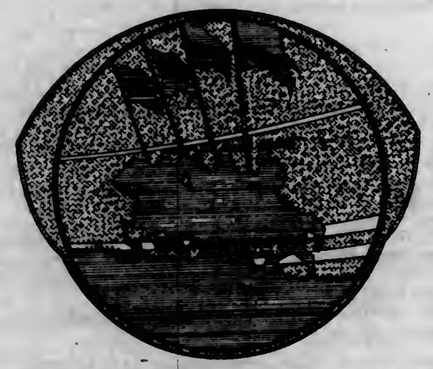
For Confection Comprising a Combination of Nuts, Pop Corn, and Syrup.
Claims use since Feb. 4, 1908.

Ser. No. 296,872. THE RALPH H. JONES COMPANY, Cincinnati, Ohio. Filed Mar. 5, 1930.

CAPREE

For Bottled Salad Dressing.
Claims use since Mar. 5, 1930.

Ser. No. 296,988. STUHR-SEIDL COMPANY, Minneapolis, Minn. Filed Mar. 7, 1930.



The dotted cross-hatching as shown in the drawing is used to indicate the color orange, and the horizontal lining as shown in the drawing is used to indicate the color blue. No claim is made to the words "Vitamins, Protein, Iodine," and "Mineral" apart from the mark as shown on the drawing.
For Feed Concentrates for Fowls and Animals—to wit, 32% Dairy Concentrate, 40% Dairy Concentrate, Buttermilk-Molasses Egg Mash, Buttermilk Egg Mash, Egg Mash.
Claims use since Dec. 15, 1928.

Ser. No. 297,004. FAIRCHILD BROS. & FOSTER, New York, N. Y. Filed Mar. 8, 1930.

RENESENCE

For Product Obtained by the Direct Extraction of the Entire Fresh Calf Stomach to be Used in the Form of Dry Powder or Liquid for the Preparation of Curds and Whey.
Claims use since Feb. 20, 1930.

Ser. No. 297,059. CONSUMERS BISCUIT COMPANY, New Orleans, La. Filed Mar. 10, 1930.



Applicant disclaims the exclusive right to the representation of the goods.
For Cakes and Biscuits.
Claims use since Oct. 1, 1929.

Ser. No. 297,124. CURTIS-HELMICK-PUGSLEY COMPANY, Minneapolis, Minn. Filed Mar. 11, 1930.

BoBo

For Candy.
Claims use since Feb. 1, 1930.

Ser. No. 297,142. SOL MAYER AND SON, San Angelo, Tex. Filed Mar. 11, 1930.



For Cattle, Sheep, and Goats.
Claims use since 1900.

Ser. No. 297,471. EUGENE DAVIDSON, Washington, D. C. Filed Mar. 18, 1930.

The Number

For Candies.
Claims use since Mar. 12, 1930.

Ser. No. 297,472. JOSEPH DI SANTO, doing business as Di Santo & Co., Duluth, Minn. Filed Mar. 18, 1930.

MAZZINI

The word "Mazzini" refers to Giuseppe Mazzini, the Italian patriot and statesman, born in Genoa, Italy, on June 22, 1805, and who died in Pisa, Italy, on Mar. 10, 1872. Applicant is the owner of registrations No. 190,672, No. 227,054, and No. 265,912.

For Fresh Honeydew Melons, Fresh Carrots, Fresh Cauliflower, Fresh Cabbage, Fresh Celery, Fresh Cranberries, Fresh Strawberries, Fresh Grapefruits, Canned Pineapple, Peanut Butter, Vinegar, Granulated Cane Sugar, and Bran for Livestock Feed.

Claims use since about Oct. 5, 1929.

Ser. No. 297,741. THE ITALIAN SUPPLY CO., Lock Haven, Pa. Filed Mar. 22, 1930.

YANKEE CLUB

For Malt Syrup.
Claims use since Jan. 1, 1930.

Ser. No. 297,799. WILLIAM DAVIS & CO., St. Louis, Mo. Filed Mar. 24, 1930.

Deco

For Malt Syrup.
Claims use since Mar. 1, 1923.

Ser. No. 297,955. BUNTE BROTHERS, doing business as Bunte, Chicago, Ill. Filed Mar. 27, 1930.

EDGEBROOK

For Candy.
Claims use since Feb. 15, 1930.

Ser. No. 297,973. S. H. KRESS & CO., New York, N. Y. Filed Mar. 27, 1930.

MERCED

For Chocolates.
Claims use since Mar. 15, 1930.

Ser. No. 298,086. NATIONAL MACARONI MANUFACTURERS ASSOCIATION, Braidwood, Ill. Filed Mar. 28, 1930.



For Macaroni, Spaghetti, and Noodles.
Claims use since on or about Jan. 2, 1930.

Ser. No. 298,176. THE JOHN C. GROUB COMPANY, doing business as The Jay C Stores, Seymour, Ind. Filed Mar. 31, 1930.

Jay C

For Nut Margarin.
Claims use since Jan. 1, 1930.

CLASS 50

Merchandise Not Otherwise Classified

Ser. No. 294,849. INTERTYPE CORPORATION, New York, N. Y. Filed Jan. 16, 1930.

INTERTYPE VOGUE

No claim being made to the exclusive right to the use of the word "Vogue" apart from the mark shown in the drawing. Said corporation is owner of registration No. 91,876 dated Jan. 8, 1918.

For Matrices for Use in Typographical Machines.
Claims use since Nov. 20, 1929.

Ser. No. 295,965. VULCAN PROOFING COMPANY, Brooklyn, N. Y. Filed Feb. 12, 1930.

KIDROY

For Imitation Leather Used for Belts, Shoe Linings, Bags, Pocketbooks, Etc.
Claims use since March, 1929.

Ser. No. 297,794. CHICAGO GLASS NOVELTY CORPORATION, Marion, Ind. Filed Mar. 24, 1930.

CRYSTALUX

For Sign Letters.
Claims use since May 18, 1929.

TRADE-MARK REGISTRATIONS GRANTED

[ACT OF FEBRUARY 20, 1905]

MAY 13, 1930

270,600. FABRICS MADE WHOLLY OR PARTIALLY OF CELLULOSE DERIVATIVES. CELANESE CORPORATION OF AMERICA, New York, N. Y.
Filed January 14, 1930. Serial No. 294,761. PUBLISHED FEBRUARY 25, 1930. Class 42.

270,601. LAMINATED YARNS. LAMICEL PRODUCTS INC., New York, N. Y.
Filed January 10, 1930. Serial No. 294,641. PUBLISHED MARCH 4, 1930. Class 48.

270,602. PILE FABRICS IN THE PIECE. E. F. TIMME & SON, New York, N. Y.
Filed January 9, 1930. Serial No. 294,602. PUBLISHED MARCH 4, 1930. Class 42.

270,603. COTTON AND LINEN BED SHEETS, SHEETING, WIDE SHEETING, PILLOWCASES, AND MUSLIN PILLOW TUBING. KLINE BROTHERS CO., doing business as J. G. Kline Company, New York, N. Y.
Filed January 8, 1930. Serial No. 294,535. PUBLISHED MARCH 4, 1930. Class 42.

270,604. HANDKERCHIEFS. DAVID HELLER, doing business as Heller & Long, New York, N. Y.
Filed January 8, 1930. Serial No. 294,530. PUBLISHED FEBRUARY 25, 1930. Class 42.

270,605. COTTON PIECE GOODS. WELLINGTON, SEARS & COMPANY, Boston, Mass.
Filed January 6, 1930. Serial No. 294,452. PUBLISHED FEBRUARY 25, 1930. Class 42.

270,606. CERTAIN EARTHENWARE ARTICLES. THE ROSEVILLE POTTERY COMPANY, Zanesville, Ohio.
Filed January 4, 1930. Serial No. 294,402. PUBLISHED FEBRUARY 25, 1930. Class 30.

270,607. PIECE GOODS OF WOOLEN FOR USE IN THE MANUFACTURE OF WEARING APPAREL. CAMDEN WOOLEN CO., Camden, Me.
Filed January 3, 1930. Serial No. 294,339. PUBLISHED FEBRUARY 25, 1930. Class 42.

270,608. SILK PIECE GOODS. GRUNEWALD NOVICK COMPANY, Chicago, Ill.
Filed December 31, 1929. Serial No. 294,251. PUBLISHED FEBRUARY 18, 1930. Class 42.

270,609. BOTTLES, JARS, JUGS, DECANTERS, AND CRUETS, ALL MADE OF GLASS. OWENS-ILLINOIS GLASS COMPANY, Toledo, Ohio.
Filed December 30, 1929. Serial No. 294,238. PUBLISHED MARCH 4, 1930. Class 33.

270,610. WOOLEN GOODS IN THE PIECE AND IN CUT LENGTHS. S. STEIN & CO., New York, N. Y.
Filed December 28, 1929. Serial No. 294,188. PUBLISHED FEBRUARY 25, 1930. Class 42.

270,611. COTTON-PIECE GOODS. NINETY SIX COTTON MILL, Ninety Six, S. C.
Filed December 28, 1929. Serial No. 294,170. PUBLISHED MARCH 4, 1930. Class 42.

270,612. KNITTED, NETTED, AND TEXTILE FABRICS OF ARTIFICIAL SILK. I. G. FARBENINDUSTRIE AKTIENGESELLSCHAFT, Frankfort-on-the-Main, Germany.
Filed December 28, 1929. Serial No. 294,155. PUBLISHED FEBRUARY 25, 1930. Class 42.

270,613. ARTIFICIAL SILK IN THE NATURE OF THREAD AND CELLULOSE ACETATE AND VISCOSE RAYON YARN. AMERICAN CHATILLON CORPORATION, New York, N. Y.
Filed December 26, 1929. Serial No. 294,048. PUBLISHED FEBRUARY 25, 1930. Class 43.

270,614. CERTAIN NAMED GOODS IN THE PIECE. QUEEN VALLEY FABRICS, INC., Providence, R. I.
Filed December 24, 1929. Serial No. 294,039. PUBLISHED FEBRUARY 25, 1930. Class 42.

270,615. CURTAINS OF COTTON AND COTTON AND WOOL TEXTILE MATERIAL. BOOTT MILLS, Lowell, Mass.
Filed December 18, 1929. Serial No. 293,819. PUBLISHED FEBRUARY 25, 1930. Class 42.

270,616. CHIFFON AND SILK PIECE GOODS. L. & M. STERN, New York, N. Y.
Filed December 12, 1929. Serial No. 293,607. PUBLISHED FEBRUARY 25, 1930. Class 42.

270,617. ICE SKATES. L. KLEIN, INC., Chicago, Ill.
Filed December 4, 1929. Serial No. 293,224. PUBLISHED MARCH 4, 1930. Class 22.

270,618. PAINTS AND PAINT ENAMELS. INDIANAPOLIS PAINT & COLOR CO., Indianapolis, Ind.
Filed January 15, 1930. Serial No. 294,924. PUBLISHED FEBRUARY 25, 1930. Class 16.

270,619. LYE. B. T. BABBITT, INC., New York, N. Y.
Filed January 9, 1930. Serial No. 294,565. PUBLISHED FEBRUARY 25, 1930. Class 6.

270,620. INSECTICIDES. THE FOREST CHEMICAL COMPANY, REGISTERED, Franquelin and Montreal, Quebec, Canada.
Filed July 29, 1929. Serial No. 287,812. PUBLISHED FEBRUARY 25, 1930. Class 6.

270,621. PERFUMES, PREPARATIONS FOR TOILET, HYGIENE AND BEAUTY. "LA COMPAGNIE DES PRODUITS EXKI LIMITEE" ("EXKI PRODUCTS COMPANY LIMITED"), Montreal, Quebec, Canada.
Filed July 25, 1929. Serial No. 287,667. PUBLISHED MARCH 4, 1930. Class 6.

270,622. HAIR GROWER, PRESSING OIL, AND SHAMPOO. MINNIE BARKER, Chicago, Ill.
Filed June 19, 1929. Serial No. 285,806. PUBLISHED MARCH 4, 1930. Class 6.

270,623. FACE CREAMS, PREPARATIONS IN CREAM AND LOTION FORM FOR USE ON THE FACE AND HANDS, FOR AFTER-SHAVING PURPOSES, FOR SUNBURN, AND CHAPPED LIPS. DR. H. TISCHER CORPORATION, Chicago, Ill.
Filed December 3, 1929. Serial No. 293,199. PUBLISHED FEBRUARY 25, 1930. Class 6.

270,624. ARC LAMPS DESIGNED FOR THERAPEUTIC PURPOSES. THE SUPER-POWER ARC LAMP COMPANY, Geneva, Ohio.
Filed December 2, 1929. Serial No. 293,162. PUBLISHED FEBRUARY 11, 1930. Class 44.

270,625. COMPOSITION OF MATTER WHICH IS SPRAYED UPON COAL AND PERMEATES THEREIN AND USED TO INSURE PERFECT COMBUSTION AND MORE EFFICIENT BURNING OF THE COAL. FRED L. MENNIE, doing business as Mennie Manufacturing Co., Omaha, Nebr.
Filed December 2, 1929. Serial No. 293,148. PUBLISHED FEBRUARY 18, 1930. Class 6.

270,626. SHOES MADE OF LEATHER, CLOTH, CANVAS, OR COMBINATIONS THEREOF. BOYD-WELSH SHOE COMPANY, St. Louis, Mo.
Filed November 28, 1929. Serial No. 292,792. PUBLISHED FEBRUARY 25, 1930. Class 39.

270,627. SHOES OF LEATHER, RUBBER, AND/OR FABRIC. FINKOVITCH-LEVINE SHOE COMPANY, Boston, Mass.
Filed November 22, 1929. Serial No. 292,776. PUBLISHED FEBRUARY 25, 1930. Class 39.

270,628. BROODERS FOR CHICKS AND THE LIKE. ANDERSON BOX COMPANY, Indianapolis, Ind.
Filed November 8, 1929. Serial No. 292,148. PUBLISHED MARCH 4, 1930. Class 50.

270,629. HATS FOR MEN AND CHILDREN. THE NO NAME HAT COMPANY, Danbury, Conn., and New York, N. Y.
Filed November 7, 1929. Serial No. 292,119. PUBLISHED FEBRUARY 25, 1930. Class 39.

270,630. HATS FOR MEN AND CHILDREN. THE NO NAME HAT COMPANY, Danbury, Conn., and New York, N. Y.
Filed November 7, 1929. Serial No. 292,118. PUBLISHED FEBRUARY 25, 1930. Class 39.

270,631. HATS FOR MEN AND CHILDREN. THE NO NAME HAT COMPANY, Danbury, Conn., and New York, N. Y.
Filed November 7, 1929. Serial No. 292,117. PUBLISHED MARCH 4, 1930. Class 39.

270,632. MEN'S, WOMEN'S, AND CHILDREN'S KNIT WEAR—NAMELY, GLOVES, SWEATERS, HATS AND CAPS, BATHING SUITS, AND UNDERWEAR. ROYAL KNITWEAR CO., Buffalo, N. Y.
Filed October 30, 1929. Serial No. 291,798. PUBLISHED FEBRUARY 25, 1930. Class 39.

270,633. CONTAINERS OF A DIAPHANOUS MATERIAL MADE IN TUBE OR ENVELOPE LIKE FORMATION AND ADAPTED AS A CLOSURE FOR ARTICLES OF MERCHANDISE, SUCH, FOR EXAMPLE, AS CIGARS. HUMITUBE MFG. CO., Peoria, Ill.
Filed October 26, 1929. Serial No. 291,620. PUBLISHED MARCH 4, 1930. Class 2.

270,634. CERTAIN NAMED WEARING APPAREL. STERN BROTHERS, New York, N. Y.
Filed September 20, 1929. Serial No. 290,046. PUBLISHED FEBRUARY 25, 1930. Class 39.

270,635. SHOES CONSTRUCTED OF LEATHER, RUBBER, OR FABRIC OR COMBINATIONS OF THESE MATERIALS. DAVID FEINFELD, doing business as French Bootery, Birmingham, Ala.
Filed September 17, 1929. Serial No. 289,888. PUBLISHED FEBRUARY 25, 1930. Class 39.

270,636. FABRIC SCARFS AND SCARFS COMBINED WITH HATBANDS TO BE WRAPPED AND TIED AROUND THE HEAD. ALEXANDER M. GREAN, doing business as Grean Company, New York, N. Y.
Filed September 5, 1929. Serial No. 289,352. PUBLISHED FEBRUARY 25, 1930. Class 39.

270,637. LADIES' WEARING APPAREL—NAMELY, SKIRTS FOR OUTER WEAR, COATS, SUITS, FUR PIECES, FUR COATS, CORSETS, AND COTTON, SUEDE, AND KID GLOVES. POLLY SHOPPE, INC., New Orleans, La.
Filed August 31, 1929. Serial No. 289,249. PUBLISHED MARCH 4, 1930. Class 39.

270,638. MEN'S, WOMEN'S, AND CHILDREN'S BOOTS, SHOES, AND SLIPPERS MADE WHOLLY OR IN PART OF LEATHER, RUBBER, CANVAS, OR TEXTILE MATERIAL. WOODBURY SHOE MFG. CO., Derry, N. H.
Filed August 7, 1929. Serial No. 288,264. PUBLISHED MARCH 4, 1930. Class 39.

270,639. MATCHES. AMTORG TRADING CORPORATION, New York, N. Y.
Filed August 6, 1929. Serial No. 288,178. PUBLISHED MARCH 4, 1930. Class 9.

270,640. AIR AND WATER VEHICLE SERVICE TOWERS, TIRE AND INFLATING VALVES. SERVICE EQUIPMENT COMPANY, South Gate, Calif.
Filed July 30, 1929. Serial No. 287,891. PUBLISHED MARCH 4, 1930. Class 18.

270,641. GRATE BARS. TAWLKS GRATE BAR COMPANY, Everett, Wash.
Filed July 2, 1929. Serial No. 286,520. PUBLISHED MARCH 4, 1930. Class 34.

270,642. FROZEN EGGS—NAMELY, FROZEN WHOLE EGGS, FROZEN EGG WHITES, AND FROZEN EGG YOLKS. STANDARD BRANDS INCORPORATED, Dover, Del., and Cincinnati, Ohio.
Filed November 15, 1929. Serial No. 292,467. PUBLISHED MARCH 4, 1930. Class 46.

270,643. PREPARED FEED FOR CATTLE, LIVESTOCK, AND POULTRY. JOSEPH C. ZIMMERMAN, doing business as Bloomington Milling Company, Bloomington, Ill.
Filed November 12, 1929. Serial No. 292,346. PUBLISHED MARCH 4, 1930. Class 46.

270,644. TOURIST PARK EQUIPMENT SUCH AS FABRICATED GATEWAYS, PRECUT LUMBER FOR CABINS AND SHELTERS, AND LUMBER. FLOYD L. MUSGROVE, Topeka, Kans.
Filed October 30, 1929. Serial No. 291,782. PUBLISHED FEBRUARY 18, 1930. Class 12.

270,645. BITUMINOUS COAL. SUNNYBROOK COAL CO., Detroit, Mich.
Filed October 28, 1929. Serial No. 291,701. PUBLISHED MARCH 4, 1930. Class 1.

270,646. POULTRY FEED. FEEDERS SUPPLY AND MANUFACTURING CO., Kansas City, Mo.
Filed October 14, 1929. Serial No. 291,055. PUBLISHED MARCH 4, 1930. Class 46.

270,647. WHEAT FLOUR. VICTORIA ELEVATOR CO., Minneapolis, Minn.
Filed October 7, 1929. Serial No. 290,769. PUBLISHED MARCH 4, 1930. Class 46.

270,648. BUILDING LUMBER. SILAS HUBBARD COMPANY, East Limington, Me.
Filed October 5, 1929. Serial No. 290,703. PUBLISHED FEBRUARY 18, 1930. Class 12.

270,649. EGGS. GOTTFRIED & MARSHALL, New York, N. Y.
Filed October 1, 1929. Serial No. 290,462. PUBLISHED MARCH 4, 1930. Class 46.

270,650. HAND BAGS. RUSSEKS FIFTH AVENUE INC., New York, N. Y.
Filed July 27, 1929. Serial No. 287,773. PUBLISHED MARCH 4, 1930. Class 3.

270,651. DAIRY PRODUCTS—NAMELY, BUTTER, CHEESE, MILK, AND ICE CREAM. SOUTHWEST DAIRY PRODUCTS COMPANY, Dallas, Tex.
Filed June 29, 1929. Serial No. 286,360. PUBLISHED MARCH 4, 1930. Class 46.

270,652. COAL. THE KOPPERS COAL COMPANY, Pittsburgh, Pa.
Filed June 21, 1929. Serial No. 285,922. PUBLISHED MARCH 4, 1930. Class 1.

270,653. PERFUMES, TOILET WATERS, FACE LOTIONS, FACE CREAMS, FACE POWDERS, ROUGES, AND LIP STICKS. LIONEL TRADING CO. INC., New York, N. Y.
Filed November 23, 1929. Serial No. 292,813. PUBLISHED MARCH 4, 1930. Class 6.

270,654. DENTAL CREAM; BEEF, IRON, AND WINE TONIC; AND ASPIRIN TABLETS. THE WILLIAM A. WEBSTER COMPANY, Memphis, Tenn.
Filed November 7, 1929. Serial No. 292,142. PUBLISHED MARCH 4, 1930. Class 6.

270,655. DEODORANTS, INSECTICIDES, AND DISINFECTANTS. ROYAL MANUFACTURING COMPANY OF DUQUESNE, Duquesne, Pa.
Filed October 31, 1929. Serial No. 291,841. PUBLISHED MARCH 4, 1930. Class 6.

270,656. FACE POWDER, ROUGE, COSMETICS, AND LOTIONS FOR THE HAIR, ETC. ETABLISSEMENTS ANDRÉ GILLIER, SOCIETE ANONYME, Troyes, France.
Filed October 18, 1929. Serial No. 291,211. PUBLISHED FEBRUARY 25, 1930. Class 6.

270,657. LAXATIVES COMPRISING AN EMULSION OF PSYLLIAM-SEED JELLY AND MINERAL OIL. SWAN-MYERS COMPANY, Indianapolis, Ind.
Filed September 28, 1929. Serial No. 290,159. PUBLISHED DECEMBER 10, 1929. Class 6.

270,658. HAIR-WAVING LOTION. ANTON BORRAS, doing business as Mon-Joie, Philadelphia, Pa.
Filed September 14, 1929. Serial No. 289,781. PUBLISHED FEBRUARY 25, 1930. Class 6.

270,659. BATH SALTS. STORFER LABORATORIES INC., New York, N. Y.
Filed August 21, 1929. Serial No. 288,822. PUBLISHED MARCH 4, 1930. Class 6.

270,660. REDUCING VALVES AND RELIEF VALVES. IRA I. NELSON, doing business as The Stack Heater Company, Boston, Mass.
Filed April 30, 1929. Serial No. 283,295. PUBLISHED MARCH 4, 1930. Class 13.

270,661. NEUTRALIZING MIXTURE AND A COUGH AND CROUP SYRUP. ALBURTON R. DEWEY, Bristol, Conn.
Filed March 25, 1929. Serial No. 281,274. PUBLISHED MARCH 4, 1930. Class 6.

270,662. CHEMICALS AND CHEMICAL PREPARATIONS FOR CLEANING THE OUTLET PIPES OF SINKS, BATHTUBS, AND WASHBOWLS. VIKING GASOLINE CORPORATION, Charleston, W. Va.
Filed March 15, 1929. Serial No. 280,813. PUBLISHED MAY 14, 1929. Class 6.

270,663. ROLLED OATS OR OAT FLAKES AND A BREAKFAST FOOD MADE FROM OATS AND RYE. PURITY OATS COMPANY, Keokuk, Iowa.
Filed March 2, 1929. Serial No. 280,195. PUBLISHED MARCH 4, 1930. Class 46.

270,664. BRICKS AND TILES. CHARLES T. BRAY, doing business as The Slag Paving Brick & Products Company, Globe, Ariz.
Filed March 2, 1929. Serial No. 280,163. PUBLISHED FEBRUARY 18, 1930. Class 12.

270,665. SHEETS AND PILLOWCASES, BLANKETS, AND TOWELS OF WOVEN TEXTILE FABRICS. LORD & TAYLOR, New York, N. Y.
Filed March 1, 1929. Serial No. 280,130. PUBLISHED FEBRUARY 25, 1930. Class 42.

270,666. PERIODICAL. NOVEL MAGAZINE CORP., New York, N. Y.
Filed February 27, 1929. Serial No. 280,085. PUBLISHED APRIL 16, 1929. Class 38.

270,667. PILLS, TABLETS FOR DIGESTIVE PURPOSES, AND CAPSULES FOR THE TREATMENT OF INFLUENZA AND CATARRH. ZOE CAILLARD, London, England.
Filed February 21, 1929. Serial No. 279,724. PUBLISHED FEBRUARY 25, 1930. Class 6.

270,668. STEEL CASTINGS. BETHLEHEM STEEL COMPANY, Bethlehem, Pa.
Filed February 14, 1929. Serial No. 279,309. PUBLISHED MARCH 4, 1930. Class 14.

270,669. SALTED PISTACHIOS. SHEBA PISTACHIO CORPORATION, Paterson, N. J.
Filed January 5, 1929. Serial No. 277,641. PUBLISHED MARCH 4, 1930. Class 46.

270,670. GOLF BALLS. WILSON-WESTERN SPORTING GOODS COMPANY, Chicago, Ill.
Filed December 31, 1928. Serial No. 277,472. PUBLISHED FEBRUARY 25, 1930. Class 22.

270,671. CANDIES. BRANDLE & SMITH CO., Philadelphia, Pa.
Filed January 14, 1930. Serial No. 294,757. PUBLISHED MARCH 4, 1930. Class 46.

270,672. CANNED FRUITS. ABRAHAM SHALIT, New York, N. Y.
Filed January 7, 1930. Serial No. 294,489. PUBLISHED MARCH 4, 1930. Class 46.

270,673. MATERIAL FOR ADDING TO CONCRETE MIXTURES FOR IMPROVING THE PROPERTIES THEREOF. TRUSCON STEEL COMPANY, doing business as The Truscon Laboratories, Detroit and Hamtramck, Mich.
Filed December 24, 1929. Serial No. 294,041. PUBLISHED FEBRUARY 25, 1930. Class 12.

270,674. PORTABLE ARBORS. STERIL MANUFACTURING COMPANY, Omaha, Nebr.
Filed December 2, 1929. Serial No. 294,035. PUBLISHED FEBRUARY 25, 1930. Class 12.

270,675. PAVING MATERIAL COMPRISING A MINERAL AGGREGATE INTIMATELY MIXED WITH A BITUMINOUS BINDER. AMIESITE ASPHALT COMPANY OF AMERICA, Camden, N. J., and Philadelphia, Pa.
Filed December 10, 1929. Serial No. 293,462. PUBLISHED FEBRUARY 11, 1930. Class 12.

270,676. PAVING MATERIAL COMPRISING A MINERAL AGGREGATE INTIMATELY MIXED WITH A BITUMINOUS BINDER. AMIESITE ASPHALT COMPANY OF AMERICA, Camden, N. J., and Philadelphia, Pa.
Filed December 10, 1929. Serial No. 293,461. PUBLISHED FEBRUARY 11, 1930. Class 12.

270,677. TILES. AMERICAN ENCAUSTIC TILING COMPANY, LTD., New York, N. Y.
Filed December 10, 1929. Serial No. 293,460. PUBLISHED MARCH 4, 1930. Class 12.

270,678. RAILROAD CROSSTIES, POLES, PILES, BRIDGE TIMBER AND TIES, SWITCH TIES, AND LUMBER TREATED WITH WOOD PRESERVATIVE. AMERICAN CREOSOTING COMPANY, Louisville, Ky.
Filed December 5, 1929. Serial No. 293,254. PUBLISHED FEBRUARY 11, 1930. Class 12.

270,679. FRESH VEGETABLES. F. J. MCCANN PACKING CO., INC., Salinas, Calif.
Filed December 3, 1929. Serial No. 293,189. PUBLISHED MARCH 4, 1930. Class 46.

270,680. FIRE HOSE. HEWITT-GUTTA PERCHA RUBBER CORPORATION, Buffalo, N. Y.
Filed January 24, 1930. Serial No. 295,172. PUBLISHED MARCH 4, 1930. Class 35.

270,681. MEDICINAL WHISKEY. NATIONAL BROKERAGE COMPANY, INC., Chicago, Ill.
Filed January 22, 1930. Serial No. 295,079. PUBLISHED MARCH 4, 1930. Class 49.

270,682. KITCHEN CABINETS. ROBERT J. SIMONS, Springfield, Mass.
Filed January 21, 1930. Serial No. 295,061. PUBLISHED MARCH 4, 1930. Class 32.

270,683. NONALCOHOLIC, NONCEREAL, MALTLESS, CARBONATED BEVERAGES AND SYRUPS AND EXTRACTS FOR MAKING THE SAME. ELCO DISTRIBUTING COMPANY, Chicago, Ill.
Filed January 20, 1930. Serial No. 294,962. PUBLISHED MARCH 4, 1930. Class 45.

270,684. MALT SYRUP. OSCAR O. HARRIS, doing business as Peerless Food Products, Philadelphia, Pa.
Filed January 10, 1930. Serial No. 294,634. PUBLISHED FEBRUARY 25, 1930. Class 46.

270,685. MALT WHISKEY FOR MEDICINAL PURPOSES. THE FRANKFORT DISTILLERY, INC., Louisville, Ky.
Filed January 9, 1930. Serial No. 294,579. PUBLISHED MARCH 4, 1930. Class 49.

270,686. CANVAS CARRIERS FOR HARVESTING MACHINES. ALWARD-ANDERSON-SOUTHARD CO., Chicago, Ill.
Filed December 28, 1929. Serial No. 294,132. PUBLISHED MARCH 4, 1930. Class 23.

270,687. TONGS. GEARENCH MANUFACTURING COMPANY, Houston, Tex.
Filed December 2, 1929. Serial No. 294,034. PUBLISHED MARCH 4, 1930. Class 23.

270,688. GINGER ALE. JOHN L. FRANKLIN, doing business as The Cordova Company, Atlanta, Ga.
Filed December 21, 1929. Serial No. 293,965. PUBLISHED MARCH 4, 1930. Class 45.

270,689. INTERNAL-COMBUSTION ENGINES. FAIRCHILD AVIATION CORPORATION, New York, N. Y.
Filed December 18, 1929. Serial No. 293,824. PUBLISHED MARCH 4, 1930. Class 23.

270,690. INTERNAL-COMBUSTION ENGINES. FAIRCHILD AVIATION CORPORATION, New York, N. Y.
Filed December 18, 1929. Serial No. 293,823. PUBLISHED MARCH 4, 1930. Class 23.

270,691. CIRCULAR SAWS AND CIRCULAR-SAW SETS. E. C. ATKINS AND COMPANY, Indianapolis, Ind.
Filed December 14, 1929. Serial No. 293,655. PUBLISHED MARCH 4, 1930. Class 23.

270,692. MALT SYRUP. MILLER HIGH LIFE CO., Milwaukee, Wis.
Filed December 7, 1929. Serial No. 293,377. PUBLISHED FEBRUARY 4, 1930. Class 46.

270,693. RUBBER AND FABRIC BELTING, RUBBER HOSE, AND PISTON PACKING. PIONEER RUBBER MILLS, San Francisco, Calif.
Filed November 29, 1929. Serial No. 293,068. PUBLISHED MARCH 4, 1930. Class 35.

270,694. HAND KNITTING DEVICES. J. W. SPEAR & SONS, INC., New York, N. Y.
Filed November 27, 1929. Serial No. 293,012. PUBLISHED MARCH 4, 1930. Class 23.

270,695. PRINTED CORDUROYS IN THE PIECE. A. D. JUILLIARD & CO., INC., New York, N. Y.
Filed January 24, 1930. Serial No. 295,181. PUBLISHED MARCH 4, 1930. Class 42.

270,696. SEAMLESS RUGS FOR FLOOR-COVERING PURPOSES. ARTLOOM CORPORATION, ARTLOOM RUG MILLS DIVISION, Philadelphia, Pa.
Filed January 23, 1930. Serial No. 295,111. PUBLISHED MARCH 4, 1930. Class 42.

270,697. PIECE GOODS OF RAYON AND COTTON. STOFFEL & CO., New York, N. Y.
Filed January 18, 1930. Serial No. 294,932. PUBLISHED FEBRUARY 25, 1930. Class 42.

270,698. TEXTILE BLANKETS. THE ESMOND MILLS, Esmond, Smithfield, R. I.
Filed January 14, 1930. Serial No. 294,767. PUBLISHED FEBRUARY 25, 1930. Class 42.

270,699. FABRICS MADE WHOLLY OR PARTIALLY OF CELLULOSE DERIVATIVES. CELANESE CORPORATION OF AMERICA, New York, N. Y.
Filed January 14, 1930. Serial No. 294,764. PUBLISHED FEBRUARY 25, 1930. Class 42.

270,700. FABRICS MADE WHOLLY OR PARTIALLY OF CELLULOSE DERIVATIVES. CELANESE CORPORATION OF AMERICA, New York, N. Y.
Filed January 14, 1930. Serial No. 294,762. PUBLISHED FEBRUARY 25, 1930. Class 42.

270,701. LYE. B. T. BABBITT, INC., New York, N. Y.
Filed January 9, 1930. Serial No. 294,562. PUBLISHED FEBRUARY 25, 1930. Class 6.

270,702. FLUID EXTRACT OF PYRETHRUM. THE CINO CHEMICAL PRODUCTS COMPANY, Cincinnati, Ohio.
Filed January 2, 1930. Serial No. 294,291. PUBLISHED FEBRUARY 18, 1930. Class 6.

270,703. LIQUID PREPARATION TO PREVENT PEOPLE FROM BITING THEIR FINGER NAILS. CHILD WELFARE GUILD, INC., New Haven, Conn.
Filed January 2, 1930. Serial No. 294,290. PUBLISHED FEBRUARY 18, 1930. Class 6.

270,704. PHARMACEUTICAL PREPARATION FOR THE RELIEF OF SPASMODIC CONDITIONS. F. HOFFMANN-LA ROCHE & CO. AKTIENGESELLSCHAFT, Basel, Switzerland.
Filed December 31, 1929. Serial No. 294,259. PUBLISHED FEBRUARY 18, 1930. Class 6.

270,705. CLEANING POLISH IN THE NATURE OF A FURNITURE OR AUTOMOBILE POLISH. W. H. MEIKRANTZ, Scranton, Pa.
Filed December 21, 1929. Serial No. 293,980. PUBLISHED FEBRUARY 25, 1930. Class 16.

270,706. MEDICINAL PREPARATION FOR ECZEMA AND OTHER SKIN ERUPTIONS WITH SEROUS DISCHARGE. VYO LABORATORIES, INC., Washington, D. C.
Filed December 18, 1929. Serial No. 293,855. PUBLISHED FEBRUARY 18, 1930. Class 6.

270,707. MEDICINAL PREPARATION FOR MANGE AND SCRATCHES AND OTHER SKIN ERUPTIONS WITH SEROUS DISCHARGE ON DOGS, CATS, HORSES, AND OTHER ANIMALS. VYO LABORATORIES, INC., Washington, D. C.
Filed December 18, 1929. Serial No. 293,826. PUBLISHED FEBRUARY 18, 1930. Class 6.

270,708. TOILET PREPARATIONS—NAMELY, FACE CREAM, COLD CREAM, FACE POWDER, BODY POWDER, AND HAND LOTIONS. MARY FLORENTINE, Boston, Mass.
Filed December 18, 1929. Serial No. 293,826. PUBLISHED FEBRUARY 25, 1930. Class 6.

270,709. ANTISEPTIC AND GERMICIDAL MEDICAMENT USED AS A DOUCHE PREPARATION. LEAH ARONSON, doing busines as A. & A. Company, Chicago, Ill.
Filed December 17, 1929. Serial No. 293,767. PUBLISHED FEBRUARY 25, 1930. Class 6.

270,710. ASTRINGENTS, ASTRINGENT CERATES, BLEACH CREAMS, ETC. V. E. MEADOWS, INC., New York, N. Y.
Filed December 16, 1929. Serial No. 293,741. PUBLISHED FEBRUARY 18, 1930. Class 6.

270,711. HAIRDRESSING. DEALERS SALES CORPORATION, St. Louis, Mo.
Filed December 16, 1929. Serial No. 293,723. PUBLISHED FEBRUARY 18, 1930. Class 6.

270,712. HAIRDRESSING. DEALERS SALES CORPORATION, St. Louis, Mo.
Filed December 16, 1929. Serial No. 293,722. PUBLISHED FEBRUARY 18, 1930. Class 6.

270,713. HAIR TONIC. DEALERS SALES CORPORATION, St. Louis, Mo.
Filed December 16, 1929. Serial No. 293,721. PUBLISHED FEBRUARY 25, 1930. Class 6.

270,714. HAIR TONIC. DEALERS SALES CORPORATION, St. Louis, Mo.
Filed December 16, 1929. Serial No. 293,720. PUBLISHED FEBRUARY 18, 1930. Class 6.

270,715. MEDICATED ALCOHOL, UNFIT FOR BEVERAGE PURPOSES. PUBLICKER INCORPORATED, Philadelphia, Pa.
Filed December 14, 1929. Serial No. 293,691. PUBLISHED FEBRUARY 18, 1930. Class 6.

270,716. PAINT ENAMEL AND OIL PAINT. JAMES MANUFACTURING COMPANY, Fort Atkinson, Wis.
Filed December 11, 1929. Serial No. 293,535. PUBLISHED FEBRUARY 25, 1930. Class 16.

270,717. CERTAIN NAMED PAINT PRODUCTS. THE IRONSIDES COMPANY, Columbus, Ohio.
Filed November 27, 1926. Serial No. 240,658. PUBLISHED FEBRUARY 25, 1930. Class 16.

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270,718. SMOKING AND CHEWING TOBACCO. BROWN & WILLIAMSON TOBACCO CORPORATION, Winston-Salem, N. C.
Filed June 11, 1927. Serial No. 250,371. PUBLISHED JANUARY 31, 1928. Class 17.

270,719. SMOKING AND CHEWING TOBACCO. BROWN & WILLIAMSON TOBACCO CORPORATION, Winston-Salem, N. C.
Filed June 11, 1927. Serial No. 250,379. PUBLISHED JANUARY 31, 1928. Class 17.

270,720. SMOKING AND CHEWING TOBACCO. BROWN & WILLIAMSON TOBACCO CORPORATION, Winston-Salem, N. C.
Filed June 11, 1927. Serial No. 250,384. PUBLISHED JANUARY 31, 1928. Class 17.

270,721. SMOKING AND CHEWING TOBACCO. BROWN & WILLIAMSON TOBACCO CORPORATION, Winston-Salem, N. C.
Filed June 11, 1927. Serial No. 250,391. PUBLISHED JANUARY 31, 1928. Class 17.

270,722. SMOKING AND CHEWING TOBACCO. BROWN & WILLIAMSON TOBACCO CORPORATION, Winston-Salem, N. C.
Filed June 11, 1927. Serial No. 250,392. PUBLISHED JANUARY 31, 1928. Class 17.

270,723. BOOTS AND SHOES MADE OF LEATHER, RUBBER, OR FABRIC OR COMBINATIONS OF THESE MATERIALS. HARRY SIR & SON, INC., New York, N. Y.
Filed November 27, 1929. Serial No. 293,011. PUBLISHED FEBRUARY 25, 1930. Class 39.

270,724. LADIES' SHOES, THE SHOES BEING MADE OF LEATHER, RUBBER, REPTILE SKINS, FABRICS, AND COMBINATIONS THEREOF. L. KLEIN, INC., Chicago, Ill.
Filed December 4, 1929. Serial No. 293,222. PUBLISHED MARCH 4, 1930. Class 39.

270,725. HEADWEAR FOR MEN AND WOMEN—NAMELY, HATS AND CAPS; GLOVES OF FABRIC AND OF FABRIC AND LEATHER; NECKTIES AND OVERCOATS FOR MEN. JOHN CAVANAGH, LTD., New York, N. Y.
Filed December 12, 1929. Serial No. 293,571. PUBLISHED MARCH 4, 1930. Class 39.

270,726. FRESH SWEET POTATOES. THOMAS E. MCKNIGHT, Lindale, Tex.
Filed January 21, 1928. Serial No. 260,456. PUBLISHED MARCH 4, 1930. Class 46.

270,727. MEDICINAL PREPARATION FOR DISINFECTION OF THE MOUTH AND THROAT. I. G. FARBENINDUSTRIE AKTIENGESELLSCHAFT, Frankfort-on-the-Main, Germany.
Filed November 30, 1927. Serial No. 258,220. PUBLISHED FEBRUARY 25, 1930. Class 6.

270,728. MEDICINE FOR USE AGAINST CHOLANGITIS, CHOLECYSTITIS, DISEASES OF THE INTESTINAL TRACTS. I. G. FARBENINDUSTRIE AKTIENGESELLSCHAFT, Frankfort-on-the-Main, Germany.
Filed November 30, 1927. Serial No. 258,218. PUBLISHED FEBRUARY 25, 1930. Class 6.

270,729. PREPARATION FOR THE REMOVAL OF CALLOUS AND CORNS. HARRY HEROLD, doing business as Herold Drug Co., Petaluma, Calif.
Filed June 29, 1928. Serial No. 268,865. PUBLISHED AUGUST 28, 1928. Class 6.

270,730. PHOTOGRAPHIC PRINTS. ROBERT J. YOUNG, Everett, Wash.
Filed December 13, 1928. Serial No. 276,673. PUBLISHED MARCH 4, 1930. Class 38.

270,731. STABLE SOLUTION OF AN ORGANIC BISMUTH PREPARATION FOR HYPODERMIC USE. E. R. SQUIBB & SONS, New York, N. Y.
Filed December 5, 1928. Serial No. 276,346. PUBLISHED FEBRUARY 4, 1930. Class 6.

270,732. A PREPARATION FOR BURNS AND CHAPPED SKIN. CORNEL DRUG STORES INC., New York, N. Y.
Filed December 5, 1928. Serial No. 276,804. PUBLISHED FEBRUARY 25, 1930. Class 6.

270,733. METAL LATH. THE BOSTWICK STEEL LATH COMPANY, Niles, Ohio.
Filed November 26, 1928. Serial No. 275,863. PUBLISHED MARCH 4, 1930. Class 12.

270,734. BITTERS. FRATELLI BRANCA, Milan, Italy.
Filed September 14, 1928. Serial No. 272,394. PUBLISHED FEBRUARY 25, 1930. Class 6.

270,735. DOUGHNUTS. JOE LOWE CORPORATION, Brooklyn, N. Y.
Filed July 17, 1928. Serial No. 269,734. PUBLISHED AUGUST 28, 1928. Class 46.

270,736. NONALCOHOLIC, NONCEREAL, MALTLESS BEVERAGE IN THE FORM OF A SOFT-DRINK SYRUP. CHARLES P. BYRD, Atlanta, Ga.
Filed September 11, 1928. Serial No. 272,197. PUBLISHED MARCH 4, 1930. Class 45.

270,737. HIGHWAY AND PAVEMENT MARKERS, NONELECTRICAL ROAD AND STREET SIGNS, AND NONELECTRICAL TRAFFIC-CONTROL SIGNALS OF THE STATIONARY TYPE IN THE FORM OF A DOME PROVIDED WITH INDICIA OR LETTERING AND/OR REFLECTORS AND IN THE FORM OF A FLEXIBLE STRIP CONTAINING INDICIA OR LETTERING. UNIVERSAL TRAFFIC CONTROL COMPANY, St. Louis, Mo.
Filed May 31, 1929. Serial No. 284,883. PUBLISHED MARCH 4, 1930. Class 50.

270,738. THIN FLOWING HIGH DIASTASIC MALT EXTRACT USED FOR DESIZING COTTON GOODS. MALT-DIASTASE COMPANY, Brooklyn, N. Y.
Filed May 25, 1929. Serial No. 284,617. PUBLISHED FEBRUARY 11, 1930. Class 6.

270,739. HORSE AND OTHER ANIMAL RATING TABLES PUBLISHED PERIODICALLY. ALBERT H. CARTER, Chicago, Ill., assignor to American Racing Record Corporation, Chicago, Ill., a Corporation of Illinois.
Filed May 17, 1929. Serial No. 284,164. PUBLISHED MARCH 4, 1930. Class 38.

270,740. ENAMELED-METAL WARE—NAMELY, ENAMELED-METAL BOILERS, POTS, PANS, KETTLES, BASINS, PERCOLATORS, TRAYS, BOWLS, STRAINERS, MOLDS, REFRIGERATOR DISHES, BUTTER DISHES, SOAP DISHES, AND JUGS. THE VOLLRATH COMPANY, Sheboygan, Wis.
Filed May 3, 1929. Serial No. 283,474. PUBLISHED MARCH 4, 1930. Class 13.

270,741. HAND BAGS. ARNOLD, CONSTABLE & COMPANY, INCORPORATED, New York, N. Y.
Filed January 9, 1930. Serial No. 294,559. PUBLISHED MARCH 4, 1930. Class 3.

270,742. DOUGHNUTS. DOUGHNUT MACHINE CORPORATION, New York, N. Y.
Filed January 7, 1930. Serial No. 294,495. PUBLISHED MARCH 4, 1930. Class 46.

270,743. COTTON BATTING. TOOTLE-CAMPBELL DRY GOODS COMPANY, St. Joseph, Mo.
Filed December 10, 1929. Serial No. 293,494. PUBLISHED MARCH 4, 1930. Class 1.

270,744. ASPHALTIC COMPOUNDS INCLUDING ANIMAL AND VEGETABLE SUBSTANCES USED AS SOFTENERS FOR RUBBER COMPOUNDS. TASCO ASPHALT CO., Newark, N. J.
Filed December 10, 1929. Serial No. 293,493. PUBLISHED MARCH 4, 1930. Class 1.

270,745. MELON SEED. KWONG CHEUNG LUNG & CO., San Francisco, Calif.
Filed December 3, 1929. Serial No. 293,185. PUBLISHED MARCH 4, 1930. Class 1.

270,746. ICE, COAL, AND FUEL WOOD. CENTRAL ATLANTIC STATES SERVICE CORPORATION, Newark, N. J.
Filed November 30, 1929. Serial No. 293,089. PUBLISHED MARCH 4, 1930. Class 1.

270,747. HEATING BOILERS. THERMO SERVICE, INC., New York, N. Y.
Filed January 9, 1930. Serial No. 294,601. PUBLISHED MARCH 4, 1930. Class 34.

270,748. HOUSEHOLD LIQUID INSECT-KILLER FOR BED BUGS, FLIES, ANTS, COCKROACHES, AND MOSQUITOES. MILWAUKEE LUBRICANTS CO., Milwaukee, Wis.
Filed January 8, 1930. Serial No. 294,551. PUBLISHED FEBRUARY 25, 1930. Class 6.

270,749. LAXATIVE PREPARATION. THE STAR-ETTS PRODUCTS COMPANY, INC., New York, N. Y.
Filed January 7, 1930. Serial No. 294,492. PUBLISHED FEBRUARY 25, 1930. Class 6.

270,750. HYPNOTIC IN TABLET FORM. RIEDEL-DE HAEN, INC., New York, N. Y.
Filed January 7, 1930. Serial No. 294,488. PUBLISHED FEBRUARY 25, 1930. Class 6.

270,751. PHARMACEUTICAL PREPARATION FOR THE TREATMENT OF COLDS, RHINITIS, HAY FEVER, AND THE LIKE. LEE LABORATORIES INCORPORATED, Cambridge, Mass.
Filed January 6, 1930. Serial No. 294,429. PUBLISHED FEBRUARY 18, 1930. Class 6.

270,752. LIQUID PREPARATION FOR USE IN TREATING MOUTH DISEASES. ORAN W. WALLACE, doing business as Toxo-Sene Company, Houston, Tex.
Filed January 3, 1930. Serial No. 294,369. PUBLISHED FEBRUARY 18, 1930. Class 6.

270,753. ASTRINGENTS, ASTRINGENT CERATES, BLEACH CREAMS, ETC. VADSCO SALES CORPORATION, New York, N. Y.
Filed January 3, 1930. Serial No. 294,368. PUBLISHED FEBRUARY 18, 1930. Class 6.

270,754. INHALANT. STERLING REMEDY COMPANY, Wheeling, W. Va.
Filed January 3, 1930. Serial No. 294,367. PUBLISHED FEBRUARY 18, 1930. Class 6.

270,755. ASTRINGENTS, ASTRINGENT CERATES, BLEACH CREAMS, ETC. MARCEL J. RAFFY, New York, N. Y.
Filed January 3, 1930. Serial No. 294,363. PUBLISHED FEBRUARY 18, 1930. Class 6.

270,756. GASTRIC-GLAND EXTRACT IN A DRY POWDER FORM FREE FROM LIPOID TO BE USED FOR EXPERIMENTAL, TECHNICAL, AND CLINICAL PURPOSES. FAIRCHILD BROS. & FOSTER, New York, N. Y.
Filed January 3, 1930. Serial No. 294,346. PUBLISHED FEBRUARY 18, 1930. Class 6.

270,757. VITAMIN CONCENTRATES. E. R. SQUIBB & SONS, New York, N. Y.
Filed January 2, 1930. Serial No. 294,323. PUBLISHED FEBRUARY 18, 1930. Class 6.

270,758. PREPARATION FOR USE IN THE TREATMENT OF IRRITATED CONDITIONS OF THE NOSE AND THROAT. PARKER W. FRAMES, doing business as Canada Cream Co., Baltimore, Md.
Filed January 2, 1930. Serial No. 294,299. PUBLISHED FEBRUARY 18, 1930. Class 6.

270,759. TYPEWRITER RIBBONS AND CARBON PAPERS. H. M. STORMS COMPANY, Brooklyn, N. Y.
Filed December 31, 1929. Serial No. 294,279. PUBLISHED MARCH 4, 1930. Class 11.

270,760. FIRECRACKERS AND FIREWORKS. JOAO M. DA ROCHA, doing business as J. M. Da Rocha Co., Firecracker Division, San Francisco, Calif.
Filed December 30, 1929. Serial No. 294,207. PUBLISHED MARCH 4, 1930. Class 9.

270,761. BUCKLES MADE OF NONPRECIOUS METAL. THE RIKER COMPANY, Newark, N. J.
Filed December 21, 1929. Serial No. 293,985. PUBLISHED FEBRUARY 25, 1930. Class 40.

270,762. BUCKLES MADE OF NONPRECIOUS METAL. THE RIKER COMPANY, Newark, N. J.
Filed December 21, 1929. Serial No. 293,984. PUBLISHED FEBRUARY 25, 1930. Class 40.

270,763. TEXTILE FABRIC TREATED WITH RUBBER, THEREBY PRODUCING A RUBBERIZED NAPPED SHEETING. E. I. DU PONT DE NEMOURS AND COMPANY, Wilmington, Del.
Filed December 9, 1929. Serial No. 293,414. PUBLISHED MARCH 4, 1930. Class 50.

270,764. MEN'S AND BOYS' FELT AND STRAW HATS AND CLOTH CAPS, MEN'S SILK HATS, AND FELT AND STRAW HATS FOR WOMEN AND CHILDREN. JOHN B. STETSON COMPANY, Philadelphia, Pa.
Filed December 7, 1929. Serial No. 293,387. PUBLISHED MARCH 4, 1930. Class 39.

270,765. CAPS AND HATS FOR MEN. HODSHON-BERG, INCORPORATED, Danbury, Conn., and New York, N. Y.
Filed December 5, 1929. Serial No. 293,274. PUBLISHED FEBRUARY 25, 1930. Class 39.

270,766. LADIES' HATS. LADY GODIVA HATS, INC., New York, N. Y.
Filed December 27, 1929. Serial No. 294,117. PUBLISHED MARCH 4, 1930. Class 39.

270,767. OUTER SOLES, INNER SOLES, MID SOLES, HEELS, COUNTERS, BOX TOES FOR BOOTS AND SHOES. DEWEY & ALMY CHEMICAL COMPANY, North Cambridge, Mass.
Filed December 26, 1929. Serial No. 294,061. PUBLISHED MARCH 4, 1930. Class 39.

270,768. LADIES' DRESSES, BLOUSES, HATS, SKIRTS FOR OUTER WEAR, PAJAMAS, SWEATERS, AND SCARFS. JEAN ADAMS INC., New York, N. Y.
Filed December 26, 1929. Serial No. 294,046. PUBLISHED MARCH 4, 1930. Class 39.

270,769. WOMEN'S SHOES MADE OF LEATHER, RUBBER, AND FABRIC AND COMBINATIONS OF THE SAME. SEARS, ROEBUCK AND CO., Chicago, Ill.
Filed December 14, 1929. Serial No. 293,693. PUBLISHED MARCH 4, 1930. Class 39.

270,770. CAPS AND HATS FOR MEN. HODSHON-BERG, INCORPORATED, Danbury, Conn., and New York, N. Y.
Filed December 12, 1929. Serial No. 293,580. PUBLISHED MARCH 4, 1930. Class 39.

270,771. MAGAZINES PUBLISHED EVERY MONTH. GRAPHIC ARTS CORPORATION, Minneapolis, Minn.
Filed January 6, 1930. Serial No. 294,422. PUBLISHED MARCH 4, 1930. Class 38.

270,772. TRADING STAMPS. THE SPERRY & HUTCHINSON COMPANY, New York, N. Y.
Filed December 31, 1929. Serial No. 294,281. PUBLISHED MARCH 4, 1930. Class 38.

270,773. HAND BAGS, POCKETBOOKS, PORTABLE CASES FOR TOILET ARTICLES MADE OF LEATHER OR SIMILAR MATERIAL; TRAVELLING BAGS, MONEY BELTS, BRIEF CASES, OVERNIGHT BAGS, POCKET KEY CONTAINERS MADE OF LEATHER OR SIMILAR MATERIAL; HAT BOXES OF LEATHER OR SIMILAR MATERIAL. HOOKLESS FASTENER COMPANY, Meadville, Pa.
Filed December 31, 1929. Serial No. 294,252. PUBLISHED MARCH 4, 1930. Class 3.

270,774. BREAD AND CAKE. SCHULZE BAKING COMPANY, Kansas City, Mo., and Chicago, Ill.
Filed December 16, 1929. Serial No. 293,751. PUBLISHED MARCH 4, 1930. Class 46.

270,775. NEWSPAPER PUBLISHED DAILY (EXCEPT SUNDAYS AND HOLIDAYS). ENTERPRISE PUBLISHING CO., Brockton, Mass.
Filed January 13, 1930. Serial No. 294,717. PUBLISHED MARCH 4, 1930. Class 38.

270,776. DAILY NEWSPAPER. DAILY LOCAL NEWS COMPANY, West Chester, Pa.
Filed January 13, 1930. Serial No. 294,712. PUBLISHED MARCH 4, 1930. Class 38.

270,777. PUBLICATION ISSUED BIMONTHLY AND AT OTHER INTERVALS. WETTERSOL DYESTUFF CORPORATION, New York, N. Y.
Filed January 11, 1930. Serial No. 294,700. PUBLISHED MARCH 4, 1930. Class 38.

270,778. LIQUID LEATHER IN THE NATURE OF AN ADHESIVE FOR MENDING LEATHER OR RUBBER SHOES, SOLES, HEELS, ETC. HARRY H. SCHAFFER, doing business as So-Lether Manufacturing Co., St. Paul, Minn.
Filed January 10, 1930. Serial No. 294,648. PUBLISHED MARCH 4, 1930. Class 5.

270,779. EGG MASH, GROWING MASH, OPEN-FORMULA EGG MASH, EGG MASH WITH BUTTERMILK, SCRATCH GRAINS, CHICK STARTER, AND GROWING GRAINS FOR POULTRY. P. J. OESTERLING & SON, INC., Butler, Pa.
Filed January 23, 1930. Serial No. 295,132. PUBLISHED MARCH 4, 1930. Class 46.

270,780. BIRD FOOD. HARRY C. EISENHUT, Richmond Hill, N. Y.
Filed January 21, 1930. Serial No. 295,022. PUBLISHED MARCH 4, 1930. Class 46.

270,781. HORSE COLLARS. COUCH BROS. MANUFACTURING CO., East Point, Ga.
Filed January 21, 1930. Serial No. 295,021. PUBLISHED MARCH 4, 1930. Class 3.

270,782. HORSE COLLARS. COUCH BROS. MANUFACTURING CO., East Point, Ga.
Filed January 21, 1930. Serial No. 295,020. PUBLISHED MARCH 4, 1930. Class 3.

270,783. ADHESIVE CEMENT. E. E. FULTON CO., Chicago, Ill.
Filed January 20, 1930. Serial No. 294,969. PUBLISHED MARCH 4, 1930. Class 5.

270,784. LUGGAGE—NAMELY, HAND BAGS, TRAVELING BAGS, SUITCASES, HATBOXES, POCKETBOOKS, AND TRAVELING CASES (NOT FITTED). BEST & CO., INC., New York, N. Y.
Filed January 20, 1930. Serial No. 294,953. PUBLISHED MARCH 4, 1930. Class 3.

270,785. PERIODICALS. AMERICAN PAINT JOURNAL COMPANY, St. Louis, Mo.
Filed January 16, 1930. Serial No. 294,837. PUBLISHED MARCH 4, 1930. Class 38.

270,786. NEWSPAPER JOURNALS ISSUED FROM TIME TO TIME. THE EDITOR & PUBLISHER CO., New York, N. Y.
Filed January 14, 1930. Serial No. 294,766. PUBLISHED MARCH 4, 1930. Class 38.

270,787. DAILY NEWSPAPER. THE PHILADELPHIA INQUIRER CO., Philadelphia, Pa.
Filed January 13, 1930. Serial No. 294,739. PUBLISHED MARCH 4, 1930. Class 38.

270,788. WHEAT FLOUR. INLAND MILLING COMPANY, Des Moines, Iowa.
Filed January 25, 1930. Serial No. 295,224. PUBLISHED MARCH 4, 1930. Class 46.

270,789. PUBLICATIONS ISSUED FROM TIME TO TIME. CHILTON CLASS JOURNAL COMPANY, Philadelphia, Pa.
Filed January 24, 1930. Serial No. 295,151. PUBLISHED MARCH 4, 1930. Class 38.

270,790. PUBLICATIONS ISSUED FROM TIME TO TIME CONTAINING INFORMATION AND DATA FOR THE AUTOMOBILE TRADE. CHILTON CLASS JOURNAL COMPANY, Philadelphia, Pa.
Filed January 24, 1930. Serial No. 295,150. PUBLISHED MARCH 4, 1930. Class 38.

270,791. MONTHLY MAGAZINE. THE CROWELL PUBLISHING COMPANY, New York, N. Y.
Filed January 23, 1930. Serial No. 295,117. PUBLISHED MARCH 4, 1930. Class 38.

270,792. ANALGESIC. WINTHROP CHEMICAL COMPANY, INC., New York, N. Y.
Filed January 22, 1930. Serial No. 295,107. PUBLISHED MARCH 4, 1930. Class 6.

270,793. ARTIFICIAL AND SYNTHETICAL PERFUMES, ESSENTIAL OILS. SOCIÉTÉ ANONYME M. NAEF & CIE., Geneva, Switzerland.
Filed January 22, 1930. Serial No. 295,088. PUBLISHED MARCH 4, 1930. Class 6.

270,794. ANILINE DYES. SANDOZ CHEMICAL WORKS, INCORPORATED, New York, N. Y.
Filed January 22, 1930. Serial No. 295,084. PUBLISHED MARCH 4, 1930. Class 6.

270,795. PERIODICAL. PHI KAPPA SIGMA, Philadelphia, Pa.
Filed January 21, 1930. Serial No. 295,048. PUBLISHED MARCH 4, 1930. Class 38.

270,796. PERIODICAL PUBLISHED MONTHLY. UNITED CHRISTIAN MISSIONARY SOCIETY, Indianapolis, Ind.
Filed January 21, 1930. Serial No. 295,009. PUBLISHED MARCH 4, 1930. Class 38.

270,797. PERIODICAL PUBLICATIONS. SULLIVAN MACHINERY COMPANY, Boston, Mass. and Chicago, Ill.
Filed January 20, 1930. Serial No. 294,999. PUBLISHED MARCH 4, 1930. Class 38.

270,798. HAIR TONIC; A PREPARATION FOR THE TREATMENT OF DANDRUFF, ECZEMA, AND OTHER DISEASES OF THE SCALP; AND LIQUID SHAMPOO. RALPH K. RATHBUN, Hastings, Nebr.
Filed January 20, 1930. Serial No. 294,994. PUBLISHED FEBRUARY 25, 1930. Class 6.

270,799. FACE POWDER. CHICAGO MAIL ORDER COMPANY, Chicago, Ill.
Filed January 20, 1930. Serial No. 294,956. PUBLISHED MARCH 4, 1930. Class 6.

270,800. ASTRINGENTS, ASTRINGENT CERATES, BLEACH CREAMS, ETC. SILVER MOON CO., INC., New Orleans, La.
Filed January 18, 1930. Serial No. 294,928. PUBLISHED FEBRUARY 25, 1930. Class 6.

270,801. FLUID PREPARATION FOR THE TREATMENT OF SIMPLE IRRITATIONS OF THE SCALP, DANDRUFF, ETC. BIGELOW-CLARK, INC., New York, N. Y.
Filed January 18, 1930. Serial No. 294,911. PUBLISHED FEBRUARY 25, 1930. Class 6.

270,802. COUGH SYRUP. SMITH BROTHERS, INC., Poughkeepsie, N. Y.
Filed January 17, 1930. Serial No. 294,898. PUBLISHED FEBRUARY 25, 1930. Class 6.

270,803. PERIODICALS. AMERICAN PAINT JOURNAL COMPANY, St. Louis, Mo.
Filed January 16, 1930. Serial No. 294,836. PUBLISHED MARCH 4, 1930. Class 38.

270,804. PERIODICAL. NATIONAL LUMBERMAN PUBLISHING CO., INC., St. Louis, Mo.
Filed January 15, 1930. Serial No. 294,818. PUBLISHED MARCH 4, 1930. Class 38.

270,805. NATURAL AND SYNTHETIC ESSENTIAL OILS SUITABLE FOR PERFUMING PURPOSES. FRITZSCHE BROTHERS, INC., New York, N. Y.
Filed January 13, 1930. Serial No. 294,719. PUBLISHED FEBRUARY 25, 1930. Class 6.

270,806. HAIR STRAIGHTENER. ESTARC LABORATORIES, Memphis, Tenn.
Filed January 13, 1930. Serial No. 294,718. PUBLISHED FEBRUARY 25, 1930. Class 6.

270,807. ASTRINGENTS, ASTRINGENT CERATES, BLEACH CREAMS, ETC. ELMO, INCORPORATED, Philadelphia, Pa.
Filed January 13, 1930. Serial No. 294,715. PUBLISHED FEBRUARY 25, 1930. Class 6.

270,808. COATING FOR TABLETS TO PREVENT THEIR DISSOLVING IN THE STOMACH, BUT WHICH ALLOWS THEM TO DISSOLVE IN THE INTESTINES. G. W. CARNRICK CO., Newark, N. J.
Filed January 11, 1930. Serial No. 294,664. PUBLISHED FEBRUARY 25, 1930. Class 6.

270,809. LYE. B. T. BABBITT, INC., New York, N. Y.
Filed January 10, 1930. Serial No. 294,610. PUBLISHED FEBRUARY 25, 1930. Class 6.

270,810. PREPARATION FOR THE TREATMENT OF CORNS, CALLOUSES, AND BUNIONS. P. L. WEEKS, Brooksville, Fla.
Filed January 9, 1930. Serial No. 294,604. PUBLISHED FEBRUARY 25, 1930. Class 6.

270,811. ANTIANEMIC SUBSTANCE DERIVED FROM STOMACH TISSUE FOR THE TREATMENT OF PERNICIOUS ANEMIA. PARKE, DAVIS & COMPANY, Detroit, Mich.
Filed January 9, 1930. Serial No. 294,591. PUBLISHED FEBRUARY 25, 1930. Class 6.

270,812. PALATABLE EFFERVESCENT COMBINATION OF ALKALIZING SALTS SO PROPORTIONED AS TO MAINTAIN PHYSIOLOGICAL ALKALINITY OF THE BLOOD PLASMA. PARKE, DAVIS & COMPANY, Detroit, Mich.
Filed January 9, 1930. Serial No. 294,590. PUBLISHED FEBRUARY 25, 1930. Class 6.

270,813. PUBLICATIONS ISSUED AT REGULAR AND IRREGULAR INTERVALS. ASSOCIATED DRY GOODS CORPORATION OF NEW YORK, New York, N. Y.
Filed January 4, 1930. Serial No. 294,381. PUBLISHED MARCH 4, 1930. Class 38.

270,814. PERIODICAL PUBLICATION. SYDNEY H. GETTELMAN, doing business as Market Review Publishing Company, Chicago, Ill.
Filed December 26, 1929. Serial No. 294,131. PUBLISHED MARCH 4, 1930. Class 38.

270,815. SEDATIVE AND EXPECTORANT. BENJAMIN LEVIN, doing business as The Ideal Pharmacal Co., St., Albans, N. Y.
Filed December 27, 1929. Serial No. 294,118. PUBLISHED MARCH 4, 1930. Class 6.

270,816. RADIUM-CONTAINING OINTMENT, SOLUTIONS, AND TABLETS. SALLY BRYAN, doing business as Denver Radium Service, Denver, Colo.
Filed December 26, 1929. Serial No. 294,055. PUBLISHED MARCH 4, 1930. Class 6.

270,817. PERIODICAL PUBLICATION. NATIONAL TOURIST HOME GUILD, Auburn, N. Y.
Filed December 16, 1929. Serial No. 293,743. PUBLISHED MARCH 4, 1930. Class 38.

270,818. BATH SALTS. JUNE SMILA GREENE, Cleveland, Ohio.
Filed December 14, 1929. Serial No. 293,664. PUBLISHED MARCH 4, 1930. Class 6.

270,819. TALCUM POWDER. THE SIDNEY ROSS CO., Newark, N. J.
Filed December 13, 1929. Serial No. 293,641. PUBLISHED FEBRUARY 25, 1930. Class 6.

270,820. CHEMICAL PREPARATIONS. AMID DURON COMPANY, New York, N. Y.
Filed December 12, 1929. Serial No. 293,574. PUBLISHED FEBRUARY 25, 1930. Class 6.

270,821. WEEKLY PUBLICATION. NATIONAL WEEKLIES, INC., Winona, Minn.
Filed December 9, 1929. Serial No. 293,439. PUBLISHED MARCH 4, 1930. Class 38.

270,822. TALCUM POWDER. THE SYDNEY ROSS CO., Newark, N. J.
Filed December 6, 1929. Serial No. 293,347. PUBLISHED MARCH 4, 1930. Class 6.

270,823. MANICURE PREPARATIONS. COTY, INC., Wilmington, Del., and New York, N. Y.
Filed November 30, 1929. Serial No. 293,091. PUBLISHED MARCH 4, 1930. Class 6.

270,824. CERTAIN NAMED SPORTING GOODS. MONTGOMERY WARD & CO., INCORPORATED, Chicago, Ill.
Filed September 5, 1929. Serial No. 289,360. PUBLISHED MARCH 4, 1930. Class 22.

270,825. SILK DRESS GOODS IN THE PIECE. GOLDSTEIN-WILKINS CORPORATION, New York, N. Y.
Filed July 13, 1929. Serial No. 287,064. PUBLISHED FEBRUARY 18, 1930. Class 42.

270,826. SILK DRESS GOODS IN THE PIECE. GOLDSTEIN-WILKINS CORPORATION, New York, N. Y.
Filed July 13, 1929. Serial No. 287,063. PUBLISHED FEBRUARY 18, 1930. Class 42.

270,827. COSMETICS—NAMELY, SKIN BLEACHES. WELLINGTON LABORATORIES, INC., Baltimore, Md.
Filed November 21, 1929. Serial No. 292,695. PUBLISHED FEBRUARY 25, 1930. Class 6.

270,828. PAINTS, PAINT ENAMELS, AND VARNISHES. ELLIOTT VARNISH CO., Chicago, Ill.
Filed November 21, 1929. Serial No. 292,661. PUBLISHED FEBRUARY 25, 1930. Class 16.

270,829. HAIR RESTORER. LOUGHLIN & COMPANY, Washington, D. C.
Filed November 19, 1929. Serial No. 292,586. PUBLISHED FEBRUARY 18, 1930. Class 6.

270,830. FACE POWDER, TALCUM POWDER, COMPACT POWDER, ETC. HOUSE OF TRE-JUR, INC., New York, N. Y.
Filed November 19, 1929. Serial No. 292,578. PUBLISHED FEBRUARY 18, 1930. Class 6.

270,831. PAINTS AND VARNISHES. THE TROPICAL PAINT AND OIL COMPANY, Cleveland, Ohio.
Filed November 18, 1929. Serial No. 292,559. PUBLISHED FEBRUARY 18, 1930. Class 16.

270,832. ALTERATIVE, RESOLVENT, APERIENT MEDICINE. THE TILDEN COMPANY, New Lebanon, N. Y.
Filed November 9, 1929. Serial No. 292,237. PUBLISHED FEBRUARY 25, 1930. Class 6.

270,833. WALL COATING IN THE NATURE OF PAINT. UNITED STATES GYPSUM COMPANY, Chicago, Ill.
Filed November 6, 1929. Serial No. 292,081. PUBLISHED FEBRUARY 25, 1930. Class 16.

270,834. BLEACHING COMPOUND FOR FABRICS. THE SINCLAIR MANUFACTURING CO., Toledo, Ohio.
Filed November 5, 1929. Serial No. 292,055. PUBLISHED FEBRUARY 25, 1930. Class 6.

270,835. ASTRINGENTS, ASTRINGENT CERATES, BLEACH CREAMS, ETC. PERCIVAL E. FALKINGHAM, New York, N. Y.
Filed November 1, 1929. Serial No. 291,869. PUBLISHED FEBRUARY 25, 1930. Class 6.

270,836. AROMATIC CRYSTALS, MOTH CAKES, CAMPHOR CAKES, ETC. VERMITOX LABORATORIES, INC., Newark, N. J.
Filed October 24, 1929. Serial No. 291,534. PUBLISHED FEBRUARY 18, 1930. Class 6.

270,837. BAKING POWDER. ROYAL BAKING POWDER COMPANY, Jersey City, N. J., and New York, N. Y.
Filed October 24, 1929. Serial No. 291,530. PUBLISHED FEBRUARY 25, 1930. Class 6.

270,838. TOOTH PASTE, COLD CREAM, ANALGESIC BALM, ETC. JOHN A. PRICE, doing business as Price Drug Company, New York, N. Y.
Filed October 21, 1929. Serial No. 291,356. PUBLISHED FEBRUARY 18, 1930. Class 6.

270,839. COSMETICS. JAMES S. GLEOHORN, doing business as The Demilo Company, Detroit, Mich.
Filed October 10, 1929. Serial No. 290,893. PUBLISHED FEBRUARY 25, 1930. Class 6.

270,840. DYES. PAAR DYE COMPANY, Newark, N. J.
Filed October 8, 1929. Serial No. 290,792. PUBLISHED DECEMBER 17, 1928. Class 6.

270,841. MEDICINE FOR RHEUMATISM, NEURITIS, LUMBAGO, SWOLLEN FEET AND LIMBS CAUSED BY URIC ACID; FOR CLEARING THE KIDNEYS, BLADDER, AND SPLEEN; AND FOR AIDING THE LIVER, STOMACH, AND BOWELS. MRS. LUCY JANE HILL, Indianapolis, Ind.
Filed October 7, 1929. Serial No. 290,752. PUBLISHED FEBRUARY 25, 1930. Class 6.

270,842. ADHESIVE LIQUID CEMENT FOR REPAIRING AND CEMENTING WOODENWARE, GLASS, CHINA, PORCELAIN, BUILDING TILE, AND PAPER GOODS. LOUIS ABSECK, doing business as Louis Abseck Co., Brooklyn, N. Y.
Filed September 3, 1929. Serial No. 289,260. PUBLISHED MARCH 4, 1930. Class 5.

270,843. EXPECTORANT COUGH SEDATIVE. COLE CHEMICAL COMPANY, Wilmington, Del., and St. Louis, Mo.
Filed August 30, 1929. Serial No. 289,182. PUBLISHED FEBRUARY 18, 1930. Class 6.

270,844. GOLF BALLS. THE WORTHINGTON BALL COMPANY, Elyria, Ohio.
Filed August 9, 1929. Serial No. 288,368. PUBLISHED FEBRUARY 18, 1930. Class 22.

270,845. GOLF BALLS. THE WORTHINGTON BALL COMPANY, Elyria, Ohio.
Filed August 9, 1929. Serial No. 288,367. PUBLISHED FEBRUARY 18, 1930. Class 22.

270,846. GOLF BALLS. THE WORTHINGTON BALL COMPANY, Elyria, Ohio.
Filed August 9, 1929. Serial No. 288,366. PUBLISHED FEBRUARY 18, 1930. Class 22.

270,847. GOLF BALLS. THE WORTHINGTON BALL COMPANY, Elyria, Ohio.
Filed August 9, 1929. Serial No. 288,365. PUBLISHED FEBRUARY 18, 1930. Class 22.

270,848. PLATINUM, OSMIUM, AND RUTHENIUM METALS AND PLATINUM, OSMIUM, AND RUTHENIUM SHEETS AND PLATES. AMERICAN PLATINUM WORKS, Newark, N. J.
Filed August 9, 1929. Serial No. 288,310. PUBLISHED MARCH 4, 1930. Class 14.

270,849. CERTAIN NAMED PAINT PRODUCTS. THE TREMCO MANUFACTURING COMPANY, Cleveland, Ohio.
Filed August 8, 1929. Serial No. 288,292. PUBLISHED FEBRUARY 25, 1930. Class 16.

270,850. OIL OR GREASE FOR USE IN THE LEATHER INDUSTRY AS A KIND OF LEATHER STUFFING. THE MARTIN DENNIS COMPANY, Newark, N. J.
Filed July 18, 1929. Serial No. 287,084. PUBLISHED FEBRUARY 25, 1930. Class 6.

270,851. OIL OR GREASE FOR USE IN THE LEATHER INDUSTRY AS A KIND OF LEATHER STUFFING. THE MARTIN DENNIS COMPANY, Newark, N. J.
Filed July 18, 1929. Serial No. 287,083. PUBLISHED FEBRUARY 25, 1930. Class 6.

270,852. SULPHUR. KOPPERS PRODUCTS COMPANY, Pittsburgh, Pa.
Filed July 11, 1929. Serial No. 286,944. PUBLISHED FEBRUARY 18, 1930. Class 6.

270,853. DISINFECTANTS. KOPPERS PRODUCTS COMPANY, Pittsburgh, Pa.
Filed July 11, 1929. Serial No. 286,943. PUBLISHED FEBRUARY 18, 1930. Class 6.

270,854. PREPARATION FOR THE TREATMENT OF CYSTITIS, URETHRITIS, NEPHRITIS AND CATARRHAL CONDITIONS OF THE GENITO-URINARY TRACT. COLE CHEMICAL COMPANY, Wilmington, Del., and St. Louis, Mo.
Filed June 24, 1929. Serial No. 286,035. PUBLISHED FEBRUARY 18, 1930. Class 6.

270,855. SETS OF FOLDING BASEBOARD SECTIONS AND CABINETS THEREFOR FOR USE IN DISPLAYING FLOOR-COVERING EFFECTS. WARREN-ALLEN CARPET COMPANY, Boston, Mass.
Filed November 26, 1929. Serial No. 292,958. PUBLISHED MARCH 4, 1930. Class 23.

270,856. EXTRACTS, FLAVORINGS, CONCENTRATES, FRUIT COLORINGS, ETC. HOLLYWOOD DRY CORPORATION, doing business as Puritybonded Products, Inc., Los Angeles, Calif.
Filed November 25, 1929. Serial No. 292,876. PUBLISHED MARCH 4, 1930. Class 45.

270,857. CROWN BLOCKS FOR GAS AND OIL DRILLING DERRICKS. BAASH-ROSS TOOL COMPANY, INCORPORATED, Los Angeles, Calif.
Filed November 23, 1929. Serial No. 292,782. PUBLISHED MARCH 4, 1930. Class 23.

270,858. PORTABLE SEED AND GRAIN CLEANING AND TREATING MACHINES. HOEFLING BROS. INC., Chico, Calif.
Filed November 21, 1929. Serial No. 292,669. PUBLISHED MARCH 4, 1930. Class 23.

270,859. PORTABLE CLEANING AND TREATING MACHINES FOR SEED AND GRAIN. HOEFLING BROS. INC., Chico, Calif.
Filed November 21, 1929. Serial No. 292,668. PUBLISHED MARCH 4, 1930. Class 23.

270,860. FLOOR WAXING AND POLISHING HAND TOOLS. THE BUTCHER POLISH CO., Boston, Mass.
Filed November 19, 1929. Serial No. 292,575. PUBLISHED MARCH 4, 1930. Class 23.

270,861. BATHROOM CABINETS AND MIRRORS. HENKEL EDGE-LITE CORPORATION, Chicago, Ill.
Filed November 18, 1929. Serial No. 292,531. PUBLISHED MARCH 4, 1930. Class 32.

270,862. BELTS AND BELTING MADE OF RUBBER COMBINED WITH FABRIC. THE B. F. GOODRICH COMPANY, New York, N. Y.
Filed November 18, 1929. Serial No. 292,529. PUBLISHED FEBRUARY 18, 1930. Class 35.

270,863. CANOPY BEDS. LOUIS M. REHTHALER, Battle Creek, Mich.
Filed November 4, 1929. Serial No. 292,010. PUBLISHED MARCH 4, 1930. Class 32.

270,864. GARDEN TOOLS—NAMELY, TROWELS, FORKS, WEEDERS, SPUDDERS, AND TRANSPLANTERS SOLD SEPARATELY AND IN SETS. ANIMAL TRAP COMPANY OF AMERICA, Lititz, Pa.
Filed October 26, 1929. Serial No. 291,602. PUBLISHED MARCH 4, 1930. Class 23.

270,865. AUTOMATIC LUBRICATORS AND PARTS THEREOF. ISOTHERMOS CORPORATION OF AMERICA, New York, N. Y.
Filed October 15, 1929. Serial No. 291,092. PUBLISHED MARCH 4, 1930. Class 23.

270,866. SMALL PORTABLE POWER-DRIVEN CUTTING AND SAWING MACHINES. PORTABLE ELECTRIC TOOL COMPANY, Fitchburg, Mass.
Filed October 8, 1929. Serial No. 290,794. PUBLISHED MARCH 4, 1930. Class 23.

270,867. OIL-WELL TOOLS. ALLEN-OLIVER CO., Los Angeles, Calif.
Filed October 3, 1929. Serial No. 290,536. PUBLISHED MARCH 4, 1930. Class 23.

270,868. GLASS GRADUATES, GLASS MEASURING CYLINDERS, AND GLASS PIPETTES. KNY-SCHEERER CORPORATION, New York, N. Y.
Filed September 26, 1929. Serial No. 290,260. PUBLISHED MARCH 4, 1930. Class 26.

270,869. PACKING GASKETS. FRANCIS L. DIETERICH, New York, N. Y.
Filed September 13, 1929. Serial No. 289,712. PUBLISHED MARCH 4, 1930. Class 35.

270,870. BARREL AND KEG NAILING MACHINES. E. H. TITCHENER & COMPANY, Binghamton, N. Y.
Filed August 17, 1929. Serial No. 288,674. PUBLISHED MARCH 4, 1930. Class 23.

270,871. GRAPE PRODUCTS—NAMELY, GRAPE JUICE AND FROZEN GRAPE BEVERAGES. GENERAL FRUIT PACKING CORPORATION, San Francisco, Calif.
Filed July 29, 1929. Serial No. 287,814. PUBLISHED MARCH 4, 1930. Class 45.

270,872. PISTON PINS, ENGINE VALVES, MACHINERY SHAFTS, MUFFLERS, MACHINERY BUSHINGS, OIL AND WATER PUMP, IMPELLERS, AND WATER-PUMP ASSEMBLIES FOR ENGINES. ALUMINUM INDUSTRIES, INC., Cincinnati, Ohio.
Filed June 25, 1929. Serial No. 286,098. PUBLISHED MARCH 4, 1930. Class 23.

270,873. GINGER ALE AND NONALCOHOLIC, NONCEREAL, MALTLESS BEVERAGES SOLD AS SOFT DRINKS. CURRAN & JOYCE COMPANY, INCORPORATED, doing business as Triplepac Bottlers, Lawrence, Mass.
Filed June 10, 1929. Serial No. 285,339. PUBLISHED MARCH 4, 1930. Class 45.

270,874. A COMPACT PRESSED-WOOD FIBER BOARD. GIBBS BOARDTILE CORPORATION, Chicago, Ill.
Filed November 27, 1929. Serial No. 292,988. PUBLISHED FEBRUARY 18, 1930. Class 12.

270,875. METAL COALHOLE DOORS, METAL CORNER BEADS, AND STEEL WINDOW SASH. THE YOUNGSTOWN PRESSED STEEL COMPANY, Warren, Ohio.
Filed October 26, 1929. Serial No. 291,649. PUBLISHED FEBRUARY 18, 1930. Class 12.

270,876. BUILDING CEMENT. UNIVERSAL PORTLAND CEMENT COMPANY, Chicago, Ill.
Filed June 28, 1929. Serial No. 286,346. PUBLISHED MARCH 4, 1930. Class 12.

270,877. BUILDING CEMENT. LAWRENCE PORTLAND CEMENT COMPANY, Northampton, Pa.
Filed June 25, 1929. Serial No. 286,121. PUBLISHED MARCH 4, 1930. Class 12.

270,878. ASPHALT ROOFING. GRAND RAPIDS TRUST COMPANY, Grand Rapids, Mich.
Filed June 8, 1929. Serial No. 285,300. PUBLISHED FEBRUARY 18, 1930. Class 12.

270,879. COTTON GOODS IN THE PIECE AND COTTON AND SILK GOODS IN THE PIECE AND ARTIFICIAL-SILK GOODS IN THE PIECE. ROSSMAN BROTHERS & MESSNER, INC., New York, N. Y.
Filed November 25, 1929. Serial No. 292,906. PUBLISHED FEBRUARY 25, 1930. Class 42.

270,880. WOOLEN SUITING IN THE PIECE. MORRIS M. SCHER, Baltimore, Md.
Filed November 12, 1929. Serial No. 292,342. PUBLISHED MARCH 4, 1930. Class 42.

270,881. CERTAIN NAMED KNITTED, NETTED, AND TEXTILE FABRICS. L. BAMBERGER & CO., Newark, N. J.
Filed September 27, 1929. Serial No. 290,296. PUBLISHED FEBRUARY 18, 1930. Class 42.

[ACT OF MARCH 19, 1920, SEC. 1 (b)]

THESE REGISTRATIONS ARE NOT SUBJECT TO OPPOSITION.

270,882. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) IMPERIAL VALLEY GRAPEFRUIT GROWERS, El Centro, Calif. Filed Mar. 6, 1928. Serial No. 262,660.

IMPERIAL VALLEY
SWEET

For Grapefruit in Its Natural State.
Claims use since Nov. 3, 1927.

270,883. (CLASS 50. MERCHANDISE NOT OTHERWISE CLASSIFIED.) OKLAHOMA CITY SCENIC COMPANY, Oklahoma City, Okla. Filed Sept. 30, 1929. Serial No. 290,423.

OKLA. CITY SCENIC CO.

For Stage Equipment—Namely, Appurtenances Such as Front Curtains, Tormentor Wings, Grand Draperies, Teaser Borders, Neutral Borders, Foliage Borders, Interior Borders, Set Interiors, Backings, Woodland Drops, Garden Drops, Ollos, Street Drops, Fabric Ollos, Fabric Tormentors, Fabric Cycloramas, and Hardwood Tracks for Drapery Curtains.
Claims use since 1914.

270,884. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) R. H. MACY & CO., INC., New York, N. Y. Filed Dec. 14, 1928. Serial No. 276,725.

MARCEAU BRAND

For Honey, Mustard, Olive Oil, Olives, Stuffed Olives; Capers, Bottled; Vegetable Relish, Corn in Vinegar, Bottled (Maise); Wine Vinegar, Bottled; Prunes, Dried; Dates, Dried; Figs, Dried; Glacé Fruits, Dried; Marrons Glacé, Dried; Marrons in Vanilla, Bottled; Paté de Foie Gras, Tins; Filet of Herring in Olive Oil, Canned and Bottled; Sardines, Canned and Bottled; Hors d'Oeuvres, Canned and Bottled—Namely, Sardines, Tuna Fish, Olives, Artichokes, Anchovies, Herring, Mushrooms, Pickles, Either in Olive Oil or Piquant Tomato Sauce; Antipasto, Canned and Bottled; Anchovies in Olive Oil, Bottled; Filet of Anchovies, Cans; Anchovies in Salt, Bottled; Bar le Duc Jelly, Bottled; Fruit Syrups, Bottled, for Food Purposes; Goose Liver, Natural, Tins; Petit Pois (Peas), Canned; Haricot Verts (String Beans), Canned; Flageolets (Lima Beans), Canned and Dried; Asparagus, Canned; Grenadine Syrup, Bottled; Wine Sauces; Macedoines (Mixed Vegetables), Canned; Mushrooms, Canned; Artichokes, Canned; Artichokes in Olive Oil, Bottled; Cepas, Canned; Cepas, Natural, Canned; Spinach, Canned; Brussels Sprouts, Canned; Carrots, Canned; Cauliflower, Canned; Truffles, Canned; Fruits in Syrup, Bottled; Cherries in Maraschino Flavor, Bottled; Raspberry Vinegar; Celery Hearts, Canned; Purée de Foie Gras, Tins.
Claims use since 1896.

270,885. (CLASS 50. MERCHANDISE NOT OTHERWISE CLASSIFIED.) SAMUEL KASSER, doing business as Union Products Co., Philadelphia, Pa. Filed Nov. 30, 1928. Serial No. 276,040.

NEVER-LEAK

For Bottle Caps and Bottle Stoppers.
Claims use since Nov. 10, 1928.

270,886. (CLASS 48. MALT BEVERAGES AND LIQUORS.) TACOMA BREWING CO., San Francisco, Calif. Filed Mar. 21, 1930. Serial No. 297,705.

Tacoma

For Cereal Malt Beverages Containing Less Than One-Half of One Per Cent Alcohol by Volume.
Claims use since January, 1920.

270,887. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) TACOMA BREWING CO., San Francisco, Calif. Filed Mar. 21, 1930. Serial No. 297,704.

TACOMA

For Cereal Malt Syrups.
Claims use since June 1, 1927.

270,888. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) MAWER-GULDEN-ANNIS INC., Brooklyn, N. Y. Filed Mar. 12, 1930. Serial No. 297,197.

NEOPOLITAN

For Preserved Cherries.
Claims use since Oct. 1, 1927.

270,889. (CLASS 45. BEVERAGES, NONALCOHOLIC.) MORRIS A. CORNETZ, doing business as The Apple Jack Company, Boston, Mass. Filed Feb. 24, 1930. Serial No. 296,400.

Apple Jack

For Nonalcoholic, Noncereal, Maltless Beverages Sold as Soft Drinks and Syrups, Extracts, and Concentrate for Making the Same.
Claims use since July 15, 1919.

270,890. (CLASS 45. BEVERAGES, NONALCOHOLIC.) H. BARON & CO., INC., Brooklyn, N. Y. Filed Feb. 20, 1930. Serial No. 296,253.

New Amsterdam

For Flavoring Extracts and Syrups for Flavoring Soft Drinks.
Claims use since Sept. 25, 1928.

270,891. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) MORGAN C. BRITT, Winter Garden, Fla. Filed Feb. 18, 1930. Serial No. 296,172.

BRITT'S BEST

For Fresh Berries and Fresh Vegetables.
Claims use since Sept. 1, 1928.

270,892. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) A. D. MILLER SONS' COMPANY, Pittsburgh, Pa. Filed Jan. 21, 1930. Serial No. 295,037.

MILLERS
"CANTFREEZE"
FLUID

For a Liquid Preparation for Use in Radiators to Prevent Water from Freezing.
Claims use since 1925.

270,893. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) R. HOE & CO., INC., New York, N. Y. Filed Jan. 27, 1930. Serial No. 295,259.

SUPER-PRODUCTION

For Rotary Printing Machines Used for Printing Newspapers, Magazines, and Similar Products.
Claims use since Dec. 12, 1928.

270,894. (CLASS 10. FERTILIZERS.) THE STADLER PRODUCTS COMPANY, Cleveland, Ohio. Filed Dec. 28, 1929. Serial No. 294,186.

SOIL-BIL-DER

For Fertilizers and Plant Foods.
Claims use since February, 1929.

270,895. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) AMERICAN AIR COMPRESSOR WORKS, INC., Brooklyn, N. Y. Filed Dec. 20, 1929. Serial No. 293,913.

AMERICAN-FAIRHURST

For Air Compressors, Vacuum Pumps, and Receiving Tanks for Compressed Air.
Claims use since Jan. 15, 1914.

270,896. (CLASS 44. DENTAL, MEDICAL, AND SURGICAL APPLIANCES.) ALBERT P. DE SANNO, Jr., doing business as A. P. de Sanno & Son, Philadelphia, Pa. Filed Dec. 19, 1929. Serial No. 293,872.

STAYBRYTE

For Hypodermic Needles and the Following Dental Instruments or Supplies—Namely, Scalers, Chisels, Excavators, Pluggers, Plastics, Burnishers, Pliers, Handles, Probes, Lancets, Spatulas, Mandrels.
Claims use since November, 1921.

270,897. (CLASS 26. MEASURING AND SCIENTIFIC APPLIANCES.) FAICHNEY INSTRUMENT CORPORATION, Watertown, N. Y. Filed May 29, 1929. Serial No. 284,782.

COLDMETER

For Thermometers.
Claims use since Feb. 1, 1929.

270,898. (CLASS 50. MERCHANDISE NOT OTHERWISE CLASSIFIED.) SCHWARZWAELDER COMPANY, Philadelphia, Pa. Filed May 3, 1929. Serial No. 283,467.

Shamykyd

For Waterproof Fabrics.
Claims use since Mar. 15, 1929.

270,899. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) FORSTMANN & HUFFMANN COMPANY, Passaic, N. J. Filed Apr. 17, 1929. Serial No. 282,542.

Corinna

For Woolen Piece Goods.
Claims use since Mar. 15, 1929.

270,900. (CLASS 37. PAPER AND STATIONERY.) READY SHARP CHALK CORP., New York, N. Y. Filed Apr. 15, 1929. Serial No. 282,432.

SHARP-EDGE

For Marking Chalk, Tailor's Chalk.
Claims use since January, 1928.

270,901. (CLASS 16. PAINTS AND PAINTERS' MATERIALS.) M. EWING FOX CO., INC., New York, N. Y. Filed Apr. 8, 1929. Serial No. 281,994.

LINEWITE

For Dry White Powder to be Mixed with Water, for Use as a Water Paint.
Claims use since Mar. 20, 1929.

270,902. (CLASS 44. DENTAL, MEDICAL, AND SURGICAL APPLIANCES.) THE STANDARD CORSET COMPANY, New York, N. Y. Filed Feb. 21, 1929. Serial No. 279,762.

NoJAR

For Body Supports.
Claims use since Feb. 13, 1929.

270,903. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) PACIFIC MILLS, Boston, Mass. Filed Mar. 29, 1929. Serial No. 281,565.

NEVERUN

For Cotton Piece Goods.
Claims use since Mar. 10, 1929.

270,904. (CLASS 50. MERCHANDISE NOT OTHERWISE CLASSIFIED.) THE FELTERS COMPANY, Boston, Mass. Filed Feb. 11, 1929. Serial No. 279,156.

DRI PAD

For Felt.
Claims use since on or about Jan. 17, 1929.

270,905. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) REED LABORATORIES, INC., Kew Gardens, N. Y. Filed Jan. 21, 1929. Serial No. 278,252.

REED ROUGE

For Combined Lip Stick and Face Rouge.
Claims use since January, 1928.

270,906. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) ESSIE M. STARK, Farmington, N. Mex. Filed Dec. 31, 1928. Serial No. 277,463.

True Color

For Hair Tonic.
Claims use since Oct. 18, 1928.

270,907. (CLASS 32. FURNITURE AND UPHOLSTERY.) THE BOYE NEEDLE CO., Chicago, Ill. Filed July 3, 1929. Serial No. 286,550.

BOYE

For Stainless-Steel Cabinet Ware Display Cabinets.
Claims use since Sept. 27, 1928.

270,908. (CLASS 22. GAMES, TOYS, AND SPORTING GOODS.) NIBLETT-JEFFRIES CORPORATION, New York, N. Y. Filed Sept. 12, 1929. Serial No. 289,687.

LEYLAND

For Golf Clubs, Iron Clubs, Iron Heads, and Golf Bags.
Claims use since on or about Mar. 11, 1929.

LABELS

REGISTERED MAY 13, 1930

37,412.—*Title:* ORIGINAL MEXICAN SUGARED CHOCOLATE) PECANS. For Sugared Pecans. AMERICAN PECAN & NUT CO., San Antonio, Tex. Published March 31, 1930.

37,413.—*Title:* ORIGINAL MEXICAN SUGARED (PILONCILLO) PECANS. For Sugared Pecans. AMERICAN PECAN & NUT CO., San Antonio, Tex. Published March 31, 1930.

37,414.—*Title:* ORIGINAL MEXICAN SUGARED (VANILLA) PECANS. For Sugared Pecans. AMERICAN PECAN & NUT CO., San Antonio, Tex. Published March 31, 1930.

37,415.—*Title:* DONNA. For Chile Con Carne. GEORGE BEGLEY, Jr., Chicago, Ill. Published September 29, 1929.

37,416.—*Title:* HAUCKS CERTIFIED HOP FLAVOR MALT EXTRACT. For Malt Extract. PHILIP G. BENJAMIN, doing business as Hauck Malt Extract Company, Cincinnati, Ohio. Published February 28, 1930.

37,417. —*Title:* PURPLE & GOLD PACKAGE ELEGANT. For Candy. BROWN & HALEY, Tacoma, Wash. Published February 1, 1930.

37,418.—*Title:* CAMPFIRE. For Marshmallows. THE CAMPFIRE CORPORATION, Chicago, Ill. Published February 1, 1930.

37,419.—*Title:* CROCE'S SCOTCH DRY BEVERAGES. For Fruit Beverages. LOUIS P. CROCE, INC., Asbury Park, N. J. Published April 4, 1930.

37,420.—*Title:* DANNEMILLER'S GOLDEN BLEND COFFEE. For Coffee. THE DANNEMILLER GROCERY COMPANY, Canton, Ohio. Published April 1, 1928.

37,421.—*Title:* ACE PROPHYLACTIC. For Prophylactic. CLARK DILWORTH, doing business as Ace Chemical Company, San Antonio, Tex. Published January 18, 1930.

37,422.—*Title:* BOGARDUS. For Cigars. ARTHUR M. DOTY, INC., New York N. Y. Published February 10, 1930.

37,423.—*Title:* PIXIE STRAINED GREEN BEANS. For Strained Green Beans. FRUIT BELT PRES. COMPANY, East Williamson, N. Y. Published January 20, 1930.

37,424.—*Title:* AMERICAN BEAUTY. For Cake. THE JAMES A. HARPER SUPPLY COMPANY, Kansas City, Mo. Published February 17, 1930.

37,425.—*Title:* LAXINE. For Laxative. JNO. A. KESSEL, Buffalo, N. Y. Published June 1, 1929.

37,426.—*Title:* KRAMO CAPS. For Bottle Caps. KRAMO MANUFACTURING CORPORATION, Philadelphia, Pa. Published January 20, 1930.

37,427.—*Title:* EPIPLASM. For a Medicinal Preparation Designed to Protect the Body Surface and to Retard Early Decay and Degeneration of the Skin. NEODERM COMPANY, Los Angeles, Calif. Published January 27, 1930.

37,428.—*Title:* SWEET GEORGIA BROWN MARVELOUS FACE POWDER. For Face Powder. MORTON G. NEUMANN, Chicago, Ill. Published September 15, 1929.

37,429.—*Title:* MUNZ 77. For Medical Preparation for the Treatment of Pyorrhea and Trench Mouth. VON MUNZ CO., Minneapolis, Minn. Published January 31, 1930.

37,430.—*Title:* A to Z. For Medical Preparation for the Treatment of Any Skin Affliction Such as Itch, Blotches, Boils, Pimples, Cold Sores, Bumps, Frostbite, and Bruises. VON MUNZ CO., Minneapolis, Minn. Published January 31, 1930.

37,431.—*Title:* KILCHIGERS. For Medical Preparation for Chiggers, Mites, Poison Ivy, Insect Bites or Stings. VON MUNZ CO., Minneapolis, Minn. Published January 31, 1930.

37,432.—*Title:* INSIGNIA OF THE WALLPAPER ASSOCIATION OF THE UNITED STATES. For Wall Paper. WALLPAPER ASSOCIATION OF THE UNITED STATES, New York, N. Y. Published August 19, 1929.

37,433.—*Title:* $1000 LOAF. For Bread. THE WESSELS BAKING COMPANY, Seattle, Wash. Published February 4, 1930.

PRINTS

REGISTERED MAY 13, 1930

12,528.—*Title:* ANESTEX INJECTUBES. For Local Anesthetic. DAVID CURTIS, doing business as Anestex Laboratories De-Ce Products Co. of N. Y., New York, N. Y. Published March 1, 1930.

12,529.—*Title:* LEM-EN-COKE. For Soft Drinks. ORRIS H. HALVERSON, Waukesha, Wis. Published March 3, 1930.

12,530.—*Title:* "LITTLE POST OFFICE" STAMP VENDING MACHINES. For Postage-Stamp-Vending Machines. SHELLEY B. HUTCHINSON, New York, N. Y. Published December 15, 1929.

12,531.—*Title:* A DENTIFRICE. For a Dentifrice. THE CHAS. H. PHILLIPS CHEMICAL CO., New York, N. Y. Published February 3, 1930.

12,532.—*Title:* THE GENUINE MISSOURI CORN COB PIPE. For Corncob Pipes. PHOENIX-AMERICAN PIPE WORKS, Boonville, Mo. Published February 1, 1930.

12,533.—*Title:* THE WINDBLOWN TULIP. For Quilting Cotton. THE STEARNS & FOSTER CO., Lockland, Cincinnati, Ohio. Published July 20, 1929.

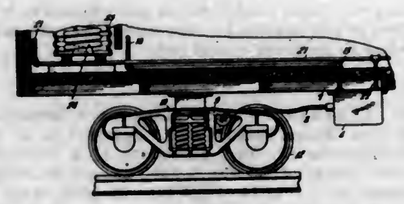
12,534.—*Title:* THE CORNUCOPIA. For Quilting Cotton. THE STEARNS & FOSTER CO., Lockland, Cincinnati, Ohio. Published February 19, 1930.

12,535.—*Title:* TUMBLING BLOCKS. For Quilting Cotton. THE STEARNS & FOSTER CO., Lockland, Cincinnati, Ohio. Published February 11, 1930.

REISSUES

MAY 13, 1930

17,660. REFRIGERATOR CAR. OTTO LUHR, Chicago, Ill. Filed Dec. 11, 1929. Serial No. 413,206. Original No. 1,642,882, dated Sept. 20, 1927, Serial No. 107,944, filed May 10, 1926. 5 Claims. (Cl. 62—117.)



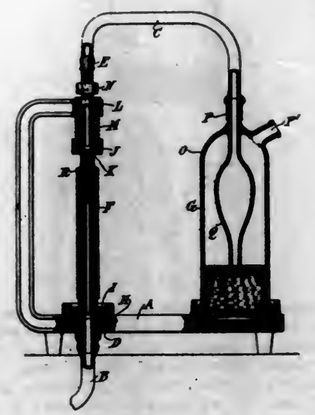
2. In a refrigerator car having a bulkhead at one end thereof, the combination with a brine tank located between the bulkhead and car end; of a refrigerating coil partly submerged within said brine tank and partly exposed outside of said brine tank; a compressor rigidly secured to the car body on the outer side thereof; means adapted to be driven from the truck while the car is in motion for operating the compressor; a condenser coil disposed on the outside of the car; a liquid receiving tank disposed on the interior of the car; and pipe connections from the compressor to the condenser coil, from the condenser coil to the tank, from the tank to the refrigerating coil, and from the refrigerating coil to the compressor, whereby the exposed portions of the refrigerating coil are effective to refrigerate the air in the car while the latter is in motion and to simultaneously refrigerate the brine and render the latter available for refrigerating the air when the car is stationary.

17,661. REFRACTORY ARTICLE AND METHOD OF PROTECTING THE SAME. RICHARD H. MARTIN, Worcester, Mass., assignor to Norton Company, Worcester, Mass., a Corporation of Massachusetts. Filed May 21, 1929. Serial No. 364,939. Original No. 1,653,918, dated Dec. 27, 1927, Serial No. 24,277, filed Apr. 18, 1925. 11 Claims. (Cl. 91—70.)

9. A refractory article comprising a body of bonded refractory grains and a relatively thin protective coating thereover and bonded thereto composed in large part of magnesium compound, said protective coating being substantially impervious to kiln gases under normal operating conditions.

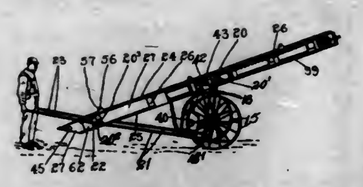
17,662. LEAK-DETECTING APPARATUS. CHARLES JOHN SPILL, Freeport, N. Y., assignor to A. Schrader's Son, Incorporated, Brooklyn, N. Y., a Corporation of New York. Filed June 28, 1928. Serial No. 289,021. Original No. 1,592,389, dated July 13, 1926, Serial No. 735,922, filed Sept. 4, 1924. 14 Claims. (Cl. 73—51.)

1. A device of the kind described, comprising a pair of aligned spaced seats one of which is movable longitudinally with respect to the other and urged toward said other by spring means, said seats being adapted to receive therebetween a pneumatic tire valve, each of said seats having a passage therethrough, one of said seats being



adapted for connection to a source of fluid pressure or suction and the other seat being connected to a pressure-indicating device.

17,663. CONVEYER. JESSE L. WENTZ Passaic, N. J., assignor to Portable Machinery Company, Inc., Passaic, N. J., a Corporation of New Jersey. Filed July 1, 1929. Serial No. 375,260. Original No. 1,275,808, dated Aug. 13, 1918, Serial No. 185,759, filed Aug. 11, 1917. Reissue No. 14,977, dated Nov. 2, 1920, Serial No. 345,651, filed Dec. 17, 1919. 11 Claims. (Cl. 198—11.)

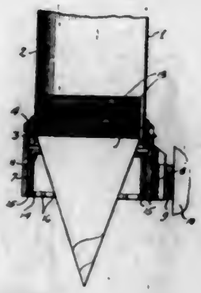


1. A conveyer as characterized comprising an endless belt; a frame therefor embodying an idler roll for supporting said belt at the lower end of said frame; and a plate engaging said belt for supporting said belt adjacent said roll and for a distance therefrom, said plate having a sharpened edge adjacent the roll for removing accretions thereon for delivery of said accretions between said belt and plate.

17,664. CONICAL-CUP DISPENSER. CESARE BARBIERI, New York, N. Y., assignor to Vortex Cup Company, a Corporation of Illinois. Filed Aug. 31, 1929. Serial No. 389,834. Original No. 1,694,157, dated Dec. 4, 1928, Serial No. 107,011, filed May 6, 1926. 8 Claims. (Cl. 312—43.)

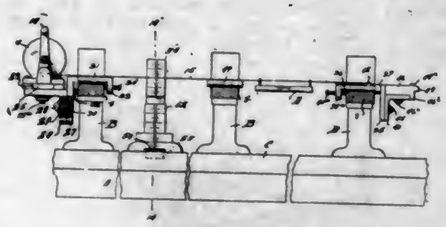
8. A cup dispenser comprising a container for a stack of internested flexible conical cups, a continuous circum-

ferential row of regularly spaced fingers near the lower or dispensing end of said container projecting radially into the path of said stack and engaging only with the lowermost cup at a distance below its upper edge whereby to support said stack with its lower end projecting a distance below the dispensing end of said container, said fingers being relatively small as well as rigid and unyielding and being rounded horizontally at their inner cup



engaging edges whereby when said lowermost cup is pulled downwardly its conical walls adjacent to its edge will be gradually deflected inwardly by said fingers in accordance with the rounded edges thereof and will bulge outwardly only to a slight extent into the spaces between said fingers thereby to ease the withdrawal movement of said cup past said fingers, said fingers after release therefrom of said cup serving to engage with the succeeding cup to prevent it from following the withdrawn cup.

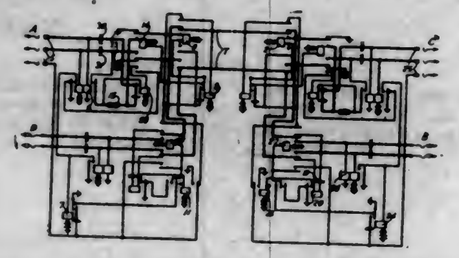
17,665. MEANS FOR LEVELING AND LINING SPINNING FRAMES. ALBERT M. GUILLET, Charlotte, N. C. Filed Jan. 30, 1929. Serial No. 336,236. Original No. 1,616,084, dated Feb. 1, 1927, Serial No. 99,128, filed Apr. 1, 1926. 17 Claims. (Cl. 33—84.)



1. Means for leveling and lining machinery comprising a pair of clamps, each having a base, a member mounted on one base for turning through a quarter of a circle, a reel mounted upon the member on said base, a wire attached to the reel, and a wire anchor mounted upon the other base and having means for detachably engaging the end of the wire.

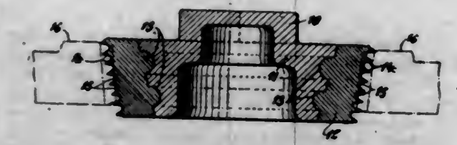
17,666. TELEPHONE SYSTEM. EDWARD E. HINRICHSEN, New York, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Mar. 8, 1930. Serial No. 434,435. Original No. 1,689,343, dated Oct. 30, 1928, Serial No. 194,323, filed May 26, 1927. 7 Claims. (Cl. 179—18.)

1. In a telephone system, a two-way trunk, means for automatically seizing said trunk at either end, means for automatically extending said trunk at either end, means responsive to the seizure of the trunk at one end for transmitting a current impulse to the opposite end, means at said opposite end responsive to said current impulse for



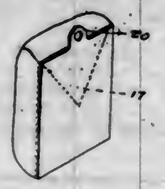
disabling the trunk seizing means and responsive to the cessation of said impulse for connecting the trunk extending means to the trunk at said end.

17,667. CLEAN-OUT PLUG. FREDERICK J. MERSFELDER and PAUL BALZE, Leonia, N. J., assignors to M. & B. Manufacturing Co., Inc., Leonia, N. J., a Corporation of New Jersey. Filed Mar. 3, 1930. Serial No. 432,885. Original No. 1,702,678, dated Feb. 19, 1929, Serial No. 192,357, filed May 18, 1927. Reissue No. 17,528, dated Dec. 17, 1929, Serial No. 361,238, filed May 7, 1929. 8 Claims. (Cl. 137—76.)



1. The herein described fitting comprising a member having a uniform taper throughout the length thereof, the thread having a broad root of a different diameter than a thread to engage same, said member having a soft metal body to permit a new thread to be cut into the said root on engaging said member with a hard metal threaded device, the taper of the thread of the soft metal member being greater than that of the other member, the pitch of the angles of the sides of the thread being substantially the same for both members.

17,668. PACKAGE. MARTIN ROSEN, Chicago, Ill., assignor to Sun Goods Corporation, Chicago, Ill., a Corporation of Illinois. Filed Mar. 7, 1930. Serial No. 434,154. Original No. 1,691,306, dated Nov. 13, 1928, Serial No. 215,004, filed Aug. 24, 1927. 5 Claims. (Cl. 206—46.)



1. A package comprising in combination loose particles of food, a stiff sheet and a diamond-shaped wrapper for enclosing said particles of food, three corners of said wrapper being folded over and secured to one face of said sheet, the remaining corner of said wrapper being disposed between said contents of the package and the other face of said sheet, whereby said last mentioned corner may be pulled out and assist in dispensing the contents from the package.

DESIGNS

MAY 13, 1930

81,121. GOBLET OR SIMILAR ARTICLE. OLIVER S. ATTERHOLT, Frostburg, Md., assignor to Sloan Brothers, Lonaconing, Md., a Partnership composed of Alexander Sloan and Dixon C. Sloan. Filed Jan. 23, 1930. Serial No. 34,240. Term of patent 14 years.



The ornamental design for a goblet or similar article as shown.

81,122. GOBLET OR SIMILAR ARTICLE. OLIVER S. ATTERHOLT, Frostburg, Md., assignor to Sloan Brothers, Lonaconing, Md., a Partnership composed of Alexander Sloan and Dixon C. Sloan. Filed Jan. 23, 1930. Serial No. 34,241. Term of patent 14 years.



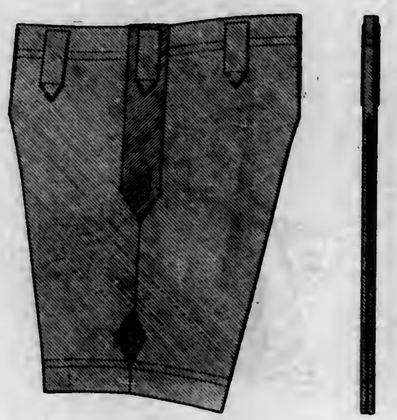
The ornamental design for a goblet or similar article as shown.

81,123. RAG DOLL. VIRGINIA D. AYRES, Berlin, Md. Filed Feb. 6, 1930. Serial No. 34,437. Term of patent 3½ years.



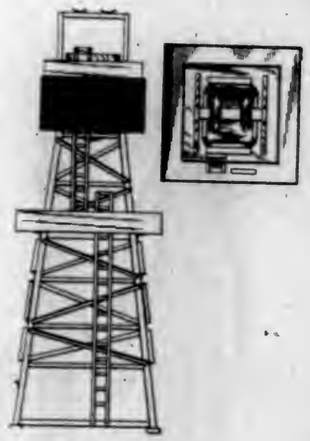
The ornamental design for a rag doll as shown.

81,124. SWIMMING TRUNK. PHILIP BERGH, Portland, Oreg., assignor to Jantzen Knitting Mills, Portland, Oreg. Filed Aug. 12, 1929. Serial No. 32,397. Term of patent 14 years.



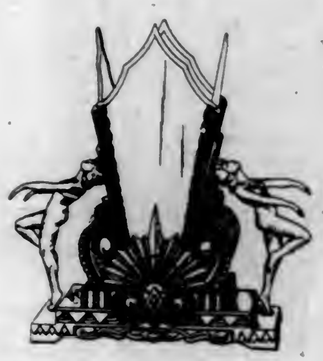
The ornamental design for a swimming trunk, as shown and described.

81,125. COMBINED LAMP AND SMOKING STAND. JOHN L. BLASDELL and COBURN H. DERRINGER, Ventura, Calif. Filed Dec. 28, 1929. Serial No. 33,972. Term of patent 3½ years.



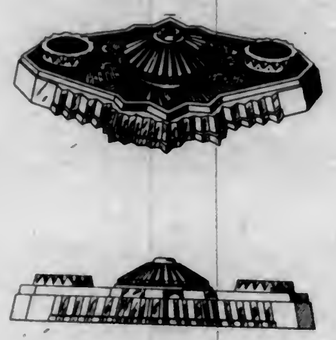
The ornamental design for a combined lamp and smoking stand, substantially as shown and described.

81,126. TABLE LAMP OR ARTICLE OF SIMILAR NATURE. PAUL CRICCHIO, New York, N. Y., assignor to Wrought Iron & Art Glass Fixture Co., Inc., New York, N. Y. Filed Feb. 15, 1930. Serial No. 34,560. Term of patent 3½ years.



The ornamental design for a table lamp or article of similar nature, as shown and described.

81,127. LIGHTING-FIXTURE BASE OR ARTICLE OF SIMILAR NATURE. GERHARD DANKER, Oradell, N. J., assignor to Grandolier Lighting Fixture Co., New York, N. Y. Filed Mar. 3, 1930. Serial No. 34,723. Term of patent 3½ years.



The ornamental design for a lighting fixture base, or article of similar nature, as shown.

81,128. SWEATER OR ARTICLE OF SIMILAR NATURE. AUGUST EGRER, Great Neck, N. Y., assignor to S. Augstein & Co., New York, N. Y. Filed Feb. 12, 1930. Serial No. 34,508. Term of patent 7 years.



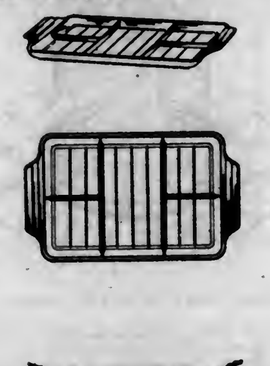
The ornamental design for a sweater, or article of similar nature, as shown.

81,129. BENCH OR SIMILAR ARTICLE. ANTONIO FABBRO, Tampa, Fla. Filed Dec. 19, 1929. Serial No. 33,859. Term of patent 14 years.



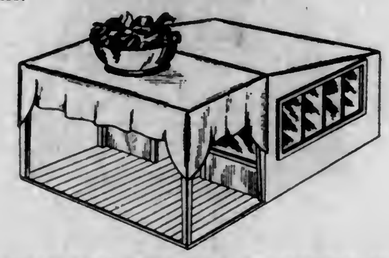
The ornamental design for a bench or similar article, as shown.

81,130. COMPARTMENT TRAY. DAVID FISHER, Paden City, W. Va., assignor to Paden City Glass Manufacturing Company, Paden City, W. Va., a Corporation of West Virginia. Filed Feb. 5, 1930. Serial No. 34,412. Term of patent 3½ years.



The ornamental design for a compartment tray, as shown.

81,131. MERCHANDISING BOOTH. FLORENCE L. GAILEY and JOHN K. GAILEY, Eagle Rock, Calif. Filed June 15, 1929. Serial No. 31,721. Term of patent 3½ years.



The ornamental design for a merchandising booth as shown.

81,132. COMBINATION WRIST COMPACT AND MIRROR. OSCAR E. GEBAUER, Scottsbluff, Nebr. Filed Jan. 14, 1930. Serial No. 34,128. Term of patent 7 years.



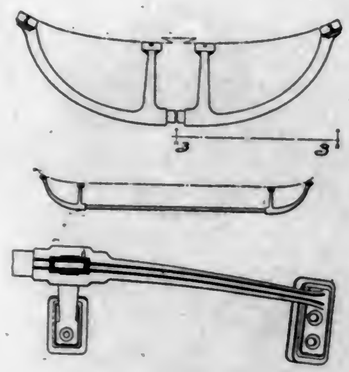
The ornamental design for a combination wrist compact and mirror as shown.

81,133. BRIDGE MEMBER FOR AN OPTICAL MOUNTING. WILLIAM PETER GLINTENKAMP, Bellaire, N. Y., assignor to May Manufacturing Co. Inc., New York, N. Y. Filed Aug. 29, 1929. Serial No. 32,616. Term of patent 7 years.



The ornamental design for a bridge member for an optical mounting, as shown.

81,134. ROBE RAIL. HERBERT V. HENDERSON, Detroit, Mich., assignor to Chrysler Corporation, Detroit, Mich., a Corporation of Delaware. Filed June 15, 1929. Serial No. 31,708. Term of patent 3½ years.



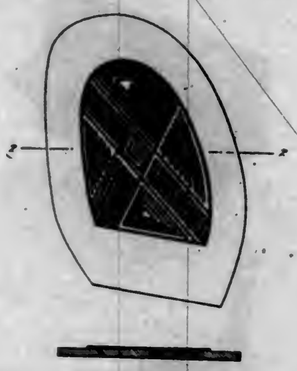
The ornamental design for a robe rail substantially as shown and described.

81,135. BATHING SUIT OR SIMILAR ARTICLE. ARDENT HOLLINGSWORTH, Portland, Oreg. Filed Dec. 5, 1929. Serial No. 33,666. Term of patent 14 years.



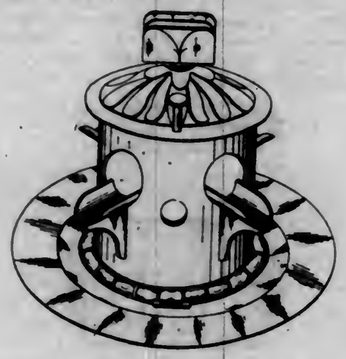
The ornamental design for a bathing suit or similar article as shown.

81,136. SHOE SOLE. MYER S. KLEIN, Chelsea, Mass., assignor to Panco Rubber Company, Chelsea, Mass., a Corporation of Massachusetts. Filed July 18, 1929. Serial No. 32,118. Term of patent 14 years.



The ornamental design for a shoe sole as shown.

81,137. ASH RECEPTACLE. ANTHONY KOLAR, New York, N. Y. Filed Feb. 26, 1930. Serial No, 34,655. Term of patent 3½ years.



The ornamental design for an ash receptacle, as shown.

81,138. BUCKLE. JEROME R. LA VIGNE, Waterbury, Conn., assignor to Waterbury Buckle Company, Waterbury, Conn., a Corporation. Filed Feb. 3, 1930. Serial No. 34,393. Term of patent 3½ years.



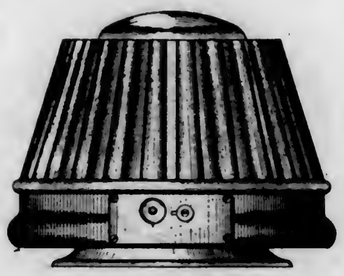
The ornamental design for a buckle as shown.

81,139. ENSEMBLE SUIT. DOROTHY LONG, New York, N. Y., assignor to Franklin Simon & Company, Inc., New York, N. Y., a Corporation of New York. Filed Feb. 12, 1930. Serial No. 34,515. Term of patent 3½ years.



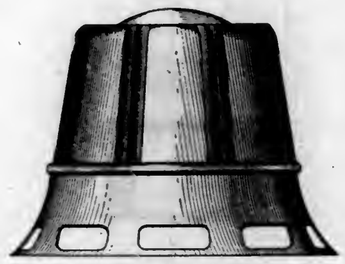
Th ornamental design for an ensemble suit substantially as shown and described.

81,140. REFRIGERATOR UNIT. EDWARD B. MALLORY, Tenafly, N. J. Filed Jan. 17, 1930, Serial No. 34,171. Term of patent 14 years.



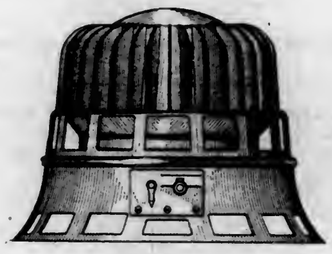
The ornamental design for a refrigerator unit as shown, and described.

81,141. REFRIGERATOR UNIT. EDWARD B. MALLORY, Tenafly, N. J. Filed Jan. 17, 1930. Serial No. 34,174. Term of patent 14 years.



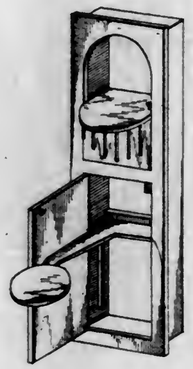
The ornamental design for a refrigerator unit as shown and described.

81,142. REFRIGERATOR UNIT. EDWARD B. MALLORY, Tenafly, N. J. Filed Jan. 17, 1930. Serial No. 34,176. Term of patent 14 years.



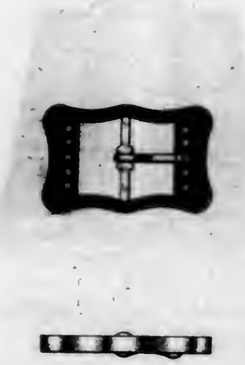
The ornamental design for a refrigerator unit as shown and described.

81,143. TELEPHONE CABINET. FREDERICK P. MICKELSON, Durham, N. C., assignor of one-half to Raymond A. Sorrell, Durham, N. C. Filed Feb. 6, 1930. Serial No. 34,431. Term of patent 3½ years.



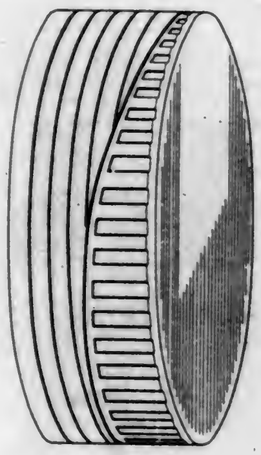
The ornamental design for a telephone cabinet, as shown.

81,144. BUCKLE. WILLIAM L. MYERS, Newark, N. J., assignor to L. A. Myers, Jr., Inc., Newark, N. J., a Corporation of New Jersey. Filed Jan. 16, 1930. Serial No. 34,155. Term of patent 7 years.



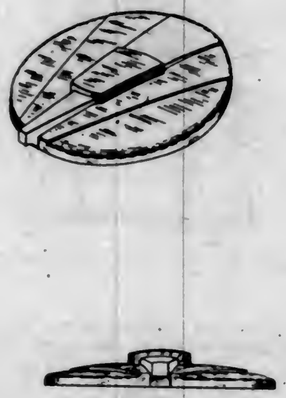
The ornamental design for a buckle substantially as shown.

81,145. HEAD LAMP. FREDERICK W. C. NEUNER, Connersville, Ind., assignor to Indiana Lamp Corporation, Connersville, Ind., a Corporation. Filed Jan. 24, 1930. Serial No. 34,265. Term of patent 7 years.



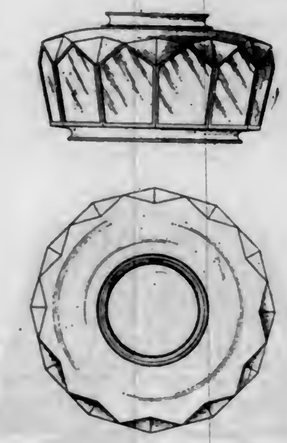
The ornamental design for a head lamp, substantially as shown and described.

81,146. COMBINED HORN BUTTON AND CONTROL LEVER. JOHN J. PUNKE, Detroit, Mich., assignor to Hupp Motor Car Corporation, Detroit, Mich., a Corporation of Virginia. Filed July 22, 1929. Serial No. 32,148. Term of patent 14 years.



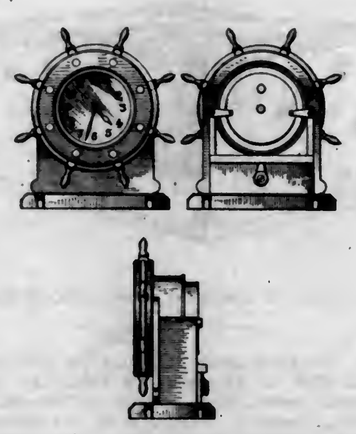
The ornamental design for a combined horn button and control lever substantially as shown.

81,147. LIGHT-DIFFUSING GLOBE. WILLIAM F. REED, Camden, N. J., assignor to Gillinder Brothers, Inc., Port Jervis, N. Y., a Corporation of New York. Filed Mar. 5, 1930. Serial No. 34,738. Term of patent 3½ years.



The ornamental design for a light diffusing globe as shown.

81,148. CLOCK CASE. JESSE T. RHODES, Brooklyn, N. Y. Filed Nov. 25, 1929. Serial No. 33,555. Term of patent 7 years.



The ornamental design for a clock case as shown.

81,149. SHOE ORNAMENT. SAMUEL M. RIKER, Chester, N. J. Filed Mar. 7, 1930. Serial No. 34,766. Term of patent 7 years.



The ornamental design for a shoe ornament, as shown.

81,150. SHOE ORNAMENT. SAMUEL M. RIKER, Chester, N. J. Filed Mar. 7, 1930. Serial No. 34,767. Term of patent 7 years.



The ornamental design for a shoe ornament, as shown.

81,151. SHOE ORNAMENT. SAMUEL M. RIKER, Chester, N. J. Filed Mar. 7, 1930. Serial No. 34,768. Term of patent 7 years.



The ornamental design for a shoe ornament, as shown.

81,152. SHOE BUCKLE. SAMUEL M. RIKER, Chester, N. J. Filed Mar. 7, 1930. Serial No. 34,770. Term of patent 7 years.

The ornamental design for a shoe buckle, as shown.

81,153. SHOE BUCKLE. SAMUEL M. RIKER, Chester, N. J. Filed Mar. 7, 1930. Serial No. 34,771. Term of patent 7 years.



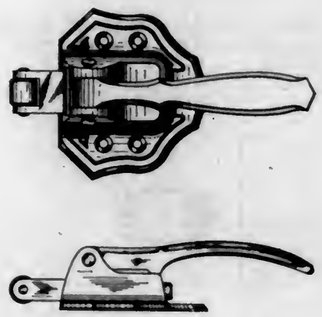
The ornamental design for a shoe buckle, as shown.

81,154. SHOE BUCKLE. SAMUEL M. RIKER, Chester, N. J. Filed Mar. 7, 1930. Serial No. 34,773. Term of patent 7 years.



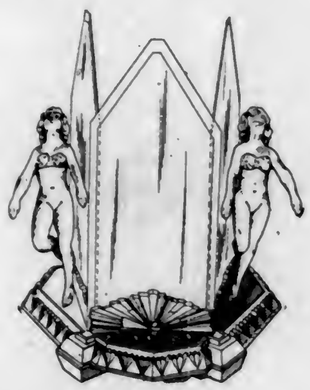
The ornamental design for a shoe buckle, as shown.

81,155. LATCH. GORDON E. ROEDDING, Grand Rapids, Mich., assignor to Grand Rapids Brass Company, Grand Rapids, Mich., a Corporation of Michigan. Filed Aug. 28, 1929. Serial No. 32,579. Term of patent 3½ years.



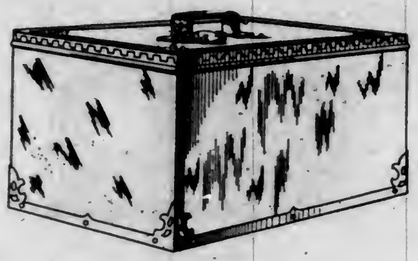
The ornamental design for a latch substantially as shown.

81,156. TABLE LAMP OR ARTICLE OF SIMILAR NATURE. FREDERICK W. ROETTGES, New York, N. Y., assignor to Wrought Iron & Art Glass Fixture Co., Inc., New York, N. Y. Filed Feb. 15, 1930. Serial No. 34,562. Term of patent 3½ years.



The ornamental design for a table lamp, or article of similar nature, as shown, and described.

81,157. BREAD BOX. SALLIE A. SCHLOSBERG, Henrietta, Tex. Filed Jan. 20, 1930. Serial No. 34,185. Term of patent 14 years.



The ornamental design for a bread box, as shown.

81,158. OUTSIDE DOOR HANDLE OR SIMILAR ARTICLE FOR AN AUTOMOTIVE VEHICLE. WILLIAM SCHNELL, Detroit, Mich., assignor to Ternstedt Manufacturing Company, Detroit, Mich., a Corporation of Michigan. Filed Feb. 24, 1930. Serial No. 34,638. Term of patent 7 years.



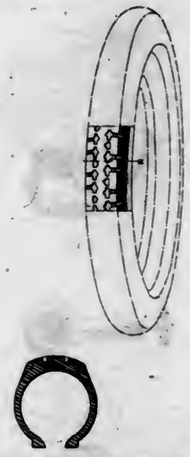
The ornamental design for an outside door handle or similar article for an automotive vehicle substantially as shown.

81,159. BABY'S SHOE BOX. BENNO SCHUBART, Nuremberg, Germany, assignor to the Firm Vereinigte Schuhfabriken Berneis-Wessels, A. G., Augsburg-Oberhausen, Germany, a Firm of Germany. Filed Mar. 6, 1930, Serial No. 34,757, and in Germany Nov. 16, 1929. Term of patent 3½ years.



The ornamental design for a baby's shoe box, as shown.

81,160. TIRE. WALTER E. SHIVELY, Akron, Ohio, assignor to Sears, Roebuck and Co., Chicago, Ill., a Corporation of New York. Filed Dec. 13, 1927. Serial No. 24,468. Term of patent 14 years.



The ornamental design for a tire, as shown.

81,161. CLOCK BASE. JOHN O. SIMPSON, Bristol, Conn., assignor to The E. Ingraham Company, Bristol, Conn., a Corporation. Filed Dec. 30, 1929. Serial No. 33,980. Term of patent 14 years.



The ornamental design for a clock base as shown.

81,162. SHOE BUCKLE. WALTER EDWARD SMITH, Warwick Downs, R. I., assignor to C. G. King & Co., Inc., Providence, R. I. Filed Feb. 28, 1930. Serial No. 34,686. Term of patent 3½ years.



The ornamental design for a shoe buckle as shown.

81,163. SHOE BUCKLE. WALTER EDWARD SMITH, Warwick Downs, R. I., assignor to C. G. King & Co., Inc., Providence, R. I. Filed Feb. 28, 1930. Serial No. 34,687. Term of patent 3½ years



The ornamental design for a shoe buckle as shown.

81,164. SHOE BUCKLE. WALTER EDWARD SMITH, Warwick Downs, R. I., assignor to C. G. King & Co., Inc., Providence, R. I. Filed Feb. 28, 1930. Serial No. 34,688. Term of patent 3½ years.



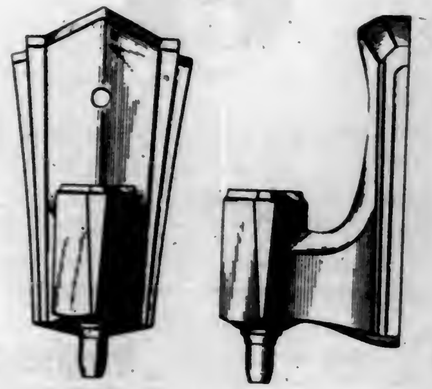
The ornamental design for a shoe buckle as shown.

81,165. SHOE BUCKLE. WALTER EDWARD SMITH, Warwick Downs, R. I., assignor to C. G. King & Co., Inc., Providence, R. I. Filed Feb. 28, 1930. Serial No. 34,689. Term of patent 3½ years.



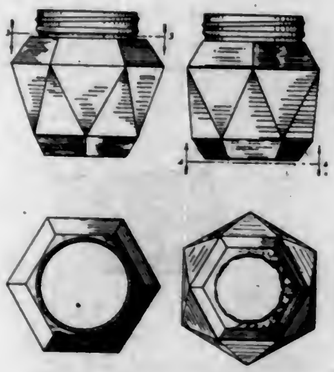
The ornamental design for a shoe buckle as shown.

81,166. LIGHTING FIXTURE. HYMAN TAUBER, East Liverpool, Ohio. Filed Jan. 31, 1930. Serial No. 34,364. Term of patent 7 years.



The ornamental design for a lighting fixture as shown.

81,167. JAR OR SIMILAR CONTAINER. WALTER D. TEAGUE, Forest Hills, N. Y., assignor to Turner Glass Corporation, Terre Haute, Ind., a Corporation of Indiana. Filed Oct. 18, 1929. Serial No. 33,091. Term of patent 14 years.



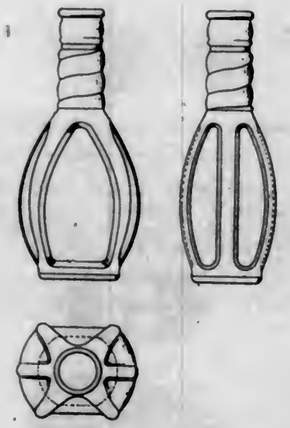
The ornamental design for a jar or similar container as shown.

81,168. SUSPENSION BRACKET. ROBERT D. W. VROOM, Wallingford, Conn., assignor to H. L. Judd Co., Inc., New York, N. Y., a Corporation of Delaware. Filed Nov. 5, 1929. Serial No. 33,337. Term of patent 7 years.



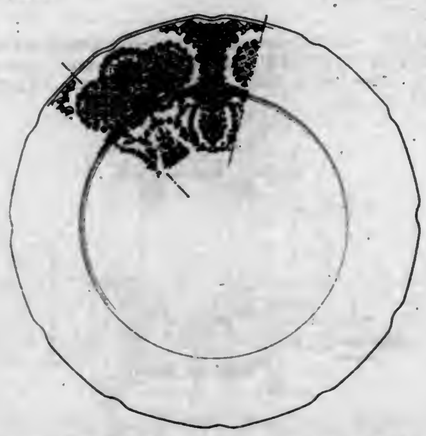
The ornamental design for a suspension bracket, substantially as shown.

81,169. BOTTLE. WALTER T. WALKER, Ottawa Hills, Toledo, Ohio, assignor to Owens-Illinois Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Nov. 9, 1929. Serial No. 33,396. Term of patent 14 years.



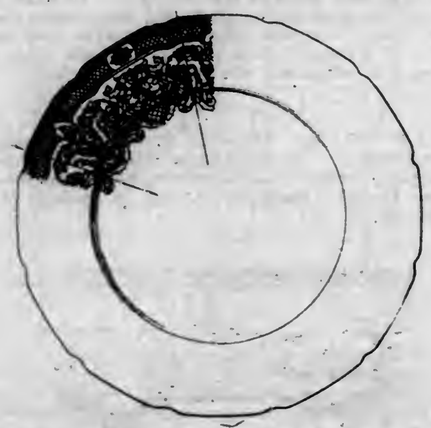
The ornamental design for a bottle, substantially as shown.

81,170. PLATE OR SIMILAR ARTICLE. GEORGE WESP, New York, N. Y., assignor to The Rosenthal China Corporation, New York, N. Y., a Corporation of New York. Filed Feb. 21, 1930. Serial No. 34,614. Term of patent 7 years.



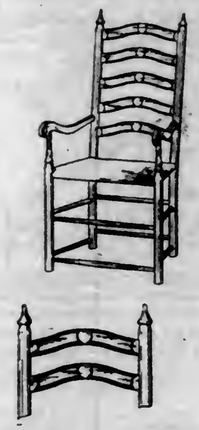
The ornamental design for a plate or similar article, as shown and described.

81,171. PLATE OR SIMILAR ARTICLE. GEORGE WESP, New York, N. Y., assignor to The Rosenthal China Corporation, New York, N. Y., a Corporation of New York. Filed Feb. 21, 1930. Serial No. 34,615. Term of patent 7 years.



The ornamental design for a plate or similar article, as shown and described.

81,172. CHAIR OR SIMILAR ARTICLE. EDSON G. WHITCOMB, Keene, N. H., assignor to Sprague & Carleton, Keene, N. H., a Corporation of New Hampshire. Filed Feb. 12, 1930. Serial No 34,491. Term of patent 7 years.



The ornamental design for a chair or similar article as shown and described.

81,173. BOTTLE. RENÉE THORNTON, New York, N. Y. Filed Mar. 12, 1930. Serial No. 34,835. Term of patent 14 years.

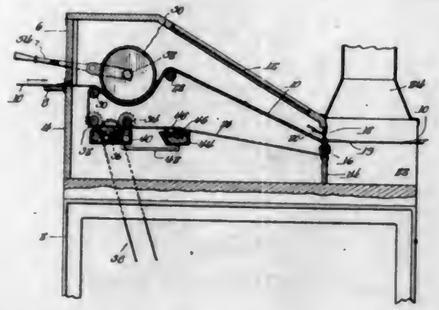


The ornamental design for a bottle as shown.

PATENTS

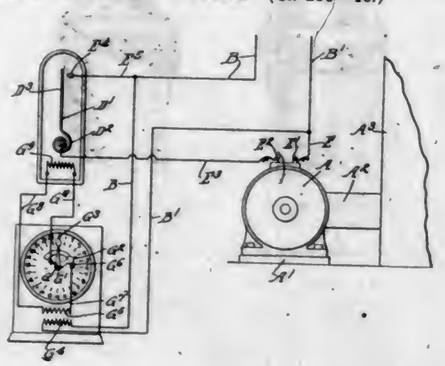
GRANTED MAY 13, 1930

1,757,950. DEVELOPING APPARATUS. RICHARD FRED ALLIN, New York, N. Y., assignor to Eugene Dietzgen Company, Chicago, Ill., a Corporation of Delaware. Filed Oct. 26, 1927. Serial No. 228,720. 10 Claims. (Cl. 95—89.)



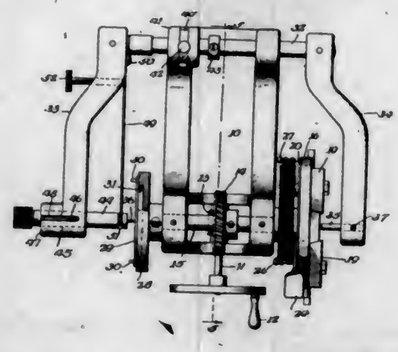
1. A developing apparatus for relatively long strips of light-sensitive material comprising an enclosing casing having inlet and outlet openings, means in said casing for feeding the strip of material from the inlet opening through the casing and through the outlet opening, said means including two contiguous traveling elements between which the strip passes, means for causing said elements to travel, means for applying developing liquid to one of said elements whereby said liquid is applied to the strip as it passes through the cabinet and means for moving one of said elements away from the other whereby to permit the adjustment of said strip relative to the elements which applies the developing liquid to the strip.

1,757,951. THERMOSTAT. JAMES L. BREESE, Jr., Chicago, Ill., assignor to Oil Devices Corporation, Chicago, Ill., a Corporation of Illinois. Filed Apr. 21, 1928. Serial No. 271,746. 7 Claims. (Cl. 236—46.)



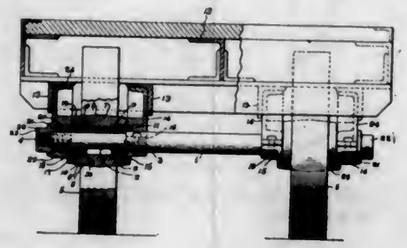
7. In a control device, a circuit including a source of power, a translating device and temperature responsive means for controlling said circuit, heating means including an electrical resistance associated with the control device and arranged to modify the operating characteristic of said temperature responsive means, and means for energizing and de-energizing the resistance including connections for insuring the continued normal operation of the temperature responsive circuit controller in the event of rupture of the resistance element.

1,757,952. MACHINE FOR CUTTING UNBREAKABLE WATCH CRYSTALS. MILTON C. CAMPBELL, Chicago, Ill. Filed Dec. 5, 1927. Serial No. 237,725. 4 Claims. (Cl. 33—28.)



1. A machine of the character described, comprising a frame, a rotary shaft mounted horizontally in said frame, means for turning said shaft, a chuck on one end of said shaft adapted to hold a watch or watch bezel, a holder on the opposite end of said shaft for a blank from which to cut a crystal, a follower adapted to follow the edge of the crystal-receiving recess of the bezel, a tool arranged to act on a blank carried by said holder, and a mechanical connection between said follower and tool to cause the tool to cut a crystal for use in the bezel as said shaft is rotated to synchronously turn the chuck and holder.

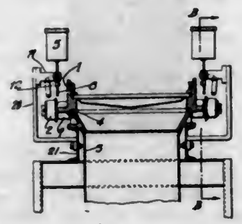
1,757,953. TRUCK. SHERWOOD M. CHASE, Columbus, Ohio, assignor to The Chase Foundry and Manufacturing Company, Columbus, Ohio, a Corporation of Ohio. Filed June 8, 1927. Serial No. 197,255. 8 Claims. (Cl. 308—208.)



1. In combination, an axle, a wheel, bearings therefor adapted to be adjusted, means mounted on said axle for adjusting said bearing, and means independent of the axle for clamping said adjusting means in adjusted position.

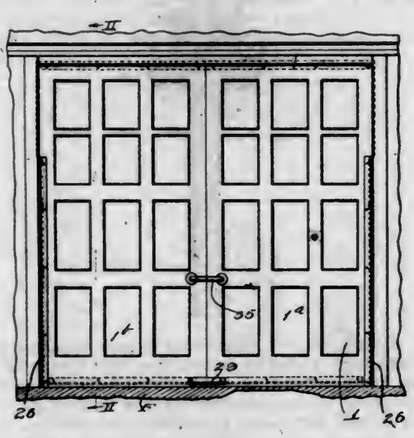
1,757,954. LUBRICATING DEVICE. EDWARD CUDDIHY, Tooele, Utah. Filed June 5, 1928. Serial No. 282,920. 1 Claim. (Cl. 184—2.)

A sintering machine having a moving chain of pallets carrying rollers, said machine having supports on which the pallets are supported independently of the rollers and slide for a part of their travel, leaving the rollers free to turn, and having rails on which the pallets are supported by said rollers for another part of their travel, in combination with means for lubricating the bearings of said rollers comprising an intermittently operating device for



applying the lubricant to each bearing as it passes such device, said lubricating device being actuated by the successive rollers as they pass a part of the machine where the pallets are supported independently of the rollers and the latter are free to turn.

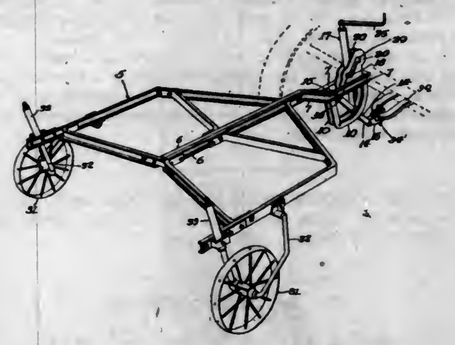
1,757,955. OVERHEAD SWINGABLE DOOR FOR GARAGES AND THE LIKE. OWEN L. DAUTRICK, Detroit, Mich. Filed Oct. 31, 1927. Serial No. 229,966. 10 Claims. (Cl. 20—19.)



1. In a building having a doorway, a door for closing said doorway, a pair of spaced rollers adjacent the lateral margins of said door, guide locking channels for receiving said rollers when said door is in closed position for preventing lateral movement of said door, a track extending from one of said locking channels, connections between said door and building, said connections allowing said door to be elevated to disengage said rollers from said locking channels and serving as a radius rod for causing an upward tilting of said door to overhead position and resilient means acting on said door for assisting in moving the same to overhead position.

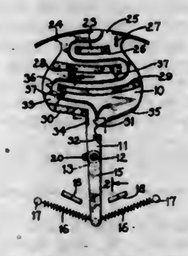
1,757,956. WHEELED-HARROW FRAME ADJUSTMENT. JOHN H. FLATLEY, Little York, and FRED C. HOY, Monmouth, Ill., assignors to Brown Lynch Scott Co., Monmouth, Ill., a Corporation of Illinois. Filed July 5, 1928. Serial No. 290,338. 12 Claims. (Cl. 97—103.)

1. The combination of a harrow having a frame, a forwardly extending lever pivoted at the front of said frame, a clevis pivotally connected to the front end of said lever for connecting the harrow to a tractor, a lifting device connected to the frame and pivoted to said lever and movable about its pivot for swinging said lever about its pivotal



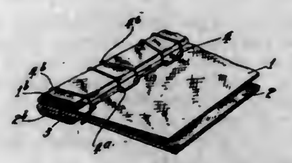
connection with the clevis as a fulcrum, to raise and lower the frame, and screw operated means on said lifting device for raising and lowering the frame independently of movement of said lifting device above its pivot.

1,757,957. LOCK-RELEASING GAME APPARATUS. CHARLES FLEISCHER, Brooklyn, N. Y., assignor to Rudolf O. Kussat, Brooklyn, N. Y. Filed Mar. 29, 1928. Serial No. 265,571. 8 Claims. (Cl. 273—138.)



1. Apparatus of the character described in combination with a casing having a window, a disc manipulator exposed to view through said window, a plurality of disc supporting ledges carried with said manipulator and so disposed that a disc may move along a ledge and drop onto another, and means to prevent contact of the disc with the window.

1,757,958. METHOD OF TREATING USED BURLAP BAGS. GEORGE I. GOLDWYN, Chicago, Ill., assignor of one-half to Herman Goldwyn, Chicago, Ill. Filed Sept. 5, 1929. Serial No. 390,493. 3 Claims. (Cl. 2—275.)

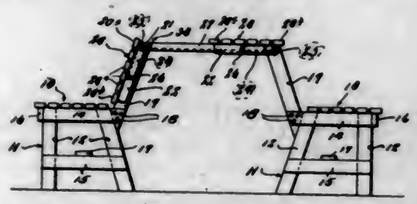


3. The method of treating used burlap or like bags which consists in providing a bag turned inside out to expose the folded over margins of the bag fabric and the frayed edges thereof as well as the line of stitching securing said folded over margins together, in folding over the frayed edges of the margins back upon said line of stitching to cover the same stitching the bag fabric together adjacent said margins with an over cast stitch which binds the frayed edges to the unfrayed parts of said margins.

1,757,959. FOAM-PRODUCING PROCESS AND MATERIAL FOR ACID METAL-CLEANING BATHS. JAMES H. GRAVELL, Elkins Park, Pa., assignor to American Chemical Paint Company, Ambler, Pa., a Corporation of Delaware. Filed Mar. 29, 1927, Serial No. 179,389. Renewed Mar. 20, 1930. 3 Claims. (Cl. 148—8.)

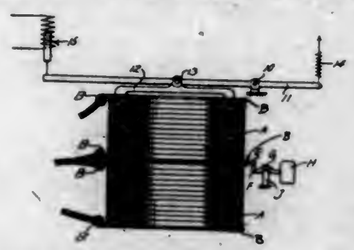
1. A bath for pickling metal comprising a metal etching acid and water, and further comprising a reaction controlling agent capable of generating formaldehyde in insufficient quantity to stop the generation of hydrogen, and cellulose waste liquor.

1,757,960. CONVERTIBLE BENCH. MILFRED L. GREENSTREET, St. Louis, Mo. Filed July 28, 1927. Serial No. 208,951. 2 Claims. (Cl. 155—43.)



1. A bench of the class described comprising in combination a supporting frame including a pair of fixed uprights extending upwardly and rearwardly therefrom, a seat on said frame, a back normally arranged against the forward edges of said uprights, a link on each side of said back and pivotally connected at one end to one end of said back and at the other end to the corresponding upright whereby when said back occupies normal position said links are arranged in juxtaposed parallel relation with said uprights, said links being swingable on the pivots on said uprights to move said back forwardly and upwardly, said back being swingable on the outer ends of said links to bring said back in a horizontal position resting on the upper ends of said uprights and extending rearwardly therefrom.

1,757,961. CARBON RESISTANCE. HUGO GROB, Berlin, Germany. Filed Jan. 27, 1927, Serial No. 164,115, and in Germany Feb. 10, 1926. 2 Claims. (Cl. 201—51.)



1. In apparatus of the character described, in combination, a carbon pile extending substantially vertically, means for varying the pressure on said pile thereby to vary its resistance, a counter-weight of substantially the same weight as that of an upper section of said pile, and means connecting said counter-weight to the lower portion of said upper section of said pile to substantially balance the weight of said upper portion.

1,757,962. FURNITURE SLIDE OR SHOE. WALTER F. HEROLD, Upper Montclair, N. J., assignor to The Bassick Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Jan. 25, 1928. Serial No. 249,411. 7 Claims. (Cl. 16—42.)

1. A furniture support comprising a base having a floor engaging bottom surface, and having an opening extending therethrough from top to bottom, the top surface of said base being shaped to provide a curved seat, furniture engaging attaching means disposed at the upper side of said base and adapted to be driven into the furniture and



movably supported with relation to said curved seat, said attaching means including a headed pin engaged within said opening with its head entirely within said opening, said opening being restricted above said head to retain the base with respect to said attaching means.

1,757,963. FURNITURE REST OR SHOE. WALTER F. HEROLD, Upper Montclair, N. J., assignor to The Bassick Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Nov. 5, 1928. Serial No. 317,181. 6 Claims. (Cl. 16—42.)



1. A furniture rest, comprising a floor engaging base, attaching means adapted to be driven into a furniture leg or the like and including a tubular stud adapted to enter the material of the furniture leg and adapted to cut a dowel of said material of a diameter corresponding to its outer diameter and to compress said dowel within it to correspond to its inner diameter, means adapted to engage the leg in outwardly spaced relation to said stud to support the latter against side strains, and a plurality of teeth carried by said means and adapted to be driven into the leg.

1,757,964. ADVERTISING OR PRICE TICKET. ALBERT E. HURST, New York, N. Y. Filed Oct. 17, 1928. Serial No. 312,997. 2 Claims. (Cl. 40—11.)



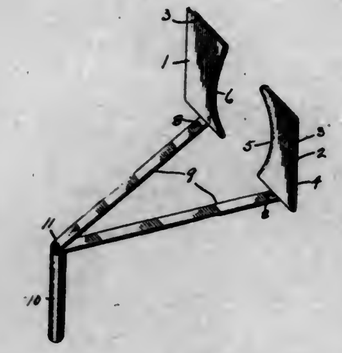
1. A price ticket having a flat body portion, a plurality of spaced forwardly extended tongues near its upper edge, said tongues being forced out of the body of the ticket and wholly surrounded by parts of the same, a single forwardly extended tongue at a distance therefrom, a card adapted to overlie a part of the body and supported by said forwardly extended tongues and a single rearwardly extending attaching tongue formed in the body portion between the forwardly extended tongues and adapted to be covered by the card held by the forwardly extended tongues said single rearwardly extending tongue being adapted to co-operate with the rear face of the body of the ticket to frictionally maintain a portion of an article between it and the ticket.

1,757,965. COMBINATION BUNDLING AND DELIVERY TABLE. HOWARD M. JAMPOL, New York, N. Y. Filed Oct. 19, 1926. Serial No. 142,728. 7 Claims. (Cl. 198—19.)



1. A combination paper bundling and delivery table comprising a table top having spaced openings in the horizontal portion thereof and adjacent one side edge, hinged covers for said openings, a conveyor belt operable longitudinally of said table and in the lower part thereof, and a deflecting apron, extending downwardly from said top and arranged to guide bundles dropped through said openings to position on said conveyor belt.

1,757,966. ACOUSTIC DEVICE. MAX KAPLICK, New York, N. Y. Filed July 14, 1928. Serial No. 292,804. 1 Claim. (Cl. 181—23.)

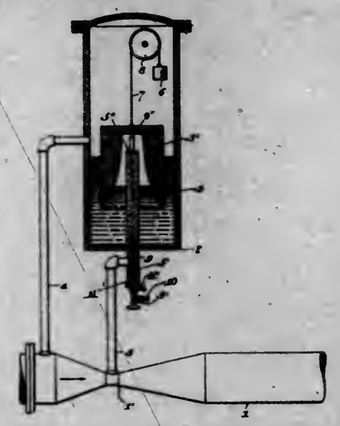


An acoustic device for the purpose set forth, comprising a plurality of shields adapted respectively to fit the head of the wearer, one adjacent to each ear, and means comprising adjustable arms having a pivotal connection, to hold said shields in assembled relation and a handle connected with said arms near said pivot, and by which said assembled shields may be supported.

1,757,967. STABILIZED ALDEHYDE OR ALDEHYDE-CONTAINING COMPOUND AND PROCESS OF MAKING THE SAME. ERIC C. KUNZ, Montclair, N. J. Filed July 14, 1927, Serial No. 205,852. Renewed Feb. 18, 1930. 15 Claims. (Cl. 23—250.)

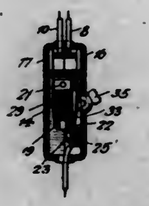
1. As a new product of manufacture an aldehyde containing a hydroxy-carboxylic acid.

1,757,968. FLUID METER. JOHN W. LEDOUX, Swarthmore, Pa., assignor, by mesne assignments, to Simplex Valve & Meter Company, Philadelphia, Pa., a Corporation of Delaware. Filed Dec. 5, 1921. Serial No. 519,970. 8 Claims. (Cl. 73—167.)



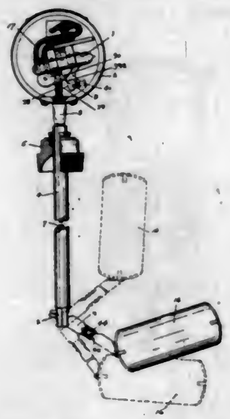
1. A fluid meter comprising a casing containing a hollow device and a sealing medium, said casing and device being relatively movable, differential pressure mechanism connected with said casing and with said device respectively, an exhaust conduit connecting the interior of said device with the atmosphere while said device is connected with said differential pressure mechanism, and means for controlling said exhaust conduit.

1,757,969. CHRISTMAS-TREE-LIGHTING OUTFIT. LEON B. MANSON, Corona, N. Y., assignor to Noma Electric Corporation, New York, N. Y., a Corporation of New York. Filed July 8, 1928. Serial No. 290,211. 2 Claims. (Cl. 200—122.)



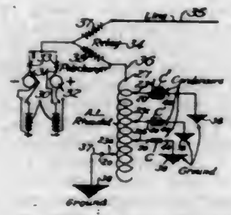
1. A circuit closer comprising a housing, a bracket secured to the inner wall of the housing and serving as a terminal, a thermostatically controlled switch arm having one of its ends secured to said bracket and its opposite end free to move into and out of closed circuit position, a contact bracket secured to the inner wall of the housing adjacent the free end of said switch arm, a resistance carried by and surrounding the switch arm, said resistance being permanently electrically connected to said brackets and affording a permanent current path between said brackets and arranged to effect movement of the free end of said switch arm into contact with said contact bracket, a manually operable switch member having one end secured to the first mentioned bracket and its opposite end located intermediate said housing and said contact bracket and adapted to be moved into engagement with said contact bracket to short circuit said resistance, and a switch lever pivotally connected to said housing and adapted to cooperate with said switch member to move such member into engagement with said contact bracket.

1,757,970. MERCURY-TUBE SWITCH. IRA E. MCCABE, Chicago, Ill. Filed Jan. 23, 1928. Serial No. 248,640. 3 Claims. (Cl. 200—84.)



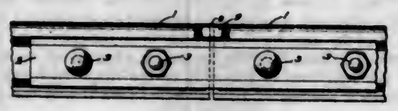
1. A float operated electric switch mechanism including an electric switch having an actuating member adapted upon movement in one direction to open the switch and upon movement in the opposite direction to close the switch, an actuating rod attached to the switch actuating member, a guide about the lower end of the actuating rod, resilient means normally holding the actuating member and rod with the switch in closed position, a float bearing arm, a pivotal connection between the free end of the float arm and lower end of the rod on the under side of the guide, said float arm cut away about the pivot allowing the resilient means to draw the pivotal connection within said guide to contact the arm and hold it at an obtuse angle in relation to the rod, said arm cut away portion on the side of the float forming a shoulder adapted to coact with the guide to allow slight rotation of the arm without excessive movement being imparted to the rod, said arm between said shoulder and float cut away to allow an upward movement thereof to clear the guide whereby upon continued upward movement the arm is fulcrumed by contact of shoulder and guide and the pivotal connection is drawn downward until it limits the upward travel of the float and the continued movement of the rod in this direction imparted to the actuating member opens the switch.

1,757,971. METHOD OF AND MEANS FOR BALANCING ELECTRIC CIRCUITS. CHARLES W. MCKIBBEN, Houston, Tex., assignor to Gulf Oil Corporation of Pennsylvania, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Feb. 10, 1928. Serial No. 253,247. 4 Claims. (Cl. 178—63.)



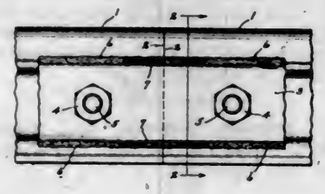
1. An artificial line including a resistor conductively connected between a physical line and ground, means to adjust the effective series circuit resistance of the resistor to ground, and a plurality of condensers shunting portions of said resistor to ground, the condensers being of different capacities and the capacity of each condenser being substantially proportional to the resistance shunted by it.

1,757,972. METHOD OF MAKING RAIL JOINTS. GEORGE A. MEAD, Mansfield, Ohio, assignor to The Ohio Brass Company, Mansfield, Ohio, a Corporation of New Jersey. Filed June 30, 1927. Serial No. 202,722. 12 Claims. (Cl. 219—10.)



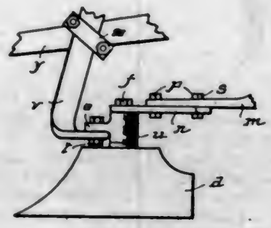
5. The method of electrically connecting adjacent rail ends comprising the steps of positioning the plates on opposite sides of the rail ends in bridging relation thereto and seam welding the plates to the rails to prevent relative longitudinal, lateral and vertical movement of the rails, then forming on a side surface of the rails a lug of cast copper in bridging relation to the rail ends.

1,757,973. METHOD AND MEANS OF ELECTRICALLY CONNECTING RAILS. GEORGE A. MEAD, Mansfield, Ohio, assignor to The Ohio Brass Company, Mansfield, Ohio, a Corporation of New Jersey. Filed Jan. 17, 1928, Serial No. 247,329. Renewed Mar. 26, 1929. 13 Claims. (Cl. 238—164.)



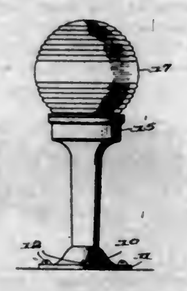
9. A rail joint comprising two rail ends bridged by a plate secured thereto by a fused seam of steel laid along the adjacent longitudinal edges of the rails and plate, and having in combination therewith a copper connecting member fused to the sides of the rail ends along the seam formed by the rails and plate.

1,757,974. CULTIVATOR-STEERING ATTACHMENT. CHRISTIAN ALBERT NIELSEN, Aabyskov Pr Skaarup, Denmark. Filed Mar. 20, 1926, Serial No. 96,121, and in Denmark Apr. 2, 1925. 2 Claims. (Cl. 97—179.)



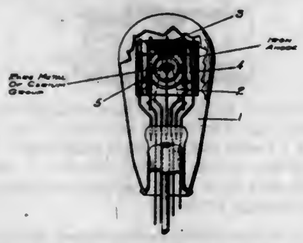
1. Apparatus for advancing farm implements on a parallel and to one side of the pulling trajectory of that of the draft power, comprising a deflector set to cut into the soil obliquely relative to the line of advance of the implement, a pivot for said deflector extending upwardly therefrom intermediate its ends, and a handle connected to said pivot for adjusting said deflector thereabout to different angles relative to said pulling trajectory.

1,757,975. LAMP. LOUIS EDWARD PERKINS, New York, N. Y. Filed Oct. 25, 1928. Serial No. 315,037. 3 Claims. (Cl. 240—7.1.)



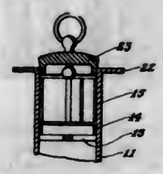
1. A lamp structure consisting of a removable base, a tubular support having a cup-shaped upper end, means for supporting a lamp socket in the central portion of said cup section, means for connecting a flag to the tubular support and means for attaching said tubular support to a flag staff.

1,757,976. VACUUM DEVICE AND METHOD OF MANUFACTURE. HARVEY CLAYTON RENTSCHLER, East Orange, N. J., assignor to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed Sept. 27, 1924. Serial No. 740,409. 3 Claims. (Cl. 250—27.5.)



1. An evacuated container having therein a rare earth metal of the cerium group and a metallic member to which said rare earth metal is attached, said metallic member being adapted to be heated to a sufficiently high temperature to vaporize said rare earth metal and being composed of iron with which said rare earth metal does not deleteriously react during such vaporization.

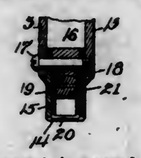
1,757,977. STRAINER. JOHN SALVATORE, East Orange, N. J. Filed Dec. 6, 1928. Serial No. 324,088. 3 Claims. (Cl. 4—292.)



1. In a drain pipe having a cross fixture therein, a perforated disc, a stem on said disc, lips projecting from said disc, and means removable from said drain pipe for supporting said disc above said cross.

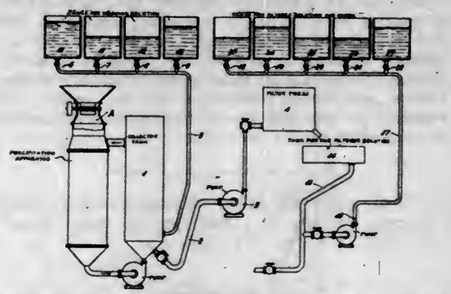
1,757,978. SHAVING MACHINE. JACOB SCHICK, Stamford, Conn. Filed Apr. 23, 1928. Serial No. 272,074. 5 Claims. (Cl. 30—12.)

1. A shaving machine comprising, in combination, a skin contacting plate of narrow width with alternate slots and blade extending widthwise of the plate, the plate being of thin metal, walls supporting the skin contacting plate at the ends of the blades, said walls having openings opposite the slots whereby hair may enter said slots without substantial bending of the hair at the surface of the skin



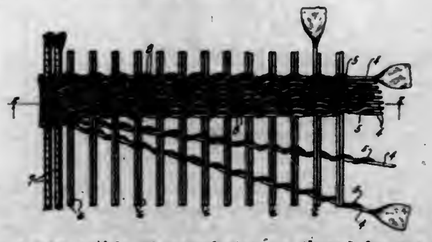
as the shaving implement is passed over the skin in a direction substantially parallel to the slots, cutter means including a plate in contact with the rear surface of the skin contacting plate and having alternate slots and teeth whereby hair in the slots is sheared as said cutter means is translated, and means to translate said cutter means.

1,757,979. PROCESS FOR CONTINUOUS WASHING OF TRICALCIUM SACCHARATE. CARL STEFFEN, Jr., Vienna, Austria. Filed Feb. 21, 1924, Serial No. 694,325, and in Austria Feb. 28, 1923. 4 Claims. (Cl. 127—47.)



4. The process of continuously treating liquor carrying precipitated calcium saccharate comprising adding directly in the precipitation apparatus itself in successive stages a washing solution, the successive washes carrying a decreasing non-sugar content.

1,757,980. WOVEN MATERIAL AND METHOD OF PRODUCING THE SAME. CARL E. STEIGER, Oshkosh, Wis., assignor to Deltox Rug Company, Oshkosh, Wis., a Corporation of Wisconsin. Filed July 12, 1928. Serial No. 292,217. 7 Claim. (Cl. 139—420.)



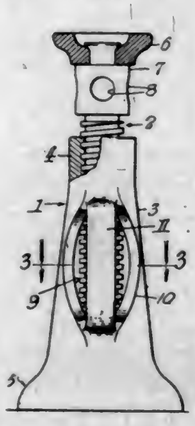
As a new article of manufacture, a thread for use in the weaving of rugs, floor coverings, and the like, consisting of two twisted together strands of material, one strand being of soft yielding material, and the other strand being of a tough fibre material, the said strand of yielding material being of a diameter at least equal to the diameter of the other strand and being of substantially the same length as said strand and the twisting together of the two strands producing a cord-like formation in which the strand of soft yielding material extends radially outwardly to a greater extent than the tough strand, to constitute the wearing surface, and in which the tough strand forms an inner core or filling.

1,757,981. TOWEL RACK. WILLIAM B. STEPHENSON, Chicago, Ill. Filed Mar. 22, 1929. Serial No. 349,050. 6 Claims. (Cl. 211—120.)



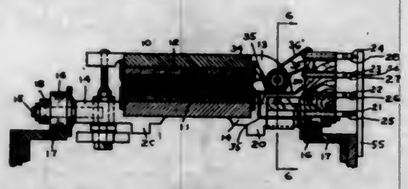
1. A rack comprising a substantially rigid frame and a plurality of yieldably engaged spring elements mounted in the frame and adapted to support articles inserted between the spring elements, the frame comprising a side arm in the form of a flat horizontally extending bar of greater height than thickness, and a bracket adapted to be secured to a vertically extending supporting surface, and formed with a vertical slot in which the side arm is slidably received to support the frame in a horizontal position projecting at right angles from the supporting surface, the upper portion of the slot being enlarged whereby the side arm can be turned to permit the frame to hang substantially vertically.

1,757,982. LIFTING JACK. WALTER BREAKENRIDGE TEMPLETON, Chicago, Ill. Filed Oct. 31, 1927. Serial No. 229,838. 1 Claim. (Cl. 254—1.)



A jack comprising a body portion forming a tubular column having a neck at one end and a downwardly tapering barrel terminating in a bell shaped base flange of greater diameter than the neck, a lifting screw threaded in the neck, a cap on the top of said screw beyond said neck, said body portion having a substantially elliptical opening at one side between said neck and base flange and exposing a portion of said screw, strengthening flanges on the body portion at either side of the opening and an arcuate strut-like member connecting the body portion at the top and bottom of said opening to provide a carrying handle arranged to come within a plane coincident with a connecting point of the cap with a point in line therewith on the base, said strut-like member bridging the opening in the body portion to preserve the strength of said body portion at the opening.

1,757,983. ELECTRICALLY-HEATED BAKING MACHINE. ROBERT GEORGE TUGENDHAT, Brunn, Czechoslovakia, assignor to Baker Perkins Company, Saginaw, Mich., a Corporation of New York. Original application filed Dec. 18, 1923, Serial No. 681,329. Divided and this application filed Oct. 22, 1926. Serial No. 143,529. 36 Claims. (Cl. 219—19.)



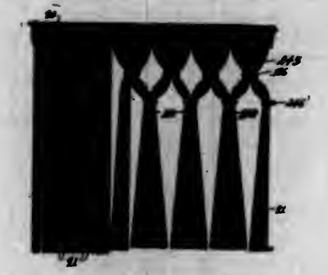
1. Baking apparatus comprising a track, a baking pan movable along said track and having a base and a cover hinged to the base, electric heating elements for the base and cover, a plurality of electricity conductors connected to a suitable source of power and extending along the track, and means for connecting said heating elements to said conductors to heat the base and cover during movement of said pan over said track.

1,757,984. FILM PACK AND HOLDER. EUGENE T. TURNEY, Holmes, N. Y. Filed Dec. 11, 1928. Serial No. 325,263. 3 Claims. (Cl. 95—22.)



1. A film holder for cameras having a slot for the projecting ends of the film strips, one wall of said slot being formed with a recess and the other wall with a hump registering with said recess so that the slot is bent first in one direction and then in the reverse direction so as to prevent the passage of light.

1,757,985. FRINGE-TASSELING MACHINE. ROBERT E. WALLISER, Chicago, Ill. Filed Mar. 28, 1929. Serial No. 350,547. 36 Claims. (Cl. 28—2.)

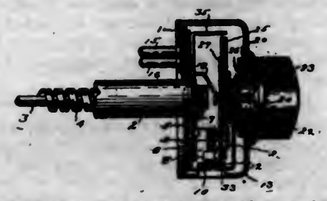


1. A machine of the kind described including means for holding and passing tassel material in a step-by-step movement through said machine; means mounted in said machine and coacting with said first mentioned means for binding into unsevered spaced groups said tassel material, by independent fastening elements and feeding mechanism for presenting fastening material to said binding means.

1,757,986. THERMOSTATIC CONTROL FOR ELECTRICALLY-HEATED APPARATUS. ALBERT E. WHITTIER, Bristol, Conn. Filed Nov. 28, 1928. Serial No. 322,374. 13 Claims. (Cl. 200—139.)

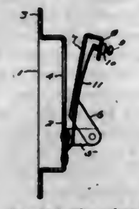
1. A thermostatic control for electric circuits comprising a base and a cover detachably applied thereto, a spindle

rotatably supported by the base, thermostatic means controlling the rotary movements of the spindle, an arm rotatable with the spindle, a finger yieldingly connected with said arm, an insulation member rotatably supported by the cover, three conductors mounted on and rotatable with said insulation member, three spring fingers mounted on the base and adapted to engage said conductors, and a switch blade pivotally connected with the intermediate of said



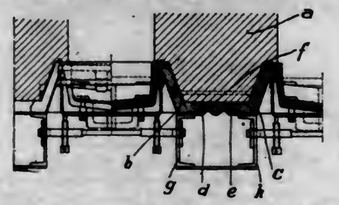
conductors and extending between the other conductors and into the path of the finger that is yieldingly connected with the thermostatically controlled arm, whereby the switch blade may be adjusted to the desired degree and said finger will normally as the temperature rises engage said blade and move it from engagement with one conductor into engagement with the other conductor, but when the blade is turned below the finger, the finger will yield without turning the arm to which it is connected.

1,757,987. OVEN VENTILATOR. ALBERT E. WHITTIER, Bristol, Conn. Filed Jan. 4, 1929. Serial No. 330,219. 3 Claims. (Cl. 236—49.)



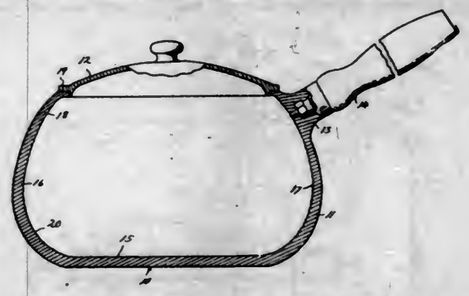
1. A ventilator for heated chambers which comprises a vented plate adapted to be fastened over an opening in the chamber wall, a shutter pivoted to said plate and adapted to normally swing toward the plate and close the vent therein, a thermostatic finger fixed to the plate and arranged to cause the shutter to swing away from the plate and uncover the vent, and adjustable means carried by the shutter and engaged by said finger when the temperature in the chamber reaches a predetermined degree.

1,757,988. INSULATING MEANS FOR COKE-OVEN HEADS. RUDOLF WILHELM, Essen-Altenessen, Germany, assignor to Arnold Beckers, Cologne-Kalk, Germany. Filed Feb. 15, 1926, Serial No. 88,207, and in Germany Feb. 25, 1925. 4 Claims. (Cl. 202—248.)



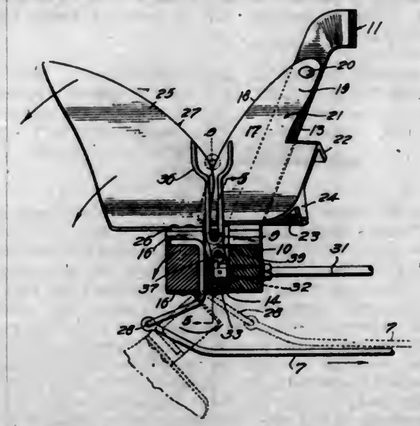
1. A coke oven comprising two coke oven chambers having a separating wall in common and each of said chambers having a lateral doorway at one lateral end of said wall, a metal cover for said end of said wall between the doorways, said cover including laterally inwardly extending members, a bridging plate, capable of yielding to variations in temperature, engaging said members, and a layer of insulating material associated with said bridging plate.

1,757,989. COOKING RECEPTACLE. CLARE S. ACTON, Detroit, Mich., assignor to Wolverine Tube Company, Detroit, Mich., a Corporation of Michigan. Filed Mar. 14, 1928. Serial No. 261,602. 2 Claims. (Cl. 53—1.)



2. As a new article of manufacture, a cooking receptacle having a bottom wall and side walls of high thermal conductivity, said side walls having highly finished outer surfaces to prevent the heat conducted by the walls from radiating outwardly and having relatively rough inner surfaces for increasing radiation inwardly toward the contents of the receptacle.

1,757,990. CHECK-WIRE GUIDE FOR CORN PLANTERS. SAMUEL D. ANDERSON, Grundy Center, Iowa. Filed Mar. 14, 1929. Serial No. 347,013. 5 Claims. (Cl. 111—48.)

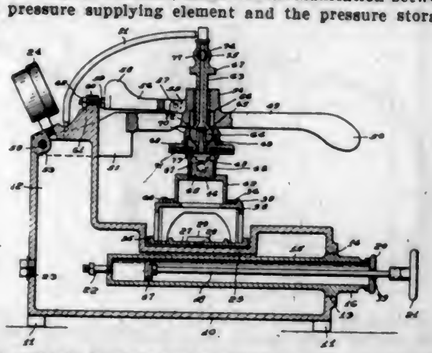


1. In a corn planter, check chain receiving, guiding and discharging means, comprising a body, a frame fixedly supported upon said body of substantially U-shaped formation having the opposite sides thereof forwardly inclined and disposed obliquely with respect to the longitudinal axis of said body, arms pivotally mounted on the opposite sides of said frame, a bar hinged to said body and parallel thereto, companion arms fixedly mounted on said bar and adapted to be normally positioned adjacent to and paired with said pivotal arms, a check fork positioned intermediately of the body and between said paired arms, said check fork being mounted for pivotal movement at substantially right angles to and away from said body, and means for imparting swinging movement to said bar, at times.

1,757,991. DENTAL CASTING MACHINE. LOUIS C. BURGARD, Louisville, Ky. Filed June 16, 1927, Serial No. 199,306. Renewed Sept. 20, 1929. 12 Claims. (Cl. 22—69.)

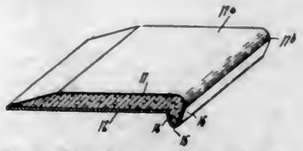
3. In a dental casting machine, a pressure storage tank serving as a base and provided with an upstanding part,

said base being adapted to hold a flask, a lever pivotally connected with said upstanding part and arranged above the flask, a pressure supplying element carried by the lever to engage the flask, means of communication between the pressure supplying element and the pressure storage



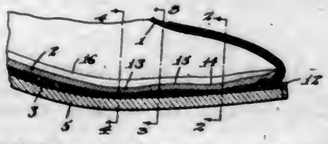
tank, and a locking element separate from the pivot of the lever and pivotally connected with the lever and adapted to detachably engage with a part of said upstanding part to hold the lever in the depressed position when moved to the same.

1,757,992. SAFETY TREAD. HOWARD G. CHAPIN, Boston, Mass.; G. Edwin Chapin and J. Colby Bassett, executors of said Howard G. Chapin, deceased, assignors to Universal Safety Tread Inc., Lowell, Mass., a Corporation of Massachusetts. Filed Apr. 27, 1928, Serial No. 273,360. Renewed Jan. 2, 1930. 1 Claim. (Cl. 20—79.)



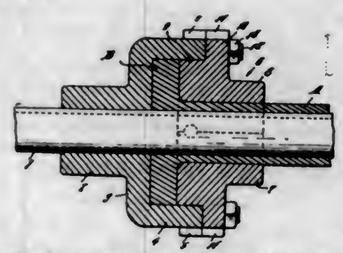
A safety tread adapted to supplement a stair tread, and comprising a metal base plate formed to bear on the top of the stair tread and having a downwardly projecting channel adapted to project forward from the outer edge of said tread, said channel including a downwardly projecting inner wall, formed to bear on said outer edge, an outwardly projecting neck, and an upwardly projecting outer wall spaced from the inner wall; and a slab of rigid antislipping material covering the base plate and including a downwardly projecting rib filling the channel, an upwardly facing top face extended forward over the rib, and a forwardly facing edge face extending downward from the top face to the outer wall of the channel, said faces meeting to form a salient wear-sustaining shoulder, the forward portion of the slab being thickened by the rib and shoulder, and adapted to project forward from the forward edge of a stair tread to which the safety tread is applied, to extend the antislipping surface forward from the stair tread, the thickened projecting portion of the slab being supported by the channel portion of the base plate.

1,757,993. BOOT OR SHOE. ERNEST W. DURKEE, Lynn, Mass. Filed July 21, 1928. Serial No. 294,447. 1 Claim. (Cl. 36—17.)



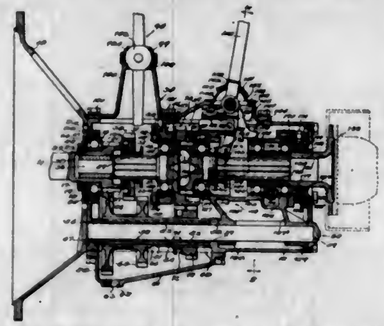
A boot or shoe comprising upper materials, an insole and an outsole, the insole being separated from the outsole and having two depressions preformed therein on its foot contacting surface, one of said depressions being located at the metatarsal joint of the great toe, and the other depression being located at the proximal phalanx of the great toe of the foot, the depression at the metatarsal joint portion of the insole being of greater depth and area than the depression at the proximal phalanx of the great toe, said insole having a beveled unbroken upturned marginal edge entirely around the interior of said shoe so that the foot of the wearer may bear against said upturned edge, the portion of the insole between said depressions forming a ridge which constitutes a gripping element for the foot of the wearer.

1,757,994. MOLD FOR VULCANIZING FLANGES ON PIPE ENDS. LOUIS C. EMMERICH, New York, N. Y. Filed Apr. 23, 1928. Serial No. 272,258. 1 Claim. (Cl. 18—42.)



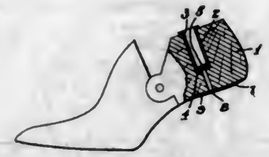
In a device for vulcanizing a rubber flange on the ends of a rubber pipe, a mandrel, a cup-shaped member having elongated attaching portions closely embracing the mandrel to center the cup-shaped member on the mandrel, a male unit adapted to be closely received in the cup-shaped body and centered thereby, said male unit embodying a pair of separable sections having the opposed portions thereof provided with interfitting means, the outer edge portions of said sections being provided with means engaging the opposed extremity of the cup-shaped body to limit the entrance of the sections into the cup-shaped body, and means to connect said cup-shaped body and said male unit.

1,757,995. TRANSMISSION. THOMAS L. FAWICK, Racine, Wis., assignor to Brown-Lipe Gear Company, Syracuse, N. Y., a Corporation of New York. Filed June 24, 1926. Serial No. 118,203. 6 Claims. (Cl. 74—58.)



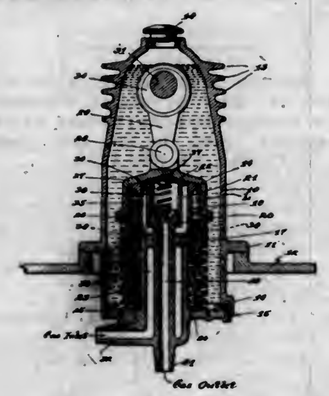
6. In a transmission, a driving shaft, a lay shaft, a driven shaft, an intermediate shaft, change spur gears between said driving and said intermediate shafts, a pair of said gears being mounted on said lay shaft, an internal gear and clutch member and a spur gear and clutch member between the intermediate shaft and the driven shaft, and a swinging frame pivoted on said lay shaft, said driven shaft being journaled in said frame, a gear case for said transmission having a slotted end plate through which the driven shaft projects, and a slidable cover plate for the slot carried by said swinging frame.

1,757,996. LAST FOR ATTACHING WOOD HEELS. ERNEST M. FULLERTON, Stoughton, Mass. Filed Sept. 20, 1928. Serial No. 307,192. 1 Claim. (Cl. 12—139.)



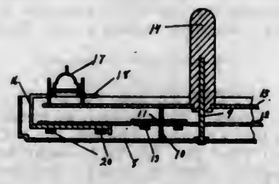
In a last of the kind described, a thimble extending downwardly from the cone and partially through the wood of the last and having an aperture through the bottom thereof of less diameter than the bore of said thimble, said last having an uninterrupted aperture therethrough of the same diameter as the diameter of the aperture in the bottom of the thimble, the aperture in said last extending from the last bottom to the bottom of the thimble and alined with the aperture in the bottom of said thimble, and a last plate having an aperture therethrough of the same diameter as the diameter of said first two apertures and alined therewith.

1,757,997. COMPRESSOR. HAROLD A. GREENWALD, Detroit, Mich. Filed Apr. 26, 1926. Serial No. 104,758. 15 Claims. (Cl. 230—85.)



1. In a compressor, a variable member cooperating with a portion of the compressor to form a chamber wall for receiving and enclosing the material to be compressed and a medium in said chamber for reducing the clearance space of said chamber.

1,757,998. GAME. LESTER C. GUNDERMAN, Pittsburgh, Pa. Filed May 15, 1926. Serial No. 109,260. 6 Claims. (Cl. 273—86.)



1. A game comprising a base, a post on the base, a frame loosely fitted over the post, wheels journaled in the frame having rolling contact on the base, a disc having a central stem rotatably fitted over the post whereby it is revolvably mounted on the wheels, miniature objects mounted on the frame and adapted to travel in a circular manner on the track.

1,757,999. COMBINATION BRUSH, COMB, AND MIRROR. CHRISTOPH HAGEN, San Francisco, Calif. Filed Oct. 8, 1928. Serial No. 311,222. 8 Claims. (Cl. 132—87.)



1. In a combination brush and comb, a casing, a partition mounted therein and dividing the casing into a brush-receiving compartment and a comb-receiving compartment, a portion of one side of said partition having a mirrored surface, a comb carrier slidably mounted in said casing and normally covering the mirror and a comb removably disposed in said carrier, said carrier being movable into a position for exposing the mirror when said comb is removed from the casing.

1,758,000. CASTER-BRACKET SOCKET. WALTER F. HEROLD, Upper Montclair, N. J., assignor to The Bassick Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Apr. 21, 1927. Serial No. 185,510. 1 Claim. (Cl. 16—29.)



A caster corner bracket socket for angle iron furniture legs, comprising a piece of sheet metal with its midsection curved to form a tubular socket portion adapted to receive a pintle, and adapted to have its rearward surface engaged with the inner angular surface of the angle iron furniture leg, the seam of said socket portion being centrally of its front portion, and attaching flap portions bent from said tubular socket portion in opposite directions from the seam and rearwardly against the surface of said tubular socket portion substantially at right angles to each other, and being further bent forwardly along an intermediate vertical line substantially at right angles to said rearwardly bent flap portions to provide attaching end portions substantially at right angles to each other and substantially tangential to said tubular socket portion, said rearwardly bent flap portions adapted with the angle iron to form a rectangular enclosing box structure for said socket portion, whereby lateral strains upon said socket portion are resisted in all directions, and whereby pressure of said socket portion away from the angle iron is imposed edgewise upon said attaching end portions.

1,758,001. CASTER. WALTER F. HEROLD, Upper Montclair, N. J., assignor to The Bassick Company, Bridgeport, Conn., a Corporation of Connecticut. Filed July 9, 1927. Serial No. 204,493. 2 Claims. (Cl. 16—39.)

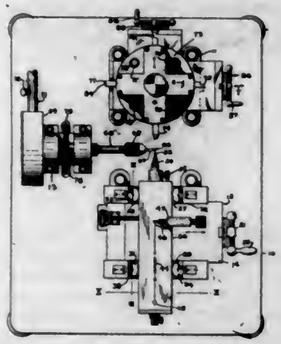
1. In a caster, a furniture leg engaging element including a top bearing portion, a laterally extending pintle

guide portion extending below said top bearing portion, and an apertured bearing base, a removable caster element including a pintle adapted to be engaged through said aperture of the base and to be engaged with said pintle guide portion, a pintle retaining split spring ring carried by said leg engaging element adapted to grip said pintle to retain it, a portion of said pintle being of smaller



diameter throughout its length than the opening of said ring and adapted to pass freely therethrough, another portion of said pintle being of larger diameter than the opening of said ring and adapted to be gripped thereby, said smaller diameter portion being of such length that said ring is ineffective until said pintle is in engaged relation with said top bearing portion.

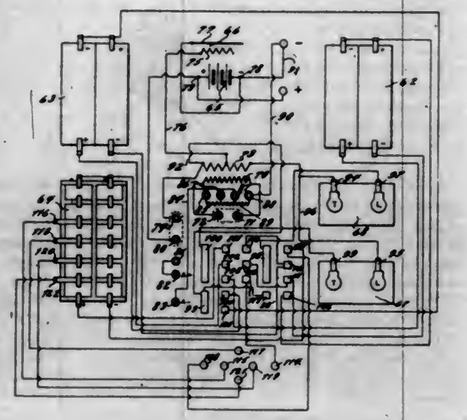
1,758,002. MACHINE AND METHOD FOR PRODUCING COIL-FORMING DIES. MILTON A. HOYT, East Orange, N. J., assignor to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed Nov. 26, 1926. Serial No. 150,873. 10 Claims. (Cl. 51—5.)



1. A machine for producing a die for forming a wire into a helical body comprising means for supporting a diamond block, a rotary holder for a tool-blank, means for shaping said blank to provide a lapping wheel for cutting a slot in said diamond block and means for moving said block in operative relation to the lapping wheel.

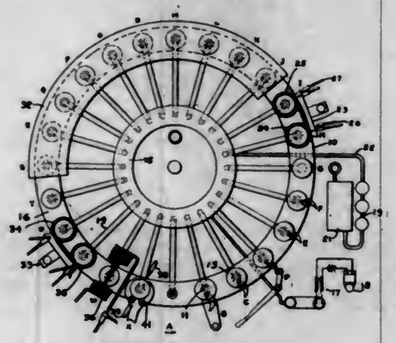
1,758,003. RADIO APPARATUS. RAYMOND A. KLOCK, Closter, N. J., assignor to Gould Storage Battery Company, Inc., New York, N. Y., a Corporation of New York. Filed July 30, 1923. Serial No. 654,565. 4 Claims. (Cl. 171—314.)

1. In radio apparatus, the combination of a container, a plurality of batteries in said container, each of said batteries comprising an even number of cells, two rectifiers in said container for charging said batteries, conductors for connecting said batteries and rectifiers together, certain of said conductors extending to the mid-points of the batteries and a movable switching means which in one position connects the batteries in series and disconnects the rectifiers therefrom and in another position connects the proper pole of one rectifier with all of the positive poles of the batteries, the opposite pole of the other rectifier



with all the negative poles of the batteries, the mid-points of the batteries and the other poles of the rectifiers being adapted for connection with an appropriate source of alternating current.

1,758,004. METHOD OF HEAT TREATING ELECTRICAL DEVICES. HARRY D. MADDEN, Montclair, N. J., assignor to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed Oct. 27, 1926. Serial No. 144,800. 10 Claims. (Cl. 250—27.5.)



1. The method of heat treating an electron emission device comprising a bulb enclosing a plurality of electrodes which consists in subjecting the electrodes to high frequency induction heating in the presence of an inert gas for obtaining a uniform heating of the electrodes.

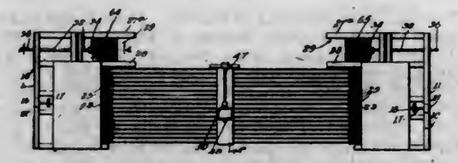
1,758,005. CUP-DISPENSER SUPPORT. WILLIAM B. MANGOLD, Chicago, Ill., assignor, by mesne assignments, to Vortex Cup Company, Chicago, Ill., a Corporation of Delaware. Filed Jan. 31, 1925, Serial No. 5,912. Renewed Apr. 19, 1927. 8 Claims. (Cl. 248—20.)

1. A cup dispenser support comprising a flanged mounting plate, supporting posts secured thereon, a plurality of resilient pads supported on said mounting plate, a latching means for holding a dispenser when engaged on said supports in locked position on said mounting plate, stop flanges on said mounting plate for the dispenser, a mounting strap having one end thereof removably engaged with said mounting plate, and an eccentric lever mounted on said mounting plate and connected with the other end of



said strap to permit tensioning of said strap for the purpose of holding the mounting plate secured in a position on a suitable support.

1,758,006. POLISHING APPARATUS. GUY L. MATTHEWS, Chicago, Ill., assignor to Harry L. Diehl. Filed Oct. 4, 1926. Serial No. 139,544. 5 Claims. (Cl. 51—236.)



1. Polishing apparatus comprising a pair of portable frames, means rotatably mounted in the frames for securing a strand of material therebetween, a plurality of synchronous electrical motors, one of said motors being mounted in each of said frames and being operatively connected to said rotatably mounted means in the frame, and means engageable with said strand for polishing it.

1,758,007. APPARATUS FOR AND METHOD OF TWISTING GUT OR THE LIKE. GUY L. MATTHEWS, Chicago, Ill., assignor to Harry L. Diehl. Filed Oct. 4, 1926. Serial No. 139,545. 4 Claims. (Cl. 117—7.)



1. The combination with a plurality of pairs of posts, adapted to have gut arranged thereupon, of a portable stand adapted to be operatively positioned with respect to any one of said posts, means rotatably mounted in said stand and engageable with one end of a strand of material having its other end secured to the post paired with the last-mentioned post, and means for rotating said rotatable means.

8. Apparatus of the kind described comprising a frame, means rotatably mounted in said frame and adapted to operatively engage one end of a strand of material having its other end secured to an independent support, a clutch member interposed between said rotating means and said first-mentioned means, and a bell crank lever pivoted on said frame, one arm of which carries a cam surface for actuating said clutch member and the other end of which carries brake means for stopping rotation of said first-named means when said clutch member is functionally inoperative.

1,758,008. REFRIGERATING UNIT. HUGO MOCK, New York, N. Y. Filed Oct. 12, 1926. Serial No. 141,209. 4 Claims. (Cl. 62—1.)



1. In a device for cooling liquids, a metal holder containing a refrigerant, a detachable top for said holder, a handle attached to said top, said handle having an opening therein to allow for the contraction and expansion of the fluid within the holder.

1,758,009. PROCESS OF MAKING BLEACHED WHITE BARYTES. WILLIAM J. O'BRIEN, Baltimore, Md. Filed May 28, 1927. Serial No. 195,147. 4 Claims. (Cl. 23—122.)

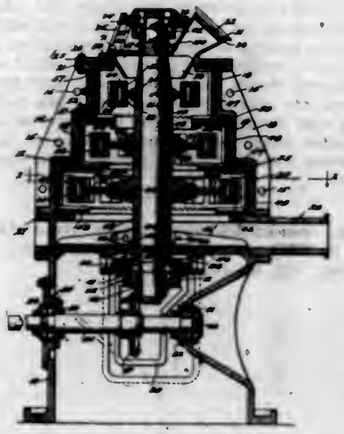
2. In a process of treating barytes, roasting an intimate mixture of barytes ore, niter cake, and sodium chloride by means of a direct flame and in an oxidizing atmosphere until a uniform molten mass is obtained and any organic matter present in the mixture is burned, introducing the molten mass into water, reducing any ferric salt in the resulting mass to the ferrous state and then washing out the soluble impurities from the barium sulphate.

3. In a process of treating barytes, roasting a mixture of ground barytes ore, niter cake, sodium chloride, and an oxidizing salt of an alkali metal until a uniform molten mass is obtained and any organic matter present in the mixture is burned, introducing the fusion product into water, reducing any ferric salt in the resulting mass to the ferrous state and then washing the barium sulphate.

1,758,010. GRINDING MILL. GEORGE F. PETTINOS, Philadelphia, Pa. Filed Aug. 18, 1928. Serial No. 300,605. 11 Claims. (Cl. 83—11.)

1. In a grinding mill comprising a vertical shaft and grinding elements mounted thereon, a stepped cylindrical

casing providing a plurality of compartments of different diameters, each compartment having a cylindrical grinding surface, an inwardly projecting annular plate forming a grinding surface at the upper side of the compartment, and an inwardly projecting annular plate forming a grinding surface at the lower side of the compartment, certain of said plates having downwardly projecting flanges, for the purpose set forth.

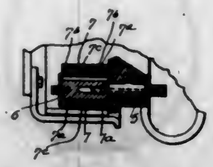


1,758,011. GOLF-BALL WASHER. WILLIAM F. REACH, Springfield, Mass., assignor to A. G. Spalding & Bros., New York, N. Y., a Corporation of New Jersey. Filed Jan. 16, 1929. Serial No. 332,851. 6 Claims. (Cl. 15—21.)



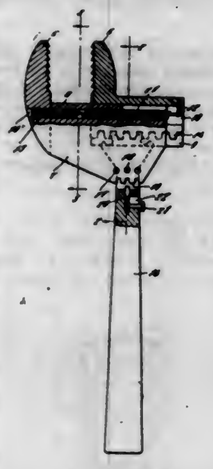
1. A device for cleaning golf balls comprising a receptacle, cylindrically arranged brushing means therein, and means for reciprocating a ball therein comprising a rod having a pair of rings adjacent its lower end, said rings being spaced apart and inclined in opposite directions relative to a plane normal to said rod.

1,758,012. BRAKE. GUSTAVE A. SCHACHT, Cincinnati, Ohio, assignor to The G. A. Schacht Motor Truck Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Feb. 15, 1927. Serial No. 168,440. 3 Claims. (Cl. 188—78.)



1. An internal expanding brake assembly having a pair of brake shoes journaled on slidable bushings, one of said shoes having a forked end with two slidable bushings therein, and the other shoe having a portion fitting within the forked portion, with a slidable bushing therein, said last named bushing being of greater diameter than the first-mentioned bushings.

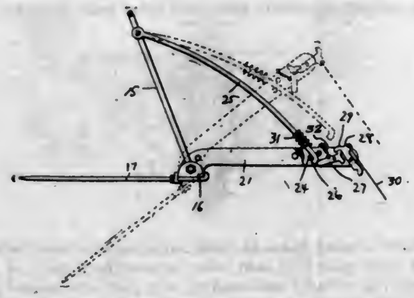
1,758,013. ADJUSTABLE WRENCH. JOHN LLOYD SCHUBERT, Hillsboro, and JOHNSTON EAKINS CALDWELL, Mount Hamill, Iowa. Filed Dec. 13, 1929. Serial No. 413,854. 2 Claims. (Cl. 81—127.)



1. A wrench comprising a pair of jaws, a plate formed on one of the jaws, a pair of plates formed on the other of said jaws and positioned at opposite sides of said first named plate, a guide at one edge of said first named plate, said pair of plates having a recess for slidably receiving the guide, rack bars formed on said pair of plates, a handle having a bifurcated end and gear segments carried by the bifurcations engaging the rack bars for moving the jaws into and out of engagement.

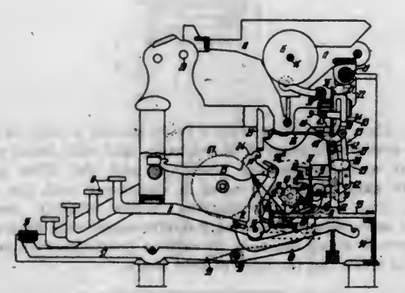
1,758,014. MANURE LOADER. JUSTIN P. STAPEL, Owen, Wis. Filed Apr. 25, 1928. Serial No. 272,778. 1 Claim. (Cl. 294—122.)

A cable supported loader of the class described, comprising a fork frame composed of a transverse frame member having a plurality of tines extending from one side thereof, a bifurcated latch arm extending from the opposite side thereof, in a plane parallel with the tines and rigidly connected thereto, longitudinally spaced pins extending transversely through the furcations on the arms, a bail attached at the ends of the transverse frame member, a trip rod pivotally attached at one end to an intermediate portion of the bail and having its free end slidably extended through certain of the pins between the bifurcated arm ends and terminating in an angularly turned stop



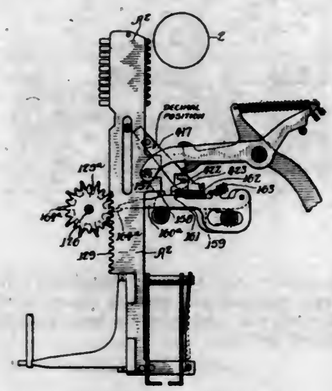
portion for engagement with one of the pins, and a trip device carried by the latch arm and releasably engageable with the adjacent end of said trip rod whereby to prevent the upward swinging movement of the latch arm by the load supported on the tines, said trip device comprising a pivoted trip member having one end engageable with the free end of the trip rod and a pivoted trigger having its opposite ends oppositely engageable with the trip member for moving the same into latch rod releasing and retaining position.

1,758,015. TYPEWRITING MACHINE. BURNHAM C. STICKNEY, Hillside, N. J., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Filed May 12, 1927. Serial No. 190,692. 14 Claims. (Cl. 197—82.)



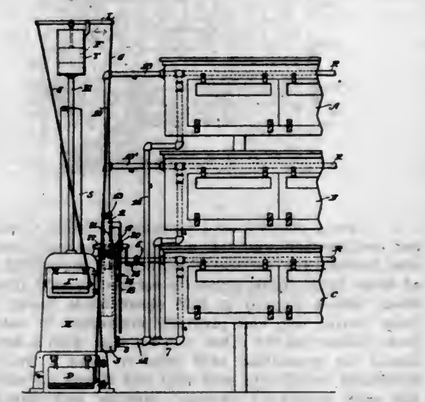
1. In a typewriting machine having typing elements including type-bars, a carriage, carriage-feeding elements and a universal bar frame intermediate the typing elements and the carriage-feeding elements and operable by the typing elements in a typing direction, a motor-driven continuously-rotating driver, and means normally released from the rotary driver, but caused by the typing movement of the universal bar to operatively engage the rotary driver and forcibly restore the universal bar and the type-bar.

1,758,016. TRANSFER MECHANISM. OSCAR J. SUNDSTRAND, Rockford, Ill., assignor, by mesne assignments, to Sundstrand Corporation, Wilmington, Del., a Corporation of Delaware. Original application filed Dec. 31, 1920, Serial No. 434,242. Divided and this application filed Nov. 27, 1925. Serial No. 71,851. 7 Claims. (Cl. 235—133.)



6. In an adding machine, an accumulating wheel having a plurality of lugs of differing characteristics, and a transfer member shiftable into position for operation by a lug having a selected characteristic.

1,758,017. METHOD OF AND APPARATUS FOR CONTROLLING THE TEMPERATURE OF MAMMOTH INCUBATORS. HAROLD L. WATSON, New Brunswick, N. J., assignor, by mesne assignments, to American Incubators, Inc., New Brunswick, N. J., a Corporation of New York. Filed Feb. 11, 1925. Serial No. 8,870. 15 Claims. (Cl. 237—4.)

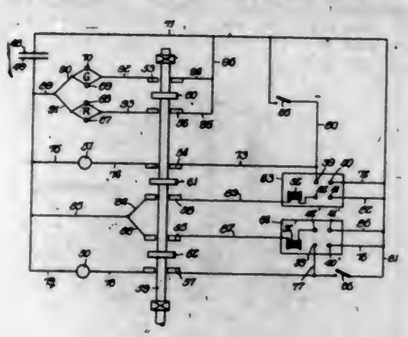


1. The method of controlling the temperature in different decks of a mammoth incubator which consists in selectively directing hotter or colder heating water from a common source into each of said decks upon a decrease or increase of the temperature therein.

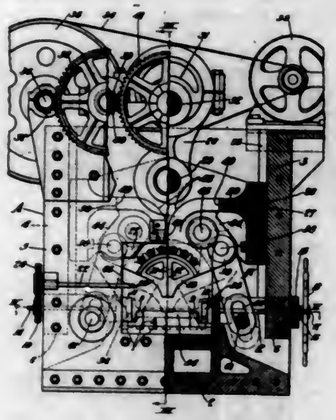
1,758,018. CONTROL MEANS FOR RAILWAY-SWITCH MECHANISM. EDGAR M. WILCOX, Hammond, Ind. Filed Sept. 23, 1926. Serial No. 137,191. 3 Claims. (Cl. 246—225.)

3. In a railroad switch mechanism, a control means, comprising an electrically influenced device for throw-

ing the switch points and means automatically operable by a passing vehicle for energizing said means to operate said switch points, when said switch points are in a predetermined position, and a circuit containing a locking device for said automatically operable means, adapted to be energized when said switch points have been moved in a predetermined position.



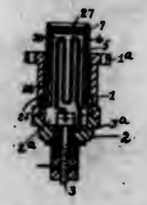
1,758,019. SHEARS. THOMAS D. WILLIAMS, Cleveland, Ohio. Filed Dec. 12, 1925. Serial No. 74,977. 8 Claims. (Cl. 164—47.)



1. A shear comprising a housing including a base member, end members and side plates, a cross-head mounted in said housing for vertical reciprocatory movement, a pair of shear blade heads pivotally secured to said cross-head, shear blades secured to said shear blade heads, control links having one end pivotally connected to said shear blade heads and the other end coacting with a fixed stop, means for permitting said links to have a limited free movement relative to said stop and means for reciprocating said cross-head thereby causing said shear blade heads, shear blades and control links to move downwardly until said shear blades penetrate the material to be sheared at which time said links will engage said stop and cause said shear blade heads and shear blades to swing outwardly about the pivotal connection with said cross-head to shear the material.

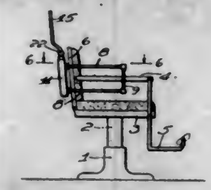
1,758,020. VAPORIZER. IRVING E. ASKE, Minneapolis, Minn. Filed Apr. 15, 1929. Serial No. 355,361. 4 Claims. (Cl. 219—38.)

1. In a vaporizer, the combination of a vaporizer cup open at one end, closed at the opposite end and provided with an intake port; a binding post extending into said cup through said closed end and insulated from the same; a pair of electric resistance members electrically connected at one end to said post within said cup and grounded on said cup; central intermediate absorbent pads positioned against the inward side faces of said resistance members; outward intermediate absorbent pads positioned against the outward side faces of said resistance members; central absorbent pads positioned between and contacting with said central intermediate pads and extending parallel therewith, said central pads being spaced from each other diametrically of said cup to form a well between said central intermediate pads and between said central pads; a pair of outer pads positioned against the outer faces of said outer intermediate pads, said outer pads being grooved



in their inward faces to form intermediate wells between said outer pads and said outer intermediate pads; a heat insulating cylinder surrounding said pads and spaced from said resistance members; a protective shell closely surrounding said cylinder and spaced for the major part of its length from said cup; and a screen positioned within said shell above said cylinder, pads and resistance members; said cylinder being spaced from said resistance members; said pads extending at their longitudinal edges to the walls of said cylinder, the outer faces of said outer pads being adapted to form chords for segments of said cylinder and in such manner to cooperate with said cylinder to form outward fuel wells; said shell and cylinder having intake ports formed therein communicating with the space between said shell and cup.

1,758,021. ADJUSTABLE MIRROR FOR BARBERS' CHAIRS AND THE LIKE. PETER D. BARAKAUSKAS, Chicago, Ill. Filed Apr. 29, 1927. Serial No. 187,611. 5 Claims. (Cl. 45—97.)



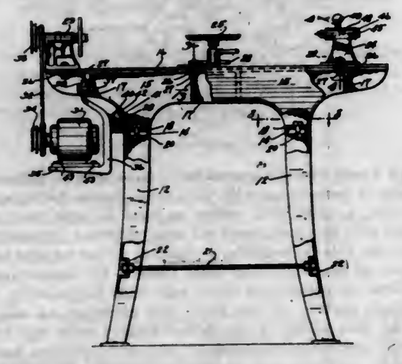
1. The combination with a chair having a back, of upper and lower rails secured to the back, said rails being spaced apart and surrounding the back and the sides of the chair, said upper rail being in alignment with the lower rail, and a mirror-supporting device slidably mounted upon said rails, whereby said mirror-supporting device may be moved along the rails to various positions with respect to the sides and the back of said chair.

1,758,022. ROADWAY AND METHOD OF CONSTRUCTING THE SAME. HARWOOD BEEBE, Spartanburg, S. C. Filed July 24, 1928. Serial No. 294,978. 4 Claims. (Cl. 94—23.)



1. A method of constructing a roadway consisting in setting spaced header curbs on a finished sub-grade, covering the sub-grade between the curbs with a base forming composition, forming earth shoulders at the outer sides of the curbs, subsequently building up the header curbs and finally covering the base with a bituminous wearing surface, the edges of the wearing surface abutting the built up portions of the header curbs.

1,758,023. LATHE. ARVID BJORKLUND, Minneapolis, Minn. Filed Mar. 23, 1927. Serial No. 177,583. 3 Claims. (Cl. 82—2.)



1. In a lathe, a frame having a bed extending outward of one end thereof, a headstock mounted on the bed outwardly of the frame, a bracket suspended from the bed below the headstock, an electric motor mounted on the bracket, pulleys on the headstock and motor outward of the bed, and a belt arranged to run over the pulleys.

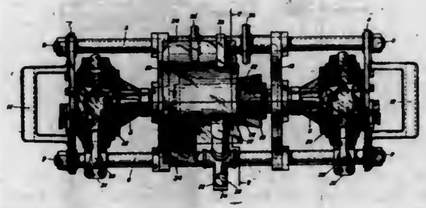
1,758,024. HOT-WATER BOTTLE. JEAN K. BLOMQUIST, Berkeley, Calif. Filed Sept. 28, 1926. Serial No. 138,248. 6 Claims. (Cl. 46—40.)



1. A doll of the character described comprising a hollow body of impervious, flexible material adapted to contain a liquid filler, and a frame of horizontal and vertical members of rigid material supported in the body to keep the latter from collapsing.

1,758,025. POLE PLANER. CARLETON H. BOLIN, Seattle, Wash., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Dec. 28, 1927. Serial No. 243,142. 3 Claims. (Cl. 144—134.)

1. A planer having framework comprising a pair of longitudinal side members and a pair of cross members associated with the ends thereof, a pair of auxiliary cross members positioned between the end cross members and carried by the side members, means carried by the framework to bear upon an object to be planed, a motor mounted on each cross member and auxiliary cross member, a rotatable cutter positioned between said motors and rotated

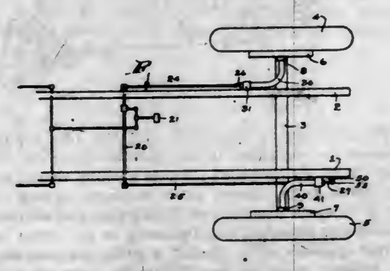


thereby about an axis parallel to the object to be planed, a controller handle associated with the side members provided with means for starting and stopping said motors, and a handle on each cross member at the ends of the planer whereby the operator may move the planer bodily along the surface to be worked upon.

1,758,026. METHOD OF MANUFACTURING BRICKS. ALEXANDER BONNINGTON, Alton, Ill., assignor to Alton Barium Products Company, Alton, Ill., a Corporation of Illinois. Filed July 14, 1927. Serial No. 205,854. 5 Claims. (Cl. 106—11.)

1. That improvement in methods of manufacturing scum-free bricks, or other ceramic bodies, which comprises combining with the brick clay the residue from roasted or reduced barytes ore or natural barium sulphate.

1,758,027. BRAKE CONTROL. FREDERIC M. BOSWORTH, Lakewood, Ohio, assignor to The Midland Steel Products Company, Cleveland, Ohio, a Corporation of Ohio. Filed June 8, 1928. Serial No. 283,784. 20 Claims. (Cl. 188—204.)

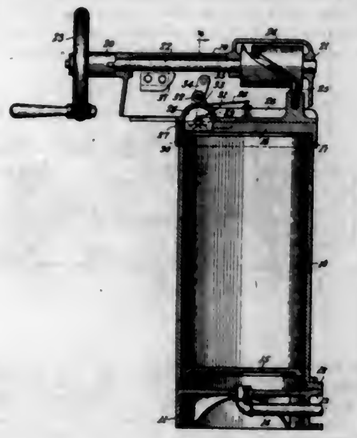


1. Operating mechanism for brakes on swiveling wheels including controls for the brakes, said controls being disposed in like relation to each wheel and in complementary relation to each other and on opposite sides of the plane of the swiveling axes of the wheels whereby the controls assume like angular relations to the wheels regardless of their turning.

1,758,028. ICE-CREAM DISPENSER. JACK E. BROWN, Brooklyn, N. Y. Filed Dec. 20, 1928. Serial No. 327,304. 5 Claims. (Cl. 107—8.)

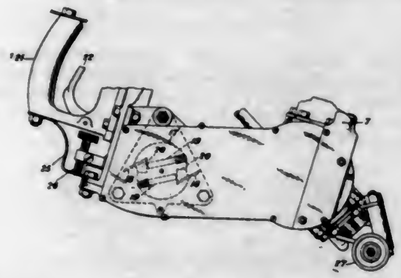
2. An apparatus for dispensing plastic substances in equal quantities comprising a tank having a piston provided with pressure applying means, a cover removably engaged on said tank, said cover containing an opening,

a casing on said cover, a slider having an inverted dispensing cup registrable with said cover opening, a cam in



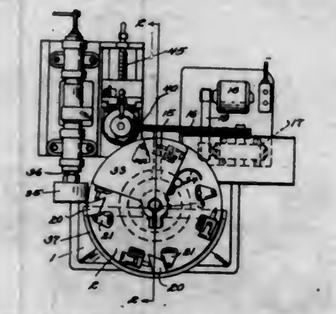
said casing, operable connections between said cam and slider, and means for manually rotating said cam to move the cup outwardly from the cover opening.

1,758,029. POLE PLANER. ORANGE R. COLE, Los Gatos, and MARSHALL T. GARLINGER, San Francisco, Calif., assignors to American Telephone and Telegraph Company, a Corporation of New York. Filed Dec. 28, 1927. Serial No. 243,136. 1 Claim. (Cl. 144—117.)



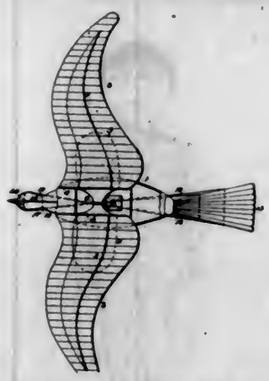
A portable planer for poles and the like comprising framework, a rotatable cutter member mounted in said framework to rotate about an axis parallel to the surface of the object to be planed, blade members having cutting edges of concave form curved to the shape of the poles to be planed and mounted longitudinally in the cutter to project from opposite sides thereof, a wedge member for each blade member mounted longitudinally therewith and so tapered to prevent its outward displacement from the cutter, means extending through said cutter from a point adjacent one wedge member for engaging and maintaining the opposite wedge member in position, a motor mounted in the framework and connected to rotate said cutter member, means adjustably positioned on the front portion of the framework for supporting and guiding the planer, means positioned on the rear portion of the framework cooperating with the last mentioned means to form a sliding support for the planer, a controller handle associated with the framework provided with means for starting and stopping said motor, a second handle whereby the operator by grasping said second handle and said controller handle may move the planer bodily along the surface to be worked upon, and means associated with the rear of the framework for adjusting the depth of cut made by the planer.

1,758,030. HEEL-BREASTING MACHINE. FRED A. DAY, Cincinnati, Ohio, assignor to The Day Wood Heel Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Oct. 14, 1929. Serial No. 399,426. 7 Claims. (Cl. 12—47.)



1. In a heel breasting machine, a base, a table rotatably mounted in connection with said base, means for rotating said table, a cylindrical cutter carried by said base and mounted for rotation about an axis disposed perpendicularly to the axis of the table, a clamping device on said table adjacent to the peripheral edge thereof for supporting a heel blank in connection with said base adjacent to the peripheral portion of the table and arranged to engage with the heel blank as the latter rotates with the table past said cutter, a horizontally disposed grooving cutter carried by said base and adapted to engage with said heel blank, and means operating upon said clamping device to hold the latter in clamping engagement with said heel blanks while the latter are in engagement with both of said cutters.

1,758,031. FLYING MACHINE. FRANCISCO IGNACIO DE CHRISTO, deceased, Horta, Fayal, Azores Islands, Portugal, by Florinda de Christo Rodrigues, administratrix, Oakland, Calif. Filed Feb. 16, 1928. Serial No. 254,867. 2 Claims. (Cl. 244—9.)

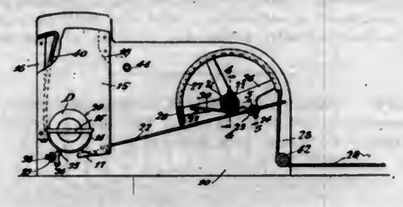


1. A flying machine comprising a body portion, a pilot's compartment constituting a rudder and capable of pivotal movement with relation to the forward end of the body portion, a floor in said compartment, a toothed segment affixed to the floor, a steering post, a pinion meshing with the segment carried by the steering post and a wheel for imparting rotary movement to the pinion.

1,758,032. SPRING TRAP FOR THROWING DISK TARGETS. JOHN THEODORE DICKMAN, Los Angeles, Calif. Filed Oct. 24, 1927. Serial No. 228,250. 6 Claims. (Cl. 124—5.)

3. A spring trap for target projection comprising a spring rod to project a target, a swinging member upon

which the rod is pivoted, means to hold one end of the rod, means for engagement of the rod at another point to flex the rod as the member continues to swing and whereby



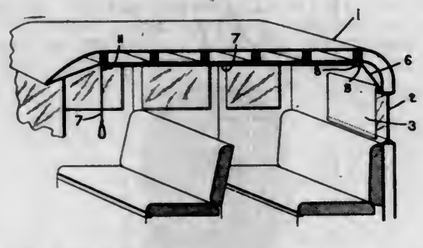
the rod will be withdrawn from said holding means upon a given amount of flexure, and means to adjust the position of said holding means for release of the rod under varying amounts of flexure.

1,758,033. TAPE AND PROCESS OF MAKING SAME. MILO C. DODGE, Auburn, N. Y., assignor to Columbian Rope Company, Auburn, N. Y., a Corporation of New York. Filed Aug. 1, 1927. Serial No. 209,888. 4 Claims. (Cl. 270—41.)



1. A paper tape comprising a pair of continuous paper ribbons having longitudinal creases therein to form a multiplicity of leaves in each ribbon with at least one of the leaves of one ribbon laid between the leaves of the second ribbon and the creased edges of the two ribbons lying at the side edges of the finished tape.

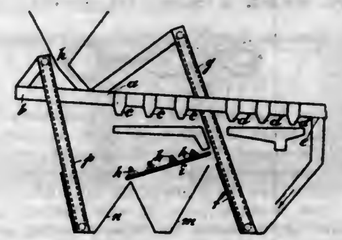
1,758,034. CURTAIN-OPERATING MEANS. WILLIAM L. DODGE, Dover, N. H. Filed July 3, 1928. Serial No. 290,240. 5 Claims. (Cl. 156—28.)



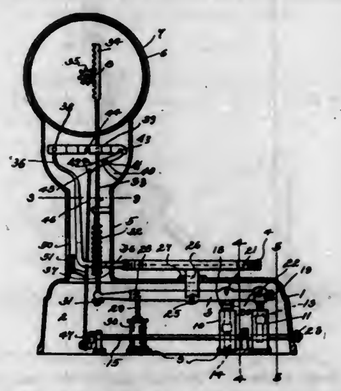
3. In a device for operating the rear curtains of automobiles, the combination with a spring roller, of a curtain wound thereon, a tape wound on the roller with the curtain, said tape having at its inner end a friction member which is loosely received between the curtain and the roller and which by frictional engagement with the roller retains the tape in its operative position, and an actuating cord connected to the tape and leading to within reach of the driver of the automobile.

1,758,035. PROCESS OF AND APPARATUS FOR WASHING COAL AND OTHER MINERALS. ANTOINE FRANCE, Liege, Belgium. Filed Nov. 3, 1925, Serial No. 66,596, and in Belgium Apr. 23, 1925. 8 Claims. (Cl. 209—18.)

1. The process of separating minerals having constituents of different specific gravities, consisting in forming a flowing stream of water and mineral of the kind specified having insufficient of the constituent of highest specific gravity to form a definite stratum, adding to said flowing stream material having a specific gravity adapting it to form a stratum including the highest specific gravity constituent, and in quantity sufficient to form therewith a definite stratum, permitting the mixture to stratify and then separaing the lowest stratum.

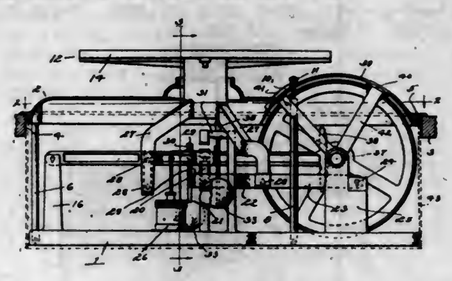


1,758,036. WEIGHING SCALE. NATHAN A. HALLWOOD, Columbus, Ohio. Filed Feb. 8, 1926. Serial No. 86,787. 8 Claims. (Cl. 265—34.)



1. In a scale, a weighing beam, a pivotal support for said beam, a check, a pivotal support for said check, and a common operating means for simultaneously shifting the operating positions of said supports with respect to said beam and check.

1,758,037. COMPUTING SCALE. NATHAN A. HALLWOOD, Columbus, Ohio. Filed Nov. 20, 1926. Serial No. 149,768. 8 Claims. (Cl. 265—37.)



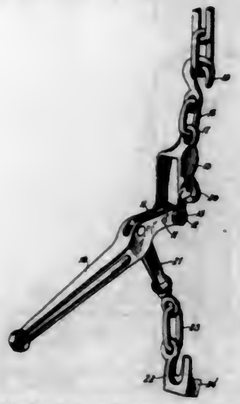
1. In a scale, a housing, a base suspended from said housing, pivotal connections between said base and said housing, adjustable threaded connections between said base and said housing admitting of variations in the working positions of said base with respect to said housing, and a scale mechanism including pendulum weights carried bodily by said base and adjustable in unison therewith.

1,758,038. SNAP HOOK. HORACE G. HANCOCK, New Haven, Conn., assignor to The O. B. North & Co., New Haven, Conn., a Corporation. Filed July 6, 1929. Serial No. 376,315. 2 Claims. (Cl. 24—232.)



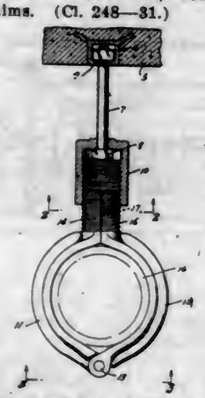
1. A snap hook comprising two complementary members having hooks at their outer ends, one provided with a centrally-arranged inwardly-extending lug and the other with two corresponding ears, the space between the ears being greater than the width of the lug, and a wire spring formed from a single piece of wire doubled upon itself and bowed at its center, the bows standing on opposite sides of the lug between said ears.

1,758,039. LOAD BINDER. LEO HAUBERT, Tulsa, Okla., assignor of one-eighth to Lyman Leroy Roller, Muskogee, Okla. Filed Apr. 14, 1927. Serial No. 183,863. 8 Claims. (Cl. 254—78.)



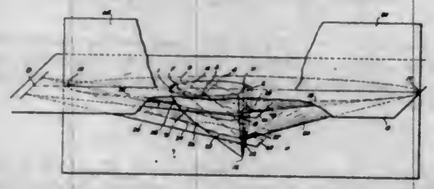
1. A load binder or pulling implement comprising, in combination, a lever having a bifurcated end; trunnions on the ends of the arms provided thereby; a clevis pivotally mounted on said trunnions; a chain-holding hook on one side of said clevis and a hook on the end thereof; an arm pivotally mounted in the bifurcation spaced from said trunnions; and a chain hook swivelly mounted on the end of said arm.

1,758,040. PIPE HANGER. ARTHUR HESS, Los Angeles, Calif., assignor of one-half to Samuel L. Marsh, Los Angeles, Calif. Filed June 16, 1926. Serial No. 116,328. 5 Claims. (Cl. 248—31.)



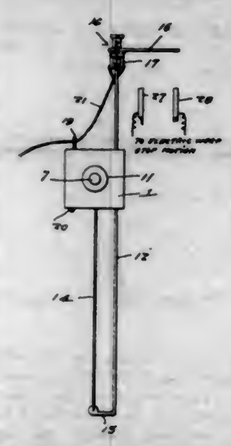
2. A pipe hanger comprising a bolt for connection to an overhead support, a thimble swiveled upon the shank of said bolt, depending therefrom and resting upon the head of said bolt so as to be freely rotatable axially thereof, the bore of said thimble being threaded, and a split pipe embracing member having sections forming a threaded shank for engagement in said bore to hold said sections together and to longitudinally adjust the position of said shank.

1,758,041. LIGHT PROJECTOR. BRUNO HEYMANN, San Francisco, Calif. Filed May 23, 1928. Serial No. 279,062. 6 Claims. (Cl. 240—41.)



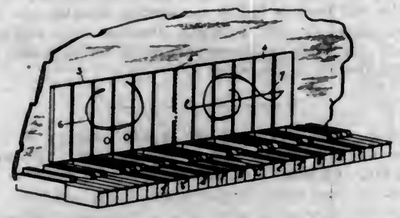
1. In a light projector a concave reflecting surface which is the locus of intersections of a family of ellipsoids of revolution all of which have one common focus, whose major axes lie in the same plane and whose other foci lie on a straight line and a cone for each of said ellipsoids having its apex coincident with said other focus, all of said cones having a common base in a plane normal to said straight line and passing through said common focus and which intersections form a family of ellipses, said ellipses diminishing according to a hyperbolic law.

1,758,042. LOOM ATTACHMENT. HARRY EDWARD HOFFMAN, Williamsport, Pa. Filed Nov. 23, 1928. Serial No. 321,399. 4 Claims. (Cl. 139—352.)



1. In a loom attachment, a casing, means for securing the casing on the loom, a rotatably adjustable shaft extending horizontally through one end of the casing, a vertically movable pull rod slidable through the casing, a contact bridging plate carried by the upper end of the rod, resilient means connecting the lower end of the pull rod with said shaft for normally urging the rod upwardly to maintain the contact bridging plate in a raised inoperative position, and a pull cord adapted for disposition across and between the warp threads and operatively connected with the pull rods for moving the same downwardly and dispose the bridging plate in an operative position when a pull is exerted on the cord by entangled warp threads.

1,758,043. DEVICE FOR CORRELATING THE STAFF WITH THE KEYBOARD OF PIANOS. HALESIA D. HOFFMEISTER, Los Angeles, Calif. Filed Oct. 3, 1927. Serial No. 223,566. 4 Claims. (Cl. 84—483.)



3. A device for correlating the positions for notes on a staff with the corresponding keys of a piano keyboard and including a representation of a staff with line extensions from said positions on said staff to be extended at angles to and over the corresponding keys of the keyboard, said device being adapted to be placed over said keyboard.

1,758,044. WAVE ANTENNA. RAY S. HOYT, River Edge, N. J., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Jan. 22, 1926. Serial No. 83,118. 4 Claims. (Cl. 250—11.)



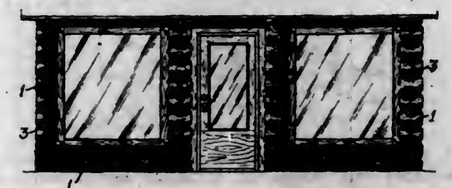
1. In a two wire wave antenna, shunt paths to ground from both wires at points along the length of the antenna, and means to make the resultant paths across the conductors at these points of high impedance.

1,758,045. REENFORCEMENT FOR WICKER CHAIRS. THEO HUYBEN, Temsche, Belgium. Filed May 28, 1928. Serial No. 281,317, and in Belgium Jan. 19, 1928. 1 Claim. (Cl. 155—197.)



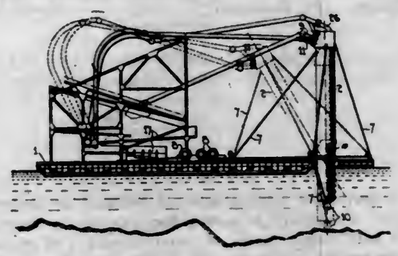
A metallic reenforcing device for wicker chairs, comprising two bars arranged diagonally under the seat of the chair, engaging with the underside thereof, and having their ends bent to form supports, the foremost of which extend parallel to and engage with the legs of the chair over their whole length, the rear ones extending parallel to and engaging with the legs of the chair over a certain distance starting from their end and then diverging from said legs, two bars arranged under and engaging respectively with, over the middle portion of their length, the first-named bars and having their ends bent to form props against the said supports, a cross bar extending close and parallel to the front side of the seat of the chair and fastened to the diagonal bars and two cross bars extending substantially parallel and close to the lateral sides of the seat of the chair and fastened to the diagonal bars.

1,758,046. ORNAMENTAL METALLIC LOG COMBINATION FOR BUILDING CONSTRUCTION. EDWARD L. ILSON, Patchogue, N. Y. Filed Mar. 26, 1929. Serial No. 349,926. 2 Claims. (Cl. 41—10.)



1. An ornamental metallic log combination for building construction comprising a plurality of trough-like metallic members formed with a bark-like configuration, end plates closing the ends of the said trough-like members and tie logs disposed intermediate said trough-like members, each tie log comprising two plates having the same bark configuration as said trough members, the two plates being united and bent into circular form and having wedge projections extending intermediate two contiguous trough members and united to the latter, and an end plate for each tie log, as and for the purpose set forth.

1,758,047. MINING OR DREDGING PLANT. DANES JENSEN, Dunedin, New Zealand. Filed May 6, 1927. Serial No. 189,372. 7 Claims. (Cl. 37—62.)



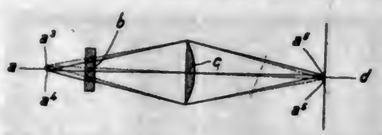
1. In a hydraulic excavator, a supporting platform, a casing mounted for swinging and sliding movement relative to the platform, a pipe extending longitudinally of the casing and terminating below the same in a spherical mouthpiece, a second pipe extending longitudinally of the casing and terminating in an upwardly opening nozzle leading into the first mentioned pipe above the mouthpiece, and a size regulating screen carried by the mouthpiece.

1,758,048. APPARATUS FOR DEHAIRING HOGS. JOHN W. KOHLHEPP, Chicago, Ill., assignor to The Allbright-Nell Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 10, 1927. Serial No. 241,090. 10 Claims. (Cl. 17—16.)



1. A dehairing machine comprising a plurality of units each unit consisting of revolvable dehairing and feeding mechanism and guide means along which the carcass is moved by said feed mechanism, said units being disposed end to end with the dehairing and feeding mechanism of one unit at one side of the path between said mechanism and guide means, and the other dehairing and feeding mechanism being arranged on the other side of said path.

1,758,049. ILLUMINATING DEVICE. AUGUST KÖHLER, Jena, Germany, assignor to The Firm of Carl Zeiss, Jena, Germany. Filed June 21, 1929, Serial No. 372,641, and in Germany June 23, 1928. 2 Claims. (Cl. 88—24.)



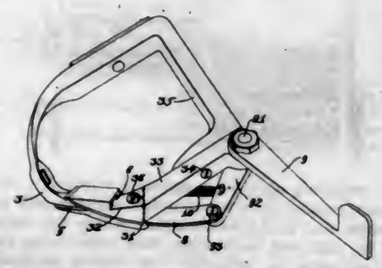
1. A device for approximately uniform illumination of a slit-shaped field, containing an oblong spatial source of light, whose longitudinal axis is perpendicular to the axis of the device, a cylindrical system of collective effect, whose cylindrical axis is perpendicular to the longitudinal axis of the source of light, and a spherical system of collective effect disposed behind the cylindrical system, the cylindrical system being adapted to project in the main section perpendicular to its cylinder axis, approximately in the entrance pupil of the spherical system, an image of the source of light, and the spherical system being adapted to alone project an image of the source of light approximately in the plane of the field to be illuminated.

1,758,050. DEVICE FOR CURLING OR WAVING HAIR. ARTHUR J. LAVERDIERE, Leominster, Mass., assignor to Tilton & Cook Co., Leominster, Mass., a Corporation of Massachusetts. Filed Dec. 24, 1927. Serial No. 242,828. 2 Claims. (Cl. 132—41.)



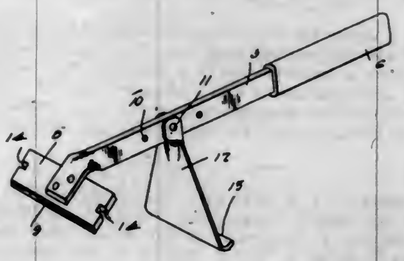
1. A device for curling hair, of celluloid or equivalent material, comprising a curling rod adapted to receive a lock of hair wound thereover, a retaining bar of rectangular cross-section cooperating therewith, pivotal connections between the two members at one end, a keeper slidingly supported upon the retaining bar and engaging four sides thereof to maintain the keeper in a predetermined lateral position with relation thereto, the keeper having an opening adapted to receive the free end of the curling rod, and a stop member mounted adjacent the end of the retaining bar and serving through contact with the keeper at opposite sides of the opening to prevent withdrawal of the keeper therefrom.

1,758,051. WELT GUIDE FOR SEWING MACHINES. FRANK W. MERRICK, Boston, Mass., assignor to American Stay Company, Boston, Mass., a Corporation of Massachusetts. Filed Nov. 12, 1925. Serial No. 68,552. 1 Claim. (Cl. 112—46.)



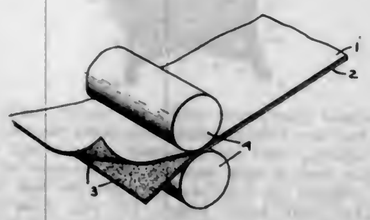
In a sewing machine comprising a work-rest by which the work operated upon is backed-up to withstand the pressure of a presser-member, and a presser-member by which the work is compressed against the said work-rest, and with the said presser-member provided with a welt-guide, the combination with said work-rest, and said presser-member provided with a welt-guide, of a welt-cutter having a cutting movement in a direction contrary to that in which the work is fed by the sewing machine and intersecting obliquely the pathway through the welt-guide, whereby the welt is dissevered by a scarfing cut from one face thereof to the other.

1,758,052. BASKET-LIDDING TOOL. GLENN E. MISSMAN, Council, Idaho. Filed May 31, 1927. Serial No. 195,316. 1 Claim. (Cl. 81—3.)



In a basket lidding tool wherein the lid includes a cross slat whose ends extend beyond the edge of the lid, and wherein the basket is provided with the usual wire bails for engagement over the respective ends of the slat; a handle lever formed from a flat bar, the inner end thereof being bent downwardly and twisted to provide an attaching lug, a cross plate fixedly secured at its intermediate portion on said lug, the lower edge of the cross plate being sharpened for biting engagement with the slat to provide a fulcrum for said lever, a plate like member increasing gradually in width toward its lower edge, a pair of spaced ears formed on the upper end of the plate like member for disposition on the hand lever, a pivot pin extending through the spaced ears and said lever, the lower edge of the plate like member bent to form a bail engaging hook, said hook being disposed between the sides of the bail and engaging the ground portion thereof for bending the same over in engagement with the adjacent end of the slat when the outer end of the lever is swung upwardly, said cross plate simultaneously forcing the lid downwardly.

1,758,053. LAMINATED SHEET MATERIAL. KIRKE L. MOSES, Brookline, Mass. Filed Apr. 19, 1924. Serial No. 707,737. 2 Claims. (Cl. 154—50.)



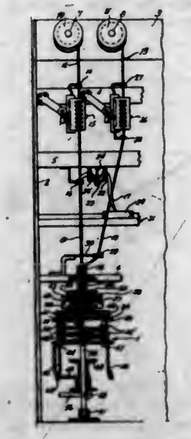
2. A two-ply sheet material adapted for use with artificial leather, one ply of which presents a tough wear-resisting surface and is constituted by a layer of paper which is made with relatively high porosity and after being formed is saturated with a rubber compound thereby to produce a homogeneous layer of interlaced fibres and rubber with a high percentage of rubber, and the other ply being of cloth and constituting a backing ply, said plies being adhesively and intimately united together by an adhesive containing rubber.

1,758,054. WELDING TORCH. JOSEPH NAGY, Long Island City, N. Y. Filed May 16, 1928. Serial No. 278,064. 6 Claims. (Cl. 158—27.4.)



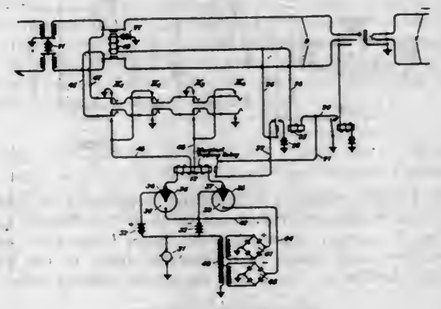
3. A welding torch comprising an outer tube member; a plug member secured in said tube in its rear end having two bores therein adapted to receive the usual oxygen and combustible gas conduits; two pipes secured in said bores within said tube member to continue said gas conduits, said pipes branching off into a plurality of subdivisions; a second plug member secured in the front end of said tube and continued as a tube like connecting member of the torch, having a central bore therein from the outer end thereof to a desired distance and inclined bores from said central bore to the inner end of said front plug there receiving said pipe branches, said inclined bores meeting said central bore at spaced apart places and alternatingly with relation to the two gases they conduct; an intermediate piece having a longitudinal bore therein to continue said central bore in said connecting piece, its front end having a flared tapering termination; a tip piece with the usual bore therethrough to continue the bore in said intermediate piece, the meeting end of said tip piece having a knife like circular double tapering shape to tightly fit into the flared mouth of said intermediate piece and to provide a smooth and gradual transition from one bore to the other, and means to releasably secure said intermediate piece to said second plug piece and said tip to said intermediate piece.

1,758,055. FRICTION AND HEAT RESISTING ARTICLE AND METHOD FOR MANUFACTURING THE SAME. WILLIAM NANFELDT, New Haven, Conn., assignor to World Bestos Corporation, New York, N. Y., a Corporation of Delaware. Filed Nov. 6, 1925. Serial No. 67,399. 14 Claims. (Cl. 92—21.)



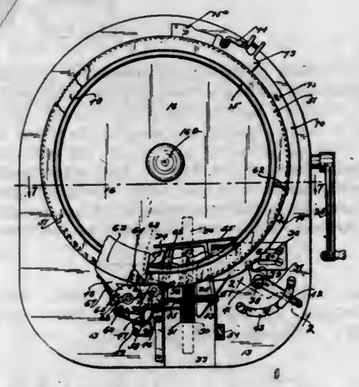
1. A method of making asbestos material adapted for use in yarn manufacture and other uses which comprises incorporating in asbestos containing pulp a binding agent, and a material adapted to soften said asbestos containing pulp, and thereafter forming the desired product therefrom.

1,758,056. SIGNALING CIRCUIT. ELIOT W. NILES, Bloomfield, N. J., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Mar. 26, 1929. Serial No. 350,058. 3 Claims. (Cl. 179—84.)



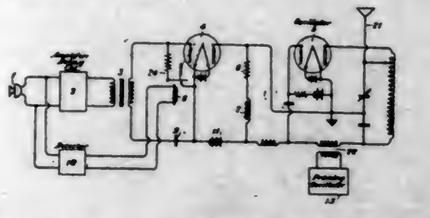
1. A cord circuit having associated therewith a source of alternating ringing current, a tripping relay connected with said source, an interrupter in said last mentioned connection, and rectifying means connected to said source said interrupted having one segment directly connected to said source and another segment connected to said rectifying means.

1,758,057. COIN-COUNTING MACHINE. CHARLES E. PETERSON, Minneapolis, Minn. Filed Oct. 7, 1925. Serial No. 60,985. 9 Claims. (Cl. 133—8.)



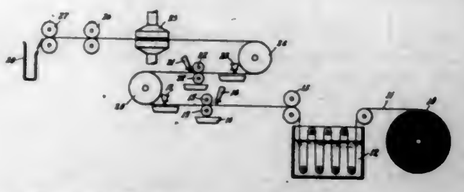
5. In a coin-counting machine, a hopper having a peripheral discharge passage, means for discharging the coins through said discharge passage one at a time, an annular member including an annular gear and an annular graduated dial mounted for rotary movements on said hopper, a device located adjacent said discharge passage and arranged to be given one step of movement for each coin discharged and to impart such step of movement to said annular member, a segmental slide mounted to move circumferentially at the exterior of said hopper and provided at one end with a gate cooperating with said discharge passage, and cooperating elements on said annular member and slide whereby when said annular member is given a predetermined number of steps of movement, said gate will be moved to a position to stop further discharge of coins through said discharge passage.

1,758,058. HIGH-FREQUENCY COMMUNICATION SYSTEM. RALPH K. POTTER, New York, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Mar. 1, 1928. Serial No. 258,374. 2 Claims. (Cl. 250—17.)



1. A high frequency transmitter comprising a modulator, an oscillator tube connected to said modulator and having a normal quiescent state under control of said modulator, and means to continually apply to the grid of said oscillator tube a low amplitude priming wave.

1,758,059. MULTICOLOR STRIP SHINGLE AND METHOD OF MAKING THE SAME. CHESTER E. RAHR, Brookline, Mass., assignor, by mesne assignments, to The Patent and Licensing Corporation, Boston, Mass., a Corporation of Massachusetts. Filed May 3, 1926, Serial No. 106,301. Renewed Aug. 24, 1929. 8 Claims. (Cl. 91—68.)



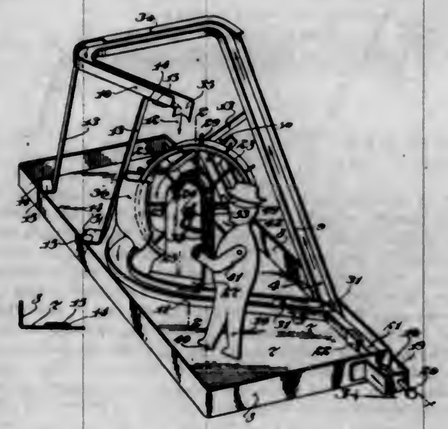
1. The method of making multi-colored strip shingles, which comprises coating a sheet of roofing felt with waterproofing material, applying granular matter of different colors to a coated face of the sheet in bands of different colors, applying granular matter of different colors to the opposite faces of the sheet to form color bands registering with the first-named color bands, cutting series of slots on the boundaries between adjacent colors, and cutting through said slots transversely of the color bands.

1,758,060. ROLLING-PIN. HARRY GEO. REINMUTH, Philadelphia, Pa. Filed May 28, 1929. Serial No. 366,717. 2 Claims. (Cl. 107—50.)



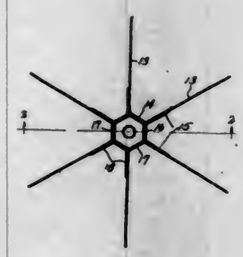
1. A device of the character described comprising two standards, blocks slidably mounted in said standards, a shaft, the ends of which are secured to said blocks, a rolling pin revolubly mounted upon the shaft, caps secured upon the upper ends of the standards, adjusting screws journalled in the caps, collars carried by the screws to prevent lengthwise movement of the latter, and pointers carried by the shaft and projecting into correlation with graduations for determining the amount of adjustment given the rolling pin relative to the standards.

1,758,061. MECHANICAL TOY. FRANK B. RENTZ and WILLARD E. FANTLE, Yankton, S. Dak. Filed Dec. 8, 1928. Serial No. 324,635. 3 Claims. (Cl. 46—37.)



1. A mechanical toy having a catapult, a race having an elevating section leading from the catapult and a return section leading to the catapult and having a gap, a projectile, said catapult being arranged to project the projectile up said elevating section and onto the return section of the race, a wheel mounted to rotate in said gap, said wheel having a plurality of circumferentially spaced pockets, the discharge end of the upper member of the return section of the race being arranged to direct the projectile into one of the pockets in the wheel at one side of a dead center for causing the projectile to impart a rotary movement to the wheel, said race having positioning means for centering the projectile in respect to the catapult, the return section of the race being arranged to deliver the projectile to said positioning means.

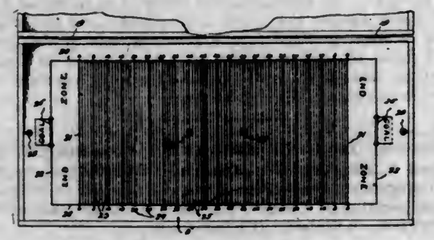
1,758,062. CENTRIFUGAL FAN AND METHOD OF MAKING THE SAME. DANIEL B. REPLOGLE, Berkeley, Calif. Filed July 28, 1928. Serial No. 296,074. 4 Claims. (Cl. 29—156.8.)



1. The method of making a centrifugal fan which consists in spot welding to a central hollow metal member a plurality of blades of substantially the same thickness as the central member, then inserting a hub within the hollow member and securing the hollow member and hub together.

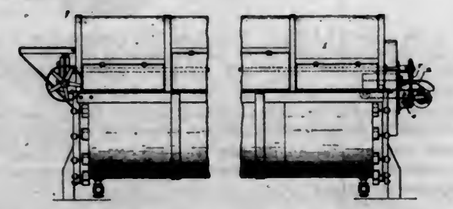
3. A centrifugal fan comprising a hollow metal member, a plurality of radial blade units having base portions welded to the central hollow member and a central hub secured within the hollow member.

1,758,063. FOOTBALL GAME. EUGENE W. ROBERT, Atlanta, Ga. Filed Feb. 24, 1928. Serial No. 256,736. 2 Claims. (Cl. 273—94.)



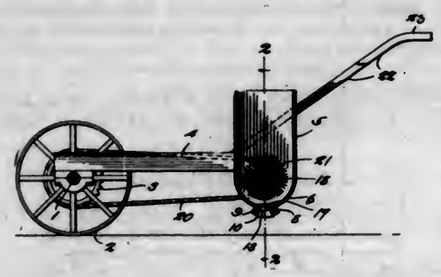
1. In a football game, a game board having a diagram of a football field thereon, goal post-forming wickets mounted in an upright position on the board at opposite ends of the diagram, and signal bells mounted behind and between the uprights of said wickets.

1,758,064. APPARATUS FOR TREATING FOOD MATERIALS. JOHN SCHMIDT, Hoopeston, Ill., assignor to Sprague-Sells Corporation, Hoopeston, Ill. Filed Mar. 10, 1926. Serial No. 93,646. 4 Claims. (Cl. 146—194.)



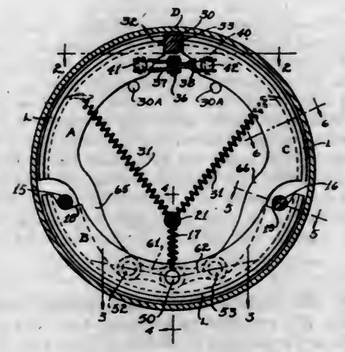
1. A unit apparatus for blanching vegetable materials comprising feed means, blanching means and discharge means, said blanching means consisting of an outer stationary shell or casing and an inner screen member mounted for rotation, said screen member having a reduced cylindrical extension at the feed end protruding through the outer casing and having no contact therewith, the said feed means comprising a hopper and an inclined chute entering said extension of said screen member and delivering material directly into said screen member and having no contact therewith, the discharge means of said unit consisting of a short endless belt extending a short distance into the discharge end of said screen member to receive material therefrom and deliver it outside of said screen member.

1,758,065. DUSTING MACHINE. EMMET L. SHERLING and GEORGE E. CUNNINGHAM, Macon, Ga. Filed June 11, 1926. Serial No. 115,297. 1 Claim. (Cl. 221—130.)



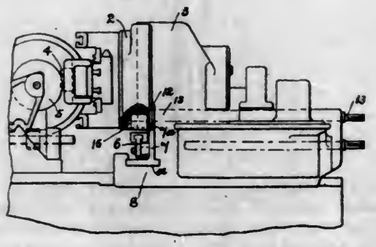
A dusting machine including a hopper having a rounded bottom provided with a longitudinally extending outlet opening from one side to the other, flanges depending from the walls of the outlet, supporting guides below the outlet having depending flanges adjustably connected to the first named flanges, the said supporting guides being arranged in pairs and the guides of each pair being superposed, strips slidably mounted at their edges between the superposed guides and adjustable therewith, said strips being extended through slots at the sides of the hopper and shiftable relative to each other to vary the size of the stream of material delivered from the hopper, a screen mounted on the guides, a shaft mounted for rotation in the hopper, and a cylindrical brush rotatable with the shaft and extending close to the screen.

1,758,066. BRAKE STRUCTURE. JOHN SNEED, Detroit, Mich., assignor to The Midland Steel Products Company, Cleveland, Ohio, a Corporation of Ohio. Filed Aug. 1, 1927. Serial No. 209,685. 17 Claims. (Cl. 188—78.)



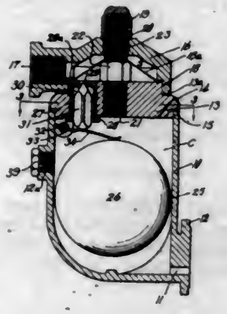
1. A brake having a pair of shoes and a link pivotally supported in its middle and connected at its ends to said shoes whereby movement of one of said shoes in one direction forces the other shoe to move in the opposite direction.

1,758,067. MACHINE FOR CUTTING OR GENERATING THE TEETH OF WHEELS. SAM SUNDERLAND, Keighley, England. Filed Nov. 29, 1927, Serial No. 236,458, and in Great Britain Dec. 28, 1926. 2 Claims. (Cl. 90—9.)



1. In a cutter machine of the class described, a movable cutter support, a member extending transversely of the machine, an arm pivoted to said member and having an inclined upper surface, a bracket slidably engaging said inclined surface and connected to said support, whereby upon the actuation of said member a reciprocating movement is imparted to said cutter support, and means for moving said member transversely of the machine.

1,758,068. CARBURETOR RESERVOIR. EDWARD A. WINFIELD, La Canada, Calif. Filed June 26, 1928. Serial No. 288,398. 1 Claim. (Cl. 137—104.)



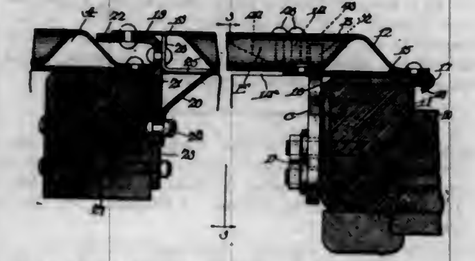
In a carburetor reservoir, a vertically extending cylindrical chamber containing a spherical float in close proximity to the chamber wall, a circular head mounted at the upper end of said chamber and containing a vertically extending bore offset from the center thereof, a vertically movable valve pin within said bore having a face spaced therefrom and adapted to seat on a shoulder at the upper end of the bore, a cover for said head and containing a liquid inlet space, and a lever having one end pivotally connected to the under side of said head and having its other end resting on said float, said lever being mounted to extend beneath said bore to support the valve pin.

1,758,069. BIT EXTENSION. JOHN HERBERT ABRAMSON, Rockford, Ill., assignor to Greenlee Bros. & Co., Rockford, Ill., a Corporation of Illinois. Filed Jan. 25, 1928. Serial No. 249,387. 3 Claims. (Cl. 279—90.)



1. In a bit extension the combination with an extension shank having a chuck on the one end thereof arranged for detachably holding a bit, and a sleeve member fitting on said shank at the chuck end and arranged to be turned in one direction in the opening of the chuck and in the opposite direction in the closing thereof, of means for detachably locking the sleeve member against turning with respect to the shank comprising a locking collar on the shank adjacent the end of said sleeve, said collar having an outside diameter preferably of substantially the same outside diameter as the sleeve for the purpose herein contemplated, a coiled compression spring fitting about the shank and bearing at one end against an annular shoulder provided on a fixed part of the shank and at the other end against an annular seat provided therefor on the collar whereby to urge the collar yieldingly toward the sleeve, means serving to hold the collar against turning relative to the shank but permitting the collar to be retracted from the sleeve against the action of the spring, and projections and recesses provided on the abutting ends of the sleeve and collar adapted to interfit when the collar is in locking position whereby to hold the sleeve against turning relative to the shank.

1,758,070. LOCKING MECHANISM FOR DOORS. ALLAN S. BARROWS, Los Angeles, Calif., assignor to The Youngstown Steel Door Company, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 23, 1923. Serial No. 627,005. 6 Claims. (Cl. 20—22.)



1. In a door latching mechanism, the combination with a one piece swinging latch member having a pivot opening at one end thereof; of a one piece retaining member for said latch member and adapted to overlie the outer surface of the same, said retaining member being provided with an integral pivot element extending through said pivot opening and an integral abutment element adapted to limit the swinging movement of said latch member in opposite directions.

1,758,071. BATHTUB. BENJAMIN BLEUSTEIN, New York, N. Y. Filed Sept. 21, 1929. Serial No. 394,276. 1 Claim. (Cl. 4—185.)



In combination with a bathtub, a body rest comprising a double layer of flexible material mounted on and secured to a frame containing a pivotal support engageable with locking means adapted to hold said support against movement, the lower of the said layers containing an opening to permit access to be had to said locking means, the said support being adapted to rest upon the bottom of said tub and to keep one end of said body rest in an elevated position.

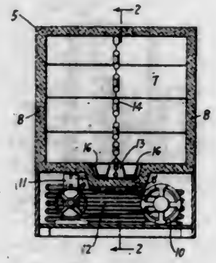
1,758,072. RAIL JOINT. JOHN W. BREWER, Magna, Utah. Filed Dec. 10, 1920. Serial No. 413,013. 3 Claims. (Cl. 238—231.)



1. In a device of the class described, two abutting rails, one of which has a V-recess at its end with the side walls

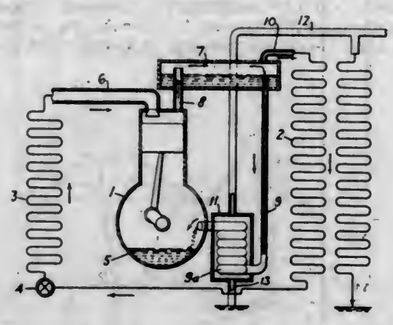
thereof upright, and with the apex of the V terminating at the inner side of the web of the rail, and the other of which has a wedge at its end fitting said recess, the heads of the two ends at the apex of the V on the inner sides of the rails having their contacting surfaces lying at an angle approaching a right angle with respect to the longitudinal center line of the rails.

1,758,073. REFRIGERATING AND ICE-MAKING CABINET. RANSOM W. DAVENPORT, Detroit, Mich., assignor to Chicago Pneumatic Tool Company, New York, N. Y., a Corporation of New Jersey. Filed Aug. 1, 1925. Serial No. 47,457. 9 Claims. (Cl. 62—116.)



6. A cabinet having a heat insulated compartment for perishable articles and a recess formed in the bottom of said compartment, a refrigerating element in said compartment extending into said recess, and closure means for said recess giving access to the same directly from said compartment.

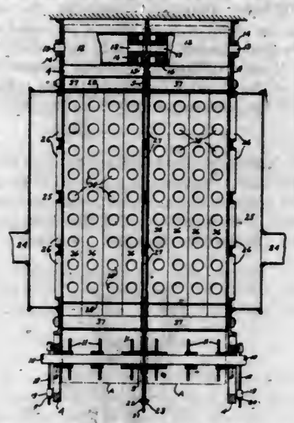
1,758,074. HEAT-TRANSFORMING APPARATUS. RANSOM W. DAVENPORT, Detroit, Mich., assignor to Chicago Pneumatic Tool Company, New York, N. Y., a Corporation of New Jersey. Filed Mar. 10, 1927. Serial No. 174,267. 18 Claims. (Cl. 62—115.)



1. In a closed cycle refrigerating system in which the working substance has dissolved therein lubricant from the lubricating system, the process of continuously separating out said lubricant at the high temperature of compression, extracting heat from the separated lubricant while out of contact with the hot vapor phase of the refrigerating system, and returning the separated and cooled lubricant to the lubricating system.

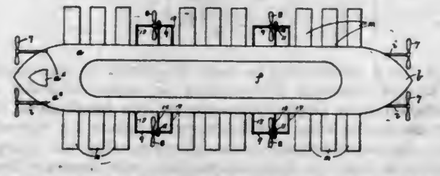
1,758,075. MECHANICAL STOKER. WILLIAM M. DUNCAN, Alton, Ill. Filed July 8, 1925. Serial No. 42,149. 1 Claim. (Cl. 110—40.)

A double stoker comprising a pair of endless traveling chain grates, separating means interposed between the adjacent sides of said grates, rotary driving means including a pair of drive shafts surrounded by said grates and forming supports therefor, and adjusting means whereby said driving means is shifted to tighten the chain grates, said adjusting means including a bearing surrounded by the grate structure and forming a support for both of said



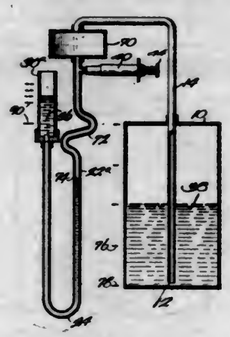
shafts, an adjusting member at the exterior of the grate structure and a connection device passing between the adjacent sides of the grates and extending from said bearing to said adjusting member, so as to connect the bearing to the adjusting member.

1,758,076. AIRSHIP. GEORGE ALBERT EAGLES, Chesham, England. Filed Jan. 25, 1927, Serial No. 163,389, and in Great Britain Dec. 2, 1926. 5 Claims. (Cl. 244—11.)



1. An airship having conical shaped ends, a central and machine compartments, motors in said machine compartments, three sets of wings arranged on each side of the airship, means for imparting independent vertical movement to each wing, from said motors, propellers on each side of said airship and means for driving said propellers from the motors.

1,758,077. LIQUID-TANK-LEVEL GAUGE. JAMES FENTRESS, Chicago, Ill. Filed July 25, 1925. Serial No. 46,014. 3 Claims. (Cl. 73—54.)



1. In combination with a tank for containing a liquid, a U-tube, a tube connecting said U-tube with said tank

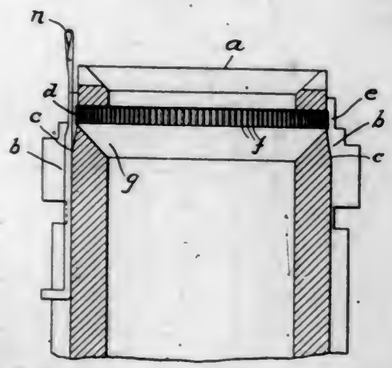
at the minimum depth within the latter at which the level of liquids therein is to be measured, an indicating element in said U-tube being movable by variations in the level of the liquid in said tank, an indicator associated with said U-tube, adapted to register the movements of said indicating element, and means included solely within said U-tube and spaced from said indicator, whereby the movement of said indicating element proportionate to the variations of the level of the liquid in the tank is increased as the liquid becomes exhausted from the tank.

1,758,078. DEVICE FOR PLACING AND REMOVING LAMP BULBS. HAROLD D. GRINNELL, Pittsfield, Mass., assignor to The G. C. A. Manufacturing Company, Pittsfield, Mass., a Corporation of Massachusetts. Filed Dec. 29, 1928. Serial No. 329,288. 9 Claims. (Cl. 294—20.)



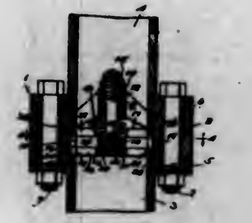
1. In a device of the class described, in combination, clamping members for gripping an object laterally and disposed in a plane transverse to the longitudinal axis of the object when applied thereto, means for spreading the clamping members, means for actuating the clamping members into the gripping position, and separate means for rotating the object when in the gripped position.

1,758,079. NEEDLE CYLINDER FOR CIRCULAR-KNITTING MACHINES. GEORGE W. KAPPES, Milwaukee, Wis., assignor to Standard-Trump Bros. Machine Company, Wilmington, Del., a Corporation of Delaware. Filed June 7, 1929. Serial No. 369,045. 1 Claim. (Cl. 66—36.)



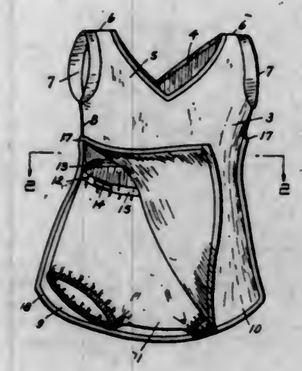
A needle cylinder provided with vertically extending needle receiving grooves in which needles are slidable, with shoulders above which the needles are adapted to extend so as to leave spaces behind the upper ends of the needles to allow them to be deflected radially inward, and with an inner circumferential groove whose maximum depth is sufficient to intersect said spaces and which, below said part of maximum depth, is provided with a bevelled wall to facilitate the downward escape of particles that enter the space behind the needles and pass into said groove.

1,758,080. GOVERNOR. EMIL R. KLEMM, Jr., Chicago, Ill. Filed Sept. 10, 1928. Serial No. 305,070. 4 Claims. (Cl. 137—152.)



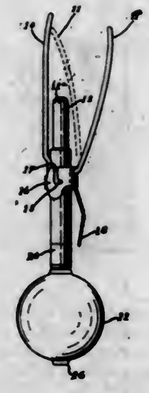
1. A device of the kind described comprising a casing, a passage therethrough, a pair of disk shaped members within said passage for controlling the flow of fluid through same, said members each having an equal number of radiating spokes having open spaces therebetween, means yieldingly holding said members apart, one of said members being movable toward the other member by the flow of fluid to control said flow, and a valve in said movable member operable by the drop in pressure of fluid flowing through said member to provide a vacuum release opening.

1,758,081. CHILD'S GARMENT. MARJORIE C. MASTERS and CLARENCE W. MASTERS, Wynnewood, Pa. Filed Aug. 18, 1928. Serial No. 300,422. 3 Claims. (Cl. 2—75.)



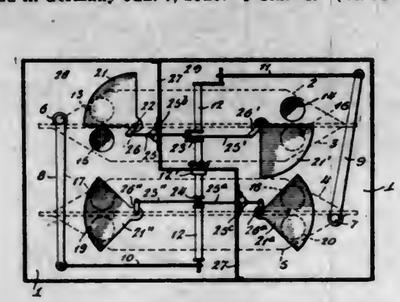
1. A one-piece buttonless garment having arm holes including a dress divided at the sides to a point above the waist line and closed from this point to the arm holes, a pair of bloomers having a waistband secured to the front of the dress at the waist line thereof, and an elastic element in the rear part of the waistband.

1,758,082. GYNECOLOGICAL INSTRUMENT. ALDEN L. MCGOWAN, Dayton, Ohio. Filed July 9, 1928. Serial No. 291,179. 16 Claims. (Cl. 128—265.)



1. A device of the class described comprising in combination a pair of complementary dilating members pivotally secured together, means for spreading the members apart, and powder discharging means rigidly secured to one of the members.

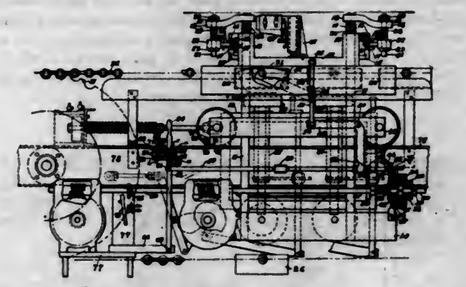
1,758,083. GAS METER. GEORG MEYER, Mains, Germany, assignor to Gasmesserfabrik Mains Elster & Co., Mains, Germany. Filed Jan. 6, 1927, Serial No. 159,399½, and in Germany Jan. 7, 1926. 5 Claims. (Cl. 73—1.)



2. A gas meter comprising a casing forming a pair of measuring chambers each provided with separate ports for the inflow and outflow of gas, the inlet ports of the two chambers being adjacent to each other and the outlet ports of the two chambers being likewise adjacent to each other, a valve controlling the inlet ports of both chambers, another valve controlling the outlet ports of both chambers, and an operative connection between said valves, so arranged that the inlet port of one chamber will be open at the same time as the outlet port of the other chamber, and vice-versa.

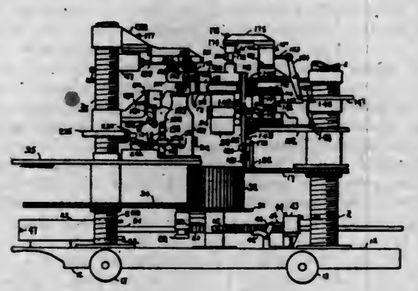
1,758,084. AUTOMATIC SAFETY DEVICE FOR POTTERY MACHINES. WILLIAM J. MILLER, Swissvale, Pa. Filed Mar. 9, 1927, Serial No. 173,194. Renewed Oct. 27, 1927. 21 Claims. (Cl. 25—24.)

1. A pottery machine including a plurality of mold carriers, reciprocating jigger mechanism adapted to cooperate with said carriers, means for conveying said carriers horizontally over said jigger mechanism, a movably mounted cover frame, a source of power, means associated with said cover frame for controlling said source of power, said



means being adapted to render the source of power inoperative when the cover frame is raised due to abnormal operation of said mechanism and/or said conveying means.

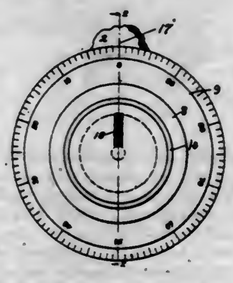
1,758,085. GLASSWARE-FORMING APPARATUS. FRANK O'NEILL, Toledo, Ohio. Filed Aug. 19, 1918. Serial No. 250,488. 20 Claims. (Cl. 49—9.)



5. A bottle blowing machine including a mold provided with neck finish means including a plunger, positive means holding the plunger in the mold, power mechanism for orienting the mold, and yieldable means controlled by the mechanism for withholding the plunger from operative position when the mold is oriented.

11. A bottle blowing machine, means embodying a horizontally reciprocable slide, relatively movable bottle engaging vertical axis members suspending glass from the slide, a pneumatic control means for the slide and an additional pneumatic control means for the engaging members.

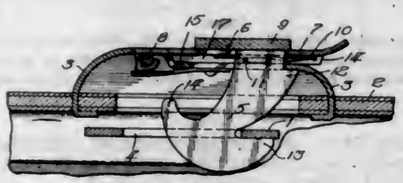
1,758,086. ADJUSTMENT-INDICATING MEANS. ADOLPH PETZLER, Freeport, N. Y., assignor to Thomas Howe, White Plains, N. Y. Filed June 12, 1922. Serial No. 567,858. 6 Claims. (Cl. 74—7.)



1. The combination with a penal, of a rotatable shaft extending therethrough for adjusting parts of the ap-

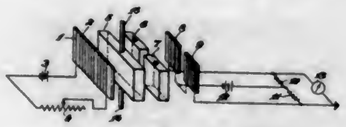
paratus, a housing secured to said panel, a spur gear rotatably mounted in a bearing in said housing and secured to said shaft, a second spur gear of smaller size than the aforementioned gear and meshing therewith, a second shaft rotatably mounted in said housing and secured to said second spur gear, a petticoat secured to said second shaft, enclosing said housing and carrying a circular indicating dial, and a handle secured to said petticoat.

1,758,087. CATCH FOR TRAVELING-BAG AND GLADSTONE-BAG FRAMES. OSCAR H. PLOTKIN, Chicago, Ill., assignor to S. Dresner & Son, Inc., Chicago, Ill., a Corporation of Illinois. Filed June 30, 1927. Serial No. 202,537. 2 Claims. (Cl. 292—228.)



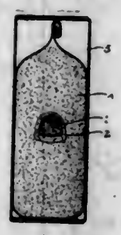
1. A latch for a traveling bag which includes an inner and an outer frame hingedly connected at their bottoms and provided in their upper frame members with vertically alined slots, comprising: a latch body fast on the upper frame member of the outer frame, a lever pivoted at one end to the latch body on a horizontal axis transverse of both frames, and a hook member slidably mounted on the lever and normally extending through the said alined slots in both frame members, the hook member having a hook normally disposed below the slotted part of the inner frame; the hook being disposed to underhang the part of the inner frame beyond one end of the slot in that frame when the hook member is slid to one position; and the hook underhanging the last named slot when the hook member is slid to another position, so as to dispose the hook for upward movement through the slot; the hook member also having a second hook facing in the same direction as the aforesaid hook and disposed for engaging the inner face of the latch body when the hook member is slid into its said position, the said second hook being effectively shorter than the first named hook, so as to reduce the frictional resistance to a sliding of the hook member during a part of the sliding movement of that member in either direction.

1,758,088. METHOD OF AND MEANS FOR DETERMINING A CONSTITUENT IN A MIXTURE OF SUBSTANCES. HANS SCHMICK, Greifswald, Germany, assignor to Siemens & Halske, Aktiengesellschaft, Siemensstadt, near Berlin, Germany, a Corporation of Germany. Filed Aug. 29, 1927, Serial No. 216,086, and in Germany Sept. 4, 1926. 10 Claims. (Cl. 73—51.)



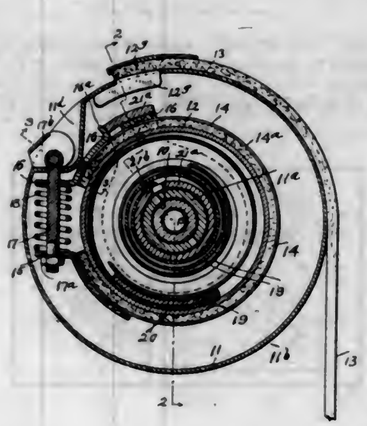
1. An arrangement for the determination of a constituent in a mixture, comprising in combination at least two bolometric resistances, a source of radiation adapted to irradiate said resistances, a first body containing the mixture to be tested and located in the range of rays between said source and said resistances, a second body containing the constituent to be determined and inserted in the range of rays between said source and one of said two resistances and means for measuring the difference of irradiation of said two resistances.

1,758,089. FOOD PRODUCT AND METHOD OF PREPARING. FRANCIS WALKER SHIRRIFF, Toronto, Ontario, Canada, assignor of one-third to William M. Shirriff and one-third to Colin H. Shirriff, Toronto, Canada. Filed Oct. 3, 1927. Serial No. 223,697. 4 Claims. (Cl. 99—11.)



4. A food product, comprising a mixture of non-flavored edible ingredients in soluble powder form, and a globule of syrup containing a flavoring extract having its surface crystallized to form a hard soluble shell, said soluble shell being incorporated in the soluble powder and forming therewith a soluble flavored compound.

1,758,090. SHOCK ABSORBER. JACOB R. SNYDER, Cleveland, Ohio. Filed Aug. 29, 1925. Serial No. 53,276. 7 Claims. (Cl. 267—10.)



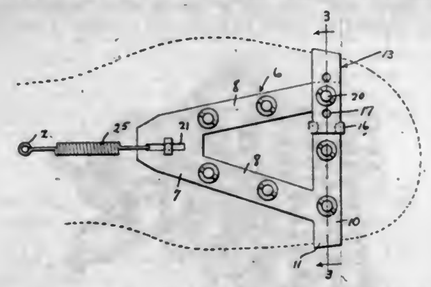
5. In a shock absorber, a rotary member, a strap adapted to be wound onto and unwound from the rotary member, a spring for rotating said member in one direction, a pair of relatively movable friction members adapted to frictionally retard the movement of said rotary member in one direction and including an expansible friction member and a spring independent of the first-named spring for acting on said flexible friction member to relieve the friction when said rotary member is rotated by the first-named spring.

1,758,091. SHOE ATTACHMENT. JOSEPH TAGLER, Los Angeles, Calif. Filed Apr. 29, 1929. Serial No. 359,012. 2 Claims. (Cl. 36—62.)

1. In an attachment of the class described, a substantially V-shaped frame including a web portion and a pair of outwardly diverging arm portions, said arm portions being provided at their outer ends with relatively stationary and adjustable sole engaging jaws, said web portion being provided with a longitudinal slot, anti-

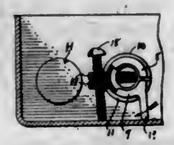
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slipping calks carried by said frame, a retaining bolt passing through said slot and adapted to be anchored



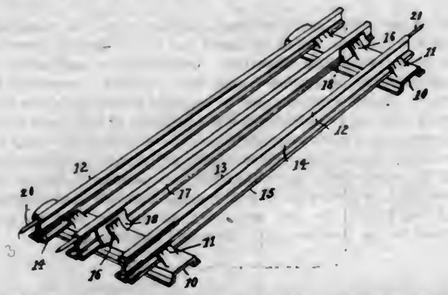
in the sole of the shoe, a coiled spring connected at one end with said slot, and means for attaching the other end of the spring to the shoe sole.

1,758,092. CABLE CONNECTER. GEORGE C. THOMAS, Jr., Elizabeth, N. J., assignor to The Thomas & Betts Co., Elizabeth, N. J., a Corporation of New Jersey. Filed Jan. 22, 1924. Serial No. 687,788. 13 Claims. (Cl. 247—25.)



8. A connecter comprising, a longitudinally split sleeve including box hole edge abutment means, a leg and a screw upon one of said sleeve portions defined by the split engaging with a box wall to move said portion laterally to clamp the cable and anchor the connecter in the box hole.

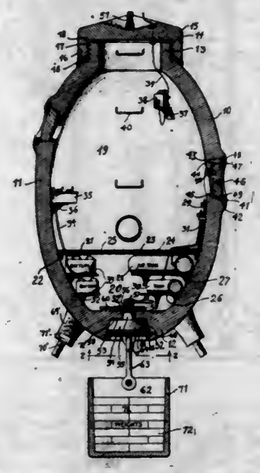
1,758,093. TOY RAILWAY TRACK. WILLIAM E. THORN, Bridgeport, Conn., assignor to The Ives Corporation, Bridgeport, Conn., a Corporation of Connecticut. Filed Dec. 23, 1927, Serial No. 242,174. Renewed Oct. 19, 1929. 3 Claims. (Cl. 191—29.)



1. In an electric toy railway track, a rail having openings formed therein, an insulating sheet, a metal sleeper provided with lugs positioned against and holding the insulation in the opening of the rail in a manner to insulate the same from the sleeper and lock it against endwise movement.

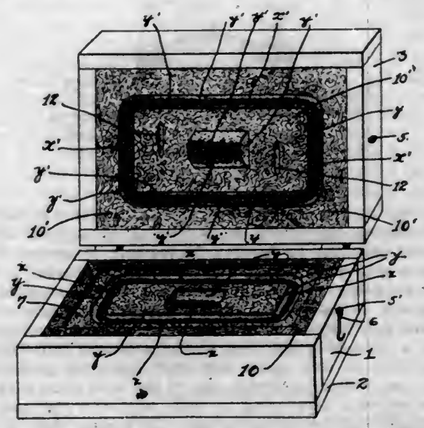
1,758,094. DIVER'S BELL. JAMES UCHI, New Boston, Ohio. Filed Mar. 16, 1925. Serial No. 15,783. 1 Claim. (Cl. 61—69.)

In a diver's bell, having a casing, the floor portion of said casing being formed with a conical opening, a cone shaped disk tightly but rotatably mounted in said conical opening, and operable from the inside of said casing, a plate connected with the bottom face portion of said conical disk by a slot and stud connection; inwardly extending lugs formed on the periphery of the conical opening in the floor portion; arcuate extensions formed



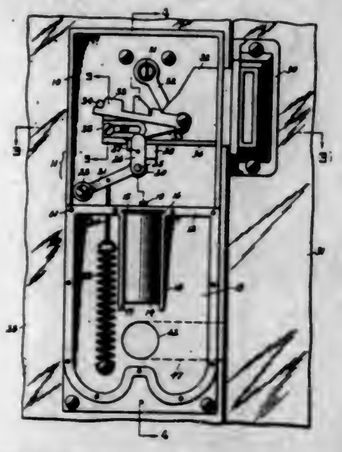
on said plate and adapted to engage said inwardly extending lugs to lock said plate to said casing, said plate to carry a weight for sinking and balancing said casing, said extensions being adapted to be disengaged from the lugs in the floor opening of the casing upon the turning of said cone shaped disk, and said plate and weight thereby released from said casing.

1,758,095. PARTING-FACING PRODUCT FOR CASTING METALS. BENJAMIN F. WALLACE, Brooklyn, N. Y. Filed Jan. 8, 1926. Serial No. 79,958. 6 Claims. (Cl. 22—163.5.)



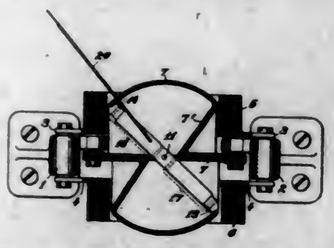
1. A pulverulent parting-facing product for casting metals, comprising graphite as the major ingredient, the same being homogeneously impregnated with a pitch-like residuum obtained from the distillation of rosin and substantially free from volatile ingredients that have a boiling point below 150° C., said product being highly water-repellent and capable of serving both as a parting in the preparation of the mold and as an effective facing for such mold during the casting operation.

1,758,096. BURGLARPROOF LOCK. JAMES J. WALSH, Philadelphia, Pa. Filed Oct. 19, 1928. Serial No. 313,890. 5 Claims. (Cl. 109—6.)



1. A lock including a gas-filled container, a firing pin for discharging the gas from the container, a hammer for forcing the firing pin against the container, means for holding the hammer out of contact with the firing pin, and a bolt slidable longitudinally in close proximity to the holding means and so arranged that lateral movement of the bolt will cause it to dislodge the holding means.

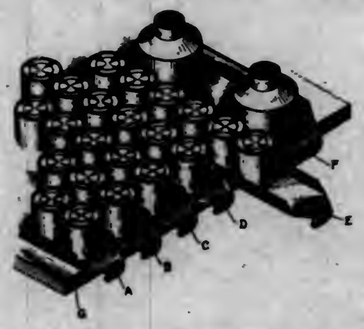
1,758,097. DYNAMOMETRIC MEASURING INSTRUMENT. PAUL WIESSNER, Berlin, Germany, assignor to Siemens & Halske, Aktiengesellschaft, Siemensstadt, near Berlin, Germany, a Corporation of Germany. Filed Mar. 1, 1928, Serial No. 258,192, and in Germany Mar. 3, 1927. 4 Claims. (Cl. 171—95.)



1. In an electrodynamometric measuring instrument, the combination of two fixed coils of rectangular cross-section disposed in parallel planes and connected to a source of current in such manner that the currents in the two coils flow in opposite directions to provide opposing magnetic fields, the adjacent faces of said coils being placed at a distance at least equal to the axial length of a coil, a rotatable shaft, and a pair of moving coils rigidly fixed side by side about said shaft and each projecting into and oscillating within one of the fixed coils, each of said movable coils being of such form and size and so arranged that it oscillates with the greater part of its surface within its associated fixed coil.

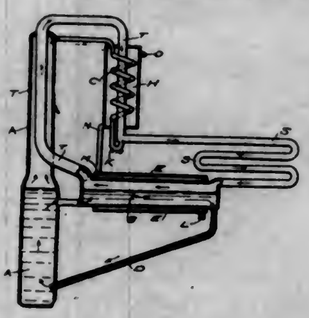
1,758,098. DISPLAY-TRAY SYSTEM AND TRAYS THEREFOR. DICK B. WILLIAMS, Larchmont, N. Y. Filed Feb. 4, 1928. Serial No. 251,781. 2 Claims. (Cl. 211—74.)

1. A system for storing and displaying merchandise comprising a substantially horizontal open shelf and a series of display trays on said shelf, each tray having a substantially open front and comprising a base adapted to slide upon said shelf and a smooth upper surface, side walls adapted to retain in single file a series of articles



placed in said tray, a rear wall and means by which each said tray may be moved and tilted upon said shelf for the purpose of causing said articles to slide forward upon said tray.

1,758,099. REFRIGERATING APPARATUS. ANTON EDWIN ANDERSON, London, England, GUIDO MAIURI, Turin, Italy, and RAOUL FELICE BOSSINI, Hayes, England. Filed Jan. 23, 1926, Serial No. 83,292, and in Great Britain Nov. 21, 1925. 2 Claims. (Cl. 62—119.5.)



1. Absorption refrigerating apparatus of the constant pressure type in which an inert gas is circulated between the evaporator and absorber, comprising a generator, a condenser, an evaporator and an absorber connected to form a closed system, and a conduit connecting the absorber and the evaporator for the passage of inert gas from the absorber to the evaporator, said conduit comprising an upwardly extending portion passing through the generator and a downwardly extending portion passing through the condenser, whereby inert gas passing through said conduit will be heated in the upwardly extending portion and cooled in the downwardly extending portion.

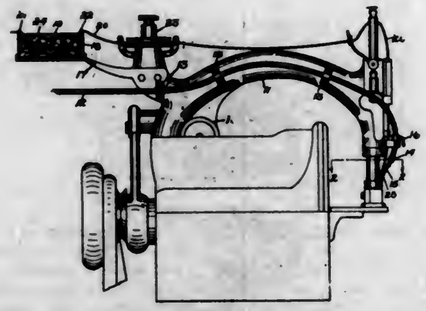
1,758,100. MACHINE FOR LAPPING AND THE LIKE. GEORGE W. ANDREWS, Jr., Vernon, Conn. Filed Feb. 4, 1928. Serial No. 251,863. 9 Claims. (Cl. 51—34.)



1. In a machine of the character described, a tool carrier mounted for reciprocating and rotary movements,

means for reciprocating said carrier, and mechanism for imparting a partial revolution to said carrier upon each stroke thereof in one direction, said mechanism including a rotary element, means for preventing rotation of said element in one direction, means for preventing rotation of said carrier in the same direction, and means between said carrier and element whereby, when said carrier is moved in one direction, one of said elements is rotated and when the carrier is moved in the other direction the other of said elements is rotated.

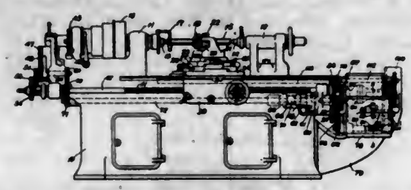
1,758,101. SEWING. ADELMER M. BATES, Chicago, Ill., assignor, by mesne assignments, to St. Regis Paper Company, New York, N. Y., a Corporation of New York. Filed Apr. 20, 1925. Serial No. 24,364. 7 Claims. (Cl. 112—218.)



1. The method which consists in moistening a thread with a vaporizable liquid, passing the moistened thread through the eye of a needle, sewing paper with the needle and thread at such a rate of speed as to heat the needle, and directing a jet of air against the needle and the moistened thread beside the needle.

5. In a sewing machine, a needle, means to operate the needle, a receptacle for liquid, means to guide thread through the receptacle on its way to the needle, and means to direct a jet of air against the needle.

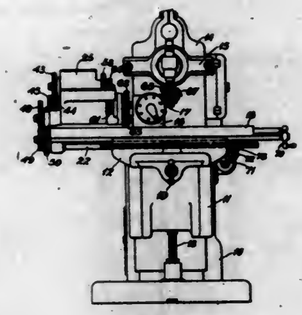
1,758,102. APPARATUS FOR RELIEVING HOBS. ALLAN H. CANDEE, Rochester, N. Y., assignor to Gleason Works, Rochester, N. Y., a Corporation of New York. Filed June 30, 1927. Serial No. 202,696. 15 Claims. (Cl. 82—19.)



1. In apparatus for relieving hobs, a rotatable blank support, a tool support, a tool mounted thereon, a bed movable in a direction longitudinally of the blank and adapted to carry one of said supports, means for moving said bed, means for simultaneously imparting a continuous rotary movement to the blank support, and means for simultaneously and in timed relation with the bed and blank movements reciprocating said tool support to effect a relieving movement of the tool, and means for actuating one of said prior mentioned means at a varying velocity and the others at uniform velocities.

5. In apparatus for relieving hobs, a rotatable blank support, a reciprocable tool support, a tool mounted thereon, a bed movable in a direction longitudinally of the blank and adapted to carry one of said supports, means for imparting a continuous movement to the bed at a uniform velocity, means for rotating the blank support on its axis continuously at a uniform velocity, a cam for reciprocating the tool support and means for continuously rotating said cam including a differential, one element of which is driven continuously at a uniform velocity in timed relation with the blank and bed movements, a second cam, means for rotating the second cam, and means operatively connecting said second cam to another element of the differential to impart a movement at a varying velocity thereto.

1,758,103. APPARATUS FOR GASHING AND SHARPENING HOBS. ALLAN H. CANDEE, ERNEST C. HEAD, and LOUIS D. NADEL, Rochester, N. Y., assignors to Gleason Works, Rochester, N. Y., a Corporation of New York. Filed June 30, 1927. Serial No. 202,697. 8 Claims. (Cl. 90—15.)



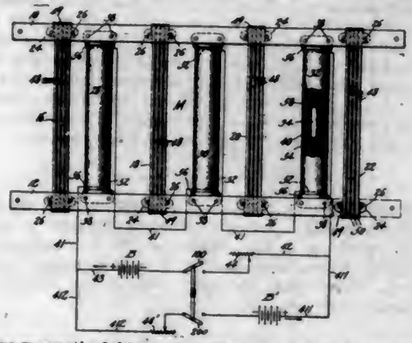
1. In apparatus of the character described, a tool support, a tool mounted thereon, a rotatable work support, a slidable table upon which one of said supports is mounted, means for imparting a cutting movement to the tool, means for moving the table to cause the tool to move longitudinally of the work, a differential, means actuated in timed relation with the table movement for rotating one element of said differential at a uniform velocity, means actuated in timed relation with the table movement for rotating another element of the differential at a varying velocity and means operatively connecting said differential with the work support.

8. In a machine for fluting or sharpening hobs, a frame, a rotary work support, a table slidably mounted on the frame for movement in a direction longitudinal of the work, means for actuating one of said parts, a cam, gearing for driving said cam from said actuated part, a differential, gearing for driving one element of said differential from said cam to impart thereto a movement at a varying velocity, gearing operatively connecting the other two elements of said differential with said two first mentioned parts, respectively, a tool support, a tool mounted thereon, and means for actuating the tool, said table being adapted to carry one of said supports.

1,758,104. MAGNET. HOWARD S. FOLKER, Mill Valley, Calif., assignor, by mesne assignments, to National Safety Appliance Company, Reno, Nev., a Corporation of Nevada. Filed Feb. 12, 1926. Serial No. 87,769. 6 Claims. (Cl. 246—63.)

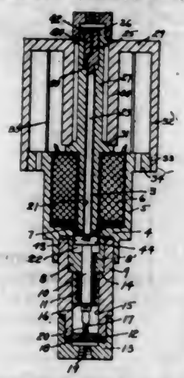
1. A magnet of the type described which comprises a pair of magnetic equalizing bars, spaced permanent magnets spanning said equalizing bars, the south poles of said magnets being connected to one bar and the north poles to the opposite bar, spaced magnet cores spanning said bars

to provide a return circuit having reluctance to the flux of said permanent magnets, and an electric circuit including solenoids about said cores and adapted to provide an



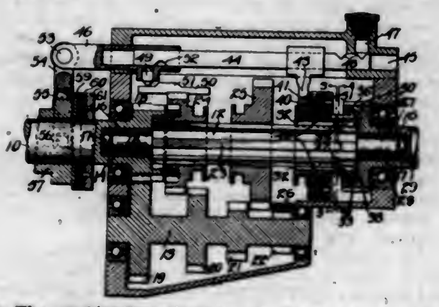
electro-magnetic field to strengthen that of said permanent magnets or a reversed electro-magnetic field to increase the permeability of said return circuit through said cores.

1,758,105. ELECTROMAGNETIC VALVE. LOUIS O. FRENCH, Milwaukee, Wis. Filed Mar. 29, 1928. Serial No. 265,610. 5 Claims. (Cl. 137—139.)



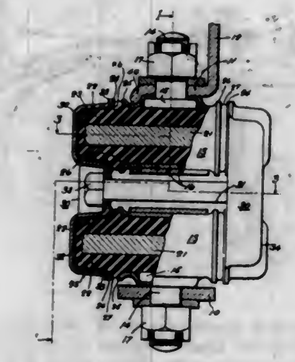
1. In an electromagnetic valve, the combination with an electromagnet, a valve chamber and a valve working in said chamber and actuated by said magnet, of an inlet passage to said chamber, and a stop member in said passage closely spaced relative to the wall of said passage to provide a filtering space to prevent the entrance of foreign matter into said chamber.

1,758,106. TRANSMISSION-DECLUTCHING MECHANISM. JOHN FLETCHER GAYLORD, Flint, Mich. Filed Mar. 19, 1928. Serial No. 262,838. 2 Claims. (Cl. 192—53.)



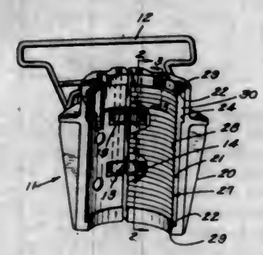
1. The combination of a pair of aligned shafts, a fixed clutch member on one of said shafts, a movable clutch member on the other shaft, an intermediate clutch member shiftable with the movable clutch member and adapted to engage the fixed clutch member for causing the shafts to rotate in synchronism prior to the connection between the fixed and movable clutch members, said intermediate clutch member having a beveled face adapted to engage the fixed clutch member, and a latch to guide the aligned shafts into definite relative rotary positions, substantially as set forth.

1,758,107. RUBBER SPRING SHACKLE. HARVEY D. GEYER, Dayton, Ohio, assignor to The Inland Manufacturing Company, Dayton, Ohio, a Corporation of Delaware. Filed May 18, 1926, Serial No. 109,980. Renewed Sept. 27, 1929. 13 Claims. (Cl. 267—54.)



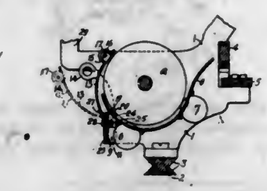
1. In combination with a spring and frame member of a vehicle, a shackle comprising: an eye member fixed to the spring, a second eye member fixed to the frame member, a flexible rubber block non-rotatably retained in each of said eyes and having the ends thereof projecting laterally beyond the eyes, an isolated metal insert in each of said blocks, and a metal side link interconnecting the projecting ends of the two rubber blocks on each side of said eyes.

1,758,108. SLIP CONSTRUCTION. EDWIN W. GOESER, Los Angeles, Calif., assignor to Emsco Derrick & Equipment Company, Los Angeles, Calif., a Corporation of California. Filed May 14, 1928. Serial No. 277,522. 4 Claims. (Cl. 24—263.)



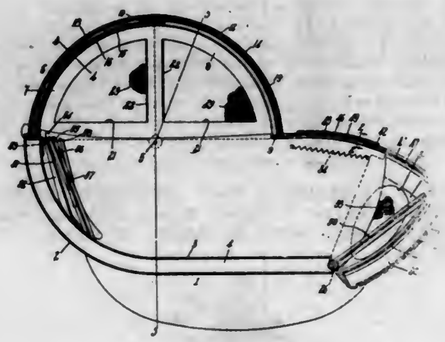
1. In a slip for gripping pipe, the combination of: a body having a frusto-conical outer face, an inner arcuated side-opening channel, and a key-way formed in said body adjacent said channel; an arcuated liner disposed in said channel and having teeth formed on the inner face thereof, and having a key-slot formed therein, said liner being adapted to be removed from said channel through said opening thereof; and a lock removably disposed in said key-way and key-slot for retaining the parts in their operative relation.

1,758,109. TYPEWRITING MACHINE. GEORGE G. GOING, Middletown, Conn., assignor to Remington Typewriter Company, Ilion, N. Y., a Corporation of New York. Original application filed May 2, 1927, Serial No. 188,243. Divided and this application filed Dec. 20, 1927. Serial No. 241,328. 7 Claims. (Cl. 197—139.)



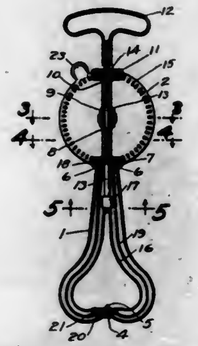
1. The combination of a carriage; a platen supported thereby; an inverted L-shaped supporting bar connected to the carriage; a paper finger carrier supported for sliding movement along said bar and comprising a plate-like portion that bears against the front face of said supporting bar, and a projection that extends from the upper edge of said plate-like portion and embraces the horizontally disposed head only of said bar, said projection having a forwardly extending portion that underlies said head; and a paper finger connected to said carrier.

1,758,110. BABY CARRIAGE. EUGENE HAMEL, Brockton, Mass. Filed June 13, 1928. Serial No. 285,146. 2 Claims. (Cl. 296—107.)



1. A baby carriage comprising, in combination, a body member embodying therein an outer and inner wall having a space therebetween, a hood of open mesh fabric pivotally attached to said body member and covering the same at one end thereof, said hood also being adapted to be moved from above the body member into the space between the walls thereof, and a transparent arcuate member slidably mounted on said hood and positioned parallel with said fabric.

1,758,111. MIXING DEVICE. FREDERICK W. HENDERSON, Seattle, Wash., assignor to Henderson Corporation, a Corporation of Washington. Filed July 11, 1927. Serial No. 204,776. 19 Claims. (Cl. 259—132.)



1. A beater having two oppositely rotating elements of the same peripheral contour, rotating about the same axis, one slightly larger than the other, and the larger enveloping the smaller, said rotating elements being pivoted at the bottom in the center and extending downward below the pivot point between the center and outer edge.

1,758,112. BABY-CARRIAGE TOP. JESSAMINE A. HEWITT, Berkeley, Calif. Filed Nov. 13, 1928. Serial No. 319,074. 3 Claims. (Cl. 296—110.)



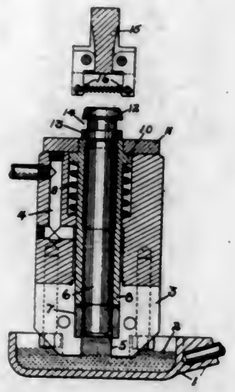
1. In combination with a baby buggy or the like, a top comprising a plurality of sections, each section separately pivoted on two sides of said buggy and a plurality of the sections adapted to telescopically collapse into out of use position adjacent each end of said buggy and adapted to be moved into position to substantially cover said buggy, a support member on each side and spaced from said buggy, means engaging each pivot to slide on said member and clamp means to lock said pivot on said member.

1,758,113. FORMING METAL CASTINGS. AUGUST KADOW, Toledo, Ohio, assignor of one-half to Wilber Owen and Charles W. Owen, Toledo, Ohio. Filed Mar. 15, 1926. Serial No. 94,715. 31 Claims. (Cl. 29—33.)

1. The process which consists in withdrawing air from one end of a mold chamber, introducing molten metal into the other end of the chamber, and, while the introduced metal is still hot, exerting pressure against the metal in the first said end and in a direction towards the second said end.

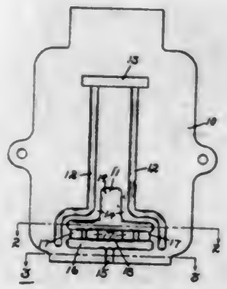
25. In casting apparatus, a mold having a casting space and an inlet opening, a plunger adapted to extend through said space, a sleeve surrounding said plunger, the end of

the sleeve forming a portion of the wall of said space, yielding means normally holding the sleeve in a predetermined position, connections between the sleeve and plunger



adapted to hold the plunger with its end adjacent the inlet opening when the sleeve is in said position, and means for forcing the plunger and sleeve towards said inlet.

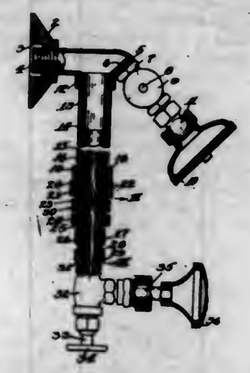
1,758,114. MEANS AND METHOD FOR FILLING MOLDS WITH MOLTEN METAL. AUGUST KADOW, Toledo, Ohio, assignor, by direct and mesne assignments, to The Vacuum Casting Company, Toledo, Ohio, a Corporation of Ohio. Filed Mar. 15, 1926. Serial No. 94,716. 8 Claims. (Cl. 22—134.)



1. The process of casting metal, which consists in withdrawing air from a mold cavity, introducing molten metal into the lower portion of the cavity under comparatively low differential pressure, continuing to withdraw gas from the cavity until it is completely filled and increasing, during the filling process, the differential between the pressure of gases on the surface of the metal rising in the cavity and the fluid pressure forcing metal into the cavity.

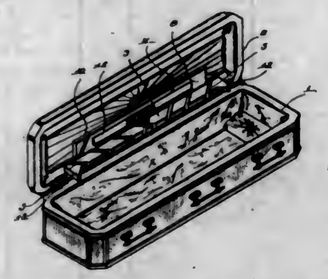
1,758,115. ADJUSTABLE SHOWER FIXTURE. JAMES W. KELLY, Chicago, Ill. Filed Jan. 12, 1929. Serial No. 331,978. 3 Claims. (Cl. 4—145.)

1. A shower fixture comprising a support adapted to be rigidly connected with a supply pipe, a main shower nozzle adjustably connected to said support, a plurality of telescoping tubes suspended from said support, packing



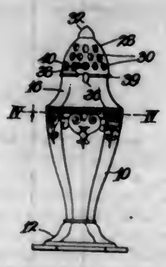
units between said telescoping tubes, rings for locking the tubes in collapsed relation, and an auxiliary spray nozzle adjustably connected with one of said tubes.

1,758,116. FUNERAL FURNITURE. ANDREW A. KERMIS, Rochester, N. Y., assignor to Kermis Tent & Awning Co., Rochester, N. Y., a Firm composed of Andrew A. Kermis and Bernard Meyering. Filed Sept. 24, 1925. Serial No. 58,438. 5 Claims. (Cl. 40—124.)



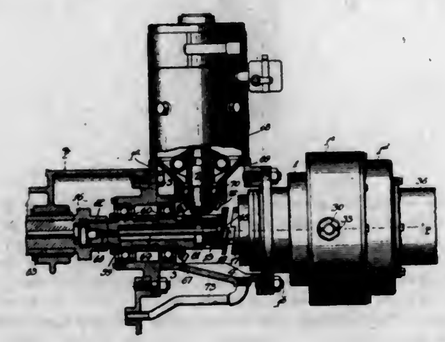
1. Funeral furniture comprising an elongated shelf adapted to rest on the inside of the open cover of a casket and having a smooth top surface and card securing strips extending transversely of the shelf and secured at opposite sides of the shelf, those portions of the strips between the secured ends being free of the shelf so that cards may be passed under them to project from both sides of the strips.

1,758,117. INDIVIDUAL SALT AND PEPPER RECEPTACLE. GUSTAV F. KRAFT, Kansas City, Mo. Filed Nov. 30, 1928. Serial No. 322,672. 3 Claims. (Cl. 65—45.)



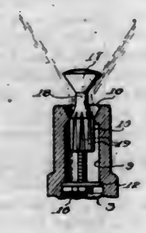
1. A condiment holder construction comprising an integral hollow base and receptacle portion, a central vertical partition dividing the receptacle portion into separate condiment compartments, a removable cover structure carried by the top of the receptacle portion and operative to regulate the outlet from both of said compartments, a securing device comprising a rod having a head enclosed within said hollow base and a shaft extending vertically through said partition into threaded engagement with said cover structure for holding said cover structure upon said receptacle portion, and means permitting rotative and limited longitudinal movement of said rod while retaining the same from withdrawal from said partition.

1,758,118. ENGINE STARTER. RAYMOND P. LANSING, Montclair, N. J., assignor to Eclipse Machine Company, Elmira, N. Y., a Corporation of New York. Filed June 28, 1926. Serial No. 118,938. 7 Claims. (Cl. 290—47.)



1. In combination with an internal combustion engine having a rotatable member and with a machine adapted to be driven thereby, an engine starting apparatus having a rotatable driving shaft in axial alignment with said engine member, and a driving connection located between and in alignment with such shaft and the engine member and having means of connection with the engine member, machine and starting apparatus, said engine member having an internally splined socket, and said driving connection comprising a shaft splined at one end to engage the splines of the engine member and provided at its other end with means of engagement with the starting apparatus, such means consisting of a jaw clutch member, said starting apparatus being provided with a corresponding shiftable clutch member and means for shifting it.

1,758,119. LAWN-SPRINKLER NOZZLE. AXEL R. LE MOON, Chicago, Ill. Filed Sept. 24, 1927. Serial No. 221,733. 8 Claims. (Cl. 299—61.)



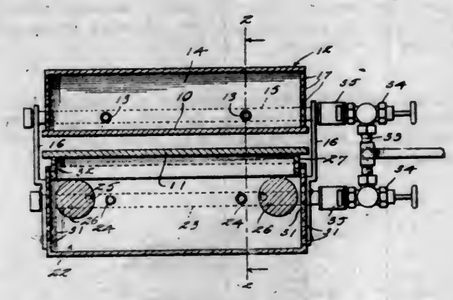
1. A nozzle comprising a shell in combination with a relatively movable core, said parts being formed relative to each other for control of the transmitted fluid according to the position of said core, and also for limiting the movements of said core, said shell having a passageway therethrough to transmit the fluid and to house said core, the latter having a narrow neck, and said shell having the inner face of its wall formed to restrict said passageway at that part which lies opposite the core neck when the valve is closed or nearly closed, said core having a head on its outer end to close the valve when the core is moved inwardly and said core having a longitudinally fluted part on the other side of its neck to fit slidably and snugly in the restricted part of said passageway and accommodate a normal operating flow of fluid in numerous small streams when the core is moved to its outward position, whereby free passage is allowed initially for a large momentary flushing current whenever operation of the nozzle is desired and formation of spray is facilitated when the valve is fully opened.

1,758,120. LUMINOUS AND ANIMATED ADVERTISING DEVICE. AUGUSTE LIBECK, Paris, France. Filed Feb. 18, 1929, Serial No. 340,885, and in France Nov. 13, 1928. 1 Claim. (Cl. 40—32.)



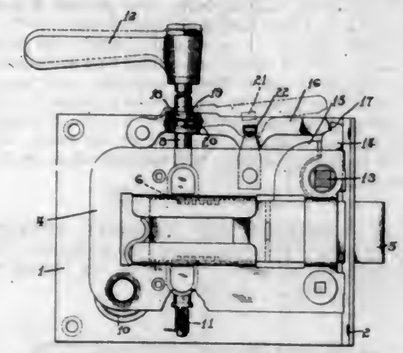
A luminous and animated advertising device comprising a casing having a glass front, a pair of pulleys supported rotatably within said casing, an endless flexible strip formed with apertures and mounted on said pulleys so that it can be moved thereby behind the glass front, a series of plates bearing transparent signs, means for connecting said plates to the strip so as to cover its apertures, a light reflector arranged so as to direct light through the strip and through the glass front, and a coloured screen arranged between the reflector and the strip.

1,758,121. SANDWICH-TOASTING MACHINE. GRANT LINES, Fort Worth, Tex., assignor of one-third to S. N. Baker, Fort Worth, Tex. Filed Nov. 10, 1928, Serial No. 318,523. Renewed Oct. 29, 1929. 5 Claims. (Cl. 126—41.)



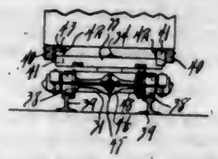
1. In a sandwich toaster, a pair of superimposed casings adjacent faces of which are in the form of plates, burners within each casing for heating the associated plate, manifolds for the burners of each casing arranged at corresponding edges of said casings, a single gas feed connection for said manifolds maintaining said casings in spaced relation at such sides while permitting pivotal movement of one of the casings with relation to the other thereof, and means for adjusting one of said plates with relation to its casing to cause it to approach or recede from the plate of the other of the casings.

1,758,122. LOCKING MECHANISM FOR LATCHES. CHARLES S. MCCARTHY, Toledo, Ohio, assignor to The American Swiss Company, Toledo, Ohio, a Corporation of Ohio. Filed Dec. 19, 1925. Serial No. 76,360. 5 Claims. (Cl. 292—164.)



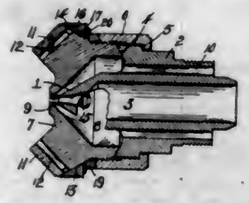
1. A latch mechanism having a sliding latch bolt, a pair of independently operable retractors for said bolt, one of said retractors being axially movable, a pivoted lever for locking one of said retractors against movement, and a member carried by said axially movable retractor and slidably engaging said lever intermediate the ends whereby axial movement of said axially movable retractor moves said lever to locking position.

1,758,123. MINIATURE INTERURBAN TRAIN. FRED M. MCFALLS and GEORGE H. BROWN, Fort Worth, Tex. Filed May 21, 1927. Serial No. 193,130. 2 Claims. (Cl. 105—226.)



1. In combination with a truck bolster and a body bolster and a king bolt pivotally connecting the same, means for vertically adjusting said body bolster relative to the body framing comprising hanger elements mounting the ends of such bolster with adjusting means cooperating therebetween.

1,758,124. SPRAY HEAD. GODFREY A. MUELLER, Point Place, Ohio, assignor to The De Vilbiss Company, Toledo, Ohio, a Corporation of Ohio. Filed Apr. 21, 1927. Serial No. 185,386. 6 Claims. (Cl. 91—45.)



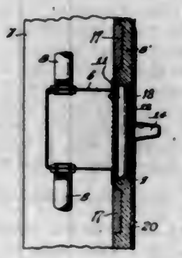
1. A spray-head having an annular external surface, an arcuate groove therein extending part way around the same and with supplemental air discharge passages leading from said groove, said surface also having air supply passages in communication with an air supply source, and a ring valve mounted on said surface and adapted by a turning thereof to control the communication between said supply passages and groove.

1,758,125. EMERGENCY-LIGHT CONNECTER. ROBERT J. OWENS, Philadelphia, Pa. Filed Oct. 15, 1925. Serial No. 62,521. 1 Claim. (Cl. 240—10.5.)



An emergency cap for a flash light, comprising a cap to replace the customary casing cap of the flash light, said cap having a threaded body portion from which extends outwardly a threaded plug adapted to be received in a conventional lamp socket, and said plug having an opening through its outer end to prevent the lamp lighting circuit being closed through the lamp socket and the flash light casing.

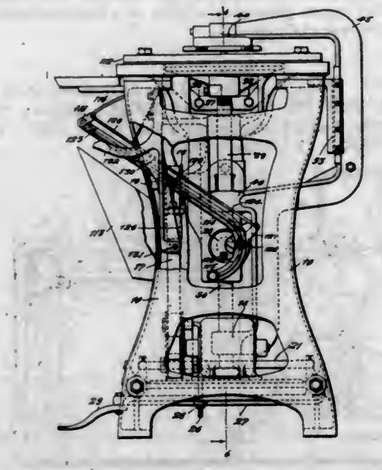
1,758,126. OUTLET LOCATOR. ABDEL JOHN PETERSON, Chicago, Ill. Filed Apr. 16, 1925. Serial No. 23,489. 3 Claims. (Cl. 247—15.)



1. An outlet box cover including a closure plate frictionally retained in an opening in said plate, said closure plate having a projecting boss serving when said plate is embedded in a plastered surface as a means to locate said outlet box and also as an instrumentality in facilitating the removal of said closure plate from said box by percussion and pressure.

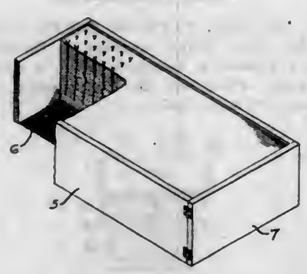
1,758,127. FOLDING MACHINE. EDWARD B. ROBY, Troy, N. Y., assignor to S. and R. Folding Machine Company, Inc., Green Island, N. Y., a Corporation of New York. Filed July 14, 1926. Serial No. 122,307. 11 Claims. (Cl. 223—15.)

1. In a machine of the class described, a frame, means carried thereby operating in synchronism to fold a blank, a rigid bar pivoted to a part of the frame and biased to its retracted position, a single arm pivotally attached to the free end of the bar and adapted to assume a raised and lowered position, the free end of said arm being extended downwardly for engagement with the blank, and means for positively moving said bar to its advanced position while maintaining the arm in its raised position and



for releasing said arm when the bar is advanced to allow the free end of the arm to engage the folded blank, and for withdrawing said bar to cause the arm to sweep the blank from the machine.

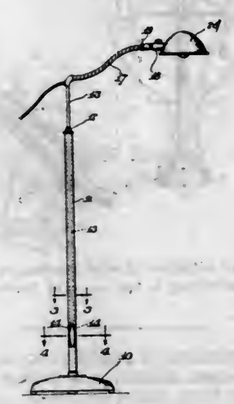
1,758,128. METHOD FOR PROPAGATING SUGAR BEETS. WILLIAM B. ROSEVEAR, Toledo, Ohio. Filed Mar. 16, 1929. Serial No. 347,642. 4 Claims. (Cl. 47—37.)



1. The process of raising tap-root seedlings, comprising planting the seed in an above-ground earth filled bed, and washing the earth from the roots while in the bed when the seedlings have grown sufficiently for transplanting.

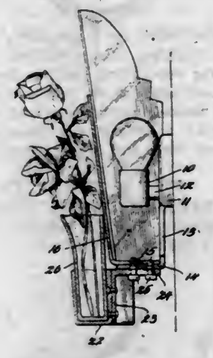
1,758,129. ELECTRIC FIXTURE. PHILIP C. SHAPIRO, Philadelphia, Pa., assignor to Siegel Manufacturing Company, Philadelphia, Pa. Filed May 28, 1927. Serial No. 195,075. 2 Claims. (Cl. 240—81.)

1. In an electric lamp stand, in combination, an outer vertically extending member, an inner member telescopically arranged therewith for vertical movement with respect thereto, spring means carried by and depending from the lower end of said inner member for frictional engagement with the internal surface of said outer member, said spring means being operative as the sole means for maintaining said members in vertically adjusted position, a flexible tubing having one end thereof fixed to the upper end of said



vertically movable inner member, a hollow member threadedly secured upon the free end of said flexible tubing, and a lamp socket supporting nipple projecting from the free end of said hollow member and freely rotatable with respect thereto.

1,758,130. ORNAMENTAL WALL FIXTURE. WILLIAM D. SHOEMAKER, Chevy Chase, Md. Filed Feb. 15, 1928. Serial No. 254,530. 3 Claims. (Cl. 240—2.)

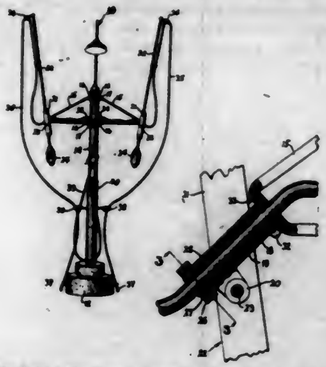


1. In a light fixture, the combination of a wall bracket and a flower holder, the holder being mounted in such proximity to the bracket as to appear as a part of the fixture, the design of the holder conforming to that of the bracket, the bracket and holder forming an ornamental wall light fixture in which the designs of the component parts unite in the production of a new design fixture.

1,758,131. SERVICE TOWER. CLARENCE J. STIRDIVANT, Huntington Park, Calif. Filed May 18, 1928. Serial No. 278,854. 6 Claims. (Cl. 299—77.)

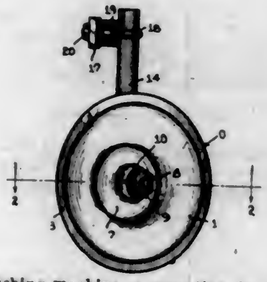
1. In a device of the class described, a support, a bracket on said support, a trunnion on said bracket, said trunnion

being inclined, an aperture in said trunnion, a bearing on said trunnion and rotatable on said trunnion, means to



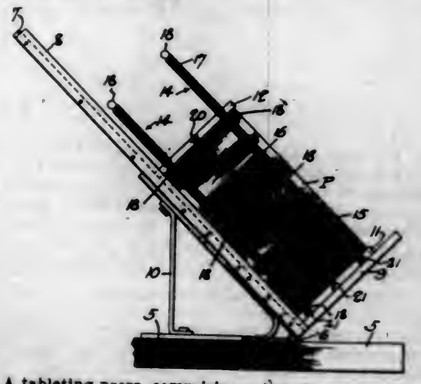
prevent complete rotation of said bearing on said trunnion, said means comprising a lug on said bearing and a stop on said bracket.

1,758,132. DITCHING MACHINE. GEORGE W. STOCKTON, Denver, Colo., assignor to J. N. Huff, Denver, Colo. Filed Mar. 26, 1927. Serial No. 178,641. 2 Claims. (Cl. 97—218.)



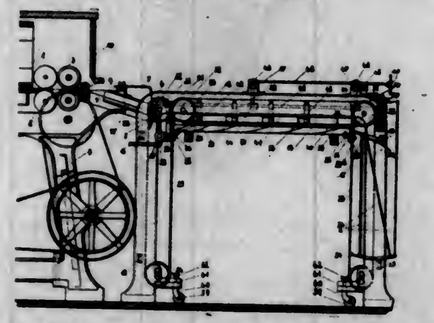
1. In a ditching machine, a mounting for cutting discs carried on said machine, said mounting having angularly disposed arms for supporting cutting discs, cutting discs on said arms and adapted to rotate thereon, said discs being angularly disposed with respect to each other, and a vertically disposed auxiliary disc mounted between the angularly disposed discs and cooperating therewith.

1,758,133. TABLETING PRESS. WILLIAM SHEPPARD WALLACE, Charlotte, N. C. Filed May 23, 1929. Serial No. 365,551. 3 Claims. (Cl. 11—1.)



1. A tableting press, comprising a trough, a base, hinged means for mounting the trough on the base, a bracket for supporting the trough in a slanting position, said trough having a rigid end member at the lower end for supporting the contents of the trough, a pair of blocks, each of said blocks having a plurality of hooks projecting from opposite ends of same, and a series of coil-springs having a plurality of loops disposed substantially at right angles to the planes of the coils of the springs, whereby any of the loops may be engaged in the hooks of the blocks to adjustably exert pressure on pads or sheets mounted between the respective blocks.

1,758,134. SHEET DELIVERING AND STACKING DEVICE FOR PRINTING MACHINES. EDUARD WEINGÄRTNER, Leipzig, Germany. Filed Oct. 6, 1927. Serial No. 224,489. 7 Claims. (Cl. 271—88.)



1. In sheet delivering and stacking devices for printing machines and the like having means for causing the delivery table to descend as the size of the stack increases, the combination of: a frame in which the delivery table is mounted, three shafts mounted in said frame and arranged in U-form, means for transmitting oscillatory rotary motion to one of said shafts, oscillating jogger arms mounted on said last named shaft, means for transmitting said motion from said last named shaft to the second shaft arranged at right angles to it, oscillating jogger arms mounted on second shaft, means for transmitting said motion in the reverse direction from said second shaft to the third shaft running parallel to said second shaft and oscillating jogger arms mounted on said third shaft.

1,758,135. MANUFACTURE OF SHOES. FREDERICK P. WILLIAMS, Lynn, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Mar. 29, 1927. Serial No. 179,345. 11 Claims. (Cl. 12—147.)

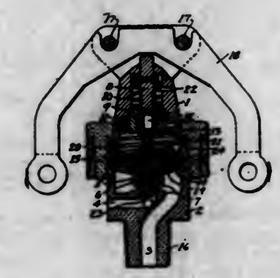


1. That improvement in methods of making shoes which consists in lasting the heel seat of a shoe, supporting the peripheral edge of said heel seat inside of the shoe, leaving the central portion of said heel seat unsupported, pounding said unsupported central portion to draw said marginal portion tightly over the support, and pounding said marginal portion to make it firm and even for the reception of a heel.

1,758,136. AUTOMATIC BLEEDER VALVE FOR AUXILIARY RESERVOIRS OF AIR-BRAKE SYSTEMS JOSEPH M. AIKMAN, Stillwater, Minn. Filed June 21, 1928. Serial No. 287,101. 7 Claims. (Cl. 303—80.)

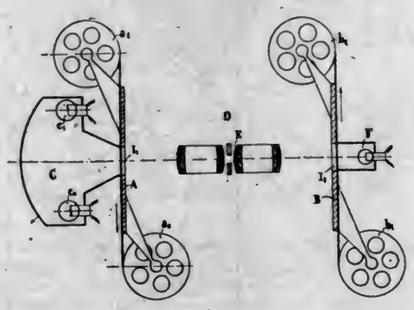
1. In a bleeder valve, the combination with a body, a valve seat therein, inlet and outlet ports from said seat,

a main valve resting on said seat and arranged to open and close said ports, a guide for lower end of said valve, a diaphragm and pressure plate attached to said valve, passages in said valve, a spring engaging with said pressure plate and holding said valve closed, chambers above and below said diaphragm, a pilot valve with combined seat and guide, a recess in said pilot valve forming a guide for the upper end of said main valve, said pilot valve



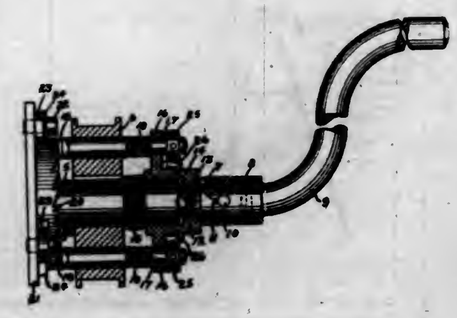
opening and closing ports at the upper end of said main valve, an outlet for said pilot valve, a spring holding said pilot valve closed, a lever for opening said pilot valve, a bypass around said diaphragm and connecting said chambers above and below said diaphragm, a valve seat in said bypass, a valve resting on said seat, a spring holding said valve against said seat, said guide for lower end of said main valve arranged to open and close ports in lower end of said main valve.

1,758,137. APPARATUS FOR PRINTING RETICULATED FILMS. RODOLPHE BERTHON, Neuilly, France, assignor, by mesne assignments, to Société Francaise Cinechromatique (Procedes R. Berthon), Paris, France, a Corporation of France. Filed July 14, 1927, Serial No. 205,736, and in France July 26, 1926. 2 Claims. (Cl. 88—24.)



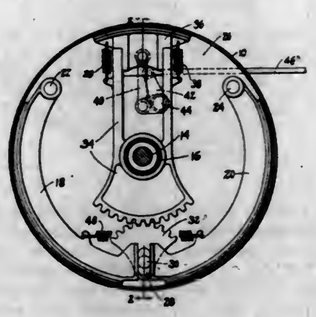
1. Apparatus for reproducing photographic films which are provided with nets of microscopic refractive elements for projection in colors, such apparatus comprising separate feeding devices for the original film to be reproduced and for a blank film; a source of light behind the original film; optical devices between the two feeding devices for projecting the images of the original film upon the blank film; a device associated with the aforesaid optical devices for shifting the luminous beam so as to neutralize the net of said original film and thereby remove waterings; and a compensating source of light behind the blank film for fogging the images in order to decrease their hardness after inversion.

1,758,138. CRANKING DEVICE. JOSEPH T. BISHOP and REYNOLD W. CHRISTY, Toledo, Ohio. Filed Jan. 14, 1929. Serial No. 332,335. 5 Claims. (Cl. 123—185.)



1. The combination with an engine shaft, of a member held for rotation therewith, but having a limited longitudinal slidable movement thereon, a relatively fixed ratchet member, spring held dogs connected with said slidable member and engageable with the ratchet member to positively prevent backward rotation of the engine shaft, means to crank the engine and at the same time shift the slidable member to bring the dogs into operative relation to the ratchet member, means rendered operable by the engine shaft, as soon as the engine is started, to withdraw the slidable member to its initial position, and means on said slidable member to positively withdraw the dogs to inoperative position as said slidable member is withdrawn.

1,758,139. BOOSTER BRAKE. LLOYD BLACKMORE, Highland Park, Mich., assignor, by mesne assignments, to Bendix Brake Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 8, 1923. Serial No. 623,718. 29 Claims. (Cl. 188—78.)



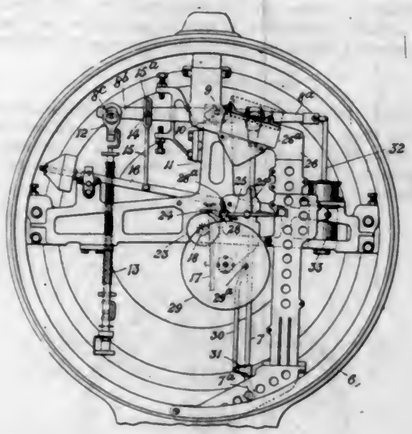
1. A brake comprising, in combination, a drum, retarding means cooperating therewith, a support angularly movable about the axis of the drum, a booster member carried by the support and movable thereover radially into frictional engagement with the drum, and means operated by angular movement of the support for operating said retarding means, the retarding means and said member engaging the same zone of the drum.

1,758,140. VISE STAND. MARTIN BOYD, Toronto, Ontario, Canada, assignor to Erich Schluecke and Paul Zink, Toronto, Canada. Filed Feb. 27, 1929, Serial No. 342,987, and in Canada Feb. 4, 1929. 2 Claims. (Cl. 304—4.)



1. A stand of the class described, comprising several converging legs, a platform pivoted to two of the legs, said platform having its sides converging at an angle corresponding to the angle of convergence of these two legs for folding against the same.

1,758,141. COIN-FREED WEIGHING APPARATUS. LESLIE CLIFFORD BRADLEY, Birmingham, England, assignor to W. & T. Avery Limited, Soho Foundry, Birmingham, England. Filed Oct. 6, 1927, Serial No. 224,379, and in Great Britain Dec. 18, 1926. 4 Claims. (Cl. 194—47.)



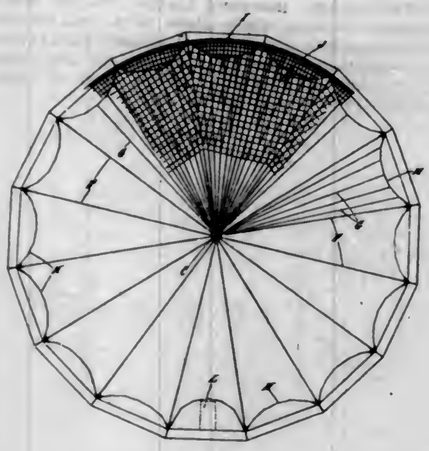
4. A coin freed weighing apparatus comprising a load supporting means, weight indicating mechanism connected with said load supporting means, a rotatable weight indicator forming part of said mechanism, a ratchet wheel rotatable with but fixed relatively to said indicator a coin operated lever adapted to co-operate with said ratchet wheel for normally locking the aforesaid indicator, means for directing a coin to operate said lever for disengaging the lever from the ratchet wheel, a rotatable disc, a pawl depending from said lever, the nose of said pawl subsequent to the disengagement of said lever from the ratchet wheel, being adapted to rest on the peripheral edge of said disc, and thereby to maintain the lever out of engagement with the ratchet wheel, and means for connecting the rotatable disc to the weighing mechanism whereby any change of load when the lever is disengaged effects through the said disc a displacement of the pawl with consequential return of the lever into its locking position.

1,758,142. HAT VENTILATOR. WILLIAM HENRY BROOKER, Bismarck, N. Dak. Filed Sept. 25, 1928. Serial No. 308,302. 2 Claims. (Cl. 2—176.)



1. A hat ventilator adapted to be located wholly within the crown adjacent the lower edge thereof and between intercepted ends of the sweat band, the same consisting of a thin elongated body offset laterally between its ends to provide an air passage and end wings, and having an outwardly disposed tongue at the bottom edge of the offset portion to underlap the brim or lower edge of the crown.

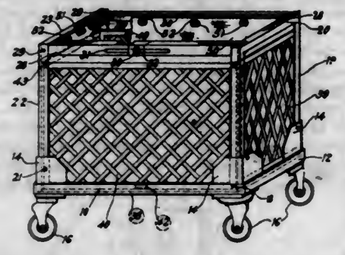
1,758,143. RIGID AIRSHIP. CHARLES DENNISTON BURNEY, BARNES NEVILLE WALLIS, and JOHN EDWIN TEMPLE, Westminster, London, England, assignors to Airship Guarantee Company, Limited, Westminster, England, a British Company. Filed Aug. 20, 1927, Serial No. 214,328, and in Great Britain Sept. 17, 1926. 11 Claims. (Cl. 244—3.)



2. A rigid airship in which the bulkhead wiring comprises a number of initially taut wires and a number of initially slack wires all radiating from a common point in proximity to the axis of the ship.

1,758,144. COMBINATION BAG AND PARCEL RACK AND DOLLY. EVERETT E. CASELMAN, Kansas City, Kans. Filed June 19, 1929. Serial No. 372,206. 4 Claims. (Cl. 280—50.)

1. In apparatus of the character described, the combination of a wheeled base frame, rack members pivotally connected with said base frame and adapted to be collapsed thereon or opened up into upright position, a bottom panel member mounted upon said base frame, vertical panel

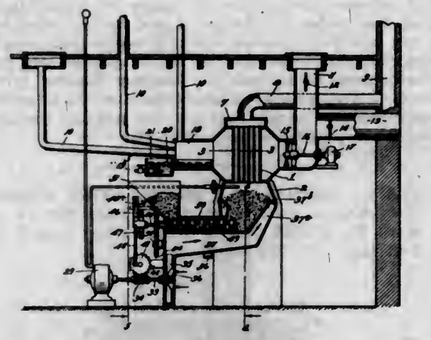


members removably mounted upon the edges of said bottom panel, and means for maintaining said vertical panel members in upright position.

1,758,145. PROCESS FOR PREVENTING THE SETTLING OUT OF PASTE DYESTUFFS. WILLIAM HENRY CLUTTERBUCK, Salford, England. Filed Jan. 2, 1929, Serial No. 329,967, and in Great Britain Feb. 1, 1928. 4 Claims. (Cl. 8—6.)

1. Process for preventing the settling out of paste dyestuffs which consists in incorporating a relatively small quantity of the natural colloidal clay known as bentonite with the paste dyestuff to produce an emulsification of the latter and cause it to remain homogeneous and give no settling after standing for long periods.

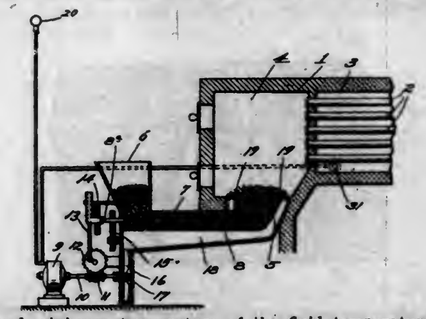
1,758,146. DOMESTIC HEATING SYSTEM. WALTER M. CROSS, Kansas City, Mo., assignor to Cross Coal-O-Matic Company, Kansas City, Mo., a Corporation of Missouri. Filed Nov. 11, 1926. Serial No. 147,667. 5 Claims. (Cl. 236—9.)



1. A heating system comprising a combustion pot, means for feeding fuel thereto, a combustion space above the combustion pot, means controlled by the temperature of the rooms to be heated for automatically regulating the fuel feeding means, and a separate thermostatic control actuated by predetermined minimum temperatures in said combustion space for preventing extinguishment of the fire when operating under low heat requirement conditions.

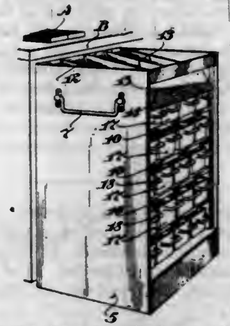
1,758,147. HEATING-SYSTEM CONTROL. WALTER M. CROSS, Kansas City, Mo., assignor to Cross Coal-O-Matic Company, Kansas City, Mo., a Corporation of Missouri. Filed Jan. 31, 1927. Serial No. 164,953. 2 Claims. (Cl. 236—9.)

1. A heating system comprising a boiler and combustion pot, an automatic under feed stoker for supplying fuel to said combustion pot, a dual thermostatic control mechanism adapted to operate the stoker, one thermostatic mechanism functioning by variations in the temperature of the interior of the dwelling and the other by predeter-



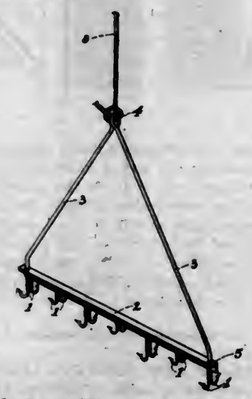
mined minimum temperature of the fluid temperature in the boiler, to prevent extinguishment of the fire under low heat requirement conditions.

1,758,148. PORTABLE SCOOP RACK. GEORGE L. CURLE, Minneapolis, Minn., assignor to The Monomelt Company, Minneapolis, Minn., a Corporation of Minnesota. Filed Oct. 15, 1928. Serial No. 312,487. 12 Claims. (Cl. 276—44.)



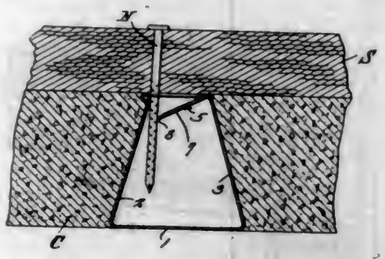
1. A rack of the class described comprising a shell having an open hopper top, and a scoop slidably and removably mounted in the shell under the open hopper top thereof.

1,758,149. BODY DRAG. TIMOTHY J. DILWORTH, Boston, Mass. Filed Aug. 20, 1928. Serial No. 300,861. 4 Claims. (Cl. 294—86.)



1. A body drag consisting of a triangular frame with a number of double pointed hooks alternately long and short, evenly spaced across the frame of the drag and attached to the frame by means of stove bolts.

1,758,150. METAL NAILING STRIP. WILLIAM H. ELSTON, Marietta, Ohio. Filed Aug. 3, 1929. Serial No. 383,339. 3 Claims. (Cl. 72—101.)

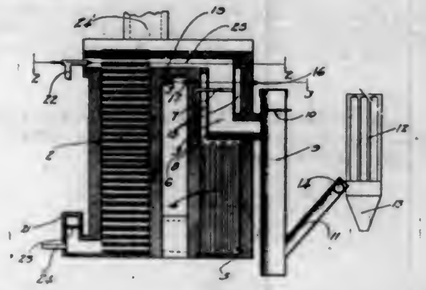


1. An all-metal nailing strip having converging sides, and a series of fingers integral with one of the sides and normally bridging the space therebetween, any one of said fingers being adapted to be shifted into the strip by an inserted fastening device and to engage and hold said device.

1,758,151. VULCANIZABLE PLASTIC COMPOSITION. NORRIS GOODWIN, Los Angeles, Calif., assignor, by mesne assignments, to Delano Land Company, a Corporation of California. Filed Mar. 10, 1924, Serial No. 698,290. Renewed Nov. 7, 1928. 12 Claims. (Cl. 106—23.)

9. A rubber composition comprising a rubber stock having incorporated therein a finely divided carbon having an oil absorption number less than that of common commercial carbon black, and characterized by having a stiffness no less than a rubber composition containing a relatively equal amount of common commercial carbon black.

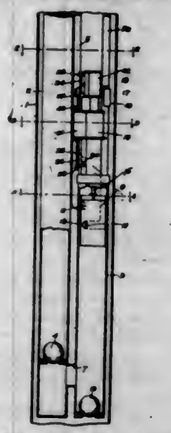
1,758,152. PROCESS OF PRODUCING A FINELY-DIVIDED CARBON. NORRIS GOODWIN, Long Beach, Calif., assignor, by mesne assignments, to Delano Land Company, a Corporation of California. Filed Mar. 10, 1924, Serial No. 698,291. Renewed Oct. 23, 1929. 15 Claims. (Cl. 134—60.)



15. A process of producing a finely divided carbon which comprises combining air and a hydrocarbon in a reaction chamber, and supplying heat to the reacting mixture by means of heating the walls of said chamber above the maximum temperature to which they would be heated by the combustion of their mixture, the proportion of oxygen supplied being sufficient to set free large amounts of carbon without consuming excessive amounts thereof in the formation of carbon dioxide.

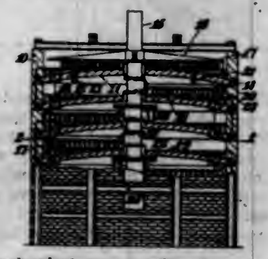
1,758,153. MEANS FOR PUMPING LIQUID. PAUL H. GRANGER, Los Angeles, Calif. Filed Oct. 31, 1928. Serial No. 316,130. 4 Claims. (Cl. 103—231.)

1. An apparatus for pumping liquids from wells comprising a liquid delivery pipe and a compressed gas supply pipe both extending within the well from the top of the well to the vicinity of the liquid to be pumped, a pumping chamber within the well in position to be submerged by the liquid to be pumped and communicating with the liquid delivery pipe and provided with a gas inlet port communicating with the compressed gas supply pipe, and with an exhaust port, a check valve opening outwardly with respect to the pumping chamber and controlling communication between the pumping chamber and the liquid delivery pipe, a check valve opening inwardly with respect to the pumping chamber and controlling entry of liquid from the well to the chamber, said pumping chamber being formed as a vertical chamber, a main valve member movable vertically in said cylinder and cooperating with the said ports of the



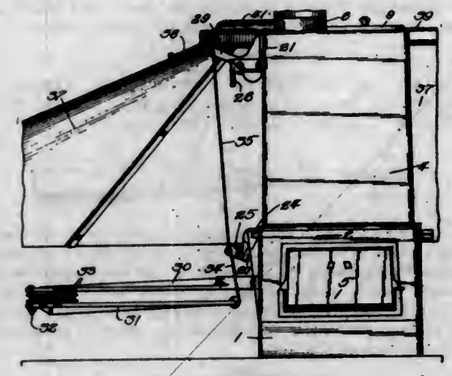
pumping chamber, fluid pressure operated means located within the well for operating said valve member to alternately open and close said ports, control valve means located within the well and operated by the movement of said main valve member to control the operation of said fluid pressure operated means, means for supplying operating fluid under the control of said control valve means to the said fluid pressure operated means, and means for supplying compressed gas to the compressed gas supply pipe to force liquid from the pumping chamber into the liquid delivery pipe when the communication between the compressed gas supply pipe and the pumping chamber is opened by operation of said main valve.

1,758,154. MECHANICAL ORE-ROASTING FURNACE. JOHN HARRIS, Sheffield, England. Filed May 21, 1928. Serial No. 279,509, and in Great Britain June 2, 1927. 7 Claims. (Cl. 263—26.)



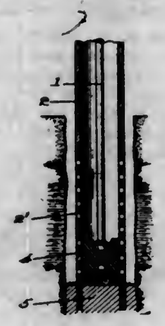
1. In a mechanical ore roasting furnace comprising a series of superimposed hearths through which a rabble shaft extends with arms operating over the hearths, the combination with a fixed ore conduit opening through an upper hearth in the path of one end of the rabble arm operating thereon and depending to a point above the rabble arm on the hearth below, of a moving conduit rotating with the shaft and disposed to register with the fixed conduit and thereby conduct ore to the rabbling level of the lower hearth, once in each revolution of the rabble shaft, substantially as specified.

1,758,155. COAL-BURNING BROODER. WILLIAM DOW HARVEY, Macomb, Ill., assignor to American Steel Products Co., Macomb, Ill., a Corporation of Illinois. Filed Oct. 17, 1927. Serial No. 226,652. 4 Claims. (Cl. 119—32.)



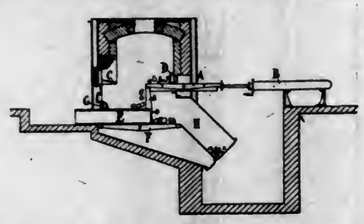
1. A brooder for use with solid fuel, comprising a heater having a lateral check draft opening near its top, and having an upper fuel feed opening and an upper flue collar; a lid for the feed opening; a hover having a top seated upon the top of the heater and having a perforation exposing the said lid and the flue collar, the perforation wall being formed for laterally engaging upper stove portions so as to center the hover on the heater; and a damper movable into and out of positions in which it closes the said opening, the damper being pivotally supported by the heater on an axis adjacent to the lower edge of the said opening and arranged for having the upper end of the damper swing away from the heater during the opening movement of the damper; the hover having a raised portion overhanging the damper and serving as a hot air chamber for accumulating the hottest air within the hover, whereby the opening of the damper will admit air to the heater from the said hot air chamber.

1,758,156. METHOD AND MEANS FOR CEMENTING OIL WELLS. FREDERICK W. HUBER, Riverside, Calif. Filed Dec. 27, 1928. Serial No. 328,715. 3 Claims. (Cl. 166—21.)



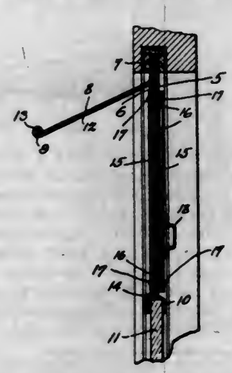
1. The method of cementing oil wells at a perforated portion of a well casing which consists in bridging the well hole below such perforated portion, forming a closure for the well casing adjacent and above the location of bridging, and progressively raising said closure while introducing cementing material between the closure and the bridging, under sufficient pressure to cause such material to be forced out through the perforations in the casing.

1,758,157. REFUSE DESTRUCTOR. ARTHUR EDWARD WILLIAM JAMES, Worcester, England, assignor to Heenan & Froude Limited, Worcester, England. Filed Nov. 19, 1928, Serial No. 320,438, and in Great Britain June 25, 1928. 2 Claims. (Cl. 110—169.)



1. In a refuse destructor furnace of the type referred to the combination with a sliding grate and ram for operating the grate, of stationary means for removing the clinker from the grate when this latter is withdrawn from the furnace, a moving shelf on to which the clinker falls arranged below and rigidly connected to the grate, stationary means for removing the clinker from the shelf when this latter is removed from the furnace, an under grate arranged below the shelf on to which the clinker falls from the shelf and from which it is removed by the shelf on the succeeding passage of this latter into the furnace and a hopper to receive the clinker from the under grate.

1,758,158. AUTOMOBILE WINDOW SCREEN. ROBERT F. JAMES, Garrett, Ind. Filed Dec. 26, 1928. Serial No. 328,480. 1 Claim. (Cl. 156—38.)



A removable screen for motor vehicle windows, including slidably connected sections, each section embodying a metallic frame having a wide upper member bent downwardly upon itself providing a flange to fit into the window groove of a car window, said wide upper member extending downwardly and outwardly to provide an awning, means at the lower edges of the sections to be fitted over the upper edge of a window, and a wire mesh covering for the frame.

1,758,159. OIL PUMP. ABRAM A. KAPLANSKY, Moscow, Union of Soviet Socialist Republics. Filed July 16, 1929, Serial No. 378,636, and in the Union of Soviet Socialist Republics May 24, 1929. 2 Claims. (Cl. 103—46.)

1. In an oil well pump, the combination with a reciprocating pump at the bottom of an oil well in a casing pipe adapted to pump the oil through said casing pipe, of an auxiliary reciprocating plunger in a cooperative relation with said pump, a cylinder enclosing said plunger and supported inside of said casing pipe, the walls of said cylinder forming a clearance within said casing pipe, a

pipe extending from said cylinder and attached thereto inside of said casing pipe to the top of said well, a liquid filling said pipe and said cylinder, a pump at the top of said well, one side of said top pump being connected with said bottom pump through said inside pipe, the other



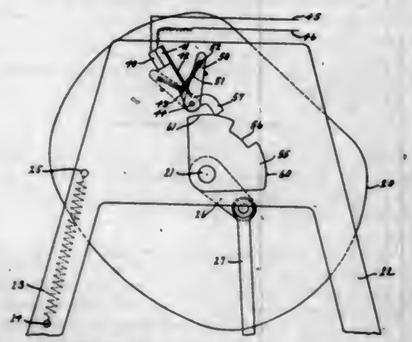
side of said top pump being connected with said casing pipe, a check valve at the top of said casing pipe, and a pipe extending from said plunger and slidably fitted in said inside pipe, adapted to conduct said liquid to the other side of said plunger.

1,758,160. FISHING LURE. AMMIE L. LEE, Panama City, Fla. Filed Jan. 29, 1929. Serial No. 335,869. 4 Claims. (Cl. 43—43.)



1. In a casting lure, a body having a movable tail, a mechanical motor, operating connections between the motor and said tail, a casting line having connections with said motor winding the motor when strain is exerted tending to separate the line and lure, the connections between said tail and motor including a shaft with which the tail is connected, and a ratchet connection between the motor and the shaft operating the shaft when the motor is in self-induced operation and disconnecting the shaft from the motor during the winding operation.

1,758,161. DOMESTIC APPLIANCE. RALPH L. LEE, Dayton, Ohio, assignor to Delco-Light Company, Dayton, Ohio, a Corporation of Delaware. Filed Oct. 23, 1923. Serial No. 670,380. 10 Claims. (Cl. 192—148.)



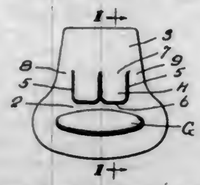
2. A washing machine comprising in combination, a movable tub; a power device drivingly connected to the tub; a sector secured to said tub; a detent normally engaging the sector to lock the tub in a proper inoperative position; means manually operable to one position to disengage the detent from the sector and hold it in such disengaged position and to start said power device, and movable into another position to reverse its effect upon the detent and cause it to engage the sector and stop the power device when the tub assumes the proper position.

1,758,162. SCREW DRIVER. ARCHIBALD R. LEMIEUX, Worcester, Mass. Filed Aug. 22, 1929. Serial No. 387,764. 3 Claims. (Cl. 145—50).



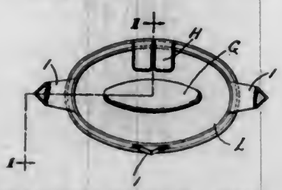
1. As an article of manufacture, a screw-driver having a rigid blade extending to the tip provided with a central longitudinal passage therethrough, a rod movable in said passage, and a spring plate located on one side of the blade, said rod being adapted to engage said spring plate and force it outwardly to increase the effective thickness of the tip end of the blade.

1,758,163. TONGUE AND TEETH FOR DOLLS' HEADS. SAMUEL MARCUS, Riverdale, N. Y., assignor to Markon Manufacturing Co., Inc., New York, N. Y., a Corporation of New York. Original application filed Oct. 21, 1926, Serial No. 143,031, Patent No. 1,689,925, dated Oct. 30, 1928. Divided and this application filed Aug. 28, 1928. Serial No. 302,550. 12 Claims. (Cl. 46—40.)



1. A tongue and teeth structure for doll heads, said structure comprising a single piece of sheet material bent forwardly at one point to provide the representation of a human tongue projecting from its forward surface, and bent forwardly at another point to provide the representation of human teeth projecting from said forward surface in appropriate relation to the tongue.

1,758,164. TONGUE AND TEETH SET FOR DOLLS AND THE LIKE. SAMUEL MARCUS, Riverdale, N. Y., assignor to Markon Manufacturing Co. Inc., New York, N. Y., a Corporation of New York. Original application filed Oct. 4, 1927, Serial No. 223,942. Divided and this application filed Aug. 28, 1928. Serial No. 302,551. 8 Claims. (Cl. 46—40.)



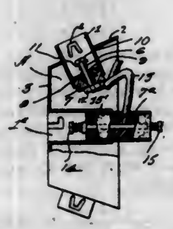
1. A tongue and teeth set for doll heads, said set comprising a base part having a portion projecting therefrom shaped to represent a tongue, the whole being formed from a single piece of sheet material of tongue color on its surface from which the tongue projects and of teeth color on its reverse surface, and a part of the base being turned over and extended toward the tongue portion to thereby expose the reverse surface and said surface being shaped to represent teeth.

1,758,165. OUTLET LEG AND VALVE FOR TANK CARS. GEORGE J. MAX, Warren, Ohio, assignor to Trumbull Manufacturing Company, Warren, Ohio, a Corporation of Ohio. Filed Sept. 14, 1928. Serial No. 305,887. 7 Claims. (Cl. 137—21.)



1. A valve comprising a seat member, a cage carried by said seat member and terminating in a collar, an internally threaded bushing loosely mounted in said collar, said bushing being formed with a transverse groove in its peripheral surface, means carried by said collar and cooperable with said groove to prevent rotation of said bushing, a valve head having an externally threaded projection threaded in said bushing, and means for rotating said head.

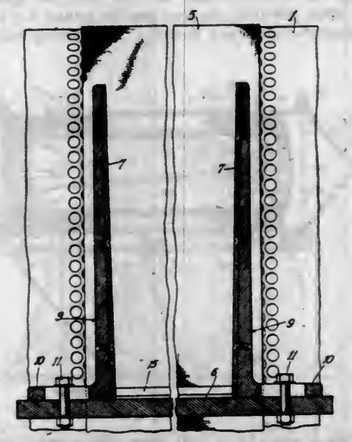
1,758,166. BULB MOUNT FOR HEADLIGHTS. ANDREW MILLER and WILLIAM MCKINLEY AKERS, Newport News, Va. Filed May 27, 1927, Serial No. 194,719. Renewed Mar. 20, 1930. 2 Claims. (Cl. 173—335.)



1. In a bulb mounting for automobile headlights, a frusto-conical shaped shell, a plurality of socket members projecting radially from the side wall thereof, one end of said shell being closed to provide a front wall, a sleeve extending rearwardly from the inner side of the front wall, an electrical conductor plug arranged within the rear end of said sleeve and being adapted to project beyond the rear end of said shell, the same being adapted for engagement within the usual bulb socket of a conventional headlight.

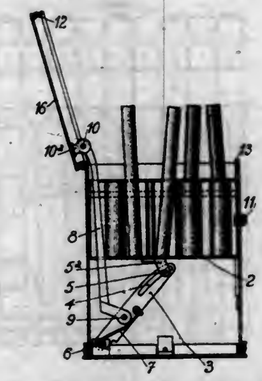
1,758,167. PAPER-MAKING MACHINE. WILLIAM H. MILLSPAUGH, Sandusky, Ohio, assignor to The Paper & Textile Machinery Company, Sandusky, Ohio, a Corporation of Ohio. Filed July 1, 1929. Serial No. 374,981. 7 Claims. (Cl. 92—38.)

5. A paper making machine having a vacuum forming cylinder and means for laterally confining liquid stock thereon comprising stationary plates having concave edges conforming to the curvature of and closely adjacent to the



forming surface of the cylinder, the inner faces of said plates adjacent the said edges being in planes diverging in the direction of rotation of the cylinder.

1,758,168. DISTRIBUTING APPARATUS FOR CIGARETTES AND OTHER ARTICLES. FRANCIS OLIVAUX, Paris, France. Filed Apr. 30, 1927, Serial No. 187,901, and in France May 26, 1926. 7 Claims. (Cl. 206—41.)



1. In a dispensing receptacle of the type described, the combination of a casing, a hinged cover for said casing, a horizontally disposed guide member in said casing having a plurality of vertically extending article guiding passages formed therein, a lifting plate slidably mounted in said casing beneath said guide member, a lever pivoted to the bottom of said casing and slidably engaging said plate and a link pivotally connecting said lever to said cover for the purpose described.

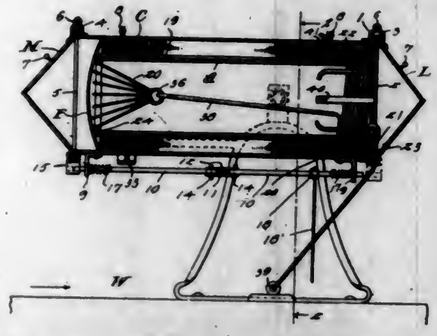
1,758,169. EXPLOSIVE COMPOSITION. FREDRICH OLSEN, Dover, N. J. Filed Oct. 16, 1925. Serial No. 62,930. 7 Claims. (Cl. 52—13.)

1. An explosive mixture consisting of trinitrotoluene and an explosive compound of guanidine.

1,758,170. PARACHUTE CONTAINER. HARRY EDGERTON PARKER, Sr., San Diego, Calif. Filed Aug. 14, 1929. Serial No. 385,819. 5 Claims. (Cl. 244—21.)

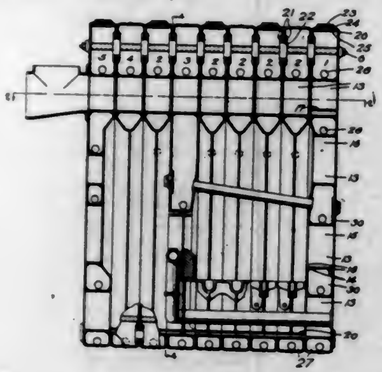
4. A parachute container comprising an elongated casing having its ends open and an outstanding flange on each

end, hinged lid members for the open ends of the casing, means for automatically moving said lid members into fully open position, and releasable means for holding the lid members in closed position, said casing being adapted



to house a parachute, said releasable means comprising a pair of pivoted slotted arms releasably engaging the outstanding flange of the casing and the outer edge of said lid members.

1,758,171. SECTIONAL HEATING BOILER. HORACE H. PEEK, Chattanooga, Tenn. Filed Feb. 24, 1928. Serial No. 256,543. 3 Claims. (Cl. 122—225.)

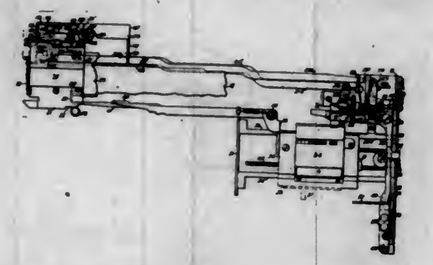


1. A sectional boiler section including, two pressed to shape sheet metal complementary parts having edges extending toward each other and welded together to partially form an opening in the section, and a number of corners of the opening each formed by an inserted corner piece extending across the line of weld of the edges of the complementary parts, and the edges of said inserted corner piece being welded to said complementary parts.

3. A sectional heating boiler including, a plurality of sections connected together, a grate and an ash pit, a majority of the sections in the region of the ash pit having water chambers extending across beneath the ash pit and having the lower walls of said chambers substantially straight and free from projections for direct engagement with a supporting floor.

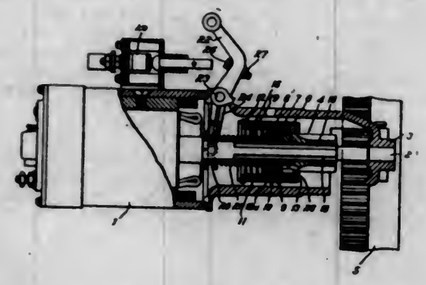
1,758,172. COMPUTING MACHINE. ARTHUR F. POOLE, Pelham Manor, N. Y., assignor to Remington Accounting Machine Corporation, New York, N. Y., a Corporation of New York. Filed May 1, 1923. Serial No. 635,847. 15 Claims. (Cl. 235—59.)

1. In a computing machine, the combination with a carriage having an extent of travel equal to a plurality of computing zones, a register, and a master actuator, one of which travels with said carriage, of clearance proof mechanism for said register including means to notify the oper-



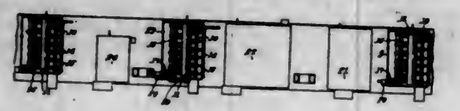
ator of the state of the register, and means actuated by the travel of the carriage for bringing said notifying means into operation on entering a computing zone and again on leaving a computing zone.

1,758,173. ENGINE STARTER. JULIUS H. RICHARDS, Springfield, Mass., assignor, by mesne assignments, to Eclipse Machine Company, Elmira Heights, N. Y., a Corporation of New York. Filed Dec. 17, 1921. Serial No. 522,981. 23 Claims. (Cl. 74—7.)



1. In a starting mechanism, the combination with a shaft, a member mounted for longitudinal movement thereon and rotatable movement therewith and means comprising a manually operable member and a yielding element for controlling the longitudinal position of said member, of means comprising a friction clutch having a member rotatable with said shaft for operatively connecting said member to said shaft.

1,758,174. SLACK-LOOP WASHING MACHINE AND METHOD. HOMER C. RIGGS, Orange, Mass., assignor to Rodney Hunt Machine Company, Orange, Mass., a Corporation of Massachusetts. Filed Aug. 14, 1926. Serial No. 129,241. 12 Claims. (Cl. 8—19.)

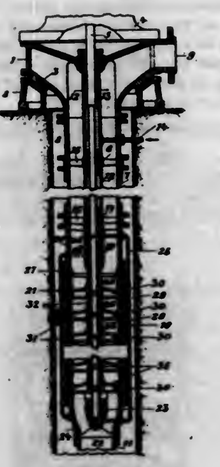


1. In a wet finishing machine, the combination with means for preparing the goods and a washing bowl, of a pair of main rolls in the bowl, adapted to receive a strand of goods therebetween, the bowl having a slanting rear surface having a gentle curve extending toward the front for receiving the strand after it leaves the rolls, a front

roll near the front of the machine to which the strand passes upwardly and then directly through the main rolls a folding cleat roll above the main rolls but to one side, for receiving each strand and folding it against the curved back of the bowl, an inside J-box in position for receiving the advance strand from the cleat roll in a folded condition in the same vertical plane as the other strands, and squeeze rolls mounted on the bowl for receiving the strand from the J-box and delivering it, whereby the goods are kept in a loose untensioned condition throughout the washing operation.

3. The process of wet finishing textile materials which consists in leading a continuous strand of the goods between a pair of main rolls and repeatedly passing the same strand in a general helical direction between the main rolls, leaving them loose at all points on both sides of the main rolls and then leading them to a wringing device and keeping the goods in a slack condition between the main rolls and the wringing device.

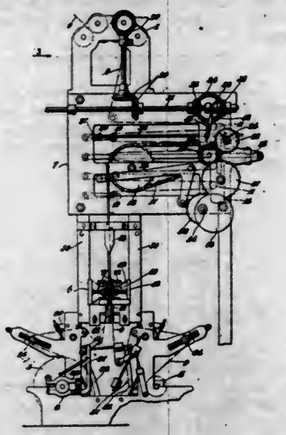
1,758,175. BORE-HOLE PUMP. CHARLES SCHAER, Langental, Switzerland, assignor to the Firm Sulzer Frères Société Anonyme, Winterthur, Switzerland. Filed May 12, 1925, Serial No. 29,653, and in Switzerland July 11, 1924. 2 Claims. (Cl. 103—90.)



1. In a bore hole pump, the combination of a casing having an outlet therein, a delivery pipe having a suction branch at the lower end thereof connected to said casing and adapted to extend into the bore hole, a protective tube within said casing and said pipe, a bearing within the lower end of said tube, said bearing having two chambers, a shaft rotatably mounted in said bearing, a rotor on the lower end of said shaft, means for circulating lubricant through said protective tube into said chambers, and means for maintaining the lubricant pressure in one of said chambers below that which obtains in the protective tube above said bearing and above that which obtains in the other of said chambers.

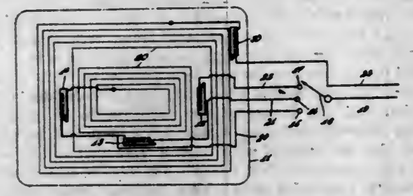
1,758,176. WEB-REPLENISHING MECHANISM. WALTER C. SCOTT, Plainfield, N. J., assignor to Isabella Scott and David J. Scott, executors of the estate of Walter Scott, deceased, doing business as Walter Scott & Company, Plainfield, N. J. Filed Aug. 24, 1925. Serial No. 51,983 22 Claims. (Cl. 242—58.)

11. Web replenishing mechanism including: two sources of web supply, a web attaching device for attaching together two webs from said sources, two severing members, one for each web, means for reciprocating the attaching



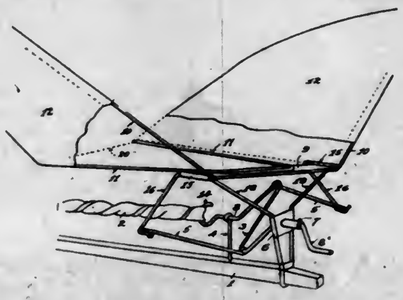
device, and means for actuating one or the other of said severing members operated by the reciprocating movement of the attaching device.

1,758,177. ELECTRICALLY-HEATED PAD. SHERROD E. SKINNER, New Britain, Conn., assignor to Landers, Frary & Clark, New Britain, Conn., a Corporation of Connecticut. Filed Feb. 15, 1924. Serial No. 692,982. 3 Claims. (Cl. 219—46.)



1. In a warming pad of the character described, a pad, a resistance circuit distributed therein, and a thermostat positioned at each extreme end of said circuit and adapted to open the circuit when a predetermined degree of temperature is reached.

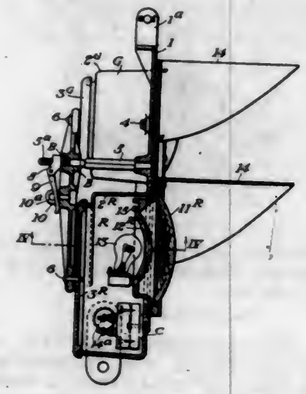
1,758,178. FLYING MACHINE. JAMES B. SLINN, Bonaparte, Iowa. Filed July 23, 1928. Serial No. 294,675. 8 Claims. (Cl. 46—40.)



1. A flying machine of the class described including in its construction a body portion, supporting means mounted thereon, a shaft journaled in said means and having a crank at opposite sides of the axis thereof, power means

connected to the shaft, a pair of wings each including a wing spar hingedly mounted on a part of the said supporting means, a lever rigid with the hinged portion of the wing spar, and a rod connecting each lever with one of said cranks.

1,758,179. LIGHT SIGNAL. CLARENCE S. SNAVELY, Pittsburgh, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Oct. 19, 1923. Serial No. 669,488. 1 Claim. (Cl. 177—329.)



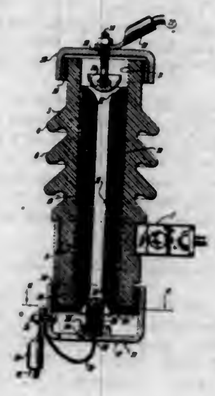
A light signal comprising a front plate, three light units supported by said front plate and each made up of an electric lamp and a lens arranged to project a horizontal beam of light from the lens, said units being arranged in a triangle with two of the units located side by side and the third unit located below and equally distant from the other two units, said lamps being adapted for individual illumination and the lenses of the three units being distinctively colored, enclosing means for said units including a cover for the back of each unit, a Y-shaped spider having one said cover attached to each leg thereof and means for pivotally attaching said spider to said front plate, the cover for the lower unit being heavier than the other covers so that said spider is biased by gravity to a position wherein each cover registers with its associated unit.

1,758,180. DEMOUNTABLE ROTARY CRUSHER. CHARLES M. STEIN, Paris, France, assignor to Société Anonyme "La Combustion" Rationnelle, Paris, France, a Corporation of France. Filed Mar. 18, 1925, Serial No. 16,586, and in France Jan. 5, 1925. 2 Claims. (Cl. 64—105.)



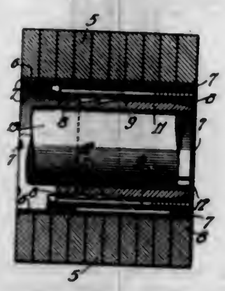
1. In a demountable mounting for rotary crushers, a drive shaft, a hub detachably mounted on the drive shaft, a drive connection operatively connecting the hub to the shaft, a rotary crusher mounted on said hub, a shearable drive connection between the hub and the crusher, and means for preventing axial displacement of the hub on the shaft.

1,758,181. LIGHTNING ARRESTER. ALWIN G. STEINMAYER, Milwaukee, Wis., assignor, by mesne assignments, to Line Material Company, South Milwaukee, Wis., a Corporation of Delaware. Filed May 10, 1928. Serial No. 276,576. 14 Claims. (Cl. 175—30.)



1. In a device of the class described, a housing, a resistance element fixed within the housing, a contact spaced from one end of the resistance element, and a second contact normally in engagement with the other end of the resistance element but operable upon a discharge of current across the gap at first mentioned end of the resistance element to produce a second gap.

1,758,182. PULLEY. ARTHUR P. STRONG, Mishawaka, Ind., assignor to Dodge Manufacturing Corporation, Mishawaka, Ind., a Corporation of Delaware. Filed Jan. 2, 1924. Serial No. 683,848. 4 Claims. (Cl. 287—52.06.)

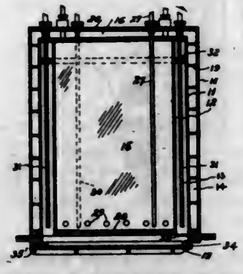


1. A pulley comprising, in combination, a shell; a bushing having a number of securing surfaces arranged to be used alternatively, permitting one or more thereof to be removed to shorten the bushing to suit a selected shaft length; and means intermediate the shell and bushing, constructed and arranged to cooperate with any said securing surface, to secure the shell and bushing together.

1,758,183. COKING RETORT. HIRAM TEATER, Cleveland, Ohio. Filed Nov. 19, 1927. Serial No. 234,509. 2 Claims. (Cl. 202—97.)

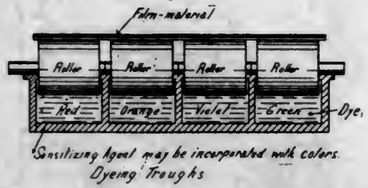
1. A sheet metal coking retort, composed of an outer vertical wall, an inner vertical wall within said outer vertical wall and an intermediate vertical wall between said outer vertical wall and said inner vertical wall, each of the walls being spaced horizontally from each of the other walls and said outer vertical wall extending above the tops of both of the other walls, each of the walls being annular in horizontal cross section, a bottom member

joining the lower extremities of the outer and intermediate walls, a bottom member closing the lower extremity of the inner wall, an outer top member closing the upper extremity of the outer wall, an inner top member spaced therefrom and closing the upper extremities of the inter-



mediate and inner walls, and spacers rigidly extending between the outer and intermediate walls whereby an annular coal chamber is formed between said inner vertical wall and said intermediate vertical wall that is entirely confined by heating surfaces with the exception of an open bottom.

1,758,184. MANUFACTURE OF MULTICOLOR CINEMATOGRAPH FILMS. JOHN EDWARD THORNTON, West Hampstead, London, England, assignor to John Owden O'Brien, Manchester, England. Filed Nov. 2, 1926, Serial No. 145,897, and in Great Britain Dec. 5, 1925. 3 Claims. (Cl. 95—2.)



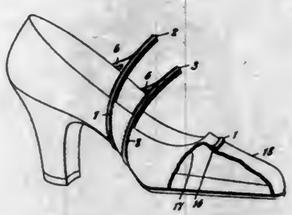
2. The method of producing a multi-width multi-layer cinematograph colloid film positive comprising coating a temporary reinforcing backing with colored colloid arranged in a plurality of parallel stripes, sensitizing the colloid, printing component images one at a time in a straight line across the multi-width film, severing the film into a plurality of strips of single-width, removing the paper reinforcement, cementing the printed colored strips together in accurate register and adding a layer of waterproof varnish.

1,758,185. CINEMATOGRAPH COLOR FILM AND METHOD OF MANUFACTURE. JOHN EDWARD THORNTON, West Hampstead, London, England, assignor to John Owden O'Brien, Manchester, England. Filed Mar. 31, 1927, Serial No. 180,023, and in Great Britain May 6, 1926. 4 Claims. (Cl. 95—2.)



1. The method of manufacturing a strip of film material which consists in coating a strip of celluloid with a thin layer of insoluble bichromated gelatine applying thereto two strips of sensitized colloid drying and shrinking the same, coating a strip of porous paper with a thin layer of soluble gelatine drying and shrinking the same, damping the face of the two strips and laying one strip on the other to amalgamate them into a single strip of film material.

1,758,186. METHOD OF PRODUCING RAISED DESIGNS ON THE SURFACE OF ARTICLES MADE FROM LEATHER OR THE LIKE. MARY E. BENDELARI, New York, N. Y., assignor to Sandalari, Inc., New York, N. Y., a Corporation of New York. Filed May 1, 1929. Serial No. 359,484. 2 Claims. (Cl. 12—146.)



1. The herein described method of producing raised designs on shoe uppers having an inner and outer ply with the outer ply being of stretchable material which consists in arranging a piece of cording in a predetermined design between the outer and inner ply of the shoe, and stretching the outer ply over the cording as so arranged in a predetermined manner and then stitching the outer ply, while in such a stretched condition, to the inner ply around the edges of the design created by the cording.

1,758,187. ROTARY-DISK UNDERREAMER. JACOB S. BROWN, Compton, Calif., assignor of one-half to Harry C. Brown and one-half to E. A. Wiley, Crompton, Calif. Filed Apr. 27, 1927, Serial No. 186,895. Renewed Aug. 7, 1929. 11 Claims. (Cl. 255—74.)

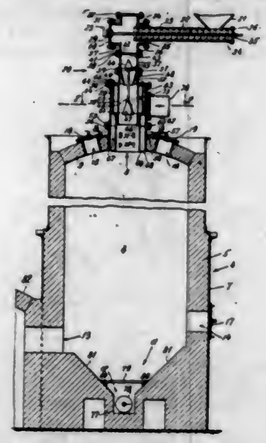


1. An under-reamer comprising in combination a core, having means to connect same to a drill pipe, a sleeve partly rotatable on the core, a plurality of tool holders slidably mounted on the sleeve, each tool holder having a rotary cutting disk, and means to slide the tool holders transversely as to the core on relative partial rotation of the core and the sleeve.

1,758,188. METHOD OF ROASTING FINES. HENRY J. CORDY and WILLIAM J. BURGOYNE, Sulphide, Ontario, Canada, assignors to General Chemical Company, New York, N. Y., a Corporation of New York. Filed Jan. 30, 1928. Serial No. 250,616. 13 Claims. (Cl. 75—60.)

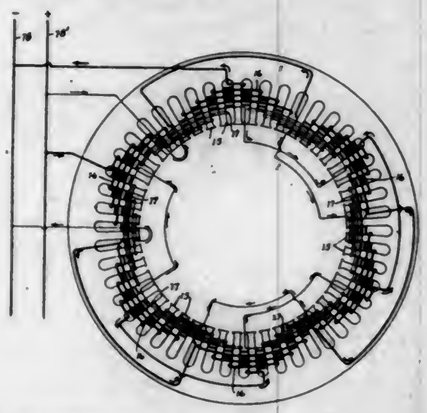
1. The method of roasting a finely divided sulphide ore which comprises forming a suspension of said ore in an

oxidizing gas, and burning said suspended ore in a roasting chamber while maintaining a portion of said gas between



the walls of said chamber and said burning ore while the latter is in a state conducive to scar formation on said walls, whereby said scar formation is avoided.

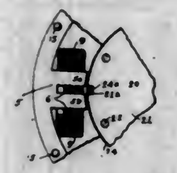
1,758,189. ELECTRIC PHONOGRAPH MOTOR. HARRY P. DORN, Cleveland, Ohio, assignor to Ray S. Gehr, Shaker Heights, Ohio. Filed Mar. 31, 1926. Serial No. 98,902. 9 Claims. (Cl. 172—278.)



1. In a phonograph, the combination of a record support, an induction motor comprising a stator and a rotor directly connected to rotate with the record support and drawing a primary circuit current variable with the motor speed, a current source of a definite voltage connected to the primary windings of the motor, said windings being of a suitable design for normal operation at synchronous speed at a much higher voltage, and governing means effective upon the rotor to limit its rotation to a speed much lower than the synchronous speed of the motor.

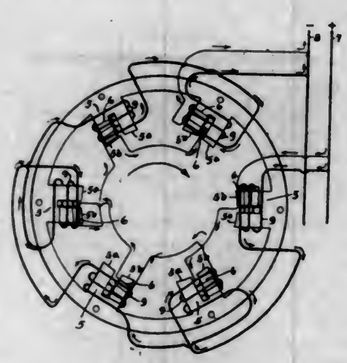
1,758,190. ELECTRIC PHONOGRAPH MOTOR. HARRY P. DORN, Cleveland, Ohio, assignor to Ray S. Gehr, Shaker Heights, Ohio. Filed Mar. 31, 1926. Serial No. 98,903. 2 Claims. (Cl. 172—278.)

1. In a phonograph, the combination of a rotatable record support; an induction motor comprising a rotor connected to drive and turn in unison with the record support and having a cylindrical laminated iron core and a secondary current conductor in the form of a band extending circumferentially around said core, a stator having iron polar projections with their polar faces disposed adjacent to the circumferential face of the rotor, and split phase primary windings on at least one of said polar sections, said windings comprising two sections which are



continuously connected in parallel across the terminals of the motor during operation thereof; and a braking governor acting on the record support and rotor to reduce the rotation of the rotor to a speed far below its free running speed and to hold the said rotation at the desired phonograph speed below 100 R. P. M.

1,758,191. ELECTRIC PHONOGRAPH MOTOR. HARRY P. DORN, Cleveland, Ohio, assignor to Ray S. Gehr, Shaker Heights, Ohio. Filed Mar. 31, 1926. Serial No. 98,904. 4 Claims. (Cl. 172—278.)

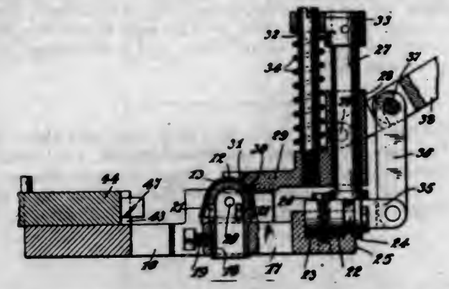


1. In an induction motor, the combination of a rotor comprising secondary current conducting means; an iron stator structure having a pole piece formed with two branches; a split-phase winding comprising a fine wire coil which as an entirety surrounds only one of said branches and a coarse wire coil surrounding both of said branches, said coils being continuously connected in parallel to the same current source while the motor is in operation; and speed regulating means to hold the operating speed of the rotor far below the synchronous or free-running speed of the motor.

1,758,192. MEANS FOR MAKING ARTIFICIAL EYES FOR DOLLS. LEO J. GRUBMAN, Belle Harbor, N. Y. Filed Dec. 17, 1926. Serial No. 155,441. 4 Claims. (Cl. 164—86.)

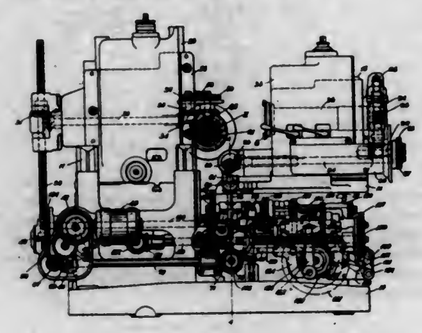
1. Apparatus for the purpose described including a fixed support upon which a hollow artificial eye member having a pupil thereon is adapted to be engaged, an adjustable sight associated with said support and with respect to which the pupil of said eye member is adapted to be located and the pupil center thereby positioned in definitely predetermined relation to planes bisecting the eye member in perpendicular relation to each other, and tool elements

operatively movable with respect to said support at opposite sides thereof to provide the wall of said eye member



with openings therethrough in definite relation to the pupil center adapted to receive the shaft or axis of an oscillatory eye mounting.

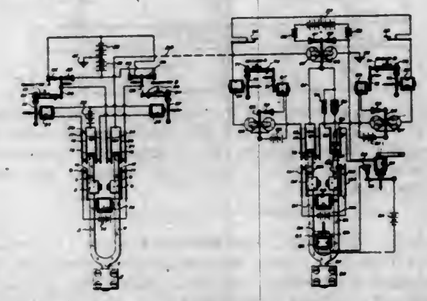
1,758,193. MACHINE FOR GENERATING GEARS. ERNEST C. HEAD, Rochester, N. Y., assignor to Gleason Works, Rochester, N. Y., a Corporation of New York. Filed Nov. 14, 1927, Serial No. 233,118. Renewed Sept. 17, 1929. 45 Claims. (Cl. 90—4.)



1. In a gear generating machine, a blank support, a tool mechanism, means for effecting a continuous relative rolling generating movement of the tool and blank in one direction and a continuous relative rolling return movement in the opposite direction, means for imparting a continuous rotary motion to the blank during the rolling movement in either direction, and means acting automatically to impart a relative depthwise feed movement between the tool and blank during the first part of said rolling generating movement to move the tool and blank into engagement.

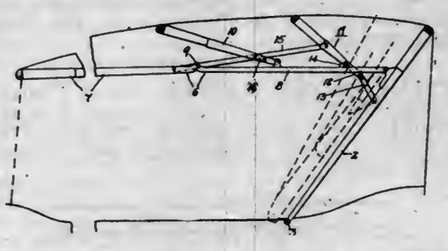
40. In a gear generating machine, a blank support, a tool, mechanism for effecting a relative rolling generating movement between the tool and blank in one direction and a relative rolling return movement in the opposite direction, means for simultaneously producing a continuous rotary motion of the blank during the rolling movement in either direction, means acting automatically to commence a positive relative withdrawing movement between the tool and blank during the latter part of said rolling generating motion, to complete said withdrawing movement during the first part of the rolling return motion, to commence a relative feeding movement during the latter part of the rolling return motion, and to complete said feeding movement during the first part of the rolling generating motion, means for driving the first named mechanism at a relatively fast speed and at a relatively slow speed, means shiftable to operatively connect either of said drives with said mechanism and means adjustable to control the operation of said last named means to predetermine the time of engagement of the fast and slow speed drives during the cycle of operation of the machine.

1,758,194. TELEGRAPH SYSTEM AND APPARATUS THEREFOR. EDWARD E. KLEINSCHMIDT, Long Island City, N. Y., assignor, by mesne assignments, to Teletype Corporation, Chicago, Ill., a Corporation of Delaware. Filed Oct. 4, 1924. Serial No. 741,578. 14 Claims. (Cl. 178—33.)



1. A system of telegraphy comprising a plurality of transmitters for sending code combinations of selecting conditions, and a vibratory timing member controlling said transmitters in a manner to cause the transmission of one selecting condition for each vibration of said vibratory member.

1,758,195. TOP FOR VEHICLES AND THE LIKE. FRED K. LEWIS, Ashtabula, Ohio. Filed Nov. 3, 1922. Serial No. 598,784. 1 Claim. (Cl. 296—116.)

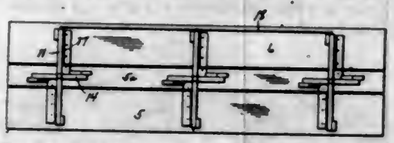


In a top for vehicles and the like, the combination of support means tending to underlie the center of gravity of the opened top, said means including a main bow inclining rearwardly from the vertical in the open position of said top, a two-part articulated auxiliary bow having its rear portion pivotally attached to said main bow and adapted to project substantially horisontally therefrom in the open position of the top; a supplemental bow pivotally attached to the rear portion of such auxiliary bow and having an extension, said supplemental bow inclining forwardly in such open top position; a link adapted to extend out of alignment with such extension and connect it to said main bow below the point of attachment of said auxiliary bow thereto; means adapted to prevent further bending of the joint between such extension and said link in the open position of the top; a second supplemental bow pivotally attached to the rear portion of said auxiliary bow forwardly of said first-named supplemental bow and inclining in the same direction; a rigid link connecting said first supplemental bow with said auxiliary bow at a point forwardly of the joint therein; and a short link flexibly connecting said link with said second supplemental bow.

1,758,196. TABLE. ARCHIBALD MACKINNON, New York, N. Y. Filed Apr. 26, 1927. Serial No. 186,796. 3 Claims. (Cl. 45—116.)

1. A folding table of the class described comprising a narrow, longitudinally extending top, leaves hingedly connected to the top, a plurality of connected frames and vertical rods on which said frames may rotate, a separable

second frame pivotally mounted on each of the rods for movement at right angles to the first mentioned frames, both of said frames being adapted for rotation as a unit to a closed, inoperative position in longitudinal alignment



with the top and between the said leaves when closed and a rod constituting a pivot link connection between the supporting frames whereby the swinging of one supporting frame will produce a corresponding swing of the other support frames.

1,758,197. LOADING MACHINE. EDMUND C. MORGAN, New York, N. Y.; Olive Eugenie Morgan executrix of said Edmund C. Morgan, deceased. Filed Aug. 14, 1917, Serial No. 186,118. Renewed Dec. 7, 1922. 24 Claims. (Cl. 198—11.)

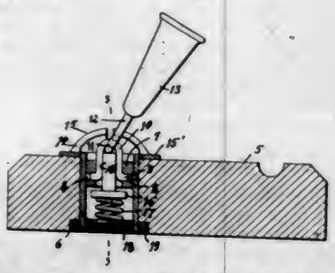


1. In a loading machine, the combination with two pivotaly connected trucks each provided with wheels adapted to travel on a mine track, and conveyer mechanism carried by said trucks and comprising sections pivotally connected directly to each other to swing relatively to each other and each relatively to said trucks on an upright axis coinciding with the pivotal axis between said trucks.

1,758,198. LOADING MACHINE. EDMUND C. MORGAN, New York, N. Y.; Olive Eugenie Morgan executrix of said Edmund C. Morgan, deceased. Filed Apr. 29, 1918, Serial No. 231,353. Renewed Dec. 28, 1928. 28 Claims. (Cl. 198—11.)

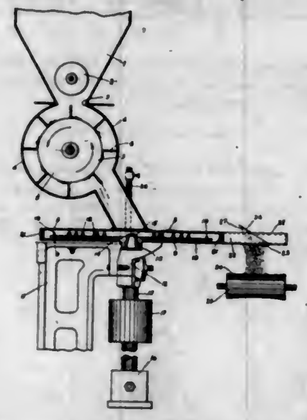
1. A loading machine comprising a main frame, supporting wheels for said frame movable vertically relative thereto for raising and lowering said frame, a supplemental frame pivotally connected with said main frame for lateral movement relative thereto, and supporting wheels carried by said supplemental frame and movable vertically relative thereto for permitting the forward end of said supplemental frame to be brought into and out of engagement with the surface over which said machine operates.

1,758,199. PEN DESK SET. LUCIFER J. MOST, New York, N. Y., assignor to Mable Todd & Co., New York, N. Y. Filed July 24, 1929. Serial No. 380,550. 7 Claims. (Cl. 120—108.)



1. A pen desk set comprising a base, a sleeve in the base, a ring in the sleeve fixed thereto, a staple fixed in the ring, a bar having an eye engaging the staple, a plunger in the ring engaging the staple, a plug closing the lower end of the sleeve, a spring between the plug and plunger for maintaining the eye of the bar against the staple, a cover over the top of the sleeve having slots for guiding the swinging movement of the bar on the staple and a pen holder support secured to the bar.

1,758,200. WET MIXING METHOD AND APPARATUS. FREDERIC D. PFEFFER and FRED TROTTER, Fort Dodge, Iowa, assignors to United States Gypsum Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 19, 1926. Serial No. 95,829. 10 Claims. (Cl. 83—73.)



1. In a wet mixer, a source of dry material supply, a continuous feeder at the bottom thereof, a rotatable member with a horizontal rotating surface, means for separately admitting dry material and a liquid at the center of the rotating member, and means for discharging the mixed dry and wet material as a wet mixture at the periphery of the rotatable member.

1,758,201. CEILING CONSTRUCTION. HERBERT W. REEL, Chicago, Ill., assignor to United States Gypsum Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 1, 1926. Serial No. 85,075. 4 Claims. (Cl. 72—71.)

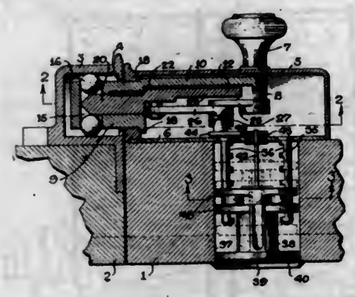


2. In a fireproof ceiling construction, in combination metal beams or channels, a hardened plastic cementitious slab containing embedded wire reinforcing fabric in contact with but suspended therefrom, and governed in thickness by retained spacers disposed between the undersurfaces of the metal beams or channels and the slab undersurface.

1,758,202. METHOD OF AND APPARATUS FOR REACTIVATING CHARCOAL. EDGAR WHITMAN RICE, Yonkers, N. Y. Filed Dec. 31, 1925. Serial No. 78,704. 4 Claims. (Cl 252—8.)

1. A method of reactivating charcoal laden with adsorbed organic matter which includes the step of slowly passing the charcoal through a kiln, subjecting it in its passage through the kiln to a continuous recirculation of pre-heated hot gases through the kiln which will support the combustion of the organic matter.

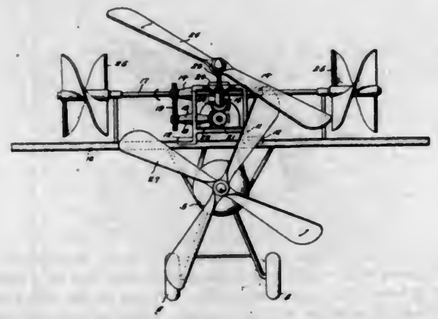
1,758,203. LOCK. SAMUEL SEGAL, New York, N. Y., assignor, by mesne assignments, to Segal Lock & Hardware Co., Inc., New York, N. Y., a Corporation of New York. Filed Apr. 18, 1922. Serial No. 554,534. 44 Claims. (Cl. 70—46.)



1. In a lock, a casing containing the locking mechanism, a cylinder, a key plug therein, means connecting the key plug and locking mechanism, means extending from said casing on which said cylinder is slidably mounted and means for locking said cylinder on said extending means, said locking means being adapted to be released only when said key plug has been rotated to a predetermined position by means of the proper key therefor.

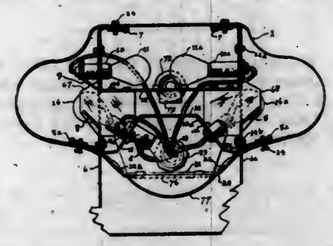
40. A lock, including, in combination, a main locking bolt for entry into a keeper, means associated with said bolt and engageable with said keeper for preventing a retraction of said bolt, a supplemental bolt controlling the operation of said means, and main bolt-actuating means constantly connected with said supplemental bolt.

1,758,204. AEROPLANE. NASSIF E. SHIBLY, Wheeling, W. Va. Filed June 17, 1929. Serial No. 371,553. 3 Claims. (Cl. 244—14.)



1. In an aeroplane, a fuselage, a sustaining plane transverse thereto, two air impellers mounted over the end portions of said sustaining plane for inwardly compressing air transversely of the craft and forming a compressed air bank over the central portion of said sustaining plane, an inclined propeller mounted to operate in a rearwardly inclined plane spaced forwardly and upwardly from said central portion of said sustaining plane, whereby the blast of air from said inclined propeller will thrust against said compressed air bank and itself become more highly compressed, a tractor propeller mounted for operation in a vertical plane at the front end of the fuselage, said tractor propeller being positioned to operate behind and under the lower portion of the zone in which said inclined propeller operates, whereby said tractor propeller acts upon the compressed blast of air from said inclined propeller.

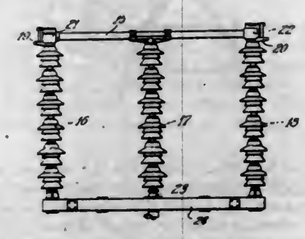
1,758,205. TRAFFIC SIGNAL. EDWARD COOPER TAYLOR, Yonkers, N. Y. Substitute for application Serial No. 704,671, filed Apr. 7, 1924. This application filed July 26, 1929. Serial No. 381,340. 31 Claims. (Cl. 177—327.)



5. In a traffic signal, a stencil plate having cutouts cooperating in groups to form the letters of two words, a source of light for each word, the sources positioned to illuminate the plate from different angles, screens to shadow sundry of the cutouts from illumination by one source thereby to enable the words to be displayed in alternation, and means to distinctively color the light from each source, including differently colored transparent sheets one arranged between each source and the plate, and supported at substantially an angle with respect to each other, such that one will reflect the light transmitted by the other, a frame connected with the plate for supporting the sheets and forming with the plate and sheets a closed chamber, the stencil plate having a cutout serving as an underscore for both words and below the frame thereby to enable the underscore to be illuminated by uncolored light from either source.

6. A traffic signal including a casing having in one wall an opening, a stencil plate for the opening having cutouts cooperating in groups to form two indicating signals, a source of light for each signal, the sources positioned within the casing to illuminate the plate from different angles, screens to shadow one or more of the cutouts from illumination by one source, thereby to enable the indications to be displayed in alternation, means to distinctively color the light from each source, including differently colored transparent sheets one arranged between each source and the plate, and suppported at an angle with respect to each other such that one will reflect the light transmitted by the other, a frame connected with the plate for supporting the sheets and forming with the plate and sheets a closed chamber, the casing having a cutout in the opposite wall from the stencil plate to provide a telltale light and within the same chamber thereby to be illuminated in accordance with the signal displayed.

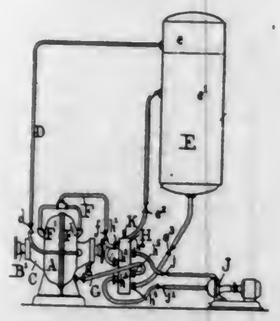
1,758,206. ROTARY SWITCH. TONY VAN RYAN and ALFRED ALSAKER, Chicago, Ill., assignors to The Delta Star Electric Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 27, 1927. Serial No. 229,002. 17 Claims. (Cl. 200—48.)



1. In an insulator bearing, a housing, a tubular sleeve mounted for movement within said housing, a shaft ro-

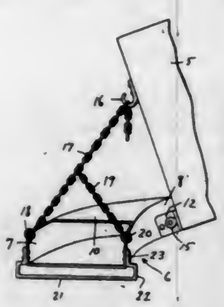
tatably mounted in said housing and extending upward into said tubular sleeve, said sleeve having a worm gear on its inner side, said shaft having a worm adapted to mesh with said gear, a spur gear rotatably mounted on said shaft, and means including said worm gear and said spur gear for imparting a plurality of different movements to said sleeve.

1,758,207. HYDRAULIC HEAT-GENERATING SYSTEM. GEORGE HENRY WALKER, Worcester, England, assignor to Heenan & Froude Limited, Worcester, England. Filed May 26, 1928, Serial No. 280,918, and in Great Britain June 23, 1927. 3 Claims. (Cl. 122—26.)



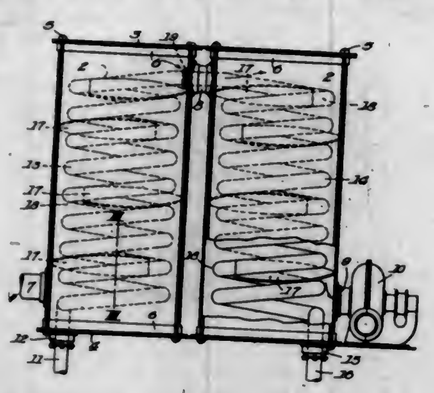
1. In an hydraulic heat generating system comprising an hydraulic heat generator, a heat accumulator and conduits connecting the generator to the accumulator, a rotor and a stator forming the heat generator, water spaces in the rotor and in the stator in which spaces vortices are set up during rotation of the rotor, a pipe connecting the centres of the vortices with the steam space in the heat accumulator, conduits connecting the water inlet and water outlet of the generator to the water space in the accumulator, a multi-ported distributing valve connected in said conduits, a plurality of pistons by which the ports are controlled and an operating rod upon which the pistons are mounted.

1,758,208. COAL CHUTE FOR DELIVERY WAGONS. CHARLES W. WARNECKE, Maywood, N. J. Filed May 23, 1929. Serial No. 365,434. 2 Claims. (Cl. 193—5.)



1 In a coal handling apparatus, an arcuate open ended chute having side, bottom and top walls, brackets carried by the inner portions of said side walls and having notches opening out through the lower edges thereof, and combination fastening and restraining devices adapted to be received in said notches, and a flexible supporting element secured to the outer portions of the side walls of the chute.

1,758,209. HEATER. ALBERT WILSON, Pittsburgh, Pa., assignor to Pittsburgh Rolls Corporation, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed June 14, 1928. Serial No. 285,299. 1 Claim. (Cl. 257—229.)



In combination, a pair of casings for hot gas circulation having at one end a hot gas inlet opening and a hot gas outlet opening respectively, a conduit connecting adjacent end portions of the casings, a fuel circulating coil in each casing having a connection extending through said conduit and provided with oppositely located inlet and outlet connections respectively extending through the casing, a series of alternating baffle plates in each casing extending inwardly from opposite walls thereof partly across and between adjacent coils of the fuel circulating coils in alternating sloping arrangement providing alternating hot gas passages, and a pump connected with the hot gas outlet opening.

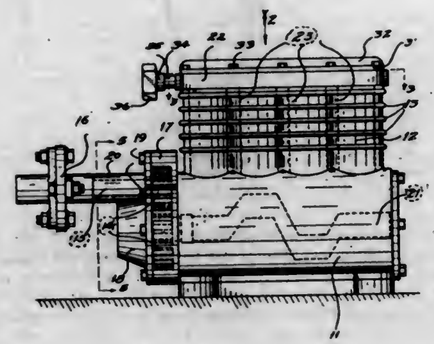
1,758,210. TIRE-CHAIN CONNECTER. JOHN S. WOODHOUSE, Troy, N. Y., assignor to Carr Chain Works, Inc., Troy, N. Y., a Corporation of New York. Filed Nov. 3, 1928. Serial No. 317,030. 1 Claim. (Cl. 24—68.)



A tire chain fastener comprising a body member having spaced side walls and connected at one end to a chain link, a lever having an end thereof pivoted at the other end of the body member and between its walls, said lever being adapted to close down between said walls, a finger piece on said lever adapted to project into said link when the lever is closed, an L-shaped slot in said lever having a cove portion extending longitudinally of the lever and an inlet and outlet portion communicating with said cove portion at the end thereof remote from the lever pivot and directed inwardly from an edge of the lever, the lower end of the wall of said inlet and outlet portion which is more remote from the lever pivot being undercut to form a relatively shallow chain seat which receives and holds the chain during initial closing movement of the lever, and a complemental L-shaped slot in each of the body-member walls, each slot having an inlet and outlet portion extending inwardly from the opposite edge of the wall from the edge of the lever having said inlet and outlet slot and a longitudinally extending cove portion below the longitudinal plane of the lever pivot, said inlet and outlet portions of the

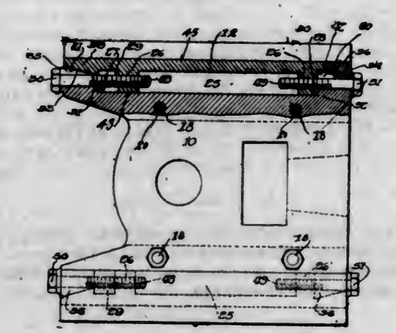
body member communicating with the cove portions at the ends thereof remote from the lever pivot, said chain when the parts are in their closed position being prevented from removal until the chain is moved out of the cove of the body member and is brought into alignment with said inlet and outlet portions of both the lever and body member during said removal.

1,758,211. AIR COMPRESSOR. WILLIAM C. ALLEN, Compton, Calif., assignor, by mesne assignments, to The Sharpe Manufacturing Co., Los Angeles, Calif., a Corporation of Delaware. Filed Jan. 26, 1927. Serial No. 163,721. 3 Claims. (Cl. 230—184.)



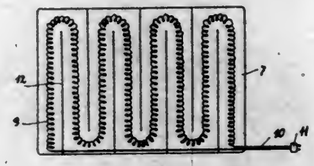
1. In a valve structure for a multiple cylinder fluid compressor, a separable valve supporting structure arranged to overlie the cylinders, said structure having a wall dividing it into an inlet and an outlet compartment, inlet and outlet valves respectively in said compartments, and a fluid tight cover sealing said compartments and resting against the wall thereof.

1,758,212. CROSSHEAD. FRANCIS NORWOOD BARD, Highland Park, Ill. Filed Dec. 21, 1922. Serial No. 608,367. 18 Claims. (Cl. 308—3.)



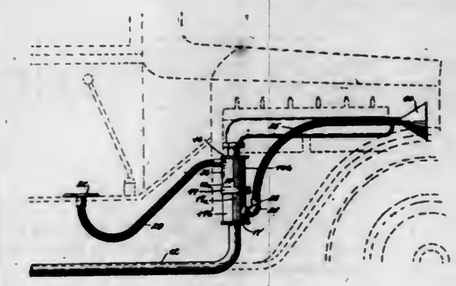
1. In a device of the character described, in combination, a cross-head and a slipper movable longitudinally of the cross-head and freely removable therefrom at all times, means for causing said slipper to move laterally of the crosshead upon a relative longitudinal movement between the two, and an angularly displaceable pivoted member for setting up such relative movement.

1,758,213. ELECTRICAL HEATING APPARATUS. JOSEF BARTIK, Vienna, Austria. Filed May 26, 1928, Serial No. 280,702, and in Austria May 31, 1927. 2 Claims. (Cl. 219—46.)



1. An electrical heating device, comprising a container of pliable material, a filler of granular, electrically non-conductive material in said container, the quantity of filler being insufficient to tightly fill the container, and an electric heating unit embedded within said filler.

1,758,214. AUTOMOBILE HEATER. GEORGE E. BLAKE, East Aurora, N. Y., assignor to Forsyth Metal Goods Company Inc., East Aurora, N. Y., a Corporation of New York. Filed Mar. 7, 1928. Serial No. 259,688. 5 Claims. (Cl. 257—241.)



1. A heater including a casing composed of two sections adapted to embrace a supporting member, each of said sections being recessed, said recesses being in register and forming an opening adapted to receive said supporting member, and each of said sections being indented to form a series of beads adjacent said opening and conforming to the shape thereof, said beads being connected to one another along their entire length by webs formed by the indentations and said beads being thereby adapted to be torn from said sections to enlarge said opening for receiving supporting members of different sizes.

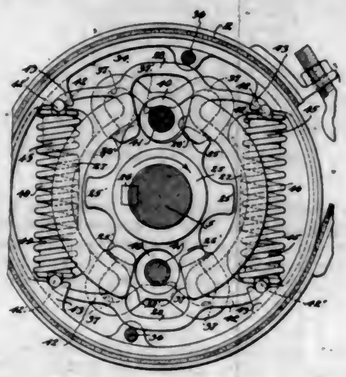
1,758,215. CONTINUOUS ABSORPTION REFRIGERATING APPARATUS. RAOUL FELICE BOSSINI and GUIDO MAIURI, London, England. Filed Mar. 28, 1929, Serial No. 350,806, and in Great Britain Apr. 11, 1928. 3 Claims. (Cl. 62—179.)

1. In a continuous absorption refrigerating apparatus, an absorption liquid, a refrigerating agent absorbed by said absorption liquid, and a gas inert to said absorption liquid and said refrigerating agent and of the same specific gravity as said refrigerating agent into and from which said refrigerating agent evaporates and is absorbed.

1,758,216. TRACTION DRIVING MECHANISM. HAROLD E. BREY, Milwaukee, Wis., assignor to Koehring Company, Milwaukee, Wis. Filed May 21, 1925. Serial No. 31,849. 21 Claims. (Cl. 192—36.)

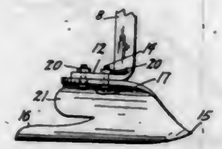
1. A clutch unit of the class described, comprising a drive clutch member operable by a shaft, a driven clutch

member, clutch instrumentalities to interlock the two and means to guide the said interlocking clutch instrumentalities to positions disengaging them from the drive clutch member under the influence of positive driving action of



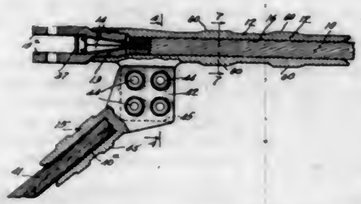
the drive clutch member, comprising a shell enclosing the drive and driven clutch members and having pockets for performing the guiding function aforesaid, and retaining means for holding the clutch instrumentalities in interlocked position on the shell.

1,758,217. CULTIVATOR TOOL. ERNEST CALKINS and ANDREW NIELSEN, Brighton, Colo. Filed Oct. 18, 1927. Serial No. 226,936. 2 Claims. (Cl. 97—198.)



1. In a cultivator, a blade pointed in the direction of the operative movement of the cultivator and transversely curved to provide a ground portion and a flange-portion extending over said ground portion inwardly with respect to the cultivator, the flange-portion having at its end remote from the point of the blade, an inwardly curving deflector adapted to throw dirt upturned by the ground portion in the operation of the cultivator, back onto the blade, and a shank-member extending downwardly on the cultivator, and attached exteriorly of the flange-portion of the blade.

1,758,218. ELECTRICAL CONNECTER. CARL B. CARLSON, Los Angeles, Calif. Filed Apr. 14, 1925. Serial No. 23,006. 5 Claims. (Cl. 24—126.)



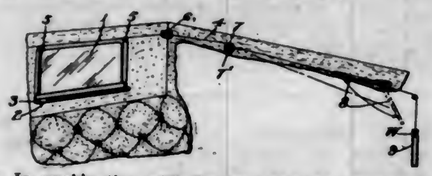
1. A device for holding a cable having a stranded reenforcing core including, a main part with a tubular body to be compressed onto the end portion of the cable, and a wedge in the outer end of the main part related thereto to clamp the stranda of the core outwardly against the inner wall of said part.

1,758,219. CAPPING AND SEDIMENT-RETAINING DEVICE FOR BOTTLED BEVERAGES. BRUCE E. CLARKE, Kansas City, Mo., and ABRAHAM DANCIGER, Tulsa, Okla. Filed July 28, 1926. Serial No. 125,429. 4 Claims. (Cl. 210—57.)



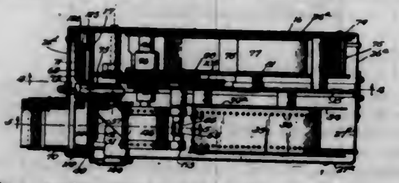
1. In a capping and sediment retaining device for bottled beverages, a container for sediment having a threaded upper end and a port through which it communicates with the interior of the bottle container, a bottle attaching ring engaging said threads, a plunger rod and seal, the plunger rod extending through said container and into the interior of a bottle and being adapted to be operated at will.

1,758,220. WINDOW-CURTAIN CONTROL. JOHN FRANCIS CURRIVAN, Milton, Mass. Filed Apr. 21, 1928. Serial No. 271,810. 5 Claims. (Cl. 156—28.)



2. In combination with the back window curtain of an automobile, a front seat control therefor comprising an interrupted pull cord system, a differential winding and unwinding drum pair interposed between the parts of the pull cord to give a maximum curtain movement with a minimum movement of the pull cord at the front seat, and a lever pivoted adjacent the driver's seat for forward and rearward movement and having the cord attached adjacent its free end, a takeup weight on the end of the pull cord, a tubular well for slidably receiving said weight, and means adjacent the driver's seat for adjustably controlling the cord.

1,758,221. MOTION-PICTURE CAMERA. HERMAN A. DE VRY, Chicago, Ill., assignor to Q. R. S.-De Vry Corporation, Chicago, Ill., a Corporation of Illinois. Filed Oct. 21, 1925. Serial No. 63,846. 39 Claims. (Cl. 88—17.)

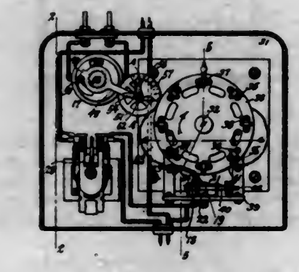


1. In a motion picture camera, the combination of an enclosing case comprising a body-section having an open

side and a cover section, a frame structure including a plate fitting in the body-section and disposed substantially in the plane of the open side of the body-section, means carried by and projecting from the outer side of the plate for supporting supply and take-up spools for endwise placement and removal, a continuous feed sprocket supported on the outside of said plate, and adapted for endwise insertion of the film, film-guiding means provided with an exposure opening and projecting outwardly from the outer side of the plate, a device for intermittently moving the film, gearing, for driving the sprocket and feed device, mounted on the inner side of said plate and in said structure, and a shutter operated by said gearing and carried by said structure, said spool supporting means, feed sprocket and film guiding means being outside of the body section to render them conveniently accessible when the cover section is open and enclosed by said cover section when it is closed.

29. In a motion picture camera, the combination of an enclosing case, means for supporting supply and take-up spools in the case, means for guiding the film, provided with an exposure opening, mechanism for continuously and intermittently feeding the film, a spring motor for driving said mechanism, and controlling means for the operation of said mechanism by the motor, comprising a wheel, a brake in coacting relation with the wheel, means for manually manipulating the brake to start and stop the motor, and means for retarding the wheel, said last mentioned means being carried by the wheel and arranged so as to move outwardly into engagement with the brake responsively to the action of centrifugal force.

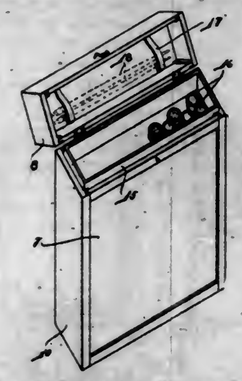
1,758,222. TIME-SWITCH MECHANISM. CHARLES K. ERNST, Buffalo, N. Y. Filed Dec. 14, 1928. Serial No. 325,945. 10 Claims. (Cl. 200—36.)



1. A time switch mechanism for controlling an electric circuit comprising a clock mechanism, a timing wheel operatively connected with said clock mechanism, and means for intermittently opening and closing said circuit by motion derived from said timing wheel, including two relatively stationary contacts arranged on opposite sides of the timing wheel, a plurality of non-settable contacts mounted on one side of the timing wheel and adapted to engage successively with a stationary contact on one side of said wheel, and a plurality of settable contacts mounted on the opposite side of said wheel and adapted to engage with the other stationary contact.

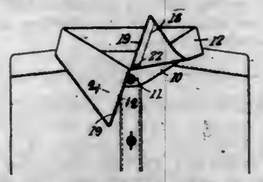
1,758,223. ARTIST'S KIT. EMIL FAHR, Detroit, Mich. Filed Feb. 2, 1929. Serial No. 337,118. 2 Claims. (Cl. 41—4.)

1. An artist's kit of the class described comprising: a box-like structure having oppositely positioned side walls, each of said side walls having formed on its inner face, a plurality of vertically extending grooves, the grooves in one of said side walls each being in alignment with one of the grooves in the opposite side wall; a paint pot container positioned in said box-like structure and adapted



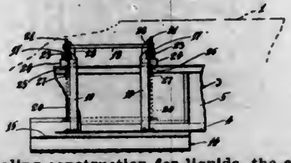
to project outwardly thereof; and a cover swingably mounted on said box like structure for engaging said paint pot container.

1,758,224. SOFT COLLAR. JOSEPH HILLMAN, New York, N. Y. Filed Dec. 17, 1929. Serial No. 414,786. 3 Claims. (Cl. 2—132.)



1. A collar having a band and a folded over top including an outer ply, an inner ply and an interlining ply, a line of stitching uniting the said plies together adjacent their edges, and another line of stitching spaced from the former line of stitching uniting the inner and interlining plies only, whereby a pocket is formed between the inner and interlining plies.

1,758,225. FLOATING-ROOF TANK. SIDNEY P. JOHNSON, San Francisco, Calif., assignor to Standard Oil Company of California, San Francisco, Calif., a Corporation of Delaware. Filed Dec. 8, 1926. Serial No. 153,302. 15 Claims. (Cl. 220—26.)

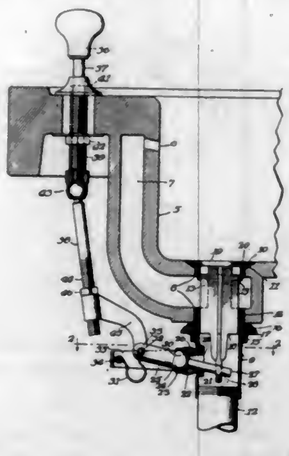


1. In a sealing construction for liquids, the combination of a tank to contain the liquid, a floating roof supported on the liquid so that an annular space is formed between the edge of the roof and the tank wall, a plurality of shoes having a support with a single pivotal axis on the roof, so as to swing bodily in an arc about the pivotal support, and means for yieldingly pressing the shoes outwardly to hold their outer faces adjacent the tank wall, said shoes being disposed with their ends spaced apart so that they are independently movable and substantially seal the annular space between the roof and the tank wall.

1,758,226. WASTE-VALVE FITTING. TOBIAS J. KAUFMAN, Chicago, Ill. Filed Jan. 14, 1927. Serial No. 161,116. 6 Claims. (Cl. 4—203.)

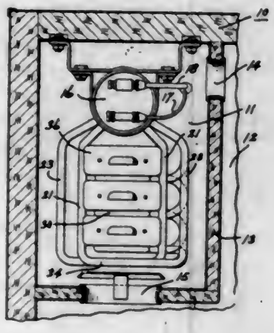
1. In a plumbing system, a lavatory basin having a drain part, a fitting in said part forming a valve seat, and

means for opening and closing said valve, said means comprising a pivoted actuating member forming one link



of a toggle, a spring forming the other link of said toggle and a push rod engaging an intermediate portion of said toggle for operating the same.

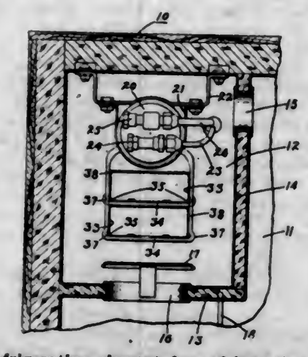
1,758,227. REFRIGERATING APPARATUS. LLOYD M. KEIGHLEY, Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation, a Corporation of Delaware. Filed Oct. 31, 1927, Serial No. 229,959. Renewed Nov. 25, 1929. 11 Claims. (Cl. 62—95.)



1. A refrigerating element for refrigerating apparatus including a refrigerant supply device and a plurality of conduits connected in parallel circuit relation thereto for circulating refrigerant, each of the conduits having a portion cooperating with the corresponding portions of the other conduits to define a freezing space and a portion extending remote from the freezing space for cooling circulating air, certain of the conduits having portions extending into the freezing space.

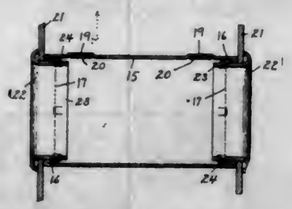
1,758,228. REFRIGERATING APPARATUS. JESSE G. KING, Dayton, Ohio, assignor to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed July 31, 1928. Serial No. 296,474. 14 Claims. (Cl. 62—95.)

2. In a refrigerating apparatus, a cooling unit including a support adapted to receive an ice tray, a refrigerant duct including vertical and horizontal leg portions in intimate thermal contact with said support, said duct having a reverse bent portion at the connection of said leg portions.



10. A refrigerating element for refrigerating apparatus comprising in combination a header forming a reservoir for liquid refrigerant and a plurality of conduits connected to the header in parallel circuit relation, said conduits being arranged to form substantially two vertical spaced apart rows to define a freezing space, some of the conduits having portions extending horizontally within the freezing space so defined.

1,758,229. SPOOL OR REEL. EVERETT H. KNEEN, Ansonia, Conn. Filed May 14, 1928. Serial No. 277,473. 3 Claims. (Cl. 242—123.)



1. A spool, comprising a core formed from a strip of metal rolled to form a tube, the abutting edges interlocked and its ends turned inward forming annular shoulders and end-pieces provided with fingers engaging with the said shoulders, whereby the end-pieces are interlocked with the core.

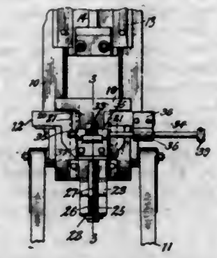
1,758,230. BOX CORNER. BERTHOLD A. LANGE, St. Louis, Mo. Filed Nov. 26, 1926. Serial No. 150,840. 2 Claims. (Cl. 229—6.)



1. A sheet of material of the character described that is bent to define a flexible seam comprising, at least, a pair of adjacent flat-bottomed substantially square-cornered grooves in one face of the material and a ridge therebetween that presents a comparatively wide and substantially flat top face.

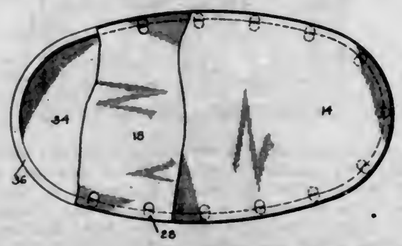
1,758,231. BED-ADJUSTING MECHANISM FOR STAMPING PRESSES. BAOR J. LINDGREN, Buffalo, N. Y., assignor to Niagara Machine & Tool Works, Buffalo, N. Y., a Corporation of New York. Original application filed Dec. 24, 1925, Serial No. 77,447. Divided and this application filed Aug. 8, 1927. Serial No. 211,400. 3 Claims. (Cl. 164—23.)

1. A sheet metal working press having a bed, and means for adjustably mounting a lower die or tool relative to the bed comprising a lower slide adapted to carry said die and guided by the bed, and means for adjusting said die vertically relative to said bed comprising a lifting lever



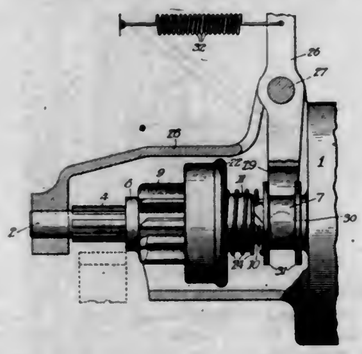
supporting said lower slide, a lifting rod connected at its lower end with said lifting lever, and a screw nut engaging with the upper end of said rod and resting on said bed.

1,758,232. ADVERTISING DEVICE. PAUL M. LOCKWOOD, Irvington, N. J. Filed Oct. 9, 1926. Serial No. 140,459. 4 Claims. (Cl. 40—10.)



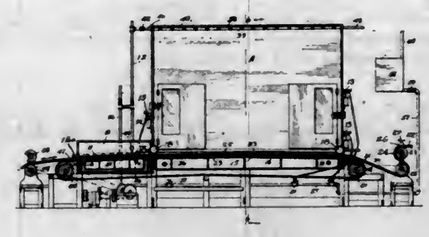
1. A device for attaching an advertising unit to fabric, comprising in combination, a flexible plate-like member arranged to support the unit on the front side of the fabric, means for clamping the unit to said member, an auxiliary flexible plate-like member on the rear side of the fabric, a plurality of teeth fast to one of said members, said teeth being arranged to pass through the fabric and engage the other of said members by bending the ends of said teeth, and means for concealing said teeth, said device when assembled being flexible, whereby it may conform to the curved surface of an automobile tire cover.

1,758,233. ENGINE STARTER. WILLIAM L. MCGRATH, Elmira, N. Y., assignor to Eclipse Machine Company, Elmira, N. Y., a Corporation of New York. Filed Jan. 23, 1924. Serial No. 688,077. 33 Claims. (Cl. 74—7.)



1. An engine starter drive including a rotatable shaft mounted for longitudinal and rotary movements, a driving member loosely mounted on the shaft and adapted to engage a member of the engine to be started, a control member mounted on the shaft for longitudinal movement thereof and rotary movement therewith, yielding means constantly urging the control member towards the driving member, and a friction clutch interposed between the control member and the driving member.

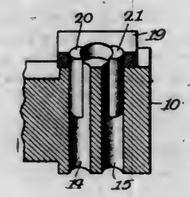
1,758,234. PROCESS OF AND APPARATUS FOR DYEING TEXTILE FABRICS. PIETER MIJER, New York, N. Y., assignor, by mesne assignments, to The Two-Tone Corporation, New York, N. Y., a Corporation of New York. Filed July 5, 1924. Serial No. 724,262. 23 Claims. (Cl. 8—19.)



1. A dyeing or coloring apparatus including a dye chamber, means for forming a color cloud in said chamber and means for evaporating liquid matter deposited on the walls of said chamber.

23. The process of dyeing textile material comprising traversing the web while steaming it in the presence of dye, and thereafter steaming the material.

1,758,235. TEMPLATE FOR FORMING KEY OPENINGS IN RAILWAY DRAFT RIGGING. CHARLES J. NASH, Chicago, Ill., assignor to Universal Draft Gear Attachment Co., a Corporation of Illinois. Original application filed June 17, 1927, Serial No. 199,483. Divided and this application filed Mar. 7, 1928. Serial No. 259,701. 2 Claims. (Cl. 72—63.)

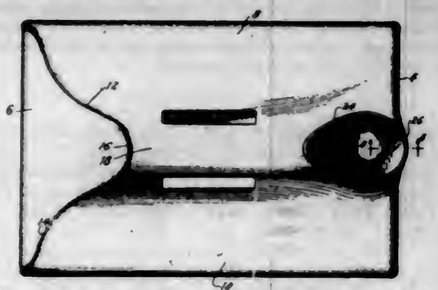


1. A templet comprising a plate having a slot therein, the ends of the slot being formed by segments of circular openings of the same diameter and its central portion by segments of a circle of larger diameter, pins secured in the ends of said slot and extending outwardly from said plate, said pins having grooves for forming with the segments of said central portion a cylindrical opening.

1,758,236. PROSTATECTOMY URINAL. CORA P. OLSON and HARRY L. EVANS, Rochester, Minn. Filed May 23, 1929. Serial No. 365,339. 9 Claims. (Cl. 4—110.)

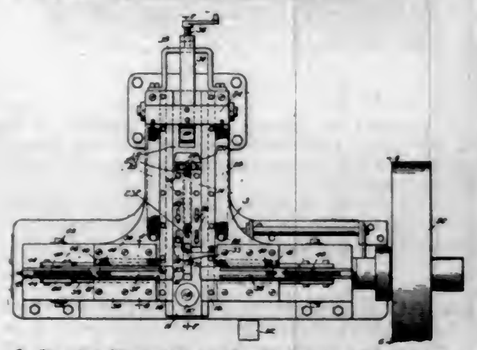
1. A urinal particularly adapted for prostatic cases, having a relatively broad flat base and having two flat end walls, the one rising substantially vertically, and the other

inclining upwardly and inwardly substantially at 45 degrees, said urinal having two side walls inclining upwardly and inwardly, substantially at 45 degrees and joining the



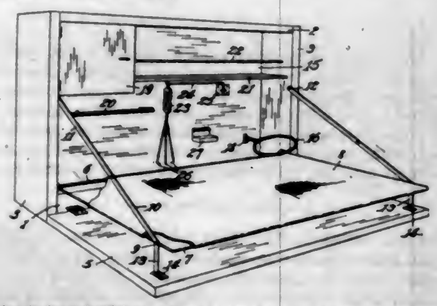
two end walls, the juncture of the ridge and the substantially vertical end wall being cut away to provide a relatively generously sized emptying mouth.

1,758,237. BENDING PRESS. MATHEW H. PAINE, Glen Ellyn, Ill. Filed Jan. 21, 1928. Serial No. 248,374. 7 Claims. (Cl. 153—34.)



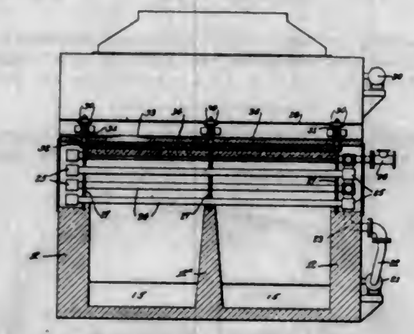
1. In a bending press, a pair of hammers slidably mounted in opposed relation, a slide having a mandrel which is drawn between the hammers when the slide is reciprocated, means for reciprocating the slide, adjustable stops for limiting the retraction of the hammers to adapt the same to serve as bending guides to form stock around mandrels of various sizes, when one thereof is drawn between the hammers, and means for driving the hammers forwardly behind the mandrel to form the stock around the mandrel, said driving means being adapted to predetermine the commencement of the driving of said hammers to correspond with the size of the mandrel.

1,758,238. WALL CABINET. ROLLAND E. PETERSON, Gary, Ind. Filed Apr. 25, 1928. Serial No. 272,692. 1 Claim. (Cl. 45—38.)



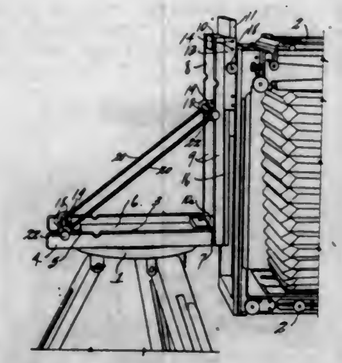
An infant bathing cabinet composed of a casing adapted to be secured to a wall at a point spaced above the floor, a hinged cover for the casing movable to a horizontal position so as to render the cover accessible to a person in a seated position or one standing on the floor, a baby rest frame pivoted to the casing, links carried by the cover and connected to the rest frame for supporting the latter spaced above and from the cover and in a horizontal position, and foldable members connected to the casing and to the points of connection of the links with the rest frame for supporting the rest frame.

1,758,239. HEATING APPARATUS. JOHN PRIMROSE, Dongan Hills, N. Y., assignor to Foster Wheeler Corporation, New York, N. Y., a Corporation of New York. Filed Jan. 9, 1925. Serial No. 1,847. 8 Claims. (Cl. 122—510.)



4. A heating apparatus comprising a chamber having a radiant heat chamber provided with an open path for a flame across the bottom thereof, a plurality of tubes disposed in the upper part of said chamber and arranged to receive heat by radiation, said tubes being disposed out of the flow of hot gases, transverse supporting beams above said tubes, plate-like supporting members for said tubes apertured to receive all of the tubes in different horizontal rows and the various tubes in each horizontal row, and supporting connections from said members to said beams for the purpose described.

1,758,240. CAMERA SUPPORT. OTTO ROACH, South Bend, Ind., assignor of two-thirds to Staples Studio, Incorporated, South Bend, Ind. Filed July 9, 1928. Serial No. 291,263. 6 Claims. (Cl. 248—45.)

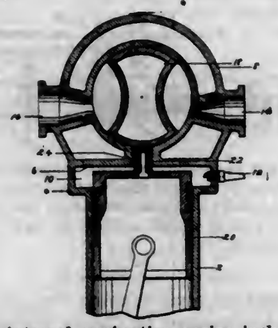


6. A mounting for cameras comprising a base, a camera supporting means hingedly mounted on said base, rockable transverse tubular members carried by said base and camera supporting means, a prop rod slidable through holes in said tubular members, and means adapted to clamp said rod to said tubular members.

1,758,241. PROCESS FOR THE PRODUCTION OF PHOSPHORUS AND ALUMINA CEMENT. ROBERT SUCHY, Bitterfeld, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Mar. 24, 1928, Serial No. 264,566, and in Germany Mar. 19, 1927. 3 Claims. (Cl. 106—25.)

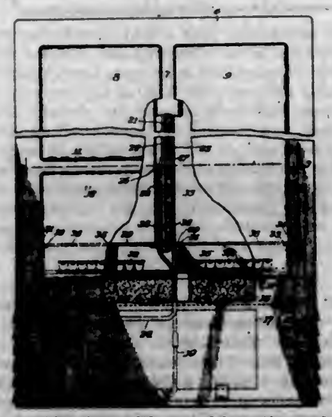
1. A process for the simultaneous production of phosphorus and alumina cement from natural calcium phosphates and bauxites, which comprises the steps of melting down under reducing conditions ferruginous bauxites with carbon sufficient to reduce the iron oxide and with calcium oxide in such quantities as to produce a slag containing calcium aluminate and alumina, tapping off separately the regulus of iron and the slag, mixing said slag with calcium phosphates and carbon and melting down the mixture to produce phosphorus, which distills off, and a molten slag which after cooling and grinding constitutes an alumina cement.

1,758,242. INTERNAL-COMBUSTION ENGINE RUDOLPH WEHR, Los Angeles, Calif., assignor to The Wehr Motor Company, a Corporation of California. Filed Apr. 15, 1929. Serial No. 355,060. 3 Claims. (Cl. 123—190.)



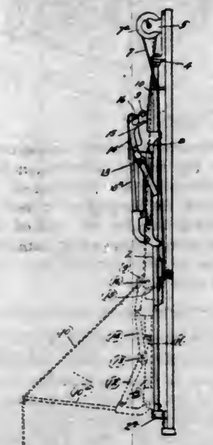
1. In an internal combustion engine including a cylinder, a piston operable therein, and a valve casing, of a chamber formed by said valve casing and an enlarged portion on said cylinder, said chamber being adapted to receive the explosive charge introduced therein and coact with said piston to constrict the exploded charge so that the shock of its explosive force will be compensated.

1,758,243. REFRIGERATING APPARATUS. WILLIAM WISHART, Beloit, Wis., assignor to National Refrigeration Corporation, Beloit, Wis., a Corporation of Delaware. Filed Mar. 14, 1927. Serial No. 175,038. 6 Claims. (Cl. 62—116.)



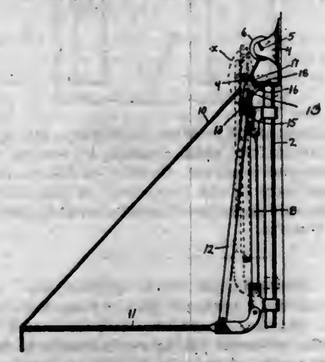
1. The combination with a refrigerating cabinet comprising a cooling chamber the front wall of which is formed by swinging doors and a permanent mullion, an apparatus chamber beneath the cooling chamber, a partition permanently separating said chambers, said partition being provided with a forwardly opening slot at one side of said mullion, a refrigerating apparatus disposed in the apparatus chamber, an evaporator disposed in said cooling chamber behind and in alignment with said mullion, and pipes extending through said slot and permanently connecting said apparatus and evaporator, said slot being of sufficient width to permit bodily lateral movement of the condenser, compressor, evaporator and pipes so as to dispose the evaporator at one side of the mullion thereby permitting the apparatus as a unit to be bodily withdrawn from the cabinet in a forward direction.

1,758,244. AUTOMATIC WINDOW AWNING. FREDERICK A. ANTON, Topeka, Kans. Filed Feb. 14, 1927. Serial No. 168,035. 7 Claims. (Cl. 156—44.)



4. In an awning, a support, an awning frame for sliding on said support, a visor frame pivoted to said awning frame, a collapsible brace between said visor frame and awning frame, a lever pivoted intermediate its length to said awning frame and being adapted to trip said brace when the awning frame has reached a prescribed point in its travel, and an extension on said lever to support the awning frame during the tripping of said visor brace.

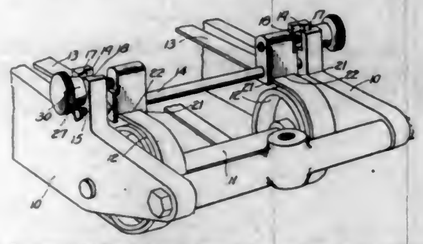
1,758,245. WINDOW AWNING. FREDERICK A. ANTON and CHARLES W. HARVEY, Topeka, Kans.; said Harvey assignor to Topeka Tent & Awning Company, Topeka, Kans., a Corporation of Kansas. Filed May 31, 1927. Serial No. 195,178. 3 Claims. (Cl. 156—44.)



2. In an awning, a support, an awning frame for sliding on said support, a visor frame pivoted to said awning

frame, means for locking the visor frame against collapse until the awning frame has reached a predetermined point in its upward travel, said means comprising a member pivoted to the awning frame and a second member pivoted to the visor frame, the two members being pivotally interconnected, and stop means for limiting movement of the member pivoted to said visor frame, one of said members being integrally formed with supporting means for the awning during the collapse of the visor frame.

1,758,246. BELT GUIDE. EDWARD M. BRACKETT and FRED M. BRACKETT, Topeka, Kans. Filed June 21, 1926. Serial No. 117,626. 4 Claims. (Cl. 74—51.)



1. In combination with spaced frame members, parallel, spaced shafts on the frame members, a pulley on one of said shafts, a block slidably mounted on the other shaft having spaced ears for engaging a belt traveling over the pulley, a slotted bracket on one of the frame members, and an adjusting member, rotatably anchored and vertically movable in said bracket and having threaded engagement with said block.

1,758,247. PROCESS OF UTILIZING SPENT LIME COOKING LIQUORS IN THE MANUFACTURE OF PAPER. ALBERT L. CLAPP, Danvers, Mass. Filed Feb. 14, 1927. Serial No. 168,225. 8 Claims. (Cl. 92—21.)

1. A process which comprises beating cellulosic fibrous material in the presence of spent lime cooking liquor, running the beaten material off on a paper machine, and treating the paper with sodium silicate solution.

7. A process which comprises beating cellulosic fibrous material in the presence of spent lime cooking liquor, and running the beaten material associated with its cooking liquor off on a paper machine.

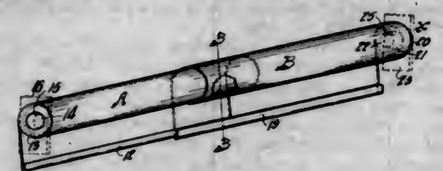
1,758,248. PROCESS OF TREATING DRY STEREOTYPE MATRICES. ALBERT W. COCHRAN and HENRY W. DEWEY, Portland, Oreg. Filed Feb. 8, 1928. Serial No. 252,936. 5 Claims. (Cl. 41—25.)



1. In the process of making stereotypes, the method of preparing the matrix which consists in coating the face thereof with zinc stearate, thereby to fill in the interstices of said face in the "roasting" of the matrix, and rendering the said face smooth, unbroken and non-adherent to the cast thereon.

1,758,249. PROTECTOR FOR CURTAINS. ARTHUR STANLEY DAVIES, Cleveland, Ohio. Filed Feb. 13, 1928. Serial No. 254,034. 6 Claims. (Cl. 156—10.)

4. A curtain protector having two members in telescopic relation with each other, each of said members supportable on one of a pair of positionally fixed spaced brackets supporting a removable curtain roll each of said members being of substantially spiral form cross-sectionally and open at an apron formed on one side, one edge of each of said members, beads formed on both longitudinal edges of



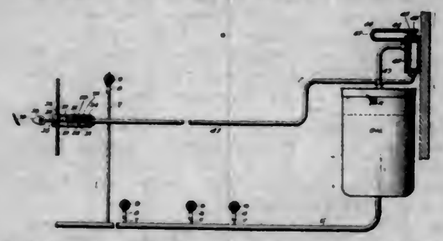
both of said members, the beads on one of said members in telescopic relation with the beads on the other one of said members and an end wall on each of said members and having means to engage the corresponding one of said brackets.

1,758,250. LUBRICATING SYSTEM. ERNEST W. DAVIS, Oak Park, Ill., assignor to Alemite Corporation, Chicago, Ill., a Corporation of Delaware. Filed Sept. 23, 1925. Serial No. 58,130. 2 Claims. (Cl. 221—47.4.)



1. A lubricant dispensing coupling comprising a barrel, a supply member, a two-piece nipple of relatively small bore swiveled at one end to said barrel and at the other end to said member, and a sleeve carried by said barrel and housing said nipple.

1,758,251. LUBRICATING SYSTEM. ERNEST W. DAVIS, Oak Park, Ill., assignor to Alemite Corporation, Chicago, Ill., a Corporation of Delaware. Filed July 24, 1926. Serial No. 124,745. 9 Claims. (Cl. 184—7.)

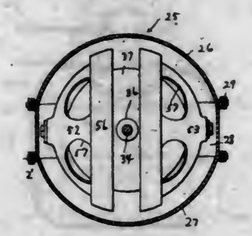


1. The combination with a vehicle comprising a chassis having bearings to be lubricated and a motor for driving said vehicle, of means for lubricating said chassis bearings, comprising a receptacle for holding the lubricant, conduits leading from said receptacle to the various bearings to be lubricated, apportioning devices connecting said conduit with said bearings, an air pump driven by said motor, a conduit for conducting air under pressure from said pump to said receptacle, and temperature responsive means for controlling the pressure of the air in said receptacle to maintain said pressure inversely proportional to the temperature to which said lubricating means is subjected.

1,758,252. VARIABLE-SPEED-TRANSMISSION MECHANISM. CUMMINGS GARDNER, Inglewood, Calif., assignor to Automatic Transmission Corporation of America, Wilmington, Del. Filed Feb. 3, 1928, Serial No. 251,632. Renewed Aug. 7, 1929. 2 Claims. (Cl. 74—34.)

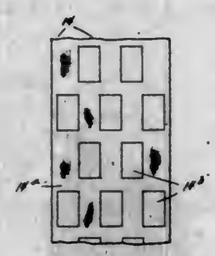
1. In a variable speed transmission mechanism, a casing, a drive shaft extending into one side thereof, a driven

shaft extending into the opposite side of the casing, an internal gear secured on the inner end of the driven shaft for rotation therewith, arms extending laterally from the inner end of the drive shaft, pinions carried by the outer ends of the arms for engagement with the annular or internal gear to drive the driven shaft with the same speed as the drive shaft, fly wheel controlled means within the



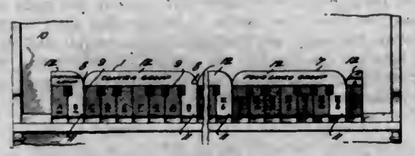
casing for varying the speed of rotation of the driven shaft coincident with the load placed thereon, said means including a spider loosely mounted on the inner end of the drive shaft, a spur gear formed on the spider for engagement with the driving pinions, laterally extending stub shafts associated with the spider, and opposed fly wheels adapted for rotation on the outer ends of the respective stub shafts.

1,758,253. BRAKE. TALMA T. GREENWOOD, East Templeton, Mass. Filed Sept. 30, 1927. Serial No. 223,163. 4 Claims. (Cl. 188—251.)



1. A friction lining for a brake having a friction face composed of two materials characterized by one having decreased and the other increased frictional effect when wet and present in such proportions that the combined frictional effect is practically the same whether the lining is wet or dry.

1,758,254. PIANO-KEYBOARD-INSTRUCTION CHART. JOSEPHINE WATROUS HAZEN, Portland, Oreg. Filed July 25, 1927. Serial No. 208,296. 3 Claims. (Cl. 84—471.)



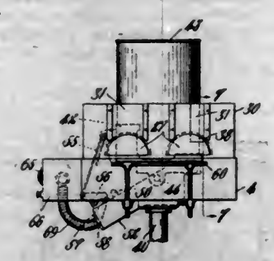
2. A chart for designating the keys of a piano and like instrument comprising an elongate strip of material adapted to be stood on the keys against the name-board of the instrument, the surface of the strip being divided into consecutive sections, each spanning the keys constituting an octave, such sections being lineally subdivided into smaller sections corresponding with the consecutive keys of an octave, the white key-sections of the octave being distinguished from each other by differentiating surfacing joined to a uniform distinguishable band-like strip extending across the top surface of the entire octave section, the surface of one end-key section of each octave section blending with said band-like strip, and the octave sections terminating on receding curves, whereby visually to tie the key-sections of the respective octave-sections together.

1,758,255. ELECTROLYTIC CELL. ALFRED ERNEST HUDD, Wallasey, England, assignor, by mesne assignments, to Automatic Electric Inc., Chicago, Ill. Filed Nov. 9, 1925, Serial No. 67,964, and in Great Britain Dec. 4, 1924. 4 Claims. (Cl. 175—316.)



1. In an electrolytic cell, a saturated solution of potassium hydrate pure by alcohol and a pair of mild steel plates immersed in said solution.

1,758,256. SHOE HEATER. MELVIN O. JENNINGS, Arlington, Mass., assignor to Harry H. Beckwith, Brookline, Mass. Filed Jan. 31, 1925. Serial No. 6,158. 2 Claims. (Cl. 12—1.)

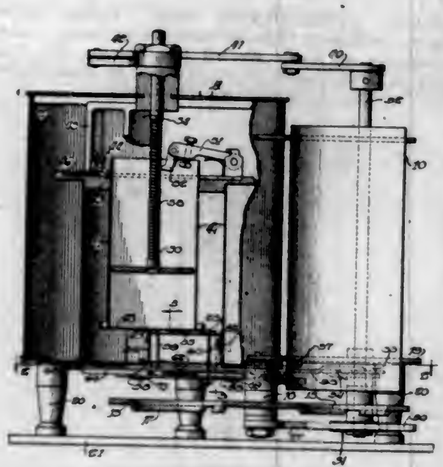


2. A device of the class described comprising an open topped receptacle, a heating unit in said receptacle formed as a flat horizontal plate, a trough fixed to said heating unit along one side of said receptacle and of less width than said unit, means for maintaining water in said trough to a predetermined level, said receptacle having a marginal ledge, and a hood having downwardly extending walls seated on said ledge and on one side of said trough, said hood having an opening in the wall remote from said trough through which the toe of a partly finished shoe may be inserted.

1,758,257. BUTTER DISPENSER AND CUTTER. THOMAS KASKOURAS, Chicago, Ill. Filed Sept. 16, 1922. Serial No. 588,630. 20 Claims. (Cl. 31—6.)

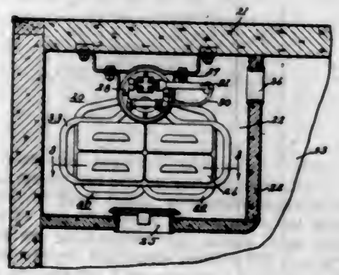
1. In a machine of the character described, the combination of a butter container, butter severing mechanism

arranged adjacent the container, a container in which dishes to be filled are confined, means for extracting a dish from said dish container, said means providing means for supporting a dish and being rotatable from the container to the severing mechanism to convey a dish from the container to the severing mechanism and having means for



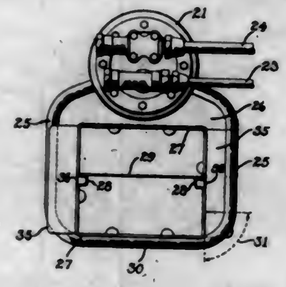
preventing the discharge of a dish from the dish container, said severing mechanism including a stationary cutting member and elements which are movable with respect to said stationary cutting member to free the butter from said stationary cutting member upon the operation of said first mentioned means.

1,758,258. REFRIGERATING APPARATUS. LLOYD M. KEIGHLEY, Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation, a Corporation of Delaware. Filed July 30, 1927. Serial No. 209,553. 18 Claims. (Cl. 62—95.)



5. In a refrigerating apparatus, a refrigerating element comprising a plurality of duct loops, one group of said loops being in longitudinal alignment to form a compartment and another group of said loops being in longitudinal alignment off set from the first group to form a second compartment, and portions of the loops in one group being in alignment longitudinally of the compartments with portions of the loops of the other groups.

1,758,259. REFRIGERATING APPARATUS. JESSE G. KING, Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation, a Corporation of Delaware. Filed Sept. 28, 1927. Serial No. 222,674. 12 Claims. (Cl. 62—95.)



1. A refrigerating element for refrigerating apparatus comprising in combination, opposed, vertically extending conduit means for circulating refrigerant arranged to define a freezing space, a support for an ice-making container within the space and remote from said conduit means, and heat conducting fin means connecting the support and the conduit means.

1,758,260. HOCKEY PAD. EMIL OTTO KNISCHEWSKY, Hamilton, Ontario, Canada. Filed Feb. 27, 1929. Serial No. 343,141. 1 Claim. (Cl. 2—22.)



In a pad of the character described an inner felt portion, an outer portion having a plurality of vertical pockets therein and stitched around its edge to the inner felt, a plurality of canes contained in said pockets, a pair of upper and lower felt inserts positioned between the outer portion and the inner felt so that the ends of the canes rest upon the inserts, a cotton wool filler contained between the outer portion and the inner felt and extending between the inserts, and a plurality of rows of stitching extending between the felt inserts, and passing through the outer portion, the cotton filler and inner felt.

1,758,261. TOOL AND ARTICLE HOLDER. JOHN ADDISON LELAND, Millers Falls, Mass., assignor to Millers Falls Company, Millers Falls, Mass., a Corporation of Massachusetts. Filed Jan. 15, 1923. Serial No. 612,586 2 Claims. (Cl. 279—36.)

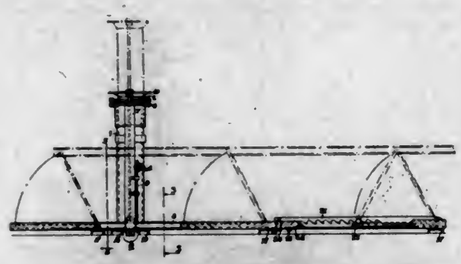
1. A chuck, including, in combination, a pair of jaws, and means for moving and supporting the same, each of said jaws including an interiorly transversely- and longitudinally-curved body flared towards its outer end and

being provided with a longitudinally-extending opening substantially centrally of its side edges and terminating



short of the outer end of said body, the outer ends of the openings and the edge-portions of said openings and of said jaws constituting bit-shank-engaging elements.

1,758,262. PORTABLE ELEVATOR. FRANK D. MAHONEY, San Anselmo, Calif. Filed Dec. 6, 1927. Serial No. 238,123. 10 Claims. (Cl. 254—91.)



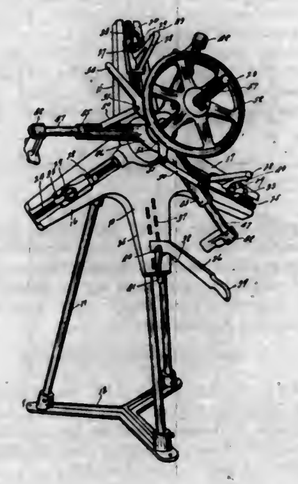
1. An elevator comprising a casing having a ram movably located therein, an upright rod attached at one end to the ram and provided with a roller at its other end, a horizontal bar supported by the roller and adapted to be raised and moved forwardly by the ram when elevated and means for supporting the ends of the bar, whereby the bar may be maintained in a substantially horizontal position.

1,758,263. FASTENING MEANS. OTTO H. MERZ, West Allis, Wis. Filed Jan. 20, 1927. Serial No. 162,222. 3 Claims. (Cl. 292—147.)



1. A fastening device for the purpose described comprising a body part having a longitudinally extending groove, a fastening bar slidable in said groove and having interfitting engagement at its sides with the groove sides, a spring secured to said body and extending at one end into said groove and against said fastening bar to yieldingly lock said bar in adjusted position, the other end of the spring being extended to form a wood engaging point, and an extension at the front end of said groove forming a rearwardly extending wood engaging point below said body.

1,758,264. TIRE-CHANGING MACHINE. ALBERT C. SENGER, Hamilton, Ohio. Filed Oct. 10, 1927. Serial No. 225,867. 11 Claims. (Cl. 157—1.)



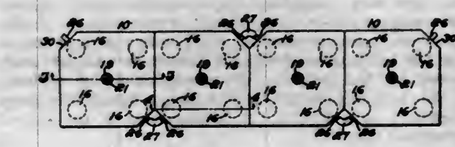
1. In a tire changer, a support, means on said support adapted to be moved into engagement with a rim, and a tire remover movably mounted on said support and having radially adjustable members engageable with a side of the tire on said rim, a pivoted lever for quickly simultaneously moving said adjustable members equally toward a common center, and threaded means for moving said remover in the direction of the axis of the rim to press the tire off of the rim, said tire remover having provisions whereby it may quickly be removed from said support.

1,758,265. LUBRICANT. SAMUEL T. SHERRICK, Denver, Colo., assignor to Edwin S. Kassler, jr., and Thomas P. Campbell, trustees, Denver, Colo. Filed Oct. 25, 1927. Serial No. 228,697. 11 Claims. (Cl. 87—9.)

1. A lubricant comprising bentonite, treated with an acid stronger than silicic acid, water and lubricating oil.

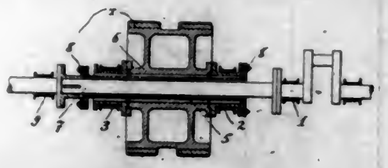
7. A lubricant composition comprising a gelatinous colloidal clay treated with an acid stronger than silicic acid whereby the latter is displaced as ortho-silicic acid, water and lubricating oil.

1,758,266. HEAT-EXCHANGE APPARATUS. ROLAND L. SMITH, Belmont, Mass. Filed Apr. 13, 1927. Serial No. 183,404. 9 Claims. (Cl. 257—152.)



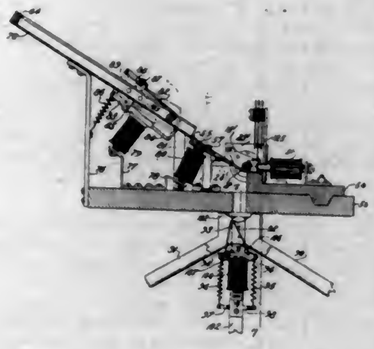
2. In heat exchange apparatus, the combination of a plurality of generally flat, rectangular, hollow units disposed edge to edge, each unit having two diagonally opposite oblique corners, one presenting an inlet and the other an outlet, the inlet of one unit being adjacent the outlet of the next adjacent unit, and a conduit connecting said inlet with said outlet.

1,758,267. RECIPROCATING STEAM ENGINE. HANS WACH, Wesermunde-Lehe, Germany. Filed Sept 15, 1926. Serial No. 135,657. 5 Claims. (Cl. 74—7.)



1. In a reciprocating steam engine and turbine power plant, an engine shaft for receiving power from the engine, a hollow shaft adapted to receive power from the turbine and concentric with said engine shaft, and means operatively connecting said engine shaft and said hollow shaft comprising a flexible member.

1,758,268. MEASURING AND SORTING DEVICE. RALPH W. WAGNER, Chicago, Ill., assignor, by mesne assignments, to Automatic Electric Inc., Chicago, Ill., a Corporation of Delaware. Filed Oct. 22, 1925. Serial No. 64,278. 1 Claim. (Cl. 177—351.)



In a device for measuring lengths of magnetic material, a grooved rest for said material, an electro-magnet chuck, an energizing circuit for the electro-magnet thereof, an electro-magnetic measuring device, an energizing circuit for the electro-magnet of said device, a plurality of signal lamps, operating circuits for said lamps and controlled by said measuring device, means for first completing the energizing circuit of the electro-magnet of said chuck and then completing the energizing circuit of the electro-magnet of said device, said electro-magnetic chuck moving the magnetic material being measured into measuring position and cooperating with said rest to hold said material in that position, said measuring device controlling the operating circuits of said lamps to light the lamp individually indicative of the measurement of the length of magnetic material.

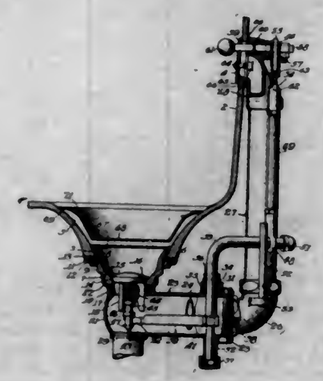
1,758,269. VACUUM-TUBE SOCKET. HENRY J. WIEGAND, Milwaukee, Wis., assignor, by mesne assignments, to Cutler-Hammer, Inc., Milwaukee, Wis., a Corporation of Delaware. Filed Sept. 10, 1926. Serial No. 134,697. 4 Claims. (Cl. 173—328.)

1. A vacuum tube support comprising a molded insulating base having a circular projection adapted to fit a correspondingly shaped opening in a panel, means for securing said base to the inner surface of said panel, said base having a plurality of openings adapted to receive predetermined prongs of a vacuum tube, a plurality of resilient contact clips having straight portions secured to the lower surface of said base, said base having a plurality of radial slots, said clips having upwardly extending reflexed portions adapted to be positioned by said slots, said reflexed



portions of said clips being normally biased across the openings in said base, means for limiting the movement of said reflexed portions under the action of said bias, said means comprising lugs or projections on said reflexed portions, and shoulders formed by said slots with which said lugs are adapted to engage, said lugs being movable out of engagement with said shoulders and against said bias upon engagement of said reflexed portions by the prongs of a vacuum tube.

1,758,270. WASTE MECHANISM FOR PLUMBING FIXTURES. ROY H. ZINKIL, Oak Park, Ill., assignor to Crane Co., Chicago, Ill., a Corporation of Illinois. Filed May 6, 1929. Serial No. 360,789. 4 Claims. (Cl. 4—200.)

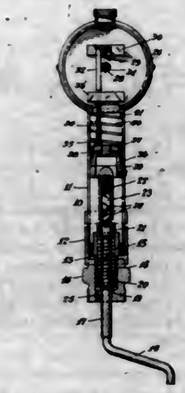


1. In combination, a plumbing fixture having waste, a spud connected to said waste and overflow orifices, piping including a horizontal portion and a vertical portion connecting said orifices, a valve for closing said waste orifice, a reciprocable rod extending externally of and substantially parallel to said vertical pipe portion, a second rod mounted transversely of said horizontal piping portion and having connection with the first said rod for reciprocation thereby, means connecting said valve and said second rod for raising and lowering said valve to open and close said waste orifice as said second rod is reciprocated, and means adjacent said overflow orifice for reciprocating the first said rod.

1,758,271. ENGINE-TESTING GAUGE. GEORGE ZITZMANN, Yonkers, N. Y., assignor to Automatic Motor Control Corporation, New York, N. Y., a Corporation of New York. Filed Feb. 8, 1926, Serial No. 86,764. Renewed July 17, 1928. 2 Claims. (Cl. 73—51.)

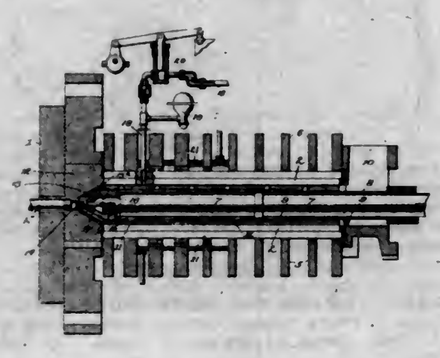
1. In an engine gauge, a housing adapted for attachment in an opening of an engine cylinder, indicating means carried by said housing, a rack bar within said housing and operatively connected with said indicating means and being

the only operating member co-operating directly with the indicating means, and operating mechanism co-operating



with said rack bar, said operating mechanism comprising pressure-actuated means mounted within the housing and engine-piston-actuatable means mounted within the housing.

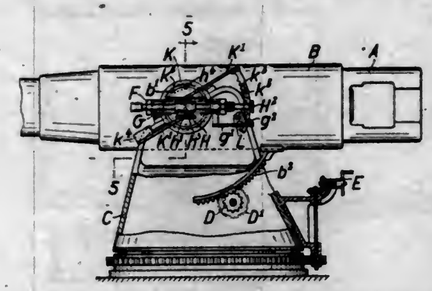
1,758,272. PROCESS FOR PRODUCING CEREAL FOODS. RAYMOND T. ANDERSON, Cleveland, Ohio, assignor to The V. D. Anderson Company, Cleveland, Ohio, a Corporation of Ohio. Filed Oct. 9, 1926. Serial No. 140,658. 5 Claims. (Cl. 99—11.)



1. That process of producing a food product which consists in subjecting the material to a high degree of mechanical pressure whereby heat is generated therein; and forcing water into the mass while under compression and in its heated condition.

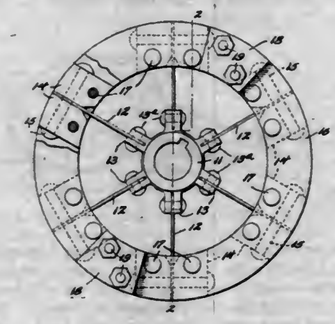
1,758,273. SIGHTING DEVICE FOR GUNS. JULIUS BECKER, HEINRICH JUST, and HERMANN HORT, Essen, Germany, assignors to Fried. Krupp Aktiengesellschaft, Essen-on-the-Ruhr, Germany. Filed July 28, 1927, Serial No. 209,119, and in Germany July 30, 1926. 8 Claims. (Cl. 33—49.)

1. In a sighting device subjected to rocking movements comprising a frame rotatable around a normally vertical axis, an elevation member rotatable on said frame about an axis arranged at right angles to the axis of rotation of said frame, means for adjusting said member about its axis for elevation, a bearing member, a cardanic suspension for said bearing member having an intermediate member interposed between said bearing member and said elevation member, said intermediate member being rotatable relative to the elevation member about the outer cardanic axis arranged at right angles to the axis of rotation of the elevation member, said bearing member being rotatable relative to the intermediate member about the inner cardanic axis arranged at right angles to said outer axis, sighting means carried by said bearing member establishing a sighting line the main direction of which is at right angles to the inner cardanic axis, means for stabilizing the bearing



member and thus the sighting line in space against elevational movements due to the rocking movements of the device, an index member rotatable about the inner cardanic axis relative to said bearing member and said intermediate member and means for adjusting said index member relative to one of said two members according to the firing angle corresponding to the range, the other of said two members carrying a corresponding index member adapted to register with said first-named index member.

1,758,274. TORSIONAL-VIBRATION ELIMINATOR. GEORGE S. BUTENKOFF, Detroit, Mich. Filed July 20, 1927. Serial No. 207,230. 7 Claims. (Cl. 74—6.)

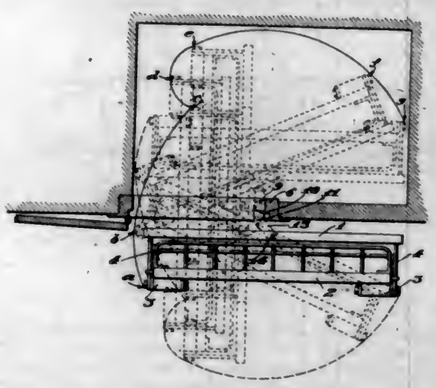


1. A device of the character described, comprising in combination, a rotatable shaft which is subject to torsional vibration, a weighted ring surrounding said shaft and spaced therefrom, a hub secured to said shaft for rotation therewith, and a plurality of circumferentially flexible spokes rigidly connected to said ring and to said hub, whereby the torsional vibration of said shaft is damped by said weighted ring and flexible spokes.

1,758,275. CLOSETABLE FOLDING BED. HARRISON U. CRAIN, St. Louis, Mo. Filed Aug. 15, 1924, Serial No. 732,279. Renewed Oct. 9, 1929. 1 Claim. (Cl. 5—172.)

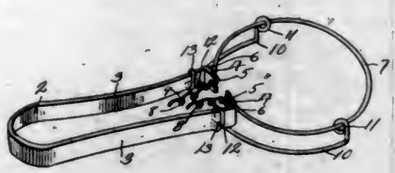
In a bed structure of the character described, a vertical shaft, means by which the shaft is rotatably supported substantially centrally of the jamb of a doorway, means self-contained within the supporting means and engageable with a stop on the shaft for limiting the rotative movement

of said shaft to substantially one-half turn, a plurality of parallel horizontal arms fixed on said shaft to swing in unison about the axis thereof so as to extend transversely of the jamb in their opened and closed positions respectively, a second vertical shaft, means by which the second shaft is rotatably supported on said parallel arms, means self-contained within said last mentioned supporting means and engageable with a stop on the second shaft for limiting



the rotative movement of said second shaft to substantially one-quarter turn on said arms, a second plurality of parallel horizontal arms fixed on said second shaft so that, at the limit of their swinging movement, they extend at an equal angle on either side of the longitudinal axes of said first mentioned arms, and a bed frame proper hingedly mounted to swing about a vertical axis on said second mentioned arms.

1,758,276. JAR AND CAP HOLDER. WILLIAM E. CULP, Monon, Ind. Filed July 24, 1929. Serial No. 380,650. 3 Claims. (Cl. 81—3.2.)

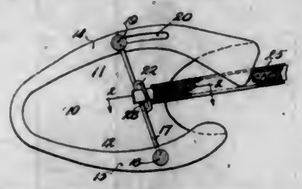


2. A receptacle tool comprising a U-shaped handle member formed from flexible material, the arms of said handle member terminating in inwardly extending notched arms, an annular contractible flexible member adjacent the ends of the notched arms, said contractible member having ends, integral enlargements carried by said ends, said ends being adapted to be received in the notches of the notched arms, flexible arcuate arms carried by the handle arms and terminating at opposite sides of the contractible member, upwardly extending arms carried by said last named arms and eyes carried by said upwardly extending arms and through which the opposite sides of the contractible member extends.

1,758,277. SUBSTITUTED ARYLSULPHONIC ACIDS AND PROCESS OF MAKING SAME. KARL DAIMLER and GERHARD BALLE, Hochst-on-the-Main, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Mar. 18, 1926, Serial No. 95,770, and in Germany Apr. 1, 1925. 11 Claims. (Cl. 260—159.)

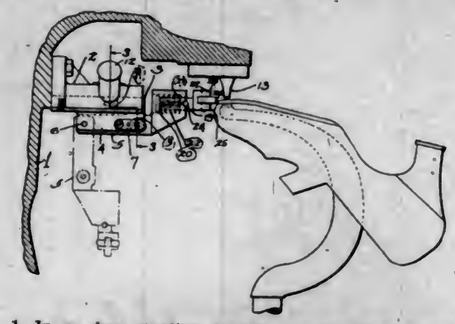
8. As new products, naphthalene-polysulphonic acids which are substituted by at least one purely aliphatic alkyl group having more than two carbon atoms.

1,758,278. SHOE FORM. WILLIAM J. DE WITT, Auburn, N. Y., assignor to Shoe Form Co. Inc., Auburn, N. Y., a Corporation of New York. Filed Dec. 20, 1928. Serial No. 327,400. 13 Claims. (Cl. 12—128.2.)



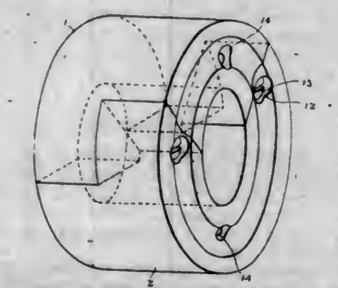
1. An expansible shoe form comprising a hollow thin walled member adapted to enter the toe of a shoe and having side walls, connecting means movable to expand or contract the side walls of the member and being attached thereto, and a thrust bar pivotally joined to and adapted to move said connecting means, said connecting means including barriers which limit the lateral movement of said thrust bar thereon.

1,758,279. GAUGE FOR SHOE-STAPLER MACHINES OR THE LIKE. ERNEST DUNFORD, St. Louis, Mo., assignor to Landis Machine Company, St. Louis, Mo., a Corporation of Missouri. Filed June 7, 1929. Serial No. 369,070. 12 Claims. (Cl. 1—19.)



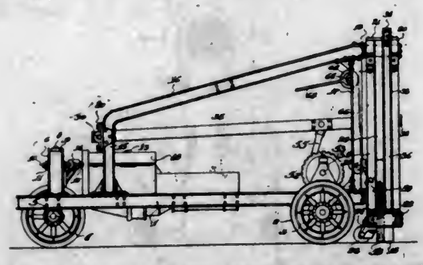
1. In a shoe stapling machine or the like, a single gauge block, a member mounting said block and movable to and from a position in which said block may function, and means for adjusting said block horizontally and vertically on said member.

1,758,280. ROLLER FOR TRAVELING CONVEYERS. DAVID T. EVANS, Toronto, Ontario, Canada. Filed May 17, 1929. Serial No. 363,956. 7 Claims. (Cl. 193—37.)



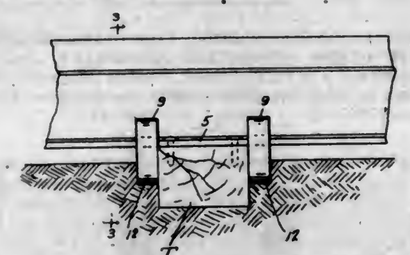
1. A roller for traveling conveyers formed of two separable members adapted to be separated radially and having co-mating bevelled surfaces adapted to direct the members to a centred position and means independent of said bevelled surfaces for securing said members together against radial displacement.

1,758,281. ROAD TAMPINC AND MAINTENANCE MACHINE. WALTER W. FOSTER, Wichita Falls, Tex. Filed May 11, 1928. Serial No. 276,825. 8 Claims. (Cl. 94—49.)



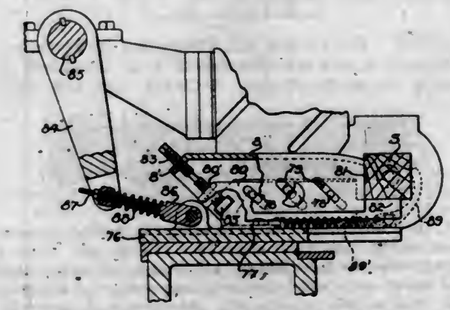
1. A machine and apparatus of the character described including a wheeled frame and a tamping bar arranged at the end of said frame for vertical reciprocation; means for operating said bar, and an auxiliary tamping member co-operating with said bar, and adapted to be operated thereby when the latter moves beyond its normal limit of travel.

1,758,282. RAIL CHAIR. JOSEPH D. GATCH, Wiggins, S. C. Filed July 2, 1929. Serial No. 375,360. 1 Claim. (Cl. 238—299.)



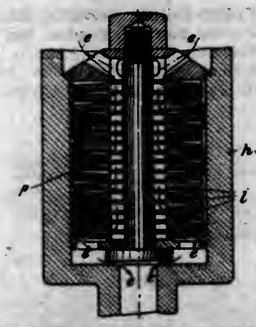
A rail chair of the class described comprising an oblong plate with a pair of integral jaws formed on the forward marginal edge thereof and extending forwardly, upwardly and then rearwardly and downwardly over the plate for engaging the base of the rail with their free end portions, the other end of the plate being thickened to form a transverse shoulder, and ribs formed under the side edges of the plate, intermediate portions of the ribs being separated from the plate and bowed downwardly, said plate having openings extending therethrough and through the shoulder and also openings extending therethrough one and adjacent each jaw.

1,758,283. TURNING LATHE. FRED M. GILMORE and STEVE FRENCH, Seattle, Wash. Filed June 2, 1927. Serial No. 195,881. 3 Claims. (Cl. 142—20.)



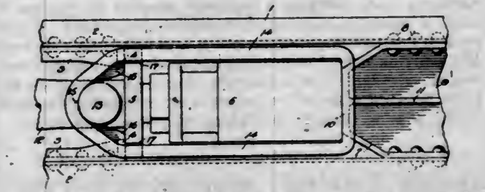
1. The method of operating high speed turning lathes which consists in first lightly setting the centers in and to support the blank for rotation followed by a pause in the setting movement of the centers, giving the blank a twirling movement during said pause and by means independent of the action of the centers, and then completing the setting of the centers.

1,758,284. FILTER FOR LIQUIDS. ALFRED GRØNNING, Hellerup, near Copenhagen, Denmark. Filed Sept. 18, 1927, Serial No. 219,334, and in Denmark July 25, 1927. 5 Claims. (Cl. 210—178.)



1. Apparatus of the kind described for straining or filtering liquids, consisting of a plurality of superposed or juxtaposed plates having raised portions which are shaped to form a narrow passage between adjacent plates over the said projecting or raised portions, the said passage being substantially zig-zag which connects a series of inlet channels with a series of outlet channels for the liquid between the raised portions.

1,758,285. DRAFT RIGGING. BYERS W. KADEL, Baltimore, Md., assignor, by mesne assignments, to The Symington Company, a Corporation of Maryland. Filed May 6, 1921. Serial No. 467,349. 4 Claims. (Cl. 213—66.)



1. In a draft rigging, the combination with a coupler having oppositely disposed pivot bosses formed thereon, of a cushioning mechanism therefor, stops for said mechanism, and means for operatively connecting the coupler to said mechanism, said means including a pair of independent vertically separated horizontally disposed yoke members surrounding said cushioning mechanism.

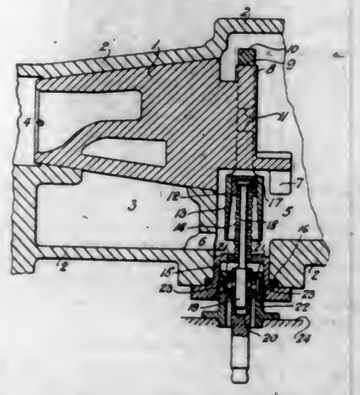
1,758,286. FACE-TREATING DEVICE. THEODORE H. LARSON, Chicago, Ill. Filed Dec. 16, 1927. Serial No. 240,351. 7 Claims. (Cl. 128—254.)



1. A face treating device comprising a front mask section constructed of velvet, a buckram lining therefor, a

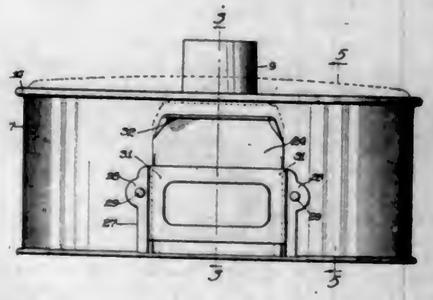
rear mask section constructed of buckram, a felt lining therefor, an electrical heating element secured to the rear mask section, an electric cord and plug connected with said heating element, means for securing the mask sections together to enclose the heating element, a marginal pad formed on the felt lining of the rear mask section to space the mask from the face of a wearer, and means connected to the connected mask sections to permit the device to be held in position upon the face of a patient.

1,758,287. FLUID-TIGHT MOTION-TRANSMITTING DEVICE. Joseph Lawson, London, England, assignor to Asiatic Petroleum Company, Limited, London, England. Filed June 18, 1928, Serial No. 286,478, and in Great Britain June 29, 1927. 20 Claims. (Cl. 221—100.)



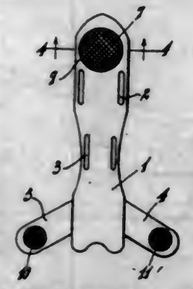
1. The combination of a self-contained mechanical unit having a body defining a chamber adapted to contain a fluid, a second unit external to said self-contained unit, a flexible tube sealing an aperture in said body and a motion transmitting device comprising detachably interconnected means external to said chamber, for transmitting movement between said self-contained and external units, said device passing through and being secured to said tube.

1,758,288. CAKE PAN. Mella Leucht, Terre Haute, Ind., assignor to Edward Katzinger Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 13, 1924, Serial No. 755,615. Renewed Oct. 23, 1929. 21 Claims. (Cl. 53—6.)



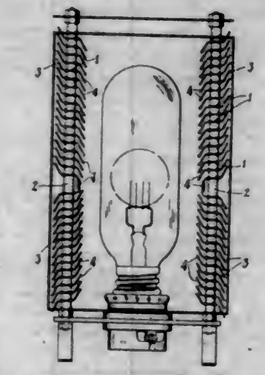
3. A cake pan comprising a side wall, a bottom wall, said side wall having an opening therein, a slidable plate for covering said opening, and a one-piece guide for guiding both lateral edges of said plate.

1,758,289. BUOYANT BATHING APPLIANCE. James W. Loy, Long Beach, Calif. Filed Sept. 4, 1929. Serial No. 390,264. 3 Claims. (Cl. 9—21.)



1. A buoyant bathing appliance comprising a board formed of a buoyant material, a pair of outwardly extending stabilizing plates adjacent the rear end of said board, said board having a hole adjacent the front end thereof, a netting secured to the board over said hole and an inflated ball of greater diameter than the hole positioned partly in the hole and held by the netting, said plates each having a hole therein, an inflated ball of greater diameter than the last named holes and netting over said last named balls whereby they are held in position.

1,758,290. LANTERN BODY FOR CINEMATOGRAPH AND OTHER PROJECTION APPARATUS. William Eugene McCormack, Strand, London, England. Filed June 14, 1929, Serial No. 370,978, and in Great Britain June 29, 1928. 7 Claims. (Cl. 240—11.)



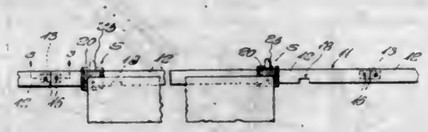
1. A lantern body for cinematograph and other projection apparatus comprising sides formed of spaced apart slats or louvres, the respective ends of which are bent longitudinally in opposite directions, one upwards and one downwards.

1,758,291. WARDROBE OR THE LIKE STRUCTURE. Richard T. McKnew, Washington, D. C. Filed July 17, 1929. Serial No. 378,950. 5 Claims. (Cl. 312—186.)



1. In a wardrobe or the like structure, having an open front and a back wall, means for closing said front, a shelf carried by said means, and a shelf arranged upon said back wall, said closing means being arranged to open into position substantially normal to said back wall, whereby the shelf on said means and the shelf on said back wall aline in substantial continuity.

1,758,292. SUPPORT FOR MAPS AND ANALOGOUS DEVICES. Roy M. Meyer and Levinus P. Denoyer, Chicago, Ill., assignors to Denoyer-Geppert Company, Chicago, Ill. Filed Jan. 3, 1928. Serial No. 244,349. 3 Claims. (Cl. 40—128.)

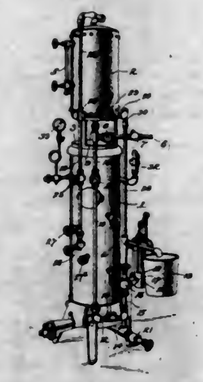


1. In a sheet suspending means, a block of material into which thumb tacks may be forced, a plate disposed vertically and contacting with the rear side of said block, means securing said plate and block together, and upper and lower hooks secured to and projecting rearwardly from said plate for engagement with an elevated track.

1,758,293. TARNISH-RESISTING SILVER AND SILVER PLATE AND PROCESS FOR PRODUCING THE SAME. William S. Murray, Utica, N. Y., assignor to Oneida Community Limited, Oneida, N. Y., a Corporation of New York. Filed Sept. 19, 1924, Serial No. 738,721. Renewed Oct. 3, 1929. 7 Claims. (Cl. 148—6.)

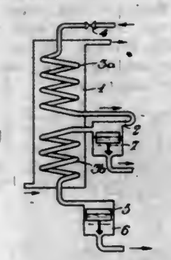
3. The process of treating silver to render it tarnish resisting which consists in subjecting the silver to the action of and impregnating it with a halogen element.

1,758,294. AUTOMATIC BOILER WATER FEEDER. Herbert Edward Page, Syracuse, N. Y., assignor to United States Hoffman Machinery Corporation, New York, N. Y., a Corporation of Delaware. Filed Aug. 4, 1926. Serial No. 127,121. 3 Claims. (Cl. 122—451.)



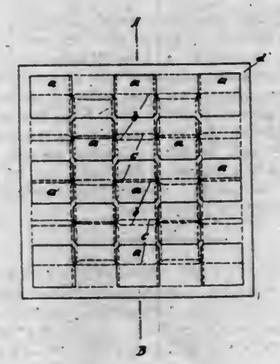
1. A water feeder for steam boilers comprising in combination a steam boiler; a water holding tank located at a level above the boiler; a valve vent pipe leading from the upper portion of the tank to the atmosphere; a valved connection leading from the lower portion of the tank to the lower portion of the boiler; a valved connection leading from the upper portion of the tank to the boiler and terminating in the latter about the normal water level thereof; and a valved connection extending from the tank to a water supply.

1,758,295. STEAM-HEATED APPARATUS. Curt Rosenblad, Sundsvall, Sweden. Filed Aug. 12, 1929, Serial No. 385,369, and in Sweden Aug. 25, 1928. 9 Claims. (Cl. 257—29.)



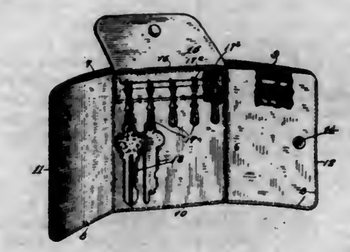
1. In a system comprising steam-heated apparatus having the total heat transmission surface divided into more than one section connected in series a throttled passage and after it a steam separator in series between all of the sections.

1,758,296. BODY ARMOR. Alfred Schaumann, Berlin-Friedenau, Germany. Filed Mar. 16, 1929, Serial No. 347,712, and in Germany July 12, 1927. 2 Claims. (Cl. 89—36.)



1. A body armor, comprising a number of flexible layers, plates of bulletproof material arranged in spaced relation upon each of said layers, said flexible layers being superposed so that the free spaces of each layer are covered by plates on the other layers.

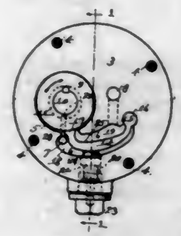
1,758,297. COMBINATION CASE. Leopold G. Stanley, Maplewood, N. J., assignor to Stanley & Stanley, Incorporated, New York, N. Y., a Corporation of New York. Filed June 20, 1927. Serial No. 200,178. 2 Claims. (Cl. 150—40.)



1. A combination bill and key case comprising outer and inner long layers attached together to form a long

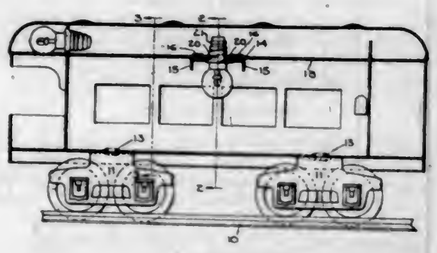
side-opening or bill-fold pocket and foldable as a whole in three sections, and key holding means mounted on one of said sections at the exterior side of the inner of said layers, and the middle section of the inner layer having a flap adapted to fold out and down to close the long pocket, and means for fastening such flap, whereby said pocket with the bills therein will surround and enclose the keys on said key holding means, while said flap closes the open side of the long pocket.

1,758,298. ROTARY PUMP. JOHN B. TEESDALE, Grand Rapids, Mich. Filed May 6, 1929. Serial No. 360,864. 7 Claims. (Cl. 103—124.)



1. In a pump of the character described: a body having a cross-sectionally round chamber and a passage communicating therewith; a rotor piston in the chamber; a gate in the passage movable into and out of fitting contact with the piston; an inlet port to the passage at one side of the gate; an outlet port from the passage at the opposite side of the gate admitting pumped fluid into the passage and pressing directly on the gate in the direction tending to move the same out of its said contact with the piston; means for normally holding the gate in contact with the piston.

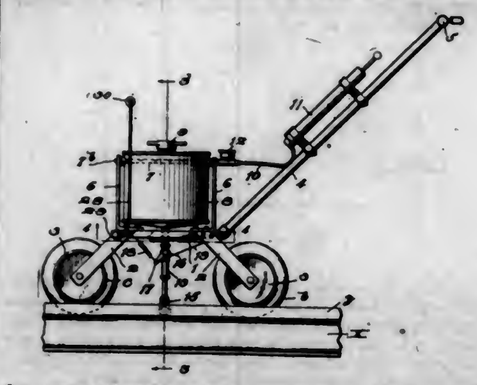
1,758,299. LAMP-SOCKET-FASTENING MEANS. WILLIAM E. THORN, Bridgeport, Conn., assignor to The Ives Manufacturing Corporation., Bridgeport, Conn., a Corporation of Connecticut. Filed Jan. 30, 1928. Serial No. 250,378. 4 Claims. (Cl. 46—48.)



1. In a toy of the class described, the combination with a metal member of a toy car having a hole therethrough, and the edges deflected to the sides to form a spiral thread, a lamp socket seated in the hole and engaging the thread, and lugs formed adjacent the hole and disposed to engage and hold the socket.

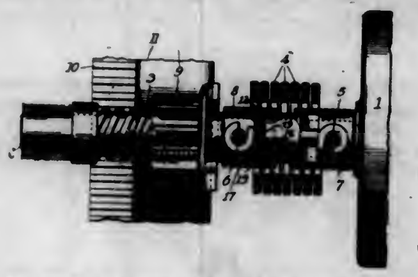
1,758,300. TRACK-OILING DEVICE. ALMON J. VAN DRESSER, New Orleans, La. Filed Dec. 8, 1927. Serial No. 238,661. 3 Claims. (Cl. 184—3.)

3. Rail lubricating apparatus comprising a wheeled support movable along a rail, a lubricant container, horizontal trunnions on which said container is mounted to swing, relative to said support, one of said trunnions being hollow, an air pump connected with said hollow trunnion



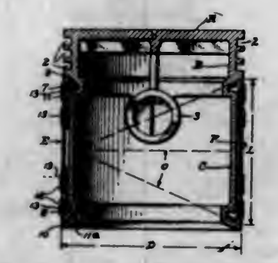
for compressing air in said container, a discharge pipe rigid with said container and swinging therewith, and means for swinging said container on its trunnions.

1,758,301. ENGINE STARTER. HENRY E. VAN NESS, Elmira, N. Y., assignor to Eclipse Machine Company, Elmira, N. Y., a Corporation of New York. Filed Feb. 7, 1923. Serial No. 617,426. 5 Claims. (Cl. 287—91.)



1. For use with a drive shaft, a sleeve having two parallel slots through its walls at right angles to its axis and an intervening weakened portion which is adapted to be displaced to engage such shaft.

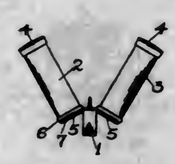
1,758,302. PISTON. CLINTON L. WALKER, Piedmont, Calif. Filed May 23, 1928. Serial No. 279,953. 2 Claims. (Cl. 74—108.)



1. A piston comprising a head and a skirt portion, said piston being constructed of an aluminum alloy and said skirt portion having an elongated recess formed therein, with angular seats at the upper and lower ends of the recess, and a metallic shell adapted to be received in the recess and having its major surface out of contact with

the skirt, said shell having angular faces formed at its opposite ends conforming to the angular seats in the recess and the angle employed being that angle whose tangent is equal to the difference between the longitudinal expansion of the piston portion between the angular seats and the longitudinal expansion of the shell member divided by the diametrical expansion of the skirt member minus the diametrical expansion of a cylinder bore when the piston and cylinder are subjected to operating temperatures.

1,758,303. LIP-STICK HOLDER. HENRY W. WILD, Waterbury, Conn., assignor to Scovill Manufacturing Company, Waterbury, Conn., a Corporation of Connecticut. Filed May 24, 1927. Serial No. 193,760. 3 Claims. (Cl. 220—32.)



1. In a lipstick holder, the combination of a central hollow guard sleeve, a pair of lip-stick containers each longer than the sleeve closed at their outer ends and opening at their inner ends into the sleeve, a bead at the inner end of each container, slots in each bead, and a projection on the sleeve at each slot passing through the slots and turned over to form a knuckle for hinging the containers to the edges of the sleeve.

1,758,304. SMOKELESS HEAT-ECONOMIZING APPARATUS FOR FURNACES OF ALL KINDS. AUGUSTE WINKLER, Bordeaux, France. Filed Mar. 12, 1925, Serial No. 15,088, and in France Aug. 26, 1924. 1 Claim. (Cl. 110—60.)

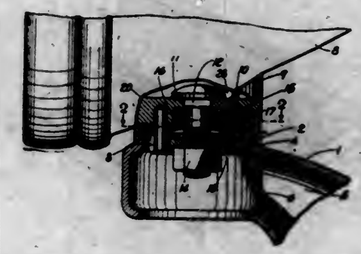


A smokeless heat economizer, comprising a mixing box, means for admitting air and steam to said box, a conduit connected to said mixing box, said conduit being formed of a plurality of hollow rectangular elements having parallel external abutting faces and lateral downwardly inclined orifices for the injection of the mixture from the interior of the elements, tie rods for maintaining said elements assembled, lateral slots on each element through which said rods pass, whereby each element may be independently removed when the tie rods are loosened, and means to insure a constant pressure of mixture at the orifices throughout the length of the conduit.

1,758,305. HEADLIGHT MOUNTING. KARL M. WISE, Buffalo, N. Y., assignor to The Pierce-Arrow Motor Car Company, Buffalo, N. Y., a Corporation of New York. Filed May 23, 1929. Serial No. 365,329. 4 Claims. (Cl. 240—57.)

1. In a headlight mounting, the combination with a headlight supported by and having limited universal move-

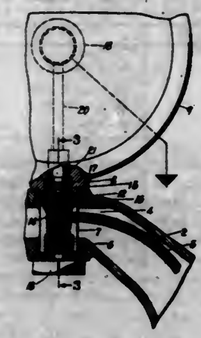
ment on a support, of conductor wires enclosed in said support, connector wires enclosed in said headlight, and means permitting the removal of said headlight from said sup-



port without necessitating the direct manual disconnection of said first named connector wires from said second named connector wires

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1,758,306. HEADLIGHT MOUNTING. KARL M. WISE, Buffalo, N. Y., assignor to The Pierce-Arrow Motor Car Company, Buffalo, N. Y., a Corporation of New York. Filed May 23, 1929. Serial No. 365,330. 5 Claims. (Cl. 240—57.)

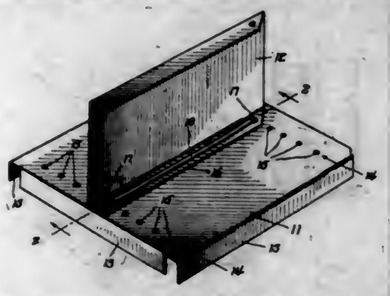


3. In a headlight mounting, the combination with a headlight and a support therefor having an opening extending therethrough and having a shoulder formed therein adjacent to said opening, of a slotted member secured to said headlight extending into said opening, an insulating member positioned in said slot and having an extended portion seated on said shoulder, a conductor wire enclosed in said support having a contact member secured in said insulating member and projecting thereabove, a conductor wire enclosed in said headlight having a terminal engaging said contact member, and a screw threaded into said slotted member for securing said headlight on said support and permitting the removal of the same from said support without necessitating the direct manual disconnection of said conductor wires.

1,758,307. SHELF CONSTRUCTION. JAMES E. BALES, Aurora, Ill., assignor to Lyon Metal Products, Incorporated, Aurora, Ill., a Corporation of Illinois. Filed Sept. 27, 1928. Serial No. 308,605. 8 Claims. (Cl 211—135.)

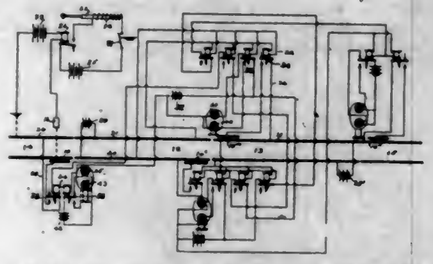
1. In combination, a shelf member, a second shelf member having a portion engaging the first shelf member and

means for fastening the shelf members together, said means including a locking portion having interlocking engagement with both said shelf members and a portion



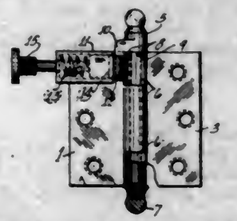
resiliently engaging one of the members whereby the locking portion is secured in interlocking relationship with the shelf members.

1,758,308. ELECTRIC TRAIN CONTROL. WILLIAM M. BECK, Elwood, Ind., assignor of one-half to Wilton L. Hibberd, Elwood, Ind. Filed Aug. 9, 1927. Serial No. 211,819. 4 Claims. (Cl. 246—69.)



1. In a block control system, the combination with a pair of rails forming a track, a ramp insulated from the track, a source of electric current permanently interconnected across said rails, a semaphore carrying means for selectively indicating occupied and unoccupied conditions of said track, a second source of current available to operate said semaphore means, and a relay interconnected across said rails; of a ramp switch controlled by said relay, said relay while under the influence of said first source of current affecting electrical circuits between said second source of current and said semaphore means to cause an unoccupied condition to be indicated, and said relay normally causing said ramp switch to remain open, and said ramp switch automatically directly connecting said ramp with one of said rails independently of said second source of current upon failure of said first source to affect said relay.

1,758,309. HOLDER FOR CASEMENT WINDOWS, DOORS, OR THE LIKE. LESLIE W BLOCK, Webster Groves, Mo. Filed Nov. 17, 1928. Serial No. 320,119. 4 Claims. (Cl. 16—141.)



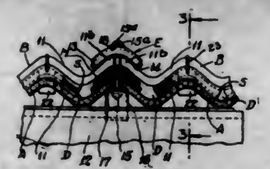
1. A holder for doors or casement windows comprising a member carried by the door or window and a member carried by the jamb, said members being normally apart and arranged whereby when said door or window is opened said members will move into engagement with one another to limit the opening movement thereof, a spring actuated bolt carried by and arranged substantially parallel to one of said members, and removed therefrom so that the other of said members may be positioned between said bolt and said member by which said bolt is carried when said door or window is opened whereby said members will be maintained in fixed relation to maintain said door or window in opened position.

1,758,310. AUTOMOBILE TIRE-RIM LUG. ARCHIBALD C. BREYER, Burlingame, Calif. Filed Sept. 11, 1929. Serial No. 391,826. 4 Claims. (Cl. 301—24.)



1. An automobile tire rim lug comprising a lug member pivotally mounted upon the felloe of a wheel adjacent a lug bolt thereof and pivotally movable in a plane parallel to the plane of the wheel into engagement with the bolt and a rim mounted upon the wheel; a nut mounted upon the outer end of the bolt; and a rib engaging a matching groove, said rib and groove being formed in concentric relation upon adjacent faces of the nut and lug member to hold the member against pivotal movement when the nut is tightened thereagainst.

1,758,311. CORRUGATED STRUCTURE. GEORGE BROWN, New York, N. Y., assignor to Craig and Brown Inc., a Corporation of New York. Filed Sept. 1, 1928. Serial No. 303,382. 4 Claims. (Cl. 108—16.)



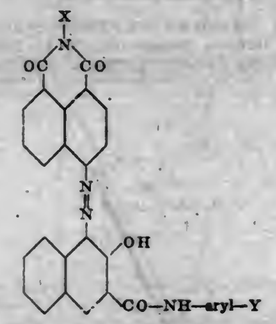
1. In a construction of the character described, a pair of corrugated sheets, positioned with their ends in overlapping relation having a space therebetween, and a filler comprising a plurality of identical members interposed between the lapped portions to form a joint, said members having their adjacent edges spaced from each other and forming drainage channels in the troughs of said corrugated sheets.

1,758,312. ELECTRICAL LINE APPARATUS. ELON J. DE RIGHT, St. Louis, Mo. Filed Aug. 16, 1928. Serial No. 300,103. 6 Claims. (Cl. 24—126.)

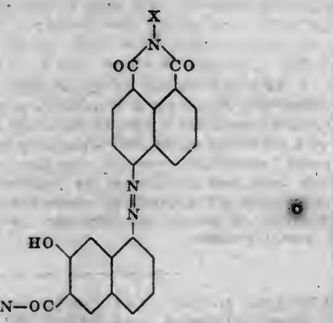
1. In a connecting device for stranded cable including a member having a tapered cable receiving opening, a wedging member for insertion in the opening, slidably disposed on the cable to be secured in said opening, and strand-engaging projections disposed on the wedging member.

1,758,313. AZO DYESTUFFS AND MATERIAL DYED THEREWITH. WILHELM ECKERT, Frankfort-on-the-Main-Hochst, and WERNER KIRST, Frankfort-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Dec. 3, 1928, Serial No. 323,555, and in Germany Dec. 10, 1927. 20 Claims. (Cl. 260—95.)

1. As new products, azo dyestuffs of the following formula:



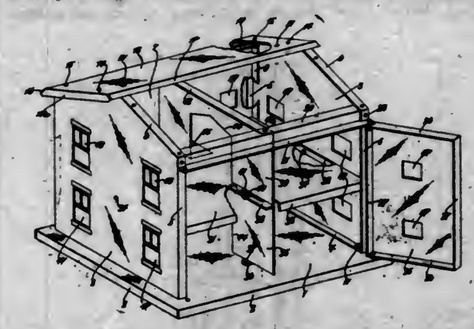
wherein X stands for hydrogen, alkyl, aryl or aralkyl, and wherein the aryl residue may be substituted or not but must contain no free sulfonic or carboxylic group and Y stands for hydrogen or the residue



wherein X has the same meaning as in the preceding formula, being claret, garnet, violet or violet-brown dyestuffs of good fastness to washing and chlorine and good to excellent fastness to light.

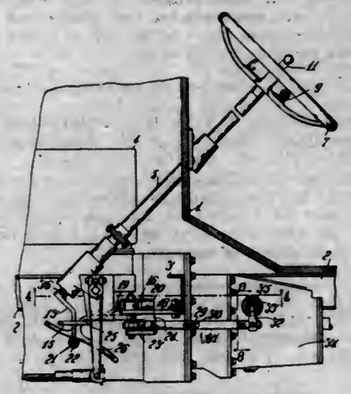
1,758,314. TOY HOUSE. JAMES HENLY FRIER, Jr., Webster Groves, Mo., assignor to John L. Mesker, St. Louis, Mo. Filed Sept. 27, 1928. Serial No. 308,703. 4 Claims. (Cl. 46—37.)

1. A device of the character described comprising a floor board, a pair of upright end plates, detachable elements fastening the lower edges of the end plates on the floor board, a rear plate having its ends abutting against the inner sides of the end plates, flanges on the rear edges of the end plates overlapping the rear sides of the ends of said rear plate, detachable means fastening said end plate in connection with said floor board, a flange along the upper edge of said rear plate, flanges along the upper ends of said end plates overlapping said flange on the upper edge of said rear plate, a rear roof plate seated upon said third-named flanges, fasteners passing through said roof plate and through the overlapping portions of said second and third-named flanges, a front roof plate overlapping the upper edge of said rear roof plate and removably attached to said end plates, a metallic strip connecting the upper corners of said end plates at the



front, a forwardly extending flange on said strip, and a door hinged to said last named flange and to said floor board.

1,758,315. GEAR CHANGE MECHANISM FOR AUTOMOTIVE VEHICLES. FRANK GIRARDI, Chicago, Ill., assignor to Edward B. Dublin, Chicago, Ill., and himself. Filed Aug. 17, 1928. Serial No. 300,162. 6 Claims. (Cl. 74—39.)

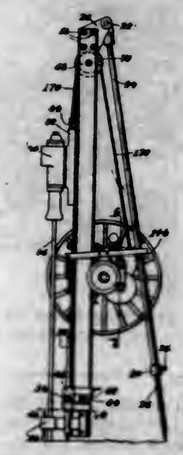


1. A change gear operating mechanism for automotive vehicles including a shaft extending through and rotatable and reciprocable relatively to the steering post, a lever associated with said shaft and the steering gear for rocking and reciprocating said shaft, a crank-arm at the lower end of said shaft, a rocking member mounted for pivotal movement on a vertical and a horizontal axis, a rod associating said member with the change gear lever of the change gear set of the vehicle, means effecting operative association of said member with said crank-arm for rocking said member on its horizontal axis, and a lever associated with said crank-arm and said member for rocking the latter on its vertical axis.

1,758,316. PORTABLE UNIVERSAL DRILL MOUNTING. CHARLES C. HANSEN, Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed Feb. 15, 1929. Serial No. 340,284. 3 Claims. (Cl. 255—51.)

1. A mounting for rock drills comprising a frame, a pair of legs secured to the frame at one end thereof, a leg secured to the opposite end, sockets attached to the frame and adapted to secure the legs in a plurality of positions, a rock drill mounted on the frame, an axle mounted on the frame, a pair of wheels mounted on the axle, a winch cooperating with the axle, a crank handle on one of the wheels, means adapted to operatively con-

nect the wheel and the axle to transmit power applied to the crank handle from the axle to the winch, means for moving the rock drill toward and away from the rock being drilled, said means comprising a pair of pulleys

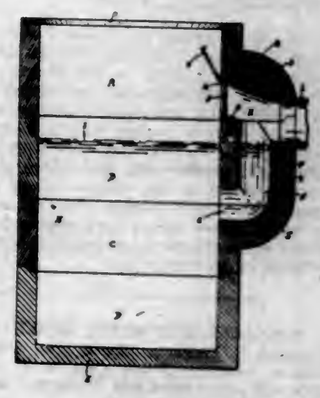


and a rope cooperating with the winch so that when the rope passes over both pulleys the rock drill is drawn toward the rock and when the rope passes over only the pulley farthest from the rock the drill is drawn from the rock when the winch is operated.

1,758,317. CLEANING AND POLISHING FLUID. STEVEN HARDY, New York, N. Y. Filed May 24, 1928. Serial No. 280,386. 1 Claim. (Cl. 87—5.)

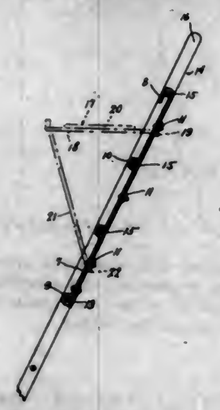
A cleaning and polishing fluid comprising the following ingredients in substantially the following proportions, 3 parts linseed oil, 1 part olive oil, 1 part oil of rosemary, 4 parts glycerine, 2 parts oil of cedar, 1 part banana oil and 12 parts spirits of turpentine.

1,758,318. CATCH BASIN. HARRY HAYLEY, Hurdmans Bridge, Ontario, Canada. Filed Mar. 5, 1929. Serial No. 344,501. 1 Claim. (Cl. 182—3.)



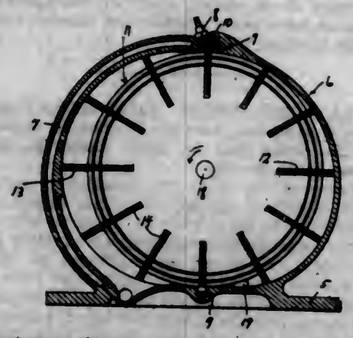
As an improved article of manufacture, a catch-basin of separately moulded, interlocking sections adapted to be built upon each other to make a complete unit, one of said sections providing a closed bottom for said unit, one of said sections having an integral lip outwardly formed at one side thereof, another of said sections having an integral portion outwardly formed at one side thereof and adapted to register in interlocking engagement over said lip, another of said sections having an integral cap outwardly formed at one side thereof and adapted to register in interlocked engagement over said portion, a drain-pipe opening being formed inwardly of the outer contour of said portion and said cap at the junction thereof, a by-pass opening formed in communication with said drain-pipe opening, downwardly through said portion and communicating with the interior of said unit at the junction of said portion and said lip, a clean-out opening formed in said cap at its junction with said portion and communicating from the interior of said unit to said drain-pipe opening and with the upper end of said by-pass opening and a closure member for normally closing the inlet to said clean-out opening.

1,758,319. LADDER-JACK-SUPPORTING DEVICE. WILLIAM B. HOLMES, Hammonton, N. J. Filed Mar. 2, 1929. Serial No. 343,966. 5 Claims. (Cl. 304—34.)



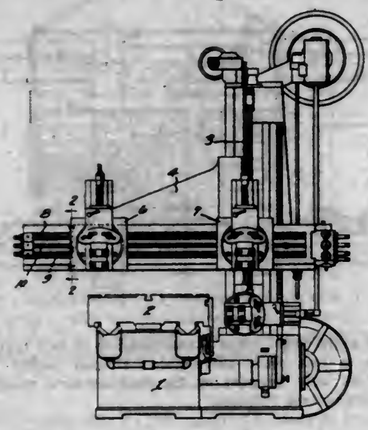
1. As a new product of manufacture, an attaching and supporting device for a workman's jack of the class described comprising a pair of duplicate side bars provided with attaching hooks, and a plurality of transversely disposed longitudinally spaced cross bars connected with the side bars and functioning as supplemental rungs, said cross bars being pivotally connected to the side bars, whereby to permit the structure to be folded into a compact package.

1,758,320. INTERNAL-COMBUSTION ENGINE. RAY C. HOSS, McClelland, Iowa. Filed May 11, 1929. Serial No. 362,218. 2 Claims. (Cl. 123—16.)



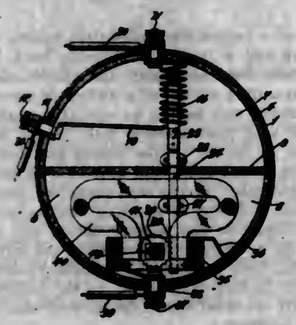
1. A rotary engine comprising a stator, a rotor, spring projected vanes on the roter, pockets in the periphery of the rotor between said vanes, a pocket at the inner side of the stator, each of said vanes being provided with a notch to permit the escape of burning gases from the preceding pocket to the succeeding pocket to ignite the latter.

1,758,321. RAIL-ADJUSTING MECHANISM. JACOB JENNE, Cleveland, Ohio, assignor to The Cleveland Planer Company, Cleveland, Ohio, a Corporation of Ohio. Filed June 11, 1928. Serial No. 284,435. 2 Claims. (Cl. 90—37.)



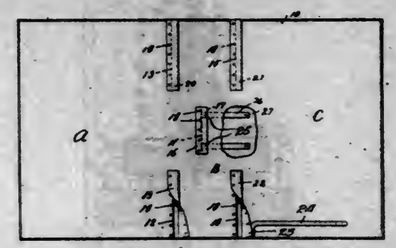
1. In combination in an open-side planer, an upright, a knee member vertically movable thereon, a rail member vertically slidably mounted on said knee member and adapted to carry a tool holding mechanism, means for securing said rail member and said knee member together in adjusted position comprising a plurality of vertical slots in one of said members spaced along the length thereof and a screw in each of said slots threaded into the other member, and a plurality of holding and adjusting systems at spaced points along said members; each comprising a slot in one of said members, opposed, threaded openings communicating with said slot, screws threaded in each of said openings, and an extension on and rigidly carried by the other of said members and received in said slot, said screws adapted to bear against said extension.

1,758,322. ELECTRICAL INSTRUMENT. KARL KLEIN, St. Louis, Mo. Filed July 23, 1928. Serial No. 294,829. 3 Claims. (Cl. 171—95.)



1. An electric instrument of the class described comprising a case separated into non-conducting compartments, dials carried in the case and visible through one wall thereof, a pair of indicators cooperating respectively with said dials, said indicators being co-axially alined, an electric actuator responsive to amperage located in one of said compartments for operating one of said indicators, and an electric actuator responsive to voltage located in the other of said compartments for actuating the other of said indicators.

1,758,323. COMBINATION SPREAD AND GARMENT. ARNOLD KORFF, New York, N. Y., assignor of one-half to Carl A. Loeb. Filed Aug. 7, 1928. Serial No. 297,973. 4 Claims. (Cl. 2—89.)

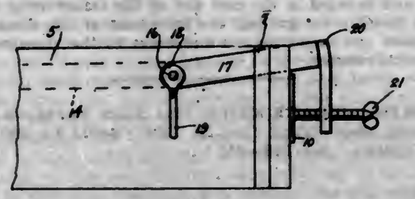


1. An article of manufacture consisting of a substantially rectangular piece of flexible material having a plurality of transversal incisions and serving in unfolded condition as a spread and in folded condition as a garment, one of said incisions serving to engage around the neck of the wearer and the other incisions forming sections foldable around the arms and trunk of the wearer, straps attached to one of the faces of said material and having means adapted to cooperate with cooperating means for retaining the section folded rearwardly around the trunk of the wearer when in folded position.

1,758,324. SULPHUR DYESTUFFS. ERWIN KRAMER, Cologne-Deutz, LUDWIG ZEH, Wiesdorf-on-the-Rhine, and BERNHARD BOLLWEG, Leverkusen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed June 18, 1928, Serial No. 285,201, and in Germany June 30, 1927. 4 Claims. (Cl. 260—17.)

4. The process which comprises reacting upon binaphthylendioxide with a sulphurating agent at a temperature between about 170 and 300° C.

1,758,325. END GATE. WILLIAM C. LAMKINS, Newport, Ark. Filed Apr. 23, 1929. Serial No. 357,575. 1 Claim. (Cl. 296—53.)

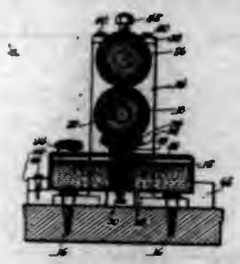


In combination, a wagon body including a pair of sides, an end gate having two pairs of cleats vertically disposed on the ends thereof in spaced relation to receive the ends of the sides, said gate having notches registering with the spaces between the cleats and formed in the upper edge of the end gate, levers pivotally mounted on the sides and adapted to be swung in a vertical plane into the notches and between the cleats, extensions depending from the rear ends of the levers and means carried by the extensions for engagement with the end gate for clamping the same against the sides and for retaining the levers in the slots.

1,758,326. DEVELOPING APPARATUS. ADOLPH LANGSNER, Chicago, Ill., assignor to Eugene Dietzgen Company, Chicago, Ill., a Corporation of Delaware. Filed Dec. 22, 1927. Serial No. 241,779. 13 Claims. (Cl. 95—89.)

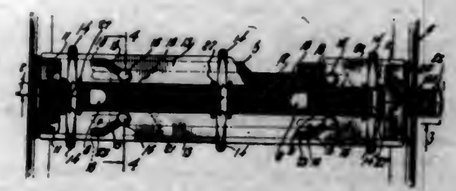
1. In a developing apparatus of the character described, the combination of a base, two rolls adapted to rotate and

contact with each other, means for rotating said rolls so as to feed a sheet of light sensitive material therethrough, a container for developing liquid, a wick extending into



said container and having an edge contacting with the face of said roll, and a porous member disposed on each side of said wick and adapted to wipe the face of said roll.

1,758,327. LOOSE-LEAF BINDER. ADOLPH G. LOTTER, Milwaukee, Wis., assignor to Stationers Loose Leaf Co., Milwaukee, Wis., a Corporation of Wisconsin. Filed Aug. 31, 1928. Serial No. 303,211. 5 Claims. (Cl. 129—9.)



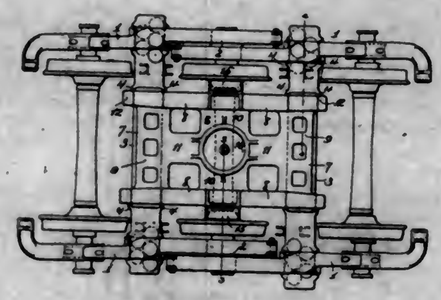
5. In a loose leaf binder, a base plate, a transversely movable member having a cam slot, ring sections carried by said transversely movable member, an actuating member movable longitudinally with respect to the base plate, and means having a longitudinal sliding connection with the base plate and being movable with the actuating member and engaged in the cam slot of the transversely movable member for guiding the movement of the actuating member and imparting its movement to the transversely movable member.

1,758,328. ROLLER KNIFE. IVA ALICE NEWSBAUM, Detroit, Mich. Filed June 29, 1928. Serial No. 289,160. 4 Claims. (Cl. 146—211.)



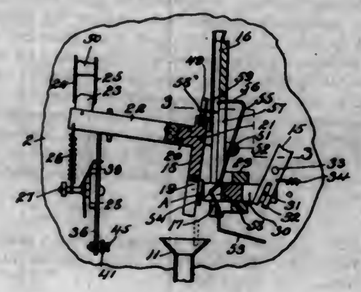
4. As an improved article of manufacture, a roller cutter including an arbor, a plurality of spaced circular cutting blades on said arbor, a yoke-like member having a slot in each of its ends extending from one edge thereof to a central portion of said ends where it terminates, the ends of the arbor having at least one surface thereof flattened to be fittedly and slidably received in said grooves respectively, the intermediate portion of the yoke extending substantially parellel to the arbor and lying adjacent the periphery thereof, inwardly extending fingers on said yoke extending between said cutting blades and extending substantially diametrically across said blades, and handles for the device secured to the ends of the said yoke.

1,758,329. SIX-WHEEL-TRUCK CONSTRUCTION. CLAUDE L. ORR, Columbus, Ohio, assignor to The Buckeye Steel Castings Company, Columbus, Ohio. Filed Aug. 24, 1928. Serial No. 301,864. 12 Claims. (Cl. 105—195.)



1. In a six-wheel truck a combination of two transverse bolsters, a one piece rectangular shaped center bolster having its only support at its four corners which bear on the transverse bolsters.

1,758,330. SALES-INDICATING MECHANISM. GEORGE W OSBORNE, North Kansas City, Mo. Filed May 4, 1929. Serial No. 360,477. 9 Claims. (Cl. 194—9.)

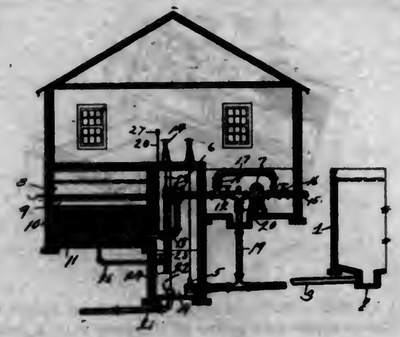


1. In a sales indicating mechanism having a coin supporting seat and a manually operable push member for forcing a coin from said seat, the combination with an electrical signalling device, of a switch in circuit in series with said device and having an operating member out of the path of said push member and in the path of and arranged to be moved to the closed position by a coin as it is being forced from said seat by said push member, means for normally forcing said operating member to the open position, a detent arranged to engage and hold said operating member in the closed position and arranged to be held by the operating member, when the latter is in the open position, from moving to the holding position, means for normally forcing said detent to the holding position, and manually operated means for moving said detent from the holding position.

1,758,331. FILTERING SYSTEM. RALPH N. PERKINS, Omaha, Nebr. Filed Oct. 16, 1928. Serial No. 312,789. 1 Claim. (Cl. 210—11.)

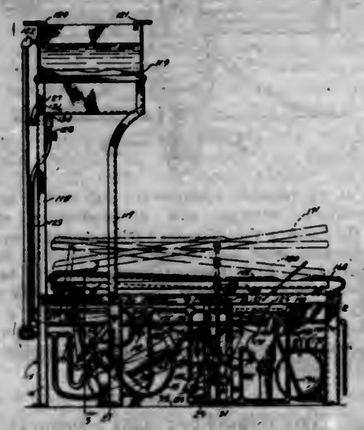
The combination with a swimming pool and filtering tank, a filtering material in said filtering tank, a sediment tank, a pipe carried by the swimming tank and discharging into the sediment tank, a suction pump disposed below the water level of the swimming pool and filtering tank,

a suction pipe extending into the filtering material and connected to the pump, a discharge pipe connecting the pump and the swimming tank and a by-pass pipe connect-



ing the pump, suction and discharge pipes and in combination with a pipe connection between the pump suction pipe and the first mentioned pipe forming means whereby the filtering material may be back washed.

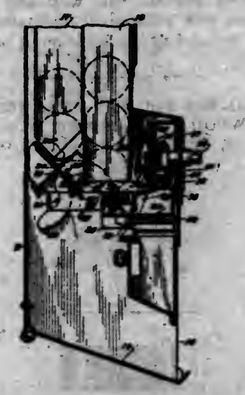
1,758,332. COLONIC AND VAGINAL IRRIGATING APPARATUS. GEORGE R. PITTAM, THOMAS B. BLEVINS, and PURL F. BRANDT, Long Beach, Calif., assignors of one-fourth to Jim C. Phillips, Long Beach, Calif. Filed Oct. 29, 1928. Serial No. 315,632. 11 Claims. (Cl. 128—227.)



1. In a colonic and vaginal irrigating apparatus, the combination of: supporting means adapted to support a human body in a reclining position, or with the head elevated above the hips and feet, or with the hips and feet elevated above the head, or with the body horizontal or in a sitting position and to move the said body to any of these positions or to any position between these positions; and means, including an insertion member, associated with said supporting means for providing fluid to the orifices of said body and simultaneously drawing off the discharge fluid.

1,758,333. VENDING MACHINE. MYRON H. RICHARDSON and ALFRED D. ANTOINE, Chicago, Ill., assignors to Advance Machine Company, Chicago, Ill., a Corporation of Illinois. Original application filed June 23, 1924. Serial No. 721,661. Divided and this application filed June 15, 1928. Serial No. 285,655. 13 Claims. (Cl. 312—48.)

1. A vending machine including a container for the articles to be vended, said container including two compartments having communication adjacent the bottom, a pivotally mounted element adjacent the bottom of one of the compartments for supporting the articles therein and for directing the articles from one compartment into the



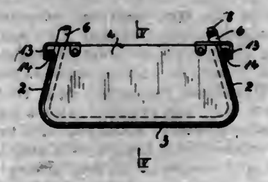
other compartment, an ejector for ejecting the articles from the said other compartment, means for actuating the ejector, and an operative connection between the said ejector and the said element for actuating the latter.

1,758,334. RIDER FOR REGISTRATION CARDS. WILHELM SCHLEIFER, Vienna, Austria. Filed May 17, 1928, Serial No. 278,604, and in Austria Mar. 23, 1928. 2 Claims. (Cl. 129—16.3.)



1. An index tab for a card having a slot parallel to and spaced a given distance from an edge of the card, said tab comprising a pair of substantially parallel arms of elastic material connected together at one end and unconnected at the other end, and a projection on one arm directed toward the other arm, said projection being spaced from the connected end of the arms a distance substantially equal to that which the slot in the card is spaced from the edge of the card, whereby when the tab is in position in the card the projection will overlie the edge of the card.

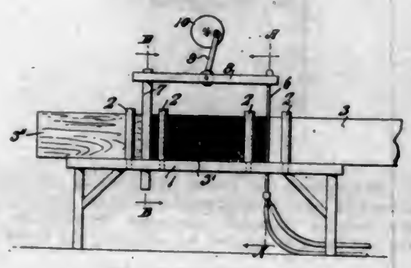
1,758,335. DEVICE FOR SUBDIVIDING LIQUID CONTAINERS. JACQUES SCHLUMPF, Horcheim, near Coblenz, Germany. Filed May 31, 1929, Serial No. 367,217, and in Germany May 29, 1928. 3 Claims. (Cl. 220—22.)



1. Means for subdividing a liquid container having upwardly convergent side walls, comprising a removable par-

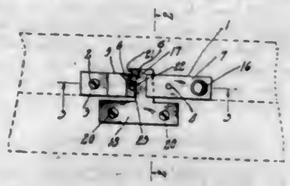
tition wall adapted to be positioned at any point longitudinally within the container, an inflatable packing element between the end and bottom edges of the partition wall and the side and bottom walls of the container, and means carried by the partition wall and releasably engaged with said side walls of the container for holding said partition wall during the inflation of said packing.

1,758,336. PROCESS FOR THE ORNAMENTAL TREATMENT OF WOOD. EMIL SCHMID, Washington, D. C. Filed Nov. 28, 1928. Serial No. 322,386. 7 Claims. (Cl. 41—41.)



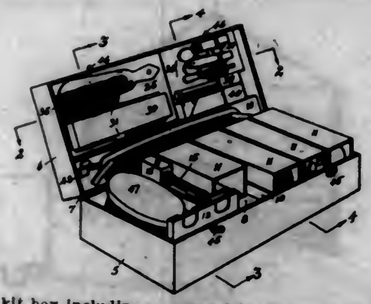
1. In the hereindescribed method of treating lumber for producing a weathered or antique appearance, the steps of holding and supporting a board so that its opposite faces are substantially vertical and portions of such opposite faces are uncovered and in free access to the atmosphere, simultaneously directly projecting hot flames upon both uncovered portions of said opposite faces in free access to the atmosphere for producing charred surfaces upon the same while effecting the longitudinal travel of the board.

1,758,337. LOCKING DEVICE. JOHN C. SHELLER, Maywood, Ill., assignor to Walter B. Hintze, Chicago, Ill. Filed Feb. 6, 1928. Serial No. 252,241. 4 Claims. (Cl. 292—175.)



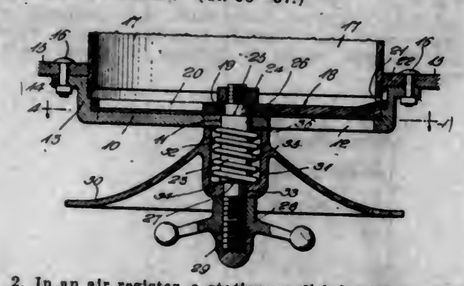
1. A device of the type described comprising an elongated frame, a guide block integral with said frame and having an abutting surface extending at right angles with respect to said frame, said guide block having a tapered surface extending from the upper edge thereof to said abutting surface and being provided with a tapered groove extending from said tapered surface to said frame through said abutting surface, an arm, a retaining lug integral with said arm and receivable in said groove as said arm is passed over said tapered surface and into engagement with said abutting surface, and means for securing said arm in engagement with said abutting surface.

1,758,338. KIT BOX. NICK SIMOS, Philadelphia, Pa. Filed Mar. 20, 1928. Serial No. 263,115. 6 Claims. (Cl. 206—16.)



1. A kit box including a recessed body part open at one side, article supporting means in the body part, a recessed lid for the open side, means for moving the supporting means toward the open side when the lid is opened, and article supports within the lid causing retraction of the supporting means within the body when the lid is closed.

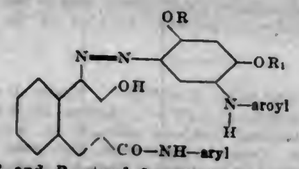
1,758,339. AIR REGISTER. ROBERT HUDSON WAGER, Jersey City, N. J. Filed Aug. 16, 1928. Serial No. 300,046. 9 Claims. (Cl. 98—37.)



2. In an air register, a stationary disk having a central shaft-receiving opening and air-conducting openings around the same, a rotatable disk lying against one side of said stationary disk and having air-conducting openings for registration with those aforesaid, a shaft having a driving connection with said rotatable disk and passing rotatably through said shaft-receiving opening, a handle on the outer end of said shaft, and an air deflector centrally connected to and carried solely by said shaft between said handle and said disks.

1,758,340. AZO DYESTUFFS AND MATERIAL DYED THEREWITH. HERMANN WAGNER, Soden-on-the-Taunus, and ADOLF KUCHENBECKER and RICHARD HUSS, Frankfort-on-the-Main-Hochst, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Dec. 3, 1928, Serial No. 323,557, and in Germany Dec. 18, 1927. 20 Claims. (Cl. 260—95.)

1. As new products, azo dyestuffs of the following formula:



wherein R and R_1 stand for alkyl, aryl or aralkyl and wherein the aroyl residue and the aryl residue may be substituted or not, but may not contain any free sulfonic acid or carboxylic acid group, being reddish-violet to bluish-violet dyestuffs insoluble in water.

1,758,341. SHIRT CONSTRUCTION. CHARLES M. WARDAN, Kirkwood, Mo. Filed May 16, 1928. Serial No. 278,180. 3 Claims. (Cl. 2—122.)



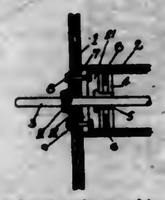
1. A sleeve construction comprising two longitudinal sections, and a felling seam and an intermediate seam securing together the adjacent edges of said sections and forming a sleeve having a placket opening extending upwardly from the lower end of the sleeve beyond said intermediate seam from said felling seam, in combination with a reinforcement member on the outer side of the sleeve and having its lower edge above said placket opening, and having one of its vertical edges attached to the sleeve by said felling seam, said reinforcement member extending across one of said sections and across the adjacent portion of the other section at the upper end of said placket opening and extending beyond said placket opening from said intermediate seam and having its edges sewed to said sections of said sleeve.

1,758,342. SHOE HAVING SEPARABLE SOLE AND UPPER. BERTHA M. WEIR, San Luis Obispo, Calif. Filed June 17, 1929. Serial No. 371,550. 3 Claims. (Cl. 36—15.)



1. In a shoe having a separable sole and upper, the combination of a continuous strip around the margin of the sole and secured thereto, a series of buttons around said margin and at least partly covered by said strip, and a series of bifurcated clips secured to the margin of the upper and normally straddling the respective buttons and combining therewith to removably secure the upper to the sole.

1,758,343. WARP BEAM. JABEZ WILKINSON, Fall River, Mass. Filed Aug. 20, 1928. Serial No. 300,825. 6 Claims. (Cl. 242—124.)



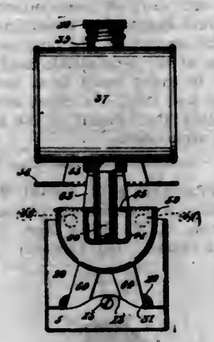
1. A warp beam having in combination, a barrel and a head, said barrel having a counterbore, a disk secured to said head and being adapted to fit within said counterbore, said barrel having notches at its ends, and means on said disk for coacting with said notches to lock said barrel and head against relative rotation.

1,758,344. SPINNER FOR FISH LURES. STANLEY M. WRIGHT and ANDREW D. MCGILL, Denver, Colo. Filed June 9, 1928. Serial No. 284,088. 4 Claims. (Cl. 43—45.)



1. A spinner for fishing lures having a central shaft comprising: a bladed impeller; an indented portion on said impeller having an opening in its extremity to receive said shaft; and a bead carried on said shaft and arranged to be positioned within said indented portion so as to contact at its periphery with said impeller so as to maintain the latter in alignment with said shaft.

1,758,345. RETORT BURNER FOR SELF-HEATING SADIRONS. CHARLES E. ADAMSON, Muncie, Ind. Original application filed Feb. 5, 1925, Serial No. 7,003. Divided and this application filed Aug. 6, 1925. Serial No. 48,517. 2 Claims. (Cl. 158—63.)

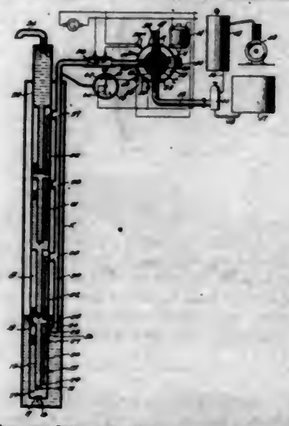


1. In a gas producer of the type described, a fuel tank having a depending feed tube, a U-shaped coupling having its lower portion connected to said feed tube, converter tubes connected to the upper ends of said coupling, blocks supporting the other ends of the converter tubes, means within said converter tubes for diffusing liquid fuel therein, and valves in the blocks operable in proximity of the blocks for controlling the discharge of gas from said converter tubes.

1,758,346. OIL-WELL PUMP. ARMAIS ARUTUNOFF, Los Angeles, Calif. Filed July 5, 1927. Serial No. 203,512. 5 Claims. (Cl. 103—249.)

1. A pump adapted for pumping liquid from a well and comprising a barrel, provided with a valve-controlled liquid inlet, a valve-controlled liquid outlet, and a valve-controlled

fluid inlet; means adapted to supply charges of a combustible fluid under pressure to the fluid inlet in the barrel from a suitable source of supply; ignition means connected in circuit with a source of electric energy and adapted by the closing of its circuit to ignite the charges of fluid in the barrel; a motor connected in circuit with the source of electric energy; a valve adapted to be operated by the motor and connected in circuit with the source of electric energy; and a pressure gauge connected with the fluid-supply means so as to register a zero pressure or a predetermined pressure above zero of the fluid and connected with the valve and motor circuit, thereby closing the valve and motor circuit only when the gauge indicates the zero



pressure or the predetermined pressure above zero, and thus causing the motor to move the valve to different positions, the construction and arrangement of the valve being such that in one position the valve will allow the combustible fluid to pass therethrough to the fluid inlet in the barrel, that in a succeeding position the valve in the mechanism will shut off communication between the barrel and the fluid supply and simultaneously will cause the closing of the circuit for the ignition means so as to ignite the charge of the combustible fluid within the barrel and thereby to expel liquid from the barrel through the liquid outlet, and that in a third succeeding position the valve will allow the exhaust of the burnt gases from the barrel to the atmosphere.

1,758,347. CONTAINER FOR MOTH BALLS. MORRIS BEIBIN, Brooklyn, N. Y., assignor of one-half to Samuel Beibin, Brooklyn, N. Y. Filed Apr. 15, 1927. Serial No. 184,148. 2 Claims. (Cl. 150—1.)



1. A container for moth balls, comprising a flat skeleton frame of wire, forming a substantially closed figure, and a flexible sack of substantially the same size and shape as the major part of said frame, the edges of said sack enveloping said frame in the plane of the latter and being supported thereby, thereby keeping said sack substantially flat, and said sack having a closable opening at one end thereof.

1,758,348. COMPOSITION FOR SOLDERING ALUMINUM WARE. FREDERICK L. BENEDETTI, Black Diamond, Wash. Filed May 16, 1928. Serial No. 278,347. 1 Claim. (Cl. 148—24.)

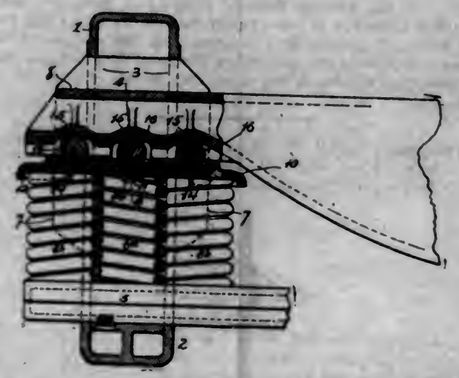
The composition herein described for use in applying solder to aluminum ware, comprising a mixture of comminuted aluminum and brass in about the proportion of two-thirds and one-third respectively, with a small quantity of olive oil to form a mass of dough-like consistency.

1,758,349. PRESSER-FOOT LIFTER AND THREAD-TENSION RELEASE. JOSEPH BEROKA, Utica, N. Y., and WALTER M. HANNEMAN, Oak Park, Ill., assignors to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 30, 1926. Serial No. 138,684. 11 Claims. (Cl. 112—238.)



1. In a sewing machine, the combination of a presser foot lifting mechanism, a plurality of threaded needles, a threaded looper cooperating with each needle, an independent tension for each needle thread and each looper thread, means for supporting the tensions said tensions being located adjacent each other and in a line, a shaft located beneath the tensions, and devices independent of the support for the tensions and operated by the oscillation of said shaft for simultaneously releasing the tensions, said shaft having a connection with the presser foot lifting mechanism whereby when the presser foot is lifted the tensions are released.

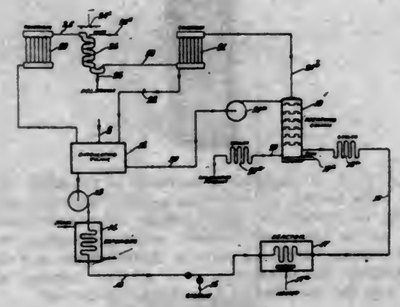
1,758,350. CAR TRUCK. SAMUEL P. BUSH, Columbus, Ohio, assignor to The Buckeye Steel Castings Company, Columbus, Ohio. Filed Sept. 15, 1927. Serial No. 219,707. 7 Claims. (Cl. 105—186.)



1. In a car truck, a side frame having a compression member, a tension member, and columns connecting said

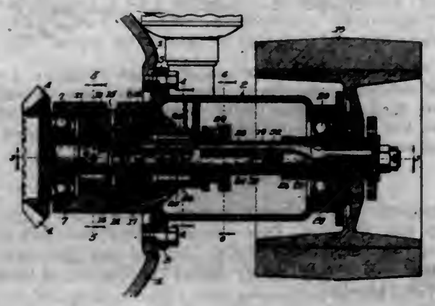
members, a spring plank resting on the tension member between the columns, a group of springs resting in part on the spring plank and in part upon the tension member within the columns, a spring cap overlying the group of springs and having portions engaging within the columns, a bolster, and rollers between the cap and the bolster, one of the rollers extending beyond the sides of the bolster over the extensions of the spring cap and within the columns.

1,758,351. CHLORINATION. CHARLES L. CAMPBELL, Boston, Mass., assignor to E. B. Badger & Sons Company, Boston, Mass., a Corporation of Massachusetts. Filed June 15, 1927. Serial No. 198,913. 10 Claims. (Cl. 260—166.)



1. In vapor phase chlorination of organic substances, the process comprising subjecting the products of the chlorinating reaction to rectification prior to cooling the same to a temperature below the saturation point thereof, and by cooling in said rectifying operation obtaining a liquid fraction containing organic chlorinated substances and a vapor fraction substantially free of organic chlorinated substances.

1,758,352. POWER TAKE-OFF UNIT FOR TRACTORS. LEON JAY CAMPBELL, Buchanan, Mich. Original application filed Oct. 4, 1926, Serial No. 139,250. Divided and this application filed Mar. 17, 1927. Serial No. 176,086. 3 Claims. (Cl. 192—71.)



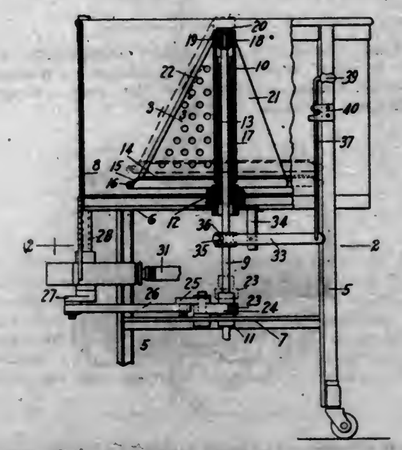
1. In a power transmitting device, the combination with a shaft, of a rotary member surrounding the shaft, a clutch key rockably mounted on the shaft and held against endwise movement thereon, said key having a cam projection, a shift collar slidably mounted on the shaft over the key and moving the same out of clutched engagement with said rotary member upon sliding the collar over said projection, and spring means about one end of the key and acting thereon to move the key into clutched engagement with the rotary member on sliding the collar off of said cam projection.

1,758,353. TIRE STRUCTURE. FRED C. CAVE, Des Moines, Iowa. Filed Aug. 2, 1926. Serial No. 126,424. 1 Claim. (Cl. 152—8.)



In a structure of the class described, the combination of a wheel having a felly, with a tubular annular resilient casing built around and having received therein an annular metal band having a flat cross section fitted against the inner face of the casing which faces outward and a larger annular resilient band positioned against the opposite inner face of the casing and a series of lugs, detachably secured to the felly and projecting radially outwardly beyond the inner band to engage and receive the inner portions of the casing for holding the casing on the wheel, said lugs having their inner ends bent toward and engaging the felly whereby the portions of the casing engaged by their outer ends are compressed between the inner metal band and the lugs.

1,758,354. WASHING MACHINE. JAMES L. COFFIELD, Dayton, Ohio. Filed Apr. 16, 1928. Serial No. 270,216. 7 Claims. (Cl. 259—101.)

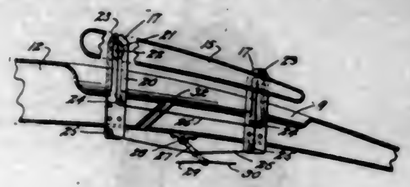


1. In a clothes washing machine comprising a stationary tub, a shaft journaled in said tub and means for imparting oscillatory movement to said shaft, an agitator arranged in said tub, connected with said shaft and having a plurality of blades, said blades having their lower portions of greater width than their upper portions and having sloping straight outer edges adapted to raise the clothes away from the bottom of said tub when said agitator is in operation.

1,758,355. AIRPLANE WING. WILLIAM F. COTTRELL and JOSEPH MCAULIFFE, Denver, Colo. Filed Feb. 9, 1928. Serial No. 253,106. 6 Claims. (Cl. 244—12.)

1. Airfoil construction for airplane wings comprising relatively small airfoils adapted to be carried in depres-

sions in the top of said wing; means for raising said airfoils from their depressions and maintaining them in a position above said wing, said means comprising brackets extending upwardly from said wing adjacent said air-



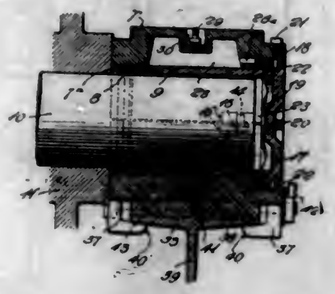
foils; guides in said brackets; projections on said airfoils adapted to engage said guides; and flexible means carried by said brackets adapted to raise or lower said projections therein.

1,758,356. PROCESS FOR PREPARING NUCLEAR-SUBSTITUTED ARYLSULPHONIC ACIDS. KARL DAIMLER and GERHARD BALLE, Hochst-on-the-Main, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Mar. 16, 1927, Serial No. 175,927, and in Germany Mar. 27, 1926. 5 Claims. (Cl. 260—159.)

1. The process of preparing substituted aryl-polysulfonic acids which comprises treating a mixture of an aromatic hydrocarbon sulfonic acid compound which is in a completely dry form and an alcohol of higher molecular weight than ethyl alcohol with a stronger sulfonating agent than sulfuric acid monohydrate.

5. As a new product a butyl-naphthalene sulfonic acid compound which is substituted in at least one of its α-positions and in at least one of its β-positions by a sulfonic acid group.

1,758,357. BEARING AND SHAFT ASSEMBLY. ORSON W. DUNHAM, Webb City, Mo., assignor to Wertzberger Derrick Company. Filed Mar. 29, 1928. Serial No. 265,636. 3 Claims. (Cl. 308—15.)



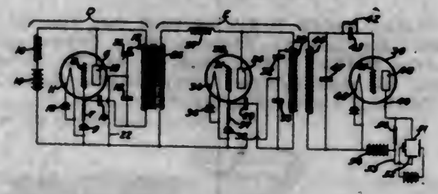
1. In a bearing and shaft assembly in which the shaft enters the bearing at one end only, the other end being entirely closed; a bearing body having an inwardly projecting shoulder at its shaft-receiving end, said body being provided with a grease chamber, a sleeve contacting slidably with the inner side of said bearing body and having one end spaced from said shoulder, annular packing means between said sleeve and shoulder, a shaft extending into said sleeve through the packing-engaging end thereof, said shaft terminating within the opposite end of the bearing body, and sleeve-sliding means outwardly spaced from the extremity of said shaft in a direction extending longitudinally of the latter for sliding said sleeve to compress said packing means around the shaft, the space between said shaft extremity and said sleeve-sliding means being in communication with said grease chamber to receive grease therefrom.

1,758,358. SAFETY BLASTING-POWDER STICK. HENRY E. ENNIS, Thayer, W. Va. Filed Dec. 23, 1927. Serial No. 242,170. 3 Claims. (Cl. 102—5.)



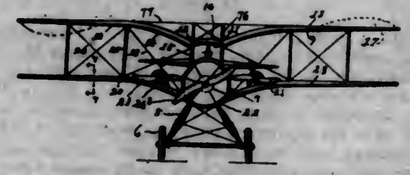
1. A stick of explosive comprising a plurality of sections each having an inserting needle receiving opening therein, the opening in the innermost section terminating short of the inner end thereof, and the openings in the other sections extending entirely therethrough, and means for holding the sections against relative turning movement and the openings in longitudinal alignment.

1,758,359. ELECTRIC OSCILLATOR SYSTEM. PHILO T. FARNSWORTH, Berkeley, Calif., assignor, by mesne assignments, to Television Laboratories, Inc., San Francisco, Calif., a Corporation of California. Original application filed Jan. 7, 1927, Serial No. 159,540. Divided and this application filed Nov. 7, 1927. Serial No. 231,690. 13 Claims. (Cl. 250—36.)



3. An electrical system comprising an oscillator, a second oscillator operative at a substantially constant amplitude during a portion of the cycle of said first oscillator, and means for integrating the wave trains produced by said second oscillator.

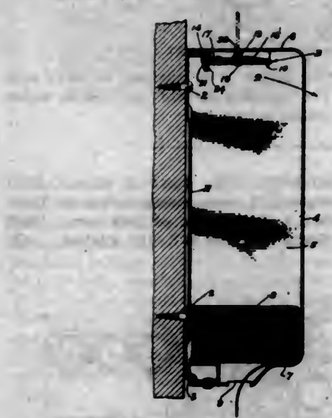
1,758,360. AEROPLANE WING STRUCTURE. JULIUS S. FOX, Cleveland, Ohio. Original application filed Mar. 5, 1926, Serial No. 92,424. Divided and this application filed Dec. 30, 1926. Serial No. 157,924. 2 Claims. (Cl. 244—12.)



1. In an aeroplane, hollow wings each comprising an outer sheet covering and an inner frame structure comprising a plurality of truss frames positioned transverse

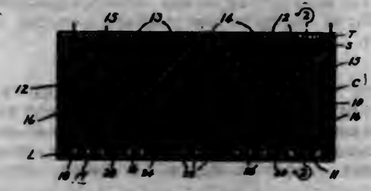
of the wing and spaced apart the length of the wing, shorter frame trusses positioned between pairs of the longer trusses and extending from the common lateral edges of the wing and from the common line of the ends of the trusses for a portion only of the breadth of the wing, thus forming a pocket in the wing bounded by a pair of the larger, main transverse trusses and the inner ends of the shorter truss frames therebetween, and a flexible gas bag positioned in said pocket.

1,758,361. LOCK FOR PAPER CONTAINERS. JOHN A. FROST, Carthage, N. Y., assignor to National Paper Products Company, San Francisco, Calif., a Corporation of California. Filed Nov. 14, 1927. Serial No. 232,964. 5 Claims. (Cl. 70—14.)



1. The combination with a container having a hinged cover section and a stationary section of a locking mechanism therefor, comprising a plate secured to the cover section and spaced therefrom, a resilient latch formed integral with the plate and lying between the plate and the cover, latch retaining means on the stationary section, and key actuated means whereby movement is imparted to release the latch with relation to the retaining means.

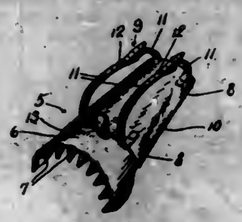
1,758,362. ELECTRIC BATTERY. CHARLES A. GILLINGHAM, Lakewood, Ohio, assignor to National Carbon Company, Inc., a Corporation of New York. Filed July 27, 1925. Serial No. 46,444. 5 Claims. (Cl. 136—108.)



1. In a battery, the combination of a box, a series of battery cells comprising jackets having open ends, a filling around the jackets, and a corrugated base having grooves and crowns upon which the jackets rest, the crowns having portions raised above the rest-portions to extend into the open ends of and position the jackets, the grooves between the crowns permitting the filling to pass under and into the jacket.

1,758,363. CORN-HUSKING PEG. JESSE G. GRANTHAM, Jacksonville, Ill.; Bessie Henderson Grantham, executrix of said Jesse G. Grantham, deceased. Filed May 18, 1926. Serial No. 109,956. 1 Claim. (Cl. 130—4.)

A corn husking peg comprising a body having one end flared, said body being of arcuate shape in cross section, inwardly deflected prongs at the extremity of the flared end of the body, an upstanding guard formed on the body adjacent the flared end, longitudinally extending straps disposed on opposite sides of the guard with their forward



ends secured substantially in align with the guard, a cover secured to the body beneath the straps and having its forward edge engaging the guard whereby the adjacent straps deflect upwardly in align with the guard.

1,758,364. FISHING TOOL. BERTEL M. JENSEN, Redondo Beach, Calif. Filed Oct. 24, 1927. Serial No. 228,267. 15 Claims. (Cl. 294—115.)

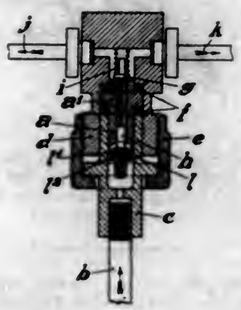


1. A fishing tool having a supporting structure with expandible and contractable fish engaging members, means to introduce said members into a well in their contracted position, hydraulically operated means for expanding said fish engaging members when in the well, and nonhydraulic mechanical or rotatable means for forcibly contracting said members and retaining said members contracted upon a fish.

1,758,365. PROCESS FOR PRODUCING SULPHURIZED VAT DYESTUFFS CONTAINING CHLORINE. GEORG KALISCHER, Frankfort-on-the-Main, HEINRICH SALKOWSKI, Mainkur, near Frankfort-on-the-Main, and FRITZ FRISTER, Fechenheim, near Frankfort-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Sept. 15, 1927, Serial No. 219,805, and in Germany Oct. 1, 1926. 7 Claims. (Cl. 260—17.)

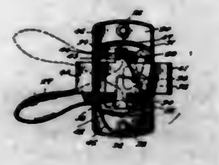
1. Improved process for producing sulphurized vat dyestuffs containing chlorine, which process comprises treating at temperatures from about 150 to about 250° an anthracene compound of the general formula $C_{14}X_{10}$, wherein the X's mean hydrogen atoms, of which one or more may be replaced by halogen or a sulphur containing monovalent residue, with disulphurdichloride with addition of a halogen carrier.

1,758,366. INJECTION PIPING FOR INTERNAL-COMBUSTION ENGINES WITH SOLID-FUEL INJECTION. JOHANN MAHLER, Augsburg, Germany, assignor to the Firm: Maschinenfabrik Augsburg-Nuernberg, Aktiengesellschaft, Augsburg, Germany, a Corporation of Germany. Filed Apr. 11, 1925, Serial No. 22,375, and in Germany May 24, 1924. 13 Claims. (Cl. 123—32.)



1. A delivery valve structure adapted for connection in the injection piping of an internal combustion engine and constructed for ready assembly or disassembly in the making of replacements of the valve seat and valve, comprising a pair of complementary members adapted to be connected together and each adapted to be connected to a portion of said injection piping to be supported thereby, a valve seat member removably mounted between said complementary members, and a valve within said valve seat member.

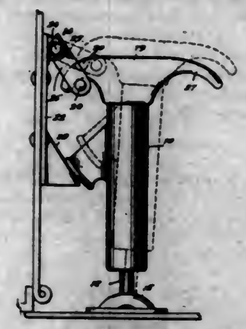
1,758,367. LATCH. RAYMOND G. MOORE and ARTHUR CLAUD-MANTLE, Bridgeport, Conn., assignors to The Bassick Company, Bridgeport, Conn., a Corporation of Connecticut. Filed July 8, 1927. Serial No. 204,340. 6 Claims. (Cl. 292—173.)



3. In a latch, a casing, movable latch means carried by said casing, a handle member having spaced fulcrum means cooperating with said casing for independent rocking movement in one or the other directions, means cooperating between said handle member and latch means for actuating the latter upon said rocking movement of the handle member in either direction, and spring means for yieldably retaining said handle member in its normal inoperative position independently of the position of the latch means.

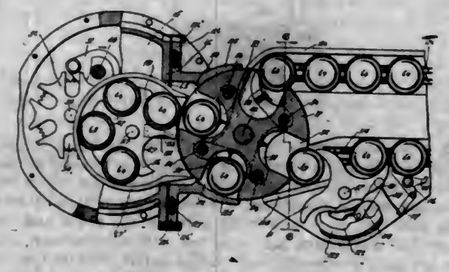
1,758,368. HOOD CATCH. RAYMOND G. MOORE, Bridgeport, Conn., assignor to The Bassick Company, Bridgeport, Conn., a Corporation of Connecticut. Filed May 3, 1928. Serial No. 274,817. 4 Claims. (Cl. 292—114.)

2. In a hood catch or the like, a hold down clamp, a keeper lever adapted to be mounted on the hood and to be engaged by said clamp, spring means acting to draw said clamp downwardly and swing said keeper lever inwardly toward the hood, and cam means between said clamp and the hood adapted to press the hood downwardly and inwardly under the action of said spring means, said down-



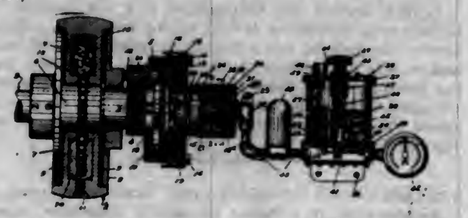
ward swinging of said keeper lever adapted to move said clamp laterally in the direction of said cam means under the action of said spring means.

1,758,369. CLOSING MACHINE. JOHN H. MUSCH, East Orange, N. J., assignor, by mesne assignments, to Thermokept Corporation, a Corporation of Delaware. Filed Oct. 25, 1926. Serial No. 143,897. 22 Claims. (Cl. 113—132.)



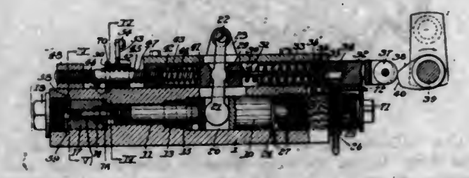
1. In an apparatus for vacuumizing and sealing containers, the combination of a vacuum chamber having an opening therein, seaming mechanism in said chamber, conveying mechanism adjacent said chamber for delivering cans thereto including a device having a plurality of can receiving pockets, and means positioned between said last mentioned device and the opening in said chamber adapted to seal the can receiving pockets through a predetermined movement of said device and yieldingly connected to said chamber.

1,758,370. HYDRAULICALLY-CONTROLLED VARIABLE-SPEED DEVICE. REUBEN A. OLSEN and RICHARD H. SHADBICK, Minneapolis, Minn., assignors of one-third to Ellsworth T. Swanson, Minneapolis, Minn. Filed Oct. 17, 1927. Serial No. 226,744. 5 Claims. (Cl. 192—85.)



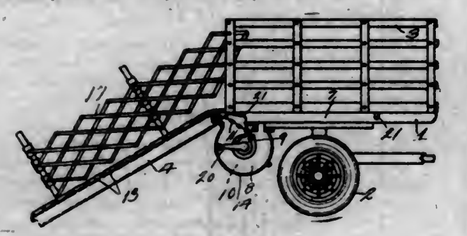
4. The combination with a shaft having a pulley thereon and adapted to be frictionally connected therewith whereby one will drive the other, of an inclosure including a diaphragm adapted upon being distended to increase the friction between the shaft and pulley, a conduit adapted to admit fluid under pressure to the inclosure, and means, including a second diaphragm, subjected to the fluid pressure within said inclosure, for sealing the inclosure with respect to the conduit.

1,758,371. FUEL-INJECTOR PUMP. VICTOR H. PALM, Butler, Pa. Filed Apr. 19, 1928. Serial No. 271,197. 13 Claims. (Cl. 123—139.)



10. A fuel injector pump for internal combustion engines comprising a housing having a pair of pumping barrels of different diameters in coaxial alinement, a plunger adapted for reciprocatory movement in said housing and having a pair of pistons operatively disposed in said barrels, said pumping barrels having communicating ports and a connection with the combustion chamber of the engine cylinder, and said plunger being adapted for operation by the engine shaft whereby fuel is charged to the engine cylinder by one piston and surplus fuel drawn back by the other piston in timed relation with the engine shaft.

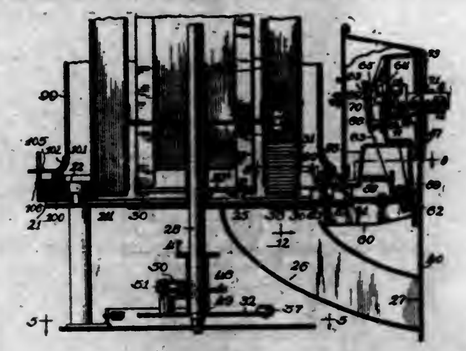
1,758,372. ANIMAL-LOADING DEVICE. EMIL PFLAUM, Pender, Nebr. Filed Mar. 13, 1928. Serial No. 261,296. 2 Claims. (Cl. 214—65.)



1. The combination with the rear end of a vehicle body, a reel beneath said body, of a loading platform, said loading platform comprising downwardly and rearwardly extending detachable bars carried by the body and a flexible tread member extending around the reel and forming means when unreeled for engaging the upper sides of the bars for forming a walk way and when reeled being entirely received on the reel beneath the vehicle body.

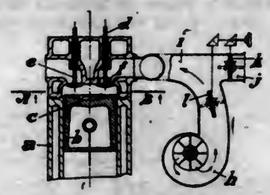
1,758,373. VENDING MACHINE. MYRON H. RICHARDSON, Chicago, and ALBERT E. GEBERT, Wilmette, Ill., assignors to Advance Machine Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 4, 1927. Serial No. 165,783. 6 Claims. (Cl. 312—66.)

1. A vending machine including a container for the articles, a reciprocable ejector for successively ejecting the articles, a lever to which the ejector is pivotally connected, means for reciprocating the ejector transversely of the supply of articles, and means carried with the ejector and movable to one side or the other of said pivot for



causing the ejector to operate in one plane during its movement in one direction and in another plane during its movement in the opposite direction.

1,758,374. COMBUSTION ENGINE. WILHELM RIEHM, Augsburg, Germany, assignor to the Firm: Maschinenfabrik Augsburg-Nuernberg, Aktiengesellschaft, Augsburg, Germany, a German Corporation. Filed Mar. 15, 1926, Serial No. 94,874, and in Germany Apr. 11, 1925. 3 Claims. (Cl. 123—32.)

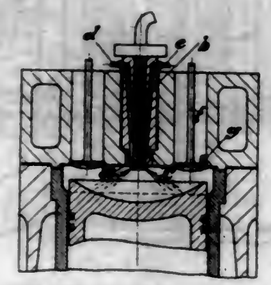


3. In an internal combustion engine of the character described, a cylinder, a piston therein, a combustion air inlet conduit for said cylinder, means adjacent the opening of said conduit into said cylinder for imparting a whirling motion to the air introduced into said cylinder and for restricting the cross-section of said opening to cause a high velocity of said whirling air within said cylinder considerably exceeding the normal rate of 60 or 70 meters per second, a plurality of fuel injection nozzles discharging substantially tangentially into the cylinder to augment the whirl of the combustion air, a blower associated with said combustion air inlet conduit for supplying pressure air thereto to compensate for the said restriction and secure a normal full charge of rapidly whirling air within the cylinder, a suction air inlet conduit opening to atmosphere connected to said blower conduit, a valve positioned within each conduit, and means for simultaneously operating said valve to open one of said conduits as the other conduit is closed.

1,758,375. INTERNAL-COMBUSTION ENGINE. WILHELM RIEHM, Augsburg, Germany, assignor to the Firm: Maschinenfabrik Augsburg-Nuernberg, Aktiengesellschaft, Augsburg, Germany. Filed July 19, 1926, Serial No. 123,461, and in Germany July 20, 1925. 1 Claim. (Cl. 123—32.)

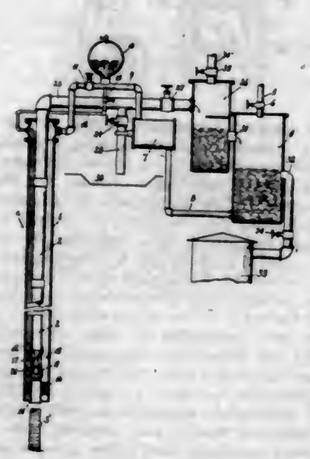
In an internal combustion engine of the character described operating with solid fuel injection and self-ignition, and in combination, a cylinder, a piston therein, said parts forming a combustion space, a fuel injection nozzle having a tip provided with a fuel injection opening positioned to inject fuel into said combustion space and hav-

ing a fuel conduit therein, said nozzle having means for circulating a cooling fluid adjacent said nozzle tip to cool the tip without excessively cooling said fuel conduit and



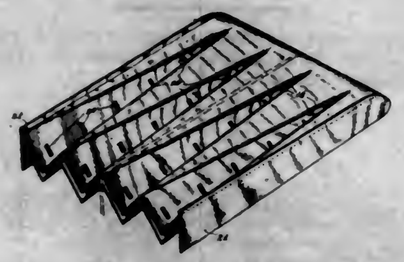
the fuel passing therethrough, and means for introducing combustion air into said combustion space in a manner to sweep over the cooled tip of said fuel injection nozzle.

1,758,376. METHOD AND MEANS TO PUMP OIL WITH FLUIDS. WILFRED D. SAWYER, Long Beach, Calif., assignor of one-half to Nelson E. Reynolds, Greeley, Colo. Filed Jan. 9, 1926. Serial No. 80,381. 3 Claims. (Cl. 103—260.)



1. In a well including a casing, a flow pipe, pumping means in said flow pipe, a packer around said flow pipe below said pumping means, a supply pipe connected to the top of said casing, means for forcing fluid under pressure through said supply pipe into the casing, a flushing pipe connected to said supply pipe and extending through said packer to a point adjacent the bottom of the well, a valve in each of said flushing pipes and supply pipes, said flushing pipe being adapted to agitate and flush sediment from the bottom of the well and circulate it to said pump means while said pumping means is in operation.

1,758,377. AIRCRAFT. BROR MAX SCHAUMAN, Highlands, N. J., assignor, by mesne assignments, to Thord-Gray Holding Corporation, New York, N. Y., a Corporation of New York. Filed Feb. 4, 1926. Serial No. 85,933. 4 Claims. (Cl. 244—14.)



1. A hollow wing open at the rear, the upper deck of said wing having vacuum channels formed therein and openings through said deck, said openings being located in said vacuum channels.

1,758,378. 6-ALKOXY-8-AMINOQUINOLINES. WERNER SCHULEMANN, Vohwinkel, near Elberfeld, and FRITZ SCHÖNHÖFER and AUGUST WINGLER, Elberfeld, Germany, assignors to Winthrop Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed Dec. 5, 1927, Serial No. 237,978, and in Germany Dec. 9, 1926. 3 Claims. Cl. 260—38.)

1. In the process for the manufacture of 6-alkoxy-8-aminoquinolines, the step which comprises subjecting 6-alkoxyquinoline-8-carboxylic acid amides to the Hofmann's decomposition by treating them with bromine and caustic alkali.

1,758,379. ATTACHMENT FOR UMBRELLAS, WALKING STICKS, HANDLES OF TENNIS BATS, AND THE LIKE. JOHN FRANCIS SHAW, London, England. Filed Nov. 20, 1925, Serial No. 70,336, and in Great Britain Nov. 21, 1924. 5 Claims. (Cl. 135—47.)

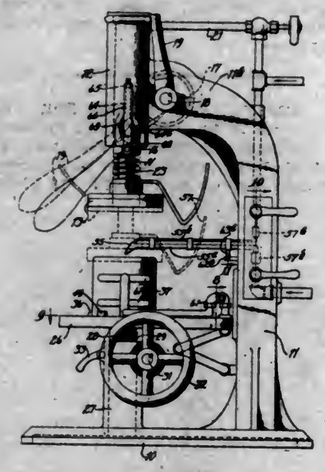


4. An attachment for a stick comprising a support, means to hold the latter on the stick, said support carrying an upwardly and a downwardly directed hook movable into engagement with said stick, said support including means for holding both hooks in extended or non-extended position.

1,758,380. CASTING MACHINE. HARRY SPIRO, Chicago, Ill. Filed Nov. 2, 1927. Serial No. 230,558. 4 Claims. (Cl. 22—69.)

1. In a device of the character described; a flask supporting table; an adjustable compression head arranged

above the table and centered with respect thereto; a flask for use on said table; and co-operating means on the



flask and table for automatically centering the same under the compression head, said means comprising co-operating radial slots and projections adapted to engage said slots.

1,758,381. PROCESS OF CATALYTICALLY REDUCING ANTHRAQUINONE COMPOUNDS AND NEW HYDROGENIZED PRODUCTS DERIVED THEREFROM. JULIUS VON BRAUN and OTTO BAYER, Frankfort-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Original application filed Feb. 27, 1926, Serial No. 91,227, and in Germany Mar. 3, 1925. Divided and this application filed June 10, 1927. Serial No. 198,005. 5 Claims. (Cl. 260—57.)

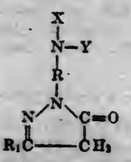
1. Process of producing a tetrahydroanthranol compound which comprises acting under pressure upon one molecular proportion of an anthraquinone compound in the presence of a base metal hydrogenation catalyst with substantially eight atomic proportions of hydrogen.

1,758,382. PROCESS OF CATALYTICALLY REDUCING ANTHRAQUINONE COMPOUNDS AND NEW HYDROGENIZED PRODUCTS DERIVED THEREFROM. JULIUS VON BRAUN and OTTO BAYER, Frankfort-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Original application filed Feb. 27, 1926, Serial No. 91,227, and in Germany Mar. 3, 1925. Divided and this application filed June 10, 1927. Serial No. 198,006. 4 Claims. (Cl. 260—57.)

1. Process of producing an octohydroanthranol compound which comprises acting under pressure upon one molecular proportion of an anthraquinone compound in the presence of a base metal hydrogenation catalyst with substantially twelve atomic proportions of hydrogen.

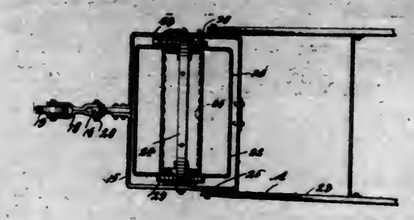
1,758,383. AZO DYESTUFFS AND PROCESS OF PREPARING THEM. HERMANN WAGNER, Soden-on-the-Taunus, HEINZ EICHWEDE and ERICH FISCHER, Hochst-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Mar. 16, 1927, Serial No. 175,924, and in Germany Mar. 31, 1926. 8 Claims. (Cl. 260—187.)

1. The process of preparing azo dyestuffs which are particularly suitable for dyeing mixed textile goods made of wool, and silk fibres, which consists in coupling any aromatic diazo compound with a pyrazolone of the following general formula:



wherein Y stands for a carboxylic acid ester residue, R for an aryl residue substituted or not, X for hydrogen, alkyl, aryl or aralkyl and R_1 for CH_3, COOH or COO-alkyl.

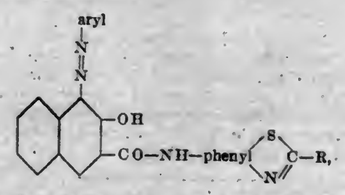
1,758,384. WEEDER. THOMAS T. WRIGHT, Macon, Mo. Filed Aug. 28, 1926. Serial No. 132,250. 5 Claims. (Cl. 97—144.1.)



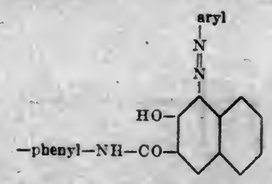
1. A weeder comprising a frame, a drum rotatably carried by the frame including a plurality of resilient ground engaging members extending transversely of the line of travel of the weeder, at least one of which is in engagement with the ground during movement of the weeder, and manual means on said frame for positively rotating the drum for moving new ground engaging members into engagement with the ground to allow the vibration of the weeder members taken from the ground to clear the same from obstructions.

1,758,385. AZO DYESTUFFS AND PROCESS OF MAKING SAME. WERNER ZERWECK, Fechenheim, near Frankfort-on-the-Main, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Original application filed Nov. 15, 1926, Serial No. 148,620, and in Germany Nov. 17, 1925. Divided and this application filed Oct. 21, 1927. Serial No. 227,858. 8 Claims. (Cl. 260—95.)

1. As new compounds the azodyestuffs having probably the general formula:



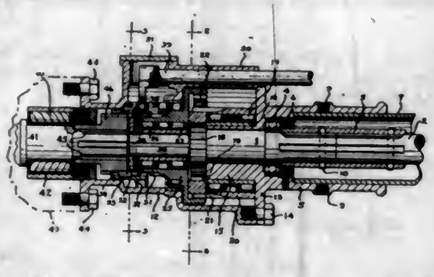
in which formula the phenyl residue in addition to the amino group may be further substituted and R means alkyl or the residue:



which dyestuffs yield upon reduction with stannous chloride an arylamine and the corresponding derivative of the

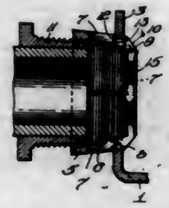
1-amino-2-hydroxy-naphthalene-3-carboxyamide, which dyestuffs are adapted for the production of valuable color lakes, when mixed with the usual substrata, and yield when produced on the vegetable fibre dyeings of a remarkable brightness and intensity and an excellent fastness, especially to rubbing.

1,758,386. TRANSMISSION GEARING. CHARLES E. F. AHLM, Cleveland, Ohio, assignor to The Twin High Transmission Company, Syracuse, N. Y., a Corporation of New York. Filed Dec. 18, 1924. Serial No. 756,746. 21 Claims. (Cl. 74—59.)



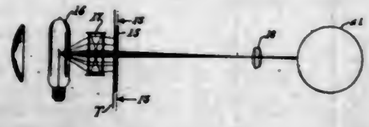
1. In a transmission gearing in combination, a casing, a driving shaft and a driven shaft, a gear carried by one of the shafts, an intermediate driving member having a gear, a hollow geared interponent connecting the two gears and surrounding one of the shafts, an eccentric bearing therefor carried rigidly by the casing, and a dental clutch mechanism arranged to selectively connect the driven shaft directly to the driving shaft and to the intermediate driving member.

1,758,387. MEANS FOR FASTENING ELEMENTS TO WALLS. ERNST G. K. ANDERSON, Evanston, Ill., assignor to Appleton Electric Company, a Corporation of Illinois. Filed Nov. 22, 1926. Serial No. 150,136. 1 Claim. (Cl. 247—25.)



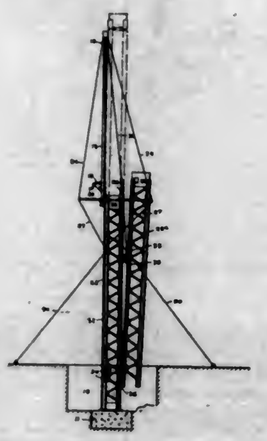
In combination, a sleeve flanged inwardly at one end and provided with a circumferential groove near said end, the flange and a portion of the sleeve inwardly therefrom being slit to permit radial expansion, and a ring U-shaped in cross-section arranged in the opening bounded by the flange and having its wings extending past the inner and outer faces of the flange.

1,758,388. PHOTOTELEGRAPHY. HARRY GUY BARTHOLOMEW, London, England. Filed Oct. 30, 1926, Serial No. 145,184, and in Great Britain Dec. 17, 1925. 7 Claims. (Cl. 178—7.)



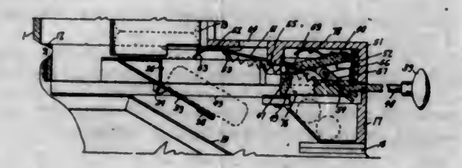
1. In the art of reproducing a picture, those steps which consist in simultaneously causing a series of reader means to co-operate with a plurality of prints of the said picture, the said reader means being caused to simultaneously cooperate with different relative small areas of the respective prints, and combining the readings secured by said reader means to produce composite small areas on the reproduced picture.

1,758,389. METHOD AND MEANS FOR ERECTING MASTS. JAMES E. BUSHNELL, North Plainfield, N. J., assignor to Ransome Concrete Machinery Company, Plainfield, N. J., a Corporation of New Jersey. Filed Nov. 21, 1928. Serial No. 320,773. 15 Claims. (Cl. 189—16.)



1. An erecting mechanism for sectional mast plants comprising a support adapted to slide along a mast section, a vertical frame mounted on said support, means on said frame adapted to assist in elevating another mast section, said support constructed and arranged to afford passage of said other mast section through the limits defined by said support.

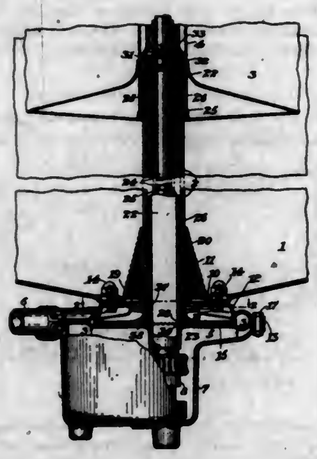
1,758,390. VENDING MACHINE. CHARLES H. CURTIS, Wheatridge, Colo. Filed Dec. 27, 1927. Serial No. 242,569. 8 Claims. (Cl. 312—67.)



1. In a coin operated vending machine having a case adapted to store vendible articles of merchandise in a laterally stationary vertical column behind a glass plate, a pivotally mounted table adapted to normally support said column and to deliver the lowermost article by pivotal movement of the table after a predetermined movement of said article along the table, and a manually operated carriage slidable above said table to a delivery position and having a platform adapted to contact with and move the lowermost article along the table and to slide under and support the next article thereabove and adapted by off-center contact with said table to prevent said pivotal delivery movement thereof prior to the completion of said predetermined movement.

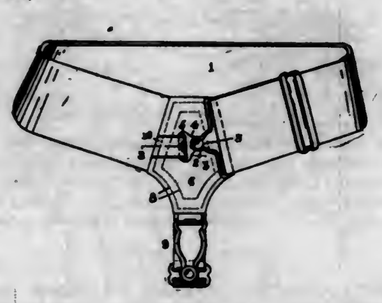
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1,758,391. PUMP-IMPELLER MOUNTING FOR LAUNDRY MACHINES. GEORGE W. DUNHAM, Utica, N. Y., assignor to Whirldry Corporation, Utica, N. Y., a Corporation of New York. Filed Nov. 11, 1925. Serial No. 68,467. 5 Claims. (Cl. 103—103.)



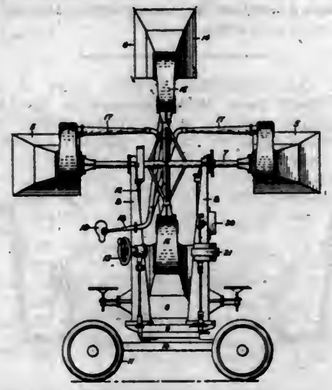
1. In a laundry machine, a tank adapted to hold liquid, a centrifugal pump casing having communication with said tank, said casing having a well secured to the lower wall and extending up above the highest liquid level, a drive shaft within said well, an impeller within said pump casing, and means for connecting said impeller to said shaft so that said impeller is constrained to rotate with said shaft but is structurally free to move axially relatively thereto, and a thrust bearing between said impeller and lower wall.

1,758,392. MAN'S GARTER. RALPH C. EISEL, Pittsburgh, Pa., assignor to Pittsburgh Garter Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Dec. 12, 1929. Serial No. 413,445. 3 Claims. (Cl. 241—6.)



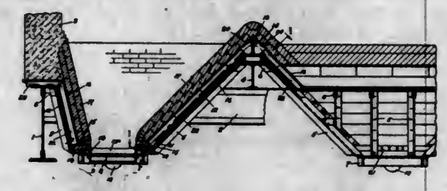
1. In a garter, the combination with a pad formed of a plurality of properly shaped textile members sewed together in superimposed relation by stitching adjacent to the edges of the members, a leg-band having its one end permanently attached to the rear edge of the pad, a wire loop on the other end of the leg band, a stud to be engaged by the wire loop and a stud plate upon which said stud is rigidly mounted and which is provided with an opening, and means for securing the stud plate in place against the outer face of the pad comprising a tongue cut from the material of the outer pad member by cuts extending inwardly from the rear edge of the pad and the tongue threaded through the opening in the stud plate, and the outer end of the tongue being stitched to the pad.

1,758,393. SOUND-LOCATING APPARATUS. HIRAM B. ELY, Philadelphia, Pa. Filed Sept. 19, 1927. Serial No. 220,531. 10 Claims. (Cl. 181—26.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928, 370 O. G., 757.)



10. In a sound apparatus, a pair of horns mounted for movement in unison, said horns formed with means for individually baffling non-frontal sound waves.

1,758,394. SELF-COOLING FURNACE BOTTOM. FREDERICK P. FAIRCHILD, White Plains, N. Y., assignor to The Allen Sherman Hoff Company, a Corporation of Pennsylvania. Filed Jan. 5, 1926. Serial No. 79,302. 12 Claims. (Cl. 110—1.)

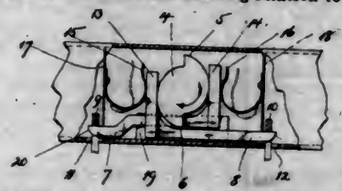


8. In a furnace bottom, two downwardly diverging walls, upwardly extending fluid passages therein, inlet openings at the lower ends of said passages, horizontal passages within the apex formed by said walls into which the upper ends of the upwardly extending passages open and outlet openings from said horizontal passages.

1,758,395. LOCK. EMIEL R. FOX, Oakwood, N. Y. Filed May 18, 1928. Serial No. 278,665. 1 Claim. (Cl. 70—2.)

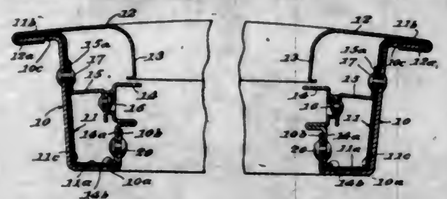
A lock of the type described, comprising a casing having slots adapted to admit members to be held in a locked position therein, partitions in said casing sliding bolts disposed in said casing so as to engage said members, and

each of said bolts having an arm extending at right angles, guiding means for said bolts, leaf springs secured to said partitions adapted to normally hold said bolts in engaging position, said leaf springs being of U-shape with one of the legs secured to said partition and the free legs thereof positioned in normal abutting relation to said arms



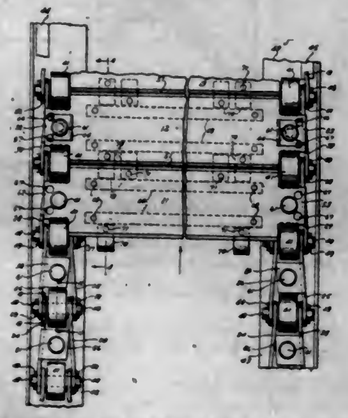
upon said bolts, and a cylindrical barrel rotatably mounted in said casing, and having a double acting cam portion, said barrel being adapted to be rotated by a key inserted therein to simultaneously move said sliding bolts out of their engaging position by the pressure exerted by said cam portion on said arms.

1,758,396. AUTOMOBILE BODY. OTTO J. GROEHN, Grosse Pointe Park, Mich., assignor to Hudson Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed June 26, 1928. Serial No. 288,424. 6 Claims. (Cl. 296—44.)



1. In a door for an automobile body, a pair of upright metal pillars having at the front thereof oppositely extending flanges, a sheet metal panel extending over said flanges, a non-metallic soundproofing sheet covering the inner surface of each pillar and bent to extend over each flange, the edges of said panel being bent around the edges of said flanges and said sheet, said sheet being interposed between said panel and flanges.

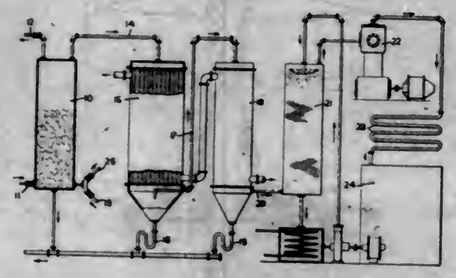
1,758,397. TRAVELING CONVEYER FOR OVENS. LAURENCE S. HARBER, Peterborough, England, assignor to Baker Perkins Company, Saginaw, Mich., a Corporation of New York. Filed May 15, 1926. Serial No. 109,258. 9 Claims. (Cl. 198—195.)



2. In a conveyer for traveling ovens, the combination of a pair of chains, each chain comprising separate inner and outer links pivotally connected with the preceding and succeeding links of the chain, and carrier plates supported at their ends one on each pair of links of said chains and positioned thereon by pivots secured to the chains at points spaced outwardly from the inner links of the chains.

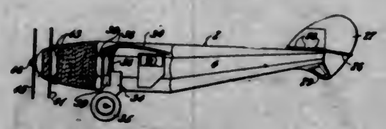
9. In a conveyer for traveling ovens, the combination of a pair of chains, each chain comprising separate inner and outer links pivotally connected with preceding and succeeding links of the chain and carrier plates supported on said chains and pivotally secured to the outer links and loosely supported on the inner links.

1,758,398. SEPARATION AND RECOVERY OF GASES. RUDOLPH LEONARD HASCHE, Elizabeth, N. J., assignor to American Smelting and Refining Company, New York, N. Y., a Corporation of New Jersey. Filed Aug. 17, 1927. Serial No. 213,550. 5 Claims. (Cl. 23—178.)



1. The method of separating and recovering sulphur dioxide gas from smelter gases, which comprises passing said gas, free from dust and fume, through silica gel, expelling sulphur dioxide from said gel by passing steam therethrough, separating the sulphur dioxide from said steam by passing through a primary condenser maintained at a sufficiently high temperature to condense the major portion of said steam without adsorbing excessive quantities of sulphur dioxide, and passing the sulphur dioxide through a second condenser whereby the gas is further cooled and its moisture content lowered, said second condenser being maintained at a temperature below that of said primary condenser.

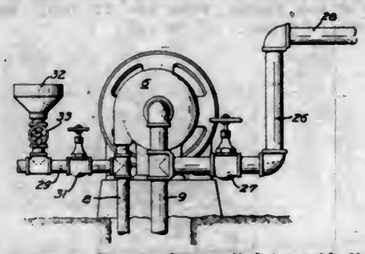
1,758,399. TOY AIRPLANE. THEODORE A. HODGDON, Springfield, Mass. Filed Sept. 24, 1928. Serial No. 307,928. 5 Claims. (Cl. 46—50.)



3. A one piece fuselage comprising a top, two sides, and a bendable nose portion, the said sides having means for receiving a one piece wing and for imparting the necessary aerodynamic camber to the wing, the fuselage having extensions located in opposed relation to provide a tail skid.

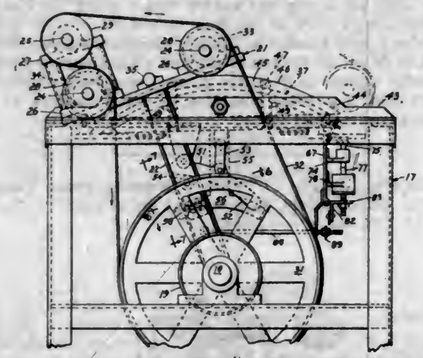
1,758,400. PUMPING SYSTEM. RACHELLE JACUZZI, Berkeley, Calif. Filed May 9, 1927. Serial No. 189,809. 5 Claims. (Cl. 103—250.)

1. In a pumping system, a pressure head comprising a cylindrical body having a recess in communication with the fluid to be pumped in one side thereof, a discharge pipe opening into said body, an eductor tube passing through a portion of said body and terminating in one wall



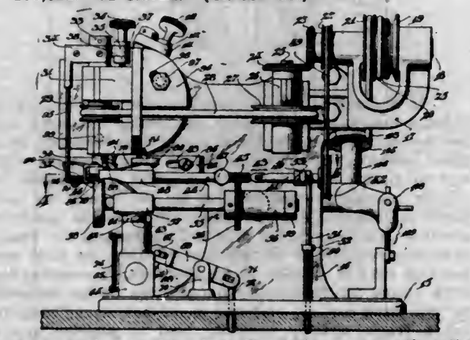
of said recess, and a nozzle supplied by said discharge pipe in alinement with and directed into said eductor tube in an opposite wall of said recess.

1,758,401. EDGE-FINISHING MACHINE. WILLIAM J. JOHNSON, Oakland, Calif. Filed Apr. 4, 1928. Serial No. 267,417. 2 Claims. (Cl. 144—149.)



1. In an edging machine for operation on an arcuate edge of an article formed of grained fibrous material, said edge extending generally as the grain of the material and being parallel to the grain at an intermediate point of the edge, a cutter carriage manually oscillatable in a fixed arcuate path, a pair of oppositely rotating and coplanar rotary cutters mounted on said carriage for movement in a common path, a shiftably mounted holder for releasably engaging the article, and means operable by the opposite travels of the cutter carriage to dispose said holder to present the different portions of said edge at opposite sides of said point for engagement by a different cutter.

1,758,402. SKIVING MACHINE. CHARLES E. JONES, Philadelphia, Pa. Filed Mar. 8, 1927. Serial No. 173,622. 31 Claims. (Cl. 69—16.)



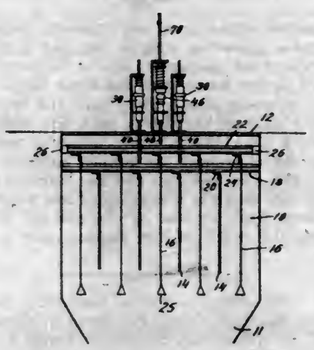
1. A skiving machine including a frame, a cutting disk rotatably mounted in the frame, a supporting wheel rotatable below and at right angles to the axis of the disk, a feed roller rotatable adjacent the supporting wheel, and means for adjusting the supporting wheel and feed roller longitudinally of their axes.

1,758,403. INDICATING GAUGE FOR LIQUIDS. HAROLD L. JOYCE, South Orange, N. J., assignor to The Tiffany Manufacturing Co., Newark, N. J. Filed May 18, 1925. Serial No. 30,132. 8 Claims. (Cl. 73—82.)



1. In a gauge for liquids, a slidable scale indicator, a guide for the indicator, a guide holder adjustable with respect to the indicator guide, means for holding the guide and holder in adjusted position, a float for mounting in a vessel containing a liquid and means having stiffness and flexibility connecting the float and the indicator.

1,758,404. APPARATUS FOR REMOVING DUST FROM ELECTRODES. ARMAND L. LABBE, Murray, Utah, assignor to American Smelting and Refining Company, New York, N. Y., a Corporation of New Jersey. Filed Sept. 2, 1925. Serial No. 54,163. 5 Claims. (Cl. 183—7.)



1. In an electrostatic precipitator, an electrode adapted to have precipitated material thereon, a hammer device for jarring loose the precipitated dust comprising a standard supported in operative relation to said electrode, an auxiliary piston member having a conduit extending therethrough, a fluid hammer having a fluid inlet, and a bit, an auxiliary cylinder member surrounding said piston, one of said members connected to said standard, the other of said members connected to said hammer, means for normally holding said hammer away from said electrode, means for supplying operating fluid to said fluid inlet through said conduit and said cylinder, whereby when fluid is supplied to operate said hammer said hammer moves forward as a unit to place said bit in operative relation to said electrode.

1,758,405. SHOE. FRANCIS J. O'DONNELL, Medway, Mass., assignor to Joseph M. Herman Shoe Company, Boston, Mass., a Corporation of Massachusetts. Filed June 29, 1928. Serial No. 289,095. 5 Claims. (Cl. 36—1.)



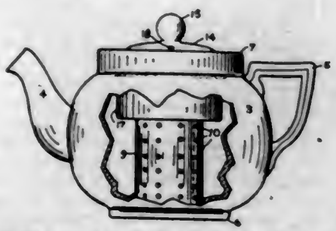
1. A shoe having its toe portion provided with a box toe stiffener of normally strong, stiff material, a stiffener pocket or enclosure of two pieces of enamel cloth, one on each side of the stiffener, the edges of the enamel cloth being sewed together to close the pocket and to protect the stiffener from access of oil.

1,758,406. END OR SIDE CLOSURE FOR CIGARETTE PACKAGES. RICHARD A. OGDEN, New York, N. Y. Filed Sept. 21, 1929. Serial No. 394,241. 4 Claims. (Cl. 206—41.)



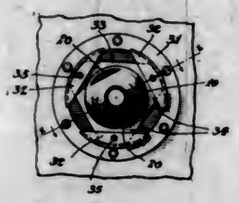
1. An end or side closure for cigarette packages, comprising a frame including a flange designed to embrace the outer portion of the package at one of its ends, side members carried by the frame with the inner faces of the top of the side members spaced away from the inner faces of the adjacent walls of the frame, said side members being of less width than the laterally adjacent walls of the frame whereby clearances are formed between the upper portions of the side members and the longer walls of the frame, said side members also being of less width than the distance from front to rear of the package and of less length than the depth of the package and a cover for the closure.

1,758,407. TEAPOT. GEORGE LEIGHTON PARKINSON, Eastwood, England, assignor to Hugh C. Edmiston, New York, N. Y. Filed Aug. 27, 1929. Serial No. 388,656. 3 Claims. (Cl. 53—3.)



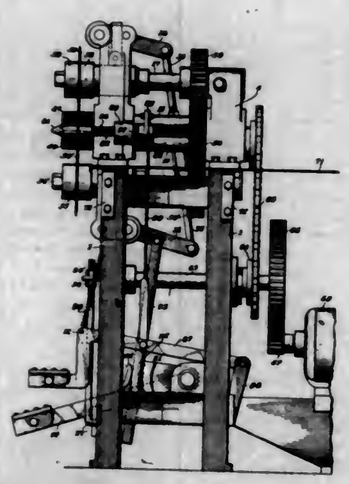
1. In a tea pot a body having a handle and spout, a foraminous tea container integral within the body at the bottom and open at the top and a cover for said body having a flange fitting over the upper portion of said container and spaced therefrom.

1,758,408. CLEAT FOR SPORT SHOES. GEORGE L. PIERCE and HENRY V. RAU, Brooklyn, N. Y., assignors to A. G. Spalding & Bros., New York, N. Y., a Corporation of New Jersey. Filed Nov. 12, 1926. Serial No. 147,899. 3 Claims. (Cl. 36—59.)



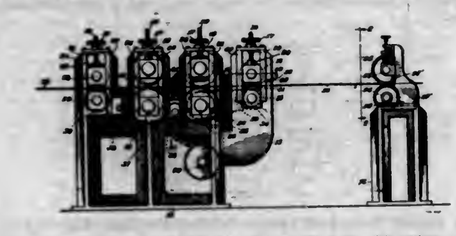
1. In a detachable cleat construction for shoes, a socket consisting of a metal plate having an annular rim portion lying in one plane and provided with means for securing the socket to a shoe sole, said plate having a series of inwardly projecting lips spaced evenly about the rim and offset downwardly to lie in a second plane, and a cleat having a base member of general polygonal shape and of a size to fit within the rim of the first plate and pass between the lips thereof to lie in the plane of the rim portion, said cleat and base being rotatable to bring portions of the base above the said lips.

1,758,409. BEAD CUTTER. HUGO REICHEL, Chicago, Ill. Filed Oct. 28, 1926. Serial No. 144,888. 3 Claims. (Cl. 164—60.)



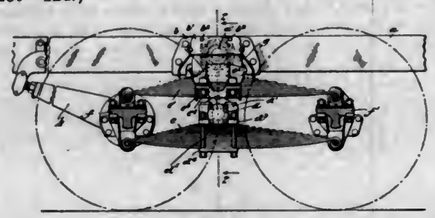
1. In a machine of the class described, a plurality of cutting instrumentalities each comprising one fixed and one movable cutter which are adapted to cooperate as a shear, said fixed cutters being mounted one above the other and in rolling contact with each other and adapted to receive thereon the material to be cut, means for normally maintaining said movable cutters out of operative position and a manually operated mechanism for simultaneously controlling the distance between the fixed and movable cutters of each instrumentality, in combination with means for facilitating the position of the material on said fixed cutters, said last mentioned means comprising a frame member normally held in position and a mechanism for manually rotating said frame member to a vertical position.

1,758,410. SHINGLE-STRIP MACHINE. HUGO REICHEL, Chicago, Ill. Filed Nov. 8, 1926. Serial No. 146,961. 2 Claims. (Cl. 164—128.)



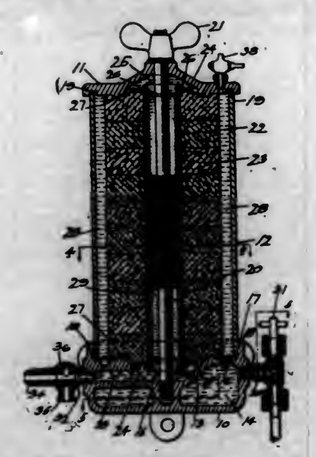
1. In a shingle strip machine, the combination with means for severing a sheet of material into a plurality of generally longitudinal strips, of means for separating the contiguous edges of adjacent strips, said separating means comprising corrugating rolls through which said strips are fed to corrugate the strips longitudinally.

1,758,411. SPRING SUSPENSION. JOSIAH E. REID, New York, N. Y., assignor to International Motor Company, New York, N. Y., a Corporation of Delaware. Filed Aug. 19, 1926. Serial No. 130,130. 10 Claims. (Cl. 280—124.)



1. In a spring suspension, a vehicle frame, a pivoting axle secured thereto, a second axle, means to pivotally connect the axles, a pair of axles, a spring connecting the pair of axles and mounted on the second axle, and a second spring connected to the pair of axles at the sides thereof opposite to the first spring.

1,758,412. LIQUID FILTER. CHARLES L. SHEPPY, Buffalo, N. Y., assignor to The Pierce Arrow Motor Car Company, Buffalo, N. Y. Filed Jan. 26, 1926. Serial No. 83,905. 12 Claims. (Cl. 210—165.)



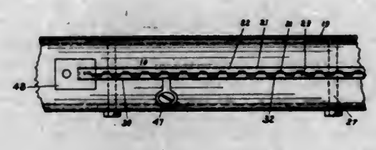
1. In a liquid filter, the combination of an enclosing casing having a removable cover, an annular filtering element of compressible resilient, coherent self shape retaining filtering material open at both ends and arranged in said casing to form an outer liquid space in the casing surrounding said filtering element and an inner liquid space within the filtering element, means for forcing said cover to a tight seat on said casing, said cover and an opposed part of said casing having annular portions which press on the opposite ends of said compressible filtering element and act when the cover is forced to its seat on the casing to compress and clamp said annular filtering element between said opposed parts of the casing and form tight joints between the ends of the filtering element and the casing parts contacting therewith, and connections for admitting liquid to one of said liquid spaces and discharging it from the other liquid space.

1,758,413. MANDREL-BAR-SUPPORTING APPARATUS FOR PIERCING MILLS. RALPH C. STIEFEL, Ellwood City, Pa. Filed Apr. 5, 1928. Serial No. 267,577. 1 Claim. (Cl. 80—13.)



In a billet piercing mill, the combination of piercing rolls, a mandrel bar provided at its forward end with a mandrel lying in the pass formed by said rolls, a plurality of pairs of movably mounted combined bar-supporting and open-top billet-guiding blocks arranged at spaced intervals intermediate the ends of said bar and having extended bar and billet engaging surfaces, and independent mechanism for separately moving each of said pairs of blocks from its mandrel-supporting to its billet-guiding position.

1,758,414. TUBULAR BURNER. RICHARD THURM, Saginaw, Mich., assignor to Baker Perkins Company, Incorporated, Saginaw, Mich., a Corporation of New York. Original application filed Oct. 15, 1925, Serial No. 62,511. Divided and this application filed Jan. 31, 1928. Serial No. 250,847. 3 Claims. (Cl. 153—99.)



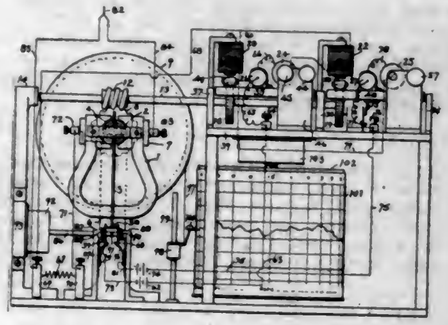
2. A burner comprising a relatively long tubular member provided with a slot extending longitudinally thereof, and a plurality of relatively long narrow walls placed face to face and extending along said slot, each of said walls having a series of spaced grooves extending transversely thereof to provide channels through which the fuel is discharged from the tubular member, the grooves in one wall being wider than the grooves in the other wall, and the grooves in each wall being opposite the spaces between the grooves in the other wall.

1,758,415. BIRD CAGE. ROSS L. TULLIS, New Haven, Conn., assignor to The Andrew B. Hendryx Company, New Haven, Conn., a Corporation of Connecticut. Filed Feb. 12, 1927. Serial No. 167,828. 6 Claims. (Cl. 119—17.)



1. A bird cage comprising a bottom portion and a body portion, means on the bottom portion of the cage to support the body portion, means for latching the two portions of the cage together, and common means for securing said latching means and said supporting means to the cage.

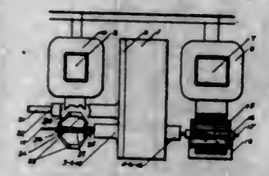
1,758,416. RECORDING GALVANOMETER. FRITZ FREDERICK UEHLING, Passaic, N. J. Filed Oct. 3, 1929. Serial No. 397,127. 12 Claims. (Cl. 171—95.)



1. In a device of the class described, the combination with a rotatably mounted galvanometer, of a shaft in geared connection with the galvanometer, a ratchet fastened to the shaft, a pawl for the ratchet, electrical means for moving the pawl against the ratchet to turn the shaft in a clockwise direction, a second ratchet fastened to the shaft, a pawl for the second ratchet, electrical means for moving the second pawl against the second ratchet to turn the shaft in a counter-clockwise direction, an electrical resistance, an electric circuit which includes the resistance and the galvanometer, a second electric circuit which includes the resistance and the first electrical means, and a third circuit which includes the resistance and the second electrical means.

1,758,417. SYNCHRONOUS ELECTRIC MOTOR. ROBERT VALVERDE, New York, N. Y. Filed Apr. 12, 1927. Serial No. 183,106. 12 Claims. (Cl. 172—278.)

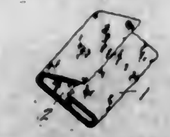
1. A self starting synchronous motor comprising, a fluted rotor having a strong starting torque mechanically connected on a common shaft to a synchronizing rotor, means associated with said synchronizing rotor to subject it to centrifugal force during operation to develop strong synchronous characteristics when near and below synchronous speed.



2. In a self-starting synchronous motor including means for producing a rotating magnetic field, an induction starting rotor comprising a sheet of hardened steel ribbon substantially corrugated to form a fluted star shaped cylinder thereby to offer an elongated and tortuous magnetic path thru the interpolar space of said magnetic field.

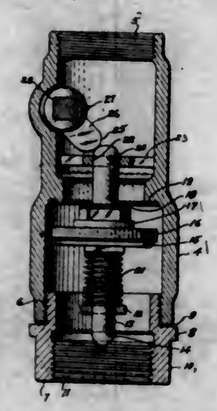
5. A self starting synchronous motor including in combination, a shaft, cooperating means associated with said shaft to produce rotation of said shaft, a fixed sleeve and movable sleeve associated with said shaft a spring associated with said shaft to keep said sleeves apart, articulated members associated with said fixed and movable sleeves and adapted to be moved relative to one another upon motion of said shaft, a single phase field associated with said casing and cooperating with said articulated members to produce synchronized rotation of said shaft.

1,758,418. BAT. FRANK J. VINCENT, Little Falls, N. Y. Filed Feb. 13, 1929. Serial No. 339,702. 12 Claims. (Cl. 19—145.)



1. A bat for use in upholstery and the like, comprising a bat of cotton, a narrower bat of loose, tough fibers superposed upon the cotton bat, and the edges of the combined bat being folded over towards and overlapping one another.

1,758,419. VALVE. ABRAM W. WHEATON, Maplewood, N. J., assignor to A. W. Wheaton Brass Works, Newark, N. J., a Corporation of New Jersey. Filed May 15, 1929. Serial No. 363,146. 4 Claims. (Cl. 251—132.)

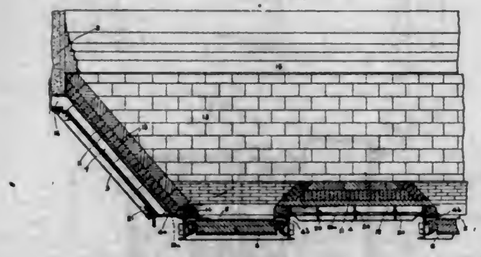


1. A valve of the class described comprising, a casing having an internal valve seat, a valve disk movable within said casing and adapted to engage said seat to close said valve, said valve disk having a valve stem and a pressure piece extending in opposite directions therefrom, means within said casing for guiding said valve stem and said pressure piece to thereby control the line of movement of said valve disk, a cam shaft and an operating cam splined on said cam shaft and adapted to cooperate with said pressure piece, said cam shaft being operable to rotate said operating cam to effect the movement of said valve disk to open position, said operating cam and said pressure piece being so constructed and arranged as to retain said valve disk in open position.

1,758,420. METHOD OF PRODUCING A COATING STABLE TOWARD ACIDS AND ALKALIS ON METALLIC ARTICLES. FRITZ AHRENS, Bockenem-on-the-Harz, Germany, assignor of one-half to Harzer Achsenwerke, G. m. b. H., Bornum-on-the-Harz, Konigsdablum (Post Bornum-on-the-Harz), Germany, a Firm. Filed July 7, 1927, Serial No. 204,136, and in Germany May 18, 1925. 6 Claims. (Cl. 18—59.)

5. The herein described method of producing on metal a coating stable towards acids and alkalis, which consists in first coating the said metal with a solution of caoutchouc contsining a reaction product produced by sulfurizing oxidizable oils by means of sulfur monochloride, applying a layer of caoutchouc to such coating, and vulcanizing the same.

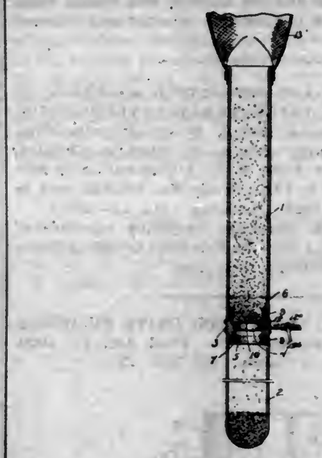
1,758,421. FURNACE CONSTRUCTION. FRANK B. ALLEN, Lower Merion Township, Montgomery County, Pa., assignor, by mesne assignments, to The Allen-Sherman-Hoff Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Nov. 13, 1924. Serial No. 749,807. 11 Claims. (Cl. 110—165.)



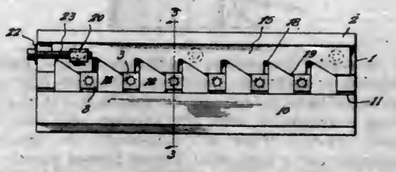
1. In a furnace of the class described, wall supporting members and a furnace bottom supported thereby, the said bottom comprising an inner refractory lining ,an outer metal shell spaced apart therefrom and having integral projections cooperating with said refractory lining to form cooling fluid passages between the lining and shell, the said passages extending upwardly past the inner sides and adjacent to the side wall supporting members.

1,758,422. APPARATUS FOR SEPARATING COMMINUTED MATTER. ROBERT ANDERSON, New York, N. Y. Filed June 12, 1928. Serial No. 284,685. 3 Claims. (Cl. 209—475.)

1. An apparatus for the separation of comminuted matter including elements of different specific gravities; said apparatus comprising an upper vessel having an outlet and a lower vessel, a tubular coupling between said vessels having a throat, a screen located in said coupling above said throat, means at outlet of said upper vessel for permitting the passage of air therethrough and for preventing the passage of any solid matter, and means for forcing air through the wall of said coupling into said upper vessel via said screen, substantially as specified.



1,758,423. VENEER KNIFE. AMERICUS D. BASINGER, Plymouth, N. C., assignor of one-half to Robert P. Walker, Plymouth, N. C. Filed Sept. 1, 1928. Serial No. 303,441. 3 Claims. (Cl. 144—212.)



1. The combination of a lower clamping bar having a series of equi-distant straight sided lugs on its upper face between its front and rear edges and a straight rib on said face along its rear edge, an upper clamping bar provided on its lower face with recesses to fit over said lugs and said rib and be thereby held against relative turning movement, a knife fitting between the forward edges of the bars, followers fitted between the bars and slidably engaged between and guided by said lugs and bearing against the back edge of the knife, an adjusting bar slidably resting on the lower clamping bar between the rib and lugs thereon and engaging the rib and the followers to shift the followers laterally for setting the blade, and means for securing the clamping bars together whereby to hold the blade, the followers and the adjusting bar in operative relation.

1,758,424. THREAD CLEANER. FRANK BAUMAN, Honesdale, Pa., assignor to Wayne Manufacturing Company, Honesdale, Pa. Filed Dec. 10, 1928. Serial No. 325,024. 1 Claim. (Cl. 28—71.)



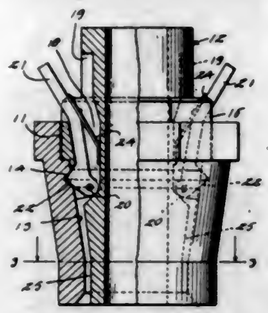
A thread guide including a plate, a guard at one side of the plate, a blade formed with a shank which is adjustably connected to said plate, and a second plate se-

cured to the first mentioned plate and provided with a metal nosing having a groove formed in a side thereof in which an edge of the plate is secured, said nosing being hardened and finished to present a straight and polished surface.

1,758,425. STABLE AND STERILIZED SOLUTION OF SALTS OF PARA-DIALKYLAMINOARYLPHOSPHINOUS ACIDS. LOUIS BENDA, Frankfort-on-the-Main-Fechenheim, Germany, assignor to Winthrop Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed Jan. 4, 1929, Serial No. 330,420, and in Germany Mar. 29, 1928. 8 Claims. (Cl. 23—250.)

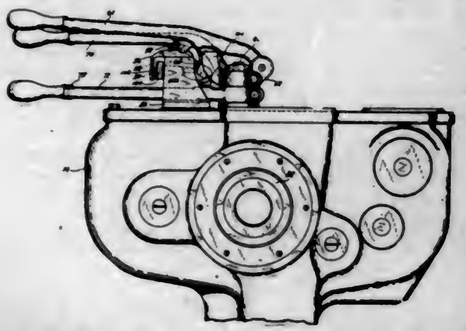
1. A process which comprises sterilizing solutions of mixtures of a salt of a para-dialkylamino-aryliphosphinous acid and of an acid binding substance.

1,758,426. LOCKING DEVICE FOR DRIVE BUSHINGS. LEE J. BLACK, Beaumont, Tex. Filed Apr. 26, 1929. Serial No. 358,414. 6 Claims. (Cl. 255—23.)



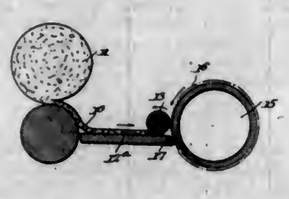
1. In means for locking a grief stem drive bushing to intermediate bushings, and in combination with a grief stem drive bushing and an intermediate bushing having nesting engagement with one another and held against relative rotation when in engagement, the intermediate bushing having a horizontal groove formed therein, levers pivoted to said grief stem drive bushing and having parts to engage in the groove of the intermediate bushing when the levers are moved in one direction, and springs substantially urging said levers in said direction.

1,758,427. INDICATING DEVICE. WILLIAM J. BURGER, Shaker Heights, Ohio, assignor to The Warner & Swasey Company, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 8, 1929. Serial No. 345,399. 40 Claims. (Cl. 116—116.)



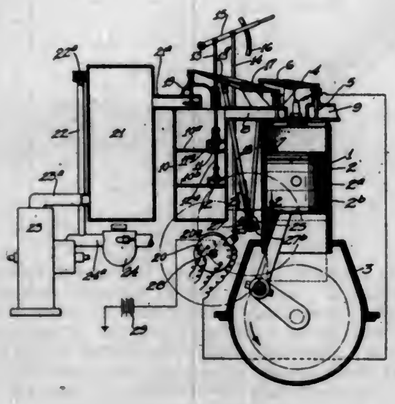
1. An indicating device associated with the members controlling a part of a machine, said device being operated by said members and directly indicating the rate of movement of such controlled part.

1,758,428. CARD. ROBERT G. CAMPBELL, New York Mills, N. Y. Filed Sept. 4, 1926. Serial No. 133,711. 1 Claim. (Cl. 19—105.)



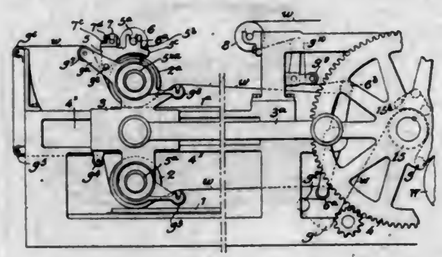
Apparatus for treating rayon, including a feed-plate over which the fibrous mass travels in a single horizontal plane, a feed-roll juxtaposed to one edge of the plate for drawing the yarn thereover, and a lickerin, the axis of the lickerin being located in a plane substantially above that of the feed-plate, also juxtaposed to the edge of the plate and coacting with the feed-roll, whereby the fibrous mass passes between the edge of the plate and the periphery of the lickerin without substantial elevation above its plane of travel over the plate, and which by reason of the position of the feed plate substantially below the axis of the lickerin is picked up by the lower periphery of the lickerin without subjecting the fibers to any substantial bending against the edge of the feed-plate.

1,758,429. INTERNAL-COMBUSTION ENGINE. MARCUS MAURICE CORY, San Diego, Calif. Filed Sept. 16, 1926. Serial No. 135,789. 4 Claims. (Cl. 123—65.)



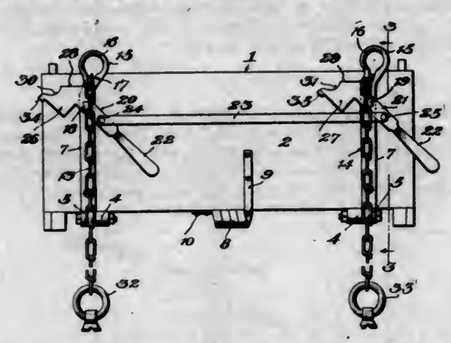
1. In an internal combustion engine, a cylinder, a piston reciprocally mounted therein, compression, multiple storage tank and valve means for controlling and conducting fuel mixture to said cylinder in variable volume, and means simultaneously operating therewith for igniting the mixture in said cylinder at constant pressure for each ignition position of the piston in said cylinder during the receding action of the piston.

1,758,430. SMUT REMOVER FOR TRAVELING-CYLINDER WEB-PRINTING PRESSES. PAUL F. COX, Chicago, Ill., assignor to The Goss Printing Press Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 13, 1929. Serial No. 339,597. 11 Claims. (Cl. 101—423.)



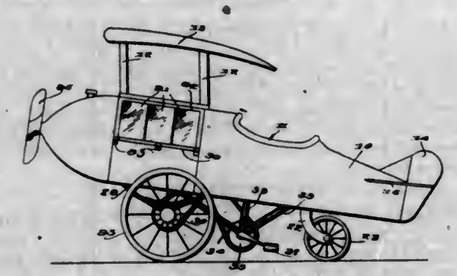
1. In a printing press having a bed and a traveling cylinder cooperating with the bed, and means for throwing the cylinder off impression on one stroke, smut removing devices adapted to clean the cylinder while it is thrown off impression.

1,758,431. RACK FOR TRUCKS OR WAGONS. CHARLES W. CRANNELL, Big Springs, Nebr., assignor of one-third to Anna C. Barnes, Big Springs, Nebr., and one-third to Ada A. Wolf, Chappell, Nebr. Filed July 24, 1928. Serial No. 294,963. 12 Claims. (Cl. 296—1.)



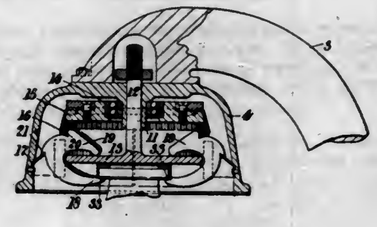
1. A rack of the character described comprising a body portion, a hinged side, chains secured to the body portion and passing through guide-ways carried by the hinged side and interlocked with said guide-ways, and means for simultaneously disengaging the chains with the guide-ways to allow the side to swing downwardly.

1,758,432. VENDING MACHINE. JAMES THOMAS CROW, Arkadelphia, Ark. Filed Sept. 13, 1928. Serial No. 305,816. 1 Claim. (Cl. 208—42.)



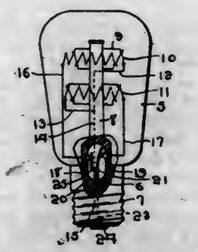
A vehicle comprising an elongated hollow body in the shape of the fuselage of an airplane, a frame connected with the body and located partly within and without the body, traction wheels carried by the frame, a steering wheel carried by the frame for supporting the rear end of the body, means for manually revolving the traction wheels whereby the body is propelled, means interpolated in the manual means for releasing a traction wheel from the manual means, means for controlling the steering wheel, and means operatively connecting the steering means with the releasing means so that when the steering means is actuated one of the releasing means will disconnect a traction wheel from the driving connection.

1,758,433. CAPSULING APPARATUS. LEONARD GORDON DAVIES, Weldstone, England. Filed Mar. 29, 1928, Serial No. 265,768, and in Great Britain Apr. 6, 1927. 9 Claims. (Cl. 226—86.)



1. A capsuling apparatus including a plurality of capsule closing fingers, and a resilient fulcrum for each of said fingers, said fulcrum permitting movement of the finger in both vertical and horizontal directions.

1,758,434. INCANDESCENT LAMP. ADOLPHE D. DE CASTRO, New York, N. Y. Filed June 14, 1926. Serial No. 115,976. 2 Claims. (Cl. 176—14.)



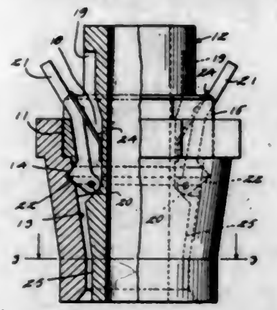
1. In an incandescent lamp, a plurality of filaments, a conductor common to one terminal of each filament, a continuous circuit from said terminal to the other terminal of one of said filaments including a thermo responsive element in said lamp, a make-and-break contact device in circuit with the other of said filaments, and one of the elements of the make-and-break contact device being secured to the thermo responsive element.

cured to the first mentioned plate and provided with a metal nosing having a groove formed in a side thereof in which an edge of the plate is secured, said nosing being hardened and finished to present a straight and polished surface.

1,758,425. STABLE AND STERILIZED SOLUTION OF SALTS OF PARA-DIALKYLAMINOARYLPHOSPHINOUS ACIDS. LOUIS BENDA, Frankfort-on-the-Main-Fechenheim, Germany, assignor to Winthrop Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed Jan. 4, 1929, Serial No. 330,420, and in Germany Mar. 29, 1928. 8 Claims. (Cl. 23—250.)

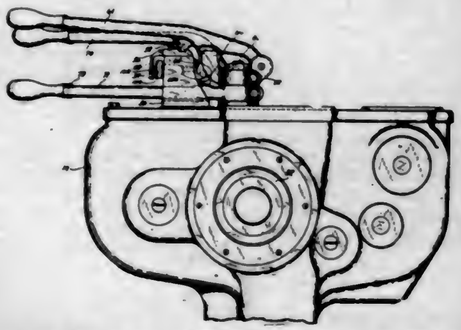
1. A process which comprises sterilizing solutions of mixtures of a salt of a para-dialkylamino-arylphosphinous acid and of an acid binding substance.

1,758,426. LOCKING DEVICE FOR DRIVE BUSHINGS. LEE J. BLACK, Beaumont, Tex. Filed Apr. 26, 1929. Serial No. 358,414. 6 Claims. (Cl. 255—23.)



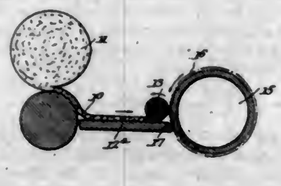
1. In means for locking a grief stem drive bushing to intermediate bushings, and in combination with a grief stem drive bushing and an intermediate bushing having nesting engagement with one another and held against relative rotation when in engagement, the intermediate bushing having a horizontal groove formed therein, levers pivoted to said grief stem drive bushing and having parts to engage in the groove of the intermediate bushing when the levers are moved in one direction, and springs substantially urging said levers in said direction.

1,758,427. INDICATING DEVICE. WILLIAM J. BURGER, Shaker Heights, Ohio, assignor to The Warner & Swasey Company, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 8, 1929. Serial No. 345,309. 40 Claims. (Cl. 116—116.)



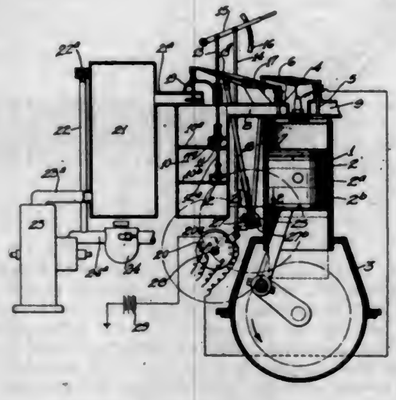
1. An indicating device associated with the members controlling a part of a machine, said device being operated by said members and directly indicating the rate of movement of such controlled part.

1,758,428. CARD. ROBERT G. CAMPBELL, New York Mills, N. Y. Filed Sept. 4, 1926. Serial No. 133,711. 1 Claim. (Cl. 19—105.)



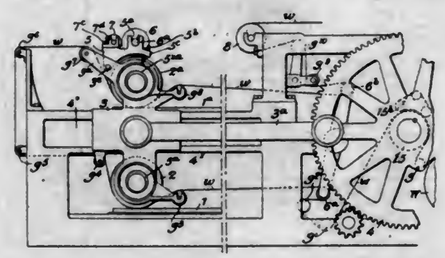
Apparatus for treating rayon, including a feed-plate over which the fibrous mass travels in a single horizontal plane, a feed-roll juxtaposed to one edge of the plate for drawing the yarn thereover, and a lickerin, the axis of the lickerin being located in a plane substantially above that of the feed-plate, also juxtaposed to the edge of the plate and coacting with the feed-roll, whereby the fibrous mass passes between the edge of the plate and the periphery of the lickerin without substantial elevation above its plane of travel over the plate, and which by reason of the position of the feed plate substantially below the axis of the lickerin is picked up by the lower periphery of the lickerin without subjecting the fibers to any substantial bending against the edge of the feed-plate.

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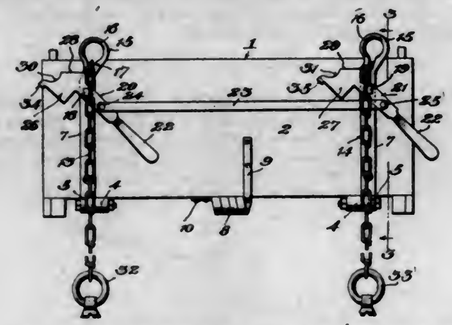
1. In an internal combustion engine, a cylinder, a piston reciprocally mounted therein, compression, multiple storage tank and valve means for controlling and conducting fuel mixture to said cylinder in variable volume, and means simultaneously operating therewith for igniting the mixture in said cylinder at constant pressure for each ignition position of the piston in said cylinder during the receding action of the piston.

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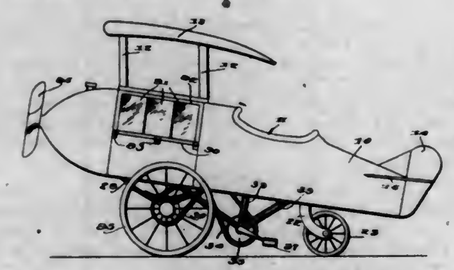
1. In a printing press having a bed and a traveling cylinder cooperating with the bed, and means for throwing the cylinder off impression on one stroke, smut removing devices adapted to clean the cylinder while it is thrown off impression.

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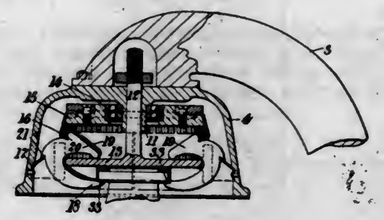
1. A rack of the character described comprising a body portion, a hinged side, chains secured to the body portion and passing through guide-ways carried by the hinged side and interlocked with said guide-ways, and means for simultaneously disengaging the chains with the guide-ways to allow the side to swing downwardly.

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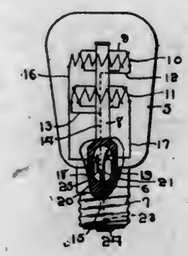
A vehicle comprising an elongated hollow body in the shape of the fuselage of an airplane, a frame connected with the body and located partly within and without the body, traction wheels carried by the frame, a steering wheel carried by the frame for supporting the rear end of the body, means for manually revolving the traction wheels whereby the body is propelled, means interpolated in the manual means for releasing a traction wheel from the manual means, means for controlling the steering wheel, and means operatively connecting the steering means with the releasing means so that when the steering means is actuated one of the releasing means will disconnect a traction wheel from the driving connection.

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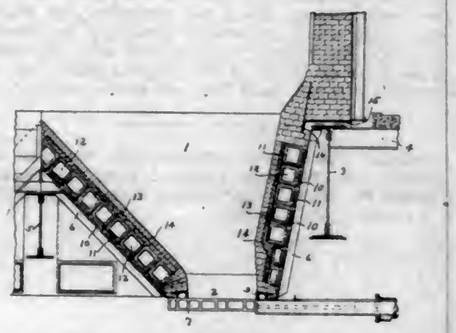
1. A capsuling apparatus including a plurality of capsule closing fingers, and a resilient fulcrum for each of said fingers, said fulcrum permitting movement of the finger in both vertical and horizontal directions.

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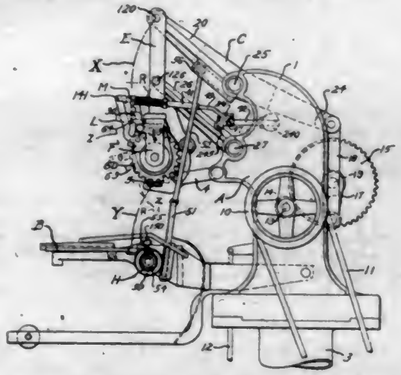
1. In an incandescent lamp, a plurality of filaments, a conductor common to one terminal of each filament, a continuous circuit from said terminal to the other terminal of one of said filaments including a thermo responsive element in said lamp, a make-and-break contact device in circuit with the other of said filaments, and one of the elements of the make-and-break contact device being secured to the thermo responsive element.

1,758,435. ASH-GATE HOPPER. FRANK H. DUNBAR, Cleveland, Ohio, assignor, by mesne assignments, to The Allen-Sherman-Hoff Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Aug. 25, 1924. Serial No. 734,031. 9 Claims. (Cl. 72—16.)



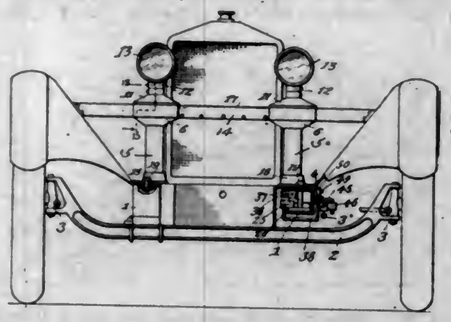
1. A furnace hopper comprising a metallic outer shell, an intermediate lining supported thereby and having horizontally disposed ventilating passages, and an inner refractory lining supported by said intermediate lining.

1,758,436. NUMBERING-MACHINE ATTACHMENT. FRED FITZGERALD, Lawrence, Mass. Filed May 4, 1928. Serial No. 275,155. 7 Claims. (Cl. 101—80.)



1. In a stamping or numbering machine, the combination with a fixed frame; of a rocker frame comprising upper and lower arms each pivoted to the fixed frame, and having their free ends connected by a head frame pivoted to the free ends of said arms; a type head carrying settable types and carried by and under the head frame; a numbering wheel having ratchet notches and revoluble in said type head; a spring pressed back turn prevention pawl pivoted to the type head and engaging said wheel notches; an advancing arm pivoted on the same axis as the numbering wheel and carrying an advancing pawl in engagement with said wheel notches; a pivot track attached to the fixed frame; a telescoping connecting rod having adjustable springs between its sections and pivotally connected at one end to the advancing arm and at its other end to a pivot slidable on the pivot track; stops for said advancing arm; a manually operable catch to hold the slidable pivot in fixed position on the pivot track; a feed table adapted to be engaged by the type head, and feeding means including a feed roll, feed roll revolving means comprising a ratchet and a rack gear together with a pawl carried by the rack gear and in engagement with the ratchet and a rack in engagement with the rack gear and adjustably pivoted to the rocker frame.

1,758,437. DIRIGIBLE HEADLIGHT. JAMES GLENNON, Sr., Rochester, Minn. Filed May 13, 1929. Serial No. 362,694. 4 Claims. (Cl. 240—62.)



4. The combination with steering mechanism of a rotatable shaft for supporting a headlight, a member rotatable with the shaft, resilient means for holding the member normally in a determined position, and a lost motion connection between the steering mechanism and said member, said connection including an element adapted to be shifted relative to the rotatable member by the action of the steering mechanism, a latch having oppositely extended wings and pivotally mounted between its wings, means carried by the member on the shaft for engagement by the respective wings, and means movable with the element actuated by the steering mechanism for swinging the latch relative to the member on the shaft and subsequently shifting said member.

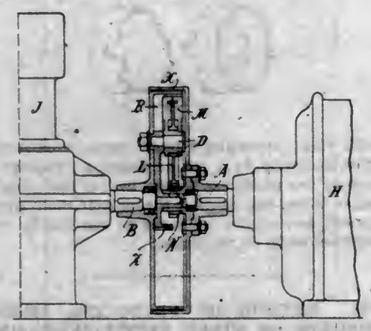
1,758,438. PROCESS FOR MANUFACTURING MOLDED EXTENSION TOPS AND MOLDED BOOTS. ALFRED A. GLIDDEN and THOMAS M. KNOWLAND, Watertown, Mass., assignors, by mesne assignments, to Hood Rubber Company, Inc., Wilmington, Del., a Corporation of Delaware. Filed Jan. 8, 1929. Serial No. 330,983. 4 Claims. (Cl. 18—59.)



1. The process of manufacturing a molded boot with extension top which consists in molding a boot of rubber compound and vulcanizing the same and in molding an extension top of rubber compound and vulcanizing the same, then attaching the lower edge of the extension top to the upper edge of the boot leg by vulcanizable adhesive material, and then locally vulcanizing the edges thus attached together.

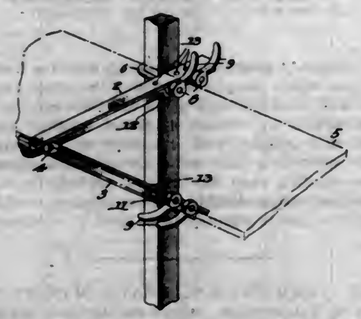
1,758,439. SHAFT COUPLING WITH POWER STORAGE. RUDOLF GOLDSCHMIDT, Berlin, Germany. Filed Feb. 14, 1924, Serial No. 692,873, and in Germany Feb. 17, 1923. 4 Claims. (Cl. 64—27.)

1. Mechanism for coupling together two rotating shafts with a connection resilient by virtue of centrifugal forces comprising two aligned shafts, arms respectively secured to one of said shafts and mechanically connected to each other, fly-weights carried by at least one of said arms, means connected to the other of said aligned shafts and



resiliently interconnected with said arms, and means to apply the centrifugal forces due to said fly-weights to restrain the angular displacements of one of said shafts relative to the other.

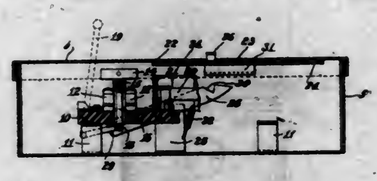
1,758,440. ADJUSTABLE POST BRACKET. JAMES R. GOODWIN, deceased, Evansville, Ind, by Percy E. Goodwin and Walter C. Goodwin, administrators, Evansville, Ind., assignors to The Steel Scaffolding Company, Evansville, Ind., a Corporation of Indiana. Original application filed Feb. 13, 1924, Serial No. 692,574. Divided and this application filed May 12, 1927. Serial No. 190,924. 1 Claim. (Cl. 304—33.)



In a bracket for use on wooden posts, the combination with an arm of angle-iron, of a brace therefor which is of angle-iron, and means for independently securing the arm and the brace to the post, comprising in one instance screw-threaded bolts whose shanks pass through one web of the brace and are spaced apart to adapt them to lie on opposite sides of the post, and in the other instance screw-threaded bolts whose shanks pass through one web of the arm, and are spaced apart to adapt them to lie on opposite sides of the post, said screw-threaded bolts each having a post-penetrating point at one end and a nut at the other end, bearing plates being secured to the webs of the arm and brace, respectively, and serving as mountings for the shanks of the screw bolts and as abutments for the nuts aforesaid.

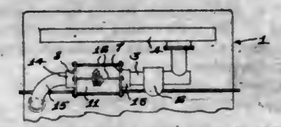
1,758,441. INCLOSED SAFETY SWITCH. HERMAN J. HAMMERLY, Wallingford, Conn., assignor to The Trumbull Electric Manufacturing Company, Plainville, Conn., a Corporation of Connecticut. Filed Oct. 19, 1928. Serial No. 313,550. 14 Claims. (Cl. 200—50.)

1. A safety switch including a box having a cover with an opening near its center, a shutter for said opening, switch mechanism in the box having a base and having protecting fuse devices accessible through said opening, a switch operating crank pivoted in one end of said box beneath the switch base and a lever pivoted intermediate its ends alongside of said fuse devices and having its inner



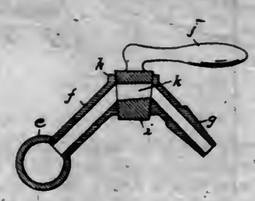
end slotted and operably connected with said crank and having a shoulder at its other end adapted to stand in the path of movement of said shutter to prevent opening said shutter when the cover is closed and the switch is closed, said switch mechanism being removable independently of said crank and lever.

1,758,442. FIRE TRAP FOR INTERNAL-COMBUSTION ENGINES. MEAD HEDGLON, Syracuse, N. Y., assignor to M. L. Oberdorfer Brass Company, Syracuse, N. Y., a Corporation of New York. Filed Sept. 27, 1928. Serial No. 308,666. 3 Claims. (Cl. 123—142.)



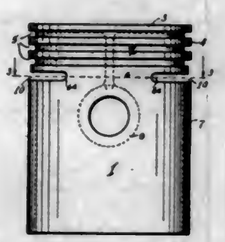
1. The combination with an internal combustion engine having a carburetor provided with a main air intake, of a fire trap around the air intake and comprising a plurality of screens spaced apart, one outside the other forming an expansion and cooling chamber between the intake and the outer air for gases formed by the fuel ignited in the intake.

1,758,443. MILKING MACHINE. ERNST TAGE JANSSON, Stockholm, Sweden, assignor to The De Laval Separator Company, New York, N. Y., a Corporation of New Jersey. Filed Aug. 24, 1928, Serial No. 301,885, and in Sweden Oct. 20, 1927. 1 Claim. (Cl. 31—86.)



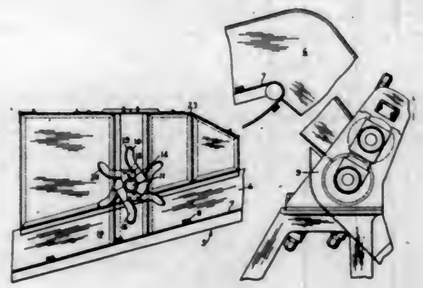
In a milking machine, the combination, with a vacuum pipe and milk receiver, of a cock having a chambered housing above said pipe, a branch extending from the pipe to the housing having a passage extending downward from the housing chamber to the pipe, a second branch having a free end extending from the housing and having a passage therein extending downwardly from the chamber, the bottom of the opening from the last passage to the chamber being above the bottom of the opening from the first passage to the chamber, and a plug in the chamber having a passage therethrough, the bottom of said passage sloping downwardly from the opening to passage in the second branch to the opening in the first mentioned branch, when the valve is open.

1,758,444. PISTON. FERDINAND JEHLE, Cleveland, Ohio, and FRANK JARDINE, Detroit, Mich., assignors, by mesne assignments, to The Cleveland Trust Company, Cleveland, Ohio, a Corporation of Ohio, as trustee. Filed Mar. 17, 1922. Serial No. 544,487. 13 Claims. (Cl. 74—108.)



1. A piston for an internal combustion engine comprising a head section consisting of a circular disc and a cylindrical flange depending from the periphery thereof, and a skirt section connected to the flange by diametrically opposite connectors of relatively short circumferential length, wrist pin bosses carried by the skirt adjacent the said connectors, the skirt having its minimum outside diameter along the line of the wrist pin bosses and its maximum outside diameter at right angles to the line of the bosses with the diameters of the intervening skirt portions decreasing in length successively from the maximum diameter toward the minimum diameter.

1,758,445. CANE-MILLING APPARATUS. NORMAN KAY, Jobos, Porto Rico. Filed Sept. 29, 1927. Serial No. 222,896. 27 Claims. (Cl. 146—119.)



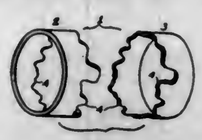
1. In a cane mill, means for feeding cane, and means for engaging and shredding the cane while being fed, said last named means comprising a rotary shaft, a series of cutting knife blades carried on said shaft and extending outwardly therefrom, and clawlike means formed on said blades adapted to hook into and shred cane.

1,758,446. LUBRICANT. FREDERICK L. KOETHEN, Niagara Falls, N. Y., assignor to Acheson Graphite Company, Niagara Falls, N. Y., a Corporation of New Jersey. Filed Nov. 10, 1926. Serial No. 147,615. 6 Claims. (Cl. 87—9.)

1. A lubricating compound consisting essentially of iron soap and mineral lubricating oil.

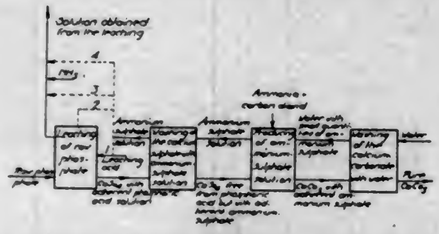
4. The process of lubricating a metal bearing surface which comprises applying thereto an iron soap and a mineral lubricating oil.

1,758,447. FINGER RING. LOUIS HAROLD LIEBS, Woodhaven, N. Y. Filed June 28, 1929. Serial No. 374,561. 1 Claim. (Cl. 63—15.)



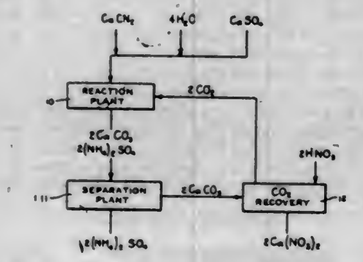
A finger ring comprising a band circumferentially separated intermediately by a cut of complex irregular curvature whereby two bands are formed having matching indentured edges facing one another throughout their circumferential extent, so that the bands can be matched by bringing them together while on the finger.

1,758,448. METHOD OF PRODUCING AMMONIUM PHOSPHATE OR MIXED FERTILIZERS CONTAINING AMMONIUM PHOSPHATE BY LEACHING OF RAW PHOSPHATE. FRANS GEORG LILJENROTH, Stockholm, Sweden. Filed June 21, 1928, Serial No. 287,289, and in Sweden July 12, 1927. 6 Claims. (Cl. 71—7.)



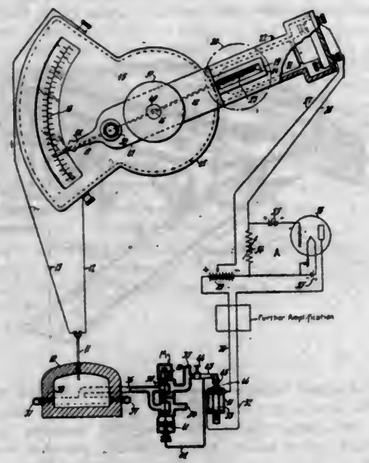
1. A method of producing soluble phosphates from phosphatic rock, which comprises leaching the crude phosphate with an acid solution, separating the lime content of the crude phosphate as calcium sulphate, washing the separated calcium sulphate with a solution of ammonium sulphate for recovering adherent solution of phosphoric acid, and then reacting upon the calcium sulphate by means of ammonia and carbon dioxide so as to produce a solution of ammonium sulphate adapted to be used in continuing the process.

1,758,449. AMMONIUM-SULPHATE MANUFACTURE. FRANS G. LILJENROTH, Stockholm, Sweden, assignor to Kunstdünger - Patent - Verwertungs - Aktiengesellschaft, Glarus, Switzerland, a Corporation of Switzerland. Filed Dec. 24, 1928. Serial No. 328,280. 13 Claims. (Cl. 23—119.)



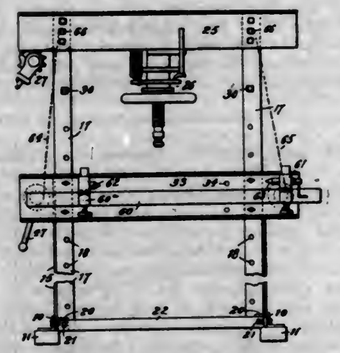
1. A process for the production of ammonium sulphate from calcium cyanamid in which the ammonium sulphate is produced in a single operation involving the reaction of calcium cyanamid, water, and a sulpur compound adapted to react with ammonia to form ammonium sulphate.

1,758,450. REGULATOR. GEORGE F. MACHLET, Elizabeth, N. J. Filed June 18, 1926. Serial No. 116,801. 34 Claims. (Cl. 236—69.)



1. The combination with an element or apparatus subject to fluctuations, of means including a galvanometer or the like including a shutter movable by fluctuations in the galvanometer circuit, a light-sensitive cell, a housing therefor having a light-receiving slit closable by said shutter, and means controlled by said light-sensitive cell for regulating said element or apparatus, said regulating means including a coil in circuit with said light-sensitive cell, an amplifier in the same circuit with said coil and cell, and a regulating device having an independent source of power and including a controller for said power operated by said coil.

1,758,451. PRESS TABLE. ROBERT E. MANLEY, York, Pa., assignor to Manley Manufacturing Company, York, Pa., a Corporation of Delaware. Filed Oct. 15, 1926. Serial No. 141,848. 5 Claims. (Cl. 153—48.)



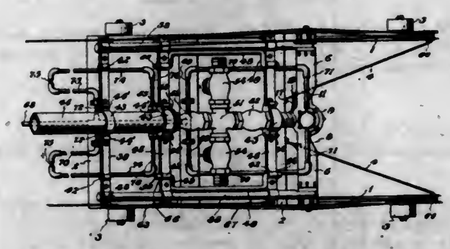
1. In a device of the character described, a pair of standards, a cross piece connecting the tops of the standards, a table slidable along said standards, said table consisting of two channels arranged back to back and spaced apart to receive the standards, a drum carried bewteen the channels at each side of the standards, a pawl and ratchet mechanism for revolving both drums, a chain attached to each drum and extending diagonally to the top of the proximate standard so that by pushing or pulling on the chain in a horisontal direction the proximate end of the table is elevated, and means for supporting the table from the standards.

1,758,452. SCOURING DEVICE. DANIEL J. MAYER, Belleville, N. J., assignor to Metal Textile Corporation, Orange, N. J., a Corporation of Delaware. Filed May 7, 1929. Serial No. 361,083. 1 Claim. (Cl. 15—210.)



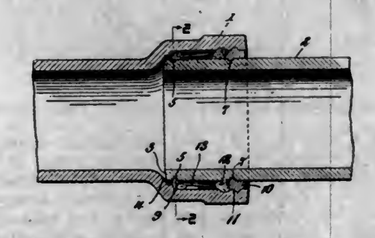
A dish mop, comprising a metallic gimped carrying strand looped upon itself with the center portions of said strand intermediate the free loop ends thereof bunched together to form a consolidated central heart from which the free loop ends radiate in all directions, a binding element encircling and holding said central heart, said binding element having an outwardly extending shank, a handle stick having an end axially bored into which said shank is inserted and secured to attach said mop head to the handle stick with adjacent free loop ends of the former overlapping and surrounding the free end portion of the latter, said end-portion of said handle stick underlying said surrounding free loop ends having an annularly undercut seat in which the latter may engage when laterally pressed and reciprocated against a surface to be cleansed.

1,758,453. OIL-WELL APPARATUS. CHARLES P. MAYS, El Dorado, Ark. Filed Feb. 11, 1928. Serial No. 253,604. 12 Claims. (Cl. 169—4.)



1. Apparatus for the purpose set forth comprising a truck including a cross beam at the advancing end thereof, said beam having a recess in its forward edge to engage the mouth of a well casing, and means on said beam to lock the same to the well casing.

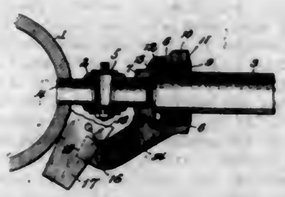
1,758,454. CAST-IRON PIPE. JAMES B. MCWANE, Birmingham, Ala., assignor to McWane Cast Iron Pipe Company, Birmingham, Ala., a Corporation of Alabama. Filed Jan. 21, 1925. Serial No. 3,830. 8 Claims. (Cl. 285—115.)



1. A cast iron pipe having a spigot end of the same diameter as the pipe proper, said end being formed with two

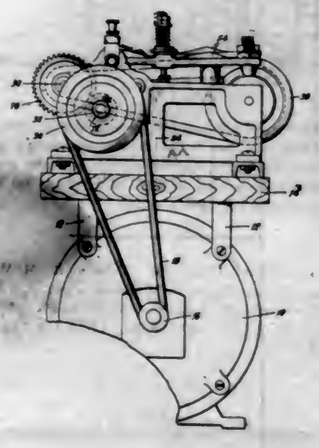
spaced series of circumferentially-alined, relative-short grooves, the end series being adapted to receive the jute or other material when in a pipe joint, and the other series to receive the lead of said joint, said grooves of both series being spaced apart circumferentially to provide interposed abutments of the original thickness of the pipe for strengthening the same and to prevent rotary movement of the spigot within the bell of such joint.

1,758,455. PIPE JOINT. JAMES R. MCWANE, Birmingham, Ala., assignor to McWane Cast Iron Pipe Company, Birmingham, Ala., a Corporation of Alabama. Filed Mar. 23, 1927. Serial No. 177,567. 13 Claims. (Cl. 137—73.)



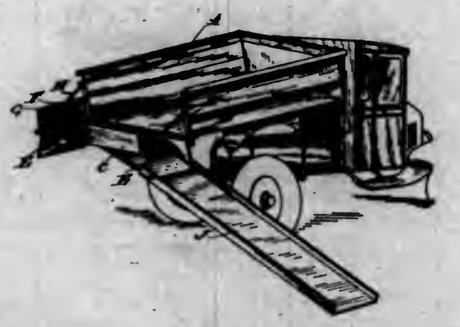
1. A bell for connecting a pipe to a main through a corporation cock, said bell having means for connection to the cock, means on the bell to form a joint with the end of the said pipe, and means carried by the bell to contact with the side of the main to reinforce the connection of the cock therewith.

1,758,456. SIGN FLASHER. AUGUST V. MENICOCCI, New York, N. Y. Filed Sept. 28, 1927. Serial No. 222,458. 8 Claims. (Cl. 200—27.)



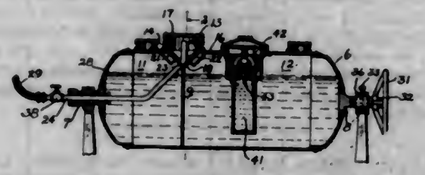
3. In a machine of the class described, in combination, a contact member, means for imparting rotary motion to said member, a contact button arranged to contact with said member to complete an electric circuit therethrough, a pivoted arm supporting said button, and means for intermittently moving said arm to bring said button into contact with said member to establish a temporary electric circuit therethrough.

1,758,457. UNLOADING DEVICE. WILLIAM A. MILLER, Lorain, Ohio, assignor of three-eighths to Allan C. Ryan and three-eighths to Andrew A. Bartlett, Lakewood, Ohio. Filed Apr. 15, 1927. Serial No. 183,958. 2 Claims. (Cl. 296—61.)



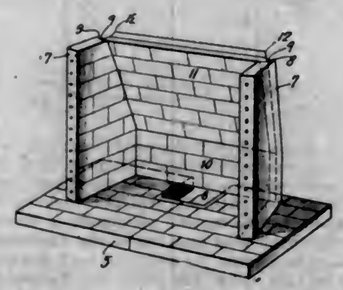
1. In a dump wagon, a hinged end gate having an integral side dumping chute at each side thereof and guard means detachably securable over the opening in each chute, said guard means being slidingly movable over said opening.

1,758,458. FIRE EXTINGUISHER. GEORGE W. MOFFITT, Oakland, Calif. Filed Sept. 23, 1925. Serial No. 58,043. 4 Claims. (Cl. 169—32.)



1. In a chemical fire extinguisher, a tank mounted for rotation about a fixed axis and partitioned to provide a plurality of normally sealed compartments therein, a chamber provided with an outlet arranged to receive charges from all of said compartments upon the rotative displacement of said tank, and means automatically operative to seal said chamber from said compartments upon a return displacement of the tank to its primary position.

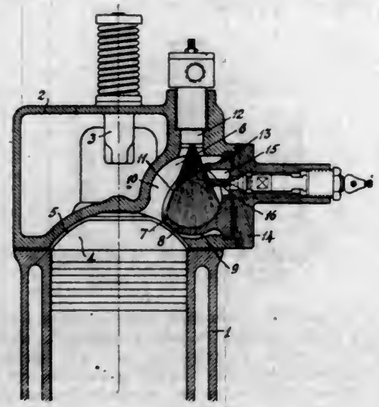
1,758,459. FIREPLACE. THOMAS F. MOONEY, Morristown, N. J. Filed Feb. 12, 1929. Serial No. 339,450. 3 Claims. (Cl. 126—130.)



3. In a sectional fireplace of the character described, a base or floor unit, a pair of side wall units, a back wall unit, said side wall units having inclined rear edge portions

extending from a point adjacent the lower ends to their upper ends, said back wall unit consisting of sections adapted to span the side wall units, one of which sections is adapted for engagement at its opposite ends with the uninclined rear edges of the side wall units, and the other of which sections is adapted for engagement with said inclined rear edge portions of the side wall units to provide a partly inclined rear wall, the adjacent meeting ends of the back and side wall units having interfitting means whereby the same may be secured together in reverse and laterally shifted positions respectively.

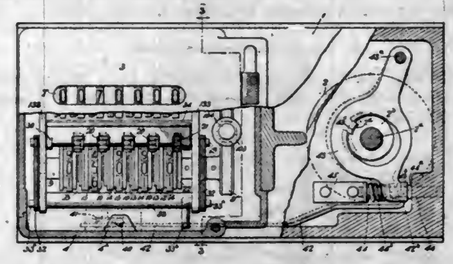
1,758,460. INTERNAL-COMBUSTION ENGINE AND METHOD OF OPERATING THE SAME. FRIEDRICH OBERHAENSLI, Bregenz-Lochau, Austria, assignor to "Omo" Aktiengesellschaft, Zurich, Switzerland, a Corporation of Switzerland. Filed Nov. 12, 1928, Serial No. 318,912, and in Germany Dec. 1, 1927. 10 Claims. (Cl. 123—32.)



1. A heavy oil motor comprising a cylinder, a piston slidable therein, an air inlet valve, a hollow member associated with said cylinder and defining a compression space into which a charge of air is adapted to be forced and compressed during the compression stroke of the piston, said space communicating with the interior of said cylinder through a constricted passageway, a bell-shaped body provided with an opening and positioned within said member at least partially in spaced relation thereto, whereby an intermediate space between said body and said member is formed, and a fuel nozzle arranged to spray a stream of fuel into the interior of said body through the opening thereof, said body being adapted to become incandescent during the operation of the motor to vaporize and ignite said fuel, and being so disposed with respect to said passageway as to divide the current of air into two streams such that part of the current of air enters directly with said fuel into said body and part is deflected into the intermediate space about said body, whereby a pre-mixture of air and fuel comprising a mixture slow to ignite is first formed in said body, said pre-mixture becoming rapidly inflammable on mixing with the air streaming around said body through said intermediate space.

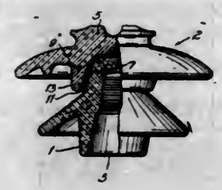
1,758,461. REGISTERING MECHANISM. JACOB W. OGDEN, Stamford, Conn., assignor to Pitney-Bowes Postage Meter Company, Stamford, Conn., a Corporation of Delaware. Filed Aug. 16, 1927. Serial No. 213,303. 3 Claims. (Cl. 235—144.)

3. In a meter, a casing having a door; means for locking the door; a register in the casing provided with numeral wheels; means for carrying over from one numeral wheel to another; a setting lever and connections whereby the carry over means may be disengaged to permit the numeral wheels to be reset when the door is open; a printer carrying shaft; means for operating the register from said



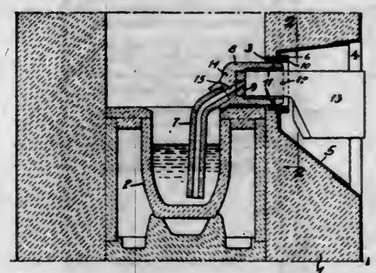
shaft; means for locking the said shaft; and operable connections between the shaft locking means and the door locking mechanism, whereby the door can not be opened to permit access to the register unless the printer carrying shaft is locked and the numeral wheels are all in proper alignment.

1,758,462. INSULATOR. DAVID HENRY OSBORNE, Jeffersonville, Pa., assignor, by mesne assignments, to Electric Service Supplies Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Mar. 17, 1927. Serial No. 176,268. 7 Claims. (Cl. 173—318.)



1. The insulator comprising a plurality of members held together by a cementitious mass of aluminate cement.

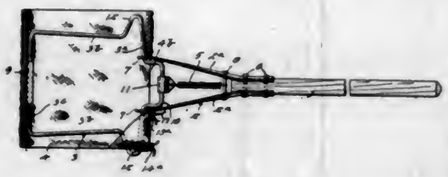
1,758,463. FURNACE FOR CASTING IRON AND OTHER DIFFICULT FUSIBLE METALS UNDER PRESSURE. ERNST PETERSSON, Orebro, Sweden. Filed Nov. 5, 1926, Serial No. 146,449, and in Sweden Jan. 9, 1925. 4 Claims. (Cl. 22—79.)



1. In a device for casting iron and other difficultly fusible metals by forcing the molten metal into the mold by means of a vacuum, the combination of a furnace having an opening in its wall, a casting pipe located between the molten metal in the furnace and said opening in the furnace wall and made of fire-proof material, a nozzle on the outer end of said pipe against which the mold is adapted to be pressed in the casting operation, and a self-adjusting suspension device carrying said pipe and the nozzle, said nozzle being located within the furnace at a place where it

is exposed to the furnace heat, the surface of the nozzle adapted to be pressed against the mold having such a shape that, when pressing it against a correspondingly shaped surface of the mold, the said surfaces will, due to said self-adjusting suspension device, automatically adjust themselves with relation to each other, so as to perform an air-tight connection between the nozzle and the mold.

1,758,464. MOP. CHARLES A. PURVIS, Long Beach, Calif. Filed Sept. 19, 1929. Serial No. 393,719. 4 Claims. (Cl. 15—147.)

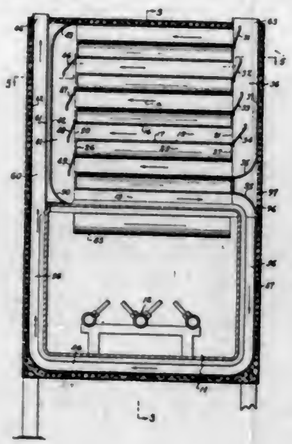


3. A mop comprising a handle, arms extending in downwardly diverging relation from the handle and provided with pivot lugs, a spreader frame of substantially rectangular contour having its top bar passing through the pivot lugs and provided between said arms with a crank, a contractile spring secured to the crank and to said arms, and a cloth applied to the frame.

1,758,465. SILICO-THERMIC METALLURGY. WILLIAM C. READ, Scarsdale, N. Y., assignor to Electro Metallurgical Company, a Corporation of West Virginia. Filed Nov. 21, 1928. Serial No. 321,036. 2 Claims. (Cl. 75—17.)

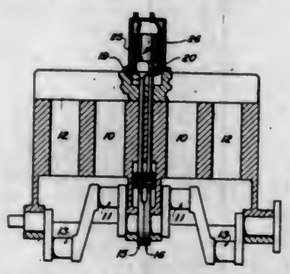
1. The method of preparing metals and alloys by self-propagating silico-thermic reduction which comprises the step of igniting from below a charge comprising a metal oxide, a silicious reducing agent, and a nitrate promoter.

1,758,466. HEATING DEVICE. ARTHUR E. REUSS, Cincinnati, Ohio, assignor to The General Iron Works Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Apr. 20, 1928. Serial No. 271,636. 4 Claims. (Cl. 257—230.)



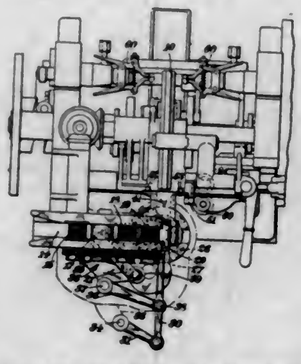
1. A heater of the character described comprising a series of cross-passages for the fluid being heated, passages for the products of combustion which separate said cross-passages, said passages arranged one above the other, a continuous upright inflow passage common to all said cross-passages at one of the ends of said cross-passages, a continuous upright outflow passage common to all said cross-passages at the other of the ends of said cross-passages, means for forcing the fluid being heated through said inflow passage, said cross-passages and said outflow passage in a general direction reverse to the direction of natural flow of said fluid being heated and forcing said fluid being heated in a common direction through said cross-passages from said inflow passage into said outflow passage, an additional cross-passage below said first-named cross-passages, said additional cross-passage connecting with the lower end of said outflow passage and directing the flow of said fluid therethrough in a direction opposite to said common direction, and a continuation passage connecting with said additional cross-passage and extending downwardly, then crosswise in said common direction and then upwardly alongside said continuous upright outflow passage.

1,758,467. VIBRATION ELIMINATOR. CHESTER S. RICKER, Indianapolis, Ind. Filed Sept. 2, 1924. Serial No. 735,315. 7 Claims. (Cl. 74—38.)



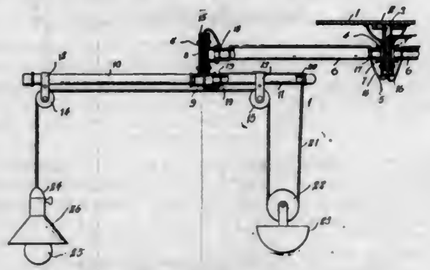
6. In an internal combustion engine having four cylinders in a plane, pistons in said cylinders, a crankshaft having four cranks arranged in two sets spaced 180° apart, and connecting rods connecting said pistons to said crank; the combination of two reciprocating weights arranged to reciprocate in the plane of said cylinders and connected respectively to said crankshaft by connecting rods which are attached to said crankshaft at eccentric points spaced 180° apart and 90° from the crankshaft cranks.

1,758,468. MACHINE FOR WRAPPING CARAMELS OR LIKE ARTICLES. ALFRED GERMAN ROSE, Gainsborough, England, assignor to Rose Brothers, Gainsborough, Limited, Albion Works, Gainsborough, England, a British Company. Filed Dec. 26, 1928, Serial No. 328,566, and in Great Britain Jan. 4, 1928. 8 Claims. (Cl. 107—4.)



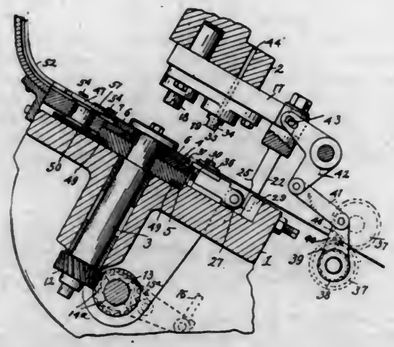
1. In a wrapping machine of the type described operable on a continuous bar of confectionery stock, the combination of a movable carrier, a reciprocating pusher for feeding caramels one at a time to the carrier, stock feeding mechanism for feeding a bar of stock up to a cutting station which is located at a point offset laterally from the path of the charging pusher, a cutter for effecting wholly at the station aforesaid the entire operation of severing individual caramels from the bar, and transfer mechanism separate from the cutter to convey the caramels one at a time from the cutting station through an arcuate path which is a quadrant of a circle into the path of the pusher.

1,758,469. LAMP BRACKET. ALEXANDER W. SANSBURN, Pilares de Nacozari, Mexico. Filed Oct. 8, 1928. Serial No. 311,193. 4 Claims. (Cl. 240—69.)



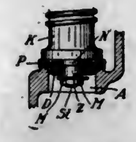
1. A lamp bracket comprising a supporting tube, a horizontal arm rotatably engaged with said tube arms rotatably connected to the first named arm, a current conducting wire leading from the tube and engaged with said arms and disposed upon opposite sides of its pivotal connection, pulleys carried by the fixed arms, said wire being trained over the pulleys, a lamp carried by one of the terminals of the wire, and a counterweight having a pulley carried thereby and engaged with the wire intermediate its ends for counterbalancing the lamp.

1,758,470. APPARATUS FOR FORMING METALLIC RETAINING MEMBERS. EDWARD H. SCHANE, Cleveland, Ohio, assignor to The Fanner Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed Sept. 29, 1924. Serial No. 740,566. 12 Claims. (Cl. 10—158.)



7. In a machine for forming metallic retaining members, the combination with a press having a bed and a head movable toward and from the bed, of a carrier disk rotatably mounted on the bed, said disk having regularly spaced peripheral notches adapted to receive said members, means for feeding a retaining member to each of the notches of the disk during rotation thereof, movable die forming means at spaced intervals on the bed adapted to engage with said members, dies carried by the head adapted to cooperate with the dies on the bed, means for alternately actuating the head and carrier, and means operated by the head in its movement toward the bed for actuating the movable die forming means.

1,758,471. VALVE. GEORG JULIUS SCHMIDT, Zweibrucken, Germany. Filed Sept. 4, 1928, Serial No. 303,746, and in Germany Feb. 12, 1926. 5 Claims. (Cl. 251—27.)



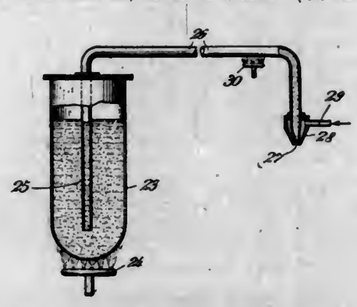
3. In a valve of the character described, the combination of a valve-seat and aperture therein, a valve-closing member, said valve-closing member consisting of a valve-disc, a neck projecting centrally from said valve-disc, a pressure-disc carried on said neck and a packing-disc interposed between said pressure-disc and said valve-seat, the outer diameter of said pressure-disc being smaller and the diameter of said valve-disc larger than the diameter of said aperture, whereby during closing motion of the valve said packing-disc will first be forced into said aperture by action of said pressure-disc and thereupon pressed tightly against said valve-seat by action of said valve-disc.

1,758,472. PRODUCTION OF TITANIC OXIDE. MORITZ SCHNETKA, Leverkusen-on-the-Rhine, Germany, assignor to Titanium Pigment Co., Inc., New York, N. Y. Filed June 25, 1928, Serial No. 288,296, and in Germany Sept. 6, 1927. 2 Claims. (Cl. 23—202.)

1. In the process for the hydrolytic precipitation of white titanic acid from sulfuric acid solutions containing titanium sulfate and iron sulfate, the step which comprises carrying out the precipitation in the presence of a compound of the group consisting of hydrofluoric acid and water-soluble fluorides.

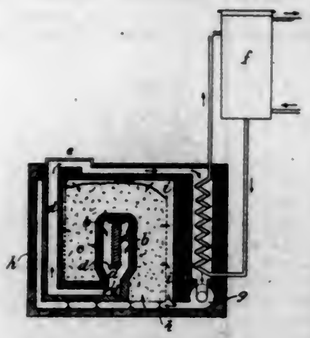
2. In the process for the hydrolytic precipitation of white titanic acid from sulfuric acid solutions containing titanium sulfate and iron sulfate, the step which comprises carrying out the precipitation in the presence of hydrofluoric acid.

1,758,473. COATING ARTICLES, PARTICULARLY WITH METALS. MAX ULRICH SCHOOP, Hoengg, Switzerland. Filed June 26, 1925, Serial No. 39,785, and in Switzerland June 30, 1924. 1 Claim. (Cl. 91—70.1.)



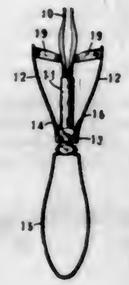
A process of producing coatings which comprises mixing a metal powder with liquid combustible in a closed container, heating the mixture to produce a vapor pressure on the surface of the mixture to expel the mixture, heating the mixture after expulsion to vaporize the liquid content of the mixture and increase the velocity of the now vapor and metallic particle mixture, and burning the resultant mixture in a jet.

1,758,474. STORAGE AND UTILIZATION OF ELECTRICALLY-GENERATED HEAT. PAUL SEEHAUS, Zurich, Switzerland. Filed Dec. 20, 1926, Serial No. 156,028, and in Switzerland Dec. 24, 1925. 8 Claims. (Cl. 219—38.)



1. An apparatus for storing and utilizing heat, comprising at least one core of heat storing material, a heating device located within said core, this core being adapted to absorb at most a portion of the heat to be stored, at least one heat-insulating and storing covering surrounding said core and consisting of material pervious for the medium to be heated, an admission passage for the medium surrounding said covering, and an outlet for the medium leading away from the inside of said core.

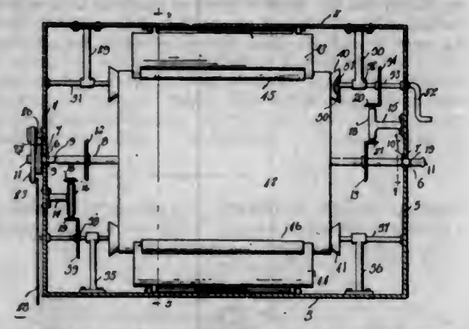
1,758,475. TWEEZERS. SAMUEL SEGAL, New York, N. Y., assignor to Segal Automatic Tweezer Corporation, New York, N. Y., a Corporation of New York. Filed Sept. 27, 1927. Serial No. 222,279. 8 Claims. (Cl. 128—350.)



1. A tweezer including a pair of jaws, a tube within which the inner ends of said jaws extend, a plug within said tube, and the end edges of said jaws extending substantially in line with the bodies thereof and loosely bearing against the side faces of said plug.

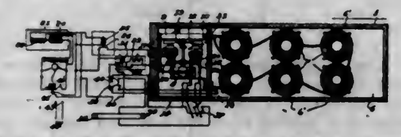
1,758,476. STREET INDICATOR. WILLIAM SIDNEY SHAW, Boise, Idaho. Filed Aug. 29, 1928. Serial No. 302,871. 3 Claims. (Cl. 40—94.)

1. A street indicator comprising a casing, a driving shaft journaled in the casing, gears fixed to the driving shaft, upper and lower rollers, a web windable upon the rollers, a rotatably supported shaft for supporting one end of each roller, a fixed shaft supporting the other end of each roller, gears carried by each of said rotatable shafts for selective engagement with the gears



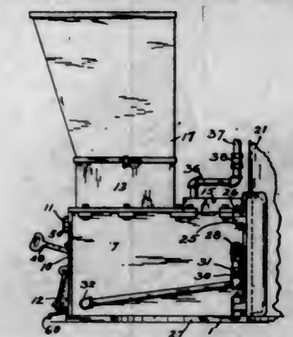
of the driving shaft to rotate the rollers upon rotation of the driving shaft, and means for intermittently rotating the driving shaft.

1,758,477. REFRIGERATING TRUCK. ALBERT C. SMITH, Winthrop, Mass., assignor to William F. Baird, Boston, Mass. Filed Dec. 20, 1927. Serial No. 241,443. 14 Claims. (Cl. 62—117.)



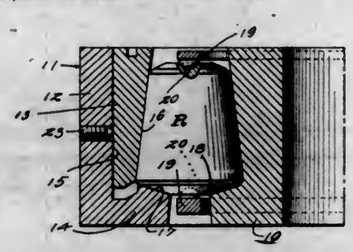
1. In a motor truck having a power plant adapted to drive the same, the combination of a refrigerating system mounted in the truck and including a compressor, an electric generator driven from said power plant, an electric motor, driving connections between said motor and said compressor, and circuit connections for supplying said motor with current from said generator.

1,758,478. WATER-COOLED COMMINUTED-FUEL BURNER. VERN C. SNYDER, Portland, Oreg. Filed June 30, 1928. Serial No. 289,485. 2 Claims. (Cl. 122—4.)



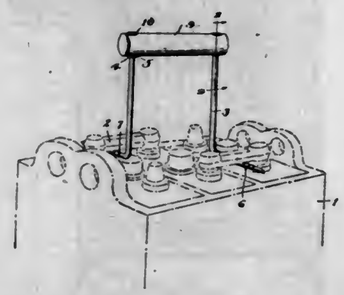
1. A burner for furnaces, consisting in a base, walls movably supported on said base, a throat element superimposed on said side walls connecting them together, a hopper mounted on said throat element, a plate rigidly connected to said side walls rearwardly of said throat element, said side walls and said plate being chambered to provide water passages, water communicating connections between said water passages, means to hingedly connect said burner to a furnace, pipe connections to supply water and withdraw the same from said passages, and swivel devices in said pipe connections in axial alignment with the hinge connections of the burner.

1,758,479. ADJUSTABLE ROLLER BEARING. JULIUS J. STRAMPEL, Haskell, Tex., assignor of one-half to John H. Zahn, Haskell, Tex. Filed Feb. 18, 1928. Serial No. 255,411. 1 Claim. (Cl. 308—236.)



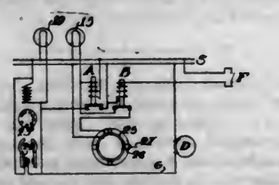
In an adjustable roller bearing, inner and outer race elements, tapered rollers interposed therebetween and a cage maintaining the rollers in properly spaced relation, the outer race element being formed in a frame section and a race section, the frame and race sections having coacting screw-threads permitting adjustment of the race section axially of the frame section, the race section being tapered for coaction with the outer faces of the rollers, corresponding ends of the frame section and inner race element having flanges against which the larger ends of the rollers engage, the adjustable race section crowding the rollers toward said flanges, the inner race element increasing in diameter from said flange toward its opposite end.

1,758,480. BATTERY-LIFTING DEVICE. WILLIAM H. TIMMONS, Jackson, Tenn. Filed Oct. 29, 1928. Serial No. 315,834. 1 Claim. (Cl. 16—114.)



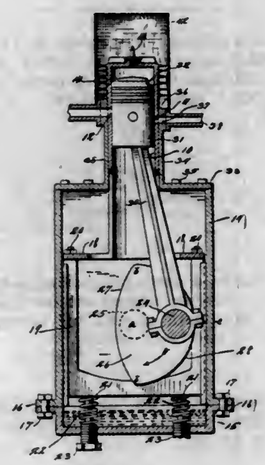
A device of the character described including a handle, spaced rods swiveled through the end portions of the handle and bent to provide battery engaging arms, said rods being freely rotatable about their longitudinal axes, and means carried on the rods and coacting with the handle for limiting said rods against endwise movement, said arms being straight and slightly inclined upwardly toward their free ends.

1,758,481. TRAFFIC SIGNAL. LEO M. TORRENCE, Arrington, Kans., assignor to Jo Margaret Torrence, Arlington, Kans. Filed Dec. 24, 1928. Serial No. 328,194. 2 Claims. (Cl. 177—337.)



1. In a traffic control system; a rotatable signal having spaced Stop and Go indicating means thereon; means for rotating the signal including an electric motor; a motor circuit; a relay for closing the circuit to the motor when the relay is de-energized; means having a part operating in synchronism with said rotating means for energizing the relay at definite positions in the rotary travel of the signal and a periodically operated switch for closing the motor circuit; whereby the signal is successively rotated and stopped to display the Stop and Go indications.

1,758,482. ENGINE. THOMAS PAYNE TUNE, Mesilla Park, N. Mex., assignor of one-tenth to Earl C. Cleaveland and one-tenth to William Scott, El Paso, Tex. Filed July 6, 1928. Serial No. 290,720. 7 Claims. (Cl. 123—77.)

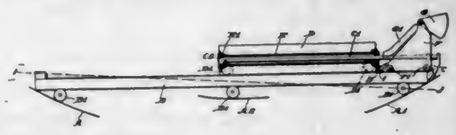


6. An engine of the character described including a crank case having vertically disposed spaced guides, a cylinder reciprocating through said guides, and extending into the crank case, a U-shaped yoke connected at its ends to the cylinder, the cylinder having inlet and exhaust ports, springs urging the cylinder and yoke upward within the crank case, a crank shaft extending through the crank case and intersected by the longitudinal axis of the cylinder and having a crank, a piston operating within the cylinder and having a connecting rod, a cam eccentrically mounted upon the crank shaft, the cam having a semi-circular cam face, a radial line extending from the center of the cam shaft to the middle of said cam face extending diametrically through the crank, said cam coacting with the yoke to cause a depression of the yoke when either end or the middle of the cam is downward and bearing against the bottom of the yoke and acting to permit the upward movement of the yoke and cylinder when the cam is turned to a position with the cam and crank extending upward, and means for causing an explosion of the charge at a period when the cylinder and piston are both depressed with the cylinder and piston closely approximated to each other to compress the charge and with the crank disposed at right angles to the longitudinal axis of the cylinder.

1,758,483. METHOD FOR CASTING PIPES. JOHN H. UHRIG, Beverly, N. J., assignor to United States Cast Iron Pipe & Foundry Company, Burlington, N. J., a Corporation of New Jersey. Filed May 18, 1928. Serial No. 278,708. 2 Claims. (Cl. 22—65.)

1. In the operation of a centrifugal pipe casting machine comprising a centrifugal mold normally inclined to a horizontal plane and a relatively longitudinally movable inclined runner through the end of which molten metal is

delivered to the rotating mold as the runner is progressively withdrawn therefrom, the improved method of counteracting the tendency to longitudinal flow of the metal



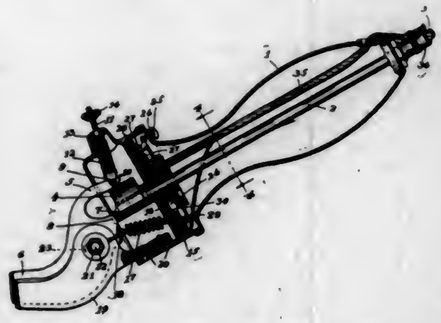
in the mold which consists in decreasing the tilt of the mold and of the runner during the pouring of the metal and as the runner is withdrawn from the mold.

1,758,484. CONVEYER. FREDERICK E. VAN SLYKE, Columbus, Ohio, assignor to The Jeffrey Manufacturing Company, Columbus, Ohio, a Corporation of Ohio. Filed Aug. 23, 1926. Serial No. 131,047. 6 Claims. (Cl. 198—173.)



5. In a conveyer, a chain link having a sprocket tooth opening, and a conveyer element attached to said link to extend across said tooth opening and having an opening disposed opposite said tooth opening.

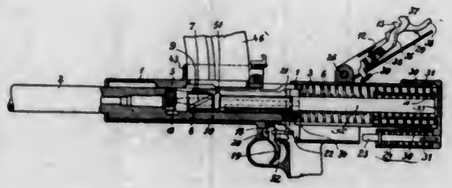
1,758,485. POWER SHEARS. FRANK D. VARTANIAN, Portland, Me. Filed Feb. 28, 1929. Serial No. 343,518. 2 Claims. (Cl. 30—13.)



2. A device of the character described comprising a handle, a blade inclinedly fixed to said handle, a second blade pivotally connected to said first mentioned blade, face to face, respectively, an arm on said second blade, an eccentric engaging said arm and adapted, when rotated, to intermittently bring said blades into cutting engagement, expansible means acting on said arm to separate said blades and bring said second blade into non-cutting engagement with said first blade, means to rotate said eccentric, and means to vary, either to increase or decrease, the extent of separation of said blades predeterminately.

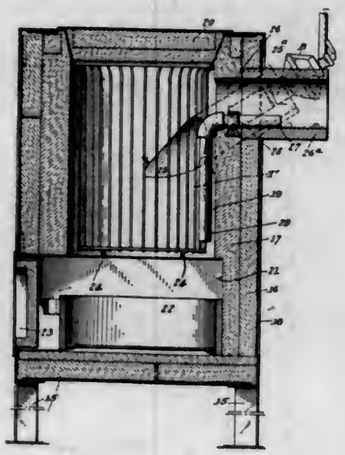
1,758,486. AUTOMATIC FIREARM. RUDOLF VON FROMMER, Budapest, Hungary. Filed Aug. 18, 1926. Serial No. 130,082. 7 Claims. (Cl. 42—4.)

1. An automatic firearm having a barrel and a breech bolt jointly taking part in the recoil movement, a striking surface on the rear end portion of the barrel, a cap forming the rear termination of the firearm, wedge shaped lugs on the outer side of the casing and on the inner side of



the said cap, a spring buffer arranged in the said cap in the path of the said striking surface, the said buffer being adapted to throw forward the barrel at its dashing against the said buffer.

1,758,487. DOMESTIC INCINERATOR. HARRY L. WARREN, Alhambra, Calif. Filed Mar. 21, 1927. Serial No. 177,115. 12 Claims. (Cl. 110—18.)

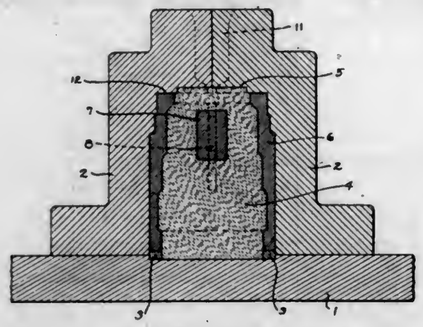


1. An incinerator comprising a firebox having a burner opening in the wall thereof, a gaseous fuel burner in the opening positioned to direct a flame emanating therefrom downwardly in the firebox, the contour of the inner wall of the firebox and the disposition of the burner thereto being such that the flame emanating from the burner will be deflected by the inner wall and caused to travel downwardly and spirally in the firebox, a vent opening in the wall of the firebox disposed slightly above and to one side of the burner, and a pipe extending downwardly from the vent opening to a point within the firebox to cause the flame to spread at the bottom of the firebox.

1,758,488. MOLD. WALTER M. WEIL, Cleveland, Ohio, assignor to The National Smelting Company, Cleveland, Ohio, a Corporation of Ohio. Filed Feb. 11, 1929. Serial No. 339,245. 3 Claims. (Cl. 22—126.)

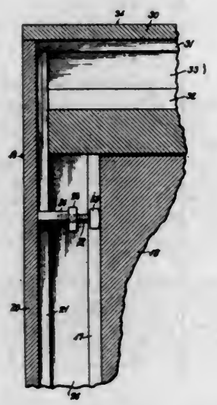
1. In combination, a permanent mold arranged to define the exterior of a casting and to chill relatively rapidly casting metal disposed against said permanent mold, and a frangible core including metal particles arranged

to define interior portions of the casting, said core being arranged to chill relatively rapidly interior portions of



said casting, whereby the interior and exterior portions of said casting may be of comparatively uniform grain structure and physical properties.

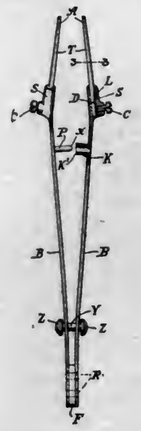
1,758,489. PORTABLE PARTITION. FRANK B. WHEAT, Los Angeles, Calif. Filed Dec. 10, 1928. Serial No. 324,960. 2 Claims. (Cl. 20—4.)



1. In a portable partition embodying a pilaster or top sash having a groove extending along the edge thereof, a strip abutting the surface of the wall or ceiling of the room in which the partition is erected, said strip having a groove therein opposed to the groove in the pilaster or sash, a bolt having the head thereof seated in one of said grooves, the side walls of which prevent rotation of said bolt, a sleeve loose on said bolt engaging in the other groove, and means for moving said sleeve longitudinally of said bolt.

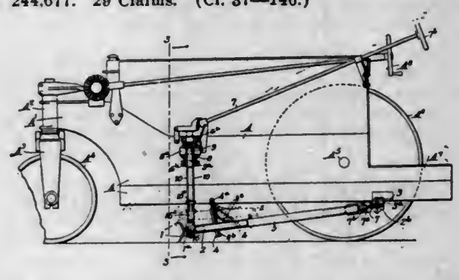
1,758,490. SOLDERING TWEEZERS. JULIUS ADERER, New York, N. Y. Filed Jan. 4, 1929. Serial No. 330,244. 4 Claims. (Cl. 81—43.)

1. A soldering tweezer comprising a pair of spring blades, united at one end and free at their other ends, tungsten tips associated with the free ends of said blades, and means on intermediate portions of the blades arranged so to cooperate that the tips can only assume a predetermined alignment, said means being dimensioned to exercise their said cooperative relation materially in advance of the moment at which the tungsten tips close upon the work piece or each other, and an abutment associated with one of the blades adapted to contact with a mating abutment on the other blade when the blades are compressed to a predetermined angular position, the resiliency of the blades being such as to yield readily at



least up to the time that said abutments make contact with each other under pressure of the operator and to absorb the said pressure before any fracturing moment occurs in the tungsten tips.

1,758,491. GRADER ATTACHMENT FOR ROAD ROLLERS. ANDREW W. AITKEN, Springfield, Ohio, assignor to The Buffalo-Springfield Roller Co., Springfield, Ohio, a Corporation of Ohio. Filed Jan. 5, 1928. Serial No. 244,677. 29 Claims. (Cl. 37—146.)

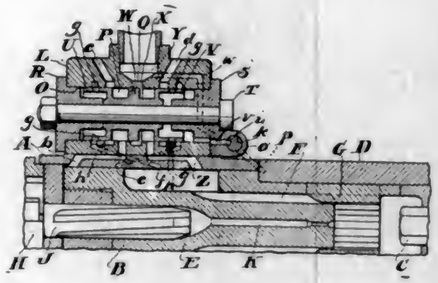


18. In combination, a wheeled frame; a grader blade beneath the frame; a center push bar having a universal rocking connection with the grader blade and frame respectively; means preventing horizontal swinging of the push bar; means for raising and lowering the blade; adjustable struts pivoted on the blade and push bar for adjusting the angularity of the blade; said struts having heads engaging the blade for maintaining the blade faced vertically for operation.

1,758,492. BLOWING DEVICE FOR ROCK DRILLS. LEWIS C. BAYLES, Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed July 19, 1927. Serial No. 206,859. 1 Claim. (Cl. 121—6.)

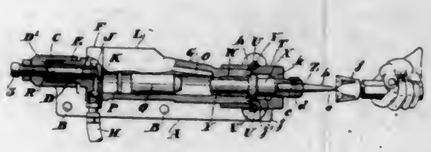
In a fluid actuated rock drill, the combination of a cylinder, a piston in the cylinder having a forward fluted extension, a valve chest for the cylinder having a valve chamber and a pressure fluid supply chamber, plugs forming closures for the ends of the valve chamber, inlet passages leading from the valve chamber to the ends of the cylinder, a distributing valve in the valve chamber controlling communication between the supply chamber

and the inlet passages, a passage leading from the supply passage through the valve chest and the front plug to the front end of the valve chamber, and a blower valve disposed transversely through the front plug controlling said passage, said blower valve being rotatable to admit



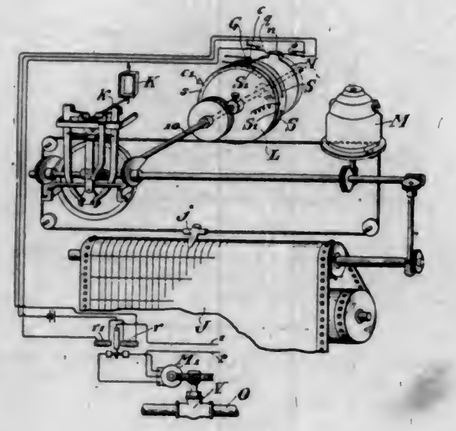
pressure fluid into the front end of the valve chamber to hold the distributing valve immovable in the rear end of the valve chamber and permit a constant flow of pressure fluid from the supply chamber to the front end of the cylinder thence along the fluted extension into a drill steel.

1,758,493. BIT PUNCH. LEWIS C. BAYLES, Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed Oct. 14, 1927. Serial No. 226,135. 1 Claim. (Cl. 76—5.)



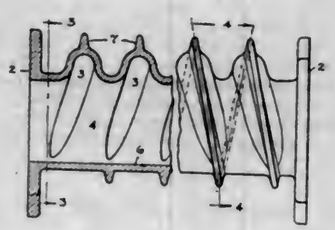
A bit punch comprising a base, a socket in the base, a cylinder containing a reciprocable piston and having a back head adapted to extend slidably into the socket, a guide sleeve rigidly secured to the base for receiving the front end of the cylinder, a stop member on the guide sleeve cooperating with the end wall of the socket to permit limited endwise movement of the cylinder, means for introducing a supply of motive fluid into the cylinder to actuate the piston, said means being held inoperative in the forward position of the cylinder, an anvil block extending into the cylinder to receive the blows of the piston, a punch pin carried by the anvil block for reforming the bores of hollow articles, a collar on the anvil block to abut the front end of the cylinder, and an end wall on the guide sleeve to act as an abutment for the collar for limiting forward movement of the anvil block, said anvil block having a considerably greater range of travel than the cylinder to permit the striking of the collar against the end wall with sufficient force to jar the punch pin free from the article.

1,758,494. RELATIVE-HUMIDITY RECORDER. LEO BEHR, Ithaca, N. Y., assignor to Leeds & Northrup Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Mar. 4, 1926. Serial No. 92,158. 36 Claims. (Cl. 235—61.)



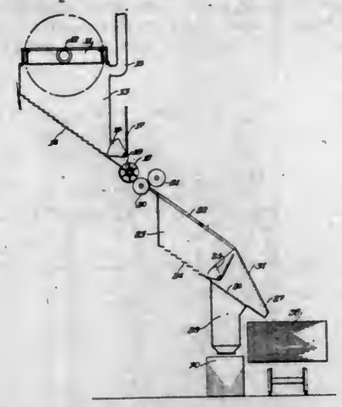
1. The method of determining relative humidity, which comprises producing a difference of potential representative of the departure of the dry bulb temperature from a reference temperature, producing a difference of potential representative of the departure of the wet bulb temperature from a reference temperature, and opposing said potential differences to each other to determine the ratio of one of them to the other.

1,758,495. CONDENSER CONSTRUCTION. CHARLES A. BOYD, Cleveland, Ohio, assignor to The Oil Conservation Engineering Company, Cleveland, Ohio, a Corporation of Ohio. Filed Apr. 18, 1925. Serial No. 24,031. 2 Claims. (Cl. 257—262.)



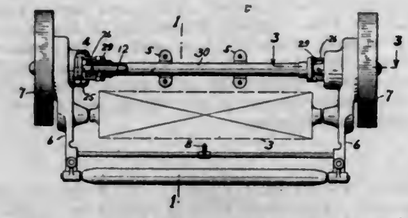
1. A condenser unit consisting of a hollow casting having a substantially continuous helical groove forming a series of convolutions exteriorly and interiorly of the casting, the axis of the hollow passage and the axis of the helical convolutions lying on spaced parallel lines so as to make the convolutions merge with the wall of the casing along one side of the casing.

1,758,496. METHOD FOR HANDLING SINTER. ARTHUR J. BOYNTON, Chicago, Ill., assignor to H. A. Brassert, Inc., Chicago, Ill., a Corporation of Illinois. Filed Mar. 16, 1925. Serial No. 15,962. 4 Claims. (Cl. 209—2.)



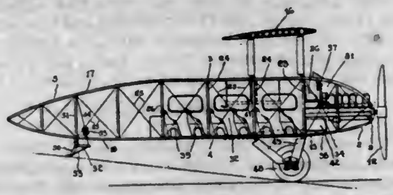
1. The method of handling sinter which comprises air cooling the material and passing it at a controlled rate of flow over screens to remove the fines.

1,758,497. LAWN MOWER. WILLIAM F. H. BRAUN, Philadelphia, Pa. Filed Dec. 11, 1923. Serial No. 679,905. 6 Claims. (Cl. 56—7.)



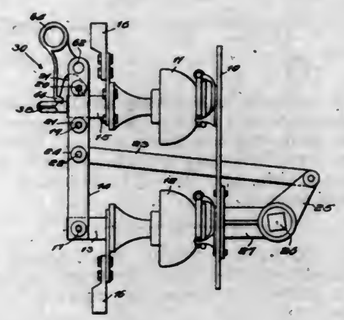
1. In a lawn mower the combination of a lawn mower unit having a constant mesh cutter drive including pawl-and-ratchet connections, a support with respect to which the unit is tiltable into position for lifting its cutter clear of the ground and into position for mowing, and clutch mechanism interpised between the support and unit and responsive to such tilting motion and operative on the pawls of said connections for putting the cutter out of rotation when clear of the ground and into rotation when in mowing position.

1,758,498. AIRPLANE. VINCENT J. BURNELLI, Lincoln, Nebr., assignor, by direct and mesne assignments, to R. B. Patent Corporation, New York, N. Y. Filed Jan. 6, 1921. Serial No. 435,481. 7 Claims. (Cl. 244—14.)



1. The combination, in an airplane, of a body portion having aerofoil contour throughout, with its leading edge of full width, motors enclosed respectively at opposite sides within said leading edge, and a useful load enclosing compartment located in an intermediate section of the aerofoil disposed in the centre of gravity of the airplane.

1,758,499. SWITCH-LOCKING MECHANISM. CHRISTEN CHRISTENSEN, Chicago, Ill., assignor to Electrical Engineers Equipment Co., Chicago, Ill., a Corporation of Illinois. Filed Aug. 17, 1925. Serial No. 50,540. 10 Claims. (Cl. 200—15.)

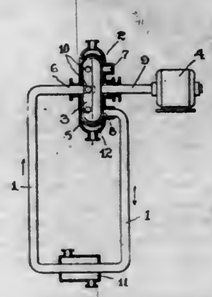


1. In combination; a plurality of switch units, a common support for the said units, each unit comprising a switch element having two blades and a terminal disposed intermediate the two blades when the switch element is in contact therewith, and locking mechanism associated with the said element of only one of the units for locking all of the units against operation, the said locking mechanism including means for locking the blades associated therewith to the terminal and for urging the blades into tighter engagement with the terminal disposed therebetween.

1,758,500. CASEIN CONTAINING PLASTIC COMPOSITION. WILLIAM W. CHRISTMAS, Ridgefield Park, N. J., assignor of one-third to C. C. Hines, Washington, D. C. Filed June 9, 1924. Serial No. 719,004. 7 Claims. (Cl. 106—38.)

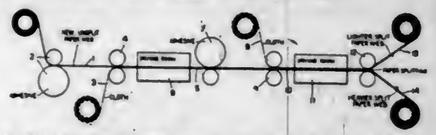
1. The method of making a plastic composition, which comprises combining casein with an alkaline earth hydroxid to produce a casein glue, mixing therewith a product from a combination of calcium carbonate and acetic acid, and then incorporating therewith an inorganic filler and an organic fibrous filler.

1,758,501. ART OF REFRIGERATION. BARTON H. COFFEY, Elizabeth, N. J. Original application filed Aug. 9, 1920, Serial No. 402,403. Divided and this application filed Nov. 17, 1925. Serial No. 69,623. 9 Claims. (Cl. 62—11.5.)



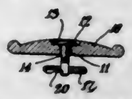
1. In a device of the character described, a continuous conduit of uniform constant cross-sectional area, fluid circulating means in said conduit, a cooler operatively positioned with respect to said conduit, a refrigerant in said conduit, and a condenser for cooling said refrigerant, and means for producing variations of pressure and temperature in the refrigerant by centrifugal force.

1,758,502. PROCESS OF MAKING FIBER-FILLED WOVEN PRODUCT. CHARLES H. CROWELL, Fairville, Pa. Filed May 10, 1927, Serial No. 190,328. Renewed Oct. 19, 1929. 10 Claims. (Cl. 154—40.)



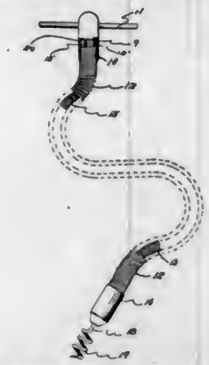
10. The process of making composite fabric which comprises securing webs of cloth to the opposite sides of a web of paper, dampening said paper web and splitting said paper web while it is damp into two composite webs each comprising a cloth layer having a uniform layer of prefelted fibers thereon.

1,758,503. LOCKING BUTTON. OTTO DISTLER and EUGENE KLEIN, New York, N. Y. Filed Feb. 18, 1929. Serial No. 340,703. 2 Claims. (Cl. 24—105.)



1. A detachable button comprising a button head, a threaded and slotted stud projecting from said button head, a threaded flange engaging said stud, said flange having a dovetailed radial channel therein, a locking bolt slidable in said channel, said bolt being adapted to be urged into said slot to secure said stud in said flange, and resilient means on said bolt for frictionally retaining said bolt in any desired position in said channel.

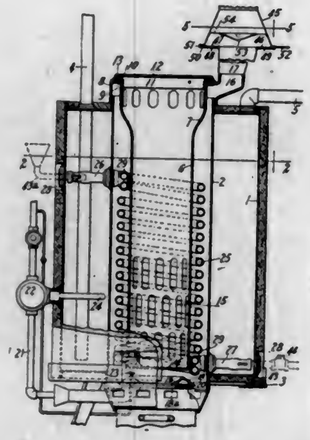
1,758,504. FLEXIBLE-HANDLED TOOL. FRANK ENGLISH, Detroit, Mich. Filed Sept. 24, 1925. Serial No. 58,271. 2 Claims. (Cl. 81—177.)



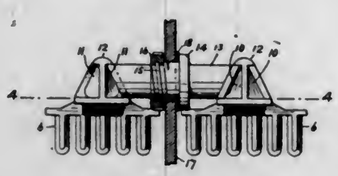
2. A flexible handled tool of the class described, comprising: a pair of heads; a flexible handle for connecting said head, said handle comprising an outer coiled wire member and an inner coiled wire member, said members being coiled in opposite directions and the torque resistance of the coils bearing a relation to each other sufficiently to elliminate lost motion and back lash and being spaced from each other diametrically sufficiently to be non-interfering with each other during the flexing of the handle.

1,758,505. COMBINED WATER HEATER AND INCINERATOR. WILLIAM C. EPSTEIN, Dayton, Ohio, assignor to The Duo-Tor Manufacturing Company, Dayton, Ohio, a Corporation of Ohio. Filed Jnne 15, 1927. Serial No. 198,892. 13 Claims. (Cl. 122—2.)

1. In a combined incinerator and water heater, a tank having inner and outer walls spaced one from the other to form a water receptacle between them, a hopper supported within and spaced from said inner wall, a burner arranged beneath said hopper, a water coil arranged about said hopper, a coupling member attached to one end of said coil and having a screw threaded opening, a second coupling member mounted on the inner wall of said tank, a fitting communicating with said water receptacle, extending through said second coupling and having a screw threaded portion to engage the opening in the first mentioned coupling member and adapted to draw said first mentioned coupling member into sealing contact with said second coupling member, the outer wall of said tank having an opening adjacent to said fitting, and a removable closure for said opening.



1,758,506. STORAGE BATTERY. BRUCE FORD, Philadelphia, Pa. Filed Sept. 8, 1925. Serial No. 54,866. 8 Claims. (Cl. 136—134.)

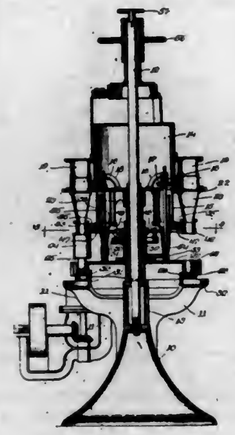


1. An inside intercell connection for storage batteries including in combination a container having covered cells, plate structures housed within the covered cells and provided with terminals, an intercell connection extending through an opening provided in a cell wall and also housed within covered cells, said connector having in spaced relation a collar and an external thread, and a nut engaging the thread and serving with the collar to clamp a cell wall.

1,758,507. MACHINE FOR FILLING CANS. FRANK A. FOSTER, Hoopeston, Ill., assignor, by mesne assignments, to Sprague-Sells Corporation, Hoopeston, Ill. Filed Mar. 5, 1921. Serial No. 449,736. 7 Claims. (Cl. 226—100.)

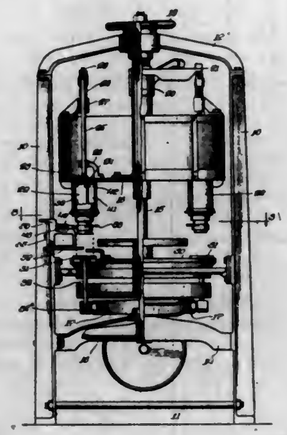
1. In a machine for filling cans with a mixture of solid and liquid materials, means for initially measuring a quantity of solid material, a spout through which said measured quantities of solid material are supplied to open cans, means for positioning the cans so that said spout extends

a predetermined distance thereinto, a liquid reservoir, means for supplying liquid from the latter to the can,



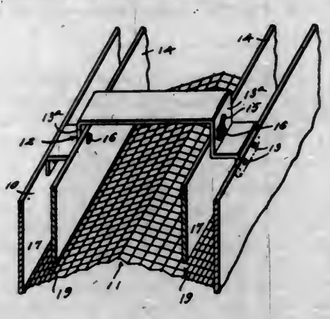
and an air intake extending from the lower end of said spout into said reservoir whereby the mixture level in said cans is regulated.

1,758,508. CAN-FILLING MACHINE. FRANK A. FOSTER, Hoopeston, Ill., assignor, by mesne assignments, to Sprague-Sells Corporation, Hoopeston, Ill. Filed Mar. 10, 1921. Serial No. 453,854. 11 Claims. (Cl. 226—97.)



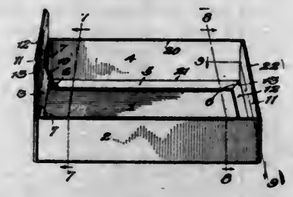
1. In a can filling machine, a movable main material tank, an auxiliary air-tight reservoir adapted to be connected thereto and to discharge into a can, means for completely filling said auxiliary reservoir from the main tank, means comprising ports whereby the contents of said reservoir may be discharged into said can, means for introducing air above the contents of said reservoir when said ports are open and after said reservoir filling means is closed, and means for preventing said introduction of air and the opening of said ports unless a can is properly positioned with respect to said reservoir.

1,758,509. SCREENING APPARATUS. WILLIAM J. GARRISON, Ridgway, Pa. Filed Feb. 28, 1929. Serial No. 343,384. 7 Claims. (Cl. 209—281.)



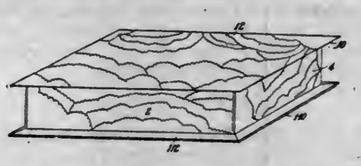
1. In combination, a separator screen having at least a portion of its surface transversely inclined to cause travel of the material to one side thereof, plates supported above and extending longitudinally of the screen and having their lower edges in spaced relation to the screen, means limiting transverse movement of material upon the screen after its passage beneath said plates, and means associated with the screen for preventing passage of material through the screen outwardly of said plates.

1,758,510. PAPER BOX. RALPH A. GROSS, Lititz, Pa., assignor to Simplex Paper Box Co., Lititz, Pa., a Corporation of Pennsylvania. Filed Oct. 8, 1927. Serial No. 224,859. 17 Claims. (Cl. 229—34.)



1. A knockdown box unit comprising a body portion, side and end flaps secured thereto, foldable corner connections between said side and end flaps, reinforcing members secured to certain of said flaps, locking members secured to other of said flaps and adapted to coact with the reinforcing members and corner connections to lock the side and end flaps perpendicular to the body, and supplemental locking means carried by said locking members and reinforcing members.

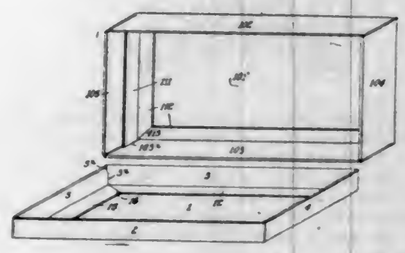
1,758,511. COLLAPSIBLE EXTENSION TOP AND BOTTOM BOX. RALPH A. GROSS, Lititz, Pa., assignor to Simplex Paper Box Company, Lititz, Pa., a Corporation of Pennsylvania. Filed May 24, 1928. Serial No. 280,177. 3 Claims. (Cl. 229—30.)



1. As a new article of manufacture, a knockdown box section comprising a main body, integral side and end flaps and means for detachably locking them in set up position, the outer faces of the side and end flaps only being decorated, and a separately formed extension member, of

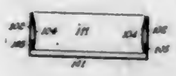
greater transverse and longitudinal diameter than the main body, decorated on its outer face only and permanently united to said main body with its undecorated face in engagement with the undecorated outer face of said main body.

1,758,512. COLLAPSIBLE PAPER BOX. RALPH A. GROSS, Lititz, Pa., assignor to Simplex Paper Box Company, Lititz, Pa., a Corporation of Pennsylvania. Filed Jan. 11, 1929. Serial No. 331,841. 9 Claims. (Cl. 229—34.)



1. As a new article of manufacture, a knock-down box of the cover rest type comprising a cover member formed from an integral blank having a main top portion and folding side and end flaps constructed to interlock when in erected position, the blank at opposite sides being provided with extra folds connected with the outer edges of the adjacent flaps, said folds being of less width than the side and end folds and constructed to fold upon themselves and the connected flap, within the cover member, and form cover rests.

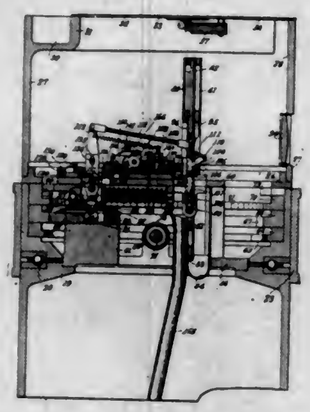
1,758,513. COLLAPSIBLE PAPER BOX. RALPH A. GROSS, Lititz, Pa., assignor to Simplex Paper Box Company, Lititz, Pa., a Corporation of Pennsylvania. Filed Mar. 14, 1929, Serial No. 347,096. 18 Claims. (Cl. 229—34.)



1. A knock-down box unit comprising a body portion and inner and outer side and end flaps secured thereto, the inner side flaps being secured adjacent to their remote edges to other portions of the box, and providing yielding portions between their longitudinal edges separated from the exterior side flaps and movable toward and from the same, said inner end flaps being provided at their ends with locking portions to engage said yielding portions of the inner side flaps to interlock with the end edges thereof to lock the box unit in erected position.

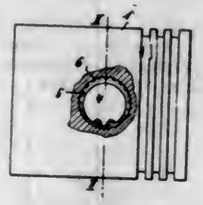
1,758,514. MULTIPLE-COIN-CONTROLLED TURNSTILE. GEORGE B. GROVER, New York, N. Y., assignor to Frederick T. Towne, Port Chester, N. Y., and James S. Hedges and W. H. L. Edwards, New York, N. Y. Filed July 24, 1928. Serial No. 294,954. 6 Claims. (Cl. 194—67.)

1. A coin controlled turnstile comprising a support, a cylinder revoluble thereon, arms on said cylinder, a ring fixed in the cylinder having internal grooves corresponding to the arms, a lock bolt spring pressed to engage in



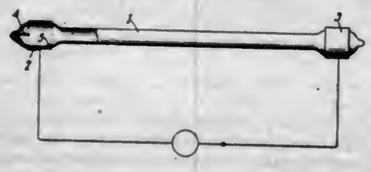
the grooves to prevent turning of the cylinder, and means operable upon the deposit of a plurality of coins to retract said bolt.

1,758,515. WRIST-PIN CONSTRUCTION. HUGO HEIKEMANN, Frankfort-on-the-Main, Germany. Filed Feb. 3, 1928, Serial No. 251,681, and in Germany Feb. 4, 1927. 1 Claim. (Cl. 74—108.)



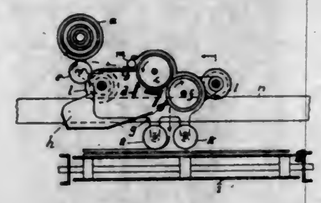
In combination, a hollow piston having spaced and aligned bearings, a wrist-pin located in said bearings, said wrist-pin being restrained from longitudinal play by spring rings located adjacent the ends thereof and being held against movement relative to said wrist-pin in a direction parallel to its longitudinal axis, each said spring ring tapering and diminishing in width towards the end portions thereof, said end portions being separate from each other and having enlarged and perforated heads.

1,758,516. GAS-FILLED TUBE. WILLIAM F. HENDRY, Ossining, N. Y., assignor to Manhattan Electrical Supply Company, Inc., a Corporation of Massachusetts. Filed Dec. 11, 1926. Serial No. 154,212. 3 Claims. (Cl. 176—122.)



1. In a discharge tube, a translucent envelope filled with a rare gas, a sodium mercury amalgam in said envelope, two external electrodes and one internal electrode for said envelope, and a connection between said internal and one of said external electrodes.

1,758,517. FEEDING APPARATUS WITH CARDING DEVICE FOR CARDING MACHINES. HEINRICH OTTO HESS, Winterthur, Switzerland, assignor to the firm Joh. Jacob Rieter & Co., Limited, Winterthur, Switzerland. Filed July 20, 1928, Serial No. 294,228, and in Germany Aug. 17, 1927. 4 Claims. (Cl. 19—63.)

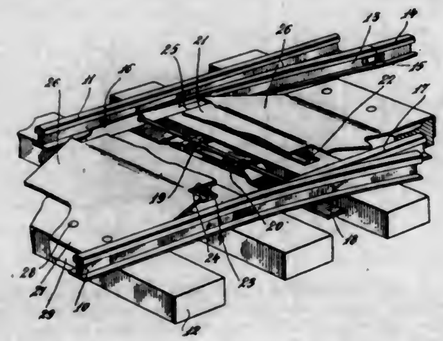


1. A feeding apparatus for carding machines comprising, a carriage adapted to travel to and fro across the width of a feed apron, means on the carriage for transforming a lap or layer of uncarded material into a thin web of material, and means for depositing said web upon the feed apron in a multiplicity of substantially horizontal superimposed layers.

1,758,518. PROCESS FOR THE PRODUCTION OF ARTIFICIAL STONES. JOHANN JAKOB, Seebach-Zurich, Switzerland, assignor to Albert T. Otto & Sons, Inc., New York, N. Y., a Corporation of New York. Filed Nov. 2, 1925, Serial No. 66,395, and in Germany Dec. 22, 1924. 3 Claims. (Cl. 23—110.)

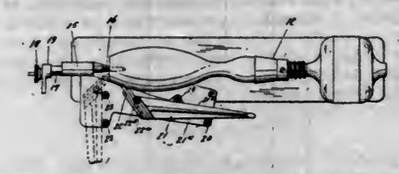
3. The process of forming an artificial stone which includes the step of fusing a material rich in silicic acid and an inorganic salt having an alkali earth metal base and an acid radical which separates and passes off as a gas during the fusing.

1,758,519. PROTECTIVE SWITCH MEMBER. HENRY M. JANVILLE, Maybrook, N. Y. Filed Oct. 14, 1929. Serial No. 399,438. 3 Claims. (Cl. 246—415.)



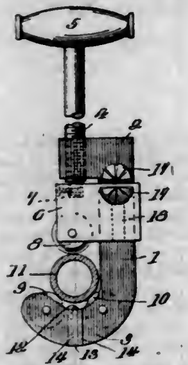
1. A device of the class described comprising in combination a straight linear rail, an adjacent angular movable switch rail, a companion curved stationary rail, and a companion switching rail mechanism for switching said switching rail, ties supporting said rails, inclined aprons mounted on said ties and a horizontal plate unitary with said apron joining the same and raised above the switch rail operating mechanism for protecting the same, recesses in said plate for receiving the switch rail end therein when said switch rail is in opened position.

1,758,520. TURNING LATHE. FRANK L. JOHNSON, Akron, Ohio. Filed Dec. 17, 1927. Serial No. 240,751. 5 Claims. (Cl. 144—2.)



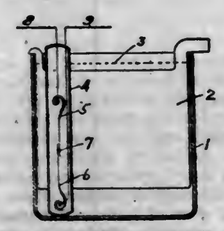
1. A lathe for redressing tenpins including work supporting and rotating means, means for adjusting the work longitudinally, a tool rest, a tool on the rest, and pairs of studs on the rest for guiding the tool, one pair of studs being so positioned as to receive the tool therebetween and to cooperate with the opposite edges thereof, said edges being at an angle to each other whereby the tool when shifted longitudinally and kept in contact with said studs will be guided along a curvilinear path by said studs to cut a curved surface on the profile of a pin, the other pair of studs being transversely aligned and so positioned with respect to said first pair as to take a dressing cut from the bottom of the pin having such relation to the profile redressing cut as to produce a base for the pin of predetermined dimension.

1,758,521. COMBINED PIPE-CUTTING AND BUR-REMOVING TOOL. PHILIP P. KERRIGAN, Fortress Monroe, Va. Filed Mar. 1, 1927. Serial No. 171,843. 3 Claims. (Cl. 7—1.)



1. In a compound tool of the class described, the combination of a body having a slot therein, a head slidable on said body adjacent said slot and carrying a plurality of tool elements, one of said elements having a portion projecting into said slot thereby to guide the head and another portion projecting externally of the head.

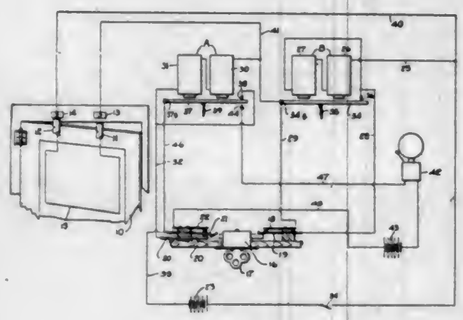
1,758,522. CHARGE-CUT-OFF FOR STORAGE BATTERIES. WILLIAM E. KERSHAW, Gwynedd Valley, Pa. Filed Aug. 6, 1925. Serial No. 48,528. 1 Claim. (Cl. 171—314.)



A storage battery including a container and electrolyte and plates arranged in the container above the bottom

thereof, providing at the bottom of the container a region of quiescent electrolyte of comparatively stable temperature below a region of circulating electrolyte in which the temperature rises sharply towards the completion of battery charge, a thermal responsive device of which a part is located wholly in the region of circulating electrolyte and of which a part is located wholly in the region of quiescent electrolyte and a circuit adapted to be controlled by the thermal responsive device.

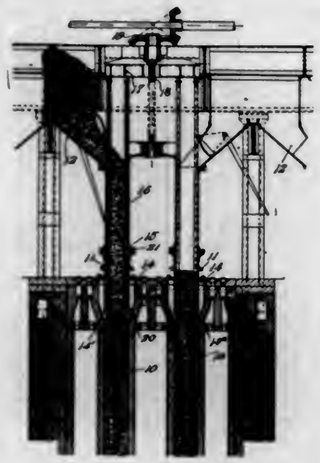
1,758,523. BURGLAR-ALARM SYSTEM. JAMES J. KERTZ, Brooklyn, N. Y., assignor to National Wiring & Protective Co. Inc., Brooklyn, N. Y., a Corporation of New York. Filed Feb. 8, 1929. Serial No. 338,355. 2 Claims. (Cl. 177—314.)



1. The combination with a signal, of a source of current, circuit connections therefor, a spring closed electromagnetically opened switch in said circuit, a manually operated switch also in said circuit, a protective circuit including electro-magnetic relays controlling the electrically operated switch in signal circuit, a second spring closed switch in a relay circuit, a second relay for closing the circuit through the first relay, a member movable to one position to operate said second spring closed switch for closing the circuit through both relays and opening both switches in the signal circuit, the armature of said second relay shunting said second spring closed switch when said relay is energized, and when moved to another position for closing the manually operated switch in the signal circuit and opening the spring controlled switch in the circuit of the first relay whereby the signal circuit may be closed on de-energizing the first relay on rupture of said protective circuit.

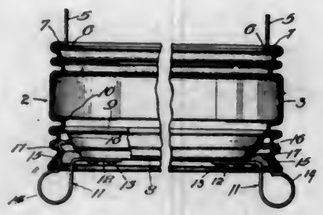
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1. The process of treating coal which comprises: heating a substantially vertically elongated descending mass of small coal laterally inwardly of the mass to at least the carbonization temperature of the same in a closed chamber; continuously discharging the solid residuum from said chamber at the lower portion thereof; continuously charging added coal into said chamber at the upper portion thereof; flowing off distillation gases from said chamber at said upper portion; and forming and maintaining in the outer lateral portions of the newly charged coal in the pasty zone of said coal substantially vertical passages having partially coked walls extending to the outer lateral portions of an adjacent part of the charge in said chamber that has advanced beyond the pasty stage for passage of distillation gases therefrom through the newly charged mass in the pasty zone.



4. In a coke oven, in combination: a substantially vertically extending chamber having lateral heating walls therefor; a superstructure on top of said chamber and forming an extension thereof; means for supplying coal to said chamber through said superstructure; a rod extending from above through said superstructure into said chamber and in close proximity to one of said lateral heating walls and adapted to provide a gas vent in solid material in said chamber in close proximity to said heating wall; and means for vertically moving said rod with relation to said chamber.

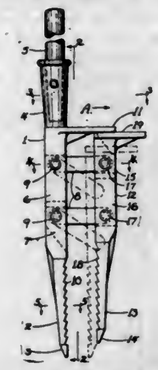
1,758,525. BIRD CAGE. LEWICKI J. LEON, Chicago, Ill., assignor, by mesne assignments, to The Andrew B. Hendryx Company, a Corporation of Connecticut. Filed June 23, 1924. Serial No. 721,673. 16 Claims. (Cl. 119—17.)



1. A cage, comprising a cage body and a base, said base having an upright marginal wall and a bottom wall, and means permanently connecting the cage body to the upper portion of said marginal wall, consisting of horizontally disposed interfitting channel and ring portions on the base and body, respectively, and extending entirely about the same.

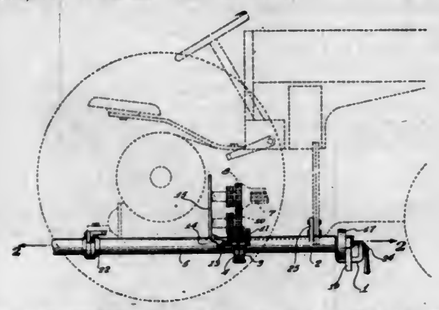
1,758,526. PLANT PULLER. GEORGE H. LEWIS, Baltimore, Md. Filed Oct. 10, 1928. Serial No. 311,586. 4 Claims. (Cl. 55—148.)

1. In a plant puller of the class described, the combination of two parallel members, one of said members being movable, foot treads at the top of each of said members, the said foot treads of the movable member adapted to rest underneath the foot tread of the other member, means for reducing the space between said members by moving said movable member downwardly so a



plant can be gripped between said members, and a handle attached to one of said members for pulling said gripped plant out of the earth.

1,758,527. POWER DRIVE ATTACHMENT. ELMER S. MAINE, Chicago, Ill. Filed Jan. 17, 1924. Serial No. 686,775. 2 Claims. (Cl. 180—53.)



1. The combination with a tractor, including a power means, of driving connections for said tractor, including a longitudinally extending propeller shaft operable by the power means; operating mechanism supported by the tractor, and including an elongated tube having a shaft rotatably mounted therein and supported thereby; and power transmission mechanism including a gear affixed directly to the propeller shaft, an idler gear meshing therewith, a gear for driving said shaft, said gear being arranged intermediate the ends of the shaft in said tube, and a radially shiftable gear adapted to be thrown into and out of mesh with said two last named gears to effect operation of the shaft in said tube.

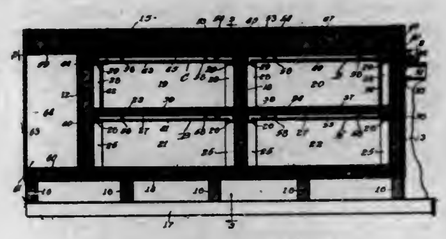
1,758,528. PRODUCTION OF TITANIUM DIOXIDE. WERNER MECKLENBURG, Moscow, Union of Soviet Socialist Republics. Filed Feb. 1, 1929, Serial No. 336,918, and in Czechoslovakia May 5, 1928. 21 Claims. (Cl. 23—202.)

7. A process for preparing a seed suspension which comprises reducing the acidity of titanium sulfate solution to a hydrogen-ion concentration of about pH 2.5–6.0, heating the mixture to about 80° C. for 15–30 minutes, and cooling said mixture.

12. A process for the production of titanium dioxide which comprises adding a mixture containing titanium hydroxide in aqueous suspension containing sodium sulfate to a solution of titanium sulfate, and maintaining the mixture at a temperature near the boiling point.

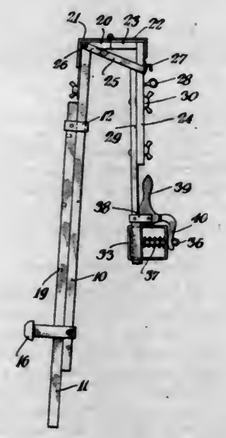
15. A process for the hydrolysis of titanium sulfate solution which comprises adding sufficient alkali to a small portion of said solution to reduce the acidity of pH 2.5–6.0 and to precipitate titanium hydroxide therein, heating said mixture to about 80° C. for 15–30 minutes, adding said mixture to the rest of the titanium sulfate solution, and maintaining the mixture at a temperature near the boiling point.

1,758,529. REFRIGERATOR VEHICLE. LOUIS B. OLIN, Chicago, Ill. Filed Jan. 30, 1929. Serial No. 336,126. 3 Claims. (Cl. 62—101.)



1. In a motor vehicle for transporting ice cream or other commodities, the combination of outer walls, a central vertical dividing wall, four freezing compartments, two on each side of said central vertical dividing wall, one above the other, a continuous pipe adapted to contain a refrigerating gas extending from the exterior of one of said walls through each of said freezing chambers at the tops thereof, said continuous pipe extending from the exterior of the truck at the front wall passing to a lower horizontal tier in the first compartment, thence to an upper horizontal tier in said first compartment, thence to an upper horizontal tier in a second compartment, thence to a lower horizontal tier in said second compartment, thence to a lower horizontal tier in the third compartment, thence to the upper horizontal tier in said third compartment, thence to an upper horizontal tier in the fourth compartment, thence to the lower horizontal tier in said fourth compartment, thence to the exterior of said wall adjacent the inlet portion of said continuous pipe.

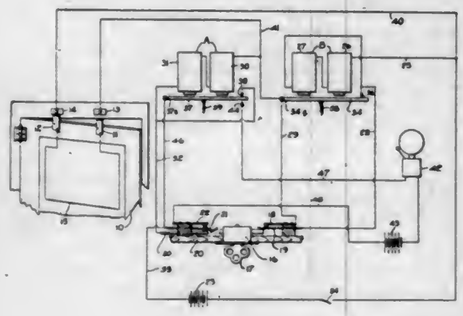
1,758,530. WINDOW CLEANER. TIMOTHY J. O'NEILL, New York, N. Y. Filed Mar. 16, 1929. Serial No. 347,478. 3 Claims. (Cl. 15—220.)



3. In a window cleaner, a pad block, rectangular frames passing through said block, pinch bars forming one side of said rectangular frames, a connecting arm joining the other side of said rectangular frames, a spring engaging

thereof, providing at the bottom of the container a region of quiescent electrolyte of comparatively stable temperature below a region of circulating electrolyte in which the temperature rises sharply towards the completion of battery charge, a thermal responsive device of which a part is located wholly in the region of circulating electrolyte and of which a part is located wholly in the region of quiescent electrolyte and a circuit adapted to be controlled by the thermal responsive device.

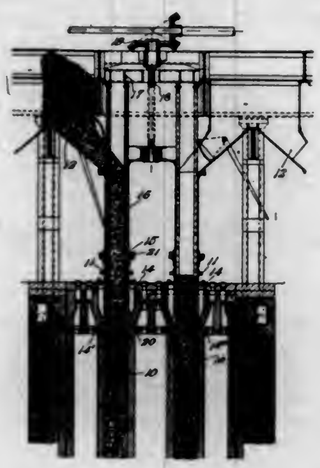
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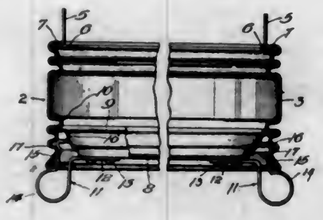
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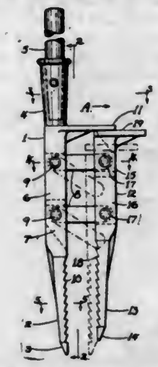
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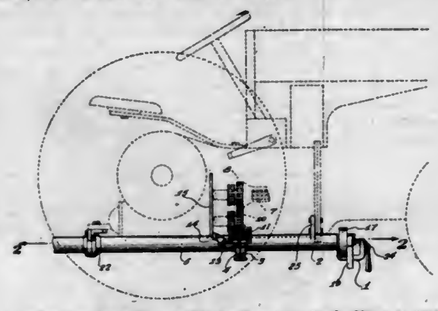
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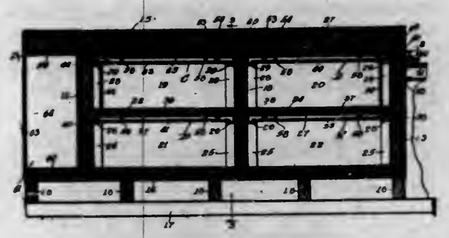
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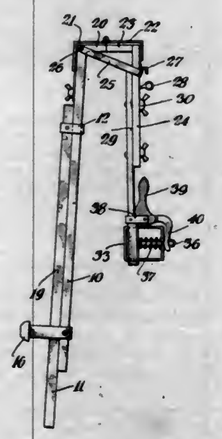
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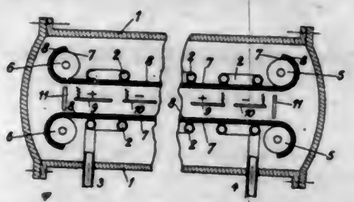
1,758,530. WINDOW CLEANER. TIMOTHY J. O'NEILL, New York, N. Y. Filed Mar. 16, 1929. Serial No. 347,478. 3 Claims. (Cl. 15—220.)



3. In a window cleaner, a pad block, rectangular frames passing through said block, pinch bars forming one side of said rectangular frames, a connecting arm joining the other side of said rectangular frames, a spring engaging

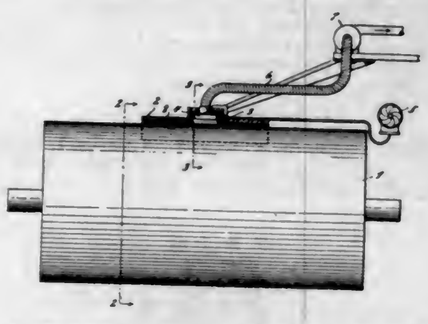
said block and said connecting bar for moving said rectangular frames to cause said pinch bars to engage with said block, a channeled cage mounted on said block having said spring coiled thereabout and serving as a guide for said spring and said connecting bar, and means for depressing said rectangular frames to provide a space between said pinch bars and said block for the insertion of a pad between said pinch bars and said block.

1,758,531. VACUUM DISPERSION COATING PROCESS. WILHELM ANTON FRANZ PFANHAUSER, Leipzig, Germany, assignor to Gesellschaft für Elektrodenzerstaubung m. b. H., Bohlitz-Ehrenberg, near Leipzig, Germany, a Corporation of Germany. Filed Oct. 10, 1927, Serial No. 225,130, and in Germany Oct. 22, 1926. 7 Claims. (Cl. 91—68.1.)



1. A process for coating articles with metals by electrodes dispersed in vacuum which consists in passing said articles in proximity to the electrodes and simultaneously directly cooling the articles.

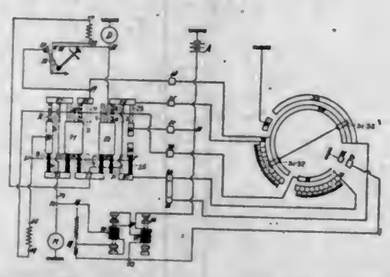
1,758,532. TEMPERATURE-MEASURING DEVICE. EDWARD D. PHINNEY, Mount Vernon, N. Y. Filed Apr. 20, 1928. Serial No. 271,442. 7 Claims. (Cl. 73—52.)



1. A temperature measuring device for a heated roll, comprising a hood conforming to the curvature of the roll and spaced a slight distance therefrom, the hood having an opening intermediate the edges thereof, means for drawing air between said hood and said roll and out of said opening and a temperature measuring device positioned in the air stream drawn over said roll.

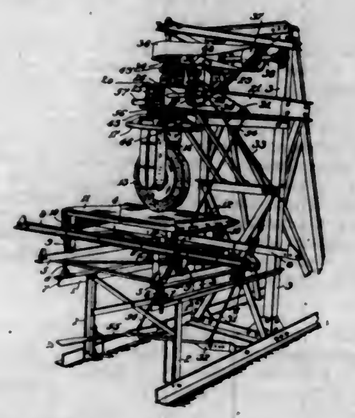
1,758,533. DYNAMO-ELECTRIC DRIVING SET FOR VEHICLES. FERDINAND PORSCHE, Stuttgart-Unterturkheim, Germany, assignor, by mesne assignments, to Daimler-Benz Aktiengesellschaft, Berlin, Germany. Filed July 20, 1923, Serial No. 652,721, and in Austria, July 29, 1922. 10 Claims. (Cl. 290—12.)

1. A dynamo-electric set, comprising as a unitary assemblage a rotary field, a stationary field and a pair of rotatable armatures mounted upon a common shaft, one for each of said fields, the opposed surfaces of each cooperating field and armature being conical, and means including a cam having a definite predetermined asymmetric curvature for effecting automatically an axial movement of said armatures in unison corresponding to variations in the torque exerted by variations of the driving resistance opposed to said set, said cam being constructed and arranged to produce such axial movement irrespective of the direction of rotation of said armatures, and a power element cooperating with the armatures and opposing the axial movement of the armatures in one direction but assisting their movement in the opposite axial direction.



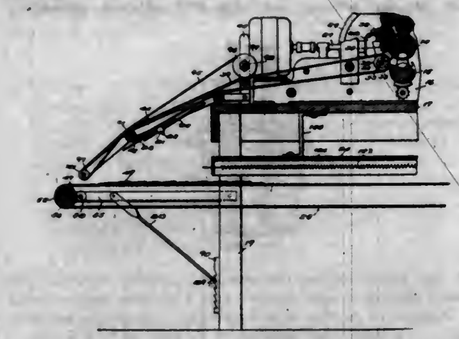
3. The combination with an internal combustion engine of an automotive vehicle, of a combined generator and motor set, having one element thereof connected to said engine, a second element stationary and a pair of elements connected with the driving wheels of the vehicle, a hand-operated switch directly connected with said set to form therewith an unitary assemblage, connections from said switch to said set arranged in one position of said switch to connect certain of said elements in series to actuate said vehicle and when in another position to reverse the polarity of certain of said elements whereby the energy due to the motion of said vehicle will be transmitted to said engine to exert a braking effect, and other connections from said hand switch to a plurality of resistances whereby the said braking effect may be altered.

1,758,534. GLASS-POLISHING MACHINE. WILLIAM E. PORTER, Los Angeles, Calif. Filed Jan. 10, 1925. Serial No. 1,559. 2 Claims. (Cl. 51—93.)



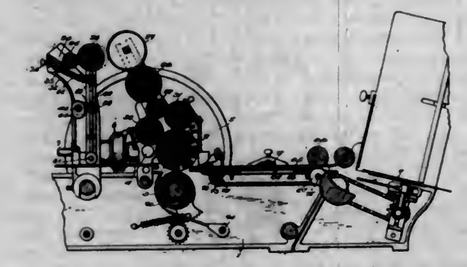
1. In a glass polishing machine, the combination with a head, of a sleeve vertically movable in said head, a fork having a shank rotatably mounted in said sleeve and supported thereby, a polishing wheel mounted on a horizontal axis in said fork, a driving shaft extending through the shank of said fork and having a driving gear connection with said wheel, a second driving shaft parallel with the first driving shaft having a driven gear connection with said first driving shaft and a driving gear connection with said fork, said gear connection permitting a relative longitudinal movement between the shafts.

1,758,535. PRINTING APPARATUS. CLAUDE L. POST, Chicago, Ill. Filed Apr. 4, 1927. Serial No. 180,804. 10 Claims. (Cl. 101—416.)



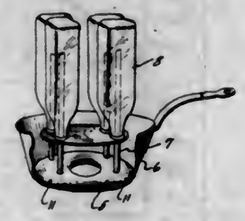
1. The combination with a printing machine, of a conveyer for receiving the printed articles, means for advancing the conveyer and means for securing the receiving end of the conveyer in a plurality of adjusted positions with respect to the printing machine.

1,758,536. PRINTING MECHANISM. CLAUDE L. POST, Chicago, Ill. Filed Oct. 8, 1924. Serial No. 741,428. 16 Claims. (Cl. 101—232.)



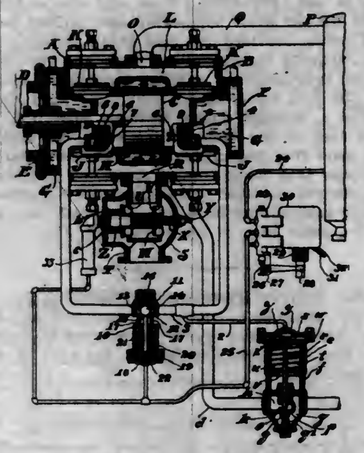
1. In a printing machine of the kind described and in combination, a printing roll, printing means and means for securing said printing means on the roll, and work-engaging means adjustably mounted on the printing roll consisting of resilient metallic ring segments constructed to operatively engage with the roll, said segments arranged to contract upon the impression roll and prevent slurring of the printed sheet passing between the rolls.

1,758,537. STERILIZER FOR BOTTLES. LAWRENCE M. RAKESTRAW, Toledo, Ohio, assignor of one-half to Nelson J. Quinn, Toledo, Ohio. Filed Aug. 6, 1925. Serial No. 48,567. 4 Claims. (Cl. 167—3.)



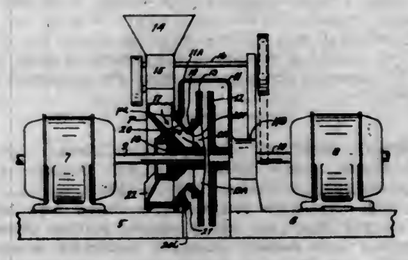
1. A condenser and sterilizer for receptacles comprising a base adapted to be immersed in a pan of cleansing liquid with a portion in spaced relation to the bottom of the pan, a plurality of jets carried by the spaced portion of the base and adapted to convey the heated liquid and steam generated below the spaced portion of the base into contact with the interiors of receptacles surrounding the upper portions of the jets, and a support for the receptacles to be cleansed carried by and arranged to brace the jets.

1,758,538. WATER-COOLING DEVICE FOR COMPRESSORS. SNOWDEN B. REDFIELD, Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed Dec. 3, 1927. Serial No. 237,445. 4 Claims. (Cl. 230—212.)



1. In a compressor, the combination of a cylinder having inlet and discharge openings, a receiver tank connected to receive pressure fluid discharged from the cylinder, a water jacket on the cylinder, a water valve, a pipe connected to the ends of the cylinder for conveying pressure fluid from the cylinder to the water valve for holding said water valve open during the operation of the compressor, and a relief valve interposed in the pipe adapted to remain closed during the normal operation of the compressor and actuated by receiver pressure for venting the cylinder and the water valve to the atmosphere during the time the compressor is operating at less than normal speeds, thus preventing the compression of air leaking into the cylinder as well as the flow of water into the water jacket.

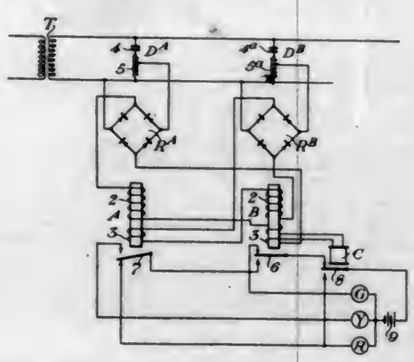
1,758,539. ATTRITION MILL. AUGUST SCHUCHARDT, Winona, Minn. Filed Apr. 2, 1929. Serial No. 351,887. 2 Claims. (Cl. 83—8.)



1. In a mill of the class described having a pair of upright milling heads rotatable in proximity to each other,

each mounted on a rotary shaft and said shaft in alinement a plurality of bearings supporting said shaft, a housing about said heads and a feeder pedestal adjoining said housing with an intake hopper in its upper part at an elevation above the milling heads; a female sealring fixed concentrically on one of said milling heads nearest the feeder pedestal and of L-shape in cross section and providing a circular collar, said head provided with a circular row of apertures flared out toward the other head, said feeder pedestal provided with a vertical intake flue communicating with said hopper and inclined guide passage means leading downwardly direct from said flue to the adjacent or outer side of the said apertured milling head, said inclined guide means comprising in the pedestal an integral horizontal hub formed with conic exterior tapering toward and terminating at the hub of said open milling head, said conical hub bored centrally for the shaft supporting said milling head and bearing means provided for said shaft within said bore and in proximity to the milling head, and further guide means in approximately parallel relation to said conic face of the hub, comprising a removably fixed male seal ring with a circular flange retained concentric within the seal ring of the open milling head, the major part of said male ring comprising a circular body flared outwardly from said flange toward the feeder pedestal, said latter pedestal provided with a circular aperture concentric of said milling head and said male seal ring to retain the outer edge of its flared body.

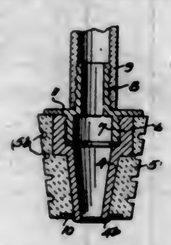
1,758,540. RELAY SYSTEM. NOBLE C. SHAW, Swissvale, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Jan. 21, 1929. Serial No. 333,777. 6 Claims. (Cl. 246—256.)



6. In combination, two sources of current of which at times the voltage of one is high and that of the other is low, while at other times the voltage of the second source is high and that of the first is low, two relays having main windings supplied with current from said two sources, respectively, and an auxiliary winding for each relay supplied with current from the source other than the one supplying current to the associated main winding for opposing the flux created by the associated main winding.

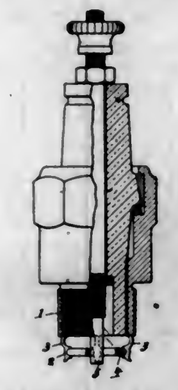
1,758,541. HOLLOW PLUG CONNECTION. CHARLES W. SIMON, Detroit, Mich. Filed July 1, 1929. Serial No. 375,107. 1 Claim. (Cl. 4—256.)

A plug connection comprising a hollow core having an enlarged upper end and a tapered portion extending therefrom said portion being of gradually decreasing diameter and having a correspondingly decreasing bore, a resilient member around said core, the latter being internally threaded at its upper end, a nipple having a threaded end engaging the threaded portion of the core, a flexible hose on the opposite end of the nipple, a flange around the nipple intermediately of its length which bears on the top of the core and extends outwardly



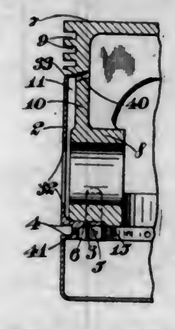
over the upper end of the resilient member to limit the upward flexing of the latter, and a washer held around the lower end of the core extending under the resilient member to limit the downward flexing of the latter.

1,758,542. SPARK PLUG. EMERICH STERN, Temisoara, Rumania. Filed Jan. 7, 1928, Serial No. 245,162, and in Austria Apr. 27, 1927. 3 Claims. (Cl. 123—169.)



1. A spark plug comprising a resiliently expansible clamping device conductingly connected with the screw-threaded end of the spark plug, and an electrode removably inserted in and yieldingly held in position by the said clamping device.

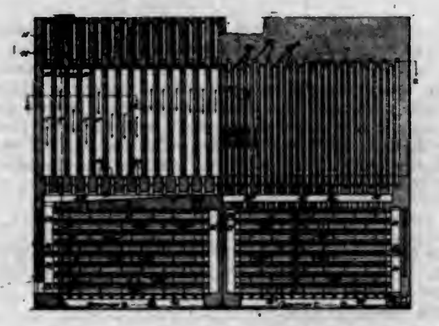
1,758,543. PISTON FOR FLUID-PRESSURE ENGINES. ERNEST TALBOT, Lowestoft, England. Filed June 12, 1928, Serial No. 284,826, and in Great Britain Nov. 10, 1927. 4 Claims. (Cl. 74—108.)



1. In a piston, the combination of a cast metal head formed with gudgeon pin bosses, a concentric shoulder

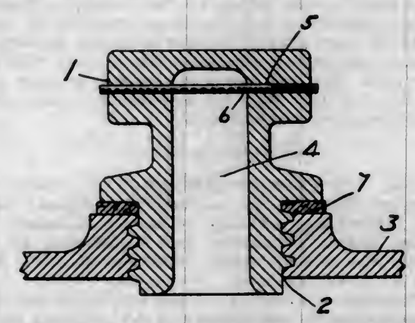
on said head, a thin metal skirt, an inward flange formed around the whole periphery of said skirt, said flange having a concentric shoulder at its inner edge which registers with that on the head, and means for attaching said flange to said head.

1,758,544. RECUPERATIVE COKING RETORT OVEN. JOSEPH VAN ACKEREN, Pittsburgh, Pa., assignor to The Koppers Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Sept. 29, 1921. Serial No. 504,143. 18 Claims. (Cl. 202—135.)



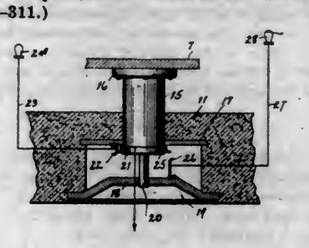
1. In a coking retort oven, in combination; a plurality of coking chambers; heating walls contiguous to such coking chambers and respectively comprising two series of vertical combustion flues of which the flues of each series are contiguous to each other; recuperator units, having inflow and outflow passages, disposed at a lower level than the aforesaid coking chambers and heating walls, said recuperator units being disposed into two series, the recuperator units of one series alternating with the recuperator units of the other; duct means communicably connecting the inflow passages of recuperator units of both series with the tops of both series of combustion flues of each heating wall; duct means communicably connecting the bottoms of both series of combustion flues with the outflow passages of such recuperator units; and separate fuel gas connections also communicably connected with the tops of both series of such combustion flues; substantially as specified.

1,758,545. VENT FOR STORAGE BATTERIES. CURTIS C. WALLACE, Philadelphia, Pa. Filed Apr. 30, 1928. Serial No. 273,834. 3 Claims. (Cl. 136—177.)



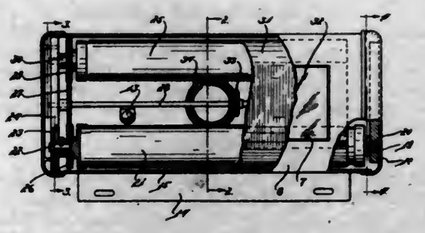
1. Venting means for a storage battery cell in a charged and dumped condition having a venting duct adapted to vent the gases evolved during a normal charge and a removable filling piece of pliable material imperfectly filling the duct and adapted to provide passage between its surface and the inner wall of the duct for venting the gases developed by local action but to retard diffusion of air into the cell.

1,758,546. SIGNAL. KARL WARTMANN, Atlantic City, N. J. Filed Sept. 8, 1927. Serial No. 218,213. 1 Claim. (Cl. 177—311.)



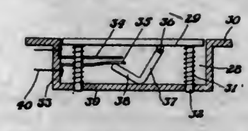
A signal device of the class described in combination with a bed frame, resilient means supporting the corner legs of said frame below a flooring, a column rigidly attached to the frame and extending below the flooring, stationary contacts below the flooring, movable contacts on the bottom of the column cooperating with the said stationary contacts and included in a circuit and signal lamps to indicate when the bed frame is occupied or vacant.

1,758,547. VEHICLE SIGNAL. EUGENE MAUNZ, Detroit, Mich. Filed Dec. 6, 1929. Serial No. 412,017. 2 Claims. (Cl. 116—43.)



1. A vehicle signal of the class described, comprising: a housing having a front wall provided with an opening; a transparent closure for said opening; side walls in said housing; a pair of rollers, each journaled at its opposite end in said side walls, one of said rollers being positioned above and one below said opening; a gear fixedly mounted on each of said rollers at one end thereof; a shaft mounted in said housing and extending parallel to said rollers and positioned between the same; a gear fixedly mounted on said shaft and meshing at all times with both of the gears on said rollers; a bevel gear carried by said shaft; means engageable with said bevel gear for effecting a rotation of said rollers; and a flexible display member windable upon said rollers.

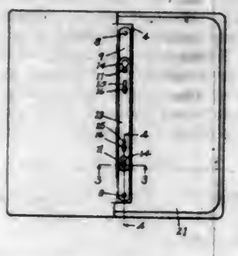
1,758,548. TREADLE SWITCH. ERHARD WERNER, New York, N. Y. Filed June 9, 1928. Serial No. 284,061. 1 Claim. (Cl. 200—86.)



In a hold-up alarm, a floating platform, vertical studs projecting from the underside of said platform, coiled springs surrounding said studs and urging said platform upward, a bell crank having its arms mutually at right-angles to each other, one of said arms being longer than the other, the longer of said arms being pivotally secured to the underside of said platform, a casing adapted to receive said platform, the elbow of said bell crank resting upon the bottom of said casing, said studs passing through

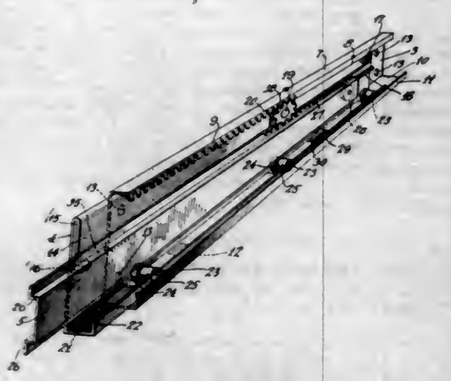
recesses in the bottom of said casing, the lower ends of said springs resting upon the bottom of said casing, said bell crank being rotated upon depression of said platform so that the longer arm moves in a downward direction and the shorter arm in an upward direction, and electrical circuit-closing means adapted to be moved into the closed position by the upward movement of said shorter arm.

1,758,549. TEMPORARY BINDER. GEORGE P. WIGGINTON, Kalamazoo, Mich., assignor, by mesne assignments, to Remington Rand Inc., New York, N. Y., a Corporation of Delaware. Filed Aug. 15, 1924. Serial No. 732,216. 3 Claims. (Cl. 129—23.)



1. In a temporary binder, the combination of covers, binding flaps on the covers, binding bars detachably connected to said flaps, binding posts on one of said bars, means on the other bar for locking the ends of the binding posts thereto, and a transfer bar provided with sheet-engaging posts removably disposed inwardly of the last-mentioned binding bar.

1,758,550. SUPPORTING MEANS FOR DRAWERS FOR ARTICLES OF FURNITURE. CARL F. WOLTERS, Marietta, Ohio, assignor, by mesne assignments, to Remington Rand Inc., New York, N. Y., a Corporation of Delaware. Filed Dec. 5, 1925. Serial No. 73,325. 4 Claims. (Cl. 45—77.)



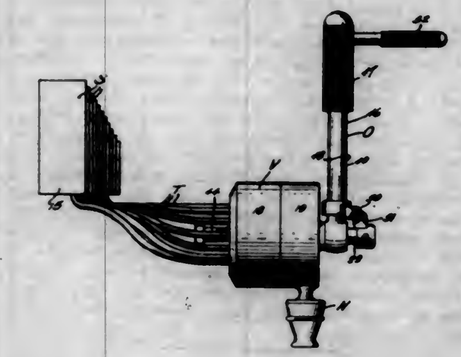
2. A drawer support, having in combination, a casing member, a carrying member entirely supported by said casing member, a drawer member entirely supported by said carrying member, and means between the casing and carrying members engaging the drawer member adapted to compensate for variations in said members, including anti-friction means between one side of said drawer member and the carrying and casing members, and means between the drawer member and the carrying and casing members having positive driving cooperation with each for positively operating the carrying member in the operation of the drawer member.

1,758,551. VENT OPENING AND PLUG FOR STORAGE BATTERIES. JOSEPH LESTER WOODBRIDGE, Philadelphia, Pa. Filed Oct. 18, 1927. Serial No. 226,870. 2 Claims. (Cl. 136—177.)



1. In combination, a cell cover having a vent opening with an approximately vertical wall, a vent plug fitting into the opening and having a corresponding wall, and an annular recess in one of said walls at the top of the opening defining a channel completely surrounding said vent plug whereby it is wholly out of contact with the cover above the channel, and a vertical groove in one of said walls communicating at its lower end with the interior of the cell and at its upper end with the channel.

1,758,552. FLUID-DISPENSING APPARATUS. PHILIP S. ALLEN and DANIEL N. ALEXANDER, Avalon, Calif. Filed Oct. 2, 1928. Serial No. 309,822. 9 Claims. (Cl. 225—26.)

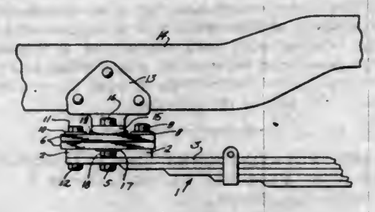


3. A valve having a casing, a stationary element having a plurality of inlet ports each adapted for communication with a source of fluid supply, a second stationary element having a plurality of outlet ports corresponding in position to the inlet ports of the first stationary element, a discharge passage in the casing communicating with all of the outlet ports, and means movable first to select any inlet port and then place the corresponding outlet port in communication therewith.

1,758,553. PROCESS OF MERCERIZING. HARRY P. BASSETT, Cynthiana, Ky., and THOMAS F. BANIGAN, Clifton Heights, Pa., assignors, by mesne assignments, to Meigs, Bassett & Slaughter, Inc., Philadelphia, Pa., a Corporation of Pennsylvania. Filed Jan. 30, 1925. Serial No. 5,887. 12 Claims. (Cl. 8—20.)

1. The process of treating cellulose textiles and the like, containing artificial silk filaments, which comprises introducing said material into a caustic alkali mercerising solution containing a salt which has an organic base and will not by reaction of the caustic alkali therewith undergo change in its chemical composition, removing said material from said mercerizing solution and then washing with a solution of said salt until the concentration of the caustic alkali has been reduced below that at which mercerization takes place.

1,758,554. FLEXIBLE CONNECTION. HARVEY W. BELL, Ardsley on Hudson, N. Y., assignor to The Beloyt Corporation, New York, N. Y., a Corporation of Delaware. Filed Aug. 24, 1926. Serial No. 131,142. 3 Claims. (Cl. 267—30.)



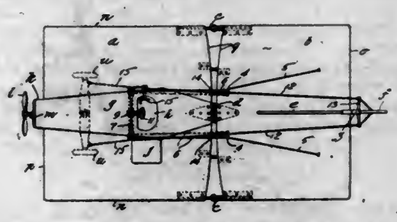
1. In combination, a supporting member, a supported member, a substantially square, flexible fabric plate having its warp and woof threads extending substantially parallel to edges of the plate, crossed rigid members connected respectively to the supported and supporting members and extending along the diagonals of the plate at opposite sides thereof and bearing against one another through the plate in the crossing area to sustain the weight of the supported body in compression, each of said rigid members being clamped to the plate at diagonally opposite points, so that the points of connection of the plate to the respective rigid members alternate, the arrangement being such that adjacent connection points are joined in each instance by threads of fabric aligned with such points so that relative movement between the rigid members is invariably resisted by direct tensioning of some of the threads and diagonal tensioning of the plate is limited.

1,758,555. BEAN HARVESTER. WILLIAM L. BETTEX and CHARLES L. BRENNER, Idalia, Colo. Filed Jan. 14, 1929. Serial No. 332,342. 3 Claims. (Cl. 56—327.)



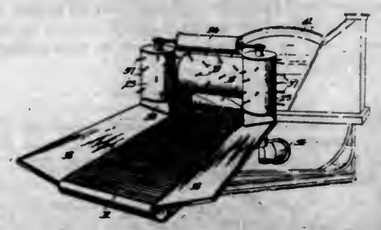
1. An implement of the character described comprising a head including a cross bar, tines extending forwardly from the ends of said cross bar, tines extending forwardly from the cross bar intermediate its ends and being of less length than the first tines, said tines being curved longitudinally, a cutting blade extending diagonally across said tines and bowed downwardly and secured to the tines, and arms extending rearwardly from said cross bar and having their free rear end portions bent upwardly.

1,758,556. FLYING MACHINE. PETER MCGUFFIE BRUCE, Lochhill, Auldgirth, Scotland. Filed Nov. 4, 1926, Serial No. 146,266, and in Great Britain Nov. 6, 1925. 5 Claims. (Cl. 244—14.)



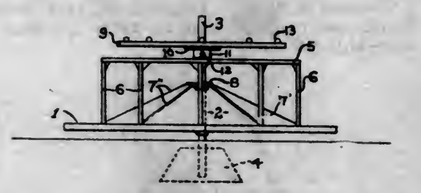
1. A flying machine having for its lifting surface a plane made in two sections approximately of the same size and hinged together so as to form a plane of greater length than width with a concavity along the longitudinal centre facing upwards and of greater depth at the end in the direction of flight and gradually merging into a flat rear end.

1,758,557. FEEDING DEVICE FOR ENSILAGE CUTTERS AND THE LIKE. FRED J. BULLOCK, Shortsville, N. Y., assignor to Papec Machine Company, Shortsville, N. Y., a Corporation of New York. Filed Sept. 26, 1927. Serial No. 222,135. 5 Claims. (Cl. 146—109.)



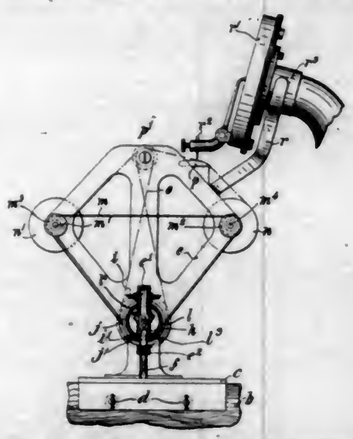
1. In a feeding device for ensilage cutters and the like, the combination of a traveling feed apron; a pair of power driven feed rollers mounted on substantially vertical axes at opposite sides of said apron; fingers mounted to be projected through the peripheries of said rollers; and means operable by the rotation of said rollers to project and retract said fingers as the rollers rotate, the fingers serving to force the material to be fed toward the center of the apron and between the rollers.

1,758,558. ROTARY RIDING MECHANISM. EMERY E. CLARK, Topeka, Kans. Filed Feb. 29, 1928. Serial No. 257,963. 2 Claims. (Cl. 272—33.)



1. In a rotary riding mechanism, in combination with a post, an annular platform having a railing at the inner margin thereof and rotatable therewith, the platform rotatably carried by the post, a disc rigidly attached to the upper end of the post, the peripheral edge of the disc being in close proximity to the railing by which means an occupant of the platform may cause rotation thereof by pulling on the peripheral edge of the disc.

1,758,559. SOUND RECORDING AND REPRODUCING APPARATUS. WILLIAM FREDERICK CROLL, London, England. Filed Dec. 8, 1927, Serial No. 238,584, and in Great Britain Dec. 13, 1926. 13 Claims. (Cl. 274—11.)



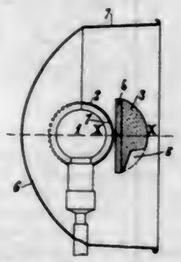
1. In sound reproducing or recording apparatus the combination of a sound box and stylus, means for feeding a record strip in contact with said stylus, a holder for said sound box and feeding means, a device for engaging said feeding means with a rotating part of an instrument of the gramophone type, whereby said feeding means are actuated, and means for attaching said holder to said instrument, with said actuating device in engagement with said rotating part.

1,758,560. AIRCRAFT PROPELLER. GAIL G. CURRIE, Los Angeles, Calif., assignor of one-half to E. Richard Just, Los Angeles, Calif. Filed Dec. 26, 1928. Serial No. 328,336. 3 Claims. (Cl. 170—170.)



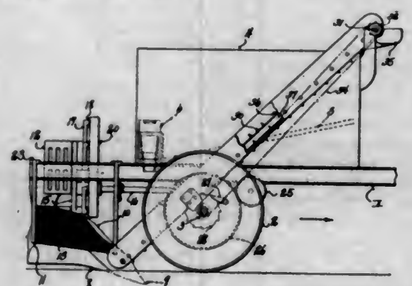
1. In a propeller, a central body portion, a pair of blades extending from said body, the longitudinal axis of said blades being spaced on opposite sides of the center of rotation, said blades each tapering outwardly towards their tips from their juncture with said body and a plurality of vanes on said blades.

1,758,561. HEADLIGHT FOR MOTOR OR LIKE VEHICLES. PAUL DELAUX, Fontenay-Sous-Bois, France, assignor to Société Anonyme: Société des Phares et Equipments Electriques, Fontenay-Sous-Bois, France, a Company of France. Filed Jan. 21, 1926, Serial No. 82,798, and in France Jan. 20, 1925. 2 Claims. (Cl. 240—41.)



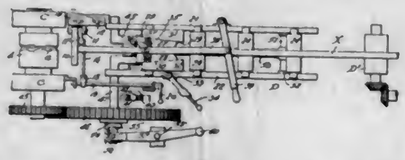
1. In a headlight for automobile vehicles, a reflector, an electric lamp with a rectilinear filament arranged perpendicularly to the axis of the reflector and also positioned horizontally thereof, a plano-convex lens arranged substantially concentric with the axis of the reflector, the lower part of the plano-convex lens being cut out to form a dihedral angle the horizontal edge of which is disposed parallel to the lamps, a plano-cylindrical lens located between the light source and the plano-convex lens, the plane surfaces of the two lenses being arranged in contacting relation with each other, and a semi-spherical reflector positioned between the plano-cylindrical lens and the lamp and provided with an opening substantially concentric to the axis of the reflector.

1,758,562. POTATO DIGGER. HENRY DICKEHAGE, West Allis, Wis. Filed Sept. 24, 1927. Serial No. 221,737. 1 Claim. (Cl. 55—56.)



A potato digger comprising a frame, a plurality of wheels for supporting said frame, a plow carried by said frame and having generally a trough-like cross section, said plow having a downwardly extending forward portion adapted to scoop up potatoes and soil and having a horizontally extending cylindrical rear portion into which said forward portion merges, a rotating spider driven from said wheels and having a plurality of feathering blades adapted to enter and sweep across the horizontal cylindrical portion of said plow, and a shaking basket immediately adjacent a lateral edge of the horizontal cylindrical portion of said plow, said blades being relatively wide and the path described by the ends of said blades being approximately of the same curvature as the cylindrical portion of said plow.

1,758,563. DIE-ROLLING PROCESS AND APPARATUS. WILLIAM H. DONNER, Buffalo, N. Y. Filed Apr. 30, 1926. Serial No. 105,724. 25 Claims. (Cl. 80—26.)

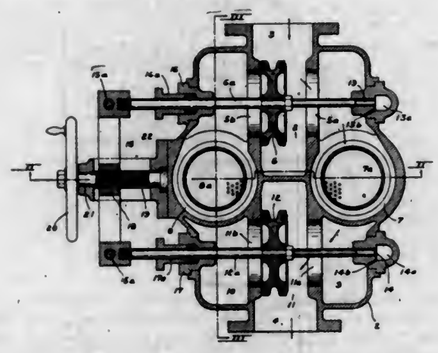


25. The process of die rolling a series of connected forging blanks which consists of passing a bar of metal at a forging temperature into proximity to a set of die rolls, stopping the movement of the bar at a definite distance from said set of die rolls, delivering the bar to the die rolls so that the front end of the bar engages with a predetermined portion of said die rolls, advancing the bar in proximity to a succeeding set of die rolls, placing the bar in the same position from said succeeding set of die rolls that it occupied before the preceding set of die rolls, and then feeding the bar into engagement with said succeeding set of die rolls in synchronized relation to the pattern of those rolls, whereby the configurations of the bar will properly register with the configurations of the pattern on the said second set of die rolls while passing therethrough

1,758,564. LEATHER AND PROCESS FOR OBTAINING SAME. ALFRED EHRENREICH, London, England. Filed Jan. 31, 1928, Serial No. 250,948, and in Belgium Sept. 23, 1927. 3 Claims. (Cl. 149—5.)

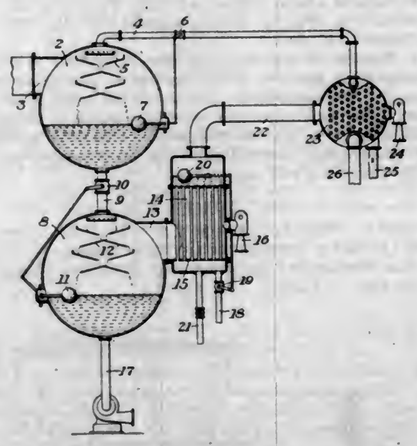
2. A method of preparing leather from the great intestines and walls of the stomach of selachian chondropterygii including the steps of washing the same with cold water, obliterating the veins thereof, liming, adding a carbolate, tanning, and acidifying.

1,758,565. TWIN STRAINER. WILLIAM S. ELLIOTT, Pittsburgh, Pa. Filed Dec. 6, 1928. Serial No. 152,801. 16 Claims. (Cl. 210—168.)



1. In a twin strainer, a plurality of separate valve chambers, strainer chambers disposed on both sides of the valve chambers, said strainer chambers communicating with the valve chambers through axially aligned ports, a plurality of axially movable valves intermediate said ports, means connecting the valves to form a bodily movable unit, and operating means for actuating the valve unit to establish a desired relationship between the valves and the ports.

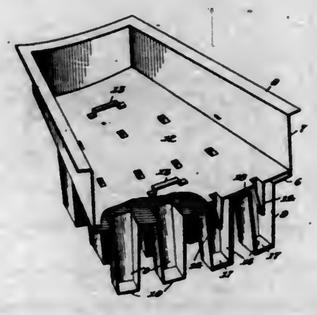
1,758,566. METHOD AND APPARATUS FOR DEAERATING AND EVAPORATING LIQUID. WILLIAM S. ELLIOTT, Pittsburgh, Pa. Filed Mar. 27, 1923. Serial No. 628,150. 21 Claims. (Cl. 183—2.5.)



9. In a liquid treating apparatus, a condenser having a liquid space and a vapor space, means for supplying a condensing liquid thereto other than the liquid being treated, means for maintaining a temperature in the liquid space of said condenser materially lower than that maintained in the vapor space thereof, means for supplying heat to the vapor space of said condenser for evaporating a portion of its condensing liquid, and means for utilizing the heat of the vapor produced in the liquid space of said condenser for preheating the liquid supplied to said apparatus.

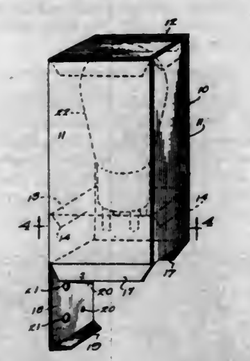
19. In a deaerating apparatus, a heater constituting a temperature stage, a receiver constituting a pressure stage, means for supplying liquid successively to said stages, a surface condenser communicating with the pressure stage for withdrawing vapors therefrom, and means for maintaining in the liquid space of said condenser a pressure lower than the pressure in said pressure stage.

1,758,567. METHOD AND APPARATUS FOR MAKING FROZEN CONFECTIONS. FRANK C. FERNANDEZ, Tucson, Ariz. Filed Aug. 12, 1927. Serial No. 212,511. 4 Claims. (Cl. 107—19.)



2. In an apparatus for making frozen confections, a tray, a pair of molds carried by and depending from said tray, a stirrup comprising a bight portion and legs, said legs extending one into each of said molds with the bight portion in the space between the molds and entirely out of the molds, laterally deflected feet at the lower ends of said legs resting upon the bottoms of said molds, and a bail secured to said stirrup at its intermediate portion.

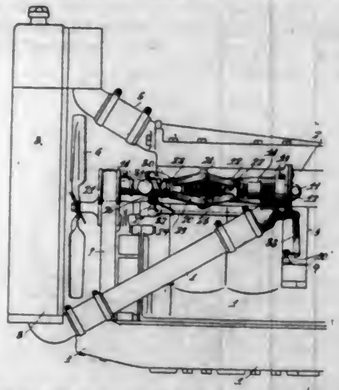
1,758,568. COMBINED CONTAINER AND TESTING BASE FOR ELECTRICAL INSTRUMENTS. ALDEN E. FINLEY, Groton, Conn. Filed Apr. 2, 1926. Serial No. 99,350. 1 Claim. (Cl. 229—6.)



A container for a radio tube having a plurality of spaced contacts of different sizes projecting from its base, comprising a hollow body having parallel sides and a top and a bottom, and a relatively thin resilient sub-bottom secured within said body above and parallel to said bottom and provided with a plurality of spaced apertures corresponding in size and arrangement to the contacts of the

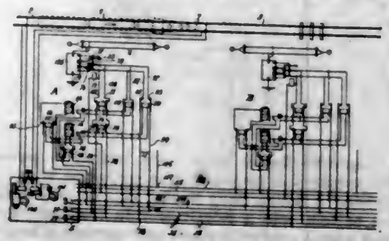
tubes, said body being adapted to receive the tubes in the space between the top thereof and the sub-bottom with the contacts of the tubes projecting through the apertures in said sub-bottom, the bottom of said body having a plurality of spaced apertures corresponding to and alined with the openings in said sub-bottom, and being spaced below the ends of the contacts of the tubes, whereby said contacts are protected against accidental communication with outside electrical means.

1,758,569. COMBINED WATER-CIRCULATING PUMP AND THROTTLE CONTROL. HENRY FOLKERTS and CHARLES L. YOST, Bristow, Iowa. Filed Apr. 14, 1927. Serial No. 183,805. 1 Claim. (Cl. 123—195.)



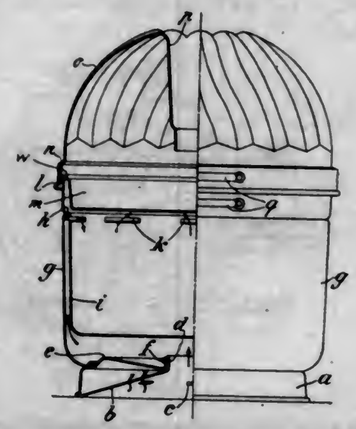
A device of the character described comprising a bracket mountable as an attachment upon an internal combustion engine having a carbureter and a throttle valve to control its output and water jacketing and a fan on a shaft driven from said motor, spaced standards projecting from the bracket and supporting bearings, a pump shaft rotatable in the bearings, a pulley on one end of the pump shaft and adapted to be rotatably associated with the fan shaft of the motor, a pump on the other end of the pump shaft to force water circulation through the jacketing, a governor on said pump shaft between the bearings comprising a fixed block secured on said pump shaft, a slide block on said pump shaft, weighted links connecting the blocks, a spring tending to separate the blocks, a rocker shaft rockably mounted on said bracket, a rocker arm on one end of said rocker shaft and link-connected to the carbureter throttle valve, and a crank on the other end of said rocker shaft and connected to move with the slide block of the governor for the purposes specified.

1,758,570. ELECTRICAL COMMUNICATING SYSTEM. CROSBY R. GAUTHIER, Ridgewood, N. J., assignor, by mesne asignments, to Federal Telegraph Company, a Corporation of California. Original application filed Nov. 22, 1919, Serial No. 340,020, Patent No. 1,552,919, dated Sept. 8, 1925. Divided and this application filed Sept. 5, 1925. Serial No. 54,741. 3 Claims. (Cl. 250—6.)



2. In a signaling system including a plurality of radio stations arranged in multiple along a trunk line, a control station connected with said line, tuning means at each radio station whereby all of said radio stations may operate on the same normal wavelength, and means operable from said control station to change the wavelength at each radio station from the normal wavelength to another wavelength individually different for each radio station.

1,758,571. BAKING AND ROASTING APPARATUS. EUGEN HAUER, Oerlikon, near Zurich, Switzerland. Filed Nov. 15, 1928, Serial No. 319,666, and in Switzerland Nov. 18, 1927. 9 Claims. (Cl. 126—275.)

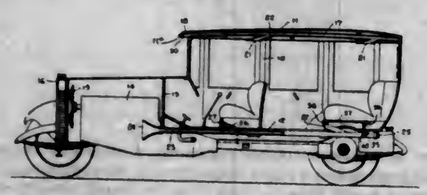


1. A baking and roasting device comprising a casing completely open at the top and bottom, a roasting pan, two outwardly extending shoulders formed on this pan one above another, the lower of these shoulders being adapted to bear upon the top rim of the casing, openings in the wall of the pan immediately below this lower shoulder, a relatively low pan with an edge flange adapted to be supported by the upper shoulder of the roasting pan, the depth of the low pan being less than the distance between the two shoulders of the roasting pan.

1,758,572. PROCESS OF PRODUCING PICTURES CONSISTING OF DYES IN PHOTOGRAPHIC MANNER. FRIEDRICH LIERG, Vienna, Austria. Filed Aug. 15, 1928, Serial No. 299,880, and in Austria Oct. 18, 1927. 14 Claims. (Cl. 95—6.)

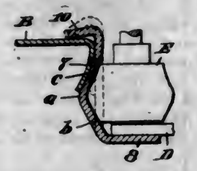
1. Process of producing pictures consisting of dyes in photographic manner, which consists in embodying in the base the dye-components (necessary for forming the colours) in a water-insoluble condition which is indifferent with respect to the silver-emulsion, and after producing the silver-image developing on top of the same the dye-image out of the said components.

1,758,573. VENTILATING DEVICE FOR AUTOMOBILES AND OTHER VEHICLES. HENRY J. LUCKE, East Orange, N. J. Filed Sept. 4, 1926. Serial No. 133,603. 6 Claims. (Cl. 98—2.)



1. A ventilating system for an automobile body and having channel means disposed at the top of the automobile body and having an inlet communicating with the atmosphere at the front side of the body, passage means communicating at its inlet with the interior of the body and at its outlet with said channel means to dispose said passage means at an acute angle to the direction of length of said channel means, channel means disposed at the bottom of the body and having inlet means communicating with the interior of the hood of the automobile and passage means communicating at its inlet with the interior of the body and communicating at its outlet with said second-named channel means to dispose said second-named ventilating passages at an acute angle with the direction of length of said second-named channel means.

1,758,574. CONTAINER CLOSURE. FRANK M. MARSHALL, Los Angeles, Calif., assignor of one-half to Frank S. Livingston, Los Angeles, Calif. Filed Dec. 8, 1927. Serial No. 237,422. 1 Claim. (Cl. 220—24.)



In a container closure, the combination with a container wall formed with an opening having a marginal flange projecting into the container; of a closure cap having a bottom wall, a side wall formed in continuation of the bottom wall, and an outwardly extending lip on the margin of said side wall; said side wall being expanded together with said flange to diverge outwardly from the inner side of the container wall, said lip extending downwardly at an inclination with its outer margin seating on the outer face of the container wall and being placed under tension.

1,758,575. PROCESS OF MAKING PISTON RINGS. LEWIS C. MARSHALL, Walpole, Mass. Original application filed Oct. 16, 1925, Serial No. 62,825. Divided and this application filed Sept. 15, 1927. Serial No. 219,657. 20 Claims. (Cl. 29—156.61.)



1. That process of making strong, tough and durable radially expansible split packing rings capable of sliding in contact with the inner surface of a cylinder wall under normal working conditions without scoring the wall, which comprises as steps bending a length of steel wire or rod of at least 0.5 per cent carbon to form a single annular turn provided with a gap at one point, and severing said turn from the said length of material.

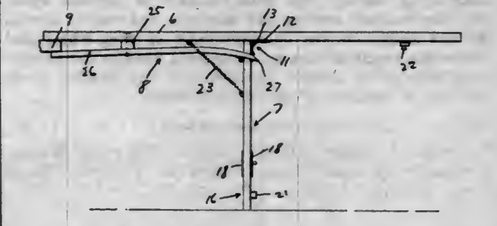
1,758,576. LIGHT-SENSITIVE SILVER-HALIDE EMULSIONS AND PROCESS OF MANUFACTURING THE SAME. OTTO MATTHIES and BRUNO WENDT, Dessau in Anhalt, Germany, assignors to Agfa Ansco Corporation, Binghamton, N. Y., a Corporation of New York. Filed Jan. 28, 1929, Serial No. 335,732, and in Germany Jan. 31, 1928. 7 Claims. (Cl. 95—7.)

1. A process of manufacturing light sensitive silver halide emulsions of increased stability, in which there is added to the emulsion a sulphur compound forming a stable silver salt with the group —SAg and having no higher solubility than silver chloride.

1,758,577. LIGHT-SENSITIVE SILVER HALIDE EMULSIONS AND PROCESS OF MANUFACTURING THE SAME. OTTO MATTHIES and BRUNO WENDT, Dessau in Anhalt, Germany, assignors to Agfa Ansco Corporation, Binghamton, N. Y., a Corporation of New York. Filed Jan. 28, 1929, Serial No. 335,733, and in Germany Jan. 31, 1928. 12 Claims. (Cl. 95—7.)

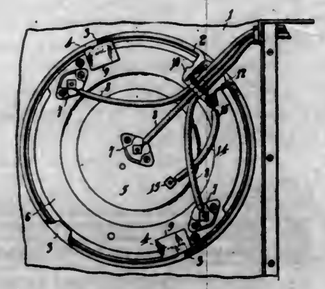
1. A process of manufacturing light sensitive silver halide emulsions of increased stability, in which there is added to the emulsion a compound forming a stable silver salt of no higher solubility than silver chloride and containing at least 3 nitrogen atoms in the molecule at least one of which being linked to a hydrogen atom which is liable to substitution by silver.

1,758,578. COLLAPSIBLE EXTENSION TABLE. GEORGE W. MCTHOMPSON, Haw River, N. C. Filed May 7, 1928. Serial No. 275,673. 1 Claim. (Cl. 45—11.)



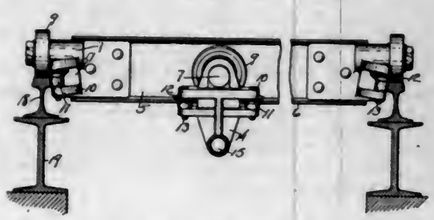
In a structure of the class described, an auxiliary support, a clamping device embodying a member disposed beneath one end portion of the support with its outer end located to engage a main support, and with its inner end located beneath the central portion of the auxiliary support, said inner end being bevelled, means connecting the intermediate portion of said member to the auxiliary support, a hingedly adjustably mounted leg structure connected to the under side of the intermediate portion of the auxiliary support, means associated with the hinge for engaging the bevelled inner end portion of said member, a rigid clip carried by said member adjacent its inner bevelled end, a spring having one end connected with the leg, and disposed in operative relation to said clip.

1,758,579. COOKING TOP OF ELECTRIC RANGES. FREDERICK W. MOFFAT, Weston, Ontario, Canada. Filed Mar. 11, 1929. Serial No. 346,134. 10 Claims. (Cl. 219—37.)



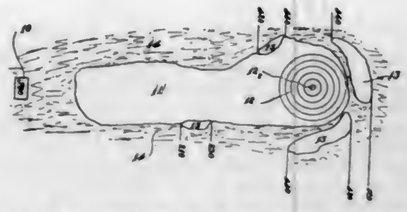
1. An electric range provided with a cooking top having an opening therein, a heating element supported in said opening and flexible lead wires beneath the top leading to said element and crossing the gap between the rim of the heating element and the edge of the opening in the top in which there is provided a drip guard connected to the underside of said top extending across the said gap and over the lead wires.

1,758,580. TRAVELING CRANE. ALFRED E. MOORE, Winsted, Conn. Filed May 29, 1928. Serial No. 281,520. 5 Claims. (Cl. 105—163.)



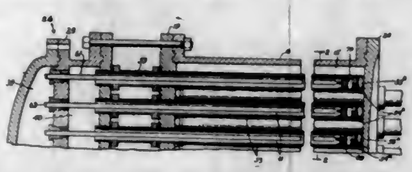
1. A crane structure including a carrier composed of an elongated load supporting member, a right angularly arranged frame connected to an end of the load supporting member to project longitudinally therebeyond, a traction wheel connected to the frame beyond the end of the load supporting member and with its axis of rotation above the longitudinal axis of said member, and means carried by the frame on the opposite sides of said wheel and below the longitudinal axis of the said member for permitting only slight pivotal movement of the member about the axis of rotation of the traction wheel.

1,758,581. GOLF GAME. JACOB JOHANNES MORCH, Toronto, Ontario, Canada. Filed Oct. 13, 1928. Serial No. 312,272. 2 Claims. (Cl. 273—87.)



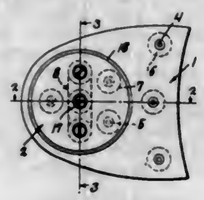
1. A game consisting of a miniature golf course, a marker indicating the position of each player on the course, a distance scale in which are tabulated the possible distances attainable for each club used, a chance scale in which is tabulated the relative chances of success the player has in view of the distances elected to be covered in any one stroke, a compensating scale indicating the manner in which the next stroke may be made in view of the position of the player on the course, a yard counter consisting of a dial, a yard indicating finger and a hole indicating finger centrally pivoted thereon, and a stroke indicating dial adapted to be rotated by the actuation of said yard indicating finger.

1,758,582. APPARATUS FOR HEAT EXCHANGING. GEORGE T. MOTT, Pearl River, N. Y. Filed Feb. 12, 1927. Serial No. 167,684. 14 Claims. (Cl. 257—238.)



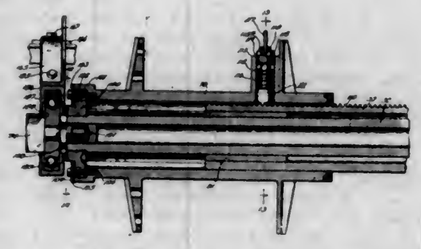
1. A friction-reducing circulating unit for heat exchangers and the like including in combination, a pair of tubes, one projecting into the other, and a deflector in an end of the outer tube and associated with the inner end of the inner tube, said deflector being divided by a central sharp edge and diverging therefrom into curved recesses.

1,758,583. SHOE HEEL. JOHN Q. PARKER, Sandusky, Ohio. Filed Jan. 30, 1928. Serial No. 250,499. 1 Claim. (Cl. 36—39.)



A shoe heel comprising a body having a circular recess in its lower face and an elongated recess in its upper face, an elongated anchor member fitted in said elongated recess having central and side threaded sockets, a circular wear member fitted in the circular recess, a flat reinforcing plate embedded in the wear member and having openings therein corresponding to the sockets in the anchoring member, a central screw extending through the axial center of the wear member, the central opening in the reinforcing member and the central socket and side screws extending through the wear member on each side of the central screw and through the side openings in the wear member and into the side sockets of the anchoring member.

1,758,584. TRACTOR. WELDON C. RARIG, Robstown, Tex. Filed Apr. 15, 1920, Serial No. 374,024. Renewed Feb. 15, 1929. 55 Claims. (Cl. 180—17.)



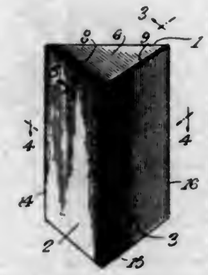
1. In a tractor, a driving axle member, a tractor wheel slidably mounted thereon, and means mounted for relative movement with respect to said driving member for extending the effective driving range thereof longitudinally and for sliding said wheel along said driving member to vary the trend of the tractor.

27. The combination in a tractor of an axle formed in two sections, each section comprising an inner member and an outer member, differential driving mechanism connected to the inner ends of said outer members, wheels connected to the outer ends of said outer members and said inner members, means for adjusting said wheels and said inner members longitudinally of said outer members, and braking means for independently retarding the rotation of either of said outer members.

1,758,585. CARTON FOR DERMATOLOGICAL AND EPIDERMICAL CREAM. GEORGE FREDERIC RIEGEL, New York, N. Y., assignor to Pinaud Incorporated, New York, N. Y., a Corporation of New York. Filed May 8, 1928. Serial No. 275,994. 1 Claim. (Cl. 229—22.)

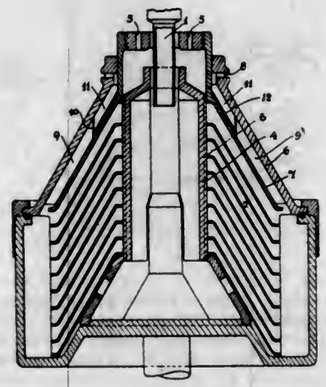
In a carton, a blank formed to provide a triangular shaped carton, said blank having a body portion scored to form the sides of the carton, a flap extending from one side edge thereof, triangular portions extending from the end edges of one side portion of said carton, tabs extending from said triangular portions with the edge furthest from the body portion forming an acute angle

with the edge from which they extend and tabs of substantially trapezoidal shape extending from the end edges of another side portion of said carton, the edges of said latter mentioned tabs forming angles with the end edges of said side portion equal to the angle formed between said side portion and the adjacent side portions when the carton is in folded position and adapted



to hold the first mentioned tabs against the adjacent side portion when the carton is in folded position, all of the tabs being rounded at their free edges whereby the edges of the first mentioned tabs, which edges are adjacent to the body portion, are inserted into the carton, on folding, free from contact with the latter mentioned tabs.

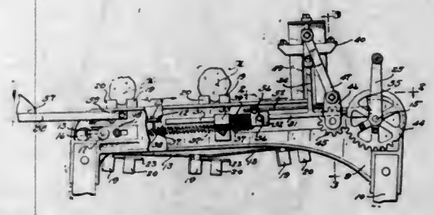
1,758,586. SEPARATOR. CARL SCHMITZ, Oelde, Germany. Filed Oct. 18, 1929, Serial No. 400,482, and in Germany Sept. 26, 1927. 2 Claims. (Cl. 233—1.)



1. In a separator of the class described having a conical drum cover and a conical top disk forming a conical space with said top, a plurality of ribs extending between the two members and ending at a distance from the upper end of the space between the two members and a plurality of additional ribs adapted to be inserted into the space between the two members and to form a continuation of the first mentioned ribs.

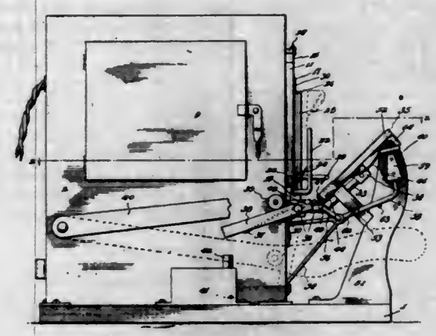
1,758,587. MACHINE FOR CUTTING SEED POTATOES. HENRY J. SMITH, Minneapolis, Minn. Filed Mar. 15, 1928. Serial No. 261,782. 4 Claims. (Cl. 146—100.)

1. In a machine of the class described, the combination with a frame, of a conveyor having a holder, operating means for the conveyor, a carriage, a cutter on the carriage, automatic means for intermittently coupling the carriage to the conveyor and position the cutter in a predetermined relation to the holder and then release



said carriage, automatic means for intermittently operating the cutter in timed relation to the movement of the carriage with the conveyor, and automatic means for returning the released carriage to normal position.

1,758,588. MACHINE FOR PRINTING PHOTOGRAPHS. GUY W. STALEY, Robbinsdale, Minn. Filed Nov. 2, 1926. Serial No. 145,798. 8 Claims. (Cl. 95—73.)

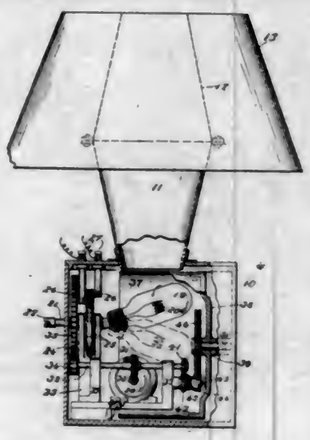


1. In an apparatus for the purpose set forth, a lamp house, means for supporting a negative on the front of the lamp house, a crank shaft mounted on the lamp house below the negative-supporting means and having an arm projecting forwardly and upwardly, a platen pivotally mounted upon the free end of said arm and carried solely by it, means slidable mounted on the platen to support material to be printed, said means being yieldably projected beyond the supporting surface of the platen, and means for rocking the crank shaft whereby to move the platen toward and from the negative on the lamp house, the material-retaining means being engageable with the front of the lamp house whereby to be shifted relative to the platen and release the material to be printed.

1,758,589. LIGHT-PROJECTION DISPLAY. THOMAS WILFRED, Forest Hills, N. Y. Filed Dec. 21, 1927. Serial No. 241,577. 16 Claims. (Cl. 272—10.)

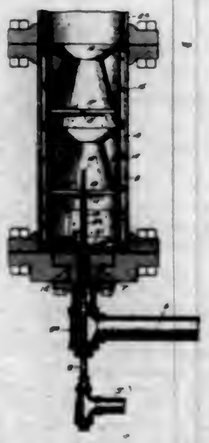
16. Light projection display apparatus comprising a filamentary lamp, a flared internal reflector in front of the lamp, arranged to deliver the beam to the curtain and centrally open to pass the center of the beam to form a projected nucleus on the curtain, and the source

of light being arranged to project light to the interior surface of the reflector, and mechanism for methodically shifting the lamp during projection, relatively to the



axis of the reflector, whereby to cause changing projected effects including progressive displacement of the projected nucleus.

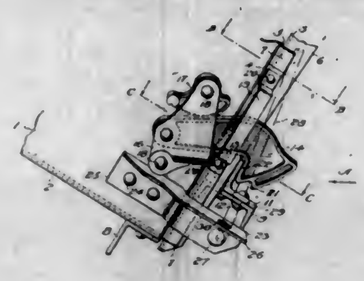
1,758,590. DISTILLATION OF HYDROCARBON OILS. ROBERT E. WILSON, Chicago, Ill., assignor to Standard Oil Company, Chicago, Ill., a Corporation of Indiana. Filed Apr. 4, 1925. Serial No. 20,632. 7 Claims. (Cl. 196—77.)



7. In the vacuum distillation of hydrocarbon oils, expanding superheated steam through an expanding passage into an enlarged conduit at reduced pressure, supplying oil to the at least partially expanded steam before entering said conduit, impinging the mass of vapor and oil particles against a surface within said conduit and subsequently causing the mass of vapor and oil particles to move forwardly through the conduit in steady flow at a rate of at least 300 feet per second.

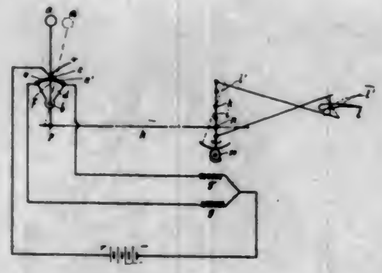
1,758,591. CAR-DOOR MECHANISM. WILLIAM E. WINE, Toledo, Ohio. Filed Oct. 25, 1923. Serial No. 670,720. 13 Claims. (Cl. 105—308.)

1. A door mechanism for railway cars including, in combination with a door hinged to the car body, a stiffening member secured to the outer face of the door, said member extending beyond an edge of the door and embodying a seat for a door supporting member, an aperture in the stiffening member, and a bracket affixed to



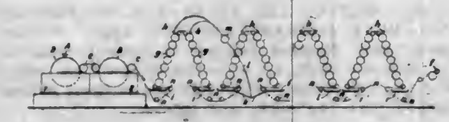
the side of the car and having an aperture substantially in alinement with the aperture in said stiffening member, said apertures being adapted simultaneously to receive a removable door prying lever.

1,758,592. AUXILIARY PILOTING DEVICE CHIEFLY FOR AIRCRAFT. RAOUL BERNADY, Neuilly sur Seine, France, assignor to Société D'Etudes et de Construction D'Appareils de Télémécanique, Seine, France, a body Corporate of France. Filed Dec. 22, 1928, Serial No. 328,001, and in France Dec. 31, 1927. 4 Claims. (Cl. 244—29.)



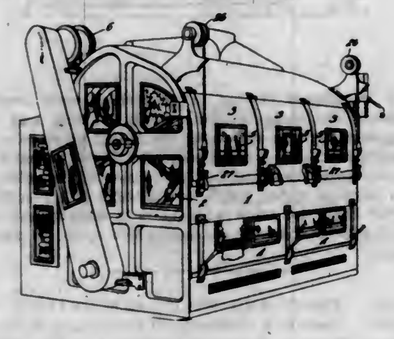
1. A piloting device for aircraft comprising a sliding and rotatable manually operated lever, an auxiliary sliding and rotatable lever, handwheels for controlling said levers, auxiliary motors, circuits controlling said motors, two sets of two contacts borne by first lever and separated respectively by a longitudinal and by a transversal insulation, brushes borne by the second lever and adapted to move respectively over the sets of contacts and to be disposed over the insulation for the longitudinal or angular position of concordance of the levers, means whereby the relative rotary motion of the second handwheel or the relative longitudinal motion of the second lever with reference to the first lever or handwheel causes the corresponding circuit to close and to make the corresponding auxiliary motor start in a given direction, means for throwing the motors in and out of gear, a horizontal and a vertical rudder permanently connected with the first lever and adapted to be actuated by the rotary and longitudinal movements thereof, and means whereby each auxiliary motor when operative controls the corresponding rudder and returns therewith the first lever into concordance with the second.

1,758,593. APPARATUS FOR THE TREATMENT OF A VISCOSE FILM. GUSTAV BETHMANN and OTTO MUTHIG, Jasenitz, near Stettin, Germany, assignors to the Firm Feldmühle, Papier- und Zellstoffwerke Aktiengesellschaft, Scholwin, near Stettin, Germany. Filed June 18, 1928, Serial No. 286,456, and in Germany May 10, 1927. 3 Claims. (Cl. 18—15.)



1. Apparatus for the treatment of a viscose film coming from the precipitation bath, comprising a plurality of obliquely arranged series of rolls adapted to guide a film alternately upward and downward in combination with liquid supply pipes for the irrigation of the film on its passage over the rolls in its downward and upward movement, each series of rolls comprising a plurality of rolls forming a substantially continuous row.

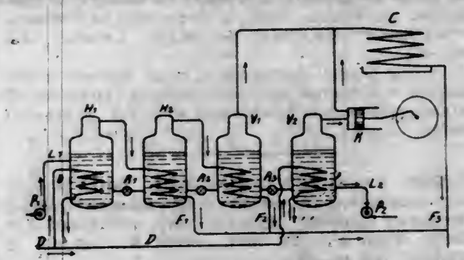
1,758,594. LAUNDRY MACHINERY. EMIL J. CARROLL, Norwood, Ohio, assignor to The American Laundry Machinery Company, Norwood, Ohio, a Corporation of Ohio. Filed Nov. 27, 1925. Serial No. 71,777. 2 Claims. (Cl. 192—135.)



1. In a laundry machine of the class described, a casing having a door, a work-receiving cylinder rotatable in said casing and having a door, an observation transparency in said casing through which said cylinder is visible, and means for effecting inching movement of said cylinder to bring its door into registry with said casing door, said inching means having a control part located outside of said casing adjacent said transparency, so that the operator can observe said cylinder through said transparency while operating said inching means, and may therefore be advised when he has brought the door of said cylinder into registry with the door of said casing.

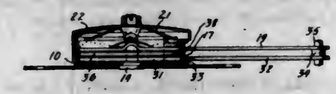
1,758,595. PROCESS FOR RECOVERY OF SULPHUR DIOXIDE FROM OILS CONTAINING SAME. GIUSEPPE CATTANEO, Hilversum, Netherlands, assignor to Allgemeine Gesellschaft fur Chemische Industrie m. b. H., Berlin-Schöneberg, Germany. Filed May 27, 1926, Serial No. 112,136, and in Germany Mar. 5, 1926. 3 Claims. (Cl. 23—178.)

1. A process of recovering liquid sulphur dioxide from oils treated therewith which comprises heating a body of oil containing sulphur dioxide, said heating being under pressure, and condensing the evolved vapors of sulphur



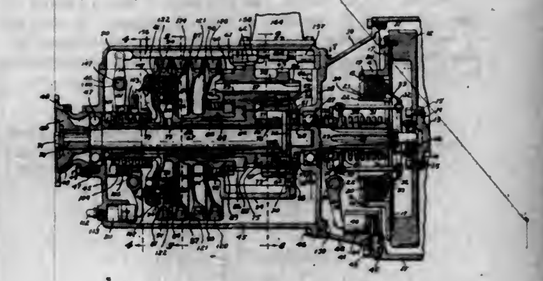
dioxide while in heat exchange relationship with another body of oil whereby the second body of oil is heated and the sulphur dioxide vapors are liquefied.

1,758,596. CAR-SUSPENSION-SPRING DAMPER. FREDERICK WILLIAM CLARK, Vaucluse, near Sydney, New South Wales, Australia. Filed Jan. 11, 1929, Serial No. 331,904, and in Australia Jan. 31, 1928. 2 Claims. (Cl. 267—9.)



1. A suspension spring damper constructed of stamped sheet steel, comprising an open top drum with slip on cover and with means adapted for fixing it to a motor chassis, a slot in the side of said drum and assembled within said drum, a disc of hard friction material, a disc with ramps on one face of it and an arm extended radially from it, and projecting through said slot and adapted to be connected to a suspension spring of a car, a cam face disc checked against rotation in the drum and having the cam depressions matching the before-mentioned disc ramps, and a star-shaped spring, with an axis bolt through the assembly and an adjusting nut on said bolt bearing on the cap above the eye of said star-shaped spring.

1,758,597. TRANSMISSION. HENRY FORD, Dearborn, Mich., assignor to Ford Motor Company, Dearborn, Mich., a Corporation of Delaware. Filed Feb. 18, 1929. Serial No. 340,733. 8 Claims. (Cl. 74—34.)



1. In a planetary transmission, a plurality of brake drums adapted to be held from rotation, a pair of brake shoes for each brake drum having an ear extending from each end of each shoe, a cam disposed between each pair of said ears, a pair of control bars disposed between each pair of said ears, a clutch pedal, and a shift lever, means for operating said cams by said clutch pedal and the means for operating said control bars by the said shift lever.

1,758,598. PRODUCT FOR TREATING DRILL-STEM JOINTS. DE RALPH FRIZELL, Watson, Calif., assignor, by mesne assignments, to Richfield Oil Company of California, Los Angeles, Calif., a Corporation of Delaware. Filed June 7, 1927. Serial No. 197,243. 3 Claims. (Cl. 87—9.)

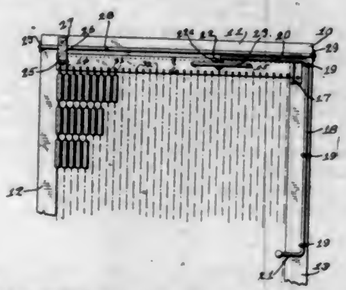
1. A new product comprising a water insoluble grease composed of a calcium soap and a mineral lubricating oil containing suspended comminuted spherical particles of a metal.

1,758,599. LAUNDRY-MARKING TAG. JAMES M. GARVEY, New York, N. Y., assignor to The American Laundry Machinery Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Aug. 24, 1927. Serial No. 215,155. 2 Claims. (Cl. 40—20.)



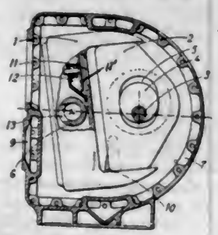
1. An identifier comprising an identifier body portion and a shank provided with spaced staple openings and a recess in the shank between said staple openings adapted to be bridged by the cross member of the staple and to receive an implement for removing the staple.

1,758,600. CHAIN PORTIÈRE. SERAFINO GRASSI, Waterbury, Conn. Filed Apr. 20, 1929. Serial No. 356,811. 5 Claims. (Cl. 156—10.)



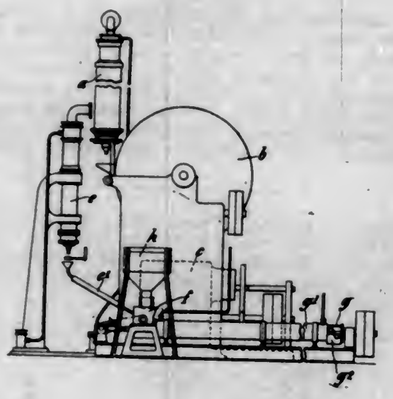
5. In a portière, a pair of inner and outer chain-supporting bars pivoted together, said inner bar adapted to be hinged to said frame, said outer bar being slidably connected to said frame, and a U-shaped frame having its base journaled in the side of said door frame, the top leg of said frame being slidably connected with said inner bar, and the bottom leg of said frame serving as an operating handle.

1,758,601. COMPRESSOR. LUCIEN HAYART, Lyon, France. Filed May 31, 1928, Serial No. 281,832, and in France June 17, 1927. 6 Claims. (Cl. 230—175.)



1. A compressor comprising a casing, a pump body oscillating within the said casing, a piston reciprocating within the said pump body, means for oscillating the said pump body and reciprocating the said piston, means for introducing the operating fluid into the said casing, means whereby the said fluid passes from the casing into the pump body through the suction exerted by the piston, and means whereby the fluid is discharged from the pump body to the outside of the casing.

1,758,602. METHOD AND APPARATUS FOR PREPARING CREAM FONDANT AND THE LIKE. RONALD HEAD, Luton, England, assignor to Baker Perkins Co. Inc., Saginaw, Mich., a Corporation of New York. Filed Mar. 14, 1928, Serial No. 261,683, and in Great Britain Mar. 15, 1927. 6 Claims. (Cl. 107—4.)



1. A continuous method of preparing cream fondant, comprising the steps of continuously cooking and then cooling sugar syrup; subjecting the cooled syrup to a partial beating action; continuously adding to the partially-beaten syrup a predetermined proportion of uncooled, unbeaten diluting syrup which, at the time of its addition, is hotter than the mass whereto it is added; and then subjecting the fondant mass and added syrup to further beating.

1,758,603. FRUIT AND VEGETABLE GRADING MACHINE. GEORGE S. HELENBOLT, Middleport, N. Y., assignor to Niagara Sprayer & Chemical Co., Inc., Middleport, N. Y., a Corporation of New York. Filed Aug. 7, 1925. Serial No. 48,736. 11 Claims. (Cl. 209—125.)



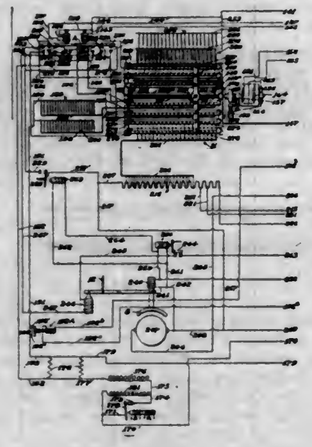
1. In a fruit or vegetable grading or sizing machine, means for delivering fruit or vegetables to the grading mechanism of said machine, comprising frictionally rotatable elements adapted to travel in a straight line and each being of non-cylindrical formation and each having elongated projecting regions, said elements being arranged in close relation to turn over the fruit or vegetables for inspection and to prevent the passage of fruit or vegetables therebetween.

1,758,604. ATTACHMENT FOR SPOOLER GUIDE RODS. LEWIS T. HOUGHTON, Worcester, Mass.; John M. Houghton and Olive M. Lambert, executors of said Lewis T. Houghton, deceased, assignors to John M. Houghton and Olive M. Lambert, Worcester, Mass. Filed Apr. 27, 1928. Serial No. 273,400. 3 Claims. (Cl. 242—157.)



1. As an article of manufacture, a clip for application to a spooler guide rod, consisting of a short length of sheet steel formed in a convex shape on the outside and of the same size as the rod inside, and of a width slightly more than half the circumference of the cylinder and adapted to be clipped on the rod and held thereon by its own resiliency.

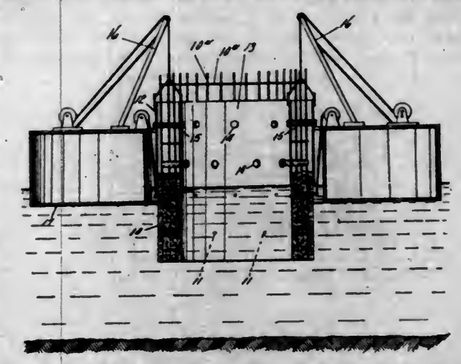
1,758,605. ELEVATOR. JOSEPH R. JACKSON, Jr., Boston, Mass. Filed Nov. 14, 1927. Serial No. 233,119. 85 Claims. (Cl. 187—29.)



16. In an elevator, the combination of a car, a weighing machine on the car for receiving the car load, a drum for the car supporting cables, a brake for the drum, and means for regulating the force of the brake proportionately to the load on the car including an electromagnet, a circuit for the magnet having a series of resistances, and means for rendering effective any one of said resistances including an electric motor, a screw shaft rotated by the motor, a follower threaded on the screw shaft having a contact movable along the resistances, a circuit for the motor including a selector having a series of contacts corresponding to the series of resistances, and a conductor member engaged by said contacts and having an insulation element adapted to engage said contacts, said weighing machine being adapted to set said member with its insulation element in engagement with any one of said contacts.

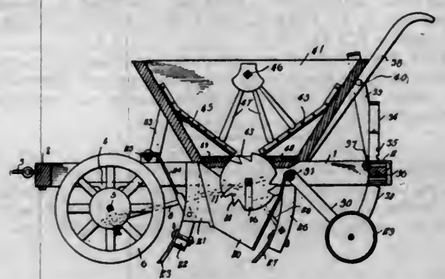
1,758,606. MARINE FOUNDATION AND METHOD FOR MAKING THE SAME. JACOB JACOBS, Copley, Ohio. Filed Dec. 20, 1927. Serial No. 241,829. 1 Claim. (Cl. 61—46.)

That method of making a marine foundation which comprises progressively building a tubular column of concrete with the use of inner and outer form members having tubular spacer therebetween to form perforations in the column, and progressively lowering the column as it is built while supporting the column with connections extending into the perforations thereof adjacent the surface



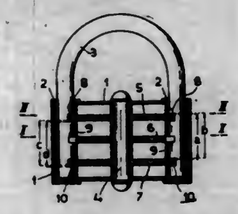
until the column reaches and settles in the bottom, the perforations serving to permit flow of water into the column to the same level as the surface.

1,758,607. PLANTER. DOLPHUS L. JOHNSON, Glendora, Miss. Filed June 5, 1928. Serial No. 283,034. 1 Claim. (Cl. 221—130.)



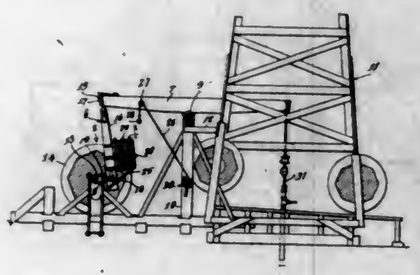
In a planter, the combination of a frame, a dropper shaft mounted in the frame, a dropper disk having a radial slot whereby it may be engaged over the shaft, a key insertible in the slot from the outer end thereof, an attaching plate carried by the key to bear against and be secured to the side of the disk, a hopper over the dropper disk, and means for rotating the dropper shaft.

1,758,608. PERMUTATION LOCK. VICTOR TEODOR JULIN, Djursholm-Danderyd, Sweden. Filed May 3, 1929, Serial No. 360,235, and in Austria Nov. 9, 1927. 3 Claims. (Cl. 70—118.)



1. A permutation lock comprising rotary discs with cuts, and a shackle having recesses in its legs for engaging said discs, of which only one fits exactly into its respective leg recess, whilst the others are movable within their recesses with a clearance, the accurately fitting disc being provided with a cover, which obstructs the access to the discs movable with clearance, when the fitting disc is placed in its open position.

1,758,609. PUMP-OPERATING MECHANISM. GEORGE KAMMERER, Whittier, Calif. Filed May 24, 1927. Serial No. 193,817. 9 Claims. (Cl. 74—71.)

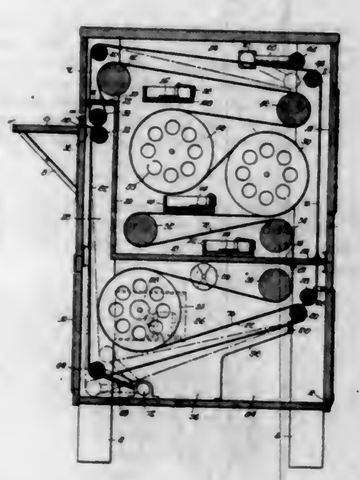


8. In a pitman for connection with a walking beam and band wheel of a pumping rig, a body member having a walking beam stirrup at one end and a band wheel crank journal at the other end, a weight-supporting element attached to the body member, and weights removably attached to said element.

1,758,610. ADHESIVE BACKING. LOUVERN G. LANGE, Passaic, N. J. Filed July 3, 1929. Serial No. 375,883. 1 Claim. (Cl. 91—68.)

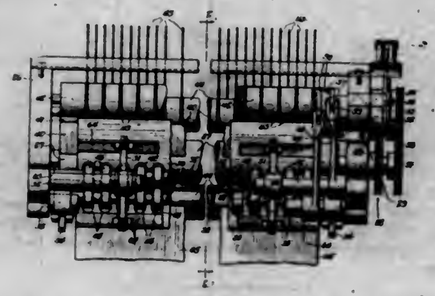
As a new article of manufacture, paper having a high gloss and having a coating of varnish on one surface of the paper and a coating of gutta percha on the other surface thereof.

1,758,611. DEVELOPING APPARATUS. ADOLPH LANGSNER, Chicago, Ill., assignor to Eugene Dietzgen Company, Chicago, Ill., a Corporation of Delaware. Filed June 28, 1928. Serial No. 288,868. 10 Claims. (Cl. 95—94.)



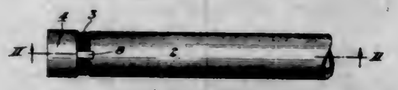
1. In a device of the class described, the combination of means forming an enclosing casing providing a developing chamber, means for feeding light sensitive material therethrough, a container in said casing holding liquid ammonia, a heater for said ammonia, and means for controlling the heating of said ammonia to control the speed of development of said light sensitive material.

1,758,612. ATTACHMENT FOR PRINTING MACHINES. ADOLPH LANGSNER, Chicago, Ill., assignor to Eugene Dietzgen Co., Chicago, Ill., a Corporation of Delaware. Filed Oct. 17, 1928. Serial No. 312,958. 17 Claims. (Cl. 271—64.)



1. In a separator, means for advancing a plurality of stacked sheets and a shiftable member for diverting separate sheets each through a different discharge channel.

1,758,613. THREAD PROTECTOR FOR PIPES. D LAFAL MARKLE, Evanston, Ill., assignor to Clayton Mark & Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 25, 1927. Serial No. 235,520. 7 Claims. (Cl. 137—91.)



1. A thread protector for pipes in combination with a pipe having a tapering thread at its end; a seamless metal sleeve fitting against the threaded portion of the pipe and having an annular flange engaging the end of the pipe; and a shear for the sleeve interposed between the sleeve and the threads, and having an anchorage between the flange and the pipe end, said shear being adapted to tear the wall of the sleeve to permit its ready removal, said protector being adapted to prevent abrasion of the thread during transportation and protect it against corrosion.

1,758,614. AIR SUPPLY FOR CAN BASKETS. JOSEPH A. MARTOCELLO, Philadelphia, Pa. Filed Feb. 15, 1927. Serial No. 168,265. 4 Claims. (Cl. 62—159.)



1. A can basket, cans therein having outside downwardly extending grooves, an outside band around the top of each can, an air lateral permanently fastened inside the basket, tubes, one in each of the grooves having their upper ends inside the can bands, and conduit connections from the upper ends of the tubes to the lateral and from the lower ends of the tubes into the bottoms of the cans.

1,758,615. METAL RECEPTACLE. HERBERT MAYLED, Batavia, N. Y., assignor to The R. E. Chapin M'f'g Works, Batavia, N. Y. Filed Jan. 6, 1928. Serial No. 244,851. 3 Claims. (Cl. 220—67.)

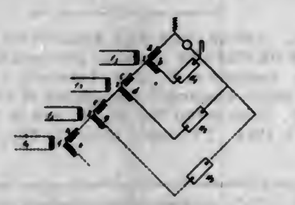


1. A metal can comprising a tubular shell, an upwardly contracting top end wall fitted across and closing the top end of the shell, and an internal reinforcing band fitted peripherally around and against the interior of the shell below and against the bottom face of said top end wall, said band, shell and top end wall being welded together at the junction between the top end wall and said shell.

1,758,616. METHOD FOR RECOVERING QUEBRACHITOL FROM RUBBER LATEX SERUM. JOHN MCGAVACK, Jackson Heights, and GEORGE B. BINMORE, Long Island City, N. Y., assignors to The Naugatuck Chemical Company, Naugatuck, Conn., a Corporation of Connecticut. Filed Dec. 2, 1925. Serial No. 72,809. 13 Claims. (Cl. 260—150.)

1. A method for recovering quebrachitol from waste rubber latex serum which comprises converting the serum into a more readily extractible condition by removal of moisture, treating with a hot alcoholic solvent which is miscible with water in all proportions, and recovering quebrachitol from the solvent by changing the solution ratio of the quebrachitol to the solvent.

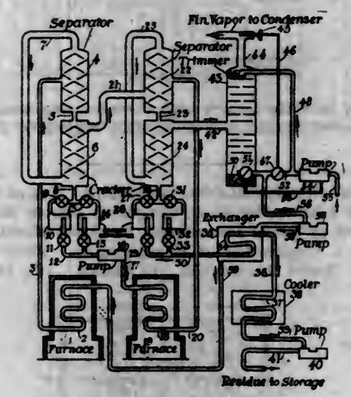
1,758,617. METHOD AND APPARATUS FOR COMBINING A PLURALITY OF SIGNALS. ALBERT B. MOULTON, Riverhead, N. Y., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Dec. 10, 1927. Serial No. 239,097. 9 Claims. (Cl. 179—15.)



1. In radio apparatus means for combining a plurality of signals including a thermionic coupling tube the capacity between the input elements of which is common to one arm of a plurality of balanced bridges, a plurality of tapped windings each of which forms two adjacent arms of one of said balanced bridges, a balancing network in the fourth arm of each balanced bridge and means for impressing a plurality of signals on said input elements comprising an input winding symmetrically coupled to each of said tapped windings.

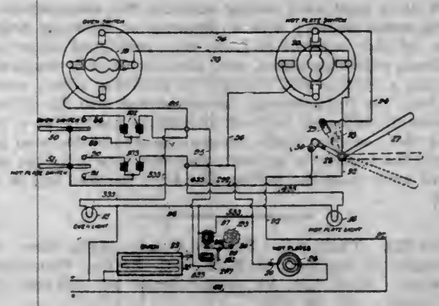
1,758,618. PROCESS OF CRACKING PETROLEUM AND MINERAL OILS AND THEIR DIFFERENT FRACTIONS. PETER NACHTSHEIM, Barnsdall, Okla. Filed May 8, 1926. Serial No. 107,809. 4 Claims. (Cl. 196—49.)

4. The process of cracking oil comprising, heating the oil to a cracking temperature in a primary heating zone, separating the vapor and residual oil in a primary separating zone, discharging the residual oil downwardly through an enlarged passageway, passing the vapor upwardly through the falling residual oil to produce a second vapor and second residual oil, discharging the second residual oil into a settling zone to remove the carbon therefrom, withdrawing and further heating said cleaned second residual oil in a secondary heating zone and there-



after separating the vapors from the residual oil in a secondary separating zone, conducting said second vapor countercurrent to the heated cleaned residual oil in said secondary separating zone thereby separating a third vapor and residual oil, and taking off the vapors of the process.

1,758,619. TIMER FOR AUTOMATICALLY CONTROLLING ELECTRIC STOVES. ROSS M. G. PHILLIPS, New Haven, Conn., assignor, by mesne assignments, to Standard Gas Equipment Corporation, of Maryland. Filed Feb. 5, 1925. Serial No. 7,051. 5 Claims. (Cl. 219—20.)

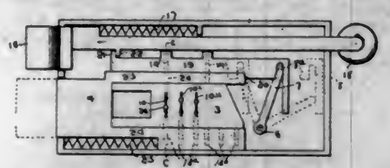


3. In an electric stove, the combination of an electric heating element, a main heating circuit therefor, a resistance circuit branching from said heating circuit and having a controllable resistance, a switch included in said circuits, a timing mechanism operative on the switch to control the supply of electric current to the main heating circuit, and a second timing mechanism operative on said switch to control the supply of current to the resistance circuit, said second timing mechanism being controlled by the heating current.

1,758,620. LOCK. ATILIO REBORI, Buenos Aires, Argentina. Filed June 15, 1925, Serial No. 37,319, and in Argentina, Apr. 30, 1925. 6 Claims. (Cl. 70—93.)

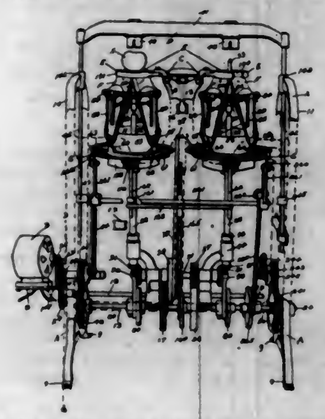
1. In a lock, a casing, a guide member therein, a bolt member engaged with said guide member, a longitudinally

movable bolt actuating member engaged with the bolt member, and sectional pin tumblers, the sections of the tumblers being located in the actuating, bolt and guide mem-



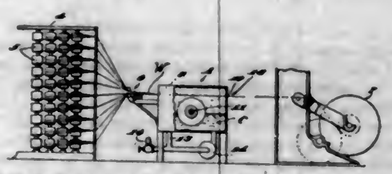
bers and operable to lock both the actuating member and bolt member against movement with respect to the guide member.

1,758,621. SEED-CELLING MACHINE. FRANK A. REYNOLDS and LUCIEN F. L. TURCOTTE, Lowell, Mass., assignors, by mesne assignments, to Lowell Machine Company, a Corporation of Massachusetts. Filed Apr. 7, 1926. Serial No. 100,336. 10 Claims. (Cl. 146—40.)



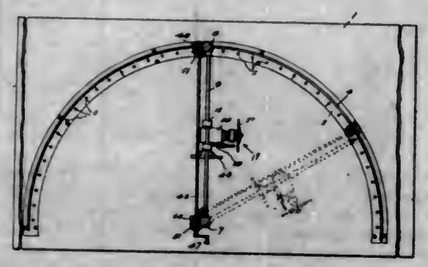
8. In a fruit seed celling machine, the combination of fixed radial blades; with a plurality of receiving chutes one for each segment of fruit, each positioned below and between adjoining blades, each chute being of V shape and having a cutting slot through its adjoining sides; means to force the fruit through the knives and into the chutes; means to hold each segment of fruit in position at a cutting slot; cutting means adapted to cut out the seed cell while the segment is so held; and means to move the segment away from the cutting slot after the seed cell is cut out.

1,758,622. TEXTILE. FULTON RINDGE, Ware, Mass., assignor of one-half to Edward C. Brown, Watertown, Mass. Filed Apr. 10, 1929. Serial No. 354,063. 11 Claims. (Cl. 28—28.)



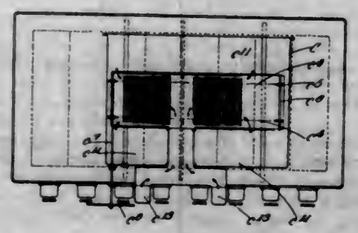
1. That method of treating textile yarn preparatory to its manufacture into cloth which comprises as steps depositing upon the surface of the yarn a thin coating of a fluid adhesive comprising a cellulose ester of nitric acid extended in a highly volatile solvent and substantially free from oily substances, and subsequently exposing the yarn to air at normal temperature to permit the solvent to evaporate whereby to provide the yarn with a temporary mildew resistant binder for its outer fibers.

1,758,623. POWER-OPERATED MITER SAW. STANLEY A. ROTH and GLEN F. TONER, Tallicum, Wash. Filed July 31, 1928. Serial No. 296,573. 3 Claims. (Cl. 143—6.)



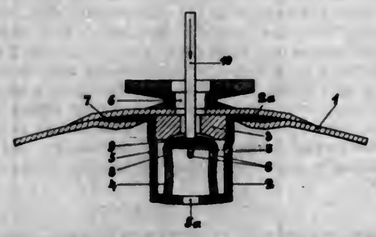
3. In combination, a table formed with an arcuate channel in the upper face thereof, an arcuate strip secured over said channel and formed with a central slot and a series of spaced holes in the edge portion thereof, a standard rotatably mounted at its lower end on the table centrally of the arcuate channel, a second standard having its lower end portion operable through the slot formed in the strip whereby said second standard is capable of swinging movement in an arc with respect to the first mentioned standard, means associated with the second standard for cooperation with the holes in the strip to secure the swingable standard in a predetermined adjusted position, upper and lower horizontal cross bars connecting the standards, vertical cross bars connecting the upper and lower horisontal cross bars, a saw carriage unit mounted between the vertical cross bars, said vertical cross bars being capable of slidable movement along the upper and lower horizontal cross bars, and means for raising and lowering the inner connected upper and lower horizontal cross bars, said saw carriage unit being capable of vertical swinging movement between the vertically disposed cross bars, a segmental rack member extending forwardly from one of the vertical cross members, and a pawl carried by the motor for engagement with the segmental rack to secure the saw carriage unit in any tilted position.

1,758,624. APPARATUS FOR REMOVING DUST FROM GASES OR VAPORS. EDOARDO MICHELE SALERNI, Paris, France, assignor to E. M. S. Industrial Processes Limited, London, England, a Corporation of England. Filed Oct. 31, 1925, Serial No. 66,052, and in Great Britain Nov. 10, 1924. 7 Claims. (Cl. 183—60).



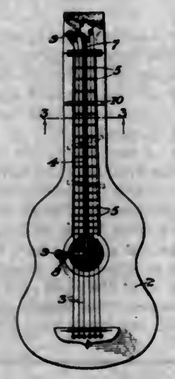
1. Apparatus for removing dust from gases comprising a casing having inlet and outlet openings, a series of pivotally mounted and depending baffle members disposed within the casing, said depending members causing the gases to pursue a sinuous path in passing from the inlet to the outlet of the apparatus, each depending member being made up of a series of horisontally disposed slats arranged in spaced relationship with one another, and in staggered relationship with the slats of contiguous depending members, and a common means for agitating said depending members and removing the deposited dust from said casing.

1,758,625. AIR VALVE FOR INFLATING HOLLOW BODIES. SIEGFRIED SAUL, Aachen, Germany. Filed Dec. 14, 1928, Serial No. 326,087, and in Germany Oct. 20, 1928. 3 Claims. (Cl. 273—65.)



1. An air valve for hollow bodies, specially football bladders, comprising in combination the bladder having a charging hole, a hood-shaped valve case of suitable material having several passages in the envelope and a central passage in the bottom plate inserted through said charging hole of said bladder so that it extends into said bladder, a flange at the upper end of said valve case stuck on said bladder, a ring-shaped valve seat of hard material as hard rubber tightly fitted into the open upper end of said valve case, and a hood-shaped valve body of soft rubber having holes in its wall its outer diameter being smaller than the inner diameter of said valve case and its normal height being somewhat greater than the distance between the lower surface of said valve seat and the upper surface of the bottom of said valve case the rim at the open end of said valve body resting on the bottom of said valve case and its closed top end bearing from below against said valve seat tightly sealing the same.

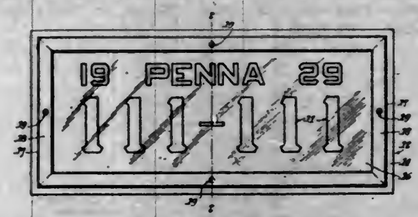
1,758,626. STRINGED MUSICAL INSTRUMENT. WALTER O. SCHMIDT, Hackensack, and CHARLES HABERMAN, North Bergen, N. J., assignors to Oscar Schmidt, Inc., Jersey City, N. J., a Corporation of New Jersey. Filed Feb. 20, 1929. Serial No. 341,362. 14 Claims. (Cl. 84—319.)



1. In combination with a stringed musical instrument, a playing attachment comprising a string engaging member, supporting means mounted on the instrument, and means connecting said member with the supporting means whereby it is capable of longitudinal, transverse and tilting movements relatively to the strings.

1,758,627. AUTOMOBILE LICENSE PLATE. WILLIAM S. SWEITZER, Commodore, Pa. Filed Sept. 6, 1929. Serial No. 390,725. 1 Claim. (Cl. 40—152.)

A license plate comprising a license tag, a transparent window overlying the tag, a support plate having a depression to receive the tag and window plate and having a surrounding flange, a gasket ring on the flange and overlying the outer edges of the window plate, a clamp ring, and means to secure the clamp ring to the flange with



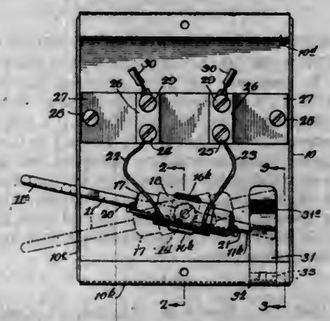
the gasket ring between, said clamp ring being semi-circular in cross section whereby to provide inner and outer clamping edges one of which overlies the flange, and the other of which overlies the outer edges of the window plate.

1,758,628. TUBULAR BURNER. RICHARD THURM and EUGENE OSCAR ENGELS, Saginaw, Mich., assignors to Baker-Perkins Company, Inc., New York, N. Y., a Corporation of New York. Filed Oct. 15, 1925. Serial No. 62,511. 4 Claims. (Cl. 158—99.)



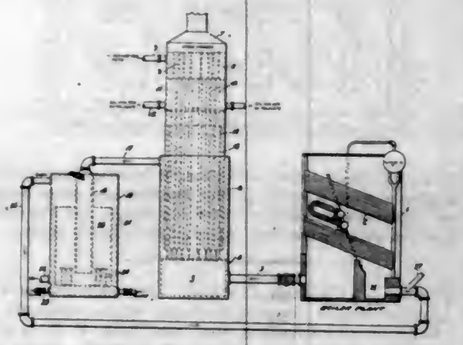
1. A gas burner comprising a conduit having an elongated opening therein, an elongated bar mounted in said opening, a spacing strip wound about said bar, and surfaces engaging the strip on each side of the bar to form a series of gas passages on each side of said bar.

1,758,629. ELECTRIC SWITCH. WILLIAM JAMES TRAXEL, Chicago, Ill., assignor, by mesne assignments, to The Liquid Carbonic Corporation, Chicago, Ill., a Corporation of Delaware. Filed Oct. 5, 1923. Serial No. 666,661. 2 Claims. (Cl. 200—152.)



1. An electric switch comprising a casing, a lever pivotally mounted in said casing and having a handle extending from said casing and a projecting extremity on the opposite side of its pivotal point from said handle, a mercury tube switch mounted on said lever to tilt therewith, flexible conductors connected to the contacts of said mercury tube switch, and a pair of spring clips secured to said casing and having parts directed inwardly toward each other for engagement with said projecting extremity of said lever, said extremity being adapted to be moved between the inwardly projecting portions of said spring clips when pressure is exerted on said handle and be retained by said spring clips on either side of said inwardly projecting parts.

1,758,630. PROCESS AND APPARATUS FOR GENERATING GASES FOR POWER DEVELOPMENT. WALTER EDWIN TRENT, New York, N. Y., assignor to Trent Process Corporation, New York, N. Y., a Corporation of Delaware. Filed Oct. 25, 1926. Serial No. 144,162. 8 Claims. (Cl. 122—5.)



1. The herein described process consisting in passing waste gases from a zone of combustion in heat transferring relation with finely pulverized coal to remove the volatiles therefrom and form a carbonized residue, in introducing such residue with its contained heat to a gas generator, in producing from the carbonaceous content of the residue gas in said generator, in conveying said gas to the zone of combustion, and in removing foreign substances from the generator.

4. The combination with a steam boiler plant, of a coal distilling apparatus, means for feeding pulverized coal continuously to said apparatus, means for continuously passing waste gases from said boiler plant to the coal distilling apparatus to remove volatiles from said pulverized coal and to form a carbonized residue, a gas generator, means for discharging such residue to said gas generator, an air inlet to said generator, whereby air is admitted to effect partial combustion of carbonized particles therein, means for withdrawing ash forming substances from the generator, and means for continuously returning gases to the steam boiler plant to be consumed therein.

1,758,631. METHOD OF IMPROVING FLOWING CHARACTERISTICS OF COAL. WALTER EDWIN TRENT, New York, N. Y., assignor to Trent Process Corporation, New York, N. Y., a Corporation of Delaware. Filed Oct. 25, 1926. Serial No. 144,163. 4 Claims. (Cl. 110—104.)

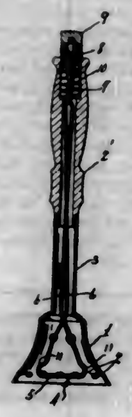
2. An improved process for supplying coal to a zone of combustion comprising raising the powdered coal to that temperature at which gases begin to be evolved from the coal without raising the coal to such temperature as will effect coking thereof, advancing the heated coal through a conduit while maintained at substantially such temperature to the combustion zone.

1,758,632. BRUSH. EDWIN R. WAGNER, St. Louis, Mo. Filed Aug. 26, 1929. Serial No. 388,475. 1 Claim. (Cl. 15—167.)



A tooth brush of the class described, combining a plurality of parts detachably joined together, said parts consisting of a handle having a screw-threaded longitudinal bore in one end, a second part having a screw-threaded longitudinal pintle rigidly affixed in one end adapted to engage the screw-threaded bore in said handle, a cylindrical brush composed of a plurality of rows of bristles, in which the length of the bristles in the end rows are longer than the bristles in the intermediate rows, said cylindrical brush being rotatably mounted in ears depending from said second part intermediate of its ends, said second part having a longitudinal screw-threaded bore in the end opposite said pintle, a third part consisting of a body portion having a screw-threaded pintle rigidly affixed in one end and adapted to engage the screw-threaded bores in said first and second parts, said body portion of said third part having a plurality of rows of bristles rigidly affixed thereto.

1,758,633. GRIPPING CLOTHES WASHER. HARRY L. WARD, Long Beach, Calif. Filed Aug. 6, 1928. Serial No. 297,836. 2 Claims. (Cl. 68—5.)

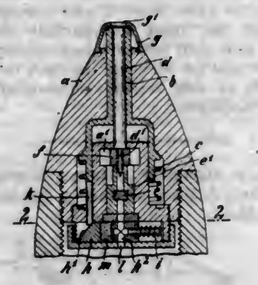


1. A gripping clothes washer comprising a bell, a hollow handle secured to the bell and rising therefrom, a pair of fingers each positioned in the bell, said fingers consisting of a loop of spring wire, one end of the wire of said loop extending into the hollow handle and forming an arm, said loop including a horizontal section at the bottom of the loop, the other end of the wire of the loop being returned and bent around the arm, a finger button secured to the upper ends of the arms, a coil spring bearing against said button and handle whereby the arms are urged upwardly, the sides of said fingers being arranged to engage the inner surface of the bell whereby said fingers are cammed inwardly toward each other into engaging position when the arms are moved upwardly, and said arms being crossed in the handle whereby said fingers are urged into extended position when the finger button is depressed.

1,758,634. MANUFACTURE OF ESTERS OF FATTY ACIDS AND OF MIXTURES CONTAINING FATTY ACIDS. ERNST WECKER, Heilbronn-on-the-Neckar, Germany. Filed June 20, 1927, Serial No. 200,285, and in Germany June 23, 1926. 8 Claims. (Cl. 260—106.)

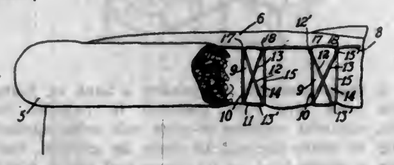
1. A process for the esterification of higher fatty acids containing at least four atoms of carbon in the molecule which consists in treating the said fatty acids with less than the corresponding stoichiometric quantity of alcohols, whereupon the excess of fatty acids is removed by introducing a suddenly expanding liquid mist which is not injurious to any of the components of the reaction into the heated reaction mixture.

1,758,635. HIGHLY-SENSITIVE HEAD-IMPACT FUSE. HANS WIESER, Werden, Germany. Filed Dec. 31, 1928, Serial No. 329,408, and in Germany Jan. 2, 1928. 5 Claims. (Cl. 102—39.)



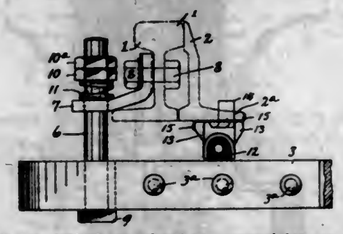
1. In a highly sensitive head impact fuse with striker pin lying freely at the percussion point, in combination, a sleeve surrounding the striking pin, automatic means for inserting a retardation compound in the fuse bore on sliding of the sleeve and means for holding the sleeve in a position of rest on impinging on other than resistent targets.

1,758,636. MATTRESS. HARRY E. WOLF, Pittsburgh, Pa., assignor to Fort Pitt Bedding Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Jan. 13, 1928. Serial No. 246,437. 5 Claims. (Cl. 5—360.)



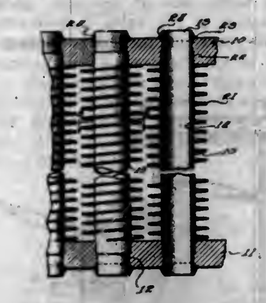
1. The method of stitching the roll edge of a mattress, which consists in threading a cord vertically through said edge, then horizontally along one side of said edge, then diagonally back through said edge to the point of first entry, then horizontally along the opposite side of said edge, then diagonally through said edge to the point of first exit at the opposite side of said edge, then horizontally with said first horizontal portion, then vertically through said edge to the point of entry of said second horizontal portion.

1,758,637. RAILWAY-SWITCH MECHANISM. LLEWELYN WYNN-WILLIAMS, Darlington, England. Filed Mar. 14, 1929, Serial No. 347,086, and in Great Britain Feb. 14, 1929. 8 Claims. (Cl. 246—453.)



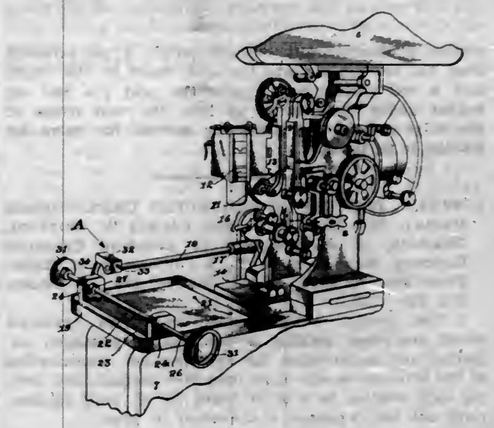
1. Railway switch mechanism comprising a pair of running rails, a beam extending transversely beneath said running rails, means for suspending said beam from said running rails, movable switch rails, rollers carried by said movable switch rails, means for carrying said rollers, and races on the beam over which said rollers traverse when the switch rails are moved, and means carried by the beam adapted for compensating for the spreading of said running rails.

1,758,638. RADIATOR. FRED M. YOUNG, Racine, Wis. Filed Mar. 6, 1929. Serial No. 344,755. 2 Claims. (Cl. 257—154.)



1. In radiator construction, a water conduit comprising an inner copper tube for resisting reducing solutions, and an outer aluminum sleeve for resisting oxidizing agents.

1,758,639. ADJUSTING MECHANISM FOR MOTION-PICTURE-FILM FRAMING MEANS. JOHN FRANCIS ADAMS, Philadelphia, Pa. Filed May 22, 1928. Serial No. 279,638. 1 Claim. (Cl. 88—17.)

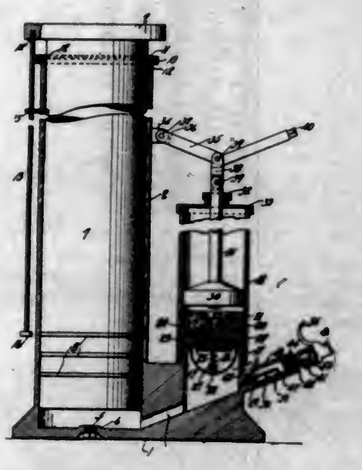


Adjusting mechanism for motion picture film framing means comprising a rearwardly extending lever for raising and lowering the framing means to adjust the film with resect to the aperture, a block secured to the outer end of said lever, an arcuate rack pivotally connected by its upper end to the said block, a shaft having a pinion fixed thereon and meshing with said rack, a bracket having a pair of bearings for said shaft, screw means to said bracket for holding the rack and pinion in engagement, and means on said shaft for manually turning the same.

1,758,640. HYDRAULIC JACK. CHARLES M. BANKS, Philadelphia, Pa. Filed Nov. 8, 1928. Serial No. 317,050. 1 Claim. (Cl. 138—9.)

In a hydraulic jack embodying a jack cylinder and plunger and an operatively connected pump cylinder and compression piston, the assembly being vertically arranged and having a relief valve for the escape of air, a compression valve in the pump cylinder below the compression piston, the same comprising an outer body portion having a central aperture and seat, the upper portion of the seat being flared upwardly and the lower portion being flared downwardly, a frusto-conical valve

for complementarily seating upwardly in the lower flared portion of the valve seat, the same being centrally recessed in its lower face, and having a flange for engaging the under side of the body portion to limit the seating action of the valve, a semi-circular bracket secured by its ends to the lower surface of the body

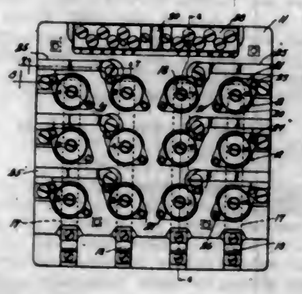


portion at diametrically opposite points, a pin extended from the bracket up into the said recess of the valve, and a coil spring seated over the said pin and extended under compression up into the said recess of the valve and having a bearing against the valve for holding it to its seat.

1,758,641. PROCESS OF PRODUCING UREA. GEORGE BARSKY, New York, N. Y., and PALMER W. GRIFFITH, Elizabeth, N. J., assignors to American Cyanamid Company, New York, N. Y., a Corporation of Maine. Filed Feb. 8, 1924. Serial No. 691,479. 6 Claims. (Cl. 260—125.)

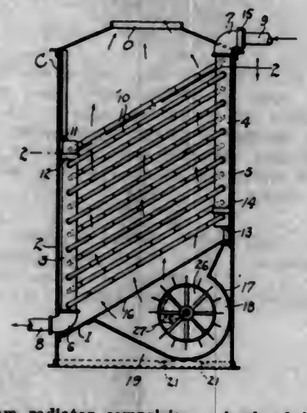
1. The process of producing urea from cyanamid which comprises making a solution of cyanamid; adjusting and maintaining the hydrogen ion concentration of the solution to not more than 10^{-1} normal; and heating said solution to a point below 80° C. until substantially all the cyanamid is converted to urea.

1,758,642. PANEL-BOARD CONSTRUCTION. REUBEN B. BENJAMIN, Chicago, Ill., assignor to Benjamin Electric Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 7, 1925. Serial No. 7,462. 4 Claims. (Cl. 200—133.)



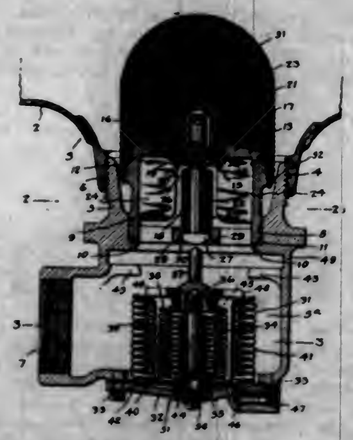
1. A panel board construction comprising an integral insulating base having plug receiving recesses therein, each recess having shoulders intermediate the top and bottom thereof, a short threaded shell contact in the outer part of each recess having flange portions seated on said shoulders and extending outwardly from the shell portion, the outer face of said insulating base extending toward the front substantially as far as the outer edge of said shell contacts, means cooperating with said flange portions for securing the shell to the base and center contacts in said recesses substantially below the level of said shoulders.

1,758,643. AIR HEATER. HENRY BAETZ, St. Louis, Mo. Filed July 5, 1927. Serial No. 203,454. 4 Claims. (Cl. 257—139.)



2. A steam radiator comprising a bank of juxtaposed return bend pipe coils disposed in parallel inclined planes, adjacent sections of each coil being spread sufficiently to cause the coil to drain by gravity, each coil having a steam inlet at its upper end and a steam and water outlet at its lower end, the inlets and outlets of the coils lying in a common vertical plane, and the inclination of the coils being with respect to a line lying in this plane and at right angles thereto.

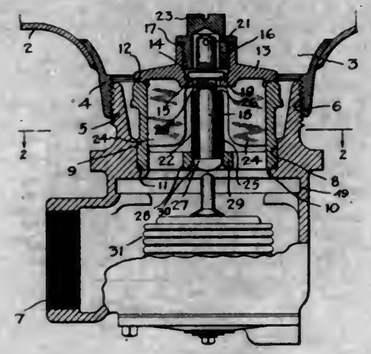
1,758,644. TANK VALVE. ARTHUR L. BETTS and PAUL S. SHIELD, Cincinnati, Ohio, assignors to Augustine Davis, jr., Cincinnati, Ohio. Filed Sept. 3, 1926. Serial No. 133,324. 19 Claims. (Cl. 137—21.)



1. In a tank having a bottom outlet, a valve for closing said outlet comprising a body applied thereto and com-

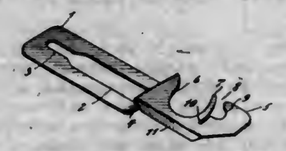
prising a portion which is secured to said outlet and a lower portion which affords an external pipe connection, the body being formed intermediate said portions with a relatively weak section adapted to break in case of an accident likely to tear away the piping, a downwardly seating valve member, an internal annulus which is carried by the valve body at a region which is offset from the zone of possible distortion resulting from the securement of the valve body to the tank outlet and which is above said relatively weak section, the annulus rising from said region free from the wall of the body and carrying the seat for said valve member on its free portion, spring means for closing the valve upon the seat likewise carried by the portion of the valve body which is above said weak section, and means in the lower portion of the body for raising the valve member to open the outlet, said means being unconnected with the valve member.

1,758,645. TANK VALVE. ARTHUR L. BETTS and PAUL S. SHIELD, Cincinnati, Ohio; Mary T. Betts administratrix of said Arthur L. Betts, deceased; said Mary T. Betts assignor, by direct and mesne assignments, to Augustine Davis, Jr., Cincinnati, Ohio. Original application filed Sept. 3, 1926, Serial No. 133,324. Divided and this application filed June 16, 1928. Serial No. 285,816. 10 Claims. (Cl. 137—21.)



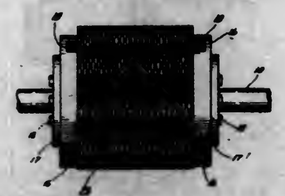
1. In a tank having a bottom outlet, a valve for closing said outlet comprising a body applied thereto and comprising a portion which is secured to said outlet and a lower portion which affords an external pipe connection, the body being formed intermediate said portions with a relatively weak section adapted to break in case of an accident likely to tear away the piping, a downwardly seating, automatically closing valve member, and an internal annulus which is centered by a tight peripheral fit in the wall of the valve body at a region which is offset from the zone of possible distortion resulting from the securement of the valve body to the tank outlet and which is above said relatively weak section, the annulus rising from said region free from the wall of the body and carrying the seat for said valve member on its free portion.

1,758,646. FASTENER FOR TYPEWRITERS. ALEXANDER P. BROWN, Long Island City, N. Y., assignor to Queens Typewriter & Stationery Corp., a Corporation of New York. Filed Nov. 20, 1928. Serial No. 320,605. 1 Claim. (Cl. 248—16.5.)



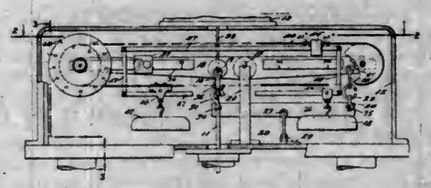
A typewriter fastener comprising a base plate, a fastening plate having a transverse slot provided with a resilient side portion adapted to firmly clasp a screw therebetween, and a depending side portion to limit the transverse movement of said fastening plate.

1,758,647. SURFACING UNIT. EDWARD P. BURRELL, Shaker Heights, and NATHAN C. HUNT, Salem, Ohio, assignors to The Rotor Air Tool Company, Cleveland, Ohio, a Corporation of Ohio. Original application filed Oct. 21, 1927, Serial No. 227,768. Divided and this application filed June 29, 1928. Serial No. 289,294. 12 Claims. (Cl. 125—5.)



12. A unit in the form of a drum having a pair of end flanges, rods extending between and at their ends supported by the flanges, at least one of the flanges having peripheral notches in which the corresponding ends of the rods are seated, said flange having a retaining ring with a portion overlying the ends of the rods and the notches and provided with a notch or opening adapted to be moved by adjustment of the ring into and out of registration with the notches of the flange.

1,758,648. COUNTING DEVICE FOR SCALES. HUGH M. CAMERON, Woodhaven, N. Y., assignor to John Chatillon & Sons, New York, N. Y., a Corporation of New York. Filed Aug. 20, 1927. Serial No. 214,305. 7 Claims. (Cl. 265—30.)

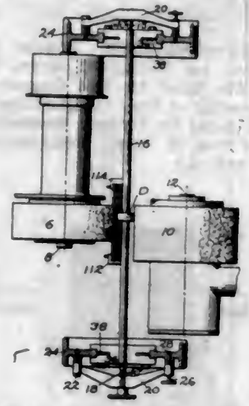


1. In combination with a weighing beam, a counting mechanism supported entirely therefrom, comprising rotatable members disposed on the beam, an element movable relative to the fulcrum of the beam connecting said members, an article receptacle connected to said element, means for automatically counteracting the effect of the weight of the receptacle when the latter is moved relative to the fulcrum, a pointer moved by one of said members and a stationary counting disc over which said pointer moves.

1,758,649. GRINDING MACHINE. WILLIAM H. CHAPMAN, Montclair, N. J., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware, Filed Jan. 10, 1927. Serial No. 160,068. 6 Claims. (Cl. 51—103.)

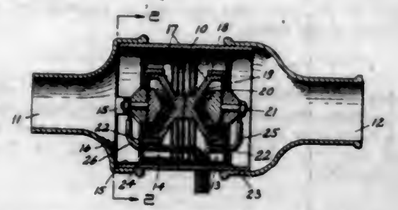
1. In a centerless grinding machine, in combination, a grinding wheel rotatable at relatively high speed, a regulating wheel rotatable at relatively low speed, the grinding wheel moving downwardly and the regulating wheel moving upwardly with respect to an interposed work-piece, and a work guide having work engaging portions located in an arc of a radius equal to that of a finished and accu-

rately sized work-piece, said work guide being located wholly at the side of the axis of the work-piece opposite the regulating wheel whereby the work is held from lateral



displacement by a plurality of contacts with the guide without loss of rolling contact with the regulating wheel; substantially as described.

1,758,650. TRANSMITTER. FRANCESCO CIRELLI, Philadelphia, Pa. Filed Aug. 4, 1928. Serial No. 297,589. 4 Claims. (Cl. 179—100.41.)



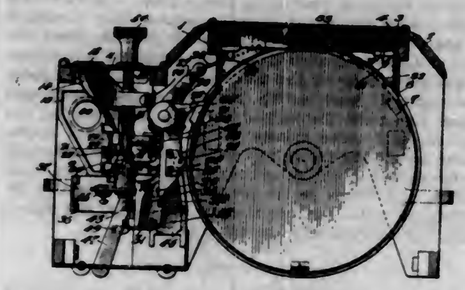
1. A transmitter including a microphone having a shell and an electrode, a casing surrounding the microphone and adapted to be inserted between the sound box and the tone arm of a phonograph, a flange in the casing, resilient fingers secured to the shell and engaging the flange, and electrical conductors electrically connected to the shell and the electrode.

1,758,651. CHEMICAL EMULSION. JOHN R. CONOVER, Upper Darby, Pa., assignor to The Laboratory of Research Chemotherapy, Philadelphia, Pa. Filed May 29, 1924. Serial No. 716,569. 10 Claims. (Cl. 167—63.)

1. The process of producing an unguent-silver-caseinate emulsion which consists in producing an alkali-caseinate emulsion by dissolving casein in an alkaline solution, adding an unguentous substance thereto and stirring the mass to complete emulsification; in producing a colloidal potassium silver salt of the alkali degradation products of casein which consists in breaking down casein in a potassium solution and mixing the resulting solution with silver nitrate dissolved in water and then heating the alkali-caseinate solution and adding the colloidal potassium silver salt solution to the heated alkali-caseinate and stirring the entire mass until homogeneous.

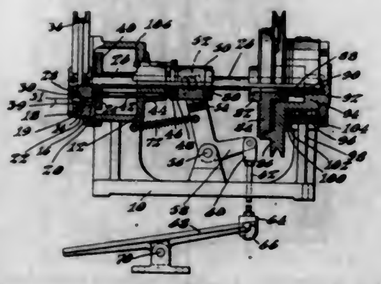
1,758,652. COIN MECHANISM FOR COIN-CONTROLLING VENDING MACHINES. ALBERT M. CRAMER, Philadelphia, Pa., assignor to Horn and Hardart Baking Company, Philadelphia, Pa., a Corporation of New Jersey. Filed Oct. 17, 1927. Serial No. 226,674. 11 Claims. (Cl. 194—1.)

2. In a coin mechanism for coin controlled vending machines, a coin chute having a movable section, a stop pin adapted to extend into said chute to prevent coins passing therethrough, a spring to move said stop pin out of said chute, a cam to move said stop pin into said coin



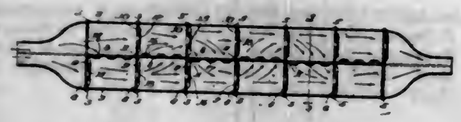
chute, means to effect the opening movement of said movable section, and an article container operative to actuate said cam.

1,758,653. MACHINE FOR ASSEMBLING BEARINGS. RAYMOND H. CRAMER, Newark, N. J., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Oct. 11, 1928. Serial No. 311,823. 20 Claims. (Cl. 29—84.)



1. In a machine for assembling rolling elements in openings of a separator, means for guiding rolling elements radially of the separator, means for supporting the rolling elements and rotating the separator to allow the rolling elements to enter the openings, and a casing having a wall concentric with and surrounding the separator to retain the rolling elements in the openings of the separator; substantially as described.

1,758,654. MUFFLER. ALBERT F. DORMEYER, Chicago, Ill. Filed Mar. 19, 1928. Serial No. 262,918. 12 Claims. (Cl. 137—160.)

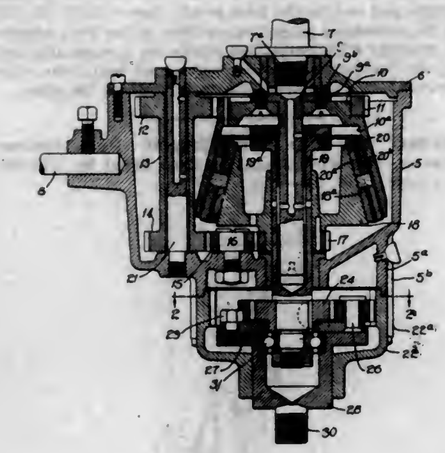


1. A muffler comprising a longitudinal casing, a plurality of structurally independent baffle elements, each substantially of Z-shape in side elevation, so disposed in said casing as to provide a substantially continuous longitudinal web portion and transverse baffle portions extending from each side of the web portion to the casing, and means securing said elements in their relative positions in said casing.

1,758,655. METHOD OF PRODUCING CELLULOSIC MATERIAL. BÉLA DORNER, Budapest, Hungary, assignor, by mesne assignments, to Cornstalk Products Company. Filed Jan. 17, 1927. Serial No. 161,713. 11 Claims. (Cl. 92—13.)

1. A method of producing cellulosic material from straw-like bodies which comprises leaching out the water soluble constituents by conveying the straw-like material slowly counter to a slowly moving stream of water, and subjecting the leached material to cooking with a suitable chemical solution.

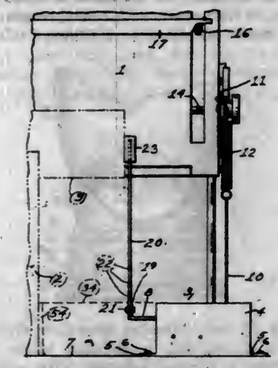
1,758,656. TAPPING ATTACHMENT. GEORGE W. EMRICK, Brooklyn, N. Y., assignor, by mesne assignments, to Ettco Tool Co. Inc., Brooklyn, N. Y., a Corporation of New York. Filed July 12, 1928. Serial No. 292,242. 3 Claims. (Cl. 74—59.)



1. In a tapping attachment involving a casing, a driven shaft in said casing, a supplemental shaft slidably mounted on the first named shaft and projecting through one end of the casing, means involving a gear chain within said casing for rotating said supplemental shaft in two directions and a clutch controlling the directional drive of said supplemental shaft by longitudinal movement of said supplemental shaft, a reduction gear unit comprising a supplemental casing, coupled with the first named casing, a tool actuating member slidable with said supplemental shaft rotatably mounted in the supplemental casing and gears within said supplemental casing and cooperating with said member and supplemental shaft for placing them in operative engagement.

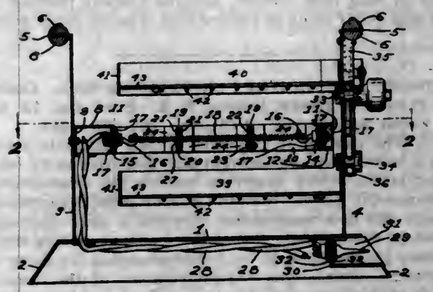
1,758,657. AUTOMATIC SPACER. CHARLES FENSKY and HARVEY J. READEY, St. Louis, Mo.; Anna K. Readey administratrix of said Harvey J. Readey, deceased. Filed Dec. 28, 1928. Serial No. 328,956. 8 Claims. (Cl. 120—34.)

1. The combination, with a copy-holder having relatively shiftable line-indicating means and a lever for shifting said means, of a device adapted to be secured in juxtaposition to a typewriter and embodying a member arranged in the path of the typewriter carriage so as to be shifted as said carriage nears the ends of its movement to the right,



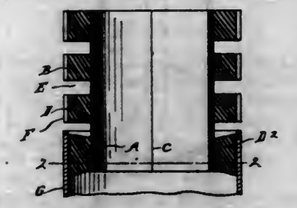
and a connection between said device and said lever, whereby said member actuates said lever through the intermediation of said device.

1,758,658. HEATER. LEE FORREST FISHER, St. Louis, Mo. Filed June 15, 1928. Serial No. 285,689. 2 Claims. (Cl. 53—5.)



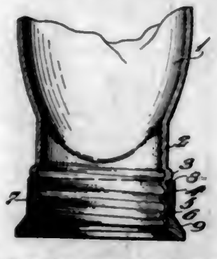
1. In a heater, a source of heat, a pair of article-holding devices interchangeably disposed on opposite sides of said source and in spaced relation thereto, and a pair of perforated plates, each being supported by said article-holding devices, the plate in the upper holding device being adapted to reflect to the article in the lower holding device the heat otherwise normally transmitted to the article in the upper holding device.

1,758,659. BUSHING. RICHARD FLURY, Detroit, Mich., assignor to Gemmer Manufacturing Company, Detroit, Mich., a Corporation of Michigan. Filed July 12, 1926. Serial No. 121,971. 4 Claims. (Cl. 308—238.)



1. An adjustable bushing comprising a body provided with a series of circumferentially extending resilient ribs and intermediate slots providing clearance for expansion in width of said ribs under radial compression.

1,758,660. GASOLINE-SERVICE-STATION GLOBE AND SUPPORT THEREFOR. EDGAR A. GILLINDER, Philadelphia, Pa., assignor to Gillinder & Sons, Inc., Philadelphia, Pa., a Corporation of Pennsylvania. Filed Jan. 30, 1926. Serial No. 85,068. 1 Claim. (Cl. 240—128.)

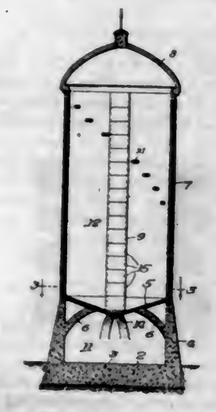


In a device of the character stated, a gasoline service station device comprising a globular glass member, an annular portion 2 formed integral with and depending from said globular member, an annular bead at the bottom of said portion 2, a pendant externally threaded neck formed integral with said member 2, and an internally threaded metallic collar adapted to engage said neck, said collar having an internal, bottom portion abutting against the lower edge of said neck portion to support the latter, and having an oppositely disposed outer, annular inclined terminal flange whose wall converges upwardly, the upper edge of said collar abutting against said bead at the upper end of said neck portion, and the annular inclined base of said collar being of greater area than its upper portion.

1,758,661. METHOD OF PURIFYING BENZOL. CHARLES FREDERICK HAGEN, Geneva, N. Y. Filed Aug. 13, 1928. Serial No. 299,449. 3 Claims. (Cl. 202—39.)

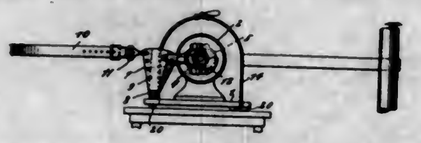
2. The method of producing a clear distillate suitable as a motor fuel and substantially free from tarry oils by distillation, which comprises raising the temperature of commercial benzol containing substantial quantities of tarry oils to a temperature at which a clear distillate is evolved substantially free of tarry oils, discarding the distillate evolved prior to the benzol attaining the above temperature, maintaining the temperature of the benzol as high as this temperature and below that at which said tarry oils distil over, discarding the residue, and collecting the evolved distillate.

1,758,662. SILO. CHAD N. HEATH, Tacoma, Wash. Filed June 17, 1927. Serial No. 199,435. 8 Claims. (Cl. 72—6.)



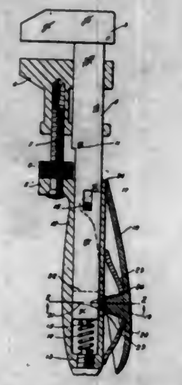
1. In a silo, a silage chute comprising a plurality of individual sections superimposed one upon another rising substantially centrally of the silo, and means within certain of said sections whereby a person may climb up and down the chute, said sections receiving lateral support only from one another and silage about them.

1,758,663. MASSAGING MACHINE. WILLIAM F. HENDAY, Ossining, N. Y., assignor to Halliwell-Shelton Electric Corporation, New York, N. Y., a Corporation of New York. Filed Feb. 8, 1928. Serial No. 252,799. 5 Claims. (Cl. 128—63.)



1. In a massaging machine, a housing, a pair of slots in said housing, a wide lever arm pivotally mounted in each of said slots with a portion projecting inside and a portion projecting outside of said housing, the pivot point being substantially in line with the plane of the housing adjacent the slot so that the lever at all times entirely fills the slot the outwardly projecting portions of the lever arm being provided with connecting points for a massaging belt and the inwardly projecting portion of said lever arms being connected to a motor means for rocking the arms.

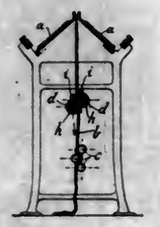
1,758,664. NUT AND PIPE WRENCH. HUGO HOELPER, Tacony, Pa. Filed June 12, 1929. Serial No. 370,309. 3 Claims. (Cl. 81—87.)



1. A wrench, comprising a stem, a longitudinal slot in said stem, a head fixed upon said stem, a jaw movable toward and away from said head, a slide upon said stem operatively connected to said jaw, a stud on said slide registering in said slot, a lever rockably mounted on said stud, disposed over said slide, a spring acting between said slide and stem tensioning said stem out of said slide, a tongue integral with and extending from said lever slidably engaging said stem in a plane angularly inclined to the longitudinal axis of said stem, to move said stem in said slide in a direction opposed to the tension of said spring, said stud engaging the opposite ends of said longitudinal slot in said stem, to limit the longitudinal movement of said slide and stem relatively to each other in either direction.

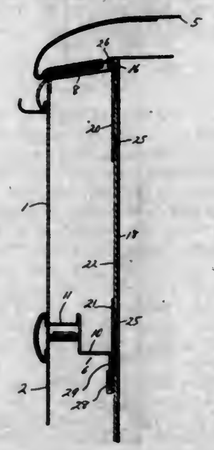
1,758,665. METHOD OF AND APPARATUS FOR FINISHING TEXTILE GOODS. JAKOB HÖPNER, Thum im Erzgebirge, Germany. Filed Sept. 19, 1928, Serial No. 306,956, and in Germany May 4, 1927. 4 Claims. (Cl. 66—147.)

1. Method of treating a knitted fabric having portions normally tending to curl, to produce a uniformly flat fabric which includes retaining successively occurring last formed loops of the fabric in engagement with fabric forming instrumentalities continuously with the formation of



said fabric, maintaining a portion of the formed web of fabric in advance of said instrumentalities under tension, removing web distorting strains in the fabric under tension, and fixing the fabric loops in undistorted relation.

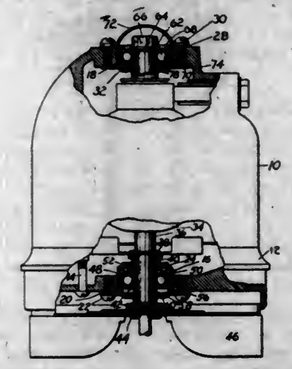
1,758,666. TRIMMING-MATERIAL ASSEMBLY. WILLIAM J. HOSKYNS, Detroit, Mich., assignor to Briggs Manufacturing Company, Detroit, Mich., a Corporation of Michigan. Filed Aug. 2, 1926. Serial No. 126,551. 4 Claims. (Cl. 296—28.)



1. A side wall structure for vehicle bodies comprising a metal panel, a panel of fabric trimming material upon the inner side of said metal panel, vertically spaced substantially horizontally disposed strips rigidly secured to said metal panel and projecting laterally inwardly therefrom, and means for supporting said panel of trimming material from said metal panel including fasteners rigidly secured to said panel of trimming material and detachably engaging the inner lateral edge portions of said strips.

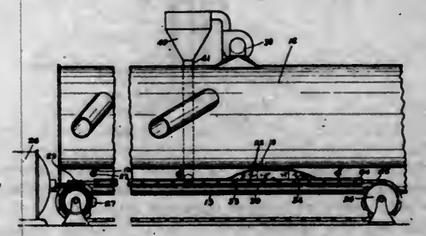
1,758,667. BEARING MOUNTING. FREDERICK G. HUGHES, Bristol, Conn., assignor to The New Departure Manufacturing Company, Bristol, Conn., a Corporation of Connecticut. Filed May 16, 1924. Serial No. 713,747. 1 Claim. (Cl. 308—189.)

In a machine having a shaft adapted to operate in a position out of the horizontal, a casing having upper and lower bores arranged in axial alignment and surrounding portions of the shaft, inner grooved race rings fixed to the portions of the shaft within the bores, series of balls held by the sides of the grooves from movement axially with respect to their inner race rings, an outer race ring on each series of balls, the outer race ring of the upper bearing having a thrust face facing upwardly and supporting the balls and the weight of the shaft, a pressed metal cup fitting in the upper bore of the casing and having an inwardly extending bearing supporting flange extending under and in contact with the lower end of the corresponding outer race ring, the cup having an outwardly extending supporting flange overlapping and secured to the upper end face of the casing to support the



cup in the bore, a cup fitting in the lower bore and slidably receiving the other outer race ring, the lower cup having an inwardly extending flange at its upper end and an outwardly extending flange overlapping and secured to the lower end face of the casing, and a spring supported by the slidable outer race ring and engaging the inwardly extending flange of its cup; substantially as described.

1,758,668. DUST-COLLECTING SYSTEM. SYLVESTER W. KIRK and WILLIAM ROGER MEUTTMAN, Cincinnati, Ohio, assignors to The Kirk & Blum Manufacturing Company, Cincinnati, Ohio, a Corporation of Ohio. Filed July 19, 1927. Serial No. 206,975. 16 Claims. (Cl. 302—17.)

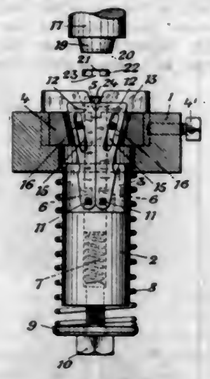


1. In a collecting and conveying system a pair of parallel pipes having a common dividing wall between them, means for intermittently effecting communication between the pipes at each of a plurality of successive places along said wall and means for exhausting air from said pipes to produce differential velocity of air movement through said pipes.

1,758,669. METHOD OF AND APPARATUS FOR SEALING THE ENDS OF FASTENING STRINGS, WIRES, AND THE LIKE. WILHELM KOHLER, Elberfeld, Germany, assignor to Bruninghaus & Co., Barmen-Wichlinghausen, Germany. Filed Mar. 15, 1928, Serial No. 261,791, and in Germany Mar. 21, 1927. 4 Claims. (Cl. 81—9.1.)

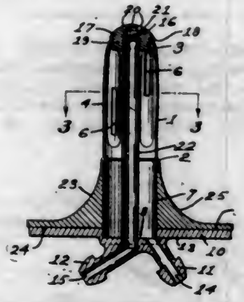
2. An implement for sealing strings, wires and the like, comprising an upper swage having a beading die, a lower swage comprising a longitudinally movable die adapted to co-operate with said upper die and to engage a flanged seal blank, jaws adapted to grip the strings to be sealed and to move together with said lower die into operative position,

but to lag behind it when moving in opposite direction, means for opening said jaws when moving into operative position and for closing them when moving in opposite



direction, stationary jaws mounted on said lower swage and adapted to co-operate with said lower and upper die in beading said seal blank around said string, and means for suitably limiting the motion of said lower die.

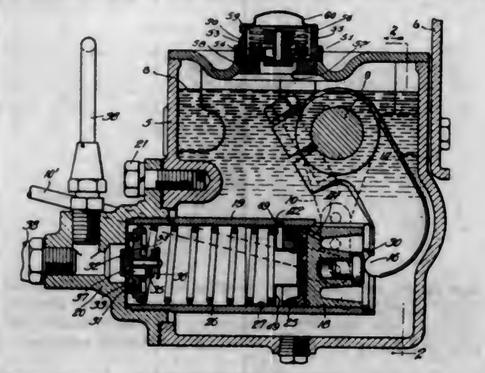
1,758,670. VAGINAL IRRIGATOR. ROLLA C. LAWRY, Webster Groves, Mo., assignor, by mesne assignments, to Neet, Incorporated, Wilmington, Del., a Corporation of Delaware. Filed Apr. 6, 1928. Serial No. 267,893. 2 Claims. (Cl. 128—241.)



1. In a vaginal irrigator, a tubular shell of drawn metal provided with an annular exterior flange intermediary of its ends and with lateral openings intermediary of said flange and one of said ends, a metal spray-tip forming a closure for the last-mentioned end of said shell, a metal base forming a closure for the other end of the shell and having influent and effluent ducts that open into the inner face of the base within the confines of the shell, a vulva-fitting pad of yieldable material intimately surrounding said shell intermediary of said flange and said base and a metal tube within the shell having its opposite ends in screw-threaded connection with the spray-tip and the influent duct of the base, respectively, said tube functioning to compress said pad between said flange and said base as well as effecting communication between said tip and said influent duct.

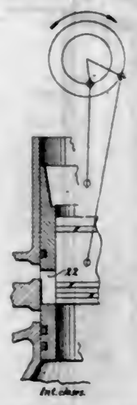
1,758,671. PRESSURE MECHANISM FOR BRAKE SYSTEMS. MALCOLM LOUGHEAD and ERWIN F. LOWEKE, Detroit, Mich., assignors to Hydraulic Brake Company, Detroit, Mich., a Corporation of California. Filed Nov. 12, 1926. Serial No. 147,860. 19 Claims. (Cl. 60—54.5.)

1. A liquid compressor for a hydraulic braking system comprising a cylinder, a piston slidable in one end of the cylinder, means for actuating the piston, an outwardly seating inlet check valve disposed in the other end of the cylinder, a spring disposed within the cylinder and be-



tween the piston and valve for retracting the piston and loading the valve, a discharge check valve for the cylinder, and means for interconnecting the valves with the hydraulically actuated brakes.

1,758,672. SLIDE-VALVE MECHANISM. CONRAD H. MATTHIESSEN, Jr., New York, N. Y. Filed Feb. 3, 1928. Serial No. 251,560. 4 Claims. (Cl. 123—75.)

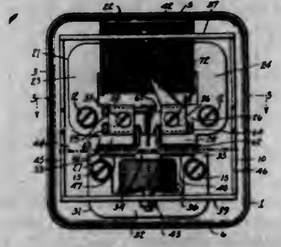


1. In an internal combustion engine of the four cycle type comprising a working cylinder, a valve head, forming an axial extension of the cylinder, provided with an inlet passage and an exhaust passage, and having a working piston within said cylinder, a sleeve slide valve reciprocating within said valve head, a plug within said slide valve, said sleeve valve provided with a port and with a skirt portion for controlling the exhaust passage, and means whereby a pair of separated cranks reciprocate said sleeve and plug, so that the fork in the sleeve, by its movement with relation to the inlet passage in the cylinder, in itself, opens and keeps open the inlet for the admission of gas during the inlet cycle and the plug will cut off the admission of gas at the beginning of the return stroke of the working piston, said plug with the inlet cut off blocking the inlet port during the compression and firing cycles.

1,758,673. INDUCTION METER. JOSEF METTLER, Zug, Switzerland, assignor to Landis & Gyr, A.-G., a Limited Joint-Stock Company of Switzerland. Filed Dec. 19, 1927, Serial No. 241,117, and in Switzerland Dec. 24, 1926. 3 Claims. (Cl. 171—264.)

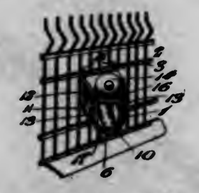
2. In an induction meter, a pressure coil and core, a current coil and core, a plurality of closely adjacent,

rotatable compensating devices for friction and phase compensation mounted on said pressure core, a single



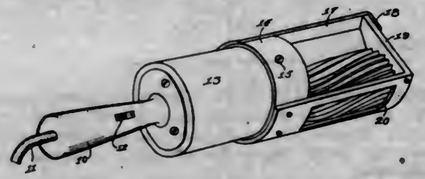
means for frictionally holding said compensating devices in adjusted position, and means for limiting the movement of said compensating devices.

1,758,674. BIRD BATH. CHARLES MORTON, Philadelphia, Pa. Filed July 20, 1927. Serial No. 207,104. 1 Claim. (Cl. 119—18.)



In a bird bath of the character stated, a one piece bottom member having a depressed, seamless well formed therein, a horizontal platform at the rear portion of said well and terminating in a rear reinforcing bead forming a perch above said platform, a vertical annular flange integral with and surrounding said well and platform and having its rear ends contiguous with the ends of said bead, a one piece roof comprising a dome, a horizontal wall surrounding the rear portion of said dome and terminating in a pendant rear, reinforcing bead, and a pendant annular flange surrounding said dome and horizontal wall and having its rear edges contiguous with the ends of said rear bead, front uprights rigidly connecting said roof to said bottom member rear uprights rigidly connecting the corresponding vertically aligned ends of the beads on said roof and bottom members, said rear uprights having vertical grooves therein, a transparent flexible strip enclosing the sides and front of said bird bath, and having its upper and lower horizontal edges confined within the upper and lower flanges of said roof and bottom members and within said front uprights, said strip having its rear vertical edges engaging the vertical grooves in said rear uprights, and rods carried by said rear uprights and having upper hooks for detachably securing said bird bath to a bird cage with the rear unenclosed portion of said bird bath in alignment with an opening in said bird cage.

1,758,675. AUTOMATIC FISH SCALER. WILLIAM REILLY, White Plains, N. Y. Filed Apr. 2, 1926. Serial No. 99,225. 1 Claim. (Cl. 17—8.)

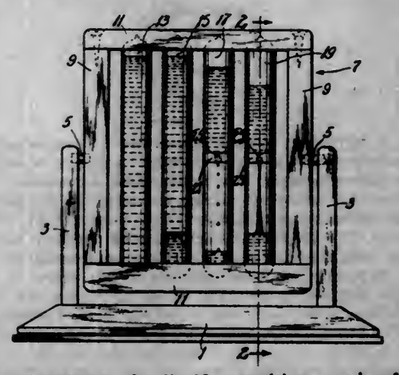


A fish scaler comprising a cylindrical motor casing, a motor housed therein and having its shaft disposed concentrically thereof, a handle mounted at one end of the casing and centrally aligned therewith, a conductor threaded longitudinally through the handle and adapted to supply current to the motor, a frame mounted at the other end of the casing and provided at its side with an opening, a milling cutter journaled in the frame at a point between the opening thereof and the center of the motor casing, intermeshing gear wheels operatively connecting the shafts of the motor and the cutter together, said milling cutter having a peripheral portion disposed through the opening in the frame and having milling edges at one side disposed beyond the exterior surface of the frame.

1,758,676. LIGHT-SENSITIVE LAYERS AND PROCESS OF PREPARING THEM. MAXIMILIAN PAUL SCHMIDT and WILHELM KRIEGER, Wiesbaden-Biebrich, Germany, assignors to Kalle & Co. Aktiengesellschaft, Weisbaden-Biebrich, Germany, a Corporation of Germany. Filed July 12, 1928, Serial No. 292,319, and in Germany July 21, 1927. 10 Claims. (Cl. 95—7.)

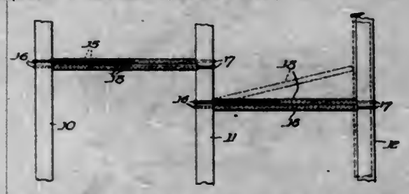
1. The process of preparing light-sensitive layers by means of diazo compounds, which consists in adding to the diazo compound a mixture of boric acid and a hydroxycarboxylic acid.

1,758,677. VISCOSIMETER AND DISPLAY DEVICE. WILLARD D. SMITH, Maplewood, Mo. Filed June 15, 1925. Serial No. 37,161. 11 Claims. (Cl. 265—11.)



1. A viscosimeter for liquid comprising a pair of air evacuated compartments separated by a partition having at least one restricted opening, said liquid partially filling the said compartments and said liquid being adapted to flow from one compartment to the other.

1,758,678. BRIDGING. WILLIAM E. WHITE, Chicago, Ill., assignor to Kalman Steel Company, Chicago, Ill., a Corporation of Delaware. Filed Oct. 13, 1928. Serial No. 312,324. 6 Claims. (Cl. 189—36.)



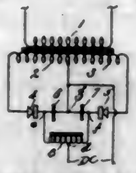
1. In bridging for beams, the combination of a tension member adapted to be united to a pair of spaced beams and a separate compression member adapted to abut said beams at points adjacent to the points of engagement therewith of the tension members and to be forced from a non-parallel position into parallelism with the tension member by sliding one end along the abutting surface of the member on the beam.

1,758,679. MEANS FOR PINNING SHEETS. HARRY AARON, Scranton, Pa., assignor to The Pinzit Company, Inc., New York, N. Y., a Corporation of New York. Filed Jan. 8, 1926. Serial No. 79,945. 20 Claims. (Cl. 1—52.)



10. In a device of the class described, the combination of a frame having a crimping member, a pivoted arm carrying a coacting crimping member, a pinning plunger on said arm, and an operating member having a cam engagement with the arm and a link connection with the plunger.

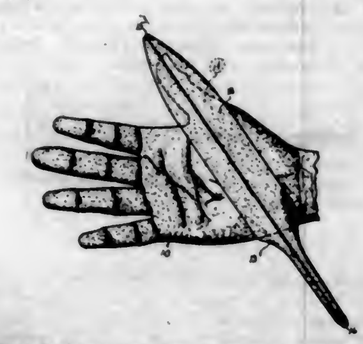
1,758,680. RECTIFYING APPARATUS. HENRI G. ANDRÉ, Paris, France. Filed Oct. 29, 1926. Serial No. 145,014. 5 Claims. (Cl. 175—363.)



1. A rectifying system comprising a transformer, the secondary circuit of which includes two pairs of elements, each pair consisting of a rectifier and a condenser, a direct current conductor joining the latter to the midpoint of the secondary, a utilization circuit, one side of which is connected to points intermediate each rectifier and condenser and the other side taken from said conductor.

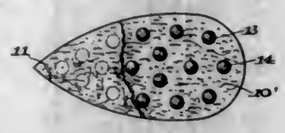
4. In a rectifying system comprising a source of alternating current, a plurality of circuits deriving energy therefrom, each containing a rectifier and condenser, and a coil connected from points intermediate each rectifier and condenser to form part of a utilization circuit, the net average magnetization of said coil being substantially zero whereby saturation is precluded.

1,758,681. MULTIPLE THUMB STALL. FRANK L. BALLARD, Ankeny, and WILLIAM A. ROBSON, Scranton, Iowa. Filed Jan. 11, 1930. Serial No. 420,073. 4 Claims. (Cl. 2—21.)



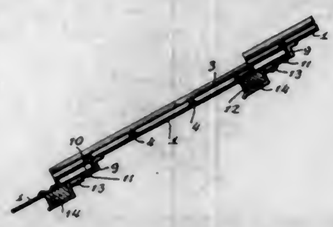
1. In a device of the class described, an elongated flexible hollow member closed at both ends, and two longitudinal slots formed in the opposite sides of said elongated member.

1,758,682. PAD FOR ELECTROPLATING DEVICES. PETER J. F. BATENBURG, Racine, and CYRIL J. ATKINSON, Milwaukee, Wis.; said Atkinson assignor to said Batenburg. Filed July 13, 1925. Serial No. 43,316. 5 Claims. (Cl. 204—5.)



1. A pad for electro-plating devices comprising a body of yielding absorbent material, and molded masses of metal salts disposed within said body.

1,758,683. ROOFING CONSTRUCTION. SIGMUND BAUER, deceased, Oberwarth, Burgenland, Austria, by Regina Löwy, administratrix, Oberwarth, Burgenland, Austria, assignor to Julia Lowy, New York, N. Y. Filed Mar. 20, 1929. Serial No. 348,596. 1 Claim. (Cl. 108—17.)



A roofing construction including superposed sheet metal plates in which the lower edge of the upper plate is bent and provided with a flange parallel to said plate and engaging the upper portion of the lower plate, and where the latter plate has its upper edge bent upwardly to engage the under surface of the upper plate, and a hook member receiving the upper bent edge of the lower plate, and said hook member and lower plate being formed with cooperating projections and depressions for interlocking said plates.

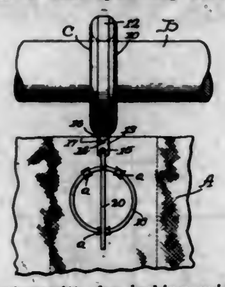
1,758,684. RADIATOR. BENJAMIN BLACKMORE, Akron, Ohio. Filed Oct. 6, 1926. Serial No. 139,830. 6 Claims. (Cl. 257—136.)



5. In a radiator, a chambered radiator body, fins detachably mounted on said body in parallel spaced relation to each other, each fin comprising a metal sheet having an opening extending therein from the bottom thereof, a right angle flange around said opening, said body snugly received in said opening with said flange positioned flat against the outer surface thereof, each lateral edge of each fin being curved to form a tubular flange, both of said flanges on each fin contacting with the adjacent fin to hold the fins in spaced relation with an air passage therebetween.

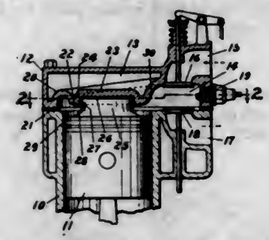
1,758,685. CURTAIN RING. JAMES H. BOYE, Chicago, Ill., assignor to James H. Boye Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 15, 1928. Serial No. 299,701. 3 Claims. (Cl. 156—21.)

1. A curtain ring, comprising an annulus adapted to slide on a curtain rod and formed with a groove in its outer periphery, a split metal ring seated in said groove, the end portions of said split ring having cooperating



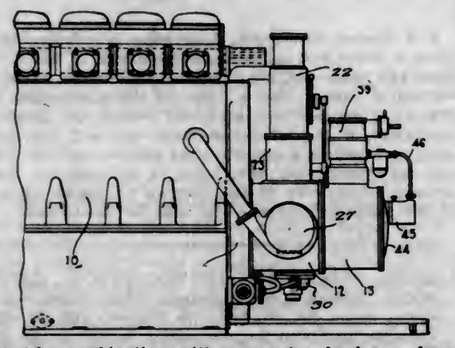
means integral therewith for locking said split ring in said groove, and a depending extension on the lower side of said split ring adapted for attachment to a curtain.

1,758,686. COMBUSTION PRESSURE-DISTRIBUTING MEANS FOR INTERNAL-COMBUSTION ENGINES. FRANK A. BULLINGTON, Kansas City, Mo., assignor to Bullington Engine Heads, Kansas City, Mo., a Common-Law Trust consisting of Louis R. Ash, Howard P. Treadway, and Frank A. Bullington. Filed Nov. 14, 1927. Serial No. 233,167. 14 Claims. (Cl. 123—191.)



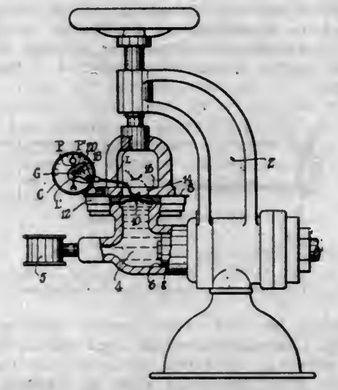
1. In an engine of the character described, a cylinder, a piston operating therein, a cylinder head having a valve chamber at one side of said cylinder, inlet and exhaust valves opening into said chamber and ignition means therein in close proximity to said inlet valve, said cylinder head being provided with a passage leading from said valve chamber to the cylinder for directing the initial application of combustion pressure to a restricted portion of the head of said piston substantially concentrically thereof, said piston and said cylinder head having uninterrupted wall portions concentric with said passage closely approaching each other at the limit of the compression stroke of the piston.

1,758,687. GOVERNOR-PUMP AGGREGATE. ALAN ERNEST L. CHORLTON, London, England. Filed Mar. 21, 1928. Serial No. 263,417. 4 Claims. (Cl. 123—195.)



1. The combination with an engine having a frame and a transmission mechanism, of a first outboard housing member carried at one end of the frame for enclosing the transmission mechanism; a second outboard housing member connected to the outer end of the first housing member; a third outboard housing member connected to the outer end of the second housing member; a governor, a circulating pump, and a lubricating pump supported by the second housing member and having actuating members extending thereinto; a fuel-feeding pump carried by the third housing member and having actuating means extending thereinto; and engine-drive shaft means extending axially through said housing members and provided with means for actuating said actuating members and means.

1,758,688. TESTING MACHINE. JAMES A. COWLEY, Springfield, Mass., assignor to B. F. Perkins & Son, Inc., Holyoke, Mass., a Corporation of Massachusetts. Filed June 18, 1928. Serial No. 286,278. 4 Claims. (Cl. 265—14.)



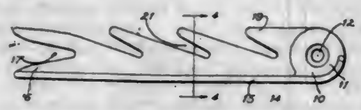
1. A testing machine comprising in combination, an apertured platform and clamp for holding a specimen, a yieldable diaphragm for distending said specimen and means for indicating the extent of the elongation of said specimen including a member for resting on said specimen and which is actuated thereby as the specimen is distended.

1,758,689. HEAT-PROTECTION MEANS FOR MOTION-PICTURE PROJECTORS. LORENZO DEL RICCIO, New York, N. Y., assignor to Paramount Famous Lasky Corporation, Los Angeles, Calif., a Corporation of New York. Filed Apr. 19, 1927. Serial No. 184,855. 10 Claims. (Cl. 88—17.)



2. In combination with the aperture plate and film confining gate of a projector, heat protective means embodying an apertured plate spaced behind the gate, and means to direct an air current between the plate and the gate and along the faces of the plate.

1,758,690. FASTENER FOR ROLLER WINDOW SHADES. ELLIOTT DEXTER, New York, N. Y. Filed Nov. 24, 1928. Serial No. 321,594. 4 Claims. (Cl. 156—44.)



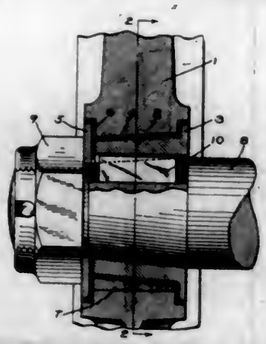
4. A fastener for roller window shades comprising a metal strip, a flange forming one longitudinal edge to said strip, walls defining a pivot opening in one edge of said strip, walls defining a wedge shaped opening in the other edge of said strip and means, in the edge of said strip opposite said flange, adapted to engage the cord of said shade to permit securing said shade at various angles to a window upon which it is mounted.

1,758,691. HERMETIC SLIP-TYPE CLOSURE FOR METALLIC BOXES. GASTON DOLLIENS, Paris, France, assignor to Etablissements Ch. Pieron & A. Poyet, Clichy, Seine, France. Filed Aug. 4, 1928, Serial No. 297,390, and in France Aug. 17, 1927. 1 Claim. (Cl. 220—42.)



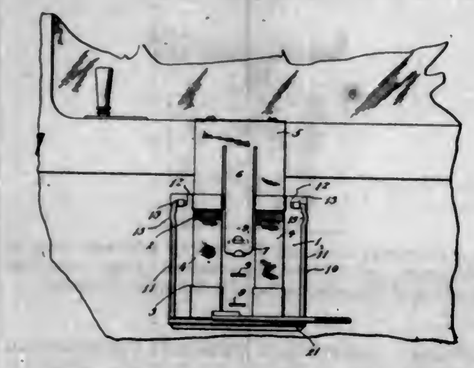
A metallic receptacle with hermetic slip-type closure comprising a receptacle body having a smooth inner surface, an outwardly projecting rib forming an inner annular groove along the upper edge, an annular member secured to said rib and having a depending flange covering said groove and whose lower edge lies against the inner lower face of said groove, whereby said flange is free to expand into said annular groove, and the inner wall of said flange being exactly in line with the inner wall of said receptacle body, and a removable closing cap whose operating surface is adapted to frictionally engage said depending flange.

1,758,692. GEAR CONSTRUCTION. ALEXANDER ENGLAND, Wilkinsburg, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Jan. 22, 1927. Serial No. 162,799. 3 Claims. (Cl. 74—28.)



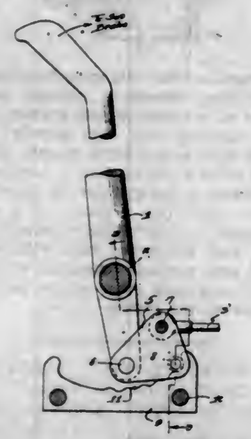
1. A gear having a hub portion provided with a tapered bore and a tapered bushing covered with one or more layers of fabric and engaging in said bore.

1,758,693. ARM REST FOR MOTOR VEHICLES. EDWARD E. FRANCE, Greeley, Colo. Filed June 5, 1929. Serial No. 368,586. 5 Claims. (Cl. 155—198.)



1. An arm rest comprising a plate, a second plate hingedly connected thereto, and provided with side openings a bail pivotally connected with the first named plate and slidable through the side openings of the second named plate, said bail having offsets in its arms, for engagement with the second named plate to hold the same in its folded position.

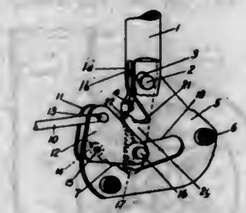
1,758,694. MECHANISM FOR CONTROLLING BRAKES OR THE LIKE. ROBERT S. GANS, Detroit, Mich. Filed Nov. 18, 1927. Serial No. 234,119. 8 Claims. (Cl. 74—39.)



3. A control mechanism, comprising in combination a lever, a brake rod, an intermediate device to which the lever and brake rod are connected, a member having a corrugated surface, and a roller on the intermediate device which engages this corrugated surface, the points of connection of the lever and brake rod and the roller being arranged in a triangle fixed relative to each other and the arrangement being such as to cause the roller to seat in any one of the furrows by reason of pull of the brake rod whereby to lock the mechanism.

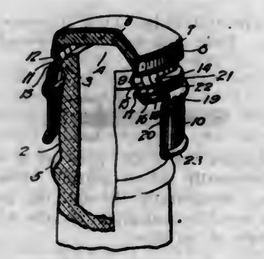
1,758,695. LOCKABLE LEVER-CONTROL MECHANISM. ROBERT S. GANS, Detroit, Mich. Filed Feb. 3, 1928. Serial No. 251,532. 16 Claims. (Cl. 74—39.)

1. In an apparatus for controlling brakes or the like, the combination of a lever, a brake rod, an intermediate device connecting the lever and brake rod adapted to retain the brakes applied in any position in which they are set by the lever, means cooperating with the



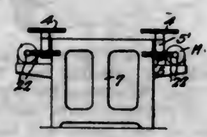
intermediate device for this purpose, and locking means engageable by independent movement of the lever for positively locking the intermediate device.

1,758,696. BOTTLE CLOSURE. RALPH A. GRAHAM, Kansas City, Mo. Filed May 25, 1928. Serial No. 280,450. 11 Claims. (Cl. 215—45.)



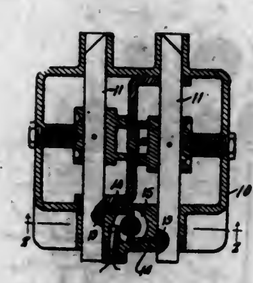
1. A bottle closure comprising a cap having a depending longitudinally slitted skirt provided with an annular recess, and a sleeve member having an inturned flange engageable with the skirt to latch the cap to the bottle and receivable by the recess to release the cap.

1,758,697. TENTER MACHINE. JOHN H. HAMILTON, Holyoke, Mass., and JOHN H. WILLIAMS, Providence, R. I.; said Hamilton assignor to B. F. Perkins & Son, Inc., Holyoke, Mass. Filed Nov. 10, 1928. Serial No. 318,498. 11 Claims. (Cl. 26—52.)



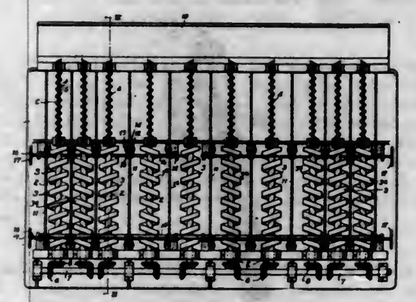
1. The combination of driving sprockets and clamp chains of a tentering machine with operating means therefor comprising, separate variable speed electric motors connected to each of said sprockets, a circuit for supplying current to said motors and means for varying the supply to said motors simultaneously whereby the speed of the motors is alternately accelerated and decelerated, the speed of one motor being accelerated while the other is decelerated and vice versa.

1,758,698. LOCKING DEVICE FOR AUTOMOTIVE VEHICLES. FRANCIS D. HARDESTY, Ferndale, Mich. Filed Dec. 17, 1926, Serial No. 155,399. Renewed Feb. 5, 1930. 5 Claims. (Cl. 70—127.)



1. In an automobile vehicle provided with a motor involving electric ignition, a switch therefor, and control mechanism including a manually operable part, a device included in said mechanism tending normally to lock said part, means for retaining said device in unlocked position, electromagnetic means to release said retaining means, means adapted to energize an electric circuit through said electromagnetic means when the switch is in "off" position, and a circuit breaker operable to break the said circuit when the locking device moves to locking position.

1,758,699. STRAIGHTENING MACHINE. BENJAMIN P. HAZELTINE, Baltimore, Md. Filed Dec. 8, 1928. Serial No. 324,623. 15 Claims. (Cl. 153—54.)

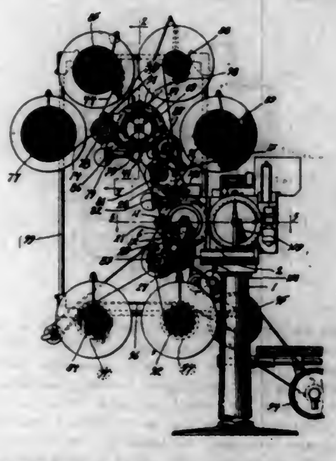


1. A machine for straightening cylindrical blanks, comprising a plurality of parallel rotatably mounted screw flights arranged to receive a blank transversely thereof and having deep threads formed to engage it substantially on its diametrically opposite sides at longitudinally spaced points, and means to rotate said screws to rotate and straighten the blank while conveying it longitudinally of said screws.

1,758,700. PHOTOGRAPHIC-PRINTING MACHINE. ALBERT S. HOWELL, Chicago, Ill., assignor to The Bell & Howell Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 17, 1927. Serial No. 213,549. 11 Claims. (Cl. 95—75.)

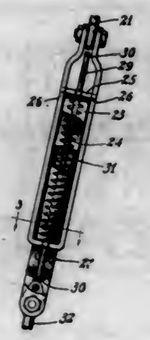
1. In a photographic printing machine the combination with a revoluble film feed sprocket comprising two axially spaced wheels at least one of which is peripherally toothed and an axial spindle extending therebetween, of a stationary film guide of areal formation disposed correspondingly with the periphery of said sprocket for guiding superposed films engaged on said sprocket and provided with an exposure aperture between said wheels

and facing inwardly of the sprocket, a stationary closure member forming an enclosure between said wheels and communicating with said exposure aperture, and an in-



candescent electric lamp within said enclosure between said spindle and exposure aperture and carried by said closure member.

1,758,701. SPRING SUSPENSION DEVICE. GEORGE R. HOWEY, Barberton, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed Nov. 15, 1927. Serial No. 233,398. 4 Claims. (Cl. 267—72.)



4. A suspension device comprising a pair of metal members of loop form interlinked with each other, a compression spring interposed between their loop ends, a bridge member on each of the said members and connecting its legs at a position spaced from their ends, a guide bar extending through the spring and engaging the said loop ends and the said bridge members, and a loose hollow member extending about the spring and adapted to be abutted by the said loop ends to limit extension of the structure.

1,758,702. GRINDING MACHINE WITH SCREEN. HOWARD C. JACOBSON, Minneapolis, Minn. Filed July 22, 1927. Serial No. 207,664. 7 Claims. (Cl. 83—11.)

1. A grinding machine having in combination, a rotary material suction and discharge fan comprising a unit with material disintegrating blades, a circular member having a plurality of holes therethrough surrounding said fan, said holes being spaced sufficiently close to each other to retain material operated upon by said blades until reduced thereby, said circular member being disposed in proximity to the outer edges of said blades and concentric of said fan, an imperforate casing surrounding said circular member and fan and disposed in eccentric relation thereto, the said casing having an inlet at one side thereof co-axial with said fan and having a tangential



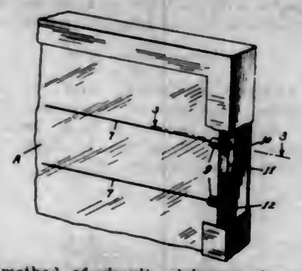
outlet leading therefrom, there being a free space between said circular member and the peripheral wall of said casing which increases in radial dimension in the direction of rotation of said fan toward said outlet, a shaft on which said fan is mounted and means for rotating said shaft at high speed.

1,758,703. WINDSHIELD. JACK A. JOHNSON, Robbinsdale, Minn. Filed Jan. 30, 1929. Serial No. 336,215. 1 Claim. (Cl. 219—19.)



The combination with the pane of a windshield or the like, of vertically spaced heating wires imbedded in and extending horizontally through the pane for heating the same, and terminal plugs, for the wires, imbedded in the end edges of the pane.

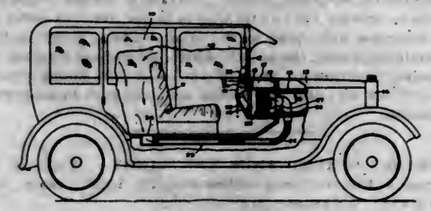
1,758,704. CIRCUIT WIRING FOR WINDSHIELDS AND THE LIKE. JACK A. JOHNSON, Robbinsdale, Minn. Filed Aug. 5, 1929. Serial No. 383,498. 4 Claims. (Cl. 219—19.)



4. The method of circuit wiring a glass plate comprising the securing of terminal lugs to the wires of the circuit, and then embedding the wires and lugs in the glass, while in a molten state, leaving the lugs exposed at one edge of the glass, and thereupon drilling and tapping the lugs for the engagement of binding screws.

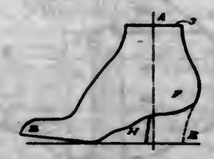
1,758,705. MEANS FOR CIRCULATING HEATED AIR IN THE CLOSED BODIES OF AUTOMOBILES. GILBERT P. KEAN, Minneapolis, Minn., assignor of one-fourth to Abbott L. Fletcher and one-fourth to Paul J. Thompson, Minneapolis, Minn. Filed Feb. 14, 1929. Serial No. 339,842. 3 Claims. (Cl. 20—40.5.)

1. Means for heating the interior of automobiles comprising a closed box in the front of said automobile adjacent the hood, a radiator in said box, a fan in the box back of the radiator, means for causing air to be taken from the rear part of the automobile and intro-



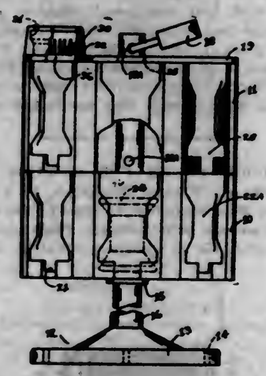
duced into the box, and means for directing the flow of air driven through the radiator by the fan against the windshield of the automobile.

1,758,706. LAST. FRANZ KELNHOFER, Vienna, Austria. Filed Aug. 18, 1927, Serial No. 213,764, and in Austria Sept. 16, 1926. 1 Claim. (Cl. 12—133.)



A footwear last having a bottom face comprising a heel portion, shank portion and fore part, with a dip curve in the shank portion at a position where the fifth metatarsal bone would normally be positioned in a shoe, outwardly bulged portions at both sides of the fore part of the last, the bulge at the outer side of the last being higher than the bulge at the inner side of the last.

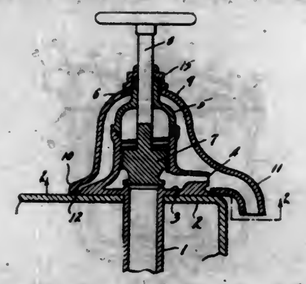
1,758,707. SPOOL-HOLDING DEVICE. MAURICE ABRAHAM LANDSBERG, Toronto, Ontario, Canada. Filed Mar. 6, 1929. Serial No. 344,656. 17 Claims. (Cl. 242—134.)



1. In a spool holding device, a magazine for the spools in which they may rotate freely, having a spool egress opening and a spool ingress opening adapted to allow the passage therethrough of the spools in one direction only, and means rotatably supporting said magazine.

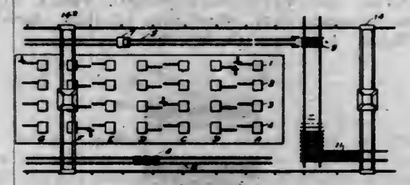
1,758,708. COVER FOR FAUCETS, ETC. HARRY C. LEDDON, Cleveland, Ohio. Filed Mar. 26, 1928. Serial No. 264,869. 1 Claim. (Cl. 137—111.)

In a device of the class described, the combination of a faucet or the like, said faucet having a discharge spout constituting part thereof, a cover adapted to be applied to said faucet and spout, said cover having an opening therethrough, said faucet or the like having a removable projec-



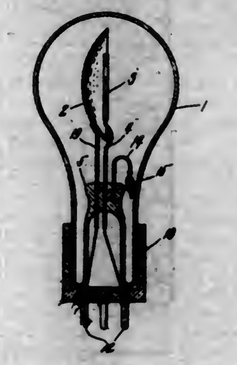
tion extending outwardly through said opening, and means located outside of said cover and engaging said cover and said projection, thereby maintaining said cover in position.

1,758,709. CONTROL SYSTEM. PHELAN MCSHANE, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Jan. 16, 1926. Serial No. 81,769. 9 Claims. (Cl. 214—18.)



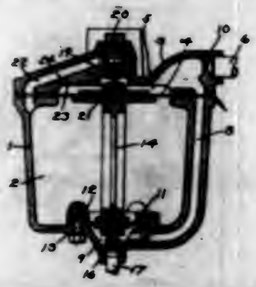
5. In a control system, a plurality of groups of work devices, a conveyor for supplying material to said devices, a motor associated with each of said devices, a master switch for controlling the operation of each motor, a plurality of groups of collector rails corresponding to said groups of work devices, and means on said conveyor for selectively energizing any one of the collector rails of a group for controlling the operation of the corresponding motor.

1,758,710. ELECTRON-DISCHARGE DEVICE. LAURENCE K. MARSHALL, Cambridge, Mass., assignor, by mesne assignments, to Old Colony Trust Company, a Corporation of Massachusetts. Filed Jan. 31, 1929. Serial No. 336,463. 10 Claims. (Cl. 250—27.5.)



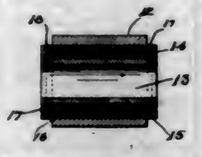
1. In an electron discharge device, a cathode comprising a layer of metal having hydrogen absorbed therein and a layer of alkali metal thereon.

1,758,711. SIGNAL-VALVE DEVICE. JOSEPH C. MCCUNE, Edgewood, Pa., assignor to The Westinghouse Air Brake Company, Hamilton, Ontario, Canada. Filed Feb. 16, 1929. Serial No. 340,448. 12 Claims. (Cl. 116—55.)



1. In a fluid pressure signal system, the combination with a train signal pipe, of a signal valve device comprising a signal controlling valve, a diaphragm, subject to the opposing pressures of the signal pipe and a chamber for operating said valve, and a restricted port, independent of the moving parts of said valve devices, through which said chamber is charged with fluid under pressure from the signal pipe.

1,758,712. ANTIRATTLING BUSHING. FRED C. MORRIS, San Francisco, Calif. Filed Sept. 13, 1924. Serial No. 737,623. 1 Claim. (Cl. 308—238.)



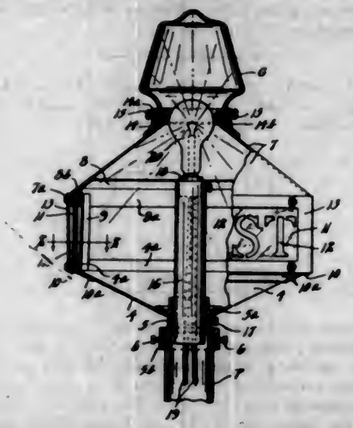
A bearing bushing for motor vehicles comprising a shell, a rubber bushing therein and having its ends projecting beyond the end of the shell and over the periphery thereof, a sleeve passing through said rubber bushing, and flanges on said sleeve at both ends substantially the diameter of the outer shell.

1,758,713. FLOUR AGITATOR FOR EXPOSING FLOUR TO THE ACTION OF A BLEACHING GAS. JOHN J. MULVEY, Seattle, Wash. Filed July 19, 1927. Serial No. 206,919. 2 Claims. (Cl. 83—42.)



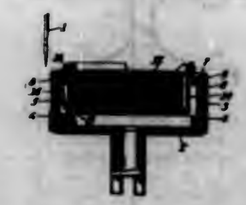
1. A device of the character described embodying a vertically disposed compartment; flour inlet and outlet ports in the upper and lower end portions respectively of said compartment; a plurality of paddle wheels revolvably mounted in said compartment substantially in a plurality of vertically disposed series in laterally off-set relation; means to operate the paddle wheels in one vertical series in one direction and those in the other vertical series in the opposite direction, the paddle wheels of one set rotating in opposite direction to that of the adjacent paddle wheel of the other set; and a bleaching gas inlet port in said compartment.

1,758,714. STREET SIGN AND LIGHT. WILLIAM P. OWENS, Cresco, Iowa. Filed Oct. 25, 1929. Serial No. 402,473. 4 Claims. (Cl. 40—132.)



1. In an illuminated street sign, a casing or chamber having a raised top provided with a central aperture therein, the inner portion of said top adjacent said aperture affording reflecting surfaces, a chamber having translucent portions secured to the top of said first mentioned chamber and having an opening at the bottom thereof communicating with said first mentioned chamber, a lamp disposed partially in said first mentioned chamber and partially ni said last mentioned chamber, said first mentioned chamber having a plurality of walls in the form of signs having opaque portions and translucent portions adapted to indicate street names by illumination, and a supporting post secured to the base of said first mentioned chamber.

1,758,715. LOOP TAKER FOR SEWING MACHINES. WILLIAM NELSON PARKES, Brooklyn, N. Y., assignor to The Singer Manufacturing Company, Elizabeth, N. J., a Corporation of New Jersey. Filed Aug. 11, 1927. Serial No. 212,175. 2 Claims. (Cl. 112—228.)



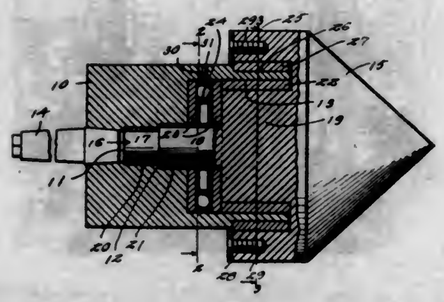
1. In a sewing machine, a reciprocatory needle, a vertical-axis rotary loop-taker having a loop-seising beak cooperating with said needle in the formation of lock-stitches, a bobbin-carrier journaled within said loop-taker having a centrally open base constituted by a narrow internal flange projecting inwardly from the bottom of the bobbin-carrier side wall, an auxiliary loop-spreading hook projecting upwardly from the base of said bobbin-carrier between the side walls of the loop-taker and bobbin-carrier, and a bobbin sustained within the bobbin-carrier upon its base flange.

1,758,716. ATTACHMENT FOR SPRING-BEARD KNITTING MACHINES. PAUL G. PERKINS, Sauquoit, N. Y. Filed Oct. 10, 1928. Serial No. 311,687. 3 Claims. (Cl. 66—105.)



1. In an attachment for spring beard knitting machines, a yielding mounted bracket having a bifurcated end, a rock member pivotedly supported at said end, a burr wheel mounted to slide on said rock member, an arm mounted on said bracket and having a slot therein, a screw bolt projecting through said slot to hold said arm to said bracket in an adjustable manner, a spring connecting said rock member with said arm, and said arm adapted to hold said rock member against the tension of said spring.

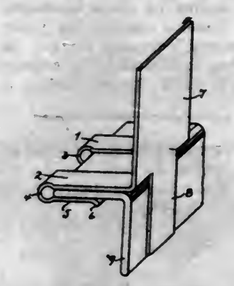
1,758,717. LATHE CENTER. SAMUEL W. GORDON, Canal Fulton, Ohio. Filed May 10, 1928. Serial No. 276,729. 1 Claim. (Cl. 82—33.)



A center including a body having a bore formed with a recess at one end, a head having a stem disposed in the bore and having an enlarged portion fitting in the recess, the outer face of the wall of the recess being formed with a rabbet, a bushing encircling the said enlarged portion within the recess, a bushing in said rabbet and partly projecting therefrom, a rearwardly extending flange on the head embracing said last-named bushing, and a retaining ring carried by the end face of the flange of said head and bearing against the rear end of the projecting portion of the last-named bushing.

1,758,718. MEANS FOR RETAINING MATTRESSES. LUCILLE TULL ROBINSON, New York, N. Y. Filed Sept. 6, 1928. Serial No. 304,364. 3 Claims. (Cl. 5—207.)

3. As a new article of manufacture, a mattress retainer comprising a flat plate having opposite edge portions partially severed therefrom and bent substantially at right angles to the plane of the plate, with that portion of the plate between said partially severed edge portions remaining in the original plane of the plate and constituting a continuation of the unsevered portion of the plate, said



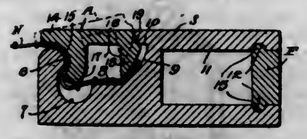
rectangularly extending arms terminating in hook ends individually engageable over the inner edge of a bed frame angle iron.

1,758,719. PROCESS OF MAKING PISTON RINGS. ALBA JOHN SMITH, Chicago, Ill., assignor to Gill Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed June 12, 1924. Serial No. 719,649. 15 Claims. (Cl. 29—156.63.)



1. In the process of making piston rings, the steps of forming each ring in a continuous form, of breaking each ring at a predetermined corresponding point thereof, of spreading each ring to a common internal diameter, and of holding each ring at said diameter while removing from each side of the break sufficient material to produce a gap of uniform width in all of said rings, the cut ring end then being adapted for closing to form a pressure retaining joint.

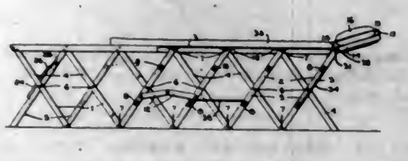
1,758,720. SCREEN. JOHN EDWARD SODERGREN, Minneapolis, Minn. Filed Jan. 14, 1929. Serial No. 332,339. 5 Claims. (Cl. 156—14.)



3. A screen having in combination, a frame comprising comparatively rigid rails and stiles joined together, a channel in one face of said frame adjacent the inner edge thereof, the inner wall of said channel having a rounded edge overhanging said channel and disposed at a lower level than the channeled face of said frame, the opposite wall of said channel having an overhanging locking edge, anchoring strips for the rails and stiles of said frame, each having a flange or lip at its longitudinal inner edge adapted to overlie the top of the rounded edge of the inner channel wall and having an arcuate rocking surface extending longitudinally of said strip inset from said flange and adapted to be fulcrumed on the rounded edge of said wall, said strip also having a netting engaging portion extending into said channel and defined at its inner edge by said rocking surface and terminating in spaced relation to the inner wall of said channel, the

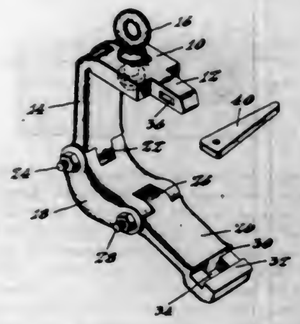
outer longitudinal edge of each strip having a shoulder below the outer face of the strip adapted to underlie the locking edge of the outer wall of said channel, and a sheet of wire netting having its edges extending between said flange and said rounded edge of the inner channel wall and about the netting engaging portion, the resiliency of the netting holding said shoulder in engagement with the locking edge of the outer channel wall.

1,758,721. CONVERTIBLE CHAIR AND FOLDING BED. SAUL SWARTZ, MEYER SWARTZ, and JACK SWARTZ, Cambridge, Mass. Filed June 22, 1927. Serial No. 200,727. 3 Claims. (Cl. 155—45.)



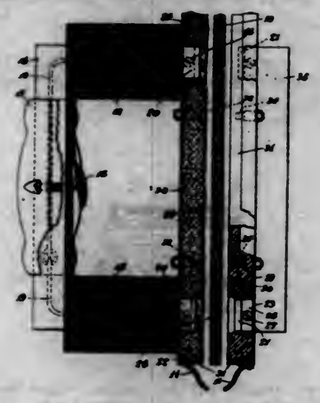
1. In a convertible folding bed and chair of the type having two folding side members and a fabric bed bottom supported thereby, the combination with said side members, of a rigid seat member hinged to the side members at one end thereof and adapted to fold over on top of the side members when the latter are folded thereby to form a seat and a pillow member hinged to the free edge of the seat member, said pillow member being supported by the seat member and forming a pillow when the side members are extended to form a bed, the dimension of said pillow member transversely of the bed being such that when the side members are folded and the seat member is in operative position with the pillow member folded underneath it, said pillow member will be situated between the folded side members, the hinge connection between the pillow member and the seat member being such as to permit the pillow member to fold over onto either side of said seat member.

1,758,722. TOWING BLOCK. RALPH F. SYMONDS, Marblehead, Mass., assignor to New England Trawler Equipment Co., Everett, Mass., a Corporation of Massachusetts. Filed Mar. 14, 1928. Serial No. 261,514. 3 Claims. (Cl. 294—83.)



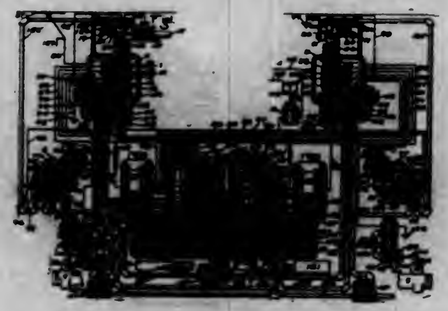
1. A towing block comprising a top plate with provision for suspension, an oppositely disposed curved bar having a low point adjacent to one end, a side member integral with said top plate pivotally supporting the end of the bar having the low point, and an articulated side member supporting the other end of said bar.

1,758,723. WINDOW CLEANER. CHARLES J. THATCHER, New York, N. Y. Filed July 22, 1927. Serial No. 207,630. 13 Claims. (Cl. 15—220.)



1. A magnetically controlled window cleaner, comprising a magnet and a cooperating follower adapted to operate over the opposite faces of the window, and a squeegee member carried by one of the operating magnetic members.

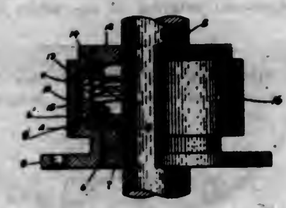
1,758,724. ELECTROPNEUMATIC BRAKE. THOMAS H. THOMAS, Edgewood, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Aug. 13, 1928. Serial No. 299,136. 33 Claims. (Cl. 303—15.)



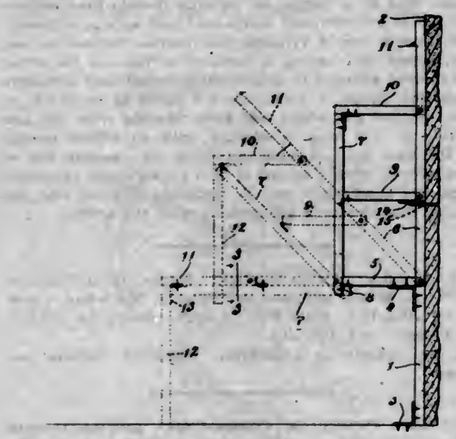
1. In an electro-pneumatic brake, the combination with a brake cylinder, of two valve devices for controlling communication through which fluid is released from said brake cylinder, one of said devices being operative at one time to supply fluid under pressure to said brake cylinder to effect a service application of the brakes and the other of said devices being operative at another time to supply fluid under pressure to said brake cylinder to effect an emergency application of the brakes, electrically controlled valve means operative to control the operation of one of said valve devices, and a valve, said valve and electrically controlled valve means being adapted to control the operation of the other of said valve devices.

1,758,725. STUFFING-BOX ASSEMBLY. GUYSBERT B. VROOM, Washington, D. C., assignor to Vroom Rotary Packing Corporation, a Corporation of Massachusetts. Filed May 28, 1925. Serial No. 33,566. 4 Claims. (Cl. 286—11.) (Granted under the act of March 3, 1883, as amended Apr. 30, 1928, 370 O. G., 757.)

1. A packing gland unit for a shaft comprising a housing, an internally threaded sleeve revolubly carried thereby, an externally threaded adjusting nut carried by the sleeve, a packing assembly non-revolubly carried by the nut, means whereby said assembly is feathered to and free to slide within said housing; the housing sleeve, adjusting nut and packing assembly being each removable from the other, and the packing assembly being removable with the nut from the sleeve.



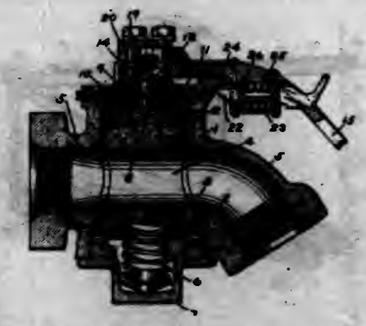
1,758,726. COMBINED SHELF AND FOLDING TABLE. HERBERT C. WEBB, Baltimore County, Md. Filed Jan. 19, 1929. Serial No. 333,714. 3 Claims. (Cl. 45—51.)



1. In a combined table and set of shelves, a fixed rectangular lower shelf, a pair of uprights each pivoted to one end of said shelf near the rear edge thereof, a second pair of uprights pivoted to the front edge of said shelf, one at each end thereof, and each having a portion projecting beyond the adjacent end of said shelf, a plurality of superposed parallel shelves, above and parallel to, and similarly pivoted on said uprights as, said fixed shelf, all of said shelves being separated from each other a distance approximately equal to the depth of said shelves, said plurality of superposed parallel shelves and said uprights being adapted to swing forwardly on their pivots to an approximately horizontal position to form a table in which the uprights near the rear of the shelves are supported by the projecting portions of said second pair of uprights at the front of the shelves.

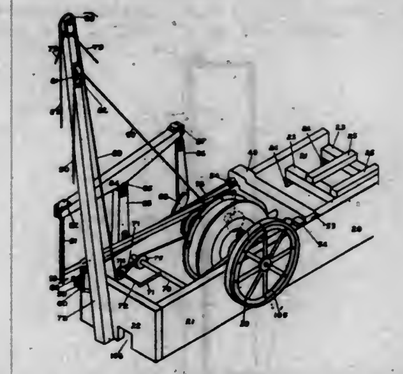
1,758,727. ANGLE-COCK DEVICE. GEORGE W. WILDIN, Pittsburgh, Pa., assignor to the Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed May 3, 1926. Serial No. 106,246. 3 Claims. (Cl. 251—97.)

1. The combination with a valve body having a valve seat and a plug valve engaging said seat and having a key portion, of a rotatable member engaging said key portion and having a bore in alinement with said key portion,



a pin in said bore engaging said key portion, a shaft rotatably mounted in said member, a cam on said shaft engaging said pin, and a handle secured to said shaft.

1,758,728. WELL-DRILLING RIG. THOMAS M. WILKINS, Sugar Grove, Pa., assignor of one-half to Allen Falconer, Jamestown, N. Y. Filed Dec. 16, 1926, Serial No. 155,173. Renewed Mar. 6, 1930. 3 Claims. (Cl. 255—11.)



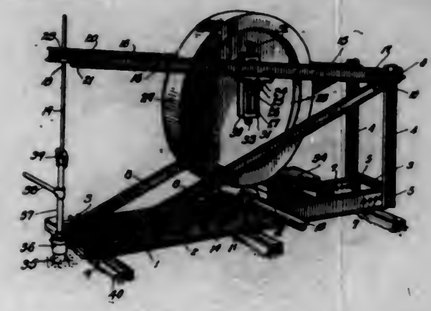
1. In a well drilling rig, including drilling mechanism, spudding mechanism and bailing mechanism, a drive wheel for actuating said mechanisms, said wheel having a pair of flanges, a strip secured to a portion of the inner face of one of said flanges, and means adapted to engage the strip on one flange, for intermittently rotating said wheel positively in one direction during the drilling and spudding operations, and adapted to engage the other flange for continuously rotating said wheel positively in the opposite direction during the bailing operations.

1,758,729. METHOD AND APPARATUS FOR SEVERING ELASTIC TUBULAR ARTICLES. GEORGE F. WILSON, Akron, Ohio, assignor to the B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed Jan. 25, 1929. Serial No. 335,052. 16 Claims. (Cl. 164—38.)



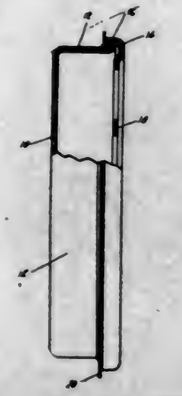
1. The method of severing elastic tubular articles which comprises placing a region of the article under longitudinal tension, and severing the article with a circumferential cut in said region.

1,758,730. PUMP UNIT. EDWARD B. WINTERS, Coffeyville, Kans. Filed Nov. 9, 1925. Serial No. 67,795. 11 Claims. (Cl. 74—14.)



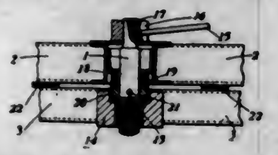
1. In a pumping unit, a driving element, a reciprocatory beam, a wheel supported on the driving element, a block adapted for radial adjustment on the wheel, and a shaft member on the block and journalled on the beam.

1,758,731. BRAKE DRUM. VINCENT BENDIX, Chicago, Ill., assignor to Bendix Brake Company, Chicago, Ill., a Corporation of Illinois. Filed June 2, 1927. Serial No. 195,995. 4 Claims. (Cl. 188—218.)



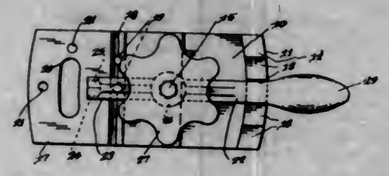
1. A brake drum having a cylindrical braking portion formed with an outwardly directed flange at its edge and having a part encircling said portion and forming a rib adjacent said flange, in combination with a backing plate having at its outer edge an integral flange encircling said flange of the brake drum and terminating immediately adjacent the side face of said rib.

1,758,732. MIXING MACHINE. JOHN FAULDER BURN, Westminster, London, and JOHN LANCASTER, Leamington Spa, England; said John Lancaster assignor to Winget Limited, Winget House, Grosvenor Gardens, Westminster, London, S. W. 1, England. Filed Sept. 21, 1928, Serial No. 307,436, and in Great Britain Oct. 6, 1927. 5 Claims. (Cl. 83—73.)



1. A mixing machine comprising a mixer unit and means for rotatably supporting the same on a vertical axis comprising bearer members one above the other, the lower bearer member being part of a chassis, the upper bearer being rotatable with the mixer unit relative to the chassis bearer, a vertical shaft extending between and connecting said bearers, in a central position, and means to prevent unintentional rotation of the mixer unit with its bearer.

1,758,733. DRILL-PRESS VISE. JULIUS N. CATO, Buchanan, Mich. Filed Feb. 25, 1927. Serial No. 170,958. 2 Claims. (Cl. 77—63.)



1. In a vise, a substantially flat body portion having an upwardly projecting flange arranged at one end thereof, said flange having a plurality of transversely ascending graduated steps formed on the upper edge thereof, a lever, a threaded post extending upwardly from said main body portion in spaced relation with said upwardly extending flange, said lever having an opening therein intermediate the ends thereof through which said post may be extended, said lever having a gripping jaw portion formed on one end thereof and having a rounded portion on the other end thereof adapted to be extended beyond said upwardly projecting flange, a hand wheel adapted to be fitted on said threaded post above said lever whereby when the jaw portion of said lever is engaged with an article resting on the main body portion and when the opposite end of said lever is resting on one of said transversely ascending steps said hand wheel may be tightened to force said jaw portion into clamping engagement with the article.

1,758,734. INSECTICIDE. HARRY V. MCCLELLAN, Seattle, Wash., assignor to Ernest S. McClellan, Crawfordsville, Ind. Filed Feb. 24, 1927. Serial No. 170,745. 4 Claims. (Cl. 167—14.)

2. An insecticide embodying powdered ferrous carbonate.

1,758,735. SWEEPING COMPOUND. EDWARD CONRAD, Toppenish, Wash. Filed Feb. 2, 1929. Serial No. 337,178. 8 Claims. (Cl. 87—5.)

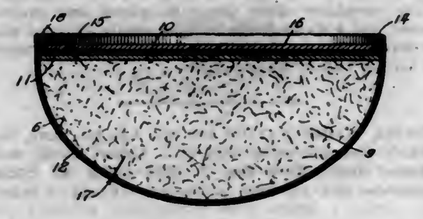
A sweeping compound consisting of a shredded fibrous material, a mineral oil, and cedar oil.

1,758,736. SPRING SUSPENSION FOR CYCLE AND MOTOR CYCLE SADDLES. JULIEN COURATIN, Par Clion, France. Filed Apr. 21, 1928, Serial No. 271,926, and in France Apr. 22, 1927. 3 Claims. (Cl. 208—100.)



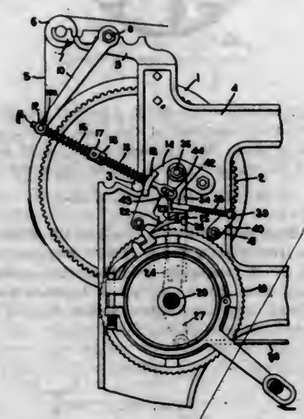
1. A suspension for cycle saddles including a spring, means for securing the forward end at a point on the cycle frame near the steering tube, a slidable guiding member attached adjacent the rear free end and for slidably fitting in the saddle tube of the cycle frame, an adjustable fulcrum for the spring, and a limiting means connected to the spring between the fulcrum and the guiding member.

1,758,737. PINCUSHION. DAVID H. CROSSER, Chicago, Ill., assignor of one-half to Henry A. Dormeyer, Chicago, Ill. Filed Oct. 17, 1927. Serial No. 226,669. 3 Claims. (Cl. 223—60.)



1. A pincushion, comprising a disk, a paper cover engaging with said disk and shaped to give the desired form for the cushion, a filling between the cover and the disk, and a cloth cover enclosing the paper cover.

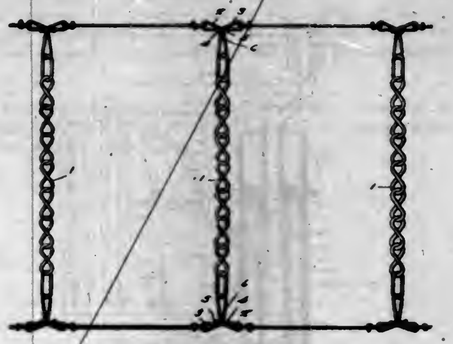
1,758,738. LET-OFF MECHANISM FOR LOOMS. CLARE H. DRAPER, Hopedale, Mass., assignor to Draper Corporation, Hopedale, Mass., a Corporation of Maine. Filed Feb. 23, 1928. Serial No. 256,087. 7 Claims. (Cl. 139—108.)



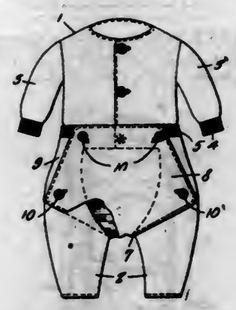
1. In a loom a warp beam, mechanism including a ratchet wheel and actuating pawl for rotating the warp beam to let off the warp, a pawl carrier for said pawl, means for advancing the pawl carrier to a fixed position at regular intervals, a movable arm having a retracting movement with the pawl carrier, means connected to a fixed part of the loom acting yieldingly to effect the retracting movement of the arm and pawl carrier, means controlled by the tension of the warp for limiting the retracting movement of the arm and means controlled by the diameter of the warp mass for limiting the retracting movement of the pawl carrier with respect to the arm whereby the actuating pawl after each advancing movement is yieldingly retracted to an extent determined both by the tension of the warp and by the diameter of the warp mass.

1,758,739. ANTISKID TIRE CHAIN. RAY C. EVANS, North River, Va. Filed May 4, 1928. Serial No. 276,105. 1 Claim. (Cl. 152—14.)

A chain link fastening for tire chains comprising aligned and right-angularly disposed loops respectively, the latter mentioned loop being of elongated formation, and both ends of the link body completing the aligned loops being locked about the neck portion of the right-angularly disposed elongated loop intersecting the aligned loops to prevent any of the loops from becoming accidentally displaced from its point of connection.



1,758,740. GARMENT. MAE E. GALE, Owosso, Mich. Filed Mar. 2, 1928. Serial No. 258,643. 1 Claim. (Cl. 2—78.)

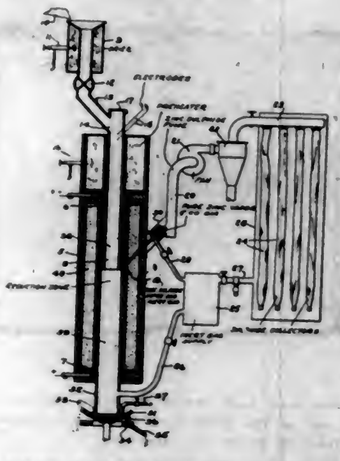


A garment of the character described comprising a body portion, leg portions formed with said body portion, the front and rear of said garment as well as the leg portions being cut away through the crotch thereof and to the waist to provide a relatively large opening having arcuate sides extending toward each other and in close proximity at the crotch, a crotch member to cover the opening, a rear flap and a front flap included in said crotch member, said flaps each having button holes arranged in pairs, said crotch member having inwardly directed arcuate sides to reduce the portion thereof arranged to close the opening at the crotch of the garment, buttons arranged in pairs upon opposite sides of the front of the garment to be received in the button holes of the flaps, and said rear flaps being directed about the sides of the garment to arrange the button holes thereof in the front of the garment whereby the crotch member can be readily removed.

1,758,741. PROCESS FOR MAKING ZINC SULPHIDE. EARL C. GASKILL, Red Bank, N. J. Filed Dec. 17, 1926. Serial No. 155,470. 5 Claims. (Cl. 23—135.)

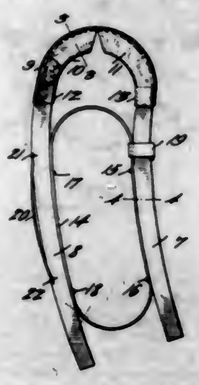
1. The process for making crystalline zinc sulphide which comprises heating raw zinc sulphide ore in a chamber from which air is excluded, and removing from the furnace and

chilling in a cloud in a non-oxidizing atmosphere the zinc sulphide vapor thus produced and in passing the resulting fume and non-oxidizing gas through a collecting medium to deposit the zinc sulphide.



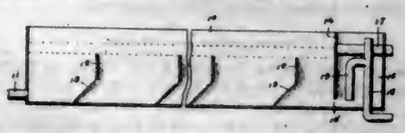
5. The process for making crystalline zinc sulphide pigment which comprises distilling zinc sulphide directly from zinc sulphide ore in an electric furnace of the vertical shaft type, and withdrawing the zinc sulphide vapor from the furnace by lowering the partial pressure of the zinc sulphide vapor.

1,758,742. SLEEVE FORM. MORRIS GOLDKOFF, Brighton Beach, Brooklyn, N. Y. Filed Nov. 26, 1927. Serial No. 235,918. 3 Claims. (Cl. 223—18.3.)



1. A sleeve form comprising forward and rear arm members and springs to press them elastically apart, in which the arm members are connected at their upper ends by an upwardly bowed spring and a concave pad is attached thereto and to the arm members to fit the shoulder.

1,758,743. OIL AND WATER SEPARATOR. JAY FLOYD HARMAN, Reno, Nev. Filed Apr. 5, 1929. Serial No. 352,808. 4 Claims. (Cl. 210—43.)



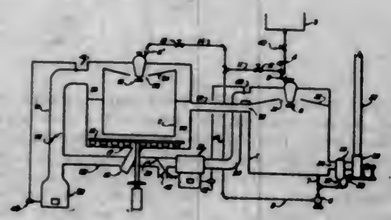
1. An oil and water separator comprising a receptacle, baffle plates carried thereby, screens mounted within the receptacle having connection with the bottom thereof and the adjacent portions of the baffle plates to facilitate the passage of the water content therethrough, said receptacle having a discharge chamber within one end, an oil discharge pipe horizontally disposed within the chamber and establishing communication at its ends between the interior of the receptacle above the baffle plates and exteriorly thereof, and a water discharge pipe wholly disposed within the chamber having the exit end thereof projecting through the bottom wall of the receptacle.

1,758,744. COMBINATION HOOK. LEO HAUBERT, Tulsa, Okla., assignor of one-eighth to Lyman Leroy Roller, Tulsa, Okla. Filed Feb. 7, 1928, Serial No. 252,620. Renewed Nov. 23, 1929. 6 Claims. (Cl. 24—230.5.)



3. In combination with a hook, a pair of separated prongs integral with the lower end of the hook having a provision for receiving a chain link between them; said jaws having curved faces to engage the end of the adjacent chain link.

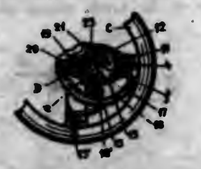
1,758,745. METHOD AND APPARATUS FOR OBTAINING SOLIDS FROM LIQUIDS. ARTHUR B. JONES, Plainfield, N. J., assignor to Industrial Associates, Incorporated, New York, N. Y., a Corporation of New York. Filed Aug. 5, 1926. Serial No. 127,472. 14 Claims. (Cl. 159—4.)



1. The method of obtaining solids from liquid, which comprises spraying the liquid in a concentrating chamber, spraying the concentrate, as produced, in a solidification chamber, passing a current of gas in series through the solidification and concentration chambers in the sequence specified, and introducing into the concentration chamber a supplemental current of gas at a temperature higher than the exit temperature of the gas from the solidification chamber.

10. Apparatus for recovering solids from liquids, comprising a concentration chamber and a solidification chamber, means for passing a current of gas through the solidification and concentration chambers in series in the sequence stated, and means for passing into the concentration chamber an auxiliary current of gas.

1,758,746. VEHICLE HEADLIGHT. ANTON KELLNER, Karlsbad, Czechoslovakia. Filed Apr. 18, 1927, Serial No. 184,513, and in Czechoslovakia Feb. 26, 1927. 1 Claim. (Cl. 240—61.)



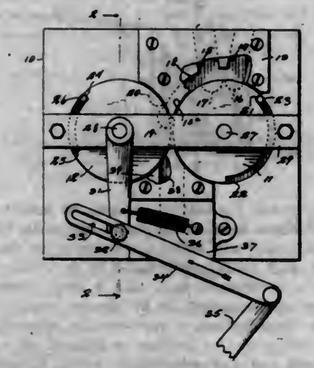
In a motor vehicle, the combination of a head light mounted for rotation in a horizontal plane, a casing mounted on the steering column of the vehicle, a toothed sector pivotally mounted in said casing, a handle carried by said sector and extending out of said casing to a position adjacent the rim of the steering wheel so as to be operable by a hand on said wheel independently of the movement of the latter, a pinion in said casing in mesh with said sector, a toothed rack secured to said casing and cooperating with said handle to hold the same in adjusted position, and rotary flexible means connecting said pinion to the head light.

1,758,747. HAIR CLIPPER. WILLIAM H. KELLY, Pittsburg, Kans. Filed Mar. 29, 1927. Serial No. 179,324. 1 Claim. (Cl. 30—1.)



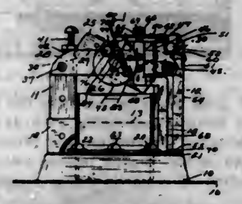
A hair clipper comprising a flat upper movable plate formed with an upwardly curved or concave offset jaw whose teeth are tapered or beveled outwardly to a point and a flat stationary lower plate having an offset jaw whose upper surface is curved to conform to the bottom face of the jaw of the upper plate and formed with outwardly beveled teeth coacting with those of the latter and straight co-operating shoulders formed at the back of the jaws of the upper and lower plates, the upper movable plate mounted to reciprocate back and forth on the lower plate and the lower plate provided in its upper face with transverse parallel grooves which extend entirely across the width thereof and prevent binding of the upper plate in the operation of the device.

1,758,748. COIN-ACTUATED MECHANISM. HENRY L. KISER, Adrian, Mich. Filed May 9, 1929. Serial No. 361,733. 9 Claims. (Cl. 194—83.)



1. A coin actuated mechanism including two disks, one of which is mounted upon a driving shaft and the other upon a driven shaft, the driven disk having in its periphery a coin recess, the driving disk having in its periphery a coin recess, means for guiding the coin into the recess of the driving disk, said coin when the driving disk is rotated, engaging in the recess of the driven disk and causing the common motion of the two disks, and means for limiting the rotations of thetwo disks, and means acting to urge the driven disk to its initial positon.

1,758,749. VOLTAGE CUT-OUT DEVICE. GEORGE W. KNIGHT, Milwaukee, Wis. Filed Apr. 2, 1926. Serial No. 99,242. 14 Claims. (Cl. 200—87.)



1. An instrument comprising an armature fulcrumed for oscillation, a potential coil associated with said armature for the influence thereof, a fixed contact, a magnetizable contact lever provided with a circuit controlling contact engageable with said fixed contact, and a cam of magnetizable material connected with said armature and arranged for interaction with said lever for the control thereof, said cam and lever being adapted to form a partial bridge path across the magnetic field established by said coil, whereby to counteract the effect of shock on said armature.

1,758,750. MATERIAL-HANDLING APPARATUS. SILAS A. KNOWLES, Denver, Colo. Filed Feb. 27, 1929. Serial No. 343,106. 6 Claims. (Cl. 198—104.)

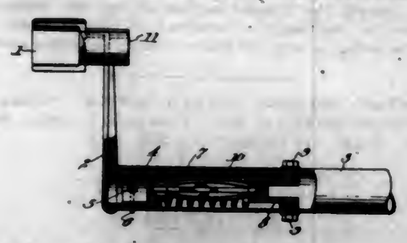


1. Apparatus for transferring material from one location to another comprising a rotatable inwardly opening circular trough into which the material is adapted to be delivered and in which the material is adapted to be retained by centrifugal force, a conduit, means arranged to scrape material from said trough and direct it into said conduit, the inner face of said trough being smooth to enable said scraping means to effectively scrape the material therefrom, and means for imparting to material delivered into said trough an initial velocity substantially equal to the velocity of said trough.

1,758,751. HIGH-TENSION-SWITCH MECHANISM. CARL G. KOPPITZ, Greensburg, Pa., assignor to Railway and Industrial Engineering Company, Greensburg, Pa., a Corporation of Pennsylvania. Filed Feb. 5, 1929. Serial No. 337,675. 11 Claim. (Cl. 200—48.)

1. In a switch of the high contact pressure type, the combination with switch jaws and a flattened contact ele-

ment, of operating mechanism for moving said element into and away from said jaws, means on said mechanism providing a pivotal support for said flattened element, yielding means retaining said element in such angular relation to said mechanism that said element is



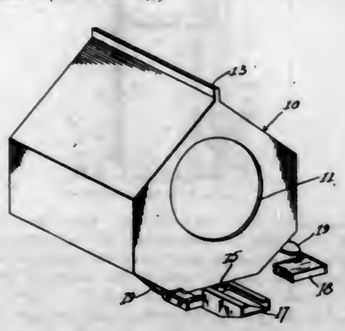
inclined to said jaws when moved into the same by said mechanism, and means cooperating with said mechanism to rotate said flattened element on said pivotal supporting means at the end of the closing motion and beginning of the opening motion of said operating mechanism.

1,758,752. MEANS FOR PROTECTING CONTACTS OF ELECTRIC SWITCHES. CLARENCE W. KUHN, Milwaukee, Wis., assignor, by mesne assignments, to Cutler-Hammer, Inc., a Corporation of Delaware. Filed Feb. 7, 1927. Serial No. 166,487. 6 Claims. (Cl. 200—146.)



1. The combination with relatively movable switch contacts, of an arcing element associated with said contacts, said element comprising an alloy of nickel and chromium.

1,758,753. HEN'S NEST. FRANK J. KUMMETH, Heron Lake, Minn. Filed Dec. 13, 1927. Serial No. 239,765. 3 Claims. (Cl. 119—45.)



1. A hen's nest comprising a box having a bottom provided with an elongated opening, an absorbent member supported in said opening, and a disinfectant receptacle slidably suspended on said absorbent member below the bottom of the box.

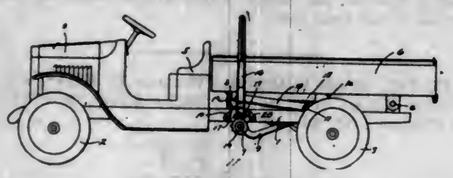
1,758,754. PRESSURE-ARM ATTACHMENT FOR BREAD-WRAPPING MACHINES. JOHN L. LONG and ROBERT OWEN, Madisonville, Ky. Filed Apr. 28, 1928. Serial No. 273,614. 1 Claim. (Cl. 93—2.)

An attachment for bread wrapping machines which is designed to contact with and exert a pressure upon the wrapped loaf of bread after the same passes through the sealer of the machine to insure a uniform sealing of the wrapper upon both the bottom and ends of the loaf; comprising a substantially inverted U-shaped frame supported upon the frame of the bread wrapping machine outward



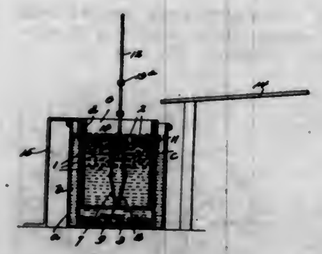
of the sealer thereof, laterally and longitudinally adjustable spring presser fingers supported on the U-shaped frame, each of said fingers comprising a downwardly arched member whose outer ends are rounded outwardly and merge into substantially rounded lips.

1,758,755. TOY DUMP CART. FRED A. LUNDAHL, Moline, Ill. Filed Mar. 24, 1924, Serial No. 701,403. Renewed Apr. 3, 1926. 2 Claims. (Cl. 298—19.)



1. In a toy dump-cart, a portable frame; a wagon body pivoted thereto; a pair of levers fulcrumed on said frame in spaced relation and having depending short arms and having a slidable connection with the wagon body; a shaft rotatably mounted on said frame; a crank-wheel fixed to said shaft; a pair of arms pivoted on opposite sides of said crank-wheel having bent portions adacent to said shaft, and diverging rearwardly to pivotal connections with the short arms of said levers; a ratchet-wheel fixed on said shaft; and a hand-lever, rockingly mounted, and adapted for alternative engagement with the teeth of said ratchet-wheel, to turn the same in one direction or the other, at will.

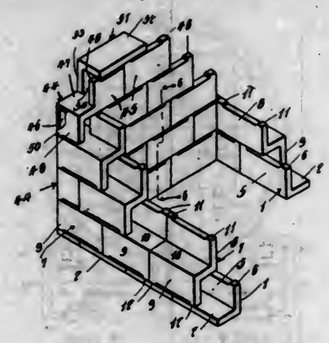
1,758,756. COAL AND REFUSE TESTER. HOPKIN MORGAN, Scranton, Pa. Filed Sept. 5, 1929. Serial No. 390,644. 5 Claims. (Cl. 209—173.)



1. An apparatus for testing samples of mixed coal and slate comprising a tank containing a liquid in which coal will float and slate will sink; a container for the samples to be tested, said container adapted to fit within the tank and having a perforated wall, and a trap having a perforated side wall adapted to fit closely within the container, said trap having a transversely extending hinge rod at its lower end, a bottom composed of two parts hinged to said rod and adapted to swing upwardly, and means extending to the top of the tank for swinging said parts.

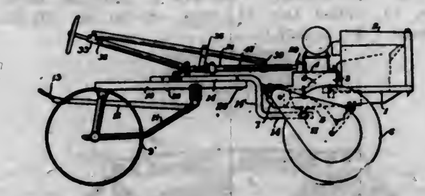
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1,758,757. BUILDING BLOCK OR TILE. HENRY H. NIEMANN, Muskogee, Okla. Filed Jan. 6, 1928. Serial No. 244,957. 1 Claim. (Cl. 72—39.)



A building block or tile comprising an interior vertical flange, an exterior vertical flange and an intervening horizontal tie web adapted to extend transversely of the wall, the interior flange extending upwardly from the tie web and the exterior flange extending downwardly from the tie web, and the flanges being provided at the ends of their free horizontal edges with relatively spaced lugs.

1,758,758. STEERING MECHANISM FOR TRACTORS. DENT PARRETT, Springfield, Ohio. Filed Feb. 19, 1927. Serial No. 169,614. 5 Claims. (Cl. 280—87.)



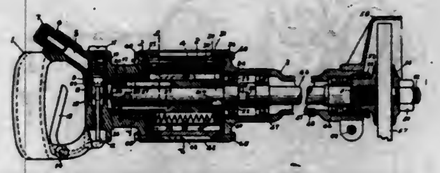
1. In a steering mechanism for a wheeled structure in which two wheels are connected by members having a vertical pivotal connection with the structure midway the wheels, a bracket having a rounded clamping portion, a rounded head clamped therein, a bearing and a guide carried by said head, a rotatable shaft mounted in said bearing and confined against longitudinal movement, said shaft being projected through said guide, a tubular member slidably mounted upon said guide into which said shaft extends, said tubular member and said shaft having interengaging screw threads, the forward end of said tubular members having an eccentric pivotal connection with the wheel connecting member, and manual means for rotating said shaft.

1,758,759. TELLURIAN. DAVID PHILLIPS, Daytona Beach, Fla. Filed July 10, 1928. Serial No. 291,656. 3 Claims. (Cl. 35—3.)



1. In a device of the character described, an earth-carrying arm mounted at its inner end to swing about a vertical axis representing the axis of the ecliptic circle, a support mounted on said arm intermediate of its ends for rotation about a vertical axis parallel with the ecliptic axis, a pole arm upstanding from said support at an angle to the vertical, an earth sphere mounted on said arm with its vertical axis in line with the axis of rotation of said support and with its polar axis coincident with that of said arm and inclined to the vertical axis, and a conical shadow fixedly mounted on said arm at the side of the earth opposite to the ecliptic axis with its longitudinal axis extending in right angular relation to the vertical earth axis and with the open end enclosing that half of the earth sphere diametrically opposite to the ecliptic axis, the lower edge of said open end being notched to embrace said pole arm and position the edge of the open end of said shadow in the vertical axis of the earth sphere.

1,758,760. AIR-DRIVEN IMPLEMENT OR TOOL. WILLIAM W. PRICE and CHARLES W. RIPSCH, Dayton, Ohio; said Ripsch assignor to said Price. Filed June 17, 1924. Serial No. 720,682. 8 Claims. (Cl. 121—34.)



4. In an implement of the character described, a cylinder section and a rotor mounted to rotate therein, such rotor having a system of air passages comprising air chambers with inlet and outlet ports, the latter discharging into the cylinder, pistons mounted in the rotor in advance of said latter ports and a sleeve valve mounted on the rotor to control the admission of air to said air chambers, whereby air will flow through such valve chambers and ports into the cylinder and exert pressure on said pistons during a part of their travel while extended into the cylinder, and whereby during the remainder of their travel they are driven by the expansion of the air so admitted.

1,758,761. SPRAYING APPARATUS. ARTHUR J. QULIA, Syracuse, N. Y., assignor to Emanuel Rickersberg. Filed Apr. 29, 1927. Serial No. 187,463. 6 Claims. (Cl. 299—84.)

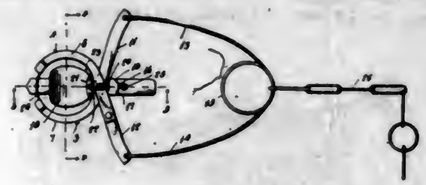


1. In a spraying device, the combination of a chamber, a stand-pipe in the chamber, a tube movably mounted in the stand-pipe, the tube being connected with a fluid supply, the stand-pipe being provided with upper openings and lower openings, the tube being provided with openings adapted to register with said openings of the stand-pipe at the same time, and means for causing suction at the lower end of said tube by the direct flow through said tube.

1,758,762. PROCESS OF DEVELOPING PHOTOGRAPHIC MATERIALS AND NEW PHOTOGRAPHIC DEVELOPERS. GUSTAV REDDELIEN and WERNER MÜLLER, Leipzig, Germany, assignors to Agfa Ansco Corporation, Binghamton, N. Y., a Corporation of New York. Filed July 19, 1928, Serial No. 294,050, and in Germany Aug. 18, 1927. 11 Claims. (Cl. 95—88.)

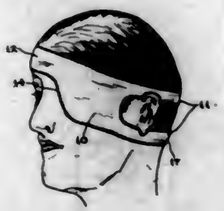
1. A new photographic developer containing with other developer-ingredients 2-hydroxyethylamino-1-hydroxybenzene.

1,758,763. ANIMAL TRAP. CHARLES M. REED, Kabletown, W. Va. Filed Apr. 25, 1929. Serial No. 358,071. 3 Claims. (Cl. 43—88.)



3. An animal trap, comprising a base, a pin supported on said base, jaws pivotally mounted on the pin, said jaws including fingers curved towards one another and adapted to engage an animal's leg, said jaws having arms extending in opposite directions from said pin, a contractile spring connecting the free ends of said arms, means to hold the jaws in set position and operable by an animal to release the jaws to the action of said spring, a circular frame secured to the base and enclosing said means, and a stop carried by the base and engageable with the jaws to limit their movement in sprung positions and prevent the engaged part of the animal moving out of said circular frame.

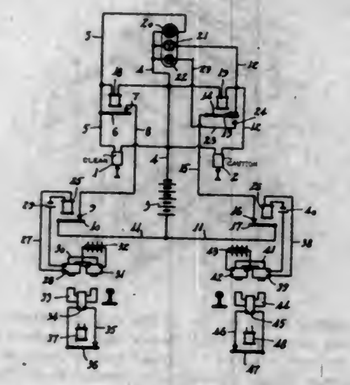
1,758,764. BANDAGE. ALVINA C. ROXBURG, McPherson, Kans. Filed Oct. 5, 1928. Serial No. 310,526. 3 Claims. (Cl. 128—163.)



1. A bandage having a body portion of a width to cover the eye or ear of the user, a single strap arranged at one end of the body portion and in continuation of the upper edge for extension part-way around the head, and spaced parallel straps at the other end of the body portion and arranged in continuation of the upper and lower edges thereof, said parallel straps extending around the head in the other direction to meet the single strap and when passing the ear to be arranged respectively above and below the same.

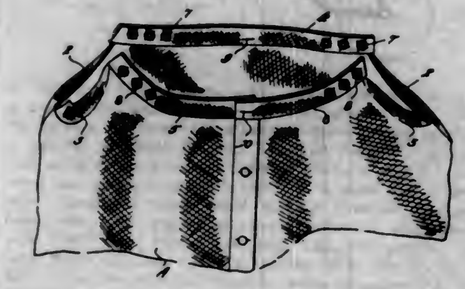
1,758,765. AUTOMATIC TRAIN CONTROL. DANIEL HERBERT SCHWEYER, Easton, Pa. Filed Feb. 27, 1928. Serial No. 257,345. 3 Claims. (Cl. 246—63.)

1. Train control apparatus comprising a plurality of electrical stick circuits each including a stick relay, control devices controlled by said relays, a plurality of vehicle-carried inductors each including a core with exciting and impulse coils thereon both energized by direct current, normally energized relays connected to the impulse coils



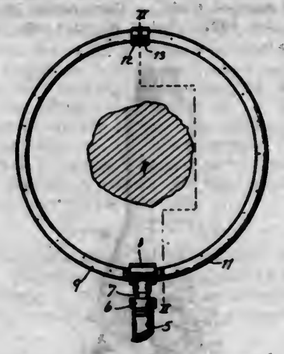
and having normally closed switches in said stick circuits, and trackside inductors for influencing the vehicle-carried inductors to deenergize the last named relays.

1,758,766. NECKBAND. THOMAS E. STAPLES, Burkeville, Va. Filed July 11, 1928. Serial No. 291,950. 1 Claim. (Cl. 2—127.)



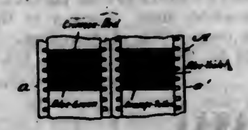
In a garment, a neck band therefor, said neck band comprising a rear section, front sections cooperating with the rear section for overlapping engagement therewith and being disposed on the inner sides thereof, said sections being of the same width, adjustable fastening means for securing the front sections to the rear sections in a manner to adjust the diameter of the neck band, said fastening means including members of snap fasteners secured in groups of threes upon the inner side of the rear section at the outer ends thereof, members cooperating with the members first mentioned and secured to the outer sides of the front sections at the ends thereof, said garment having a split yoke with the portions formed by the split secured to the respective sections, and a strip of material formed with one split portion and adapted to underlie the split when the sections are disposed in operative position through the instrumentality of the fastening means.

1,758,767. SPRINKLER. LOUIS E. TAGGART, near Palo Alto, Calif. Filed Apr. 26, 1929. Serial No. 358,316. 1 Claim. (Cl. 299—141.)



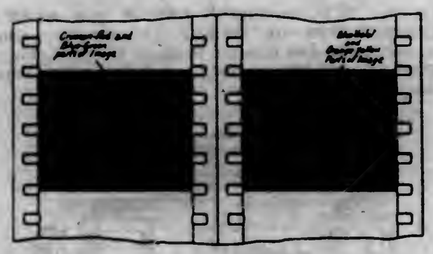
In a sprinkler, a pair of substantially semi-annular sprinkler heads pivotally connected at their inlet ends with a supply pipe and having their opposite ends closed, said sprinkler heads being adapted to lie in a common plane with each other, and jets formed in said heads so as to cross a series of concentric sprays.

1,758,768. MULTICOLOR CINEMATOGRAPH AND OTHER FILM. JOHN EDWARD THORNTON, London, England, assignor to John Owden O'Brien, Manchester, England. Filed May 5, 1924, Serial No. 711,254, and in Great Britain May 18, 1923. 3 Claims. (Cl. 95—2.)



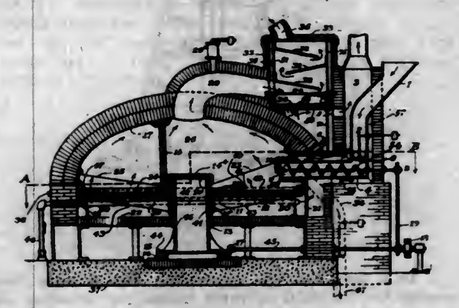
1. A double width multi-color screen-mosaic picture positive comprising a double width film of transparent material, a color-mosaic screen in two colors covering each half width of the double width film, an adhesive substratum between each color-screen and each half width of the film, and a half-picture of negative character upon each half width of the film superimposed on its own color-screen.

1,758,769. MULTICOLOR CINEMATOGRAPH AND OTHER FILM. JOHN EDWARD THORNTON, West Hampstead, London, England. Original application filed May 5, 1924, Serial No. 711,254, and in Great Britain May 18, 1923. Divided and this application filed Nov. 3, 1925. Serial No. 66,602. 5 Claims. (Cl. 95—2.)



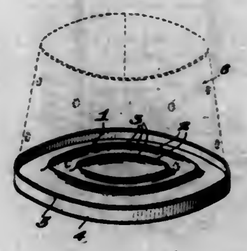
1. A method of producing a photograph in the form of a multi-color transparency which consists in photographically splitting the original scene or picture into two component half-pictures in two mosaic-color-screen images of negative character upon a transparent sensitized support of double-picture-area, each half-picture image representing a different pair of colors from the other and photographically reproducing from the half-pictures of negative character a further two half-pictures, but of positive character, upon another transparent support also of double-picture-area having a sensitized panchromatic emulsion layer attached to the support and two mosaic-color-screens formed side-by-side upon the support between it and the emulsion thereon, one screen representing and filtering one pair of colors and the other screen a different pair of colors.

1,758,770. RETORT. JAMES N. VANDEGRIFT, New York, N. Y., assignor to Charles M. Barnett, New York, N. Y. Filed June 8, 1923. Serial No. 644,122. 5 Claims. (Cl. 202—103.)



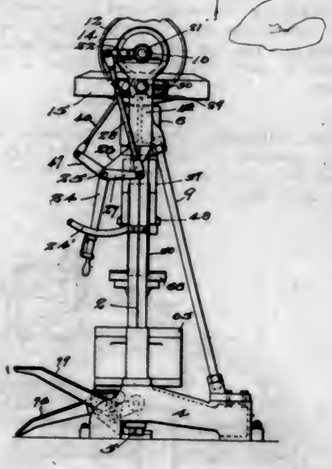
1. A retort comprising a revolvable spreading table, means for spreading carbonaceous material in an even layer upon said table, and means for removing the treated material from the table, comprising a blade adjacent to or touching the table to scrape the material therefrom and a blade arranged in advance of said first mentioned blade, said second blade being spaced from the table to permit the layer of material to pass thereunder adjacent to said first blade in the path of travel of the material but acting to prevent the material backing up when acted upon by the removing blade, and means for heating said table to evolve the vapors from the material thereon.

1,758,771. METHOD OF PACKING FRUIT. ROY E. WESTBROOK, Emmett, Idaho. Filed Mar. 5, 1929. Serial No. 344,424. 2 Claims. (Cl. 226—17.)



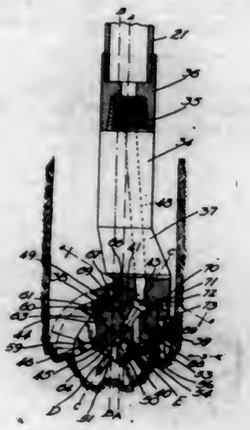
1. The method of packing fruit in baskets, which consists in placing a ring facer pad within the flange of the inverted lid, filling said pad with a layer of fruit, setting a liner on said lid flange, filling said liner with fruit, lowering the inverted basket over said liner, and securing said basket and lid together.

1,758,772. FRICTION TILE PRESS. FRANK B. YINGLING, Hamilton, Ohio, assignor to The Ceramic Machinery Company, Hamilton, Ohio. Filed Aug. 1, 1927. Serial No. 200,837. 4 Claims. (Cl. 24—45.)



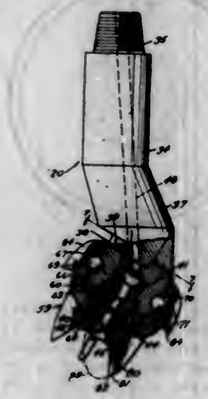
1. In a tile press the combination with a lower reciprocable die, of pedal operated means for elevating said die, a brake device for coaction with said pedal device, and a second pedal device for lowering said die.

1,758,773. METHOD OF AND BIT FOR CUTTING A HOLE LARGER THAN THE BIT. JOHN A. ZUBLIN, Los Angeles, Calif., assignor to Universal Engineering Company, Los Angeles, Calif., a Corporation of California. Filed Mar. 20, 1926. Serial No. 96,158. 22 Claims. (Cl. 255—71.)



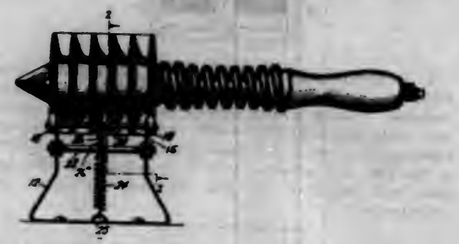
1. A rotary bit comprising: a body formed concentric of a body axis; an inclined pin extending downwardly from said body; and a cutter carried rotatably on said pin, said cutter having a plurality of pilot blades adapted to form a pilot bore eccentric of said body axis, and said pilot blades having outer curved faces generated around a point located on the rotating axis of the cutter.

1,758,774. BIT HAVING VERTICAL HAMMERING ACTION. JOHN A. ZUBLIN, Torrance, Calif., assignor, by mesne assignments, to Universal Engineering Company, Los Angeles, Calif., a Corporation of California. Filed Aug. 10, 1927. Serial No. 211,965. 15 Claims. (Cl. 255—71.)



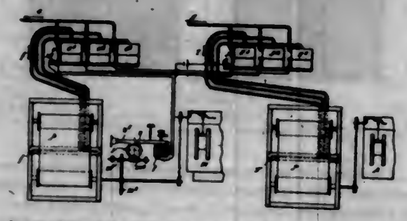
13. In combination: a drill column; means for rotating said drill column; a cutter carried by said drill column and adapted to be continuously rotated thereby; and means between said cutter and drill column for intermittently raising and dropping said drill column onto said cutter.

1,758,775. HEAT-DISSIPATING DEVICE. CHARLES C. ABBOTT, Pittsfield, Mass., assignor to General Electric Company, a Corporation of New York. Filed Mar. 27, 1926. Serial No. 98,041. 5 Claims. (Cl. 257—263.)



5. A holder for a soldering iron, comprising a plurality of relatively movable heat radiating members, and means for causing said members to engage the soldering iron when inserted in the holder.

1,758,776. SYNCHRONIZING DEVICE FOR MUSICAL INSTRUMENTS OR OTHER APPARATUS. EMILE AUBRY, Paris, and GABRIEL BOREAU, Versailles, France. Filed Jan. 24, 1928, Serial No. 249,136, and in France Jan. 27, 1927. 5 Claims. (Cl. 84—119.)



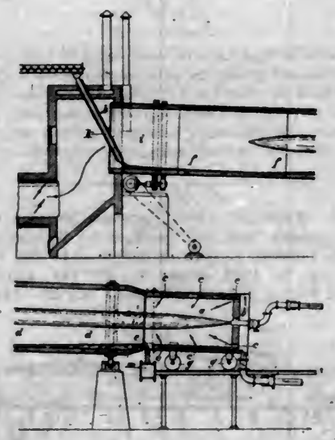
1. A synchronizing device for musical instruments and other apparatus controlled by a perforated sheet, said device comprising a conductor apparatus, a motor driving the same, a number of conducted apparatus, a motor driving each of said conducted apparatus, means for regulating the running speed of each said last mentioned motors, a set of pneumatically operated relay means for the conductor apparatus and each of the conducted apparatus, a tracker bar associated with each of said conductor and conducted apparatus, a perforated sheet associated with tracker bar and provided, in addition to the usual perforations controlling the operation of the respective apparatus, with auxiliary perforations adapted to cooperate with the respective tracker bar to actuate the said relay means, and to control thereby the speed regulating means of each of the motors driving the respective conducted apparatus, for the purpose described.

1,758,777. CONDENSER MICROPHONE. FREDERICK C. BARTON, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed June 18, 1928. Serial No. 286,107. 2 Claims. (Cl. 179—111.)



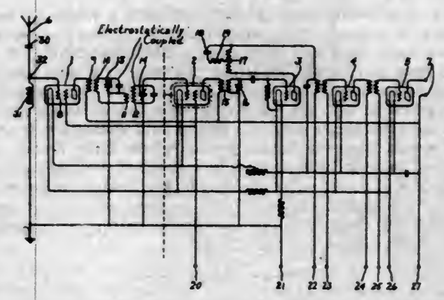
1. In a condenser microphone, a diaphragm, means for clamping said diaphragm including clamping surfaces comprising a plurality of successive sinusoidal grooves and ridges arranged to overlap the edge of said diaphragm, non-metallic rings interposed between said diaphragm and said surfaces and means arranged to force surfaces toward each other.

1,758,778. KILN FOR THE MANUFACTURE OF FUSED CEMENT. ANTOINE BAUCHÈRE and GABRIEL ARNOU, Paris, France. Filed Mar. 26, 1925, Serial No. 18,598, and in France Apr. 9, 1924. 3 Claims. (Cl. 222—7.)



1. Apparatus for making fused cement comprising an inclined rotary kiln, means for feeding the cement ingredients into the kiln at its upper end, the lower end of the kiln being open, a non-rotatable forehearth having an open end arranged close to the lower end of the rotary kiln, the latter having a discharge opening for liquefied fused cement at the joint between said rotary kiln and forehearth, a fuel nozzle entering said forehearth and directed longitudinally of said forehearth and kiln, the walls of said kiln being constructed of heat retaining material in a portion adjacent said forehearth and of heat dissipating material in the portion next removed from said forehearth, means for controlling the projection of a flame from said nozzle through said kiln so that the flame tip shall extend a slight distance into the chamber defined by the wall of heat dissipating material, said last named chamber being constructed of such length as to assure that the flame tip is in a region of endothermic reaction.

1,758,779. HIGH-FREQUENCY AMPLIFIER CIRCUITS. BURKE BRADBURY, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Mar. 2, 1928. Serial No. 258,558. 6 Claims. (179—171.)



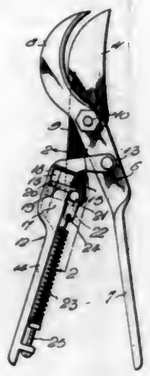
1. The combination in a radio receiving system adapted to receive signals within a specified range of frequencies, of a four-element screen-grid electron discharge device having a tunable link circuit closely coupled to its output circuit, and a second four-element screen-grid electron discharge device having a tunable input circuit, a portion of said tunable link circuit being coupled to the tunable input circuit of the second device by an electromagnetic coupling, said circuits being arranged to have a certain electrostatic coupling between them, and said couplings being so proportioned that the voltage transfer from the output circuit of the first device to the input circuit of the second device will be substantially uniform through the specified range of frequencies.

1,758,780. METHOD OF MAKING STONE-PLANER TOOLS. WILLIAM F. BROMM, Chicago, Ill. Filed Oct. 11, 1926. Serial No. 140,717. 3 Claims. (Cl. 76—101.)



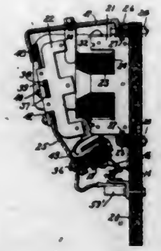
1. The method of making a high speed tool with a low carbon holder which consists in broadening and flattening one end of a bar of low carbon steel, in welding thereto under pressure a thin piece of high speed steel which extends the full width of the flattened portion, and in bending and grinding the edge so that the high speed steel is backed and supported by the low carbon material for the full length of the cutting edge.

1,758,781. PRESSURE-APPLYING TOOL. ERASMUS J. BURGER and ASA H. CAREY, Napa, Calif. Filed Jan. 19, 1928. Serial No. 247,914. 3 Claims. (Cl. 30—11.)



1. A pressure-applying tool comprising a relatively long lever, a comparatively short lever, a fulcrum connecting said levers near their front ends, a third lever fulcrumed at its front end to said relatively long lever at a point spaced behind the first named fulcrum, said third lever having a longitudinal slot near said front end thereof and a guard flange extending across one side of said slot and outwardly spaced from the slotted portion of the lever, a slide received between said slotted lever portion and said guard flange and having a lateral portion received in said slot, a pivot connecting said slide with the rear end of said comparatively short lever, and a roller on said pivot engaging the inner edge of said third lever.

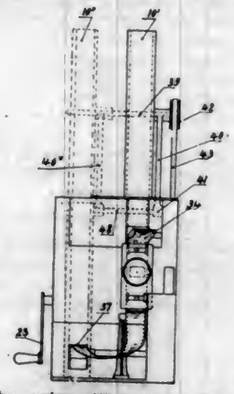
1,758,782. ELECTROMAGNET. EUGENE R. CARICHOFF, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Dec. 1, 1927. Serial No. 237,075. 14 Claims. (Cl. 175—338.)



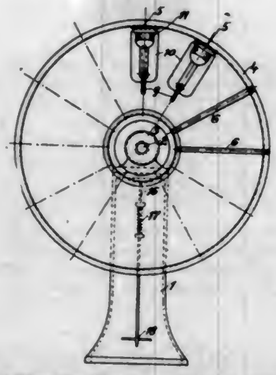
1. An electromagnetic device comprising a base, an electromagnet having a frame provided with slots therein and provided with a winding, clamping fingers secured to the base and engaging said slots to hold the frame in position, and an armature therefor cooperating with said frame and loosely mounted so as to be free to adjust itself in proper alignment with the frame.

1,758,783. TRANSPORTABLE APPARATUS FOR PROJECTING MOVING PICTURES. ANDRÉ LEON VICTOR CLEMENT DEBRIE, Paris, France. Filed Jan. 29, 1926, Serial No. 84,706, and in France Feb. 26, 1925. 2 Claims. (Cl. 88—17.)

1. A transportable apparatus for projecting moving pictures comprising a casing, an optic arrangement and a film driving mechanism inside said casing, a film feed reel, a take up reel, a removable box disposed inside the casing and containing the film feed reel, a box for storing the take up reel inside the casing, the removable box being adapted to be secured, the removable box being adapted to be secured outside the casing either above the second box or above the film driving mechanism and collapsible means for driving the film feed reel inside its box in either of its positions outside the casing.

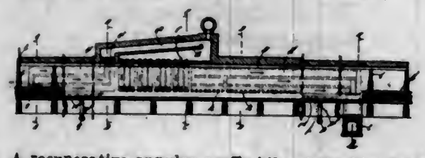


1,758,784. SOLE-SETTING MACHINE. ALBERT DEMNITZ, Dresden, Germany. Filed Apr. 21, 1925, Serial No. 24,825, and in Germany Sept. 12, 1924. 2 Claims. (Cl. 12—37.)



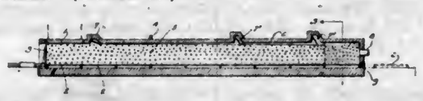
1. A sole setting machine comprising a standard having an axis disposed angularly with respect thereto, an upright annular member mounted for turning movement upon said axis, spaced pressing clamps carried at the inner periphery of the ring, and resiliently tensioned locking means mounted upon the standard and engageable with the member.

1,758,785. TUNNEL KILN. ARTHUR MCDOUGALL DUCKHAM, London, England, assignor to Woodall-Duckham (1920) Limited, London, England, a British Company. Filed Apr. 8, 1927, Serial No. 182,148, and in Great Britain Dec. 3, 1926. 11 Claims. (Cl. 25—142.)



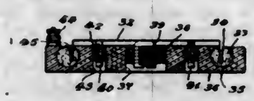
1. A recuperative annular muffle kiln of the kind herein referred to, wherein water vapour is removed, under control, from the kiln chamber at one or more points between the charging point and the zone of open heating, for the purpose set forth.

1,758,786. PROCESS OF AND FURNACE FOR EXTRACTING METALS FROM ORES. SVEN CARL GUNNAR EKELUND, Karskrona, Sweden. Filed Oct. 15, 1926, Serial No. 141,830, and in Sweden Oct. 19, 1925. 4 Claims. (Cl. 75—77.)



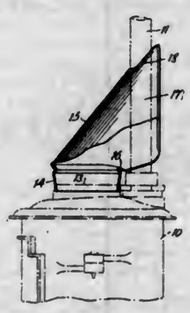
4. The process of treating ore in a stationary, substantially horizontal tunnel furnace, comprising introducing the ore in successive batches into the one end of the furnace and a stream of hot reducing gas from any source at a point adjacent the other end, letting the gas counterflow-wise meet the ore, the same gas only once passing the furnace channel, spreading the gas uniformly over the furnace section by means of bringing the ore to fill the furnace channel to its whole height width and length, causing the upper surface of the whole ore charge to come in close contact with the furnace roof, moving the ore batches step by step together with a movable inside furnace bottom through the furnace, successively charging fresh ore into the one end and discharging treated ore from the other, and preheating the ore prior to its reduction by introducing air into the reducing gas stream at a suitable point adjacent the charging end of the furnace for the combustion of reducing gas, which has already performed its essential reducing function, drawing off the flue gases at the charging end of the furnace.

1,758,787. THERMOSTAT. ARNOLD ESCHER, Raleigh, N. C. Filed July 21, 1925. Serial No. 44,999. 16 Claims. (Cl. 200—118.)



1. In a thermostat, a thin strip formed of monometallic material and having its ends fixed in position and maintained under a slight stress so that when the strip is heated to a predetermined degree said strip will suddenly buckle, and a contact for maintaining the strips under a slight stress.

1,758,788. ATTACHMENT FOR GAS WATER HEATERS. ALEXANDER H. FRANK, Columbia, Pa. Filed Jan. 19, 1928. Serial No. 247,996. 3 Claims. (Cl. 122—4.)

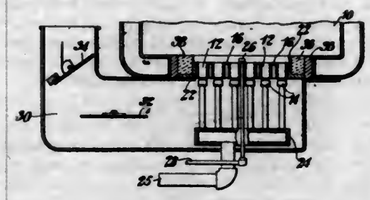


1. An attachment for gas water heaters having a vertical hot water discharge pipe, including a bifurcated cowl member adapted to receive said pipe between the furcations thereof.

1,758,789. STENCIL SHEET AND METHOD OF PREPARING COATING THEREFOR. PAUL A. GOLLNICK and NAOMI GOLLNICK, Chicago, Ill., assignors, by mesne assignments, to Selectograph Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 12, 1928. Serial No. 305,609. 15 Claims. (Cl. 41—38.6.)

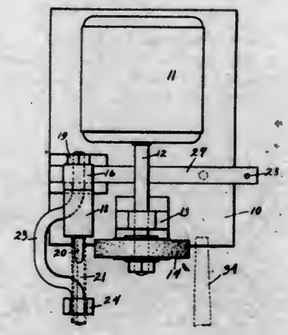
11. A stencil sheet carrying a coating including an uncoagulated colloidal protein in admixture with a vegetable drying oil, and a tempering agent.

1,758,790. GAS-BURNING DEVICE. JAMES P. FISHER, Bartlesville, Okla., BENJAMIN GREENFIELD, Jackson Heights, N. Y., and NOBLE M. HUTCHINSON, Oil Hill, Kans., assignors to Doherty Research Company, New York, N. Y., a Corporation of Delaware. Original application filed Jan. 10, 1924, Serial No. 685,319. Divided and this application filed Sept. 11, 1926. Serial No. 134,806. 6 Claims. (Cl. 158—99.)



1. In a gas burner, the combination of a plurality of uniformly shaped narrow bars each having a plurality of holes formed therein constituting open ended primary air-gas mixing tubes extending therethrough, said bars being arranged in spaced parallel relation to form relatively narrow passages therebetween for the passage of secondary air from adjacent the inlet to the outlet ends of said tubes, and gas jet members spaced from the bars and co-axial with the holes therein for directing the gas and inducing primary air into said tubes.

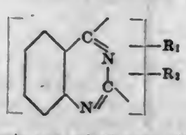
1,758,791. ADJUSTABLE FLYER-GRINDING DEVICE. ALBERT M. GUILLET, Charlotte, N. C. Filed Nov. 11, 1927. Serial No. 232,624. 5 Claims. (Cl. 51—234.)



1. In a grinding machine, a base portion, a rotary grinding implement, mounted on said base portion, a bell crank lever pivotally mounted on said base portion, a perforated member supported by said bell crank lever, a pin on the upper end of said bell crank lever located in alinement with the perforation in said perforated member, said perforation and pin being adapted to receive a tubular member, and means for swinging the bell crank lever to bring the tubular member in contact with the grinding means.

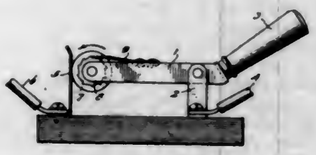
1,758,792. CONDENSATION PRODUCT OF THE BENZODIAZINE SERIES. WINFRID HENTRICH and MAX HARDTMANN, Wiesdorf-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Dec. 14, 1927, Serial No. 240,074, and in Germany Dec. 13, 1926. 3 Claims. (Cl. 260—32.)

1. As new products the compounds of the general formula:



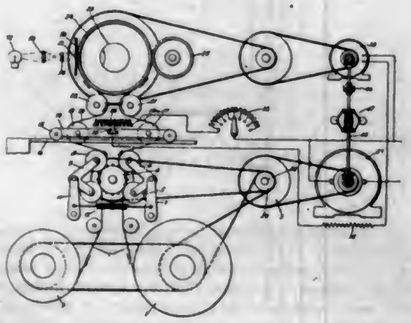
wherein R_1 represents any substituent which is attached to the benzo-diazine residue with a nitrogen, sulfur or oxygen atom and R_2 represents a substituted amino group, a substituted mercapto group or a substituted hydroxy group with the exception of an alkoxy group, being generally grayish powders soluble in water with a generally yellowish coloration, if they contain an acid group, and insoluble in water, if they are free form an acid group, and being valuable intermediate products in the manufacture of dyestuffs and pharmaceutical substances.

1,758,793. ELECTRIC SWITCH. JAY J. HOGAN, Stratford, Conn., assignor to The Bryant Electric Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Apr. 30, 1928. Serial No. 273,939. 4 Claims. (Cl. 200—164.)



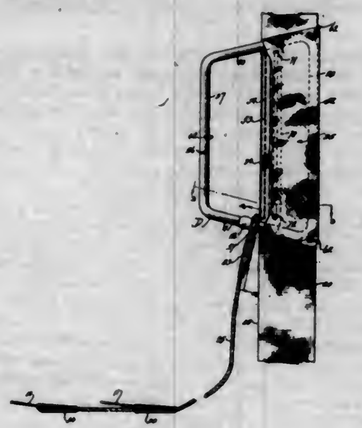
1. An electric switch having a fixed contact and a moving contact adapted to be in engagement therewith for a part of its movement, said contacts being adapted to make a rubbing surface engagement with each other when the switch is operated in one direction, and to provide a rolling contact in the other direction.

1,758,794. FILM DRIVING. CHARLES A. HOXIE, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Aug. 12, 1927. Serial No. 212,599. 10 Claims. (Cl. 271—2.3.)



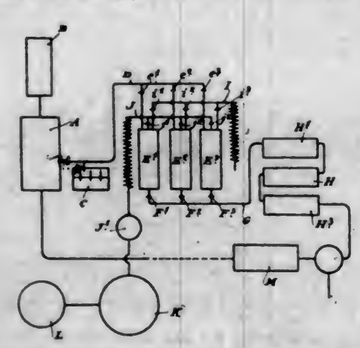
1. In apparatus for recording sound on a film or for reproducing sound from a film record, a film driving means, means for moving portions of the film toward and from said means, a movable member engaging respectively portions of the film approaching and leaving the driving means, and means responsive to the position of said member for controlling the speed of one of said means.

1,758,795. PARACHUTE-RIP-CORD CONSTRUCTION. LESLIE L. IRVIN, Buffalo, N. Y., assignor to Irving Airchute Company, Inc., Buffalo, N. Y., a Corporation. Filed Mar. 26, 1928. Serial No. 264,844. 11 Claims. (Cl. 244—21.)



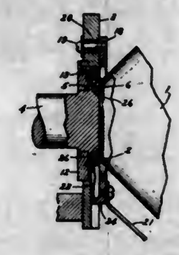
11. In parachute rip cord apparatus the combination of a rip cord body, a handle having an elongated hand inserting opening to facilitate free insertion of an aviator's glove covered fingers and hand and bounded at one longitudinal side by a long hand grasping bar, the handle remote from the hand grasping bar having relatively spaced portions with side marginal edges relatively inclined in a direction transverse from said hand grasping bar, means connecting the rip cord body to the handle at a location spaced from the long hand grasping bar, and expansible holding means releasably clamping upon the relatively inclined edges of the said spaced portions of the handle.

1,758,796. PROCESS FOR PRODUCING LIQUID FUELS. ALFRED JOSEPH, Paris, France, assignor to Societe Internationale des Procedes Prudhomme Houdry, Paris, France, a Limited Joint-Stock Company. Filed July 11, 1927, Serial No. 204,887, and in France July 21, 1926. 2 Claims. (Cl. 23—3.)



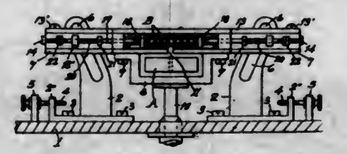
1. In a process of the type wherein hydrocarbon products to be treated are vaporized, subjected to catalytic purification to remove sulphur therefrom, and then subjected to hydrogenation with addition of hydrogen-containing gas thereto, the steps of passing a current of air through a contaminated purifying element to remove sulphur therefrom, then passing a current of water gas through said purifying element to convert the catalytic material to an active state, and then passing said vaporized products to be hydrogenated through said purifying element while continuing said current of water gas, thereby retaining the portion of said gas not employed in the conversion of said catalytic material for enriching said products and adding additional enriching gases thereto.

1,758,797. LOUD-SPEAKER. EDWARD W. KELLOGG, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Aug. 2, 1926. Serial No. 126,465. 19 Claims. (Cl. 179—115.5.)



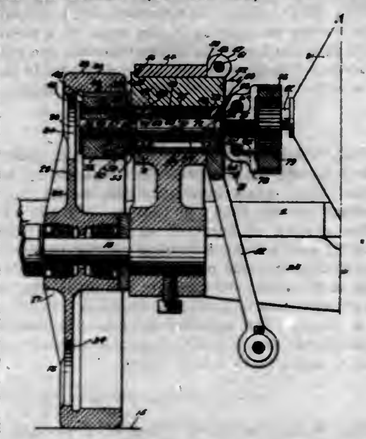
1. In an apparatus for reproducing sound, a diaphragm adapted to vibrate as a whole, an annular armature of magnetic material mounted thereon, a magnetic member cooperating with the armature, a winding mounted in a groove on said member adapted to actuate said armature and diaphragm, the air gaps between said member and armature being constant in length but variable in area.

1,758,798. WRAPPING MACHINE. JOAQUIN ALEMANY LOPEZ, Habana, Cuba. Filed May 17, 1928. Serial No. 278,503. 1 Claim. (Cl. 226—5.)



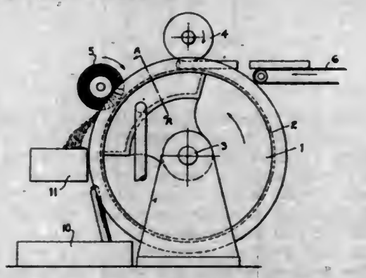
In a machine of the class described, a base, standards spaced with regard to each other and mounted upon said base, means for adjusting the standards with respect to each other, a third standard upon the base, plates having their relatively adjacent ends supported upon the last mentioned standard and spaced with respect to each other, means for imparting vertical movement to the last mentioned standard, plates supported above the first mentioned plates and in spaced opposed relation to eah other and between which articles to be packed and wrapped are to be inserted in a bunch, members mounted upon the first mentioned plates and slidably adjustable thereon, coacting means upon the said members and the standards for effecting such adjustment thereof in the upward and downward movement of the last mentioned standard, the said plates which are in spaced opposed relation being supported by the said members and means yieldably holding the plates in relatively diverging planes whereby when a bunch of articles is inserted between the more widely spaced sides of the plates and is moved between the plates, the urging of the plates to parallel position, by the inserted bunch, will effect compression of the articles to compact, mutually contacting form.

1,758,799. AMUSEMENT VEHICLE. ROBERT J. LUESS, Philadelphia, Pa. Filed Sept. 27, 1926. Serial No. 138,004. 11 Claims. (Cl. 180—70.)



1. In combination, a car wheel having a rim and a web, a car body having a movable bearing, a driving element for engagement with said rim and disposed adjacent to one side of said web, a shaft removably positioned in said bearing eccentrically of the axis thereof, one end of said shaft serving to support said driving element, a gear-wheel element detachably secured to the other end of the shaft, and actuating means for said movable bearing, whereby said driving element may be actuated relative to said rim, said web having an aperture through which said driving element and said shaft may be passed upon disengagement from said gear-wheel element.

1,758,800. CIGARETTE MACHINERY. WALTER EVERETT MOLINS, London, England. Filed July 2, 1928, Serial No. 289,930, and in Great Britain July 4, 1927. 11 Claims. (Cl. 131—37.)



1. In a machine for recovering tobacco from defective cigarettes, the combination with means for slitting the cigarette paper, of pneumatic means for unfolding the slit paper, and means for separating the tobacco from the paper.

1,758,801. OPTICAL DEVICE. BERTRAM MOSES, Garden City, Kans. Filed Aug. 8, 1927. Serial No. 211,478. 4 Claims. (Cl. 88—1.)



2. A device of the class described comprising a casing open at its opposite ends, transparent members closing the

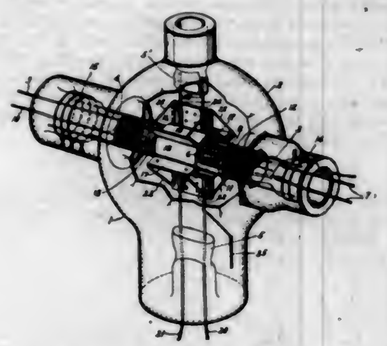
open ends of said casing, prisms disposed in said casing, means for rotating said prisms, an opaque member having a restricted sight opening in the same abutting one side of one of the said transparent members, and a second opaque member having an opening in the same of a greater area than the said sight opening abutted against one side of the other of said transparent members, said prisms being disposed in alinement with the said sight openings.

1,758,802. PROCESS OF RESOLVING OIL EMULSIONS AND REAGENTS THEREFOR. FREDERICK H. PENN, Dallas, Tex. Filed Dec. 28, 1925, Serial No. 77,981. Renewed Apr. 20, 1928. 20 Claims. (Cl. 196—4.)

1. The process of breaking or resolving emulsions of mineral oil and water comprising adding thereto an acid derivative of a mineral oil and a fatty acid glycerid and causing such added materials to act upon the emulsion until such emulsion is broken or resolved.

11. A reagent for breaking or resolving emulsions of mineral oil and water containing an acid derivative of a mineral oil and a fatty acid glycerid.

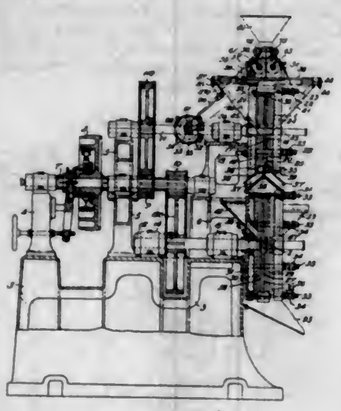
1,758,803. VACUUM TUBE. OTIS W. PIKE, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Mar. 14, 1927. Serial No. 175,056. 8 Claims. (Cl. 250—27.5.)



1. An electron discharge device comprising a container having oppositely disposed reentrant portions provided with stems, a reentrant portion positioned at an angle with respect to said stems, a filamentary electrode supported from one of said stems, a grid supported by the other stem, a shielding electrode surrounding said filamentary electrode and grid and supported by one of said reentrant portions, said shielding electrode extending substantially the entire distance between said stems and an anode surrounding said shielding electrode and supported from said angularly-positioned reentrant portion.

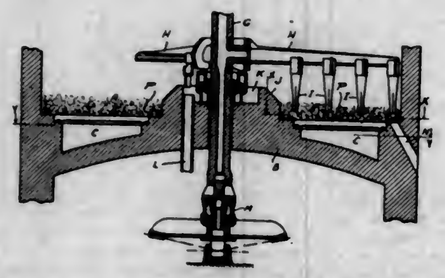
1,758,804. APPARATUS FOR PRODUCING REFINED COCOA LIQUOR FROM COCOA NIBS AND THE LIKE. WILLIAM EDWARD PRESCOTT, Harrow, England, assignor to Baker Perkins Company, Incorporated, Saginaw, Mich., a Corporation of New York. Filed Dec. 22, 1927, Serial No. 241,943, and in Great Britain Dec. 22, 1926. 12 Claims. (Cl. 83—8.)

1. Apparatus for producing refined cocoa liquor from cocoa nibs, said apparatus being of the type including reducing apparatus for rough grinding the nibs, refining apparatus for producing refined cocoa liquor from the rough ground liquor produced in said reducing apparatus, characterised by the fact that said reducing apparatus and said refining apparatus each comprises a disk rotatable between and cooperating with two stationary disks to provide two independent grinding spaces; that a preliminary proportioning means is provided for delivering unground material at a predetermined rate of flow to each of the said two independent grinding spaces of said reducing apparatus, and that means are provided for delivering the rough ground liquor discharged from one grinding space



of said reducing apparatus to one grinding space of said refining apparatus and for separately delivering the rough ground liquor from the other grinding space of the reducing apparatus to the second grinding space of the said refining apparatus, whereby no further proportioning of the material undergoing refining treatment is necessary.

1,758,805. APPARATUS FOR SUBJECTING A MASS OF POWDERED OR GRANULAR MATERIAL TO THE ACTION OF GASES, PARTICULARLY APPLICABLE TO THE CALCINING AND ROASTING OF ORES AND SIMILAR MATERIALS. HARRY MACKENZIE RIDGE, London, England. Filed May 9, 1928. Serial No. 276,487. 2 Claims. (Cl. 263—26.)

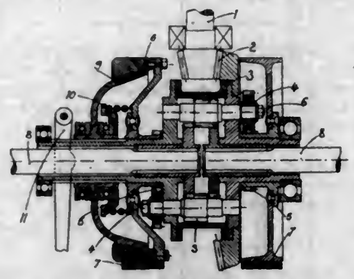


1. Apparatus for disseminating air or other gas or gases through a mass of pulverulent, granular or lumpy material disposed in a bed of substantially uniform depth, comprising a floor; means forming an annular space above said floor; radial partitions dividing said space into gas chambers; means for admitting gas to said chambers; and roofs for said chambers comprising radially arranged grate bars.

1,758,806. STEERING OF ENDLESS-TRACK VEHICLES. LEON SAIVES, Billancourt, France, assignor to Société Anonyme des Usines Renault, Billancourt, France, a Corporation of France. Filed Nov. 8, 1926, Serial No. 147,015, and in France Dec. 11, 1925. 3 Claims. (Cl. 180—92.)

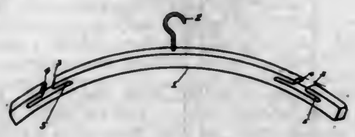
1. In a steering control for endless track vehicles, separate drive shafts for each track, differential gearing for

actuating each shaft including braking means for the respective sections of the differential, a clutch for effecting locking of the differential sections and the drive shafts



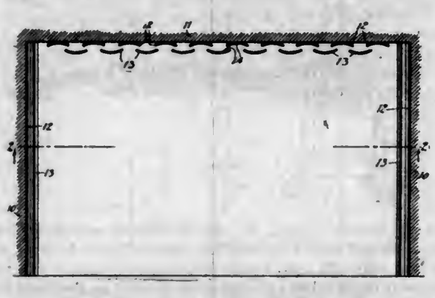
together for driving in a straight line, and interconnected means for releasing the clutch when either brake is applied and for releasing the brakes when the clutch is applied.

1,758,807. GARMENT HANGER. THERESE SERPOSS, Washington, D. C. Filed Feb. 8, 1927. Serial No. 166,690. 2 Claims. (Cl. 223—64.)



2. In a garment hanger comprising a substantially arcuate body, a terminal portion integral with the body having an elongated channel provided with approaching overhanging walls forming a narrow entrance to the elongated channel.

1,758,808. MEANS FOR ACOUSTICAL CORRECTION AND SOUND DEADENING. FRED J. SEABEN, Brooklyn, and KENYON B. CONGER, Jr, Ardsley-on-Hudson, N. Y. Filed June 15, 1927. Serial No. 199,026. 6 Claims. (Cl. 181—30.)



1. An acoustical correction and sound deadening means, comprising the combination with a chamber wall or ceiling, of series of spaced elements of predetermined potential vibratory responsiveness, positioned with respect to said wall or ceiling, said series of elements disposal respectively in relatively different planes.

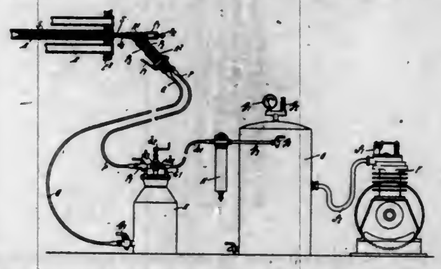
1,758,809. TRAFFIC-SIGNAL REFLECTOR FOR MOTOR VEHICLES. WALTER J. SHOEMAKER, Hamburg, N. Y. Filed Feb. 10, 1928. Serial No. 253,434. 3 Claims. (Cl. 88—1.)

1. The combination with a motor vehicle and a signal lamp reflector mounted on the forward part of the motor vehicle beyond the windshield, including a reflecting surface for reflecting traffic signal lamps from the signal lights to the driver, said reflector having an externally



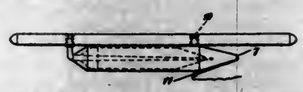
convex body facing upwardly, and being provided with a lower reflecting surface, the reflecting surface having a plurality of flat sides disposed in acute angular relation.

1,758,810. METHOD OF AND IN APPARATUS FOR TREATING THE TUBES OF SURFACE CONDENSERS AND THE LIKE TO PREVENT CORROSIVE ACTION. JOHN AUSTIN and HARRY SMITH, Liverpool, England. Filed Dec. 16, 1925, Serial No. 75,797, and in Great Britain Dec. 30, 1924. 1 Claim. (Cl. 91—68.)



The improved method of protecting the inferior surfaces of the tubes of surface condensers so as to provide the said surface with a non-corrosive coating sufficiently thin so as not to substantially diminish the heat transmitting efficiency of the tube, but sufficiently even, continuous and tough to resist the corrosive action, characterized as follows,—cleaning the tubes in situ in the condenser by abrasive action; then blowing through the tubes jets of compressed air to remove the dust and dirt detached by the abrasive action; then applying in the form of a spray a first coating of paint containing bitumen or the like tough plastic adhering substance mixed with a suitable drier liquid; then rendering the first coating even, and dealing with the pools of paint which may be formed, by brushing; then drying the first coating by circulating air through the tubes; then applying a second coating of the paint; then rendering the surface of the second coating even by brushing and finally drying the second coating by a supply of air; each coating process being applied by spraying to coat the end surfaces of the tube, ferrule and the adjacent portions of the tube plate; substantially as described.

1,758,811. SHUTTLE FOR LOOMS. FERDINAND SOUCZEK, Reichenberg, Czechoslovakia. Filed July 20, 1927, Serial No. 207,301, and in Czechoslovakia July 26, 1926. 8 Claims. (Cl. 139—197.)



5. A shuttle body and a bobbin-enclosing carrier frictionally secured to the body to permit ready detachment of the carrier.

1,758,812. ASPIRATING HEAD FOR FLOWING LIQUIDS. GEORGE MCWILLIE WILLIAMSON and GLASGOW WATKINS HAYWOOD, Shreveport, La. Filed June 25, 1928. Serial No. 288,043. 4 Claims. (Cl. 103—260.)

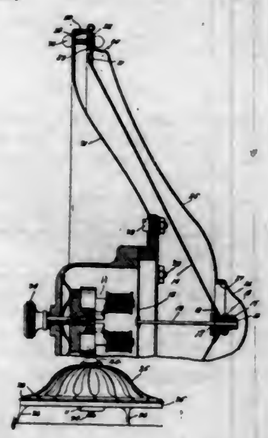
1. An immersible liquid lifting head comprising a depending pressure gas feeding tube, an outer sleeve sus-

pended and supported at its upper end from said tube at a point above its lower end and depending to a point below the lower end of said tube in concentric spaced relation thereto, a jet tube of larger diameter than said gas tube joined at its upper end to the lower end of the gas tube and depending therefrom, said jet tube being spaced from the inner wall of said outer sleeve and having an enlarged upper end concentric with said gas tube and provided with an annular series of upwardly directed jet passages therethrough substantially concentric with and circumferentially outward from the lower end of said



gas tube, an internal seat on said outer sleeve receiving and supporting the enlarged upper end of said jet tube and providing passages for the flow of liquid upwardly therethrough, an elongated inverted tubular gas pressure dome having its open upper end jointed to the lower end of said jet tube and depending therefrom in alinement therewith, and an independent Venturi nozzle interposed between the upper end of said jet tube and said outer sleeve in spaced concentric relation thereto and supported at its lower end by said internal sleeve seat outwardly of and enclosing the upper jet end of said jet tube.

1,758,813. TELEPHONE DEVICE. ARTHUR PRIMROSE YOUNG, Kenilworth, and JOHN H. BUTCHER, Rugby, England, assignors to General Electric Company, a Corporation of New York. Filed Aug. 18, 1925, Serial No. 51,032, and in Great Britain Oct. 21, 1924. 4 Claims. (Cl. 181—31.)



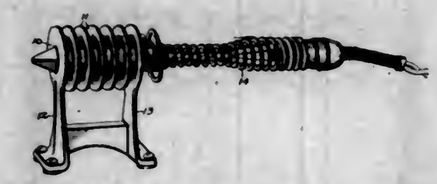
1. In combination, a substantially conical shaped diaphragm, a vibrator member, an adjustable connection between the vibrator member and diaphragm, and a cover member secured at the edge of said diaphragm, said cover member having a removable portion adjacent said adjustable connection.

1,758,814. ROTARY BIT HAVING RECIPROCATING MOTION. JOHN A. ZUBLIN, Los Angeles, Calif., assignor to Universal Engineering Company, Los Angeles, Calif., a Corporation of California. Filed Sept. 8, 1925. Serial No. 54,874. 31 Claims. (Cl. 255—71.)



1. A bit for use in drilling wells comprising: a body adapted to be rotated about a vertical axis; a cutter mounted to turn freely on said body about an inclined axis; and prongs formed on the bottom of said cutter projecting downwardly therefrom a sufficient distance so that the lower ends of said prongs swing inwardly from a point near the circumference of the well to a point near its center as the bit is rotated, said prongs having a length equal to about one quarter the diameter of the hole to be produced.

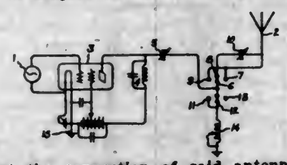
1,758,815. SELF-CONTAINED HEATED DEVICE. CHARLES C. ABBOTT, Pittsfield, Mass., assignor to General Electric Company, a Corporation of New York. Filed Aug. 16, 1923. Serial No. 657,773. 2 Claims. (Cl. 257—263.)



2. A cooling stand for self-contained soldering irons comprising a hollow cylindrical member made of heat conducting material into which the soldering iron is inserted, and heat dissipating vanes on said member so arranged that heat is received from said iron at a rate having a predetermined ratio with respect to the rate at which heat is imparted to the soldering iron so as to approximate actual working conditions.

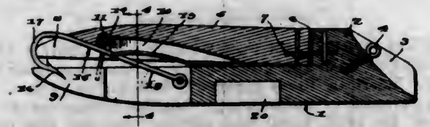
1,758,816. RADIO TRANSMITTING SYSTEM. PAUL D. ANDREWS, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed June 5, 1929. Serial No. 368,669. 3 Claims. (Cl. 250—17.)

1. In combination, an antenna, a source of oscillations of frequency variable over a wide range, said source having a ground connection, a connection between said source and said antenna, coupling means connected between said connection and ground, said coupling means being variable substantially to resonate with the impedance of said antenna over a range of frequencies, whereby said antenna is principally current fed from said source over said range of frequencies and switching means arranged



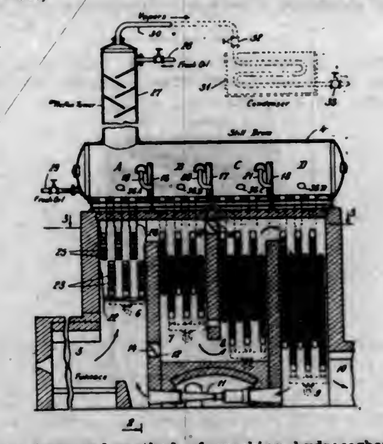
to interrupt the connection of said antenna with said coupling means and make another connection whereby said antenna is principally voltage fed from said source at other frequencies.

1,758,817. FISH LURE. ELWIN J. BABBITT, Holland, Mich. Filed Dec. 28, 1928. Serial No. 329,006. 2 Claims. (Cl. 43—35.)



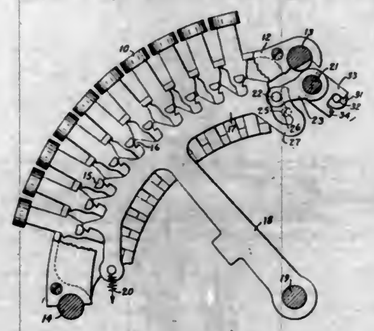
1. A lure comprising a body having a cut out portion terminating adjacent one end in an abutment, a section conforming to the shape and filling said cut out portion being pivotally connected at one end adjacent said abutment, said movable member and said body having longitudinally extending registering slots opening through the rear ends thereof, a substantially inverted U-shaped catch member spanning the slot in the body member with the legs thereof converging intermediate their ends to form a hook shank clamp whereby the hook is yieldably held within the lure, a spring mounted in the path of the hook to engage it when set and exert its tension in a direction to project the hook when released, said movable section having a portion engaging said hook when the latter is set whereby the sections are held separated at their free ends and adapted to force the hook outward externally of the lure when the movable jaw or section is closed.

1,758,818. ART OF CRACKING HYDROCARBON OILS. JOHN E. BELL, deceased, Brooklyn, N. Y., by Lola R. Bell, executrix, Brooklyn, N. Y., and Edward W. Isom, Locust Valley, N. Y., assignors to Sinclair Refining Company, New York, N. Y., a Corporation of Maine. Filed Jan. 22, 1925. Serial No. 3,984. 8 Claims. (Cl. 196—59.)



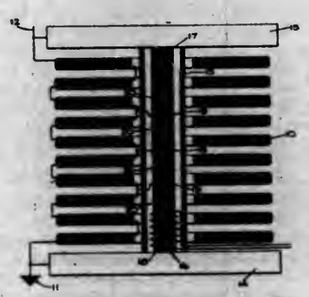
2. An improved method of cracking hydrocarbon oils, which comprises heating a body of oil to a cracking temperature under pressure by circulating oil from the body in heat exchanging relation with heating gases and back to the body, subjecting the vapors from the cracking operation to a refluxing operation, and circulating the reflux at a more rapid rate in heat exchanging relation with the heating gases before the heating gases are brought into heat exchanging relation with the oil in the first said heating operation.

1,758,819. CASH REGISTER. FRIEDRICH W. F. BERGER, Berlin, Germany, assignor to The National Cash Register Company, Dayton, Ohio, a Corporation of Maryland. Filed May 28, 1927, Serial No. 195,051, and in Germany July 5, 1926. 5 Claims. (Cl. 235—27.)



1. In a machine of the class described, a plurality of banks of depressible keys divided into two groups, a releasing detent for each bank of keys, a release shaft capable of receiving a given movement upon operations of the machine and capable of receiving a greater movement by manual means, a rod fixed to said shaft and cooperating with the releasing detents of one of the groups of said banks of keys for releasing the depressed keys during an operation of the machine, a second rod free on said shaft and cooperating with the releasing detents of the second group of said banks of keys, and a slot and pin connection between said rods for moving the second rod a shorter distance than the first rod to prevent release of the depressed keys in said second groups of banks of keys during an operation of the machine.

1,758,820. ELECTRICAL INDUCTION APPARATUS. JOSEF BIERMANNS, Karlshorst, Germany, assignor to General Electric Company, a Corporation of New York. Filed Oct. 22, 1929, Serial No. 401,573, and in Germany Nov. 1, 1928. 4 Claims. (Cl. 175—356.)

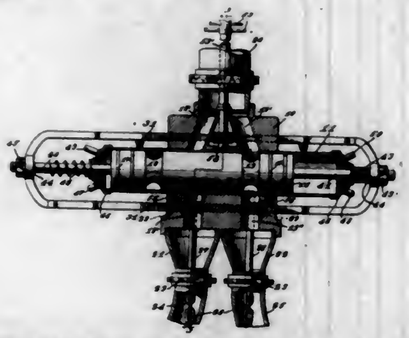


1. An electrical induction apparatus including a magnetic core having end yokes, and a winding extending be-

tween said yokes, said yokes being insulated from each other, and each yoke being conductively connected to the adjacent end of said winding.

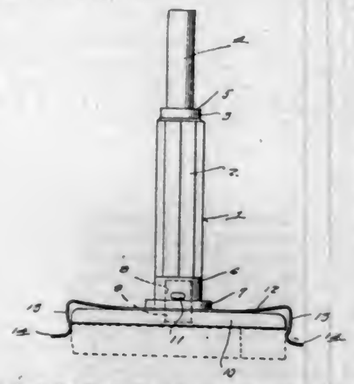
4. An electrical induction apparatus including a magnetic core having a winding leg, a high voltage winding distributed along and surrounding said winding leg, and a low voltage winding surrounding said winding leg and concentrated near one end thereof, said winding leg having sections insulated from each other, and each of said sections being conductively connected to an adjacent part of said high voltage winding.

1,758,821. RAIL-SANDING DEVICE AND CLEANER THEREFOR. ROY R. BIRCHFIELD, Holly Ridge, La., assignor of one-half to I. F. Cryer, Bossier Parish, La. Filed July 6, 1929. Serial No. 376,348. 2 Claims. (Cl. 291—5.)



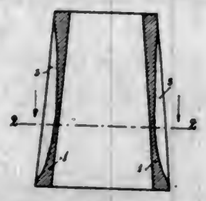
1. In a device of the class described, a body portion, a cylinder mounted therein, a piston within the cylinder, said cylinder being provided with ports controlled by the piston, ducts in communication with the ports, agitating devices within said ducts, and means connected with opposite ends of the piston, and movable through the body and alongside of the cylinder, for rotating the agitating devices upon the operation of the piston.

1,758,822. PNEUMATIC HAMMER ATTACHMENT. JOHN W. BIRDSONG, Meridian, Miss., assignor of one-half to Nate S. Williamson and W. Luther Clayton, Meridian, Miss. Filed Aug. 26, 1929. Serial No. 388,596. 8 Claims. (Cl. 1—47.)



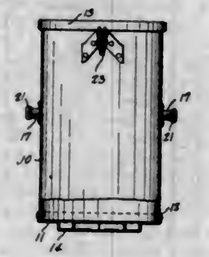
1. A tool for inserting reinforcing irons, comprising a handle portion, a shank extending therefrom for connecting the same to an operating implement, an annulus on the lower end portion of the handle, a head plate connected to the lower end of the handle, and a pair of resilient gripping jaws mounted on said head plate and retained thereagainst by the annulus.

1,758,823. INGOT MOLD. MARCEL BLAGÉ, Vireux-Molhain, France. Filed Jan. 12, 1929, Serial No. 332,184, and in France Jan. 20, 1928. 5 Claims. (Cl. 22—139.)



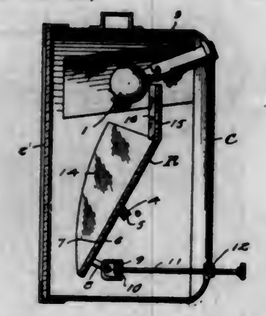
1. An ingot mold having walls having external surfaces which are concave both vertically and horizontally, said walls forming corners at their points of merging with each other, the external faces of said corners being straight in a vertical direction, and each of said corners being of substantially the same cross-sectional area at all points throughout its height.

1,758,824. TRUNNION FOR BARRELS OR OTHER ARTICLES. JAMES R. COE, Waterbury, Conn., assignor to The American Brass Company, New Haven, Conn., a Corporation of Connecticut. Original application filed Feb. 18, 1927, Serial No. 169,208. Divided and this application filed May 16, 1928. Serial No. 278,279. 6 Claims. (Cl. 294—73.)



1. A barrel of the class described having outwardly extending diametrically oppositely located trunnions on the side walls thereof adapted to form positioning means adapted to cooperate with the trunnions of similar barrels to uniformly position a plurality of said barrels in line, and a pair of hooks secured to the sides of said barrel adjacent the top thereof and diametrically arranged in a plane at substantially right angles to the plane of the trunnions so that they will be arranged in alignment to be simultaneously engaged by a common carrying means.

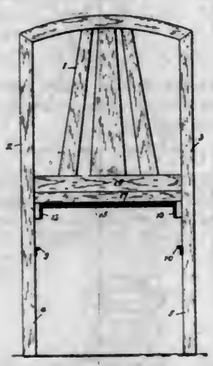
1,758,825. HEADLIGHT. JOHN B. DARLINGTON, Bellefonte, Pa. Filed May 9, 1929. Serial No. 361,698. 1 Claim. (Cl. 240—44.)



A lamp comprising, in combination, a casing having an illuminating member positioned within the upper portion

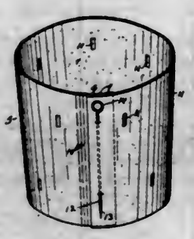
of the casing, a transversely disposed downwardly inclined reflector within the casing positioned above the illuminating member and extending in advance thereof, a reflector body positioned within the casing below the illuminating member and disposed on an upward and rearward incline, means for supporting said reflector body for independent swinging adjustment in a vertical direction, side reflector bodies carried by the ends of the reflector body and disposed on a forward and outward incline with respect thereto, and an upwardly directed top reflector body carried by the upper end of the first reflector body, the top reflector body terminating inwardly of the ends of the first reflector body, the ends of the top reflector body being continued by outwardly and forwardly inclined reflector wings.

1,758,826. NESTED CHAIR. LOUIS DELLERT, Brooklyn, N. Y. Filed Nov. 5, 1928. Serial No. 317,253. 8 Claims. (Cl. 155—2.)



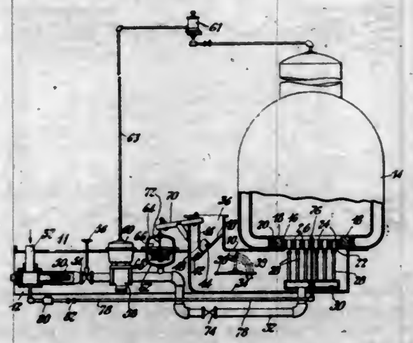
2. A chair, including a pair of front legs, a pair of rear legs merging into a back, said rear legs being spaced further apart than the front legs, a seat secured to the top of said front legs and to said rear legs, said seat slanting from the rear legs to the front legs, said slant being sufficient to permit several chairs of idential structure and identical size to be nested, the rear chairs being forced beneath the front chairs from the rear.

1,758,827. BASKET-LINING DEVICE. COLON J. DUDLEY, Hamburg, N. Y., assignor to John S. Rice, Biglerville, Pa. Filed July 8, 1929. Serial No. 376,536. 2 Claims. (Cl. 217—8.)



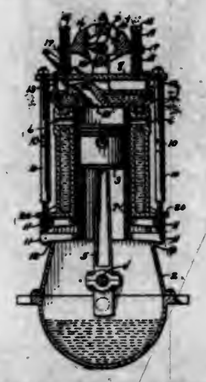
1. As a new article of manufacture, a packing liner for use in packing fruit and the like having removable means coacting with portions of the liner to hold the same against expansion, the liner, when said means is removed, being so constructed as to permit expansion of the liner, said means permitting its removal to be effected when the liner is full without the disturbance of the content therein.

1,758,828. COMBINED BURNER AND REGULATOR UNIT. JAMES P. FISHER, BENJAMIN GREENFIELD, and NOBLE M. HUTCHINSON, Bartlesville, Okla., assignors to Doherty Research Company, New York, N. Y., a Corporation of Delaware. Filed Jan. 10, 1924. Serial No. 685,319. 9 Claims. (Cl. 158—7.)



1. The combination with a steam boiler having a firebox, of a draft conduit extending outwardly from an opening in the firebox, a burner arranged across the firebox end of the conduit, means for supplying fluid fuel to said furner including a regulator responsive to changes in boiler pressure for varying the amount of fuel supplied to the burner, a damper in that end of the conduit which is open to the atmosphere, and a motor for operating said damper, said motor being under the control of the fuel pressure between said regulator and the burner.

1,758,829. INTERNAL-COMBUSTION ENGINE. EDWARD LESLIE GILBERT, Fort Bayard, N. Mex. Filed Apr. 15, 1929. Serial No. 355,325. 3 Claims. (Cl. 123—75.)

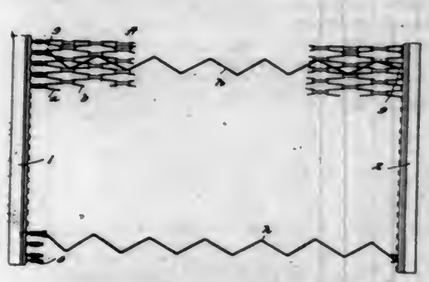


1. In a sleeve valve motor provided with a pair of valves for each cylinder, a cam shaft arranged above the head of the motor, a plurality of cams on said cam shaft, means for rotating the cam shaft from the movable part of the motor, cross heads guided for vertical movement at the top of the motor, a pair of rods connecting each cross head with one of the valves and resilient means for imparting movement of the cams of the cam shaft to the cross heads.

1,758,830. AUTOMATICALLY FOLDING BED-BOTTOM FABRIC. NOAH S. HARTER, Waukegan, Ill., assignor to Champion Folding Furniture Company, Waukegan, Ill., a Corporation of Illinois. Original application filed Oct. 5, 1927, Serial No. 224,151. Divided and this application filed May 17, 1929. Serial No. 363,859. 3 Claims. (Cl. 245—5.)

1. A folding bed bottom fabric comprising a plurality of wire strands, each bent to form a series of loops opening

alternately in opposite directions, and rows of links hingedly connecting the closed ends of alternate loops in the adjacent strands, said loops and links lying in a common



plane when the fabric is stretched, and a helical spring extending longitudinally of the fabric and adapted to fold the successive strands and links oppositely when tension on the fabric is relaxed.

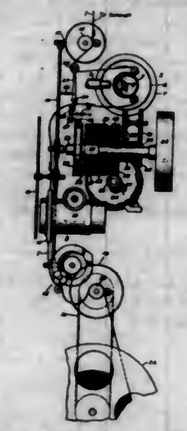
1,758,831. LOAD BINDER. LEO HAUBERT, Tulsa, Okla., assignor of one-eighth to Lyman Leroy Roller, Tulsa, Okla. Filed Dec. 19, 1927. Serial No. 241,123. 4 Claims. (Cl. 254—78.)



1. An implement for binding loads comprising, in combination, an operating lever having a bifurcated end to provide spaced arms; integral, outstanding trunnions formed on the ends of the arms; a clevis pivotally mounted on said trunnions; spaced fingers formed integrally on one side of the clevis and extending transversely to the clevis; a hook connected to the free end of the clevis; a pull bar pivoted between the arms in spaced relation to the trunnions; a hook swivelled on the free end of the bar; and spaced fingers formed integrally on the hook and extending laterally from one side thereof.

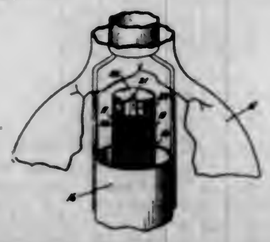
1,758,832. FILM-DRIVING APPARATUS. CHARLES L. HEISLER, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Mar. 27, 1929. Serial No. 350,405. 4 Claims. (Cl. 271—23.)

1. In film phonograph apparatus of the character described, driving means for the film comprising a rotatable member arranged to engage the film adjacent the point of control, film driving apparatus spaced from said rotatable member and also arranged to engage the film, a motor having driving connections with said rotatable



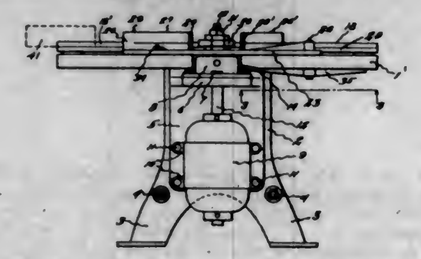
said driving apparatus, inertia means associated with said driving apparatus, and an elastic member between the inertia means and the motor.

1,758,833. THERMOELECTRIC DEVICE. JOHNSON F. HENDAY, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Aug. 28, 1924. Serial No. 734,569. 2 Claims. (Cl. 250—27.5.)



1. An electric discharge device comprising a receptacle, a pair of electrodes mounted therein, means connected with one of said electrodes for supporting the other of said electrodes, said means including a flat metal plate and an elongated insulator connected at one end to said plate, said insulator projecting into said one electrode, a hook shaped member connected to said other electrode and to the other end of said insulator, and a metallic sheath mounted on said member between the insulator and said other electrode.

1,758,834. MACHINE TO SHAPE FLOORING BLOCKS. LORENZO R. HESTON and ARNEA L. ANDERSON, Fairfield, Iowa. Filed Mar. 14, 1929. Serial No. 347,006. 3 Claims. (Cl. 144—90.)



1. A wood-working machine comprising an upright support, a horizontal table rigidly secured thereto and having

an opening therein, cutting means arranged over said opening, a swinging arm having a similarly shaped opening oppositely disposed to said first mentioned opening, engaging said table top and pivotally secured thereto at a point to one side of said first mentioned opening, to enclose said cutting means, said swinging arm having a raised shoulder formed on one side thereof on each side of said opening and having an integral upwardly extending flange formed on its inner upper edge, the inner ends of said flanges being in alignment with the sides of said opening and arranged transverse to the longitudinal axis of said arm, that portion of the flange adjacent the free end of said arm being flared outwardly to form a cam surface, the flanges on the sides of said opening serving as a guard for said cutting means, and guide and stop means on said arm and table respectively adapted to guide and limit the movement of said arm.

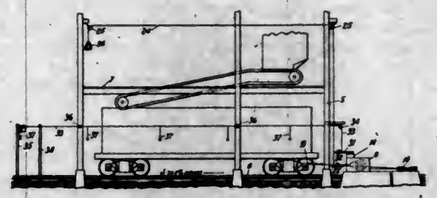
1,758,835. FLASH LIGHT. CLINT T. HIME, San Antonio, Tex., assignor of one-third to P. H. Long, San Antonio, Tex. Filed Jan. 4, 1929. Serial No. 330,234. 1 Claim. (Cl. 240—10.5.)



A flashlight of the class described comprising a casing part formed of spiral metal, whereby said casing part can be expanded and contracted lengthwise, a disk in the front end of the casing part, a threaded sleeve at the other end thereof, a closing cap threaded to the sleeve, a spring carried by the cap for engaging the rearmost battery, a switch part on the disk, a coil spring in the casing part having one end connected with the switch part and its other end connected with a part of the sleeve whereby the spring acts as a conductor and as means for normally holding the casing part in contracted position, a shell at the front end of the casing part, a part threaded thereto, a reflector and lens carried by said latter part and a lamp carrying socket carried by the disk and electrically connected with the foremost battery and having contacts for engagement by the switch part.

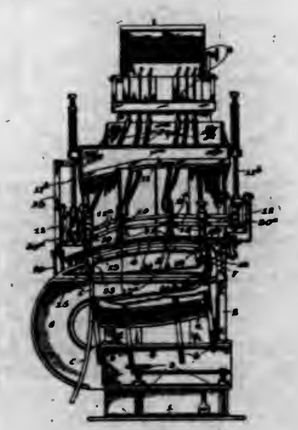
1,758,836. CAR-RETARDING DEVICE. GRANT HOLMES, Danville, and ANDREWS ALLEN, Glencoe, Ill., assignors to Robt. Holmes & Bros., Inc., Danville, Ill., a Corporation of Illinois. Filed Aug. 5, 1929. Serial No. 383,470. 10 Claims. (Cl. 104—178.)

1. In a retarding device to control the movement of a car down an inclined track, a rotatable drum, a cable wound on said drum and having means to connect the same with a car which is to be controlled, a brake for said drum to control the unwinding of said cable, power operated means for actuating said drum to rewind said cable



thereon, a controlling device for said power operated means, and separate actuating devices for said brake and said controlling device located at separated points, both of which are remote from said drum.

1,758,837. APPARATUS FOR APPLYING HOOPS AND/OR LINERS TO BARRELS. ALFRED B. HOUTZ, Elizabeth City, N. C. Filed Dec. 11, 1928. Serial No. 325,187. 10 Claims. (Cl. 1—13.5.)

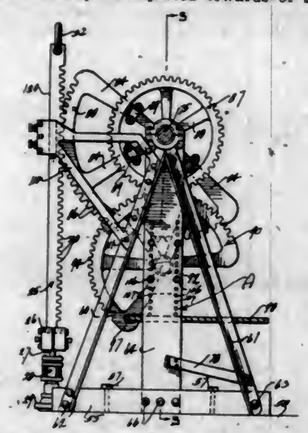


1. In apparatus for securing hoops to barrels; in combination, nail driving and clinching mechanism; means for rotatably supporting a barrel body; and means for guiding a flexible hoop strip length into the barrel through an open end thereof for winding to circular hoop form against the inner surface of the barrel by the rotation of the barrel and for nailing to the barrel by said mechanism.

1,758,838. PUMPING JACK. HENRY M. JARVIS, Winfield, Kans., assignor of three-fourths to Clarion George Cox, Winfield, Kans. Filed Apr. 11, 1927. Serial No. 182,778. 8 Claims. (Cl. 74—14.)

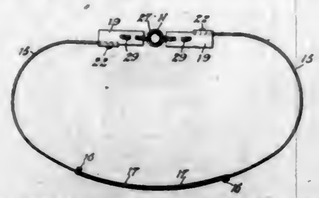
1. In a pumping jack the combination of a supporting frame, a gear rotatably supported from the pumping frame, means associated with said gear for connection with a polish rod, a second gear keyed for movement with the first mentioned gear, a third gear on the frame in meshing relation with the second gear, and a pull line connected with

said third gear, said third gear having a mounting on the frame which may be adjusted towards or away from



the second gear to substitute various sizes of gears by means of which to adjust the length of stroke of a polish rod.

1,758,839. PLANT SUPPORT. THEODORE KELSEY, Brooklyn, N. Y. Filed Aug. 7, 1929. Serial No. 384,182. 4 Claims. (Cl. 47—47.)



1. In a plant supporting device, a post adapted to be driven into the ground alongside of a plant, a plant embracing girdle, a clamp for supporting the girdle from the post and interengageable means provided respectively on the girdle terminals and the clamp serving as a common means for detachably connecting the girdle with the clamp and for frictionally maintaining the clamp on the post.

1,758,840. RESCUE WHISTLE. THERESE KREILL, Milwaukee, Wis. Filed Dec. 21, 1929. Serial No. 415,810. 2 Claims. (Cl. 116—137.)

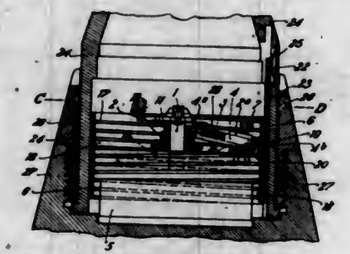


1. A whistle of the class described comprising a body forming a container for compressed fluid and having an opening in one end thereof, a threaded nipple connected with the body and surrounding the opening, a whistle member threaded on the nipple, a valve for closing the opening, means whereby the valve can be moved to open position to allow the compressed fluid to pass through the whistle member, said whistle member being removed to enable a source of compressed fluid to be attached to the nipple to introduce compressed fluid into the container.

1,758,841. TRIHALOGENATED MS-BENZDIANTHRONES. MAX ALBERT KUNZ, Mannheim, Switzerland, and KARL KÖBERLE, Ludwigshafen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Original application filed June 16, 1927, Serial No. 199,421, and in Germany Mar. 15, 1926. Divided and this application filed Feb. 2, 1928. Serial No. 251,455. 2 Claims. (Cl. 260—61.)

1. As new articles of manufacture tri-halogen-ms-benzdianthrones.

1,758,842. MECHANICAL TIME FUSE. PAUL LIEBERGELD, Bad Thal, Thuringia, Germany. Filed Aug. 12, 1929. Serial No. 385,163, and in Germany Oct. 6, 1927. 4 Claims. (Cl. 102—36.)



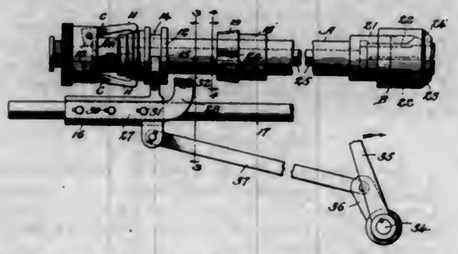
1. A time fuse for a projectile, comprising in combination a timing member in the shape of a ring having an internal helical groove, a pointer, a clockwork mechanism for operating the said pointer, a pin on the said pointer, capable of directly engaging in the said helical groove and of travelling in it along a predetermined distance according to the setting of the timing member, a spring for causing the pin to engage in the helical groove after the projectile has been fired and a gap at the end of the helical groove for receiving the pin, as and for the purpose set forth.

1,758,843. CABINET. LOUIS PHILIP LIZOTTE, Holyoke, Mass. Filed Aug. 6, 1928. Serial No. 297,755. 1 Claim. (Cl. 312—140.)



A bracket comprising a cylindrical upright formed with a bore longitudinally disposed therein, arms extending from one end of said upright and being formed with openings in the free ends thereof, and securing means for said bracket and passing through the openings and into the bore.

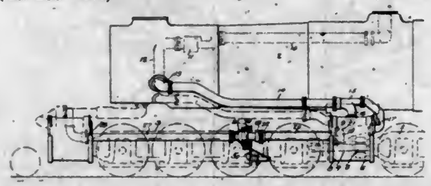
1,758,844. COMBINED CHUCK AND BRAKE MECHANISM. FRED R. LONG, Catawissa, Pa. Filed June 4, 1929. Serial No. 368,279. 4 Claims. (Cl. 279—1.)



1. In mechanism of the class described, a spindle, a chuck and a brake element carried by said spindle, a chuck

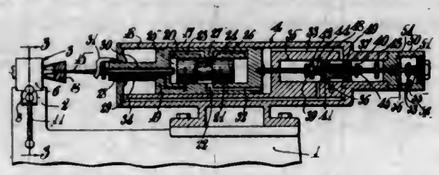
actuator slidable on said spindle, a shift member for sliding said chuck actuator, and a brake element movable in unison with said shift member for cooperation with said spindle carried brake element.

1,758,845. STEAM PIPE FOR SIMPLE ARTICULATED LOCOMOTIVES. JAMES C. MARIS, Glen Olden, Pa. Filed May 10, 1929. Serial No. 362,036. 4 Claims. (Cl. 105—47.)



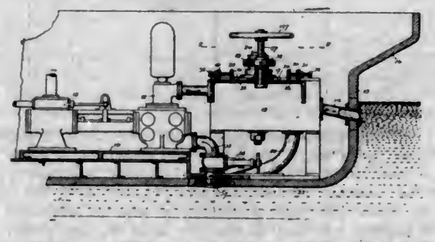
1. The combination in a high pressure simple "Mallet" locomotive, of a rear frame, and a front frame coupled to the rear frame; a cylinder structure at the forward end of each frame; a boiler mounted on the rear frame and overhanging the front frame; a live steam pipe extending from the smoke box end of the boiler to the rear cylinder structure; a live steam pipe made in two sections extending from the rear cylinder structure to the front cylinder structure; a ball-and-socket connection for the two sections of the pipe section; and means for supporting said ball-and-socket connection.

1,758,846. HOLE-OPENING PUNCH. LOUIS A. MAXSON, Claremont, N. H., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed Oct. 8, 1921. Serial No. 506,383. 48 Claims. (Cl. 76—5.)



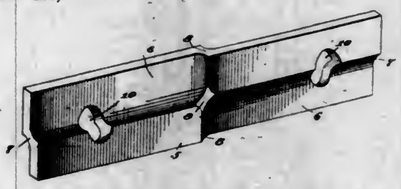
1. In a drill steel hole opening mechanism, a hole opening punch, hammer mechanism cooperating therewith, and pressure fluid actuated means including relatively reciprocable cylinder and piston elements for feeding said hammering mechanism forwardly to feed said punch into a hole and for automatically withdrawing said punch when a predetermined forward movement thereof has taken place.

1,758,847. SHIP-PROPELLING MEANS. AMOS C. MCINTOSH, Eureka, Calif. Filed Oct. 16, 1928. Serial No. 312,906. 3 Claims. (Cl. 115—14.)



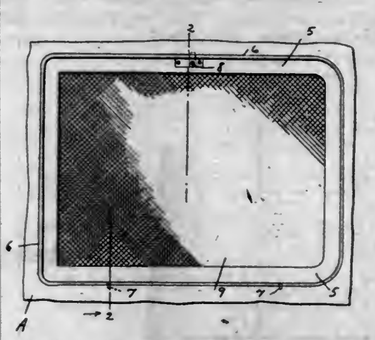
1. Ship propelling means of the character described including a rearwardly and downwardly discharging jet tube at the stern at each side of the longitudinal center line of the ship, a forwardly and downwardly discharging jet tube at each side of the keel line of the ship, a two-way valve controlling each rearwardly discharging and forwardly discharging jet tube, a sprocket wheel secured to the upper ends of said valves, an endless sprocket chain trained around said sprocket wheels and transversely of the ship, an actuating sprocket wheel mounted at the longitudinal center of the sprocket chain and between the runs thereof, a longitudinally movable support for said actuating sprocket wheel, and means for adjusting said support longitudinally of the ship whereby said actuating sprocket wheel may be adjusted with respect to the runs of the sprocket chain.

1,758,848. SPRING NUT-LOCKING DEVICE FOR RAIL JOINTS. HARRY G. NORWOOD, New York, N. Y., assignor to Theodore F. Von Dorn, New York, N. Y. Filed July 2, 1929. Serial No. 375,379. 5 Claims. (Cl. 151—38.)



1. A rail joint locking plate formed from a single piece of spring steel having its central portion formed with oppositely disposed angular shouldered portions and a longitudinal angular portion formed from its central portion to each end thereof.

1,758,849. AUTOMOBILE DOOR SCREEN. GABRIEL W. PERRON, Williamsett, Mass. Filed Mar. 23, 1927. Serial No. 177,669. 2 Claims. (Cl. 156—4.)

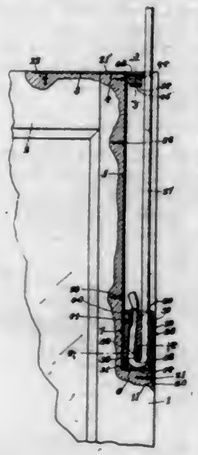


2. In a screen for automobile door windows, a frame constructed for disposition within the window opening of the door, said frame being provided at the top, bottom and sides thereof with a packing strip, said packing strip constituting means for retaining said top, bottom and sides of the screen out of engagement with the adjacent portion of the window opening, retaining means carried by said frame at the bottom thereof for engagement with the lower surface of the window opening, said last mentioned means being disposed to one side of the packing strip, and a key controlled member carried by said frame at the top thereof adapted to be received into a slot in the upper horizontal surface of the window opening.

1,758,850. COUPLING OR HOLDING ATTACHMENT FOR SASH-WEIGHT CORDS. CONRAD REIFSCHNEIDER, St. Louis, Mo. Filed Feb. 23, 1929. Serial No. 342,112. 8 Claims. (Cl. 16—205.)

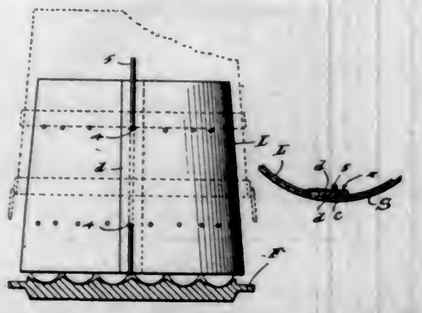
1. A coupling attachment for sash weight cords comprising a casing adapted to be anchored within the side

rails of a sash and having its outer side and top open, a holder member adapted to be positioned within the lower portion of the casing and provided with means for the passage of the end terminal portion of the cord, means carried by said holder member for clamping said end ter-



minal portion thereto, and means adapted to be carried by the sash and extending transversely through said member and casing for removably anchoring said holder member stationary to said casing and rail.

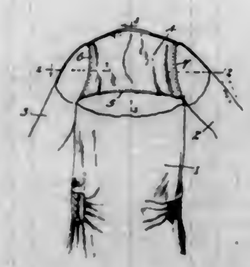
1,758,851. BASKET LINER. JOHN S. RICE, Biglerville, Pa., and JAMES W. TREW, Baltimore, Md.; said Trew assignor to said Rice. Filed Nov. 23, 1929. Serial No. 409,387. 1 Claim. (Cl. 217—3.)



As a new article of manufacture, an endless packing lining for use in packing fruit and the like, having a fold extending substantially throughout its height, said fold affording overlapping portions, a removable rod coacting with said overlapping portion to hold the same against expansion, the liner, when said rod is removed, being so constructed as to provide expansion of the liner, said rod permitting its removal to be effected when the liner is full without the disturbance of the content therein.

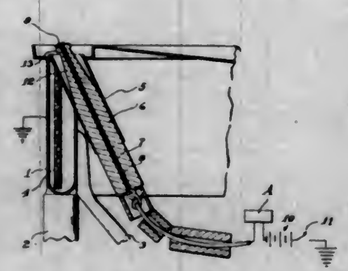
1,758,852. REAR YOKE FOR DRESSES. LOUIS C. ROSENBLATT, New York, N. Y. Filed Sept. 17, 1929. Serial No. 393,205. 1 Claim. (Cl. 2—74.)

A dress, including a body having a neck opening and a pair of sleeve openings, an interiorly-positioned protecting and reinforcing yoke extending from the neck opening and shoulders downwardly substantially to a line drawn from the bottom of one sleeve opening to the bottom of the other opening, a line of stitching at each end of the yoke for connecting the yoke to said body, said lines of stitching following the edges of the respective sleeve openings for approximately half their circumference, and other lines of stitching for connecting the upper



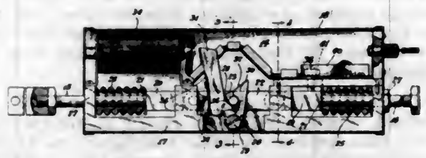
edge of the yoke to said body at the neck opening and along lines extending from the neck opening to the sleeve openings, said yoke at its lower edge being unattached, said yoke being formed of fabric, the transverse threads of the yoke being anchored at the opposite ends thereof and providing reinforcing means along the entire depth of the yoke.

1,758,853. IGNITION DEVICE. ALFRED RUTTIMAN, Gardner, Mass., assignor to Florence Stove Company, Gardner, Mass., a Corporation of Massachusetts. Filed June 3, 1926. Serial No. 113,497. 3 Claims. (Cl. 175—115.)



1. In combination an annular oil bowl having a kindler therein, jump spark electrodes one of which is made up of a group of tiny heat resisting unipolar electrode wires of heat impeded conductivity and together with the other jump spark electrode, providing a gap in proximity to said kindler, whereby on the one hand the spark will ignite the oil with which said kindler is saturated or in the event of a short circuited spark gap said oil will be vaporized and ignited by the incandescence of said tiny wires, substantially as described.

1,758,854. VEHICLE CONTROL MEANS. KARL OSTEN SCHAUMAN, New York, N. Y., assignor to William Henry Avery, San Francisco, Calif. Filed Apr. 16, 1926, Serial No. 102,402. Renewed Jan. 17, 1929. 26 Claims. (Cl. 180—83.)

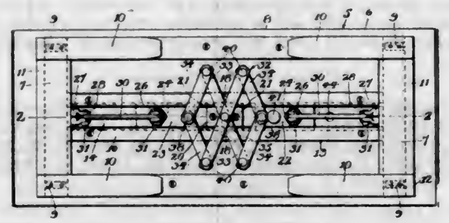


11. In an emergency control apparatus for motor vehicles equipped with a bumper and a brake normally actuated by driver operable means, electrically controlled means for actuating the said brake independently of the driver operable means, an alarm device, a bumper-controlled contact, and a manual control switch movable to one position to form a circuit placing the electrically controlled means under the influence of the bumper-controlled contact, to another position to form a circuit placing the alarm device under the influence of the bumper-controlled contact, and to a third position rendering the bumper-controlled contact inactive.

1,758,855. MANUFACTURE OF 2-7 DINITRO-ANTHRAQUINONE. ROBERT EMANUEL SCHMIDT and BERTHOLD STEIN, Elberfeld, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed June 28, 1926, Serial No. 119,198, and in Germany June 25, 1925. 3 Claims. (Cl. 260—57.)

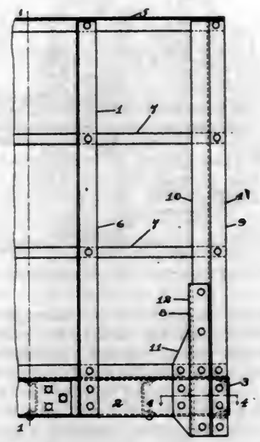
1. In processes of making 2-7 dinitro-anthraquinone the step of nitrating anthrone with concentrated nitric acid at below room temperature in the absence of diluents.

1,758,856. FOLDING TABLE. CHARLES JOSEPH SCHMITT, Algoma, Wis. Filed Mar. 5, 1928. Serial No. 259,169. 4 Claims. (Cl. 45—11.)



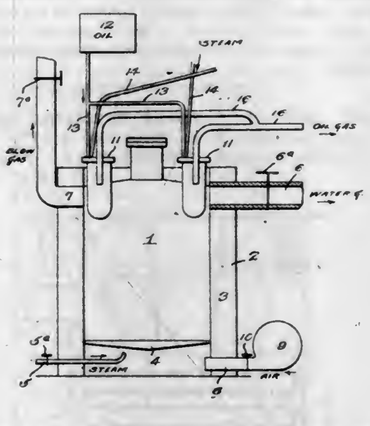
1. A folding table comprising, a top, oppositely disposed legs hinged thereto, a guide secured to the underside of the top and extending lengthwise between the legs, an anchor block fixedly secured in the guide, a pair of blocks slidable in the guide and positioned on opposite sides of the anchor block, means connecting the respective sliding blocks with said oppositely disposed legs, and extensible and contractible means pivotally connected to the sliding blocks and anchor block to provide for the simultaneous shifting of the legs, said extensible and contractible means including a pair of center strips having a common pivotal connection intermediate their ends with said anchor block, a pair of end strips pivotally connected with the center strips respectively and further pivotally connected with one of said sliding blocks, and a similar pair of end strips pivotally connected with the center strips respectively and further pivotally connected to the other of said sliding blocks.

1,758,857. CAR CONSTRUCTION. ALFRED C. SCHMOHL, Beaver Falls, Pa., assignor to Pressed Steel Car Company, Pittsburgh, Pa., a Corporation of New Jersey. Filed July 20, 1929. Serial No. 379,724. 4 Claims. (Cl. 105—404.)



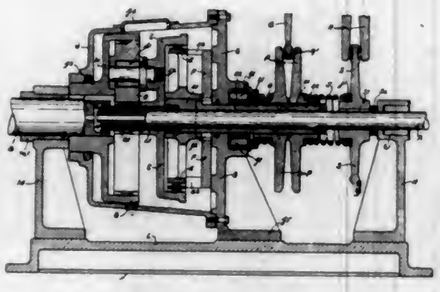
1. In a car construction an end sill, side sill, and corner post connected together, a brace member connecting said corner post and end sill, said brace having a portion thereof spaced from said end sill and extending above and below said sill to engage with said corner post.

1,758,858. GAS-MAKING APPARATUS. ALFRED SCHWARZ, Montclair, N. J., assignor to Coal and Oil Products Corporation, a Corporation of Delaware. Filed Feb. 18, 1927. Serial No. 169,237. 1 Claim. (Cl. 48—71.)



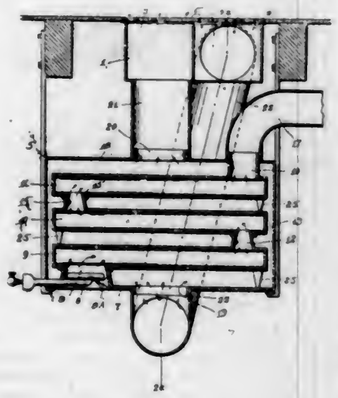
A gas making apparatus comprising a water gas generator, means for introducing air into the lower portion of said generator, means for introducing steam into the lower portion of said generator, a blow gas outlet in the upper portion of said generator, a water gas outlet in the upper portion of said generator, a plurality of retorts disposed within said generator, one of said retorts being positioned directly in the path of gases removed through said blow gas outlet, another of said retorts being positioned directly in the path of gases removed through said water gas outlet, means for introducing oil to said retorts, and means for removing oil gases from said retorts.

1,758,859. SPEED-VARYING GEAR. JOHN STANDEN SHAW, Fazakerley, Liverpool, and WALTER HEAP, West Derby, Liverpool, England. Filed June 17, 1929, Serial No. 371,677, and in Great Britain June 20, 1928. 6 Claims. (Cl. 74—34.)



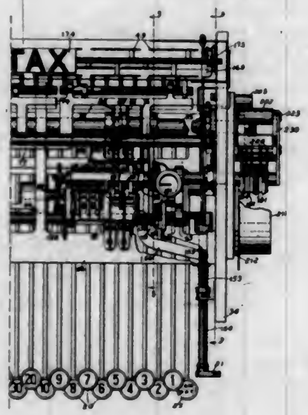
1. In a speed changing and reversing gear, in combination, an epicyclic driving mechanism comprising an externally toothed wheel element, an internally toothed wheel element, and a planetary pinion element with planetary pinions gearing with the said toothed wheels, and the axes of which are mounted on a part rotatable about a common axis; a driving shaft rotatable about the common axis; and connected to one of the said elements; a driven shaft rotatable about the common axis and connected to another of said elements; and a control mechanism adapted to drive the other element, said control mechanism comprising an eccentric rotatable about the common axis, a gyrating wheel mounted on the eccentric and an internally toothed wheel with which the gyrating wheel gears; and a secondary speed varying mechanism through which the driving shaft drives the eccentric and comprising a shaft parallel to the common axis, means for varying the distance between the shaft and the common axis, and two pairs of conical friction driving members, one pair connecting the driving shaft to the lay shaft, and one pair connecting the lay shaft to the eccentric, one member of each of said pairs being a disc with a coned periphery, and the other member being a pair of connected reversely set coned discs pressed together by spring pressure so as to frictionally engage the respective single discs, substantially as described.

1,758,860. MINIATURE FLOOR FURNACE. MICHAEL F. SHIED, Rochester, N. Y. Filed Aug. 3, 1929. Serial No. 383,263. 2 Claims. (Cl. 126—116.)



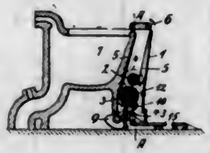
1. In a miniature floor furnace the combination of a register box, a warm air compartment and a cold air compartment in said register, a series of horizontal radiators suspended below said register box and connected in series with one another, a jacket surrounding said radiators, a conductor pipe connecting the bottom of said jacket with said cold air compartment, a conductor pipe connecting the top of said jacket with said warm air compartment, a gas burner located at the beginning of said radiators to have the products of combustion from the burner pass thru all of said radiators, and a pipe at the end of said radiators to carry off the products of combustion from the radiators.

1,758,861. CASH REGISTER. BERNIS M. SHIPLEY, Dayton, Ohio, assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio, a Corporation of Maryland. Filed May 5, 1919. Serial No. 294,966. 11 Claims. (Cl. 235—2.)



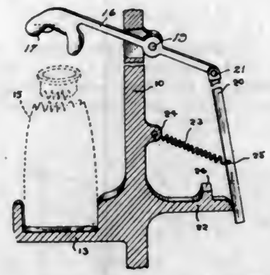
1. In a machine of the class described, the combination of a plurality of totalizers, a group of actuators for each of said totalizers, each actuator having a determined numerical order, item entering means differentially actuating said actuators simultaneously, and connections intermediately of the two sets of actuators whereby actuators of unlike numerical order will receive movement in unison.

1,758,862. DEVICE FOR UNIFORMLY MOVING ON A PAPER STRIP FOR CLOSET SEATS. KARL SOMMER, Steinenberg, Germany. Filed July 30, 1928, Serial No. 296,367, and in Germany June 25, 1925. 9 Claims. (Cl. 4—247.)



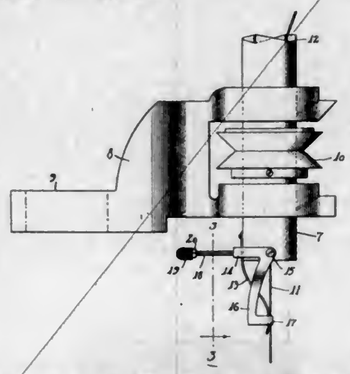
1. A device for uniformly moving on a paper strip on closet seats, comprising in combination with a pedal lever, a winding roll for the paper strip, a feed mechanism for said winding roll, means connecting said pedal lever with said feed mechanism, said pedal lever serving directly as abutment for said winding roll so that this winding roll can carry out only a movement corresponding to the actual diameter of the paper roll, a uniform feeding of the paper strip at any roll diameter being thus ensured.

1,758,863. SAFETY MILK-BOTTLE HOLDER. RICHARD A. SPAWTON, Brookfield, Nova Scotia, Canada. Filed Dec. 7, 1928. Serial No. 324,457. 2 Claims. (Cl. 232—41.)



1. A bottle holder of the character described comprising a bracket adapted to be secured to a door or other suitable support, a projection extending from said bracket through the door, having a circular cavity on the upper face thereof to receive the bottle, a lever arm pivotally connected to said bracket and extending forward through the door, terminating in a cap to fit over the top of the bottle, a ledge extending rearward from the bracket, a locking member pivoted to said lever arm to rest on said ledge and prevent movement of the lever arm when the bottle is in place.

1,758,864. SPINNING MACHINE. ALFRED STRADER, Columbus, Ohio. Filed Apr. 10, 1929. Serial No. 354,004. 3 Claims. (Cl. 19—154.)

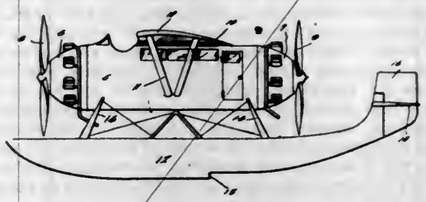


1. A device of the character described comprising a rotatable tube, a pair of nipper members carried by the tube for gripping a cord passing through the tube, one of said members being mounted to swing to and from the other member at one side thereof, and a weight carried by the first-named member at the opposite side of the second-named member for moving the first-named member toward the second-named member by centrifugal action when the tube is rotated and for swinging the first-named member away from the second-named member when the tube is stopped.

1,758,865. DYESTUFFS CONTAINING SULPHUR AND CHROMIUM AND PROCESS OF MAKING SAME. FRITZ STRAUB and HANS MAYER, Basel, and HERMANN SCHNEIDER, Riehen, near Basel, Switzerland, assignors to Society of Chemical Industry in Basle, Basel, Switzerland. Filed May 2, 1928, Serial No. 274,668, and in Switzerland May 7, 1927. 12 Claims. (Cl. 260—12.)

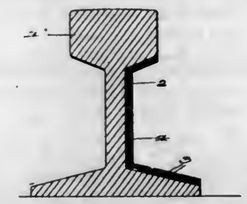
3. Process for the manufacture of dyestuffs containing sulphur and chromium, consisting in treating with polysulfides chromium compounds of azo-dyestuffs from orthohydroxy-diazo compounds and any coupling components capable of being chromed.

1,758,866. TANDEM-MOTORED MONOSEAPLANE. HEIL VINCENT SWEET, Buffalo, N. Y. Filed Nov. 23, 1929. Serial No. 409,308. 1 Claim. (Cl. 244—2.)



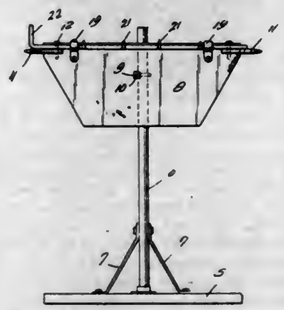
A tandem motored mono-seaplane comprising a pair of elongated pontoons, a car body having propelling means fore and aft, supporting studs directly connecting the car body with the pontoons and positioning the former in medial elevated position between the latter, a single supporting wing carried by the said car body and supported transversely across the upper intermediate portion of the body, a rudder at the rear end of each pontoon, a horizontal stabilizing plane connecting the rudder carrying portions of the pontoons and extending centrally between the upper and lower edges of the rudders, and elevators at the trailing edges of the stabilizing plane.

1,758,867. TRACK INSULATION. LESTER W. TARR, Newark, Del., assignor, by mesne assignments, to Continental-Diamond Fibre Company, Newark, Del., a Corporation of Delaware. Filed Feb. 23, 1929. Serial No. 342,273. 5 Claims. (Cl. 238—159.)



1. A rail insulation formed of fibrous material saturated with a phenolic condensation product, and a fibrous insulating backing material secured thereto.

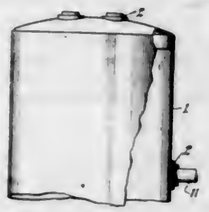
1,758,868. BAG-HOLDING APPARATUS. WILLIAM TELANDER, Milaca, Minn. Filed May 21, 1928. Serial No. 279,544. 1 Claim. (Cl. 83—26.)



In a device of the class described, a plate, a pair of bars rockable on the plate at spaced intervals to swing in a substantially horizontal plane, springs secured to the plates and to one end of each of said bars for urging the opposite ends of the bars outwardly from one another, said bars

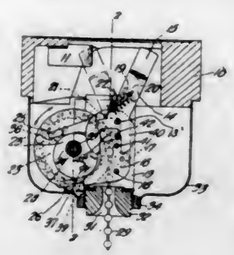
being provided with bag engaging hooks at their outer ends, a shaft, means for mounting the shaft horizontally on the plate, additional bag engaging hooks extending from the shaft between said bars, said last mentioned bag engaging hook terminating inwardly from the first mentioned bag engaging hooks, and spring means for normally holding the shaft so that the bag engaging hooks carried thereby project outwardly from the plate into said horizontal planes for engagement with one side of the bag at the upper edge thereof, when the first referred to bag engaging hooks are engaged with the bag adjacent the opposite ends of the bag, whereby the mouth of the bag at the upper edge will be so extended as to limit the swinging movement of said bars under the action of the first referred to springs.

1,758,869. COPPER-BOILER OUTLET. ALBERT H. TRAGESER and LOUIS HASSINGER, New York, N. Y. Filed Sept. 19, 1928. Serial No. 307,040. 6 Claims. (Cl. 220—39.)



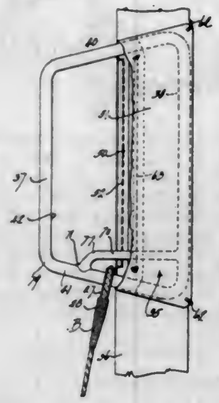
1. A copper boiler and its outlet, including a copper boiler body having a pressed-out apertured portion, said portion being tubular, an internally-threaded metal sleeve snugly fitting said portion, the outer end of said sleeve and the outer end of said portion being welded together, throughout, and reinforcing means connecting said sleeve end portion coacting with the welded part for preventing independent rotation of the sleeve.

1,758,870. QUICK-ACTION ELECTRIC SWITCH. ARTHUR JAMES VEALL, Melbourne, Victoria, Australia. Filed June 25, 1927, Serial No. 201,383, and in Australia July 22, 1926. 10 Claims. (Cl. 200—64.)



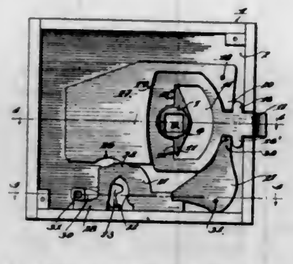
1. An electric switch having a base of insulating material supporting fixed contacts, a bridge piece fitted to the base, movable contacts fitted to a member pivotally mounted on the bridge piece, an axle on the bridge piece, a guide pulley rotatively mounted on the axle, a U-shaped driving member fitted to the axle and partially embracing the pulley, a pull cord passing around the pulley and attached at one end to the driving member, a spring acting on the driving member in opposition to the pull cord, eccentrics associated with the pulley and adapted to be actuated in one direction by the operation of the driving member, an oscillatable member adapted to be actuated by the eccentrics, and a compression spring interposed between the oscillatable member and the member carrying the movable contacts whereby when the oscillatable member is actuated by the partial rotation of the pulley by the driving member the compression spring will be displaced to exert an opening or closing pressure on the movable contacts.

1,758,871. PARACHUTE RIP CORD. GEORGE WAITE, Buffalo, N. Y., assignor to Irving Airchute Company, Inc., Buffalo, N. Y., a Corporation. Filed Nov. 16, 1928. Serial No. 319,934. 16 Claims. (Cl. 244—21.)



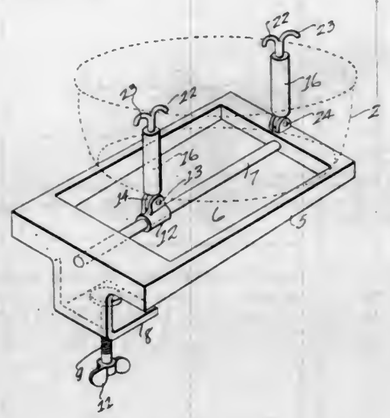
1. As an article of manufacture a parachute rip cord assembly comprising a handle of endless loop-forming rigid material arranged in the form of a trapezoid and providing an elongated hand inserting opening therein, a rip cord body having a slidable connection on the material of the handle spaced from the narrower end of the trapezoid, and means on the handle forming obstructions at opposite sides of the rip cord body connection on the handle to limit the amplitude of movement of the former along the latter to a location spaced from the said narrower end of the trapezoid.

1,758,872. LOCK. ROBERT WHEELER, Wellsburg, W. Va. Filed Jan. 5, 1929. Serial No. 330,547. 5 Claims. (Cl. 70—51.)



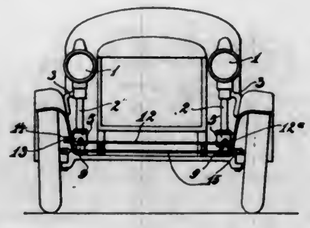
1. In a lock, the combination of a case, a bolt projectable through one side thereof, said bolt being provided with a recessed enlargement at its inner end and oppositely extending lugs adjacent its outer end, each lug forming a notch with the associated edge of the enlargement, operating means for the bolt disposed within the recess, an eccentrically mounted weight within said case said weight having a bill projecting into one of said notches and normally urging said bolt into projected position, a pivoted detent having a bill disposed in the other notch whereby said detent is caused to swing with the projection and retraction of the bolt, and key operated means whereby the detent may be locked against swinging movement when the bolt is in its projected position.

1,758,873. HOLDING DEVICE. HARVEY O. WICKES, Castella, Calif. Filed July 17, 1929. Serial No. 379,044. 1 Claim. (Cl. 65—54.)



In a device of the character described a rectangular plate, clamping means secured to one end of said plate, said clamping means comprising a pivoted barrel, a hook element positioned in said barrel and a spring positioned within said barrel and surrounding said hook element, a rod horizontally positioned in said frame, a sliding fastening element movable on said rod, said fastening element comprising a pivoted barrel, a horizontal element positioned in said barrel, a spring surrounding said horizontal element, said springs and said barrels serving to hold said horizontal elements against withdrawal from said barrel whereby a receptacle positioned on said frame and between said horizontal element may be engaged thereby, for the purpose specified.

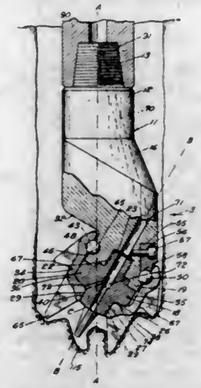
1,758,874. DIRIGIBLE HEADLIGHT. EUSTACH ZAHRADNIK, Vienna, Austria. Filed Jan. 31, 1929, Serial No. 336,462, and in Austria May 3, 1928. 2 Claims. (Cl. 240—62.)



2. Automatically adjustable headlamps as specified in claim 1 in which the radial pins are spring-controlled so that the lamps are automatically returned into the initial position when the coupling is disengaged.

1,758,875. CUTTER FOR ROTARY BITS. JOHN A. ZUBLIN, Los Angeles, Calif., assignor to Universal Engineering Company, Los Angeles, Calif., a Corporation of California. Original application filed Sept. 8, 1925, Serial No. 54,874. Divided and this application filed Nov. 11, 1929. Serial No. 406,237. 14 Claims. (Cl. 255—71.)

1. In a cutter for use on a bit, the combination of: a cup-shaped portion having a cavity adapted to receive a pin; a thrust-journal face formed on the bottom of said cup-shaped portion, there being a cylindrical opening formed in the bottom of said cup-shaped portion, the wall thereof forming a radial-journal face; and a plurality of prongs extending downward from said cup-shaped portion, said prongs having a length equal to about one-quarter the diameter of the hole to be cut.



1,758,876. PICTORIAL REPRODUCTION IN PLAQUE. THOMAS M. BANSFIELD, Chicago, Ill. Filed Oct. 24, 1928. Serial No. 314,626. 4 Claims. (Cl. 41—24.)

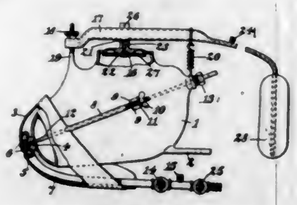


1. The process of making pictorial reproductions in metal plaque form which consists in preparing a base member in embossed relief, having portions raised proportionately to the pictorial reproduction being made, and having depressions formed between the raised portions, plating the surface with a metal coating, covering the plated surface with a powdered substance to fill said depressions, and then brushing the surface to remove surplus powdered material, leaving said material in the depressions to accentuate the relief.

1,758,877. METHOD OF DYEING. ROBERT R. SLEEPER, Boundbrook, N. J., assignor, by mesne assignments, to The Calco Chemical Company, Inc., a Corporation of Delaware. Filed Aug. 30, 1928. Serial No. 303,115. 9 Claims. (Cl. 8—6.)

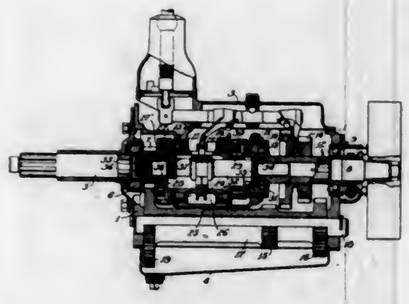
1. The method of dyeing fibres by means of a dye sensitive to the impurities contained in crude sodium bisulphate, which comprises assisting the adsorption of the dye on the fibres by means of crude sodium bisulphate, and simultaneously counteracting the effect on the dye of the impurities contained in the crude sodium bisulphate.

1,758,878. APPARATUS FOR SPRAYING MOLTEN SUBSTANCES. HENDRIK JOHAN VERSTEEG, Diemen, Netherlands, assignor to Christiaan Johan Jung, Amsterdam, Netherlands. Filed Aug. 19, 1927, Serial No. 214,031, and in the Netherlands Sept. 3, 1926. 10 Claims. (Cl. 91—12.2.)



1. In apparatus for spraying molten substances, the combination of a container, a separate nozzle formed with a faced surface around one end of its bore fitting a corresponding faced edge around an opening in the container, a perforated tubular jet ring at the other end of the nozzle bore fitting close against a shoulder around a reduced part of the nozzle, means for clamping the jet ring and nozzle together and the nozzle against the faced edge of the container, and means for supplying compressed air or gas to the container, and to the jet ring, substantially as specified.

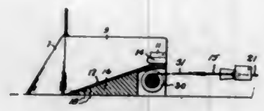
1,758,879. OILING MEANS FOR TRANSMISSIONS. SAMUEL O. WHITE, Muncie, Ind., assignor to Warner Gear Company, Muncie, Ind., a Corporation of Indiana. Filed Mar. 23, 1927. Serial No. 177,541. 5 Claims. (Cl. 74—58.)



1. In an automobile transmission the combination with a casing, of coaxial driving and driven shafts extending into said casing, an external gear on one of said shafts, an internal gear on the other shaft, a hollow eccentric gear member mounted between said gears and having sets of external and internal teeth in mesh with the internal and external gears respectively, a supplemental oil reservoir mounted with a plane normally above the oil level plane of said casing, the end walls of said reservoir supporting a bearing respectively for said gear member, and one of said shafts, a transverse web in said reservoir intermediate of its ends and supporting a second bearing for said gear member, and a trough arranged in the upper part of said casing, adapted to deliver oil to said reservoir and to receive oil from a transmission gearing mounted on one of said shafts.

1,758,880. RETARDING DEVICE FOR AIRCRAFT. LYTLE S. ADAMS, Seattle, Wash., assignor to Airways Patent Corporation, a Corporation of Delaware. Filed May 21, 1928. Serial No. 279,320. 11 Claims. (Cl. 244—2.)

1. In aeroplane pick up apparatus, a cable having a weight on its lower end and adapted to hang from an aeroplane, a grappling device arranged to receive said cable and be picked up thereby, and a support for the grappling



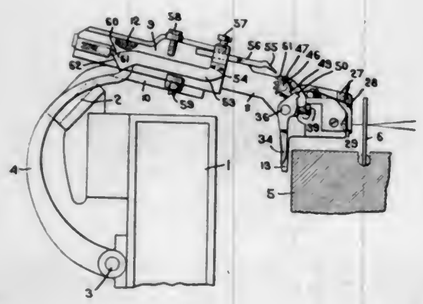
device having an upwardly inclined surface and forwardly converging guides for guiding the weight to the grappling device.

1,758,881. FILTRATION MEDIUM. HANS E. BIRKHOLZ, Chicago, Ill., assignor, by mesne assignments, to American Air Filter Company, Inc., Louisville, Ky., a Corporation of Delaware. Filed Oct. 12, 1927. Serial No. 225,660. 1 Claim. (Cl. 183—45.)



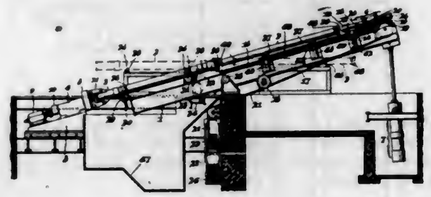
A filter material comprising a plurality of interengaged twisted ribbon-like metallic strands some of which are permanently deformed to provide a plurality of dish-shaped depressions in one face of the strand and corresponding protuberances in the other face thereof, said deformed portions of the strand being separated by normally undeformed portions.

1,758,882. INTERMITTENT THREAD-CUTTING TEMPLE. HORACE H. BURDETT, Hopedale, Mass., assignor to Draper Corporation, Hopedale, Mass., a Corporation of Maine. Filed June 5, 1929. Serial No. 368,687. 9 Claims. (Cl. 139—266.)



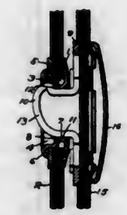
1. A thread cutting loom temple comprising a stand, a shank slidable rearward in the stand by a spring and forward by the lay on the beat-up, filling severing mechanism mounted on the shank, means acting to open said mechanism, means engaged and actuated by the lay upon the beat-up to close said mechanism, and means actuated by the relative sliding movement of the stand and shank to withdraw said closing means from engagement by the lay and lock it in withdrawn position after a predetermined number of beat-ups.

1,758,883. APPARATUS FOR FREEING AND EXTRACTING CASTINGS FROM MOLDS. LOUIS A. CAMEROTA, Burlington, N. J., assignor to Walter Wood, Philadelphia, Pa. Filed June 7, 1928. Serial No. 283,527. 16 Claims. (Cl. 22—94.)



1. An apparatus for freeing a casting from a mold consisting of a sand lined flask comprising means for tilting the flask, and means for applying relative rotative and longitudinal movement between the flask and casting, whereby the sand lining is disintegrated and falls from the flask.

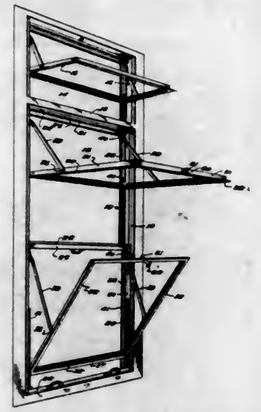
1,758,884. FASTENER. FRED S. CARR, Newton, Mass., assignor, by mesne assignments, to United-Carr Fastener Corporation, Cambridge, Mass., a Corporation of Massachusetts. Filed Dec. 30, 1926. Serial No. 157,909. 1 Claim. (Cl. 24—214.)



A grommet installation for cooperative engagement with a snap fastener stud comprising, in combination, a carrying medium, a stud-engaging part having a plate portion of substantial area located at one side of the carrying medium, a tubular portion integral with and extending from said plate portion through a hole in the carrying medium and a plate located at the opposite side of the support against which a portion of the free end of said tubular portion is clenched to secure the said stud-engaging part to the carrying medium, said plate covering substantially the same area as the plate portion of the stud-engaging part and said tubular portion having an abrupt annular shoulder parallel with the plane of the carrying medium and located within the opening through the carrying medium between the two faces of the carrying medium for cooperative engagement with a shoulder on a cooperating stud member.

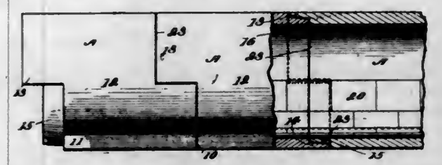
1,758,885. WINDOW FRAME. MILTON T. CLARK and JOHN RUSSELL MONTGOMERY, Youngstown, Ohio, assignors to Truscon Steel Company, Youngstown, Ohio, a Corporation of Michigan. Filed Nov. 23, 1928. Serial No. 321,468. 5 Claims. (Cl. 189—66.)

1. In a window structure, the combination with a window frame, of a sash frame slidable therein, a glass-carrying frame including top and bottom rails, one of which is provided with an open ended channel, links pivoted to the sash frame and to the glass-carrying frame, guideway on the stiles of the sash frame, and spring-pressed plungers located longitudinally of and housed in the ends of the



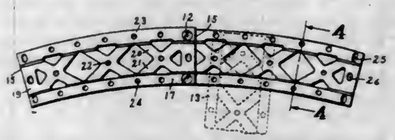
channel of said channeled rail of the glass-carrying frame and slidably extending through the open end of the channel and engaged in the guideways of the sash frame's stiles.

1,758,886. SHIP-LAP JOINT. JOSEPH COGITO and BIAGIO INGRASSIA, Cleveland, Ohio. Filed May 25, 1927. Serial No. 194,136. 1 Claim. (Cl. 285—57.)



A pipe joint comprising two pipe sections, each having half the edge margin at one end thereof provided with a male portion of an external diameter less than the external diameter of the body portion of the pipe section, said male portion providing an external shoulder at its junction with the body portion of said pipe section, the other half of the edge margin being cut away internally to provide a female portion and an internal shoulder at the inner end of said female portion, said male and female portions being adapted for overlapping engagement with the complementary portions of the adjoining end of the other pipe section.

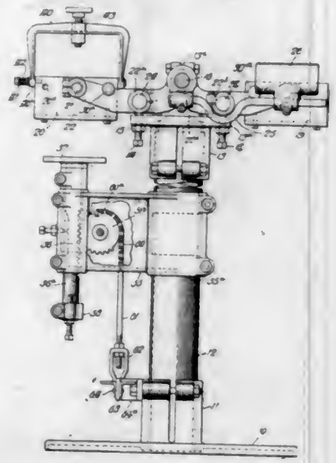
1,758,887. TOY BUILDING CONSTRUCTION. ALFRED C. GILBERT, Hamden, Conn., assignor, by mesne assignments, to The A. C. Gilbert Company, New Haven, Conn., a Corporation of Maryland. Filed Feb. 4, 1927. Serial No. 165,904. 13 Claims. (Cl. 46—35.)



4. A toy building element, comprising a sheet metal strip in the form of a circular ring sector, having a flange along its outer periphery extending substantially at right angles thereto, said sector having a part offset from the plane and extending the entire arcuate length thereof, said part being offset in the same direction in which said flange extends and being spaced from the outer and inner periphery of said sector, said offset portion having a series of

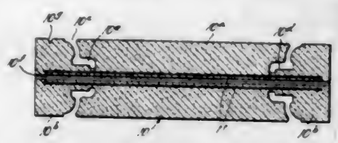
spaced apart perforations along its medial line, said sector having a series of arcuately aligned perforations adjacent each edge thereof, the perforations in said offset portion being in alignment radially with perforations in said sector.

1,758,888. APPARATUS FOR MAKING CORES. GEORGE W. GILDERMAN, Mishawaka, Ind., assignor to Dodge Manufacturing Corporation, Mishawaka, Ind., a Corporation of Delaware. Filed June 4, 1927. Serial No. 196,473. 35 Claims. (Cl. 22—13.)



1. In apparatus of the class described, a pair of boxes, and arms pivotally attached to said boxes and rotatable about a common axis.

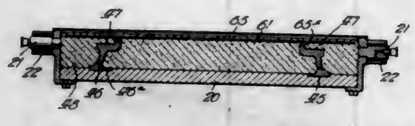
1,758,889. CORE. GEORGE W. GILDERMAN, Mishawaka, Ind., assignor to Dodge Manufacturing Corporation, Mishawaka, Ind., a Corporation of Delaware. Original application filed June 4, 1927, Serial No. 196,473. Divided and this application filed Apr. 26, 1928. Serial No. 273,036. 11 Claims. (Cl. 22—165.)



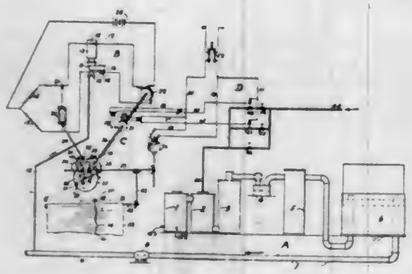
1. A core for coring a hollow roll casting, having integral extensions for exteriorly molding the ends of the casting, said extensions joined to the main core body by central coring portions and having molding faces in fixed spaced relation to the ends of said main core body shaped to mold the ends of the casting in dished form, said molding faces and the confronting faces of the ends of the main core body being curved or inclined in the same general direction with reference to a plane at right angles to the core axis.

1,758,890. PROCESS FOR MAKING CORES. GEORGE W. GILDERMAN, Mishawaka, Ind., assignor to Dodge Manufacturing Corporation; Mishawaka, Ind., a Corporation of Delaware. Original application filed June 4, 1927, Serial No. 196,473. Divided and this application filed Apr. 26, 1928. Serial No. 273,037. 3 Claims. (Cl. 22—194.)

1. A process of core formation consisting in separately forming portions of the core in boxes, employing segmental templates in said boxes and embedding the same in the core material charged in said boxes, thereafter applying stripper plates to said boxes, then removing said templates through said stripper plates by rotating them, then applying an adhesive to the exposed surfaces after removal of said stripper plates, then moving said boxes into assembled relation to join said core portions, thereafter removing the completed core from said boxes.



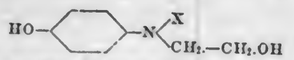
1,758,891. AUTOMATIC OIL CONTROL FOR CARBURETED WATER-GAS SETS. MORGAN PARSONS, Moylan, Pa., assignor to The U. G. I. Contracting Company, Philadelphia, Pa., a Corporation of Delaware. Filed Mar. 28, 1927. Serial No. 178,865. 4 Claims. (Cl. 48—87.)



1. Automatic oil control for carbureted water gas sets including a water gas carbureter, comprising a calorimeter adapted to measure the calorific value of the carbureted water gas produced, a galvanometer system responsive to the calorimeter and balanced at a predetermined standard calorific value of the carbureted water gas and unbalanced upon departure from that calorific value, and oil supply control means responsive to the galvanometer system.

1,758,892. PROCESS OF DEVELOPING PHOTOGRAPHIC MATERIALS AND NEW PHOTOGRAPHIC DEVELOPERS. GUSTAV REDDELIEN and WERNER MÜLLER, Leipzig, Germany, assignors, by mesne assignments, to Agfa Ansco Corporation, Binghamton, N. Y., a Corporation of New York. Filed Nov. 2, 1927, Serial No. 230,687, and in Germany Nov. 19, 1926. 22 Claims. (Cl. 95—88.)

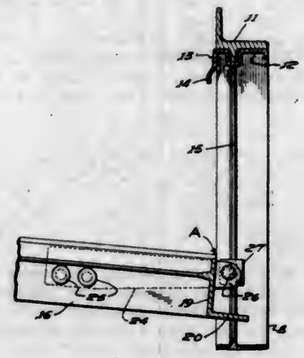
1. A photographic developer containing together with other developer ingredients a compound of the general formula:



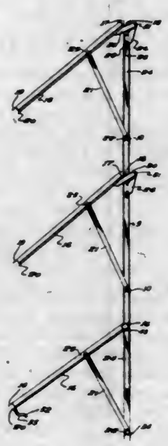
wherein X represents a substituent of the group consisting of —H and —$CH_2.CH_2.OH$.

1,758,893. WINDOW STRUCTURE. ADOLF H. SCHAFFERT, Youngstown, Ohio, assignor to Truscon Steel Company, Youngstown, Ohio, a Corporation of Michigan. Filed Mar. 20, 1929. Serial No. 348,574. 5 Claims. (Cl. 189—66.)

1. In a window structure, the combination with a frame having a vertical side guideway, a swinging sash that operates in the frame, links connecting the sash and frame to cause its swinging movements, a slide block engaged with the guideway, and a mounting for the sash having a pivotal mounting on the slide block at one side of the vertical center of the guideway, said mounting coacting with the links to cause the upper end of the sash to abut against and be stopped by the frame after said upper end has passed to a position lower than the lower end of the sash.

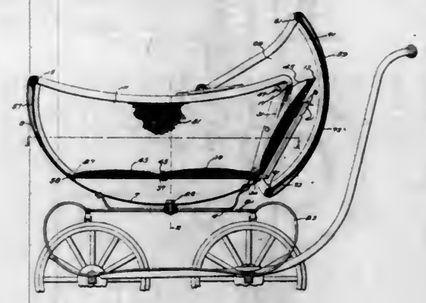


1,758,894. WINDOW STRUCTURE. ADOLF H. SCHAFFERT, Youngstown, Ohio, assignor to Truscon Steel Company, Youngstown, Ohio, a Corporation of Michigan. Filed Apr. 4, 1929. Serial No. 352,478. 8 Claims. (Cl. 189—67.)



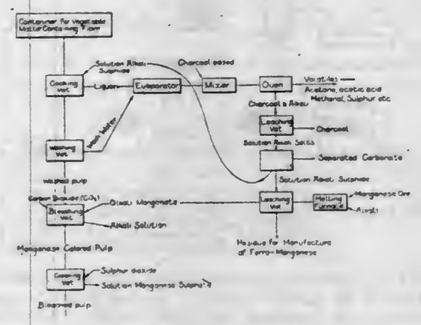
1. The combination with a window frame, of a plurality of sashes mounted in said frame to swing, an actuating bar mounted to reciprocate in the window frame, a connection between one of the sashes and the bar that causes the swinging of the sash on the reciprocation of the bar, and a bolt movably mounted on the other sash and detachably engaging with the bar to effect its movement with the latter sash and to permit the independent movement of said latter sash.

1,758,895. BABY CARRIAGE. HAROLD F. SHAW, Leominster, Mass., assignor to F. A. Whitney Carriage Company, Leominster, Mass., a Corporation of Massachusetts. Filed June 6, 1927. Serial No. 196,934. 11 Claims. (Cl. 296—63.)



1. In a baby carriage a basin-like body having a bottom and ends and dished side portions shaped as a single unit from sheet metal of substantially uniform thickness and constituting in itself a self-maintaining resistant structure, and longitudinal strips terminally secured to the body interiorly of the dished sides thereof and providing a support for a seat.

1,758,896. MANUFACTURE OF PAPER PULP. ALFRED M. THOMSEN, San Francisco, Calif. Filed Aug. 1, 1927. Serial No. 209,791. 3 Claims. (Cl. 92—9.)

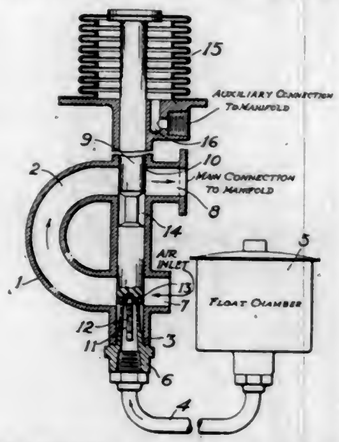


3. A process for liberating fiber obtained from a vegetable source from encrusting materials which consists in cooking the fiber in a solution of alkali sulphide only, washing the fiber, bleaching the fiber by subjecting it to a solution of alkali manganate, simultaneously passing carbon dioxide gas through the solution, and then cleaning the fiber by subjecting it to the action of sulphur dioxide.

1,758,897. APPARATUS FOR SUPPLYING ANTIKNOCK LIQUIDS. EARLE W. EVANS, Linden, N. J., assignor to Standard Oil Development Company, a Corporation of Delaware. Filed Oct. 31, 1925. Serial No. 65,959. 4 Claims. (Cl. 123—127.)

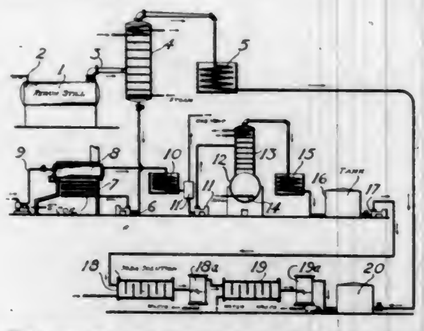
1. An auxiliary apparatus to be used in addition to the carburetor for supplying antiknock substances to an in-

ternal combustion engine, said apparatus comprising a casing, a passageway therethrough and adapted to be connected to the intake manifold of the engine, an inlet for air into said passageway, an inlet for anti-knock substance



into said passageway, and a valve stem actuated automatically by fluid-pressure differentials formed in the operation of the engine and having valves adapted to control both said inlets.

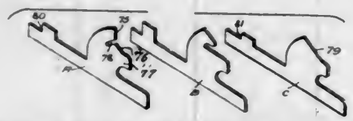
1,758,898. PROCESS OF PREPARING MOTOR FUELS. FRANK A. HOWARD, Elizabeth, N. J., assignor to Standard Oil Development Company, a Corporation of Delaware. Filed July 21, 1922. Serial No. 576,578. 7 Claims. (Cl. 196—147.)



1. The process of preparing motor fuel, which comprises separating the light fractions of gasoline from the heavy fractions and reserving the light fractions, vaporizing the heavy fractions and passing the vapor at substantially atmospheric pressure, together with air through a temperature zone of 450° to 600° F., the proportion of air being about 11 to 12 cubic feet per pound of hydrocarbon, collecting condensible products, distilling said products with superheated steam, treating with dilute alkali solution, washing with water, and mixing the washed product with the reserved light fractions originally separated from the gasoline.

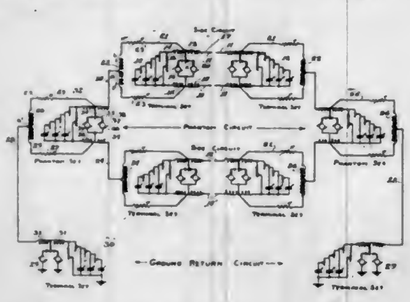
1,758,899. MEANS AND INSTRUMENTALITY FOR EFFECTING REVERSE PLATING. ROBERT H. LAWSON, Pawtucket, R. I., assignor to Hemphill Company, Central Falls, R. I., a Corporation of Massachusetts. Original application filed May 10, 1926. Serial No. 107,921. Divided and this application filed May 28, 1929. Serial No. 366,540. 5 Claims. (Cl. 66—108.)

1. Mechanism for effecting plating and reverse plating in a knitted fabric, including an upright circular series of independent latch needles, the points of the bills of said needles all being out of line with and in advance of the shanks of said needles, whereby the hooks of all of the said needles are truly concentrically positioned; thread engaging instrumentalities for each needle respectively, including special instrumentalities where reverse plating is to be formed; all of said instrumentalities being movable individually in and out radially to the needle circle in a horizontal path; thread guiding means to feed a back thread and a face thread in plating relation to the needles; each of said special instrumentalities having an outwardly and downwardly sloping edge adapted to receive at least one of said threads during loop formation and for the



purpose of effecting reverse plating and means to impart an inward movement to desired thread engaging instrumentalities at an abnormally early point in the loop forming operation, whereby when a special instrumentality of the series is given said abnormally early inward movement, it receives at least one of said threads upon said outwardly and downwardly sloping edge during loop forming operation and reverse plating is effected at the corresponding needle, and whereby if said special instrumentality is not given said abnormally early inward movement, neither thread is received upon said outwardly and downwardly sloping edge and reverse plating is not effected at the corresponding needle.

1,758,900. SUPERIMPOSED TELEGRAPH CIRCUITS. RONALD V. MORGENSTERN, Metuchen, N. J., assignor to The Western Union Telegraph Company, New York, N. Y., a Corporation of New York. Filed Mar. 3, 1928. Serial No. 258,948. 10 Claims. (Cl. 178—49.)

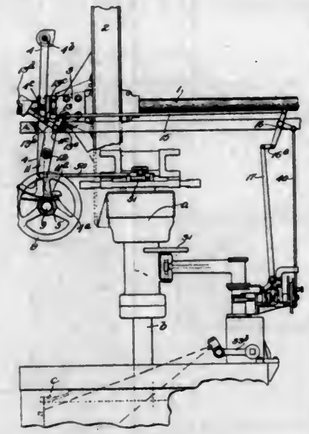


1. A superimposed telegraph circuit comprising a metallic circuit, telegraph transmitting means comprising a source of signaling potentials connected through resistance to a pair of terminals of said circuit and a shunt circuit connected to said terminals comprising an inductive resistance coil, and a conductor of a circuit having a ground return connected to the midpoint of said coil, whereby the inductance coil offers great impedance to the flow of current from said metallic circuit and negligible impedance to flow from said ground return circuit.

1,758,901. MEANS FOR AUTOMATICALLY CONTROLLING CENTRIFUGAL MACHINES. EUGENE ROBERTS, Salt Lake City, Utah, assignor to The Western States Machine Company, Salt Lake City, Utah, a Corporation of Utah. Filed Dec. 8, 1925. Serial No. 74,111. 10 Claims. (Cl. 210—71.)

1. In a centrifugal apparatus, the combination with a centrifugal machine and its driving means, of means for

starting the centrifugal through its driving connection, a brake and an automatically timed sprayer cooperatively associated with the centrifugal, and coordinated timing



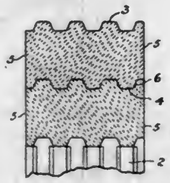
means acting to start the operation of the sprayer at a predetermined interval after the centrifugal is started and to apply the brake at a predetermined interval after the spraying operation has ceased.

1,758,902. GROUND-GRIPPING CHAIN FOR AUTOMOBILE TIRES. JAMES E. ROBISON, Boulder, Colo., assignor of one-eighth to Ralph M. Reeves, Denver, Colo. Filed Oct. 26, 1926. Serial No. 144,219. 3 Claims. (Cl. 152—14.)



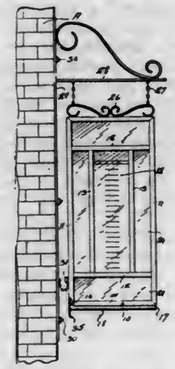
1. In a ground-gripping chain for automobile tires having spaced, parallel side chains, cross-chains between and connecting said side chains, said cross-chains comprising a tractive element formed of a plurality of similar, flat, separably interconnected links having each one smooth surface and angularly disposed surface-engaging means on the other surface, said means comprising marginal lugs on said link at substantially right angles to said surface and to one another and a central lug parallel to one of said marginal lugs, said links being hingedly interconnected for limited articulation, and hook members hingedly secured to either end of said tractive element.

1,758,903. REFRACTORY BLOCK. PAUL G. WILLETTS, Berlin, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed Apr. 6, 1926. Serial No. 100,121. 1 Claim. (Cl. 72—38.)



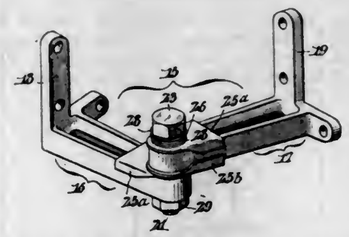
A wall for glass furnaces for contact with the molten glass therein comprising a plurality of refractory blocks having interengaging corrugations parallel to the glass-contacting face of said wall to form tortuous joints between the blocks, the corrugations in the joints between superimposed courses of blocks having contacting surfaces adjacent to the glass-contacting face of the blocks which extend downwardly, whereby to minimize the erosive action upon the blocks of the upwardly moving gases evolved from the molten glass when it penetrates a short distance into the joints.

1,758,904. PRICE CARD AND SIGN EXHIBITOR. WILLIAM PEOCE AGEE, Jr., Little Rock, Ark., assignor to Specialty Advertising Company, Little Rock, Ark. Filed July 10, 1928. Serial No. 291,627. 8 Claims. (Cl. 40—64.)



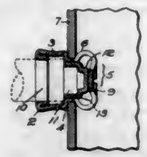
1. A price card exhibitor comprising a frame open at the bottom and having a price card insertible from the bottom up into said frame, the price card having like indicia on opposite faces thereof so as to be seen from opposite sides of the frame, and means for holding the price card in place including a slide engaged with the lower end of the frame and having a portion extending down below the lower end of the frame and in which the lower edge of the price card may be disposed whereby when the slide is withdrawn the lower edge of the price card may be grasped and pulled out.

1,758,905. HINGE. JOAH BROGDEN, Melrose Park, Pa., assignor to David Lupton's Sons Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Dec. 28, 1926. Serial No. 157,446. 3 Claims. (Cl. 16—141.)



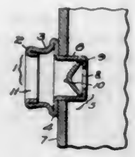
1. In a hinge of the character described comprising two complemental hinge components, the combination of interposed friction members of unlike material with apertured ends for passage of the hinge pintle respectively associated with said components and individually restrained from movement relative to them by integral parallel side flanges, and a pivot screw pintle passing free through one of the components and taking into the other with capacity for adjustment to vary the contact pressure between said friction members and thereby increase or decrease resistance to hinge movement.

1,758,906. SEPARABLE SNAP-FASTENER ELEMENT. MOSES F. CARR, Lexington, Mass., assignor, by mesne assignments, to United-Carr Fastener Corporation, Cambridge, Mass., a Corporation of Massachusetts. Filed Apr. 18, 1928. Serial No. 270,913. 5 Claims. (Cl. 24—219.)



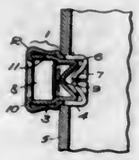
2. A fastener element having a body portion having a stud portion at one end provided with an apertured head, a neck, a base flange extending directly inwardly from said neck and an attaching portion extending from said base flange, said attaching portion being slit to permit ease of expansion, means forming part of the fastener assembly for laterally expanding said attaching portion and closure means within the body portion for closing the slits in the attaching portion so that water or dirt passing into the fastener through the aperture in the stud head will be excluded from passing through the stud slits.

1,758,907. SEPARABLE SNAP-FASTENER ELEMENT. MOSES F. CARR, Lexington, Mass., assignor, by mesne assignments, to United-Carr Fastener Corporation, Cambridge, Mass., a Corporation of Massachusetts. Filed Apr. 18, 1928. Serial No. 270,914. 3 Claims. (Cl. 24—208.)



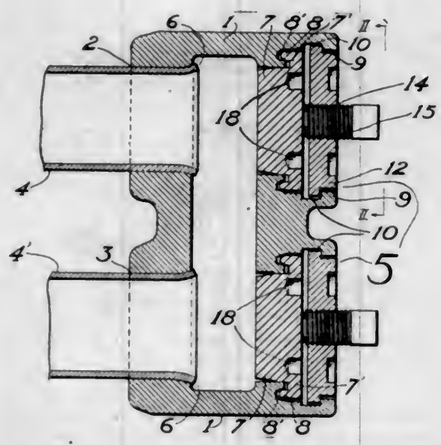
1. A snap fastener member comprising a fastener-receiving portion, a cup-shaped attaching portion extending from said fastener-receiving portion, and a disc-like member located within said cup-shaped member and having a hump which is adapted to be flattened to enlarge the diameter of said disc-like member, thereby to expand the peripheral wall of said cup-shaped attaching portion.

1,758,908. SEPARABLE FASTENER. MOSES F. CARR, Lexington, Mass., assignor to United-Carr Fastener Corporation, Cambridge, Mass., a Corporation of Massachusetts. Filed Oct. 5, 1928. Serial No. 310,658. 5 Claims. (Cl. 24—219.)



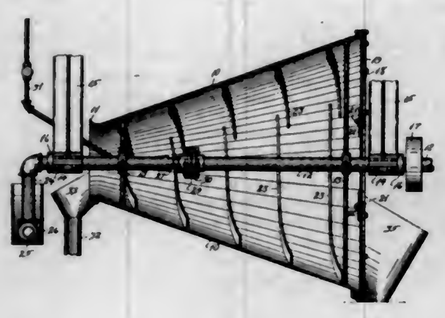
1. A snap fastener element including a one-piece body part having fastener-engaging means adjacent to one end thereof, an expansible attaching portion at the other end, a cup-shaped member located within the body part and secured in fixed relation thereto and means forming a part of said cup-shaped member and adapted to expand the peripheral wall of the attaching portion to secure the fastener element to a support.

1,758,909. TUBE CLOSURE OR HEADER. HERBERT B. COFFIN, Roselle Park, N. J., assignor to Standard Oil Development Company, a Corporation of Delaware. Filed Apr. 1, 1927. Serial No. 180,086. 2 Claims. (Cl. 220—29.)



1. A tube closure comprising a box receiving the end of a tube and having an opening therein, a seat in the box, a sealing plug adapted to fit tightly against the seat and close said opening, an exterior in-turned flange on said box and having recesses on its inner margin, a locking plate having projections adapted to slip through said recesses, a compartment beneath said flange and adapted to receive said projections so that they lie under unrecessed portions of the flange, a removable locking block adapted to fit into one of the recessed portions of the flange and into the registering space therebelow between projections on the locking plate and means for forcing the sealing plug against the seat.

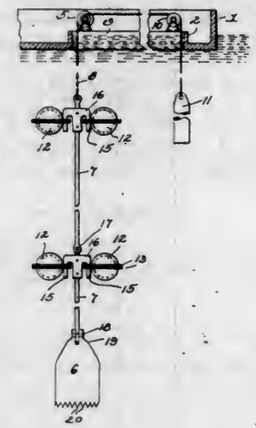
1,758,910. ROTATING FILTER. EDWIN B. GOODWIN, Denver, Colo. Filed July 24, 1928. Serial No. 295,030. 2 Claims. (Cl. 210—151.)



1. A rotating filter comprising a hollow, open-ended shell having the form of a truncated cone, a shaft axially of and projecting at either end beyond said shell, rigid connections between said shaft and shell, means for rotatably supporting said shaft in horizontal position and means on said shaft whereby said shaft and shell may be rotated, filtering material transversely of,

closing and removably and replaceably secured to the larger end of said shell, an interrupted helix on the inner surface of and projecting radially within said shell, the pitch of said helix ascending toward the lesser end of said shell, and means for introducing a mixture to be filtered into said shell.

1,758,911. DEEP-SEA ANCHOR. WILLIAM E. HAMILTON, Columbus, Ohio. Filed Apr. 6, 1928. Serial No. 267,876. 10 Claims. (Cl. 114—206.)



1. In anchoring mechanisms, an anchor body, suspending means for said body comprising a plurality of flexible sections, self-releasing submerged floats carried by said sections, and means for uniting said sections with an associated vessel.

1,758,912. DIAZO-SALT PREPARATION. FERDINAND KELLER and KARL SCHNITZSPAHN, Offenbach-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Dec. 8, 1925, Serial No. 74,161, and in Germany Dec. 27, 1924. 18 Claims. (Cl. 8—6.)

1. A diazo-salt preparation, comprising a mixture of an aromatic diazo compound in a solid form with a soluble metal of an aryl-sulfonic acid.

1,758,913. ROAD-BUILDING MATERIAL AND METHOD OF MAKING THE SAME. SAMUEL S. SADTLER, Springfield Township, Montgomery County, Pa., assignor to Amiesite Asphalt Company of America, Camden, N. J., a Corporation of New Jersey. Filed May 28, 1929. Serial No. 366,770. 16 Claims. (Cl. 94—23.)

1. The method of making a bituminous paving material, which consists in adding to a graded mineral aggregate a bituminous binding material and agitating said aggregate in said material with the presence of a liquefier for said bituminous binding material and a relatively small quantity of rubber, until the pieces of aggregate are provided with a relatively thick coating of bituminous cement, the weight of said rubber being from two tenths of one per cent to two per cent of the weight of said bituminous cement.

1,758,914. ROAD-BUILDING MATERIAL AND METHOD OF MAKING THE SAME. SAMUEL S. SADTLER, Springfield Township, Montgomery County, Pa., assignor to Amiesite Asphalt Company of America, Camden, N. J., a Corporation of New Jersey. Filed June 28, 1929. Serial No. 374,615. 8 Claims. (Cl. 94—23.)

1. The method of making a paving material consisting of a graded aggregate coated with bituminous material which consists in adding from substantially one quarter of one part to substantially one part, by weight, of rubber, to from substantially 8 to 12 parts by weight of a liquefier of said bituminous material, adding the said mixture to substantially 1900 parts, by weight, of aggregate under agitation and thoroughly distributing said mixture over the surfaces of the individual pieces of said aggregate, and then adding to said aggregate so treated from substantially 35 to substantially 140 parts, by weight of said bituminous material and agitating the mass to thoroughly coat the individual pieces of aggregate with said bituminous material.

Patents Nos. 1,758,915 to 1,759,826

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THE OFFICIAL GAZETTE OF THE United States Patent Office

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Designs	44—No.	81,174 to No.	81,217, inclusive.
Patents	912—No.	1,758,915 to No.	1,759,826, inclusive.
Total	1,223		

Adverse Decisions in Interference

In interferences involving the indicated claims of the following patents final decisions have been rendered that the respective patentees were not the first inventors with respect to the claims listed:

Pat. 1,658,281, R. Beutner, Resins and method of preparing the same, decided April 12, 1930, claim 4.

Pat. 1,675,186, E. H. Loftin and W. F. Grimes, Amplifiers of high-frequency electrical currents, decided April 28, 1930, claims 1, 3, 4, 5, 6, 7, and 9.

Pat. 1,723,687, D. T. Williams, Fractionating condenser, decided April 12, 1930, claims 1, 5, and 6.

Adjudicated Patents

(D. C. Md.) Stevenson patent, No. 1,099,626, for fastener for doors, claim 1, *Held* valid and infringed. *Jamison Cold Storage Door Co.* v. *Victor Cooler Door Co.*, 38 F. (2d) 490.

(D. C. Md.) Stevenson patent, No. 1,208,042, for closure for compartments, *Held* valid and infringed. Id.

(D. C. Mo.) Pagliuca patent, No. 1,302,205, for chocolate-coating machine and the like, claims 1, 3, 10, 12, 14, 15, and 16, *Held*, on counterclaim, valid and infringed. *United Drug Co.* v. *Ireland Candy Co.*, 38 F. (2d) 505.

(D. C. Mo.) Flynn patent, No. 1,612,762, for de-tailing mechanism for candy-coating machines, claims 1, 2, and 3, *Held* invalid, because of prior public use. Id.

NOTICE—CHANGES IN FEES—LAW EFFECTIVE JUNE 1, 1930

ALL FINAL FEES MUST BE IN ACCORDANCE WITH NEW LAW

The act of Congress, approved April 11, 1930, provides that the fee for issuing each original patent shall be $25.00 and $1.00 for each claim in excess of 20, instead of the present fee of $20.00 and $1.00 for each claim in excess of 20.

This requirement applies to all cases, since the act itself does not provide that it should apply only to applications filed after June 1, 1930, nor only to applications in which the notice of allowance was issued after June 1, 1930.

In any application allowed on or before May 31, 1930, in which the fee is actually paid into the Patent Office on or before May 31st, the old schedule of fees applies. If it is desired that the issuance of the patent on such an application be delayed, as for example in order to file a foreign application, such issuance will upon request made when the fee is paid be deferred not to exceed three months. (See sec. 4885, R. S.)

THOMAS E. ROBERTSON,
Commissioner of Patents.

Condition of Applications Under Examination at Close of Business May 9, 1930

(Total number of applications awaiting action, excluding Trade-Mark Division, 117,380; Trade-Mark Division, 1,727. Oldest new case, July 2, 1929; oldest amended, July 2, 1929. The dates given are 1929 except where † indicates 1930.)

Room No.	Divisions, Examiners, and Subjects of Inventions	Oldest new application awaiting action by applicant	Oldest amended application awaiting action by applicant	No. of applications awaiting action
		New	Amended	
112	1. LOEFFLER, F. A., Closure Operators; Fences; Gates; Tillage; Scattering Unloaders; Handling and Hoist Line Implements.	Sept. 11	Oct. 2	1,308
126	2. HADEN, C. F., Bee Culture; Dairy; Presses; Tobacco	July 19	July 22	2,292
331	3. LINDSEY, A., Heating; Metal Founding; Metallurgy; Metal Treatment	Aug. 12	Dec. 13	1,545
234	4. MERRITT, A. D., Conveyers; Hoists; Handling Apparatus; Excavating	Oct. 11	Oct. 26	1,237
106*	5. MACNAB, J. F., Harvesters; Music; Acoustics; Sound Recording; Knotters	Aug. 16	Aug. 20	1,475
318	6. LEWERS, A. M., Carbon Chemistry	July 5	July 13	2,509
106	7. JARBOE, C. G., Optics; Photography	July 29	July 27	2,599
133	8. HENRY, C. C., Beds; Chairs; Kitchen and Table Articles; Racks and Cabinets	July 27	Nov. 13	1,721
221	9. ADAMS, R. E., Pumps; Fluid and Fluid-Current Motors	Oct. 18	Oct. 21	1,426
118	10. HUNTER, O. F., Land Vehicles—Animal Draft Appliances, Bodies and Tops	Aug. 1	Sept. 11	1,796
148*	11. ARMSTRONG, H. C., Boots, Shoes, and Leggings; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Whip Apparatus.	Nov. 6	Nov. 15	1,027
380	12. PIERCE, P. P., Machine Elements	Sept. 16	Sept. 21	1,577
154*	13. CLIFT, J. W., Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Working; Needle and Pin Making; Turning; Boring and Drilling.	July 12	July 23	1,671
102*	14. BRUMBAUGH, N. J., Farriery; Metal Bending; Metal Tools and Implements, Making; Sheet-Metal Ware, Making; Wire Fabrics; Wire Working; Metal Working, Assembling, and Blanks and Processes.	July 31	Aug. 10	1,450
329	15. WORRELL, L. W., Glass; Plastic Block and Earthenware Apparatus; Plastics	July 22	July 26	3,046
242*	16. SPENCER, C. J., Telegraphy; Telephony	Aug. 13	Oct. 1	1,241
307	17. RAFTER, G. S., Label Pasting and Paper Hanging; Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet-Material Associating or Folding; Sheet or Web Feeding; Type Setting.	July 27	Aug. 26	1,657
229	18. PORTER, M. E., Motors, Expansible-Chamber Type; Power Plants; Speed-Responsive Devices	Sept. 10	Sept. 18	1,479
236	19. GLASCOCK, E. S., Furnaces; Heating Systems; Liquid and Gaseous Fuel Burners; Stoves and Furnaces.	Aug. 2	July 31	2,215
179	20. GROVE, S. D., Miscellaneous Hardware; Closure Fasteners; Locks and Latches; Safes; Undertaking.	Sept. 6	Sept. 14	1,632
212	21. THOMPSON, T. J., Textiles; Cloth Finishing	Sept. 5	Dec. 13	940
244*	22. COLWELL, J. H., Aeronautics; Firearms, Ordnance, and Explosive Devices; Air Guns, Catapults, and Targets; Boats and Buoys; Ships; Marine Propulsion.	Sept. 18	Nov. 2	1,678
217	23. GROESBECK, W. D., Coin Handling; Recorders; Registers	July 22	July 22	1,203
147*	24. DURAS, C. O., Apparel; Apparel Apparatus; Garment Supporters; Sewing Machines	July 15	July 27	1,304
202*	25. LIGHTFOOT, J. H., Agitating; Butchering; Classifying Solids; Centrifugal-Bowl Separators; Mills; Threshing; Vegetable and Meat Cutters and Comminutors.	Aug. 31	Sept. 12	1,635
228*	26. HODGES, J. S., Electricity, Generation; Motive Power	July 31	Aug. 9	1,254
214	27. ANDERSON, L. S., Brush, Broom, and Mop Making; Brushing, Scrubbing, and General Cleaning; Laundry; Washing Apparatus.	Aug. 1	Aug. 1	1,645
225	28. BENSON, A. R., Internal-Combustion Engines	Aug. 20	Aug. 28	2,171
160*	29. MORRIS, B. N., Woodworking; Tools; Compound Tools	Dec. 1	Nov. 27	755
248	30. SHIPMAN, J. L., Automatic Temperature and Humidity Regulation; Illuminating Burners; Illumination; Thermostats and Humidostats.	Aug. 19	†Jan. 30	1,209
312	31. HOLMES, W. N., Distillation; Gas, Heating and Illuminating; Mineral Oils	Aug. 2	Aug. 12	2,633
249	32. BARTHOLOMEW, J. A., Gas and Liquid Contact Apparatus; Heat Exchange; Gas Separation	Oct. 9	Oct. 5	1,735
152	33. WYMAN, W. I., Bridges; Masonry and Concrete Structures; Metallic Building Structures; Roads and Pavements; Roofs; Wooden Buildings.	July 18	July 18	2,614
304	34. SIMPSON, G. R., Electricity, Transmission to Vehicles; Pneumatic Dispatch; Railways, Rolling Stock, Switches, and Signals; Store Service; Vehicle Fenders.	Sept. 6	Sept. 17	1,172
116*	35. REYNOLDS, E. C., Buckles, Buttons, Clasps, Etc.; Card and Sign Exhibiting; Signals; Toilet	Oct. 2	Oct. 10	1,764
105	36. MORTON, G. L., Automatic Weighers; Geometrical and Measuring Instruments; Force Measuring	Aug. 30	Sept. 21	2,329
224*	37. WEAVER, M. E., Electricity, Circuit Makers and Breakers	Aug. 19	Aug. 16	2,122
145	38. KRAFFT, C. F., Animal Husbandry; Earth Boring; Hydraulic and Earth Engineering; Mining, Quarrying, and Ice Harvesting; Stoneworking; Wells.	Aug. 5	Aug. 10	1,471
220	39. COWLES, A. W., Fluid-Pressure Regulators; Multiple Valves; Valves; Water Distribution	July 15	July 15	1,981
262*	40. OBERLIN, J. J., Bottles and Jars; Receptacles	July 12	Oct. 15	3,262
125	41. BROWN, J. I., Land Vehicles, Wheels, and Axles; Resilient Tires and Wheels; Wheel Substitutes; Railway Draft Appliances.	Sept. 9	Sept. 18	1,411
223*	42. CUTTING, H. O., Electric Signaling	Sept. 23	Oct. 16	1,618
124*	43. HOPKINS, F. M., Baths, Closets, Sinks, and Spittoons; Sewerage; Electricity, Medical and Surgical; Medicines; Surgery; Dentistry; Artificial Body Members.	July 15	July 15	2,248
253	44. SHAFFER, C. H., Dispensing; Filling and Closing Portable Receptacles; Refrigeration	July 10	July 10	2,369
379	45. GILES, A. H., Pulleys and Shafting; Lubrication; Bearings and Guides; Spring Devices	Aug. 14	Aug. 14	2,517
233	46. WOLCOTT, C. L., Concentrating Evaporators; Fluid Sprinkling, Spraying, and Diffusing; Fire Extinguishers; Liquid Heaters and Vaporizers.	Sept. 5	Sept. 17	1,640
264	47. BARKER, H., Clutches and Power Stops; Brakes and Motors	July 20	Aug. 15	2,582
212*	48. ROEPKE, O. B., Electricity, General Applications	Aug. 10	Aug. 12	1,403
239	49. EDINBURG, F. P., Check-Controlled Apparatus; Domestic Cooking Vessels; Ventilation; Driers; Liquid Separation or Purification.	Oct. 26	Nov. 16	1,200
322	50. BLAKE, C. L., Plastic and Liquid Coating Compositions; Coating	Aug. 2	Aug. 10	2,922
240*	51. BACKUS, C. D., Radiant Energy, Wave Transmission	Aug. 12	Aug. 12	2,418
144	52. MORGAN, E. T., Supports; Chucks; Joint Packing; Pipe and Rod Joints or Couplings; Tool-Handle Fastenings.	Sept. 21	Sept. 18	2,720
201*	53. PECK, M. K., Books; Manifolding; Printed Matter; Stationery, Educational Appliances; Paper Files and Binders; Tents, Canopies, Umbrellas, and Canes; Curtains, Shades, and Screens.	Nov. 11	Nov. 9	1,318
241	54. LANE, C. H., Electric Lamps; Conductors; Vapor Electric Devices; Space Discharge Tubes	July 20	July 22	2,918
102	55. BOWEN, S. T.—Bread, Pastry, and Confection Making; Cutlery	†Feb. 12	†Feb. 11	395
	55. BOWEN, S. T.—Designs	†Apr. 11	†Apr. 28	386
309	56. PORTER, F. J., Electrochemistry; Laminated Fabrics; Paper Making; Substance Preparation	July 25	Aug. 3	2,555
257*	57. NICOLSON, G. D. G., Cutting and Punching; Bolt, Nut, Rivet, Nail, Screw, Chain, and Horseshoe Making; Driven and Screw Fastenings; Jewelry; Nut and Bolt Locks.	Aug. 2	July 23	1,226
270*	58. DOWELL, E. F., Abrading; Typewriting	July 2	July 2	1,525
315	59. RICHARD, V. I., Chemistry; Alcohol; Fertilizers; Cement and Lime; Hides, Skins, and Leather; Fuel	July 16	July 19	2,291
213*	60. GLASS, R. L., Electricity, Heating, and Welding; Batteries; Resistances and Rheostats; Prime Mover Dynamo Plants; Conduits and Housings.	July 30	Aug. 6	2,473
269	61. PARKS, G. E., Elevators; Winding and Reeling; Pushing and Pulling; Fire Escapes; Ladders; Scaffolds; Velocipedes; Horology; Time-Controlling Apparatus.	July 10	July 19	2,605
245*	62. COCHRAN, W. W., Toys; Amusement Devices; Furniture; Fishing and Trapping; Baggage; Package and Article Carriers.	Aug. 5	Aug. 10	2,330
300	63. WINKELSTEIN, A. H., Bleaching and Dyeing; Explosive, Pyrotechnic, and Match Compositions; Oils, Fats, and Glue; Preserving; Sugar, Starch, and Carbohydrates.	July 31	Aug. 2	2,250
163	Trade-Marks, Labels, and Prints: F. A. RICHMOND—Trade-Marks	†Apr. 8	†Apr. 22	1,544
	Labels and Prints	†Apr. 9	†Apr. 26	183

* Refers to room numbers in the annex.

DECISIONS IN PATENT AND TRADE-MARK CASES

U. S. Court of Customs and Patent Appeals

SHARP & DOHME *v.* PARKE, DAVIS & Co.

No. 2,255. Decided February 21, 1930

[37 F. (2d) 960]

1. TRADE-MARKS—SIMILARITY.

Where a mark for which registration is asked is substantially the same as an unregistered mark previously used by another, the differences being non-distinctive, *Held* that registration was properly refused.

2. SAME—SAME—QUESTION TO BE CONSIDERED.

"If the mark which applicant seeks to register upon goods of the same descriptive properties, is the same as an opposer's registered mark, then the applicant's mark can not be registered. It is unimportant what rights others may have as against the opposer's mark—the applicant has no right to assert them in such proceeding. The same principle would be applicable to known owned unregistered trade marks."

APPEAL from the Patent Office. Affirmed.

Messrs. Pennie, Davis, Marvin & Edmonds, Mr. Dean S. Edmonds, Mr. Frank E. Barrows, Mr. George J. Hesselman, Mr. C. M. Fisher, and *Mr. R. K. Stevens* for Sharp & Dohme.

Messrs. Gifford & Scull, Mr. Newton A. Burgess, and *Mr. Horace W. Bigelow* for Parke, Davis & Co.

GRAHAM, *P. J.:*

Sharp & Dohme, of Baltimore, Maryland, filed an application for registration of a trade-mark used by it on a large number of chemicals, medicines, and pharmaceutical supplies, which it claims has been in use since February 15, 1922. The mark is thus described:

A parallelogram having rounded corners and defined by light and heavy border lines, a broad band extending across the lower end of the panel and a second band extending across the panel near the upper end thereof, and there being light lines adjacent both bands connecting the light border lines.

Parke, Davis & Company, a Michigan corporation, filed opposition to said registration, claiming that it was the owner of an unregistered trade-mark substantially identical with the one so proposed to be registered, which it had been using, continuously, upon goods of the same descriptive properties, since on or about February 8, 1902, and that such registration would cause confusion and damage to opposer.

The Examiner of Interferences sustained the opposition and, on appeal, this decision was affirmed by the Commissioner.

A considerable amount of testimony was taken and is before us. From this it appears that the contentions made by opposer are correct and that for many years before the applicant used this form of label, the opposer used practically the same label and had introduced it to the trade throughout the United States. It is true that the opposer used, as its band color, blue, brown, red, and black, according to the class of preparation which was marked, and that the applicant used blue-black as its band color. In the application, however, Sharp & Dohme does not confine itself to any particular color scheme, even if such difference in color were material, which question is not before us here.

[1] The only other appreciable difference in the marks is that upon the lower band of applicant's mark appears in reverse letters the name "Sharp & Dohme, Baltimore," while on opposer's mark the words are, in like reverse letters, "Parke, Davis & Co." Under the provision of the statute, the name "Sharp & Dohme" is not registerable unless it is printed in some particular or distinctive manner. Section 5, act of February 20, 1905, as amended. 33 Stat. 724. It is not claimed that the form or design of the reverse letters which applicant uses differs from those of the opposer. If there is any distinction in the way in which the names are used, it must be in the general appearance of the mark which appellant desires to register. This, as we have seen, is practically identical with the one used by the opposer. Hence, there appears to be nothing distinctive and registerable.

To support its contentions the applicant insists that for many years, and prior to opposer's use of the same, the two-band, reverse-type label was commonly used in the medicine and pharamceutical trade and from this it argues that there where the only similarity between an opposer's mark and an applicant's mark is due to features common to the trade, the opposition should be dismissed. In support of this proposition it cites *Alaska Packers' Ass'n.* v. *Getz Bros. & Co.*, 49 App. D. C. 55, 258 Fed. 527, 264 O. G. 534; *Goodall Worsted Co.* v. *Palm Knitting Co.*, 56 App. D. C. 148, 10 F. (2d) 1013, 252 O. G. 535; and *Booth Fisheries Co.* v. *Adams & Sons Grocer Co.*, 56 App. D. C. 142, 10 Fed (2d) 1007, 350 O. G. 469. We are unable to see how the cases cited are in point. In each of them the marks of opposer and applicant were different; here they are identical.

Said section 5 of the statute provides:

Provided, that trade-marks which are identical with a registered or known trade-mark owned and in use by another and appropriated to merchandise of the same descriptive properties, or which so nearly resemble a registered or known trade-mark owned and in use by another and appropriated to merchandise of the same descriptive properties as to be likely to cause confusion or mistake in the mind of the public or to deceive purchasers shall not be registered; * * *.

[2] This statute is plain and definite. If the mark which applicant seeks to register upon goods of the same descriptive properties, is the same as an opposer's registered mark, then the applicant's mark can not be registered. It is unimportant what rights others may have as against the opposer's mark—the applicant has no right to assert them in such proceeding. The same principle would be applicable to known owned unregistered trade-marks.

Reference may be had, in this connection, to *Canterbury Candy Makers* v. *Brecht Candy Co.*, 54 App. D. C. 82, 294 Fed. 1013, 320 O. G. 3. This was a trade-mark cancellation proceeding in which the use of a representation of a sign with the name of the maker upon it, as a trade-mark, was involved. The petitioner had registered its mark, also a representation of a sign, before the registration of the defendant. The court said, in part:

It is urged by the registrant that others engaged in the same line of business are using signs as trade-marks.

This may be conceded, but it furnishes no reason why registrant should be given the sole right to employ one. As against the petitioner, the registrant has not an exclusive right to the mark. That is all we are concerned about in this proceeding.

To the same effect are *Hood Rubber Co.* v. *Needham Tire Co.*, 48 App. D. C. 227, 258 O. G. 643, and the *Standard Brewery Co.* v. *Interboro B. Co.*, 44 App. D. C. 193, 222 O. G. 728.

We are of opinion the decision of the Commissioner was right, and it will be affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE GEORGE LANGFORD

No. 2,217. Decided February 21, 1930

[37 F. (2d) 753]

PATENTABILITY—METHOD AND MECHANISM FOR RESHAPING WORN ANGLE JOINT BARS.

Claims for a method and for a mechanism for reshaping worn angle joint bars *Held* unpatentable over the prior art.

APPEAL from the Patent Office. Affirmed.

Messrs. Brown, Jackson, Boettcher, & Dienner, Mr. Henry H. Babcock, Mr. Charles A. Brown, and *Mr. John A. Dienner* for Langford.

Mr. T. A. Hostetler for the Commissioner of Patents.

BLAND, *J.:*

From a decision of the Board of Appeals affirming that of the Examiner, rejecting patent claims 1 to 5, the applicant has appealed to this court.

The subject matter of the invention is a method and means for treating worn angle bars, which bars are for the purpose of forming the joints at the ends of steel railroad track rails. Angle bars of the kind here referred to are also called fish plates and splice bars and contain holes properly distanced to match the holes in the ends of the steel rails. On the top sides of the angle bars are protruding faces which fit against the steel rail. They are held tightly to the rail by bolts which pass through the rail and plates. As the protruding faces of the plates wear, loose joints occur, which necessitate the continual tightening of the bolts. When the plates are worn by continued use to the point where the bolts will no longer tighten them, it has been found desirable to again extend or rebuild the protruding faces of the angle bars so as to renew them to substantially their original condition.

Applicant claims that, until he invented the instant process, there was no practical or commercial method of renewing fish plates so as to make them suitable for re-use on main line tracks, and that the worn plates were either scrapped or used on different tracks and on different sized rails. He claims that his invention has been a commercial success where all other efforts have been failures, and that the McKenna Process Co., of Joliet, Ill., licensee of Langford, has treated two million bars and restored them to main line track service.

The claims submitted and rejected are as follows:

1. The method of reshaping a worn angle joint bar, which comprises heating the bar to soften the same, applying upon the lateral surfaces of the bar a forming pressure for the entire body of metal of the bar, restraining the flow of metal about the bolt holes to conform them to a predetermined accurate size and location.

2. The method of treating a worn angle joint bar to restore the same for use in joining rail ends such as those to which it was originally applied which comprises heating the bar to a suitable temperature, compressing the entire body of the bar by the application of pressure to substantially the entire side faces of the bar, flowing the metal out laterally towards the edges of the bar, confining the edge faces of the bar to restore the bearing surfaces along top and bottom edges, and simultaneously restraining the flow of the metal along the intermediate portion of the bar both laterally and longitudinally to restore the size and location of the bolt holes.

3. Means for reshaping worn angle joint bars comprising in combination an open ended bottom die shaped to confine the inside face and the tapered bearing faces on the lateral surfaces of an angle bar, an open ended top die shaped to engage the outside of the angle bar, said dies having draw space between them extending off substantially continuous with an outer edge of the bar, means for applying pressure to the dies to close them, and forming pins guided in both dies, said pins being adapted to enter the bolt holes and serving as forming pins to shape the bolt holes to predetermined size and location when the metal of the bar is compressed by closing of the dies.

4. The method of renewing a worn bar of the type which has a central longitudinal web and enlarged head and foot portions, which comprises heating the bar to soften the same, applying upon the lateral surfaces including the web and the head and foot portions a forming pressure for the entire body of metal of the bar, and restraining the flow of metal about the bolt holes to conform them to a predetermined accurate size and location and, at the same time, restoring the bearing surfaces upon the head and the foot of the bar.

5. The method of renewing a worn bar of the type which has a central longitudinal web and enlarged head and foot portions, with bearing surfaces thereupon, which comprises heating the bar to soften the same, applying upon the lateral surfaces including the web and the head and foot portions a forming pressure, thereby forcing the metal of the head and foot portions to move at right angles to the direction in which the pressure is applied so as to raise the head and foot bearing surfaces, and simultaneously restraining the flow of metal about the bolt holes to conform them to a predetermined accurate size and location.

The rejection of the Patent Office was based upon the references: Wegner (Danish), 15,249, Oct. 30, 1911; Morse, 125,751, April 16, 1872.

The Examiner originally rejected three of the claims on Wegner and stated that the placing of the pegs in the holes was obvious. Two additional claims were then submitted. The Examiner later rejected all of the claims on the Danish patent in view of Morse. The Board of Appeals affirmed the Examiner on the references, Wegner and Morse, and expressed the view that Morse not only disclosed the pin function but also disclosed the method used by applicant in reshaping fish plates.

It is our opinion that the applicant has suggested nothing which is not already taught in the art. Wegner taught the art of reshaping worn fish plates by flowing the metal by pressure so that the wearing face of the same would fit the rail ends and the desired result was brought about in Wegner as in applicant's process by the use of dies, upper and lower, fitting into each other, which, when great pressure is applied, move the heated metal from one portion of the plate to the desired protruding face.

It is contended by applicant that his process differs from Wegner and Morse in the fact that the Danish patent does not disclose a die which completely encloses the angle bar operated upon. The patent tribunals were of the opinion that this is not a patentable distinction, with which conclusion, under the circumstances of this case, we agree.

It is further contended that applicant's process is new in so far as it provides pins to fit into the holes of the plate during the forging operation so as to keep the holes open and insure their proper spacing, and that in the Morse patent the pins and holes are used only for the purpose of insuring the proper position of the blank felly plate and that Morse did not teach the use of pins for the purpose of preventing the holes from being filled up by the flowing metal.

Regardless of whether Morse intended the pins for the identical purpose as that claimed for them in applicant's process, it is obvious that they would perform the same function. Furthermore, we are inclined to agree with the Examiner in his first ruling that, regardless of Morse, the use of the pins would not constitute invention.

It is not claimed by applicant that he, by a combination of old processes, has produced a new result. The results were both old in the art. He may have produced a commercial success by the use of old methods, but, as we view it, such success did not result from invention.

The decision of the Board of Appeals is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

GOODRICH COMPANY *v.* CLOSGARD WARDROBE COMPANY

No. 2,158. Decided February 6, 1930

[37 F (2d) 420]

TRADE-MARK—GOODS OF THE SAME DESCRIPTIVE PROPERTIES—WARDROBE BAGS AND OVERSHOES NOT.

Wardrobe bags *Held* not of the same descriptive properties as overshoes, even though both articles are provided with a certain type of slide fastener.

APPEAL from the Patent Office. Affirmed.

Messrs. Pierson, Eakin & Avery and *Mr. Willard D. Eakin* for Goodrich Company.

Mr. Edwin S. Clarkson for Closgard Wardrobe Company.

GARRETT, *J.:*

This is a trade-mark case involving use of the word "Zipper."

In May, 1926, appellee filed with the Commissioner of Patents a declaration of the adoption and use of the word "Zipper" as a trade-mark for wardrobe bags, in Class 2, Receptacles, and applied for registration in accordance with the act of February 20, 1905, as amended. This declaration, which was amended in July, 1926, alleged that the trade-mark had been "continuously used and applied to applicant's goods since April 1, 1925."

In October, 1926, the application was passed to publication and published November 9, 1926, 352 O. G. 302.

November 19, 1926, appellant filed with the Commissioner notice of opposition.

April 21 appellee entered a motion to dismiss the opposition, which, upon being heard on May 12, 1927, before the Examiner of Interferences, was allowed. The case was appealed to the Commissioner and on October 31, 1927, the Commissioner's decision affirming the decision of the Examiner was rendered. Appeal was thereupon taken by the opposer and thus the matter comes before this court.

In its notice of opposition appellant alleges that on April 7, 1925, it obtained registration, No. 197,090, of the word "Zipper" as a trade-mark for "boots made of rubber and fabric"; that it has continuously and very extensively used the word, in interstate commerce, as a trade-mark for "boots made of rubber and fabric, and more especially overshoes made of rubber and fabric," from about June 13, 1923; that it has widely popularized the word; that boots and overshoes are articles of clothing and wardrobe bags are closely related to and associated in the minds of the public with clothing; that the course of trade is similar—to a large extent the same—with reference to the respective articles; that its goods have contained slide fasteners as component parts thereof; that it understood appellee's goods contained similar slide fasteners; and that the use of the word by appellee would damage appellant in various ways, such as causing confusion of trade, diluting the popularity of appellant's trade-mark, subtracting from the established good will of appellant, unwarrantedly lessening the distinctiveness of appellant's trade-mark, likely causing members of the public to assume a business connection between appellant and appellee and tending to cause the word "Zipper" to become a generic name for slide fasteners, without justification and to opposer's damage.

The slide fastener, which we understand both parties to the instant controversy to be using, was a patented invention, but the patent long since expired so that the article is now subject to use by the public upon any and all goods to which it may be thought suitable. The name "Zipper" does not appear upon the slide fastener itself. The certificate of registration to appellant states that "The trade-mark is applied by printing it on a label applied to the box in which the boots are sold." The statement of appellee in its application says that in its case "The trade-mark is applied or affixed to the goods, by placing thereon a printed label on which the trade-mark 'Zipper' is shown."

An examination of the reproductions of the designs used by the respective parties in their utilization of the word does not show any similarity, which would cause the design of one party to be mistaken for, or confused with, the design of the other party, and we do not understand any allegation that such is the case is made. It is the use of the word itself to which appellant makes objection.

It does not seem to us that the goods of the respective parties can be held to be of the same descriptive properties, in the sense of the statute. Boots and shoes and overshoes are articles of clothing and "wardrobe bags" suggests the idea of the bags being utilized as receptacles or protectors for some articles of clothing, but hardly for boots, shoes or overshoes. The relation is too remote. The only physical element common to the goods is the type of slide fastener, and we should be unwilling to hold that this element served to

render them "of the same descriptive properties," they being in all other respects wholly dissimilar.

Numerous authorities were cited in the briefs and oral arguments of the respective parties and these we have carefully examined greatly to our interest and instruction, but we find none which we think would justify the holding for which appellant contends. Upon the contrary, the weight of authority appears to be in support of the decisions of the Patent Office tribunals. *Johnson Educator Food Company* v. *Sylvanus Smith & Co., Inc.*, 175 O. G. 268, 37 App. D. C. 107; *The Quaker Oats Company* v. *Mother's Macaroni Company*, 198 O. G. 899, 41 App. D. C. 254; *The Rockwood Pottery Company* v. *The A. Wilhelm Company*, 212 O. G. 1691, 43 App. D. C. 1; *The Denver Gas & Electric Light Company* v. *The Alexander Lumber Company*, 283 O. G. 182, 50 App. D. C. 207; and many others cited in their decisions appear to be in point.

The decision of the Commissioner is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE DALTON

No. 2,200. Decided February 6, 1930

[37 F (2d) 420]

PATENTABILITY—DESIGNS—CASING FOR ELECTRIC MOTORS.

A design for a casing for an electric motor *Held* unpatentable over the prior art, since, while applicant may have produced a design distinguishable from the references, "it seems to us that the applicable reference features negative any real inventive art, or inventive accomplishment on applicant's part."

APPEAL from the Patent Office. Affirmed.

Mr. C. P. Goepel and *Mr. Mortimer C. Lyddane* for Dalton.

Mr. T. A. Hostetler for the Commissioner of Patents.

GARRETT, *J.:*

This is an appeal from the decision of the Board of Appeals of the Patent Office affirming the action of the Examiner in refusing to allow claim for patent for "the ornamental design for a casing for electric motors, as shown."

The design appears to be primarily intended for use in encasing small electric motors utilized for operating household mechanisms, such as sewing machines, washing machines, and the like.

The Examiner rejected the application both upon the ground that the article did not present subject matter proper for design patent, and also that the design presented did not show invention over the disclosures embraced in patents to Gray and Kelley, the former being Design Patent No. 43,036 and the latter mechanical Patent No. 931,620.

The Board overruled the Examiner as to the first ground of rejection but sustained the latter ground.

The drawings of the application show a casing of the usual type for enclosing the motor parts, having radiating ventilating openings arranged throughout a complete circle at one end of the casing, and similar openings in the upper half of the other end. The gear covering at the latter end is of inverted V shape, the upper portion thereof being within the ventilating opening.

In one of the figures (3) of the patent to Gray there is a semicircular arrangement of openings in the upper half of the casing and the patent to Kelley shows the end members also provided with radial openings, those in one of the ends being V-shaped.

It appears that openings in dynamo casings of this type are essential as a matter of utilitarian consideration and in any design openings of some character must be provided for purposes of ventilation.

We are unable from our study of the drawings and specifications to see any such advance over the prior art as shown in the references as to justify our holding that the Board of Appeals was in error in its decision.

It may readily be conceded that applicant has produced a design which is quite distinguishable from those of the references, but it seems to us that the suggestions of the applicable reference features negative any real inventive art, or inventive accomplishment on applicant's part. We can detect nothing showing that degree of originality which we think would have to be present to justify the granting of a patent as sought.

The decision of the Board of Appeals is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE HOLMES AND SHAMEL

No. 2,213. Decided February 6, 1930

[37 (F. 2d) 440]

PATENTABILITY—METHOD OF REPORTING.

Claims for a method of reporting, consisting in the repeating by a listener of the language into the transmitter of a sound-recording machine and writing the words reproduced thereby *Held* unpatentable since, "neither the power to hear nor the power to repeat what one hears are of themselves patentable, at this period of human development, and we do not think a method of combining these faculties for the purposes described in the application comes within the purview of the patent statute."

APPEAL from the Patent Office. Affirmed.

Mr. Charles H. Shamel for Holmes and Shamel.

Mr. T. A. Hostetler for the Commissioner of Patents.

GARRETT, *J.:*

This case involves an appeal from the Commissioner of Patents affirming a decision of the Board of Examiners in Chief sustaining in part the decision of the Examiner denying the patentability of claims to a method of "reporting in writing testimony, speeches, and other discourse."

Fifteen claims were embraced in the application. All were denied. Nos. 1 and 5 may be taken as typical:

1. The method of producing a written record of spoken language which consists in a second person repeating such language into the transmitter of a sound-recording machine, placing the records so made on a sound-reproducing machine, and writing on an adapted surface the words so reproduced.

5. The method of producing sound-records of long-continued oral proceedings, which consists in repeating said proceedings into the mouthpiece of a sound-recording device until the first record is nearly full, then starting a second record, repeating the continuation of said proceedings into the mouthpiece in such manner as to be recorded on both records, and continuing said repitition to be recorded on the second record, after the termination of the first record.

The references cited are: Dodge, 449,349, March 31, 1891; Clausen, 1,206,987, Dec. 5, 1916.

Nothing new or inventive of a mechanical nature is claimed over the devices of the references. The claims are confined to the method described. Briefly stated, this method consists of a person listening to the speaker whose utterances it is desired to record and repeating them by spoken word into a dictating machine from which they can be transcribed into writing in the usual way.

The customary method now, in many instances, is for a stenographer to write the speech or other discourse in shorthand and then read it into the dictating mechine from the shorthand characters. The method of applicants would eliminate the shorthand operation.

In the final analysis the elements of the method claimed as new seem to consist of the use of (*a*) the sense of hearing and (*b*) the power of speech in repetition of what was heard. These are applied as steps in an old process of producing the spoken words in written form for such uses as may be desired.

We do not think it can be held to be invention to evolve the concept of having a person listen and then repeat into a dictating machine what he or she may hear.

Appellants present an ingenious and interesting argument but it is not persuasive.

Surely neither the power to hear nor the power to repeat what one hears are of themselves patentable, at this period of human development, and we do not think a method of combining these faculties for the purposes described in the application comes within the purview of the patent statute.

The decision of the Commissioner is sound, and the same is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE JOBST

No. 2,222. Decided February 6, 1930

[37 F. (2d) 751]

1. PATENTABILITY—AFFIDAVITS AS TO COMMERCIAL USE.

Affidavits that a certain article is unique in itself and has gone into wide commercial use are not of themselves sufficient to establish patentability where the principle applied in the device has as applied been definitely disclosed in the prior art. "A production may be unique without being patentable, and extensive use resulting in commercial success may flow from causes other than invention."

2. SAME—TOOTHBRUSH.

Claims for a toothbrush in which the bristles are anchored in the head by staples *Held* unpatentable over the prior art.

APPEAL from the Patent Office. Affirmed.

Messrs. Whittemore, Hulbert, Whittemore & Belknap, Mr. Prescott M. Hulbert, and *Mr. Clarence B. Zewadski* for Jobst.

Mr. T. A. Hostetler for the Commissioner of Patents.

GARRETT, *J.:*

Appellant made application for patent claiming to have invented certain new and useful improvements in brushes stating that the invention "relates * * * more particularly to the means for anchoring the tufts of bristles in the bore of the brush head."

The application having been denied by the tribunals of the Patent Office, appeal was taken from the decision of the Board of Appeals and the matter brought before us.

The claims, seven in number, seem to have been drawn especially to a toothbrush, although claims 1, 2 and 3 are not so restricted. Some toothbrushes, said to have been manufactured according to the specifications, were exhibited to the court during the hearing.

Claim 3, which appellant presents as representative, reads as follows:

A brush comprising a back having tuft receiving bores and formed of a resiliently yieldable material, bristle tufts engaging said bores and staple anchors for securing said tufts in the form of loops having their prongs slightly crossed, the width of said staples being greater than the normal diameter of the bore and being embedded in the outside walls thereof, thereby providing clearance for the individual bristle loops.

The references cited against patentability are: White, 47,157, April 4, 1865; Sheldon (British), 1 679, June 7, 1867.

In the brief of appellant it is stated:

The essential novelty is that the tufts are firmly secured by round wire staples which are inserted in, and are embedded in the side walls of, the bores in the brush back, and without penetration of the staple points through the back.

The White patent discloses tufts held in holes extending more than half way through the back by staples which are designed to spread when driven into the wood, the staples upon being so driven taking a loop shape.

The British patent shows tufts secured in the holes, or bores, by staples of the same shape as those of appellant. The exact operation of these staples upon being driven seems to depend upon the material of which the brush back is composed. According to the specifications this material may be wood, ivory, metal or other substances.

The holding of tufts in brush backs by the use of staples is admittedly old in the prior art and is disclosed in the references cited, and, like the tribunals of the Patent Office, we have been unable to discover invention in the particular result which applicant has attained by the adjustment of the staples which he uses to the material of the brush backs in the manner described.

[1] Appellant filed the affidavits of persons said to be familiar with the manufacture, structure and sale of brushes for the purpose of showing that a toothbrush in which the tufts are secured by staples is something unique, and also for the purpose of showing great commercial success for his product.

Granting both these facts to be amply proven, we nevertheless do not see how they, of themselves, singly or combined, can sustain patentability where the principle applied in the device is, as applied, definitely disclosed in the prior art. A production may be unique without being patentable, and ex-

tensive use resulting in commercial success may flow from causes other than invention.

In *Boston Pencil Pointer Co.* v. *Automatic Pencil Sharpener Co.*, 276 F. 910, 912, the court (C. C. A.) said:

> Nevertheless commercial success is an unsafe guide to invention unless prior efforts to fill the space be shown, and when they are shown it is not infrequently found that the faculty of invention was not necessary to fill whatever vacancy existed.
>
> Further, it is settled that articles may be new in a commercial sense, when they are not new in the sense of the patent law (*Collar Co.* v. *Van Dusen*, 23 Wall. 530, 23 L. Ed. 128), and novelty, however great, can never be put in the place of invention (*Robins* v. *Link Belt Co.*, 233 F. 1005, 148 C. C. A. 15). The fact that a patented device has had enormous sales does not dispense with all other evidence of invention.

[2] It seems to us that the prior art disclosed the particular feature of applicant's structure which is here emphasized, with such an approximation to the precise plan by which his own result was secured as to negative any patentable inventive production so far as the claims of the application are concerned.

The decision of the Board of Appeals is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE HAMILTON

No. 2,280. Decided February 6, 1930; petition for rehearing denied March 19, 1930

1. REISSUE—STATUTE CONSTRUED.

The reissue statute (sec. 4916, R. S.) does not permit the reissuance of a patent, granted upon a joint application, to one of the applicants alone.

ON PETITION FOR REHEARING

2. SAME—SAME.

"Appellant is therefore seeking through the reissue statute to cure a void act. It seems to us that the reissue itself would be the reissue of a void thing and we are unable to see how any act of the Patent Office or any fiat or decision of this court could give it validity."

3. BRIEFS—AMICUS CURIÆ.

A request to file a brief as amicus curiæ will not be granted where the person making the request is not "an attorney of this court."

APPEAL from the Patent Office. Affirmed.

Mr. Clifford C. Bradbury and *Mr. Rose O. Hinkle* for Hamilton.

Mr. T. A. Hostetler for the Commissioner of Patents.

GARRETT, *J.*:

On October 30, 1917, Letters Patent No. 1,244,686, issued to Hamilton Manufacturing Company, assignee of Walter R. Bamford and Harry W. Hamilton, described in said letters as joint inventors of a vacuum system for internal-combustion engines. The patent included six claims.

At a later date Curtis B. Camp, as trustee, acquired title to the patent through mesne assignments from the original patentee, Hamilton Manufacturing Company, and is now the owner of same.

Sometime prior to June, 1927, Mr. Hamilton died and subsequent to his death it was discovered that he was, in fact, the sole inventor of such elements of the patent as were covered by claims 1 and 2, and the joint invention of Bamford and Hamilton only covered the elements contained in claims 3, 4, 5, and 6. It is conceded that the sole invention of Hamilton is divisible from the joint invention of Bamford and Hamilton.

This presented a situation wherein the original patent granted jointly to Bamford and Hamilton was invalid as to claims 1 and 2.

In 1927 Camp, as trustee, assignee, filed two applications for reissue, one covering claims 1 and 2 and the other claims 3, 4, 5, and 6. The latter application, which covered the elements jointly invented, was allowed, but the former, which covered the elements solely invented by Hamilton, was rejected by the tribunals of the Patent Office on the ground that the reissue statute makes no provision for the reissue of a joint patent to a sole applicant.

Appeal was taken and the matter so comes before this court.

The sole question presented is one of law.

The Board of Appeals in its decision rejecting the application for reissue said:

> Justice would appear to warrant the reissue as requested but reissues must be granted within the provisions of the statute.

[1] From all the facts appearing in the record we think equity would result from a reissue, but we are unable to see how the statute can be construed so as to allow one.

Section 4916, Revised Statutes, 35 USCA, section 64, provides that:

> Whenever any patent is inoperative or invalid, by reason of a defective or insufficient specification, or by reason of the patentee claiming as his own invention or discovery more than he had a right to claim as new, if the error has arisen by inadvertence, accident or mistake * * * the Commissioner shall * * * cause a new patent * * * to be issued to the patentee or * * * to his executors, administrators or assigns, for the unexpired part of the time of the original patent * * *.

This section was derived from the act of July 8, 1870, chapter 230, section 53, 16 Stat. 205.

This statute received an official construction by the Attorney General of the United States upon the precise point here involved in *Ex parte Barsaloux*, August 7, 1878, C. D. 1878, 154, in which among other things it was said:

> I entertain no doubt of the authority of the department to correct its own clerical errors made in issuing a patent; as where, on a reissue, it has been granted to the original patentee when it should have been granted to his assignee, or where the date is incorrectly given, or the term of the patent wrongly stated, etc. But the case under consideration does not present an error of that sort. The error here presented consists of a false suggestion in the original application that the invention was joint. This, whether done through ignorance or by mistake, does not, in my opinion, afford any ground for the action prayed for. The patent issued upon that application must be deemed to be void, as a joint patent cannot be sustained upon a sole invention of one of the patentees (see 1 Mason's C. C. Rep. 473), and the department cannot, by means of alterations or corrections, confirm or impart validity to a patent which was originally void.
>
> After a joint patent has once been issued upon an application of two or more persons as joint inventors, if the application erroneously described the invention as joint instead of sole, it is not, as I have just intimated, within the power of the department to remedy the matter by changing the terms of the patent already issued. The parties interested may file a new application, which, if seasonably done, can be made the basis for the issue of a new patent; but such new patent will not retroact by way of confirmation of the original.

It is argued by appellant that the opinion of the Attorney General gave too narrow a construction of the statute in that he would seem to confine reissues to cases in which the errors or mistakes were "attributable to the department." This is not our construction of the opinion although it specifically mentions only "its (the department's) own clerical errors," but, however this may be, we are unable to agree that the statute admits of an interpretation which would enable a reissue by which a patent would be granted which could not have been granted had the facts properly and truly appeared in the original application. Admittedly that could not have been done under the application upon which Patent No. 1,244,686 was issued.

Had the facts been known it would have been necessary for Hamilton to have filed separate application in order to obtain patent upon claims 1 and 2. To hold that now a reissue can be made would be to hold that a result can be accomplished by reissue which could not have been accomplished under the original application had it been then amended so as to show the fact that as to claims 1 and 2 Hamilton was the sole inventor, nothing further appearing to show any joint patentable interest or right as to said claims.

Appellant insists "that the preamble is a part of a patent specification wherein a defect, arising by inadvertence, accident, or mistake, is correctable by reissue," and that since there was such a defect so arising in the preamble to Patent 1,244,686, alleging joint invention as to all claims, rather than sole invention as to two of them and joint invention as to the other four, there may be such a correction.

It seems to us that the error of this argument lies in the fact that the moment the correction of the preamble is permitted in the manner here sought a condition is exposed under which the original patent itself would not have issued, the very condition indeed which renders the original void. To grant appellant the reissue as requested, it seems to us, would be to base an act upon an invalid foundation.

The original patent as to claims 1 and 2 is concededly void. It is apparent that even if it be correct to treat the preamble as a part of the specifications (which we do not deem it necessary to decide), these specifications could not have been amended to show the facts without rendering it impossible to issue a patent as to these claims upon the original application. It does not, therefore, seem to us that the reissue statute admits of a construction through which an error or mistake of the character here shown, however inadvertently it may have been made, can be cured by reissue.

The decision of the Board of Appeals is affirmed.

Affirmed.

ON PETITION FOR REHEARING

Appellant has filed a petition for a rehearing in this case in which it is alleged that the decision handed down by us on February 6, 1930:

(1) Overrules an important holding of the Court of Appeals of the District of Columbia;

(2) Will make it necessary for the Patent Office to revoke its practice of permitting (by amendment of pending applications) the elimination of parties erroneously joined as joint inventors, which practice was the direct result of that holding of the predecessor of this court, now overruled by this court, and

(3) Jeopardizes the validity of all patents which have issued upon such amended applications and the rights supposed to be vested in the owners of such patents.

The particular decision referred to as having been overruled by our decision in the instant case is that of the Court of Appeals of the District of Columbia. *In re Roberts*, 49 App. D. C. 250, 263 F. 646, 1920 C. D. 158, the doctrine of which relating to the matter involved in the contentions quoted, supra, was followed in *Briggs and Jacobi* v. *Keisling*, 53 App. D. C. 49, 288 F. 254, 1923 C. D. 186, and others.

Upon the authority of the foregoing decisions appellant contends in his petition for rehearing that if the facts had become known at the time the original application of Hamilton and Bamford was pending, either one of three courses could have been pursued, which would have insured patents, solely to Hamilton as to claims 1 and 2 and jointly to Hamilton and Bamford as to claims 3, 4, 5 and 6, to wit:

(1) The original joint application could have been amended to eliminate Bamford and claims 3 to 6 which cover the joint invention; and a new joint application containing claims 3 to 6 could have been filed for Bamford & Hamilton, such new application being accorded the benefit of the filing date of the original joint application.

(2) The original joint application could have been amended to eliminate claims 1 and 2; and a new sole application for claims 1 and 2 could have been filed for Hamilton alone, such new sole application being accorded the benefit of the earlier filing date of the original joint application.

(3) Two new applications could have been filed; a sole application in the name of Hamilton containing only claims 1 and 2, and a joint application for Bamford and Hamilton containing claims 3 to 6; both of these new applications being accorded the benefit of the filing date of the original joint application.

Whether this contention be correct it is not necessary for us to decide because it is not in issue in the case, but in view of the fact that learned counsel for appellant seems to have misunderstood the opinion of the court, it is deemed proper to say that in our entire consideration of the case our presumption was that the situation might have been taken care of by some proper procedure in the Patent Office during the pending of the original application, and, it may be added, we should feel that justice would be served if the reissue statute admitted the relief which appellant prays.

But we are limited by the statute.

The question under the facts of this case is not what might have been accomplished in connection with the original application, and at that time, but what may be done under the reissue statute.

Had the facts developed during the pendency of the original application that, as to the features embraced in claims 1 and 2, Hamilton was the sole inventor, and the Patent Office had nevertheless granted Letters Patent to Hamilton and Bamford jointly, such patent would have been void as to those claims. It does not alter the legal situation that the facts did not develop until a number of years thereafter. The patent as to these claims was equally invalid because of the error upon the very material matter of who the inventor was. This is the law as fixed by the statute.

The fact that by severing the original application two valid separate patents, one sole and one joint, might have been obtained, does not alter the legal fact that the joint patent was invalid as to that portion which could only be legally issued to the single inventor.

[2] Appellant is therefore seeking through the reissue statute to cure a void act. It seems to us that the reissue itself would be the reissue of a void thing

and we are unable to see how any act of the Patent Office or any fiat or decision of this court could give it validity. Our function in appeals from the Patent Office is administrative. *Vide Postum Cereal Co.* v. *Calif. Fig Nut Co.*, 272 U. S. 693, 698, 699, 358 O. G. 811.

Neither in the original opinion nor in this one has there been any overruling of, or any passing upon, the decision of the Court of Appeals of the District of Columbia in the Roberts case and other cases involving the same question. Those decisions are not involved by the issue which we decided in this case and there was no occasion to pass upon them.

It may be further said that we do not suppose that simply because we sustain the action of the Patent Office in this case that fact will be taken by the Patent Office tribunals as authority upon which it will feel constrained to change its practice upon questions not here in issue and not here passed upon.

As for appellant's third ground of apprehension relative to jeopardizing the validity of some classes of patents that may have been issued, it would appear sufficient to say that we are at a loss to understand how this case can affect any other cases save as the facts of such other cases may coincide with the facts of this.

The petition for rehearing presents nothing new in the way of argument. All that is said therein which is applicable to the case at bar was quite ably presented upon the hearing and was fully considered by us in deciding the case. The petition for rehearing is denied.

[3] There has been an application made by a person who is not an enrolled attorney of this court to be permitted to file a brief as amicus curiæ in connection with the petition for rehearing and a copy of the brief has been offered. This request will be denied for the reason that the person making it is not an attorney of this court and is, as he states, "a stranger to the proceeding."

We mention it here only in order to make a comment which we think should be made in connection with questions of practice before us.

The proposed brief makes reference to the opinion of the Attorney General in *Ex parte Barsaloux*, which was referred to in our original opinion as being an authority in line with our decision.

It is then stated that a reissue patent was granted with Barsaloux as sole inventor on May 11, 1880, on application filed April 8, 1880, "subsequent to the opinion of the Attorney General." The proposed brief does not state, however, that the reissue patent so granted was issued by the Patent Office in obedience to a special act of Congress, specifically directing the same in that particular case. This special act passed April 1, 1880, 21 Stat. L. 526.

We are unable to understand why the statement should have been made in the offered brief unless it was desired that we should, without investigating the question, infer that the Patent Office itself has reversed its position as taken following the Attorney General's opinion. Surely it is not expected that a special act of Congress passed for the relief of a particular individual can be regarded as authority to guide a court in construing a general law.

Amicus curiæ briefs are often accepted and sometimes appreciated by courts, but filing one which tends to mislead a court is, to say the least of it, incapable of being regarded as a particularly friendly act.

Patent Suits

(Notices under sec. 4921, R. S., as amended Feb. 18, 1922.)

1,195,632, W. C. White, Circuit connections of electron-discharge apparatus; 1,231,764, F. Lowenstein, Telephone relay; 1,251,377, A. W. Hull, Method of and means for obtaining constant direct-current potentials; 1,356,763, R. V. Hartley, Oscillation generator; 1,472,470, same, Method of and means for producing alternating currents; 1,432,022, R. A. Heising, Circuit connection of electron-discharge apparatus, filed Nov. 11, 1929, D. C., E. D. N. Y., Doc. 4535, *Radio Corp. of America et al.* v. *C. M. Shrebroff.*

1,223,659, W. S. Barnickel, Treatment of crude oil; 1,467,831, same, Process for treating petroleum emulsions, filed Feb. 17, 1930, D. C. Kans., 2d Div., Doc. E 586-N, *W. S. Barnickel & Co.* v. *Independent Oil & Gas Co.*

1,231,764. (See 1,195,632.)

1,243,079, 1,243,081, 1,243,082, M. B. Lloyd, Method of producing woven-reed articles, D. C. N. J., Doc. E 2424, *L. H. Greenwood et al.* v. *Monarch Mfg. Co.* Decree for injunction Jan. 16, 1930.

1,243,081. (See 1,243,079.) 1,243,082. (See 1,243,079.)

1,251,377. (See 1,195,632.)

1,279,750, R. A. Oglesby, Magneto-electric generator; 1,300,637, same, Magneto for internal-combustion engine; 1,390,376, same, Automatic speed governor for internal-combustion engines, C. C. A. 8th Cir. (St. Louis), Doc. 8555, *Quick Action Ignition Co., et al.* v. *The Maytag Co.* Decree modified and affirmed Feb. 20, 1930.

1,300,637. (See 1,279,750.)

1,320,936, L. L. Scott, Safety device for combustion systems; 1,602,175, same, Electric control system for fuel-oil burners, C. C. A. 8th Cir. (St. Louis), Doc. 8542, *Electrol, Inc.*, v. *Merrell & Co. Inc., et al.* Decree affirmed Feb. 20, 1930.

1,353,666, 1,427,012, F. H. Page, Wing and similar member of aircraft, filed Dec. 9, 1929, D. C., E. D. N. Y., Doc. 4608, *Hadley Page, Ltd.*, v. *Curtiss Aeroplane & Motor Co., Inc.*

1,356,763. (See 1,195,632.)

1,371,662, C. W. Bedford, Art of vulcanizing caoutchouc; 1,477,805, same, accelerator for the vulcanization of caoutchouc substance, D. C., N. D. Ohio, E. Div., Doc. 2126, *The Goodyear Tire & Rubber Co.* v. *Rubber Service Laboratories Co., Inc.* Dismissed without prejudice Feb. 28, 1930.

1,371,662. (See 1,356,763.)

1,379,224, O. P. Smith, Dog-racing amusement; 1,507,439; same, Starting cage for racing dogs; 1,507,440, same, Housing for conveyer cars and tracks, D. C., W. D. Okla. (Oklahoma City), Doc. 1046, *H. M. Smith* v. *Capitol City Kennel Club.* Dismissed Mar. 3, 1930.

1,390,376. (See 1,279,750.) 1,396,860. (See Re. 15,220.)

1,427,012. (See 1,353,666.) 1,432,022. (See 1,195,632.)

1,448,681, 1,704,154, E. R. Stoekle, Electrical resistance; 1,660,879, D. E. Moore, Rheostat, filed Nov. 12, 1929, D. C., E. D. N. Y., Doc. 4536, *Central Radio Laboratories* v. *Pilot Radio & Tube Corp.*

CARNEGIE LIBRARY OF ATLANTA

1,456,528, H. D. Arnold, Electric discharge device; 1,459,412, A. M. Nicolson, Thermionic translating device; Re. 15,278, I. Langmuir, Electron-discharge apparatus, D. C., E. D. N. Y., Doc. E 4609, *Radio Corp. of America et al.* v. *Cable Radio Tube Corp.* Consent decree for plaintiff Feb. 25, 1930. Same, filed Dec. 12, 1929, D. C., E. D. N. Y., Doc. 4626, *Radio Corp. of America et al.* v. *Pilot Radio & Tube Corp.*

1,459,412. (See 1,456,528.) 1,467,831. (See 1,223,659.)

1,472,470. (See 1,195,632.) 1,477,805. (See 1,371,662.)

1,507,439. (See 1,379,224.) 1,507,440. (See 1,379,224.)

1,537,708, W. Schottky, Thermionic vacuum tube; 1,558,437, I. Langmuir, Electrical discharge apparatus; 1,696,103, G. Seibt, Electric discharge tube, filed Dec. 12, 1929, D. C., E. D. N. Y., Doc. 4625, *Radio Corp. of America et al.* v. *Pilot Radio & Tube Corp.* Same, filed Dec. 28, 1929, D. C., E. D. N. Y., Doc. 4678, *Radio Corp. of America et al.* v. *Seedman Automobile & Radio Co., Inc.*

1,558,437. (See 1,537,708.)

1,562,811, M. J. Tracy, Partitions in jail construction and speaking panel therefor; 1,635,650, same, Communication device, D. C., N. D. Ohio, E. Div., Doc. 3022, *Pauly Jail Building Co.* v. *The Van Dorn Iron Works Co.* Dismissed Feb. 1, 1930.

1,577,917. (See Re. 15,220.) 1,602,175. (See 1,320,936.)

1,611,466, Lewis & Murray, Steaming tube for hair waving; 1,637,147, W. S. Lewis, Tube for permanent waving, D. C., N. D. Ohio (E. Div.), Doc. 2355, *The Le Mur Co.* v. *D. V. Ellsworth* (*The Ohio School of Cosmetic Therapy*). Dismissed without prejudice Feb. 26, 1930.

1,620,771. (See Re. 15,220.) 1,635,650. (See 1,562,811.)

1,637,147. (See 1,611,466.) 1,641,593. (See 1,696,380.)

1,641,798. (See Re. 17,469.) 1,660,879. (See 1,448,681.)

1,683,558. (See 1,696,380.) 1,696,103. (See 1,537,708.)

1,696,380, W. M. Brower, Instrument control; 1,683,558, F. A. Kolster, Variable condenser; 1,641,593, same, Multiple variable condenser, D. C. Del., Doc. E 730, *Federal Telegraph Co.* v. *Stern & Co.* Dismissed without prejudice Feb. 19, 1930.

1,698,566, R. J. Simpson, Case for measuring tapes; Des. 71,257, same, Measuring tape, filed Dec. 13, 1929, D. C., N. J., Doc. E 3965, *L. S. Starrett Co.* v. *Keuffel & Esser Co.*

1,704,154. (See 1,448,681.) 1,725,398. (See Re. 17,413.)

Re. 15,220, D. G. Lorraine, Gas, oil, and sand separator; 1,396,860, 1,577,917, same, Method of and apparatus for separating oil and gas; 1,620,771, same, Oil and gas separator, D. C., S. D. Calif. (Los Angeles), Doc. E M-16-J, *Lorraine Corp.* v. *Union Tank & Pipe Co.* Dismissed Feb. 17, 1930.

Re. 15,278. (See 1,456,528.)

Re. 17,413, A. T. Kathner, Annealing and heat-treating furnace; 1,725,398, same, Metal-treating furnace, filed Mar. 1, 1930, D. C., N. D. Ohio (W. Div.), Doc. 1050, *The Duraloy Co.* v. *Surface Combustion Co., Inc.*

Re. 17,469, E. Bocchino, Safety device for fire escapes, filed Jan. 4, 1930, D. C., N. J., Doc. E 3969, *Safety Device Fire Escape Co., Inc.*, v. *National Fire Escape Weight Receiver Corp. et al.*

Disclaimers

Re. Patent No. 17,596.—*George Langford*, Joliet, Ill. RAIL JOINT. Patent dated February 18, 1930. Disclaimer filed May 5, 1930, by the assignee. *McKenna Process Company of Illinois*, patentee, said Langford, concurring.

Hereby enters a disclaimer, limiting the aforesaid claims Numbers 2, 3, 4, 8, 10, and 11 of said reissued Letters Patent as follows:

Patentee hereby disclaims all rail joint bars for joining the ends of rails except bars wherein the lateral convexity or bowing is supplemented by an increase of the fishing height above that of the original height of the bar along at least the central part of the bar to preserve a suitable draw space along at least the central part of the bar, for fitting worn rail ends having various degrees of wear.

1,458,920.—*Frederick J. Troll*, Baltimore, Md. ROAD-BEARING METER. Patent dated June 12, 1923. Disclaimer filed April 30, 1930, by the patentee said *Troll*, the assignee, *The Loadometer Company*, and the sole licensee, *The Black & Decker Manufacturing Company.*

Hereby enter their disclaimer as to claim 15, which reads:

"15. A method of determining wheel pressures of load vehicles while the vehicles are on the road, which consists in placing a plurality of manually portable independent weighing units on the roadway in the path of the wheels, spacing them apart to correspond to the tread, running the wheels on to the weighing units, and reading the respective weighing units."

1,654,078.—*Charles D. Fagan*, Sharon, Pa. DRAIN PIT AND GREASE RACK. Patent dated December 27, 1927. Disclaimer filed April 29, 1930, by the assignee, *Sharpsville Boiler Works Co.*

Hereby makes disclaimer to such parts of the thing patented as it does not choose to claim or hold by virtue of said patent and assignment, said disclaimer being as follows:

That in claim 1 "a pair of substantially flat wheel guides secured to the longitudinal top edges of said trough member" shall comprise *a pair of substantially flat wheel guides comprising channel irons with the channels turned downwardly, said wheel guides being secured to the longitudinal top edges of said trough member.*

That in claim 2 "channel bars mounted on the sides of the trough and below the top thereof to comprise trackways" shall comprise *channel bars with the flanges thereof turned downwardly, said channel bars being mounted on the sides of the trough and below the top thereof to comprise trackways.*

That in claim 3 "wheel guides supported adjacent the longitudinal edges of said trough" shall comprise *wheel guides comprising channel bars with the flanges turned downwardly, said wheel guides being supported adjacent the longitudinal edges of said trough.*

That in claim 4 "wheel guides integrally secured to the longitudinal top walls of said pit" shall comprise *wheel guides comprising channel irons with the flanges thereof turned downwardly, said wheel guides being integrally secured to the longitudinal top side walls of said pit.*

That in claim 5 "a pair of channel-shaped elongated metal members secured to the side walls to form runways for the wheels of an automobile whereby an automobile may be run into position over said trough to be serviced" shall comprise *a pair of channel-shaped elongated metal members with the flanges thereof turned downwardly, said metal members being secured to the side walls to form runways for the wheels of an automobile whereby an automobile having any width tread greater than the width of said side walls may be run into position over said trough to be serviced.*

Claim 6 is disclaimed in its entirety.

That in claim 7 "and elongated members permanently secured to the upper portion of said side walls, said members being shaped to form runways for rubber tired automobile wheels, whereby an automobile may be run into position over said trough to be serviced" shall comprise *elongated flanged members with the flanges turned downwardly, said members being permanently secured to the upper portion of said side walls and being shaped to form runways for rubber tired automobile wheels, whereby an automobile having a tread wider than the width of said trough may run into position over said trough to be serviced.*

Interference Notices

U. S. PATENT OFFICE, *Washington, Apr. 25, 1930.*

Joseph A. O'Neill, his assigns or legal representatives, take notice:

An interference having been declared by this Office between the application for patent of Harry E. Chipman, 97 Suffolk Street, Springfield, Mass., and Patent No. 1,653,467, granted December 20, 1927, to Joseph A. O'Neill, 2626 Broadway, New York, N. Y., and the notice of such declaration sent by registered mail to said O'Neill at said address having been returned by the post office undeliverable, notice is hereby given that unless said O'Neill, his assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the interference will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

U. S. PATENT OFFICE, *Washington, D. C., May 7, 1930.*

Carl A. Held, his assigns or legal representatives, take notice:

An interference has been declared by this Office between applications for patents filed by Stanley McClatchie, of 2577 Ashton Road, Cleveland Heights, Ohio, and Carl A. Held, of Waverly Place, Farmingdale, N. Y. Counsel for Held states that he does not know the present whereabouts of Held. Notice is hereby given that unless said Held, his assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the interference will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

U. S. PATENT OFFICE, *Washington, D. C., May 7, 1930.*

Herbert Scheel, his assigns or legal representatives, take notice:

An interference having been declared by this Office between the application for patent of Kent E. Keller, of Ava, Ill., and patent granted December 18, 1928, No. 1,695,348, to Herbert Scheel, of 2210 Pacific Avenue, Dallas, Tex., c/o Ferguson Motors Co., and a notice of such declaration sent by registered mail to said Scheel at the said address having been returned by the post office as undeliverable, notice is hereby given that unless said Scheel, his assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the interference will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

Notices of Cancellation

U. S. PATENT OFFICE, *Washington, Apr. 19, 1930.*

Alice R. Meller, her assigns or legal representatives, take notice:

A cancellation proceeding having been instituted by this Office upon the application of The American Products Company, 3265 Colerain Avenue, Cincinnati, Ohio, to effect the cancellation of the trade-mark registration of Alice R. Meller, 3500 Louisa Street, Pittsburgh, Pa., No. 169,768, dated July 3, 1923, and the notice of such proceeding sent by registered mail to the said Meller at the said address having been returned by the post office as undeliverable, notice is hereby given that unless said Meller, her assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the cancellation will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

U. S. PATENT OFFICE, *Washington, Apr. 22, 1930.*

John Harris Griffith, his assigns or legal representatives, take notice:

A cancellation proceeding having been instituted by this Office upon the application of The American Products Company, of 3265 Colerain Avenue, Cincinnati, Ohio, to effect the cancellation of the trade-mark registration of John Harris Griffith, of Marietta, Ga., No. 144,406, dated July 5, 1921, and the notice of such proceeding sent by registered mail to the said Griffith at the said address having been returned by the post-office as undeliverable, notice is hereby given that unless said Griffith, his assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the cancellation will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

U. S. PATENT OFFICE, *Washington, Apr. 28, 1930.*

Baruch Cerf, his assigns or legal representatives, take notice:

A cancellation proceeding having been instituted by this Office upon the application of the Epstein-Minzter Co. Inc., 729–731 South 12th Street, Newark, N. J., to effect the cancellation of the trade-mark registration of Baruch Cerf, doing business at 204 27th Street, Milwaukee, Wis., and in Chicago, Ill., under the name of Czonable Products Co., No. 159,324, dated September 26, 1922, and the notice of such proceeding sent by registered mail to the said Cerf at the said addresses having been returned by the post office as undeliverable, notice is hereby given that unless said Cerf, his assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the cancellation will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

U. S. PATENT OFFICE, *Washington, D. C., Apr. 30, 1930.*

Cumalena Manufacturing Co., its assigns or legal representatives, take notice:

A cancellation proceeding having been instituted by this Office upon the application of the United Drug Company, of 43 Leon Street, Boston, Mass., to effect the cancellation of the trade-mark registration of the Cumalena Manufacturing Co., of Crafton, Pa., No. 42,070, dated February 16, 1904, and the notice of such proceeding sent by registered mail to the said Cumalena Manufacturing Co. at the said address having been returned by the post office as undeliverable, notice is hereby given that unless the Cumalena Manufacturing Co., its assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the cancellation will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

U. S. PATENT OFFICE, *Washington, May 3, 1930.*

Anthony J. Trasso, his assigns or legal representatives, take notice:

A cancellation proceeding having been instituted by this office upon the application of The American Products Company of 3265 Colerain Avenue, Cincinnati, Ohio, to effect the cancellation of the trade-mark registration of Anthony J. Trasso, of 35–37 Sixth Avenue, New York, N. Y., No. 146,149, dated August 30, 1921, and the notice of such proceeding sent by registered mail to the said Trasso at the said address having been returned by the post office as undeliverable, notice is hereby given that unless said Trasso, his assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the cancellation will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

TRADE-MARKS

OFFICIAL GAZETTE, MAY 20, 1930

[VOL. 394. No. 3]

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this publication.

Marks applied for " under the ten-year proviso " are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 1 of said act, a fee of ten dollars must accompany each notice of opposition.

CLASS 1

Raw or Partly-Prepared Materials

Ser. No. 297,724. BLUE DIAMOND COAL COMPANY, Knoxville, Tenn. Filed Mar. 22, 1930.



MAYFLOWER

For Coal.
Claims use since Feb. 17, 1930.

Ser. No. 298,240. L. H. HAMEL LEATHER CO., Haverhill, Mass. Filed Apr. 1, 1930.



For Leather.
Claims use since early part of the year 1918.

Ser. No. 298,371. BLACK STAR COAL COMPANY, Louisville, Ky. Filed Apr. 4, 1930.

BLACK STAR - KELLY O.K.

For Coal.
Claims use since 1921.

Ser. No. 298,519. THIOKOL CORPORATION, Kansas City, Mo. Filed Apr. 7, 1930.

THIOKOL

For Sulfur-Containing Plastic Material Used in the Manufacture of Gaskets, Hose, Insulating Coating, Dielectric Materials, Protective Coatings, and Like Products.
Claims use since Dec. 1, 1929.

CLASS 2

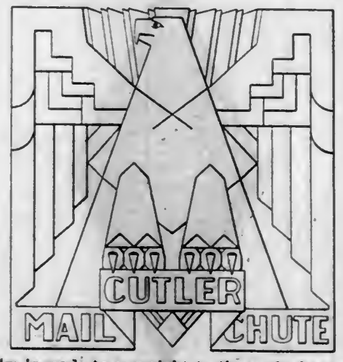
Receptacles

Ser. No. 291,189. HERBERT MACLEAN WARE, London, England. Filed Oct. 17, 1929.

KLEENTAINER

For Paper, Cardboard, Waxed Paper, Waxed Board, and Waxed Papier-Maché, Food Bottles, Boxes, Cartons, Trays, Racks, and Baskets.
Claims use since Sept. 2, 1929.

Ser. No. 295,468. CUTLER MAIL CHUTE CO., Rochester, N. Y. Filed Feb. 1, 1930.



No claim is made to any right to the exclusive use of the words "Mail Chute" apart from the mark as shown.
For Mail Chutes and Mail Boxes.
Claims use since Dec. 14, 1929.

Ser. No. 295,469. CUTLER MAIL CHUTE CO., Rochester, N. Y. Filed Feb. 1, 1930. Under 10-year proviso.

CUTLER

For Mail Chutes and Mail Boxes.
Claims use since Jan. 1, 1884.

Ser. No. 297,203. MAURICE W. MOTT, doing business as Grange Silo Co., Red Creek, N. Y. Filed Mar. 12, 1930.

GRANGE SILO CO.,

For Wooden and Cement Silos.
Claims use since Nov. 1, 1921.

CLASS 4

Abrasive, Detergent, and Polishing Materials

Ser. No. 256,357. MAYER & SCHMIDT, SCHLEIFMASCHINEN & SCHMIERGELWERKE, A. G., Offenbach-on-the-Main, Germany. Filed Oct. 20, 1927.

Alumax

For Aluminous Artificial Abrasives.
Claims use since Apr. 20, 1925.

Ser. No. 295,959. SOCIETE CADUM S. A., Courbevoie, France. Filed Feb. 12, 1930.

DONGE

For Toilet and Bath Soaps, Shaving Soap and Cream, and Soap Shampoos.
Claims use since Dec. 12, 1921.

Ser. No. 296,386. BARTON MANUFACTURING COMPANY, St. Louis, Mo. Filed Feb. 24, 1930.



For Shoe Dressings.
Claims use since Jan. 28, 1930.

Ser. No. 296,554. CARRIE C. TAYLOR, doing business as Dexto Company, Richmond, Va. Filed Feb. 26, 1930.

DEXTO

For Cleansing Liquid Used in Cleaning Fabrics Such as Rugs, Clothes, and the Like.
Claims use since Feb. 19, 1930.

Ser. No. 296,794. ALLEGRO COMPANY, Newark, N. J. Filed Mar. 4, 1930.

ALLEGRO

For Razor Hones, Razor Strops, Abrasive Cakes for Razor Strops, Razor-Strop Coatings, Razor-Strop Softeners.
Claims use since June 26, 1929.

Ser. No. 296,926. ABBAS SMAIL, doing business as Nightingale Products, Brooklyn, N. Y. Filed Mar. 6, 1930.



For Liquid and Powder Cleanser and Stain Remover for Cleaning Fabrics.
Claims use since Feb. 21, 1930.

Ser. No. 297,697. THE SELIG COMPANY, Atlanta, Ga. Filed Mar. 21, 1930.

OLE-SOL

For Metal Polish.
Claims use since Mar. 24, 1928.

Ser. No. 297,743. EMIL JOHNSON, doing business as Emil Johnson's, St. Paul, Minn. Filed Mar. 22, 1930.

DUCK SEAL

The word "Seal" is hereby disclaimed apart from the mark as shown in the drawing.
For Shoe and Leather Preserver, Polish, and Waterproofing Compound.
Claims use since Jan. 1, 1930.

Ser. No. 298,010. EDWARD F. BRADY, Jr., doing business as The Miller Products Company, Gary, Ind. Filed Mar. 28, 1930.

SMILING THRU

For Liquid Glass Cleaner.
Claims use since Feb. 25, 1930.

Ser. No. 298,188. THE KLE KLO PRODUCTS COMPANY, INC., Blackwell, Okla. Filed Mar. 31, 1930.

KLE-KLO

For Cloth-Cleaning Compound.
Claims use since August, 1929.

Ser. No. 298,219. THE WILLIAM A. WEBSTER COMPANY, Memphis, Tenn. Filed Mar. 31, 1930.

DERMISAN

For Shaving Cream.
Claims use since Mar. 30, 1929.

Ser. No. 298,336. THE JOHN C. KING FLOORING COMPANY, Cleveland, Ohio, and Detroit, Mich. Filed Apr. 3, 1930.

Kingsonite

For Cleaning Preparation for Block Floors.
Claims use since Mar. 14, 1930.

CLASS 5

Adhesives

Ser. No. 297,976. ALVINE W. LYON, doing business as The Lyon Specialty Co., Hollywood, Calif. Filed Mar. 27, 1930.



"Mustop-Gum Curls"

No claim being made to the exclusive right to the use of the word "Gum" apart from the mark shown in the drawing.
For Adhesive-Mending Tissue for Application to Silk, Knitted, and Woven Fabrics to Prevent a Run from Enlarging.
Claims use since Feb. 15, 1930.

CLASS 6

Chemicals, Medicines, and Pharmaceutical Preparations

Ser. No. 263,776. THE MILSON COMPANY, Cincinnati, Ohio. Filed Mar. 26, 1928.

Silkennette

For Cosmetics and Toilet Preparations—Namely, Skin Lotions.
Claims use since Oct. 24, 1927.

Ser. No. 286,093. VISCO PRODUCTS COMPANY, Houston, Tex. Filed June 24, 1920.

MUD-IT

For Solution of Sodium Compound Used in Drilling Mud, Said Solution Being Adapted for Mixing with the Soil When Drilling Rotary Wells to Make the Soil More Viscous and Slippery, Thereby to Aid in the Drilling.
Claims use since May 13, 1929.

Ser. No. 288,406. WEINBERGER DRUG STORES, INC., doing business as Superior Laboratories, Cleveland, Ohio. Filed Aug. 10, 1929.



For Shampoo Compound or Mixture.
Claims use since 1917.

Ser. No. 289,318. HEKO-WERK CHEMISCHE FABRIK AKTIENGESELLSCHAFT, Berlin-Tempelhof, Germany. Filed Sept. 4, 1929.

Hekotect

For Salves, Free from Grease, Especially Dry Salves for Use in the Treatment of Skin Diseases.
Claims use since May 30, 1927.

Ser. No. 291,190. WEINBERGER DRUG STORES, INC., doing business as Superior Wynco Laboratories, Cleveland, Ohio. Filed Oct. 17, 1929.

Wynco

For Antiseptic Foot Powder, Hematic Syrup of Hypophosphites Compound, Hemorrhoidal Suppositories, Cold Cream, Lemon Cream, and Vanishing Cream.
Claims use since Sept. 23, 1929.

Ser. No. 291,675. LUCIEN LELONG, INC., Chicago, Ill. Filed Oct. 28, 1929.

BAGUETTE

For Filled Powder and Rouge Vanity Cases.
Claims use since July 24, 1929.

Ser. No. 292,846. DAGGETT & RAMSDELL, New York, N. Y. Filed Nov. 25, 1929. Under 10-year proviso.

DAGGETT AND RAMSDELL'S

For Cold Cream.
Claims use since 1891.

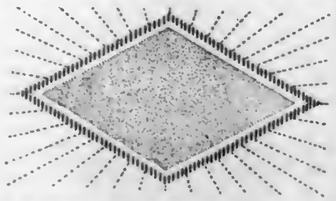
Ser. No. 293,841. LONE STAR EXTERMINATING CO., New York, N. Y. Filed Dec. 18, 1929.

"LONE-STAR"



For Insecticides.
Claims use since May 28, 1929.

Ser. No. 294,054. SALLY BRYAN, doing business as Denver Radium Service, Denver, Colo. Filed Dec. 26, 1929.



The lining shown on the drawing is used for shading purposes only.
For Radium-Containing Ointment for Burns, Open Sores, Cuts, Wounds, Bruises, Inflamed Surfaces, Dressings, and Also for Rheumatic Pains, Lumbago, Neuralgic Pains, Non-infectious Skin Diseases, Throat and Bronchial Affections, Chronic or Acute Inflammations, Catarrh and Hemorrhoids, Also for Radium-Containing Solutions and Radium-Containing Tablets, Both to be Used as Directed by Physicians Where the Use of Radium is Indicated, Also for Suppositories.
Claims use since Jan. 1, 1917.

Ser. No. 294,388. AUGUST KARRETH, doing business as Luitpold-Werk Chemisch-Pharmazeutische Fabrik, Munich, Germany. Filed Jan. 4, 1930.

Septospuman

For Healing, Disinfecting, and Protecting Preparations Used in the Treatment of Wounds, Body Cavities, Body Canals, and Fistulas.
Claims use since Aug. 4, 1925.

Ser. No. 295,387. POND'S EXTRACT COMPANY, New York, N. Y. Filed Jan. 30, 1930.



No claim is made to the words "Skin Freshener" apart from the mark shown in the drawing.
For Skin-Freshener Preparation.
Claims use since Jan. 10, 1930.

Ser. No. 295,903. PAUL LEMIRE, Berlin, N. H. Filed Feb. 11, 1930.



For Medical Preparation for the Treatment of Diseases of the Skin.
Claims use since Oct. 15, 1929.

Ser. No. 296,601. HARRY C. KAHLO, doing business as Aratin Products Company, Indianapolis, Ind. Filed Feb. 27, 1930.

ARATIN

For Medical Preparation for Use in Diabetes.
Claims use since Jan. 25, 1930.

Ser. No. 296,913. BENJAMIN R. FAUNCE, Riverside, N. J. Filed Mar. 6, 1930.



The right to use the words "Cough Syrup" and the representation of a bottle is hereby disclaimed, except in the relationship in which they are shown to other parts of the mark.
For Cough Syrup.
Claims use since Jan. 1, 1930.

Ser. No. 297,386. SOCIETE ANONYME POUR L'EXPANSION DES MARQUES DE FABRIQUE ET COMMERCE, Courbevoie, France. Filed Mar. 15, 1930.



For Granulated Laxative Pharmaceutical Product.
Claims use since May 6, 1909.

Ser. No. 297,482. DAVID HEREDIA, New York, N. Y. Filed Mar. 18, 1930.

Heredia
Hair Tonic



In the drawing the hand writing being the facsimile of the signature of the applicant, no claim being made to the exclusive use of the words "Hair Tonic" apart from the mark as shown.
For Preparation for the Treatment of the Hair.
Claims use since Feb. 28, 1930.

Ser. No. 297,498. THE SCIOTO PETROLEUM COMPANY, Columbus, Ohio. Filed Mar. 18, 1930.

Zoom-Fluid

The word "Fluid" is disclaimed except in association with the other features of the mark.
For Motor-Fuel Compound for Reducing Detonation, Minimizing Carbon, Neutralizing the Action of Gum, and Lubricating the Cylinders of Internal-Combustion Engines.
Claims use since Feb. 3, 1930.

Ser. No. 297,768. THE PARAFFINE COMPANIES, INC., San Francisco, Calif. Filed Mar. 22, 1930.

PABCO

For Wood-Preservative Compound, Chemical Cleaner, and Denatured Alcohol.
Claims use since about July, 1918, on wood-preservative compound; since about May, 1928, on chemical cleaner; and since July 17, 1928, on denatured alcohol.

Ser. No. 298,098. THOMAS HEATON, Wallasey, Cheshire, England. Filed Mar. 29, 1930.

"LIVERVITE"

For Medicated Preparations for Human Use in the Treatment of Liver Complaints.
Claims use since July 16, 1929.

CLASS 7

Cordage

Ser. No. 297,053. A. W. ARCHER CO., INC., New York, N. Y. Filed Mar. 10, 1930.



For Braided Cord Made from Cotton, Manila, Hemp, or Jute Fiber.
Claims use since July 8, 1926.

CLASS 9

Explosives, Firearms, Equipments, and Projectiles

Ser. No. 282,251. PUGET SOUND & ALASKA POWDER COMPANY, Seattle, Wash. Filed Apr. 11, 1929.



For High Explosives—Namely, Dynamite, Gelatine, Gelignite, Stumping Powder, and Quarry Powder.
Claims use since about October, 1920.

Ser. No. 298,327. HITT FIREWORKS CO., Seattle, Wash. Filed Apr. 3, 1930.

HITT'S MOONLIGHT SILVER FALLS

For Pyrotechnique Novelties.
Claims use since December, 1929.

Ser. No. 298,328. HITT FIREWORKS CO., Seattle, Wash. Filed Apr. 3, 1930.

HITT'S SEARCHLIGHT FIERY NIAGARA

For Pyrotechnique Novelties.
Claims use since December, 1929.

Ser. No. 298,329. HITT FIREWORKS CO., Seattle, Wash. Filed Apr. 3, 1930.

HITT'S BABY

NIAGARA

For Pyrotechnique Novelties.
Claims use since December, 1929.

CLASS 10

Fertilizers

Ser. No. 271,940. N. V. POTASH EXPORT MAATSCHAPPIJ, New York, N. Y. Filed Sept. 5, 1928.

NV

For Potash for Fertilizers.
Claims use since June 27, 1928.

CLASS 11

Inks and Inking Materials

Ser. No. 296,501. BEN W. THOMPSON, doing business as National Ink & Chemical Co., Los Angeles, Calif. Filed Feb. 25, 1930.



The words "Products, Chemicals, Paste Inks," and the expressions "Are The Best, There's A Saving," and "Known The World Over" are disclaimed apart from the other features of the mark shown in the drawing.
For Writing Ink.
Claims use since Feb. 3, 1928.

CLASS 12

Construction Materials

Ser. No. 283,242. WABASH PORTLAND CEMENT COMPANY, Stroh, Ind.; Osborn, Ohio; and Detroit, Mich. Filed Apr. 29, 1929.



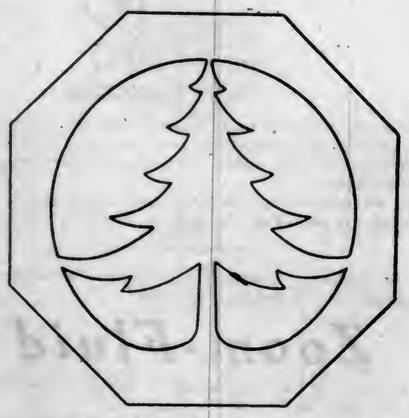
Applicant disclaims "Detroit" apart from the combination as shown.
For Brick Mortar.
Claims use since Jan. 2, 1929.

Ser. No. 283,243. WABASH PORTLAND CEMENT COMPANY, Stroh, Ind.; Osborn, Ohio; and Detroit, Mich. Filed Apr. 29, 1929.

BONDTITE

For Brick Mortar.
Claims use since Jan. 2, 1929.

Ser. No. 283,370. THEODORE F. BORST, doing business as American Forestry Company, Framingham Center, Mass. Filed May 2, 1929.



For Garden Furniture—Namely, Arbors, Pergolas, Wooden Fences, Gates, and Trellises.
Claims use since 1923.

Ser. No. 283,374. THEODORE F. BORST, doing business as American Forestry Company, Framingham Center, Mass. Filed May 2, 1929.

Little Tree

For Arbors, Pergolas, Wooden Fences, Gates, and Trellises.
Claims use since 1923.

Ser. No. 296,134. JOHN H. MITCHELL, Chicago, Ill. Filed Feb. 17, 1930.

KANETEX

No claim being made to the word "Insulation" apart from the other features of the mark.
For Artificial Lumber, Wall Board, and Artificial Thermal Insulation.
Claims use since about Sept. 15, 1929.

Ser. No. 297,391. WATERMAN BRICK AND TILE COMPANY, INC., Waskom, Tex. Filed Mar. 15, 1930.

CATUGU

For Building Brick.
Claims use since Dec. 2, 1929.

Ser. No. 297,507. AMALGAMATED ROOFING COMPANY, Chicago, Ill. Filed Mar. 19, 1930.

TRU-LOK

For Shingles.
Claims use since June 1, 1929.

Ser. No. 298,303. AMERICAN HAIR & FELT COMPANY, Chicago, Ill. Filed Apr. 3, 1930.

SEALOFELT

For Hair-Felt Products for Sound Deadening and Thermal Insulation.
Claims use since Mar. 17, 1930.

Ser. No. 298,381. FEDERAL SEABOARD TERRA COTTA CORPORATION, New York, N. Y. Filed Apr. 4, 1930.



The drawing is lined to indicate a red background.
For Terra Cotta.
Claims use since November, 1928.

CLASS 13

Hardware and Plumbing and Steam-Fitting Supplies

Ser. No. 285,499. HENRY K. DAVIES & CO., INC., New York, N. Y. Filed June 13, 1929.

LAYMESH

For Rubber-Coated Metal Dippers, Trays, Pipes, and Tubes.
Claims use since on or about May 22, 1929.

Ser. No. 296,250. AMERICAN HARD RUBBER COMPANY, Hempstead and New York, N. Y. Filed Feb. 20, 1930.

ACE

For Hard or Soft Rubber, Solid Lined or Covered Equipment for Chemical-Process Industrial Uses—Namely, Baths, Bibb Cocks, Bushings, Candle Filters, Caps, Check Valves, Cocks, Cones, Couplings, Crosses, Dippers, Drains, Elbows, Faucets, Float Balls, Float Valves, Foot Valves, Funnels, Gate Valves, Hose Cocks, Hose Couplings, Ladles, Laterals, Lock Nuts, Pet Cocks, Pipe, Plugs, Sieves, Sinks, Spinnerette Lock Nuts, Stop Cocks, Straightway Cocks, Siphons, T's, Three-Way Cocks, Trays, Unions.
Claims use since December, 1920.

Ser. No. 296,572. S. BASCH IMPORT CORPORATION, New York, N. Y. Filed Feb. 27, 1930.

TATCHABLE

For Porcelain Bathroom Accessories—Namely, Glass Holders, Soap Dishes, Towel Racks, Hooks, and Toilet-Paper Holders.
Claims use since Feb. 15, 1930.

CLASS 16

Paints and Painters' Materials

Ser. No. 283,692. GERHARDT A. MILLARD, Chicago, Ill. Filed May 8, 1929.

LIN-O-NIZ

For Adhesive Coatings in the Nature of Varnishes.
Claims use since Apr. 25, 1929.

Ser. No. 296,040. THE WORLD PAINT & VARNISH CORP., New York, N. Y. Filed Feb. 14, 1930.



No claim is made to the wording appearing on the drawing, excepting the term "The World" and applicant's corporate name, apart from the mark shown.
For Ready-Mixed Paints and Varnishes.
Claims use since Dec. 1, 1929.

Ser. No. 296,370. JOSEPH A. TUMBLER, Baltimore, Md., assignor to J. A. Tumbler Laboratories, Baltimore, Md. Filed Feb. 21, 1930.

TUMBLER

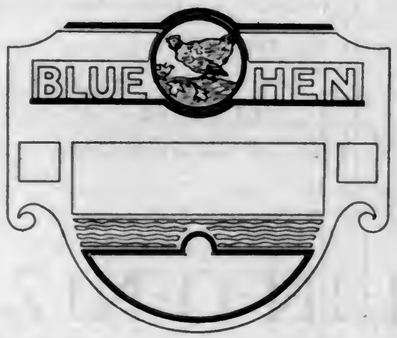
The lining on the drawing indicates red.
For Cleaner and Polish for Automobiles and Furniture.
Claims use since Feb. 3, 1930.

Ser. No. 296,611. THE REARDON COMPANY, St. Louis, Mo. Filed Feb. 27, 1930.

MODEX

For Paints in Dry Form.
Claims use since Feb. 20, 1930.

Ser. No. 297,232. JAMES BRADFORD CO., Wilmington, Del. Filed Mar. 13, 1930.



For Ready-Mixed Paints, Paint Enamels, Lacquers, Paste Paints, Paint Oils, Japans, Varnishes, and Driers.
Claims use since about March, 1927.

CLASS 19

Vehicles, Not Including Engines

Ser. No. 297,115. ANDERSON MANUFACTURING COMPANY, Cambridge, Mass. Filed Mar. 10, 1930.

ANDERSON-AJAX

For Vehicle Spring Covers.
Claims use since Nov. 23, 1929.

CLASS 20

Linoleum and Oiled Cloth

Ser. No. 298,479. ARMSTRONG CORK COMPANY, Lancaster, Pa. Filed Apr. 7, 1930.

Embosstex

For Linoleum, Felt Base, and Similar Floor Coverings.
Claims use since Mar. 3, 1930.

Ser. No. 298,481. ARMSTRONG CORK COMPANY, Lancaster, Pa. Filed Apr. 7, 1930.

DECORESQ

For Linoleum, Felt Base, and Similar Floor Coverings.
Claims use since Dec. 17, 1929.

CLASS 22

Games, Toys, and Sporting Goods

Ser. No. 289,041. PACIFIC GOLF BALL, LTD., San Francisco, Calif. Filed Aug. 26, 1929.

PACIFIC PRINCE

For Golf Balls.
Claims use since July 22, 1929.

Ser. No. 296,362. SOUTH BEND BAIT CO., South Bend, Ind. Filed Feb. 21, 1930.

ORENO

For Bows, Arrows, Wood Blanks for Bows and Arrows, Arrow Quivers, Targets, Arm Guards, Parallel Points, Arrow Nocks, Bow Strings, and Archery Tackle.
Claims use since Jan. 31, 1930.

Ser. No. 297,107. MORRIS WABER, New York, N. Y. Filed Mar. 10, 1930.

AVIO

For Wheel Toys, Mechanical Toys, and Parts Thereof.
Claims use since Apr. 30, 1929.

Ser. No. 297,240. HERBERT D. CLAYTON, Hill City, Kans. Filed Mar. 13, 1930.



QUEEN OF PLAYTIME

The picture forming a feature of the mark is a fanciful representation of a young school girl.
For Merry-Go-Rounds.
Claims use since Feb. 1, 1930.

Ser. No. 297,590. FAIRYLAND MANUFACTURING COMPANY, Chattanooga, Tenn. Filed Mar. 20, 1930.

TOM THUMB

For Materials for Constructing Miniature Golf Courses and Apparatus for Use in Connection Therewith—Namely, Cups for Greens, Green Markers, Putting Irons, Golf Balls, Score Cards, and Display Signs.
Claims use since July, 1929.

Ser. No. 297,751. HARLAN W. MAJOR, New York, N. Y. Filed Mar. 22, 1930.

Major made

The mark as shown in the drawing is in applicant's hand-writing. Applicant disclaims the word "Made" apart from the mark as shown.
For Fishing Reels, Fishing Lines, Fishing Rods, Artificial Baits, Sinkers, Spears, Gaff Hooks, Fish Hooks, Leaders, Tackle Boxes, Fishing and Tackle Swivels, Spinners, Polo Mallets, Golf Clubs.
Claims use since October, 1927.

Ser. No. 297,793. CHAPMAN & CHAPMAN, Paterson, N. J. Filed Mar. 24, 1930.

AMOS & ANDY
FRESH AIR TAXI CO.
OF AMERICA INC.

A. BROWN PRES.

No claim being made to "A. Brown Pres." apart from the mark shown.
For Toy Automobiles.
Claims use since Mar. 3, 1930.

Ser. No. 297,990. THE S. & H. NOVELTY COMPANY, Atlantic City, N. J. Filed Mar. 27, 1930.

AMOS 'N ANDY

For Dolls.
Claims use since Feb. 15, 1930.

Ser. No. 298,026. HOLGATE BROTHERS COMPANY, Kane, Pa. Filed Mar. 28, 1930.

JERRY BLOCKS

The word "Blocks" is disclaimed apart from the mark shown in the drawing.
For Toy Building Blocks.
Claims use since Mar. 1, 1930.

Ser. No. 298,231. THE ENTERPRISE MANUFACTURING COMPANY, Akron, Ohio. Filed Apr. 1, 1930.

WHOOPEE

For Spinners.
Claims use since on or about Mar. 10, 1930.

Ser. No. 298,232. THE ENTERPRISE MANUFACTURING COMPANY, Akron, Ohio. Filed Apr. 1, 1930.

RAZEM

For Artificial Bait.
Claims use since on or about Mar. 10, 1930.

Ser. No. 298,233. THE ENTERPRISE MANUFACTURING COMPANY, Akron, Ohio. Filed Apr. 1, 1930.

KLIPEC

For Fishhooks.
Claims use since on or about Mar. 10, 1930.

CLASS 23

Cutlery, Machinery, and Tools, and Parts Thereof

Ser. No. 266,294. AMERICAN MANGANESE BRONZE COMPANY, Holmesburg, Philadelphia, Pa. Filed May 12, 1928.

Ambroco

For Cast Bronze Machinery Bushings.
Claims use since November, 1927.

Ser. No. 276,817. RICHARD WOLFERTZ, doing business as Once Over Razor Blade Co., Buffalo, N. Y. Filed Dec. 15, 1928.

ONCE OVER

Applicant claims ownership of Trade-Mark No. 116,150, registered Apr. 10, 1917.
For Razor Blades.
Claims use since about November, 1928.

Ser. No. 277,178. PRATT & WHITNEY COMPANY, New York, N. Y. Filed Dec. 24, 1928.



For Gear-Burnishing Gears.
Claims use since Apr. 18, 1928.

Ser. No. 292,781. E. C. ATKINS AND COMPANY, Indianapolis, Ind. Filed Nov. 23, 1929.



For Cane Knives.
Claims use since Sept. 1, 1929.

Ser. No. 294,093. STEPH. BEISSEL SEL. WWE. & SOHN, Aix-La Chapelle, Germany. Filed Dec. 26, 1929. Under 10-year proviso.



For Sewing-Machine Needles.
Claims use since 1879.

Ser. No. 296,917. INDIAN MOTOCYCLE COMPANY, Springfield, Mass. Filed Mar. 6, 1930.



For Outboard Motors, Parts, and Accessories Therefor.
Claims use since Feb. 19, 1930.

Ser. No. 297,162. D. S. TUCKER COMPANY, Cleveland, Ohio. Filed Mar. 11, 1930.

AEROTEX

For Boiler-Tube Cleaners.
Claims use since Feb. 11, 1930.

Ser. No. 298,023. MERGENTHALER LINOTYPE COMPANY, New York and Brooklyn, N. Y. Filed Mar. 28, 1930. Under 10-year proviso.

MERGENTHALER

For Machines for Producing Type Bars and Parts Thereof.
Claims use since about July 1, 1885.

Ser. No. 298,115. IRVING PRICE, New York, N. Y. Filed Mar. 29, 1930.

LEMONIER

For Lemon Squeezers.
Claims use since Jan. 16, 1930.

Ser. No. 298,324. GREAT STATES CORPORATION, Richmond, Ind. Filed Apr. 3, 1930.

NEPTUNE

For Lawn Mowers.
Claims use since Aug. 4, 1926.

CLASS 24

Laundry Appliances and Machines

Ser. No. 290,277. THE TAGIT COMPANY, Rockford, Ill. Filed Sept. 26, 1929.

DATEM

For Laundry Marking Tags.
Claims use since Apr. 25, 1929.

CLASS 25

Locks and Safes

Ser. No. 297,346. DAVID H. ZELL, INC., New York, N. Y. Filed Mar. 14, 1930.

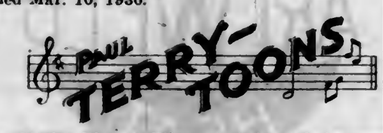
THE ELEVENTH COMMANDMENT

For Portable Coin Banks.
Claims use since 1926.

CLASS 26

Measuring and Scientific Appliances

Ser. No. 297,102. PAUL H. TERRY, Long Island City, N. Y. Filed Mar. 10, 1930.



For Motion-Picture Films of Animated Cartoons with Synchronized-Sound Track Thereon.
Claims use since Feb. 23, 1930.

CLASS 32

Furniture and Upholstery

Ser. No. 271,027. GASAU-THOMPSON BEDDING COMPANY INCORPORATED, Brooklyn and New York, N. Y. Filed Aug. 15, 1928.



For Chair Couches.
Claims use since Jan. 1, 1928.

Ser. No. 297,424. MAURICE H. GLASSMAN, Boston, Mass. Filed Mar. 17, 1930.

STOR-ALL

For Storage Cabinets for Furs.
Claims use since February, 1929.

CLASS 33

Glassware

Ser. No. 298,313. CORNING GLASS WORKS, Corning, N. Y. Filed Apr. 3, 1930.

NONEX

For Glass Lantern and Lamp Globes and Chimneys.
Claims use since Jan. 1, 1909.

CLASS 34

Heating, Lighting, and Ventilating Apparatus, Not Including Electrical Apparatus

Ser. No. 272,494. HYNES & COX ELECTRIC CORPORATION, Albany, N. Y. Filed Sept. 15, 1928.

RED CROWN

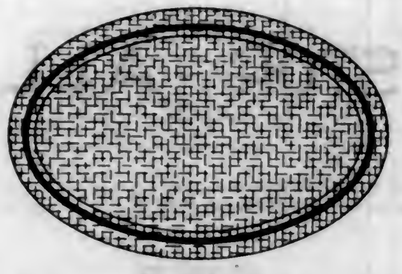
The words "Red Crown" are shown in red.
For Electrical Domestic Water Heaters.
Claims use since Mar. 1, 1928.

Ser. No. 272,495. HYNES & COX ELECTRIC CORPORATION, Albany, N. Y. Filed Sept. 15, 1928.

RED CROWN DUOSTAT

The words "Red Crown" are shown in red.
For Electrical Domestic Water Heaters.
Claims use since Mar. 1, 1928.

Ser. No. 282,977. R. E. DIETZ COMPANY, New York, N. Y. Filed Apr. 25, 1929.



The trade-mark consists of a yellow-colored oval or ellipse. No registration rights are claimed in an oval tag per se.

For Fuel-Burning Lamps and Lanterns and the Burners and Metal Parts Thereof.

Claims use since 1913.

Ser. No. 291,990. LITTLEFORD BROTHERS, Cincinnati, Ohio. Filed Nov. 4, 1929.



The words "A Good Heater" and "Cincinnati, O." are disclaimed apart from the mark as shown.

For Tar and Asphalt Heating Apparatus and Road-Repair Heating Apparatus, Not Including Electrical Apparatus.

Claims use since March, 1925.

Ser. No. 295,821. WALKER MANUFACTURING COMPANY, St. Joseph, Mo. Filed Feb. 8, 1930.

WYSWA

For Oil Burners and Equipment Therefor—Namely, Draft Regulators, Automatic Cut-Off Valves, and Oil Filters.

Claims use since on or about Dec. 5, 1929.

Ser. No. 295,897. HALL ELECTRIC HEATING COMPANY, INC., Philadelphia, Pa. Filed Feb. 11, 1930.

Hallmark HEATING

The word "Heating" is disclaimed apart from the mark shown in the drawing. The trade-mark is formed in red as indicated by the lines in the drawing.

For Building and Water Heaters of the Heat-Storage Type.

Claims use since Aug. 20, 1928.

Ser. No. 296,213. ARCWELD MANUFACTURING COMPANY, INC., Seattle, Wash. Filed Feb. 19, 1930.



Applicant disclaims the exclusive right to register "Clean Heat" except in the combination shown. Applicant is the successor in business of • • • the registrant to whom there was issued on October 17, 1922, Trade-Mark Certificate No. 160,291.

For Coal, Oil, Wood, and Gas Furnaces and Furnace Bodies.

Claims use since July, 1927.

Ser. No. 298,058. YORK HEATING & VENTILATING CORPORATION, Bridgeport and Philadelphia, Pa. Filed Mar. 28, 1930.

ENGINEERED CLIMATE

For Air-Conditioning Apparatus Comprising a Casing Having an Air Intake and a Spray Chamber Through Which the Air Passes in Contact with Regulated Water Spray and Devices for Circulating the Air Through the Casing.

Claims use since Jan. 30, 1930.

Ser. No. 298,060. YORK HEATING & VENTILATING CORPORATION, Bridgeport and Philadelphia, Pa. Filed Mar. 28, 1930.

CLIMATE-MAKING UNIT

For Air-Conditioning Apparatus Comprising a Casing Having an Air Intake and a Spray Chamber Through Which the Air Passes in Contact with Regulated Water Spray and Devices for Circulating the Air Through the Casing.

Claims use since Feb. 3, 1930.

CLASS 35

Belting, Hose, Machinery Packing, and Non-metallic Tires

Ser. No. 298,038. THE PHARIS TIRE AND RUBBER COMPANY, Newark, Ohio. Filed Mar. 28, 1930.

PARAMAX

For Motor-Vehicle Tires, Casings, and Tubes Made of Rubber or Rubber and Fabric.

Claims use since Mar. 13, 1930.

CLASS 37

Paper and Stationery

Ser. No. 295,937. JAMES FRANK DUNLEAVY, Boston, Mass. Filed Feb. 12, 1930.

FILEX

For Filing Supplies—Namely, Folders, Guides, Cards, Indexes, Signals, Tabs.

Claims use since March, 1923.

Ser. No. 295,938. JAMES FRANK DUNLEAVY, Boston, Mass. Filed Feb. 12, 1930.

Kraftex

For Filing Supplies—Namely, Folders, Guides, Cards, Indexes, Signals, Tabs.

Claims use since March, 1927.

Ser. No. 296,243. GENEVIEVE FINLAY STEWART, New York, N. Y. Filed Feb. 19, 1930.

"APRKIN"

For Paper Aprons.

Claims use since July 10, 1928.

Ser. No. 296,537. MARATHON PAPER MILLS COMPANY, Rothschild, Wis. Filed Feb. 26, 1930.

MARATHON BOND

The word "Bond" does not form a part of the registration sought apart from the mark shown on the drawing.

For Bond Paper.

Claims use since Feb. 4, 1930.

Ser. No. 297,345. YAWMAN AND ERBE MFG. CO., Rochester, N. Y. Filed Mar. 14, 1930.

"Y and E"

For Stationery and Supplies, and Particularly for File Guides; Nonmetallic Label Holders for File Guides, Label Inserts for File Guides, Celluloid Windows for Label Holders, File Holders, Flat and Expanding Envelopes; Combination Envelopes and File Guides, Partially-Printed Forms; File Transfer Cases, Hand-Operated Perforators, Clip Files; Blank, Printed, Ruled, Tabbed, and Indexed Cards for Filing Systems; and Indicator Tabs or Flags.

Claims use since July 1, 1901.

CLASS 38

Prints and Publications

Ser. No. 288,651. KAMEN-BLAIR, INC., Kansas City, Mo. Filed Aug. 17, 1929.

STYLE-COACH

For Magazines.

Claims use since July, 1929.

Ser. No. 288,652. KAMEN-BLAIR, INC., Kansas City, Mo. Filed Aug. 17, 1929.



For Magazines.

Claims use since July, 1929.

Ser. No. 294,580. GOOD STORY MAGAZINE COMPANY, INC., New York, N. Y. Filed Jan. 9, 1930.

The Whole Truth About Racketeers

For Magazine Published Periodically.
Claims use since Dec. 31, 1929.

Ser. No. 294,838. AMERICAN PAINT JOURNAL COMPANY, St. Louis, Mo. Filed Jan. 16, 1930.

American Modes in PAINTING and DECORATING

For Supplement to a Periodical.
Claims use since Jan. 10, 1929.

Ser. No. 296,099. C. B. NICHOLSON PRINTING COMPANY, doing business as Tourist Publishing Co., St. Louis, Mo. Filed Feb. 15, 1930.

The Tourist

For Periodical Publication.
Claims use since Sept. 1, 1929.

Ser. No. 296,190. THE HOUSE BEAUTIFUL PUBLISHING CORPORATION, Boston, Mass. Filed Feb. 18, 1930.

House Beautiful

For Periodical.
Claims use since September, 1897.

Ser. No. 296,961. FALL RIVER HERALD NEWS PUBLISHING COMPANY, Fall River, Mass. Filed Mar. 7, 1930.

Herald FALL RIVER News

For Daily Newspaper Published Every Day Except Sundays and Holidays.
Claims use since on or about June 14, 1926.

Ser. No. 297,050. AMERICAN MUSIC CO., INC., San Francisco, Calif. Filed Mar. 10, 1930.

AMERICAN MUSIC CO.

For Sheet Music.
Claims use since Aug. 1, 1929.

Ser. No. 297,226. THE BEST FOODS, INC., New York, N. Y. Filed Mar. 13, 1930.

the salad bowl

For Booklets, Printed from Time to Time.
Claims use since June, 1923.

Ser. No. 297,686. LEV WERN PUBLISHING COMPANY, Louisville, Ky. Filed Mar. 21, 1930.

HELLO WORLD

For Weekly Newspaper.
Claims use since Jan. 24, 1930.

Ser. No. 297,910. HANSEN SPECIALTY COMPANY, Sioux City, Iowa. Filed Mar. 26, 1930.

BLUEBIRD

For Trading Stamps and Coupons.
Claims use since 1915.

Ser. No. 297,988. THE SCHOLASTIC PUBLISHING COMPANY, Pittsburgh, Pa., and Mount Morris, Ill. Filed Mar. 27, 1930.

The SCHOLASTIC

For Semimonthly Magazine.
Claims use since September, 1922.

Ser. No. 298,086. JOHN L. DEXTER, Mariposa, Calif. Filed Mar. 29, 1930.

MARIPOSA GAZETTE

For Weekly Newspaper.
Claims use since about May 10, 1854.

Ser. No. 298,158. FAWCETT PUBLICATIONS, INC., Robbinsdale, Minn. Filed Mar. 31, 1930.

FORTUNE TELLER MAGAZINE

For Magazines Published Every Month.
Claims use since Mar. 1, 1930.

Ser. No. 298,159. FAWCETT PUBLICATIONS, INC., Robbinsdale, Minn. Filed Mar. 31, 1930.

EVERYDAY MECHANICS

For Magazines Published Every Month.
Claims use since Feb. 1, 1930.

Ser. No. 298,160. FAWCETT PUBLICATIONS, INC., Robbinsdale, Minn. Filed Mar. 31, 1930.

HOME MECHANICS

For Magazines Published Every Month.
Claims use since Feb. 1, 1930.

Ser. No. 298,261. CHRISTY WALSH, New York, N. Y. Filed Apr. 1, 1930.

(All-America Board of Track and Field)

For Heading for a Series of Articles.
Claims use since Mar. 2, 1930.

Ser. No. 298,271. CARBOLOY COMPANY, INC., New York, N. Y. Filed Apr. 2, 1930.

CARBOLOY

For Publication Issued Monthly.
Claims use since Sept. 1, 1929.

Ser. No. 298,505. HARRISON MCJOHNSTON, Chicago, Ill. Filed Apr. 7, 1930.

POINT-A-WEEK CLUB

For Weekly Publication.
Claims use since Jan. 1, 1930.

Ser. No. 298,625. GOOD STORY MAGAZINE COMPANY, INC., New York, N. Y. Filed Apr. 10, 1930.

Racketeer Stories

For Magazine Published Periodically.
Claims use since Dec. 31, 1929.

Ser. No. 298,627. GOOD STORY MAGAZINE COMPANY, INC., New York, N. Y. Filed Apr. 10, 1930.

Under Cover Stories

For Monthly Magazine.
Claims use since Mar. 27, 1930.

Ser. No. 298,629. MILT GROSS, New York, N. Y. Filed Apr. 10, 1930.

COUNT SCREWLOOSE OF TOOLOOSE

For Cartoon Strip.
Claims use since Jan. 1, 1929.

CLASS 39

Clothing

Ser. No. 258,678. CLIMAX HOSIERY MILLS, Athens, Ga. Filed Dec. 9, 1927.



No claim is made to the word "Irreg" apart from the mark as shown on the drawing.
For Hosiery.
Claims use since Apr. 8, 1927.

Ser. No. 272,822. THE MALLORY HAT COMPANY, Danbury, Conn. Filed Sept. 22, 1928.

Burton-Taylor

For Men's Hats.
Claims use since Aug. 28, 1928.

Ser. No. 280,319. EARL S. CALDOR, doing business as Packaine, or Paqain, New York, N. Y. Filed Mar. 6, 1929.

JEUNE FEMME
BUST LIGAMENT DOCTOR
P PAS-PRESSE
BY PA QAIN

Applicant disclaims the right to the exclusive use of the words "Bust Ligament" and "Pas Presse" apart from the mark as shown.
For Bust Bodices for Women in the Nature of Brassières.
Claims use since July 2, 1928.

Ser. No. 291,725. GROUND GRIPPER SHOE COMPANY, INC., Boston, Mass. Filed Oct. 29, 1929.

Little Gripper

For Children's Shoes Made of Leather, Rubber, or Fabric or Combinations of the Same.
Claims use since on or about July 3, 1926.

Ser. No. 292,572. B. & R. CLOTHING CO. INC., New York, N. Y. Filed Nov. 19, 1929.



Applicant disclaims the word "Shade" apart from the mark as shown.
For Men's and Young Men's Suits and Overcoats.
Claims use since June 15, 1928.

Ser. No. 293,262. CHICAGO RUBBER CLOTHING CO., Racine, Wis. Filed Dec. 5, 1929.



For Outer Coats for Men, Women, and Children.
Claims use since Oct. 14, 1929.

Ser. No. 294,256. HOOKLESS FASTENER COMPANY, Meadville, Pa. Filed Dec. 31, 1929.

TALON

For Trunks for Gym Suits or Swimming Suits; Boots and Shoes of Leather, Rubber, and of a Combination of Rubber and Fabric; Children's Blouses and Drawer-Legging Suits, One-Piece Full-Length Suits, and One and Two Piece Wash Suits, Children's Sleepers, Women's and Children's Blouses, Lumberjacks, Men's Overall Suits and Overalls, Men's Dress and Work Shirts, Boys' Shirts for Outer Wear, Children's Snow Suits, Riding Breeches and Golf Jackets for Men and Women, Baby Robes in the Nature of a Sleeping Bag, Bag-Type Garments for Adults, Men's and Children's Knitted Underwear, Nurses' Uniforms, Leggings, and Leather Gloves.
Claims use since Sept. 28, 1929.

Ser. No. 294,542. PURITAN GARMENT CO. INC., New York, N. Y. Filed Jan. 8, 1930.



No claim is made to the word "Uniforms" apart from the mark shown on the drawing. The lining on the drawing is for shading purposes only.
For Ladies' House and Street Dresses All Made of Cotton Goods.
Claims use since about Jan. 1, 1928.

Ser. No. 294,794. BRÜDER BÖHM, Vienna, Austria. Filed Jan. 15, 1930.



For Hats and Hat Bodies Made of Hair, Wool, Felt, or Velour Felt and Caps, All Intended for the Use of Men, Women, and Children.
Claims use since Aug. 9, 1921.

Ser. No. 295,438. D. M. OBERMAN MFG. CO., Jefferson City, Mo., and New York, N. Y. Filed Jan. 31, 1930.

SEALD SEAM

The word "Seam" is disclaimed apart from the other features of the trade-mark as shown in the drawing.
For Men's and Boys' Coats, Trousers, Riding Breeches, and Lumberjacks.
Claims use since about Nov. 15, 1929.

Ser. No. 295,550. SEABIDGE INC., New York, N. Y. Filed Feb. 3, 1930.



The descriptive words "Fashion Hosiery" are disclaimed apart from the mark as shown on the drawing.
For Hosiery.
Claims use since February, 1922.

Ser. No. 296,274. HIRSCH SHIRT CORPORATION, Chicago, Ill. Filed Feb. 20, 1930.

Custom-Towne

The word "Custom" is disclaimed apart from the mark as shown in the drawing.
For Men's and Boys' Dress and Negligee Shirts.
Claims use since Nov. 1, 1928.

Ser. No. 296,465. JOSEPH SCHMEETS & SON, INC., New York, N. Y. Filed Feb. 24, 1930.



For Ladies', Misses', and Children's Coats, Suits, and Topcoats.
Claims use since Dec. 31, 1929.

Ser. No. 296,580. NORMAN M. YUCHTMAN, Brooklyn, N. Y. Filed Feb. 27, 1930.

WULWERIN BOW

The word "Bow" is hereby disclaimed apart from the mark as shown on the drawing.
For Neckties.
Claims use since Aug. 1, 1929.

Ser. No. 296,729. BUTLER BROTHERS, Chicago, Ill. Filed Mar. 3, 1930.

Elinore

For Corset Brassières, Girdles, and Brassières.
Claims use since Feb. 15, 1930.

Ser. No. 296,776. SEARS, ROEBUCK AND CO., Chicago, Ill. Filed Mar. 3, 1930.

TEETER TOTTER

For Children's Shoes Made of Leather, Rubber, and Fabric and Combinations of the Same.
Claims use since Jan. 20, 1930.

Ser. No. 296,777. SEARS, ROEBUCK AND CO., Chicago, Ill. Filed Mar. 3, 1930.

Footline FOOTWEAR

No claim is made to the word "Footwear" apart from the mark shown in the drawing.
For Ladies' Shoes Made of Leather, Rubber, and Fabric and Combinations of the Same.
Claims use since Jan. 11, 1930.

Ser. No. 296,871. JONES HAT COMPANY, St. Joseph, Mo. Filed Mar. 5, 1930.



No claim is made to the term "Waterproof" apart from the mark as shown.
For Hats and Caps for Men.
Claims use since June, 1910.

CARNEGIE LIBRARY OF ATLANTA

Ser. No. 296,990. TRAUGOTT BROTHERS, INC., doing business as The Fair, Indianapolis, Ind. Filed Mar. 7, 1930.



The words "Clothes" and "Indianapolis" are disclaimed apart from the mark shown on the drawing.

For Men's Clothing—Namely, Men's and Young Men's Suits, Men's and Young Men's Topcoats, and Men's and Young Men's Overcoats.

Claims use since Jan. 1, 1930.

Ser. No. 297,440. LANCASTER SHOE COMPANY, Elizabethtown, Pa. Filed Mar. 17, 1930.

Mountain Lodge

For Shoes and Particularly Leather Oxfords and Boots.
Claims use since Jan. 1, 1930.

Ser. No. 297,449. MONZA MILLS, INC., New York, N. Y. Filed Mar. 17, 1930.

OXFORD



The lining on the drawing denotes shading. The word "Oxford" is disclaimed apart from the mark shown.

For Women's Felt and Straw Hats.
Claims use since about Jan. 1, 1929.

Ser. No. 297,503. WESTCOTT HOSIERY MILLS, Dalton, Ga. Filed Mar. 18, 1930.

FABRIMODE

For Hosiery.
Claims use since Dec. 15, 1929.

Ser. No. 297,661. CHOCK-HOROWITZ COMPANY, New York, N. Y. Filed Mar. 21, 1930.



For Men's and Boys' Pajamas and Night Robes.
Claims use since January, 1930.

Ser. No. 297,725. BROWN DURRELL CO., Boston, Mass., and New York, N. Y. Filed Mar. 22, 1930.

GOR-TEX

For Men's, Women's, and Children's Hosiery and Underwear of Knitted, Netted, and/or Textile Fabrics.
Claims use since Mar. 11, 1930.

Ser. No. 297,790. APTA CORPORATION, New York, N. Y. Filed Mar. 24, 1930.

ON-OFF

For Overalls.
Claims use since Mar. 12, 1930.

Ser. No. 297,835. COHEN, GOLDMAN & CO. INC., New York, N. Y. Filed Mar. 25, 1930.

MID-TEX

For Men's, Boy's, and Children's Outer Garments Consisting of Coats, Vests, Pants, Overcoats, Raincoats, Dusters, Mackinaws, Ulsters, Smoking Jackets, Automobile Coats, Bath Wraps; Men's Dress, Negligee, and Work Shirts; Men's, Women's, and Children's Underwear Made of Knitted, Netted, and Textile Fabrics; and Uppers for Shoes.
Claims use since Mar. 1, 1930.

Ser. No. 297,985. SACKMAN BROTHERS COMPANY, New York, N. Y. Filed Mar. 27, 1930.

MASKOWEEN

For Children's Play Suits, Fancy Costumes, and Masquerade Suits and Men's and Women's Fancy Costumes and Masquerade Suits.
Claims use since Mar. 20, 1930.

Ser. No. 298,032. THE FRANK H. LEE COMPANY, Danbury, Conn. Filed Mar. 28, 1930.

Frank H. Lee Co.

The portion "Frank H. Lee" of the mark is the autographed signature of Frank H. Lee, president and treasurer of the applicant company.

For Men's Soft and Stiff Felt Hats, Straw Hats, Wool Hats, and Caps.
Claims use since January, 1930.

Ser. No. 298,091. DUPLAN SILK CORPORATION, New York, N. Y. Filed Mar. 29, 1930.

COLORAMA

For Ladies' Dresses.
Claims use since Mar. 5, 1930.

Ser. No. 298,099. HOLEPROOF HOSIERY CO., Milwaukee, Wis. Filed Mar. 29, 1930.

NOGART

For Hosiery.
Claims use since Mar. 20, 1930.

Ser. No. 298,222. THE B. V. D. COMPANY, INC., Baltimore, Md. Filed Apr. 1, 1930.



In the drawing the lining indicates the color red as it appears on the specimens filed with the application, although color is not claimed as part of the mark.

For Bathing Suits for Men, Women, and Children.
Claims use since Jan. 31, 1930.

CLASS 40

Fancy Goods, Furnishings, and Notions

Ser. No. 290,559. DOLLFUS-MIEG & CIE. SOCIETE ANONYME, Mulhouse, France. Filed Oct. 3, 1929.



For Braids, Articles of Passementerie; Embroidery of Cotton, Silk, Linen, Wool, Jute, Ramie, Spun Floret Silk, Artificial Silk, and Other Textile Materials in Gold, Silver, Fine or Simili or any Other Metals, Whatever Their Combination in These Various Products and Whatever Their Make-up and Structure; and Needle Work of All Kinds.
Claims use since about 1872.

Ser. No. 297,137. EDWARD M. KAPSTEIN, doing business as Pincho Hair Pin Co., Boston, Mass. Filed Mar. 11, 1930.

Bob-an-Long

For Hairpins not made of Precious Metal.
Claims use since Feb. 25, 1930.

CLASS 42

Knitted, Netted, and Textile Fabrics

Ser. No. 280,474. S. COHEN & Co., New York, N. Y. Filed Mar. 9, 1929.

Vianne

For Silk Piece Goods, Rayon, Silk and Rayon, and Cotton Piece Goods.
Claims use since October, 1928.

Ser. No. 287,587. NORTHERN JOBBING COMPANY, Chicago, Ill.; New York, N. Y.; and St. Paul, Minn. Filed July 24, 1929.

REPUTATION

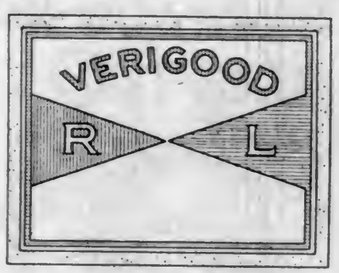
For Bed Coverlets of Textile Fabrics, Bed and Camp Blankets of a Textile Nature, Sheets of Cotton and Linen; Sheetings in Linen, Cotton; Pillowcases, Pillow Tubing; Bedspreads in Cotton, Rayon, Silk, and/or Combinations Thereof; Mattress Covers of Cotton, Draperies, Curtains, Lace, and Shade Cloth, Curtain Goods in the Piece; Table Coverings of Rayon, Linen, Cotton, Silk, and/or Combinations Thereof; Dress Fabrics of Silk, Linen, Cotton, Rayon, or Mixture of Same in the Piece; Shirtings in Cotton, Rayon, or Silk and/or Combinations Thereof; Piece Goods—Namely, Silks, Cotton, Rayon, Wool, Linen, Laces, Embroideries, Handkerchiefs.
Claims use since July 1, 1928.

Ser. No. 296,644. GOLDENBERG BROS. & CO., New York, N. Y. Filed Feb. 28, 1930.

MIRAMAR

For All-Silk Flat Chiffon Cloth in the Piece.
Claims use since Sept. 16, 1929.

Ser. No. 297,494. N. Y. COTTON STORES INC., doing business as Ruby Lane Stores, New York, N. Y. Filed Mar. 18, 1930.



The lining in the drawing representing the colors red, gold, and blue. No claim being made to the exclusive use of the word "Verigood" (nor to the outline of the label per se) apart from the mark shown on the drawing.
For Cotton Piece Goods and Household Linen—Namely, Sheets, Pillowcases, Bedspreads, and Tablecloths.
Claims use since Dec. 28, 1929.

Ser. No. 298,304. AMERICAN MANUFACTURING COMPANY, Brooklyn, N. Y. Filed Apr. 3, 1930.

IXL

For Bales and Rolls of Bagging for Covering Cotton.
Claims use since Jan. 24, 1930.

Ser. No. 298,383. FORSTMANN & HUFFMANN COMPANY, Passaic, N. J. Filed Apr. 4, 1930.

Delna

For Woolen Piece Goods.
Claims use since Mar. 1, 1930.

Ser. No. 298,385. FORSTMANN & HUFFMANN COMPANY, Passaic, N. J. Filed Apr. 4, 1930.

Sacha

For Woolen Piece Goods.
Claims use since Mar. 1, 1930.

CLASS 43

Thread and Yarn

Ser. No. 298,380. J. & P. COATS (R. I.) INC., Pawtucket, R. I. Filed Apr. 4, 1930.

TRIMSTITCH

For Thread.
Claims use since Sept. 13, 1929.

CLASS 44

Dental, Medical, and Surgical Appliances

Ser. No. 295,931. THE DENTAL MANUFACTURING COMPANY LIMITED, London, England. Filed Feb. 12, 1930.

AMELITE

For Dental Cement.
Claims use since June, 1929.

Ser. No. 296,271. FILLOR FAMOUS FACIAL CORPORATION, Long Island City, N. Y. Filed Feb. 20, 1930.



For Massage Apparatus, Hair Driers, Automatic Devices for Applying Substances to the Face and Skin, and Automatic Mechanically-Operated Beautifying Apparatus.
Claims use since Oct. 26, 1929.

CLASS 45

Beverages, Nonalcoholic

Ser. No. 296,718. SCHWEPPES (COLONIAL & FOREIGN) LIMITED, London, England. Filed Mar. 1, 1930.



No claim being made to the exclusive use of the words "Lemon Squash" apart from the mark shown on the drawing. The lining shown on the drawing is for the color red.
For Nonalcoholic, Maltless Beverage Sold as a Soft Drink—Namely, Lemon Squash.
Claims use since January, 1921.

Ser. No. 297,090. ANDERS LINDAHL, Stockholm, Sweden. Filed Mar. 10, 1930.



For Lemonade, Nonalcoholic, Maltless Soft Drinks, and Essences and Extracts for Preparing Such Drinks.
Claims use since Apr. 14, 1920.

Ser. No. 297,726. CALIFORNIA CRUSHED FRUIT CORPORATION, Los Angeles, Calif. Filed Mar. 22, 1930.

OASIS

For Nonalcoholic, Maltless Beverages Sold as Soft Drinks, and Concentrates, Compounds, and Syrups for Making the Same.
Claims use since Feb. 28, 1930.

Ser. No. 298,051. ALEXANDER P. SEPUT, doing business as Red Arrow Bottling Works, Detroit, Mich. Filed Mar. 28, 1930.



The words "Dry" and "Pale Ginger Ale" are disclaimed apart from the mark shown in the drawing.
For Ginger Ale.
Claims use since Jan. 15, 1927.

Ser. No. 298,790. THE CHURCH MFG. CO., sometimes doing business as Church Grape Juice Company, Kennewick, Wash. Filed Apr. 14, 1930.

FIESTA

For Grape Juice, Nonalcoholic, Noncereal, Maltless, Carbonated Beverages, Sold as Soft Drinks and Syrups for Making the Same, and Ginger Ale.
Claims use since Feb. 22, 1930, on grape juice and since Mar. 13, 1930, on nonalcoholic, noncereal, maltless, carbonated beverages, sold as soft drinks, and syrups for making the same, and ginger ale.

CLASS 46

Foods and Ingredients of Foods

Ser. No. 255,366. THE ZIG-ZAG SANDWICH SHOP, Tulsa, Okla. Filed Sept. 28, 1927.



For Sandwiches, Pies, and Cake.
Claims use since Apr. 1, 1927.

Ser. No. 281,725. EFRON AND NOVIK, Passaic, N. J. Filed Apr. 2, 1929.

Superfine

No claim is made herein to the word "Superfine" apart from the mark as shown. No claim is made to the color of the mark.

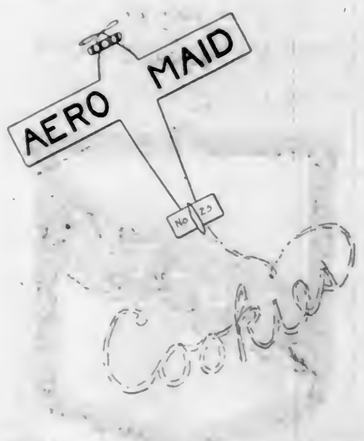
For Hot Peppers, Sweet Peppers, Dill Pickles, Sweet Mixed Pickles, Vinegar Pickles, Sour Mixed Pickles, Tomatoes, Sauerkraut, Chowchow, Olives, and Mustard and Piccalilli, All of Said Goods Being Packed Either in Glass Jars or in Wooden Pails After Having Been Cured.
Claims use since Jan. 1, 1916.

Ser. No. 288,061. CAMBERN CORPORATION, Spokane, Wash. Filed Aug. 3, 1929.



For Butter and Ice Cream.
Claims use since Feb. 1, 1929.

Ser. No. 290,811. CARL L. BEST, Cleveland, Ohio. Filed Oct. 9, 1929.



No claim is made to the word "Cookies" apart from the mark shown.
For Baked Goods, Especially Cookies.
Claims use since Sept. 23, 1929.

Ser. No. 291,383. DELPHIAN FOOD PRODUCTS, INC., Long Island City, N. Y. Filed Oct. 22, 1929.



For Powder Preparations for Use in Making Desserts, Puddings, Fillings.
Claims use since Apr. 18, 1928.

Ser. No. 291,417. SUCHAR PROCESS CORPORATION, New York, N. Y. Filed Oct. 22, 1929.

PURE CANE
SUCHAR
REFINED SUGAR
FINE GRANULATED

The words "Pure Cane Refined Sugar" and "Fine Granulated" are disclaimed apart from the trade-mark as shown in the drawing.
For Refined or Granulated Sugars.
Claims use since on or about Oct. 28, 1928.

Ser. No. 291,750. CHESTER IVAN WRIGHT, Seattle, Wash. Filed Oct. 29, 1929.

GOOD OLD SOUTHERN
Ivan's
REAL MADE
MILD MEDIUM HOT

The words "Good, Old, Real Made, Mild, Medium," and "Hot" shown in the drawings are hereby disclaimed apart from the other features of the mark.
For Prepared Chili, Tamales, Spanish Hamburger.
Claims use since June 15, 1924.

Ser. No. 293,909. THE SAMUEL FEAST AND SONS COMPANY, INC., Center, Colo. Filed Dec. 19, 1929.

FEAST
Forever
MORE

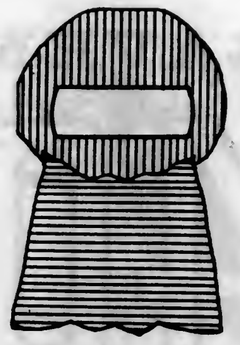
For Fresh Potatoes.
Claims use since Nov. 1, 1928.

Ser. No. 294,657. THE AMERICAN MALT COMPANY, Baltimore, Md. Filed Jan. 11, 1930.

AMERICAN
Our Special

Applicant disclaims the words "American" and "Our Special" except in the precise relation and association in which the same appear herein.
For Malt Syrup.
Claims use since Oct. 15, 1929.

Ser. No. 294,701. WILLIAMSON CANDY COMPANY, Chicago, Ill. Filed Jan. 11, 1930.



The drawing is lined for red and blue.
For Candy.
Claims use since August, 1928.

Ser. No. 294,806. GREAT FALLS MEAT COMPANY, Great Falls, Mont. Filed Jan. 15, 1930.

RAINBOW

For Smoked and Boiled Ham, Bacon, Sausage, and Loin Back and Boned Rolled Shoulder.
Claims use since 1914.

Ser. No. 295,228. S. J. MCCULLAGH, INC., Buffalo, N. Y. Filed Jan. 25, 1930.

TRAYMORE

For Coffee.
Claims use since Jan. 1, 1930.

Ser. No. 295,518. WILLIAM W. JAKUBIAK, Brooklyn, N. Y. Filed Feb. 3, 1930.

AUTODINE

For Cooked Cake, Sandwiches, Pies, Puddings, Pastry, Ice Cream, Bread, Butter, Fruit and Vegetable Salads, Cooked Beef, Mutton, Pork, and Chicken; Cooked Vegetables, Macaroni, and Baked Beans.
Claims use since Jan. 7, 1930.

Ser. No. 296,826. RAVEN MANUFACTURING COMPANY, Council Bluffs, Iowa. Filed Mar. 4, 1930.

RAVEN 40

For Hog Feed.
Claims use since July 17, 1928.

Ser. No. 296,984. RANA PRODUCTS CO. INC., New York, N. Y. Filed Mar. 7, 1930.

RA-NA

For Coffees.
Claims use since Nov. 15, 1929.

Ser. No. 297,019. LANCE PACKING COMPANY, Charlotte, N. C. Filed Mar. 8, 1930.

LANCE'S P-CHEE

The vertical lining appearing in the drawing is used to indicate the color red.
For Sandwiches.
Claims use since about Sept. 5, 1929.

Ser. No. 297,374. JOHN LOVRANICH, San Diego, Calif. Filed Mar. 15, 1930.

IR-O-PHYLL

For Health Food Consisting of Liquid Extract of Vegetables.
Claims use since Feb. 1, 1929.

Ser. No. 297,478. THE GOYER COMPANY, Greenville, Miss. Filed Mar. 18, 1930.

PURE GOLD

For Spaghetti, Macaroni, and Evaporated Milk.
Claims use since 1929.

Ser. No. 298,107. LANCE PACKING COMPANY, Charlotte, N. C. Filed Mar. 29, 1930.

LANCE'S CLUB

The lining shown in the drawing is used to designate the color red.
For Peanut-Butter Sandwiches.
Claims use since about June 1, 1922.

Ser. No. 298,172. FRANK GILCHRIST, doing business as Lucky Number Confections, Philadelphia, Pa. Filed Mar. 31, 1930.

LUCKY NUMBER

For Candy.
Claims use since Mar. 26, 1930.

Ser. No. 298,173. PEDRO A. GOMEZ, Los Angeles, Calif. Filed Mar. 31, 1930.

CARTA BLANCA

For Malt Syrup.
Claims use since about Feb. 15, 1929.

Ser. No. 298,177. THE JOHN C. GROUB COMPANY, Seymour and Mitchell, Ind. Filed Mar. 31, 1930.

RULER

For Wheat Flour.
Claims use since Oct. 1, 1905.

Ser. No. 298,186. KING FULLER CRANDELL CO., Chicago, Ill. Filed Mar. 31, 1930.

TRY-SUM

For Prepared Mustard, Olives, Peanut Butter, and Pickles.
Claims use since May, 1925.

Ser. No. 298,227. CASTLES ICE CREAM COMPANY, Irvington, N. J. Filed Apr. 1, 1930.

CASTLES



For Ice Cream.
Claims use since 1905.

Ser. No. 298,298. C. W. AEPPLER, doing business as Wisconsin Honey Farm, Oconomowoc, Wis. Filed Apr. 3, 1930.

LAND O'LAKES

For Honey.
Claims use since Apr. 10, 1927.

Ser. No. 298,343. WILLIAM LICHTENSTEIN, doing business as Ideal Trading Co., New York, N. Y. Filed Apr. 3, 1930.

I-D-L

The drawing is lined to indicate the colors yellow and blue.
For Dried Foods—Namely, Lentils, Pea Beans, and Split Peas.
Claims use since Mar. 31, 1930.

Ser. No. 298,472. SAIMA SYVERSON, Hibbing, Minn. Filed Apr. 5, 1930.

Saima's
HEALTH
BREAD

Exclusive use of "Health Bread" is claimed only in association with the mark shown.
For Bread.
Claims use since Mar. 3, 1930.

Ser. No. 298,508. O. A. NELSON, doing business as The Winners Packing Co. Ltd., San Francisco, Calif. Filed Apr. 7, 1930.

Winners



For Canned Dog and Cat Food.
Claims use since Nov. 1, 1929.

CLASS 47

Wines

Ser. No. 298,451. Mme MARCEAU, SOCIÉTÉ À RESPONSABILITÉ LIMITÉE, Bordeaux, France. Filed Apr. 5, 1930.



For Wines, Red or White, Sparkling or Not.
Claims use since June 20, 1907.

Ser. No. 298,452. Mme MARCEAU, SOCIÉTÉ À RESPONSABILITÉ LIMITÉE, Bordeaux, France. Filed Apr. 5, 1930.



For Wines.
Claims use since June 9, 1904.

CLASS 50

Merchandise Not Otherwise Classified

Ser. No. 291,331. THE GARR MFG. CORP., Newark, N. J. Filed Oct. 21, 1929.

Tak-Tu

For Drinking Straws.
Claims use since Mar. 1, 1929.

Ser. No. 297,620. SEARS, ROEBUCK AND CO., Chicago, Ill. Filed Mar. 20, 1930.

PREMIER

For Charcoal Incubators.
Claims use since Jan. 31, 1930.

TRADE-MARK REGISTRATIONS GRANTED

[ACT OF FEBRUARY 20, 1905]

MAY 20, 1930

270,909. TOILET PAPER, PAPER TOWELS, AND PAPER NAPKINS. SCOTT PAPER COMPAN, Chester, Pa.
Filed June 12, 1929. Serial No. 285,477. PUBLISHED MARCH 11, 1930. Class 37.

270,910. COIN-CONTROLLED OR SLUG-CONTROLLED MERCHANDISE-DISPENSING DEVICES AND PARTS OF SUCH DEVICES. FERGUS & PALMER, Cleveland, Ohio.
Filed October 2, 1929. Serial No. 290,506. PUBLISHED MARCH 11, 1930. Class 23.

270,911. PERIODICAL. MCKESSON & ROBBINS, INCORPORATED, Bridgeport, Conn.
Filed September 23, 1929. Serial No. 290,138. PUBLISHED MARCH 11, 1930. Class 38.

270,912. FASTENERS AND BINDERS FOR BINDING AND HOLDING LOOSE PAPERS TOGETHER. DANIEL A. BRENNAN, Chicago, Ill.
Filed September 23, 1929. Serial No. 290,114. PUBLISHED MARCH 11, 1930. Class 37.

270,913. SCRAPERS FOR GLASS, WOOD, METAL, ETC. THE MACLEOD MANUFACTURING CO., INC., Chicago, Ill., assignor to A. F. Dormeyer Mfg. Co., Chicago, Ill., a Corporation of Illinois.
Filed September 7, 1929. Serial No. 289,468. PUBLISHED MARCH 11, 1930. Class 23.

270,914. FOOD CONCENTRATES FOR FOWLS AND ANIMALS—TO WIT, THIRTY-TWO PER CENT DAIRY CONCENTRATE, FORTY PER CENT DAIRY CONCENTRATE, BUTTERMILK-MOLASSES EGG MASH, BUTTERMILK EGG MASH, EGG MASH. STUHR-SEIDL COMPANY, Minneapolis, Minn.
Filed October 30, 1929. Serial No. 291,805. PUBLISHED MARCH 11, 1930. Class 46.

270,915. CANDY. STEPHEN F. WHITMAN & SON, INC., Philadelphia, Pa.
Filed October 29, 1929. Serial No. 291,749. PUBLISHED MARCH 11, 1930. Class 46.

270,916. TRUNKS, TRAVELING BAGS, POCKETBOOKS, OVERNIGHT BAGS, HATBOXES OF LEATHER OR SIMILAR MATERIAL AND USED FOR TRAVELING PURPOSES, VALISES, GLADSTONE BAGS, BRIEF CASES, CATALOG CASES, HAND WARDROBES, PULLMAN CASES, AND SAMPLE-DISPLAY CASES. TRIANGLE TRAVELING BAG WORKS, INC., Cincinnati, Ohio.
Filed September 21, 1929. Serial No. 290,096. PUBLISHED MARCH 11, 1930. Class 3.

270,917. STOCK FEED. JOSEY-MILLER COMPANY, Beaumont, Tex.
Filed August 30, 1929. Serial No. 289,191. PUBLISHED MARCH 11, 1930. Class 46.

270,918. DIETETIC MILK AND MILK PRODUCTS MADE WITH LACTIC-ACID BACTERIA. ALFRED ZIERER, Vienna, Austria.
Filed June 18, 1929. Serial No. 285,763. PUBLISHED MARCH 11, 1930. Class 46.

270,919. PRINTED BOOKS AND CHARTS. M. D. BERLITZ, PUBLISHER, New York, N. Y.
Filed November 23, 1929. Serial No. 292,791. PUBLISHED MARCH 11, 1930. Class 38.

270,920. CUT FLOWERS AND SHRUBS. CASPER C. TREPEL, Farmingdale, N. Y.
Filed November 22, 1929. Serial No. 292,763. PUBLISHED MARCH 11, 1930. Class 1.

270,921. LOOSE-LEAF BINDERS. AMERICAN LOOSE LEAF CORPORATION, New York, N. Y.
Filed November 20, 1929. Serial No. 292,607. PUBLISHED MARCH 11, 1930. Class 37.

270,922. WOODWORKING MACHINERY. ONSRUD MACHINE WORKS, INC., Chicago, Ill.
Filed November 18, 1929. Serial No. 292,548. PUBLISHED MARCH 11, 1930. Class 23.

270,923. ENVELOPES. OLD COLONY ENVELOPE COMPANY, Westfield, Mass.
Filed November 18, 1929. Serial No. 292,546. PUBLISHED MARCH 11, 1930. Class 37.

270,924. GASKETS. VICTOR MANUFACTURING & GASKET COMPANY, Chicago, Ill.
Filed November 9, 1929. Serial No. 292,238. PUBLISHED MARCH 11, 1930. Class 35.

270,925. WATERPROOFED PAPER FOR WRAPPING FOODSTUFFS AND FOR USE IN MAKING CARTONS, SHIPPING CONTAINERS, CEMENT SACKS, PAPER BAGS, DRINKING CUPS, ETC. KELLOGG BOX BOARD COMPANY, Chicago, Ill.
Filed November 7, 1929. Serial No. 292,111. PUBLISHED MARCH 11, 1930. Class 37.

270,926. HAIR, WOOL, OR VELOUR FELTS AND FELTS OF OTHER MATERIAL. BRÜDER BÖHM, Vienna, Austria.
Filed October 30, 1929. Serial No. 291,756. PUBLISHED MARCH 11, 1930. Class 50.

270,927. TOOLS AND MACHINERY. THE BILLINGS & SPENCER COMPANY, Hartford, Conn.
Filed October 4, 1929. Serial No. 290,647. PUBLISHED MARCH 11, 1930. Class 23.

270,928. DISPLAY STAND FOR STORE-COUNTER MERCHANDISE. KIEFER STEWART COMPANY, Indianapolis, Ind.
Filed August 17, 1929. Serial No. 288,655. PUBLISHED MARCH 11, 1930. Class 32.

270,929. MATTRESSES. BELKNAP HARDWARE & MANUFACTURING COMPANY, Louisville, Ky.
Filed August 17, 1929. Serial No. 288,635. PUBLISHED MARCH 11, 1930. Class 32.

270,930. FRUIT-JUICE EXTRACTORS OF THE HAND-OPERATED TYPE. TWIN COUPLER COMPANY, INC., Poughkeepsie, N. Y.
Filed July 24, 1929. Serial No. 287,600. PUBLISHED MARCH 11, 1930. Class 23.

270,931. MONTHLY PUBLICATION. NATIONAL TRADE JOURNALS, INC., New York, N. Y.
Filed July 19, 1929. Serial No. 287,358. PUBLISHED MARCH 11, 1930. Class 38.

270,932. WRITING AND PRINTING PAPER AND MAILING ENVELOPES. STRATHMORE PAPER COMPANY, Mittineague, Mass.
Filed July 12, 1929. Serial No. 287,024. PUBLISHED MARCH 4, 1930. Class 37.

270,933. PRINTED PUBLICATION. AMERICAN BUREAU OF CHIROPRACTIC, New York, N. Y.
Filed July 11, 1929. Serial No. 286,968. PUBLISHED MARCH 11, 1930. Class 38.

270,934. SOFT DRINKS. MAX KRIM, doing business as Krim Beverage Company, Lebanon, Pa.
Filed December 6, 1929. Serial No. 293,330. PUBLISHED MARCH 11, 1930. Class 45.

270,935. CANNED FRUITS—NAMELY, PEACHES, PEARS, CHERRIES, FRUITS FOR SALAD, APRICOTS, AND PINEAPPLE; CANNED SWEET POTATOES. AUNT NELLIE'S FARM KITCHEN, INC., Hartford, Wis.
Filed December 4, 1929. Serial No. 293,204. PUBLISHED MARCH 4, 1930. Class 46.

270,936. TYPEWRITING MACHINES AND PARTS THEREOF. ROYAL TYPEWRITER COMPANY, INC., New York, N. Y.
Filed January 28, 1930. Serial No. 295,305. PUBLISHED MARCH 11, 1930. Class 23.

270,937. FOUNTAIN PENS AND PARTS THEREOF. FRANCIS BYRNE IVY, New York, N. Y.
Filed January 25, 1930. Serial No. 295,225. PUBLISHED MARCH 11, 1930. Class 37.

270,938. LEAD PENCILS, COLORED PENCILS, COPYING PENCILS, INK PENCILS, AND PENHOLDERS. SWAN PENCIL CO. INC., New York, N. Y.
Filed January 29, 1930. Serial No. 295,350. PUBLISHED MARCH 11, 1930. Class 37.

270,939. ADHESIVES—NAMELY, CEMENTS, PASTES, AND GUMS. DEWEY & ALMY CHEMICAL COMPANY, North Cambridge, Mass.
Filed December 26, 1929. Serial No. 294,065. PUBLISHED MARCH 11, 1930. Class 5.

270,940. HOMEMADE CANDIES. LA TESTE HOME MADE CANDIES, Chicago, Ill.
Filed December 16, 1929. Serial No. 293,736. PUBLISHED MARCH 11, 1930. Class 46.

270,941. METALS OF THE PLATINUM GROUP. BAKER & COMPANY, INC., Newark, N. J.
Filed January 3, 1930. Serial No. 294,335. PUBLISHED MARCH 11, 1930. Class 14.

270,942. LADIES' AND CHILDREN'S COATS AND DRESSES, SUITS, WAISTS, AND SKIRTS. STATMAN & ROSEN GARMENT COMPANY, St. Louis, Mo.
Filed December 23, 1929. Serial No. 294,029. PUBLISHED FEBRUARY 25, 1930. Class 39.

270,943. MEN'S AND BOYS' SUITS, TOPCOATS, AND OVERCOATS AND COATS, VESTS, AND TROUSERS SEPARATELY. JACOB BRAUNSTEIN, doing business as Woventex Co., Philadelphia, Pa.
Filed December 18, 1929. Serial No. 293,820. PUBLISHED FEBRUARY 25, 1930. Class 39.

270,944. CLEANSING COMPOUND WITH INCIDENTAL WATER-SOFTENING PROPERTIES. HARTSDALE RESEARCH LABORATORIES, INC., Hartsdale, N. Y.
Filed December 16, 1929. Serial No. 293,731. PUBLISHED MARCH 11, 1930. Class 4.

270,945. DENTAL INVESTMENT COMPOUND. FRANZ B. BURGER, doing business as Western Dental Products Company, Los Angeles, Calif.
Filed December 10, 1929. Serial No. 293,464. PUBLISHED MARCH 4, 1930. Class 44.

270,946. HOSIERY. EXCELSIOR MILLS, Union, S. C.
Filed December 9, 1929. Serial No. 293,417. PUBLISHED FEBRUARY 25, 1930. Class 39.

270,947. COTTON KNIT, WOOLEN KNIT, RAYON, GLOVE SILK, AND NAINSOOK UNDERWEAR FOR MEN, WOMEN' AND CHILDREN. RICHARD S. LILIENTHAL, New York, N. Y.
Filed December 7, 1929. Serial No. 293,376. PUBLISHED MARCH 4, 1930. Class 39.

270,948. MEN'S SUITS. L. KLEIN, INC., Chicago, Ill.
Filed December 4, 1929. Serial No. 293,223. PUBLISHED MARCH 4, 1930. Class 39.

270,949. OVERALLS, OVERALL UNION SUITS, WORK SHIRTS, PANTS. BELLMORE MANUFACTURING COMPANY, Gainesville, Ga.
Filed December 4, 1929. Serial No. 293,207. PUBLISHED MARCH 4, 1930. Class 39.

270,950. MEN'S, WOMEN'S, AND CHILDREN'S OUTER CLOTHING—NAMELY, SUITS, OVERCOATS, TOPCOATS, TROUSERS, KNICKERS, RIDING HABITS, HATS, AVIATION HELMETS. LOUIS ROTH & CO. INC., Los Angeles, Calif.
Filed December 3, 1929. Serial No. 293,193. PUBLISHED FEBRUARY 25, 1930. Class 39.

270,951. SILVER AND METAL POLISHES, SOAPS, AND TOILET-BOWL CLEANERS. THE CLEAN-ITE COMPANY, Charlton, Iowa.
Filed January 15, 1930. Serial No. 294,797. PUBLISHED FEBRUARY 25, 1930. Class 4.

270,952. HOSIERY. HOLEPROOF HOSIERY CO., Milwaukee, Wis.
Filed January 11, 1930. Serial No. 294,671. PUBLISHED MARCH 4, 1930. Class 39.

270,953. PERMANENT-HAIR-WAVING PADS. JACOB TANENBAUM, Brooklyn, N. Y.
Filed January 6, 1930. Serial No. 294,447. PUBLISHED MARCH 4, 1930. Class 44.

270,954. CRAVATS. SALVATOR BONAN, New York, N. Y.
Filed December 7, 1929. Serial No. 293,762. PUBLISHED MARCH 4, 1930. Class 39.

270,955. HOSIERY. VILLA RICA MILLS, INC., Villa Rica, Ga.
Filed December 19, 1929. Serial No. 293,905. PUBLISHED FEBRUARY 25, 1930. Class 39.

270,956. WOMEN'S AND MISSES' DRESSES. CELANESE CORPORATION OF AMERICA, New York, N. Y.
Filed December 20, 1929. Serial No. 293,918. PUBLISHED FEBRUARY 25, 1930. Class 39.

270,957. PAJAMAS. BONNIE-LOU INC., Cleveland, Ohio.
Filed December 26, 1929. Serial No. 294,053. PUBLISHED FEBRUARY 25, 1930. Class 39.

270,958. LADIES' AND CHILDREN'S DRESSES. SABINE GARMENT COMPANY, Beaumont, Tex.
Filed December 28, 1929. Serial No. 294,183. PUBLISHED MARCH 4, 1930. Class 39.

270,959. LADIES' AND CHILDREN'S DRESSES. SABINE GARMENT COMPANY, Beaumont, Tex.
Filed December 28, 1929. Serial No. 294,182. PUBLISHED MARCH 4, 1930. Class 39.

270,960. READY-MIXED PAINTS. PYRO PROOF PRODUCTS COMPANY, Everett, Wash.
Filed January 2, 1930. Serial No. 294,318. PUBLISHED MARCH 4, 1930. Class 16.

270,961. TOOTHBRUSHES. CALSODENT COMPANY, INC., New York, N. Y.
Filed June 1, 1929. Serial No. 284,899. PUBLISHED MARCH 11, 1930. Class 29.

270,962. CIGARS. FEDERAL CIGAR COMPANY, INC., Red Lion, Pa.
Filed May 31, 1929. Serial No. 284,845. PUBLISHED JULY 16, 1929. Class 17.

270,963. ALIMENTARY PASTES. KANSAS CITY MACARONI & IMPORTING CO., Kansas City, Mo.
Filed May 4, 1929. Serial No. 283,503. PUBLISHED AUGUST 6, 1929. Class 46.

270,964. ALIMENTARY PASTES—NAMELY, SPAGHETTI, NOODLES, VERMICELLI, AND MACARONI PRODUCTS. SALVATORE VIVIANO, doing business as Viviano Macaroni Manufacturing Company, Carnegie, Pa.
Filed April 30, 1929. Serial No. 283,315. PUBLISHED MARCH 4, 1930. Class 46.

270,965. OLIVE OIL. BENJAMIN DORMAN, Brooklyn, N. Y.
Filed April 29, 1929. Serial No. 283,181. PUBLISHED MARCH 11, 1930. Class 46.

270,966. DETERGENT CLEANING COMPOUNDS IN FLAKE, PULVERIZED, AND LIQUID FORM. TURCO PRODUCTS INC., Los Angeles, Calif.
Filed April 23, 1929. Serial No. 282,886. PUBLISHED MARCH 4, 1930. Class 4.

270,967. HEALING AND SOOTHING BALM. TORB, INC., Allentown, Pa.
Filed April 20, 1929. Serial No. 282,717. PUBLISHED OCTOBER 15, 1929. Class 6.

270,968. POTATO CHIPS. CHARLES J. SHASTEEN, Toledo, Ohio.
Filed April 17, 1929. Serial No. 282,572. PUBLISHED MAY 28, 1929. Class 46.

270,969. CANNED COFFEE. THE W. K. HENDERSON IRON WORKS AND SUPPLY CO., LTD., Shreveport, La.
Filed March 25, 1929. Serial No. 281,290. PUBLISHED MARCH 11, 1930. Class 46.

270,970. LIGATURES. JOHNSON & JOHNSON, New Brunswick, N. J.
Filed February 15, 1929. Serial No. 279,404. PUBLISHED FEBRUARY 25, 1930. Class 44.

270,971. VINEGAR. THE FLEISCHMANN COMPANY, Cincinnati, Ohio, and New York, N. Y., assignor to Standard Brands Incorporated, Dover, Del., a Corporation of Delaware.
Filed January 24, 1929. Serial No. 278,391. PUBLISHED MARCH 4, 1930. Class 46.

270,972. MALT EXTRACTS FOR FLAVORING FOODS. IGNASIO LENTINI, doing business as North Star Malt Co., Woburn, Mass.
Filed January 22, 1929. Serial No. 278,299. PUBLISHED MARCH 11, 1930. Class 46.

270,973. DISTILLED ALCOHOLIC SPIRITS IN THE NATURE OF BEVERAGES, INCLUDING WHISKEY, GIN, BRANDY, AND RUM. GEO. G. SANDEMAN, SONS & CO., LTD., London, England.
Filed January 18, 1929. Serial No. 278,141. PUBLISHED MARCH 11, 1930. Class 49.

270,974. CANDY. PRISCILLA SEARS CONFECTIONERY COMPANY, Boston, Mass.
Filed January 14, 1929. Serial No. 277,964. PUBLISHED MARCH 11, 1930. Class 46.

270,975. SANDWICHES, CANDY, BUNS, COOKIES, AND CAKES. HARRISON'S ORANGE HUTS, INC., Chicago, Ill.
Filed January 5, 1929. Serial No. 277,628. PUBLISHED MARCH 11, 1930. Class 46.

270,976. SANDWICHES, CANDY, BUNS, COOKIES, AND CAKES. HARRISON'S ORANGE HUTS, INC., Chicago, Ill.
Filed January 5, 1929. Serial No. 277,627. PUBLISHED MARCH 11, 1930. Class 46.

270,977. SANDWICHES, CANDY, BUNS, COOKIES, AND CAKES. HARRISON'S ORANGE HUTS, INC., Chicago, Ill.
Filed January 5, 1929. Serial No. 277,626. PUBLISHED MARCH 11, 1930. Class 46.

270,978. ADHESIVE COMPOUNDS—VIZ, CEMENT FOR RUBBER GOODS AND LIQUID TO PREPARE RUBBER GOODS TO RECEIVE THE CEMENT. THE ORRSELL COMPANY, New York, N. Y., Philadelphia, Pa., and Vancouver, Wash.
Filed December 14, 1929. Serial No. 293,684. PUBLISHED MARCH 11, 1930. Class 5.

270,979. SMOKED AND COOKED HAMS. ARNOLD BROS., Chicago, Ill.
Filed December 12, 1929. Serial No. 293,567. PUBLISHED MARCH 11, 1930. Class 46.

270,980. FRESH CITRUS AND DECIDUOUS FRUITS AND FRESH VEGETABLES. YAQUI FRUIT CO., Los Angeles, Calif.
Filed December 26, 1929. Serial No. 294,102. PUBLISHED MARCH 11, 1930. Class 46.

270,981. CANNED SALMON. ALITAK FISH COMPANY, Bellingham, Wash., and Kodia Island, Territory of Alaska.
Filed January 9, 1930. Serial No. 294,557. PUBLISHED MARCH 11, 1930. Class 46.

270,982. CANNED SALMON. ALITAK FISH COMPANY, Bellingham, Wash., and Kodia Island, Territory of Alaska.
Filed January 9, 1930. Serial No. 294,555. PUBLISHED MARCH 11, 1930. Class 46.

270,983. HATBOXES IN THE NATURE OF LUGGAGE, HAT TRUNKS, AND TRAVELING CASES FOR CANES. JOHN CAVANAGH, LTD., New York, N. Y.
Filed January 3, 1930. Serial No. 294,340. PUBLISHED MARCH 11, 1930. Class 3.

270,984. NUT CANDIES. HERMAN J. HIRSCH, doing business as Hollow Tree Pantry, Milwaukee, Wis.
Filed December 30, 1929. Serial No. 294,223. PUBLISHED MARCH 11, 1930. Class 46.

270,985. DRESSED POULTRY. WITT'S MARKET HOUSE, Minneapolis, Minn.
Filed January 27, 1930. Serial No. 295,287. PUBLISHED MARCH 11, 1930. Class 46.

270,986. PREPARED COMPOSITION FOR THE MAKING OF DOUGHNUTS. PILLSBURY FLOUR MILLS COMPANY, Minneapolis, Minn.
Filed January 27, 1930. Serial No. 295,273. PUBLISHED MARCH 11, 1930. Class 46.

270,987. COFFEE. AMERICAN COFFEE CORPORATION, New York, N. Y.
Filed January 25, 1930. Serial No. 295,202. PUBLISHED MARCH 11, 1930. Class 46.

270,988. CANDY. M. J. HOLLOWAY & COMPANY, Chicago, Ill.
Filed January 13, 1930. Serial No. 294,724. PUBLISHED MARCH 11, 1930. Class 46.

270,989. CHICKS. REX W. MANEVAL, doing business as The Maneval Chickeries, Frankfort, Kans.
Filed January 9, 1930. Serial No. 294,585. PUBLISHED MARCH 11, 1930. Class 46.

270,990. DIE-WIPING PAPER. HOWARD PAPER COMPANY, INC., Boston, Mass.
Filed January 21, 1930. Serial No. 295,029. PUBLISHED MARCH 11, 1930. Class 37.

270,991. TABLE SYRUP AND MOLASSES. STEUART, SON & COMPANY, INCORPORATED, Baltimore, Md.
Filed December 12, 1929. Serial No. 293,606. PUBLISHED MARCH 4, 1930. Class 46.

270,992. KNITTED AND TEXTILE FABRIC UNDERWEAR AND SWEATERS FOR MEN AND BOYS. OTTENHEIMER CO., Salt Lake City, Utah.
Filed November 25, 1927. Serial No. 258,037. PUBLISHED MARCH 12, 1929. Class 39.

270,993. MALT EXTRACTS. FOREST HILLS COMPANY, doing business as Old Colony Brewing Co., Boston, Mass.
Filed November 21, 1927. Serial No. 257,865. PUBLISHED JANUARY 22, 1929. Class 46.

270,994. PADS FOR USE IN PERMANENT-HAIR-WAVING MACHINES. LEON INGRASSIA, doing business as I. Leon Company, New York, N. Y.
Filed January 10, 1927. Serial No. 242,593. PUBLISHED MARCH 4, 1930. Class 44.

270,995. CHILDREN'S AND INFANTS' WOVEN-CLOTH UNDERWAISTS AND DRAWERS. MANNION MULLER CO., Union City, N. J.
Filed January 7, 1927. Serial No. 242,484. PUBLISHED APRIL 16, 1929. Class 39.

270,996. MEN'S SUITS AND OVERCOATS. THE SIMON LEVIN & SONS CO., Baltimore, Md.
Filed June 12, 1926. Serial No. 233,129. PUBLISHED AUGUST 17, 1926. Class 39.

270,997. CIGARS. FEDERAL CIGAR COMPANY, INC., Red Lion, Pa.
Filed June 20, 1928. Serial No. 268,363. PUBLISHED JUNE 4, 1929. Class 17.

270,998. CIGARS. FEDERAL CIGAR COMPANY, INC., Red Lion, Pa.
Filed June 20, 1928. Serial No. 268,362. PUBLISHED JUNE 4, 1929. Class 17.

270,999. CANNED FRUITS AND VEGETABLES, CANNED FISH, ETC. NATIONAL GROCER COMPANY, Detroit, Mich.
Filed April 27, 1928. Serial No. 265,491. PUBLISHED MARCH 4, 1930. Class 46.

271,000. PNEUMATIC AND SOLID TIRES CONSTRUCTED WHOLLY OR PARTLY OF RUBBER AND USED FOR MOTOR TRUCKS, MOTOR CARS, MOTOR CYCLES, BICYCLES, AEROPLANES, AND OTHER VEHICLES. THE GOODYEAR TIRE & RUBBER COMPANY, Akron, Ohio.
Filed December 7, 1928. Serial No. 276,417. PUBLISHED MARCH 11, 1930. Class 35.

271,001. COVERS FOR THE SPARE TIRES OF AUTOMOBILES. MCKIMMIE MOTOR CO. INC., Richmond, Va.
Filed November 19, 1928. Serial No. 275,534. PUBLISHED MARCH 11, 1930. Class 35.

271,002. CHILDREN'S AND LADIES' WASH DRESSES, NOVELTY APRONS, AND HOUSE DRESSES. BAXLEY DRESS MANUFACTURING COMPANY, Seattle, Wash.
Filed October 3, 1928. Serial No. 273,281. PUBLISHED FEBRUARY 19, 1929. Class 39.

271,003. CANNED FRUITS, CANNED VEGETABLES, CANNED FISH. M. FEIBUSCH, San Francisco, Calif.
Filed July 25, 1928. Serial No. 270,122. PUBLISHED MARCH 11, 1930. Class 46.

271,004. CIGARS. FEDERAL CIGAR COMPANY, INC., Red Lion, Pa.
Filed July 19, 1928. Serial No. 269,836. PUBLISHED JULY 23, 1929. Class 17.

271,005. OLEOMARGARINE. NATIONAL FOODS INC., New Orleans, La.
Filed July 12, 1928. Serial No. 269,479. PUBLISHED MARCH 11, 1930. Class 46.

271,006. CANDY. STEPHEN F. WHITMAN & SON, INC., Philadelphia, Pa.
Filed July 5, 1928. Serial No. 269,166. PUBLISHED AUGUST 21, 1928. Class 46.

271,007. CANNED FRUIT. SPRAGUE, WARNER & COMPANY, Chicago, Ill.
Filed July 3, 1928. Serial No. 269,057. PUBLISHED OCTOBER 2, 1928. Class 46.

271,008. TOILET PAPER, PAPER TOWELS, AND PAPER NAPKINS. SCOTT PAPER COMPANY, Chester, Pa.
Filed June 12, 1929. Serial No. 285,478. PUBLISHED MARCH 11, 1930. Class 37.

271,009. FOUNTAIN PENS. KAUFMANN BROS. & BONDY, INC., West New York, N. J.
Filed November 29, 1929. Serial No. 293,051. PUBLISHED MARCH 11, 1930. Class 37.

271,010. COAL. SMOKY HOLLOW COAL CO., Albia, Iowa.
Filed November 30, 1929. Serial No. 293,114. PUBLISHED MARCH 11, 1930. Class 1.

271,011. BRIQUETS OF COAL AND COKE. RICHMOND NICHOLAS, doing business as Briquet Company of America, Chicago, Ill.
Filed December 11, 1929. Serial No. 293,538. PUBLISHED MARCH 11, 1930. Class 1.

271,012. PERIODICAL PUBLICATION DEVOTED TO THE PRACTICAL AND TECHNICAL DISCUSSION OF MATERIAL AND MACHINERY USED IN THE GRAPHIC ARTS. GENERAL PRINTING INK CORPORATION, New York, N. Y.
Filed December 18, 1929. Serial No. 293,827. PUBLISHED MARCH 71, 1930. Class 38.

271,013. PLUMB BOBS, STRAIGHTEDGES, RULES, AND CHALK LINES. HYDE MANUFACTURING COMPANY, Southbridge, Mass.
Filed December 18, 1929. Serial No. 293,834. PUBLISHED MARCH 11, 1930. Class 26.

271,014. ADVERTISING DISPLAY DEVICES IN THE NATURE OF MINIATURE SET STAGE. ADVERTISING DISPLAYS, INC., Covington, Ky.
Filed December 20, 1929. Serial No. 293,912. PUBLISHED MARCH 11, 1930. Class 32.

271,015. PORTABLE AND FLEXIBLE-SHAFT BENCH GRINDERS AND PARTS THEREOF. KELLER MECHANICAL ENGINEERING CORPORATION, Brooklyn, N. Y.
Filed December 20, 1929. Serial No. 293,924. PUBLISHED MARCH 11, 1930. Class 28.

271,016. TOILET PAPER, PAPER TOWELS, PAPER NAPKINS. HENRY JARISCH, Jr., Holyoke, Mass.
Filed December 21, 1929. Serial No. 293,975. PUBLISHED MARCH 11, 1930. Class 37.

271,017. PERIODICAL PUBLICATIONS. NEW YORK AUTOMOBILE CLUB, INC., New York, N. Y.
Filed December 24, 1929. Serial No. 294,038. PUBLISHED MARCH 11, 1930. Class 38.

271,018. MATRICES FOR THE PRODUCTION OF PRINTER'S TYPE. CONTINENTAL TYPEFOUNDERS ASSOCIATION, INC., New York, N. Y.
Filed December 28, 1929. Serial No. 294,147. PUBLISHED MARCH 11, 1930. Class 50.

271,019. DAVENPORTS, CHAIRS, BOUDOIR CHAIRS, ROCKING-CHAIRS, CHAISE LONGUES, BENCHES, STOOLS, AND OTTOMANS. THE NORTHWESTERN UPHOLSTERING COMPANY, Minneapolis, Minn.
Filed January 2, 1930. Serial No. 294,317. PUBLISHED MARCH 11, 1930. Class 32.

271,020. PICTURE FRAMES. THE HOUSH COMPANY, INC., Boston, Mass.
Filed January 14, 1930. Serial No. 294,773. PUBLISHED MARCH 11, 1930. Class 32.

271,021. PHOTOGRAPHIC CAMERAS, FILMS, AND PRINTING FRAMES, ETC. EASTMAN KODAK COMPANY, Rochester, N. Y.
Filed January 20, 1930. Serial No. 294,960. PUBLISHED MARCH 11, 1930. Class 26.

271,022. MAYONNAISE, SANDWICH SPREAD, AND THOUSAND ISLAND DRESSING. JAMES ROBERT TICHENOR, doing business as J. R. Tichenor & Sons, Louisville, Ky.
Filed January 16, 1930. Serial No. 294,863. PUBLISHED MARCH 4, 1930. Class 46.

271,023. CANNED GRAPEFRUIT JUICE FOR FOOD PURPOSES AND CANNED TOMATO JUICE. WEST FLORIDA PRESERVING COMPANY, INC., Bradenton, Fla.
Filed January 16, 1930. Serial No. 294,865. PUBLISHED MARCH 11, 1930. Class 46.

271,024. CHOCOLATE FROSTING FOR FOOD PURPOSES. WALTER J. RICKEL, doing business as United Purchasing Co., Chicago, Ill.
Filed January 17, 1930. Serial No. 294,893. PUBLISHED MARCH 11, 1930. Class 46.

271,025. PREPARED, SMOKED, AND DRIED BEEF, PREPARED AND SMOKED PORK, SAUSAGE, DRESSED POULTRY, LARD, BUTTER, CHEESE, AND EGGS. EVANSVILLE PACKING COMPANY, Evansville, Ind.
Filed January 18, 1930. Serial No. 294,917. PUBLISHED MARCH 4, 1930. Class 46.

271,026. CANNED FRUITS, CANNED VEGETABLES, CANNED FISH, CHILI SAUCES, CANNED FRUIT PRESERVES, MAYONNAISE DRESSING, FRENCH DRESSING, DRIED FRUITS, AND CATSUP. HAAS, BARUCH & COMPANY, Los Angeles, Calif.
Filed January 24, 1930. Serial No. 295,161. PUBLISHED MARCH 11, 1930. Class 46.

271,027. COFFEE, COOKIES, CAKE, ETC. MILBROOKS RESTAURANTS INC., New York, N. Y.
Filed December 20, 1929. Serial No. 293,929. PUBLISHED MARCH 11, 1930. Class 46.

271,028. NONFATTENING MAYONNAISE. UNITED MARKETS, INC., Boston, Mass.
Filed December 21, 1929. Serial No. 293,990. PUBLISHED MARCH 4, 1930. Class 46.

271,029. METAL POLISHES AND REFINISHERS. ARTHUR MARABATE, doing business as Marabate Products Company, Detroit, Mich.
Filed July 15, 1929. Serial No. 287,148. PUBLISHED MARCH 11, 1930. Class 4.

271,030. CHILDREN'S DRESSES. ROSENAU BROS. INC., Philadelphia, Pa.
Filed July 23, 1929. Serial No. 287,545. PUBLISHED MARCH 4, 1930. Class 39.

271,031. STRETCHERS FOR CARRYING HUMAN BODIES. JULIA G. SAUNDERS, San Francisco, Calif.
Filed August 3, 1929. Serial No. 288,090. PUBLISHED FEBRUARY 25, 1930. Class 44.

271,032. SOAP. COLGATE-PALMOLIVE-PEET COMPANY, Chicago, Ill.
Filed August 9, 1929. Serial No. 288,317. PUBLISHED MARCH 11, 1930. Class 4.

271,033. SOAP. ALFONS FEHRENBACH, Union City, N. J.
Filed August 19, 1929. Serial No. 288,700. PUBLISHED MARCH 4, 1930. Class 4.

271,034. PAD FOR USE IN PERMANENT WAVING OF HAIR. DALLEY WEAVER COMPANY, INC., Birmingham, Ala.
Filed August 22, 1929. Serial No. 288,847. PUBLISHED MARCH 4, 1930. Class 44.

271,035. WOMEN'S HOSIERY. BUTLER BROTHERS, Chicago, Ill.
Filed September 9, 1929. Serial No. 289,502. PUBLISHED MARCH 4, 1930. Class 39.

271,036. POLISHING AND CLEANING COMPOUND FOR LACQUER FINISHES. MCALEER MANUFACTURING COMPANY, Detroit, Mich.
Filed October 5, 1929. Serial No. 290,714. PUBLISHED MARCH 4, 1930. Class 16.

271,037. DRESS AND WORK TROUSERS. BEDFORD JOHNSON CO., INC., New York, N. Y.
Filed October 10, 1929. Serial No. 290,873. PUBLISHED FEBRUARY 25, 1930. Class 39.

271,038. DRESS AND WORK TROUSERS. BEDFORD JOHNSON CO., INC., New York, N. Y.
Filed October 10, 1929. Serial No. 290,877. PUBLISHED FEBRUARY 25, 1930. Class 39.

271,039. SILK HOSIERY AND LADIES' FULL-FASHIONED SILK HOSIERY. OWEN OSBORNE, INC., Philadelphia, Pa.
Filed October 15, 1929. Serial No. 291,099. PUBLISHED FEBRUARY 25, 1930. Class 39.

271,040. WASHING POWDER AND POWDERED SOAP. MILWAUKEE LUBRICANTS CO., Milwaukee, Wis.
Filed October 28, 1929. Serial No. 291,682. PUBLISHED MARCH 4, 1930. Class 4.

271,041. SOAP. MILWAUKEE LUBRICANTS CO., Milwaukee, Wis.
Filed October 28, 1929. Serial No. 291,684. PUBLISHED MARCH 4, 1930. Class 4.

271,042. CORNSTARCH, SOUPS, MACARONI, SPAGHETTI, AND NOODLES (PACKAGED), CANNED SPAGHETTI, RICE, MINCEMEAT, JELL POWDER, PACKAGED CODFISH, EVAPORATED AND DRIED FRUITS, HONEY, PEANUT BUTTER, OLIVE OIL, SALAD OIL, TAPIOCA, FRUIT-FLAVORED SYRUPS FOR FOOD PURPOSES, APPLE BUTTER, BIRDSEED, AND PREPARED BIRD GRAVEL. THE GROCERS & PRODUCERS CO., Cleveland, Ohio.
Filed July 8, 1929. Serial No. 286,763. PUBLISHED MARCH 4, 1930. Class 46.

271,043. PREPARED CONDIMENT OF SPICES. J. & J. COLMAN, LIMITED, London, England.
Filed August 15, 1929. Serial No. 288,548. PUBLISHED MARCH 4, 1930. Class 46.

271,044. CANNED FRUITS AND VEGETABLES, JAMS, JELLIES, ETC. EVERETT FRUIT PRODUCTS COMPANY, Everett, Wash.
Filed August 21, 1929. Serial No. 288,788. PUBLISHED MARCH 11, 1930. Class 46.

271,045. RAW POP CORN, POPPED POP CORN, POP-CORN SEASONING, SALTED PEANUTS, AND PEANUT BUTTER. WALTER E. HUGO, Hammond, Ind.
Filed September 7, 1929. Serial No. 289,460. PUBLISHED MARCH 4, 1930. Class 46.

271,046. DRESSED POULTRY, EGGS, BUTTER, CHEESE, AND FULL-CREAM CHEESE. NORTH PLATTE VALLEY CO-OPERATIVE CHEESE COMPANY, Scottsbluff, Nebr.
Filed September 9, 1929. Serial No. 289,532. PUBLISHED MARCH 11, 1930. Class 46.

271,047. HONEY. PALESTINE INDUSTRIALS INC., New York, N. Y.
Filed October 3, 1929. Serial No. 290,591. PUBLISHED MARCH 4, 1930. Class 46.

271,048. CANNED SUGAR CORN, STRINGLESS BEANS, PUMPKIN, HOMINY, ETC. THE KROGER GROCERY & BAKING CO., Cincinnati, Ohio.
Filed November 23, 1929. Serial No. 292,810. PUBLISHED MARCH 4, 1930. Class 46.

271,049. CANNED BAKED BEANS, SPAGHETTI, MAYONNAISE, BOSTON BROWN BREAD, CAKE MIXES, DOUGHNUT FLOURS, MALTED COCOA. BARRY FOOD PRODUCTS, INC., Buffalo, N. Y.
Filed November 4, 1929. Serial No. 291,960. PUBLISHED MARCH 11, 1930. Class 46.

271,050. LEATHER. J. GREENEBAUM TANNING COMPANY, Milwaukee, Wis.
Filed June 12, 1929. Serial No. 285,456. PUBLISHED MARCH 11, 1930. Class 1.

[ACT OF MARCH 19, 1920, SEC. 1 (b)]

THESE REGISTRATIONS ARE NOT SUBJECT TO OPPOSITION

271,051. (CLASS 16. PAINTS AND PAINTERS' MATERIALS.) BRADSHAW-PRAEGER & Co., Chicago, Ill. Filed July 18, 1928. Serial No. 269,765.

Certified

For Prepared Shellac.
Claims use since July 2, 1928.

271,052. (CLASS 44. DENTAL, MEDICAL, AND SURGICAL APPLIANCES.) THE WILLIAMS GOLD REFINING CO., INC., Buffalo, N. Y. Filed Dec. 27, 1926. Serial No. 242,035.

MELTED BY RADIO

For Dental Golds—Viz, Bands, Orthodontia Band, Wire and Tubing Materials, Lingual Bars, Casting Golds, Clasps, Discs, Filling Gold, Foil, Plate, Shells, Solder, Tubing, and Wire.
Claims use since November, 1923.

271,053. (CLASS 12. CONSTRUCTION MATERIALS.) THE MOSAIC TILE COMPANY, Zanesville, Ohio. Filed Jan. 23, 1928. Serial No. 260,518.)

IRONSTONE

For Floor, Wall, and Ceiling Tiles for Interior and Exterior Purposes.
Claims use since on or about Mar. 1, 1923.

271,054. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) CARL H. FRINK, Clayton, N. Y. Filed May 15, 1929. Serial No. 284,055.

SNO-PLOWS

For Snowplows.
Claims use since Mar. 10, 1928.

271,055. (CLASS 12. CONSTRUCTION MATERIALS.) THE C. PARDEE WORKS, Philadelphia, Pa. Filed Apr. 9, 1929. Serial No. 282,130.

TUFTILE

For Floor, Wall, and Decorative Tile.
Claims use since Mar. 1, 1929.

271,056. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) CALIFORNIA REX SPRAY CO., Benicia, Calif. Filed Apr. 2, 1929. Serial No. 281,722.

SNAYL-TOX

For Preparation for Destroying Ground Pests—Namely, Snails, Sow Bugs, Earwigs, Slugs, Cutworms, and Grasshoppers.
Claims use since Mar. 20, 1929.

271,057. (CLASS 27. HOROLOGICAL INSTRUMENTS.) ENGGASS JEWELRY COMPANY, Detroit, Mich. Filed Mar. 18, 1929. Serial No. 280,900.

WEBSTER

For Watches.
Claims use since Mar. 11, 1929.

271,058. (CLASS 27. HOROLOGICAL INSTRUMENTS.) ENGGASS JEWELRY COMPANY, Detroit, Mich. Filed Mar. 18, 1929. Serial No. 280,899.

CLAREMORE

For Watches.
Claims use since Mar. 11, 1929.

271,059. (CLASS 14. METALS AND METAL CASTINGS AND FORGINGS.) THE AMERICAN STEEL AND WIRE COMPANY OF NEW JERSEY, Cleveland, Ohio; Chicago, Ill.; Pittsburgh, Pa.; New York, N. Y.; Worcester, Mass.; Hoboken, N. J. Filed Mar. 7, 1929. Serial No. 280,373.

GRIPTITE

For Stapling Wire, and More Particularly Cement-Coated Stapling Wire.
Claims use since Jan. 10, 1929.

271,060. (CLASS 35. BELTING, HOSE, MACHINERY PACKING, AND NONMETALLIC TIRES.) CLAYTON MARK & COMPANY, Chicago, Ill. Filed Feb. 21, 1929. Serial No. 279,861.

TRADE RED CLAYTON MARK RUBBER MARK

The lining in the drawing is intended to indicate the color red.
For Rubber Packers to be Fitted into Well Valves, Which Valves are Especially Adapted for Use in Artesian Wells.
Claims use since Feb. 5, 1925.

271,061. (CLASS 37. PAPER AND STATIONERY.) NIAGARA ENVELOPE MANUFACTORY, INC., Buffalo, N. Y. Filed Nov. 12, 1929. Serial No. 292,331.

SEALTITE

For Correspondence and Mailing Envelopes.
Claims use since Mar. 1, 1929.

271,062. (CLASS 39. CLOTHING.) STEINBERGER BROS GLOVE CORP., San Francisco, Calif. Filed Sept. 30, 1929. Serial No. 290,434.

WEARCLEAN

For Leather and Fabric Gloves.
Claims use since Aug. 28, 1925.

271,063. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) HILLIARD'S GLASS HOUSE GOODIES, INC., Boston and West Roxbury, Mass. Filed July 31, 1929. Serial No. 287,926.

Hilliard's Goodies

For Chocolates, Candles, and Bonbons.
Claims use since Feb. 4, 1925.

271,064. (CLASS 37. PAPER AND STATIONERY.) Z. & W. M. CRANE, INC., Dalton, Mass. Filed July 3, 1929. Serial No. 286,532.

CRANE'S OLDE BOOK

For Writing Paper for Brochures and Fine Books.
Claims use since April, 1927.

271,065. (CLASS 39. CLOTHING.) A. E. NETTLETON CO., Syracuse, N. Y. Filed June 10, 1929. Serial No. 285,368.

BARCLAY

For Men's and Young Men's Leather Shoes.
Claims use since Feb. 1, 1929.

271,066. (CLASS 42, KNITTED, NETTED, AND TEXTILE FABRICS.) PHILIP SHLANSKY & CO., INC., New York, N. Y. Filed June 7, 1929. Serial No. 285,227.

BEAVERLIKE

For Cloth in the Piece Made of a Mixture of Cotton and Wool and Used in Making Ladies' Coats.
Claims use since July 1, 1928.

271,067. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) SALINAS PRODUCE COMPANY, Salinas, Calif. Filed June 5, 1929. Serial No. 285,112.

BULGE PAK

For Fresh Vegetables.
Claims use since Mar. 23, 1929.

271,068. (CLASS 27. HOROLOGICAL INSTRUMENTS.) THE HAMMOND CLOCK COMPANY, Chicago, Ill. Filed Mar. 17, 1930. Serial No. 297,429.

HAMMOND

For Electric Clocks.
Claims use since June, 1928.

271,069. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) SATISH C. GHOSE, Chicago, Ill. Filed Mar. 3, 1930. Serial No. 296,740.

DELHI-INCENSE

For Incense.
Claims use since Mar. 27, 1929.

271,070. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) HEILBRUNN BROS., New York, N. Y., assignor to Heilbrunn Bros., Inc., New York, N. Y., a Corporation of New York. Filed Feb. 27, 1930. Serial No. 296,595.

Heilbrunn

For Candies and Chocolates.
Claims use since March, 1928.

271,071. (CLASS 37. PAPER AND STATIONERY.) HOOPER PAPER & TWINE CO., INC., Philadelphia, Pa. Filed Feb. 17, 1930. Serial No. 296,123.

MERIT BRAND

For Paper Products as Follows: Kraft, Manila, Blotting, Tag Board, Manila Wrapping, Wax for Wrapping Purposes, Adding-Machine Paper, Pattern, Tissue, Toilet, Paper Towels, and Chocolate Layer Board.
Claims use since Jan. 4, 1929.

271,072. (CLASS 39. CLOTHING.) NEITZEL MANUFACTURING CO., INC., Waterford, N. Y. Filed Feb. 10, 1930. Serial No. 295,858.

Neitzel

For Nurses' Apparel—Namely, Aprons, Bibs, Bath Robes, Uniforms, Caps, Collars, and Cuffs.
Claims use since Dec. 1, 1928.

271,073. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) LUDLOW LABORATORIES INC., Chicago, Ill. Filed Feb. 3, 1930. Serial No. 295,022.

KEEP KLEEN

For Paste Cleaner for the Hands of Mechanics.
Claims use since Jan. 2, 1928.

271,074. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) W. WIRT WICKES & SON, New York, N. Y. Filed Dec. 9, 1929. Serial No. 293,458.

GOLDEN REFINERS · A · SODERHOLM · SWEDISH RYE

For Molasses.
Claims use since July 15, 1928.

271,075. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) DANIEL T. SWAVELY, doing business as The Swavely Varnish Works, Flint, Mich. Filed Nov. 9, 1928. Serial No. 275,084.

RUBBER GLAZE

For Vehicle Top Dressings.
Claims use since July 1, 1927.

TRADE-MARK REGISTRATIONS RENEWED

34,951. A CERTAIN NAMED POLISHING COMPOUND. Registered July 24, 1900. THE FIRM OF A. ROSALOWSKY, Berlin, Germany. Renewed July 24, 1930, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

76,372. AN ANTISEPTIC TARTAR REMOVER IN THE FORM OF A PENCIL. Registered January 11, 1910. MARTIN C. OLSON, Chicago, Ill. Renewed January 11, 1930, to Thos. Christy & Co., London, England, assignee.

77,155. CONCRETE MIXERS AND CONCRETE STONE MACHINES. Registered March 15, 1910. GEORGE C. CHRISTOPHER & SON, Wichita, Kans. Renewed March 15, 1930.

77,485. SMOKING TOBACCO, CIGARS, AND CIGARETTES. Registered April 12, 1910. GODFREY PHILLIPS & SONS. Renewed April 12, 1930, to Godfrey Phillips, Limited, London, England, a Corporation of Great Britain, successor.

77,733. A PREPARATION FOR ERADICATING WARTS. Registered May 3, 1910. J. J. GEORGES & SON, INC., Washington, D. C., a Corporation of the District of Columbia. Renewed May 3, 1930.

77,957. A COMPOUND OF COFFEE AND CHICORY. Registered May 17, 1910. THE REILY-TAYLOR COMPANY. Renewed May 17, 1930, to Wm. B. Reily & Company, Inc., New Orleans, La., a Corporation of Louisiana, successor.

78,050. CERTAIN ASBESTOS PRODUCTS. Registered May 24, 1910. UNITED STATES ASBESTOS CO., Manheim, Pa. Renewed May 24, 1930, to Raybestos-Manhattan, Inc., Passaic, N. J., a Corporation of New Jersey, assignee.

78,212. RAZORS AND RAZOR BLADES. Registered May 31, 1910. EDWIN WILBUR SPRING, London, England. Renewed May 31, 1930, to Rubie Blade Corporation, New York, N. Y., a Corporation of New York, assignee.

78,464. STICKY INSECT BANDING FOR FRUIT TREES. Registered June 14, 1910. STRAWSONS & COMPANY. Renewed June 14, 1930, to Strawson Chemical Co. Limited, London, England, a Corporation of Great Britain, successor.

78,543. LEATHER BELTING. Registered June 21, 1910. SOUTHERN BELTING COMPANY OF NEW ORLEANS, New Orleans, La., a Corporation of Louisiana. Renewed June 21, 1930.

78,698. VALVES. Registered July 5, 1910. THE FISHER-GOVERNOR COMPANY, Marshalltown, Iowa, a Corporation of Iowa. Renewed July 5, 1930.

78,893. A COMPOUND OF PORT WINE AND EXTRACT OF MEAT. Registered July 19, 1910. ALBERT CHARLES FREDK. MORGAN. Renewed July 19, 1930, to Morgan Brothers (London) Limited, London, England, an Organized Company of Great Britain, successor.

79,122. SEWING THREADS. Registered August 9, 1910. GUDEBROD BROS. CO., New York, N. Y. Renewed Aug. 9, 1930, to Gudebrod Bros. Silk Co., Inc., Philadelphia, Pa., a Corporation of Pennsylvania, successor.

79,197. PENHOLDERS. Registered August 16, 1910. EAGLE PENCIL COMPANY. Renewed August 16, 1930, to Eagle Pencil Company, New York, N. Y., a Corporation of Delaware, assignee.

79,334. A NONALCOHOLIC BEVERAGE. Registered August 30, 1910. HAROLD H. FRIES, New York, N. Y. Renewed August 30, 1930.

79,352. MALT EXTRACTS. Registered August 30, 1910. MALT-DIASTASE COMPANY, New York, N. Y. Renewed August 30, 1930, to Malt-Diastase Company, Brooklyn, N. Y., a Corporation of New York.

79,365. SOAP. Registered August 30, 1910. PURITAN SOAP COMPANY, Rochester, N. Y., a Corporation of New York. Renewed August 30, 1930.

79,462. ALE, BEER, AND OTHER MALT LIQUORS. Registered September 13, 1910. P. BALLANTINE & SONS, Newark, N. J., a Corporation of New Jersey. Renewed September 13, 1930.

79,464. A COMPOSITION OF COD-LIVER OIL AND TAR OIL. Registered September 13, 1910. SOCIETA PRODOTTI CHIMICO FARMACEUTICI A. BERTELLI & C., Milan, Italy, a Corporation of Italy. Renewed September 13, 1930.

79,511. LIQUID PAINTS AND VARNISHES. Registered September 13, 1910. JOHN CHARLES NICHOLSON. Renewed September 13, 1930, to Jenson & Nicholson Limited, Stratford, England, a Corporation of Great Britain, successor.

79,589. CANNED CORN. Registered September 20, 1910. THE KROGER GROCERY & BAKING CO., Cincinnati, Ohio, a Corporation of Ohio. Renewed September 20, 1930.

79,610. A REMEDY FOR THE TREATMENT OF MALARIA. Registered September 20, 1910. SHARP & DOHME, Baltimore, Md., a Corporation of New Jersey. Renewed September 20, 1930.

79,620. FLUID-PRESSURE GAGES, FLUID-PRESSURE INDICATORS, AND FLUID-PRESSURE REGULATORS. Registered September 20, 1910. A. SCHRADER'S SON, INCORPORATED, New York, N. Y. Renewed September 20, 1930, to A. Schrader's Son, Incorporated, Brooklyn, N. Y., a Corporation of New York.

79,622. AN ANTISEPTIC AND ASTRINGENT MOUTH WASH. Registered September 20, 1910. THE ZYMOLE COMPANY, New York, N. Y. Renewed September 20, 1930, to Frederick Stearns & Co., Detroit, Mich., a Corporation of Michigan, assignee.

79,670. CURRANTS. Registered September 27, 1910. THE HILLS BROTHERS COMPANY, New York, N. Y., a Corporation of New York. Renewed September 27, 1930.

79,689. LEATHER BOOTS AND SHOES. Registered September 27, 1910. JOHN PILLING SHOE COMPANY, Lowell, Mass., a Corporation of Massachusetts. Renewed September 27, 1930.

LABELS

REGISTERED MAY 20, 1930

37,434.—*Title:* JOLLY TIME BRAND POP CORN. For Pop Corn. AMERICAN POPCORN COMPANY, Sioux City, Iowa. Published March 17, 1930.

37,435.—*Title:* BACHMAN'S ORIGINAL BUTTER THIN PRETZELS. For Pretzels. BACHMAN'S, INC., Reading, Pa. Published February 26, 1930.

37,436.—*Title:* OLD WURZBURG. For Malt Syrup. THE BACHRACH-FELD CO., doing business as Old Wurzburg Malt Co., Cincinnati, Ohio. Published March 1, 1930.

37,437.—*Title:* "PEP-O-LIME." For Beverage. CHARLES CHURCHILL BANFIELD, Portland, Oreg. Published March 28, 1930.

37,438.—*Title:* EAGLE—"THE CHOICE OF A NATION." For Cigarettes. STANLEY J. FLETCHER, Tampa, Fla. Published November 15, 1929.

37,439.—*Title:* GLOSSTER WAX. For Liquid Wax. JAMES GOOD, INC., Philadelphia, Pa. Published March 17, 1930.

37,440.—*Title:* THAT'S MINE. For Canned Salmon. G. P. HALFERTY & Co., Seattle, Wash. Published March 1, 1930.

37,441.—*Title:* FOTOPOR PAPER. For Paper. HANSON-VAN WINKLE-MUNNING COMPANY, Matawan, N. J. Published December 23, 1929.

37,442.—*Title:* MARY CHILTON. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published August 28, 1929.

37,443.—*Title:* BETTY GALE. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published December 28, 1929.

37,444.—*Title:* G. R. KINNEY CO., INC. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published February 8, 1930.

37,445.—*Title:* DEYS. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published February 14, 1930.

37,446.—*Title:* HOCHSCHILD, KOHN & CO. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published January 29, 1930.

37,447.—*Title:* ENTROTH'S. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published February 19, 1930.

37,448.—*Title:* SUPREME FOOTWEAR. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published February 18, 1930.

37,449.—*Title:* S AND K. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published January 6, 1930.

37,450.—*Title:* FOOT BALL MINTS. For Candy Mints. HARRY H. HOKE, Jr., doing business as Hoke Manufacturing Co., Washington, D. C. Published January 15, 1930.

37,451.—*Title:* GOLDEN MAID SLENDER BUTTER PRETZELS. For Pretzels. R. KOCH, Philadelphia, Pa., assignor to American Cone & Pretzel Company, Philadelphia, Pa., a Corporation of West Virginia. Published February 26, 1930.

37,452.—*Title:* LARVEX. For Mothproofing Compound. THE LARVEX CORPORATION, New York, N. Y. Published January 9, 1929.

37,453.—*Title:* MAILLARD'S SANS RIVAL CHOCOLATES. For Chocolate Candy. HENRY MAILLARD, INC., Long Island City, N. Y. Published April 1, 1930.

37,454.—*Title:* MEAD'S DEXTRI-MALTOSE WITH VITAMIN B. For Prepared Food in Powdered Form Containing Vitamin B for Infants and Invalids. MEAD JOHNSON & COMPANY, Evansville, Ind. Published March 15, 1930.

37,455.—*Title:* DRAIN PIPE CLEANER. For a Preparation for Cleansing Drain Pipes. MECHLING BROTHERS CHEMICAL COMPANY, Camden, N. J. Published January 15, 1930.

37,456.—*Title:* HYDROXCIDE. For Insecticide and Fungicide Powder. MECHLING BROTHERS CHEMICAL COMPANY, Camden, N. J. Published March 1, 1930.

37,457.—*Title:* NEW JERSEY DRY MIX. For Mixture of Sulphur Lime and Calcium Caseinate. MECHLING BROTHERS CHEMICAL COMPANY, Camden, N. J. Published March 1, 1930.

37,458.—*Title:* ARSENATE OF LEAD. For Arsenate of Lead Powder. MECHLING BROTHERS CHEMICAL COMPANY, Camden, N. J. Published March 1, 1930.

37,459.—*Title:* CALCIUM CASEINATE. For Calcium Caseinate. MECHLING BROTHERS CHEMICAL COMPANY, Camden, N. J. Published March 1, 1930.

37,460.—*Title:* ARSENATE OF CALCIUM. For Arsenate of Calcium Powder. MECHLING BROTHERS CHEMICAL COMPANY, Camden, N. J. Published March 1, 1930.

37,461.—*Title:* BORDEAUX MIXTURE. For Bordeaux-Mixture Powder. MECHLING BROTHERS CHEMICAL COMPANY, Camden, N. J. Published March 1, 1930.

37,462.—*Title:* RAINBOW. For Butter. THE MENASHA PRODUCTS CO., Chicago, Ill., assignor to Cudahy Bros. Company, Cudahy, Wis. Published December 7, 1929.

37,463.—*Title:* REAL POTATO BREAD. For Bread. THE MENASHA PRODUCTS COMPANY, Chicago, Ill. Published March 1, 1930.

37,464.—*Title:* MODERN BREAD. For Bread. THE MENASHA PRODUCTS COMPANY, Chicago, Ill. Published March 1, 1930.

37,465.—*Title:* ROLLS. For Rolls. THE MENASHA PRODUCTS COMPANY, Chicago, Ill. Published March 1, 1930.

37,466.—*Title:* BUNS. For Buns. THE MENASHA PRODUCTS COMPANY, Chicago, Ill. Published March 1, 1930.

37,467.—*Title:* DELICIOUS MODERN BREAD. For Bread. THE MENASHA PRODUCTS COMPANY, Chicago, Ill. Published March 1, 1930.

37,468.—*Title:* RED ARROW. For Egg Noodles. MILWAUKEE MACARONI CO., Milwaukee, Wis. Published March 28, 1930.

37,469.—*Title:* GARIBALDI. For Malt Syrup. MILWAUKEE MALT SYRUP CO., Milwaukee, Wis. Published April 5, 1930.

37,470.—*Title:* OLD MILWAUKEE. For Malt Syrup. MILWAUKEE MALT SYRUP COMPANY, Milwaukee, Wis. Published April 5, 1930.

37,471.—*Title:* NEODERM. For Medicinal Preparation a Preparation for the Skin. NEODERM COMPANY, Los Angeles, Calif. Published January 27, 1930.

37,472.—*Title:* OVERMYER'S 100% PURE MALT SYRUP. For Malt Syrup. THE OVERMYER COMPANY, Toledo, Ohio. Published February 24, 1930.

37,473.—*Title:* RADIATOR-STOP-A-LEAK DAM-IT. For Material for Stopping Leaks in Radiators and Cracked Engine Blocks. S. J. PEARCE & SONS, Medford, Mass. Published February 20, 1930.

37,474.—*Title:* AVIATION MOTOR OIL. For Motor Oil. RICHFIELD OIL COMPANY OF CALIFORNIA, Los Angeles, Calif. Published February 5, 1930.

37,475.—*Title:* ROCKER ARM GREASE. For Grease. RICHFIELD OIL COMPANY OF CALIFORNIA, Los Angeles, Calif. Published February 5, 1930.

37,476.—*Title:* SAVOREE PAK. For Canned Chicken. RUNNYMEDE FINANCE COMPANY, doing business as Runnymede, Los Angeles and Reseda, Calif. Published March 1, 1930.

37,477.—*Title:* APEX LOAF. For Bread. SANIWAX PAPER CO., Kalamazoo, Mich. Published March 19, 1930.

37,478.—*Title:* RICHMORTAR MASONRY CEMENT. For Cement Products. SOUTHWESTERN PORTLAND CEMENT COMPANY, Dayton, Ohio. Published August 8, 1929.

37,479.—*Title:* WALCO. For Garments. THE WALCO COMPANY, Los Angeles, Calif. Published August 15, 1929.

37,480.—*Title:* GOOD MORNING. For Grapefruit. M. H. WHITTIER COMPANY, LTD., Los Angeles, Calif. Published March 1, 1930.

PRINTS

REGISTERED MAY 20, 1930

12,536.—*Title:* A. B. C. BOOK OF THE BIBLE. For Bibles. A. B. C. BOOK OF THE BIBLE PUBLISHING CO., Washington, D. C. Published March 21, 1930.

12,537.—*Title:* SHE CAN DO ANYTHING A BOY CAN—THIS LITTLE BETTINA BELMONT. For Wheat Breakfast Food. THE CREAM OF WHEAT CORPORATION, Minneapolis, Minn. Published April 10, 1930.

12,538.—*Title:* SOPHISTICATE. For Cigarettes. R. J. REYNOLDS TOBACCO COMPANY, Winston-Salem, N. C. Published March 1, 1930.

12,539.—*Title:* ENTR'ACTE. For Cigarettes. R. J. REYNOLDS TOBACCO COMPANY, Winston-Salem, N. C. Published February 17, 1930.

12,540.—*Title:* IF WINTER COMES. For Cigarettes. R. J. REYNOLDS TOBACCO COMPANY, Winston-Salem, N. C. Published February 1, 1930.

12,541.—*Title:* WHEN CRITICAL SMOKERS GET TOGETHER. For Cigarettes. R. J. REYNOLDS TOBACCO COMPANY, Winston-Salem, N. C. Published January 22, 1930.

12,542.—*Title:* CUES. For Cigarettes. R. J. REYNOLDS TOBACCO COMPANY, Winston-Salem, N. C. Published January 20, 1930.

12,543.—*Title:* CAMELS ARE PLEASANT PUNCTUATION MARKS. For Cigarettes. R. J. REYNOLDS TOBACCO COMPANY, Winston-Salem, N. C. Published January 6, 1930.

12,544.—*Title:* A PLEASANT BREATHING SPELL—HAVE A CAMEL. For Cigarettes. R. J. REYNOLDS TOBACCO COMPANY, Winston-Salem, N. C. Published January 20, 1930.

12,545.—*Title:* WHEN THE TABLE TALK TURNS TO CIGARETTES—. For Cigarettes. R. J. REYNOLDS TOBACCO COMPANY, Winston-Salem, N. C. Published January 1, 1930.

12,546.—*Title:* HEIGHTS OF PLEASURE. For Cigarettes. R. J. REYNOLDS TOBACCO COMPANY, Winston-Salem, N. C. Published January 1, 1930.

12,547.—*Title:* CURTAIN. For Cigarettes. R. J. REYNOLDS TOBACCO COMPANY, Winston-Salem, N. C. Published December 23, 1929.

12,548.—*Title:* INTERMISSION. For Cigarettes. R. J. REYNOLDS TOBACCO COMPANY, Winston-Salem, N. C. Published November 25, 1929.

12,549.—*Title:* ENJOY YOURSELF. For Cigarettes. R. J. REYNOLDS TOBACCO COMPANY, Winston-Salem, N. C. Published October 28, 1929.

12,550.—*Title:* REAL CIGARETTE PLEASURE. For Cigarettes. R. J. REYNOLDS TOBACCO COMPANY, Winston-Salem, N. C. Published March 24, 1930.

12,551.—*Title:* TURN THIS PACKAGE OVER AND READ THE BACK. For Cigarettes. R. J. REYNOLDS TOBACCO COMPANY, Winston-Salem, N. C. Published March 26, 1930.

12,552.—*Title:* CHARMING. For Cigarettes. R. J. REYNOLDS TOBACCO COMPANY, Winston-Salem, N. C. Published March 29, 1930.

12,553.—*Title:* YOU'RE GOING SOMEWHERE WHEN YOU GO WITH CAMELS. For Cigarettes. R. J. REYNOLDS TOBACCO COMPANY, Winston-Salem, N. C. Published March 1, 1930.

12,554.—*Title:* BABYLAND. For Baby Furniture. SOUTHERN FURNITURE COMPANY, Tulsa, Okla. Published March 4, 1930.

12,555.—*Title:* BASKET OF FLOWERS. For Quilting Cotton. THE STEARNS & FOSTER CO., Lockland, Cincinnati, Ohio. Published February 8, 1930.

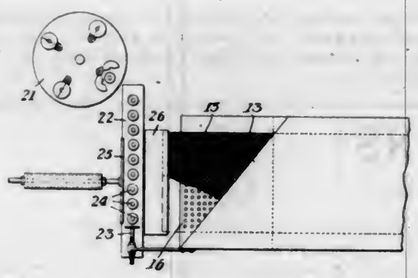
12,556.—*Title:* THE WINDBLOWN TULIP. For Quilting Cotton. THE STEARNS & FOSTER CO., Lockland, Cincinnati, Ohio. Published February 19, 1930.

12,557.—*Title:* WAUGHRINE, THE CHAMPION PAIN KILLER. For Medicinal Preparation for Treating Rheumatism, Lumbago, Neuritis, and All Pains and Aches. THE WAUGHRINE MEDICINE COMPANY, Washington, D. C. Published April 10, 1930.

REISSUES

MAY 20, 1930

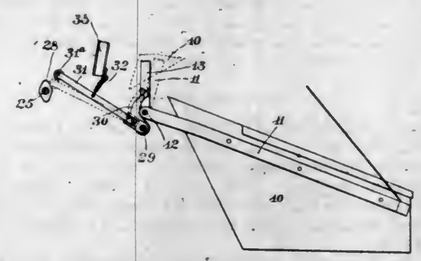
17,669. APPARATUS FOR HANDLING GLASSWARE. GEORGE E. HOWARD, Butler, Pa., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed Mar. 4, 1930. Serial No. 433,193. Original No. 1,618,660, dated Feb. 22, 1927, Serial No. 119,866, filed July 1, 1926. 25 Claims. (Cl. 49—47.)



23. Apparatus for handling and heat treating glassware to effect the annealing thereof, comprising an elongate lehr tunnel, an endless conveyor belt for transporting the ware therethrough, and means disposed adjacent to the ware-entering end of said tunnel for alternatively supplying heat to or abstracting heat from the ware on said belt previous to subjecting the ware to annealing temperatures within said tunnel, said means comprising a chamber having an upper wall, over and in contact with which said belt passes, means for supplying heat to the interior of said chamber, and means alternatively for passing a cooling medium through said chamber, whereby to compensate for various temperature conditions existing in the ware when placed on said belt.

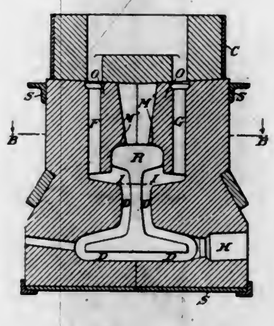
17,670. LOADER AGITATOR FOR CONCRETE-MIXING MACHINES. GEBHARD JAEGER, Columbus, Ohio, assignor to The Jaeger Machine Company, Columbus, Ohio, a Corporation of Ohio. Filed Mar. 19, 1930. Serial No. 437,254. Original No. 1,714,601, dated May 28, 1929, Serial No. 159,975, filed Jan. 8, 1927. 10 Claims. (Cl. 83—73.)

1. In a concrete mixing machine having a rotatable mixing drum, a charging bucket therefor, and linking means for the bucket, means for agitating the bucket on its linking means including a crank arm and means for



oscillating the same, and means whereby said crank arm is held out of oscillating position until the charging bucket is in drum charging position.

17,671. METHOD AND MEANS FOR THE ALUMINO-THERMIC WELDING OF RAILS AND THE LIKE. EDWARD F. BEGTRUP, Jersey City, N. J., assignor to Metal and Thermit Corporation, Carteret, N. J., a Corporation of New Jersey. Filed Mar. 24, 1930. Serial No. 438,617. Original No. 1,741,399, dated Dec. 31, 1929, Serial No. 352,096, filed Apr. 3, 1929. 5 Claims. (Cl. 22—206.)



1. The method of welding railway rails, which comprises fusion welding the bases and webs by contact with alumino-thermic steel, pressure welding the heads under heat from the slag of the alumino-thermic reaction, and shielding portions of the tread and gauge faces of the rail from contact with said slag.

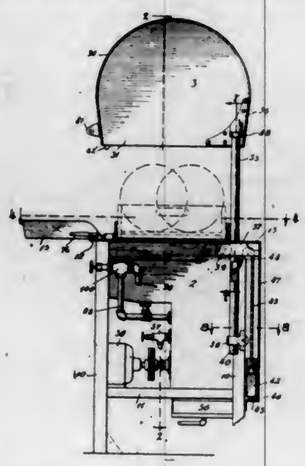
17,672. DISPLAY SIGN. WILLIS O. PAOUTY, Hermosa Beach, Calif. Filed Mar. 19, 1930. Serial No. 437,255. Original No. 1,671,741, dated May 29, 1928, Serial No. 197,103, filed June 7, 1927. 3 Claims. (Cl. 40—130.)



2. A display sign comprising a ceramic character having a glazed exposed face, a luminous tube conforming to the shape of said character, said tube lying substantially parallel to the exposed face of said character and spaced therefrom and means for supporting said tube in the spaced relation over the character.

17,673. WASHING MACHINE. ERICH R. ZADEMACH, Elizabeth, N. J., assignor, by mesne assignments, to Hobart Manufacturing Company, Troy, Ohio, a Corporation of Ohio. Filed July 31, 1928. Serial No. 296,600. Original No. 1,628,818, dated May 17, 1927, Serial No. 52,521, filed Aug. 26, 1925. 19 Claims. (Cl. 141—9.)

1. In a washing machine, the combination of a distributor for directing a liquid upwardly and outwardly, a valve controlling the supply of liquid to the distributor, a vertically movable casing open at its bottom, a normally locked control lever for said valve, and means for automatically unlocking said control lever when the casing is moved downwardly to a position in which its inner surface will intercept the liquid projected from the distributor.



DESIGNS

MAY 20, 1930

81,174. LIGHTING FIXTURE OR ARTICLE OF SIMILAR NATURE. HUGO BOHL, Westfield, N. J., assignor to Radiant Lighting Fixture Co., Inc., New York, N. Y. Filed Feb. 12, 1930. Serial No. 34,497. Term of patent 3½ years.



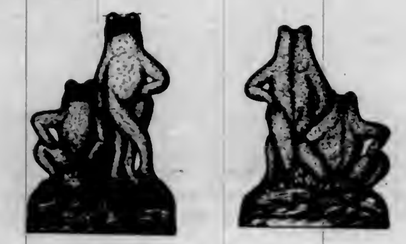
The ornamental design for a lighting fixture, or article of similar nature, as shown and described.

81,175. FARE TOKEN. MATTHEW R. BOYLAN, Jersey City, N. J., assignor to Public Service Coordinated Transport, Newark, N. J., a Corporation of New Jersey. Filed Jan. 10, 1930. Serial No. 34,095. Term of patent 14 years.



The ornamental design for a fare token as shown.

81,176. STATUE. GEORGE S. BAUSH, Zanesville, Ohio. Filed Mar. 8, 1930. Serial No. 34,791. Term of patent 3½ years.



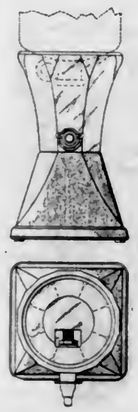
The ornamental design for a statue, as shown.

81,177. SIGN. HARRY R. COLE, Wilmington, Del., assignor to Tile and Mantel Contractors Association of America, Wilmington, Del., a Corporation of Delaware. Filed Oct. 5, 1929. Serial No. 32,958. Term of patent 14 years.



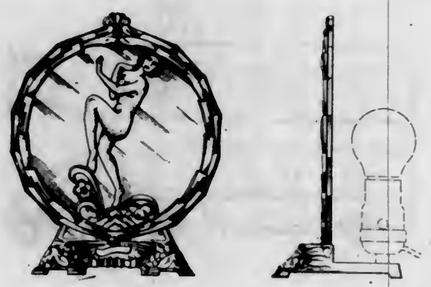
The ornamental design for a sign, as shown.

81,178. LIQUID DISPENSING APPARATUS. CHRISTOPHER M. CORDLEY, Greenwich, Conn., assignor to Cordley & Hayes, New York, N. Y., a Corporation of New York. Filed May 31, 1929. Serial No. 31,487. Term of patent 7 years.



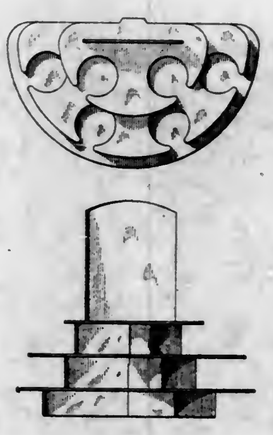
The ornamental design for a liquid dispensing apparatus, as shown.

81,179. LAMP. PAUL CRICCHIO, Bronx, N. Y., assignor to Aljac Art Metal Products Corporation, Brooklyn, N. Y., a Corporation of New York. Filed Mar. 19, 1930. Serial No. 34,970. Term of patent 3½ years.



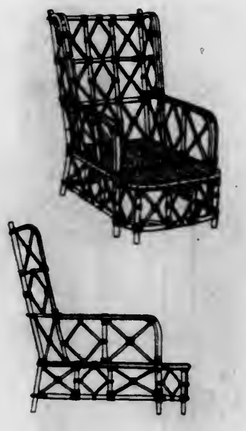
The ornamental design for a lamp, as shown.

81,180. DISPLAY STAND. LEON A. DANCO, Fairfield, Conn., assignor to McKesson & Robbins, Incorporated, Bridgeport, Conn., a Corporation of Connecticut. Filed Mar. 13, 1930. Serial No. 34,840. Term of patent 14 years.



The ornamental design for a display stand substantially as shown.

81,181. CHAIR. FRANK DEBSKI, New York, N. Y. Filed Feb. 17, 1930. Serial No. 34,577. Term of patent 3½ years.



The ornamental design for a chair, as shown.

81,182. TEXTILE FABRIC. IMOGENE DE LANCY, New York. N. Y., assignor to Otis Company, Inc., Boston, Mass., a Corporation of Massachusetts. Filed Feb. 7, 1929. Serial No. 29,969. Term of patent 3½ years.



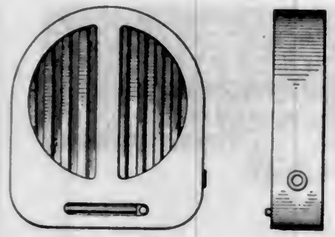
The ornamental design for a textile fabric substantially as shown and described.

81,183. BOOK END. HIRAM J. DUCLOS, New Rochelle, N. Y. Filed Feb. 24, 1930. Serial No. 34,630. Term of patent 3½ years.



The ornamental design for a book end, as shown.

81,184. TELEPHONE-TRANSMITTER CASE. GEORGE B. FRENCH, Southampton, N. Y., assignor to French Electric Company, Inc., a Corporation of New York. Filed Feb. 20, 1929. Serial No. 30,150. Term of patent 3½ years.



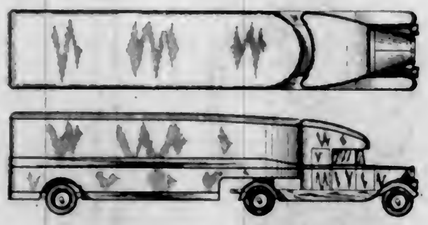
The ornamental design for a telephone transmitter case as shown.

81,185. HOSIERY. ROBERT FRIEDRICH, Philadelphia, Pa. Filed Feb. 6, 1928. Serial No. 25,289. Term of patent 7 years.



The ornamental design for hosiery, as shown.

81,186. COMBINED TRACTOR AND TRAILER. JOHN J. GUND, Cleveland, Ohio, assignor to Lakewood Storage, Inc., Lakewood, Ohio, a Corporation of Ohio. Filed Feb. 20, 1930. Serial No. 34,598. Term of patent 14 years.



The ornamental design for a combined tractor and trailer as shown.

81,187. BRACE FOR AN ELECTRIC-LIGHT FIXTURE. BERNHARD HASENSTAB, Buffalo, N. Y., assignor to Markel Electric Products, Inc., Buffalo, N. Y., a Corporation of New York. Filed Mar. 14, 1930. Serial No. 34,867. Term of patent 3½ years.



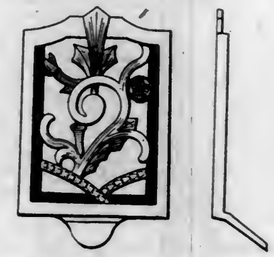
The ornamental design for a brace for an electric-light fixture, substantially as shown.

81,188. BRACE FOR AN ELECTRIC-LIGHT FIXTURE. BERNHARD HASENSTAB, Buffalo, N. Y., assignor to Markel Electric Products, Inc., Buffalo, N. Y., a Corporation of New York. Filed Mar. 14, 1930. Serial No. 34,868. Term of patent 3½ years.



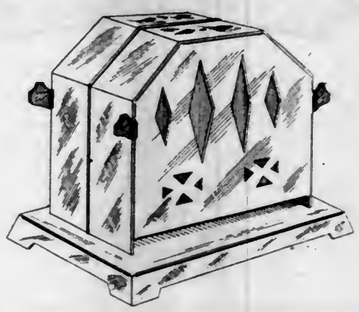
The ornamental design for a brace for an electric light fixture substantially as shown.

81,189. MEDALLION FOR AN ELECTRIC-LIGHT FIXTURE. BERNHARD HASENSTAB, Buffalo, N. Y., assignor to Markel Electric Products, Inc., Buffalo, N. Y., a Corporation of New York. Filed Mar. 14, 1930. Serial No. 34,869. Term of patent 3½ years.



The ornamental design for a medallion for an electric light fixture, substantially as shown.

81,190. ELECTRIC TOASTER. HARRY G. HECKMANN, Binghamton, N. Y., assignor to Central Flat-Iron Manufacturing Company, Johnson City, N. Y. Filed Mar. 11, 1930. Serial No. 34,819. Term of patent 14 years.



The ornamental design for an electric toaster, as shown.

81,191. DOLL. HARRY S. HOPKINS White Plains, N. Y. Filed Mar. 4, 1930. Serial No. 34,728. Term of patent 3½ years.



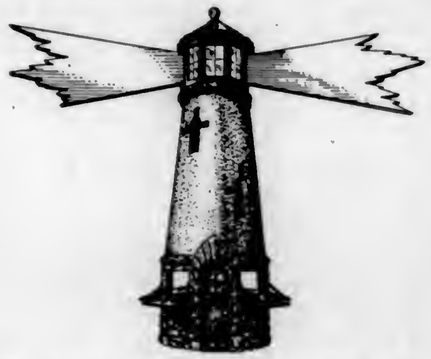
The ornamental design for a doll, as shown.

81,192. TOY ANIMAL. WILLIAM R. HOWELL, Philadelphia, Pa. Filed Mar. 10, 1930. Serial No. 34,803. Term of patent 7 years.



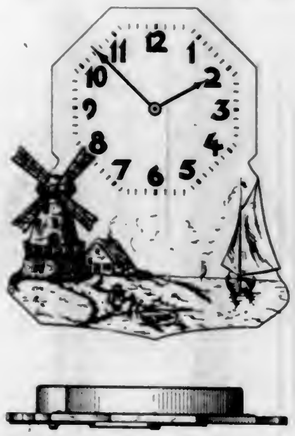
The ornamental design for a toy animal, as shown.

81,193. REFRESHMENT STAND. WATHEN M. JAMES, Denver, Colo. Filed Jan. 25, 1930. Serial No. 34,287. Term of patent 14 years.



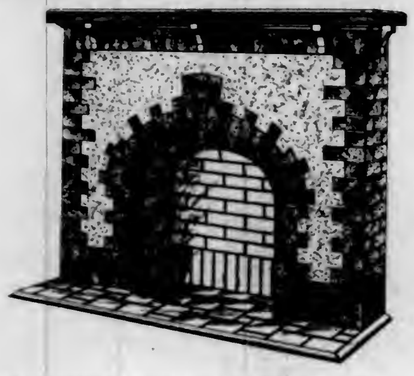
The ornamental design for a refreshment stand as shown and described.

81,194. CLOCK CASING. MARTIN JAUCH, Newark, N. J., assignor to New Jersey Clock Company, Newark, N. J., a Corporation of New Jersey. Filed Jan. 23, 1930. Serial No. 34,250. Term of patent 3½ years.



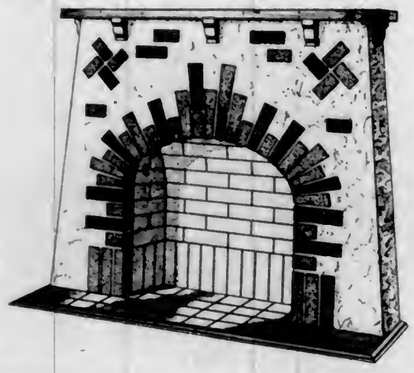
The ornamental design for a clock casing, as shown.

81,195. FIREPLACE. JONAS G. JOHNSON, Baltimore, Md. Filed Nov. 21, 1929. Serial No. 33,520. Term of patent 14 years.



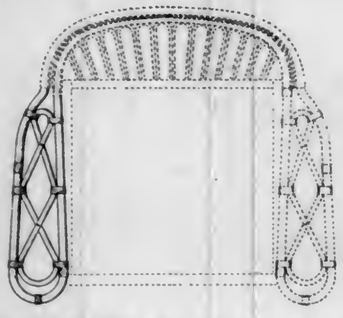
The ornamental design for a fireplace as shown.

81,196. FIREPLACE. JONAS G. JOHNSON, Baltimore, Md. Filed Dec. 5, 1929. Serial No. 33,656. Term of patent 14 years.



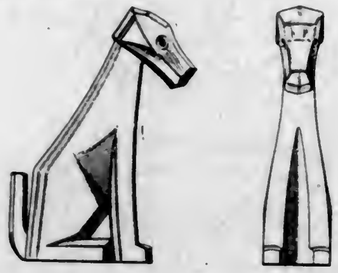
The ornamental design for a fireplace as shown.

81,197. FRAME OF A CHAIR OR SETTEE. CHARLES WESLEY JONES, Glen Ridge, N. J., assignor to Sons-Cunningham Reed & Rattan Co., Inc., New York, N. Y., a Corporation of New York. Filed Nov. 7, 1929. Serial No. 33,367. Term of patent 7 years.



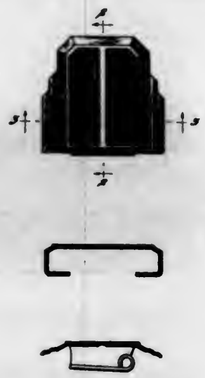
The ornamental design for the frame of a chair or settee, as shown and described.

81,198. ANIMAL FIGURE. ALBERT KLEIN, New York, N. Y. Filed Dec. 26, 1929. Serial No. 33,918. Term of patent 3½ years.



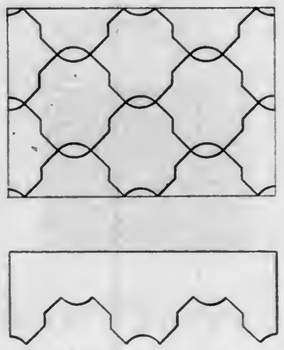
The ornamental design for an animal figure substantially as shown.

81,199. BUCKLE. WILLIAM J. MORSE, Attleboro, Mass., assignor to Morse Andrews Company, Attleboro, Mass., a Corporation of Massachusetts. Filed Mar. 6, 1930. Serial No. 34,752. Term of patent 3½ years.



The ornamental design for a buckle, substantially as shown.

81,200. SHINGLE. HENRY C. NATERMAN, Los Angeles, Calif. Filed Aug. 24, 1929. Serial No. 32,526. Term of patent 14 years.



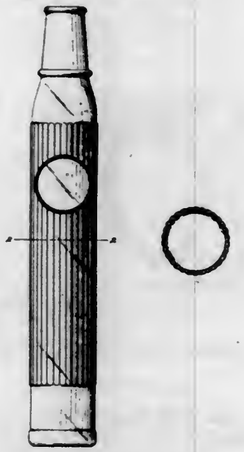
The ornamental design for a shingle, as shown.

81,201. CABINET. MARTIN NYSTROM, Chicago, Ill., assignor to The Brunswick-Balke-Collender Company, Chicago, Ill., a Corporation of Delaware. Filed Feb. 15, 1929. Serial No. 30,073. Term of patent 7 years.



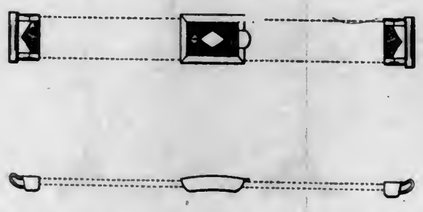
The ornamental design for a cabinet substantially as shown.

81,202. BOTTLE. CARL A. PETERSEN, Evanston, Ill. Filed Mar. 26, 1929. Serial No. 30,622. Term of patent 14 years.



The ornamental design for a bottle, as shown.

81,203. BRACELET. EUGEN PRESTINARI, Irvington, N. J., assignor to Gemex Company, Newark, N. J., a Corporation of New Jersey. Filed Jan. 28, 1930. Serial No. 34,325. Term of patent 3½ years.



The ornamental design for a bracelet, substantially as shown and described.

81,204. SMOKING-STAND BODY. JAMES H. REICHART, Muncie, Ind. Filed Nov. 1, 1929. Serial No. 33,248. Term of patent 7 years.



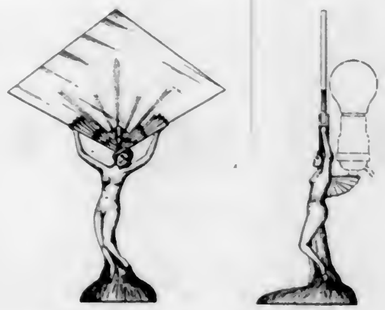
The ornamental design for a smoking stand body, as shown.

81,205. LAMP. FREDERICK W. ROETTGES, Brooklyn, N. Y., assignor to Aljac Art Metal Products Corporation, Brooklyn, N. Y., a Corporation of New York. Filed Mar. 19, 1930. Serial No. 34,972. Term of patent 3½ years.



The ornamental design for a lamp, as shown.

81,206. LAMP. FREDERICK W. ROETTGES, Brooklyn, N. Y., assignor to Aljac Art Metal Products Corporation, Brooklyn, N. Y., a Corporation of New York. Filed Mar. 19, 1930. Serial No. 34,973. Term of patent 3½ years.



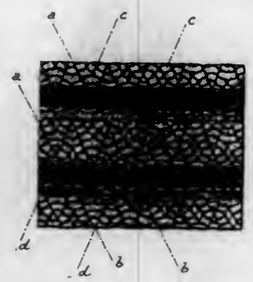
The ornamental design for a lamp, as shown.

81,207. JAR. SAMUEL ROSS, North Bergen, N. J. Filed Aug. 22, 1929. Serial No. 32,516. Term of patent 7 years.



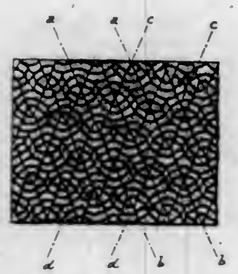
The ornamental design for a jar as shown.

81,208. KNITTED FABRIC. MOSES SCHREIBER, New York, N. Y., assignor to Allentown Knit Fabrics Company, New York, N. Y., a Corporation of Pennsylvania. Filed Dec. 20, 1929. Serial No. 33,866. Term of patent 7 years.



The ornamental design for a knitted fabric substantially as shown and described.

81,209. KNITTED FABRIC. MOSES SCHREIBER, New York, N. Y., assignor to Allentown Knit Fabrics Company, New York, N. Y., a Corporation of Pennsylvania. Filed Dec. 21, 1929. Serial No. 33,876. Term of patent 7 years.



The ornamental design for a knitted fabric substantially as shown and described.

81,210. TIRE. RUSSELL SMITH, Gosport, Ind. Filed Mar. 18, 1930. Serial No. 34,961. Term of patent 14 years.



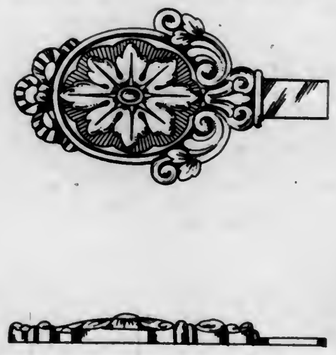
The ornamental design for a tire, as shown.

81,211. CENTER ORNAMENT FOR DRAPERY RODS OR THE LIKE. WALTER EDWARD SMITH, Providence, R. I., assignor to Kenney Manufacturing Company, Cranston, R. I., a Corporation of Rhode Island. Filed Mar. 8, 1930. Serial No. 34,786. Term of patent 7 years.



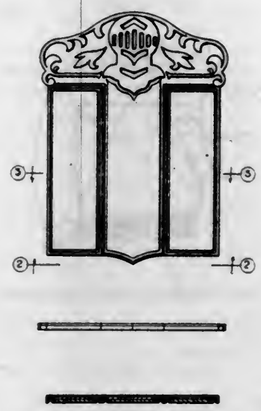
The ornamental design for a center ornament for drapery rods or the like, as shown.

81,212. END ORNAMENT FOR DRAPERY RODS OR THE LIKE. WALTER EDWARD SMITH, Providence, R. I., assignor to Kenney Manufacturing Company, Cranston, R. I., a Corporation of Rhode Island. Filed Mar. 8, 1930. Serial No. 34,787. Term of patent 7 years.



The ornamental design for an end ornament for drapery rods or the like, as shown.

81,213. LABEL. GEORGE F. STANLEY, Dayton, Ohio, assignor to The Stanley Manufacturing Company, Dayton, Ohio, a Corporation of Ohio. Filed Mar. 3, 1930. Serial No. 34,719. Term of patent 7 years.



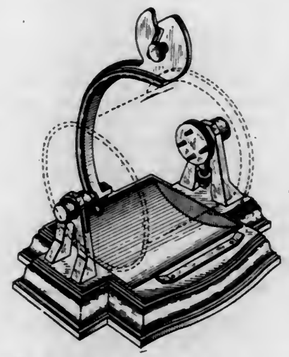
The ornamental design for a label, substantially as shown.

81,214. SUSPENDER BUCKLE OR THE LIKE. HAROLD C. VAISEY, Rochester, N. Y., assignor to Hickok Manufacturing Company, Inc., Rochester, N. Y., a Corporation of New York. Filed Sept. 9, 1929. Serial No. 32,697. Term of patent 3½ years.



The ornamental design for a suspender buckle or the like, as shown.

81,215. RIBBON-SPOOL HOLDER OR THE LIKE. OTTO VOGL, Chicago, Ill. Filed June 13, 1929. Serial No. 31,674. Term of patent 14 years.



The ornamental design for ribbon spool holder, or the like, substantially as shown.

81,216. COAT. MAX WEBBER, Beacon, N. Y. Filed Nov. 18, 1929. Serial No. 33,484. Term of patent 7 years.



The ornamental design for a coat, as shown.

81,217. COMBINATION LAVATORY AND TOILET SEAT. DAVID F. YOUNGBLOOD, San Antonio, Tex. Filed Oct. 9, 1929. Serial No. 32,985. Term of patent 14 years.

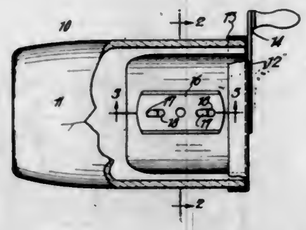


The ornamental design for a combination lavatory and toilet seat, as shown.

PATENTS

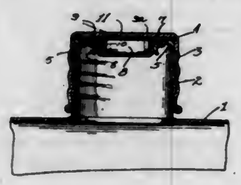
GRANTED MAY 20, 1930

1,758,915. RAZOR-BLADE SHARPENER. EMANUEL AARON, Bronx, N. Y. Filed Aug. 8, 1929. Serial No. 384,403. 4 Claims. (Cl. 76—89.2.)



1. A razor blade sharpening device comprising a cylindrical body open at one end, a cap rotatably mounted on the open end of said body, manipulating means for rotating said cap, and razor blade supporting means carried by said cap for supporting a razor blade with its knife edge or edges in bearing contact with the inner periphery of said cylindrical body.

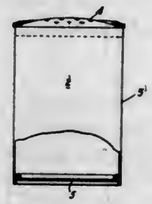
1,758,916. DUAL NOZZLE CLOSURE FOR CONTAINERS. CHARLES J. AULBACH, Passaic, N. J., assignor to Continental Can Company, Inc., New York, N. Y., a Corporation of New York. Filed Mar. 25, 1929. Serial No. 349,791. 2 Claims. (Cl. 220—29.)



1. A container comprising a body portion provided with an inwardly extending breast having a central opening leading to the container, said breast having a depending retaining shoulder at said opening, an inner closure having a central depression adapted to extend into said opening and capable of being expanded into engagement with said retaining shoulder for securing the closure to the container, said breast having a recess in its outer face at said opening and said inner closure having a horizontal flange adapted to fit in said recess being of sufficient depth so that the upper face of the horizontal flange of the inner closure is substantially flush with the outer face of the breast, an outer closure, means for securing the outer closure to the container, and a thin sealing disc disposed within said outer closure and adapted to be pressed thereby into sealing contact with the flange of the inner closure and the breast of the container in the region outside of said flange.

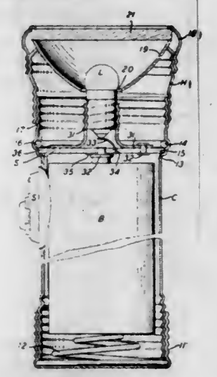
1,758,917. FIBROUS CONTAINER. LEWIS C. BROOKS, Milwaukee, Wis., assignor to National Paper Can Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed May 19, 1927. Serial No. 192,532. 4 Claims. (Cl. 229—7.)

1. A fibrous container having a wall bent upon itself to form a rim of two piles in contact, the rim defining a container opening, the wall material being turned inwardly toward the axis of the container and then outwardly



toward the opening so as to form an annular closure engaging said seat within the rim and spaced inwardly therefrom.

1,758,918. FLASH LIGHT. CHALMERS K. BAYCE, Short Hills, and HOMER W. JONES, Newark, N. J., assignors to National Carbon Company, Inc., a Corporation of New York. Filed June 15, 1927. Serial No. 199,075. 9 Claims. (Cl. 240—10.5.)

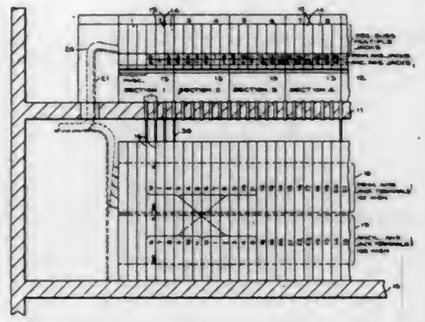


2. In a flashlight, the combination of a casing containing a battery and having an interior shoulder and an interior groove; a reflector within said casing having an aperture; a diaphragm within said casing resting upon said shoulder, said diaphragm being insertable and removable through the front end of said casing; a snap ring seated in said groove and resting against said diaphragm; a lamp holder carried by said diaphragm and insulated from both said reflector and said casing; a lamp in said lamp holder projecting through said aperture; and a flexible connection carried by said diaphragm connecting one terminal of said lamp to one terminal of said battery.

1,758,919. CABLING ARRANGEMENT FOR TELEPHONE SYSTEMS. MELVIN J. ARNDT, Rochester, N. Y., assignor to The Stromberg Carlson Telephone Manufacturing Company, Rochester, N. Y., a Corporation of New York. Filed Apr. 6, 1927. Serial No. 181,399. 1 Claim. (Cl. 179—98.)

Telephone exchange equipment including a switchboard mounted on one floor, said switchboard being provided with panels, each panel having a plurality of primary answering jacks and ancillary answering jacks, an intermediate distributing frame on a second floor directly be-

neath said switchboard and extending in the same direction as said switchboard, said intermediate distributing frame having verticals spaced on the same centers as the sides of said panels, terminals on each panel, cables con-

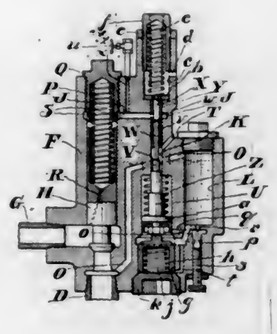


necting the primary answering jacks and ancillary answering jacks to terminals on associated verticals and jumpers for cross-connecting said terminals whereby the appearances of lines in said ancillary jacks may be varied by interchanging said jumpers.

1,758,920. STABILIZED PEROXIDE SOLUTION. GUSTAV BAUM, Weissenstein-on-the-Drau, Austria, assignor to Chemische Fabrik Weissenstein G. m. b. H., Carinthia, Austria. Filed Oct. 12, 1927, Serial No. 225,834, and in Austria Sept. 16, 1926. 5 Claims. (Cl. 23—251.)

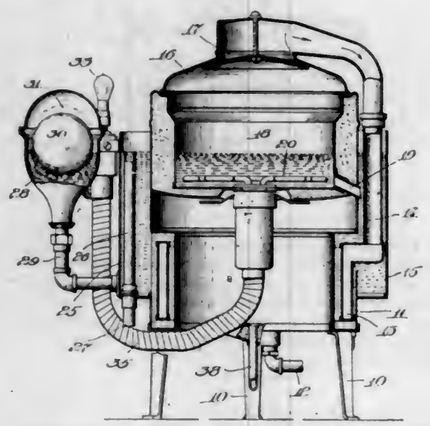
1. Peroxide solution containing sodium pyrophosphate and an alkali metal halide.

1,758,921. VALVE FOR PNEUMATIC-DISPLACEMENT PUMPS. LEWIS C. BAYLES, Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed Oct. 6, 1927. Serial No. 224,380. 5 Claims. (Cl. 137—139.)



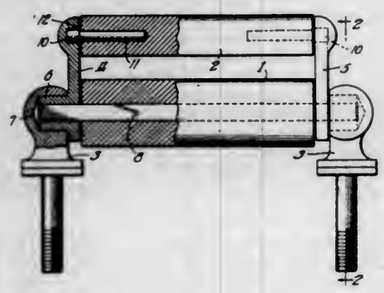
1. A valve for pneumatic displacement pumps, comprising a casing, a main control valve in the casing, a relief port for said main valve, an auxiliary valve controlling said relief port, a liquid pressure chamber, actuating liquid therein subjected to pressure on the outlet side of the chamber, main and auxiliary liquid passages leading from the liquid pressure chamber to the auxiliary valve, for actuating said valve, means for automatically closing the said main liquid pressure passage after the auxiliary valve has started to move, and thereafter permitting actuating liquid pressure to pass through the auxiliary passage, and means for restricting the flow through said auxiliary passage, whereby the control of the said relief port for the main supply valve is timed for predetermined periods between opening and closing, and means for returning the auxiliary valve to initial position.

1,758,922. AUTOMATIC CUT-OFF MECHANISM FOR ELECTRIC STILLS. ALEXANDER M. BERG, Chicago, Ill., assignor to Precision Scientific Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 24, 1929. Serial No. 357,620. 1 Claim. (Cl. 219—19.)



In an electric distillation apparatus, the combination of a vaporizing casing, an electric heating element therefor, a pair of chambers communicating with said casing and disposed on opposite sides thereof, a condensation tube extending from said casing into one of said chambers, a separate float chamber communicating with the other of said chambers and free of the disturbances and precipitations set up by said element, a float located in said chamber, a mercury switch electrically connected to said element, and means operatively connecting said float and switch, the movement of said float operating to complete and break the circuit through the switch at predetermined times dependent upon the level of the liquid in said chamber.

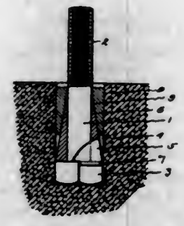
1,758,923. HINGE FOR TOILET SEATS. JOSEPH W. BISHOP, Muskegon Heights, Mich., assignor to The Brunswick-Balke-Collender Company, Chicago, Ill., a Corporation of Delaware. Filed Dec. 19, 1928. Serial No. 327,103. 5 Claims. (Cl. 4—236.)



1. The combination of a toilet seat, a rod of non-circular shape in cross section fitting in and extending through a hole of similar shape in the rear of said seat and

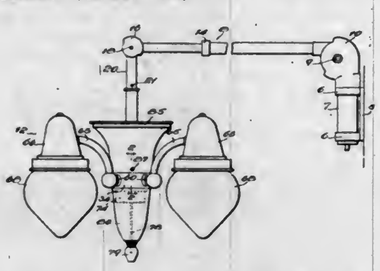
projecting beyond the sides thereof, a hinge plate on each end of said rod, each plate having a hole in which said rod is rigidly secured, a pair of standards supporting said seat for pivotal movement about a horizontal axis extending through said seat, said plates extending upwardly above said seat when in its lowered position, and a cover between the upper ends of said plates pivoted thereon.

1,758,924. BOLT ANCHOR. HENRY J. BLAKESLEE, West Hartford, Conn. Filed Aug. 22, 1928. Serial No. 301,217. 1 Claim. (Cl. 72—105.)



Means for anchoring a bolt head in a hole, which comprises a wedge member of hard metal that has a conical exterior and a central longitudinal perforation adapted to fit the bolt shank, the larger diameter of said wedge member being adapted to fit the hole and having a lip adapted to fit between the wall of the hole and a face of the bolt head, and an expansible member of soft metal that has a cylindrical exterior adapted to fit the hole and a tapering central perforation shaped to fit the conical exterior of the wedge member, said expansible member also having slots extending longitudinally from its lower end.

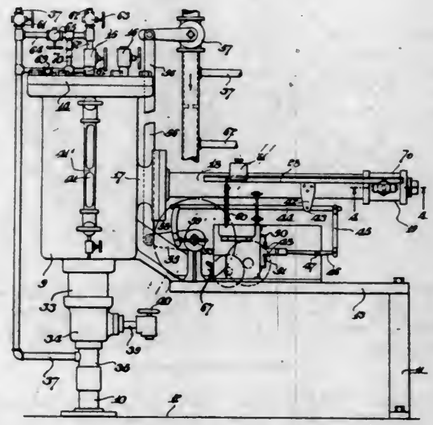
1,758,925. LIGHT FIXTURE. HARRY J. BOSWORTH, Chicago, Ill. Filed Jan. 23, 1928. Serial No. 248,621. 14 Claims. (Cl. 240—73.)



7. In a light fixture of the class described, the combination of a pendant support having an external radial shoulder at its lower end, a mounting member freely turnable upon the lower end of said support and having an internal radial shoulder seated upon said first shoulder, stop means limiting the turning movement of the mounting member upon the lower end of the pendant support to less than a complete turn, a fixture support, a fixture thereon, pintle means secured to said fixture support and turnable in the mounting member to pivot said fixture support thereon, said mounting member being split along the pintle means and means for clamping the split portion of said mounting member upon said pintle means to frictionally resist pivotal movement of the fixture upon the mounting member.

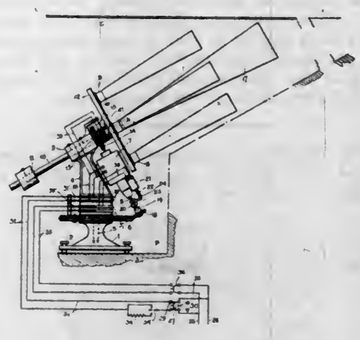
1,758,926. VOLUME-FLOW REGULATOR. GEORGE A. BROOKE, Jr., Germantown, Pa. Filed Oct. 19, 1927. Serial No. 227,099. 2 Claims. (Cl. 137—78.)

2. In a volume flow regulator, the combination of a pressure chamber, a pressure actuated element enclosed within said chamber, a rock shaft projecting from the pressure of the chamber into atmosphere, at a distance from the pressure actuated element, a member communicating movement from the pressure actuated element to the rock shaft, a lever connected to the rock shaft out-



side of said chamber, means for communicating pressures from different points in the line of said flow to opposite sides of the pressure actuated element, a motor controlled by the outside lever for actuating the flow valve, and means operating between the motor and the outside lever as a factor in the motor control.

1,758,927. AIRCRAFT SIGNAL. JOHN P. BUCKLEY, Washington, D. C., and ARTHUR E. NESBITT, Chevy Chase, Md. Filed Mar. 16, 1929. Serial No. 347,570. 11 Claims. (Cl. 177—352.)

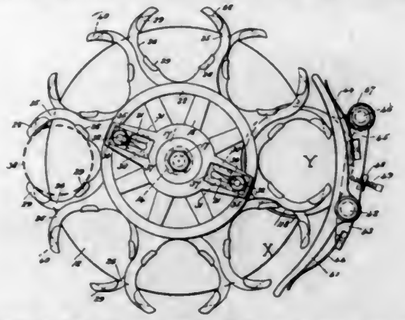


1. Aircraft signaling means comprising means for projecting a beam of sound waves upwardly, and other means for projecting sound waves upwardly in enveloping relation to the said beam, the sound waves of the jacket being distinct from the sound waves of the beam.

1,758,928. BOTTLE CARRIER. WILLIAM L. BURNS, Baltimore, Md., assignor to Burns Bottling Machine Works, Inc., Baltimore, Md. Filed Jan. 30, 1929. Serial No. 336,223. 15 Claims. (Cl. 198—210.)

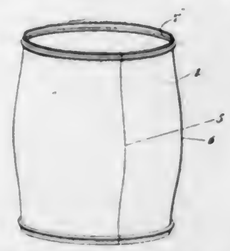
1. In a bottle carrier, a rotary driving hub provided with radial slots, a pair of adjustable carrier members

pivoted on the hub and provided with jaws for engaging the bottles, each carrier member having slots arranged at an angle to the slots in the hub, and the slots of one carrier member being inclined in the reverse direction to



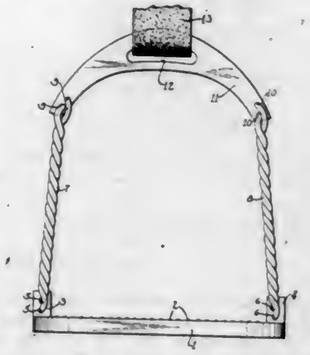
the slots in the other, and clamping bolts engaging with the slots in the hub and in the carrier members and slidable radially of the hub to adjust the size of the said jaws.

1,758,929. METHOD OF MAKING METAL BARRELS AND THE LIKE. JOHN J. CAIN, Bayonne, N. J. Filed June 27, 1928. Serial No. 288,565. 9 Claims. (Cl. 113—120.)



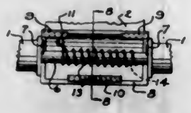
1. The method or process of making metal barrels and the like which includes pre-shaping a sheet of metal during the rolling thereof to form a longitudinally extending convex portion or bilge therein, cutting said pre-shaped metal sheet into lengths and bending said lengths into cylindrical shape so as to form a barrel body.

1,758,930. STIRRUP. ARCHIBALD DONALD CAMERON, Fort Screven, Ga. Filed Oct. 1, 1928. Serial No. 309,647. 2 Claims. (Cl. 54—47.)



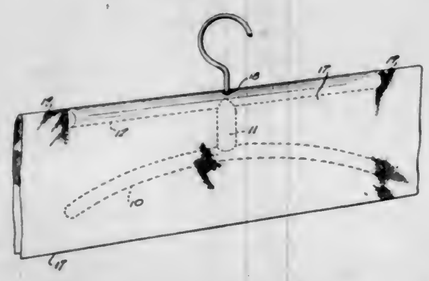
1. A device of the type described comprising a base portion, a top portion, and flexible side portions connecting said base portion with said top portion, said flexible side portions comprising a multiplicity of links, each of said links having a plurality of links passing therethrough, a plurality of links on each of the flexible side portions being connected with said top portion.

1,758,931. HINGE FOR JEWELRY. GASTON CANDAS, Paris, France. Filed Mar. 8, 1928. Serial No. 259,957. 3 Claims. (Cl. 63—2.)



2. In a brooch, the combination comprising a skeleton frame, having opposing transversely projecting flanges interconnected by a reduced neck portion adapted to serve as an axle, a stop lug projecting longitudinally of said frame from at least one of said flanges and lying within the periphery of the flange from which it projects, a sectional cylinder comprising two hemi-cylindrical members one of which is slightly shorter than the other, thereby forming at least one semi-circular terminal stop adapted to cooperate with the aforesaid stop and limit the extent of movement of said cylinder in each direction of rotation thereof and a spring adapted to normally hold said cylinder in a predetermined position and to return the cylinder to such position when externally applied pressure on said cylinder is released.

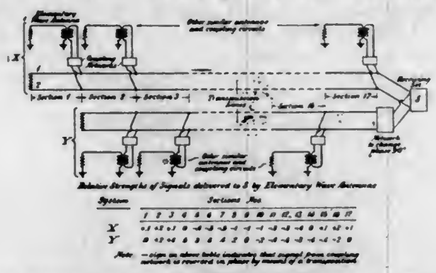
1,758,932. GARMENT-HANGER. OTTO BLAINE CARTER, New York, N. Y. Filed Aug. 11, 1928. Serial No. 299,057. 1 Claim. (Cl. 223—61.)



A garment hanger of the character described comprising a hook, an arch-shaped member for receiving the shoulder part of the garment, a rigidly attached cross-bar between said hook and said member, and a flexible open-ended cover carried by said cross-bar to conceal the upper part of the garment, the side and the lower edges of said cover being open to permit convenient access to the garment on said member.

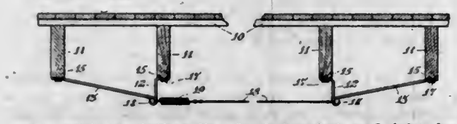
1,758,933. TRANSPOSED AND TAPERED ANTENNA. ARTHUR G. CHAPMAN, East Orange, N. J., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Aug. 21, 1926. Serial No. 130,637. 4 Claims. (Cl. 250—11.)

1. A transposed and tapered antenna system comprising two separate aperiodic horizontal antennæ, each antenna being divided into a plurality of sections, a connecting circuit for each of said antennæ, means to couple each of the sections of each antenna with the connecting circuit individual to the antenna to which the sections be-



long, means connected with one of the connecting circuits to change the phase of the currents therein, and a translating circuit common to both connecting circuits.

1,758,934. HOOK. ALMON E. CONRATH, La Grange, Ill. Filed Feb. 23, 1929. Serial No. 342,213. 1 Claim. (Cl. 68—12.)



A combined clothes line hook bracket and joist brace, said device comprising a depending vertical portion provided with a horizontal securing flange adapted for affixation to a joist, a diagonal portion extending from the vertical portion and provided at its free end with a horizontal securing flange adapted for affixation to an adjoining joist, said flanges lying in the same horizontal plane, and a hook formed as a continuation of the vertical and diagonal portions, said hook located exterior of the included angle between the portions and curved in the direction of the diagonal portion with the end of its bill arranged closely adjacent the diagonal portion, said hook adapted to receive a tension member exerting a pull in the direction of the diagonal portion, whereby the said diagonal portion serves as a joist brace and strengthens the hook by resisting the pull of the tension member thereon.

1,758,935. METALLIC RAILWAY CROSSING. JOHN A. DAILEY, Burlington, and LEWIS W. GERTH, Wapello, Iowa. Filed Feb. 9, 1929. Serial No. 338,648. 16 Claims. (Cl. 238—8.)



1. In combination, the rails of a railroad track, crossing plates between said rails and adjacent to said rails, said crossing plates having edges adapted to underlie the heads of said rails, angled members secured to said plates, insulating material secured between certain of said angled members and forming boundaries for said plates, and an intermediate plate between said first mentioned plates locked to certain of said angled members.

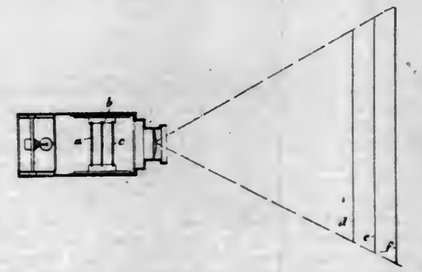
1,758,936. COMBATING AND EXTERMINATING OF VERMIN AND INSECT PESTS. KARL DOBMAIER, Leverkusen-on-the-Rhine, Germany, assignor to Winthrop Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed Feb. 16, 1928, Serial No. 254,898, and in Germany Feb. 24, 1927. 8 Claims. (Cl. 167—22.)

1. As a new agent for combating and exterminating vermin and insect pests a water soluble molecular addition compound of furfurol.

1,758,937. LACTOBACTERIA PRODUCT. GEORGE H. EARP-THOMAS, Glen Ridge, N. J. Filed Dec. 5, 1925. Serial No. 73,523. 7 Claims. (Cl. 167—66.)

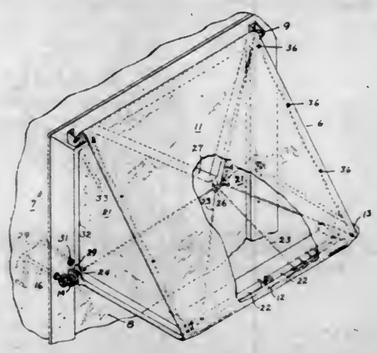
1. A new product comprising an oil emulsion containing viable lactobacteria and a culture medium therefor, suspended in the emulsion.

1,758,938. ARRANGEMENT FOR PRODUCING IMMOVABLE OR MOVABLE PROJECTED IMAGES OF PLASTIC APPEARANCE. FRIEDRICH FELDNER, Vienna, Austria, assignor, by mesne assignments, to Paul Planer, Vienna, Austria. Filed Mar. 18, 1929, Serial No. 347,955, and in Austria Mar. 24, 1928. 1 Claim. (Cl. 88—24.)



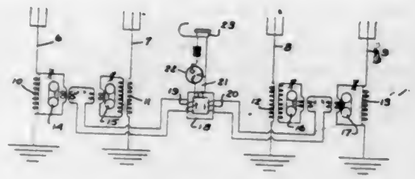
Arrangement for producing immovable or movable projected images of plastic appearance, comprising a number of diapositives arranged behind one another, sections on each diapositive, the sections of all diapositives complete themselves to the desired picture, and screens arranged behind one another and corresponding in number to the number of positives, and sections on each screen corresponding to the parts of the diapositives not covered by the sections of the latter.

1,758,939. AWNING. CHRISTIAN P. FOGH, Oakland, Calif. Filed Mar. 15, 1927. Serial No. 175,463. 3 Claims. (Cl. 156—44.)



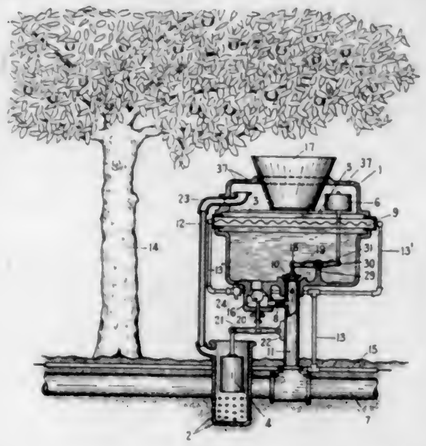
2. In a roller awning, a swinging U-shaped frame adapted to be pivotally attached to a wall, a roller adapted for attachment to said wall, a fabric sheet secured at one end to said roller, and at its other end to said frame, a pair of angular fabric, side wings secured to said fabric sheet, a spring roller carried by and between the sides of said U-shaped frame, a stirrup secured to the fabric sheet near the inner end thereof, a cord secured to said spring roller and extended through said stirrup and then through an opening in the lower corner of one of said flaps, said cords adapted to hold said flap in either an operative or inoperative position.

1,758,940. MEANS FOR SEPARATING UNDESIRED FROM DESIRED ELECTRIC CURRENTS. EDWARD G. GAGE, New York, N. Y., assignor to Radio Corporation of America, New York, N. Y., a Corporation of Delaware. Filed Feb. 6, 1924. Serial No. 690,947. 3 Claims. (Cl. 250—10.)



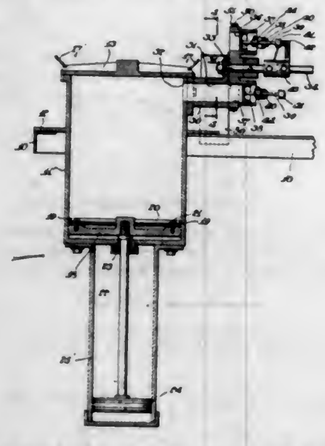
3. In radio signalling systems for simultaneously transmitting and receiving a plurality of frequencies each subject to disturbance currents, means for simultaneously modulating a plurality of transmitted frequencies, means for receiving each of the transmitted frequencies separately combined with a portion of the disturbance currents accompanying the same, means for eliminating the disturbance currents accompanying each of the independent received frequencies by opposition, means for combining received currents of each of the independent frequencies in additive relationship, and means for utilizing the resultant combined currents.

1,758,941. CITRUS-PRODUCTION DEVICE. VICTOR L. GIBSON, Los Angeles, Calif. Filed Sept. 13, 1927. Serial No. 219,359. 9 Claims. (Cl. 61—13.)



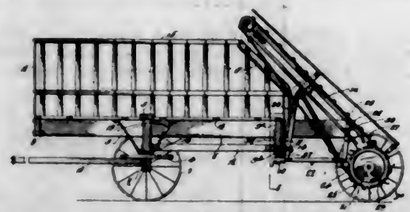
1. In an underground water system, means to heat and circulate the water therein, a branch line connected with said water system, a tank supported above the ground by said branch line, means to discharge water into said tank from said branch line, means for heating the water in said tank, a by-pass in said branch line, means to discharge water through said branch line into said tank, an overflow in said container, a perforated sump adjacent to said container and adapted for location in close proximity to the trees of an orchard, an overflow pipe connecting said overflow and said sump, and a supply tank wherein to heat said water which is to be circulated through said system, and distributed to said trees through said tanks.

1,758,942. MACHINE FOR FORMING FISH CAKES AND THE LIKE. ISRAEL GOTTLIEB and SAMUEL J. T. STOUT, Philadelphia, Pa. Filed Aug. 8, 1927. Serial No. 211,414. 3 Claims. (Cl. 107—8.)



1. In a machine of the character described a rotatable mold member having a plurality of mold openings, means for feeding material to said mold openings, each of said mold openings having a piston slidably mounted therein, each of said pistons having a rod extending rearwardly therefrom, brackets secured to the mold member in which said rods are guided, collars adjustably mounted on said rods and adapted to limit the rearward movement of the pistons, a fixed spindle on which the mold member is journaled, and a sector cam adapted to be engaged by the rear ends of said rods to force the pistons forward in the mold openings to discharge therefrom the articles formed therein, said sector cam being adjustable longitudinally and axially on said spindle.

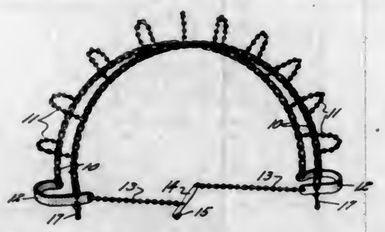
1,758,943. HAY-LOADING WAGON. FRANK L. GRAY, Shelburne Falls, Mass. Filed May 7, 1928. Serial No. 275,875. 1 Claim. (Cl. 214—65.)



An apparatus of the character set forth, comprising a wagon, steering wheels supporting the same, beams mounted upon said wagon, a rack mounted upon the beams, a bolster secured to the beams adjacent the rear ends of the latter, a loader having a supporting member, means securing the supporting member to the beams for anchoring said loader against lateral swing with respect to said wagon, said means comprising brackets provided with inwardly extending shoulders resting upon said supporting member, the bracket being secured to said securing member and also to said beams, and wheels supporting said loader.

1,758,944. NONSKID CHAIN. CARL E. GROSCH, Sturgis, S. Dak. Filed Aug. 15, 1927. Serial No. 212,888. 1 Claim. (Cl. 152—14.)

A tire chain comprising: the combination of a pair of U-shaped bands adapted to be placed around the tread portion of said tire; an inner circumferential chain secured to the rear extremity of each of said bands; an outer circumferential chain secured adjacent the outer extremity of each of said bands, said circumferential chains having a length exceeding half the circumference of said tire; tread chains spaced along and joining said circumferential chains throughout their length; legs on the outer extremities of said bands extending in a common plane toward the axis of said tire and within the circumference defined by said circumferential chains; and a tie member secured to the extremity of each of said legs and arranged to cross the outer face of said tire, said legs having a sufficient length so that any tendency of said bands to slip around said tread portion toward the outside will act to increase the tension in said tie member.

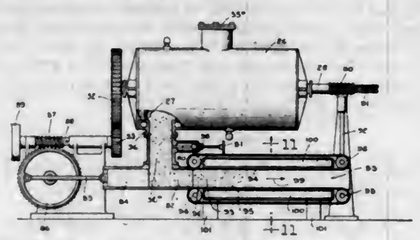


1,758,945. SCREW DRIVER. JAMES L. GRUBE, Cleveland, Ohio. Filed Nov. 6, 1928. Serial No. 317,616. 10 Claims. (Cl. 145—50.)



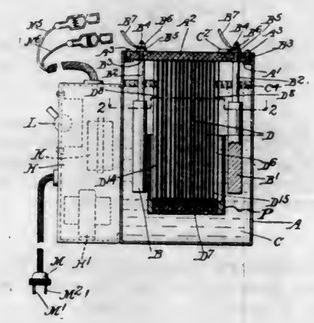
1. A screw driver bit having driving faces disposed on opposite sides thereof, said faces extending from opposite ends of the bit edge transversely of the bit and each extending the entire width of the bit lengthwise of the bit edge and terminating at substantially the other end of the bit edge in a laterally directed shoulder reinforcing the opposite driving face.

1,758,946. METHOD OF FORMING PRODUCTS FROM CORK AND THE RESULTING PRODUCT THEREOF. WILLIAM F. GRUPE, Rutherford, N. J., assignor to Armstrong Cork Company, Lancaster, Pa., a Corporation of Pennsylvania. Filed Mar. 25, 1927. Serial No. 178,336. 4 Claims. (Cl. 18—48.)



2. The method of forming cork products from cork particles which comprises subjecting the particles to steam and controlling the resultant moisture content of the particles under condition of sub-atmospheric pressure, then treating the particles with an adhesive under condition of sub-atmospheric pressure and then subjecting the particles to an elevated temperature under condition of sub-atmospheric pressure and compressing the resultant product under atmospheric pressure varying gradually from sub-atmospheric pressure to atmospheric pressure.

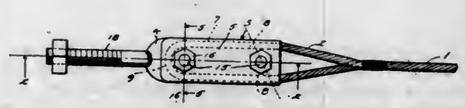
1,758,947. BATTERY ELIMINATOR. LAURENS HAMMOND, Chicago, Ill., assignor to Andrews-Hammond Corporation, Chicago, Ill., a Corporation of Illinois. Filed Sept. 7, 1926. Serial No. 134,057. 14 Claims. (Cl. 175—318.)



1. In an electrical device adapted to receive an alternating current and to deliver a direct current of generally constant flow, a rectifier and a condenser having electrodes immersed in a fluid electrolyte, and a container, adapted to contain said electrolyte and to enclose said rectifier and condenser, the electrodes of the condenser comprising a plurality of metallic plates positioned in said electrolyte, and insulating means for separating and spacing them.

10. In an electrical device adapted to receive an alternating current and to deliver a direct current of generally constant flow, a rectifier and a condenser and a body of liquid electrolyte common to the two, and means for breaking the circuit between the rectifier and the condenser when the liquid falls to a predetermined level.

1,758,948. ANCHOR-ROD CLAMP. HARRY E. HELM, Huntington, Ind. Filed Apr. 10, 1929. Serial No. 354,053. 1 Claim. (Cl. 24—135.)

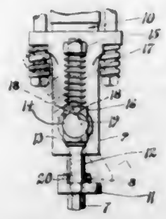


An anchor rod clamp comprising male and female sections having registering loop-shaped grooves to receive the loop of a guy wire or cable and interlocking bosses and recesses, transverse fastening bolts extending through said recesses and bosses and nuts screwing on the threaded ends of said bolts.

1,758,949. DRILL-STEEL-RETAINING DEVICE. CHARLES A. HULTQUIST, Los Angeles, Calif. Filed Feb. 16, 1925. Serial No. 9,480. 5 Claims. (Cl. 121—32.)

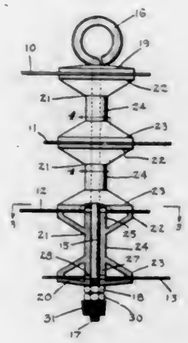
1. The combination with the barrel of a drilling machine, said barrel adapted to receive a drill steel in one end, of studs projecting laterally from opposite sides of the barrel and each provided with a tapered hole, a drill steel retainer having a portion engageable with an abutment on

a drill steel in the barrel and having arms passing through the holes from the side of the studs adjacent the drill-steel end of the barrel, said arms having relatively fixed bearings engaging the studs at said sides, bearings slidable on



the arms in engagement with the opposite sides of the studs, one of the bearings and one of the studs having parts interlocking when the retainer is in position to retain the drill steel, and springs on the arms holding the slidable bearing engaged with the studs.

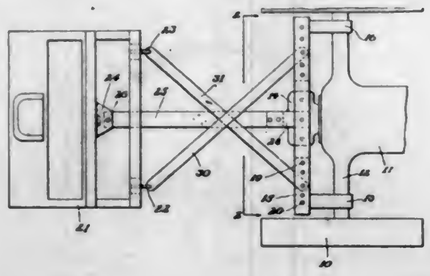
1,758,950. CHIMNEY CLEANER. WALTER P. HUNECKE, Frontenac, Minn. Filed Sept. 23, 1927. Serial No. 221,531. 4 Claims. (Cl. 15—243.)



4. A chimney cleaning device comprising a spindle, a plurality of scrapers mounted upon said spindle, a plurality of spacers disposed upon said spindle between said scrapers, means disposed between the respective spacers for interlocking the same to form a unitary structure, said spindle being rotatable relative to said unitary structure.

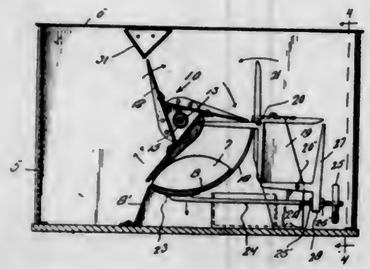
1,758,951. TRACTOR HITCH. ELMO W. JOHNSON, Hicksville, N. Y. Filed Nov. 11, 1927. Serial No. 232,521. 1 Claim. (Cl. 280—33.5.)

In combination with a tractor and trailer, a hitch for coupling the tractor and trailer comprising a perforated guide plate on the tractor, an additional plate disposed beneath the guide plate and having openings therein, straps securing the plates to the tractor, a draft bar pivotally secured to the front end of the trailer and the rear end of the tractor, eyelets at the front corners of the trailer, crossed braces pivotally connected to said eyelets extending diagonally forward and being secured to the additional plate and the guide plate in the space extending between these members, downwardly curved tongues secured to said draft bar and pivotally secured to said deformed bar, said braces being adapted to pull on one corner of the trailer and push on the opposite corner for



retaining the trailer in straight line while the tractor is turning, the perforations on said guide plate being adapted to have bolts pass therethrough and to permit adjusted positions of said braces as desired to cause the trailer to pass around a shorter turn than the tractor.

1,758,952. ANIMAL TRAP. AUSTIN ENOS KNESS, Audubon, Iowa, assignor to Clara Kness, Audubon, Iowa. Filed Nov. 19, 1927. Serial No. 234,481. 3 Claims. (Cl. 43—74.)

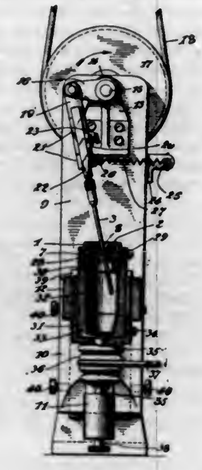


1. An animal trap comprising a housing having an entrance opening in one side wall thereof, a trip plate mounted within said housing, a rotatable unit mounted within the housing and above said plate, means tending to spin the unit in one direction, said unit including a plurality of radiating blades, a latch mechanism for holding the unit in a set position, said latch mechanism comprising a plurality of radiating arms, said arms being adapted for successive engagement with the blades of the unit, and a pawl consisting of a pair of angularly connected legs, a connection between the pawl and the trip plate whereby the pawl may be actuated to cause the disengagement of one leg thereof from one of the arms, while the other leg is adapted to act as a stop for said arm to permit only a partial revolution of the unit.

1,758,953. APPARATUS FOR POLISHING DIES. FREDERICK KRAUSE, Jersey City, N. J. Filed Feb. 3, 1928. Serial No. 251,565. 3 Claims. (Cl. 51—31.)

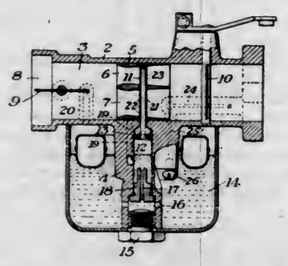
1. In a device for polishing a die, consisting of an upright standard, an adjustable mounting on the standard, a movement receiving part associated with the mounting,

a holder connected to be operated by the movement receiving part and including two principal members, one



member including a body adapted to engage a polishing rod, and the other member including a binder for securing the polishing rod to the body.

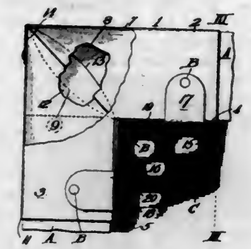
1,758,954. CARBURETOR. WILLIAM J. LINN, Pittsburgh, Pa. Filed Jan. 26, 1923. Serial No. 614,981. 5 Claims. (Cl. 261—41.)



1. In a carburetor, a carbureting chamber having a fixed air opening, a plurality of Venturi tubes in said chamber, said tubes being disposed with their axes substantially parallel and in substantially the same vertical plane, a single vertical nozzle cooperating with at least two of said Venturi tubes, said nozzle having openings into the Venturi tubes for the discharge of fuel therein-to, said nozzle having openings in one side thereof for the passage of air and openings in the opposite side thereof for the discharge of fuel, said openings being substantially parallel to the air flow through the Venturi tube.

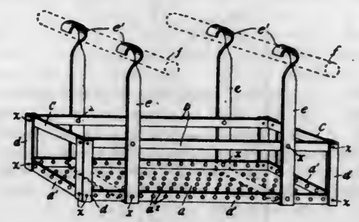
1,758,955. WINDOW SCREEN. ANDREW W. LOVEJOY, Kansas City, Mo. Filed Feb. 29, 1928. Serial No. 257,837. 9 Claims. (Cl. 156—14.)

4. A corner socket for screen frames made of a single piece of sheet metal and comprising a right-angle shaped side or face and a corresponding parallel face spaced therefrom and having overlapping arcuate ends extending diagonally from the inner angle to the outer angle of the socket; outer edge walls uniting the outer edges of said side or face portions and forming a joint at the outer corner of the socket, one of the said edge walls having an angularly-projecting lug bridging the said joint



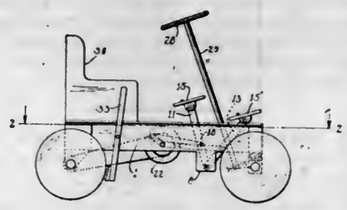
and fitting flatly upon the other edge wall, and edge walls at the inner corner of the socket paralleling the said outer edge walls.

1,758,956. CRATE FOR USE IN WEIGHTING FABRICS. EDGAR J. MASKERY, Paterson, N. J. Filed Apr. 15, 1929. Serial No. 355,130. 4 Claims. (Cl. 8—19.)



2. A crate for use in weighting fabrics comprising a foraminous substantially rectangular bottom, uprights extending up from and rigidly secured to the bottom, each upright being angular in horizontal section and receiving a corner of the bottom in its interior angle, bars secured to and connecting the uprights, the adjoining ends of each two adjoining bars being received within the interior angle of the corresponding upright, and hangers extending upwardly from and secured to the bottom at opposite sides thereof and having suspending means above the bars.

1,758,957. VEHICLE. ROBERT GASAWAY MCKAY, Indiana Harbor, Ind. Filed Aug. 24, 1928. Serial No. 301,812. 3 Claims. (Cl. 208—34.)

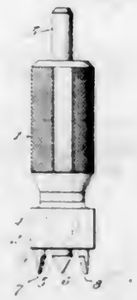


1. A device of the type described comprising a frame, an axle rotatably carried by said frame, wheels mounted upon said axle, a flywheel rotatably carried by said frame, means for operatively connecting said flywheel with said axle, pedal levers pivotally mounted upon said frame, and means connecting said levers to said flywheel at spaced-apart points whereby said levers may be moved in opposite directions for rotating said flywheel for rotating said axle and said wheels.

1,758,958. WOOD PRESERVATION. HOWARD S. MCQUAID, Lakewood, Ohio, assignor to Harold W. Walker, Edgewood, Md. Filed July 25, 1924, Serial No. 728,177. Renewed Apr. 8, 1927. 8 Claims. (Cl. 134—78.6.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928, 370 O. G., 757.)

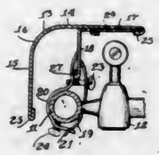
1. In a wood preservative, a solution in petroleum oil of an arsenical, organic compound, toxic to marine borers and having a solubility of 0.7 to 60 parts in 100,000 parts of sea water at 20° C.

1,758,959. LAYOUT CENTERING TOOL. HENRY W. MEESEL, Newark, N. J. Filed May 7, 1928. Serial No. 275,642. 5 Claims. (Cl. 33—191.)



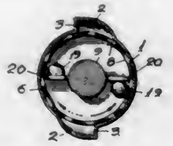
3. A centering punch comprising a shank having aligning means thereon, said aligning means comprising, a plurality of knife edges arranged in a common plane, and a marking punch carried by said shank and arranged for movement along a line normal to said common plane and in predetermined relation to the lines in said plane passing along said knife edges.

1,758,960. GAS-VALVE PROTECTOR. ABRAHAM MENDELSON, Yardville, N. J., and SAM PEARL, Brooklyn, N. Y. Filed Feb. 9, 1929. Serial No. 338,694. 8 Claims. (Cl. 126—42.)



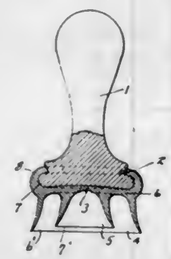
1. A gas valve protector for gas ranges and the like, comprising a cover member having flat plates connected at right angles with each other, an angle support with one arm secured on one of said flat plates, and the other arm parallel and spaced from the other of said flat plates, and a means for clamping the second mentioned arm of the angle support in various positions upon the gas supply pipe of a gas range.

1,758,961. SHADE-ROLLER LATCH. CHARLES MENDLER, San Francisco, Calif. Filed Mar. 27, 1929. Serial No. 350,298. 5 Claims. (Cl. 156—36.)



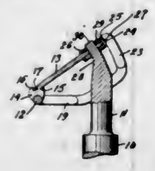
4. The combination with a shade roller provided with means for normally rotating said roller in a winding direction, of an inner shell secured to one end of the roller and having a plurality of apertures therein; an outer shell fitted over the inner shell and rotatably engaging the same, said outer shell having pockets formed in diametrically opposite positions upon the upper and lower sides thereof and being secured against rotation with either of said pockets downwardly disposed; a partition horizontally disposed centrally within the inner shell and having apertures formed therein; and a detached member loosely mounted within the shell upon each side of the partition and freely movable within the shell, the lowermost member being normally moved by gravity to engage the downwardly disposed pocket of the outer shell through an aperture of the inner shell to normally hold the roller and inner shell against rotation relative to the outer shell, said member being displaced by a rotation of the inner shell in an unwinding direction and being held out of engagement by a rapid rotation of the shell and roller in either direction and being limited in its free movement within said inner shell by the partition, the opposite detached member being normally seated in an inoperative position within one of the apertures of the partition.

1,758,962. MASSAGE DEVICE. CARL MILLER, San Francisco, Calif. Filed Apr. 30, 1928. Serial No. 274,007. 2 Claims. (Cl. 128—300.)



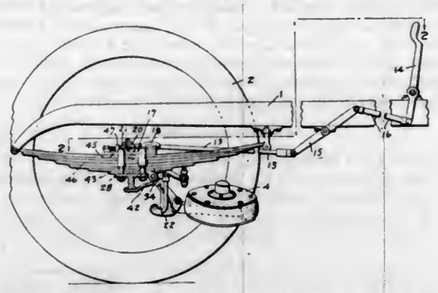
1. A massaging device comprising a handle having a concave end and an annular groove disposed adjacent to the end, a pair of vacuum cups, one being disposed within the other and both being cast from rubber, said cups having a common base and a curved flange extending therefrom, the end of said flange being received in the groove.

1,758,963. SAFETY RAZOR. JOSEPH MUROS, New York, N. Y. Filed May 18, 1928. Serial No. 278,694. 4 Claims. (Cl. 30—12.)



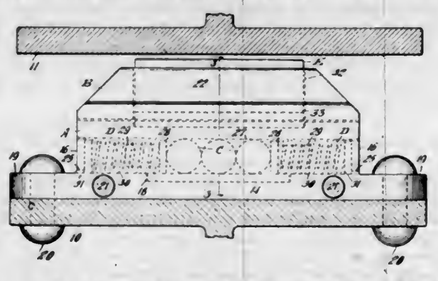
1. A safety razor comprising a handle, and a head mounted thereon made of a single piece of wire and including a straight central portion for co-operation with the cutting edge of a razor blade, means on said straight portion adapted to support the blade and for spacing its cutting edge from said straight portion, yielding terminals co-operating with the back of the blade and adapted to swing toward and away from said supporting means for yieldingly gripping the blade, and intermediate sections engaging said handle and attached to the latter, and an extension on said handle for engagement with the blade to prevent longitudinal shifting of the latter on said head.

1,758,964. PARKING DEVICE FOR MOTOR VEHICLES. JOHN MYERS, Oroville, Calif. Filed May 16, 1927. Serial No. 191,816. 14 Claims. (Cl. 180—1.)



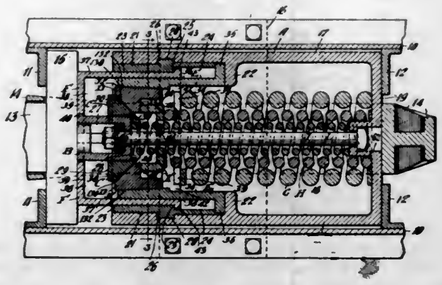
1. The combination with a vehicle having a front axle and front wheels, of traction wheels for lifting the front wheels clear of the ground, manually controlled means for moving said wheels into contact with the ground, said wheels lifting the front wheels when the back wheels of the automobile rotate forwardly, and automatic means for locking said traction wheels in either of these two positions.

1,758,965. ANTIFRICTION BEARING. JOHN F. O'CONNOR, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed Dec. 29, 1926. Serial No. 157,659. 3 Claims. (Cl. 308—226.)



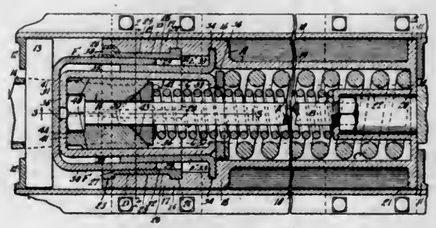
1. In an anti-friction device, in combination with the body and truck bolsters of a railway car; a two-part base member having upstanding side walls provided with overhanging flanges on their upper edges, bottom walls, and spaced end wall portions at each end; a cap provided with longitudinally extending grooves adapted for the reception of the overhanging flanges on the side walls of said base member, and each end of said cap having an extension adapted to be movably disposed between the end wall portions of said base member; anti-friction means interposed between the undersurface of said cap and said base member and adapted to movably support said cap; centering means including springs arranged at each side of said anti-friction means and adapted to be flexed by movement of the latter; a follower interposed between said springs and the extension on said cap and the end wall portions at each end of the device, said cap being interlocked with said two-part base member when the latter is secured in position, and co-operating with said base member to maintain the various parts of said device in permanently assembled relation, said cap being provided with a well in its upper surface; a bearing block removably disposed in said well and projecting above the latter and adapted to be engaged by said body bolster; and a plurality of shims disposed in said well and removably interposed between said bearing element and the bottom of said well, whereby the vertical height of the bearing face of said element and hence the overall height of said device may be adjusted from the exterior of the anti-friction device without disturbing the operative parts thereof.

1,758,966. FRICTION SHOCK-ABSORBING MECHANISM. JOHN F. O'CONNOR, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed Nov. 4, 1927. Serial No. 230,943. 8 Claims. (Cl. 213—33.)



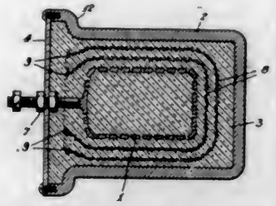
1. In a friction shock absorbing mechanism, the combination with a follower acting member and a follower relatively movable toward and away from each other; of a pressure transmitting element co-operating with the follower; a plurality of relatively stationary friction elements anchored to said member against longitudinal movement with respect thereto; a plurality of movable friction elements actuated by the follower and having frictional engagement with said member; friction shoes having frictional engagement with the stationary friction elements; wedge means co-operating with the shoes, said wedge means being actuated after a predetermined compression of the mechanism; and spring resistance means including a plurality of separate, independently acting elements respectively opposing inward movement of the pressure-transmitting element, movable friction elements and friction shoes.

1,758,967. FRICTION SHOCK-ABSORBING MECHANISM. JOHN F. O'CONNOR, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed Feb. 27, 1928. Serial No. 257,124. 5 Claims. (Cl. 213—33.)



1. In a friction shock absorbing mechanism, the combination with a friction shell having opposed side walls and top and bottom walls; of opposed removable liners for said shell, each liner having a side wall provided with an inner friction surface and spaced guiding and wearing flanges extending inwardly at right angles from said wall and protecting the top and bottom walls of the shell; a spring resistance; stationary friction plates; movable friction plates; and wedge pressure-creating means, the flanges of said liners overhanging the pressure-creating means and the movable plates.

1,758,968. ELECTRICAL CONDENSER. GREENLEAF WHITTIER PICKARD, Newton Center, Mass., assignor to Wireless Specialty Apparatus Company, Boston, Mass., a Corporation of New York. Original application filed Apr. 28, 1921, Serial No. 465,079. Divided and this application filed Apr. 28, 1923. Serial No. 635,214. 7 Claims. (Cl. 175—41.)



1. An electrical condenser structure comprising electrically conducting parts separated from one another by a substantial thickness of a solid readily liquefiable insulant, and a sheet embedded in and surrounded by said insulant in position separated from said conducting parts, said sheet being formed with holes filled with the insulant whereby the latter extends continuously between the conducting parts but is strengthened by said sheet.

1,758,969. FLOATING-LAP LADDER. PETER PIRSCH, Kenosha, Wis., assignor to Peter Pirsch and Sons Co., Kenosha, Wis., a Firm composed of Peter Pirsch, W. R. Pirsch, and Celia Pirsch Even. Filed Oct. 24, 1928. Serial No. 314,659. 3 Claims. (Cl. 228—18.)



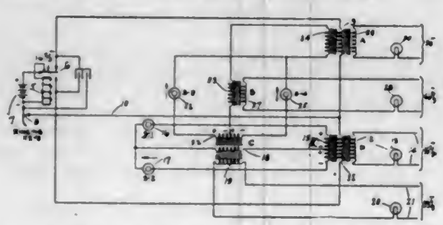
1. An extension ladder, comprising a base ladder section, a lap member slidably mounted on the upper end portion thereof, and an extension ladder section slidable within said lap member and extensible longitudinally of the base ladder section its entire length, and forming an uninterrupted climbing continuation of the base ladder section.

1,758,970. BALING PRESS. VÄINÖ HERMAN POHJONEN, Pori, Finland. Filed Sept. 14, 1927. Serial No. 219,525. 25 Claims. (Cl. 100—19.)



6. Apparatus of the character described comprising supporting rails, a carriage mounted to travel upon said rails, said carriage including a bale receiving member having an open top and open sides, compression members adapted to move into the open top and open sides of said bale receiving member to compress material therein, rollers mounted on the outer faces of said compression members, and side and overhead rails converging slightly with respect to said supporting rails, and adapted to contact with said rollers to effect movement of said compression members inwardly into said bale receiving member.

1,758,971. FREQUENCY CHANGER. WINFRED T. POWELL, Rochester, N. Y., assignor to The Stromberg-Carlson Telephone Manufacturing Company, Rochester, N. Y., a Corporation of New York. Filed July 28, 1925. Serial No. 46,674. 5 Claims. (Cl. 175—363.)



1. The method of producing a plurality of currents of predetermined frequency from a single source of current which consists in interrupting the current flow from said source in uniform time intervals, changing the interrupted current to alternating current, multiplying the frequency of said alternating current, multiplying the frequency of said multiple frequency current, heterodyning certain of said currents to produce an additional multiple frequency current, and delivering said multiple frequency currents for use.

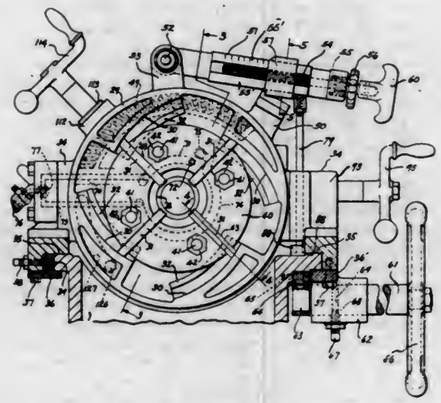
2. In a system for producing ringing currents of different frequencies for signalling polystation telephone lines, a source of current, means for cyclically varying the current from said source, means for transforming said varying current into alternating current, means for multiplying the frequency of said alternating current to produce two multiple frequency currents of different frequencies, and means for combining said multiple frequency currents to produce an additional multiple frequency current differing in frequency from the two others.

1,758,972. PIANO. CHARLES WILLIAM PRESSLEY, Hollywood, Calif. Filed Feb. 1, 1928. Serial No. 251,178. 7 Claims. (Cl. 84—176.)



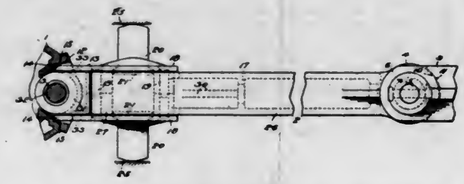
1. In a device of the character described, a pivoted foldable keyboard unit, the under surface of which is finished and adapted for display when said keyboard unit is swung upon its pivotal axes from an extended to an upright position and foldable legs to support said key-board unit.

1,758,973. PIPE-THREADING MACHINE. CHARLES RASMUSSEN, Racine, Wis., assignor of one-half to Ralph T. Ingalls, Racine, Wis. Filed Dec. 16, 1926. Serial No. 155,117. 1 Claim. (Cl. 10—96.)



In a pipe-threading machine, a die head having chaser supporting and adjusting parts supported for relative movement with respect to each other and operable upon such movement in opposite directions to impart inward and outward adjusting movements respectively to the chasers, an element carried by one of said parts, an element pivotally connected to the other of said parts, a block carried by said second-named element for adjustment with respect thereto and arranged upon pivotal movement of the latter for movement into or out of engaging relation with said first-named element to prevent or permit adjusting movement of said parts, and means for adjusting said block with respect to said second-named element.

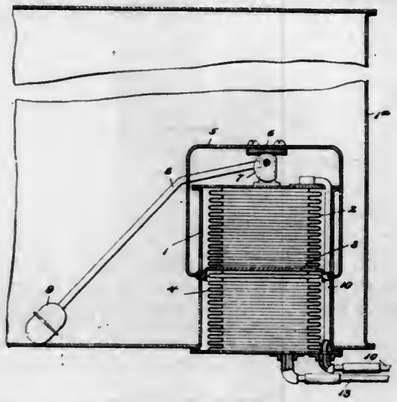
1,758,974. DRAFT APPLIANCE FOR RAILWAY VEHICLES. WILLIAM J. REGAN, Wilkinsburg, Pa., assignor to The McConway & Torley Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Aug. 29, 1928. Serial No. 302,870. 7 Claims. (Cl. 213—19.)



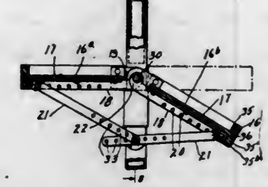
1. A draft appliance for railway cars comprising a coupler stem, a coupler head, means for pivotally connecting said head and stem, and means mounted on said stem for normally maintaining said head and stem in central position, said stem being provided at its rear end with means adapting it to be pivotally connected to a draft rigging element and being of box section adjacent its rear end and having forwardly extending spaced straps integrally united by a boss adapted to receive the said means for pivotally connecting the head and stem.

1,758,975. LIQUID-LEVEL GAUGE. DONALD H. REEVES, Dayton, Ohio. Filed Dec. 3, 1920. Serial No. 428,096. 4 Claims. (Cl. 73—82.)

1. In a liquid level gauge, the combination of a liquid reservoir having opposed bellows positioned therein, a plate between said bellows and connected to each of the same, a float in said reservoir, means for imparting movement to said plate and said bellows upon movement of said float, an indicator including opposed bellows, fluid conducting conduits connecting said first named bellows respectively with said second named bellows and visual indicating means connected to and actuated by the movement of said second named bellows.



1,758,976. DISPLAY STAND. CHARLES P. RICE, New York, N. Y. Filed July 28, 1926. Serial No. 125,359. 14 Claims. (Cl. 211—147.)



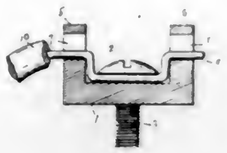
4. A display stand comprising a base member, a standard on said base member, a shelf member detachably and adjustably supported in connection with said standard, means for retaining said shelf member in predetermined positions of adjustment on said standard, and said shelf member being composed of separate shelf parts having a common pivot on said means and arranged centrally with reference to said standard and extending at opposite sides of said standard and adjustable relatively to each other on said pivot.

1,758,977. REFLECTING PRISM. THOMAS W. ROLPH, Newark, Ohio, assignor to Holophane Company, Inc., New York, N. Y., a Corporation of New York. Filed Apr. 21, 1926. Serial No. 103,446. 2 Claims. (Cl. 88—1.)



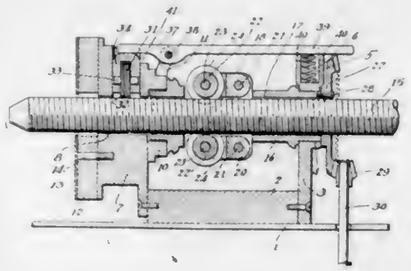
1. A reflecting prism constructed of two reflecting sides and a connecting reflecting surface extending over the top of the prism constructed to reflect a light ray at least three times in the same plane and plural lenticular refracting formations at the base of the prism opposed thereto, one at each side of its center and adapted to confine the entering light to the sides of the reflecting prism so as to increase the amount of light reflected.

1,758,978. BINDING DEVICE FOR FLEXIBLE LINEAR CONNECTIONS. LOUIS W. ROSEN, Brooklyn, N. Y. Filed Mar. 30, 1926. Serial No. 98,506. 4 Claims. (Cl. 173—259.)



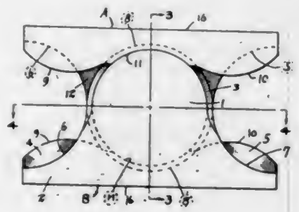
1. In a binding device for flexible linear connections, a screw positioned in a base with a flat head on said screw lowerable to said base, guide means fixed to said base and adjacent to said screw for receiving and holding such connection on a straight line beneath the screw head and beside the shank of said screw and normally above said base.

1,758,979. CARBON FEED FOR ARC LAMPS. LEOPOLD A. ROSENHAHN, Los Angeles, Calif. Filed Oct. 20, 1926. Serial No. 142,862. 12 Claims. (Cl. 176—66.)



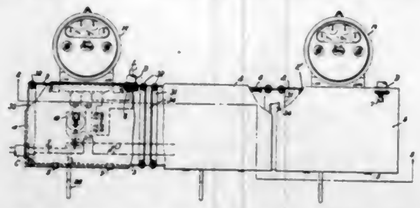
1. A carbon feed for arc lamps comprising in combination a carbon having screw threads directly on its periphery, means to rotate the carbon, and means engaging the threads to feed the carbon forwardly.

1,758,980. ADJUSTABLE FURNITURE. WAYNE F. ROSITER, San Francisco, Calif. Filed July 5, 1928. Serial No. 290,654. 5 Claims. (Cl. 101—402.)



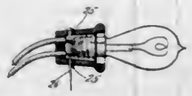
1. An adjustable furniture comprising two identical members pivotally secured to each other, the outer edges of said members being swingable into various angular positions with respect to each other.

1,758,981. ELECTRIC-METER SERVICE INSTALLATION. JOSEPH SACHS, West Hartford, Conn. Filed May 10, 1927. Serial No. 190,287. 18 Claims. (Cl. 247—2.)



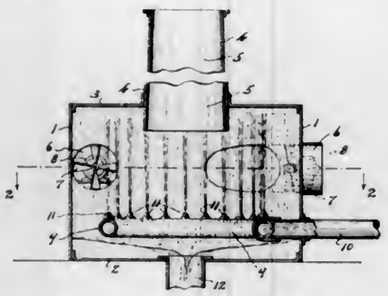
1. An open-sided cabinet for an electric appliance comprising in combination, an open-sided channel-shaped body portion leaving the sides and at least a part of the front of the cabinet open and substantially unobstructed, a circuit opening and closing appliance in the cabinet means associated with the aforesaid body portion at each side of the cabinet, and serving either for the connection of a side wall for closing the corresponding open side of the cabinet or for the connection of the cabinet with another similar cabinet in side-by-side alignment therewith, each of the said means serving in conjunction with a side wall or with another cabinet to prevent access to the enclosed appliance through the corresponding initially open end of the cabinet, an openable front cover means connected with the said body portion and movable independently of the cover means of any other connected cabinet to provide access to the enclosed appliance, and a manually operable actuating handle for the said appliance located on the exterior of the cabinet and between the planes of the open sides of the said cabinet.

1,758,982. DECORATIVE WIRING. EMIEL P. SEGHERS, Chicago, Ill. Filed July 14, 1926. Serial No. 122,392. 2 Claims. (Cl. 171—97.)



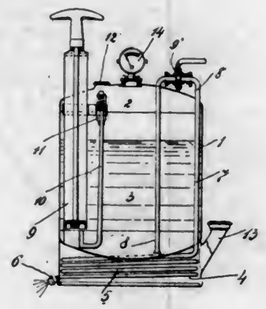
1. An electric lighting system comprising a plurality of electric lights in series, each light having a socket provided with a perforation therein to permit the insertion of a short circuiting member for shunting said light.

1,758,983. COOLING TOWER. JAMES M. SEYMOUR, Newark, N. J. Filed May 14, 1926. Serial No. 109,004. 1 Claim. (Cl. 261—79.)



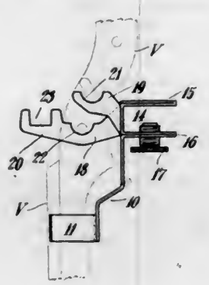
A substantially cylindrical cooling tower housing, the top of said housing having a central discharge opening to the atmosphere of substantially smaller diameter than the diameter of the housing, means for introducing air tangentially into said housing for unimpeded gyratory movement therein prior to discharge through said discharge opening, air propulsion means within said air introducing means, an annular conduit having a plurality of emission orifices, said conduit being concentric to said discharge opening and disposed at the top of said housing intermediate said discharge opening and the side walls of said housing, whereby said conduit serves to deliver a plurality of finely divided streams of medium to be cooled into contact with the gyrating air prior to axial escape of the latter upwardly through said housing and said discharge opening, and means to discharge the cooled medium from the lower end of said housing.

1,758,984. APPARATUS FOR SPRAYING HEAVY OILS. WILLY STRICKER, Hanover, Germany, assignor to Curt Richter, Hanover, Germany. Filed Aug. 7, 1928, Serial No. 298,090, and in Germany Aug. 10, 1927. 1 Claim. (Cl. 299—96.)



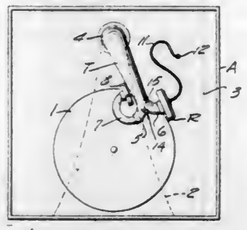
Apparatus of the class described comprising a vessel having a chamber for the reception of hot water and a chamber for the reception of oil, a pipe coil leading from the oil chamber and arranged in the hot water chamber and provided with a discharge nozzle arranged near the bottom of the vessel and air compressing apparatus arranged in the said oil chamber to discharge compressed air thereinto and having an operating handle arranged exteriorly of and above said vessel.

1,758,985. SUPPORT FOR VIOLINS, VIOLIN BOWS, AND THE LIKE. DEZSŐ SZIGETI, New York, N. Y. Filed June 20, 1927. Serial No. 199,903. 3 Claims. (Cl. 248—20.)



1. Supporting means for a violin and the like, comprising a connecting member, means to attach said connecting member to a suitable support, means associated with said connecting member for engaging the keys of a violin, and means cooperating with said key engaging means for receiving the neck of said violin.

1,758,986. SOUND-AMPLIFYING APPARATUS. ADOLPH A. THOMAS, New York, N. Y., assignor to Radio Corporation of America, New York, N. Y., a Corporation of Delaware. Filed Mar. 12, 1924. Serial No. 698,596. 7 Claims. (Cl. 179—100.12.)

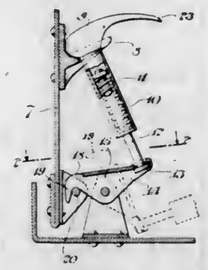


1. In a phonograph having a top board, a tone arm extending above said board and having a sound box permanently mounted thereon, a rigid branch tube projecting laterally from said tone arm at an acute angle to the longitudinal axis of said arm, so that sound waves pass easily from said branch tube into the tone arm, said branch tube being arranged entirely above said board, and a telephone receiver adapted to be connected to the free end of said branch tube without removal of the sound box and without interfering with the movements of the sound box into and out of operative position.

1,758,987. TREATMENT OF ANIMAL MATTER. DAVID THOMSON, London, England. Filed Nov. 30, 1925, Serial No. 72,394. Renewed Oct. 11, 1929. 2 Claims. (Cl. 99—11.)

2. A process for treating edible animal matter according to which the edible animal matter is first minced to as fine a degree as possible in a mincing machine, the minced product is then mixed with water and subjected to treatment in a macerating machine whereby a very finely divided product is obtained, this finely divided product is then subjected to treatment in a second macerating machine until a substantially colloidal solution is obtained which is slightly acid, the acid solution is then neutralized by the addition of sodium hydroxide or the like and finally the solution is treated in a centrifuge or by filtration for the removal of the remaining lipoids substantially as specified.

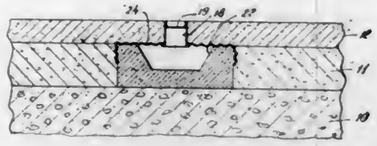
1,758,988. AUTOMOBILE HOOD CLAMP. WOLFGANG TURNWALD, Syracuse, N. Y. Filed Dec. 7, 1927. Serial No. 238,266. 5 Claims. (Cl. 292—96.)



1. In a device of the character described, the combination of upper and lower fixed latching elements and cooperating upper and lower movable latching elements, and means for exerting spring tension between said movable latching elements, the parts so arranged that the lower cooperating fixed and movable elements will come into latching engagement prior to the engagement of the upper fixed and movable latching elements.

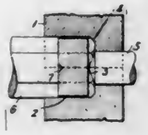
CARNEGIE LIBRARY OF ATLANTA

1,758,989. UNDERFLOOR DUCT SYSTEM AND METHOD OF MAKING. HERVEY S. WALKER, Ardmore, Pa. Filed June 21, 1926. Serial No. 117,212. 13 Claims. (Cl. 247—3.)



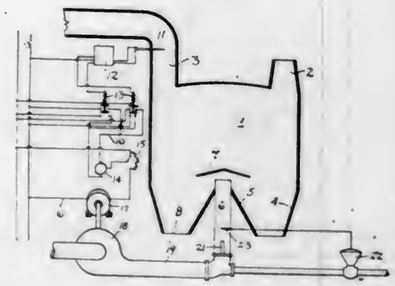
1. In a method of constructing a concealed wiring system in the floor of a building, the steps of installing a duct adapted to house electrical conductors on an intermediate level of the floor by placing a band of floor material on the said level, forming an open-top channel in the band, and closing the channel by means of a plate, mounting a plurality of similar outlet fittings in the plate at selected points, these fittings being in communication through the plate with the interior of the duct, and laying the upper layers of floor material on the said intermediate level to enclose and conceal the duct and the outlet fittings, the top surface of the floor lying substantially at the level of the tops of the outlet fittings.

1,758,990. METHOD OF MAKING NUTS. WILLIAM L. WARD, Port Chester, N. Y., assignor to Russell, Burdsall & Ward Bolt and Nut Company, Port Chester, N. Y., a Corporation of New York. Filed July 9, 1924. Serial No. 724,925. 3 Claims. (Cl. 10—86.)



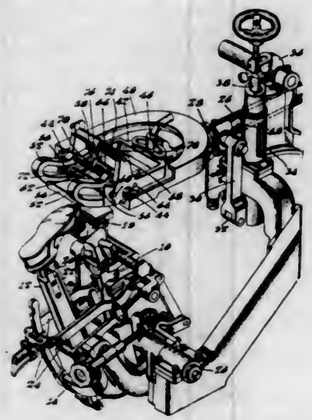
1. The method of making nuts which includes confining a blank in an open die, expanding the blank substantially to the size of the die by superficial pressure while cold and subsequently centrally indenting the bottom of the blank while the lateral portion of said bottom is unconfined and subsequently compressing the periphery.

1,758,991. METHOD OF MAKING PRODUCER GAS. ROBERT L. WILLIS, Youngstown, Ohio. Filed Sept. 17, 1924. Serial No. 738,223. 1 Claim. (Cl. 48—203.)



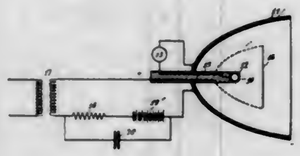
A method of making producer gas in a gas producer having a solid fuel bed, which comprises blasting the fuel bed with mixed air and steam and thereby generating producer gas, automatically controlling the quantity of air admitted by the temperature of the outgoing producer gas, and automatically controlling the quantity of steam admitted by the temperature of the mixed air and steam being admitted to the base of the fuel bed.

1,758,992. LEVELING MACHINE. ERASTUS B. WINKLEY, Lynn, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Aug. 11, 1928. Serial No. 299,055. 24 Claims. (Cl. 12—35.)



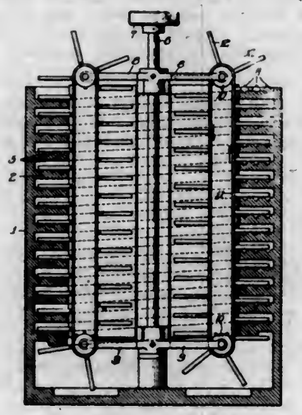
12. A leveling machine having, in combination, a shoe support, a leveling tool having a general curvature such as to adapt it to apply rolling pressure to the bottom of a shoe on said support and provided with a matrix surface formed in accordance with the desired longitudinal and lateral contours of the sole of the shoe, the tool being so mounted as to roll on the shoe in response to engagement of the shoe therewith, and spring means for determining the position of the tool with respect to movement about its axis at the time of its initial engagement with the shoe.

1,758,993. SOUND REPRODUCER. IRVING WOLFF, New York, N. Y., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Nov. 17, 1928. Serial No. 320,023. 15 Claims. (Cl. 179—113.)



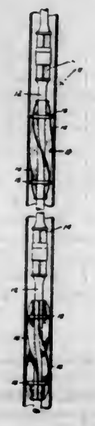
1. The method of reproducing sound which consists in providing a corona discharge between two discharge members and in applying a modulating potential to said corona discharge independently of at least one of the discharge members.

1,758,994. CONVEYER. LUCIEN I. YEOMANS, Chicago, Ill., assignor to Lucien I. Yeomans, Incorporated, Chicago, Ill., a Corporation of Illinois. Filed Oct. 14, 1929. Serial No. 399,456. 5 Claims. (Cl. 198—136.)



1. A conveyer comprising a stationary helical support and propelling means comprising an endless series of members arranged to revolve within the supporting structure as a unit and simultaneously travel in a path parallel to the axis of the helical support.

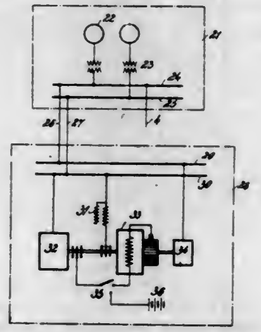
1,758,995. TUBING CLEANER AND PROTECTOR. JOHN C. ARMSTRONG, Fillmore, and JOSEPH E. WALLIS, Los Angeles, Calif. Filed May 18, 1928. Serial No. 278,758. 7 Claims. (Cl. 166—18.)



1. For use in combination with well tubing and sucker rods, a tubing cleaner device which comprises: bearing members rotatably mounted upon said sucker rods; and radially extending blade members rigidly interposed between said bearing members, said bearing members being provided with fluid circulating apertures.

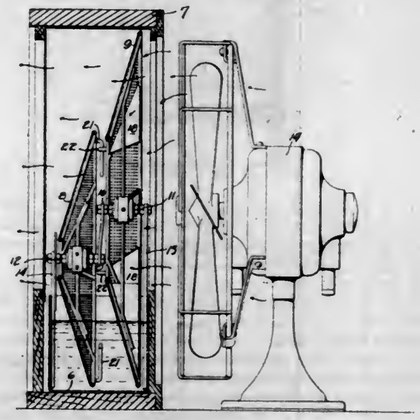
1,758,996. METHOD OF TESTING AND STARTING HIGH-TENSION LINES. KARL BAUDISCH, Berlin-Wilmersdorf, Germany, assignor to Siemensschuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany, a Corporation of Germany. Filed Sept. 24, 1928, Serial No. 307,894, and in Germany Sept. 29, 1927. 8 Claims. (Cl. 172—237.)

1. Apparatus for testing and starting high-tension lines, comprising in combination, a rotor excited asynchronous generator adapted to supply wattless current to the line to be tested, a three-phase current exciter for exciting the rotor of said generator, a second alternating current network, an adjustable voltage transformer adapted to energize said exciter and connected to said second alternating current network, and an auxiliary motor mechanically coupled with said generator and said exciter and connected to said second alternating current network.



2. In a system for testing and starting high tension lines, embodying an asynchronous generator for delivering wattless current from its stator into the line, and being driven by an auxiliary motor, and an outside excited three phase alternating current exciter machine coupled with the generator for exciting the generator rotor; the method of testing and starting the line consisting in first running the generator up to full speed, and then gradually exciting the generator rotor from said exciter machine to full voltage.

1,758,997. AIR PURIFIER AND COOLER. FRANK T. BOGARD, Oakland, Calif. Filed Dec. 15, 1928. Serial No. 326,247. 10 Claims. (Cl. 261—92.)

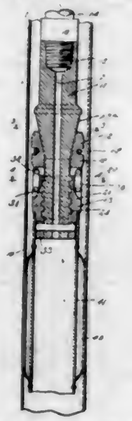


1. In an apparatus of the character described, a receptacle arranged to contain a liquid, a plurality of screen discs mounted to rotate with the lower portions thereof immersed in the liquid, driving connections to rotate one disc at a greater speed than the other, and means to set up a current of air through said discs during rotation thereof.

1,758,998. HOLDING TOOL FOR USE IN WELLS. CHARLES LEONARD BREWSTER and WILLIAM PHILIP HENRY, Huntington Beach, Calif. Filed Dec. 14, 1927. Serial No. 240,064. 6 Claims. (Cl. 294—86.)

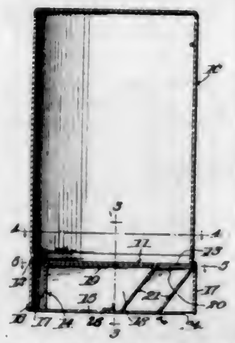
1. A tool for engaging a well casing including a body adapted to be rotated, slips carried by the body operable to

engage the casing, a member connected with the body through screw threads and operable through rotation of the body relative to the said member to actuate the slips



outwardly, and means in connection with said member to hold it against rotation, the body having a longitudinal opening for circulation.

1,758,999. DISPENSING DEVICE. ELLIOTT CARNS, New York, N. Y. Filed Aug. 6, 1929. Serial No. 383,880. 5 Claims. (Cl. 221—104.)



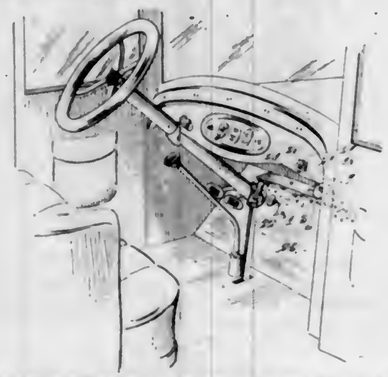
1. A dispensing device of the class described, having a body provided with spaced walls, a dispensing member movable between said walls and having an inclined measuring space, the innermost wall having an eccentric opening adapted to register with said space in the closed position of the dispensing member, and the other wall closing said space in the last mentioned position, said dispensing member being movable outwardly to a position where said space may discharge, said dispensing member having a wall at its top rearwardly of said space to close the eccentric opening when the dispensing member is projected.

1,759,000. RADIO SIGNALING SYSTEM. ARTHUR G. CHAPMAN, Upper Montclair, N. J., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Nov. 23, 1927. Serial No. 235,303. 6 Claims. (Cl. 250—11.)



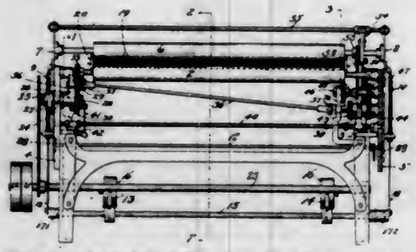
5. In a wave antenna system for directional signaling the combination with an antenna comprising a plurality of sections whose longitudinal axes lie approximately in the same straight line, of means connected with the sections of the said antenna to render each section a collector of radiant energy and to join the adjacent sections so that each acts as a transmission line for the conveyance of currents resulting from the energy collected by the preceding one, and a receiving device upon which the currents of all sections are combinedly impressed.

1,759,001. HEAT DISTRIBUTOR. CHESTER CHERRY, Canal Winchester, and GEORGE A. FROGGATT, Columbus, Ohio. Filed June 19, 1929. Serial No. 372,166. 10 Claims. (Cl. 98—2.)



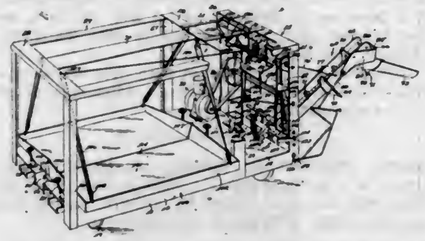
1. In heat distributors, a hollow elongated body having a front wall with ventilator openings and a valve casing intermediate the ends of said body, said valve casing having two ports, one for passing hot air toward one end of said elongated body and the other for passing hot air toward the other end of said elongated body, said valve casing having a neck for coupling to the duct of an air heater, a valve in said valve casing having ports for each of said valve casing ports and arranged to open one or both of said valve casing ports at a time, or to close both said ports at a time accordingly as said valve is in one position or another, and means by which said valve may be turned.

1,759,002. SPOOL WINDER. CHARLES H. COLLINS, deceased, Amsterdam, N. Y., by Mary Collins, executrix, Cranesville, N. Y., and ERNEST D. JANSEN, Albany, N. Y.; Agnese C. Jansen, administratrix of said Ernest D. Jansen, deceased; assignors to Collins Loom Works, Inc., Amsterdam, N. Y., a Corporation of New York. Filed Aug. 15, 1928. Serial No. 299,774. 6 Claims. (Cl. 28—55.5.)



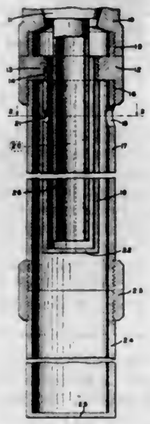
1. In a spool winder of the class described: three parallel rollers adapted to fit between the heads of the spools to be wound, one of them yieldingly mounted; means for positively driving all of said rollers in the same direction, one of them at a peripheral speed different from that of the others; and means for exerting a substantially constant pressure in opposition to the normal yielding movement of said yieldingly mounted roller, during the winding operation.

1,759,003. CONVEYER FOR MIXERS. FRANK A. DAVIDSON, Pasadena, Calif. Filed Oct. 1, 1927. Serial No. 223,319. 12 Claims. (Cl. 214—83.)



1. In the art described, the combination of a platform having a longitudinal central trough, an endless conveyer having its upper run operating horizontally in said trough, bins pivotally mounted on the platform on each side of the trough, a frame structure above the platform, a cable and pulley block connection between the frame and the bins, a rotatable shaft having drums loose thereon on which said cables are wound, means to actuate said shaft, clutches to engage and disengage the drums and the shafts, and means to operate the conveyer.

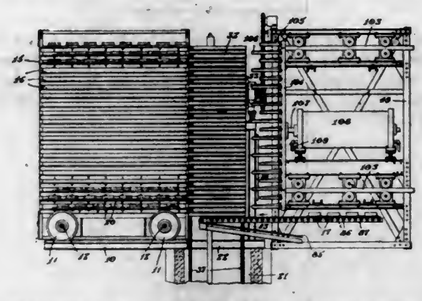
1,759,004. GAS ANCHOR AND SAND SEPARATOR. WILLIAM J. DUNLAP, Long Beach, Calif. Filed Mar. 13, 1929. Serial No. 346,591. 5 Claims. (Cl. 103—220.)



1. A gas anchor and sand separator comprising an outer tube adapted to be connected to the bottom of a working barrel, an intermediate tube also adapted to be suspended from the working barrel within the outer tube and an inner tube adapted to be suspended from a standing valve within the intermediate tube, said intermediate tube and outer tube having closed bottoms, there being an entrance to the outer tube adjacent its top and an entrance to the intermediate tube adjacent its top arranged on the opposite side of the intermediate tube from the entrance to the outer tube, the entrance to the inner tube being adjacent its bottom, and means forming a partition connecting the intermediate and outer tubes from near the top of the intermediate tube to near its bottom.

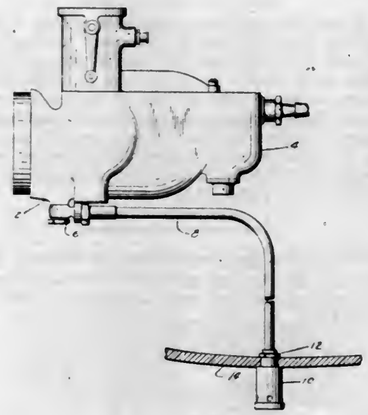
1,759,005. LOADING STATION AND DRIER CAR. CLAUD E. FULLER, New York, N. Y., assignor to New York Brick Handling Corporation, New York, N. Y., a Corporation of New York. Filed Sept. 20, 1928. Serial No. 307,251. 3 Claims. (Cl. 214—41.)

1. In a device of the kind described, the combination with a carrier, operating means therefor, a device for delivering a plurality of groups of articles in succession to the carrier, means operable by each group of articles as they are delivered to the carrier for operating the control means for such carrier to move the same vetically through a predetermined distance, reciprocating means movable in one direction for simultaneously removing all



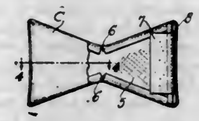
of the groups of articles from the carrier, and movable in the other direction out of association with the carrier, and means operable by the reciprocating means on the return thereof out of association with the carrier for disengaging the carrier operating means and permitting the return of the carrier to normal position.

1,759,006. AUTOMATIC VALVE. DAVID GREGG, Dayton, Ohio. Filed Apr. 11, 1923. Serial No. 631,334. 2 Claims. (Cl. 123—119.)



1. A fuel system for an aircraft engine, fuel atomizing means in the fuselage of the aircraft, means exterior of the fuselage and in connection with the atomizing means responsive to variations in atmospheric pressure for draining the fuel atomizing means.

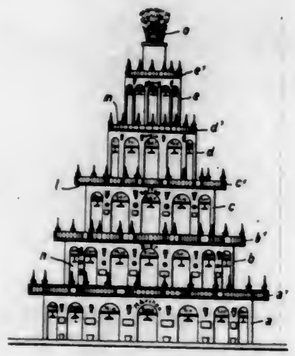
1,759,007. NECKTIE STRUCTURE. MAX HALPERN, Bronx, and WILLIAM MAYER, Brooklyn, N. Y. Filed Feb. 16, 1929. Serial No. 340,440. 3 Claims. (Cl. 2—151.)



1. In a bow tie, a pair of front and a pair of rear interconnected wings having means to enable them to be

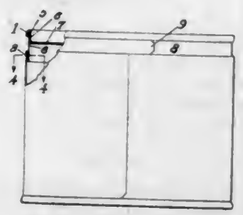
attached to a collar, said wings composed of inner and outer plies of material, a reinforcing lining between said plies and a strip of elastic secured between its ends to the lining at the end of each wing portion of the tie, each strip being turned inwardly between its ends so that said ends will exert outward pressure upon the wing plies.

1,759,008. ROLLER TERRACE TOWER AS PLACE OF AMUSEMENT AND RECREATION. ADOLF HEINZE, Coswig Anhalt, Germany. Filed June 2, 1927, Serial No. 196,121, and in Germany Dec. 29, 1926. 3 Claims. (Cl. 272—2.)



1. A towerlike building, comprising stories of different size which form a series of stationary terraces, circular rails secured to the terraces, rotary annular platforms provided with wheels which run on the said rails, said platforms being of different size to correspond with the terraces which support them and each platform being arranged to encircle the story which forms the next terrace above it, and annular observation gangways arranged above the level of the said terraces and supported by them and encircling the said platforms.

1,759,009. CAN. HENRY HEITLAGE, St. Bernard, Ohio, assignor to The Procter & Gamble Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Feb. 2, 1929. Serial No. 337,070. 8 Claims. (Cl. 220—54.)

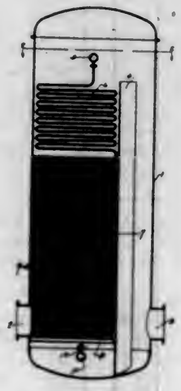


1. A blank for a can with a tearing strip, the removal of which releases the lid, comprising a blank from which the can body is formed, said blank having a band at one edge for crimping to retain the can lid, a band, one edge of which lies immediately adjacent said crimping band weakened to provide a tearing strip, and a band, one edge of which lies adjacent the opposite edge of said tearing strip for providing a bent reinforcing band of three layers and the meeting edges of the portion for forming the reinforcing band shaped so as to form a four ply layer with three overlapping joints and at least two butt joints.

1,759,010. PROCESS OF DYEING ACETATE SILK. RONALD SMITH HORSFALL, LESLIE GORDON LAWRIE, and JAMES ALEXANDER RUSSELL HENDERSON, Manchester, England, assignors to British Dyestuffs Corporation Limited, Manchester, England. Filed May 19, 1926, Serial No. 110,264, and in Great Britain May 29, 1925. 5 Claims. (Cl. 8—5.2.)

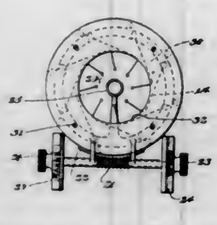
2. Cellulose acetate fiber dyed with dyes of the type of ordinary acid dyestuffs but having a sulphonamide group in lieu of a sulphonic acid group.

1,759,011. REHEATER. ANDRÉ HUET, Paris, France, assignor to The Superheater Company, New York, N. Y. Filed Nov. 30, 1928, Serial No. 322,870, and in France Apr. 30, 1928. 9 Claims. (Cl. 257—220.)



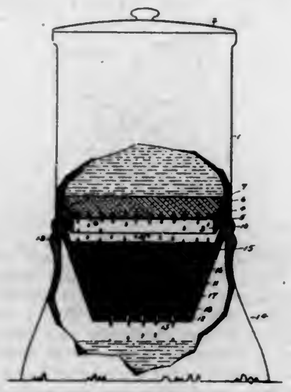
1. In apparatus of the class described, the combination of a shell, an inlet to and an outlet from said shell, whereby steam to be superheated may be circulated through the shell, a conduit extending through but not opening into the shell, means to supply superheated steam of higher pressure than the steam flowing through the shell to the inlet of the conduit, and means to remove condensate from its outlet, the conformation of said conduit being such that adjacent to its inlet the steam flow through it is rapid while further on the steam is substantially stagnant.

1,759,012. RANGE FINDER AND GUN SIGHT. ROBERT KAUCH and CHARLES L. PAULUS, Dayton, Ohio. Filed Mar. 18, 1924. Serial No. 700,098. 8 Claims. (Cl. 33—53.)



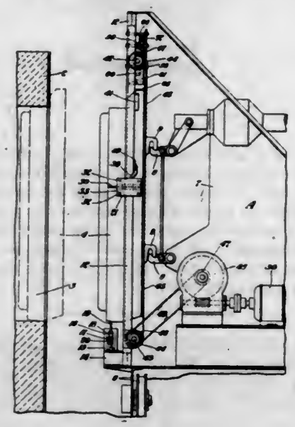
6. In an adjustable gun sight, the combination with a fixed sight device thereon of a support, a plurality of wire-like vanes mounted on said support and spaced about a circumference concentric with said sight, a gear operated means for adjusting said vanes together in equal degrees toward and away from said fixed sight to space the inner ends of said vanes to form approximate circles of different diameters, and index means associated with said vanes for effecting an adjustment of said vanes in accordance with a known speed of an objective.

1,759,013. FILTER. CARL B. LANCASTER, Alameda, Calif. Filed Aug. 27, 1928. Serial No. 302,199. 3 Claims. (Cl. 210—105.)



2. A filter comprising a porous horizontal plate, said plate having upon the under side thereof a series of shallow circular grooves to insure discharge of the filtered liquid from a plurality of points throughout the area of said filter.

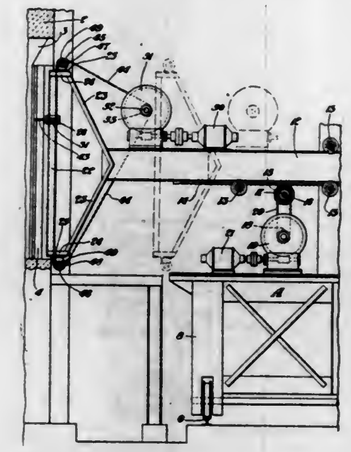
1,759,014. DOOR-CLEANING APPARATUS. JAMES MCINTOSH, Pittsburgh, Pa., assignor to The Koppers Company, a Corporation of Delaware. Filed June 15, 1928. Serial No. 285,756. 7 Claims. (Cl. 15—93.)



1. In a door cleaning mechanism a frame having an outline substantially the same as the outline of the door to be cleaned, scraper members mounted on and movable relative to the side members of said frame, at least one other scraper member carried by and movable transversely of said frame, and means for moving said scrapers relative to said frame.

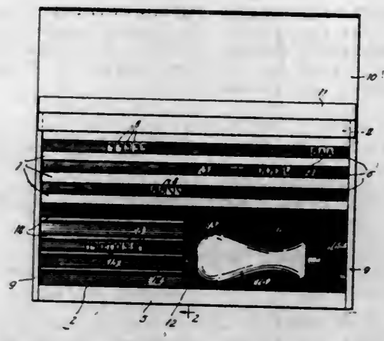
1,759,015. DOORFRAME-CLEANING APPARATUS. JAMES MCINTOSH, Pittsburgh, Pa., assignor to The Koppers Company, a Corporation of Delaware. Filed June 28, 1928. Serial No. 288,832. 7 Claims. (Cl. 15—93.)

1. A door-frame cleaning apparatus, comprising a horizontally reciprocable ram, a vertically disposed head-member fixedly secured to the outer end of said ram, a guide-block slidably mounted for vertical movement on said head, a pair of yoke members mounted horizontally



on said block and slidable relative thereto, means for yieldably forcing said yoke members outwardly from said block, scraper members carried by said yoke members, and means for moving said block vertically on said head.

1,759,016. PRINTING KIT. LOUIS MELIND, Chicago, Ill. Filed Feb. 13, 1929. Serial No. 339,604. 5 Claims. (Cl. 276—44.)

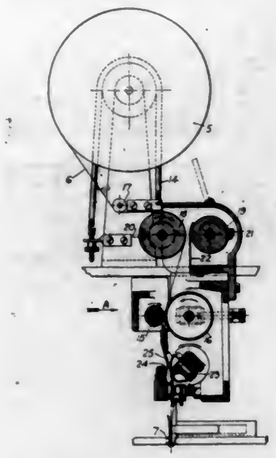


1. In a printing kit, a case comprising a one piece block provided with a forward trough of predetermined cross section, said block being of reduced thickness between said trough and its rear edge forming a shoulder of reduced height between the trough and the rear of the block, the shoulder being provided with spaced grooves in its upper face and of less depth than said trough.

1,759,017. PROCESS OF RECLAIMING RUBBER. GEORGE J. MILLER, Douglas, Ariz. Filed Mar. 19, 1928. Serial No. 262,990. 3 Claims. (Cl. 18—52.)

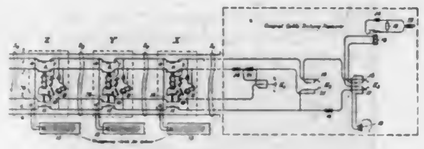
1. The treatment of rubber compound and cotton to remove the cotton by solution in acidified zinc chloride solution, in a closed digester, under the influence of heat and pressure, and the subsequent washing of the remaining rubber by digesting it in a closed digester under the influence of heat and pressure.

1,759,018. CUTTING MECHANISM. WALTER EVERETT MOLINS, Deptford, London, England. Filed Oct. 28, 1927, Serial No. 229,479, and in Great Britain Nov. 8, 1926. 7 Claims. (Cl. 164—68.)



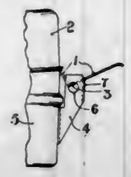
1. A device for use on a wrapping machine of the type wherein a batch of cigarettes or like articles is enveloped in a wrapper comprising means for feeding a wrapping web, means for forming an arc shaped series of perforations in the central portion of the moving web, and means for thereafter slitting said web from each edge thereof to the nearest perforation.

1,759,019. ELECTRICAL TESTING SYSTEM. JOHN B. MURPHY, Los Angeles, Calif., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Jan. 13, 1926. Serial No. 81,096. 5 Claims. (Cl. 175—183.)



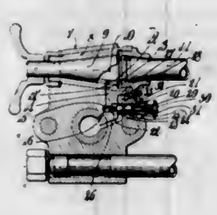
2. In an arrangement for determining the condition of insulation of an electrical transmission system, the combination with a cable comprising a plurality of sections each containing a plurality of insulated conductors enclosed in a sheath, the conductors of adjacent sections being spliced together, a wrapping cloth to bind together the spliced conductors at each splicing point, the said cloth having a plurality of test wires woven therein, the said test wires being connected with certain conductors in said cable, a plurality of relays at definite intervals along the said cable each having its armatures and contacts so connected that the said certain conductors will normally be rendered continuous throughout the said cable, a source of potential and switching means connected with the windings of the said relays to open the testing circuit of the said test wires at each testing point to determine whether the low insulation exists between the point of opening and the end of the cable at which the signaling means is located, and then to close the said testing circuit through the contacts and armatures of the said relay to the next testing point.

1,759,020. POLISH AND LIKE TIN. WILLIAM HENRY NORNABLE, Leeds, England. Filed Jan. 26, 1929, Serial No. 335,358, and in Great Britain Feb. 6, 1928. 4 Claims. (Cl. 220—43.)



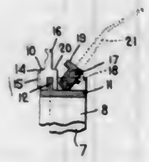
4. A lid remover of the class described comprising a support, a lever having a lid engaging portion and a handle portion, said portions being angularly disposed relative to each other, means providing a floating fulcrum connection between said lever and said support at the juncture of said portions, and means on said support providing an auxiliary fulcrum for said lever when said handle portion is moved outwardly relative to the support.

1,759,021. FEED MECHANISM. CHARLES F. OSGOOD, Claremont, N. H., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed July 1, 1921. Serial No. 481,977. 4 Claims. (Cl. 121—9.)



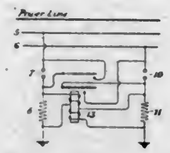
1. In a rock drilling mechanism, the combination with a drilling motor, pressure fluid actuated feeding means therefor, and a pressure fluid supply for said motor and feeding means, of controlling means for said feeding means including a manually operable valve controlling the exhaust of pressure fluid from said feeding means, and a cooperating pressure fluid controlled valve automatically controlling said exhaust.

1,759,022. TYPE CHASE. FRED A. PUTNAM, Keene, N. H., assignor to Markem Machine Company, Boston, Mass., a Corporation of Massachusetts. Filed Apr. 23, 1927. Serial No. 185,987. 7 Claims. (Cl. 101—381.)



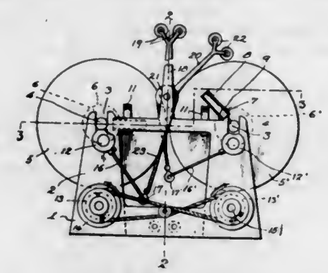
1. A type holder comprising a type-holding frame having an exterior type-holding rib, type members each having a forked body portion to fit over the rib, and a locking bar pivoted to the frame to turn about an axis parallel to the rib and when in operative position engaging the type members and locking them to the rib.

1,759,023. ELECTRICAL PROTECTIVE DEVICE. AUGUST H. SCHIRMER, Newark, N. J., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Aug. 16, 1927. Serial No. 213,269. 2 Claims. (Cl. 175—214.)



1. In an electrical protective system, the combination with a telephone line circuit to be protected from voltages set up by an extraneous source, an air gap protective device connected with the line circuit and adjusted to operate at a predetermined voltage, a grounded impedance permanently in series with the protective device, and a relay connected with the line circuit in shunt of said impedance operated by the potential drop across said impedance caused by imposed voltages on the line circuit when exceeding any desired magnitude, said relay also short circuiting the protective device during the potential drop across said impedance, and said relay and said impedance being connected from the line circuit to ground through a path in short circuit of said protective device during the entire interval the excess voltage is on the line circuit to prevent excessive heating of the winding of the relay and the protective device and the permanent grounding of the protective device.

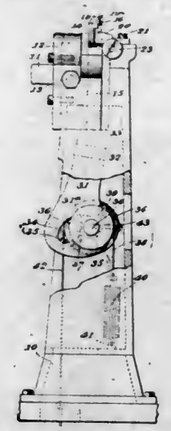
1,759,024. FILM WINDER. CHRISTIAN SELBACH, Kitano-Machi, Kobe, Japan. Filed Dec. 20, 1926, Serial No. 156,027, and in Japan June 5, 1926. 2 Claims. (Cl. 88—18.7.)



1. A film-winder comprising a plurality of rotatable shafts, a plurality of film cases respectively carried thereby, a plurality of rotating wheels for driving said film cases respectively, cam members in co-operation with said shafts respectively, for raising and lowering the shafts to operate said film cases to engage and disengage said wheels alternatively, means for connecting said cam members with each other, said means comprising rods with roller, a pulley, a flexible connecting medium over said pulley, a rocking lever attached to the frame and carrying said pulley, all adapted to be acted upon by the film after every half of the performance of the film projection.

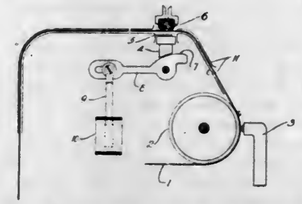
1,759,025. MITER-CUTTING MACHINE FOR PATTERN BINDING. HOLTON J. SUTHERLAND, JOHN H. SUTHERLAND, and ALFRED W. SUTHERLAND, Swampscott, Mass. Filed Jan. 12, 1929. Serial No. 332,110. 7 Claims. (Cl. 164—50.)

1. A machine for mitering channeled binding strips comprising a reciprocable punch provided with opposed cutting portions, means for supporting a binding strip including a die cooperating with said punch, and means for reciprocating said punch in a manner whereby one of said cutting portions will be moved to miter one of the



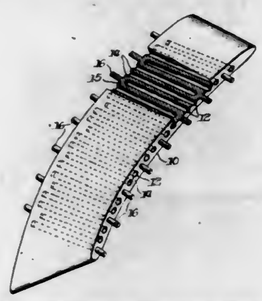
flanges from the outer to the inner side and the other cutter will be moved to miter the other flange from the outer to the inner side.

1,759,026. TELEGRAPH APPARATUS. WARREN S. TERRIBERRY, San Leandro, Calif., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Nov. 15, 1927. Serial No. 233,411. 6 Claims. (Cl. 178—1.)



1. In a printing telegraph system in combination a message recording means, and perforating and depositing means associated therewith for making contact with and obliterating a received message.

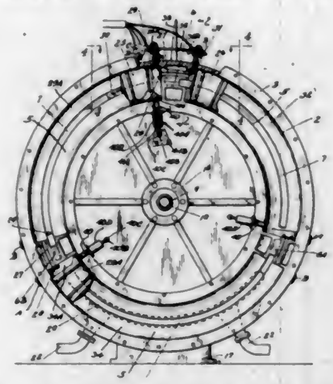
1,759,027. BLADE FOR ROTARY BLOWERS AND COMPRESSORS. WILLEM VAN RIJSWIJK, Baden, Switzerland, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland, a Joint-Stock Company of Switzerland. Filed Aug. 22, 1927, Serial No. 214,597, and in Germany Aug. 25, 1926. 1 Claim. (Cl. 230—134.)



In blading construction for rotary fluid machines, an elongated blade, said blade being provided with adjacent

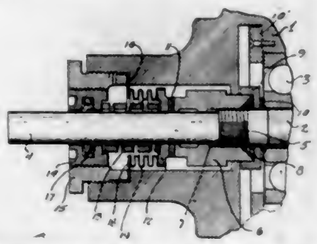
passages extending obliquely with respect to its longitudinal axis and each being open at one end and closed at the other end by the material of said blade, the closed ends of said passages being disposed at opposite edges of said blade, and blade-retaining elements associated with said blade and disposed respectively adjacent the closed ends of said passages and substantially on an imaginary line perpendicular to the longitudinal axis of said blade.

1,759,028. ROTARY INTERNAL-COMBUSTION ENGINE. JOSEPH D. WINANS, West Timber, Oreg. Filed Dec. 28, 1926. Serial No. 157,498. 2 Claims. (Cl. 123—11.)



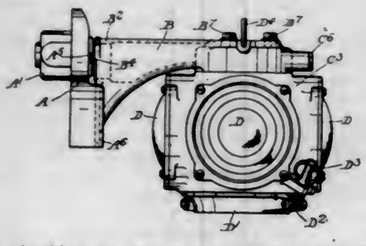
1. In a rotary internal combustion engine, the combination of a rotary casing provided with a plurality of arcuate cylinders separated by diaphragms constituting cylinder heads, a piston to travel in each cylinder, means to exhaust and feed charges to said cylinder successively, means cooperating with the feed means for supplying a fuel charge in each cylinder forward and rearward of its piston, means for firing the fuel charge in the two chambers, simultaneously, means for holding said pistons stationary during the firing of the forward fuel charge, thereby causing the diaphragm ahead of each piston to recede and impart rotation to said casing, means for releasing the holding means when the diaphragm to the rear of each successive piston has moved adjacent thereto, means for firing the charge to the rear of each successive piston subsequent to firing the charge ahead thereof whereby each piston is caused to move to the forward end of its cylinder, means for holding each piston in the forward end of its cylinder, and means for releasing the last mentioned holding means operating coincident with the firing of the forward fuel charge.

1,759,029. STUFFING-BOX PACKING. WILLIAM WISHART, Clinton, Iowa, assignor to Climax Engineering Company, Clinton, Iowa, a Corporation of Delaware. Filed Jan. 6, 1926. Serial No. 79,670. 2 Claims. (Cl. 286—11.)



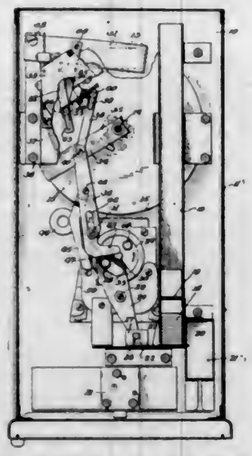
1. The combination with a shaft and a bearing housing therefor, of a packing unit engaged in said bearing housing around said shaft and comprising a floating washer, a sleeve in threaded engagement with the shaft positioned adjacent one side thereof, a hardened steel ring positioned adjacent the other side thereof, a coiled spring engaged around said shaft contacting said ring to hold the same in frictional engagement with said floating washer, a corrugated sheath enveloping said coiled spring with one end thereof sealed to said ring, a ring disk engaged in said housing to which the outer end of said corrugated sheath is hermetically sealed, a retaining cap removably threaded into said housing for holding said ring disk in position, a plug sleeve adjustably engaged in said retaining cap adapted to engage against the outer end of said coiled spring, and a packing ring carried by said plug sleeve for frictionally contacting the surface of the shaft extension.

1,759,030. CLASSIFICATION LAMP. WILLIAM A. WULLE, Chicago, Ill., assignor to The Pyle-National Company, Chicago, Ill., a Corporation of New Jersey. Filed Feb. 4, 1928. Serial No. 251,872. 5 Claims. (Cl. 240—24.)



1. A classification lamp for locomotives and the like comprising a cylindrically socketed bracket, a light housing having an interiorly flanged cylindrical extension rotatably mounted in said socket, a light supporting plate held in position in the bottom of the socket, peripherally flanged to overlie the flange on the extension and means interposed between the extension and the bracket for yieldingly locking the extension against rotation in the socket.

1,759,031. DISPLAY DEVICE FOR VENDING MACHINES. ALFRED D. ANTOINE, Chicago, and ALBERT E. GEBERT, Wilmette, Ill., assignors to Advance Machine Company, Chicago, Ill., a Corporation of Illinois. Filed June 2, 1928. Serial No. 282,387. 21 Claims. (Cl. 40—71.)



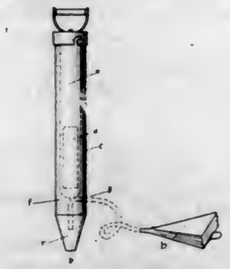
1. A machine of the character described embodying a sight opening, a rotatable member movable past said opening and containing matter to be exhibited through said opening, means for rotating the said member, a shutter for closing said opening to a view of said matter therethrough, check controlled means for controlling the operation of said shutter in one direction, and means operating to control and time the return movement of the shutter.

1,759,032. AIRPLANE. FRANK BAUER, Williamsville, N. Y. Filed Feb. 18, 1928. Serial No. 255,368. 12 Claims. (Cl. 244—29.)



1. In an airplane a wing that has small rectangular ailerons in the forward part of said wing these ailerons being located about one width of such aileron back from the front edge of the wing, these ailerons when inactive are placed within the upper and lower outside lines of the wing camber, and these ailerons are inactive when the airplane is flying forward on an even keel, and these ailerons moving automatically when the forward edge of the wing is forced downward the up-rushing air flow forcing these rectangular ailerons out of the wing proper to a short distance from the wing, these ailerons are held to the wing by means of a rod, this rod being fastened to the front edge of the wing and being movable upwardly through a slot in the wing, this slot running from the wing's front edge to the front edge of the ailerons, this rod being fastened to the ailerons halfway between the ends of each aileron and halfway back from the front edge of each aileron the fastening joint being such that the ailerons can pivot forward and backward and the ailerons when in use are automatically held above the wing and at a right angle to up-rushing flow of air.

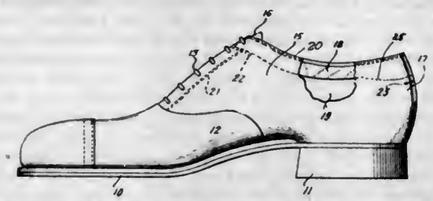
1,759,033. SMOKE DEVICE. WALTER BECK, Frankfort-on-the-Main, Germany, assignor to Deutsche Gold & Silber Scheideanstalt, vormals Roessler, Frankfort-on-the-Main, Germany, a Corporation. Filed Feb. 24, 1926. Serial No. 90,327, and in Germany Feb. 26, 1925. 4 Claims. (Cl. 43—124.)



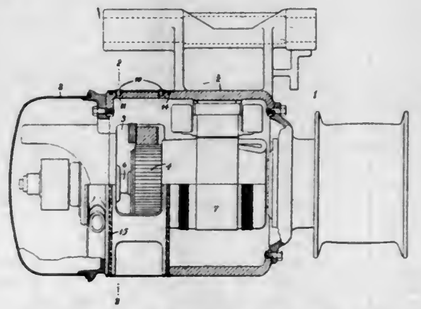
1. A process for combating noxious animals in underground passages which consists in generating a gas mixture containing hydrogen sulfide by the ignition of combustible cartridges without an external supply of air, and adding air to the fully developed gases at a point remote from the point of combustion so that the oxygen of the air will not react with the burning materials or with the evolved gases.

1,759,034. SHOE CONSTRUCTION. ROBERT S. BLAIR, Stamford, Conn. Filed Apr. 13, 1927. Serial No. 183,315. 12 Claims. (Cl. 36—58.5.)

1. In shoe construction, in combination, a low shoe provided with a front opening, a pair of resilient parts respectively mounted at each side of the shoe along its upper edge and positioned between the lining and outer member of the shoe, said parts extending in a forward direction first converging and then diverging for a substantial distance to provide a concave resilient member, and means adapted to draw together the opening in said shoe and thereby press said outwardly concave spring parts against the sides of the ankle.

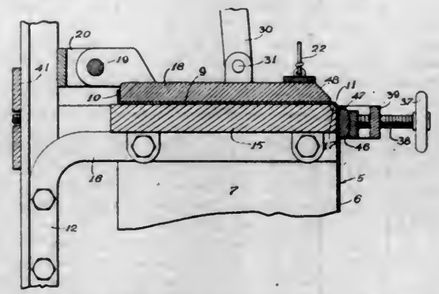


1,759,035. GENERATOR-COVER BAND. WILLIAM F. BOUCHÉ and EMIL H. BLATTNER, Rochester, N. Y., assignors, by mesne assignments, to Simplex Equipment Company, Inc., New York, N. Y., a Corporation of Delaware. Filed Sept. 9, 1927. Serial No. 218,498. 6 Claims. (Cl. 171—252.)



2. In a generator having a frame provided with openings opposite the commutator, means for covering said openings comprising a metal band disposable in encircling relation to the frame, means for contracting the band, and packing means carried by the generator frame and engaged by the band, said packing means being in the form of strips extending circumferentially of the frame beyond the edges of said openings.

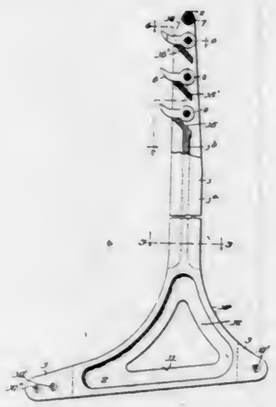
1,759,036. WELDING FIXTURE. ALAN BRANTINGHAM, Rockford, Ill., assignor to Emerson-Brantingham Corporation, Rockford, Ill., a Corporation of Illinois. Filed Oct. 31, 1927. Serial No. 229,836. 5 Claims. (Cl. 113—99.)



1. In a welding fixture the combination of a pair of templates, the one of which is arranged to fit inside the

work and the other outside the work, a clamping frame extending around the inside template and in spaced relation thereto so as to permit the introduction of the end of a hollow box-like work piece therebetween about the template, clamping means on said frame for securing the work piece to the template at the edge portions thereof, the edges of the workpiece being slightly exposed for the welding operation, the outside template being superposed on the inside template with another work piece therebetween, the latter work piece being arranged to serve as an end closure for the first mentioned work piece, and means for clamping the templates together to hold the work pieces so that their edges are in adjoining relation the edges of the second mentioned work piece being likewise exposed for the welding operation.

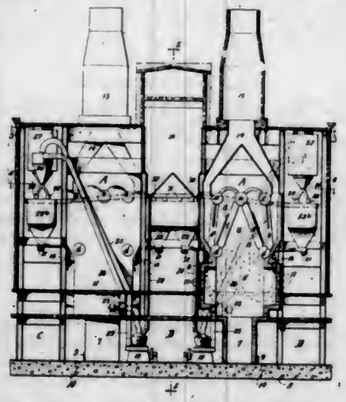
1,759,037. NIGGER BAR. COREY C. BRAYTON, Berkeley, Calif., assignor to American Manganese Steel Company, Chicago, Ill., a Corporation of Maine. Filed Aug. 25, 1927. Serial No. 215,299. 2 Claims. (Cl. 143—97.)



2. A nigger bar comprising, in combination, an integral base and shank, the latter being substantially I-shaped in cross-section, and a plurality of teeth mounted in openings within the shank, the mounting for each of said teeth comprising a hollow pin having a T-shaped headed portion adapted to engage the side walls of an elongated recess formed in the shank to prevent rotation of the pin, and a headed rivet extending through the hollow pin and upset at the extremity opposite to the headed portion to prevent accidental displacement of the pin, the head of said rivet being disposed within a recess formed in the shank, and one of the heads of the pin and rivet being smaller than the recess within which it reposes to render it readily accessible in dismantling the mounting.

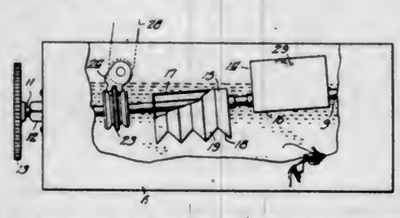
1,759,038. APPARATUS FOR BURNING PULVERIZED FUEL. VIRGINIUS Z. CARACRISTI, Bronxville, N. Y., assignor to Combustion Engineering Corporation, a Corporation of New York. Filed May 6, 1921. Serial No. 467,345. 5 Claims. (Cl. 110—104.)

1. In a pulverized fuel burning system for power plants, the combination of a pair of furnaces spaced apart to provide a bay therebetween and including combustion chambers, said furnaces occupying a substantial portion of the height of the plant, a coal bin in the upper part of the bay, a pulverized coal bin therebelow, means for feeding pulverized coal to one of said combustion chambers from the pulverized coal bin, a pulverizer below the pulverized



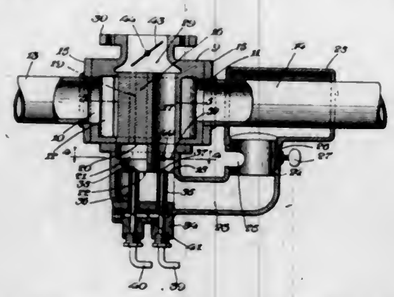
coal bin, means for delivering coal from the coal bin to the pulverizer, and means whereby coal may be delivered from the pulverizer to the pulverized coal bin.

1,759,039. MOTION-TRANSLATING DEVICE. JOHN E. CARROLL, Chicago, Ill. Filed Dec. 12, 1928. Serial No. 325,477. 8 Claims. (Cl. 74—14.)



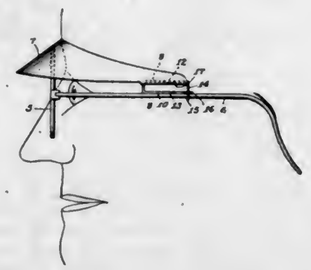
1. A device of the character described comprising a liquid container, a shaft in said container having one end free for vertical movement, means associated with said shaft for turning the same, a float on said shaft offset with respect to the axis thereof, a dipper on said shaft offset oppositely from said float with respect to said shaft.

1,759,040. CARBURETOR. HARRY O. CRAM, Bridgeport, Conn. Filed Jan. 21, 1925. Serial No. 3,743. 19 Claims. (Cl. 261—14.)



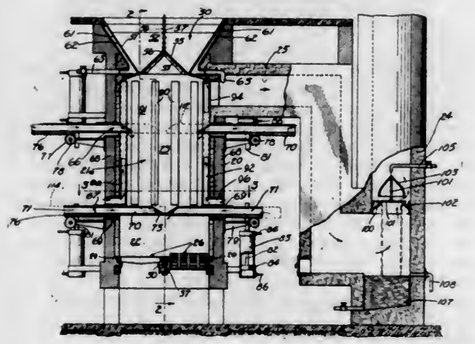
1. A carburetor comprising a mixing chamber within a heating chamber, the mixing chamber comprising a main duct having an air inlet and a plurality of independent ducts all having an independent but common air inlet, all of said ducts extending through the heating chamber and having a common outlet, a pair of fuel nozzles, one for each inlet whereby one nozzle is in communication with one duct and the other in communication with all of the remaining ducts, throttling means for the outlet, and positively controlled means located adjacent to one of said nozzles for gradually or entirely cutting off the supply of fuel from said nozzle.

1,759,041. EYE SHADE. ROY A. DAWES, Seattle, Wash. Filed Sept. 29, 1928. Serial No. 309,236. 1 Claim. (Cl. 2—13.)



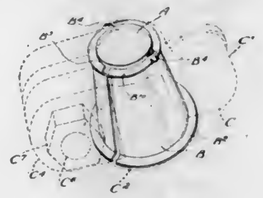
The combination with a pair of eye-glasses, of an eye shade comprising a relatively small visor arranged to rest on the rims of the eye-glasses, a spring clip for each end of said visor comprising complementary upper and lower spaced portions, each of said portions having an angular offset, the ends of the visor adhesively secured around said upper portions whereby the angular offsets provide rigid connections, said lower portions having angular mouths at their ends, and tongues formed from the ends of the upper portions arranged to cooperate with said mouths in yieldingly grasping the temple members of the eye-glasses.

1,759,042. INCINERATOR. FELIX O. DE CARIE, Los Angeles, Calif. Filed Nov. 20, 1926. Serial No. 149,606. 13 Claims. (Cl. 110—17.)



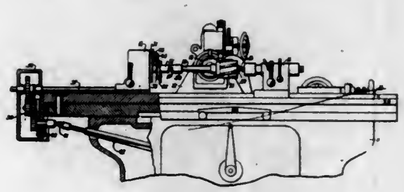
1. In an incinerator of the nature disclosed, the combination of: a furnace having a lower combustion chamber, a treating chamber superposed above said combustion chamber and an exit flue leading from the upper portion of said treating chamber, whereby all of the products of combustion must pass through said treating chamber; means for introducing into the upper end of the treating chamber, material to be consumed; material supporting means defining the upper extent of the combustion chamber and the lower extent of the treating chamber, said means consisting of opposed series of horizontal arms mounted to slide into and out of the furnace chambers while either or both chambers are filled with said material; and means for reciprocating said arms, there being draft passages disposed around said treating chamber and extending from said supporting arms upwardly to communication with said exit flue and serving to direct the products of combustion through the peripheral portion of said treating chamber so that the draft so created will draw vapors and gases from any level of said treating chamber directly to said exit flue.

1,759,043. STORAGE-BATTERY TERMINAL CONNECTION. NORMAN L. DERBY, Long Island City, N. Y., assignor to Stanley R. Root, Philadelphia, Pa. Filed July 20, 1927. Serial No. 207,063. 12 Claims. (Cl. 173—259.1.)



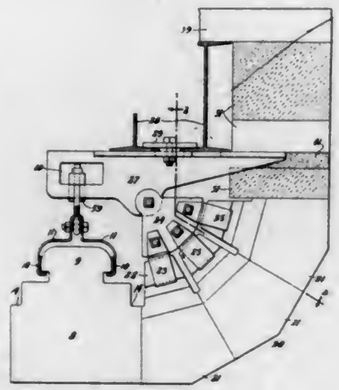
1. The combination with a storage battery terminal post, of a clamp member mounted on said post and means for holding said clamp member in a predetermined position relative to said post comprising a sleeve member having an inwardly projecting flange at the top thereof and a vertical rib integrally formed in said sleeve projecting outwardly from one side thereof.

1,759,044. CLEARANCE-SETTING MECHANISM. GERARD A. DE VLIEG, Rockford, Ill. Original application filed May 15, 1926, Serial No. 109,222, Patent No. 1,710,533. Divided and this application filed Dec. 4, 1926. Serial No. 152,669. 10 Claims. (Cl. 51—225.)



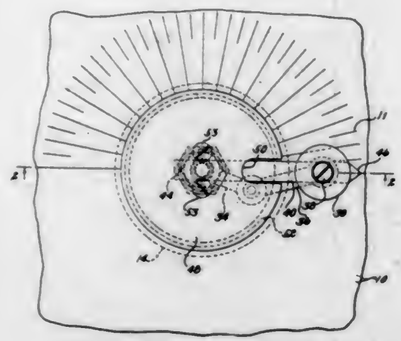
1. A clearance setting mechanism for rotary cutters having, in combination with a support, a center on said support for the cutter, a rotatably adjustable cam member mounted on said support and having a plurality of off-set arcuate cam surfaces, means for holding said cam member yieldingly in any one of a plurality of positions corresponding to said cam surfaces, a sleeve loosely mounted on said center and adapted to be operatively connected for rotary movement with the cutter, said sleeve having a peripheral flange, a ring member rotatably adjustable on said sleeve next to said flange and having a dog adapted to engage said cam member, and means for clamping said ring to said flange, said cam member upon adjustment serving to angularly adjust the cutter relative to said center and serving to hold the cutter in adjusted position relative to said support.

1,759,045. FURNACE-ARCH CONSTRUCTION. BRADLEY DOBIE, Elmhurst, N. Y., assignor to American Arch Company, a Corporation of Delaware. Filed Feb. 21, 1924. Serial No. 694,318. 9 Claims. (Cl. 110—99.)



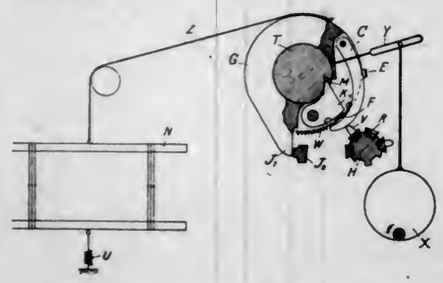
1. A refractory arch nose comprising supporting means, fantail sets of main nose brick with supports at intervals along said means, and fantail sets of filler brick between and supported by said main sets.

1,759,046. CONTROL DEVICE. OTTO EDELMANN, Oak Park, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Mar. 28, 1928. Serial No. 265,264. 3 Claims. (Cl. 175—41.5.)



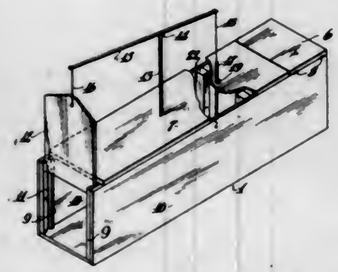
1. In a variable electric unit, a plurality of series of stationary members and a duel control device comprising a rotatable shaft, members mounted thereon, members mounted on a sleeve rotatable thereabout, an arm slidably mounted in the head of the shaft, and pivoted members interconnecting the slidable arm and the sleeve, the slidable arm being rotatably movable to simultaneously rotate all the movable members and radially movable to independently rotate the sleeve and the members mounted thereon.

1,759,047. HARNESS-CONTROLLING MECHANISM FOR LOOMS. ARNOLD EDELSTEIN and GEORGE KIS, Budapest, Hungary. Filed Sept. 7, 1927, Serial No. 217,912, and in Hungary Sept. 7, 1926. 3 Claims. (Cl. 139—66.)



1. A harness controlling mechanism of the type described, comprising a notched operating shaft, a plurality of annular members mounted on said shaft, pivoted pawls on said members adapted to engage in the notch of said operating shaft, and means connected to said members for operating the harnesses.

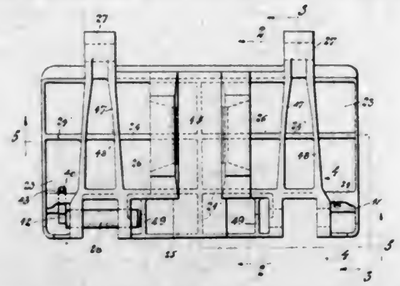
1,759,048. ANIMAL TRAP. DEWEY L. Z. FISHER, Crystal Springs, Ark. Filed Apr. 25, 1928. Serial No. 272,629. 1 Claim. (Cl. 43—61.)



In an animal trap, an elongated box open at its front end and closed at the other end, the said box having a trigger aperture through the rear portion of its top; a wire screen partition secured within the box near the rear wall and dividing the box into a frontal trap chamber and a rear bait chamber; a door for the bait chamber; shoulder pieces vertically secured upon the inner sides of the walls of the box adjacent the said trigger aperture of the top for forming a relatively narrowed passage way; a trap door mounted at the frontal and open end of the box and adapted for vertical, sliding movement; a post upon the top of the box; a lever pivoted upon the post and having its forward end loosely connected with the said trap door; and a trigger pin loosely passed through the said trigger aperture of the top of the box between the said shoulder pieces, and loosely connected at its upper end with the free end of the said lever, the said trigger pin having a notch cut therein for engaging the margin of the said trigger aperture to hold the said trap door in open position.

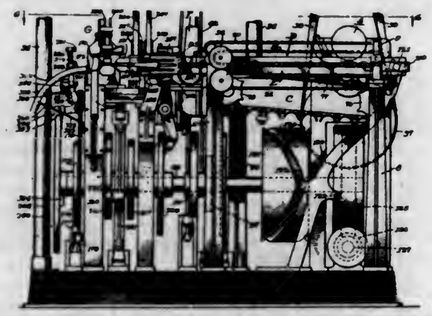
1,759,049. CREEPING TRACTION UNIT. MITCHELL L. FYKSE, South Milwaukee, Wis., assignor to Bucyrus-Erie Company, South Milwaukee, Wis., a Corporation of Delaware. Filed Sept. 7, 1926. Serial No. 134,001. 4 Claims. (Cl. 305—10.)

2. A tread belt link for creeping traction mechanisms having: a broad ground-engaging surface on one side thereof; a narrow wheel-receiving channel, centrally disposed, on the other side thereof; and upstanding wheel-guiding flanges, containing openings for the extrusion of



dirt from the wheel-receiving channel by the action of the wheels, said flanges being each thickened along its upper edge, to compensate for said openings.

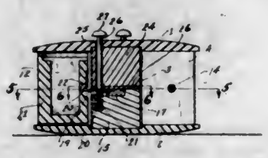
1,759,050. METHOD OF AND MACHINE FOR ASSEMBLING SPRINGS. JOHN F. GAIL, Evanston, Ill., assignor to Simmons Company, New York, N. Y., a Corporation of Delaware. Filed May 31, 1927. Serial No. 195,405. 45 Claims. (Cl. 226—18.)



33. In the art of spring assembling, the combination of a support for a two-ply fabric strip, means for inserting springs between the plies of said strips, means for forming single cross-seams between adjacent springs and means for forming double cross-seams at predetermined intervals between adjacent springs.

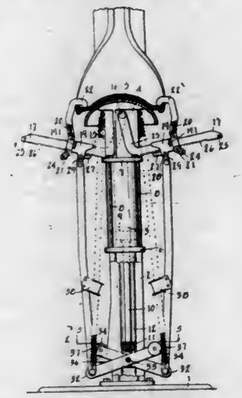
40. A method of producing a spring cushion strip, which consists in inserting springs successively between the plies of a tubular fabric strip, pushing said springs successively through said strip to final position therein, and cross-stitching said strip behind each spring.

1,759,051. COMBINATION SMOKER'S TRAY. JOHN HENDERSON, Opal City, Oreg. Filed Jan. 19, 1928. Serial No. 247,909. 3 Claims. (Cl. 312—152.)



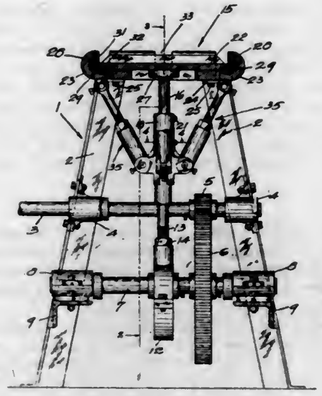
1. In a device of the class described, the combination of a base forming element, a top element and a cylindrical holder centrally disposed therebetween maintaining the same in position and alignment, partitions in spaced relationship disposed between the base and top and outwardly extending from the cylindrical holder sufficient in length to engage the top and base elements, receptacles hingedly secured relative to the partitions, a locking latch partially disposed within the cylindrical holder and extending therefrom in registerable alignment with a locking plate placed upon the inner side of a receptacle for locking the receptacle when the same is pressed inwardly about the hinged support.

1,759,052. TIRE-SPREADING MACHINE. ARTHUR C. HOPKINS, Niles, Mich., assignor to National-Standard Company, Niles, Mich. Filed May 31, 1928. Serial No. 281,628. 29 Claims. (Cl. 154—9.)



23. In a structure of the class described, the combination of a work support, levers, tire engaging members mounted on said levers so that they may be engaged with the rim of a tire by a longitudinal sliding movement on the levers, means for actuating said levers, and means acting to return the levers to initial position and move the tire engaging members outwardly on the levers.

1,759,053. BENDING MACHINE. WILLIAM C. IRVIN, Oakland, Calif., assignor to Yager Sheet Metal Company, a Copartnership composed of Isabelle Yager, Ralph C. Yager, and George L. Yager, Oakland, Calif. Filed Nov. 18, 1927. Serial No. 234,209. 8 Claims. (Cl. 153—17.)



1. In a bending machine for rebending the upwardly extending flanges of a work, a table for supporting said

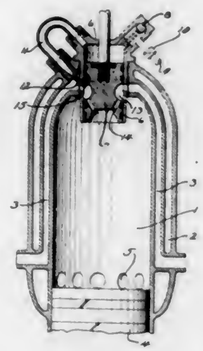
work, bending tools, bearings secured to the table for rotatably holding said tools, the axes of rotation of said tools being outside of said flanges; each tool having a die face thereon disposed at an angle to the plane of the table; arms on said tools slidably extending thru said bearings, and means for simultaneously swinging said arms thereby causing said die faces to rebend said flanges and to clamp the work over said table.

1,759,054. ANIMAL CATCHING AND HOLDING TOOL. WILLIAM H. LAUB, New Richmond, Ohio. Filed Oct. 5, 1928. Serial No. 310,515. 1 Claim. (Cl. 119—153.)



In a tool of the class described, a handle member, a lever adjustably fulcrumed thereon, an arcuate nose engaging tongue longitudinally extended from the end of the lever and having a slot adjacent the lever, and a noose secured at one end to the outer end of the tongue and passed through the said slot and secured to the end of the handle member.

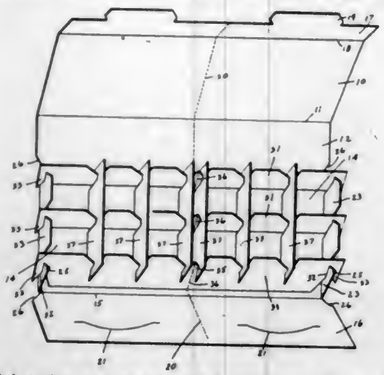
1,759,055. COMBINED INTAKE VALVE AND VAPORIZER. LOUIS LEONARD LUCE, Oakland, Calif. Filed Sept. 23, 1926. Serial No. 137,347. 10 Claims. (Cl. 123—30.)



1. The combination with an internal combustion engine having a cylinder and a piston therein, of a piston valve assembly mounted in said cylinder, an air conduit connected to the piston valve, said piston valve being so reciprocated as to connect the air conduit to the cylinder for scavenging the same when the piston is at the end of a stroke; and means operatively connected to the piston valve for spraying fuel, compressed by the piston valve, into the cylinder during another stroke of the engine piston.

1,759,056. SEVERABLE EGG CARTON. HOMER MCWILLIAMS, Indianapolis, Ind., assignor to Lockwood Lockwood Goldsmith & Galt, trustee, Indianapolis, Ind. Filed May 9, 1928. Serial No. 276,293. 2 Claims. (Cl. 229—29.)

1. A paper or cardboard carton for fragile articles formed from a folded blank including opposite ends, each including an interlocking portion, an interlocking strip extending transverse to the ends and interlockingly connected at its ends with the interlocking portions of the ends, a pair of strips lying immediately adjacent and in spaced relation to each other and parallel to the blank ends and transverse to the strip, said parallel strips having interlocking connections with said transverse strip, the transverse strip and the blank including registering scorings transverse to the transverse strip and parallel to the



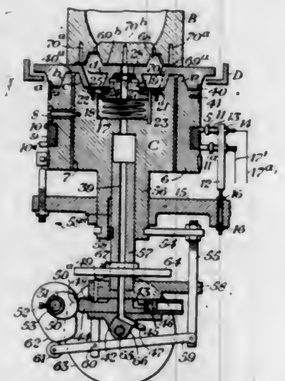
parallel strips and intermediate the same for transverse division of the carton between the spaced strips for forming two similar complete closed end smaller cartons from the larger carton.

1,759,057. GIRDER. JAMES C. MEEM, Brooklyn, N. Y. Filed May 7, 1927. Serial No. 189,524. 5 Claims. (Cl. 189—37.)



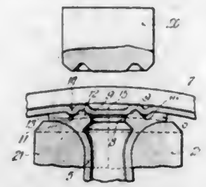
1. A continuous girder construction comprising spaced web splices, chord angles, chord splices having substantially the same length as said web splices and substantially the same width as the said chord angles, and bolting means for securing said web splices, chord angles and chord splices in assembled relation, said chord angles abutting each other at the intermediate sections of certain web splices with at least one unbroken chord angle secured to the same end of the web splice.

1,759,058. METHOD OF AND MEANS FOR PRODUCING POTTERY WARE. WILLIAM J. MILLER, Swissvale, Pa. Filed Feb. 24, 1927. Serial No. 170,613. 38 Claims. (Cl. 25—22.)



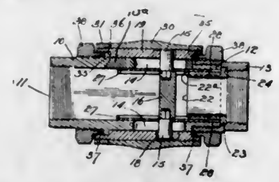
1. In the manufacture of pottery, the method which consists in providing a chuck and mold with communicating passages and applying sub-atmosphere to the mold through said passages during the jiggering operation, to evacuate air and excess moisture deposits from between the chuck and mold and the mold and charge of plastic material.

1,759,059. METHOD OF MAKING METAL WHEELS. EDMUND C. MOGFORD, Buchanan, and FREDERICK W. BURGER, Niles, Mich., assignors to Clark Equipment Company, Buchanan, Mich., a Corporation of Michigan. Original application filed Apr. 19, 1926, Serial No. 102,892. Divided and this application filed Apr. 19, 1928. Serial No. 271,256. 8 Claims. (Cl. 29—174.)



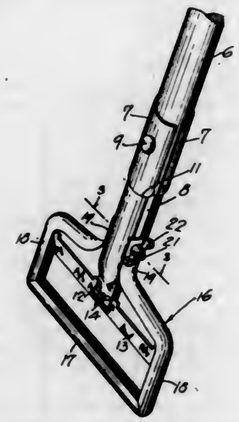
1. In a wheel having a hollow spoked spider held under compression by a rim under tension, the method of interlocking the rim and spider which comprises supporting the end of a spoke adjacent its bearing on the rim independently of the rest of the spider and pressing the metal of the rim into interlocking engagement with the end of the spokes.

1,759,060. VALVE. EMMETT B. MOORE, Evanston, Ill. Filed July 24, 1928. Serial No. 294,992. 14 Claims. (Cl. 251—11.)



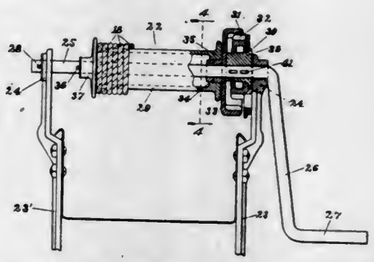
1. In a valve structure of the character described, a stationary inner member, a valve seat therein, a valve movably supported in said inner member, a sleeve rotatably mounted on said member, and means responsive to the rotation of said sleeve for moving the valve axially with respect to its seat and adapted for rotating it transversely. thereto.

1,759,061. MOP HANDLE. JAMES W. MORAIS, Oakland, and JACOB L. RUDDICK, Berkeley, Calif. Filed Dec. 10, 1928. Serial No. 324,860. 2 Claims. (Cl. 15—151.)



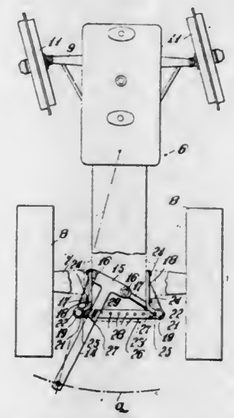
1. A mop head comprising a mop handle, a frame slidable on an end thereof, said frame comprising a clamping side opposite the end of handle, said clamping side having a slot therein opening toward the end of the handle, parallel guide elements extending at the opposite ends of the clamping side, a split ferrule on the end of the handle, projections on said frame extending over the slot of said ferrule, means extending thru the slot and said projections for securing the frame to the ferrule, and a cross member secured to the end of the ferrule, so as to be held in alignment with the clamping slot by said guide members, said cross member being adapted to be moved into said clamping slot for securing a mop fabric therein.

1,759,062. WINDLASS. LEONARD B. NEIGHBOUR, Moline, Ill., assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed Aug. 4, 1927. Serial No. 210,539. 3 Claims. (Cl. 74—35.)



1. A windlass of the class described comprising spaced supporting bearings, a shaft rotatably mounted in said bearings, a crank at one end of said shaft beyond the adjacent bearing, a winding drum rotatably mounted on said shaft between said bearings, an internal gear mounted concentrically of said shaft between said bearings and operatively connected with said winding drum, an eccentric mounted on said shaft between said bearings, a key connecting said eccentric and shaft and permitting relative endwise sliding movement therebetween, a driving gear mounted on said eccentric and meshing with said internal gear, the cooperating bearing surfaces of said eccentric and said driving gear being tapered, and an arm extending from said driving gear and having oscillatable and slidable connection with a fixed point.

1,759,063. DRAFT ATTACHMENT FOR TRACTORS. WILLIAM L. PAUL, Berkeley, Calif., assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed Sept. 20, 1926. Serial No. 136,486. 16 Claims. (Cl. 280—33.12.)

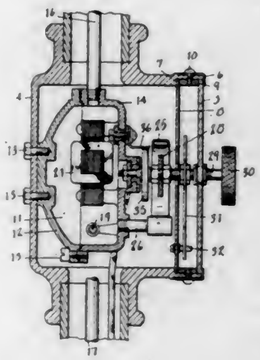


2. In combination, a tractor, bracket means secured to said tractor, a pair of links pivoted to said bracket

means on transversely spaced centers, and having forwardly converging ends normally free to swing laterally, a draw bar pivotally connected to the free ends of said links, and a cross bar carried by said bracket means and on which said draw bar is adapted to slide in its pivotal movement, said cross bar having openings therein for receiving a coupling pin or the like for locking said draw bar in a selected angular position.

15. The combination with a tractor, of a draft connection comprising a draft member, and floating means carried by the tractor and connecting said draft member therewith to move bodily relatively thereto and to swing about a point remote from the point of physical connection of said draft member with the tractor.

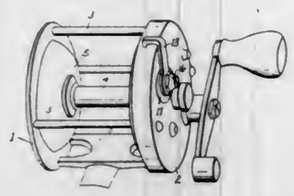
1,759,064. PRESSURE-REGULATING DEVICE. HAROLD G. RITCHIE, Battle Creek, Mich., assignor to Gavin Ritchie & Sons, Inc., Battle Creek, Mich. Filed Mar. 14, 1927. Serial No. 175,396. 8 Claims. (Cl. 50—10.)



1. In a pressure regulating device, the combination of a housing, a dial therein provided with pressure indicating indicia, an air chamber within said housing provided with air inlet and outlet connections, a needle valve for the air inlet connection disposed within said air chamber and seating outwardly against the inlet pressure, an electromagnet within said air chamber, a coating armature pivotally mounted within said air chamber and provided with a return spring, said armature having an arm engaging said inlet valve whereby the valve is held yieldingly against its seat, a spindle provided with a finger piece and with an index finger operatively associated with said dial, a cam-shaped control member arranged on said spindle in relation corresponding to the said index finger, a Bourdon tube connected to said air chamber and arranged within said housing to embrace said control member, and a contact threaded for adjustment on said Bourdon tube coacting with said control member, said control member and Bourdon tube being electrically connected to and constituting a control switch for said electromagnet.

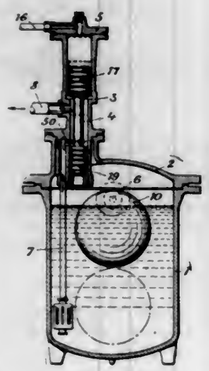
1,759,065. FISHING REEL. SAMUEL G. RUSSELL and ROSSITER R. POTTER, Kalamazoo, Mich., assignors to Shakespeare Company, Kalamazoo, Mich. Filed Sept. 26, 1928. Serial No. 308,445. 3 Claims. (Cl. 242—84.7.)

1. In a fishing reel, the combination with a frame provided with a head member, a spool provided with a pinion, a U-shaped support arranged to embrace said pinion and pivoted at the end of one arm to said head member, a driving gear mounted on said support in coacting relation with said pinion, and an eccentric rotatably mounted on said head member and provided with a finger-piece, said eccentric being engaged in an opening in the other arm of said support whereby when the eccentric is actuated the support is swung on its pivot, the eccentric



being positioned relative to the support pivot so that the support is placed under springing stress during the throw of the eccentric.

1,759,066. STEAM TRAP. CHARLES SCHAER, Langenthal, Switzerland, assignor to the Firm of Sulzer Frères, Société Anonyme, Winterthur, Switzerland. Filed Oct. 15, 1927, Serial No. 226,286, and in Switzerland Oct. 23, 1926. 6 Claims. (Cl. 137—103.)

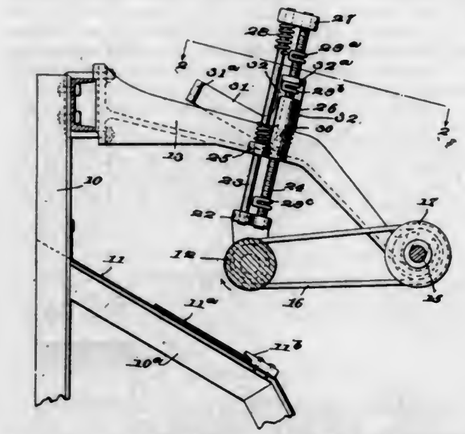


1. In a steam trap the combination of a float, a discharge valve for the condensate, and a power actuated piston combined with the discharge valve and constituting therewith a differential piston member disposed in a chamber communicating with the lower or condensate-containing part of the trap during discharge of the condensate, a portion of the differential piston member intermediate the ends thereof controlling the discharge of the condensate being arranged intermediate the ends thereof.

1,759,067. APPARATUS FOR SIZING GLOBULAR ARTICLES. BRONSON C. SKINNER, Dunedin, Fla., assignor, by mesne assignments, to Florida Citrus Machinery Company, Dunedin, Fla., a Corporation of Florida. Filed Jan. 11, 1928. Serial No. 245,984. 18 Claims. (Cl. 209—103.)

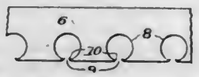
1. Apparatus for sizing globular articles comprising a conveyor, a sizing element spaced from said conveyor to provide a sizing outlet, an adjustable support for said sizing element to permit it to be moved toward and away

from said conveyor to vary the size of said outlet, a plurality of individually adjustable stops mounted one



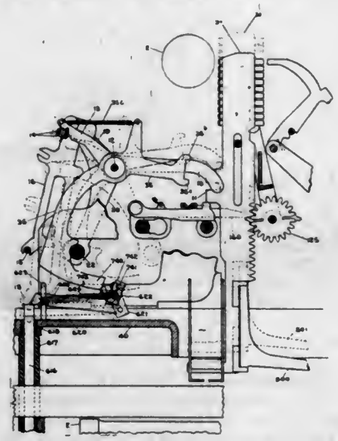
above the other on said support, and means for selectively engaging said stops to hold said sizing element in adjusted position.

1,759,068. BRUSH-MAKING MACHINE. THOMAS L. STROUD, Rosslyn, Va. Filed Sept. 14, 1928. Serial No. 305,953. 3 Claims. (Cl. 300—19.)



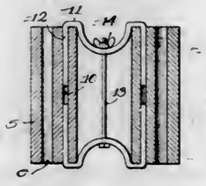
1. In a bristle segregating device, a bar, pockets extending transversely of the bar and spaced along the length thereof, slots extending transversely of the bar communicating with said pockets, both of the transverse edges on each side of the slots terminating in hooks facing one another.

1,759,069. CASH REGISTER OR SIMILAR MACHINE. OSCAR J. SUNDSTRAND, Rockford, Ill., assignor, by mesne assignments, to Sundstrand Corporation, Wilmington, Del., a Corporation of Delaware. Filed Aug. 4, 1923. Serial No. 655,557. 20 Claims. (235—22.)



1. A cash register having, in combination, a type-carrier having a plurality of symbol type, a manually-settable member having a plurality of stops to limit movement of said type-carrier into printing positions, means to move said type carrier to printing position, a cash drawer, and means operable in the movement of said type carrier to unlatch said drawer.

1,759,070. ELEMENT FOR MASONRY CONSTRUCTION. KARL H. TENGSTEDT, Chicago, Ill. Filed June 5, 1929. Serial No. 368,514. 4 Claims. (Cl. 72—44.)

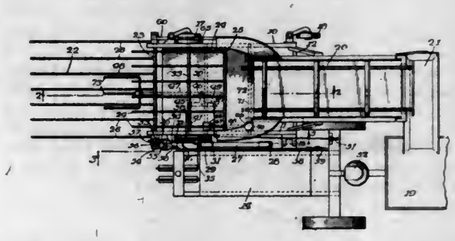


1. In elements of masonry construction a pair of tile having slots running vertically therethrough, a pair of channels the flanges whereof enter the slots in said tile from opposite ends and a tie bolt for securing the webs of said channels together.

1,759,071. APPLICATION OF VAT DYES TO TEXTILE FIBERS. ARTHUR R. THOMPSON, Jr., Charlotte, N. C., assignor to Rohm & Haas Company, a Corporation of Delaware. Filed Feb. 27, 1926. Serial No. 91,250. 1 Claim. (Cl. 8—5.)

A dyeing bath adapted for dyeing textile fibers over a temperature range of from room temperature to 212° F., comprising a vat dye in alkaline solution reduced with sodium hydrosulphite and sodium formaldehyde sulfoxylate.

1,759,072. LOADING MACHINE. JOHN F. THOMSON, Chicago Ill. Filed Sept. 15, 1927. Serial No. 219,630. 19 Claims. (Cl. 214—90.)

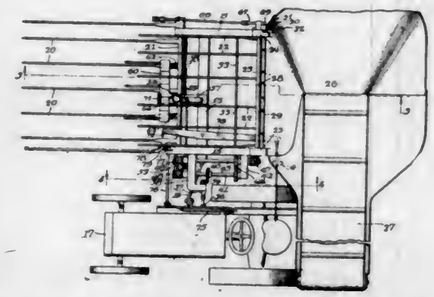


6. In a machine of the class described, in combination, a portable frame, an oscillatable lifting fork normally projecting forwardly from the frame, a rotating crank shaft, connection between the crank of the shaft and the lifting fork, an oscillatable delivering fork mounted on the frame back of the lifting fork and normally projecting forwardly, a crank arm carried by the delivering fork, a cam carried by the crank shaft, and operative connection between the cam and the crank arm, the cam and crank of the crank shaft being so related that the upward movement of the delivery fork commences as the lifting fork approaches the limit of its upward movement.

1,759,073. SHOCK LOADER. JOHN F. THOMSON, Chicago, Ill. Filed Sept. 20, 1928. Serial No. 307,092. 11 Claims. (Cl. 214—90.)

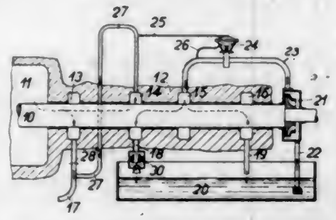
1. In a machine of the class described, in combination, a lifting element, a transferring element receiving from

the lifting element, a receptacle to which the transferring element delivers, a movable wall for the receiving side of



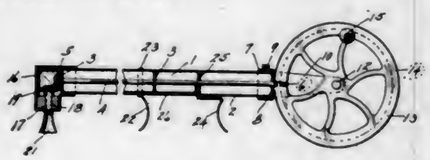
the receptacle, means for erecting the wall after the delivery of the material to the receptacle, and means for displacing the wall in advance of each delivery.

1,759,074. LIQUID-SEALED GLAND FOR MACHINE SHAFTS. WILLEM VAN RIJSWIJK, Baden, Switzerland, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland, a Joint-Stock Company of Switzerland. Filed June 3, 1927, Serial No. 196,180, and in Germany Apr. 12, 1926. 2 Claims. (Cl. 286—19.)



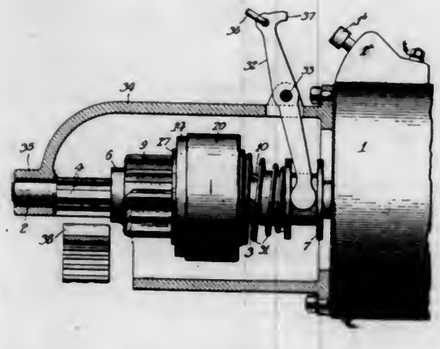
1. In a fluid sealed packing gland for a machine casing having a rotating member extending therefrom, a gland structure associated with said casing and surrounding said member, said gland structure having an inlet chamber and outlet chambers, a reservoir arranged adjacent said gland structure, conduits connecting said outlet chambers with said reservoir, a conduit connecting one of said outlet chambers to a low pressure space, and means for controlling the supply of sealing fluid to said inlet chamber in accordance with pressure variations in the outlet chamber connected with the low pressure space.

1,759,075. TOOTH-CLEANING DEVICE. CARL C. WAHL, Glasgow, Mo. Filed Aug. 3, 1928. Serial No. 297,352. 1 Claim. (Cl. 15—97.)



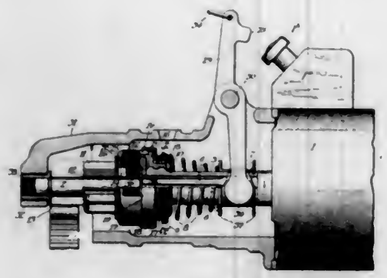
In a tool of the kind described, a brush, a tubular support for the brush, said support forming a paste holding housing, the same being longitudinally slotted along one side, perforated journal disks mounted within the housing in spaced relation at one end of the said slotted portion, a drive shaft journaled centrally through said journal disks and connected with the said brush, a force plug slidably mounted within the housing at the slotted portion thereof, a guard strip extended from a marginal point of the force plug and slidably covering the said slot of the housing, a finger hold permanently mounted upon the housing at the end thereof wherein is mounted the said journal disks, and a companion finger hold having its inner end connected to the said force plug and having its free end extended outwardly through the said slot of the housing.

1,759,076. ENGINE STARTER. MAURICE P. WHITNEY, Elmira, N. Y., assignor to Eclipse Machine Company, Elmira, N. Y., a Corporation of New York. Filed July 15, 1927. Serial No. 205,902. 25 Claims. (Cl. 74—7.)



1. An engine starter drive including a rotatable shaft mounted for longitudinal and rotary movements, a driving member mounted on the shaft and adapted to engage a member of the engine to be started, a control member mounted on the shaft for longitudinal movement thereof and rotary movement therewith, a friction clutch between the control member and the driving member, and means for multiplying the pressure of the control member upon the clutch.

1,759,077. ENGINE STARTER. MAURICE P. WHITNEY, Elmira, N. Y., assignor to Eclipse Machine Company, Elmira, N. Y., a Corporation of New York. Filed July 15, 1927. Serial No. 205,903. 15 Claims. (Cl. 74—7.)

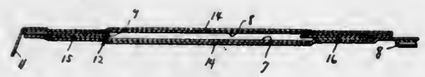


1. An engine starter drive including a rotatable shaft mounted for longitudinal and rotary movements, a driving member mounted for longitudinal movement to engage a member of the engine to be started, a control member mounted on the shaft for longitudinal movement thereof and rotary movement therewith, and a multiple plate friction clutch operatively connected with the driving member and the control member for the transmission of torque from the latter to the former, said control member having provision to clamp the clutch plates against said shaft.

1,759,078. METHOD OF SMELTING COPPER. ALAN DEAN WILKINSON, Cananea, Mexico, assignor to The Cananea Consolidated Copper Company, S. A., Cananea, Sonora, Mexico, a Corporation of Mexico. Filed Mar. 26, 1926. Serial No. 97,766. 8 Claims. (Cl. 75—62.)

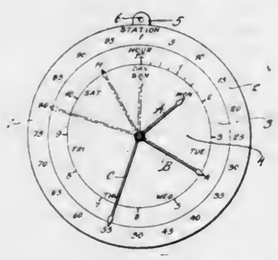
1. In the treatment of copper ores, the method which consists in introducing the raw charge to a reverberatory furnace in a moist condition and disposing it at an abnormally steep angle so as to maintain a molten bath of abnormal width in the furnace.

1,759,079. SAMPLE BOOK. CHARLES ERNEST WOLF and ANTHONY AGLI, Hackensack, N. J. Filed June 1, 1928. Serial No. 282,070. 4 Claims. (Cl. 129—20.)



1. A sample book comprising a continuously formed foldable sheet, a series of supplemental sheets, attached at the opposite sides of said first named sheet in staggered relation and sample card supporting means formed on each of said sheets and arranged to secure the cards in position thereon with the ends of the cards inserted through the sheets, a portion of said supplemental sheets constituting a separator for the inserted ends of the cards carried at opposite sides of the sheets whereby to prevent contact of the inserted ends of the cards with elements rearwardly of the supplemental sheets.

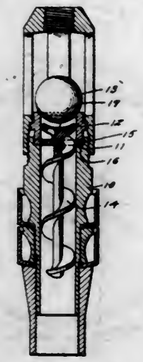
1,759,080. RADIO PROGRAM REMINDER. WILLIAM F. YOUNGBLODT, Denver, Colo. Filed Aug. 13, 1929. Serial No. 385,590. 1 Claim. (Cl. 116—133.)



A radio program reminder comprising, a member having three sets of indicia arranged in concentric circular arcs, one set having spaced indicia representing radio broadcasting stations, another set having spaced indicia representing the days of the week, another set of spaced indicia representing the hours of the day, and a separate indicator movably associated with each set of indicia.

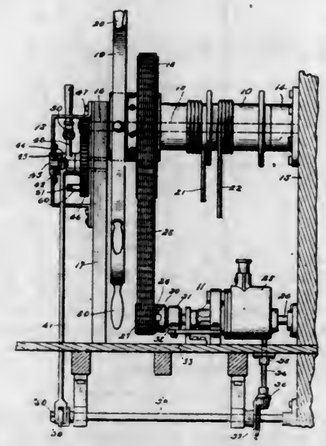
1,759,081. VALVE CONSTRUCTION. JOHN K. ANDERSON, Midwest, Wyo. Filed Apr. 6, 1929. Serial No. 353,144. 2 Claims. (Cl. 251—129.)

1. The combination with an inlet tube having a valve seat and a valve coacting with the seat, of a spiral baffle arranged within and rigid to the tube beneath the valve seat for causing rotation of fluids passing through the tube to the valve, the upper end of said baffle being



notched in conformity to the contour of the valve to thereby permit approach of the baffle in close proximity to the valve adjacent the wall of the valve seat.

1,759,082. MARINE STEERING GEAR. DANIEL BAILEY, Hasbrouck Heights, N. J., assignor to Merritt, Chapman & Scott Corporation, New York, N. Y., a Corporation of Delaware. Filed May 14, 1929. Serial No. 363,054. 4 Claims. (Cl. 114—146.)

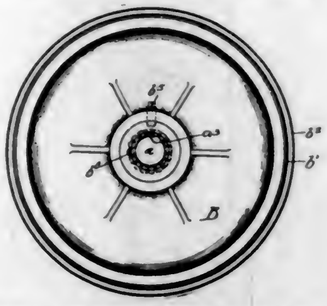


1. In or for a steering gear, a rotatable tiller-operating member, a motor mechanism for rotating said tiller-operating member in opposite directions, a pinion rotatable with the tiller-operating member, a gear meshing with said pinion, a hand-controlled lever adapted to rock on the axis of said gear adjacent to the plane thereof, means connected with and operable by said hand-controlled lever for controlling the starting and stopping of the motor mechanism, and a projecting element carried by said gear and adapted to engage said hand-controlled lever to rock the same, whereby to automatically stop the motor mechanism when the tiller-operating member reaches a predetermined limit of movement in either direction.

1,759,083. CAR WHEEL. SILAS J. BARTON, Chicago, Ill. Filed July 14, 1927. Serial No. 205,558. 3 Claims. (Cl. 308—180.)

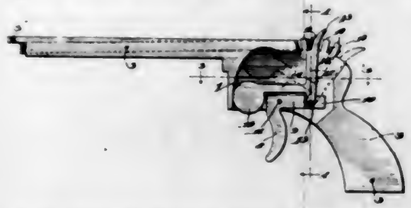
1. The combination of a non-rotatable axle having an annular groove in its outer periphery and integral walls

forming both ends of the groove, a car-wheel rotatable around the axle and comprising a tread and a hub having a corresponding annular groove in its inner periphery and integral walls forming both ends of said groove, and rollers fitting into both of said grooves, and engaging the walls



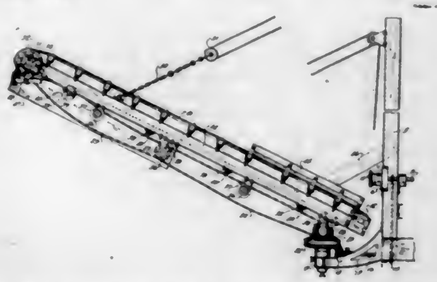
at both ends of the grooves in the hub and axle to lock the wheel and axle against relative axial movement in either direction, the hub and axle each having a notch through the side-walls engaged by one end of the rollers, through which the rollers may be individually inserted into the grooves only when the notches are in registry.

1,759,084. TOY PISTOL. FRED T. BAUM, Marion, and CLARENCE GLENN NORRIS, Sweetser, Ind. Filed Nov. 13, 1928. Serial No. 319,091. 9 Claims. (Cl. 124—14.)



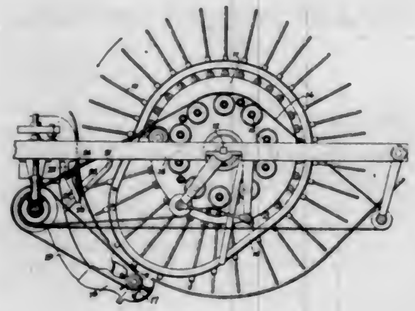
1. A toy pistol for shooting elastic bands comprising a pistol form body providing at its front end an anchoring abutment for the overlaid front ends of a series of elastic bands and provided rearwardly thereof with a succession of fixed band-tensioning and retaining abutments for the rear ends of successive bands, with a single manually operated means for releasing the tensioned ends of successive bands from said tensioning abutments.

1,759,085. CONVEYER. CHARLES NEWTON BEBINGER, Janesville, Wis., assignor to Northern Conveyor & Mfg. Co., Janesville, Wis., a Corporation of Wisconsin. Filed Oct. 14, 1927. Serial No. 226,169. 2 Claims. (Cl. 198—119.)



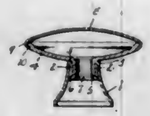
1. The combination with a conveyer having an endless belt, of a supporting means therefor, comprising bearings extending from a portion of the conveyer, a bearing on said supporting means, a vertical shaft in said bearing having its upper end formed with a horizontally disposed bearing, an intermediate gear loosely mounted on said vertical shaft, a horizontal shaft journaled in the horizontal bearing and in the bearings extending from the conveyer, a pinion loosely mounted on said shaft and engaging the intermediate gear, means on said pinion for transmitting motion from the pinion to the endless belt, and a pinion on the supporting means engaging the intermediate gear, and means for driving the pinion.

1,759,086. COTTON PICKER. HIRAM N. BERRY, Greenville, Miss., assignor, by direct and mesne assignments, to Cotton Harvester Corporation of America, Greenville, Miss., a Corporation of Delaware. Filed Nov. 28, 1927. Serial No. 236,228. 7 Claims. (Cl. 56—44.)



1. In a cotton picker, a revolving cylinder, rotating spindles radiating from said cylinder and arranged in horizontal rows, and a comb having teeth normally extending at an angle into the spindles between the rows thereof, said comb being yieldable on its support for movement toward and away from the cylinder.

1,759,087. KNOB FOR FURNITURE. ALBERT L. BIRDSALL, Grand Rapids, Mich., assignor to Keeler Brass Company, Grand Rapids, Mich. Filed July 18, 1929. Serial No. 379,169. 1 Claim. (Cl. 16—121.)



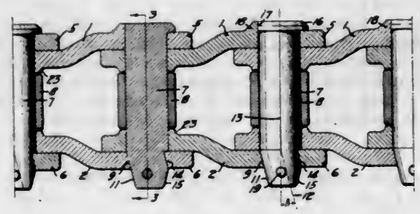
In a knob for furniture and the like, the combination of a shank having its outer end turned inwardly upon itself providing an internal shoulder, and a head provided with a central stud fitting within said inturned portion of said shank and upset upon the inner edge thereof whereby the head and shank are secured together.

1,759,088. SHROUD FOR MULTISTAGE PUMP PLUNGERS. LESTER C. BLACK, Los Angeles, Calif. Filed Jan. 24, 1928. Serial No. 248,998. 4 Claims. (Cl. 103—202.)



1. As a new article of manufacture, a cup plunger shroud comprising a cylindrical body member having a tapered guide head and a central boss at its lower end forming an annular shoulder against which the peripheral edge of a cup plunger is adapted to seat.

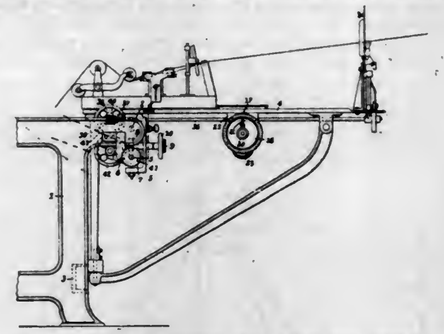
1,759,089. TRANSMISSION CHAIN. LESTER C. BLACK, Los Angeles, Calif. Filed Apr. 9, 1928. Serial No. 268,533. 8 Claims. (Cl. 74—32.)



4. A transmission chain of the character described comprising a plurality of links each of which includes a pair of side bars, said side bars having a plurality of apertures in their opposite ends, and pins for connecting said links, said pins having end portions over which said apertured side bars can be passed, the end portion of each of said pins being formed with a surface inclined to the longitudinal axis of the pin, said surface co-operating with an inclined surface in one of the apertures whereby the side bars are urged together upon the tensioning of the chain.

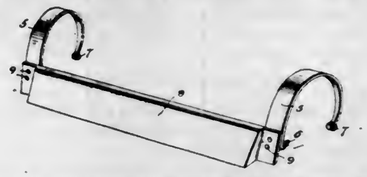
1,759,090. WARPING-MACHINE INDICATOR. GEORGE W. BOGDANFFY, Clifton, N. J., assignor, by mesne assignments, to Sipp Eastwood Corporation, Paterson, N. J., a Corporation of New Jersey. Filed May 11, 1929. Serial No. 362,259. 2 Claims. (Cl. 28—37.)

1. In combination, the frame of a warping machine, a reed carriage traversable therein, rotating means operatively connected with the carriage to cause traverse motion thereof, a clock arranged on the carriage and including a fixed element and a rotary element, said elements



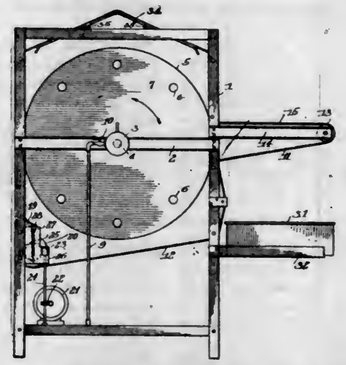
having a cooperating pointer and scale, and means to transmit motion from the first means to said rotary element.

1,759,091. BRUSH ATTACHMENT. CLAUD J. BROOKS and ROSS M. BROOKS, Oklahoma City, Okla. Filed May 6, 1929. Serial No. 360,918. 2 Claims. (Cl. 15—246.)



1. A brush attachment comprising two C-shaped springs whose arms are adapted to straddle a brush back, and grip the same under the influence of their own resiliency, an elongated scraper secured at its ends to the front arms of said springs, and prongs projecting rearwardly from said front arms to penetrate the brush back under the rearward thrusting action of the scraper thereby preventing slippage of the springs on said back.

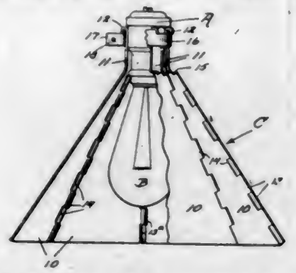
1,759,092. APRON DRIER. ARTHUR W. CAPS, Rochester, N. Y., assignor to Photostat Corporation, Providence, R. I., a Corporation of Rhode Island. Filed July 31, 1928. Serial No. 296,577. 3 Claims. (Cl. 34—4.)



1. In a drier, the combination with an open frame and a heated drum rotatably mounted therein, of a pair of endless aprons having a superposed running relationship on said drum, supports for the respective aprons upon which they converge on passage to the drum and diverge upon leaving the drum, one of said aprons having a return flight

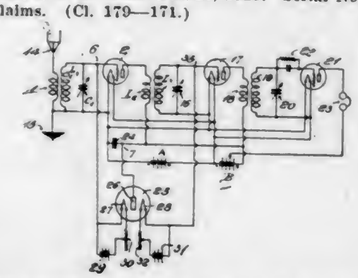
above and in spaced relationship to the drum, means comprising a single relatively thin member beneath and relatively close to said return flight for condensing vapors rising from the drum before they reach said flight and for utilizing the heat resulting from such condensation for heating said flight, and means for driving the aprons.

1,759,093. COLLAPSIBLE LAMP SHADE. MONROE S. CLAWSON, Upper Montclair, N. J. Filed Jan. 17, 1927. Serial No. 161,579. 6 Claims. (Cl. 240—108.)



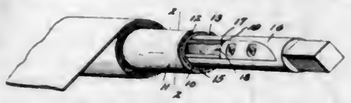
1. A collapsible lamp shade comprising a plurality of sections provided at one end with reduced extensions adapted to engage upon an electric lamp socket in embracing relation thereto, and means engageable exteriorly about said extensions for clamping the same rigidly and immovably to the socket.

1,759,094. AMPLIFICATION SYSTEM. SAMUEL COHEN, Brooklyn, N. Y. Filed Feb. 21, 1925. Serial No. 10,885. 5 Claims. (Cl. 179—171.)



1. An amplification system comprising a plurality of electron tubes each having grid, filament and plate electrodes, input circuits interconnecting said grid and filament electrodes, output circuits interconnecting said plate and filament electrodes, means coupling the output circuit of one of said tubes with the input circuit of a succeeding tube, and a composite impedance path having its ends connected with each of said input circuits with an intermediate portion of said path connected to each of said output circuits, the paths thus established consisting in part of independent electron streams whereby undesired oscillatory currents may be prevented in said amplification system.

1,759,095. SPINDLE FOR ENGAGING AND WINDING TEXTILE FABRIC. CHARLES W. COKER, Hartsville, S. C., assignor to Sonoco Products Company, Hartsville, S. C., a Corporation of South Carolina. Filed Sept. 11, 1923. Serial No. 662,147. 3 Claims. (Cl. 242—74.)

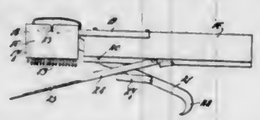


1. A portable spindle for clamping and winding textile fabric comprising in combination, a cylindrical pasteboard tube, a split pasteboard tube closely and yieldingly fitting under tension and largely surrounding said tube substantially throughout its length, having spaced parallel longitudinal edges, the inner side of the split tube being scored longitudinally to facilitate lateral bending without breaking when opened, whereby the straight end edge of the fabric to be wound may be inserted under one straight edge and securely clamped by it to the inner tube of the spindle.

1,759,096. PROCESS OF RECONDITIONING POPPET-VALVE ENGINES. MARTIN B. COVERT, Holland, Mich. Filed July 26, 1929. Serial No. 381,407. 4 Claims. (Cl. 123—198.)

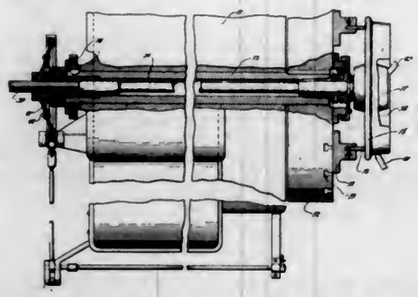
1. The process of reconditioning a poppet valve internal combustion engine consisting of heating the engine, supplying about two ounces of liquid to each cylinder above and upon the piston, the chief ingredient of the liquid being kerosene, permitting the engines to cool for about five hours, adjusting the valve tappets for improper seating, running the engine under sufficient load and for sufficient time to decarbonize the valves, seats and all other surfaces in the combustion chamber, and then readjusting the valve clearance for perfect seating of the valves.

1,759,097. DEVICE FOR USE IN HAIR WAVING AND CURLING. ALEXANDER CRAIG, London, England. Filed Oct. 20, 1928, Serial No. 313,895, and in Great Britain June 8, 1928. 7 Claims. (Cl. 132—31.)



1. Devices for use in hair waving, curling and the like comprising a two-part clamp, each part provided adjacent the opening portion of the clamp with a comb, the ends of the teeth of which combs are adapted to be brought together along the lengths of the combs so that when the said ends meet they include a desired angle between them, and beyond which position the teeth of which combs are adapted to intermesh, the two parts of the clamp being so shaped that in the closed position they are adapted to clamp the portion of the hair under treatment between them, and heating means for applying heat to the hair under treatment, all for the purposes set forth.

1,759,098. WHEEL CHUCK. JOHN C. CROCKER, Pittsburgh, Pa. Filed Jan. 30, 1926. Serial No. 84,964. 4 Claims. (Cl. 82—40.)



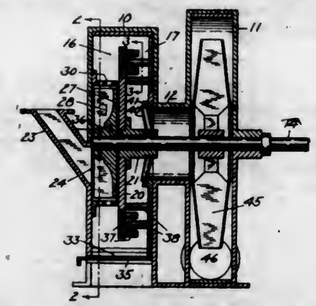
1. In a machine having a rotating work-holding member, as a lathe or boring mill, the combination of a rotating work-carrying member, a clamping device arranged at the axis of said member and adapted to extend into the article being worked upon, said clamping device comprising laterally movable clamping dogs and a retracting

spring embracing said dogs for returning the dogs to non-clamping position after completion of the work, and a locking member engaging said carrying member and adapted to cooperate therewith to move said clamping device to operative position.

1,759,099. PROCESS OF MANUFACTURING REFLECTORS. CHARLES W. DAKE, Chicago, Ill., assignor to The Pyle-National Company, Chicago, Ill., a Corporation of New Jersey. Filed Mar. 19, 1926. Serial No. 96,078. 2 Claims. (Cl. 204—8.)

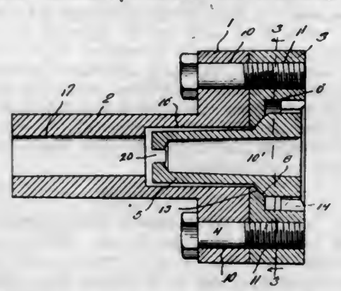
1. The process of making reflectors which consists in chemically depositing a coating of conducting material on a non-conducting form, electroplating thereon a layer of chromium, then electroplating on the chromium, a reinforcing layer of nickel, then electroplating on the nickel a thick supporting layer of copper, then cutting away all said layers about the edge of the form to free them, removing the assembled reflector from the form and then removing the conducting layer.

1,759,100. APPARATUS FOR PULVERIZING MATERIALS. FRED H. DANIELS, Worcester, Mass., assignor to Riley Stoker Corporation, Worcester, Mass., a Corporation of Massachusetts. Filed Aug. 21, 1926. Serial No. 130,750. 11 Claims. (Cl. 83—11.)



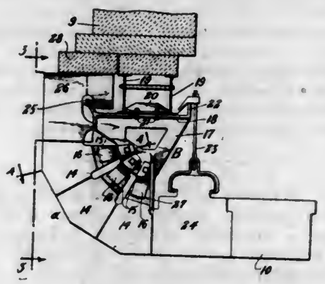
1. A pulverizing apparatus comprising a casing having two grinding zones, the outlet zone communicating with the inlet zone at its periphery only, means forming an inlet and an outlet respectively for said zones, a set of wide revoluble substantially radial beater fan blades arranged to crush material delivered through the inlet and create an air current towards the second zone, and impact bodies revolubly mounted in the second zone to pulverize finely material delivered thereto from the first zone.

1,759,101. ADJUSTABLE FLOATING TOOL HOLDER. JOSEPH E. DANIELS, Clifton, N. J. Filed June 9, 1928. Serial No. 284,232. 1 Claim. (Cl. 279—16.)



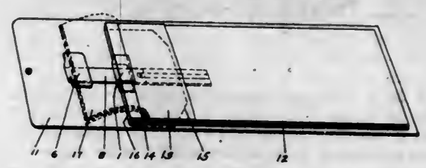
A floating tool holder of the class described, comprising a body with a shank extending therefrom, said body and said shank having a central opening, said body having openings adjacent the periphery thereof, a base plate on the body, screws through the peripheral openings of the body, and threadedly engaged in the base plate for holding the base plate in place, said base plate being provided with an opening registering with the first mentioned opening, and an annular channel with entrances from the front of the face plate, a sleeve having a hole for receiving a tool shank and having driving lugs radiating therefrom to be inserted to the channel through the entrances, pin stops in the base plate extending into the channel and against which the lugs are adapted to abut when the sleeve is turned.

1,759,102. ARCH STRUCTURE. BRADLEY DOBIE, Ridgewood, N. J., assignor to American Arch Company, New York, N. Y., a Corporation of Delaware. Filed Aug. 10, 1922. Serial No. 580,857. 12 Claims. (Cl. 110—99.)



1. In a furnace arch construction the combination of a supporting member and a fantail set of nose bricks supported therefrom, the bricks of the set being arranged in alignment and pivotally secured to said supporting member independently of adjacent bricks circumferentially of the nose.

1,759,103. CHECK-STUB HOLDER. CHARLES E. EBERSOL and ROBERT GRIEVE, Lansing, Mich. Filed Aug. 16, 1928. Serial No. 300,130. 2 Claims. (Cl. 281—42.)

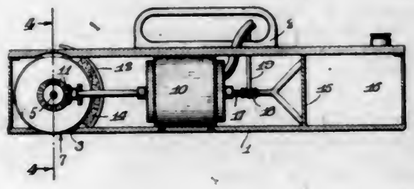


1. A check-stub holder comprising a stationary section with a long straight portion in the form of a flat tube to be placed under the pad of checks, and with a wide hook on one end to grip firmly over the bound end of the pad of checks; and a slidable section, with a long straight portion which is slidable in and out of said tube just far enough for the wide hook on the outer end of the slidable section to catch and hold out flat, out of the way, all of the previously written check stubs while writing the next stub and check.

1,759,104. ELECTRIC HAND SANDING MACHINE. BERTIE W. EAGLE, Aiken, S. C., assignor of one-half to Roland N. Murray, Aiken, S. C. Filed Oct. 31, 1928. Serial No. 316,206. 1 Claim. (Cl. 51—170.)

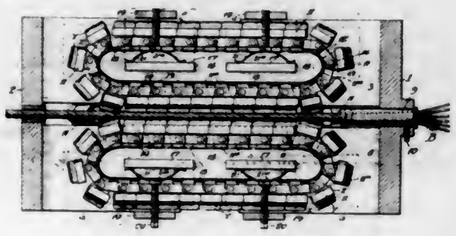
A device of the class described comprising a casing having an opening in its bottom adjacent one end thereof, a sanding roller journaled in the casing with a portion extending through said opening, the top of the casing also

having an opening therein arranged above the first opening, a shield arranged in rear of the roller and having one end connected with the bottom of the casing and its other end passing through the opening in the top thereof, absorbent material placed between the shield and the roller, a curved perforated pipe in the space between the



shield and roller and covered by the absorbent material, a reservoir for containing liquid in the casing, a pipe connecting the reservoir with the curved pipe, a handle on the top of the casing, a valve in the pipe and a handle connected with the valve and passing through the casing at a point adjacent the handle on the casing.

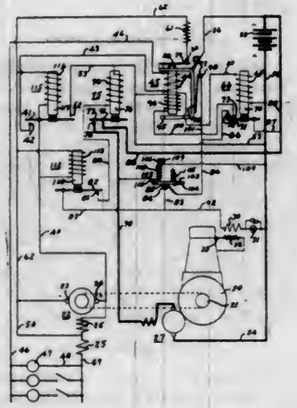
1,759,105. DIE FOR LAYING WIRE ROPE AND WIRE-ROPE STRANDS. JOSEPH E. EVANS, Bedford, Ind., assignor of one-fourth to Charles S. Knight, Chicago, Ill. Filed Sept. 7, 1928, Serial No. 304,455. Renewed Sept. 26, 1929. 14 Claims. (Cl. 117—50.)



1. In a wire rope making machine, a compression device for laying the strands of the rope including a frame and a plurality of endless chains of connected die elements mounted to travel with their inner flights extending parallel with each other adjacent the center of the device, said die elements being formed with cylindrically segmental working faces arranged to engage the rope and together form a rope passageway.

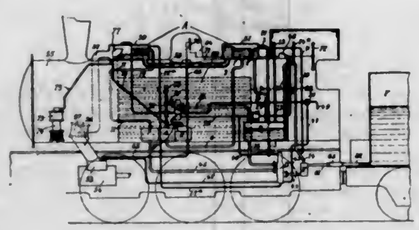
1,759,106. ELECTRICAL APPARATUS. JOHN RALPH FEHR, Dayton, Ohio, assignor to Delco-Light Company, Dayton, Ohio, a Corporation of Delaware. Filed July 20, 1926. Serial No. 123,748. 5 Claims. (Cl. 290—30.)

1. An electrical system comprising in combination, a prime mover, a storage battery, a work circuit, electrical apparatus connected with the prime mover and battery for starting the prime mover with current from the battery and for thereafter supplying current to the work circuit, a prime-mover-control device, plural control circuits for said device, a controller for rendering one of said control circuits operative, and an electromagnetically operated switch for closing another of said prime-mover-control circuits by current from the battery, said switch including a control-circuit-closing-coil energized by the battery, the circuit for said coil including contacts actuated by the controller, and means responsive to the



operation of the prime mover for maintaining the second mentioned prime-mover-control circuit closed independently of said controller.

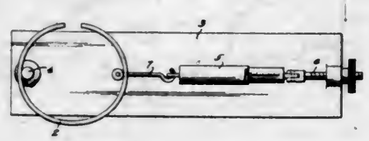
1,759,107. HOT-WATER FEEDING FOR BOILERS. SEBASTIEN OTTO ALFRED FIEDLER, Paris, France, assignor to l'Auxiliaire des Chemins de Fer et de l'Industrie, Paris, France. Filed May 19, 1926, Serial No. 110,224, and in France May 29, 1925. 11 Claims. (Cl. 122—1.)



1. With a steam power plant including a source of cold water, a boiler and a prime mover adapted to be supplied with steam from said boiler, the combination of a water heater connected to said source of cold water, means for heating the water in said heater with waste heat from said power plant, a tank, means for supplying said tank with hot water from said heater, injecting means for feeding said boiler, means for connecting the inlet of said injecting means with said tank and means actuated by the stoppage of steam to said prime mover for allowing the flow of water from said tank to said injecting means and for means actuated by the stoppage of steam to said prime mover preventing the flow of water from said source of cold water to said heater.

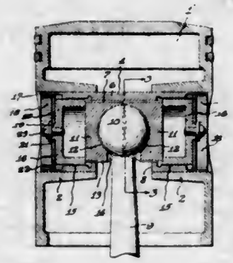
1,759,108. METHOD OF MAKING PISTON-RING PATTERNS. HARRY S. GRAVES, Detroit, Mich.; Ethel S. Graves administratrix of said Harry S. Graves, deceased. Filed Sept. 16, 1926. Serial No. 135,807. 6 Claims. (Cl. 22—190.)

1. A method of making a piston ring pattern, which consists in providing a split ring of the desired final circumferences expanding said split ring for wall pressure, making a master pattern templet with dimensions corresponding to the expanded split ring, fitting a perfectly



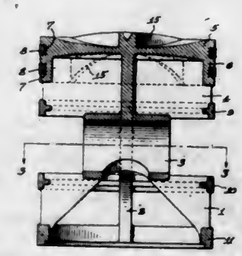
round ring over the master pattern templet, and fixing the pattern ring to hold its configuration when the master pattern templet is removed.

1,759,109. PISTON AND CONNECTING-ROD ASSEMBLY. HARRY S. GRAVES, Highland Park, Mich.; Ethel S. Graves administratrix of said Harry S. Graves, deceased. Filed Aug. 10, 1927. Serial No. 211,899. 7 Claims. (Cl. 74—108.)



3. In a piston, a sleeve supported transversely therein, a socket member inserted in said sleeve, and caps threaded in said sleeve and engaging the ends of said socket member.

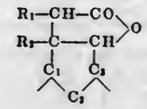
1,759,110. PISTON. HARRY S. GRAVES, Highland Park, Mich.; Ethel S. Graves administratrix of said Harry S. Graves, deceased. Filed Aug. 10, 1927. Serial No. 211,901. 4 Claims. (Cl. 74—108.)



1. A piston comprising a single central bearing member, radial vanes formed above and below the same, and a partition head formed upon the upper vanes.

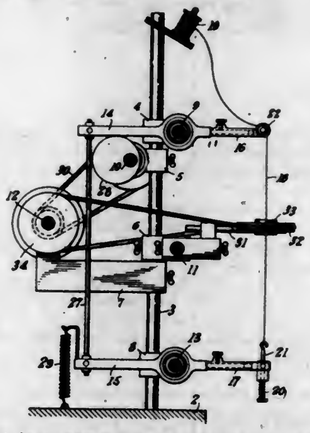
1,759,111. CYCLIC KETONIC COMPOUNDS AND PROCESS OF PREPARING THEM. HEINRICH GRUNDE, Hochst-on-the-Main, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed July 5, 1927, Serial No. 203,669, and in Germany July 8, 1926. 8 Claims. (Cl. 260—181.)

1. As new products the compounds containing the atom-grouping:



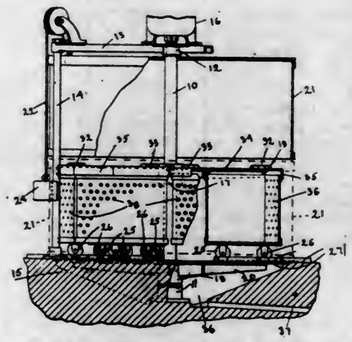
wherein R_1 and R_2 represent substituents of the group including hydrogen and halogen, and C_1, C_2 and C_3 represent carbon atoms belonging to an aromatic nucleus.

1,759,112. METHOD FOR LAPPING DIES. WILLIAM HADDOW, Ossining, N. Y. Filed Jan. 8, 1929. Serial No. 331,143. 4 Claims. (Cl. 51—62.)



3. That improvement in the method of lapping a die having a hole therethrough comprised in supplying to the die, a lapping wire having a diameter sufficient to fill the hole in the die, drawing said wire back and forth through said die and at the same time rotating said die, unused portions of the wire being frequently fed into the die, whereby the die is supplied with wire filling the die.

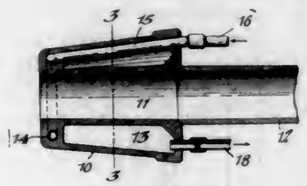
1,759,113. LAUNDRY DRYING APPARATUS. JOHN J. HEGARTY, Medford, Mass. Filed Nov. 10, 1928. Serial No. 318,500. 4 Claims. (Cl. 210—76.)



1. In a centrifugal drying apparatus having an upright rotatable shaft, the combination of a plurality of radial

arms and a platform rigid with the shaft; a plurality of independent, removable, vehicular receptacles supported by the platform, radially disposed between contiguous arms, and adapted to be engaged thereby for the purpose of being rotated therewith; elements movably secured to the arms, and adapted to engage the several receptacles for retaining them in fixed relation to the axis of the shaft when rotated thereabout.

1,759,114. TUYÈRE FOR BLAST FURNACES. ERNEST H. HOLZWORTH, Buffalo, N. Y. Filed May 17, 1927. Serial No. 191,950. 1 Claim. (Cl. 122—6.6.)



A blast furnace tuyère, comprising a body having an air passage extending therethrough and a water-circulating compartment surrounding said air passage and extending from the base to a point short of the nose of said body, and a circulating coil embedded in the nose and isolated from said compartment, said coil having an inlet branch extending lengthwise through the water-circulating compartment for delivering a continuous supply of water through the coil and an outlet branch disposed substantially parallel with said inlet branch and discharging into the inner end of said compartment, the coil being made of a material having a higher melting point than that of the tuyère-body.

1,759,115. MANUFACTURE OF LITHOPONE. WILLIAM C. HOOBY, Palmerton, Pa., assignor to The New Jersey Zinc Company, New York, N. Y., a Corporation of New Jersey. Filed Dec. 15, 1925. Serial No. 75,621. 9 Claims. (Cl. 134—78.)

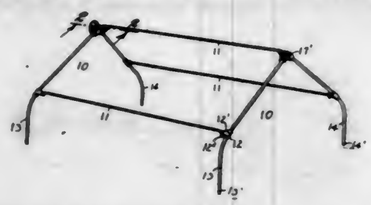
6. The improvement in the manufacture of lithopone which comprises promoting uniformity in the finished product by establishing a predetermined excess of and ratio between the hydrate and sulhydrate radicals in the crude pulp at the endpoint of the precipitating step.

1,759,116. MANUFACTURE OF LITHOPONE. WILLIAM C. HOOBY, Palmerton, Pa., assignor to The New Jersey Zinc Company, New York, N. Y., a Corporation of New Jersey. Filed Dec. 15, 1925. Serial No. 75,622. 3 Claims. (Cl. 134—78.)

3. In a process for the manufacture of lithopone in which a predetermined ratio of hydrate to sulfhydrate radicals is established in the crude pulp at the end point of the precipitating step, the improvement which comprises varying said ratio of hydrate to sulfhydrate radicals in amount sufficient to permit of a temperature of calcination adapted to impart to the finished lithopone substantial resistance to light while at the same time developing satisfactory hiding-power and color.

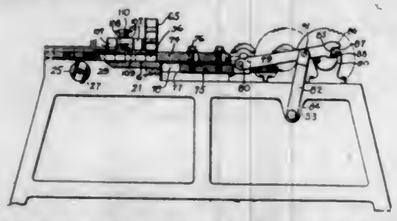
1,759,117. CANOPY. GEORGE HOPP, New York, N. Y. Filed Sept. 27, 1928. Serial No. 308,825. 6 Claims. (Cl. 135—4.)

1. In a canopy, a framework therefor, comprising supporting frames joined by cross bars, each of said frames comprising at least two shaped sections, means for joining said shaped sections together, said means including



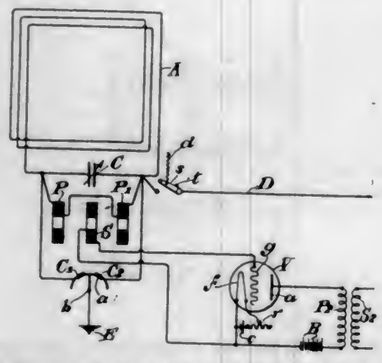
L-shaped members provided with means for engagement with cooperating means on the ends of the respective sections of said framework.

1,759,118. MACHINE FOR SHAPING WOODEN BLOCKS. WILLIAM HUBBARD, Dolgeville, N. Y., assignor to Hubbard Heel Company, Inc., Dolgeville, N. Y., a Corporation. Filed Oct. 5, 1927. Serial No. 224,252. 7 Claims. (Cl. 12—47.)



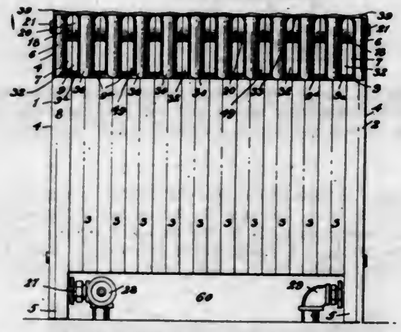
1. In a machine for shaping the entire width of the bottom of relatively short wooden blocks, the combination of a horizontally arranged rotary shaper having blades adapted to engage the width of the blocks, oppositely disposed upstanding side guides adapted to engage the longitudinal sides of said blocks and form a guideway through which the blocks may be pushed in a continuous line into engagement with and past the shaper while the blocks are being held solely by said guides from lateral and vertical displacement when brought into engagement with said shaper, and means for pushing said row of blocks forwardly past the shaper.

1,759,119. RADIOCOMPASS. FREDERICK A. KOLSTER, Palo Alto, Calif., assignor to Federal Telegraph Company, San Francisco, Calif., a Corporation of California. Filed Feb. 18, 1925. Serial No. 9,936. 10 Claims. (Cl. 250—11.)



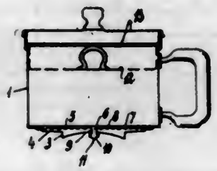
5. Radio receiving apparatus comprising non-uniform directional absorption structure, substantially uniform directional absorption structure co-acting therewith, means for translating the received energy into an indication, auxiliary absorption structure, and means for bringing said auxiliary absorption structure into electrically unsymmetrical relation with said first named absorption structure for determining the sense of direction of a source of electro-radiant energy.

1,759,120. RADIATOR. WALTER E. KUENSTLER, New York, N. Y. Filed Jan. 5, 1928. Serial No. 244,637. 3 Claims. (Cl. 257—151.)



2. A radiator assembly composed of a plurality of hollow connected end and intermediate radiator sections, the outer faces of said sections having substantially flat flanges so that when said sections are placed together they present continuous substantially plane surfaces across their back, front and top faces, the flanges on said sections being interrupted at the bottom and at the upper end of the front whereby an air channel is provided between the sections, said channel beginning at the exposed bottoms of the sections and terminating at the upper open front thereof, said assembly having its end sections extending below the intermediate sections, said end sections having inlet and outlet openings disposed toward one another whereby inlet and outlet pipes connected thereto will be located below the lower ends of the intermediate sections and between the end sections.

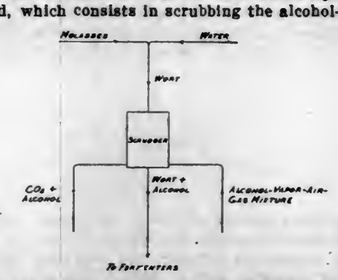
1,759,121. COFFEE PERCOLATOR. HUBERT LAMPLOTA, Brno, Czechoslovakia. Filed May 9, 1928, Serial No. 276,453, and in Czechoslovakia Dec. 9, 1927. 1 Claim. (Cl. 33—3.)



A coffee percolator comprising a vessel having a central discharge aperture, a loose bottom placed in said vessel, a nipple on said bottom adapted to project through the discharge aperture of the vessel, said bottom being formed with spaced lugs adapted to support a filtering element so that the liquid can flow between the lugs to the nipple, and a discharge nozzle fitted detachably on said nipple outside the vessel.

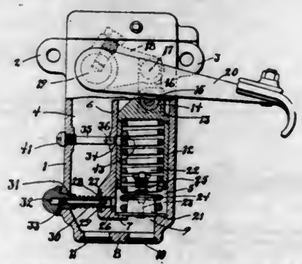
1,759,122. METHOD OF MAKING ALCOHOL. FRANK E LICHTENTHAELER, Newton Highlands, Mass. Filed Jan. 26, 1924. Serial No. 688,844. 6 Claims. (Cl. 195—20.)

4. The step in the method of making alcohol by fermentation and distillation wherein water substances enter the process and wherein alcohol-vapor-air-gas mixture products are evolved, which consists in scrubbing the alcohol-vapor-



air-gas mixture products by the water substances to recover the otherwise wasted alcohol from the alcohol-vapor-air-gas mixture.

1,759,123. SHOCK ABSORBER. RALPH M. LOVEJOY, Boston, Mass. Filed May 12, 1923. Serial No. 638,562. 4 Claims. (Cl. 267—8.)



2. A shock absorber comprising a fluid-containing reservoir, a cylinder, a piston reciprocable in said cylinder, means permitting a substantially free flow of fluid from said reservoir into said cylinder upon movement of the piston in one direction, means restricting the flow of fluid from the cylinder into said reservoir upon movement of the piston in the opposite direction, the wall of said cylinder being provided with an aperture leading from said reservoir to said cylinder, a plug removably mounted in said aperture having a restricted passage communicating with said reservoir and said cylinder and a port in said piston of greater area than that of the aperture in said cylinder wall communicating therewith when the piston is in normal position, but movable out of such communication upon movement of the piston beyond a predetermined distance from normal position.

1,759,124. SEALING TAPE AND PROCESS OF MANUFACTURING SAME. JOHN MACLAURIN, Ware, Mass. Filed Feb. 25, 1925. Serial No. 11,600. 6 Claims. (Cl. 91—68.)

1. A sealing tape comprising a strip of cloth, a coating of waterproof adhesive united securely to one side of said strip, said adhesive being hard and non-tacky at normal temperatures but adapted to become soft and sticky when heated to a temperature substantially above normal, and a protective filling material in the surface of said strip opposite to said coating and adapted to strongly resist the tendency of said adhesive to sweat through the cloth when the adhesive is melted in affixing said tape to an article, the surface of said strip to which the adhesive is applied being uncoated with filling material.

1,759,125. WIRE GUARD. JULIE MAINELLO and JOSEPH P. BACCA, Trinidad, Colo. Filed June 14, 1927. Serial No. 198,858. 4 Claims. (Cl. 247—2.)

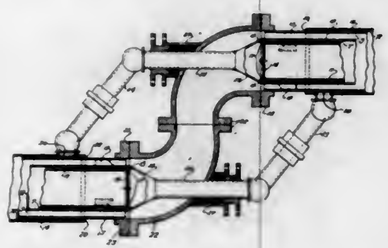
1. The combination with an electric meter box and an insulated wire extending thereto, of a bushing embracing

the wire and having normally spaced portions providing a substantially radial slot, said bushing being of a thickness sufficient to close the space between the wire and the wall of the opening in which it is seated, all parts of the



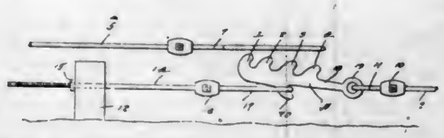
bushing being located outside of the meter box, and adjustable means engaging the spaced portions of the bushing for contracting the slot and clamping said bushing upon the insulated wire to hold it against displacement relative to the wire and meter box.

1,759,126. HEAT INTERCHANGER. RALPH G. MANSFIELD, La Salle, N. Y., assignor to Union Carbide Company, a Corporation of Virginia. Filed Apr. 2, 1926. Serial No. 99,378. 4 Claims. (Cl. 257—246.)



1. A heat interchanger comprising a plurality of units coupled in series, each unit comprising passages for temperature changing media and a passage intermediate such passages for the fluid to be treated, means at the ends of each unit for connecting said intermediate passages of adjacent units and means for connecting each passage for temperature changing media of one unit to the passage for temperature changing media of an adjacent unit on the opposite side of said intermediate passage.

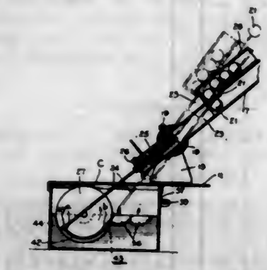
1,759,127. DISCONNECTING HOOK. FRANCIS MAGESON, Bolivar, N. Y. Filed July 15, 1929. Serial No. 378,527. 1 Claim. (Cl. 24—69.)



A disconnecting hook structure of the class described comprising an elongated shank having formed on one edge thereof a plurality of spaced hooks, and the other edge thereof with a single hook at a point intermediate the outermost of the first named hooks, and one end of the shank having an eye formed thereon and extending longitudinally therefrom.

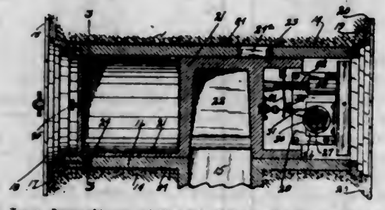
1,759,128. TOY REPEATING GUN. LOUIS MARX, New York, N. Y. Filed Oct. 11, 1928. Serial No. 311,726. 15 Claims. (Cl. 124—13.)

1. A mechanically operated toy gun comprising a movably mounted simulated gun barrel, a magazine for holding a plurality of projectiles associated with said barrel for feeding the projectiles individually to said barrel, means movable in said barrel for forcibly discharging a projectile



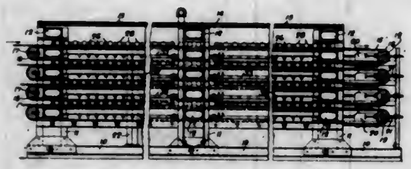
fed thereto, and a motor for recurrently operating said projectile discharging means and for simultaneously imparting to said gun barrel a sudden bodily movement.

1,759,129. AFTER-HOUR DEPOSITORY. OLIVER B. McCLINTOCK and EDWARD G. LAWRENCE, Minneapolis, Minn., assignors to O. B. McClintock Company, Minneapolis, Minn., a Corporation of Minnesota. Filed Feb. 16, 1928. Serial No. 254,804. 6 Claims. (Cl. 109—1.)



1. In a depository of the kind described, a casing adapted to be anchored in the wall and provided with a depending delivery chute and a parcel carrier mounted in said casing for endwise sliding and rotary movements and provided with a parcel-receiving pocket arranged to be turned from an upright exposed position outside of said casing into an inverted position aligned with said delivery chute.

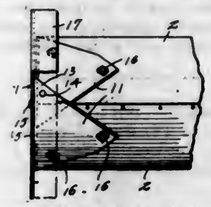
1,759,130. DRIER. LOUIS G. MERRITT, Lockport, N. Y. Filed May 26, 1927. Serial No. 194,441. 19 Claims. (Cl. 34—12.)



1. A treating machine for sheet material, including, in combination, a conveyor of the endless-apron type, a series of rollers disposed adjacently and loosely supported by the upper surface of said conveyor, means for driving said conveyor, and a heating element having means for separating said rollers and confining their movement to substantial vertical planes.

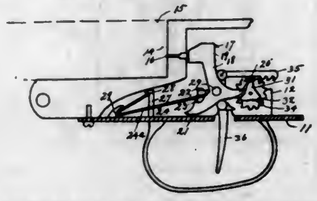
1,759,131. STOCK-FEEDING TROUGH. WILLIAM H. MILLER, Fairbank, Iowa. Filed July 21, 1928. Serial No. 294,536. 8 Claims. (Cl. 119—61.)

1. A stock feed trough comprising an elongated substantially V-shaped body section, an end support for each end of the body section comprising an upright plate arranged transversely of the trough end, a pair of supporting wings suspended from the top edge of and formed integral with the plate and projecting from the inner face thereof each positioning upon the under face of one



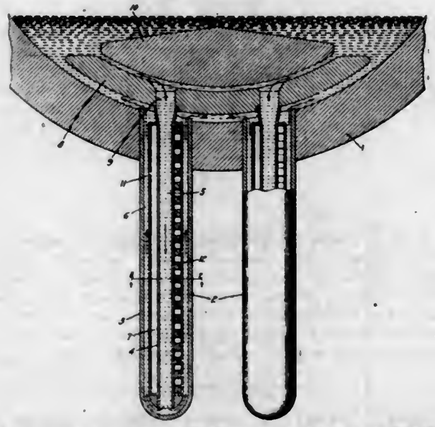
side of the trough body, and a reinforcing tab carried by one of said wings extending beneath the trough and secured to and against the under face of the adjacent wing.

1,759,132. GUN-DISCHARGING MEANS. DANIEL N. MINK, Fresno, Calif. Filed Jan. 29, 1929. Serial No. 335,924. 2 Claims. (Cl. 42—42.)



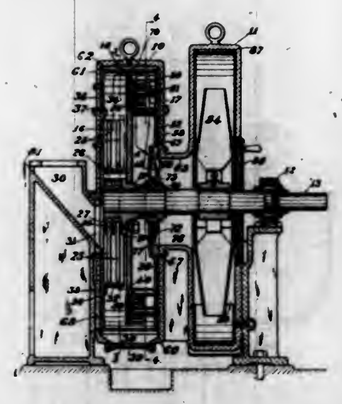
1. Gun discharging means having a plurality of pivotally mounted hammers, separate cam means for each hammer adapted to move the hammer against a spring tension and to release said hammer adapted to move the hammer against a spring tension and to release said hammer at a fixed point in the rotation of the cam, each of said hammers having a dog formed integral therewith adapted to form a stop to prevent a reverse movement of said cam, pawl and ratchet means for rotating said cams simultaneously, said pawl and ratchet means being actuated with a trigger pivotally mounted and adapted to have a back and forth movement, said pawl and ratchet means and said cams being adapted to actuate but one hammer at one back and forth movement of the trigger.

1,759,133. MERCURY BOILER. ANTHONY J. NERAD, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed July 11, 1927. Serial No. 205,017. 10 Claims. (Cl. 122—305.)



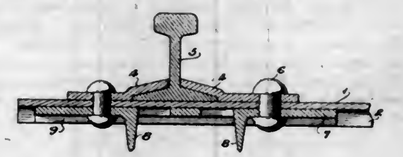
1. A boiler for generating mercury vapor, said boiler being charged with a substance consisting of mercury and adulterating material to which the heat is applied for vaporizing the mercury of the substance.

1,759,134. PULVERIZING APPARATUS. ROBERT SANFORD RILEY and OLLISON CRAIG, Worcester, Mass., assignors to Riley Stoker Corporation, Worcester, Mass., a Corporation of Massachusetts. Filed Nov. 7, 1925. Serial No. 67,639. 32 Claims. (Cl. 83—11.)



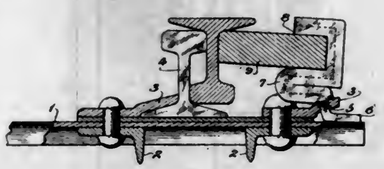
1. A pulverizing apparatus comprising a casing having an inlet and a centrally located outlet, means forming two peripherally communicating grinding zones adjacent to the same, revoluble beaters within the outlet zone arranged to pulverize the material transmitted thereto and means including revolubly mounted hammers within the inlet grinding zone which is arranged to crush the material preliminarily and prevent the escape of hard foreign bodies to the second zone.

1,759,135. METALLIC TIE AND ALIGNMENT LUG THEREFOR. JUSTUS J. ROSS, Huntington, W. Va. Filed Apr. 23, 1929. Serial No. 357,491. 5 Claims. (Cl. 238—340.)



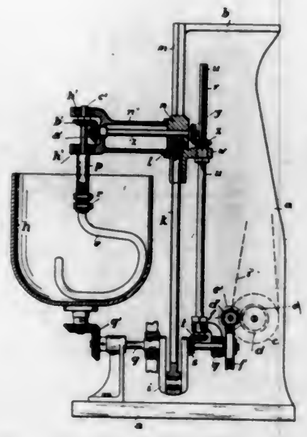
1. In a metallic cross-tie, a reinforcing plate secured to the under side thereof, and one or more alignment lugs struck from said plate.

1,759,136. EXTENSION-RAIL CLIP. JUSTUS J. ROSS, Huntington, W. Va. Filed Apr. 23, 1929. Serial No. 357,492. 11 Claims. (Cl. 238—10.)



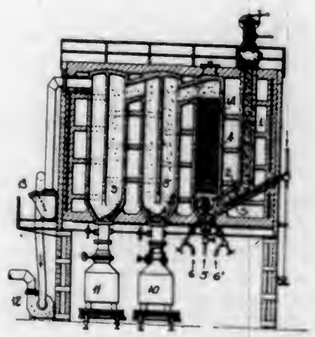
1. In combination with a cross-tie, a rotatable clip associated with the tie for securing a rail in place on the tie, and a second clip detachably engaging the first-mentioned clip for the purpose described.

1,759,137. DOUGH-KNEADING MACHINE. RICHARD SARTOR, Wahlbach, near Burbach, Westphalia, Germany. Filed June 17, 1929, Serial No. 371,531, and in Germany Dec. 19, 1928. 3 Claims. (Cl. 259—82.)



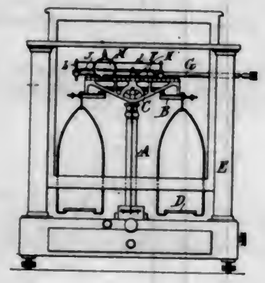
1. A dough kneading machine comprising a revolving trough, a kneading arm in said trough, means for reciprocating the arm vertically in the trough, and means for rotating the arm about a vertical axis through one revolution during each up and down movement.

1,759,138. APPARATUS FOR PRODUCING ACTIVE CARBON. JOHAN NICOLAAS ADOLF SAUER, Amsterdam, Netherlands; Honore Amand Pedro Marie Tervooren, representative of the estate of said Johan Nicolaas Adolf Sauer, deceased, assignor to Naamlooze Vennootschap Algemeene Norit Maatschappij, Amsterdam, Netherlands, a Corporation of The Netherlands. Original application filed July 29, 1924, Serial No. 728,923, and in Great Britain Aug. 9, 1923. Divided and this application filed Apr. 6, 1926. Serial No. 100,187. 8 Claims. (Cl. 202—121.)



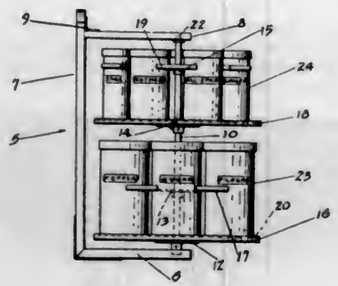
1. An apparatus for producing active carbon from carbonaceous material comprising a substantially vertical chamber, baffling means in said chamber so disposed in relation to each other as to produce a plurality of tortuous passages in said chamber running vertically through said chamber, means to heat said chamber, means to introduce finely divided carbonaceous material and gases near the foot of said chamber, and means to draw off activated material at an upper level of said chamber.

1,759,139. BALANCE. WILLIAM C. SEYTER, Union City, N. J., assignor to The Torsion Balance Company, New York, N. Y., a Corporation of New York. Filed May 21, 1929. Serial No. 364,741. 9 Claims. (Cl. 265—54.)



1. A balance or weighing scale comprising an enclosing case, a balance beam having a calibrated scale, a movable rider, a rider carrier, a lens for viewing the position of the rider with respect to the calibrated scale, and a supporting means for the lens, said rider carrier and lens-supporting means being mounted on a movable means which is operable from the exterior of the enclosing case.

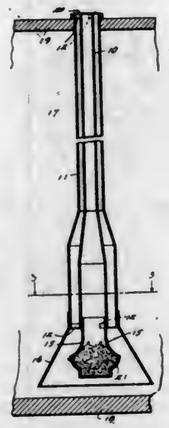
1,759,140. SPICE-CONTAINER RACK. RAE SILBERGER, Arroyo Sanitorium, Calif. Filed Apr. 8, 1929. Serial No. 353,301. 2 Claims. (Cl. 211—77.)



1. In a device of the class described, a supporting frame, a vertically disposed spindle mounted therein, means carried by said spindle for supporting a plurality of containers in circular formation thereabout, said means comprising annular bases having beaded outer edges and a hinged bearing support carried by the frame whereby the entire unit may be removed from the frame.

1,759,141. PURIFIER FOR CISTERNS. LESLIE M. STRAIN, Mitchell, S. Dak. Filed Apr. 21, 1928. Serial No. 271,902. 2 Claims. (Cl. 210—36.)

1. In an attachment for cisterns and other storage tanks, a tube opening through the top of the tank and having at its lower end a receptacle, a purifying agent in the receptacle, there being openings admitting the contents of the tank to the tube through the lower end thereof at a point above the bottom of the receptacle and the agent therein, and a removable screen cap for said tube.

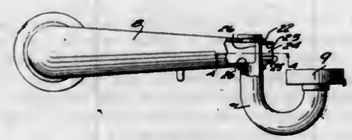


1,759,142. PAPER CLIP. SAMUEL TALISMAN, San Bernardino, Calif. Filed Feb. 7, 1927. Serial No. 166,524. 8 Claims. (Cl. 24—26.)



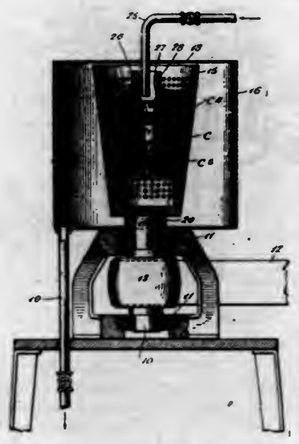
8. A paper clip consisting of a wire bent to form a pair of spaced apart eyes in alinement with one another, a third eye disposed in a plane at right angles relative to the first eyes, arms from the first eyes extending down to adjacent the third eye, said third eye being elongated to form a clamp jaw, the terminals of said arms being bent away from said third eye.

1,759,143. COMBINED PHONOGRAPH AND RADIO RECEIVING CABINET. ADOLPH ALEXANDER THOMAS, New York, N. Y., assignor to Radio Corporation of America, New York, N. Y., a Corporation of Delaware. Original application filed May 20, 1922, Serial No. 562,278. Patent No. 1,652,219, dated Dec. 31, 1927. Divided and this application filed May 16, 1923. Serial No. 639,240. 14 Claims. (Cl. 179—100.12.)



2. Sound-reproducing apparatus comprising a phonograph horn, a tone arm connected with said horn and at its outer end carrying a phonograph reproducer, a rigid tubular extension at the outer end of said tone arm for supporting a telephone receiver without removal of the phonograph reproducer, and a rotary valve member mounted in the outer end of the tone arm for controlling the communication between said extension and said tone arm.

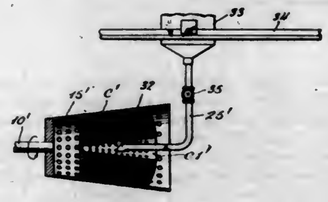
1,759,144. DYEING APPARATUS. HENRY E. VAN NESS, Elmira, N. Y. Original application filed Mar. 11, 1926, Serial No. 93,821. Divided and this application filed Oct. 27, 1926. Serial No. 144,412. 6 Claims. (Cl. 8—19.)



1. Apparatus for dyeing a cone of yarn, comprising a hollow conical perforated core on which the yarn is wound, means for rotating the yarn and core with the open end of the core upward, means for supplying liquid to the interior of the core through its open end, and means for preventing said liquid from splashing out of the open end of the core during the rotation.

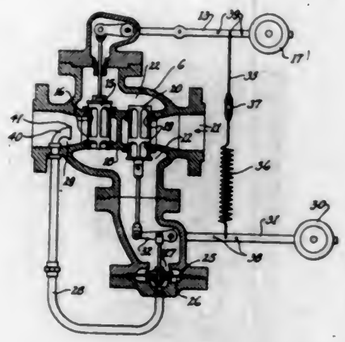
2. Dyeing apparatus, comprising the combination with means for rotating a cone of yarn wound on a perforated core and means for supplying liquid to the interior of said core, of a conical cup fitting into the core, containing lateral perforations, and having a lip extending outward from the open end of the core.

1,759,145. DYEING APPARATUS. HENRY E. VAN NESS, Elmira, N. Y. Original application filed Mar. 11, 1926, Serial No. 93,821. Divided and this application filed Oct. 27, 1926. Serial No. 144,413. Renewed Nov. 9, 1929. 1 Claim. (Cl. 8—17.)



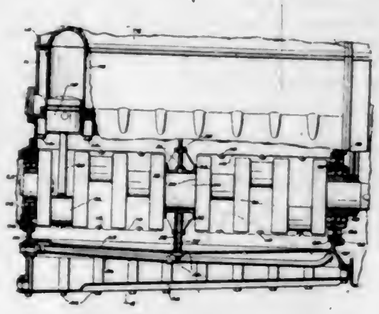
Apparatus for dyeing, comprising means for rotating a mass of yarn containing a central opening, a pipe extending into the central opening of the mass and having a discharge nozzle, and means for adjusting said nozzle in a direction parallel to the axis of the mass so that it will discharge liquid at any desired zone of the inner surface of the mass.

1,759,146. FEED-WATER VALVE. VINCENT V. VERNSCHOTEN, Erie, Pa., assignor to Northern Equipment Company, Erie, Pa., a Corporation of Pennsylvania. Filed May 6, 1927. Serial No. 189,254. 10 Claims. (Cl. 50—10.)



1. A fluid conduit, a casing connected in said conduit, a chamber in said casing, a partition across said chamber, a main and a control valve in said partition, means for varying the opening of said main valve, and means depending on the drop in pressure through said main valve for varying the opening of said control valve.

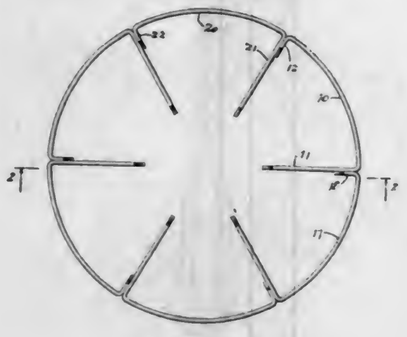
1,759,147. INTERNAL-COMBUSTION ENGINE. JESSE G. VINCENT, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Feb. 23, 1924. Serial No. 694,574. 6 Claims. (Cl. 123—195.)



1. In an internal combustion engine, the combination with a multithrow crankshaft of a barrel crankcase having side openings and an end opening large enough to receive the crankshaft, said side openings being large enough for insertion and removal of the connecting rods, the crankcase being adapted to have the crankshaft assembled through said end opening and three bearings in said crankcase for said crankshaft.

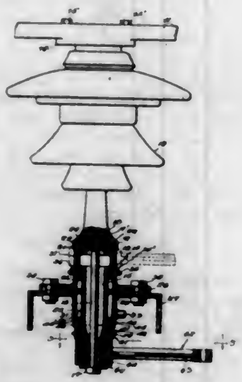
1,759,148. GRATE FOR OIL AND GAS STOVES. LEWIS T. WILCOX, Peekskill, N. Y. Filed Feb. 4, 1927. Serial No. 165,767. 4 Claims. (Cl. 126—214.)

1. A grate adapted to overlie an oil or gas burner comprising a plurality of sections of band material each section having an arcuate peripheral portion and angular arms of different lengths, the sections being disposed with their arms extending inwardly and with the short arms of



each section engaging the longer arms of the succeeding section, and being secured thereto to form a substantially circular grate.

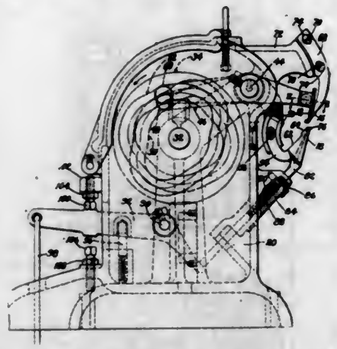
1,759,149. ROTARY INSULATOR. ALFRED ALSAKER, Chicago, Ill., assignor to The Delta-Star Electric Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 27, 1926. Serial No. 137,926. 34 Claims. (Cl. 308—228.)



1. A non-freezing bearing adapted to stand exposed to the weather comprising a hollow spindle having an enlarged integral head portion at one end, an integral ball race adjacent the junction of said head and spindle, an overhanging divergent cave for the ball race, a barrel having an integral cooperating ball race disposed under said cave and balls in said races.

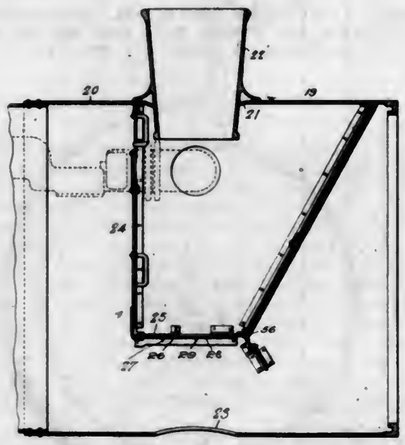
1,759,150. HEEL-COVER TRIMMING MACHINE. LEWIS J. BAZZONI, Swampscott, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Apr. 12, 1927. Serial No. 183,183. 36 Claims. (Cl. 12—42.)

1. In a trimming machine, means for supporting and trimming a flexible heel cover margin which projects beyond the edge of a heel face to which the cover has been applied, and means constructed and arranged to engage



simultaneously both the covered face and another face of the heel to position the heel relatively to the trimming means to determine the location of the trimming cut.

1,759,151. LOCOMOTIVE-SMOKE-BOX SPARK NETTING. WILLIAM L. BEAN, West Haven, Conn. Original application filed June 2, 1925, Serial No. 34,406. Divided and this application filed Apr. 2, 1926. Serial No. 99,417. 8 Claims. (Cl. 110—122.)



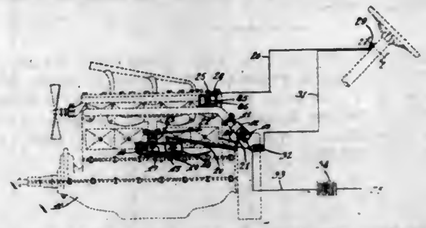
1. In a smoke-box structure, a spark-netting, comprising two sections which lie in a common plane and a third section which lies in a plane parallel to the other two, and two bars each presenting two oppositely facing grooves which receive adjacent margins of said third section and one of said two sections.

1,759,152. SODIUM BORATE TRI-SODIUM PHOSPHATE COMPOUND AND PROCESS FOR ITS MANUFACTURE. CHARLES F. BOOTH and ARTHUR B. GERBER, Anniston, Ala., and PAUL LOGUE, St. Louis, Mo., assignors to Federal Phosphorus Company, Birmingham, Ala., a Corporation of Alabama. Filed Oct. 28, 1927. Serial No. 229,525. 11 Claims. (Cl. 23—50.)

1. The herein described composition of matter consisting of a compound of sodium phosphate and sodium borate.

9. The herein described process for the manufacture of a sodium borate tri-sodium phosphate composition, which consists in the addition of caustic soda and sodium borate to di-sodium phosphate, substantially as described.

1,759,153. AUTOMATIC REGULATOR FOR INTERNAL-COMBUSTION-ENGINE FUEL MIXERS. MAURICE F. DUFFY, Chicago, Ill. Filed Apr. 12, 1926. Serial No. 101,285. 11 Claims. (Cl. 123—106.)



1. In a device of the class described, the combination with a carburettor having means normally in operative position for enriching the explosive mixture supplied to an internal combustion engine, of fluid actuated means for rendering said enriching means inoperative, means for holding said enriching means in inoperative position, and means for rendering said holding means inoperative.

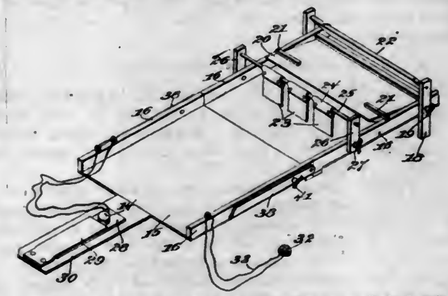
1,759,154. PAINT AND VARNISH REMOVER AND PROCESS OF MAKING SAME. CARLETON ELLIS, Montclair, N. J., assignor to Chadeloid Chemical Company, New York, N. Y., a Corporation of West Virginia. Filed Jan. 11, 1926. Serial No. 80,631. 10 Claims. (Cl. 87—5.)

6. The process of making a paint and varnish remover which comprises passing the constant boiling point mixture of isopropyl alcohol and water, containing a few per cent of tertiary butyl alcohol, through a cracking zone whereby a substantial proportion of acetone is formed and the tertiary butyl alcohol is decomposed in part at least and water is thereby formed, adding a volatile miscible hydrocarbon to precipitate water, separating the latter and incorporating a small percentage of wax in the benzol-containing product of diminished water content.

1,759,155. CLEANING FLUID AND METHOD OF PRODUCING THE SAME. BRUCE B. FARRINGTON, Berkeley, Calif., assignor, by mesne assignments, to Standard Oil Company of California, San Francisco, Calif., a Corporation of Delaware. Filed June 1, 1925. Serial No. 34,227. 3 Claims. (Cl. 87—5.)

1. A cleaning fluid capable of evaporating with sufficient readiness so as not to leave a ring in material cleaned therewith, and consisting of a petroleum distillate having a boiling point range between 220 degrees F. and 400 degrees F., admixed with sufficient carbon tetrachloride to raise the flash point above 100 degrees F., but containing less than fifty per cent carbon tetrachloride.

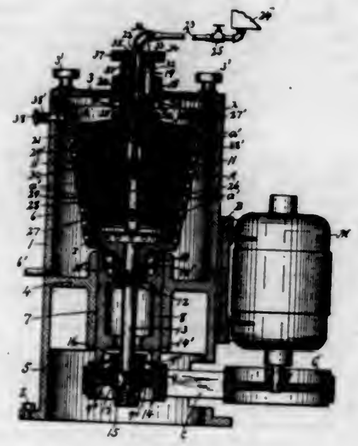
1,759,156. GOLF PRACTICE APPARATUS OR GAME. FRED O. FISH, Winchester, Mass. Filed Jan. 7, 1926. Serial No. 79,769. 14 Claims. (Cl. 273—35.)



1. A golf practice apparatus comprising a disk having substantially the diameter of a golf ball and a thickness

which adapts it to be driven from a playing surface by a golf club without tumbling, an inclined receiving surface intercepting the line of flight of the disk and means for stopping the disk after being intercepted by said receiving surface.

1,759,157. APPARATUS FOR TREATING YARN IN HOLLOW MASS FORMATION. WARD N. GERE, Syracuse, N. Y., assignor, by mesne assignments, to Eclipse Textile Devices Incorporated, Elmira Heights, N. Y., a Corporation of New York. Filed May 18, 1926. Serial No. 109,930. 21 Claims. (Cl. 8—18.)

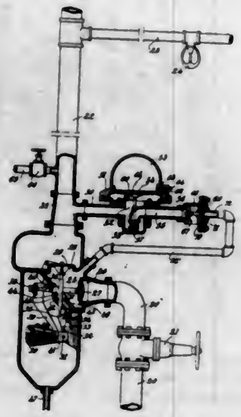


1. In an apparatus for treating yarn wound in hollow cone formation, opposed co-axially mounted cone supporting elements rotatable about a vertical axis, and provided with means for frictionally engaging the outer and inner peripheries of the yarn cone, the frictional engagement of said yarn cone serving to transmit rotary motion from one element to the other, and means for rotating one of said elements with the yarn cone between them.

10. In apparatus for treating yarn wound in hollow cone formation, the combination of a casing, a detachable cover for said casing, a conical cage rotatably mounted in the casing and having its larger end open and adapted to engage the outer surface of a yarn cone, a conical mandrel rotatably mounted in the cover and coaxial with the cage when the cover is applied to the casing and adapted to engage the inner surface of a yarn cone, and means for rotating one of said rotatably mounted elements.

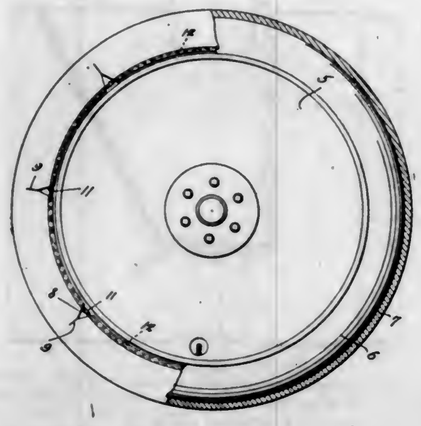
1,759,158. DRY-PIPE SPRINKLER MECHANISM. JOHN R. HAMILTON, Yonkers, N. Y., assignor to Ohio Automatic Sprinkler Company, Youngstown, Ohio, a Corporation of Ohio. Filed May 26, 1925. Serial No. 32,956. 3 Claims. (Cl. 169—17.)

1. Venting means for a dry pipe sprinkler system comprising an open-ended conduit connected with the part of the system to be vented, said conduit being of sufficient diameter throughout to afford a free and copious vent, a normally effective closure intermediate the ends of the conduit, self-restoring means controlled by a sudden diminution of fluid pressure in the part of the system to be vented for effecting an opening of said closure, and an externally-disposed normally ineffective means for closing the open end of said conduit, said closing means com-



prising a normally dormant fluid pressure motor and means operated thereby when energized to render the closing means effective.

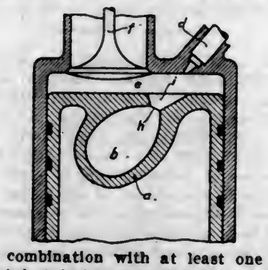
1,759,159. AUTO TIRE PROTECTOR. URBAN WILLIAM HUTCHINGS, Sam Fordyce, Tex. Filed May 25, 1928. Serial No. 280,562. 1 Claim. (Cl. 150—54.)



In a tire protector, a flexible cover constructed to conform to the shape of a tire, one of the sides of the cover having V-shaped cut out portions extending inwardly from the edge thereof, cables secured to the cover and having their ends terminating adjacent to the V shaped cut out portions, and means for connecting the adjacent ends of the cables at points within the cut out portions.

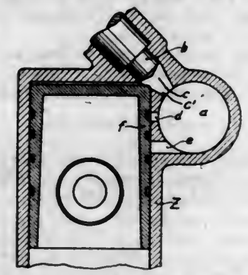
1,759,160. COMBUSTION POWER ENGINE. FRANZ LANG, Munich-Nymphenburg, Germany, assignor to Acro Aktiengesellschaft, Küssnacht am Rigi, Switzerland. Filed Nov. 21, 1925, Serial No. 70,615, and in Germany Dec. 6, 1924. Renewed May 11, 1928. 8 Claims. (Cl. 123—32.)

1. In a combustion engine with self-ignition comprising a cylinder and a piston working therein, a compression chamber formed in the piston, said chamber being arranged lengthwise at an angle to the axis of the piston and in communication with the compression space of the



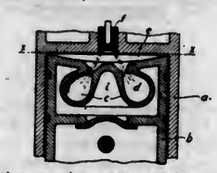
cylinder, in combination with at least one fuel-injector, arranged to inject fuel toward the piston-chamber at the end of the compression stroke.

1,759,161. OIL ENGINE WITH FUEL INJECTION. FRANZ LANG, Stuttgart, Germany, assignor to Acro Aktiengesellschaft, Küssnacht am Rigi, Switzerland. Filed Mar. 6, 1926, Serial No. 92,758, and in Germany Mar. 16, 1925. 8 Claims. (Cl. 123—32.)



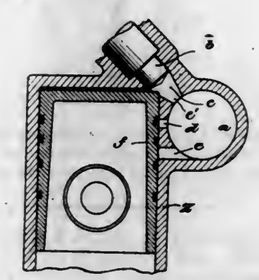
1. An oil engine with fuel injection, comprising in combination a cylinder, a piston adapted to reciprocate in said cylinder, a fuel injection nozzle arranged in said cylinder, a mixing chamber, arranged in advance of the mouth of said injection nozzle and opening into the combustion chamber of the cylinder, a supplemental combustion chamber connected with said mixing chamber through a passage having a constricted throttling orifice, and additional passages, connecting the supplemental combustion chamber with the cylinder space and adapted to afford a further passage for the ignited mixture after a part of the working stroke of the piston in order to diminish throttling of the expansion of the ignited mixture out of the supplemental combustion chamber during the working stroke.

1,759,162. OIL MOTOR. FRANZ LANG, Munich-Nymphenburg, Germany, assignor to Acro Aktiengesellschaft, Küssnacht am Rigi, Switzerland. Filed Feb. 11, 1927, Serial No. 167,529, and in Germany Feb. 19, 1926. 4 Claims. (Cl. 123—32.)



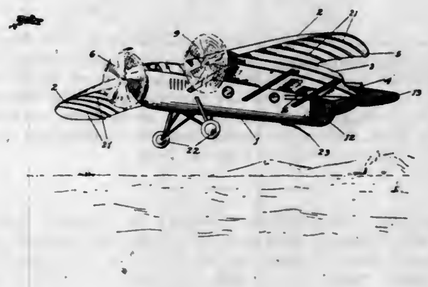
1. A combustion engine with self-ignition, comprising a cylinder and a piston reciprocating therein, said piston being provided with an annular compression space arranged therewithin and connected by a ring-shaped aperture of reduced cross-section with the compression space of the cylinder.

1,759,163. OIL ENGINE WITH FUEL INJECTION. FRANZ LANG, Munich, Germany, assignor to Acro Aktiengesellschaft, Küssnacht am Rigi, Switzerland. Original application filed Mar. 6, 1926, Serial No. 92,758, and in Germany Mar. 16, 1925. Divided and this application filed July 6, 1927. Serial No. 203,820. 3 Claims. (Cl. 123—32.)



1. In an oil-engine with fuel-injection comprising a cylinder and a piston arranged to reciprocate in said cylinder, the combination of a fuel-injector arranged on the cylinder, a mixing chamber arranged in advance of the mouth of said fuel-injector and communicating with the combustion chamber of the cylinder, with a supplemental combustion-chamber arranged on the cylinder and in communication with said mixing chamber, through a contracted throttling orifice, and an additional communicating port between said supplemental combustion chamber and the cylinder-space, and arranged to be closed by the piston during the last part of its compression stroke.

1,759,164. AEROPLANE. JAMES G. LYONS, Stockton, Calif. Filed Mar. 6, 1928. Serial No. 259,439. 8 Claims. (Cl. 244—12.)



1. An aeroplane including a body and a single wing disposed directly over the body and extending lengthwise thereof to a point beyond the rear end of the same, a vertical rudder mounted entirely under the rear overhanging portion of the wing, and a horizontal rudder hinged in connection with the rear portion of the wing, and projecting rearwardly of the same.

1,759,165. PLATE SUPPORTER. GUSTAV R. MAYER, Buffalo, N. Y. Filed Nov. 5, 1928. Serial No. 317,154. 2 Claims. (Cl. 248—41.)

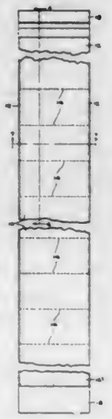
1. A plate supporter comprising a support, a ball arranged at the upper end of said support, a head upon which

a plate is adapted to be carried, a spherical socket arranged adjacent to the upper side of said head and fitting



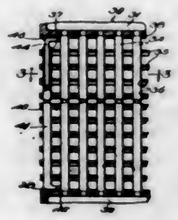
over said ball so as to form a universal joint therewith, and a counterbalancing weight of annular form depending from said head around said ball and socket.

1,759,166. RIBBON FOR USE IN MAKING INFUSIONS OF COFFEE AND OTHER MATERIAL. HARRY A. MEDIN, Minneapolis, Minn. Filed July 25, 1927. Serial No. 208,169. 1 Claim. (Cl. 53—3.)



A ribbon for use in making infusions of coffee and other materials comprising a thin flat layer of such material of extended length such that a portion only of the ribbon will be employed at any one time in making the infusion, such layer being continuous and of uniform thickness, and strips of pervious flexible mesh for holding said material in such continuous thin flat layer.

1,759,167. RADIATOR. ARTHUR B. MODINE, Racine, Wis., assignor to Modine Manufacturing Company, Racine, Wis., a Corporation of Wisconsin. Filed May 28, 1926. Serial No. 112,375. 4 Claims. (Cl. 257—125.)



1. A radiator comprising spaced tanks, tubular members interposed between the tanks and communicating therewith, telescoping reenforcing means interposed between the tanks and rigidly secured thereto, and cooling fins secured to the tubular members and to the reenforcing means.

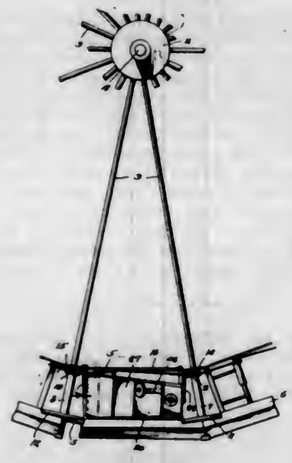
1,759,168. ABRASIVE ARTICLE AND METHOD OF MAKING THE SAME. FRANCIS G. OKIE, St. Paul, Minn., assignor to Minnesota Mining & Manufacturing Company, St. Paul, Minn., a Corporation of Minnesota. Filed Mar. 13, 1926, Serial No. 94,593. Renewed July 5, 1929. 11 Claims. (Cl. 51—280.)

1. The process of manufacturing a stable waterproof abrasive article in the nature of sandpaper or the like, which includes incorporating a grit of comminuted abrasive particles in a waterproof adhesive material, applying such incorporated grit and adhesive material to and permitting same to penetrate the sheet for maintaining the bonding effect throughout the effective abrading life of the article when used in a water abrading operation, and compensating for such penetration of the sheet by simultaneously applying another coat to the back of the article as an auxiliary waterproofing and bonding agent.

1,759,169. METAL ALLOY AND THE PROCESS OF FORMING THE SAME. JENS J. OLSEN, San Antonio, Tex. Filed Aug. 24, 1927. Serial No. 215,265. 5 Claims. (Cl. 75—1.)

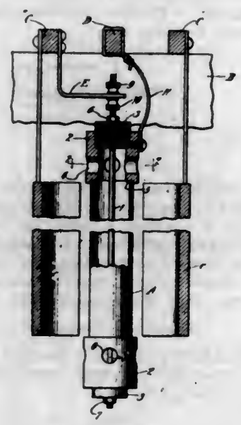
1. An alloy containing copper, iron and nickel in approximately the proportions by weight of 140 to 150 lbs. of copper, 5 lbs. of iron, and 2½ lbs. of nickel.

1,759,170. AMUSEMENT DEVICE. JAMES A. SHERRY, Fall River, Mass. Filed Oct. 1, 1928. Serial No. 309,406. 10 Claims. (Cl. 272—43.)



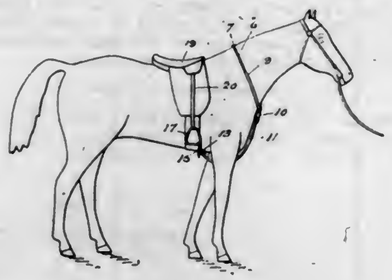
1. In an amusement device, a rotor mounted to turn in a substantially horizontal plane, a vehicle, means for mounting the vehicle on the rotor for oscillatory tilting movement with respect to the vertical and transversely of the path of the vehicle as it is carried around in an orbit by the rotor; mechanism for imparting the aforesaid tilting movement to the vehicle, said mechanism including supporting wheels for the vehicle; and means under the control of an occupant of the vehicle for varying the aforesaid tilting movement between maximum and minimum.

1,759,171. MEANS FOR ELECTROPLATING TUBES INTERNALLY AND EXTERNALLY. VICTOR L. SODERBERG, Detroit, Mich., and C. ROY GLEASON, Chicago, Ill. Filed May 12, 1927. Serial No. 190,771. 6 Claims. (Cl. 204—5.)



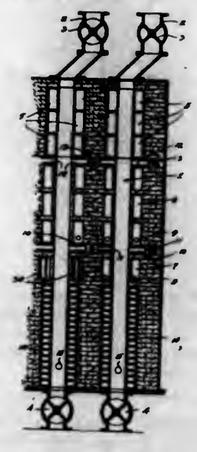
2. A combined anode and holder for a tube to be electroplated, comprising a rod, a clamping head on the upper end of the rod, and a second clamping head on the rod below the other head, one of the heads being detachable, the upper head having a part of conducting material insulated from said rod and adapted to engage a tube arranged in the holder, means for suspending said rod in electrically conductive relation to a bus bar, and means for connecting said part of conducting material to a second bus bar.

1,759,172. GAITING HARNESS. HENRY R. SMALLEY, U. S. Army, Washington, D. C. Filed June 12, 1929. Serial No. 370,165. 9 Claims. (Cl. 54—71.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928, 370 O. G., 757.)



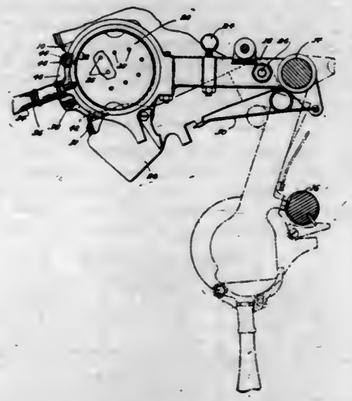
1. The combination with a riding saddle having stirrups, of a gaiting harness comprising a neck loop and members extending from the loop connected with the stirrups, said parts adapted at all gaits of the animal to cause the stirrups to alternately contact with the legs of the animal and cause him to properly and fully lift his feet.

1,759,173. METHOD OF AND APPARATUS FOR REDUCING METALLIC OXIDES WITHOUT MELTING. WILLIAM H. SMITH, Detroit, Mich. Filed May 10, 1928. Serial No. 276,579. 29 Claims. (Cl. 75—77.)



1. The method of reducing iron ore and similar metallic oxides without melting, which consists in successively subjecting the ore and a reducing agent to a fixed reducing zone and cooling zone and completely eliminating the oxidizing gases formed by the reducing action before subjecting the reduced iron to the cooling zone.

1,759,174. NAIL-TRANSFERRING MECHANISM. JOHN F. STANDISH, Winthrop, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Aug. 25, 1927. Serial No. 215,385. 7 Claims. (Cl. 1—32.)

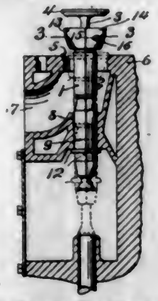


1. The combination with a nail-transferring member, of a movable nail-retaining gate, a handle arranged to move the transferring member and be movable upon said member, and a latch for the gate carried by the handle.

1,759,175. VALVE HOLDER AND BUSHING EJECTOR. LE ROY VAUGHT, Kansas City, Mo., assignor of one-third to Archie C. Guy and one-third to William E. Grimmer, North Kansas City, Mo. Filed May 10, 1928. Serial No. 276,662. 6 Claims. (Cl. 51—262.)

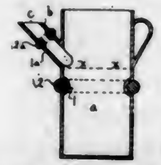
1. In means for holding a valve while it is being ground to its seat in a cylinder block having a valve chamber, a

valve seat and a hole concentric with said seat communicating with said chamber and adapted to have fitted therein a valve guide bushing, said valve holding means consisting in a tubular holder adapted to have slidably



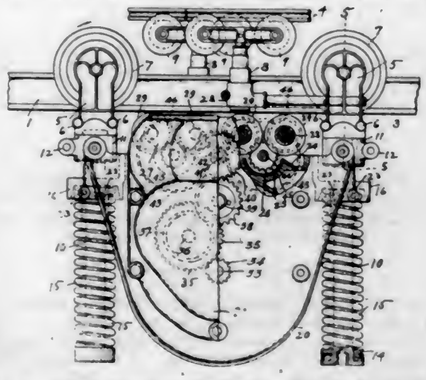
and rotatably fitted therein the stem of a valve which is being ground in said seat, and insertible through said seat and chamber into and fitted to said hole and having within said chamber a head cupped in its upper end and of greater diameter than said hole.

1,759,176. CONTAINER. GARDNER TUFTS VOORHEES, Boston, Mass. Filed Oct. 24, 1927. Serial No. 228,310. 8 Claims. (Cl. 215—100.)



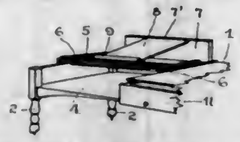
1. The combination in a container having an outlet, a base and a containing wall, joining them, adapted to stand in a substantially vertical position, with its outlet above its base, when its base rests on a substantially horizontal support, of a groove in and encompassing said wall, located above said base and below said outlet, said groove's wall being of substantially the same thickness as said containing wall, said groove being adapted to retain an absorbent band adapted to prevent liquid drip from said outlet from flowing down said containing wall onto said support.

1,759,177. TRACTOR FOR OVERHEAD CARRIER SYSTEMS. WILLIAM G. WEHR, East Cleveland, Ohio, assignor to The Cleveland Crane & Engineering Company, Wickliffe, Ohio, a Corporation of Ohio. Filed June 2, 1927. Serial No. 196,125. 19 Claims. (Cl. 105—80.)



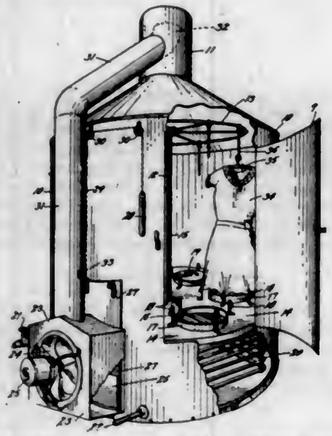
1. A tractor for overhead carrier systems having oppositely disposed wheels adapted to engage upper and lower surfaces of a rail flange, means for yieldably pressing the opposed wheels toward each other, and means for driving said wheels which engage the lower surface of the rail flange to propel the tractor along the rail.

1,759,178. DESK TABLE. EVERETT DUDLEY WELDON, Hastings-upon-Hudson, N. Y. Filed Jan. 25, 1927. Serial No. 163,318. 3 Claims. (Cl. 45—70.)



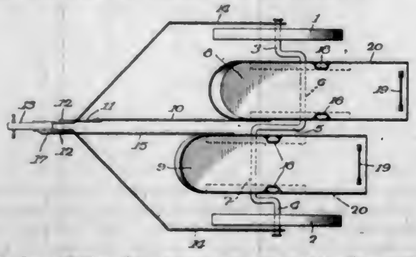
2. A desk-table including in combination, a hollow bed section having a top and bottom and an open front, a cut out leaf hinged to the top, a tablet on the underside of the cut out leaf and positioned in inclined relation thereto and adapted to form an inclined bed when the leaf is raised and a skirt carried by said leaf and tablet and adapted to close the open front of the bed section.

1,759,179. GARMENT DRIER. JEROME WIESMAN, Denver, Colo. Filed Mar. 22, 1929. Serial No. 349,017. 7 Claims. (Cl. 34—26.)



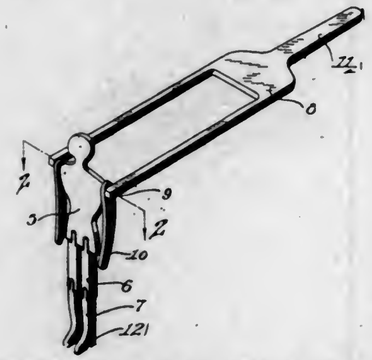
1. A garment drier comprising: a vertical cylindrical housing; a garment wheel adapted to rotate in a horizontal plane within said housing; means for hanging garments from said wheel; and a circular floor plate suspended from said wheel and adapted to rotate therewith.

1,759,180. TOY OR AMUSEMENT VEHICLE. LEWIS ALEXANDER, Clinton, Ill. Filed Apr. 7, 1927. Serial No. 181,064. 4 Claims. (Cl. 280—60.)



1. In vehicles for amusement purposes, the combination of wheels having a common axis and means for propelling the vehicle, a seat on said vehicle, and instrumentalities for causing back and forth movement of the seat, horizontally automatically, while at the same time oscillating and tilting about a single supporting axis which automatically shifts from one vertical plane to another relatively to said axis, when the vehicle is in motion.

1,759,181. TOY. RICHARD E. ANDREW, Philadelphia, Pa. Filed Feb. 21, 1928. Serial No. 255,906. 1 Claim. (Cl. 46—40.)

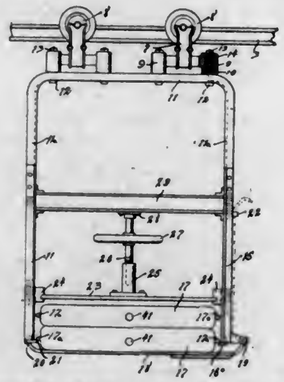


A toy including an actuator which is bifurcated to form elongated prongs, pivots in the ends of the prongs, and a dancing doll, having loosely joined thighs and legs, shoulders wider than the rest of the body, and arms rotatable on the shoulders, rotatably mounted upon the pivots; the pivots extending through the arms and into the shoulders.

1,759,182. MEDICINAL PREPARATION. WILLIAM A. BENDER and HUGO G. LOESCH, Rochester, N. Y., assignors, by mesne assignments, to General Foods Corporation, a Corporation of Delaware. Filed Oct. 27, 1924. Serial No. 746,214. 4 Claims. (Cl. 167—56.)

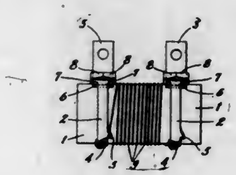
1. A pharmaceutical preparation comprising a homogeneous mixture of castor oil and a mineral oil in suitable proportions with an emulsifying ingredient.

1,759,183. SUSPENDED CARRIER. EARL T. BENNINGTON, Cleveland Heights, Ohio, assignor to The Cleveland Crane and Engineering Company, Wickliffe, Ohio, a Corporation of Ohio. Original application filed Aug. 4, 1926, Serial No. 127,081. Divided and this application filed Jan. 21, 1929. Serial No. 334,084. 10 Claims. (Cl. 22—1.)



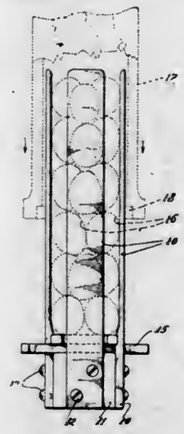
7. A suspended carrier having trucks with wheels adapted to roll along an overhead trackway, a frame having means upon which the lugs of sand mold flasks are adapted to rest, means for yieldingly connecting said frame to said trucks, a member connected to said frame and adapted to form a support for the sand molds, and adjustable clamping means adapted to engage the top of a mold.

1,759,184. RESISTANCE UNIT. FREDERIC H. BULLINGER, Yonkers, N. Y., assignor to Ward Leonard Electric Company, a Corporation of New York. Filed Jan. 30, 1928. Serial No. 250,361. 7 Claims. (Cl. 201—63.)



1. A terminal device for resistance units and the like comprising a support, a conducting terminal strip enveloping said support, and means carried by said support for engaging the edges of the meeting ends of said terminal strip.

1,759,185. PACKING DEVICE. LAYARD CAMPBELL, New York, N. Y. Filed May 10, 1928. Serial No. 276,522. 2 Claims. (Cl. 226—18.)

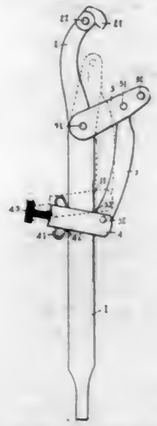


2. A device of the character described comprising a stripper having a plurality of annularly disposed recesses formed about its outer edge, a head having a plurality of blades perpendicularly extended to conform with the annular edge of said stripper, said blades being adapted for disposition within said recesses in the stripper to be moved with respect thereto.

1,759,186. SPANNER WRENCH. JAMES G. COLLINS, Kalamazoo, Mich., assignor to Atlas Press Company, Kalamazoo, Mich. Filed Oct. 8, 1928. Serial No. 310,971. 4 Claims. (Cl. 81—90.)

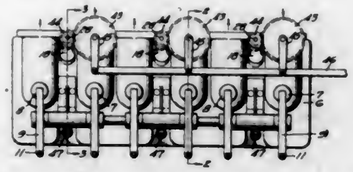
3. In a spanner wrench, a handle terminating in a fixed jaw, a laterally projecting engaging pin at the side of the jaw, a movable jaw pivoted to the handle and having a laterally projecting engaging pin corresponding to the engaging pin on the fixed jaw, a slide on the handle consisting of a loop, a connecting link from the slide to the

movable jaw, whereby the same is adjusted by the adjustment of the slide, teeth on the side of the handle, teeth on the end of the connecting link cooperating there-



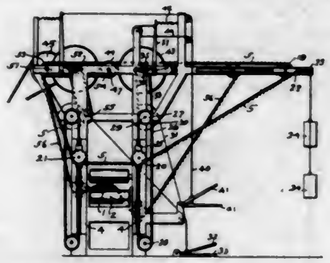
with, a spring for the slide doubled on itself and its ends engaging the slide to hold the said teeth yieldingly in engagement, as specified.

1,759,187. INTERNAL-COMBUSTION ENGINE. CLINTON DAVIDSON, San Francisco, Calif. Filed Jan. 7, 1929. Serial No. 330,819. 2 Claims. (Cl. 123—32.)



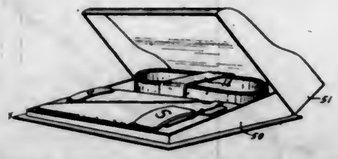
1. In an internal combustion engine including a cylinder, means for injecting fuel into said cylinder, a shaft cooperatively associated with said injection means to control injection, a gear on said shaft, an air admission valve, a butterfly valve for controlling air passing to said admission valve, a shaft cooperatively associated with the butterfly valve for controlling the position thereof, a gear on said last mentioned shaft, the gears cooperating to move the shafts to control fuel and air admitted to the cylinder.

1,759,188. SLAB-DEBARKING MACHINE. WILLIAM A. DAVIDSON, Aberdeen, Wash. Filed July 9, 1928. Serial No. 291,287. 11 Claims. (Cl. 144—208.)



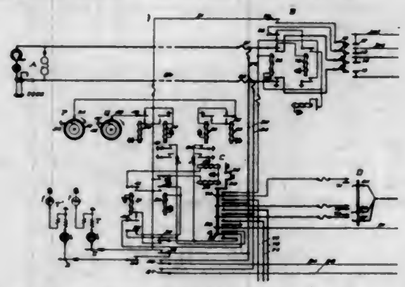
1. In a debarking machine, the combination with means adapted to feed the slab through the machine; means adapted to debark the front end of the slab, a continuously moving flexible chain adapted to engage the slab at said debarked front end; means adapted to permit said chain to conform to the shape of the slab; teeth on the front edge of said chain and adapted to cut the bark thereof as the slab is fed through the machine; and means adapted to prevent said chain from cutting into the slab.

1,759,189. DISPLAY INSERT. AARON FISHMAN, Chicago, Ill. Filed June 10, 1927. Serial No. 197,886. 6 Claims. (Cl. 206—80.)



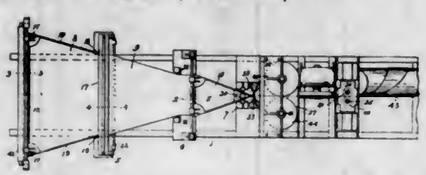
1. A display mounting for both a belt buckle and a watch guard of the type that may be secured to a belt and is provided with a chain to be secured to a watch, said mounting including means to which the belt buckle may be locked, and a support upon which the watch guard may be mounted, said means and said support being spaced so that upon securing the chain to the buckle when both the guard and the buckle are in position, the watch guard and buckle are irremovably locked to the mounting, the chain preventing the removal of the buckle.

1,759,190. AUTOMATIC TELEPHONE SYSTEM. HERBERT M. FRIENDLY, Chicago, Ill. Filed Mar. 5, 1928. Serial No. 259,047. 45 Claims. (Cl. 179—18.)



1. In an automatic telephone system, a first line, a second line, first automatic switch means for extending connection to said first line, second automatic switch means for extending connection from said first line to said second line, and mechanism operated automatically in accordance with the time of day for determining whether or not responsive to effecting a connection to said first line will thereupon cause said second switch means to progress the connection to said second line.

1,759,191. FOLDING MACHINE. GEORGE L. FULK, Cleveland, Ohio, assignor, by mesne assignments, to Bonnar-Vawter Fanform Company, Inc., Cleveland, Ohio, a Corporation of Delaware. Filed Sept. 21, 1926. Serial No. 136,798. 24 Claims. (Cl. 270—94.)



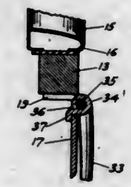
1. In a folding machine, means for continuously feeding a sheet to be folded, means acting on opposite edge portions of the sheet as it is being fed to progressively and successively bend said edge portions into a plane at right angles to the body of the sheet in alternating directions, and means acting upon the sheet between said edge portions to fold the same into a plurality of layers between said edge portions.

1,759,192. PRINTING-PRESS CYLINDER. GEORGE L. FULK, Cleveland, Ohio, assignor, by mesne assignments, to Bonnar-Vawter Fanform Company, Inc., Cleveland, Ohio, a Corporation of Delaware. Filed June 2, 1927. Serial No. 196,126. 3 Claims. (Cl. 101—375.)



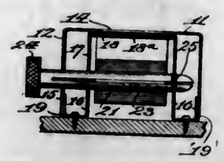
1. In a printing press, the combination with a tubular shaft having bearing supports at the opposite ends thereof, of a hollow printing cylinder mounted on said shaft between the bearing supports, end members for said cylinder bearing upon said shaft, said cylinder having an internal diameter greater than the external diameter of the shaft, said cylinder having an internal annular rib spaced inwardly from each end member and bearing upon the shaft between the end of the cylinder and the center therof for supporting said cylinder between said end members.

1,759,193. VEHICLE DOOR. GEORGE E. GRIMM, Toledo, Ohio, assignor to The Willys-Overland Company, Toledo, Ohio, a Corporation of Ohio. Original application filed July 5, 1923, Serial No. 649,588. Divided and this application filed May 21, 1924. Serial No. 714,873. 8 Claims. (Cl. 296—44.)



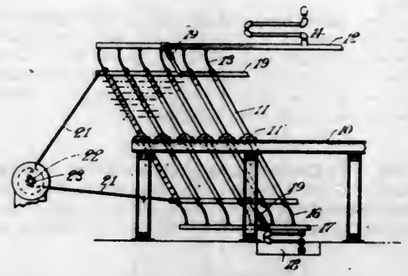
1. In combination with a door frame and a panel mounted thereon, means for securing a handle thereto comprising a tongue extending from said panel and bent to form a hinge eye for the handle, and a slot in the panel adjacent said tongue, the free end of said tongue being projected through said slot and clinched to said panel.

1,759,194. RECORDING DEVICE FOR MOTOR VEHICLES. PAUL E. HANSEN, Riverside, Calif. Filed Oct. 3, 1928. Serial No. 310,141. 2 Claims. (Cl. 281—7.)



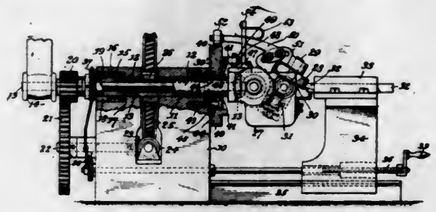
1. In a recording device of the class described, a one piece frame comprising side walls, channel-shaped members on the lower ends of said side walls and a paper supporting table connecting the upper portions of said side walls, a housing adapted to enclose said frame, said housing being provided in its top with an opening that exposes said table, the lower edges of the side walls of the housing having inturned edges for engagement with the lower outer corners of the channel-shaped members on the lower portions of the side walls of the frame, and slotted paper carrying spindles journaled in the side walls of the frame.

1,759,195. LUMBER DRIER. BURT S. HARRISON, Brooklyn, N. Y. Filed Apr. 15, 1929. Serial No. 355,121. 10 Claims. (Cl. 34—16.)



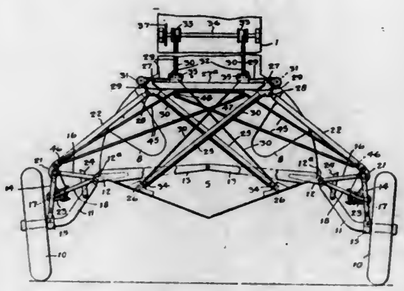
1. A drier of the kind described comprising tilting grids having side members and connecting cross members, the cross members of which are adapted to carry a heating medium and which serve as stock platens.

1,759,196. DRILL GRINDER. THADDEUS A. JACKSON, Brooklyn, N. Y. Filed Dec. 13, 1928. Serial No. 325,780. 5 Claims. (Cl. 51—32.)



1. In a drill grinder having a drill holder, and means for feeding the same, a stationary head-stock, drive shafts longitudinally slidable therein, a revoluble support, a grinder mounted to oscillate thereon toward and away from the drill center, means for rotating said support to carry the grinder bodily around the center of the drill and means for reciprocating said drive shafts and support and grinder relative to said stationary head-stock in a longitudinal plane toward and away from said drill for the purpose set forth.

1,759,197. RETRACTABLE LANDING GEAR. GROVER LOENING, New York, N. Y., assignor to Loening Aeronautical Engineering Corporation, a Corporation of New York. Filed Oct. 27, 1927. Serial No. 229,019. 11 Claims. (Cl. 244—2.)

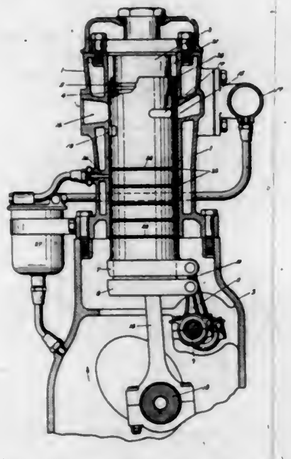


1. In a landing gear, a wheel carrying frame mounted to swing between an extended and a retracted position, a

link serving to hold the frame in extended position, a member rockingly connected to the frame and also to the link, and shock-absorbing means between said member and the frame.

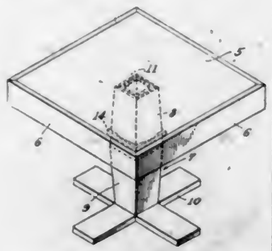
10. In an amphibian machine, and in combination with a retractable wheeled landing gear and means for operating the same, means for elastically counterbalancing the weight of the gear, said counterbalancing means being so disposed as to press against the wheels in the retracted position to keep them from spinning.

1,759,198. SLEEVE-VALVE-LUBRICATION SYSTEM. JOSEPH R. MARES, Toledo, Ohio, assignor to The Willys-Overland Company, Toledo, Ohio, a Corporation of Ohio. Filed May 20, 1927. Serial No. 192,860. 9 Claims. (Cl. 123—196.)



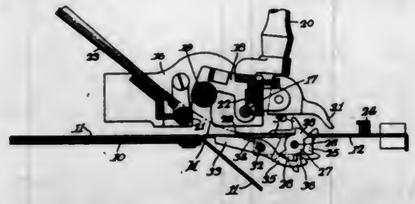
1. In an internal combustion engine of the sleeve valve type, a sleeve having intake and exhaust ports, means for supplying the lubricant to the surface thereof, and suction means to remove excess lubricant from the surface of the sleeve, said means being disposed to withdraw the fluid from the exhaust port side of the sleeve.

1,759,199. COLLAPSIBLE TABLE. ALBERT MCGALL, Orange, N. J. Filed Aug. 24, 1927. Serial No. 215,163. 3 Claims. (Cl. 45—11.)



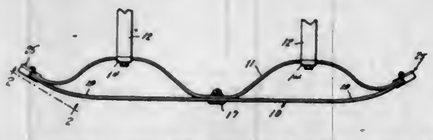
2. In a collapsible table, the combination with a table top and a base, of a collapsible column hingedly joining the base and top, said column consisting of two frusto-pyramidal sections having their bases coincident, each section consisting of a plurality of separate sides adapted when the column is in extended position to contact with and reinforce each other, and to be independent from each other when in collapsed position, and a clamp member for releasably retaining the sides in contact with each other to form a rigid column.

1,759,200. PAPER-STOP DEVICE FOR DUPLICATING MACHINES. WILHELM K. MOLL, Chicago, Ill., assignor to Ditto, Inc., Chicago, Ill., a Corporation of Illinois. Filed Feb. 18, 1929. Serial No. 340,757. 6 Claims. (Cl. 101—133.)



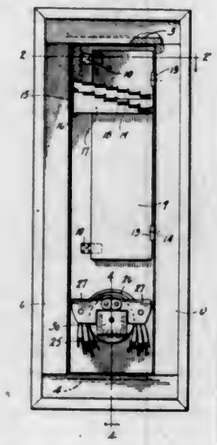
1. In a duplicating machine having a traveling platen carriage, the combination with a margin bar located opposite one end of the printing bed of the machine, of a shiftable paper stop on the front of said margin bar, a second paper stop on said margin bar in rear of said shiftable stop, means normally holding said shiftable stop out of operative position during the functioning of said second stop, and means actuated from the platen carriage for moving said shiftable stop into operative position.

1,759,201. VEHICLE BUMPER CONSTRUCTION. JOHN C. MONTEITH, Cleveland, Ohio, assignor to Sterling Spring Company, Cleveland, Ohio, a Corporation of Ohio. Filed June 7, 1929. Serial No. 369,066. 10 Claims. (Cl. 293—55.)



1. A bumper comprising vertically spaced front bars and a back bar, said bars at one end being arranged parallel with each other and the back bar contacting with the front bars, a cap member fitting over the ends of said bars and a single bolt rigidly securing the bars in said cap and to each other.

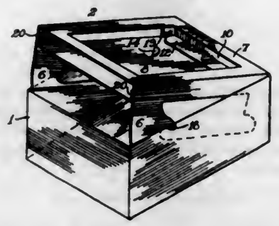
1,759,202. COLLAR AND NECKTIE CABINET. LLOYD F. NELSON, Seattle, Wash. Filed Nov. 22, 1927. Serial No. 235,009. 2 Claims. (Cl. 211—96.)



1. In a device of the character described, a necktie support comprising a horizontally directed arm provided

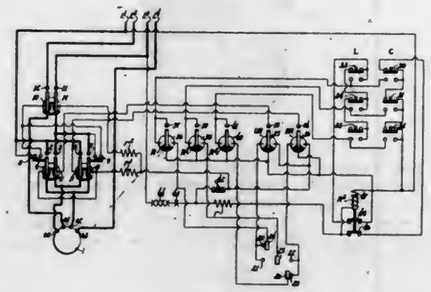
along its top edge with a plurality of fingers arranged in succession and in a downwardly stepped relation with slots formed beneath each of the fingers and opening to the ends thereof to permit looping of the ties about the fingers.

1,759,203. DISPLAY CARTON. THEODORE L. NEUMANN, Dayton, Ohio, assignor to The Dayton Paper Novelty Company, Dayton, Ohio, a Corporation of Ohio. Filed May 24, 1926. Serial No. 111,291. 6 Claims. (Cl. 206—44.)



6. A carton comprising a body portion and a display top, side panels depending from the display top and fitting within the sides of the body portion of the carton to support said display top in an inclined position, supporting flaps bent inwardly from said side panels, and means for connecting said side flaps together in a horizontal plane below the display top to provide an inclosing receptacle open at its rear end.

1,759,204. MOTOR-CONTROL SYSTEM. WALTER J. NEUSTEDTER, North Milwaukee, Wis., assignor, by mesne assignments, to Cutler-Hammer, Inc., a Corporation of Delaware. Filed Apr. 28, 1928. Serial No. 273,552. 12 Claims. (Cl. 157—29.)



5. In a motor control system, the combination with motor controlling means including a plurality of manual starting switches and a safety switch to be operated in the intervals between successive motor operations, of a relay controlled by certain of said starting switches and said safety switch jointly to disable other of said starting switches during certain motor operations.

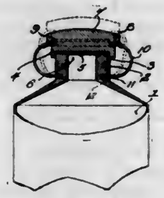
1,759,205. DIAL-LIGHTING DEVICE FOR AUTOMATIC TELEPHONES. FRANK L. PEYTON, Dallas, Tex. Filed Mar. 10, 1928. Serial No. 260,690. 3 Claims. (Cl. 179—90.)

1. In combination with a telephone of the automatic type having a dial plate and an apertured dial therebeneath provided with a circuit closure and means to close the circuit closure upon lifting a receiver, a casing mounted on the telephone base and extending about the dial



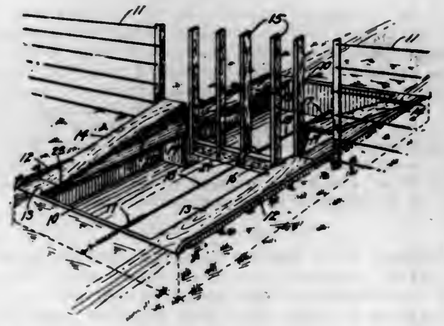
below the dial plate, with light bulbs extending from the inner surface of the casing, and a circuit including the light bulbs and circuit closer.

1,759,206. CLOSURE FOR COLLAPSIBLE TUBES. EDWIN L. POHL, Hartford, Wis. Filed Feb. 17, 1927. Serial No. 168,889. 2 Claims. (Cl. 221—60.)



1. A collapsible container having an apertured discharge neck, a cap cooperating therewith to close the same, and a pair of resilient links connecting said container and cap and normally applying a closing pressure between said cap and neck, said links being outwardly bowed and deformable under lateral pressure to lift said cap from said neck.

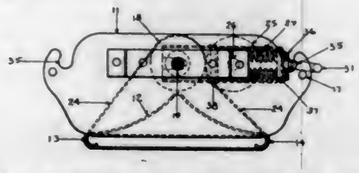
1,759,207. AUTOMATICALLY-OPERATED FENCE GATE. FRED G. ROSE and JOHN H. MURRAY, Rocky Ford, Colo. Filed Aug. 31, 1928. Serial No. 303,170. 4 Claims. (Cl. 39—5.)



3. An automatic fence gate comprising: a gate hinged across its lower extremity so as to swing to a substantially

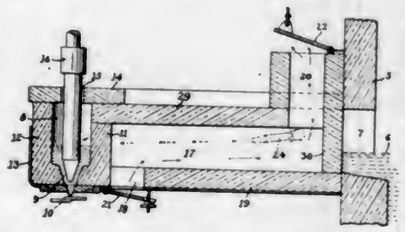
horizontal position; and means operable by the weight of a vehicle for swinging said gate to said latter position, said means comprising a board-like member hinged at its one extremity and raised at its other extremity; and a link extending downwardly and forwardly from the raised extremity to a pivot on said gate, there being a similar construction at each side of said gate, so that downward movement of said hinged boards will push said gate downwardly and forwardly to a substantially horizontal position.

1,759,208. WRINGER. SIMON E. SCHROEDER, Newton, Iowa, assignor, by mesne assignments, to Automatic Washer Company, Newton, Iowa, a Corporation of Delaware. Filed Mar. 8, 1928. Serial No. 259,984. 2 Claims. (Cl. 68—32.)



2. In a wringer device, a power roll, a pressure roll shiftable from one operative position in pressure relation with the power roll to a second operative position in pressure relation with the power roll, belt guiding means spaced from the power roll, a belt trained about the power roll and the belt guiding means, said guiding means extending on opposite sides of, perpendicular to, and equal distances from, a plane in which the axis of the power roll lies, said plane bisecting the angle formed by two planes formed by passing through the axis of the power roll and the axes of the pressure roll in both of its operative positions.

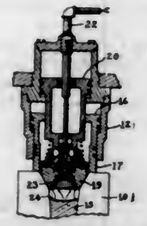
1,759,209. GLASS FEEDER. LEONARD D. SOUBIER, Toledo, Ohio, assignor to Owens-Illinois Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Oct. 26, 1927. Serial No. 228,735. 9 Claims. (Cl. 49—55.)



1. In combination, a container for a supply body of molten glass, a laterally extending substantially U-shaped trough communicating at both ends with the container and having a bottom outlet opening therein, a cover for said trough, a chamber arranged between the branches of said trough and having a bottom inlet at its forward end for entry of outside air, a stack rising from the inner end of said chamber, an exhaust port providing communication between said stack and one end of the trough, and means arranged at the other end of said trough to apply heat to the glass in the trough.

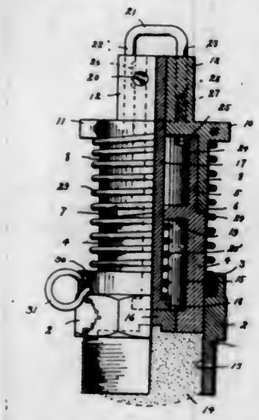
1,759,210. MACHINE FOR FORMING HOLLOW GLASSWARE. LEONARD D. SOUBIER, Toledo, Ohio, assignor to Owens-Illinois Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Jan. 18, 1928. Serial No. 247,487. 5 Claims. (Cl. 49—18.)

4. In a machine for forming hollow glass articles, the combination of an inverted blank mold open at its upper end to receive a charge of glass, means for applying air under superatmospheric pressure to the upper surface of the glass and thereby compacting it in the mold, a closure device movable into position to close said open end of



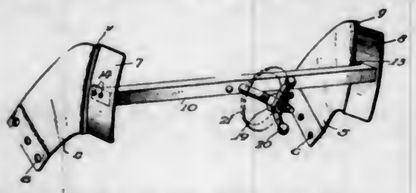
the mold, means for expanding the glass to hollow form in the mold by air pressure supplied to the lower end of the mold, and means for maintaining sub-atmospheric pressure in the mold above the glass throughout the period of said expansion.

1,759,211. GREASE CUP. HUGH B. SPENCER, Duluth, Minn., and WILLIAM R. SMITH, Winnipeg, Manitoba, Canada. Filed Nov. 5, 1928. Serial No. 317,419. 5 Claims. (Cl. 184—48.)



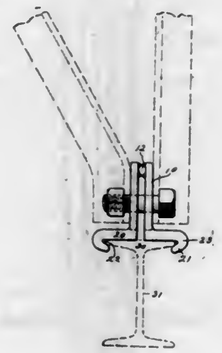
5. In combination, a lubricant carrying plug, a feeding plug cooperatively carried by the first mentioned plug, a spiral spring for imparting action to the feeding plug, two separate hand controlled means for predetermining the action of the spring, one of said means carrying other selective means whereby to turn the feeding plug in either direction.

1,759,212. CARRIER FOR DISK WHEELS. CHARLES F. WASSERFALLEN, Detroit, Mich., assignor, by mesne assignments, to Detroit and Security Trust Company, Detroit, Mich., a Corporation of Michigan. Filed Mar. 17, 1926. Serial No. 95,171. 4 Claims. (Cl. 224—29.)



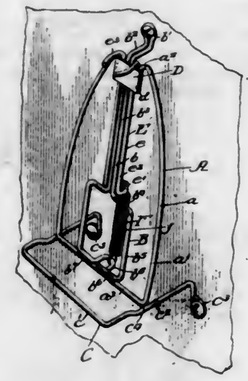
1. In a carrier for disk wheels, the combination of brackets adapted to be secured to the frame of a vehicle and to extend rearwardly therefrom, an arcuate shoe and shoulders for the wheel and on the brackets, a cross-bar extending between the shoes and having its ends fixed thereto, a bolt extending through the bar and having an offset head riveted to the bar, and means on the bolt for clamping the wheel against the shoulders.

1,759,213. OVERHEAD CONVEYER. JERVIS B. WEBB, Detroit, Mich. Filed Oct. 17, 1928. Serial No. 312,951. 5 Claims. (Cl. 104—111.)



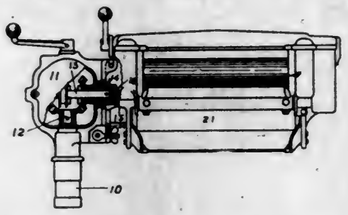
1. A connecting device for conveyer tracks comprising a pair of plates each having a horizontally extending hooked portion and a vertically extending portion provided with a fulcrum, and means located between said hooked portion and fulcrum for drawing said plates together.

1,759,214. SADIRON HOLDER. RUSSELL A. WINTERS, Chicago, Ill. Filed Apr. 13, 1927. Serial No. 183,283. 10 Claims. (Cl. 68—27.)



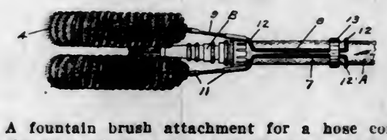
1. A holder for a sad-iron, embodying an elongated frame adapted to have the sole of the iron placed thereagainst, and means for retaining the iron with the sole thereof against the frame comprising a member at one end of the frame adapted to engage the heel of the iron, a member mounted at the other end of the frame to slide longitudinally with respect to said frame and adapted to grip the toe of the iron, and a spring attached to the last mentioned member and operative to slide the same so as to engage the toe of the iron and shift automatically the entire iron towards the heel engaging member.

1,759,215. WRINGER. ALPHEUS W. ALTORFER, Peoria, Ill. Filed Jan. 4, 1926. Serial No. 79,074. 2 Claims. (Cl. 68—32.)



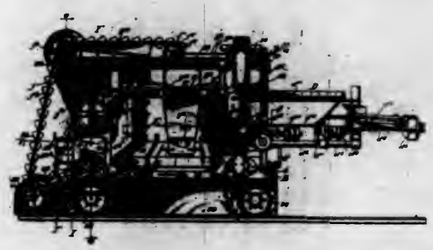
1. In combination, a wringer head, a driven member therein, a wringer frame, a roller shaft therein, means respectively on the driven member of the head and the roller shaft for effecting detachable driving connection therebetween, means on the wringer head and frame respectively comprising an upwardly open slot on the wringer head and a pivot pin on the frame for effecting detachable pivoted connection therebetween at the upper portion respectively of the wringer head and frame, and interlocking means respectively on the lower portion of said head and frame.

1,759,216. BRUSH. FRED O. ANDERSON, Minneapolis, Minn. Filed Feb. 23, 1929. Serial No. 342,215. 3 Claims. (Cl. 15—128.)



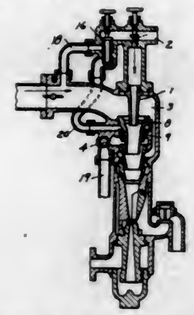
1. A fountain brush attachment for a hose comprising a brush member positioned in advance of the end of the hose to receive water therefrom, a pair of laterally disposed handle members extending rearwardly from the brush member and for longitudinal contact with the sides of the hose to centrally grip the hose, and a split ring rotatable on the handle members for releasably securing them on the hose.

1,759,217. MOLDING MACHINE. ELMER O. BEARDSLEY and WALTER F. PIPER, Chicago, Ill., assignors to The Beardsley & Piper Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 19, 1926. Serial No. 89,274. 48 Claims. (Cl. 22—36.)



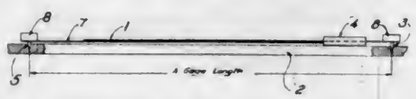
1. The combination of a truck comprising sides and cross members rigidly secured thereto, one of said members being formed of cast metal and embodying an integral housing, a machine mounted on the truck for filling flasks, a sand reservoir on the truck, mechanism for feeding sand from the reservoir to the machine, a motor on the truck, and a transmission driven by the motor for driving the truck, comprising gearing enclosed in said housing.

1,759,218. EXHAUST-STEAM INJECTOR. EMANUEL BLAUHORN, Vienna, Austria. Filed Sept. 22, 1927, Serial No. 221,381, and in Austria Feb. 5, 1927. 4 Claims. (Cl. 103—265.)



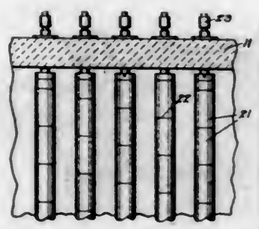
1. In an injector of the class described, the combination of a main low pressure steam nozzle, a steam space communicating therewith, a high pressure lifting nozzle surrounding said main nozzle, conduits to supply said steam space and said lifting nozzle with live steam, and valve means for admitting live steam to said conduits in alternation only.

1,759,219. EXTENSOMETER. GLENN H. BOWLUS, Los Angeles, Calif. Filed Feb. 1, 1928. Serial No. 251,189. 3 Claims. (Cl. 33—161.)



1. An extensometer for measuring elongation in tension tests, comprising: a first tack point and a tape secured thereby to the material under test; a slider affixed to an end of said tape; a second tack point and a flexible graduated scale secured thereby to said material, said scale being adapted to longitudinally traverse said slider in such manner that the elongation of that portion of said material lying between said tack points reads on said scale against a mark on said slider.

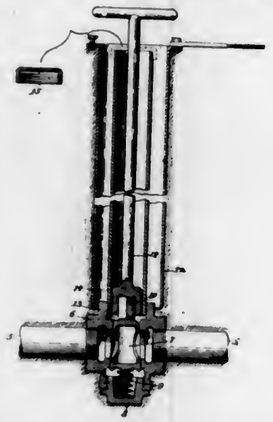
1,759,220. LEER ROLL. WILBUR F. BROWN, Toledo, Ohio, assignor to Libbey-Owens Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Oct. 1, 1925. Serial No. 59,758. 3 Claims. (Cl. 198—127.)



1. In an annealing leer for use in sheet glass apparatus, plurality of sectional rolls, the joints of the sections of the roll being staggered with relation to the adjacent rolls.

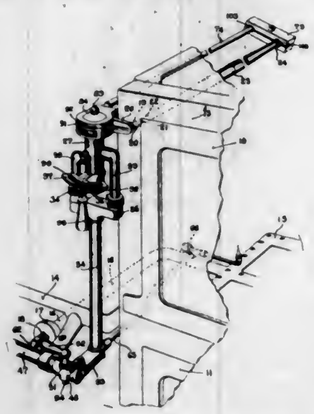
1,759,221. SHUT-OFF COCK. HIRAM J. CARSON, Cedar Rapids, Iowa. Filed May 9, 1927. Serial No. 189,943. 2 Claims. (Cl. 137—13.)

1. A normally sealed shut-off cock structure for underground gas pipes comprising: a pipe connecting body adapted to be connected in the underground pipe line, said body having a tapered valve seat therein with the larger end of the seat opening downward; a correspondingly tapered plug within and cooperable with said seat, said plug being adapted for rotation and also downward endwise movement relative to said seat and provided at its upper portion with an upwardly facing portion and formed to cooperate with a wrench for turning; means for sealing the plug opening at the underside of the connecting body; means within the connecting body normally urging said plug upwardly into



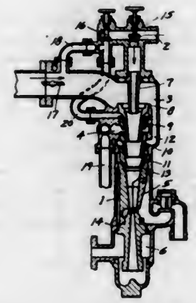
the seat; a pipe having a sealed connection at its lower end with said pipe connecting body and extended upwardly to a point readily accessible from the ground level; and removable sealing closure means for the upper end of said pipe whereby said closure means may be temporarily removed to receive a wrench insertable within the pipe to engage and turn the plug and also to engage said upwardly facing portion of the plug to force the latter downward within the tapered seat to sufficiently loosen the plug to permit turning.

1,759,222. OVEN-HEAT REGULATOR. EMIL L. CLAUS, Milwaukee, Wis., assignor, by mesne assignments, to Claus Manufacturing Co., Milwaukee, Wis., a Corporation of Wisconsin. Filed Apr. 1, 1924. Serial No. 703,439. 4 Claims. (Cl. 236—15.)



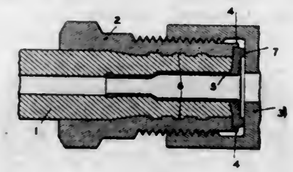
1. In a device of the character described including an oven, a burner for the oven and a gas supply connectible therewith, a housing having an inlet port and an outlet port, means connecting the inlet port with the gas supply, means connecting the outlet port with the oven burner, a pair of cooperating valve members mounted in the housing member and adapted to control the flow of fuel from the inlet port to the outlet port, a thermostatic member mounted within the oven, a connection between said thermostatic member and one of said valve members whereby the flow of fuel from the inlet to the outlet ports is coordinated with the temperature of the oven, a quadrant extending laterally from the housing with the axis of the other valve member as its center, an indicator adapted to traverse the quadrant, and a connection between said indicator and the other valve member whereby the same may be set to adjust the maximum temperature maintained in the oven.

1,759,223. EXHAUST-STEAM INJECTOR. HANS DEUTSCH, Vienna, Austria. Filed Sept. 15, 1927, Serial No. 219,739, and in Austria Oct. 2, 1926. 9 Claims. (Cl. 103—265.)



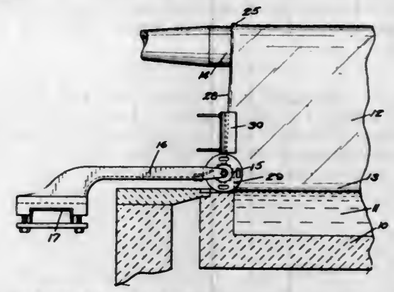
1. In an injector of the class described, the combination of alined live steam, exhaust steam, water, combining, and delivery nozzles, and a second live steam nozzle surrounding the exhaust steam nozzle.

1,759,224. METHOD OF ATTACHMENT OF HOSE FITTINGS. BURNS DICK and ALBERT BRUNNER, St. Louis, Mo., assignors to Wagner Electric Corporation, St. Louis, Mo., a Corporation of Delaware. Filed Apr. 22, 1929. Serial No. 356,913. 2 Claims. (Cl. 29—148.)



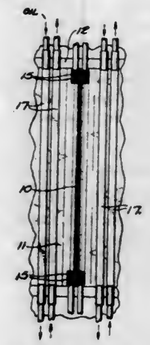
1. The method of securing a connector sleeve to a hose of resilient material, which comprises inserting the hose end into the sleeve, inserting a nipple into the bore of the portion of the hose within the sleeve, and then from the outer end inwardly progressively increasing to a substantial degree the diameter of all of the nipple within the hose except that of the inner end portion.

1,759,225. WIDTH-MAINTAINING WHEEL. JOHN L. DRAKE, Toledo, Ohio, assignor to Libbey-Owens Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Sept. 14, 1925. Serial No. 56,173. 9 Claims. (Cl. 49—17.)



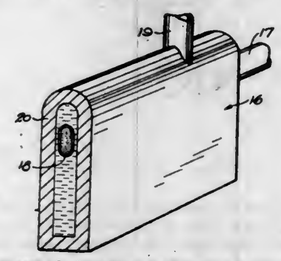
1. In sheet glass apparatus, means for drawing a sheet from a mass of molten glass, a grooved member engaging the border portions of the sheet, and a scraper disposed within the groove.

1,759,226. METHOD OF OPERATING SHEET-GLASS COOLERS. JOHN L. DRAKE, Toledo, Ohio, assignor to Libbey-Owens Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Oct. 4, 1926. Serial No. 139,289. 6 Claims. (Cl. 49—83.1.)



1. The process of absorbing heat from a mass or molten glass or from a newly formed glass sheet consisting in passing a stream of oil through a metallic casing in proximity thereto but out of contact therewith, and in maintaining the temperature of the oil in excess of 212° Fahrenheit.

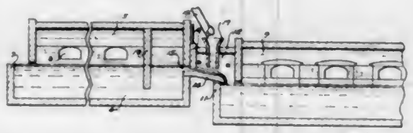
1,759,227. METHOD OF OPERATING SHEET-GLASS COOLERS. JOHN L. DRAKE, Toledo, Ohio, assignor to Libbey-Owens Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Nov. 9, 1926. Serial No. 147,260. 4 Claims. (Cl. 49—83.1.)



1. The process of absorbing heat from a mass of molten glass or from a newly formed glass sheet, which consists in

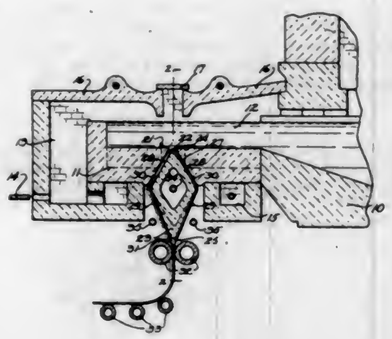
arranging a metallic casing adjacent thereto but out of contact therewith, in passing a stream of cooling liquid through said casing in contact with the outer side walls thereof, and in so relating the walls of the casing and the cooling liquid that the outer surfaces of said casing will attain to a temperature of 212° Fahrenheit or over while allowing the temperature of the liquid to remain below 212° Fahrenheit.

1,759,228. PROCESS AND APPARATUS FOR PRODUCING MOLTEN GLASS. JOHN L. DRAKE, Toledo, Ohio, assignor to Libbey-Owens Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed July 23, 1927. Serial No. 207,868. 13 Claims. (Cl. 49—54.)



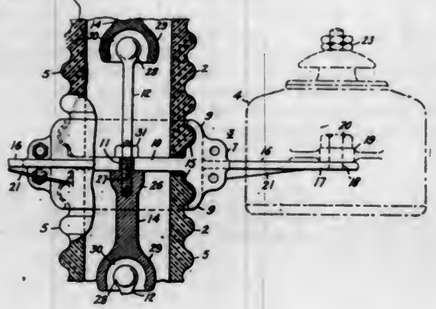
2. In glass apparatus, a tank furnace construction comprising a melting tank containing a mass of molten glass, a second melting tank in proximity to the first tank, means for conveying the molten glass from the first tank to the second tank in relatively thin stream form, and means for mixing additional glass making materials with the stream of molten glass as it is conveyed from the first tank to the second tank.

1,759,229. METHOD AND APPARATUS FOR DRAWING SHEET GLASS. JOHN L. DRAKE, Toledo, Ohio, assignor to Libbey-Owens Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Feb. 1, 1928. Serial No. 251,086. 18 Claims. (Cl. 49—17.)



1. Apparatus for making sheet glass including, a tank furnace having a slot in the bottom of its working receptacle, said slot being of variable width longitudinally and a flow slab co-operating with said slot, as and for the purposes set forth.

1,759,230. ELECTRICAL STRUCTURE. WILLIAM DUBILIER, New Rochelle, N. Y., assignor to Dubilier Condenser Corporation, a Corporation of Delaware. Filed Feb. 12, 1924, Serial No. 692,328. Renewed Mar. 28, 1930. 26 Claims. (Cl. 175—41.)



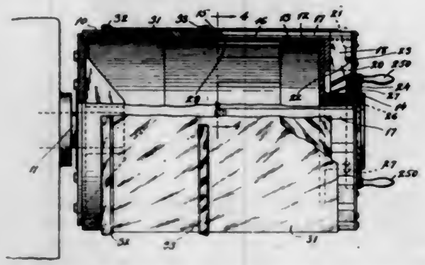
1. An electrical structure built up to constitute a supporting rack or standard and comprising a plurality of alternate insulating and conducting sections, condensers supported by said conducting sections, and means providing a definite ultimate electrostatic breakdown path between the conducting sections.

1,759,231. LIQUID DISTRIBUTOR. HARVEY FELDMEIER and CHARLES B. DALSELL, Little Falls, N. Y., assignors to D. H. Burrell & Co., Inc., Little Falls, N. Y. Filed Mar. 12, 1927. Serial No. 174,922. 18 Claims. (Cl. 299—58.)



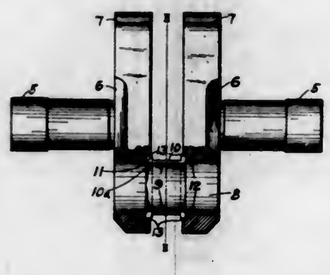
18. The method of discharging a liquid having a tendency to foam, in a relatively thin broad stream substantially free from foam, which comprises discharging said liquid from a horizontal pipe at a plurality of points along the pipe into an enclosing chamber, building up a head of liquid in and partially filling said chamber, and discharging said liquid under said head from said chamber at a plurality of spaced points arranged to form said thin broad stream.

1,759,232. BAND-FOLDING APPARATUS. JOHN R. GAMMETER, Akron, Ohio. Filed Aug. 16, 1929. Serial No. 386,413. 18 Claims. (Cl. 154—10.)



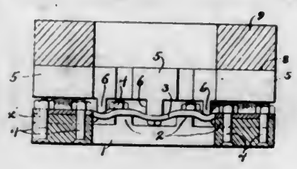
1. Band-folding apparatus comprising a band support, means adapted to engage the inner side of the band adjacent the line of fold, and mechanism for positively moving said means radially outward to initiate the fold and for then moving it longitudinally to complete the folding operation.

1,759,233. MEANS AND METHOD FOR RESIZING CRANK ARMS AND CRANK PINS. JULIUS KINDERVATER, Richmond, Va. Filed May 15, 1926. Serial No. 109,244. 4 Claims. (Cl. 74—38.)



1. The combination of a pair of crank arms, having flat opposed faces, each arm having a crank pin bore, and a recess extending across its opposed face, and surrounding the crank pin bore; a crank pin having its ends fitted in said bores, and a reduced portion disposed between the arms; a sectional sleeve, having a horizontal portion filling the reduced portion of the pin, and a vertical flange at each end, filling the respective recess, and extending therein radially beyond the horizontal portion.

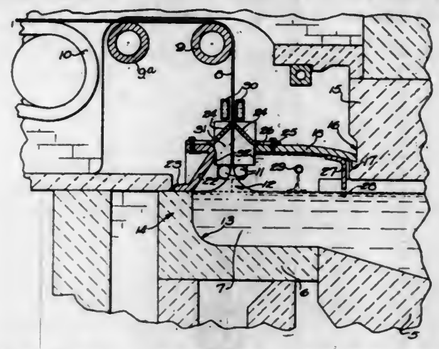
1,759,234. THRUST-BEARING-ALIGNING METHOD. MAHLON E. LAYNE, Houston, Tex., assignor to Layne & Bowler Corporation, Los Angeles, Calif., a Corporation of California. Original application filed Apr. 5, 1924, Serial No. 704,387. Divided and this application filed Sept. 8, 1925. Serial No. 55,056. 6 Claims. (Cl. 153—48.)



1. A method of aligning bearings that comprise a base, a body of resistant deformable material on the base, and thrust bearing segmental shoes supported on the deformable material, which method consists in, before use of the bearing, applying pressure in substantial excess of the working load of the bearing to all of said shoes simultaneously through the medium of a member having a surface placed against the surface of the shoes, whereby the bearing surfaces of the shoes are all positioned in substantial alignment.

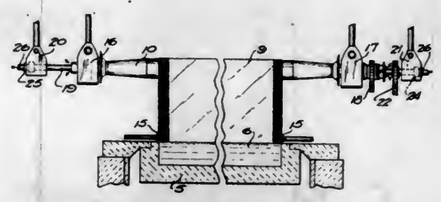
1,759,235. SHEET-GLASS APPARATUS. LEOPOLD MAMBOURG, Lancaster, Ohio, assignor to Libbey-Owens Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Sept. 20, 1926. Serial No. 136,459. 12 Claims. (Cl. 49—17.)

1. In sheet glass apparatus, a receptacle containing a mass of molten glass, means for drawing a sheet therefrom, a roll over which the sheet is deflected into a horizontal plane, a hood arranged over the receptacle and



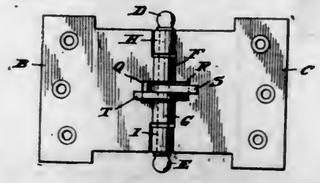
adapted to protect the sheet from the atmosphere during its formative period, and heat absorbing means arranged between the hood and said roll.

1,759,236. SHEET-GLASS APPARATUS. LEOPOLD MAMBOURG, Lancaster, Ohio, assignor to Libbey-Owens Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Nov. 17, 1926. Serial No. 148,781. 15 Claims. (Cl. 49—17.)



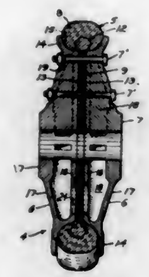
1. In sheet glass apparatus, means for deflecting a sheet from one plane to another, and means rotating within the first named means and independently thereof for cooling the same.

1,759,237. HINGE. RODNEY N. MCCLURE, Inglewood, Calif. Filed Oct. 26, 1925. Serial No. 64,869. 2 Claims. (Cl. 16—140.)



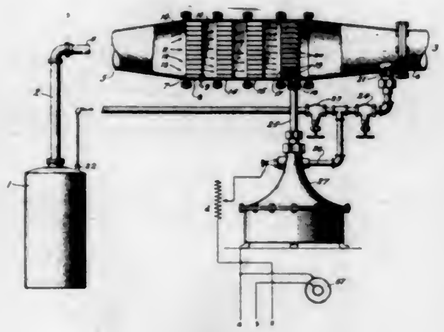
1. A hinge of the class described comprising a pair of leaves, each having a pair of relatively spaced hinging knuckles, a pintle for extension through said knuckles, each leaf having a cutaway portion between its hinging knuckles, resistance means comprising elements, having meeting faces bearing undulations, for disposition in said cutaway portions and perforated for the extension therethrough of the pintle, said cut away portions having greater heights than the combined thicknesses of said resistance elements plus the depth of said undulations, the upper resistance element being directly engaged by a knuckle of the hinge leaf bearing the object hinged, for the purpose of utilizing the weight of such object to yieldingly resist relative movement of the opposed undulations, and the lower resistance element being nonyieldingly supported in the cutaway portion of the other hinge leaf.

1,759,238. WHEEL. ISIDORE A. MEALE, Alameda, Calif., assignor to Eames Company, San Francisco, Calif., a Corporation of California. Filed Oct. 27, 1928. Serial No. 315,414. 3 Claims. (Cl. 301—63.)



1. In a wheel a pair of complementary disc members releasably fixed together in coaxial relation to define a central hub and a peripheral tire receiving groove, said members each having axially spaced walls connected at the hub and groove-defining portions of the members.

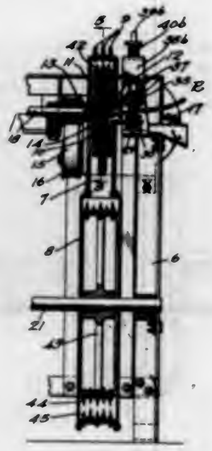
1,759,239. FLOW METER AND METHOD OF MAKING SAME. MONTFORD MORRISON, Chicago, Ill. Filed Oct. 8, 1923. Serial No. 667,397. 12 Claims. (Cl. 73—167.)



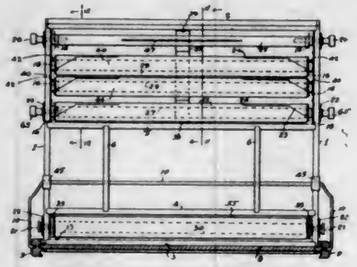
1. In a pressure differential creating device for fluids, the combination with the conduit through which the fluid, the pressure of which is to be differentiated, flows, of a chamber in the line of flow, having a cross-section greater than that of the said conduit and containing a multiplicity of ducts each of a cross-section smaller than the aforesaid conduit, said ducts being disposed parallel one to the other, parallel to the line of flow of the fluid, and disposed over the entire cross-section of the aforesaid chamber.

1,759,240. FIBER-ROPE PICKER. MORRIS MUDRICK, Los Angeles, Calif. Filed May 7, 1929. Serial No. 361,062. 5 Claims. (Cl. 19—82.)

1. The combination of a rotor having an arm revoluble therewith, a passage in said rotor having an axial inlet and a discharge mouth at the outer end of said arm, means to feed a rope into said inlet and retain it against rotation whereby the rope is untwisted on rotation of said rotor, normally stationary picker teeth facing the discharge mouth of said rotor passage, and co-operating picker teeth on said rotor disposed to sweep by said first mentioned teeth.



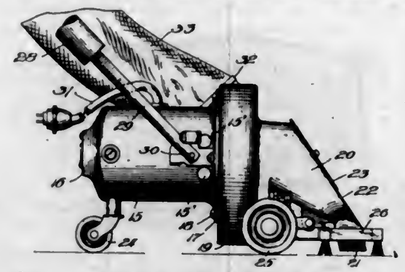
1,759,241. EDUCATIONAL DEVICE FOR INTERCHANGEABLE TOPICS. LEWIS E. MYERS, Valparaiso, Ind., assignor, by mesne assignments, to The Northern Trust Company and Harold H. Rockwell as trustees. Filed Nov. 23, 1925. Serial No. 71,008. 4 Claims. (Cl. 40—86.)



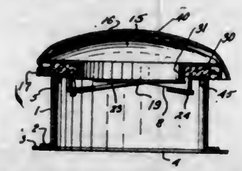
1. In educational devices, a suitable frame, attachable and detachable rollers positioned in the frame, means for rotating such rollers, attachable and detachable scrolls adapted to be held relatively flat between a pair of rollers for display purposes, a pivoted reversible board for covering the front of the frame, a permanent covering for the rear of the frame, a bail connecting the board to the frame, a spring catch on the frame, and cooperating means on the board for locking the frame and board to each other in an automatic manner against disengagement in all directions.

1,759,242. REMOVABLE COVER-PLATE MOUNTING. EMANUEL NIELSEN, Racine, Wis., assignor to Hamilton Beach Mfg. Co., Racine, Wis., a Corporation of Wisconsin. Filed Oct. 31, 1928. Serial No. 316,317. 8 Claims. (Cl. 15—9.)

1. Means for removably mounting a plate upon a support, including a plurality of headed bolts movably mounted in apertures in the support, springs between the bolt heads and ends bearing against the inner surface of the support for normally maintaining the bolts in plate-engaging position, said plate being provided with means for engaging the bolt heads and for temporarily moving same to non-engaging position.

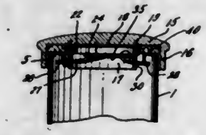


1,759,243. BAYONET-JOINT CLOSURE. JAMES S. REID, Cleveland, Ohio, assignor to The Eaton Axle and Spring Company, Cleveland, Ohio, a Corporation of Ohio. Filed Jan. 14, 1929. Serial No. 332,276. 13 Claims. (Cl. 220—40.)



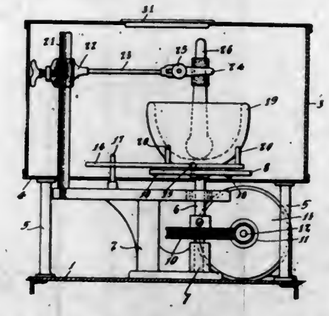
1. A bayonet-joint closure for the ends of tubular necks having opposed cam portions adjacent the ends to be closed, comprising a locking member and a supporting member therefor, said locking member comprising a substantially flat sheet metal disc provided with two circumferentially disposed slots extending inwardly from the disc edge in opposite directions, thereby forming at the circumference of the disc two opposed resilient locking fingers, said fingers at their free ends terminating beyond the circular edge of the disc to provide resilient extensions for locking engagement with the opposed cam portions of such a neck.

1,759,244. CLOSURE. JAMES S. REID, Cleveland, Ohio, assignor to The Eaton Axle and Spring Company, Cleveland, Ohio, a Corporation of Ohio. Filed Jan. 14, 1929. Serial No. 332,277. 10 Claims. (Cl. 220—40.)



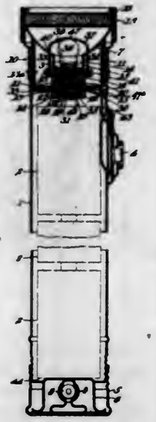
1. A bayonet-joint closure for the ends of tubular necks having opposed cam portions adjacent the ends to be closed, comprising a locking member provided with outwardly extending locking fingers for cooperative engagement with the cam portions of such a neck, a supporting member for said locking member, a sealing gasket maintained in assembly with the closure by the locking fingers of said locking member, and resilient means releasably secured to said supporting member for maintaining the locking member in assembly with said supporting member, the resiliency of said means permitting its ready release from said supporting member to enable the locking member to be disassembled from said supporting member and the sealing gasket freed from its assembly with the closure.

1,759,245. GRINDER AND DISINTEGRATOR. EDWIN W. SCHULTZ and FRANK D. BANHAM, Palo Alto, Calif.; said Banham assignor to said Schultz. Filed May 4, 1929. Serial No. 360,372. 7 Claims. (Cl. 83—10.)



1. In a grinding and disintegrating apparatus the combination of a driving disc, means for driving said disc, a platen movably positioned above said disc, a pin eccentrically mounted in said disc and journaled in said platen, being provided with a guide adapted to slidably cooperate with a fixed pin, a substantially stationary grinding member, and a complementary grinding member in operative contact with said first grinding member and actuated by said platen.

1,759,246. HAND LAMP. RALPH R. SMITH, Jackson Heights, N. Y., assignor to National Carbon Company, Inc., a Corporation of New York. Filed May 7, 1925. Serial No. 28,708. 15 Claims. (Cl. 240—10.5.)

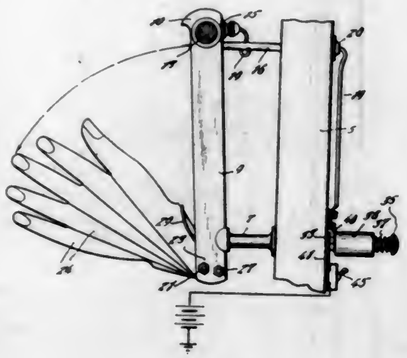


2. In a flashlight the combination with a battery, an incandescent lamp having a terminal in contact with a connector in circuit with the battery, and a reflector, of a lamp socket assembly carrying the lamp and adjustable to shift the lamp relatively to the reflector, a guard carried by the socket assembly and bearing against the lamp bulb to press the lamp into contact with said conductor, and resilient means carried by the socket assembly and bearing against the lamp to force the lamp out of contact with said conductor to open the circuit when the lamp bulb is broken.

1,759,247. SIGNAL. FREDERICK TRAUTMAN, Freeport, N. Y. Filed July 1, 1929. Serial No. 375,071. 1 Claim. (Cl. 116—41.)

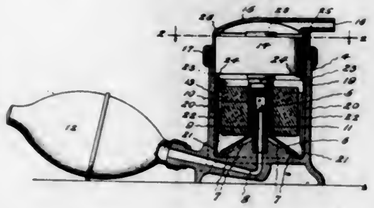
A signal for motor vehicles comprising a semaphore adapted to be mounted at the outer side of the vehicle

body, a pushrod slidably disposed through the side of the vehicle for actuating the semaphore, spring means on the pushrod for normally maintaining the semaphore in retracted position, a manually operable lever, a rocker arm,



one end of the rocker arm being adapted to engage the inner end of the pushrod, and a flexible connection between the opposite end of the rocker arm and the said manually operable lever.

1,759,248. LATHER-FORMING DEVICE. ROBERT HUDSON WAGER, Jersey City, N. J. Filed Jan. 5, 1928. Serial No. 244,732. 15 Claims. (Cl. 299—88.)

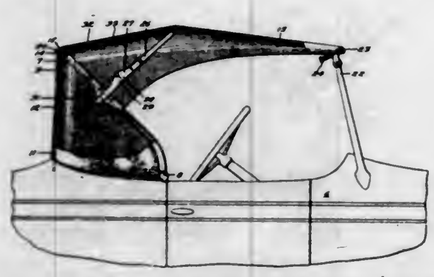


1. In combination with a lather forming device embodying a container for saponaceous liquid, and a removable cover swiveled upon the upper end of the container wall and capable of manual turning; means in said container for loosening accumulated soap, said loosening means being operatively connected with said cover for actuation by turning of the latter.

1,759,249. VAT DYESTUFFS OF ANTHRACENE SERIES CONTAINING NITROGEN AND PROCESS OF PREPARING SAME. KARL WILKE and JOSEF STOCK, Hochst-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed June 21, 1926, Serial No. 117,568, and in Germany July 2, 1925. 6 Claims. (Cl. 260—61.)

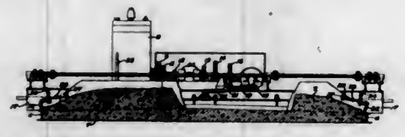
1. Process for preparing new vat dyestuffs of the anthracene series containing nitrogen which consists in treating with caustic alkali an amino-Bz-1-halogen-benzanthrone compound, produced by acting with a nitrating agent upon a Bz-1-halogen-benzanthrone and reducing the nitrated compound thus obtained.

1,759,250. VEHICLE TOP. EDWARD A. WRIGHT, Fresno, Calif. Filed Aug. 2, 1926. Serial No. 126,577. 4 Claims. (Cl. 296—107.)



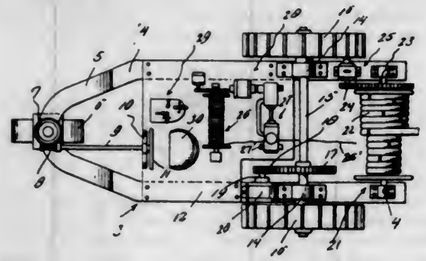
1. A top for a vehicle having an open body, comprising a draft shield adapted to remain upright at the rearward part of said body, an upright windshield at the forward part of said body, a flexible cover portion fastened to said windshield and said draft shield, and a toggle-jointed bow mounted on said draft shield for tautening said cover portion.

1,759,251. SCRAPER MECHANISM. ANDREW J. CLAUSEN, San Francisco, Calif. Filed Oct. 4, 1927. Serial No. 223,868. 10 Claims. (Cl. 94—45.)



2. In combination with a road finishing machine having a screed, a scraper, means for imparting reciprocating motion thereto longitudinally of the screed, and resilient means for maintaining the scraper in effective position during one stroke of the reciprocating motion.

1,759,252. PUMP TRUCK. WILLIAM H. COBURN and CHARLES KIERNAN, Morgantown, W. Va., assignors of one-third to Ernest H. Gilbert, Morgantown, W. Va. Filed Sept. 29, 1927. Serial No. 222,920. 2 Claims. (Cl. 180—27.)

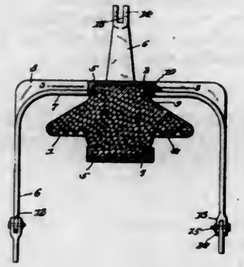


1. A pump truck for use in coal mines comprising a substantially U-shaped frame, its connecting portions being offset upwardly and whose bar portions are disposed in spaced parallelism and adapted to occupy a plane close to the surface of the earth, a single guide and steering wheel mounted upon the upwardly offset portion, a pair of traction wheels mounted upon the intermediate portion of said guide bars, an electric motor carried by one of said bar portions having suitable drive connections with said wheel, bearing on the respective bar portions adjacent

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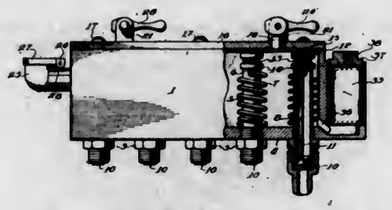
their outer extremities, a reel mounted for rotation in said bearings, a sectional hose mounted on said reel, an electric motor carried by the other of said bar portions and having suitable drive connections with said reel, a platform carried by the side bars and located between said upwardly offset portions and said traction wheels, said platform being adapted to accommodate the driver, and a double-acting motor driven pump on said platform provided with hose couplings for operable connection with the said sectional hose on said reel.

1,759,253. INSULATOR. ROY C. GERHARDT, Lockport, N. Y. Filed Jan. 11, 1929. Serial No. 331,829. 5 Claims. (Cl. 173—366.)



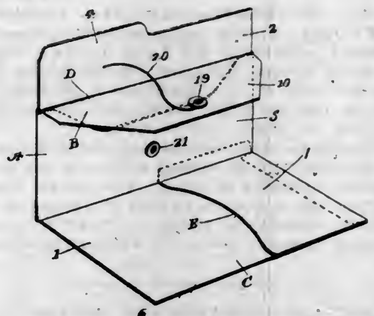
1. An insulator comprising an insulating member consisting of a body portion and axial hub extensions of polygonal formation located at the top and bottom of the body, and reversely arranged link members provided with cap portions fitting the hub extensions and slidably interlocked with the same and adapted to hold the link members against rotary movement, said link members being disposed in planes at right angles to each other.

1,759,254. MULTIPLE OILER. REMI J. GITS, Chicago, Ill. Filed Apr. 4, 1927. Serial No. 180,871. 4 Claims. (Cl. 184—64.)



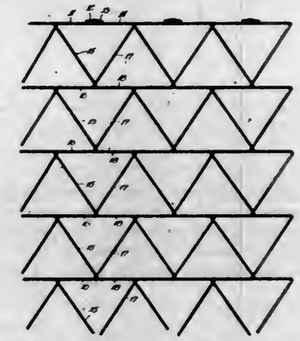
2. An oiler comprising a reservoir adapted to contain oil, an upstanding tubular member mounted in the floor of said reservoir and communicating with the interior thereof, the lower end of said tubular member being provided with a discharge opening, a valve for controlling the flow of oil through said opening, a valve stem concentrically mounted within said tubular member for controlling said valve, the upper end of said valve stem projecting above the top end of said tubular member, a cap mounted on the top end of said valve stem, resilient compression means bearing between the under side of said cap and the top end of said tubular member for normally holding said valve in a closed position, a manually operable cam lever mounted on said reservoir for pressing down on said cap to open said discharge valve, and a wick disposed in said reservoir and partially within said tubular member for conducting oil from said reservoir to said discharge opening.

1,759,255. FILING RECEPTACLE. ABRAHAM S. GREENHAUS, New York, N. Y., assignor, by mesne assignments, to Majestic Mills Paper Co. Inc., New York, N. Y., a Corporation of New York. Filed Dec. 20, 1927, Serial No. 241,326. Renewed Oct. 5, 1929. 4 Claims. (Cl. 129—16.7.)



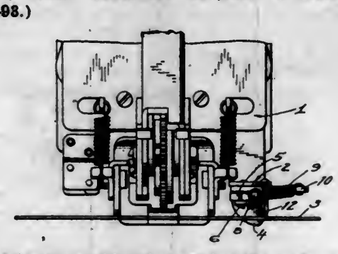
1. A receptacle comprising an envelope including a closure flap, means connected to said envelope to provide a filing compartment at the rear of the envelope, and means connected to the first-mentioned means to provide a letter folder forwardly of and foldable relatively to said envelope.

1,759,256. TRIANGULAR MESH FABRIC. NOAH S. HARTER, Waukegan, Ill. Filed May 16, 1928, Serial No. 278,308. Renewed Oct. 23, 1929. 3 Claims. (Cl. 245—5.)



2. Chain link wire fabric consisting of interlocking wire members extending continuously across the fabric, said members each having alternate portions extending diagonally of the fabric and substantially lengthwise of the fabric, the diagonal portions of adjacent members extending in opposite directions.

1,759,257. GRIPPER FOR BOX-STRAPPING MECHANISM. LEO M. HARVEY, Los Angeles, Calif. Filed Oct. 8, 1928. Serial No. 310,022. 8 Claims. (Cl. 140—93.)



1. A gripper capable of assuming an open position to receive a wire or the like when moved laterally into the

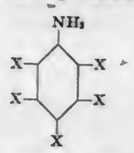
gripper, having resilient means for closing the gripper, and means in the path of the laterally moving wire actuated by the laterally moving wire, and operating to open the gripper.

1,759,258. PROCESS FOR PREPARING DYEINGS ON THE FIBER. WINFRID HENTRICH and MAX HARDTMANN, Wiesdorf-on-the-Rhine, and ERNST TIETZE, Cologne-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Dec. 20, 1928, Serial No. 327,465, and in Germany Dec. 28, 1927. 3 Claims. (Cl. 8—5.)

1. The process which comprises introducing cotton which is impregnated with an aqueous solution of any coupling component containing no sulfonic acid and no carboxylic acid group into an aqueous solution of a diazonium fluoro sulfonate, containing no sulfonic acid and no carboxylic acid group, squeezing the cotton, washing and drying the same.

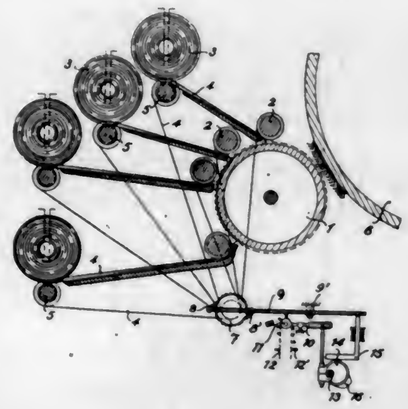
1,759,259. AZO DYESTUFFS AND PROCESS OF PREPARING THEM. ERWIN HOFFA and FRITZ MÜLLER, Hochst-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Dec. 7, 1927, Serial No. 238,457, and in Germany Dec. 13, 1926. 13 Claims. (Cl. 260—95.)

1. The process of preparing azo dyestuffs by diazotizing an arylamine of the following formula:



wherein one X stands for the group —CN and the other X's for hydrogen or any substituent, and coupling it with an azo component capable of being coupled with diazo-compounds.

1,759,260. SPINNING PROCESS FOR POLYCHROMATIC YARNS, DEVICE FOR SAID PROCESS, AND THE PRODUCT OF SAID PROCESS. OSWALD HOFFMANN, Neugersdorf, Germany. Filed Mar. 2, 1926, Serial No. 91,754, and in Germany Jan. 20, 1906. 11 Claims. (Cl. 19—145.)



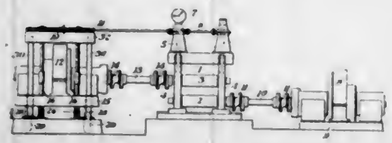
1. Carder for producing slubbing or yarn from differently dyed fibres with altering mixing ratio of the single coloured fibres between 0 and 100% of the portions of the total material comprising in combination mechanical arrangements for feeding each color of the different coloured fibres, and adjustable means for regulating the amount of each single colour required.

1,759,261. PROCESS FOR MANUFACTURING SULPHUR DYESTUFFS. GEORG KALISCHER, Frankfort-on-the-Main, and HEINRICH RITTER, Dietesheim-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed June 26, 1928, Serial No. 288,529, and in Germany July 11, 1927. 5 Claims. (Cl. 260—19.)

1. The process which comprises heating an indophenol compound with polysulfides in the presence of a hydroaromatic hydroxy-compound as a solvent.

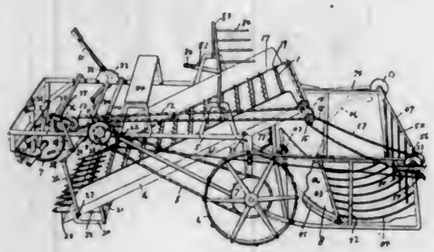
5. The process which comprises heating 3-(4'-hydroxyphenyl)-amino-carbazole with polysulfides in the presence of methyl-cyclohexanol as a solvent.

1,759,262. ROLLING MILL. JULIAN KENNEDY, Pittsburgh, Pa. Filed June 23, 1926. Serial No. 117,995. 5 Claims. (Cl. 80—56.)



2. A rolling mill comprising a roll stand having the usual rolls, roll housings and screw-downs for vertically adjusting the position of one roll relative to that of another roll, means for driving the rolls including a motor mounted at one side of the roll stand for driving the adjustable roll, a vibrating spindle flexibly coupled to the motor and the roll, a vertically adjustable support for the motor, and means for adjusting the motor support to raise and lower the motor to maintain it substantially level with the adjustable roll.

1,759,263. HARVESTER. HENRY F. KNIEP and ARMIN LIST, Buhl, Idaho. Filed Dec. 13, 1927. Serial No. 239,670. 5 Claims. (Cl. 56—346.)



1. A receptacle structure for a harvesting machine of the class described comprising a frame, a bottom structure in the frame including a shaft with fingers extending rearwardly therefrom and a cover frame extending forwardly therefrom, latch structure for holding the bottom structure normally in place, a shaft, tines extending from the shaft to swing between the fingers, means for rocking the shaft, and means cooperable with the movement of the shaft to cause the unlatching of the latch structure and the tilting of the bottom structure.

1,759,264. SULPHUR DYESTUFFS. ERWIN KRAMER, Cologne-Deutz, BERNHARD BOLLWEG, Leverkusen-on-the Rhine, and LUDWIG ZEH, Wiesdorf-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed June 21, 1928, Serial No. 287,343, and in Germany Aug. 31, 1927. 8 Claims. (Cl. 260—20.)

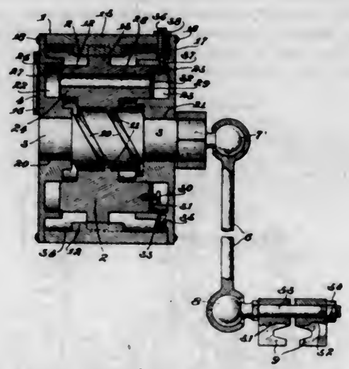
1. In the process for the manufacture of sulphur dyes the step which comprises treating β-binaphthol with a compound of the group consisting of sulphur halogenides and mixtures of sulphur with sulphur halogenides at a temperature of about 250-260° C.

1,759,265. WINDING DEVICE. PAUL KUNIN and ISAAC E. MCELROY, Minneapolis, Minn.; said McElroy assignor to said Kunin. Filed Aug. 23, 1928. Serial No. 301,545. 11 Claims. (Cl. 132—33.)



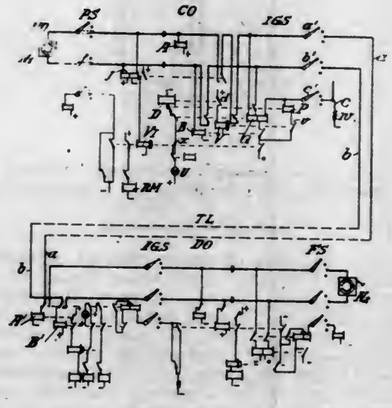
9. A device of the class described, comprising a substantially straight tubular casing adapted to be held in the hand, a driving shaft rotatably mounted within said casing and extending longitudinally thereof and having one end projecting beyond one end of said casing, a clutch mounted within said casing and having one of its elements connected with a flexible driving member adapted to be connected with a rotary source of power, means on the exterior of said casing controllable by a finger for moving said shaft longitudinally of said casing to drivably connect said shaft with said clutch, and means for securing a rotary implement to the projecting end of said shaft.

1,759,266. SNUBBER. LOUIS L. LOMAR, Houston, Tex. Filed Jan. 17, 1925. Serial No. 3,068. 21 Claims. (Cl. 188—89.)



1. In a device of the character described, a casing adapted to contain a fluid, a shaft rotatably mounted in said casing, said shaft and said casing being adapted to be connected to relatively movable parts of a vehicle, said casing having a main fluid chamber and opposed piston chambers open at one end to said main chamber, a piston slidable on said shaft and reciprocable in the open ends of said piston chambers, and a screw and nut connection between said shaft and said piston, said piston having a conduit extending entirely therethrough and closed except at the opposite ends of said piston, said conduit being adapted to form a communicating passage between said piston chambers.

1,759,267. AUTOMATIC TELEPHONE SYSTEM. FRIEDRICH MERK, Frankfort-on-the-Main, Germany. Filed Nov. 3, 1928, Serial No. 317,035, and in Germany May 5, 1927. 6 Claims. (Cl. 179—18.)



1. In an automatic telephone system comprising a plurality of telephone exchanges; two-wire trunk lines between said exchanges; automatic selectors in said exchanges adapted automatically to select a disengaged trunk line, each of said selectors embodying three brushes and a three-wire multiple field; means in these selectors for testing over a wire of the multiple field arranged locally in the exchange of the said selector whether the selected line is disengaged; and means brought into action by said testing means to determine whether the said trunk line is in working order.

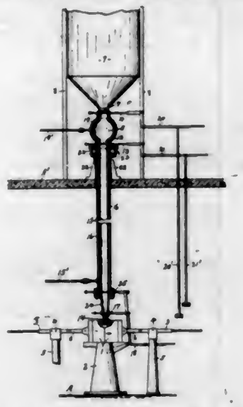
1,759,268. MANUFACTURE OF IRON CARBONYL. ALWIN MITTASCH, Ludwigshafen-on-the-Rhine, and CARL MÜLLER, Mannheim, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Jan. 29, 1925, Serial No. 5,619, and in Germany Feb. 1, 1924. 9 Claims. (Cl. 23—203.)

2. The process of manufacturing iron carbonyl which comprises passing over a metallic iron a gas containing carbon monoxid at a high pressure and an elevated temperature and with sufficient speed to carry the iron carbonyl formed away with the gases and reducing the temperature of the gases after the reaction to less than about 140 degress centigrade before releasing the pressure.

1,759,269. APPARATUS FOR CASTING MOLTEN METAL OR OTHER FLUENT OR SEMIFLUENT MATERIAL. FREDERICK C. MORRISON, Syracuse, N. Y. Filed Feb. 6, 1928. Serial No. 252,871. 3 Claims. (Cl. 22—79.)

1. In an apparatus for casting molten metal in a mold having a sprue, a measuring pot having a capacity approximately equal to that of the mold and provided with an inlet

in its top and an outlet in its bottom, separate gates controlling the inlet and outlet, and an upright conduit having

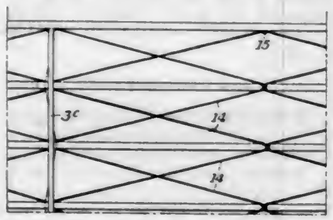


a straight vertical passage therethrough leading directly from the outlet of the measuring pot to the sprue of the mold.

1,759,270. PROCESS OF PRODUCING AN ARTIFICIAL SKATING GROUND. FRANZ EUGEN MÜLLER, Dresden, Germany, assignor to Edgar Vorwerk, Hamburg, Germany. Filed Mar. 7, 1928, Serial No. 259,904, and in Germany February, 1928. 5 Claims. (Cl. 94—22.)

1. A process for the production of imitation ice surfaces for skating and sliding sports which comprises providing, on a suitable floor or surface, a layer of a mixture containing a dry calcined anhydrous sodium salt and a crystallized, or hydrated sodium salt, and adding to the layer a calculated quantity of water sufficient to cause the calcined portion of the salt mixture to convert into the crystalline state.

1,759,271. GRATING STRUCTURE. HARRY NAGIN, Pittsburgh, Pa., assignor to Tri-Lok Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed June 27, 1927. Serial No. 201,702. 2 Claims. (Cl. 94—30.)



1. A grating structure formed of girder bars and cross bars, the cross bars lying in planes generally perpendicular to the top of the grating but having laterally offset portions, and a filler material in the spaces between the members, the offset portions forming backings for the filler material.

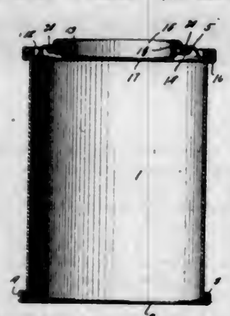
1,759,272. ACYL-AMINO-DIBENZANTHRONES AND PRODUCTS RESULTING THEREFROM BY TREATMENT WITH ALKYLATING AGENTS. PAUL NAWIASKY, Ludwigshafen-on-the-Rhine, Germany, assignor, by mesne assignments, to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed July 10, 1925, Serial No. 42,825, and in Germany Aug. 11, 1924. 4 Claims. (Cl. 260—61.)

1. The process of producing new vat dyestuffs of the dibenzanthrone series which comprises acting on an amino derivative of the dibenzanthrone series with an acylating agent in the presence of at least such an amount of an inert organic diluent that the resulting mixture can be stirred when warm.

1,759,273. MANUFACTURE OF DYESTUFFS. PAUL NAWIASKY and ARTUR KRAUSE, Ludwigshafen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed June 11, 1928, Serial No. 284,656, and in Germany June 27, 1927. 7 Claims. (Cl. 260—60.)

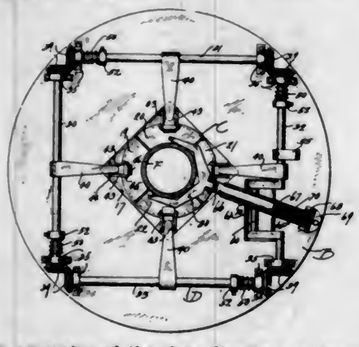
1. A process of producing new colored compounds which consists in acting on naphthazarine at temperatures not exceeding 100° C. with primary aliphatic amines.

1,759,274. RECEPTACLE CLOSURE. FRANK J. O'BRIEN, Baltimore, Md., assignor, by mesne assignments, to Continental Can Company, Inc., New York, N. Y., a Corporation of New York. Filed Feb. 10, 1927. Serial No. 167,223. 1 Claim. (Cl. 220—81.)



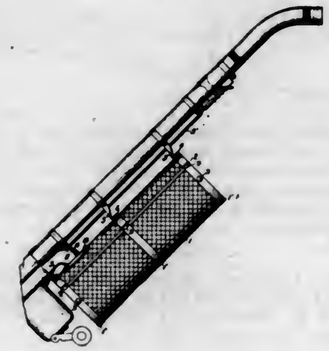
A can comprising a body portion, an apertured top adapted to be secured to said body portion by a double seam, said top having a depending vertical wall at the opening therein forming a friction seat, said top intermediate said vertical wall and the double seam being bent to form a trough, the bottom of which inclines upwardly to said vertical wall, a removable cap having a depressed portion forming a friction plug adapted to engage the friction seat on said top for mechanically securing said cap to said top for mechanically securing said cap to said top, said cap having the peripheral portion thereof extending over said top and a portion of said trough, and a hermetic sealing material disposed in said trough and engaging the under side of said peripheral projecting portion of the cover for forming a seal between the cover and the top.

1,759,275. GRIPPING DEVICE. CHARLES POWELL, Los Angeles, Calif. Filed May 28, 1928. Serial No. 281,272. 12 Claims. (Cl. 24—263.)



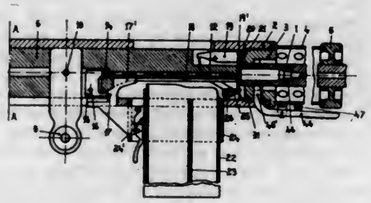
1. In apparatus of the class described a base member having a pipe passageway therethrough, a plurality of gripping slips carried thereby and movable to engage and disengage the pipe, means for operating said slips including a crank, and means movably carried by the base and adapted to engage the pipe and the crank to operate the latter for operating the slips into a gripping relation with the pipe upon downward movement of the latter.

1,759,276. AIR-WAY DUST FILTER AND CONNECTIONS THEREFOR. DANIEL BENSON REPLOGLE, Berkeley, Calif., assignor, by direct and mesne assignments, to The Commerce Guardian Trust & Savings Bank, Toledo, Ohio, as Trustee. Filed May 14, 1928, Serial No. 277,708, and in Germany Apr. 9, 1928. 5 Claims. (Cl. 183—51.)



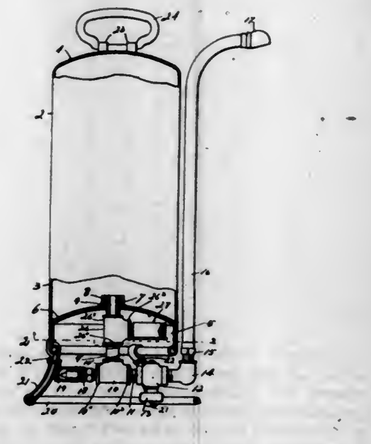
5. The herein described means for attaching a dust filtering element to the discharge pipe of an air-way or suction cleaner comprising a pair of clamping shields concentric of the pipe opening, and means operating one of said shields to clamp the inlet of the filtering element between said shields for operatively clamping a mouth of the filtering element between said shields.

1,759,277. AUTOMATIC FIREARM. BETHEL-ABIEL REVELLI, Turin, Italy, assignor to Armamenti Militari S. A., Turin, Italy. Filed Mar. 21, 1928, Serial No. 263,288, and in Great Britain Aug. 25, 1927. 4 Claims. (Cl. 42—3.)



1. A machine gun comprising, in combination with a breech bolt of which the closure is obtained by virtue of its weight a striker carried by said bolt, a stop member on the breech, a lever co-operating with said stop member for actuating said striker before the breech bolt has reached the end of its closing stroke, a barrel chamber having longitudinal grooves corresponding with the neck portion of the cartridge case to generate, when the charge explodes, a counter-pressure on said neck portion, the length of said chamber being such that it completely embraces the cartridge, and its edge being free of notches, an ejector, and means for displacing said ejector towards the outside when the breech bolt closes.

1,759,278. AIR-RESERVE TANK. HARRY C. RITTER, Jersey Shore, Pa., assignor of one-half to John C. Patchen and one-fourth to D. B. Jaffe, Jersey Shore, Pa. Filed Nov. 23, 1926. Serial No. 150,296. 1 Claim. (Cl. 221—73.5.)

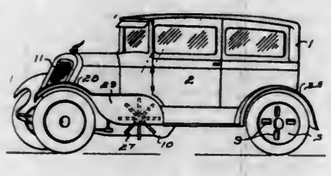


An air reserve tank comprising, in combination, a receptacle having an inturned roll at one end, inlet and outlet valves at the same end as the roll, a base ring positioned at a distance from the end of the receptacle to which the valves are connected, supports, each constructed from a single strip of metal so fashioned as to provide a portion partially surrounding the base ring and parallel portions extending toward the tank and terminating in jaws corresponding to the shape of the end of the tank including the roll, and means to draw said jaws together to clamp the support on the tank.

1,759,279. MATERIAL FOR THE LOW-TEMPERATURE SOLDERING OF METALS. JULES ALFRED ROGNON, Levallois Perret, France. Filed July 20, 1929, Serial No. 379,883, and in France July 24, 1928. 1 Claim. (Cl. 148—26.)

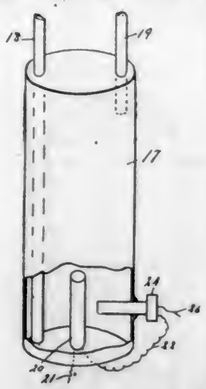
A composition for the low-temperature soldering of metals, comprising a mixture of borax, 18%; zinc chloride, 40%; sodium bromide, 34%; and aluminum bromide, 8%, the aforesaid percentages being by weight.

1,759,280. LAND AND WATER VEHICLE. ALEXSEY PETTROW ROMANIUK, Detroit, Mich. Filed Sept. 3, 1929. Serial No. 390,136. 3 Claims. (Cl. 115—1.)



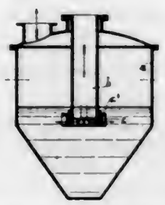
1. A land and water vehicle comprising ground wheels, a motor, a drive connection to said motor from said wheels including a universal joint and a buoyant member extending beneath the motor and having side walls at opposite sides of the motor and a front wall forward of the motor, and having a rear wall, and means water-sealing said universal joint in said rear wall.

1,759,281. ELECTRIC WATER HEATER. VALENTINE ROSENBERGER, Philadelphia, Pa. Filed June 13, 1928. Serial No. 284,977. 1 Claim. (Cl. 219—39.)



An electric water heater comprising a conduit for connection at one end with a water-supply, a fitting at the opposite end of said conduit and having a passageway in alignment with the bore of the conduit, another passageway at right angles thereto and a socket, said socket adapted to be connected with a pipe leading to an outlet, a casing mounted in the fitting and closing the first mentioned passageway and also projecting into the conduit and having an outside diameter smaller than the inside diameter of said conduit, the inner end of said casing being closed, heating units comprising heating elements supported on mica, a tiltable mercury switch, a piston in the second named passageway and movable in one direction by flow of water through the fitting, a spring to move the piston in the opposite direction when the flow of water is stopped, means to connect said piston with the mercury switch after actuating the latter in unison therewith, and an electric circuit including a source of supply, the mercury switch, and the heating unit.

1,759,282. WASHER. JOSEF SCHAEFER, Dortmund, Germany. Filed June 27, 1925, Serial No. 40,025, and in Germany Oct. 31, 1924. 3 Claims. (Cl. 261—93.)



1. In a washing and absorbing apparatus in combination, a liquid container, a relatively stationary depending admission pipe, endwise immersed in the liquid of said container, a substantially cylindrical downwardly closed, laterally apertured, cap-like discharging member, loosely guided upon the exterior of the immersed extremity of said pipe and freely rotatable thereon, of somewhat larger diameter than said pipe, communicating therewith and spaced from the walls of the container.

1,759,283. SECURING MEANS FOR HOOKLESS FASTENERS FOR RECEPTACLES. CARL A. SCHMIDT, Brooklyn, N. Y. Filed Mar. 18, 1927. Serial No. 176,381. 5 Claims. (Cl. 70—2.)

1. In a receptacle having an opening arranged with co-operating releasable fastener members on the edges thereof and a cam member slidable on the edges of the opening operative to move said fastener members to receptacle closing and opening position and pivotally carrying a manipulating plate, a hood member movably mounted on the receptacle constructed and arranged to be engaged over and enclose the cam member and its manipulating

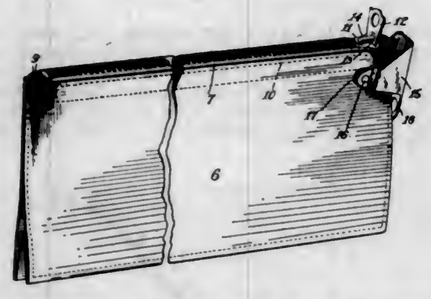
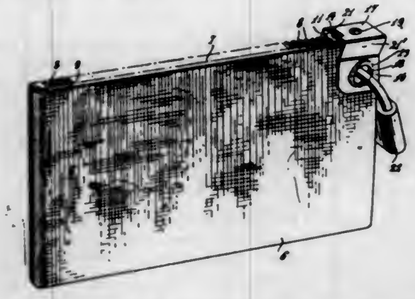


plate in the receptacle closing position of the cam member, and said cam member manipulating plate and the hood member being adapted for engagement of means when the hood member is in cam member enclosing position to secure said hood member in said position and the cam member against movement.

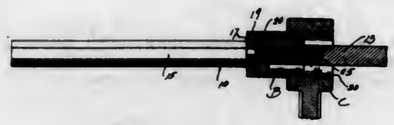
1,759,284. LOCKING MEANS FOR HOOKLESS FASTENERS FOR RECEPTACLES. CARL A. SCHMIDT, New York, N. Y. Filed Mar. 16, 1928. Serial No. 262,074. 4 Claims. (Cl. 70—2.)



3. In a receptacle of rectangular shape having an opening extending along one end thereof arranged with co-operating releasable fastener members on the opposite edges and a fastener actuator slidable longitudinally on the edges of the opening and operative when moved in one direction to move said fastener members to receptacle closing position and when moved in reverse direction move the fastener members to receptacle opening position, a hood pivotally mounted on the actuator to have movement relative thereto and having alined perforations in opposite sides, said hood being adapted to be engaged over the actuator and a corner of the receptacle to embrace a perforated portion of the receptacle with the actuator in position with the fastener members in receptacle closing position, and the hood adapted to be secured in said position by a padlock the shackle of which is engaged in the perforations of the hood and receptacle.

1,759,285. BUSHING REMOVING AND REPLACING TOOL. CHESTER A. SEASE, Harrisburg, Pa., assignor of one-half to Preston Crowell, Jr., Harrisburg, Pa. Filed Apr. 24, 1928. Serial No. 272,501. 12 Claims. (Cl. 29—88.2.)

1. In a bushing replacing and removing tool the combination of a supporting body comprising a pair of elongated parts, means to adjustably clamp said parts together, and a plurality of relatively stepped discs of different sizes assembled upon the body and clamped in

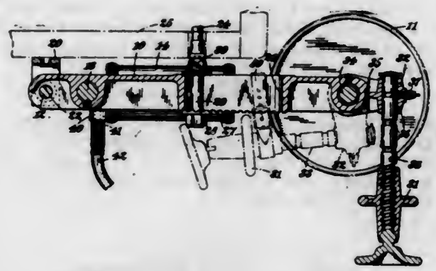


rigid relation thereon between and by said clamping parts, with the latter extending at opposite ends of the tool beyond said discs.

1,759,286. METHOD OF PREPARING ANIMAL MEATS FOR THE MARKET. PAUL CYRUS SMITH, Western Springs, Ill., assignor to Swift & Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 31, 1928. Serial No. 329,661. 8 Claims. (Cl. 17—45.)

8. The industrial method of treating food carcasses which consists in first, while the carcass still retains animal heat, separating therefrom muscular masses which have heretofore commonly been chilled and set in their natural attached relation to the skeletal structure of a carcass, and thereafter chilling such muscular masses for the purpose of removing the animal heat.

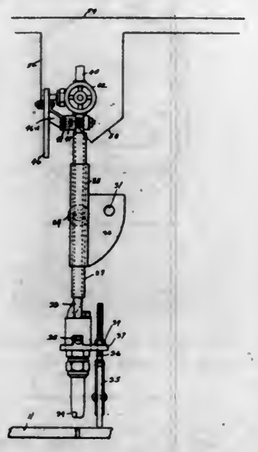
1,759,287. PUMP FOR INFLATING PNEUMATIC TIRES. CHARLES DENTON STEEL, London, England. Filed Feb. 14, 1929, Serial No. 339,889, and in Great Britain June 18, 1928. 4 Claims. (Cl. 230—37.)



1. In a pump, the combination of a cylinder, a piston therein, driving means for the piston comprising at least one friction disc to be frictionally driven by a road wheel of a vehicle, a movable supporting frame arranged to be pivotally mounted for engaging the disc with the road wheel, and lifting means arranged to bear on the ground and move the frame about its axis of pivoting towards the said road wheel to press the one or more friction discs into driving contact therewith.

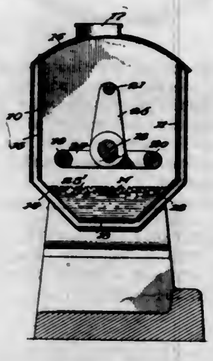
1,759,288. CUTTING-TORCH HOLDER. JAMES TEMPLE, Portland, Oreg. Filed June 14, 1926. Serial No. 115,870. 1 Claim. (Cl. 266—23.)

A metal cutting burner of the type employing a motor driven carriage, a burner carried thereby having heating gas and cutting gas conduits each valve controlled, characterised by the provision of means for starting the motor



by a movement of the cutting gas valve after the opening of the cutting gas conduit, whereby the motor need not be started until the initial cut is clear.

1,759,289. METHOD OF MIXING DOUGH. JOHN M. VAN HOUTEN, Beacon, N. Y., assignor to Dutchess Tool Company, Beacon, N. Y., a Corporation of New York. Filed July 3, 1929. Serial No. 375,719. 5 Claims. (Cl. 259—109.)



1. The method of manipulating dough which consists in advancing a mass of dough along a working surface in paths directly angular to each other, intermittently subjecting the surface of the mass to a rubbing pressure while on said surface and periodically interrupting the advance of said mass and turning it on said surface whereby said rubbing action is successively applied to reverse surfaces of the mass.

1,759,290. DOUGH-MIXING APPARATUS. JOHN M. VAN HOUTEN, Beacon, N. Y., assignor to Dutchess Tool Company, Beacon, N. Y., a Corporation of New York. Filed July 3, 1929. Serial No. 375,720. 14 Claims. (Cl. 259—109.)

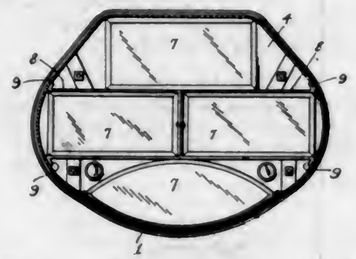
1. In a dough manipulating machine, the combination of a receptacle having a multiplicity of substantially flat surfaces directly angularly disposed in relation to each other and means for advancing a plastic mass of dough

along said surfaces with a rubbing pressure applied to the surface of said mass, the advance of the dough being



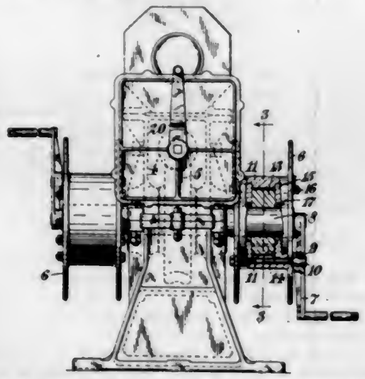
periodically interrupted by the individual surfaces, and means for turning the mass when its advance is thus interrupted.

1,759,291. SIGNAL. GORDON EDWARD ATKINSON, Niagara Falls, N. Y. Filed Dec. 15, 1928. Serial No. 326,327. 1 Claim. (Cl. 40—132.)



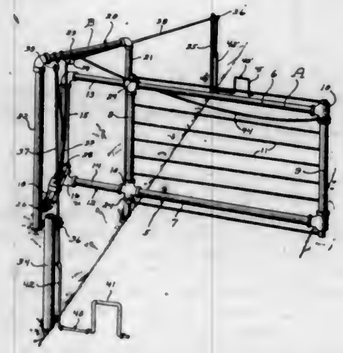
A lamp box comprising a casing provided with a window in one side thereof, and a pair of U-shaped partitions mounted within the casing with their bight portions secured together and with their ends secured to opposite walls of the casing to divide the box into a plurality of compartments and a lamp and a lens for each of the said compartments.

1,759,292. HOISTING APPARATUS. JOHN SYDNEY BARCLAY, New Malden, England. Filed Sept. 30, 1927, Serial No. 223,131, and in Great Britain Oct. 13, 1926. 15 Claims. (Cl. 254—185.)



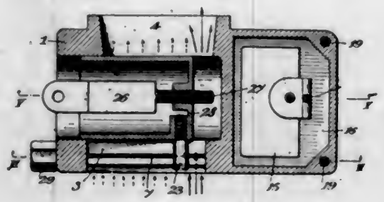
1. In a hoisting apparatus, the combination with a winding drum and a driving means for rotating it, of a free-wheel device between said winding drum and the said driving means which permits rotation of the drum in the hoisting direction independently of the driving means and a second driving means, independent of the first driving means, for rotating the drum in the hoisting direction at a higher speed than does the first named driving means.

1,759,293. DOOR OR GATE OPERATING MECHANISM. JOSEPH O. BARRETT, Rydal, Kans. Filed Sept. 25, 1928. Serial No. 308,168. 2 Claims. (Cl. 39—51.)



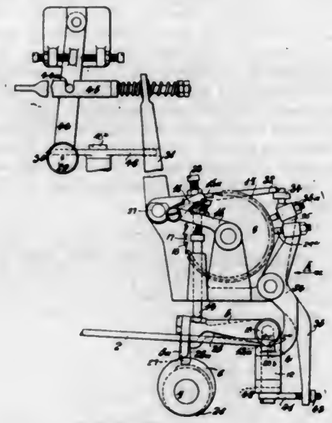
1. In an operating mechanism for closures, a guide rod mounted vertically on the closure, a fixed standard mounted adjacent the closure, a throw lever swivelly mounted at one end adjacent the lower end of the standard, means pivotally and slidably connecting the outer end of the lever to said guide rod, a sheave carried by the upper end of the standard, an operating cable trained over the sheave and having connection with the outer end of the throw lever, a trip member connected with the opposite end of the cable to exert a pull on the cable for effecting initial movement of the closure from either an open or closed position, and weight means on the throw lever to cause downward sliding movement of the outer end of the lever on the guide rod for completing movement of the closure into either an open or closed position.

1,759,294. CARBURETOR. OTTO BAUMGARTNER, Durrenast, near Thun, Switzerland, assignor to Arnold Haefeli, Munich, Germany. Filed Oct. 23, 1926, Serial No. 143,694, and in Switzerland Dec. 19, 1925. 3 Claims. (Cl. 261—51.)



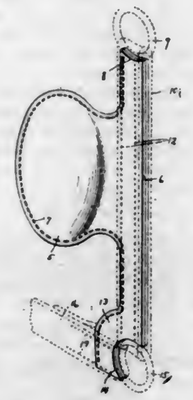
1. In a carburetor, the combination with a casing having two parallel bores and a transverse air slot extending across the bores; of a tubular fuel nozzle in one of the bores, said nozzle having a longitudinal slot in its upper portion presented to the air passing through the air slot and a longitudinal series of holes in the lower portion of the nozzle presented to the liquid fuel, a reciprocable valve in the other bore controlling the supply of air through the air slot and the area of the nozzle slot presented to said air.

1,759,295. CIRCULAR-KNITTING MACHINE. PERCIVAL ARTHUR BENTLEY, Leicester, England. Filed Dec. 21, 1926, Serial No. 156,190, and in Great Britain Dec. 21, 1925. 4 Claims. (Cl. 66—137.)



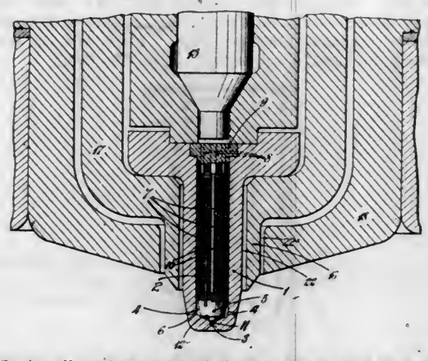
1. In a circular knitting machine, a plurality of relatively displaceable yarn feeds, a rotatable drum, a cam on said drum functioning relatively to displace the yarn feeds, a second cam on said drum functioning to determine the return movement of said yarn feeds, automatically operated means for holding the yarn feeds in their displaced position prior to their return to the normal position, and a main control means controlling the operation of the first-named drum.

1,759,296. BLIND FOR BRIDLES. ISAAC W. BROWN, Eldorado Springs, Mo. Filed Nov. 30, 1928. Serial No. 322,920. 2 Claims. (Cl. 54—10.)



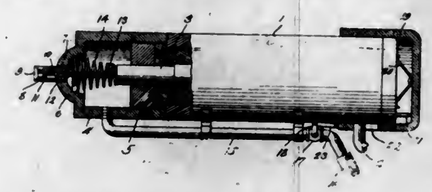
1. In a blind construction for bridles, a cheek strap formed integrally with the blind with its opposite ends terminating above and below said blind, said blind and said cheek strap being formed of a plurality of laminations whereby to add rigidity thereto, harness rings arranged at the upper and lower ends of said cheek strap, and a ring retaining strap inserted through said rings and extended longitudinally at opposite sides of the cheek strap and secured throughout its length thereto.

1,759,297. NOZZLE FOR ENGINES WORKING WITH AIRLESS FUEL INJECTION. WALTER SCOTT BURN, Hartlepool, England. Filed Apr. 16, 1928, Serial No. 270,525, and in Great Britain May 6, 1927. 4 Claims. (Cl. 299—115.)



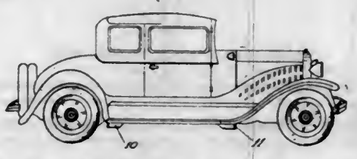
2. An oil engine nozzle of the kind referred to comprising a hollow outer member having a whirling sprayer hole formed therein, surrounded by additional penetrating sprayer holes, and a filter member having a tapered end arranged in the outer member covering the sprayer hole and leaving a clearance space around the said tapered end communicating with the penetrating sprayer holes, the extremity of such filter member having diametrically opposite grooves extending tangentially from the whirling sprayer hole to the clearance space aforesaid.

1,759,298. GREASE GUN. WILLIAM ARCHIE CHAPMAN, Lithonia, Ga. Filed Sept. 1, 1928. Serial No. 303,548. 2 Claims. (Cl. 221—47.3.)



1. A lubricating attachment for pneumatic hammers, including a grease container for attachment to one end portion of the casing of a pneumatic hammer, thereby to house the projecting operating element of the hammer, a nozzle extending from the container, means for supplying grease to the container, means having slidable engagement with the other end of the pneumatic hammer to control the supply of air to the hammer, and a grease controlling valve actuated by said slidable means.

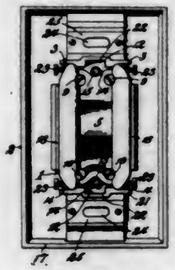
1,759,299. LIGHT FOR MOTOR VEHICLES. CHARLES V. CHUPRIN and IONATIUS J. CHUPRIN, Mount Carmel, Pa. Filed Mar. 8, 1929. Serial No. 345,355. 2 Claims. (Cl. 240—7.1.)



1. A lighting device for the wheel structures of motor vehicles comprising housing members located adjacent the wheel structures therefor, lamp casings arranged adjacent the ends of the housing to illuminate opposite sides

of the wheel structures, and switch compartments carried within each of the housings between the lamp casings.

1,759,300. DUSTPROOF TOGGLE SWITCH. ROY HERBERT CUNNINGHAM, Jackson, Mich., assignor to Reynolds Spring Company, Jackson, Mich. Filed Apr. 2, 1928. Serial No. 266,773. 9 Claims. (Cl. 200—168.)



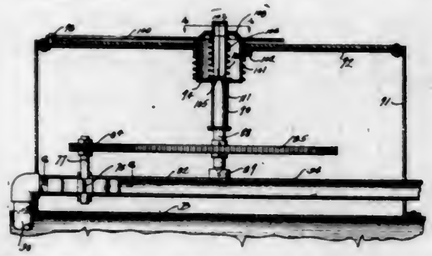
1. A device of the class described including a housing of molded insulating material having integral back, side and end walls and open at the front and forming a switch receiving chamber, said housing being also provided with corner recesses communicating with the switch chamber, and a face plate of molded insulating material provided at its inner face with side and end flanges fitting against the exterior of the side and end walls of the housing and spaced apart at the corner recesses thereof, said face plate capping the housing to form a dust-proof switch.

1,759,301. APPARATUS FOR COOLING COMPRESSOR VALVES AND COMPRESSED FLUIDS. IRWIN L. DUNN and JAMES O. LEWIS, Tulsa, Okla. Filed Feb. 23, 1928. Serial No. 256,304. 7 Claims. (Cl. 230—208.)



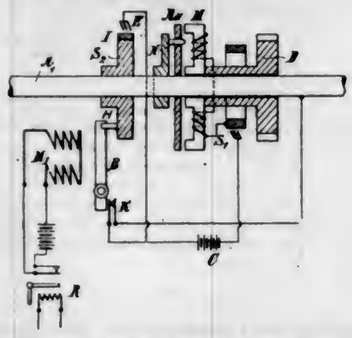
1. In a discharge valve of the character described, a member having a channel opening through its exterior surface, and means for delivering a cooling fluid to said channel opening to be discharged over the exterior surface of said member.

1,759,302. METER FOR LUBRICANT-DISPENSING APPARATUS. STANLEY DUVALL, Breckenridge, Tex. Filed June 17, 1924. Serial No. 720,691. 2 Claims. (Cl. 235—144.)



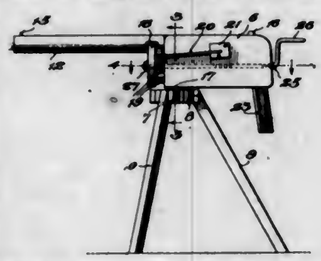
2. In a device of the class described the combination of a stationary dial, a rotary shaft concentric with the dial, a rotary hollow casing freely rotatable upon said shaft and rotatably bearing in said dial, a rotatable indicator connected with said hollow casing and operating over said dial, a plunger non-rotatably mounted upon said shaft for axial movement therealong, said hollow casing having an opening therein through which an exterior portion of the plunger extends, a spring in the hollow casing, a clutch portion connected with the plunger, said spring operating in a compressed relation between said portion and the hollow casing for urging said portion into a frictional clutching engagement with the hollow casing, whereby when in engagement therewith the rotary casing will be connected with the shaft for rotation therewith, the plunger upon depression further compressing the spring to move the portion out of engagement with the rotary casing, and a spiral spring exteriorly about the rotary casing connected therewith at one end and at its other end with the stationary dial to normally cause rotation of the said casing in one direction.

1,759,303. METHOD AND MEANS FOR THE TRANSMISSION OF PICTURES AND THE LIKE. OTHO FULTON, Bromley, England. Filed Apr. 19, 1928, Serial No. 271,296, and in Austria Apr. 12, 1927. 6 Claims. (Cl. 178—53.)



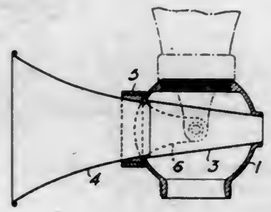
1. A device for the electrical reception of pictures, comprising means for receiving both picture signals and synchronizing signal, a rotating receiving drum, and driving means therefor, an electromagnetic clutch which is electrically energized to couple the receiving drum to the driving means, means for stopping the receiving drum at the completion of each revolution, means operated by the synchronizing signal for releasing the receiving drum at the commencement of each revolution and for energizing the said clutch, other means for maintaining the clutch electrically energized throughout substantially the remainder of the revolution while the picture signals are being received and means operated by the picture signals for receiving a picture.

1,759,304. TOY MACHINE GUN. ALFRED M. GOODLOE, Roanoke, Va., assignor to Exchange Lumber Company, Roanoke, Va., a Corporation of Virginia. Filed Apr. 10, 1929. Serial No. 353,972. 9 Claims. (Cl. 46—46.)



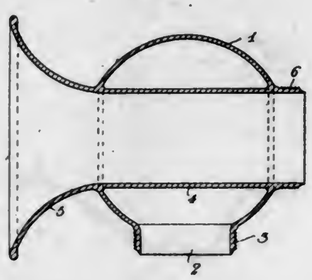
1. A toy machine gun comprising a stock or breech member, a barrel member projecting therefrom, and noise-producing elements consisting of a disk-shaped member at the rear of said barrel member mounted to rotate in a plane transverse thereto and having a series of spaced pins, and a clapper having its free end in cooperative relation with said pins for the production of a succession of sounds when said disk-shaped member is rotated.

1,759,305. COOLING APPARATUS FOR MOTOR VEHICLES. JOHAN ANSHELM GRANSTEDT, Sjalevad, Sweden. Filed June 27, 1928, Serial No. 288,753, and in Sweden July 12, 1927. 4 Claims. (Cl. 257—25.)



1. In a water cooling system for motor vehicles the combination with a radiator, of a water inlet pipe, a through-extending tube open at both ends inserted in said inlet pipe, and a funnel shaped air inlet pipe extending forwardly from said tube.

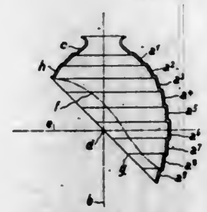
1,759,306. COOLING APPARATUS. JOHAN ANSHELM GRANSTEDT, Sjalevad, Sweden. Original application filed June 27, 1928, Serial No. 288,753, and in Sweden Mar. 16, 1928. Divided and this application filed Oct. 11, 1929. Serial No. 398,978. 2 Claims. (Cl. 257—25.)



1. The herein described attachment for an automobile radiator, comprising a hollow body having an opening surrounded by a projecting threaded nipple to engage a threaded hole in the radiator, an open-ended tube extending through said body at right angles to the direction of said opening, a projecting threaded nipple of the same dimensions as said first-mentioned nipple provided at one end of said tube, and a projecting funnel provided at the other end of the tube.

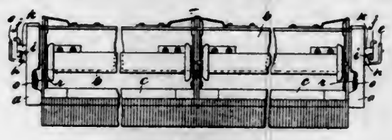
1,759,307. BELL-SHAPED REFLECTOR FOR ILLUMINATING SHOW WINDOWS. HANS HARTINGER, Jena, Germany, assignor, by mesne assignments, to Zeiss Ikon A-G., Berlin, Germany. Filed June 28, 1927, Serial No. 202,147, and in Germany June 30, 1926. 2 Claims. (Cl. 240—6.)

1. Reflector consisting of a glass bell silvered outside, containing a neck adapted to receive a holding device, the glass bell being provided with waves or zones graduated relatively to each other and forming together with the waves or zones a part of a body of revolution whose axis



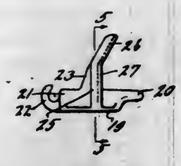
coincides with the axis of the said neck and the margin of the bell lying on a surface, substantially inclined at an oblique angle to the said axis.

1,759,308. LOOM FOR WEAVING CARPETS AND LIKE TUFTED PILE FABRICS. THOMAS WILLIAM HEAD, Bridgnorth, and ERNEST JOSEPH PERRY, Birmingham, England. Filed Mar. 15, 1929, Serial No. 347,320, and in Great Britain July 19, 1928. 3 Claims. (Cl. 139—10.)



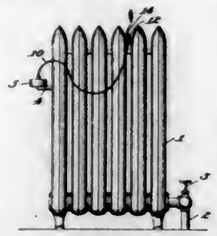
1. A tuft-yarn tube carrier frame, for use in looms for weaving carpets and like tufted pile fabrics, comprising in combination with the end plates, a fixed jaw thereon, a pivoted clamping jaw operating in association with said fixed jaw, and a spring-pressed toggle device controlling said pivoted jaw, for the purpose of mounting and locking said frame upon the endless carrier chains of the loom, the jaws being adapted for release by a reverse pressure applied to said toggle.

1,759,309. CORN-SHELLER FEED CHAIN. WALTER F. HEIMGARTNER, Lincoln Township, Plymouth County, Iowa. Filed Sept. 3, 1929. Serial No. 390,111. 2 Claims. (Cl. 198—173.)



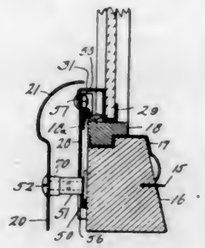
1. In a feed chain link for corn shellers, a loop having means for attachment to other links, said loop including side arms, and a pair of spaced prongs formed integrally with said side arms, extending first at right angles to the plane of the loop and thence extending in parallel relation to each other, in a direction inclined away from the loop and toward one end thereof, at an angle to the plane of the loop, the length and spacing of the inclined portions being such that they will follow roughly the contour of the butt end of an ear of corn received by the prongs.

1,759,310. MODULATOR FOR HEATING SYSTEMS. MAURICE FRANK HUTCHISON, Herndon, Va.; Clare E. Hutchison, administratrix of said Maurice Frank Hutchison, deceased. Filed Apr. 1, 1920. Serial No. 370,471. 5 Claims. (Cl. 236—64.)



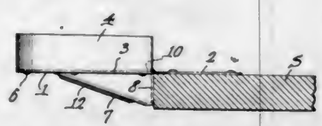
1. The combination with a radiator, of a vent secured therein, a casing over said vent, a valve in the casing controlling the flow through the vent, a diaphragm in the casing carrying said valve, a flexible pipe leading into the casing, means for supporting the free end of the pipe in contact with a radiator section, and a thermostatic liquid in said pipe exerting pressure upon said diaphragm.

1,759,311. WINDSHIELD SCREEN. LESTER E. IKE, Plainview, Nebr., ARTHUR LANGREN and DEL HUTSON, Le Mars, Iowa, and LYNN H. LATTA, Sioux City, Iowa. Filed May 18, 1928. Serial No. 278,898. 6 Claims. (Cl. 296—89.)



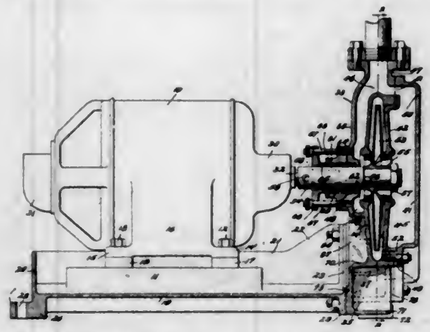
3. In a windshield screen for vehicles of the type employing a transverse cowl frame member, a windshield glass seating on said frame member from above and movable in its own plane, a panel spaced inwardly from said frame member to form a ventilating air space, a screen bracket secured to the glass near its lower extremity and having a portion extending inwardly beyond the inner extremity of said frame member, and a screen removably secured to the said portion and received in said ventilating air space, whereby the screen is movable with the glass.

1,759,312. SHELF BRACKET. ALBERT JANKE, Alden, Iowa. Filed July 15, 1929. Serial No. 378,484. 1 Claim. (Cl. 248—20.)



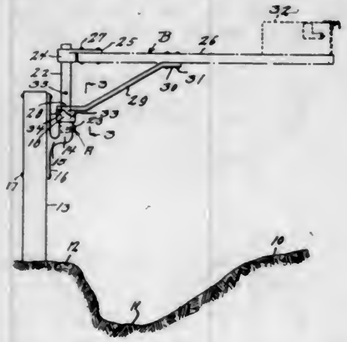
A display bracket for shelves including a tongue for attachment on a shelf, a base extending from one end of the tongue, means on the base for retaining an article, a brace struck downwardly from the base, an upwardly extending wing upon the brace, and means on the wing and cooperating with the base for limiting the downward movement of the brace, said wing constituting means for abutting against the edge of the shelf.

1,759,313. CENTRIFUGAL WATER PUMP. IRVING C. JENNINGS, South Norwalk, Conn., assignor to Nash Engineering Company, South Norwalk, Conn., a Corporation of Connecticut. Filed June 15, 1923. Serial No. 645,661. 11 Claims. (Cl. 103—103.)



1. A centrifugal water pump comprising in combination a volute casing having integral inlet and outlet water pipe connections, an impeller secured to a drive shaft therein, a separate head portion comprising an end wall of the pump housing and the adjacent wall of the impeller casing spaced apart to form a water chamber between them and provided with an inlet port connecting said chamber with said inlet pipe connection of the volute casing and means for detachably connecting said head portion to said volute casing.

1,759,314. BRACKET FOR HIGHWAY USE AND THE LIKE. JOHN KINQUIST, Sioux City, Iowa. Filed Dec. 23, 1927. Serial No. 242,107. 2 Claims. (Cl. 248—1.)

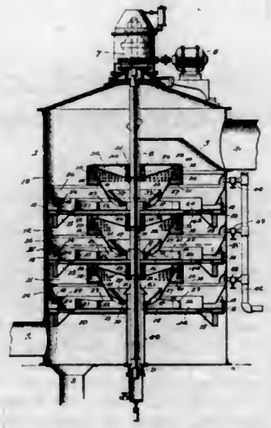


1. A swinging bracket including a support bearing having an annular upper edge inclined upwardly in one direction, a shaft projecting upwardly from the center of said bearing, and a swinging arm including an integral lower bearing provided with a downwardly projecting tooth shaped to register with said inclined edge when in a normal position, an upwardly inclined brace on said lower bearing terminating in a horizontal portion, and an upper bearing freely receiving the shaft, said upper bearing including an integral, horizontal arm, the said horizontal arm being adapted to be secured to a horizontally projecting, supporting arm.

1,759,315. CENTRIFUGAL SCRUBBER. PAUL M. KUEHN, Baltimore, Md., assignor to The Bartlett Hayward Company, Baltimore, Md., a Corporation of Maryland. Filed May 31, 1927. Serial No. 195,557. 4 Claims. (Cl. 261—91.)

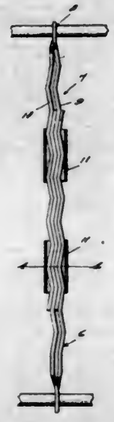
1. In a centrifugal scrubber, the combination of a casing; a pumping member mounted therein, said member

comprising a body element of inverted substantially frusto-conical form; a series of overlapping and spaced plates secured at their upper ends to the inner face of the lower portion of the body element, each of said plates at its



lower end being formed with an inturned section, said section extending upwardly inclining rearwardly; and a frusto-conical cover plate overlying the upper edges of said inturned sections; and a pan-like receptacle underlying the lower ends of the series of plates aforesaid.

1,759,316. STIRRUP FOR CONCRETE REENFORCING UNIT. WYNDHAM R. MADDEN, Bamberton, Vancouver Island, British Columbia, Canada. Filed Oct. 11, 1928. Serial No. 311,879. 3 Claims. (Cl. 72—76.)



3. A stirrup for concrete reenforcing units comprising a pair of complementary units, each of which is provided with means for connection to a reenforcing element, and a shank presenting spaced longitudinally crimped arms, the arms of one unit being adapted to be engaged in the other unit, said arms being of resilient material normally flexed so as to spring away from one another, and a confining member slidable on each shank and adapted when engaged over the crimped portion of the unit to retain the interdigitated arms thereof in fixed relation.

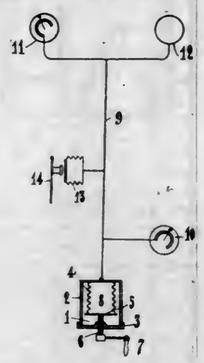
1,759,317. SHIELD. ROBERT MALCOM, Chicago, Ill. Filed July 9, 1928. Serial No. 291,462. 3 Claims. (Cl. 2—11.)

1. A shield of the character described comprising a body portion provided with rearwardly sloping top and bottom portions, the body portion having a sight-opening provided with a glass holding frame secured about said opening, a bracket disposed lengthwise of and secured to the bottom portion and having a vertically disposed leg



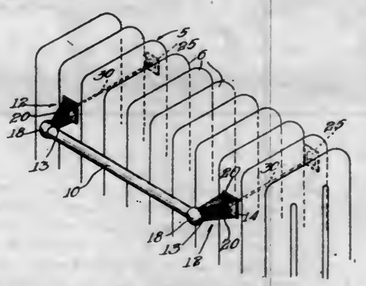
substantially in the plane of the forward face of said body portion, a handle secured to said leg of the bracket, and an arcuate hand shield secured at top and bottom to said handle.

1,759,318. DEVICE FOR THE DISTANT TRANSMISSION OF ORDERS. RENÉ MERCIER, Paris, France, assignor to Etablissements Aera, Paris, France. Filed July 11, 1929, Serial No. 377,554, and in France Aug. 1, 1928. 5 Claims. (Cl. 116—21.)



1. A hydraulic telegraph for the distant transmission of signals, comprising a closed system filled with liquid and embodying piping, a pressure transmitter communicating with said piping and acting in liquid-tight manner on the liquid, and indicating manometers branched on the piping to receive the pressure impulses transmitted through the liquid by the transmitter.

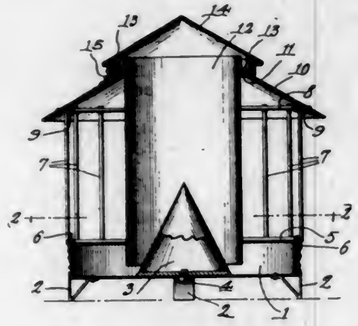
1,759,319. TOWEL RACK. WILLIAM S. MONROE, Chicago, Ill. Filed July 7, 1928. Serial No. 291,051. 2 Claims. (Cl. 211—86.)



1. In a towel bar fixture for attachment to a radiator, the combination of a pair of one-piece brackets each having

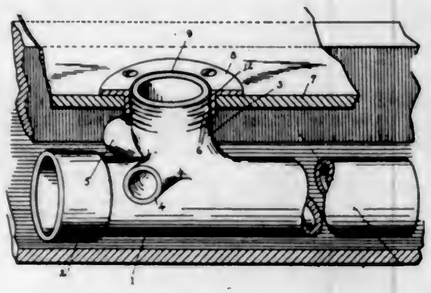
a clamping base at one end adapted to fit between the coils of a radiator with an integral hollow head at the opposite end of each bracket, said heads each having a lateral opening in one side of the wall thereof, a securing means passing through each of said bases, said heads each being offset to permit of accessibility to said securing means, a bar disposed across the front of the radiator with its respective ends extending through said openings and supported directly in the walls of said hollow bracket heads, the respective ends of said bar cooperating directly with the walls of the hollow bracket heads opposite the lateral openings of each and held against endwise displacement thereby, and means cooperating with said securing means for attaching the brackets to the radiator coils.

1,759,320. CHICKEN FEEDER. CHARLES MOSEL, Kerrville, Tex. Filed June 7, 1929. Serial No. 369,143. 3 Claims. (Cl. 119—52.)



1. A feeder of the class described including a tray, a frusto-conical cover, upper and lower rings secured to the cover and tray respectively, spaced members connecting the rings and supporting the cover above the tray, and a lid hingedly mounted on the cover, said cover having a central opening normally closed by the lid.

1,759,321. COMBINATION T Y CONNECTION. WILLIAM H. OLDFIELD, Rochester, N. Y. Filed Apr. 20, 1927. Serial No. 185,120. 2 Claims. (Cl. 285—208.)



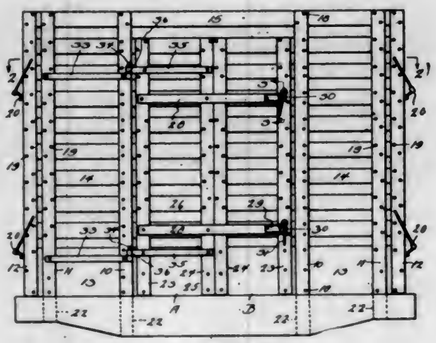
1. In a combined T Y connecting pipe, the combination of a horizontal section, a vertical T section branching from the top of said horizontal section, a pair of Y sections branching from the side of said vertical T section at an elevation partially above the top of said horizontal section and above its central line so as to provide the discharge openings of said Y sections partially in said vertical section and partially in said horizontal section.

1,759,322. LOOM FOR WEAVING CARPETS AND LIKE FABRICS. ERNEST JOSEPH PERRY, Birmingham, England. Filed May 11, 1929, Serial No. 362,195, and in Great Britain July 18, 1928. 5 Claims. (Cl. 139—10.)



1. A tuft-yarn spool and tube carrier device, for use in looms for weaving carpets and like tufted pile fabrics, comprising a foundation frame of the full width required adapted to be supported at its ends, a plurality of sectional frames adapted for attachment to said foundation frame and placed end to end thereon so as to extend completely across the fabric, tubes joined together side by side upon each sectional frame, bearings on each sectional frame for the removable mounting of a separate spool, bearing plates on each sectional frame adapted for locating engagement with said foundation frame, and locking devices provided on said foundation frame for rigidly securing the sectional frames in position thereon.

1,759,323. END GATE. CLARENCE A. PERSINGER, Sioux City, Iowa. Filed Sept. 30, 1929. Serial No. 396,327. 6 Claims. (Cl. 296—51.)

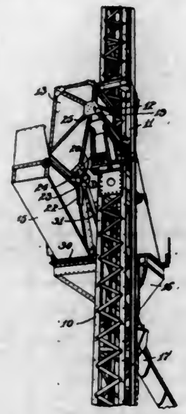


1. In an end gate for trucks, an end gate including vertical, central posts defining a doorway and provided with opposed channels, a door slidably received in said channels, said door comprising two door sections hinged together on a vertical axis, whereby the door may break intermediate its ends so as to allow its end portions to be withdrawn from the channels, and vertically separable coacting hinge elements secured to one door section and to the adjacent end gate structure, respectively, positioned to interengage when the door is in a lowered position, so as to support the door at one side of the doorway for hinging movement.

1,759,324. BUILDING-MATERIAL-HOISTING APPARATUS. ALVIN C. RASMUSSEN, Indianapolis, Ind., assignor to Insley Manufacturing Company, Indianapolis, Ind., a Corporation of Indiana. Filed June 16, 1926. Serial No. 116,335. 3 Claims. (Cl. 214—95.)

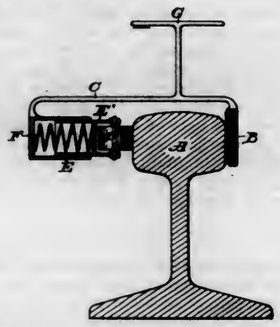
1. In a hoisting apparatus the combination with a vertically movable carrier, a tilting bucket carried thereby and normally biased toward non-dumping position, a pair of rollers mounted one behind the other at the mouth of said bucket, and a tilting guide arranged in the vertical

path of movement of said rollers, such guide being of such form as to engage the rollers to carry the bucket to inverted position without obstructing continued upward



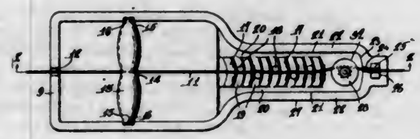
movement of the bucket after inversion and engaging said rollers in the downward movement of the bucket to move the same back to normal position.

1,759,325. RAIL-MACHINING DEVICE. FRIEDRICH W. SCHMIDT, Berlin-Mariendorf, Germany. Filed Dec. 10, 1928, Serial No. 324,875, and in Germany Jan. 18, 1928. 3 Claims. (Cl. 29—76.)



1. A device for machining the lateral surfaces of rail head welding collars comprising a substantially U-shape frame to straddle the rail head, a tool for removing stock carried by one leg of the frame to engage one side of the rail head, and pressure exerting means carried by the other leg of the frame to engage the opposite side of the rail head and force the tool into cutting engagement with its contiguous rail face.

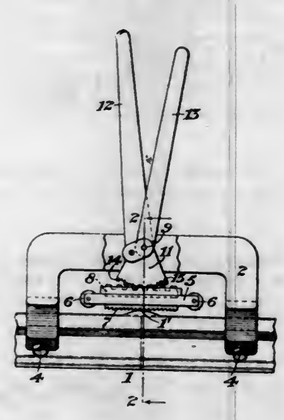
1,759,326. OILER FOR THREADS. FREDERICK C. SCHOLLER, Philadelphia, Pa. Filed May 7, 1926. Serial No. 107,315. 13 Claims. (Cl. 91—32.)



1. The method of removing excess liquid from a moving liquid-treated thread which consists in guiding the thread about a circular path and in utilizing the centrifugal force secured to throw off excess liquid.

11. In a device for conditioning thread carrying a surplus of liquid, a rotary spool about which the thread is adapted to pass and an adjustable friction drag for the spool.

1,759,327. APPARATUS FOR MACHINING WELDED RAIL JOINTS. HERMANN SCHULTZ, Berlin-Lankwitz, Germany. Filed July 24, 1929, Serial No. 380,746, and in Germany Aug. 17, 1928. 8 Claims. (Cl. 90—24.)



1. Apparatus for machining welded rail joints, comprising a frame adapted to be clamped to the rails, a lever pivoted in said frame intermediate its ends, a cutting tool engaging the top of the rails, and connections between the lever and tool for reciprocating the latter.

1,759,328. SOUND REPRODUCER. EDWIN H. SMYTHE, Evanston, Ill., assignor to Western Electric Company, Incorpoated, New York, N. Y., a Corporation of New York. Filed Aug. 17, 1926. Serial No. 129,732. 17 Claims. (Cl. 181—31.)

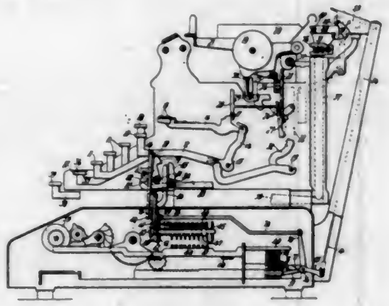


1. A sound reproducer comprising a spiral diaphragm having its convolutions in edgewise relation, and means for imparting vibrations to an end of said spiral.

1,759,329. COMBINED TYPEWRITING AND COMPUTING MACHINE. HERBERT H. STEELE, Lynbrook, N. Y., assignor, by mesne assignments, to Elliott-Fisher Company, New York, N. Y., a Corporation of Delaware. Filed June 17, 1926. Serial No. 116,555. 23 Claims. (Cl. 235—59.)

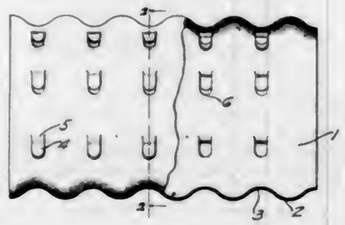
2. In a typewriting and computing machine, the combination with a traveling carriage having a platen, a computing mechanism having denominational selecting devices rendered operable by the travel of the carriage, and

numeral-keys normally operative to type and normally inoperative to compute, of a shift device operable by the



actuation of the selecting devices during the course of typing, to connect the numeral-keys to the computing mechanism.

1,759,330. DRAINAGE CULVERT. PERRY VAN HORNE, Canton, Ohio, assignor to The Canton Culvert and Silo Company, Canton, Ohio, a Corporation of Ohio. Filed Mar. 11, 1927. Serial No. 174,538. 1 Claim. (Cl. 61—10.)



A corrugated cylindrical drainage culvert having drainage openings in the valleys of the corrugations thereof, and struck out tongues disposed over said openings, said tongues being substantially concentric with the body of the culvert, and being connected to the body of the culvert by means of shoulder portions which are parallel to the longitudinal axis of the culvert.

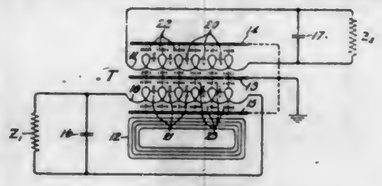
1,759,331. DERIVATIVE OF ALKOXY-FATTY ACIDS. ROBERT H. VAN SCHAACK, Jr., Evanston, Ill., assignor to Van Schaack Bros. Chemical Works, Inc., Chicago, Ill., a Corporation of Illinois. Filed Nov. 12, 1928. Serial No. 319,024. 13 Claims. (Cl. 260—106.)

1. A composition of matter comprising a substance that may be represented by the type formula $R_1O.R_2.COO.R_3$, in which R^1 represents the alkyl radical of a secondary alcohol, R^2 represents an alkylene group containing an odd number of carbon atoms, and R^3 represents a monovalent chemical unit.

12. Isopropyl isopropoxy-acetate which may be represented by the formula $(CH_3)_2CHO.CH_2.COO.CH(CH_3)_2$.

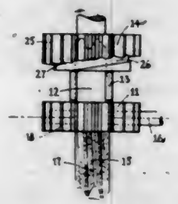
1,759,332. WAVE TRANSMISSION CIRCUIT. HORACE WHITTLE, Maplewood, and DONALD G. GAIMLEY, Ridgewood, N. J., assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Mar. 23, 1927. Serial No. 177,518. 7 Claims. (Cl. 178—44.)

7. A transformer for use in a system transmitting waves embracing a wide band of frequencies, said transformer having certain of its constants: mutual impedance, leakage impedance and shunt capacity, proportioned with respect to the others to give the transformer



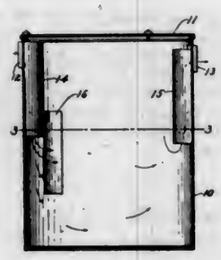
a phase-shift-frequency characteristic throughout the frequency range transmitted such as to compensate the phase distortion of said waves by said system.

1,759,333. METHOD OF FORMING GEARS. ERNEST WILDHABER, Brooklyn, N. Y. Filed July 20, 1927. Serial No. 207,280. 16 Claims. (Cl. 51—278.)



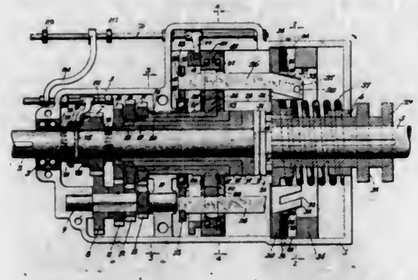
1. The method of grinding gears of constant profile, which consists in providing two coaxial members having grinding portions disposed in a thread, in positioning said members so as to engage only opposite sides of different teeth of a gear blank, the portions simultaneously engaged facing towards each other and being displaced angularly about the axis of said gear blank relatively to each other, in rotating grinding members and blank on the respective axes in timed relation to each other, and in providing feeding motion between grinding members and blank in the direction of the teeth of the blank.

1,759,334. SEPTIC TANK. FREDERICK E. WILSON, Buffalo, N. Y. Filed Sept. 1, 1926. Serial No. 132,970. 7 Claims. (Cl. 210—6.)



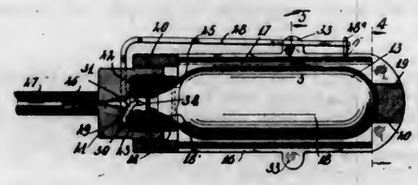
1. A septic tank comprising a casing having an inlet and an outlet, both opening into the interior of the casing at points adjacent the casing wall and below the maximum level of liquid in the casing as determined by the outlet, and a baffle wall disposed in said casing closely adjacent one of said openings into the casing and extending laterally therefrom but for the major portion of both of its vertical edges spaced from the side walls of the casing to permit passage around both of its side edges of a liquid passing through said casing.

1,759,335. POWER-TRANSMITTING DEVICE. JOHN WOLKOFF, Newark, N. J. Filed Nov. 30, 1927. Serial No. 236,620. 5 Claims. (Cl. 74—59.)



1. In a speed change device, a driving member, a driven member, a plurality of parts driven at different speeds by said driving member and a clutching device including a clutch having a radially movable part for engaging said driving parts, a longitudinal member fixed radially at one end and movable radially at its other end and engaging said radially moving clutch part and an axially movable part connected to said driven member for moving radially said other end of said longitudinal member.

1,759,336. LIFE-SAVING SWIMMING BELT. JOSEPH S. WOLLK, New York, N. Y. Filed Aug. 28, 1928. Serial No. 302,500. 3 Claims. (Cl. 9—19.)



1. In a device of the class described, a bracket formed with a recess for receiving a cartridge, a boss with a niche formed at one end of the bracket for forming an abutment for the rear of a cartridge engaged in the said recess, an internally threaded flange formed at the front end of the bracket, a stem member engaged therein, a tubular gasket secured within the stem member and arranged for receiving the front reduced portion of a cartridge within the said recess, a tube for connection with inflatable member secured on the stem, a compressed gas holding cartridge engaged in the said recess and having a puncturable front end, a means for forcing the cartridge out of engagement with the said gasket upon turning the bracket off of the stem, and means for puncturing the said end of the cartridge when desired.

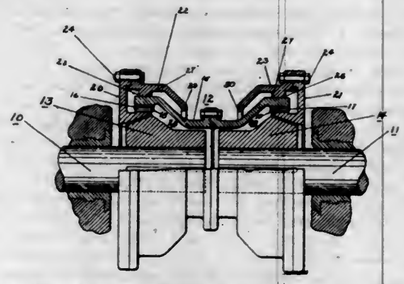
1,759,337. TWIST-OFF PREVENTER. JOHN A. ZUBLIN, Los Angeles, Calif. Filed June 11, 1928. Serial No. 284,507. 3 Claims. (Cl. 255—28.)

1. For use in combination with a drill string and a drill bit, a device adapted to be positioned in said drill string above said drill bit for releasing a torsional strain in said drill string, embodying: a clutch supporting member having a longitudinal passage therethrough and having a shoulder formed thereon; a slidable clutch sleeve fixed against rotation on said supporting member; a cooperating rotatable clutch sleeve substantially fixed against longitudinal movement on said supporting member and having a longitudinal passage adapted to register with said mentioned passage; and a compression spring interposed between said slidable clutch sleeve and the



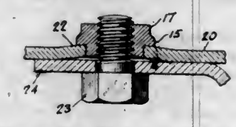
shoulder formed on said supporting member for holding said slidable clutch sleeve and said rotatable clutch sleeve in yieldable engagement.

1,759,338. COUPLING. ROBERT C. ALLEN, Swarthmore, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 30, 1929. Serial No. 359,303. 4 Claims. (Cl. 64—91.)



1. A flexible shaft coupling comprising in combination a sleeve having a row of internal teeth, a shaft hub having a row of external teeth meshing with the teeth on the sleeve, an annular member secured to the hub member and encircling the sleeve member, and an annular bearing between the annular member and the sleeve and disposed in a plane extending transverse to and intermediate the length of the intermeshing teeth.

1,759,339. THREADED NUT FOR SECURING METAL PARTS. BIRGER TORVALD ANDREN, Milwaukee, Wis., assignor to A. O. Smith Corporation, Milwaukee, Wis., a Corporation of New York. Original application filed July 15, 1927, Serial No. 205,963. Divided and this application filed Feb. 23, 1929. Serial No. 341,998. 4 Claims. (Cl. 85—32.)



1. An article of manufacture, a nut to be mounted in a plate-like member, the said nut comprising a body por-

tion having a threaded opening extending therethrough, and a shank having a cross section other than circular to constitute means for holding the nut against turning in the plate-like member, the said body portion having a dished shoulder adjacent and surrounding the shank to form an undercut recess at one end of the nut, the length of the shank being but slightly greater than the thickness of the said plate-like member.

1,759,340. LIGHTER. LOUIS V. ARONSON, Newark, N. J., assignor to Art Metal Works, Inc., a Corporation of New Jersey. Filed Oct. 26, 1927. Serial No. 228,816. 9 Claims. (Cl. 67—7.1.)



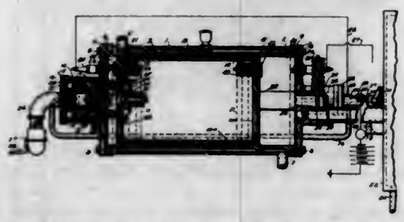
3. A lighter comprising in combination, a cylindrical fuel receptacle, a cylindrical member surrounding a portion of said receptacle and revoluble thereon, a disc rigidly mounted in spaced relation to an end of said receptacle, ignition means mounted upon said disc comprising an abradant surfaced wheel carried by a shaft journalled in said disc, a pyrophoric element housed in a socket carried by said disc and spring pressed against the periphery of said wheel, means housed in the space between said disc and said receptacle comprising a pinion secured to said shaft, an annular gear carried by said cylindrical member and having interior teeth meshing with said pinion, and a wick tube projecting from said receptacle through said disc whereby revolution of said cylindrical member may cause operation of said ignition apparatus to ignite fuel with which the wick housed in said tube may be saturated.

1,759,341. PROCESS OF BLEACHING. GUSTAV BAUM, Weissenstein-on-the-Drau, Austria, assignor to The Niagara Electro Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed July 9, 1928, Serial No. 291,474, and in Austria June 30, 1927. 7 Claims. (Cl. 8—2.)

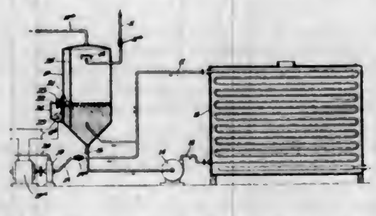
1. Process of bleaching which comprises subjecting the material to be bleached to the action of gaseous hydrogen peroxide.

1,759,342. INTERNAL-COMBUSTION COMPRESSOR ENGINE. DAVID M. BELL, Sandwich, Ontario, Canada, assignor of one-half to Joseph Alter, Wayne, Mich. Filed June 11, 1928. Serial No. 284,455. 4 Claims. (Cl. 60—44.)

1. An internal combustion compressor engine adapted for producing high pressures within a connected reserve tank used in combination therewith, comprising a cylinder casing, said cylinder casing being closed at both ends and provided with means for cooling, a hollow cylindrical piston, also closed at both ends, but having an inlet valve in one end thereof with means for injecting fuel gas therein, and outlet valves at both ends of said piston, accurately fitted within the cylinder casing and free to oscillate therein, forming a fuel combustion chamber at each end of the cylinder, said cylinder being provided with recess pockets formed in each end thereof, said piston being provided with cylindrical projections to fit the cylinder recess pockets and slide therein during the oscillating movement of the piston for forming air cushions at each end of the piston stroke, means mounted at one end of the cylinder for injecting fuel gas within the hollow piston at high pressure during the oscillating stroke, means mounted at each end of the piston for injecting fuel gas at high pressure alternately into the said combustion chambers, ignition means mounted at each end of the cylinder and projecting within the respective cylinder combustion chambers, said ignition means being provided with mechanism suitable for causing alternate explosions of the fuel gas within the said combustion chamber as the piston compresses the fuel gas therein, outlet exhaust ports mounted at each end of the cylinder casing and provided with pressure controlled valves for preventing escape of the cylinder pressure until after the ignition has taken place therein, exhaust pipes mounted within each of the exhaust ports and connected to a high pressure reserve tank for conducting the gas at high pressure from each of the cylinder combustion chambers directly to the high pressure tank.



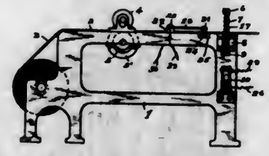
1,759,343. DECOLORIZATION OF HYDROCARBONS. IRVING C. CARPENTER, New York, N. Y., and ARTHUR R. MOORMAN, Tulsa, Okla., assignors, by mesne assignments, to Contact Filtration Company, San Francisco, Calif., a Corporation of Delaware. Filed Sept. 17, 1926. Serial No. 136,029. 11 Claims. (Cl. 196—147.)



1. In a continuous process of decolorizing oil with clay containing water the steps of, initially heating a body of oil to a temperature above the boiling point of water, continuously feeding and distributing onto the surface of said body a mixture of oil with clay containing water to cause the evaporation of water from said mixture, removing the vapors and continuously maintaining the temperature of said oil body by heating a stream of oil-clay mixture withdrawn from and returned to said body.

1,759,344. SHEET-PAPER CUTTER. CEDRIC S. CHESSMAN, Pittsburgh, Pa., assignor of two-thirds to Arthur J. Davis and Charles D. Davis, Pittsburgh, Pa. Filed Aug. 29, 1928. Serial No. 302,761. 1 Claim. (Cl. 164—49.)

In a sheet paper cutter of the character described, the combination of a supporting table for the paper, a transversely disposed contact bar mounted in the top of said table and insulated from the latter, a stationary blade secured to the forward end of the table, and having its cutting edge disposed on the plane of the top of said table, a pair of slide rods slidably mounted for vertical movement at respective sides of said table, an armature head carried at the lower end of each of said slide rods, a cross-bar having its ends fixed to the upper ends of said slide rods, a shearing blade associated with said stationary blade and being adjustably connected in said cross-bar, a spring carried by each of said slide rods for normally maintaining said shearing blade in the elevated position, a pair of solenoids supported by said table and associated with respective armature heads, an operating circuit for energizing said solenoids, a pair of resilient contact arms adjustably mounted on said table and engaging respective side edge margins of the paper, said contact arms connecting with said operating circuit and being adapted for contacting with said contact bar through apertures provided in the paper for closing the operating circuit to energize said solenoids for effecting the cutting operation, and means for feeding the paper forwardly through said stationary and shearing blades.

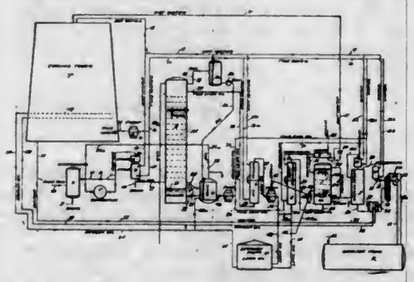


1,759,345. CAN OPENER. REYBURN T. CHASE, Camden, N. J. Filed July 8, 1927. Serial No. 204,379. 6 Claims. (Cl. 30—3.)



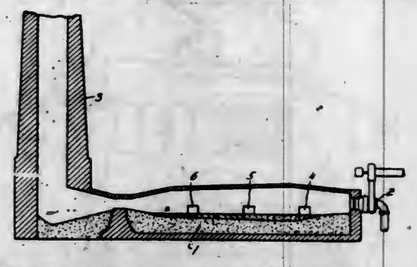
1. In a can opener, the combination of a frame; a traction wheel so mounted that it may move across the body of the frame to engage or disengage the rim of the can; means for turning the traction wheel; a shearing blade mounted on the frame as a part thereof, and having a penetrating portion and a diagonal shearing edge, and means for forcing the traction wheel toward the shearing blade.

1,759,346. ABSORPTION PROCESS. CLARENCE D. COULTER, Los Angeles, Calif., assignor to Southwestern Engineering Corporation, Los Angeles, Calif., a Corporation of California. Filed Aug. 16, 1926. Serial No. 129,324. 3 Claims. (Cl. 196—8.)



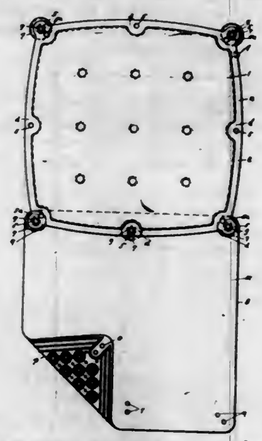
3. The process of recovering gasoline fractions from gas, that includes absorbing said fractions in comparatively heavy absorbing liquid; then heating the laden absorbing liquid to a temperature sufficient to vaporize the absorbed substances and also a portion of the absorbing liquid; then by fractional condensation separating substantially all the vapors of the absorbed liquid; and putting said absorbing liquid condensate back into the body of absorbing liquid in the process at a point subsequent to the absorption operation and before the heating stage.

1,759,347. IRON REFINING. GEORGE S. EVANS, Bronxville, N. Y., assignor to The Mathieson Alkali Works, New York, N. Y., a Corporation of Virginia. Filed Feb. 18, 1928. Serial No. 255,268. 2 Claims. (Cl. 75—27.)



1. In the operation of air furnaces for melting iron and steel, the improvement which comprises, after melting down the metal and before tapping, skimming off the slag formed during melting down of the metal, thereafter adding a soda ash refining agent directly to the metal bath near the firing end of the furnace, and flowing the resulting refining slag over the metal bath to the stack end of the furnace.

1,759,348. BATHTUB CUSHION AND MAT. MORRIS FISHMAN, Detroit, Mich. Filed Nov. 13, 1929. Serial No. 406,748. 4 Claims. (Cl. 4—185.)

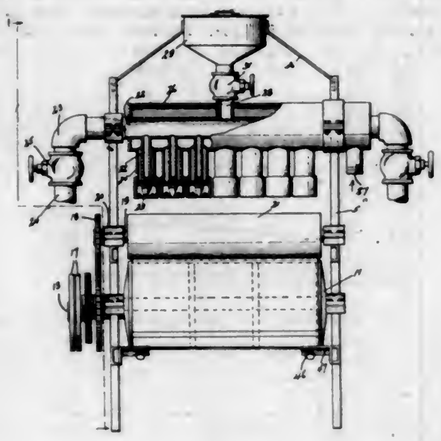


1. A cushion mat adapted for mounting inside of a bath tub and used in combination therewith, comprising a resilient cushion section having vacuum cups mounted along the sides thereof, a flexible mat section detachably mounted along the bottom edge of said cushion capable of being folded over the cushion surface and attached thereto and means mounted on said cushion for engaging the mat edge for retaining same thereon.

1,759,349. LEATHER-SPRAYING MACHINE. LELAND S. GOODWIN and WILFRED A. MICHAUD, Salem, Mass. Filed June 6, 1928. Serial No. 283,387. 1 Claim. (Cl. 299—86.)

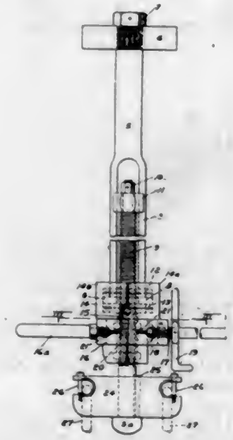
A spray apparatus comprising a liquid spray pipe, a jacket for said spray pipe, a supply tank, a feed pipe ex-

tending from the spray pipe through said jacket for connection with the tank, a pipe connecting the jacket with a supply of air under pressure, a plurality of sleeves extending laterally from said jacket, discharge pipes communicating with the spray pipe and concentrically disposed in said sleeves, spray heads threaded to the ends of said sleeves and said discharge pipes having discharge orifices in each thereof disposed substantially in a common



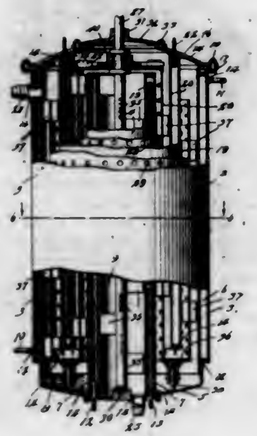
plane, the spray head for each of said sleeves having centrally and eccentrically disposed orifices, said central orifices having inwardly flared walls and said spray head for the corresponding discharge pipe having a tapered end complemental with the wall of said central orifice and an apertured spacing ring carried at the end of each of said discharge pipes for centering the tapered spray head in the corresponding central orifice.

1,759,350. TEMPER SCREW. EDGAR E. GREVE, Bellevue, Pa., assignor to Oil Well Supply Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed July 2, 1925. Serial No. 41,095. 8 Claims. (Cl. 255—15.)



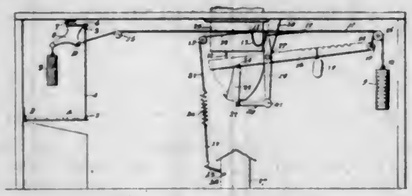
1. A temper screw including a body having reins formed with flanged ends, a screw slidably retained in the body, a divided nut on the screw, the sections of said nut surrounding and being swiveled on the flanges of the reins and operable for adjustably moving the screw in the body, a clamp means to unitarily secure the nut sections together, and means carried by said clamp means for adjusting the nut sections.

1,759,351. HEAT-EXCHANGING APPARATUS. RUDOLPH G. GUNDERSEN, New York, and ARCHIBALD STRUTHERS, Yonkers, N. Y., assignors to New York Engineering Company, New York, N. Y., a Corporation of New York. Filed Apr. 7, 1928. Serial No. 268,253. 9 Claims. (Cl. 257—109.)



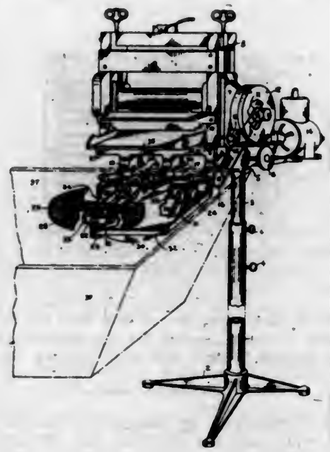
1. In a cooling device, a plurality of concentric cylinders, means for supplying a substance to be cooled to one cylinder, an opening in said cylinder to admit the substance to the adjacent cylinder, an outlet in said last mentioned cylinder, a channel for receiving a cooling fluid disposed between said cylinders and inlet and outlet pipes extending through the same end of said channel, one of said pipes extending substantially to the opposite end of the channel pipe whereby said fluid is admitted and withdrawn from different parts of said channel.

1,759,352. POULTRY FEEDER. LEE HART, Independence, Mo. Filed Apr. 4, 1927. Serial No. 180,785. 3 Claims. (Cl. 119—22.)



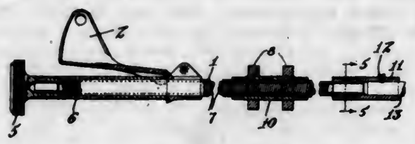
3. A poultry feeder comprising a roost capable of being lowered by the weight of fowls thereon, partly supported by cables attached to a bell-hanger crank provided with a counterpoise, a cable leading therefrom terminating in a sectional weight, a dry-mash receptacle provided with a sloping side and bottom and a lift door in one side thereof, said door pivoted and hung in such manner and so connected by an auxiliary cable cooperating with the aforementioned main cable as to be capable of being closed by the said lowering of said roost and of being opened by the release and raising of said roost.

1,759,353. CLOTHES-WASHING DEVICE. AUGUST HORMEL, Hudson Heights, N. J. Filed Apr. 15, 1927. Serial No. 183,957. 2 Claims. (Cl. 68—29.)



1. A device of the class described, including a standard with means thereon to support a washboard rotatable about one axis, and other means to support the board for rotation about an axis at right angles to the first named axis.

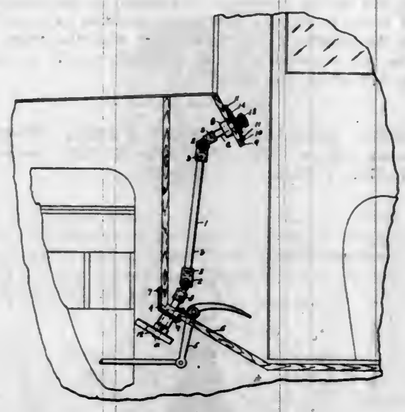
1,759,354. CARBURETOR CONTROL. ALFRED F. JACKSON, Attleboro, Mass., assignor to Apco Mossberg Corporation, Attleboro, Mass., a Corporation of Massachusetts. Filed Oct. 11, 1928. Serial No. 311,847. 1 Claim. (Cl. 74—39.)



In a device of the kind described, a tube, means on said tube to secure same to the dash of an automobile, a flexible element guided by said tube, a sleeve carried by one end of said element and having a set screw therein for attachment of said sleeve to the article to be controlled by said flexible element, an operating handle at the opposite end of said flexible element for rotating and reciprocating said element, said handle being offset from the article to be controlled, a hollow stem projecting from said handle and slidably mounted over one end of said tube, the interior of said stem adjacent to said handle being of less diameter than the remainder of the interior of said stem, one end of said flexible element being secured in said reduced diameter portion of said stem.

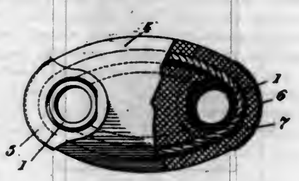
1,759,355. AUTO ACCELERATOR-REGULATING DEVICE. FREDERICK H. KAMPMAN, Detroit, Mich. Filed June 8, 1929. Serial No. 369,470. 3 Claims. (Cl. 74—81.)

1. A cam regulating device adapted to be installed within an auto body for limiting the movement of the auto accelerator pedal and to be used in combination therewith, comprising an operating shaft suitable for mounting between the instrument board and the foot board of an automobile, suitable bearings for attaching to the auto body walls for rotatably mounting said operating shaft therein, a disc spiral cam fixedly attached to one end of said operating shaft, both bearings and shaft being so positioned as to place the spiral cam in line with the movement of the auto accelerator pedal to engage and



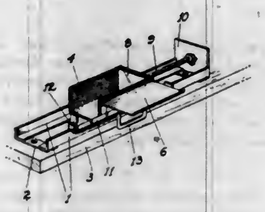
regulate the movement thereof, and means mounted on the instrument board of the auto connected to the operating shaft for rotating the attached spiral cam to any desired relative position with the pedal.

1,759,356. POWER-TRANSMITTING MEANS. HANS KATTWINKEL, Coswig, Saxe, Germany. Filed Dec. 18, 1926, Serial No. 155,705, and in Germany Mar. 9, 1926. 11 Claims. (Cl. 64—96.)



1. A resilient tensile force transmitting member, more particularly for the universal joints in automobiles and the like, comprising, a body capable of yielding resiliently to pressure, an endless flexible tensile member circumferentially enclosing said body, means to receive external bolt means to be attached to said tensile member, and means embracing said tensile member to hold said tensile member permanently against said receiving means.

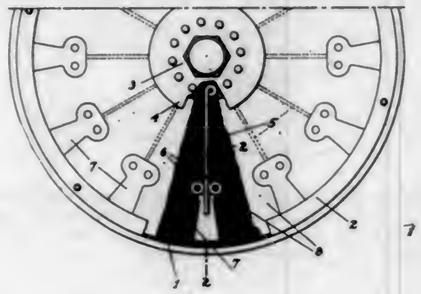
1,759,357. CANNING APPARATUS. WILBUR E. LACEY, Isleton, Calif. Filed May 20, 1929. Serial No. 364,460. 5 Claims. (Cl. 226—18.)



1. A can filling device including a receptacle of substantially the same size and shape as a can, and dis-

posed with its major axis horizontally, said receptacle being open at one end and along the top, a hinged lid for the top, a support along which said receptacle is slidable and also serving as a support for an open topped can when disposed with its open end abutting against the open end of the receptacle, a plunger in the receptacle rigid with the support, and means mounted in connection with the receptacle for engagement with the outer end of the can to enable said can and receptacle to be moved as a unit along the support.

1,759,358. RESILIENT VEHICLE WHEEL. WILBUR E. LACEY, Isleton, Calif. Filed June 17, 1929. Serial No. 371,376. 1 Claim. (Cl. 152—28.)



A resilient vehicle wheel comprising a hub, a felly band, spokes flexibly mounted in the hub and projecting toward but not reaching the band, said spokes being resilient only in the circumferential plane of the wheel, housings projecting inwardly from and rigid with the band and into which the free ends of the spokes slidably project, a single pair of opposed rollers mounted in the housings and engaging the opposed faces of the spokes, and resilient rubber extending unbroken between the hub and band between the spokes.

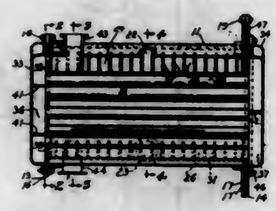
1,759,359. INSECT CATCHER. EVA M. LENNOX, Hartford, Conn. Filed Nov. 28, 1928. Serial No. 322,556. 4 Claims. (Cl. 43—131.)



1. An insect catcher including a pan, and means for supporting said pan in a vertical or horizontal position, and a pad made to assimilate a fanciful object secured within and projecting from said pan, and comprising an inner and outer portion, one at least of which is saturated with a poisonous ingredient.

1,759,360. HEAT EXCHANGER. GREGORY H. LIFUR, Los Angeles, Calif. Filed Aug. 3, 1927. Serial No. 210,297. 6 Claims. (Cl. 257—236.)

1. In a heat exchanger, a body providing a fluid circulation chamber, tube plates defining the ends of said chamber, tubes extending through and between said plates, heads disposed outwardly of said tube plates and co-operating therewith to define fluid distribution chambers communi-

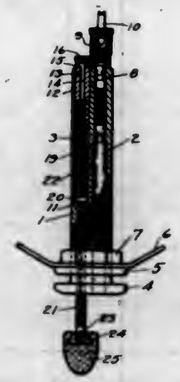


cating with said tubes, one of said tube plates being provided with an inlet opening for the adjacent distribution chamber whereby a fluid may be introduced thereinto.

1,759,361. PROCESS OF TREATING NATURAL ALKALINE WATERS OR BRINES TO OBTAIN THEREFROM COMMERCIALLY USEFUL SUBSTANCES. JAMES G. MILLER, Lone Pine, and ALEXIS C. HOUGHTON, Bartlett, Calif. Filed Apr. 25, 1929. Serial No. 358,151. 15 Claims. (Cl. 23—40.)

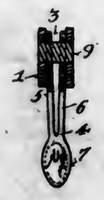
1. The process of separating and recovering sodium carbonate in a purified state from complex brines containing the same which consists in chilling the brine to a temperature above zero degrees centigrade so as to cause the precipitation of sodium carbonate decahydrate, and separating the decahydrate crystals from the brine.

1,759,362. TIRE-ALARM VALVE. CLAUD J. MOSHER, Seattle, Wash., assignor of forty-nine per cent to Samuel C. Taylor, Seattle, Wash. Filed Jan. 28, 1929. Serial No. 335,401. 4 Claims. (Cl. 116—34.)



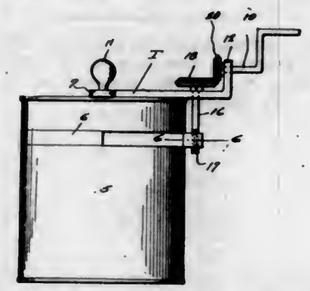
1. In a device of the character described, a valve casing, means for holding the said casing in the inner tube of a motor vehicle tire, means whereby air may be supplied to the tube through the said casing, and suitable alarm mechanism in the said casing to operate to give an alarm when the pressure in the tire passes below a predetermined amount.

1,759,363. KNITTING NEEDLE. ALEXANDER C. PARLINI, Woodside, N. Y., assignor to Gotham Knitbac Machine Corporation, New York, N. Y., a Corporation of Delaware. Filed July 3, 1929. Serial No. 375,658. 4 Claims. (Cl. 66—117.)



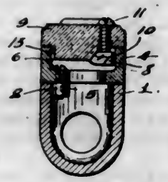
1. A run repair needle having a hook portion and a slotted shank portion with a pivot pin in said shank portion, in combination with a latch member having a hood to protect said hook and resilient fins extending from said hood to said pivot pin to frictionally engage the sides of said slot.

1,759,364. CAN OPENER. RICHARD M. QUIGG, Miami, Fla. Filed Aug. 13, 1929. Serial No. 385,567. 2 Claims. (Cl. 220—52.)



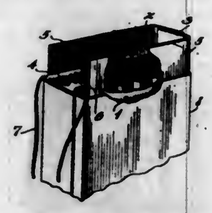
1. An apparatus of the class described comprising a T-shaped frame including a head and a stem, said stem merging into a right angularly disposed ear, a crank shaft journalled in the ear having a pinion thereon, a second shaft journaled through the stem and having a beveled gear thereon meshing with the pinion, the extremity of the second shaft being slitted to engage the tongue of a removable strip of a can.

1,759,365. ADAPTER MEMBER FOR CONDUIT OUTLET BOXES. JOHN T. PEARSON and RAYMOND H. OLLEY, Syracuse, N. Y., assignors to Crouse-Hinds Company, Syracuse, N. Y., a Corporation of New York. Filed Jan. 26, 1926. Serial No. 83,820. 4 Claims. (Cl. 247—17.)



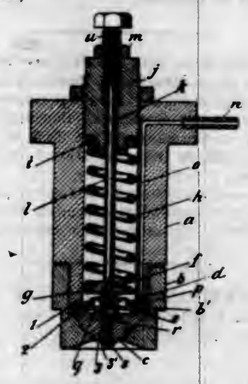
1. An adapter member for attaching appliances for one of two types of conduit outlet boxes as specified to the other of said type, both of said types having oblong openings in different sides thereof corresponding to the oblong openings of the boxes, the adapter member having means on one open side for attachment to the open side of the boxes of one type in place of the appliances for such type, the adapter member having its other open side formed to receive the oblong appliances for boxes of said other type.

1,759,366. CIGARETTE PACKAGE. CHARLES A. PENN, New York, N. Y., assignor to The American Tobacco Company, New York, N. Y., a Corporation of New Jersey. Filed Feb. 16, 1929. Serial No. 340,503. 3 Claims. (Cl. 229—51.)



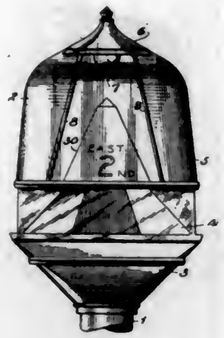
1. A cigarette package having at one end a fold free at its side edges from the adjacent folds, a tearing cord lying beneath said fold, said cord having a portion connected with the folded end of the package and another portion connected with a tag.

1,759,367. INJECTION VALVE FOR INTERNAL-COMBUSTION ENGINES. OVE PETERSEN, Hellerup, near Copenhagen, Denmark. Filed Oct. 20, 1927, Serial No. 227,546, and in Denmark Aug. 31, 1927. 4 Claims. (Cl. 299—133.)



1. An injection valve for internal combustion engines comprising a valve casing, a metal diaphragm having a solid central part, a flexible intermediate part and an inflexible rim having smooth flat surfaces, said central part on its under side having a flat annular valve seat surrounding a recess, and a flat upper surface, a semi-spherical injection nozzle having an outer rim with flat surfaces corresponding to the rim of the diaphragm, and a raised central part having a flat valve surface, said rim and said central part forming an annular channel in said nozzle, a ring nut having an inner spherical surface corresponding to the outer spherical surface of said injection nozzle, said ring nut being adapted to cooperate with said casing for securing said diaphragm between said nozzle and said casing, the flat surface of said rim forming an oil-tight joint, said annular valve surface of the central part of said diaphragm being adapted to register with the flat valve surface of the central part of said nozzle and normally form an oil-tight valve, said nozzle having atomizing apertures therein and a central aperture communicating the recess of said central part of the diaphragm with the atomizing apertures, the expansible-contractible chamber formed by said diaphragm and the annular channel in said nozzle communicating with oil conduit means in said casing, spring means disposed in the flat upper surface of the central part of said diaphragm for normally maintaining the valve in its closed position, means for adjusting said spring means, and an adjustable stop adapted to restrict the lift of the valve of said diaphragm.

1,759,368. TRAFFIC SIGNAL. EMIL H. PIRON, Detroit, Mich., assignor to Noble and Harris, Detroit, Mich. Filed Jan. 31, 1929. Serial No. 336,401. 16 Claims. (Cl. 116—63.)

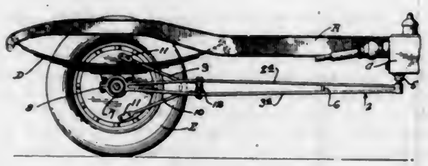


1. In a traffic signal, a reflecting surface, a plurality of signals to be reflected, and means for periodically changing the signals so reflected.

1,759,369. PROCESS FOR REFINING WOOD SPIRIT OILS. WILHELM QERFURTH, Bruchhausen, near Arnsberg, Germany, assignor to Holzverkoblungs-Industrie Aktien-Gesellschaft, Konstanz (Badenia), Germany, a Corporation of Germany. Filed Feb. 25, 1928, Serial No. 257,107, and in Germany Mar. 3, 1927. 6 Claims. (Cl. 202—66.)

1. In a process for refining wood-spirit oils, the step of passing wood-spirit oils in the form of vapor at temperatures above 300° C. in contact with heavy metal oxides.

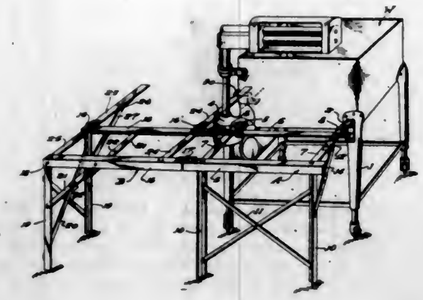
1,759,370. COMBINATION RADIUS ROD AND TORQUE ARM. CARL J. RHODIN, Oakland, Calif. Filed Oct. 20, 1928. Serial No. 313,657. 4 Claims. (Cl. 180—85.)



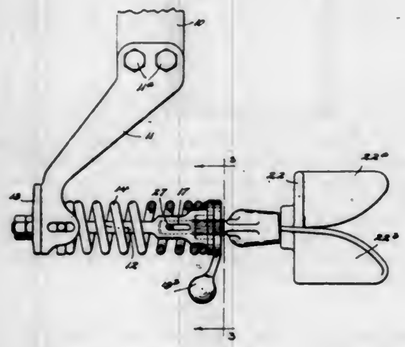
1. The combination with the axle of a vehicle of a radius rod attached at one end to the vehicle and at the opposite end to the axle, and a torque arm rigidly secured at one end to the axle and at the opposite end to the radius rod at a point intermediate the ends of the radius rod and disposed on a sufficient angle with relation to the longitudinal axis of the radius rod to absorb torsional movement of the axle either in tension or compression.

1,759,371. TUB STAND. WILLIAM EDMOND RIDEOUT, Crookston, Minn. Filed May 16, 1929. Serial No. 363,568. 3 Claims. (Cl. 68—35.)

3. In combination with a support, a stand comprising a plurality of sections, hinged supporting means for hingedly securing one of said sections to the support, hinge means for securing a second section to said first section, hinge means for securing a third section to said section, bracing means for said third section, leg members hingedly secured to said first and second sections, and link means secured to said first and second sections for foldably holding the leg members on said sections.



1,759,372. AUTOMATIC TRAIN-PIPE CONNECTER. JOSEPH ROBINSON, New York, N. Y. Filed Jan. 26, 1921, Serial No. 440,099. Renewed Oct. 2, 1928. 10 Claims. (Cl. 285—58.)

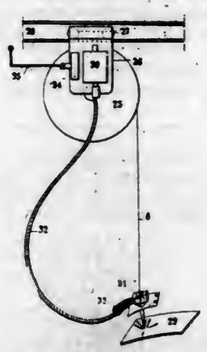


1. In an automatic train pipe connecter, a bracket, a stem supported on said bracket for universal movement relative thereto, a flange carried by said stem and adapted to contact with the rear face of the bracket, a coupling head, a threaded shank projecting rearwardly therefrom, said stem having a threaded portion engaged by said shank whereby said head may be adjusted toward and from said bracket, means for permanently preventing rotation of said head relative to said stem, and means for yieldingly supporting said stem and head in front of the bracket.

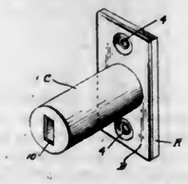
1,759,373. ARC WELDING. ROBERT SARAZIN, Neuilly-sur-Seine, France. Filed Dec. 7, 1927, Serial No. 238,443, and in France May 13, 1926. 1 Claim. (Cl. 219—8.)

A device for arc welding, comprising a reel carrying the electrode wire, a motor arranged near this reel, a flexible shaft actuated by this motor, a hollow shaft driven by the flexible shaft, a bevel gearing driven by the said hollow shaft, a spur gear with which comes in

engagement one of the elements of the bevel gearing, a toothed wheel driven by the said spur gear, a set of feeding rollers driven by the said toothed wheel, an electrode wire passing through the flexible shaft and driven by the traction of the said rollers.

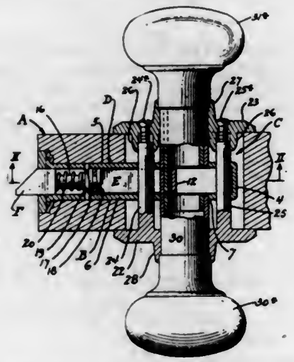


1,759,374. LATCH-FACE-PLATE MOUNTING. WALTER R. SCHLAGE, San Francisco, Calif., assignor to Schlage Lock Co., San Francisco, Calif., a Corporation of California. Filed July 18, 1928. Serial No. 293,559. 6 Claims. (Cl. 70—16.)



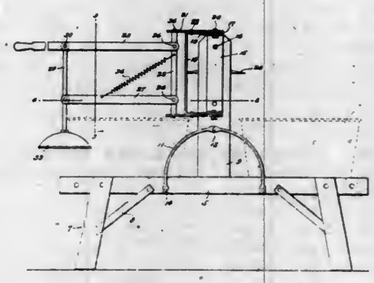
1. In a device of the character described, a latch housing having an annular flange formed at one end, a main face plate engaging the flanged end of the latch housing; and an auxiliary face plate secured to the rear side of the main face plate and engaging and clamping the annular flange of the latch housing with relation to the main face plate.

1,759,375. SPLIT SPINDLE FOR DOOR LATCHES. WALTER R. SCHLAGE, San Francisco, Calif., assignor to Schlage Lock Co., San Francisco, Calif., a Corporation of California. Filed July 18, 1928. Serial No. 293,560. 2 Claims. (Cl. 292—124.)



1. In a door latch of the character described a latch housing, a retractor slidably mounted therein, a spindle extending through the housing at right angles to the longitudinal axis of the housing, said spindle having a cut away portion which straddles the retractor, said cut away portion forming a pair of shoulders engageable with the retractor and securing the spindle against endwise movement, and the remaining metal in alignment with the cut away portion forming a roll back member engaging the retractor.

1,759,376. WASHING MACHINE. WILLIAM B. STEEN and CECIL D. SHARP, Stahl, Mo. Filed Sept. 5, 1928. Serial No. 304,046. 1 Claim. (Cl. 68—19.)



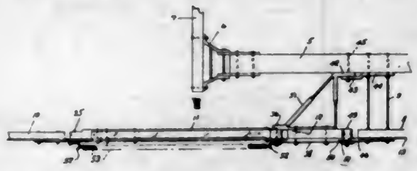
A washing machine apparatus of the class described including a supporting structure, a standard rising from the supporting structure, a bracket on the standard, a frame rockable on the bracket horizontally, a shaft, levers pivotally engaged on the shaft, a rod pivotally engaged with the levers, an inverted cup-shaped element on the lower end of the rod, a spring secured at one end of the shaft and at the other end to one of the levers for normally holding them upwardly, said brackets being substantially U-shaped in formation to include an elongated vertically disposed bight having relatively short laterally extending legs, and said frame being substantially U-shaped in formation to include a relatively elongated bight and legs pivotally engaged with the first mentioned legs, a pair of spaced arms each fixed to a leg of the frame and pivoted with the second legs and extending beyond the second bight, and said shaft being journaled vertically between the extremities of said arms.

1,759,377. AUTOMOBILE BRAKE. HARRY D. TAPPAN, Philadelphia, Pa. Filed Mar. 9, 1925. Serial No. 14,049. 2 Claims. (Cl. 188—77.)



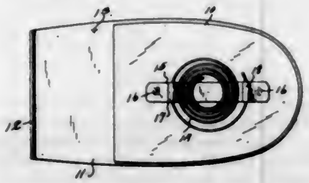
1. An automobile brake comprising in combination a brake drum, a brake shoe engaging co-operatively with the brake drum, a brake lining composed of a compressible and elastic material interposed between said brake shoe and brake drum, the brake drum composed of a hard unyielding material contacting with and moving frictionally upon said lining, and having its surface, so contacting with said lining, corrugated with transverse grooves having their edges slightly rounded so as to meet obliquely the face of the lining, and means for tightening the brake shoe upon said drum and lining.

1,759,378. OVERHEAD CONVEYER. ROSCOE H. THOMPSON, Wausaukee, Wis. Filed May 24, 1929. Serial No. 365,764. 5 Claims. (Cl. 104—92.)



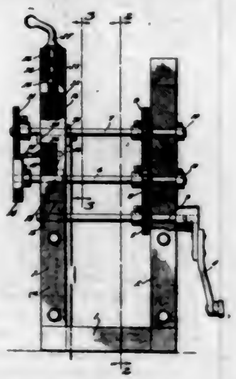
1. An overhead conveyer track comprising in combination, a pivotally supported crane adapted for horizontal swinging movement, a plurality of interconnected track sections, hangers carried by the crane providing suspension means for one of the track sections for movement with the crane, and a bracket fixedly secured to another of said track sections and pivotally suspended from said crane.

1,759,379. SPRING HEEL. JOSEPH WEINBERG, New Castle, Pa. Filed June 19, 1928. Serial No. 286,657. 1 Claim. (Cl. 36—37.)



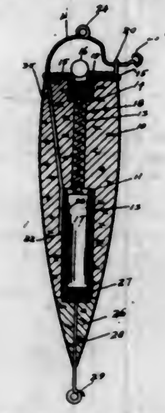
As an article of manufacture, a resilient heel support comprising a metallic plate, a leather heel supporting piece to which the heel is attached, a metallic strip welded to the plate and formed with two downwardly bent loops, and a coiled spring of relatively thin material set on edge, the uppermost coil being disposed in said loops and supported thereby, the coils gradually contracting in diameter and one coil being disposed below another coil, each coil normally being disposed within and overlapping the next adjacent coil.

1,759,380. MACHINE FOR TRIMMING SOLE MARGINS. PEARL JOSEPH WENTWORTH, Fort Thomas, Ky. Filed Aug. 9, 1926. Serial No. 128,067. 8 Claims. (Cl. 69—13.)



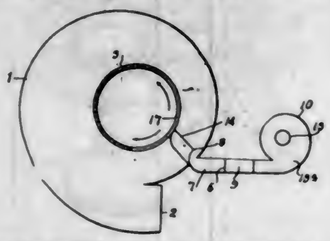
1. In a device of the class described, a frame, a pair of rotary feeding elements having opposing peripheral surfaces, one of the feeding elements being of less width than the other and adjustable in relation thereto, a cutter holder adjustable with and having a blade disposed at the side of the narrow faced feeding element and above the peripheral surface of the broad faced rotary element, the wide faced rotary feeding element having an increased diameter portion beneath the blade for directing the material edge inserted between the rotary elements upward into the blade for removal of a greater quantity of material from the margin.

1,759,381. ELECTRICAL FLOAT FOR FISHLINES. WILLIAM L. WEST, Belmont, N. C., assignor of one-half to W. M. Hall, Belmont, N. C. Filed Sept. 10, 1928. Serial No. 305,046. 2 Claims. (Cl. 43—17.)



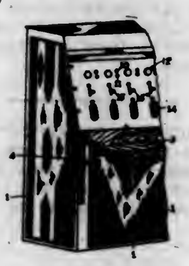
1. In a fish line float, the combination with a float body, a vertically disposed bore in the lower portion of the float, a bore of smaller diameter than the first bore, and being vertically disposed in the upper portion of the float and communicating with the first named bore, an enlarged bore in the upper end of the float and being in communication with the second named bore, an electric bulb mounted in the enlarged bore, a contact member extending from the bulb to a point near the outer periphery of the float, a spring wire member mounted in the float and being held in place above the bulb by means of a staple, means on the wire for engaging a fish line, a cylindrical casing mounted in the first named bore and being adapted to contain a battery, a hole in the casing thru which the lower end of said wire is adapted to pass and press against the side of the battery, a compression spring extending between the upper end of the battery and the lower end of the bulb, a stopper for the lower end of the first named bore, and means on the lower end of the stopper for slidably holding the fish line.

1,759,382. APPARATUS FOR SEPARATING AND COLLECTING DUST. JOHN WHITMORE, Belfast, Ireland, assignor to Davidson & Company Limited, Belfast, Ireland. Filed Apr. 30, 1924, Serial No. 710,106, and in Great Britain May 3, 1923. 5 Claims. (Cl. 183—34.)



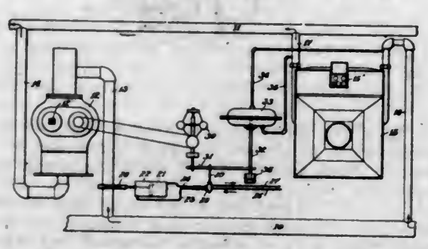
3. A dust collecting apparatus comprising in combination, a volute primary vortex chamber having a substantially vertical axis, a tangential inlet thereto on the maximum radius of the volute for the dust laden gases, a chimney passing axially through the primary vortex chamber, an opening in the wall of that part of the chimney within the primary vortex chamber, a tangential outlet about at the minimum radius of the primary vortex chamber for the centrifugally separated dust accompanied by a certain amount of the original volume of gas, a pocket extending the full height of the primary vortex chamber in communication with said tangential dust outlet, an outlet from said pocket, a secondary vortex chamber having a continually decreasing radius of vortex, a connection from the outlet from said pocket to said secondary vortex chamber, an outlet from the secondary vortex chamber to enable an unimpeded flow of the purified gas to take place, and a dust outlet at a lower part of the secondary vortex chamber.

1,759,383. TRAIN-DISPATCHING SYSTEM FOR RAILROADS. SEDGWICK N. WIGHT, Rochester, N. Y., assignor to General Railway Signal Company, Rochester, N. Y. Filed Feb. 28, 1928. Serial No. 257,643. 8 Claims. (Cl. 246—122.)



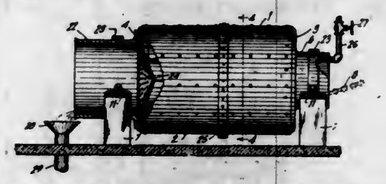
1. A dispatching machine for dispatching by signal indications visible to the engineer the movement of trains and indicating train movements to the dispatcher comprising, a control board, a plurality of levers on said board, one for each track switch, an indicator for each lever indicating the passage of a train by the track switch controlled by the corresponding lever, and indicating means between two adjacent levers for indicating the direction of train movement between the track switches controlled by such adjacent levers.

1,759,384. GAS-METERING SYSTEM. JOHN T. WILKIN and CARL R. HOUGHTON, Connersville, Ind., assignors to The Connersville Blower Company, Inc., Connersville, Ind., a Corporation of Indiana. Filed June 13, 1925. Serial No. 36,819. 3 Claims. (Cl. 73—167.)



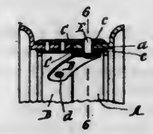
1. A metering system comprising a supply main, a delivery main, a large volume meter and a small volume meter in parallel between said mains, a valve controlling flow through the large volume meter, means for automatically opening or closing said valve as delivery demand respectively exceeds or drops to a predetermined volume, said means being under the influence of each of said meters and under the joint influence of both.

1,759,385. PULPING MACHINE. GEORGE STANFORD WITHAM, Jr., Hudson Falls, N. Y. Filed Jan. 24, 1928, Serial No. 249,064. Renewed Apr. 4, 1930. 3 Claims. (Cl. 92—20.)



1. A pulping machine comprising a rotatively mounted, substantially horizontal drum having imperforate sides and provided at one end, with a hollow shaft of a diameter adapted to admit to said drum large masses, such as bales or laps, of material to be pulped, the opposite end of said drum being perforated in a zone intermediate the periphery and axis but imperforate throughout a zone of substantial width adjacent the periphery; the maximum diameter of the perforate zone exceeding the interior diameter of said hollow shaft.

1,759,386. TIRE RIM OF MOTOR AND LIKE VEHICLES. ELIAS LEMUEL BAGGSTROM, Mangere, Auckland, New Zealand, assignor to The Baggstrom Patent Motor Rim Company Limited, Tauranga, New Zealand. Filed Sept. 8, 1927, Serial No. 218,335, and in New Zealand Apr. 26, 1927. 1 Claim. (Cl. 301—35.)



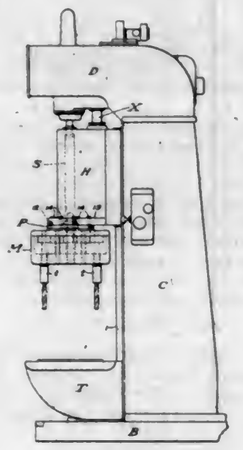
A wheel rim comprising two circumferential parts of the same diameter arranged to butt joint together, and one having apertures at intervals around its circumference, lugs affixed to the other part to extend transversely across the surface of the first part and each having a hole therein adapted to coincide with one of the said apertures, the said lugs being arranged in pairs so that those of each pair extend transversely from the opposite peripheral faces of the rim part to which they are affixed and receive the other part of the rim between them, spring tongues disposed upon the inner periphery of the rim and each pivoted at one of its ends to one part thereof so that it springs outwards at the free end, and having a pin on the outer side of its free end arranged to pass out through the aperture in the rim part and also through the holes in the corresponding lugs.

1,759,387. ACOUSTIC DIAPHRAGM AND PROCESS FOR ITS MANUFACTURE. CLINTON BATEHOLTS, Hoosick Falls, N. Y., assignor to Specialty Insulation Manufacturing Company, Inc., Hoosick Falls, N. Y., a Corporation of New York. Filed Oct. 16, 1928. Serial No. 312,820. 8 Claims. (Cl. 181—32.)



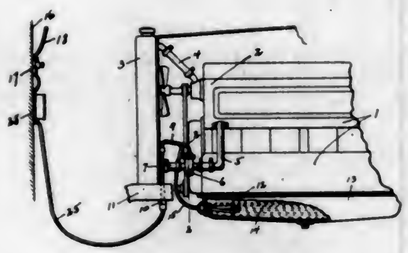
1. As a new product, a composite material for diaphragms comprising a carrier-sheet of long, coarse vegetable fibers, and, combined therewith, a uniformly disseminated plastic composition, the long, coarse fibres of said carrier sheet being promiscuously distributed therethrough and constituting thin, paper-like mass.

1,759,388. DRILL-HEAD ADAPTER PLATE. HARRY W. BOCKHOFF, Richmond, Ind., assignor to The National Automatic Tool Company, Richmond, Ind., a Corporation of Indiana. Filed Feb. 15, 1928. Serial No. 254,366. 4 Claims. (Cl. 77—22.)



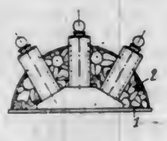
1. A machine tool combining a frame providing spaced guides; a head translatably mounted on said guides, said head having a substantially flat face perpendicular to said guides; means to translate said head; a rotating driving spindle journaled in said head and terminating adjacent one end thereof; a cluster box of a size and shape different from the size and shape of the lower end of said head and providing a stub shaft, adapted to be secured to said translatable head with said shaft in driving relation with said driving spindle; a substantially flat adapter plate having one face secured to said cluster box and its opposite face formed complemental to the face of said translatable head; and means to secure said adapter plate to said translatable head.

1,759,389. HEATING DEVICE. KENNETH H. BOWEN, Auburn, N. Y. Filed Jan. 2, 1929. Serial No. 329,761. 2 Claims. (Cl. 219—38.)



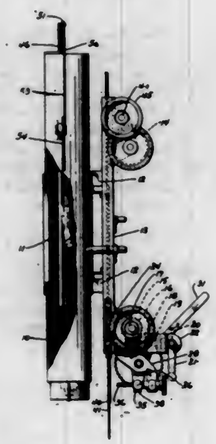
1. In a device of the class described, an automobile engine, a water circulating system for cooling the engine, a heating unit in and forming a permanent part of the water circulating system, an extraneous source of potential, an electrical circuit connecting the heating unit and the source of potential, an extraneous clock operated switch interposed in said circuit, and a manually operated means interposed in said circuit to permit a part of the circuit to be disconnected from the portion of the circuit which includes the heating unit.

1,759,390. SUPPORT FOR PHIALS, FLASKS, BOTTLES, AND LIKE CONTAINERS. EDGAR WILLIAM BRANDT, Paris, France. Filed June 5, 1928, Serial No. 283,046, and in France June 11, 1927. 4 Claims. (Cl. 211—74.)



1. In combination with a support for phials and like containers comprising a base and guiding means for said containers secured on said base, a number of containers, interfitting male and female portions on said guiding means and said containers adapted to cooperate with each other for selectively receiving and maintaining said containers on said support.

1,759,391. DEVICE FOR PROJECTING FILMS. WILLIAM J. CITRON, San Francisco, Calif., assignor to The Trailograf Company, Inc., San Francisco, Calif., a Corporation of California. Filed Mar. 13, 1926. Serial No. 94,589. 9 Claims. (Cl. 88—28.)



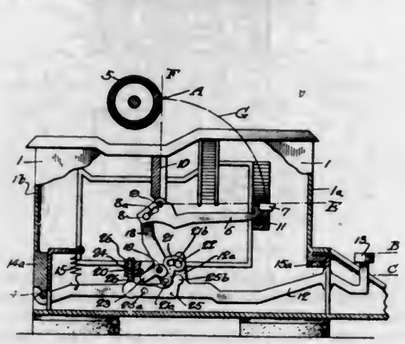
1. In a film projecting apparatus, a relatively long, narrow frame to support and guide a film and at its upper and lower ends fitted with supply and storage reels respectively, and operating mechanism for the storage reel including intermittent means to advance the film one or more image spaces upon each actuation, and other means, including speed reduction mechanism, for imparting a continuous movement to said storage reel at a sufficient reduction in speed to permit reading of text on the film while the latter is in continuous motion and a mounting for said operating mechanism adjacent one end of the storage reel, including means whereby the continuous movement device may be readily disconnected from the storage reel so as to prevent interference with the operation of the intermittent means.

1,759,392. COP HOLDER. ERNEST A. DE WOLF, Cranston, R. I., assignor to Universal Winding Company, Boston, Mass., a Corporation of Massachusetts. Filed Apr. 11, 1928. Serial No. 269,165. 7 Claims. (Cl. 242—130.)



4. In a device of the type specified, the combination of a hollow holder adapted to receive a cop, cone or package of strand material, a rod extending axially of the holder, a member having a hub slidable on the rod and provided with rearwardly extending arms, an annular flange carried at the end of the arms, and a spring for sliding the member on the rod to press the flange against the end of the cop or package supported on the holder.

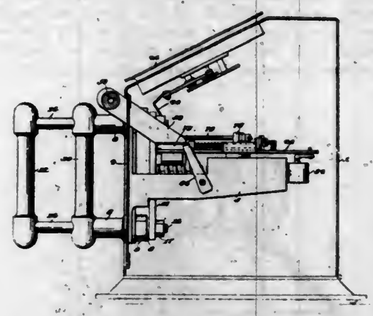
1,759,393. KEY ACTION FOR TYPEWRITERS AND OTHER MACHINES. ORVILLE U. DESHA, Fort Collins, Colo., assignor of one-fifth to The Desha Typelex Trust Estate, Fort Collins, Colo. Filed Jan. 27, 1928. Serial No. 249,881. 8 Claims. (Cl. 197—27.)



1. In a typewriter key action, a type bar, a key lever providing an upward arm intermediately of its ends, a vibratory lever pivoted intermediately of its ends, means operatively connecting the upward end of the vibratory lever with the type bar, an actuating trip link operatively connected to the lower end of the vibratory lever, an actuating trippet pin carried by said key lever arm operatively interlocking the actuating trip link moving the type bar to printing point upon depression of the key lever, means disinterlocking said trippet pin and actuating trip link for returning the type bar to normal position while the key lever is in depressed position.

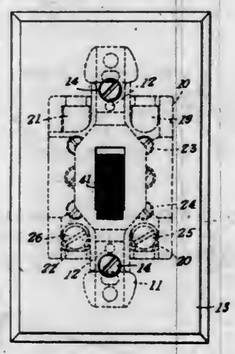
1,759,394. GRIP TESTER. WILLIAM K. EDWARDS, Big Spring, Tex. Filed Mar. 10, 1928. Serial No. 260,755. 2 Claims. (Cl. 194—56.)

1. In a grip testing machine, a grip resisting spring, a handle for compressing said spring, a rocking lever for preventing movement of said handle, means for rotating said lever to release said handle, detent mechanism to



prevent rotation of said lever and devices operated by pressure applied through an inserted coin for actuating said detent mechanism to release the lever.

1,759,395. AUTOMATIC SAFETY SWITCH. BENJAMIN E. GETCHELL, Plainville, Conn., assignor to The Trumbull Electric Manufacturing Company, Plainville, Conn., a Corporation of Connecticut. Filed Dec. 22, 1928. Serial No. 327,943. 14 Claims. (Cl. 200—116.)

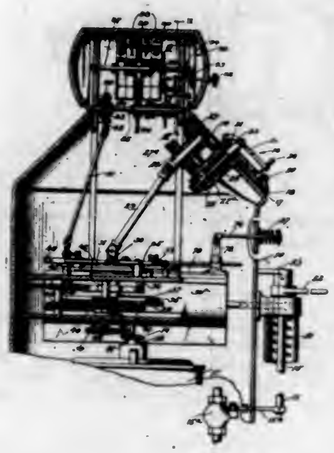


13. An electric switch construction including stationary contacts, a movable contact having a latching tip, a rocking handle for manually operating said movable contact under normal circuit conditions, toggle links and a spring connecting said handle and said movable contact, a bi-metallic thermostatic latch having operable engagement with the latching tip of said movable contact under normal circuit conditions and a heater element for bending said thermostatic latch to release the latching tip of said movable contact on overloaded circuit conditions, the said spring being trip-free from the rocking handle and operating to move the movable contact member to open circuit with a snap action when the switch is operated manually or automatically, said spring operating to move the rocking handle to off position and to move the latching tip of the movable contact into re-latching position after each circuit opening movement of said switch.

1,759,396. SHUT-OFF AND INDICATOR CONTROL FOR OIL-DISPENSING APPARATUS. ALBERT J. GRANBERG, Berkeley, Calif., assignor to Ralph N. Brodie Company, Oakland, Calif., a Corporation of California. Filed Jan. 3, 1925. Serial No. 394. 13 Claims. (Cl. 221—101.)

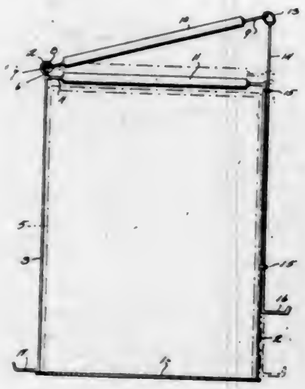
1. In combination with a fluid meter and a shutoff valve, a trip mechanism for retaining said valve open

after it has been opened, a control mechanism adapted upon reaching tripping position to release said trip mechanism and permit said valve to close, said control mechanism being governed by the meter and operating in direct ratio thereto, and means for setting said control mechanism back from tripping position to predetermine the operative period of the meter prior to permitting the



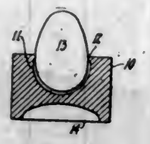
valve to close, a spring motor included in the control mechanism and adapted to be wound when setting back the control mechanism and capable of advancing the control mechanism to tripping position after the latter has been set and the valve has been opened.

1,759,397. MOP WRINGER. OLIVER P. GREENSTREET, Owensville, Mo. Filed Oct. 13, 1928. Serial No. 312,349. 4 Claims. (Cl. 15—262.)



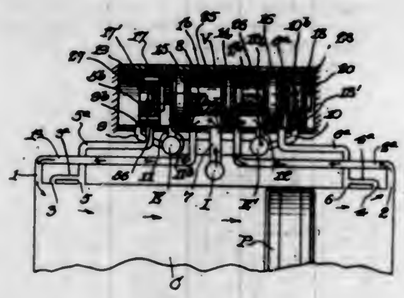
1. A mop wringer of the character described comprising a bucket receiving frame, a substantially horizontal squeezing unit carried by the frame, a shiftable squeezing unit pivotally attached at one end to the frame and designed to be brought into coacting relation with the first mentioned unit for the performance of a mop squeezing operation, and a reciprocable foot operator carried by the frame and connected with the shiftable unit.

1,759,398. EGG HOLDER. MARJORIE HART, Vancouver, Wash. Filed Jan. 10, 1928. Serial No. 245,730. 1 Claim. (Cl. 65—22.)



An egg cup comprising a resilient rubber body having its bottom shaped to hold the body in an upright position when the body is resting on a horizontal supporting surface, said body having a substantially spherical cavity, the mouth of which opens at the top of the body, and an inwardly extending annular flange integral with the body, arranged at the mouth of said cavity and defining an opening in the top of the body of less diameter than any horizontal diameter of the cavity at its largest portion, for the purpose of grasping the upper portion of an egg seated in said cavity.

1,759,399. STEAM VALVE GEAR. JOHN HELENBERG, Houston, Tex. Filed Aug. 30, 1926. Serial No. 132,527. 1 Claim. (Cl. 121—150.)

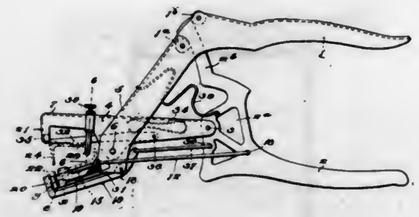


In combination, a cylinder, a piston in the cylinder, said cylinder having a port at each end, a bushing casing having a pair of longitudinally spaced ports at each end, a port at the center thereof and a pair of ports between the center port and each pair of end ports, a slide valve in the bushing casing having a central enlargement associated with the central port, enlargements at the ends of the valve for association with the third mentioned ports, control valves for association with the end ports, a pair of headed pins on which the control valves are slidable, said pins engaging the first mentioned valve at the ends thereof, said control valves having openings extending therethrough, conduits leading from the end ports of the cylinder to the inner ports of the pairs of ports, the central port of the casing having a conduit leading thereto from an intake means and the outer ones of the end ports being exhaust ports and the outer one of the intermediate ports in the casing between the end ports and the central ports being also exhaust ports.

1,759,400. EAR-TAGGING APPARATUS FOR STOCK. ELBERT R. HOBBS, Castleford, Idaho. Filed Feb. 9, 1928. Serial No. 253,090. 12 Claims. (Cl. 128—331.)

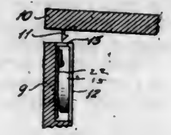
1. In apparatus of the class described, a pair of levers, a pair of jaws adapted to be moved thereby, means for

holding between said jaws a metal device to be clinched, and punching means with supplemental operating means



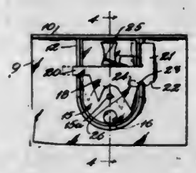
therefor, whereby the same dies may first prepare the orifice and thereafter may be actuated by said levers to clinch the metal device therein.

1,759,401. LOCK. JOHN R. HOGAN, Altavista, Va., assignor to The Lane Company, Inc., a Corporation of Virginia. Filed Nov. 13, 1928. Serial No. 319,075. 5 Claims. (Cl. 70—27.)



1. In a lock, the combination with a swingingly mounted keeper, a combined key pin and push button secured to said keeper, and a locking bolt adapted to be moved relatively to the keeper to lock the keeper against movement.

1,759,402. LOCK. JOHN HOGAN, Altavista, Va., assignor to The Lane Company, Inc., a Corporation of Virginia. Filed Nov. 20, 1928. Serial No. 321,946. 1 Claim. (Cl. 70—29.)



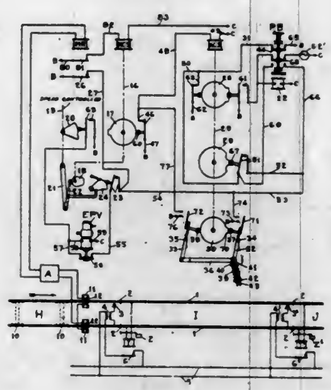
In a lock, a casing having a latch opening through its top wall, a keeper plate pivotally mounted in said casing and having an opening through its upper end portion adapted to receive a latch, a key operated locking bolt in said casing adapted to be moved relatively to the keeper plate to lock the keeper against movement, a key pin on said keeper plate and a push button on said keeper plate.

1,759,403. MOP. ROBERT L. HORSLEY, Memphis, Tenn., assignor of one-half to Isaac D. Block, Memphis, Tenn. Filed Nov. 22, 1928. Serial No. 321,091. 3 Claims. (Cl. 15—229.)



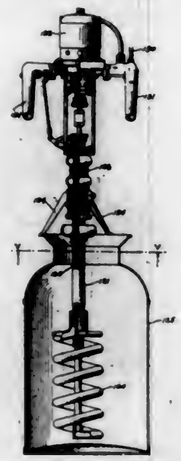
1. A mop comprising a handle, a reel-shaped metal frame having four side members attached to the sides of said handle and extending beyond the lower end, and a mop head composed of four distinct wisps of yarn with each of said wisps attached separately about one of said side members.

1,759,404. TRAIN CONTROL. WINTHROP K. HOWE, Rochester, N. Y., assignor to General Railway Signal Company, Rochester, N. Y. Filed Jan. 31, 1925. Serial No. 6,067. 15 Claims. (Cl. 246—63.)



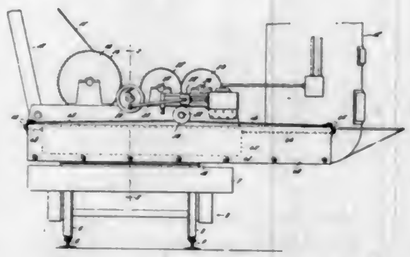
1. In an automatic train control system, the combination of a speed restricting device governed in accordance with traffic conditions ahead and initiated if traffic conditions ahead are dangerous so as to gradually reduce the permissive speed at which the vehicle may travel without incurring an automatic brake application, means for applying the brakes regardless of any substantial speed at which the train is traveling and effective a predetermined distance after said speed restricting device has been initiated, and means for preventing said last mentioned means from applying the brakes effective if actuated at repeated distance intervals.

1,759,405. PORTABLE LIQUID-TREATING APPARATUS. AAGE JENSEN, Los Angeles, Calif. Original application filed June 6, 1927, Serial No. 196,775. Divided and this application filed Oct. 10, 1928. Serial No. 311,555. 2 Claims. (Cl. 257—104.)



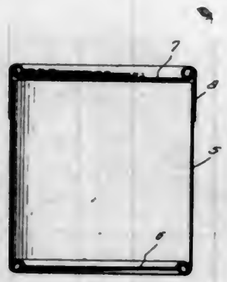
2. An apparatus for treating liquids, comprising a coil through which a temperature-changing medium may be circulated, a shaft on which the coil is mounted, said shaft being provided with inlet and outlet connections for the treating medium, a motor carried by the shaft for rotating the latter, flexible connections leading to the shaft, for supplying the treating medium thereto, flexible connections leading to the motor for supplying a driving medium thereto, a bearing on the shaft, and means on the bearing, engageable with a container, for supporting the entire device during its operation.

1,759,406. PORTABLE CRANE. WILMOT JONES, Atlantic City, N. J. Filed Apr. 12, 1928. Serial No. 269,376. 1 Claim. (Cl. 212—49.)



In a hoisting crane of the class described, a wheel supported truck, a turn table mounted thereon, a base on the turn table, a steam power plant on the base, a boom pivotally mounted on the base, a drum mounted for rotation on the base, a boom operating cable connected with the boom and mounted on the drum, a power shaft, an operating connection between the power shaft and power plant, an operating connection between the shaft and said drum, a supplemental winch shaft on said base, winches on the opposite ends of said winch shafts, manually operated clutch mechanism operatively connecting the power shaft and winch shaft, a pair of channel shaped casings mounted on opposite longitudinal edges of the base and provided with spaced transversely extending anti-friction rollers, counterbalancing weights slidable in the casing and upon the rollers, and operating cables connected with the weight and wound upon the winches.

1,759,407. PAPER CONTAINER. HAROLD P. KINGSBURY, Northampton, Mass. Filed June 20, 1928. Serial No. 287,014. 1 Claim. (Cl. 206—44.)

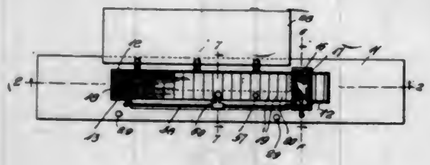


A closure for cylindrical containers comprising a circular flange for telescoping over the walls of the container at the open end thereof, said circular flange having its outer marginal edge rolled inwardly, a transparent disk disposed over the open end of the container and between the periphery of the flange, the marginal edge of the disk rolled upwardly into rolled edge of the flange between the layers thereof and having the edge of the flange pressing outwardly on the roll of the disk, and said roll on the disc and flange circular.

1,759,408. METHOD FOR PURIFYING GAS FROM HYDROGEN SULPHIDE WITH PRODUCTION OF ZINC SULPHIDE. ALBERT F. KUNBERGER, Swarthmore, Pa., assignor to The United Gas Improvement Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Mar. 8, 1928. Serial No. 260,253. 2 Claims. (Cl. 23—3.)

1. A process of purifying gases from hydrogen sulphide which comprises effecting a double decomposition of hydrogen sulphide and zinc chloride producing insoluble zinc sulphide and ammonium chloride by washing the gas with a solution of zinc ammonium chloride in ammonium chloride.

1,759,409. AUTOMATIC REMINDER. LEON Y. LASSITER, Tulsa, Okla. Filed Apr. 17, 1926. Serial No. 102,756. 1 Claim. (Cl. 161—1.)



In an automatic reminder, a cabinet having a top provided with spaced openings, a traveling tape movable from within the cabinet to the outside thereof through one of said openings and across the top of the cabinet to the other openings and thence through the latter-named opening back into the cabinet, said tape being divided into sections of equal dimensions, each having indicia indicative of a particular period of time, a guide extending along the portions of the tape lying over the surface of the cabinet top between said openings, and a perforator movable along said guide and operative for perforating any division of the tape exposed between the openings.

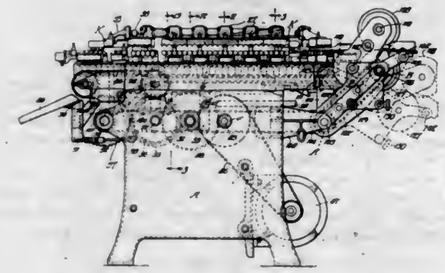
1,759,410. PNEUMATIC TIRE. HAROLD B. MARSTON, Philadelphia, Pa. Filed Aug. 3, 1925, Serial No. 47,946. Renewed Oct. 8, 1928. 7 Claims. (Cl. 117—53.)



1. A pneumatic tire cord comprising an elastically compressible core and a plurality of sheathed elastic wire strands twisted upon the core in close mutual relation, each strand constituting a helical spring embracing the core and free to contract and expand.

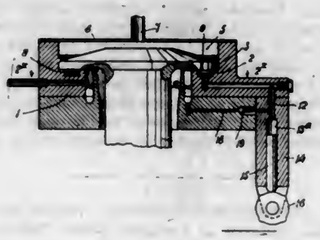
6. A pneumatic tire casing including cords made up of elastically compressible cores and a plurality of sheathed metal strands snugly twisted upon said cores in close mutual relation, said strands being free to squeeze the elastic core under tension stresses, and also free to reduce the squeeze when tension stresses are reduced.

1,759,411. PLASTIC-CANDY-FORMING MACHINE. ROBERT F. MORRISON, Oak Park, Ill., assignor to Elder & Robinson Co., Chicago, Ill., a Corporation of Illinois. Filed July 21, 1926. Serial No. 123,846. 23 Claims. (Cl. 107—15.)



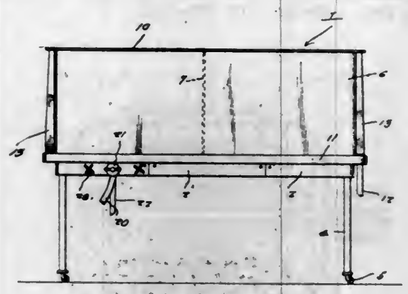
2. A plastic candy forming machine including a plurality of presses, means for operating the presses to successively act upon a continuous plastic candy rope fed to the machine, roller mechanism driven with the presses for forming and feeding a plastic candy rope to the presses, a frame for supporting said roller mechanism in operative relation to the presses, and means for shifting said frame to move the rollers out of operative relation to the presses and permit feeding the rope independent of the roller mechanism.

1,759,412. BEARING. WARREN NOBLE, Detroit, Mich. Filed Mar. 10, 1927. Serial No. 174,296. 8 Claims. (Cl. 308—170.)



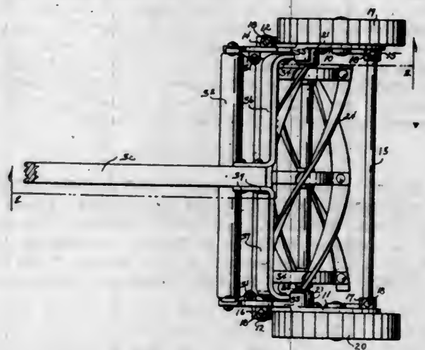
1. In a bearing, a stationary member, a rotary member, said members having opposed thrust faces, and means transmitting vibration to one of said members to temporarily relieve friction therebetween.

1,759,413. RINSE TUB. ERNEST NUTTING, Marshalltown, Iowa. Filed Dec. 17, 1928. Serial No. 326,564. 1 Claim. (Cl. 68—31.)



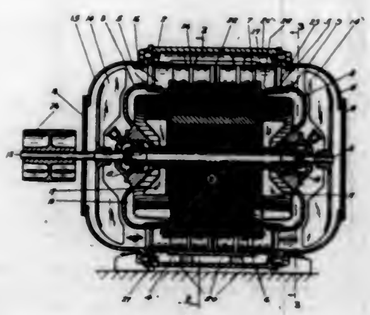
A portable laundering unit for rinsing clothes comprising a supporting frame, a tub supported on the frame and presenting separate rinsing compartments, each of which has a drain opening, a pipe connecting said openings, and extending horizontally below the bottom of the tub, a second horizontal pipe extending transversely of the said connecting pipe with its intermediate portion in communication with the latter and having its opposite ends terminating at the sides of the tub, a control valve associated with each pipe end, a drain pipe extending downwardly from one of the said valves, a filling hose connected with the other valved end, and valves arranged in said connecting pipe on opposite sides of the communicating transverse pipe and having their respective operating elements disposed for manual operation adjacent a common side of the said frame.

1,759,414. LAWN MOWER. CARL A. OLSON, Clarinda, Iowa, assignor to Clarinda Manufacturing Company, Clarinda, Iowa, a Corporation of Iowa. Filed Feb. 18, 1928. Serial No. 255,301. 7 Claims. (Cl. 56—254.)



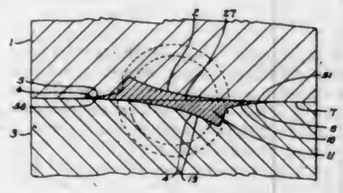
1. In a lawn mower, a pair of side frames, a means for holding said side frames spaced apart and parallel with each other, a reel shaft journaled in said frames, each of said frames being formed with a substantially annular flange, a wheel mounted adjacent each side frame and formed with an internal gear embracing its flange, pinions on said reel shaft meshing with the internal gears of said wheels, and a handle member secured to said frames, the points of connection of said handle member to the frames being located outside of the annular flanges thereof and above said reel shaft, whereby force applied to the handle will exert a downward pressure on the rear portions of the side frames to reduce the tendency of said pinions to travel upwardly on said internal gears.

1,759,415. TOTALLY INCLOSED AND VENTILATED ELECTRIC MACHINE. HUGO PERLESZ, Cedarburg, Wis., assignor to American Electric Motor Company, Milwaukee, Wis. Filed Jan. 18, 1928. Serial No. 247,498. 4 Claims. (Cl. 172—36.)



1. In a dynamo electric machine, a frame, a stator carried within said frame, but spaced apart therefrom to form an air chamber, said frame having at least one outlet from said chamber to the atmosphere, said stator being composed of a plurality of groups of laminæ, said groups being differently constructed, the laminæ of one group having perforations near their outer periphery to form air ducts therethrough, the laminæ of another group being so constructed beyond the winding slots as to form radial air vents leading from said air ducts to said air chamber, journal support plates at each end of the machine, each of said plates having a portion projecting toward the stator, each of said plates having a flange extending radially to provide means for attachment to said frame, said flange having openings substantially in line with said perforations in the stator laminations, a ring carried at each end of the stator core and having a part co-operating with said projecting portion of each of said plates to form a closure for the stator winding, means positioned at the ends of and adjacent the outer edges of the stator for closing off said air chamber at these respective points, a rotor and shaft journalled in said support plates, a fan carried on the rotor shaft at least at one end adjacent to and outside said plate and a shield having air admission means for covering said fan and co-operating with an adjacent support plate to form a fan chamber.

1,759,416. METHOD OF MANUFACTURING FORGED PERCUSSION MASONRY TWIST DRILLS. HENRY W. PLEISTER, Westfield, and JOHN KARITZKY, Garwood, N. J., assignors to Henry B. Newhall Corporation, Garwood, N. J., a Corporation of New Jersey. Filed Mar. 24, 1928. Serial No. 264,418. 2 Claims. (Cl. 76—108.)



1. The method of manufacturing a complete integral forged twist masonry boring percussion drill having a chisel cutting or boring end consisting in forging the drill blank and using the flashing to form lands and the chisel cutting or boring edge, so that the chisel cutting or boring end will be of maximum strength, rigidity and toughness and will only require the minimum amount of grinding, trimming off some of the flashing, and twisting the blank.

1,759,417. ELECTRICAL CORD SUPPORT. WILLIAM RABSILBER, New York, N. Y., assignor to Clara Roberts, Naugatuck, Conn. Filed Mar. 23, 1927. Serial No. 177,640. 2 Claims. (Cl. 248—30.5.)



1. In a device of the character described, the combination of a detachable and rotatably arranged fork shaped flexible cord-gripping member, an elongated tubular receptacle member for said fork shaped flexible cord-gripping member, a suitable fastening member arranged to permit the attaching or detaching of the device to or from a suitable operating base, and a pliable coil shaped bending member securely and permanently held in position between said elongated tubular receptacle member and said fastening member, substantially as and for the purpose set forth.

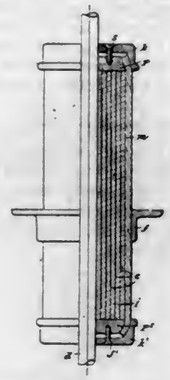
1,759,418. SNAP FASTENER. DANIEL I. REITER, New York, N. Y. Filed Feb. 2, 1928. Serial No. 251,286. 9 Claims. (Cl. 24—216.)



1. A snap fastener socket member having inwardly-directed stud-retaining fingers, a centrally-disposed guard and thumb-piece adapted to serve as a resonant sounding element to enhance the sound produced by an inserted stud, and a plurality of pointed fastening spurs all comprising integral parts of a single sheet of metal, said spurs being extended back with respect to the open face of the socket member well beyond the surface of the sounding member.

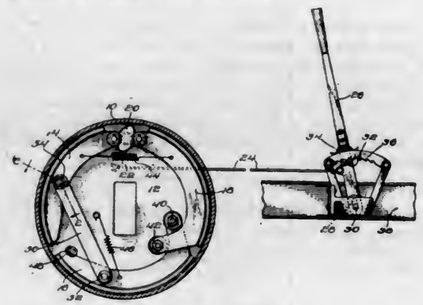
1,759,419. CONDENSER BUSHING. SIGURD RUMP, Boston, Mass., assignor to American Brown Boveri Electric Corporation, New York, N. Y., a Corporation of New York. Filed Mar. 2, 1926. Serial No. 91,767. 4 Claims. (Cl. 173—318.)

2. A terminal insulating bushing comprising an electric current conductor, layers of insulating and of conducting material wound about said conductor, a tube of flexible insulating material enclosing said layers of material, me-



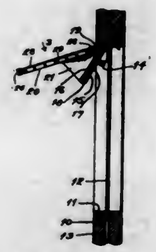
tallic members within said tube, and metallic caps enclosing and clamping the ends of said tube against said metallic members.

1,759,420. BRAKE. ROY S. SANFORD, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Mar. 21, 1928. Serial No. 263,404. 5 Claims. (Cl. 188—78.)



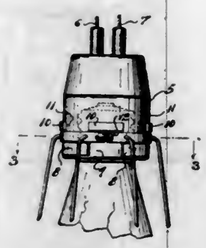
1. A brake comprising a pair of rigid shoes arranged end to end, in combination with a rigid link freely pivoted to one shoe and frictionally clamped to the other shoe.

1,759,421. COMBINATION VENTILATOR AND SHADE FOR VEHICLES. JOHN PAUL SCHMIDT, Baltimore, Md. Filed Feb. 15, 1928. Serial No. 254,355. 3 Claims. (Cl. 156—15.)



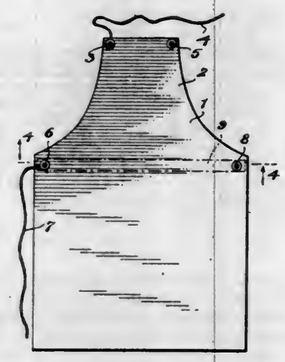
2. Supporting means for a combination ventilator and shade for vehicles comprising a bracket attachable within the margin of the window opening for receiving one end of said ventilator and an arm detachably carried by said bracket for mounting one end of said shade.

1,759,422. LAMP-SOCKET CASING. HAROLD E. SLADE, Glen Ridge, N. J. Filed June 17, 1920. Serial No. 371,371. 3 Claims. (Cl. 240—143.)



1. In a one-piece socket casing, means to provide an external annular shade holder or guard seat, comprising spaced annular rows of rib projections integral with the casing body, the rib projections in each row being separated by intervening gaps, and said rib projections of one row being in aligned opposition to the gaps in the other row.

1,759,423. APRON. ALEXANDER H. STRAUS, New York, N. Y. Filed Nov. 17, 1928. Serial No. 320,012. 2 Claims. (Cl. 2—48.)

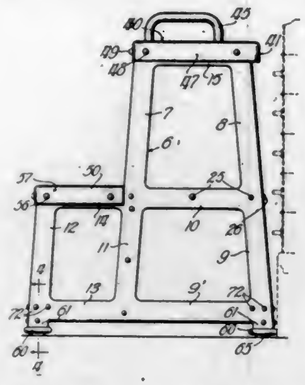


1. An apron having a body composed of a paper sheet, means for retaining the same about the body comprising a string secured adjacent to one edge of the garment, a button secured adjacent to the opposite edge and about which said string is adapted to be wrapped, and a reinforcing strip extending across one face of the body and connected thereto solely at the points of securement of the string and button.

1,759,424. STEPLADDER. EMIL A. STRAUSS, Wilmette, Ill., assignor to Edward E. Strauss, Wilmette, Ill. Filed June 30, 1928. Serial No. 289,338. 6 Claims. (Cl. 228—56.)

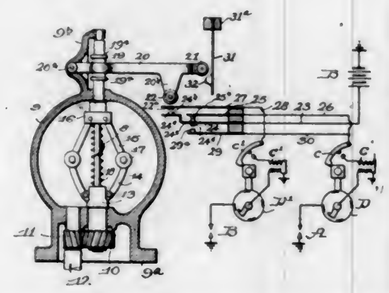
1. A step or ladder comprising end spiders, means for supporting said spiders in spaced relation, roller assemblies on which said ladder is adapted to be moved, each of said assemblies comprising a channel member rigidly

secured to said spiders, a leaf spring in said channel member, rollers secured adjacent the ends of said spring.



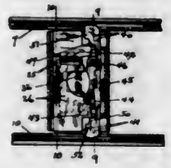
4. A step or ladder comprising a frame, a pair of channel members mounted at the bottom of said frame, leaf springs mounted in each of said channel members, and a roller carried by each of said leaf springs.

1,759,425. INTERNAL-COMBUSTION ENGINE. SAMUEL SUEKOFF, Chicago, Ill. Filed June 6, 1928. Serial No. 283,261. 7 Claims. (Cl. 123—148.)



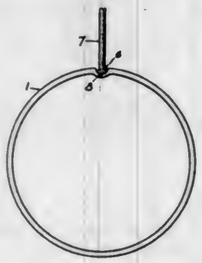
1. In an internal combustion engine, the combination of a cylinder, a plurality of spark plugs mounted in the head of the cylinder, and an ignition system comprising high tension circuits including each spark plug and low tension circuits including a battery, and governor-controlled contact members acting to close the circuit through either or both of said low tension circuits at predetermined speed ranges of said engine.

1,759,426. LOCK FOR LOOSE-LEAF BINDERS. PAUL O. UNGER, Syracuse, N. Y., assignor to McMillan Book Company, Syracuse, N. Y., a Corporation of New York. Filed Oct. 13, 1928. Serial No. 312,258. 9 Claims. (Cl. 129—24.)



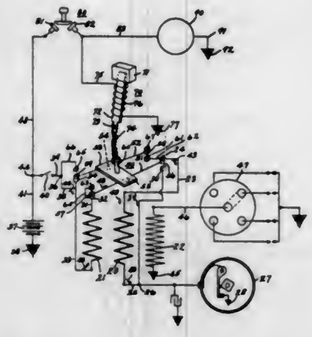
5. In a device of the class described, a back member, opposed covers attached to the back member, a pair of opposed housings secured on the back member, a plurality of leaf retaining posts having their opposite ends positioned in the housings, means in each housing for releasably securing the ends of the posts in the housing, automatic means for locking said securing means in the securing position, means for holding the locking means in the unlocking position, and means actuated by the securing means for returning the locking means to the locking position.

1,759,427. ELECTRICALLY-WELDED PIPE AND METHOD OF MANUFACTURING THE SAME. BIRGER TORVALD ANDREN, Milwaukee, Wis., assignor to A. O. Smith Corporation, Milwaukee, Wis., a Corporation of New York. Filed Feb. 20, 1929. Serial No. 341,428. 4 Claims. (Cl. 219—10.)



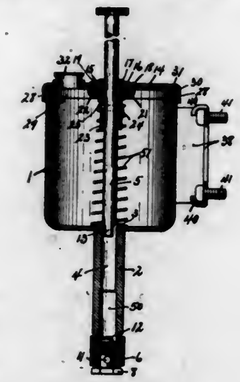
1. The method of electric arc welding metal sheets which comprises forming integral projections on the edges thereof, said projections meeting below the normal lower plane of said edges to provide a welding groove therebetween, and depositing metal in the said groove by means of an electric arc and a fusible metallic electrode to thereby fuse said edges and provide an integrally welded sheet metal structure.

1,759,428. IGNITION SYSTEM. JAMES L. ARTHUR, Anderson, Ind., assignor to Delco-Remy Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Dec. 31, 1928. Serial No. 329,554. 16 Claims. (Cl. 123—179.)



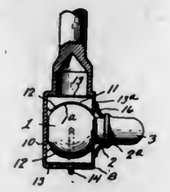
1. In an electrical system for use with internal combustion engines, the combination, with a source of electrical current and engine starting means energized thereby, of an ignition circuit also energized from said source, and automatic means for decreasing the normal resistance of said ignition circuit coincidentally with the energization of said engine starting means, comprising a sectionally divisible primary coil, and electroresponsive means energizable by said source and operable to change the relation of said primary coil sections.

1,759,429. LUBRICATING SYSTEM. CHESTER A. BACON, Auburn, N. Y., assignor to Bowen Products Corporation, Auburn, N. Y., a Corporation of New York. Filed Apr. 23, 1925. Serial No. 25,257. 7 Claims. (Cl. 184—28.)



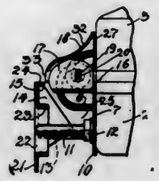
1. A combined tank and pump comprising a receptacle and a pump cylinder secured thereto, a piston movable through a wall of the receptacle and in the pump cylinder, a bearing for said piston carried by the wall of the receptacle, slidably laterally in all directions with respect to said wall, and including spring means tending to maintain the bearing in any position.

1,759,430. BALL AND SOCKET CONNECTION. DAVID BENJAMIN, Cleveland Heights, Ohio, assignor to The Gabriel Company, Cleveland, Ohio, a Corporation of Ohio. Filed July 14, 1928. Serial No. 292,613. 6 Claims. (Cl. 287—90.)



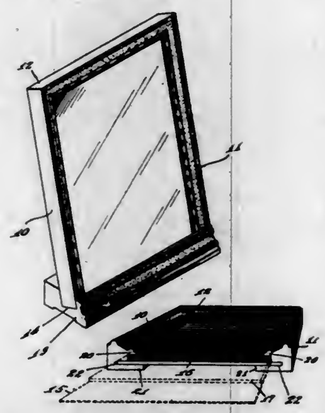
2. A socket mounting comprising a housing having an open front, a pair of symmetrical bearing members each consisting of an inner hemispherical anti-friction lining, an outer backing of resilient deformable material, and a metallic housing for said backing, and means for locking the said bearing members in place in the first housing.

1,759,431. ELECTRIC COOKING APPLIANCE. ALFRED BERSTED and MARTIN BERSTED, Chicago, Ill. Filed Oct. 14, 1927. Serial No. 226,236. 9 Claims. (Cl. 219—19.)



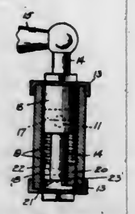
1. In an electrical cooking device, a pair of cooking sections, and a hinge connecting said sections comprising a pair of apertured hinge plates, flanged extensions on said hinge plates, apertured hinge lugs formed on said flanged extensions, a hinge pin projecting through the apertures of said hinge lugs, flexible wire connections leading from one cooking section to the other and coiled around the ends of said hinge pin to the outside of said apertured hinge lugs, terminal posts mounted in the lower hinge plate, and protecting hoods attached to the upper and lower hinge plates to form protecting housings for the hinge lugs, the flexible wire connections and said terminal posts.

1,759,432. PICTURE FRAME. CARL F. BRECHT, Indianapolis, Ind. Filed Dec. 31, 1928. Serial No. 329,352. 6 Claims. (Cl. 40—148.)



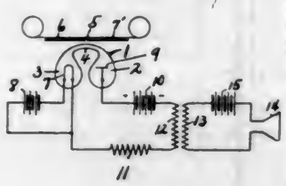
1. A frame for pictures, comprising two opposed frame members each having an inwardly projecting front lip behind which the edges of the glass, the picture, and the backing lie, and each also having an inwardly projecting back lip against which the rear face of the backing near its edges lies, said back lip extending farther inwardly than does the front lip; in combination with a backing which is fastened at its edges against such back lip to serve as a reinforcement between said two frame members, and a closure member having a groove in which the ends of said opposed frame members are detachably mounted.

1,759,433. SAFETY GAS COCK. CARL CARMOSIN, Great Neck, N. Y. Filed Aug. 1, 1928. Serial No. 296,815. 3 Claims. (Cl. 251—163.)



1. A safety gas cock, comprising a casing having inlet and outlet openings, a cylindrical valve in said casing having a transverse bore to establish a passage between the inlet and outlet openings, a stem integral with the valve and having a radial projection at one end and a grip at the other, a serrated nut fixed in the casing, and a spring between the valve and nut to normally urge the radial projection of the stem into engagement with the serrated surface of said nut to prevent accidental rotary movement of the stem to open the valve.

1,759,434. APPARATUS FOR PRODUCING PHOTOGRAPHIC RECORDS. THEODORE WILLARD CASE, Auburn, N. Y., assignor to Case Research Laboratory Inc., Auburn, N. Y., a Corporation of New York. Filed Mar. 4, 1927. Serial No. 172,911. 6 Claims. (Cl. 176—122.)



1. A lamp for producing a photographic record of light wave variations corresponding to sound wave variations comprising a bulb formed in two chambers which lie side by side and a capillary connecting the two chambers on a line lying outside the limits thereof, an electrode in each chamber, and a circuit connecting the electrodes.

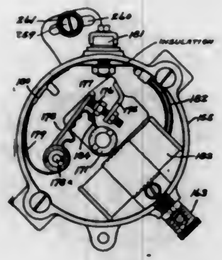
1,759,435. IGNITION SYSTEM. WILLIAM A. CHRYST, Dayton, Ohio, assignor, by mesne assignments, to Delco-Remy Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Jan. 14, 1926. Serial No. 81,192. 5 Claims. (Cl. 200—21.)



2. An ignition device comprising, in combination, a housing; a plate rigidly secured in said housing; a second plate pivotally secured to the first-mentioned plate and having an elongated slot; a pair of circuit interrupters in said housing, each including a stationary contact and a cooperating, movable contact arm, one of said interrupters being mounted on the first-mentioned plate, the other on the second plate; a cam engaging the movable contact arm of each interrupter and adapted to operate them; an eccentric member carried by the first-mentioned plate and extending through the elongated slot of the second plate, said member being operable to adjust the second plate relative to the first plate, whereby the angle between the point of contact of the interrupter arms and the cam may be adjusted as desired; and means carried by the first plate and adapted to clamp the second plate to lock it in the adjusted position.

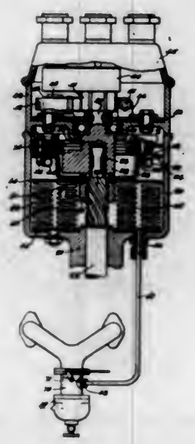
1,759,436. IGNITION APPARATUS. WILLIAM A. CHRYST, Dayton, Ohio, assignor, by mesne assignments, to Delco-Remy Corporation, Dayton, Ohio, a Corporation of Delaware. Original application filed July 15, 1922, Serial No. 575,217, Patent No. 1,606,207, dated Nov. 9, 1926. Divided and this application filed Mar. 1, 1926. Serial No. 91,629. 1 Claim. (Cl. 200—19.)

Engine ignition apparatus comprising in combination, a timer cup, a terminal insulatingly supported by the cup, a condenser supported within the cup and electrically connected with a metal clip which is attached to the terminal, a cam within the cup, a breaker lever supported within the cup and operated by the cam, and a leaf spring conductor



bearing at one end against the clip and electrically connected with the lever, said spring urging the lever toward the cam.

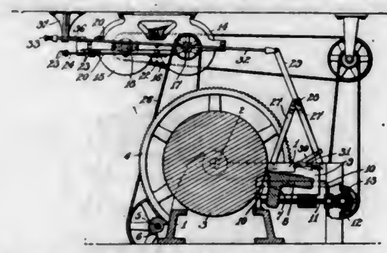
1,759,437. IGNITION APPARATUS. WILLIAM A. CHRYST, Dayton, Ohio, assignor to Delco-Remy Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Aug. 5, 1927. Serial No. 210,822. 10 Claims. (Cl. 123—117.)



1. Ignition apparatus comprising a circuit breaker operated by a rotatable cam, a drive shaft, an intermediate drive element through which rotation is transmitted from the shaft member to the cam member, means comprising an annular expansion chamber responsive to engine load conditions for varying the angular relation between the intermediate element and one of the members, and means responsive to engine speed for varying the angular relation between the intermediate element and the other of said members.

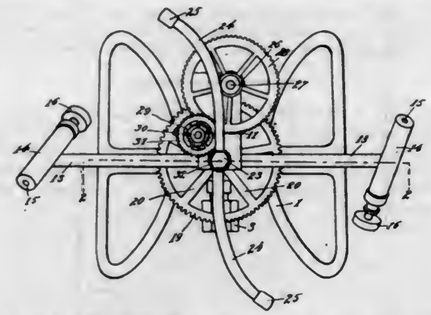
1,759,438. VENEER-CUTTER-SPEED CONTROL. HARRY C. CLAY and CHARLES L. IRWIN, Columbus, Ind., assignors to Reeves Pulley Company, Columbus, Ind., a Corporation of Indiana. Filed Nov. 8, 1926. Serial No. 145,929. 3 Claims. (Cl. 144—209.)

1. The combination with a veneer cutting machine having means for rotating the log and means for feeding the cutting knives toward said log, of a speed varying mechanism drivingly connected with the log rotating means and comprising two pairs of friction cones, a connecting belt, two controlling levers acting upon said pairs of cones to variably position the same relatively to one another,



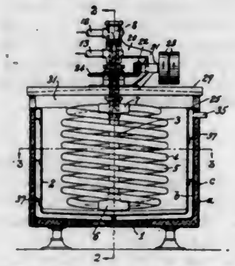
means for simultaneously shifting controlling levers, and means operated by the movement of the knives for operating said lever shifting means.

1,759,439. LAWN SPRINKLER. WALTER H. COLES, Troy, Ohio, assignor to The Skinner Irrigation Company, Troy, Ohio, a Corporation of Ohio. Filed Dec. 31, 1924. Serial No. 759,185. 13 Claims. (Cl. 299—70.)



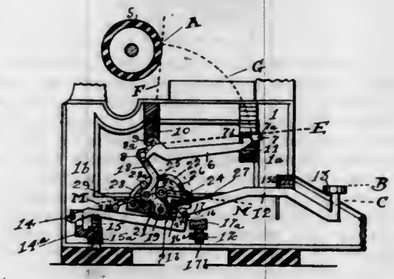
1. In a lawn sprinkler, a water passage member, a supporting member rigidly supported thereby, a sleeve axially aligned with axis of said supporting member and rotatable within same, a rotatable supporting member attached to the upper end of said sleeve, arms with sprinkler heads attached to said rotatable supporting member, a sleeve mounted in said rotatable supporting member, an upper supporting member attached to upper end of said sleeve, arms with spraying nozzles attached to said upper member and means for causing a counterbalancing motive reaction from the ejection force of the water from the sprinklers between said upper and lower rotating arms.

1,759,440. APPARATUS FOR HEATING AND COOLING LIQUIDS. FRITZ G. CORNELL, Jr., Caldwell, N. J., assignor, by mesne assignments, to Jensen Creamery Machinery Company, Inc., Bloomfield, N. J., a Corporation of New York. Filed May 27, 1926. Serial No. 111,965. 2 Claims. (Cl. 257—107.)



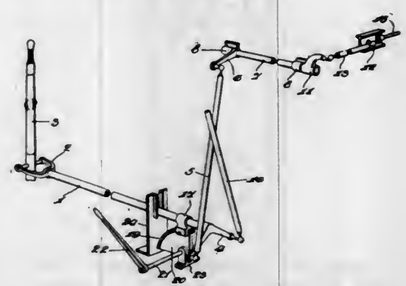
2. In an apparatus of the character described, in combination, a square tank, a container surrounding the same, a helical stirrer within the tank, means for rotating the stirrer, whereby circulation of liquid in said square tank adjacent to the walls of such tank is induced, and means for causing circulation of a fluid in said container in a direction counter to the flow of said liquid adjacent to said walls, whereby a rapid and efficient heat interchange between said liquid and fluid is promoted.

1,759,441. KEY ACTION FOR TYPEWRITERS AND OTHER MACHINES. ORVILLE U. DESHA, Fort Collins, Colo., assignor of one-fifth to The Desha Typelex Trust Estate, Fort Collins, Colo. Filed Jan. 27, 1928. Serial No. 249,875. 12 Claims. (Cl. 197—27.)



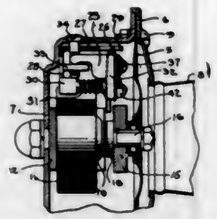
1. In a typewriting machine, a type bar, a key lever, means operatively connecting the type bar and key lever comprising a biangular vibratory lever and a sublever independently rotatable about a common pivot, a trip link coupling operatively connecting the vibratory lever and sublever for moving the type bar to the printing point upon depression of the key lever, means reversely breaking said coupling after the printing impact of the type bar returning the vibratory lever and type bar to normal operative position while the key lever is in depressed position, means restoring said sublever and coupling to normal operative position upon release of the key lever.

1,759,442. CONTROL-SURFACE-OPERATING MECHANISM. RICHARD HENRY DEPEW, Jr., Forest Hills, N. Y., assignor to Fairchild Airplane Manufacturing Corporation, New York, N. Y. Filed Apr. 2, 1928. Serial No. 266,831. 11 Claims. (Cl. 244—29.)



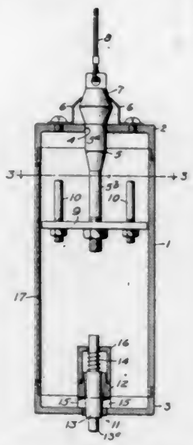
1. In an airplane of the folding wing type, ailerons mounted on the airplane wings, aileron controlling means mounted in the airplane body, said controlling means being operably connected to said ailerons when said wings are in normal position and inoperatively connected with said ailerons when said wings are in folded position, to permit the operation of said controlling means without a resulting movement of said ailerons when said wings are in folded position.

1,759,443. ELECTROMAGNETIC HORN. FARNUM F. DORSEY, Rochester, N. Y., assignor, by mesne assignments, to North East Appliance Corporation, Rochester, N. Y., a Corporation of New York. Original application filed July 10, 1925, Serial No. 42,760. Divided and this application filed Apr. 2, 1926. Serial No. 99,290. 7 Claims. (Cl. 177—7.)



1. In an electromagnetic horn, the combination of a vibratory assembly, including a diaphragm and an armature mounted on the rear thereof; a housing supporting the diaphragm; an electromagnet cooperative with the armature and mounted upon the housing; a plate lying substantially parallel with the diaphragm, means pivotally supporting said plate, adjacent the wall of the housing, at one side of the armature, a stationary contact and a spring-blade fixed on said plate, said spring-blade carrying a movable contact and projecting into position to be actuated by a part of the vibratory assembly near the center thereof; arms projecting rearwardly from the plate; a cross-bar engaging said arms; means biasing said arms toward the cross-bar; and means accessible from the outside of the housing for adjusting the position of the cross bar.

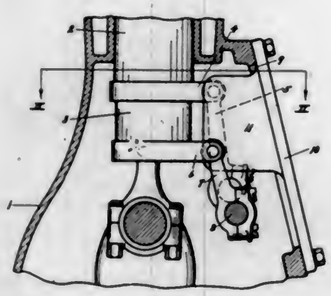
1,759,444. SAMPLE THIEF. WILLIAM D. DUNN, Elizabeth, and ROBERT JEFFERYS, Carteret, N. J.; said Dunn assignor to Retta Harriet Dunn, Elizabeth, N. J. Filed Feb. 5, 1929. Serial No. 337,574. 8 Claims. (Cl. 137—13.)



1. A sample thief comprising a normally closed casing adapted to be lowered into liquid; a cord supporting said casing; and means actuated by said cord to open said casing at any desired elevation.

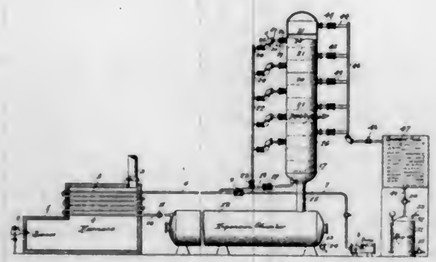
1,759,445. SLEEVE VALVE. HENRY J. EDWARDS, Toledo, Ohio, assignor to The Willys-Overland Company, Toledo, Ohio, a Corporation of Ohio. Filed June 19, 1929. Serial No. 372,009. 7 Claims. (Cl. 123—75.)

1. In a sleeve valve internal combustion engine an assembly comprising a sleeve having an apertured lug projecting therefrom, a connecting rod for reciprocating said sleeve, and a pin extending through said connecting rod and said lug; means for preventing displacement of said



pin in one direction, and means independent of said assembly adapted to be positioned adjacent said pin for preventing displacement of said pin in the opposite direction.

1,759,446. APPARATUS FOR CRACKING OIL. GUSTAV EGLOFF and HARRY P. BENNER, Chicago, Ill., assignors to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Mar. 28, 1921, Serial No. 456,221. Renewed Mar. 18, 1929. 2 Claims. (Cl. 196—107.)

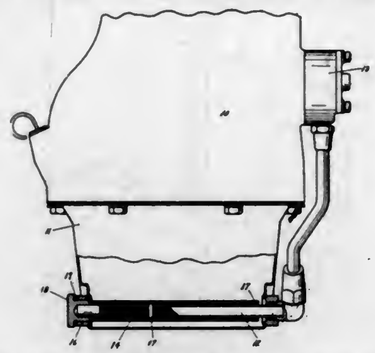


1. In an apparatus for treating hydrocarbon oil, a heating coil located in a furnace, an expansion chamber located outside the furnace, a dephlegmator in communication with said expansion chamber, means for initially supplying raw oil to said coil, means for diverting the supply of raw oil from said coil and means for passing said diverted raw oil through a plurality of independent streams into separate portions of said dephlegmator, means for controlling the volume and velocity of the oil being introduced through each of said streams, means for taking off uncondensed vapors from said dephlegmator and means for condensing and collecting the said vapors.

1,759,447. INTERNAL-COMBUSTION-ENGINE OIL STRAINER. WALTER S. FISHER, Toledo, Ohio, assignor to The Willys-Overland Company, Toledo, Ohio, a Corporation of Ohio. Filed May 31, 1927. Serial No. 195,241. 3 Claims. (Cl. 210—170.)

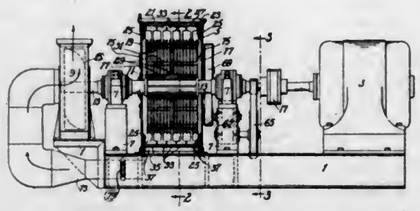
1. The combination of an oil pan having a bottom and side walls for an automobile engine having a horizontal oil withdrawal tube supported by one of said side walls,

and an aperture in the opposite side wall in alignment with the tube, a removable tubular screen adapted to be



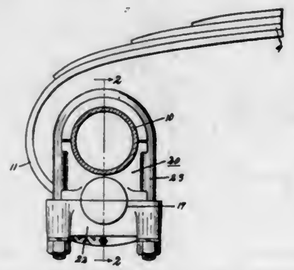
inserted through the aperture, said screen being cooperatively disposed with respect to the tube whereby oil withdrawn from the pan passes therethrough.

1,759,448. GRINDER. EDWARD H. FRICKEY, St. Louis, Mo., assignor to Dixie Machinery Manufacturing Company, St. Louis, Mo., a Corporation of Missouri. Filed Oct. 21, 1927. Serial No. 227,715. 4 Claims. (Cl. 83—11.)



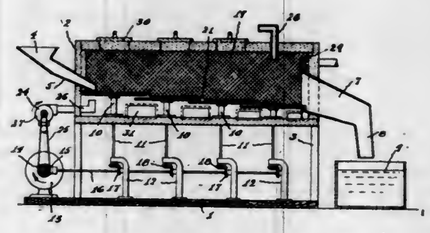
1. In a grinder, a separately removable and flexible screen, means for supporting said screen comprising a plurality of hinged members, one of which is hinged on the grinder and an adjustable support for the other hinged member, said support having means for permitting movement of said other hinged member about a center other than said hinge on the grinder and means for predetermining the movement of the member hinged to the grinder independently of said other hinged member, whereby space may be attained permitting removal of said screen.

1,759,449. SPRING SHACKLE. HARVEY D. GEYER, Dayton, Ohio, assignor to The Inland Manufacturing Company, Dayton, Ohio, a Corporation of Delaware. Filed Dec. 20, 1926. Serial No. 155,801. 7 Claims. (Cl. 267—41.)



1. In combination with a cantilever spring, and stationary axle of a motor vehicle, a shackle interconnecting the spring end with said axle, comprising: a transverse metal bar of greater length than the width of the spring end and rigidly fixed to said spring end, an elastic rubber block surrounding said spring end and bar, and a metal housing supported by said axle and confining said rubber block under compression and having an opening therein of sufficient dimensions to clear the spring where it passes therethrough whereby said spring end may pivot within said housing by internal distortion of the elastic rubber block.

1,759,450. METHOD AND APPARATUS FOR TREATING HOT GALVANIZED ARTICLES. CHARLES A. GIBLIN, Westfield, N. J., assignor, to Henry B. Newhall Corporation, Garwood, N. J., a Corporation of New Jersey. Filed Sept. 15, 1928. Serial No. 306,162. 13 Claims. (Cl. 91—50.3.)



1. A method of the class described which consists in subjecting a coated article to intermittent impacts in a confined channel, and moving said article in an irregular path through said channel whereby excess coating on said object is removed.

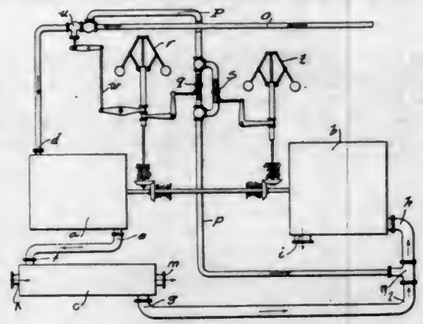
10. In an apparatus of the class described, a chamber, means to move metal coated articles in a progressive series of intermittent paths through said chamber, means in said chamber to limit lateral movement of said articles as they travel through said series of paths and simultaneously jar said articles by impact, thereby removing excess metal coating thereon, means in said chamber to keep said articles moving means free of metal coating, and means providing closable cleaning apertures associated with said chamber whereby to remove thrown metal from said limiting means and the interior of said chamber.

1,759,451. COSMETIC APPLIANCE. FANNIE B. GORDON, Chicago, Ill. Filed Mar. 21, 1929. Serial No. 348,821. 8 Claims. (Cl. 132—78.5.)



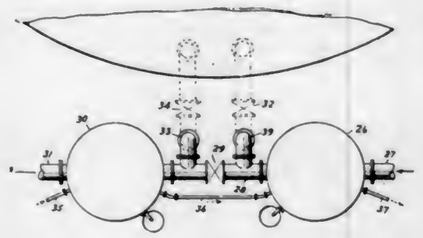
1. In a device of the character described, a pad of pliable soft material having a pocket, extending axially through the mass of soft material and surrounded on all sides by said material, a container for cosmetic material insertable into the pocket, and means for frictionally retaining the container within the pocket.

1,759,452. PROCESS AND APPARATUS FOR REGULATING MULTISTAGE STEAM ENGINES OF THE HIGH PRESSURE TYPE. OTTO H. HARTMANN, Cassel-Wilhelmshohe, and FRIEDRICH WEMPE, Cassel, Germany, assignors to Schmidt'sche Heissdampf, G. m. b. H., Cassel-Wilhelmshohe, Germany, a Corporation of Germany. Filed Oct. 8, 1924, Serial No. 742,302, and in Germany Oct. 30, 1923. 11 Claims. (Cl. 60—73.)



4. A multiple stage steam engine having a superheater for superheating the steam on its passage from one stage to the next, a device for regulating the passage of steam from said superheater to the said next stage, a governor operated by the engine according to its number of revolutions, a cylinder, a piston movable in said cylinder and operatively connected with said regulating device, a connection for exposing one side of said piston to the pressure prevailing in the passage between the superheater and said next stage, another connection for exposing the other side of said piston to a different pressure, and an operative connection by which said governor controls said second named connection.

1,759,453. GAS CONDENSER. JOHN S. HAUG, Philadelphia, Pa., assignor to United Engineers & Constructors Inc., Philadelphia, Pa., a Corporation of Delaware. Filed May 6, 1929. Serial No. 360,801. 4 Claims. (Cl. 257—24.)

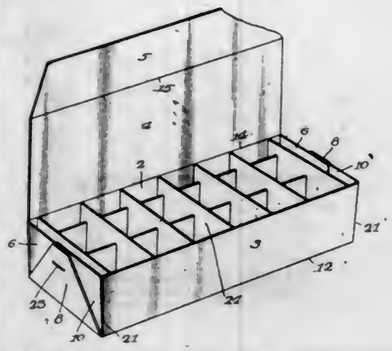


1. Apparatus for cooling and storing gas including a relief holder, a condensing chamber on the inlet side of the holder, a second condensing chamber on the outlet side of the holder, means for connecting said condensing chambers together, and means for passing a stream of a cooling agent progressively through both condensing chambers in counter current relation to the flow of gas therethrough.

1,759,454. URANIUM METAL AND PRODUCT AND PROCESS OF MAKING THE SAME. JOHN ALLEN HEANY, New Haven, Conn., assignor, by mesne assignments, to Arcturus Radio Tube Company, Newark, N. J., a Corporation of Delaware. Filed Oct. 22, 1925. Serial No. 64,255. 3 Claims. (Cl. 75—1.)

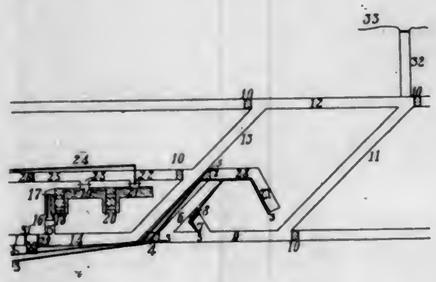
1. An alloy of uranium and molybdenum, the uranium not exceeding 5% of the constituents of the alloy.

1,759,455. CARTON. MILTON HINKLEY, Benton Harbor, Mich. Filed Sept. 25, 1926. Serial No. 137,639. 6 Claims. (Cl. 229—31.)



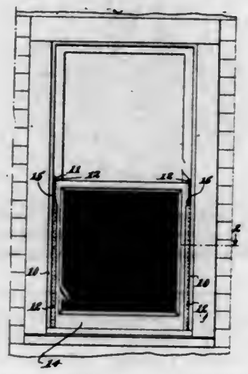
1. In a carton formed from a single blank, the combination of flat end walls inclined outwardly, flat front and rear side walls inclined outwardly at an angle, a flat bottom wall, and a flexible rectangular cover integral with the rear side wall, whereby each carton body is rectangular at top and bottom and shaped to nest one carton within another, to form a stack of cartons for shipment or storage, with the cover of each carton protruding from the side of the stack, said end walls being formed of sheet material folded and doubled back upon itself and creased to obviate cutting through the material and to form stronger end walls to protect the contents of the carton, providing inside overlapping flaps having straight end edges, and an outside upwardly tapered flap of more than one thickness for each end of the carton, forming an overlap inside each end wall, with the straight upper edge of each outside flap necessarily positioned flush with the straight upper edges of the inside flaps in the folding of the blank to obtain said inclined angle of the front and rear walls, said inside end edges extending downward from the top edge of each flap to points below, with the overlap between these two edges at each end of the box, and with each outer flap wide enough to cover the entire overlap, each inside flap comprising only a single thickness of the blank, whereby said overlap is of double thickness only.

1,759,456. PROCESS OF EXTRACTING USEFUL ELEMENTS FROM THEIR ORES BY THE AID OF GASES. BJARNE HOFSETH, Leirbotn, Norway. Filed Aug. 25, 1927, Serial No. 215,508, and in Norway Sept. 10, 1926. 3 Claims. (Cl. 262—1.)



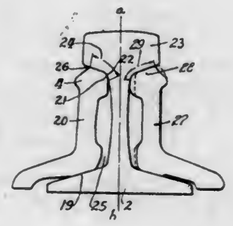
1. The process of extracting metals and other useful elements in metallic minerals from the ore, without mining the ore, by bringing suitable gases to act upon heated surfaces within the orebody under such conditions that thereby the useful elements in the metallic minerals present in the orebody are transferred into some volatile product which after suitable treatment may be utilized.

1,759,457. SCREEN SLIDE. ALBERT A. KAMIN, Chicago, Ill. Filed Sept. 7, 1928. Serial No. 304,402. 2 Claims. (Cl. 156—14.)



2. A screen slide adapted to be attached to the blind stop of a window frame for engaging the edge of a screen, comprising a channel shaped member having a flat portion adapted to be disposed against said blind stop, and two parallel lateral side flange portions, each of said flange portions being bent inwardly upon itself for a short distance, said entire channel shaped member adapted to extend substantially half the distance from the window sill to the window head, and the upper portion of one of said side flange portions being cut away at the upper end thereof to facilitate insertion and removal of a screen, said flat portion provided with a plurality of spaced indentations for the reception of fastening elements, substantially as described.

1,759,458. RAIL JOINT AND BAR. GEORGE LANGFORD, Joliet, Ill., assignor to McKenna Process Company of Illinois, Joliet, Ill., a Corporation of Illinois. Filed Dec. 23, 1929. Serial No. 415,910. 10 Claims. (Cl. 238—243.)



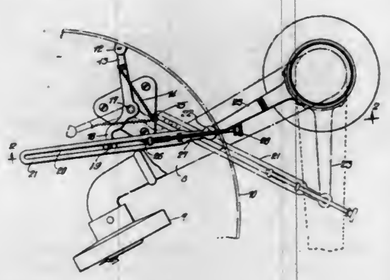
10. A rail joint bar adapted for head and flange fishing contact with the rail when applied in a rail joint, with the head fishing of the bar in contact with the rail from the upper outer corner of the bar head to the bottom of the upper inner fillet thereof and the upper outer corner of the bar head spaced an appreciable distance inwardly from the lower outer corner of the rail head.

1,759,459. DISPENSING TOP FOR BOTTLED CARBONATED LIQUIDS. JAMES A. MURDOCK, Tulsa, Okla. Filed May 2, 1927. Serial No. 188,211. 14 Claims. (Cl. 225—22.)



10. A device of the character described comprising a hollow body adapted to be attached in sealing contact over the closure end of a container and having a discharge opening, and a combined closure perforating and valve member mounted in said body.

1,759,460. PHONOGRAPH STARTING AND STOPPING DEVICE. JOHN ROWLAND NOCK and CECIL JOHN NOCK, Brooklyn, N. Y. Filed May 26, 1928. Serial No. 280,755. 4 Claims. (Cl. 142—144.)

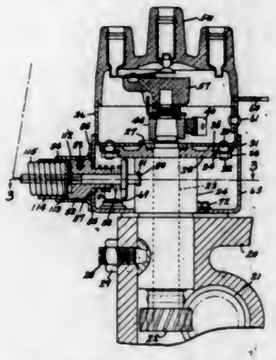


3. The combination with a phonograph having a record carrying turn-table and a tone arm movable thereover, of a base plate secured beneath said turn-table, a lever pivoted thereto, a spring connecting the lever and the base plate and arranged to move across the pivot point to urge the lever toward or away from the edge of the turn-table, a pin on the end of the lever, an extension on the tone arm, a slot receiving the pin and permitting movement thereof longitudinally of said arm, and an adjustable member in said slot for limiting the movement of said pin.

1,759,461. IGNITION APPARATUS. HARRY E. NORVIEL, Anderson, Ind. Filed Mar. 25, 1926. Serial No. 97,458. 10 Claims. (Cl. 200—19.)

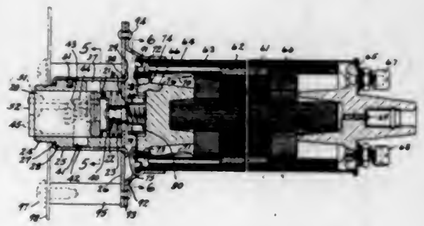
4. Ignition apparatus comprising, in combination, an engine having a frame and an engine operated shaft; a timer having a housing attached to the frame and a shaft supported by the housing and mechanically connected with the engine shaft; a switch having a case attached to the

frame by means accessible only within the switch case, and devices within the case for rendering the timer operative or non-operative, said case co-operating with the timer housing to provide an enclosure for said switch



devices and case attaching means; and key controlled means for locking the timer and switch case in assembled relation and for operating the switch so as to render the timer non-operative.

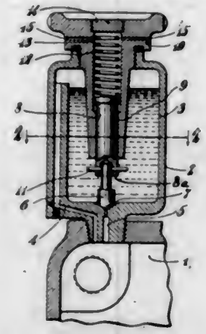
1,759,462. IGNITION COIL AND LOCK SWITCH. HARRY E. NORVIEL, Anderson, Ind., assignor to Delco-Remy Corporation, Dayton, Ohio, a Corporation of Delaware. Original application filed Aug. 21, 1926, Serial No. 130,615. Divided and this application filed Apr. 12, 1927, Serial No. 183,144. Renewed Oct. 2, 1929. 6 Claims. (Cl. 175—361.)



1. An electric switch controller and lock therefor comprising, in combination, a unitary sub-assembly including an operating member, a lock therefor, and a support for the operating member and lock and including a mounting plate; a unitary sub-assembly including an ignition coil having a cylindrical housing and an ignition switch mounted on one of the coil housing end walls, and a flanged collar attached to the coil cylindrical housing and extending beyond the end wall carrying the switch; and means for securing the flange to said plate, said plate and flange being adapted to provide a housing for the switch, and to locate the switch operating member in operative relation to the first mentioned operating member.

1,759,463. LUBRICATOR. ROBERT C. OSGOOD, Claremont, N. H., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed Oct. 1, 1921. Serial No. 504,800. 6 Claims. (Cl. 184—76.)

1. In combination, a chamber containing pressure fluid under substantially constant pressure, and means for feeding lubricant into said chamber comprising a lubricant reservoir, a passage for establishing communication between said chamber and said reservoir to place the lubricant in said reservoir under normally constant pressure, an outlet for lubricant from said reservoir to said chamber, a valve for controlling said outlet, and means presenting



an unbalanced area subjected to said normally constant pressure in said reservoir for automatically holding said valve open when pressure fluid is being supplied to said chamber.

1,759,464. PROCESS OF PRESERVING CITRUS FRUIT. PHILIP PHILLIPS, Orlando, Fla. Filed June 10, 1929. Serial No. 369,925. 1 Claim. (Cl. 99—11.)

That improvement in the process of producing canned citrus fruit, consisting in removing the peel or skin and the core of the fruit and cutting the pulp in a plurality of locations to produce vertical sections of pulp having intermediate pieces of membrane.

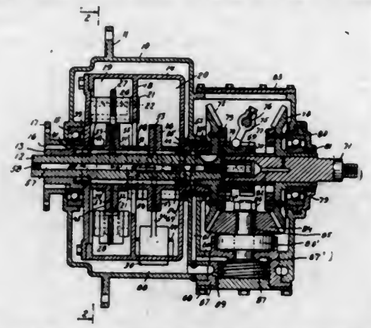
1,759,465. DEMOUNTABLE CONVEYING DEVICE. WILLIAM POLGAR, New York, N. Y. Filed July 13, 1929. Serial No. 378,018. 5 Claims. (Cl. 104—126.)



1. A demountable conveying device, comprising platform sections adapted for connection in end-to-end relation, a carriage movably mounted on said platform sections and adapted for receiving a hook connected for supporting furniture and the like, means for holding said carriage stationarily any place along the length of the platform sections, means for retarding speed of motion of said carriage when not held, adjacent ends of each of the sections being provided with brackets having vertical portions and overlapping horizontal portions, a transverse beam over each joint between adjacent platform sections and between said vertical portions and formed with a center pin engaging through apertures in said horizontal portions and also formed with downturned ends, and columns receiving said downturned ends for supporting the platforms upon a floorway or stairway.

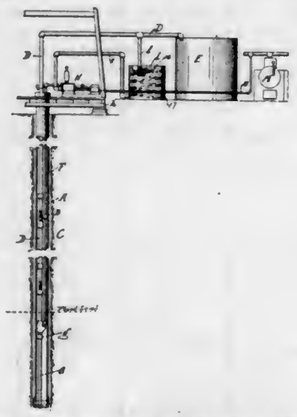
1,759,466. AUTOMATIC SPEED-CHANGE MECHANISM. FINLEY R. PORTER, Port Jefferson, N. Y., assignor to John Dale, trustee. Filed Aug. 21, 1929. Serial No. 387,338. 20 Claims. (Cl. 74—14.)

1. In an automatic speed change mechanism, the combination of a driving member, a driven member, variable motion means positively connected to said driven member for joint movement in one direction in substantially constant angular relation, a device permitting limited relative movement between them in the opposite direction, centrifugal means connected to said driving member, and



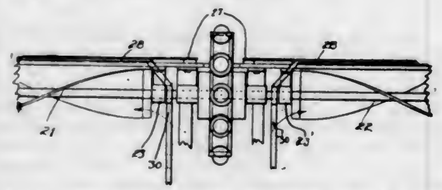
variable connections between said means controlled by the relative torques of said members, said connections constituting the driving connection between said means.

1,759,467. SYSTEM AND MEANS OF ELEVATING FLUID. JOSEPH H. SLOCUM, Los Angeles, Calif. Filed Sept. 20, 1923. Serial No. 663,914. 2 Claims. (Cl. 103—232.)



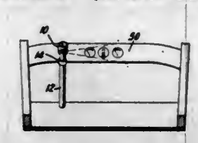
1. The method of elevating oil having a gasifiable constituent, from an oil well which consists in introducing into a body of such liquid in the lower end of an eduction tube oil heated to a temperature sufficient to gasify said constituent, the introduction of the second mentioned liquid being in such a way as to produce an entrainment of the first mentioned liquid.

1,759,468. AEROPLANE PROPELLER. CHARLES E. SMITH, Oroville, Calif. Filed Sept. 5, 1928. Serial No. 304,043. 6 Claims. (Cl. 244—16.)



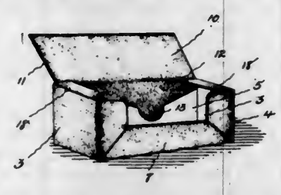
6. In combination with an aeroplane having a wing with a longitudinal chamber in the front edge thereof, a propeller in said chamber and means for opening and closing the lower portion of said chamber.

1,759,469. INSTRUMENT ILLUMINATOR. HAROLD W. SMITH, Port Huron, Mich. Filed July 14, 1928. Serial No. 292,879. 4 Claims. (Cl. 240—8.28.)



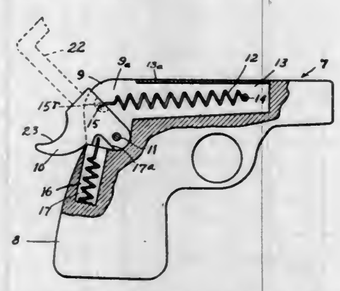
1. In an automobile instrument, a meter casing having an opening therein, an illuminator for said instrument mounted in said casing, and a shutter controlling the casing opening and having an aperture therein, to permit rays from the aforesaid illuminator to illuminate other automobile parts, said shutter being slidable upon the casing to adjust the position of the shutter aperture, and being effective to prevent the escape of light otherwise than through such aperture.

1,759,470. FOLDING, PACKING AND DISPLAY CONTAINER. ARNOLD J. TANNER, North Haven, Conn. Original application filed Apr. 18, 1928, Serial No. 270,924. Divided and this application filed Feb. 4, 1929. Serial No. 337,205. 5 Claims. (Cl. 206—44.)



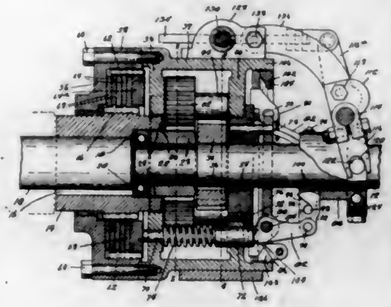
1. A container and cover therefor composed of a single blank comprising a body portion with a lateral extension therefrom, said body portion forming the cover, back wall and bottom of the container, said extension being united to said body to form the front and end walls of the container, a depending portion of said body portion connected to said back wall providing the bottom of the container, the free end of said depending portion being arranged to fold over said front wall whereby said bottom is held in a suspended position, and an upwardly extending portion of said body in substantial alignment with said depending portion being arranged to form said cover.

1,759,471. BOOMERANG-THROWING DEVICE. DON V. TANTLINGER, Sherman, Calif. Filed Apr. 3, 1928. Serial No. 266,954. 1 Claim. (Cl. 124—1.)



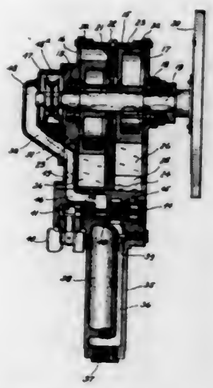
A boomerang thrower having a body portion which simulates a fire-arm, and having a groove channelled out longitudinally of the barrel thereof, a plate secured over said groove to convert it into an elongated chamber, a trigger adapted to throw a missile stationed near one end of said chamber, and a tension spring in said chamber to actuate said trigger.

1,759,472. REVERSING MECHANISM. HENRY A. TUTTLE, Upton, Mass.; Jennie L. Tuttle executrix of said Henry A. Tuttle, deceased. Filed July 9, 1928. Serial No. 291,333. 21 Claims. (Cl. 74—34.)



1. Reversing mechanism including the combination of driving and driven shafts, gearing to secure reverse drive including a gear carried by said driven shaft, a hub carried by said driving shaft, a flexible positive driving connection between said hub and gear which permits both to rotate freely in angular displacements thereof, a gear fixed to the driven shaft, planetary pinion gears meshing with the aforesaid gears, an axially fixed carrier for said pinion gears, and means to hold said carrier stationary for reverse drive.

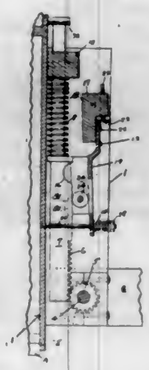
1,759,473. ROTARY MOTOR TOOL. JOHN J. N. VAN HAMERSVELD, Cleveland Heights, Ohio, assignor to The Rotor Air Tool Company, Cleveland, Ohio, a Corporation of Ohio. Filed Oct. 12, 1927. Serial No. 225,682. 6 Claims. (Cl. 121—34.)



1. In a fluid pressure tool, a motor having a stationary portion provided with a lateral extension and having a cylinder bore, a spindle having a rotor in the cylinder bore, a handle secured to said extension and having a fluid passageway extending therethrough, a governor at one end of the spindle and passageways for conducting fluid from the handle to the governor and from the governor back to the said lateral extension.

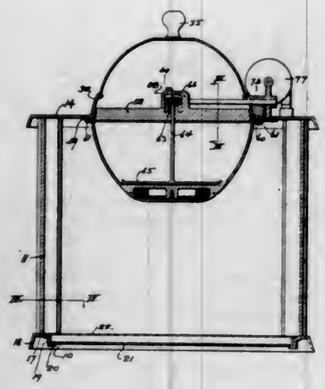
1,759,474. SPRING HINGE FOR ICE-BOX DOORS. LELAND J. VOLQUARDSEN, San Francisco, Calif. Filed Apr. 10, 1928. Serial No. 268,826. 14 Claims. (Cl. 16—190.)

1. A hinge of the character described comprising a housing, a bar reciprocally supported upon the housing, means associated with the housing and door and adapted for connection with the door, which means when the door with which it is connected is moved into open and closed positions will reciprocate said bar, a spring associated with



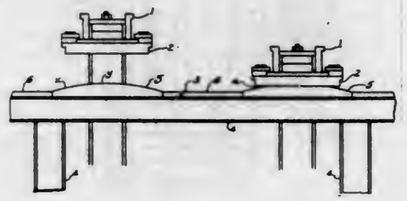
said housing and bar, which spring acts as a counterbalance for the door, and a spring urged detent means operating to automatically accelerate the closing of the door when the door is in nearly closed position and to hold the door in closed position against unintentional opening movement.

1,759,475. CORN POPPER. TITUS S. WALKER, Memphis, Tenn. Filed May 15, 1929. Serial No. 363,284. 8 Claims. (Cl. 53—4.)



1. In a corn popper, a top having a circular opening therethrough, a removable cover disposed thereover, a popping pan hingedly secured to the underside of said top, and fixedly mounted stirring means, comprising a bar spanning said top opening and secured at each end to said top, a vertically disposed stirrer rod journalled in said bar, stirrer arms carried thereby adapted to coact with said pan, an end of said rod projecting above said bar, a gear thereon, a horizontal shaft disposed parallel with said bar, a gear on said arm meshing with said rod gear, a motor mounted on said top, and gearing connecting the shaft of said motor and said horizontal shaft for actuating said stirrer rod.

1,759,476. WORK-SUPPORTING MEMBER FOR PRINTING MACHINES. FRANK M. ALLEN, Summit, N. J., assignor to Congoleum-Nairn, Inc., a Corporation of New York. Refiled for abandoned application Serial No. 218,636, filed Sept. 10, 1927. This application filed Mar. 21, 1930. Serial No. 437,647. 5 Claims. (Cl. 101—407.)

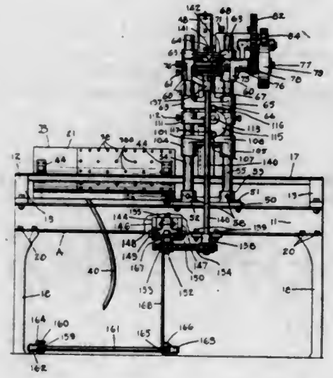


1. In a bed-and-platen print machine, in combination, a printing member having a flat printing surface and a resilient work-supporting member, including a normally convexed spring plate, adapted to be flexed to a substantially flat work supporting surface during the printing operation.

1,759,477. ALLOY OF HIGH SURFACE STABILITY COMPRISING NICKEL AND SILICON. PERCY A. E. ARMSTRONG, Loudonville, and RALPH P. DE VRIES, Newtonville, N. Y., assignors, by direct and mesne assignments, to Ludlum Steel Company, Watervliet, N. Y., a Corporation of New Jersey. Filed Jan. 7, 1921. Serial No. 435,706. 6 Claims. (Cl. 75—1.)

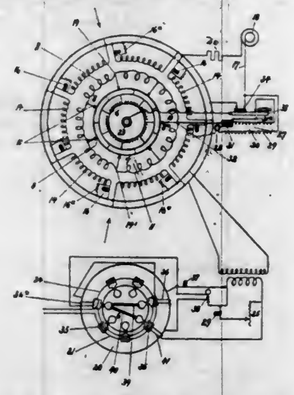
1. An alloy for resisting acid corrosion and oxidation at high temperatures, containing nickel in an amount greater than 20% and less than 60%, silicon in an amount greater than 3% and less than 9%, and the balance principally of iron.

1,759,478. SKINNING AND FATTING MACHINE. CARL G. G. BERGSTROM, St. Paul, Minn. Filed Apr. 18, 1928. Serial No. 270,899. 23 Claims. (Cl. 146—88.)



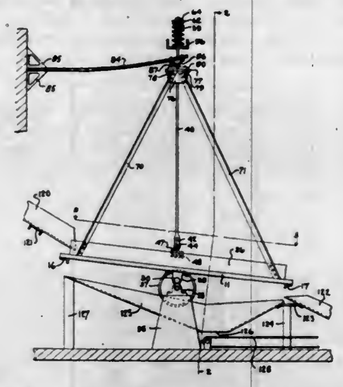
1. In a skinning and fatting machine, a support having a curved surface, a cutter having a curved cutting edge adapted to substantially conform to said surface and to move along said surface, means for supporting the object to be sliced upon said surface, and means permitting the movement of said cutter and support relative to one another to feed said cutter through the object skinned and along said surface.

1,759,479. TESTING INSTRUMENT. PENROSE E. CHAPMAN, St. Louis, Mo. Filed June 23, 1922. Serial No. 570,506. 35 Claims. (Cl. 175—183.)



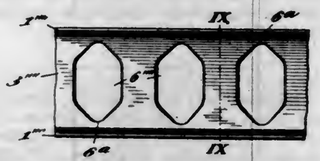
2. In an armature testing instrument, the combination of a plurality of transformers having their secondaries connected in series and current indicators connected in series with their primaries.

1,759,480. SIZING MECHANISM. KENNETH DAVIS, St. Benedict, Pa., assignor, by mesne assignments, to Rembrandt Peale, W. Sanders Davies, and William S. Wallace, trustees. Filed Aug. 21, 1924. Serial No. 733,328. 10 Claims. (Cl. 209—326.)



1. A sizing mechanism including in combination a perforate sizing bed, means for imparting to the bed a combined rising and falling and swinging movement, about axes which are above and below the bed, and means for resiliently supporting the axis about which the swinging movement takes place.

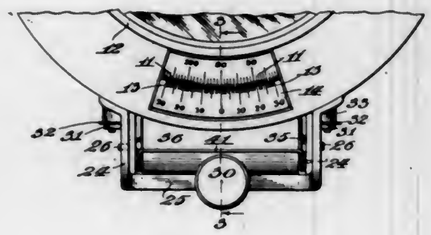
1,759,481. METAL ROLLING. ROBERT S. A. DOUGHERTY and NEVIL GREENWELL, Bethlehem, Pa. Filed May 7, 1927. Serial No. 189,690. 27 Claims. (Cl. 80—66.)



27. A process for producing open-work in metals including the steps of providing a plurality of scored, weakened

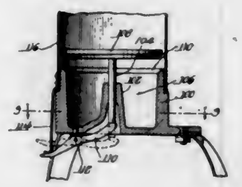
places in a blank, mechanically working the metal between weakened places to reduce the thickness of the metal to different degrees transversely of the direction of lengthening, thereby to elongate the metal between the weakened places to different degrees and thus develop the weakened places into openings.

1,759,482. ANGLE-RECORDING ATTACHMENT FOR TRANSITS. JOSEPH A. GENDRON, Los Angeles, Calif. Filed May 19, 1923. Serial No. 640,221. 2 Claims. (Cl. 234—1.)



1. The combination with an angle measuring instrument having a concentrically arranged scale and a vernier of a manually operable frame pivotally mounted on the instrument, and printing mechanism including a roll and platen carried by said pivotally mounted frame for taking impressions of portions of said scale and vernier.

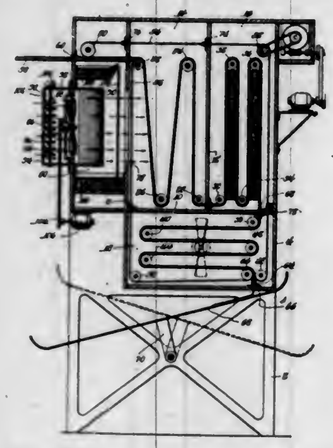
1,759,483. DEVELOPING APPARATUS. ADOLPH LANGSNER, Chicago, Ill., assignor to Eugene Dietzgen Company, Chicago, Ill., a Corporation of Delaware. Filed Dec. 22, 1927. Serial No. 241,780. 21 Claims. (Cl. 95—89.)



17. A developing apparatus comprising means forming a developing chamber having an opening, a separable closure for said opening, means formed and arranged in said closure for emitting developing gases into the chamber and manually operable means for controlling the emission of said gases into said chamber.

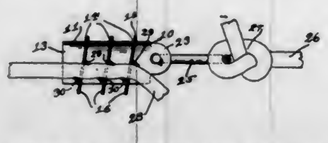
1,759,484. DEVELOPING APPARATUS. ADOLPH LANGSNER, Chicago, Ill., assignor to Eugene Dietzgen Company, Chicago, Ill., a Corporation of Delaware. Filed Mar. 7, 1928. Serial No. 259,751. 15 Claims. (Cl. 95—94.)

1. In a device of the class described, the combination of a frame, means for supporting light sensitive material therein, means carried in said frame and adapted to be saturated with liquid ammonia, means for blowing air



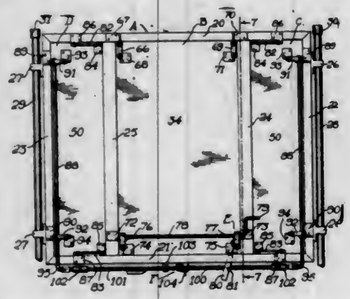
against said saturated means whereby to evaporate the saturant and to blow the same upon the light sensitive material.

1,759,485. LINE CLAMP. ALBERT L. LE PAGE, Oakville, Conn. Filed May 9, 1929. Serial No. 361,591. 13 Claims. (Cl. 24—115.)



1. In a line clamp, a U-shaped body member, means at one end of said body member for permanent connection to a line, a lever plate pivoted to the base of said body member, said lever plate having an aperture for receiving a second line, and a pair of parallel inclined oppositely extending clamping jaws disposed in vertical alinement at the upper and lower edges of said aperture, said jaws being adapted to engage said second line when the latter is under tension, and to be disengaged therefrom when the tension is released.

1,759,486. DISPLAY BOARD. EDWARD E. LEU, Chicago, Ill. Filed May 27, 1929. Serial No. 366,195. 14 Claims. (Cl. 40—63.)



1. A display board comprising three adjacent panels, a display section normally resting in each said panel, link

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hinges at the upper edge of the central section for connecting said section to its panel, pivotal means at the lower end of said central section for shifting the lower end of said section into and out of its normal position in its panel, link hinges connecting the outer sections to their panels respectively, pivotal means connected to each outer section for shifting the adjacent portion of said section forward out of its normal position in its panel, and connecting and operating means between the pivotal means on said outer sections for actuating said pivotal means to move said outer sections to and fro, toward each other to normal positions and from each other to open positions.

1,759,487. CRIB SHEET HOLDER. CAROLYN H. LOEB, San Francisco, Calif. Filed Sept. 11, 1929. Serial No. 391,830. 6 Claims. (Cl. 24—72.5.)



1. A sheet holder for beds comprising a cord having the mediate portion thereof in engagement with the foot of the bed whereby the opposite ends of the cord extend lengthwise of the bed into engagement with the sheet at the head of the bed.

1,759,488. BEAD CHAIN. NORMAN MARSHALL, Bridgeport, Conn. Filed July 9, 1927. Serial No. 204,596. 3 Claims. (Cl. 59—78.)

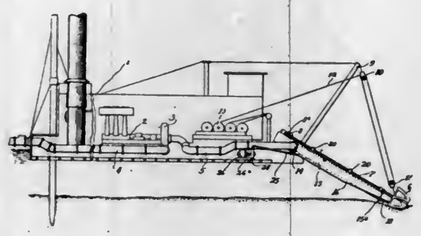


1. A chain of the character described made up of a plurality of like elements; each such element comprising a shank, an enlargement near one end of the shank and a substantially globular hollow structure at the other end of the shank, said hollow structure having an opening at the end thereof opposite the shank; the shank-enlargement of one element being housed in the hollow structure of the next element, said hollow structure of the last mentioned element, in the part thereof marginal to said opening, being bent back toward the shank-enlargement of the first-mentioned element as well as in toward the shank of said first-mentioned element.

1,759,489. PRODUCTION OF CELLULOSE ESTER COMPOUNDS. ALONZO S. MCDANIEL, New York, N. Y., assignor to Cellulose Utilities Corporation, a Corporation of Delaware. Filed June 4, 1923. Serial No. 643,425. 20 Claims. (Cl. 134—49.)

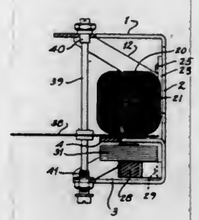
5. In the method of dissolving a cellulose ester, the step which comprises bringing the cellulose ester into intimate contact with uncombined monomethylamine in an amount corresponding to between about $\frac{1}{4}$ of one per cent and about five per cent of the dry weight of the cellulose ester compound.

1,759,490. HYDRAULIC DREDGING SYSTEM. ALOYS NEVELING, Chicago, Ill. Filed Jan. 16, 1926. Serial No. 81,649. 1 Claim. (Cl. 37—67.)



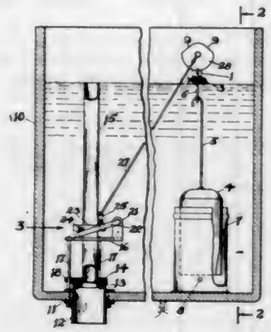
In a hydraulic dredge, a suction pipe, a pump for producing a suction and a predetermined entrance head in said pipe, and means for boosting said entrance head independently of said pump, said means comprising an annular chamber disposed in the inlet portion of said pipe and in communication with the interior inlet portion thereof at the point where the dredged material enters, through a plurality of annularly disposed and inwardly directed passages, apertured bushings adjustably carried in said passages, a water force pump connected to said annular chamber for forcing water under pressure to said annular chamber and through said apertured bushings, said bushings being adjustable relative to the outlet of said passages to determine the character of the jets passing therethrough and vary the entrance head pressure.

1,759,491. ELECTRIC METER MECHANISM. RICCARD PUDELKO, Zug, Switzerland, assignor to Landis & Gyr, A.-G., a Joint-Stock Company of Switzerland. Filed Mar. 4, 1926, Serial No. 92,139, and in Switzerland Mar. 10, 1925. Renewed Oct. 7, 1929. 10 Claims. (Cl. 171—264.)



8. In an electric meter structure, a unitary frame having a central portion and two angled end portions substantially parallel to each other, bearings for the meter disc shaft in the end portions, mountings for the coils and cores on the intervening structure, and a counterpole projecting from said central portion, and located between said end portions.

1,759,492. FLUSH TANK. WILLIAM H. SCHULTE, Trenton, N. J. Filed Feb. 24, 1928. Serial No. 256,728. 6 Claims. (Cl. 4—53.)

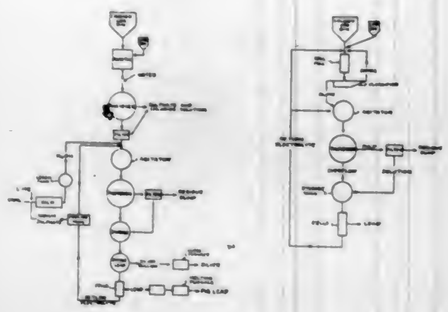


1. An apparatus comprising a tank, a flushing valve for allowing discharge from the tank, an operating mechanism for the valve including a handle on the exterior of the tank, a spindle for the handle extending through the wall of the tank, and a cam on the spindle and within the tank, means connecting the valve and operating mechanism whereby operation of the handle opens a valve, a float within the tank, and a member cooperating with the edge of said cam and operated by said float to maintain the cam in position corresponding to open position of the valve until the float falls to a predetermined level in the tank.

1,759,493. METHOD OF ELECTROLYSIS. URLYN C. TAINTON, East St. Louis, Ill. Filed Apr. 1, 1926, Serial No. 99,139. Renewed May 13, 1929. 8 Claims. (Cl. 204—4.)

1. An anode for use in the electrolysis of zinc and manganese salts, said anode consisting of an alloy containing lead and silver.

1,759,494. METHOD FOR THE RECOVERY OF LEAD AND OTHER METALS FROM ORES OR OTHER LEAD-BEARING MATERIALS. URLYN C. TAINTON, Johannesburg, Transvaal, South Africa. Filed Sept. 19, 1927. Serial No. 220,358. 4 Claims. (Cl. 204—15.)



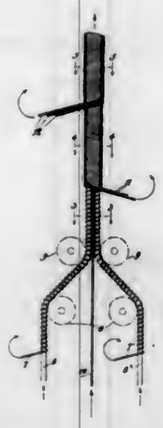
1. A method of recovering metallic lead from material containing carbonate or sulphate salts thereof, which consists in treating the material after grinding with a solution containing alkaline hydroxides to dissolve the lead as an alkali plumbite, separating the solution from the residue, electrolyzing said solution to precipitate metallic lead, removing the sulphate or carbonate radical from the solution, and employing the solution from leaching a fresh charge of material.

1,759,495. PROCESS AND DEVICE FOR DRYING TUBULAR BODIES. JULIUS VOSS, Wiesbaden-Biebrich, Germany, assignor to Kalle & Co., Aktiengesellschaft, Wiesbaden-Biebrich, Germany. Filed Mar. 28, 1929, Serial No. 350,664, and in Germany Sept. 15, 1927. 6 Claims. (Cl. 34—48.)



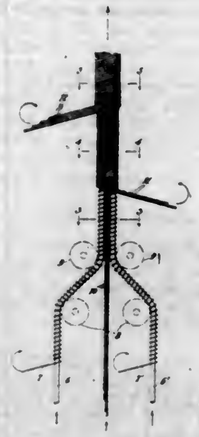
1. The process of drying tubular bodies of great length which consists in continually passing the tubular body in an inflated state through a drying chamber in such a manner that it runs in a straight line inside the drying chamber.

1,759,496. COVERED ELASTIC CORD. EDWARD WEINTRAUB, Brooklyn, N. Y. Filed July 23, 1929. Serial No. 380,442. 1 Claim. (Cl. 117—57.)



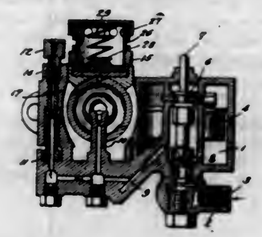
A covered elastic cord composed of a plurality of spirally wound elastic threads, a limiting thread interposed between said elastic threads, and a series of oppositely wound covering threads over the elastic and limiting threads.

1,759,497. COVERED ELASTIC CORD. EDWARD WEINTRAUB, Brooklyn, N. Y. Filed July 23, 1929. Serial No. 380,443. 1 Claim. (Cl. 117—57.)



A covered elastic cord composed of a plurality of spirally wrapped elastic threads, a plurality of adjacent limiting threads interposed between said elastic threads, and a series of oppositely wound covering threads over the elastic and limiting threads.

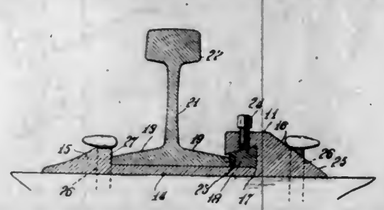
1,759,498. CARBURETOR. ATTILIO ABRATE, Rio de Janeiro, Brazil. Filed May 1, 1924. Serial No. 710,821. 1 Claim. (Cl. 261—41.)



A carburetor for explosion engines comprising a main carbureting chamber, a suction duct for said engine communicating with said chamber, a throttle valve pivoted therein controlling the communication of said carbureting chamber with said suction duct of the engine, an auxiliary carbureting chamber having a duct opening in said suction duct by a controlled opening beyond said valve and by a free opening adapted to be closed by the edge of said valve, said suction duct also having an opening beyond said valve communicating with the atmosphere, said auxiliary chamber duct also communicating with the atmosphere at one end thereof beyond said auxiliary chamber, two co-axial Venturi tubes disposed in said main carbureting chamber and spaced from each other and from the walls of said chamber defining an auxiliary air pocket, a main nozzle disposed with its outlet in the inner Venturi tube at the position of greatest suction, and a suction controlled air valve communicating with said air pocket adapted to introduce additional air about said main nozzle.

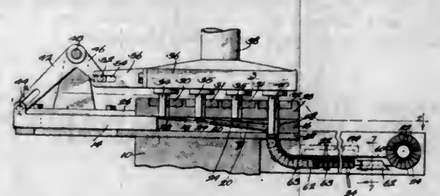
1,759,499. RAIL ANCHOR. MICHELE BRUNO, Chicago, Ill. Filed Apr. 28, 1927. Serial No. 187,302. 1 Claim. (Cl. 238—304.)

In an article of the class described adapted to secure a rail to a tie, having in combination, a plate having a bearing surface, an abutment extending upwardly from one end of said plate forming a shoulder, said shoulder having slots adapted to receive spikes terminating in apertures extending through said plate arranged so that spikes passing therethrough engage the rail above said bearing surface, another upwardly extending abutment oppositely disposed from said first named abutment forming a shoulder, an undercut portion in said last named abutment extending the entire length thereof, the vertical wall of said undercut portion being inclined longitudinally and the



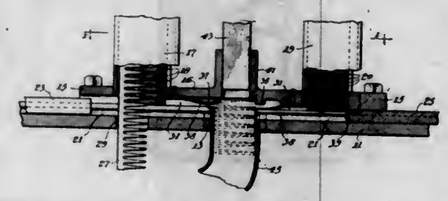
under side of the overhanging portion of said undercut being inclined downwardly and inwardly adapted to retain a key, the key being substantially trapezoidal in cross section and being tapered longitudinally to engage the longitudinally inclined vertical wall of the undercut portion when said key is forced into position whereby the key is urged against the rail to retain the latter in place on said bearing surface, and a set screw in said overhanging portion engaging the key to retain it against longitudinal movement.

1,759,500. COMMUTATOR-ASSEMBLY APPARATUS. LOUIS T. FREDERICK, Valparaiso, Ind. Filed June 7, 1927. Serial No. 197,145. 22 Claims. (Cl. 29—84.)



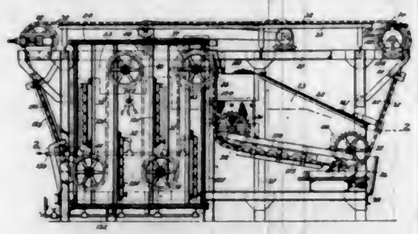
1. In a machine for assembling commutator segments, a ring chamber for arranging the segments circularly, and a guide for the segments terminating in the ring chamber.

1,759,501. COMMUTATOR-ASSEMBLY MECHANISM. LOUIS T. FREDERICK, Valparaiso, Ind., assignor to Chicago Mica Company, Valparaiso, Ind., a Corporation of Indiana. Filed Mar. 3, 1928. Serial No. 258,860. 20 Claims. (Cl. 29—84.)



1. In a machine for assembling commutators, an assembly channel, a plurality of ducts entering the channel radially, means for introducing commutator segments into the channel alternately from said ducts and means for forcing the segments through the channel.

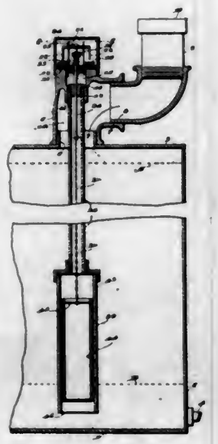
1,759,502. METHOD OF AND APPARATUS FOR COATING ARTICLES. JAMES SCOTT GEORGE and ROGER S. SPERRY, Waterbury, Conn., assignors to Scovill Manufacturing Company, Waterbury, Conn., a Corporation of Connecticut. Filed Aug. 11, 1925. Serial No. 49,524. 37 Claims. (Cl. 91—46.)



1. In an apparatus of the class described, and in combination, a tank for a lacquer bath, supporting means for a shell, conveyor means on which the supporting means is pivotally mounted, for conveying the supporting means past the tank to cause the shell to be submerged in the bath, a cam-engaging element on the supporting means, and a cam adjacent the tank for engagement by said element for causing the supporting means to tilt, thereby to tilt the shell while in the bath and permit the escape of any entrapped air.

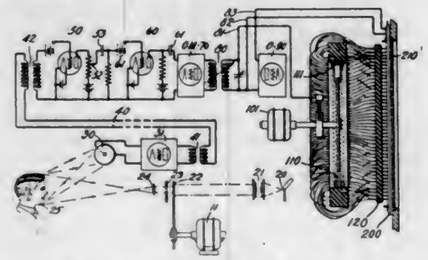
36. In an apparatus of the class described, and in combination, a supporting framework, a dipping tank located adjacent one end of the framework, a pair of endless chains having cross rods capacitated to receive article-supporting racks, sprockets over which the chain runs and positioned to give the chains a downward path toward the tank and an upward slant away from the tank, other sprockets positioned to give the chains an up and down zig-zag course from said upward slant to the opposite end of said framework, and means for driving the chains.

1,759,503. FLOAT SWITCH. GEORGE R. GEALACH and HENRY R. ARENTON, Spokane, Wash. Filed Apr. 2, 1928. Serial No. 266,840. 3 Claims. (Cl. 200—84.)



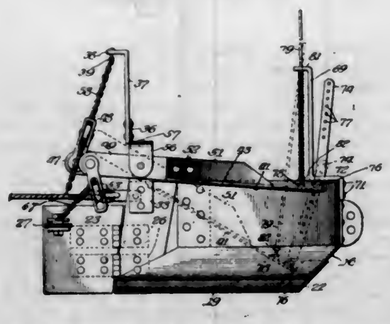
1. In a device for signaling depletion of liquid in supply storage, a tank adapted to contain a supply of liquid and having a lower draw-off pipe and an upper filling fitting, a shield tube secured in and depending from said fitting into said tank and being substantially out of communication with the entering liquid passing through said fitting, a cup shield near the bottom of said tank and open at its lower end to the contents thereof and having its upper end secured in open communication with the lower end of said tube whereby the liquid level in said tank and shield tube and cup shield will always be the same, a light weight signal actuating cup freely slidable in said cup shield and having an open top and adapted to contain a quantity of liquid to lower said cup when the level in said tank descends below the top of said cup, a circuit closing device in said fitting adapted to energize an alarm, a supporting line connected with said circuit closing device and with said cup, and a spring normally holding said circuit closing device in a circuit open position and supporting said cup in a predetermined position when said cup is immersed.

1,759,504. ELECTROOPTICAL TRANSMISSION. FRANK GRAY, New York, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 6, 1927. Serial No. 181,537. 20 Claims. (Cl. 178—6.)



1. In an electro-optical image producing system, a source of voltage having variations characteristic of the image to be produced, a lamp having a glow discharge chamber, and means for substantially continuously impressing upon at least a portion of said chamber a high frequency of substantially constant energy.

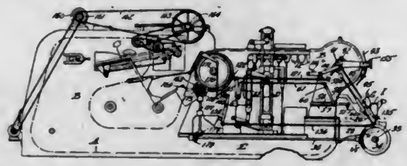
1,759,505. SCRAPER. LESLIE P. GREEN, Chicago, Ill., assignor, by mesne assignments, to Ira J. Wilson, Winnetka, Ill. Filed May 10, 1926, Serial No. 107,874. Renewed Apr. 12, 1930. 28 Claims. (Cl. 37—147.)



7. In a bottomless drag scraper, a load control member for predeterminately fixing the amount of load to be carried by said scraper, and means extending from the front of the side walls of said scraper for accomplishing side cutting.

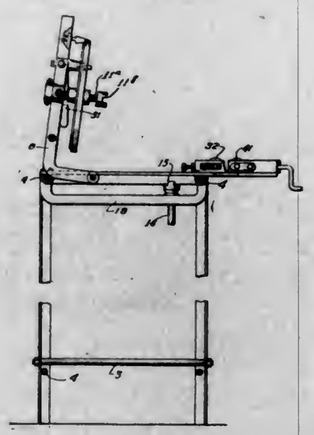
22. In a bottomless drag scraper, a load control member pivoted at its front end and having its rear end adapted to rise and fall in said scraper, cutting members pivotally connected to the forward end of said scraper, a member fulcrumed intermediate its ends on said scraper and operatively connected to said load control member, a pair of chains having one of their ends connected to said scraper and the other of their ends connected to their respective cutting members, and a plurality of members pivoted to said fulcrumed member and connected to the intermediate portions of said respective chains for operatively connecting said cutting members with said load control member.

1,759,506. BOTTLE-WASHING MACHINE. JOSEPH HAUK, Buffalo, N. Y., assignor to Rice & Adams Corporation, Buffalo, N. Y. Filed Sept. 14, 1926. Serial No. 135,381. 3 Claims. (Cl. 198—24.)



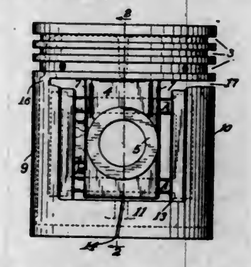
1. In a bottle washing machine, the combination of a conveyor movable in a vertical plane and adapted to support and pass bottles through said machine, an endless travelling feed chain, a table having a horizontal top formed with a recess having a portion extending in transverse relation to said conveyor at a distance therefrom and another similar portion adjacent said conveyor, and having end portions connecting said transverse portions, said chain having parts extending into said table recess and parts bearing on said table top respectively, for guiding and supporting said chain, a plurality of bottle rests mounted on said chain and each of which is adapted to have a bottle placed thereon while said chain is passing through said first mentioned portion of said table recess, means for advancing said chain to carry the bottles on said rests adjacent said conveyor, and means for then engaging said bottles and projecting them into said conveyor.

1,759,507. MACHINE FOR MAKING TIRE PATCHES. PAUL E. HAWKINSON, Minneapolis, Minn., assignor to Kehawke Manufacturing Co., Minneapolis, Minn., a Corporation of Minnesota. Original application filed Aug. 25, 1925, Serial No. 52,474. Divided and this application filed Dec. 16, 1927. Serial No. 240,354. 6 Claims. (Cl. 164—85.)



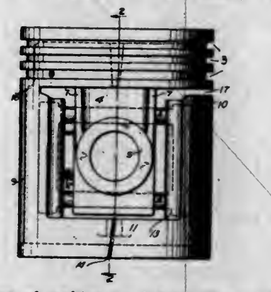
1. In a machine of the class described, an endless knife carried by two separated wheels, a pivoted frame supporting said knife and wheels whereby said knife and wheels may be swung as a unit from operative to an inoperative position, stock feeding means, power means to drive said knife, and means to feed stock to said knife.

1,759,508. PISTON. FRANK JARDINE, Cleveland, Ohio, assignor, by mesne assignments, to The Aluminum Company of America, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Sept. 23, 1926. Serial No. 137,194. 6 Claims. (Cl. 74—108.)



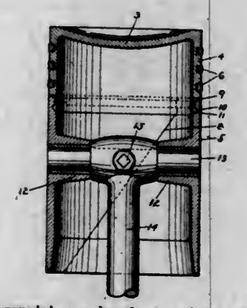
1. A piston having a head, and a skirt comprising two spaced bearing faces, one of which is integrally joined to the head at its center by rigid connecting portion lying in the cylindrical surface of the head and skirt and spaced therefrom at its sides.

1,759,509. METHOD OF MAKING PISTONS. FRANK JARDINE, Cleveland, Ohio, assignor, by mesne assignments, to The Aluminum Company of America, Pittsburgh, Pa., a Corporation of Pennsylvania. Original application filed Sept. 23, 1926, Serial No. 137,194. Divided and this application filed Mar. 19, 1928. Serial No. 262,641. 6 Claims. (Cl. 29—156.5.)



1. The process of making an insert piston which comprises casting the piston about the inserts, separating at least one bearing face from the piston head, heat treating at about 300° F. for about 50 hours, and then machining the casting.

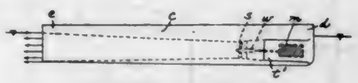
1,759,510. PISTON FOR MOTORS. CHARLES Y. KNIGHT, Pasadena, Calif., assignor to The Knight American Patents Company, Chicago, Ill., a Corporation of Delaware. Filed Apr. 30, 1919. Serial No. 293,650. 1 Claim. (Cl. 74—108.)



A piston comprising a head; a unitary cylindrical shell forming a depending trunk for said head; means for

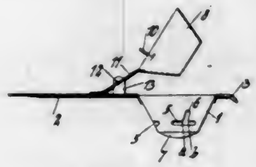
loosely and detachably securing the shell to the head whereby the shell may expand or contract without restraint of said head; oppositely disposed wrist pin bearings formed in the shell wall; one-half of the shell as bounded by an axial plane through the wrist pin bearings being solid throughout, and the opposite half of the shell having a symmetrically disposed and single split extending at an angle to the shell axis and cutting both free ends of said shell, the solid half of the shell being on that side of the cylinder which receives the lateral thrust of the piston during the power stroke.

1,759,511. COMBINED SHIP AND PROPELLER. LUDWIG KOBT, Hanover, Germany. Filed Sept. 20, 1928, Serial No. 307,162, and in Germany June 10, 1927. 5 Claims. (Cl. 115—39.)



1. A combined ship and propeller, comprising, in combination with the hull of the ship, a tunnel-forming member provided at its bottom and comprising a short conical front portion, the diameter of which increases quickly in the direction to the respective open end of the tunnel, and a long conical rear portion, the diameter of which increases slowly in the direction to the respective open end of the tunnel, said two portions communicating with one another at their narrow ends and one of them being twoparted; a propeller arranged at the place of communication of said tunnel portions, a motor between the parts of the twoparted tunnel portion, and a shaft connecting said motor and said propeller.

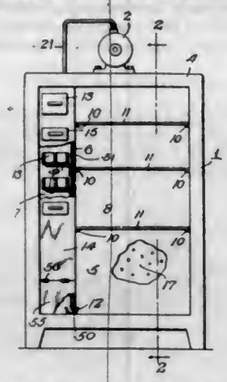
1,759,512. EGG SEPARATOR. HEINRICH KRAMER, Frankfort-on-the-Main-Hedderheim, and ALFONS VAN ROSSUM, Frankfort-on-the-Main-Eschersheim, Germany. Filed Nov. 10, 1928, Serial No. 318,561, and in Germany Mar. 18, 1927. 2 Claims. (Cl. 146—2.)



1. Egg separator comprising a conical container having a number of discharge openings and a handled conical funnel engaging the said container and being adapted to be lifted therefrom.

1,759,513. REFRIGERATOR. THOMAS J. LITTLE, Jr., Detroit, Mich., assignor to Copeland Products, Inc., Detroit, Mich., a Corporation of Michigan. Filed Aug. 16, 1926. Serial No. 129,312. 6 Claims. (Cl. 62—116.)

2. In combination, a refrigerator cabinet having a storage space therein, a sheet-like refrigerant expansion chamber extending between the top and bottom thereof positioned within said storage space and dividing the same into separate compartments of materially different volumes, and ledges in thermal contact with said expansion chamber for combined heat absorbing fins and receptacle supports.



1,759,514. ADJUSTER FOR OSTEOPATHIC USE. ELI E. LOOSE, Findlay, Ohio. Filed Dec. 14, 1927. Serial No. 240,030. 9 Claims. (Cl. 128—69.)



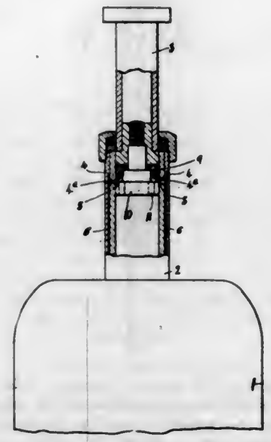
2. An instrument for osteopathic treatment of the spine, comprising a rod, means adapted to connect one end of the rod to a fixed support to permit the rod to be rocked about its longitudinal axis, an adapter pad provided with a convex active face and with a transverse groove extending through said face and gradually increasing in depth and gradually decreasing in width from its transverse center toward its ends, and means connecting the adapter pad to the rod for rocking movement therewith.

1,759,515. VENTILATION-CONTROLLING MEANS FOR CHICKEN BROODERS. REX W. MANEVAL, Frankfort, Kans. Filed Dec. 15, 1927. Serial No. 240,232. 3 Claims. (Cl. 119—34.)



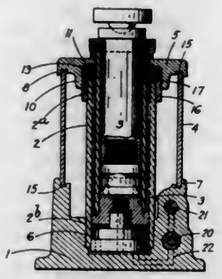
1. In a ventilation controlling means for chicken brooders, in combination with brooders of the kind described comprising a plurality of compartments, hingedly connected doors on the upper sides of each of the compartments and sides transversely positioned to the doors, whereby a circulating shaft is formed, a heating element and a moisture element at the base of the shaft, a duct in which said elements are positioned and means for introducing air to the duct, a fabric partition across each of the compartments spaced a short distance from the doors, and a thermostat supported by an arm and the upper side of the doors as opening and closing means therefor to control the temperature within the compartments.

1,759,516. HYDRAULIC JACK. HENRY CHIPMAN MILLER, London, England, and GEORGE PERCY SUMNER, deceased, London, England, by May Sumner, executor, Middlesex, England; said May Sumner, executor, assignor to said Henry Chipman Miller. Filed July 5, 1928, Serial No. 290,584, and in Great Britain July 6, 1927. 2 Claims. (Cl. 138—9.)



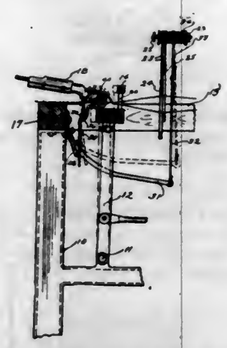
1. In a fluid pressure lifting and tipping jack comprising a ram having a cup leather and operating in a cylinder furnished with overflow vents through which excess of motive fluid can escape from the cylinder when the ram is raised to the limit of its lift, the combination with the overflow vents of an annular groove formed in the bore of the cylinder (about the inner ends of said vents) so as to co-operate with and form a guide and support for the cup leather of the ram as such cup leather is drawn past said vents.

1,759,517. HYDRAULIC JACK. HENRY CHIPMAN MILLER and EDGAR HARRY DAINTON, London, England. Filed Aug. 23, 1928, Serial No. 301,564, and in Great Britain Aug. 30, 1927. 2 Claims. (Cl. 138—9.)



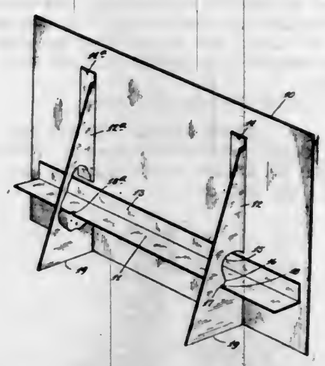
1. A hydraulic or other fluid pressure jack having a fixed ram cylinder furnished with an adjustable externally screw-threaded sleeve adapted to form a stop collar for the ram working in said cylinder, and a reservoir for the motive fluid formed by means of a loose shell or casing assembled to the base concentrically of said cylinder and clamped in position by a cover plate formed with a central perforated socket and a concentric recess, said socket being adapted to make threaded engagement with said externally threaded sleeve and to form in combination therewith a gland and stuffing box for the ram.

1,759,518. DOT-FILLING RETAINER. LAWLESS E. MONROE, Lakedale, N. C. Filed Mar. 20, 1929. Serial No. 348,485. 8 Claims. (Cl. 139—195.)



1. In a loom, a temple, a lay adapted to move to and from said temple, selvage retaining hooks adapted to be raised when the lay strikes the temple and to automatically lower when the lay leaves the temple and connections between said selvage retaining hooks and the harness mechanism of the loom whereby the selvage retaining hooks may be rendered inoperative at a predetermined time.

1,759,519. DISPLAY DEVICE. THOMAS FREDERICK MOORE, New York, N. Y. Filed Sept. 20, 1923. Serial No. 663,728. 3 Claims. (Cl. 40—146.)



1. A display device, comprising in combination with a display card, two braces formed of separate pieces of material each hinged to the back of the card so that it may be folded against the card within the limits thereof or turned to stand perpendicular thereto, said braces extending at an angle to each other and each extending substantially entirely across the back of the card to serve when turned to stand perpendicular thereto to prevent bending of the card, one of said braces being formed to serve as a prop for supporting the card in upright position and being wider than the other and having a recess through which the other brace extends, and said braces being provided with cooperating means to hold them both perpendicular to the card.

1,759,520. METHOD AND ARTICLE FOR WIPING INKY SURFACES. FRANK T. PARSONS, Jr., Washington, D. C. Filed Mar. 8, 1928. Serial No. 260,120. 6 Claims. (Cl. 101—156.)

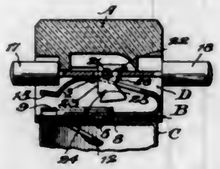
2. The method of removing undesirable ink from inky surfaces of engraving plates, cylinders, and the like which

consists in relatively passing over the ink surface flexible material having a ridged surface of an absorbent nature, the ridges being spaced and the material operating on the



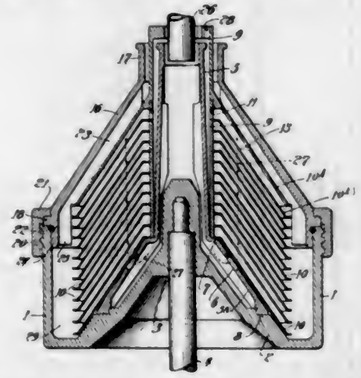
inky surface with ridges only in engagement with the inky surface during relative movement of the flexible material over the inky surface.

1,759,521. PUSH-SWITCH SOCKET. CARL M. PETERSEN, Trenton, N. J., assignor to Circle F. Mfg. Co., Trenton, N. J., a Corporation of New Jersey. Filed Feb. 14, 1928. Serial No. 254,290. 15 Claims. (Cl. 173—355.)



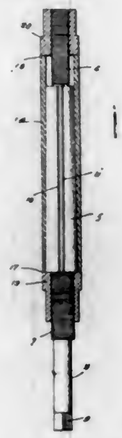
1. In a device of the class described, in combination with a body, a contact carried by said body, and a spring carried by said body normally spaced from said contact and movable into engagement therewith to complete an electrical circuit; a shiftable push bar, and an actuator carried by said push bar for engagement with said spring to force same into engagement with said contact when the push bar is moved in one direction, said actuator being pivoted to said push bar whereby it is adapted to engage with the spring upon movement of the push bar in an opposite direction to be rotated to permit quick release of said spring.

1,759,522. CENTRIFUGAL SEPARATOR. CARL SCHMITZ, Oelde in Westfalen, Germany. Filed Jan. 7, 1930, Serial No. 419,066, and in Germany Jan. 7, 1929. 9 Claims. (Cl. 233—20.)



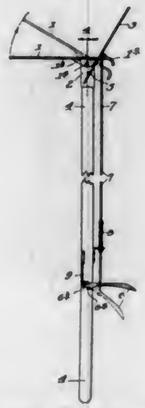
1. In an upright centrifugal separator, a rotating housing having a vertical axis and including a cover having an outlet at its top, a plurality of vertically spaced disks disposed within the housing, each disk having its periphery freely spaced from the inner wall of the said housing, and radial web members depending from the cover and extending inwardly of the housing to the top of the uppermost disk and substantially to the periphery of a plurality of upper disks, the said web members having their lower ends terminating above the peripheries of a plurality of disks.

1,759,523. ABRADING TOOL. JAMES E. SIMS, Santa Ana, Calif. Filed Apr. 23, 1929. Serial No. 357,485. 4 Claims. (Cl. 51—194.)



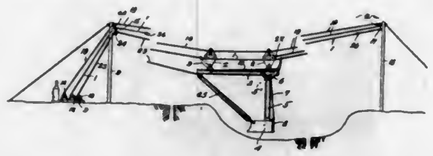
1. An abrading tool of the character referred to comprising a solid cylindrical mandrel having reduced threaded portions at its opposite ends, the threaded portion at one end merging with a shank, the shank having means at its outer end of angular contour and adapted to be gripped by an extraneous object to rigidly secure said mandrel thereto, said mandrel formed with a pair of circumferentially spaced sockets extending axially thereof, a pair of resilient clips frictionally supported in said sockets, an axially slotted tubular sleeve mounted on the mandrel, said slot registering with said pair of sockets, a sheet of abrading material circumposed on said sleeve and having the side edges thereof trained through said slot and anchored in said clips, a pair of nuts mounted on the threaded portions of said mandrel in abutment with the ends of said sleeve for securing said sleeve to said mandrel.

1,759,524. DEVICE FOR LIFTING GOODS FROM SHELVES. IRVING W. SMITH, Niagara, Wis. Filed Aug. 3, 1928. Serial No. 297,161. 4 Claims. (Cl. 294—19.)



1. A device for removing goods from shelves comprising, a stock, a shelf or platform pivotally mounted on said stock, a back member rigidly secured to said stock and offset at an angle from the vertical axis thereof, and means for tilting said platform into a position substantially at a right angle to said back member.

1,759,525. SLACKLINE EXCAVATOR. JOSHUA H. STREET, Chattanooga, Tenn. Filed June 11, 1928. Serial No. 284,625. 5 Claims. (Cl. 37—117.)

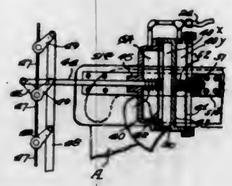


1. A slackline excavator including a track cable, a carriage mounted to travel therealong, a bucket connected to and suspended from the carriage, means for swinging the bucket relative to the carriage to fill the bucket and elevate the load, said means constituting a means for shifting the carriage in one direction along the track cable, means for shifting the carriage in the opposite direction along said cable, cooperating means on the carriage and track cable for discharging the load from the bucket when the carriage is brought to a predetermined position on the cable, and means for paying out the track cable to lower the carriage and bucket and for taking up said cable to elevate the carriage and bucket.

1,759,526. PREPARATION OF ROSIN SOLUTIONS. ANDRÉ THIRIET and PIERRE DELCROIX, Voiron, France, assignors, by mesne assignments, to Procédés Navarre, Lyon, France. Filed June 21, 1926, Serial No. 117,621, and in Germany Apr. 10, 1926. 3 Claims. (Cl. 134—21.)

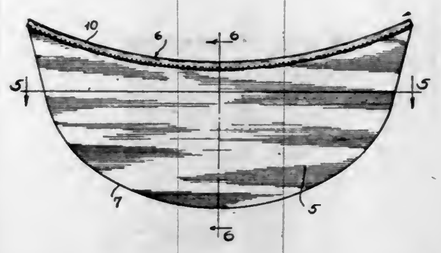
3. A clear solution, consisting of a completely saponified rosin-soda soap dissolved in a solution of caustic soda, the total content of soda, both combined and in solution, being less than 10 grammes per liter.

1,759,527. PRESSURE-CONTROLLED RADIATOR SHUTTER. PERCIVAL S. TICE, Chicago, Ill. Filed Jan. 15, 1927. Serial No. 161,457. 9 Claims. (Cl. 123—174.)



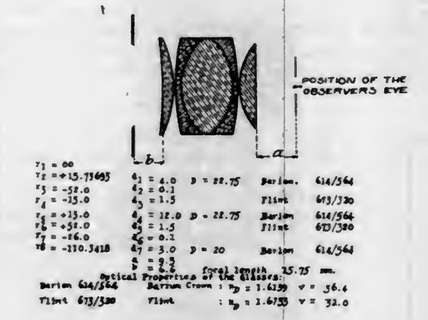
1. In a construction for the purpose indicated in combination with means for controlling air circulation through the radiator of a motor vehicle engine, an expansible and reducible device; operating connections to said circulation-controlling means from the movable element of such device by whose movability it is rendered expansible and reducible, and fluid pressure connections to said device from a variable pressure region of the engine, the area of said moving element being large enough to enable the same to operate said means to the limit in opening direction upon a minimum departure from atmospheric pressure developed by the running of the engine; a second expansible and reducible device having a movable element of substantially less area than the first, said second device having also fluid pressure connections from the engine, and its movable element being adapted to be actuated only upon predetermined degree of departure from atmospheric pressure, said element of said second device being connected for actuating the circulation controlling means of the radiator in closing direction upon and proportionately to such departure from atmospheric pressure.

1,759,528. STAY MEMBER FOR COAT NECKS. DANIEL E. TRACY, Ashtabula, Ohio. Filed Feb. 28, 1928. Serial No. 257,753. 1 Claim. (Cl. 2—255.)



A stay member for the rear neck portion of a coat, comprising a relatively stiff substantially crescent-shaped sheet having a curved upper edge conforming to the lower line of the coat collar and gradually decreasing in thickness and stiffness from the upper central portion toward the bottom and sides, said sheet embodying a single piece of flexible resilient material of non-absorbent homogenous character, having one face thereof flat and its other face arched outwardly.

1,759,529. OCULAR. CHRISTIAN VON HOFE, Berlin-Zehlendorf, Germany, assignor to The Firm Optische Anstalt C. P. Goerz Aktiengesellschaft, Berlin, Germany. Filed May 1, 1924, Serial No. 710,242, and in Germany May 5, 1923. 2 Claims. (Cl. 88—57.)

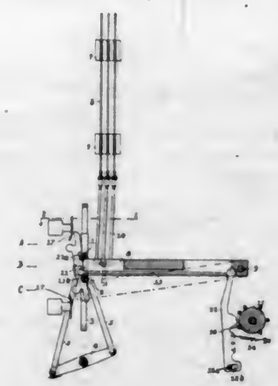


1. Ocular comprising a cemented three lens element and at each of its sides at a distance therefrom a collecting element, the collecting element on the image side of the intermediate three lens element being so positioned that the distance of its vertex from the focal plane adjacent to it is at least one third of the focal length of the ocular and the collecting element lying on the eye-side of the intermediate three lens element facing the latter with a convex surface.

1,759,530. LOOM SHEDDING MECHANISM. WILLIAM S. WELLS, Los Angeles, Calif., assignor, by mesne assignments, to Wonder Weave, Inc., Boston, Mass., a Corporation of Massachusetts. Filed Aug. 30, 1928. Serial No. 302,896. 8 Claims. (Cl. 139—67.)

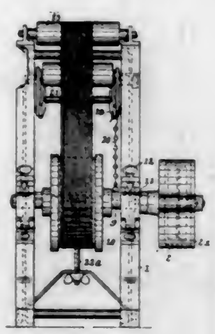
1. Means to effect shedding of warps in weaving including a pair of actuators reciprocating in opposite directions together toward and together from an intermediate plane, a shiftable warp-shifting system, a transfer coupler shiftable with said system and also oscillatory with respect thereto into coupling engagement with either and out of coupling engagement with the other actuator, and means

to oscillate the coupler including a back-and-forth movable member with respect to which the coupler is oscillatory,



and a link to transmit oscillations from said member to the coupler and pivoted to each of them and shiftable with the latter and with respect to the former of them.

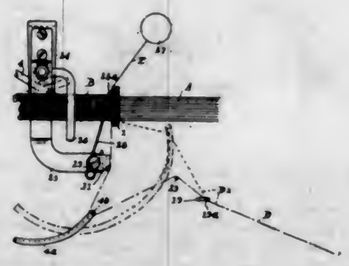
1,759,531. LET-OFF MECHANISM FOR LOOMS. WILLIAM S. WELLS, Los Angeles, Calif., assignor, by mesne assignments, to Wonder Weave, Inc., Boston, Mass., a Corporation of Massachusetts. Filed Sept. 5, 1928. Serial No. 304,060. 3 Claims. (Cl. 139—109.)



1. In combination, a loom frame, a unitary structure removably supported therein and comprising a support arranged at one side of the frame, a rotary warp-beam receiving member journaled in the support and projecting from the side thereof next to the frame and having means to interlock it with the beam for rotation therewith, and warp controlled means on the support to releasably hold said member from rotation.

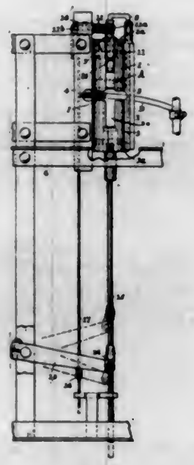
1,759,532. NEEDLE LOOM. WILLIAM S. WELLS, Los Angeles, Calif., assignor, by mesne assignments, to Wonder Weave, Inc., Boston, Mass., a Corporation of Massachusetts. Filed Oct. 3, 1928. Serial No. 310,160. 9 Claims. (Cl. 139—124.)

1. Mechanism for forming in the warp sheds produced in a stretched fabric-and-warp sheet loops of filling including a looper arranged to move forward from one side of the sheet through each shed as it is formed and back and having a filling-supporting surface sailently bent lengthwise of the path of movement of the looper and also having relatively forward of said surface a reeving guide for the filling, and means to tension and guide the tensioned filling to the looper having a substantially fixed



instrumentality to confine the filling to a guiding point at said side of the sheet and approximately in a plane cutting said sailently bent surface longitudinally thereof.

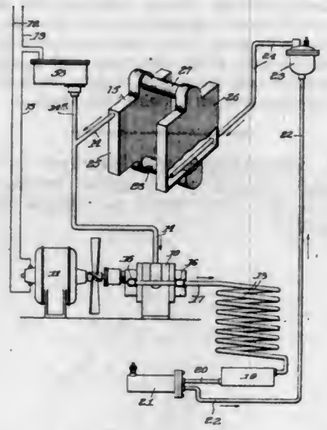
1,759,533. SHUTTLE-OPERATING MECHANISM. WILLIAM S. WELLS, Los Angeles, Calif., assignor, by mesne assignments, to Wonder Weave, Inc., Boston, Mass., a Corporation of Massachusetts. Filed Oct. 8, 1928. Serial No. 310,161. 16 Claims. (Cl. 139—124.)



1. In a mechanism for passing a yarn package back and forth with the yarn trailing therefrom, the combination of a yarn-package carrier movable back and forth in a given path and normally urged in one direction, means to guide the carrier in said path, releasable means to restrain the carrier against movement in said direction while so urged, and means to return the carrier to the latter means after each such movement.

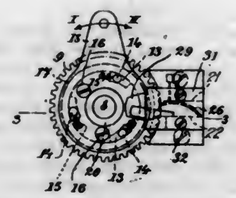
1,759,534. REFRIGERATING APPARATUS. GEORGE ANDERSEN, Chicago, Ill., assignor to W. B. Parkyn. Filed Dec. 18, 1926. Serial No. 155,646. 22 Claims. (Cl. 62—127.)

1. In refrigerating apparatus, the combination of a refrigerating element, a liquid-refrigerant course communicating with said element, means for delivering liquid refrigerant to said course, and valve mechanism in said course comprising a casing, a valve controlling the flow of refrig-



erant from said casing, and means controlling said valve and movable by the pressure of gas entering said casing, to close said valve.

1,759,535. DRIVING MECHANISM FOR INTERMITTENTLY-ROTATING SHAFTS. CARL LOUIS BACH, Limbach, Germany. Filed July 2, 1926, Serial No. 120,234, and in Germany July 16, 1925. 3 Claims. (Cl. 188—81.)

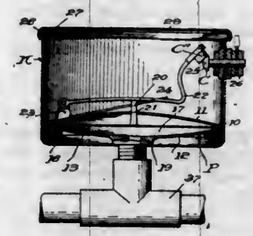


1. Means for preventing return movement of an intermittently revolved member, comprising in combination, a cylindrical member secured to said intermittently revolved member, a pair of rails fixedly mounted at one side of the axis of rotation, a lever member yieldingly mounted therebetween, having a notch with parallel walls adapted to engage the inner and outer surfaces of said cylindrical member, said lever member operating to yield and permit motion of said cylinder in one direction, but operating to automatically clamp said cylinder between its walls and prevent motion in the opposite direction.

1,759,536. METHOD OF MANUFACTURING YEAST. ARNOLD K. BALLS, Philadelphia, Pa., assignor of one-third to Martin Nilsson, Peekskill, N. Y., and one-third to Arthur W. Hixson, Leonia, N. J.; The National City Bank of New York, executor of said Martin Nilsson, deceased. Filed Dec. 24, 1925. Serial No. 77,592. 6 Claims. (Cl. 195—20.)

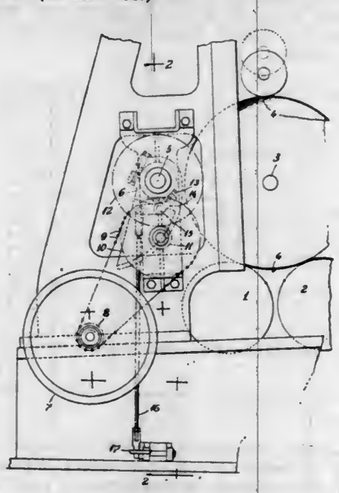
1. In a process of manufacturing yeast by propagation of a mash containing a yeast-fermentable carbohydrate and phosphate ions, the improvement which comprises controlling the hydrogen-ion concentration of the mash by supplying yeast available nitrogen in the mash in the form of carbamide and by periodically adding to the mash a salt of an acid substantially assimilable by yeast and a base relatively non-assimilable by yeast.

1,759,537. FLUID-OPERATED CIRCUIT CONTROLLER. WALTER C. BUCKBEE and ARTHUR R. BUCKBEE, Whittier, Calif. Filed Apr. 30, 1928. Serial No. 274,079. 3 Claims. (Cl. 200—83.)



1. A pressure operated circuit controller comprising a cylindrical casing having an open end, a pair of disks in the casing adjacent its open end, a flexible diaphragm interposed between the disks and co-operating with one of the latter to form a chamber at one side of the diaphragm, the disks and diaphragm having laterally projecting peripheral flanges extending in one and the same direction, with the flange of one disk nested within the flange of the diaphragm, and the flange of the diaphragm nested within the flange of the other disk, the flange of said other disk being nested within the casing at its open end, so that by crimping together the wall of the casing at its open end the flanges of the disks and diaphragm, the disks and diaphragm will be secured to each other and to the casing to close the open end of the latter and hermetically seal said chamber, the chamber being provided with a port through which pressure from a pressure creating device is adapted to be admitted to the diaphragm to actuate the latter, a stationary contact, a movable contact insulated from the stationary contact, and means operatively connecting the movable contact and diaphragm operable in response to movements of the latter to move the movable contact into or out of engagement with the stationary contact.

1,759,538. WINDING MACHINE. JAMES A. CAMERON, Brooklyn, N. Y., and GEORGE B. RICKARD, Glen Rock, N. J., assignors to Cameron Machine Company, Brooklyn, N. Y., a Corporation of New York. Filed Jan. 7, 1928, Serial No. 245,075. Renewed Nov. 16, 1929. 2 Claims. (Cl. 242—66.)



1. In a winding machine, the combination with two surface winding drums spaced apart and rotatable in the

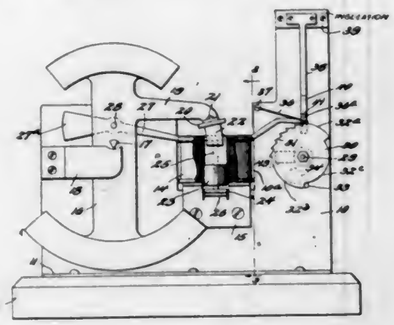
same direction, and a winding shaft to be placed in the valley between the drums and to support a roll of flexible material, of ejecting means to move the winding shaft and its roll of flexible material upwardly out of said valley and outwardly over one of said drums including a pivotally supported member and an actuating device therefor and a ratchet and pawl associated with said ejecting means to prevent backward and downward movement of said ejecting means.

1,759,539. CORING AND PEELING DEVICE. GUSTAV A. CARLSON, Chicago, Ill., assignor to The Boye Needle Company, Chicago, Ill., a Corporation of Illinois. Filed July 21, 1928. Serial No. 294,500. 2 Claims. (Cl. 146—53.)



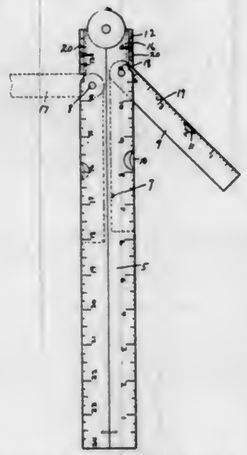
1. An apple-coring device, comprising a handle, and a tubular coring member having a cut-away side and a pointed piercing member, said piercing member having a symmetrically disposed core-severing member struck inwardly therefrom substantially in longitudinal alignment with the point of said piercing member and said piercing member having a cutting edge adapted to make an incision in advance of the base of the core-severing member during insertion of the implement.

1,759,540. SELECTOR. THADDEUS S. CASNER, Plainfield, N. J., assignor to Radio Electric Clock Corporation, New York, N. Y., a Corporation of Delaware. Filed Feb. 14, 1927. Serial No. 168,136. 12 Claims. (Cl. 177—353.)



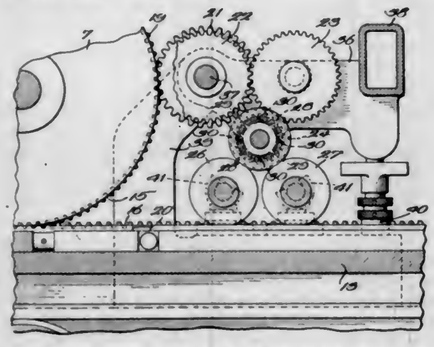
7. A selector responsive to a code of electric impulses consisting of series of uniformly spaced impulses separated by silent intervals, in combination, a pendulum having a frequency of oscillation substantially equal to the frequency of the impulses, means momentarily acting on the pendulum upon reception of each impulse adapted to impart an oscillation thereto of predetermined amplitude only after a certain number of impulses have been received, a member moved step-by-step by the pendulum from an initial position, means returning said member to initial position upon reception of each impulse, whereby said member will move to a predetermined position only during one of said silent intervals, and a circuit controller actuated only when said member is in said predetermined position and an impulse is received.

1,759,541. COMBINED RULER SQUARE AND MITER SQUARE. THOMAS J. CHILDRESS, Waynesboro, Va. Filed Nov. 23, 1927. Serial No. 235,239. 2 Claims. (Cl. 33—98.)



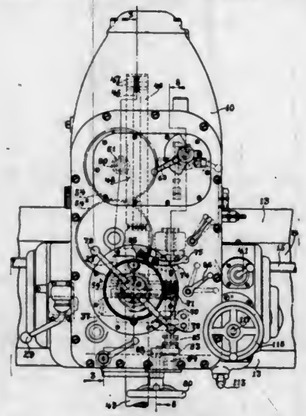
2. In combination, a folding rule having longitudinally extending recesses formed in its outer edges when in folded position, arms pivotally mounted at one end in said recesses and adapted for outward swinging movement with respect to the rule and a pair of adjustably mounted stop plates carried by the rule and engageable by the respective arms for controlling the extent of outward movement of said arms, said stop plates and the adjacent edges of the rule each having portions of a scale formed thereon and cooperating to indicate a predetermined adjustment of the stop plate.

1,759,542. PRINTING PRESS. ALFRED C. CHRISTOPHERSON, Chicago, Ill., assignor to Hacker Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 8, 1929. Serial No. 345,378. 11 Claims. (Cl. 101—353.)



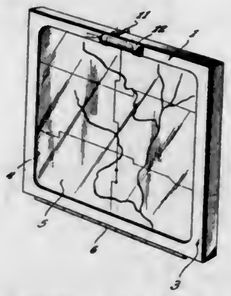
1. A printing press including two cooperating printing members between which the sheet to be printed upon is received, the printing form being carried by one of said members and being subject to printing pressure from the other member; inking mechanism inclusive of an inking roller engaging said form; and gearing in driving relation to said inking roller and inclusive of two members in driving and driven relation and in lost motion relation, wherein the printing pressure exerting printing member is a cylinder and the form bearing member is a flat bed in gear with the cylinder.

1,759,543. TOOL HEAD FOR RADIAL DRILLS. LYNDON C. COLE, Hamilton, Ohio, assignor, by mesne assignments, to General Machinery Corporation, Hamilton, Ohio, a Corporation of Delaware. Filed Nov. 14, 1927. Serial No. 233,109. 2 Claims. (Cl. 77—28.)



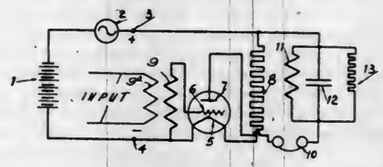
1. A drill head for radial drills comprising in combination, a body member, a spindle rotatably mounted therein, a driving shaft extending through the body member at right angles to said spindle, a gear rotatably mounted on said shaft, driving connections between said shaft and gear, a gear directly secured to said spindle and meshing with said first mentioned gear, a second gear on said spindle rotatably mounted thereon, change speed driving connections from said shaft to said second gear to rotate said second gear at different speeds relative to the shaft, and clutches for connecting said rotatably mounted gears to the shaft and spindle respectively whereby said spindle may be rotated from either of said gears on said spindle.

1,759,544. MAP HOLDER. CHARLES W. CROES, Aberdeen, S. Dak. Filed Feb. 23, 1929. Serial No. 342,126. 1 Claim. (Cl. 40—10.)



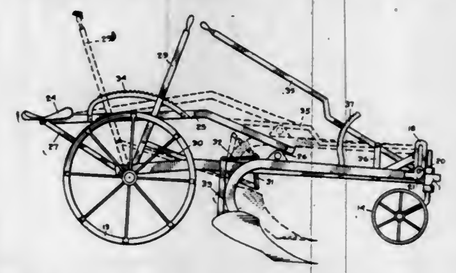
A map holder comprising a back section and a cover section constituting a casing for receiving a plurality of individual maps, the cover section having a sight opening, a transparent panel closing the opening, plates mounted in the casing between the maps, and yieldable means urging the plates apart to hold one map flat against the panel.

1,759,545. ELIMINATING EFFECT OF VARIATIONS IN CURRENT SUPPLIED TO AUDIONS. GEORGE B. CROUSE, Woodcliff, N. J., assignor, by mesne assignments, to Conner Crouse Corporation. Filed Aug. 22, 1924. Serial No. 733,558. 11 Claims. (Cl. 250—27.)



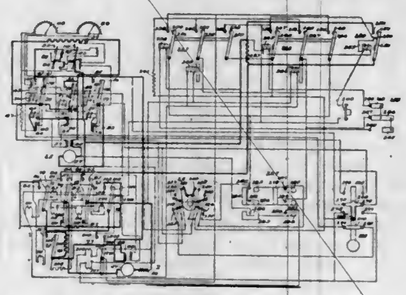
7. In apparatus for eliminating in the plate circuit of an audion the effect of variations in potential of the current supplied to the plate and cathode, means for increasing the magnitude of the variations in potential of the current energizing said cathode to cause variations in the plate circuit substantially equal to those of the current supplied directly to the plate and for preventing shifting of the phase relation between the cathode and plate effects.

1,759,546. TWO-ROW LISTER. LAURENCE W. CROUSE, Lincoln, Nebr. Filed June 6, 1927. Serial No. 196,897. 4 Claims. (Cl. 97—243.)



1. A two-row lister plow including a wheeled frame and a pair of lister plows secured thereto, said two plows having beams secured to said frame, means connecting the forward end portions of the beams of said plows together in spaced apart relation, and means for tilting said connecting means for individually raising or lowering the forward end portions of the beams of ssid plows.

1,759,547. ELECTRIC CIRCUITS FOR PLANERS. ROBERT C. DEALE, Plainfield, N. J., assignor, by mesne assignments, to General Machinery Corporation, Hamilton, Ohio, a Corporation of Delaware. Filed Sept. 24, 1925. Serial No. 58,401. 18 Claims. (Cl. 172—240.)

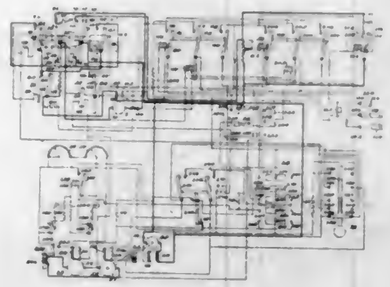


7. In a planer control system, the combination comprising a reciprocating table, a feed motor, a pilot switch

for automatically operating the feed motor in accordance with the movement of the table, a low torque resistor initially in the circuit of the feed motor, and means mechanically operated by the feed motor after a predetermined movement thereof for excluding the low torque resistor from the feed motor circuit.

12. In a planer control system, the combination comprising a reciprocating table, a feed motor, a pilot switch operated in accordance with the movement of the planer table, means operated by the pilot switch for operating the feed motor, a limit switch, and means for insuring the stopping of the feed motor only in accordance with the operation of the limit switch.

1,759,548. PLANER-CONTROL SYSTEM. ROBERT C. DEALE, Plainfield, N. J., assignor, by mesne assignments, to General Machinery Corporation, Hamilton, Ohio, a Corporation of Delaware. Filed Nov. 23, 1925. Serial No. 70,995. 27 Claims. (Cl. 172—240.)

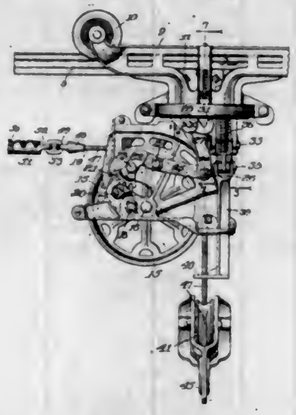


1. In a planer control system, the combination comprising a reciprocating table, a motor having armature and field-magnet windings for reciprocating said table, resistors in circuit with the motor field-magnet winding, means for controlling the direction of rotation of the motor in accordance with the movement of the table, means for including all of said resistors in the field winding during the return stroke to the motor at a faster speed during the return stroke than during the cutting stroke, and means for controlling said resistors to vary the speed of the motor during the cutting stroke so as to reduce the motor speed only when a cutting operating is being effected.

19. In a planer control system, the combination comprising a reciprocating table, a motor for reciprocating said table, a generator for energizing the motor armature, an exciter for energizing the motor and the generator field windings, a pilot switch for controlling the direction of current flow through the generator field windings in accordance with the table movement, a creep resistor and means for connecting said creep resistor in series circuit with the motor field winding across the exciter whenever the pilot switch is moved to neutral position.

1,759,549. HAY CARRIER. HOWARD J. FERRIS, Harvard, Ill., assignor to Hunt, Helm, Ferris & Company, Harvard, Ill., a Corporation of Illinois. Filed Nov. 8, 1929. Serial No. 405,662. 2 Claims. (Cl. 212—214.)

1. In combination, a track, a carriage movable thereon, a trip block on said track, a trip member cooperating with said block, sling pulleys, clamping mechanism, and a composite flexible member for controlling the elevation of said pulleys and comprising a section of fiber rope, a section of metal cable and an abutment adjacent the outer end of said metal cable section and adapted to engage said clamping mechanism in the elevated position of said pulleys, said metal cable section being of such diameter that it



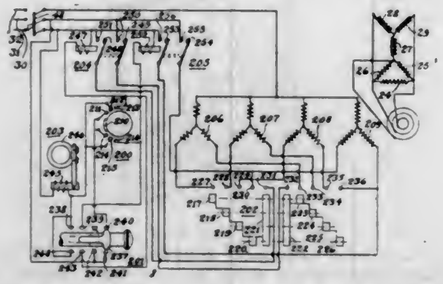
cannot be clamped by said clamping mechanism and said rope section being of such diameter that it can be clamped by said clamping mechanism.

1,759,550. SPRING CATCH. CECIL ASSUR FRIEDLANDER, London, England, assignor to Cecil Assur Byworth & Company, London, England. Filed June 4, 1928, Serial No. 282,773, and in Great Britain July 12, 1927. 7 Claims. (Cl. 24—230.)



1. A catch of the class described comprising two separable elements, each element formed with a socket and tongue, the tongue of each element interlocking with the corresponding socket of the other element, the end of the tongue of one element when in locked position, being so spaced from the end of the tongue of the other element that the interlocking action of each tongue with the corresponding socket is independent of the other tongue.

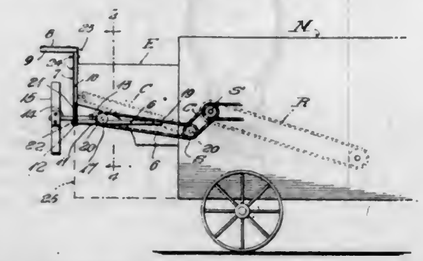
1,759,551. CONTROL SYSTEM. GEORGE E. GREENLEAF and ROBERT C. DEALE, Plainfield, N. J., assignors, by mesne assignments, to General Machinery Corporation, Hamilton, Ohio, a Corporation of Delaware. Filed Apr. 20, 1923. Serial No. 633,510. 4 Claims. (Cl. 172—240.)



1. In a control system for a machine tool, the combination with a reciprocating member, a polyphase motor having a primary and a secondary winding for operating said

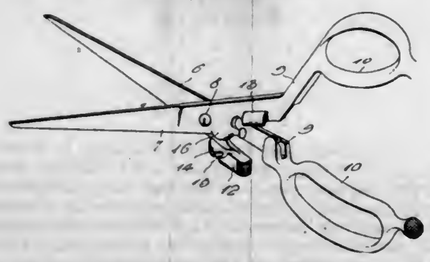
reciprocating member, automatic means comprising a pilot switch operated by the reciprocating member for controlling said primary winding to reverse the direction of rotation of the motor and to operate the motor at different speeds in different directions, and a manually operable switch connected to said pilot switch for rendering the pilot switch ineffective and for controlling the motor independently of the pilot switch, of impedance elements connected to the motor secondary winding for limiting the current flow during reversing of the motor connections and for effecting substantially short circuit conditions in the secondary winding when the motor is operating at normal speed.

1,759,552. STRAW-SPREADING ATTACHMENT. SHERMAN A. HAHN, Waterville, Wash. Filed Feb. 1, 1929. Serial No. 336,723. 4 Claims. (Cl. 275—8.)



1. A straw spreading attachment for a traveling machine, comprising two parallel longitudinal bars for attachment to the rear of the machine, a rear transverse bar extending between and secured to the rear ends of said longitudinal bars, a front transverse bar secured also to said longitudinal bars, two vertical bars secured to and rising from said rear ends of said longitudinal bars, two arms secured to the upper ends of said vertical bars respectively and projecting rearwardly therefrom, a transverse horizontal shield board secured to said arms, two vertical shield boards, the latter being secured at their inner edges to said vertical bars and at their upper ends to said horizontal board, two longitudinal shafts having bearings mounted on said transverse bars, said shafts having beaters behind said vertical boards and under said horizontal board, and driving means for said shafts.

1,759,553. MILLINER'S SHEARS. NELLIE OLIVE HENAULT, Butte, Mont. Filed Mar. 6, 1929. Serial No. 344,903. 6 Claims. (Cl. 140—123.6.)

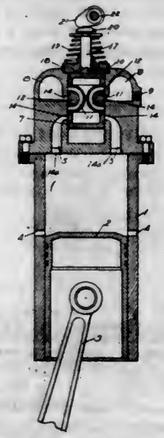


1. In milliner's shears, crossed pivoted blades and handle-carrying shanks projecting rearwardly beyond the blade pivot; a flange behind the blade pivot integral with the inner edge of one blade and projecting laterally across the inner edge of the other blade, and a boss integral with the outer side of said other blade at the inner edge of the latter, said boss and flange being disposed in co-operable relation with each other to provide jaws for tightening a bent wire connection of a hat frame.

1,759,554. PROCESS FOR PREPARING 6-CHLORO-2-NITRO-1-METHYLBENZENE-4-SULPHONIC ACID. FRANZ HENLE and BARTHOLOMÄUS VOSSEN, Hochst-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation. Filed Aug. 24, 1925, Serial No. 52,216, and in Germany Sept. 1, 1924. 3 Claims. (Cl. 260—142.)

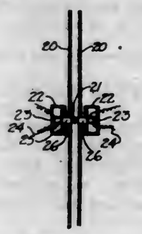
1. The process which comprises treating a mixture of 6-chloro-2-nitro-1-methylbenzene and 4-chloro-2-nitro-1-methylbenzene with sulfuric acid containing sulfuric anhydride at a temperature not substantially above 80° C., treating the resulting reaction mixture with a quantity of sodium chloride sufficient to precipitate the unsulfonated 4-chloro-2-nitro-1-methylbenzene but insufficient to precipitate the sodium salt of 6-chloro-2-nitro-1-methylbenzene-4-sulphonic acid in the presence of water, separating the precipitated 4-chloro-2-nitro-1-methylbenzene from the solution, and treating the solution with sodium chloride in quantity sufficient to precipitate the sodium salt of 6-chloro-2-nitro-1-methylbenzene-4-sulphonic acid.

1,759,555. ENGINE-VALVE MECHANISM. ERNEST E. HUMES, Cambridge Springs, Pa. Filed May 22, 1929. Serial No. 365,192. 5 Claims. (Cl. 121—193.)



4. In an engine valve mechanism, the combination of an engine cylinder having an exhaust port; a piston in the cylinder controlling the exhaust port; a cylindrical steam chest arranged in the cylinder head and having annularly arranged ports leading to the cylinder and annularly arranged ports leading to the chest; and a valve in the chest having an annularly arranged U-shaped valve passage adapted to connect the ports.

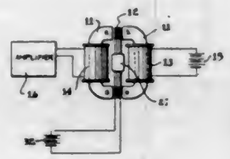
1,759,556. LOUD-SPEAKER. MILLER REESE HUTCHISON, West Orange, N. J., assignor, by mesne assignments, to Acoustic Products Company, New York, N. Y., a Corporation of Delaware. Filed May 27, 1926. Serial No. 112,034. 8 Claims. (Cl. 181—31.)



1. A loud speaker or sound projector, comprising separated air confining members, an opening in one of said

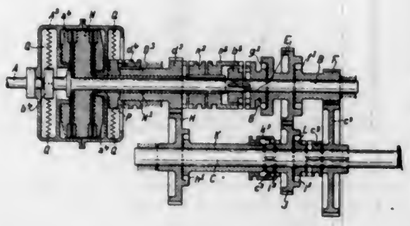
members, a sound emitting device in communication with said opening, a sound deflector opposed to said sound emitting device.

1,759,557. PLURAL-CONDUCTOR ACTUATING UNIT. MILLER REESE HUTCHISON, Jr., Madison, N. J., assignor, by mesne assignments, to Acoustic Products Company, New York, N. Y., a Corporation of Delaware. Filed July 1, 1927. Serial No. 202,834. 1 Claim. (Cl. 179—115.5.)



In a device of the character described, a coil, a diaphragm attached to said coil and adapted to be vibrated by movement thereof, a source of steady current for said coil, and electromagnets positioned on opposite sides of said coil, those on one side being provided with a source of steady current and those on the opposite side being provided with a source of intermittent current.

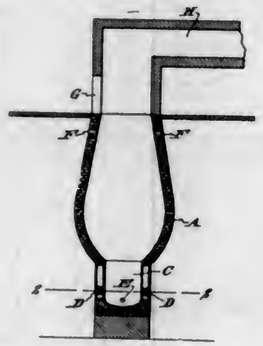
1,759,558. VARIABLE-SPEED GEAR. WERNER JACOBS, Essen, Germany, assignor to Fried. Krupp Aktiengesellschaft, Essen-on-the-Ruhr, Germany. Filed Mar. 26, 1929, Serial No. 350,059, and in Germany Apr. 4, 1928. 2 Claims. (Cl. 74—59.)



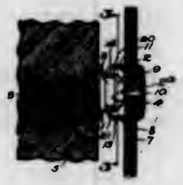
1. In a variable speed gear a driving member, a driven member, a slip clutch, one half of said slip clutch being permanently connected to said driving member, two alternative gear-wheel trains of different ratios of transmission comprising two gear wheels arranged coaxially with said slip clutch, a free wheel coupling for said gear-wheel trains, two couplings to be operated at will between said gear wheels and said clutch half for coupling said gear wheels and said clutch half when said clutch is inoperative, additional couplings to be operated at will between said gear wheels and the other half of said slip clutch, for coupling each of said gear wheels with said other half, when said slip clutch is inoperative.

1,759,559. BLAST FURNACE FOR REDUCTION AND RECOVERY OF VOLATILIZABLE METALS AS OXIDES AND METHOD OF OPERATING THE SAME. WOLFGANG JOB, Berlin-Dahlem, Germany, assignor to American Lurgi Corporation, New York, N. Y., a Corporation of New York. Filed June 29, 1926, Serial No. 119,440, and in Germany July 2, 1925. 2 Claims. (Cl. 75—17.)

1. A furnace for the recovery of volatile metals in the form of oxides from ores containing volatilizable metals comprising a narrow rectangular tuyère zone and superposed thereon a shaft of rectangular section wherein said shaft is bellied out above said tuyère zone, the width of said tuyère zone is less than one-fifth of the height of the furnace, the inner tuyère openings are constricted to form pointed jets, and means for introducing additional air are provided in the upper part of the furnace beneath the throat.

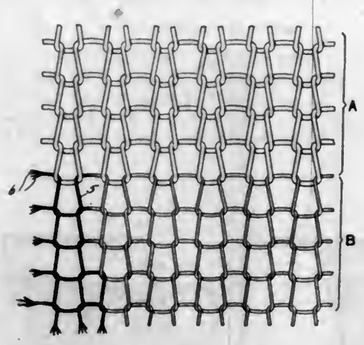


1,759,560. SEPARABLE FASTENER. WALTER I. JONES, Arlington, Mass., assignor, by mesne assignments, to United-Carr Fastener Corporation, Cambridge, Mass., a Corporation of Massachusetts. Filed Feb. 11, 1928. Serial No. 253,731. 5 Claims. (Cl. 24—217.)



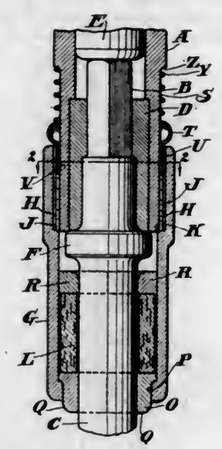
1. A three-side lock fastener comprising, in combination, a stud having a head, a neck and a relatively abrupt shoulder between said head and said neck, a cooperating socket including a stud-engaging part having a stud-receiving aperture surrounded by a yieldable stud-engaging wall, said wall having a flat portion surrounding a portion of the circumference of the stud-receiving aperture and engaged directly with the shoulder of the stud at three sides to prevent separation when stress is exerted between the stud and socket adjacent to those three sides and said wall having a generally curved portion for another portion of the circumference of the stud-receiving aperture to provide a rounded cam portion engaged with the fourth side of the shoulder to permit disengagement of the stud and socket by a separating stress exerted at the said fourth side adjacent to said cam portion of said wall.

1,759,561. KNITTED FABRIC. DAVID H. YOUNG, Dalton, Ga., assignor to Westcott Hosiery Mills, Dalton, Ga., a Corporation of Georgia. Filed Jan. 9, 1930. Serial No. 419,611. 7 Claims. (Cl. 66—202.)



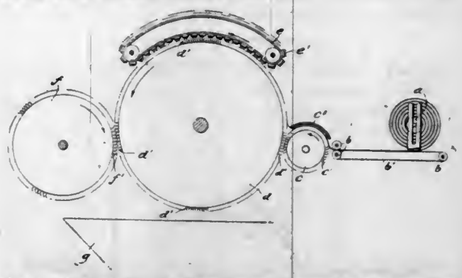
1. A knitted fabric composed of a lustrous yarn having a plurality of individual threads, said threads having been given a twist in one direction and the final yarn a twist in the opposite direction, the twists given being of the order of 28 to 48 turns per inch.

1,759,562. IMPLEMENT RETAINER FOR PNEUMATIC TOOLS. ROY O. ALLEN, Athens, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed Apr. 2, 1928. Serial No. 266,528. 1 Claim. (Cl. 121—32.)



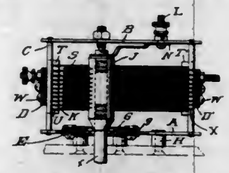
In an implement retainer for pneumatic tools, the combination of a cylinder and a working implement extending into the cylinder, a sleeve for retaining the implement in the cylinder, arcuate ribs on the cylinder and in the sleeve adapted to interlock for holding the sleeve on the cylinder, a shoulder in the sleeve to abut the end of the cylinder for guiding the ribs into engagement with each other, a ring slidable on the cylinder having integral fingers to extend between the ribs for holding the sleeve against rotation with respect to the cylinder, a spring seated with one end against the ring and with its other end against the cylinder to maintain the fingers between the ribs, and yieldable means in the sleeve for limiting the forward movement of the working implement.

1,759,563. APPARATUS FOR CARDING COTTON. ALBERT W. ARNOLD, Charlotte, N. C., assignor to Edward C. Bowers and Charles L. Feldman, receivers for Wickwire Spencer Steel Company, New York, N. Y., a Corporation of Massachusetts. Filed Nov. 16, 1928. Serial No. 319,799. 1 Claim. (Cl. 19—102.)



An apparatus for carding cotton comprising a carding cylinder having a foundation, straight teeth in the foundation disposed substantially radially to the axis of the cylinder, a top flat for the cylinder, and straight teeth projecting substantially radially toward the carding cylinder and cooperating with the straight teeth thereof.

1,759,564. VARIABLE CONDENSER. MORRIS H. BENNETT and WILLIAM COLINA, Waterbury, Conn., assignors to Scovill Manufacturing Company, Waterbury, Conn., a Corporation of Connecticut. Filed Sept. 11, 1925. Serial No. 55,656. 3 Claims. (Cl. 175—41.5.)

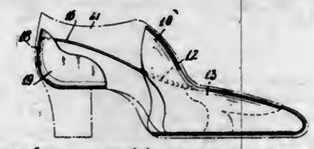


1. A variable condenser comprising a frame, a rotor-shaft rotatably mounted in said frame, a set of rotor-plates carried by said rotor-shaft, a set of stator plates, a pair of adjustable supporting blocks connected to the set of stator plates, one at each end of said set, each supporting block being arranged for lateral and angular movement in contact with the frame and having a slot near each end and screws passing through said slots and into the frame, the screws for one supporting block being in axial alignment with the corresponding opposite screws for the other supporting block, the axial lines through the corresponding opposite screws passing close to the corresponding edges of the central stator plate.

1,759,565. CHARGE FOR BLASTING CAPS. WILLARD DE C. CRATER, Succasunna, N. J., assignor to Hercules Powder Company, Wilmington, Del., a Corporation of Delaware. Filed Aug. 13, 1929. Serial No. 385,696. 5 Claims. (Cl. 52—4.)

1. In a blasting cap a charge including nitrolactose as an ingredient.

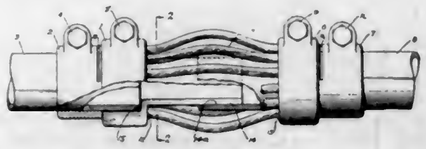
1,759,566. SHOE FORM. ERNESTO DAMI, New York, N. Y. Filed Apr. 23, 1929. Serial No. 357,418. 3 Claims. (Cl. 12—128.1.)



1. A shoe form, comprising a vamp and toe portion, a guide attached thereon, a strap engaged in the guide, a

heel portion attached on the rear of the strap, said vamp and toe portion having edge sections hingedly mounted and urged into spread conditions by springs coaxial on the hinges, and rear extension members projecting from the rear of the edge sections for allowing manual forcing of the edge sections together while inserting and removing the vamp and toe portion from a shoe.

1,759,567. SLIDE JOINT FOR ELECTRICAL CONDUCTORS. ABRAHAM BERNARD DIBNER, New York, N. Y. Filed Sept. 7, 1928. Serial No. 304,544. 6 Claims. (Cl. 173—324.)



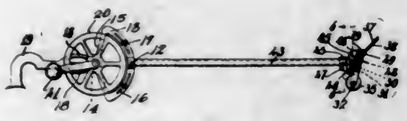
1. A slide joint for hollow electrical conductors comprising two electrically connected clamping members each adapted for attachment to one end of two adjacent electrical conductors, and a slide attached to one of said members and adapted to slidably move within the hollow end of the adjacent conductor.

1,759,568. FEEDER OR TEAT FOR FEEDING BOTTLES. CARL FERVERS, Cologne-on-the-Rhine, Germany. Filed Nov. 10, 1928, Serial No. 318,328, and in Germany Aug. 14, 1926. 1 Claim. (Cl. 128—252.)



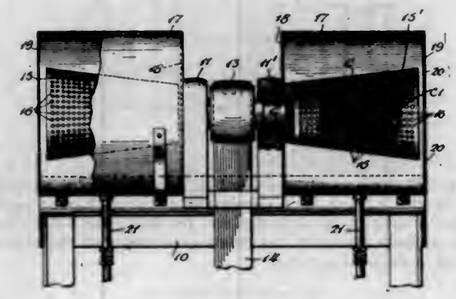
A feeder for nursing bottles, comprising a shallow conical breast portion having annular corrugations on its outer surface and a centrally projecting teat integral with the breast portion and substantially shorter than the radius of said breast portion, the diameter of the lower portion of the teat being less than that of the outer portion thereof.

1,759,569. GRASS CUTTER. DANIEL FORSBERG, Brooklyn, N. Y. Filed Oct. 8, 1928. Serial No. 310,996. 2 Claims. (Cl. 56—239.)



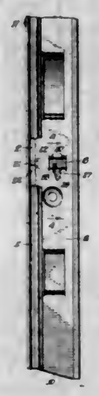
1. In a grass cutter, a tubular handle with a longitudinal standard and a shaft running through both handle and standard, arms projecting from said longitudinal standard and formed with arcuate slots, other arms, wing set screws passing thru said arcuate slots and threadedly engaged in the latter arms, a transverse standard secured to the latter arms, a bevel gear rotatively mounted on the transverse standard and meshing with a bevel pinion on said shaft, and a handle projecting from the transverse standard capable of assuming various angular positions relative to the aforementioned tubular handle.

1,759,570. CENTRIFUGAL EXTRACTOR. JOHN P. GAREY, Elmira Heights, and LOUIS B. HASBROUCK, Elmira, N. Y., assignors to Eclipse Textile Devices, Inc., Elmira, N. Y., a Corporation of New York. Filed Apr. 8, 1926. Serial No. 100,580. 3 Claims. (Cl. 210—63.)



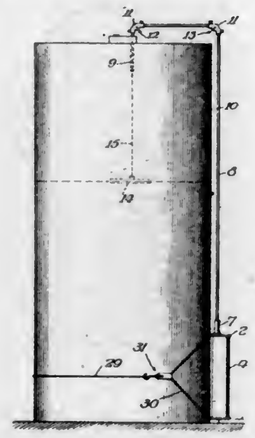
1. A device for extracting liquid from yarn wound in the form of yarn cones, comprising a rigid foraminous frusto-conical holder having substantially the same taper as the yarn cones, longer than the yarn cones, and open at its larger end to receive one of the yarn cones, and means secured to the holder for rapidly rotating it and a yarn cone wedged into it about the axis of the yarn cone.

1,759,571. SASH GUIDE. RAYMOND L. GREIST, Chicago, Ill., assignor to The Adlake Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 15, 1928. Serial No. 319,509. 3 Claims. (Cl. 189—75.)



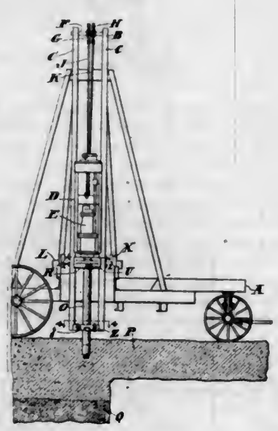
1. In a sash guide, a fixed strip, a removable sash-retaining strip, and a laterally shiftable slide engageable with said sash-retaining strip to hold the same in position.

1,759,572. TANK GAUGE. RAY E. HALL, Chicago, Ill., assignor to Hall Research Corporation, Chicago, Ill., a Corporation of Delaware. Filed Feb. 20, 1928. Serial No. 255,515. 9 Claims. (Cl. 73—82.)



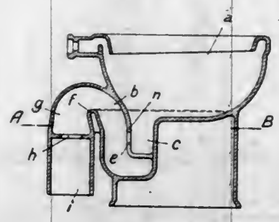
4. In a tank gauge a reel bodily movable vertically, a flexible tape adapted to be wound upon or unwound from the reel during its bodily movement, and means for rotating the reel on its downward movement to wind the tape thereon.

1,759,573. DRIVING DEVICE FOR PIPES. CHARLES C. HANSEN, Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed Feb. 20, 1928. Serial No. 255,705. 1 Claim. (Cl. 255—51.)



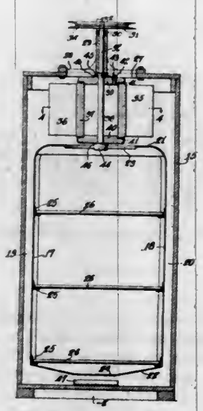
In a driving device for driving a pipe through soft strata overlying the rock intended to be drilled, the combination of a rock drilling machine having its drill steel passing through the pipe being driven and a guide frame for the drilling machine, a drive head between the rock drill and the pipe and against which the body of the drilling machine is adapted to bear for driving the pipe, guideways in the drive head to slidably receive the frame for guiding the drive head, said drive head having a recess to receive the end of a pipe intended to be driven, and means clamped to the frame for guiding the pipe near the point of entrance of said pipe into the soft strata.

1,759,574. WATER-CLOSET PAN. MAX HOLLENWEGER, Bonn, Germany. Filed June 20, 1929, Serial No. 372,513, and in Germany May 6, 1929. 1 Claim. (Cl. 4—69.)



A water closet pan, comprising a fore chamber of rectangular cross-section arranged between the pan and the siphon channel and having a slot extending through the bottom and wall perpendicular to said fore chamber and of the same cross-section as said fore chamber.

1,759,575. AIR-COOLING SYSTEM. AXEL HOLMSTRÖM, Viggbyholm, Sweden. Filed Oct. 17, 1923, Serial No. 669,134, and in Germany June 16, 1923. 4 Claims. (Cl. 261—84.)

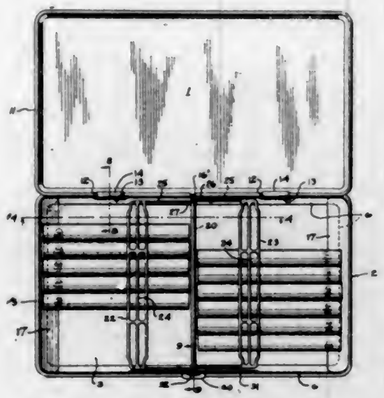


1. A cylindrical impeller body of material permeable to water having a water inlet, an enlarged interior reservoir and having its upper end initially open, means for closing the bottom of the impeller and a mount for the impeller adapted to rotate it about the axis thereof and having blades of the same permeable material as the impeller and integral therewith.

1,759,576. CIGARETTE CASE. EDWARD B. HOUGH, Providence, R. I. Filed Sept. 8, 1927. Serial No. 218,167. 9 Claims. (Cl. 206—41.)

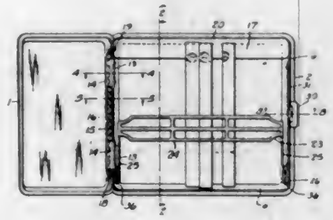
4. In a cigarette case, a base cover and a top cover, said base cover comprising a bottom having an inwardly projecting flange, a separate frame held by said flange, a U-shape holder, means pivoting said holder to said frame, said holder having small ears provided with notches, said

frame having holes, wire springs held between said frame and the bead formed by said inwardly projecting flange,



said springs projecting through said holes and disposed in said notches, whereby said holder is yieldably pressed against the cigarettes and is locked in raised position.

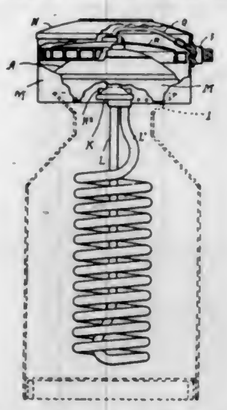
1,759,577. CIGARETTE CASE. EDWARD B. HOUGH, Providence, R. I. Filed July 24, 1928. Serial No. 295,111. 4 Claims. (Cl. 206—41.)



1. In a cigarette case, a base cover comprising a bottom having an inwardly projecting flange, a frame having a lateral flange overlying said bottom and an upstanding wall, said upstanding wall having a part reduced in height on one side, a cigarette-dispensing ramp gently sloping from the top of said reduced part to said bottom and having a depending flange disposed inside said reduced part, said reduced part having apertures, said depending flange having tongues passing through said apertures and bent over on the outside, and a top cover hingedly connected to said base cover and fitting over said upstanding wall.

1,759,578. MILK-COOLING DEVICE. WILLIAM C. KELSO, Rushville, Ind., assignor, by direct and mesne assignments, to William J. Wilson and Pearl Wilson, Rush County, Ind. Filed July 2, 1928. Serial No. 289,897. 8 Claims. (Cl. 257—74.)

2. A liquid cooling device, comprising a cover structure adapted to be reposed above the mouth of a container, a tubular conduit device supported by and journaled vertically in the cover structure, a circulatory element communicating with, secured to and which is extended downwardly from said conduit device, a water supply pipe of diameter less than the bore of the conduit device and which has a swivel union with the entry portion of the circulatory element, a fountain box having its trough portion surrounding the lower portion of the cover structure, a water wheel hubbed to the conduit device at position above the cover structure, and a device to divide the head of water



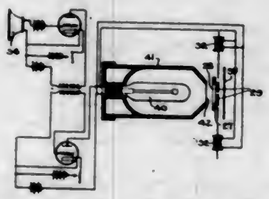
entering same, into an upper and a lower jet, the upper jet being operable through the conduit and circulatory element to pass in and through the latter, and the lower jet being operable to actuate the water wheel.

1,759,579. CARTRIDGE POCKET. OSCAR H. KLEIN, New York, N. Y. Filed Oct. 15, 1928. Serial No. 312,513. 4 Claims. (Cl. 224—19.)



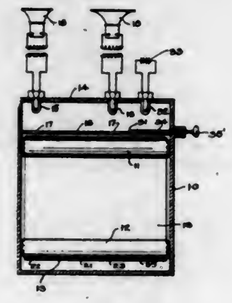
1. A cartridge pocket, comprising outer material having a flap portion, strap portion, and a cartridge holding portion, inner material having a strap portion, resilient joint and a cartridge holding portion, and being secured to the outer material for forming a strap passage and a cartridge pocket, the said resilient joint being disposed between the strap and cartridge portions, and capable of moving the cartridge pocket to a downwardly inclined position, so that a slight pull on a set of cartridges contained in the cartridge pocket will be sufficient to transfer all cartridges into the cupped palm of one's hand.

1,759,580. APPARATUS FOR AND METHOD OF PHOTOGRAPHICALLY RECORDING SOUNDS. BERNARD KWARTIN, Philadelphia, Pa. Filed Apr. 2, 1928. Serial No. 266,475. 14 Claims. (Cl. 179—100.3.)



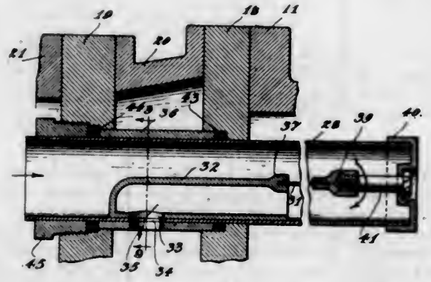
1. An apparatus for photographically producing a sound record upon a photographic film comprising means responsive to sound variations for producing light rays differing in intensity in accordance with the sound variations, an opaque member having a slot of given depth and width through which said light rays pass, and means operative in accordance with said sound variations for varying the effective width of said slot without affecting the depth thereof.

1,759,581. METHOD AND APPARATUS FOR RECORDING AND REPRODUCING SOUND WAVES. BERNARD KWARTIN, Philadelphia, Pa. Filed June 16, 1928. Serial No. 285,850. 15 Claims. (Cl. 179—100.3.)



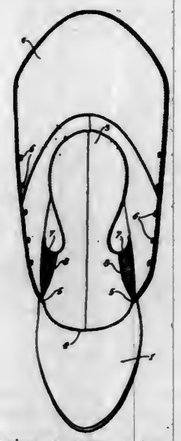
2. In an apparatus for photographically recording sounds, in combination, means for converting the sounds into corresponding electrical variations, means for recording said electrical variations upon a photographic film, and manually operated means operable independently of said first mentioned means to photographically produce upon a photographic film, simultaneously as said sound waves are recorded an auxiliary sound shading record which is in accord with the dynamic shading of the sounds as originally produced.

1,759,582. HEAT EXCHANGER. WILLIAM LONSDALE, Roselle, N. J., assignor to Foster Wheeler Corporation, New York, N. Y., a Corporation of New York. Filed Jan. 24, 1928. Serial No. 248,990. 7 Claims. (Cl. 257—238.)



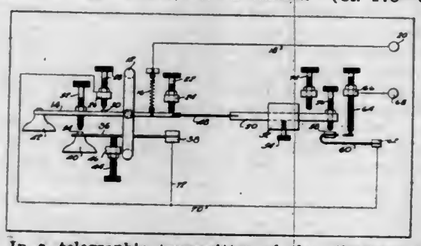
1. A heat exchanger tube comprising a cylindrical body, one end thereof being open, longitudinal flanges extending from adjacent the open end of the tube to the opposite end thereof, a partition wall extending across the tube and secured in place between the parts of the said flanges, the said partition wall being notched at the said opposite end of the tube, a socket member secured to the notched end of the partition wall, a cap on the said opposite end of the tube, and a bolt passing through the cap and engaging the said socket to secure the cap in position on the tube.

1,759,583. LADY'S BOOT. FRANK J. MARTIN, St. Louis, Mo., assignor to Johnson-Stephens & Shinkle Shoe Company, St. Louis, Mo., a Corporation of Missouri. Filed Aug. 13, 1928. Serial No. 299,370. 1 Claim. (Cl. 36—51.)



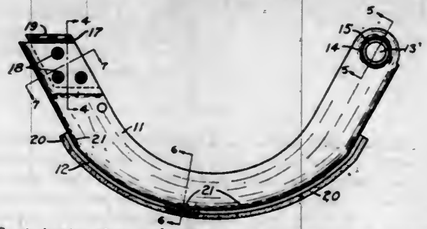
A lady's boot having, a vamp, a top seamed thereto and provided with lacing receiving elements, and a tongue secured to the vamp at the front and elastically connected thereto at the sides below the crown of the instep, the top extending forward where seamed to the vamp so as to overlap the elastic connection and in order to lace across the tongue.

1,759,584. TELEGRAPHIC TRANSMITTER. CHARLES FREDERICK MCELROY, Brooklyn, N. Y. Filed Aug. 7, 1928. Serial No. 297,957. 2 Claims. (Cl. 178—82.)



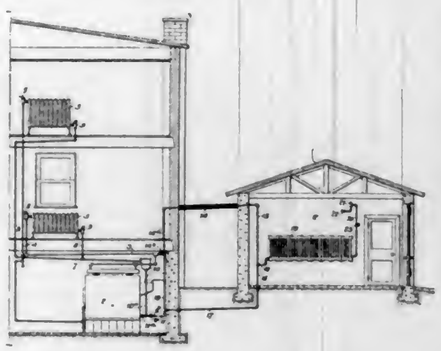
1. In a telegraphic transmitter of the vibratory type a pivoted key arm, a vibratory member connected therewith, contacts whereby movement of the key arm will close a circuit independent of movement of the vibratory member and thereupon cause such vibratory member to operate, and means whereby movement of such vibratory member may break such circuit.

1,759,585. BRAKE. ELMER LLOYD MCINTYRE, Detroit, Mich., assignor to The Studebaker Corporation, South Bend, Ind., a Corporation of New Jersey. Filed Jan. 18, 1924. Serial No. 687,105. 29 Claims. (Cl. 188—250.)



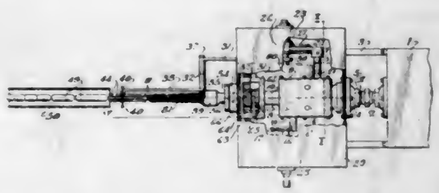
13. A brake shoe, comprising two independent angular sections secured back to back.

1,759,586. STEAM-HEATING SYSTEM. FRANK H. MONTREUIL, Philadelphia, Pa., assignor to Warren Webster & Company, a Corporation of New Jersey. Filed Sept. 24, 1925. Serial No. 58,277. 2 Claims. (Cl. 237—67.)



1. In a heating system, a main building equipped with a two-pipe gravity steam heating system including a boiler, risers, return pipes and radiators and wherein the water of condensation is automatically returned to the boiler under a maintained differential pressure across the radiators plus a static head which, together with the differential pressure is substantially equal to the boiler pressure and said radiators each having a separate control valve to regulate the supply of steam thereto, in combination with a separate building at a distance from the main building, and heating means for said separate building consisting of a radiator arranged at an elevation above the water level in the boiler in the main building, normally open steam supply and water return connections between the lower part of the radiator in the separate building and respectively in communication with the steam and water spaces of the boiler in the main building to normally maintain steam in the radiator of the separate building at substantially boiler pressure, a portion of said steam supply and water return connections including a pipe from the lower part of the radiator and embedded in the ground with a downward incline toward the boiler of the main building and through which return water of condensation flows, and means in communication with the interior of the radiator in the separate building for insuring regulated communication thereof with the atmosphere.

1,759,587. SAUSAGE STUFFING AND LINKING MACHINE. FOSTER H. PARKER, Chicago, Ill. Filed Nov. 18, 1927. Serial No. 234,065. 17 Claims. (Cl. 17—33.)



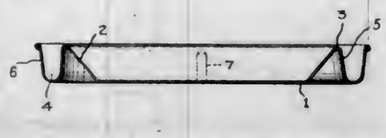
1. The combination with a sausage meat container and the outlet pipe thereof, of a sausage stuffing and linking machine removably connected with said outlet pipe and comprising a rotatable nozzle, a plurality of control valves positioned between said nozzle and the container outlet pipe, to control the flow of sausage meat from the container through the nozzle and into a sausage casing engaged on the nozzle, a stationary sausage holder, a driving shaft, an eccentric mechanism operated thereby and connected with one of said valves to alternately open and close the same to permit a predetermined quantity of sausage meat to be delivered from said container through said nozzle into the sausage casing, adjustable sausage holding mechanisms positioned to coact with said stationary sausage holder to receive the partially stuffed portion of the sausage casing, bell-crank means for actuating the same, cam controlled mechanisms operated by the driving shaft permitting the bell-crank means and the holding mechanisms to close to hold the partially formed sausage on said stationary holder against rotation, gear mechanisms connected with said nozzle, and a cam roller on said driving shaft adapted to actuate said gear mechanism to cause the same to rotate said nozzle and the sausage casing engaged thereon to twist the sausage casing adjacent the end of the partially formed sausage to complete the forming of the same.

1,759,588. ICE RETAINER FOR WATER PITCHERS. FRANK PELLETIER, New York, N. Y. Filed Sept. 9, 1929. Serial No. 391,296. 4 Claims. (Cl. 65—31.)



1. An ice retainer comprising a pair of semi-circular discs with their straight sides substantially adjacent each other, means for slidably connecting the disc sections to move at right angles to the straight sides, friction-material covered vertical prongs connected with the edges of the disc sections for engaging against the inner sides of a pitcher, and a vertical spring for urging the disc sections apart and constituting a handle for supporting a pitcher in which the retainer is engaged.

1,759,589. PIE PLATE. JOHN J. PETERS, New York, N. Y. Filed Nov. 3, 1928. Serial No. 316,971. 1 Claim. (Cl. 53—6.)



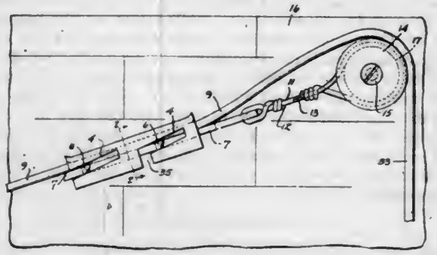
A pipe plate composed of a bottom formed to rest on the floor of a baking oven and having an integral circular upwardly extended flange which is inclined outwardly to form a rim for the bottom, said rim being then extended downwardly to provide a combined gutter-forming and heat-confining wall which cooperates with and lies opposite to and is spaced from the rim to confine heat between the rim and wall, said wall being then extended outwardly to form a gutter bottom which lies in substantially the plane of the plate bottom and being finally extended upwardly to form the other wall of the gutter, said walls of the gutter and said rim extending in substantially straight lines and the walls of the gutter being approximately parallel and extending from substantially the plate bottom to the top of the rim to form a gutter of capacity in depth substantially equalling the depth of the plate and being closely related so that the gutter is of maximum capacity and with but relatively slight increase of the diameter of the plate.

1,759,590. SKIDLESS TIRE. LOUIS G. PETERS, New York, N. Y. Filed June 14, 1929. Serial No. 370,856. 2 Claims. (Cl. 152—14.)



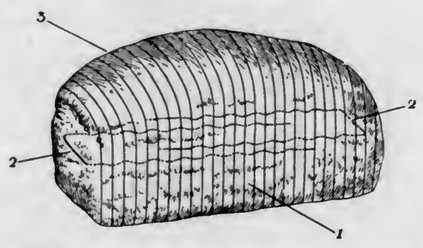
2. A non-skid tire having a plurality of metal traction members embedded therein with their outer faces flush with the tread, and each consisting of a shank casing with a central bore, a traction head with a stem slidably engaged in the bore, means for firmly holding the shank casings against displacement, and means for holding the stems at various extended positions from the casings for readjustments of the traction heads upon wear, said last mentioned means comprising coacting means between each shank casing and stem for holding these parts in relative positions and including a head located within a recess in the traction head so as to be accessible from the exterior of the tire.

1,759,591. DROP-WIRE SUPPORT. HENRY W. PLEISTER, Westfield, and JOHN KARITZKY, Garwood, N. J., assignors to Henry B. Newhall Corporation, Garwood, N. J., a Corporation of New Jersey. Filed July 25, 1928. Serial No. 295,149. 4 Claims. (Cl. 24—123.)



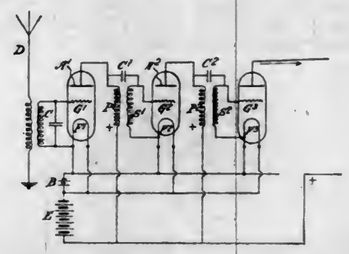
1. The combination in a drop wire support of a box provided with two vertical sides having a plurality of inclined slots, some of which open to the rear of the box, and a tongue adapted to cooperate with the slots.

1,759,592. RETAINER FOR SLICED BREAD. OTTO F. ROHWEDDER, Davenport, Iowa, assignor to Mac-Roh Sales & Mfg. Company, Davenport, Iowa, a Corporation of Delaware. Filed Jan. 25, 1927. Serial No. 163,441. 4 Claims. (Cl. 99—10.)



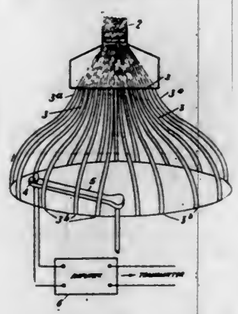
4. A sliced loaf of bread having the slices thereof secured in their original position by staples inserted in the loaf from the opposite ends thereof approximately upon the longitudinal axis of the loaf and having their inner end portions substantially overlapping within the loaf.

1,759,593. THERMIONIC RECEIVING DEVICE FOR WIRELESS TELEGRAPHY AND TELEPHONY. HENRY JOSEPH ROUND, Muswell Hill, London, England, assignor to The Radio Corporation of America, New York, N. Y., a Corporation of New York. Filed Mar. 31, 1920, Serial No. 370,175, and in Great Britain May 13, 1919. Renewed Feb. 21, 1929. 7 Claims. (Cl. 179—171.)



1. A coupling device for thermionic amplifiers comprising a primary coil, a secondary coil inductively coupled thereto, and a condenser connected to adjacent ends of said coils, the inductive reactance of said device being high as compared to the capacitive reactance of said device.

1,759,594. PICTURE TELEGRAPHY. HENRY JOSEPH ROUND, Westfield, Muswell Hill, London, England, assignor to Radio Corporation of America, a Corporation of Delaware. Filed May 11, 1927, Serial No. 190,467, and in Great Britain May 21, 1926. 8 Claims. (Cl. 178—6.)

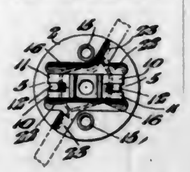


1. A picture telegraphy system comprising, a picture surface, a plurality of light tubes massed at one end behind said picture surface, said tubes being arranged at the other end to form a picture cipher, a light source, means for projecting light from said source upon said picture surface and through said light tubes in accordance with the intensity of light and shade in said picture surface, light sensitive means associated with the end of each of said tubes forming the said picture cipher for responding to variations in intensity in light and shade of said picture as passed through said tubes, a transmitting system, and means provided by said light sensitive means for influencing said transmitter in accordance with said varying intensity in light and shade in said picture.

1,759,595. ELECTRIC OUTLET DEVICE. HAROLD E. SLADE, Glen Ridge, N. J., assignor to Beaver Manufacturing Company, Newark, N. J., a Corporation of New Jersey. Filed May 18, 1929. Serial No. 364,070. 1 Claim. (Cl. 173—338.)

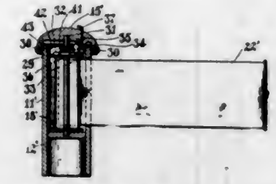
An electrical outlet device of the character stated, comprising a body and cap, longitudinally extending means for

securing said cap and body together, there being spaced blade receiving apertures extending through said body, a centrally disposed mounting screw carried by and projecting from said cap and adapted to engage an external support, there being an aperture in said body having a countersunk seat registering with the head of said screw for the insertion of a tool for actuating said screw, and there being aligning recesses in the juxtaposed faces of said body and cap, arranged at an angle to said fastening means, said body having recesses arranged angularly to said longitudinal securing means for the reception of a



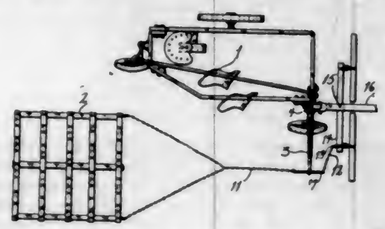
conductor, spring contacts disposed within said blade receiving apertures, and shoulders formed in the outer portions of said blade receiving apertures for engaging the outer ends of said contacts, the inner portions of the latter being deflected outwardly and formed into juxtaposed, offset outer and central tongues positioned in the recesses in said cap and adapted to receive the divided members of an electrical conductor therebetween, said central tongues being clamped upon said divided conductor members when said body and cap members are assembled, whereby said contacts are prevented from longitudinal displacement.

1,759,596. BLOTTER ATTACHMENT FOR FOUNTAIN PENS. RICHARD STEUDTE, New York, N. Y. Filed Aug. 12, 1927. Serial No. 212,436. 2 Claims. (Cl. 242—107.)



2. A blotter attachment for fountain pens, comprising a spool rotatively mounted in the cap of a fountain pen, a ratchet wheel mounted on the upper end of the spool, a top element rotatively and removably mounted on the said cap and arranged for assuming fixed positions, a rod journaled in the top element, a pawl mounted on the rod and engaging the said ratchet wheel, a blotter member attached on the said spool, and a spiral spring automatically revolving said spool upon turning the said rod for disengaging the pawl from the ratchet wheel.

1,759,597. HARROW HITCH FOR GANG PLOWS. LAWRENCE A. SWANSER, Brusett, Mont. Filed Sept. 10, 1927. Serial No. 218,731. 1 Claim. (Cl. 97—5.)



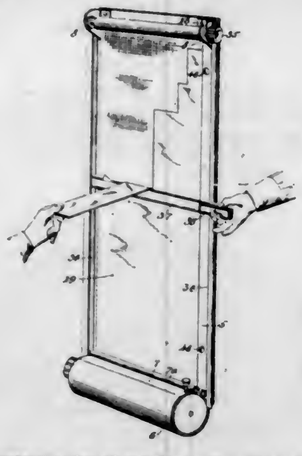
In a device of the kind described for associating a plow and harrow, the said plow being equipped with a conventional tongue and doubletree, a lateral harrow arm extended rigidly from the plow immediately back of the said doubletree, the extremity of the said arm being extended beyond the extremity of the said doubletree, a link depending from the extremity of the said harrow arm, the lower end of the link being forked, a pulley rotatably mounted within the fork of the said link, a slidable link mounted through the said fork and adapted to ride upon the said pulley, a chain connecting the rear end of the slidable link with the said harrow, and a chain angularly connecting the forward ends of the said slidable link with the extremity of the said doubletree.

1,759,598. BOW-FACING OAR. GEORGE F. WEBB, Hamilton, Ontario, Canada. Filed Oct. 18, 1929, Serial No. 400,533, and in Canada Dec. 13, 1928. 7 Claims. (Cl. 9—25.)



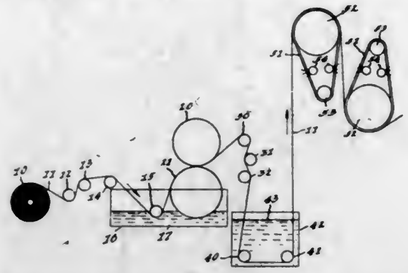
1. In bow facing oars a mounting member adapted to be secured to a gunwale or other rigid part of a rowing craft, an oar fulcrumed to said member at one point, a lever fulcrumed to said member at another point remote from the first point, a link, one member of a hook and eye combination on the inboard end of the oar, a complemental member of the hook and eye combination on the inboard end of the link, the width of the gap between the bill and back of the hook being less than the diameter of the main portion of the eye but perceptibly greater than the diameter of a reduced minor portion thereof so that the hook and eye may be separable when the oar and link are in a certain inoperative relative position but inseparable when the oar and link are in operative position, said link having a hook and eye connection at its outboard end with the outboard end of the lever.

1,759,599. ADHESIVE-TAPE DISPENSER. HORACE C. YATES and FRANK L. HANN, Mount Vernon, Iowa. Filed May 23, 1927. Serial No. 193,641. 4 Claims. (Cl. 164—73.)



1. In apparatus for dispensing surgical tape in the form of a web having a backing sheet to be peeled from the web, a roller for the web, a take-up roller for the residual material, supports for said rollers, and a bar disposed between the rollers and across and in front of the adhesive strip, to limit the tear of said strip.

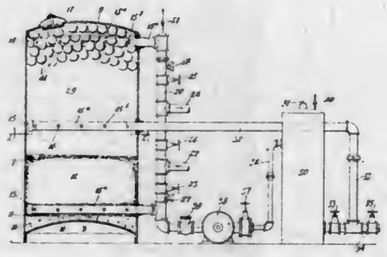
1,759,600. METHOD AND APPARATUS FOR TREATING COATED MATERIAL. VAN HAMM WILSHIRE, Dayton, Ohio, assignor to The Specialty Papers Company, Dayton, Ohio, a Corporation of Ohio. Filed Feb. 19, 1926. Serial No. 89,349. 5 Claims. (Cl. 91—68.)



1. The method of treating paper, or the like, which consists in applying a coating of paraffin to the paper, exposing the coated paper to the action of a liquid, and then removing the surface liquid without marring its surface by blotting the same.

4. In a machine for treating paper or the like, a dryer for removing surface liquid from said paper without marring the surface of the paper comprising a carrier vehicle adapted to receive the liquid from the paper and to carry it to a point remote from the paper, and means for causing relative motion between said carrier and a body of air at said remote point whereby to remove liquid from said carrier.

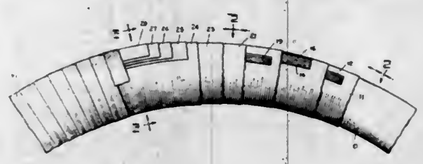
1,759,601. METHOD OF AND APPARATUS FOR SOFTENING WATER. GUY SCOTT APELDORN, Philadelphia, Pa. Filed Aug. 25, 1926. Serial No. 131,336. 9 Claims. (Cl. 210—24.)



1. In water softening apparatus the combination of a casing, a bed of water softening material therein, a distributor at the bottom of the bed, a second distributor at the top of the bed, a third distributor at the top of the casing, a salt tank, a water inlet near the bottom of the salt tank, a water outlet near the top of the salt tank, a source of hard water connected to the bottom distributor, a soft water outlet connected to the top or third distributor, a connection between the second distributor and the tank inlet, a connection betwen the tank outlet and the bottom distributor, and a pump in said last mentioned connection.

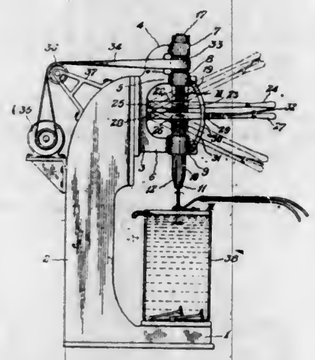
1,759,602. PUNCTUREPROOF PNEUMATIC INNER TUBE. WALTER J. ASCHENBACH, East Orange, N. J. Filed Apr. 30, 1926. Serial No. 105,626. 1 Claim. (Cl. 152—13.)

A puncture proof pneumatic inner tube of resilient material having a relatively thickened outer peripheral tread and relatively thin side walls, a substantially continuous length of fabric disposed within said relatively thickened outer peripheral tread, the portion of said tread disposed inwardly of said length of fabric being under a relatively high compression, said length of fabric having its warp and weft threads extending on the bias to the direction of its length whereby both said warp and weft threads extend at an angle to the circumferential direction of the outer periphery of the thread and provide both transverse and longitudinal resiliency, the lateral edges of said fabric being substantially straight whereby the warp and weft threads individually terminate at substantially uniform distances from the longitudinal center of the fabric and



afford a relatively high degree of edge strength under stretching strains, and supplemental strips of fabric disposed within said tread and overlapping the lateral edges of said first mentioned length of fabric, said supplemental strips also having their warp and weft threads extending on the bias and providing additional strength along the edges of the main strip with a degree of elasticity not less than the elasticity of the main strip whereby the stretch in the plane of the margins of the latter is substantially uniform throughout the tube.

1,759,603. METHOD OF HEAT TREATMENT. RICHARD E. BISSELL, Cleveland Heights, Ohio, assignor to Thompson Products Inc., Cleveland, Ohio, a Corporation of Ohio. Filed Aug. 2, 1926. Serial No. 126,351. 2 Claims. (Cl. 148—21.5.)

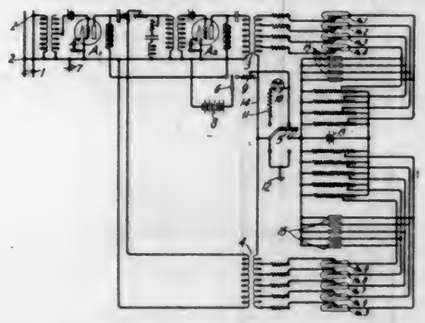


2. In the process of heat treating internal combustion engine valves, the said valves comprising a stem and a head having a valve seat portion, the steps of rotating the valve at high speed, and applying intense heat to a portion of the rotating valve seat surface and continuing rotation of the valve until the valve seat portion of the valve has reached the required temperature, and then immediately quenching the heated portion of the valve while it is still rotating.

1,759,604. INDICATING DEVICE. BJORN G. BJORNSON, New York, N. Y., assignor to Bell Telephone Laboratories Incorporated, New York, N. Y., a Corporation of New York. Filed Oct. 30, 1926. Serial No. 145,296. 9 Claims. (Cl. 175—183.)

1. In an indicating system, a line for transmitting electric currents supplied from a variable source of voltage, a

plurality of indicating means, means independent of said line for calibrating said indicating means and adjusting them to operate simultaneously at a common predetermined



voltage, and other means responsive to the current in said line for causing said indicating means to operate successively to indicate variations in the voltage on said line.

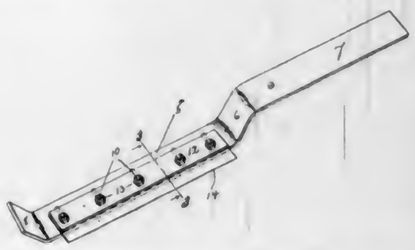
1,759,605. STABLE-SURFACE ALLOY STEEL. RALPH P. DE VRIES, Newtonville, N. Y., assignor to Ludlum Steel Company, Watervliet, N. Y., a Corporation of New Jersey. Filed Jan. 20, 1926. Serial No. 82,608. 5 Claims. (Cl. 75—1.)

1. A ferrous alloy containing from 0.5% to 5% copper; from 0.5% to 6% silicon, together with from 0.1% to 2% aluminum, and characterized by its resistance to scaling and corrosion at high temperatures.

1,759,606. STABLE-SURFACE ALLOY STEEL. RALPH P. DE VRIES, Newtonville, N. Y., assignor to Ludlum Steel Company, Watervliet, N. Y., a Corporation of New Jersey. Filed Jan. 22, 1926. Serial No. 83,139. 6 Claims. (Cl. 75—11.)

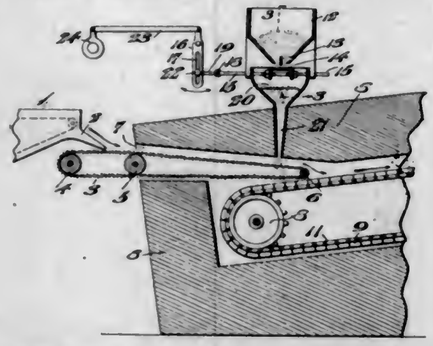
1. As a new product, a stable surface alloy steel capable of being worked and comprising aluminum from 1.5% to 6.0%, copper from 0.5% to 6.0%, carbon from 0.05% to 1.0%, and the balance iron.

1,759,607. GARDEN IMPLEMENT. FRANKLIN M. DUNN, Overlea, Md. Filed Sept. 15, 1927. Serial No. 219,604. 1 Claim. (Cl. 30—9.)



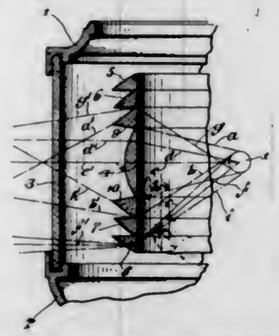
A cutting implement of the class described, including a shank having one end bent laterally at right angles thereto, to form a guard, and its opposite end offset to provide an extension constituting a handle, said shank, guard, and handle stamped from a single blank of material, said shank provided with openings, and means extending through said openings for detachably secured a cutting blade to either longitudinal side edge of said shank, and means to retain said blade in positive position on said shank.

1,759,608. APPARATUS FOR TREATING PRETZELS, CRACKERS, AND THE LIKE. WILLIAM EHRHART, Lancaster, Pa. Filed June 28, 1929. Serial No. 374,485. 5 Claims. (Cl. 107—43.)



2. In apparatus of the character stated, an oven, a main conveyor in said oven, a hopper for containing a powdery material, means including a reciprocating slide, operative to sprinkle said material upon edible articles being conveyed through the oven, and an auxiliary conveyor of mesh overlapping the main conveyor beneath said hopper whereby at least some of the powdery material may pass through the mesh of the auxiliary conveyor to the main covering.

1,759,609. OPTICAL SIGNAL DEVICE. SVEN AUGUST ESKILSON, Stockholm, Sweden, assignor to American Gas-Accumulator Company, Elizabeth, N. J., a Corporation of New Jersey. Filed Mar. 3, 1928. Serial No. 258,811. 2 Claims. (Cl. 240—106.)

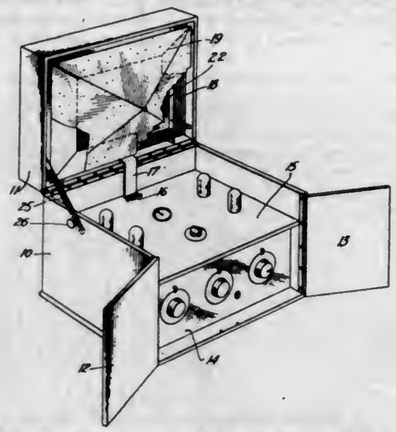


1. In an optical signal device, the combination of a condensing lens, a light deflecting element located in contiguous relation to an edge of the said lens, one or more condensing lenses located in adjoining relation to the outer edge of the said light deflecting element and a source of light located to include the focal center of the said lenses, the rays of light from said source which pass through the said light deflecting element being refracted and issuing therefrom in directions extending transversely of and across a horizontal plane including the focus of the said lens.

1,759,610. RADIO RECEIVING SET. GEORGE H. FISHER, New York, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 16, 1925. Serial No. 23,467. 1 Claim. (Cl. 250—14.)

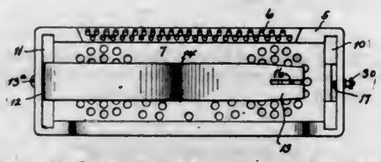
A radio receiving set comprising a cabinet, radio receiving apparatus mounted therein, a hinged cover for said cabinet, a grille forming the surface of said cover, a

direct-acting diaphragm mounted on said grille with its main radiating surface facing the inside of said cabinet,



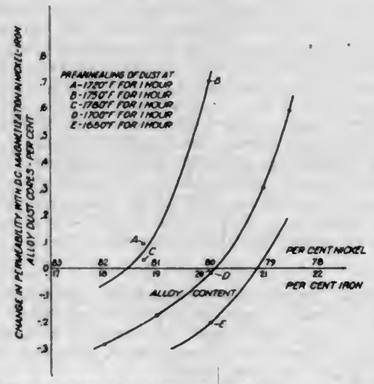
and substantially dust proof fabric mounted over said grille for protecting said diaphragm and said apparatus when the cover is closed.

1,759,611. BASS STRAP FOR ACCORDIONS AND THE LIKE. EUGENIO GALIZI and ADRIANO GALIZI, New York, N. Y. Filed Oct. 1, 1928. Serial No. 309,389. 5 Claims. (Cl. 84—376.)



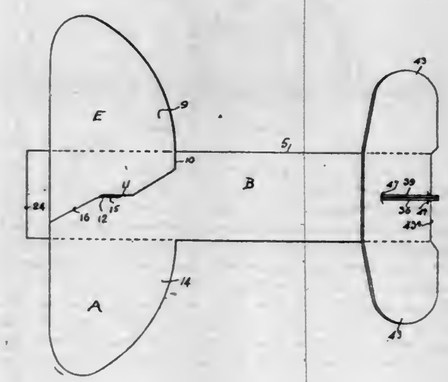
1. In an attachment for an accordion case having a valve board cover, a bass strap, means for fastening one end of the strap in one end of the case and means for adjustably clamping the opposite end of the strap within and to the opposite end of the case.

1,759,612. METHOD OF PRODUCING MAGNETIC BODIES. FREDERICK J. GIVEN, East Orange, RALPH M. C. GREENIDGE, Orange, and JOHN R. WEEKS, Jr., East Orange, N. J., assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed June 6, 1929. Serial No. 368,970. 5 Claims. (Cl. 175—21.)



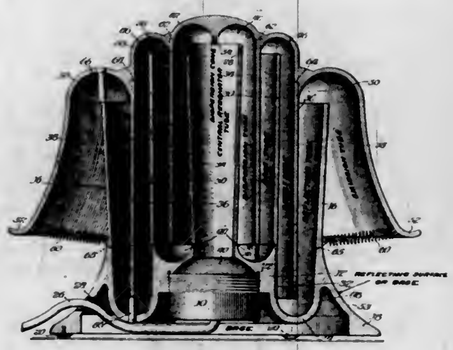
1. In the process of producing a magnetic body comprising finely divided particles of a magnetic alloy including nickel and iron in given proportions, formed into a substantially homogeneous mass, the method of improving the magnetic stability of the final body which consists in subjecting the magnetic particle prior to their assembly into final form to an annealing heat treatment at a temperature and for a length of time determined by the relative proportions of the nickel and iron in said alloy.

1,759,613. CARTON. ROBERT C. GREEN, Dayton, Ohio, assignor to The Green & Green Company, Dayton, Ohio, a Corporation of Ohio. Filed Oct. 17, 1928. Serial No. 313,114. 16 Claims. (Cl. 229—8.)



1. A new article of manufacture for use as a carton, comprising a blank arranged to be formed in the shape of an airplane, having a box-like fuselage to serve as a container, and wings thereon adapted to lock the sides, top and bottom of the box together.

1,759,614. ACOUSTIC AMPLIFIER. HARRY E. HALL, St. Charles, Ill., assignor to Freeman and Sweet, Chicago, Ill., a Copartnership composed of Hadley F. Freeman and Donald H. Sweet. Filed Apr. 21, 1924, Serial No. 707,825. Renewed Sept. 20, 1929. 9 Claims. (Cl. 181—27.)

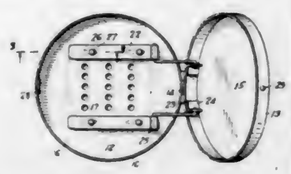


1. In an acoustic amplifier, in combination, a base, a loud speaker unit supported thereby, said base defining an oral cavity over the diaphragm of said unit, and walls defining an annularly convoluted enlarging passage opening downwardly above the outer edge of said base.

1,759,615. TREATMENT OF STEAM-BOILER WATER. RALPH E. HALL, Pittsburgh, Pa., assignor to John M. Hopwood, Dormont Borough, Pa. Filed Dec. 4, 1926. Serial No. 152,730. 2 Claims. (Cl. 210—14.)

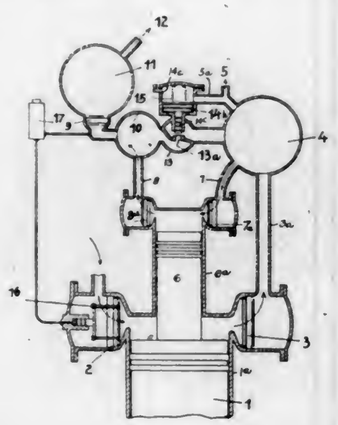
1. The process of inhibiting foaming in steam boilers, comprising bubbling a small amount of insoluble gas through the steam-water interface.

1,759,616. VANITY CASE. HARRY HEITEL and JOSEPH HEITEL, New York, N. Y., assignors of one-third to Harry Jacobson, New York, N. Y. Filed July 24, 1928. Serial No. 294,955. 17 Claims. (Cl. 132—83.)



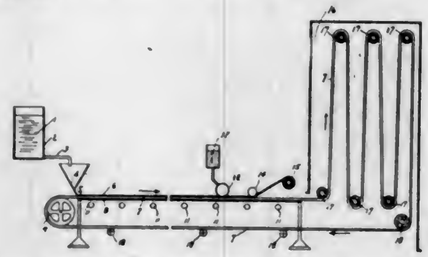
1. In a vanity case, a lower case member, an upper case member hinged thereto, a one-piece apertured and slotted partition dividing the lower member into a power storage compartment and a dispensing compartment, and provided with a peripheral annular flange engaging said lower member, a slide disposed underneath the partition and having apertures adapted to register with the apertures in the partition when the case is open, a hinged bottom on the lower member adapted to engage the lower edge of said flange, whereby loose powder may be inserted into the storage compartment, the outermost parts of said case members and said bottom being flush in the closed position of the case to provide a smooth outer surface, inclined blades projecting downwardly from the slide, a link holding member secured to the slide and passing through the slot of the partition, and a link connecting the link holding member to the upper member for operating the slide when the case is opened and for closing the dispensing compartment when the case is closed.

1,759,617. GAS COMPRESSOR. ALFRED HOERBIGER, Mauer, near Vienna, Austria, assignor to the Firm Hoerbiger & Co., Mauer, near Vienna, Austria. Filed Aug. 27, 1928, Serial No. 302,324, and in Austria Aug. 27, 1927. 6 Claims. (Cl. 230—22.)



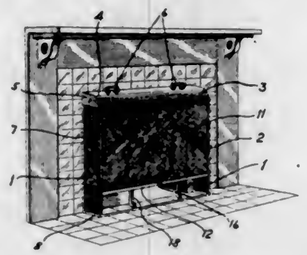
1. In a multistage gas compressor, the combination of at least two compressing cylinders and pistons working therein, a reservoir for each of said cylinders communicating with the delivery sides of said cylinders, a duct connecting the reservoirs of two successive compressor stages, and means adapted to maintain a substantially constant ratio between the pressures in the said reservoirs, said means being included in said duct and being responsive to the pressures in the two reservoirs which it connects.

1,759,618. MANUFACTURE OF RUBBER ARTICLES. ERNEST HOPKINSON, New York, and WILLIS A. GIBBONS, Little Neck, N. Y., assignors to General Rubber Company, New York, N. Y., a Corporation of New Jersey. Filed June 12, 1925. Serial No. 36,586. 5 Claims. (Cl. 18—56.)



1. A process for manufacturing sheets or strips of rubber which consists in continuously depositing rubber from an aqueous quick filtering dispersion thereof upon a moving web of filtering material and withdrawing the aqueous portion of the dispersion by filtration, and continuously detaching the rubber deposited on said web without interruption of its movement.

1,759,619. FIREPLACE SCREEN. EDWARD HUTCHINSON, Jr., Philadelphia, Pa. Filed Aug. 14, 1928. Serial No. 299,482. 1 Claim. (Cl. 126—202.)

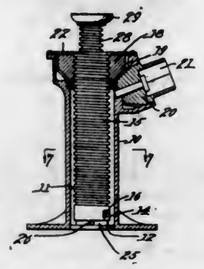


A portable screen or guard for removable position before an open fire place and having an open back for resting against a fire place wall and having an extended or swell wire mesh front to extend well beyond the fire place wall in order to accommodate the fire dogs and having wire mesh sides, a metal cap having flat sides and a curved front arranged at the top of said screen or guard, handles for said metal cap, a curtain including spring actuated means therefor at the front of said screen or guard, means for maintaining said curtain fixed against the action of said spring actuated means, said means including a pair of endwise, movable, spring controlled grippers for engaging a fixed part of said screen or guard, and a baffle plate arranged below and to the rear of said spring actuated means for deflection of heat waves therefrom.

1,759,620. METHOD OF TREATING HYDROCARBONS INCLUDING HYDROCARBON DERIVATIVES. JOSEPH HIDY JAMES, Pittsburgh, Pa., assignor to Clarence P. Byrnes, trustee. Filed Nov. 5, 1919. Serial No. 335,939. 39 Claims. (Cl. 260—116.)

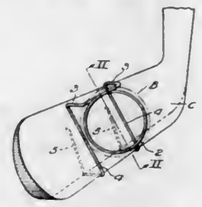
60. In the process of oxidizing an oxygen-containing aliphatic hydrocarbon derivative of more than one carbon atom, the step consisting of passing the same in vapor or gaseous phase with an oxygen-containing gas in contact with a compound of high-melting-point low-atomic volume metal at a temperature below a red heat.

1,759,621. DOUBLE-SCREW JACK. ALVIN L. JOHNSON, Worcester, Mass., assignor, by direct and mesne assignments, to Walker Manufacturing Company, Racine, Wis., a Corporation of Wisconsin. Filed Oct. 19, 1926. Serial No. 142,726. 17 Claims. (Cl. 254—102.)



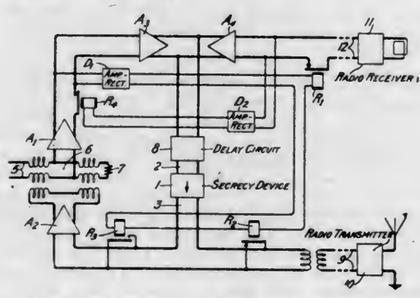
1. In a double screw jack, the combination with two screws, one threaded within the other, of a casing having guides along its interior, a rotatable nut engaging the threads of the outer screw to operate it, means projecting from the outer screw and movable vertically with respect thereto for engaging the guides to prevent the outer screw from turning, and means for forcing said projecting means into the spaces between the guides.

1,759,622. ATTACHMENT FOR GOLF CLUBS. JOHN J. KENNEY, Pittsburgh, Pa. Filed Mar. 11, 1929. Serial No. 345,989. 9 Claims. (Cl. 273—35.)



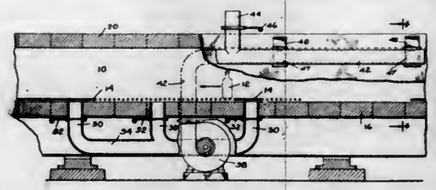
1. As an article of manufacture, an attachment for golf clubs, comprising means adapted to engage a club head, and ball retaining and centering means carried thereby.

1,759,623. SIGNALING SYSTEM. ROBERT C. MATHES, Wyoming, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Jan. 21, 1928. Serial No. 248,377. 28 Claims. (Cl. 250—9.)



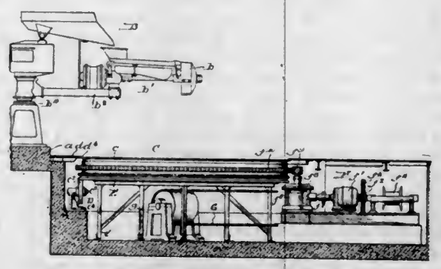
1. A signaling system of the four-wire type comprising two one-way line sections, one for incoming transmission and one for outgoing transmission, a one-way device having its input associated with both of said one-way line sections and having its output associated with both of said one-way line sections, and voice operated devices connected to each of said one-way line sections for selectively establishing a connection through said one-way device over either of said one-way line sections.

1,759,624. LEER. JOHN MAYO, Fairmont, W. Va., assignor to Thermal Engineering Corporation, Long Island City, N. Y., a Corporation of New York. Filed Oct. 1, 1927. Serial No. 223,450. 4 Claims. (Cl. 49—46.)



2. In a leer having front and rear ends and a conveyor for moving articles of glassware therethrough from front to rear, in combination, means for drawing atmospheric air through the rear of said leer and over the glassware within the rear of the leer whereby said ware is cooled and said air is heated; means for withdrawing said air from the leer at a point removed from the rear thereof, and means for subsequently returning said air into the leer at a point still further removed from the rear thereof.

1,759,625. APPARATUS FOR HANDLING SAND IN FOUNDRIES. WALTER E. NAYLOR, Chicago, Ill., assignor to The Beardsley & Piper Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 7, 1927. Serial No. 166,342. 11 Claims. (Cl. 22—21.)

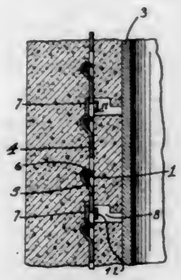


1. In an apparatus of the character described, the combination with a floor having an opening therein, of a turntable positioned in said opening and having the top thereof exposed so that flasks may be placed thereon for filling purposes and removed, said turn-table having openings through which the displaced flask-filling material will pass in lieu of cumulating thereon, mechanism for rotating the turn-table, and means under the table for catching the material that passes therethrough.

1,759,626. CENTERING REENFORCING CONSTRUCTION FOR COLUMNS. THEODORE H. OCKELS, Torrance, Calif. Filed Dec. 28, 1926. Serial No. 157,570. 4 Claims. (Cl. 72—76.)

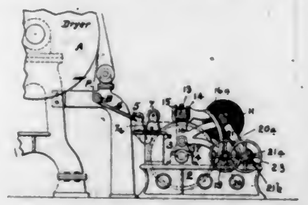
1. In a reenforcing construction for hollow columns and the like, the combination of a circumferentially disposed reenforcing member, a plurality of vertical reenforcing members connected with the circumferential member, a plurality of centering saddles mounted on the vertical mem-

bers and having extensions projecting inwardly toward the axis of the column, and a core within the column un-



attached to the saddles abutting against the extensions and cooperating with the saddles to center the circumferential reenforcing member in the column.

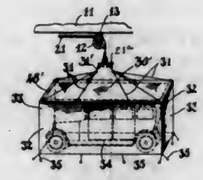
1,759,627. MEANS FOR SLITTING AND WINDING PAPER FROM PAPER-MAKING MACHINES. PHILIP D. PARSONS, Philadelphia, Pa., assignor to Scott Paper Company, a Corporation of Pennsylvania. Filed Aug. 8, 1924. Serial No. 730,830. 5 Claims. (Cl. 164—65.)



1. In a paper slitting and winding machine, the combination of guiding means over which the paper web is conveyed, with slitting mechanism for dividing the paper web into a plurality of narrower webs, a rotating drum over and in contact with which the plurality of narrower webs are caused to simultaneously travel, a multiple core rotatable member upon the several cores of which the plurality of narrower webs are respectively wound and in which the subdivision of the core is in alinement with the slitting mechanism whereby the two adjacent edges of the slit web will be received respectively upon the adjacent ends of the multiple core, means for temporarily supporting the rotatable member whereby it may move away from the drum while maintaining the paper rolls upon it in contact with said drum and whereby friction is provided for rotating the member together with the paper rolls thereon, a second rotatable multiple core member arranged intermediate of the first mentioned rotatable multiple core member and the slitting devices, means for supporting the second rotatable multiple core member in rolling contact with the drum and the paper travelling thereon with freedom of movement toward or from said drum whereby the paper web between the first and second rotatable members may be ruptured upon completion of the rolls upon the first rotatable member and the ruptured web wrapped about the second rotatable member for starting a second plurality of rolls, and means for moving the support for the second rotatable member circumferentially about the drum for transferring it to the supporting means which temporarily support the first rotatable member.

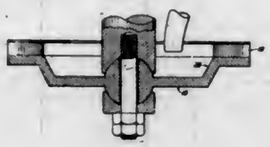
1,759,628. SUSPENDED COVER. VINCENZO PELLEGRINO, Rye, N. Y. Filed Jan. 20, 1928. Serial No. 248,108. 2 Claims. (Cl. 135—8.)

2. In a device of the class described, a vehicle cover, a main rope arranged for hoisting the cover, other ropes attached on the cover, a plate member attached on the main rope, rods pivotally connected on the plate member, means for adjusting the inclination of the rods, threaded rods longitudinally engaged on the rods, and rings con-



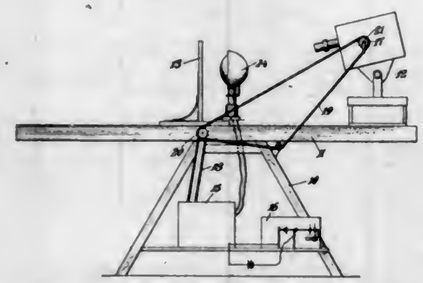
nected on the free end of the threaded rods, and connected with the said other ropes, so that a hoisted vehicle cover may be tilted as desired.

1,759,629. NEBULIZATION OF FLUIDS. CHAMPLAIN L. RILEY, North Plainfield, N. J., assignor to Industrial Associates, Incorporated, New York, N. Y., a Corporation of New York. Filed Mar. 31, 1926. Serial No. 98,838. 6 Claims. (Cl. 299—63.)



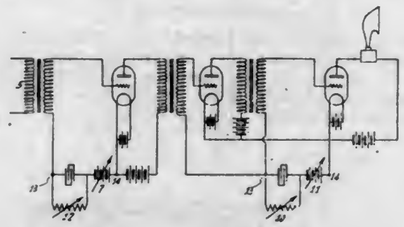
1. A high speed centrifugal nebulizer unit comprising a peripheral ring of impeller vanes, a web lying radially inward of said vanes, said web being substantially radial and adapted to receive and centrifugally disperse a fluid stream fed thereto, and means intermediate said web and vane ring to receive said dispersed fluid and to distribute the same to the impeller ring simultaneously and uniformly at all points.

1,759,630. CINEMA APPARATUS. EDWARD S. RINALDY, Rockville Center, N. Y. Filed June 21, 1921. Serial No. 479,216. 4 Claims. (Cl. 74—14.)



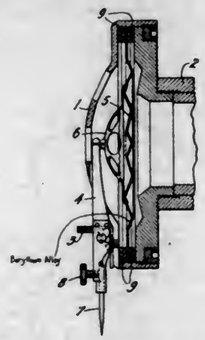
1. In combination with an intermittently operated motion picture camera; mechanism for intermittently actuating the camera mechanism, and comprising an operating shaft and means to impart unidirectional rotation thereto, a member loosely mounted thereon and connected with said camera for operating the camera mechanism, means movable with said loosely mounted member to hold the same against rotation, means to clutch said loosely mounted member to the shaft, and controlling means therefor including an intermittently actuated shaft and releasing means thereon for the holding means of the said loosely mounted member, and automatically-operated means to terminate the rotation of said operating shaft after a predetermined movement of said controlling means.

1,759,631. MEANS FOR AMPLIFYING ELECTRICAL CURRENTS OF AUDIBLE FREQUENCIES. WALTER VAN B. ROBERTS, Bronxville, N. Y., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Feb. 26, 1926. Serial No. 90,771. 2 Claims. (Cl. 179—171.)



1. In combination, a series of amplifiers, each having anode, cathode and control electrodes, input and output circuits, the cathodes being inductively connected, the control electrodes being connected to their respective input circuits, the anodes being connected to their respective output circuits, and another connection from the input circuits to the cathodes including a bias condenser and a bias battery for maintaining the said control electrodes at a biasing potential which is substantially equal to the peak value of the signal voltage applied to the control electrodes, and above the battery potential.

1,759,632. ACOUSTIC DIAPHRAGM. WILLIAM A. SCHEUCH, Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed July 6, 1925. Serial No. 41,479. 11 Claims. (Cl. 181—32.)



1. An acoustic diaphragm formed of an alloy comprising beryllium as its principal ingredient.

1,759,633. SHOCK-ABSORBING SHACKLED SUSPENSION FOR CAR SPRINGS. EUGEN SMOGROVICS, Pezinok, Czechoslovakia. Filed Aug. 12, 1927, Serial No. 212,417, and in Germany Aug. 31, 1926. 1 Claim. (Cl. 267—54.)



A shackle suspension for an upward and downward limitation of the flexing action of vehicle springs, the combination with a semi-elliptical spring, of a shackle joint having three acting points disposed in V-shaped relation to each other, one of said points being disposed in position to exert a downward pressure on the spring at a point within the length of the longest leaf of the spring, another of said points being disposed in position to exert an upward pressure on the spring at the upward and downward stopping stage of the flexing action at a point nearer the end of said longest leaf than the point at which the downward pressure is exerted, the third one of said points being adapted for pivotal connection with a supporting frame, at least one end of a spring leaf being disposed between the downwardly and uwpardly acting points of the shackle joint whereby said end is released temporarily at the middle stage of the downward spring action.

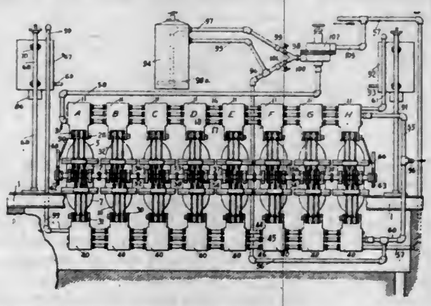
1,759,634. TREATMENT OF IRON OR STEEL. KARL B. THEWS, Drexel Hill, and JOSEPH S. CARLITZ, Philadelphia, Pa.; said Carlitz assignor to said Thews. Filed Dec. 7, 1929. Serial No. 412,565. 8 Claims. (Cl. 148—8.)

1. An aqueous solution of a non-oxidizing acid capable of dissolving iron oxides to which has been added an inhibitor comprising an organic substitution product of $CX(NH_2)_3$, in which X represents Se or Te.

1,759,635. TREATMENT OF IRON OR STEEL. KARL B. THEWS, Drexel Hill, and JOSEPH S. CARLITZ, Philadelphia, Pa.; said Carlitz assignor to said Thews. Filed Dec. 7, 1929. Serial No. 412,566. 10 Claims. (Cl. 148—8.)

1. An aqueous solution of a non-oxidizing acid capable of dissolving iron oxides to which has been added an inhibitor comprising an organic pseudo-substitution product of $NH:C(XH).NH_2$, in which X represents S, Se or Te.

1,759,636. WATER-SOFTENING APPARATUS. EDWARD T. TURNER, Dayton, Ohio. Filed Dec. 22, 1924. Serial No. 757,376. 67 Claims. (Cl. 210—24.)



1. In a water softening mechanism, a series of water softening devices of relatively small capacity, means for connecting each of said water softening devices with a source of supply of water to be softened and with a source of supply of regenerating solution, and mechanically operated means for so controlling said connecting means that while one of said water softening devices is connected within the source of supply of regenerating solution, a plurality of said water softening devices will be connected with a source of supply of water to be softened.

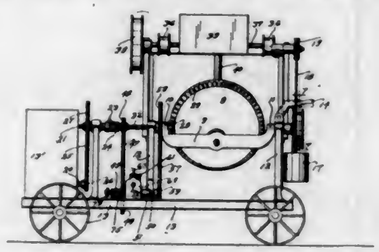
1,759,637. SWIMMER'S LIFE-SAVING BELT. JOSEPH S. WOLLK, New York, N. Y. Filed Sept. 9, 1929. Serial No. 391,199. 9 Claims. (Cl. 9—17.)



1. A swimmer's life saving belt comprising a plurality of air containers connected with an air supply strap hav-

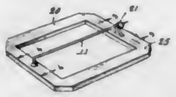
ing a mouth piece for manual inflation, said air supply strap consisting of a pair of superimposed sheets of cloth material rubberized on their inner sides and hermetically sealed along the edges, means for attaching the containers to each other, and means for holding them on the body of a wearer.

1,759,638. TIMING DEVICE. PERRY P. YOHE and WEBSTER CHRISTIE, Windom, Minn., assignors, by direct and mesne assignments, to Koehring Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Oct. 9, 1926. Serial No. 140,551. 18 Claims. (Cl. 83—73.)



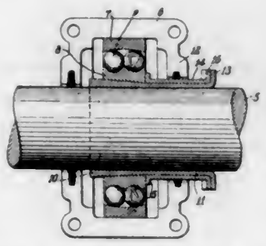
1. In combination with a machine of the character described having a drum mounted for rotary and discharge movements, driving connections for rotating the drum, and automatic means for moving the drum into discharge position at the completion of a predetermined period of time of rotation.

1,759,639. BUCKLE. MORRIS BELLOCH, Brooklyn, N. Y. Filed May 16, 1928. Serial No. 278,112. 1 Claim. (Cl. 24—161.)



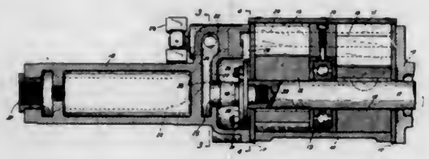
An ornamental buckle or the like comprising a body portion of cast metal, a pin of flexible wire, and a hook, the hook being of cast metal integral with the body of the buckle and the butt end of the pin being embedded in the body of the buckle opposite the hook, and bent toward the hook, the flexible wire of the pin allowing for this bending, and acting as a spring for giving a springy movement to the pin in applying and releasing the buckle.

1,759,640. SHEET-METAL ADAPTER. HAROLD E. BRUNNER, Larchmont, and ROBERT F. RUNGE, Forest Hills Gardens, N. Y., assignors to The Skayef Ball Bearing Company, Hartford, Conn., a Corporation of Connecticut. Filed June 13, 1929. Serial No. 370,558. 3 Claims. (Cl. 308—236.)



1. An adapter for use in mounting a bearing on a shaft and comprising a sleeve for embracing the shaft and having a split bearing seat portion at one end tapering toward the center, the other end of the sleeve having a waved outwardly directed flange and a collar rotatably mounted on the sleeve, and having a mating waved flange at one end, the other end having a bearing engaging flange.

1,759,641. GOVERNOR FOR FLUID-PRESSURE MOTORS. HAL L. COOK, Cleveland Heights, Ohio, assignor to The Rotor Air Tool Company, Cleveland, Ohio, a Corporation of Ohio. Filed Oct. 20, 1928. Serial No. 313,745. 15 Claims. (Cl. 137—140.)



1. A governor for a fluid pressure motor comprising a governor body adapted to be connected to the motor spindle and having a ported sleeve-like portion, a ported sleeve mounted exteriorly thereon, a governor arm carried by the governor body and having a connection with said sleeve so as to turn it, and means for dampening the action of the governor arm.

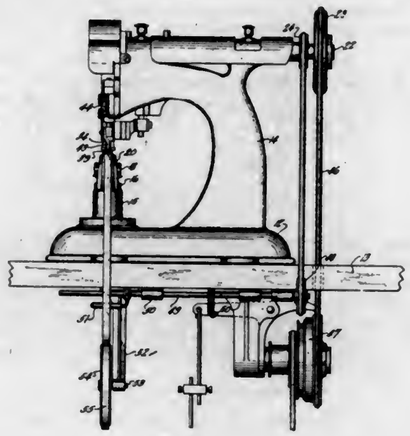
1,759,642. WIRE STRETCHER. LEVI HAWBAKER, Elmore, Minn. Filed Aug. 29, 1927. Serial No. 216,055. 3 Claims. (Cl. 254—81.)



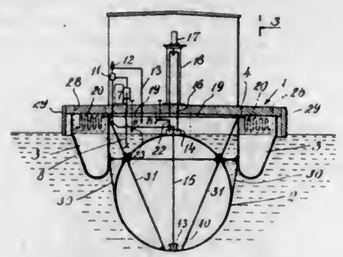
1. A wire stretching device having in combination, a pair of arms pivotally connected together at one end and extending in diverging relation, said arms having laterally extending projections thereon at the same side of said device, said projections each formed with a surface facing away from the connected ends of said arms and with a surface intersecting said surface at the outer side of said projections, said first mentioned surface also inclining inwardly toward the connected end of said arm, a bar over-lapping and pivoted to each of said arms beyond said projections and having an inclined end surface adapted to substantially abut and cooperate with said first mentioned surface on said projection to clamp a wire therebetween, said surfaces forming a slot therebetween open at one side of said device, the ends of said bars being formed as handles.

1,759,643. METHOD OF FORMING BACK HEEL SEAMS FOR FOOTWEAR. BENJAMIN H. HERBSTER, Milwaukee, Wis., assignor, by mesne assignments, to Chapline-Mayer Shoe Company, Milwaukee, Wis., a Corporation of Delaware. Filed Sept. 24, 1927. Serial No. 221,734. 6 Claims. (Cl. 12—146.)

1. The method of forming back heel seams for footwear which consists in sewing a pair of shoe quarters together while turned inside out, turning the quarters right side out, subjecting the seam on the turned right side of the leather to the action of a smoothing device, and applying to and causing the adherence of a strip of material over the seam on the inside of the quarters.



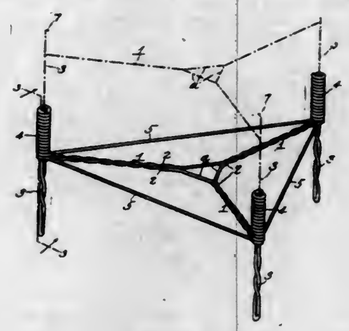
1,759,644. OIL-CARRYING MARINE VESSEL. WILLIAM REED-HILL, Whitestone, N. Y., assignor, by mesne assignments, to Aqua Systems Incorporated, New York, N. Y., a Corporation of New York. Filed Jan. 21, 1928. Serial No. 248,293. 13 Claims. (Cl. 114—74.)



1. An oil-carrying marine vessel comprising the combination of buoyant members, a tank normally submerged and completely filled with oil or water or both carried by the buoyant members, and means for flowing oil out at the top of the tank by means of water forced in at the bottom.

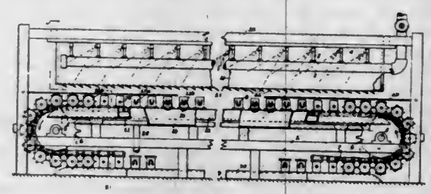
1,759,645. MULTIPLE-UNIT PLATE RACK. ELIZABETH W. JANKE and ALFRED H. JANKE, Plainfield, N. J.; said Alfred H. Janke assignor to said Elizabeth W. Janke. Filed Sept. 14, 1929. Serial No. 392,504. 8 Claims. (Cl. 211—178.)

1. A vertical multiple unit plate rack built up of a plurality of superposed independent units, each unit adapted to support a plate and constituting a skeletonized polygonal frame, composed of a plurality of lengths of wire, twisted together in pairs and shaped at each polygon corner, so that one wire forms a foot and the other wire



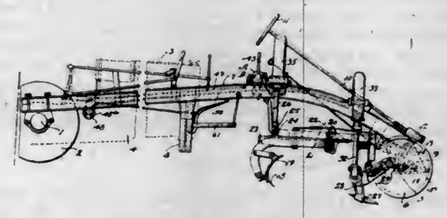
a socket for supportingly engaging respectively the socket and foot at the corresponding corners of the adjacent units to hold the units in spaced relation to each other.

1,759,646. APPARATUS FOR TREATING ARTICLES WITH LIQUID. CHARLES C. JESSEN, Passaic, N. J., assignor to Napon Rayon Corporation, Clifton, N. J., a Corporation of Delaware. Filed July 28, 1927. Serial No. 209,020. 5 Claims. (Cl. 8—19.)



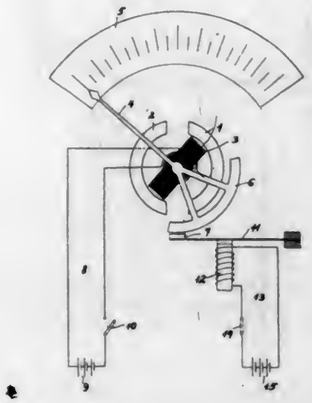
5. In combination, means to deliver a liquid shower, a chamber to house the shower closed at the top and opposite sides, a bottom for the chamber obstructing the fall of the shower and having numerous openings throughout a given area and through which the liquid may then pass downward in a divided state, and means to convey the articles to be wetted under the chamber and through the liquid falling from said bottom in such divided state.

1,759,647. ONE-MAN ROAD GRADER. LEO T. KINCANNON, Bucyrus, Ohio, assignor to Marion Machine, Foundry & Supply Company, Marion, Ind., a Corporation. Filed May 3, 1927. Serial No. 188,525. 12 Claims. (Cl. 37—145.)



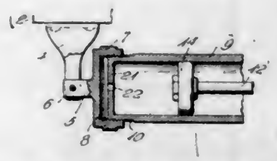
10. In a tractor grading machine of the class described, the combination with a main frame and a plurality of earth working implements mounted thereon, of a control lever operable to cause either separate or simultaneous raising and lowering actions on the part of said implements.

1,759,648. METHOD OF AND MEANS FOR MEASURING SHORT INTERVALS OF TIME. WILLY KUNZE, Bremen, Germany, assignor to Submarine Signal Company, Boston, Mass., a Corporation of Maine. Filed Aug. 11, 1924, Serial No. 731,522, and in Germany Aug. 18, 1923. 3 Claims. (Cl. 161—15.)



1. An apparatus for measuring short time intervals, comprising a pivoted coil for carrying electric current, an indicator rotated by the rotation of said pivoted coil, said indicator having a pointer at one end and a segment at the other, means for setting up a permanent magnetic field relative to an initial position of said coil, means for applying a torque to said coil to cause the rotation of the same at the beginning of the time interval to be measured, braking means applied to the periphery of said segment for stopping and holding said indicator at the end of the time interval to be measured, and a scale for reading the time interval.

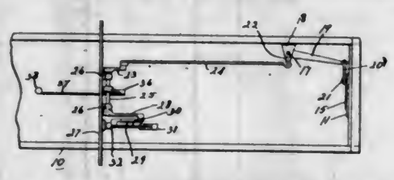
1,759,649. PNEUMATIC DOOR CLOSER. HARRY J. LEBHERZ, Frederick, Md., assignor to The Everedy Company, Frederick, Md., a Corporation of Maryland. Filed Aug. 11, 1928. Serial No. 299,064. 3 Claims. (Cl. 16—84.)



1. A door closer comprising a rotatable cylinder, a piston and piston rod operative in said cylinder, a socket member having internal screw threads cut therein on a taper, the end of said cylinder being screw threaded on a taper corresponding to the taper of the internal screw threads in said socket member, the end wall of said cylinder being ported to permit the passage of air into or out of said cylinder for leakage through the threaded connection between the end of said cylinder with said socket member, the rate of leakage of the air being predetermined by rotation of said cylinder to a selected position with respect to said socket member.

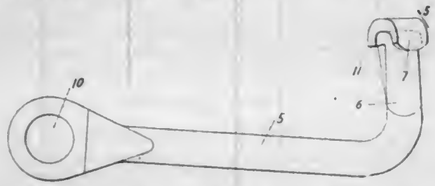
1,759,650. SAFETY DEVICE FOR CRANKING AND ELECTRIC STARTER FOR AUTOMOBILES. ROBERT LITTLER, Sr., Philadelphia, Pa., assignor to Martha E. Littler, Philadelphia, Pa. Filed Mar. 7, 1927. Serial No. 173,405. 3 Claims. (Cl. 123—179.)

1. In a safety device for automobiles, an apron carried by the automobile and provided with an opening in alignment with the crank shaft, a pair of parallel transverse horizontal guides on said apron, one above and the other below the opening, an apertured plate slidably mounted in said guides to prevent insertion of a crank for engagement with the engine shaft except when the aperture in said plate registers with the hole in the apron, said plate being supported by the guides to prevent accidental deformation



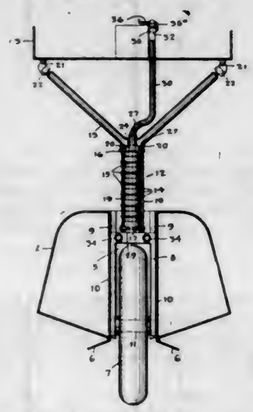
thereof, an horizontal shaft, arms carried by said shaft, means to connect one of said arms with the transmission lever of the automobile, a vertical shaft, means to connect the other arm of the horizontal shaft with one of the arms of the vertical shaft and a link to connect the other arm of the vertical shaft with the plate whereby operation of the transmission lever will slide the plate horizontally in the guides.

1,759,651. LIFTING DEVICE. EVERETT G. LIVESAY, Dayton, Ohio. Filed May 19, 1926. Serial No. 110,279. 2 Claims. (Cl. 294—82.)



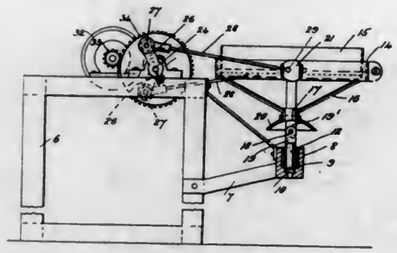
1. In a lifting device of the character described, a supporting member comprising an elongated portion, a transverse portion at one end of said elongated portion, and a hook shaped portion at the outer end of said transverse portion, said transverse portion having an inwardly facing shoulder adjacent to said hook shaped portion, and said elongated portion also having at its other end means for connecting the same with a hoisting device.

1,759,652. RETRACTABLE LANDING GEAR. GROVER LOENING, New York, N. Y. Filed June 29, 1929. Serial No. 374,732. 12 Claims. (Cl. 244—2.)



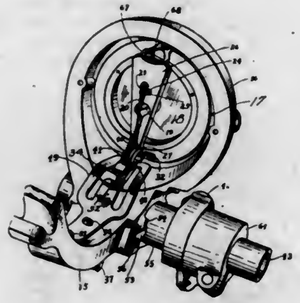
1. A retractable landing gear comprising a wheel carrying part, a foldable main strength strut connected therewith and containing an offset hinge device causing said strut to be self-locking when straightened to protract the wheel, and operating means comprising a push and pull rod connected with said main strength strut to fold and straighten the same.

1,759,653. SIEVE-OPERATING MECHANISM. JAMES LOVE, Jr., Wilkes-Barre, Pa., assignor of one-half to Thomas Powell, Wilkes-Barre, Pa. Filed Jan. 24, 1929. Serial No. 334,777. 7 Claims. (Cl. 209—327.)



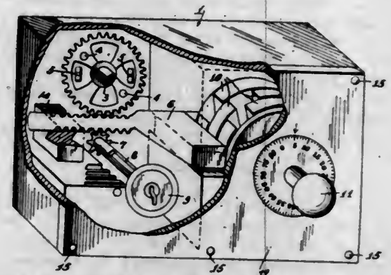
1. In a sieve operating mechanism, a supporting frame, a frame for holding a sieve mounted to oscillate horizontally and tilt laterally on the supporting frame, a driving shaft provided with cranks set at an obtuse angle to each other, and means for connecting the cranks with the sieve frame at opposite sides of its vertical axis.

1,759,654. PHONOGRAPH. JOSEPH M. LUCARELLE, Bridgeport, and JOHN E. RENHOLDT, Stratford, Conn., assignors to Dictaphone Corporation, Bridgeport, Conn., a Corporation of New York. Filed Aug. 13, 1924. Serial No. 731,795. 25 Claims. (Cl. 274—21.)



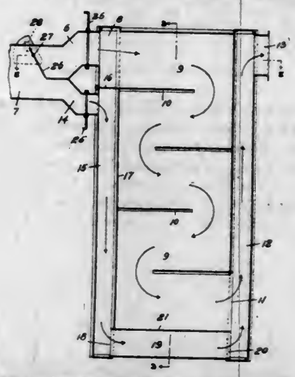
18. In combination, a frame; a sound-box carriage mounted on the frame; a record-engaging stylus mounted in the carriage and capable of record-tracking movements relative to the carriage; means for back-spacing the sound-box carriage while allowing the stylus to remain in engagement with the record; a clamping device comprising companion parts, one of which is connected to the stylus and mounted for movement with the stylus in its record-tracking movements, and the other of which is fixed against said tracking movements, said parts upon engagement with each other being adapted to hold the stylus against tracking movement; and means comprising a resilient member and operated by the back-spacing means for causing said parts to engage during the back-spacing movements of the carriage.

1,759,655. SWITCH LOCK. THOMAS B. LYLES, Terre Haute, Ind. Filed Sept. 10, 1927. Serial No. 218,721. 2 Claims. (Cl. 200—45.)



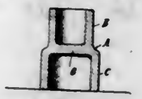
1. In a switch lock, a casing, an electrical switch mechanism including a gear mounted within the casing, a locking lug slidably mounted in the casing and provided with means coacting with the switch gear to rotate the latter upon movement of the locking lug, means operable by a key for actuating said locking lug and permutation locking tumblers positioned in the path of travel of the locking lug and permitting movement of the latter when spaces in all of the tumblers are in endwise alignment with the locking lug.

1,759,656. HEAT-EXCHANGE APPARATUS. GREGORY D. MANTLE, Pittsburgh, Pa., assignor, by mesne assignments, to Surface Combustion Company, Toledo, Ohio, a Corporation of New York. Filed Apr. 9, 1926. Serial No. 100,862. 11 Claims. (Cl. 257—168.)



5. A heat exchange apparatus having in combination an inlet, a passage associated with said inlet for directing a stream of fluid through the apparatus, a second inlet, a second passage associated therewith for directing a stream of fluid across that part of the apparatus subjected to the highest temperature and an eccentrically supported damper associated with said first inlet and adapted to be operated by the pressure therein for maintaining the flow through said second inlet substantially constant.

1,759,657. GOLF TEE. WARREN H. MCLEOD, Boulder, Colo. Filed Mar. 18, 1929. Serial No. 348,012. 5 Claims. (Cl. 273—33.)



1. A golf tee of substantially hollow cylindrical form compressed from a homogeneous earthy material and having formed integral therewith a relatively thin disintegrable transverse reinforcing web.

1,759,658. MANUFACTURE OF PURE IRON. ALWIN MITTASCH, Ludwigshafen-on-the-Rhine, CARL MÜLLER, Mannheim, and EDUARD LINCKH, Ludwigshafen-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Dec. 21, 1925, Serial No. 76,871, and in Germany Dec. 15, 1924. 5 Claims. (Cl. 75—14.)

1. The process of manufacturing pure iron which comprises subjecting iron carbonyl vapor in a diluted condition to thermal decomposition by contact with a molten metal.

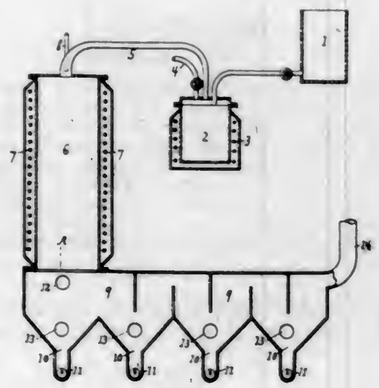
1,759,659. MANUFACTURE OF PURE IRON. ALWIN MITTASCH, Ludwigshafen-on-the-Rhine, CARL MÜLLER, Mannheim, and WALTER SCHUBARDT, Ludwigshafen-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Mar. 4, 1926, Serial No. 92,366, and in Germany May 23, 1925. 7 Claims. (Cl. 75—14.)

1. The process of manufacturing pure iron which comprises decomposing iron carbonyl in the hot free space of a heated vessel substantially at a distance from the hot walls of the vessel.

1,759,660. PRODUCTION OF PURE IRON. ALWIN MITTASCH and CARL MÜLLER, Mannheim, and EDUARD LINCKH, Ludwigshafen-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed July 2, 1927, Serial No. 203,258, and in Germany July 5, 1926. 1 Claim. (Cl. 75—14.)

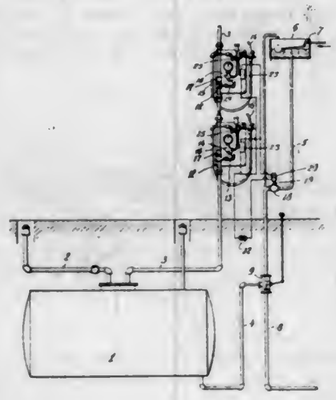
The process of producing pure iron which comprises bringing undiluted iron carbonyl in contact with fused iron.

1,759,661. FINELY-DIVIDED METALS FROM METAL CARBONYLS. CARL MÜLLER, Mannheim, and WALTER SCHUBARDT, Ludwigshafen-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed July 2, 1927, Serial No. 203,242, and in Germany July 6, 1926. 3 Claims. (Cl. 75—17.)



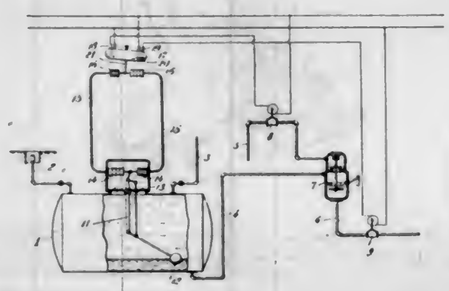
1. The process of producing pure metals which comprises decomposing metal carbonyls of metals having an atomic weight higher than 56, in the hot free space of a heated vessel at a substantial distance from the hot walls of the vessel.

1,759,662. PRESSURE CONTROL FOR HYDRAULIC OIL STORING AND DELIVERING SYSTEMS. WILLIAM J. PETER, New York, N. Y., assignor, by direct and mesne assignments, to Aqua Systems Incorporated, New York, N. Y., a Corporation of New York. Filed Oct. 7, 1926, Serial No. 140,006. Renewed Apr. 11, 1928. 23 Claims. (Cl. 221—67.)



1. In a hydraulic oil storage and delivery system, the combination of a tank, an oil delivery hose receiving oil from the tank, a source of hydraulic pressure designed to be connected with and disconnected from the tank, a support for the hose when not in use, and manually controlled means for connecting the source of pressure with the tank operable only when the hose is removed from the support, and automatically operated to disconnect the source of pressure from the tank when the hose is replaced on the support.

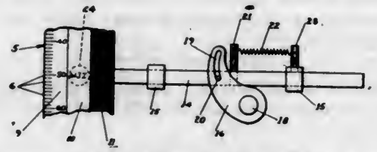
1,759,663. MEANS FOR CONTROLLING THE FLOW IN HYDRAULIC OIL STORING AND DISPENSING SYSTEMS. WILLIAM J. PETER, New York, N. Y., assignor, by direct and mesne assignments, to Aqua Systems Incorporated, New York, N. Y., a Corporation of New York. Filed Feb. 5, 1929. Serial No. 337,586. 4 Claims. (Cl. 221—67.)



1. In a hydraulic oil storage and delivery system the combination of a tank, a float designed to float on the water in the tank, valves controlling the flow of liquid into and out of the tank, an expansible-compressible element immersed in the liquid within the tank and operated by the rise and fall of the float, a fluid conduit leading from said expansible-compressible element to a point without the tank, and means operated by the fluid for operating the control valves, whereby the flow is governed by the position of the float.

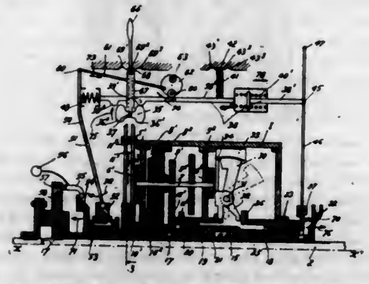
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1,759,664. SELECTOR TUNING DEVICE. JOHN O. PRESCOTT, Glenbrook, Conn., assignor to Columbia Phonograph Company, Inc., Bridgeport, Conn., a Corporation of New York. Original application filed Nov. 22, 1929, Serial No. 409,007. Divided and this application filed Apr. 1, 1930. Serial No. 440,750. 7 Claims. (Cl. 116—124.4.)



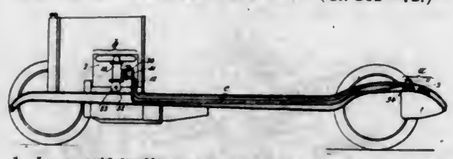
1. In combination, a radio dial including a more or less opaque portion and means to engage said portion to treat the same to make a translucent line across said portion to indicate the location of a broadcasting station on said dial.

1,759,665. AUTOMATIC CLUTCH AND CHANGE-SPEED MECHANISM. JEAN LÉON SERVON, Bayonne, France, assignor to Embrayage Automatique Bloch Servon Société à Responsabilité Limitee, Paris, France, a Limited Joint-Stock Company of France. Filed Feb. 4, 1928, Serial No. 251,786, and in France Mar. 25, 1927. 10 Claims. (Cl. 74—97.)



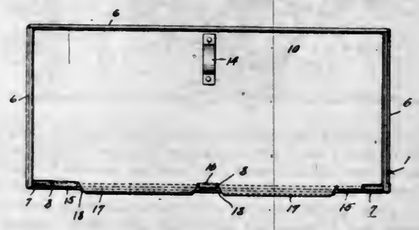
1. In an automatic clutching and speed changing device, the combination with a driving shaft and a driven shaft, of a fly-wheel attached to the driving shaft, a planetary gear train operatively interposed between the fly-wheel and the driven shaft, a pair of sun gears loosely mounted coaxially with the driven shaft and meshing with certain satellite gears of said train, a brake associated with each of said sun gears, and means automatically responsive to the speeds of said driving and driven shafts and to the resistance of said driven shaft for controlling the operation of said brakes.

1,759,666. CARBURETOR. EDOUARD SEIGNOL, Paris, France. Filed June 25, 1927, Serial No. 201,382, and in France June 26, 1926. 4 Claims. (Cl. 261—72.)



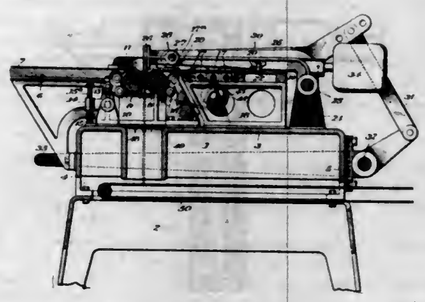
1. In a self-feeding carburetor the combination of an internal combustion engine intake, a main liquid fuel tank located at a lower level than the said intake, a primary venturi positioned above the level of the fuel in the main tank and close to said tank, a conduit connecting the throat of the venturi directly to a point slightly above the bottom of the tank, a secondary venturi in the intake, a throttle valve downstream the secondary venturi regulating the flow of carbureted mixture to the engine, a piping connecting the primary venturi to a point slightly downstream of the throat of the secondary venturi therein, a pneumatically balanced air throttle valve regulating the flow of air in the secondary venturi and influencing the flow of air in the primary venturi, a piston movable in a cylinder, a cylinder exhaust conduit connecting one face of the said piston with a point located between the two throttle valves, a spring tending to close the air regulating throttle valve and a connection between the said piston and the said air regulating throttle valve, the movements of the piston under the influence of the depression above referred to and of the said spring causing the air regulating throttle valve to be moved towards its closure position when the depression diminishes and vice versa and means for regulating the section of the said cylinder exhaust conduit.

1,759,667. MAIL BOX. PETER STAY, Reedley, Calif. Filed June 20, 1929. Serial No. 372,483. 1 Claim. (Cl. 232—28.)



A receptacle comprising a body including a bottom having terminal sockets and intermediate sockets spaced from each other and from the terminal sockets, a hinge rod in the sockets, a front provided with terminal eyes and with an intermediate eye, the terminal eyes being engaged around the hinge rod between the terminal sockets and the intermediate eye being engaged around the hinge rod between the intermediate sockets, a reinforcing rod extended along the inner edge of the front, the front having projections extended around the reinforcing rod and located between the terminal eyes and the intermediate eye, the projections being curved and prolonged to form tongues extended part way around the intermediate sockets, the projections and the reinforcing rod forming an eccentric shoulder which engages a portion of the bottom to limit the opening of the front, the tongues and the intermediate sockets being provided with lug and seat elements which interengage to hold the front closed.

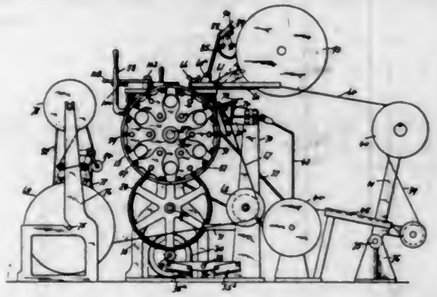
1,759,668. APPARATUS FOR MAKING MULTIPLE-PLY FABRICS. WILLIAM C. STEVENS, Akron, Ohio, assignor to The Firestone Tire and Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Dec. 11, 1922. Serial No. 606,018. 1 Claim. (Cl. 270—80.)



Apparatus of the character described comprising, in combination, cooperating folding and pressing rollers arranged to feed a strip of fabric therebetween in a downward direction, a vertical plate adjacent the path of move-

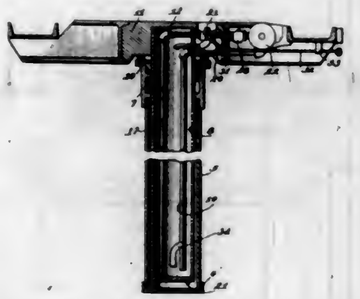
ment of the strip, and a horizontal conveyor arranged to pull the lower edge of the strip against the plate before the other edge of the strip leaves said rollers.

1,759,669. METHOD AND APPARATUS FOR BUILDING TIRE BEADS. WILLIAM C. STEVENS, Akron, Ohio, assignor to The Firestone Tire and Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Oct. 11, 1926. Serial No. 140,804. 6 Claims. (Cl. 154—9.)



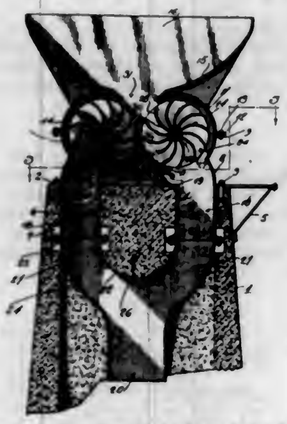
1. Apparatus for building beads comprising a rotatable drum having a fixed peripheral portion and expansible portions on each side of said fixed portion, means for guiding a strip of fabric onto said drum, said means including a guide plate having spaced guide-bars relatively adjustable thereon and a cross rod overlying said plate; means for guiding a strip of core forming material onto said drum, said means including spaced brackets between which the material passes and rollers between the brackets over which the material passes; means for applying a filler strip on the drum, said means including a grooved roller movable onto or away from the drum and means for supplying the filling strip to said roller; means for expanding or contracting the expansible portions of the drum; means for expanding one side of the fabric against the side of the core and means for turning the other side of the band over the core onto the first named side thereof, said two means including stitcher blades movable transversely over the surface of the drum from opposite sides thereof; and means for driving the drum at different speeds, said means including a friction pulley and friction rollers continuously driven at different speeds movable interdependently toward and from the friction pulley or to a neutral position.

1,759,670. LIFTING JACK. LOUIS C. STUKENBORG, Memphis, Tenn., assignor to Oildraulic Lift Company, Memphis, Tenn., a Corporation of Delaware. Filed July 8, 1927. Serial No. 204,327. 4 Claim. (Cl. 138—9.)



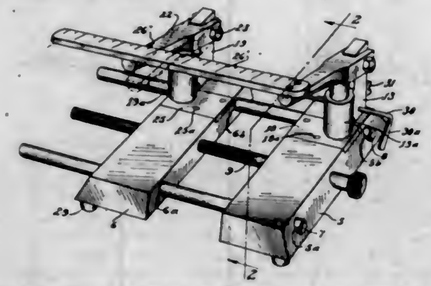
1. In a vehicle lifting device of the class described, a stationary cylinder, a piston slidable in the cylinder, a body rigidly mounted on the upper end of the piston, means mounted on said body and constructed for accommodating and supporting a vehicle, a motor driven pump on said vehicle supporting means, and valved piping connected with the pump and associated with the piston, said valved piping including a discharge pipe connected through a valve with the pump, a return pipe extending from the valve, the valve being movable to position for affording communication between the discharge pipe and the pump or another position affording communication between the discharge pipe and the return pipe and a supply pipe connected with the pump.

1,759,671. WATER MOTOR. MIHÁLY TARIS, Montreal, Quebec, Canada. Filed Apr. 25, 1929. Serial No. 358,036. 5 Claims. (Cl. 60—102.)



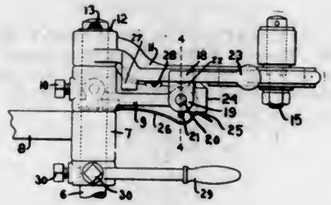
5. A water motor comprising a casing, a pair of water wheels rotatable therein in the same plane with adjacent peripheral edges spaced from each other, means in the casing operable exteriorly thereof adapted to be moved into engagement with the wheels for arresting movement thereof, a concrete support for the motor casing, said arresting means dividing the water flowing through the casing, an outlet pipe having a fork at one end receiving the divided stream of water, said arresting means including a pair of hingedly connected arcuate brake shoe plates, gear mechanism for raising and lowering the plates into and out of operative position, guide rods on the hinged and outer edges of the plates, guide slots in the adjacent casing walls for the rods to direct the brake shoe plates toward and away from the water wheels, a gear mechanism including a pair of worm gear operated shafts attached at their upper ends to the hinged edges of the plates, means exteriorly of the casing for operating the worm gears, and a gear wheel on each water wheel shaft in meshing engagement with each other.

1,759,672. PAPER PUNCH. JEREMIE TELLIER, New Bedford, Mass. Filed Aug. 23, 1929. Serial No. 387,074. 4 Claims. (Cl. 164—91.)



1. An adjustable punching device consisting of a pair of punching units, each having an operating handle, an adjustable connection between said units, and a combined handle bar and gauge secured to one of said handles and overlying and adapted to bear upon the other of said handles, said other handle having a pointer to co-operate with said gauge to indicate the spacing between the punching centers of the two punching units.

1,759,673. HARNESS-FRAME-LEVELING MECHANISM. HARRY W. THATCHER, Hopedale, Mass., assignor to Draper Corporation, Hopedale, Mass., a Corporation of Maine. Filed Oct. 7, 1929. Serial No. 397,854. 9 Claims. (Cl. 139—56.)



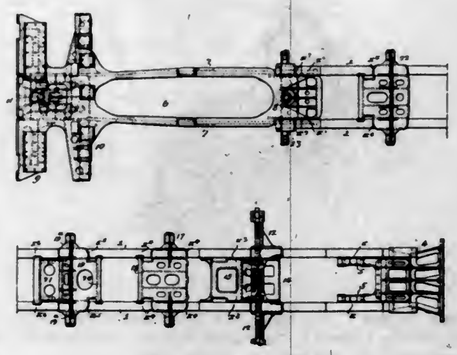
1. A cone-actuated loom harness frame mechanism comprising a cone mounted for axial oscillation, connections therefrom to the harness frames, a rocker arm mounted for coaxial oscillation with and with respect to the cone, means connected to the rocker arm for oscillating it, a driving arm mounted for coaxial oscillation with the cone, a latch pivotally mounted on one of said arms and movable into and out of locking engagement with the other arm whereby when the latch is swung into unlocking position the harnesses may be leveled manually.

1,759,674. SHOCK ABSORBER FOR LANDING GEARS FOR AEROPLANES. JOHN F. WALLACE, Shaker Heights, Ohio, assignor to The Cleveland Pneumatic Tool Company, Cleveland, Ohio, a Corporation of Ohio. Filed Apr. 8, 1926. Serial No. 100,521. 14 Claims. (Cl. 267—64.)



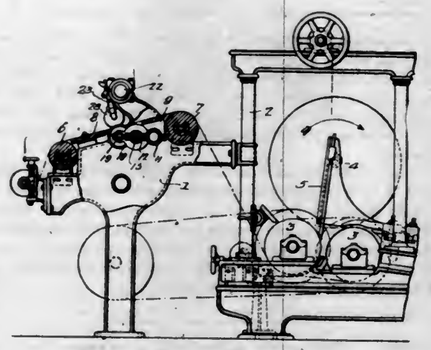
1. A shock absorbing device, comprising a pair of telescopic members, one in the form of a cylinder and the other slidable therein and having two pistons engaging the inner wall of the cylinder, there being a cushioning chamber between the head of the cylinder and one piston, and a fluid receiving recoil checking space between the pistons, embodying means for retarding the flow of fluid therein in one direction.

1,759,675. LOCOMOTIVE FRAME. CHARLES W. WERST, Philadelphia, Pa. Filed Apr. 12, 1929. Serial No. 354,629. 7 Claims. (Cl. 105—172.)



3. The combination in a locomotive frame, of two side frames; a front frame and a rear frame welded to said side frames; and a guide bearer cross-tie resting upon the side frames and welded thereto.

1,759,676. DRIVEN SLITTER FOR PAPER-SLITTING MACHINES. JOSEPH A. WHITE, Melrose Park, Pa., assignor to The Moore & White Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed July 7, 1928. Serial No. 291,078. 4 Claims. (Cl. 164—70.)

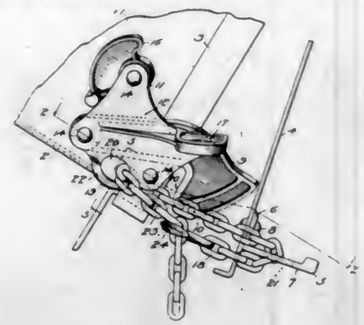


1. The combination in a driven slitter of a paper-slitting machine, of a transverse support; a slitter frame carried by said support; a driven shaft passing through the frame; a gear wheel at the frame through which the shaft extends; a pinion meshing with the gear wheel; a shaft on which the pinion is mounted; and a slitter blade mounted on the shaft.

1,759,677. DOOR MECHANISM FOR RAILWAY CARS. WILLIAM E. WINE, Toledo, Ohio. Filed Feb. 5, 1929, Serial No. 337,634. Renewed Apr. 15, 1930. 8 Claims. (Cl. 105—308.)

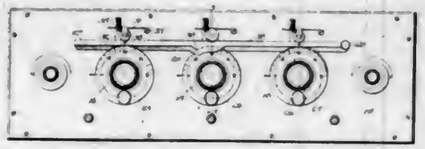
1. In a door mechanism for railway cars, the combination with a hinged door movable to open position under the influence of gravity, of a hook member pivotally mounted on the car body and cooperable with the door for supporting it in closed position, a bracket having a plate portion overlying the outer face of the hook and disposed in a plane substantially parallel with adjacent portions of the car, the plate portion of said bracket being provided with

an aperture, a member mounted upon the door, and a chain device cooperable with the latter and the apertured portion of said bracket adapted, upon release of the door



from its supporting hook, to arrest opening movement of the door to sustain it in a desired position of adjustment for regulating the discharge of lading from the car.

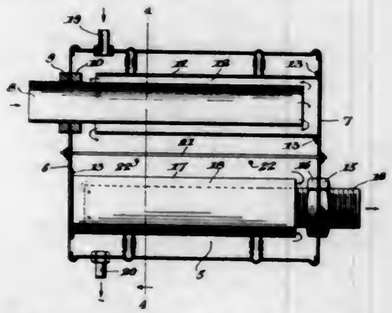
1,759,678. RADIO APPARATUS. DORSEY F. ASBURY, Broomes Island, Md. Filed Dec. 31, 1923, Serial No. 683,756. Renewed Oct. 23, 1929. 18 Claims. (Cl. 175—41.5.)



1. In radio apparatus, a rotatable shaft, a tuning unit a part of which is movable with said shaft, a member on said shaft, an operator engaging said member, a pivoted arm, a roller carried by said arm engaging said operator for driving the latter, and means reacting from said shaft against said arm to hold said roller in engagement with said operator.

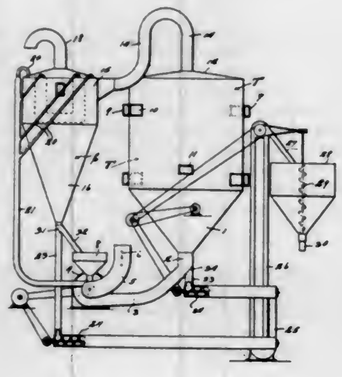
15. In radio apparatus, more than two tuning units, a part of each of which is movable, connections between the movable parts of the units to collectively secure adjustments of the units, and means included in said connections and carried by the movable part of at least one of the units, said means being operable to effect individual adjustment of the movable part of its related unit.

1,759,679. EXHAUST MUFFLER. ALFRED BACKMAN, Halifax, Nova Scotia, Canada. Filed July 26, 1928, Serial No. 295,554. 1 Claims. (Cl. 137—160.)



A muffler comprising a casing having side and end walls, an upper imperforate open ended tube extending longitudinally thereinto from the front end of the casing into proximity to the rear end and constituting a gas inlet to the muffler, an imperforate tube surrounding said upper tube and extending from the rear end wall of the casing into proximity to the front end wall and forming an annular passage between said tubes, a lower imperforate open ended tube extending longitudinally into the casing from the rear end wall into proximity to the front end wall and constituting a gas outlet from the muffler, an imperforate tube surrounding said lower tube and extending from the front end wall of the casing into proximity to the rear end wall and forming an annular passage between said last mentioned tubes, a water inlet at the top of the casing, and a water outlet at the bottom thereof.

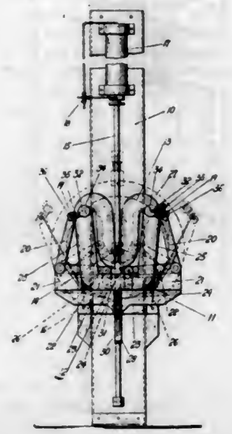
1,759,680. APPARATUS FOR TREATMENT OF FOODSTUFFS. FRANCIS C. BEARDSLEE, Los Angeles, Calif., assignor to B. M. Huffine, J. I. Huffine, and himself as joint trustees. Filed Feb. 21, 1928. Serial No. 256,003. 5 Claims. (Cl. 259—2.)



1. An apparatus for mixing foodstuffs comprising a tank, a supply hopper, a conduit leading from the hopper to the tank, a fan for directing an air blast through the conduit into the tank, said blast being of sufficient force to draw the materials in the hopper into the tank and to maintain such materials in suspension and in agitation within the tank, a separating tank, a carry-off pipe leading from the upper portion of the first named tank and discharging within the separating tank, said air blast also carrying the materials through the carry-off pipe into the separating tank, means within the separating tank for bringing substantially into quiescence the air upon entering the separating tank to permit the materials carried into the separating tank by the air to readily separate therefrom, and a suction pipe leading from the separating tank to the conduit, the fan for creating the blast of air through the conduit also creating a suction through the suction pipe.

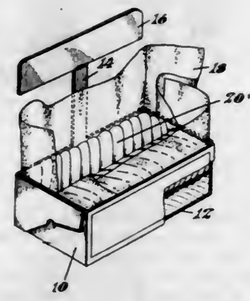
1,759,681. DEVICE FOR INSERTING AIR BAGS IN TIRES. WILLIAM H. BINES, Akron, and WILLIAM A. CORLETT, Kenmore, Ohio, assignors to The Firestone Tire and Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Dec. 4, 1924. Serial No. 753,847. 20 Claims. (Cl. 18—2.)

1. Apparatus of the class described comprising a pair of presser elements relatively movable toward and from each other and adapted to receive a pressure bag therebetween, and a second pair of presser elements movable toward and



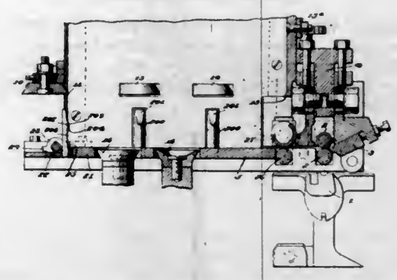
from each other substantially at right angles to the first pair, and presser plates spanning each element of the second pair and one element of the first pair.

1,759,682. METHOD OF PREPARING CONSUMER PACKAGES. CLARENCE BIRDSEYE, Gloucester, Mass., assignor, by mesne assignments, to Frosted Foods Company, Inc., Dover, Del., a Corporation of Delaware. Filed June 24, 1929. Serial No. 373,277. 8 Claims. (Cl. 62—170.)



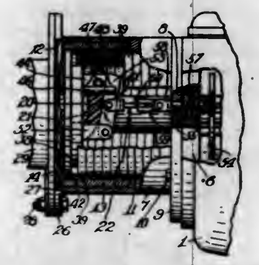
1. The method of preparing consumer packages of a perishable food product, which consists in enclosing the product in a container having walls to shape the product and a surface presenting a substantial area of thin flexible pellicle, and then freezing the product, while so shaped and confined, by contact of a heat-conductive member coextensive with its pellicle-covered area.

1,759,683. MECHANISM FOR NOTCHING AND FEEDING BODY BLANKS TO BODY MAKERS. JAMES EDWARD BRATT and CHARLES HUNTER BOYD, Syracuse, N. Y., assignors to Continental Can Company, Inc., New York, N. Y., a Corporation of New York. Filed Feb. 2, 1928. Serial No. 251,279. 13 Claims. (Cl. 113—7.)



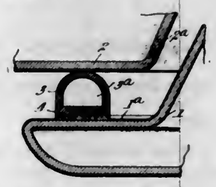
1. In a body maker, the combination of forming rolls, notching mechanism, means for feeding the body blanks to the notching mechanism, and rotating feeding devices disposed between the forming rolls and the notching mechanism for engaging and moving a blank from the notching mechanism into the forming rolls.

1,759,684. ANTIREVERSE SAFETY CLUTCH. DALMAR TEMPLETON BROWNLEE, Indianapolis, Ind., assignor to L. G. S. Devices Corporation, Indianapolis, Ind., a Corporation of Indiana. Filed Apr. 4, 1928. Serial No. 267,236. 10 Claims. (Cl. 192—4.)



1. Anti-reverse safety apparatus having an operable friction clutch device, a rotary transmission shaft provided with a clutch member to be engaged by the clutch device for arresting reverse movement of the shaft, and control means mounted on the shaft to control the clutch device for permitting reverse movement and alternatively also forward movement of the shaft.

1,759,685. METHOD OF AND MEANS FOR APPLYING PACKING GASKETS AND ANALOGOUS ARTICLES. FERDINAND F. BRUCKER, Akron, Ohio, assignor to The Miller Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Jan. 12, 1928. Serial No. 246,356. 7 Claims. (Cl. 20—69.)



1. The herein described method of applying rubber to another article, which consists in providing the surface of

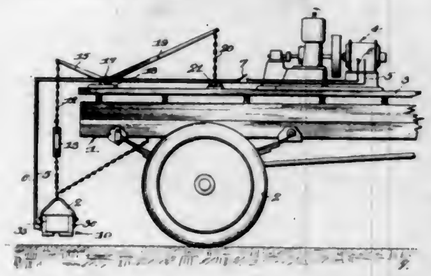
the article with a soluble enamel coating, providing the rubber with a fibrous backing, saturating the face of the fibrous backing with a material comprising a solvent of enamel and pressing the same against the enamelled surface of the article.

1,759,686. WELD ROD FOR ELECTRIC-ARC WELDING. ARTHUR W. CARLSON, Milwaukee, Wis., assignor to A. O. Smith Corporation, Milwaukee, Wis., a Corporation of New York. Filed May 23, 1929. Serial No. 365,335. 6 Claims. (Cl. 219—8.)



1. A composite weldrod comprising sections of dissimilar metal joined end to end, one section being composed of metal of special characteristics for deposit as welding metal and the other section comprising metal having superior heat and electro-conductive characteristics.

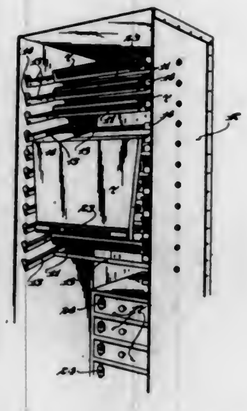
1,759,687. ROAD MAGNET. WALTER M. CARTER, Greenwood, Miss. Filed Nov. 27, 1928. Serial No. 322,246. 3 Claims. (Cl. 209—215.)



1. A magnetic road cleaning apparatus comprising pillow blocks having bearings to be mounted on a truck, a rock shaft mounted in said bearings and having lever arms extending laterally therefrom in opposite directions and at an obtuse angle to each other, adjustable suspension means carried by one of said arms, a magnet carried by said suspension means, means carried by the other arm adapted for adjustable connection with a truck, and magnetizing means for the magnet adapted to be carried by the truck.

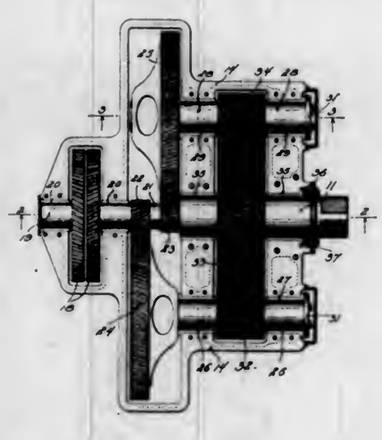
1,759,688. RACK FOR MATRIX MAGAZINES. GEORGE L. CURLE, Minneapolis, Minn. Filed Nov. 15, 1928. Serial No. 319,565. 15 Claims. (Cl. 276—44.)

1. A rack for a matrix magazine having at its upper end a pair of arms which project outward of the edges thereof, said rack having a pair of track rails spaced to receive a matrix magazine therebetween with its arms removably mounted on the track rails to sustain the maga-



zine for compound pivotal and sliding movements into and out of the rack, and a sustaining member in the rack for holding the lower end of the magazine raised.

1,759,689. GEAR SET. PERCY C. DAY, Milwaukee, Wis., assignor to The Falk Corporation, Milwaukee, Wis., a Corporation of Wisconsin. Filed Aug. 6, 1927. Serial No. 211,064. 1 Claim. (Cl. 74—7.)

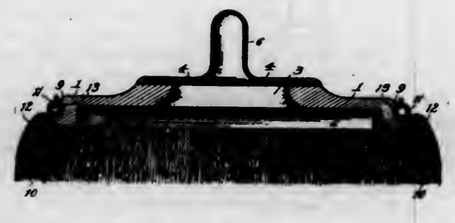


In a gear set the combination of a shaft, a pinion thereon, a second shaft, a pair of spaced bearings therefor permitting free axial movement thereof, a gear on said second shaft between said bearings and meshing with said pinion, a pair of single helical pinions on said second shaft beyond said bearings, a third shaft coaxial with said second shaft, a gear on said third shaft, a pair of shafts, a pair of spaced bearings for each of said pair of shafts, a pinion on each of said pair of shafts between the bearings thereof and meshing with said last named gear, means for holding said pair of shafts against end movement, and a single helical gear on each of said pair of shafts beyond the bearings thereof and meshing with one of said single helical gears, said single helical gears being axially movable with said second shaft and coacting with said single helical gears to equalize the load thereon.

1,759,690. METAL-HARDENING PROCESS. GEORGE A. FLECKENSTEIN, Stratford, EDWARD M. HANF, Bridgeport, and MAX L. WATERMAN, Fairfield, Conn., assignors to The Singer Manufacturing Company, Elizabeth, N. J., a Corporation of New Jersey. Filed Nov. 23, 1928. Serial No. 321,507. 2 Claims. (Cl. 148—19.)

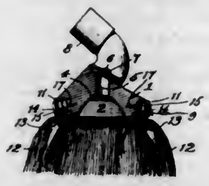
1. The process of case-hardening a portion only of an article, comprising plating the portion of the article to be left unhardened with a thin coating of chromium whereby the plated portion is not materially increased in size, and then subjecting both plated and unplated portions of the article to the hardening operation, whereby to case-harden the unplated portion of the article.

1,759,691. VACUUM DRY MOP. CLIFFORD J. GLEASON, Worcester, Mass., assignor to M. S. Wright Company, Worcester, Mass., a Corporation of Massachusetts. Filed Jan. 27, 1923. Serial No. 615,313. 1 Claim. (Cl. 15—158.)



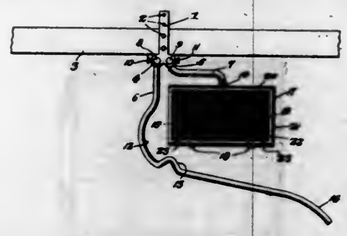
An attachment for a vacuum cleaner, which latter has a suction creating means and a nozzle, said attachment comprising a dry mop adapted to be detachably connected to the nozzle and including a plurality of strands, said strands being of a sufficient length and flexible so that when suction is applied to the nozzle they will be drawn beneath the under surface of the nozzle to engage the surface to be cleaned and to form a substantial seal between the nozzle and the surface to be cleaned.

1,759,692. VACUUM DRY MOP. CLIFFORD J. GLEASON, Worcester, Mass., assignor to M. S. Wright Company, Worcester, Mass., a Corporation of Massachusetts. Filed Jan. 27, 1923. Serial No. 615,314. 3 Claims. (Cl. 15—158.)



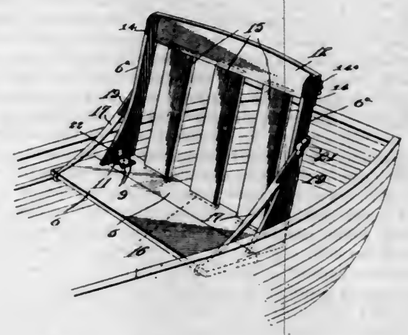
1. In combination with a nozzle of a vacuum cleaner having downwardly and inwardly tapered side edges, a mop having a portion adapted to lie flat against the side edges of the nozzle, and means carried part by the tapered side edges and part by the mop for directly connecting the mop to the nozzle.

1,759,693. INSECT-DESTROYING DEVICE. LOOMIS MCARTHUR GOODWIN, Raleigh, N. C. Filed Oct. 13, 1928. Serial No. 312,383. 6 Claims. (Cl. 43—133.)



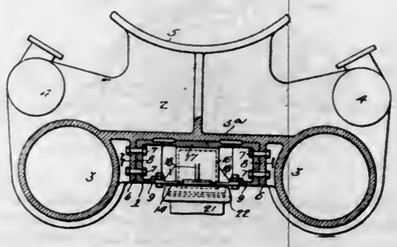
1. In an insect destroying device, the combination with a supporting beam, of a bracket comprising a unitary member secured thereto, a pan supporting arm adjustably secured to said bracket and a wiper arm adapted to cooperate with said pan also adjustably carried by said bracket.

1,759,694. SEAT-BACK REST. PETER GREENWOOD, Sawyer, Wis. Filed Nov. 2, 1928. Serial No. 316,739. 4 Claims. (Cl. 155—131.)



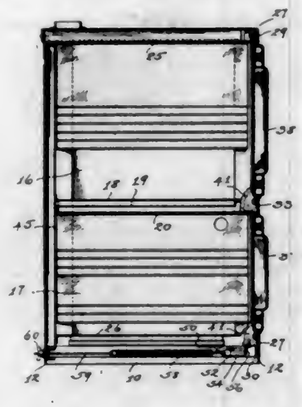
1. In a detachable back rest for board seats, a panel to be arranged in abutting relation to the seat, a vertical back rest carried thereby, and means for attaching the back rest to the board seat with said panel abutting an edge of the seat and in the same plane therewith.

1,759,695. LOCOMOTIVE CENTER PLATE. HENRY K. HARWICK, Darby, Pa. Filed Apr. 2, 1929. Serial No. 351,947. 9 Claims. (Cl. 105—44.)



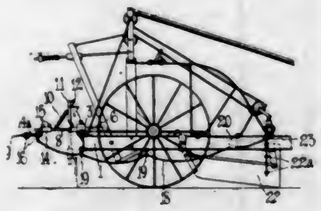
1. The combination of a locomotive frame having an upper web; a cylinder saddle mounted thereon; and a center bearing structure extending into the frame and resting against the upper web of said frame.

1,759,696. BALANCE FOR OVEN DOORS. JOHN W. HEARL, Baltimore, Md., assignor to A. Welskittel & Son Co., Baltimore, Md., a Corporation of Delaware. Filed June 15, 1928. Serial No. 285,514. 2 Claims. (Cl. 126—191.)



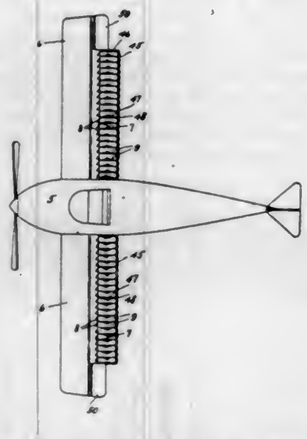
1. In a stove oven structure the combination with an oven with vertical air spaces at opposite sides thereof, of an oven-front provided with a door-opening which opening has bearing surfaces at opposite sides of its lower edge, a door having two side bars whose inner ends project inwardly beyond the hinge-edge of the door proper and each of said projecting bar-end having a bottom-edge-notch,—the said bottom edge-notches engaging the side bearing surfaces at the lower edge of the oven-front door-opening and in vertical alinement with the air-spaces at the sides of the oven, a stud-plate secured to the outer wall of the oven structure below the side air-spaces, a bell-crank lever carried on said stud-plate and movable in a vertical plane parallel with said side air spaces, a connection between one end of the bell-crank lever and one projecting end of a door above it and a coiled spring extending in a direction between the front and rear of the stove and having its front end connected to the other end of the said bell-crank lever.

1,759,697. ATTACHMENT TO SCRAPERS AND SCOOPS FOR EARTH AND THE LIKE. DAVID JOSEPH HILL, Grey Lynn, Auckland, New Zealand, assignor of one-half to John Edward Hill, Auckland, New Zealand. Filed Oct. 20, 1928, Serial No. 313,768, and in New Zealand Oct. 28, 1927. 8 Claims. (Cl. 37—124.)



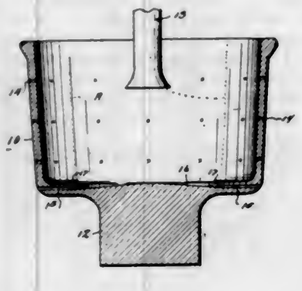
1. An attachment for scraping and scooping machines, comprising a spreader blade mounted at the rear of the machine, and capable of being raised and lowered; a scoop tiltably mounted on said machine; connections between said scoop and said blade, whereby the latter is brought to an operative position, by the action of the scoop in delivering its load, and means for returning the blade to an inoperative position.

1,759,698. AEROPLANE. JAN HLAVACEK, Chicago, Ill. Filed Apr. 30, 1929. Serial No. 359,295. 4 Claims. (Cl. 244—12.)



1. In combination, an aeroplane wing having an enlarged rear end with a recess therein, a casing in the recess, a plurality of shafts journaled through the casing, means for simultaneously rocking the shafts, shutter fins on the shaft exteriorly of and to the rear of the casing.

1,759,699. SPINNING POT OR CENTRIFUGE. CLAYTON L. HOEY, Frederica, Del. Filed Jan. 26, 1929. Serial No. 335,239. 4 Claims. (Cl. 118—49.)

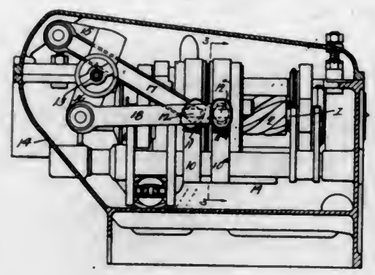


1. A centrifuge of the character described having a circular side wall and bottom, the bottom having a central depression inward of the side wall, the bottom of the depression extending upward toward the center at a slight angle to a level with the outer portion of the bottom and the outer wall of the depression overhanging and the bottom of the centrifuge being provided with a plurality of radial passages opening through said outer wall of the depression.

1,759,700. PRODUCT FOR TANNING AND TAWING INDUSTRIES AND PROCESS FOR ITS MANUFACTURE. MAURICE KAHN, Paris, and ELIANE LE BRETON and GEORGES SCHAEFFER, Strasbourg, France. Filed Apr. 22, 1926, Serial No. 103,960, and in France Nov. 20, 1923. 15 Claims. (Cl. 149—6.)

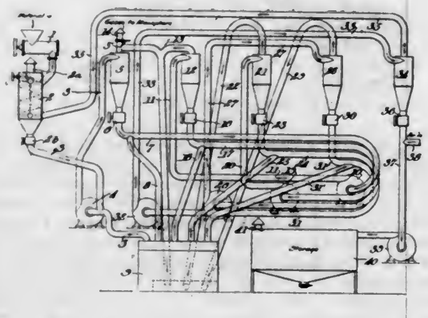
1. Products useful in tanning and tawing industries comprising a mixture of softening substances, emulsifiable fatty bodies, water and cellulosic residues of lower vegetables, substantially deprived of their albuminoid substances.

1,759,701. VALVE GEAR. JOHN S. KEEN, Philadelphia, Pa. Filed Sept. 26, 1929. Serial No. 395,358. 7 Claims. (Cl. 121—127.)



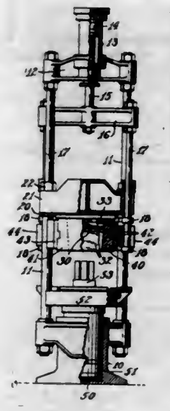
6. The combination in a valve gear, of a power driven shaft; a driving screw thereon; two cams located side-by-side on said shaft beyond one end of the screw; two sleeves meshing with the screw and arranged to turn with said screw but capable of being adjusted longitudinally thereon, one sleeve connected to one cam, the other sleeve connected to the other cam; a shifter on each sleeve in which the sleeve is free to turn; a double crank reverse shaft having connecting rods at each side of the gear, one rod being connected to one crank of the shaft and to one of the shifters, the other rod being connected to the other crank and the other shifter; and two stops on one set of rods, one stop being of greater length than the other, so that when the mechanism is in the extreme forward portion, the stop of greater length will prevent the parts jamming, and when in the extreme reverse position the shorter stop will prevent the parts jamming.

1,759,702. PROCESS, AND SYSTEM OF APPARATUS, FOR DESICCATING FOODSTUFFS. ARTHUR W. KOON, Thibodaux, La., assignor to Arta May Koon, New Orleans, La. Filed Sept. 7, 1929. Serial No. 390,999. 6 Claims. (Cl. 34—34.)



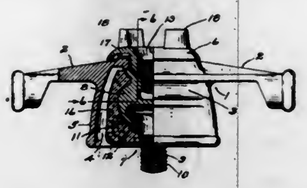
1. A process for desiccating fodder, forage and like foodstuff materials which comprises introducing the material to be desiccated into a current of a gaseous drying medium consisting of a suitably proportioned mixture of steam and inert gaseous products of combustion at a temperature materially above the dew-point of water, maintaining free suspension of the material in said medium during the travel of the latter for a relatively brief period of time during the course of which travel the material is mechanically treated, and separating the material from the medium out of contact with air and while the medium is still at a temperature materially above the dew-point of water.

1,759,703. BATTERY-BOX PRESS. JOHN AHLGREN LINDENBORG, Indianapolis, Ind., assignor, by mesne assignments, to Battery Containers, Inc., Boston, Mass., a Corporation of Massachusetts. Filed June 22, 1928. Serial No. 287,382. 3 Claims. (Cl. 18—19.)



1. In a press mold, the combination of a cross head having a depending mold formed of depending mating elements, a press plunger arranged below said mold, means for moving said press plunger upwardly into the mold, a wedge ring movable upwardly into position to enclose the mating mold elements and movable downwardly to a position below said mold elements, and means, supporting said wedge ring, for moving the same up and down said means comprising spaced abutments engaging the wedge ring and spaced apart a distance greater than the vertical dimension of the engaged portion of the wedge ring, whereby said wedge ring may be impacted downwardly by said moving means.

1,759,704. CONDUCTOR SUPPORT. SAMUEL S. MATTHES, Mansfield, Ohio, assignor to The Ohio Brass Company, Mansfield, Ohio, a Corporation of New Jersey. Filed Oct. 25, 1924. Serial No. 745,818. 9 Claims. (Cl. 173—366.)

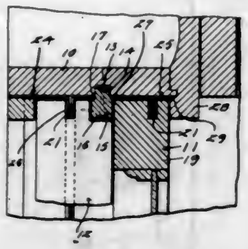


7. A conductor support comprising a supporting member, a two part suspending member having its parts insulated from each other and having unlimited rotation relative to the supporting member, means detachably secured to the suspension member and interlocked therewith against relative rotation to secure the members together.

1,759,705. WINDOW CONSTRUCTION. ROBERT E. MORRIS, Salisbury, Md. Filed Apr. 22, 1929. Serial No. 357,290. 1 Claim. (Cl. 20—69.)

A window construction comprising a frame stile having a longitudinal parting-bead receiving groove in its exposed face, and a parting-bead having a longitudinal central rib arranged to fit within said groove and flanked by longitudinal shoulders overlying the said face of the

stile, and fastening means through the parting-bead and into the bottom wall of the groove whereby said bead is

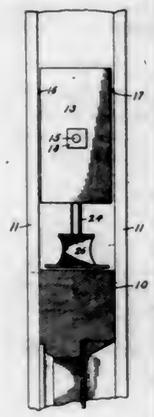


adapted for adjustment to lie with its shoulders against the face of the stile, at times, and to overlap and retain an edge of a weatherstrip, at times.

1,759,706. LACTIC CITRUS PRODUCT. NIELS D. NIELSEN, Elyria, Ohio, assignor to Nielsen Laboratories, Inc., Elyria, Ohio, a Corporation of Ohio. Filed July 18, 1927. Serial No. 206,802. 3 Claims. (Cl. 99—11.)

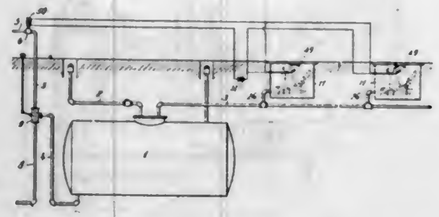
1. As a new product, a sterilized solution of the miscible constituents of lactic milk serum casein and fat free, de-oiled and de-albuminized citrus fruit juice having an acidity of more than 1%.

1,759,707. WINDOW-SASH STOP. GEORGE HARRISON PADDOCK, Superior, Wis. Filed Mar. 2, 1927. Serial No. 172,183. 3 Claims. (Cl. 292—288.)



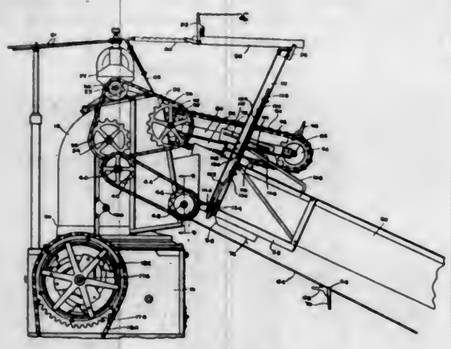
1. A window-sash-stop including a casing having openings in two opposite sides and also having an opening through its lower end, a spring-pressed plunger mounted for upward and downward movement in the last said opening, two dog members pivotally mounted in said casing and having sharp ends extending into the first said openings, respectively and being operable by said spring-pressed plunger for extending said sharp ends in opposite directions from the casing and causing them to bear against sash-guiding strips between which the window-sash-stop is insertible, these dog-members being adapted to engage and penetrate the sash-guiding-strips upon upward movement of a window sash against the window sash stop, substantially as described.

1,759,708. SYSTEM FOR STORING AND DISPENSING OIL. WILLIAM J. PETER, New York, N. Y., assignor, by direct and mesne assignments, to Aqua Systems Incorporated, New York, N. Y., a Corporation of New York. Filed Jan. 31, 1929. Serial No. 336,400. 12 Claims. (Cl. 221—67.)



1. In an oil storage and delivery system, the combination of a tank, a delivery outlet receiving oil from the tank, a source of pressure designed to be connected with and disconnected from the tank, a box, a cover on the box, and means within the box for connecting the source of pressure with the tank operable only when the cover is open and automatically operated to disconnect the source of pressure from the tank when the cover on the box is closed.

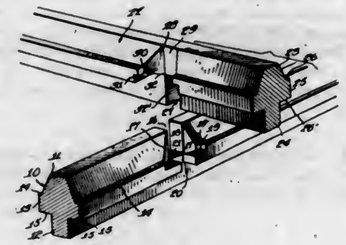
1,759,709. FEEDING MECHANISM FOR THRASHING MACHINES. ANDREW J. PETERSON, Isanti, Minn. Filed Oct. 27, 1927. Serial No. 229,070. 5 Claims. (Cl. 198—165.)



1. A feeding mechanism for thrashing machines comprising a trough pivotally attached at its rear end on the machine, an endless chain device whose upper stretch travels in the bottom of said trough for feeding bundles, a support extending upwardly from said trough, a tubular member pivotally attached to the upper end of said support and extending rearwardly therefrom, a ratchet bar telescoping in said tubular member, a support to which the rear end of said ratchet bar is pivotally attached, and a spring-pressed detent pivotally attached to said tubular member for engagement with the teeth of said ratchet bar.

3. A feeding mechanism for thrashing machines comprising a support, sprocket wheels mounted in spaced relation on said support, endless sprocket chains passing around said wheels for feeding bundles, feeding fingers pivoted intermediate their lengths to said chains, and links pivoted at one of their ends to the inner ends of said fingers and pivoted at the other of their ends to said chains for holding said fingers in outstanding position with relation to the straight portion of said chains and causing them to assume a backwardly inclined relation when said chains pass around said wheels at the delivery end of the mechanism.

1,759,710. WINDOW-SASH MULLION. EDMUND C. POHLAND, AUGUST F. POHLAND, and CHARLES POHLAND, Sr., Latrobe, Pa. Filed June 19, 1928. Serial No. 286,666. 1 Claim. (Cl. 287—51.)



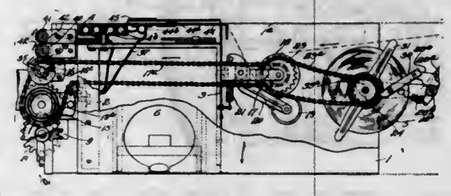
A joint for a bar and a cross-bar arranged in intersecting relation, said bar and cross-bar each being formed of a single strip of material, said bar and cross-bar being provided with oppositely disposed ribs and oppositely disposed side members, one of said ribs converging toward its outer extremity, said bar being provided with an opening extending substantially half way through from the top thereof and being further provided with an opening extending inwardly from each side member thereof, said last named openings communicating with said first named opening, said converging rib being beveled and cut away adjacent said first named opening and communicating with the latter and said second named openings, said side members being provided with relatively short longitudinal cut away portions communicating with the beveled portions of the ribs, and said cross-bar being provided with an opening extending substantially half way through from the bottom thereof and being further provided with an opening extending inwardly from each side member thereof, said last named openings communicating with said first named opening in the cross-bar, said converging rib of the cross-bar being beveled and cut away adjacent the openings in said cross-bar, and communicating with the openings in said cross-bar, the side members of said cross-bar being provided with relatively short cut away portions communicating with the beveled portions on the ribs of the cross-bar, the openings, cut away portions and beveled portions of said cross-bar fitting with the openings, cut away portions and beveled portions respectively of said bar.

1,759,711. SWIMMING APPLIANCE. OSBORNE I. PRICE, Frederick, Md. Filed Oct. 31, 1928. Serial No. 316,168. 6 Claims. (Cl. 9—17.)



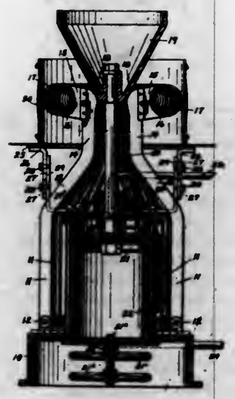
1. A swimming appliance comprising an envelope of rubberized cloth, a sponge rubber core within said envelope in contact with the interior surface of said rubberized cloth the edge portions of said cloth being vulcanized to seal said sponge rubber core within said envelope and connecting means extending from a position adjacent each end of said rubberized cloth envelope for engagement one with the other for adjusting said swimming appliance to various diameters for fitting the waist of the swimmer.

1,759,712. MACHINE FOR APPLYING TRANSFER STAMPS TO FABRIC. CHARLES G. RICHARDSON, Springfield, Vt., assignor to Parks & Woolson Machine Company, Springfield, Vt., a Corporation of Vermont. Filed Oct. 12, 1927. Serial No. 225,784. 21 Claims. (Cl. 41—1.)



1. In a stamp transferring machine, the combination of two co-acting flat faced presser members, each revoluble about a single separate axis that is substantially parallel to the axis of the other to imprint a transfer stamp upon an interposed fabric, said presser members being arranged to exert opposed pressure between the flat surfaces while the presser members are revolving.

1,759,713. TIRE EXPANDER. ROSCOE V. RITCHEY, Akron, Ohio, assignor to The Firestone Tire and Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed July 6, 1925. Serial No. 41,467. 1 Claim. (Cl. 154—9.)

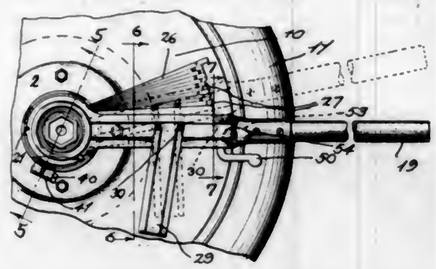


Apparatus of the class described, comprising a circumferential series of levers pivoted at one end, an arcuate shoe mounted on each lever at its other end, an annular, helical, tensile spring supported by said shoes and tending to force the levers radially inward, a cone-shaped cam engaging the last-named end of each of said levers, means for reciprocating the cam to swing the levers radially outward and expand said spring, and means for limiting the motion of said reciprocating means to a predetermined degree, thus limiting also the radial expansion of the spring.

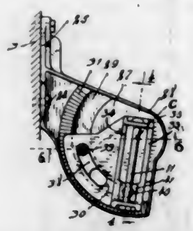
1,759,714. BRAKE TESTER. FRANK S. RODE, Jeannette, Pa. Filed Sept. 20, 1928. Serial No. 307,147. 8 Claims. (Cl. 265—1.)

1. In a brake testing device, a pair of frame members having a handle secured to one end thereof, a disk portion sandwiched between the frame members at the opposite end thereof, said disk portion having an indicating segment formed thereon, an enclosed wrench formed

through the center portion of the disk member, a coiled spring for holding the segment portion of the disk' member in inoperative position, and detachable means for connecting the enclosed wrench portion to the hub of a vehicle whereby the brakes of the vehicle may be tested.

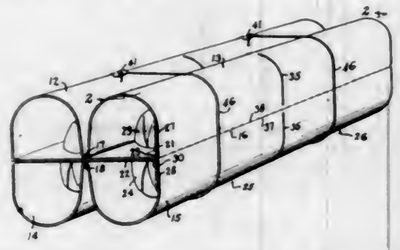


1,759,715. AWNING BRACKET. EDWARD H. SCHANE, Cleveland, Ohio, assignor to The Fanner Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed Oct. 27, 1928. Serial No. 315,418. 8 Claims. (Cl. 156—44.)



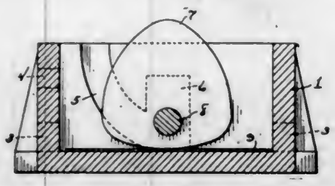
4. A bracket adapted to be used as an awning support comprising a fixed member adapted to be secured to a wall, and a member adjustable relative to said fixed member and adapted to be secured to the end of the awning supporting arm, said adjustable member substantially floating with respect to said fixed member and movable thereon about a predetermined center to various positions of adjustment, said members each having an arcuate slot concentric with said predetermined center through which means carried by the other members extends for securing such members together in the various positions of adjustment.

1,759,716. EGG CARTON. ERICH SCHINSCHOLL, Cincinnati, Ohio. Filed Sept. 6, 1928. Serial No. 304,328. 5 Claims. (Cl. 229—29.)



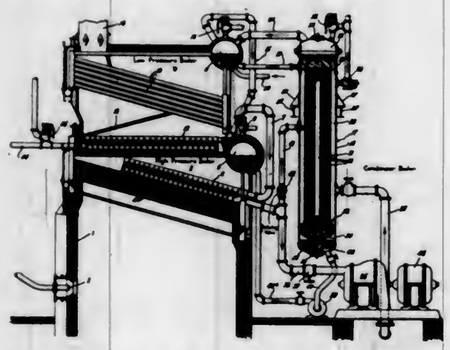
1. An egg carton comprising a shell embodying a pair of substantially semi-cylindrical longitudinally extending shell-sections forming longitudinally extending shell halves hinged together by a score integral in said shell at the proximate sides of said substantially semi-cylindrical sections, and longitudinally extending egg-nest sections extending laterally from the opposite sides of said respective shell-sections toward said score and provided with a plurality of mating egg-pockets extending lengthwise of said shell-halves and including a plurality of longitudinally arranged groups of said mating egg-pockets, and forming a completed composite egg carton, and means for manual breaking of said completed composite egg carton into a plurality of sectional egg cartons comprising providing all said longitudinally extending portions of said completed composite egg carton with incisions extending transversely therein between said groups of mating egg-pockets for manually breaking said completed composite egg carton into said plurality of divided egg cartons on said incisions.

1,759,717. ADJUSTABLE SIDE BEARING. EMORY SEASHOLTZ, Waycross, Ga. Filed July 9, 1929. Serial No. 376,960. 2 Claims. (Cl. 308—224.)



1. A bearing of the class described comprising a fixed box, a bearing roller in the box having short trunnions in the ends adjacent the bottom thereof, said box having its sides provided with arcuate slots which merge into vertically directed depressions, and which receive therein the trunnions to permit of the bearing gravitating into the box when its trunnions are arranged in the arcuate slots and to dispose its trunnions in a line with the vertical notches, a shim inserted in the box below the bearing for raising the same to bring the trunnions thereof into the notches.

1,759,718. POWER INSTALLATION. ARTHUR R. SMITH, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Apr. 14, 1928. Serial No. 270,109. 6 Claims. (Cl. 60—49.)



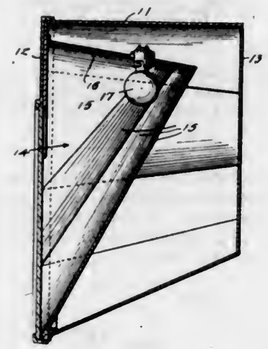
1. In combination, a boiler setting, a high pressure boiler and a low pressure boiler mounted in said setting, an engine utilizing steam from said high pressure boiler, a condenser boiler connected in parallel with said low pressure boiler, a conduit for conveying exhaust from said engine to said condenser boiler, and water supply conduit means and steam discharge conduit means for the low pressure boiler and the condenser boiler.

1,759,719. ELASTIC TENSION DEVICE. LEON SPINO and JOSEPH NICOLETTA, Clyde, N. Y. Filed Apr. 20, 1928. Serial No. 271,586. 3 Claims. (Cl. 267—74.)

1. An elastic tension device comprising a helical tension spring having closely related convolutions, and an attaching element secured to each end of said spring, each attaching element including an attaching block removably connected to the spring and having an axial threaded opening, an engaging member embodying a stem adjustably threaded in the opening of the block and having means for connecting its outer end to one of a pair of parts to be connected by the tension device, lateral malleable lugs on opposite sides of the attaching block passing outwardly between adjacent convolutions of the spring and clinched over one of said convolutions, said block having recesses in opposite sides thereof, and plates removably countersunk in said recesses and having said lugs formed on the inner ends thereof.

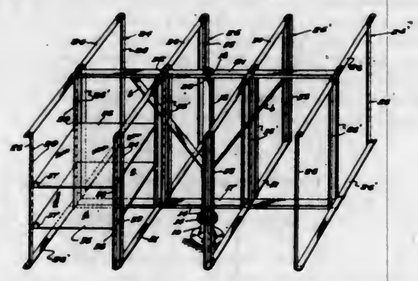


1,759,720. HEADLIGHT. GEORGE W. STITZER, Mahanoy City, Pa. Filed Apr. 22, 1929. Serial No. 357,233. 1 Claim. (Cl. 240—41.)



In a headlight, a casing comprising a plurality of upwardly and rearwardly tapering walls and an upper horizontal longitudinally extending housing, said housing having a depending front wall the lower edge of which is cut to conform to and form the upper portion of the front opening of the casing, and a reflector in the forward portion of the said casing, said reflector comprising a plurality of upwardly and inwardly tapering reflecting plates having their forward ends secued to the forward ends of said tapering walls of the casing and having an approximately horizontal flat top wall connected with the said front wall of the housing, and a source of light supported by and depending from said top wall and concealed by the front wall of the housing.

1,759,721. DISPLAY RACK. FELIX W. TEACHOUT, Huntingdon, Tenn. Filed Jan. 19, 1929. Serial No. 333,595. 3 Claims. (Cl. 211—144.)



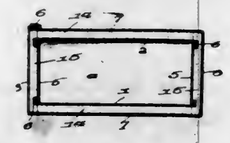
1. A display rack including a pedestal, a vertical and rotatable support carried thereby, two bars attached to and carried by said support and extending in opposite directions therefrom, a plurality of frames attached to said supports and in spaced relation, each of which frames is provided with a pair of perforated strips, and a plurality of shelves for disposition between said strips.

1,759,722. MULTIPLE-LEAF SPRING. JOHN WARREN WATSON, Wayne, Pa. Filed May 26, 1928. Serial No. 280,785. 6 Claims. (Cl. 267—47.)



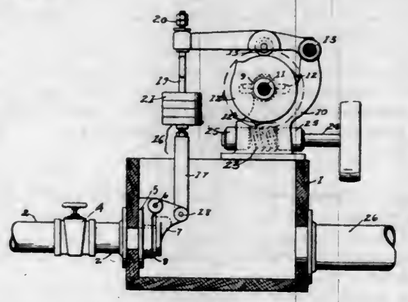
1. In a spring, the combination of a plurality of superimposed metal leaves and means for clamping said leaves together, and a rubber leaf so positioned between adjacent ones of said metal leaves as to separate and support them for the greater portion of their superimposed length between their clamped section and an extremity of one of said leaves, but not so positioned as to interfere with said metal leaves being brought into direct contact at the section where they are clamped together.

1,759,723. CABINET FOR THE RECEPTION OF DAIRY PRODUCTS. IVAN C. WELD, Sandy Spring, Md. Filed Dec. 7, 1927. Serial No. 238,417. 2 Claims. (Cl. 220—9.)



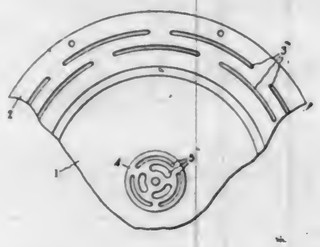
1. A refrigerator construction comprising an outer shell, a layer of insulating material within said shell, and an inner sheet-metal shell having reinforcing means extending along and strengthening its corners approximately throughout their lengths, said strengthening means reinforcing the corners and maintaining their proper contour while the inner shell is being forced into position, thereby pressing the insulating material into its proper position.

1,759,724. FLUSHING VALVE. JOSEPH A. WHITE, Melrose Park, Pa., assignor to The Moore & White Company, Philadelphia, Pa., a Company of Pennsylvania. Filed June 16, 1928. Serial No. 285,923. 7 Claims. (Cl. 92—42.)



1. The combination in a flushing valve mechanism, of a valve box; a series of inlet pipes communicating with the box; a valve for each inlet pipe; and means for operating the valves so that they will be operated consecutively at regular intervals of time.

1,759,725. SOUND-PRODUCING DEVICE. ARTHUR PRIMROSE YOUNG, Kenilworth, England, and JOSEPH HUTT, deceased, Kenilworth, England, by Cecilia Elizabeth Hutt, executrix, Kenilworth, England, assignors to General Electric Company, a Corporation of New York. Filed Aug. 7, 1928, Serial No. 298,056, and in Great Britain Sept. 22, 1927. 5 Claims. (Cl. 181—37.)



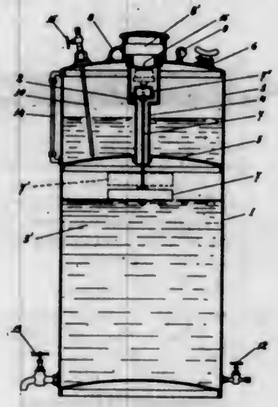
1. The combination of a support, a diaphragm, and a member connected between said support and said diaphragm and provided with overlapping staggered slots.

1,759,726. PORTABLE BORING TOOL. CONRAD ZIGENHEIM, Hamilton, Ontario, Canada. Filed Nov. 14, 1929. Serial No. 407,183. 1 Claims. (Cl. 144—106.)

A manually operable boring tool of the character described comprising a frame having a rear end mounting for a grip handle, a grip handle secured thereto, manually operable gearing carried by said mounting, a forward mounting, a power shaft journalled at its opposite ends in said mountings, rods connecting said mountings rigidly together, a housing pivotally attached to the forward mounting, a bit holding shaft journalled in said pivoted housing, and geared to said power shaft, a lever connected to said pivotally attached housing, a sleeve mounted slidably on one of said rods, and connected to one end of said lever, an adjustable link connection between said lever and a stationary part of the said frame, and means for interlocking said link at different positions, according to the angular adjustment of the bit holding shaft, the latter being arranged and adapted for different angular adjustments relatively to the axis of the power shaft.

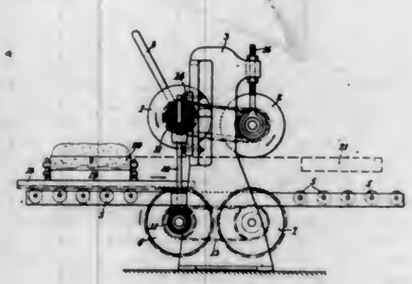
1,759,727. HYDROPNEUMATIC RESERVOIR FOR PETROL FUELS AND THE LIKE. MARCO BACCICH, Fiume, and CARLO DE-FILIPPI, Milan, Italy. Filed Mar. 21, 1928, Serial No. 263,326, and in Egypt Mar. 22, 1927. 2 Claims. (Cl. 221—67.)

1. A liquid elevator comprising a tank provided intermediate its ends with a partition to form two chambers in superposed relation therein, a centrally disposed tubular member in the upper chamber and opening into the lower chamber, an oil outlet in the upper chamber, means for admitting water under pressure into said lower chamber, an outlet for the water at the lower part of the tank, a conduit connecting said upper chamber with the interior of said tubular member, a float in said lower chamber, and



a valve in said tubular member, said valve being actuated by said float to close said conduit when a predetermined amount of water has been admitted to said lower chamber.

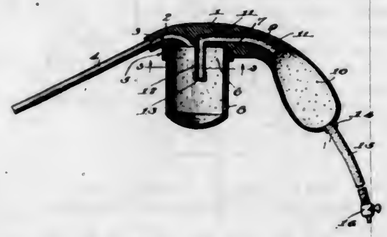
1,759,728. MOLDING MACHINE. ROGER BACHON, Bourges, France, assignor of one-half to Société Anonyme des Usines de Rosieres, Bourges, France. Filed Dec. 31, 1927, Serial No. 243,967, and in France Jan. 6, 1927. 4 Claims. (Cl. 22—40.)



1. In a molding machine, the combination of a frame, a series of horizontal rollers on this frame forming a roller path, a molding frame movable on the said rollers, a first pressing cylinder mounted at the upper part of the frame, means for adjusting the position of this cylinder in height, a second pressing cylinder disposed, on the frame at a lower level than the first one, means for adjusting this second cylinder in height, and two counter pressure rollers mounted on the frame just beneath the pressing cylinders at the level of the said roller path, driving means acting upon the first pressing cylinder, power transmission means between the two pressing cylinders and power transmission means between the two counter pressure rollers.

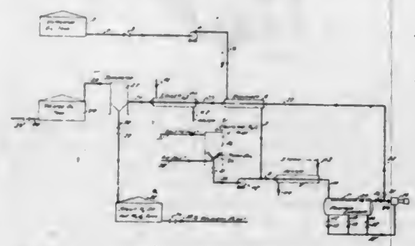
1,759,729. DEVICE FOR REMOVING EGGS FROM FISH HATCHERIES. JOSEPH BERGER, Lake View, Nev. Filed Apr. 16, 1928. Serial No. 270,472. 6 Claims. (Cl. 209—71.)

3. A device for the separation of materials having visually different characteristics comprising a transparent sighting intake tube, an outlet tube forming a siphon therewith and providing for continuous suction through said intake tube, a material trapping reservoir interposed between and communicating with each of said tubes, a material trapping strainer interposed between said outlet tube



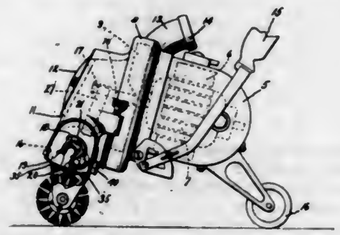
and reservoir, and means associated with the siphoning tube for ejecting from the transparent intake tube through the inlet opening thereof undesired material visually observed to enter said tube.

1,759,730. PROCESS OF PURIFYING HYDROCARBONS. JOHN C. BLACK, Los Angeles, and JOHN R. MCCONNELL, Whittier, Calif., assignors, by mesne assignments, to Richfield Oil Company of California, Los Angeles, Calif., a Corporation of Delaware. Filed June 7, 1927. Serial No. 197,150. 2 Claims. (Cl. 196—29.)



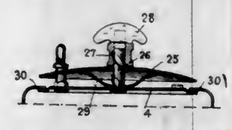
1. A process of purifying liquid hydrocarbons comprising treating the same with an aqueous solution of caustic alkali containing suspended manganese dioxide at an elevated temperature and under sufficient pressure to substantially prevent vaporization of the hydrocarbons and the aqueous solution of caustic alkali to render the hydrocarbons "sweet" to the "doctor test", then separating the treated hydrocarbons from the residual aqueous solution of caustic alkali and manganese dioxide compounds and distilling the treated hydrocarbons at a temperature not greater than the temperature employed in the sweetening step.

1,759,731. FLOOR POLISHER. JESSE F. CARSON, East Cleveland, Ohio, assignor to Electric Vacuum Cleaner Company, Inc., Cleveland, Ohio, a Corporation of New York. Filed Aug. 19, 1927. Serial No. 214,193. 9 Claims. (Cl. 15—49.)



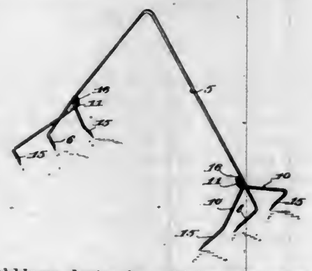
1. A polishing attachment adapted to be secured under the nozzle of a vacuum cleaner having the usual motor, fan, and spring pressed cleaning brush hangers in the nozzle, comprising in combination a rotary floor polisher, brackets which support the polisher below the nozzle, each of said brackets having a member which extends upwardly inside the nozzle and is supported by the hangers, a second member which extends downwardly and supports one end of the polisher, and means for rotating the polisher.

1,759,732. COOKING POT OF THE SELF-CLOSING TYPE FOR THE COOKING OF FOOD AND FOR OTHER USES. MOÏSE ALI CHARLOT, Paris, France. Filed Oct. 8, 1927, Serial No. 224,861, and in France Oct. 30, 1926. 5 Claims. (Cl. 53—1.)



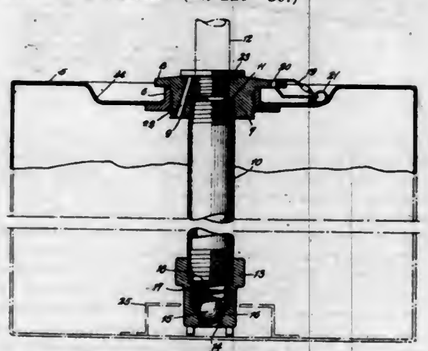
5. A self closer for containers in which an unsymmetrical opening is unsymmetrically arranged with reference to the axes of symmetry of the container to be closed, thus allowing the cover of said opening to be placed in position and removed without having to incline said cover on the container thereby preventing the contamination of the substances contained in the container.

1,759,733. MOTOR-VEHICLE HOLDDOWN. WILLIAM B. COOK, Mexico, Mo. Filed May 28, 1929. Serial No. 366,621. 5 Claims. (Cl. 188—32.)



1. A holddown device for vehicles comprising a substantially V-shaped axle engaging member each leg of which being provided with an eye, and a length of rod engaged with each eye and having its end fashioned with anchoring barbs.

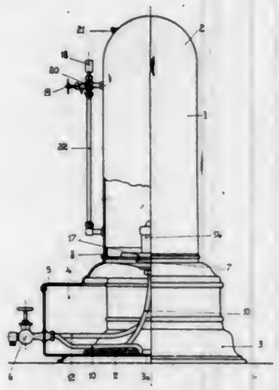
1,759,734. MEANS TO PREVENT SUBSTITUTION OF OIL AND THE LIKE PRODUCTS. ARTHUR E. DAVENPORT, Maywood, Ill. Filed Feb. 10, 1928. Serial No. 253,507. 2 Claims. (Cl. 220—39.)



1. A tank formed with a depression in its top wall and with an opening within the depression, a bung removably

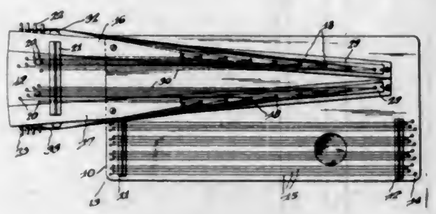
fitting said opening and having a flange above the bottom of the depression and substantially on a level with the top wall of the tank beyond the depression, a pipe extending longitudinally within the tank and having threaded connection with the bung, and a rupturable seal connecting the flange of the bung with the bottom of the depression, whereby the seal is protected by the wall of the depression against casual rupture.

1,759,735. AUTOMATIC APPARATUS FOR PREPARING AERATED WATER. CARLO DEROSSI, Turin, Italy. Filed Apr. 6, 1929, Serial No. 353,011, and in Italy Nov. 26, 1928. 2 Claims. (Cl. 225—21.)



1. An automatic apparatus for the rapid production of aerated water comprising in combination a vessel for the water to be aerated, an aerating unit located in said vessel and centrally fixed to the bottom of this latter, means for admitting gas into said aerating unit and said vessel, a hollow base for said vessel adapted to contain a refrigerating medium, a coil in said hollow base and connected at one end to said aerating unit and an outlet cock at the other end of said coil.

1,759,736. STRING MUSICAL INSTRUMENT. LEONARD DODSON and JAMES DODSON, Chicago, Ill. Filed Mar. 5, 1928. Serial No. 259,234. 3 Claims. (Cl. 84—263.)



2. In a stringed musical instrument, a plurality of substantially U-shaped strings, means for securing the free ends of said strings including frets and tuning posts to which said strings are individually connected, means for securing said strings at the bight portions thereof including anchoring elements disposed in rows, said anchoring elements being arranged so as to be of gradually increasing height along said rows, the anchoring elements of greatest height being disposed toward said frets, said anchoring elements being arranged such that said strings may be directed therearound and secured thereto in such a manner that said strings will pass downwardly along said anchoring elements on the side thereof disposed toward the juxtaposed element of lesser height.

1,759,737. METHOD TO PROVIDE GLUE IN SMALL PIECES IN THE SHAPE OF GRANULES OR DROPS WITH A COATING OF A POWDER AS WELL AS GLUE MANUFACTURED ACCORDING TO SAID METHOD. GUSTAF ECKERBOM, Sandvik, near Stockholm, Sweden, assignor to Stockholms Benmjölsfabriks Aktiebolag, Sandvik, near Stockholm, Sweden. Filed Feb. 3, 1928, Serial No. 251,739, and in Sweden Feb. 4, 1927. 5 Claims. (Cl. 87—7.)

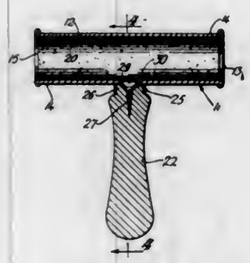
4. A new product of manufacture consisting of powder-coated drops of glue.

1,759,738. HEAD GUARD. JOSEPH ERARIO, New York, N. Y. Filed July 5, 1928. Serial No. 290,615. 1 Claim. (Cl. 2—9.)



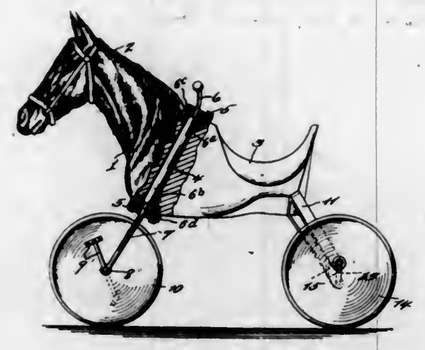
A head gear comprising a head band reinforced at the rear side by stitching and padded at the front side, padded sections between the front and rear sides extending downwardly to protect the cheeks and jaw, a perforated area between the front and cheek pads, the band having side openings surrounded by ear pads, depending flaps on the lower sides of the head gear, a strap attached at one end to one flap, a strap guide on the outer side of the same flap, the other flap having an opening therein for the passage of the strap, a strap buckle on the outer side of the other flap, and another flap overlying the buckle and slotted for the passage of the strap from the buckle for holding the same flatly against the buckle while in use and the strap end being threaded through the strap guide.

1,759,739. BIRD-CAGE-PERCH CLEANER. FANNIE FERRIS, New York, N. Y. Filed Dec. 3, 1928. Serial No. 323,450. 1 Claim. (Cl. 51—186.)



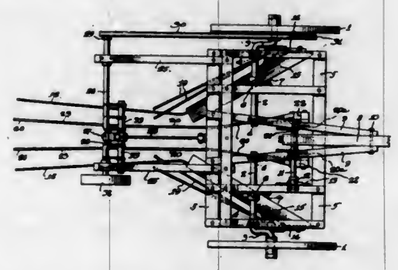
A perch cleaner comprising a single tubular outer wall of resilient material, said wall having a split throughout its length, abrasive material carried on the inner surface of said wall, a right angularly disposed handle exteriorly mounted on said wall, a fastening element attaching the latter to the handle, said wall adapted to movably receive a perch therein, and outwardly flared edges on the respective ends of the tubular members.

1,759,740. TOY HORSE. DALE E. FOLTZ, Granville, Pa. Filed Apr. 14, 1928. Serial No. 269,988. 1 Claim. (Cl. 208—42.)



A toy horse comprising a body provided with an inclined bore formed on an incline through the body, a forward front steering column mounted in said bore, said steering column where it passes through the bore being enlarged, said enlargement causing shoulders to be formed adjacent the opposite ends of the enlargement, and means fixed in the upper and lower parts of the body and cooperating with the shoulders to hold the steering column against the axial movement, the upper end of the steering column having handle bars, and a steering wheel including propelling means operatively mounted at the lower end of the steering column, a frame secured to the rear end of the body and inclined downwardly and having an axle in bearings of its lower end, and a pair of rear supporting wheels mounted on the ends of the axle and fixed oppositely eccentric with relation to the axle whereby up and down swaying movements may be imparted to the body.

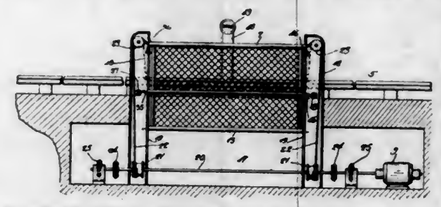
1,759,741. VINE CUTTER OR BEAN PULLER. CHARLES H. FOWLER, Matherton, Mich. Filed Feb. 25, 1929. Serial No. 342,355. 4 Claims. (Cl. 55—60.)



1. A vine harvesting machine including means for loosening the vines from the ground, rearwardly converging rods for gathering the loosened vines into a window, trailing rods upon which the vines are deposited by said gathering rods, said trailing rods being free to vibrate and shake the dirt from the vines, a fork supported above said windrow, and means for imparting to said fork a rearward and downward motion to lift the vines and deposit the same in a loose windrow on top of the ground.

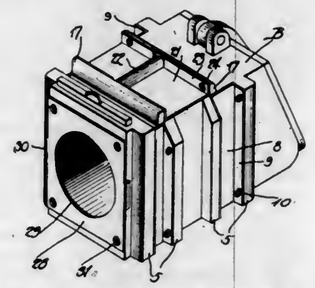
1,759,742. AUTOMATIC RAILROAD-CROSSING GATE. VITO GALIZIA, Plainfield, N. J. Filed Aug. 18, 1927. Serial No. 213,908. 1 Claim. (Cl. 246—125.)

A pair of railroad crossing gates constructed and adapted to be automatically lowered below the surface of the roadway to open position and automatically raised above the roadway to closed position, and comprising each a pair of hollow pillars sunk below the roadway and rising above the same, said pillars having slotted inner sides, a gate structure having a frame work with top and bottom rails projecting through the slots and vertically slidable therein, pulleys mounted within and at the upper ends of said pillars, cables passing over said pulleys and attached to said gate, a horizontal shaft passing through



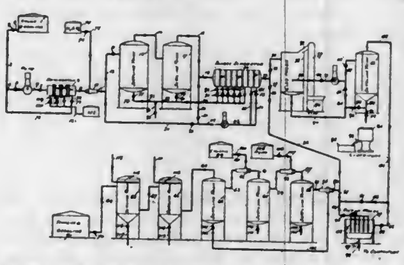
said pillars below the roadway, winding drums mounted on said shaft and having wound thereon said cables, and means connected with said shaft, and with train controlled devices, whereby said gate is raised and lowered by the passing of a train over said devices and means including sprocket wheels and chains whereby operative movement is conveyed from the motor shaft of one gate to the other gate.

1,759,743. CAR TRUCK. GIOACCHINO GAMBACCINI, Kent, Ohio. Filed Aug. 23, 1928. Serial No. 301,633. 1 Claim. (Cl. 105—225.)



A journal box having a pair of spaced parallel upstanding ribs on its top and a transverse rib connecting said pair of ribs, in combination with an equalizing bar having a supporting end adapted to seat upon the journal box between said pair of ribs and having a transverse groove to receive said transverse rib, and wear plates removably applied to one of said parts.

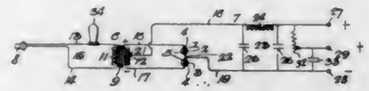
1,759,744. PROCESS OF REFINING HYDROCARBON OILS. EARLE W. GARD, BLAIR G. ALDRIDGE, HUGH J. MULTER, and RAYMOND T. HOWES, Los Angeles County, Calif. Filed Sept. 12, 1927. Serial No. 219,147. 4 Claims. (Cl. 196—4.)



1. In the refining of hydrocarbon oils, that step in the process for separating products of emulsion from an oil, comprising, continuously passing an oil containing prod-

ucts of emulsion through a series of solid foraminous blocks containing capillary passages to agglomerate the emulsified constituent contained in said oil, causing said agglomerated constituents to separate from the oil in stages, continuously removing that part of the agglomerated constituents which is substantially free of oil, continuously re-passing that part of the constituents which is not substantially free of oil again through the same series of solid foraminous blocks, along with the said oil containing the products of emulsion to be agglomerated and separated in stages.

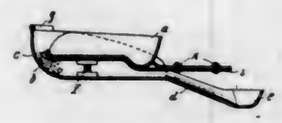
1,759,745. CURRENT-RECTIFYING SYSTEM. WILLIAM H. GRIMDITCH, Philadelphia, Pa., assignor to Philadelphia Storage Battery Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Oct. 22, 1925. Serial No. 64,184. 9 Claims. (Cl. 175—363.)



1. An electrical system comprising a transformer having primary and secondary windings, a film-type rectifying device associated with said secondary winding, and a resistor having a positive temperature coefficient associated with one of said windings, said resistor having a resistance substantially less than the impedance of the transformer winding with which it is associated under normal operating conditions and greater than the impedance of said transformer winding under overload conditions.

3. A current-rectifying system comprising a transformer having primary and secondary circuits, a metallic-filament lamp operatively associated with one of said circuits, a film-type, full-wave rectifier connected in said secondary circuit, and filtering means electrically connected to said rectifier means, said lamp being designed to limit the currents traversing the rectifier under predetermined conditions to harmless values.

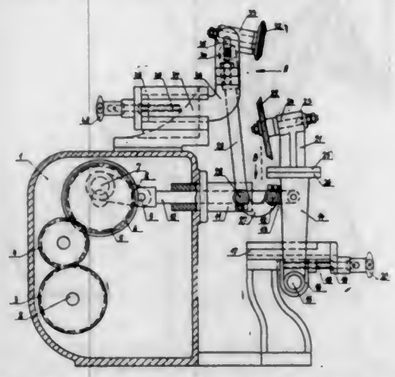
1,759,746. DENTAL SPOON. ARTHUR HARDER, Warnemunde, Germany. Filed Mar. 23, 1928, Serial No. 264,161, and in Germany Apr. 16, 1927. 3 Claims. (Cl. 32—6.)



1. In a dental spoon for taking casts of the upper jaw, in combination, a main spoon adapted to produce a tight seal towards the throat, a spaced lower spoon adapted to enclose the said main spoon from below, so that a space is left between said two spoons, and means to universally connect said spoons in such a manner that said lower spoon is movable toward and from said main spoon and laterally thereof.

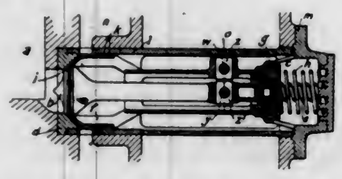
1,759,747. CIGARETTE-MAKING MACHINE. MAX PAUL ERNST HOHN, Dresden, Germany, assignor to "Universelle" Cigarettenmaschinenfabrik J. C. Muller & Co., Dresden, Germany. Filed Jan. 23, 1928, Serial No. 248,844, and in Germany Jan. 25, 1927. 4 Claims. (Cl. 131—37.)

1. Apparatus for controlling the grinding and whetting means for the sickle knives of string cigarette machines, comprising a sickle knife for cutting up the cigarette strings into separate cigarettes, said sickle knife being adapted to follow the string in the direction of feed of the string and with the velocity of the string during the execution of the cut, obliquely positioned grinding means for said sickle knife, a swing lever carrying said grinding means, obliquely positioned whetting means for the sickle knife, a carrier for said whetting means, controlling means connecting said whetting-means carrier with the swing lever and crank gear adapted to rock the swing lever



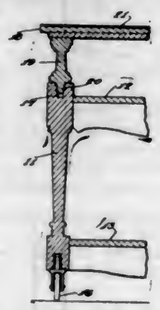
so as to move the grinding means and the whetting means into contact with the cutting edge of the sickle knife in passing and to cause said grinding means and said whetting means to follow the cutting edge and remain in contact with it as it recedes from them.

1,759,748. MEANS FOR THE COOLING OF COMPRESSORS OF THE PISTON TYPE. ALBERT HUGUENIN, Paris, France. Filed Sept. 18, 1928. Serial No. 306,762. 3 Claims. (Cl. 230—226.)



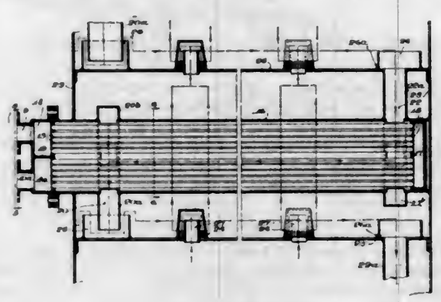
1. In a compressor of the piston type, the combination of a cylinder, a tapered valve seat in the wall of said cylinder, a poppet discharge valve coacting with said seat, a slide valve concentric with said poppet valve and also coacting with said seat, a sleeve in which the said slide valve is slidable, and packing rings disposed between the said poppet valve and said slide valve, and also between the said slide valve and the said sleeve.

1,759,749. SERVING TABLE. CHESTER KNIGHT, New York, N. Y. Filed May 18, 1928. Serial No. 278,830. 2 Claims. (Cl. 45—17.)



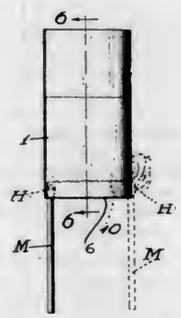
1. A serving table comprising a wheeled table proper having sockets at the top thereof, a removable serving tray, legs extending from said serving tray, and pins projecting from the free ends of said legs for seating in the respective sockets for supporting said serving tray above and in spaced relation to the top of said wheel table proper.

1,759,750. GAS AND LIQUID CONTACT APPARATUS. MEINHARD H. KOTZEBUE, Tulsa, Okla. Filed May 26, 1927. Serial No. 194,430. 9 Claims. (Cl. 261—114.)



5. A bubble control section for an absorption or distillation tower, comprising a wall section adapted to fit upon the top of a similar wall section, a bubbling tray attached in a horizontal position interiorly of the wall portion, a horizontal tubular heat interchanger interior to said wall portion and above the said bubbling tray, a casing for said interchanger, entrance and exit pipes for said interchanger on opposite ends thereof, said exit pipe having means surrounding the pipe to provide a liquid seal therefor.

1,759,751. MATCH BOX. BALINT KOVÁCS, Castalia, Ohio, assignor of one-third to Charles K. Sabo, Castalia, Ohio, and one-third to Alex Hari, Baybridge, Ohio. Filed Aug. 16, 1928. Serial No. 300,028. 2 Claims. (Cl. 206—33.4.)

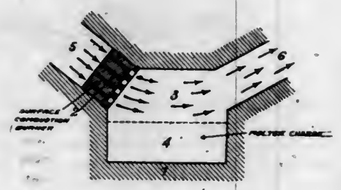


1. In a match box of the character described, a box body and removable cover, a false bottom for the body set upwardly from the lower end and having an opening at one end thereof for the single delivery of a match, a pair of downwardly converging side walls at opposite sides of the delivery opening and extending between the false bottom and lower end of the box body, and a scratching surface on the bottom face of the false bottom.

1,759,752. PROCESS FOR THE MANUFACTURE OF VEGETABLE WOOL. JEAN JULES LAMBRECTH, Nieppe, France. Filed May 31, 1929, Serial No. 367,637, and in France June 9, 1928. 1 Claim. (Cl. 8—20.)

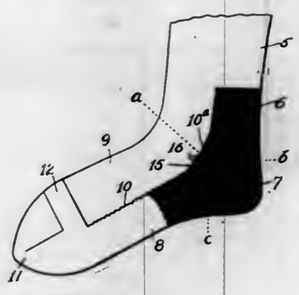
Process of treatment of vegetable fibers, to give them the properties of animal wool, comprising a mechanical treatment for the separation of small pellicles and part of the adhering gums, a protective lubricating treatment of the fibers with a hot saponifying bath, a treatment with a rapidly circulating cold caustic lye, a neutralization by immersion in an acidulated and rapidly circulating bath, the bleaching of the fibers, the rinsing of the fibers, the treatment by a softening bath containing neutral soap and sodium monosulfide and the wringing and drying of the fibers.

1,759,753. METHOD FOR WORKING UP IRON ORES IN A DIRECT WAY. PIERRE HUGO LEDEBOER, deceased, Paris, France, by Antoinette Eucharis Marie Gérardin Ledeboer, administratrix, Paris, France, assignor to Staalsyndicaat Dr. Ledeboer II, The Hague, Netherlands. Filed Mar. 17, 1928, Serial No. 262,604, and in the Netherlands Mar. 30, 1927. 1 Claim. (Cl. 75—14.)



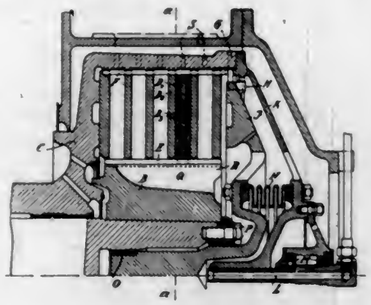
A method for working up iron ores in a direct way by reducing the ore and by separating the iron in a molten state, characterized by the fact that as heating source for the melting process a combustion gas is applied, having the necessary temperature and practically containing no free oxygen, which combustion gas is obtained by means of a burner acting according to the principle of surface combustion.

1,759,754. SPLIT-FOOT STOCKING. WILLIAM L. LENGEL, Reading, Pa., assignor to The Lengel-Fencil Co., Reading, Pa., a Corporation of Pennsylvania. Filed Dec. 27, 1926. Serial No. 157,360. 2 Claims. (Cl. 66—179.)



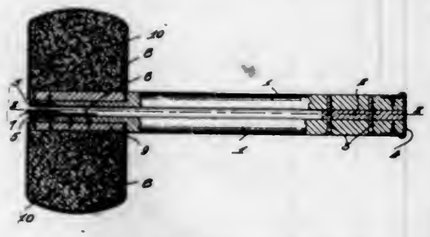
1. The improved method of knitting high-spliced split-foot stockings which consists in gradually transferring end needles from the front split foot knitting action into the rear high splice knitting action preliminary to starting the knitting action of the heel pocket; then knitting the heel pocket by narrowing and widening reciprocative action upon a portion of the needles less than the maximum then employed in the high splice; and then resuming split foot knitting on both front and rear needles, said rear starting with the maximum number of needles employed in the high splice and gradually transferring end needles to the front half knitting action until the minimum number of needles employed in the high splice is reached, and continuing the bottom foot portion on said minimum number of needles.

1,759,755. PNEUMATIC COUPLING. WALTHER LINDNER, Dusseldorf-Grafenberg, Germany, assignor to the Firm Hohenzollern Aktiengesellschaft fur Lokomotivbau, Dusseldorf-Grafenberg, Germany. Filed Dec. 21, 1927, Serial No. 241,717, and in Germany Dec. 21, 1926. 8 Claims. (Cl. 192—88.)



1. In a pneumatic friction clutch the combination of a driving member, a coaxial driven member, each of said members carrying a set of friction discs, a centrally arranged and axially displaceable pressure-plate adapted to bring the sets of friction discs into frictional engagement with each other, said pressure-plate forming one side wall of a tight pressure-chamber, a centrally arranged and axially immovable plate forming the other side wall, a longitudinally expansible corrugated tube of relatively small diameter forming the outer wall of the said pressure-chamber, and apertures in the said pressure-plate, on the outside of the pressure-chamber, such apertures leading cooling air to the discs.

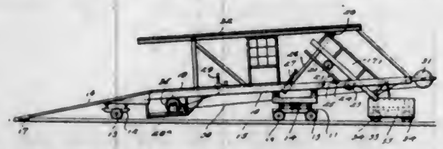
1,759,756. DETONATING TOY. HARRY MORRIS, Atlanta, Ga. Filed Jan. 11, 1930. Serial No. 420,221. 2 Claims. (Cl. 46—46.)



1. A device of the class described comprising a pair of handle members supported in spaced relation and formed of resilient material, a striker plate carried by one member, a hammer member attached to said member and having a part extending over the striker plate and weight forming members attached to the handle members for causing the hammer to explode a cap placed between the same and the striker plate when one of the weight members is brought against an object.

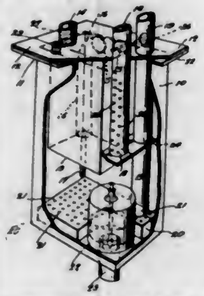
1,759,757. CAR-UNLOADING DEVICE. RALPH W. PATTEN, Olyphant, MICHAEL A. VRABEL and JOHN F. GOMBAR, Throop, and WILLIAM H. BELL, Clarks Summit, Pa. Filed Apr. 5, 1928. Serial No. 267,770. 1 Claim. (Cl. 214—47.)

In a car unloader, a frame, upwardly and forwardly inclined main rails secured to the frame, upwardly and forwardly inclined tipple rails resting upon and pivoted to the frame, stops carried by the tipple rails and adapted to engage the wheels of the car when the center of gravity thereof is substantially alined with the pivot of the tipple rails, a guide sheave mounted on the frame for rotation about an axis alined with and located forwardly beyond the pivot of the tipple rails, a cable passing over the sheave and adapted to be engaged with the car, a U-shaped bumper member arranged in an upwardly and forwardly



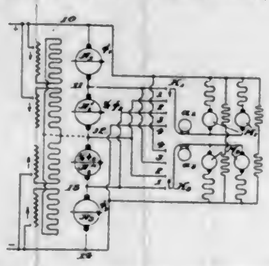
inclined position with its cross bar extending over and above the car and having its legs slidably connected to the frame to permit the member to move for a limited distance in the direction of its general plane, and springs connected to the frame and legs of the member to yieldingly resist the movement of the member under the influence of the car.

1,759,758. CARBURETOR. EDWARD HENRY PHILLIPS, Kensington, Australia, assignor to Phillips Volatilisor Syndicate Company, Limited, Sydney, New South Wales, Australia, a Company of New South Wales. Filed Jan. 11, 1928, Serial No. 246,057, and in Australia Feb. 18, 1927. 2 Claims. (Cl. 261—124.)



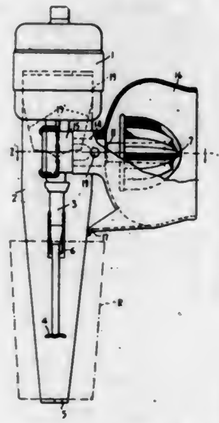
1. A carburetor comprising a container for liquid fuel, a perforated air distributing chamber within the container, an air inlet pipe having one end connected to the air distributing chamber, the other end being controllably open to atmosphere, a float valve for maintaining the liquid fuel at a level above the air distributing chamber, a drying chamber having an orifice through which the mixture from the container may enter, a pipe connected to the orifice in the drying chamber and extending downwardly within and to near the bottom of the drying chamber, a gas draw off pipe connected to the drying chamber, and means for draining said drying chamber.

1,759,759. DIRECT-CURRENT PRESSURE-SPLITTING DEVICE. ANGELO DELLA RICCIA, Brussels, Belgium. Filed Dec. 2, 1921, Serial No. 519,558, and in France Dec. 16, 1920. 10 Claims. (Cl. 172—239.)



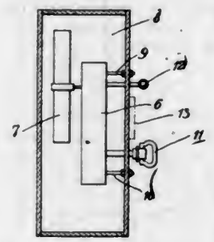
8. A direct current transformer or pressure splitting device comprising; two similar end armature windings connected respectively to the two terminals of the line and each having a commutator fitted to half the line tension; at least one armature winding connected in series between said two end windings and having at least one commutator fitted to the full line tension; all these windings being wound upon armatures mounted on the same shaft; field windings to equally excite said two end windings and at least one field winding to excite said at least one intermediate winding, whereby the device splits the pressure of the line in at least three portions two of which are equal to each other.

1,759,760. COMBINED JUICE EXTRACTOR AND MIXER. CLARENCE RINGWALD, North Hampton, Ohio, assignor to Robbins & Myers, Inc., Springfield, Ohio, a Corporation of Ohio. Filed Aug. 30, 1929. Serial No. 389,438. 6 Claims. (Cl. 259—1.)



1. In a combined juice extracting and mixing machine, a support, an electric motor mounted on said support, a mixing member connected with the shaft of said motor, a juice extracting member operatively connected with the shaft of said motor, means for supporting a receptacle in operative relation with said mixer, and means for discharging juice from said extractor into said receptacle while so supported.

1,759,761. APPARATUS FOR INDUCING SLEEP. HANS SALOMON, Berlin-Halensee, and MAX FRIEDRICH, Berlin, Germany. Filed Mar. 11, 1925, Serial No. 14,757, and in Germany May 2, 1924. 2 Claims. (Cl. 84—1.)

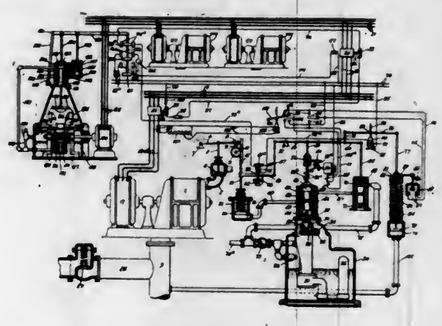


1. An apparatus for inducing sleep, comprising in combination with a shaft, a motor and a train of gears to transmit the drive of the motor to the shaft, of a flat vibratory vane mounted on the shaft to be rotated thereby, the rotation of the vane and the resistance of the air to the movement of the vane operating to effect a humming sound, the plane of the vane being normal to the plane of rotation thereof to utilize the maximum resistance of the air to intensify the vibration to augment the humming sound produced by the rotation of the vane.

1,759,762. REMOVING INCRUSTATION FORMED ON METALLIC SURFACES. RICHARD SELIGMAN, Wandsworth, London, England. Filed Aug. 1, 1927, Serial No. 210,017, and in Great Britain Nov. 4, 1926. 5 Claims. (Cl. 87—5.)

3. The process for removing the incrustation which forms on a metallic surface in contact with hot milk which consists in treating the surface with pure ortho-phosphoric acid said pure ortho-phosphoric acid containing a colloid soluble in said acid to prevent or minimize the action of the pure ortho-phosphoric acid upon the metallic surface itself.

1,759,763. TURBINE-REGULATING MEANS. REGINALD G. STANDERWICK, Marblehead, Mass., assignor to General Electric Company, a Corporation of New York. Filed Feb. 23, 1929. Serial No. 341,918. 16 Claims. (Cl. 290—2.)



1. In combination, an elastic fluid turbine, an alternating current generator driven thereby, bus bars to which the alternating current generator is connected, means other than said generator for fixing the frequency of the current on said bus bars, a speed governor for the turbine, said governor being set so that at normal frequency on the bus bars it is not operative to control the turbine, a frequency responsive device, and means controlled by the frequency responsive device for rendering the speed governor operative to control the turbine in case the frequency on the bus bars decreases below a predetermined low value.

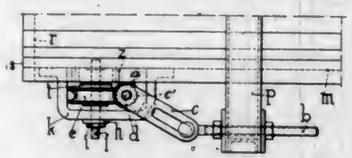
11. The combination with an elastic fluid turbine having valve means for controlling the flow of elastic fluid thereto, of control means for positioning said valve means comprising a speed responsive governor and a governor responsive to the pressure of elastic fluid flowing from the turbine, means for adjusting the setting of the speed governor, and means controlled by said pressure responsive governor for adjusting the speed governor setting means to effect opening of the valve means when the pressure of the elastic fluid flowing from the turbine is below a certain low value.

15. The combination with a turbine driven set comprising an elastic fluid turbine having valve means for controlling the flow of elastic fluid thereto, of a speed governor for the turbine, means for adjusting the setting of the speed governor, a second governing means for the turbine, said second governing means normally controlling the supply of elastic fluid to the turbine, and means responsive to an abnormal operating condition of said set for rendering inoperative said second governing means and adjusting the setting of the speed governor.

1,759,764. SHAKING CONVEYER. KARL STROEDTER, Bochum, Germany, assignor to the Firm Gebr. Eickhoff Maschinenfabrik, Bochum, Germany. Filed July 7, 1927, Serial No. 204,004, and in Germany May 21, 1927. 8 Claims. (Cl. 198—220.)

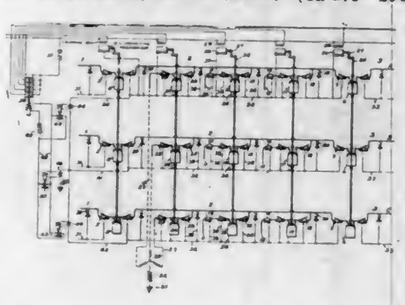
1. A device of the character described comprising a shaking conveyer, a shovel member, a gearing continuously

coupling the shaking conveyer to the shovel member for permitting them to reciprocate together, and means co-



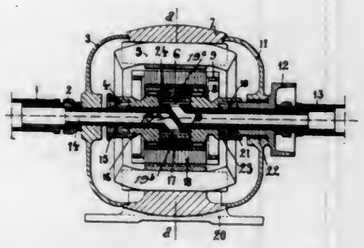
acting with the gearing for moving the shovel member longitudinally relatively to the shaking conveyer during their reciprocation.

1,759,765. PROTECTIVE SYSTEM. HENRY R. SUMMERHAYES, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Feb. 13, 1926. Serial No. 88,160. 10 Claims. (Cl. 175—294.)



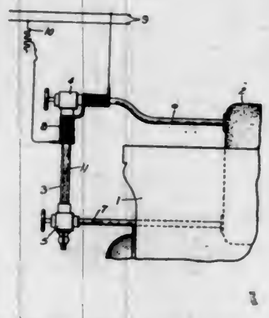
I. In combination, polyphase current conducting and controlling apparatus arranged in sections, separate switches controlling current flow to the respective sections, said conducting and controlling apparatus and said switches being provided with ground busses individual to the conducting and controlling apparatus and switches of each section, a source of current connected to supply current to said apparatus, and means connected in said ground busses responsive to the flow of current from apparatus and switches in any section to ground for stripping open the switches controlling current flow to said section independently of the switches and controlling current flow to the other sections.

1,759,766. COMBINED PUMP AND ELECTRIC MOTOR. CONSTANTIN SZMUKLER, Grenoble, France. Filed July 10, 1925, Serial No. 42,770, and in France July 28, 1924. 1 Claim. (Cl. 103—118.)



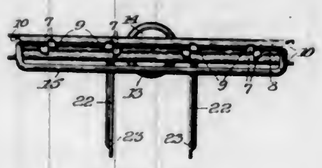
A combined pump and electric motor comprising a pair of casing heads, a fixed tubular pump element extending through the casing heads and providing intake and discharge channels for said pump, a revoluble pump element mounted on said fixed tubular pump element at a point between the casing heads, a rotor for said motor secured to and surrounding said revoluble pump element and having a bearing in one of the casing heads and an annular stator for said motor arranged between the casing heads and coacting therewith to enclose the pump elements and the rotor.

1,759,767. LIQUID-LEVER GAUGE FOR BOILERS. ELIHU THOMSON, Swampscott, Mass., assignor to General Electric Company, a Corporation of New York. Filed Jan. 14, 1926. Serial No. 81,288. 3 Claims. (Cl. 73—54.)



I. The combination with a gauge glass for a boiler, of means for maintaining the temperature of the vapor in the upper portion of the glass at a value such that the vapor is superheated.

1,759,768. MOP HEAD. HENRY TSCHERNING, Freeport, Ill., assignor to Arcade Manufacturing Company, Freeport, Ill., a Corporation of Illinois. Filed Oct. 27, 1927. Serial No. 229,047. 2 Claims. (Cl. 15—148.)

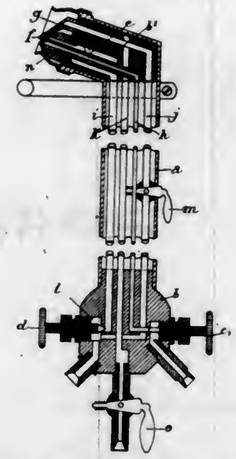


I. A combined mop and brush-holding head comprising first, second and third members, said first and second members having abutting flat portions deflected outwardly medially to provide a stick-receiving socket, tongues on one of the latter members, the third member being a trough and disposed across and in contact with each of said first and second members at an edge of the abutting portions, said trough having slots through which said tongues pass to secure the trough in place, a bail coacting with the trough to secure a mop thereto, the second member having shoulders, and said bail having a portion coacting with said shoulders to hold a brush in operative position.

1,759,769. BLOWPIPE. CYPRIEN VUILLAUME, Lyon, France. Filed May 20, 1925, Serial No. 31,639, and in France May 20, 1924. 1 Claim. (Cl. 158—27.4.)

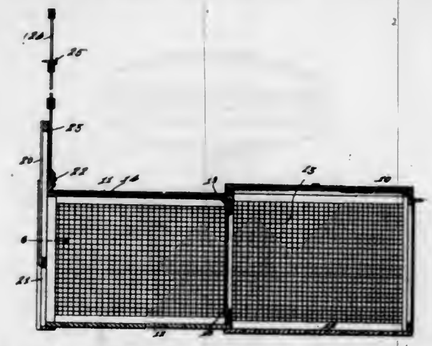
A blow-pipe comprising a casing having a short end but at an angular declination, a plurality of valve controlled ducts received in said casing and extending therethrough, a conical nozzle for each duct arranged concentrically with respect to each other and mounted in the short end of the casing, the innermost of said concentrically arranged

nozzles being provided with striations formed on its outer surface, a cap secured to the free extremity of said short



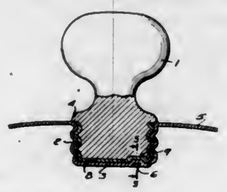
end about the concentrically arranged nozzle and an air duct opening rearwardly of said cap for directly delivering compressed air into the same.

1,759,770. POULTRY TRAP. TRIMBLE J. WHETSTONE, Hutchinson, Kans. Filed May 28, 1928. Serial No. 281,235. 4 Claims. (Cl. 119—22.)



1. In a trap, a reticulated container comprising an outer section open at one end, an inner section slidable within the outer section, a hinged closure for the inner end of the inner section to divide the trap into separate compartments and a slidingly mounted closure for the outer end of the inner section.

1,759,771. KNOB-ATTACHING DEVICE. OTTO B. WILLI, Montgomery City, Mo. Filed Feb. 21, 1929. Serial No. 341,745. 8 Claims. (Cl. 53—8.)



1. A knob attaching device for kettle covers and the like, comprising a threaded socket carried by the cover, and an externally threaded cup permanently connected to the knob, said socket and said cup having integral interlocking means for resisting unscrewing of the cup from the socket.

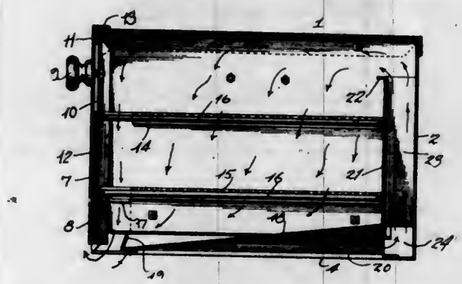
1,759,772. RIFLE-BARREL ATTACHMENT AND AMMUNITION FOR SHOTGUN BARRELS. EDGAR A. WILLIAMS, Upper Black Eddy, Pa. Filed Aug. 30, 1928. Serial No. 302,999. 9 Claims. (Cl. 42—77.)



1. In an attachment for gun barrels, a small caliber gun barrel adapted to be inserted in a gun barrel and having longitudinal grooves in its outer surface.

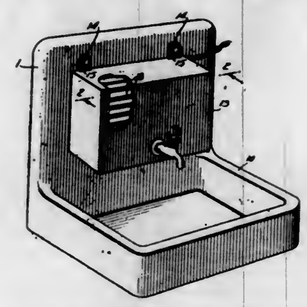
5. A cartridge adapter for firearms, comprising a shell, a tubular filler in said shell, a compressible wad in said shell in front of said tubular filler adapted to be compressed against the rear end of a subcaliber barrel within a firearm barrel to provide a gas tight joint with said rear end.

1,759,773. PORTABLE OVEN. CHARLES E. ADAMSON, Muncie, Ind., assignor of one-third to Josephine L. Zorbaugh, Fort Wayne, Ind. Filed Sept. 28, 1928. Serial No. 309,006. 4 Claims. (Cl. 126—275.)



1. An oven comprising a body open at its bottom, guide rails supported within the body and having rearwardly disposed lug portions, a door pivotally mounted in the body and having side flanges adapted to engage said lug portions when the door is moved to an open position with relation to the body.

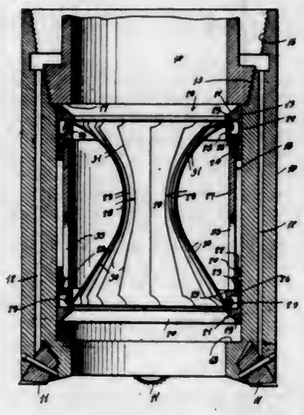
1,759,774. ELECTRIC WATER HEATER. ANGELO ANDRIULLI, Jersey City, N. J. Filed Nov. 15, 1928. Serial No. 319,658. 3 Claims. (Cl. 219—39.)



1. A device of the character described including a receptacle, a water conducting coil within said receptacle having a discharge end protruding therethrough, a faucet

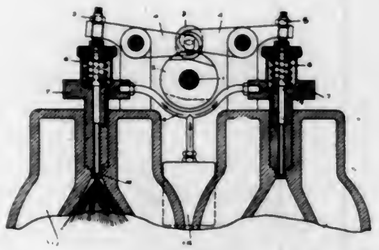
associated with said discharge end, a casing within said coil, a heat generating electrical resistance within said casing and spacing means for retaining said casing in spaced relation from said coil.

1,759,775. CORE TRAP OR RETAINER. JAMES G. BOSWELL, Freeport, Tex., assignor of one-half to Walter L. Russ, Freeport, Tex. Filed May 10, 1928. Serial No. 276,714. 4 Claims. (Cl. 255—72.)



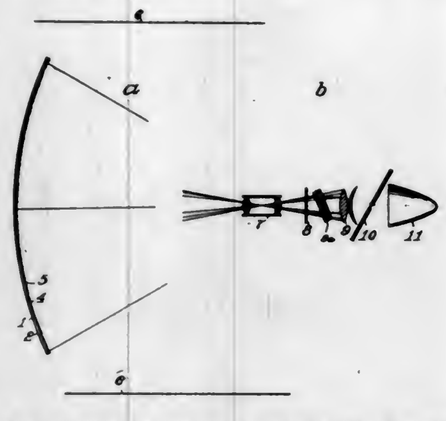
1. A core retainer comprising ring members, spring blades each having a hook at each end engaging said members, said spring blades being resiliently constricted throughout their length to provide a constricted passage intermediate of their ends to engage a core.

1,759,776. MULTICYLINDER COMBUSTION MOTOR. JAN BRONS, Appingedam, Netherlands, assignor to Naamlooze Vennootschap Appingedammer Bronsmotorenfabriek, Appingedam, Netherlands. Filed Jan. 7, 1927, Serial No. 159,708, and in the Netherlands Jan. 15, 1926. 1 Claim. (Cl. 123—32.)



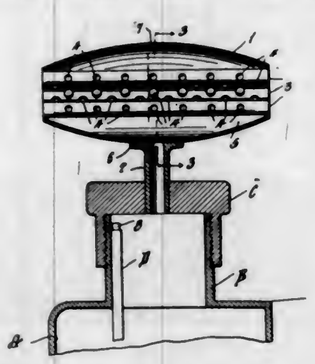
A fuel-injecting device for multi-cylinder combustion engines having a needle valve for each cylinder adapted to inject fuel into said cylinder, a spring associated with each needle valve, a source of fuel supply connected to each valve and having a pressure substantially equal to the normal spring pressure of the needle valve, a cam shaft and rocker arm mechanism associated with said springs and adapted to increase and decrease the pressure of said springs at predetermined time intervals whereby the needle valves are held in closed position by said spring pressure, and released at a predetermined time by the pressure of the fuel to inject fuel into the cylinders.

1,759,777. PROJECTION SYSTEM. ALOYSIUS J. CAWLEY, Pittston, Pa. Filed Dec. 15, 1926. Serial No. 156,097. 4 Claims. (Cl. 88—24.)



3. A projection screen consisting of a ridged surface, each of said ridges having a slanting surface at the polarizing angle, and a vertical light diffusing surface the rear surface of said screen being provided with light absorbing means.

1,759,778. CONDENSER FOR AUTOMOBILE RADIATORS. JULIUS G. CLUCHEY and GEORGE L. CLUCHEY, Flint, Mich. Filed May 19, 1927, Serial No. 192,634. Renewed Oct. 24, 1929. 1 Claim. (Cl. 257—25.)

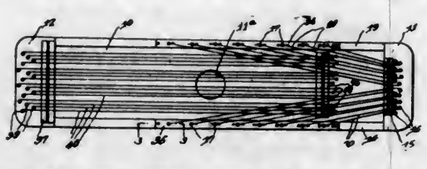


A condenser for automobile radiators, comprising a barrel-shaped casing having the ends of smaller diameter than the diameter of its intermediate portion, a nested core of open tubular members extending from end to end of the casing, a tubular nipple secured to said casing and alined with an opening therein, said nipple being adapted to be secured in an opening of a radiator cap to communicate with the interior of a radiator, baffle plates in said casing on each side of the opening aforesaid, and the casing provided with a vent to maintain atmospheric pressure in the casing and radiator, the walls of the casing by inclining from the intermediate portion to the ends and the open ended tubes providing for cooling of said walls and tubes by contact therewith of air in motion.

1,759,779. STRINGED MUSICAL INSTRUMENT. LEONARD DODSON and JAMES DODSON, Chicago, Ill. Filed Oct. 24, 1927. Serial No. 228,415. 4 Claims. (Cl. 84—263.)

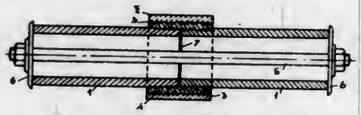
3. In combination with a stringed musical instrument, an anchoring element having an opening extending there-

through in the body portion thereof and a shallow groove in the upper end thereof disposed parallel to said opening, the string being disposed in said groove and then down-



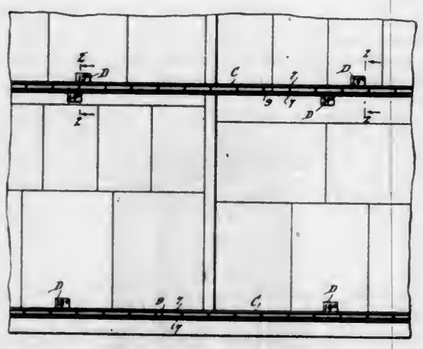
wardly along said body portion and then through said opening, and means on the end of said string adapted to prevent said string passing back through said opening.

1,759,780. RIGID JOINT, PIPE, AND ITS MANUFACTURE. FRANCESCO FIGARI, Genoa, Italy. Filed Nov. 6, 1925, Serial No. 67,458, and in Italy Nov. 10, 1924. 1 Claim. (Cl. 285—111.)



A method for jointing pipe sections consisting in arranging a plurality of sections together in series, roughening the outer surface of the end portions of adjacent pipe sections, exerting temporary pressure on the remote ends of said sections to temporarily hold the sections together under pressure, applying a cementitious binding circumferentially about the roughened portions and across the meeting edges of the pipe sections to permanently connect the sections together under pressure, and finally removing the temporary pressure subsequent to the hardening of the binding.

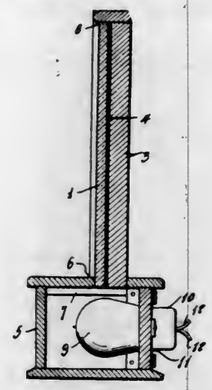
1,759,781. PRICE TAG OR SIGN HOLDER. LOUIS FONTANNAZ, New York, N. Y. Filed Nov. 21, 1928. Serial No. 320,992. 3 Claims. (Cl. 40—10.)



1. A price tag or sign supporting attachment for a shelf comprising a strip of material disposed in front of and secured to the forward edge of the shelf, said strip having temporarily deformable resilient cylindrical beads at the upper and lower edges between which and the forward edge of the shelf, the tags are received and clamped.

1,759,782. ILLUMINATED SIGN. JOHN J. FOX, Saginaw, Mich. Filed June 9, 1927. Serial No. 197,612. 1 Claim. (Cl. 40—130.)

A sign of the character set forth comprising a hollow base provided on its upper side with opaque walls having a slot therebetween, strips secured within the base at opposite sides thereof and extending across the slot, a frame extending upwardly from the base and fitted in the slot and closed at its rear side, a glass plate disposed within the frame having its lower edge portion positioned in said slot and

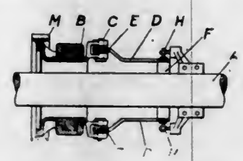


resting upon the strips, the location of said strips affording a construction wherein said lower edge portion of the glass plate is unobstructed between the strips, and a lamp within the base.

1,759,783. CLEANSING COMPOSITION. LOUIS GERGELE, Chicago, Ill. Filed June 15, 1928. Serial No. 285,791. 1 Claim. (Cl. 87—5.)

A polishing composition consisting of egg shells fourteen parts, fuller's earth two parts, rotten stone two parts, sal ammoniac one-eighth of a part, all in powdered mixed condition, and luke warm water of an amount to form a paste when mixed with some or all of said other mixed ingredients.

1,759,784. MEANS FOR TRANSMITTING ENERGY BETWEEN SHAFTS. HUGO GROB, Berlin, Germany, assignor to Naamlooze Vennootschap Machinerieen en Apparaten Fabrieken, Utrecht, Netherlands. Filed July 24, 1925, Serial No. 45,928, and in Germany July 24, 1924. 1 Claim. (Cl. 64—98.)

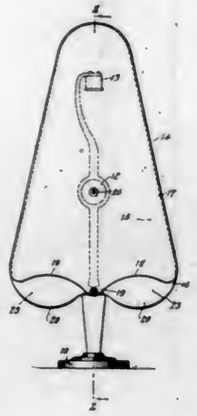


A device for transmitting energy between driving and driven rotary shafts, both shafts being substantially coaxial and mounted to permit lateral movement therebetween, comprising two links pivotally mounted to one of the shafts at one end of the links, a rigid intermediate member to which the other ends of the links are pivotally mounted, and means pivotally mounting the intermediate member to the other of said shafts, said means permitting movement of the intermediate member in a direction at right angles to the rotary shafts, and said two links being mounted to permit of relative lateral displacement of the two shafts in a direction which is vertical both to the axial direction of the shafts as well as to the direction of movement of the intermediate member.

1,759,785. LOUD-SPEAKER ENVELOPE. ROY H. GULDMAN, North Tarrytown, N. Y. Filed Feb. 2, 1928. Serial No. 251,383. 6 Claims. (Cl. 181—31.)

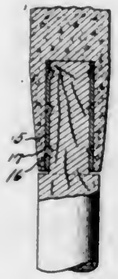
1. A sound amplifier, comprising an envelope body including substantially conical walls secured together at the

major portion of their edges, leaving an open portion between their edges constituting a sound outlet, an actuating unit arranged within the body having a driving pin connected to the apex of one wall, a supporting standard ex-



tending through the open portion of the envelope body and supporting the actuating unit, and a diaphragm speaking element supported by the standard for vibrating the air column enclosed by the envelope body.

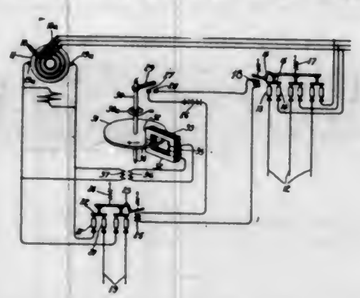
1,759,786. PILE. EUGENE A. HARDIN, Detroit, Mich. Filed Oct. 13, 1927. Serial No. 225,912. 2 Claims. (Cl. 61—56.)



1. A pile, comprising one or more sections of wood, a section of preformed concrete provided with a socket into which the uppermost end of the wooden section fits, and a metal ring disposed between the walls of the socket and the said end of the wooden section, said metal ring having means biting into the wood.

1,759,787. PROTECTIVE DEVICE FOR ROTARY CONVERTERS. FRANZ HILLEBRAND, Niederschonhausen, Berlin, Germany, assignor to General Electric Company, a Corporation of New York. Filed June 17, 1927, Serial No. 199,607, and in Germany June 30, 1926. 7 Claims. (Cl. 175—294.)

1. In combination, a rotary converter, alternating current mains, direct current mains, means including brushes for completing a circuit between the direct current end of said converter and said direct current mains, means for completing a circuit between the alternating current end of said converter and said alternating current mains, and means connected across said direct current brushes and



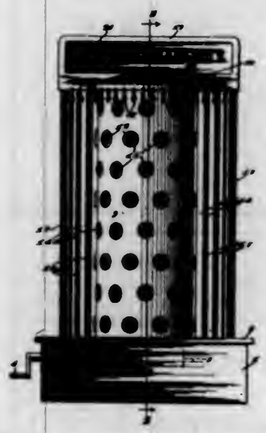
dependent upon pulsations in the direct current circuit for interrupting the circuit between said converter and said alternating current mains.

1,759,788. OIL-GAUGE WIPER. ALPHA O. HOLVECK, Jr., Victoria, Tex. Filed June 1, 1929. Serial No. 367,721. 2 Claims. (Cl. 15—210.)



1. A wiper for oil gauge rods of internal combustion engines comprising a pair of resilient arm members connected at one end and arranged in spaced relation, a wiping padding overlying the inner faces of the arms, the body of material upon the arms being in contact, and means carried by one of said arms for frictionally engaging a supporting body, said means comprising an elongated arm member having an integral resilient tongue associated therewith and said wiping material carrying arms being arranged at an inclination with respect to the supporting arm to drain oil from one end of the device.

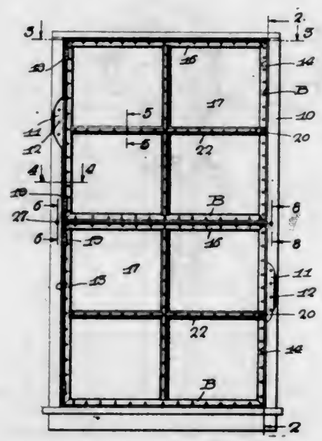
1,759,789. ADVERTISING DEVICE. CHARLES E. HOWARD, Ypsilanti, Mich. Filed Apr. 24, 1929. Serial No. 357,760. 2 Claims. (Cl. 40—77.)



1. In an illuminated sign, a base having a motor therein, a cylinder on the top of the base to which the driven shaft of the motor is fixed, said cylinder, throughout its length, being provided with spaced series of circumferential openings, different colored translucent discs seated in said

openings and having their outer faces cut to provide facets, a flanged cover arranged over the top but free from connection with the cylinder, a semi-cylindrical member resting on the base and arranged to the rear and to the sides of the cylinder and held spaced from the cylinder by the flanged cap, a vertically arranged reflective surface on the inner face of the semi-cylindrical member, a sign plate on the top carrying a sign provided with open letters, a plate between the top of the sign and the rear of the cover, said cover, opposite the reflective surface having an opening therethrough and a lamp bulb supported on the cover and arranged in the cylinder.

1,759,790. WINDOW. BENJAMIN L. INGRAM and WILLIAM H. DE LONG, Menard, Ill. Filed Sept. 26, 1928. Serial No. 308,391. 2 Claims. (Cl. 189—66.)



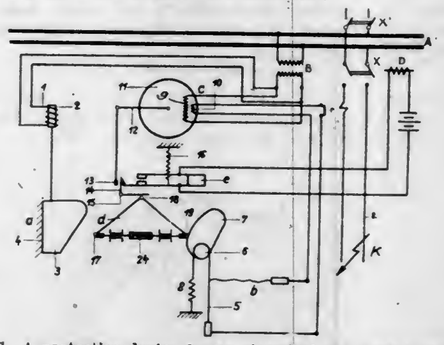
1. A window construction including a casing having sash receiving grooves, upper and lower sashes, each sash including inner and outer frame sections of L-shaped formation in cross section, the outwardly directed flange on the outer section being slidably received in one of said grooves, the forwardly directed flange of the same section being in contact with said casing, the forwardly directed flange of the inner section lying in contacting engagement with the corresponding flange of the outer section, the inwardly directed flange of the inner section constituting a support for the glass pane of the window, means for securing the said glass pane to the last mentioned flange, and means for supporting the inner frame upon the outer frame for swinging movement.

1,759,791. SAFETY BLOCK FOR MINE CARS. CARL F. KECK, Pleasant Unity, Pa. Filed Feb. 23, 1929. Serial No. 342,118. 5 Claims. (Cl. 104—257.)



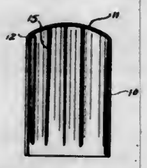
1. A device of the class described comprising a bar having a handle at one end thereof, a pair of upright members connected with the bar and a rail engaging head on the upper end of each member having a large front end acting as a stop for the wheel of a car.

1,759,792. SELECTIVE RELAY. FRITZ KESSELRING, Hermsdorf, near Berlin, Germany, assignor to Dr. Paul Meyer A. G., Berlin, Germany, a Joint-Stock Company. Filed Dec. 15, 1926, Serial No. 155,069, and in Austria Aug. 6, 1926. 6 Claims. (Cl. 175—294.)



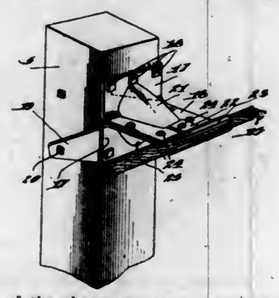
1. A protective device for an electrical net work system comprising a voltage relay, a directional relay having voltage and current coils, a thermal relay included in the circuit of said current coil, each of said relays being connected to said system, electrical means for opening said system, a switch in circuit with said means for controlling the operation thereof, means operated by said voltage relay and said thermal relay for actuating said switch, and means operated by the directional relay for controlling the closing of said switch.

1,759,793. FENDER CONSTRUCTION FOR VEHICLES. BART LUND, Hammond, Ind. Filed Jan. 5, 1929. Serial No. 330,637. 1 Claim. (Cl. 280—152.)



In a fender construction including a skirt portion and a hood portion having a downwardly depending lip, a plurality of fins arranged on the under side of said hood in spaced apart relation, said fins extending from a point adjacent the forward end of said hood to a point adjacent the rear lower end thereof, said fins being tapered longitudinally thereof and being disposed with the wider end portions adjacent the forward end of said hood while the narrower end portions are disposed adjacent the rear end thereof.

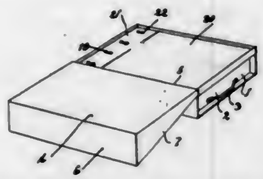
1,759,794. SAFETY BARRIER FOR ROADWAYS. WILLIAM MCDADE, Selbyville, W. Va. Filed Feb. 29, 1928. Serial No. 257,952. 1 Claim. (Cl. 248—36.)



In a device of the character described, a pair of superimposed plates, oppositely extending right angular flanges

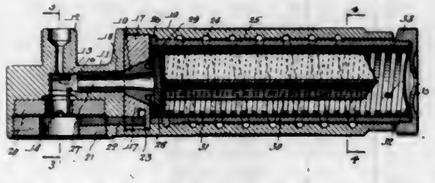
projecting from the rear ends of the plates, clamping jaws carried by the opposite ends of the plates, a longitudinally extending reinforcing bulge formed in each of the plates and extending to the attaching flanges, detachable fastenings connecting the two plates together, and a rearwardly projecting attaching wing carried by each of the flanges, the attaching wings being disposed at opposite ends of the attaching flanges.

1,759,795. DUPLICATING DEVICE. JOHN D. MCLEOD, Saskatoon, Saskatchewan, Canada. Filed Feb. 3, 1928. Serial No. 251,701. 8 Claims. (Cl. 101—125.)



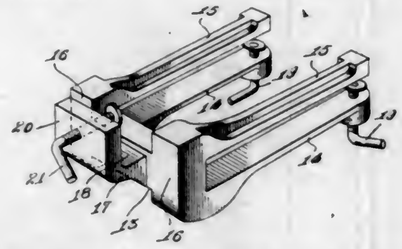
1. In a duplicating device, a rigid nonperforated base member having a smooth flat surfaced upper face, an ink pad lying on the said face and stretched to lie flat on said face and a stencil sheet for application on the upper face of the pad.

1,759,796. SAFETY VALVE FOR TIRES. ALBERT RAYMOND MILES, Indianapolis, Ind. Filed Sept. 1, 1926. Serial No. 133,062. 3 Claims. (Cl. 137—53.)



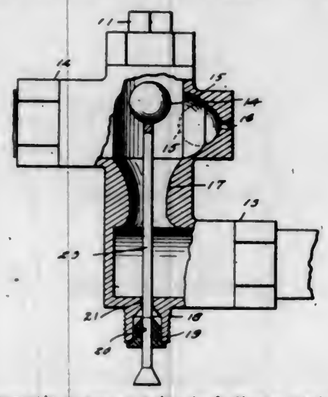
2. In a device of the class described, including a tubular body having a removable head, a threaded hollow stem passing through said head and forming a bore for release of air, said stem having a conical inner end adapted to constitute a valve seat, a shell in said body having threaded connection therewith, a plug within said body abutting one end of said inner shell when inner shell is at innermost position, said plug having a conical seat to receive said conical stem end, a valve controlling said hollow stem, and spring means exerting pressure on said valve, said shell affording an abutment for one end of the spring and adapted to vary the tension of the spring for relative turning of the body and shell.

1,759,797. CAN HOLDER. FRANK J. MORAVEK, Holyrood, Kans. Filed Sept. 10, 1927. Serial No. 218,665. 1 Claim. (Cl. 224—29.)



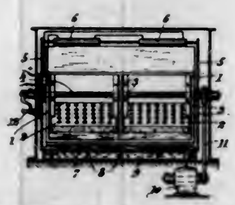
A holder comprising spaced parallel arms, enlargements formed with the arms and connecting the latter at one end in superposed pairs, a body portion connecting the enlargements together, the opposite ends of said arms being free, an arm formed with the body portion, an upwardly projecting portion formed in the last mentioned arm and being spaced with respect to the body portion to provide a channel, said enlargements providing shoulders, a screw member threadedly secured in the upwardly projecting portion, and being adapted for engagement with the depending rim of a container received in said channel to force said rim against said shoulders, and means carried by the lower arms of the pairs, for securing said holder to a support.

1,759,798. AUTOMATIC CUT-OFF. SYLVESTER E. MURPHY and CHARLES L. GALLIAN, Russell, Ky. Filed Dec. 17, 1928. Serial No. 326,495. 1 Claim. (Cl. 137—153.)



An automatic pressure valve including a casing having an inlet and an outlet means, a valve seat arranged opposite the inlet means and having a vent opening, a valve seat arranged in a plane at right angles to the first seat, and intermediate the inlet and outlet, a ball valve normally held on the first seat by the pressure of the incoming fluid and to gravitate to the other seat upon reduction of the pressure of such fluid, the casing having an opening in line with the second seat and provided with packing and a closure, and a rod arranged to be passed through said packing and opening for moving the valve from the second seat into position between said inlet and said vent, whereby it will be seated on the first seat by the pressure of the fluid.

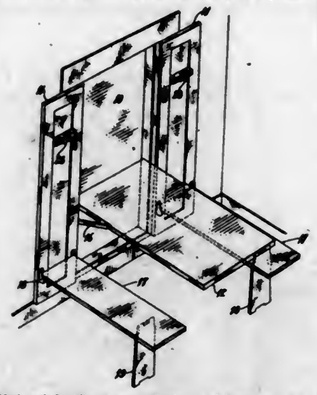
1,759,799. INCUBATOR. ADOLF NICKERL, Inzersdorf, near Vienna, Austria. Filed Jan. 14, 1928, Serial No. 246,776, and in Austria Sept. 14, 1926. 4 Claims. (Cl. 119—37.)



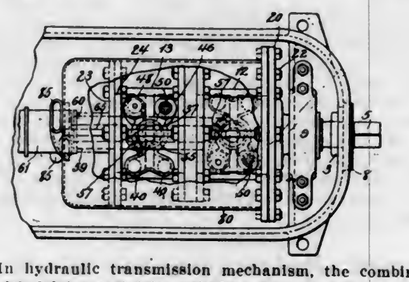
1. In an electrically heated incubator the combination with incubator trays disposed in the incubator case, of an electric heating member arranged for rotation around the said trays.

1,759,800. BUILT-IN FURNITURE. WILLIAM A. NOACK, Oakland, Calif., assignor to Concealo Fixture Company, Inc., a Corporation of Nevada. Filed Dec. 17, 1923. Serial No. 681,099. 1 Claim. (Cl. 155—123.)

In concealable furnishings, a cabinet having a rear wall and an open front, hinged doors for closing said cabinet front, a table unit of substantially the width of said cabinet and foldably connected with said rear wall, and bench units foldably connected endwise with the inner faces of said doors and adapted, when said doors are opened and disposed parallel with the face of the cabinet, to be projected to each side of the lateral limits of said cabinet and parallel with said table.

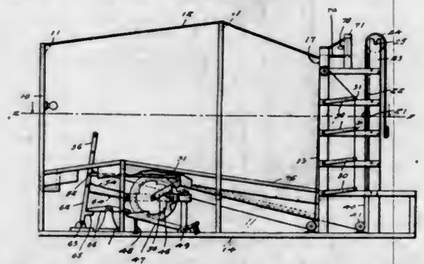


1,759,801. FLUID-CONTROLLED TRANSMISSION MECHANISM. CHARLES H. NORRLIN, Philadelphia, Pa. Filed Nov. 10, 1927. Serial No. 232,453. 12 Claims. (Cl. 192—58.)



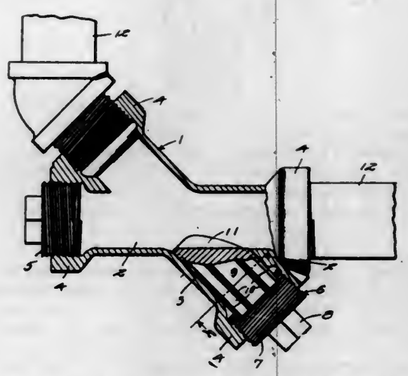
1. In hydraulic transmission mechanism, the combination with driving and driven shafts, of a cylinder eccentric to and rotatable with the driving shaft, said cylinder having two chambers, a rotor in each chamber, concentric with the axis of the driving shaft, said rotors being rotatable with with the driven shaft, pistons carried by the respective rotors, the pistons of one rotor being disposed at an angle to the pistons of the other rotor, inlet and discharge ports for the cylinder chambers, and a controlling valve between the inlet and discharge ports whereby to transfer fluid from one side of the pistons to the other side thereof and control the rate of transfer.

1,759,802. BALL GAME APPARATUS. FRED N. J. OHLSON, Pierson, Fla. Filed June 27, 1928. Serial No. 288,668. 7 Claims. (Cl. 273—103.)



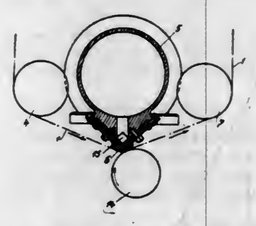
1. Game apparatus having a shelf, a receptacle to which the same leads and adapted to hold balls, platforms extending forwardly and downwardly from said shelf, a conveyor to return balls onto said shelf so as to roll into the receptacle, and said platforms being inclined inwardly and downwardly to cause the balls to roll onto the conveyor.

1,759,803. PIPE CLEAN-OUT FITTING. MAURICE W. PYSHER and FRED L. PYSHER, Walla Walla, Wash. Filed Mar. 9, 1929. Serial No. 345,730. 2 Claims. (Cl. 137—70.)



1. A cleanout fitting, comprising a hollow body having three arms one arranged at an angle with relation to the other two and each interiorly threaded at its end, a plug adapted to be threadably engaged in any one of the arms having a stem designed to close the arm to the point of intersection therewith of an adjacent arm, said stem being smaller than the interior diameter of the fitting arm, and means carried by the stem for cleaning the face of the adjacent wall of the arm in which it is positioned when rotated for removal therefrom.

1,759,804. DEVICE FOR DRYING TEXTURES. OTTO PIENON, Berlin, Germany, assignor to the Firm Rudolph & Kühne G. m. b. H., Berlin, Germany. Filed Mar. 20, 1928, Serial No. 263,108, and in Germany Apr. 2, 1927. 2 Claims. (Cl. 34—48.)

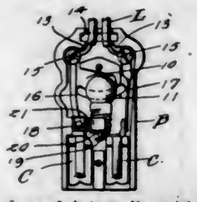


1. Apparatus for drying and dehydrating webs of woven material comprising a nozzle having a slot for the passage of compressed air, means for feeding a web over the nozzle and across the said slot, and a single pressure roller mounted at that side of the nozzle from which the web recedes, in its passage past the nozzle, closely adjacent the lip of said nozzle, and coacting with the said side of the nozzle to exert pressure upon the web.

1,759,805. ELECTRICAL CONNECTION PLUG. MARTIN C. POLLOCK and EARLE E. POLLOCK, Denver, Colo., assignors of one-fourth to Jacob Weiss and one-fourth to Richard S. Shannon, Denver, Colo. Filed Apr. 7, 1928. Serial No. 268,240. 1 Claim. (Cl. 177—311.)

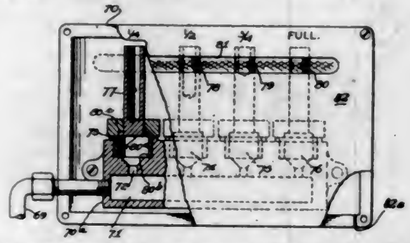
A two part electric plug having a passage extending therethrough and enlarged at its central portion, the plug

being provided in a side thereof with an opening communicating with said enlarged portion of the passage, contacts arranged within one end of the passage, binding screws arranged within the other end of the passage, conductor strips extending across the enlarged portion of the passage and secured to the contacts and binding screws, an



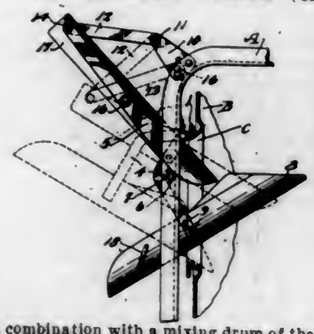
elastic extension formed integrally with one of the conductor strips at the point of connection of the strip with its contact, a bulb having a contact engaging said extension and provided with a contact lug, and an element detachably securing the contact lug to the other conductor strip at the point where the strip is connected to its contact.

1,759,806. LIQUID-LEVEL INDICATOR. EDWARD A. ROCKWELL, Long Island City, N. Y., assignor to Stewart-Warner Corporation, Chicago, Ill., a Corporation of Virginia. Original application filed Apr. 13, 1923, Serial No. 631,791. Divided and this application filed Dec. 6, 1926, Serial No. 152,896. Renewed Feb. 14, 1929. 5 Claims. (Cl. 116—118.)



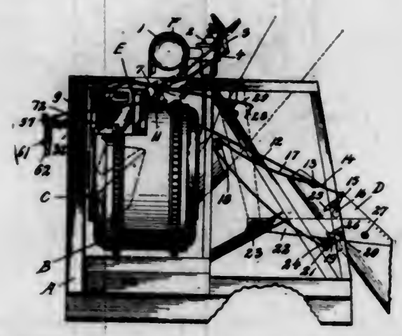
1. A construction for indicating pressure due to head of liquid, consisting of a plurality of visibly positioned plungers, each comprising a piston head, vertically positioned cylinders in which the piston heads respectively reciprocate, a duct through which the said cylinders have communication at their lower ends with the pressure to be indicated, the plungers being of different weight, whereby as the pressure to be indicated increases they are thrust up in the respective cylinders successively in the order of their weights.

1,759,807. DISCHARGE CHUTE AND DEFLECTOR. JOHN DANIEL, Milwaukee, Wis., assignor to Koehring Company, Milwaukee, Wis., a Corporation. Filed June 23, 1928. Serial No. 287,677. 7 Claims. (Cl. 193—10.)



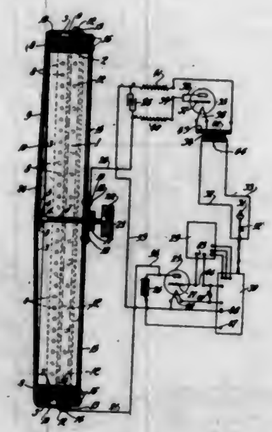
1. The combination with a mixing drum of the constantly rotating type having a discharge opening of a discharge device therefor including counter-balancing means for minimizing the effort necessary to operate the discharge device and which counter-balancing means also constitutes a sealing device for the discharge opening of the drum.

1,759,808. AUTOMATIC CONTROL FOR CONCRETE-MIXING MACHINES. JOHN DANIEL, Milwaukee, Wis., assignor to Koehring Company, Milwaukee, Wis., a Corporation. Filed Feb. 7, 1929. Serial No. 338,147. 15 Claims. (Cl. 83—73.)



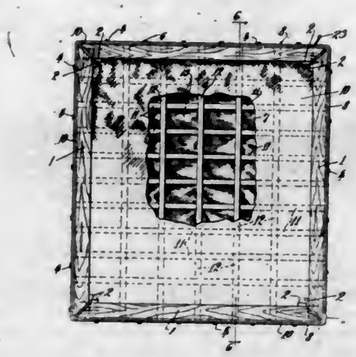
1. In a concrete mixing machine of the class described, the combination, with a mixing drum, of a discharge chute for discharging aggregates from the mixing drum and a loading skip for charging aggregates into the drum, a water supply means for supplying quantities of water to the mixing drum, and control instrumentalities associated with the discharge chute, water supply means, and loading skip including a device for causing the discharge chute to assume a mixing position simultaneously with the initiation of the flow of water from the water supply means to the mixing drum, said device also causing said flow of water to take place during the passage of the aggregates from the skip into the drum and during lowering movement of the skip.

1,759,809. ACOUSTIC CONDENSER. PHILIP E. EDELMAN, Chicago, Ill., assignor to Ephraim Banning, Chicago, Ill. Filed Apr. 3, 1929. Serial No. 352,201. 11 Claims. (Cl. 179—111.)



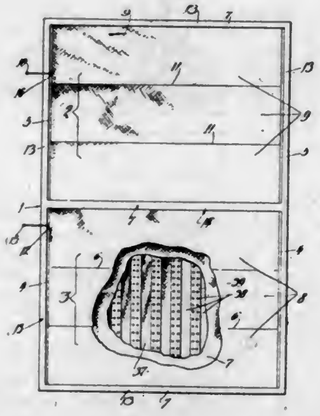
1. An acoustic condenser comprising, in combination, a supporting frame, a flexible woven screen electrode carried thereby, a dielectric sheet supported adjacent to said electrode, and an electrode carried by said dielectric sheet.

1,759,810. CONDENSER REPRODUCER. PHILIP E. EDELMAN, Chicago, Ill., assignor to Ephraim Banning, Chicago, Ill. Filed Apr. 11, 1929. Serial No. 354,233. 20 Claims. (Cl. 179—111.)



1. As an acoustic condenser reproducer, the combination of two flexible electrodes of dissimilar conducting area and a flexible dielectric sheet of impregnated fabric therebetween whereby both electrodes move under variations in the electrical impulses to produce sound waves in the air.

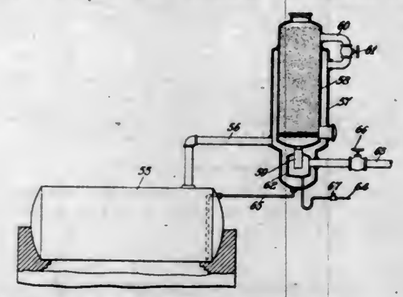
1,759,811. PUSH-PULL CONDENSER SPEAKER. PHILIP E. EDELMAN, Chicago, Ill., assignor to Ephraim Banning, Chicago, Ill. Filed Apr. 17, 1929. Serial No. 355,957. 20 Claims. (Cl. 179—111.)



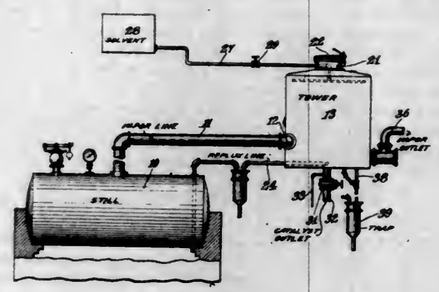
1. In an acoustic condenser having electrodes and a co-operating dielectric sheet therefor, the improvement which comprises attaching perforated soft metal strips to one of said electrodes to control the vibrations thereof.

1,759,812. METHOD FOR PURIFYING HYDROCARBON COMPOUNDS. THOMAS T. GRAY, Elizabeth, N. J., assignor to The Gray Processes Corporation, a Corporation of Delaware. Filed Sept. 26, 1923. Serial No. 664,893. 17 Claims. (Cl. 196—96.)

1. The method of refining petroleum distillate containing unstable unsaturated compounds which consists in first passing said distillate in vapor phase around a solid adsorptive catalyst in indirect heat exchange relation therewith, thereby maintaining the catalyst substantially at the temperature of the vapors, then passing the vapors through the catalyst to polymerize the unstable unsaturated compounds, continuously draining from said catalyst condensate formed therein, then separating the vapors from the liquid and subsequently condensing the vapors.

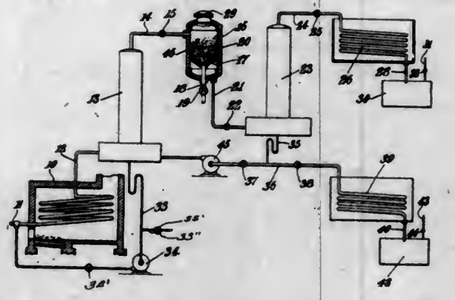


1,759,813. PROCESS AND APPARATUS FOR TREATING HYDROCARBONS. THOMAS T. GRAY, Elizabeth, N. J., assignor to Gray Processes Corporation, Newark, N. J., a Corporation of Delaware. Filed Mar. 24, 1925, Serial No. 17,855, and in Canada Sept. 18, 1924. 22 Claims. (Cl. 196—96.)



2. The process of purifying cracked hydrocarbons which consists in passing the same in vapor form through a body of solid adsorbent material thereby depositing on the said material a polymerized compound which tends by its presence to render the said material ineffectual and removing the said compound during operation of the process by passage of a condensate of the said vapors through the said material.

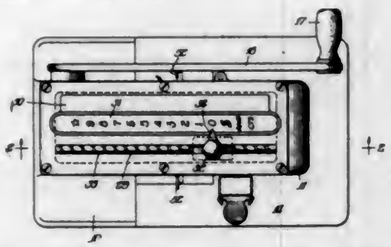
1,759,814. REFINING OF HYDROCARBONS. THOMAS T. GRAY, Elizabeth, N. J., assignor to Gray Processes Corporation, Newark, N. J., a Corporation of Delaware. Filed Aug. 9, 1926. Serial No. 128,007. 14 Claims. (Cl. 196—96.)



1. The method of obtaining substantially color stable motor fuel, which comprises cracking a hydrocarbon oil,

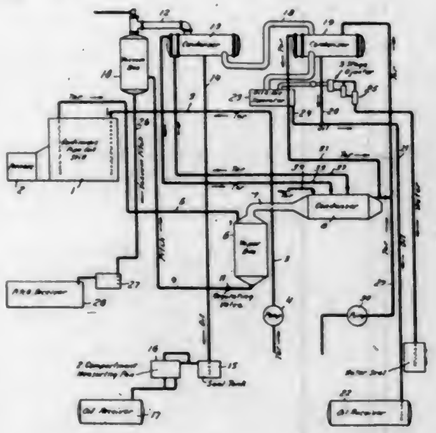
subjecting the resulting cracked vapors to partial condensation to obtain a vapor fraction having a definite boiling range, contacting the fraction thus obtained while still in vapor phase with solid adsorptive material thereby polymerizing the constituents of the fraction which tend to discolor on exposure to light and to form deposits, continuously draining from said adsorptive material and withdrawing from the vicinity of the treating zone polymers formed in said material, and continuously removing the treated fraction from said adsorptive material.

1,759,815. CHECK WRITER. DAVID W. JOHNSON, Chicago, Ill. Filed May 11, 1928. Serial No. 276,872. 11 Claims. (Cl. 197—6.4.)



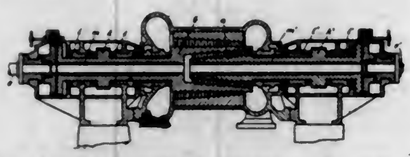
6. In a check writer, in combination, a rotatable type wheel, type characters carried thereby, a platen for printing cooperation with one of said characters at the printing point, actuating means for effecting printing cooperation of the platen and type wheel, a worm having gear connection with the type wheel whereby the latter may be rotated by rotation of the worm, a setting device movable longitudinally of the worm and in mesh therewith to effect its rotation, and means operable by the actuating means for locking the type wheel against rotation.

1,759,816. DISTILLATION OF TAR. ALEXANDER A. MACCUBBIN, Montclair, and JOSEPH ZAVERTNIK, Jr., Harrington Park, N. J., assignors to The Barrett Company, New York, N. Y., a Corporation of New Jersey. Filed Sept. 11, 1928. Serial No. 305,265. 15 Claims. (Cl. 196—76.)



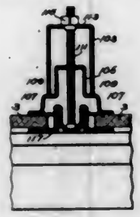
1. The method of distilling tar and of producing distillate oils and high melting point pitch therefrom, which comprises heating the tar while flowing in a restricted stream of narrow cross-section in a continuous manner without objectionable decomposition, discharging the heated tar into an expansion zone with sudden volatilization of a large part of the normal oil content of the tar, cooling the vapors to condense distillate oils, withdrawing the pitch residue and subjecting it to a high vacuum while it is still at a temperature sufficiently high to effect distillation of additional oils therefrom.

1,759,817. STEAM TURBINE. KARL RÖDER, Hanover, Germany. Filed Dec. 29, 1927, Serial No. 243,396, and in Germany June 23, 1926. 6 Claims. (Cl. 253—16.5.)



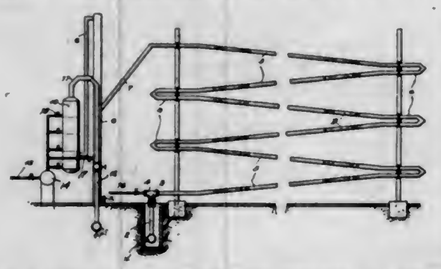
1. In a steam turbine, in combination, an inner rotor, having a plurality of axially spaced peripheral rows of blades upon its outer circumference, an outer hollow rotor, carrying on its inner circumference axially spaced rows of inwardly directed blades, said outer rotor enveloping the inner rotor along its bladed portion, a shaft for each rotor, carrying its rotor freely at its end, at least one of said shafts having a central longitudinal boring serving for admitting live operating steam through its interior to said rotors, and a separate tubular steam conduit disposed within said shaft boring and being sealed at its ends at narrow marginal portions against the end portions of said shaft boring.

1,759,818. STORE-FRONT CONSTRUCTION. HYMAN RUBIN, Roxbury, Mass. Filed Mar. 1, 1929. Serial No. 343,642. 12 Claims. (Cl. 189—78.)



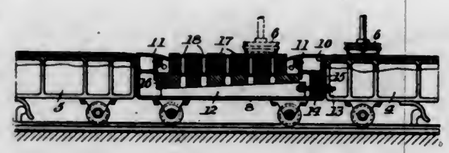
1. In a store front construction, a division bar comprising an outer strip having longitudinal inturned parallel ribs each doubled back upon itself and terminating in lateral opposed flanges, a screw secured to said division bar between said ribs, and an inner strip provided with an opening aligning with said screw and means for engaging said screws for drawing said inner and outer strip together.

1,759,819. GAS PURIFIER. ZENO W. WICKS, Fort Worth, Tex. Filed Jan. 28, 1925. Serial No. 5,399. 1 Claim. (Cl. 183—8.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928, 370 O. G., 757.)



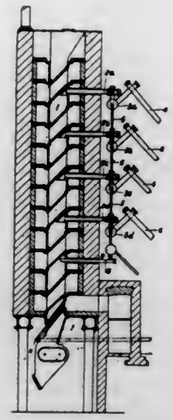
In an apparatus of the character described, in combination, a series of zigzag pipes connected to a suitable supply of gas at one end and a storage receptacle at the opposite end, said pipes being inclined in the direction of progression of flow therethrough, means for injecting a cleaning fluid at the inlet with sufficient velocity to agitate the gases, and a series of spiral plates within said zigzag pipes, said plates being periodically spaced at long intervals whereby the stream of mixture is inverted first in one direction and then in the other.

1,759,820. APPARATUS FOR CLEANING GLASS-POLISHING PADS. HAROLD M. BLACK, Butler, Pa., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed May 4, 1927. Serial No. 188,848. 2 Claims. (Cl. 15—21.)



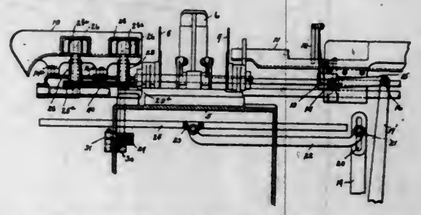
1. A cleaning device for polishing pads, comprising a table capable of traveling movement past a polishing pad in advance of a glass carrying table, a pad cleaning member on said table positioned to engage the polishing pad while traveling, and a guide plate at the rear end of said table whose forward edge extends to a plane below the plane of the succeeding glass-carrying table and whose rear edge is disposed in approximately the plane of said glass-carrying table.

1,759,821. PROCESS OF AND APPARATUS FOR DESTRUCTIVE DISTILLATION. ROBERT HENRY CROZIER, London, England. Filed July 15, 1929, Serial No. 378,209, and in Great Britain May 18, 1928. 8 Claims. (Cl. 202—24.)



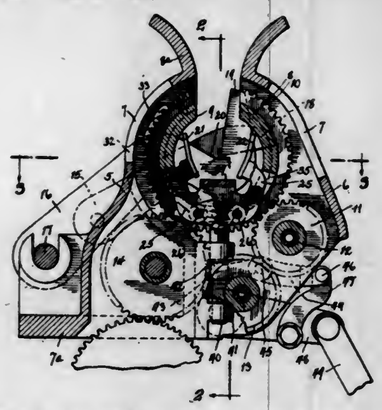
6. The process of the destructive distillation of solid carbonizable material which comprises progressively feeding the material into a zone, continuously decomposing the material at progressively increasing temperatures in said zone, simultaneously and separately removing from the material the vapors formed at a plurality of different temperatures, subjecting said vapors to reflux fractional condensation comprising passing the hotter vapors into contact with the condensates from the cooler vapors.

1,759,822. LINKING MACHINE. AUGUST L. N. FLEMING, Carthage, N. Y., assignor to Superior Linking Machine Corporation, Wilmington, Del., a Corporation of Delaware. Filed Sept. 20, 1928. Serial No. 307,315. 20 Claims. (Cl. 17—34.)



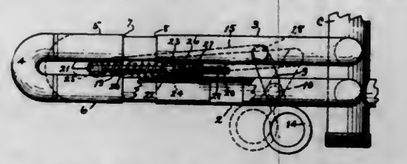
1. In a linking machine having a stationary guide for receiving one end of a filled casing and means for compressing the filling within a section of said casing during its passage in said guide.

1,759,823. LINKING MACHINE. AUGUST L. N. FLEMING, Carthage, N. Y., assignor to Superior Linking Machine Corporation, Wilmington, Del., a Corporation of Delaware. Filed Nov. 19, 1928. Serial No. 320,509. 12 Claims. (Cl. 17—34.)



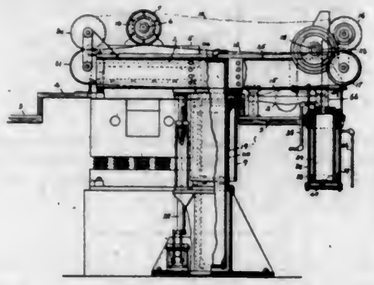
1. In a linking machine having a fixed housing, a rotor within the said housing arranged to receive a section of a filled casing therein, means for clamping the casing outside of the rotor, means for clamping the section of the casing within the rotor and means for revolving said rotor.

1,759,824. TUNING-SLIDE-ACTUATING MECHANISM. EDWARD J. GULICK, Elkhart, Ind., assignor to C. G. Conn, Ltd., Elkhart, Ind., a Corporation of Indiana. Filed July 19, 1928. Serial No. 293,896. 5 Claims. (Cl. 84—396.)



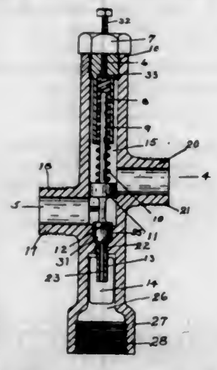
5. In a wind musical instrument of the character described, the combination of a U shaped tuning slide, the stationary instrument tubes with which the tuning slide telescopically cooperates, means for manually and outwardly actuating the tuning slide, spring means for retracting the tuning slide, and screw means mounted adjacent said instrument tubes for adjusting the tension of said spring.

1,759,825. ROLL-OVER TRAVERSING MECHANISM FOR MOLDING MACHINES. WILFRED LEWIS, Haverford, Pa., assignor to The Tabor Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed May 26, 1927. Serial No. 194,360. 8 Claims. (Cl. 22—32.)



1. Rollover traversing mechanism for molding machines comprising a rollover plate, having trunnions and cable drums, a mounting for affording the plate a turning motion and a traversing motion, cables connected with the drums to turn the plate, other cables connected to traverse the plate, means on the mounting for pulling said cables in the same direction and at different speeds to turn the plate or table and to traverse it, and plungers for raising and lowering the mounting.

1,759,826. PRIMER VALVE. SAMUEL F. GOSS, Portland, Oreg. Filed Dec. 18, 1926. Serial No. 155,740. 6 Claims. (Cl. 137—153.)



1. In combination with a pipe leading from a source of water supply under pressure, a water pipe leading to a water-discharge fixture, and a pipe leading to a floor drain trap, a valve-body having a longitudinally disposed bore, laterally disposed passages in said body connecting said bore with said supply and discharge pipes, respectively, said passages being disposed in relatively offset relation, a branch-passage at the end of said bore upon the side of said supply-passage opposite to said discharge-passage and emptying into said trap-pipe, a valve-member formed with plunger disks positioned upon each side of said supply passage when the valve is closed and having an annular space between said disks registering with said supply passage, a spring yieldingly maintaining said valve member in closed position, and means for adjusting the force of said spring.

Patents Nos. 1,759,827 to 1,760,862

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Labels	15—No.	37,481 to No.	37,495, inclusive.
Prints	18—No.	12,558 to No.	12,575, inclusive.
Reissues	12—No.	17,674 to No.	17,685, inclusive.
Designs	50—No.	81,218 to No.	81,267, inclusive.
Patents	1,036—No.	1,759,827 to No.	1,760,862, inclusive.
Total	1,371		

Adjudicated Patents

(D. C. N. Y.) Lundin patent, No. 1,140,469, for boat, *Held* valid and infringed. *Welin Davit & Boat Corporation v. C. M. Lane Life Boat Co.*, 38 F. (2d) 685.

(D. C. Conn.) Cavanagh patent, No. 1,303,161, for electric switch, claims 1, 3, 4, 6, and 7 *Held* valid and infringed. *Fonce v. American Specialty Co.*, 38 F. (2d) 639.

(C. C. A. Pa.) Hoodwin patent, No. 1,469,596, for tray, *Held* not infringed. *Daigger Corporation v. Evons*, 38 F. (2d) 628.

(C. C. A. Wis.) Walton patent, No. 1,612,788, for tire flap, *Held* invalid. *C. O. Tingley & Co. v. Badger Rubber Works*, 38 F. (2d) 630.

(C. C. A. Pa.) Hoodwin design patent, No. 60,025, for ice-cream-cone tray, *Held* not infringed. *Daigger Corporation v. Evons*, 38 F. (2d) 628.

Adverse Decisions in Interference

In interferences involving the indicated claims of the following patents final decisions have been rendered that the respective patentees were not the first inventors with respect to the claims listed:

Pat. 1,430,987, E. A. Hauff, Electric furnace, decided April 18, 1930, claims 3, 4, 5, 16, and 17.

Pat. 1,569,006, G. Deakin, Telephone system, decided April 9, 1930, claims 1, 2 and 5.

NOTICE—CHANGES IN FEES—LAW EFFECTIVE JUNE 1, 1930

ALL FINAL FEES MUST BE IN ACCORDANCE WITH NEW LAW

The act of Congress, approved April 11, 1930, provides that the fee for issuing each original patent shall be $25.00 and $1.00 for each claim in excess of 20, instead of the present fee of $20.00 and $1.00 for each claim in excess of 20.

This requirement applies to all cases, since the act itself does not provide that it should apply only to applications filed after June 1, 1930, nor only to applications in which the notice of allowance was issued after June 1, 1930.

In any application allowed on or before May 31, 1930, in which the fee is actually paid into the Patent Office on or before May 31st, the old schedule of fees applies. If it is desired that the issuance of the patent on such an application be delayed, as for example in order to file a foreign application, such issuance will upon request made when the fee is paid be deferred not to exceed three months. (See sec. 4885, R. S.)

THOMAS E. ROBERTSON,
Commissioner of Patents.

Condition of Applications Under Examination at Close of Business May 16, 1930

(Total number of applications awaiting action, excluding Trade-Mark Division, 117,747; Trade-Mark Division, 1,863. Oldest new case, July 12, 1929; oldest amended, July 9, 1929. The dates given are 1929 except where † indicates 1930.)

Room No.	Divisions, Examiners, and Subjects of Inventions	Oldest new application awaiting office action	Oldest amended application awaiting office action	No. of applications awaiting action
112	1. LOEFFLER, F. A., Closure Operators; Fences; Gates; Tillage; Scattering Unloaders; Handling and Hoist Line Implements.	Sept. 23	Oct. 5	1,321
126	2. HADEN, C. F., Bee Culture; Dairy; Presses; Tobacco	Aug. 5	Aug. 6	2,288
331	3. LINDSEY, A., Heating; Metal Founding; Metallurgy; Metal Treatment	Aug. 22	Dec. 13	1,548
234	4. MERRITT, A. D., Conveyers; Hoists; Handling Apparatus: Excavating	Oct. 14	Oct. 26	1,267
108*	5. MACNAB, J. F., Harvesters; Music; Acoustics; Sound Recording; Knotters	Aug. 19	Aug. 27	1,465
318	6. LEWERS, A. M., Carbon Chemistry	July 16	July 15	2,484
106	7. JARBOE, C. G., Optics; Photography	Aug. 7	Aug. 1	2,622
133	8. HENRY, C. C., Beds; Chairs; Kitchen and Table Articles; Racks and Cabinets	Aug. 17	Nov. 13	1,777
221	9. ADAMS, R. E., Pumps; Fluid and Fluid-Current Motors	Oct. 23	Nov. 2	1,436
118	10. HUNTER, O. F., Land Vehicles—Animal Draft Appliances, Bodies and Tops	Aug. 1	Sept. 11	1,802
148*	11. ARMSTRONG, H. C., Boots, Shoes, and Leggings; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Whip Apparatus.	Nov. 9	Nov. 26	1,032
380	12. PIERCE, P. P., Machine Elements	Sept. 16	Sept. 21	1,608
154*	13. CLIFT, J. W., Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Working; Needle and Pin Making; Turning; Boring and Drilling.	Aug. 2	July 29	1,662
102*	14. BRUMBAUGH, N. J., Farriery; Metal Bending; Metal Tools and Implements, Making; Sheet-Metal Ware, Making; Wire Fabrics; Wire Working; Metal Working, Assembling, and Blanks and Processes.	Aug. 7	Aug. 19	1,456
329	15. WORRELL, L. W., Glass; Plastic Block and Earthenware Apparatus; Plastics	July 29	Aug. 5	3,040
242*	16. SPENCER, C. J., Telegraphy; Telephony	Aug. 13	Oct. 1	1,239
307	17. RAFTER, G. S., Label Pasting and Paper Hanging; Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet-Material Associating or Folding; Sheet or Web Feeding; Type Setting.	Aug. 1	Sept. 11	1,653
229	18. PORTER, M. E., Motors, Expansible-Chamber Type; Power Plants; Speed-Responsive Devices	Sept. 17	Sept. 23	1,491
236	19. GLASCOCK, E. S., Furnaces; Heating Systems; Liquid and Gaseous Fuel Burners; Stoves and Furnaces.	Aug. 9	Aug. 5	2,236
179	20. GROVE, S. D., Miscellaneous Hardware; Closure Fasteners; Locks and Latches; Safes; Undertaking.	Sept. 6	Sept. 23	1,634
212	21. THOMPSON, T. J., Textiles; Cloth Finishing	Sept. 5	Dec. 13	927
244*	22. COLWELL, J. H., Aeronautics; Firearms, Ordnance, and Explosive Devices; Air Guns, Catapults, and Targets; Boats and Buoys; Ships; Marine Propulsion.	Oct. 7	Sept. 24	1,672
217	23. GROESBECK, W. D., Coin Handling; Recorders; Registers	July 25	July 30	1,198
147*	24. DURAS, C. O., Apparel; Apparel Apparatus; Garment Supporters; Sewing Machines	July 27	Aug. 3	1,330
202*	25. LIGHTFOOT, J. H., Agitating; Butchering; Classifying Solids; Centrifugal-Bowl Separators; Mills; Threshing; Vegetable and Meat Cutters and Comminutors.	Sept. 12	Sept. 19	1,634
228*	26. HODGES, J. S., Electricity, Generation; Motive Power	Aug. 12	Aug. 19	1,261
214	27. ANDERSON, L. S., Brush, Broom, and Mop Making; Brushing, Scrubbing, and General Cleaning; Laundry; Washing Apparatus.	Aug. 5	Aug. 5	1,652
225	28. BENSON, A. R., Internal-Combustion Engines	Aug. 26	Sept. 5	2,191
160*	29. MORRIS, B. N., Woodworking; Tools; Compound Tools	Dec. 9	Dec. 9	733
248	30. SHIPMAN, J. L., Automatic Temperature and Humidity Regulation; Illuminating Burners; Illumination; Thermostats and Humidostats.	Aug. 26	†Feb. 17	1,200
312	31. HOLMES, W. N., Distillation; Gas, Heating and Illuminating; Mineral Oils	Aug. 2	Aug. 13	2,085
249	32. BARTHOLOMEW, J. A., Gas and Liquid Contact Apparatus; Heat Exchange; Gas Separation	Oct. 14	Oct. 8	1,723
152	33. WYMAN, W. I., Bridges; Masonry and Concrete Structures; Metallic Building Structures; Roads and Pavements; Roofs; Wooden Buildings.	July 29	July 31	2,609
304	34. SIMPSON, G. R., Electricity, Transmission to Vehicles; Pneumatic Dispatch; Railways, Rolling Stock, Switches, and Signals; Store Service; Vehicle Fenders.	Sept. 12	Oct. 2	1,197
116*	35. REYNOLDS, E. C., Buckles, Buttons, Clasps, Etc.; Card and Sign Exhibiting; Signals; Toilet	Oct. 2	Nov. 11	1,779
105	36. MORTON, G. L., Automatic Weighers; Geometrical and Measuring Instruments; Force Measuring.	Sept. 7	Sept. 24	2,341
224*	37. WEAVER, M. E., Electricity, Circuit Makers and Breakers	Sept. 3	Aug. 24	2,107
145	38. KRAFFT, C. F., Animal Husbandry; Earth Boring; Hydraulic and Earth Engineering; Mining, Quarrying, and Ice Harvesting; Stoneworking; Wells.	Aug. 5	Aug. 13	1,463
220	39. COWLES, A. W., Fluid-Pressure Regulators; Multiple Valves; Valves; Water Distribution	July 22	July 23	2,005
262*	40. OBERLIN, J. J., Bottles and Jars; Receptacles	July 19	Oct. 16	3,289
125	41. BROWN, J. L., Land Vehicles, Wheels, and Axles; Resilient Tires and Wheels; Wheel Substitutes; Railway Draft Appliances.	Sept. 10	Sept. 27	1,437
223*	42. CUTTING, H. O., Electric Signaling	Oct. 3	Oct. 25	1,594
124*	43. HOPKINS, F. M., Baths, Closets, Sinks, and Spittoons; Sewerage; Electricity, Medical and Surgical; Medicines; Surgery; Dentistry; Artificial Body Members.	July 22	July 22	2,253
253	44. SHAFFER, C. H., Dispensing; Filling and Closing Portable Receptacles; Refrigeration	July 18	July 18	2,366
379	45. GILES, A. H., Pulleys and Shafting; Lubrication; Bearings and Guides; Spring Devices	Aug. 17	Aug. 17	2,508
233	46. WOLCOTT, C. L., Concentrating Evaporators; Fluid Sprinkling, Spraying, and Diffusing; Fire Extinguishers; Liquid Heaters and Vaporizers.	Sept. 5	Sept. 19	1,657
234	47. BARKER, H., Clutches and Power Stops; Brakes and Motors	July 25	Aug. 29	2,576
212*	48. ROEPKE, O. B., Electricity, General Applications	Aug. 14	Aug. 19	1,401
239	49. EDINBURG, F. P., Check-Controlled Apparatus; Domestic Cooking Vessels; Ventilation; Driers; Liquid Separation or Purification.	Oct. 30	Nov. 19	1,230
322	50. BLAKE, C. L., Plastic and Liquid Coating Compositions; Coating	Aug. 9	Aug. 22	2,915
240*	51. BACKUS, C. D., Radiant Energy, Wave Transmission	Aug. 19	Aug. 19	2,433
144	52. MORGAN, E. T., Supports; Chucks; Joint Packing; Pipe and Rod Joints or Couplings; Tool-Handle Fastenings.	Sept. 23	Sept. 27	2,744
201*	53. PECK, M. K., Books; Manifolding; Printed Matter; Stationery, Educational Appliances; Paper Files and Binders; Tents, Canopies, Umbrellas, and Canes; Curtains, Shades, and Screens.	Nov. 19	Nov. 18	1,310
241	54. LANE, C. H., Electric Lamps; Conductors; Vapor Electric Devices; Space Discharge Tubes	July 27	July 27	2,945
102	55. BOWEN, S. T.—Bread, Pastry, and Confection Making; Cutlery	†Mar. 1	†Mar. 1	392
	Designs	†Apr. 19	†May. 5	383
309	56. PORTER, F. J., Electrochemistry; Laminated Fabrics; Paper Making; Substance Preparation	Aug. 7	Aug. 13	2,557
257*	57. NICOLSON, G. D. G., Cutting and Punching; Bolt, Nut, Rivet, Nail, Screw, Chain, and Horseshoe Making; Driven and Screw Fastenings; Jewelry; Nut and Bolt Locks.	Aug. 1	July 23	1,210
270*	58. DOWELL, E. F., Abrading; Typewriting	July 12	July 9	1,524
315	59. RICHARD, V. I., Chemistry; Alcohol; Fertilizers; Cement and Lime; Hides, Skins, and Leather; Fuel.	July 24	July 24	2,279
213*	60. GLASS, R. L., Electricity, Heating, and Welding; Batteries; Resistances and Rheostats; Prime Mover Dynamo Plants; Conduits and Housings.	Aug. 9	Aug. 7	2,475
269	61. PARKS, G. E., Elevators; Winding and Reeling; Pushing and Pulling; Fire Escapes; Ladders; Scaffolds; Velocipedes; Horology; Time-Controlling Apparatus.	July 23	July 25	2,619
245*	62. COCHRAN, W. W., Toys; Amusement Devices; Furniture; Fishing and Trapping; Baggage; Packages and Article Carriers.	Aug. 13	Aug. 12	2,361
300	63. WINKELSTEIN, A. H., Bleaching and Dyeing; Explosive, Pyrotechnic, and Match Compositions; Oils, Fats, and Glue; Preserving; Sugar, Starch, and Carbohydrates.	Aug. 6	Aug. 7	2,521
163	Trade-Marks, Labels, and Prints: F. A. RICHMOND—Trade-Marks	†Apr. 17	†Apr. 22	1,650
	Labels and Prints	†Apr. 16	†May 2	213

* Refers to room numbers in the annex.

DECISIONS IN PATENT AND TRADE-MARK CASES

U. S. Court of Customs and Patent Appeals

CALIFORNIA PACKING CORPORATION *v.* TILLMAN & BENDEL, INC.

No. 2,341. Decided April 14, 1930

1. TRADE-MARKS—GOODS OF THE SAME DESCRIPTIVE PROPERTIES—HOW DETERMINED.

"On the other hand, we think the great weight of authority is to the effect that 'the dominant purpose of that part of the section here involved is the prevention of confusion and deception,' and that in determining the meaning of the phrase 'merchandise of the same descriptive properties,' controlling consideration must be given to the question as to whether or not the goods are similar to the extent that confusion, deception, or mistake will result to the public or to purchasers, and if the goods are sufficiently similar, that the use of an identical trade-mark on the goods of both will result in the goods of one being regarded by the purchaser as the goods of the other, that they are to be regarded as goods of the same descriptive properties."

2. SAME—SAME—SAME.

"This distinguishing difference or indistinguishable similarity may rest not only in the 'essential characteristics' of the goods themselves with reference to their form, composition, texture, and quality, but may rest in the use to which they are put, the manner in which they are advertised, displayed, and sold, and probably other considerations. The question as to whether confusion and failure to distinguish will result may also depend largely upon the class of purchasers, or persons concerned."

3. SAME—REGISTRABILITY—DOUBT RESOLVED AGAINST APPLICANT.

Where there is any doubt as to whether the goods of an applicant are such as to lead to confusion and mistake as to the source of origin by reason of the use of that mark by another, that doubt should be resolved against the applicant. "The doctrine of the subject of doubt emanates from and is prompted by the fact that the applicant has the whole world to select from and it is no hardship to require him to select a trade-mark which will eliminate the probability of confusion."

4. SAME—SAME—SAME.

Coffee *Held* to constitute goods of the same descriptive properties as fruits and vegetables, canned, dried, and preserved; pork and beans, pickles, mustard, and sardines, etc.

GARRETT, J., and LENROOT, J., specially concurring.

APPEAL from the Patent Office. Reversed.

Mr. Archibald Cox, Mr. Frank D. Madison, and *Mr. Wm. G. Henderson* for California Packing Corporation.

Mr. Wm. S. Graham, Mr. George C. Shoemaker, Mr. Herman Phleger, Mr. Maurice E. Harrison, and *Mr. Harry F. Riley* for Tillman & Bendel, Inc.

BLAND, *J.:*

This is an appeal from the decision of the Commissioner of Patents dismissing a notice of opposition filed by the California Packing Corporation to the registration by Tillman & Bendel, Inc., of "Del Monte" as a trade-mark for coffee. Appellee's application was filed February 21, 1925.

The opposer, appellant, California Packing Corporation, in or about 1916 became the successor of the California Fruit Canners Association, which, in 1899, was organized by the consolidation of a number of canners of fruits and vegetables. This consolidation included the Oakland Preserving Company. The latter company was organized in 1891 by F. Tillman, sr., who was president of the corporation and owned a controlling interest in its stock. The business of the Oakland Preserving Company was canning fruits, vegetables, and preserves. Upon the consolidation of the Oakland Preserving Company with the California Fruit Canners Association, F. Tillman, sr., became a director in the new company and a member of the finance committee. Mr. F. Tillman, sr., prior to and at the time of the organization of the Oakland Preserving Company, owned a controlling interest in Tillman & Bendel, wholesale grocers, and so continued until 1915, when he retired, his son later (1920) becoming president, upon reorganization. Upon the organization of the Oakland Preserving Company, the suggestion of F. Tillman, sr., that the trade-mark "Del Monte" be used upon their fruits, vegetables, and preserves was approved by other interested officials. At the time it was generally known that there was a popular hotel in San Francisco by the name of Del Monte and both sides hereto agree that the name "Del Monte," as a trade name, is derived from the name of the Del Monte Hotel.

The California Packing Corporation, and its predecessors, since beginning originally to pack and sell fruits, vegetables, and preserves, has added gradually to its line of shelf goods until, in 1925, applicant put out 150 different "Del Monte" products which included many kinds of fruits and vegetables, canned, dried, and preserved; also pork and beans, relishes, sauces, tomato paste, sauerkraut, pork and sauce, jelly, honey, fruit juices, pickles, chowchow, salmon, tuna, milk, apple sauce, mustard, olive oil, apricot-kernel oil, fruit salad, vinegar, sardines, macaroni, noodles, and spaghetti. Appellant's business of manufacturing and selling said products under its trade-mark, of which the name "Del Monte" is the most conspicuous part, has grown to an aggregate of over $30,000,000 per year and its outlay on advertising has amounted to over $11,000,000. The testimony indicates that all of its materials are of very high grade, and all of the products are sold in grocery stores. From the beginning its business has been a growing and expanding one, new canned, bottled, preserved, and dried products being added to its line from time to time. It has never handled tea or spices and has only dealt in coffee to the extent that it regarded necessary for it to comply with trade-mark requirements, in anticipation, evidently, of making application for the registration of a trade-mark.

The record discloses that appellee, prior to the organization of the Oakland Preserving Company, sold coffee to the Hotel Del Monte, and that the

manager of the hotel required that the coffee and other goods be purchased of Tillman & Bendel, in drums, be stenciled and marked with the name "Del Monte"; that later certain retail dealers desired to sell "Del Monte" coffee; that the coffee was sold in drums, gunnysacks, and in different bulk wholesale quantities, the containers for which were stenciled or marked "Del Monte." The record also contains testimony to the effect that empty paper bags, lined with oiled paper, for holding one pound of coffee, were furnished retail dealers so that they might sell the "Del Monte" coffee in pound packages, and there is some testimony to the effect that Tillman & Bendel filled the one-pound bags and placed them in sealed drums or cans and sold them to retail dealers. There is also some evidence to the effect that "Del Monte" coffee was sold by Tillman & Bendel in containers ranging from two pounds on up.

It is not contended by Tillman & Bendel that they have ever sold or offered for sale "Del Monte" coffee or any other kind of coffee in one-pound tins. Applicant's proposed trade-mark not only calls for the use of the name "Del Monte," but it is to be used on tin containers, vacuum-sealed, labeled "net contents one pound."

Applicant contends that it is entitled to register its proposed "Del Monte" trade-mark for two reasons: First, because coffee is not of the same descriptive properties as any of the goods produced and sold under the name "Del Monte" by appellant and, therefore, comes within the provision of section 5 of the Trade-Mark Act of 1905 which provides that "no mark by which the goods of the owner of the mark may be distinguished from other goods of the same class shall be refused registration," etc.; second, that appellant has never used the trade-mark on coffee, or goods of the same descriptive properties, and that appellee has, since prior to the early "'90's," used the words "Del Monte" as a trade-mark on coffee, and that it has continuously used the said mark on coffee to this date.

The first proviso in section 5, supra, is as follows:

Provided, That trade-marks which are identical with a registered or known trade-mark owned and in use by another and appropriated to merchandise *of the same descriptive properties*, or which so nearly resemble a registered or known trade-mark owned and in use by another and appropriated to merchandise *of the same descriptive properties as to be likely to cause confusion or mistake in the mind of the public or to deceive purchasers shall not be registered* * * * (Italics not quoted with exception of first word.)

The trade-marks are identical and if the goods upon which applicant seeks to use the trade-mark are "of the same descriptive properties as to be likely to cause confusion," etc., registration must be denied, and our determination of this question, we think, decides this case.

Thousands of pages have been written by the courts in construing the last-quoted provision and there are but few statutory phrases which have produced so much variance and conflict of judical opinion. Some courts have consistently and repeatedly urged that the term "of the same descriptive properties" must be given its ordinary and colloquial meaning and that if the two classes of goods in controversy differ in their distinguishing characteristics, they are not goods of the same descriptive properties, even though their general and essential characteristics, together with the manner in which they are sold and used are sufficiently similar to permit of confusion as to whether the goods of the one are the goods of the other. In this class of decisions may be listed the fllowing: *Muralo Co.* v. *National Lead Co.*, 36 App. D. C. 541, 165 O. G. 471; *George* v. *Smith*, 52 F. 830; *Check-Neal Coffee Co.* v. *Hal Dick Mfg. Co.*, 18 T. M. Rep. 464 (July 30, 1928); *American Tobacco Co.* v. *Gordon*, 56 App. D. C. 81, 342 O. G. 510; and in *Anhauser-Busch Brg. Assn.* v. *Peter Stumpf Brg. Co. et al.*, 129 O. G. 3501, where beer, wines, and distillates were held not to be goods of the same descriptive properties.

[1] On the other hand, we think the great weight of authority is to the effect that "the dominant purpose of that part of the section here involved is the prevention of confusion and deception," and that in determining the meaning of the phrase "merchandise of the same descriptive properties," controlling consideration must be given to the question as to whether or not the goods are similar to the extent that confusion, deception or mistake will result to the public or to purchasers, and if the goods are sufficiently similar, that the use of an identical trade-mark on the goods of both will result in the goods of one being regarded by the purchaser as the goods of the other, that they are to be regarded as goods of the same descriptive properties.

The line of decisions first referred to, which apply the colloquial meaning to the phrase, are controlled in the most part by the thought expressed most definitely in *Muralo Co.* v. *National Lead Co.*, supra, and *George* v. *Smith*, supra. In the Muralo Co. case we find the following language used:

The purchaser has some definite use in view, and must know whether he wants white lead to compound into paint, or for other purposes, or whether he wants kalsomine. * * * he knows whether he wants white lead or kalsomine, and, unless mentally defective, an unprincipled salesman could not induce him to take one for the other.

In *George* v. *Smith*, supra, it was said:

No one who has not permanently parted with his wits could purchase a can of salmon supposing he was getting a can of tomatoes.

Since the decision of the United States Supreme Court in *American Steel Foundries* v. *Robertson*, 269 U. S. 372, 342 O. G. 711, the courts have, with almost complete unanimity, abandoned the view that in construing the words "merchandise of the same descriptive properties" they were used in the colloquial sense and in the sense indicated by the last two cited authorities. In *American Steel Foundries* v. *Robertson*, supra, the word "Simplex" as part of a corporate name involved a consideration of what Congress intended by the enactment of the Federal trade-mark law, a part of which is under consideration here. Mr. Justice Sutherland, speaking for the court, announced the doctrine that:

The law of trade-marks is but a part of the broader law of unfair competition, the general purpose of which is to prevent one person from passing off his goods or his business as the goods or business of another.

After discussing the use of identical names and other related subject matter, the court said:

These principles, it must be assumed, were in mind when Congress came to enact the registration statute. And, since that body has been given no power to legislate upon the substantive law of trade-marks, it reasonably may be assumed, also, that, to the extent the contrary does not appear from the statute, the intention was to allow the registration of such marks as that law, and the general law of unfair competition of which it is a part, recognized as legitimate. The House Committee on Patents, in reporting the bill which upon enactment became the registration statute in question, said: "Section 5 of the proposed bill we believe will permit the registration of all marks which could, under the common law as expounded by the courts, be the subject of a trade-mark and become the exclusive property of the party using the same as his trade-mark." Report No. 3147, Dec. 19, 1904, H. of R., 58th Cong., 3d sess.

In that case we think the Supreme Court said nothing more nor less (as applicable to the case at bar) than that Congress had no power to make trade-marks valid which were invalid under the common law, since the constitution gave it no power to legislate upon the substantive law of trade-marks; that the only power Congress had was to pass legislation not inconsistent with such substantive law. Congress, therefore, by the use of the words "merchandise of the same descriptive properties," could not be presumed to have authorized the registration of a trade-mark for public use which use could be prevented by resort to the common law. (See Hopkins on Trademarks, Tradenames and Unfair Competition, fourth edition, p. 49.) While, in courts of equity, there may be principles of law applied in actions concerning unfair trade practices and unfair competition, growing out of trade-marks, which are not applicable in proceedings like that at bar, the law, nevertheless, must be the same in both jurisdictions regarding the question of the probability of confusion. It is inconceivable that Congress in its efforts to lessen confusion, deceit, and mistake in connection with the use of trade-marks, which must be regarded by the courts as *prima facie* evidence of ownership, intended to authorize the registration of a trade-mark which was invalid at common law and thus arm the registrant with a weapon, impotent for good but virile for mischief. *Levy* v. *Uri*, 31 App. D. C. 441, 135 O. G. 1363; *Thaddeus Davids Co.* v. *Davids*, 233 U. S. 461, 469; 202 U. S. 952.

We conclude, therefore, that the meaning of the phrase "merchandise of the same descriptive properties" must not only be ascertained in the light of the use of the words "goods of the same class," in the first part of section 5 and the words "of substantially the same descriptive properties" in section 16 of the trade-mark act, but must also be construed in connection with the predominant phrase of the provision "as to be likely to cause confusion or mistake in the mind of the public or to deceive purchasers," and the predominant word "distinguished" in the first part of the section.

[2] By the first part of section 5, Congress makes mandatory the registration of any mark *by which the goods of the mark's owner may be "distinguished" from other goods of the same "class,"* with certain exceptions. This provision is *inclusive*. The proviso which follows, while *exclusive* in character, certainly, excludes no mark for any goods which are included in the first part. The two provisions are directed toward the same purpose and must not be regarded as having opposite tendencies. Therefore, the right to register depends upon the distinguishing dissimilarity between the goods or the marks. The same degree of difference in the marks or goods or both must exist so as to *distinguish* the goods of the owner as is required to prevent the probability of "confusion or mistake in the mind of the public," etc. This *distinguishing difference* or *indistinguishable similarity* may rest not only in the "essential characteristics" of the goods themselves with reference to their form, composition, texture, and quality, but may rest in the use to which they are put, the manner in which they are advertised, displayed, and sold, and probably other considerations. The question as to whether confusion and failure to distinguish will result may also depend largely upon the class of purchasers, or persons concerned.

As was aptly said in *Yale Electric Co.* v. *Robertson*, 26 F. (2d) 972, there must "be enough disparity in character between the goods of the first and second users as to insure against confusion." In support of this view many cases may be cited; however, a few cited here and others cited elsewhere in this opinion will suffice: *I. E. Palmer Co.* v. *Nashua Mfg. Co.*, 34 F. (2d) 1002, 389 O. G. 533; *Aunt Jemima Mills Co.* v. *Rigney & Co.*, 247 F. 407; *Akron-Overland Tire Co.* v. *Willys-Overland Co.*, 273 F. 674; *Vogue Co.* v. *Thompson-Hudson Co.*, 300 F. 509; *Rosenberg Bros. & Co.* v. *Elliott*, 7 F. (2d) 962; Layton *Pure Food Co.* v. *Church & Dwight Co.*, 182 F. 35; *Charles Broadway Rouss, Inc.* v. *Winchester Co.*, 290 F. 463.

Applying this rule to the facts at hand, if one-pound sealed cans of coffee in grocery stores, on the same shelves with 150 other sealed cans or containers of groceries such as are shown to be the product of appellant, might be mistaken for the goods of appellant, when identical trade-marks are used and both are sold to the same class of purchasers, then the goods are of the same descriptive properties and fall within the provision of the proviso, and the trade-mark "Del Monte" for such coffee is not registerable by appellee.

In applying the rule, which we regard as sound both on reason and authority, we are not inclined to extend the same beyond the limitations within which the courts have heretofore applied it. The mere fact that some indefinite and far-fetched confusion is to be shown or pointed out does not necessarily require that the goods shall be regarded as of the same descriptive properties. The product of the "chewing-gum maker" and that of the "ironmonger" can hardly be said to possess such common characteristics, either in texture, quality, sale, or use as to permit of confusion, certainly not in the absence of proof. The same may be said of clothespins and dried herrings. True enough, manufacturing concerns make, and department stores and sales agencies sell, a more varied and miscellaneous line of goods now than in past years. This consideration argues for and not against our con-

clusion herein reached since it will not be presumed that the Congress was ignorant of this growing tendency of the trade, confusion in which it, by the trade-mark act, sought to minimize.

As pertaining to the registration of trade-marks, the Court of Appeals of the District of Columbia has, for a quarter of a century, and until April 2, 1929, possessed the identical jurisdiction which we now possess. It also had (and now has) the additional appellate trade-mark jurisdiction in passing upon equity cases arising in the Supreme Court of the District of Columbia. The same problem that confronts us now has confronted it during all this time and it has probably passed upon more trade-mark cases, involving the question here presented, than all the other courts combined, within the same period. It must be conceded that prior to the decision of the Supreme Court of the United States in the American Steel Foundries case, supra, there was much conflict between the different pronouncements of the District court of appeals on the question here involved as is evidenced by *Levi* v. *Uri*, supra, *California Packing Corp.* v. *Price-Booker Mfg. Co.*, 52 App. D. C. 259, 308 O. G. 451, and *Heller & Co.* v. *Southern Cotton Oil Co.*, 55 App. D. C. 288, 336 O. G. 510, on the one hand, and *American Tobacco Co.* v. *Gordon*, supra, and *Muralo Co.* v. *National Lead Co.*, supra, on the other.

After its decision in the American Tobacco Co. case, and after the Supreme Court's decision in the American Steel Foundries case, we find the Court of Appeals of the District of Columbia almost unanimously and uniformly holding that goods were of the same descriptive properties, when considered with reference to trade-mark registrability, if the goods in their characteristics, sale, or use were sufficiently similar to permit the goods of the one to be taken by the public as the goods of the other—*the question of confusion being the test.* In *Duro Pump & Mfg. Co.* v. *California Cedar Products Co.*, 56 App. D. C. 156, 344 O. G. 1058, pumps and wall board were held to be goods of the same descriptive properties, since the court concluded that confusion would result. The same was the holding in *Macy & Co.* v. *Carter & Sons*, 56 App. D. C. 249, 350 O. G. 470, as to men's clothing and hosiery; in *Haas Bros. Fabrics Corp.* v. *Bliss, Fabyan & Co.*, 57 App. D. C. 44, 355 O. G. 157, as to crinkly fabrics of cotton and artificial silk; in *Di Santo* v. *Guarneri*, 57 App. D. C. 89, 359 O. G. 248, as to olive oil and tomato paste; in *Blek Co.* v. *Mishawaka Rubber & Woolen Mfg. Co.*, 57 App. D. C. 149, 363 O. G. 214, as to garments and socks; in *Kassman & Kessner* v. *Rosenberg Bros. Co.*, 56 App. D. C. 109, 346 O. G. 257, as to men's hats and caps and men's suits and overcoats; in *Lincoln Motor Co.* v. *Lincoln Mfg. Co.*, 58 App. D. C. 191, 374 O. G. 251, as to automobiles and brakes and timers, and in *In re Defender Mfg. Co.*, 58 App. D. C. 234, 378 O. G. 4, as to sheets and piece goods.

In the Di Santo case, supra, in an opinion by Judge Graham, of this court, then sitting with the court of appeals, the identical trade-mark "Mazzini" as applicable to olive oil and tomato paste was under consideration. In reversing the decision of the Assistant Commissioner of Patents, the court there said:

> It is a matter of common knowledge that the products, tomato paste and olive oil, are both food products—one a condiment for the making of soups and relishes; the other principally used as an ingredient for sauces and salads. They are sold as canned goods, from the same establishments, and presumably to the same class of purchasers. The purchaser of olive oil would doubtless be led to purchase a brand with which he had become familiar as a purchaser of tomato paste. Thus confusion would result, and not only the maker of the tomato paste, but the public as well, would be deprived of the protection which it was obviously the purpose of the trade-mark statute to give. And if it be found that there is doubt as to whether such confusion will exist, it is the duty of the court to resolve that doubt against the newcomer in the field. *Waitke & Co.* v. *Schafer & Co.*, 49 App. D. C. 254, 263 F. 650.

[3] We think the decision in the Di Santo case is supported by the overwhelming weight of recent authority and that the principle announced therein is controlling in the issue at bar. If tomato paste and olive oil are of the same descriptive properties to the extent that confusion would result from the fact that the purchaser might be led to believe that the producer of the olive oil produced the tomato paste, likewise in the case at bar, we conclude that coffee in one-pound tin cans, sold in grocery stores to the same customers who buy the 150 grocery food products manufactured by appellant, would also lead to confusion and mistake in the purchaser believing that the coffee of appellee was the goods of appellant and, as announced in that case, we reiterate here that if there was any doubt on the subject, it should be resolved against the applicant. The doctrine of the subject of doubt emanates from and is prompted by the fact that the applicant has the whole world to select from and it is no hardship to require him to select a trade-mark which will eliminate the probability of confusion. *Kassman & Kessner* v. *Rosenberg Bros. Co.*, supra.

Appellee argues at great length that it should be permitted to register its trade-mark because it was the prior user on coffee as stated hereinbefore, apparently from the standpoint that our decision as to the registrability of its trade-mark in this action would be controlling of its right to use the name "Del Monte" on coffee. We are only concerned in this action with appellee's right of *registration* of the trade-mark and not with its *use* of the same. As to whether appellee, in law, has the right to use the trade name "Del Monte" on coffee in containers of any description, or whether it has the right to use it in markets confined to the west coast or throughout the world, are questions not before us and are not decided. We do decide that such a statement of facts is not shown here as would warrant this court in saying that appellee was entitled to the *exclusive* use of the words on coffee, the right to such exclusive use being implied from the right to registration. The goods being of the same descriptive properties, so that the registration of the proposed trade-mark will lead to confusion, the statute requires that registration be denied, irrespective of other legal rights between the parties. (Note *Beech-Nut Co.* v. *Lorillard Co.*, 273 U. S. 629, was an action for infringement and not concerning registration.)

It is finally argued by appellee that appellant's trade-mark "Del Monte" had a wide use on sardines, meats, candies, and several other articles prior to and coincident with its use by either appellee or appellant, and that because of this fact, appellee contends that opposer's trade-mark must be "strictly construed and narrowly limited to specific goods." This argument would seem to lead only in the direction of the conclusion that appellant had no right to its numerous registrations for food products already granted. (See *Thaddeus Davids Co.* v. *Davids*, supra.) We are not passing upon this question. "Del Monte" is a registered trade-mark for about 150 well-known food products manufactured and sold by appellant. The statute prevents the registration of "Del Monte" on goods of similar description to those upon which "Del Monte" is affixed under a registered or known trade-mark. In urging the registrability of appellee's trade-mark as against the identical mark of the opposer, it is, to say the least, not helpful for applicant to point out that others have used the same or a similar mark prior to opposer's use of the same. *Sharpe & Dohme* v. *Parke Davis & Co.*, No. 2,223. —— Ct. Cust. & Pat. Appls. ——, —— F. (2d) ——. (See also *Del Monte Special Food Co.* v. *California Packing Corporation*, 34 F. (2d) 774.) *Thaddeus Davids Co.* v. *Davids*, supra, is squarely in point here.

Del Monte Special Food Co. v. *California Packing Corporation*, supra, decided by the Circuit Court of Appeals, Ninth Circuit, last year, and the case of *Eastman Photographic Materials Co.* v. *Kodak Cycle Co.*, 15 Reports Patent Cases 105, strongly support the conclusion and reasoning herein.

In the Del Monte case, supra, the Circuit Court of Appeals affirmed the judgment of the district court enjoining the Del Monte Special Food Co. from the use of the word "Del Monte" in connection with the marking of oleomargine or other food products. The Yale Electric Corporation case was cited with approval. It was found that confusion would result, and, in substance, that the infringer was trying to pass his goods off for the goods of the California Packing Corporation.

The Eastman case, supra, was an English case in which the Eastman Photographic Materials Co. brought an action for the purpose, among other things, of cancelling the trade-mark of the Kodak Cycle Co. as applied to bicycles. The court there held that confusion would result in the fact that purchasers would assume that bicycles made by the one were the property of the other and that the public would there by be deceived, and the registration was canceled.

[3] In the case at bar confusion is proved, but aside from the proved confusion, it is obvious to us that confusion would result. In *Nestle & Anglo-Swiss Condensed Milk Co.* v. *Walter Baker & Co., Ltd.*, 37 App. D. C. 148, 167 O. G. 765, the court said:

> In a trade-mark case involving the question whether there is such a similarity between two marks as will cause confusion in trade, an ocular inspection of the marks constitutes the most satisfactory evidence.

The decision of the Comissioner is reversed.

Reversed.

GARRETT, *J.*, and LENROOT, *J.*, specially concurring:

While concurring in the conclusion reached by the majority in this case. we are not in accord with all the reasoning upon which that conclusion is based.

We think the decision should rest upon practically the same grounds as those expressed, in *Cheek, Neal & Co.* v. *Hal Dick Mnfg. Co.*, 17 C. C. P. A.——, decided concurrently herewith, and upon the reasoning in the specially concurring opinion in *Goodrich & Co.* v. *Hockmeyer*, 17 C. C. P. A. ——, also decided on this day.

The effect of the majority opinion, as we construe it, is to give an undue emphasis to confusion without first determining the issues of "class" and "same descriptive properties" which are elements that, in contemplation of the statute, must be present to cause the confusion. It is said:

> * * * if one pound sealed cans of coffee in grocery stores, on the same shelves with 150 other sealed cans or containers of groceries such as are shown to be the product of appellant, might be mistaken for the goods of appellant, when identical trade-marks are used and both are sold to the same class of purchasers, then the goods are of the same descriptive properties and fall within the provision of the proviso. * * *.

It seems to us that the effect of this reasoning is largely to make the mark itself, *after* it has been applied, the predominating element in determining whether confusion in origin may result and thus determine similarity of class or descriptiveness of properties, not so much from the nature and characteristics of the goods themselves as from the marks that may be applied to them.

In the administration of the Trade Mark Act of 1905, the duties of the Patent Office are purely statutory. and the authority of this court, when it is invoked by an appeal, is limited in the same manner that the Patent Office is limited. We do not think we are clothed with the equitable jurisdiction inherent in the common law courts and conferred by law upon those Federal and District of Columbia courts having equity jurisdiction. *Vide Postum Cereal Co.* v. *Calif. Fig Nut Co.*, 272 U. S. 693, 698–99, 358 O. G. 811.

It seems to us that if the doctrine of the majority opinion be followed to its logical end there may be brought into the determination of matters arising under the registration statute questions that belong only to equity courts and which we do not think Congress intended to place within the Patent Office jurisdiction, or within the jurisdiction of this court, in registration proceedings. We fear that we are about to assume a jurisdiction which Congress never intended we should exercise in mere administrative or statutory proceedings.

The majority say:

> We conclude, therefore, that the meaning of the phrase "merchandise of the same descriptive properties" must not only be ascertained in the light of the use of the words "goods of the same class," in the first part of section 5 and the words "of substantially the same descriptive properties" in section 16 of the Trade Mark Act, but must also be construed in connection with the *predominant* phrase

of the provision "as to be likely to cause confusion or mistake in the mind of the public or to deceive purchasers," and the *predominant* word "distinguished" in the first part of the section. (Italics ours.)

This holds, as we understand it, that greater emphasis is to be given a result than is placed upon the causes producing it. It reasons from effect back to cause, and virtually amounts to saying that if confusion as to origin may result from the application of the mark that will be taken as conclusive of the fact that the statutory elements which, under certain circumstances, prohibit registration—similarity of class and descriptiveness—are present. This seems to us a strained construction of the statute, and does not give to the words "same class" and "same descriptive properties," used in the statute, the consideration which is their due.

We do not think we are at liberty to relegate those phrases to a state of practical unimportance, and declare the condition they describe will be inferred to exist because we believe confusion might exist.

It seems to us that the natural and orderly way to apply the statute is to determine, first, whether the goods are of the same class and of the same descriptive properties, and then look to the character of the mark so as to ascertain whether its application would cause confusion. The reasoning of the majority opinion apparently would have it first determined whether by reason of the application of the mark there might be confusion, and, if so, would conclude from this the existence of sameness or similarity.

It is true that the majority opinion says: "The mere fact that some indefinite and far-fetched confusion is to be shown or pointed out does not necessarily require that the goods shall be regarded as of the same descriptive properties," and gives certain illustrations by comparing products of the "chewing-gum maker" and the "ironmonger" as well as "clothes pins" and "dried herrings." But this seems to us merely to mean that before any particular consideration need be given to the statutory words, other than confusion, there must be such a difference as that those words might as well never have been included in the statute.

It seems to us that for all practical purposes the majority opinion can be readily and logically so extended as virtually to eliminate class sameness and similar descriptiveness from the act and deny registration where the marks are identical or so resemble each other as that confusion of origin may be believed possible simply as a result of the application of the mark.

Since the words are in the statute we think it our duty to give them effect, and feel that the test should be made from a consideration of the characteristics of the goods themselves which are to produce the effect, and not by taking a mere possible result as conclusive of its causes.

The majority opinion contains the following statement:

After its decision in the American Tobacco Co. case, and after the Supreme Court's decision in the American Steel Foundries case, we find the Court of Appeals of the District of Columbia almost unanimously and uniformly holding that goods were of the same descriptive properties, when considered with reference to trade-mark registrability, if the goods in their characteristics, sale or use were sufficiently similar to permit the goods of the one to be taken by the public as the goods of the other—*the question of confusion being the test.* In *Duro Pump & Mfg. Co.* v. *California Cedar Products Co.*, 56 App. D. C. 156, pumps and wall board were held to be goods of the same descriptive properties, since the court concluded that confusion would result. The same was the holding in *Macy & Co.* v. *Carter & Sons*, 56 App. D. C. 249, as to men's clothing and hosiery; in *Haas Bros. Fabrics Corp.* v. *Bliss, Fabyan & Co.*, 57 App. D. C. 44, as to crinkly fabrics of cotton and artificial silk; in *Di Santo* v. *Guarneri*, 57 App. D. C. 89, as to olive oil and tomato paste; in *Blek Co.* v. *Mishawaka Rubber & Woolen Mfg. Co.*, 57 App. D. C. 149, as to garments and socks; in *Kassman & Kessner* v. *Rosenberg Bros. Co.*, 56 App. D. C. 109, as to men's hats and caps, and men's suits and overcoats; in *Lincoln Motor Co.* v. *Lincoln Mfg. Co.*, 58 App. D. C. 191, as to automobiles and brakes and timers, and in *In re Defender Mfg. Co.*, 58 App. D. C. 234, as to sheets and piece goods.

We have carefully examined the authorities cited in the quotation, and it is our opinion that the majority is in error in holding that in the cases cited, confusion was the test of whether the goods were of the same descriptive properties, as that phrase is used in said section 5.

The first case cited, *Duro Pump & Mfg. Co.* v. *California Cedar Products Co.*, supra, did not involve in any way the question in the case at bar. That case involved the use of a part of a corporate name, and the case arose under the second proviso of section 5, which proviso does not contain the words "same descriptive properties." Obviously, in deciding that case, the construction of the words "same descriptive properties," contained in the section, was not involved, and it was clearly proper to apply the test of confusion irrespective of whether the goods of the parties were of the same descriptive properties.

We might add that the above observations are also applicable to the *American Steel Foundries Case*, 269 U. S. 372, 342 O. G. 711.

In the cited case of *Haas Bros. Fabrics Corp.* v. *Bliss Fabyan & Co.*, supra, the court said:

• • • the goods in question, as shown by certain of the exhibits, are of the same descriptive properties, and that the purchasing public, seeing them sold under the same mark, would naturally believe that they had the same commercial origin in point of manufacture or marketing.

Here clearly the court first found that the goods were of the same descriptive properties without applying the test of confusion, and the confusion test was applied only as between goods possessing the same descriptive properties.

In the case of *Di Santo* v. *Guarneri*, cited and thereafter quoted from and discussed in the majority opinion herein, the opinion was written by Presiding Judge Graham of this court, sitting as a member of the Court of Appeals of the District of Columbia, as provided by law.

In that opinion Judge Graham expressly held that the goods there involved were of the same descriptive properties, and he made no mention of *confusion* in arriving at that determination. He applied the test of confusion only as to trade-marks on goods possessing the same descriptive properties; that is, he first determined class or descriptive properties, and then inquired into confusion, as we contend section 5 clearly requires.

The case of *Blek Co.* v. *Mishawaka Rubber & Woolen Mfg. Co.*, supra, throws no light whatever upon the question under discussion.

In *Kassman & Kessner* v. *Rosenberg Bros. Co.*, supra, the court expressly held that the goods were of the same descriptive properties, and there is no reference in the opinion to confusion in arriving at that conclusion.

In *Lincoln Motor Co.* v. *Lincoln Mfg. Co.*, supra, the court said:

• • • the marks are not only deceptively similar, but were applied to goods of the same descriptive properties, to an extent that would inevitably lead to confusion.

Here clearly is stated the proposition for which we contend, and that is that confusion is the *result* of a deceptively similar mark being applied to goods of the same descriptive properties, and not the test of whether the goods have such properties.

In the case of *In re Defender Mfg. Co.*, supra, the court held that "the goods possess the same descriptive properties," and there is no reference in the opinion to the test of confusion being applied in reaching that conclusion.

From our examination of the authorities cited, there is only one that makes any reference to the doctrine asserted in that part of the majority opinion last quoted, and that is the case of *Macy & Co.* v. *Carter & Sons.*, supra.

In that case it was expressly held that the goods "belong to the same general class of merchandise," and in that connection no reference was made to confusion. Later in the opinion, however, it was stated that where confusion results in the minds of purchasers, goods may be said to be of the same descriptive properties; but we believe this is the only case decided since the decision in the *American Steel Foundries case*, supra, where the doctrine adopted in the majority opinion is even referred to.

On the other hand, there have been a large number of cases decided by the Court of Appeals of the District of Columbia, in addition to those cited in the majority opinion, where goods were decided to be, or not to be, of the same descriptive properties without any reference to confusion as a test in arriving at that conclusion.

It is our view that a careful examination of all the cases decided by that court, including those cited in the majority opinion, compels the conclusion that they do not sustain the position taken by the majority upon this question.

U. S. Court of Customs and Patent Appeals

THE B. F. GOODRICH COMPANY *v.* HOCKMEYER (ZIP-ON MFG. CO. SUBSTITUTED)

No. 2,208. Decided April 14, 1930

1. TRADE-MARKS—SAME DESCRIPTIVE PROPERTIES—STATUTE CONSTRUED.

"It would seem to be evident then, that the language 'same descriptive properties' contained in the first *proviso* was intended by the Congress to relate to goods of the same general class; that such language was not intended to be more or less comprehensive than the term 'class' used in the first part of the section; that the language of the first *proviso* was intended to state the converse of the mandates of the first part of the section, namely, that a mark by which the goods of the owner of the mark may not be distinguished from other goods of the same class *shall not be registered.*"

2. SAME—SAME—SAME.

"Keeping in mind the principles of equity as applied to the law of trade-marks, the words 'same class' and 'same descriptive properties' were intended to be given a limited or an extended meaning and application, according to whether or not the use of identical or similar trade-marks would be likely to cause confusion or mistake in the mind of the public or to deceive purchasers."

3. SAME—SIMILARITY—"ZIP-ON" AND "ZIPPER."

The term "Zip-On" *Held* confusingly similar to the term "Zipper" as applied to goods of the same descriptive properties.

4. SAME—EXTENSION OF BUSINESS—RIGHT TO USE OF MARK.

"It appears from the record that appellant has in the past manufactured various articles of wearing apparel, many of which are similar, not only in name but in use, to many of the articles manufactured by appellee. It would seem to be clear that appellant ought to have the right to extend the use of its mark, at least, to the various articles of wearing apparel formerly manufactured by it, when it resumes the manufacture and sale of such articles."

5. SAME—SAME DESCRIPTIVE PROPERTIES—MEN'S, WOMEN'S, AND CHILDREN'S KNICKERBOCKERS, ETC., AND BOOTS AND OVERSHOES OF RUBBER AND FABRIC.

Men's, women's, and children's knickerbockers and other articles of wearing apparel *Held* to be of the same descriptive properties as boots and overshoes of rubber and fabric.

LENROOT, J., and GARRETT, J., specially concurring.

APPEAL from the Patent Office. Reversed.

Messrs. Eakin & Avery and *Mr. William D. Eakin* for B. F. Goodrich Company.

Mr. James R. Hodder for Hockmeyer.

HATFIELD, *J.:*

This is an appeal from the decision of the Commissioner of Patents affirming the decision of the Examiner of Interferences denying the application of appellant for the cancellation of trade-mark registration No. 192,312, issued December 2, 1924, to Clive E. Hockmeyer, (thereafter, when the Zip-On Manufacturing Company was organized, assigned to that Company) for the trade-mark "Zip-On" for use on "leggings; men's, women's, and children's knickerbockers; children's rompers, children's sleeping and carriage suits, children's hats, children's coats, children's suits, children's overalls, children's play suits, children's bath robes, children's blouses, children's bloomers."

It was claimed by appellant in its application for cancellation that it had used the word "Zipper" as a trade-mark for "boots made of rubber and fabric, and more especially overshoes made of rubber and fabric," since June, 1923; that on April 7, 1925, appellant obtained registration No. 197,090, of the word "Zipper" as a trade-mark for "boots made of rubber and fabric"; and that appellee had not used the mark "Zip-On" prior to March, 1924.

It appears from the record that, with the exception of hats, the articles above enumerated upon which the trade-mark "Zip-On" is used by appellee, as well as those upon which the trade-mark "Zipper" is used by appellant, are equipped with "hookless fasteners." The fasteners are obtained by each of the parties from the Hookless Fastener Company. Appellant is licensed to use them solely on

rubber footwear, while appellee has the right to use them on the various articles enumerated in its trade-mark registration. It further appears from the record that appellant, prior to the year 1918, manufactured and sold various articles of wearing apparel composed of "all-rubber clothing, as well as double-texture, cloth, rubberized raincoats, caps, and, in fact, clothing for all purposes, both for dress and for work wear."; and that "Double texture refers to two distinct pieces of cloth which are bound together with a rubber binder, making them, to all intents and purposes, one piece; and the rubber binder between the two fabrics gives the waterproof properties."

It further appears that the following articles were formerly manufactured and sold by appellant: "Raincoats; rubber leggings; rubber blankets; rubber capes; rubber caps; rubber hats; rubber fishing shirts; policemen's rubber coats; rubber jackets, being short coats; firemen's rubber-coated leggings; firemen's rubber jackets, being short rubber coats; rubber service-cap covers for police caps; miner's white rubber coats; acid-resisting rubber suits, consisting of hat and jacket, or blouse; double-coated rubber wash-aprons"; that the manufacture of many of these articles was discontinued by appellant due to the fact that during the "World War" the Government "required these facilities for the manufacture of gas masks; and this department was disbanded to make room for that work"; and that, while appellant manufactures "cloth and rubber in the sheeting form similar to that which was formerly used in clothing" which is now purchased by manufacturers of various articles, it has not resumed the manufacture of those articles of wearing apparel, due to the present unfavorable market conditions. It appears, however, that appellant still has the necessary equipment for the manufacture of such articles, and that, in addition to boots and overshoes, it now manufactures the following named articles of wearing apparel: "Rubber bathing caps, rubber bathing belts, woolen lumbermen's socks, short woolen hose or socks, felt boots, knit shoes with felt soles, leather shoes with rubber-composition soles."

The tribunals of the Patent Office held that the goods of the respective parties were not of the same descriptive properties. With regard to the similarity of the trade-marks, the Commissioner of Patents made the following observations:

> Both marks involved are formed from the word "Zip." The record shows that long prior to the adoption and use by the petitioner of its trade-mark "Zipper," the word "Zip" and other words comprising the word "Zip" had been adopted and used by others as trade-marks for various articles of merchandise. The registrant in its motion to dismiss the petition for cancellation lists forty-six registrations consisting of the word "Zip," or other words comprising the word "Zip." Of these special mention may be made of Registration No. 119,139, October 23, 1917, of the trade-mark "Zip" for snap fasteners. The goods manufactured and sold by the parties to this proceeding and to which their respective marks are appropriated, however, are not fasteners. The slide fasteners used by them, according to this record, are manufactured and sold by the Hookless Fastener Company.
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> In view of the prior adoption and use by many others of the word "Zip" and other words comprising the word "Zip," as trade-marks on various articles of merchandise, the members of the public naturally exercise care in discriminating distinctions, between such marks, and when exercising such care they would not be apt to confuse the mark "Zip-On," as printed, with the mark "Zipper," even though the two marks were appropriated to goods of the same descriptive properties; and in view of such prior adoption and use of marks consisting of or comprising the word "Zip," it seems evident that the petitioner's trade-mark rights under his trade-mark "Zipper" are confined within narrow limits.

The record clearly establishes that appellant has expended considerable time and money in advertising its trade-mark "Zipper," and that appellee has expended a less amount in advertising its trade-mark "Zip-On." It appears that the word "Zip" and other words comprising the word "Zip" have been registered as trade-marks for various articles. It does not appear, however, that any of these marks have been registered for use on clothing or wearing apparel.

It is claimed by appellant that the goods of the respective parties possess the same descriptive properties; that the mark "Zip-On" is confusingly similar to the mark "Zipper"; that the mark "Zipper" has been popularized by appellant; and that the use of the word "Zip-On" as a trade-mark on the articles of clothing covered by appellee's registration would cause confusion in the trade, dilute the popularity of appellant's trade-mark, subtract from its established good will, and lessen the distinctiveness of appellant's trade-mark. Many other claims are made by appellant but we think they need not be stated here.

Counsel for appellee, on the contrary, contends that the goods of the respective parties do not possess the same descriptive properties, and that neither party is entitled to the exclusive use of "the common word or root 'Zip'." We quote from the brief of counsel:

> The use of the word "Zip" is a common English word suggestive of speed, and right here we will contend that the entire difficulty into which the Goodrich Co. has involved this registrant and others is because of the unfair, improper, and inequitable attempt of the Goodrich Co. to monopolize this word "Zip," despite the fact that it is a common English word largely descriptive, or at least suggestive, of hookless or slide fasteners—a point not involved in this proceeding. Because Goodrich made the mistake of utilizing, popularizing and advertising a trade-mark which incorporated a common English word does not give such company the right to cull from the public domain the word "Zip" and exclude all people in other lines of industry and making other goods from a different use of "Zip."

It was conceded by counsel for appellee, at the time of the oral argument in this court, that the word "Zip-On" was similar to the word "Zipper," and that, if the goods of the parties possessed the same descriptive properties, appellee would not be entitled to have the word "Zip-On" registered as a trade-mark.

The pertinent part of section 5 of the trade-mark act of February 20, 1905, reads as follows:

> Sec. 5. That no mark by which the goods of the owner of the mark may be distinguished from other goods of the same class shall be refused registration as a trade-mark on account of the nature of such mark unless such mark—
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> * * * * * * *
>
> *Provided*, That trade-marks which are identical with a registered or known trade-mark owned and in use by another and appropriated to merchandise of the same descriptive properties, or which so nearly resemble a registered or known trade-mark owned and in use by another and appropriated to merchandise of the same descriptive properties as to be likely to cause confusion or mistake in the mind of the public or to deceive purchasers shall not be registered: * * *

Section 13 of that act provides for the cancellation of the registration of trade-marks, where it is made to appear that the registrant was not entitled to the use of the mark at the date of his application for registration.

Section 16 provides in part "That the registration of a trade-mark under the provisions of this act shall be prima facie evidence of ownership."

The language "merchandise of the same descriptive properties" contained in section 5 has given the courts considerable concern. It has been held in many cases that the Congress intended to use the words "same descriptive properites" "in the natural and ordinary sense" and that "two trade-marks may be said to be appropriated to merchandise of the same descriptive properties, in the sense meant by the statute, when the general and essential characteristics of the goods are the same." *D. & C. Co., Inc.*, v. *Everett Fruit Products Co.*, 57 App. D. C. 262; 365 O. G. 658; 20 F. (2d) 279, and cases therein cited. The difficulty with this interpretation is that it is as broad, comprehensive, and indefinite as the words interpreted; and, in order that it may be given application, it is necessary to again resort to interpretation. The net result has been a construction of the statute so broad and indefinite as to be of little help either to the courts or to litigants, or a construction so narrow and limited as to thwart the evident purpose of the Congress. Recognizing this situation, the courts and the Patent Office tribunals have found it necessary, in a large number of cases, to arbitrarily and summarily hold that the goods of the contending parties did or did not, as the case might be, possess the same descriptive properties. Sometimes, where the goods of the parties were not identical, the courts have been compelled to resort to similarity of use, construction, and other tests of similarity in an effort to apply the "general and essential characteristics" rule. Obviously, although it was not so stated, confusion, either with respect to the goods or their origin, was the dominant and controlling influence in those decisions. For, whether the similarity tests be considered severally or jointly the question of confusion is necessarily present, and, in the final analysis, is the controlling factor. So, in the case of *California Packing Corporation* v. *Price-Booker Mfg. Co.*, 52 App. D. C. 259, 285 F. 993, 308 O. G. 451, the Court of Appeals of the District of Columbia said:

> The paragraph implies that, if *the mark would not distinguish the goods of its owner from other goods of the same class, it should be denied registration.* No interpretation of the phrase "the same descriptive properties," which occurs in the same section, applicable to all cases alike, has ever been given, so far as we know. The courts have been content with deciding in each case as it arose either that the goods did or did not possess those qualities, without going further. *We think the dominant purpose of the part of the section here involved is the prevention of confusion and deception. If the use of the later mark would be likely to produce either, the mark should be rejected. Whenever it appears that confusion might result, it is because the goods have the same descriptive properties.* We reason from the effect to the cause. For instance, no one would be deceived into believing that a can of tobacco and a can of peas were put out by the same concern, simply because they bore similar trade-marks.
>
> Turning now to the goods of the parties to this litigation, we find that they are sold in the same stores, are put out in small containers, are used in connection with each other, and are associated in the public mind. We think that a person seeing the mark in question on a container of pickles would be likely to assume that they were produced by the same concern as that which produced the canned fruits or vegetables bearing a similar mark. At least we are not clearly convinced that he would not be, and therefore we hold against the newcomer. (Italics ours.)

In the case of *The I. E. Palmer Company* v. *Nashua Manufacturing Company*, 17 C. C. P. A. ——, 34 F. (2d) 1002, 389 O. G. 533, we referred to the rule announced in the California Packing Corporation case and said:

> While we do not mean to be understood as saying that the rule thus announced is sufficiently full and comprehensive to cover every possible situation, we are, nevertheless, of the opinion that it was the intention of the Congress to prevent, if possible, confusion, mistake, and deceit in the use of trade-marks. Obviously, merchandise of contending parties may be dissimilar, and yet the trade-marks thereon may so nearly resemble each other as to cause, when the merchandise is sold to the general public, confustion and mistake, and to make deceit an easy matter of accomplishment.

In the case of *In re S. C. Herbst Importing Company*, 30 App. D. C. 297, 134 O. G. 1565, the Court of Appeals of the District of Columbia said:

> *The purpose of the act was to prevent, and not to promote, confusion; to protect, and not to deceive, the public.* The language used empowers the Commissioner to exercise his discretion as to whether a proposed mark should be registered. If in his opinion its registration will "be likely to cause confusion or mistake in the mind of the public" or to "deceive purchasers," he is bound to reject it. (Italics ours.)

Other decisions might be cited in support of the rule announced in the *California Packing Corporation* v. *Price-Booker Mfg. Co.*, *In re S. C. Herbst Importing Company*, and *The I. E. Palmer Company* v. *Nashua Manufacturing Company* cases, supra.

In the case of *American Steel Foundries* v. *Robertson, Commissioner, et al.*, 269 U. S. 372; 342 O. G. 711, the Supreme Court, speaking with reference to the language contained in the second *proviso* of section 5, supra, said:

> The general doctrine is that equity not only will enjoin the appropriation and use of a trade-mark or trade name where it is completely identical with the name of the corporation, but will enjoin such appropriation and use where the resemblance is so close as to be likely to produce confusion as to such identity, to the injury of the corporation to which the name belongs. *Cape May Yacht Club* v. *Cape May Yacht & Country Club*, 81 N. J. Eq. 454, 458; *Armington & Sims* v. *Palmer*, 21 R. I. 109, 115. Judicial interference will depend upon the facts proved and found in each case. *Hendriks* v. *Montagu*, L. R. 17 Ch. Div. 638, 648; *Higgins Co.* v. *Higgins Soap Co.*, 144 N. Y. 462, 469–471.
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> *These principles, it must be assumed, were in mind when Congress came to enact the registration statute. And, since that body has been given no power to legislate upon the substantive law of trade-marks, it reasonably may be assumed, also that, to the extent the contrary does not appear from the statute, the intention was to allow the registration of such marks as that law, and the general law of unfair competition of which it is a part, recognized as legitimate.* The house Committee on Patents, in reporting the bill of which upon enactment became the registration statute in question, said: "Section 5 of the proposed bill we believe will permit the registration of all marks which could, under the common law as expounded by the courts, be the subject of a trade-mark and become the exclusive property of the party using the same as his trade-mark." Report No. 3,147, Dec. 19, 1904, H. of R., 58th Cong., 3 sess.
>
> The provision, therefore, that no mark consisting merely in the name of a corporation shall be registered, is to be construed in harmony with those established principles in respect to the appropriation of corporate names to which we have referred. Where the appropriation of the corporate name is complete, the rule of the statute, by its own terms, is absolute and the proposed mark must be denied registration without more. But where less than the whole name has been appropriated, the right of registration will turn upon whether it appears that such partial appropriation is of such character and extent that, under the facts of the particular case, it is calculated to deceive or confuse the public to the injury of the corporation to which the name belongs.
>
> The fact, for example, that the articles upon which the mark is used are not of the same description as those put out by the corporation, is entitled to weight, since the probability of such confusion and injury in that situa-

tion obviously is more remote than where the articles are of like kind. The cases, naturally, present varying degrees of difficulty for the application of the rule. *Primarily, the power and the duty rests with the Commissioner of Patents to determine the question in each case in the exercise of an instructed judgment upon a consideration of all the pertinent facts.* (Italics ours.)

If, as the court said in the above case, citing *United Drug Co.* v. *Rectanus Co.*, 248 U. S. 90, 97; 257 O. G. 1082; *Hanover Milling Co.* v. *Metcalf*, 240 U. S. 403, 413–414; 224 O. G. 1407, "'The law of trade-marks is but a part of the broader law of unfair competition' (idem), the general purpose of which is to prevent one person from passing off his goods or his business as the goods or business of another," and, if the general principles of equity applicable to the law of trade-marks "were in mind when Congress came to enact the registration statute" it would seem to be obvious that the provisions of section 5, under consideration here, should not be given a literal construction, but, except where a contrary intention clearly appears from the statute, should be construed in harmony with the general principles of equity applicable to the law of trade-marks.

Accordingly, the language in the first proviso of section 5 should be construed in connection with the language contained in the first part of section 5, "That no mark by which the goods of the owner of the mark *may be distinguished from* other *goods of the same class* shall be refused registration as a trade-mark on account of the nature of such mark unless such mark—." (Italics ours.)

[1, 2] It would seem to be evident then, that the language "same descriptive properties" contained in the first proviso was intended by the Congress to relate to goods of the same general class; that such language was not intended to be more or less comprehensive than the term "class" used in the first part of the section; that the language of the first proviso was intended to state the converse of the mandates of the first part of the section, namely, that a mark by which the goods of the owner of the mark may not be distinguished from other goods of the same class *shall not be registered*; and that, keeping in mind the principles of equity as applied to the law of trade-marks, the words "same class" and "same descriptive properties" were intended to be given a limited or an extended meaning and application, according to whether or not the use of identical or similar trade-marks would be likely to cause confusion or mistake in the mind of the publice or to deceive purchasers. And, of course, in this connection, the use, appearance, and structure of the articles, the similarity or the lack of similarity of the packages or containers in which, the place or places where, and the people to whom, they were sold should be considered.

While it is true that the statute was not intended to be as comprehensive as the principles of equity applicable to the law of trade-marks, it certainly was not the purpose of the Congress to enact a statute opposed to those principles. To so hold would be but to deny that the statute was enacted in the light of common sense. Such a construction would require the registration of trade-marks which would not be recognized as legitimate by the courts under the substantive law of trade-marks.

[3] The trade-mark "Zipper" was used by appellant long prior to the adoption and use by appellee of the mark "Zip-On." It was undoubtedly adopted because of the peculiar characteristics of the hookless fasteners used on and made a distinctive feature of appellant's goods. The word "Zip" is not only suggestive of speed but of sound. "Zipper" means to fasten with a "Zip," while "Zip-On" means to put on with a "Zip." Accordingly, the words not only mean substantially the same thing, but the marks are of such close resemblance as to make it perfectly clear that if used upon goods of the same descriptive properties, confusion, mistake, and deceit would result.

[4] It appears from the record that appellant has in the past manufactured various article of wearing apparel, many of which were similar, not only in name but in use, to many of the articles manufactured by appellee. It would seem to be clear that appellant ought to have the right to extend the use of its mark, at least, to the various articles of wearing apparel formerly manufactured by it, when it resumes the manufacture and sale of such articles. This conclusion is in conformity with the general rule "that the owner of a trade-mark will not be hampered or embarrassed in the legitimate extension of his business by the registration of the mark to another." *Canton Culvert & Silo Company* v. *Consolidated Car-Heating Company*, 44 App. D. C. 491; 226 O. G. 1799, and cases cited. Moreover, we should ever be mindful of the well established rule that, in a close case, doubt should be resolved "against the newcomer." The reason for this rule is that the field from which a trade-mark may be selected is as broad and unlimited as the vision and imagination of the human mind; and there can be no excuse, except in cases where the fields of activity are widely separated, for one to adopt and use a trade-mark confusingly similar to the established mark of another upon goods of the same general class. *Aunt Jemima Mills Co.* v. *Blair Milling Co.*, 50 App. D. C. 281; 270 F. 1021; 286 O. G. 863.

It is argued by counsel for appellee that the word "Zip" is a common English word and that appellant has no right to the exclusive use of it as a trade-mark. The answer to this argument is that appellant's trade-mark is "Zipper," not "Zip." Nor is appellant entitled to the exclusive use of every trade-mark formed by the use of the word "Zip." But surely, if the statute providing for the registration of trade-marks is not to be a weapon for the perpetration of fraud and deceit, registrants of trade-marks are entitled to some measure of protection from those who designedly or otherwise closely simulate such marks and, due to confusion in the mind of the public, trade on the popularity and good will of the registrant. While there is evidence in the record that appellee did not designedly simulate appellant's trade-mark and had no intention of trading on the good will and popularity of appellant, nevertheless, its goods are sold in the same territory as those of appellant, and the likelihood of confusion and mistake in the mind of the public and corresponding injury to appellant is not altered by evidence of appellee's good faith.

[5] The articles upon which the respective trade-marks are used are of the same general class—wearing apparel. Applying the rule hereinbefore stated, we are of opinion that the use by appellee of the trade-mark "Zip-On" on the articles of wearing apparel enumerated in its trade-mark registration, in view of the prior use of the trade-mark "Zipper" on boots and overshoes by appellant, would be likely to cause confusion or mistake in the mind of the public and to deceive purchasers. We hold, therefore, that the goods of the respective parties are of the same general class; that they possess the same descriptive properties; that the marks are confusingly similar; and that appellee's registration of the trade-mark "Zip-On" should be canceled.

The decision is reversed.

Reversed.

LENROOT, *J.*, specially concurring:

I concur in the conclusion reached in this case, but I cannot agree to the following statement in the opinion of the majority:

> • • • The words "same class" and "same descriptive properties" were intended to be given a limited or an extended meaning and application, according to whether or not the use of identical or similar trade-marks would be likely to cause confusion or mistake in the mind of the public or to deceive purchasers.

It seems to me that the language quoted clearly violates express terms of section 5 of the trade-mark act of February 20, 1905, and in effect would amend said act by striking out of said section the word "class," and the phrase "same descriptive properties" where it occurs the second time in the first proviso of said section.

Clearly, if confusion or mistake is to be determinative of "class" and "same descriptive properties," then these words have no meaning or effect whatever, used as above indicated in said section.

I agree with the majority that the words "same class" and the phrase "same descriptive properties," as used in said section, are synonymous in their meaning, and for the sake of brevity shall use the words "same class" in lieu of the phrase "same descriptive properties."

Under the language first above quoted, as I construe it, the portions of section 5 here under consideration would, in effect, read as follows:

> That no mark by which the goods of the owner of the mark may be distinguished from other goods • • • shall be refused registration as a trade-mark on account of the nature of such mark unless such mark—
>
> • • • • • • •
>
> *Provided*, That trade-marks which are identical with a registered or known trade-mark owned and in use by another and appropriated to merchandise of the same descriptive properties, or which so nearly resemble a registered or known trade-mark owned and in use by another • • • as to be likely to cause confusion or mistake in the mind of the public or to deceive purchasers shall not be registered.

In other words, under the interpretation given the section in the majority opinion, the words "class" in the first part of the section and "same descriptive properties" where they occur the second time in the proviso, are mere surplusage.

The rule is so familiar that it requires no citation of authorities in support of it, that effect must be given to every part of a statute.

In the case of *American Steel Foundries* v. *Robertson*, 269 U. S. 372, 342 O. G. 711, the Court declared that "to the extent *the contrary does not appear from the statute*, the intention was to allow the registration of such marks as that law," (substantive law of trade-marks) "and the general law of unfair competition of which it is a part, recognized as legitimate." (Italics mine.)

I submit that there is nothing in this language that supports the elimination of the words here being considered from section 5. On the contrary, it clearly implies that effect must be given to every part of the section.

It seems to me that the statute, both in express language and intent, is clear, that in a trade-mark proceeding it is the duty of the Patent Office first to ascertain whether the mark proposed to be registered distinguishes the goods to which it is applied from other goods of the same class. In order to determine this, its first inquiry must be as to class. The word "class" has a common meaning and has been defined by lexicographers as follows:

The Century Dictionary defines "class" as:

> 4. a number of objects distinguished by common characters from all others, and regarded as a collective unit or group; a collection capable of a general definition; a kind.

Funk & Wagnalls New Standard Dictionary defines it thus:

> 3. a number of objects, facts, or events having common accidental or essential properties; a set; kind; variety; as, a *class* of propositions, of energies, of duties.

If the Patent Office finds that the goods are not of the same class, it should enquire no further with a view to possible adverse action upon the application, so far as that part of the section here under consideration is concerned. If, however, it finds that they are of the same class, and the marks are not identical, then and not until then is it authorized to consider the matter of confusion. Under the rule laid down in the majority opinion, it must first determine whether confusion exists in order to determine class. But why determine class at all under this rule? If confusion results by the use of two marks, that is the end of it; they are then of the same class; so says, in effect, the majority opinion, as I understand it. If the term "class" is to have a limited or extended meaning and application, according to whether confusion is likely to be caused by the use of the marks, then the word "class" means nothing in the section, for it has no application. According to this theory, two articles may clearly belong to the same class, according to the ordinary meaning of the word, but they are not of the same class if confusion is not likely to be caused by the use of similar trade-marks upon them. As I construe the statute, it plainly states that confusion shall be the test of rejection of an application for registration only if the goods to which marks, not identical, are applied, are in the same class, but by the majority opinion, the consideration of confusion is always necessary in order to determine class.

I appreciate that the language in the opinion which I have been discussing is followed by the statement:

And, of course, in this connection, the use, appearance, and structure of the articles, the similarity or the lack of similarity of the packages or containers in which, the place or places where, and the people to whom, they were sold should be considered.

I do not, however, understand that this language is intended to modify in any way the statement preceding it, that—

The words "same class" and "same descriptive properties" were intended to be given a limited or an extended meaning and application, according to whether or not the use of identical or similar trade-marks would be likely to cause confusion or mistake in the mind of the public or to deceive purchasers.

If the language following is intended to modify the foregoing, it seems to me that it should so state. If so intended, does the majority mean that confusion shall not always be the test of whether the goods are in the same class or not, but only in certain cases? If so, to what cases will the test of confusion be applied, and in what cases will class be determined from the ordinary meaning of the word?

However, as I understand the opinion, the fair construction of the language is that the test of confusion shall always be applied in determining whether goods are of the "same class" or possess the same "descriptive properties," and the language referring to use, appearance, structure of the articles, etc., is intended to aid in determining whether confusion is likely to be caused, and has no bearing or application otherwise.

The statute we are construing is, it seems to me, clear and unambiguous, at least when it is held that the word "class" and the phrase "same descriptive properties" are synonymous in their meaning; and that being the case, I cannot concur in a construction which in my opinion eliminates therefrom a material element designed to govern proceedings in the Patent Office.

GARRETT, J., concurs in the specially concurring opinion.

Patent Suits.

[Notices under sec. 4921, R. S., as amended Feb. 18, 1922]

908,125, F. C. Overbury, Method of making shingle strips and blanks therefor; 1,410,018, O. P. Kiracofe, Roofing machine, D. C. N. J., Doc. E 1168, *Flintkote Co.* v. *National Asbestos Mfg. Co.* Decree for injunction Jan. 25, 1930.

1,025,822, 1,163,253, W. H. Millspaugh, Paper-making machine; 1,163,251, same, Paper making, D. C. Oreg. (Portland), Doc. E 9032, *The Guardian Trust Co. et al.* v. *Hawley Pulp & Paper Co.* Dismissed Feb. 18, 1930. Doc. E 9033, *The Guardian Trust Co. et al.* v. *St. Helens Pulp & Paper Co.* Decree as above.

1,089,907, W. D. Coolidge, Electrical contact, filed Dec. 7, 1929, D. C., E. D. N. Y., Doc. 4597, *P. R. Mallory & Co., Inc.*, v. *P. Sorensen.* Doc. 4615, *P. R. Mallory & Co., Inc.*, v. *Standard Motor Products Co., Inc.* Consent decree for plaintiff Dec. 21, 1929.

1,125,476, G. Claude, System of illuminating by luminescent tubes, D. C., E. D. N. Y., Doc. 4557, *Claude Neon Lights, Inc.*, v. *J. K. Ropke.* Discontinued Jan. 8, 1930. Same, filed Nov. 20, 1929, D. C., E. D. N. Y., Doc. 4558, *Claude Neon Lights, Inc.*, v. *H. Rosenbaum.* Doc. 4559, *Claude Neon Lights, Inc.*, v. *A. Appello.* Doc. 4560, *Claude Neon Lights, Inc.*, v. *S. Neham (De La Hoydes Pharmacy).* Same, filed Nov. 27, 1929, D. C., E. D. N. Y., Doc. 4574, *Claude Neon Lights, Inc.*, v. *J. Cutter.* Doc. 4575, *Claude Neon Lights, Inc.*, v. *G. Rudolphi.* Doc. 4576, *Claude Neon Lights, Inc.*, v. *J. Viebrock.* Doc. 4577, *Claude Neon Lights, Inc.*, v. *L. Lefkon (Mye Drug Stores).* Doc. 4578, *Claude Neon Lights, Inc.*, v. *M. Bugner et al. (Bugner & Lewson).* Doc. 4579, *Claude Neon Lights, Inc.*, v. *B. Ornstein.* Same, D. C. Mass., Doc. E 3082, *Claude Neon Lights, Inc., et al.* v. *Volt Aro Tubes, Inc., et al.* Consent decree for plaintiff Jan. 24, 1930.

1,134,333, F. R. Harris, Method for the construction of dry or graving docks, D. C., S. D. N. Y., Doc. E 45/73, *F. R. Harris* v. *A. McMullen Co.* Dismissed Mar. 5, 1930.

1,161,705, M. B. Lloyd, Mechanism for cutting tubing into lengths, D. C. N. J., Doc. E 3129, *Steel & Tubes, Inc.*, v. *General Tube Co.* Decree for injunction Jan. 28, 1930.

1,163,251. (See 1,025,822.) 1,163,253. (See 1,025,822.)

1,220,886, C. A. Pfaustichl, Tungsten contact point, filed Jan. 15, 1930, D. C., E. D. N. Y., Doc. 4722, *Fansteel Products Co., Inc.*, v. *P. Sorensen.*

1,235,319, J. Huether, Taping machine, D. C., E. D. N. Y., Doc. 4303, *Corrugating Machinery Corp. et al.* v. *Empire Corrugated Container Corp.* Dismissed after trial Feb. 21, 1930. Doc. 4304, *Corrugating Machinery Corp. et al.* v. *Progressive Corrugated Paper Machinery Co., Inc.* Decree as above.

1,268,269, Murray and Rugg, Gear synchronizer, filed Nov. 25, 1929, D. C., E. D. N. Y., Doc. 4568, *R. W. Co., Inc., et al.* v. *Upperou-Cadillac Corp.*

1,334,539, W. H. Huth, Toy fighting tank, filed Dec. 4, 1929, D. C., E. D. N. Y., Doc. 4594, *Wolverine Supply & Mfg. Co. et al.* v. *F. K. Loeser & Co., Inc.*

1,377,566, C. F. Eckart, Method of enhancing the growth of plants; Re. 15,231, same, Method of and means for enhancing the growth of plants, D. C. Mo. (St. Louis), Doc. 8475, *International Paper Co.* v. *Graham Paper Co.* Claims 1, 2, 4, 5, and 7 of Patent 1,377,566 held valid and infringed, dismissed as to Re. 15,231 Mar. 4, 1930.

1,410,018. (See 908,125.)

1,456,307, G. W. Gwinn, Machine for applying stamps, labels, or sealing strips to packages, filed Mar. 6, 1930, D. C., S. D. N. Y., Doc. E 50/137, *American Machine & Foundry Co.* v. *Arenco Machine Co., Inc.*

1,504,128, C. G. Lindbom, Cigarette case, filed Nov. 14, 1929, D. C., E. D. N. Y., Doc. 4541, *Wm. Demuth & Co.* v. *A. Pollak.*

1,548,465, J. P. Henry, Process for the production of wood grains, filed Dec. 28, 1929, D. C., E. D. N. Y., Doc. 4677, *The Vance Mfg. Co. et al.* v. *A. C. Horn Co.*

1,552,013, J. L. Schroyer, Package closure, filed Nov. 14, 1929, D. C., E. D. N. Y., Doc. 4540, *W. Demuth & Co.* v. *Rennak Sales Co.*

1,623,048, J. D. Crosby, Process of finishing cold-rolled steel, D. C. R. I., Doc. 306, *J. D. Crosby Co.* v. *Rhode Island Strip Steel Co.* Discontinued Mar. 3, 1930.

1,625,639, Prenzinger and Lange, Heading machine and body-conveying means, filed Dec. 26, 1929, D. C., E. D. N. Y., Doc. 4664, *The Max Ams Machine Co.* v. *W. E. Bliss Co.*

1,652,479, Huck and Twight, Brake for automobile vehicles, filed Feb. 28, 1930, D. C., E. D. Mich., S. Div., Doc. 4010, *Huck Axle Corp. et al.* v. *Midland Steel Products Co.*

1,702,318, P. J. Rossman, Claim check for parking stations, filed Mar. 5, 1930, D. C., E. D. Wis. (Milwaukee), Doc. 2874, *Badger Auto Service Co., Inc.*, v. *Central Parking Stations, Inc.*

1,706,392, Buono and Buono, Method of treating furs and machine therefor, filed Dec. 16, 1929, D. C., E. D. N. Y., Doc. 4646, *U. S. Blind Stitch Machine Corp.* v. *Reliable Machine Works, Inc.*

1,719,805, L. Hammond, Alternating-current clock, filed Mar. 6, 1930, D. C., E. D. Ill. (Danville), Doc. 231-D, *The Hammond Clock Co.* v. *The Kodel Electric & Mfg. Co.*

Re. 15,231. (See 1,377,566.)

Re. 15,278, I. Langmuir, Electron-discharge apparatus, D. C., E. D. N. Y., Doc. 4708. *Radio Corp. of America et al.* v. *G. J. Seedman & Co., Inc.* Consent decree for defendant Mar. 4, 1930.

Re. 15,791, P. Leiken, Knickers, filed Dec. 28, 1929, D. C., E. D. N. Y., Doc. 4666, *The Peerless Smoking Jacket Co., Inc., et al.* v. *S. L. Leopold.*

Des. 70,209, J. Berlinger, Wedding ring, filed Dec. 9, 1929, D. C., E. D. N. Y., Doc. 4607, *J. Berlinger* v. *Busch Jewelry Co., Inc.* Same, filed Jan. 28, 1930, D. C., E. D. N. Y., Doc. 4755, *J. Berlinger* v. *D. J. Conviser et al. (Uneeda Credit Clothing Co. et al.).*

Des. 73,778, J. Derk, Table scarf, appeal filed Nov. 26, 1929, C. C. A., 3d Cir., Doc. 4310, *Derk Mfg. Co.* v. *Northampton Textile Co.*

Des. 79,558, M. Kornblum, Lamp, filed Jan. 28, 1930, D. C., E. D. N. Y., Doc. 4754, *Metal Lamp Corp* v. *Aljac Lighting Fixture Co., Inc.*

Amendments to the Trade-Mark Rules

The Rules of Practice of the Patent Office relating to trade-marks have been amended as follows. The changes in rule 82 are to take effect June 1, 1930, except the changes relating to the charge for photostat copies and the charges for abstracts of title, which changes are to take effect July 1, 1930.

THOMAS E. ROBERTSON,
Commissioner.

Rule 62, in lines 7 and 8, strike out the words "fixing a time for hearing such petition by the Commissioner, and"; lines 10 and 11, strike out the words "after being notified of the order fixing the day of hearing."; line 10, change "5" to *10*, and add at the end of the rule the words:

Hearing will be granted at the discretion of the Commissioner.

Rule 82, lines 1 and 3, change "$10.00" to *$15.00*; strike out lines 17, 18, 19, and 20, and insert in lieu thereof:

For photostat copies of records	*.20*
If certified, for the certificate, additional	*.50*

Strike out lines 21 to 27, inclusive, and insert:

For recording every assignment, agreement power of attorney, or other paper not exceeding six pages	*3.00*
For each additional two pages or less	*1.00*
For each additional trade-mark or application included or involved in one writing, where more than one is so included or involved additional	*.50*

Strike out lines 28, 29, 30, and 31, and insert in lieu thereof:

For abstracts of title:	
For the search, one hour or less, and certificate	*3.00*
Each additional hour or fraction thereof	*1.50*
For each brief from the digest of assignments of 200 words or less	*.50*

Strike out line 37, and insert in lieu thereof:

For the certificate	*.50*

Amendments to the Rules of Practice

The Rules of Practice of the Patent Office have, with the approval of the Secretary, been amended as follows, to take effect June 1, 1930, except the changes in rule 191 relating to the charges for photostat copies and photoprints and the charges for abstracts of title, which changes are to take effect July 1, 1930.

THOMAS E. ROBERTSON,
Commissioner.

Rule 41, add at the end of the rule the following:

Provided that more than one species of an invention, not to exceed three, may be claimed in one application of that application also includes an allowable claim generic to all the claimed species. In the first action on an application containing a generic claim or claims and claims to more than one species thereunder the examiner, if he is of the opinion after a complete search that no generic claim presented is allowable, shall require the applicant in his response to that action to elect that species of his invention to which his claims shall be restricted if no generic claim is finally held allowable.

Rule 101, strike out the last clause beginning "but".

Rule 109, strike out the first sentence and insert the following:

An applicant involved in an interference may, within a time fixed by the examiner of interferences not less than thirty days after the preliminary statements (referred to in rule 110) of the parties have been received and approved, or if a motion to dissolve the interference has been brought by another party, within thirty days from the filing thereof, on motion duly made as provided by rule 153, file an amendment to his application containing any claims which in his opinion should be made the basis of interference between himself and any of the other parties.

Lines 10 and 16, strike out "law examiner" and insert *examiner of interferences.*

Rule 114, line 7, strike out "thirty days" and insert in lieu thereof the following:

a time fixed by the examiner of interferences, not less than thirty days,

Line 10, after "brought," first occurrence, insert the following:

, except a motion by such junior party denying the patentability of any claim constituting a count of the interference, provided, however, that where a patent is not involved such junior party may file a statement as to his reasons for considering such claim or claims unpatentable, which statement shall be given due consideration by the primary examiner after the termination of the interference before passing the application of the successful party to issue.

Rule 122, line 10, strike out "not later than the thirtieth day" and insert in lieu thereof—

within the time fixed by the examiner of interferences, not less than thirty days,

Lines 13 and 16, strike out "Commissioner" and insert *examiner of interference*

Lines 14 and 15, strike out "the law examiner" and insert *him*

Cancel next to last paragraph.

Rule 123, line 2, strike out "law examiner" and insert *examiner of interferences.*

Rule 124, lines 1 and 2, strike out "law examiner" and insert *examiner of interferences*

Rule 128, lines 3 and 9, strike out "law examiner" and insert *examiner of interferences*

Line 4, strike out "request the suspension of" and insert *suspend*

Rule 130, strike out the last sentence and insert the following:

When the examiner of interferences has denied such a motion for dissolution the question shall not be reinvestigated by him except in view of evidence which was not before him when the motion was considered, but it may be raised before the appellate tribunals on appeal from the award of priority.

Rule 144, line 4, after "arguments" insert:

with service upon each adverse party as provided in rule 15½ (b)

Same line, strike out "ten" and insert *thirty*

Line 5, strike out "three" and insert *ten*

Rules 148, 149, 150, and 162, strike out "Court of Appeals of the District of Columbia", each occurrence, and insert *Court of Customs and Patent Appeals*

Rule 162, after first paragraph insert the following paragraph:

Where, however, a record does not exceed one hundred and twenty-five letter sized double-spaced typewritten pages or the equivalent thereof, printing may be dispensed with upon request, provided, however, that there shall be furnished, in addition to the original transcript, copies of the typewritten testimony, one for the office, which shall not become part of the record, and one for each adverse party, to be filed within the time specified for filing printed copies, and provided, further, that where printing has thus been dispensed with, the appellant, if appeal is taken from the decision of the examiner of interferences, must file the required number of printed copies of the record, both of his own and of the appellee, if the latter has not been printed, within thirty days from the taking of the appeal. If the printed record is not filed within the time specified or within any extension thereof granted by the Board of Appeals, the appeal shall be dismissed.

Cancel last sentence of the rule.

Rule 163, lines 4 and 5, strike out "But in case satisfactory reason" and insert in lieu thereof:

Where the brief does not exceed thirty legal sized double-spaced typewritten pages or the equivalent thereof, and in any case where satisfactory reason therefor is shown, typewritten briefs may be submitted.

Rule 191, in lines 4, 7, and 10, strike out "$20.00" and insert *$25.00.*

Line 20, strike out entire line.

Lines 25, 29, and 33, strike out ".25" and insert *.50.*

Strike out lines 30, 31, and 32 and insert in lieu thereof:

For photostat copies of printed records	*.20*

Strike out lines 39, 40, and 41 and insert in lieu thereof:

For photoprints of drawings, for each sheet of drawings	*.20*

Strike out lines 46 to 52, inclusive, and insert in lieu thereof:

For recording every assignment, agreement, power of attorney, or other paper not exceeding six pages	3.00
For each additional two pages or less	1.00
For each additional patent or application included or involved in one writing, where more than one is so included or involved, additional	.50

Strike out lines 53, 54, 55, and 56 and insert in lieu thereof the following:

For abstracts of title to each patent or invention—	
For the search, one hour or less, and certificate	3.00
Each additional hour or fraction thereof	1.50
For each brief from the digest of assignments, of 200 words or less	.50

Interference Notices

U. S. PATENT OFFICE, *Washington, D. C., May 7, 1930.*

Carl A. Held, his assigns or legal representatives, take notice:

An interference has been declared by this Office between applications for patents filed by Stanley McClatchie, of 2577 Ashton Road, Cleveland Heights, Ohio, and Carl A. Held, of Waverly Place, Farmingdale, N. Y. Counsel for Held states that he does not know the present whereabouts of Held. Notice is hereby given that unless said Held, his assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the interference will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

U. S. PATENT OFFICE, *Washington, D. C., May 7, 1930.*

Herbert Scheel, his assigns or legal representatives, take notice:

An interference having been declared by this Office between the application for patent of Kent E. Keller, of Ava, Ill., and patent granted December 18, 1928, No. 1,695,348, to Herbert Scheel, of 2210 Pacific Avenue, Dallas, Tex., c/o Ferguson Motors Co., and a notice of such declaration sent by registered mail to said Scheel at the said address having been returned by the post office as undeliverable, noitice is hereby given that unless said Scheel, his assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the interference will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

U. S. PATENT OFFICE, *Washington, May 13, 1930.*

Lewis Newman, his assigns or legal representatives, take notice:

An interference having been declared by this Office between the application for patent of Charles Berg, 501 Fifth Ave., New York, N. Y., and Patent No. 1,679,050, granted July 31, 1928, to Lewis Newman, 10118 Adams Ave., and 1064 East 97th St. *or* 1748 East 22nd St., Cleveland, Ohio, and a notice of such declaration sent by registered mail to said Newman at said addresses having been returned by the post office undeliverable, notice is hereby given that unless said Newman, his assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the interference will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

Notices of Cancellation

U. S. PATENT OFFICE, *Washington, Apr. 28, 1930.*

Baruch Cerf, his assigns or legal representatives, take notice:

A cancellation proceeding having been instituted by this Office upon the application of the Epstein-Minzter Co. Inc., 729–731 South 12th Street, Newark, N. J., to effect the cancellation of the trade-mark registration of Baruch Cerf, doing business at 204 27th Street, Milwaukee, Wis., and in Chicago, Ill., under the name of Czonable Products Co., No. 159,324, dated September 26, 1922, and the notice of such proceeding sent by registered mail to the said Cerf at the said addresses having been returned by the post office as undeliverable, notice is hereby given that unless said Cerf, his assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the cancellation will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

U. S. PATENT OFFICE, *Washington, D. C., Apr. 30, 1930.*

Cumalena Manufacturing Co., its assigns or legal representatives, take notice:

A cancellation proceeding having been instituted by this Office upon the application of the United Drug Company, of 43 Leon Street, Boston, Mass., to effect the cancellation of the trade-mark registration of the Cumalena Manufacturing Co., of Crafton, Pa., No. 42,070, dated February 16, 1904, and the notice of such proceeding sent by registered mail to the said Cumalena Manufacturing Co. at the said address having been returned by the post office as undeliverable, notice is hereby given that unless the Cumalena Manufacturing Co., its assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the cancellation will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

U. S. PATENT OFFICE, *Washington, May 3, 1930.*

Anthony J. Trasso, his assigns or legal representatives, take notice:

A cancellation proceeding having been instituted by this office upon the application of The American Products Company of 3265 Colerain Avenue, Cincinnati, Ohio, to effect the cancellation of the trade-mark registration of Anthony J. Trasso, of 35–37 Sixth Avenue, New York, N. Y., No. 146,149, dated August 30, 1921, and the notice of such proceeding sent by registered mail to the said Trasso at the said address having been returned by the post office as undeliverable, notice is hereby given that unless said Trasso, his assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the cancellation will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

U. S. PATENT OFFICE, *Washington, May 9, 1930.*

The San Aprove Company, its assigns or legal representatives, take notice:

A cancellation proceeding having been instituted by this Office upon the application of The American Products Company, of 3265 Colerain Avenue, Cincinnati, Ohio, to effect the cancellation of the trade-mark registration of The San Aprove Company, of 831 Lafayette Boulevard, Detroit, Mich., No. 158,411, dated June 20, 1922, and the notice of such proceeding sent by registered mail to The San Aprove Company at the said address having been returned by the post office as undeliverable, notice is hereby given that unless The San Aprove Company, its assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the cancellation will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

TRADE-MARKS

OFFICIAL GAZETTE, MAY 27, 1930

[VOL. 394. No. 4]

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this publication.

Marks applied for " under the ten-year proviso " are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 1 of said act, a fee of ten dollars must accompany each notice of opposition.

CLASS 1

Raw or Partly-Prepared Materials

Ser. No. 291,674. GUY LEE LEATHER COMPANY, Philadelphia, Pa. Filed Oct. 28, 1929.



The lining in the drawing denotes the color red. No claims is made to the use of the word "Whiteoak" apart from the mark shown in the drawing.

For Leather Strips and Sole Leather.

Claims use since Aug. 1, 1921.

CLASS 2

Receptacles

Ser. No. 294,348. FORSTNER CHAIN CORP., Irvington, N. J. Filed Jan. 3, 1930.

Forsit

For Pocket Case Preferably Made of Metal for Holding Cigars, Cigarettes, Matches, Playing Cards, Perfumes, Face Powder, Compacts, Razors, Razor Blades. Powder Puffs, Lip Sticks, and Eyebrow Pencils.

Claims use since Dec. 16, 1929.

CLASS 3.

Baggage, Animal Equipments, Portfolios, and Pocketbooks.

Ser. No. 294,454. IRVING V. WETZSTEIN, doing business as Lamella Company, New York, N. Y. Filed Jan. 6, 1930.



For Women's and Children's Hand Bags.

Claims use since July, 1928.

CLASS 4

Abrasive, Detergent, and Polishing Materials

Ser. No. 291,920. HARRIET A. HINCKLEY, doing business as Bennett Manufacturing Company, Springfield, Mass. Filed Nov. 2, 1929.

CLEANUM

For Cleaning Preparation in Paste, Cream, or Liquid Form for Cleaning Kid Gloves, Shoes, Hand Bags, and Leather Goods Generally, Including Washable Kid Gloves.

Claims use since 1903.

Ser. No. 292,847. DAGGETT & RAMSDELL, New York, N. Y. Filed Nov. 25, 1929.



The drawing is lined for shading purposes only.
For Soap and Shaving Cream.
Claims use since Oct. 10, 1929.

Ser. No. 292,848. DAGGETT & RAMSDELL, New York, N. Y. Filed Nov. 25, 1929.



The drawing is lined for shading purposes only.
For Soap and Shaving Cream.
Claims use since Oct. 10, 1929.

Ser. No. 292,856. DAGGETT & RAMSDELL, New York, N. Y. Filed Nov. 25, 1929.

DAGELLE

For Soap and Shaving Cream.
Claims use since Oct. 10, 1929.

Ser. No. 295,425. MINATOLWERKE A.-G., Lucerne, Switzerland. Filed Jan. 31, 1930.

Minatol

For Liquid Antiseptic Soap.
Claims use since Dec. 12, 1914.

Ser. No. 295,661. FIRST NATIONAL STORES INC., Boston, and Somerville, Mass. Filed Feb. 6, 1930.

FINAST

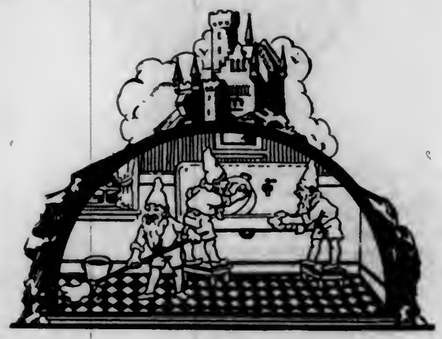
For Shoe Polish and Metal and Glass Polishes.
Claims use since Oct. 26, 1926.

Ser. No. 297,343. EDWARD WRIGLEY, doing business as The Wrigley Mfg. Co., Philadelphia, Pa. Filed Mar. 14, 1930.



No claim is made to any of the wording appearing on the drawing.
For Paste Cleanser—That is to Say, for a Compound in Paste Form for Cleaning Painted, Enameled, and Metallic Surfaces, Marble, Tile and Mosaics, Linoleums, Oilcloth, Carpets, Dirty Hands, and the Like Adapted to be Used by Being Applied to the Surface to be Cleansed and Then Wiped Off.
Claims use since Jan. 8, 1930.

Ser. No. 297,612. MILWAUKEE LUBRICANTS CO., Milwaukee, Wis. Filed Mar. 20, 1930.



For Cleaning Powder Containing the Ingredients of Powdered Soap, Soda Ash, and Pumice.
Claims use since about Dec. 5, 1923.

Ser. No. 298,738. H. TH. BÖHME A. G., Chemnitz, Germany. Filed Apr. 12, 1930.

Fewa

For Soap Preparations.
Claims use since Jan. 9, 1930.

CLASS 6

Chemicals, Medicines, and Pharmaceutical Preparations

Ser. No. 279,277. HOUSE OF TRE-JUR, INC., New York, N. Y. Filed Feb. 13, 1929.



TRE-JUR

Applicant is the owner of registered Trade-Mark No. 193,646 covering the word "Tre-Jur."
For Face Powder, Talcum Powder, Compact Powder, Rouge, Cold Cream, Vanishing Cream, Lip-Stick Rouge, Hair Wash, Tooth Paste, Shampoo Preparations, Toilet Waters, and Perfume.
Claims use since Nov. 15, 1926.

Ser. No. 282,344. COSMETIC DISTRIBUTORS, INC., New York, N. Y. Filed Apr. 13, 1929.



For Salves for Scalp Ointment for Treatment of the Scalp.
Claims use since Feb. 7, 1929.

Ser. No. 288,601. THE ANTIDOLOR MFG. CO., INC., Springfield, N. Y. Filed Aug. 16, 1929.

Topanol

For Contact Anesthetic.
Claims use since about July 25, 1929.

Ser. No. 290,981. SWAN-FINCH OIL CORPORATION, New York, N. Y. Filed Oct. 11, 1929.

SOLTEX

For Soluble Textile Oils.
Claims use since Jan. 1, 1919.

Ser. No. 291,397. MARVO-LIN PRODUCTS CO., Newark, N. J. Filed Oct. 22, 1929.

MARVO-LIN

For Nonrubbing Liniment for Relieving Rheumatic Pains, Sprains, Bruises, Swellings, and Congestions.
Claims use since July 15, 1928.

Ser. No. 291,554. JEROME DE MOTT, New York, N. Y., assignor to Car-Bis-Sal, Inc., New York, N. Y., a Corporation of New York. Filed Oct. 25, 1929.

CAR-BIS-SAL

For Pharmaceutical Preparation, Which Said Preparation is Used to Relieve Acidosis.
Claims use since June, 1928.

Ser. No. 291,731. JOHN N. MCMATH, Upper Montclair, N. J. Filed Oct. 29, 1929.

Kis-Again

For Lip Sticks, Refills for Lip-Stick Holders, Lip Crayons, Lip Compact, Face Powder, Rouge, Skin Ointment, Skin Cream, Toilet Water, Perfume, Bath Powder, Bath Salts, Hand Lotion, Eyebrow Pencil.
Claims use since July 5, 1929.

Ser. No. 292,212. ARPAD ENOCH ILLES, doing business as A. E. Illes Company, Dallas, Tex. Filed Nov. 9, 1929.

Dr. B. G. Illes' 8–8–8 Powders



B. G. Illes M. D.

The portrait shown is that of Dr. B. G. Illes, deceased, and the name in script is a facsimile of the signature of the said Dr. Illes. The word "Powders" is disclaimed.
For Medicinal Preparations for the Relief of Fever, Neuralgia, Headache, Cold, Influenza, and Rheumatism.
Claims use since Nov. 9, 1927.

Ser. No. 292,651. LOUIS I. BLOCK, Chicago, Ill. Filed Nov. 21, 1929.

Varodene

For Facial Creams—Namely, Cleansing Cream, Bleach Cream, Skin Cream, and Freckle Cream; Hair Grower, Hand Cream, and Skin-Whitening Lotion.
Claims use since Sept. 10, 1929.

Ser. No. 292,849. DAGGETT & RAMSDELL, New York, N. Y. Filed Nov. 25, 1929.



The drawing is lined for shading purposes only.
For Toilet Creams, Toilet Lotions, Toilet Powders, Perfumes, Cosmetic Make-Up Toiletries, Cosmetic Manicure Toiletries, Cosmetic Hairdressing Toiletries, Cosmetic Body Toiletries, Oral-Hygiene Preparations, Bath Salts, Beauty Clay, Smelling Salts, Eye Wash, and Headache Cologne.
Claims use since Oct. 10, 1929.

Ser. No. 292,850. DAGGETT & RAMSDELL, New York, N. Y. Filed Nov. 25, 1929.



The drawing is lined for shading purposes only.
For Toilet Creams, Toilet Lotions, Toilet Powders, Perfumes, Cosmetic Make-Up Toiletries, Cosmetic Manicure Toiletries, Cosmetic Hairdressing Toiletries, Cosmetic Body Toiletries, Oral-Hygiene Preparations, Bath Salts, Beauty Clay, Smelling Salts, Eye Wash, and Headache Cologne.
Claims use since Oct. 10, 1929.

Ser. No. 292,855. DAGGETT & RAMSDELL, New York, N. Y. Filed Nov. 25, 1929.

DAGELLE

For Toilet Creams, Toilet Lotions, Toilet Powders, Perfumes, Cosmetic Make-Up Toiletries, Cosmetic Manicure Toiletries, Cosmetic Hairdressing Toiletries, Cosmetic Body Toiletries, Oral-Hygiene Preparations, Bath Salts, Beauty Clay, Smelling Salts, Eye Wash, and Headache Cologne.
Claims use since Oct. 10, 1929.

Ser. No. 293,230. HARRY POLLEY, doing business as Virgee Cosmetic Company, Cleveland, Ohio. Filed Dec. 4, 1929.



The label as shown on the accompanying drawing comprises silver printing on a violet background. The word "Dressing" is disclaimed apart from the mark as shown. The portrait constituting a feature of the mark is fanciful.
For a Compound Designed to Impart to Human Hair, Especially to Grey and White Hair, a Lustre and Silvery Shine, as Well as Softness, Especially to Dry, Harsh, and Brittle Hair, and to Contribute to the Relief of a Yellowish Hue Often Found Upon Grey and White Hair.
Claims use since October, 1929.

Ser. No. 293,488. JEAN BAPTISTE SALARNIER, Crepieux-Rillieux, France. Filed Dec. 10, 1929.

HARMELLE

For Perfumery and Toilet Cream.
Claims use since Apr. 14, 1904.

Ser. No. 293,672. LADY JANIS, INC., Chicago, Ill. Filed Dec. 14, 1929.



Applicant is the owner of registered Trade-Marks No. 169,469 and No. 170,028.
For Astringents, Astringent Cerates, Bleach Creams, Beauty Creams, Cold Creams, Cleansing Creams, Obesity Creams, Refreshing Creams, Obesity Astringents, Dry Rouges, Liquid Rouges, Face Bleaches, Face Packs, Eyebrow and Eyelash Grower, Eyedrops, Hand Lotions, Skin Lotions, Face Powders, Talcum Powders, Sachets, Hair Salves, Hair Elixirs, Hair Tonics, Hair Oils, Shampoos, Hair Dyes, Bath Salts, Smelling Salts, Lip Sticks, Incense, Tooth Powders, Mouth Washes, Dentifrices, Tooth Pastes, Nail Powders, Nail Creams, Nail Bleaches, Witch-Hazel, Peroxides, Petroleum Jellies, Witch-Hazel Salves, Camphor Creams, Foot Powders, Deodorants, Disinfectants, Bay Rum, Perfumes, and Toilet Waters.
Claims use since Mar. 1, 1922.

Ser. No. 293,856. WEINBERGER DRUG STORES, INC., Cleveland, Ohio. Filed Dec. 18, 1929.



For Cleansing Cream, a Preparation for Removing Cuticle and for Bleaching the Nails, Deodorant Paste, Double Astringent, Eyebrow Pencil, a Preparation for Beautifying the Eyelashes, Eye Shadow Cream, Face Powder, Lip Paste, Lip Stick, Liquid Deodorant, Muscle Oil, Rouge, Cold Cream, and Talcum Powder.
Claims use since July 19, 1927, on face powder and cleansing cream; since Oct. 21, 1929, on preparation for removing cuticle and for bleaching nails; since Aug. 3, 1929, on deodorant paste; since Oct. 10, 1929, on double astringent; since Dec. 4, 1929, on eyebrow pencil; since Nov. 12, 1929, on preparation for beautifying the eyelashes; since Dec. 12, 1929, on eye shadow cream and lip paste; since June 1, 1929, on lip stick; since Aug. 3, 1929, on liquid deodorant; since Aug. 9, 1929, on muscle oil; since Feb. 1, 1929, on rouge; since Aug. 29, 1929, on cold cream; and since Aug. 15, 1929, on talcum powder.

Ser. No. 293,857. WEINBERGER DRUG STORES, INC., Cleveland, Ohio. Filed Dec. 18, 1929.



For Cleansing Cream, a Preparation for Removing Cuticle and Bleaching Nails, Deodorant Paste, a Preparation for Beautifying the Eyelashes, Liquid Deodorant, Muscle Oil, Nail Polish, a Preparation for Removing Nail Polish, Cold Cream, Perfume, and Talcum Powder.
Claims use for and upon cleansing cream since Aug. 3, 1929; for and upon a preparation for removing cuticle and bleaching nails since Oct. 21, 1929; for and upon deodorant paste since Aug. 3, 1929; for and upon a preparation for beautifying the eyelashes since Nov. 12, 1929; for and upon liquid deodorant since Aug. 3, 1929; for and upon muscle oil since Aug. 9, 1929; for and upon nail polish since Oct. 1, 1929; for and upon a preparation for removing nail polish since Oct. 1, 1929; for and upon cold cream since Aug. 29, 1929; for and upon perfume since Nov. 11, 1929; and for and upon talcum powder since Aug. 15, 1929.

Ser. No. 294,042. WESTPHAL & SOHN GESELLSCHAFT MIT BESCHRÄNKTER HAFTUNG, Frankfort-on-the-Main, Germany. Filed Dec. 24, 1929.

Reglycol

For Preparation for Diabetes.
Claims use since April, 1921.

Ser. No. 294,944. DAN COHEN, doing business as American Chemical Manufacturing Co., Memphis, Tenn. Filed Jan. 17, 1930.

STAR-O

For Hairdressing, Skin Bleach.
Claims use since on or about June 10, 1919.

Ser. No. 295,000. TAR PRODUCTS CORPORATION, Providence, R. I. Filed Jan. 20, 1930.

HEXOLINEUM

For Insecticides.
Claims use since Nov. 21, 1929.

Ser. No. 295,521. THE KOLYNOS COMPANY, New Haven, Conn. Filed Feb. 3, 1930.

PARISETTE

For Toilet Preparations and Cosmetics—Namely, Rouge, Lip Sticks, Eyebrow Pencils, and Rouge and Powder Compacts.
Claims use since Dec. 27, 1929.

Ser. No. 295,734. DR. HESS & CLARK, INC., Ashland, Ohio. Filed Feb. 7, 1930. Under section 5b of the act of 1905, as amended in 1920.

DR. HESS

For Poultry, Astringent and Antiseptic Tablets, Louse and Other Insect Killers or Destroyers in Powdered Form, Animal and Poultry Dip and Disinfectant, Spray for Keeping Flies and Mosquitoes from Livestock, Poultry Worm Medicine, Vermifuge and Laxative for Poultry, Medicinal Preparation serving as a Tonic to the Appetite and Aid to Elimination and Supply for Mineral Deficiency in Feed for Horses, Hogs, Sheep, and Cows, and Antiseptic Powder.
Claims use since March, 1894.

Ser. No. 296,314. BARNES EMULSION CO., San Francisco, Calif. Filed Feb. 21, 1930.

BARNES EMULSION



The descriptive word "Emulsion" is disclaimed apart from the mark shown on the drawing. No claim is made to the surname "Barnes" apart from the mark as shown.

For Medicinal Preparation Used as a Worm Specific and as an Aid to Digestion and Assimilation of Food for Dogs, Cats, and Foxes.

Claims use since Oct. 10, 1929.

Ser. No. 296,365. WILLIAM J. STARK, Lincoln, Mo. Filed Feb. 21, 1930.



The words "External Compound" are disclaimed apart from the other features of the mark shown in the drawing.

For External Compound for Hogs Used in the Treatment of Cholera, Thumps, Swine Plague, Coughs, Worms, Lameness, Lice, Green Scours, and Constipation.

Claims use since Feb. 14, 1930.

Ser. No. 296,641. A. MADIE FIELDS, DeLand, Fla. Filed Feb. 28, 1930.



For Liniment for External Use in Treating Head Colds, Chest Colds, Sore Throat, Tonsilitis, Rheumatism, Swelling, Bruises, and Soreness.

Claims use since Feb. 14, 1930.

Ser. No. 296,698. SAMUEL GOLDBERG, doing business as d'Ormont Laboratories, Philadelphia, Pa. Filed Mar. 1, 1930.

FEMALGA TRADE MARK CAPSULES

Applicant disclaims the words "Trade Mark" and "Capsules" apart from the mark as shown on the drawing as being descriptive.

For Powder in Capsule Form Being Relief for Dysmenorhea.

Claims use since Feb. 1, 1929.

Ser. No. 296,867. J. L. HOPKINS & CO., New York, N. Y. Filed Mar. 5, 1930.

REDRATSQUIL

For Rat and Mouse Poison.

Claims use since Nov. 1, 1929.

Ser. No. 297,363. FAIRCHILD BROS. & FOSTER, New York, N. Y. Filed Mar. 15, 1930.

PEPSAMARA

For Gastric Extract to be Used as a Bitter Tonic and Designed to Promote Appetite and Digestion.

Claims use since Mar. 28, 1899.

Ser. No. 297,481. THE HARROWER LABORATORY, INC., Glendale, Calif. Filed Mar. 18, 1930.

THYMO-CORTIN

For Endocrine Solution for Use in Treatment of Certain Disturbances of Cellular Chemistry and Metabolism Associated with Dermatosis and/or Malignancy.

Claims use since Mar. 5, 1930.

Ser. No. 297,652. B. T. BABBITT, INC., New York, N. Y. Filed Mar. 21, 1930.



No claim being made to the exclusive use of the words "Fumeless Drain Pipe Solvent" apart from the mark as shown in the drawing.

For Drain-Pipe Solvent.

Claims use since January, 1930.

Ser. No. 297,860. KATHRYN FLEMING, Minneapolis, Minn. Filed Mar. 25, 1930.

KUTI-FIRMA

For Cream Used for Cleansing the Skin as a Base for Powder for Treating Rough or Chapped Skin and as a Finishing Cream for After Shaving.

Claims use since January, 1915.

Ser. No. 298,002. HOWARD HAMILTON BAKER, Buffalo, N. Y. Filed Mar. 28, 1930.

SparkL Incense

No claim is made to the word "Incense" apart from the mark shown.

For Incense.

Claims use since Jan. 10. 1930.

Ser. No. 298,025. HEALTH PRODUCTS CORPORATION, Newark, N. J. Filed Mar. 28, 1930.

Whites

The trade-mark consists of a facsimile of the signature of C. H. White, whose written permission to use his signature is attached hereto.

For Cod-Liver-Oil Concentrate.

Claims use since February, 1930.

Ser. No. 298,156. ISAAC DE KOVEN, doing business as De Koven Pharmaceutical Company, Not Inc., Chicago, Ill. Filed Mar. 31, 1930.

PENT FOR PAIN

Applicant disclaims any right to the words "For Pain" appearing in the trade-mark except in connection with the rest of the trade-mark.

For Liquid Preparation to be Externally Applied for the Relief of Pains, Sprains, Stiffness, and Soreness.

Claims use since Mar. 15, 1930.

Ser. No. 298,197. HARRY H. MYERS, doing business as Mobile Barber and Beauty Supply House, Mobile, Ala. Filed Mar. 31, 1930.



For Preparation for the Treatment of Dandruff.

Claims use since Nov. 15, 1929.

Ser. No. 298,205. NORTON C. ROSE, doing business as N. C. R. Laboratories, Minneapolis, Minn. Filed Mar. 31, 1930.



No claim being made to the use of the words "Natural Color Restorer" apart from the mark shown in the drawing. The drawing is lined for the color brown. However, the lining indicating the color brown is disclaimed. The portrait appearing on the drawing is fanciful.

For Hair-Color Restorer.

Claims use since about Jan. 1, 1927.

Ser. No. 298,247. LIONEL TRADING CO. INC., New York, N. Y. Filed Apr. 1, 1930.

FAUBY

For Perfumes, Toilet Waters, Face Lotions, Face Creams Face Powders, Rouges, and Lip Sticks.

Claims use since about 1926.

Ser. No. 298,272. ANTHONY CENTO, doing business as A. Cento, St. Louis, Mo. Filed Apr. 2, 1930.

GLORIAS

For Toilet Preparations—Namely, Hair Tonics and Dressings.
Claims use since about February, 1925.

Ser. No. 298,434. FAIRCHILD BROS. & FOSTER, New York, N. Y. Filed Apr. 5, 1930.

HEMOKIN

For Preparation of Beef Muscle and Stomach Substance to be Used in the Form of a Dry Granular Powder Designed for the Treatment of Anemia.
Claims use since Feb. 26, 1930.

Ser. No. 298,435. FAIRCHILD BROS. & FOSTER, New York, N. Y. Filed Apr. 5, 1930.

HEPKOL

For Preparation of the Liver in Dry Powder Form Designed for Use in the Treatment of Metabolic Disorders.
Claims use since Mar. 13, 1930.

Ser. No. 298,476. JOHN R. ALLEN, Gary, Ind. Filed Apr. 7, 1930.

J. R. ALLEN'S K. ✝ T.

For Preparation for the Treatment of Rheumatism.
Claims use since October, 1929.

Ser. No. 298,515. CLARENCE A. SCHNEIDER, doing business as Schneider's Laboratories, Detroit, Mich. Filed Apr. 7, 1930.

GREEN TOP

For Cold Capsules.
Claims use since May 14, 1929.

Ser. No. 298,569. DOROTHY GRAY, Bloomfield, N. J. Filed Apr. 9, 1930.

Texture

For Skin Lotion.
Claims use since about December, 1928.

Ser. No. 298,586. NYANZA COLOR & CHEMICAL CO. INC., New York, N. Y. Filed Apr. 9, 1930.

MELLOSTRINE

For Chemical Product for Treating and Finishing Textile Fibers.
Claims use since Mar. 26, 1930.

Ser. No. 298,628. WM. M. GAMBILL, doing business as Ogene Co., Abilene, Tex. Filed Apr. 10, 1930.

O G E N E

For Mouth Wash and Dentifrice.
Claims use since May 20, 1928.

Ser. No. 298,631. HENRY & HENRY, INC., New York, N. Y. Filed Apr. 10, 1930.

HAVOK

For Insecticides.
Claims use since Mar. 19, 1930.

Ser. No. 298,658. PUBLICKER INCORPORATED, Philadelphia, Pa. Filed Apr. 10, 1930.

Thermice

For Solidified Carbon Dioxide.
Claims use since Apr. 2, 1930.

Ser. No. 298,704. KAY LABORATORIES, INC., West Haverstraw, N. Y. Filed Apr. 11, 1930.

NICOTROL

For Agricultural Insecticides.
Claims use since Dec. 14, 1929.

Ser. No. 298,706. KAY LABORATORIES, INC., West Haverstraw, N. Y. Filed Apr. 11, 1930.

PENETROL

For Agricultural Insecticides.
Claims use since June 20, 1929.

Ser. No. 298,721. SPOONER, INC., New York, N. Y. Filed Apr. 11, 1930.

GENESSE

For Perfumes, Toilet Waters, Face Lotions, Hand Lotions, Facial Creams, Waving Fluids, Rouges, Brilliantine, Lip Sticks, Face Powders, Sachets, Eyebrow Pencils, Bath Salts, Talcums, Shampoos, Nail Polishes, Hair Tonics.
Claims use since Mar. 25, 1928.

Ser. No. 298,722. STANCO INCORPORATED, Wilmington, Del., and New York, N. Y. Filed Apr. 11, 1930.



No claim is made to the representation of a carton per se, and no claim is made to the printed language other than the words "Mistol" and "Stanco Incorporated." The portraits shown in the drawing are fanciful. The drawing is lined for shading purposes only.
For Nose and Throat Spray.
Claims use since Mar. 12, 1930.

Ser. No. 298,723. STANCO INCORPORATED, Wilmington, Del., and New York, N. Y. Filed Apr. 11, 1930.





The lining shown on the drawing is used for shading purposes only. No claim is made to the representation of a label per se nor to the printed language other than the words "Mistol" and "Stanco Incorporated."
For Nose and Throat Spray.
Claims use since Mar. 12, 1930.

Ser. No. 298,737. H. TH. BÖHME A. G., Chemnitz, Germany. Filed Apr. 12, 1930.

Eusmenol

For Chemical Dye Aids—Namely, Moistening Preparations, Thread and Fibre Protecting Preparations, Thread and Fibre Penetrating Preparations, Smoothing Preparations, and Tanning Preparations.
Claims use since Dec. 4, 1929.

Ser. No. 298,739. H. TH. BÖHME A. G., Chemnitz, Germany. Filed Apr. 12, 1930.

Praedigen

For Chemical Dye Aids—Namely, Moistening Preparations, Thread and Fibre Protecting Preparations, Thread and Fibre Penetrating Preparations, Smoothing Preparations, and Tanning Preparations.
Claims use since Jan. 9, 1930.

Ser. No. 298,741. H. TH. BÖHME A. G., Chemnitz, Germany. Filed Apr. 12, 1930.

Smenol

For Chemical Dye Aids—Namely, Moistening Preparations, Thread and Fibre Protecting Preparations, Thread and Fibre Penetrating Preparations, Smoothing Preparations, and Tanning Preparations.
Claims use since Dec. 4, 1929.

Ser. No. 298,750. I. G. FARBENINDUSTRIE AKTIENGESELLSCHAFT, Frankfort-on-the-Main, Germany. Filed Apr. 12, 1930.

Nosuprin

For Anæsthetic.
Claims use since about November, 1924.

Ser. No. 298,751. I. G. FARBENINDUSTRIE AKTIENGESELLSCHAFT, Frankfort-on-the-Main, Germany. Filed Apr. 12, 1930.

„Paranoval"

For Hypnotic.
Claims use since about August, 1924.

Ser. No. 298,752. I. G. FARBENINDUSTRIE AKTIENGESELLSCHAFT, Frankfort-on-the-Main, Germany. Filed Apr. 12, 1930.

Voluntal

For Hypnotic and Sedative.
Claims use since about October, 1922.

Ser. No. 298,757. J. C. MERRISH, doing business as Oralee Freres. New York, N. Y. Filed Apr. 12, 1930.

HOLLYWOOD NIGHTS
ORALEE FRERES

For Perfumes.
Claims use since Mar. 19, 1930.

Ser. No. 298,783. BONIDE CHEMICAL CO. INC., Utica, N. Y. Filed Apr. 14, 1930.

SANASEED

For Poisoned Seed for Killing Mice.
Claims use since Mar. 4, 1930.

CLASS 7

Cordage

Ser. No. 298,249. MANVILLE JENCKES COMPANY, Pawtucket, R. I. Filed Apr. 1, 1930.



For Cotton Cord.
Claims use since Feb. 24, 1930.

CLASS 8

Smokers' Articles, Not Including Tobacco Products

Ser. No. 266,103. SOCIETE ANONYME DES ANCIENS ETABLISSEMENTS BRAUNSTEIN FRERES, Paris, France. Filed May 8, 1928. Under 10-year proviso.



For Cigarette Paper.
Claims use since Aug. 8, 1888.

Ser. No. 298,164. GENERAL-DIREKTION DER ÖSTERR. TABAKREGIE, Vienna, Austria. Filed Mar. 31, 1930.

HELIANE

For Cigarette Paper, Cigarette Tubes, Cigarette Holders, Cigar Holders, and Tobacco Pipes.
Claims use since Feb. 24, 1930.

CLASS 9

Explosives, Firearms, Equipments, and Projectiles

Ser. No. 295,541. HUGO SEUTHE, Richrath, near Dusseldorf, Germany. Filed Feb. 3, 1930.

Seuthelin

For Flash-Light Powder for Photography.
Claims use since Feb. 27, 1929.

CLASS 11.

Inks and Inking Materials

Ser. No. 297,599. C. HOWARD HUNT PEN COMPANY, Camden, N. J. Filed Mar. 20, 1930.



For Lettering, Writing, and Drawing Ink.
Claims use since Feb. 24, 1930.

CLASS 12

Construction Materials

Ser. No. 281,890. ASBESTOS SHINGLE, SLATE & SHEATHING COMPANY, Ambler, Pa. Filed Apr. 5, 1929.

DUOFACE

For Fireproof Roofing Covering, Roofing Slate, Shingles.
Claims use since Mar. 12, 1929.

Ser. No. 292,863. BONDED MATERIALS COMPANY, Louisville, Ky. Filed Nov. 25, 1929.

"GILASFO"

For Semifluid Roof Coating and Waterproofing Asphaltic Compounds.
Claims use since Nov. 13, 1929.

Ser. No. 296,023. WALLACE G. PALMER, Jr., doing business as The Beutect Company, North Tonawanda, N. Y. Filed Feb. 14, 1930.

BEUTECT

For Lumber Either Unprotected by Pigment or Prestained or Prepainted Lumber and Fasteners Used in Connection with the Lumber for Securing the Same in Place.
Claims use since Nov. 6, 1929.

Ser. No. 297,167. AMERICAN ABRASIVE METALS COMPANY, New York, N. Y. Filed Mar. 12, 1930.

NICALUN

For a Surface Layer of Hard Granular Mineral Elements—Namely, Stair Treads, Elevator-Door Sills, and Door Saddles, and Other Antislip Walkway Surfaces.
Claims use since Feb. 25, 1930.

CLASS 13

Hardware and Plumbing and Steam-Fitting Supplies

Ser. No. 288,462. ALUMINUM INDUSTRIES, INC., Cincinnati, Ohio. Filed Aug. 13, 1929.

DIAMOND

For Vehicle and Machinery Bolts.
Claims use since on or about February, 1923.

Ser. No. 291,815. THE CHICAGO FAUCET CO., Chicago, Ill. Filed Oct. 31, 1929.

Add-A-Shower

No claim is made to the word "Shower" apart from the mark as shown.
For Bath Faucets.
Claims use since Mar. 22, 1929.

Ser. No. 294,684. NORTHWESTERN BARB WIRE COMPANY, Sterling, Ill. Filed Jan. 11, 1930.

RED HEAD

For Wire Bale Ties.
Claims use since Nov. 25, 1929.

Ser. No. 294,685. NORTHWESTERN BARB WIRE COMPANY, Sterling, Ill. Filed Jan. 11, 1930.

GOLD BAND

For Wire Bale Ties.
Claims use since Nov. 25, 1929.

Ser. No. 296,129. THOMAS E. MARKLEY, Los Angeles, Calif. Filed Feb. 17, 1930.



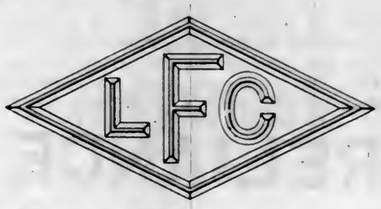
For Metal Fixtures for Shades, Awnings, and Canopies, Such as Brackets, Etc.
Claims use since Jan. 5, 1930.

Ser. No. 298,475. THE YALE & TOWNE MFG. CO., Stamford, Conn. Filed Apr. 5, 1930.

YALE
JUNIOR

For Door Stops, Transom Centers, Drawer Pulls, Butts, Casement-Window Adjusters, Wrought Escutcheon Plates, and Repair Parts Therefor.
Claims use since Mar. 25, 1930.

Ser. No. 298,579. LYNCHBURG FOUNDRY COMPANY, Lynchburg, Va. Filed Apr. 9, 1930.



For Cast-Iron Pipe and Fittings.
Claims use since 1922.

CLASS 14

Metals and Metal Castings and Forgings

Ser. No. 296,904. Continental Typefounders Association, Inc., New York, N. Y. Filed Mar. 6, 1930.

METROPOLIS

For Printer's Type.
Claims use since about October, 1929.

Ser. No. 296,905. Continental Typefounders Association, Inc., New York, N. Y. Filed Mar. 6, 1930.

SPHINX

For Printer's Type.
Claims use since Jan. 1, 1929.

Ser. No. 296,907. Continental Typefounders Association, Inc., New York, N. Y. Filed Mar. 6, 1930.

Gloria

For Printer's Type.
Claims use since September, 1929.

Ser. No. 296,908. Continental Typefounders Association, Inc., New York, N. Y. Filed Mar. 6, 1930.

EVE

For Printer's Type.
Claims use since January, 1927.

Ser. No. 297,893. Calumet Electric Casteel Co., Hammond, Ind. Filed Mar. 26, 1930.

CASTEEL

For Steel Castings.
Claims use since Mar. 10, 1930.

Ser. No. 297,949. The American Steel and Wire Company of New Jersey, Cleveland, Ohio; Chicago, Ill.; Pittsburgh, Pa.; New York, N. Y.; Worcester, Mass.; and Hoboken, N. J. Filed Mar. 27, 1930.

RELIANCE

For Wire.
Claims use since Jan. 1, 1914.

Ser. No. 297,998. American Lead Company, Indianapolis, Ind. Filed Mar. 28, 1930.

ARROW

For Soft Lead and Babbitt Metal.
Claims use since February, 1930.

Ser. No. 298,722. The West Steel Casting Company, Cleveland, Ohio. Filed Apr. 11, 1930.

CUMLOYCAST

For Ferrous Castings.
Claims use since about July 3, 1929.

CLASS 15

Oils and Greases

Ser. No. 293,483. Petroleum Conversion Corporation, New York, N. Y., and Texas City, Tex. Filed Dec. 10, 1929.



In the drawing the vertical lining of the flames or streamers is to indicate red. Applicant disclaims the words "True Vapor Phase" apart from the mark shown.
For Motor-Fuel Oils.
Claims use since June 1, 1928.

Ser. No. 295,419. Beacon Oil Company, Boston, Mass. Filed Jan. 31, 1930.

DOUBLE-QUICK!

For Refined, Semirefined, and Unrefined Oils and Greases Made from Petroleum Both with and without Admixture of Animal, Vegetable, or Mineral Substances for Illuminating, Burning, Power, Fuel, and Lubricating Purposes, and Lubricating Greases.
Claims use since Dec. 11, 1929.

Ser. No. 297,272. G. Whitfield Richards, Philadelphia, Pa. Filed Mar. 13, 1930.

LUBE-A-TUBE

For Metal Drawing Compound Lubricants Made from Oils and Lubricants.
Claims use since 1909.

Ser. No. 297,869. Metasap Chemical Company, Harrison, N. J. Filed Mar. 25, 1930.

BASE 532

Applicant disclaims the use of the word "Base" apart from the mark as shown.
For Grease Bases Used in Blending with Mineral Oils Such as Paraffine Oils, Spindle Oils, &c, Which Have a Solidifying Effect Producing Lubricants of Various Types.
Claims use since Feb. 27, 1929.

CLASS 16

Paints and Painters' Materials

Ser. No. 282,307. Meol Co., Inc., Los Angeles, Calif. Filed Apr. 12, 1929.

MEOL BRAND

No claim being made to the word "Brand" apart from the mark shown.
For Lacquers.
Claims use since Jan. 15, 1929.

Ser. No. 295,262. Charles Eneu Johnson & Company, Philadelphia, Pa. Filed Jan. 27, 1930.

CARBON ATLANTIC MADE IN U.S.A. BLACK

The words "Carbon Black" and "Made in U. S. A." are disclaimed apart from the trade-mark shown in the drawing.
For Carbon Black.
Claims use since Dec. 15, 1929.

Ser. No. 295,702. United Color & Pigment Co., Newark, N. J. Filed Feb. 6, 1930.

TIDOLITH

For Paint Pigments.
Claims use since July 24, 1929.

Ser. No. 298,983. The Egyptian Lacquer Manufacturing Company, New York, N. Y. Filed Apr. 17, 1930.

ACTINO

For Lacquer.
Claims use since Nov. 25, 1929.

CLASS 17

Tobacco Products

Ser. No. 297,632. The Tobacco Export Company, Inc., Clarksville, Tenn. Filed Mar. 20, 1930.

-POCAHONTAS-
-NATURAL-

Applicant disclaims use of the word "Natural" apart from the mark "Pocahontas."
For Prepared Leaf Tobacco.
Claims use since Jan. 4, 1929.

Ser. No. 298,118. ROY R. SMITH, Red Lion, Pa. Filed Mar. 29, 1930.

HELLO WORLD

For Cigars.
Claims use since Jan. 1, 1930.

CLASS 19

Vehicles, Not Including Engines

Ser. No. 281,390. AMERICAN AERONAUTICAL CORPORATION, New York, N. Y. Filed Mar. 27, 1929.



For Aeroplanes, Seaplanes, Flying Boats, and Amphibian Aeroplanes.
Claims use since Feb. 5, 1929.

Ser. No. 294,901. THERMO INSTRUMENT COMPANY, Norfolk, Va. Filed Jan. 17, 1930.

AUTO TAB

For Service-Recording Attachments for Automobiles and the Like.
Claims use since September, 1926.

Ser. No. 297,477. GAGNIER FIBRE PRODUCTS COMPANY, doing business as The Super-Visor Company, Detroit, Mich. Filed Mar. 18, 1930.

Super-Visor

No claim is made to the word "Visor" apart from the mark as shown.
For Antiglare Shield for Automobiles or Other Vehicles.
Claims use since Jan. 23, 1930.

Ser. No. 298,213. E. L. SUTTER, St. Paul, Minn. Filed Mar. 31, 1930.

Sleet-Master

For Apparatus Utilizing Engine Heat for Preventing the Accumulation of Sleet and Frost on the Windshields of Automobiles.
Claims use since Mar. 1, 1930.

CLASS 20

Linoleum and Oiled Cloth

Ser. No. 296,664. NEW JERSEY BONDED FLOOR CO., Garfield, N. J. Filed Feb. 28, 1930.

BEAUCRAFT

For Linoleum Floor Coverings.
Claims use since Oct. 28, 1929.

CLASS 21

Electrical Apparatus, Machines, and Supplies

Ser. No. 291,262. AUTOMATIC SIGNAL CORPORATION, New Haven, Conn. Filed Oct. 19, 1929.

=TRAFF-O-MATIC=

For Automatic Electric Traffic-Control Systems.
Claims use since Oct. 1, 1929.

Ser. No. 295,908. TAYLOR-TRAVERS CORPORATION, LTD., Los Angeles, Calif. Filed Feb. 11, 1930.

RADIOWL

The word "Radio" is disclaimed apart from the mark shown in the drawing.
For Radio Circuit Time Switches.
Claims use since July 1, 1928.

Ser. No. 296,456. SWIFT ELECTRIC WELDER COMPANY, Detroit, Mich. Filed Feb. 24, 1930.

SWIFT

For Electric Welding Machinery Consisting of Spot Welders, Butt Welders, Flash Welders, Seam Welders, and Special Welding Machines.
Claims use since about Aug. 1, 1925.

Ser. No. 296,528. GEORGE F. KEEGAN, Cincinnati, Ohio. Filed Feb. 26, 1930.

MOTOR PEP

For Spark-Plug Protectors, Which are Metal Caps Adapted to Fit Over the Spark-Plug Points and Protect the Same from Oil and Carbon.
Claims use since Jan. 16, 1930.

Ser. No. 297,190. HARRISON WHOLESALE COMPANY, Chicago, Ill. Filed Mar. 12, 1930.

GOLD LABEL

Right to exclusive use of a label colored gold is hereby disclaimed.
For Storage Batteries.
Claims use since Jan. 1, 1920.

Ser. No. 297,213. STONE FOG LIGHT CORPORATION, Los Angeles, Calif. Filed Mar. 12, 1930.

AMBERAY

The representation of a headlight and the word "Amberay" are disclaimed apart from the mark shown in the drawing.
For Headlights, Searchlights and Lenses for the Same.
Claims use since Oct. 1, 1927.

Ser. No. 297,628. THERMADAIRE CORPORATION, New York, N. Y. Filed Mar. 20, 1930.

THERMADAIRE

For Electric Room Heaters of the Reflector Type.
Claims use since about Mar. 3, 1930.

Ser. No. 298,368. AMERICAN ELECTRIC COMPANY, INC., Chicago, Ill. Filed Apr. 4, 1930.

Monotype

For Operator's Telephone Switchboard.
Claims use since May 22, 1929.

CLASS 22

Games, Toys, and Sporting Goods

Ser. No. 276,103. CHAS. A. STEVENS & BROS., Chicago, Ill. Filed Nov. 30, 1928.

DECORATIVE PLAYING CARDS



No claim is made to the words "Decorative Playing Cards" apart from the mark as shown.
For Playing Cards.
Claims use since June, 1924.

Ser. No. 285,137. ALL-FAIR, INCORPORATED, Churchville, N. Y. Filed June 6, 1929.

ALL-FAIR

For Horse Game, Shooting Game, Air-Race Games, Automobile Games, Fortune-Telling Game, Noah-Ark Game, Traffic Game, Geography-Type Games, Ring-Toss Games, Bell-Boy Game, Tiddley-Wink-Type Games, Lotto-Type Game, Checker-Type Games, Radio Game, Parcheesi-Type Games, Projectile-Type Games, Bowling-Type Games, Tennis and Baseball Type Game, Ball-Toss Game, Buying and Selling Type Game, and Figure Toys.
Claims use since Apr. 1, 1922.

Ser. No. 291,489. FRANK H. READ, doing business as Novelty Advertising Company, Los Angeles, Calif. Filed Oct. 23, 1929.

AIRACER

For Toy Airplanes and Toy-Airplane Catapults.
Claims use since July, 1929.

Ser. No. 295,364. DAVEGA, INC., New York, N. Y. Filed Jan. 30, 1930.

FLEETWING

For Golf Balls.
Claims use since Oct. 15, 1929.

Ser. No. 296,801. DAVEGA, INC., New York, N. Y. Filed Mar. 4, 1930.

Ketch-um

For Fishing-Tackle Outfits, Not Including Bait.
Claims use since Jan. 10, 192..

Ser. No. 297,403. ARRANBEE DOLL CO., New York, N. Y. Filed Mar. 17, 1930.

NANCY
ARRANBEE
DOLLS

No claim is made to the words "Trade Mark" and "Dolls" and to the representation of the goods apart from the mark shown on the drawing.
For Doll Bodies.
Claims use since Mar. 3, 1930.

Ser. No. 298,027. HOLGATE BROTHERS COMPANY, Kane, Pa. Filed Mar. 28, 1930.

HOLGATE
SINCE 1789

For Toy Building Blocks Made of Plain Wood, Toy Building Bricks Colored Red, Jerry Blocks Comprising Toy Blocks Made from Plain Wood, Porcupine Blocks Comprising Toy Blocks Finished in Colors, Toy Animals and Barns Finished in Colors, Toy Easels, Toy Wheelbarrows, and Playground Equipment Comprising Slides, Sand Boxes, Swings, and Seesaws.
Claims use since Jan. 1, 1920.

Ser. No. 298,068. PAGE D. BALLARD, doing business as The Crest Playing Card Co., Chicago, Ill. Filed Mar. 29, 1930.

ROYAL CREST

For Playing Cards.
Claims use since September, 1929.

Ser. No. 298,692. THE ENTERPRISE MANUFACTURING COMPANY, Akron, Ohio. Filed Apr. 11, 1930.

SNAPIE

For Artificial Bait, Such as Spinners.
Claims use since Apr. 1, 1930.

Ser. No. 298,693. THE ENTERPRISE MANUFACTURING COMPANY, Akron, Ohio. Filed Apr. 11, 1930.

T·N·T

For Artificial Bait, Such as Minnows.
Claims use since Apr. 1, 1930.

CLASS 23

Cutlery, Machinery, and Tools, and Parts Thereof

Ser. No. 280,716. KLAUER MANUFACTURING COMPANY, Dubuque, Iowa. Filed Mar. 14, 1929.

K

For Corn Shellers, Vises, Road Graders, Road Scrapers, Road Levelers, Gravel Sifters, Road Scarifiers, Road Drags, Wild-Oats Separators; Roofing Tools, Consisting of Hammers, Knives, Shapers, Trimmers, and Solder Irons; Metal-Working Machinery, Consisting of Metal-Forming Tools, Drills, Lathes, Planers, Grinding Machines, Riveting Hammers, and Shapers; and Snowplows.
Claims use since January, 1906.

Ser. No. 287,525. FRIEDRICH DECKEL, doing business as Prazisionsmechanik und Maschinenbau, Munich, Germany. Filed July 23, 1929.

COMPUR

For Transmission Gears and Fuel-Injection Devices for Diesel Engines.
Claims use since January, 1927.

Ser. No. 298,070. SOABAR COMPANY, Philadelphia, Pa. Filed Apr. 10, 1930.

SOABAR COMPANY

For Power Pin-Ticketing Machines, Power Gummed-Label-Marking Machines, Power Sew-Ticketing Machines, Power Tag Markers, Power Ticket and Label Markers, Power Ticket Markers, and Hand Gummed-Label Markers.
Claims use since June 1, 1921, on power pin-ticketing machines; since Oct. 27, 1921, on power gummed-label-Marking Machines; since Feb. 22, 1922, on power sew-ticketing machines; since Sept. 30, 1922, on power tag markers; since Feb. 7, 1928, on power ticket and label markers; since Feb. 19, 1926, on power ticket markers; and since Feb. 21, 1928, on hand gummed-label markers.

CLASS 24

Laundry Appliances and Machines

Ser. No. 294,377. THE AMERICAN LAUNDRY MACHINERY COMPANY, Norwood Station, Cincinnati, Ohio. Filed Jan. 4, 1930.

AMERICAN ULTRA SPEED TUMBLER

No claim is made to the use of the words "Speed Tumbler" apart from the mark as shown.
For Drying Machines for Removing Moisture or Cleaning Fluids from Fabrics, Clothing, and the Like.
Claims use since Aug. 7, 1929.

Ser. No. 294,789. THE BARTON CORPORATION, West Bend, Wis. Filed Jan. 15, 1930.

LaSalle

For Laundry Washing Machines.
Claims use since on or about June, 1929.

Ser. No. 294,791. THE BARTON CORPORATION, West Bend, Wis. Filed Jan. 15, 1930.

VIKING

For Laundry Washing Machines.
Claims use since on or about August, 1929.

Ser. No. 294,922. GRINNELL WASHING MACHINE CORPORATION, Grinnell, Iowa. Filed Jan. 18, 1930.

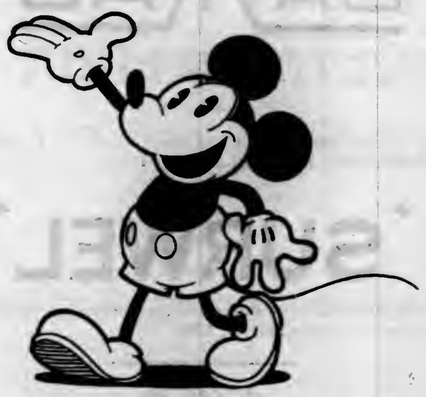
GRINNELL
QUAKER MAID

The lining representing the colors blue and green in the mark are disclaimed as apart from the mark as shown in the drawing. The words "Manufactured by" and "Grinnell, Iowa," are disclaimed apart from the mark as shown in the drawing.
For Laundry Washing Machines.
Claims use since Jan. 3, 1929.

CLASS 26

Measuring and Scientific Appliances

Ser. No. 285,411. WALTER E. DISNEY, Hollywood, Calif. Filed June 11, 1929.



For Motion Pictures Reproduced in Copies for Sale.
Claims use since May 1, 1928.

Ser. No. 285,412. WALTER E. DISNEY, Hollywood Calif. Filed June 11, 1929.



For Motion Pictures Reproduced in Copies for Sale.
Claims use since on or about May 1, 1928.

Ser. No. 296,691. CONTINENTAL OPTICAL COMPANY, Indianapolis, Ind. Filed Mar. 1, 1930.

MONARCH

For Spectacle Frames.
Claims use since May, 1929.

Ser. No. 297,369. SYDNEY KANN, doing business as Sydney Kann and Company, Detroit, Mich. Filed Mar. 15, 1930.

CORECTO

For Goggles and Sun Glasses.
Claims use since Jan. 1, 1930.

Ser. No. 297,539. THE RADIO PRODUCTS CO., Dayton, Ohio. Filed Mar. 19, 1930.

DAYRAD

For Radio-Tube-Testing Devices.
Claims use since Jan. 16, 1930.

Ser. No. 297,940. SPERRY SUN WELL SURVEYING COMPANY, Philadelphia, Pa. Filed Mar. 26, 1930.

"SURWEL"

For Instruments for Surveying the Courses of Bore Holes.
Claims use since Feb. 17, 1930.

CLASS 28

Jewelry and Precious-Metal Ware

Ser. No. 294,385. CHARLES H. GROUNDS, doing business as The MacGregor Company, Pittsfield, Mass. Filed Jan. 4, 1930.

kuff-bak

For Sleeve Holders of Precious Metal.
Claims use since Nov. 1, 1929.

Ser. No. 296,428. ISIDOR KOTTLE, doing business as Continental Mfg. Co., New York, N. Y. Filed Feb. 24, 1930.

Gotham

For Silverware, Consisting of Flat and Hollow Table Silver, Silver Piece Ware—Namely, Bread Trays, Candy Dishes, Serving Trays, and Silver Vases.
Claims use since 1894.

Ser. No. 297,364. FRIEDMAN RING COMPANY, Chicago, Ill. Filed Mar. 15, 1930.



For Finger Rings of Precious Metals.
Claims use since Jan. 1, 1930.

Ser. No. 297,426. JOSEPH GRANAT, doing business as Granat Bros., San Francisco, Calif. Filed Mar. 17, 1930.

Bow-Knot

For Finger Rings.
Claims use since Mar. 1, 1930.

Ser. No. 297,663. DREHER BROS. & WIDER, New York, N. Y. Filed Mar. 21, 1930.

Star Ray

For Synthetic Semiprecious Stones.
Claims use since Feb. 26, 1930.

Ser. No. 297,841. ARMBRUST CHAIN COMPANY, Providence, R. I. Filed Mar. 25, 1930.



For Bracelets, Wrist-Watch Bracelets, Bracelet Chains, Watch Chains, Neck Chains, Fob Chains, Girdle Chains, Anklets, Sautoirs, and Necklaces.
Claims use since on or about Feb. 18, 1930.

Ser. No. 297,952. BLACKSTONE SILVER COMPANY, INC., Stratford, Conn. Filed Mar. 27, 1930.

DELHAND

For Silver-Plated Flat Tableware.
Claims use since Jan. 15, 1930.

CLASS 29

Brooms, Brushes, and Dusters

Ser. No. 292,851. DAGGETT & RAMSDELL, New York, N. Y. Filed Nov. 25, 1929.



The drawing is lined for shading purposes only.
For Powder Puffs and Absorbent Powder Puffs.
Claims use since Oct. 10, 1929.

Ser. No. 297,419. SAMUEL M. DELL & CO., INC., Baltimore, Md. Filed Mar. 17, 1930.

PROPELLER

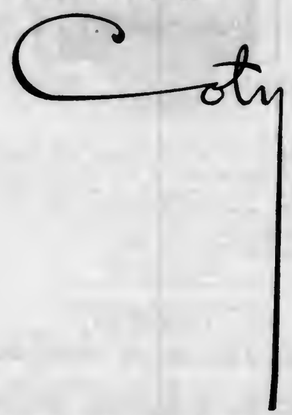
For Paintbrushes.
Claims use since January, 1930.

Ser. No. 297,783. SUPERSET BRUSH CO., INC., New York, N. Y. Filed Mar. 22, 1930.

Superset
KEENHAND

For Paintbrushes.
Claims use since Mar. 1, 1930.

Ser. No. 298,080. COTY, INC., Wilmington, Del., and New York, N. Y. Filed Mar. 29, 1930.



The trade-mark shown in the accompanying drawing being the facsimile signature of the president of the applicant corporation.
For Nailbrushes.
Claims use since Oct. 21, 1929.

Ser. No. 298,274. DAGGETT & RAMSDELL, New York, N. Y. Filed Apr. 2, 1930.

Vivatone

For Cleansing Puffs and Absorbent Puffs.
Claims use since Nov. 16, 1928.

CLASS 31

Filters and Refrigerators

Ser. No. 298,023. GOSLIN-BIRMINGHAM MANUFACTURING CO., INC., Birmingham, Ala. Filed Mar. 28, 1930.

VALLEZ ROTARY FILTER

No claim is made to the exclusive use of the words "Rotary Filter" apart from the mark as shown.
For Filters.
Claims use since Feb. 15, 1918.

CLASS 32

Furniture and Upholstery

Ser. No. 297,714. YAWMAN AND ERBE MFG. CO., Rochester, N. Y. Filed Mar. 21, 1930.

FIRM-A-FILE

For Transverse Partition Plates for Filing-Cabinet Drawers.
Claims use since Feb. 1, 1930.

CLASS 33.

Glassware

Ser. No. 297,629. THOMA GLASS INC., Fairfield, Iowa. Filed Mar. 20, 1930.



The drawing is lined to indicate the color blue. All the wording shown on the drawing, except the words "Thoma, Firepol," and "The Blue Seal" are disclaimed apart from the mark shown.
For Glass.
Claims use since Jan. 1, 1930.

Ser. No. 297,630. THOMA GLASS INC., Fairfield, Iowa. Filed Mar. 20, 1930.



The drawing is lined to indicate the color blue. The words "Glass" and "Quality" are disclaimed apart from the mark shown.
For Glass.
Claims use since Jan. 1, 1930.

CLASS 34

Heating, Lighting, and Ventilating Apparatus, Not Including Electrical Apparatus

Ser. No. 294,891. THE PHANTOM STOKER COMPANY, Cleveland, Ohio. Filed Jan. 17, 1930.

PHANTOM

For Domestic Coal Stokers.
Claims use since about Aug. 27, 1929.

Ser. No. 297,222. FRANK W. AIKIN, doing business as International Oil Burner Co., Watertown, N. Y. Filed Mar. 13, 1930.



No claim being made to the words "Silent Oil Burner" apart from the mark shown. The drawing is shown as lined for red.
For Oil Burners.
Claims use since Dec. 1, 1928.

Ser. No. 297,306. HARWIN HEATER CO., INC., New Haven, Conn. Filed Mar. 14, 1930.

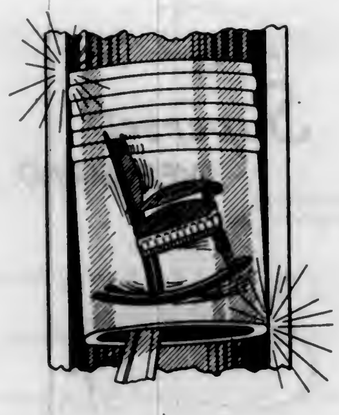
CLIMATE CREATOR

For Coal, Gas, or Oil Burning, Steam-Heating Systems for Buildings.
Claims use since Jan. 1, 1929.

CLASS 35

Belting, Hose, Machinery Packing, and Non-metallic Tires

Ser. No. 298,045. RAMSEY ACCESSORIES MANUFACTURING CORPORATION, St. Louis, Mo. Filed Mar. 28, 1930.



The representation of the piston and rings and connecting rod in the section of the cylinder is hereby disclaimed apart from the mark as shown. The drawing is not lined for color, but for shading only.
For Piston Rings.
Claims use since Feb. 24, 1930.

CLASS 36

Musical Instruments and Supplies

Ser. No. 236,481. THE FRED. GRETSCH MFG. CO., New York, N. Y. Filed Aug. 26, 1926.

Music Master

For Harmonicas (Mouth Organs).
Claims use since about 1912.

Ser. No. 280,650. RAYMOND M. LANG, doing business as Lang Manufacturing Company, Hoffman, Minn. Filed Mar. 13, 1929.

Whoopee

For Musical Jugs.
Claims use since Feb. 5, 1929.

Ser. No. 293,192. C. A. RICHARDS, INC., New York, N. Y. Filed Dec. 3, 1929.



For Phonographs.
Claims use since about Aug. 1, 1929.

Ser. No. 294,383. BUEGELEISEN & JACOBSON, New York, N. Y. Filed Jan. 4, 1930.

STERLING
TRADE MARK

Applicant disclaims the words "Sterling" and "Trade Mark" apart from the mark shown in the drawing.
For Accordions.
Claims use since June 1, 1929.

CLASS 37

Paper and Stationery

Ser. No. 281,861. STANDARD PRODUCTS CORPORATION, New York, N. Y. Filed Apr. 4, 1929.

FOAMLITE

For Tissue Paper.
Claims use since about July 1, 1911.

Ser. No. 292,853. DAGGETT & RAMSDELL, New York, N. Y. Filed Nov. 25, 1929.

DAGGETT & RAMSDELL
d and r

The drawing is lined for shading purposes only.
For Cleansing Tissue.
Claims use since Oct. 10, 1929.

Ser. No. 292,854. DAGGETT & RAMSDELL, New York, N. Y. Filed Nov. 25, 1929.



The drawing is lined for shading purposes only.
For Cleansing Tissue.
Claims use since Oct. 10, 1929.

Ser. No. 292,858. DAGGETT & RAMSDELL, New York, N. Y. Filed Nov. 25, 1929.

DAGELLE

For Cleansing Tissue.
Claims use since Oct. 10, 1929.

Ser. No. 295,718. ALBERT MARKMANN & Co., Langenberg, Germany. Filed Feb. 6, 1930.



For Paper Streamers and Confetti.
Claims use since June 13, 1921.

Ser. No. 296,991. VEREINIGTE PAPIERWERKE AKTIENGESELLSCHAFT, Nuremberg, Germany. Filed Mar. 7, 1930.

VISA-BELLA

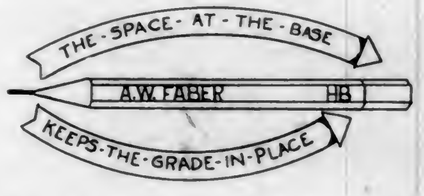
For Paper-Face Cloth of Cellulose for Cleaning the Face and Skin.
Claims use since Nov. 12, 1926.

Ser. No. 297,079. ILLINOIS PACIFIC GLASS CORPORATION, San Francisco, Calif. Filed Mar. 10, 1930.

No-Bruz

For Cardboard or Paper Liners for Fruit-Boxes.
Claims use since Feb. 10, 1930.

Ser. No. 297,125. A. W. FABER, INC., Newark, N. J. Filed Mar. 11, 1930.



No claim is made to the words "The Space at the Base Keeps the Grade in Place" apart from the mark shown in the drawing. No claim is made to the representation of the goods nor to the letters "H B" apart from the mark shown in the drawing.
For Pencils.
Claims use since November, 1927.

Ser. No. 297,254. KOTEX COMPANY, Chicago, Ill. Filed Mar. 13, 1930.

Kerfs

For Paper Handkerchiefs.
Claims use since Mar. 4, 1930.

Ser. No. 297,847. CAREW MANUFACTURING COMPANY, South Hadley Falls, Mass. Filed Mar. 25, 1930.

CONSULAR BOND

Applicant disclaims an exclusive right to the word "Bond" apart from the mark shown in the drawing.
For Writing and Printing Paper.
Claims use since Mar. 12, 1930.

Ser. No. 297,924. MCCLURE & WHEAT, Rock Rapids, Iowa. Filed Mar. 26, 1930.

SANI-CELLULOSE

The word "Cellulose" is disclaimed apart from the mark shown on the drawings.
For Tissue Rolls.
Claims use since Feb. 11, 1930.

Ser. No. 298,067. BADGER PAPER MILLS, INC., Peshtigo, Wis. Filed Mar. 29, 1930.

Vertex

For Writing Paper and Tissue Paper for Printing and Wrapping.
Claims use since Mar. 21, 1930.

Ser. No. 298,260. THE TISSUE COMPANY, Saugerties, N. Y. Filed Apr. 1, 1930.

LINETTE

For Paper Napkins and Towels.
Claims use since Feb. 15, 1930.

Ser. No. 298,614. BONNAR-VAWTER FANFORM COMPANY, INC., Cleveland, Ohio. Filed Apr. 10, 1930.

CARBINFOLD

For Printed Blank Forms to Which Other Matter May be Added.
Claims use since Mar. 29, 1930.

Ser. No. 298,662. THE ROYAL LACE PAPER WORKS, INC., Brooklyn, N. Y. Filed Apr. 10, 1930.

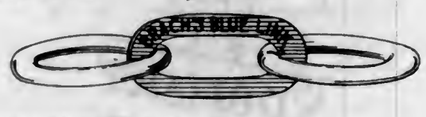


The lining in the drawing represents the color royal purple.
For Paper Products—Namely, Shelf Paper, Lace Paper, Doilies, Napkins, Towels, Confetti, Tissue Paper, and Fancy Printed and Embossed Paper in Rolls and Sheets.
Claims use since Mar. 14, 1930.

CLASS 38

Prints and Publications

Ser. No. 289,096. E. J. BRACH & SONS, Chicago, Ill. Filed Aug. 28, 1929.



The drawing is lined for blue.
For Periodical.
Claims use since Jan. 17, 1928.

Ser. No. 290,397. WALTER H. BARTHOLOMEW, doing business as The Bartcraft Studios, Nyack, N. Y. Filed Sept. 30, 1929.

The Bartcraft Studios

For Photographs, Photograph Enlargements, and Photograph Art Reproductions of Photographs, Photographic Prints, and Etchings.
Claims use since Mar. 9, 1929.

Ser. No. 296,989. SUN PUBLISHING COMPANY, Jackson, Tenn. Filed Mar. 7, 1930.

THE JACKSON SUN

For Daily Newspaper.
Claims use since 1888.

Ser. No. 297,055. THE AUTOMOBILE CLUB OF MISSOURI, St. Louis, Mo. Filed Mar. 10, 1930.

APROPOS

For Periodical Publication Issued Monthly.
Claims use since March, 1921.

Ser. No. 297,415. DAILY TELEGRAPH PRINTING COMPANY, Bluefield, W. Va. Filed Mar. 17, 1930.

Bluefield Daily Telegraph

For Newspaper.
Claims use since Sept. 22, 1926.

Ser. No. 297,416. DAILY TELEGRAPH PRINTING COMPANY, Bluefield, W. Va. Filed Mar. 17, 1930.

SUNSET BLUEFIELD THE TIMES-LEADER NEWS

For Newspaper.
Claims use since July 14, 1907.

Ser. No. 297,522. E. R. CROWE & COMPANY, INC., New York, N. Y. Filed Mar. 19, 1930.

ADVERTISERS and ADVERTISING AGENTS

For Magazine Issued Semimonthly.
Claims use since Feb. 27, 1930.

Ser. No. 297,596. JANICE HAMILTON, New York, N. Y. Filed Mar. 20, 1930.

CHEK-O-BORD

No claim is made to the word "Bord" apart from the mark shown on the drawing.
For Laundry Lists.
Claims use since December, 1929.

Ser. No. 297,774. PARKER-BRAWNER COMPANY, Rosslyn, Va. Filed Mar. 22, 1930.

MILK

For Publication Published from Time to Time Devoted to the Milk Industry.
Claims use since May, 1929.

Ser. No. 298,459. RAYNER DECALCOMANIA CO., Chicago, Ill. Filed Apr. 5, 1930.

WATERWAY

For Decalcomania Transfers.
Claims use since Nov. 12, 1929.

CLASS 39

Clothing

Ser. No. 275,760. WORTHY MANUFACTURING COMPANY, Chicago, Ill. Filed Nov. 22, 1928.

HEADLINER

For Men's and Boys' Negligee and Work Shirts.
Claims use since Sept. 6, 1928.

Ser. No. 285,224. THE SELBY SHOE CO., Portsmouth, Ohio. Filed June 7, 1929.



For Shoes.
Claims use since Mar. 1, 1929.

Ser. No. 291,246. SOCIETE ANONYME ETABLISSEMENTS ANDRÉ GILLIER, Troyes, France. Filed Oct. 18, 1929.



For Hosiery and Underwear for Men, Women, and Children; Also Swaddling Clothes, Chemises, Camisoles, Drawers, and Petticoats, and Any Combination Thereof.
Claims use since July 9, 1928.

Ser. No. 293,642. ABRAHAM SANDLER, Boston, Mass. Filed Dec. 13, 1929.



For Boots, Shoes, and Slippers of Leather, Fabric, or Combinations Thereof.
Claims use since October, 1926.

Ser. No. 293,679. NATHAN NEUMAN, Philadelphia, Pa. Filed Dec. 14, 1929.



The colors—namely, red, blue, and yellow—appearing on the label and the geometric designs are features of the applicant's mark, the series of horizontal lines denoting blue, the series of vertical lines denoting red, and the series of broken vertical and horizontal lines denoting yellow. The descriptive word "Sportswear" is hereby disclaimed.
For Sweaters, Knitted Jackets, and Knitted Bathing Suits.
Claims use since Oct. 1, 1929.

Ser. No. 294,486. E. P. REED & CO., Rochester, N. Y. Filed Jan. 7, 1930.

FOOTPRINTS

For Boots and Shoes Made in Whole or in Part of Leather, Textile Fabric, and Rubber.
Claims use since Nov. 22, 1929.

Ser. No. 294,487. E. P. REED & CO., Rochester, N. Y. Filed Jan. 7, 1930.

YOUR FOOTPRINT IN LEATHER!

For Boots and Shoes Made in Whole or in Part of Leather, Textile Fabric, and Rubber.
Claims use since Dec. 16, 1929.

Ser. No. 295,057. SHERBROOKE UNDERGARMENT CO., INC., New York, N. Y. Filed Jan. 21, 1930.

WUNDIES

The lining shown in the drawing is intended to represent shading only, the trade-mark consisting in the word "Wundies."
For Garments, Undergarments, and Clothing for Women, Misses, and Children—Namely, Brassières, Bandeaux, Bloomers, Step-Ins, French Panties, Combinations of the Same, and Combination Articles Formed by Uniting Selected Ones of the Aforementioned Articles.
Claims use since Jan. 8, 1930.

Ser. No. 295,359. BRADLEY KNITTING COMPANY, Milwaukee, Wis. Filed Jan. 30, 1930.



The lining in the drawing indicates the color red.
For Bathing Suits.
Claims use since Dec. 16, 1929.

Ser. No. 295,406. VOGUE BRASSIERE MFG. CO., Newark, N. J. Filed Jan. 30, 1930.

Cor-sylph-ette

For Corsets, Brassières, Girdles, Garter Belts, Bandeaux, Combinations Comprising Girdles and Brassières in Combination, Foundations Comprising Corsets and Brassières.
Claims use since Dec. 12, 1929.

Ser. No. 296,174. CHAMPION KNITTING MILLS, Chattanooga, Tenn. Filed Feb. 18, 1930.

CHAMPION

For Hosiery.
Claims use since June, 1918.

Ser. No. 296,636. MICHEL DASSONVILLE, Paris, France. Filed Feb. 28, 1930.

MIKILAINE

For Men's, Women's, and Children's Socks and Stockings; Women's Dresses, Coats, Robes, and Sweaters; and for Men's and Women's Underwear—Namely, Shirts, Drawers, and Chemises.
Claims use since Apr. 23, 1929.

Ser. No. 296,820. RICE'S INC., Norfolk, Va. Filed Mar. 4, 1930.

Lady Rice

For Hosiery, Nightgowns, Slips, Chemises; Bandeaux Sets Composed of Two Pieces Including Bust Supports or Brassières and Panties or Step-Ins in the Nature of Underdrawers; Bloomers, Foundation Garments Otherwise Known as Corsets, Step-Ins in the Nature of Underdrawers, Pajamas, Underskirts, Corsets, Bed Jackets, Brassières; Gloves Made of Leather, Fabric, and/or Any Combination Thereof; Shoes Made of Rubber, Leather, Fabric, and/or Any Combination Thereof; Millinery—Namely, Hats and Caps; Dresses, Coats for Women and/or Children.
Claims use since about Feb. 5, 1930.

Ser. No. 297,061. CONVERSE RUBBER COMPANY, Malden, Mass. Filed Mar. 10, 1930.



The applicant disclaims the right to the exclusive use of the pictorial representation of a shoe apart from the setting and relation in which it appears in the drawing.
For Boots and Shoes Made of or Containing Rubber and/or Canvas.
Claims use since Jan. 17, 1930.

Ser. No. 297,277. MANNIE ROSINGER, doing business as Eureka Electric Company, Chicago, Ill. Filed Mar. 13, 1930.

TOP-O'

For Straw Hats, Felt Hats, and Caps for Men; Straw Hats and Felt Hats for Women.
Claims use since Dec. 2, 1929.

Ser. No. 297,279. MANNIE ROSINGER, doing business as Eureka Electric Company, Chicago, Ill. Filed Mar. 13, 1930.

TOPO

For Straw Hats, Felt Hats, and Caps for Men; Straw Hats and Felt Hats for Women.
Claims use since Dec. 2, 1929.

Ser. No. 297,288. DAVID WATINSKY, doing business as La France Garment Co., New York, N. Y. Filed Mar. 13, 1930.

Garden O'Roses

For Women's and Misses' Dresses.
Claims use since about June, 1929.

Ser. No. 297,430. PAULINE HERMAN HIRSCH, doing business as Pauline Herman, Philadelphia, Pa. Filed Mar. 17, 1930.

Pauline Herman
RITTENHOUSE PLAZA
WALNUT AT NINETEENTH
PHILADELPHIA PA

No claim is made to "La Mode du Jour" or "Rittenhouse Plaza Walnut at Nineteenth, Philadelphia, Pa." apart from the other features of the mark.
For Hats for Women and Children.
Claims use since Jan. 7, 1930.

Ser. No. 297,683. LEBANON SHIRT COMPANY, Lebanon, Lititz, Lexington, and Hebron, Pa., and New York, N. Y. Filed Mar. 21, 1930.

GLENS FALLS

No claim is made to the words "Glens Falls" apart from the mark disclosed in the drawing.
For Men's and Boys' Dress, Negligee, and Work Shirts.
Claims use since July 1, 1929.

Ser. No. 297,703. SWISROSE DRESSES, INC., New York, N. Y. Filed Mar. 21, 1930.

Briarcliff Frocks

No claim being made to the exclusive use of the word "Frocks" apart from the mark as shown in the drawing.
For Ladies' and Misses' Dresses.
Claims use since Mar. 11, 1930.

Ser. No. 298,064. ALABAMA DRY GOODS COMPANY, Birmingham, Ala. Filed Mar. 29, 1930.

VIVIAN

For Hosiery.
Claims use since August, 1929.

Ser. No. 298,100. HOSIERY GUILD, INC., Troy, N. Y. Filed Mar. 29, 1930.

Guild

For Hosiery Including Hosiery for Men, Women, Misses, Children, and Infants.
Claims use since Dec. 20, 1929.

Ser. No. 298,149. CERTIFIED HOSIERY, INC., Clifton, N. J. Filed Mar. 31, 1930.

Junior League

For Hosiery.
Claims use since February, 1930.

Ser. No. 298,182. HOLEPROOF HOSIERY CO., Milwaukee, Wis. Filed Mar. 31, 1930.

AUTOGART

For Hosiery.
Claims use since Mar. 20, 1930.

Ser. No. 298,183. INTERNATIONAL HARVEST HAT CO., St. Louis, Mo. Filed Mar. 31, 1930.

GLARE-NO

For Men's Hats.
Claims use since Mar. 6, 1930.

Ser. No. 298,257. SERVICE HAT LINING CORP., New York, N. Y. Filed Apr. 1, 1930.

Jonquil

For Women's and Misses' Felt and Straw Hats.
Claims use since July, 1929.

Ser. No. 298,285. MENDEL & HENLE, Cincinnati, Ohio. Filed Apr. 2, 1930.

DON JUAN

For Men's Neckties.
Claims use since Jan. 1, 1930.

Ser. No. 298,300. ALABAMA DRY GOODS COMPANY, Birmingham, Ala. Filed Apr. 3, 1930.

TALKING PICTURE

For Hosiery.
Claims use since Mar. 26, 1926.

Ser. No. 298,334. JANTZEN KNITTING MILLS, Portland, Oreg. Filed Apr. 3, 1930.

MONOSEAM

For Swimming Suits for Men, Women, and Children.
Claims use since Mar. 3, 1930.

Ser. No. 298,361. J. SCHOENEMAN, INCORPORATED, Baltimore, Md. Filed Apr. 3, 1930.

POLAPILE

For Coats, Vests, Trousers, Knickerbockers, Topcoats, and Overcoats for Men, Youths, and Boys.
Claims use since Sept. 9, 1929.

Ser. No. 298,379. CLUETT, PEABODY & CO., INC., Troy, N. Y. Filed Apr. 4, 1930.

ARASNAP

For Negligee and Dress Shirts.
Claims use since Mar. 19, 1930.

Ser. No. 298,444. HART-ALBIN COMPANY, Billings, Mont. Filed Apr. 5, 1930.

BROOKMOOR

For Ladies' Coats and Suits.
Claims use since Mar. 1, 1930.

Ser. No. 298,465. SIEGEL-LYTTLE, INC., New York, N. Y. Filed Apr. 5, 1930.

HALL OF FAME

For Women's Dresses.
Claims use since Mar. 15, 1930.

Ser. No. 298,513. PRASHKER, SOHN & CO., New York, N. Y. Filed Apr. 7, 1930.

GLO-SHEEN

For Men's and Boys' Dress, Negligee, and Work Shirts.
Claims use since Jan. 20, 1930.

Ser. No. 298,529. CHENEY BROTHERS, South Manchester, Conn. Filed Apr. 8, 1930.

Shangketee

For Cravats and Necktles.
Claims use since Mar. 20, 1930.

Ser. No. 298,536. JAMES A. HEARN & SON, INC., New York, N. Y. Filed Apr. 8, 1930.

HEARN-TALKIE

For Women's, Misses', and Children's Dresses, Coats, Sweaters, Skirts, Smocks, Middies, and Blouses.
Claims use since March, 1929.

Ser. No. 298,642. R. H. MACY & CO., INC., New York, N. Y. Filed Apr. 10, 1930.

Crepetex

For Hosiery.
Claims use since Mar. 29, 1930.

Ser. No. 298,708. MOCK, JUDSON, VOEHRINGER CO. INC., New York and Long Island City, N. Y. Filed Apr. 11, 1930.

Mimi

For Hosiery.
Claims use since Apr. 1, 1930.

Ser. No. 298,727. THE STERLING COMANY, Chicago, Ill. Filed Apr. 11, 1930.

Eton Etta

For Ladies' House Dresses.
Claims use since Feb. 22, 1930.

Ser. No. 298,735. AMERICAN HOSIERY COMPANY, New Britain, Conn. Filed Apr. 12, 1930.

RAYTIE

For Knitted and Woven Goods Comprising Undershirts, Underdrawers, Union Suits, Bathing Suits, Sweaters, and Hosiey for Men, Women, and Children, of Various Materials Comprising Cashmere, Cashmere Wool, Wool, Merino, Pure Linen, Pure Silk, Silk Mixed, Cotton, Lisle Thread, and Rayon or Artificial Silk and Mixtures of the Same.
Claims use since Jan. 31, 1930.

CLASS 40

Fancy Goods, Furnishings, and Notions

Ser. No. 296,895. THE AMERICAN CRAYON COMPANY, Sandusky, Ohio. Filed Mar. 6, 1930.

CRAYONEX

For Stamped Textile Fabrics.
Claims use since Mar. 1, 1930.

Ser. No. 297,006. JOSEPH FLEISCHER, doing business as Fleischer & Co., New York, N. Y. Filed Mar. 8, 1930.

PINETTE

For Combs Made of Nonprecious Metal.
Claims use since Oct. 15, 1927.

CLASS 42

Knitted, Netted, and Textile Fabrics

Ser. No. 282,538. FOREMOST FABRICS CORPORATION, New York, N. Y. Filed Apr. 17, 1929.

CREPE PRECIEUX

No rights are asserted to the exclusive use of the word "Crepe" apart from the trade-mark as shown in the drawing.
For Silk Piece Goods.
Claims use since Oct. 8, 1926.

Ser. No. 289,525. GEORGE A. LEPAGE, Sedan, France. Filed Sept. 9, 1929.



No claim being made to the exclusive use of the words "Made in France."
For Woolen Piece Goods.
Claims use since January, 1928.

Ser. No. 295,040. MOSKOWITZ BROS. INC., New York, N. Y. Filed Jan. 21, 1930.

EMBROS *Quality*

The descriptive word "Quality" being disclaimed apart from the mark shown, the lining on the drawing indicating shading merely.
For Novelty Swiss Curtains Made of Cotton and Silk.
Claims use since Nov. 1, 1927.

Ser. No. 296,626. JOSEPH BANCROFT & SONS CO., Wilmington, Del. Filed Feb. 28, 1930.



The words "Improved," "Holland's," "Color," "Width," "Yards," "Trade Mark," and the phrase "Reg. U. S. Pat. Off." are disclaimed apart from the mark as shown in the drawing. The outline of the label per se is likewise disclaimed except in so far as it relates to the fanciful arrangement and design. In use the label carries also variable indications of color and size.
For Shade Cloth in the Piece.
Claims use since Feb. 15, 1930.

Ser. No. 296,796. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y. Filed Mar. 4, 1930.

Kamelkid

For Pile Fabrics in the Piece.
Claims use since Feb. 17, 1930.

Ser. No. 296,797. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y. Filed Mar. 4, 1930.

Alpavel

For Pile Fabrics in the Piece.
Claims use since Feb. 17, 1930.

Ser. No. 296,798. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y. Filed Mar. 4, 1930.

Alpadown

For Pile Fabrics in the Piece.
Claims use since Feb. 17, 1930.

Ser. No. 296,800. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y. Filed Mar. 4, 1930.

Alpalam

For Pile Fabrics in the Piece.
Claims use since Feb. 17, 1930.

Ser. No. 296,806. FRENCH & WARD, New York, N. Y. Filed Mar. 4, 1930.

CHINTWILLA

For Piece Goods of Woolen and Cotton Mixtures.
Claims use since Feb. 3, 1930.

Ser. No. 298,012. CELANESE CORPORATION OF AMERICA, New York, N. Y. Filed Mar. 28, 1930.

BELLESSA

For Fabrics Made Wholly or Partially of Cellulose Derivatives.
Claims use since about Mar. 4, 1930.

Ser. No. 298,412. WILLIAM G. PARK, Hanover, Conn. Filed Apr. 4, 1930.

AAA Angus Park FABRICS

No claim being made to the exclusive use of the word "Fabrics" apart from the mark as shown in the drawing, the name "Angus Park" being a facsimile of the signature of Angus Park, deceased.

For Textile Fabrics of Wool, Silk, Cotton, Rayon, and Combinations of the Same in the Piece.

Claims use since Mar. 14, 1930.

Ser. No. 298,413. WILLIAM G. PARK, Hanover, Conn. Filed Apr. 4, 1930.

GALA-PARK FABRICS

No claim being made to the exclusive use of the word "Fabrics" apart from the mark as shown in the drawing.

For Textile Fabrics of Wool, Silk, Cotton, Rayon, and Combinations of the Same in the Piece.

Claims use since Mar. 27, 1930.

Ser. No. 298,524. WORUMBO MANUFACTURING COMPANY, Bath, Me. Filed Apr. 7, 1930.

BUMBLE "B"

For Woolen Fabrics.

Claims use since Nov. 15, 1929.

Ser. No. 298,690. DUPLEX SILK MILLS, INC., New York, N. Y. Filed Apr. 11, 1930.

Panavella

For Silks in the Piece.

Claims use since February, 1930.

Ser. No. 298,927. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y. Filed Apr. 16, 1930.

La Loie Supreme

For Pile Fabrics in the Piece.

Claims use since Apr. 10, 1930.

CLASS 43

Thread and Yarn

Ser. No. 297,456. MAX POLLACK & CO., INC., New York, N. Y. Filed Mar. 17, 1930.

CHIEF



For Sewing Threads.

Claims use since Feb. 1, 1929.

Ser. No. 298,912. SOCIETE ANONYME ETABLISSEMENTS GAMMA, Lyon, France. Filed Apr. 15, 1930.



GAMA

For Thread and Yarn.

Claims use since Jan. 15, 1925.

CLASS 44

Dental, Medical, and Surgical Appliances

Ser. No. 292,956. TEUTONOPHONE, INC., New York, N. Y. Filed Nov. 26, 1929.

Teutonophone

For Instruments for Assisting the Hearing of the Deaf.

Claims use since Nov. 22, 1929.

Ser. No. 295,912. VIOLET RAY CORPORATION, Chicago, Ill. Filed Feb. 11, 1930.

VIRACOR PRODUCTS

The word "Products" is disclaimed apart from the features of the mark shown in the drawing.

For High-Frequency Violet-Ray Apparatus, an Incandescent Therapeutic Lamp for Use in Operative Association with Numerous Kinds and Forms of Therapeutic Apparatus and Analogous Devices, and Ultra-Violet Lamps.

Claims use since October, 1929.

Ser. No. 296,065. LANAIR COMPANY, Chicago, Ill. Filed Feb. 15, 1930.

R-U-Ys

For Sanitary Packs or Sanitary Napkins, Composed of Cotton or any Other Absorbent Material.

Claims use since Dec. 1, 1928.

Ser. No. 297,543. SCHELLBERG MANUFACTURING CORPORATION, New York, N. Y. Filed Mar. 19, 1930.

GADGET

For Apparatus for Use in Colonic Therapy.

Claims use since Jan. 1, 1927.

Ser. No. 297,654. BERKELEY COMPANY, Chicago, Ill. Filed Mar. 21, 1930.

TROPIC

For Sanitary Napkins.

Claims use since Oct. 19, 1929.

Ser. No. 297,887. L. BAMBERGER & CO., Newark, N. J. Filed Mar. 26, 1930.

LB

For Sanitary Articles—Namely, Belts and Napkins, Aprons, Girdles, Step-Ins, Bloomers, and Skirts Made of Rubber and/or Combinations Thereof.

Claims use since Dec. 16, 1929.

Ser. No. 297,981. A. EDMOND PAUSSER, doing business as Edmond Process, Philadelphia, Pa. Filed Mar. 27, 1930.

Nu-Strix

For Textile Strips Used in Hair Waving for Effecting Curling and Waving of Human Hair.

Claims use since 1927.

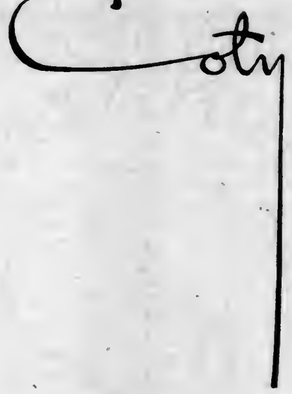
Ser. No. 298,052. SILVERICE INC., New York, N. Y. Filed Mar. 28, 1930.

MASSAGETTE

For Appliances for Massaging and Application of Creams, Lotions, Astringents, and the Like.

Claims use since February, 1930.

Ser. No. 298,079. COTY, INC., Wilmington, Del., and New York, N. Y. Filed Mar. 29, 1930.



The trade-mark being a facsimile signature of the president of the applicant corporation.

For Nail Files, Emery Boards, Manicure Sticks, Manicure Buffers, and Manicure Sets.

Claims use since Oct. 21, 1929.

CLASS 45

Beverages, Nonalcoholic

Ser. No. 293,070. JACOB S. POLEFSKY, New York, N. Y. Filed Nov. 29, 1929.

RY-MELLOW

For Extract for Flavoring Soft Drinks, Such as Ginger Ale and Other Carbonated Waters.

Claims use since Aug. 1, 1926.

Ser. No. 293,071. JACOB S. POLEVSKY, New York, N. Y. Filed Nov. 29, 1929.

BURB-ON-OAK

For Extract for Flavoring Soft Drinks, Such as Ginger Ale and Other Carbonated Waters.
Claims use since Aug. 1, 1926.

Ser. No. 298,947. PETER LOZORAITIS, doing business as National Bottling Company, Worcester, Mass. Filed Apr. 16, 1930.

NERVALE

For Carbonated, Nonalcoholic, Noncereal, Maltless Beverages Sold as Soft Drinks—viz, a Carbonated Beverage Flavored with the Extracts from Certain Herbs.
Claims use since Oct. 7, 1929.

CLASS 46

Foods and Ingredients of Foods

Ser. No. 266,135. OLAF HERTZWIG TRADING COMPANY, INC., New York, N. Y. Filed May 9, 1928.

MUNKENS



For Canned Herring Products Comprising Lax Sill, Smoked Fat Herrings, Rollmops, Vinga Sill, Gaffel Bitar, Anchovies, Polar Sill in Oyster Sauce, Polarmatjes Sill, Fish Balls, Cod-Roe Caviar, and Soused Mackerel.
Claims use since about Aug. 1, 1924.

Ser. No. 267,937. CROWN JEWEL GROVES, Redlands, Calif. Filed June 13, 1928.

SWEETHEART OF THE ORANGE

Exclusive use of the word "Orange" is not claimed except in association with the other features of the mark shown.
For Fresh Citrus Fruits.
Claims use since Dec. 1, 1916.

Ser. No. 277,980. SOUTHWEST BAKING COMPANY, Dallas, Tex. Filed Jan. 14, 1929.



No claim is made to the representation of the goods or to the words "Dinner Rolls" apart from the other features of the mark as shown.
For Rolls.
Claims use since about Nov. 20, 1928.

Ser. No. 278,218. GENERAL MARKET HOUSE COMPANY, Chicago, Ill. Filed Jan. 21, 1929.

DADDY'S

For Bacon.
Claims use since Jan. 2, 1929.

Ser. No. 286,344. B. SPILIADIS & COMPANY, INC., New York, N. Y. Filed June 28, 1929.

RIO RITA

For Canned Tomatoes with Puree, Canned Tomato Paste, and Canned Tuna Fish.
Claims use since August, 1928.

Ser. No. 287,270. WINSLOW B. TAYLOR COMPANY, Boston, Mass. Filed July 17, 1929.



Lucy Allen

The portrait shown in the drawing is merely fanciful. No registration rights are claimed for the words "Lucy Allen" apart from the mark shown in the drawing.
For Chocolates.
Claims use since about May 4, 1929.

Ser. No. 288,723. QUALITY PRODUCTS, INC., Salisbury, Md. Filed Aug. 19, 1929.

Q BRAND

Applicant disclaims the use of the word "Brand" apart from the mark shown in the drawing. The drawing is lined to indicate the color red.
For Canned and Raw Fruits and Vegetables—viz, Apples, Peaches, Pears, Strawberries, Blackberries, Cucumbers, Beets, Spinach, Tomatoes, Succotash, Lima Beans, String Beans, Stringless Beans, and Fresh Sweet Potatoes.
Claims use since Apr. 1, 1928.

Ser. No. 291,970. OLIVER C. FORTUNE, doing business as Kurth, Darland & Fortune, Kansas City, Mo. Filed Nov. 4, 1929.



For Table Syrup Made from Glucose Sugar and Corn Cobs.
Claims use since Sept. 30, 1929.

Ser. No. 292,545. NEW CENTURY COMPANY, Chicago, Ill. Filed Nov. 18, 1929.

ROVER

For Wheat and Rye Flour.
Claims use since Oct. 30, 1929.

Ser. No. 293,201. WESTERN STATES GROCERY COMPANY, Oakland, Calif. Filed Dec. 3, 1929.

MAX-I-MUM

For Peanut Butter, Canned Fruits, Canned Vegetables, Canned Berries, Raisins, Dried Fruits, Dried Vegetables, Jams, Jellies, Fruit Preserves, Canned Shrimp, Canned Fish, Canned Shellfish, Canned Clam Chowder, Minced Clams, Canned Evaporated Milk, Vinegar, Coffee, Tea, Olives, Spices, Tomato Catchup or Catsup, Food-Flavoring Extracts, Maple Syrup, Honey, Molasses, Cane and Maple Syrup; Canned Meats—Namely, Cooked Corned Beef, Corned-Beef Hash, Veal Loaf and Meat By-Products with Pork Added, Cooked Lunch Tongue, Potted Meat Food Products, Deviled Meat Food Products, Wafer Sliced Beef, Vienna Sausage, Sandwich Spread, Roast Beef; Deviled Meats, Pickles, Canned Soups, Horse-Radish, Olive Oil, Salad Oil, Mustard, Sauces, Canned Sauerkraut, Dried Cocoanut, Celery Salt, Dried Beans, Sago, Tapioca, Rolled Wheat, Dried Sweet Corn, Pearl Barley, Wheat Flour, Corn Meal, Canned Hominy, Macaroni, Egg Noodles, Candies, Canned Chile Peppers, Sandwich Spread, Canned Pimientos, Table Syrup, Sorghum, Maple Sugar, Sugar, Clam Nectar, Fish Balls, Dried Fish, Salt Fish, Smoked Fish, Cornstarch, Rice, Yeast, Buckwheat Flour, Graham Flour, Whole-Wheat Flour, Rye Flour, Rye Meal, Farina, Spaghetti, Vermicelli, Rolled Oats, Oatmeal, Wheat Flakes, Shredded Wheat, Rusk, Crackers, Biscuits, Mincemeat, Cottonseed Oil, Shredded Cocoanut, Dried Peas, Dried Potatoes, Dried Soup Vegetables, Dried Onions, Shelled Pop Corn, Granulated Wheat, Dried Eggs.
Claims use since Apr. 15, 1907.

Ser. No. 294,463. CALIFORNIA PACKING CORPORATION, San Francisco, Calif. Filed Jan. 7, 1930.

Del Monte

For Canned Fruits, Canned Vegetables, Jams, Jellies, Dried Fruits, Canned and Dried Prunes, Raisins, Fruit Preserves, Olives, Canned Fish, Cranberry Sauce, Catsup, Honey, Tomato Sauce, Fruit Juices for Food Purposes, Sauerkraut, Tomato Purée, Maraschino-Type Cherries, Vinegar, Fruit Butter, Canned Hominy, Canned Beans with or without Pork and Tomato Sauce, Tea, Flavoring Extracts for Food Purposes, Spices, Pepper, Olive Relish, Marmalades, Canned Rice, Tomato Paste, Vegetable Oil, Pickles, Meat Sauces, Salad Dressing, Mustard, Glacé Fruits, Tamales, Ravioli, Soup, Evaporated Milk, Cocoa, Chocolate, Rolled Oats, Tapioca, Noodles, Spaghetti, Dry Rice, Gelatine, Mincemeat, Sugar and Maple Syrup, Peanut Butter, Potato Flour, Apple Sauce, Pickle Relishes, Chowchow, Chili Sauce, Fresh Vegetables, Candies, Apricot-Kernel Oil, Macaroni; Fresh Fruits—Namely, Peaches, Pears, Grapes, and Grapefruit; Salted Nuts, Sugar, Mayonnaise, Vegetable Shortening, Sauerkraut Juice, Tomato Juice, Canned Meat—Namely, Canned Chicken; and Dried Vegetables.
Claims use since Oct. 1, 1891, on canned fruits, canned vegetables, jams, and jellies; since 1904 on dried fruits, prunes, and raisins; since 1905 on preserves, olives, and canned fish; since 1909 on cranberry sauce and catsup; since 1910 on honey, tomato sauce, and fruit juices; since 1911 on sauerkraut and tomato purée; since 1912 on maraschino-type cherries; since 1913 on vinegar; since 1914 on fruit butter and canned hominy; since 1915 on canned beans with and without pork and tomato sauce; since 1916 on tea, flavoring extracts, spices, and pepper; since 1917 on olive relish; since 1918 on marmalade, canned rice, tomato paste, vegetable oil, pickles, meat sauce, salad dressing, mustard, glacé fruits, tamales, ravioli, soup, evaporated milk, cocoa, chocolate, cereals, tapioca, noodles, spaghetti, dry rice, gelatine, mincemeat, syrup, peanut butter, and potato flour; since 1919 on apple sauce, relishes, chowchow, chili sauce, fresh vegetables, and candies; since Apr. 16, 1921, on apricot-kernel oil; since Nov. 28, 1925, on macaroni; since Sept. 16, 1926, on fresh fruits; since Nov. 16, 1926, on nuts and

sugar; since Dec. 28, 1926, on mayonnaise and shortening; since Nov. 10, 1928, on sauerkraut juice; since Feb. 28, 1929, on tomato juice; and since May 22, 1929, on canned meat and dried vegetables.

Ser. No. 294,467. CALIFORNIA PACKING CORPORATION, San Francisco, Calif. Filed Jan. 7, 1930.



The lining on the drawing indicates the colors green, red, and gold.

For Canned Fruits, Canned Vegetables, Jams, Jellies, Dried Fruits, Canned and Dried Prunes, Raisins, Fruit Preserves, Olives, Canned Fish, Cranberry Sauce, Catsup, Honey, Tomato Sauce, Fruit Juices for Food Purposes, Sauerkraut, Tomato Purée, Maraschino-Type Cherries, Vinegar, Fruit Butter, Canned Hominy, Canned Beans with or without Pork and Tomato Sauce, Tea, Flavoring Extracts for Food Purposes, Spices, Pepper, Olive Relish, Marmalades, Canned Rice, Tomato Paste, Vegetable Oil, Pickles, Meat Sauces, Salad Dressing, Mustard, Glacé Fruits, Tamales, Ravioli, Soup, Evaporated Milk, Cocoa, Chocolate, Rolled Oats, Tapioca, Noodles, Spaghetti, Dry Rice, Gelatine, Mincemeat, Sugar and Maple Syrup, Peanut Butter, Potato Flour, Apple Sauce, Pickle Relishes, Chowchow, Chili Sauce, Fresh Vegetables, Candies, Apricot-Kernel Oil, Macaroni; Fresh Fruits—Namely, Peaches, Pears, Grapes, and Grapefruit; Salted Nuts, Sugar, Mayonnaise, Vegetable Shortening, Sauerkraut Juice, Tomato Juice, Canned Meat—Namely, Canned Chicken; and Dried Vegetables.

Claims use since 1904 on canned fruits, canned vegetables, jams, jellies, dried fruits, prunes, and raisins; since 1905 on preserves, olives, and canned fish; since 1909 on cranberry sauce and catsup; since 1910 on honey, tomato sauce, and fruit juices; since 1911 on sauerkraut and tomato purée; since 1912 on maraschino-type cherries; since 1913 on vinegar; since 1914 on fruit butter and canned hominy; since 1915 on canned beans with and without pork and tomato sauce; since 1917 on olive relish; since 1918 on marmalades, canned rice, tomato paste, vegetable oil, pickles, meat sauces, salad dressing, mustard, glacé fruits, tamales, ravioli, soup, evaporated milk, cocoa, chocolate, cereals, tapioca, noodles, spaghetti, dry rice, gelatine, mincemeat, syrup, peanut butter, and potato flour; since 1919 on apple sauce, relishes, chowchow, chili sauce, fresh vegetables, and candies; since Apr. 16, 1921, on apricot-kernel oil; since Nov. 28, 1925, on macaroni; since Sept. 16, 1926, on fresh fruits; since Dec. 28, 1926, on mayonnaise and shortening; since Nov. 10, 1928, on sauerkraut juice; since Feb. 28, 1929, on tomato juice; and since May 22, 1929, on tea, flavoring extracts, spices, pepper, nuts, sugar, canned meat, and dried vegetables.

Ser. No. 295,685. WILLIAM F. MULHERIN, doing business as Excelsior Supply Company, Syracuse, N. Y. Filed Feb. 6, 1930.

Excelsior

For Barley-Malt Syrup.
Claims use since June, 1920.

Ser. No. 295,874. THE TROPICAL VITAMIN CO., INC., Orlando, Fla. Filed Feb. 10, 1930.



For Candy Confection.
Claims use since about Jan. 8, 1930.

Ser. No. 295,875. THE TROPICAL VITAMIN CO., INC., Orlando, Fla. Filed Feb. 10, 1930.

Vitabar

For Candy Confection.
Claims use since about Jan. 8, 1930.

Ser. No. 297,081. JURT BORN, INC., Brooklyn, N. Y. Filed Mar. 10, 1930.



The lining shown on the drawing is for the purpose of shading only.
For Chocolate Candy Bars.
Claims use since about Jan. 25, 1930.

Ser. No. 297,516. CALIFORNIA AND HAWAIIAN SUGAR REFINING CORPORATION, LTD., San Francisco, Calif. Filed Mar. 19, 1930.

CRYSTALETS

For Granulated-Sugar Tablets.
Claims use since Feb. 21, 1930.

Ser. No. 297,948. AMERICAN COFFEE COMPANY, INC., New Orleans, La. Filed Mar. 27, 1930.



For Coffee and Tea.
Claims use since Apr. 1, 1903.

Ser. No. 298,348. MONOCACY VALLEY CANNING COMPANY, Frederick, Md. Filed Apr. 3, 1930.

INDIAN SPRING

For Canned Fruits and Vegetables.
Claims use since 1914.

Ser. No. 298,374. THE BUENAVENTURA COMPANY OF CUBA, Chicago, Ill. Filed Apr. 4, 1930.

Bv

For Certain Fresh Citrus Fruits—Viz., Grapefruits, Oranges, Tangerines, and Limes.
Claims use since 1907.

Ser. No. 298,405. EDGAR P. LEWIS & SONS, INC., Boston, Mass. Filed Apr. 4, 1930.

CHECK AND DOUBLE CHECK

For Candy.
Claims use since Feb. 21, 1930.

Ser. No. 298,409. OBREGON DISTRIBUTING COMPANY, Nogales, Ariz. Filed Apr. 4, 1930.

JADE

In the drawings the letters are crosshatched or lined to indicate the color green.
For Fresh Green Peas.
Claims use since Jan. 25, 1930.

Ser. No. 298,422. GEORGE TIBBITS BEDELL, Detroit, Mich. Filed Apr. 5, 1930.

KOLD KAT

For Chocolate-Coated Ice Cream.
Claims use since Feb. 25, 1930.

Ser. No. 298,502. JOHN KRIZANOVIC, doing business as Czecho-Slovak Products Co., Newark, N. J. Filed Apr. 7, 1930.

CZECHO-SLOVAK MAID

For Malt Syrup.
Claims use since Apr. 5, 1930.

Ser. No. 298,549. C. F. SIMONIN'S SONS, INC., Philadelphia, Pa. Filed Apr. 8, 1930.



No claim being made to the exclusive use of the words "Olio Puro" apart from the mark as shown in the drawing.
For Salad Oil.
Claims use since Mar. 24, 1930.

Ser. No. 298,607. YOUNG'S CANDY PRODUCTS CO., INC., Philadelphia, Pa. Filed Apr. 9, 1930.



For Candy.
Claims use since February, 1919.

Ser. No. 298,655. NEW ENGLAND CONFECTIONERY COMPANY, Cambridge, Mass. Filed Apr. 10, 1930.

SLIM JIM

For Candy.
Claims use since Mar. 11, 1930.

Ser. No. 298,767. SUMMIT SWEETS INC., Jersey City, N. J. Filed Apr. 12, 1930.



For Candy.
Claims use since July 15, 1929.

Ser. No. 298,788. GEO. W. CASWELL COMPANY, San Francisco, Calif. Filed Apr. 14, 1930.

NATIONAL CREST

For Coffee.
Claims use since about Apr. 12, 1907.

Ser. No. 298,862. STATE WHOLESALE GROCERS, Chicago, Ill. Filed Apr. 14, 1930.

S.W.S.

For Canned Vegetables.
Claims use since July 1, 1929.

Ser. No. 298,873. WINOM BROS., Seeley, Calif. Filed Apr. 14, 1930.

THREE POINT

For Sweet Potatoes in Their Natural State.
Claims use since Mar. 3, 1930.

Ser. No. 298,897. CHIN LAIN, doing business as The Asia Commercial Company, Shanghai, China, and San Francisco, Calif. Filed Apr. 15, 1930.



The Chinese symbol shown on the drawing means—"Happiness and long life."
For Tea.
Claims use since Mar. 24, 1923.

Ser. No. 298,949. FRANK MACMONNIES, INC., doing business as Societe Agaric, Paris, France, and as Pennsylvania Mushroom Co., Philadelphia, U. S. A., New York, N. Y. Filed Apr. 16, 1930.

DESIRÉ

For Canned Mushrooms.
Claims use since Apr. 25, 1927.

Ser. No. 298,951. J. A. MEDINA COMPANY, New York, N. Y. Filed Apr. 16, 1930.

MDA

For Green Coffee.
Claims use since Feb. 28, 1930.

CLASS 48

Malt Beverages and Liquors

Ser. No. 298,174. JOHN GRAF COMPANY, Milwaukee, Wis. Filed Mar. 31, 1930.

English Club

For Malt Beverage Containing Less Than One-Half of One Per Cent Alcohol by Volume.
Claims use since Feb. 14, 1930.

CLASS 50

Merchandise Not Otherwise Classified

Ser. No. 292,239. ZENKER SONS, Columbus, Ohio. Filed Nov. 9, 1929.

Mayflower

For Memorials, Monuments, and Grave Markers.
Claims use since Aug. 28, 1929.

Ser. No. 295,726. COLUMBUS COATED FABRICS CORPORATION, Columbus, Ohio. Filed Feb. 7, 1930.



For Pyroxylin-Coated Fabrics.
Claims use since Jan. 24, 1930.

Ser. No. 296,078. PARAZIN PRINTING PLATE, INC., Rochester, N. Y. Filed Feb. 15, 1930.

PARAZIN

For Printing Plates.
Claims use since May 15, 1929.

Ser. No. 296,737. FULTON BAG & COTTON MILLS, Atlanta, Ga. Filed Mar. 3, 1930.



For Waterproofed Cotton Goods.
Claims use since Dec. 16, 1929.

Ser. No. 296,862. LAWRENCE E. GOELLER, Circleville, Ohio. Filed Mar. 5, 1930.

JAX-Ty-RAK

No claim is made to the term "Ty-Rak" apart from the mark as shown.
For Racks for Holding Neckties.
Claims use since Jan. 29, 1930.

Ser. No. 297,575. AUTOLUX SIGN COMPANY, Boston, Mass. Filed Mar. 20, 1930.

Autolux

For Advertising Signs of the Type Illuminated by Reflected Light.
Claims use since Mar. 4, 1930.

Ser. No. 298,022. E. I. DU PONT DE NEMOURS AND COMPANY, Wilmington, Del. Filed Mar. 28, 1930.

RUG ANCHOR

The exclusive use of the word "Rug" is disclaimed apart from the mark as shown.
For Rubber-Coated Fabric to Prevent the Slipping of Rugs.
Claims use since 1913.

TRADE-MARK REGISTRATIONS GRANTED

[ACT OF FEBRUARY 20, 1905]

MAY 27, 1930

271,076. DENTIFRICE. THE R. L. WATKINS COMPANY, New York, N. Y.
Filed August 28, 1928. Serial No. 271,671. PUBLISHED MARCH 11, 1930. Class 6.

271,077. DENTIFRICE. THE R. L. WATKINS COMPANY, New York, N. Y.
Filed August 27, 1928. Serial No. 271,631. PUBLISHED MARCH 11, 1930. Class 6.

271,078. DENTIFRICE. THE R. L. WATKINS COMPANY, New York, N. Y.
Filed August 23, 1928. Serial No. 271,462. PUBLISHED MARCH 11, 1930. Class 6.

271,079. DENTIFRICE. THE R. L. WATKINS COMPANY, New York, N. Y.
Filed August 22, 1928. Serial No. 271,415. PUBLISHED MARCH 11, 1930. Class 6.

271,080. ALTERATIVE, ANALGESIC, ANTACID, ETC. CARROLL DUNHAM SMITH PHARMACAL CO., New York, N. Y.
Filed July 23, 1928. Serial No. 270,014. PUBLISHED MARCH 11, 1930. Class 6.

271,081. ELECTRIC FLOOR LAMPS, TABLE LAMPS, AND CEILING FIXTURES. BOUY INCORPORATED, New York, N. Y.
Filed June 30, 1928. Serial No. 268,910. PUBLISHED MARCH 11, 1930. Class 21.

271,082. PERFUMES, HYGIENIC AND COSMETIC ARTICLES. FROMM BROTHERS, Berlin, Germany.
Filed June 23, 1928. Serial No. 268,540. PUBLISHED MARCH 4, 1930. Class 6.

271,083. WORK SHIRTS, WORK PANTS, AND OVERALLS. MOUNT AIRY OVERALL CO., Mount Airy, N. C.
Filed June 11, 1928. Serial No. 267,852. PUBLISHED SEPTEMBER 4, 1928. Class 39.

271,084. REFRACTORY INSULATING PARTS—NAMELY, HEATER PLATES FOR ELECTRIC AIR HEATERS, FLATIRONS, HOT PLATES, AND SIMILAR DOMESTIC HEATING DEVICES. PORCELAIN PRODUCTS, INC., Findlay, Ohio.
Filed January 3, 1928. Serial No. 259,638. PUBLISHED JUNE 4, 1929. Class 21.

271,085. AUTOMOBILE CABS AND TRUCKS. CHECKER CAB MANUFACTURING CORPORATION, Chicago, Ill., assignor to Checker Cab Manufacturing Corporation, Kalamazoo, Mich., a Corporation of New Jersey.
Filed September 18, 1922. Serial No. 169,576. PUBLISHED APRIL 17, 1923. Class 19.

271,086. MEN'S LEATHER GLOVES. STRAWBRIDGE & CLOTHIER, Philadelphia, Pa.
Filed December 19, 1929. Serial No. 293,904. PUBLISHED MARCH 11, 1930. Class 39.

271,087. PREPARED MUSTARD. MOLLIE R. HAND, Norwich, N. Y.
Filed December 13, 1929. Serial No. 293,622. PUBLISHED MARCH 18, 1930. Class 46.

271,088. CANNED FISH, CANNED VEGETABLES, OLIVES IN BULK, AND ANTIPASTO. STROHMEYER & ARPE COMPANY, doing business as United Pure Food Co., New York, N. Y.
Filed December 12, 1929. Serial No. 293,608. PUBLISHED MARCH 18, 1930. Class 46.

271,089. HOSIERY, UNDERWEAR, AND SWEATERS FOR MEN, WOMEN, AND CHILDREN. H. K. REGAR & SONS, INC., Bridgeport, Pa.
Filed December 9, 1929. Serial No. 293,447. PUBLISHED FEBRUARY 25, 1930. Class 39.

271,090. COFFEE. TEXAS COFFEE COMPANY, INCORPORATED, Beaumont, Tex.
Filed December 3, 1929. Serial No. 293,198. PUBLISHED MARCH 18, 1930. Class 46.

271,091. RUBBER HEELS. BRADSTONE RUBBER COMPANY, Woodbine, N. J.
Filed January 10, 1930. Serial No. 294,612. PUBLISHED MARCH 11, 1930. Class 39.

271,092. TISSUE PAPER FOR REMOVING COLD CREAM. POND'S EXTRACT COMPANY, New York, N. Y.
Filed January 9, 1930. Serial No. 294,593. PUBLISHED MARCH 11, 1930. Class 37.

271,093. MAGAZINES PUBLISHED EVERY MONTH. FAWCETT PUBLICATIONS, INC., Robbinsdale, Minn.
Filed February 10, 1930. Serial No. 295,840. PUBLISHED MARCH 18, 1930. Class 38.

271,094. TRADING STAMPS AND TRADING COUPONS. EMPIRE STAMP COMPANY, Imperial, Calif.
Filed February 10, 1930. Serial No. 295,837. PUBLISHED MARCH 18, 1930. Class 38.

271,095. MONTHLY PUBLICATION. WHALEY-EATON SERVICE, INC., Washington, D. C.
Filed February 8, 1930. Serial No. 295,822. PUBLISHED MARCH 18, 1930. Class 38.

271,096. CANNED VEGETABLES. SHELBY CANNING CO., Shelbyville, Ind.
Filed February 6, 1930. Serial No. 295,696. PUBLISHED MARCH 18, 1930. Class 46.

271,097. PORK LINK SAUSAGE. KOHRS PACKING COMPANY, Iowa City and Davenport, Iowa.
Filed February 6, 1930. Serial No. 295,680. PUBLISHED MARCH 18, 1930. Class 46.

271,098. COFFEE. JAMES VAN DYK COMPANY, New York, N. Y.
Filed February 4, 1930. Serial No. 295,587. PUBLISHED MARCH 18, 1930. Class 46.

271,099. CANDIES. ANDY'S CHOCOLATE SHOPS, INC., Chicago, Ill.
Filed February 3, 1930. Serial No. 295,500. PUBLISHED MARCH 18, 1930. Class 46.

271,100. PERIODICAL PUBLISHED ANNUALLY. DR. PETER FAHRNEY & SONS CO., Chicago, Ill.
Filed January 30, 1930. Serial No. 295,368. PUBLISHED MARCH 18, 1930. Class 38.

271,101. HOUSE BUSINESS PUBLICATIONS ISSUED FROM TIME TO TIME RELATIVE TO INVESTMENTS. PEABODY AND COMPANY, Chicago, Ill.
Filed January 29, 1930. Serial No. 295,346. PUBLISHED MARCH 18, 1930. Class 38.

271,102. SEMIWEEKLY PUBLICATION DEVOTED TO PETROLEUM PRODUCTS. PAUL W. BOSWELL, doing business as Boswell Oil Company, Cincinnati, Ohio.
Filed January 28, 1930. Serial No. 295,292. PUBLISHED MARCH 18, 1930. Class 38.

271,103. WOOD HEELS. NEW ENGLAND WOOD HEEL CO., Haverhill, Mass.
Filed January 23, 1930. Serial No. 295,129. PUBLISHED MARCH 11, 1930. Class 39.

271,104. MAGAZINE PUBLISHED PERIODICALLY AT LEAST EVERY THREE MONTHS. NEW METROPOLITAN FICTION, INC., New York, N. Y.
Filed January 22, 1930. Serial No. 295,081. PUBLISHED MARCH 18, 1930. Class 38.

271,105. CERTAIN NAMED WEARING APPAREL. FRANKLIN SIMON & CO. INC., New York, N. Y.
Filed January 18, 1930. Serial No. 294,929. PUBLISHED MARCH 11, 1930. Class 39.

271,106. SOLES OF RUBBER COMPOSITION OR ITS EQUIVALENT FOR BOOTS AND SHOES. THE BEAR-FOOT SOLE COMPANY, INC., Boston, Mass.
Filed January 11, 1930. Serial No. 294,660. PUBLISHED MARCH 11, 1930. Class 39.

271,107. LEATHER AND FABRIC GLOVES. REYNIER & CO., New York, N. Y.
Filed January 8, 1930. Serial No. 294,543. PUBLISHED MARCH 11, 1930. Class 39.

271,108. SULFITE PAPER FOR PRINTING. CROWN WILLAMETTE PAPER COMPANY, San Francisco, Calif.
Filed January 8, 1930. Serial No. 294,508. PUBLISHED MARCH 18, 1930. Class 37.

271,109. SULFITE WRAPPING PAPER. CROWN WILLAMETTE PAPER COMPANY, San Francisco, Calif.
Filed January 8, 1930. Serial No. 294,506. PUBLISHED MARCH 18, 1930. Class 37.

271,110. MONTHLY PERIODICAL. FIELD PUBLICATIONS, INC., New York, N. Y.
Filed January 7, 1930. Serial No. 294,475. PUBLISHED MARCH 18, 1930. Class 38.

271,111. FRESH ORANGES AND GRAPEFRUIT. GEORGE ANDREWS, Winter Haven, Fla.
Filed January 4, 1930. Serial No. 294,379. PUBLISHED MARCH 18, 1930. Class 46.

271,112. ARCTICS. THE BEACON FALLS RUBBER SHOE COMPANY, Beacon Falls, Conn.
Filed December 30, 1929. Serial No. 294,202. PUBLISHED MARCH 11, 1930. Class 39.

271,113. WRAPPING PAPER. THE OHIO WAX PAPER COMPANY, Columbus, Ohio.
Filed December 26, 1929. Serial No. 294,082. PUBLISHED MARCH 18, 1930. Class 37.

271,114. COTTON BIAS BINDING, SILK BIAS BINDING, AND RAYON BIAS BINDING. ASSEMBLED PRODUCTS COMPANY, INC., New York, N. Y.
Filed December 21, 1929. Serial No. 293,950. PUBLISHED MARCH 11, 1930. Class 40.

271,115. COTTON BIAS BINDING, SILK BIAS BINDING, AND RAYON BIAS BINDING. ASSEMBLED PRODUCTS COMPANY, INC., New York, N. Y.
Filed December 21, 1929. Serial No. 293,949. PUBLISHED MARCH 11, 1930. Class 40.

271,116. COTTON BIAS BINDING, SILK BIAS BINDING, AND RAYON BIAS BINDING. ASSEMBLED PRODUCTS COMPANY, INC., New York, N. Y.
Filed December 21, 1929. Serial No. 293,948. PUBLISHED MARCH 11, 1930. Class 40.

271,117. LUBRICATING OIL. HUEGEL-NUGENT PETROLEUM COMPANY, Chicago, Ill.
Filed January 20, 1930. Serial No. 294,973. PUBLISHED MARCH 11, 1930. Class 15.

271,118. ELECTRIC BATTERY FOR THE IGNITION OF COMBUSTION ENGINES. SOCIÉTÉ DES MAGNÉTOS R. B., Paris, France.
Filed January 17, 1930. Serial No. 294,807. PUBLISHED MARCH 11, 1930. Class 21.

271,119. PINE-NEEDLE EXTRACT COMBINED WITH BATH SALTS. LEOPOLD GRANITZ, doing business as Continent Import Co., New York, N. Y.
Filed January 17, 1930. Serial No. 294,875. PUBLISHED MARCH 11, 1930. Class 6.

271,120. CANNED TOMATO JUICE. THE VAN CAMP PACKING COMPANY, INCORPORATED, Indianapolis, Ind.
Filed January 10, 1930. Serial No. 294,654. PUBLISHED MARCH 18, 1930. Class 46.

271,121. CANNED FOODS AND CANNED VEGETABLE JUICES—VIZ, VEGETABLES, SOUP, AND TOMATO JUICE. THE VAN CAMP PACKING COMPANY, INCORPORATED, Indianapolis, Ind.
Filed January 10, 1930. Serial No. 294,653. PUBLISHED MARCH 18, 1930. Class 46.

271,122. INTAGLIO INK, NEWS INK, LITHOGRAPHIC INK, PRINTING INK, STAMP PADS, AND INKING RIBBONS. THE INTERNATIONAL PRINTING INK CORPORATION, New York, N. Y.
Filed January 8, 1930. Serial No. 294,533. PUBLISHED MARCH 18, 1930. Class 11.

271,123. SALVE FOR TREATING ULCERS OF THE LEG. HÄDENSA GESELLSCHAFT M. B. H., Berlin-Lichterfelde, Germany.
Filed January 8, 1930. Serial No. 294,525. PUBLISHED MARCH 11, 1930. Class 6.

271,124. CLOTHESLINES. FIRST NATIONAL STORES INC., Boston and Somerville, Mass.
Filed February 6, 1930. Serial No. 295,663. PUBLISHED MARCH 18, 1930. Class 7.

271,125. GLASS GLOBES. MACBETH-EVANS GLASS COMPANY, Charleroi, Pa.
Filed February 3, 1930. Serial No. 295,525. PUBLISHED MARCH 11, 1930. Class 33.

271,126. MOUTH WASH AND GARGLE. EXCLUSIVE CHEMICALS, INC., Dallas Tex.
Filed February 3, 1930. Serial No. 295,511. PUBLISHED MARCH 11, 1930. Class 6.

271,127. ASTRINGENTS, ASTRINGENT CERATES, BLEACH CREAMS, ETC. RUTH PASKIN, doing business as Maison de Paris, New York, N. Y.
Filed February 1, 1930. Serial No. 295,493. PUBLISHED MARCH 11, 1930. Class 6.

271,128. VEHICLE TIRES OF RUBBER OR RUBBER COMPOSITION OR RUBBER AND FABRIC AND INNER TUBES THEREFOR. THE MOHAWK RUBBER COMPANY, Akron, Ohio.
Filed February 7 1930. Serial No. 295,744. PUBLISHED MARCH 18, 1930. Class 35.

271,129. SPRING WATER IN ITS NATURAL STATE, CARBONATED, AND MEDICATED. WAUKESHA PURE SPRING WATER COMPANY, Mukwonago, Wis.
Filed February 6, 1930. Serial No. 295,705. PUBLISHED MARCH 18, 1930. Class 45.

271,130. MEDICATED SPRING WATER. WAUKESHA PURE SPRING WATER COMPANY, Mukwonago, Wis.
Filed February 6, 1930. Serial No. 295,704. PUBLISHED MARCH 18, 1930. Class 45.

271,131. GINGER ALE, VANILLA SODA, ROOT BEER, ETC. FIRST NATIONAL STORES INC., Boston and Somerville, Mass.
Filed February 6, 1930. Serial No. 295,665. PUBLISHED MARCH 18, 1930. Class 45.

271,132. VEHICLE TIRES MADE WHOLLY OR IN PART OF RUBBER. CORDUROY TIRE COMPANY, Grand Rapids, Mich.
Filed February 4, 1930. Serial No. 295,558. PUBLISHED MARCH 18, 1930. Class 35.

271,133. ADHESIVE PATCHING MATERIAL (USED IN THE MENDING OR PATCHING OF WORN OR TORN PIECES IN FABRIC OR CLOTH). SIEGFRIED ROOZENDAAL, New York, N. Y.
Filed February 1, 1930. Serial No. 295,495. PUBLISHED MARCH 25, 1930. Class 5.

271,134. SETTEES AND CHAIRS, NOT INCLUDING SUCH AS ARE USED FOR DENTAL, SURGICAL PURPOSES. SPRAGUE & CARLETON, INC., Keene, N. H.
Filed January 31, 1930. Serial No. 295,446. PUBLISHED MARCH 18, 1930. Class 32.

271,135. U LEATHERS, CUP LEATHERS, AND HAT OR FLANGE LEATHERS, THE PURPOSE OF SAID LEATHERS BEING TO ELIMINATE LEAKAGE. J. E. RHOADS & SONS, Philadelphia, Pa.
Filed January 30, 1930. Serial No. 295,380. PUBLISHED MARCH 18, 1930. Class 35.

271,136. PISTON RINGS. ALLTEX PISTON RING COMPANY, Brooklyn, N. Y.
Filed January 25, 1930. Serial No. 295,201. PUBLISHED MARCH 18, 1930. Class 35.

271,137. HOME AND HOSPITAL ANTISEPTIC. E. R. SQUIBB & SONS, New York, N. Y.
Filed January 24, 1930. Serial No. 295,195. PUBLISHED MARCH 4, 1930. Class 6.

271,138. MOTOR-VEHICLE RUBBER TIRES, CASINGS, AND TUBES. THE PHARIS TIRE AND RUBBER COMPANY, Newark, Ohio.
Filed January 23, 1930. Serial No. 295,134. PUBLISHED MARCH 18, 1930. Class 35.

271,139. TABLETS FOR TREATING OBESITY. OBEX CORPORATION, New York, N. Y.
Filed January 23, 1930. Serial No. 295,131. PUBLISHED MARCH 4, 1930. Class 6.

271,140. SILK WALL DRAPES. LYDIA BUSH-BROWN, New York, N. Y.
Filed February 1, 1930. Serial No. 295,457. PUBLISHED MARCH 11, 1930. Class 42.

271,141. PHOSPHATE AND LACTATE MIXTURE SUITABLE FOR USE WITH SODIUM BICARBONATE FOR THE SAME PURPOSE AS BAKING POWDER. STANDARD BRANDS INCORPORATED, Dover, Del.; Cincinnati, Ohio; and New York, N. Y.
Filed January 30, 1930. Serial No. 295,397. PUBLISHED MARCH 11, 1930. Class 6.

271,142. PLAYING CARDS. THE UNITED STATES PLAYING CARD CO., Norwood, Ohio.
Filed January 28, 1930. Serial No. 295,309. PUBLISHED MARCH 11, 1930. Class 22.

271,143. ARTIFICIAL AND SYNTHETICAL PERFUMES, ESSENTIAL OILS. SOCIÉTÉ ANONYME M. NAEF & CIE., Geneva, Switzerland.
Filed January 22, 1930. Serial No. 295,089. PUBLISHED MARCH 11, 1930. Class 6.

271,144. ARTIFICIAL AND SYNTHETICAL PERFUMES, ESSENTIAL OILS. SOCIÉTÉ ANONYME M. NAEF & CIE., Geneva, Switzerland.
Filed January 22, 1930. Serial No. 295,087. PUBLISHED MARCH 11, 1930. Class 6.

271,145. WOOLEN, COTTON, LINEN, SILK, AND ARTIFICIAL SILK YARN. EMILE BERNAT & SONS CO., Jamaica Plain, Mass.
Filed January 18, 1930. Serial No. 294,909. PUBLISHED MARCH 11, 1930. Class 42.

271,146. LICE POWDER TO CONTROL LICE ON POULTRY AND LIVESTOCK AND FLEAS ON DOGS AND CATS, TABLETS FOR PURIFYING THE DRINKING WATER FOR POULTRY, AND WORM CAPSULES FOR TAPE AND ROUND WORMS IN POULTRY. A. H. PRUITT, doing business as A-P Laboratories, Wichita, Kans.
Filed January 15, 1930. Serial No. 294,825. PUBLISHED MARCH 11, 1930. Class 6.

271,147. MEDICINE FOR THE RELIEF OF INDIGESTION, DYSPEPSIA, AND GAS ON THE STOMACH. CHARLES M. ROSENBAUM, doing business as C. M. R. Mfg. Co., New York, N. Y.
Filed January 14, 1930. Serial No. 294,779. PUBLISHED MARCH 11, 1930. Class 6.

271,148. MEDICINAL PREPARATIONS FOR THE TREATMENT OF COUGHS, COLDS, INDIGESTION, BRONCHITIS, DYSPEPSIA, AND GAS ON THE STOMACH. CHARLES M. ROSENBAUM, doing business as C. M. R. Mfg. Co., New York, N. Y.
Filed January 14, 1930. Serial No. 294,778. PUBLISHED MARCH 11, 1930. Class 6.

271,149. PREPARATION FOR TREATING CUT SOLES TO PRODUCE LONGER LIFE. ROZ-IN-IZE, INC., Boston, Mass.
Filed January 8, 1930. Serial No. 294,545. PUBLISHED MARCH 11, 1930. Class 6.

271,150. COTTON HANDKERCHIEFS NOT IN THE PIECE. R. P. GORMAN & COBBE, LTD., Belfast, North Ireland.
Filed January 8, 1930. Serial No. 294,522. PUBLISHED MARCH 11, 1930. Class 42.

271,151. PERFUMES IN POWDERED AND LIQUID FORM. RENÉE THORNTON, New York, N. Y.
Filed January 7, 1930. Serial No. 294,494. PUBLISHED MARCH 11, 1930. Class 6.

271,152. MEDICINE FOR THE TREATMENT OF AEROPHAGY. LABORATOIRES G. BEYTOUT, SOCIETE A RESPONSABILITE LIMITEE, Paris, France.
Filed January 7, 1930. Serial No. 294,479. PUBLISHED MARCH 4, 1930. Class 6.

271,153. MEDICINE FOR THE TREATMENT OF DISEASES OF THE STOMACH. LABORATOIRES G. BEYTOUT, SOCIETE A RESPONSABILITE LIMITEE, Paris, France.
Filed January 7, 1930. Serial No. 294,478. PUBLISHED MARCH 4, 1930. Class 6.

271,154. CHEMICAL DYE AIDS. H. TH. BÖHME A.-G., Chemnitz, Germany.
Filed January 2, 1930. Serial No. 294,303. PUBLISHED MARCH 4, 1930. Class 6.

271,155. GAME CONSISTING OF SELF-FIGURING MAGIC CARDS OR FORTUNE-TELLING CARDS. JAKOPEC-SAMC COMPANY, Chicago, Ill.
Filed December 31, 1929. Serial No. 294,261. PUBLISHED MARCH 11, 1930. Class 22.

271,156. GLASSWARE, SHEET AND PLATE GLASS, AND GLASS USED FOR PAVING. SOCIÉTÉ ANONYME DES MANUFACTURES DES GLACES ET PRODUITS CHIMIQUES DE ST.-GOBAIN, CHAUNY & CIREY, Paris, France.
Filed December 26, 1929. Serial No. 294,092. PUBLISHED FEBRUARY 18, 1930. Class 33.

271,157. MEDICAL COMPOUND ADAPTED FOR THE TREATMENT OF CHRONIC CONSTIPATION AND OTHER AILMENTS—NAMELY, RHEUMATISM, KIDNEY, LIVER, AND BLADDER TROUBLE, FEVERS, AND RUN-DOWN CONDITION. RICHARD B. MUSICK'S COMPOUND COMPANY, Los Angeles, Calif.
Filed December 24, 1929. Serial No. 294,037. PUBLISHED MARCH 11, 1930. Class 6.

271,158. MEDICINAL SOLUTION FOR USE AS AN APPLICATION IN INFLAMED CONDITIONS OF THE NASAL PASSAGES. LEONARD A. SEELTZER, doing business as Seltzer, Detroit, Mich.
Filed December 23, 1929. Serial No. 294,026. PUBLISHED MARCH 11, 1930. Class 6.

271,159. POCKET HANDKERCHIEFS. GUSTAV WINKLER, doing business as the firm Gustav Winkler, Berlin, Germany.
Filed December 18, 1929. Serial No. 293,859. PUBLISHED FEBRUARY 25, 1930. Class 42.

271,160. ALL-WOOL BLANKETS. THE LEAKSVILLE WOOLEN MILLS, INC., Charlotte, N. C.
Filed December 10, 1929. Serial No. 293,474. PUBLISHED MARCH 11, 1930. Class 42.

271,161. A PREPARATION OF IODINE, A PREPARATION OF HYDROGEN PEROXIDE, AND A PREPARATION FOR APPLICATION TO CORNS FOR SOFTENING AND REMOVING SAME, ALL FOR HUMAN USE AS MEDICINES. CLAY & ABRAHAM LTD., Liverpool, England.
Filed December 5, 1929. Serial No. 293,265. PUBLISHED MARCH 11, 1930. Class 6.

271,162. NAIL AND CUTICLE BRUSHES. HERBERT & COMPANY, Detroit, Mich.
Filed February 1, 1930. Serial No. 295,477. PUBLISHED MARCH 18, 1930. Class 20.

271,163. SERIES OF CARTOONS OR COMIC STRIPS IN A DAILY NEWSPAPER. DAILY GRAPHIC, INC., New York, N. Y.
Filed January 31, 1930. Serial No. 295,424. PUBLISHED MARCH 18, 1930. Class 38.

271,164. MOTOR CYCLES. HARLEY-DAVIDSON MOTOR COMPANY, Milwaukee, Wis.
Filed January 30, 1930. Serial No. 295,371. PUBLISHED MARCH 11, 1930. Class 19.

271,165. SEPARATOR PLATES FOR STORAGE BATTERIES. DEWEY & ALMY CHEMICAL COMPANY, North Cambridge, Mass.
Filed January 28, 1930. Serial No. 295,294. PUBLISHED MARCH 11, 1930. Class 21.

271,166. ELECTRIC SADIRONS. SEARS, ROEBUCK AND CO., Chicago, Ill.
Filed January 27, 1930. Serial No. 295,280. PUBLISHED MARCH 11, 1930. Class 21.

271,167. RADIO RECEIVING SETS AND PARTS THEREOF. GENERAL MOTORS CORPORATION, Detroit, Mich.
Filed January 27, 1930. Serial No. 295,258. PUBLISHED MARCH 11, 1930. Class 21.

271,168. NOSE AND THROAT SPRAY HAVING ANTISEPTIC AND SHRINKING ACTION IN CASES OF INFECTION AND CONGESTION. ABBOTT LABORATORIES, Chicago, Ill.
Filed January 27, 1930. Serial No. 295,243. PUBLISHED MARCH 11, 1930. Class 6.

271,169. PHARMACEUTICAL PREPARATION FOR THE TREATMENT OF COLDS. KLEER-A-KOLD CO., Milwaukee, Wis.
Filed January 25, 1930. Serial No. 295,226. PUBLISHED MARCH 11, 1930. Class 6.

271,170. GLASS DRAWER KNOBS, GLASS DRAWER PULLS, AND GLASS DOOR KNOBS. CONSOLIDATED FACTORIES, LTD., Santa Ana, Calif.
Filed November 29, 1929. Serial No. 293,028. PUBLISHED MARCH 11, 1930. Class 13.

271,171. ADVERTISING SIGNS WHICH MAY BE USED WITH OR WITHOUT ILLUMINATION. MOTOLOGUE ADVERTISING CORPORATION, New York, N. Y.
Filed November 29, 1929. Serial No. 293,062. PUBLISHED MARCH 18, 1930. Class 50.

271,172. MEDICINE USED IN THE TREATMENT OF TUBERCULOSIS. POHLENZ & SALCEDO, Mexico, Mexico.
Filed December 2, 1929. Serial No. 293,154. PUBLISHED MARCH 11, 1930. Class 6.

271,173. HEATING SYSTEMS, VENTILATING SYSTEMS, COOLING SYSTEMS, AIR-CONDITIONING SYSTEMS, DRYING SYSTEMS, DEHYDRATING SYSTEMS, HUMIDIFICATION SYSTEMS, AND DEHUMIDIFICATION SYSTEMS. BERG HEATING AND VENTILATING CO., Los Angeles, Calif.
Filed December 6, 1929. Serial No. 293,311. PUBLISHED MARCH 11, 1930. Class 34.

271,174. ELECTRIC METAL-WORKING APPARATUS AND PARTS FOR SUCH APPARATUS. THOMSON-GIBB ELECTRIC WELDING COMPANY, Lynn, Mass.
Filed December 7, 1929. Serial No. 293,388. PUBLISHED MARCH 11, 1930. Class 21.

271,175. OILS AND GREASES OR PETROLEUM PRODUCTS SUCH AS GASOLINE, MOTOR-FUEL OILS, AND LUBRICATING GREASES. UNITED STATES REFINING COMPANY, Los Angeles, Calif.
Filed December 7, 1929. Serial No. 293,390. PUBLISHED MARCH 11, 1930. Class 15.

271,176. CORRUGATED PAPER CASES FOR SHIPPING BURIAL COFFINS. SUPERIOR PAPER PRODUCTS COMPANY, Carnegie, Pa.
Filed December 16, 1929. Serial No. 293,754. PUBLISHED FEBRUARY 25, 1930. Class 2.

271,177. DEVICE FOR HEATING THE OIL IN INTERNAL-COMBUSTION ENGINES IN CIRCULATING ELECTRIC HEATERS. AVIATION ACCESSORIES CORPORATION, San Francisco, Calif.
Filed December 17, 1929. Serial No. 293,810. PUBLISHED MARCH 11, 1930. Class 21.

271,178. STOKERS. ECONOMY STOKER COMPANY, Salt Lake City, Utah.
Filed December 19, 1929. Serial No. 293,877. PUBLISHED MARCH 11, 1930. Class 34.

271,179. SEPARABLE FASTENERS OF THE SLIDER-CONTROLLED TYPE. HOOKLESS FASTENER COMPANY, Meadville, Pa.
Filed December 19, 1929. Serial No. 293,880. PUBLISHED MARCH 11, 1930. Class 13.

271,180. SALT AND PEPPER SHAKERS, CANDLESTICKS, VASES, ATOMIZERS, AND CASTERS, ALL MADE OF OR PLATED WITH PRECIOUS METAL. QUAKER SILVER COMPANY, Attleboro, Mass.
Filed December 19, 1929. Serial No. 293,896. PUBLISHED MARCH 11, 1930. Class 28.

271,181. GAS AND OIL BURNERS, COMBINATION GAS AND OIL BURNERS, FIRE POTS, COMBUSTION CHAMBERS. LEE B. METTLER, doing business as Lee B. Mettler Co., Los Angeles, Calif.
Filed December 26, 1929. Serial No. 294,079. PUBLISHED MARCH 11, 1930. Class 34.

271,182. WAX LAMPS AND CANDLESTICKS. SMITH & NICHOLS, INC., New York, N. Y.
Filed December 26, 1929. Serial No. 294,091. PUBLISHED MARCH 11, 1930. Class 34.

271,183. TARPAULINS. PITTSBURGH WATERPROOF COMPANY, Pittsburgh, Pa.
Filed December 30, 1929. Serial No. 294,240. PUBLISHED MARCH 18, 1930. Class 50.

271,184. LEATHER SUBSTITUTES. LEATHER FINISH FABRICS, INC., Newark, N. J.
Filed December 31, 1929. Serial No. 294,268. PUBLISHED MARCH 18, 1930. Class 50.

271,185. AIR VALVES FOR STEAM RADIATORS. W. A. RUSSELL & CO., New York, N. Y.
Filed January 2, 1930. Serial No. 294,321. PUBLISHED MARCH 11, 1930. Class 13.

271,186. HEATING REGISTERS. TUTTLE & BAILEY MANUFACTURING COMPANY, New York, N. Y.
Filed January 2, 1930. Serial No. 294,324. PUBLISHED MARCH 11, 1930. Class 34.

271,187. COMMERCIAL MOTOR CARS, CHASSIS, AND CONSTRUCTIVE PARTS. GRAHAM-PAIGE MOTORS CORPORATION, Dearborn, Mich.
Filed January 6, 1930. Serial No. 294,421. PUBLISHED MARCH 11, 1930. Class 19.

271,188. LUBRICATING OILS. THE CANFIELD OIL COMPANY, Cleveland, Ohio.
Filed January 7, 1930. Serial No. 294,472. PUBLISHED MARCH 11, 1930. Class 15.

271,189. PERFUMES, TOILET WATER, FACE POWDER, TALCUM POWDER, FACE CREAMS, ROUGES, LIP STICKS, SACHETS, LOTION FOR THE SKIN AND HAIR, BRILLIANTINE, BATH SALTS. PARFUMERIE MONPELAS, STEINFELS FRERES & CIE., SOCIETE A RESPONSABILITE LIMITEE, and doing business as Luyna, Vincennes, France.
Filed January 7, 1930. Serial No. 294,483. PUBLISHED MARCH 11, 1930. Class 6.

271,190. TABLETS FOR TREATING OBESITY. OBEX CORPORATION, New York, N. Y.
Filed January 23, 1930. Serial No. 295,130. PUBLISHED MARCH 4, 1930. Class 6.

271,191. MECHANISM FOR AUTOMATICALLY CONTROLLING THE SEQUENCE OF OPERATION OF CONCRETE MIXERS. CHAIN BELT COMPANY, Milwaukee, Wis.
Filed January 23, 1930. Serial No. 295,115. PUBLISHED MARCH 18, 1930. Class 23.

271,192. CAMERAS. BURLEIGH BROOKS, New York, N. Y.
Filed January 16, 1930. Serial No. 294,844. PUBLISHED MARCH 18, 1930. Class 26.

271,193. ASTRINGENTS, ASTRINGENT CERATES, BLEACH CREAMS, ETC. LIGHTFOOT SCHULTZ COMPANY, Hoboken, N. J.
Filed January 15, 1930. Serial No. 294,811. PUBLISHED MARCH 4, 1930. Class 6.

271,194. PREPARATIONS FOR THE TREATMENT OF AILMENTS IN THE STOMACH. LEO G. GARSKE, Minneapolis, Minn.
Filed January 11, 1930. Serial No. 294,668. PUBLISHED MARCH 11, 1930. Class 6.

271,195. NAIL POLISH. COTY, INC., Wilmington, Del., and New York, N. Y.
Filed January 10, 1930. Serial No. 294,623. PUBLISHED MARCH 11, 1930. Class 6.

271,196. LINIMENT FOR THE TREATMENT OF RHEUMATISM, BRUISES, ETC. ETTA HECTOR, Brooklyn, N. Y.
Filed January 8, 1930. Serial No. 294,527. PUBLISHED MARCH 4, 1930. Class 6.

271,197. PREPARATION FOR TREATING ECZEMA. HADENSA GESELLSCHAFT m. b. H., Berlin-Lichterfelde, Germany.
Filed January 8, 1930. Serial No. 294,526. PUBLISHED MARCH 11, 1930. Class 6.

271,198. PAPER DRESS PATTERNS. THE CONDE NAST PUBLICATIONS, INC., New York, N. Y.
Filed January 3, 1930. Serial No. 294,341. PUBLISHED MARCH 18, 1930. Class 26.

271,199. COMPOUNDS FOR REMOVING SCALE, RUST, CORROSION, AND THE LIKE FROM BOILERS, ETC. ARAB CHEMICAL AND ENGINEERING CORP., Gloucester City, N. J.
Filed January 3, 1930. Serial No. 294,334. PUBLISHED MARCH 4, 1930. Class 6.

271,200. PREPARATION IN POWDER FORM CONTAINED IN CAPSULES FOR THE TREATMENT OF LEUCORRHŒA AND VAGINAL UTERINE ULCERS. EDNA J. LEWIS, doing business as Lewis Laboratories, Hollywood, Calif., assignor to Georgia G. La Mark, Los Angeles, Calif.
Filed January 2, 1930. Serial No. 294,310. PUBLISHED MARCH 4, 1930. Class 6.

271,201. CHEMICAL DYE AIDS. H. TH. BOHME A. G., Chemnitz, Germany.
Filed January 2, 1930. Serial No. 294,302. PUBLISHED MARCH 4, 1930. Class 6.

271,202. CEREAL MALT BEVERAGES CONTAINING LESS THAN ONE-HALF OF ONE PER CENT ALCOHOL. PABST CORPORATION, Milwaukee, Wis.
Filed December 31, 1929. Serial No. 294,274. PUBLISHED MARCH 18, 1930. Class 48.

271,203. HAIR GROWER. KASIMIR KOWALSKI, Chicago, Ill.
Filed December 31, 1929. Serial No. 294,266. PUBLISHED MARCH 4, 1930. Class 6.

271,204. MECHANICAL DEVICE FOR USE FOR THE REMOVAL OF CARBON FROM COMBUSTION CHAMBERS AND VALVES THEREOF. CHARLES L. EVERWINE, Newark, N. J.
Filed December 28, 1929. Serial No. 294,151. PUBLISHED MARCH 18, 1930. Class 23.

271,205. SKIN CREAM. FRANK O. RINGNELL, doing business as F O R Laboratories, Glendale, Calif.
Filed December 26, 1929. Serial No. 294,086. PUBLISHED MARCH 11, 1930. Class 6.

271,206. PERFUME, TOILET WATER, SACHET, FACE CREAMS, ETC. BALDWIN PERFUMERY COMPANY, doing business as Baldwin, Chicago, Ill.
Filed December 26, 1929. Serial No. 294,051. PUBLISHED MARCH 11, 1930. Class 6.

271,207. COSMETICS. LOUISE KENT, INC., Brooklyn, N. Y.
Filed December 16, 1929. Serial No. 293,734. PUBLISHED MARCH 11, 1930. Class 6.

271,208. LINIMENT, CORN SALVE, WHITE-PINE COUGH SYRUP, ETC. SLOTHOWER BROS. & SONS, Harrisburg, Pa.
Filed December 12, 1929. Serial No. 293,605. PUBLISHED MARCH 11, 1930. Class 6.

271,209. PYORRHEA PREPARATION. FORHAN COMPANY, New York, N. Y., assignor, by mesne assignments, to Forhan Company, Inc., New York, N. Y., a Corporation of New York.
Filed December 9, 1929. Serial No. 293,422. PUBLISHED MARCH 11, 1930. Class 6.

271,210. MEDICINE FOR THE RELIEF OF KIDNEY AND BLADDER TROUBLE AND TO PREVENT GALLSTONES AND GRAVEL FORMATIONS. EBREY CHEMICAL WORKS, INC., New York, N. Y.
Filed December 9, 1929. Serial No. 293,415. PUBLISHED MARCH 11, 1930. Class 6.

271,211. HANDKERCHIEFS AND VEILS. KNOX HAT COMPANY, INC., New York, N. Y.
Filed June 1, 1929. Serial No. 284,911. PUBLISHED MARCH 11, 1930. Class 42.

271,212. MEDICINAL PREPARATION RECOMMENDED FOR THE TREATMENT OF COUGHS, IRRITATIONS OF THE THROAT, CATARRHAL CONDITIONS, AND AFFECTIONS OF THE RESPIRATORY TRACT GENERALLY. SEECK & KADE, INC., New York, N. Y.
Filed May 28, 1929. Serial No. 284,748. PUBLISHED NOVEMBER 5, 1929. Class 6.

271,213. HOSE SUPPORTERS AND HOSE-SUPPORTER GRIPS. THE ANSONIA O & C COMPANY, Ansonia, Conn.
Filed May 22, 1929. Serial No. 284,433. PUBLISHED MARCH 11, 1930. Class 39.

271,214. RUBBER TIRES FOR VEHICLES. BIGGS & BLACK, INC., New York, N. Y.
Filed May 17, 1929. Serial No. 284,159. PUBLISHED MARCH 18, 1930. Class 35.

271,215. TABLES, TABLE TOPS, CHAIRS, CABINETS, STOOLS, CAKE BOARDS, AND BREAD BOARDS. ALBANY DOOR COMPANY, Albany, Oreg.
Filed May 11, 1929. Serial No. 283,837. PUBLISHED MARCH 18, 1930. Class 32.

271,216. PAPERBOARD BOXES AND CARTONS. THE HINDE & DAUCH PAPER COMPANY, Sandusky and Delphos, Ohio; Chicago, Ill.; Philadelphia, Pa.; New York, N. Y.; and Muncie, Ind.
Filed May 10, 1929. Serial No. 283,770. PUBLISHED MARCH 11, 1930. Class 2.

271,217. CLEANSING CREAM, MASSAGE CREAM, FACE POWDER, BATH POWDER, ASTRINGENT, WRINKLE CREAM, PERFUME, SHAMPOO, ROUGE, BRILLIANTINE, AND DOUCHE POWDER. KENNETH R. BARNUM, doing business as Nightingale Laboratories, Kansas City, Mo.
Filed May 8, 1929. Serial No. 283,654. PUBLISHED MARCH 4, 1930. Class 6.

271,218. LAXATIVE MEDICINAL TONIC. F. O. KNOPPEL, doing business as Nectartone Laboratories, Chicago, Ill.
Filed May 8, 1929. Serial No. 283,647. PUBLISHED MARCH 4, 1930. Class 6.

271,219. AUTOMOBILES AND THEIR STRUCTURAL PARTS. CHRYSLER CORPORATION, Detroit, Mich.
Filed May 6, 1929. Serial No. 283,553. PUBLISHED MARCH 11, 1930. Class 19.

271,220. OLIVE OIL. BENJAMIN DORMAN, Brooklyn, N. Y.
Filed April 29, 1929. Serial No. 283,182. PUBLISHED MARCH 18, 1930. Class 46.

271,221. MATERIAL COMPOSED OF SATURATED FATTY ACIDS. THE PROCTER & GAMBLE COMPANY, Cincinnati, Ohio.
Filed April 25, 1929. Serial No. 283,004. PUBLISHED MARCH 11, 1930. Class 6.

271,222. BEAUTY CREAM, COLD CREAM, FACE POWDER, HAIR TONIC, ETC. THE MILSON COMPANY, Cincinnati, Ohio.
Filed April 20, 1929. Serial No. 282,741. PUBLISHED AUGUST 27, 1929. Class 6.

271,223. PERFUMES, TOILET WATER, FACE POWDER, TALCUM POWDER, DUSTING POWDER, AND BATH CRYSTALS. ADOLPH SPIEHLER, INC., Rochester, N. Y.
Filed April 17, 1929. Serial No. 282,576. PUBLISHED SEPTEMBER 10, 1929. Class 6.

271,224. ORNAMENTAL ARTICLES MADE OF MOLDED METAL—NAMELY, STATUETTES. CRESCENT METAL WORKS, INC., Newark, N. J.
Filed April 8, 1929. Serial No. 281,990. PUBLISHED MARCH 18, 1930. Class 50.

271,225. SALVE OR OINTMENT FOR THE TREATMENT OF ULCERS, RHEUMATISM, AND PILES. SALOMON CHAJUD, Las Juntas, Abangares, Costa Rica.
Filed March 25, 1929. Serial No. 281,259. PUBLISHED MARCH 11, 1930. Class 6.

271,226. CHOCOLATE COCOANUT CANDY BARS. THE BRADLEY, SMITH COMPANY, New Haven, Conn.
Filed February 16, 1929. Serial No. 279,442. PUBLISHED FEBRUARY 18, 1930. Class 46.

271,227. PERFUMERIES, COLOGNE WATERS, BATH SALTS, FACE CREAMS, ETC. GEORG SCHICHT A. G., Aussig, Czechoslovakia.
Filed February 15, 1929. Serial No. 279,388. PUBLISHED MARCH 11, 1930. Class 6.

271,228. RADIO RECEIVING SETS AND LOUDSPEAKERS, ANTENNÆ TRANSFORMERS, ETC. THE BALDWIN COMPANY, Cincinnati, Ohio.
Filed February 6, 1929. Serial No. 278,924. PUBLISHED MARCH 11, 1930. Class 21.

271,229. FERTILIZER. CHAS. W. PRIDDY & COMPANY, INCORPORATED, Norfolk, Va.
Filed February 2, 1929. Serial No. 278,807. PUBLISHED MARCH 18, 1930. Class 10.

271,230. MAGAZINE. SIMMONS-BOARDMAN PUBLISHING CO., New York, N. Y.
Filed February 1, 1929. Serial No. 278,754. PUBLISHED MARCH 18, 1930. Class 38.

271,231. DRESS FABRICS OF SILK SOLD IN THE PIECE. ALBERT GODDE, BEDIN, INC., New York, N. Y.
Filed January 29, 1929. Serial No. 278,592. PUBLISHED MARCH 11, 1930. Class 42.

271,232. PERFUMES, ALDEHYDES, ALCOHOLS, AND NATURAL AND SYNTHETIC ESSENTIAL OILS SUITABLE FOR PERFUMING PURPOSES. CHARABOT, INC., New York, N. Y.
Filed January 16, 1929. Serial No. 278,028. PUBLISHED MARCH 4, 1930. Class 6.

271,233. CANDY. DILLING & COMPANY, Indianapolis, Ind.
Filed December 21, 1928. Serial No. 277,057. PUBLISHED MARCH 18, 1930. Class 46.

271,234. LADIES' WRIST WATCHES. BULOVA WATCH COMPANY, INC., New York, N. Y.
Filed December 17, 1928. Serial No. 276,831. PUBLISHED FEBRUARY 12, 1929. Class 27.

271,235. TEXTILE BATH MATS AND AWNING FABRICS. MORTON H. GOLDENBERG, doing business as "Goldenberg's," Washington, D. C.
Filed December 14, 1928. Serial No. 276,693. PUBLISHED MARCH 11, 1930. Class 42.

271,236. FRATERNITY LAPEL BUTTONS OF PRECIOUS METAL. THE DELTA CHI FRATERNITY, Iowa City, Iowa.
Filed December 5, 1928. Serial No. 276,307. PUBLISHED MARCH 11, 1930 Class 28.

271,237. LUBRICATING OILS AND GREASES. C. A. SKINNER, Council Bluffs, Iowa.
Filed December 4, 1928. Serial No. 276,277. PUBLISHED APRIL 9, 1929. Class 15.

271,238. SAFETY-RAZOR BLADES. LOUIS SCHWARZ, Chicago, Ill.
Filed October 30, 1928. Serial No. 274,574. PUBLISHED DECEMBER 11, 1928. Class 23.

271,239. HAIR RESTORER. JARSON HAIRENU CO., Detroit, Mich.
Filed September 8, 1928. Serial No. 272,104. PUBLISHED MARCH 19, 1929. Class 6.

271,240. HOOKS AND EYES AND BUCKLES MADE OF NONPRECIOUS METAL. KRAFFT & SCHÜLL, Duren, Germany.
Filed June 8, 1929. Serial No. 285,276. PUBLISHED MARCH 18, 1930. Class 40.

271,241. LIQUID MEDICINAL PREPARATION FOR THE TREATMENT OF RHEUMATISM, NEURITIS, AND OTHER PAINFUL CONDITIONS. BERTRAM B. MAIER, doing business as Windsor Park Chemical Company, Chicago, Ill.
Filed July 13, 1929. Serial No. 287,082. PUBLISHED MARCH 11, 1930. Class 6.

271,242. PORCELAIN WARE. PORZELLANFABRIK WALDERSHOF AKTIENGESELLSCHAFT VORMALS JOHANN HAVILAND, Waldershof, Germany.
Filed July 11, 1929. Serial No. 286,952. PUBLISHED MARCH 11, 1930. Class 30.

271,243. INSECTICIDES. KOPPERS PRODUCTS COMPANY, Pittsburgh, Pa.
Filed July 11, 1929. Serial No. 286,942. PUBLISHED MARCH 11, 1930. Class 6.

271,244. INSECTICIDES, DISINFECTANTS, ETC. CHEMICAL COMPOUNDING CORPORATION, Brooklyn, N. Y.
Filed August 16, 1929. Serial No. 288,585. PUBLISHED MARCH 11, 1930. Class 6.

271,245. HANDKERCHIEFS AND VEILS. KNOX HAT COMPANY, INC., New York, N. Y.
Filed June 6, 1929. Serial No. 285,159. PUBLISHED MARCH 11, 1930. Class 42.

271,246. PREPARATIONS FOR THE RELIEF OF EPILEPSY AND NERVOUSNESS. MORRIS ADLER, New York, N. Y.
Filed November 9, 1929. Serial No. 292,191. PUBLISHED MARCH 4, 1930. Class 6.

271,247. MEDICINAL PREPARATION IN LIQUID FORM TO BE APPLIED EXTERNALLY FOR THE TREATMENT OF RHEUMATISM AND SPRAINS. OTTO KOHVAKKA, San Francisco, Calif.
Filed November 5, 1929. Serial No. 292,040. PUBLISHED MARCH 11, 1930. Class 6.

271,248. SKIN ANTISEPTIC. EDWARD A. HENSKE, doing business as Kin-Septic Company, St. Louis, Mo.
Filed November 4, 1929. Serial No. 291,983. PUBLISHED DECEMBER 24, 1929. Class 6.

271,249. DEODORANT AND INSECTICIDE, WITH A BASE OF PARADICHLOR BENZENE, IN THE FORM OF SOLID CHIPS. CRYSTAL PRODUCTS CO., INC., New York, N. Y.
Filed October 18, 1929. Serial No. 291,206. PUBLISHED DECEMBER 10, 1929. Class 6.

271,250. POWDER PREPARATION FOR USE IN THE TREATMENT OF PILES. MIKE H. VASKOS, Beloit, Wis.
Filed October 12, 1929. Serial No. 291,034. PUBLISHED MARCH 11, 1930. Class 6.

271,251. ALL KINDS OF TABLE AND KITCHEN KNIVES, FORKS, AND SPOONS OF BASE METAL; ALSO BUTCHERS' AND GARDENERS' KNIVES, POCKETKNIVES, CHOPPING KNIVES, AND HATCHETS, ALL OF BASE METAL. MANUFACTURE METALLURGIQUE DE TOURNUS, Tournus, France.
Filed November 4, 1929. Serial No. 291,992. PUBLISHED MARCH 18, 1930. Class 23.

271,252. TOOTH PASTE AND A LIQUID ANTISEPTIC. DA-LEE CHEMICAL CO. INC., Baltimore, Md.
Filed September 5, 1929. Serial No. 289,341. PUBLISHED MARCH 4, 1930. Class 6.

271,253. GRAPE JUICE. SIMONS BROTHERS, Charleston and Johns Island, S. C.
Filed July 12, 1929. Serial No. 287,020. PUBLISHED MARCH 18, 1930. Class 45.

271,254. MAGAZINES AND INSTRUCTION SHEETS ISSUED FROM TIME TO TIME. UNITED STATES POWER SQUADRONS, INC., Washington, D. C.
Filed November 25, 1929. Serial No. 292,913. PUBLISHED MARCH 11, 1930. Class 38.

271,255. FOOT APPAREL COMPRISING MEN'S, LADIES', AND CHILDREN'S BOOTS AND SHOES MADE OF LEATHER. I. LEVENTHAL AND SONS, West Brighton, N. Y.
Filed November 15, 1929. Serial No. 292,453. PUBLISHED MARCH 11, 1930. Class 39.

271,256. WRITING PAPER, CORRESPONDENCE CARDS, AND MAILING AND CORRESPONDENCE ENVELOPES. M. & F. SCHLOSSER PAPER CORPORATION, New York, N. Y.
Filed November 5, 1929. Serial No. 292,052. PUBLISHED MARCH 18, 1930. Class 37.

271,257. TOFFEE. JOHN MACKINTOSH AND SONS, LIMITED, Halifax, England.
Filed September 23, 1929. Serial No. 290,171. PUBLISHED DECEMBER 24, 1929. Class 46.

271,258. TOILET PAPER. WYOMING VALLEY PAPER MILL, Northumberland, N. H., and New York, N. Y.
Filed September 6, 1929. Serial No. 289,432. PUBLISHED DECEMBER 31, 1929. Class 37.

271,259. LAUNDRY AND TOILET SOAP. EDWARD D. CAPLES, doing business as Bluo Manufacturing Co., Somerville, Mass.
Filed September 5, 1929. Serial No. 289,335. PUBLISHED NOVEMBER 12, 1929. Class 4.

271,260. BOOTS AND SHOES MADE OF LEATHER AND COMBINATIONS OF LEATHER AND FABRIC. FIELD & FLINT CO., Brockton, Mass.
Filed August 20, 1929. Serial No. 288,745. PUBLISHED MARCH 11, 1930. Class 39.

271,261. PORTABLE ACCOUNTING RECORDS, INDIVIDUAL RECORD SHEETS, AND TABLES OF FIGURES FOR USE IN PREPARING SAID RECORDS FOR USE BY FARMERS. DUDLEY H. STILES, doing business as Serval System, Kansas City, Kans.
Filed August 10, 1929. Serial No. 288,402. PUBLISHED MARCH 18, 1930. Class 37.

271,262. CERTAIN NAMED FANCY GOODS AND FURNISHINGS. THE WILCOX NOVELTY COMPANY, Athol, Mass.
Filed August 2, 1929. Serial No. 288,042. PUBLISHED MARCH 11, 1930. Class 40.

271,263. CHOCOLATES, HARD CANDIES, AND BONBONS. HILLIARD'S GLASS HOUSE GOODIES, INC., Boston and West Roxbury, Mass.
Filed July 31, 1929. Serial No. 287,925. PUBLISHED MARCH 18, 1930. Class 46.

271,264. ICE CREAM. DE COURSEY CREAMERY COMPANY, Kansas City, Kans.
Filed July 22, 1929. Serial No. 287,455. PUBLISHED MARCH 18, 1930. Class 46.

271,265. CERTAIN NAMED WEARING APPAREL. I. G. FARBENINDUSTRIE AKTIENGESELLSCHAFT, Frankfort on-the-Main, Germany.
Filed July 16, 1929. Serial No. 287,180. PUBLISHED MARCH 11, 1930. Class 39.

271,266. PINS MADE OF BASE METAL. A. MEYERS & SONS, New York, N. Y.
Filed June 29, 1929. Serial No. 286,375. PUBLISHED MARCH 18, 1930. Class 40.

271,267. LINIMENT FOR SPRAINS, BRUISES, MUSCULAR RHEUMATISM, ACHES, PAINS, SORE MUSCLES, NEURALGIA, LUMBAGO, SCIATICA, AND SWOLLEN LIMBS. PEARSON REMEDY COMPANY, INC., Burlington, N. C.
Filed November 14, 1929. Serial No. 292,416. PUBLISHED FEBRUARY 4, 1930. Class 6.

271,268. RADIO RECEIVING SETS ADAPTED FOR COMBINATION WITH PHONOGRAPHS. SELECTRIC PHONOGRAPH AND RADIO CORPORATION, Grand Rapids, Mich.
Filed November 23, 1929. Serial No. 292,833. PUBLISHED MARCH 11, 1930. Class 21.

271,269. BADGES, EMBLEMS, FINGER RINGS, ORNAMENTAL PINS, LAPEL BUTTONS, WATCH CHARMS, AND OTHER INSIGNIA OF THE IMPROVED ORDER OF RED MEN, ALL MADE OF OR PLATED WITH PRECIOUS METAL. GREAT COUNCIL OF THE UNITED STATES OF THE IMPROVED ORDER OF RED MEN, Philadelphia, Pa.
Filed November 23, 1929. Serial No. 292,804. PUBLISHED MARCH 11, 1930. Class 28.

271,270. MATERIALS TO BE USED IN PLACE OF SUGAR FOR BEVERAGES. WALTER J. RICKEL, Chicago, Ill.
Filed November 22, 1929. Serial No. 292,751. PUBLISHED MARCH 18, 1930. Class 46.

271,271. BABBITT AND BEARING METALS. THE INGALLS IRON WORKS CO., Birmingham, Ala.
Filed November 18, 1929. Serial No. 292,568. PUBLISHED MARCH 18, 1930. Class 14.

271,272. PREPARATION FOR THE RELIEF OF PAIN AND DISCOMFORT ARISING FROM SIMPLE HEADACHES, NEURALGIA, HEAD COLDS, MUSCULAR ACHES AND PAINS. COTTON BELT DRUG COMPANY, Augusta, Ga.
Filed November 18, 1929. Serial No. 292,524. PUBLISHED MARCH 11, 1930. Class 6.

271,273. SMOKING AND CHEWING TOBACCO. POWELL & GOLDSTEIN, INC., Oneida, N. Y.
Filed November 16, 1929. Serial No. 292,508. PUBLISHED MARCH 18, 1930. Class 17.

271,274. COMBINATION UTENSILS HAVING THE FUNCTION OF DISHWASHERS, STEAM COOKERS, AND COLD-PACK CANNERS. FAGLEY & HALPEN, Philadelphia, Pa.
Filed October 11, 1929. Serial No. 290,943. PUBLISHED MARCH 11, 1930. Class 13.

271,275. METAL STORAGE TANKS, BINS, VATS. THE ALPHA TANK & SHEET METAL MFG. CO., St. Louis, Mo.
Filed October 7, 1929. Serial No. 290,732. PUBLISHED MARCH 11, 1930. Class 2.

271,276. ELECTRIC NONGLARE FOG-PENETRATING LIGHTS. WILLIAM P. VERDON, SR., Hoboken, N. J.
Filed October 21, 1929. Serial No. 291,371. PUBLISHED MARCH 11, 1930. Class 21.

271,277. ELECTRIC MEAT ROASTERS. PRESTO ELECTRIC ROASTER COMPANY, Pittsburgh, Pa.
Filed October 17, 1929. Serial No. 291,175. PUBLISHED MARCH 11, 1930. Class 21.

271,278. ALIMENTARY PRODUCTS—NAMELY, MACARONI, SPAGHETTI, AND NOODLES. MERCURIO BROS. SPAGHETTI MFG. CO., St. Louis, Mo.
Filed October 5, 1929. Serial No. 290,715. PUBLISHED MARCH 18, 1930. Class 46.

271,279. AUTOMATIC ELECTRIC TEMPERATURE, PRESSURE, FLOAT, AND TIME RESPONSIVE DEVICES AND REPLACEMENT PARTS THEREOF, ETC. TIME-O-STAT CONTROLS COMPANY, Elkhart, Ind.
Filed September 6, 1929. Serial No. 289,425. PUBLISHED MARCH 11, 1930. Class 21.

271,280. ELECTRICAL WIRING DEVICES, ELECTRICAL SPECIALTIES AND ELECTRICAL HEATING DEVICES KNOWN TO THE TRADE AS ELECTRICAL SWITCHES, PLUGS, PUSH BUTTONS, OUTLETS, PENDANT SWITCHES, CAMP FIXTURES, LAMP SOCKETS, LIGHTING FIXTURES, CONNECTORS, RESISTANCE UNITS AS USED IN RHEOSTAT AND RADIO APPARATUS; HEATING UNITS AS UTILIZED IN ELECTRIC TOASTERS, OVENS, RADIATORS FOR INDUSTRIAL AND DOMESTIC PURPOSES, TRANSFORMERS; MOULDED ARTICLES KNOWN AS ELECTRIC WALL PLATES, BUTTONS, SHIELDS, CORD ADJUSTERS, AND MOULDED MEMBERS FORMING PARTS IN ELECTRIC WIRING DEVICES. RODALE MANUFACTURING COMPANY, New York, N. Y.
Filed September 3, 1929. Serial No. 289,304. PUBLISHED MARCH 11, 1930. Class 21.

271,281. WOOD AND FIBRE PACKING BOXES AND CARTONS. O. B. ANDREWS COMPANY, Chattanooga, Tenn.
Filed August 3, 1929. Serial No. 288,049. PUBLISHED MARCH 11, 1930. Class 2.

271,282. WRIST-WATCH BRACELETS. KESTENMAN BROS. MFG. CO., Providence, R. I.
Filed July 17, 1929. Serial No. 287,256. PUBLISHED MARCH 11, 1930. Class 28.

271,283. LIGATURES OR CLAMPS FOR MOUTHPIECES OF MUSICAL INSTRUMENTS. GEORGE L. MILLER, doing business as Miller Dental Laboratory, Boston, Mass.
Filed July 5, 1929. Serial No. 286,647. PUBLISHED MARCH 11, 1930. Class 36.

271,284. COSMETIC FOR THE HAIR AND SCALP. FRANK H. NEWTON, Los Angeles, Calif.
Filed November 19, 1929. Serial No. 292,591. PUBLISHED MARCH 11, 1930. Class 6.

271,285. PERFUME, TOILET WATER, TALC POWDER, ETC. COLGATE-PALMOLIVE-PEET COMPANY, Chicago, Ill.
Filed November 16, 1929. Serial No. 292,485. PUBLISHED FEBRUARY 25, 1930. Class 6.

271,286. COMPLEXION CREAM AND FACE LOTION. THE SPANN & TOMLIN SEASIDE MFG. CO., Tulsa, Okla.
Filed October 28, 1929. Serial No. 291,700. PUBLISHED MARCH 11, 1930. Class 6.

271,287. MATCHES. VULCAN MATCH CO., INC., New York, N. Y.
Filed October 26, 1929. Serial No. 291,643. PUBLISHED MARCH 18, 1930. Class 9.

271,288. GLASS VALANCES AND PIECES OF DECORATED AND CARVED GLASS EMPLOYED IN THE STRUCTURE OF SHOW WINDOWS. ENY ART, INC., New York, N. Y.
Filed September 17, 1929. Serial No. 289,884. PUBLISHED MARCH 11, 1930. Class 33.

271,289. GOLF BALLS. PACIFIC GOLF BALL, LTD., San Francisco, Calif.
Filed August 26, 1929. Serial No. 289,039. PUBLISHED FEBRUARY 18, 1930. Class 22.

271,290. GOLF BALLS. WRIGHT & DITSON, Boston, Mass.
Filed August 16, 1929. Serial No. 288,629. PUBLISHED FEBRUARY 11, 1930. Class 22.

[ACT OF MARCH 19, 1920, SEC. 1 (b)]

THESE REGISTRATIONS ARE NOT SUBJECT TO OPPOSITION

271,291. (CLASS 29. BROOMS, BRUSHES, AND DUSTERS.) THE INDUSTRIAL HOME FOR THE BLIND, Brooklyn, N. Y. Filed Jan. 27, 1930. Serial No. 295,261.

MANHATTAN MOP

For Mops.
Claims use since Jan. 2, 1928.

271,292. (CLASS 34. HEATING, LIGHTING, AND VENTILATING APPARATUS, NOT INCLUDING ELECTRICAL APPARATUS.) JOHN H. ROETHEL, Brooklyn, N. Y. Filed Feb. 6, 1930. Serial No. 295,719.

THE BLINDLESS HEADLIGHT PROTECTOR

For Shades or Dimmers Made of Metal or Other Opaque Material for Automobile Headlights to the Front of Which They Are Fastened.
Claims use since Oct. 28, 1927.

271,293. (CLASS 16. PAINTS AND PAINTERS' MATERIALS.) JOHN DUICH, Madison, Ill. Filed Feb. 15, 1930. Serial No. 296,050.

KLEAN-RITE

For Cleaning and Polishing Compound for Automobiles, Furniture, Floors, and Woodwork.
Claims use since Jan. 1, 1923.

271,294. (CLASS 7. CORDAGE.) HOOPER PAPER & TWINE CO., INC., Philadelphia, Pa. Filed Mar. 8, 1930. Serial No. 297,013.

MERIT BRAND

For Cotton Twines, Sash Cord, Ropes, and Twines—Namely, Jute, Paper Makers, Box Twines, Tube Rope, Manila Rope, and Hemp Twine.
Claims use since Jan. 4, 1929.

271,295. (CLASS 17. TOBACCO PRODUCTS.) REED TOBACCO COMPANY, Richmond, Va. Filed Mar. 14, 1930. Serial No. 297,330.

Yorktown

For Cigarettes.
Claims use since October, 1926.

271,296. (CLASS 13. HARDWARE AND PLUMBING AND STEAM-FITTING SUPPLIES.) JOHN J. BARKER, doing business as Boston Coupling Company, Boston, Mass. Filed Mar. 17, 1930. Serial No. 297,405.

BARKER

For Fire-Hose Couplings, Fire-Hose Nozzles, Hose Spray Pipes, Water Valves, and Fire-Hose Connections.
Claims use since Jan. 1, 1908.

271,297. (CLASS 33. GLASSWARE.) CONTAINER SALES COMPANY, INC., New York, N. Y. Filed Mar. 20, 1930. Serial No. 297,585.

Quik-Seal

For Jars Composed of Glass With Metal Tops.
Claims use since Dec. 4, 1928.

271,298. (CLASS 33. GLASSWARE.) CONTAINER SALES COMPANY, INC., New York, N. Y. Filed Mar. 20, 1930. Serial No. 297,586.

Quik-Seal
AIR-TITE

For Jars Composed of Glass with Metal Tops.
Claims use since Dec. 4, 1928.

271,299. (CLASS 39. CLOTHING.) VASSAR SWISS UNDERWEAR COMPANY, Chicago, Ill. Filed June 27, 1929. Serial No. 286,285.

SLIP-ON

For Men's and Boys' Union Suits.
Claims use since December, 1928.

271,300. (CLASS 24. LAUNDRY APPLIANCES AND MACHINES.) NATIONAL SPRING CLIP CO. INC., Montpelier, Vt. Filed Aug. 12, 1929. Serial No. 288,429.

KlosKlips

For Spring Clothespins.
Claims use since Apr. 1, 1929.

271,301. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) PACENT REPRODUCER CORPORATION, New York, N. Y. Filed Aug. 17, 1929. Serial No. 288,662.

PACENT
REPRODUCER

For Electric Sound-Reproduction Apparatus Consisting of Electrical Devices for Converting Sound Records on Discs and Films Into Sound Synchronously with the Exhibition of Motion Pictures.
Claims use since Dec. 1, 1928.

271,302. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) ELMER RICHARDS COMPANY, Chicago, Ill. Filed Aug. 20, 1929. Serial No. 288,761.

Richtone

For Radio Receiving Sets.
Claims use since Mar. 1, 1929.

271,303. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) ANNA S. WILDER, Sherwood, Mich. Filed Sept. 4, 1929. Serial No. 289,329.



For Preparation Used in the Treatment of the Eyes.
Claims use since Apr. 15, 1929.

271,304. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) COLUMBIA CABLE & ELECTRIC CO., Long Island City, N. Y. Filed Nov. 5, 1929. Serial No. 292,028.

COLUMBIA

For Armored Electric Cable and Flexible Steel Conduit.
Claims use since May 23, 1928.

271,305. (CLASS 29. BROOMS, BRUSHES, AND DUSTERS.) BAKER BRUSH CO., INC., New York, N. Y. Filed Feb. 4, 1929. Serial No. 278,864.

NO-SLIP

For Artists' Brushes.
Claims use since about Jan. 10, 1927.

271,306. (CLASS 39. CLOTHING.) AUSTIN F. BURDICK, doing business as The Snugfit Eye Patch Co., Lansing, Mich. Filed Mar. 16, 1929. Serial No. 280,825.

SNUGFIT

For Surgical Bibs.
Claims use since May, 1927.

271,307. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) RALPH H. GLEZEN, doing business as Peerless Chemical Company, Los Angeles, Calif. Filed Mar. 27, 1929. Serial No. 281,418.

STOMACAL

For Stomach Medicine.
Claims use since Feb. 15, 1928.

271,308. (CLASS 39. CLOTHING.) DIAMOND FULL FASHIONED HOSIERY COMPANY, High Point, N. C. Filed Mar. 29, 1929. Serial No. 281,549.

Granada

For Hosiery.
Claims use since Feb. 1, 1929.

271,309. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) GREAT FALLS MEAT COMPANY, Great Falls, Mont. Filed Jan. 15, 1930. Serial No. 294,805.

MONTANA

For Hams, Bacon, and Luncheon Meat.
Claims use since 1914.

271,310. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) MASSACHUSETTS DUCK GROWERS ASSOCIATION, Boston, Mass. Filed Dec. 12, 1929. Serial No. 293,588.



For Dressed Ducklings.
Claims use since Apr. 1, 1927.

271,311. (CLASS 15. OILS AND GREASES.) PIERCE PETROLEUM CORPORATION, Wilmington, Del., and St. Louis, Mo. Filed Oct. 21, 1927. Serial No. 256,418.

GRATIOT

For Lubricating Oils.
Claims use since Dec. 29, 1926.

271,312. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) BROWNELL & FIELD CO., Providence, R. I. Filed May 22, 1929. Serial No. 284,437.

Melton

For Canned Vegetables and Fish.
Claims use since Apr. 3, 1929.

271,313. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) WILLIAM HILLS JR. & CO., INCORPORATED, New York, N. Y. Filed Apr. 17, 1929. Serial No. 282,553.

רויטער בויטע RED OIL

The Jewish characters shown on the drawing mean "Red Oil."
For Canned Salmon.
Claims use since Mar. 26, 1929.

271,314. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) CRESCENT NOVELTY CO., North Bergen, N. J., and New York, N. Y. Filed Apr. 15, 1929. Serial No. 282,397.

PETAL-LACE

For Net Laces, Silk Laces, and Venice Laces in the Piece.
Claims use since Mar. 1, 1929.

271,315. (CLASS 39. CLOTHING.) R. H. WHITE COMPANY, Boston, Mass. Filed Apr. 4, 1929. Serial No. 281,867.

Malvern

For Men's Suits, Coats, Overcoats, Vests, and Trousers.
Claims use since Feb. 27, 1929.

LABELS

REGISTERED MAY 27, 1930

37,481.—*Title:* ELIXIR ASPIRAL. For Pharmaceutical Preparation. M. A. FEINBERG, New York, N. Y. Published Apr. 7, 1930.

37,482.—*Title:* PANSIPETAL. For Silk Textile Fabrics. FOLLMER CLOGG & CO., New York, N. Y.; Lancaster and Philadelphia, Pa.; and San Francisco, Calif. Published February 11, 1930.

37,483.—*Title:* SALAD BOWL. For Sandwich Spread. THE GELFAND MFG. COMPANY OF CALIF., INC., Los Angeles, Calif. Published February 13, 1930.

37,484.—*Title:* SUNNY BOY. For Soda. EDWARD J. HAFFNER, St. Louis, Mo. Published March 11, 1930.

37,485.—*Title:* R-K-O. For Candy. THE JOHN D. HAMILTON COMPANY, Tacoma, Wash. Published April 1, 1930.

37,486.—*Title:* NO. C B—317. For Tea Rolls. LAMBOOY LABEL & WRAPPER COMPANY, Kalamazoo, Mich. Published December 10, 1929.

37,487.—*Title:* CEDAR WOOD OIL PAINT. For Paint. MAINTENANCE SPECIALTIES SUPPLY CO., INC., Brooklyn, N. Y. Published March 1, 1930.

37,488.—*Title:* MANNINGS SUN-DAR TEA. For Tea. MANNINGS INC., San Francisco, Calif. Published April 8, 1930.

37,489.—*Title:* MANNINGS JO-TO TEA. For Tea. MANNINGS INC., San Francisco, Calif. Published April 8, 1930.

37,490.—*Title:* MANNINGS KOHI-STAN TEA. For Tea. MANNINGS INC., San Francisco, Calif. Published April 8, 1930.

37,491.—*Title:* FRESH SEAL. For Sliced Peaches. RAY-BROWN COMPANY, INC., Woodburn, Oreg. Published December 1, 1929.

37,492.—*Title:* SUPERYARN FABRICS. For Fabrics, Crepes and Georgettes. HENRY ROSENZWEIG & CO., INC., New York, N. Y. Published March 20, 1930.

37,493.—*Title:* LAST LONG, PLASTIC ROOF COATING. For Liquid Plastic Roof Coating. ABRAHAM SCHMERLING, doing business as Central Plumbing Supply Company, Philadelphia, Pa. Published November 4, 1929.

37,494.—*Title:* SHY-N AUTO POLISH. For Automobile and Furniture Polish. SHY-N PRODUCTS CO., Morgantown, W. Va. Published May 18, 1928.

37,495.—*Title:* ASPIROIDS. For Relieving Colds. UNITED DRUG COMPANY, Boston, Mass. Published March 19, 1930.

PRINTS

REGISTERED MAY 27, 1930

12,558.—*Title:* ARCTURUS PHOTOLYTIC CELL. For Photo-Electric Devices. ARCTURUS RADIO TUBE COMPANY, Newark, N. J. Published April 10, 1930.

12,559.—*Title:* THERE IS A KEY TO BEAUTY. For Cleansing Cream, Skin Tonic, and Cleansing Tissues. ELIZABETH ARDEN INC., doing business as Elizabeth Arden, New York, N. Y. Published February 8, 1930.

12,560.—*Title:* LOVE. For Perfume. ELIZABETH ARDEN INC., doing business as Elizabeth Arden, New York, N. Y. Published March 17, 1930.

12,561.—*Title:* HELLO WORLD. For Candy. THE BONITA COMPANY, Fond du Lac, Wis. Published February 28, 1930.

12,562.—*Title:* CHUBB THE WHEATALL CHEF. For a Breakfast Cereal. BRADFORD MILLING COMPANY, Denver, Colo. Published March 1, 1930.

12,563.—*Title:* DAND ER-GO. For Treating Dandruff. PAULINE G. BROOKS, Corsicana, Tex. Published February 3, 1930.

12,564.—*Title:* DENTEES. For Dentifrice. WILLIAM HANSEN, Chicago, Ill. Published March 15, 1930.

12,565.—*Title:* A CAMEL CAN GO 11 DAYS WITHOUT A DRINK, BUT! I CAN'T GO 1 DAY WITHOUT A CAMEL. For Cigarettes. J. ROLAND KAY, Chicago, Ill. Published March 20, 1930.

12,566.—*Title:* IT REIGNS WHEN IT'S POURED. For Ginger Ale, Lime and Lithia, Sarsaparilla, and Carbonated Beverages. KING OF CLUBS, INC., Newark, N. J. Published March 15, 1930.

12,567.—*Title:* BOMBARDED WITH ENERGY. For Radio Tubes. NATIONAL UNION RADIO CORP., New York, N. Y. Published December 16, 1929.

12,568.—*Title:* OVERTURES. For Cigarettes. R. J. REYNOLDS TOBACCO COMPANY, Winston-Salem, N. C. Published March 17, 1930.

12,569.—*Title:* IT'S THE CAMEL BLEND. For Cigarettes. R. J. REYNOLDS TOBACCO COMPANY, Winston-Salem, N. C. Published March 19, 1930.

12,570.—*Title:* BETTER PROM THAN LAST YEAR. For Cigarettes. R. J. REYNOLDS TOBACCO COMPANY, Winston-Salem, N. C. Published April 1, 1930.

12,571.—*Title:* THE LUXURY OF CAMELS COSTS NO MORE. For Cigarettes. R. J. REYNOLDS TOBACCO COMPANY, Winston-Salem, N. C. Published March 31, 1930.

12,572.—*Title:* LOOK AT IT THIS WAY. For Cigarettes. R. J. REYNOLDS TOBACCO COMPANY, Winston-Salem, N. C. Published April 2, 1930.

12,573.—*Title:* BETTER AND HERE'S WHY. For Cigarettes. R. J. REYNOLDS TOBACCO COMPANY, Winston-Salem, N. C. Published April 7, 1930.

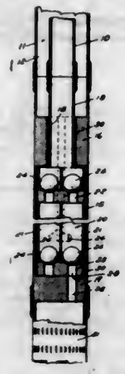
12,574.—*Title:* STANDING OUT AS THE BETTER CIGARETTE. For Cigarettes. R. J. REYNOLDS TOBACCO COMPANY, Winston-Salem, N. C. Published March 20, 1930.

12,575.—*Title:* RICE'S GIANT SUMMER STRAIGHT NECK SQUASH. For Squash Seeds. JEROME B. RICE SEED CO., Cambridge, N. Y. Published November 10, 1929.

REISSUES

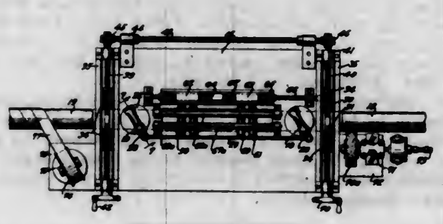
MAY 27, 1930

17,674. OIL-WELL PUMP. DONALD D. BURCH, Shawnee, Okla. Filed Oct. 25, 1929. Serial No. 402,510. Original No. 1,696,135, dated Dec. 18, 1928, Serial No. 251,397, filed Feb. 2, 1928. 14 Claims. (Cl. 103—234.)



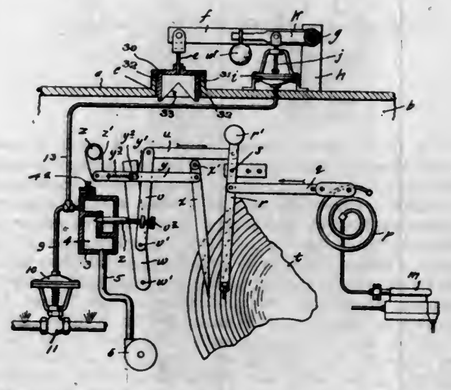
1. In a deep well pump and in combination, an assemblage adapted to be disposed in the fluid contained in the well comprising a barrel having heads at its opposite ends and having a port in each head, the upper head having an axial opening and a combined cylinder and control valve element rotatable within the barrel and having a neck extending through the opening of the upper head, said element having cylinder bores each having at its lower end a check-valved opening adapted to align with the port of the lower head and at its upper end a check-valved outlet communicating with the neck and ports in said element opening through the upper end of the element and each communicating at its lower end with one of the cylinders, said ports during rotation of the element alternately aligning with the port of the upper head.

17,675. MACHINE FOR TREATING PIPES AND THE LIKE. HAROLD SERAPHIN CHRISTOPHER, Los Angeles, Calif., assignor, by mesne assignments, to The Paraffin Companies, Inc., a Corporation of Delaware. Filed Oct. 25, 1929. Serial No. 402,511. Original No. 1,668,265, dated May 1, 1928, Serial No. 68,738, filed Nov. 12, 1925. 27 Claims. (Cl. 242—11.)



18. A machine of the character described comprising means for supporting for movement a cylindrically shaped object, an endless belt adapted to tractionally engage the object to impart thereto a combined rotary and longitudinal motion upon movement of the belt, and a pair of guide elements contacting with said belt, one of said guide elements being mounted for movement relative to the other to vary the relationship between the longitudinal and the rotary motions.

17,676. THERMOSTATIC CONTROL OF A VENT IN A CHAMBER. HOWARD M. CONE, Longview, Wash., assignor of one-half to The Long-Bell Lumber Company, Kansas City, Mo., a Corporation of Missouri. Filed Mar. 22, 1930. Serial No. 438,847. Original No. 1,705,176, dated Mar. 12, 1929, Serial No. 103,048, filed Apr. 19, 1926. 9 Claims. (Cl. 236—44.)



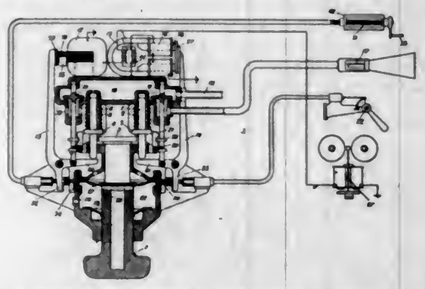
6. In a kiln and the like, in combination with a vent in the kiln chamber, a cover for the vent, means for operating said cover, means for conditioning the air within the kiln chamber, a control for said air conditioning means, means operated by a thermostatic instrument located within the kiln chamber whereby said cover and control are operated, and adjustable means for varying the time interval between the operating of the air conditioning means and the vent cover, said cover operating means opening or closing the vent opening at a rate varying as compared with the corresponding movements of the cover.

17,677. BRAKE-TESTING DEVICE FOR AUTOMOBILES. CHARLES F. COWDREY, Fitchburg, Mass., assignor, by mesne assignments, to Bendix-Cowdrey Brake Tester, Inc., a Corporation of Delaware. Filed Nov. 2, 1926. Serial No. 145,900. Original No. 1,568,804, dated Jan. 5, 1926, Serial No. 15,867, filed Mar. 16, 1925. 51 Claims. (Cl. 265—25.)



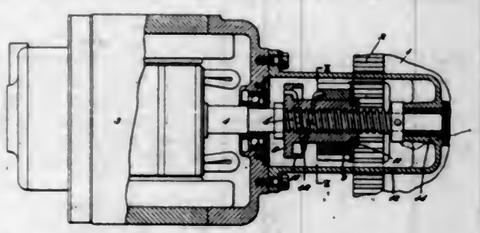
1. A brake tester for testing the action of a brake upon a wheel of an automobile, comprising in combination, a head engageable with a wheel of an automobile to rotate it under brake resistance and provided with a hub constructed to be driven by a shaft, a supporting frame, a rotatable shaft upon the frame and each end of which is constructed to be placed in driving engagement with said hub, means for rotating said shaft, an indicator, and means controlled by the shaft driving means for actuating the indicator to indicate the turning force applied to said head.

17,678. TRAIN-CONTROL SYSTEM. ALFRED E. HUDD, Long Park, Chesham Bois, England, assignor, by mesne assignments, to Automatic Electric Inc., Chicago, Ill. Filed Mar. 27, 1930. Serial No. 439,512. Original No. 1,731,664, dated Oct. 15, 1929, Serial No. 647,292, filed June 23, 1923, and in Great Britain Aug. 16, 1922. 39 Claims. (Cl. 246—178.)



1. A train control system comprising a track, a ramp located alongside said track, means for connecting a periodic current to said ramp, a train, a shoe on said train adapted to engage conductively with said ramp, a brake applying device on said train, a means normally acting on said brake applying device tending to effect the application of the brakes, a second means more powerful than said first means and acting counter thereto on said brake applying device for normally preventing the application of the brakes and operable by said shoe into an ineffective position, and a device on said train electrically connected to said shoe and responsive to said periodic current to act counter to said first means when said second means is in its ineffective position inoperative to prevent the application of the brakes.

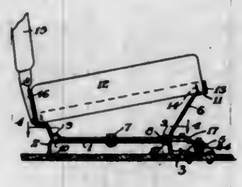
17,679. STARTING MECHANISM FOR AUTOMOBILES. WALTER G. MYLIUS, Wilkinsburg, Pa., assignor, by mesne assignments, to Eclipse Machine Company, Elmira Heights, N. Y., a Corporation of New York. Filed Feb. 19, 1921. Serial No. 446,519. Original No. 1,247,138, dated Nov. 20, 1917, Serial No. 14,860, filed Mar. 16, 1915. 10 Claims. (Cl. 74—7.)



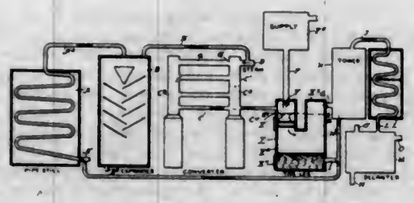
1. In a starting mechanism, the combination with an engine member, and a motor, of a screw-threaded shaft operatively connected to said motor, a pinion adapted to be actuated into and out of engagement with said engine member upon relative rotative movements of said shaft and said pinion, and means for yieldingly connecting said pinion to said shaft for movements relatively to each other independently of said relative rotative movements and for controlling the engagement of said pinion with said engine member according as the motor constitutes the driving or the driven member.

17,680. AUTOMOBILE SEAT AND THE LIKE. LE ROY SMELKER, Dayton, Ohio. Filed Dec. 30, 1929. Serial No. 417,578. Original No. 1,682,989, dated Sept. 4, 1928, Serial No. 122,321, filed July 14, 1926. 10 Claims. (Cl. 155—95.)

5. A rotatable seat for an automobile comprising a support base having an upwardly presented bearing face and a peripheral extension wall extending downwardly a short distance therefrom for engagement at the lower end thereof with the automobile floor, a seat supporting base rotatably supported thereon having a downwardly presented bearing face cooperating with the bearing face of said support base and having an upwardly extending peripheral wall, and a seat attached to said seat supporting base.



17,681. PROCESS FOR TREATING HYDROCARBON OILS. JOSEPH B. WEAVER, Toledo, Ohio, assignor, by mesne assignments, to Gyro Process Company, a Corporation of Michigan. Filed June 6, 1927. Serial No. 196,977. Original No. 1,601,786, dated Oct. 5, 1926, Serial No. 37,244, filed June 15, 1925. 15 Claims. (Cl. 196—61.)



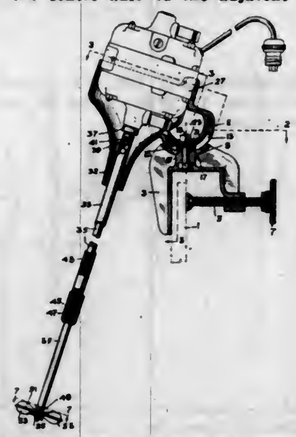
5. The process of treating hydrocarbon oil which comprises converting the oil in the vapor phase at a temperature in excess of approximately 1000° F., and immediately upon completing the conversion in the vapor phase abruptly arresting the conversion reaction by effecting a rapid and substantially instantaneous cooling of the products of conversion to a critical temperature less than approximately 600° F., and then continuing the further treatment of the products of conversion at temperatures sufficiently low to produce no further carbon deposit.

17,682. FROSTING GLASS ARTICLES. ROWLAND D. SMITH, Corning, N. Y., assignor to Corning Glass Works, Corning, N. Y., a Corporation of New York. Filed Mar. 31, 1930. Serial No. 440,650. Original No. 1,740,376, dated Dec. 17, 1929. Serial No. 279,202, filed May 19, 1928. 12 Claims. (Cl. 41—42.)

1. The method of preparing a frosting solution which consists in fusing a salt of an alkali metal of the first periodic group having an atomic weight between 22 and 40, brinding the fused material to the desired degree of fineness and then mixing it with proper batch materials to form a frosting solution.

17,683. MIXING DEVICE. FREDERICK L. CRADDOCK, Rochester, N. Y., assignor to Mixing Equipment Company, Inc., Rochester, N. Y., a Corporation of New York. Filed Nov. 25, 1929. Serial No. 409,726. Original application filed July 31, 1923, Serial No. 654,825. Renewed Apr. 4, 1928. Original No. 1,703,099, dated Feb. 26, 1929. 23 Claims. (Cl. 259—103.)

1. The combination of a tank having a side and containing a mix, a mixing device mounted at the top of the tank, provided with a screw propeller extending down into the tank and revolvable about an axis in a vertical plane external to the centre axis of the adjacent mix in the



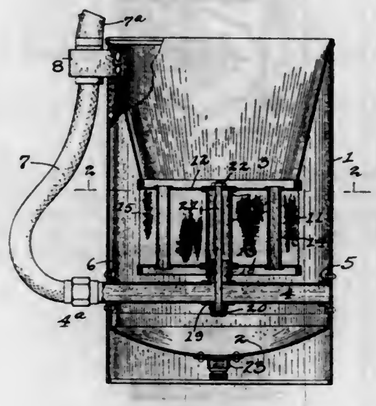
tank, whereby a propeller stream of the mix may impinge upon and coact with the side of the tank to effect a rolling of the mix and a thorough mixture thereof.

17,684. CUSHION CAP FOR TOOLS. JOHN B. CROFOOT, Mount Prospect, Ill. Filed Mar. 31, 1930. Serial No. 440,564. Original No. 1,713,820, dated May 21, 1929, Serial No. 262,255, filed Mar. 16, 1928. 4 Claims. (Cl. 1—48.)



3. A cushion cap comprising a unitary pliable structure having a bottom socket adapted to clampingly receive the head of a stapling machine, a top socket formed in said cushion cap, a resilient shock absorbing porous element disposed in said top socket, and means for retaining said porous element in said top socket.

17,685. STRAINER. WALLACE M. DILLON, Washington, D. C. Filed Feb. 17, 1930. Serial No. 429,160. Original No. 1,665,494, dated Apr. 10, 1928, Serial No. 64,319, filed Oct. 23, 1925. 15 Claims. (Cl. 210—149.)



1. In a gasoline strainer of the character described and in combination, an outer container, a hopper, a member attached to the hopper, the side wall thereof being a filter and well above the bottom of the container, means extending through the horizontal plane of the member longitudinally of the container for conducting an entering fluid from the hopper to the bottom of the container below the filtering wall, means for conducting the fluid to the exterior of the container after it has passed through the filtering wall into said member, and means connecting the conducting means with the filtering member.

DESIGNS

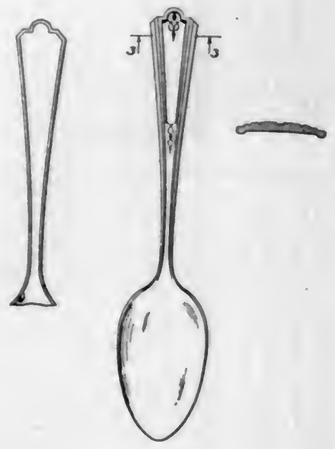
MAY 27, 1930

81,218. PAPER CUP OR SIMILAR ARTICLE. ARTHUR S. ALLEN, New York, N. Y., assignor to Pac-Kups Incorporated, Easton, Pa., a Corporation of Pennsylvania. Filed Mar. 18, 1930. Serial No. 34,957. Term of patent 14 years.



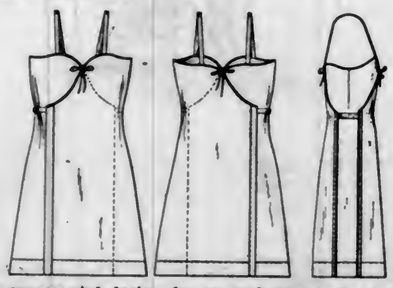
The ornamental design for a paper cup or similar article as shown.

81,219. SPOON OR SIMILAR ARTICLE. GROSVENOR N. ALLEN, Oneida, and LILLIAN V. M. HELANDER, Niagara Falls, N. Y., assignors to Oneida Community, Limited, Oneida, N. Y., a Corporation of New York. Filed Jan. 4, 1930. Serial No. 34,019½. Term of patent 14 years.



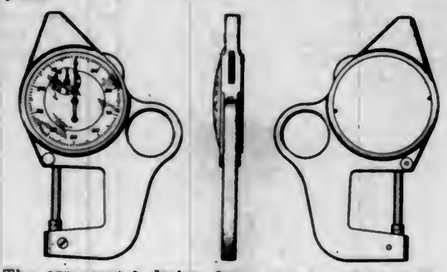
The ornamental design for a spoon or similar article as shown and described.

81,220. UNDERGARMENT. RUTH F. ALBERT, New York, N. Y. Filed Dec. 11, 1929. Serial No. 33,750. Term of patent 14 years.



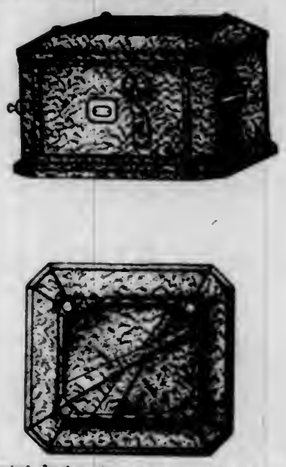
The ornamental design for an undergarment, as shown and described.

81,221. GAUGE. WARREN AMES, Newton, Mass. Filed Mar. 19, 1930. Serial No. 34,968. Term of patent 14 years.



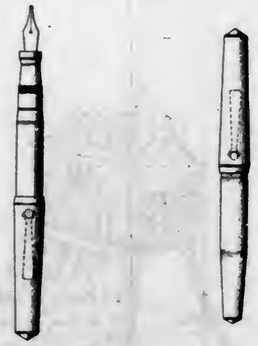
The ornamental design for a gauge, substantially as shown.

81,222. EXERCISING AND MASSAGING MACHINE CASING. FRITZ A. ANDERSON, Milton, Wis., assignor to The Burdick Corporation, Milton, Wis., a Corporation of Delaware. Filed Aug. 26, 1929. Serial No. 32,547. Term of patent 3½ years.



The ornamental design for an exercising and massaging machine casing as shown.

81,223. FOUNTAIN PEN. ROBERT BACK, Chicago, Ill., assignor to The Wahl Company, Chicago, Ill., a Corporation of Delaware. Filed Sept. 23, 1929. Serial No. 32,838. Term of patent 7 years.



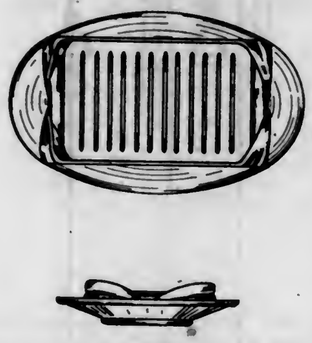
The ornamental design for a fountain pen substantially as shown.

81,224. INCENSE BURNER. FREDERICK BINNIER and GEORGE E. UNDERWOOD, Royal Oak, Mich. Filed Nov. 23, 1929. Serial No. 33,535. Term of patent 7 years.



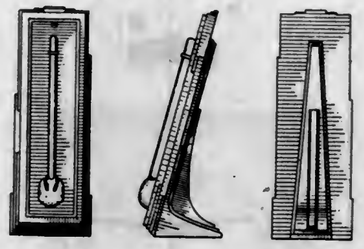
The ornamental design for an incense burner as shown.

81,225. CRACKER CONTAINER. LOYD H. BOATTENHAMER, Oklahoma City, Okla. Filed Mar. 31, 1930. Serial No. 35,071. Term of patent 3½ years.



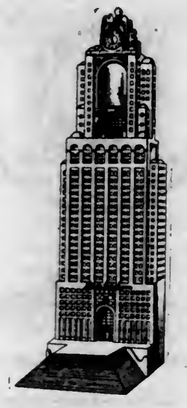
The ornamental design for a cracker container, as shown.

81,226. THERMOMETER. H. BRAINARD BROWN, Rochester, N. Y., assignor to Taylor Instrument Companies, Rochester, N. Y., a Corporation of New York. Filed Mar. 14, 1930. Serial No. 34,857. Term of patent 3½ years.



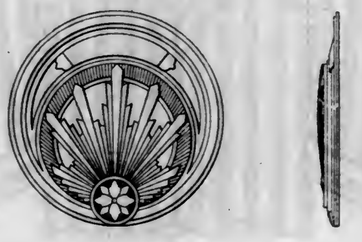
The ornamental design for a thermometer, as shown.

81,227. CASING FOR COMBINED WEIGHING AND INSURANCE-VENDING MACHINES. GEORGE H. BUTLER, Los Angeles, Calif., assignor to Nadic, Ltd., Los Angeles, Calif., a Corporation of California. Filed Aug. 14, 1929. Serial No. 32,410. Term of patent 14 years.



The ornamental design for a casing for combined weighing and insurance vending machines, as shown.

81,228. MEDALLION. PIERRE J. CHÉRON, Stratford, Conn., assignor to Moto Meter Gauge & Equipment Corporation, Long Island City, N. Y., a Corporation of Delaware. Filed Mar. 7, 1930. Serial No. 34,781. Term of patent 14 years.



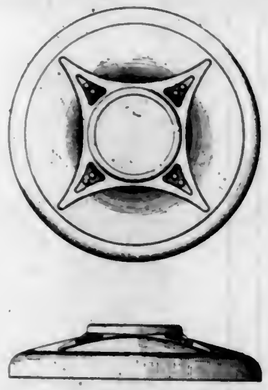
The ornamental design for a medallion substantially as herein shown and described.

81,229. SHOE ORNAMENT. HORACE A. DALRYMPLE, Haverhill, Mass. Filed Jan. 9, 1930. Serial No. 34,065. Term of patent 3½ years.



The ornamental design for a shoe ornament as shown.

81,230. VEHICLE WHEEL HUB CAP. HENRY G. DIBELKA, Chicago, Ill., assignor to The Kingsley-Miller Company, Chicago, Ill., a Corporation of Illinois. Filed July 15, 1929. Serial No. 32,051. Term of patent 3½ years.



The ornamental design for a vehicle-wheel hub plate as shown.

81,231. COMBINATION PAJAMA JACKET AND DICKY. SAMUEL GATES, Brooklyn, N. Y. Filed Dec. 10, 1929. Serial No. 33,730. Term of patent 7 years.



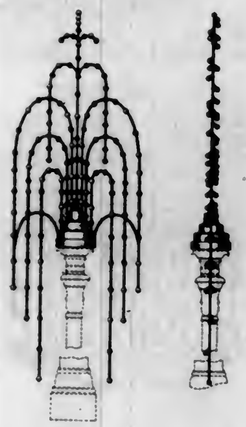
The ornamental design for a combination pajama jacket and dicky as shown.

81,232. WATER-MILL TOY. FRANK J. GORIUP, Pittsburgh, Pa., assignor to Wolverine Supply & Manufacturing Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Mar. 14, 1930. Serial No. 34,863. Term of patent 7 years.



The ornamental design for a water mill toy as shown.

81,233. LIGHTING DEVICE. JOSEPH W. GOSLING, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Aug. 9, 1929. Serial No. 32,349. Term of patent 14 years.



The ornamental design for a lighting device as shown.

81,234. CHANDELIER. FOSTER GUNNISON, Bronxville, N. Y., assignor to Cox, Nostrand & Gunnison, Inc., Brooklyn, N. Y., a Corporation of New York. Filed Dec. 30, 1929. Serial No. 33,979. Term of patent 14 years.



The ornamental design for a chandelier, as shown.

81,235. TEXTILE FABRIC OR SIMILAR ARTICLE OF MANUFACTURE. HERMAN HAUG, Scarsdale, N. Y., assignor to Golding Bros. Company, New York, N. Y., a Corporation of New York. Filed Mar. 5, 1930. Serial No. 34,745. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article of manufacture substantially as shown and described.

81,236. TEXTILE FABRIC OR SIMILAR ARTICLE OF MANUFACTURE. HERMAN HAUG, Scarsdale, N. Y., assignor to Golding Bros. Company, New York, N. Y., a Corporation of New York. Filed Mar. 5, 1930. Serial No. 34,746. Term of patent 3½ years.



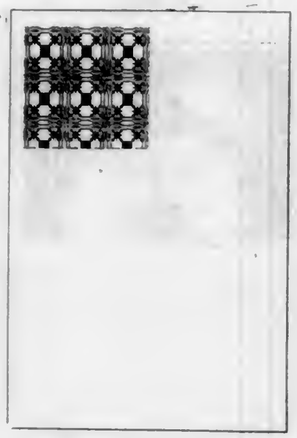
The ornamental design for a textile fabric or similar article of manufacture substantially as shown and described.

81,237. LAPEL BUTTON. LEO F. HENEBRY, Roanoke, Va., assignor to Norfolk & Western Veterans Association, Roanoke, Va.. Filed Feb. 21, 1930. Serial No. 34,601. Term of patent 14 years.



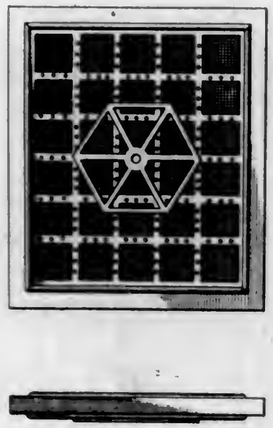
The ornamental design for a lapel button, as shown.

81,238. TEXTILE FABRIC OR SIMILAR ARTICLE OF MANUFACTURE. CHRISTIAN HOFFMANN, Rutherford, N. J., assignor to Golding Bros. Company, New York, N. Y., a Corporation of New York. Filed Mar. 5, 1930. Serial No. 34,748. Term of patent 3½ years.



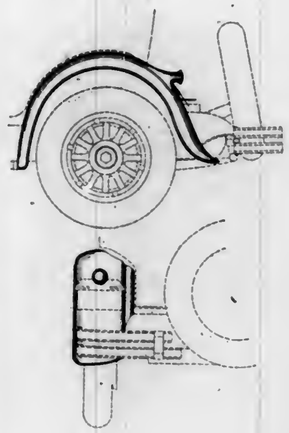
The ornamental design for a textile fabric or similar article of manufacture substantially as shown and described.

81,239. BURGLARPROOF WINDOW GUARD. CHARLES ALFRED HUGHES and EDWARD JOSEPH THOLE, Evansville, Ind. Filed Feb. 27, 1930. Serial No. 34,676. Term of patent 14 years.



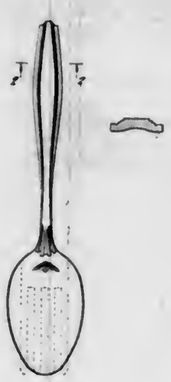
The ornamental design for a burglarproof window guard, as shown.

81,240. COMBINED FENDER AND TAIL-LAMP CASING FOR VEHICLES. JAMES R. HUGHES, South Bend, Ind., assignor to The Pierce-Arrow Motor Car Company, Buffalo, N. Y., a Corporation of New York. Filed Sept. 11, 1929. Serial No. 32,723. Term of patent 14 years.



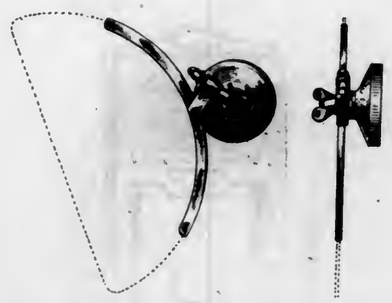
The ornamental design for a combined fender and tail lamp casing for vehicles substantially as shown.

81,241. SPOON OR SIMILAR ARTICLE. GEORGE P. ITTIG, Bridgeport, Conn., assignor to Blackstone Silver Company, Incorporated, Bridgeport, Conn., a Corporation of Connecticut. Filed Mar. 17, 1930. Serial No. 34,910. Term of patent 7 years.



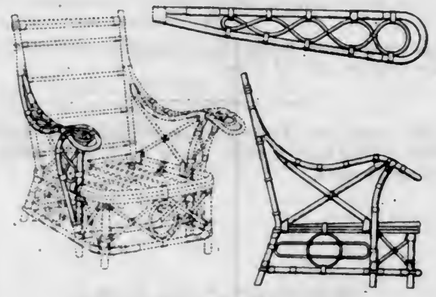
The ornamental design for a spoon or similar article, substantially as shown.

81,242. ANTIGLARE ATTACHMENT FOR WINDSHIELDS OF AUTOMOBILES. ARTHUR SAMUEL JOHN, Stanton, South Wales, assignor to Dim-Dazzle (Parent) Company Limited, London, England. Filed Sept. 23, 1929, Serial No. 32,844, and in Great Britain Nov. 16, 1928. Term of patent 3½ years.



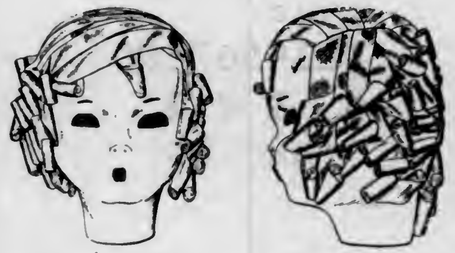
The ornamental design for an antiglare attachment for windshields of automobiles, as shown.

81,243. FRAME OF A CHAIR OR SETTEE. CHARLES WESLEY JONES, Glen Ridge, N. J., assignor to Sons-Cunningham Reed & Rattan Co., Inc., New York, N. Y., a Corporation of New York. Filed Nov. 9, 1929. Serial No. 33,389. Term of patent 7 years.



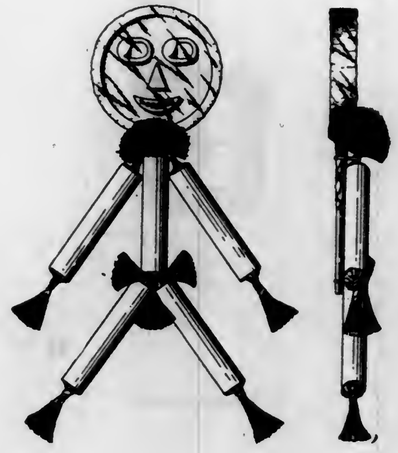
The ornamental design for the frame of a chair or settee, as shown and described.

81,244. DISPLAY HEAD. ETTA D. KIDD, Pelham Manor, N. Y., assignor to Etta, Inc., New York, N. Y., a Corporation of New York. Filed Mar. 26, 1930. Serial No. 35,032. Term of patent 3½ years.



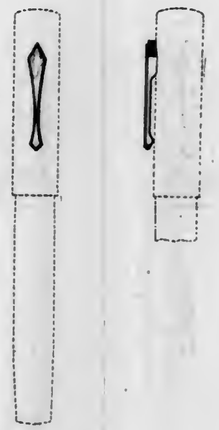
The ornamental design for a display head as shown.

81,245. CANDY DOLL. MILDRED C. KNAPP, Chicago, Ill. Filed Feb. 10, 1930. Serial No. 34,467. Term of patent 3½ years.



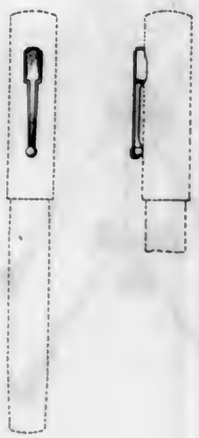
The ornamental design for a candy doll, as shown.

81,246. CLIP FOR A FOUNTAIN PEN OR THE LIKE. GABRIEL LARSEN, Springfield, N. J., assignor to L. E. Waterman Company, New York, N. Y., a Corporation of New York. Filed Sept. 21, 1929. Serial No. 32,821. Term of patent 14 years.



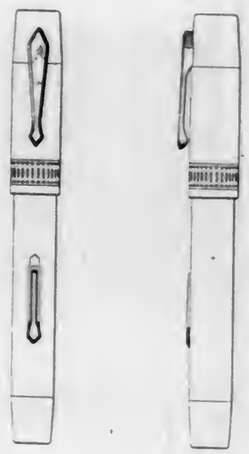
The ornamental design for a clip for a fountain pen or the like as shown.

81,247. CLIP FOR A FOUNTAIN PEN OR THE LIKE. GABRIEL LARSEN, Springfield, N. J., assignor to L. E. Waterman Company, New York, N. Y., a Corporation of New York. Filed Sept. 21, 1929. Serial No. 32,822. Term of patent 14 years.



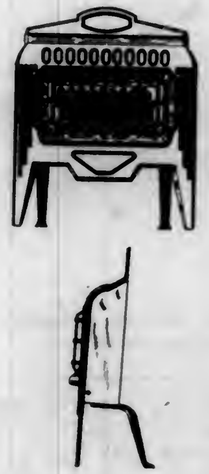
The ornamental design for a clip for a fountain pen or the like as shown.

81,248. FOUNTAIN PEN. GABRIEL LARSEN, Springfield, N. J., assignor to L. E. Waterman Company, New York, N. Y., a Corporation of New York. Filed Jan. 23, 1930. Serial No. 34,243. Term of patent 14 years.



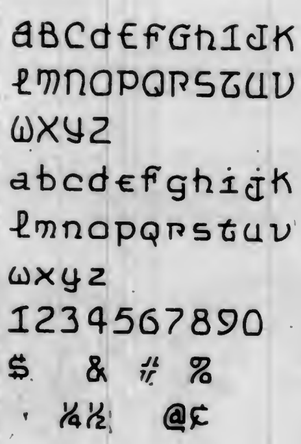
The ornamental design for a fountain pen as shown.

81,249. PORTABLE ELECTRIC ROOM HEATER. LINDLEY S. LAWSON, Pittsburgh, Pa. Filed Feb. 24, 1930. Serial No. 34,631. Term of patent 3½ years.



The ornamental design for a portable electric room heater substantially as shown.

81,250. FONT OF TYPE. MICHAEL LIPMAN, New Canaan, Conn. Filed Sept. 7, 1929. Serial No. 32,695. Term of patent 14 years.



The ornamental design for a font of type, substantially as shown.

81,251. ENSEMBLE SUIT. DOROTHY LONG, New York, N. Y., assignor to Franklin Simon & Company, Inc., New York, N. Y., a Corporation of New York. Filed Mar. 12, 1930. Serial No. 34,834. Term of patent 3½ years.



The ornamental design for an ensemble suit substantially as shown and described.

81,252. TEXTILE FABRIC OR SIMILAR ARTICLE OF MANUFACTURE. JOSEPH HENRY MACK, Passaic, N. J., assignor to Golding Bros. Company, New York, N. Y., a Corporation of New York. Filed Mar. 5, 1930. Serial No. 34,744. Term of patent 3½ years.



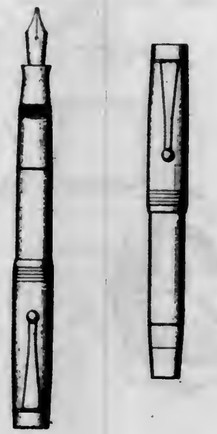
The ornamental design for a textile fabric or similar article of manufacture substantially as shown and described.

81,253. BUCKLE. WILLIAM L. MYERS, Newark, N. J., assignor to L. A. Myers, Jr., Inc., Newark, N. J., a Corporation of New Jersey. Filed Mar. 29, 1930. Serial No. 35,062. Term of patent 7 years.



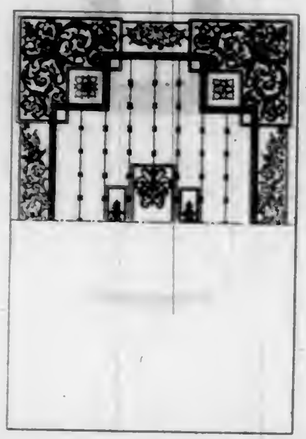
The ornamental design for a buckle substantially as shown.

81,254. FOUNTAIN PEN. KENNETH S. PARKER, Janesville, Wis., assignor to The Parker Pen Company, Janesville, Wis., a Corporation of Wisconsin. Filed July 8, 1929. Serial No. 31,965. Term of patent 14 years.



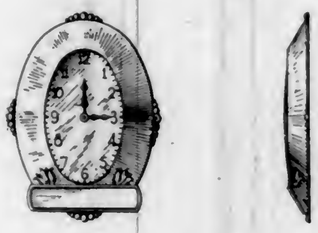
The ornamental design for a fountain pen, as shown.

81,255. TEXTILE FABRIC OR SIMILAR ARTICLE OF MANUFACTURE. WILLIAM RAMSAY, Dunfermline, Scotland, assignor to Golding Bros. Company, New York, N. Y., a Corporation of New York. Filed Mar. 19, 1930. Serial No. 34,967. Term of patent 3½ years.



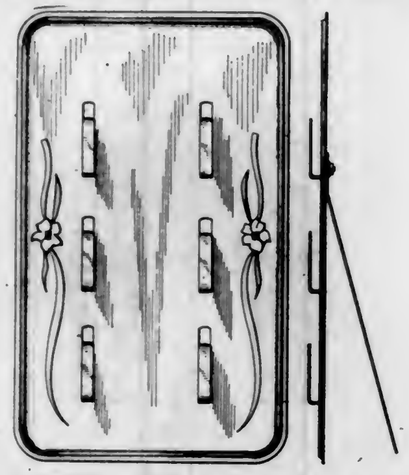
The ornamental design for a textile fabric or similar article of manufacture substantially as shown and described.

81,256. WATCHCASE. GEORGE REA, Brooklyn, N. Y. Filed Oct. 4, 1929. Serial No. 32,940. Term of patent 7 years.



The ornamental design for a watchcase as shown.

81,257. CHECK HOLDER. FREDERICK NEWTON REYNOLDS, Amarillo, Tex. Filed Mar. 10, 1930. Serial No. 34,799. Term of patent 3½ years.



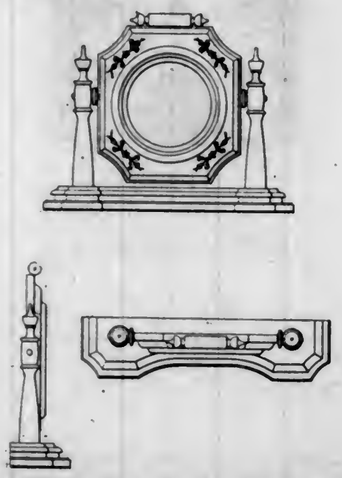
The ornamental design for a check holder, as shown.

81,258. SHOE ORNAMENT. SAMUEL M. RIKER, Chester, N. J. Filed Mar. 28, 1930. Serial No. 35,052. Term of patent 7 years.



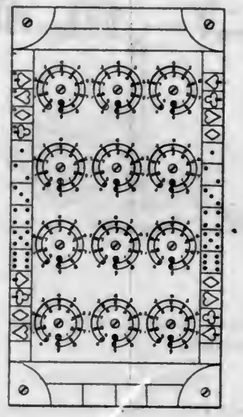
The ornamental design for a shoe ornament, as shown.

81,259. PICTURE FRAME. PERCY C. ROSS, Columbus, Ind. Filed Feb. 13, 1930. Serial No. 34,524. Term of patent 3½ years.



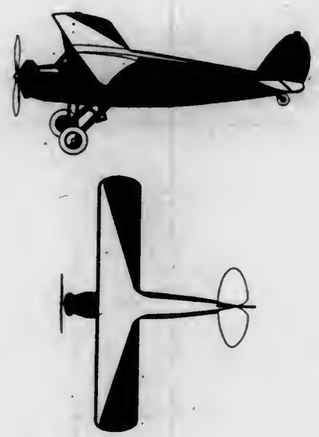
The ornamental design for a picture frame as shown.

81,260. SCORE BOARD OR SIMILAR ARTICLE. HENRY L. SCHROEDER, Chicago, Ill. Filed Feb. 21, 1930. Serial No. 34,602. Term of patent 3½ years.



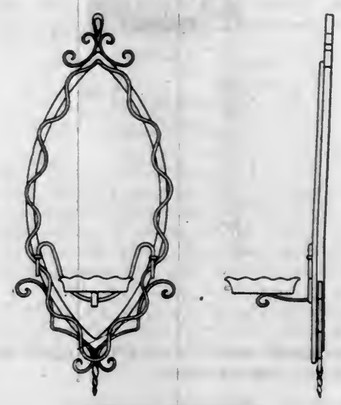
The ornamental design for a score board or similar article, substantially as shown.

81,261. AEROPLANE. EDWARD A. STINSON, Wayne, Mich. Filed Mar. 10, 1930. Serial No. 34,808. Term of patent 3½ years.



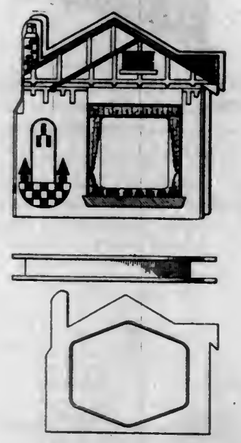
The ornamental design for an aeroplane, as shown.

81,262. WALL POT HOLDER. IRVING G. SCOTT and MAUD C. FOX, New York, N. Y. Filed Mar. 28, 1930. Serial No. 35,058. Term of patent 3½ years.



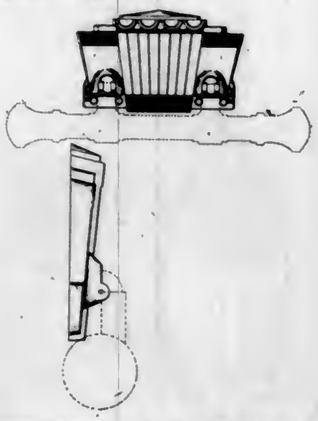
The ornamental design for a wall pot holder as shown.

81,263. BUNGALOW BOX. RUSSELL STOVER, Denver, Colo. Filed Oct. 19, 1929. Serial No. 33,110. Term of patent 14 years.



The ornamental design for a bungalow box as shown.

81,264. PLATE FOR CASKET HANDLES OR THE LIKE. WILLIAM N. THOMAS, New Haven, Conn., assignor to Sargent & Company, New Haven, Conn., a Corporation of Connecticut. Filed Jan. 22, 1930. Serial No. 34,231. Term of patent 14 years.



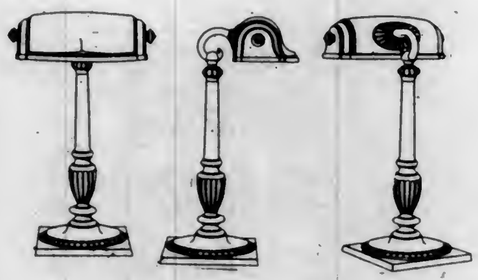
The ornamental design for a plate for casket handles or the like substantially as shown.

81,265. LAMP OR SIMILAR ARTICLE. ARTHUR VON FRANKENBERG, New York, N. Y., assignor to Frankart, Inc., New York, N. Y., a Corporation of New York. Filed Nov. 12, 1929. Serial No. 33,429. Term of patent 7 years.



The ornamental design for a lamp or similar article substantially as shown.

81,266. DESK LAMP. HARRY F. THURBER and FREDERICK E. GREENE, New Haven, Conn., assignors to The Greist Manufacturing Company, New Haven, Conn., a Corporation of Connecticut. Filed Sept. 25, 1929. Serial No. 32,868. Term of patent 7 years.



The ornamental design for a desk lamp substantially as shown and described.

81,267. DESK LAMP. HARRY F. THURBER and FREDERICK E. GREENE, New Haven, Conn., assignors to The Greist Manufacturing Company, New Haven, Conn., a Corporation of Connecticut. Filed Sept. 25, 1929. Serial No. 32,869. Term of patent 7 years.

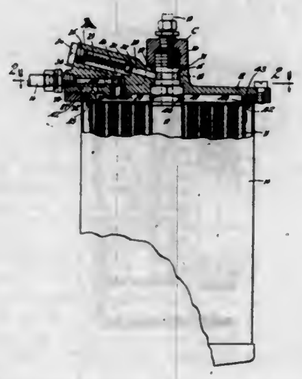


The ornamental design for a desk lamp substantially as shown and described.

PATENTS

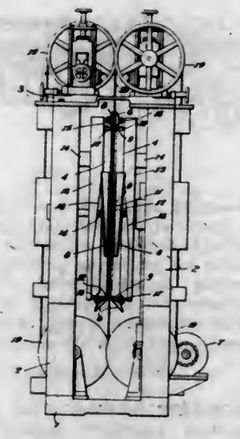
GRANTED MAY 27, 1930

1,759,827. OIL FILTER BY-PASS. ABRAHAM M. BABITCH, Flint, Mich., assignor to A C Spark Plug Company, Flint, Mich., a Company of Michigan. Filed May 9, 1927. Serial No. 189,992. 4 Claims. (Cl. 210—165.)



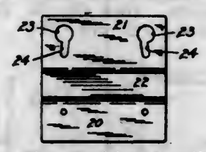
1. In an oil filter, a closure for one end of said filter, inlet and outlet passages in said closure, a passageway in said closure connecting said inlet and outlet passages, a valve for controlling said passageway, and a plug in said inlet having a plurality of openings and a peripheral groove, to allow the flow of oil to said passageway.

1,759,828. FILLETING MACHINE. JAMES J. BARRY, Gloucester, Mass., assignor to Frosted Foods Company, Inc., Dover, Del., a Corporation of Delaware. Filed Apr. 30, 1927. Serial No. 187,784. 12 Claims. (Cl. 17—4.)



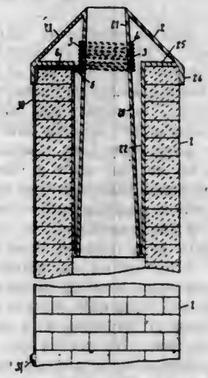
11. A band knife having a longitudinally wavy cutting edge, the margin of said band next the said wavy cutting edge tapering to said edge from both sides of the band, with one of said tapers extending inward from said cutting edge a less distance than the other taper.

1,759,829. MAP HOLDER. JOHNSE H. BECK, Indianapolis, Ind., assignor to Geo. F. Cram Company, Indianapolis, Ind., a Corporation of Illinois. Filed Nov. 28, 1927. Serial No. 236,083. 4 Claims. (Cl. 40—83.)



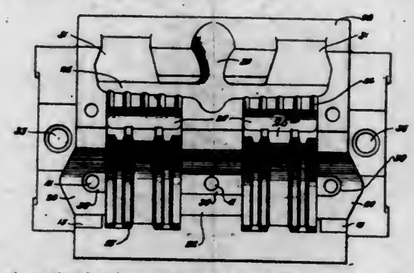
1. A map support comprising a roller-supporting rod having two laterally projecting headed shanks arranged upon opposite sides of the middle of the rod and intermediate of the ends, and a supporting bracket having a pair of keyhole slots, the upper ends of which are large enough to receive the shank heads and the depending shanks of which are large enough to receive the shanks but smaller than the heads, said slots and shanks being so arranged that the rod may pivot on either shank.

1,759,830. CHIMNEY-CAP HEATER. LESTER L. BLANCHARD, Dover Foxcroft, Me., assignor to Henri Crepeau, Montreal, Canada. Filed Apr. 13, 1929. Serial No. 354,899. 5 Claims. (Cl. 219—38.)



1. In a chimney, a metal surface within the outlet thereof, and means to heat the metal surface independent of the heat of combustion gases.

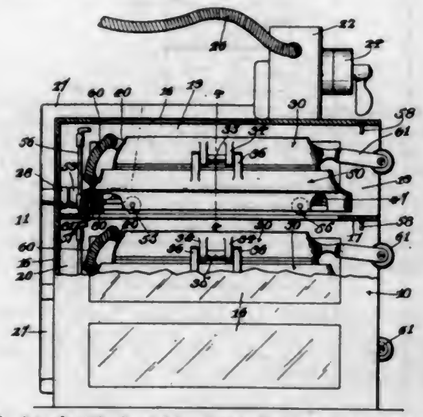
1,759,831. MOLD FOR METALLIC CASTINGS. ALFRED L. BOEGEHOLD, Detroit, Mich., assignor to General Motors Research Corporation, Detroit, Mich., a Corporation of Delaware. Filed Aug. 1, 1927. Serial No. 209,844. 8 Claims. (Cl. 22—155.)



1. A mold having a forming cavity corresponding to the article to be cast; a reservoir immediately above the

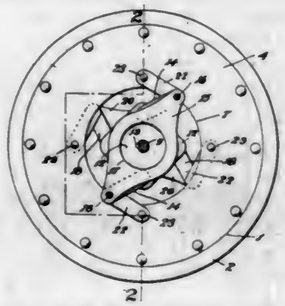
forming cavity of approximately the same horizontal extent as the forming cavity and communicating with it through an orifice of substantially equal horizontal extent; a distributing basin communicating with said reservoir through a plurality of pencil gates, and a pouring hopper communicating with the distributing basin.

1,759,832. ELECTRICAL COOKING APPARATUS. PETER S. BANFF, Chicago, Ill., assignor, by mesne assignments, to Sanitary Food Machine Corporation, a Corporation of Illinois. Filed Oct. 19, 1928. Serial No. 313,584. 4 Claims. (Cl. 219—19.)



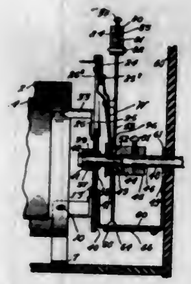
3. An electrical cooking apparatus comprising a housing open at its front, a plurality of electrical cooking elements slidably mounted in the housing and each provided with an electrical heating means and a normally open heating circuit including a terminal, said housing including means arranged therein for spacing said elements from each other and for supporting said elements, each of said elements provided at its rear with a vertically disposed plate carrying a terminal, rollers carried by said elements and tavelling on said supporting means, spaced electrical terminals carried by the housing at the rear thereof and arranged in the path of movement of said elements and coacting with the terminals on the plates for selectively closing the normally open heating circuits, and a supply circuit common to said terminals carried by the housing, said housing provided at its front with depending means and said plates provided with vertically extending means coacting with the depending means for coupling the elements to the housing when the elements are extended from the front thereof.

1,759,833. FLEXIBLE DRIVING MEANS. FRANCIS N. BARDWELL, Passaic, N. J. Filed Aug. 12, 1927. Serial No. 212,408. 3 Claims. (Cl. 64—97.)



1. A flexible drive for wheel members comprising a driving member and a driven member, a plurality of opposite pairs of links with the pairs of links evenly spaced from each other, and each pair of links having one link pivoted to the driving member and its other link pivoted to the driven member, said links of each pair being also pivoted to each other, and independent spanners connecting opposite pairs of links at their point of pivotal connection.

1,759,834. SWITCH MECHANISM. ERNEST A. BOHLMAN, Chicago, Ill., assignor to Kellogg Switchboard and Supply Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 7, 1927. Serial No. 173,323. 13 Claims. (Cl. 200—11.)



1. A device of the character described including a mounting panel having an orifice therein, contacts mounted flat against said panel having an integrally formed portion extending into said orifice and a pair of integrally formed portions adapted to secure said contacts to said panel, and a wiper arm extending into said orifice and engaging the said first extending portion of said contacts.

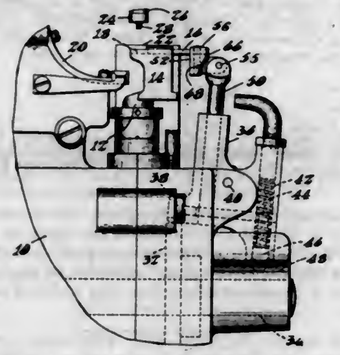
1,759,835. MATERIAL-FEEDING APPARATUS. STANLEY EDWARD BOYNTON, Oak Park, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Nov. 30, 1927. Serial No. 236,629. 4 Claims. (Cl. 143—45.)



1. In a wood-working apparatus, a sawing table, a pair of rotary saws alternately movable into operative association with material to be sawed, an endless conveyor positioned in the table for advancing material to the saws, means for arresting the advancement of the material, and means responsive to the operation of either of the saws and operable subsequent to said operation to move the arresting means away from the material.

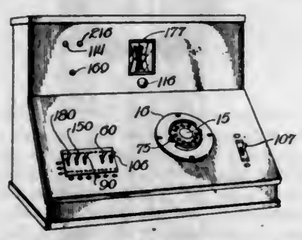
1,759,836. HOOK-SETTING MACHINE. MELLEN N. BRAY, Boston, Mass., assignor to Tubular Rivet & Stud Company, Boston, Mass., a Corporation of Massachusetts. Filed June 24, 1929. Serial No. 373,314. 6 Claims. (Cl. 218—17.)

1. In a hook-setting machine, an anvil formed to occupy the throat of a lacing-hook, a coupling member by which said anvil and an operating member may be connected, said anvil and said coupling member having complemental interlocking portions provided with registering holes, a locking member formed to slide in said holes



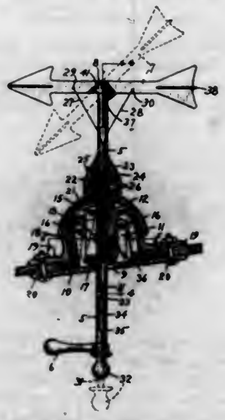
to lock the anvil to the coupling member, and resilient means arranged to maintain said locking member in locking position.

1,759,837. SYSTEM AND APPARATUS FOR TESTING IMPULSES AND IMPULSE DEVICES. RAYMOND WICKLUND BROWN and CHRISTIAN PAULSON, Chicago, Ill., assignors to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed June 6, 1928. Serial No. 283,232. 20 Claims. (Cl. 179—175.)



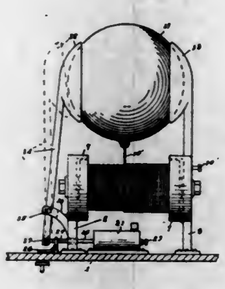
1. In a system for testing a dial, means for clamping the dial operative in response to a movement of the dial, and means for causing a release of said clamping means upon a second movement of the dial.

1,759,838. MOTOR-VEHICLE SEMAPHORE. RALPH A. CHURCHILL, Spokane, Wash. Filed June 29, 1929. Serial No. 374,717. 3 Claims. (Cl. 116—46.)



1. The combination with a motor vehicle, of a motor vehicle semaphore comprising a tubular member mounted to project through the top of the vehicle, said tube adapted to be turned on its axis, means for adjusting said tube to the vertical position, a direction arrow pivotally mounted on the upper end of said tube, and a handle for the lower end of the tube disposed in the same vertical plane with the direction arrow.

1,759,839. INDICATOR FOR WRECKED SUBMERGED CRAFTS. PETER M. CIRIMELE, Los Banos, Calif. Filed Oct. 26, 1927. Serial No. 228,945. 2 Claims. (Cl. 114—16.5.)

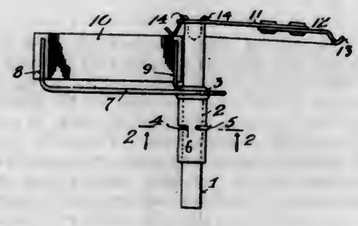


1. An indicator for wrecked submerged crafts comprising a frame, a reel carried thereby, a buoy, a cable connected to said buoy and wrapped around said reel, said frame having a cup-shaped member for bearing against the side of said buoy, and a second cup-shaped member normally held against the other side of said buoy for securing the buoy to the frame, a lever carrying said second named member and being pivotally secured to said frame, a piston rod for moving said lever, and a piston acted upon by the pressure of the water for releasing said buoy at predetermined depths.

1,759,840. PICKLING COMPOUND. PERCY J. COLE and CLIFFORD BANTA, Philadelphia, Pa., assignors to The Barrett Company, New York, N. Y., a Corporation of New Jersey. Filed Oct. 31, 1928. Serial No. 316,350. 15 Claims. (Cl. 148—8.)

1. The process of pickling metals which comprises subjecting the same to an inorganic acid pickling bath and inhibiting the chemical action of the acid on the metal without interfering with the removal of scale or oxide by incorporating in the acid bath an aromatic nitrile.

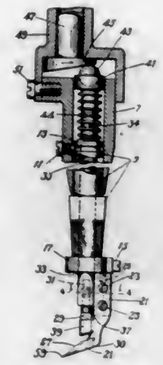
1,759,841. MEANS FOR ADJUSTING ELECTRICAL APPARATUS. GEORGE J. ELTZ, Jr., New York, N. Y., assignor to Chas. Freshman Co. Inc., New York, N. Y., a Corporation of New York. Filed Mar. 1, 1928. Serial No. 258,248. 7 Claims. (Cl. 171—242.)



1. The combination with a support, of an inductance mounted thereon, a rotatable shaft on said support, and a

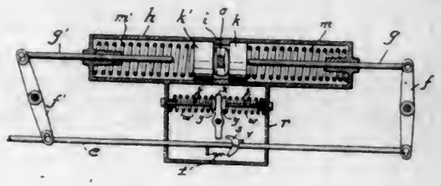
contact member, attached to said shaft, said contact member having a heart shaped periphery arranged to contact with the inductance.

1,759,842. CUTTING DEVICE. JOSEPH FOSSA, Danvers, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Mar. 15, 1924. Serial No. 699,571. 10 Claims. (Cl. 164—75.)



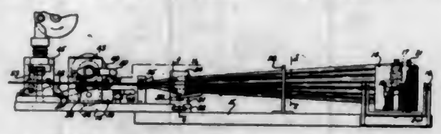
1. A power-operated hand-tool comprising a tubular handle consisting of two relatively rotatable tubular sections having a swivel connection whereby one of them may be grasped and turned by a thumb and finger, a plunger arranged in said handle and having a spline connection with said one of said sections to be turned thereby, a cutter affixed to said plunger, and mechanism carried by the other one of said sections to reciprocate said plunger lengthwise, said mechanism including a flexible element adapted to be connected to a source of power to operate the mechanism.

1,759,843. AUTOMATICALLY-OPERABLE RAILWAY SWITCH. ROLAND R. FOULKE, Philadelphia, Pa. Filed Apr. 4, 1929. Serial No. 352,381. 6 Claims. (Cl. 246—317.)



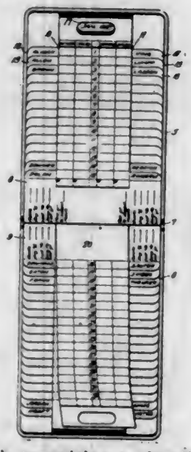
1. The combination with two sections of a track, a second track which diverges from said track, and a switch movable into position to connect the rails of one of said track sections either with the rails of the other track section or with the rails of the other track, of a rod extending lengthwise of the tracks and operably connected with said switch, a lever adjacent one of said tracks, a spring-actuable member normally holding said lever in operable position and movable, against spring tension, by said lever, connections to said rod which are disconnected from, but operable by, said member, when so operated by said lever, to move said rod to operate the switch, and an actuator adapted to be carried by a moving train and operate said lever.

1,759,844. METHOD OF PRODUCING ARTICLES FROM SHEET MATERIAL. AUGUSTUS WILKES GUDGE, Newark, N. J., and EARL WENSLEY, Cicero, Ill., assignors to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed June 9, 1928. Serial No. 284,208. 6 Claims. (Cl. 270—94.)



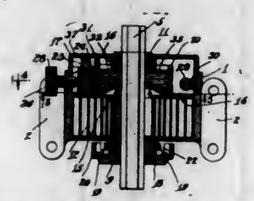
1. A method of forming an article, which consists of producing a plurality of longitudinal folds of uniform width in a ribbon of material, creasing the material along the folded edges, and stamping therefrom an annular member having a greater diameter than the width of the folded material.

1,759,845. SALES-RECORD BOOK. ELEANOR M. HARRIS, Chicago, Ill. Filed Oct. 24, 1927. Serial No. 228,389. 5 Claims. (Cl. 281—38.)



1. A record book comprising a plurality of leaves, the leaves being in two sets on opposite sides of the hinge line of the book, the leaves of each set having the side edges cut away to form stepped portions at both side edges of each leaf whereby a portion of each side edge of each leaf is presented to view when the book is opened at the center, said portions each bearing a name of the subject, the activities of which are to be recorded.

1,759,846. DOORCHECK. WILLIAM F. HENDRY, Ossining, N. Y., assignor to Manhattan Electrical Supply Company, Inc., New York, N. Y., a Corporation of Massachusetts. Filed Sept. 21, 1927. Serial No. 221,001. 16 Claims. (Cl. 16—49.)



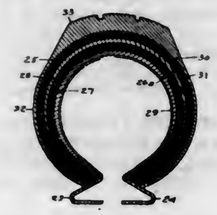
1. In a damping means for oscillating bodies, a rotatable drum, a stationary abutment and a wedge movable to a position between the drum and the abutment, a spring for thrusting the wedge between the drum and abutment and means attached to the drum for opposing the action of said spring and maintaining the wedge out of engagement with the drum.

1,759,847. FASTENER PLATE. GEORGE A. HOLMES, Newton, Mass., assignor, by mesne assignments, to United-Carr Fastener Corporation, Cambridge, Mass., a Corporation of Massachusetts. Filed Dec. 13, 1927. Serial No. 239,678. 7 Claims. (Cl. 24—208.)



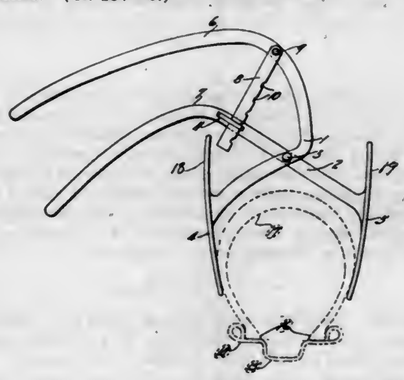
1. A back plate for snap fasteners having a portion of its edge thickened substantially for a short distance only to provide means for abutment against another like plate to prevent overlapping of the plates when being fed along a chute in a fastener-attaching machine and provided with apertures to receive the prongs of a cooperating fastener member.

1,759,848. METHOD OF MAKING TIRE CASINGS. JOHN HOWARD, Montreal, Quebec, Canada, assignor, by direct and mesne assignments, of three-eighths to Sigmund Greenberg and one-eighth to William Goodman and Max S. Wolfson, New York, N. Y. Filed May 16, 1927. Serial No. 191,802. 2 Claims. (Cl. 154—14.)



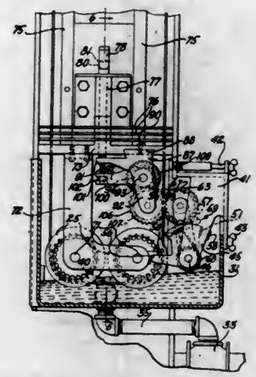
1. The herein described method of making a tire casing, consisting in forming the moist hide into an endless casing having outturned rim flanges from the inner wall portions and partially drying, then stiffening and reinforcing the hide by the introduction into the pores of a filling and closing substance adapted to harden, coincidently with the final drying out of the hide, then forming a tire protector of hide surfaced with cotton and cementitious material and lined and introducing said protector into said endless casing, and finally surfacing the outer casing with cotton and cementitious material and a rubber tread covering suitably vulcanized and finally lining and surfacing.

1,759,849. TIRE TOOL. JOSEPH L. HUSAK, Schuyler, Nebr. Filed June 15, 1929. Serial No. 371,112. 2 Claims. (Cl. 157—6.)



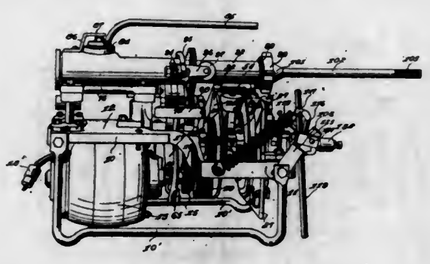
1. In a tire tool, a pair of levers fulcrumed together and formed at their operating ends into relatively short tire engaging jaws and at their opposite ends into relatively long and outwardly and downwardly curved handles, the said jaws having oppositely extended portions adapted to serve as auxiliary handles and as stops for the operating handles.

1,759,850. STRAND-COATING APPARATUS. JOHN JANICKI, Oak Park, Ill., assignor to Western Electric Company Incorporated, New York, N. Y., a Corporation of New York. Filed Sept. 16, 1927. Serial No. 219,947. 14 Claims. (Cl. 91—31.)



1. A strand coating apparatus comprising means for applying a coating material upon a strand, companion strand-engaging rolls, means for advancing a coated strand between the rolls, and means for rotating each of the rolls at a velocity different from that of the coated strand to effect a wiping action thereon.

1,759,851. SAUSAGE-LINKING MECHANISM. WALTER J. O. JOHNSON, Chicago, Ill., assignor to The Albright-Nell Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 26, 1928. Serial No. 272,964. 24 Claims. (Cl. 17—33.)

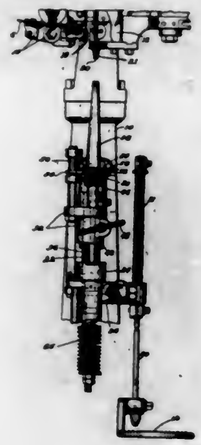


1. A sausage linking mechanism comprising a rotatable nozzle adapted to receive a sausage casing over the free end thereof and through which sausage meat is constantly fed from said stuffer; and means including friction driving elements for intermittently rotating said nozzle at a rate permitting the constant feed of the meat.

1,759,852. WORK SUPPORT FOR FASTENING-INSERTING MACHINES. JOHN L. JONES, Weymouth, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Dec. 13, 1927. Serial No. 239,780. 23 Claims. (Cl. 1—41.)

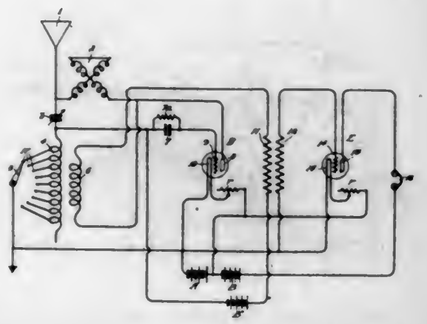
1. A fastening inserting machine having a horn, a support for the horn relatively to which the horn is mounted

for vertical and horizontal adjustment, means for holding the horn against downward displacement from adjusted position, an upstanding rod carried by the horn support,



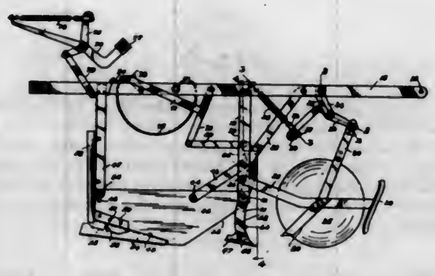
and means carried by the horn and co-operating with the rod to prevent disturbance of the horizontal adjustment of the horn.

1,759,853. RECEIVING CIRCUIT. LEROY D. KELLOGG, Chicago, Ill., assignor to Kellogg Switchboard and Supply Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 28, 1923. Serial No. 628,335. 4 Claims. (Cl. 250—27.)



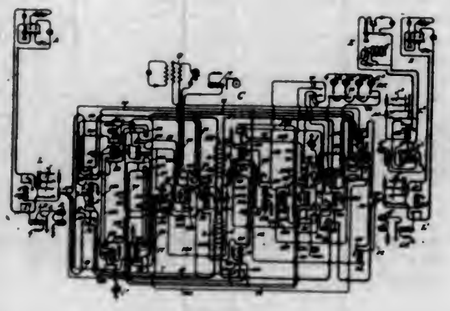
1. In a wireless receiving system for receiving high frequency oscillations, the combination with a plate circuit and a grid circuit, an oscillation receiver, a condenser between the grid and oscillation receiver for resonating the grid circuit, a tuning device between the oscillation receiver and the plate for resonating the plate circuit, a feed back coil, a receiving winding, a source of plate current, and a continuous conductive connection extending from said plate to said grid, including in series, said feed back coil, said receiving winding and said source of plate current.

1,759,854. CULTIVATOR. SAMUEL LEWIS KIDD, Listowel, Ontario, Canada. Filed Apr. 5, 1928. Serial No. 267,621. 1 Claim. (Cl. 97—225.)



In a cultivator, a frame, a vertical shoe attached thereto, said shoe gradually receding from its frontal extremity to present an inclined working edge, the rear portion of the shoe having its bottom edge cut off at an angle, and a tooth having its tips bent downwardly and inwardly to exterminate quack grass.

1,759,855. TELEPHONE SYSTEM. GLENN KINER, Chicago, Ill., assignor to Kellogg Switchboard and Supply Company, Chicago, Ill., a Corporation of Illinois. Filed May 23, 1928. Serial No. 279,920. 13 Claims. (Cl. 179—51.)

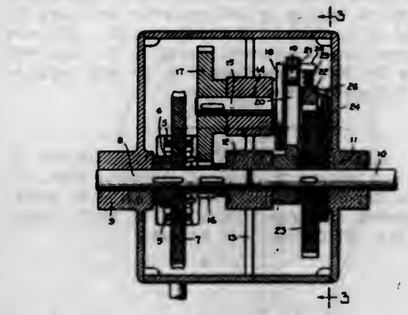


1. A telephone system comprising telephone lines of different character including common battery lines and local battery lines, a cord circuit for interconnecting two common battery lines or a common battery line with a local battery line, and disconnect means in said cord for disconnecting the answering end of said cord from a calling common battery line incident to actuating the hook switch at the calling station upon termination of conversation between a pair of common battery telephone lines.

1,759,856. DRIVING AND SPEED-VARYING MECHANISM. SILARD KLEIN, New York, N. Y. Filed Feb. 8, 1928. Serial No. 251,529. 4 Claims. (Cl. 74—54.)

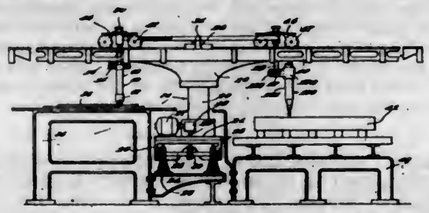
1. Mechanism of the class described, comprising a driving shaft, a worm thereon, a worm gear engaging the worm, a second shaft on which the worm gear is mounted, a driven shaft aligned with the second shaft and independently

revoluble, a countershaft, a pinion on the second shaft, a gear on the countershaft engaging the pinion, a driving stud supported to rotate with the countershaft at a substantial radial distance from the countershaft axis, a rocker



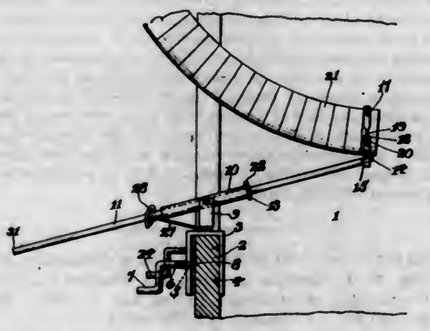
provided with a slot in which the driving stud is located to effect oscillation of the rocker, a ratchet wheel on the driven shaft, and a pawl on the rocker co-operating with the ratchet wheel.

1,759,857. REPRODUCING MECHANISM. CARLOS KREBS, Boston, Mass. Filed Mar. 14, 1929, Serial No. 347,065, and in Germany Jan. 25, 1929. 10 Claims. (Cl. 266—23.)



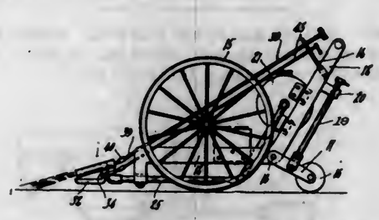
1. A reproducing machine wherein the movement of the reproducing means is controlled by that of a tracer relative to a template, comprising a single tracer, a pair of tracer carriages, means connecting said carriages and supporting said tracer, a plurality of reproducing tools, a pair of carriages supporting said tools and means joining each tracer carriage to a tool supporting carriage whereby the movement of the tracer relative to a template is transmitted to the tools.

1,759,858. GRAIN-SPOUT HOLDER. WILLIAM KUTZ, Ravenna, Nebr. Filed Oct. 12, 1928. Serial No. 312,189. 2 Claims. (Cl. 248—30.)



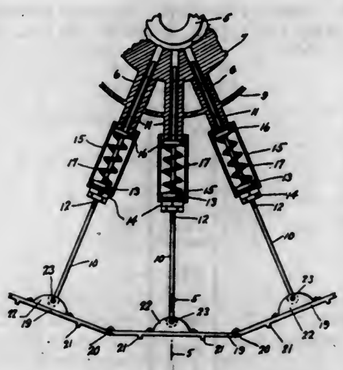
2. A grain spout holder comprising, a rod, a tubular supporting member therefor adjustable longitudinally of the rod, a vertically disposed yoke having said supporting member pivoted within the bifurcated end thereof to swing on a horizontal axis, a clamp for swivelly mounting said yoke with respect to a grain receptacle, means for connecting one end of the rod to a grain spout, and means whereby any swivel movement of said yoke may be prevented.

1,759,859. MACHINE FOR MELTING SNOW. PETER LA COURT, Boston, Mass. Filed Dec. 11, 1928. Serial No. 325,345. 1 Claim. (Cl. 126—271.2.)



A snow-melting machine comprising a wheeled frame, a supply tank supported by the frame, means for exerting pressure on liquid fuel in the tank, a fuel supply pipe connected with the tank and extending across the forward end of the frame, a row of inclined burners connected with the supply pipe and arranged to forwardly and downwardly project jets of fuel, valves controlling the burners, drip pans under the burners, igniters arranged to ignite liquid fuel in the pans to ignite jets emitted by the burners, each igniter including a movable and a fixed member, valve-operating shafts connected with the controlling valves, igniter-operating shafts connected with the movable members of the igniters, said shafts extending to the rear portion of the frame, and means at said rear portion for operatively supporting said shafts, each burner and its valve, the igniter, and the valve and igniter shafts associated therewith, constituting elements of a unit which is operable independently of the other units.

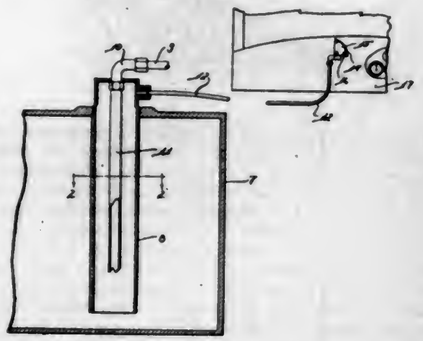
1,759,860. SPRING TRACTOR WHEEL. WILFRED EMANUEL LAGERFELDT, Iron Mountain, Mich. Filed May 18, 1929. Serial No. 364,090. 1 Claim. (Cl. 152—30.)



A spring wheel of the character described comprising a hub, elongated tubular guides radiating from the hub, a traction rim encircling the hub in spaced relation thereto and comprising a series of flat rectangular hingedly connected rigid plates, a plurality of spokes pivotally connected, at their outer ends to the longitudinal central portions of the plates and having their free ends slidably extending into the guides, circular discs mounted on the spokes in spaced relation to the guides, cylindrical housings

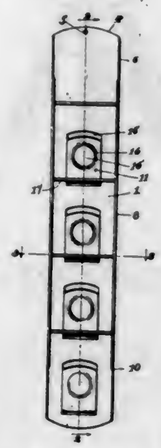
mounted on the spokes and extending telescopically over the free ends of the guides, inturned flanges on said housings in engagement with the outer faces of the discs, jamb nuts threaded on the spokes for engagement with the outer faces of the housing flanges for clamping same against the discs, circular discs slidably mounted on the spokes in spaced relation to the first named discs and in engagement with the free ends of the guides, and compressible springs positioned in the housings and encircling the spokes intermediate the circular discs thereon and having their opposite ends engaged with said discs.

1,759,861. LIQUID-RESERVE DEVICE. HENRY LOWE, Tecumseh, Ontario, Canada. Filed Mar. 6, 1929. Serial No. 344,691. 4 Claims. (Cl. 158—46.5.)



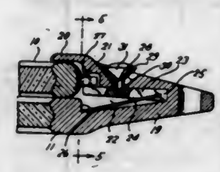
1. A device of the class described adapted for use with a tank for the reception of liquid comprising: a tube projected into said tank, the inner end of said tube being open and the outer end of said tube being closed; an outlet delivery pipe projected through the closed end of said tube and projected inwardly of said tank, said outlet delivery pipe terminating at its inner end above the inner end of said tube, said tube having an opening communicating with the atmosphere; and means for closing said opening to prevent entry of air into said tube.

1,759,862. DISPLAY HOLDER. FRANK V. MOORE, Holton, Kans. Filed Feb. 7, 1929. Serial No. 338,212. 5 Claims. (Cl. 211—50.)



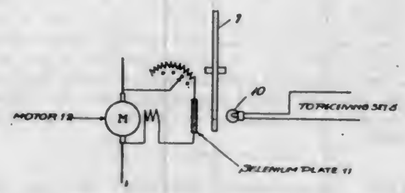
1. A holder comprising an open front body portion including a back wall and a pair of side walls projecting forwardly from the back wall, said back wall having superposed, spaced intermediate portions thereof projected forwardly to provide a set of spaced holder members having free outer ends and sides, and a set of spaced bars free of connection to the holder members, each bar of the set positioned in spaced relation to and outwardly and upwardly with respect to the free end of a holder member, said bars being disposed transversely with respect to the back wall and having the ends thereof seated in the side walls in proximity to the free edge of the latter.

1,759,863. EYEGLASS CONSTRUCTION. GEORGE E. NERNEY and WILBUR H. SIDDALL, Attleboro, Mass., assignors to Bay State Optical Company, Attleboro, Mass., a Corporation of Maine. Filed Jan. 6, 1927. Serial No. 159,314. 17 Claims. (Cl. 88—44.)



1. In eyeglass construction, a folding frame comprising, in combination, a pair of rims, means connecting said rims adapted to permit them to swing together into folded position one over the other and including spring means tending to unfold them; and means adapted to hold said rims in folded position against the action of said spring means, said last means including means forming a closed loop on one of said rims and a spring catch on the other of said rims having a part adapted to enter said loop.

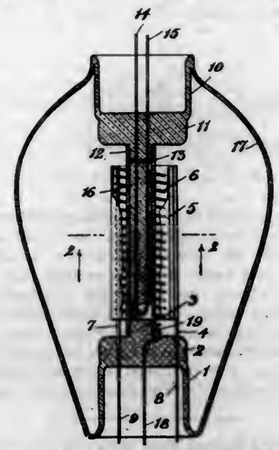
1,759,864. METHOD AND APPARATUS FOR SYNCHRONIZING TWO OR MORE DISCONNECTED ELEMENTS. HARRY J. NICHOLS, Washington, D. C. Filed Jan. 10, 1923. Serial No. 611,828. 14 Claims. (Cl. 172—293.)



1. In apparatus of the class described, in combination, a sending station, a periodically moving element and means associated therewith for sending an electrical impulse during each period or cycle of movement, a receiving station having an associated circuit which is energized upon the reception of the impulse, a moving element at the receiving station, a source of radiant energy in said circuit, means to control the energy transmitted from the energy source in accordance with the departure of the second element from a synchronous phase relation with the first element, and means responsive to such control to synchronize the movement of said elements.

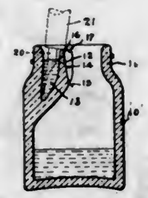
1,759,865. VACUUM TUBE. GEORGE H. PERRYMAN, Woodcliff, N. J., assignor to Perryman Electric Co., Inc., a Corporation of Delaware. Filed Apr. 5, 1927. Serial No. 181,027. 3 Claims. (Cl. 250—27.5.)

1. In a vacuum tube, an envelope, an upper stem secured thereto, a lower stem, anode and grid leads extending from the lower stem, said leads carrying an anode and grid respectively, filament leads extending from the upper stem, a projection formed on and extending from the upper stem, a tubular cathode fitted over said projection and extending



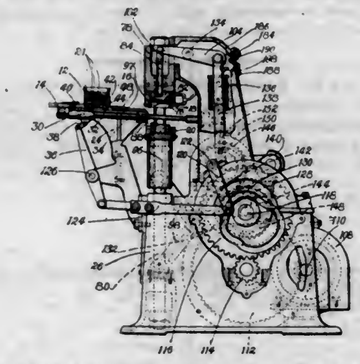
therefrom, said cathode surrounding the filaments, and a projection on the lower stem over which the lower end of the cathode is fitted.

1,759,866. BOTTLE. OWEN E. RAAB, Seattle, Wash. Filed Nov. 9, 1927. Serial No. 232,020. 6 Claims. (Cl. 215—6.)



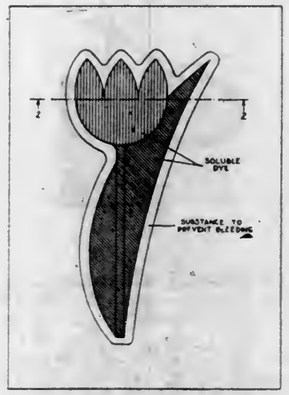
1. A bottle having a neck provided with a transverse wall which passes substantially through the neck in the general direction of the neck and forms an integral well arranged to be filled by tilting the bottle, both the bottle and the well being directly accessible for the dipping of a pen thereinto through the mouth of the bottle.

1,759,867. HEEL TRIMMING AND COMPRESSING MACHINE. EUGENE J. RAY, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Nov. 12, 1927. Serial No. 232,899. 28 Claims. (Cl. 12—42.)



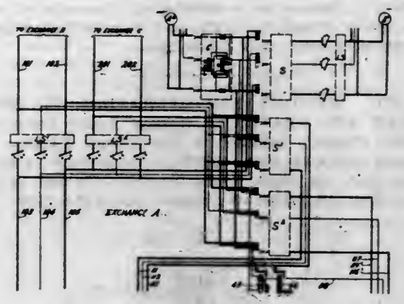
1. In a machine for operating upon shoe-part blanks, a die, a presser member operable within the die, and means for causing relative movement between the die and presser member to effect trimming and compressing operations upon a blank in operative position between the die and presser member.

1,759,868. TRANSFER FOR MULTICOLORED DESIGNS AND MARKINGS. HELENA S. SADTLER, Erdenheim, Pa. Filed Dec. 6, 1927. Serial No. 238,240. 10 Claims. (Cl. 41—33.)



4. A transfer sheet comprising a base having a design in one or more colors imprinted thereon with an ink containing water-soluble dyestuff and a layer of water-soluble gum bordering the design.

1,759,869. TELEPHONE SWITCHING SYSTEM. NORMAN H. SAUNDERS, Homewood, Ill., assignor to Reserve Holding Company, Kansas City, Mo., a Corporation of Delaware. Filed July 30, 1927. Serial No. 209,569. Renewed Oct. 30, 1929. 37 Claims. (Cl. 179—26.)

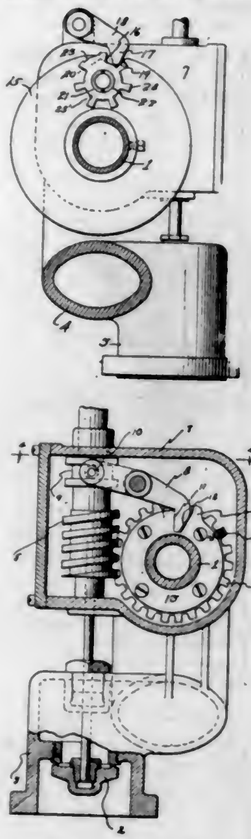


34. In a telephone system, a trunk line, a plurality of branches of the trunk line, and a relay controlled over the trunk line for separately repeating impulses over said branches in pre-determined succession.

1,759,870. BOILER CLEANER. NORMAN L. SNOW and CURTIS L. HOWSE, Detroit, Mich., assignors to Diamond Power Specialty Corporation, Detroit, Mich., a Corporation of Michigan. Filed Dec. 26, 1923. Serial No. 682,798. 14 Claims. (Cl. 122—392.)

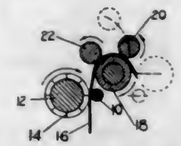
1. In a boiler cleaner, the combination with an oscillatory blower element, and a valve for controlling the admis-

sion of cleaning fluid to said blower element, of means dependent upon the angular travel of said blower element for holding said valve open and permitting said valve



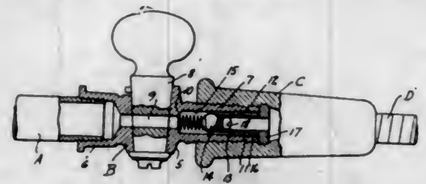
to close, and means for limiting the angular travel of said blower element for a predetermined number of oscillatory cycles thereof to retain said first-mentioned means in position to hold said valve open.

1,759,871. MACHINE FOR OPERATING ON HIDES, SKINS, AND LEATHER. GUSTAV ADOLF SCHETTLER, Leeds, England, assignor to The Turner Tanning Machinery Company, Portland, Me., a Corporation of Maine. Filed Nov. 30, 1926, Serial No. 151,772, and in Germany Dec. 18, 1925. 8 Claims. (Cl. 149—16.)



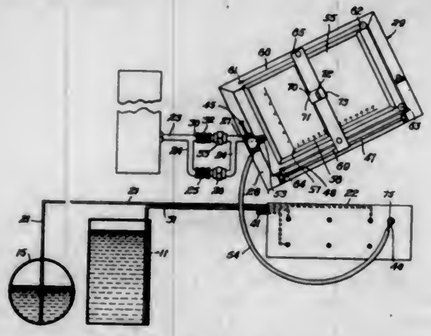
7. In a machine for operating upon hides, skins, leather and other similar pieces of work, a bladed cylinder for operating on the work having helically arranged blades extending in opposite directions from points between the ends of the cylinder, a bed roll for supporting the work against the thrust of the blades, and a plurality of feed rolls for feeding the work past the cylinder, one of the feed rolls having helically arranged blades disposed similarly to those of the bladed cylinder and another feed roll having helically arranged blades disposed reversely to the blades of the other feed roll.

1,759,872. SAFETY GAS FITTING. OSCAR SCHWIMMER, Los Angeles, Calif. Filed Jan. 11, 1927. Serial No. 160,322. 1 Claim. (Cl. 284—13.)



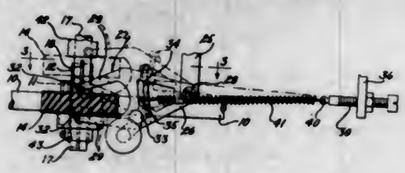
A gas fitting comprising a discharge nozzle to receive a service tube, a bushing with an inner end seat detachably mounted in the bore of said nozzle, a valve for said seat whereby said valve tends to occlude the flow of gas through said fitting, an actuating member freely separable from said nozzle having a stem insertable in the bore thereof so as to unseat said valve and permit the flow of gas therethrough in combination with a connector for said service tube arranged to frictionally grip and yieldably hold said actuating member in its bore.

1,759,873. APPARATUS FOR MEASURING THE LIQUID CONTENTS OF VESSELS. DAN DIMMITT SHEWMON, Oak Park, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Mar. 6, 1923. Serial No. 623,184. 5 Claims. (Cl. 73—54.)



1. In a volume indicating apparatus for selective association with liquid in a plurality of vessels through an interposed body of gas, a pressure indicating means responsive to the pressure exerted upon the body of gas by the liquid in a selected vessel, a chart having scales calibrated for the various vessels, and an indicating member adjustable to agree with the indication of the pressure indicating means when associated with one of the vessels and co-operating with the scale calibrated therefor to indicate the amount of liquid in the vessel.

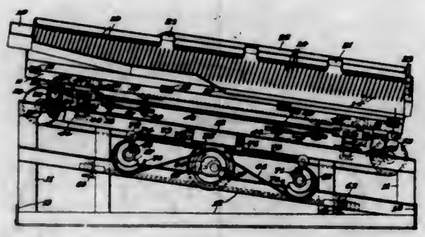
1,759,874. POWER-TRANSMITTING APPARATUS. HARRY CARPENTER STEARNS, Oak Park, Ill., assignor to Western Electric Company, New York, N. Y., a Corporation of New York. Filed July 27, 1927. Serial No. 208,797. 8 Claims. (Cl. 192—150.)



2. A power transmitting apparatus comprising a driving and a driven member having cooperating surfaces ar-

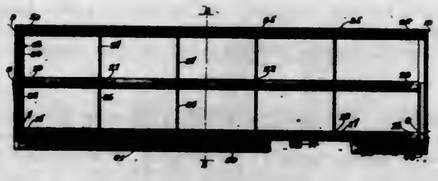
ranged for permitting the driven member to move in response to the end thrust thereon to permit a disengagement of the surfaces, pivotal means mounted to operatively engage opposite surfaces of the driven member, and an elastic toggle link connected at one end to the pivotal means at one side of th pivotal point thereof for maintaining the surface in driving engagement when a normal load is being transmitted but yielding when the load exceeds a predetermined amount to cause a disengagement of the surfaces.

1,759,875. OPERATING MECHANISM. ALBERT H. STEBBINS, Los Angeles, Calif. Filed May 15, 1928. Serial No. 277,916. 15 Claims. (Cl. 74—14.)



1. In combination with a supporting casing having a frame mounted thereupon for transverse vibratory movement, a pair of double ended levers pivotally mounted upon the supporting casing beneath the frame at points spaced lengthwise of the casing and each lever having a protruding portion intermediate its ends and constructed to impart the rocking movement of the lever to said frame, means connecting said levers to cause them to operate in unison, and power actuated means connected to the opposite ends of said levers to rock them to thereby impart transverse vibratory movement to said frame.

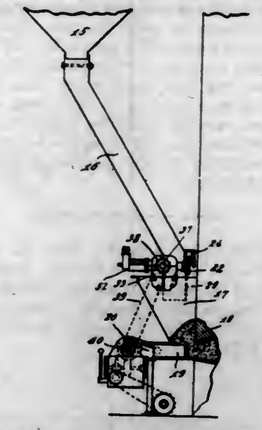
1,759,876. TRUCK BODY. SIMEON E. TRAVIS, Jr., Hattiesburg, Miss. Filed Oct. 22, 1928. Serial No. 314,151. 4 Claims. (Cl. 296—3.)



1. A truck body comprising lower, intermediate and upper side and end rails, vertical corner rails common to the ends of said side and end rails, a plurality of pairs of spaced lower, intermediate and upper transversely extending supports secured respectively to and bracing the lower, intermediate and upper side rails, and bracing means between said lower and intermediate supports and bracing means between said intermediate and upper supports.

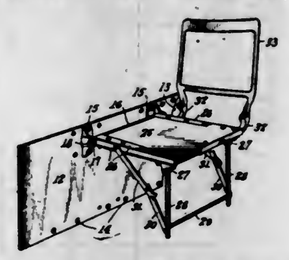
1,759,877. COAL SPREADER. THOMAS N. WYNNE, Indianapolis, Ind. Filed Dec. 31, 1926. Serial No. 158,250. 7 Claims. (Cl. 214—35.)

1. In combination with an automatic stoker having a hopper, a swinging coal-feeding chute for feeding coal into and distributing it along said hopper, two sprockets rotatably mounted near the ends of said hopper in a plane parallel to the path of movement of the lower end of said chute, a chain surrounding said sprockets, said chute being connected to said chain, a rotatable shaft, means for driving



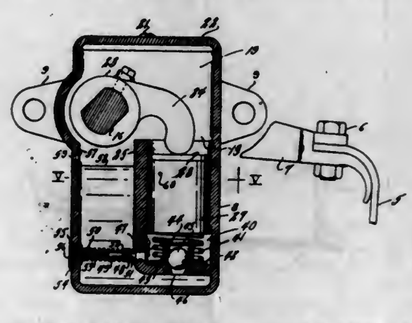
said shaft constantly in one direction, and periodically reversible power-transmission mechanism inter-connecting said shaft and one of said sprockets.

1,759,878. FOLDING SEAT FOR AUTOMOBILE DOORS. CHARLES ZIZZO, Newark, N. J. Filed Apr. 30, 1927. Serial No. 187,730. 1 Claim. (Cl. 155—12.)



In a folding seat, a plate fixed on a support, a sleeve rotatably mounted on said plate, a seat fixed on said sleeve, a rod in said sleeve, a torsional element in said sleeve, one end of said element engaging with said sleeve and the other end with said rod, a ratchet on said rod, and a pawl engaging with said ratchet.

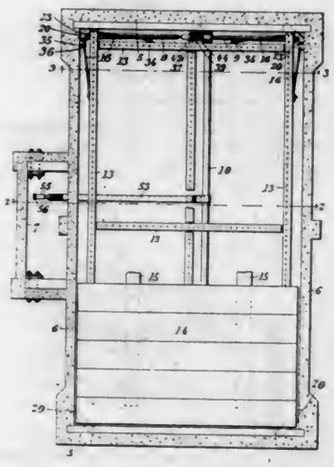
1,759,879. REBOUND DEVICE. ERNEST W. ACKERMAN and GRIFFITH C. NICHOLSON, Monroe, Mich., assignors to The Hydro-Check Corporation, Monroe, Mich., a Corporation of Michigan. Filed Oct. 19, 1927. Serial No. 227,147. 7 Claims. (Cl. 267—8.)



7. A rebound take-up device comprising a vessel having a cylinder therein, a piston in said cylinder as a movable

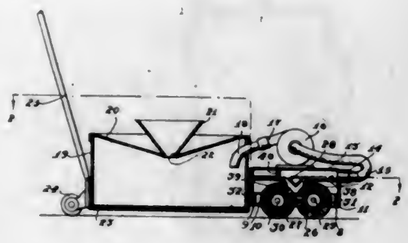
partition between the cylinder chamber and the vessel chamber, there being port communication through the cylinder between said chambers including a ring shaped valve shiftable axially of and away from the port in providing an annular clearance about the valve toward the port, a helical spring coaxially of the port valve resisting shifting of the valve away from the port, a headed stem coacting as a guide for the ring and about which stem the spring is mounted, said stem extending to the vessel exterior, said vessel having an opening providing a seat into which said stem is countersunk, packing in said seat over said stem, and a flush closure for the packing independently of which the spring is adjustable.

1,759,880. WEIGHING SCALE. KARL E. BARRETT and GLENN K. FULLER, Sherbrooke, Quebec, Canada, assignors to The B. S. & M. Scale Company Limited, Sherbrooke, Canada, a Corporation of Canada. Filed Sept. 21, 1925, Serial No. 57,723, and in Canada Aug. 17, 1925. 23 Claims. (Cl. 265—71.)



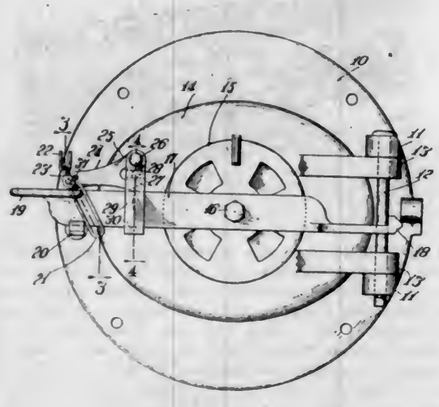
1. In a platform scale, a base, supports carried diagonally across the corners of the base, levers, and pivotally mounted plates connecting the levers with the said supports.

1,759,881. FLOOR SCRUBBING AND DRYING DEVICE. GARFIELD BENTLEY, Highland Park, Mich. Filed Apr. 26, 1926. Serial No. 104,564. 1 Claim. (Cl. 15—7.)



A mechanism of the class described comprising a frame; a pair of brush rollers rotatably mounted in said frame in axial parallel relation to each other; means for rotating said rollers in opposite directions; a housing positioned above said rollers and having an elongated opening formed in its base extending axially of and between said rollers; a deflecting member, V-shaped in transverse cross section, mounted on said housing and positioned inwardly thereof at said opening to provide at opposite sides thereof a pair of axially extending entry nozzles leading into said housing; and a vacuum producing mechanism for setting up a vacuum in said housing and a receptacle in communication, through said vacuum mechanism, with said housing.

1,759,882. LOCOMOTIVE FIRE-DOOR FASTENER. CHARLES H. BILTY, Milwaukee, Wis. Filed July 9, 1928. Serial No. 291,239. 5 Claims. (Cl. 292—210.)



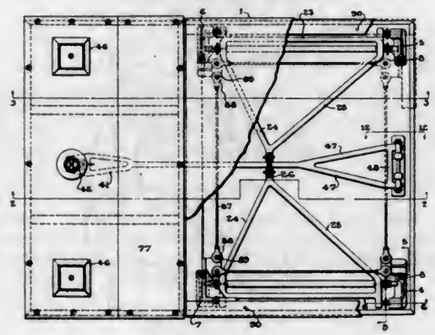
1. A locomotive fire door fastener comprising, in combination with the pivoted horizontally disposed handle of the firebox door, a horizontally disposed member arranged above said handle and pivotally mounted at one of its ends and above its horizontal axis to automatically swing into position below its pivot point, so as to position the free end of the member in parallel contacting relation with the door handle, and means having operative relation with the member and yielding operative relation with the door handle whereby said member is swung upwardly out of locking position in advance of movement of the door handle.

1,759,883. ELECTRIC CABLE. CHARLES R. BOGOS, Waban, Mass., assignor to Simplex Wire and Cable Company, Boston, Mass., a Corporation of Massachusetts. Filed Apr. 12, 1928. Serial No. 269,341. 2 Claims. (Cl. 173—267.)



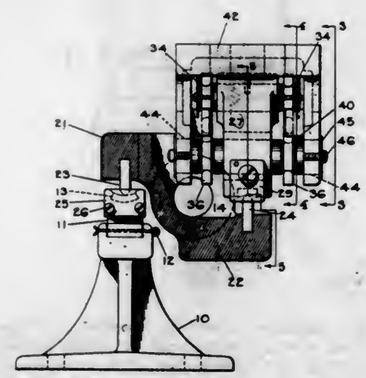
1. An armored insulated electric cable, consisting of an insulated conducting element covered with a layer of cushioning material encased in an armor layer covered with another layer of cushioning material, said armor layer consisting of a single helically wound arched zinc tape the successive turns of which overlap to form a single armor layer free from interstices opening radially therethrough, said cable being free from magnetic elements.

1,759,884. PLATFORM SCALE. ALFRED BOUSFIELD, St. Johnsbury, Vt., assignor to E. and T. Fairbanks and Company, St. Johnsbury, Vt., a Corporation of Vermont. Filed Apr. 28, 1927. Serial No. 187,221. 14 Claims. (Cl. 265—71.)



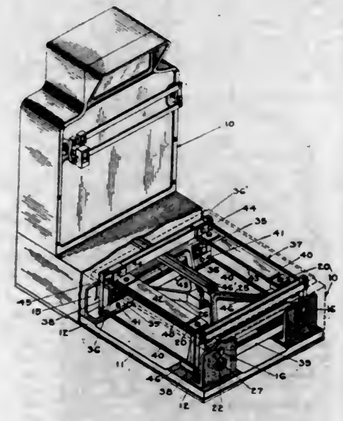
1. In a device of the character described, in combination, a base, a plurality of fulcrum stands mounted in said base, pins secured to said fulcrum stands, loops pivoted on said pins and lever supporting means suspended from said loops, said pins having means thereon to prevent the disengagement of said loops.

1,759,885. SCALE. ALFRED BOUSFIELD, St. Johnsbury, Vt., assignor to E. and T. Fairbanks and Company, St. Johnsbury, Vt., a Corporation of Vermont. Filed June 11, 1928. Serial No. 284,574. 9 Claims. (Cl. 265—71.)



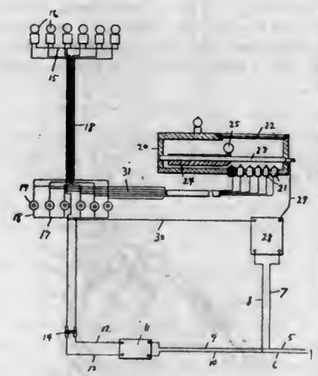
7. In a device of the character described, in combination, a load pivot, a bearing block having an aperture therein superimposed on said load pivot for free tipping movement, a pin mounted in said bearing block, loops depending from said pin, a second pin carried by said loops, said second pin being of smaller diameter than said aperture and adapted to be freely movable therein and platform structure supported on said second pin.

1,759,886. SCALE. ALFRED BOUSFIELD, St. Johnsbury, Vt., assignor to E. and T. Fairbanks and Company, St. Johnsbury, Vt., a Corporation of Vermont. Filed Aug. 11, 1928. Serial No. 298,989. 16 Claims. (Cl. 265—71.)



1. In a device of the character described, in combination, a base, stands fixed thereto, levers fulcrumed on said stands and an adjustable means connecting said levers, said means being flexible.

1,759,887. FIRE-ALARM SWITCH. WILLIAM J. BURKE, Bronx, N. Y. Filed Dec. 7, 1927. Serial No. 238,376. 1 Claim. (Cl. 200—168.)

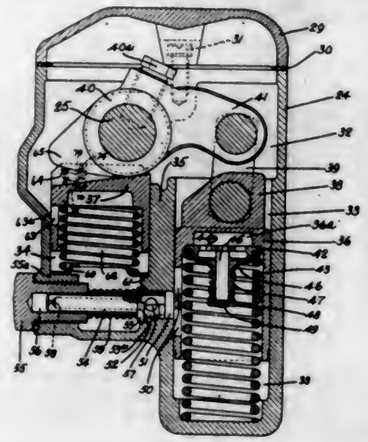


A device of the class described including a box, a plurality of push button circuit closers in the bottom of the box, a rod extending longitudinally of the box and formed of conducting material, a slide of conducting material on the rod, said slide being movable to engage the push buttons in a progressive manner for closing all circuits, a glass panel in the top of the box, and means for breaking the glass panel so that access may be had to the slide.

1,759,888. SHOCK ABSORBER. WILLIAM A. CHRYST, Dayton, Ohio, assignor, by mesne assignments, to Delco Products Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Nov. 18, 1927. Serial No. 234,113. 8 Claims. (Cl. 267—8.)

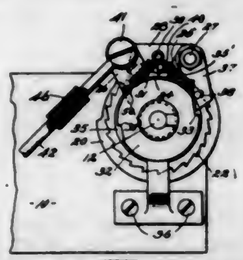
6. A shock absorber for cushioning the movement of two relatively movable members comprising, a casing adapted

to be secured to one of said members presenting a fluid chamber and two cylinders; a piston reciprocal in each of said cylinders; a rock shaft journalled in said casing and operatively connected to the other relatively movable member, said rock shaft having arms within the casing which engage the pistons for operating one or the other piston into its cylinder in response to the movement of said members toward or away from each other; an opening through the skirt of the one piston, gradually covered by the movement of the said one piston for gradually restricting the



flow of fluid from the cylinder beneath said piston through the opening in its skirt to the fluid chamber upon movement of the relatively movable members toward each other; means in the other piston for establishing a free flow of fluid from the fluid chamber into the cylinder beneath said piston during the said movement of said members; and means comprising a valve interposed between the two cylinders and having one constantly open passage for delivering fluid from the one cylinder to the other at a restricted flow when either piston is moved into its cylinder.

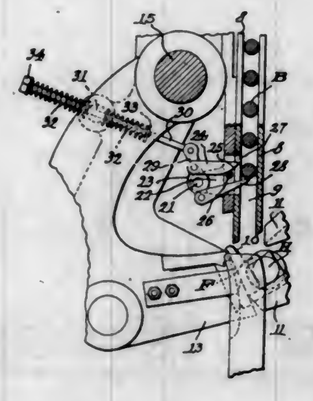
1,759,889. INKING FOUNTAIN. HARRY W. CLARK, Wyandotte County, Kans. Filed May 31, 1929. Serial No. 367,330. 8 Claims. (Cl. 101—364.)



4. An inking fountain comprising an ink receptacle, an ink feed roll, means for intermittently rotating said roll forwardly and backwardly, said means being adapted to rotate said roll forwardly a plurality of times to each backward rotation thereof.

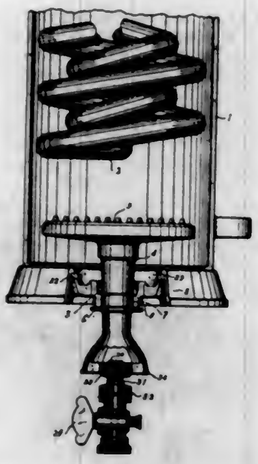
1,759,890. FEED FOR BOLT-TRIMMING MACHINES. WILLIAM L. CLOUSE, Tiffin, Ohio, assignor to The National Machinery Co., Tiffin, Ohio. Filed Nov. 13, 1926. Serial No. 148,288. 4 Claims. (Cl. 10—165.)

1. In a machine of the class described, the combination with downwardly inclined guides for supporting bolts therebetween with their heads uppermost, and a downwardly inclined delivery chute, of a laterally movable jaw for transferring bolts from the outlet end of the guides to the inlet end of the delivery chute, and means controlled by



the operation of the jaw for moving in opposite directions the heads of two adjoining bolts suspended from the guides and thereafter releasing one of the bolts for gravitation to the jaw.

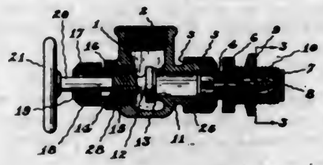
1,759,891. VALVE. LORAN F. DOEN, Cleveland, Ohio, assignor to The Cleveland Heater Company, Cleveland, Ohio, a Corporation of Ohio. Filed July 20, 1926. Serial No. 123,690. 3 Claims. (Cl. 137—69.)



1. A gas appliance accessory comprising a manually operable cock having a valve body externally threaded at one end forming the female portion of the union connection, a combined union and spud holder forming the male portion of the union connection adapted to be detachably secured to the externally threaded portion of said valve body, and a gas spud carried in said spud holder.

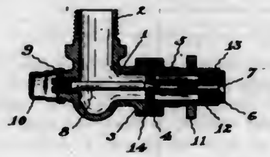
1,759,892. VALVED COUPLING. LORAN F. DOEN, Cleveland, Ohio, assignor to The Cleveland Heater Company, Cleveland, Ohio, a Corporation of Ohio. Filed Apr. 15, 1927. Serial No. 184,141. 2 Claims. (Cl. 277—67.)

1. An angle valve having a male union outlet, a centrally bored regulating needle mounted in said outlet, a spud having a reducing orifice, and means longitudinally adjustable on said union outlet and carrying said spud whereby the position of said spud may be adjusted relatively to said



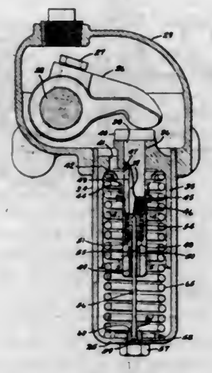
regulating needle so that in the limiting positions of said spud fluid flow from the valve is controlled by the size of spud orifice in one case and in the other case by the size of the central bore of said regulating needle.

1,759,893. VALVE. LORAN F. DOEN, Cleveland, Ohio, assignor to The Cleveland Heater Company, Cleveland, Ohio, a Corporation of Ohio. Filed Apr. 15, 1927. Serial No. 184,142. 5 Claims. (Cl. 137—69.)



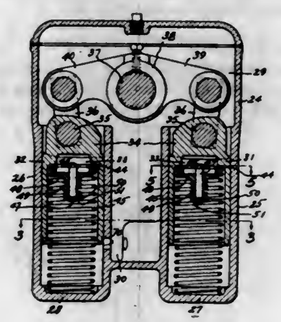
1. In an adjusting valve for gas burning appliances, a valve body provided with inlet and outlet openings, a spud carrier, a union connection between said spud carrier and the outlet end of said valve body, a spud carried by said spud carrier and an adjustable needle to vary the size of the opening at the inlet end of said spud..

1,759,894. SHOCK ABSORBER. GEORGE W. ELSEY, Dayton, Ohio, assignor, by mesne assignments, to Delco Products Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Mar. 3, 1927. Serial No. 172,476. 10 Claims. (Cl. 267—8.)



10. A shock absorber comprising in combination, a casing presenting a pressure chamber and a reservoir, a displacement member, means for establishing a free flow of fluid from the reservoir to the pressure chamber in response to the movement of the displacement member in the one direction, and means for restricting the flow of fluid from the pressure chamber to the reservoir upon the reverse movement of the displacement member, said means comprising a tubular member providing a valve seat, a valve in said tubular member and having a head portion adapted to engage with the valve seat, and a stem slidably supported in the tubular member, said stem having a contour providing passages between it and the tubular member, which passages terminate below the valve head portion, the valve having a central, longitudinal orifice forming a restricted communication between the pressure chamber and the reservoir, a spring within the tubular member adapted to maintain the valve upon the valve seat and a metering pin supported on the casing at its one end, the other end extending into the longitudinal orifice of the valve, said metering pin having a groove decreasing in cross sectional area as it approaches the end of the pin extending into and through the orifice in the valve.

1,759,895. SHOCK ABSORBER. GEORGE W. ELSEY, Anderson, Ind., assignor, by mesne assignments, to Delco Products Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Nov. 21, 1927. Serial No. 234,673. 1 Claim. (Cl. 267—8.)

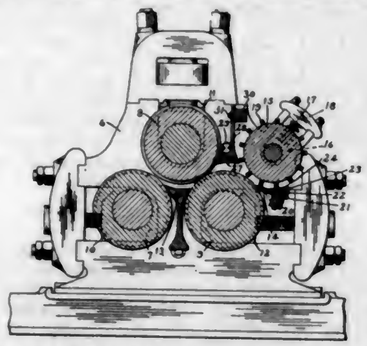


A device for controlling the movement of two relatively movable members, comprising in combination, a casing secured to one of said movable members and presenting closed end cylinders in communication with a common fluid chamber; pistons reciprocal in said cylinders; means connecting the other relatively movable member with the pistons whereby said pistons are reciprocated in their respective cylinders in accordance with the movement of the relatively movable members; a valve controlled port in the head of each piston, adapted to establish a free flow of fluid from the fluid chamber to the respective cylinders when the pistons in said cylinders are moved upwardly by the connecting means, said ports being closed to the return flow of fluid to the fluid chamber when the movement of the pistons is downwardly; a port in the wall of one cylinder providing communication between said cylinder and the common fluid chamber, said port, however, being closed gradually by the downward movement of the piston in said cylinder to gradually, increasingly restrict the escape of fluid from said cylinder; and a separate, spring-loaded, unbalanced valve providing communication between each of the respective cylinders and the common fluid chamber, each valve being adapted to restrict the flow of fluid from the respective cylinder to the common fluid chamber in response to the downward movement of the piston toward the closed end of its cylinder.

1,759,896. MILL SHREDDER. FRANKLIN FARREL, Jr., New Haven, Conn., assignor, by mesne assignments, to Farrel-Birmingham Company, Incorporated, Ansonia, Conn., a Corporation of Connecticut. Filed July 1, 1927. Serial No. 202,885. 6 Claims. (Cl. 100—47.)

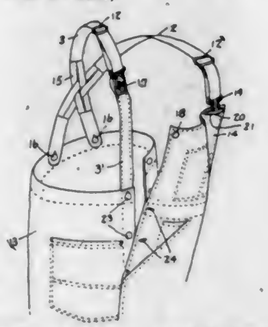
1. In a cane mill, shredding means, means cooperating therewith adapted to support cane passing through said

mill while acted on by said shredding means, and means for resisting movement of the cane over said cooperating means due to the action of said shredding means thereon,



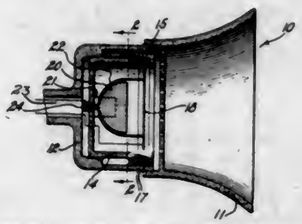
said last named means being provided with a cane supporting surface arranged at an angle to the adjacent cane supporting surface of the cooperating means.

1,759,897. GARMENT. GEORGE H. FRANCISCO, Los Angeles, Calif., assignor of one-half to Annie A. Davis, Los Angeles, Calif. Filed July 11, 1928. Serial No. 291,751. 4 Claims. (Cl. 2—230.)



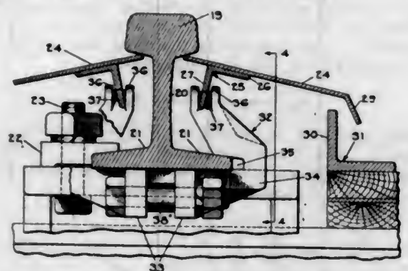
4. In combination, a pair of overalls comprising front and rear portions formed with a downwardly extending side parting therebetween terminating a substantial distance below the waist line, the front portion having an upwardly extending bib thereon, a pair of straps adapted to pass over the shoulders of a wearer for supporting the overalls attached at their rear ends to said rear portion, and at their forward portions to said bib, one only of the forward ends of said straps provided with an extension passing downward below the upper end of said bib and secured to the rear portion adjacent the side parting.

1,759,898. TRANSMITTER. HAL FREDERICK FRUTH, Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Sept. 16, 1926. Serial No. 135,723. 3 Claims. (Cl. 179—145.)



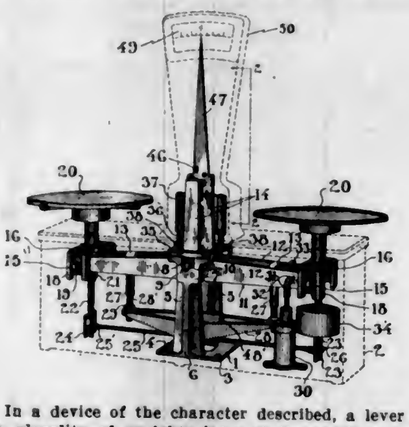
1. In a transmitter, a vibratory diaphragm, a housing, a low resistance conductor block fixed within the housing and provided with an arcuate contact surface, a flexible high resistance conductor strip connected with the diaphragm and secured to the block medially of the arcuate surface, the strip being operable in response to vibrations of the diaphragm to vary its contact with the surface of the block and thereby vary the effective resistances of the elements.

1,759,899. WEATHER SHIELD FOR TRACK SCALES. CLYDE E. FULLER, St. Johnsbury, Vt., assignor to E. and T. Fairbanks and Company, St. Johnsbury, Vt., a Corporation of Vermont. Filed June 25, 1928. Serial No. 288,089. 4 Claims. (Cl. 265—71.)



1. In a device of the character described, in combination, a scale deck having an opening therein, a plurality of rail stands projecting through said opening, a rail mounted on said stands, brackets mounted on said rail independently of said stands and a shield fulcrumed on said brackets.

1,759,900. SCALE. HARLAN A. HADLEY, St. Johnsbury, Vt., assignor to E. and T. Fairbanks and Company, a Corporation of Vermont. Filed Nov. 21, 1927. Serial No. 234,716. 16 Claims. (Cl. 265—54.)



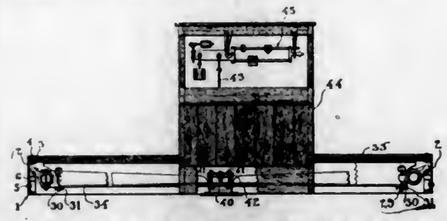
1. In a device of the character described, a lever having a plurality of uprights integral therewith, a torsion ribbon attached to said uprights and an indicator fulcrumed on said ribbon.

1,759,901. COMPOSITION SHINGLE. NORMAN P. HARSHBERGER, Chicago, Ill. Filed Sept. 30, 1926. Serial No. 138,598. 3 Claims. (Cl. 108—7.)



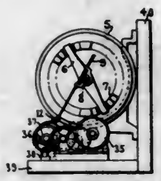
1. A method of forming shingles consisting in cutting from sheets of shingle material individual pieces, each piece having one edge materially longer than the opposite edge, and in then crimping the long edge so that it is substantially the same length across as is the main body of the shingle.

1,759,902. PLATFORM SCALE. ALFRED COLQUITT HOWARD, East Moline, Ill., assignor to E. and T. Fairbanks and Company, St. Johnsbury, Vt., a Corporation of Vermont. Filed Aug. 12, 1927. Serial No. 212,480. 15 Claims. (Cl. 265—71.)



1. In a device of the character described, the combination with a frame and a plurality of levers supported thereon, of extension levers rotatably connected to said levers.

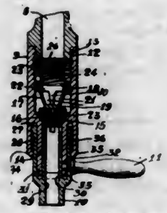
1,759,903. OPERATING MECHANISM FOR DIMMER RHEOSTATS. RICHARD B. HUNTER, Milwaukee, Wis., assignor, by mesne assignments, to Cutler-Hammer, Inc., Milwaukee, Wis., a Corporation of Delaware. Filed Dec. 11, 1924. Serial No. 755,208. 11 Claims. (Cl. 177—346.)



1. The combination with a master operating shaft adapted to be continuously driven in one direction through successive cycles, of a plurality of oscillatable rheostat control elements, and means providing individually adjustable connections, between said shaft and said elements, said connections providing for maximum or minimum or any intermediate range of oscillating movement of the respective control elements during each cycle of operation of said shaft.

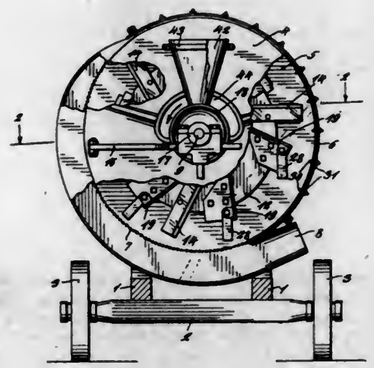
8. The combination with a plurality of rheostats each having a resistance varying member movable alternately in reverse directions throughout a given maximum range, of power driven means operable unidirectionally through successive cycles for concurrently and repeatedly effecting operation of said resistance varying members throughout all or any portion of their respective maximum ranges, and including means for independently varying the ranges of movement of said resistance varying members with respect to each other.

1,759,904. PLUMBER'S BIB. SAMUEL M. KASS, Philadelphia, Pa. Filed Feb. 23, 1925. Serial No. 10,987. 1 Claim. (Cl. 251—8.)



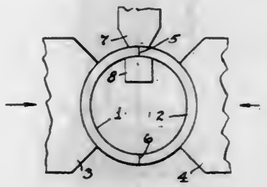
In a bib, a barrel providing a chamber having a valve seat at one end and of reduced internal diameter below the valve seat, a valve resting upon the valve seat, a valve carrier spring-pressed against the valve, the barrel being annularly grooved at the bottom to provide a cylindrical inner shell and an outer shell concentric therewith, an annular operating member entering the annular groove, spiral interconnection between the cylindrical shell and the operating member, valve-engaging connections moved by the operating member an enlargement on the upper end of the operating member and a cooperating contraction at the lower end of the outer shell to prevent withdrawal of the operating member.

1,759,905. ENSILAGE CUTTER AND GRINDER. CHARLES W. KEITH, Denver, Colo., assignor to D. K. Stephenson, Denver, Colo. Filed Dec. 6, 1926. Serial No. 152,851. 4 Claims. (Cl. 146—107.)



1. In an ensilage cutter and grinder, a rotor, fan blades mounted thereon, a casing enclosing said rotor, said casing having a cylindrical wall curved about the center of rotation of said rotor, said fan blades having extensions pivotally connected to their ends and adapted to assume a radial position when the fan rotates, the peripheries of said extensions being closely adjacent the inner surface of said cylindrical wall when the rotor is rotating about its axis.

1,759,906. METHOD OF MAKING BEARINGS. EDWARD P. KERRUISH, Cleveland Heights, Ohio, assignor to The Cleveland Graphite Bronze Company, Cleveland, Ohio, a Corporation of Ohio. Filed Dec. 19, 1928. Serial No. 327,143. 3 Claims. (Cl. 29—149.5.)

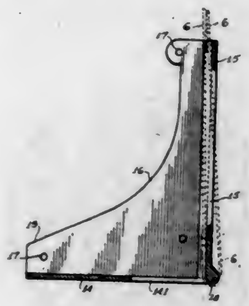


1. In a method of making bearing shells, the steps which consist in forming two approximately semi-cylindrical shells from flat stock, holding said shells with their abutting edges in accurate tight engagement with considerable pressure, and then integrally uniting said abutting edges with a union of less strength than that of the stock to maintain such edges in said tight engagement for a subsequent operation.

1,759,907. PLASTIC COMPOSITION. WOLF KRITCHEVSKY and KARL A. SCHULTZ, Chicago, Ill. Filed Nov. 20, 1926. Serial No. 149,793. 2 Claims. (Cl. 106—37.)

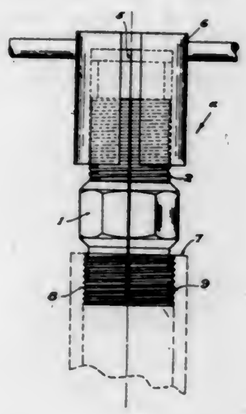
2. A plastic moldable composition of matter that may be worked by hand without mechanical pressure or apparatus consisting of celluloid, acetone, the acetone being at least equal in amount to the amount of celluloid used, alcohol, benzol, and wood flour.

1,759,908. JOIST CONNECTION. HENRY H. LAMPERT, Chicago, Ill. Filed May 16, 1928. Serial No. 278,243. 1 Claim. (Cl. 20—94.)



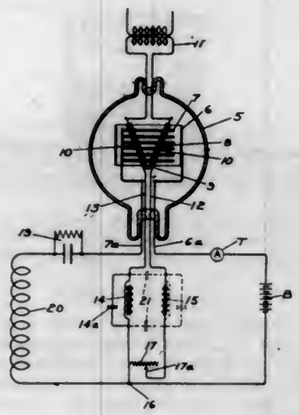
In a device of the class described, a shoe comprising a pair of transversely disposed integral bearing members adapted to embrace a corner of a joist, said bearing members having a pair of slots formed therein for receiving a tie element, a cross bar located between said slots and disposed in the plane of one of said bearing members for attachment to the tie element, and a pair of guide-rails located on the inner face of one of said members on respectively opposite sides of one of said slots for securing said shoe and tie element against relative lateral shifting, said guide-rails being spaced inwardly from the side edges of said one member.

1,759,909. REMOVABLE THREAD FOR OIL SAVERS. JAMES NEIL LOCKE, Long Beach, Calif. Filed Aug. 23, 1926. Serial No. 131,087. 2 Claims. (Cl. 285—147.)



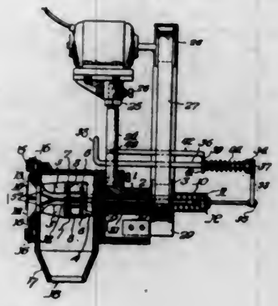
1. In an oil saver head having a transverse groove and longitudinal slots therein, externally threaded complementary shells, a rib on said shells adapted to fit into said groove, strips on said shells adapted to fit into said slots, thereby removably and non-rotatably mounting the shells on the head.

1,759,910. CIRCUITS FOR THERMIONIC TUBES. FREDERICK S. MCCULLOUGH, Edgewood, Pa. Filed Aug. 25, 1925. Serial No. 52,307. 12 Claims. (Cl. 250—27.)



1. The combination with a thermionic tube having a cathode comprising a plurality of sections and a heater for the cathode, of wires connected with the different sections of the cathode, and a variable resistance connected across said wires.

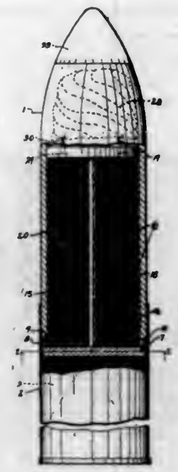
1,759,911. CORN TRIMMER. JOHN THOMAS MCGRATH, Bloomington, Ill. Filed Feb. 27, 1926. Serial No. 91,061. 13 Claims. (Cl. 130—9.)



9. In a corn trimmer, means for removing the kernels of an ear of corn from a portion of one end thereof including means for cutting a fillet between the portion from which the grains have been removed and the remaining grains adjacent thereto.

1,759,912. ANTIAIRCRAFT OFFENSIVE AND DEFENSIVE MEANS. WILLIAM H. MOUNT, Summit, N. J. Filed Nov. 11, 1925. Serial No. 68,273. 9 Claims. (Cl. 102—29.)

1. A device for offense and defense against aircraft including in combination a projectile having a wire and an attached parachute stowed therewithin, means for releasing the wire during the flight of the projectile to trail from



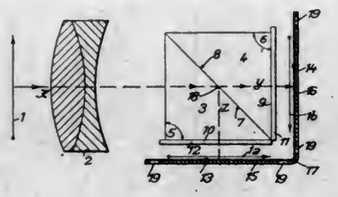
the projectile, and means for thereafter releasing the parachute from the projectile to support the downwardly dependent wire in the air.

1,759,913. PROCESS OF TREATING DISPERSIONS. FRANZ RUDOLF MOSER, Bussum, Netherlands. Filed July 27, 1925, Serial No. 46,510, and in the Netherlands Jan. 2, 1925. 18 Claims. (Cl. 252—6.)

1. A process for the manufacture of a water insoluble organic substance in dispersed condition which comprises incorporating a protective colloid and an electrolyte in an aqueous dispersion of the water insoluble organic substance and subjecting the dispersion to treatment with a second electrolyte, generating in the dispersion a finely divided colloidal substance during the treatment thereof with said second electrolyte.

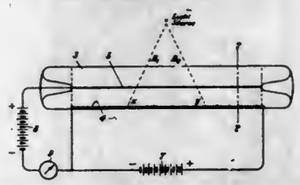
6. A process of increasing the stability of an aqueous dispersion of water immiscible material which comprises incorporating a relatively small amount of a primary protective colloid and forming in situ a secondary protective colloid in the presence of said primary protective colloid.

1,759,914. METHOD OF PRODUCING FILMS FOR COLOR CINEMATOGRAPHY. ALEXANDER PILNY, Zurich, Switzerland. Filed Nov. 5, 1928, Serial No. 317,262, and in Germany Nov. 8, 1927. 7 Claims. (Cl. 88—16.4.)



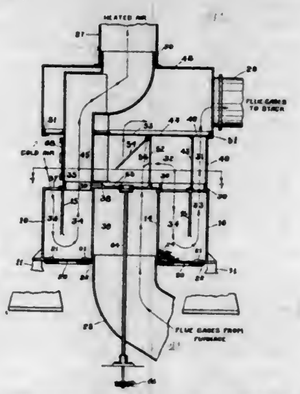
1. A method of producing film strips for cinematography which comprises splitting a series of images rectangularly and projecting them onto longitudinal parallel portions of a film strip by folding the strip longitudinally at right angles to present said portions for receiving the partial images.

1,759,915. PHOTO-ELECTRIC CELL. RALPH K. POTTER, New York, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Sept. 8, 1926. Serial No. 134,301. 2 Claims. (Cl. 250—1.)



1. A photo-electric cell responsive to the displacement of an incident light beam, comprising a light-sensitive, double-terminal cathode of high ohmic resistance and an anode.

1,759,916. FURNACE AIR PREHEATER. ROBERT SANFORD RILEY, Worcester, Mass., assignor, by mesne assignments, to The Air Preheater Corporation, New York, N. Y., a Corporation of New York. Filed Aug. 17, 1925, Serial No. 50,602. Renewed Apr. 9, 1929. 12 Claims. (Cl. 257—6.)



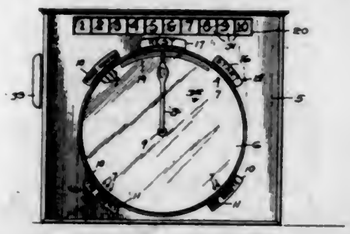
8. A heat exchange apparatus comprising a cylindrical drum having its axis arranged vertically, radial partitions and walls arranged to form passages within the drum communicating at both ends with openings through the top wall of the drum, heat exchange material in the passages means for admitting heated and cold gases, and a rotatable valve casing slidably and rotatably mounted on the top of the drum which has passages therethrough and is arranged to transmit the heated and cold gases alternately and successively through the different passages of the drum to effect a heat exchange therein.

1,759,917. SEAL. OSCAR A. ROSS, New York, N. Y. Filed June 25, 1927. Serial No. 201,391. 6 Claims. (Cl. 85—55.)



1. An article adapted to be applied to the exposed portion of a removable fastener for preventing molestation thereof which comprises; a cap portion arranged to form an enclosure for the exposed portion of the fastener, an annular portion surrounding the cap portion, an inverted frustro conical portion joined to the annular portion, the frustro-conical portion being constrained to enter an annular space between the surface of the substructure into which the fastener is inserted and the upper portion of the fastener to form a seal therebetween.

1,759,918. GAME SIGNALING APPARATUS. MAX C. SCHWARTZ, Washington, D. C. Filed Mar. 30, 1925. Serial No. 19,360. 1 Claim. (Cl. 161—17.)

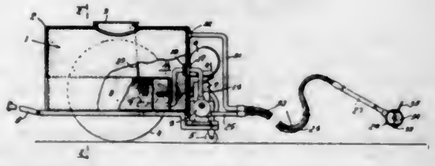


A time indicator of the character described comprising a main casing having a dial arranged thereon, electrical contact elements carried by said dial adjacent its edges, a hand for traversing said dial, said dial divided in four equal divisions of one minute each, said hand connected with a source of electrical energy, certain of said contact elements arranged at the minute division of the dial, electrical connection between the last named contacts and both visual and audible signals, one of said last named contacts arranged at the first division of the dial for indicating the starting point, two of said contacts arranged at the second division in spaced relation for indicating both visibly and audibly the one minute elapsed time, three of said contacts arranged at the third division in spaced relation for indicating both visibly and audibly the two minute elapsed time, four of said contacts arranged at the fourth division in spaced relation for indicating both visibly and audibly the three minute elapsed time, an elongated contact strip arranged between the three minute signal and the starting point, electrical connection between said strip and a visual signal for indicating a rest period during the travel of the hand thereover, said hand adapted to engage the several contacts for indicating the progress of the game, an indicator casing arranged above the dial and provided with figures upon its face for progressively indicating the several stages of the game, independent illuminating means for each of said figures, electrical means operable by the passage of the hand over a contact adjacent the starting point for causing the said figures to become successively illuminated for each complete revolution of the hand.

1,759,919. ARTIFICIAL PLAGIOCLASE COMPOUND. FELIX SINGER, Berlin-Charlottenburg, Germany. Filed Dec. 9, 1927, Serial No. 239,010, and in Germany Dec. 17, 1926. 3 Claims. (Cl. 23—110.)

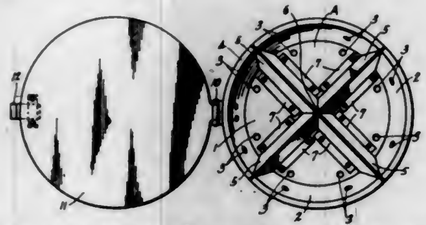
1. A process of manufacturing artificial plagioclase-compounds which consists in heating oxycompounds of bivalent metals and oxycompounds of silicon and of alumina in a proportion substantially corresponding to the formula $RO.Al_2O_3.2SiO_2$ to temperatures approximating but not reaching the point of fusion of the mixtures obtained.

1,759,920. BITUMEN SPREADER. CHARLES G. TALBOTT, Stamford, Conn., assignor to The Barrett Company, a Corporation of New Jersey. Filed Aug. 28, 1926. Serial No. 132,068. 3 Claims. (Cl. 91—44.)



1. In combination a tank, means for heating bitumen therein, a pump for withdrawing bitumen from said tank, a mobile spreading nozzle, a flexible line establishing fluid communication between the outlet of said pump and one end of said nozzle, a flexible return line establishing communication between the other end of said nozzle and the tank and means for blowing out said lines.

1,759,921. VESSEL FOR SUBMERGED BAKING OF PIES. JAMES N. TARPLEY, Oklahoma City, Okla. Filed Mar. 25, 1929. Serial No. 349,558. 6 Claims. (Cl. 53—6.)



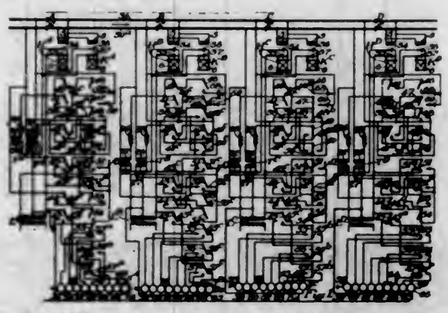
1. A device, as described, embodying, a circular plurally perforated pan for baking pies in deep oil, having integral crossed wedge-shaped hollow partitions for separating said pies into four equal parts, a flat hinged lid adapted to be closed over said pan in spaced relation thereto, said space and said perforations for permitting the circulation of oil for facilitating the baking of said pies.

1,759,922. ADJUSTABLE SEAT SUPPORT. CLIFFORD M. TEMPLETON, Detroit, Mich. Filed Mar. 7, 1927. Serial No. 173,422. 3 Claims. (Cl. 155—14.)



1. In an adjustable seat support of the class described adapted for use with a body having a floor, a supporting member pivotally attached to said seat, adjacent one edge thereof; a rotatable member for supporting said supporting member, said rotatable member carrying said seat rearwardly and forwardly of said floor upon pressure exerted thereon in either direction; means for locking said rotatable member against forward and rearward movement; means for adjusting the angularity of said seat relative to said floor; and means for locking said seat in its various positions of angular adjustment.

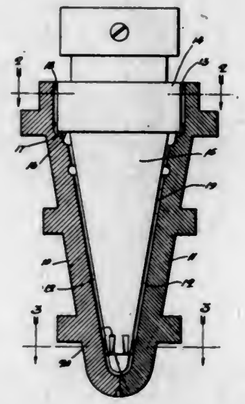
1,759,923. ELECTRICAL APPARATUS. HOWARD A. THOMPSON, Edgewood Borough, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Original application filed July 6, 1928, Serial No. 290,789. Divided and this application filed Dec. 10, 1929. Serial No. 413,098. 5 Claims. (Cl. 246—38.)



1. In combination, two relays each having two windings and each being selectively responsive to the phase relation

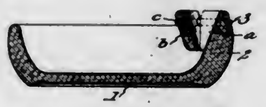
of currents in its windings, means for constantly supplying one winding of each relay with only half-waves of one polarity of alternating current of fixed-relative phase, means for supplying the remaining windings with only the positive or only the negative half-waves of alternating current of normal or reverse phase or with full-wave alternating current of normal or reverse phase or with only the positive or only the negative half-waves of alternating currents of both normal and reverse relative phase, and signaling means controlled by said relays.

1,759,924. MOLD FOR BAKING CUP PASTRY AND THE LIKE. WEBB W. TURNBULL, Dayton, Ohio, assignor to National Biscuit Company, New York, N. Y., a Corporation of New Jersey. Filed Nov. 3, 1927. Serial No. 230,798. 10 Claims. (Cl. 107—66.)



6. In a mold for forming cup pastry and the like, an outer mold member having a conical cavity therein, a conical core in the mold member and spaced therefrom to provide an annular conical space, means for holding the large end of the core centrally in the conical cavity, and projections on the core for holding the tip of the core centrally in the conical cavity.

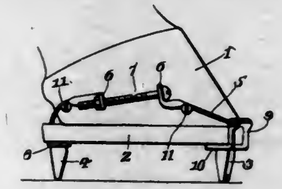
1,759,925. CIGAR OR CIGARETTE EXTINGUISHER. FREDERIK MARINUS VAN GELDEREN, Enschede, Netherlands. Filed Mar. 10, 1928, Serial No. 260,791, and in the Netherlands July 7, 1927. 6 Claims. (Cl. 131—51.)



1. A cigar or cigarette extinguisher, having a body portion providing a bore for the reception of a cigar or cigarette, said body portion being formed of a plurality of members, and means for normally holding said members in body-forming position but yielding under pressure of a cigar or cigarette introduced axially of said bore to permit said body portion to expand and contract to receive and grip the cigar or cigarette inserted in said bore.

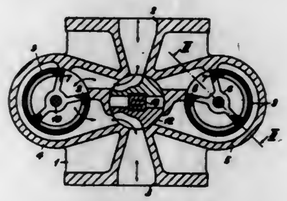
1,759,926. HORSESHOE FASTENER. BARDENES P. WELLAND, Albert Lea, Minn. Filed July 26, 1929. Serial No. 381,237. 3 Claims. (Cl. 168—22.)

1. A horse-shoe fastener comprising a length of wire for passing around a hoof with the ends thereof in spaced relation, means for securing the wire to the shoe, a plurality of supporting elements projecting horizontally from



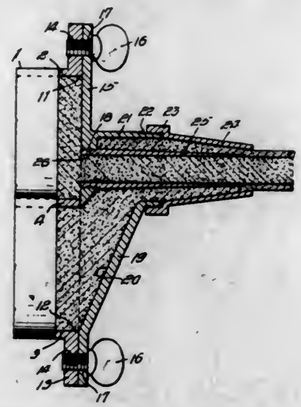
the hoof for the passage of the wire thereover, and means connected with said spaced ends for drawing them toward each other.

1,759,927. FILTER. JEAN ZWICKY, Maidenhead, England. Filed Sept. 26, 1925. Serial No. 58,902. 5 Claims. (Cl. 210—168.)



1. A filter comprising a filter body having an inlet and outlet and including casings for two straining members a valve seating and channels connecting said inlet and outlet and said casings to ports in said valve seating, and a rotary valve formed in two parts with a passage between them fitting said seating and having channels adapted to connect the inlet and outlet respectively to the two sides of the one straining member, or to the two sides of the other straining member, one portion of said valve being removable and reversible to enable the valve to connect the two casings in succession between the inlet and outlet.

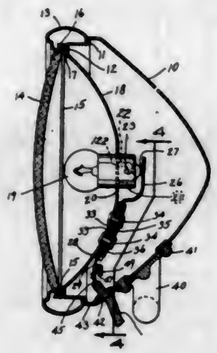
1,759,928. NOZZLE STRUCTURE. SAMUEL ALLEN, Jonesboro, Ill. Original application filed Apr. 5, 1926, Serial No. 99,774. Divided and this application filed May 23, 1927. Serial No. 193,566. 1 Claim. (Cl. 107—1.)



In combination with a two cylinder machine for discharging two different substances at the same time, of an end plate, screw threaded means for detachably connecting said end plate to the machine, said end plate

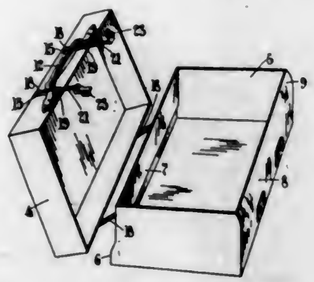
including a neck portion having an inclined discharge passage, said neck portion terminating in a tubular head, external screw threads for said head, an outer discharge nozzle having internal screw threads at its inner end for screw threaded connection with the tubular head of the neck portion of said end plate, said end plate having an internally screw threaded opening in axial alignment with the tubular head of said neck portion of the plate, an internal nozzle, the inner end of said internal nozzle being externally screw threaded for screw threaded connection with the internally screw threaded opening of the end plate.

1,759,929. LAMP SOCKET AND CONTACT. EDWARD C. ALBRIGHT, Connersville, Ind., assignor to Indiana Lamp Corporation, Connersville, Ind., a Corporation. Filed Nov. 2, 1928. Serial No. 316,642. 4 Claims. (Cl. 240—41.)



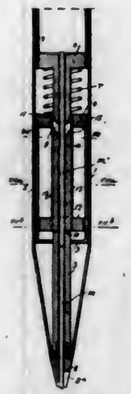
1. In a lamp having a reflector and a light bulb, the combination of a socket rigid with the reflector and through which the bulb projects, a spring contact terminating adjacent the bulb for contacting therewith and locking it in said socket, said contact being elongated and including a current conductor anchorage at the opposite end and an apertured mid-portion, insulation between the reflector and the contact mid-portion, and means extending through the contact aperture and insulation for supporting the contact upon the reflector in predetermined relation.

1,759,930. SUITCASE. ALFRED CHARLES ATKINS, London, England. Filed Aug. 22, 1927, Serial No. 214,730, and in Great Britain Sept. 25, 1926. 1 Claim. (Cl. 190—45.)



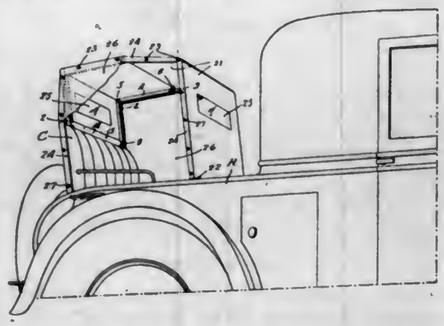
A variable capacity box, suit case, trunk or the like, comprising a top portion of rectangular cross section from front to back and from side to side and a lower portion having a rectangular base and a rear wall at right angles thereto, said rear wall having an inwardly extending step a short distance above the base and the front wall of the lower portion being at right angles to the base at its front end and inclined slightly toward the rear wall at its upper end, the lower edge of the rear wall of the top portion bearing against the rear wall of the lower portion and above the step when the parts are assembled for minimum capacity so that the outer exposed surface of the rear walls of the top portion and lower portion are in the same vertical plane and longitudinally extensible connecting and securing means between the said portions comprising a member hingedly connected to the top portion and a member detachably connected to the lower portion at the point opposite the step.

1,759,931. EVER-POINTED PENCIL. PIERRE BARBERON, Le Fayet, France. Filed Dec. 6, 1927, Serial No. 238,125, and in France Dec. 8, 1926. 8 Claims. (Cl. 120—17.)



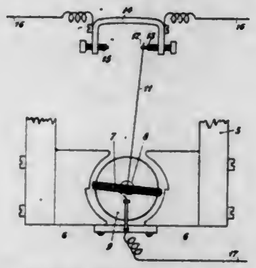
1. An ever-pointed pencil, comprising a clamping device for normally holding an upper piece of lead in a stationary position relatively to the main body of the pencil, a movable inner tube holding a lower piece of lead, affording passage thereto through its pointed end and adapted to descend axially with reference to the main body by suitable controlling means, means serving to release the upper piece of lead from its clamping device when the said inner tube is lowered allowing the same to fall freely and abut said lower piece of lead, means for raising again said inner tube into its normal position, and means by which the upper piece of lead is again engaged in the said clamping device before the end of the ascent of the inner tube, whereby the latter during its return to the normal position will slide upon the lower piece of lead and will thus uncover part of the lead.

1,759,932. RUMBLE-SEAT TOP. LEOPOLD A. BAUM, Newark, N. J. Filed June 6, 1928. Serial No. 283,340. 2 Claims. (Cl. 296—99.)



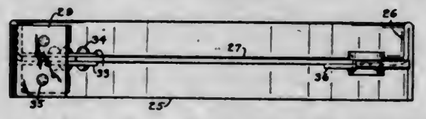
1. The combination of an automobile body provided with a cockpit containing a depressed rumble seat; a cushioned back for said seat mounted to fold down and close the cockpit and provided with an elongated upwardly opening compartment within the cushion and extending along the upper edge thereof; a collapsible top structure for the seat comprising a plurality of canopy-supporting channel frame members each frame member consisting of a rear channel member adapted to unfold to vertical position with the channel facing forward, and a series of nestable top members hinged together and to the upper end of each of the rear members and adapted to fold together one within the other fore-and-aft of the automobile and to be then folded with the channel of the rear member, hinge connections between the lower ends of the rear members and the seat back, said hinge connections being within the said compartment, and adapting the rear members and the folded top members to fold down transversely of the automobile along the top of the foldable seat and to lie within the said compartment, whereby they will not obstruct the folding down of the seat back and will be disposed within the automobile body when the back is closed; and means to releasably hold the top frame members unfolded and extended forward from the top of the rear members, and the rear members erect for supporting a canopy.

1,759,933. CONTACT-MAKING DEVICE. RALPH K. BONELL, East Orange, N. J., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Mar. 2, 1928. Serial No. 258,638. 8 Claims. (Cl. 200—110.)



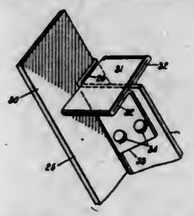
1. A contact making device comprising a fixed member and a rotatable armature member, a pointer associated with the armature member and movable therewith, a coil associated with said armature member, said fixed member comprising pole pieces positioned on either side of said armature member, said pole pieces being so constructed and related to the armature member as to provide a large air gap and a small air gap on each side of the armature in its normal position, the magnetic circuit having a magnetic flux density of mean value when the armature member is in normal position, said magnetic circuit having a comparatively large flux density when said armature member is in one abnormal position, and said magnetic circuit having a comparatively small flux density when said armature member is in another abnormal position, whereby the pointer is accelerated in its movement from a central position in response to a change in the current through said coil.

1,759,934. BRAKE. ARTHUR J. CHANTER, South Bend, Ind., assignor to The Studebaker Corporation, South Bend, Ind., a Corporation of New Jersey. Filed Feb. 27, 1926. Serial No. 91,115. 20 Claims. (Cl. 188—250.)



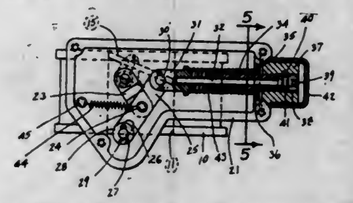
1. A brake shoe formed from a single sheet of metal into a cylindrical brake lining attaching surface, said shoe having a single reversely bent stiffening portion and a single inwardly extending radial rib.

1,759,935. BRAKE. ARTHUR J. CHANTER, South Bend, Ind., assignor to The Studebaker Corporation, South Bend, Ind., a Corporation of New Jersey. Original application filed Feb. 27, 1926, Serial No. 91,115. Divided and this application filed Jan. 23, 1928. Serial No. 248,785. 16 Claims. (Cl. 188—250.)



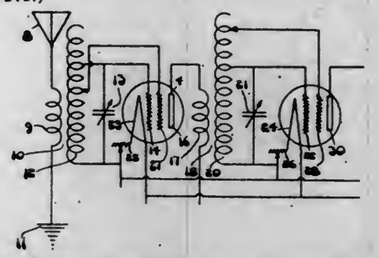
2. A pressed metal brake shoe comprising an arcuate lining attaching surface having a reversely bent portion terminating in a radial reinforcing web, and a pressed metal T-shaped stamping embracing the outer sides of said web to provide a support for a cam contact member.

1,759,936. AUTOMATIC GOVERNOR. CALVIN COOK, Anderson, Ind., assignor to Pierce Governor Company, Anderson, Ind., a Corporation. Filed Mar. 16, 1929. Serial No. 347,542. 5 Claims. (Cl. 137—152.)



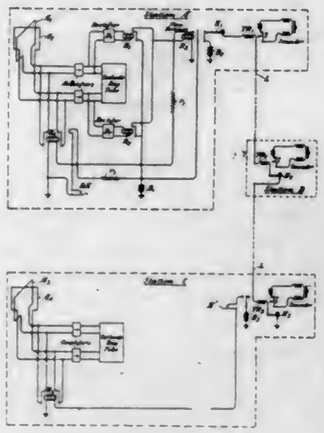
1. In an automatic governor the combination of an engine responsive speed controlling oscillatable member, a lever rigid with said oscillatable member, another lever having an elongated elliptical slot mounting at one end and pivotally connected to the first mentioned lever intermediate its ends, and a suction opposing extended spring construction connected to the opposite end and compressible by the suction operation.

1,759,937. RADIOCIRCUITS. GUY S. CORNISH, Cincinnati, Ohio, assignor to The Cincinnati Patent Engineering Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Oct. 4, 1924. Serial No. 741,771. 2 Claims. (Cl. 179—171.)



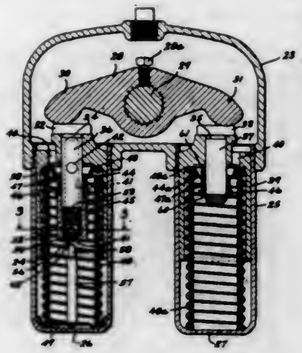
1. A wave signal responsive circuit consisting of alternately associated radio frequency transformers and audions, each of said transformers consisting of primary and secondary coils inductively coupled relatively to each other, each of said audions possessing duplicate grid elements, one of said grid elements having circuit connection with one of said coils, the other of said grid elements having circuit connection with the same coil as to which the first mentioned grid elements are connected, but at a point therein different from and adapted to produce different inductive results from those produced at the point of connection of the first mentioned grid elements.

1,759,938. COORDINATION OF DIRECTION-FINDER OBSERVATIONS. SAMUEL W. DEAN, Brooklyn, N. Y., assignor to Amrican Telephone and Telegraph Company, a Corporation of New York. Filed Apr. 20, 1929. Serial No. 356,786. 11 Claims. (Cl. 250—11.)



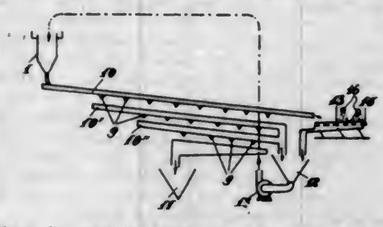
3. The method of coordinating the observations made at a plurality of separated points to determine the location of sources of static disturbances, which consists in causing an observed static crash to render the observing apparatus at a control point temporarily unresponsive to subsequent crashes, and causing the observed crash to send out from said control point to the other observation point or points a signal serving to identify the observed crash.

1,759,939. SHOCK ABSORBER. GEORGE W. ELSEY, Dayton, Ohio, assignor, by mesne assignments, to Delco Products Corporation, Dayton, Ohio, a Corporation of Delaware. Filed June 22, 1927. Serial No. 200,689. 11 Claims. (Cl. 267—8.)



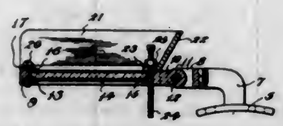
1. A shock absorber for cushioning the movement of two relatively movable members comprising, a casing having two cylinders providing a fluid reservoir adapted to be secured to one of said members; a separate piston reciprocable in each cylinder; operating means secured to the other movable member for moving both pistons, an intake valve in each piston; fluid flow controlling means comprising a pair of the intake valve carried by one of said pistons cooperating with a member supported in its cylinder for gradually and increasingly restricting the flow of fluid through said piston to resist the movement of said piston by the operating means when the movable members approach each other; and a constant fluid flow orifice provided by the intake valve in the other piston for constantly restricting the flow of fluid through this piston constantly to resist the movement of said piston by the operating means when the movable members separate.

1,759,940. APPARATUS FOR WASHING MINERALS BY MEANS OF LIQUID STREAMS. ANTOINE FRANCE, Liege, Belgium. Filed Dec. 30, 1926, Serial No. 158,063, and in Belgium Dec. 30, 1925. 1 Claim. (Cl. 209—18.)



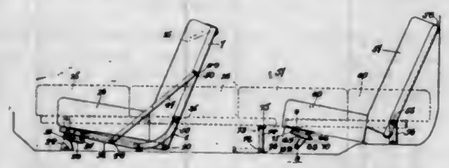
A plant for washing schlamms and other fine mineral particles, comprising: a plurality of suitably inclined launders for washing the particles by means of liquid stratifying streams, discharge means for the lowest stratum high gravity particles of each launder except the last into the adjacent launder for further washing therein, a very fine meshed vibrating screen, arranged at the end of the first launder, for separating from the fine particles discharged at the end of same the film of loam surrounding said particles, means for spraying clear water adapted to cooperate with said screen in removing said film of loam, means to collect simultaneously and amalgamate the loam derived from this screening and the light particles discharged at the end of a number of launders, except the first, and means to bring back into one of the launders the thus amalgamated products.

1,759,941. GRINDER SHIELD. ANDREW C. FREY, Jackson, Mich. Filed Sept. 26, 1928. Serial No. 308,528. 3 Claims. (Cl. 51—272.)



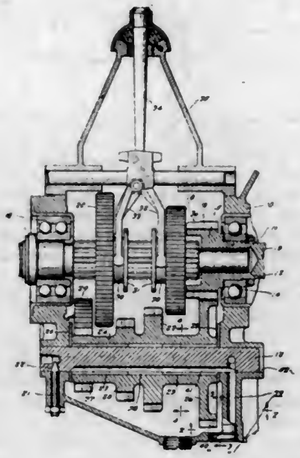
1. A grinder shield including a body frame, a transparent element carried thereby, and a clamping frame securing said element in position and provided with shielding means reinforcing the frame and upstanding about said element for shielding the same.

1,759,942. CONVERTIBLE AUTOMOBILE SEAT. RICHARD L. GRIDER, Lawrence, Kans. Filed Oct. 15, 1928. Serial No. 312,621. 4 Claims. (Cl. 155—7.)



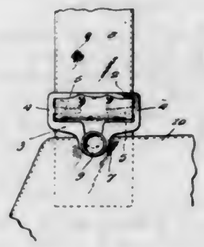
1. A device of the character described, comprising a seat frame, a back frame pivoted at its lower end to the rearward end of said seat frame, a base having a fixed pivotal connection with the back frame intermediate the upper and lower ends of the latter, and a link having its respective ends pivotally connected with said seat frame, and base.

1,759,943. TRANSMISSION. KARL L. HERRMANN, South Bend, Ind., assignor to The Studebaker Corporation, South Bend, Ind., a Corporation of New Jersey. Filed Apr. 11, 1927. Serial No. 182,865. 9 Claims. (Cl. 184—11.)



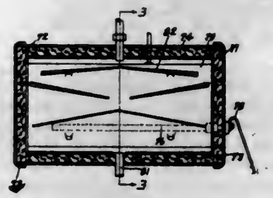
6. A vehicle transmission having a housing containing a lubricant and a longitudinally grooved shaft supported by said housing, spaced bushings surrounding said shaft and enclosing a portion of said groove, a hub having a gear formed thereon receiving said bushings, and a conduit in a wall of said housing, said conduit having communication with said groove on said shaft and opening into the interior of said housing at a point adjacent the outer circumference of said gear whereby lubricant thrown from said gear by rotation thereof will be forced into said conduit, and into said groove to the space between said bushings for lubricating the bearing surfaces between said shaft and said bushings.

1,759,944. COMBINED BUCKLE AND BUTTON LOOP. WILLIAM M. HUESEMAN, Dillsboro, Ind. Filed Jan. 3, 1930. Serial No. 418,366. 3 Claims. (Cl. 24—73.)



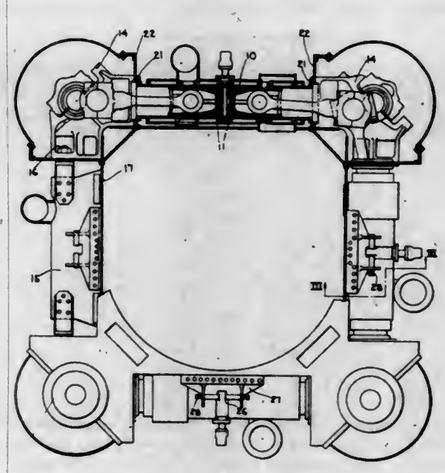
3. A buckle comprising a frame having upper and lower bars and end bars connecting the upper and lower bars, said lower bar being formed with a button-receiving seat, and arms extending towards each other from said end bars and bent upwardly in spaced relation to their ends to form shanks and prongs extending upwardly therefrom, said prongs having their upper end portions overlying said upper bar in spaced relation thereto.

1,759,945. REFRIGERATING APPARATUS. HARRY B. HULL, Dayton, Ohio, assignor, by meane assignments, to Frigidaire Corporation, a Corporation of Delaware. Filed Mar. 29, 1924. Serial No. 702,973. 2 Claims. (Cl. 62—120.)



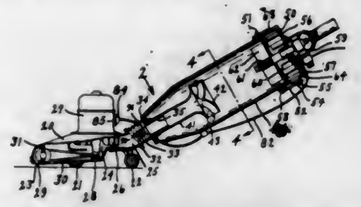
1. In a refrigerating system of the absorption type including a generator-absorber, said generator-absorber comprising a substantially horizontally disposed elongated reservoir, end walls abutting the ends of the reservoir, a second wall surrounding the reservoir and connected with said end walls, said second wall being spaced from the reservoir to provide an air insulating chamber surrounding said reservoir, a conduit connected adjacent the top of the chamber for conducting a cooling medium thereto, baffles within said chamber, said baffles being arranged in staggered relation for directing the cooling medium over the surface of the reservoir, and a drain for the chamber adjacent the bottom thereof.

1,759,946. INTERNAL-COMBUSTION ENGINE. ALEXANDER T. KASLEY, Moores, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 31, 1927. Serial No. 179,766. 12 Claims. (Cl. 121—120.)



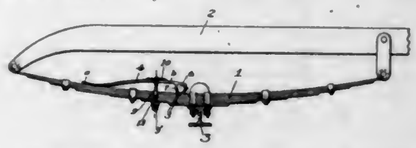
1. In a multi-cylinder reciprocating engine, the combination with a cylinder and a piston therein, of yieldable means cooperating between the cylinder and a stationary part of the engine structure whereby upon excessive friction between the cylinder and the piston said yieldable means is effective to indicate said excessive friction.

1,759,947. DOMESTIC APPLIANCE. RALPH L. LEE, Dayton, Ohio, assignor to Delco-Light Company, Dayton, Ohio, a Corporation of Delaware. Filed Jan. 14, 1924. Serial No. 686,125. 3 Claims. (Cl. 183—85.)



1. A dust separator comprising, in combination, an elongated dust container, a pipe extending into the container lengthwise thereof, a stationary directing member for imparting a swirling motion to air leaving said pipe, and a power driven propeller to increase the swirling motion of said air.

1,759,948. DEVICE FOR CONTROLLING THE ACTION OF VEHICLE SPRINGS. GEORGE W. LIBBY, Portland, Me. Filed Jan. 9, 1928. Serial No. 245,351. 2 Claims. (Cl. 267—48.)



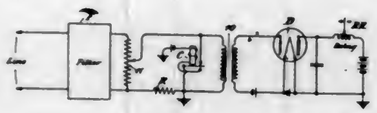
1. In a device of the character described, adapted to be applied to a vehicle spring, comprising in combination with said spring, a bent resilient leaf thicker on one end than on the other and having at the thicker end a socket, a member, of relatively greater resiliency than leaf, seated in said socket, a U bolt adapted to secure said leaf on said vehicle spring—the socket end of said leaf being located adjacent the thicker portion of said vehicle spring, and means to vary, either to increase or decrease, the tensional pressure of said leaf on said spring.

1,759,949. FASTENER AND SUSPENDING DEVICE. DAVIS MARINSKY, New York, N. Y., assignor to Mollie Beckerman, New York, N. Y. Filed Aug. 11, 1928. Serial No. 298,975. 4 Claims. (Cl. 24—245.)



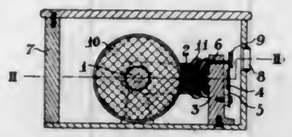
2. A device of the class described comprising two coupling members each fashioned from sheet material, a strap for coupling said members together, said strap being threaded through one of the members a number of times in such manner as to form an extending loop portion, the loop portion of the strap being threaded through the other member, said loop portion forming flexible means for coupling the second named member with the first named member, and the free end portion of said strap extending through the first named member adjacent the lower end portion thereof.

1,759,950. ALTERNATING-CURRENT TELEGRAPH SYSTEM. ANDREW L. MATTE, Summit, N. J., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Feb. 23, 1928. Serial No. 256,385. 8 Claims. (Cl. 178—67.)



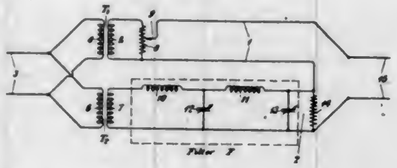
1. In a low frequency alternating current carrier telegraph system in which each code element is transmitted as a limited number of alternating current waves of substantially uniform low frequency, a receiving arrangement comprising means to rectify half waves of only one polarity, and means to effectively break up both the positive and negative impulses of each carrier cycle of a train of carrier waves corresponding to a code element into a plurality of impulses of higher frequency to permit the rectifier to rectify elements of both half cycles.

1,759,951. DEVICE FOR MEASURING ELECTRICAL QUANTITIES. BRYAN HAROLD CABOT MATTHEWS, Cambridge, England. Filed Dec. 6, 1928, Serial No. 324,169, and in Great Britain Dec. 14, 1927. 1 Claim. (Cl. 171—95.)



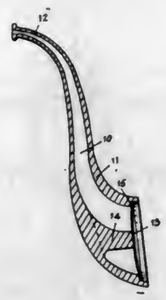
A device for measuring electrical quantities comprising a field magnet inclusive of a pair of pole pieces, a standard of non-magnetic material, the pole pieces of said field magnet being converged with respect to one another and secured to said standard, a vibratory armature mounted on said standard and disposed for cooperation with said pole pieces, a mirror carried by said armature, and windings around said pole pieces adapted for connection with an electrical circuit whose quantity is to be measured.

1,759,952. ELECTRICAL TRANSMISSION SYSTEM. RALPH G. MCCURDY, Englewood, N. J., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Mar. 1, 1926. Serial No. 91,651. 9 Claims. (Cl. 178—44.)



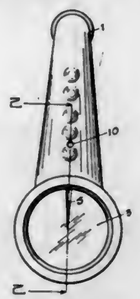
1. The method of eliminating the fundamental component of a complex wave, which consists in transmitting the complex wave through one branch circuit, transmitting only the fundamental component of the complex wave through a paralleled branch circuit, and shifting the phase of the fundamental component transmitted through one of the branch circuits so as to be in opposition to the phase of the fundamental component transmitted through the other of the branch circuits, and combining the branch circuits so as to eliminate the fundamental wave.

1,759,953. CONFECTION MUSICAL TOY. HUBERT A. MYERS, Toledo, Ohio, assignor of one-half to Arthur S. Hickok, Toledo, Ohio. Filed June 21, 1928. Serial No. 287,221. 3 Claims. (Cl. 46—46.)



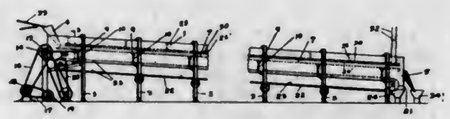
1. In a toy, a diaphragm of elastic sheet material forming a closed chamber within the body of the toy, a post projecting into the chamber, the upper end of the post located below the level of the edge of the body of the toy, the diaphragm secured to the post to elastically press the diaphragm against an edge portion of the body of the toy.

1,759,954. SOUND INSTRUMENT. HUBERT A. MYERS, Toledo, Ohio, assignor of one-half to Arthur S. Hickok, Toledo, Ohio. Filed May 16, 1929. Serial No. 363,427. 8 Claims. (Cl. 46—46.)



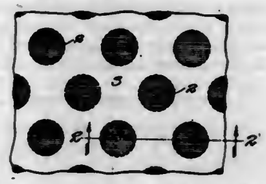
1. In a sound instrument, a shell having a chamber, a mouthpiece communicating with the chamber, a concave diaphragm forming a wall of the chamber to close the chamber and secured throughout the entire length of its periphery to the edge of the shell.

1,759,955. COFFEE-ROASTING MACHINE. JOSEPH F. QUINN, Burlingame, Calif., assignor to Geo. W. Caswell Co., San Francisco, Calif., a Corporation of California. Filed Jan. 16, 1929. Serial No. 332,829. 5 Claims. (Cl. 34—12.)



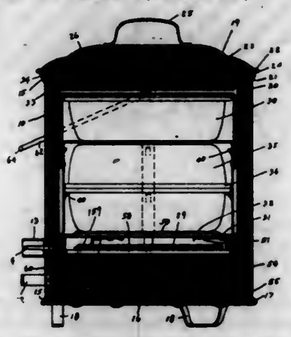
1. Coffee roasting apparatus comprising an elongated housing, a shaker table in said housing arranged to agitate and carry a layer of coffee beans through said housing, means for agitating the table, and means for maintaining a zone of radiant heat above and uniformly overlying the table.

1,759,956. PLANOGRAPHIC PRINTING SURFACE. ROBERT F. REED, Norwood, and PAUL W. DORST, Cincinnati, Ohio, assignors to The Lithographic Technical Foundation, Inc., New York, N. Y., a Corporation of Delaware. Filed Jan. 19, 1929. Serial No. 333,739. 10 Claims. (Cl. 41—41.5.)



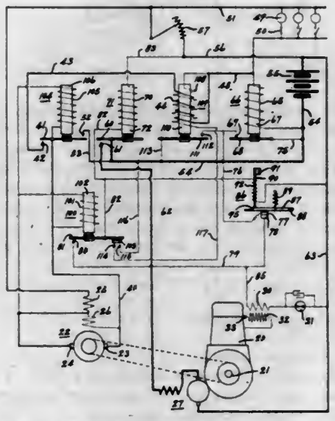
3. A lithographic plate, the surface of which comprises printing and non-printing portions, the former, a grease-receptive film of hardened albumen, and the latter a hydrophilic film of hardened gum arabic.

1,759,957. ELECTRIC AND FIRELESS COOKER. JAMES H. REICHART, Muncie, Ind. Filed Feb. 15, 1926. Serial No. 88,423. 11 Claims. (Cl. 53—11.)



1. In a device of the character described, the combination of a substantially U-shaped strap member, each end being U-shaped, and a supporting portion having a plurality of spaced pairs of openings for receiving said U-shaped ends of the U-shaped strap.

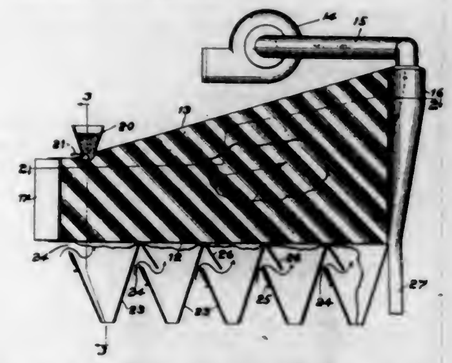
1,759,958. ELECTRICAL APPARATUS. WARREN H. F. SCHMIEDING, Dayton, Ohio, assignor to Delco-Light Company, Dayton, Ohio, a Corporation of Delaware. Filed Mar. 30, 1926. Serial No. 98,628. 7 Claims. (Cl. 290—30.)



1. An electrical generating system comprising, in combination, a prime mover; a storage battery; a work cir-

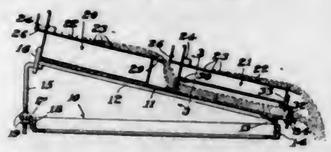
cuit; electrical apparatus connected with the prime mover and battery for starting the prime mover and for thereafter supplying current to the work circuit; a prime mover control device; a magnetic controller for rendering said device operative; and switch apparatus including a high resistance coil connected across the battery, a circuit for said coil arranged in series relation with the work circuit and adapted to be controlled after the prime mover is self-operative, and means actuated by said coil for controlling said control device independently of said controller.

1,759,959. AIR CLASSIFIER. ALBERT H. STEBBINS, Los Angeles, Calif. Filed Apr. 2, 1928. Serial No. 266,515. 5 Claims. (Cl. 209—135.)



1. An air classifier comprising a container having upstanding side walls disposed in spaced relation to form an air passage between them and provided with corrugations or flutes that extend downwardly diagonally of the path of the air through said passage at an acute angle to the direction of travel of the air stream, and means for advancing material laden air through the passage so that the heavier particles that work out of the path of the air into the channels between the corrugations or flutes will be carried by their velocity along the downwardly inclined channels towards the lower wall of the classifier.

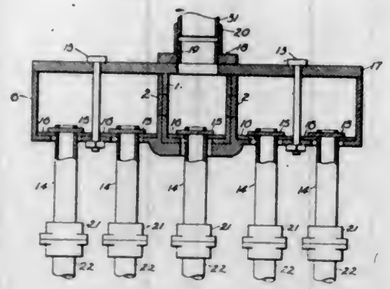
1,759,960. CONCENTRATOR TABLE. ALBERT H. STEBBINS, Los Angeles, Calif. Filed May 24, 1929. Serial No. 365,745. 7 Claims. (Cl. 209—508.)



1. Deck mechanism for a table concentrator, comprising in combination, a deck supporting carriage, a deck carrying platform mounted on the carriage at a transverse inclination, a pair of decks mounted upon the platform side by side to extend longitudinally thereof and supported by the carriage at a transverse inclination so that each deck will discharge its tailings along its lower side, and means for supporting the deck near the lower side of the platform in spaced relation to the platform so that the stream of tailings from the upper deck will flow down the platform under the lower deck and combine with the stream of tailings from the lower deck.

1,759,961. SMOKE-CONSUMING DEVICE. THOMAS C. STEPHENS, St. Louis, Mo. Filed Aug. 4, 1928. Serial No. 297,521. 6 Claims. (Cl. 110—75.)

1. A smoke consuming device comprising an air heating box adapted to be located in the upper part of the fire box of a furnace and consisting of walls forming multiple communicating chambers radiating from a central chamber, an air intake pipe extending from said central chamber to the outside of the furnace, and pipes extending downward



within the fire box from said chambers, said pipes being loosely mounted in the bottom walls of said chambers, and each pipe consisting of two members, and a cup like box flexibly connecting said members, substantially as described.

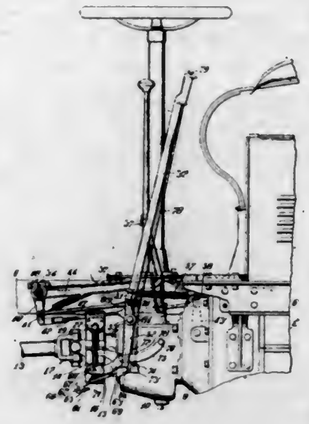
1,759,962. REFRIGERATING APPARATUS. ANTHONY T. STOCK, Dayton, Ohio, assignor to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Jan. 31, 1928. Serial No. 250,835. 8 Claims. (Cl. 62—115.)

1. Refrigerating apparatus comprising a motor, a plurality of ducts constituting a condenser and draped in arcuate form around the outside of the body of said motor, a shield between the body of said motor and said condenser and a fan adapted to force air about said ducts.

1,759,963. BRAKE MECHANISM FOR VEHICLES. BERGER STOCKFLETH, Berrien Springs, and FREDERICK W. BURGER, Niles, Mich., assignors to Clark Tructractor Company, Buchanan, Mich., a Corporation of Michigan. Filed Apr. 29, 1926. Serial No. 105,450. 3 Claims. (Cl. 188—106.)

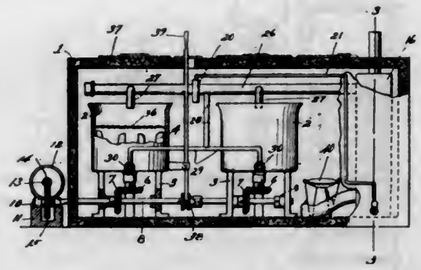
2. In brake mechanism for vehicles, the combination of a propeller shaft brake, a brake actuating lever, means operatively connecting said lever with said brake, a brake pedal having a lost motion connection with said lever, a manually operable lever mounted concentrically with said brake actuating lever, a fixed shoulder carried by said

brake actuating lever and extending across the path of and adapted to be engaged by said manually operable lever only



when the same is moved toward brake setting position, and latching means associated with said manually operable lever for latching the same in brake setting position.

1,759,964. APPARATUS AND METHOD FOR MAINTAINING CHOCOLATE IN MELTED CONDITION. RUSSELL STOVER, Denver, Colo. Filed May 3, 1926. Serial No. 106,428. 5 Claims. (Cl. 126—343.5.)



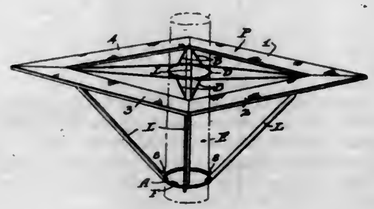
1. A heating apparatus of the character described, comprising in combination, an insulated case, heating kettles with valve controlled draw-off lines in the case, a source of heat, a hot air duct connected therewith, leads from the duct terminating within the upper part of the kettles, secondary leads from the ducts adapted to circulate the heating medium about the draw-off lines and valves, and a return duct for delivering the spent heating medium back to the heat source.

1,759,965. HARROW. LUMIR SVANCARA, Buhl, Idaho. Filed Mar. 26, 1929. Serial No. 350,036. 3 Claims. (Cl. 55—90.)



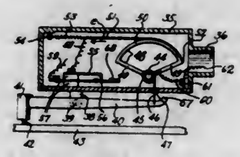
1. In a harrow structure of the class described, a wheeled frame, a front U-shaped member having trunnion ends journaled in the main frame, U-shaped rear member having trunnion terminals journaled through the rear portion of the main fame and extending outwardly thereof, wheels journaled on the last mentioned trunnion terminals, links connecting the bight portions of the U-shaped members, an auxiliary frame, brackets rising from the auxiliary frame and journaled on the bight portions of the member, and cultivating means carried by the auxiliary frame, a crank lever fixed to one of the last mentioned trunnion terminals to swing the member for raising and lowering the auxiliary frame, ears extending from the lengths of the rear U-shaped member, rods having stops thereon extending through the ears, and means for adjusting the rods to limit the downward movement of the rear member thereby controlling the digging depth of the cultivating machine.

1,759,966. DATE-PICKING PLATFORM. PAUL M. SWINNEY, Los Angeles, Calif. Filed Jan. 23, 1928. Serial No. 248,740. 6 Claims. (Cl. 304—28.)



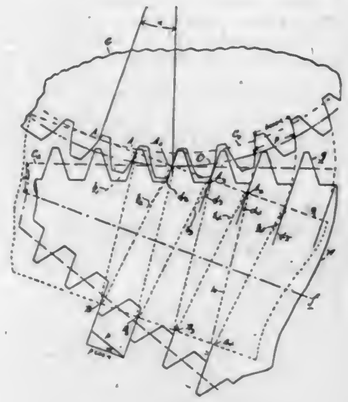
1. A fruit picker's platform comprising a platform, inclined legs arranged to support the platform at their upper ends and to abut the bole of the tree at their lower ends, a cable extending through said legs and around said tree and clamped together at its ends, a chain in the plane of the platform encircling said tree, and braces connecting said chain and said legs, for adjustably supporting said device on the tree.

1,759,967. ELECTRIC SOUND TRANSMITTER. ADOLPH A. THOMAS, New York, N. Y. Filed Dec. 11, 1926, Serial No. 154,059. Renewed May 29, 1928. 23 Claims. (Cl. 179—100.41.)



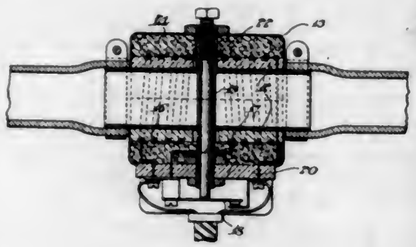
19. An electric phonograph comprising the combination of a pair of elements having different electric conductivities and arranged to have variable contact with each other, a vibratory member for operating one of said elements to short-circuit a variable length or area of the element having the lower conductivity, and non-acoustic elastic means for holding said elements in predetermined normal position.

1,759,968. WORM GEARING. NIKOLA TRBOJEVICH, Detroit, Mich., assignor to Gleason Works, Rochester, N. Y., a Corporation of New York. Filed May 19, 1924. Serial No. 714,445. 16 Claims. (Cl. 74—36.)



1. A worm drive consisting of two frusto-conical screws the threads of which form a rack of constant pitch in the axial plane section and an Archimedean spiral in their plane development arranged upon the same axis with their small ends adjacent, and a conjugate worm gear simultaneously meshing with both screws.

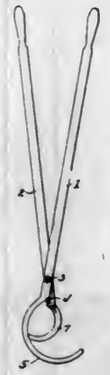
1,759,969. ENGINE HEATER. WOLFGANG TURNWALD, Syracuse, N. Y. Filed Nov. 29, 1927. Serial No. 236,477. 3 Claims. (Cl. 219—38.)



1. In a heating unit for the circulating system of water cooled engine cylinders, the combination of a simple section of metal pipe, a split porcelain core surrounding said pipe, a resistance coil surrounding said core, a metal casing having inturned ends provided with a filling such as a substantial body of asbestos wool enclosing said core with its resistance, a sleeve extending diametrically through said pipe, core and casing, having mounted therein a thermostat element, and a switch operated by said element for controlling a section of the resistance.

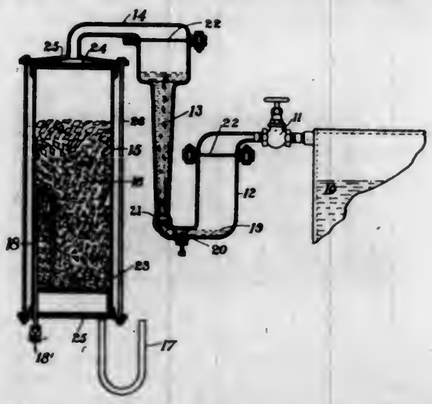
1,759,970. HOG TONGS. FREDERICK WILLIAM WELK, Markesan, Wis. Filed Nov. 5, 1928. Serial No. 317,234. 1 Claim. (Cl. 119—154.)

A hog catcher and holder comprising handle members pivotally connected together and having long and short arms, the short arms of the members being equipped with reversely curved jaws one of which is smaller than the other, and one of the said short arms having at its forward end a laterally extending angular arm



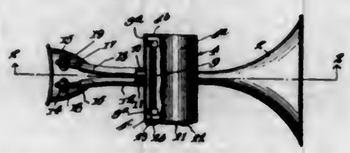
by the outer end of which the smaller jaw is carried whereby said small jaw is positioned in spaced parallel relation to the other jaw.

1,759,971. APPARATUS FOR CONTROLLING BREATHING OF OIL-CONTAINING HOUSINGS. ARTHUR O. AUSTIN, Barberton, Ohio, assignor, by mesne assignments, to The Ohio Brass Company, Mansfield, Ohio, a Corporation of New Jersey. Filed Sept. 22, 1924. Serial No. 739,003. 5 Claims. (Cl. 220—85.)



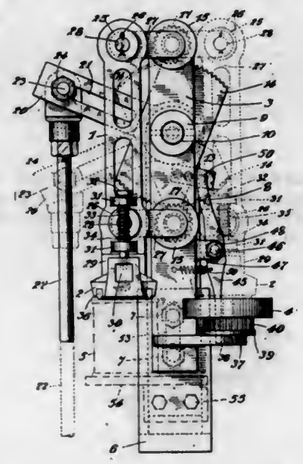
1. The combination with a casing for electrical apparatus having expansible liquid therein, of a trap connected with said casing, a receptacle having a moisture absorbing material therein, said receptacle being arranged in series with said casing and trap, and porous baffles for preventing the escape of liquid from said trap.

1,759,972. VOICE BUILDER. RALPH O. BONELL, Kenosha, Wis. Filed Mar. 9, 1929. Serial No. 345,709. 7 Claims. (Cl. 84—466.)



4. An instrument of the character set forth, comprising a tube having a mouthpiece, a resonance chamber communicating with the tube, a tongue within the resonance chamber, the tongue being spaced from the lateral wall of the resonance chamber and having its ends arranged at opposite sides of the point of communication between said chamber and tube, and means adapted to connect the resonance chamber with the nasal passages.

1,759,973. STAMPING MACHINE. WILLIAM H. BROOKS, Oconomowoc, Wis., assignor to Carnation Company, Oconomowoc, Wis., a Corporation of Delaware. Filed May 18, 1928. Serial No. 278,700. 5 Claims. (Cl. 101—301.)



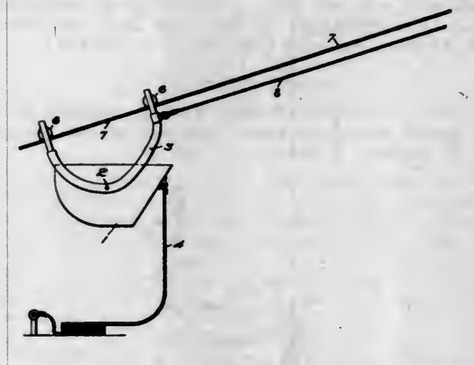
1. A stamping machine for storage vessels comprising a holder bearing characters to be inscribed on a vessel, a carrier therefor, an inking pad, a support upon which the inking pad is rotatably mounted, cranks connected to the carrier and mounted on the support, a gearing connected to each of said cranks, a segment gear having an arm projecting therefrom, a rod connected to said arm to reciprocate and actuate the segment gear in reverse directions to cause the carrier to move the holder toward the pad and then away from same to imprint a storage vessel, a ratchet connected to the inking pad, a disc bearing a pawl to engage the ratchet and give one way rotary movement to the pad, a lever connected to said disc, and a hook on the segment gear for intermittent operation of the lever.

1,759,974. TOY HANDKERCHIEF CASE AND PURSE. SYDNEY A. CAMPBELL, Brighton, and LOTHAIR I. VAN BUSKIRK, Newtonville, Mass. Filed Oct. 10, 1928. Serial No. 311,641. 3 Claims. (Cl. 150—28.)



1. A toy handkerchief case and purse comprising a front section of flexible sheet material shaped to simulate a child's pet, a complementary back section of similar material secured thereto at or near its peripheral edge to form a space therebetween, said back section having a slit therein to provide access to said space, and complementary means carried by said front and back sections for retaining articles in said space.

1,759,975. AUTOMATIC LOADING TRANSPORTER. GEORGE HERBERT CONOR, Buenos Aires, Argentina. Filed Apr. 11, 1927, Serial No. 182,752, and in Great Britain Apr. 6, 1927. 3 Claims. (Cl. 214—59.)



1. Automatic dumping conveyor apparatus comprising in combination, a trackway, an anchorage therebeneath, a carriage adapted to run on said trackway, said carriage comprising a cross bar at each end and a U-shaped longitudinal bar at each side connecting the ends of said cross bars, a roller supporting each of said cross bars on said trackway, selectable pivot bearings in the lowest portion of said side bars, a bucket pivoted above its center of gravity upon said bearings, said bucket having flat sides parallel to said cross bars, and a trip rope connected to one end of said bucket and to said anchorage and adapted to invert said bucket at a predetermined point of travel.

1,759,976. FLEXIBLE SHEET MATERIAL. DAVID P. CUMMINGS, Newton Center, Mass. Filed June 6, 1927. Serial No. 196,771. 5 Claims. (Cl. 91—68.)



1. A double face sheet material comprising parallel webs of pile fabric spaced apart by compacted pile fibres lying in intermingled angular relation to the planes of said webs and impregnated throughout with a permanently flexible water-repellant binder.

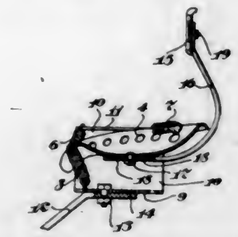
1,759,977. CAMP COT FOR AUTOMOBILES. JOHN W. DENTON, Ponca City, Okla. Filed July 26, 1928. Serial No. 295,366. 1 Claim. (Cl. 5—119.)



A folding cot comprising in combination a pair of spaced apart upstanding plates, a roller journaled at one end in one of said plates and having a bore formed in its opposite ends, a tubular member fixedly secured to the other of said

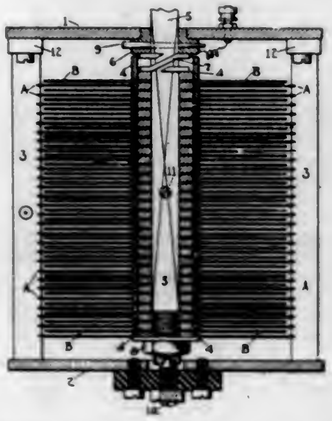
plates and freely inserted in the bore for rotatably supporting the roller, spring means disposed in the bore with its opposite ends attached respectively to the roller and the tubular member, a bed frame extending outwardly from the plates and comprising a pair of sectional side rails having their ends reduced, a transverse end rail disposed outwardly from the plates, said plates and said end rail having openings therein for receiving the respective reduced ends of the side rails, said side rails operating to maintain the plates and end rail in spaced relation, a fabric covering for the frame having its end attached respectively to said roller and said transverse rail and having hems along its side edges through which to freely insert the side rails and a pawl and ratchet mechanism for the roller adapted to tighten the fabric thereabout for stretching the fabric longitudinally on the frame.

1,759,978. SPRING IMPLEMENT SEAT. FRANK A. DONALDSON, Minneapolis, Minn. Filed July 16, 1928. Serial No. 292,940. 6 Claims. (Cl. 155—51.)



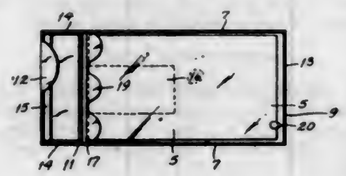
5. Means for supporting a seat comprising a supporting frame, springs engaging the frame and the sides of said seat forward of the center thereof and holding the seat suspended, and a spring equalizing means engaging the frame and the front of the seat and cooperating with said seat and springs to maintain said seat on even keel.

1,759,979. VARIABLE ELECTRIC CONDENSER. WILLIAM WALTER DRURY, London, England, assignor to Radio Corporation of America, a Corporation of Delaware. Filed Jan. 9, 1924, Serial No. 685,095, and in Great Britain Jan. 12, 1923. 13 Claims. (Cl. 175—41.5.)



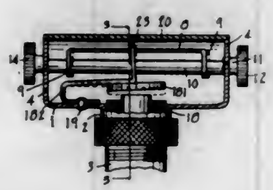
1. A rotating element of a rotating plate condenser having a hollow spindle to which the plates are attached, a shaft for the spindle and means independent of the means for attaching the plates to the spindle for adjusting the relative axial position between the spindle and shaft said adjusting means including a yieldable member.

1,759,980. CARDCASE. WILL J. ECKER, Jr., St. Louis, Mo. Filed Sept. 21, 1928. Serial No. 307,512. 2 Claims. (Cl. 206—39.)



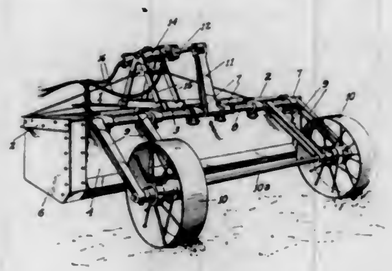
1. A card case comprising a bottom, rear and end walls, a false rear wall secured in said case and inclining forwardly with a flange at its upper forward end, a spring post secured in said case near the forward end of the case for selectively holding the cards in the case.

1,759,981. RAZOR. ROBERT F. ELZINGA and PETER ELZINGA, Holland, Mich.; said Robert F. Elzinga assignor to said Peter Elzinga. Filed June 20, 1929. Serial No. 372,296. 5 Claims. (Cl. 30—12.)



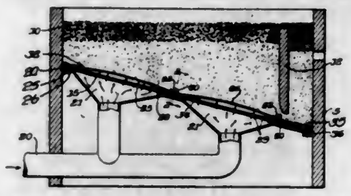
5. In a razor, the combination of a head provided with a handle and with a guard at its forward edge and having outwardly projecting end members, a blade holder supporting rod eccentrically mounted on said end members for rotative adjustment, a blade holder slidably mounted on said rod, and an electromagnet arranged in said handle and provided with a spring supported armature operatively associated with said blade holder.

1,759,982. HYDRAULICALLY-CONTROLLED LEVELER. ALBERT B. HAUSER, Stockton, Calif. Filed Apr. 10, 1929. Serial No. 353,915. 4 Claims. (Cl. 37—169.)



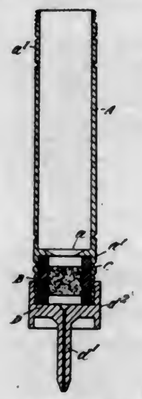
1. A leveler including a rigid frame structure adapted at its forward end for connection to a draft means, said frame including a cross beam at its rear end, a back plate and blade member depending from said cross beam, a horizontal transverse shaft supported from said cross beam rearwardly of and adjacent the same, arms fixed on and depending downwardly and rearwardly from the shaft, wheels turnably supported by the arms, and means for turning the shaft.

1,759,983. SCREEN FOR FLOTATION PROCESSES. HENRY B. HOUSTON, Dallas, Tex. Filed June 22, 1925. Serial No. 38,608. 6 Claims. (Cl. 261—122.)



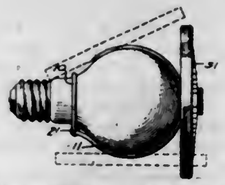
2. A flotation screen comprising a relatively rigid perforate rubber backing sheet forming a grid, and a thin elastic sheet overlying said grid, said last sheet having slits for the passage of air therethrough, and said slits being opened by stretching of the sheet and substantially closed by retraction thereof.

1,759,984. FILTER. CHARLES EVANS JENKINS, Manchester, England, assignor to John J. Griffin and Sons Limited, London, England. Filed June 22, 1928. Serial No. 287,396. 3 Claims. (Cl. 210—112.)



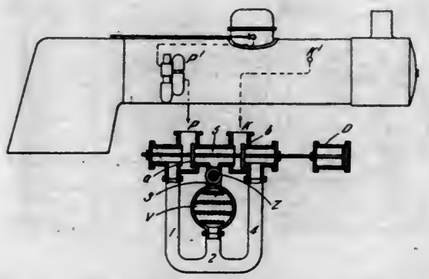
2. A filter comprising a tubular body, a filtering element therein, packing surrounding and extending above and below said element, and means for comprising said packing to cause the filtering element to be secured in place so that liquid can only pass through the body by passing through the filtering element.

1,759,985. SHADE HOLDER. HOWARD LE ROY JENKINS, Newark, Ohio, assignor to Holophane Company, Inc., New York, N. Y., a Corporation of New York. Filed Jan. 26, 1927. Serial No. 163,651. 8 Claims. (Cl. 240—138.)



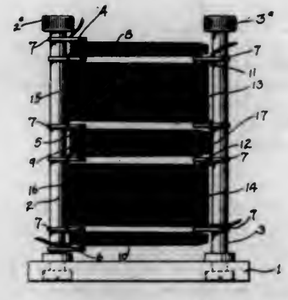
1. In combination, an electric lamp bulb, a shade holder having a portion encircling the small diameter neck portion of the bulb, a pair of members extending about the bulb in a longitudinal direction, a shade supporting member slidably carried on the pair of members, means for tightening the shade holder onto the bulb to prevent slipping of the shade supporting member, and a shade on the shade supporting member.

1,759,986. CHANGE-OVER DEVICE FOR BOILER-FEED-WATER HEATERS AND SIMILAR APPARATUS, ESPECIALLY APPLICABLE FOR LOCOMOTIVES. PAUL JULIUSBURGER, Charlottenburg, Berlin, Germany. Filed Dec. 8, 1925, Serial No. 74,211, and in Germany Dec. 22, 1924. 12 Claims. (Cl. 122—412.)



1. In combination, a boiler feed water heater and a change-over device, the latter comprising a valve controlled inlet conduit capable of receiving water from a feed pump, piping connected to the inlet conduit and to the opposite ends of the heater, a valve controlled outlet conduit capable of delivering water to a boiler, and piping connecting the outlet conduit to the opposite ends of the heater, the piping and valves being arranged for the alternate delivery of water to the opposite ends of the heater and from the said opposite ends to the outlet and for the alternate flow of water in opposite directions through the heater.

1,759,987. RADIO FREQUENCY TRANSFORMER. FREDERICK E. KNAPP, San Diego, Calif. Filed Dec. 7, 1925. Serial No. 73,678. 8 Claims. (Cl. 171—119.)

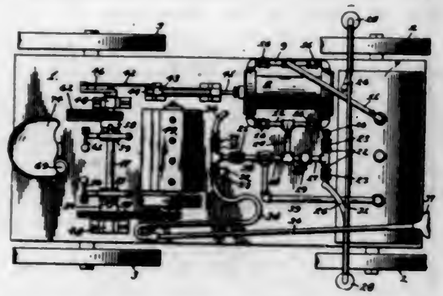


1. In a transformer of the class described, a pair of spaced apart, independently rotatable, parallel supports, and coils mounted at their one sides on each of said supports, spaced from each other and shiftable relatively to each other into and away from the space between said supports.

1,759,988. SPRAYING MACHINE. WILLIAM D. KNAPP, San Francisco, Calif., assignor of one-half to George Dawsett, San Francisco, Calif. Filed Apr. 11, 1928. Serial No. 269,266. 4 Claims. (Cl. 299—42.)

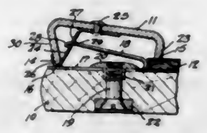
1. A spraying machine comprising the combination with a wheel supported platform, of a tank mounted upon the platform and arranged to store a supply of spraying solution; a pump; an intake connection connected between the tank and the pump; a delivery connection connected to the pump, said connection being divided into two main branches each provided with a plurality of outlet connections; spraying connections connected to each of the outlet connections; valve means for controlling the delivery of solution through each main branch; a power shaft; means connected between the shaft and the pump for actuating said pump; a power motor mounted upon the platform; means con-

nected between the motor and shaft for driving the shaft; driving means connected between the shaft and the supporting wheels; and clutches mounted in connection with the power shaft and operable to independently connect or



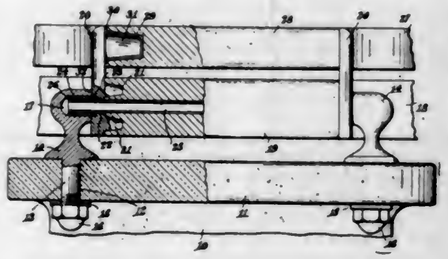
disconnect the motor or supporting wheels from the drive shaft whereby the pump may be driven by the motor or by the forward movement of the machine, or the machine may be driven forwardly by the motor.

1,759,989. DRAFTING IMPLEMENT. THOMAS P. LEAMAN, Bridgeport, Conn. Filed Oct. 11, 1927. Serial No. 225,483. 8 Claims. (Cl. 45—131.)



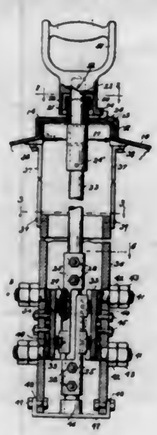
3. In a drafting implement, a board, a pair of clamps for a sheet of paper arranged one adjacent one side edge of the board and the other adjacent one end, a pair of securing means fo reach clamp and at least one of them being adjustable longitudinally of the other clamp so that the clamps may be set at right angles to each other, each clamp being provided with an upright wall forming a guide for a straight-edge instrument.

1,759,990. HINGE CONNECTION FOR WATER-CLOSET SEATS AND COVERS. HOWARD C. LESLIE, Milton, Mass., assignor to B R E Manufacturing Co., Hyde Park, Mass., a Corporation of Massachusetts. Filed May 9, 1929. Serial No. 361,734. 12 Claims. (Cl. 4—236.)



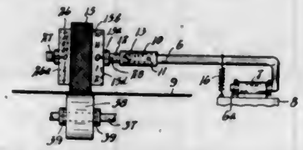
1. In a water closet, two separated vertical posts having sockets facing toward each other; a seat having an extension between said posts; a metal end plate at each side of said extension having a recess in the outer face thereof; a sleeve fitted to each socket with one end extending into said recess; and a member extending through the seat and both sleeves with its opposite ends upset over the outer ends of said sleeves.

1,759,991. TAP CHANGER. MARGARET LEE MACLEAN, Niles, Ohio, assignor, by mesne assignments, to American Brown Boveri Electric Corporation, New York, N. Y., a Corporation of New York. Filed June 2, 1927. Serial No. 195,974. 8 Claims. (Cl. 200—8.)



1. In a tap changer, a supporting tube, contacts mounted upon said tube and arranged in pairs with the individual contacts of a pair spaced apart longitudinally of the tube, said pairs being spaced apart transversely of the tube, a metallic shoe adapted to bridge the contacts of a pair, a rod arranged axially within said tube and mounted for rotation, a carrier secured to said rod, means for supporting said shoe upon said carrier so as to permit of limited motion therebetween, a pair of springs, one in transverse alignment with each contact, said springs tending to separate said shoe and carrier, and means for rotating said rod so as to move said shoe from engagement with one pair of contacts into engagement with a different pair of contacts.

1,759,992. MEASURING DEVICE FOR WIRE CLOTH. CHARLES M. MCCARTHY, Minneapolis, Minn. Filed Nov. 25, 1925. Serial No. 71,365. 6 Claims. (Cl. 33—129.)



2. A measuring device for flexible material having in combination, a shaft, a friction drum journaled on said shaft, and adapted to have its peripheral surface move in contact with the material to be measured, an indicator wheel rotatable about said shaft, a ratchet member carried by said wheel, an arm rigidly carried by said shaft, a yoke pivoted to said arm, an eccentric on said drum embraced by said yoke for moving said yoke, a ratchet member engaging dog carried by said yoke for moving said ratchet in one direction, resilient means connected to said dog and secured to said shaft, and means for preventing movement of said ratchet member, and wheel in a reverse direction.

1,759,993. DISH BASKET. THURSTON MCGILL, Chicago, Ill. Filed Oct. 2, 1926. Serial No. 139,125. Renewed Mar. 31, 1930. 2 Claims. (Cl. 141—11.)

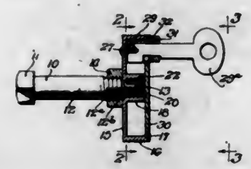
2. In a device of the class described including a basket structure, an angular frame confined in the basket structure, members extending diagonally across the bottom of the basket at the under side thereof and having end portions

connected to the corners of the frame, partitions of different height each formed from a member bent substantially U-shaped with end portions connected to opposite sides of the frame, and a partition member formed from a separate flat



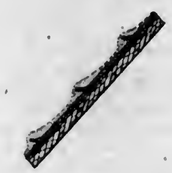
strip of material and having its end portions connected to said opposite sides of the frame, the intermediate portion of said last mentioned partition being disposed with its flat side extending in a substantially vertical plane.

1,759,994. BOLT LOCK. CARL V. NEWBILL, The Dalles, Oreg. Filed Dec. 31, 1924. Serial No. 759,014. 2 Claims. (Cl. 70—90.)



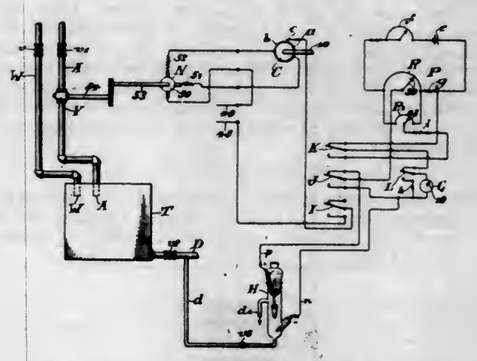
1. In a device of the character described, a bolt having two contiguous threaded sections of different diameters, the outermost having a longitudinal slot therein, a nut on the innermost of said threaded sections, a lock housing in threaded engagement with the outermost threaded section of said bolt, a slot engaging member radially slidable with and wholly at one side of said housing, a spring upon the same side of said housing for normally urging said engaging member into the slot in said outermost threaded section, and key operated means also within said housing for moving said member from said slot, said engaging member and slot having correspondingly shaped inclined cooperating faces effective to permit the member to disengage said slot as the housing is turned to threadedly engage said bolt.

1,759,995. ROOFING ELEMENT. FREDERICK C. OVERBURY, Hillsdale, N. J., assignor, by mesne assignments, to The Patent and Licensing Corporation, Boston, Mass., a Corporation of Massachusetts. Filed May 15, 1928. Serial No. 277,950. 6 Claims. (Cl. 108—7.)



1. An individual roofing element having the marginal portion along the butt edge thereof bent upwardly and extending at an angle to the plane of the element.

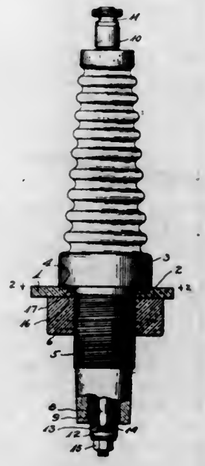
1,759,996. SYSTEM FOR ALTERNATELY RECORDING AND CONTROLLING. HENRY C. PARKER, Philadelphia, Pa., assignor to Leeds & Northrup Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Sept. 9, 1926. Serial No. 134,427. 33 Claims. (Cl. 23—253.)



7. In a system of recording and control, a deflecting member, a movable structure the extents and directions of whose movements are controlled by said deflecting member, recording and control structures controlled by said movable structure, and means for controlling said recording and control structures alternately.

15. The combination with a potentiometer circuit, of a galvanometer controlled thereby, a source of electro-motive-force in said circuit representative of variation of the magnitude of a condition, and means controlling said condition comprising means for substituting for said source a second source of electro-motive-force of fixed magnitude whose magnitude represents a predetermined magnitude of the condition.

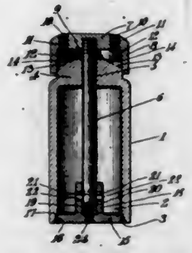
1,759,997. TRANSFORMER CONTAINER. ALPHONSE F. PIEPER, Rochester, N. Y. Filed Apr. 17, 1926. Serial No. 102,625. 1 Claim. (Cl. 173—318.)



In an oil tight mounting for a high-tension bushing of an X-ray oil transformer and like apparatus, in combination, a bushing, a cover having an opening therethrough for reception of a portion of the bushing, said cover also being provided with a recess in its upper face extending about and from said opening, a compressible sealing gasket fitting into the recess and of a normal thickness greater than the depth of the recess, the bushing being provided

with a threaded portion extending through the opening and corresponding in cross-section thereto, said bushing being also provided with a shoulder at the upper face of the cover and extending outwardly beyond the recess and the gasket therein, and a nut screwed onto the threaded portion of the bushing and bearing against the under face of the cover, the under face of the shoulder seating flat upon the upper face of the cover outwardly beyond the gasket, the cover being clamped between the nut and the shoulder and the gasket being compressed axially and expanded radially by the shoulder into sealing contact with and about said portion of the bushing, the under face of the shoulder being in sealing contact with the upper face of the gasket.

1,759,998. DEVICE FOR DISTRIBUTING POWDERY SUBSTANCES. LESTER B. PLATT, Caldwell, N. J. Filed Sept. 10, 1927. Serial No. 218,609. 15 Claims. (Cl. 221—62.)



1. A device of the character described including, in combination, a hollow body portion having its lower end open and having a neck at its upper end, said neck having an opening therethrough, a closure and distributing member adapted to fit the open end of the body portion, a rod connected to said closure and distributing member and slidably extending through said opening in said neck, a button for operating said rod, and cooperating adjustable means between said neck and said button whereby upon proper adjustment of said cooperating means the longitudinal movement of said button and rod may be varied by rotation of said button.

1,759,999. ROOFING. CHESTER E. RAHR, Brookline, Mass., assignor, by mesne assignments, to The Patent and Licensing Corporation, Boston, Mass., a Corporation of Massachusetts. Filed Aug. 1, 1924. Serial No. 729,494. 9 Claims. (Cl. 108—7.)



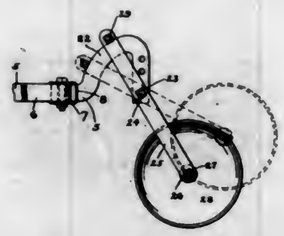
1. Roofing comprising surfaced sheet material having an additionally coated portion of one face presenting a surface more suitable than the remainder of said face to receive cement by which overlapping sheet material may be fixed thereto.

1,760,000. FUNGICIDAL PRODUCT FOR SEED TREATMENT. CHARLES S. REDDY, Ames, Iowa, assignor to The Quaker Oats Company, Chicago, Ill., a Corporation of New Jersey. Filed Mar. 17, 1928. Serial No. 262,601. 8 Claims. (Cl. 167—38.)

1. A fungicide comprising a reaction product of a mercury compound and a furan derivative.

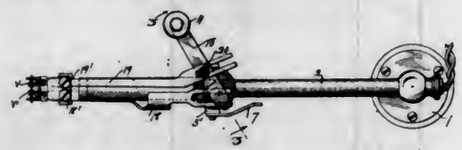
1,760,001. CULTIVATOR. ARTHUR W. REYNOLDS, Leonardsville, N. Y., assignor to The Babcock Manufacturing Company, Leonardsville, N. Y., a Corporation of New York. Filed May 17, 1927. Serial No. 191,978. 1 Claim. (Cl. 97—189.)

In combination, an implement beam having its forward end curved upwardly around and then downwardly to form an arcuate portion and a straight downwardly disposed end portion having a series of holes therein, a pivotal bearing carried in one of the holes in said downwardly extending end portion and concentric with said arcuate portion, a wheel bracket formed of two parts, one at



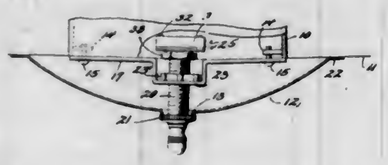
each side of said forward end and pivoted in said bearing and having their upper ends terminating above said arcuate portion, a bolt passing through said upper ends in close proximity to said arcuate portion and clamping the bracket parts thereto in various adjusted positions, and a wheel carried in at the lower end of said bracket.

1,760,002. METHOD OF ATTACHING DOLLS' EYES TO DOLLS' HEADS. ISAAC A. ROMMER, Brooklyn, N. Y., assignor to Ideal Novelty & Toy Co., Brooklyn, N. Y., a Corporation of New York. Filed June 21, 1928. Serial No. 287,056. 3 Claims. (Cl. 29—84.)



1. A method of pivotally connecting an eyeball member of a doll's head to the said head, said eyeball member having perforated lugs, which consists in passing the ends of a springy connecting member through said perforated lugs, and releasing said ends to permit them to press against the adjacent inner portion of the doll's head while said ends are at a temperature sufficient to cause them to enter the said head.

1,760,003. SWITCH AND FIXTURE SUPPORT. MARK N. RUSSELL, Syracuse, N. Y., assignor to Pass & Seymour, Inc., Syracuse, N. Y., a Corporation of New York. Filed Jan. 28, 1927. Serial No. 164,307. 5 Claims. (Cl. 240—85.)



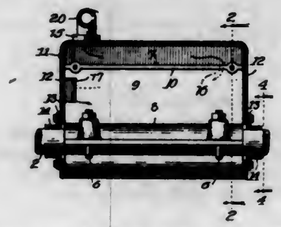
1. The combination with an outlet box and a canopy, of a strap secured adjacent the open side of said box, said strap having a threaded opening therethrough at right angles to said open side of said box, a supporting tube passing through said opening and having adjustable threaded engagement with said strap to thereby support said tube, a switch supported solely by the end of said tube facing said box, said switch and tube being relatively rotatable, an operating means for said switch passing through said tube, said canopy having a hole therein through which said tube passes and means to support said canopy solely from said tube.

1,760,004. TORPEDO AND METHOD OF MAKING SAME. MONT RUTTER and EMIL E. LECHLER, Atglen, Pa. Filed Sept. 22, 1927. Serial No. 221,167. 5 Claims. (Cl. 102—25.)



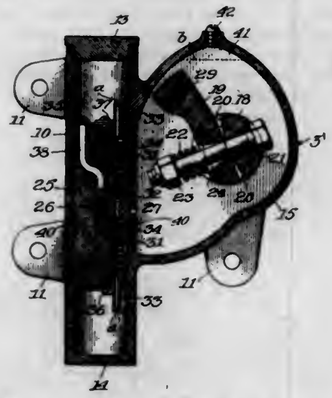
1. A torpedo comprising a cylindrical casing having means disposed in each end thereof for retaining an explosive mixture within the casing, the said means comprising frustro-conical shaped cups positioned within the ends of the cylinder and having their closed ends extending toward the explosive mixture.

1,760,005. HEATER FOR MOTOR VEHICLES. ELMER RYDER, Elgin, Ill., Filed Jan. 24, 1927. Serial No. 162,997. 6 Claims. (Cl. 257—241.)



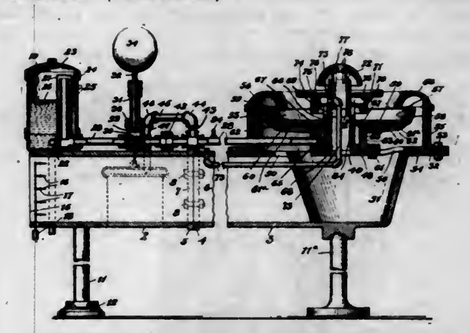
5. A motor vehicle heater adapted for use with the exhaust pipe of a vehicle engine, comprising a heater casing having end walls with openings therein through which the exhaust pipe extends, the openings in said walls adapted to accommodate pipes of different sizes and being larger than the largest size of the exhaust pipe, said casing having a cold air intake and a hot air outlet, and end plates fitted for different sizes of pipe and each plate being adapted to be removably secured to said end walls adjacent said openings and extending to and fitting about one of such pipes to close the opening.

1,760,006. SHOCK ABSORBER. ELMER RYDER, Elgin, Ill. Filed Mar. 12, 1928. Serial No. 260,828. 10 Claims. (Cl. 188—88.)



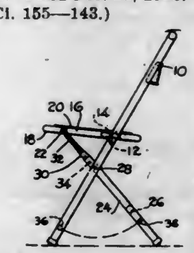
1. A shock absorber for motor vehicles, comprising, in combination, an actuating arm, shock absorbing means operable by said arm, and a yieldable connection between said arm and said means whereby the arm may yield with respect to said means under excessive or relatively light shocks.

1,760,007. OIL BURNER. WILLIAM F. SCHALLER, Alameda, Calif., assignor to M. W. Hendrich, New York, N. Y. Filed Mar. 15, 1927. Serial No. 175,518. 5 Claims. (Cl. 158—91.)



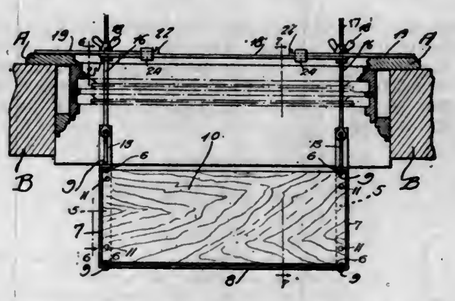
1. In an oil burning device, a hollow support forming an air passage, a lower burner plate supported on said hollow support, means for feeding fuel to said lower plate, an upper burner plate supported above the lower plate, a second fuel supply means for feeding fuel to said upper plate, an air supply passage extending through the support and leading to the upper burner plate, a wall surrounding the lower burner plate and a deflecting plate on the upper end of said wall and overhanging the lower burner plate.

1,760,008. FOLDING CHAIR. GEORGE D. SCHEMERHORN, Reading, Mich. Filed Feb. 11, 1928. Serial No. 253,557. 5 Claims. (Cl. 155—143.)



5. In a folding chair, a pair of uprights, a pair of rear legs pivoted thereto, a seat, and a metal reinforcing bar extending across the bottom of the seat, the ends of the bar having lateral ears pivoted to the uprights, said lateral ears being spaced from the sides of the seat to permit the rear legs to be folded between the sides of the seat and the ears within the plane of the uprights.

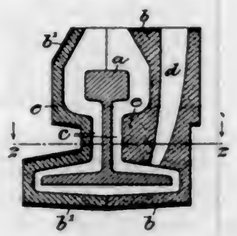
1,760,009. WINDOW SCAFFOLD. EMIL SCHULTZ, Streator, Ill. Filed Oct. 8, 1928. Serial No. 311,125. 2 Claims. (Cl. 304—24.)



1. In a window scaffold, a platform, U-shaped brackets secured to the opposite ends of the platform, brace bars for

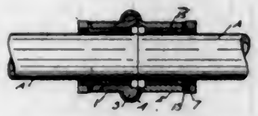
connecting the upper ends of the U-shaped brackets, an angle bracket mounted on a central portion of one of the extensions of each U-shaped bracket, an eye-bolt for securing the angle brackets to the U-shaped extensions, a screw threaded eye-bolt passing through the eye of the first mentioned eye-bolt and an adjustable clamping bar through which said screw threaded eye-bolt passes.

1,760,010. CASTING MOLD FOR ALUMINO-THERMIC WELDING. HERMANN SCHULTZ, Lankwitz, near Berlin, Germany. Filed Feb. 18, 1928, Serial No. 257,117, and in Germany Apr. 6, 1927. 3 Claims. (Cl. 22—116.)



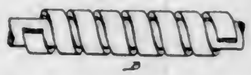
1. A mold box for alumino-thermic welding railway rails and the like having an interior shape substantially corresponding to and somewhat larger than the pattern; whereby the mold forming medium will have walls of substantially uniform thickness.

1,760,011. CONDUIT COUPLING. HOWARD A. SELAH, Erie, Pa., assignor to Erie Malleable Iron Company, Erie, Pa., a Corporation of Pennsylvania. Filed Feb. 18, 1926. Serial No. 89,043. 1 Claim. (Cl. 247—27.)



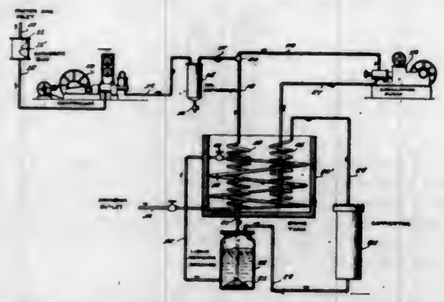
In a conduit fitting, the combination of a tubular coupling member formed of united parts, one part having a peripheral shoulder at its inner edge and the other part a lip extending over and engaging the shoulder uniting the parts, each part having a continuous integral annular wall and a wedging inner surface converging toward the ends of the member and a contractible slitted sleeve in each part having a wedging surface engaging the wedging surface of the part and a screw-threaded outer end; and nuts on the outer ends of the sleeves drawing the sleeves into wedging engagement with the member to contract the sleeves.

1,760,012. MANUFACTURE OF TELEGRAPH AND TELEPHONE CABLES. WILLOUGHBY STATHAM SMITH, Newton Poppleford, and ALFRED DEVER SHUTER, Harrow-on-the-Hill, England. Filed Jan. 2, 1925, Serial No. 294, and in Great Britain May 6, 1924. 5 Claims. (Cl. 178—45.)



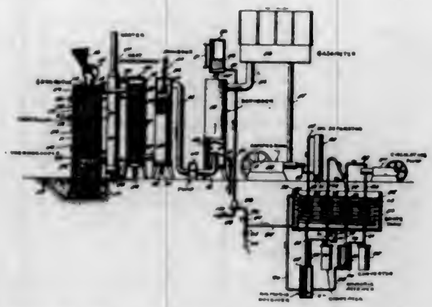
1. A process for the manufacture of telegraph and telephone conductors which comprises first laying the loading material in strip form around the conductor then partially unwinding said loading material and finally annealing the loaded conductor.

1,760,013. PROCESS OF AND APPARATUS FOR MAKING AMMONIA. FRANCIS H. SNYDER and EDGAR D. NEWKIRK, Syracuse, N. Y. Filed Feb. 21, 1927. Serial No. 170,025. 11 Claims. (Cl. 23—199.)



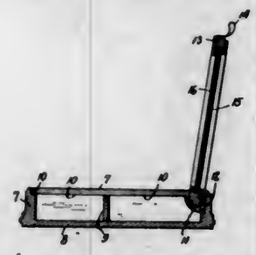
5. In the continuous process of making ammonia by the combination of hydrogen and nitrogen in the presence of a suitable catalyst, the steps of contacting partially purified ammonia factor gases with a moving current of liquefied ammonia, introducing such mixture into a body of liquefied ammonia, and combining the purified factor gases in the presence of a suitable catalyst to form ammonia.

1,760,014. PROCESS OF PREPARING AMMONIA-FACTOR GASES. FRANCIS H. SNYDER and EDGAR D. NEWKIRK, Syracuse, N. Y. Filed July 22, 1927. Serial No. 207,743. 10 Claims. (Cl. 23—7.)



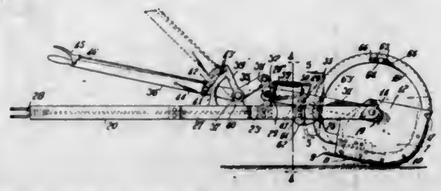
6. The process of producing hydrogen and nitrogen which comprises passing a current of sponge iron through a chamber, passing a current of steam and air countercurrentwise through the apparent volume occupied by said sponge iron, maintaining an elevated temperature in said chamber, and conducting off the gaseous products formed.

1,760,015. VANITY CASE. EDWIN J. SCHWABE, Far Rockaway, Long Island, N. Y. Filed Nov. 13, 1928. Serial No. 319,065. 1 Claim. (Cl. 132—83.)



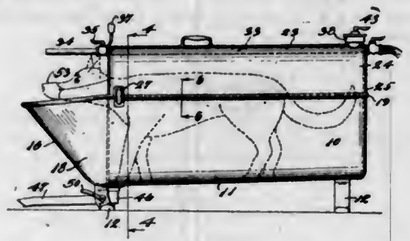
A vanity case comprising an open box and a lid separate from said box and detachably fitted thereupon, said lid being adapted to swing upwardly and to rest upon one of its edges, said box being provided with a rabbet extending lengthwise of the box and with another rabbet extending crosswise of the box, said rabbets being located at different levels, said box being also provided with a notch into which said rabbets merge, said notch and said rabbets being so located that said lid may rest flat upon one of said rabbets thus closing the box, or may rest with one of its edges in said notch and in engagement with the other of said rabbets.

1,760,016. EARTH SCRAPER. JOSEPH H. SLAKER, Aurora, Ill., assignor to Western Wheeled Scraper Company, Aurora, Ill., a Corporation of Illinois. Filed Dec. 24, 1926. Serial No. 156,783. 15 Claims. (Cl. 37—140.)



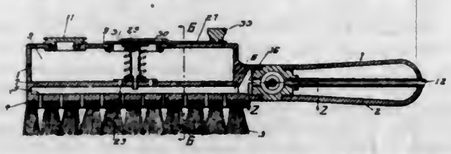
1. An earth scraper of the type described comprising a draft frame, a pan pivotally connected therewith and having upwardly extending arcuate means secured thereto to rotate therewith, a lever fulcrumed on the draft frame, and latch mechanism for holding the pan against rotation, said latch mechanism being movable by said lever concentrically with the axis of the pan to release the pan to permit it to rotate.

1,760,017. ANIMAL BATH. DAISY ELLEN SMOOT, Apopka, Fla. Filed May 11, 1928. Serial No. 277,080. 10 Claims. (Cl. 119—1.)



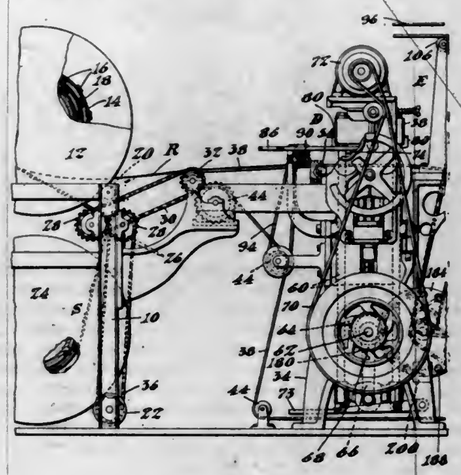
1. In an animal bath, a tub having a recessed end wall, an arched closure for said tub having an end wall provided with a recess for cooperating with the recess in the tub wall, a liquid supply pipe disposed within the closure to discharge upon the occupant of the tub, a trough extended from the end of the tub beneath said recesses, and a spray pipe disposed above said trough.

1,760,018. FOUNTAIN BRUSH. MARK SOSS, Spokane, Wash. Filed Jan. 22, 1929. Serial No. 334,245. 1 Claim. (Cl. 15—129.)



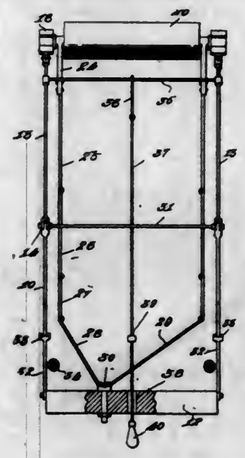
The combination in a brush having a hollow rigid head and a perforated partition therein forming a soap reservoir and a water distributing chamber, of means for supplying water to the chamber, said head having a top opening and a detachable washer closing the opening, a rotary perforated, spring pressed valve in the reservoir for coaction with the perforated part of the partition, an exterior valve lever adjacent the handle, and a valve stem joining the lever and valve and journaled in said washer and partition.

1,760,019. MACHINE FOR CUTTING SHEET STOCK. ERNEST W. STACEY, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed May 14, 1927. Serial No. 191,458. 30 Claims. (Cl. 164—22.)



1. In a machine for cutting sheet-stock, the combination with a movable cutting die, of means for continuously advancing the stock into operative relation to the die, a gage for determining the advance of the stock, and means under the control of the operator for governing the movement of the die in accordance with the relation of the stock to the gage.

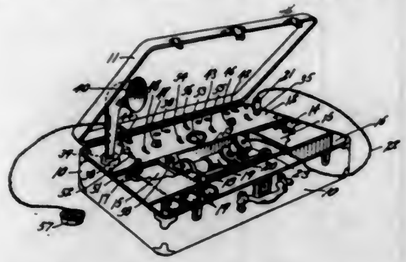
1,760,020. TROLLEY BEARING. MERLE D. STALDER, Cleveland, Ohio, assignor of one-fourth to James F. Caffrey, Cleveland, Ohio. Filed July 27, 1928. Serial No. 295,815. 3 Claims. (Cl. 191—56.)



1. A trolley harp construction comprising pivotally connected legs, bearing members carried upon the uppermost

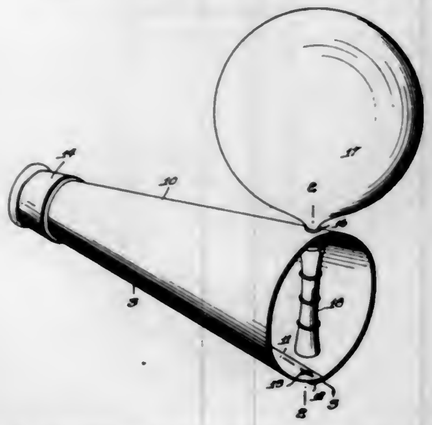
ends thereof, an elongated harp of cylindrical form having the axle therefor journaled within said bearings, brushes having connection with the axle being adapted to transmit electrical energy therefrom, and cup-shaped members carried within the bearing members to insulate the ends of said axle from the legs.

1,760,021. VOICE-RECORDING APPARATUS. LAWRENCE STONE, Jr., Denver, Colo. Filed Feb. 20, 1928. Serial No. 255,751. 2 Claims. (Cl. 179—100.4.)



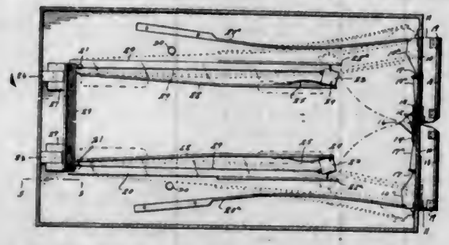
1. A combined sound reproducer and recorder comprising: a container; partitions in said container dividing the latter into compartments; an electrical amplifying unit in one of said compartments; a panel covering said latter compartment; an electrical sound producing unit supported by said panel; a horn adapted to be connected with said latter unit; a first connector extending through said panel; a microphone adapted to be detachably connected with said first connector; a circuit between said first connector and the input of said amplifying means so that said microphone will impress impulses on said amplifying unit; an electrical recording apparatus carried in another one of said compartments; a second connector extending through said panel; a second circuit between said second connector and the output of said amplifying unit; a third circuit between said sound producing unit and the output of said amplifying unit; detachable means for connecting said recording apparatus with said second connector; and means on said panel for selectively closing said second and third circuits so as to place either or both said sound producing unit and said recording apparatus in circuit with the output of said amplifying unit.

1,760,022. NOVELTY NOISE MAKER. HERBERT LEE STOWE, Bridgeport, Conn. Filed Sept. 15, 1928. Serial No. 306,192. 2 Claims. (Cl. 46—46.)



1. In combination, a sound modifying member having open ends and an aperture intermediate its ends, a sound making device arranged in said member, and an inflatable member carried by said device and extending through said aperture providing means for causing sounds to be emitted from said device into said sound modifying member, said sounds being variable in tone and intensity by intermittently closing and opening the ends of said modifying member.

1,760,023. VEHICLE-OPERATED GARAGE DOOR. JOHN TENBROOK, Glenwood Springs, Colo. Filed Mar. 9, 1929. Serial No. 345,762. 7 Claims. (Cl. 292—93.)



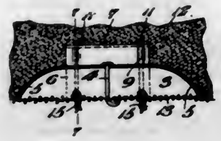
1. An automatic door comprising in combination inwardly swinging doors urged to a closed position, bumpers mounted upon the outer faces of the doors and adapted to be engaged by the front wheels of an entering car, the bumpers being mounted for movement, latches holding the doors closed but shifted to a releasing position when the bumper is shifted relative to the doors by contact with automobile wheels, car engaging means holding the doors in an open position and including shiftable door engaging latches, and car actuated releasing means disposed within the garage and in the path of movement of the car and when engaged by a car, releasing said last named latches to permit the doors to close.

1,760,024. WEED CUTTER. THOMAS G. SYDNOR, Richmond, Va. Filed July 23, 1929. Serial No. 380,352. 1 Claim. (Cl. 30—9.)



A device of the class described comprising a frame consisting of side rods and a cross member connecting the rods to one end of the frame, a two edged blade secured to the opposite end portions of the rods, an arm encircling member swingingly carried by the cross member of the frame, said arm encircling member comprising a looped member, a tubular spacing member adapted to surround said cross member and engage at the opposite ends thereof the free ends of said looped member and reinforcing securing means engaging said free ends of said looped member and a hand grasp interposed between and secured to the side rods of the frame inwardly of the cross member.

1,760,025. BUILDING STRUCTURE. FREDERICK M. VENZIE, Philadelphia, Pa. Filed Mar. 12, 1926. Serial No. 94,291. 1 Claim. (Cl. 72—105.)



An anchorage for lathing sheathing adapted to be embedded in concrete construction during the molding thereof, which comprises a generally concaved elongated inverted shield which is substantially boat-shaped considered longitudinally and is of substantially W-shaped cross-section, said shield being of seamless metal and adapted to be embedded in the concrete with the edges thereof flush with the outer surface, an anchor wire extending across the edges of said shield and around said shield and having transversely extending terminal anchor members said shield having an aperture extending through the top thereof for the reception of fastening means including a nail passing through said aperture and attached to said lathing sheathing, whereby said shield and transverse anchor member may be secured to the inner surface of concrete molding forms.

1,760,026. BUILDING CONSTRUCTION. FREDERICK M. VENZIE, Philadelphia, Pa. Filed July 23, 1929. Serial No. 380,275. 5 Claims. (Cl. 72—70.)



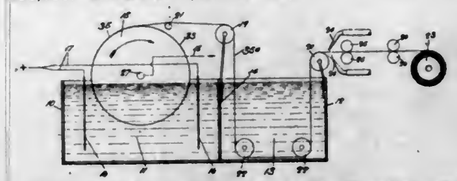
1. In a building structure of the character stated in which the parts are of metal and cementitious material throughout, a pair of spaced beams, channel irons paralleling said beams, hangers straddling each beam and supporting said channel irons, spaced pairs of telescopically arranged cross-members supported by said channel irons, troughs supported between adjacent pairs of cross-members, a cover plate spanning adjacent pairs of troughs, and a cementitous fill for said troughs, said fill being arranged upon the top of said cover plate.

1,760,027. BUILDING STRUCTURE. FREDERICK M. VENZIE, Philadelphia, Pa. Filed Sept. 5, 1929. Serial No. 390,463. 5 Claims. (Cl. 72—66.)



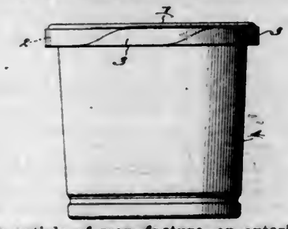
1. In a building construction of the character stated, spaced beams, plaster-boards arranged between said beams, a plurality of inverted substantially cup-shaped tiles arranged upon the upper surface of said plaster-boards, vertically disposed tie-rods for securing a tile with respect to a plaster-board, clips for securing adjacent plaster-boards together at their sides, and a fill of cementitious material above the plaster-boards and around said tiles.

1,760,028. PROCESS OF PRODUCING METAL SHEETS BY ELECTRODEPOSITION. HARRY M. WILLIAMS and ROBERT G. SUMAN, Dayton, Ohio, assignors to General Motors Research Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Dec. 1, 1924. Serial No. 753,038. 2 Claims. (Cl. 204—6.)



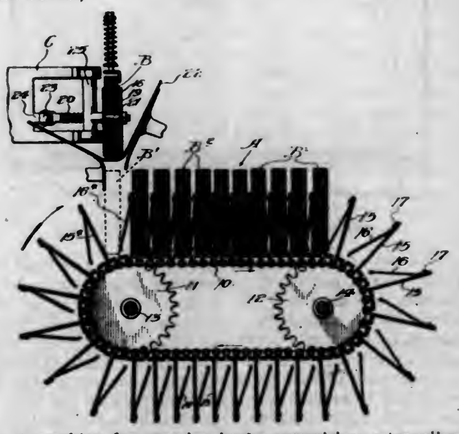
1. The process of producing sheets of metal which comprises electrodepositing the metal directly upon a chromium containing metallic surface and stripping the sheet so formed from said surface.

1,760,029. EXTERIOR SLIP COVER FOR CONTAINERS. WILBUR L. WRIGHT, Fulton, and JOSEPH T. BOND, Phoenix, N. Y., assignors to Oswego Falls Corporation, Fulton, N. Y., a Corporation of New York. Filed Feb. 15, 1927. Serial No. 168,335. 1 Claim. (Cl. 229—5.5.)



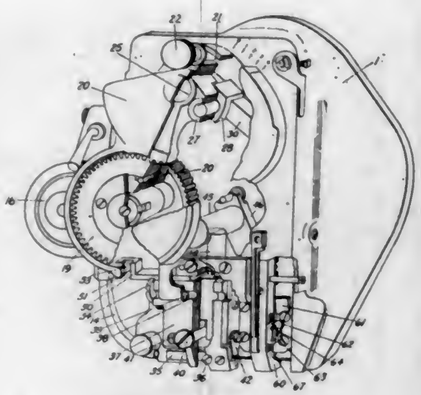
As a new article of manufacture, an exterior slip cover for paper and other cans, consisting essentially of a relatively-flimsy paper disk having a smooth surface ironed cylindrical flange, and a relatively strong stiff non-expansible paper band united to and exteriorly surrounding said flange and of approximately the same length as and terminating flush with the lower end of said flange, whereby said cover is adapted to slip on the exterior surface of a can with approximate air tight contact to provide an approximate liquid tight can closure.

1,760,030. MACHINE FOR PRESSING BOOKS. HARLEY C. ALGER, Chicago, Ill., assignor to R. R. Donnelley & Sons Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 12, 1928. Serial No. 305,452. 10 Claims. (Cl. 11—1.)



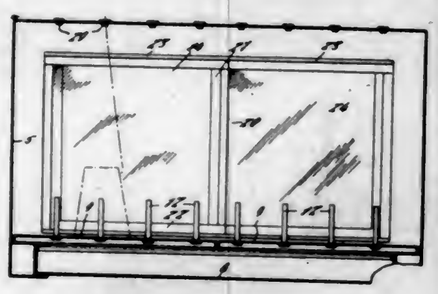
1. A machine for pressing books comprising a traveling means having a series of forms for holding and pressing books as they leave a book binder, and means for discharging said books endwise from said forms.

1,760,031. STITCHER HEAD. HOWARD G. ALLEN, Niagara Falls, N. Y., assignor to H. R. Bliss Company, Inc., Niagara Falls, N. Y., a Corporation of New York. Filed Mar. 9, 1928. Serial No. 260,287. 19 Claims. (Cl. 1—2.)



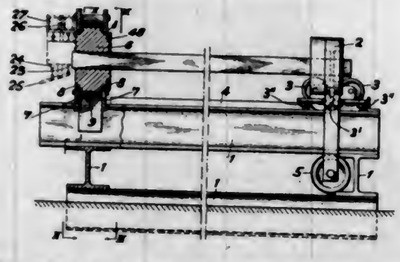
1. In a stitcher head, the combination of a stitch forming and driving mechanism including a reciprocating drive bar, means for feeding wire to said mechanism, and an operable connection between the drive bar and the feeding means arranged to utilize the reciprocating movement of the drive bar to intermittently operate the feeding means, said connection consisting of relatively movable members which operate to drive the wire feeding means at speeds which vary with respect to the rate of speed of the movement of the drive bar, with the rate of speed of the feeding means diminishing near the end of each intermittent feeding movement.

1,760,032. THREAD-MOISTENING DEVICE. JOSEPH AMON, Rahway, N. J. Filed July 15, 1929. Serial No. 378,505. 2 Claims. (Cl. 28—58.)



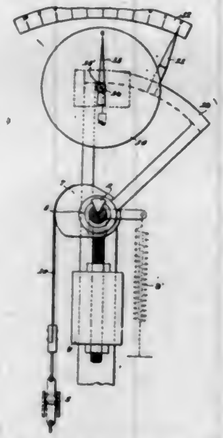
1. A thread moistening device comprising a cabinet normally open at its bottom and having closures mounted in its sides, a drawer mounted to slide in guides at the open bottom of the cabinet and to contain a liquid, said cabinet having an inwardly projecting flange immediately above the drawer, a pair of trays resting upon the said flange and provided with pinties for supporting spools of threads and perforated to provide openings through which the vapor of the liquid arises to moisten the thread, and a plurality of guide bushings disposed in the top wall of the cabinet to provide guides through which the thread of the spool is adapted to extend.

1,760,033. MACHINE FOR GENERATING TORSIONAL MOMENTS, PARTICULARLY FOR TESTING PURPOSES. ALFRED J. AMSLER, Schaffhausen, Switzerland. Filed May 20, 1929, Serial No. 364,622, and in Germany Apr. 16, 1929. 5 Claims. (Cl 265—14.)



1. In a device for generating torsional moments, particularly for testing purposes, a rotatable and a non-rotatable chuck for gripping the test piece to be subjected to torsion, a toothed rim provided on said rotatable chuck, pawls cooperating with said toothed rim and exerting a tangential force on the latter, hydraulic presspots for operating said pawls, and means to determine the hydraulic pressure which is proportional to the torsional moment exerted on the test piece.

1,760,034. PENDULUM WEIGHER. FRANZ BANDHAUER, Vienna, Austria, assignor to The Firm S. Rothmüller A. G., Vienna, Austria. Filed Dec. 30, 1927, Serial No. 243,753, and in Austria Jan. 19, 1927. 2 Claims. (Cl. 265—62.)



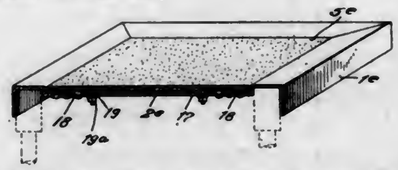
1. In a weigher the combination of a scale beam, knife edges on said beam and movable pillows for movably supporting said beam and means for moving said pillows substantially in synchronism and in the same direction with the knife edges.

1,760,035. CONDUCTOR TERMINAL. GEORGES BEDARD, Montreal, Quebec, Canada. Filed Oct. 22, 1928. Serial No. 314,194. 3 Claims. (Cl. 173—259.)



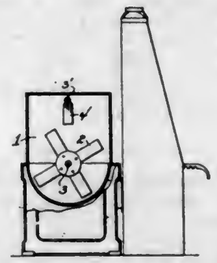
1. A conductor terminal comprising a pair of arms formed at the ends of a conductor and normally extending outwardly in a plane with the conductor body, and a bolt threaded at the end of the conductor having a head formed with an irregular peripheral contour, said arms being bendable to doubled positions to engage a connecting conductor and the bolt head to prevent rotary movement of the bolt.

1,760,036. TABLE. WARREN S. BELLOWS, Worcester, Mass. Filed June 12, 1924. Serial No. 719,514. 9 Claims. (Cl. 45—31.)



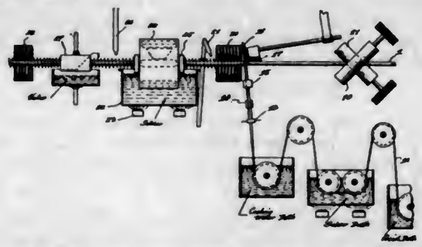
1. In a table of the type described, the combination of separate rim and center portions, legs supporting the rim, a cover for said center portion and unitary means on the rim portion for detachably retaining the cover on said center portion and for detachably retaining the center portion in the rim portion.

1,760,037. ATTACHMENT FOR COTTON-CLEANING MACHINES. JOHN B. BRENNEN, Atlanta, Ga. Filed Mar. 22, 1929. Serial No. 349,181. 1 Claim. (Cl. 19—85.)



A cotton cleaning machine comprising a casing, a shaft rotatably mounted in the lower portion of the casing, beaters fixed for rotation with the shaft, a shaft mounted in the end walls of the casing parallel to and above the first mentioned shaft, arms extending downwardly from the last mentioned shaft at the ends thereof, tension springs connected to the lower ends of the arms and to the corresponding end walls of the casing and yieldably holding the arms in a vertical position, and beater members fixed at their upper ends to the last mentioned shaft and extending vertically downwardly therefrom and in vertical planes with respective alternate ones of the beaters upon the first mentioned shaft.

1,760,038. FINNED TUBE. HARRY W. BUNDY, Detroit, Mich., assignor, by mesne assignments, to Bundy Tubing Company, Detroit, Mich., a Corporation of Michigan. Filed July 14, 1927. Serial No. 205,593. 5 Claims. (Cl. 257—262.)



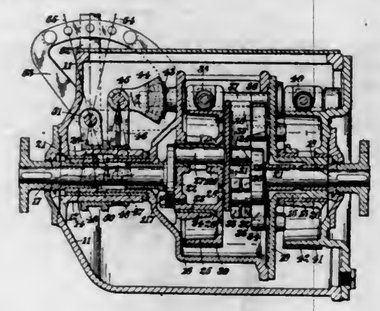
1. A finned tube comprising a tubular body, spiral convolutions of stock on the tube which stock is angular in cross section, one leg of the angle forming a spiral fin, and the other leg of the angle flatly abutting the tube wound in coils having a heat-conducting relation with one another, said leg secured to the tube by solder and secured to each other by solder.

1,760,039. METHOD OF FORMING FINNED TUBE INTO SHAPES. HARRY W. BUNDY, Detroit, Mich., assignor, by mesne assignments, to Bundy Tubing Company, Detroit, Mich., a Corporation of Michigan. Filed Feb. 6, 1928. Serial No. 252,222. 9 Claims. (Cl. 113—33.)



1. The method of forming finned tubes into shapes and finishing the tube which comprises, forming the finned tube and leaving the parts unsealed, forming the tube substantially into the desired shape and then subjecting the same to a bath of sealing metal to finish the tube by sealing the parts together and to set the tube into the shape in which it was formed.

1,760,040. REVERSING GEAR. LEWIS BURN, Longparish, England. Filed July 27, 1928, Serial No. 295,777, and in Great Britain Aug. 2, 1927. 8 Claims. (Cl. 74—14.)

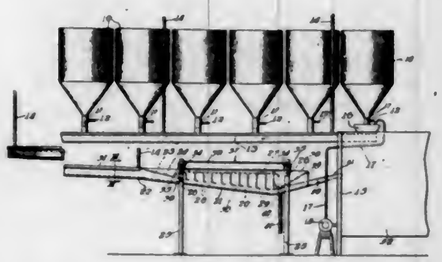


1. A reversing gear comprising in combination a driving shaft, a drum operatively connected to the driving shaft and mounted to rotate coaxially therewith, an eccentric bearing in the drum, a disc having diametrical slots therein and rotatably mounted in said bearing, a driven shaft coaxial with the driving shaft and provided at its end with a double crank whereof the arms engage in said slots, a reversing disc, a plurality of crank arms connecting the slotted disc to the reversing disc and means for clutching the reversing disc either to the drum to rotate therewith or to a stationary part of the gear, for the purpose described.

1,760,041. CLEANING AND WASHING DEVICE. MEAD S. CARMICHAEL, Sparta, Wis., assignor to Scott-Viner Company, Columbus, Ohio, a Corporation of Ohio. Filed Mar. 24, 1928. Serial No. 264,485. 2 Claims. (Cl. 146—193.)

2. Means for cleaning and washing vegetables and the like comprising a flat trough of slight incline and of extended length, in combination with a water separating section, said section including an inclined wall of greater pitch than said trough, a discharge orifice comprising a constricted spout upwardly inclined and associated with

said section to provide therein a fixed liquid level, a plurality of baffles in said section and extending downwardly to restrict the rapid flow of liquid through said section to the

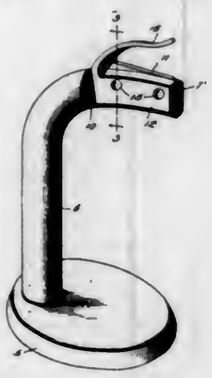


part adjacent the bottom thereof, and a series of transversely arranged scrapers extending into the liquid in said section and movable lengthwise thereof to remove therefrom material floating upwardly between said baffles.

1,760,042. PROCESS FOR BLEACHING TEXTILE FIBERS BY MEANS OF OZONE. EMILIO CRESPI, Crespi-sur-l'Adda, Italy, and MARIUS PAUL OTTO, Paris, France. Filed Nov. 30, 1926, Serial No. 151,785, and in France Feb. 2, 1926. 6 Claims. (Cl. 8—2.)

1. A process of bleaching textile fibers, comprising immersing the fibers in an alkaline solution containing caustic soda and sulphoricinate of sodium and placing the moist fibers in contact with an atmosphere of ozonized air containing from 4.5 to 9 grams of ozone per cubic meter of air.

1,760,043. TWINE CUTTER. ARTHUR GUY CROFT, Boise, Idaho. Filed June 20, 1929. Serial No. 372,452. 1 Claim. (Cl. 30—14.)

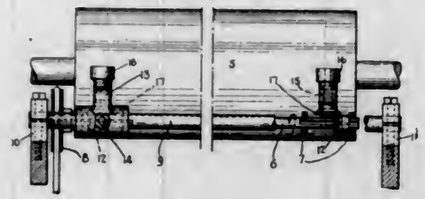


A twine cutter comprising a post provided with a forwardly projecting rigid arm, said arm having a flat vertical side and a vertical shoulder at an angle to said flat side, a flat blade bearing against said flat side of said arm and projecting upwardly from the latter, a clamping plate disposed against the side of said blade remote from said flat side of said arm, said arm, blade and plate having fastener-receiving openings, a guard arm integral with the rear end of said clamping plate and projecting forwardly over said blade, said guard arm having a downwardly facing shoulder at its rear end lying upon the first named arm to assist in alining said openings, said clamping plate abutting the first named shoulder to further aid in alining said openings, and fasteners receivable in said openings when alined.

1,760,044. INSULATING COMPOSITION. LUIS DE AYESTARAN, Zarauz, Spain. Filed Nov. 9, 1928. Serial No. 318,311. 3 Claims. (Cl. 106—15.)

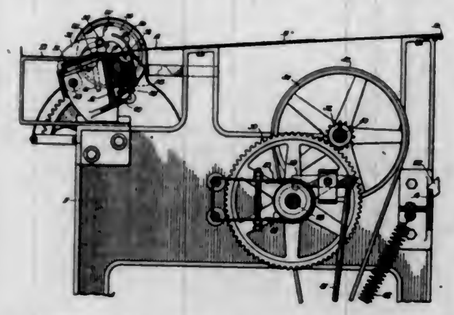
1. An improved composition of matter consisting of finely divided wood charcoal, rosin, bees-wax and tar, the resultant composition being a non-conductor of heat and electricity and having a specific gravity of approximately 1.12.

1,760,045. APPARATUS FOR MANUFACTURING CARBON PAPER. HAROLD W. A. DIXON, Hollis, N. Y., assignor to Columbia Ribbon & Carbon Manufacturing Company, Inc., Glen Cove, N. Y., a Corporation of New York. Filed Apr. 23, 1926. Serial No. 104,087. 3 Claims. (Cl. 91—50.)



3. In a machine for the manufacture of carbon paper, the combination of a drive shaft, bevel gears rotatable with said shaft and adjustable lengthwise thereof, a pair of brackets, a support for each of said brackets, said brackets being adjustable in said supports, a vertically extending shaft carried in each bracket, a roller carried by each of the last mentioned shafts, and a bevel gear on the opposite end of each of said shafts and in constant mesh with the first mentioned bevel gears.

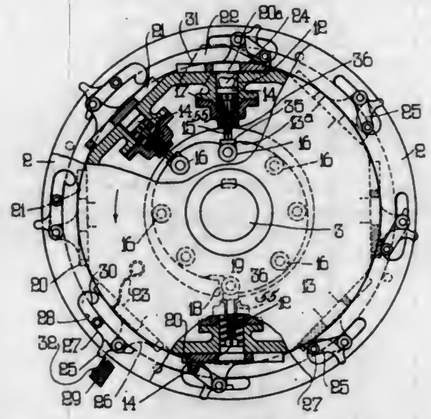
1,760,046. TIN-EDGING MACHINE. JOHN W. DIXON, Maywood, Ill. Filed Aug. 31, 1928. Serial No. 303,175. 6 Claims. (Cl. 153—1.)



1. A machine for applying an edging strip to one or more sheets of material, comprising, in combination, a bed on which the strip is positioned, a blade against which the strip is folded, a bar for folding the strip, a motor, a power-transmitting connection between the motor and the bar, and a control member for establishing said connection and then automatically releasing the same after the bar has folded the strip and returned to starting position.

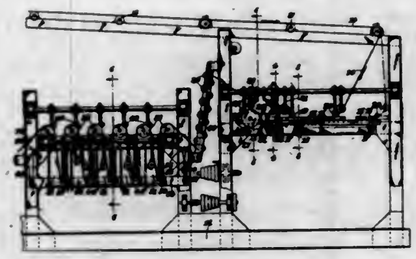
1,760,047. APPARATUS FOR THE MANUFACTURE OF BISCUITS OR THE LIKE. WILLIAM DREDGE, Manchester, England. Filed June 21, 1927, Serial No. 200,486, and in Great Britain July 16, 1926. 12 Claims. (Cl. 107—15.)

5. Apparatus for the manufacture of biscuits or the like, comprising in combination a rotary drum having a plurality of radial recesses in its periphery forming moulds, means for intermittently rotating the said drum, means for feeding into said moulds dough pieces of a required size and weight to form each a separate biscuit into said moulds, spring operated and cam controlled plungers radially movable in the moulds and adapted during their outward movement to mould and emboss the dough pieces during the rotation of the drum, means for closing the mouths of the



moulding recesses in which the moulding and embossing operation is being performed, and means for moving said plungers in the moulds and for causing the ejection of the moulded and embossed pieces from the moulds at a point in the drum diametrically opposite to that at which the dough pieces are fed into the moulds and while the drum is at rest.

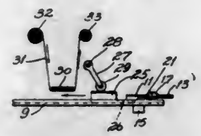
1,760,048. APPARATUS FOR MAKING MOSAIC SCREENS FOR COLOR PHOTOGRAPHY. LOUIS DUFAY, Versailles, France, assignor to Harold Wade, London, England. Filed Mar. 8, 1929, Serial No. 345,400, and in Great Britain Aug. 4, 1928. 10 Claims. (Cl. 95—81.5.)



1. A machine for treating long strips of dyed sheet material having a resist pattern imprinted thereon for the production of mosaic screens for color photography and cinematography comprising in combination a trough for a decolorizing agent, a device for applying a dye, a washing device, a drying device, a trough for a solvent of the resist material, a wiping device within said trough, a second drying device and means for guiding and moving the strip to be treated continuously through the troughs and devices in the order named.

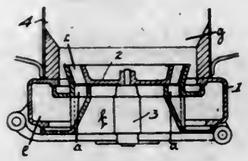
1,760,049. ENGRAVING-PRESS ATTACHMENT. WILL J. ECKER, Jr., St. Louis, Mo., assignor of one-half to August Bender, St. Louis, Mo. Filed Feb. 27, 1929. Serial No. 342,984. 2 Claims. (Cl. 101—165.)

1. A portion of an embossing press comprising a track, on which is mounted a die and a scraper blade, the die and scraper blade being in constant spaced relationship, means of applying ink to the superficial area of the die, a pad, a feed roller, and a take up roller, a sheet of paper mounted on the feed roller, and passing around said pad to said take up roller, so that when the die passes in contact with



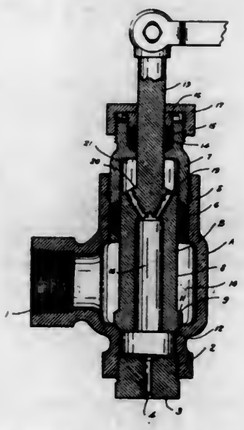
the sheet of paper, the ink is removed from the die to the sheet of paper, so that when the scraper blade comes in contact with the same sheet of inked paper it moves across said paper so that the ink will be removed from said paper.

1,760,050. GAS BURNER. REGNIER EICKWORTH, Essen, Germany. Filed Aug. 24, 1921, Serial No. 494,974, and in Germany Nov. 11, 1919. 2 Claims. (Cl. 110—22.)



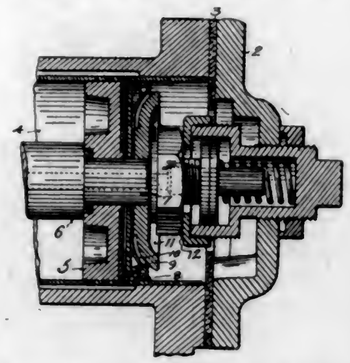
1. A burner comprising a casing, a rotary impeller in said casing, a rim on said impeller, vanes on one side of said rim, and passages for gas and for air in said casing which are so arranged with respect to said vanes that each of said vanes intersects the lines of flow from the passages for gas and from the passages for air.

1,760,051. QUICK-OPERATING VALVE. HAROLD W. FLETCHER and RALPH NEUHAUS, Houston, Tex., assignors to Hughes Tool Company, Houston, Tex., a Corporation of Texas. Filed Nov. 7, 1927. Serial No. 231,760. 5 Claims. (Cl. 251—159.)



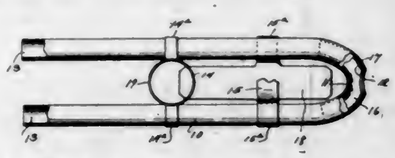
1. A device of the character described comprising a valve housing having an inlet opening thereto and a constricted outlet therefrom, a valve seat spaced above said outlet, a valve shaped to fit said seat, a stuffing box about said valve forming a pressure space above said valve, said valve having a passage connecting with said pressure space, the preponderance of fluid pressures on the valve areas at its upper and lower sides being normally upward when said valve is away from its seat, said pressures tending to preponderate downwardly as said valve is near said seat.

1,760,052. EXPANDER. PARIS R. FORMAN, Rahway, N. J., assignor to National Pneumatic Company, New York, N. Y., a Corporation of West Virginia. Filed Sept. 24, 1927. Serial No. 221,840. 6 Claims. (Cl. 74—109.)



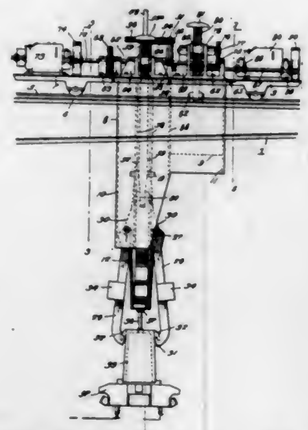
2. The combination with a cylinder having a piston therein of a washer on said piston for forming a sliding seat with said cylinder and a normally flat radially slotted resilient disc cooperating with said washer to assume a cup-shaped formation to expand said washer into contact with the cylinder walls.

1,760,053. FINGER-NIPPLE CALF FEEDER. BERNARD W. GANS, Piedmont, S. Dak. Filed May 21, 1929. Serial No. 364,839. 7 Claims. (Cl. 119—71.)



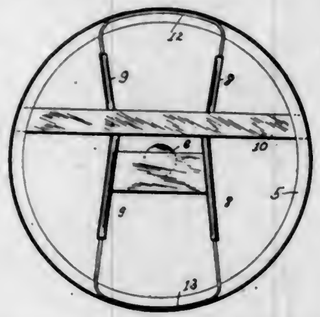
1. A calf feeder comprising a tubular member open at its opposite ends, and a finger ring carried by the tubular member whereby the tubular member may be carried by the finger.

1,760,054. INGOT STRIPPER. ELGY J. GEORGE, Gary, Ind., assignor of one-half to Casca T. Howland, Baltimore, Md. Filed July 19, 1928. Serial No. 293,933. 24 Claims. (Cl. 22—95.)



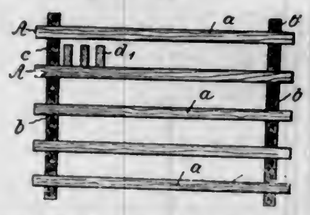
6. In ingot stripping mechanism, a traveling crane bridge, a trolley carriage mounted thereon, a housing rigidly suspended from the trolley carriage, a stripper-head embodying a push rod and a pair of mould grasping arms arranged for vertical sliding movement in said housing, power actuating mechanism mounted on said trolley carriage, non-flexible means connecting said stripper-head to said power mechanism, adapted to be actuated by the latter to lower and raise the stripper-head, and a power shaft detachably connected at its lower end to said stripper-head and slidably connected to said power mechanism adapted to be actuated by the latter to operate the push rod and the mould grasping arms of said stripper-head.

1,760,055. RAY ABSORBER AND DEFLECTOR FOR AUTOMOBILE HEADLIGHTS. GEORGE E. GRAVES, Oklahoma City, Okla. Filed Mar. 26, 1929. Serial No. 349,901. 4 Claims. (Cl. 240—48.4.)



1. In an automobile head lamp, a cross bar retainer, upright sleeves secured thereto, resilient clips inserted into the sleeves, and impinging the lamp shell to hold the device in place, a ray absorber carried by the cross bar, a ray deflector carried between the sleeves and below the first named ray absorber, and rearwardly extending ray deflecting wings carried by the sleeves and beneath the first named ray absorber, and on each side of the second ray deflector.

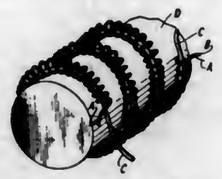
1,760,056. DRYING FRAME WITH TRANSVERSE LATHS. GÜNTHER HARTMANN, Vietz, Germany. Filed Sept. 30, 1927, Serial No. 223,184, and in Germany Oct. 6, 1926. 4 Claims. (Cl. 34—17.)



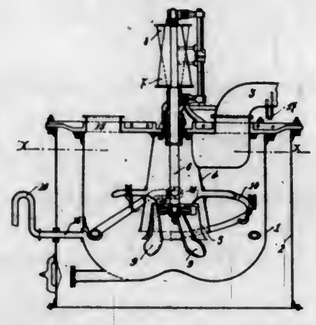
1. A drying frame comprising horizontal longitudinal laths and transverse laths on both ends and both faces of the aforesaid laths, the exposed upper and lower faces of the transverse laths having countersinks, a metal sleeve having its bottom closed and inserted in each countersink and bolts passing through the sleeves and countersinks of each pair of transverse laths, one end of each bolt projecting from a countersink and sleeve.

1,760,057. ELECTRIC RESISTANCE. CORNELL S. HAWLEY, Albany, N. Y., assignor, by mesne assignments, to Consolidated Car-Heating Company, Inc., Albany, N. Y., a Corporation of New York. Filed Feb. 26, 1927. Serial No. 171,235. 2 Claims. (Cl. 201—71.)

1. An electrical resistance comprising a refractory core, a coreless insulating cord, a bare resistance wire approximately incapable of self-support helically wound upon the insulating cord so as to stiffen the cord and support the wire, said stiffened wire-supporting cord being formed into helical coils and mounted helically on said refractory core

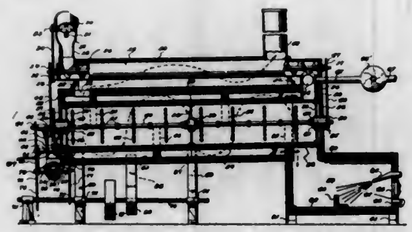


1,760,058. TAR-SEPARATING APPARATUS. HENRI HENNEBUTTE and EDOUARD GOUTAL, Paris, France, assignors to Société Anonyme "La Carbonite" of St. Denis-sur-Seine, France, a Company of France. Filed Nov. 28, 1927, Serial No. 236,347, and in France Dec. 2, 1926. 2 Claims. (Cl. 183—77.)



1. A separator for gases and condensable vapors, more especially applicable to the classification of the gasified products obtained in the course of the carbonization of wood, peat, lignite, etc., and comprising a receptacle, a conduit for the gasified products leading to the central part of said receptacle, a rotary member in this conduit, vanes on said rotary member for stirring the liquid in the receptacle, and curved tubes having their inlet ends at the lower part of the receptacle and their outlets at a higher level above said rotary member and adapted to circulate the liquid material contained in said receptacle.

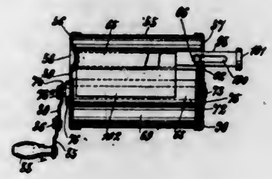
1,760,059. RENDERING PROCESS. STANLEY HILLER, Oakland, Calif. Filed Nov. 24, 1924. Serial No. 752,030. 4 Claims. (Cl. 87—13.)



1. The process of rendering fat and oil containing solids which comprises the steps of simultaneously mechanically impacting and disintegrating the solid structure, melting the fats and oils therefrom, and partially dehydrating the partially disintegrated mass to a point where the moisture content of the solid residue is reduced to from 5 to 20 per cent while maintaining the material at temperatures between 110° and 212° Fahrenheit; and continuously expressing the dehydrated solid residue.

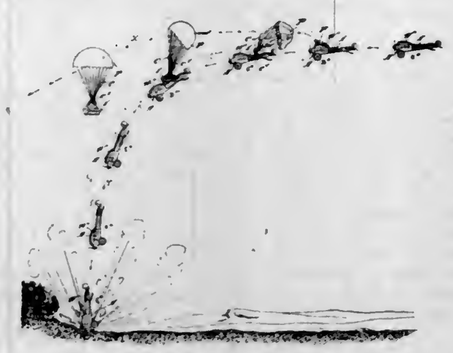
3. A process of rendering fat and oil containing solids with a natural moisture content of more than 20 percent which comprises finely disintegrating the fat and oil containing solids; heating the disintegrated solids by the application of indirect heat thereto to render the same; and removing the evolved vapors to remove moisture therefrom until the moisture content of the solid constituents thereof has been reduced to the range of 5 to 20 percent while maintaining the materials at temperatures between 110° and 212° Fahrenheit; and thereafter pressing the solid constituents to separate residual oil and fats therefrom.

1,760,060. RAZOR-BLADE EJECTOR. JOHN HOLTZMAN, New York, N. Y. Original application filed July 31, 1924, Serial No. 729,283. Divided and this application filed Apr. 9, 1927, Serial No. 182,217. 3 Claims. (Cl. 51—81.)



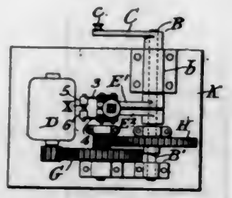
1. In ejecting means for wafer safety razor blades, a casing, a member within the casing adapted to position safety razor blades, a blade ejector member arranged for movement into and out of the casing, and arranged to engage and to push upon the end of a blade to eject the blade from the casing, one of said members having a slot therein, and a pin in the other of said members inserted into the slot for limiting the movement of the ejector member.

1,760,061. PARACHUTE SAFETY SUSPENSION FOR AEROPLANES. PAUL P. HORNI, Newark, N. J. Filed Jan. 21, 1928. Serial No. 248,407. 5 Claims. (Cl. 244—21.)



1. An aeroplane comprising in combination a fuselage having a compartment for the pilot with the controls for the plane located therein, and a separate compartment, a container adapted to fit closely within said separate compartment, a parachute laid in folded condition on the fuselage forward of the said container, flexible shrouds connecting the said container, to the parachute, means for holding the folded parachute on to the fuselage, means in the pilot's compartment for causing the release of the said holding means.

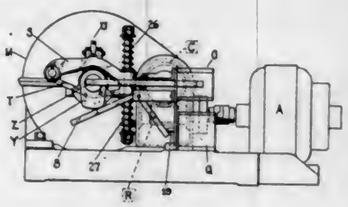
1,760,062. CAR-DOOR OPERATION. LEE P. HYNES, Albany, N. Y., assignor, by mesne assignments, to Consolidated Car-Heating Company, Inc., Albany, N. Y., a Corporation of New York. Filed Mar. 11, 1922. Serial No. 543,079. 15 Claims. (Cl. 268—53.)



1. The combination with a car door, of an electric motor, a rotatable door operating shaft, a gear wheel mounted on said shaft, reducing gearing interposed between and operatively connecting said motor and said wheel, and a radially extended arm carried by an end of said shaft so as to rotate therewith, the free end of said arm having a slidable operating connection with said door.

13. The combination with a car-door, of an operating electric motor for the door, a motor circuit, means actuated by said motor for operating the door, said means including a torsion-switch operated by the motor in the event of the door being obstructed and located in the motor circuit between the motor and the ground.

1,760,063. ELECTRIC DOOR-OPERATING MECHANISM. LEE P. HYNES, Albany, N. Y., assignor, by mesne assignments, to Consolidated Car-Heating Company, Inc., Albany, N. Y., a Corporation of New York. Filed Mar. 17, 1923. Serial No. 625,868. 17 Claims. (Cl. 268—53.)

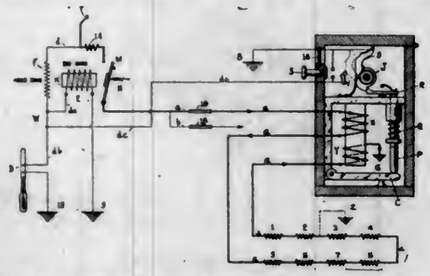


1. Electric door operating mechanism comprising a motor, a door operating shaft, non-reacting gearing interposed between the motor and said shaft, a spring interposed between said gearing and said shaft, said spring being subject to the motor torque and reacting against said shaft on one side and against a fixed abutment on the other side provided by said gearing.

14. Door-operating mechanism comprising a motor, a door-operating arm, spring means interposed between said arm and said motor so that said arm may be driven by said motor, a channel on the rear edge of the door, and a roller on the end of the door arm traveling longitudinally in said channel.

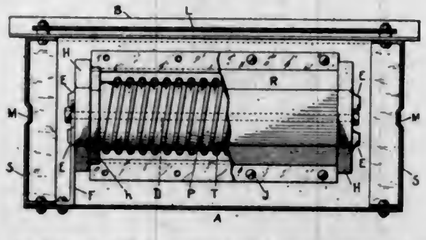
1,760,064. SAFETY DEVICE FOR ELECTRIC HEATERS. LEE P. HYNES, Albany, N. Y., assignor, by mesne assignments, to Consolidated Car-Heating Company, Inc., Albany, N. Y., a Corporation of New York. Filed May 9, 1923. Serial No. 637,843. 2 Claims. (Cl. 219—20.)

2. A safety device for electric heaters that are connected in series, comprising a main switch in the heater circuit, a switch-closing-magnet for said switch, a circuit shunting said closing magnet, a thermostat controlling said shunting circuit, a branch from said shunting circuit, a spring-closed switch in said branch, a releasing magnet therefor having differential coils contained in the heater circuit on opposite sides of the heaters, and means



including a manually operable switch for independently grounding said branch circuit, so as to shunt said spring-closed switch.

1,760,065. ELECTRIC HEATER. LEE P. HYNES, Albany, N. Y., assignor, by mesne assignments, to Consolidated Car-Heating Company, Inc., Albany, N. Y., a Corporation of New York. Filed Mar. 24, 1924. Serial No. 701,387. 4 Claims. (Cl. 219—34.)



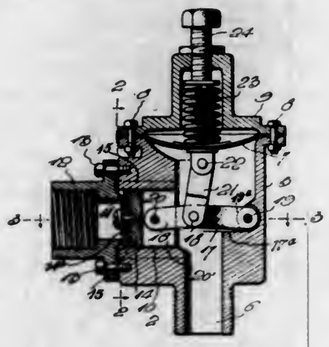
1. An electric heater comprising a casing provided with an internal insulating support, an exposed coil heater mounted on said support and located within said casing, and an insulated two-part metallic guard plate spaced from said heater and the two parts of said guard plating spaced from each other so as to provide openings for air currents to pass through in direct contact with the coil heater.

1,760,066. SAFETY HOLDING DEVICE. SAMUEL JOSEPH JONES, Bronx, N. Y. Filed Aug. 8, 1928. Serial No. 298,365. 2 Claims. (Cl. 306—15.)



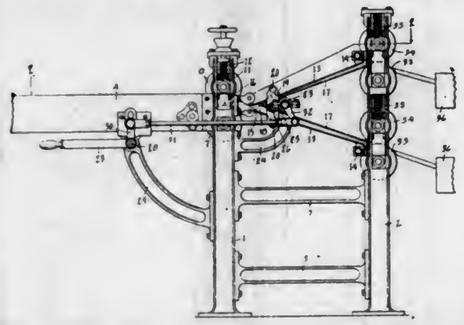
1. In a device of the class described a handle, a ring clamp embracing said handle and having outwardly extending flanges formed with bolt receiving openings; a tool clamp secured to said flanges and adjustable to different positions thereon and a single bolt extending through said flanges and tool clamp, said bolt serving to clamp a tool in said tool clamp and to secure said tool clamp in adjusted position on said ring clamp.

1,760,067. PRESSURE-RELIEF VALVE. ROY E. JOYCE, Los Angeles, Calif. Filed Sept. 2, 1927, Serial No. 217,203. Renewed Mar. 22, 1930. 2 Claims. (Cl. 137—53.)



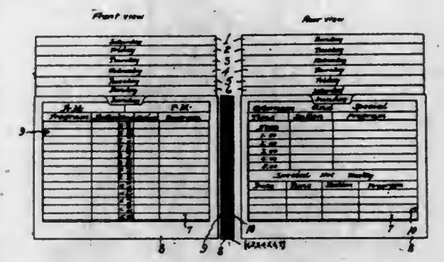
1. A pressure relief valve comprising an open-topped casing having a pressure inlet and a lateral pressure outlet, the latter having an inwardly facing valve seat and valve-guiding means, a valve slidably mounted in said guiding means and co-operating with said seat, two toggle links in the casing having their inner ends pivoted together, the outer end of one of said links being pivoted to said valve, the outer end of the other link being pivoted to the casing at a point horizontally spaced from the inner end of said valve, a horizontal ledge in the casing formed integrally with the latter in the downward path of said other link to limit the valve-closing movement of the two toggle links, a vertical link pivoted at its lower end to the inner ends of said toggle links, a diaphragm extending across the open top of the casing and having a lug pivoted to the upper end of said vertical link, a hood secured to the casing over said diaphragm, a coiled compression spring in said hood acting downwardly on said diaphragm, and an adjusting screw for said spring threaded through said hood.

1,760,068. SORTING MACHINE. HARRY C. KENDALL, Kalamazoo, Mich., assignor to Rex Paper Company, Kalamazoo, Mich. Filed Apr. 21, 1928. Serial No. 271,908. 8 Claims. (Cl. 214—11.)



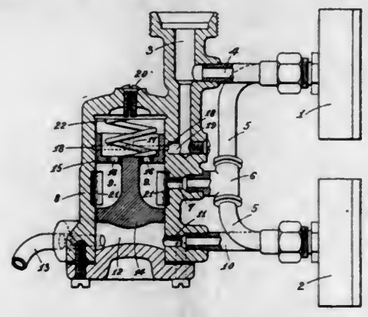
2. In a machine of the class described, the combination of an inspecting conveyor, coacting feed rollers to which the sheets are delivered by said inspecting conveyor, sorting chutes comprising rearwardly diverging outer chute members pivotally supported at their rear ends, coacting rearwardly diverging inner chute members disposed with their forward ends meeting in alinement with the bite of said feed rollers and in spaced relation thereto, side pieces pivotally connected to said outer chute members, a rockshaft disposed transversely between said inner chute members and provided with arms pivotally connected to said side pieces whereby said outer chute members may be simultaneously shifted relative to said inner chute members for selectively directing the sheets discharged by the said feed rollers, and coacting pairs of delivery rollers disposed at the rear ends of said chutes to discharge the sheets therefrom.

1,760,069. RADIOCALENDAR. JAMES P. KENNEDY, Brooklyn, N. Y. Filed Sept. 25, 1929. Serial No. 394,995. 6 Claims. (Cl. 40—122.)



1. In a calendar device as described, the combination comprising a container having an opening in the front and rear thereof, seven cards in said container one for each day in the week, and designated spaces on said cards arranged so that the face of the card exposed through the front window and the face of the card exposed in the rear window are both for the same day.

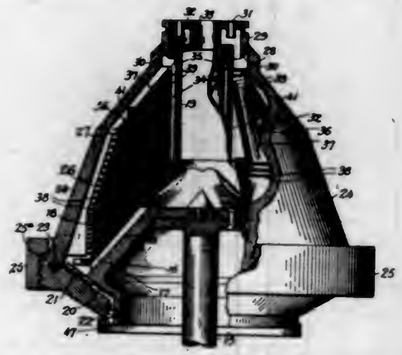
1,760,070. PUMPING APPARATUS. EDWARD KINSELLA, Spondon, near Derby, England, assignor to Celanese Corporation of America, a Corporation of Delaware. Filed Apr. 6, 1927, Serial No. 181,396, and in Great Britain Nov. 17, 1926. 6 Claims. (Cl. 103—11.)



1. In pumping units of the kind hereinbefore referred to for delivering artificial silk spinning solutions to spinning jets or other applications, comprising a pilot pump of major delivery, a measuring pump of smaller delivery connected in series therewith, and a by-pass for surplus liquid from the feed side of the measuring pump to the feed side of the pilot pump, the combination with the pilot pump and measuring pump and the by-pass, of a pressure balance and by-pass controlling valve, comprising a piston member and a by-pass controlling slide valve

member operated by said piston member, said piston member being subjected on its opposite faces respectively to the pressure of the delivery side of the pilot pump and to the pressure of the delivery side of the measuring pump, and said slide valve member being adapted to regulate the by-pass by its movement under normal variations of pressure on the respective sides of the piston member; and means for establishing communication between the delivery side of the measuring pump and the feed side of the pilot pump when an excess out-of-balance pressure is developed on the delivery side of the measuring pump, whereby the excess out-of-balance pressure is released and the liquid permitted to circulate idly in the unit and the delivery from the unit to the point of use ceases.

1,760,071. CENTRIFUGAL SEPARATOR. HENRY GEORGE KOEPKE, Chicago, Ill., assignor, by mesne assignments, to Standard Brands Incorporated, Dover, Del., a Corporation of Delaware. Filed Sept. 17, 1926. Serial No. 136,128. 9 Claims. (Cl. 233—47.)



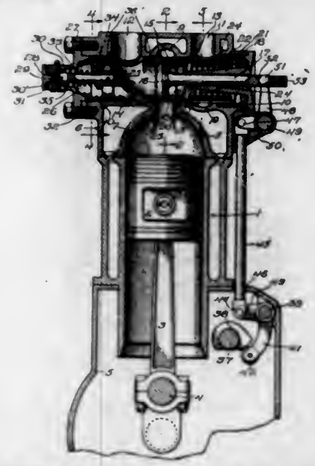
1. In a centrifugal separator of the discharge nozzle type, the combination with a central supply tube having a plurality of longitudinal ribs thereon; of a series of conical separator discs notched to fit on said ribs with but small clearance, said ribs being bevelled at their tops to form substantially a continuation of the surface of the upper disc and passing through all of the discs.

1,760,072. DOUBLE-HUNG REVERSIBLE METAL WINDOW CONSTRUCTION. WILLIAM C. LEA, Los Angeles, Calif. Filed Nov. 28, 1928. Serial No. 322,444. 9 Claims. (Cl. 189—66.)



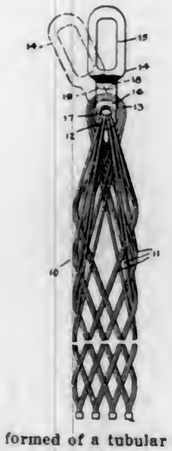
1. A double hung window construction embodying: a fixed window frame; sliding frames in said fixed frame; and pivoted sash members in said sliding frames, the pivotal axes of said sashes being slidable in said sliding frames and lever members mounted in the upper ends of said sliding frames and pivotally connected to said sash members at intermediate points.

1,760,073. INTERNAL-COMBUSTION ENGINE. FRANK H. LINDENBERG, Columbus, Ohio. Filed Oct. 15, 1927, Serial No. 226,469. Renewed Nov. 19, 1929. 7 Claims. (Cl. 123—188.)



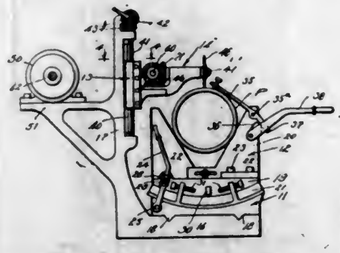
1. In an internal combustion engine, in combination, a cylinder structure including a head, said head being formed to include a transversely extending valve chamber, there being spaced inlet and exhaust passages provided in said head on opposite sides of said chamber, sleeves slidably mounted in said chamber, a valve member positioned transversely within said chamber and situated between the adjacent end of said sleeves, and operating means for said valve member, said means serving to operate said valve member to effect relative separation of said sleeve and to establish collectively communication between said cylinder and one or the other of said passages.

1,760,074. CABLE GRIP. PHILIP J. MARTIN, Elizabeth, N. J. Filed July 2, 1929. Serial No. 375,567. 6 Claims. (Cl. 24—123.)



1. A cable grip formed of a tubular woven mesh of wire strands brought together at the draft end into a plurality of freely formed loops and a draft head provided with a plurality of apertures through which said loops freely pass.

1,760,075. PERFORATING MACHINE. IRA J. MCCULLOUGH and MILLARD SUMTER BLACK, Huntington Park, Calif. Filed Jan. 17, 1925. Serial No. 3,042. 10 Claims. (Cl. 29—70.)

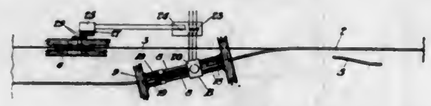


1. A machine for perforating pipe including, a pipe carrier movable about an axis longitudinal of the pipe, said axis being located at the uppermost part of the pipe, and a cutter arranged above the carrier in substantially vertical alignment with said axis and movable vertically into and out of engagement with the pipe.

1,760,076. DYE SOLUTION. CARL S. MINER, Chicago, Ill., assignor to The Quaker Oats Company, Chicago, Ill., a Corporation of New Jersey. Filed Feb. 4, 1927. Serial No. 166,008. 9 Claims. (Cl. 8—6.)

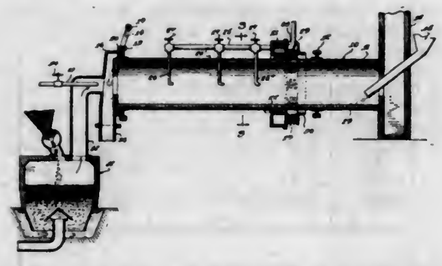
1. A composition of matter comprising a dye dissolved in a solvent comprising a furan derivative.

1,760,077. AERIAL TRAMWAY. MAX P. MORRISON, Worcester, Mass., assignor to The American Steel and Wire Company of New Jersey, a Corporation of New Jersey. Filed Mar. 7, 1929. Serial No. 345,200. 6 Claims. (Cl. 104—250.)



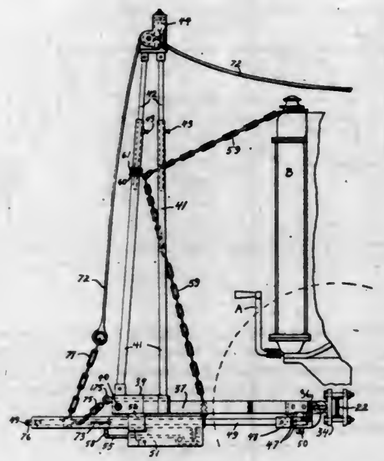
1. A bucket spacing mechanism for aerial tramways comprising the combination with a tramway cable and feeder track, of stop members adapted to be moved into and out of the path of travel of the buckets travelling along said feeder track to control the movement of the buckets along said track, and timing means for controlling the operation of said stop members so as to cause said buckets to be released at spaced intervals.

1,760,078. PROCESS FOR THE LOW-TEMPERATURE REDUCTION OF IRON ORES. EDGAR D. NEWKIRK and ARTHUR J. BRIGGS, Syracuse, N. Y. Filed Oct. 3, 1927. Serial No. 223,794. 6 Claims. (Cl. 75—77.)



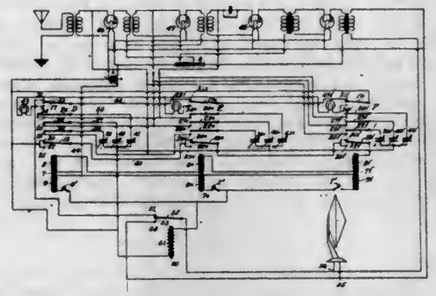
1. The process of reducing oxid ores of metals comprising subjecting a charge of ore and carbonaceous material to progressively higher partial pressures of reducing gases at temperatures favorable to the reduction.

1,760,079. TRACTOR GUIDE. ORR T. NICHOL, Omaha, Nebr., assignor to Nichol Manufacturing Company, a Corporation of Nebraska. Filed Sept. 14, 1928. Serial No. 305,951. 10 Claims. (Cl. 97—49.)



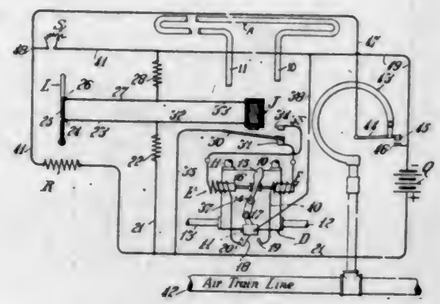
1. Automatic guiding means for tractors of the class having wheels mounted on steering-knuckles pivoted at the ends of a fixed transverse axle, comprising a guide-tongue connected at its rear end with the tractor-axle and swingable about a vertical axis adjoining said axle, pilot devices mounted pivotally upon the front end portion of said guide-tongue, hoisting means connected with said pilot devices for moving the same from ground-engaging position to a position elevated above the guide-tongue, a guide-arm secured to the tractor-steering means and projecting forwardly therefrom, means normally coupling the guide-tongue with said guide-arm whereby the latter is moved in accordance with the lateral swinging movements of the guide-tongue, and means actuated by elevating of the pilot devices for disconnecting said coupling means from the guide-tongue.

1,760,080. DEVICE FOR CONTROLLING RADIO APPARATUS. JULIUS NISENSON, Brooklyn, N. Y., assignor of one-half to Aaron Chanin, New York, N. Y. Filed Aug. 4, 1928. Serial No. 297,502. 5 Claims. (Cl. 250—20.)



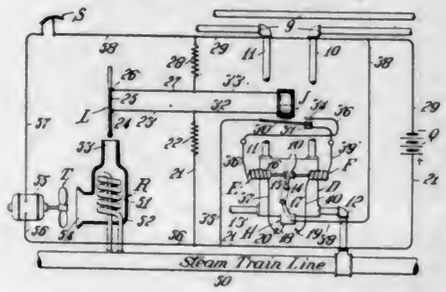
2. In a device for automatically conditioning a radio receiving set to receive radio waves from selected broadcasting stations, said receiving set having a sound reproducer connected thereto, means to short-circuit the sound reproducer during the process of conditioning the set to receive a selected station whereby undesired sounds are prevented.

1,760,081. THERMOSTAT CONTROL. PAUL B. PARKS, Oak Park, Ill., assignor to Vapor Car Heating Company, Inc., Chicago, Ill., a Corporation of New York. Filed June 18, 1927. Serial No. 199,715. 12 Claims. (Cl. 236—68.)



1. In a heating system, a radiator, a valve to govern the supply of heating medium thereto, a thermostat directly responsive to temperature changes in the space to be heated to control the valve and means for continuously applying regulatable quantities of additional heat directly to the thermostat.

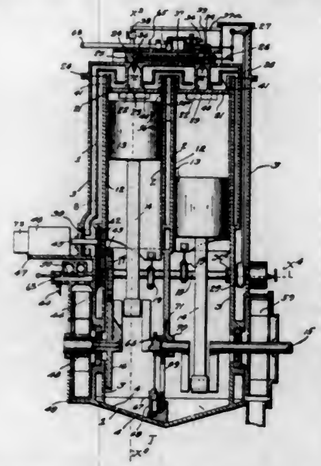
1,760,082. THERMOSTAT CONTROL. PAUL B. PARKS, Oak Park, Ill., assignor to Vapor Car Heating Company, Inc., Chicago, Ill., a Corporation of New York. Original application filed June 18, 1927, Serial No. 199,715. Divided and this application filed Aug. 3, 1928. Serial No. 297,223. 8 Claims. (Cl. 236—1.)



1. In a temperature regulating system, a temperature controlling thermostat mounted so as to be exposed to the air in the space, the temperature of which is being regulated, whereby the thermostat will respond to changes in the temperature in this space, and means for adjusting the thermostat comprising a housing mounted adjacent the thermostat, said housing having an inlet opening for receiving air from the space and an outlet opening directed toward the thermostat, means for projecting a regulatable quantity of air through the housing against the themostat, and means positioned within the housing and over which the air is forced for changing the temperature of this air.

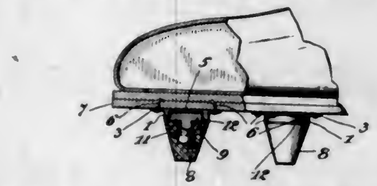
1,760,083. CONSTANT-COMPRESSION ENGINE. ADOLPH C. PETERSON, Minneapolis, Minn. Filed Sept. 7, 1922. Serial No. 586,726. 1 Claim. (Cl. 123—33.)

In a constant-compression engine of the sleeve-valve type having a cylinder and cooperating piston therein, a passageway in the cylinder block adjacent the bore thereof, a port between said passageway and said bore, blower-actuated means to cause a continuous air stream through said passageway and past said port, a sleeve valve governing said port and controlling the alternate expulsion of exhaust gas from said cylinder into said air stream and the admission from said air stream of scavenging air and additional mixture air for use in the ensuing fuel charge



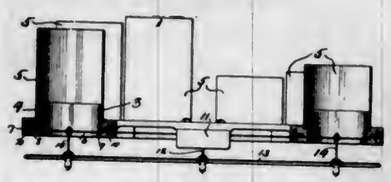
for the engine through said port, said fuel charge being admitted through an independently valve-controlled port into the combustion chamber of the engine.

1,760,084. SHOE CLEAT. GEORGE L. PIERCE, Brooklyn, N. Y., assignor to A. G. Spalding & Bros., New York, N. Y., a Corporation of New Jersey. Filed Oct. 8, 1929. Serial No. 398,120. 1 Claim. (Cl. 36—59.)



A detachable cleat structure for athletic or sport shoes, comprising a socket and a cleat proper, the socket having an internally threaded sleeve projecting from a flange perforated for insertion of attachment devices, and the cleat including a body and a head portion externally screw-threaded to engine in the sleeve thread, the socket at the inner end of the sleeve being of moderate thickness and externally convex, this portion being deformed by insertion of the cleat head and thereupon exerting resilient pressure on the head and screw-threads, preventing inadvertent unscrewing.

1,760,085. REPRODUCING DEVICE. WILLIAM T. PLUM, Jr., Oakhurst, N. J. Filed Sept. 7, 1928. Serial No. 304,475. 7 Claims. (Cl. 181—31.)



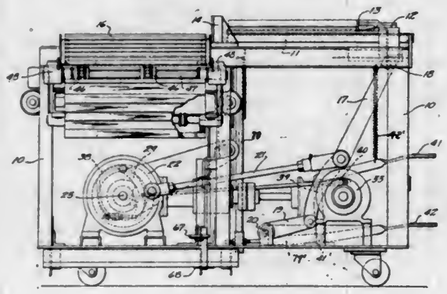
1. A reproducer comprising in combination a plurality of resonators, a diaphragm for each resonator extending transversely thereof, means for adjusting the several diaphragms independently to tune the resonators, and a single actuating unit for said diaphragms.

1,760,086. HEATER. ISRAEL L. PUTNAM, Yuba City, Calif. Filed Feb. 4, 1929. Serial No. 337,855. 10 Claims. (Cl. 129—90.)



1. A heater comprising inner and outer tubular members spaced apart at the bottom and one inclined toward the other at the top to form a heating chamber gradually diminishing toward the top, and the inner member extending below the outer one and forming the support upon which the heater rests, and heating means at the bottom between the members.

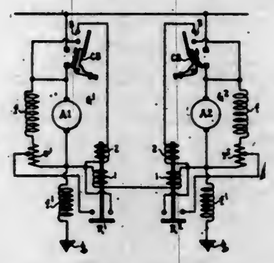
1,760,087. SOAP-CUTTING APPARATUS. JULIUS A. SCHWANTES, Wauwatosa, Wis., assignor to Colgate-Palm-Olive-Peet Company, Chicago, Ill., a Corporation of Delaware. Filed Oct. 18, 1928. Serial No. 312,294. 7 Claims. (Cl. 25—106.)



1. In a machine of the character described, the combination with the cutting mechanism for cutting soap bars into cakes and a delivery mechanism for receiving the cut cakes, of means under the control of an operator at the feeding end of the machine for controlling the cutting mechanism, means under the control of an operator at the delivery end of the machine for controlling the delivery mechanism, and an interlock for said means preventing one operator operating his controls while the other operator's control means is operative.

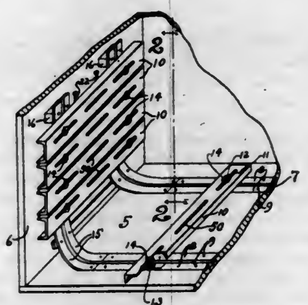
1,760,088. GENERATOR CONTROL. EDWIN W. SEEGER, Wauwatosa, Wis., assignor, by mesne assignments, to Cutler-Hammer, Inc., Milwaukee, Wis., a Corporation of Delaware. Filed Aug. 25, 1928. Serial No. 301,950. 9 Claims. (Cl. 171—223.)

1. The combination with compound direct current generators connected in parallel and having an equalizer connection, of shunt field regulating means for one of said generators including a control winding and connections



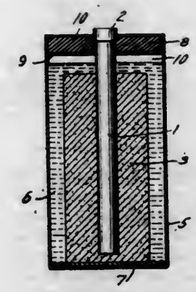
whereby the energizing current of said winding is rendered proportional to the potential drop in said equalizer connection.

1,760,089. SHIPPING DEVICE. CLIFFORD L. SNYDER, Detroit, Mich., assignor to The Evans Auto Loading Co. Inc., a Corporation of Delaware. Filed Feb. 27, 1929. Serial No. 343,089. 6 Claims. (Cl. 105—368.)



1. In combination, a freight car, a movable member secured thereto, having means for attachment of a shipping device thereto, and means for moving said member back and forth, from a wall to the floor of the car, whereby it may be alternately stored and used, while maintaining it secured to the car.

1,760,090. DRY CELL. WAYNE D. STALEY, Madison, Wis., assignor to Burgess Battery Company, Madison, Wis., a Corporation of Wisconsin. Filed July 6, 1928. Serial No. 290,761. 13 Claims. (Cl. 136—123.)



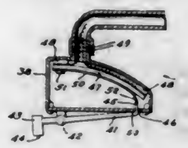
1. A dry cell cathode core having a coating comprising ungelatinized starch and a binder of gelatinized starch.

1,760,091. TREATMENT OF COMESTIBLES WITH SMOKE. HARDEN F. TAYLOR, Bronx, N. Y., assignor to The Atlantic Coast Fisheries Company, New York, N. Y., a Corporation of Maine. Filed Apr. 9, 1928. Serial No. 268,812. 17 Claims. (Cl. 99—9.)

11. In the method of treating fish with smoke, the step of adding ammonia gas in sufficient amounts to render the smoke alkaline in reaction.

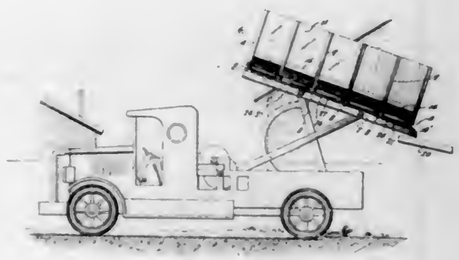
13. Smoked fish having substantially the properties produced by treating fish with smoke containing an excess of ammonia gas including uncoagulated proteins and having an acidity lower than the untreated fish.

1,760,092. ELECTRIC PHONOGRAPH REPRODUCER. ADOLPH A. THOMAS, New York, N. Y. Filed Dec. 11, 1926, Serial No. 154,058. Renewed Mar. 8, 1929. 15 Claims. (Cl. 179—100.41.)



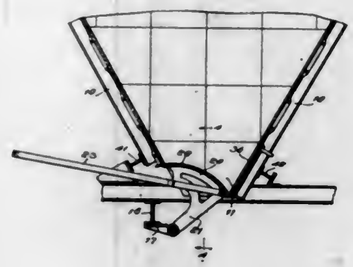
1. An electric phonograph reproducer comprising a casing adapted to be supported in operative relation to a record, a resistance element and a conducting element carried by said casing and adapted to be connected in circuit, means for rigidly supporting one of said elements, the other element consisting of a resilient strip fixed at one end only so as to be in permanent contact with the fixed element at that end, the inherent tension of said strip being such that normally it lies in contact with said fixed element for a predetermined length and then bends away from said fixed element, and a vibratory stylus arm mounted on said casing and adapted to actuate the movable portion of said resilient strip to vary the contact area between said elements, whereby the resistance of said circuit is varied in accordance with the vibrations of said arm.

1,760,093. COAL-TRUCK BODY. PERCY M. THORN, Long Island City, N. Y. Filed Apr. 23, 1929. Serial No. 357,383. 6 Claims. (Cl. 298—8.)



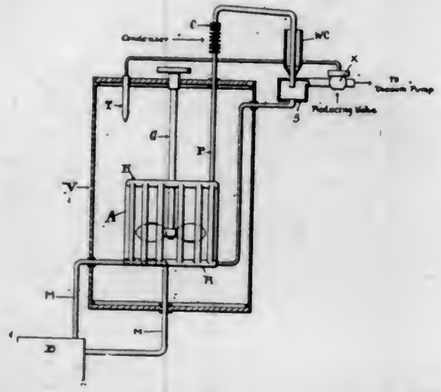
1. In a truck of the tiltable rear-end dumping type, a body for said truck comprising side and end walls, and a bottom wall having a discharge opening; means to subdivide the interior of said body into separate load unit carrying compartments; a fixed discharge chute underlying the bottom wall opening of said body, and having an open discharge end at the rear of said body; and a manipulatable closure device for each compartment intermediate the bottom wall discharge opening of said body and said discharge chute.

1,760,094. STORAGE TANK. EDGAR B. TOLMAN, Jr., Chicago, Ill. Filed Jan. 18, 1928. Serial No. 247,680. 1 Claim. (Cl. 221—144.)



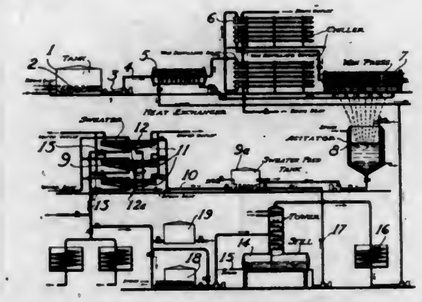
In a receptacle of the kind described, a pair of opposite side walls converging to form a bottom, said converging side walls terminating to form a discharge opening, a plurality of laterally arranged gates for said discharge opening, said gates individually operable and having adjacent margins overlapping, said gates supported by means free of said discharge opening whereby when all of said gates are open the flow from said discharge opening is unobstructed.

1,760,095. HEATING PROCESS. JUSTIN F. WAIT, New York, N. Y., assignor to Sun Oil Company, Philadelphia, Pa., a Corporation of New Jersey. Filed July 26, 1923. Serial No. 654,054. 4 Claims. (Cl. 126—370.)



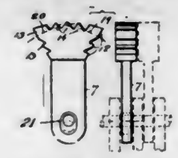
1. The process of effecting heat interchange which comprises establishing a circulation of a substance through a primary circuit and imparting heat to said substance to boil it at one region in the circuit, providing a secondary circuit containing a substance, transferring heat at another region of the primary circuit from the vapors in the primary circuit to the substance in the secondary circuit to effect boiling of the substance in the secondary circuit and condensation of vapors in the primary circuit, effecting an interchange of heat between the substance in the secondary circuit and a material with which heat is to be ultimately exchanged and controlling the pressure, and thereby maintaining substantially constant the temperature, in the secondary circuit by the temperature of the material with which heat is to be ultimately exchanged.

1,760,096. ART OF MANUFACTURING PARAFFIN. CLARENCE A. WARD, Linden, N. J., assignor to Standard Oil Development Company, a Corporation of Delaware. Filed Nov. 20, 1925. Serial No. 70,413. 6 Claims. (Cl. 196—20.)



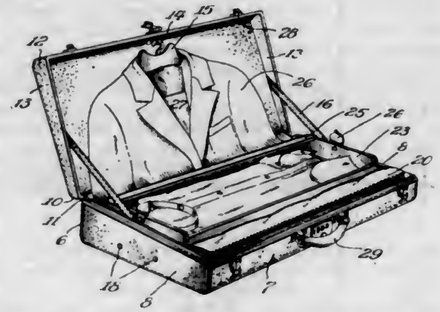
1. The process of obtaining paraffin from a petroleum distillate containing more than 20% of paraffin comprising redistilling without substantial cracking whereby a residuum is obtained substantially solid at approximately 100° F., cooling the residuum and sweating it to obtain paraffin.

1,760,097. ROTARY PIVOTED HAMMER. OLIVER J. WILLIAMS, Burlingame, Calif. Filed Jan. 25, 1928. Serial No. 249,284. 5 Claims. (Cl. 83—11.)



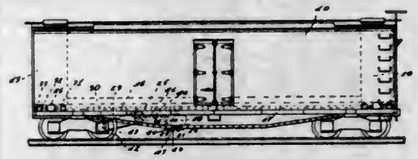
1. The combination with rotary spaced discs and a hammer rod mounted therein, of a pivoted hammer having a relatively non-turning insert piece adjustably fixed in the hammer shank at its inner end so as to form one piece therewith and oscillate in unison, and a head end having teeth radially disposed,—said piece having an eye for said rod radially movable in the shank to vary the operative length, substantially as shown and described.

1,760,098. WARDROBE SUITCASE. ELMER ELLSWORTH WILT, Chicago, Ill., assignor to Wilt Trunk Company, Chicago, Ill., a Corporation of Illinois. Filed July 5, 1929. Serial No. 376,049. 3 Claims. (Cl. 190—41.)



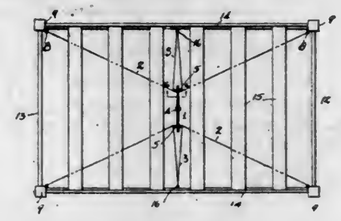
2. A suit case comprising a main section and a cover section hingedly secured together, means for hanging clothes in one of said sections, a floating tray within the case, and means secured to the main section adapted to hold the tray spaced from the side walls of the case sections to provide a space for the clothing, said tray being of a width less than the width of the case between the top and bottom walls and slidable relative to said end walls and toward said bottom wall to engage the clothing.

1,760,099. BRINE AND EROSION CONTROL FOR RAILROADS. ROY E. WING, Highland Park, Mich. Filed Feb. 4, 1929. Serial No. 337,499. 6 Claims. (Cl. 62—19.)



1. The combination with a refrigerator car having an ice compartment, of a storage tank for collecting the brine discharged from the ice compartment while the car is in motion, and means operable upon a stopping of the said car for effecting a discharge of the brine from the said storage tank.

1,760,100. FURNITURE BRACE. THEODORE H. WITTLIFF, Cleveland, Ohio. Filed Mar. 16, 1923. Serial No. 625,475. 6 Claims. (Cl. 5—306.)



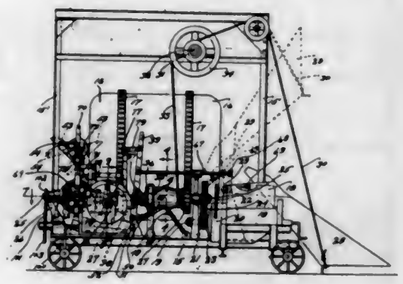
1. In a bracing system for furniture, the combination with an article of furniture having four spaced supports and connecting members therebetween, of a pair of flexible elements, each extending longitudinally between two adjacent supports, a pair of flexible elements each extending transversely of said article from one of said connecting members, and an adjustable tensioning means slidably engaging each of said flexible elements and maintaining the same in tension.

6. An article of the character described, having in combination a plurality of flexible elements connected with the frame of an article of furniture, a central adjusting screw having oppositely threaded ends, and terminal plates screw-threadedly engaged upon and perpendicular to said ends, each of said plates having means on its inner face adjacent each of its upper and lower marginal edges and on opposite sides of said adjusting screw for receiving said respective flexible elements, freely engaged thereover, which serve to anchor against rotation said terminal plates while said adjusting screw is being manipulated.

1,760,101. MIXING MACHINE. PERRY P. YOHE, Minneapolis, Minn., assignor to Koehring Company, Milwaukee, Wis., a Corporation. Filed Apr. 9, 1927. Serial No. 182,515. 20 Claims. (Cl. 83—73.)

1. The combination with a mixing drum, a main drive shaft therefor, a loading skip, a hoisting drum for the skip, and clutch mechanism for operatively connecting the hoist drum with the main drive shaft for the mixing drum, of timing mechanism for automatically controlling the operation of the skip, said mechanism being directly connected

with the main drive shaft of the drum and including cam means for automatically operating the clutch to initiate upward movement of the skip, and means adapted for

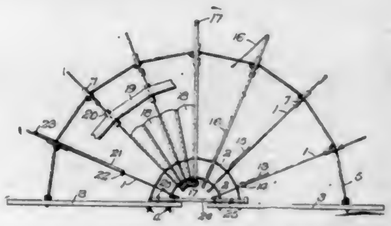


operation by the skip upon its reaching its uppermost position, to move the clutch into neutral portion, whereby hoisting action is discontinued.

1,760,102. COMPOSITION FOR CHEMICAL HEATERS. HOWARD H. BAKER, Buffalo, N. Y., assignor to Ready Heat Products, Inc., Buffalo, N. Y., a Corporation of New York. Filed June 26, 1925. Serial No. 39,822. 6 Claims. (Cl. 44—3.)

6. A material for chemical heaters, comprising comminuted iron, blue vitriol, salt, potassium chlorate, and an absorbent, all in commingled form and adapted to receive a quantity of water to cause generation of heat.

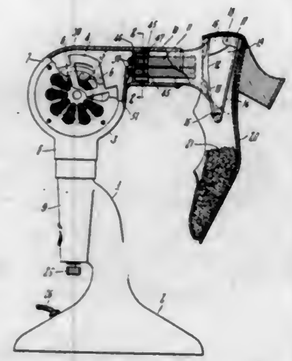
1,760,103. RECORD FILE. EDWARD A. BANSCHBACH, Chicago, Ill. Filed June 23, 1922. Serial No. 570,463. 3 Claims. (Cl. 129—15.)



1. A record holder comprising a back and a plurality of partition sheets arranged face to face to form pockets therebetween, means for holding the edges of said sheets adjacent the back of said record holder in close proximity but free to move limited amounts relative to one another, and means for connecting the edges of said partition sheets opposite to said first-mentioned edges to one another to permit greater separation of said last-mentioned edges thereof than is permitted to the first-mentioned edges of said sheets so that said sheets will be retained in radial position when the outermost sheets of said record holder are opened to lie substantially flat on a supporting surface.

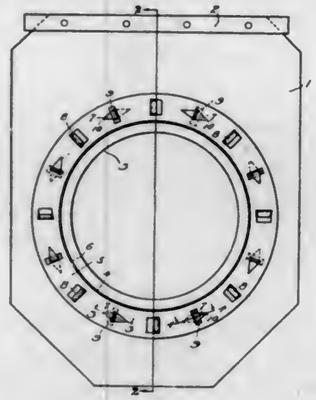
1,760,104. APPARATUS FOR HEATING COUNTER PORTIONS OF SHOES. HARRY H. BECKWITH, Brookline, Mass. Filed Oct. 4, 1928. Serial No. 310,319. 2 Claims. (Cl. 12—1.)

1. A device of the class described comprising a stand having a hollow arm projecting laterally therefrom, a head at the outer end of said arm comprising a pair of plates spaced to provide lateral openings communicating with the hollow of said arm and over which the heel portion of a shoe may be supported with said lateral openings adja-



cent to the sides of the counter portion of the shoe, and means for blowing heated air through said arm to escape through said lateral openings into contact with the shoe supported on said head.

1,760,105. DUST GUARD. DONALD S. BARROWS, Rochester, N. Y., assignor, by mesne assignments, to The Symington Company, a Corporation of Maryland. Filed June 27, 1923. Serial No. 648,102. 16 Claims. (Cl. 286—6.)

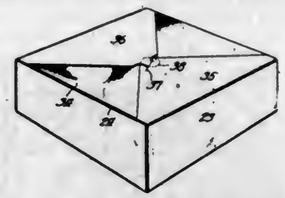


1. A journal box dust guard comprising a curtain of flexible material having an opening therein, means for supporting said curtain within the well of the journal box, a bearing member surrounding said opening and spaced from the side edges of said curtain, said bearing member being formed of relatively thin metal sections arranged upon opposite sides of the curtain, each of said sections having a portion providing an annular flange disposed near said opening and means integral therewith for intersection and connection with the curtain and the other section.

1,760,106. DISPLAY PACKAGE FOR PAPER NAPKINS OR THE LIKE. RICHARD W. BEACH, Indianapolis, Ind., assignor to Beach & Arthur, Inc., Chicago, Ill., a Corporation. Filed Jan. 5, 1929. Serial No. 330,531. 6 Claims. (Cl. 206—46.)

1. A package comprising a wrapper, a quantity of paper napkins or the like enclosed in said wrapper, the latter having flaps extending over said napkins, and a specimen napkin disposed outside said flaps, said wrapper having

additional flaps extending over said specimen and adapted to be fastened together, a portion of the specimen napkin



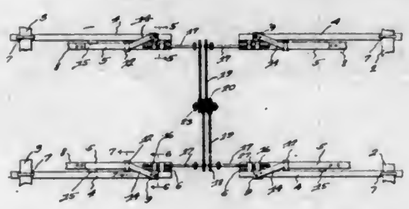
being exposed so that it may be seen and felt by customers and the remaining napkins being inaccessible and thus protected against damage or soiling.

1,760,107. PLASTER-SCORING TOOL. ERNEST J. BENSON, Los Angeles, Calif., assignor of fifty-one one-hundredths to Edward Westberg, Glendale, Calif. Filed May 31, 1928. Serial No. 281,941. 1 Claim. (Cl. 72—128.)



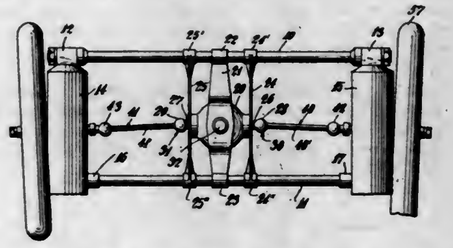
A plaster scoring tool comprising a supporting member provided with a longitudinal slot therein, a slide longitudinally movable along said supporting member, a bolt extending through said slot and said slide with the head of the bolt engaging the supporting member at the sides of said slot, a nut on said bolt for engaging said slide for adjustably securing the slide along said member, a plurality of scraping rods pivoted at one end to said slide to swing together or apart, and a fixed guide on said supporting member through which said rods extend for causing said rods to swing together or apart as said slide is moved along said supporting member.

1,760,108. MOTOR VEHICLE. LUCIUS L. BISHOP, Chicago, Ill. Filed July 3, 1928. Serial No. 290,083. 3 Claims. (Cl. 280—106.5.)



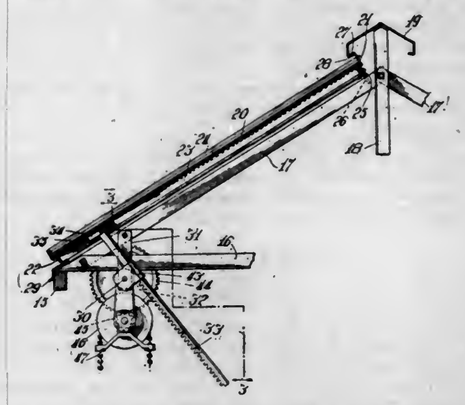
1. A chassis for supporting the body of a vehicle including bars arranged in parallel pairs beneath the body at the front and rear at each side thereof, one bar of each pair having one end pivotally connected to the body of the vehicle adjacent the center and the other end connected to an axle of the vehicle, the other bar of each pair having one end pivotally connected to the body of the vehicle near the center, springs connecting the other end of the last bars to the body of the vehicle at each end, and means whereby to adjust the leverage of said bars.

1,760,109. INDEPENDENTLY-MOUNTED VEHICLE WHEEL. ANTHONY BIZZARRI, New York, N. Y. Filed Sept. 2, 1927. Serial No. 217,225. 13 Claims. (Cl. 180—73.)



1. In a vehicle, a suspension piston, a sleeve having a tapered channel therein, a wheel spindle having a tapered intermediate portion passing transversely through said tapered channel, and a ball bearing race mounted on the outer end of said spindle.

1,760,110. SKYLIGHT-ACTUATING MECHANISM. BENJAMIN P. BLASKI, Chicago, Ill. Filed Aug. 27, 1925. Serial No. 52,813. 5 Claims. (Cl. 268—24.)

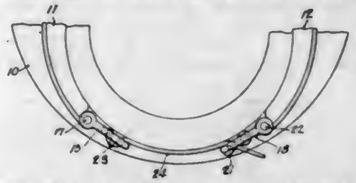


1. In a skylight, the combination of a supporting structure, a closure section swingingly mounted on said supporting structure, a plurality of bars adapted by longitudinal movement in one direction to raise said section, power means for moving said bars in unison, and connections between said bars and said section adapted to hold the bars in position but to permit a limited movement of the bars in the direction away from the section, the arrangement being such as automatically to stop the movement of the bars away from the section shortly after the section reaches its closed position.

1,760,111. HAME FASTENER. WILLIAM BOSCHUETZ, Milwaukee, Wis. Filed Mar. 30, 1929. Serial No. 351,227. 4 Claims. (Cl. 54—28.)

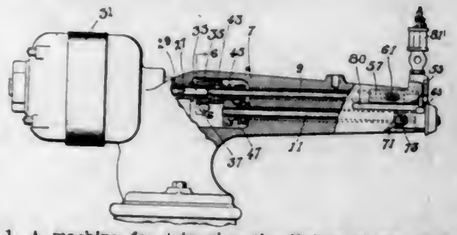
1. A hame fastener comprising a link having a bifurcated end for attachment to one of the hames and a plurality of

cross bars an intermediate one of which is provided with a laterally extending pin, a buckle having a bifurcated end for attachment to the other of the hames and a plurality of cross bars one of which supports a pivoted tongue,



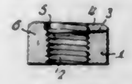
and a hame strap secured at one end to the said link by engagement with the cross bars and the lateral pin thereof, and connected at the other end to the said buckle by the tongue thereof.

1,760,112. LINING-TRIMMING MACHINE. JAMES A. BROGAN, Lawrence, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Aug. 24, 1923. Serial No. 659,177. 27 Claims. (Cl. 12—51.)



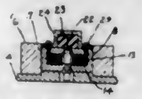
1. A machine for trimming the lining which projects beyond the edge of the upper at the top of a shoe, comprising a frame having a fork to provide a passageway for the projecting lining, a pair of rotary shafts journaled in the branches respectively of said fork, a pair of rotary cutters carried by said shafts respectively, and co-operating feed members mounted one on each shaft in position to engage the projecting lining, one of said members being yieldable transversely with respect to the shaft upon which it is mounted.

1,760,113. LOCK NUT. JAMES HOYT BROWN, Denver, Colo. Filed Sept. 28, 1928, Serial No. 308,962. Renewed Oct. 24, 1929. 7 Claims. (Cl. 151—21.)



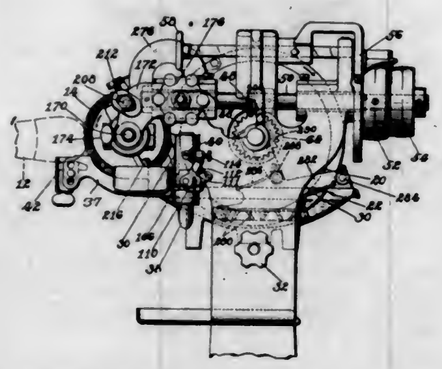
1. A nut having a ring resiliently connected therewith, said ring having a portion lying within the plane thereof and adapted loosely to surround a bolt when the bolt is positioned thru the nut, said ring having a portion in the plane thereof adapted to engage a thread of the bolt and to exert tension in a direction parallel with the bolt axis thereby to bind the nut on the bolt.

1,760,114. PICK-UP. FRANK L. CAPPS, Milford, Conn., and HARRY A. SUMMERS, Brooklyn, N. Y., assignors to Columbia Phonograph Company, Inc., Bridgeport, Conn., a Corporation of New York. Filed Apr. 13, 1929. Serial No. 354,854. 12 Claims. (Cl. 179—100.41.)



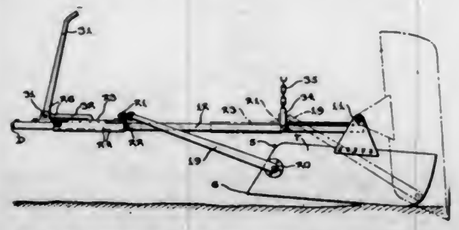
1. In an electric phonograph pick-up, an armature mounted for rocking movement about a pivot, a flexible spring member projecting from said armature and damping means enclosing the end of said spring.

1,760,115. BLACKING MACHINE. HERBERT L. CHAPIN, Swampscott, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed June 15, 1927. Serial No. 199,041. 43 Claims. (Cl. 12—31.)



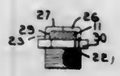
1. In a blacking machine, an applying brush, a blacking receptacle, pick-up means for lifting blacking from the receptacle, and means for transferring the blacking from the pick-up means to the applying brush comprising members constructed and arranged to operate also to straighten the bristles of the brush.

1,760,116. DRAG SCOOP. ROBERT B. COFFMAN, New Alexandria, Pa. Filed Aug. 5, 1929. Serial No. 383,726. 5 Claims. (Cl. 37—140.)



1. In a drag-scoop, the combination of a scoop-pan including side-walls provided with upwardly extending ears, a cross-beam pivotally connected to said ears, a draught-beam having its rear end secured to said cross-beam, a sliding member on said draught-beam, means including links to connect said scoop-pan to said sliding member, means on said draught-beam to limit the rearward movement of said sliding member and thereby limit the pivotal movement of the scoop-pan from its approximately level position to an approximately vertical dumping position, and means to hold said sliding member in different adjustments on the draught-beam and to release the sliding member for permitting it to slide forward and rearward.

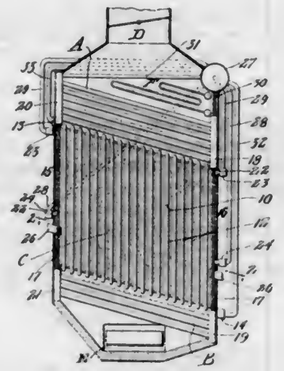
1,760,117. FIXTURE SUPPORT AND METHOD OF MAKING THE SAME. WALTER J. CORMAY, Auburndale, Mass. Filed June 8, 1927. Serial No. 197,500. 6 Claims. (Cl. 247—22.)



1. An adjustable support for electric fixtures and the like comprising a nipple having at one end diametrically opposite relatively narrow extensions of bendable material, the end portions of which are bent toward each other at a distance from the circular end of the nipple to provide a transverse aperture to receive a supporting bar and a nut on said nipple operable to clamp the bar against the bent portions of said extension.

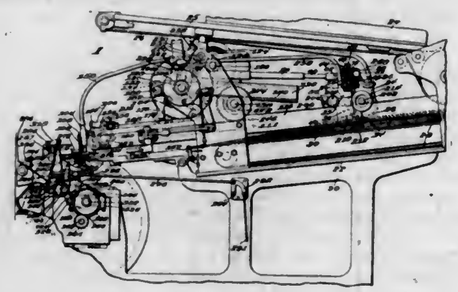
4. A blank for making supporting nipples for electric fixtures which comprises a rectangular plate of a length corresponding to the circumference of the cylindrical nipple to be formed and having longitudinally extending screw-thread grooves and means to provide a transverse aperture through said nipple when formed.

1,760,118. BOILER FURNACE. JOSEPH B. CRANE, Pittsburgh, Pa., assignor to Ladd Water Tube Boiler Company, New York, N. Y., a Corporation of Delaware. Filed Feb. 17, 1926. Serial No. 88,762. 6 Claims. (Cl. 122—235.)



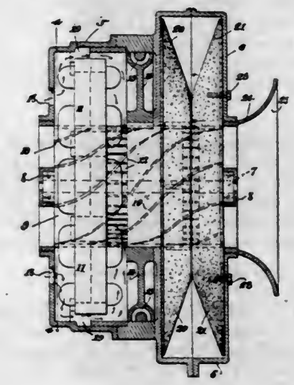
1. The combination with a boiler of the type including vertically spaced banks of substantially horizontal water tubes and their headers, of a combustion chamber intermediate the levels of said banks of tubes, said combustion chamber being defined by said banks of tubes and by vertical water tubes, means for introducing fuel to be burned in suspension therein, and an offtake for the products of combustion beyond each of said banks of tubes, a superheater located between one of said banks of tubes and the offtake therebeyond, and means for controlling the outflow of the products of combustion.

1,760,119. PAPER-FEEDING MACHINE. FRANK L. CROSS, Port Washington, N. Y., and HENNING HALLSTREAM, Braintree, Mass., assignors to Cross Paper Feeder Company, a Corporation of Massachusetts. Filed May 12, 1926. Serial No. 108,546. 19 Claims. (Cl. 271—30.)



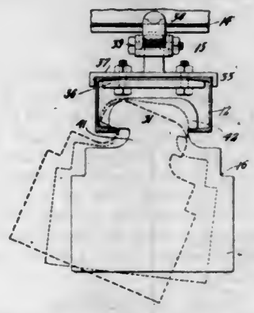
1. A sheet feeding machine comprising a feed table, means for delivering a continuous bank of feathered sheets over the table, means for elevating or buckling the rear portion of the top sheet, suction carrier mechanism engaging with the front portion of the thus separated sheets and advancing the sheet to delivery position, and means for supplying a supporting film of air beneath the separated sheet during the delivery of the sheet by the suction carrier mechanism.

1,760,120. COMBINED FUEL BLOWER AND PULVERIZER. PAUL L. CROWE, Baltimore, Md. Filed Aug. 24, 1927. Serial No. 215,099. 3 Claims. (Cl. 83—8.)



1. A combined blower and pulverizer, comprising a casing and a housing, a sleeve rotatably mounted transversely in said housing and casing, a motor located in said casing and secured to said sleeve for rotating the same, a fan located on the interior of said sleeve, grinding wheels located in said housing, one of said grinding wheels secured to and rotatable with said sleeve and communicating therewith, the other of said grinding wheels secured to the housing, and a fan blade carried by the sleeve to constitute a blower.

1,760,121. REFRACTORY ARCH CONSTRUCTION. BRADLEY DOBIE, Elmhurst, N. Y., assignor to American Arch Company, a Corporation of Delaware. Filed Oct. 26, 1923. Serial No. 671,058. 6 Claims. (Cl. 110—99.)

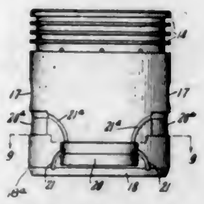


1. A refractory arch construction comprising spaced runners, and brick with unequal shoulders resting on said runners removable after lateral displacement in the direction of the wide shoulders.

1,760,122. ENGINE PISTON. CARL B. DREVITSON, Somerville, Mass. Filed May 28, 1929. Serial No. 366,611. 4 Claims. (Cl. 74—108.)

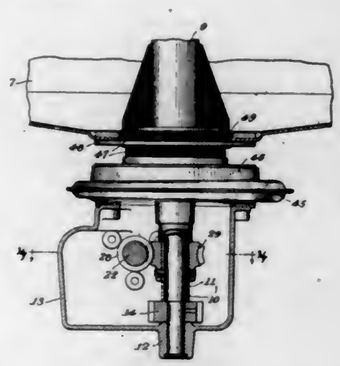
1. The combination with an engine cylinder, of a piston having a beveled face intersecting the periphery of the inner

end of the piston, a recess in said periphery spaced from said face, and a groove in said periphery extending from the beveled face to the recess, said face, recess, and groove being adapted to cooperate with the bore of the cylinder in forming a tapered oil-containing throat having a receiving



mouth, an oil pocket, and a duct connecting the throat with the pocket, the arrangement being such that, during an inward stroke of the piston, oil on the cylinder bore is accumulated under pressure in the throat, forced through the duct, and trapped in the pocket to constitute a hydraulic cushion, whereby side slap is eliminated.

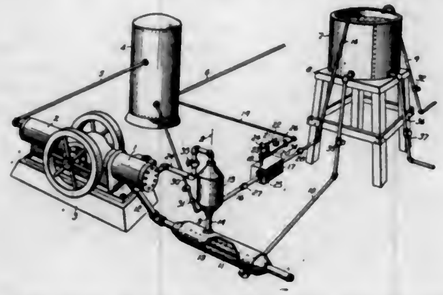
1,760,123. GEARING FOR LAUNDRY MACHINES. GEORGE W. DUNHAM, Utica, N. Y., assignor to Whirldry Corporation, Utica, N. Y., a Corporation of New York. Filed May 16, 1925. Serial No. 30,759. 9 Claims. (Cl. 74—14.)



1. In machinery of the character disclosed, a hollow column, a gear case dependent from the foot of the column, a vertical shaft stepped in said gear case and extending up through the hollow column, a tubular shaft surrounding said first shaft and also projecting up through the column, a horizontal drive shaft journaled in the gear case, worms on said drive shaft, a worm gear on the tubular shaft engaged with one of the worms, a worm gear journaled in the case in engagement with the other worm and driving connections from the second worm gear to the first mentioned vertical shaft.

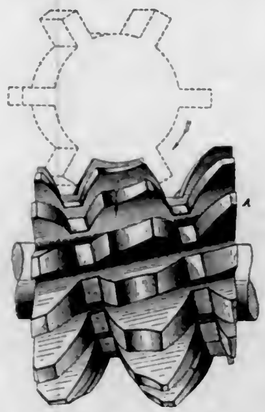
1,760,124. APPARATUS FOR EXTRACTING COMBUSTIBLE VAPORS FROM LIQUID PETROLEUM. IRWIN L. DUNN, Tulsa, Okla. Filed Oct. 14, 1926. Serial No. 141,591. 3 Claims. (Cl. 196—132.)

1. Apparatus for extracting the light vapors from liquid petroleum including an oil fractionating receptacle for petroleum to be treated, means for delivering petroleum to the receptacle, means for heating the petroleum, means for delivering air to said receptacle for percolation through the petroleum, a float chamber connected with the receptacle, an outlet from said chamber, means for delivering air to said chamber, valve mechanism, including a float in said chamber controlling delivery of air to said chamber, to exhaust the chamber through said outlet when the float



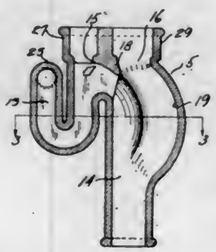
is raised above the point of constant liquid level, and means connected with the receptacle above the constant liquid level for discharging light petroleum vapors from the receptacle.

1,760,125. HOB. JOHN EDGAR, Rockford, Ill., assignor to Barber-Colman Company, Rockford, Ill., a Corporation of Illinois. Filed May 10, 1926. Serial No. 107,848. 11 Claims. (Cl. 29—103.)



1. A hob of the character described comprising a threaded and gashed blank having relieved teeth, said blank having an annular groove forming depressions in said teeth.

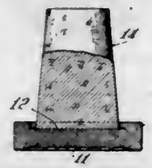
1,760,126. DRAIN TRAP. JOHN E. EHRET, Berkeley, Calif. Filed May 29, 1929. Serial No. 366,820. 6 Claims. (Cl. 182—18.)



1. A drain trap comprising a body member formed with a substantially U shaped trap passage, a downwardly extending discharge passage joined with one end of the trap

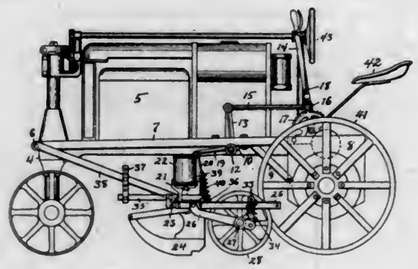
passage, a vent passage extending upward from a point of communication with the trap passage and two intake openings for the trap passage, a partition in said body member dividing said trap passage into two trap chambers each of which is served by one of said intake openings, said body member having a continuation waste line passage leading into the upper end of the discharge passage, and a partition between said vent and waste passages having a laterally extended portion at its lower end to serve as a deflector.

1,760,127. BOTTLE STOPPER. HAROLD H. ELLIOTT, Glencoe, Ill., assignor to Halsam Products Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 4, 1928. Serial No. 251,824. 3 Claims. (Cl. 215—48.)



1. As a new article of manufacture, a disc of wood in which the grain runs axially and having a socket pressed directly along the grain into one face of the disc, such socket being of a generally circular conformation with an enlargement beyond the true circular form defined at at least one end circumferentially of the socket by a comparatively abrupt shoulder.

1,760,128. FARM-IMPLEMENT ATTACHMENT FOR TRACTORS. CHARLES A. ENZ, Fort Wayne, Ind. Filed Sept. 24, 1928. Serial No. 307,816. 3 Claims. (Cl. 97—47.)

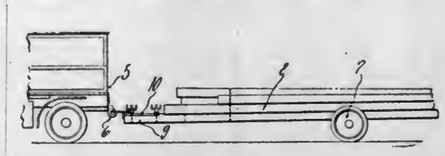


1. In combination with a tractor, a cross-beam fixed at its middle portion to the front end of the tractor and provided at each end with a stud; a side beam disposed longitudinally on each side of the tractor, secured to said cross-beam at one end and to the tractor frame at its rear end; a rock-shaft laterally disposed on each side of the tractor and supported by the corresponding side beam, each shaft having a pair of arms fixed thereon; operating means in connection with one of the arms on each of said shafts; two implements disposed respectively at the sides of said tractor ahead of the corresponding drive-wheels thereof, each implement having a draw-bar pivotally connected upon the stud at the corresponding end of said cross-beam; a mechanism for the support of each implement including ground wheels and springs in connected relation with the frame thereof; connecting means between each implement and the other of said pair of arms on the corresponding rock shaft, and having limited play therebetween, there being a spring included in said means bearing upon said implement, whereby the implement may be raised from the ground and held suspended, or downward pressure applied thereto accordingly as the operating means therefor is adjusted; and an adjusting means in connection with the draw bar of each implement for adjustably tilting said implement relative thereto.

1,760,129. PROCESS OF REMOVING ASH-FORMING CONSTITUENTS FROM OIL. HERBERT G. M. FISCHER, Westfield, N. J., assignor to Standard Oil Development Company, a Corporation of Delaware. Filed Apr. 8, 1926. Serial No. 100,718. 9 Claims. (Cl. 196—146.)

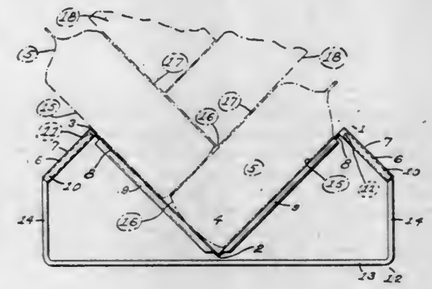
2. Process for removing ash-forming hydratable constituents existing in relatively anhydrous form in an oil, comprising adding water to the oil, the quantity being at least sufficient to form a hydrate but not in excess of three times that amount, bringing oil and water into intimate contact, and removing the constituents in hydrated form.

1,760,130. POLE HITCH. ELBERT E. FORREST, Gary, Ind., assignor, by mesne assignments, to Line Material Company, South Milwaukee, Wis., a Corporation of Delaware. Filed Jan. 18, 1929. Serial No. 333,311. 2 Claims. (Cl. 280—33.44.)



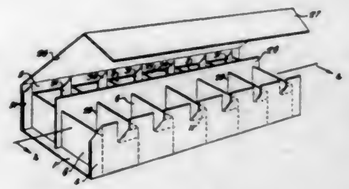
1. A device for attaching a pole or the like supported upon a trailer with a vehicle or the like, comprising a main member adapted to be readily detachably secured to the pole, a cross piece carried by the main member, a chain passed about the pole and having one end detachably connected with one end of the cross piece, means carried by the other end of the cross piece for drawing the chain tightly about the pole, a stop member carried by the main member against which the adjacent end of the pole abuts, and an eye plate carried by the main member by which the device is connectable with the vehicle.

1,760,131. DISPLAY STAND. MARSHALL D. GIBSON, Webster Groves, Mo., assignor to Jas. H. Forbes Tea & Coffee Company, St. Louis, Mo., a Corporation of Missouri. Filed May 4, 1929. Serial No. 360,336. 3 Claims. (Cl. 211—133.)



3. A display stand having a channel-shaped package-receiving seat and flaps inclining in opposite directions from the outer edges of said seat, the end edges of said flaps being beaded, in combination with a support, said support including rising end portions having oblique upper portions adapted to be inserted in the beaded end edges of said flaps to prevent displacement thereof.

1,760,132. EGG CARTON. EDWARD EVERETT HALE, Buffalo, N. Y. Filed Dec. 6, 1927. Serial No. 238,153. 5 Claims. (Cl. 229—29.)

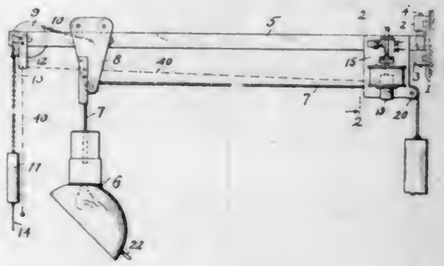


1. A collapsible carton, comprising a lid, bottom, sides and transverse partitions between the sides and integrally connected therewith, and brace members formed in the rear side by slitting the same to provide resulting tabs joined by folds to the rear wall and partitions, respectively, the upper ends of said tabs extending above the top edge of the rear side and partitions and disposed in horizontal alinement with the top edge of the front side to form supports for the lid when closed.

1,760,133. REFRACTORY AND METHOD OF MAKING THE SAME. HAROLD C. HARRISON, Columbus, Ohio, assignor to McLanahan-Watkins Co., Hollidaysburg, Pa., a Partnership. Filed Dec. 22, 1924. Serial No. 757,542. 9 Claims. (Cl. 25—156.)

1. The method of producing a refractory ceramic product which comprises first preparing a raw batch containing more than 50% by weight of a mineral belonging to the cyanite group and subsequently dry pressing the batch into the desired shape and firing the dry pressed article thus obtained.

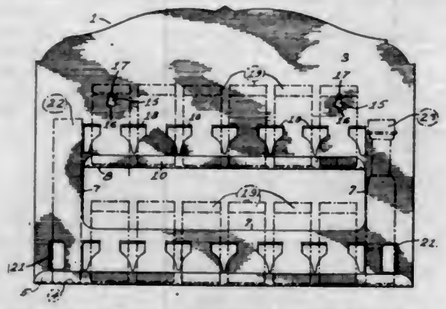
1,760,134. ARC-LAMP HANGER. GEORGE W. HOPKINS, Cleveland, Ohio. Filed May 16, 1928. Serial No. 278,285. 4 Claims. (Cl. 174—177.)



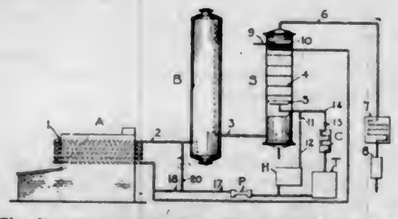
1. A mechanism for holding a suspended device in various positions of vertical adjustment and for returning the same to its uppermost position comprising a flexible suspension element upon one end of which the device to be suspended thereby is secured, means for guiding said element, means associated with said element for normally maintaining said device in its uppermost position, and means for holding said element with its suspended device in any position of adjustment.

1,760,135. DISPLAY RACK. WALLER C. HORNADAY, University City, Mo., assignor to Jas. H. Forbes Tea & Coffee Company, St. Louis, Mo., a Corporation of Missouri. Filed June 24, 1929. Serial No. 373,262. 4 Claims. (Cl. 211—88.)

1. A display rack formed of a blank of material having a portion bent to form a shelf and portions struck out from the blank at intervals to form integral projections having their lateral edges arcuately shaped to enter the interstices between laterally adjacent articles on the shelf to maintain the articles in laterally spaced relation to one another.



1,760,136. CONTROL OF PYROLYTIC CONVERSION. FRANK A. HOWARD, Elizabeth, N. J., assignor to Standard Oil Development Company, a Corporation of Delaware. Filed May 21, 1923. Serial No. 640,492. 8 Claims. (Cl. 196—51.)



8. The improvement in the art of pyrolytic conversion of hydrocarbons to lower boiling products, which comprises heating the hydrocarbons to the desired extent in a heating zone, then allowing digestion to the desired extent in a digestion zone, withdrawing the cracked products from said zone through a common line, separating the tarry liquid therefrom, controlling the temperature of the digestion zone against undesired rise by introducing condensate from the vapors derived from the digestion, and controlling the temperature of said condensate by cooling a portion of the same before introduction into the digestion zone.

1,760,137. PROCESS FOR THE PRODUCTION OF SODIUM THIOSULPHATE. HENRY HOWARD, Cleveland, Ohio, assignor, by mesne assignments, to The Grasselli Chemical Company, Cleveland, Ohio, a Corporation of Delaware. Filed Dec. 5, 1925. Serial No. 73,483. 3 Claims. (Cl. 23—115.)

1. Process for the production of sodium thiosulphate which comprises reacting upon sodium sulfid with sulfur dioxid supplied in the form of burner gases in the presence of sodium sulfite in a reaction mixture containing sulfur dioxid slightly in excess of the requirements of the reaction:

$$2Na_2S + 3SO_2 = 2Na_2S_2O_3 + S$$

and sodium sulfite sufficient to meet the requirements of the reaction:

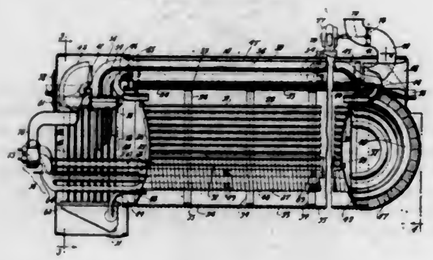
$$S + Na_2SO_3 = Na_2S_2O_3.$$

1,760,138. COMBINATION ELECTRIC PLUG AND SWITCH. ALLAN F. HUNT, Burlingame, Calif. Filed June 21, 1927. Serial No. 200,374. 4 Claims. (Cl. 200—51.)

1. A combined attaching plug and switch comprising a base of non-conducting material, a plurality of contacts carried thereby and adapted to engage corresponding contact terminals on an attaching member, corresponding ends of said contacts being exposed at one end of the base, a cap of non-conducting material superimposed on and cooperating with one end of the base with the adjacent peripheral edges of said cap and base projecting one over the other, a rod extending axially through said cap and base for pivotally uniting said cap and base for relative axial rotation, a plurality of contacts carried by the cap and exposed on one face for wiping contact with the exposed face of the base contacts on the relative axial rotation of the cap and base to make or break the circuit therebetween, cooperating means associated with the cap and base for limiting the relative axial rotation of the parts in either direction, said cap provided with an axial opening for the reception of conductor wires, means for attaching the conductor wires to the cap contacts, and means for indicating the circuit making and breaking positions of the cap and base when relatively axially rotated.



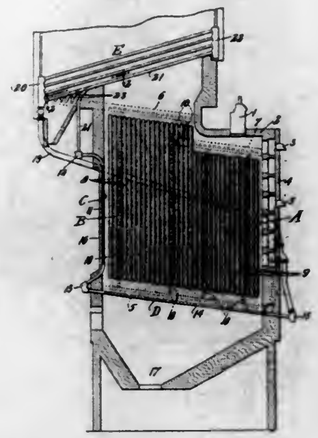
1,760,139. LOCOMOTIVE. HOWARD L. INGERSOLL, Stamford, Conn. Filed Nov. 23, 1923. Serial No. 676,497. 11 Claims. (Cl. 122—150.)



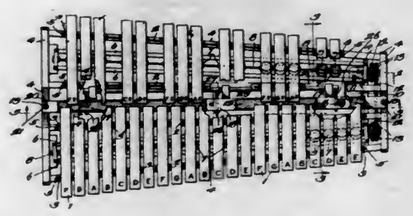
1. A locomotive boiler comprising a main drum with fire flues and return tubes, a smoke box at the rear thereof, and a casing extending forward along said main drum from said smoke box; a steam drum in said casing receiving steam for said main drum; a superheater in said smoke box receiving steam from said steam drum; a feed-water heater in said smoke box delivering into said main drum; and a supply conduit for air for combustion extending rearward through said casing.

1,760,140. POWDERED-FUEL-BURNING BOILER FURNACE. STANLEY A. JACQUES, Chicago, Ill., assignor to International Combustion Engineering Corporation, New York, N. Y., a Corporation of Delaware. Filed Aug. 24, 1926. Serial No. 131,149. 6 Claims. (Cl. 122—235.)

1. In combination with a substantially horizontal tubular boiler, a combustion chamber therebelow having side water walls including appropriate headers, upcomers for said water walls connected into the circulation of the boiler and constituting a portion of a row of the tubes of the tubular boiler, and means for introducing fuel to be burned in said combustion chamber.



1,760,141. MUSICAL INSTRUMENT. MURVIN L. JONES, Chicago, Ill., assignor to J. C. Deagan, Inc., Chicago, Ill., a Corporation of Illinois. Filed Nov. 16, 1928. Serial No. 319,919. 3 Claims. (Cl. 84—410.)

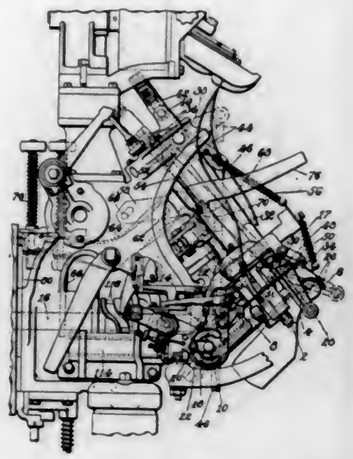


1. A musical instrument including a horizontal row of vibrant horizontal bars each adapted, when set into vibration, to produce a tone of a musical scale differing from the tones produced by the others; a unitary sound dampener; spring means normally pressing said dampener into engagement with all of said bars; and means for moving said sound dampener out of engagement with all of said bars.

1,760,142. UPPER-PULLING MACHINE. BERNHARDT JORGENSEN, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Mar. 19, 1923, Serial No. 626,083. Renewed Apr. 24, 1929. 117 Claims. (Cl. 12—4.)

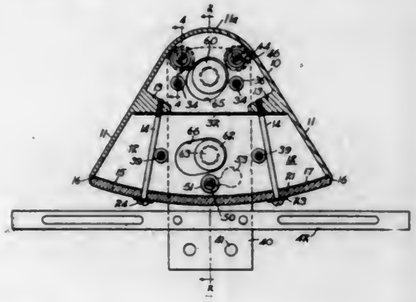
1. In a machine of the class described, the combination with shoe positioning means, of upper pulling means comprising a gripper so positioned as to grip the upper at that portion of the shoe where the side of the last and the edge of the sole curve inwardly from the ball toward

the shank, and means for imparting to said gripper in the course of the upper pulling operation turning movement



about an axis extending heightwise of the shoe to draw the upper inwardly toward the side of the last at the rear of the ball line.

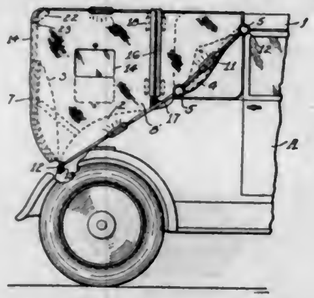
1,760,143. LANTERN. JOHN JUERGENS, Chicago, Ill., assignor of one-half to Stephen J. Kosteling, Jr., Chicago, Ill., and one-half to Nels H. Rasmussen, Chicago, Ill. Filed Feb. 28, 1927. Serial No. 171,558. 5 Claims. (Cl. 177—329.)



4. The combination of a lantern body having walls including a rear wall forming an upper compartment and a lower compartment, a bracket, means carried by the bracket for holding two lamp bulbs whereby when the lantern body is normally applied to the bracket one of said bulbs will extend into the upper compartment and the other thereof into the lower compartment, and means for holding the body readily releasable upon the bracket, said last-mentioned means including an arcuate bayonet slot opening in said rear wall and a headed clamping member carried by the bracket to cooperate therewith and providing that the lantern body may be applied to the bracket out of its normal position and then swung into its normal position, said clamping member being adapted to hold the body firmly upon the bracket in its normal position.

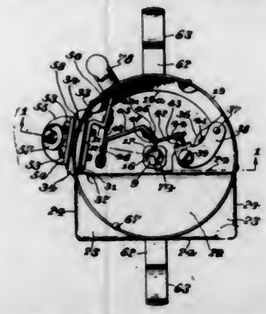
1,760,144. RUMBLE-SEAT INCLOSURE. ABRAHAM KANER, St. Louis, Mo. Filed Dec. 22, 1927. Serial No. 241,799. 1 Claim. (Cl. 296—99.)

An auxiliary inclosure for the rumble seat of an automobile, comprising side walls of substantially triangular shape, a top wall between said side walls, and a rear end wall connected to the rear edges of both side walls and top wall, stiffener means carried by said rear wall and extending upwardly between the top and bottom edges of said rear wall and terminating at the top of the vehicle, means for detachably mounting said inclosure upon said vehicle,



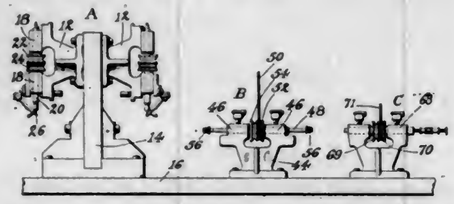
and a corner plate connected to the ends of said stiffener means at the inside of the corner formed by the meeting of the top and rear walls and overlying the stiffener means so that said top wall is not supported on the tops of said stiffener means.

1,760,145. IGNITION-TIMING APPARATUS. ARTHUR ATWATER KENT, Ardmore, Pa. Filed Jan. 19, 1922. Serial No. 530,265. 13 Claims. (Cl. 200—22.)



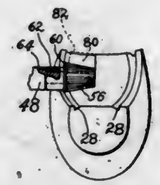
2. Ignition timing structure comprising a governor casing, a second separate casing superposed thereon, ignition timing contacts controlled by said governor and carried by and within said second casing, a distributor cap superposed upon said second casing, and cap-holding structure engaging said governor casing and extending across said superposed casing into holding engagement with said cap.

1,760,146. MACHINE FOR USE IN MAKING HEELS. JOHN T. KERSHAW, Haverhill, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Aug. 31, 1927. Serial No. 216,682. 12 Claims. (Cl. 12—42.)



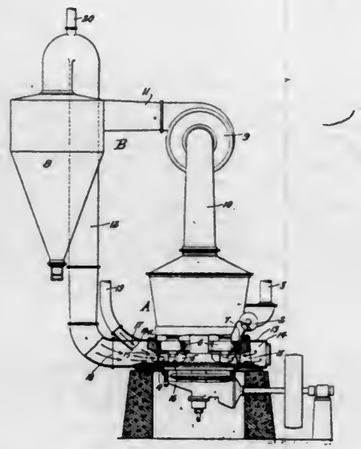
1. Mechanism for use in operating upon the breasts of heels comprising means for forming a relatively narrow groove in the breast of a heel, and work-gaging means arranged to engage the side of the heel for determining the widthwise location of the groove.

1,760,147. METHOD OF MAKING COVERED HEELS. JOHN T. KERSHAW, Haverhill, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Original application filed Aug. 31, 1927, Serial No. 216,682. Divided and this application filed Apr. 18, 1929. Serial No. 356,214. 10 Claims. (Cl. 12—147.)



1. That improvement in methods of preparing the breasts of heels for the reception of paneled breast coverings which consists in forming a groove along each lateral margin of the breast of a heel to define the lateral edges of a panel, and thereafter widening the grooves in directions toward the middle of the heel breast.

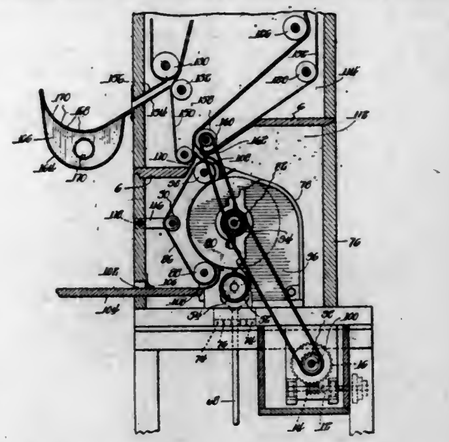
1,760,148. ART OF DRYING COAL IN THE MILL. HENRY KREISINGER, Piermont, N. Y., assignor to International Combustion Engineering Corporation, New York, N. Y., a Corporation of Delaware. Filed Aug. 11, 1928. Serial No. 299,091. 8 Claims. (Cl. 83—45.)



1. In a pulverizing mill of the gas lift type, the combination of the mill casing and its grinding parts, with means for supplying a lifting current of relatively cool gas, and means for supplying a lifting current of relatively hot gas, said two means being so relatively disposed that the cool gas is interposed between the hot gas and those parts of the mill in which there is a collection of relatively stationary material.

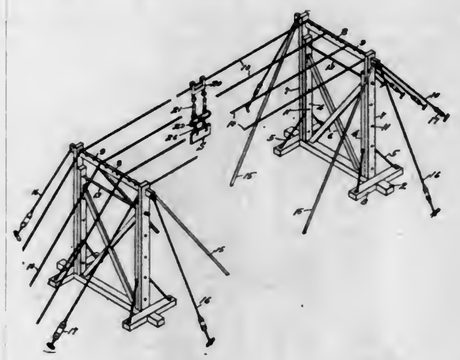
1,760,149. DEVELOPING APPARATUS WITH TUBULAR GAS DISCHARGE. ADOLPH LANGSNER, Chicago, Ill., assignor to Eugene Dietzgen Company, Chicago, Ill., a Corporation of Delaware. Filed Jan. 13, 1928. Serial No. 246,460. 10 Claims. (Cl. 95—94.)

1. In developing apparatus for light sensitive material, the combination of an enclosing cabinet forming a developing chamber, means in said chamber for feeding light sensitive material therethrough, and a tubular valve located in said chamber and connected to a source of ammonia gas, said valve being constructed and arranged to discharge a sheet of ammonia gas directly into contact



with the feeding means, and said feeding means having a porous surface to occlude the gases and to bring such occluded gases into contact with the sensitive side of the light sensitive material.

1,760,150. MULTICABLE, EXTENSION HOIST CONVEYER. JOHN D. LAWRENCE, San Diego, Calif. Filed Mar. 8, 1928. Serial No. 260,228. 1 Claim. (Cl. 104—126.)

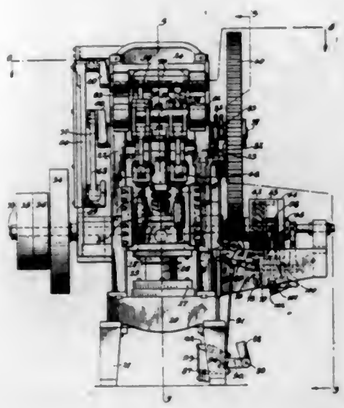


A hoisting and transporting cableway system, having, in combination, spaced sills each with a pair of braced posts, header beams above respective pairs of posts and having standards adjustable along and secured against adjacent posts, a cable mounted on spaced headers, a traveller operative along the cable, and a top cross-brace shaft for the side standards and being adjustable therewith, and a guide pulley, for a traveller line, supported on the said shaft.

1,760,151. BLANK-HOLDING AND CLUTCH-OPERATING MECHANISM FOR PRESSES. BROR J. LINDGREN, Buffalo, N. Y., assignor to Niagara Machine & Tool Works, Buffalo, N. Y., a Corporation of New York. Filed Aug. 24, 1926. Serial No. 131,221. 3 Claims. (Cl. 113—38.)

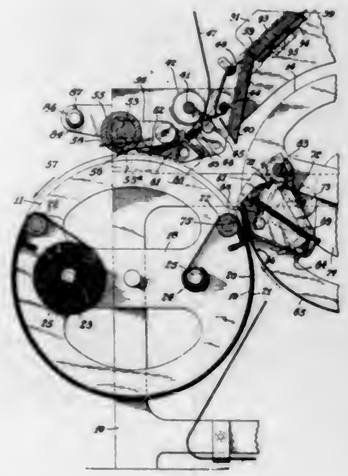
1. A press comprising a holding die slide, front and rear rock shafts each having lower rock arms and an

upper rock arm, links connecting the lower arms of said lower shafts with said holding die slide, front and rear upper rock shafts arranged above said front and rear lower shafts and each having a lower rock arm and an upper rock arm, a link connecting the lower arm of said



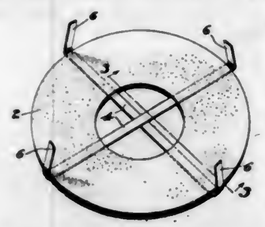
front upper rock shaft with the upper arm of said lower rear rock shaft and another link connecting the lower arm of the upper rear rock shaft with the upper arm of the lower front rock shaft, and means for actuating the upper arms of said upper rock shafts.

1,760,152. DUPLICATOR. HANS K. LORENTZEN, New York, N. Y. Filed Mar. 25, 1926. Serial No. 97,189. 11 Claims. (Cl. 101—132.)



1. In a rotary duplicator, an impression drum, automatic means for feeding a sheet of paper to said drum in timed relation to the movement of said drum, a feed roller, and a tiltable bed for moving the sheet of paper into contact with the feed roller.

1,760,153. DETACHABLE BASE FOR TELEPHONE TRANSMITTERS. MATTHEW LUCE, Jr., Brookline, Mass., assignor to Maurice Leavitt, Chelsea, Mass. Filed Jan. 14, 1929. Serial No. 332,249. 5 Claims. (Cl. 179—147.)



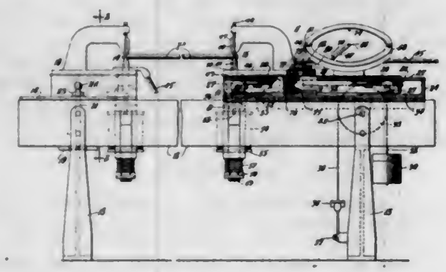
1. An article of the character described comprising a rubber mat constructed to support a telephone transmitter base, and metal parts embedded in said mat and having upwardly extending fingers to grip the edge of said base and thereby fasten said mat to said base.

1,760,154. GIRT CONSTRUCTION FOR COMPRESSION-TYPE DERRICKS. CHARLES W. LYNCH, Perry, Okla., assignor to Pickering Lumber Company, Kansas City, Mo., a Corporation of Delaware. Filed Aug. 18, 1926. Serial No. 129,876. 2 Claims. (Cl. 20—0.5.)



1. The combination of an upright composed of two members arranged in superposed endwise abutted relation and of rectangular cross sectional contour, a pair of right angle shaped brackets fitting flatwise against diagonally opposite corners and sides of and bridging the joint between said members, the arms of one bracket being engaged with and fastened to the opposing arms of the other bracket, girts abutted sidewise against the arms of the last-mentioned brackets and endwise against the respective arms of the other bracket, and bolts extending through the girts and the bracket arms in sidewise abutted relation with the girts.

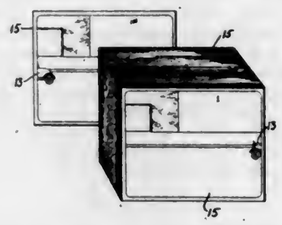
1,760,155. ELECTRIC HEATING APPARATUS. ANGUS S. MACDONALD, Great Neck, N. Y., CHARLES C. WAITE, Roselle Park, N. J., and E. MELVILLE HUGGINS, New York, N. Y., assignors to Snead & Company, Jersey City, N. J., a Corporation of New Jersey. Filed May 16, 1923. Serial No. 639,231. 10 Claims. (Cl. 219—11.)



1. Apparatus for heating by passage of current comprising horizontal ways; carriages thereon, one adjustable for differences in length of pieces to be treated and

the other movable to allow for expansion of such pieces; clamping heads insulatively mounted on said carriages open for sidewise introduction and removal of pieces, and provided with clamp jaws constructed to be heated by the current for heating the pieces, respectively adjustable for differences in size of pieces and movable up or down to hold or release them, with springs for opening the lower jaws and solenoids for closing them carried by said heads between said ways and with heating current leads and effective electrical connections between leads and lower jaws; means for exerting a pull on the piece through the movable carriage; means actuated by said movable carriage in response to expansion of the piece for determining the heating period; and means for shutting off the heating current, controlling return of the carriage, and deenergizing the solenoids to release the piece, in automatically determined sequence.

1,760,156. MOTION-PICTURE PHOTOGRAPHY. NED HERBERT MANN, Los Angeles, Calif. Filed June 18, 1927. Serial No. 199,763. 3 Claims. (Cl. 88—16.)



1. The method of producing composite motion pictures which consists in reproducing a given scene upon a series of cards, then photographing a figure in real action upon a motion picture film, reproducing each frame of said motion picture film upon a card on a scale to match with said scene, cutting out said action figure, then placing said action figure in the correct position on said scene cards, and then photographing said cards consecutively upon individual frames of a motion picture film.

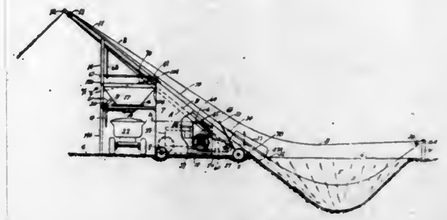
1,760,157. CHANGEABLE DISPLAY SIGN. GEORGE MARGOLIN, New York, N. Y., assignor to Olaf Ussing, East Rockaway, N. Y. Filed Mar. 31, 1928. Serial No. 266,407. 17 Claims. (Cl. 40—87.)



1. In a device of the class described, the combination with a main frame, of a plurality of individual unit frames detachably carried thereby, arranged in longitudinal series, each unit frame carrying two reels and a sign displaying web mounted upon said reels, adapted to be wound upon one of said reels and unwound from the other in one or the other direction, said unit frames being arranged side by side, so as to cause said webs to travel transversely of their serial arrangement, the reels of each frame being operable independently of the reels of the others.

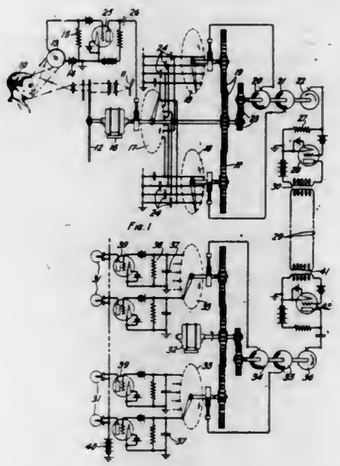
1,760,158. GRAVEL-LOADING DEVICE. HARRY M. MARTENSON and FRED W. PETERSON, White Rock, Minn. Filed July 16, 1926. Serial No. 122,804. 1 Claim. (Cl. 214—100.)

In a portable gravel handling device of the class described, a housing with an inclined top extending approximately to the ground level, a skeletoned extension frame normally in common plane with and from the top of said sloping top and having adjustable supports and a hopper under the said extension frame, two cables, cable handling means mounted within said housing, a gravel bucket adapted to be drawn by one of said cables from a point rearward of said housing and up the sloping top thereof and onto said grate, the other cable connected to said bucket and adapted to draw it rearwardly from the



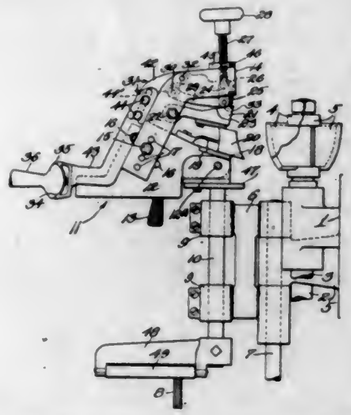
grate; a source of power within said housing including cable drums operatively connected with said cables, and power control means operatively connected with said source of power and the cable operating means, a floor in said housing, said housing open forwardly to receive a tractor adapted to be backed therein on said floor, means holding the axle housings of the tractor in fixed position on said floor, and means operatively connecting said tractor with the cable drums substantially as shown and described.

1,760,159. ELECTROOPTICAL IMAGE PRODUCTION. ROBERT C. MATHES, Wyoming, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed July 24, 1928. Serial No. 295,058. 11 Claims. (Cl. 178—6.)



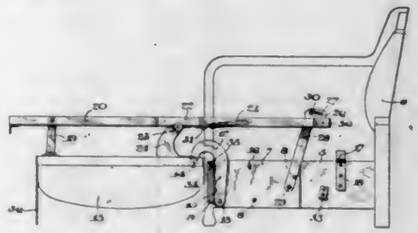
1. In an electro-optical image producing system, means for periodically scanning a field of view, image producing apparatus, and means for actuating said image producing apparatus to produce an image of said field of view made up of line series of elemental areas set up in the same order from one side of the image field to the opposite side during each full scanning period, which elemental areas occupy positions for each period different than for the preceding and following periods with respect to the image field as a whole.

1,760,160. HEEL-ROUNDING MACHINE. JAMES A. MCNEILL, Bradford, Mass. Filed Oct. 10, 1928. Serial No. 311,625. 6 Claims. (Cl. 12—87.)



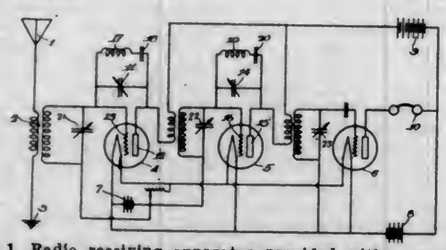
1. A machine of the character described provided with a jack having, in combination, a vertically disposed and vertically movable pivotal spindle; a jack body pivotally connected with the upper end portion of said spindle and provided with a seat for a heel blank; a blank clamping jaw movably supported by said body in a position above said seat; a jaw-operating hand lever pivotally supported by said body to swing on a horizontal axis and utilized by the operator to move the jack laterally; means through which said lever acts to operate said movable jaw when it is swung manually on its pivot, and means on said body positively engaging the handle end portion of said hand lever when the latter occupies blank clamping position so as to hold said handle end portion against lateral movement relatively to the body when utilized by the operator to move the jack laterally.

1,760,161. BED DAVENPORT. CHARLES W. MEYES, Sheboygan, Wis., assignor to Sheboygan Couch Company, Sheboygan, Wis., a Corporation of Wisconsin. Filed Apr. 30, 1923. Serial No. 635,579. 9 Claims. (Cl. 5—34.)



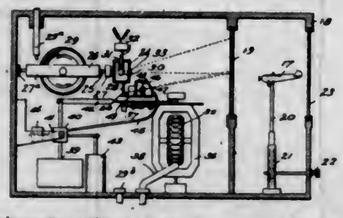
7. In a bed davenport, the combination, with end frames and a fixed front rail extending therebetween, of a pair of seat-supporting arms pivotally mounted behind the front rail for limited angular displacement and each having a forwardly projecting upper end adapted to just clear the upper edge of said rail without substantial change in elevation, a seat member pivotally mounted at its bottom on the projecting upper ends of said arms and in its seat-forming position having its forward lower edge extending close to the upper edge of said fixed front rail, said seat member being invertible about its pivotal mountings when said arms are swung forwardly, and a bed member having an articulated connection with said seat member and with said end frames and movable to elevated bed-forming position on the inversion of said seat member.

1,760,162. RADIO TUNING MEANS. BYRON B. MINNIUM, Chicago, Ill., assignor, by mesne assignments, to Story & Clark Radio Corp., Chicago, Ill., a Corporation of Delaware. Filed Oct. 27, 1924. Serial No. 745,985. 7 Claims. (Cl. 179—171.)



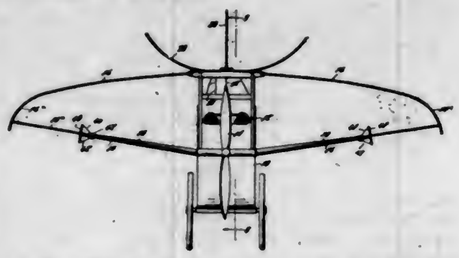
1. Radio receiving apparatus provided with a vacuum tube having a plate and a grid and a filament, having adjustable tuning means providing one and the same shunt path of fixed resistance for all frequencies or wave lengths to permit feed back connected in shunt of said plate and grid, the input circuit of the tube including the secondary of a transformer, and adjustable capacity in shunt of said transformer secondary, adjustable relatively to and independently of said adjustable tuning means, one side of said capacity being connected to one terminal of said filament, and the other side of said capacity being connected to said grid, whereby the input circuit of said tube, may be tuned by said capacity for different frequencies or wave lengths, and such tuning may be improved by said first mentioned tuning means.

1,760,163. FLIGHT-ATITUDE INDICATOR. WILLIAM C. MORRIS, Langley Field, Va. Filed Jan. 14, 1929. Serial No. 332,508. 16 Claims. (Cl. 33—204.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928, 370 O. G. 757.)



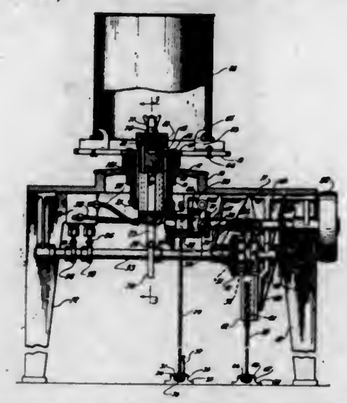
1. An aircraft attitude indicator comprising a ground plane representation, a representation of the longitudinal and lateral axes of an aircraft in a position for visual comparision with the ground plane representation, and means for adjusting the aircraft axes representation with respect to the ground plane representation in a direction to simulate the effect of changes in altitude.

1,760,164. AEROPLANE. CURTIS R. MORRISON, Marshfield, Oreg. Filed Nov. 18, 1927. Serial No. 234,240. 2 Claims. (Cl. 244—12.)



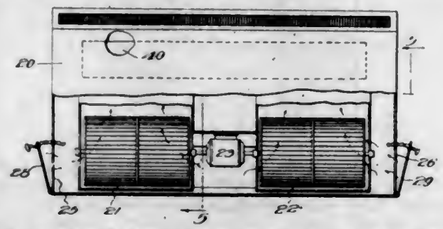
1. An aeroplane comprising a fuselage provided with a straight top, flat sides and a rounded bottom, the bottom being rounded longitudinally of the fuselage to a degree whereby the depth of the fuselage is approximately half of the length thereof, an upper plane including wings extending from the opposite sides of the top of the fuselage and curving downwardly, downturned outer ends formed with the wings and together with the top of the fuselage providing a substantially oval shape configuration, lower wings extending from the opposite sides of the fuselage between the upper and lower ends thereof and terminating inwardly of the ends of the upper wings to provide pockets, struts connecting the lower wings with the upper wings and extending from the fuselage, ailerons carried by the lower wings and disposed for movement in the pockets, a two part rudder with one part mounted for movement in a cut-away portion formed in the fuselage, fins formed with the other part, said rudder being capable of movement on a vertical and a horizontal axis, and means for moving said rudder accordingly and simultaneously with the ailerons.

1,760,165. CAN-SPRAYING MACHINE. EDWARD C. MUELLER, Toledo, Ohio, assignor to American Can Company, New York, N. Y., a Corporation of New Jersey. Filed Aug. 25, 1925. Serial No. 52,335. 13 Claims. (Cl. 91—45.)



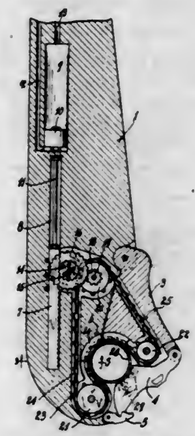
1. Apparatus for coating containers, comprising a rotatable element for supporting the can, a power shaft operatively connected with said element to rotate the same, spraying mechanism having a spray element positioned substantially within the can when the latter is in place and movable to spray the entire interior of the can as the same is rotated, a rack and pinion for so moving the spray element, valve mechanism for controlling the supply of spraying material to said spraying mechanism, a cam shaft operatively connected with said power shaft and having cams thereon for automatically operating said valve mechanism, and manually controllable clutches adapted, respectively, to connect said rotatable element and said cam shaft to the power.

1,760,166. UNIT VENTILATOR. HARRY W. PAGE, Wauwatosa, Wis. Filed Oct. 21, 1927. Serial No. 227,850. 4 Claims. (Cl. 257—137.)



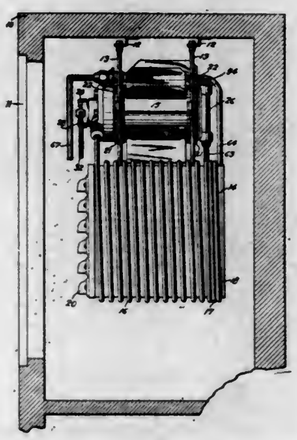
4. In an air heating and circulating unit, a casing having an outlet and separate inlets for room air and outside air, air heating means in the casing, blower means in the casing in position to drive air past said heating means and through said outlet, and means to prevent mingling of the incoming room air and the incoming outside air until after they reach said blower means.

1,760,167. SPINNING TONGS. JOHN B. PALMER, Long Beach, Calif. Filed Aug. 9, 1929. Serial No. 384,637. 4 Claims. (Cl. 81—57.)



1. A spinning tongs comprising a body, a pair of sprockets mounted in the body, a jaw pivotally secured to the body, said body having a pipe receiving recess therein, a gate pivoted to the jaw and latched to the body, said gate closing said pipe receiving recess, a third sprocket mounted in the jaw, a chain encircling all of said sprockets, so that the third sprocket may loop said chain about the work in the recess pipe engaging means on the chain and a driving means engaging one of said sprockets whereby the chain is rotated to spin the pipe.

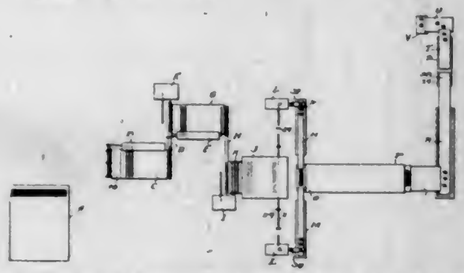
1,760,168. REFRIGERATION. FRANK DESNOYERS PELTIER, Evansville, Ind., assignor, by mesne assignments, to Servel, Inc., New York, N. Y., a Corporation of Delaware. Filed Feb. 26, 1927. Serial No. 171,112. 14 Claims. (Cl. 62—95.)



1. An evaporator for refrigeration comprising a box-like frame adapted to receive ice trays, a header above said

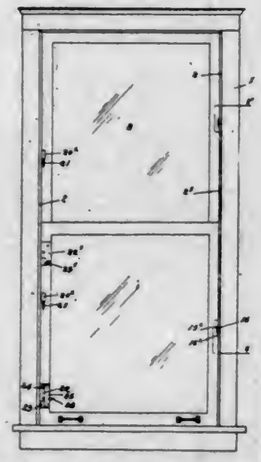
frame, evaporator tubing extending around said frame and connected to said header, said tubing comprising two sections, one section being arranged in heat exchange relation with substantially the greater portion of said frame and the other section being arranged in heat exchange relation with a relatively small portion of said frame and means to pass refrigerant first through the tubing in heat exchange relation with substantially the greater portion of said frame, thence into the header and therefrom through tubing arranged in heat exchange relation with a relatively small portion of the frame, said last mentioned tubing communicating with the upper part of said header.

1,760,169. PROCESS OF MANUFACTURING SPRINGS. ARTHUR S. PHELPS, Buffalo, N. Y., assignor to Pratt & Letchworth Company, Buffalo, N. Y., a Corporation of Ohio. Filed Nov. 5, 1928. Serial No. 317,135. 10 Claims. (Cl. 29—173.)



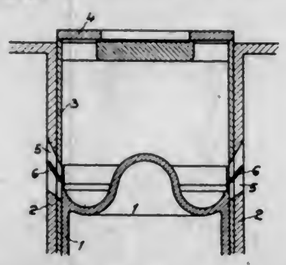
1. The herein described process of manufacturing springs which includes: successively conveying through a furnace a plurality of pieces of the stock, with the pieces arranged transverse to the line of bodily movement of the pieces and heating one set of ends of the pieces; successively conveying the pieces of stock endwise to an operating station as the pieces successively leave the furnace; forming the heated ends of the pieces at said station; then successively conveying through another furnace the pieces of stock with the pieces arranged transverse to the line of bodily movement of the pieces and heating the other set of ends of the pieces; and successively conveying the pieces of stock endwise to a second operating station as the pieces successively leave the second furnace.

1,760,170. WINDOW. JAMES R. ROY, Winnipeg, Manitoba, Canada. Filed June 18, 1928. Serial No. 286,255. 3 Claims. (Cl 20—46.)



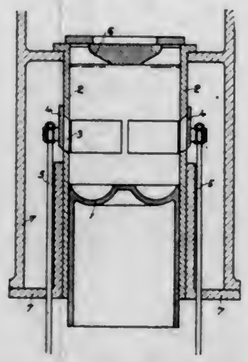
1. The combination with a window frame, of vertically extending battens and parting strips secured to the sides of the frame and forming vertical guideways and having centrally located removable sections at one side of the frame, upper and lower sashes slidably mounted in the guideways, rack bars secured to the sashes and located in pairs at opposite sides of the parting strips, pinions rotatably carried by the parting strips and engageable with the pairs of rack bars aforesaid, said pinions being located centrally of the frame and one of said pinions being removable with the removable parting strip section and said removed parting strip and batten sections permitting of the inswinging of the sashes upon the sashes being brought to a central position in respect to the frame and engaging hinge sections carried by the frame and the sashes, said hinge sections becoming engaged when the sashes are brought to a central position within the frame and being adapted to support the sashes when swung inwardly as aforesaid.

1,760,171. PUMP AND COMPRESSOR. KURT SCHOENE, Hamburg, Germany. Filed Apr. 5, 1928, Serial No. 267,671, and in Germany Apr. 14, 1927. 5 Claims. (Cl. 230—179.)



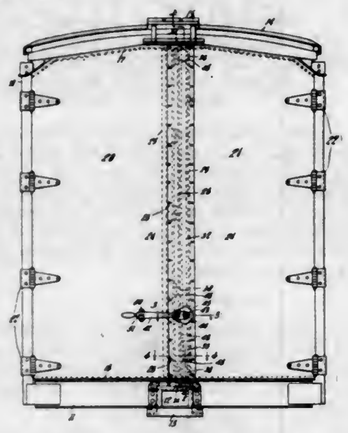
1. In a pump or compressor, the combination of a cylinder and a piston, the cylinder having in its wall at least one inlet port which is overtraveled and opened by the piston as the latter moves through its suction stroke, said port being arranged to direct the entering fluid obliquely inward and in the direction of such stroke of the piston, and the piston being formed with curved deflecting surfaces in the path of such entering fluid arranged to apply usefully to the piston the kinetic energy of the entering fluid.

1,760,172. VALVE GEAR FOR PUMPS AND COMPRESSORS. KURT SCHOENE, Hamburg, Germany. Filed Apr. 5, 1928, Serial No. 267,672, and in Germany Apr. 28, 1927. 5 Claims. (Cl. 230—202.)



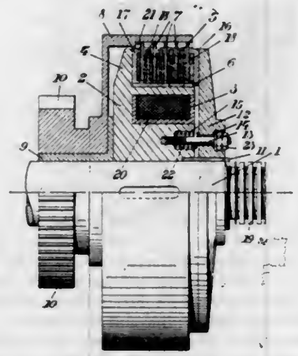
1. In a pump or compressor, the combination of a cylinder and a piston, the cylinder having in its wall at least one inlet port which is overtraveled and opened by the piston as the latter moves through its suction stroke, said port being arranged to direct the entering fluid obliquely inward and in the direction of such motion of the piston, and the piston being formed with curved deflecting surfaces in the path of such entering fluid arranged to apply usefully to the piston the energy of the entering fluid; and a valve controlling said port independently of the piston and arranged to close against back flow while said port remains opened by the piston on its discharge stroke.

1,760,173. END-DOOR CONSTRUCTION FOR RAILWAY CARS AND LOCKING MEANS THEREFOR. ERNEST R. SCHULZ, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed May 31, 1928. Serial No. 281,727. 5 Claims. (Cl. 189—46.)



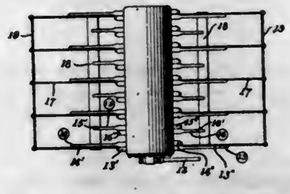
1. In a door construction for railway cars, the combination with a door hinged to the car body, said door being reinforced along the vertical free edge thereof by a pair of beams, each having parallel flange portions connected by a web, said flange portions and web together defining a channel, the flanges of the beams being arranged parallel and edge to edge engagement and the channels defining a vertically disposed chamber; of locking means mounted in said chamber and cooperating with keeper means mounted on the car body for locking the door in closed relation.

1,760,174. ELECTROMAGNETICALLY-OPERATED FRICTION COUPLING. PAUL SCHÜNEMANN, Eisenach, Germany, assignor to Magnet-Werk G. m. b. H. Eisenach Spezialfabrik für Elektromagnet-Apparate, Eisenach, Germany. Filed Mar. 3, 1927, Serial No. 172,539, and in Germany Jan. 28, 1927. 4 Claims. (Cl. 192—84.)



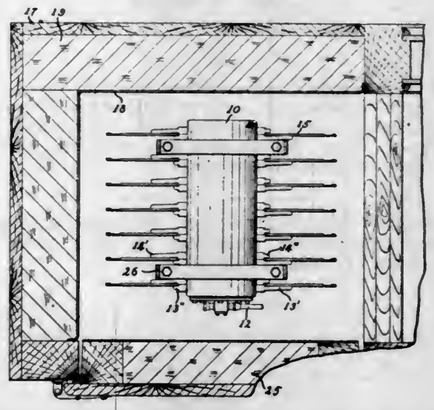
1. An electromagnetically operated friction coupling, comprising a shaft, two coupling members, one fixed to said shaft, two groups of discs mounted one on each of said coupling members, a magnet-winding within said coupling member and slip rings connected therewith, a single disc-shaped armature located at the end of said coupling member bearing said magnet winding and at the side opposite to the other coupling member, said armature being shiftable on a projection of the coupling member bearing the magnet winding, the diameter of said projection being larger than that of the slip rings.

1,760,175. REFRIGERATING APPARATUS. SYLVESTER M. SCHWELLER, Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation, a Corporation of Delaware. Filed Oct. 26, 1927. Serial No. 228,918. 14 Claims. (Cl. 62—95.)



9. A cooling unit for mechanical refrigerators comprising a plurality of sets of ducts, each of said sets including at least three vertically extending legs, a fin for each of said sets thermally connected with at least three of said legs, and ducts without fins interposed between and spaced from the finned sets.

1,760,176. REFRIGERATING APPARATUS. SYLVESTER M. SCHWELLER, Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation, a Corporation of Delaware. Filed Oct. 26, 1927. Serial No. 228,919. 11 Claims. (Cl. 62—75.)

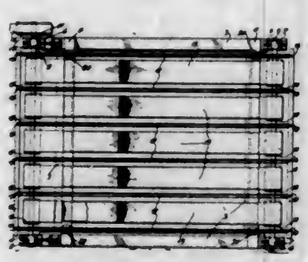


1. A cooling unit adapted to be placed in the path of cooling medium flowing thereover for cooling such medium, said unit including a heat absorbing plate or fin and refrigerant conduit means having a plurality of downwardly extending branch portions each thermally connected to one surface of the plate and conduit means thermally connected to the opposite surface of the plate.

1,760,177. PAPER-FEEDING RACK. STEWART SCOTT, Jr., Ferguson, Mo. Filed May 16, 1928. Serial No. 278,177. 8 Claims. (Cl. 271—61.)

1. An apparatus of the class described comprising a main frame, and a plurality of spaced belts supported

in the top of said frame, in combination with a portable supporting frame for a stack of paper comprising spaced longitudinal members arranged to seat between said belts



and to be retained by the main frame below the surface of the belts, and means for moving said belts in unison whereby said stack of paper is moved forwardly in alinement.

1,760,178. WESTON STANDARD CELL. LOUIS J. SEITZ, Jr., Elizabeth, N. J., assignor to Weston Electrical Instrument Corporation, Newark, N. J., a Corporation of New Jersey. Filed Oct. 8, 1928. Serial No. 310,169. 6 Claims. (Cl. 136—88.)



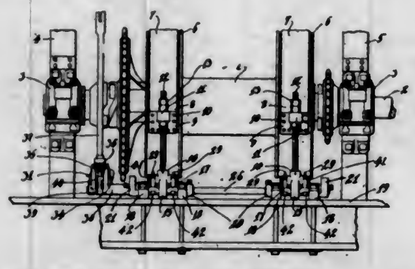
1. In a standard cell of the Weston type, having an electrode consisting of mercury, a depolarizer of mercurous sulphate and a metal terminal in contact with said electrode, means for excluding the mercurous sulphate from the vicinity of said terminal.

1,760,179. VINE PROTECTOR. BOTSFORD S. SMITH, Fort Fairfield, Me. Filed Mar. 18, 1929. Serial No. 347,968. 1 Claim. (Cl. 97—192.)



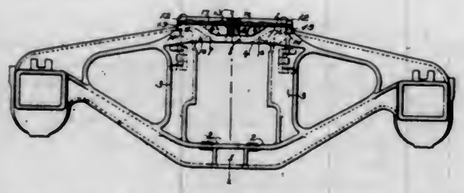
A vine deflecting attachment for a wheeled implement, comprising three metal rods, two of which are disposed horizontally to straddle a wheel while the third rod is vertically disposed for attachment to a frame part, the front ends of the horizontal rods being bent toward each other and extended forwardly and the lower end of the vertical rod being bent forwardly, the three forwardly extending rod ends being integrally secured to each other to provide an elongated vine separating nose, the rear ends of said horizontal rods being provided with eyes to surround a wheel-carrying spindle.

1,760,180. DIFFERENTIAL AND STRAIGHT BRAKE EQUALIZER FOR ROTARY DRAW WORKS. JOHN D. SPALDING, Crafton, Pa., and DAVID S. FAULKNER, Los Angeles, Calif., assignors to The National Supply Company of Delaware, New York, N. Y., a Corporation of Delaware. Filed July 12, 1926. Serial No. 121,811. 8 Claims. (Cl. 188—204.)



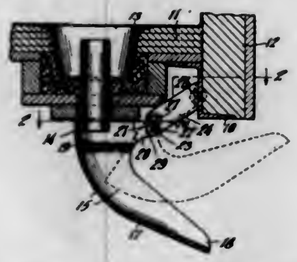
1. In a draw works brake, the combination of a pair of spaced brake rims, brake bands mounted on the said rims, actuating means secured to the live ends of said brake bands, differential actuating means secured to the dead ends of the said brake bands, means for equalizing the said brake actuating means, and means adapted to be connected with the dead end brake band actuating means for rendering the same inoperative.

1,760,181. SIDE FRAME. HARRY W. STERTZBACH and JOHN S. MCPHERSON, Columbus, Ohio, assignors to The Buckeye Steel Castings Company, Columbus, Ohio. Filed Aug. 11, 1928. Serial No. 299,000. 12 Claims. (Cl. 105—199.)



1. The combination of a side frame and a ribbed supporting block rigidly secured upon the top of the side frame compression member, and having a substantially flat upper surface for sustaining downward loads.

1,760,182. REFRIGERATOR CAR. WALTER C. STONE, Webster Groves, Mo. Filed Oct. 28, 1927. Serial No. 229,355. 6 Claims. (Cl. 137—111.)



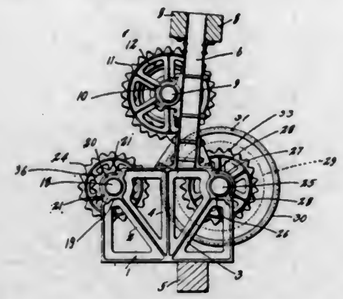
2. In a refrigerator car having a drain pipe with the discharge end thereof located inwardly of the side wall of the car; an extension drain spout disposed beneath the lower end of said drain pipe and arranged to catch the drippings therefrom, said spout being pivotally mounted on the car body independently of said drain pipe to permit the same to be moved to an out of the way position with respect to said drain pipe to permit cleaning of the latter.

1,760,183. AIR INDUCER AND PREHEATER FOR FURNACES. EDWIN H. SWIFT, Brooklyn, N. Y. Filed Oct. 26, 1926. Serial No. 144,299. 3 Claims. (Cl. 110—75.)



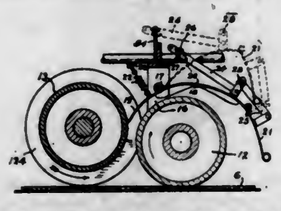
1. In an air inducer and pre-heater the combination of an air induction tube, a heating coil detachably located in the tube, said coil comprising a plurality of lengths of coils, a core for each length of coil, a series of loops extending from each core following each other in a helical path, the ends of the core of each length of coil welded together and threaded and a coupling connecting the threaded ends of the cores, said couplings enabling the lengths of the core to be replaced.

1,760,184. TWO-POST, THREE-SPEED, THREE-SHAFT LARGE-DRUM DRAW WORKS. EDWARD TIMBS, Los Angeles, Calif., assignor to The National Supply Company of Delaware, New York, N. Y., a Corporation of Delaware. Filed Aug. 15, 1927. Serial No. 212,966. 9 Claims. (Cl. 254—187.)



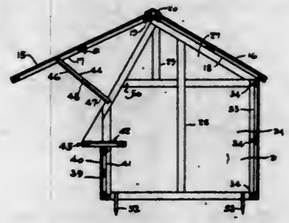
1. In a rotary drawworks, the combination of a pair of base frame members, posts supported on the base frame members, means for rotatably supporting a drive shaft on the posts between the ends thereof, a drum shaft, a counter-shaft, and means for supporting the drum shaft and counter-shaft on the base frame members respectively on opposite sides of the drive shaft.

1,760,185. DOUGH BRAKE. FORREST MASON ALDRICH and CARL L. HANSEN, Seattle, Wash. Filed Sept. 13, 1927. Serial No. 219,311. 9 Claims. (Cl. 107—9.)



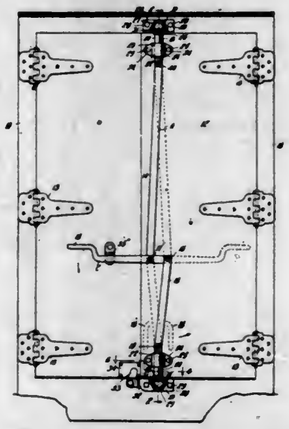
1. A machine of the character described, embodying an endless conveyor belt; longitudinally disposed partitions mounted immediately above said belt, which divide the top area of said belt into sections in which material to be operated upon may travel; a set of rolls in each section operatively disposed in spaced relation above said belt; a curler operatively mounted with respect to one of said rolls, whereby said material after being pressed into a sheet may be curled into a roll; material supporting means operatively disposed beneath and at each end of and in spaced relation to, said belt whereby said belt may cause said material to return to the feed end of said belt; and means to cause the material to be diverted into the sections successively, whereby the same material may be operated upon by the rolls in the different sections.

1,760,186. ADVERTISING STRUCTURE. DONALD JOHN BARKER, Cowansville, Quebec, Canada. Filed Sept. 10, 1927. Serial No. 218,646. 1 Claim. (Cl. 20—2.)



In a collapsible booth, end walls, back walls and counter base secured together by suitable clamps, a counter rigidly secured on said base and outwardly therefrom and a roof having a clamped rear section secured to the end and back walls and a hinged front section adapted to fold down to the counter and form with said counter base the front closure and to be elevated and form a shade.

1,760,187. REFRIGERATOR-CAR-DOOR FASTENER. ARILD M. BRENNE, Grand Rapids, Mich., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed Feb. 5, 1926. Serial No. 86,141. 8 Claims. (Cl. 268—72.)

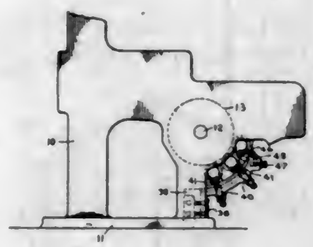


4. In a door operating mechanism of the character described, the combination with a member having a door opening and provided with a pivoted door, of a keeper fixed to the door frame adjacent the door opening; a rotatable operating member slidably mounted in said door and adapted to be projected into engagement with said keeper to effect closing movement of said door and arranged to be moved to a new position and projected into engagement with said keeper to effect opening movement of said door; and means for projecting and rotating said member.

1,760,188. ROLLER-SUPPORTING DEVICE. HARRY VINCENT BALL, Concord, Mass., assignor to R. Hoe and Co., Inc., New York, N. Y., a Corporation of New York. Filed Oct. 15, 1925. Serial No. 62,673. 1 Claim. (Cl. 101—349.)

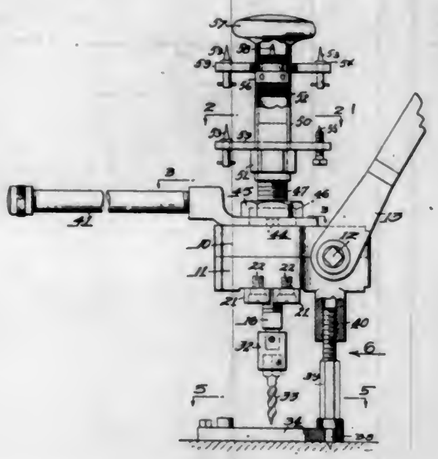
In a printing press, the combination with a supporting frame and an inking roller journaled therein; of means

mounted in said frame and adapted to adjustably support said inking roller, said means comprising a curved arm extending laterally and upwardly from a portion of the main supporting frame, said arm being provided with a



plurality of guideways, a rod slidably and adjustably mounted in each of said guideways, each of said rods bearing a roller adapted to bear against said inking roller, and means adapted to slide said rods in said guideways.

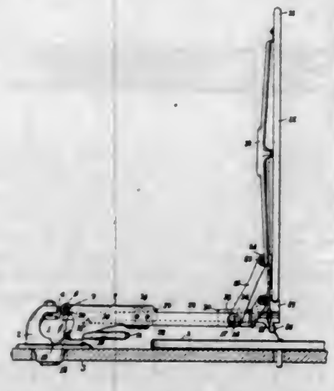
1,760,189. PORTABLE BORING MACHINE. JOHN J. BROSNAN, Worcester, Mass. Filed Jan. 10, 1929. Serial No. 331,483. 9 Claims. (Cl. 144—104.)



1. In a boring machine, the combination of a casing, a gear therein having a key, a screw-threaded shank having a key way for said key passing through the center of the gear, a pair of pivoted frames on said casing, each having a half nut for engaging the screw-threaded part of said shank, a lug on the casing, a screw having a knurled head and a conical interior surface carried by said lug, the two members of said nut frame having projections adapted to be engaged by said conical surface for forcing the nut frames together and a spring for normally forcing them apart.

1,760,190. TALKING MACHINE. HORACE LEOPOLD TUCKER BUCKLE, Iver Heath, England, assignor to Victor Talking Machine Company, Camden, N. J., a Corporation of New Jersey. Filed July 28, 1925, Serial No. 46,648, and in Great Britain Sept. 4, 1924. 15 Claims. (Cl. 181—31.)

11. A mounting of the class described comprising a horizontally swinging arm provided with bearing members, a rod longitudinally movable in said bearing members, a link pivoted to said arm, and a large sized diaphragm pivoted

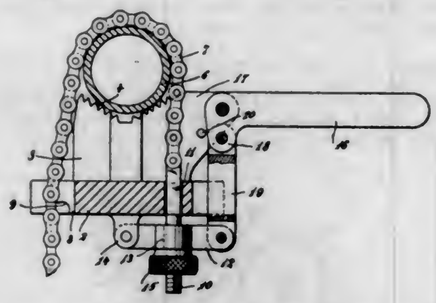


to said link and rod, said diaphragm being adapted to occupy a substantially vertical playing position and a substantially horizontal non-playing position.

1,760,191. METHOD OF TREATING CLAY. WINFRED G. BUCKLES, Parco, Wyo., assignor to Parco Development Company, Parco, Wyo., a Corporation of Delaware. Filed Apr. 27, 1928. Serial No. 273,435. 8 Claims. (Cl. 25—156.)

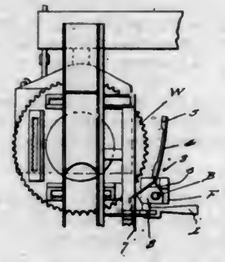
1. The herein described method of making a high refractory formed, in the main, of a crystalline material and a clay, which consists of storing said clay in finely divided form in that quantity of water necessary for the reduction to moldable condition of the whole mass for a period of time sufficient to permit microscopic penetration of the clay by the water, said quantity of water being sufficient to produce a flowable cream, and thereafter pugging said cream and the crystalline material together.

1,760,192. VISE. FRANCIS J. CARNELLI, Jamaica, N. Y. Filed Feb. 2, 1929. Serial No. 336,970. 1 Claim. (Cl. 81—19.)



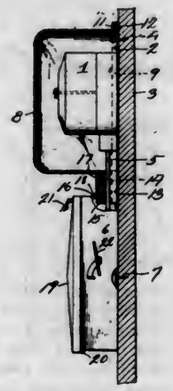
A pipe vise including a flat base plate, a pair of standards projecting upwardly from said base plate in spaced relation and having their top edges at their forward parts provided with synclinally arranged serrations, said serrations forming the fixed jaw of the vise, a pivot pin extending between the rear upper ends of said standards, a bell crank lever pivoted at its angle on said pin and having a long horizontal handle arm and a short vertical arm, lugs projecting downwardly from said base and alined with the centers of said jaws, a lever pivoted at one end between said lugs and having an enlarged central portion provided with a vertical opening, a link connecting the free end of the lever and the end of the short arm of the bell crank lever, said base having an opening alined above the opening in the second mentioned lever, said opening being disposed centrally between said standards, a chain engaging hook on the opposite side of the base from the opening and likewise disposed between said standards, a chain having its links selectively engageable on said hook and provided on its end with a bar having a portion passing through the opening in the base plate and substantially fitting the same and having a terminal threaded portion extending through the opening in the second mentioned lever, and an adjusting nut mounted on said threaded end and bearing against the underside of the second mentioned lever.

1,760,193. ANTISPLASH GUARD. DAVID A. CRAIG, Ludington, Mich., assignor of one-half to George H. D. Sutherland, Ludington, Mich. Filed Dec. 10, 1928. Serial No. 325,044. 1 Claim. (Cl. 199—53.)



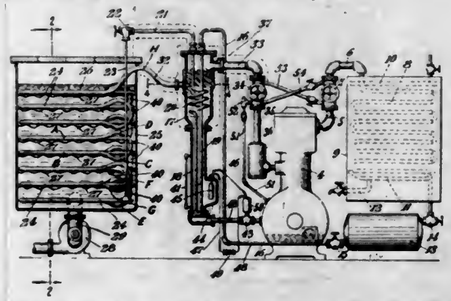
In a structure of the class described, in combination, a linotype machine including a frame having a mounting bracket thereon, a starting and stopping lever pivotally mounted on said bracket, and a mold wheel on the frame in close proximity to said bracket, and an anti-splash guard mounted on said bracket for cooperation with the periphery of the mold wheel, said guard being adapted to protect the hands and legs of the operator against injury and burns from overflowing and splashing molten metal from the metal pot on said machine and comprising a splash plate including an upper longitudinally bowed portion having a longitudinal flange on one edge, an intermediate portion disposed at a substantial obtuse angle to said upper portion and provided on its underside with an apertured attaching flange secured to said bracket, and a depending apron disposed at right angles to said intermediate portion and extending below said bracket.

1,760,194. METER PROTECTOR. JULIAN L. ESTORGE, New Orleans, La. Filed Apr. 27, 1926. Serial No. 104,947. 2 Claims. (Cl. 247—2.)



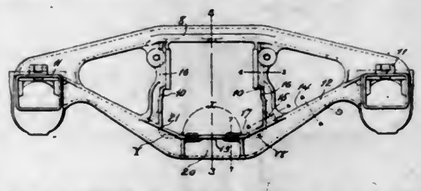
1. A switch box and meter housing comprising a plate on which said meter is mounted, a housing for said meter disposed on the plate, the upper end of said housing being provided with a flange, a flange carried by the upper end of the plate and overlying the housing flange, flanges carried by opposite sides of the plate and engaging opposite sides of the housing, an extension member carried by the plate and extending through the opening in the switch box, flanges carried by opposite sides of the extension plate, a hollow extension carried by the housing and disposed between the flanges of the extension plate and extending into the switch box through an opening therein, an edge of said opening being disposed in a groove of the housing extension.

1,760,195. REFRIGERATING SYSTEM. THOMAS M. GUNN, Brooklyn, N. Y., assignor of one-sixth to Gorham Crosby, Glen Ridge, N. J. Filed Jan. 29, 1924. Serial No. 689,209. 21 Claims. (Cl. 62—115.)



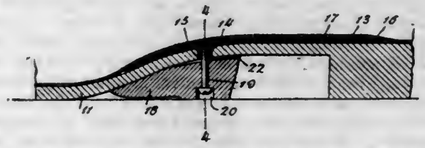
1. In the method of recovering lubricant from the refrigerant in a refrigerating system wherein the refrigerant is compressed and liquefied in one part of the system and is caused to vaporize in the refrigerating part of the system and the lubricant is soluble in the refrigerant, the step which consists in transferring heat from the compressed refrigerant to lubricant laden refrigerant leaving the refrigerating part of the system to distill the refrigerant from the lubricant.

1,760,196. CAR TRUCK. MERRITT R. HANSEN, Columbus, Ohio, assignor to The Buckeye Steel Castings Company, Columbus, Ohio. Filed July 23, 1929. Serial No. 380,363. 10 Claims. (Cl. 105—205.)



1. In a car truck side frame, a tension member having an inclined transverse web, and a bolster opening column having a transverse web merging into the web of the tension member.

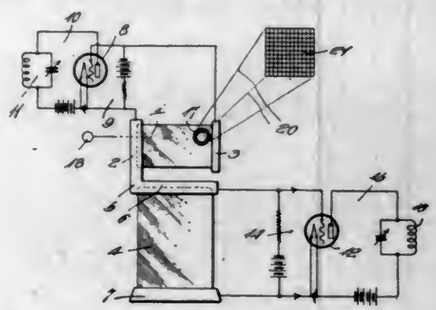
1,760,197. SHOE. MORRIS HIRSHFIELD, Brooklyn, N. Y. Filed Nov. 5, 1926, Serial No. 146,339. Renewed Aug. 27, 1929. 8 Claims. (Cl. 36—76.)



1. In a shoe, the combination of a metallic plate shaped to conform to the shape of the foot and lying upon the in-

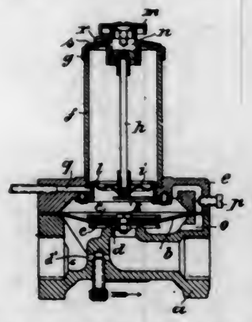
side of the sole toward the inside of the shoe, a yielding member upon the outside of the sole projecting downwardly therefrom in registry with the arch of the shoe into engagement with the surface upon which the shoe stands, said member tapering along curved lines toward the inside of said shoe and lying substantially flush with and merging into the tread surface of the sole thereof, a fastening screw passing through said sole for connecting the yielding member with said plate, and a layer of yielding material covering said plate upon the inside of the shoe.

1,760,198. TELEVISION APPARATUS. CLINTON W. HOUGH, Boonville, N. Y., assignor, by mesne assignments, to Federal Telegraph Company, a Corporation of California. Filed Aug. 13, 1927. Serial No. 212,762. 5 Claims. (Cl. 178—6.)



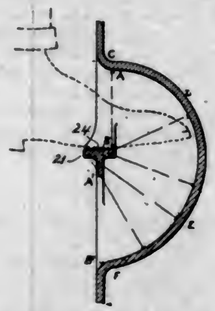
1. A scanning system comprising a plurality of piezo electric crystal elements, one of said piezo electric crystal elements being arranged for vibration along a vertical axis and the other of said piezo electric crystal elements being arranged for vibration along a horizontal axis, means intermediate said piezo electric crystal elements, and means controlled by said last mentioned piezo electric crystal element for directing a beam of light over a predetermined area.

1,760,199. THERMOSTATIC REGULATOR VALVE. FRIEDRICH JANSSEN, Osnabruck, Germany, assignor to G. Kromschröder Aktiengesellschaft, Osnabruck, Germany, a Company of Germany. Filed Oct. 25, 1926, Serial No. 144,063, and in Germany Oct. 28, 1925. 2 Claims. (Cl. 236—80.)



1. In mechanism for regulating fluid flow, the combination with a casing having a fluid inlet and outlet and a connecting passage therebetween, of a pressure operated valve for controlling said passage, said valve being subjected on one side to said controlled fluid, a by-pass for fluid to the other side of said valve, means for throttling said by-pass, and means for controlling the pressure of said by-passed fluid, said means comprising an auxiliary valve and a thermostat directly connected thereto, said pressure operated valve, auxiliary valve and thermostat being coaxially disposed.

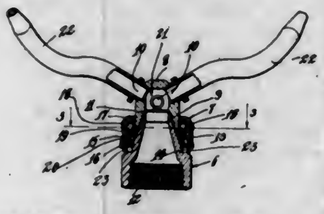
1,760,200. STEP FOR FREIGHT CARS. GEORGE E. LARGE, Columbus, Ohio, assignor to The Buckeye Steel Castings Company, Columbus, Ohio. Filed Feb. 21, 1929. Serial No. 341,717. 13 Claims. (Cl. 105—443.)



1. An inside step for freight cars or the like, including a hollow dome-shaped member having a mouth, and a bridge extending across the mouth between the top and bottom of the latter.

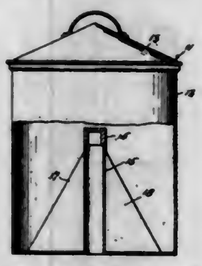
2. An inside step for cars or the like, including a dome-shaped member forming a pocket, and a bridge extending horizontally across the mouth of the pocket.

1,760,201. SPRINKLER HEAD. WALTER G. MACOMBER, Los Angeles, Calif. Filed Mar. 13, 1928. Serial No. 261,256. 5 Claims. (Cl. 299—69.)



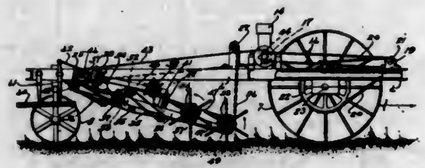
1. A sprinkler head comprising a nozzle member, a bearing mounted on the nozzle member, and a hollow ported cap extending through and rotating in the bearing and enclosing the discharge end of the nozzle member, the nozzle member provided with an open port below the bearing to drain off liquid that leaks between the nozzle and cap.

1,760,202. WASHING-MACHINE APPLIANCE. NANNIE E. MAEDGEN, Troy, Tex. Filed Mar. 9, 1929. Serial No. 345,734. 1 Claim. (Cl. 259—51.)



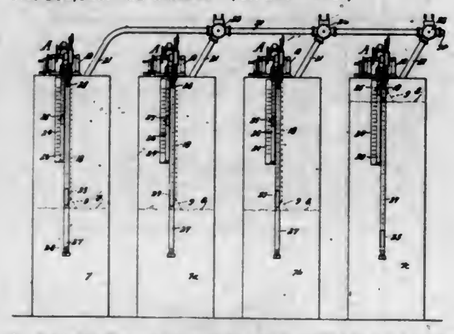
An attachment of the character described comprising a container, means mounted axially on and extending into said container for coupling the same to an operating shaft, agitating baffles extending inwardly from the walls of the container to a point remote from the coupling means, and agitating baffles extending outwardly from the coupling means to a point remote from the cylinder walls, and in overlapping relation to the first mentioned baffle.

1,760,203. QUACK-GRASS DIGGER. KARL H. MENKE, Owatonna, Minn. Filed Mar. 12, 1928. Serial No. 261,021. 5 Claims. (Cl. 97—10.)



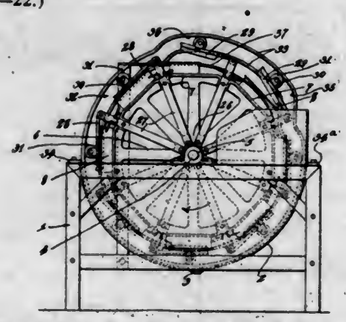
4. In a machine of the class described, the combination of the truck, of front and rear toothed cylinders journaled on a part carried by the truck, front and rear elevators mounted on a part carried by the truck rearward of the cylinders, a hurdle working between said two elevators, and a beater working over each elevator.

1,760,204. BIN INDICATOR. HARVEY CLARENCE MITTENDORF, East Orange, N. J., assignor to International Combustion Engineering Corporation, New York, N. Y., a Corporation of Delaware. Filed Sept. 10, 1928. Serial No. 304,848. 22 Claims. (Cl. 116—118.)



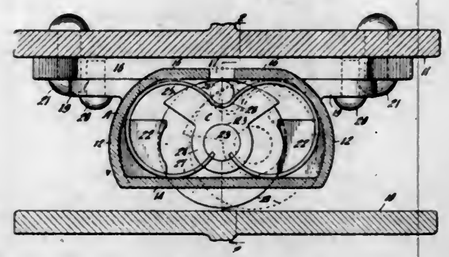
1. A bin indicator comprising in combination a revoluble drum having a line connected thereto from which a cone is suspended, said cone being adapted to rest on the surface of the material in the bin, another line connected to said drum from which a counterweight is suspended, the relative effect of the cone and counterweight being such that the drum will revolve under influence of the weight of the cone when the cone is free and will revolve under influence of the weight of the counterweight when there is slack in the line of the cone, means for locking and unlocking said drum, means for arching the cone line to move the cone when the drum is locked and an indicator associated with a moving part.

1,760,205. DRAINER. WESLEY A. MULLER, Monterey, Calif., assignor to California Packing Corporation, San Francisco, Calif., a Corporation of New York. Filed Sept. 17, 1928. Serial No. 306,606. 9 Claims. (Cl. 226—22.)



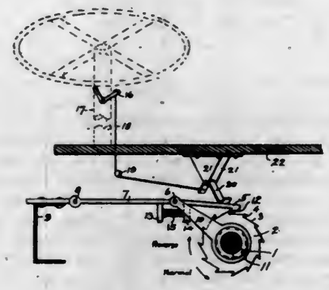
3. In a device of the class described, the combination of a conveyor, means for feeding filled cans on to the conveyor, means adapted to enter the cans for compressing the contents of the cans within the cans on the conveyor, and means for inverting the filled cans with the contents thereof compressed to drain the cans.

1,760,206. ANTIFRICTION ROLLER SIDE BEARING. JOHN F. O'CONNOR, Chicago, Ill., assignor, by mesne assignments, to W. H. Miner, Inc., a Corporation of Delaware. Filed Apr. 3, 1924. Serial No. 703,901. 6 Claims. (Cl. 308—226.)



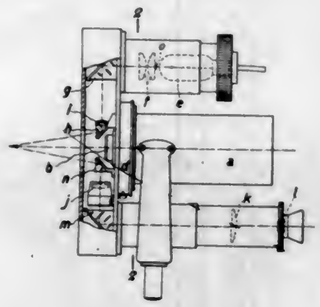
1. In an anti-friction bearing, the combination with a housing adapted to be secured to a body bolster and having an interior bearing surface; of an anti-friction roller; a rocker connected to each end of said roller and having an arcuate bearing surface eccentric to the bearing surface of said roller and projecting therebeyond at the ends of the rockers; and means for pivotally suspending said rockers from a point above their connections to said roller, said rockers transmitting the load between said bearing surface of the housing and the truck bolster after the rockers have been rocked a predetermined amount; and means for centering said parts after the load has been removed.

1,760,207. HILL LOCK FOR AUTOMOBILES. FRED J. PARSONS, Tacoma, Wash. Filed Apr. 23, 1929. Serial No. 357,497. 1 Claim. (Cl. 188—30.)



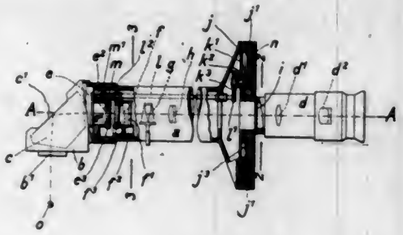
In a hill lock for automobiles, the combination with a propeller shaft; a toothed ratchet wheel mounted thereon; a pawl adapted to engage the teeth of said ratchet wheel to hold the shaft from rotation in reversed direction; a bar hinged to the automobile frame and to said pawl; a bracket mounted on the propeller shaft and attached to the hinge between said bar and said pawl; a spring interposed between lugs extending from said bar and said pawl and adapted to raise said pawl out of engagement with the ratchet wheel and means operable from the steering post of the automobile and adapted to press the pawl into contact with said ratchet wheel against the action of said spring.

1,760,208. CAMERA FOR PHOTOGRAPHING THE EYEBALL. FRANKLIN PFEIFFER and THEODOR KÜHL, Jena, Germany, assignors to The Firm Carl Zeiss, Jena, Germany. Filed Mar. 21, 1928, Serial No. 263,546, and in Germany Apr. 6, 1927. 8 Claims. (Cl. 95—11.)



1. Camera for photographing the eyeball, comprising a casing, an objective fixed on the casing, a source of light fixed on the casing and a mirror fixed on the casing in the vicinity of the said objective and adapted to transmit light, emerging from the source of light, approximately parallel to the axis of the said objective to the eye to be photographed.

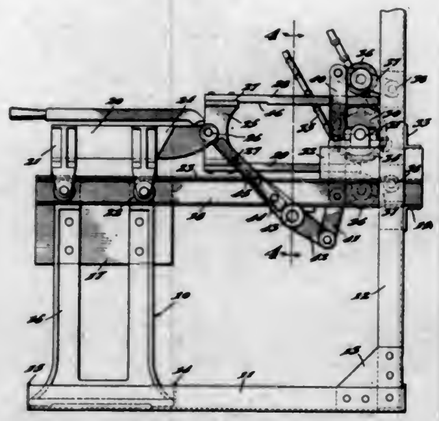
1,760,209. REFRACTOMETER FOR LIQUIDS. FRANKLIN PFEIFFER, Jena, Germany, assignor to the Firm of Carl Zeiss, Jena, Germany. Filed June 29, 1929, Serial No. 374,689, and in Germany July 6, 1928. 4 Claims. (Cl. 82—14.)



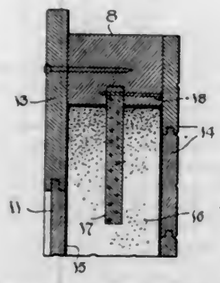
1. A refractometer for determining a property of a liquid upon which depends the refractive index of this liquid, containing a prism system with a surface adapted to totally reflect rays which have entered the prism, a telescope so disposed behind the prism system as to be capable of receiving rays passed through the said prism, a reading device comprising a scale and a diagram, which diagram consists of a number of curves, both said parts being displaceable relatively to each other, each of the said curves representing the relation of the said property and the temperature, and the scale indicating one of these two quantities, and each of the said curves pertaining to a certain definite degree of the quantity not indicated on the scale, a mark fixed within said telescope, a deflecting device located behind the said prism system and adapted to adjust the position of the extreme rays which are yet totally reflected at the said surface relatively to the said mark, and means for coupling the reading device and the deflecting device.

1,760,210. TRANSMISSION DEVICE. NATHAN RANSOHOFF, Cincinnati, Ohio. Filed May 26, 1928. Serial No. 280,878. 3 Claims. (Cl. 74—14.)

1. A device of the class described, comprising, a drive roll, an element to be linearly moved, extensions provided on said element, said extensions arranged for engagement at opposite points of the periphery of the drive roll, means for alternately forcing said extensions into frictional engagement with the drive roll, and the friction surfaces of said extensions formed to become disengaged from the drive roll after a predetermined movement in either direction for automatically discontinuing the feed.

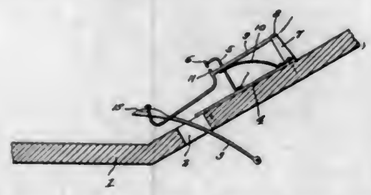


1,760,211. INSULATED STRUCTURAL UNIT. JOSEPH L. ROSENMILLER, York, Pa., assignor to York Ice Machinery Corporation, York, Pa., a Corporation of Delaware. Filed Oct. 15, 1928. Serial No. 312,661. 4 Claims. (Cl. 20—35.)



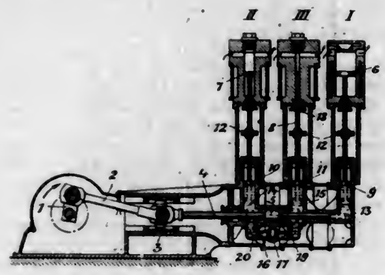
1. A heat insulating structural element comprising two spaced walls; a filling of fluent insulating material in the space between said walls; and a strip of sheet insulating material extending downward from the top of said element, terminating above the bottom of said element, and forming a dip seal with the fluent material at the top thereof.

1,760,212. AUTOMOBILE SIGNAL SWITCH. ROLAND O. RUBLE, Rosedale, Kans. Filed July 11, 1927. Serial No. 204,829. 1 Claim. (Cl. 200—59.)



In automobile signal means, and in combination, terminals, one of which is movable below and toward and from the other, an automobile accelerator pedal in rear of said terminals, a standard carrying the terminal opposed to the movable terminal, a lever carrying said movable terminal and fulcrumed in front of the terminals and having a rear portion arranged alongside of and in close proximity to the accelerator pedal and adapted to be depressed when the accelerator pedal is depressed, and yielding means below and exerting upward pressure against the lever forward of the terminals for moving said lever and putting the movable terminal in contact with the other terminal when the accelerator pedal is relieved of pressure.

1,760,213. HIGH-PRESSURE PISTON FOR RECIPROCATING COMPRESSOR OR THE LIKE. CHARLES SCHAER, Langenthal, Switzerland, assignor to the Firm of Sulzer Frères Société Anonyme, Winterthur, Switzerland. Filed Feb. 29, 1928, Serial No. 257,888, and in Switzerland Oct. 21, 1927. 4 Claims. (Cl. 230—49.)



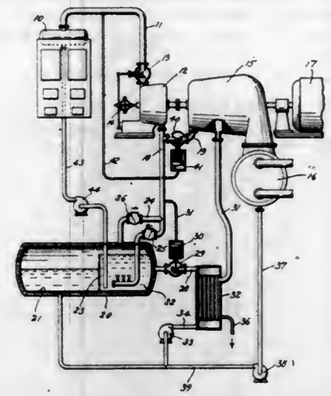
1. In a high pressure reciprocating compressor, the combination with a primary piston effecting a positive movement, of a plurality of intermediate pistons, an oscillating column of liquid arranged between each side of said primary piston and one of said intermediate pistons, through each of which columns power is transmitted to said intermediate pistons, a by-pass between said liquid columns, and a control member in said by-pass.

1,760,214. PROCESS OF PRODUCING WATERPROOF CONCRETE, SPECIALLY FOR PAVINGS. RICHARD SCHUBERT, Bremen, Germany. Filed Mar. 10, 1928, Serial No. 260,809, and in Germany Dec. 23, 1927. 2 Claims. (Cl. 94—24.)

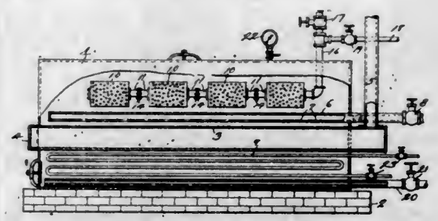
1. The method of producing a waterproof concrete body or surface, which consists in first forming a binding and insulating mixture of liquid coal tar and an insulating material, adding the same to a concrete mixture and water at the time of making the latter, and then laying and tamping the resultant waterproof plastic mass.

1,760,215. STEAM PLANT. JOSEF SMÉKAL, Josefuv Dul, Czechoslovakia. Filed Dec. 31, 1924, Serial No. 759,164, and in Germany Nov. 9, 1923. 6 Claims. (Cl. 60—94.)

1. In a steam plant, in combination, a source of steam, a power element supplied with steam from said source, an accumulator, heating means, means to conduct steam from an intermediate stage of the power element to the heating means, means to conduct water through the heating means and to the accumulator, means to conduct steam from said source into the presence of said water to condense the steam and produce hot water to be accumulated, automatic means to control the flow of water through the heating means in response to variation of pressure in said source and operating to increase the rate of flow on increase of pressure and means to conduct steam from said accumulator to the power element.

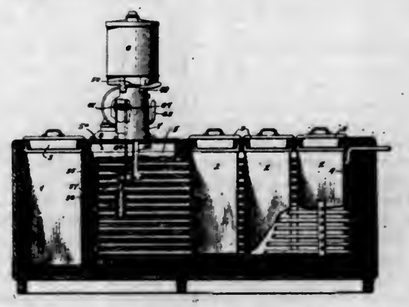


1,760,216. LIQUID-PURIFYING DEVICE. JOHN H. STOCKHOLDER, New Orleans, La., assignor to Mary Stockholder, New Orleans, La. Filed Dec. 26, 1928. Serial No. 328,564. 2 Claims. (Cl. 210—43.)



1. A liquid purifying device comprising a tank, a fire box extending through said tank, a valve controlled perforated intake pipe in the tank above the fire box and having its perforations downwardly disposed, a purified liquid discharge pipe above the intake pipe, said discharge pipe being formed from a plurality of sections, perforated drums surrounding said sections, said sections being perforated within the drums and straining elements within the drums around the sections.

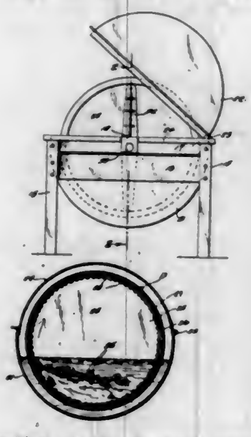
1,760,217. ICE-CREAM-FREEZING SYSTEM. CHARLES TAYLOR, Buffalo, N. Y., assignor to Taylor Freezer Corporation, Beloit, Wis., a Corporation of Delaware. Filed Nov. 1, 1926. Serial No. 145,426. 6 Claims. (Cl. 62—114.)



1. An ice cream freezing system comprising a cabinet including a brine container, means for cooling the brine

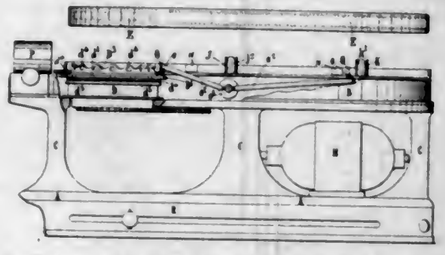
in said container, a freezer mounted on said cabinet above the level of the brine in said container, means for delivering brine from said container to said freezer, means for shutting off the flow of brine to the freezer, and means for draining the brine from said freezer back into said container.

1,760,218. DRY-CLEANING MACHINE. ONÉSIME THIBAULT and ROBERT REID, San Diego, Calif. Filed Apr. 1, 1929. Serial No. 351,769. 3 Claims. (Cl. 8—19.)



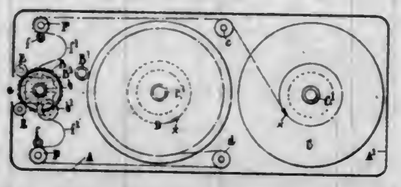
1. In a machine of the character described, a frame having cross members, bearings in the cross members, a casing having a lower section and an upper section movable on the lower section to open and close, extensions on the lower section engaging the cross members for supporting the lower section within the frame, and a drum having shafts engaging within the bearings for supporting the drum for rotative movement within the casing.

1,760,219. CINEMATOGRAPH PROJECTION APPARATUS. JOHN EDWARD THORNTON, West Hampstead, London, England, assignor to John Owden O'Brien, Manchester, England. Filed Jan. 13, 1927, Serial No. 160,963, and in Great Britain Jan. 28, 1926. 2 Claims. (Cl. 88—18.2.)



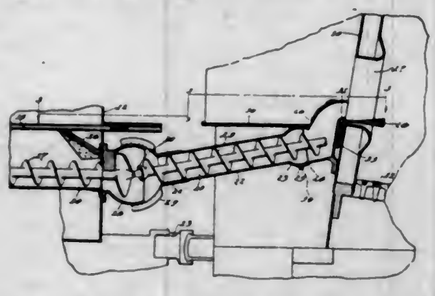
1. Cinematograph film projection apparatus comprising a framing, an electric motor mounted within the framing, gearing driven by the motor, a casing carried by the framing within which the gearing is housed, two spindles and a crown wheel projecting through the casing, a clutch between the motor and the gearing to allow for the stopping of the rotation of the spindles and crown wheel independently of the motor, a Geneva wheel driven intermittently from the gearing to exhibit the film, a lamp and lens by which the film is illuminated and projected, a friction drive for the spindles to allow for a change in size of the reels during projection, an arm for reversing the friction drive for rewinding the film, a lid to close over the film during projection and a spring and levers to prevent contact with the spindles and crown wheel when the lid is raised.

1,760,220. CINEMATOGRAPH SPOOL CASE. JOHN EDWARD THORNTON, West Hampstead, London, England, assignor to John Owden O'Brien, Manchester, England. Filed Jan. 26, 1927, Serial No. 163,806, and in Great Britain Feb. 20, 1926. 1 Claim. (Cl. 88—17.)



A detachable spoolcase for use in cinematograph film apparatus comprising in combination with a casing of a framing mounted within the casing, a drum upon which the film is wound carried by the framing, a hollow spindle passing through one side of the framing upon which the drum is mounted, a spool arranged in line with the drum upon which the film is wound after exposure, a second hollow spindle passing through the side of the framing upon which the spool is mounted, a leader strip permanently affixed at one end to the drum and at the other end to the forward end of the film, a second leader strip permanently affixed at one end to the spool and at the other end to the rear end of the film, a toothed sprocket feed drum and a Maltese wheel, mounted in the framing, over which the film passes and by which it is driven, two further spindles mounted in the framing, a loop forming sprocket wheel mounted on each spindle to deliver the film to and from an exposure aperture in the casing gearing mounted outside the framing within the casing by which the loop forming sprockets are continuously driven and the Maltese wheel intermittently rotated, idle rollers carried by the framing to retain the film in contact with the feed drum and apertures in the casing to give access to the hollow spindles.

1,760,221. LOCOMOTIVE STOKER. EDWIN ARCHER TURNER, New York, N. Y., assignor to The Standard Stoker Company, Incorporated, a Corporation of Delaware. Filed July 11, 1928. Serial No. 292,007. 8 Claims. (Cl. 110—101.)



1. In combination, a locomotive having a tender and a firebox provided with a hand firing opening, a transfer and delivery conduit comprising a section located under the tender floor, a nozzle attached to the backhead of the locomotive and delivering through the hand-firing opening therein, and a section universally jointed to said nozzle and to said section.

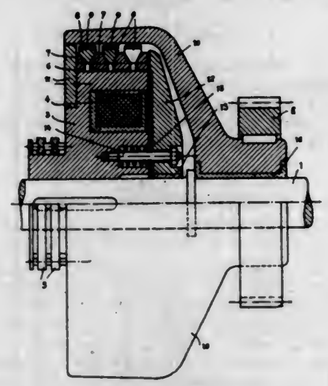
1,760,222. VALVE AND COCK. ERNEST B. WHITMARSH, Detroit, Mich., assignor to Detroit Brass and Malleable Works, Detroit, Mich., a Corporation of Michigan. Filed Jan. 8, 1927. Serial No. 159,773. 4 Claims. (Cl. 251—152.)

1. The combination of a cock body having inlet and outlet connections, said cock body having the lower end thereof provided with a slot and a recess, a rotatable plug in said body and having a stem protruding from the lower end of said body, said stem having a pair of parallel facets formed thereon and extending entirely across the same, a stop member mounted in the recess of the cock



body and projecting into the slot thereof to prevent rotation of said stop member relative to said cock body, and inwardly projecting means carried by said stop member and engageable by the facets of said stem for defining the rotation of said plug in said cock body.

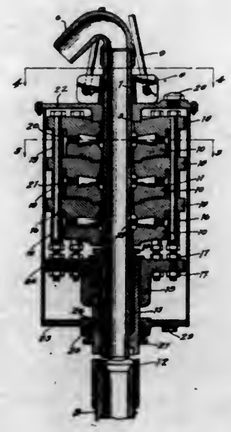
1,760,223. FRICTION COUPLING. BRUNO WITTKUHNS, New York, N. Y., assignor to the Firm: Magnet-Werk G. m. b. H., Eisenach Spezialfabrik für Elektromagnet-Apparate, Eisenach, Thuringia, Germany. Filed June 25, 1927, Serial No. 201,470, and in Germany June 30, 1926. 5 Claims. (Cl. 192—84.)



1. In a friction clutch a revolvably mounted inner cylindrical body, a set of unsplit rings, laterally tapered at the outer periphery thereof, revolvably fixed and axially slidable with relation to said body, encompassing the periphery of said body, an abutment member on said body at one end thereof, a set of split rings, laterally tapered at the inner periphery thereof, encompassing said set of unsplit rings, said split rings being positioned alternately with the unsplit rings and the tapered parts of the rings in each set being adjacent the tapered parts of the rings in the other set and disposed to come into contact therewith, a cylindrical shell, encompassing said set of split rings and normally having an annular clearance therebetween and the peripheries of said split rings, and a means for pressing said unsplit rings in the direction of said abutment member, thereby expanding said split rings in a radial direction and bringing their outer peripheries into engagement with said shell at the inner surface of the latter.

1,760,224. SWIVEL. JAMES A. WRAY, Los Angeles, Calif. Filed Dec. 22, 1928. Serial No. 328,043. 14 Claims. (Cl. 255—25.)

1. A swivel comprising a tubular member adapted to be connected to a source of fluid supply, a tubular member adapted to support a load rotatably connected to said first mentioned member by means of a plurality of pairs of coacting roller races, one member of each pair of races being secured to one of said tubular members and the other member of each pair of races being secured to the other tubular member to provide alternate connections to said tubular members in seriatim, and rollers disposed



between the members of each pair of races whereby to provide multiple sets of roller bearings, all acting together for resisting relative longitudinal movement of said tubular members.

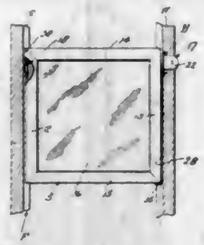
1,760,225. RADIO TRANSMITTER. PHILIP D. ZURIAN, Madison, Wis., assignor, by mesne assignments, to Burgess Battery Co., Madison, Wis., a Corporation of Wisconsin. Filed May 19, 1927. Serial No. 192,520. 4 Claims. (Cl. 250—19.)

4. The method of operating a vacuum tube high frequency transmitter comprising a vacuum tube master-oscillator and a vacuum tube power-amplifier which consists in normally applying a negative potential to the grid of said power-amplifier of such value as substantially to stop the flow of plate current through said amplifier, reducing the negative bias on the grid of said power-amplifier sufficiently to permit a flow of plate current therethrough and simultaneously closing the plate circuit of said master-oscillator.

1,760,226. SASH BALANCE. JAMES P. APPLEBY, Los Angeles, Calif., assignor to Frank Graves Sash, Door and Mill Company, Los Angeles, Calif., a Corporation of California. Filed Mar. 21, 1927. Serial No. 176,893. 1 Claim. (Cl. 16—198.)

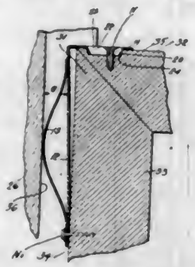
In combination with a window frame and a sash member adapted to slide vertically in the frame, a spring ac-

tuated sash balance mounted in the frame and applied to one side of the sash member in a manner tending to rotate the sash about a horizontal axis, and a pressure shoe acting between the other side of the sash member and an



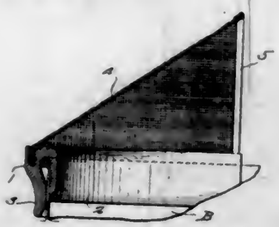
opposing frame member and exerting a lateral force on the sash member sufficient to maintain the upper corner of said other side member free of the frame member in all positions of the sash.

1,760,227. FRICTION SHOE FOR WINDOW SASHES. JAMES P. APPLEBY, Los Angeles, Calif., assignor to Frank Graves Sash, Door and Mill Company, Los Angeles, Calif., a Corporation of California. Filed Mar. 21, 1927. Serial No. 176,894. 4 Claims. (Cl. 292—76.)



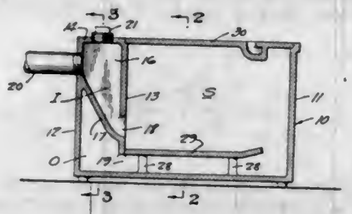
2. In a device of the character described, an L-shaped member, a bowed spring anchored to one of the arms of the member, the other arm of the member having a slot extending longitudinally thereof, and a depending marginal flange about the slot.

1,760,228. MILK STRAINER. CHARLES E. ARMSTRONG, Washington, D. C. Filed Oct. 8, 1928. Serial No. 311,209. 2 Claims. (Cl. 210—135.)



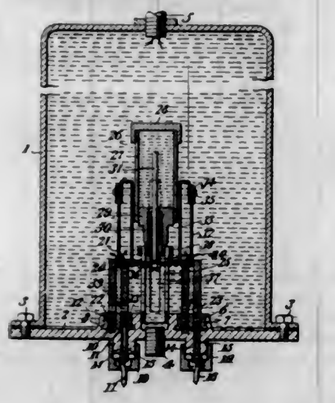
1. A strainer for use on containers of different sizes, including an elongated clip of rubber molded in one piece to form inner and outer lips for gripping the inner and outer surfaces respectively of a container inserted therebetween, thereby to form a sealing connection between the clip and container, and a screen fabric seated at one edge in the clip, the other edge of the screen fabric being extended across the clip from one end to the other, said clip and fabric being adapted to flex to permit adjustment of the clip to the curvature of the container to which it is applied.

1,760,229. SEPARATOR TO CLARIFY WASTE WATERS. CHARLES ARNDT, Los Angeles, Calif. Filed Aug. 28, 1929. Serial No. 388,930. 6 Claims. (Cl. 210—56.)



1. A separator to clarify waste waters comprising a basin, an upright wall paralleling and adjacent one end wall of said basin, a transverse wall between said upright wall and said end wall to form inlet and outlet chambers, said upright wall having openings adjacent the lower portion placing said inlet and outlet chambers in communication with the remaining chambers in said basin, which remaining chamber forms a separation chamber, a plate extending from said upright wall toward and short of the wall opposite said end wall to form a return flow channel, said channel being in free communication with the upper part of said separation chamber.

1,760,230. AUTOMATIC ELECTRIC WATER HEATER. MANSFIELD C. CRAWLEY, Groton, N. Y., assignor to Charles D. Davis, Washington, D. C., and William R. Davis, Westfield, N. J. Filed Sept. 14, 1927. Serial No. 219,494. 24 Claims. (Cl. 219—40.)



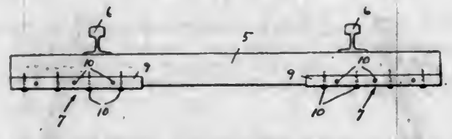
1. In a water heater, the combination of a tank; a pair of electrodes spaced apart in said tank in position to be submerged in the water; electrical conductors connected to said electrodes; an insulating shield adapted to reciprocate and to be interposed between said electrodes and to be withdrawn therefrom; normally stationary means to positively support said shield withdrawn from said electrodes independently of the water in said tank; and means actuated by changes in temperature of water in the tank to operate said supporting means to interpose said shield between said electrodes when the temperature of the water in the tank rises, and to positively withdraw said shield when the temperature of the water is reduced

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1,760,231. RAILWAY CROSSTIE. GEORGE WASHINGTON CORRIGAN, Los Angeles, Calif. Filed Aug. 19, 1929. Serial No. 386,878. 1 Claim. (Cl. 238—95.)

A railway tie having secured thereto at its opposite ends and at each side thereof, angle bars, the angle bars

on one side of this tie having their horizontal flanges disposed in spaced parallelism with the adjacent angle bars on the other side of the tie, and the angle bars being secured to the tie at one end thereof having their inner



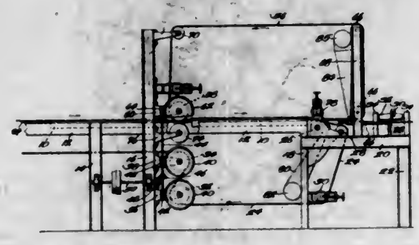
ends disposed in spaced relation to the inner opposed ends of the angle bars secured to the tie at the opposite end of said tie, whereby certain portions of the tie may be left unprotected.

1,760,232. PRUNING SHEARS. HERMANN FINKEN, Rodenkirchen, near Cologne, Germany. Filed Dec. 24, 1928, Serial No. 328,234, and in Germany Feb. 26, 1927. 5 Claims. (Cl. 30—11.)



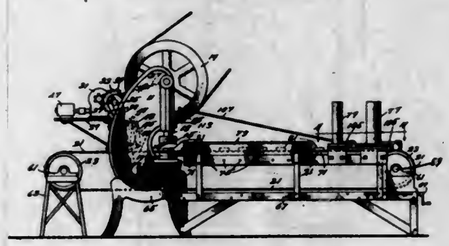
1. A spring shears of the type set forth, comprising a pair of shear members crossing each other, means at the crossing point for pivotally connecting the said members for operative reciprocation, and means for permitting and controlling longitudinal reciprocal displacement of the one shear member upon, and relative to, the other shear member, comprising a link member pivotally secured at its higher extremity to the relatively stationary shear member, and at its lower extremity to the relatively displaceable shear member, and means for urging the said shear members into the open position, the said pivotal means comprising a disk having a longitudinal prismatic guide groove, a cup-shaped cover member housing said disk for free relative rotary reciprocation therein, and means detachably securing said cover to the relatively stationary shear member.

1,760,233. MICA-LAYING MACHINE. LOUIS T. FREDERICK, Valparaiso, Ind., assignor, by mesne assignments, to Chicago Mica Company, Valparaiso, Ind., a Corporation of Indiana. Filed June 1, 1925. Serial No. 34,079. 10 Claims. (Cl. 154—2.5.)



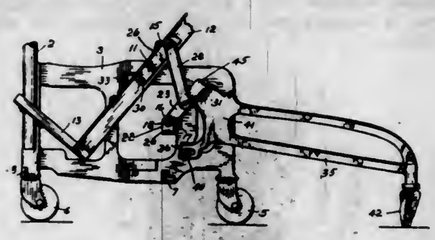
10. In a machine for making mica plate, a pair of endless carrier belts having portions extending adjacent each other and moving in unison whereby mica flakes may be confined between the belts and carried along thereby, heated pressure means between which the belts pass for pressing the belts together upon the work material arranged therebetween and means for stripping off the work material from the belts after the same have passed between the pressure means.

1,760,234. MEANS FOR AND METHOD OF MOLDING MATERIALS. LOUIS T. FREDERICK, Valparaiso, Ind., assignor to Chicago Mica Company, Valparaiso, Ind., a Corporation of Indiana. Filed Mar. 7, 1928. Serial No. 259,757. 20 Claims. (Cl. 18—30.)



1. In a device of the class described, a closing mold and a conveyor comprising a receptacled strip for carrying moldable material to the closing mold, the conveyor being adapted to co-operate with the dies of the closing mold to form a part of the mold when in closed position.

1,760,235. BRACE-LEG OPENING APPARATUS FOR FOLDING BEDS. CLAYTON E. GRAY and SAMUEL B. COOKE, Portland, Oreg., assignors to Universal Bed Company, Portland, Oreg., a Corporation of Oregon. Filed Mar. 5, 1929. Serial No. 344,219. 2 Claims. (Cl. 5—168.)

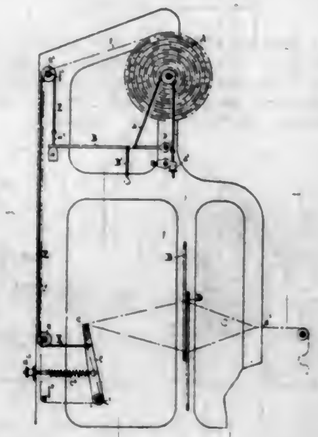


1. In combination with a folding-bed, and a carriage-frame in which said bed is mounted to swing into lowered position, of a pair of brace-legs pivotally connected upon opposite sides of said frame to swing horizontally from closed position parallel to the front of the carriage frame to open position extending forwardly thereof, a rocker-bar adjacent each said leg and pivoted in said frame, link-connections between each said rocker-bar and the bed arranged to actuate said rocker bars against the legs and thereby push said legs to open position as the bed is lowered, and a spring connected to each said leg to close said legs as the bed is raised.

1,760,236. LET-OFF MOTION FOR NARROW-FABRIC LOOMS. HUBERT HAYWOOD, Wirksworth, England. Filed June 10, 1929, Serial No. 369,567, and in Great Britain July 11, 1928. 1 Claim. (Cl. 139—103.)

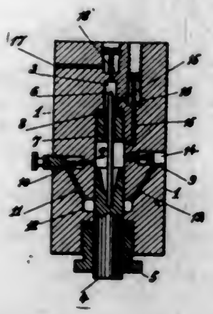
A warp let off motion for narrow width looms comprising in combination a creel mounted on the top of the loom, a boss on the creel, a flexible band passing over said boss to apply tension thereto, a pivoted release

lever to which one end of the flexible device is attached, a vibrator over which the warp yarn passes, a flexible connection between the vibrator and the pivoted release lever so that as the vibrator moves forward by the delivery of the woven fabric the pivoted release lever will be actuated to remove the tension on the boss of the creel



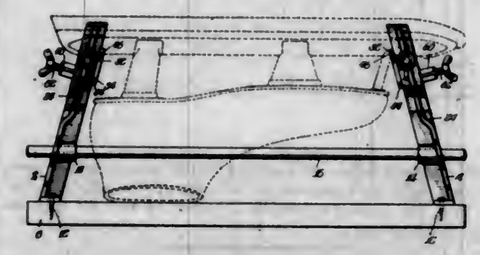
and allow a small length of yarn to be unwound therefrom, an adjusting screw attached to the end of the flexible band to facilitate the setting of the vibrator, a spring connected to the vibrator, an adjusting screw for adjusting the tension of said spring and a lighter spring connected to the release lever so that the vibrator spring will overcome the release lever spring.

1,760,237. PUMP. POUL ARNE SCOTT IVERSEN, Copenhagen, Denmark. Filed Apr. 6, 1927, Serial No. 181,574, and in Denmark Mar. 22, 1927. 8 Claims. (Cl. 103—168.)



1. Pumping apparatus, comprising a main pump chamber and an auxiliary pump chamber, a reciprocating plunger in each chamber, and a supply passage leading from the auxiliary pump chamber to the main pump chamber; both plungers making their corresponding strokes in unison, so that fluid will be drawn into the auxiliary pump chamber and supplied therefrom through said passage to the main pump chamber during the suction stroke of the plungers, and will be discharged in small quantity under high pressure from said main pump chamber and simultaneously compressed in said auxiliary chamber to a pressure which is only slightly below the working pressure in the main pump chamber during the compression stroke of the plungers.

1,760,238. SKATE CLAMP. ALFRED K. JOHNSON, Chicago, Ill., assignor to The Alfred Johnson Skate Co., Chicago, Ill., a Corporation of Illinois. Filed Jan. 13, 1928. Serial No. 246,458. 6 Claims. (Cl. 51—228.)



1. In a device of the class described, the combination of two upstanding brackets provided with spaced apart jaws for receiving skate runners therebetween, means for operating said jaws and means located below said jaws to receive and hold the skate runners with their edges to be sharpened disposed in a predetermined plane above the top level of the jaws.

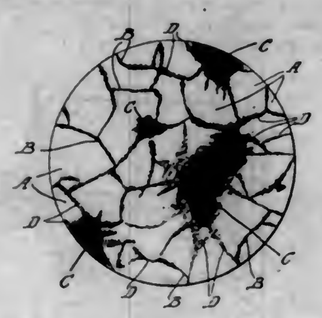
1,760,239. PROCESS OF TREATING MALLEABLEIZED CAST IRON. CARL F. LAUENSTEIN and NEIL M. WATERBURY, Indianapolis, Ind., assignors to Link-Belt Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 29, 1926. Serial No. 157,865. 2 Claims. (Cl. 148—21.8.)

2. The process of heat treating malleableized cast iron which includes heating the iron to a temperature sufficient to cause the formation of iron carbide, and subsequently controlling the rate of cooling of the iron to prevent the escape of any substantial amount of the carbon from the iron carbide so formed.

1,760,240. HEAT TREATING OF METALS. CARL F. LAUENSTEIN, Indianapolis, Ind., assignor to Link-Belt Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 7, 1927. Serial No. 231,789. 4 Claims. (Cl. 148—21.8.)

4. The process of treating malleableized cast iron containing ferrite and graphitic carbon, which includes the following steps; heating it to a point above the carbon combining temperature and quenching it to cause the formation of martensite and troostite, reheating it to a temperature sufficient to cause the martensite and troostite to break down to form sorbite or pearlite, and cooling it.

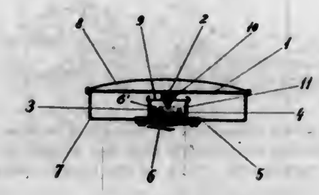
1,760,241. METAL. CARL F. LAUENSTEIN, Indianapolis, Ind., assignor to Link-Belt Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 15, 1928. Serial No. 312,460. 5 Claims. (Cl. 148—31.)



2. A ferrous alloy of granular formation having a tough, strong constituent of the alloy distributed widely

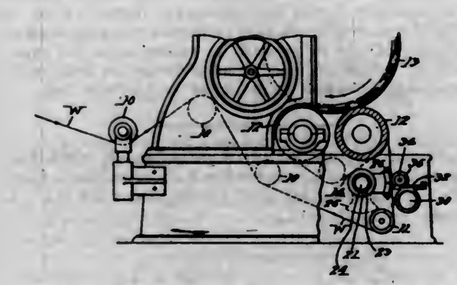
through the material along the grain boundaries whereby separation of the grains of the alloy is made more difficult, said strong substance being mostly an iron carbide.

1,760,242. TRANSMITTER. ANTON LAUTERER, Berlin-Schoneberg, Germany, assignor to C. Lorenz Aktiengesellschaft, Berlin-Tempelhof, Germany. Filed July 24, 1928, Serial No. 295,084, and in Germany Jan. 21, 1928. 3 Claims. (Cl. 179—122.)



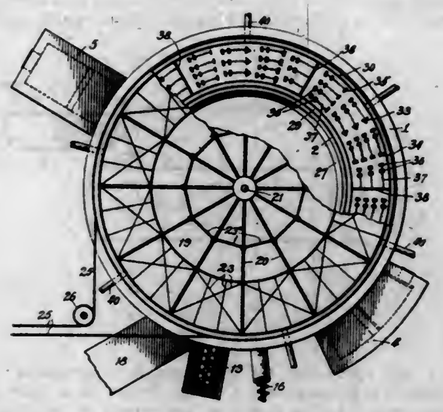
3. An undamped transmitter employing carbon granules and having means for preventing burning of the carbon granules comprising a diaphragm, a capsule enclosing the body of carbon-powder, an electrode in said capsule and provided with a conducting ring projecting into the body of carbon powder, a plate covering the side of the capsule facing the diaphragm and having an opening therein, a nipple on the diaphragm extending loosely through said opening and into the carbon-powder in the capsule and a felt-ring enclosing the nipple between said plate and said diaphragm and closing the joint between the nipple and wall of said opening in the plate.

1,760,243. SLITTER. FREDERICK W. LODDING, Worcester, Mass., assignor to Rice, Barton & Fales, Incorporated, Worcester, Mass., a Corporation of Massachusetts. Filed Mar. 18, 1929. Serial No. 347,772. 5 Claims. (Cl. 164—65.)



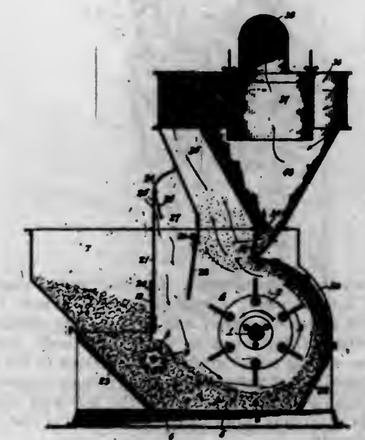
1. In a slitting device for a paper winding machine, the combination with a series of circular slitting cutters and means for rotating each one independently at high speed, of a sector shaped member located back of the web adjacent to each slitting knife and means for oscillating said sector shaped member on its own axis to constantly present new surfaces to the web at all times.

1,760,244. HEAT-TREATMENT KILN. HENRY G. LYKKEN, Minneapolis, Minn. Filed Jan. 2, 1925. Serial No. 38. 16 Claims. (Cl. 263—26.)



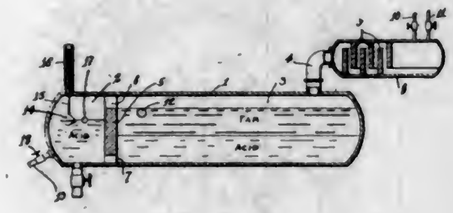
1. A heat treatment kiln comprising a hearth for holding the material to be treated, means for heating the hearth and the material thereon, a cover for and movable over said hearth, and sealing means between the movable cover and the hearth for maintaining the space over the hearth independent of outside.

1,760,245. DEVICE FOR REDUCING AND FEEDING REDUCED MATERIALS. HENRY G. LYKKEN, Minneapolis, Minn. Filed Mar. 22, 1926. Serial No. 96,409. 16 Claims. (Cl. 83—11.)



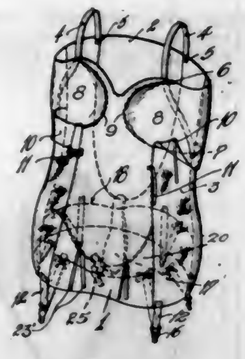
1. A reducing device having a reducing chamber, means for causing a vertical cyclonic action in the chamber for reducing the material supplied to said chamber, and means for supplying the material to the lower part of said chamber.

1,760,246. APPARATUS FOR HYDROLYZING ACID SLUDGE. FRANK L. MAKER and JOHN L. COOLEY, Berkeley, and CHARLES F. TUTTLE, Richmond, Calif., assignors to Standard Oil Company of California, San Francisco, Calif., a Corporation of Delaware. Filed Apr. 18, 1927. Serial No. 184,556. 4 Claims. (Cl. 23—285.)



4. An apparatus for continuously hydrolyzing acid sludge which comprises, a vessel divided by a baffle into intercommunicating chambers, and means for causing the relative acid and tar volumes in one chamber of the vessel to vary in accordance with the height of liquid in the other of said chambers.

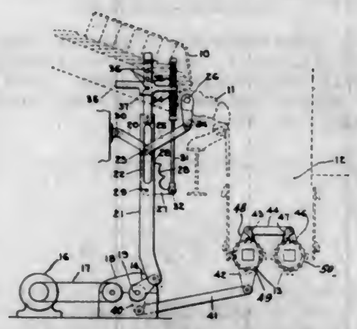
1,760,247. CORSET. THERESSIA MCKENZIE, Seattle, Wash. Filed Jan. 28, 1928. Serial No. 250,240. 1 Claim. (Cl. 2—30.)



In a foundation form-fitting garment of the character described, a front panel, a rear panel, side panels, all the said panels being connected and arranged to conform to the curvature of the trunk of the human body, the said front panel having semi-circular bust sections in the upper portion thereof, and suitable shoulder straps connected to the said front panel at points above the said bust sections, said straps extending downwardly to the upper end of the said side panels.

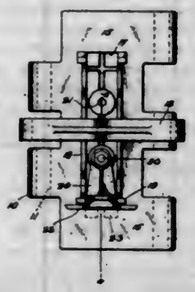
1,760,248. STOKER-GRATE AGITATOR. CHARLES F. MILLER, Moores, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Nov. 11, 1926. Serial No. 147,806. 6 Claims. (Cl. 110—33.)

2. In a stoker, the combination of a grate section; means for supporting the grate section to permit movement of such section; and means for moving the grate section; said moving means including a rod having a slot, means for imparting a reciprocatory motion to the rod, toggle mecha-



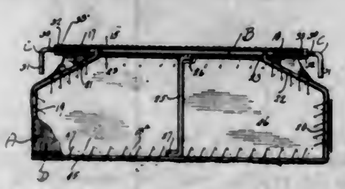
nism operatively connected to the grate section and having an actuating pin slidably disposed within the slot, and means for varying the throw of the toggle mechanism.

1,760,249. DETACHABLE WHEEL GUIDE FOR TRACTOR-CHAIN LINKS. JOHN TURNER MOORE, Reading, Pa., assignor, by mesne assignments, to Rex-Watson Corporation, Canastota, N. Y., a Corporation of New York. Filed Feb. 26, 1929. Serial No. 342,814. 7 Claims. (Cl. 305—10.)



6. A tractor chain link having inner and outer walls, the outer wall forming the tread and the inner wall having a wheel supporting surface, a web connecting said walls, a guide member detachably secured on said link, a projection on one side of said guide having a recess therein in which said web is received, said projection engaging against the interior of said inner wall, an extension on the opposite side of said guide, and fastening means for detachably securing said extension to the outer wall of said link.

1,760,250. VEHICLE-WINDOW SHADE OR AWNING. DANIEL W. NEIL, JR., and ALBERT B. CASKEY, Ponca City, Okla. Filed Oct. 24, 1927. Serial No. 228,361. 4 Claims. (Cl. 156—15.)

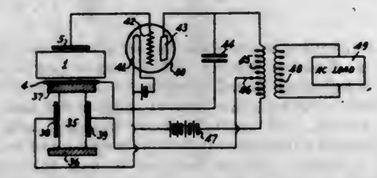


2. In a window awning of the class described the combination of a frame including a top bar, an outer bar, and side bars connecting the ends of the outer and top bars,

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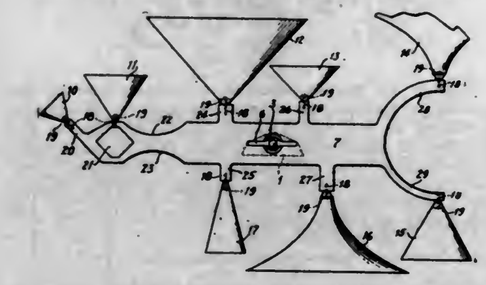
the upper ends of the side bars being offset inwardly toward each other, window engaging frame members adjustable on the ends of the top bar at a location inwardly of the side bars, said adjustable members being of L-shaped formation and each having a window engaging part which may be adjusted to either side of the plane of the frame.

1,760,251. APPARATUS FOR PRODUCING ELECTRIC OSCILLATIONS. ALEXANDER MCLEAN NICOLSON, New York, N. Y., assignor, by mesne assignments, to Federal Telegraph Company, a Corporation of California. Filed Dec. 20, 1926. Serial No. 155,901. 8 Claims. (Cl. 250—36.)



1. In a system for generating alternating current of a predetermined frequency the combination of, a piezo electric crystal having a fundamental frequency corresponding to said predetermined frequency, a source of mechanical vibrations disposed adjacent to a face of said piezo electric crystal, a vacuum tube having input and output circuits, said piezo electric crystal being associated with the input circuit of said vacuum tube, said source of mechanical vibrations being connected to the output circuit of said vacuum tube whereby it is maintained in operation by energy received from said circuit.

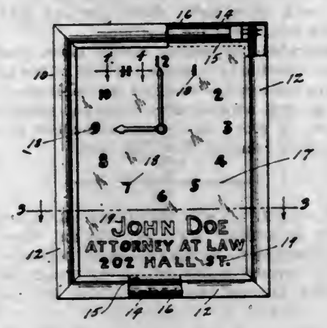
1,760,252. MULTIPLE RESONANT ACOUSTIC DEVICE. ALEXANDER MCLEAN NICOLSON, New York, N. Y., assignor, by mesne assignments, to Federal Telegraph Company, a Corporation of California. Filed Sept. 17, 1927. Serial No. 220,072. 3 Claims. Cl. 181—31.)



1. A sound reproducing device comprising a multiplicity of sound generating elements, each of said sound generating elements having a different natural frequency of response, said elements being so arranged that the response frequencies are distributed over the range of frequencies to be reproduced, a resilient plate adapted to be shaped to predetermine its acoustic characteristics, and a single means connected to said resilient plate for energizing all of said sound reproducing elements.

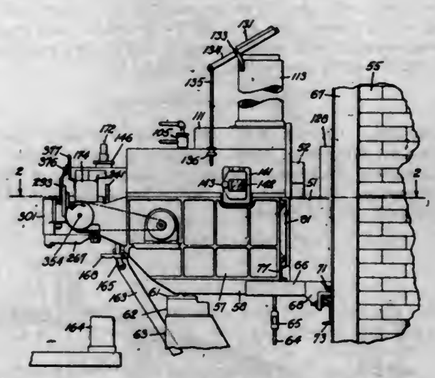
1,760,253. ADVERTISING CLOCK DIAL AND MEANS FOR ILLUMINATING THE SAME. JAMES I. PARRISH, Dallas, Tex. Filed June 4, 1928. Serial No. 282,728. 1 Claim. (Cl. 40—130.)

The combination of a translucent clock dial bearing advertising indicia and a support and illuminating means for the dial; said support and illuminating means comprising a substantially rectangular frame formed with side, top and bottom frame members, each of said side, top and bottom frame members having a body portion provided with inwardly projecting and spaced flanges forming grooves to receive the edges of said dial, said body portion having its walls curving outwardly from said flanges to provide a substantially cup-shaped cross section for said walls symmetrical with respect to said dial, each of said side, top and bottom frame members having the outer edges of said curved



walls connected by a substantially plane wall member to provide a hollow construction for each of said frame members, to receive therein an electric light bulb for illuminating said dial, said plane wall surfaces having reflecting properties whereby the light from the bulbs is reflected onto said dial, and colored plates interposed between the bulbs and the surfaces to be illuminated, whereby color effects are obtained.

1,760,254. APPARATUS FOR FEEDING MOLTEN GLASS. KARL E. PEILER, West Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed Dec. 31, 1923. Serial No. 683,576 44 Claims. (Cl. 49—55.)



1. Apparatus for feeding molten glass, comprising a forehearth projecting from a tank and having a discharge outlet, a chute to receive glass from the outlet and direct it to a waste receptacle, means for supporting the chute for swinging movement longitudinally of the forehearth towards the front thereof into glass receiving position and towards the rear thereof out of glass receiving position, and a latch for retaining the chute in either of its said positions.

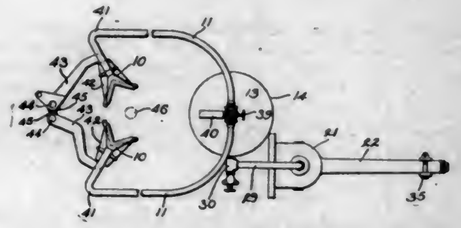
3. Apparatus for feeding molten glass, comprising a forehearth having a submerged discharge outlet, an orifice ring forming a continuation of the outlet, a carrier for the

ring pivotally mounted on the forehearth, a removable lever, and a fulcrum for the lever, carried by the forehearth, said carrier having a portion adapted to be engaged by the lever whereby the carrier and ring may be moved by the lever to and from their position below the outlet.

9. Apparatus for feeding molten glass, comprising a forehearth having an outlet, a feeding implement, an arm carrying the implement in substantially vertical alignment with the outlet, and means to adjust the arm horizontally both rectilinearly and angularly, the arm being mounted on a pivot about which the arm may be swung out of and into operative position.

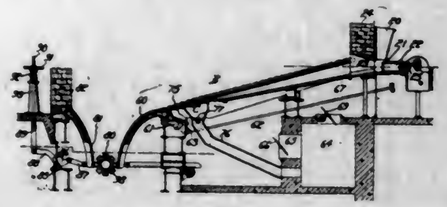
14. Apparatus for feeding molten glass, comprising an implement movable to regulate the feed of the glass, a cam, connections between the cam and the implement, and means operable at will without direct manual actuation of said connections to move said connections out of and again into operative relation with the cam.

1,760,255. COOLING MECHANISM FOR GLASS-FEEDER SHEAR BLADES. KARL E. PEILER, West Hartford, Conn,. assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed Jan. 15, 1929 Serial No. 332,649. 15 Claims. (Cl. 49—14.)



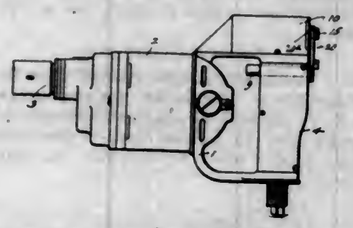
3. Spray mechanism for cooperative shear blades of glass feeding apparatus comprising a pair of spray heads adapted to discharge spray onto the shear blades when said shear blades are in their retracted positions, an atomizer, and a pair of spray conducting conduits connecting said atomizer and said discharge heads, said conduits being substantially equal in length and having substantially similar spray conducting passages.

1,760,256. UNDERFEED STOKER. ROBERT SANFORD RILEY, Worcester, Mass., assignor to Riley Stoker Corporation, Worcester, Mass., a Corporation of Massachusetts. Filed Apr. 22, 1922. Serial No. 556,011. 5 Claims. (Cl. 110—44.)



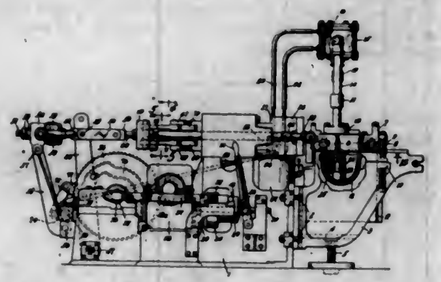
3. An underfeed stoker comprising a stationary bottom and movable side walls forming a retort therebetween, tuyère blocks on the side walls, a stationary overfeed grate section having tuyère openings therethrough which serves as an extension of the retort bottom and overfeed grate sections on each side of said stationary section which are movable lengthwise of the stoker with said retort side walls.

1,760,257. SWITCH. JOHN A. SMITH, Bellevue, Ky., assignor to The United States Electrical Tool Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Dec. 30, 1925. Serial No. 78,262. 6 Claims. (Cl. 200—50.)



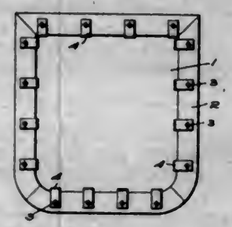
1. A controlling mechanism for an electric motor, comprising, a direction control switch and a power control switch, a rotatable operating lever for said direction control switch, a translatable control member for said power control switch, said rotatable lever provided with apertures alignable with said translatable member and traversed thereby in motor starting position to lock the direction control lever against movement while the motor power is on.

1,760,258. DIE-CASTING MACHINE. MARC STERN, Flint, Mich., assignor to A C Spark Plug Company, Flint, Mich., a Company of Michigan. Filed July 16, 1928. Serial No. 292,941. 20 Claims. (Cl. 22—69.)



1. In a die casting machine, a movable melting pot member, a movable die member movable in the path of movement of said pot member, means common to said members to concurrently move them thru the same path, connections between said means and the respective members, one of the connections including a motion modifying device, whereby the concurrent movement of the members is thru different limits.

1,760,259. UPHOLSTERY INSTALLATION. ROLLO F. WALTERS, Detroit, Mich., assignor, by mesne assignments, to United-Carr Fastener Corporation, Cambridge, Mass., a Corporation of Massachusetts. Filed July 24, 1924. Serial No. 727,958. 3 Claims. (Cl. 45—138.)



1. A frame for reception of an upholstered installation, said frame including a plurality of apertures, and a plurality

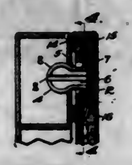
of studs having cliplike base portions presenting detent means for engagement in said apertures, said detent means substantially smaller in cross-section than the cross-section of said apertures thereby to permit said studs to shift in any transverse direction relative to said frame.

1,760,260. UPHOLSTERY INSTALLATION. ROLLO F. WALTERS, Detroit, Mich., assignor, by mesne assignments, to United-Carr Fastener Corporation, Cambridge, Mass., a Corporation of Massachusetts. Filed July 24, 1924. Serial No. 727,960. 12 Claims. (Cl. 45—138.)



1. In a trimming installation, the combination of a frame, a trim part and a fastener securing said frame and trim part together, said fastener comprising a stud secured to one part of said installation, stud-receiving means on the other part of said installation receiving said stud, and a casing holding the stud in assembly with one part of the installation while permitting the stud to be freely shifted in any direction in one plane for alignment with said stud-receiving means.

1,760,261. UPHOLSTERY INSTALLATION. ROLLO F. WALTERS, Detroit, Mich., assignor, by mesne assignments, to United-Carr Fastener Corporation, Cambridge, Mass., a Corporation of Massachusetts. Filed July 24, 1924. Serial No. 727,959. 5 Claims. (Cl. 45—138.)



1. An upholstered part comprising a thin backing, a metal strip secured in fixed relation to one side of said backing and a number of snap fastener members for securing the upholstered part to a supporting structure, means provided by said strip whereby said snap fastener members are held in assembled relation therewith, said means embodying a lost motion connection and permitting lateral shifting of said snap fastener members in any direction relative to the metal strip as and for the purposes illustrated and described.

1,760,262. SEPARABLE FASTENER. ROLLO F. WALTERS, Detroit, Mich., assignor, by mesne assignments, to United-Carr Fastener Corporation, Cambridge, Mass., a Corporation of Massachusetts. Original application filed July 24, 1924, Serial No. 727,950. Divided and this application filed Feb. 26, 1925. Serial No. 11,705. 9 Claims. (Cl. 24—208.)



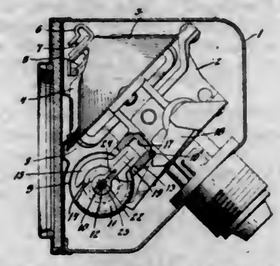
5. A fastener strip comprising, in combination, a relatively narrow strip of sheet metal having a plurality of fastener units held in assembled relation therewith, said fastener units shiftable in any lateral direction relative to said strip.

1,760,263. SEPARABLE FASTENER. ROLLO F. WALTERS, Detroit, Mich., assignor, by mesne assignments, to United-Carr Fastener Corporation, Cambridge, Mass., a Corporation of Massachusetts. Original application filed July 24, 1924, Serial No. 727,960. Divided and this application filed May 28, 1928. Serial No. 281,181. 2 Claims. (Cl. 24—213.)



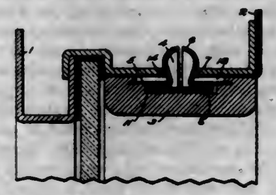
1. A fastener unit comprising, in combination, an attaching part, a number of attaching prongs spaced substantial distances apart and formed integral with and extending from said attaching part for piercing a support to secure the fastener unit thereto, a shiftable fastener part assembled with said attaching part and extending in the same direction as said attaching prongs, and means provided by the fastener unit to secure the attaching part and fastener part together while permitting transverse shifting of the fastener part in any direction transverse to the axis of the fastener unit.

1,760,264. ATTACHMENT FOR ODOMETERS. IVAR T. WEDIN, Flint, Mich., assignor to A C Spark Plug Company, Flint, Mich., a Company of Michigan. Filed Nov. 15, 1928. Serial No. 319,541. 9 Claims. (Cl. 74—54.)



1. In an odometer, a shaft, a wheel thereon, yielding brake means to frictionally engage said wheel to at times hold it from rotation, and retaining means for holding said shaft from movement in the direction of its longitudinal axis, said retaining means being integral with said brake means.

1,760,265. TRIMMING INSTALLATION. FRED S. CARR, Newton, Mass.; Moses F. Carr, executor of said Fred S. Carr, deceased, assignor, by mesne assignments, to United-Carr Fastener Corporation, Cambridge, Mass., a Corporation of Massachusetts. Filed Feb. 26, 1925. Serial No. 11,696. 6 Claims. (Cl. 45—138.)



1. A separable fastener secured installation comprising, in combination, a frame part presenting a stud-receiv-

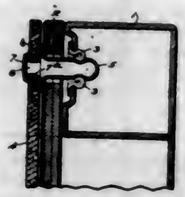
ing means, frame covering means presenting at the inner face thereof a stud member having a yieldable head engaged with said stud-receiving means thereby securing said frame covering means to said frame and a washer-like plate engaging said frame covering means thereby holding said stud in position and said plate having an aperture through which the yieldable stud head passes, said aperture being smaller in diameter than the largest diameter of said head so that the washer is snapped over the head of the stud and said frame covering means having an aperture of greater diameter than that portion of the stud located therein whereby said stud may shift in any lateral direction relative to said frame covering means.

1,760,266. TRIMMING INSTALLATION. FRED S. CARR, Newton, Mass.; Moses F. Carr, executor of said Fred S. Carr, deceased, assignor, by mesne assignments, to United-Carr Fastener Corporation, Cambridge, Mass., a Corporation of Massachusetts. Filed Feb. 26, 1925. Serial No. 11,698. 3 Claims. (Cl. 45—138.)



1. A trimming installation comprising, in combination, a trim strip having a stud-receiving aperture at the inner face thereof, a frame part having a stud-receiving aperture, a depressed portion provided in one of said parts to form a pocket between said apertures and a double snap fastener stud unit having a central flange portion, said stud unit presenting two stud heads extending in opposite directions and engaged in said apertures to secure said trim strip to said frame part and said central flange portion located in the pocket provided between said parts.

1,760,267. UPHOLSTERY INSTALLATION. FRED S. CARR, Newton, Mass.; Moses F. Carr, executor of said Fred S. Carr, deceased, assignor, by mesne assignments, to United-Carr Fastener Corporation, Cambridge, Mass., a Corporation of Massachusetts. Filed Jan. 9, 1926. Serial No. 80,190. 1 Claim. (Cl. 45—138.)



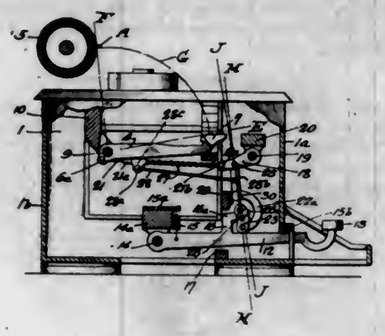
A combined upholstery and slip cover installation comprising, in combination, a frame, an upholstered unit covering said frame, a slip cover covering the upholstered unit and separable fastening means securing all of the said parts together, said separable fastening means including socket means presented by said frame and a combination stud unit securing said slip cover to said upholstery covering, said stud unit comprising a stud part having a relatively long shank passing through said upholstery covering and having a neck engaging the socket means presented by said frame and a relatively shorter stud part secured to said first mentioned stud part and extending in the opposite direction therefrom and fastened by stud-engaging means to the slip cover.

1,760,268. SINK-CLEANING IMPLEMENT. HENRY CAVE, Hartford, Conn., assignor to The Fuller Brush Company, Hartford, Conn., a Corporation of Connecticut. Filed Nov. 26, 1927. Serial No. 235,984. 5 Claims. (Cl. 15—111.)



1. A cleaning implement formed of sheet metal and including a handle, a support including side flanges at the end of the handle with notches in the ends of said flanges, and a resilient lip projecting from said support in position to clamp a brush within said notches.

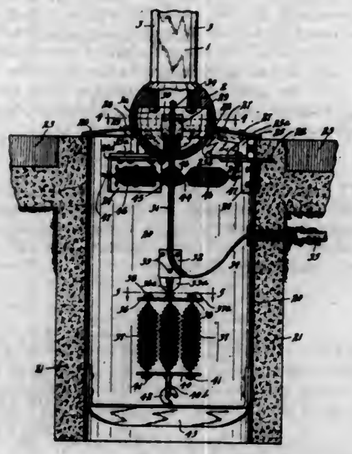
1,760,269. KEY ACTION FOR TYPEWRITERS AND OTHER MACHINES. ORVILLE U. DESHA, Fort Collins, Colo., assignor of one-fifth to The Desha Typelex Trust Estate, Fort Collins, Colo. Filed Jan. 27, 1928. Serial No. 249,877. 10 Claims. (Cl. 197—27.)



1. In a key mechanism and action for a typewriting machine, a type bar, a rearwardly disposed vibratory lever pivotally supported by a bar extending across the front of the machine, a forward pull link operatively connecting the type bar and vibratory lever, a key lever, a reversely breaking actuating coupling comprising a downward draw link and a downward thrust link, an upward angular arm intermediately the ends of the key lever forming an integral part of the latter with its forearm extending forwardly providing an operative plane forwardly thereof and beneath the forearm and above the forward portion of the key lever and the pivotal connection of the lower ends of the draw link and thrust link operating within said operative plane operatively interlocking the elements of said coupling moving the type bar to printing point upon depression of the key lever, means reversely breaking said coupling for simultaneously returning the vibratory lever, forward pull link and type bar to normal operative position while key lever is held depressed, means restoring the elements of said coupling to normal operative interlocked position upon release of the key lever.

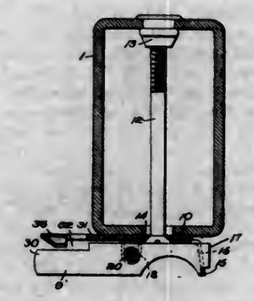
1,760,270. YIELDING SELF-ARIGHTING LAMP OR SIGNAL DEVICE. FRANK W. GRISWOLD, Minneapolis, Minn. Filed Mar. 3, 1924, Serial No. 696,545. Renewed Apr. 9, 1930. 28 Claims. (Cl. 40—145.)

14. A lamp or signal device comprising a hollow standard, a vertically extending partition dividing said standard into chambers, lamps in said chambers, means for supporting said standard for downward swinging movement in any direction, flexible means holding said standard in vertical position, said standard having an opening at its top, a passage extending longitudinally therethrough and having an opening at its bottom, said flexible means passing through said last mentioned opening, said openings and passage permitting entrance and circulation of air through said standard caused by the heat of said lamps.



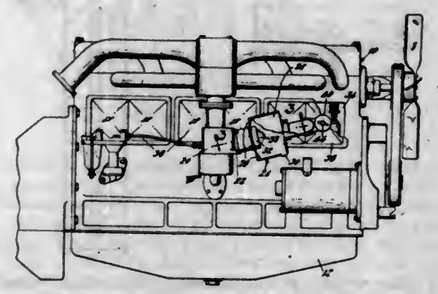
23. A lamp or signal device comprising a standard, a substantially spherical hollow ball at the bottom thereof, said ball having an opening at its underside, supporting means for said ball at the underside thereof, a flexible means passing into said opening, means disposed in said ball secured to said flexible means and engaging said ball for connecting the same and said flexible means, and resilient means connected to said flexible means for holding said ball on said supporting means with said standard in vertical position.

1,760,271. YARN CARRIER OR TUBE FRAME. EDGAR F. HATHAWAY, Wellesley, Mass., assignor to Shawmut Engineering Company, Dorchester, Mass., a Corporation of Massachusetts. Filed May 1, 1929. Serial No. 359,648. 6 Claims. (Cl. 139—10.)



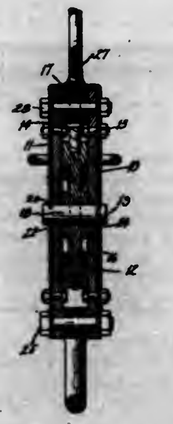
1. In a yarn carrier or tube-frame, in combination with a main frame or carrier bar, a longitudinal series of barriers or guides extending in substantial parallelism transversely of the frame at the lower portion thereof, each with one end projecting at the front of the frame, a yarn-spacing strip along the frame, having one side portion overlying the projecting ends of the barriers and formed with a corresponding series of broadside-threadable yarn passages, one between each two adjacent barriers, and with a deflected or barb-like portion for each such passage to prevent reverse escape of the yarns, and attaching means comprising two series of formations along the frame for individually receiving and positioning the respective barriers, the formations of the series nearer the frame front being of less vertical extent than the barriers.

1,760,272. AIR CLEANER. CHARLES L. MCCUEN, Lansing, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed July 18, 1928. Serial No. 293,644. 5 Claims. (Cl. 123—119.)



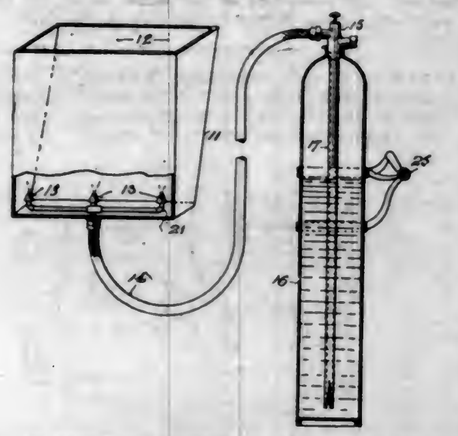
1. An internal combustion engine having a crankcase having an air inlet, a suction operated air intake, an air cleaner for the intake, said cleaner including means for whirling the air and an outlet for clean air leading from the center of the vortex, and a connection from the crankcase to the center of the vortex for withdrawing air from the crankcase and delivering it directly to the clean air outlet without undergoing cleaning action.

1,760,273. AXLE MOUNTING FOR SAFETY SHEAVE BLOCKS. WILLIAM H. MCKISSICK, Tulsa, Okla. Filed Dec. 22, 1928. Serial No. 327,911. 4 Claims. (Cl. 254—197.)



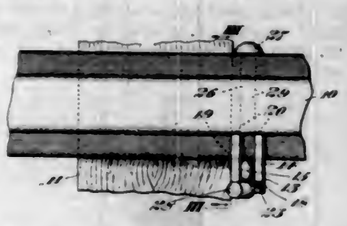
1. In a safety sheave block, a housing comprising two members movable laterally of the sheave axis and each having inturned guard flanges on opposite sides of its longitudinal axis, the guard flanges of one member being normally aligned and registered with the guard flanges of the other member, an axle extending through the housing and having recesses receiving portions of the housing members, whereby said axle is held against longitudinal displacement, and a sheave journaled on the axle, one of said housing members being rotatable upon the axle and the other housing member engaging one of the recessed axle portions, whereby it is held against rotation.

1,760,274. FIRE EXTINGUISHER. HENRY R. MINOR, Ossining, N. Y., assignor, by mesne assignments, to Walter Kidde & Company, Inc., New York, N. Y., a Corporation of New York. Filed Sept. 26, 1925. Serial No. 58,736. 3 Claims. (Cl. 169—11.)



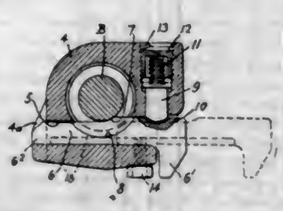
1. The method of extinguishing fire which comprises projecting a jet of fire extinguishing gas at a high velocity and interposing in close contiguity to said jet a protective shield between the jet and the laterally adjacent atmospheric air so long as the velocity of said jet is otherwise sufficient to entrain air.

1,760,275. RAIL ANCHOR. GEORGE LOOP MOORE and JAMES ROBERT STEELE, Owego, N. Y. Filed Aug. 4, 1927. Serial No. 210,627. 15 Claims. (Cl. 238—329.)



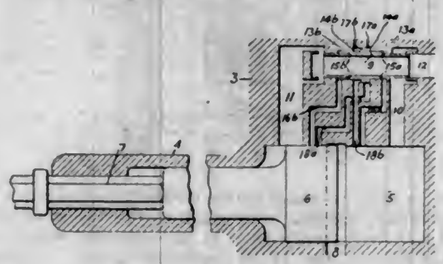
11. A jaw member for a rail anchor comprising a pair of spaced side members of rhombic outline, a web member joining said side members, the forward edges of the side members being slotted to provide aligned bearing surfaces which are angular with respect to the plane of the web member, and tie engaging members extending downwardly and outwardly from said web members.

1,760,276. STEEL PULLER. GUSTAVE M. NELL, Detroit, Mich., assignor to Chicago Pneumatic Tool Company, New York, N. Y., a Corporation of New Jersey. Filed July 30, 1926. Serial No. 125,905. 1 Claim. (Cl. 121—32.)



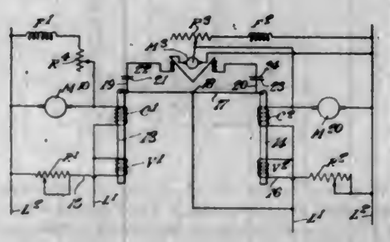
The combination with a chuck for a collared working tool, said chuck having a transverse differential opening therethrough intersecting the tool socket, of a retainer pin substantially rectangular in cross section and differential in size to fit said opening and arranged to engage said tool beyond its collar, the ends of said pin extending beyond said chuck and one end being formed as a hook-shaped stop to facilitate moving said pin, cooperating means on said chuck and pin including a stop screw on said chuck engaging a groove in said pin for limiting the movement of said pin within said opening and for preventing the withdrawal of said pin, a spring stop for holding said pin in tool retaining position, said pin having an arcuate groove in its upper face adapted to receive the tool collar and lock the pin against movement in said opening, and means preventing contact with the material worked upon by said tool from forcing said pin to tool releasing position comprising an extension on said chuck partly enclosing the smaller end of said pin.

1,760,277. FLUID-PRESSURE TOOL. GUSTAVE M. NELL, Detroit, Mich., assignor to Chicago Pneumatic Tool Company, New York, N. Y., a Corporation of New Jersey. Filed Dec. 29, 1926. Serial No. 157,704. 10 Claims. (Cl. 121—18.)



1. A fluid pressure motor comprising a cylinder, a piston reciprocable therein, and a valve for controlling the motive fluid supply to operate said piston and moving automatically in timed relation with the latter, said valve having opposed shift areas, said cylinder providing vents for said areas and supply passages thereto under control of said piston, said vents being of less extent than said passages, said valve having opposed holding areas alternately effective to retain the valve in position, and means for substantially balancing the pressure on said holding areas just before motive fluid is admitted to one of said supply passages to cause the valve to shift.

1,760,278. METHOD AND APPARATUS FOR ROLLING TUBULAR ARTICLES. HENRY S. NEWLIN, Jersey City, and WILLIAM E. DATE, East Orange, N. J.; said Newlin assignor to The M. W. Kellogg Company, New York, N. Y., a Corporation of Delaware. Filed Oct. 8, 1927. Serial No. 224,892. 3 Claims. (Cl. 80—5.)



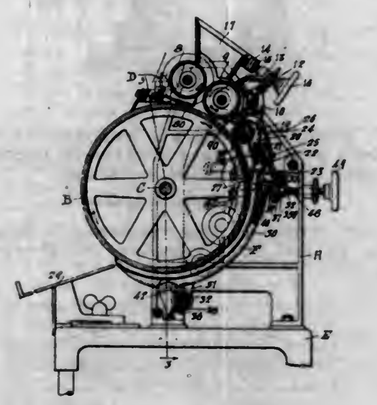
1. The method of equalizing the load between two motors the speed of one of which varies continuously, which comprises tying the said motors together through a differential load control device consisting of a pivoted bar member having contact means at either end, magnets connected with either end of said bar and energized by the respective motor circuits, said magnets when unequally energized being adapted to turn said pivoted member to make contact with a rheostat member connected to each motor circuit and causing the speed of one motor to increase until both magnets are energized equally.

1,760,279. DISK-FORM BOTTLE CLOSURE. FRANK O'NEILL, Jr., New York, N. Y. Filed Dec. 9, 1927. Serial No. 238,863. 8 Claims. (Cl. 215—51.)



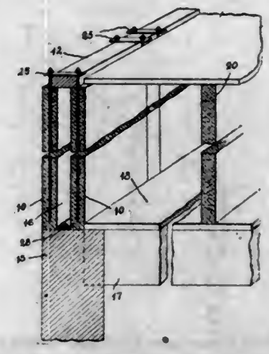
1. A container closure of sheet material having on opposite sides oppositely projecting overlapping tongues that provide handle means for lifting the closure from the container, said tongues being integral parts of the same piece of sheet material.

1,760,280. ROLL-MOLDING MACHINE. EDWARD T. PARSONS, Upper Montclair, N. J., assignor to Thomson Machine Company, a Corporation of New Jersey. Filed June 20, 1928. Serial No. 286,853. 2 Claims. (Cl. 107—9.)



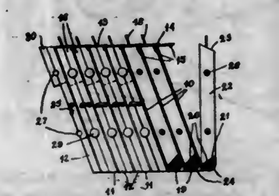
1. In a dough molding machine, a main frame, a dough sheeting mechanism on said frame, a loaf-forming mechanism comprising a pair of members having portions of their surfaces adjacently disposed and movable in opposite directions, one of which is a roller, to cooperate with each other to curl the forward edge of a sheet of dough from said dough sheeting mechanism, a supplemental frame pivotally mounted at one end on said main frame to swing toward and from said roller, a substantially semicircular curling plate partially surrounding said roller in spaced and eccentric relation thereto at the side thereof opposite the other of said surfaces to receive the curled edge of the dough sheet between said roller and the end of said curling plate nearest the roller and spirally roll said sheet into a loaf, means for hingedly mounting said curling plate at its other end on said supplemental frame to bodily swing toward and from said roller, said eccentric relation of the curling plate to said roller compensating for the increase in diameter of the loaf as the sheet is rolled, and means mounted on said supplemental frame for influencing said curling plate toward said curling roller so that said curling plate can yield away from said roller and exert only such pressure on the loaf as to cause the necessary friction to cause the sheet to be rolled.

1,760,281. BUILDING-WALL SECTION. WALDEMAR J. PEDERSEN, Floral Park, Long Island, N. Y. Filed Jan. 21, 1928. Serial No. 248,540. 1 Claim. (Cl. 72—16.)



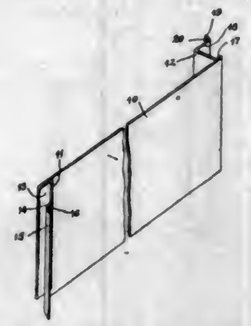
A building wall formed from inner and outer wall sections arranged in spaced relation to each other to form a continuous unobstructed passage throughout the entire area of said wall, each of said sections being of the same thickness throughout the area thereof forming flat inner and outer surfaces on said sections, the side edges of each section being beveled outwardly to form intermediate adjacent wall sections, chambers substantially V-shaped in cross sectional form and exposed through the outer surfaces of said inner and outer walls, reinforcing and coupling rods extending transversely through each section at vertically spaced intervals, the ends of said rods projecting through the beveled side edges of said sections, the rods of adjacent sections being in alinement and adapted to be twisted together within said chambers in coupling said sections together to form the wall structure, a slushing compound adapted to be placed in said chambers to conceal and finish the joints of adjacent wall sections, means for spacing the lower ends of said inner and outer walls, coupling strips arranged upon the upper edges of said inner and outer wall sections, and means involving reinforcing rods arranged vertically in said wall sections cooperating with said strips to support and space the upper ends of said inner and outer walls.

1,760,282. CONCRETE MOLD. WALDEMAR J. PEDERSEN, Floral Park, Long Island, N. Y. Filed Jan. 21, 1928. Serial No. 248,541. 9 Claims. (Cl. 25—121.)



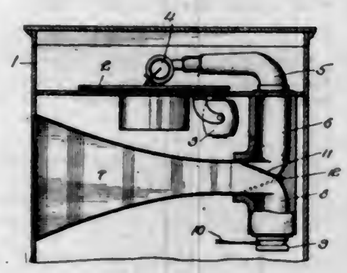
3. In a mold of the class described, a mold section comprising an elongated wall member, end wall members extending angularly with reference to opposite side faces of the ends of said first named wall member, the first named wall member being coupled with the end wall members in such manner as to assume a vertically inclined position, the upper edge of the first named wall member having angularly extending bracing and spacing members, a pallet adapted to be arranged adjacent the lower end of said first named wall member with the upper face of said pallet arranged at a vertical inclination to said wall member, the lower surface of said pallet being arc-shaped in form, and another mold section similar to the fist named section and adapted to be arranged at one side thereof, and means for coupling one section with an adjacent section to form a mold chamber therebetween, the bottom of which is formed by said pallet.

1,760,283. CONCRETE MOLD. WALDEMAR J. PEDERSEN, Floral Park, Long Island, N. Y. Filed Jan. 21, 1928. Serial No. 248,542. 3 Claims. (Cl. 25—121.)



3. In a mold of the class described, a mold section comprising a vertically arranged straight wall member, side wall members arranged at the side edges of said vertical wall member and being substantially V-shaped in cross sectional form including portions arranged in parallel and abutting relation to the adjacent surfaces of the vertical wall member, portions arranged at an angle of approximately forty-five degrees to the first named portion and said vertical wall member, the free edges of said angular portions terminating in angular flanges for alining one wall member with an adjacent wall member in forming a multiple chamber mold, said side wall members being arranged at opposite side faces of the vertical wall member, and the angular portion of said side wall member at one side of the mold section being directly inwardly and at the other side being directed outwardly.

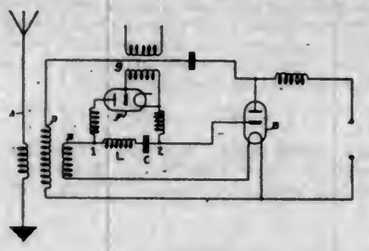
1,760,284. DUPLEX HORN FOR SOUND REPRODUCERS. GROVER, G. REHFIELD, Chicago, Ill., assignor, by mesne assignments, to Radio Corporation of America, New York, N. Y., a Corporation of Delaware. Filed Feb. 27, 1922, Serial No. 539,366. Renewed Feb. 21, 1925. 5 Claims. (Cl. 179—100.12.)



1. A sound reproducing apparatus comprising a wireless receiving set, a phonograph, an amplifying horn having a pair of inlets respectively associated with the phonograph and with the wireless receiving set, means including a movable valve for normally abutting off the inlet connection to the phonograph, and automatic means for moving the valve to cause the same to shut off the inlet connection associated with the wireless receiving set when the phonograph is in operation.

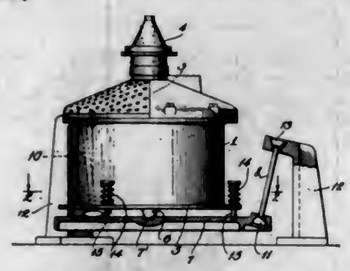
1,760,285. MODULATION CIRCUIT. WALTER SCHAFFER, Berlin, Germany, assignor to Gesellschaft für Drahtlose Telegraphie m. b. H., Berlin, Germany, a Corporation of Germany. Filed Feb. 14, 1924, Serial No. 692,628, and in Germany Feb. 16, 1923. 5 Claims. (Cl. 250—17.)

1. A modulated radio frequency generating system comprising a triode oscillation generator, means for controlling the grid bias thereof at signal frequency and means including a series resonant circuit tuned to the oscilla-



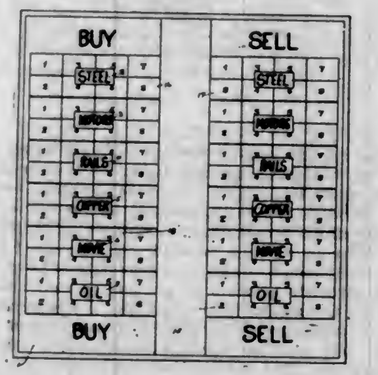
tion frequency connected in parallel with the bias control means for preventing influence upon said bias control means by the generated oscillations.

1,760,286. CENTRIFUGAL. CARL SCHAUM, Germantown, Pa., assignor to Fletcher Works, Incorporated, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Mar. 18, 1926. (Serial No. 95,550. 3 Claims. (Cl. 210—63.)



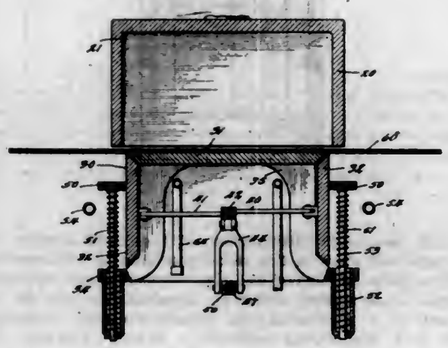
1. A centrifugal comprising a centrifugal tub and basket, and a plurality of hangers of unequal lengths freely suspending the centrifugal tub and basket.

1,760,287. GAME. FRANCIS J. SCHIPPERS, Brooklyn, N. Y. Filed May 12, 1928. Serial No. 277,197. 2 Claims. (Cl. 273—135.)



1. A game comprising a game sheet divided into a plurality of greater sub-divisions, each greater sub-division being again divided into a plurality of lesser sub-divisions, each of the lesser sub-divisions having an indicating figure, a plurality of disks, each bearing a figure corresponding to a figure in the lesser sub-divisions, and a plurality of cards each bearing the title of one of the greater sub-divisions, and a plurality of cubes for directing the play, one of said cubes bearing on each of its sides, the title of one of the greater sub-divisions, another cube bearing on each of its sides, a figure indicating the value.

1,760,288. APPARATUS FOR MAKING CONTAINERS. LESLIE STEVENS, Glen Ridge, N. J., assignor to Stevens Manufacturing Corporation, New York, N. Y., a Corporation of Delaware. Original application filed May 28, 1923, Serial No. 641,983. Divided and this application filed Jan. 14, 1928. Serial No. 246,880. 5 Claims. (Cl. 18—19.)



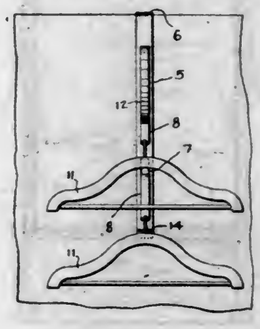
1. In an apparatus for making a seamless container, the combination with a rectangular internal form; of means for drawing and shaping a continuous piece of sheet material against said internal form, comprising a rectangular external form of such relative size that the space between its side and end walls and the side and end walls of the internal form is only slightly greater than the thickness of the sheet material to be shaped between the forms, the edge of the side and end walls of the external form being adapted to guide the material smoothly into the space between said walls and the walls of the internal form, and means for causing a relative approaching forming movement between said forms, whereby as the external form moves over the internal form a piece of material which has been placed on the top of the internal form is drawn smoothly in between the side walls and end walls of the two forms; and means for causing a slight relative flatwise approaching movement between the side and end walls of the two forms to press the shaped material between said walls.

1,760,289. HIGHLY-ACTIVE ADSORBENT AND CATALYTIC MASS. FRITZ STOEWENER, Ludwigshafen-on-the-Rhine, and ERNST MÜNZING, Neurossen, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Oct. 6, 1927, Serial No. 224,518, and in Germany Oct. 13, 1926. 3 Claims. (Cl. 23—182.)

1. The process of producing hard highly active adsorbents and catalytic masses which comprises mechanically homogenizing a washed heterogeneous jelly in a moist state until a homogeneous paste is obtained and drying the paste.

1,760,290. CLOTHES-HANGING DEVICE. ANTHONY TAMMARAZZO, Arlington, N. J. Filed Sept. 13, 1928. Serial No. 305,796. 2 Claims. (Cl. 211—87.)

1. A portable and collapsible clothes hanger, including a bar terminally formed to permit it to be removably suspended from a fixture, said bar being formed between its ends with a rectangular slot, and a clothes hanger having a hook terminal to loosely embrace and be supported by the lower edge of such slot, said member being extended below the hook to provide a length to bear squarely



against the surface of the bar and extended outwardly from such extended portion to support a hanger proper in advance of and spaced from said bar.

1,760,291. INDICATING DEVICE. ADOLPH A. THOMAS, New York, N. Y. Original application filed Aug. 24, 1925, Serial No. 51,915. Divided and this application filed Mar. 20, 1929. Serial No. 348,444. 16 Claims. (Cl. 116—124.3.)

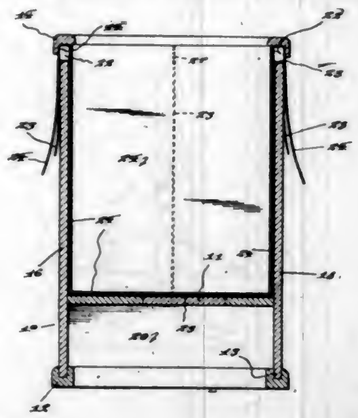


1. Dialing means for radio use including a rotatably mounted dial having progressively numbered divisions arranged thereon in a plurality of spiral turns about the center of mounting, a spiral abutment rotatable with the dial coextensive with the spiral turns and having substantially the same pitch as that of the spiral turns, a guide and an indicator mounted in the guide engaging the abutment, said indicator having radial movement across the dial adapted to abut upon each indicating number of said divisions.

1,760,292. HOUSEHOLD-WASTE BALER. WALTER A. TROTH, Brooklyn, N. Y. Filed Nov. 21, 1928. Serial No. 320,938. 3 Claims. (Cl. 100—19.)

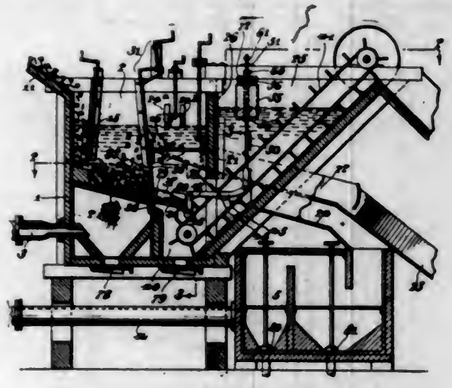
1. A baler comprising a bottom frame member having a groove in its upper face, a top frame member having a groove in its bottom face, side walls having their lower ends removably mounted in the groove in said bottom

frame member and having their upper ends removably mounted in the groove in said top frame member, a re-



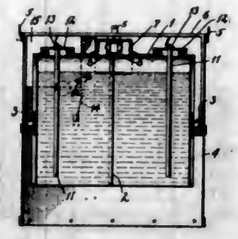
movable bottom for said baler, and clips carried by the top edges of said side walls for securing an enveloping means within said baler.

1,760,293. COAL-WASHING APPARATUS. ANDREW WITZAL, Scranton, ANTHONY G. RABEL, Throop, and HARRY F. STEVENS, Dunmore, Pa. Filed Jan. 12, 1927. Serial No. 160,351. 11 Claims. (Cl. 209—496.)



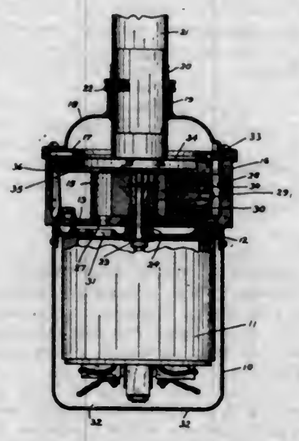
1. In a coal washing apparatus, the combination of a tank comprising a couple of compartments through one of which water flows and in the other of which the water is contained in a more or less quiescent state, the flow of water through the first named compartment operating to separate the coal from slate and other refuse matter of higher specific gravity than the coal, the said first named compartment having a screen bottom upon which the slate and other refuse matter settles and also having a front wall having an opening at the lower edge thereof through which the said slate and other refuse matter is discharged, said opening constituting a passage for water from the first to the second named compartment and through which the two compartments are in direct communication, the height of the water in the said second compartment varying with the percentage of slate and other refuse in the coal being washed, a hinged plate extending forwardly from the lower edge of the discharge opening for the slate and other refuse matter separated from the coal, and means adapted to be controlled by variation of the height of the water in the said second named compartment for adjusting the said hinged plate into different positions.

1,760,294. FIRE EXTINGUISHER. WILLIS D. WITTER, Catonsville, Md., assignor, by mesne assignments, to American La France and Foamite Corporation, a Corporation of New York. Filed Apr. 9, 1925. Serial No. 21,804. 13 Claims. (Cl. 169—27.)



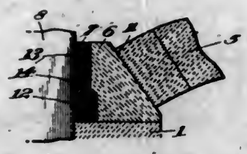
1. A foam fire extinguisher of the kind adapted to be supported above a fire risk comprising in combination substantially cylindrical solution compartments for component foam making solutions mounted for rotation as a unit on a horizontal axis parallel to the cylindrical axis to a discharging position, a mixing chamber and foam delivery conduit carried by said rotatable unit and having connections with each of said compartments and a foam delivery outlet, and means for retaining the unit in the position in which said conduit is on the upper side thereof.

1,760,295. PNEUMATIC HORN. JOHN M. AUFIERO, Brooklyn, N. Y., assignor to E. A. Laboratories, Inc., Brooklyn, N. Y., a Corporation of New York. Filed Aug. 3, 1929. Serial No. 383,266. 7 Claims. (Cl. 116—142.)



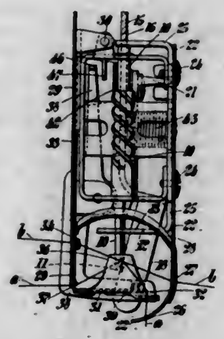
1. A warning signal including, in combination, a motor, a plate mounting said motor, a compressor unit affixed to said plate and including a flange extending adjacent its outer edge, said plate and unit being formed with openings for the passage of air, a clamping ring connected to said unit, a diaphragm retained by said ring and adapted to be acted upon by air compressed by said unit, a housing mounted by said ring, and a tube mounted by said housing and having its inner end extending in contact with said diaphragm.

1,760,296. SKEWBACK BLOCK. JOSEPH BROOKES, Sparrows Point, Md., assignor to Bethlehem Steel Company. Filed Nov. 5, 1927. Serial No. 231,367. 2 Claims. (Cl. 110—99.)



1. A skewback support of substantially rectangular cross section having a face thereof of step formation to constitute a shoulder, said shoulder being normal to the body portion and intermediate the top and bottom edges of said body portion, said face being continuous from said shoulder to the lower extremity of the support.

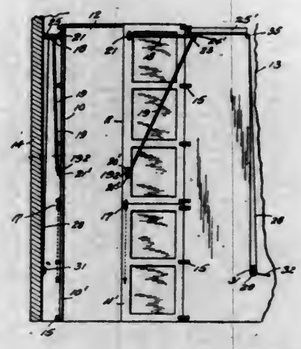
1,760,297. KNOTTING APPLIANCE. THOMAS COLLINS, Timperley, England, assignor to Cook & Co., Manchester, Limited, Manchester, England, a British Company. Filed Feb. 8, 1928, Serial No. 252,779, and in Great Britain May 19, 1927. 4 Claims. (Cl. 289—3.)



1. A device for tying weavers' knots having means whereby the device is held, a supporting member, a frame carried by said supporting member, a rotatable knotting bill mounted in said frame, hand operated means for operating said knotting bill, a member pivotally mounted on one side of said frame, a member slidably mounted on the other side of said frame, a curved portion at the end of said member passing partly across the front of said frame, a yarn slot near the end of said curved portion, a yarn slot in the straight portion of said member, a guiding horn projecting upwardly from near the front edge of said yarn slot in said straight portion, said guiding horn passing across said frame, a slot in said sliding member near its rear end, and on the underside, a pivot on said supporting member, a lever mounted on said pivot, one arm of said lever engaging said slot at the rear of said sliding arm, a slot in said hand operated means for operating said knotting bill, the other arm of said lever overhanging said slot, a pin on said arm engaging said slot whereby the movement of said hand operated means to rotate said knotting bill reciprocates said sliding member.

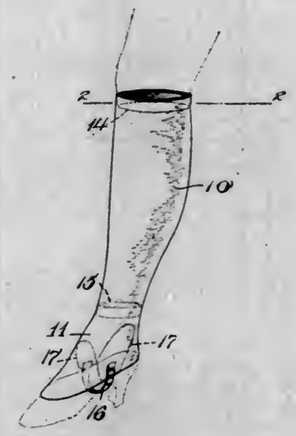
1,760,298. REMOTE-CONTROLLED DOOR-OPERATING MECHANISM. GEORGE A. CROSMAN, Seattle, Wash. Filed Feb. 26, 1929. Serial No. 342,725. 9 Claims. (Cl. 268—61.)

1. In combination with a building structure and a door hingedly connected thereto, a track rigid with said structure at the hinged side of the door, a member arranged to travel on said track, rod devices operatively connecting



said member with the free side of the door at different elevations, and means connected to said member to impart door opening and closing movements thereto.

1,760,299. STOCKING PROTECTOR. ALEXANDER B DICKERSON, Newark, N. J. Filed Aug. 7, 1928. Serial No. 297,979. 1 Claim. (Cl. 36—2.)

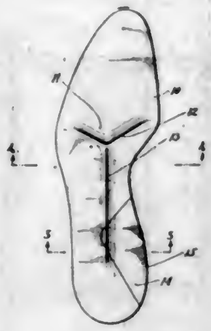


A stocking protector comprising a continuous thin elastic fabric to fit the leg and to be supported over a stocking by its own elasticity, said fabric being waterproof and a wire member incorporated in the foot portion of the protector, said member extending along both sides of the foot and having loops to extend over the instep and around the back of foot above the heel.

1,760,300. INSOLE FOR SHOES. ALFRED F. DONOVAN, Boston, Mass. Filed Nov. 8, 1927. Serial No. 231,869. 1 Claim. (Cl. 36—71.)

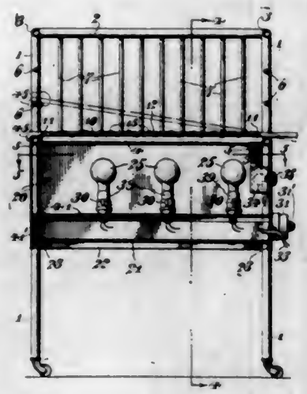
An insole constructed of relatively rigid material molded to provide an elevated area disposed coincident with the metatarsal arch of the human foot and having an elevated

area disposed at one side of the center of the heel portion of the foot and a central valley portion extended length-



wise of the shank portion of the insole and between the two said elevated areas for controlling the bend of the insole below the arch of the human foot.

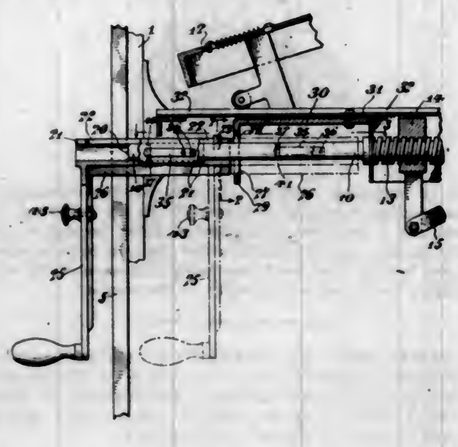
1,760,301. BASSINET. LAURENCE R. DOUGHERTY, Penfield, Pa., assignor to H. D. Dougherty & Company, Incorporated, Philadelphia, Pa., a Corporation of Pennsylvania. Filed June 24, 1927. Serial No. 201,209. 1 Claim. (Cl. 5—284.)



A bassinet comprising a casing having sides and ends and a bottom and an open top, infant-supporting means located above said casing and constituting practically a closure for the open top thereof, a casing supported upon the bottom of the first named casing, and electric heating elements mounted upon said second named casing and projecting upwardly therefrom, the said heating elements being located within the first named casing underneath the said infant supporting means, the said second named casing being adapted to inclose the electric current conducting means for supplying electric current to the said electric heating elements.

1,760,302. MEANS FOR ADJUSTING ARTICULATED BEDSPRINGS. LAURENCE R. DOUGHERTY, Penfield, Pa., assignor to H. D. Dougherty & Company, Incorporated, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Feb. 9, 1928. Serial No. 252,988. 12 Claims. (Cl. 5—77.)

1. In means for relatively adjusting the articulated members of a bed spring, the combination of a rotatable shaft one end of which terminates inwardly of the outer side of an end frame of a bed, means mounted upon the end portion of said shaft for causing rotation thereof, the said means including a sleeve, means to permit the said sleeve to be adjusted inwardly and outwardly upon the said shaft



to position the outer portion of the said sleeve either inwardly or outwardly of the outer side of the said end frame, and means operating to lock said sleeve and shaft against rotation when the sleeve is adjusted to its inward position upon the shaft.

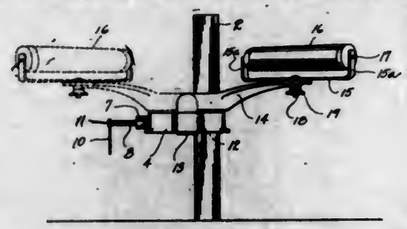
1,760,303. ATTACHMENT FOR BEDS. LAURENCE R. DOUGHERTY, Penfield, Pa., assignor to H. D. Dougherty & Company, Incorporated, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Mar. 17, 1928. Serial No. 262,560. 2 Claims. (Cl. 5—83.)



1. In combination, a bed, a frame having means for supporting a person, means for supporting said frame in position above the bed, means for vertically adjusting the opposite ends of said frame independently of each other whereby the said frame may be placed in angular position with respect to the plane of the opposite side rails of the bed, means for guiding the said frame in its vertical adjustments the said means comprising projections which depend from the said frame, and tubular projections which extend upwardly from the bed structure, the said projections being in telescopic engagement with each other and relatively axially adjustable, and means for pivotally supporting said tubular projections whereby angular adjustment thereof may be permitted.

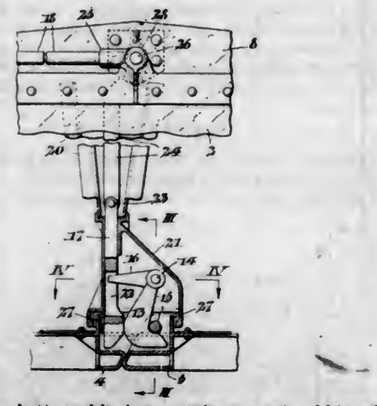
1,760,304. LUMBER-LOADING ROLL. EMIL FELDIN, Everett, Wash. Filed Oct. 22, 1928. Serial No. 314,100. 2 Claims. (Cl. 193—42.)

1. A device of the character described comprising a clamp bar provided with a socket, and clamp mechanism associated with the bar for detachably securing it at various positions of adjustment on a supporting member, a bracket having a mounting shank removably applicable to the socket as a means of supporting the bracket in a horizontally extended position and said shank being reversible in the socket to change the relation of the bracket with respect



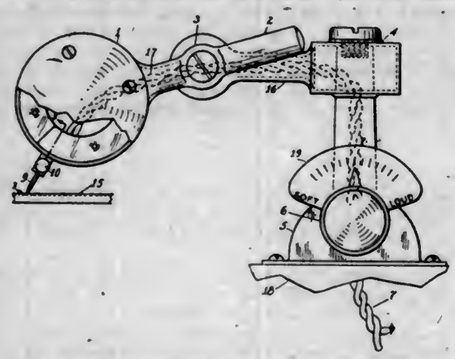
to the bar, a yoke pivotally mounted at the outer end of the bracket, and a horizontally disposed roller supported at its ends in said yoke and releasable means for securing the yoke to the bracket to retain the yoke at various positions of adjustment.

1,760,305. DROP-BOTTOM SHIPPING CONTAINER. FREDERICK K. FILDES, Altoona, Pa. Filed Nov. 22, 1928, Serial No. 321,147. Renewed Feb. 28, 1930. 10 Claims. (Cl. 105—366.)



1. In a drop-bottom shipping container, a pair of hinged bottom doors, one adapted to be held in closed position by the other, means for locking and releasing said latter bottom door, said means being operable from the top of the container.

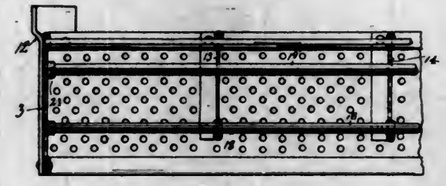
1,760,306. REPRODUCER ARM. ALFRED N. GOLDSMITH, Mount Vernon, N. Y., assignor to Radio Corporation of America, a Corporation of Delaware. Filed July 29, 1925. Serial No. 46,702. 2 Claims. (Cl. 179—100.4.)



1. In a phonograph the combination of, an electromagnetic reproducer, a reproducer arm and pedestal, an electro-

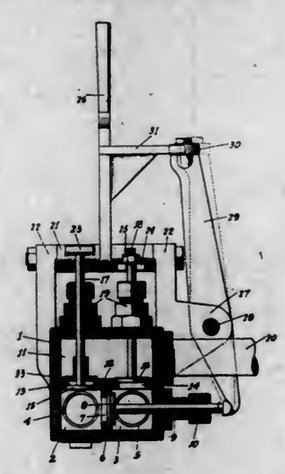
magnetic controlling means constructed and arranged to control the output of said electro-magnetic reproducer, said means being mounted within said pedestal, means carried by said pedestal to vary the controlling means, and means associated with said last mentioned means to indicate the character of adjustment on said controlling means.

1,760,307. METAL DISH TRAY FOR DISHWASHING MACHINES. WALTER BERNHEIM KAUFFMANN, Boston, Mass., assignor, by mesne assignments, to Edward S. Foster, Boston, Mass. Filed Jan. 28, 1928. Serial No. 250,131. 4 Claims. (Cl. 141—9.)



1. In a rectangular tray construction for use in dish washing machines, the combination of perforated metal side members having their upper and lower edges reinforced by metal strips secured thereto, metal reinforcing plates secured to the corners formed by the joinder of said side members with each other, a plurality of perforated metal spacing strips of less width than said side members, and secured to and extending at predetermined intervals between two of said side members, metal reinforcing strips secured to the upper and lower edges of said metal spacing strips, a plurality of metal spacing rods secured to the upper reinforced portions of and extending between the other two side members and said metal spacing strips, and a plurality of parallel wooden rods spaced at predetermined intervals with respect to each other and removably supported by and extending through said last mentioned side members and the lower reinforced portions of said metal spacing strips.

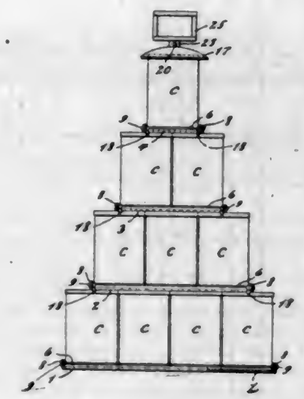
1,760,308. FLUID-CONTROL VALVE. ROBERT G. LE TOURNEAU, Stockton, Calif. Filed Feb. 27, 1928. Serial No. 257,503. 7 Claims. (Cl. 277—1.)



1. A valve structure including a body, a pair of separated pressure intake and return chambers therein, another chamber in the body having spaced ports communicating with said first named chambers separately, a conduit leading from said other chamber, normally closed valves for said ports, a movable operating structure for

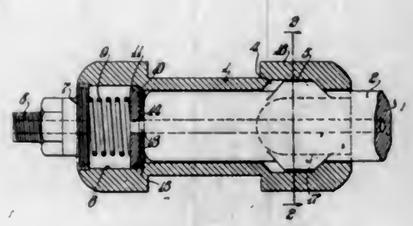
said valves for opening them alternately, there being a port between said pressure intake and return chambers, a valve for said port opening away from the intake chamber and means for closing said last named valve operated in conjunction with the operation of said valve operating structure.

1,760,309. COLLAPSIBLE DISPLAY STAND. MURRAY J. MARRITS, New York, N. Y. Filed Dec. 18, 1928. Serial No. 326,719. 2 Claims. (Cl. 211—74.)



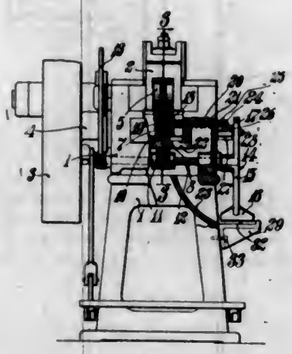
1. A collapsible display stand, comprising a sectional base plate having flanges for holding engagement with the sides of packages placed thereon, the sections of said plate being adjustable relatively to each other in a direction to vary the size of its package receiving area, means adjustably connecting the flanges of said sections for securing the latter in adjusted position, a top plate for holding the packages from the upper side thereof, and means for securing the top and base plates in fixed relation.

1,760,310. ROCK DRILL. EDWARD E. MILLER, El Paso, Tex., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed June 22, 1927. Serial No. 200,704. 9 Claims. (Cl. 279—89.)



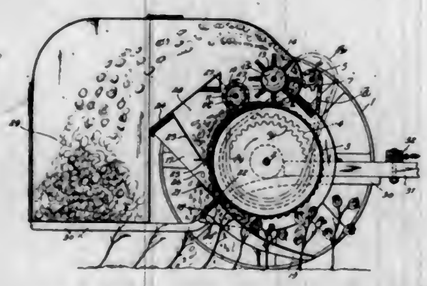
1. In a device for freeing stuck drill steels, a hollow cap member adapted to receive the shank of the drill steel, means for passing pressure fluid through said cap member directly to the longitudinal bore at the end of the steel, and fluid pressure held means carried by said cap member for providing a seal between said cap member and said steel.

1,760,311. FORGING MACHINE. GEORGE F. MILLS, Michigan City, Ind., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed Oct. 5, 1925. Serial No. 60,586. 20 Claims. (Cl. 76—5.)



1. A forging machine comprising initial and final discharge mechanisms, one of which includes an element movable substantially continuously through a predetermined path, and means whereby the other mechanism is rendered operative only during the portion of said movement through said path.

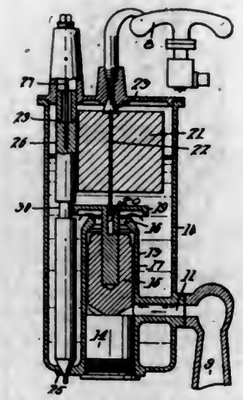
1,760,312. COTTON-HARVESTING MACHINE. JOHN E. MITCHELL, St. Louis, Mo. Filed Feb. 15, 1929. Serial No. 340,065. 8 Claims. (Cl. 56—34.)



1. A combined cotton harvesting and cleaning machine, comprising a series of spaced stripping members adapted to be passed through the cotton plants, and a saw cylinder mounted for rotation above said stripping members to engage the bolls of cotton on the plants entering the spaces between said stripping members and defining a gradually narrowing space from the front ends of said stripping members to the rear ends thereof.

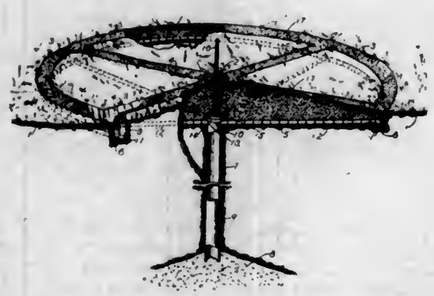
1,760,313. AUTOMATIC PRIMER FOR CENTRIFUGAL PUMPS. RALPH L. MORGAN, Worcester, Mass. Filed Mar. 12, 1928. Serial No. 260,929. 7 Claims. (Cl. 103—113.)

1. The combination with a centrifugal pump and a source of minus pressure, of a primer for the pump comprising a casing having an inlet connected with the normal pressure side of the pump, a cylinder in the casing for receiving liquid directly from the pump, a passage delivering from the cylinder into the chamber of the primer, means whereby when the pressure in the inlet is low the liquid will flow into the casing through the cylinder, but when the pressure is high, communication to the casing will be cut off, the casing being connected with the source



of minus pressure, and a float valve in the casing for closing the connection between the casing and said source of minus pressure.

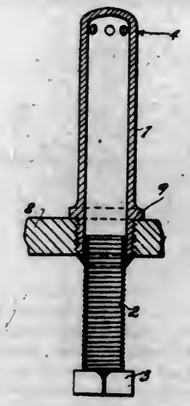
1,760,314. DRAINAGE SYSTEM. ED MURREY, College View, Nebr. Filed May 4, 1928. Serial No. 275,089. 6 Claims. (Cl. 61—11.)



1. In a drainage construction for draining a depressed area, a well at the low point of said area, trench portions circumferentially disposed to said well to intercept water flowing toward the well, and radial channels connecting the well with said trench portions for conducting water from the trench portions to the well.

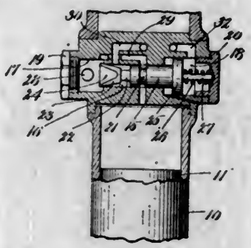
1,760,315. AERATION DEVICE FOR INTERNAL-COMBUSTION ENGINES. RICHARD NACKET, Vancouver, British Columbia, Canada. Filed July 13, 1927. Serial No. 205,453. 1 Claim. (Cl. 48—180.)

An aeration device for diluting the intake manifold gases of an internal combustion engine comprising, a hollow screw-threaded plug adapted to engage a corresponding screw-threaded aperture in an intake manifold, a tightly wound helix of resilient wire forming a flexible tube secured air-tight to the inner extremity of said hollow plug, the outward extremity of the said flexible tube being closed air-tight, fins secured to the closed extremity of said helix, said fins being adapted to resist the gaseous flow in said manifold, and the said helix being so wound that its



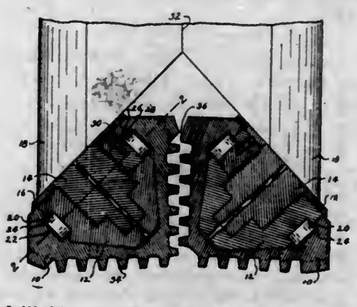
adjacent convolutions are air-tight except when said helix is deflected from axial alignment with the said hollow plug by the gaseous flow in the said manifold.

1,760,316. DRILLING MECHANISM. CHARLES F. OSGOOD, Claremont, N. H., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed Mar. 13, 1924. Serial No. 699,122. 1 Claim. (Cl. 121—5.)



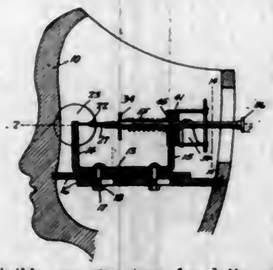
The combination in a drilling mechanism comprising a tool, rotation means therefor actuated by fluid pressure, fluid actuated feeding means for said tool, and means responsive to the resistance to rotation of said tool for automatically shutting down the flow of fluid to said feed and increasing the flow to said rotation means.

1,760,317. DRILL BIT. ROWLAND O. PICKIN, Los Angeles, Calif. Filed Mar. 3, 1927. Serial No. 172,309. 5 Claims. (Cl. 255—71.)



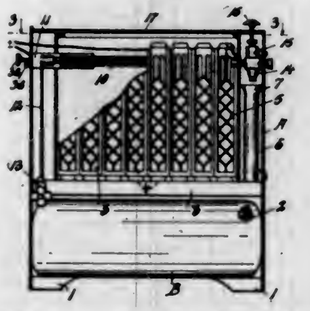
1. A drill bit, provided with an approximately frusto conical shaped rotatable cutter locked upon a bearing by means of rollers inserted in a raceway, said rollers being inserted in said raceway through a hole in said bearing.

1,760,318. DIRIGIBLE EYE STRUCTURE FOR DOLLS AND MANIKINS. JOHN C. POOKE, Utica, N. Y. Filed Jan. 7, 1929. Serial No. 330,793. 4 Claims. (Cl. 46—40.)



1. In a dirigible eye structure for dolls and manikins, the combination of a hollow head having eye openings at the front, a frame attachable to the interior of the head, a pair of spherical eyes in said openings, a plate hingedly mounted near its forward edge on said frame on a horizontal axis approximating the line connecting the centers of the two eyes, said hinge plate having oppositely directed lateral arms extending back of said eyes and having a guideway curved in a circle having approximately the same center as the adjacent eye, a bracket on each arm adapted to slide on said guideway of the arm and having forwardly extending means rigidly connected to the rear of the eye and means for swinging said plate on its axis and for sliding said brackets in unison on said plate.

1,760,319. LIQUID-FUEL RADIANT HEATER. FRANK V. RISINGER, Lakewood, Ohio. Filed Jan. 7, 1929. Serial No. 330,833. 11 Claims. (Cl. 126—95.)



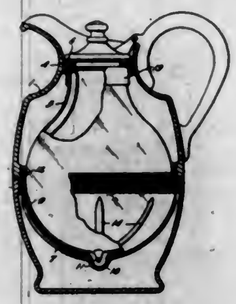
1. In a heater, in combination, a burner, heating elements heated by a flame from the burner at the base of the heating elements, and a generating appliance for vaporizing liquid fuel to be consumed at said burner, said appliance being located at the upper portions of the heating elements remote from the burner and in heat exchange relation to the said elements.

1,760,320. HAIR-CURLING APPARATUS. PETER SANTURELLO, Columbus, Ohio. Filed Jan. 9, 1926. Serial No. 80,321. 54 Claims. (Cl. 132—33.)



1. In a hair-waving apparatus, the combination of a mandrel, relatively movable recessed plates secured to one end of said mandrel for attaching said mandrel to a bunch of hair in close proximity to the root ends thereof and a device slidably and revolubly mounted on said mandrel for spirally coiling said bunch of hair around said mandrel.

1,760,321. VACUUM CONTAINER. FRITZ SEIGHEIM, New York, N. Y. Filed Mar. 24, 1928. Serial No. 264,564. 8 Claims. (Cl. 215—13.)



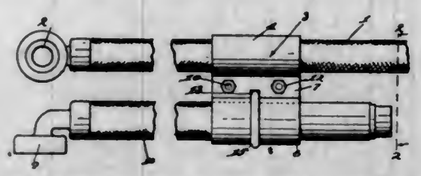
1. A serving utensil having a casing formed of two parts detachably connected, a vacuum container within said casing and removable therefrom, and screw-threaded means for rigidly securing said container to one of said parts.

1,760,322. FUEL-INJECTION VALVE FOR DIESEL ENGINES. DWIGHT E. SELBY, Balboa, Calif. Filed May 21, 1928. Serial No. 279,234. 11 Claims. (Cl. 123—32.)



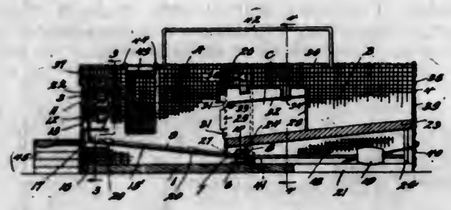
1. In a fuel injector, the combination with a housing having a fuel passage communicating with an injector aperture, and a valve adapted to optionally seal or open said passage, means for moving said valve to open position, resilient means normally holding said valve closed, and resilient means interposed between said valve and said moving means within said housing.

1,760,323. HOSE CONNECTION FOR AIR GAUGES. CHARLES F. SHELTON, Los Angeles, Calif. Filed June 22, 1926. Serial No. 117,705. 1 Claim. (Cl. 248—20.)



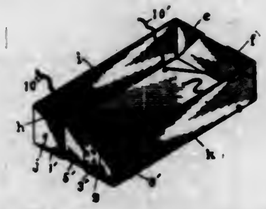
A hose connection for air gauges comprising a strip of metal having a web with tubular portions connected thereto, web ends extending from the tubular portions over the web, the ends and the web being secured to each other by bolts, one of the tubular sections having an annular peripheral slot adapted to receive the bead on a gauge, and said tubular portion being adapted to secure a gauge and a hose secured thereto, the other tubular portion being adapted to secure a flexible hose, the said web having a slot therethrough to receive part of the bead of the gauge.

1,760,324. RAT TRAP. SAMUEL P. SLATER, Atlanta, Ga. Filed Mar. 19, 1928. Serial No. 262,883. 1 Claim. (Cl. 43—67.)



An animal trap comprising a housing open at the top, a partition separating the housing into front and rear trapping sections having entrance openings, a pivoted counterbalanced platform floor member for the front section, a closure for the entrance to said front section hingedly connected to the platform member and operable to closed position by the weight of the animal on said platform, an auxiliary rear bottom section supported in a plane above that of the said platform and having its front end connected to said partition, an auxiliary chamber within said rear section communicating with the entrance to the front section, a gravity actuated closure means for the top of said auxiliary chamber adapted to permit ingress into the rear section and prevent egress therefrom, said auxiliary rear bottom, auxiliary chamber, and partition being connected and removable from said housing as a unit, and closure means for said housing.

1,760,325. FIBROUS CONTAINER. MILTON SMALL, Brooklyn, N. Y. Filed Feb. 5, 1927. Serial No. 166,047. 2 Claims. (Cl. 229—41.)

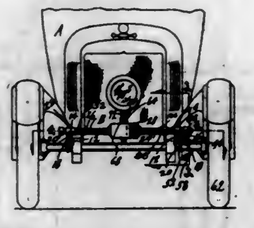


1. A container formed from a rectangular blank of material that is longitudinally and transversely creased parallel with the edges thereof to form the sides and ends of the container, the creases extending to the edges of the blank and intersecting to form corner sections, which latter are integral and united with both the sides and the ends, the sides and corner sections being folded inwardly on the longitudinal crease lines so the corner sections overlie the ends, and when thus folded the corner sections being united with the ends near the free edges of the latter, and the ends being diagonally creased form the intersections of the longitudinal and transverse creases of the blank to the free corners of the overlying corner sections.

1,760,326. IRON-NICKEL ALLOY. FRITZ STÄBLEIN, Essen, Germany, assignor to Fried. Krupp Aktiengesellschaft, Essen-on-the-Ruhr, Germany. Filed Oct. 31, 1928, Serial No. 316,356, and in Germany Dec. 24, 1927. 3 Claims. (Cl. 175—21.)

1. An iron-nickel alloy containing about 33 to 48 per cent of nickel, 0.3 to 3 per cent of silicon, and the remainder iron.

1,760,327. PILOT HEADLIGHT. JAMES ALFRED THOMAS, Albert Lea, Minn. Filed Apr. 4, 1928. Serial No. 267,210. 4 Claims. (Cl. 240—62.)

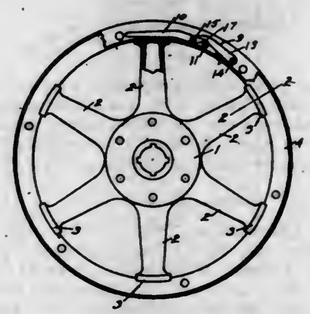


1. A pilot light comprising a tube, means for mounting said tube on an automobile, a control housing associated with said tube, a bracket oscillatably mounted on said housing, a lamp on said bracket, means within said housing for oscillating the bracket, a cable connected with said last mentioned means, extending from one end of the tube and connected to the steering arm of the automobile, an adjusting member in said tube connected with said cable for controlling the position of the oscillating means relative to the bracket, a notch in said tube adjacent the connection of the cable to the last mentioned means for affording access to said adjusting member, and a sleeve normally covering said notch.

1,760,328. HALOGENATED ORTHO-SULPHO-BENZOIC ACID COMPOUNDS. DANIEL TWISS, Baltimore, Md., assignor to Hynson, Westcott & Dunning, Inc., Baltimore, Md., a Corporation of Maryland. Filed Apr. 4, 1928. Serial No. 267,483. 15 Claims. (Cl. 260—53.)

1. A nuclear polyhalogenated ortho-sulpho-benzoic acid compound.

1,760,329. WHEEL. LORENZO E. WAITE, Erie, Pa., assignor to Erie Malleable Iron Company, Erie, Pa., a Corporation of Pennsylvania. Filed Apr. 18, 1929. Serial No. 356,110. 6 Claims. (Cl. 301—100.)

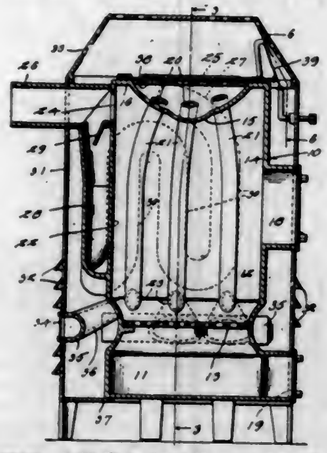


1. In a wheel, the combination of a wheel center having felloe supporting seats; a felloe of channel shape in cross section separated transversely; and a lever mechanism mounted within the channel and drawing the separated ends together to clamp the felloe on the seats.

1,760,330. FURNACE OR HEATER CONSTRUCTION. HOWARD W. WEST, Portsmouth, Va. Filed Mar. 19, 1929. Serial No. 348,226. 14 Claims. (Cl. 126—67.)

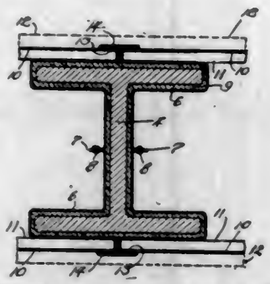
1. In a furnace having the usual wall, fluid conducting tubes disposed interiorly of the furnace and having their upper ends opening through the top and their lower ends through the lower part thereof, each of said tubes having

as the outer wall thereof for at least a portion of its length formed by the furnace wall, and flues arranged exteriorly to said wall and having as their inner walls the outer wall



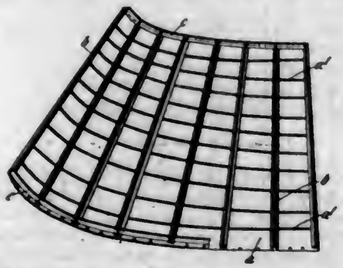
of the furnace, said flues having portions aligning with said tubes and substantially coextensive with the portions of the tubes which have their outer walls formed by the furnace wall.

1,760,331. BUILDING. HALBERT E. WHITE, Tampa, Fla. Filed Oct. 28, 1926. Serial No. 144,788. 7 Claims. (Cl. 72—46.)



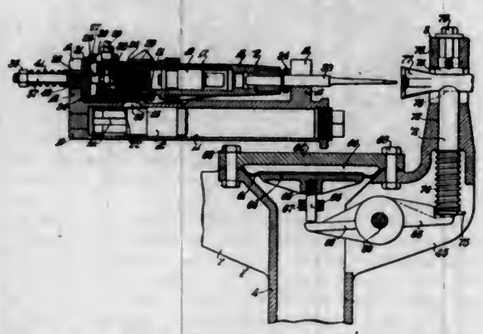
1. Building construction comprising a frame member, a sheet metal casing fitting over said frame member, insulating material between the frame member and the casing, said casing having integrally formed projections, and sheathing engaging with and held in position by said projections.

1,760,332. AEROPLANE WING AND THE LIKE. MICHEL WIBAULT, Paris, France, assignor to Vickers (Aviation) Limited, Westminster, England, a British Company. Filed June 14, 1929, Serial No. 370,895, and in France June 20, 1928. 4 Claims. (Cl. 244—33.)



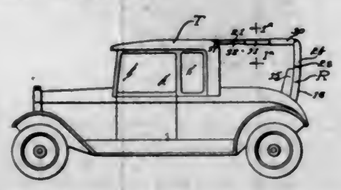
1. An aeroplane wing or the like, comprising an internal framework made up of longitudinal girders interconnected by a plurality of transverse ribs, and a covering made up of a plurality of independent sheet metal panels, each of the said panels being stiffened by a plurality of corrugations arranged upon the exterior surface of the wing and extending transversely of the wing span and by a plurality of stiffening members secured to the interior surface of the wing and extending longitudinally of the wing span.

1,760,333. PUNCHING MECHANISM. WADE H. WINEMAN, Michigan City, Ind., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed Apr. 14, 1927. Serial No. 183,854. 12 Claims. (Cl. 76—5.)



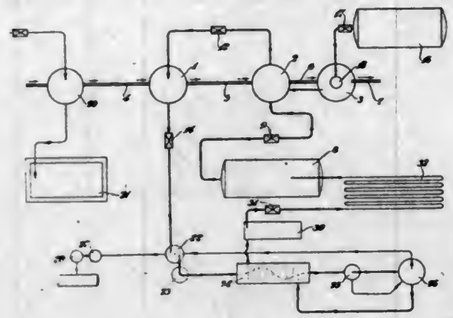
1. In a punching mechanism, a guideway, a carriage slidable on said guideway, a hammer mechanism movably mounted on said carriage, and means for manually feeding said hammer mechanism and carriage relative to said guideway comprising an actuating member extending longitudinally of the carriage and having a laterally bent portion normally engaging said carriage, an abutment carried by said hammer mechanism, and a coiled spring interposed between said bent portion and said abutment to form a resilient connection between said actuating member and said hammer mechanism and between said carriage and said hammer mechanism.

1,760,334. RUMBLE-SEAT TOP. OTTO ALTENBACH, Los Angeles, Calif. Filed May 9, 1927. Serial No. 189,958. 2 Claims. (Cl. 296—98.)



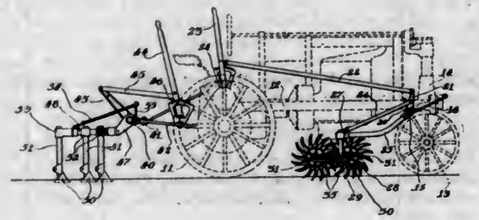
1. In combination, a rumble seat back having a compartment therein, a spring roller in the compartment, a cover sheet secured to the spring roller and normally wound thereon, the cover sheet having side sections, a pair of doors for the compartment hingedly connected to the seat back to occupy a folded position in which they form a closure for the compartment and an extended position in which they are disposed vertically at opposite ends of the seat back, a pair of extensible arms each composed of a plurality of telescopically associated sections and pivoted on the doors to occupy a folded position in which they are disposed parallel to and at the inner sides of the doors and an extended position in which they are at right angles to the upper ends of the doors when the latter are extended, so as to project forwardly to the top of an automobile for attachment thereto, spring means for maintaining the arms in either of said positions, and means for detachably securing the side sections to the seat back and doors to maintain the cover in covering-forming position.

1,760,335. PROCESS FOR THE REMOVAL OF BENZOL AND ITS HOMOLOGUES FROM FUEL GASES. JOSEPH BECKER, Pittsburgh, Pa., assignor to The Koppers Company, a Corporation of Pennsylvania. Filed July 7, 1926. Serial No. 120,895. 7 Claims. (Cl. 183—114.6.)



3. The process of removing benzenoid compounds from fuel gas which comprises recirculating a relatively large quantity of absorbent oil over a stage in which it comes into contact with the gas and a stage in which it is distilled for removal of benzenoid compounds therefrom, and treating the gas subsequent to contact with said recirculating oil with a relatively small volume of unrecirculated fresh absorbent oil.

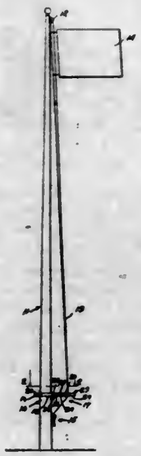
1,760,336. TRACTOR CULTIVATOR. BERT R. BENJAMIN, Oak Park, Ill., assignor to International Harvester Company, a Corporation of New Jersey. Filed Jan. 14, 1928. Serial No. 246,674. 9 Claims. (Cl. 97—47.)



1. In a row crop cultivator, the combination with a tractor having rear traction wheels and dirigible front supporting wheels, of a crossbar mounted on the tractor in advance of the traction wheels and back of the dirigible wheels, drag beams pivoted to said bar and disposed in spaced pairs each of which is arranged to straddle a plant row along which the tractor moves, a plurality of laterally spaced pronged wheels mounted between each pair of drag beams, a second crossbar mounted on the tractor at the rear of the traction wheels, drag beams pivoted on said second crossbar at points in offset relation to the drag beams on the forward crossbar, and cultivating plows mounted on the rear drag beams and positioned to operate on the soil at either side of the path of operation of the pronged wheels.

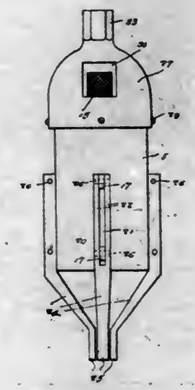
1,760,337. FLAGPOLE-ROPE TIGHTENER. ALPHONSE BERNARDIN, Santa Monica, Calif. Filed Aug. 5, 1929. Serial No. 383,760. 9 Claims. (Cl. 116—173.)

1. A flag rope tightener, comprising in combination a flag pole having a pulley at the top, a securing means at the bottom, a rope roved through the pulley and attached to the securing means, having an up and down run, an arm pivotally connected to the pole and having a guide means interengaging at least one of the runs of the rope,



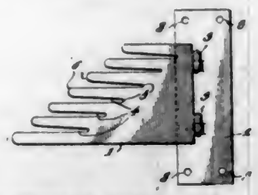
the arm being adapted to move from a vertical to a horizontal position and increase the spacing of the rope from the pole.

1,760,338. ADJUSTABLE SEMISOCKET WRENCH. WILLIAM S. BILLMYER, Jr., Moline, Ill. Filed June 12, 1929. Serial No. 370,354. 2 Claims. (Cl. 81—53.)



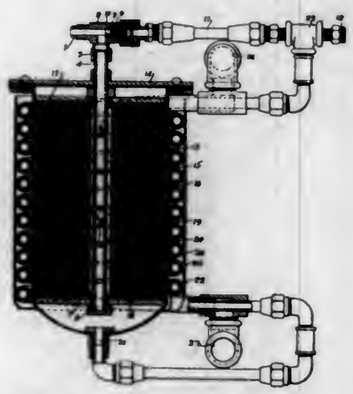
1. In a wrench of the class described, the combination of a cylindrical casing closed at its ends, a substantially dome-shaped cap for the casing, a threaded shank centrally arranged and extending longitudinally of the casing, said shank being fixed to the casing at one end thereof, the other end of said shank projecting beyond the casing at the adjacent end and extending inwardly of said cap, said last mentioned end of the shank being provided with a knurled finger grip, said casing being provided with an opening extending therethrough whereby access may be had to the finger grip, a core carried by and adapted for axial movement of the shank, a plurality of radially disposed gripping arms arranged exteriorly of the casing, means pivotally connecting said arms with said core, and means for moving said arms inwardly or away from one another during axial movement of the core upon said shank.

1,760,339. HANGER FOR TOWELS, TIES, AND SIMILAR ARTICLES. HARRY G. BISHOP, Fort Hoyle, Md. Filed May 7, 1928. Serial No. 275,814. 1 Claim. (Cl. 211—120.)



A rack for supporting neckties and the like comprising a body member having its front edge inclined downwardly and outwardly at an angle to the vertical and having a series of substantially horizontally disposed slots opening out at said edge, said slots being of equal length and extending inwardly one beyond the other to so display the articles as to permit the ready inspection thereof, said slots having horizontal bottom walls and downwardly and inclined top walls to permit the articles placed in said slots to bind between said walls, and means for supporting the body in a raised position.

1,760,340. OIL FILTER. CHARLES C. BLACKMORE, Dayton, Ohio. Filed July 21, 1927. Serial No. 207,387. 6 Claims. (Cl. 210—165.)



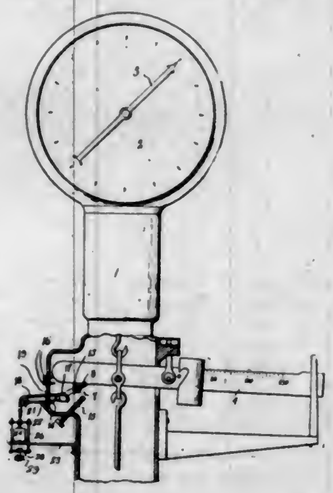
4. In a filter, the combination of a casing, an inlet distribution pipe projecting within said casing, a washer on the inner end of said pipe, a cylindrical filter means supported by said washer and surrounding said pipe, said filter means being composed of filter paper with both ends closed by layers of filter paper.

1,760,341. HARROW-TOOTH HOLDER. JOSEPH L. BARWTON, Ruston, La. Original application filed Nov. 30, 1927, Serial No. 236,808. Divided and this application filed Oct. 12, 1928. Serial No. 312,151. 1 Claim. (Cl. 55—154.)



The combination with a harrow beam, and a harrow tooth attached to the side of the beam, of a bracket disposed about the tooth and provided on one edge at its front and rear corners with lips adapted in one position of the tooth to engage the upper edge of the beam and extend across the front and rear edges of the tooth and provided at its front end with a tongue having its extremity forming an obliquely disposed seat adapted to engage over the upper edge of the beam in another position of the tooth.

1,760,342. WEIGHING SCALE. ALONZO L. BUCK, Langley, S. C. Filed Sept. 26, 1928. Serial No. 308,458. 3 Claims. (Cl. 265—49.)



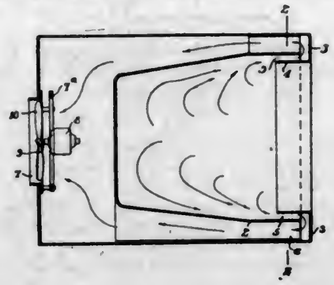
1. A scale lock comprising a pair of axially alined spindles, cranks on the inner ends of said spindles, a rod adjustably secured in and extending between the cranks to bear against a scale beam and prevent movement of the same, means connected to one of the spindles for manually swinging the cranks away from the scale beam, and means connected with one of the spindles and constantly tending to hold the cranks to the scale beam.

1,760,343. TAILPIECE FOR STRINGED MUSICAL INSTRUMENTS. FRANK J. CALLIER, San Antonio, Tex. Filed May 12, 1928. Serial No. 277,219. 6 Claims. (Cl. 84—302.)



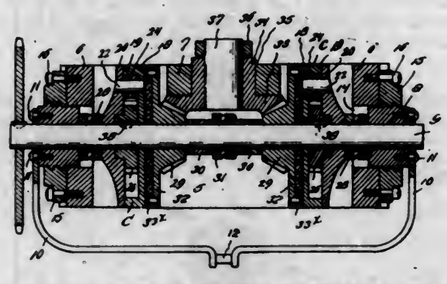
1. In a stringed musical instrument, a tail piece, a cable connected to the tail piece and having terminal portions, and an end pin having diverging openings receiving the terminal portions of said cable.

1,760,344. SPRAY TOOTH. FREDERICK CHARAVAY, Piqua, Ohio, assignor, by mesne assignments, of one-half to Hartzell Industries, Inc., Wilmington, Del., a Corporation of Delaware. Filed Dec. 13, 1926. Serial No. 154,480. 4 Claims. (Cl. 91—60.)



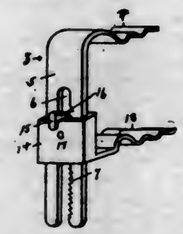
1. An enclosure having an opening adapted to receive a vapor, a front edge outlet for the vapor completely surrounding said opening, and fan means at the rear of said enclosure for pulling said vapor through the edge outlet.

1,760,345. POWER DEVICE FOR APPLYING VEHICLE BRAKES. WALTER L. CONGDON, El Paso, Tex., assignor of one-fourth to John H. Waldman and one-fourth to Charles R. Carter, El Paso, Tex. Filed July 6, 1928. Serial No. 290,833. 5 Claims. (Cl. 74—59.)



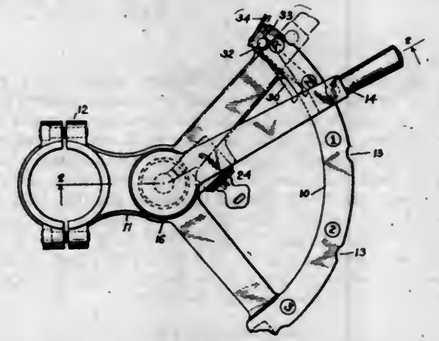
1. A power device of the class described for applying brakes comprising a rotating shaft, bearings on the shaft, means for simultaneously moving the bearings toward and away from each other on the shaft, casings rotatable on the shaft, ratchet means in the casing to cause one casing to rotate with the shaft when the shaft is rotating in one direction and to cause the other casing to rotate with the shaft when the shaft is rotating in the opposite direction, gears on the shaft between the casings to be frictionally engaged by the casings when the bearings are moved inwardly to move the casings toward the gears, means for holding the gears in spaced relation to each other and a gear meshing with said gears.

1,760,346. BEDDING CLAMP. FRANK M. CORREA, Honolulu, Territory of Hawaii. Filed Dec. 12, 1928. Serial No. 325,566. 2 Claims. (Cl. 24—263.)



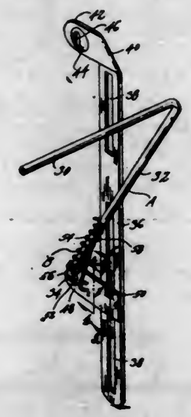
1. A device of the character described comprising a shank terminating in a fixed jaw, at its upper end, said shank being bifurcated and having a toothed inner portion, a slidable jaw, a relatively short socket by which said jaw is carried said socket being slidable upon said shank, and a pawl pivoted within said socket member and operable within said bifurcation and upon said teeth, said pawl having an extension end terminating in a head projecting above said socket.

1,760,347. VALVE-CONTROL HANDLE AND LOCK FOR MOTOR CARS. ALVIN M. CRAIG, New Haven, Conn., assignor to Universal Gear Shift Corporation, a Corporation of Delaware. Filed Dec. 10, 1926. Serial No. 153,795. 3 Claims. (Cl. 74—39.)



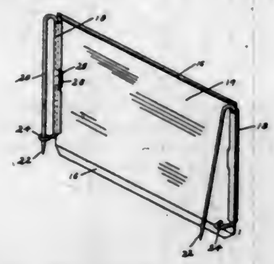
1. A structure of the kind described comprising a quadrant, a handle movable freely over the quadrant for the major portion of its length, and a detent pivoted at one end of and straddling the quadrant and manually releasable beyond the latter and within easy reach of the handle and arranged to normally prevent the movement of the handle to a certain position with respect to the quadrant.

1,760,348. AWNING STRUCTURE SUPPORT AND TENSIONING MECHANISM. WILLIAM G. DUNN, Clarinda, Iowa. Filed May 19, 1927. Serial No. 192,543. 3 Claims. (Cl. 156—44.)



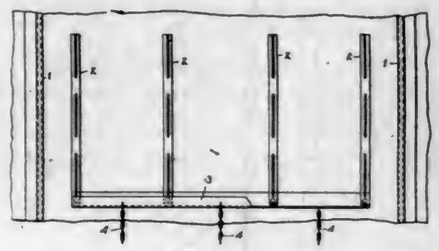
2. In a roller awning structure including an awning supporting arm, a bracket having an opening therein for pivotal coaction of said arm therewith and spring means tending to move said arm away from the roller of said awning structure, said spring means exerting a pressure from a point on said arm toward a point on said bracket spaced from the opening therein, such pressure being exerted in a straight line between said points, such straight line, in one position of said arm, coinciding with the center of said opening.

1,760,349. ACCESSORY MOUNTING. WILLIAM G. DUNN, Clarinda, Iowa. Filed Dec. 5, 1927. Serial No. 237,792. 2 Claims. (Cl. 206—19.5.)



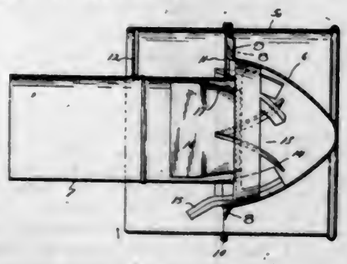
1. An article of the class described comprising a support of rectangular outline and of greater length than width, a pin like fastening element lockingly engaged and held against pivotal movement by each end of said support on the back side thereof, a keeper formed from a part of said fastening element, said keeper retaining the free end of said fastening element in spaced position from the back of said support whereby a fabric upon which said article is mounted and through which said fastening elements are extended may be pierced at two points by each element to support the article and prevent its upward movement and removal from the fabric.

1,760,350. DEVICE FOR THE INSTALLATION OF STEEL REENFORCEMENT IN CONCRETE PAVEMENTS. WALTER S. EDGE, Pittsburgh, Pa. Filed Dec. 12, 1928. Serial No. 325,532. 8 Claims. (Cl. 94—39.)



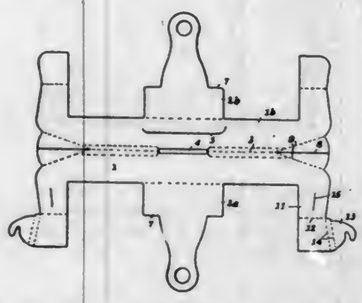
1. In a device for the installation of steel reenforcement in concrete structures, a supporting member consisting of a base to which are attached two or more supports with their long axes paralleling the base and their tops in approximately the same horizontal plane.

1,760,351. AIR CLEANER. EDWIN R. EVANS, Detroit, Mich. Filed Dec. 27, 1926. Serial No. 157,389. 14 Claims. (Cl. 183—113.)



10. In an air purifier for a carburetor, the combination with a suction conduit connected to the carburetor, of a deflector for guarding the mouth of said conduit, means for forcing air past said deflector, some of the air passing said deflector being drawn within said deflector and into said conduit, and means for withdrawing foreign matter from within said deflector.

1,760,352. GARMENT HANGER. HERMAN A. FEIGELMAN, Paterson, N. J. Filed Dec. 19, 1928. Serial No. 327,075. 11 Claims. (Cl. 223—66.)



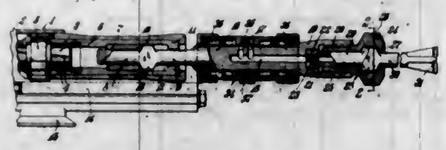
1. A garment hanger consisting of a blank of flexible stiff sheet material folded to form an elongated two-ply hanger bar and having a tongue extending from one ply of the hanger bar transversely of the line of fold and said tongue rebent and protruding through the part of said material forming the hanger bar and forming the suspender of the hanger.

1,760,353. SECTIONAL GOLF SHAFT. DUTEE W. FLINT, Cranston, R. I., assignor to Swingrite Company, Inc., Providence, R. I., a Corporation of Rhode Island. Filed Sept. 1, 1926. Serial No. 132,953. 9 Claims. (Cl. 273—80.)



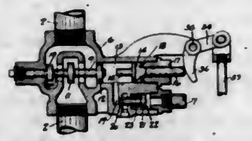
1. A shaft for golf clubs comprising a plurality of segmental sections of different inherent flexibility whereby the flexibility of the shaft may be regulated.

1,760,354. ROCK-DRILLING MECHANISM. ELMER G. GARTIN, Claremont, N. H., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed Sept. 23, 1925. Serial No. 58,172. 2 Claims. (Cl. 279—91.)



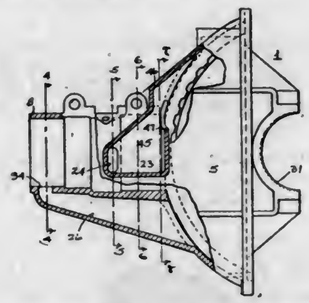
1. Mechanism for supporting and rotating a hollow lugged drill steel comprising a rod section having a longitudinal passage therethrough and a socket at the end thereof, a member fixed in the inner end of said socket positioned for engagement with the butt end of a drill steel, a cooperating chuck-like member having in the forward end thereof a recess provided with shoulders to engage and transmit rotation to the lugs of a drill steel, said recess having a forward opening provided with slots having side walls out of alinement with the shoulders, and cooperating threads on said rod sections and member whereby rotation of said chuck-like member will effect a rigid clamping of said steel and member to said rod section.

1,760,355. AUTOMATIC CONTROL VALVE. CHARLES R. HARDY, Mount Vernon, N. Y., assignor to The Superheater Company, New York, N. Y. Filed Sept. 8, 1927. Serial No. 218,289. 5 Claims. (Cl. 103—20.)



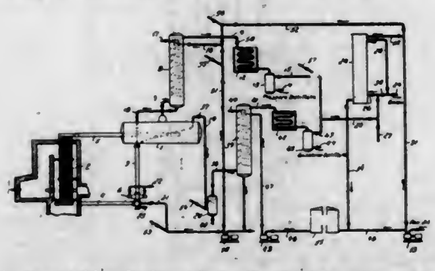
1. The combination with a steam driven pumping unit having a steam supply conduit, of a control valve located in said conduit and urged to closed position by the resultant force exerted thereon by steam admitted thereto, means dependent upon the presence of water at the suction side of the pump for delaying the closing of said valve, and means actuated by delivery pressure from the pump for changing the resultant force exerted on said valve to open it.

1,760,356. AXLE. GEORGE W. HARPER, Cleveland, Ohio, assignor to The Columbia Axle Company, Cleveland, Ohio, a Corporation of Ohio. Filed Aug. 1, 1924. Serial No. 729,505. 3 Claims. (Cl. 184—13.)



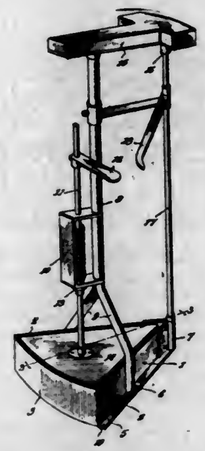
1. In an axle of the character described, the combination of an enlarged housing, a cover plate therefor provided with a tubular extension, bearings mounted in spaced relation in said extension, a shaft mounted in said bearings, means for conveying lubricant from said housing to said extension between said bearings, said bearings being adapted to permit lubricant to flow therethrough longitudinally of said extension, and said extension having a separate passage extending from said housing to a point beyond the most distant of said two bearings to return lubricant passing therethrough.

1,760,357. ART OF CRACKING HYDROCARBON OILS. EUGENE C. HERTHEL and THOMAS DE COLON TIFFT, Chicago, Ill., assignors to Sinclair Refining Company, New York, N. Y., a Corporation of Maine. Filed Jan. 5, 1928. Serial No. 244,683. 3 Claims. (Cl. 196—49.)



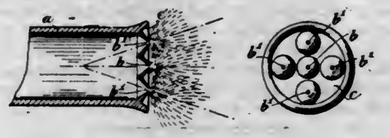
1. In cracking hydrocarbon oils, the improvement which comprises heating a charge of oil to a cracking temperature under pressure taking off vapors and gases therefrom and subjecting them to a condensing operation, subjecting uncondensed vapors and gases from the condensing operation to scrubbing treatment with raw oil to be supplied to the cracking operation, discharging residual oil from the first mentioned charge of oil and reducing the pressure thereon, thereby causing vaporization of part of said residual oil, subjecting the resulting vapors to a refluxing operation, introducing raw oil with absorbed constituents from the scrubbing treatment into direct contact with the vapors in this refluxing operation, and taking off and condensing the vapors from this refluxing operation.

1,760,358. ICE-CREAM DIPPER. CARL G. HERTZER, Tiffin, Ohio. Filed Feb. 27, 1929. Serial No. 343,159. 1 Claim. (Cl. 107—48.)



An ice cream dispenser comprising a sector-shaped molding frame having a laterally extending flange at the bottom edge of a side wall, a bearing at the converging ends of the side walls, a rod having diverging arms at its lower end attached to the side walls of the frame intermediate their ends, a shaft paralleling the rod and journaled thereto and to the said bearing, a hand grip connecting the upper ends of the rod and shaft, an operating lever attached to the shaft and limited in its movement in one direction by the said rod, a blade attached to the lower end of the shaft, a stop on the flanged side wall of the frame to normally position the blade, an ejector plate loosely fitting the frame and closing the top thereof, a stem slidably mounted on the rod and having a limited upward movement, and a spring normally holding the stem at the limit of its upward movement.

1,760,359. METHOD OF EXTINGUISHING FIRE. GEORGE CROSBY HISS, East Orange, N. J., assignor to Walter Kidde & Company, Inc., New York, N. Y., a Corporation of New York. Filed Mar. 29, 1924. Serial No. 702,724. 1 Claim. (Cl. 169—11.)

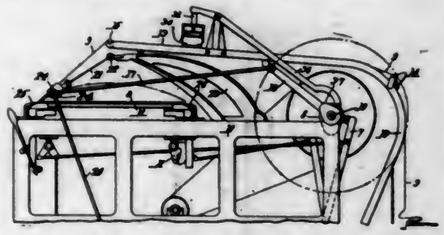


The method of extinguishing fire which comprises projecting a jet of fire extinguishing gas at a high velocity and interposing in close contiguity to said jet a protective shield of fire extinguishing gas between the jet and the laterally adjacent atmospheric air so long as the velocity of said jet is otherwise sufficient to entrain air.

1,760,360. REFRACTORY PRODUCT. HARRISON P. HOOD, Corning, N. Y., assignor to Corning Glass Works, Corning, N. Y., a Corporation of New York. Original application filed Jan. 26, 1922, Serial No. 531,970. Divided and this application filed Apr. 27, 1923, Serial No. 635,132. Renewed June 18, 1928. 5 Claims. (Cl. 106—9.)

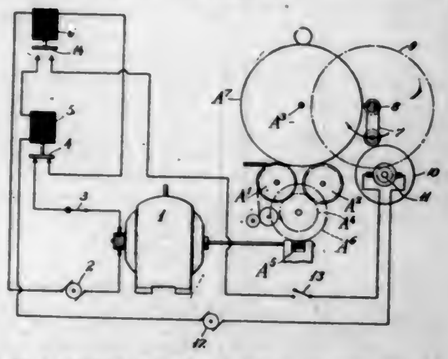
1. A batch for a refractory product containing a crystalline aluminum silicate and a binder containing aluminum hydroxide and silicic acid.

1,760,361. FABRIC-TRADE-MARKING DEVICE. ERIK GILBERT JEBSEN, Kristiansand, Norway, assignor to Curtis & Marble Machine Company, Worcester, Mass., a Corporation of Massachusetts. Filed Sept. 4, 1928. Serial No. 303,822. 3 Claims. (Cl. 101—291.)



1. The combination with a fabric folding machine adapted to fold the fabric back and forth and leave the same amount of cloth in each fold, of a reciprocable printing attachment therefor connected with the mechanism for controlling the folding of the cloth and timed therewith to stamp the cloth once for each complete fold and at the same position in each fold.

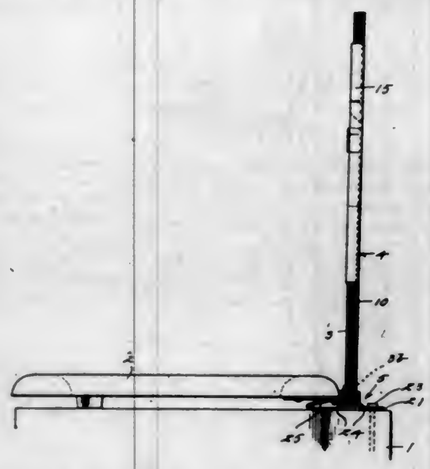
1,760,362. INTERCONNECTED CONTROLLING DEVICE FOR WINDING AND ROLL-EJECTING MECHANISM. ROBERT McC. JOHNSTONE, Summit, N. J., assignor to Cameron Machine Company, Brooklyn, N. Y., a Corporation of New York. Filed May 10, 1928. Serial No. 276,685. 6 Claims. (Cl. 242—66.)



5. In a winding machine, winding apparatus to wind flexible material into a roll, ejecting apparatus to cause ejection of the wound material from the winding apparatus, two motors one to actuate the winding apparatus and the other to actuate the ejecting apparatus, two electrical circuits one for each motor, and a circuit closer controlled by one circuit to open the other circuit when the first circuit is closed.

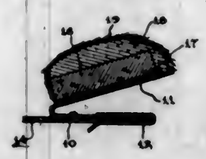
1,760,363. HOLDER FOR SANITARY COVERS FOR TOILET SEATS. DANIEL J. KANN, Eau Claire, Wis. Filed Sept. 17, 1929. Serial No. 393,174. 2 Claims. (Cl. 4—245.)

1. In combination, a toilet bowl and its seat, hinges for the seat supporting means secured to the bowl at the rear edge of the seat, and formed integrally with the hinges of the seat, said supporting means comprising a pair of parallel upright members, a holder carried by said means



and extending upwardly therefrom and having its front side open, a tablet of sanitary toilet seat covers arranged within the holder, and means permitting the covers to be withdrawn one at a time from the holder.

1,760,364. PREDATORY-BIRD DECOY. ARTHUR E. KEMMERLING, Wilkinsburg, Pa. Filed Apr. 24, 1928. Serial No. 272,509. 1 Claim. (Cl. 43—96.)



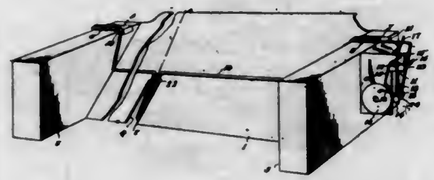
1. A device for the purpose indicated consisting of a base, a feather covered body mounted on the base, and trap pan attaching means carried by the base, the base consisting of upper and lower plates resiliently connected, the body being carried by one of said plates and the attaching means by the other.

1,760,365. CHAIR. CARLTON VANCE KING, Corry, Pa. Filed Sept. 24, 1928. Serial No. 308,052. 5 Claims. (Cl. 155—127.)



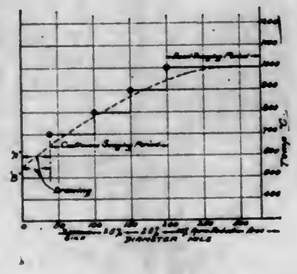
1. In combination with a chair having arms, a tray or the like extending between the arms, said tray member having a depending pin at each end, said pins having enlarged heads at their lower ends, said arms each having a rectangular recess in its top surface along its inner edge, the bottom of said recess having a groove therein for receiving the heads of the pins, a locking bar slidable on the bottom of said recess and bridging the groove, a channel member in said recess inverted over the locking bar, said channel bar being rigidly secured to said arm and having a series of holes for selectively receiving said depending pin, said locking bar having a series of keyhole shaped holes therein corresponding to the holes in said channel, the circular portion of the said keyhole shaped holes being adapted to register with the holes in the channel to permit passage of the head of the pin therethrough and the slot portions of the keyhole shaped holes being adapted when positioned above the head of the pin to prevent withdrawal thereof, said locking bar having a handle depending therefrom and said arm having an elongated slot for permitting slidable passage of said handle.

1,760,366. TYPEWRITER ATTACHMENT. AARON MARCELLUS, Ballston Lake, N. Y. Filed Jan. 14, 1928. Serial No. 246,732. 4 Claims. (Cl. 197—189.)



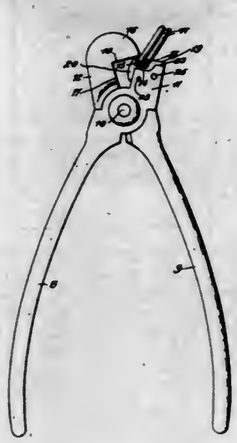
1. The combination with the paper rest of a typewriter, of a shaft pivotally supported by the typewriter and having a tongue carried thereby, the paper rest having a slot therein, a gong, a gong striker urged to striking position, means carried by the shaft for holding the striker inactive when a letter sheet is engaged between the tongue and paper rest, and releasable to sound the alarm when the letter sheet passes from engagement with the tongue and the tongue enters the slot.

1,760,367. DUCTILE CHROMIUM AND METHOD OF PRODUCING THE SAME. JOHN WESLEY MARDEN and MALCOLM N. RICH, East Orange, N. J., assignors to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed Apr. 27, 1926. Serial No. 104,917. 9 Claims. (Cl. 148—11.5.)



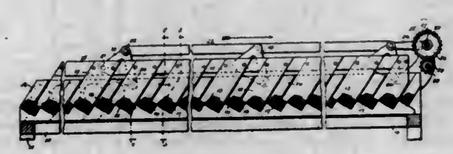
1. The process of producing malleable chromium masses which comprises compacting metal powder of substantial purity and of predetermined particle size and particle size contrast into ingots of predetermined density, heating the same to drive off the occluded and absorbed gas content thereof at a temperature substantially lower than the combination temperature with the metal powder and subsequently consolidating the ingot by subjecting it to a temperature approximating but below its melting point, the entire degasifying and sintering treatments being conducted in an environment inert with respect to the metal.

1,760,368. WIRE PLIERS. CHRISTIAN C. MILLHEAM, Beloit, Wis. Filed July 18, 1929. Serial No. 379,255. 4 Claims. (Cl. 140—121.)



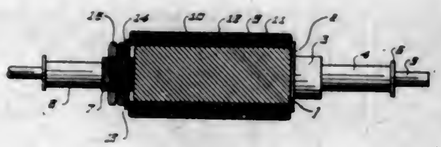
1. Wire pliers comprising two crossed levers pivoted together at their crossing point, the front end of one of said levers being shorter than the front end of the other lever and being provided in its front edge with a wire-receiving notch, said notch having a rear wall and opposed side walls, said rear wall being transverse to the length of the pliers while said side walls extend in planes longitudinally of said length, said other lever end being provided with a lug projecting from its inner edge in front of said short lever end and extending across said notch, said lug having a rear edge opposed to and spaced forwardly from said rear wall of said notch, said rear and side walls of said notch and said rear edge of said lug co-operating in forming a wire-receiving and holding slot when the levers are in closed position.

1,760,369. CONVEYER FOR FRUITS AND VEGETABLES. ANDREW O. MOE, Toppenish, Wash., assignor to Food Machinery Corporation, San Jose, Calif. Filed Aug. 22, 1928. Serial No. 301,245. 5 Claims. (Cl. 198—218.)



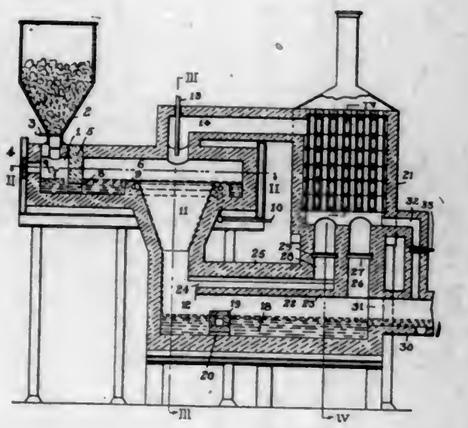
1. In a machine of the class described, obliquely disposed guide members, obliquely disposed reciprocating members and disposed at right angles to the path of articles which are to be moved between the guide members, and transversely disposed displacing members on opposite sides of each rest member and movable with the reciprocating members; together with longitudinal bars to which said reciprocating members are secured, and means to actuate said bars.

1,760,370. OUTER COVERING FOR THE MOISTENING AND INKING FORM ROLLERS OF LITHOGRAPHIC OFFSET-PRINTING MACHINES. EDWIN B. MORRIS, Clayton, Mo. Filed Aug. 24, 1928. Serial No. 301,836. 4 Claims. (Cl. 91—67.8.)



1. A covering for the moistening roller shafts of lithographic offset printing machines, comprising an inner tube treated with a moisture proof liquid free to be axially slipped on each shaft, and absorbent material secured around said tube.

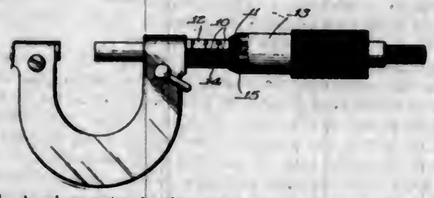
1,760,371. APPARATUS FOR MELTING GLASS AND THE LIKE. WILLIAM A. MORTON, Pittsburgh, Pa., assignor, by mesne assignments, to Amco Incorporated, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Nov. 19, 1926. Serial No. 149,312. 19 Claims. (Cl. 49—54.)



10. In apparatus for melting glass, the combination of a plurality of chambers which are atmospherically isolated, one of said chambers being a reducing chamber into which the materials are introduced and another of said chambers being an ebullition chamber, said chambers having a submerged connection between them, a circular weir in the ebullition chamber, said weir being surrounded by the molten glass in said ebullition chamber, a vertical passage into which the glass overflows and travels therethrough in the form of an extended sheet, a working chamber into which the glass travels from said passage, means for applying supermelting temperatures to the glass in said passage, and means for heating the ebullition chamber and the working chamber by waste heat from said passage.

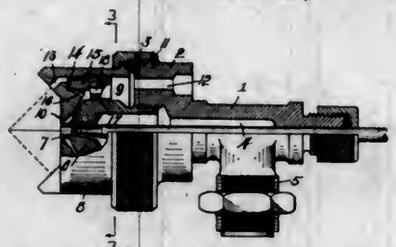
12. In apparatus for melting glass, the combination of a passage through which the glass travels and wherein it is subject to the highest furnace temperatures, a working chamber into which the glass is delivered from said passage, a feeder boot to which the glass is supplied from the working chamber, a recuperator, and selective means for leading the heat currents from said passage into said working chamber and feeder boot on its way to the recuperator.

1,760,372. MICROMETER OR THE LIKE. ERIK G. PERSSON, Eskilstuna, Sweden, assignor to Aktiebolaget C. E. Johansson, Eskilstuna, Sweden. Filed May 16, 1927. Serial No. 191,624. 2 Claims. (Cl. 33—166.)



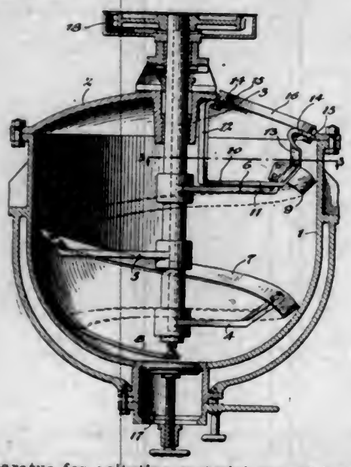
1. A micrometer having graduations thereon, the graduations and the background thereof being treated to dull the same to thereby accentuate the visibility of said graduations.

1,760,373. SPRAY HEAD. JAMES E. PERRIN, Toledo, Ohio, assignor to The De Vilbiss Company, Toledo, Ohio, a Corporation of Ohio. Filed Mar. 14, 1927. Serial No. 175,140. 8 Claims. (Cl. 91—45.)



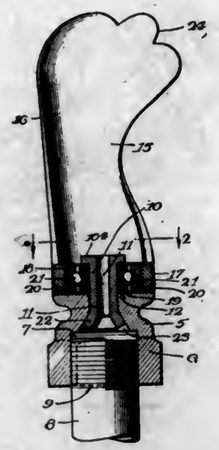
1. In a spray-head of the class described, inner and outer nozzles mounted for relative rotary adjustment and the outer nozzle having supplemental air discharge passages, a valve between the nozzles for regulating the discharge of air from the supplemental passages and movable by a relative turning of the nozzles, to open or close said passages or to vary the discharge of air therefrom, the actuated movements of the valve being relative to both nozzles.

1,760,374. MATERIAL AGITATION. RUSSELL J. PEPPER, Kenmore, N. Y., assignor to National Aniline & Chemical Co., Inc., New York, N. Y., a Corporation of New York. Filed Feb. 19, 1926. Serial No. 89,318. 10 Claims. (Cl. 259—45.)



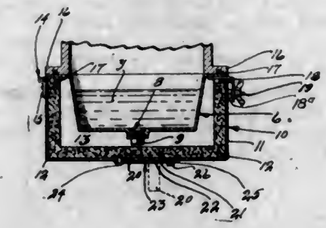
1. Apparatus for agitating material comprising in combination a container, substantially vertical agitating means within said container and adjacent the wall thereof, and means for removing material from said agitating means.

1,760,375. LAWN SPRINKLER. THORVAL L. BYERSON, Park Ridge, Ill., assignor to W. D. Allen Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed May 4, 1927. Serial No. 188,631. 1 Claim. (Cl. 299—126.)



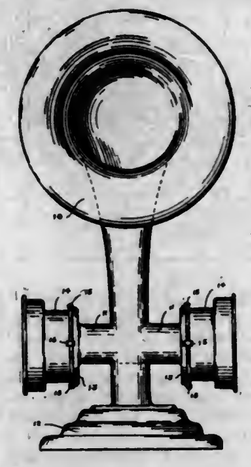
In a lawn sprinkler, the combination of a nozzle member having a coupling portion for connecting the nozzle to a stand pipe or the like, an outlet aperture and a seat adjacent its upper end, an anti-friction bearing member comprising inner and outer races, and a plurality of ball bearings interposed there-between, the inner and of said races bing axially apertured and disposed against said seat, means for locking said inner race to said nozzle member comprising a tubular outlet part disposed in said aperture and having a laterally, outwardly extending flange adjacent its upper end overlying said inner race, the inner end of said outlet part being swaged outwardly on the inside of said coupling part so as to lock the outlet part to the nozzle member, and a sprayer member including a blade portion and an annular bottom portion fitting snugly over said outer race, whereby the sprayer is rotatably supported relative to said nozzle member by said bearing member, said blade being formed and arranged so as to intercept a stream of fluid discharged from said nozzle and thereby to be rotated.

1,760,376. OIL-BASE INSULATING PAN FOR INTERNAL-COMBUSTION ENGINES. WALTER WILLIAM SCHWARTING, Minneapolis, Minn.; Grace Cook Schwarting owner by decree of distribution of estate of said Walter William Schwarting, deceased. Filed Feb. 17, 1928. Serial No. 255,069. 4 Claims. (Cl. 184—104.)



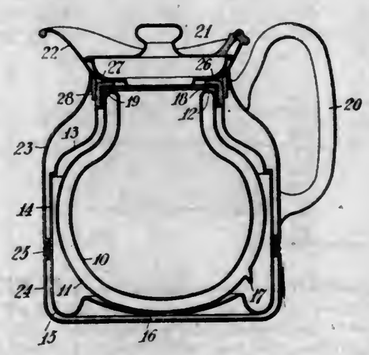
3. The combination with an internal combustion engine having a crank case, an oil base and oil-base-securing bolts for detachably securing said oil base to said crank case, of an insulating pan surrounding the exposed surfaces of said oil base and spaced therefrom to afford a dead air chamber therebetween, a hinge on one side of said oil base and having its lower wing secured thereto and having its upper wing secured to said crank case by one of said oil-base-securing bolts, and a hasp on the other side of said insulating pan and having its upper wing secured to the crank case by means of one of the oil-base-securing bolts and having its lower wing detachably secured to the insulating pan.

1,760,377. RADIO LOUD-SPEAKER. FREDERICK RICHARD SHAW, Armstrong, British Columbia, Canada. Filed Mar. 21, 1928. Serial No. 263,578. 8 Claims. (Cl. 181—31.)



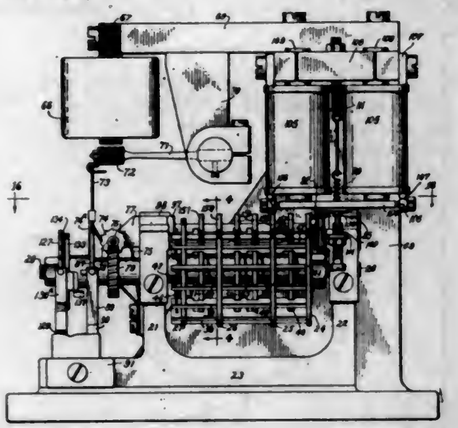
1. In a radio loud speaker having a horn, a base, a horizontal tone arm connecting with said horn having enlargements at each end, a shell adapted to fit said enlargement forming an earphone piece receptacle, spring clips to secure the shell in position and a diaphragm yieldably supported in the enlarged end of the tone arm.

1,760,378. VACUUM-WALLED CONTAINER. FRITZ SIEGHEIM, New York, N. Y. Filed June 23, 1928. Serial No. 287,838. 10 Claims. (Cl. 215—13.)



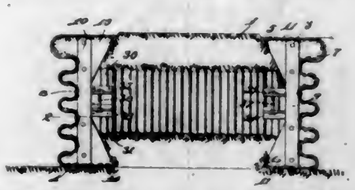
1. A heat insulated container having an outer metal jacket formed of two separable sections, one of said sections being provided with an annular inwardly extending flange presenting a plane transverse inner surface, a double walled glass vessel having an annular metal part secured to the neck thereof presenting an upper plane transverse surface adapted to directly abut against the first mentioned surface to form a tight joint, and means for rigidly securing the vessel within the jacket to the first mentioned section of said jacket with said surfaces in firm contact and independent of the other section.

1,760,379. SELECTOR. DUNCAN J. STEWART, Rockford, Ill., assignor to Howard D. Colman, Rockford, Ill. Filed Sept. 12, 1927. Serial No. 218,935. 10 Claims. (Cl. 177—353.)



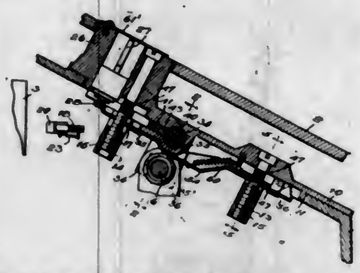
10. A selector for signalling systems comprising, in combination, a plurality of rigid code bars, a combination element, a rotary carrier on which said code bars and combination element are mounted with the code bars arranged for individual endwise movement transversely of the combination element, said code bars on the one hand and the combination element on the other being arranged for limited relative rotation, and said code bars having at points between their end portions normally coacting with said combination element to permit such relative rotation only when the code bars are set in a predetermined combination, means operable to rotate said carrier through a predetermined operating cycle, a non-rotatable signal responsive device positioned for the successive presentation thereto of said code bars and operable to effect the endwise movement of the latter selectively, means operable near the end of the cycle to cause said member to move independently of the code bars when the latter are set in said predetermined combination, and a control means acting as an incident to such independent movement.

1,760,380. HEADWALL FOR DRAINPIPES. MICHAEL L. SULLIVAN, Sandberg, Calif. Filed Mar. 16, 1927. Serial No. 175,742. 8 Claims. (Cl. 61—16.)



1. A head-wall for culverts comprising a structural sheet metal member having parallel top and bottom portions, a corrugated, upstanding portion connecting said top and bottom portions and having an aperture therein, a pair of angle-irons extending between said top and bottom portions, said upstanding corrugated portion being secured to said angle-irons, corner braces connecting said top portion to said angle-irons and said bottom portion to said angle irons, a corrugated pillow member secured adjacent said aperture, and a corrugated block member secured adjacent said aperture and extending between said top and bottom portions, brackets secured to said pillow member and to said block member on either side thereof, and clamping bolts between said bracket members whereby said pillow and block portions may be brought together to firmly clamp a section of corrugated pipe.

1,760,381. VEHICLE LOCKING MECHANISM. SVEN SVENSON, Fond du Lac, Wis., assignor, by mesne assignments, to Lokaford Company, Springfield, Ill., a Corporation of Illinois. Filed Sept. 27, 1926. Serial No. 138,071. 12 Claims. (Cl. 70—126.)



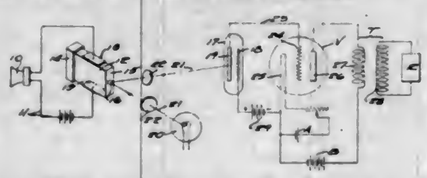
1. In a motor vehicle locking device of the kind described, a plate constructed to constitute a transmission cover plate, means for detachably securing said cover plate in place on the transmission casing and key-actuated and controlled means for controlling said securing means, brake locking means carried by said plate and operatively controlled by said key-controlled mechanism, said locking means operatively connected with the brake band, and means carried by said cover plate for engaging the engine fly-wheel and operatively controlled by said key-controlled means.

1,760,382. CONTROLLING MEANS FOR ELECTRIC SWITCHES. CLYDE H. TEESDALE, Grand Rapids, Mich., assignor to Teesdale Manufacturing Company, Grand Rapids, Mich., a Corporation of Michigan. Filed Jan. 23, 1926. Serial No. 83,327. 11 Claims. (Cl. 200—84.)



1. In an organization of the character described: a vessel adapted to contain a liquid; an electric switch; a rod operatively connected with the switch and having spaced stops; a float in the vessel having a movement between the stops, and adapted to engage in its movement in one direction one of the stops to open the switch, and to engage in its movement in the opposite direction the other stop to close the switch, and in its continued movement in the last-mentioned direction to open the switch.

1,760,383. APPARATUS FOR TRANSMITTING AND AMPLIFYING ELECTRIC IMPULSES. ADOLPH A. THOMAS, New York, N. Y. Filed Sept. 24, 1926. Serial No. 137,394. 6 Claims. (Cl. 179—100.4.)



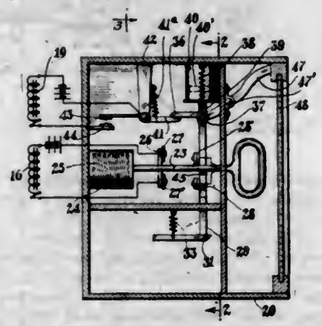
1. A single piezo-electric element carrying a mirror rigidly mounted thereon.

1,760,384. FASTENER FOR WATCH BRACELETS. CHARLES R. TOST, Centerdale, R. I., assignor to The Hadley Company, Providence, R. I., a Corporation of Rhode Island. Filed Apr. 5, 1929. Serial No. 352,666. 3 Claims. (Cl. 24—265.)



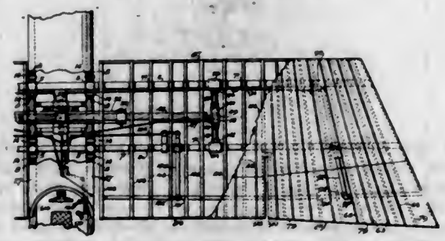
3. A fastener for separably connecting the end of a bracelet section to the bail of a watch or the like, comprising a jaw member having upstanding side portions at one end and a curved hook portion at its opposite end, the hook portion having a central recess at its transverse edge, and a locking member pivoted between said side portions, and provided at one end with a cam portion for gripping a bracelet end received between said side portions when the locking member is swung to close the hook portion to enclose the bail behind the hook, the locking member having a projecting tongue at its opposite end formed to fit said recess in edgewise relationship, the closed hook having substantially smooth inner and outer surfaces.

1,760,385. FIRE-EXTINGUISHING SYSTEM. ANTONIO VALENTE, West Albany, N. Y. Filed Aug. 3, 1925. Serial No. 47,784. 1 Claim. (Cl. 200—18.)



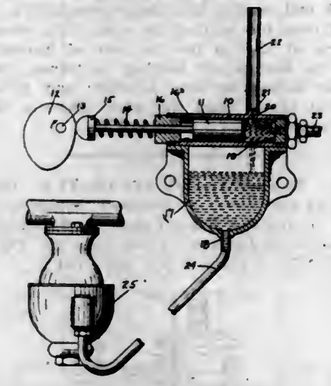
A switch mechanism for fire extinguishing systems, comprising circuit closing means for closing a primary circuit, a plurality of bars for closing a plurality of secondary circuits, spring for maintaining the bars in a normally off position, operating means for selectively actuating said bars to close any desired one of said individual secondary circuits after said primary circuit has been closed, and means for preventing closing of said secondary circuits before the closure of said primary circuit.

1,760,386. FLYING MACHINE. JOHN DUMANS VAN VLIET, San Francisco, Calif. Filed May 6, 1926. Serial No. 107,120. 37 Claims. (Cl. 244—31.)



1. A rigid structure, a member extending transversely thereto, supports for said member carried by said structure, said supports holding said member against vertical displacement and adapted to permit displacement of said member laterally with respect to the supports and the structure, a member carried by said first member and projecting transversely from the side thereof, and a vertically slotted member rigid with said structure, the slot of said last named member receiving said second named member and holding the same against lateral displacement whereby said first named member is positioned laterally with respect to the supports and the structure.

1,760,387. INERTIA PUMP FOR SUPPLYING GASOLINE TO CARBURETORS. SERGIUS VERNET, Brooklyn, N. Y., assignor of one-half to William P. Hammond, Scarsdale, N. Y. Filed Oct. 8, 1925. Serial No. 61,153. 11 Claims. (Cl. 103—153.)

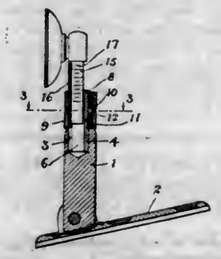


1. The combination with a valveless reciprocating pump of a reservoir receiving liquid from said pump and hydrostatic means to render said pump inoperative when said reservoir has been filled to a predetermined level.

1,760,388. DENTAL CEMENT. CLARENCE C. VOGT, Pittsburgh, Pa. Filed Aug. 11, 1926. Serial No. 128,713. 2 Claims. (Cl. 106—6.)

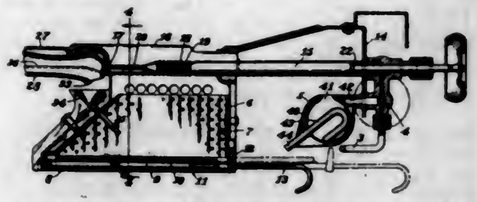
1. A finely ground silicate dental cement powder of substantially uniform composition and having a sufficient proportion of the material in grains of colloidal dimensions to materially increase the adhesiveness of the cement.

1,760,389. SIGHT FOR FIREARMS. THOMAS ARCHER WATSON, Toronto, Ontario, Canada. Filed July 23, 1927. Serial No. 207,922. 7 Claims. (Cl. 33—57.)



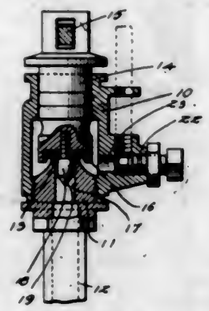
1. A sight for fire-arms, comprising a guide member having a longitudinal groove formed with bevelled sides, a sighting member slidable along said groove and bevelled to engage the sides thereof, resilient means for holding said sighting member in contact with the bevelled sides of said groove including means held in position by said resilient means for raising and lowering said sighting member.

1,760,390. PRESSURE BURNER. FRED E. WHITE and ALFRED RUTTIMAN, Boston, Mass., assignors to Florence Stove Company, Boston, Mass., a Corporation of Massachusetts. Filed June 15, 1928. Serial No. 285,528. 12 Claims. (Cl. 158—61.)



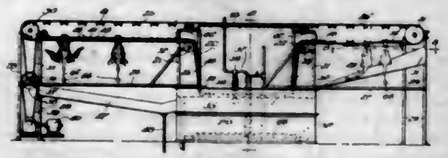
1. In combination, an elongated generator for vaporizing liquid fuel, and a blue flame atmospheric burner of elongated form for heating the same, said burner having an opening at its top for the exit of heated gases, a wick at the bottom for heating the gases, the opening at the top being restricted laterally and being of less longitudinal extent than the wick, whereby the heated gases are concentrated into a small area.

1,760,391. TANK-FILLING APPARATUS. CHARLES E. WILLIAMS and JOHN A. JOHNSON, Frankfort, Ind., assignors to Indiana Brass Company, Frankfort, Ind., a Corporation of Indiana. Filed June 23, 1927. Serial No. 200,925. 1 Claim. (Cl. 137—104.)



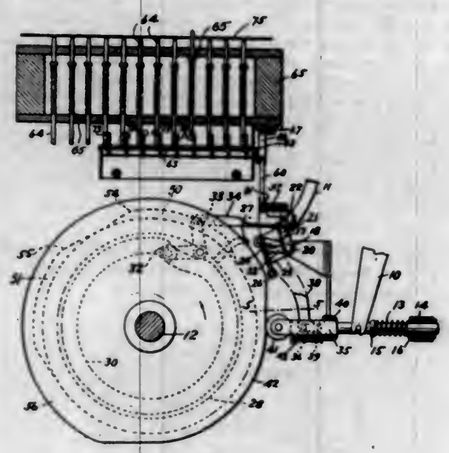
In a ball-cock for flush tanks, a valve body having an inlet and an outlet and provided about the inlet with a valve seat, a valve for coaction with said seat to control communication between the inlet and outlet and disposed therebetween, and a plunger carried by said valve entering the inlet upon initial closing movement of the valve to reduce the flow space thereof to a point such that the outlet space between the valve and valve seat exceeds the flow space of the inlet until the valve is substantially seated, said plunger comprising a cylindrical body of a length slightly less than the distance through which the valve is shifted in moving from closed to open position and being of slightly less diameter than the bore of the inlet, and the lower end of the plunger being abruptly tapered and located immediately above the inlet when the valve is open.

1,760,392. APPARATUS FOR PLUCKING POULTRY. ELMER L. ARMINGER, Chicago, Ill. Filed Oct. 22, 1927. Serial No. 227,982. 12 Claims. (Cl. 17—11.)



2. In an apparatus of the class described, the combination of a tank, an endless chain conveyor mounted to travel above the tank and extending beyond the tank at each end, the lower turn of the conveyor overlying the tank being carried downwardly into the tank and then out of the tank and the upper turn extending in a straight line, and means carried by the conveyor for suspending fowls therefrom for immersion in the tank, substantially as described.

1,760,393. CARD-GROUP CONTROL FOR TABULATING MACHINES. SCOTT C. BARTHOLOMEW, Pittsburgh, Pa., assignor, by mesne assignments, to Remington Rand, Inc., New York, N. Y., a Corporation of Delaware. Filed Apr. 24, 1926. Serial No. 104,502. 10 Claims. (Cl. 335—91.)



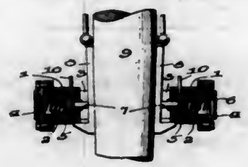
1. A card-controlled mechanism comprising an operating mechanism for a card feeding device, a reciprocating means for transmitting motion to said operating mechanism, a detachable connection between said reciprocating means and said operating mechanism, a card analyzing unit, means including a rack actuated by said analyzing unit to shift said connection to detached position, and a timing device for restoring said detachable connection.

1,760,394. CATCH PLATE FOR KNOB LATCHES. FRANK ELLISON BEST, Seattle, and CARL EVENSEN, Seabold, Wash., assignors to Frank E. Best, Inc., Seattle, Wash., a Corporation of Washington. Filed Aug. 30, 1927. Serial No. 216,378. 4 Claims. (Cl. 292—359.)



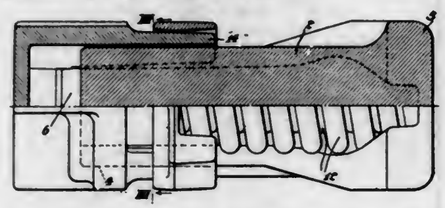
1. The combination with a door latch having a substantially square rotatable knob shank provided with knobs and arranged to extend through a knob rose plate that is secured by screws to a door, of a catch plate slidable between the knob rose plate and the door and guided for movement on said screws, said catch plate having a keyhole slot therein through which said knob shank extends and a finger piece on said catch plate extending outwardly from said knob rose plate.

1,760,395. ELECTRODE HOLDER. HEINRICH BROCK, Cologne, Germany, assignor to Det Norske Aktieselskab for Elektrokemisk Industri of Norway, Oslo, Norway. Filed Dec. 7, 1926, Serial No. 153,176, and in Germany Dec. 7, 1925. 6 Claims. (Cl. 266—15.)



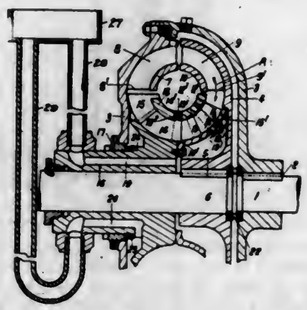
1. An electrode holder comprising a ring, a series of pistons mounted therein, a series of clamps adapted to engage the electrode, and a series of springs individually acting on said pistons and exerting sufficient pressure therethrough and against the clamps to support and hold the electrode.

1,760,396. SHOCK-ABSORBING MECHANISM. ALBERT O. BUCKIUS, Cleveland, Ohio, assignor to National Malleable and Steel Castings Company, Cleveland, Ohio, a Corporation of Ohio. Filed Aug. 3, 1927. Serial No. 210,230. 3 Claims. (213—36.)



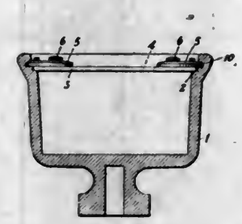
1. In frictional shock absorbing mechanism, a longitudinally extending included friction member of I-bar form having at the sides of its web portion a plurality of longitudinally extending friction faces; friction shoes engaging the friction member; a pair of followers engaging each of the shoes, said followers also having cooperating telescoping guiding surfaces to maintain the said followers in alignment with the central member; and a compression spring element arranged to resist the inward movement of the shoes and followers relative to the friction member.

1,760,397. ROTARY MECHANISM FOR THE TRANSMISSION OF POWER. ALLAN COATS, Paisley, Scotland. Filed Nov. 18, 1927, Serial No. 234,218, and in Great Britain Nov. 27, 1926. 5 Claims. (Cl. 60—54.)



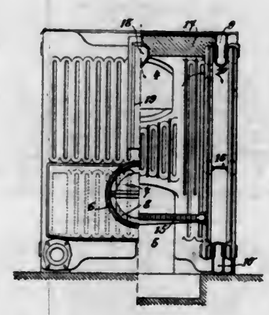
1. Rotory power transmitting mechanism, comprising a rotary impeller, a turbine, and return guide vanes interposed between the exit from said turbine and the inlet to said impeller, said impeller, turbine and return guide vanes being included in a circuit for fluid and said return guide vanes being pivoted near the entrance edge with the exit edge overlapping the entrance edge of the following guide vane so that the pivotal action is restricted in the direction towards the following guide vane but unrestricted in the opposite direction.

1,760,398. LOCKING DEVICE FOR SPINNING-BUCKET COVERS. CLARENCE E. COLEMAN, Buffalo, N. Y., assignor, by mesne assignments, to Du Pont Rayon Company, New York, N. Y., a Corporation of Delaware. Filed Sept. 24, 1926. Serial No. 137,517. 12 Claims. (118—49.)



1. In combination, a spinning bucket having a cover thereon and a recess therein, a locking plate eccentrically pivoted on said cover adapted to be received in said recess and locked therein by the centrifugal force of the rotating bucket.

1,760,399. LOW-PRESSURE BOILER. LOUIS COURTOT, Paris, France, assignor to American Radiator Company, New York, N. Y., a Corporation of New Jersey. Filed Mar. 24, 1926, Serial No. 96,941, and in France Mar. 25, 1925. 3 Claims. (Cl. 122—209.)

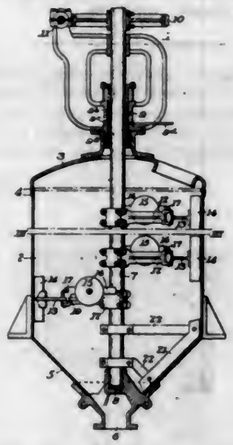


2. A boiler of the character described comprising a plurality of vertical fluid-containing panels forming the fuel receptacle, and flues laterally thereof, a duct for supplying secondary air to said fuel receptacle disposed longitudinally of the boiler at the top thereof, a crown member of refractory material supported by said panels and said duct, certain of said panels having openings adjacent to said crown member to provide outlets from said fuel receptacle to said flues, substantially as specified.

1,760,400. OIL-CRACKING STILL. LOFTUS B. CUDDY, Cleveland, Ohio. Filed July 2, 1918. Serial No. 243,030. 6 Claims. (Cl. 196—192.)

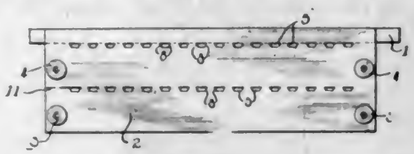
1. In an oil-cracking still having a curved inner surface, a central shaft extending within the still, a plurality of arms fixed to said shaft, a lever pivoted to each of said arms and having a forwardly inclined scraper thereon

adapted to be pulled along the inner surface of the still upon rotation of said central shaft, and a weight mounted to act upon each of said levers to press the scrapers



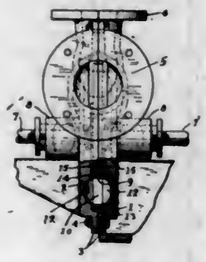
against such inner surface, said weights being effective on said levers intermediate the pivotal mounted thereof and the scraper, substantially as described.

1,760,401. HINGE MEMBER FOR CARDS. GEORGE HIVES DAWSON, Cambridge, Mass., assignor, by mesne assignments, to Remington Rand Inc., New York, N. Y., a Corporation of Delaware. Filed Nov. 16, 1925. Serial No. 69,356. 9 Claims. (Cl. 129—16.7.)



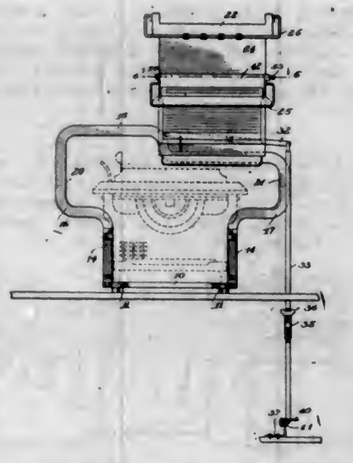
1. In a card carrier, a supporting member, a relatively stiff paper hinge attached to said member and provided with a straight series of apertures having diverging straight wall portions for producing a narrow weakened section having a varying resistance with the line of least resistance parallel to said supporting member.

1,760,402. PUMP. WILLIAM I. DEBRICK, Davenport, Iowa, assignor to Westco-Chippewa Pump Company, Davenport, Iowa, a Corporation of Delaware. Original application filed Aug. 18, 1927, Serial No. 213,812. Divided and this application filed Jan. 12, 1928. Serial No. 246,178. 5 Claims. (Cl. 103—96.)



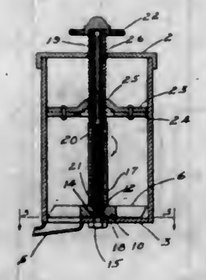
1. A rotary pump comprising a rotor in the form of a disc having an annular row of transverse apertures therethrough, and a casing provided with an inlet and an outlet and having walls making a close working fit with each lateral face of the disc inwardly and outwardly of said row of apertures and closely fitting the side wall of the rotor between the inlet and outlet, said casing having an unobstructed channel formed therein alongside the row of apertures in the rotor and extending from the inlet to the outlet on each side of the rotor.

1,760,403. COPYHOLDER FOR BILLING MACHINES. CHARLES R. DRAKE, Rochester, N. Y., assignor to The Line-A-Time Mfg. Co. Inc., Rochester, N. Y., a Corporation of New York. Filed Apr. 2, 1927. Serial No. 180,483. 7 Claims. (Cl. 120—29.)



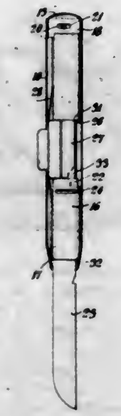
1. A copyholder supporting frame comprising a pair of spaced brackets, a substantially U-shaped member mounted on each of said brackets with the bottom portions of the U's extending substantially vertically and the leg portions extending inwardly, and means connecting the upper leg of one U-shaped member with the upper leg of the other U-shaped member; the bottom portion of one of said U's being longer than the bottom portion of the other U.

1,760,404. SOFT-SOAP DISPENSER. FRANK M. FUNK, Detroit, Mich. Filed July 24, 1929. Serial No. 380,495. 3 Claims. (Cl. 221—79.)



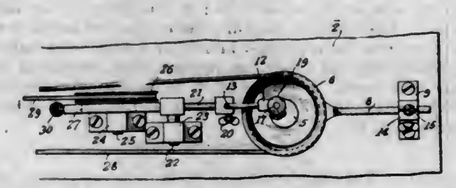
1. A soap dispenser comprising in combination a container arranged to receive a quantity of soft soap, a fan having one or more blades inclined from the vertical and arranged to be covered by, and to eject, the soap through an opening in the bottom of the said container, a spindle fixed to the said fan and extending upwardly, a pipe arranged to surround the said spindle, the said pipe and spindle having a clutch connection, a disc threadedly mounted on the said pipe and arranged to move downwardly within the said container to scrape the soap from the sides thereof as the pipe is rotated to turn the fan to eject the soap whereby, when the pipe is rotated in the opposite direction, the pipe and disc are disconnected from the said fan and spindle and may be removed independently therefrom to facilitate filling of the soap container.

1,760,405. FLAT DROP KNIFE. BENJAMIN F. GRENNAN, New York, N. Y., assignor to Eagle Pencil Company, New York, N. Y., a Corporation of Delaware. Filed Aug. 18, 1927. Serial No. 213,720. 6 Claims. (Cl. 30—100.)



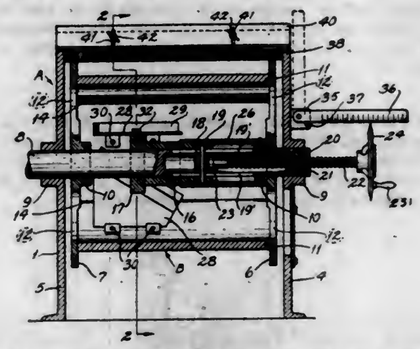
3. A device of the character described comprising the combination of a hollow handle provided with a slot in one of its ends, a blade movable in the handle and carrying a projection co-operating with the handle adjacent said slot to limit movement of the blade outward of the slot, a guiding element for the blade within the handle having a cut-away portion in one of its sides, a collar surrounding said element and cut-away portion and co-operating with the aforesaid projection to latch the blade within the handle and element and with the inner end of the blade to latch the blade in its outer or exposed position, a spring normally holding the collar in latching position, and means operable from the exterior of the handle to operate the collar to unlatch the blade.

1,760,406. DIE-LAPPING MACHINE. WILLIAM HADDOW, Ossining, N. Y. Filed Apr. 27, 1927. Serial No. 187,033. 5 Claims. (Cl. 51—67.)



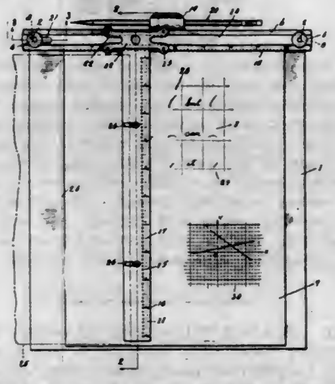
3. In a device of the character described the combination of a pivoted lever, a frame, having two outreaching arms, adjustably fixed in one end of said lever, said arms having means for sustaining a lapping wire therebetween, a die carrier revolubly supported with its axis approximately in line with the wire sustaining means of said arms, means for oscillating said lever and means for rotating said die carrier.

1,760,407. PERCENTAGE FEEDER. GEORGE H. HEBEBRAND, Florissant, Mo. Filed Feb. 4, 1928. Serial No. 251,794. 10 Claims. (Cl. 83—44.)



1. A feeding machine of the class described comprising a casing affording an inlet and an outlet for material, a feeding member rotatably mounted in the casing between said inlet and outlet, and a plurality of pockets formed in the periphery of said feeding member, each of said pockets being formed by a plurality of movable elements adjustable to vary the volumetric capacity of the pocket.

1,760,408. MEMORY PAD. REBECCA E. HOOPER, Half Moon Bay, Calif. Filed Nov. 14, 1927. Serial No. 233,230. 2 Claims. (Cl. 33—76.)



1. A device of the type described, comprising a support, uprights carried by said support, means carried by said uprights for clamping a pad to said support, a floating guide bar slidably carried by said uprights, a stop carried by one of said uprights, a ruler, means for slidably connecting said ruler to said guide bar, said stop normally preventing the movement of said ruler off from the pad, said stop being movable into inoperative position for permitting the ruler to move off from the pad.

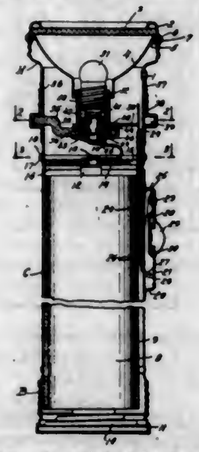
1,760,409. CABLE. JAMES FORREST HOWE, Worcester, Mass., assignor to The American Steel and Wire Company of New Jersey, a Corporation of New Jersey. Filed Apr. 18, 1921. Serial No. 462,332. 2 Claims. (Cl. 173—13.)



1. A high tension cable conductor comprising a substantially circular stranded core composed of a plurality of ferrous metal strands of relatively high strength and low conductivity, and a surrounding covering of at least

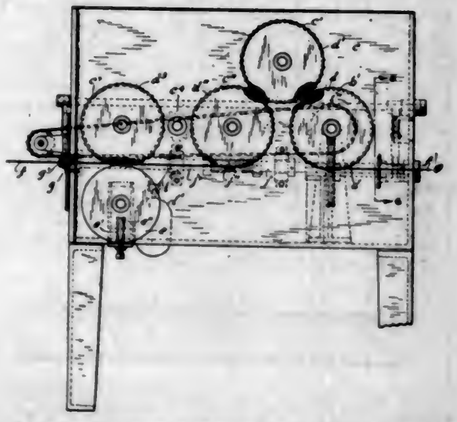
two helically wound copper strips, said strips being overlapped so that the edges of one strip will be offset with relation to the edges of the other strip and so that said covering will be composed of two layers of said strips throughout its length, and said strips being unsecured to each other and to said core to permit free flexing of the cable.

1,760,410. BATTERY HAND LAMP. FREDERICK L. HUMESTON, New Haven, Conn., assignor, by mesne assignments, to Winchester Repeating Arms Company, a Corporation of Delaware. Filed May 21, 1927. Serial No. 193,149. 5 Claims. (Cl. 240—10.5.)



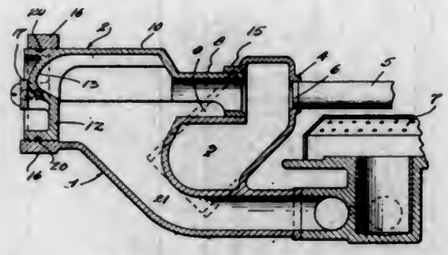
1. In a hand lamp, a casing, a battery within said casing, a reflector fixed in one end of said casing and having an opening therein, a lamp socket, means for adjustably supporting said socket in the opening of said reflector to move relative to said reflector, an inwardly extending ledge on the wall of said casing between said battery and said socket, a partition resting on said ledge, conducting means extending through said partition for electrical connection with said battery, and an expansible spring member fixed to said conducting means and electrically connecting said lamp socket to said conducting means.

1,760,411. BEAD-CUTTING MECHANISM. WALTER E. HUMPHREY, Kent, Ohio, assignor to The Mason Tire & Rubber Corporation, Kent, Ohio, a Corporation of Delaware. Filed Aug. 7, 1926. Serial No. 127,959. 11 Claims. (Cl. 164—43.)



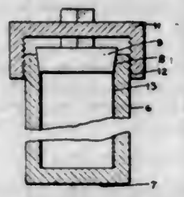
1. In a bead-cutting mechanism, the combination with means for uniformly advancing the bead-forming material, of a rotated cutter member therefor, actuating means including an interposed spring reacting against the cutter member, a detent for said member, and means timed with the bead advancing means for retracting the detent and releasing the cutter member, substantially as set forth.

1,760,412. COMBINED STARTING AND MIXING CHAMBER FOR LIQUID-FUEL BURNERS. JAMES IRONSIDE, Detroit, Mich., assignor, by mesne assignments, to Clayton & Lambert Manufacturing Co., Detroit, Mich, a Corporation of Delaware. Filed June 13, 1928. Serial No. 284,922. 9 Claims. (Cl. 168—81.)



1. A combined starting and mixing chamber for liquid fuel burners, comprising a housing provided with a passageway for conducting air to the vaporized fuel and another passageway for conducting the vaporized fuel towards the burner or burners, and a combined closure and starting member rotatably mounted on the said housing and adapted to close the upper part of said second passageway from the atmosphere and place the same in communication with said first passageway in one position of rotation.

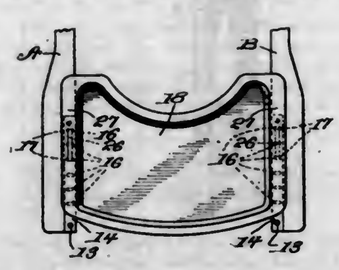
1,760,413. ZIRCONIUM AND PREPARATION THEREOF. WILLIAM PHILIP KIERNAN, East Orange, N. J., assignor to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed Sept. 16, 1926. Serial No. 135,821. 6 Claims. (Cl. 148—11.5.)



1. The process of producing formed articles of zirconium which comprises producing a relatively pure coarse metal powder of the metal, compacting the same, heating the compacted article to a low temperature in a high vacuo to substantially degasify the compacted metal powder, sintering the degasified article at a high temperature approximating but below the fushion point thereof in the same high vacuo and thereafter subjecting the cintered article to mechanical deformation at temperatures approximating 800° C.

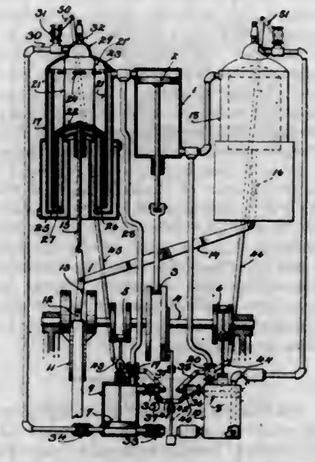
1,760,414. CHAIR. CARLTON VANCE KING, Corry, Pa. Filed Apr. 19, 1929. Serial No. 356,558. 6 Claims. (Cl. 155—127.)

1. In combination, a chair having arms, a tray or the like extending between the arms, said tray member having a depending transversely flattened pin at each end thereof, said flattened pins having widened heads at their lower ends, said arms each having a rectangular recess in its top surface along its inner edge, said arms being provided with spaced apart drainage holes extending through the arms from the bottom of the recess, said drainage holes also serving to receive the heads of the pins, a locking bar slidable on the bottom of said rectangular recess, said locking bar being arched or curved so that its ends only normally engage the bottom of the recess, a channel member in said rectangular recess inverted over and enclosing said locking bar, said channel member being curved oppositely to said locking bar with its ends normally elevated above its center, said channel member having a series of narrow transversely disposed rectangular apertures for selectively receiving said depending flattened pins, said locking bar having a series of key openings corresponding to the holes in the channel member, the enlarged portions of the said key openings being adapted to register with the holes in the channel to permit



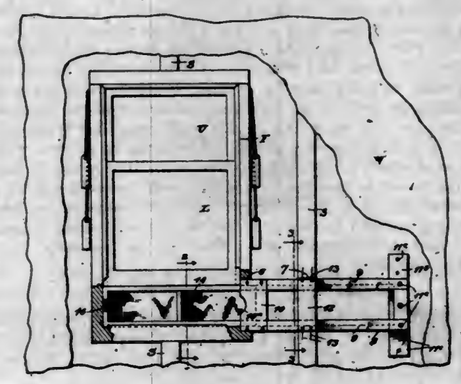
passage of the head of the pin therethrough, and the narrower or slot portions of the key openings being adapted when positioned above the head of the pin to prevent withdrawal thereof, said locking bar having a handle or finger piece depending therefrom, and said arm having a slot for receiving said handle and permitting movement thereof longitudinally of the arm, said arm having bolt holes in its ends, said channel having registering bolt holes in its ends, and said locking bar having bolt receiving slots in its ends registering with bolt holes, and bolts extending through said registering bolt holes for rigidly securing said channel member to the arm while permitting adjustment of tension and limiting sliding movement of the locking bar, and nuts on the bolts.

1,760,415. HOT-AIR ENGINE. JOSEPH KOENIG, Manitowoc, Wis.; Remus Koenig and Ruby K. Ellis administrators of said Joseph Koenig, deceased. Filed May 13, 1926. Serial No. 108,800. 4 Claims. (Cl. 123—22.)



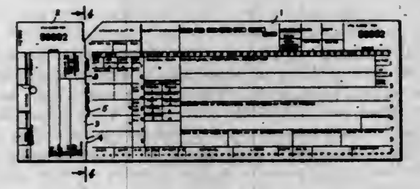
4. A hot air engine comprising a working cylinder having a working piston therein, a crank shaft driven from said working piston, a pair of air conditioning cylinders having one of their ends directly connected to opposite ends of said working cylinder, means connecting opposite ends of said air conditioning cylinders, and air shifting pistons slidably mounted in each of said cylinders, means carried by said crank shaft for quickly moving the shifting pistons to opposite ends of the air conditioning cylinders at the completion of each stroke of the working piston, an air pump for forcing air into the other end of each of said air conditioning cylinders, means for admitting fuel to said last mentioned end of each of said air conditioning cylinders, means for igniting said fuel, and means for discharging a portion of the gas in each of said air conditioning cylinder, means for igniting said fuel, and means for discharging a portion of the gas in each of said air conditioning cylinders to the air pump corresponding to such cylinder to aid in the compression of air in said air pump.

1,760,416. WINDOW SCREEN. LAWRENCE KOLANO and THOMAS PALKA, Wyandotte, Mich. Filed Oct. 14, 1929. Serial No. 399,577. 5 Claims. (Cl. 156—14.)



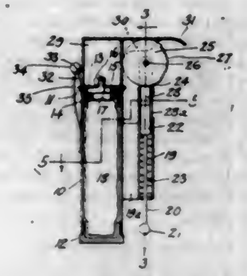
4. A structure as specified in claim 2; together with vertical end members secured to said bars and forming therewith a rigid frame.

1,760,417. DETACHABLE RECORD CARD. CLAIR D. LAKE, Endicott, N. Y., assignor to The Tabulating Machine Company, Endicott, N. Y., a Corporation of New Jersey. Filed Feb. 24, 1927. Serial No. 170,469. 3 Claims. (Cl. 281—2.)



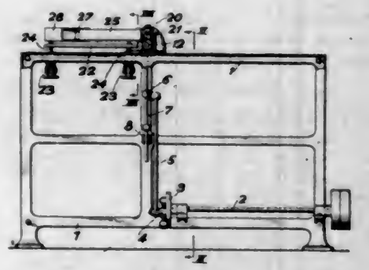
1. A record card provided wtih a partition line extending between edges of a card comprising a plurality of elongated slits terminating at said edges of the card and intermediate slits extending towards each other between said elongated slits and on the same side of the latter, and laterally thereof.

1,760,418. IGNITER. CHARLES F. LARSEN, New York, N. Y. Filed Dec. 27, 1926. Serial No. 157,186. 2 Claims. (Cl. 67—7.1.)



1. In an igniter having a container for fuel-saturated cotton and a wick projecting therefrom, a sparking device comprising a wheel, having a partly serrated face, a sparking member normally in contact with the non-serrated face of the wheel, a fingerpiece projecting from and integrally connected to the said wheel to revolve the wheel and bring the said serrated face in rubbing contact with the said sparking member, a cap fastened to the said wheel, adapted to fit over the wick end of the said container when the igniter is in a closed position and adapted to revolve with the said wheel to an open position when the serrated face of the wheel is brought in contact with the said sparking member, the said cap having a cam-like protuberance, and a spring secured to the container having a terminal engage the said protuberance when the cap is normally in a closed position.

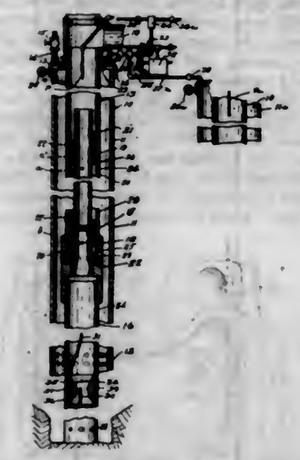
1,760,419. PACKING COTTON WOOL FOR DRESSING PURPOSES. ANTON LEHMANN, Flawil, Switzerland. Filed Dec. 10, 1927, Serial No. 239,159, and in Switzerland Dec. 11, 1926. 5 Claims. (Cl. 226—14.)



3. A machine for inserting strips of cotton wool into envelopes, comprising in combination, a pair of positively driven rollers feeding the strip between said rollers in the longitudinal and horizontal directions, a frame in which said rollers are mounted, toothed racks cooperating with said frame, and means to reciprocate said frame along said toothed racks in the vertical direction for endwise feeding and folding said strip vertically in zig-zag fashion.

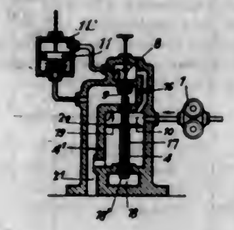
1,760,420. OIL RECOVERY METHOD AND APPARATUS. WALTER A. LOOMIS, Long Beach, Calif. Filed Apr. 21, 1926. Serial No. 103,448. 8 Claims. (Cl. 103—233.)

1. In means for causing and controlling the flow of an oil well, a tubing string for the upward delivery of oil, a tail pipe therebelow, extending substantially to the bottom of a well, an intermediate organization comprising a mixer surrounded by a shell, said mixer and shell being apertured



at different levels, means for supplying pressure fluid to the mixer, and a pipe for the downward and interior delivery of a light hydrocarbon to a level below said mixer.

1,760,421. SPEED-REGULATING DEVICE FOR PRIME MOVERS. ALBERT LÜTHI, Zurich, Switzerland, assignor to the Firm Aktiengesellschaft der Maschinenfabriken Escher Wyss & Cie., Zurich, Switzerland. Filed July 14, 1927, Serial No. 205,729, and in Switzerland July 17, 1926. 4 Claims. (Cl. 264—14.)



1. A device for governing the speed of prime movers provided with a regulating member; comprising a liquid pump constantly driven by the machine to be governed, a receiving chamber into which said pump constantly delivers a quantity of pressure liquid varying in dependence of the speed of said machine, a piston connected with said regulating member, a cylinder containing said piston, a discharging chamber into which liquid from said cylinder discharges, a pressure chamber from which liquid is supplied to said piston and having a vent therefrom, means of constant area to throttle the flow from said receiving chamber to said pressure chamber, means to control the venting of liquid from the pressure chamber, and means to throttle liquid by-passing the pressure chamber and liquid flowing from the receiving chamber into the discharging chamber, the means to control the venting of liquid from the pressure chamber being moved by the differential liquid pressure between the receiving chamber and the discharging chamber.

1,760,422. EMERGENCY EXIT FOR VEHICLES. ROBERT A. MACKIE, Detroit, Mich., assignor to American Car and Foundry Motors Company, New York, N. Y., a Corporation of Delaware. Filed Sept. 24, 1927. Serial No. 221,747. 1 Claim. (Cl. 280—166.)

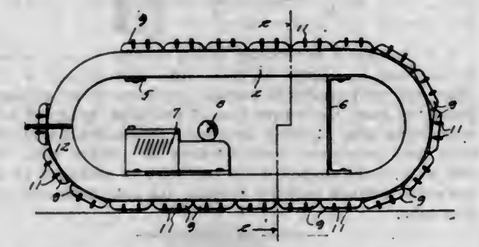
In a passenger coach having side sills, a plurality of passenger carrying compartments one thereof arranged

a substantial distance above the other with the floors of both compartments arranged in spaced relation to provide a baggage compartment, means for permitting egress of passengers from the elevated compartment comprising a step well formed in the baggage compartment between



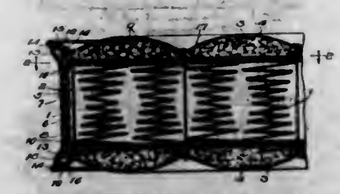
one of the side sills and the floor of the elevated compartment and adjacent the door opening, and steps secured to said sill and said floor and normally arranged in the well and normally concealed by the door, said steps being extensible from the wall when the door is open.

1,760,423. TRACTOR TOY. LOGAN L. MALLARD, Norfolk, Va. Filed Apr. 22, 1929. Serial No. 357,288. 8 Claims. (Cl. 46—48.)



1. In a toy of the class described, a body member characterized by spaced endless track members, bracing elements connecting said track members, and a plurality of disconnected track-retained ground engaging members slidably mounted thereon, adapted to move over said tracks as the device is propelled.

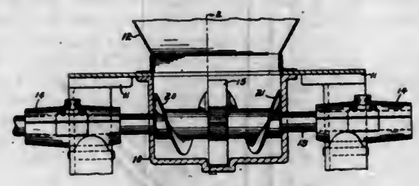
1,760,424. MATTRESS. MAX MARSACK, Sheboygan, Wis. Filed Nov. 5, 1928. Serial No. 317,322. 3 Claims. (Cl. 5—351.)



3. In a mattress of the kind described and in combination with an inner spring construction, a quilted side boxing having inner and outer plies, and means separate from the spring construction for supporting the boxing consisting of tightly stretched cross bands forming a lattice structure on the opposite faces of said construction, the ends of said bands being fastened to the adjacent inner ply of said boxing.

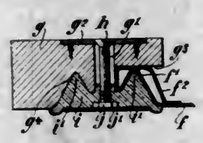
1,760,425. DISCHARGING PROPELLER. ESLI A. MARSH, Chicago, Ill., assignor, by mesne assignments, to St. Regis Paper Company, New York, N. Y., a Corporation of New York. Filed Oct. 10, 1928. Serial No. 311,518. 4 Claims. (Cl. 198—53.)

1. In apparatus for feeding pulverulent or granular material, a casing having a discharge opening adjacent the bottom thereof, a centrifugal propeller having its discharge side in alinement with said discharge opening and mounted rotatably upon an approximately horizontal axis and having radially extending blades, and a member at one



side of said propeller adapted to force material laterally into the spaces between the propeller blades, there being an opening above the path of said propeller blades allowing the escape of air.

1,760,426. PANELING WITH FLEXIBLE CONNECTIONS. ALFRED F. MASURY, New York, N. Y., assignor to International Motor Company, New York, N. Y., a Corporation of Delaware. Filed Sept. 26, 1927. Serial No. 221,901. 3 Claims. (Cl. 296—29.)



1. A construction of the character described comprising a panel, the end of the panel being turned back on itself to form a triangular portion and secured to the main panel portion whereby the angular portion is braced, cooperating angle portions formed in an adjacent member to which the panel is to be connected, a strip of yielding non-metallic material engaging angular portions of the first member, and means to place the strip under compression to connect the elements positively.

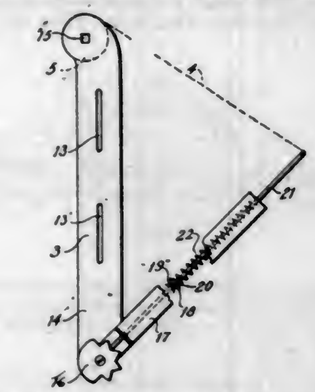
1,760,427. PROCESS FOR PREVENTING WEATHERING OF GLASS. ROBERT C. MATLOCK, Jr., Bloomfield, N. J., assignor to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed Oct. 17, 1928. Serial No. 313,187. 16 Claims. (Cl. 41—42.)

1. The method of frosting glass articles which comprises subjecting said article to the action of a highly concentrated fluoride etching solution for a limited interval of time, followed by a second etching action by a lesser strength fluoride solution for another interval of time and thereafter subjecting the etched glass surface to the action of a chemical solvent inert with respect to said glass but substantially capable of removing from the etched surface of the double alkali and alkaline earth metal silico fluorides formed by the said etching reactions thereon.

1,760,428. COMBINATION AWNING AND SHADE. GEORGE W. MILLER, Wagoner, Okla. Filed June 24, 1927. Serial No. 201,126. 2 Claims. (Cl. 156—44.)

1. In the awning structure a pair of parallel plates having holes at one end for mounting a spring roller, pins fixed to the other end of said plates, a ratchet fixed on each pin and spaced from its plate, an arm pivotally mounted on each pin between the plate and the ratchet, each arm extending outwardly in a plane parallel to the plane of its plate for a short distance, then having two 90° bends to form an offset portion, the free end being again bent back 90°, there being a hole in each bent portion, a

U-shaped bail having each end passing through the holes of the respective arm, and bearing against the ratchet,



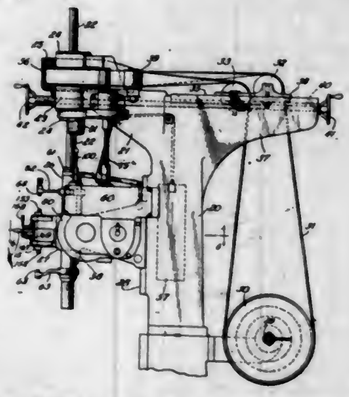
spring means urging each end into engagement with the respective ratchet, and an awning curtain secured at one end to said roller and at the other to the base of the bail.

1,760,429. SUN AND RAIN SHIELD. GEORGE W. MILLER, Wichita, Kans. Filed Sept. 1, 1927. Serial No. 216,987. 7 Claims. (Cl. 152—44.)



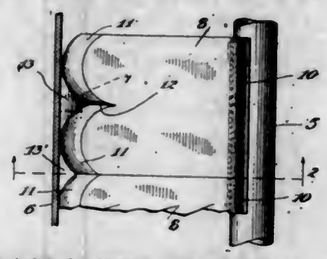
3. A sun and rain shield including an adjustable frame having side members, one of the side members having a portion of its length adjacent to its end, bent upon itself defining a slot, a tooth extending laterally from the extremity of said side member, said side members operatively connected by a tube cross member for width adjustment.

1,760,430. DRILLING MACHINE. JAMES F. MIRRIELEES, Cincinnati, Ohio, assignor to The Avey Drilling Machine Co., Cincinnati, Ohio, a Corporation of Ohio. Filed Sept. 27, 1923. Serial No. 665,048. 36 Claims. (Cl. 77—33.)



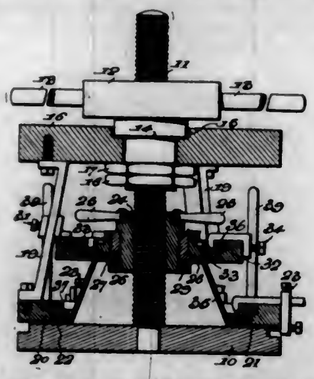
1. In a drilling machine, the combination with the machine frame, drill spindle and spindle sleeve, of a vertically adjustable guiding head for the spindle sleeve mounted on the machine frame, a horizontal feed shaft journaled in said head and geared to said sleeve, a vertical drive shaft geared to said spindle and extending into said head, a series of horizontal countershafts journaled in said head and extending from front to rear thereof, worm gearing connecting one of said countershafts to said feed shaft, worm gearing connecting another of said countershafts to said drive shaft and adjustable change speed gearing connecting said countershafts.

1,760,431. SIDE BRICK FOR FIRE-BOX ARCHES. JOHN E. MUHLFELD, Scarsdale, N. Y. Filed Dec. 23, 1927. Serial No. 242,025. 5 Claims. (Cl. 110—87.)



1. A side brick for firebox arches having a seat formed on one end to engage an arch tube and formed at its other end with surfaces curved transversely in opposite directions from the center line of the brick, said end surfaces being also rounded or convex longitudinally of the brick and presenting spaced points of contact with the side wall of the firebox when the brick is arranged in an upwardly inclined position between the side sheet and the arch tube.

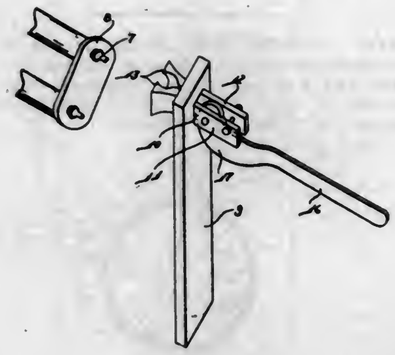
1,760,432. MACHINE FOR SHAPING CONICAL METAL FORMS. THOMAS J. MURRAY, Beacon, N. Y. Filed Feb. 6, 1929. Serial No. 337,982. 12 Claims. (Cl. 153—21.)



1. In a machine of the class described, a base, a pair of die carriers mounted above the base, ring dies on said carriers to engage the outer face of a conical blank adjacent its respective ends, means to move said carriers toward the base thereby to form an outwardly projecting flange at the base end of said blank, and a supplemental die carrier with a die over which the blank is located, and means to move said supplemental die to form a collar on the other end of said blank, substantially as shown and described.

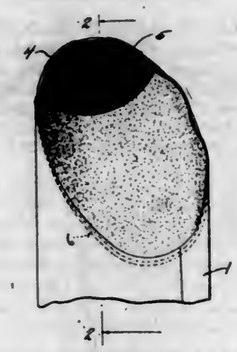
1,760,433. EXTRACTING TOOL. EDGAR NORDSTROM, Detroit, Mich. Filed Dec. 6, 1928. Serial No. 324,118. 6 Claims. (Cl. 29—86.1.)

4. A tool of the class described comprising a bearing plate having an opening therein; a pair of plates projected through said opening and having their outer surfaces adjacent one end flared outwardly, the movement of said bearing plate longitudinally of said pair of plates in the



direction of said end of said pair of plates effecting an approach of said pair of plates at said end toward each other.

1,760,434. SLEEVE CONSTRUCTION FOR COATS. ERNEST M. ORLOW, Wauwatosa, Wis. Filed June 27, 1927. Serial No. 201,628. 1 Claim. (Cl. 2—268.)



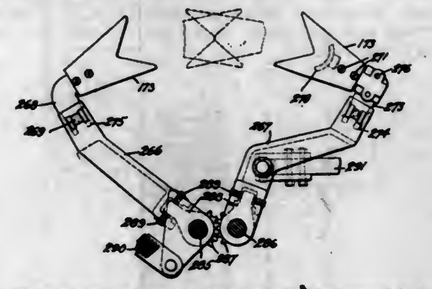
A sleeve construction for coats comprising a body portion provided with an arm hole and having a curved bulged head adjacent the arm hole and merging into the body portion of the sleeve, a stiffener formed of resilient fabric, shaped to the curved head of the sleeve and confined entirely within said sleeve, said fabric having its weave arranged diagonally to the axis of the sleeve and a plurality of distinct and separate rows of blind stitching securing the stiffener to the fabric of the sleeve throughout the major portion of the stiffener, said rows of stitching being curved and converging at the front and rear of the sleeve.

1,760,435. SHEAR MECHANISM FOR GLASS FEEDERS. KARL E. PEILER, West Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Original application filed Dec. 31, 1923, Serial No. 683,576. Divided and this application filed Nov. 18, 1925. Serial No. 69,803. 24 Claims. (Cl. 49—55.)

4. Apparatus for separating molten glass into mold charges, comprising a movable glass severing blade adjustable to different angular positions, and a guide for the mold charges movable with the blade and having a fixed angular position.

12. Glass severing mechanism comprising a pair of pivotally mounted arms carrying shear blades, gears connecting the arms to swing them toward and from each other, and means for adjusting the angular relation between the gears and their respective arms.

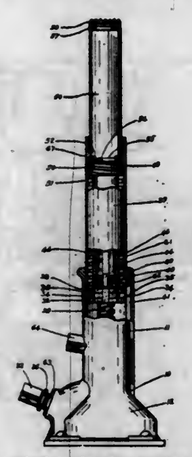
18. Apparatus for separating molten glass into mold charges, comprising a shear blade, means for producing a continuous discharge of air toward the blade, and means for periodically supplying oil to said air discharge so as to produce a periodic oil spray on said knife.



20. Glass severing mechanism including a movable arm carrying a shear blade, an operating mechanism for said arm including a cam lever and a cam for actuating the cam lever, a latch carried by said cam lever, and means cooperable with said latch when said lever has been swung clear of said cam to prevent return movement of the cam lever toward said cam, whereby said shear blade will be maintained inoperative.

22. A pre-setting device for a pair of carrier supported shear blades, one of said shear blades being angularly adjustable relatively to its carrier, comprising a block, a slide movable mounted on the block, means for securing one of said carriers to the block so that the shear blade on the said carrier is turned toward the slide, means for securing the second carrier to said slide so that the blade of the second carrier overlaps the blade of the first carrier, and means for adjusting said slide relatively to said block to cause the overlapping portions of said blades to contact flatwise with each other.

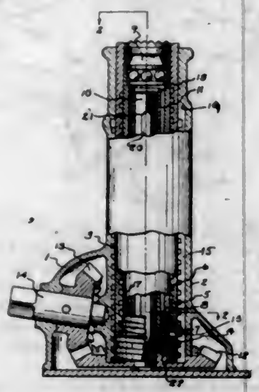
1,760,436. LIFTING JACK. ADOLPH PETELER, Freeport, N. Y., assignor to Auto Specialties Mfg. Co., San Francisco, Calif., a Corporation of California. Filed Sept. 29, 1926. Serial No. 138,580. 18 Claims. (Cl. 254—102.)



1. In a device of the character described, a base member, a member extensible therefrom, a second member ex-

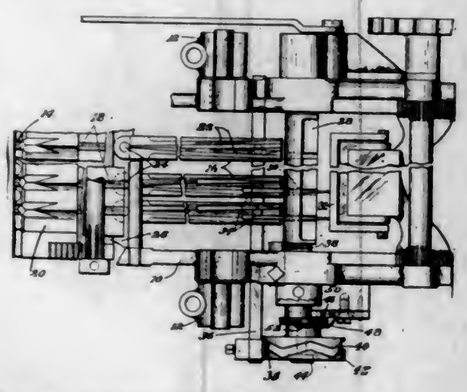
tensible from said first member, and means for simultaneously extending said members comprising a rotatable driving member and means connecting said driving member with said first extensible member so as to extend the same upon rotation of said driving member, and means comprising a member mounted to turn with said driving member and axially movable relative to the driving member and rotatable relative to said first extensible member for extending said second extensible member.

1,760,437. LIFTING JACK. ADOLPH PETELER, Freeport, N. Y., assignor to Auto Specialties Manufacturing Co., San Francisco, Calif., a Corporation of California. Filed Sept. 18, 1924. Serial No. 738,362. 33 Claims. (Cl. 254—102.)



1. A lifting jack comprising a pedestal, a lifting member adapted to be projected from said pedestal, an actuating member for said lifting member, a second lifting member adapted to be projected with respect to said first lifting member, an actuating member for said second lifting member and driving means common to said actuating members arranged in said pedestal and effective to project said first lifting member with respect to said pedestal and said second lifting member with respect to said first lifting member.

1,760,438. FASTENING-SUPPLYING APPARATUS. ELMER R. POPE, Hamilton, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Sept. 7, 1927. Serial No. 217,987. 17 Claims. (Cl. 1—39.)



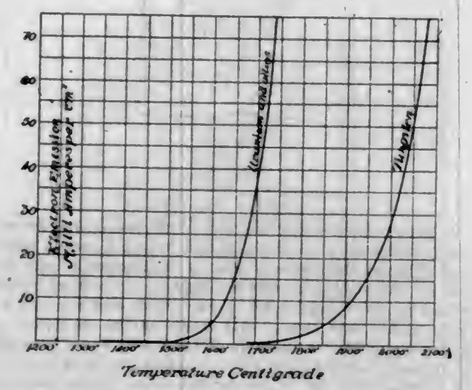
4. In a fastening-supplying apparatus, a raceway provided with fastening-conveying grooves, a discharge device having a fastening-receiving portion individual to each groove, and means arranged to hold a fastening conveyed by the groove at the discharge device ready for delivery to the receiving portion while another fastening from the groove is being discharged by said portion.

1,760,439. CLOSURE STRUCTURE. JAMES S. REID, Cleveland, Ohio, assignor, by mesne assignments, to The Eaton Axle & Spring Company, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 12, 1928. Serial No. 261,060. 11 Claims. (Cl. 220—40.



1. A closure, comprising a body member and a locking member carried thereby, said locking member having a central portion for securement to said body member, a plurality of radially extending locking arms each having locking means, and a plurality of radially extending flexing arms of resilient material, said locking arms and said flexing arms being arranged in alternate relation about said central securing portion.

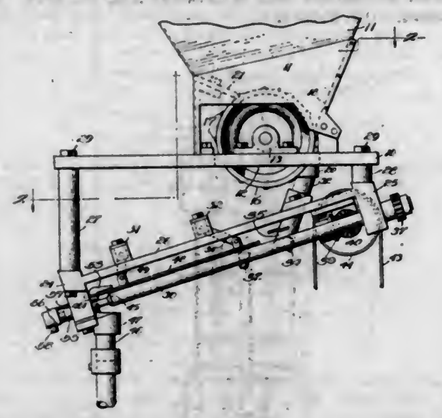
1,760,440. ELECTRON-EMISSION MATERIAL. HARVEY C. RENTSCHLER, JOHN W. MARDEN, and CLAYTON T. ULREY, East Orange, N. J., assignors to Westinghouse Lamp Company, a Corporation of Pennsylvania. Original application filed June 25, 1921, Serial No. 480,301. Divided and this application filed Dec. 23, 1922. Serial No. 608,784. 2 Claims. (Cl. 250—27.5.)



1. Material suitable for use as an electron emitter in electron discharge devices comprised of a refractory metal body containing approximately 93 per cent tungsten and approximately 7 per cent uranium.

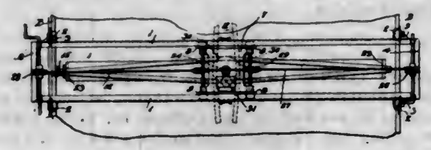
1,760,441. CORK-FEEDING DEVICE. ARTHUR I. RISSER, Chicago, Ill., assignor to U. S. Bottlers Machinery Co., Chicago, Ill., a Corporation of Illinois. Filed May 28, 1928. Serial No. 281,345. 11 Claims. (Cl. 226—92.)

2. In a feeding device for conical corks, a pair of shafts mounted in spaced relation so that the shafts engage the larger ends of corks placed therebetween, said shafts having an ejecting portion, means for rotating one of the



shafts to move the corks along to said portion, and means for shoving the corks back at the ejecting portion if the corks have not been ejected.

1,760,442. FINISHING MACHINE. JOHN F. ROBB, Cleveland Heights, Ohio, assignor to Koehring Company, Milwaukee, Wis., a Corporation of Wisconsin. Original application filed June 1, 1923, Serial No. 642,832. Divided and this application filed Sept. 2, 1924. Serial No. 735,527. 27 Claims. (Cl. 94—39.)



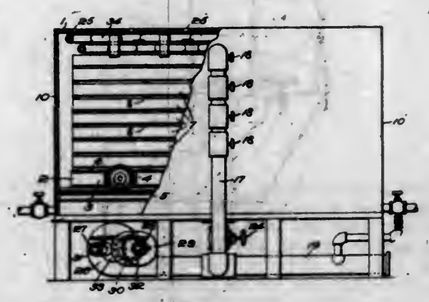
2. A machine for finishing concrete pavements, the same comprising a rotative multiple finishing device including a series of finishing elements adapted to be brought into operative position by rotation of said device, and means to vibrate said finishing device when one of its finishing elements is operative.

1,760,443. DEVICE FOR LIFTING INVALIDS. FRED. SCHEIDEGGER, Monroe, Wis. Filed Aug. 14, 1929. Serial No. 385,948. 2 Claims. (Cl. 224—6.)



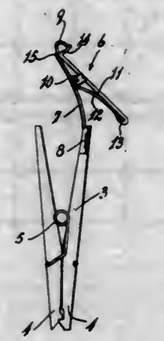
1. A lifting device of the class described comprising, in combination, a pair of bails each having its extremities spaced apart and pivoted to those of the other bail all on substantially the same axis and each bail being bent off toward the other bail remote from the axis of such pivoting, and a flexible lifting member having a running engagement with three of the extremities and also engaged with the fourth extremity.

1,760,444. METHOD OF DRYING MATERIALS. FREDERICK A. SECORD, Portland, Me. Original application filed Oct. 30, 1919, Serial No. 334,478. Divided and this application filed Jan. 25, 1922, Serial No. 531,722. Renewed Oct. 19, 1929. 6 Claims. (Cl. 34—24.)



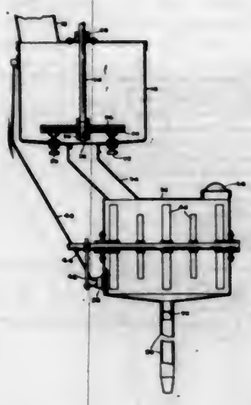
1. That method of drying which consists in raising the temperature of the moisture substantially throughout the mass to be dried and then in subjecting different layers of the mass to lower temperatures varying according to the positions of the layers relatively to the source of heat to cause moisture therein to move to its surface.

1,760,445. CLOTHESPIN. ROY V. SHACKELFORD, Long Beach, Calif. Filed July 19, 1929. Serial No. 379,344. 2 Claims. (Cl. 24—137.)



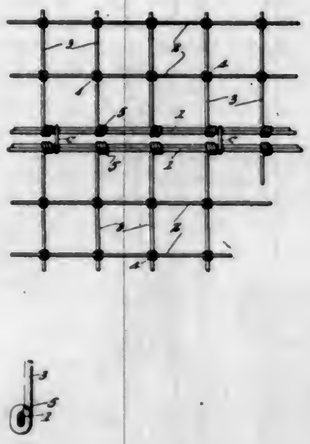
1. In combination with a clothes pin including a pair of spring actuated jaws, of a metal suspension attachment comprising a hook member, integrally formed flanges on the lower end of said hook member, said flanges being adapted to encircle one of the jaws whereby the attachment is secured to the pin, a hook formed on the upper end of the said hook member, a closure member pivotally secured to the hook member and adapted to bear against the hook member, and a head on the closure member adapted to extend under the hook, said head being curved to conform to the surface of the line and said hook member being curved inwardly so that said hook is in line with the center of said pin.

1,760,446. PROCESS OF MAKING BUILDING BLOCKS. MAX SKOLNIK, Minneapolis, Minn., assignor to Insolo Holding Company, Minneapolis, Minn., a Corporation of Minnesota. Filed Nov. 19, 1928. Serial No. 320,411. 6 Claims. (Cl. 92—6.)



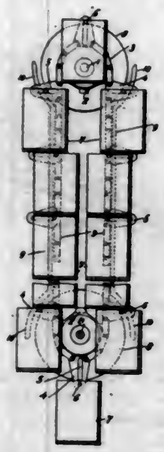
1. The process of making building blocks and the like which consists in reducing fibrous material to comparatively small pieces, subjecting the reduced material to the action of a solution of lime, pressing the fibrous mass into shape, drying the pressed material, and treating the dried material with water glass.

1,760,447. WIRE FABRIC. WILLIAM H. SOMMER, Peoria, Ill. Filed Nov. 15, 1928. Serial No. 319,605. 1 Claim. (Cl. 245—8.)



A wire fabric including longitudinal marginal and intermediate line wires and cross-connected stay wires, the marginal wires comprising a pair of wires disposed in contacting relation throughout their length, said wires being disposed in a substantially vertical plane and the ends of the stay wires connected to said marginal wires by a series of oval coils tightly disposed exteriorly around said marginal wires, the greatest length of the oval coils being in the plane of the length of the stay wires, and said coils being completely filled by said marginal wires, whereby to prevent shifting of the marginal wires relative to each other.

1,760,448. CASE FOR BOOKS OR THE LIKE. ABRAHAM STEINSCHNEIDER, Berlin, Germany. Filed July 27, 1929, Serial No. 381,481, and in Germany Aug. 16, 1928. 11 Claims. (Cl. 211—121.)



1. Case for books or the like comprising a row of superposed shelves, an endless chain extending vertically at either end of said row of shelves, a top and a bottom sprocket wheel for supporting and guiding each chain, slotted arms fixed to and extending at right angles to said chains and a pin at each end of each shelf projecting into the slot of an arm.

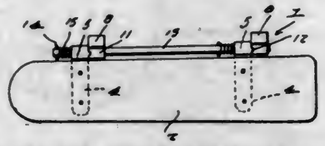
1,760,449. COIN-CONTROL MECHANISM FOR VENDING MACHINES. SWAN J. SWANSON, St. Louis, Mo., assignor of one-half to Ugo Dalpini, St. Louis County, Mo. Filed Apr. 17, 1929. Serial No. 355,810. 1 Claim. (Cl. 194—70.)



In a device of the character described, a shell, a coin receptacle, a front plate said shell and coin receptacle secured in operative relationship on said front plate, a cylindrical cup rotatively mounted in said shell, a shaft secured to said cylindrical cup at one end, an end closure secured in the open end of said cylindrical cup, a shaft secured to said end closure, a handle secured to the free end of said first shaft, an arm secured to the free end of said second shaft, means for actuating a commodity delivery device secured to said arm, said shell and cylindrical cup having a plurality of arcuated slots formed therein, coin guides in sliding engagement in said shell, said guides having holes formed therein, a rod in sliding engagement in each of said coin guides said rod projecting in its normal position beyond the periphery of said coin guide, a slide secured to said rod, said coin guides in position in said shell so that said guides will be in registration with certain of the slots in said shell and cylindrical cup and so that the projections of said rods will normally extend through holes in said cylindrical cup into certain other

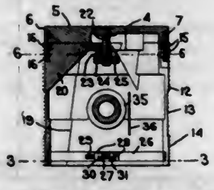
slots in said shell, so that when the proper coin is inserted in any slot, it will depress one of said slides and one of said guides and the projection of one of said rods, and when the proper coins have been inserted in all of the slots of said shell, the slides in all the coin guides and all the rod projections will be depressed so as to permit the rotation of said cylindrical cup in said shell, until the coins come in registration with other slots in said shell and fall into said coin receptacle.

1,760,450. ARMREST. MAE M. TAYLOR, Hollywood, Calif. Filed Aug. 2, 1928. Serial No. 297,042. 1 Claim. (Cl. 155—198.)



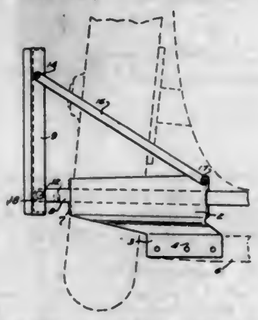
An arm rest for automobiles consisting essentially of suspension arms having hooks at their upper ends and horizontally disposed aligned sleeves at their lower ends and also having diametrically opposite notches in the forward end of each sleeve, a rod fixed in said sleeves, and extending forwardly beyond the forward sleeve and having pins spaced forwardly of the sleeves, a board, metallic straps fixed to the underside of the board and having sleeves mounted on and movable about and also movable lengthwise of said rod and provided at their rear ends with diametrically opposite lugs for cooperation with the notches in the first-named sleeve, and coiled springs mounted on the rod and interposed between the pins thereof and the second-named sleeve.

1,760,451. PISTON. LESLIE J. THOMAS, Arlington Heights, Mass., assignor to Vera C. Batchelder, Arlington Heights, Mass. Filed Aug. 30, 1927. Serial No. 216,395. 10 Claims. (Cl. 74—108.)



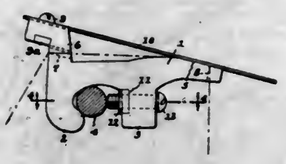
1. A piston comprising a solid head, a cylindrical skirt divided into a plurality of segments, means mounted on the head for simultaneously and equally adjusting the segments bodily in a radial direction.

1,760,452. LUGGAGE CARRIER. GOODWIN O. TUSTING, Alameda, Calif. Filed Apr. 1, 1929. Serial No. 351,484. 8 Claims. (Cl. 224—29.)



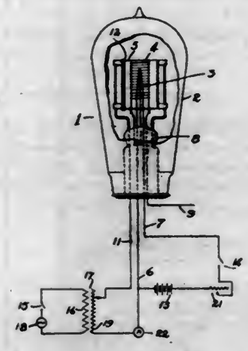
1. A luggage carrier comprising a platform, a bracket adapted to be fixed on the frame of a vehicle, a link pivoted to the platform at one end and to the bracket at the other end, and a bar slidably mounted in the bracket and pivoted to the platform.

1,760,453. THREAD GUIDE. PAUL UHLIG, Paterson, and WALTER ULRICH, Little Falls, N. J. Filed July 16, 1929. Serial No. 378,641. 4 Claims. (Cl. 66—126.)



1. A thread-guide of the class described comprising an integral body of vitreous material having a substantially flat top thread-table and an upstanding head removed from the table and said body also having receiving and delivery thread-guiding notches the former of which is in the head and opens sidewise thereof and extends therethrough generally toward the table and the latter of which extends directly downwardly from the table and opens relatively forward of the device, in combination with a spring secured to the head and normally pressing against the table between said head and the delivery passage.

1,760,454. MANUFACTURE OF ELECTRON-EMITTING DEVICES AND THE LIKE. CLAYTON TRIDLE ULREY, East Orange, N. J., assignor to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed July 24, 1922. Serial No. 577,021. 2 Claims. (Cl. 250—27.5.)

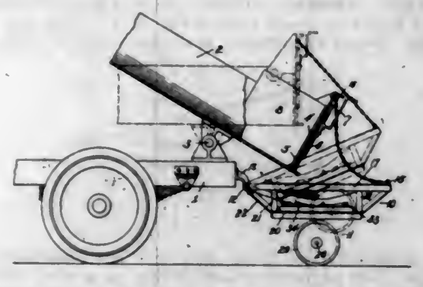


1. The method of activating a refractory incandescible cathode for electron emission purposes, comprising enclosing the same in an evacuated envelope with another electrode consisting at least in part of thorium metal and heating the said electrode by electron bombardment to a temperature sufficiently high to partially vaporize said thorium and sputtering said vaporized thorium from said electrode to the cathode.

1,760,455. MATERIAL SPREADER. PERCY M. VAN VALKENBURG, Adrian, Mich. Filed Apr. 28, 1928. Serial No. 273,509. 1 Claim. (Cl. 275—8.)

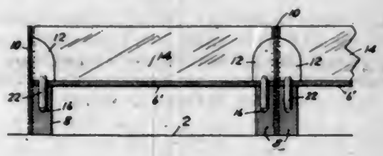
The combination with a truck having a chassis, a tiltable dump body mounted thereon, and brackets rigidly secured to the rear end of the chassis and extending rearwardly and downwardly therefrom, the rear ends of said brackets being provided with bearings, of a trailer, a transverse horizontal shaft secured in the front side of the trailer frame and journaled in said bearings to provide a pivotal connection between the truck chassis and the trailer so

that the latter has up and down swinging movement with respect to the truck, means constituting a substantially permanent connection between the rear part of the trailer and the upper part of the truck body to cause a raising of the trailer from the ground by said body when lowered



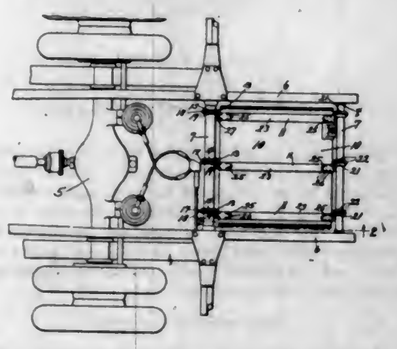
to normal position and to cause a lowering of the trailer when the truck body is tilted to dumping position, and means carried by the trailer and operative by tractive action to effect a centrifugal spreading of material discharged from the truck body.

1,760,456. CLIP. RAYMOND T. VON PALMENBERG, New York, N. Y. Filed Dec. 13, 1928. Serial No. 325,731. 7 Claims. (Cl. 312—140.)



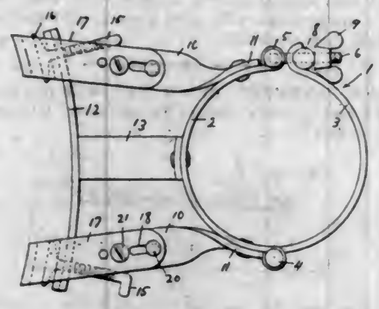
1. A clip comprising opposed flanges adapted to engage opposite faces of a sheet and an expanding pin portion.

1,760,457. LIQUID-FUEL-TANK SUPPORT. HUBERT WALKER, Royal Oak, Mich., assignor to American Car and Foundry Motors Company, New York, N. Y., a Corporation of Delaware. Filed Jan. 28, 1927. Serial No. 164,359. 3 Claims. (Cl. 280—5.)



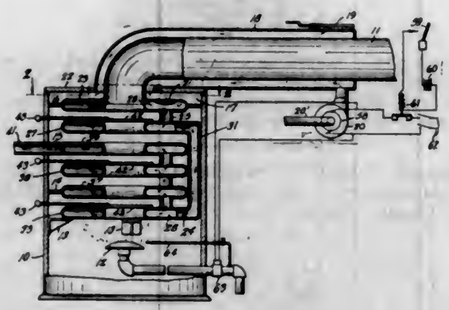
1. A fuel tank support comprising a band upon which the tank rests, a clamping element secured to one end of the band and having a hook formed at one end thereof to rest upon a supporting element, a clamping element secured to the other end of the band and having a recess formed in the upper end thereof to engage about another supporting element, means securing the clamping elements to said supporting elements, and retaining members in contact with the upper surface of the tank and connected to the clamping elements.

1,760,458. PIPE SUPPORT. ADOLPH B. WEBER, Wadena, Iowa. Filed July 16, 1928. Serial No. 292,988. 1 Claim. (Cl. 248—30.)



A pipe support of the class described comprising a clamp structure adapted to engage over the edge of a supporting wall, an annular clamp structure connected to said first mentioned structure, said annular clamp structure consisting of a pair of semi-circular members, said members being hingedly connected together at one of their ends, and means for securing the remaining ends of the members together, said first mentioned clamp structure consisting of an arcuate plate secured to one of said semi-circular members, bars connecting the ends of the arcuate plate with said member, L-shaped members secured to said bars, each with one of its legs spaced parallel from one end of the arcuate plate, and clamp means for operation between said legs and plate for engagement with the upper edge of the wall.

1,760,459. FURNACE. HARRY D. WEED, Southport, Conn. Filed Aug. 19, 1929. Serial No. 386,917. 13 Claims. (Cl. 126—116.)



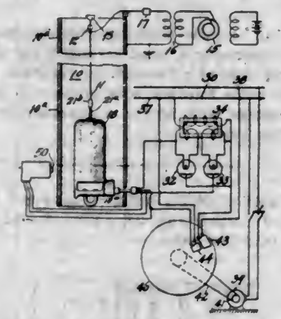
1. In a furnace, an enclosing casing providing a combustion chamber in the lower part thereof, an exit flue for the products of combustion at the upper part thereof, a heating means for a circulating medium in said casing comprising upper and lower portions, an inlet for the circulating medium to the upper part of the upper portion, a conduit leading from the lower part of the upper portion, to the lower part of the lower portion, and a conduit leading from the upper part of the lower portion.

1,760,460. SELF-LOCKING MAILING CIRCULAR. GEORGE WEISLOW, Chicago, Ill. Filed Dec. 21, 1928. Serial No. 327,548. 6 Claims. (Cl. 229—92.5.)



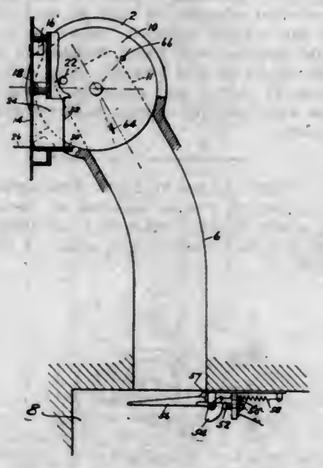
1. A mailing circular including a body foldable into compact form, a free end portion integral with said body, said body having a slit therein, said end portion being folded transversely thereof intermediate its length, said folded free end constituting a flap insertable in said slit when said body is folded.

1,760,461. SYSTEM OF ELECTRICAL PRECIPITATION. CARL S. WEYANDT, Pittsburgh, Pa., assignor to Syntron Company, a Corporation of Delaware. Filed Nov. 21, 1923. Serial No. 676,130. 23 Claims. (Cl. 183—7.)



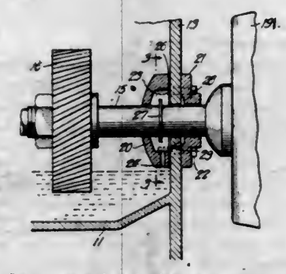
1. In an electric precipitator, the combination with a vertically suspended conductor, of means for periodically vibrating the conductor comprising an electromagnetic reciprocating device, electroionic control means therefor, and means for periodically energizing said control means.

1,760,462. DEPOSITORY DEVICE. SAMUEL P. YEO, Philadelphia, Pa. Filed Nov. 1, 1928. Serial No. 316,597. 11 Claims. (Cl. 194—1.)



1. A depository device including a receiving chamber, a rotary receptacle provided with a receiving space arranged to be brought into position for discharge into the receiving chamber or to be brought to a deposit receiving position, electrically controlled means for issuing a ticket upon the passage of a deposit to the receiving chamber, and means operated upon movement of the receptacle towards receiving position for restoring the ticket issuing means.

1,760,463. MEANS FOR PREVENTING OIL LEAKAGE. JOSEPH ABENANTI, Chicago, Ill., assignor to Crown Rheostat & Supply Co., Chicago, Ill., a Corporation of Illinois. Filed Aug. 23, 1926. Serial No. 130,969. 3 Claims. (Cl. 286—5.)



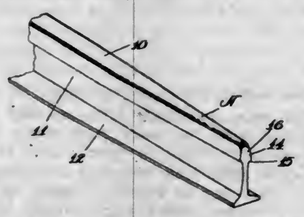
1. Means for preventing leakage of oil from an oil containing casing having a rotating member therein and a shaft extending from said member through a wall of said casing, comprising a member on one side of said wall having an opening therethrough loosely receiving said shaft and having a recess therein about said shaft in the side of said member adjacent said wall, and a collar on said shaft within said recess for causing the oil to be directed away from said shaft into said recess by centrifugal force due to the rotation of said shaft, said member having a drain opening therein for draining the oil from said recess, a second member on the other side of said wall having an opening therethrough loosely receiving said shaft and having a recess about said shaft in the side thereof adjacent said wall, said wall having a drain opening therethrough connecting the two recesses.

1,760,464. METHOD OF MAKING IMITATION ANIMAL FUR. WILLIAM ACHTMEYER, Orange, Conn., assignor to Sidney Blumenthal & Co. Inc., New York, N. Y., a Corporation of New York. Filed Feb. 10, 1928. Serial No. 253,505. 1 Claim. (Cl. 139—391.)



A method of producing a pile fabric of the character described simulating animal fur, which includes the following steps; selecting longer and coarser and shorter and finer fibers, combining said fibers into a thread, weaving said thread into a backing so as to project from said backing in substantially straight lengths, severing said thread to form a pile, and carding the pile to cause the longer and coarser and shorter and finer fibers to project unequally from the backing.

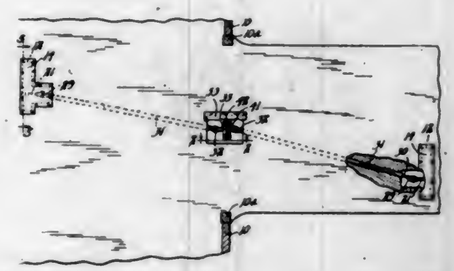
1,760,465. FROG POINT. DAVID E. ANDERSON, St. Paul, Minn. Filed Sept. 1, 1928. Serial No. 303,419. 4 Claims. (Cl. 246—435.)



1. A frog point made from a rail section having a beveled pointed end with a ball point of virtually the

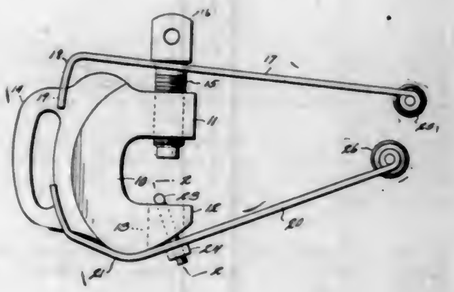
width of the web of the rail, shoulders formed on either side of the lower portion of the pointed end of the ball of the rail, and an arcuated tip end at the apex formed into the ball of the frog point.

1,760,466. SWITCH FOR DOOR OPERATORS. JOHN E. ANDERSON, Minneapolis, Minn. Filed Aug. 3, 1927. Serial No. 210,333. 5 Claims. (Cl. 268—33.)



5. A switch operating device for a door opening and closing mechanism having in combination, a vehicle operated means disposed at either side of said door, shafts adapted to be turned by said vehicle operated means respectively, a second shaft adapted to carry a rotatable switch and means for connecting said first mentioned shafts and said second shaft whereby said second shaft is turned upon operation of either of said vehicle operated means.

1,760,467. FENDER ROLLER. ALLEN PRESTON ASHER, Sandpoint, Idaho. Filed Nov. 13, 1928. Serial No. 319,081. 5 Claims. (Cl. 81—15.)



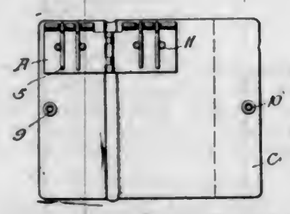
4. A fender tool of the character described, comprising a body having upper and lower jaws, resilient arms operatively engaged with the body respectively above and below the jaws thereof and carrying rollers at their free ends, and means operatively engaging the arms and jaws whereby the arms may be adjusted toward or from each other and the rollers shifted longitudinally of the body and relative to each other to position one roller in advance of, in registry with, or behind the other roller.

1,760,468. TWISTING TOOL. CHARLES F. BAILEY, Peoria, Ill., assignor to William H. Sommer, Peoria, Ill. Filed Mar. 22, 1929. Serial No. 349,190. 8 Claims. (Cl. 140—119.)



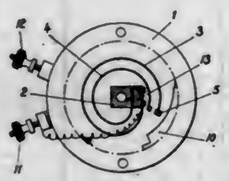
1. A twisting tool for securing wire fasteners to revetment work, comprising a head arranged for the reception of the twisting ends of a fastener therewithin, and a member having movable relation with respect to the head and adapted to engage and secure a fastener in a twisting position on the head.

1,760,469. KEY CONTAINER. HERMAN BOCK, East Orange, N. J. Filed Aug. 24, 1928. Serial No. 301,822. 1 Claim. (Cl. 150—40.)



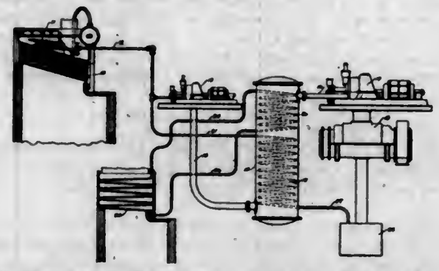
A key container of the character described comprising a flexible cover member, a pair of hingedly connected plates connected adjacent an edge of said cover, a plurality of key support members carried by each of said plates said flexible cover being foldable in the axis of pivotal movement of said hingedly connected plates, and snap means to secure said cover in a folded condition to enclose said hingedly connected plates and keys supported thereby.

1,760,470. FIRE-ALARM SIGNAL. EMILE CELESTIN JEAN BOUILLON, Paris, France, assignor to Societe Bouillon Frères, Paris, France. Filed Sept. 28, 1926, Serial No. 138,309, and in France Oct. 2, 1925. 3 Claims. (Cl. 200—139.)



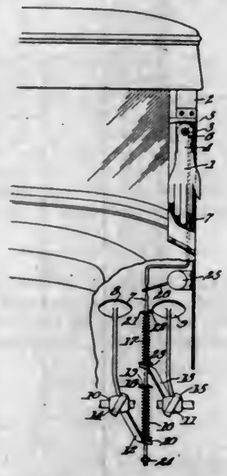
1. An apparatus of the class described comprising, in combination, a circular support having a raised center portion, a block carried by said center portion, a pair of spiral thermally responsive elements fixed at one extremity to said block and insulated from each other, a circular casing for enclosing said elements, said casing being rotatable about said raised center portion, a cam segment fixed to the wall of said casing and adapted to coact with the free extremity of one of said thermally responsive elements, a member carried by the casing having indicia thereon, and means carried by the block for cooperating with said indicia to indicate the temperature of operation of the apparatus.

1,760,471. POWER PLANT. BENJAMIN BROIDO, New York, N. Y., assignor to The Superheater Company, New York, N. Y. Filed Nov. 24, 1926. Serial No. 150,478. 14 Claims. (Cl. 60—73.)



10. In a power plant, a main steam supply, an exhaust steam reheater comprising a plurality of heating elements, a conduit leading from the main steam supply to one of said elements, and a closed circuit system supplying steam to another of said elements at a pressure above that of the main steam supply, said system comprising a continuous flow boiler, a conduit leading from the outlet end of said boiler to said element, and a conduit leading from said element to the inlet end of said boiler.

1,760,472. CONTROL MECHANISM FOR MOVABLE ELEMENTS. IRVING E. BROWN and NICHOLAS HOFFMAN, Perth Amboy, N. J. Filed Aug. 26, 1929. Serial No. 388,414. 5 Claims. (Cl. 116—47.)



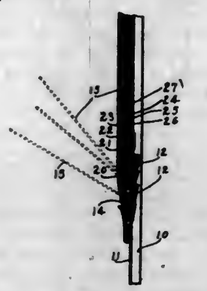
1. In a control mechanism for movable elements, particularly motion direction signals for vehicles, the combination with a movable element and a rod for imparting movement thereto, of two operating levers slidably engaging said rod, and connections between said levers and rod whereby either lever may impart movement to said rod independently of the other lever.

1,760,473. NECKTIE AND METHOD OF TYING SAME. WALTER J. BRUEHL, Buffalo, N. Y. Filed May 24, 1929. Serial No. 365,695. 2 Claims. (Cl. 2—150.)



1. A method of tying a necktie to give a four-in-hand knot appearance, consisting in forming a neck loop having a minor end portion and a major end portion overlapping one another, wrapping the major end portion completely about the minor end portion in close embrace therewith and beneath the loop to form a substantial knot shaping core depending from the loop with a downward taper, then passing the free portion of the major end upwardly through the neck loop and thence draping it downwardly over the shaping core, then conforming the sides of the draped portion snugly about the shaping core whereby the overlying draped portion assumes the shape of the shaping core and conceals the same, and finally securing said sides behind the shaping core so as to hold said sides from view and maintain the snug conformability of the draped portion to the shaping core.

1,760,474. RECORD CARD OR LIKE MEMBER FOR INDEXES OR FILES. CHARLES S. CAMPBELL and ALFRED E. HUNT, New Haven, Conn., assignors, by mesne assignments, to Remington Rand Inc., New York, N. Y., a Corporation of Delaware. Original application filed Oct. 10, 1921, Serial No. 506,819. Divided and this application filed May 6, 1924. Serial No. 711,488. 2 Claims. (Cl. 129—16.)

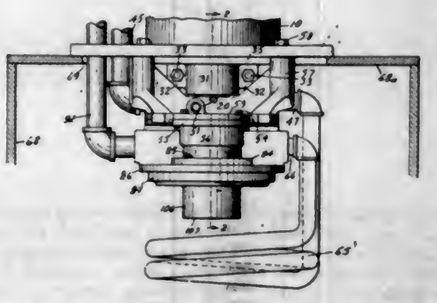


1. In an index or file, the combination of a support, and a plurality of reference members mounted in superposed substantially coincident relation, each reference member having a stub portion at one side formed with openings, tongues on said stub portions projecting into said openings, and a reference-bearing portion having a separable hinge connection with its stub portion, the outermost stub portion having the tongues thereon extending through the openings in the other stub portions and detachably engaging said support to mount said plurality of reference members on said support in interlocked relation, and each reference-bearing portion being independently detachable from its stub portion without disturbing the interlocking connection between the stub portion and said support.

1,760,475. FLUID PUMP OR COMPRESSOR. WILLIS H. CARRIER, Essex Fells, N. J., assignor to Carrier Engineering Corporation, Newark, N. J. Filed Oct. 1, 1924. Serial No. 741,082. 23 Claims. (Cl. 230—79.)

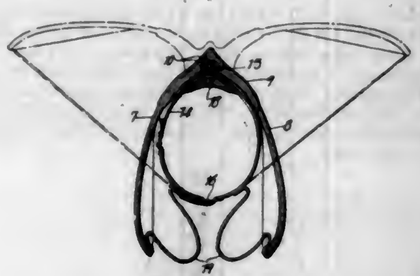
1. In a centrifugal pump in which a liquid acts as a pumping medium for a gas, a plurality of rotary impellers

arranged in axial alinement and connected to rotate together, each adapted to cause the rotation of the pumping liquid, means for causing the pumping liquid to pass from one to another of said impellers and be acted upon by said



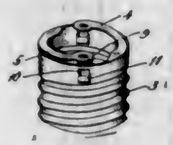
impellers in succession so as to cause a gas to be received at a low pressure by one impeller and delivered at a higher pressure by another impeller, and means for adjusting the axial position of an impeller to regulate the clearance between the impeller and an opposed part of the pump.

1,760,476. FOOT APPLIANCE FOR SWIMMERS. NORMAN A. CHASTENAY, Ozone Park, N. Y. Filed July 19, 1929. Serial No. 379,480. 4 Claims. (Cl. 9—21.)



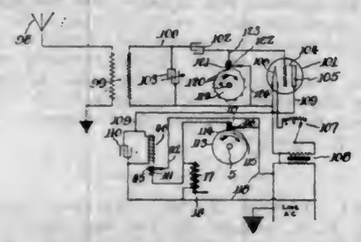
1. As a new product of manufacture, a swimmer's appliance of the class described comprising a relatively thick centrally disposed rubber body, and a pair of duplicate wings connected thereto, said body constituting a hinge and possessing normal inherent properties to maintain the wings in substantial parallelism but allowing the wings to swing outwardly to open position, and adjustable retaining straps carried by said body.

1,760,477. LAMP SOCKET. MEREDITH CLARK, Hempstead, N. Y. Filed Dec. 27, 1928. Serial No. 328,783. 5 Claims. (Cl. 176—31.)



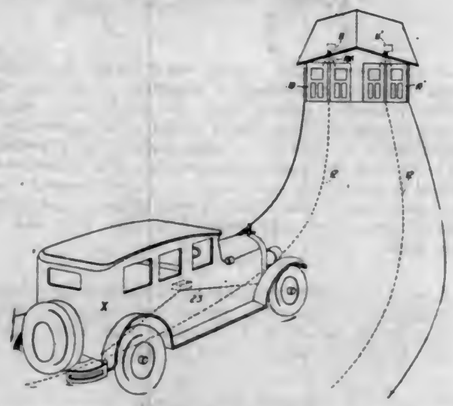
1. In combination, a threaded socket shell, a support therefor, a threaded base engaged in the shell, a two-part lock against rotary displacement of the base in the shell, one element of which is on the base and the other on the support, and means resiliently connecting the shell to the support for in and out movement of the shell and base as a unit in engaging and disengaging the locking elements.

1,760,478. SELECTIVE SIGNALING APPARATUS. HOWARD D. COLMAN, Rockford, Ill. Filed July 6, 1926. Serial No. 120,763. 68 Claims. (Cl. 250—2.)



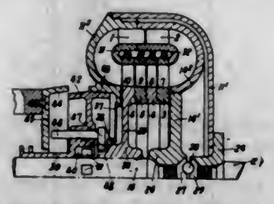
65. A selective receiver comprising a series of selector elements and a rotary carrier therefor, a member arranged to operate upon said elements successively, signal responsive means including a relay for controlling said member, a motor for driving said carrier, and means for supplying energy to said motor including a switch controlled by said relay.

1,760,479. RADIANT-ENERGY CONTROL SYSTEM. HOWARD D. COLMAN, Rockford, Ill. Filed May 4, 1927. Serial No. 188,856. 26 Claims. (Cl. 250—2.)



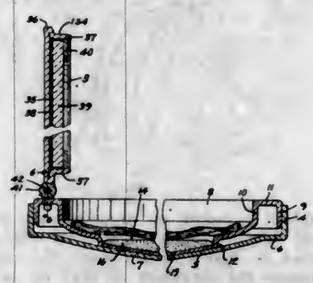
6. A radiant energy control system comprising, in combination with a door operator or the like, a radio transmitter carried by a motor vehicle and including a sending antenna, a radio receiver including a receiving antenna and responsive only to relatively strong signal impulses received from the transmitter when the sending and receiving antennæ are in relatively close proximity, said receiver being operable at the end of a predetermined operating cycle to initiate the operation of the door operating mechanism.

1,760,480. ROTARY POWER TRANSMISSION MECHANISM. ALLAN COATS, Paisley, Scotland. Filed Dec. 4, 1925, Serial No. 73,183, and in Great Britain Dec. 17, 1924. Renewed Apr. 14, 1930. 12 Claims. (Cl. 60—54.)



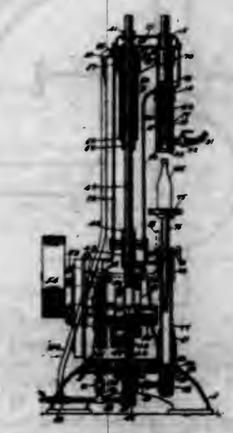
1. Rotary power transmission mechanism comprising a path for fluid including rotary driving vanes, a shaft connected to rotate said vanes, rotary driven vanes, a second shaft alined with the first shaft and connected to rotate with said driven vanes, and a series of return guide vanes interposed between the exit from the driven vanes and the entrance to the driving vanes, said return guide vanes being yieldable to fluid impinging on their backs and unyieldable to fluid impinging on their faces.

1,760,481. POLYGON VANITY CASE. CHARLES N. CORYELL, Mamaroneck, N. Y. Filed Feb. 18, 1928. Serial No. 255,291. 10 Claims. (Cl. 132—83.)



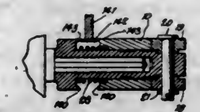
1. A vanity case comprising a cover having a polygonal, cylindrical side wall, a bottom having an outer annular flat portion connecting with said cylindrical portion and a circular convex domed portion rising above said flat portion, a bezel ring having a polygonal edge fitting in said cover and a circular depending inner flange, a circular convex compact backing fitting said domed portion and held by said bezel ring, and a second cover cooperating with said first cover.

1,760,482. PACKAGING MACHINE. WILLIAM VAUGHAN DERBY, Baltimore, Md., assignor, by mesne assignments, to Crown Cork & Seal Company, Inc., New York, N. Y., a Corporation of New York. Filed June 13, 1924. Serial No. 719,867. 18 Claims. (Cl. 226—77.)



4. In a packaging machine, and in combination, a packaging head element having a capping die and liquid delivery means, a bottle supporting element, means for causing one of said elements to approach the other element a given distance to place the head and supported bottle in filling relation and to approach further the approached element for the capping operation, and means for giving the approached element a displacement toward the approaching element that is, in extent, dependent on the height of the supported bottle.

1,760,483. METHOD AND APPARATUS FOR POWER TRANSMISSION AND RELEASE. ALEXANDER DOW, New York, N. Y., assignor to Dow Patents Holding Corporation, a Corporation of Delaware. Filed Oct. 14, 1927. Serial No. 226,170. 8 Claims. (Cl. 74—7.)

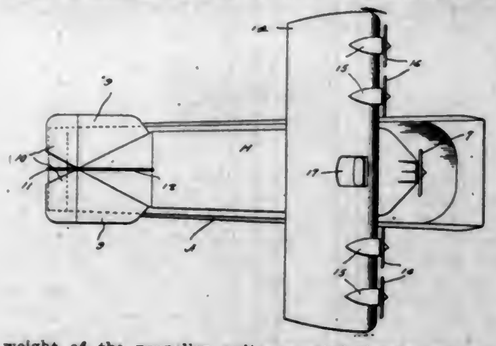


1. A power transmission mechanism comprising a driving and a driven shaft in parallel relation, a driving shaft-mechanism mounted on the driving shaft comprising the following elements: a sleeve adapted to fit on said driving shaft and splined with respect thereto to permit an axial movement of said sleeve on said shaft, and a rotary movement with said shaft, said sleeve having at one end thereof a section of greater diameter than said sleeve, said section having an annular face of conical form, the apex of said cone lying in the line of the axis of said sleeve and directed toward the opposite end of said sleeve, a shaft carried by said sleeve perpendicular to the axis of said sleeve at the end thereof opposite said enlarged section, two rollers mounted for rotation at the opposite ends of said shaft, said rollers adapted for cooperation with suitable cam surfaces hereafter defined, said sleeve having an external cylindrical bearing surface intermediate said enlarged section and said rollers, a second sleeve embracing said cylindrical bearing surface of said first mentioned sleeve and being free to rotate on said bearing surface and also to axially slide thereon, said second sleeve provided at one end with an annular face of conical form, the apex of said cone being in the line of the axis of said sleeve and oppositely disposed with respect to said first mentioned conical face, elastic means interposed between said sleeves, tending to normally separate said conical faces, the end of said second sleeve, opposite to that having said conical face, being provided with cam surfaces adapted to cooperate with said rollers, said cams emanating from points respectively in a plane perpendicular to the axis of said sleeves and developing to points in another plane parallel with the plane last referred to, said points marking the beginning and the termination of said cam surfaces, indentures in the end of said sleeve between the points of the beginning and termination of the respective cam surfaces, such indentures being formed in the arc of a circle and adapted to receive said rollers when at rest before they start to rise on said cam surfaces, and permitting a complete separation of said conical faces, said second sleeve being of mass and weight sufficient to inherently present an inertia to any actuating force that may be directed to rotate the same due to the rotation of the bearing surface on which said sleeve is mounted, or actuating force due to the rotation of said rollers on the said cam surfaces, a driven member fixed to said driven shaft and provided adjacent its periphery with annular conical surfaces adapted to extend between said oppositely disposed conical surfaces of the respective sleeves and shaped for line contact herewith, so that when said driven member is clamped between conical faces of the sleeves, by reason of the rotation of the driving shaft, said driven member will partake of the rotary motion of the driving shaft.

1,760,484. AERO SPEED BOAT. PAUL KENNETH DUDLEY, Fitchburg, Mass. Filed Mar. 16, 1929. Serial No. 347,627. 1 Claim. (Cl. 114—66.5.)

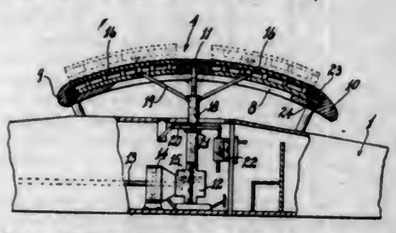
An aero-speed boat comprising an elongated hull of a type adapted to skim along the surface of the water, a cabin extending longitudinally of the hull and converging at its forward end to provide a forwardly tapered motor housing spaced rearwardly of the bow of the hull and upwardly above the deck of the latter, a motor-driven air propeller associated with said motor housing, a lifting wing mounted transversely of the forward portion of the said cabin and having a cockpit formed in the

center thereof, a plurality of air propellers mounted on the said wing adjacent the forward edge thereof, said wing being of such lifting capacity as to compensate for the



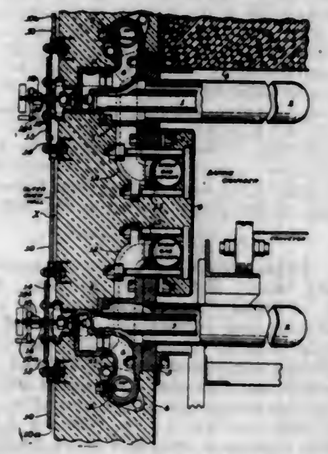
weight of the propeller units mounted thereon without causing the hull to rise entirely from the water, elevator means on the rear end of the cabin, and air rudder means also at the rear end of the cabin.

1,760,485. AIRPLANE CONSTRUCTION. WALDEMAR A. ENDTER, Long Beach, Calif. Filed May 4, 1929. Serial No. 360,460. 2 Claims. (Cl. 244—15.)



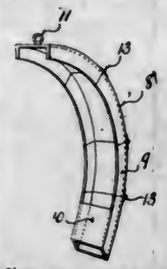
1. In an airplane, a transverse wing, a helicopter propeller in said wing, means to rotate said propeller, a stationary leading edge extending partly around said propeller, a stationary trailing edge extending partly around said propeller, the upper surface of said propeller conforming in curvature to the curvature of the wing.

1,760,486. FUEL SYSTEM FOR INCLOSED-BURNER BAKE OVENS. EUGENE OSCAR ENGELS, Saginaw, Mich., assignor to Baker Perkins Company, Inc., Saginaw, Mich., a Corporation of New York. Filed Nov. 8, 1928. Serial No. 317,943. 16 Claims. (Cl. 107—55.)



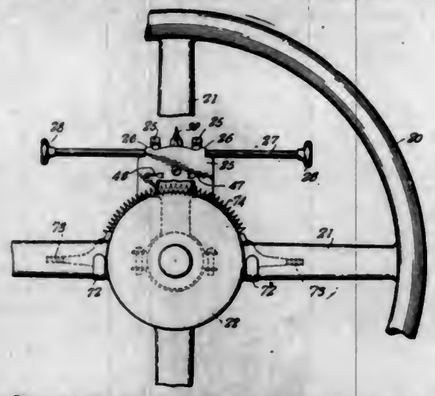
1. In combination, a walled oven, an independently walled baking chamber therein, a tubular gas burner having an enclosing jacket of substantially U-form, its ends disposed side-by-side, an adjustably shiftable panel normally constituting an integral part of a wall of said chamber, said panel formed with apertures in register with the ends of said jacket, for the purposes set forth.

1,760,487. BOILER. MICHAEL N. FREEMAN, Racine, Wis. Filed Mar. 22, 1928. Serial No. 263,629. 1 Claim. (Cl. 122—410.)



A circulator including an arcuate body formed of a plurality of hingedly connected sections whereby the end sections may be folded back toward the center of the body to reduce the curvature so that the body may be inserted through a manhole or handhole of a furnace, said body having lateral flanges projecting in the same direction as the curvature and adapted to contact with the outer side walls of a furnace, an eyelet carried by the upper opened end of the body, a hook secured to the eyelet for engaging an adjacent flue tube for supporting the circulator in place, and the lower end of said circulator being formed as a complete tube.

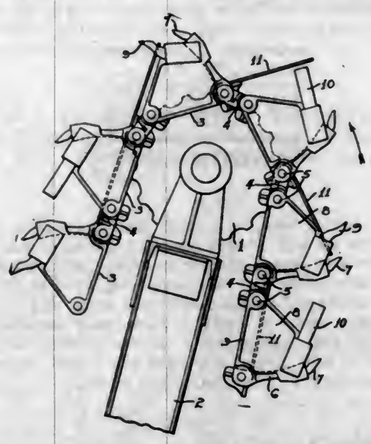
1,760,488. VEHICLE SIGNAL SWITCH. RAPHAEL C. GALLINANT, Ridgefield Park, N. J. Filed Apr. 5, 1930. Serial No. 441,762. 9 Claims. (Cl. 200—59.)



1. In combination with a wheeled vehicle having a steering wheel and post, of a dielectric block fixed on said post, contacts carried by said block, a round rod slidably mounted on said block, a heavy contactor arm secured rigidly to said rod engageable solely by gravity with either of said contacts, said rod being manually slidable in either direction, and flexible means adjustably carried by the steering wheel to retract the arm from either contact.

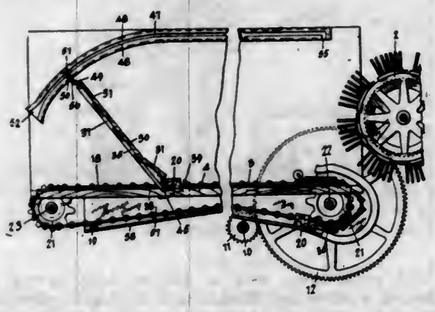
1,760,489. BUCKET CHAIN FOR DITCHING MACHINES AND THE LIKE. CHARLES L. GEORGE, Findlay, Ohio, assignor to The Buckeye Traction Ditcher Company, Findlay, Ohio, a Corporation of Ohio. Filed Aug. 20, 1928. Serial No. 300,740. 7 Claims. (Cl. 198—144.)

7. A digging element comprising a series of buckets and links alternating with each other and pivotally connected end to end, a cleaning blade normally projecting into each bucket, and means for rocking said blade about



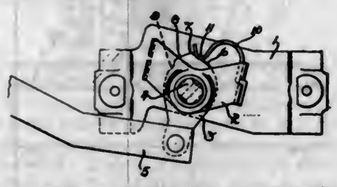
an axis to discharge the contents of the bucket, said axis being in advance of the pivotal connection between the bucket and the link which precedes it.

1,760,490. MANURE SPREADER. RALPH L. GROSE, Findlay, Ohio. Filed Apr. 11, 1928. Serial No. 269,072. 5 Claims. (Cl. 275—5.)



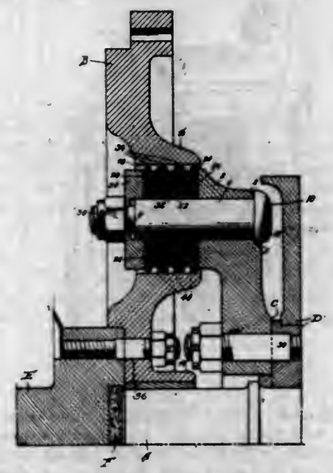
1. In a manure spreader having a spreader drum and a box, the combination of a belt for conveying the manure in the box to the spreader drum of the spreader, a collapsible gate connected to the belt, means for moving the belt within the box towards one end of the box, means for raising the gate and means for maintaining the gate in its raised position and for lowering the gate in the vicinity of the spreader drum of the spreader.

1,760,491. REMOTE CONTROL FOR DOOR LATCHES. FLETCHER D. GRUND, Weston, and HOLDEN W. RIGHTMYER, Toledo, Ohio, assignors to The American Swiss Company, Toledo, Ohio, a Corporation of Ohio. Filed Aug. 23, 1929. Serial No. 388,003. 1 Claim. (Cl. 292—239.)



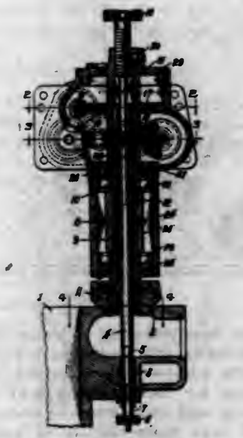
In a door latch, a control lever, means pivotally to mount said lever, a bolt-operating strap connected to said lever, a uniformly curved edge surface on said lever providing the normal operating range for the lever movement, a raised edge portion on said lever forming a terminus for said uniformly curved surface, a notch in the edge of said lever on the opposite side of said raised portion, a spring having a portion normally bearing against said uniformly curved surface adjacent said raised portion, and means to anchor an end portion of said spring.

1,760,492. COUPLING. ELBERT J. HALL, Detroit, Mich., assignor to American Car and Foundry Motors Company, New York, N. Y., a Corporation of Delaware. Filed Oct. 26, 1927. Serial No. 228,818. 5 Claims. (Cl. 64—100.)



1. In combination with a fly wheel having a series of openings formed therein, a rotatable shaft, a spider secured to the shaft and provided with a plurality of lobes extending adjacent the fly-wheel openings, resilient driving elements secured to the lobes and positioned within the openings, said elements having annular recesses defining spaced ribs adapted to engage the walls of said openings, and a compression member engaging the driving elements for expanding the latter against the walls of said openings.

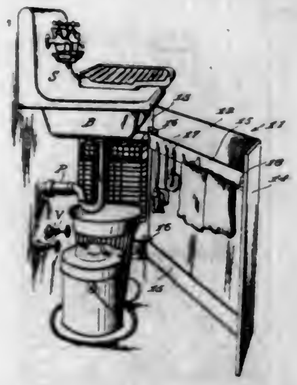
1,760,493. PORTABLE GRINDING TOOL. EARNEST A. HALL, Toledo, Ohio, assignor to The Hall Manufacturing Co., Toledo, Ohio, a Corporation of Ohio. Filed July 20, 1927. Serial No. 207,168. 6 Claims. (Cl. 51—241.)



1. In a tool of the class described, a guide fixed with respect to the work, a shaft rotatable on said guide in

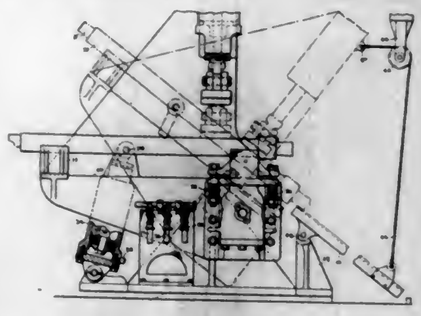
eccentric relation thereto, a second shaft rotatable on said first shaft, a rotary abrasive member carried by the second shaft without said guide, and positively driven intergeared means for imparting rotation to said first shaft about said guide and to the second shaft about the first shaft.

1,760,494. SANITARY CABINET. NEWTON T. HAMMER and EDNA H. HAMMER, Washington. D. C. Filed July 31, 1929. Serial No. 382,382. 1 Claim. (Cl. 312—118.)



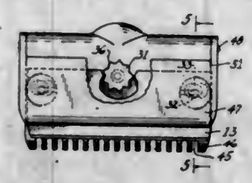
In combination with a sanitary kitchen sink projecting from a wall above the floor and having exposed pipes beneath the same, a readily removable cabinet comprising a front panel and two end panels hingedly connected thereto along adjacent edges, said panels being of a height to removably fit beneath the overhanging flange of said sink, and said end panels being of a width approximately equal to the distance the sink projects outwardly from the wall, and a rack on the rear of said cabinet for the support of utensils, whereby a readily removable cabinet is provided beneath said sink.

1,760,495. APPARATUS FOR REMOVING CORES FROM CASTINGS. ANTON HANSEN, Newark, N. J. Filed Oct. 30, 1928. Serial No. 315,936. 5 Claims. (Cl. 22—1.)



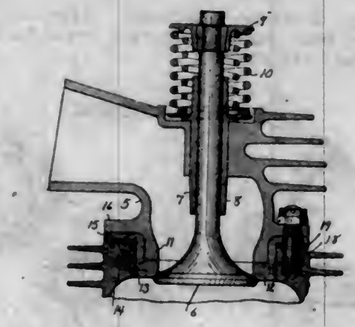
4. In a pipe core removing machine of the class described, a base frame and superstructure pivotally mounted thereon, jaws adapted to hold groups of pipe containing cores, means for clamping said jaws upon said pipe, means for tilting said superstructure and jaws, means for vibrating said jaws independently of said cores, and a grid adapted to tilt with said superstructure and jaws to receive said cores as discharged from said pipe.

1,760,496. SAFETY RAZOR. RUSSELL P. HARSHBERGER, Chicago, Ill. Filed Jan. 20, 1922. Serial No. 530,526. 22 Claims. (Cl. 30—12.)



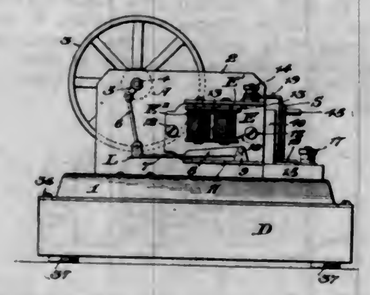
1. In a safety razor, a tubular casing, a tubular frame mounted in the bore of said casing, a system of gears and shafts for said razor, the shafts being journaled in the walls of said frame and the gears being fixed to their respective shafts and meshing with each other, so as to form an operative series of gears, a razor head threaded into one end of said casing and a handle threaded into the other end of said casing, said head and handle preventing relative movement of said frame and casing.

1,760,497. REMOVABLE VALVE CAGE FOR INTERNAL-COMBUSTION ENGINES. AUGUSTUS HASBROUCK, New Haven, Conn. Filed May 4, 1929. Serial No. 360,418. 3 Claims. (Cl. 123—189.)



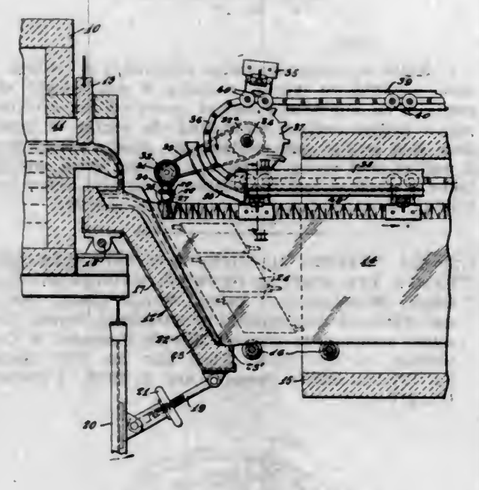
1. The combination with a cylinder head having an opening, of a valve-cage formed with a neck, a valve-seat surrounding and closely fitting said neck and adapted to enter the said opening in the cylinder head to which the cage and seat are secured, and a valve mounted in the said cage to co-act with said seat.

1,760,498. TOY ELECTRIC MOTOR. CHARLES T. HOFFMAN, Washington, D. C., assignor of one-half to Emory L. Groff, Washington, D. C. Filed Jan. 15, 1930. Serial No. 421,030. 10 Claims. (Cl. 46—49.)



1. A toy motor including a supporting frame, a fly wheel having its shaft supported in the frame, a crank and a cam on opposite ends of said shaft, an electro-magnet supported on one side of the frame, an armature member having a spring lever extension operatively connected with the crank, and a circuit breaking lever adapted to be operated by the cam.

1,760,499. METHOD OF AND APPARATUS FOR DRAWING SHEET GLASS. VICTOR E. HOFMANN, Toledo, Ohio. Filed Jan. 25, 1929. Serial No. 334,982. 21 Claims. (Cl. 49—3.)



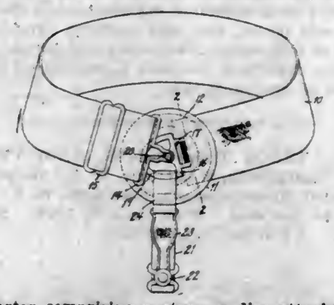
1. Apparatus for drawing sheet glass comprising an inclined drawin gtrough, means to flow molten glass into one of the trough, and means to draw a sheet of glass substantially horizontally and on edge from said trough.

1,760,500. PRESSER-FOOT WELT GAUGE. JESSE E. IVES, Danbury, Conn. Filed Aug. 14, 1928. Serial No. 299,506. 7 Claims. (Cl. 112—141.)



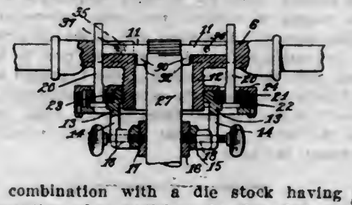
1. In a presser foot for use on sewing machines in sewing the turned-over welt of a hat brim, a body portion adapted to rest on the brim and press it against the feed dog, an inner and anouter guide secured to said body and adapted to independently yield upwardly, resilient means tending to force the guides downwardly, the outer guide having a curved wall to fold over the outer portion of the brim and an upright wall to engage the outer edge of the brim, and the inner guide having an upright wall to engage the inner edge of the folded-over portion of the brim.

1,760,501. MAN'S GARTER. JOSEPH JACOBS, Milford, Conn., assignor to The A. J. Donohue Corporation, Milford, Conn., a Corporation. Filed Sept. 23, 1929. Serial No. 394,595. 2 Claims. (Cl. 241—6.)



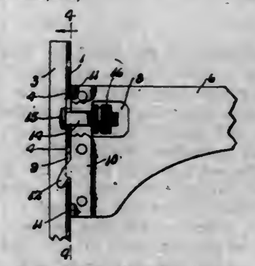
1. A garter comprising a strap, a disc attached to one end thereof, a loop connected with the opposite end thereof, a plate secured to said disc, said plate provided with a stud, and formed with an opening providing a segmental bar and a button and loop-member connected with said bar.

1,760,502. STOCK AND DIE. LOUIS W. JONES, New York, N. Y., assignor of one-half to Francis J. Carnelli, Jamaica, N. Y. Filed June 22, 1929. Serial No. 372,935. 2 Claims. (Cl. 10—123.)



1. The combination with a die stock having a bore for the reception of an article to be threaded of substantially greater diameter than said article, said stock also having radial chaser receiving recesses in its forward face and opening at their inner ends into said bore, of a set of threading chasers having shanks fitting said recesses and secured therein, said chasers being provided with threaded ends extending into said bore from said recesses and having extensions longitudinally of the bore and positioned to engage the unthreaded portion of the article being threaded, said extensions having their inner faces offset outwardly from the threaded portion to a slight degree, said offset faces being of substantially the same lengths as the threaded portions of the chasers and being parallel to the axis of the die stock, and bevelled faces extending outwardly and rearwardly from the rear ends of the offset faces.

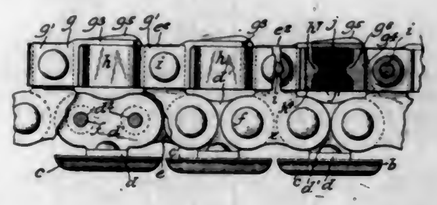
1,760,503. BRACKET. JOSEPH J. KNAPE, Grand Rapids, Mich., assignor to Knape & Vogt Manufacturing Company, Grand Rapids, Mich., a Corporation of Michigan. Filed Sept. 3, 1929. Serial No. 390,129. 2 Claims. (Cl. 248,19.)



1. A bracket comprising, a bracket arm of flat metal adapted to be positioned in a vertical plane, a projection

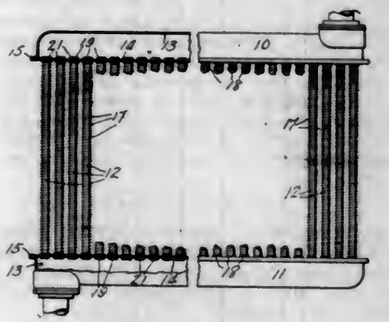
extending from an end of said arm and located between the upper and lower edges of the arm, vertical plates secured one at each side of the arm at said end thereof and having their outer faces flush with the said end of the arm whereby said projection extends beyond the adjacent edges of said plates, and hook members extending from the edges of said plates downwardly and beyond said end of the arm, said hook members being located below the upper end of said projection.

1,760,504. TRACK FOR TRACKLAYING VEHICLES. FRANK KOHLBERGER, Whitestone, N. Y., assignor to International Motor Company, New York, N. Y., a Corporation of Delaware. Filed June 6, 1929. Serial No. 368,772. 3 Claims. (Cl. 305—10.)



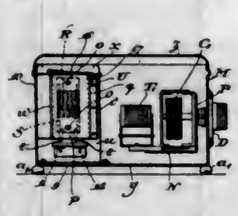
1. An endless track for vehicles comprising a plurality of pads, means to connect the pads, extensions on the connecting means, a U-shaped and L-shaped arm secured to each extension and projecting therefrom in horizontal directions with the extremities of the L-shaped arms projecting within the oppositely extending adjacent U-shaped arms, seats on the opposed faces of such arms, and means between the seats to oppose, yieldingly, relative movement between the pads.

1,760,505. RADIATOR AND THE LIKE. EDWARD S. LEA, Morrisville, Pa., assignor to Carrier Construction Company, Inc., Newark, N. J. Filed July 20, 1927. Serial No. 207,103. 11 Claims. (Cl. 257—154.)



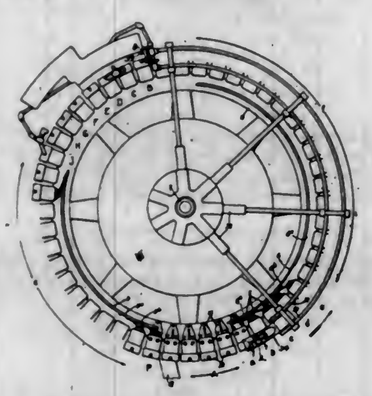
3. In a radiator or the like, the combination of a header having a thin flexible wall provided with holes surrounded by integral inwardly projecting flanges on said wall, and a radiating tube having a portion fitting tightly in each of said flanged holes, said tube having an integral external projection which engages the outer end edge of said flanged hole and having the inner end of the tube split and turned back over the inner end of said flange and against said inner end and the outer surface of said flange, whereby said tube is secured against inward and outward movement in said flanged hole, and solder joints being formed between said tube and hole flange at the inner and outer sides of said flange.

1,760,506. RADIO RECEIVING APPARATUS. EDMUND G. LODGE, Philadelphia, Pa., assignor to Atwater Kent Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed July 24, 1928. Serial No. 295,026. 7 Claims. (Cl. 250—14.)



1. Radio receiving apparatus comprising a cabinet, a radio receiving set therein, a casing in said cabinet, elements of an alternating current power unit in said casing, a ballast resistor controlling the supply of power from said unit to said receiving set, means spaced from a wall of said casing to form a flue in which said resistor is mounted, and temperature responsive means controlling the rate of flow of air through said flue.

1,760,507. BASING MACHINE FOR INCANDESCENT LAMPS AND SIMILAR DEVICES. WALTHER-WINFRIED LOEBE, Waidmannslut, Berlin, WILLY LEDIG, Berlin, and HEINRICH ASMUSSEN, Charlottenburg, Berlin, Germany, assignors to General Electric Company, a Corporation of New York. Filed Mar. 23, 1927, Serial No. 177,734, and in Germany Apr. 8, 1926. 8 Claims. (Cl. 176—3.)

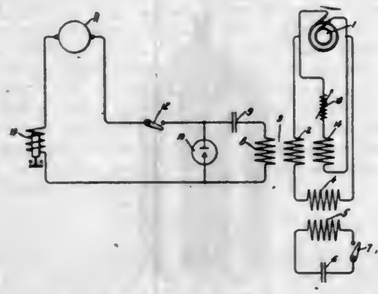


1. In a basing machine, the combination of a rotatable carrier, a plurality of basing heads mounted on said carrier in a circle concentric with the axis of rotation of said carrier, heating means adjacent a portion of the path of movement of said heads for heating said heads to set the cement in bases in said heads, a contact rail adjacent said portion of the path of movement of said heads and curved to be parallel to said path, and a sliding contact mounted on each of said heads to engage said rail and thereby electrically connect a base in said head to said contact rail so that said filament is lighted during the cement setting operation.

1,760,508. SIGNALING SYSTEM. HANS LUND, Berlin-Schoneberg, HANS LAUB, Berlin-Tegeland, and FRANZ HIRT, Berlin-Friedenau, Germany, assignors to General Electric Company, a Corporation of New York. Filed Sept. 30, 1927, Serial No. 223,223, and in Germany Jan. 5, 1927. 8 Claims. (Cl. 246—63.)

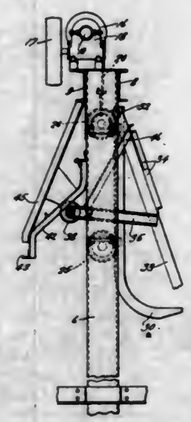
1. In combination, an electrical circuit, means whereby a current variation is caused therein, means adapted to

be operated responsively to said current variation, means for retaining said means in its operated condition after said variation has passed, said retaining means including



a normally inactive electron discharge device and means responsive to said current variation for causing said device to become active.

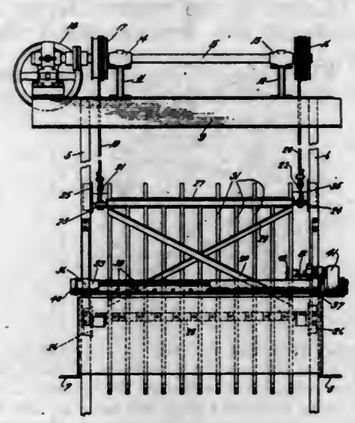
1,760,509. SELF-DUMPING RAG CATCHER. HARVEY E. MARVEL, Fort Wayne, Ind., assignor to S. F. Bowser & Company, Inc., Fort Wayne, Ind., a Corporation of Indiana. Filed June 3, 1927. Serial No. 196,177. 11 Claims. (Cl. 214—95)



2. A self-dumping rag catcher, comprising a frame structure constructed to be positioned over a beater tub, a material handling carriage on the frame structure, means for elevating and lowering said carriage with respect to the beater tub, material collecting members on said carriage, and means associated with said carriage for removing the material collected by said members comprising a series of arms pivotally mounted on said carriage in association with said members, and means for projecting and retracting said arms with respect to said members comprising an oblique track on the rag catcher frame, rollers disposed to travel said track, and a connection between said rollers and said arms.

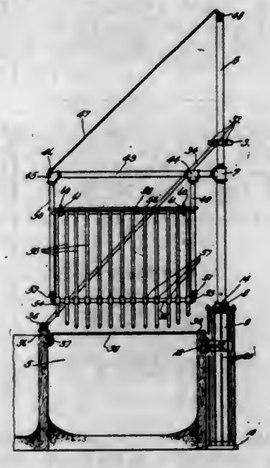
1,760,510. SPRAYING APPARATUS FOR RAG CATCHERS. HARVEY E. MARVEL, Fort Wayne, Ind., assignor to S. F. Bowser & Company, Inc., Fort Wayne, Ind., a Corporation of Indiana. Filed June 3, 1927. Serial No. 196,178. 9 Claims. (Cl. 141—12.)

1. In combination, a rag catcher of the class described having a carriage mounted to be lowered into and raised from a beater for removing material therefrom, and means for automatically spraying the material as it is removed from the beater by said carriage comprising a spray de-



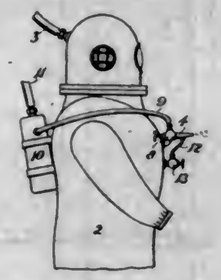
vice, a normally closed control valve therefor, and tripping mechanism actuated by said carriage for opening the valve when the carriage is elevated.

1,760,511. RAG-CATCHING APPARATUS FOR BEATER TUBS. HARVEY E. MARVEL, Fort Wayne, Ind., assignor to S. F. Bowser & Company, Inc., Fort Wayne, Ind., a Corporation of Indiana. Filed June 27, 1927. Serial No. 201,566. 9 Claims. (Cl. 214—113.)



1. In a rag catcher of the class described, a material handling carriage mounted to be lowered into and elevated from a beater tub and moved into a low dumping position at one side of said tub, a material-collecting cradle comprising a plurality of spaced-apart rods each having upright comparatively long arms and lower horizontally projecting short arms pivotally mounted on said carriage to swing on a horizontal axis, a rod connecting the upper ends of said long arms, latch mechanism associated with said rod to hold the long arms in upright position and the short arms in horizontal position while rags are being carried by said cradle from the beater tub and to one side thereof, and means for releasing said latch mechanism to effect dumping of the rags by automatic swinging of the cradle on said horizontal axis.

1,760,512. DIVING DRESS. VIVIAN ROY MCBRIDE and HARRY RICHARD WARD, Melbourne, Australia, assignors of one-fourth to Francis Allen Chartres and one-fourth to Sydney Lawrence Chartres, Melbourne, Victoria, Australia. Filed Feb. 16, 1929, Serial No. 340,518, and in Australia Mar. 12, 1928. 4 Claims. (Cl. 61—70.)

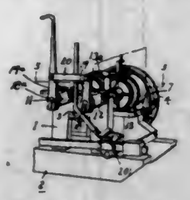


1. In diving dress and the like, an air discharge device comprising a jet connected to a source of high pressure air, a casing arranged around said jet to form a suction space and a pipe connected from the dress to said suction space whereby air breathed by the diver is exhausted and expelled into the water by the reaction of the high pressure jet.

1,760,513. PRODUCTION OF ALKALINE-EARTH TITANATES. REGINALD HILL MONK and LUDVIG FIRING, Montreal, Quebec, Canada; said Firing assignor to John Irwin, Montreal, Canada. Filed Feb. 10, 1927. Serial No. 167,354. 9 Claims. (Cl. 23—203.)

5. A process of producing a titanate of barium from precipitated titanium hydrate which comprises treating the hydrate with sodium acetate to unite with all the SO_4 in the said hydrate, washing with water to remove the sodium sulphate formed, adding to the hydrate barium carbonate and adding a sufficient amount of HCl to form an accelerator and heating the mixture to approximately 830° C., as herein described.

1,760,514. REVERSING GEAR ATTACHMENT FOR DRUM HOISTS. WILLIAM E. MORGAN, East Lansing, Mich., assignor to Novo Engine Company, Lansing, Mich. Filed Mar. 5, 1926. Serial No. 92,443. 1 Claim. (Cl. 254—187.)



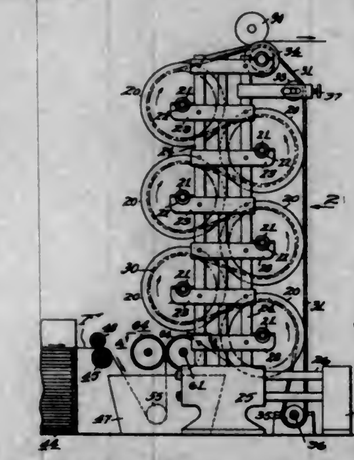
In a reversible gear structure, the combination of a frame, a main shaft with a gear and recessed sheave thereon, said sheave embracing said gear and containing a series of peripheral grooves, parallel drive shafts with gears keyed thereto and meshing with the main gear and housed within the said recess of said sheave, a hoist gear, intermeshing gears with clutch faces revolubly mounted on said drive shafts, one of which is in mesh with said hoist gear, clutches therefor each comprising a member fixed to each of said shafts and an adjustable member slidable thereon to embrace and engage said clutch faces on said gears, and right and left hand screw thrust members for actuating the said clutch members coupled to be operated simultaneously by parallel levers adjusted in a central position to release both clutches and on movement of said lever to one side or the other to lock said clutches alternatively, whereby on clutching one or the other of said gears the direction of drive of the sheave is reversed.

1,760,515. ELECTRICAL CONNECTER. HANS NEUBERT, Annaberg, Germany, assignor to General Electric Company, a Corporation of New York. Filed July 15, 1927, Serial No. 206,060, and in Germany Nov. 26, 1926. 3 Claims. (Cl. 173—332.)



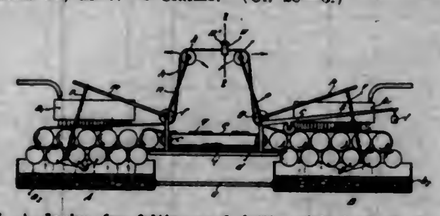
1. A connecter for electric heating devices, comprising a support, electrical contacts carried by said support, electrically conducting leads extending into said support, and electrical conductors connecting said contacts and said leads made of material having poor heat conductivity.

1,760,516. DRYING AND FINISHING MACHINE. SVAN NORDEN, Cranston, R. I., assignor to Moore Fabric Company, Pawtucket, R. I., a Corporation of Rhode Island. Filed Feb. 19, 1929. Serial No. 341,163. 19 Claims. (Cl. 91—55.)



1. In a drying and finishing machine, a plurality of drying cylinders each having its outer drying surface formed with a succession of truncated conical portions, and guiding means to present pieces of narrow curvilinear fabric to said cylinders.

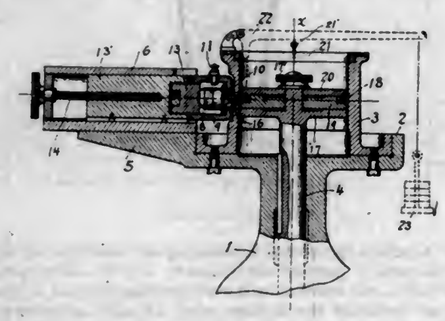
1,760,517. FELTING AND FULLING MACHINE. CARL HANS REHFUS-OBSELÄNDER, Kehl-on-the-Rhine, Germany. Filed Aug. 22, 1928, Serial No. 301,348, and in Germany June 23, 1927. 4 Claims. (Cl. 28—6.)



1. A device for felting and fulling felt hats, including two roller tracks formed of superposed rows of rollers,

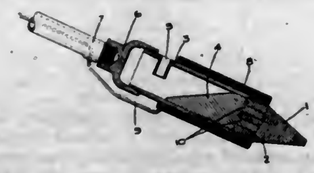
the roller tracks being connected together by conveying means which convey the felt hats from between the rows of rollers of one roller track to between the rows of rollers of the other roller track and then lead the felt hats from the roller tracks of the latter to those of the former again so that the felt hats automatically describe a cycle which is repeated frequently without interruption, said conveying means including an endless conveyor belt consisting of two rubber belts extending from the inlet between the two roller sets of one roller track over a table between both roller tracks and between the two roller sets of the other roller track, then above the upper roller set of the last mentioned roller track over guide rollers and finally above the upper roller sets of the first mentioned roller track and into its inlet.

1,760,518. APPARATUS FOR MEASURING PISTON-RING PRESSURE EXERTING UPON CYLINDER WALLS. MASATOSI OKOCHI and KEIKICHI EBIHARA, Shitaya-Ku, Tokyo, Japan, assignors to Zaidan Hojin Rikgaku Kenkyujo, Tokyo, Japan. Filed June 22, 1927. Serial No. 200,698. 4 Claims. (Cl. 177—351.)



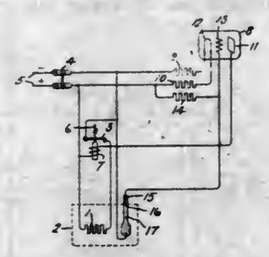
4. A machine for testing piston ring pressure upon cylinder wall, comprising a frame provided with a shallow cylindrical cup at the top, a cylinder having a flange adapted to be detachably clamped to the top of said frame, a piston having a guide arranged reciprocately in said cylinder and supporting a piston ring to be tested, the axis of said frame, cylinder and piston and its guide being arranged in alinement with each other, piezo-electric crystals arranged outside the cylindrical cup, means for transmitting the piston ring therethrough to the piezo-electric crystals projecting through the cylindrical cup, a two-armed lever and weight device adapted to have a weight applied to one of its arms, the other arm exerting a certain known pressure upon the pressure gauge for calibration thereof, and a means for radially adjusting the position of a piezo-electric pressure gauge which is supported by an arm of said frame.

1,760,519. SOLDERING IRON. ROBERT PALMER, Niskayuna, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Dec. 29, 1926. Serial No. 157,796. 4 Claims. (Cl. 113—109.)



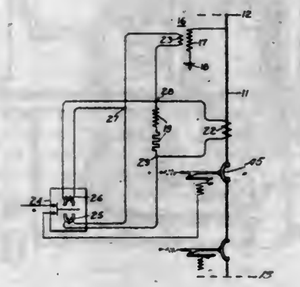
1. A soldering device comprising a tip made of porous sintered tungsten adapted to absorb molten solder, said tip being provided with a working surface, and means for applying molten solder to a different portion of said tip than said working surface so that solder is fed through said tip to said working surface.

1,760,520. TEMPERATURE-REGULATING APPARATUS. JOHN H. PAYNE, Ballston Spa, N. Y., assignor to General Electric Company, a Corporation of New York. Filed May 22, 1928. Serial No. 279,812. 5 Claims. (Cl. 236—78.)



1. The combination of a heat producing element, a switch provided with an operating coil and arranged to transmit heating current to said element, a space discharge device provided with a cathode and an anode for transmitting operating current to said coil and with a grid for controlling said operating current, means in circuit with said cathode providing a positive and a negative biasing potential with respect to said cathode, means including a resistor for applying one of said biasing potentials to said grid, and means including a contact and closure means therefor operable in response to the heat produced by said heating element for applying the other of said biasing potentials to said grid.

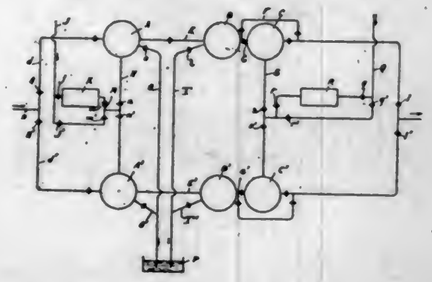
1,760,521. PROTECTIVE ARRANGEMENT. HERBERT STANLEY PETCH, London, and EDWARD L. E. WHEATCROFT, Cambridge, England, assignors to General Electric Company, a Corporation of New York. Filed June 21, 1926, Serial No. 117,630, and in Great Britain June 26, 1925. 11 Claims. (Cl. 175—294.)



1. A protective arrangement for an electric circuit including an impedance connected and arranged to be energized in accordance with the current of the circuit and proportioned to produce a potential drop which varies in

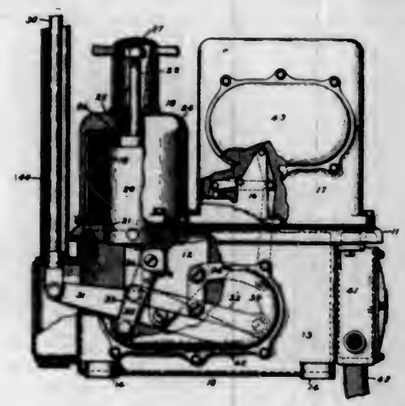
accordance with the potential drop in a section of the circuit, and a relay having a winding connected to be energized in accordance with the difference between the potential drop across the impedance and a potential of the circuit and a cooperating winding connected to be energized in accordance with a potential of the circuit.

1,760,522. PROCESS AND APPARATUS FOR PURIFYING CASES. EUGÈNE ALBERT PRUDHOMME, Neuilly-sur-Seine, France, assignor to Societe Internationale Des Procedes Prudhomme (S. I. P. P.), Paris, France, a Limited Joint Stock Company of France. Filed Apr. 7, 1926, Serial No. 100,462, and in France Mar. 4, 1926. 7 Claims. (Cl. 23—3.)



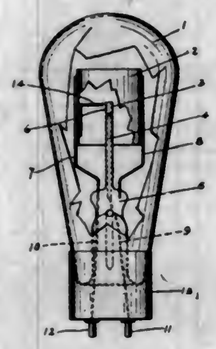
1. A continuous process for desulphurization of gases which consists in heating said gases successively in the presence of nickel oxide to remove mineral sulphur therefrom and in the presence of copper oxide to remove organic sulphur therefrom.

1,760,523. ELECTRIC-SWITCH-OPERATING MECHANISM. WILLIAM K. RANKIN, Scotia, N. Y., assignor to General Electric Company, a Corporation of New York. Filed May 28, 1926. Serial No. 112,411. 4 Claims. (Cl. 200—111.)



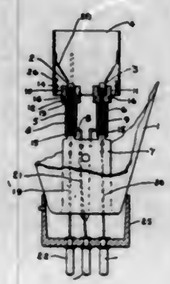
1. A solenoid actuated switch operating mechanism comprising a hollow supporting member, a removable base plate forming a cover therefor and having openings therethrough, lever and link mechanism carried thereby within the hollow member, a solenoid and a tripping mechanism on the base plate operatively connected through said openings with the lever and link mechanism, and protective coverings for said solenoid and said tripping mechanism fitting the base plate and covering the openings therein.

1,760,524. ELECTRIC DISCHARGE DEVICE. HARVEY CLAYTON RENTSCHLER, East Orange, N. J., assignor to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed Oct. 2, 1925. Serial No. 59,986. 11 Claims. (Cl. 250—27.5.)



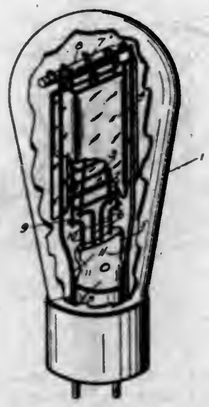
1. A discharge device comprising an envelope, a rare gas therein, a pair of electrodes in said envelope which function in the absence of thermionic activity and a quantity of metal of the cerium group of rare earth metals on one of said electrodes.

1,760,525. RECTIFIER. HARVEY CLAYTON RENTSCHLER, East Orange, and WILLIAM WALTER MERRYMON, Glen Ridge, N. J., assignors to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed Dec. 15, 1926. Serial No. 154,987. 2 Claims. (Cl. 250—27.5.)



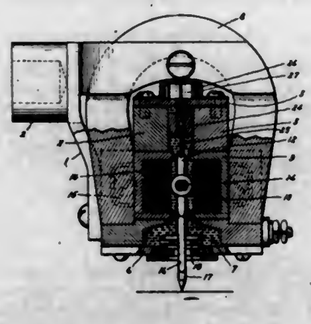
1. An electric discharge device comprising an envelope containing a monatomic gas, a cathode therein of large area and an anode of relatively small area, whereby a unidirectionally electric discharge may be obtained, said anode being composed of carbon in a substantially pure and gas-free condition and a quantity of misch metal on said cathode for reducing the cathode resistance.

1,760,526. ELECTRODE. HARVEY CLAYTON RENTSCHLER, East Orange, N. J., assignor to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed Feb. 16, 1929. Serial No. 340,505. 5 Claims. (Cl. 250—27.5.)



1. An electron discharge device having a cathode comprising at least in part an oxide of an alkaline earth metal and a second electrode composed of an alloy including chromium, the chromium content only of the surface of said second electrode being oxidized.

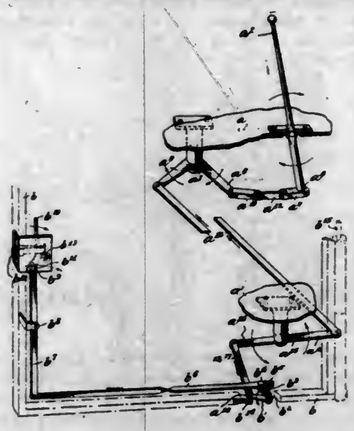
1,760,527. ELECTRICAL DEVICE. LEWIS T. ROBINSON, Niskayuna, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Mar. 10, 1927, Serial No. 174,855. Renewed Feb. 10, 1928. 8 Claims. (Cl. 179—100.4.)



1. A phonograph device of the character described comprising a magnet, an armature mounted to vibrate adjacent thereto, a stylus, a connection between the stylus and the armature, and a casing containing a damping liquid enclosing the armature, said casing having a flexible wall portion through which said connection extends.

1,760,528. DOOR-OPERATING MECHANISM. GORDON M. SCHANTZ, Allentown, Pa., assignor to International Motor Company, New York, N. Y., a Corporation of Delaware. Filed May 5, 1927. Serial No. 188,895. 1 Claim. (Cl. 268—3.)

In a door operating mechanism, in combination with a door and a floor, an arm on the door for unlatching the same, an arm mounted with the floor and adapted to push substantially perpendicularly to the plane of the closed door, a pivot mounted on the door, an arm on the pivot, means connecting the second arm with the said last named arm, a crank on the pivot at an angle to the last named arm and rotatable therewith, a link connecting the



first named arm and the crank, and a stop on the door, the third arm abutting against the stop subsequent to actuation of the said first named arm to open the door.

1,760,529. ELECTRIC SWITCH. CHARLES F. SCHWENNKER, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed May 26, 1928. Serial No. 280,876. 8 Claims. (Cl. 200—150.)

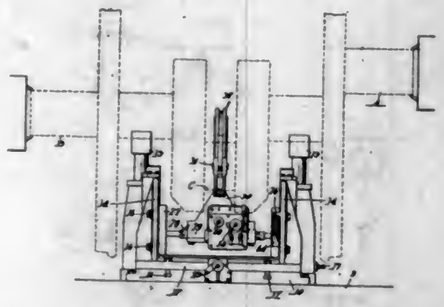


1. An electric switch comprising cooperating fixed and movable contacts separable in an insulating liquid, an insulated contact supporting member, an explosion chamber casing secured to the member in spaced relation thereto, and a contact carrier arranged to slide laterally to a position between the supporting member and the casing, said contact carrier adapted to be maintained in operative position by clamping means common to said supporting member and casing.

1,760,580. CENTER-PIN-TURNING ATTACHMENT. RUSSELL P. SKIDMORE and ALFRED VOEDISCH, Fitchburg, Mass., assignors to Shaw Crane-Putnam Machine Company, Inc., Fitchburg, Mass., a Corporation of Delaware. Filed Nov. 7, 1928. Serial No. 317,842. 14 Claims. (Cl. 82—9.)

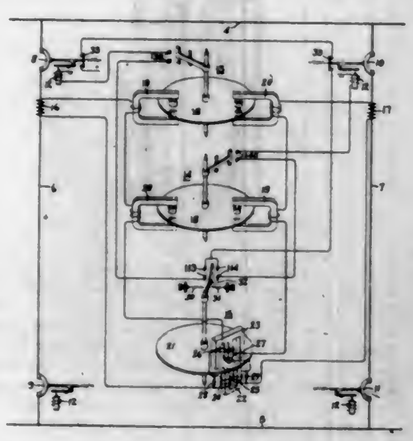
1. In a center-pin turning attachment for a journal turning, quartering, and pin turning machine, the combi-

nation of a base adapted to be fixed on the machine, and a support adjustable transversely on the base, said support having means for supporting the tools, projecting therefrom, of a frame vertically adjusted on said means, a drum supported by said frame, and rotatable means supported by the drum for rotating the tool around the circumference of the pin to be turned.



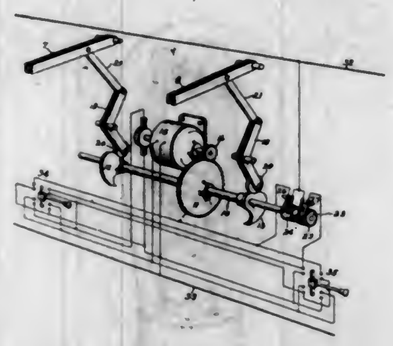
2. In a center-pin turning attachment for a journal turning, quartering, and pin-turning machine, the combination of a base adapted to be mounted on the machine, and a support adjustable transversely on the base, said support having knee brackets, of a frame vertically adjusted on said knee brackets, a carriage horizontally adjustable on the frame, a drum supported by said carriage, a rotatable means supported by the drum for rotating a cutting tool around the circumference of the pin to be turned, and means for feeding the carriage in an axial direction with respect to said drum for feeding the tool along the work on its cutting stroke either forward or backward while the tool is rotating around the work.

1,760,531. PROTECTIVE ARRANGEMENT. OLIVER C. TRAVER, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed May 14, 1928. Serial No. 277,550. 6 Claims. (Cl. 175—294.)



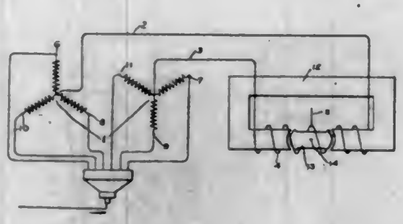
1. In combination with two parallel circuits and circuit interrupting means for controlling the circuits, means for selectively controlling said circuit interrupting means on the occurrence of unbalanced circuit conditions including relay means operative when the ratio between the currents in said circuits exceeds a predetermined value, and cooperating relay means connected to be energized in accordance with the difference between the sum of and the difference between the circuit currents.

1,760,532. SWITCH-OPERATING MECHANISM. LUDWIG S. WALLE, Scotia, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Apr. 24, 1928. Serial No. 272,552. 4 Claims. (Cl. 200—92.)



1. Mechanism for the selective operation of a plurality of switches comprising an operating member for each switch, an actuating motor constructed to rotate in opposite directions, a pair of similar, reversely arranged cams driven by said motor and operatively engaging the operating member of each switch, means for closing the motor circuit to cause it to rotate in either direction and means operated in response to the rotation of the cams to predetermined positions for opening the motor circuit.

1,760,533. VAPOR DISCHARGE DEVICE. FRANK P. WHITAKER, Rugby, England, assignor to General Electric Company, a Corporation of New York. Filed Feb. 5, 1929, Serial No. 337,662, and in Great Britain Feb. 14, 1928. 3 Claims. (Cl. 175—363.)



1. The combination of direct and alternating current circuits, an electric discharge device connected to said alternating current circuit, and an interphase transformer including coils connected between said alternating current circuit and said device, and a core provided with an air gap and with an adjustable member arranged to vary the length of said air gap.

1,760,534. METHOD OF ARC WELDING. GEORGE AUGUSTINE WHITING, Windsor, Victoria, and ROY ALGERNON HOLLAND, West Brunswick, Victoria, Australia, assignors to E. M. F. Electric Company Proprietary Limited, South Melbourne, Victoria, Australia, a Corporation of Victoria, Australia. Filed June 23, 1927, Serial No. 200,953, and in Australia July 9, 1926. 1 Claim. (Cl. 219—10.)

A method of arc welding, comprising the steps of springing an arc between the work and a welding electrode embodying a metal core provided with a coating containing a supply of free carbon and a hydrated inorganic substance having a high combined water content; liberating the water of said inorganic substance by the heat of the arc; decomposing the liberated water by the carbon so as to produce free molecular hydrogen for creating a reducing atmosphere around the arc and the fused metal of the weld to protect said fused metal from the atmosphere; converting part

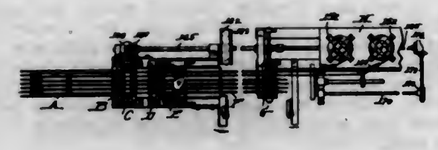


of the molecular hydrogen into atomic hydrogen by the high temperature; and passing the atomic hydrogen into contact with the fused metal of the weld to re-convert it into molecular hydrogen.

1,760,535. PROCESS OF TREATING OILS AND OTHER GLYCERIDES. WILLIAM C. ARSEM, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed May 22, 1929. Serial No. 365,241. 5 Claims. (Cl. 87—12.)

1. The process of treating a glyceride of an unsaturated, fatty acid, which consists in heating said glyceride in the presence of a substance containing an amine radical.

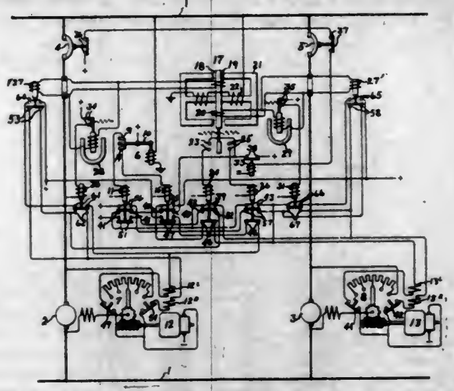
1,760,536. MACHINE FOR MAKING FIBER REED. EARL F. BALDWIN and FRANK E. WOODS, Gardner, Mass., assignors to American Fibre Corporation, Gardner, Mass., a Corporation of Massachusetts. Original application filed Mar. 25, 1926, Serial No. 97,468, Patent No. 1,680,358. Divided and this application filed Mar. 8, 1928. Serial No. 260,157. 16 Claims. (Cl. 270—94.)



1. A machine for making fiber reed which consists in a folding device, and a combined pressing and sizing device effective to deliver folded fiber of uniform width.

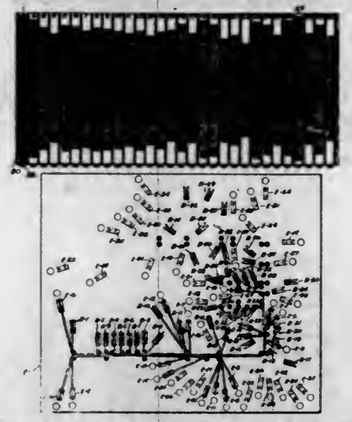
1,760,537. REGULATING SYSTEM. HERMAN BANY, Yeadon, Pa., and GORDON R. MCDONALD, Schenectady, N. Y., assignors to General Electric Company, a Corporation of New York. Filed Nov. 10, 1928. Serial No. 318,538. 23 Claims. (Cl. 171—312.)

1. In combination, a load circuit, two parallel connected dynamo electric machines supplying current thereto, and means responsive to the voltage of said circuit and to the relative current outputs of said machines for decreasing only the excitation of the machine carrying more than its normal portion of the total load when the load circuit



voltage is above a predetermined value and one of the machines is supplying more than its normal share of the total current outputs of the two machines.

1,760,538. ASSEMBLY OF CABLES. HOWARD I. BECKER, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Sept. 8, 1927. Serial No. 218,344. 8 Claims. (Cl. 29—84.)



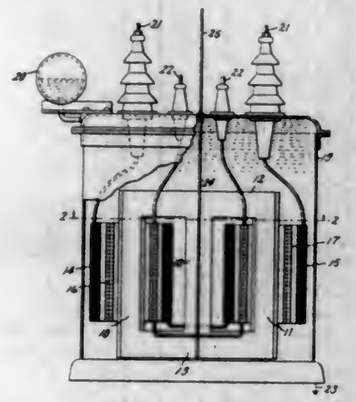
1. A cable assembly apparatus comprising means for supporting the different conductors to be included in the cable, a member comprising a starting and ending clip for each conductor, means adjacent each ending clip for indicating when one end of a conductor has been inserted in the corresponding starting clip, and means mounted on said conductor supporting means for indicating when the other end of said conductor is inserted in the indicated ending clip.

6. The method of assembling a cable comprising conductors, each stored in a different receptacle, which comprises utilizing one end of each conductor to produce an indication of the point where the other end of said conductor is to be located, and utilizing the other end of said conductor to produce an indication of the receptacle from which said conductor has been removed.

1,760,539. OIL TREATMENT. SYLVESTER BOYER, Lynn, Mass., assignor to General Electric Company, a Corporation of New York. Filed Feb. 2, 1925. Serial No. 6,462. 1 Claim. (Cl. 196—23.)

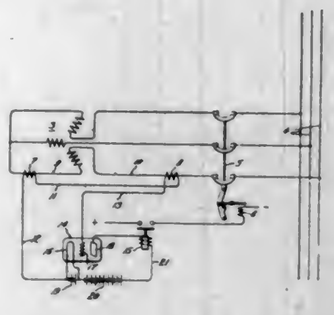
The method of treating mineral oil which consists in bringing such oil into contact with oxycellulose resulting from nitric acid oxidation for a length of time sufficient to remove water and acid bodies from the oil.

1,760,540. TRANSFORMER. FREDERICK F. BRAND, Pittsfield, Mass., assignor to General Electric Company, a Corporation of New York. Filed Oct. 19, 1929. Serial No. 400,947. 5 Claims. (Cl. 175—356.)



1. A transformer including a grounded magnetic core, and a single phase winding on said core, said winding including two series connected sections, and said core including an unwound portion interposed between said two winding sections.

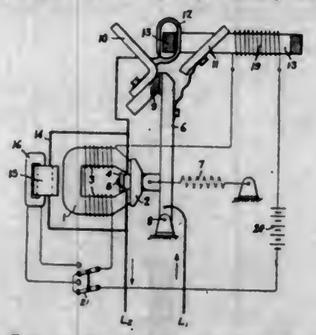
1,760,541. PROTECTIVE ARRANGEMENT. WALDEMAR BRUCKEL, Berlin, Germany, assignor to General Electric Company, a Corporation of New York. Filed Mar. 30, 1926, Serial No. 98,586, and in Germany May 25, 1925. 9 Claims. (Cl. 175—294.)



1. A protective arrangement for an electric system including non-magnetic core transformers, one at each of two points of the system connected to be energized in accordance with the currents at the points, a thermionic device having a controlling grid and an auxiliary circuit including the secondaries of the transformers and said grid so connected and arranged as to energize the grid circuit in accordance with the difference between the currents at the two points of the system.

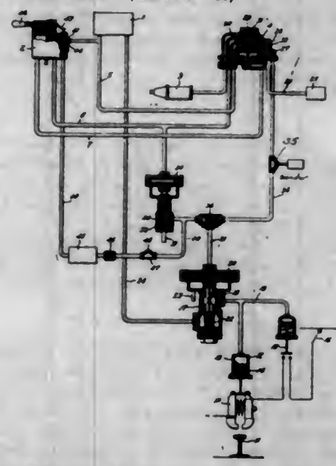
1,760,542. ELECTRORESPONSIVE DEVICE. ALFRED COHN, Berlin, Germany, assignor to General Electric Company, a Corporation of New York. Filed Dec. 4, 1928, Serial No. 323,720, and in Germany Jan. 10, 1928. 7 Claims. (Cl. 175—294.)

1. In combination, an electroresponsive device having a normally excited holding electromagnet, a tripping winding disposed between the poles of the holding electromagnet for controlling the path of the flux of the holding electromagnet to effect operation of the device, and separate means inductively interconnecting the holding electromagnet with said tripping winding to control the



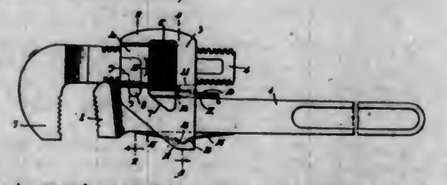
inductive effect of the tripping winding on the holding electromagnet upon predetermined rapid variations of current in the tripping winding.

1,760,543. BRAKE SYSTEM. HORACE A. DAVIS, Erie, Pa., assignor to General Electric Company, a Corporation of New York. Filed Sept. 28, 1926. Serial No 138,152. 8 Claims. (Cl. 303—3.)



8. In combination, an air brake system, a track brake, fluid pressure operated means for controlling the operation of said track brake, a pipe for supplying fluid pressure to said fluid pressure operated means, said pipe normally being in communication with the atmosphere through a relatively large opening, means responsive to an application of the air brakes for cutting off the communication between said pipe and atmosphere through the relatively large opening, and means for exhausting fluid pressure from said pipe to atmosphere through a relatively small opening.

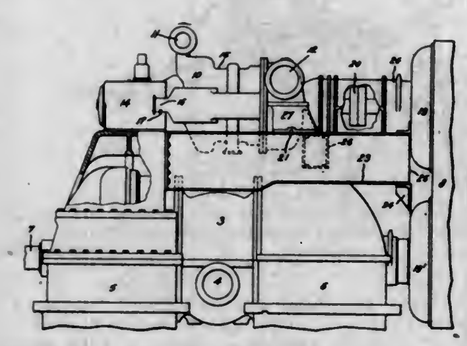
1,760,544. WRENCH. FRANK H. DICKSON, Auburn, N. Y. Filed Jan. 21, 1930. Serial No. 422,397. 2 Claims. (Cl. 81—103.)



1. A wrench comprising a frame having bayonet slots, a handle shank extending through the frame and having

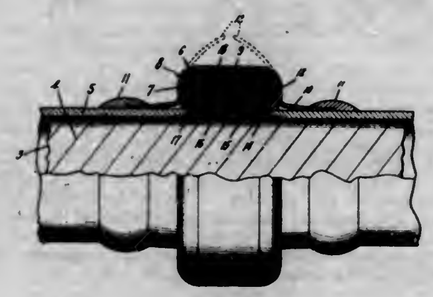
pivot studs removably seated in said slots, a stem extending through the frame, and a nut on the stem in said frame, the stem and shank having complementing jaws, said slots and stem being so arranged that when the stem is in the frame the studs are prevented from being removed from said slots and when the stem is removed from the frame the studs are movable out of said slots.

1,760,545. ELASTIC-FLUID-TURBINE ASSEMBLAGE. JOHN H. DORAN, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Aug. 26, 1929. Serial No. 388,459. 5 Claims. (Cl. 60—70.)



1. In a turbine installation, the combination of a low pressure turbine unit, a high pressure turbine unit, an apparatus driven by each unit, a coupling which unites the shaft of the high pressure unit with that of its driven apparatus, a supporting member for one end of the high pressure unit which is carried by the casing of the low pressure unit and is in spaced relation thereto, and a longitudinally extending means which supports the other end of the high pressure unit, is secured to the member at one end and is slidably supported by said driven apparatus at the other end.

1,760,546. INSULATING JOINT FOR CABLE SHEATHS. EUGENE D. EBY, Pittsfield, Mass., assignor to General Electric Company, a Corporation of New York. Filed Feb. 25, 1927. Serial No. 170,990. 6 Claims. (Cl. 173—268.)



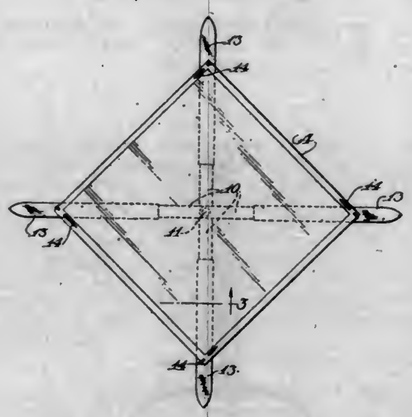
1. An insulating joint for cable sheaths comprising a pair of tubular members having outer ends which are secured fluid-tight to the parts of the sheath and facing enlarged ends which are spaced apart, and a cylindrical body located between the spaced ends which insulates the members and has external ribs which are gripped by the enlarged ends of the members.

1,760,547. OPERATING MECHANISM FOR ELECTRIC SWITCHES. FREDERICK E. FISHER, Sudbrook Park, Md., assignor to General Electric Company, a Corporation of New York. Filed Apr. 20, 1928. Serial No. 271,574. 3 Claims. (Cl. 200—63.)



1. Switch operating mechanism including two relatively rotatable members, resilient means between said members arranged to have energy stored therein on movement of one of the members relatively to the other and thereby to tend to move the other member from one position to another, means for holding the other member against movement in each of said positions including two toggles one being rigid and the other collapsed, an abutment for the center pins of said toggles for holding the toggles in the rigid condition, and means for collapsing the rigid toggle including a tripping arm pivotally mounted on said one member and arranged on a predetermined movement of the member to engage and move the center pin of the rigid toggle away from said abutment whereby to permit the movement of said other member under the bias of the energy stored in said resilient means.

1,760,548. HANDKERCHIEF-DRYING FRAME. LAURA FLENTYE, Wilmette, Ill. Filed Apr. 14, 1927. Serial No. 183,814. 4 Claims. (Cl. 45—24.)

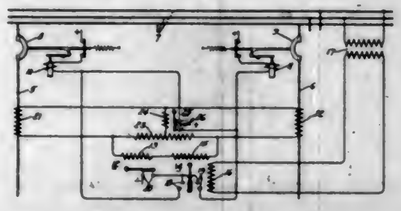


1. A collapsible drying frame comprising more than two members hingedly secured together at one end, means for fastening them in the open and closed positions, and a removable cloth cover secured to said frame for securing an article to be dried.

1,760,549. ALUMINUM ALLOY. TRUMAN S. FULLER and DAVID BASCH, Schenectady, N. Y., assignors to General Electric Company, a Corporation of New York. Filed Dec. 13, 1923. Serial No. 680,516. 3 Claims. (Cl. 148—21.1.)

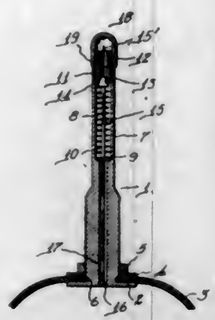
3. The method of improving the tensile strength of a cast alloy which is substantially devoid of copper but contains more than 80% aluminum, at least about 6% zinc and at least about ½% magnesium, which consists in heating the alloy between 450° C. and 575° C., quenching the alloy and then aging it at a temperature of about 150° C.

1,760,550. PROTECTIVE ARRANGEMENT. WILLIAM C. HAHN, Chicago, Ill., assignor to General Electric Company, a Corporation of New York. Filed Feb. 7, 1929. Serial No. 338,304. 3 Claims. (Cl. 175—294.)



1. In combination with two parallel lines and a circuit interrupter for each line, means for selectively controlling the opening of the circuit interrupter in the line carrying the greater current when the difference between the line currents exceeds a predetermined value and for controlling the opening of the circuit interrupter of each line when the sum of the line currents exceeds a predetermined value including current transformers respectively connected to be energized from said lines, a differential protective circuit including the secondaries of said transformers connected for normally opposing electromotive forces, an inductive winding connected in series in said circuit, a connection across said circuit from an intermediate point of said winding including a relay for controlling both of said circuit interrupters simultaneously and a relay having a winding connected to be energized from said inductive winding for selectively controlling said circuit interrupters.

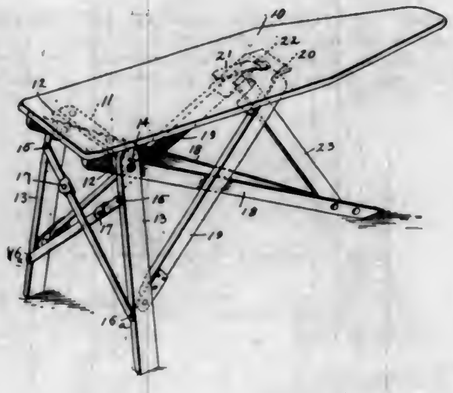
1,760,551. TWIN-BODY TIRE VALVE. HOMER HASTING, Detroit, Mich. Filed Jan. 25, 1929. Serial No. 334,918. 1 Claim. (Cl. 152—12.)



A valve comprising a stem having a circular bore, a valve seat in the upper end of said bore, a pin extending through said bore, a poppet valve formed upon the upper end of said pin and adapted to seat upon said valve seat, a piston formed on the lower end of said stem and adapted to slide into said bore when said poppet valve is in contact with said seat, and a spring adapted to maintain said poppet valve against said seat.

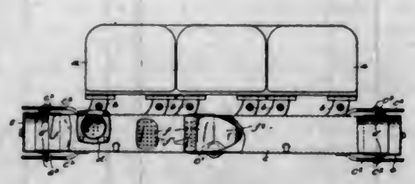
1,760,552. IRONING BOARD. JAMES G. HAUGH, Bascom, Ohio. Filed Oct. 23, 1928. Serial No. 314,499. 5 Claims. (Cl. 68—10.)

1. An ironing board having a plurality of spaced-apart floor-engaging members that include a pair of legs, means pivoting the legs to the under side thereof for movement towards and from one another between positions in which they lie lengthwise against the under side of the board, and a vertical position, and a pair of braces each extending from one leg to the opposite leg in an oblique direction, said legs at their point of pivotal connection with the board being movable to a limited extent towards and



from one another, whereby when they are in an opened position they may be spread at their floor-engaging ends substantially farther apart than the width of the ironing board and when in a position folded against the board lie wholly within the wide edges of the board.

1,760,553. MUFFLER MANIFOLD. EDWARD R. HEWITT, Midvale, N. J., and WILLIAM B. JUPP, New York, N. Y., assignors to International Motor Company, New York, N. Y., a Corporation of Delaware. Filed May 29, 1928. Serial No. 281,504. 4 Claims. (Cl. 137—160.)

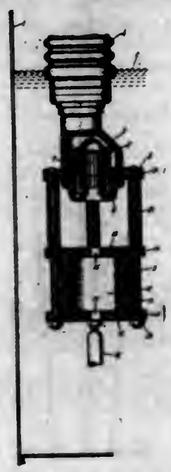


1. A muffler manifold having an exhaust port and a plurality of inlet ports, a tubular chamber, a pocket formed at one end of the chamber, a single perforated baffle forming a longitudinal partition for a portion of the length of the chamber, and a bent extension on the baffle forming, with the walls of the chamber, a restricted portion through which part of the exhaust gases pass.

1,760,554. ELECTRIC SWITCH. JOHN D. HILLIARD, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed June 21, 1926. Serial No. 117,239. 1 Claim. (Cl. 200—150.)

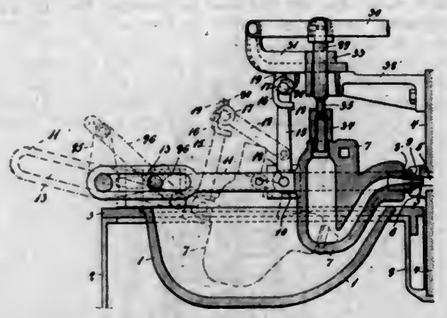
A fluid break switch comprising a receptacle containing insulating liquid, an insulator bushing projecting into the liquid, a fixed contact, a flanged retaining and enclosing member for said contact supported by said bushing, an-

explosion chamber, and a plurality of spaced rods securing said explosion chamber to the flange of said member in



spaced relation with said fixed contact, whereby said contact may be removed without disturbing the explosion chamber.

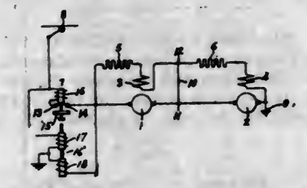
1,760,555. PRESS-CASTING MACHINE. CARL JOHAN HULT, Tureberg, Sweden. Filed Apr. 23, 1928, Serial No. 272,291, and in Sweden Mar. 29, 1926. 5 Claims. (Cl. 22—69.)



1. In a die-casting machine in combination a ladle having a bearing surface on the rear side thereof a rigid supporting member extending substantially in horizontal direction, a slot-guiding device provided at the rear end of said supporting member and permitting of horizontal parallel displacement of said member, shiftable suspending means carrying the fore end of the supporting member, said member being formed at its fore end with a bearing surface adapted to abut tightly against the corresponding bearing surface on the rear side of the ladle, and means connecting the fore end of the supporting member with the rear side of the ladle, said connecting means co-operating with said bearing surfaces so as to form a rigid joint.

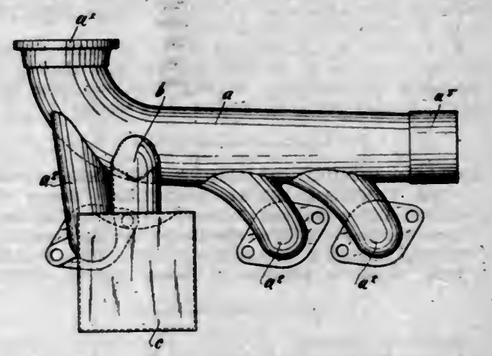
1,760,556. ELECTRIC BRAKING. LEOPOLD JANISCH, Berlin, and WILHELM WELSCH, Berlin-Niederschonhausen, Germany, assignors to General Electric Company, a Corporation of New York. Filed Sept. 26, 1927, Serial No. 221,881, and in Germany Dec. 24, 1926. 5 Claims. (Cl. 172—179.)

1. In an electric braking system, the combination of a plurality of electric motors having their armatures connected in series and their field windings connected in a parallel excitation circuit with the armatures for regenerative braking operation with a source of electric power, a plurality of resistors included in said excitation circuit for controlling the regenerative braking excitation current and providing for dynamic braking operation of the motors independently of the power source, means for disconnect-



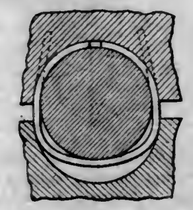
ing the armature circuit and excitation circuit from the power source, and connections between the excitation circuit and the armature circuit of the motors permitting separate dynamic braking operation of different portions of the motors.

1,760,557. EXHAUST MANIFOLD. WILLIAM B. JUPP, New York, N. Y., assignor to International Motor Company, New York, N. Y., a Corporation of Delaware. Filed May 25, 1928. Serial No. 280,535. 1 Claim. (Cl. 137—160.)



The combination with an exhaust manifold for a multiple cylinder internal combustion engine, said manifold extending parallel to the line of the cylinders and having extensions at angles thereto communicating with the exhaust ports of said engine, the manifold being formed to permit the escape of gases therefrom at one end only, of an enlarged, closed compartment and a relatively small always-open passage connecting said compartment to the manifold adjacent the end thereof at which the exhaust escapes and offset with respect to the extensions and exhaust valves.

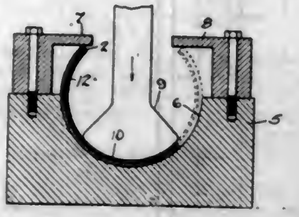
1,760,558. METHOD OF MAKING CYLINDRICAL ARTICLES FROM FLAT BLANKS. WILLIAM H. KLOCKE, Woodhaven, N. Y., assignor to The Cleveland Graphite Bronze Company, Cleveland, Ohio, a Corporation of Ohio. Filed Dec. 2, 1926. Serial No. 152,159. 6 Claims. (Cl. 29—149.5.)



1. In a method of making cylindrical articles from flat blanks, the steps which consist in first forming a flat

blank into a U-shaped channel of which the base of the U has a plurality of radii different from that of the desired finished cylinder, and then causing the metal in the side walls and bottom of the U-shaped channel to flow into true cylindrical shape.

1,760,559. BEARING AND METHOD OF MAKING SAME. WILLIAM H. KLOCKE, Woodhaven, N. Y., assignor to The Cleveland Graphite Bronze Company, Cleveland, Ohio, a Corporation of Ohio. Filed Nov. 5, 1928. Serial No. 317,393. 4 Claims. (Cl. 29—149.5.)



3. In a method of forming bearings, the steps which consist in forming a blank of approximately semi-cylindrical form and then re-forming said blank by successive radial pressure application to various circumferential portions of said semi-cylindrical blank.

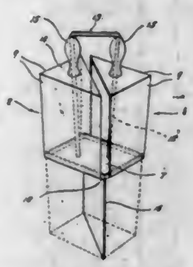
4. A curved bi-metal bearing having the entire surface thereof formed to an accurate predetermined contour by successive and individual swaging operations upon successive circumferential increments of its surface.

1,760,560. METHOD OF MAKING HUB SHELLS AND LIKE TUBULAR METAL ARTICLES. HARRY W. KRANZ, Lakewood, and JACOB S. FENZEL, Cleveland, Ohio, assignors to The Cleveland Welding Company, Cleveland, Ohio, a Corporation of Ohio. Filed Jan. 31, 1929. Serial No. 336,483. 15 Claims. (Cl. 29—159.3.)



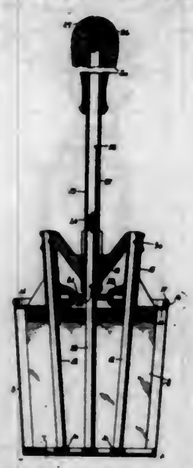
1. In the manufacture of tubular articles of variant diameter, the method which consists in providing a tube, reducing the diameter and circularly corrugating one terminal portion of such tube and then enlarging the diameter of the other terminal portion of such tube.

1,760,561. DIPPER FOR SEMISOLID MATERIALS. MONROE E. MILLER, Washington, D. C. Filed Aug. 31, 1926. Serial No. 132,869. 13 Claims. (Cl. 107—48.)



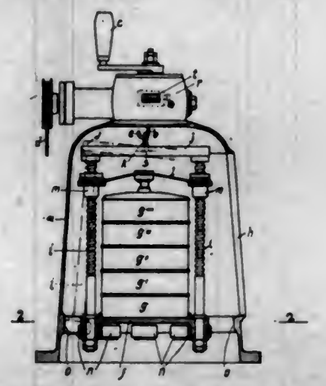
1. A dipper comprising a top plate, upwardly extending arms connected thereto, a handle connecting said arms, blades slidable relatively to said plate to be projected below and retracted above said plate, and handles connected to said blades and each slidable on one of said arms.

1,760,562. DIPPER FOR SEMISOLID MATERIALS. MONROE E. MILLER, Washington, D. C. Filed Nov. 5, 1926. Serial No. 146,437. 21 Claims. (Cl. 107—48.)



1. A dipper comprising a top plate, a scoop blade slidable relatively to the top plate to projected and retracted positions, a yoke member attached to said top plate, a handle member slidable in said yoke member and connected to said blade, and latching means carried by the yoke member to engage the handle member.

1,760,563. MATERIAL-SHAKING MECHANISM. RUDOLF PAWLIKOWSKI, Goerlitz, Germany. Filed Apr. 11, 1928, Serial No. 269,096, and in Germany Feb. 10, 1928. 3 Claims. (Cl. 209—366.)



1. A shaking device having a sifting receptacle, a carriage for the same, a vertical rotary shaft from which the said carriage is pendulously mounted, a plurality of striking means at the bottom of said carriage spaced round the periphery thereof, a stationary encircling ring surrounding the said striking means and adapted to be impulsively engaged thereby when the base of said carriage swings outwards and means for driving said shaft about a vertical axis.

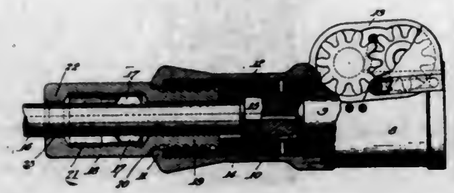
1,760,564. SHEET BINDER. EYNUS CLYDE REYNOLDS, Sweetwater, Tenn. Filed Jan. 21, 1927. Serial No. 162,622. 1 Claim. (Cl. 24—67.)



A sticker having wings extending in opposite directions away from one another to bear on a surface and

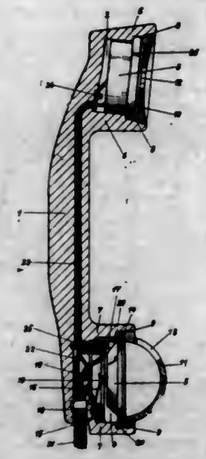
having a doubled portion between said wings forming a finger piece for convenience in picking up and manipulating the sticker, the inner surfaces of said doubled portion and the corresponding surfaces of both of said wings being coated with adhesive material, and the inner surfaces of said doubled portion being detached so as to slip over and adhere to the edge portion of a sheet.

1,760,565. CHUCK STRUCTURE. WALTER H. ROVER, Denver, Colo., assignor to Gardner-Denver Company, Denver, Colo., a Corporation of Delaware. Filed Oct. 24, 1927. Serial No. 228,366. 4 Claims. (Cl. 121—32.)



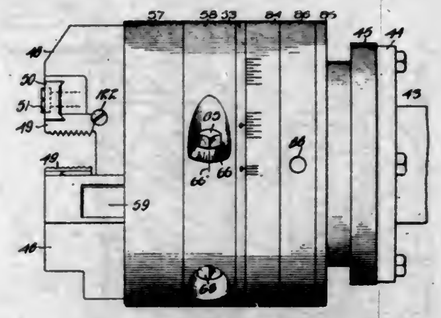
1. A chuck structure for rock drills and the like, comprising a front housing, a chuck sleeve in the housing, said housing having an inturned portion overlying the front end of the sleeve, and a chuck removable from the front end of the housing and overlying the inturned portion thereof, said chuck having a portion extending into the housing and detachably interlocked with the sleeve, said chuck having a tool-receiving chamber.

1,760,566. MICROTELEPHONE. JOHANN SCHNEIDER and GEORG HECKMANN, Frankfort-on-the-Main, Germany, assignors to The Firm Fuld & Co., Telephon und Telegraphenwerke A. G., Frankfort-on-the-Main, Germany. Filed Feb. 2, 1929, Serial No. 337,057, and in Germany Feb. 3, 1928. 7 Claims. (Cl. 179—103.)



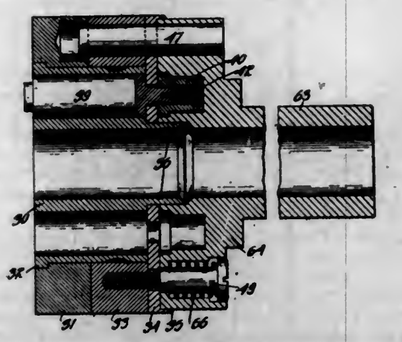
1. A micro-telephone comprising a handle carrying at opposite ends integral casings open at the front and interiorly screw-threaded, receiver and microphone units housed within the respective casings so that the walls of the casings project outwards beyond the said units, and covers having their edges screw-threaded and completely screwed into the open fronts of the casings so as to engage the interior threads thereof, said covers having their outer surfaces formed so that they cannot afford a grip for the hand.

1,760,567. DIE HEAD. HARRY T. SHEARER, Waynesboro, Pa., assignor to Landis Machine Company, Waynesboro, Pa., a Corporation of Pennsylvania. Filed Sept. 30, 1925. Serial No. 59,563. 4 Claims. (Cl. 10—100.)



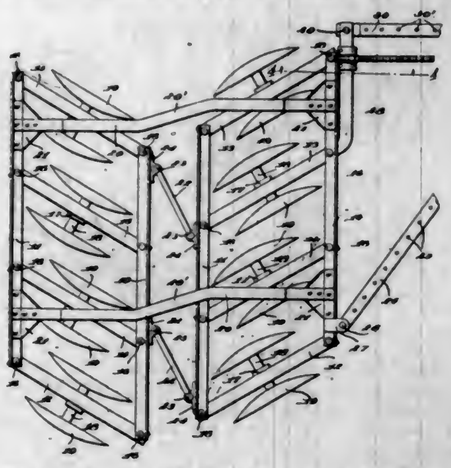
2. In a die head, a front unit comprising a body member having parallel bores therethrough, trunnions mounted in the bores, chaser holders mounted on the trunnions, tangential chasers in the holders, a closing ring mounted on said body and connected to said chaser holders, an adjusting ring mounted on said body, means for adjusting said rings around said body to vary the cutting size of said die head, a flange on the front of said body member, and a plate secured to the rear of said member by which the rings are held against axial movement relative to the said body, the said plate being connected to and positioning said trunnions against axial movement in said body, a separate rear unit comprising a head body member, a plurality of rings surrounding said head body member, locking means mounted in said rings on the rear unit head body member engaging the rings on the front unit head body member for locking the die head in closed position and unlocking the die head for open position, and means for securing the head body members together, substantially as set forth.

1,760,568. DIE HEAD. HARRY T. SHEARER, Waynesboro, Pa., assignor to Landis Machine Company, Waynesboro, Pa., a Corporation of Pennsylvania. Filed Nov. 5, 1925. Serial No. 67,136. 16 Claims. (Cl. 10—100.)



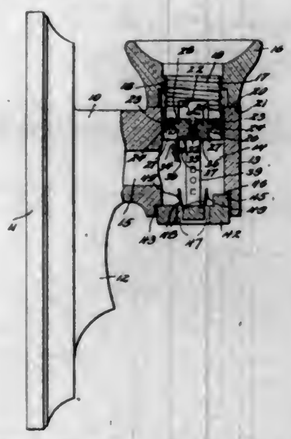
7. In a die head, a front unit comprising a head body having trunnion bearings, trunnions in said bearings, chaser-holders on said trunnions, tangential chasers on said holders, a closing ring about the body connected to said chaser-holders, an adjusting ring about the body, a ring about a reduced extension of said body, means for securing said ring to said body, means for securing the trunnions to the last-named ring to prevent axial movement of the trunnions, a separate rear unit, pins on the rear unit slidably mounted in said adjusting ring and adapted to engage recesses in said closing ring, and means for holding said units yieldably in contact with each other, substantially as set forth.

1,760,569. AGRICULTURAL MACHINE. JAMES S. STEWART, Redlands, Calif., assignor, by mesne assignments, to George Voss, San Bernardino, Calif. Filed Aug. 25, 1927. Serial No. 215,425. 7 Claims. (Cl. 55—30.)



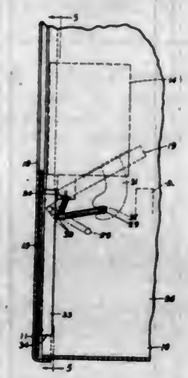
1. In a machine of the class described, a leading gang frame, a trailing gang frame, said gang frames each comprising a pair of spaced parallel frame bars and end and intermediate cross bars pivotally connecting said frame bars, disc blades journalled on the cross bars of each of said gang frames, means for retaining one of the frame bars of each of the gang frames in fixed parallel relation, and means for simultaneously shifting the other of the frame bars of said gang frames endwise to vary the angular positions of said cross bars relative to said fixed frame bars, whereby to correspondingly vary the angular cutting positions of said disc blades.

1,760,570. CONVENIENCE OUTLET FOR FIXTURES. DON N. THOMPSON, deceased, Syracuse, N. Y., by Eva C. Thompson, executrix, Syracuse, N. Y., assignor to Pass & Seymour, Inc., Syracuse, N. Y., a Corporation of New York. Filed May 17, 1927. Serial No. 192,113. 9 Claims. (Cl. 173—334.)



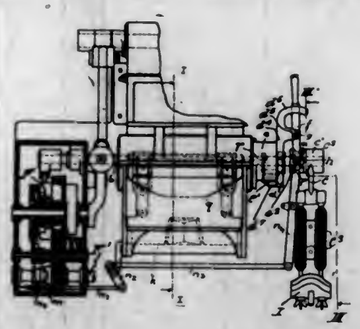
1. The combination with a supporting tube, of an assembly adapted to fit therein and comprising, a screw shell, an insulating button secured to said shell, an insulating disk, a pair of conducting straps securing said button and disk in spaced relation, attachment plug contact springs carried by said disk in electrical engagement with said straps and means to connect conductor wires to said straps.

1,760,571. SAFETY SWITCH BOX. DAVID T. WADSWORTH, Cold Springs, Ky., assignor to The Wadsworth Electric Manufacturing Company, Covington, Ky., a Corporation of Kentucky. Filed Dec. 9, 1925. Serial No. 74,418. 9 Claims. (Cl. 200—50.)



1. In a device of the class described the combination with a switch box having an apertured cover, of a slidable door mounted for reciprocation upon the cover for opening and closing the aperture in said cover, a straight flange mounted on and terminating substantially within the body lines of the slidable door, a switch in the box, a crank journaled in the box for opening and closing the switch, said crank having an offset portion for movement into and out of the path of the flange as the switch is opened and closed by the crank.

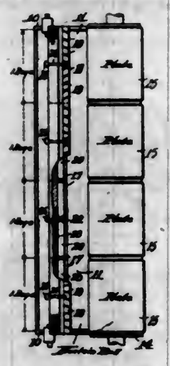
1,760,572. MECHANICALLY-OPERATED GRATE-FEEDING MEANS. ALEXANDER ERWIN WECK, Dolau, Germany. Filed May 5, 1927, Serial No. 189,092, and in Germany Dec. 15, 1926. 3 Claims. (Cl. 110—113.)



1. In a mechanical stoker comprising a throwing box, means for supplying fuel to the box in charges, a shaft traversing said box, a throwing shovel, mounted on said shaft, a lever loosely mounted in said shaft, spring operating means secured to the end of said lever, a hand operating lever mounted to pivot on the axis of the shaft, a movable member splined on said shaft, and engageable with either of said levers, and means to move said movable member into engagement with either of said levers.

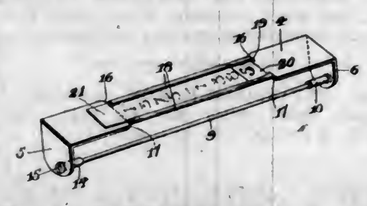
1,760,573. PAGE CUT-OFF FOR INK FOUNTAINS. HENRY A. WISE WOOD, New York, N. Y., assignor to Wood Newspaper Machinery Corporation, New York, N. Y., a Corporation of Virginia. Filed Nov. 15, 1926, Serial No. 148,442. Renewed Oct. 23, 1929. 10 Claims. (Cl. 101—351.)

1. In an inking device for a printing press, the combination with a fountain roll and a plurality of blades for regulating the thickness of the ink on the roll, of means for adjusting each blade toward or from the roll,



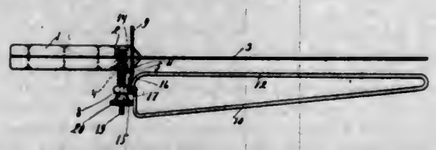
and means independent of said adjusting means, for moving each blade against the roll to cut off the ink delivery from the area regulated by that blade.

1,760,574. BOOK-IDENTIFICATION DEVICE. WILLIAM J. WRIGHT, Overlea, Baltimore, Md. Filed Dec. 1, 1928. Serial No. 323,166. 3 Claims. (Cl. 129—1.)



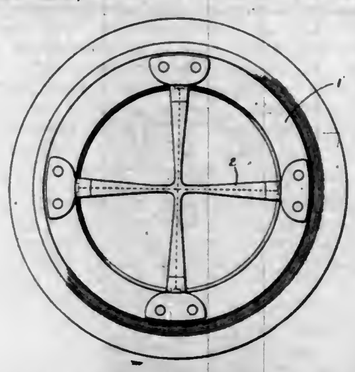
2. A device of the character described comprising a strip having spaced apertured lugs, a securing rod having its opposite ends mounted in the aperture in the lugs and, in conjunction with said lugs, constituting means for securing the strip on a binder, said strip further having turned-back groove-forming marginal portions for securing indicia-bearing means upon the strip.

1,760,575. ADJUSTABLE SLICING KNIFE. RINGHALD PER ALFRED ANDERSSON, Taby, Stockholm, Sweden. Filed Aug. 22, 1927, Serial No. 214,727, and in Sweden Jan. 5, 1927. 2 Claims. (Cl. 30—20.)



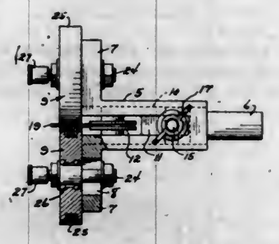
1. An adjustable slicing knife including a blade, a handle and a ring fastening the blade to the handle, a horizontal shaft riveted to the ring at right angles to the length of the knife blade and on which shaft is slidably arranged a lockable and settable sliding block, provided with a guiding bar fastened to it and arranged parallel to the blade, the inner edge of which guiding bar rests against the end surface of the object to be cut, the sliding block with the guiding bar being turnable on the shaft and provided with a helical spring one end of which is fastened to the shaft and the other end of which is adapted to turn the knife bar downwardly with relation to the knife edge, the sliding block also being provided with a stop-arm fastened to it, which stop-arm rests against the back of the blade and determines the position of the spring actuated guiding bar in relation to the knife edge.

1,760,576. BRIDGE FOR STEAM-ENGINE-EXHAUST NOZZLES. AUGUSTINE R. AYERS, Cleveland, Ohio. Filed Jan. 10, 1927. Serial No. 160,265. 2 Claims. (Cl. 230—100.)



1. A bridge for a steam engine exhaust nozzle comprising a plurality of arms extending from the center of the bore of the nozzle to the sides thereof, said arms being of greater width near the periphery of the bore than at the center thereof, the width and number of said arms being such that their combined area in a plane perpendicular to the path of the steam is considerably less than the unobstructed area in said plane.

1,760,577. BAND-SAW GUIDE. JOHN RANDOLPH BISHOP, Charlottesville, Va. Filed Oct. 26, 1927. Serial No. 228,934. 1 Claim. (Cl. 143—162.)

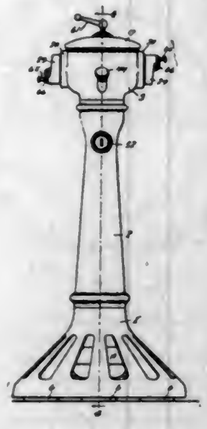


A guide for a band saw comprising a substantially U-shaped frame having recesses formed in the underside of the arms thereof to provide a track, outwardly extending opposed flanges formed on the ends of the arms, leather faced journaled guide rollers adjustably mounted on the flanges for movement with respect to each other, a support having a groove on its underside and a hole communicating with the groove intermediate its ends, a T-shaped bolt having its head arranged in the groove and its shank passing through the hole, downwardly curved ears formed on the support, a circumferentially grooved guide roller journaled between the ears, said support being arranged for movement on the track with the shank of the bolt passing between the arms for slidable movement and in a manner whereby the grooved guide roller is adjustable with respect to the first mentioned guide rollers, a wing nut threadedly secured to the shank and being engageable with the upper side of the arms for retaining the grooved roller in adjusted positions and an attaching projection formed with the U-shaped frame.

1,760,578. VIBRATING MACHINE. AUGUST E. R. BLOMQUIST, Cleveland, Ohio. Filed July 9, 1928. Serial No. 291,375. 6 Claims. (Cl. 128—63.)

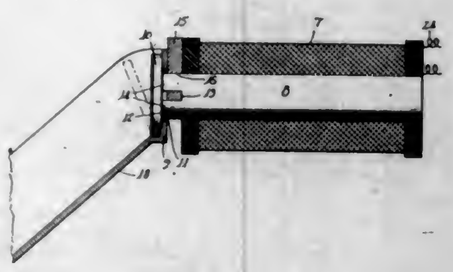
1. In a vibrating machine, the combination of a vibrating element, mechanism for vibrating the same including

axially spaced gears, a member rotatable on an axis intermediate the planes of said gears, power transmitting means supported by said member and adapted to be swung through an arc concentric with the axis of rotation of said member into driving engagement with either of said



gears by the oscillation of said member, means rotatable on an axis substantially coincident with that of the member for oscillating said member through the intervention of the power transmitting means, and driving mechanism having operative connection with said power transmitting means.

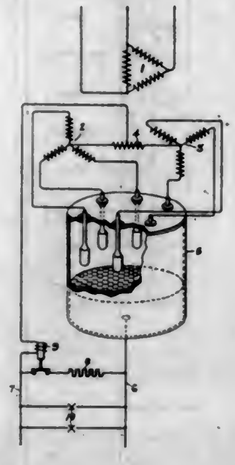
1,760,579. METHOD OF AND MEANS FOR TESTING COINS. FREDERIC H. BRINKERHOFF, Belleville, N. J. Filed Jan. 23, 1929. Serial No. 334,499. 4 Claims. (Cl. 194—101.)



2. The method of testing a coin consisting in disposing a coin on edge in a leaning position, and then subjecting the coin on the side toward which it leans to an alternating magnetic field so as to kick the coin away from the magnetic field, with the leaning angle of the coin to a vertical line being sufficiently great that the coin will not be kicked from the magnetic field excepting if the coin is of silver or aluminum.

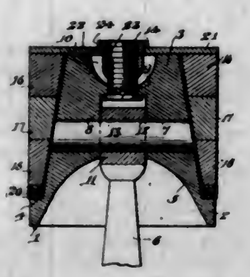
1,760,580. SYSTEM OF DISTRIBUTION. HERBERT D. BROWN, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Feb. 21, 1925. Serial No. 10,966. 6 Claims. (Cl. 175—363.)

1. A system of distribution comprising a source of alternating current and a direct current consumption circuit including a variable load, an asymmetric conducting device connected therebetween, means for preventing an increase in the voltage impressed on said circuit when



the load approaches zero, said means comprising a resistance, and means responsive to an electrical condition in the said circuit for controlling said resistance.

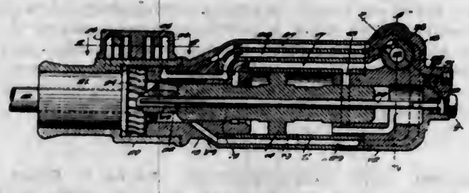
1,760,581. EXPANSIBLE PISTON. LEONARD C. BURNS, Portland, Oreg. Filed May 31, 1927. Serial No. 195,504. 4 Claims. (Cl. 74—108.)



1. In an expansible piston a core formed of a cylindrical portion, and a forwardly directed tapered portion of greater length and of less diameter throughout than said rear portion, said core having its rear end provided with a recess extending through said rear portion and into said tapering portion, said tapering portion formed at its axis with a rectangular, lengthwise extending slot, an opening and a socket, said opening interposed between and communicating with said socket and slot, said opening being of a diameter less than that of the socket and less than the width of the slot, said tapering portion further formed with a diametrically extending opening intersected centrally thereof by said slot, and said slot opening into said recess and said socket opening at the forward end of said tapered portion.

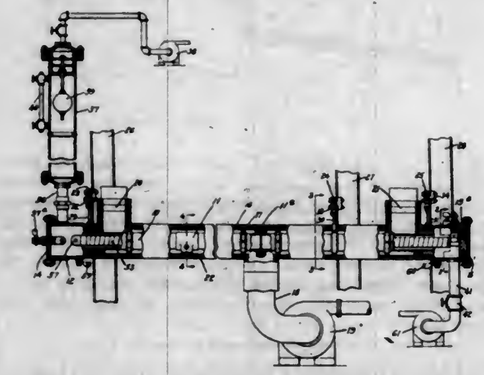
1,760,582. HOLE-CLEANING APPARATUS. OMAR E. CLARK, Denver, Colo., assignor, by mesne assignments, to The Gardner-Denver Company, Quincy, Ill., a Corporation of Delaware. Original application filed Apr. 19, 1918, Serial No. 229,500. Patent No. 1,538,421, dated May 19, 1925. Divided and this application filed Sept. 4, 1923. Serial No. 660,837. 4 Claims. (Cl. 121—6.)

1. In apparatus of the character set forth, the combination with a drilling motor, including a barrel and a hammer piston operating therein, of a tool receiving chuck, a tube extending through the piston for delivering fluid to a drill steel placed in the chuck, a passageway in the barrel for delivering fluid to a drill steel placed in the chuck, a chuck rotating motor, means for supplying the exhaust



from said motor to the passageway in the barrel, means for supplying live fluid to the tube, and a common valve for controlling the supply of fluid to the drilling motor and to the chuck rotating motor, said valve also controlling the passage of exhaust to the passageway.

1,760,583. METHOD AND APPARATUS FOR TREATING INSULATED CONDUCTORS. WALLACE S. CLARK, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Mar. 23, 1926. Serial No. 96,888. 7 Claims. (Cl. 91—70.)



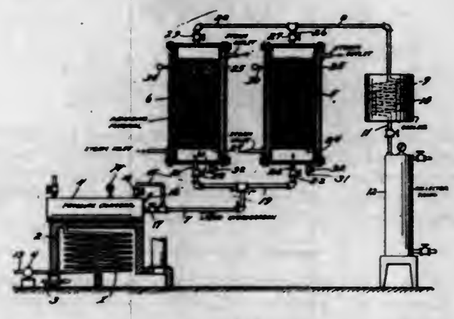
7. Apparatus for impregnating insulated cables comprising an elongated tubular airtight container into which the cable is drawn endwise, means for connecting the cable with an external electrical supply source, means for connecting the ends of said container to the terminals of an electrical supply source, a casing surrounding said container in spaced relation therewith, and means for producing a current of cooling gas in the space between said container and said casing.

1,760,584. BORE-OPENING APPARATUS. LORENZO E. CROFT, Denver, Colo., assignor to Gardner-Denver Company, Denver, Colo., a Corporation of Delaware. Filed Oct. 26, 1928. Serial No. 315,325. 2 Claims. (Cl. 76—5.)



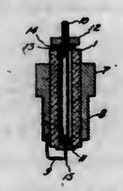
1. In apparatus of the character described, the combination with a fluid operated tool comprising a barrel having a piston chamber, of a hammer piston in the piston chamber, a bore opening pin operated on by the piston and projecting beyond one end of the hammer, a support for the tool and on which it is movably mounted, including a portion located in rear of the tool, a rear head for the barrel having an offset portion, said offset portion having a motive fluid supply passageway, means for distributing the motive fluid from the passageway to the tool, a valve in the offset portion and out of line with the piston chamber controlling the supply passageway and having a stem projecting from its rear end and in a position to be engaged by the said portion of the support to open the valve when the tool is pushed rearwardly by an article forced upon the bore opening pin.

1,760,585. PROCESS OF REFINING HYDROCARBONS. ROY CROSS, Kansas City, Mo., assignor to Cross Development Corporation, a Corporation of Delaware. Filed Nov. 21, 1923. Serial No. 676,027. 7 Claims. (Cl. 196—30.)



1. A process for treating hydrocarbon oil, consisting in heating the oil to a temperature above 200° F. and not in excess of 600° F. while maintaining thereon sufficient pressure commensurate with the temperature of the oil to maintain it in substantially the liquid phase, passing the oil thence through a bed of refining material comprising a mixture of dried hydrous aluminum silicate intimately intermixed with a metal salt.

1,760,586. SPARK PLUG. PHILIP K. DEVERS, Lynn, Mass., assignor to General Electric Company, a Corporation of New York. Continuation in part of application Serial No. 596,197, filed Oct. 22, 1922. This application filed Jan. 14, 1926. Serial No. 81,344. 3 Claims. (Cl. 123—109.)

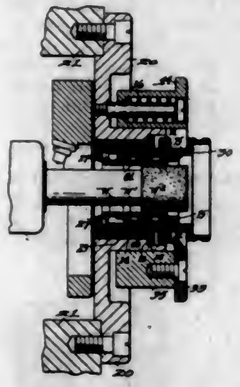


2. A spark plug comprising a hollow silica body, a conductor passing through the bore thereof, a relatively thin coat of metal on substantially the entire outer surface of said hollow body and a relatively heavy metal shell alloyed with said thin coating, and spark points mounted on said conductor and shell.

1,760,587. WORK HOLDER FOR GRINDING MACHINES. ALDEN M. DRAKE, Greenfield, Mass., assignor to Greenfield Tap & Die Corporation, Greenfield, Mass., a Corporation of Massachusetts. Filed Aug. 8, 1929. Serial No. 384,339. 5 Claims. (Cl. 279—1.)

1. In a machine tool, a holder for cylindrical work comprising a hollow cylindrical sleeve having an internal

flange, a hub member in which said sleeve is centered and supported, means engaging said sleeve for yieldingly seating said sleeve in said hub member and thereby clamping a plurality of work pieces between the internal flange of



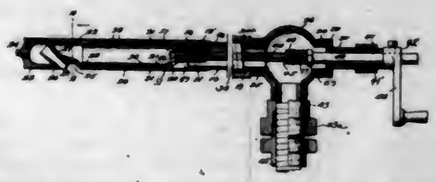
said sleeve and a shoulder fixed with respect to said hub member, and means to center the work pieces in the cylindrical sleeve, said means comprising springs mounted on the inner face of said cylindrical sleeve and yieldingly engaging the outer walls of said work pieces.

1,760,588. BOILER ATTACHMENT. IVAN D. EBY, Richmond, N. Y. Filed Aug. 7, 1923. Serial No. 656,164. 13 Claims. (Cl. 122—390.)



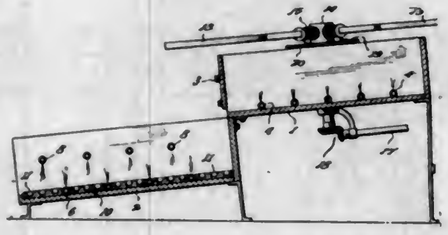
1. The combination with a boiler having a heating section, a combustion chamber, and a smoke box, a smoke box door having a centrally disposed opening, of a soot blower insertible through said opening and through the heating section into the combustion chamber, said soot blower including a tubular member, and a revolvable head provided with a single, obliquely disposed nozzle capable of producing a strong jet of steam and directing it onto a restricted area on the tube sheet of the boiler, the steam supply passages being substantially unrestricted up to the nozzle so that high pressure steam is available at the nozzle, the nozzle being so disposed that the reaction of the jet rotates the head, the tubular member and head being reciprocable in the opening and the heating section.

1,760,589. BOILER ATTACHMENT. IVAN D. EBY, Richmond, N. Y. Filed Apr. 2, 1924. Serial No. 703,829. 6 Claims. (Cl. 122—390.)



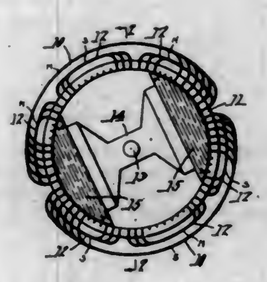
1. A soot blower adapted to be entirely removed from a boiler or furnace for use in another boiler or furnace and structurally independent thereof, said soot blower having a tubular member adapted to be inserted through a tube leading to the combustion chamber of a boiler, a hollow shell revolvably carried inside the tubular member, a head supported by said shell and projecting out of one end of the tubular member and provided with a jet-forming nozzle, a casing having a steam inlet and attached to the other end of the tubular member, a driving shaft rotatably supported by the casing, a flexible shaft connected to the shell and the driving shaft, the flexible shaft transferring to the driving shaft the pull exerted by the steam reacting against the revolvable head, and a device for transferring said pull from the driving shaft to the casing.

1,760,590. ORE CONCENTRATOR. RALPH C. FEHELY and RAYMOND F. STEVENSON, Jacksonville, Oreg.; said Stevenson assignor to said Fehely. Filed Apr. 20, 1927. Serial No. 185,313. 1 Claim. (Cl. 209—203.)



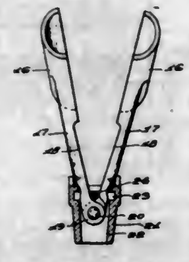
In an ore concentrator, a pan, blocks supported upon the bottom of said pan and having mercury receiving pockets in their upper faces, lower pipes extending across the bottom of said pan between said blocks and having their upper portions perforated, upper pipes extending across said pan above the blocks in staggered relation to the lower pipes and having their lower portions perforated, and means for supplying fluid to the upper and lower pipes.

1,760,591. FREQUENCY CHANGER. ALLAN W. FORBES, Worcester, Mass. Filed Nov. 10, 1927. Serial No. 232,395. 2 Claims. (Cl. 172—281.)



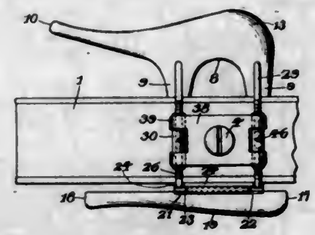
1. In a frequency changer, the combination with a magnetic core and two windings thereon having different numbers of poles, with a rotary member adapted to be magnetized by one winding and adapted to generate a current in the other of a different frequency and comprising two magnetizable members spaced apart on opposite sides of the center and each extending across the core inside.

1,760,592. HOLDING DEVICE FOR FISHING POLES OR RODS. GLEN E. GIFT, Fairmount, Ind. Filed Dec. 27, 1927. Serial No. 242,757. 4 Claims. (Cl. 248—37.)



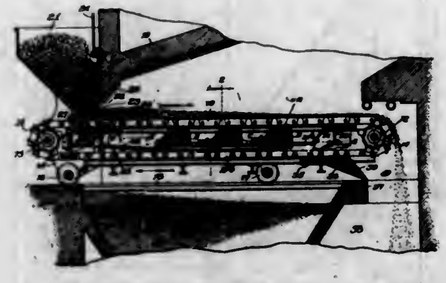
1. A device for holding a fishing rod or pole, comprising a sleeve, co-acting jawa for receiving the rod or pole and having tapered shanks, operating within the sleeve, and means carried by the sleeve to spread the shanks upon their longitudinal movement with relation to the sleeve.

1,760,593. COMBINATION CHIN REST AND SHOULDER PAD. FREDERICK GOSPARLIN, Chicago, Ill. Filed June 27, 1928. Serial No. 288,697. 9 Claims. (Cl. 84—278.)



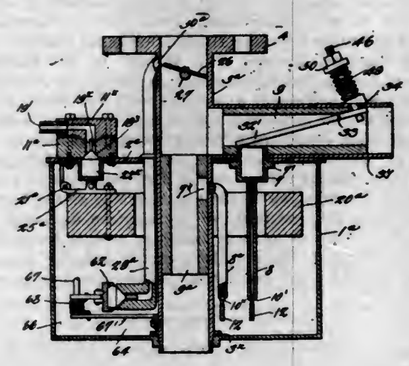
1. In a chin rest and shoulder pad for a violin, a chin supporting member formed with tapered ends and having its upper surface formed with a diagonally extending elongated depression, a triangular raised portion formed on one of said ends and abutting said depression, a member having a curved contour to conform with the contour of the collar bone, means for adjustably clamping said members together, and means coacting with said clamping means for securing the members to a violin, said securing means including a pin for insertion through the hole formed in the violin for the accommodation of the tail piece button and further including means carried by the inner end of the pin for locking the latter in position.

1,760,594. STOKER. JOHN C. HEAVEY, Chicago, Ill. Filed Mar. 5, 1923. Serial No. 622,890. 8 Claims. (Cl. 110—40.)



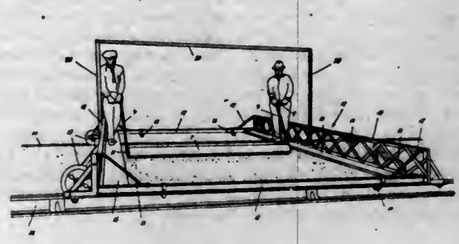
1. A stoker comprising a continuous chain grate, a series of partitions in the space beneath the upper part of said grate dividing said space into a series of compartments, said partitions lying some distance beneath the bottom of said upper part, and being flat on top and adapted to support ashes on their top portions to cooperate with said upper part to prevent passage of air from one compartment to the next, each partition being hollow, and a member slidable into position beneath said partition and slidable therefrom to close the bottom of a compartment whereby the passage of air through said compartment may be controlled.

1,760,595. CARBURETOR. WILLIAM A. HEIDE, Detroit, Mich. Filed Apr. 19, 1923. Serial No. 633,210. 1 Claim. (Cl. 261—62.)



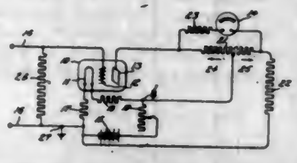
A carburetor including a fuel receptacle, a cover thereon, a suction pipe extending across the receptacle and downwardly through the cover and the bottom of the receptacle, said suction pipe constituting means for holding the cover assembled with the receptacle, an intake choke member within the suction pipe, a fuel tube in the receptacle, a screw-threaded enlargement at one end of the tube recessed to provide a cup opening downwardly into the tube and upwardly into the choke member, said enlargement being in threaded engagement with the top of the receptacle, the suction pipe, and the choke member for holding them assembled and for supporting the fuel tube in the receptacle, a valve pivotally mounted in the choke member, one end portion of the valve being adapted to extend over the cup, and means for actuating the valve.

1,760,596. MEANS FOR AND METHOD OF FINISHING CONCRETE SURFACES. JOSEPH WILLIAM HELTZEL, Warren, Ohio. Filed Mar. 24, 1925. Serial No. 17,940. 4 Claims. (Cl. 94—39.)



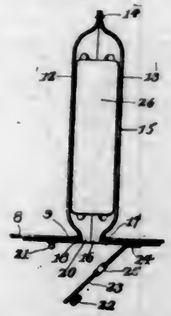
4. The combination of a roller for preparing a concrete structure while in plastic condition, and a carriage movable over said structure and having means flexibly connected to the roller for operating the roller transversely of itself without supporting the roller from the carriage and having means for supporting said roller for movement longitudinally from one position to another.

1,760,597. THERMIONIC MEASURING DEVICE. STEPHEN C. HOARE, Lynn, Mass., assignor to General Electric Company, a Corporation of New York. Filed Feb. 15, 1926. Serial No. 88,431. 3 Claims. (Cl. 175—183.)



1. In combination, an electron discharge device having a filament, grid and plate electrodes, a battery for supplying a heating current to said filament, resistances in series with said filament, connections from said resistances to the grid and plate for respectively impressing negative and positive voltages thereon with respect to the filament, terminals for impressing an unknown voltage on said grid, an indicating instrument associated with the plate circuit of said device for measuring the unknown voltage, said instrument being connected across a resistance which is connected at one end to the plate, at an intermediate point to the plate voltage source, and at the other end to a high resistance circuit going to the negative side of the battery for balancing the resistance of the electron discharge device, the various resistances being so proportioned that with the unknown voltage disconnected and the filament current normal said indicating instrument has a zero deflection.

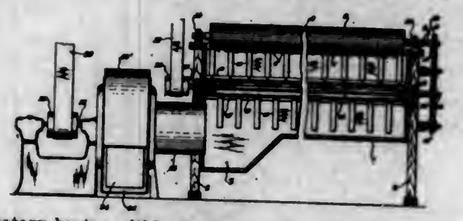
1,760,598. INSECTICIDE CONTAINER. JOHN P. HORN, Lancaster, Pa. Filed Feb. 21, 1928. Serial No. 256,018. 2 Claims. (Cl. 299—24.)



1. A container for the purpose set forth comprising an extendible, flexible body portion for receiving an insecticide and having one end open, said body portion being provided with perforations and further formed co-extensive with its open end with an outwardly directed, right angularly disposed, flanged portion, a flexible coupling plate secured against the outer face of said portion, extending laterally therefrom and formed with a slot having the wall thereof registering with the inner face of the body portion at the open end of the latter, a closure for said slot hinged at one side thereof against the outer face of said plate in proximity to one side edge of the latter and formed with spaced intake openings adapted to register with said slots, and said closure and plate having fixed, coacting interengaging means for detachably connecting the other side of the closure to the other side of the plate.

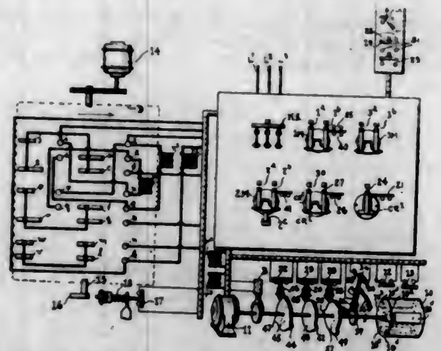
1,760,599. CARPET-CLEANING MACHINE. HENRY P. JOHNSTON, Canton, Ohio, assignor to The American Laundry Machinery Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Dec. 2, 1927. Serial No. 237,222. 5 Claims. (Cl. 15—12.)

1. A fabric cleaning machine including a table over which the fabric is passed, a housing, the table being provided with a slot communicating with the interior of the housing, a feed roller provided with a corrugated, resilient surface, adjacent to the slot for feeding the fabric across the table,



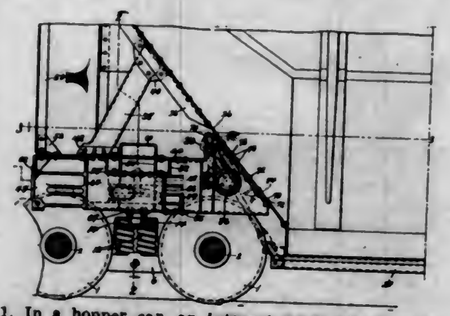
a rotary beater within the housing for beating the fabric through said slot, means for driving the beater and feed roller, and suction means communicating with the housing.

1,760,600. CONTROL MEANS FOR MOTOR-DRIVEN DEVICES. RALPH G. LOCKETT, Wauwatosa, Wis., assignor, by mesne assignments, to Cutler-Hammer, Inc., a Corporation of Delaware. Filed Dec. 23, 1927. Serial No. 242,147. 11 Claims. (Cl. 192—142.)



2. In a controller for a motor driven rotatable device, the combination with means to direct stopping of said device, means subject to coincident predetermined conditions of speed, angular position and only one direction of rotation to effect a prime stop of said device in a predetermined angular position of the latter, means operable independently of said first mentioned means to thereafter direct stopping of said device in other predetermined angular positions sequentially, and means operable automatically to render said last mentioned means ineffective for stopping said device pending attainment of a given speed of the latter.

1,760,601. HOPPER CAR. ADOLPH KASSLER, New York, N. Y., assignor to American Car and Foundry Company, New York, N. Y., a Corporation of New Jersey. Filed May 8, 1928. Serial No. 276,078. 15 Claims. (Cl. 105—250.)

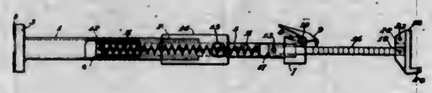


1. In a hopper car, an integral draft sill casting comprising spaced channel shape sills recessed to receive bolster

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diaphragms, spaced outwardly projecting arms for attaching to said bolster diaphragms, a plate for engaging the end hopper sheet joining the inner ends of said sills and bearings for the hopper door operating mechanism on the sills adjacent said plate.

1,760,602. PRESSURE-APPLYING AND INDICATING DEVICE FOR BRAKE PEDALS. FRANCIS B. MCKINNEY, Baldwin Township, Allegheny County, and CHARLES H. ALLEN, Pittsburgh, Pa., assignors to Auto Brakeometer Corporation, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed July 22, 1927. Serial No. 207,667. 4 Claims. (Cl. 265—63.)

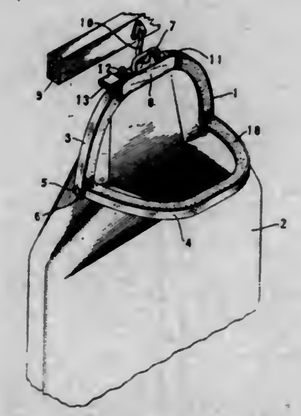


1. A brake pedal pressure-applying and indicating device, comprising seat board and pedal-engaging members telescopically connected to each other for relative longitudinal movements, a graduated scale on one of said members for indicating the pressure applied to a foot pedal by the device, means for adjusting said members to variable relative extended positions, yielding weighing means acting constantly between said members to urge them to their extended positions as variably adjusted, and releasable means for temporarily locking said members in their collapsed position.

1,760,603. METHOD OF COATING METALS. EDWIN R. MILLRING, New York, N. Y., assignor to American Machine & Foundry Company, a Corporation of New Jersey. Filed July 21, 1923. Serial No. 653,022. 8 Claims. (Cl. 91—70.2.)

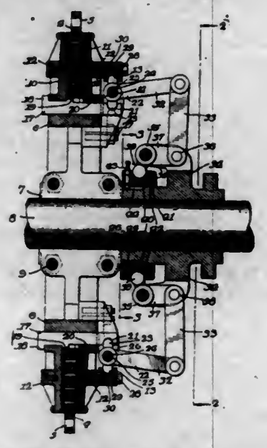
1. The method of covering metal with a protective metal coating, which consists in applying to the metal a coating alloy in super-cooled condition.

1,760,604. SAFETY CONTAINER. SAMUEL PAULL and SAUL MANDELTORT, New York, N. Y., assignors to Waterproof Pocket Corporation, a Corporation of New York. Filed Feb. 11, 1928. Serial No. 253,542. 6 Claims. (Cl. 9—10.)



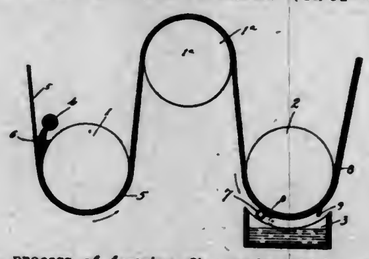
1. A safety container having two nested bags of fire and waterproof material and two linings of air and water tight material nested together, the chamber formed by the inner bags being partially inflated and the necks of all of said bags being united into a homogeneous structure, a frame having pivoted jaws to which the neck of the structure is attached and a seal for said jaws.

1,760,605. CLUTCH. WILLIAM J. PEARMAIN, Racine, Wis., assignor to Twin Disc Clutch Company, Racine, Wis., a Corporation of Wisconsin. Filed Jan. 3, 1928. Serial No. 244,083. 4 Claims. (Cl. 192—68.)



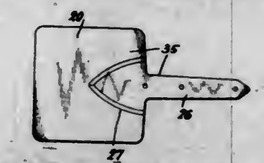
1. In a clutch of the form described comprising a friction disk, clamping disks on opposite sides thereof and movable into and out of engagement therewith, and a hub adapted to be secured to a shaft to which hub said clamping disks are keyed for rotary movement therewith, actuating levers, fulcrumed on the hub and pivotally engaging one of said clamping disks, slides engaged by the respective levers and engaged with the other of the clamping disks for moving the latter into and out of engagement with the friction disk, a sleeve adapted to slide on the shaft to which the hub is secured, levers pivoted on said sleeve, links connecting the first mentioned with the last mentioned levers and means for adjusting the last mentioned levers.

1,760,606. SATURATED FIBER WEB. NEAL C. PIKE, Bianton, Fla., assignor to The Richardson Company, Lockland, Ohio, a Corporation of Ohio. Filed May 26, 1924. Serial No. 716,052. 4 Claims. (Cl. 91—68.)



1. A process of forming fiber webs which consists in filling the web from one side only with a saturant, said filling being controlled to leave the other surface substantially unfilled, and then applying a priming coat of desired character to the unfilled side.

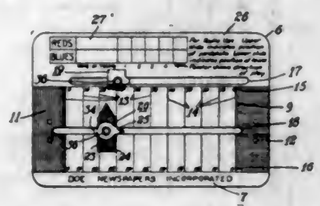
1,760,607. METHOD OF MAKING SHOVELS. NATHANIEL GOULD ROBERTSON, Wyoming, Pa. Filed Feb. 6, 1928. Serial No. 252,145. 3 Claims. (Cl. 76—113.)



1. In the art of making shovels wherein a blade portion and strap portion are provided which are subsequently

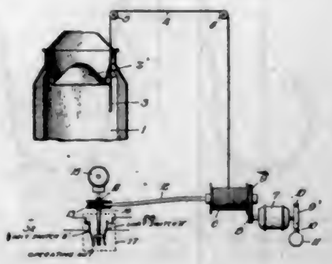
united, including the steps of making and uniting the parts which comprise first providing a bevel around the edge of the V portion of the strap and in providing such bevel performing all surface finishing operations upon the bevel of the strap before the strap is united to the blade and in thereafter contacting the non-bevelled surface of the strap with the blade and in thereafter effecting welding of the parts together by contacting the blade part with a cylindrical welding roll and contacting the bevelled edge of the V of the strap part with a bevelled welding roll and in then rolling both parts through the rolls while current is passed therethrough to provide a continuous weld between the parts whereby a completed assembly is secured which requires no further strap finishing operations.

1,760,608. FOOTBALL-GAME-INDICATING ADVERTISING NOVELTY. HUGH G. ROSS, Wilkinsburg, Pa. Filed Nov. 2, 1929. Serial No. 404,301. 19 Claims. (Cl. 116—120.)



1. An advertising novelty comprising a card having, in addition to advertising matter thereon, a representation of a football field thereon, a closed, lengthwise slot therein, a slide movable in said slot for indicating the position of the teams, and a pointer for indicating the direction of play.

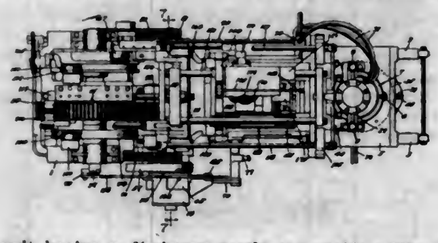
1,760,609. STOCK INDICATOR. JOHN S. ROWAN, Baltimore, Md., and GORDON FOX, Chicago, Ill.; said Rowan assignor to Rowan Controller Company, Baltimore, Md., a Corporation of Maryland, and said Fox assignor to Freyn Engineering Company, Chicago, Ill., a Corporation of Maine. Filed May 19, 1926. Serial No. 110,128. 11 Claims. (Cl. 33—125.)



1. A level indicator comprising a test member, an electric motor for raising said test member, brake means for said motor biased to braking relationship with said motor, electric control means for causing the dropping of said test member, said electric control means including means responsive to the stoppage of movement of said test member for raising said test member to a predetermined position.

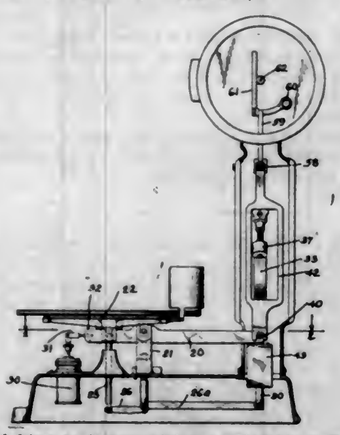
1,760,610. DIE-CASTING MACHINE. MARC STERN, Flint, Mich., assignor to A C Spark Plug Company, Flint, Mich. Filed June 4, 1926. Serial No. 113,707. 43 Claims. (Cl. 22—69.)

1. In a die casting machine, a pair of cooperating die members, means to stationarily mount one of the die members on the machine, actuating mechanism for moving the other die member relative to said stationary die member, to open and close the die cavity, said movable die member having a sprue opening leading to the die cavity from a point spaced from the parting surfaces of the die members, whereby cores can be pulled in any direction at right angles to the axis of said sprue opening, a movable furnace-melting



pot unit having a discharge nozzle engageable with said sprue opening, means to move said unit to bring the nozzle into engagement with the sprue opening when the die members are closed, cores carried by both the stationary and the movable die sections, projectable into the die cavity, and automatic actuating means for retracting the cores in timed relation with the parting of the die members.

1,760,611. SCALE. THOMAS H. STRACHAN, Dayton, Ohio, assignor to Dayton Scale Company, Dayton, Ohio, a Corporation of New Jersey. Filed July 3, 1925. Serial No. 41,283. 9 Claims. (Cl. 265—97.)



1. A weighing scale comprising a rotatable indicator, a lever, an indicator driving frame pivotally supported on said lever and carrying gear means for rotating said indicator in both directions, and a check device for preventing excessive oscillations of said frame and erroneous movements of the indicator obtained from said excessive oscillations.

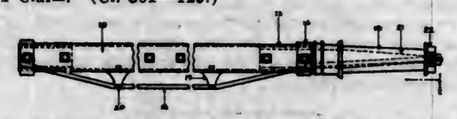
1,760,612. WINDOW SCREEN. HARVEY B. TROTT, McKeesport, Pa. Filed Aug. 30, 1928. Serial No. 302,927. 6 Claims. (Cl. 156—38.)



4. A rectangular frame for a window screen comprising a strip of sheet metal folded lengthwise upon itself and lying in only two planes, providing two oppositely disposed spaced-apart walls, and a wire fabric having its edges secured between and by the said walls, the said walls being cut transversely at the corners of the frame and the folded edge being continuous and bent at the corners

to form right angle corners and the walls adjacent to the cuts overlapping each other at the corners to form four thicknesses.

1,760,613. AXLE ASSEMBLY. DANIEL W. VOORHEES, Jr., Peru, Ill. Filed Oct. 15, 1928. Serial No. 312,468. 1 Claim. (Cl. 301—129.)



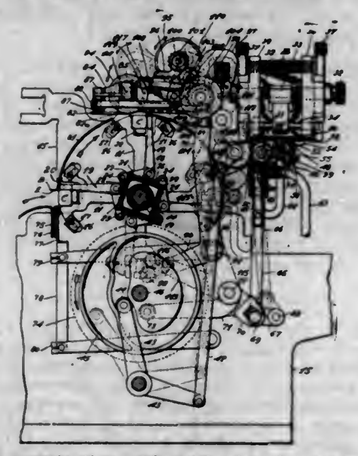
An axle comprising a pair of parallel spaced oppositely disposed channel members having their channel portions turned inwardly, skeins at either end of the axle having stub ends fitting between said channel members, means for securing said stub ends in position between said channel members, said skeins serving to hold said channel members in spaced relation, a truss rod extending at its ends through said skeins, means on the ends of said rod bearing against said skeins, said rod passing in its central portion between said channel members to a point below said axle, and means for spacing the central portion of said truss rod from said axle.

1,760,614. CLEANING DEVICE. SAMUEL WEINTRAUB, New York, N. Y. Filed Aug. 7, 1928. Serial No. 297,042. 1 Claim. (Cl. 15—115.)



In a brush having an elongated rectangular backing from which the bristles extend, a longitudinal recess in each of the upper front and rear corners of said backing, a wire rod having pivotal connections at the ends of said backing to permit swinging selectively into either recess, a handle on said rod, a mop having a part clamped in either recess by said rod, said mop including a plurality of wiping elements adapted to fold below said bristles.

1,760,615. BANDING ATTACHMENT FOR CIGAR-ENVELOPING MACHINES. HENRY H. WHEELER, Brooklyn, N. Y., assignor to International Cigar Machinery Company, a Corporation of New Jersey. Filed Apr. 4, 1928. Serial No. 267,461. 18 Claims. (Cl. 131—61.)



1. The combination with mechanism for wrapping assemblages of bands and envelops circumferentially about cigars with the bands outside the envelops, of means for presenting bands to said mechanism for assemblage with envelops.

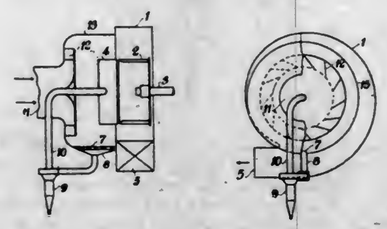
13. The combination with a rotating turret having cigar supporting pockets and coacting folding devices for wrapping bands circumferentially about cigars in said pockets, of means for presenting each band to said turret before the latter receives a cigar to be encircled by said band, said means including a band magazine, and a suction-head and coacting device receiving band in flat form from said magazine and turning and delivering them in arched form to said turret.

1,760,616. HYDRAULIC CONVEYER. WILLIAM C. WHITCOMB, Rochelle, Ill., assignor to Geo. D. Whitcomb Company, Rochelle, Ill., a Corporation of Illinois. Filed Jan. 6, 1928. Serial No. 244,899. 4 Claims. (Cl. 302—16.)



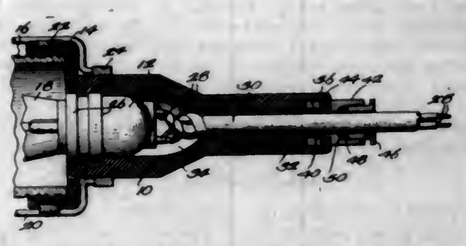
1. A hydraulic conveyer for handling sand or silt, comprising a conveyer pipe having a suction end, a discharge end, and a series of spaced intermediate discharge openings, and a settling chamber at each intermediate opening equipped at its bottom with a valve controlled outlet, whereby to collect sand or silt from a fluid current passing through said pipe and discharge it beneath each chamber, said chambers being arranged in such contiguous relation that the deposits therefrom may be worked into a continuous ridge.

1,760,617. APPARATUS FOR SEPARATING AND COLLECTING DUST. JOHN WHITMORE, Belfast, Ireland, assignor to Davidson & Company Limited, Belfast, Ireland. Original application filed Apr. 30, 1924, Serial No. 710,106, and in Great Britain Jan. 28, 1924. Divided and this application filed Dec. 26, 1924. Serial No. 758,111. 12 Claims. (Cl. 183—34.)



1. Apparatus for separating and collecting dust from a dust-laden gaseous current, comprising in combination a primary separating chamber for the centrifugal treatment of the dust-laden current, an inlet therein for the said current, means for imparting a vertical motion to the current on entering the primary separating chamber, a tangentially projecting outlet from the primary separating chamber for the separated dust and a portion of the gaseous current, a secondary separating chamber adapted to finally separate and collect the dust from the said portion of the gaseous current, a tangential inlet thereto, a duct connecting the tangential outlet from the primary separating chamber to the tangential inlet to the secondary chamber, an axial outlet from the primary separating chamber for the main portion of the gaseous current after the separation of the dust therefrom, and a rotary fan connected so as to cause the dust-laden current to flow at the required velocity through the inlet and the purified current through the axial outlet of the primary separating chamber.

1,760,618. LAMP-GUARD HANDLE. DANIEL WOODHEAD, Chicago, Ill. Filed Aug. 2, 1928. Serial No. 296,999. 5 Claims. (Cl. 240—54.)



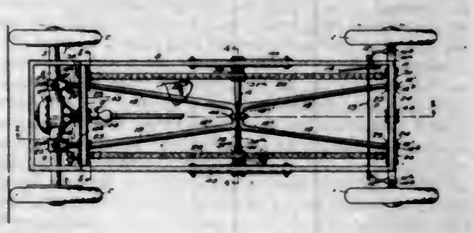
5. A lamp guard handle of resilient material having a nut embedded near its rear end whereby a portion of the material of the handle overlies the rear surface of the nut, a stuffing box having a stem with a loose running thread screwing into the nut whereby the rotation of the box is without important effect to rotate the nut and causes the stuffing box to be drawn towards the nut, the stuffing box having a surface facing forward to engage the material of the handle which overlies the nut, packing within the box and a stuffing nut screwing into the box for effecting a tight seal between the cord and the stuffing box.

1,760,619. CLUTCH-PLATE CONNECTION. HARRY T. WOOLSON, Detroit, Mich., assignor to Chrysler Corporation, Highland Park, Mich., a Corporation of Delaware. Filed Apr. 12, 1926. Serial No. 101,335. 1 Claim. (Cl. 192—68.)



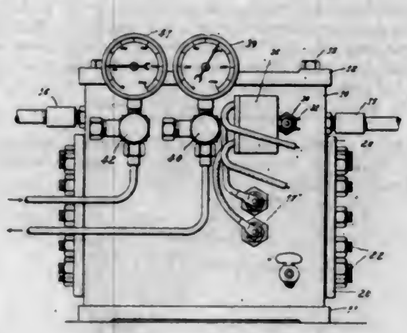
In combination, a shaft having a flanged sleeve thereon, a clutch plate secured to said flange, and a rubber member clamped between said flange and plate, said rubber member having a radially extending rib thereon and said plate and flange having corresponding indentations to receive the rib.

1,760,620. VEHICLE. HARRY J. ALBERS, Cleveland, Ohio. Filed Oct. 29, 1928. Serial No. 315,789. 12 Claims. (Cl. 280—106.5.)



1. In a vehicle, the combination of a main frame, pairs of supporting wheels, axle members connected to said pairs of wheels, respectively, means for connecting said axle members together to trunnion about a longitudinal axis, a transverse intermediate member, and a connecting device between each end of said frame and the adjacent axle member and pivotally connected to the latter on an axis coincident with the axis of said trunnion, and a connecting device between each side of said frame and the adjacent outer portion of said intermediate member and pivotally connected to the latter on a transverse axis, said pivot connections for said devices serving as the sole connections between them and said axle members and intermediate member.

1,760,621. REFRIGERATING APPARATUS. SWAN F. ANDERSON, Rockford, Ill. Filed July 13, 1925. Serial No. 43,077. 22 Claims. (Cl. 62—115.)



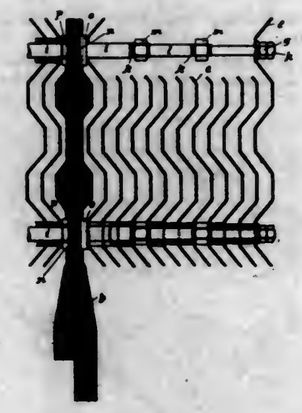
1. In a refrigerating apparatus, a condensing coil, a container therefor, cooling liquid line connections therefor, a liquid tight housing arranged below the normal liquid level in said container, a compressor having communication with said condensing coil and mounted in liquid tight relation on said housing also below the liquid level, and a motor completely encased within said housing having driving connections with said compressor.

1,760,622. SPARKING TOY. LOUIS V. ARONSON, Newark, N. J., assignor to Art Metal Works, Inc., a Corporation of New Jersey. Filed May 3, 1928. Serial No. 274,688. 11 Claims. (Cl. 46—14.)



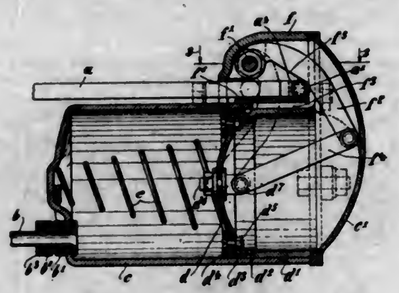
8. Spark producing mechanism comprising spaced rotatable members, an inertia member between said rotatable members, one of said members comprising an abradant surface, a pyrophoric member carried by another of said members, and means for producing relative movement between said rotatable members and said inertia member.

1,760,623. APPARATUS FOR TREATING GASES. MAX AUAIG, Munich, Germany. Filed Apr. 29, 1929, Serial No. 358,997, and in Germany Feb. 26, 1929. 5 Claims. (Cl. 261—83.)



1. An apparatus for the purpose specified, comprising a bar adapted to be rotated in a casing, said bar having alternate threaded and unthreaded surfaces, plates spaced from each other and mounted on said bar and means engaging the threaded surfaces for retaining the plates in position on the bar.

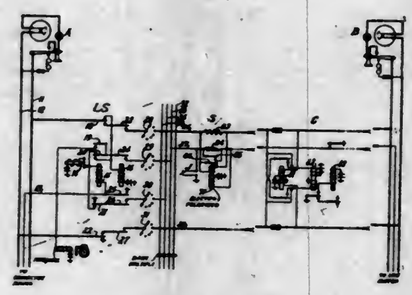
1,760,624. SERVO-BRAKE MECHANISM. OTTO J. BADERTSCHER, Zurich, Switzerland. Filed Sept. 12, 1927. Serial No. 218,869. 3 Claims. (Cl. 188—152.)



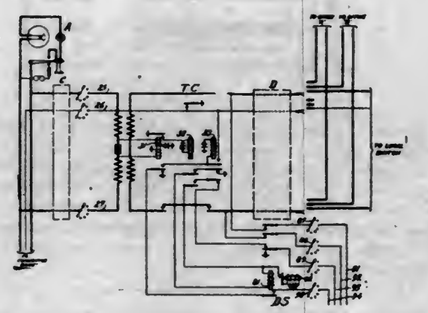
2. A servo-brake mechanism for vehicles comprising a cylinder, a piston movable therein, means to apply an actuating pressure to the piston, a force transmitting lever, means to pivot the lever in operative relation with the cylinder, means to connect the piston with the lever pivotally, a driven member, rollers carried upon the end of the driven member, tracks mounted upon the cylinder and upon which certain of the rollers ride, and a cam face on the lever to engage another of the rollers, angle of contact of the cam face with the axis of the driven member approaching 90° during braking action.

1,760,625. TELEPHONE SYSTEM. JOHN I. BELLAMY, Brookfield, Ill., assignor, by mesne assignments, to Automatic Electric Inc., Chicago, Ill., a Corporation of Delaware. Original application filed Oct. 30, 1924, Serial No. 746,730, Patent No. 1,712,643, dated May 14, 1929. Divided and this application filed Apr. 24, 1928. Serial No. 272,381. 9 Claims. (Cl. 179—9.)

1. In a rotary line switch having wipers which normally stand on the bank contacts a line relay for initiating the hunting movement of said line switch, a combined switching and cut-off relay for disconnecting the associated line from said line relay and for connecting it to the switch wipers when a call is made on the associated line, and for disconnecting the associated line from the line relay when a call is received on the associated line, a third wiper on said switch for supplying current to hold up said line relay on an outgoing call to maintain the wipers connected up, a fourth test wiper for said switch, and circuit connections for supplying potential through the fourth test wiper to guard the selected set of back contacts.



1,760,626. TELEPHONE SYSTEM. JOHN I. BELLAMY, Brookfield, Ill., assignor to Reserve Holding Company, Kansas City, Mo., a Corporation of Delaware. Filed May 25, 1928. Serial No. 280,427. 8 Claims. (Cl. 179—18.)

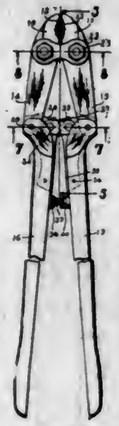


1. In a telephone system, an impulse circuit over which trains of impulses are transmitted incidental to the positioning of automatic switching apparatus, resistance compensating apparatus associated with said impulsing circuit, and testing means controlled over said impulse circuit for adjusting the compensating apparatus in accordance with the resistance of the circuit.

1,760,627. HAND TOOL. WILLIAM A. BERNARD, New Haven, Conn., assignor to The William Schollhorn Company, New Haven, Conn. Filed Aug. 4, 1926. Serial No. 127,159. 4 Claims. (Cl. 81—200.)

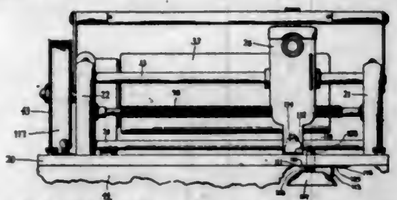
1. In a hand tool, a pair of jaws rockable about a common center, a pair of strap members pivotally secured to said jaws and extending across the common center, shank portions having bifurcated ends extending rearwardly from said jaws and diverging therefrom when said jaws are in closed position, a handle lever bifurcated at one end pivotally connected to the bifurcated ends of said shank

portions, gear segments secured to said handle members at the bifurcated ends thereof, a pair of strap members



pivotally secured to said gear segments by pivot pins, said last mentioned strap members and pivot pins being retained in position by said bifurcated handle members.

1,760,628. PHONOGRAPH. ALFRED V. BODINE, Fairfield, Conn., assignor to Dictaphone Corporation, Bridgeport, Conn., a Corporation of New York. Original application filed May 1, 1926, Serial No. 105,989. Divided and this application filed May 21, 1927, Serial No. 193,256. Renewed Oct. 1, 1928. 18 Claims. (Cl. 116—17.)



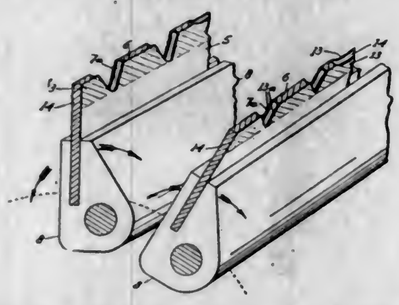
10. In a phonograph, the combination of a frame, a traveling carriage thereon; a fixed striker on the frame; a bell movably mounted on the frame to be brought into engagement with the striker; a trip device mounted on the carriage and adapted to move and subsequently release the bell when the end of the record is approached; and means to cause the bell to engage the striker after it is released.

1,760,629. METHOD OF THREADING BASES. ROBERT BRINDLE, Jr., West Orange, N. J., assignor to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed Feb. 1, 1929. Serial No. 336,899. 14 Claims. (Cl. 250—27.5.)



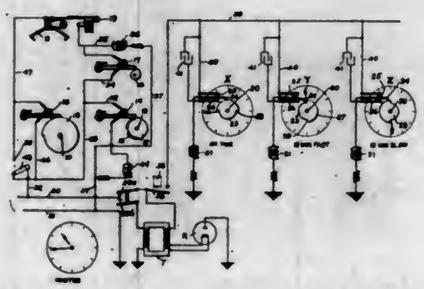
1. The method of threading wires of an electrical device through a member having a plurality of definitely spaced apertures which comprises adjusting the wires in a given spaced relation and in readjusting the wires to positions corresponding to the spaced relation of said apertures.

1,760,630. SCRAPER BLADE AND PROCESS OF HARDENING THE SAME. WILHELM B. BRONANDER, Montclair, N. J., assignor to Standard Tobacco Stemmer Company, a Corporation of Virginia. Filed May 17, 1928. Serial No. 278,386. 4 Claims. (Cl. 131—57.)



1. A self sharpening scraper element, comprising a blade of substantial thickness along one edge having hardened marginal surfaces on each side of said blade and extending along said edge, portions of the edge being cut away to form a working edge having hardened corners and a relatively soft central portion.

1,760,631. SELF-REGULATING CLOCK SYSTEM. JAMES W. BRYCE, Bloomfield, N. J., assignor to International Time Recording Company of New York, Endicott, N. Y., a Corporation of New York. Filed Mar. 4, 1927. Serial No. 172,909. 3 Claims. (Cl. 58—24.)



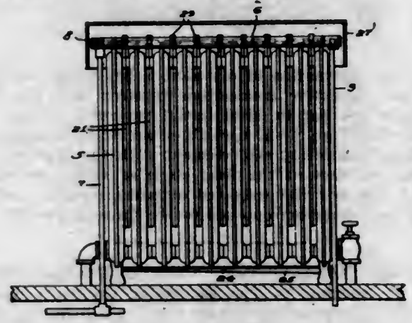
1. The method of actuating and regulating one or more secondary clocks by the use of alternating and direct current impulses comprising sending over a main line alternating current impulses and direct current impulses during alternate periods of time; connecting a secondary clock to the main line so as to be driven by either current impulses of alternating current or by current impulses of direct current during the aforesaid periods; and causing one or more of the said current impulses of one of said periods to be ineffectual upon a secondary clock when a secondary clock is fast or causing the secondary clock to continue to be affected by said current impulses during the same period when the secondary clock is slow.

1,760,632. SYSTEM AND METHOD OF UTILIZING TIDAL ENERGY. DEXTER P. COOPER, Eastport, Me. Filed Dec. 7, 1925. Serial No. 73,595. 12 Claims. (Cl. 61—20.)

4. In a method of utilizing tidal energy, in which water is impounded in a storage bay at high tide, the improvement comprising operating with water direct from the ocean for a period after the bay is filled, and then operating with impounded water and delivering the tail water into a drainage bay until the rising water therein and the falling tide outside have reached the same level.

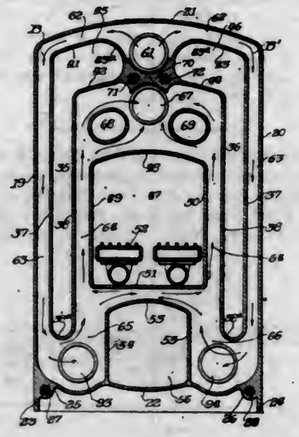


1,760,633. HUMIDIFIER. ROBERT A. CRAWFORD, Chamberlain, S. Dak. Filed Feb. 8, 1928. Serial No. 252,853. 5 Claims. (Cl. 237—38.)



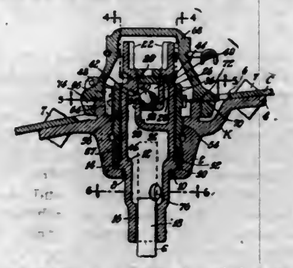
1. In combination, a radiator comprising a plurality of spaced sections, a water pan, shaped and dimensioned to rest upon and extend longitudinally along the top of the radiator throughout substantially the length thereof, elongated wicks extending downwardly from said pan, shaped to lie between the radiator sections and transverse wicks connected to the tops of the first named wicks and having their terminal ends disposed in the water in the pan, said transverse wicks serving to feed the water from the pan to the vertical wicks.

1,760,634. WATER HEATER. AUGUST FLISS, Jr., Chicago, Ill., assignor to Evenheat Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 24, 1925. Serial No. 64,552. 5 Claims. (Cl. 122—225.)



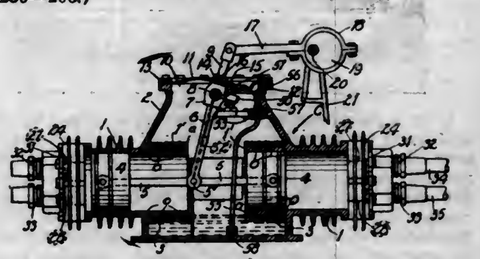
1. A liquid heater including a liquid passageway having substantially adjacent inlet and outlet portions separated by a partition, a combustion chamber substantially surrounded by said liquid passageway, and disposed adjacent to and below said outlet, and a passageway for products of combustion connected to said combustion chamber and interposed in said liquid passageway and having a portion adjacent to said inlet and outlet and separated therefrom by a heat conducting wall.

1,760,635. VALVE MECHANISM FOR CAR TANKS. CLYDE H. FOLMSBEE, Cranford, N. J., assignor to American Car and Foundry Company, New York, N. Y., a Corporation of New Jersey. Filed Sept. 27, 1928. Serial No. 308,606. 15 Claims. (Cl. 137—21.)



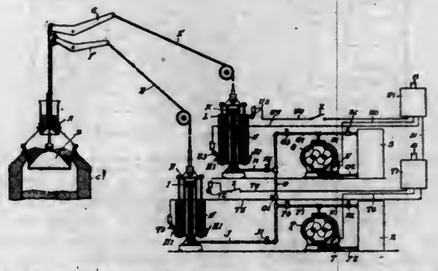
1. In a car tank, a combined relief valve mechanism and valve rod actuator comprising a housing secured to the tank, a hollow valve casting supported by the housing and with which a valve rod is engaged, and a relief valve in said casting.

1,760,636. REFRIGERANT COMPRESSOR. JOHN A. FORTUNE and DAVID E. WHITSON, St. Louis, Mo., assignors of one-third to Edward Schaaf, St. Marys, Mo. Filed Aug. 6, 1928. Serial No. 297,838. 5 Claims. (Cl. 230—206.)



1. A compressor comprising a cylinder, crank case, and piston operable in the cylinder, said cylinder having its skirt perforated and extending into the crank case, and an oil absorbent packing around said skirt.

1,760,637. HYDRAULIC ELECTRIC BELL HOIST. GORDON FOX, Chicago, Ill., assignor to Freyn Engineering Company, Chicago, Ill., a Corporation of Maine. Filed June 2, 1927. Serial No. 195,882. 6 Claims. (Cl. 254—178.)



1. In combination, a member the movement of which is to be controlled, a counterweight for biasing same to a

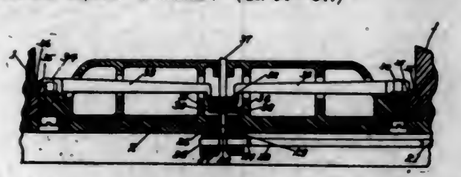
raised position, hydraulic means for lifting said counterweight to permit said member to descend, and a reversible pump for pumping liquid to said hydraulic means and to receive power from said hydraulic means.

1,760,638. CONSTRUCTION TOY. ALFRED C. GILBERT, Hamden, Conn., assignor, by mesne assignments, to The A. C. Gilbert Company, New Haven, Conn., a Corporation of Maryland. Filed Aug. 5, 1927. Serial No. 210,806. 4 Claims. (Cl. 46—35.)



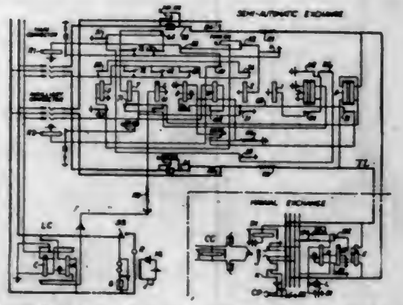
4. A toy construction element for a toy construction set, wherein the elements are provided with circular openings evenly spaced according to a standard, said element comprising an elongated strip-like member, said member being provided with a row of uniformly spaced circular openings therein, said openings having their centers in substantial alignment along the length of the strip and being spaced according to a standard, and the said openings being alternately large and small whereby said strip may accommodate itself to various other elements of the toy construction set.

1,760,639. CONTROL MECHANISM FOR METAL PLANERS. ROBERT GILLHAN, THOMAS ADDISON, FRANK WETZEL, and GEORGE LANGEN, Cincinnati, Ohio, assignors to The Cincinnati Planer Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Aug. 5, 1925. Serial No. 48,390. 3 Claims. (Cl. 90—37.)



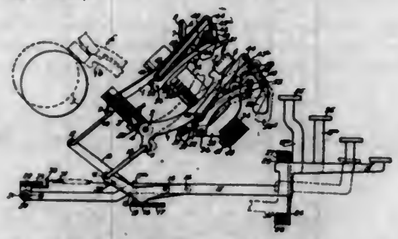
1. In a planer having a housing and a cross rail, and mechanism for elevating the cross rail on the housing, a lever clamp carried by the cross rail adapted to frictionally engage said housing, a slidably mounted rod, said rod having a non-rotatable member threaded thereon, said member adjustable with the rotation of the rod, means interconnected with the rail elevating mechanism for moving said rod, and said threaded member providing means for actuating said lever clamp.

1,760,640. SEMIAUTOMATIC TELEPHONE SYSTEM. FERNAND PIERRE AUGUSTIN GOHOREL, Paris, France, assignor to Automatic Electric Inc., Chicago, Ill., a Corporation of Delaware. Filed June 15, 1928, Serial No. 285,539, and in France Sept. 23, 1927. 14 Claims. (Cl. 179—27.)



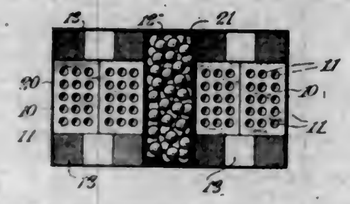
2. In a semi-automatic telephone system wherein telephone lines are accessible to a finder switch and also to a permanently associated connector switch, operator controlled means for setting said connector switch on any accessible line desired by a calling subscriber whose line is connected with by said finder.

1,760,641. TYPEWRITING MACHINE. GEORGE G. GOING, Middletown, Conn., assignor to Remington Typewriter Company, Ilion, N. Y., a Corporation of New York. Filed Feb. 9, 1928. Serial No. 253,076. 17 Claims. (Cl. 197—25.)



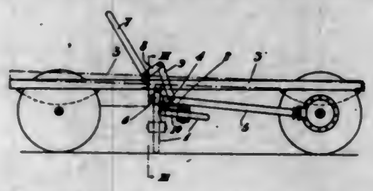
1. The combination of a platen, a key lever, a pivoted type bar, operative connections between said key lever and said type bar to effect initial movement of the type bar towards the platen, a weighted actuating element, and a linkage connecting said element with the type bar and so disposed that at the final stage of return movement of the type bar the weighted actuating element will be moved in a direction opposed to the force of gravity.

1,760,642. GAME OUTFIT. TOM C. GRAHAM, Albany, N. Y., assignor to The Embossing Company, Albany, N. Y., a Corporation of New York. Filed Apr. 2, 1928. Serial No. 266,526. 1 Claim. (Cl. 273—135.)



A game apparatus comprising a plurality of blocks of uniform size constituting playing boards, each having a plurality of depressions arranged in a plurality of rows all said blocks having the same number of depressions and rows; a plurality of sets of dice, three dice in each set, each die having two parallel faces of one color, two parallel faces of another color, and two parallel faces of a third color; and a plurality of marbles to fill the depressions in said blocks, one-third of the marbles being of the first mentioned color, one-third of the second color, and one-third of the third color.

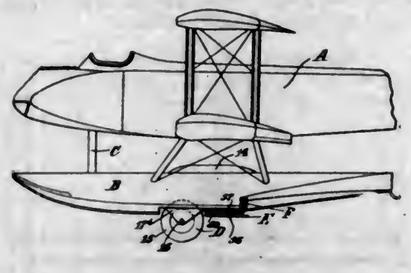
1,760,643. TURNING DEVICE FOR MOTOR VEHICLES. JOHAN ANSHELM GRANSTEDT, Sjalevad, Sweden, assignor of one-half to Gunnar Per Olof Fogelqvist, Sundsvall, Sweden. Filed June 20, 1928, Serial No. 286,990, and in Sweden June 27, 1927. 1 Claim. (Cl. 180—1.)



In a turning device for motor vehicles of the character described, the combination of a motor car frame, a shaft

located in the longitudinal direction of said car frame and adapted to be driven by the motor car engine, a wheel mounted on said shaft, and an auxiliary supporting wheel movably mounted in the motor car frame in such manner that it may be moved to a position with its plane substantially perpendicular to the longitudinal direction of the motor car frame and with its upper portion bearing against and supporting said first-named wheel and its lower portion bearing against the ground thereby raising one end of the motor car frame.

1,760,644. LANDING GEAR FOR AIRPLANES. CHARLES WARD HALL, Larchmont, N. Y. Filed June 11, 1927. Serial No. 198,028. 13 Claims. (Cl. 244—2.)

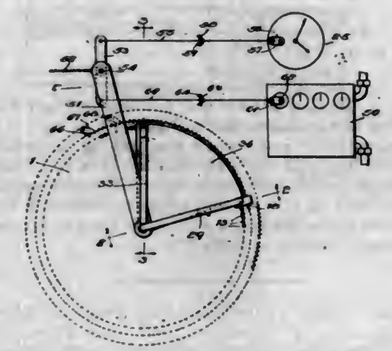


2. In an airplane, a retractably mounted landing wheel, a plurality of retractably mounted landing hooks, and means controllable by the operator of the machine and including an operative connection between wheel and hooks for simultaneously effecting the extension and retraction of said wheel and said hooks.

1,760,645. METAL FOIL. WILFORD J. HAWKINS, Claiborne, Md., assignor to American Machine & Foundry Company, a Corporation of New Jersey. Filed May 16, 1928. Serial No. 278,346. 2 Claims. (Cl. 154—50.)

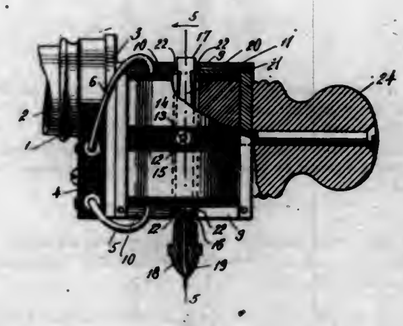
2. Wrapping material comprising paper, and a facing of metal foil composed of lead containing from ¼ to ½ of 1% of magnesium and rolled to a thinness of approximately .0005".

1,760,646. METER. ALFRED HERZ, Chicago, Ill. Filed Aug. 19, 1925. Serial No. 51,238. 24 Claims. (Cl. 234—34.)



1. The method of indicating demand over a fixed period of time which comprises moving a series of markers of fixed number corresponding to the units of time in the fixed period of time from a zero position along a predetermined path, separating said markers by distances along the path corresponding to the demands for successive units of time, and measuring the advance from zero of the foremost marker in terms of demand.

1,760,647. ELECTRICAL PICK-UP. MARCUS C. HOPKINS, Washington, D. C., assignor to Hopkins Corporation, New York, N. Y., a Corporation of Delaware. Filed Nov. 18, 1925. Serial No. 69,807. 4 Claims. (Cl. 179—100.41.)



1. In a device for generating speech current from a phonograph record, the combination of a pair of permanent magnets, opposing pole pieces clamped therebetween and spaced apart to form a pair of air gaps, an armature positioned in said air gaps, a pivotal support for said armature, cushioning members mounted on said pole pieces and engaging said armature at all times to position said armature when at rest and control its movement when in motion, means for supporting said magnets on the tone arm of a phonograph, and means for operatively connecting said armature with a sound record.

1,760,648. SCRAPER-BLADE ATTACHMENT FOR BROOMS. HERMAN S. JOHNS, Ada, Okla. Filed Oct. 9, 1928. Serial No. 311,348. 2 Claims. (Cl. 15—111.)



1. A scraping blade attachment for brooms comprising a plate curved longitudinally to accommodate itself to the head of the broom upon which it is adapted to repose, a blade formed on one edge of the plate and offset with relation thereto, and means including bendable prongs arranged at the opposite sides of the blade and adapted to be embedded in the end face of the head of the broom for holding the plate fixed relatively to said head.

1,760,649. COMBINED HEDDLE AND LINGO AND METHOD OF MAKING THE SAME. JOHN JACOB KAUFMANN, Elkins Park, Pa., assignor to Steel Heddle Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed June 24, 1927. Serial No. 201,064. 14 Claims. (Cl. 139—90.)



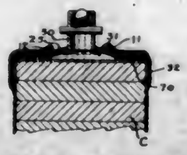
1. A heddle having an eye near the lower end thereof, and a lingo comprising a rod having a slot at its upper end within which the lower end of the heddle is fixedly positioned, the slotted portion of the lingo having rigid side walls closely engaging and gripping the lower portion of the heddle.

1,760,650. GOGGLES. KARL KRUENING, Jamaica, N. Y. Filed Sept. 20, 1927, Serial No. 220,659. Renewed Apr. 15, 1930. 10 Claims. (Cl. 2—14.)



9. In goggles of the character described, a lens frame of angular cross-section having a flange shaped to fit the contour of the face and a second flange extending outwardly therefrom, a lens supported on said second flange and means for abutting said lens, said means comprising a strip secured to and extending upwardly from said second flange at an acute angle thereto and having edge contact with said lens.

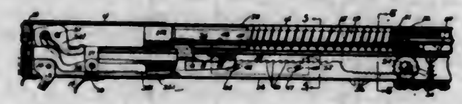
1,760,651. SPRING COVER. BENNO B. LEUSTIG, Cleveland, Ohio. Filed Feb. 28, 1925. Serial No. 12,247. 13 Claims. (Cl. 267—37.)



13. A vehicle spring cover of the character described, comprising a fabric body member having its opposite edges adapted to lie on one side of the spring, means for drawing said edges toward each other, a member underlapping both of said edges and extending longitudinally of the spring, said member having an opening, and a grease gun nipple extending through said opening and between said edges.

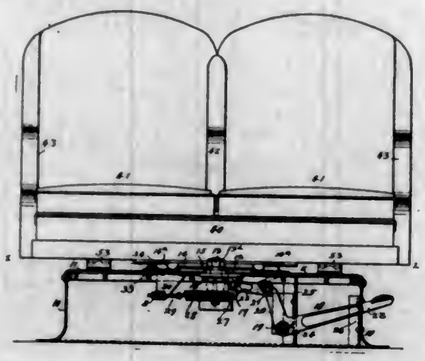
1,760,652. AIR GUN. CRAWFORD C. LOOMIS, Ilion, N. Y., assignor to Remington Arms Company, Inc., a Corporation of Delaware. Filed Sept. 28, 1928. Serial No. 308,903. 18 Claims. (Cl. 124—10.)

1. In an air gun comprising a spring actuated plunger, a cocking mechanism therefor, said cocking mechanism having a reciprocating element provided with a ratchet rack, a pivoted member adapted to cooperate with said



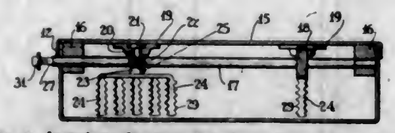
rack when it is moving in one direction and means carried by said element to disconnect said member from said rack and permit its return to normal.

1,760,653. CAR SEAT. WILLIAM J. MAYER, Philadelphia, Pa., assignor, by mesne assignments, to American Car and Foundry Company, New York, N. Y., a Corporation of New Jersey. Filed Apr. 21, 1928. Serial No. 271,815. 3 Claims. (Cl. 155—96.)



1. The combination of a base, a seat plate arranged to slide on the base and turn thereon, a base plate secured to the seat plate, a seat structure pivoted to the base plate, means for moving the seat structure longitudinally, the seat plate and the base being slotted, and a plate on the seat structure adapted to extend through said slots when the seat is in its normal position, said plate having a notched projection to engage a lug on the base to hold the seat structure rigidly to the base when in its normal position.

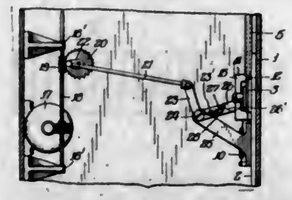
1,760,654. DEVICE FOR STIRRING FROZEN DESSERTS. RALPH B. MAXWELL, Modesto, Calif. Filed Oct. 16, 1929. Serial No. 399,907. 4 Claims. (Cl. 259—104.)



1. In a freezing drawer for domestic refrigerators, a lid closely fitting and removably mounted on said drawer, a horizontal shaft and gearing mounted on the inner side of said lid and said shaft terminating in a shank beyond the edge of the lid, stirring devices rotatably mounted on the inner side of said lid and extending inwardly toward the bottom of the drawer in mesh with the gearing, means for manually turning said shaft.

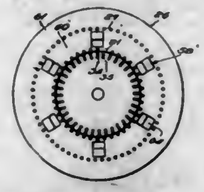
1,760,655. CHECK-CONTROLLED SWITCH MECHANISM. JOHN F. MEYER, Chicago, Ill. Filed Dec. 8, 1928. Serial No. 324,620. 4 Claims. (Cl. 194—6.)

1. A mechanism of the character described comprising a coin receiver and an eccentrically pivoted lever adapted to support a coin therebetween, an electric circuit including said receiver and lever and adapted to be completed by said coin, a motor in said circuit, and means operated by said motor and comprising a pivoted tripper arranged to travel in a path which includes said lever and to pass said



lever, said tripper being mounted to yield in passing the lever in one direction and adapted to engage and operate the lever in passing in the opposite direction to release the coin.

1,760,656. ELECTRICAL APPARATUS. MARCEL MONEYRON, Chicago, Ill. Filed Apr. 9, 1927, Serial No. 182,376, and in France Dec. 10, 1926. 9 Claims. (Cl. 172—238.)



1. A device of the kind described for transforming alternating current into alternating current of a different number of phases, said device having a winding for each of said currents, means for varying the effective value of said second-mentioned current while the no-load voltage thereof remains substantially unchanged, said means including means for varying the number of effective turns of said windings whereby the transformer ratio remains substantially unchanged.

2. A device of the kind described for transforming alternating current into alternating current of a different number of phases, said device having a winding for each of said currents, means for varying the number of effective turns in said windings to vary the effective value of the output current, and a plurality of movable laminated cores controlling the ratio of the reluctances of the magnetic paths associated with said windings for varying the effective value of the output current.

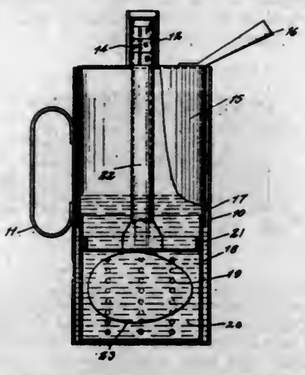
9. A rotary phase converter of the kind described for transforming alternating current into alternating current of a different number of phases, said converter comprising a stator having a winding for each of said currents and having magnetic paths associated with said windings, and means movable with respect to said stator for varying the ratio between the reluctance of one of said paths and the reluctance of the other to vary the effective current induced in one of said windings.

1,760,657. TOY PROJECTILE. MANUEL MONGE, Greenwood, Mass. Filed Aug. 17, 1928. Serial No. 300,245. 2 Claims. (Cl. 46—37.)



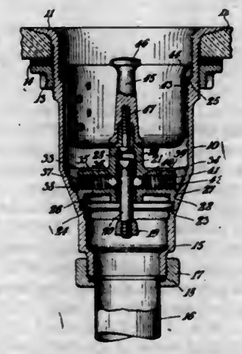
1. A toy projectile of the class described comprising a hollow thin walled domed shell of stearic acid, said shell being seamless and continuous except for a filling opening of small area, relative to the maximum cross-section of the shell, whereby the shell possesses substantially the maximum strength inherent in a hollow body having uninterrupted domed walls, the wall of the shell being of substantially uniform thickness throughout and having a smooth outer surface, and a member separate from the body of the shell for covering the opening therein.

1,760,658. EGG-TESTING DEVICE. JOSEPH PAMPE, Homer City, Pa. Filed July 10, 1928, Serial No. 291,572. Renewed Apr. 5, 1930. 1 Claim. (Cl. 99—6.)



An egg tester of the class described comprising a pair of water containing vessels one within the other, the inner vessel composed of two parts screwed together and having perforated walls in one of its parts adapted to receive an egg, handles for said outer and said inner vessels, a neck part on said inner vessel, a pointer thereon, a float in said inner vessel normally resting by its own weight upon the egg, a graduated stem on said float adapted to rise with said float to indicate by said pointer the quality of the egg to be tested, an egg of first class quality sinking to the bottom of the inner container, and allowing the graduation of the stem to sink to its lowest level, with the indication "F" coming opposite the pointer, an egg of good quality floating near the bottom of the inner container to raise said float and its graduated stem to bring the indication "G" opposite the egg to be of good quality, an egg of inferior quality with gas development raising to a higher level in the lower inner container and lifting the float and its stem to bring its legend "B" opposite the pointer for indicating the inferior quality of the egg.

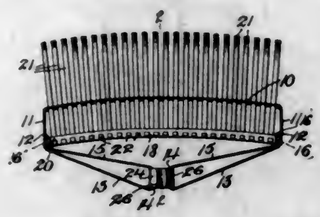
1,760,659. WASTE-PIPE FITTING. ABRAM N. PASMAN, Waterbury, Conn., assignor to Scovill Manufacturing Company, Waterbury, Conn., a Corporation of Connecticut. Filed June 6, 1929. Serial No. 368,965. 17 Claims. (Cl. 4—287.)



7. In a waste pipe fitting, a coupling, a stopper, a strainer dish revoluble on the stopper, a lift stem con-

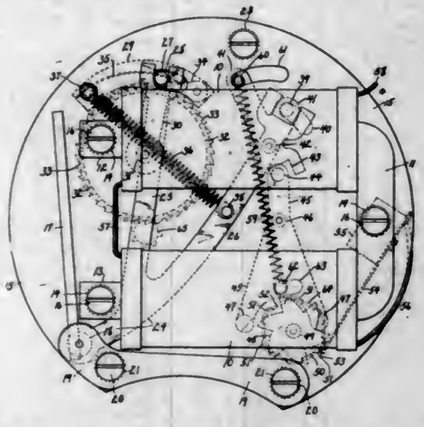
nected to the stopper with a portion of the strainer dish intermediate between the same and the stopper, and a lock screw passing through a portion of the stopper and into the said lift stem for locking the lift stem to the said stopper, the said stopper, strainer dish and lift stem being movable within the stopper to positions in which the stopper is seated and unseated and also being entirely removable as a unit from the said coupling.

1,760,660. RAKE. CARL E. PETERSON, Upper Montclair, N. J., assignor to Eastern Tool & Manufacturing Company, Bloomfield, N. J. Filed Mar. 2, 1929. Serial No. 343,951. 1 Claim. (Cl. 55—10.)



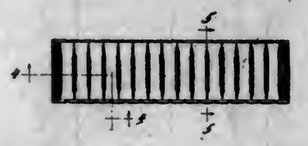
A rake comprising a strip of metal forming a cross-arm and rearwardly and outwardly extending side-arms having off-set portions therein, said strip then extending inwardly and rearwardly and then outwardly and forwardly with its end in engagement with the cross-arms at the offset portions, and a second cross-arm in rear of the first with its end bent around the side arms and the ends of the strip and in rear of said offset portions, the cross-arms having openings for receiving tines.

1,760,661. CONTACT MECHANISM FOR ELECTRIC CLOCKS. WILSON E. PORTER, New Haven, Conn., assignor to The New Haven Clock Co., New Haven, Conn., a Corporation. Filed Dec. 27, 1926. Serial No. 157,066. 6 Claims. (Cl. 200—62.)



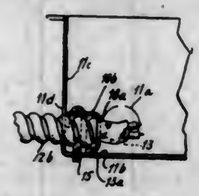
6. In a contact-mechanism for electric clocks of the type in which an armature is moved in one direction by a driving-spring and in the opposite direction by an electromagnet, the combination with a rotary contact-member having a plurality of segregated contact-points, of a yielding contact-member co-acting therewith, a star-wheel connected to the said rotary contact-member for driving the same and having its arms formed with cam-like outer edges, and spring-actuated snap-action means for imparting step-by-step movement to the said rotary contact-member, including a pair of interconnected pivotal levers and a spring connected to each of the said levers for effecting their snapping action by the shifting of its position with respect to their dead-centers.

1,760,662. BRACELET CHAIN. EUGEN PRESTINARI, Irvington, N. J., assignor to Gemex Company, Newark, N. J., a Corporation of New Jersey. Filed June 14, 1929. Serial No. 371,011. 1 Claim. (Cl. 59—80.)



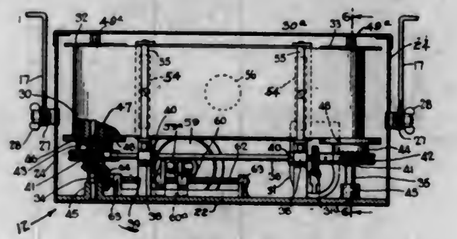
A bracelet chain comprising a series of generally rectangular-shaped frame links, each having a longitudinal slot therein, and sheet metal links each comprising a body portion with oppositely extending wings, each extending through the slot of a frame link seated directly in contact with the body portion and folded together with their edges abutting, and end sections on said frame links folded towards said body portions to form margins for said sheet metal links.

1,760,663. BUSHING-CLAMP-CONNECTING DEVICE. EDWARD M. ROSENFIELD, New York, N. Y. Filed June 23, 1927. Serial No. 200,803. 2 Claims. (Cl. 247—25.)



1. A one piece bushing clamp for securing armored electric cables in position in a junction outlet box comprising a top wall, a front wall integral with said top wall, said front wall having an opening therein smaller than the external diameter of the cable armor, the rim of said opening forming a bushing for protecting the unarmored portion of the cable against injury, and a rear wall spaced from said front wall depending from the top wall and integral therewith, said rear wall being shaped to the contour of the cable armor, and a securing device engaging said clamp and a wall of the junction box for forcing the lower edge of the front wall against an interior wall of the junction box and for forcing said rear wall into clamping engagement with the cable armor, said clamp being wholly within the junction box.

1,760,664. ELECTRICALLY-OPERATED SIGN. EDWARD M. ROSENFIELD, New York, N. Y. Filed Sept. 11, 1929. Serial No. 391,748. 10 Claims. (Cl. 40—31.)



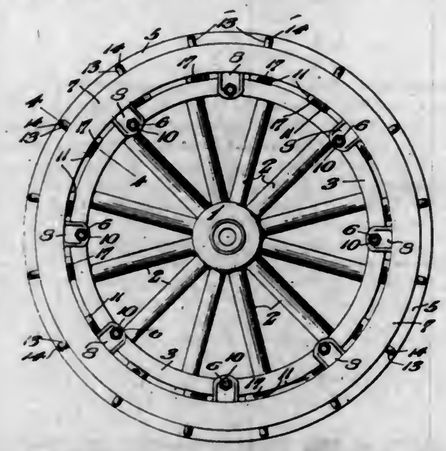
1. In a sign of the character described, a base, a pair of spaced stationary shafts upstanding on said base, a turnhead revolvably mounted on each shaft, a motor including a transmission for turning said heads simultaneously, means for controlling the direction of rotation of the motor permanently coupled to and driven by one of said heads, and a spool mounted to turn with each of said heads.

1,760,665. SHOE. DAVID E. SPATHELF, University City, Mo., assignor to Hamilton, Brown Shoe Company, St. Louis, Mo., a Corporation of Missouri. Filed Nov. 14, 1927. Serial No. 233,064. 2 Claims. (Cl. 36—19.)



1. In a McKay sewed shoe, an outsole, an insole provided with an arch support in the form of a reinforcing wing formed integral with the body portion of said insole and extending laterally therefrom, a continuous row of McKay sewed stitches extending through the inner side margin of the shank of said outsole and also through said insole, said continuous row of stitches being located approximately in a line where the arch support merges into the body of said insole, and an upper secured by said continuous row of stitches, said upper having an inturned portion directly below said arch support and a similar inturned portion at the opposite side of the shoe, the outer face of which contacts directly with the top face of said outsole.

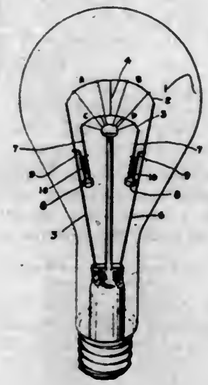
1,760,666. SAFETY EMERGENCY ATTACHMENT FOR WHEELS. JOHN P. SPICER, Philadelphia, Pa., assignor, by mesne assignments, of one-half to John P. Spicer, one-fourth to Albin H. Cornog, and one-fourth to Adelaide V. Engle Cornog. Filed Apr. 3, 1925. Serial No. 20,315. 1 Claim. (Cl. 301—51.)



An attachment for wheels comprising an annular member having a plain exterior surface and being of channel cross section, the open side of said annular member facing said wheel, and a plurality of cylindrical casings formed integral with and concealed from view by said annular member, each of said cylindrical casings having at its outer end a flanged opening, a flanged bushing fitting in said opening, a spring pressed pin having its outer end pointed and having a shoulder intermediate its ends abutting against said bushing, the inner portion of said pin being disposed within said casing, a vertically slotted sleeve threaded into the other end of said casing and adapted to maintain said pin in position, and fastening devices common to said casing and said sleeve.

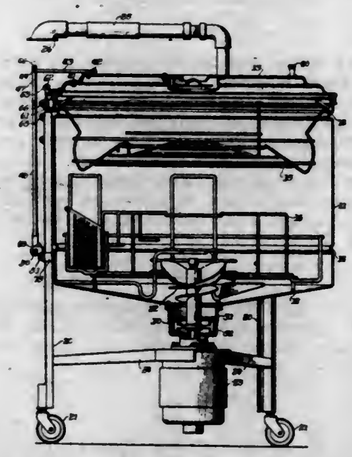
1,760,667. MULTIFILAMENT LAMP. WILLIAM CHARLES SPROESSER and ERNEST ANTON LEDERER, East Orange, N. J., assignors to Westinghouse Lamp Company a Corporation of Pennsylvania. Filed Oct. 8, 1926. Serial No. 140,281. 4 Claims. (Cl. 176—26.)

1. An incandescent electric lamp having a main filament and a reserve filament therein, leading-in conductors for said filaments, from which said reserve filament is normally insulated, said main and reserve filaments being connected electrically intermediate their lengths whereby



upon destruction of the main filament the potential difference across said insulation is increased to break down the same and bring into circuit a portion of the reserve filament.

1,760,668. DISHWASHING MACHINE. EDGAR S. STODDARD, Berwyn, Ill., assignor to The Conover Company, Chicago, Ill., a Corporation of Illinois. Filed May 24, 1928. Serial No. 280,128. 14 Claims. (Cl. 220—24.)

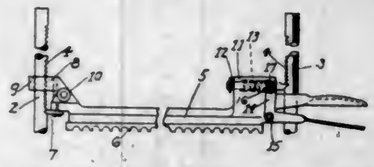


1. In a hinge and lid support construction for washing machines, a hinged lid and a vertical bar, the lower end of which is pivotally attached to the rear leg of the machine at a point substantially below the top of the machine and the upper end of which is provided with a T-shaped portion which is adapted to support the lid when in inverted horizontal position, which T-shaped portion is connected to the lid by swinging guide rods.

1,760,669. MEAT CLAMP. ELMER G. STRECKFUSS, Cincinnati, Ohio, assignor to The Cincinnati Time Recorder Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Mar. 20, 1926. Serial No. 96,297. 7 Claims. (Cl. 146—217.)

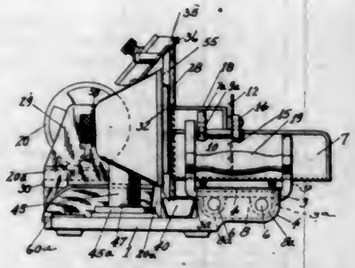
1. In a meat clamp, the combination with a pair of fixed vertical rack bars, a clamp bar, means on the clamp bar surrounding said rack bars and slidable thereon, said

clamp bar being pivotally connected to one of said means, and means on the clamp bar at the said pivotally connected end for engaging the adjacent rack bar to hold the



clamp bar against movement, said clamp bar having position adjusting means actuative with one hand, the movement of which in one direction is effective for regulating the position of said clamp bar relative to both rack bars.

1,760,670. MEAT SLICER. ELMER G. STRECKFUSS, Cincinnati, Ohio, assignor to The Cincinnati Time Recorder Company, Cincinnati, Ohio, a Corporation of Ohio. Filed July 14, 1927. Serial No. 205,772. 5 Claims. (Cl. 146—102.)



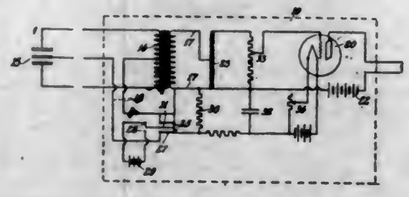
1. In a slicing machine, the combination with a base, a rotary knife supported on said base, a trough having guide rods therein, and having its ends higher than its sides, frame means slidingly mounted on the guide rods, and extending out from the sides of the tray, a cover plate secured to the ends of the trough, and hence lying out of the path of said frame means, a tray mounted on said frame means, said knife located near one of said sides, and a narrow pan located adjacent the said side and beneath the knife for catching particles of the sliced article.

1,760,671. HOIST FOR AUTOMOBILES AND THE LIKE. PATRICK J. SULLIVAN, Boston, Mass. Filed Sept. 26, 1928. Serial No. 308,360. 4 Claims. (Cl. 294—78.)



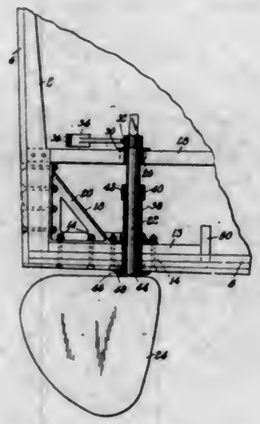
1. A grappling device for hoisting apparatus embracing in its construction a suspension member adapted to be attached to a suspension cable, a plurality of radiating arms detachably secured to said suspension member in fixed angular relation to one another, said arms being provided at their outer ends with inwardly turned hook-like claws adapted to embrace a wheel periphery, means for clamping said arms and said suspension member together, said means preventing angular displacement of the arms with relation to one another when so clamped together.

1,760,672. COMBINED MICROPHONIC TRANSMITTER AND AMPLIFIER THEREFOR. LINCOLN THOMPSON, Naugatuck, Conn., assignor, by mesne assignments, to Wm. H. Bristol Talking Picture Corporation, Waterbury, Conn., a Corporation of Connecticut. Filed July 21, 1927. Serial No. 207,372. 9 Claims. (Cl. 179—171.)



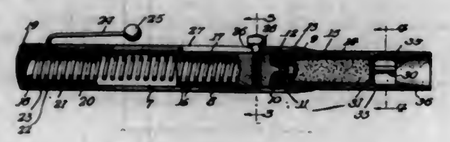
1. In combination: a microphonic transmitter; an audio frequency amplifier connected therewith; and an energising circuit for the microphone in series with the plate circuit of the amplifier.

1,760,673. BOAT CONSTRUCTION. ALBERT W. W. VAN HOORN, Wilmington, Del., assignor to American Car and Foundry Company, New York, N. Y., a Corporation of New Jersey. Filed Dec. 14, 1929. Serial No. 414,000. 5 Claims. (Cl. 9—6.)



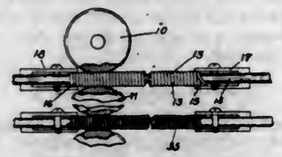
2. In a boat, horn timber, a transom post, a casting secured to said horn timber and transom post and provided with a rudder-port adjacent one end thereof.

1,760,674. PISTOL. PETER VON FRANTZIUS, Chicago, Ill. Filed Sept. 13, 1928. Serial No. 305,780. 5 Claims. (Cl. 42—1.)



3. In a pistol, the combination of a cylindrical stock, a spring-pressed firing element in the stock, a breech plug in the stock, a barrel for a cartridge, and a wad cutter in the barrel disposed adjacent the outer end of the cartridge shell to prevent insertion of a cartridge with a bullet.

1,760,675. METHOD OF FORMING DIES. STEN WADSTEN, Bloomfield, N. J., assignor to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed Jan. 12, 1928. Serial No. 246,294. 5 Claims. (Cl. 76—107.)



1. The method of producing a coil winding die which consists in supporting a helically coiled section of wire having the turns thereof in given spaced relation, moving a blank having a curved surface in contact with said coil, applying a force to produce an initial impression of said coil in said blank and in moving said blank into contact with another coiled section having the turns thereof in a different spaced relation.

1,760,676. TOE PLATE. JOHN F. WAIDELICH, Jr., Jackson, Mich. Filed May 13, 1929. Serial No. 362,557. 1 Claim. (Cl. 36—73.)



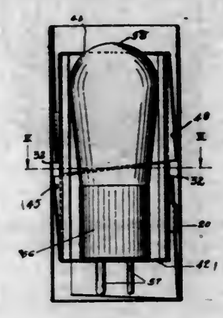
The combination of a toe plate formed from a substantially circular stamping of thin metal provided with an upturned peripheral marginal flange producing a curved connecting surface with the floor engaging surface of the protector and a flaring edge for insertion within the material to which the protector is to be applied, said protector having a centrally depressed hole with an upturned flange around the same adapted to be depressed into the material to which the protector is applied, and a nail having a tapered head filling said central hole and disposed below the floor engaging surface of the protector, and fastening the protector to the material to which the protector is applied.

1,760,677. LAMP. ALFRED F. WIEDENHOEFT, Chicago, Ill. Filed Jan. 5, 1929. Serial No. 330,476. 5 Claims. (Cl. 240—81.)



1. In a lamp of the character described, the combination of a hollow upright adapted to receive electric wires, said upright having a yoke shaped portion forming a central aperture and two curved arms joined above and below the hollow portion, at least one of said arms being provided with a butter for the reception of an electric connection passing through the hollow support, said yoke shaped portion having a cutout, an indicia bearing plate for the opening in said yoke shaped portion, a keeper or plug for the indicia bearing plate, and means for holding said keeper in position.

1,760,678. LOCKING CARTON. HAROLD AMATEL, East Orange, N. J., assignor to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed July 20, 1927. Serial No. 207,089. 2 Claims. (Cl. 229—6.)



1. A radio tube carton comprising resilient supporting means movable longitudinally thereof for holding a tube within the carton, means for limiting the degree of movement of said supporting means within said carton, and means for locking said supporting means to prevent removal of said tube.

1,760,679. GARMENT PRESS. ERNEST D. ANDERSON, New York, N. Y., assignor to Troy Laundry Machinery Company, Inc., New York, N. Y., a Corporation of Delaware. Filed Jan. 12, 1928. Serial No. 246,228. 5 Claims. (Cl. 192—131.)

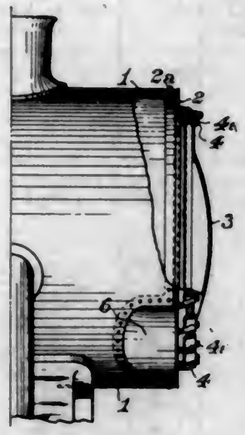


1. In a pressing machine, a valve control mechanism comprising a rotatable valve member, an arm attached to said member, a lever pivotally connected intermediate its ends to said arm, a second lever pivotally connected at one end to a fixed point and at an intermediate point engaging one end of the first mentioned lever, said levers serving, upon movement of their free ends, to rotate said valve member and thereby operate said valve.

1,760,680. STEAM-BOILER SMOKE BOX. GEORGE B. ASHWORTH, Amsterdam, N. Y. Filed Jan. 14, 1928. Serial No. 246,726. 3 Claims. (Cl. 110—178.)

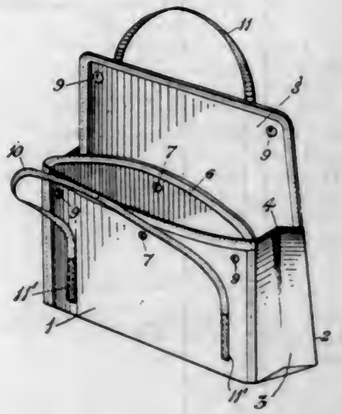
1. In a steam boiler, the combination of a smoke box having an annular front projecting inwardly provided with a sealing face about its inner margin; a closure for the front of the box having a marginal flange directed toward the box provided with a sealing face engaging the sealing face of the annular front, one of said faces being formed frusto-conical and the other face being curved in

cross section providing thereby substantially line contact between the faces; and pressure adjustable clamping means for forcing the faces together in sealing relation whereby



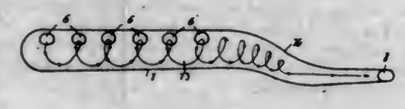
the pressure exerts a contracting force against said flange tending to produce a wedge fit between the inclined and curved engaging surfaces.

1,760,681. LADY'S HAND BAG. HUGO BAROL, Philadelphia, Pa. Filed Apr. 16, 1927. Serial No. 184,254. 1 Claim. (Cl. 150—28.)



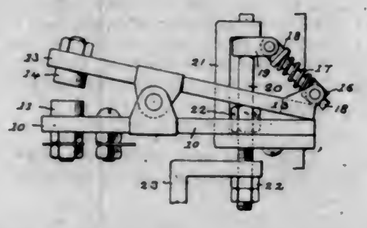
A bag of the character described, comprising side and bottom portions formed from a single piece of material, a rigid member applied to the bottom to provide a relatively wide cross sectional area therefor at all times, end pieces of a width equivalent to the bottom portion stitched at the side edges thereof to the edges of said side portions and creased inwardly from the top thereof to produce upwardly converging side portions when the bag is closed and permit approximately the same cross sectional area throughout the height when the bag is open, a central partition wall stitched to the inner face of one side portion by the same means stitching the ends thereto, a relatively short flap formed integral with the upper end of said partition and overlapping the outer face of the last mentioned side portion, means to removably secure said flap to the outer face of said last-mentioned side portion, a relatively large flap formed integral with the upper portion of the opposite side portion adapted to overlap the first mentioned flap and the first mentioned side portion to enclose the upper portion of the bag, additional means to removably secure the second meutioned flap to the outer face of the first mentioned side portion below the aforesaid securing means and relatively long hand loops stitched at their ends for a reasonable distance of their length to the outer faces of the side portions of the bag well below the upper edges thereof, the stitching of the loop terminating in a plane well below the securing means for the large flap and said loops being adapted to project well above the bag top, as and for the purposes described.

1,760,682. COLLECTING CONDUIT FOR THE EXHAUST PIPES FOR INTERNAL-COMBUSTION ENGINES. FRIEDRICH AUGUST BOYSEN, Leipsig, Germany. Filed Oct. 20, 1926, Serial No. 142,856, and in Germany Apr. 22, 1925. 12 Claims. (Cl. 137—160.)



1. The method of suppressing the individual explosion noises of exhaust gases from an internal combustion engine, which comprises imparting a gyratory motion to the gas streams almost immediately when the same leave the exhaust ports of said engine, the path of which motion initially has a diameter several times that of the entering gas streams, and which path is unobstructed whereby the gas streams are finally again reduced to the same cross-sectional size as they initially were individually, and passing said gases into a muffler.

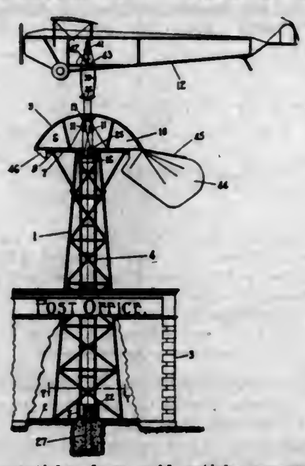
1,760,683. PEDAL-OPERATED SWITCH. GEORGE A. BURGESS, Waukegan, Ill., assignor to Chicago Hardware Foundry Company, North Chicago, Ill., a Corporation of Illinois. Filed Nov. 29, 1927. Serial No. 236,490. 1 Claim. (Cl. 200—67.)



A switch mechanism for electric lavatory driers of the herein described pedestal type, comprising a controlling switch of the snap type, a reciprocating rod having operative relation to said switch, a toggle link pivotally connected at one end to said reciprocating rod, an abutment head journalled on the movable contact carrying member of the switch and having guiding connection with the other end of the aforesaid toggle link, a spring having an abutment at one end on the said toggle link and at the other end against the aforesaid abutment head, a depending rod, means for yieldingly moving said depending rod in one direction, a pedal lever having operative connection with the lower end of said depending rod, and a connecting means of the limited independent movement type intermediate of the aforesaid reciprocating rod and the said depending rod.

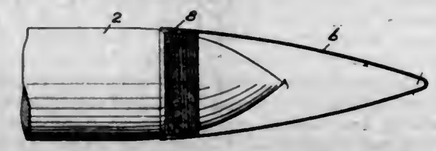
1,760,684. AIR-MAIL EXCHANGE. HOBBS E. CLIFFORD, Knightstown, Ind. Filed Feb. 8, 1929. Serial No. 338,582. 12 Claims. (Cl. 258—1.)

1. In an air mail exchange, a tower structure, an article suspending rack associated therewith, means for positioning said rack at either extremity of said tower structure, and means associated with an aerial craft adapt-



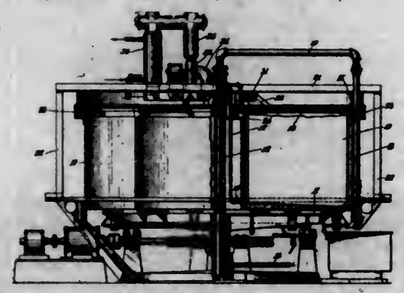
ed to remove articles from said article supporting rack and deposit other articles thereon when the first rack is moved to the upper extremity of said tower.

1,760,685. PROJECTILE. JOHN L. COX and BERNARD M. FINE, Philadelphia, Pa. Filed Dec. 5, 1927. Serial No. 237,655. 8 Claims. (Cl. 102—28.)



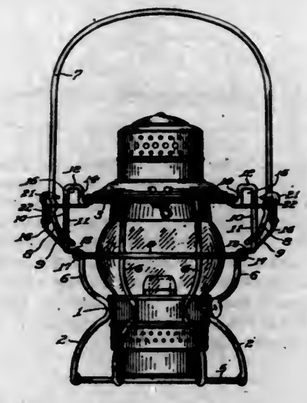
1. A projectile having a circumferential forwardly facing shoulder, in combination with a windshield of drawn steel whose rear end is of substantially no greater thickness than its main body and a ring permanently secured to the rear end thereof, said ring having an interior thread engaging an exterior thread on the projectile and abutting against said shoulder.

1,760,686. PASTEURIZING APPARATUS. ALBERT J. DAVIS, New York, N. Y. Filed Jan. 19, 1928. Serial No. 247,822. 8 Claims. (Cl. 257—208.)



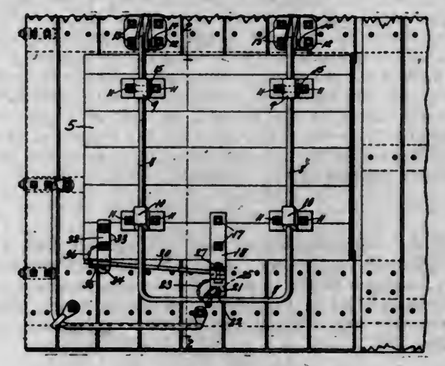
5. A milk pasteurizing apparatus comprising a plurality of holders, a cover extending thereover, said cover and holders being mounted for rotation of one relative to the other, means for establishing a seal between said cover and holders, an annular header between said cover and holders, nozzles leading from said header, a blower having its inlet communicating with the space below said cover and having its outlet communicating through a conduit with said header and heating means surrounding said conduit.

1,760,687. BAIL HOLDER. NATHAN H. DAVIS, Philadelphia, Pa., assignor to Keystone Lantern Company, a Corporation of New Jersey. Filed June 3, 1927. Serial No. 196,253. 7 Claims. Cl. 240—52.)



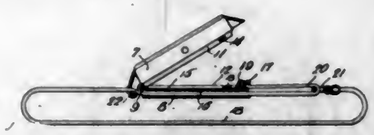
1. In a bail-holder, the combination with means for mounting an extremity of the bail for both pivotal and sliding movement, of a bracket located at an intermediate point in the path of such sliding movement and having an opening through which said extremity is freely movable, and means carried by said bracket for engaging the bail at a point removed from such extremity thereof, to restrain the bail against pivotal movement.

1,760,688. HATCH-COVER-SUPPORTING MEANS. WILLIAM F. DIETRICHSON, Webster Groves, Mo., assignor to American Car and Foundry Company, New York, N. Y., a Corporation of New Jersey. Original application filed Aug. 20, 1925, Serial No. 51,516. Divided and this application filed Oct. 16, 1926. Serial No. 142,136. 8 Claims. (Cl. 292—262.)



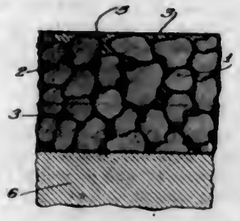
1. A device for supporting a pivoted closure in elevated position comprising a bar attached to the closure and projecting downwardly therebeyond in the form of a perforated extension, a fixed perforated keeper, a fastening element for connecting the perforated extension and keeper to normally retain the closure in closed position, and a support pivotally secured at one end to the first mentioned bar and adapted to be swung to a substantially vertical position when the closure is open, the support having an opening at its lower end for registration with the opening in the keeper and adapted for engagement by said fastening element only when the closure is in open position.

1,760,689. BRACELET FOR WATCHES OR THE LIKE. CHARLES A. DOMLER, Providence, R. I., assignor to The Hadley Company, Inc., Providence, R. I., a Corporation of Rhode Island. Filed July 30, 1929. Serial No. 382,116. 4 Claims. (Cl. 224—4.)



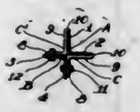
1. An article of the class described comprising a case having front and back sections, a bridge member within the back section and extending approximately from one side to the other of said section to furnish an elongate, open-ended channel, and a bracelet slidable lengthwise through the channel, one end of the bracelet being attached to the case and the opposite end thereof being adjustably connected to a looped portion of the bracelet, so that the effective length of the bracelet may be adjusted by varying the length of its looped portion.

1,760,690. PAVEMENT AND PROCESS OF LAYING. WALTER H. FLOOD, Chicago, Ill. Continuation of application Serial No. 96,366, filed Mar. 22, 1926. This application filed June 17, 1929. Serial No. 371,380. 3 Claims. (Cl. 94—22.)



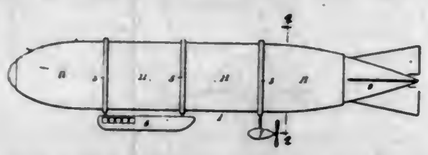
1. A cold laid pavement comprising a course of stones individually coated with soft or liquefied bituminous material of sufficient thickness to prevent adherence of cement to the stones, and a hydraulic cement grouting for filling substantially all the voids in and the interstices between the stones of said course thus forming a skeleton framework for holding the stones in position and to prevent their displacement, said coating of bituminous material serving to bind the stones to the grouting as well as a partition medium to separate the stones from the cement so as to allow for expansion and compression stresses and to thus minimize cracking of the pavement.

1,760,691. REENFORCING LEG AND CLAMP FOR ANGLE-IRON DERRICKS. JOSEPH P. FOUKES, Pittsburgh, Pa., assignor to Lee C. Moore & Company, Incorporated, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Sept. 27, 1926. Serial No. 137,862. 4 Claims. (Cl. 189—13.)



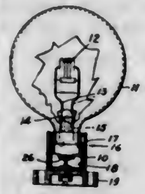
1. A clamp for attaching together parallel angle bars placed apex to apex with their legs diverging, comprising an angle bracket member adapted to fit into the space between said diverging legs of the two angle bars and having a terminal hook on one end adapted to engage the edge of one leg of one angle bar, the other end being adapted to be bolted to the adjacent leg of the other angle bar.

1,760,692. AIRSHIP. CHARLES GIUDICE, Brooklyn, N. Y., assignor of two-thirds to Martin Stockman, Murray Stockman, and Jerome G. Ambro, Brooklyn, N. Y. Filed Mar. 21, 1929. Serial No. 348,710. 5 Claims. (Cl. 244—3.)



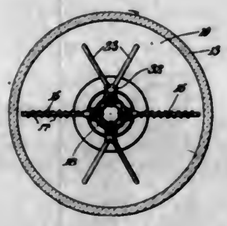
1. In an airship, the combination with a stationary rigid gas holding cylinder, of a flush surfaced cylinder mounted to rotate about said stationary cylinder, and a motor driving said rotatable cylinder to prevent lateral winds from deviating the airship from intended course.

1,760,693. PREFOCUSED INCANDESCENT ELECTRIC LAMP. DANIEL SNYDER GUSTIN, East Orange, N. J., assignor to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed Oct. 5, 1925. Serial No. 60,383. 7 Claims. (Cl. 176—7.)



1. An incandescent electric lamp, comprising a bulb, a filament in said bulb, a base secured to said bulb, slots formed in said base in predetermined positions with respect to said filament and a concave portion formed from said base adjacent each of said slots.

1,760,694. ROASTING-FURNACE CONSTRUCTION. HENRY J. HARTLEY, New York, N. Y., assignor to Nichols Copper Company, New York, N. Y., a Corporation of New York. Filed Nov. 10, 1928. Serial No. 318,397. 6 Claims. (Cl. 263—26.)



5. In a roasting furnace construction a rotatable shaft including conduit means extending from a source of supply of a fluid cooling medium, socket means on said shaft, and adaptor means engaging said socket means, said adaptor means having a plurality of divergent outlet openings for carrying arm members, said adaptor also having internal cavities for bringing said conduit means into communication with each of the arms carried by the adaptor.

1,760,695. WRINGER MOP. HARRY HERTZBERG, Brooklyn, N. Y. Filed July 29, 1929. Serial No. 381,949. 5 Claims. (Cl. 15—120.)

1. A wringer mop comprising in combination a mop handle, a thread on one end of said handle, a helical coil

of wire adapted to engage the threads on said handle, said coil extending beyond the end of said handle, a sleeve rotatably and slidably mounted on said handle and mop material



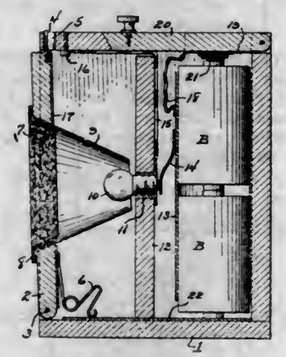
having one end attached to said sleeve the other end covering said wire coil beyond the end of said handle, forming a flexible extension to said handle enclosed within mop material.

1,760,696. BOAT. CHARLES A. HERRMANN, Penn Yan, N. Y. Filed Feb. 11, 1928. Serial No. 253,717. 7 Claims. (Cl. 114—66.5.)



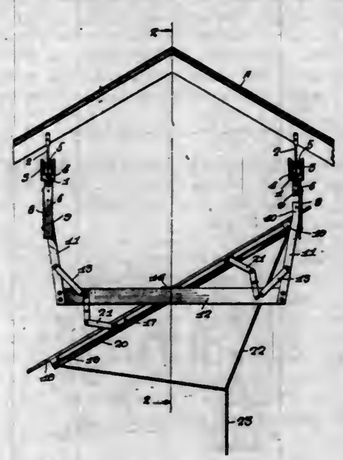
1. In a boat hull, an interrupted planing bottom of less length and beam than the length and beam of the hull and extending from a point forward of the central midship section rearwardly an appreciable distance beyond said midship section to within a short distance of and terminating short of the extreme stern of the hull.

1,760,697. EGG CANDLER. ROY B. HOCHSTADTER and FRANK HOCHSTADTER, Brooklyn, N. Y. Filed July 25, 1928. Serial No. 295,270. 1 Claim. (Cl. 99—6.)



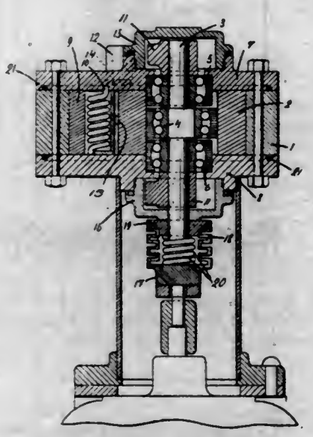
An egg candling device comprising a casing having an opening therein with a hole in the top over the opening, a member closing the opening and hingedly connected at its lower end to the casing, a pin carried by the upper end of the said member and engaging the hole in the top of the casing whereby movement of the member is limited, a spring in the casing and bearing against the inner lower part of the member for holding the pin at the outer wall of the hole, said member having an oval-shaped hole therein, a reflector of conical shape having its large end passing through said oval hole, with its small end arranged in the casing, a cushion carried by the large end of the reflector, an electric bulb in the casing surrounded by the small end of the reflector, a circuit for the bulb and means for closing the circuit by the inward movement of the member.

1,760,698. HAY MOWER. CHARLES HOTH, Postville, Iowa. Filed Sept. 24, 1928. Serial No. 308,065. 2 Claims. (Cl. 214—5.)



1. A delivery and distributing device comprising a wheeled adjustable frame, suspended tracks for the wheels of said frame, a platform, a rock shaft square in cross section and secured midway the ends of said platform, saddles secured to said frame, V-shaped portions inclined in said saddles and receiving the ends of said rock shaft, links pivotally secured in pairs and having their ends secured to the frame and platform respectively, bracing means for said frame, a flexible member having its ends secured to said platform, and a flexible element secured to the first mentioned flexible element for moving the latter to operate the frame and platform as well as for securing the platform at various positions with respect to said frame.

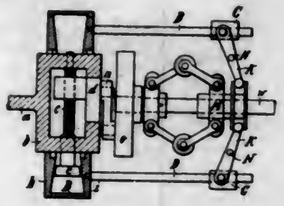
1,760,699. ROTARY COMPRESSOR, PUMP, OR MOTOR. CARL ALBIK HULT, Stockholm, Sweden. Filed Mar. 29, 1928, Serial No. 265,730, and in Sweden Apr. 6, 1927. 3 Claims. (Cl. 103—130.)



1. In a rotary pump, compressor or engine of the type set forth, a casing having covers, a rotor in the casing and having a central bore, a rotor shaft journalled in two bearings mounted in the covers and one on each side of

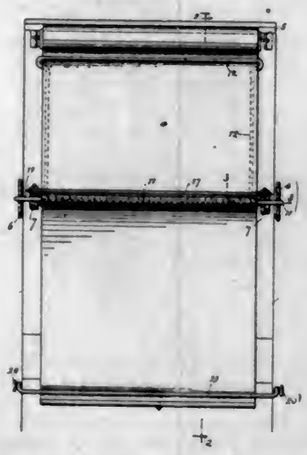
the rotor, said bearings extending into the central bore of the rotor and having an outside diameter so proportioned to the diameter of said bore that the difference in diameters is equal to the difference in diameters between the outside diameter of the rotor and that of the bore of the rotor casing, so that the surface of the inner bore of the rotor will contact with the surface of the bearings while the outer surface of the rotor will run closely against the internal surface of the casing.

1,760,700. AUTOMATIC VARIABLE-SPEED GEAR. EDUARD JANIK, Vienna, Austria. Filed Feb. 20, 1929, Serial No. 341,445, and in Austria Feb. 27, 1928. 2 Claims. (Cl. 74—92.)



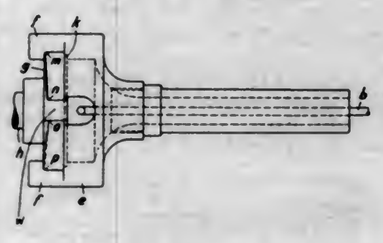
1. In an automatic variable speed gear the combination of a driving shaft, a frame fast on such driving shaft, a screw revolubly mounted in such frame, a nut mounted on such screw and a crank pin secured to such nut, a wheel fast on the said screw, two actuating wheels located on opposite sides of the wheel on the screw, the planes of such actuating wheels being parallel to each other and perpendicular to the plane of the screw wheel and the said actuating wheels being adapted to engage alternatively therewith, such actuating wheels being slidingly mounted on the said frame, a driven shaft substantially coaxial with the driving shaft, a one way clutch wheel secured to such driven shaft, means operatively connected to the said crank pin for intermittently moving the said one way clutch wheel, a centrifugal governor mounted on the said driven shaft and comprising a sleeve slidably mounted on such shaft and means for operatively connecting the said sleeve to the above said actuating wheels.

1,760,701. CURTAIN HOLDER. GODEL KALENOFF, Brooklyn, N. Y. Filed Sept. 22, 1928. Serial No. 307,691. 2 Claims. (Cl. 156—44.)



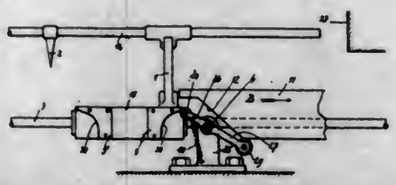
1. A shade supporting mechanism comprising quadrants adapted to be secured to intermediate portions of both sides of a window frame, a U-shaped frame pivotally mounted on and adapted to be retained in positions of angular adjustment by said quadrants, a shade, a spring roller on which the shade is adapted to wind, a rod carried by the quadrants, means for securing the free end of the shade to the lower end of the window frame, the shade being threaded over the outer end of the U-shaped frame and over the rod so that a portion of the shade will lie substantially in the same plane with the frame, while a portion of the shade will lie substantially flat against the window frame.

1,760,702. NUT-TAPPING DEVICE. FRIEDRICH WILHELM KOSFELD, Brackwede, Germany. Filed Jan. 5, 1928, Serial No. 244,714, and in Germany Jan. 31, 1927. 6 Claims. (Cl. 10—129.)



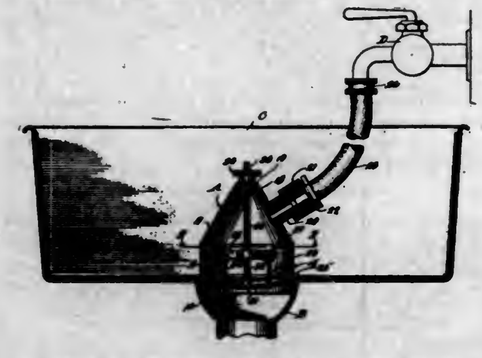
2. A chuck or head for tapping nuts and the like by means of a screw tap having a straight shaft with a curved rear end, comprising a sleeve for the straight part of the shaft to be housed therein, a cup-shaped member firmly connected with the said sleeve for the curved end of the shaft to be accommodated therein, claws provided on the said cup-shaped member, and means on a driving shaft engaged by said claws for detachably engaging a driving shaft with the chuck, said screw tap being readily removable through said cup when the chuck is removed from the driving shaft.

1,760,703. STRAIGHT-KNITTING MACHINE. PAUL LIEBERKNECHT, Chemnitz, Germany, assignor to Maschinenfabrik Einsiedel Gesellschaft mit beschränkter Haftung, Chemnitz, Germany. Filed Oct. 20, 1928, Serial No. 313,889, and in Germany Feb. 12, 1928. 1 Claim. (Cl. 66—130.)



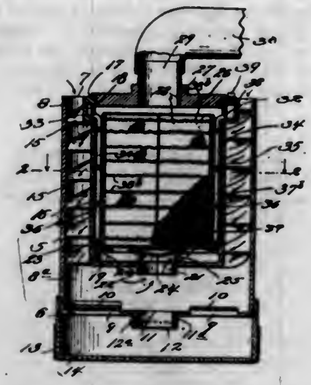
In a straight-bar knitting machine, the combination with a thread guide, a slur bar and a friction box mounted on the bar and connected to the guide, of a cam connected to the slur bar, a rigid abutment for the friction box, a double-armed lever pivoted to said abutment, a spring acting on said lever so as to hold one arm thereof in sliding engagement with the cam, and a cam on the friction box adapted to engage the other arm of the lever and cause the box to be displaced on the bar at the end of its travel, the cam on the box being adapted to turn the lever during the displacement, the cam on the bar being adapted to control the lever movement so as to effect a gradual stoppage of the friction box.

1,760,704. SINK-PIPE CLEANER. JOHN T. LINDSTROM, Allentown, Pa. Filed Jan. 10, 1928. Serial No. 245,778. 1 Claim. (Cl. 285—44.)



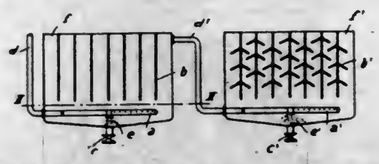
A waste pipe cleaner comprising a dome having an open lower end, the upper end of the dome being provided with an opening, a cross-arm provided at its central portion with a threaded bore, holding hooks carried by the cross-arm for engaging the strainer plate of a waste pipe, an adjusting rod threaded in said bore, a bearing head formed on the lower end of the rod and in axial alinement therewith, said bearing head being of substantially conical shape flaring toward its lower end to provide an enlarged bearing face for engaging the strainer plate and holding the adjusting hooks in operative position on the strainer plate, the dome being adapted to be placed over the waste pipe and said adjusting rod with the upper end thereof extending through the opening in the dome, an adjusting nut threaded on the upper end of said rod for engagement with the upper end of the dome and for closing said opening, and means for supplying liquid under pressure to the dome.

1,760,705. AIR CLEANER OR FILTER FOR CARBURETORS. WARREN V. LUDLAM, Meridian, Miss. Filed Nov. 9, 1926. Serial No. 147,303. 10 Claims. (Cl. 183—30.)



9. In an air filter of the character described, the combination of a main casing having an air inlet and an air outlet, an oil reservoir in communication therewith, a frame of perforated tubing fitting in the casing, said frame being in communication with said reservoir and by means of which oil is distributed from the reservoir, a hollow fabric member of substantially the same shape as the frame disposed within the frame to receive the oil therefrom, and strands of hair having their ends supported in the fabric member and disposed to span the space between the walls of the member.

1,760,706. APPARATUS FOR OBTAINING YEAST. OTTO LUHRS, Mannheim-Waldof, Germany, assignor to Zellstoffabrik Waldof, Mannheim-Waldof, Germany, a Joint Stock Company. Filed Feb. 29, 1928, Serial No. 258,046, and in Germany Mar. 12, 1927. 5 Claims. (Cl. 195—18.)



1. Apparatus for the obtention of yeast as a by-product in the manufacture of alcohol by fermentation of sugar-containing liquids, comprising a fermenting vat, means arranged close to the bottom of said vat adapted to impart a gyratory motion to a layer of the liquid situated above the bottom of the vat and to cause the yeast distributed on the bottom of the vat and suspended in the said liquid layer to accumulate in the center of the bottom, means adapted to limit the said gyratory motion to the lowermost zone of the vat, and means for drawing off said yeast accumulation.

1,760,707. WELL-TESTING DEVICE. SAMUEL MACKIN, Laredo, Tex. Filed Feb. 7, 1928. Serial No. 252,577. 5 Claims. (Cl. 166—1.)

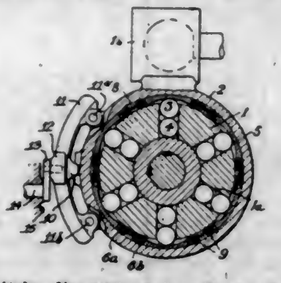


1. In a well testing device, a mandrel, a plurality of resilient rings thereon, a housing slidably connected with the upper end of the mandrel, a member on the lower end of the mandrel engaged by the lower ring so that the pressure of the parts above the mandrel will compress the rings, latch means for locking the parts with the rings in normal position and in expanded position, such latch means consisting of a latch bar on the upper end of the mandrel and a part in the housing having rack teeth thereon for engaging the latch bar for holding the parts in a position with the rings expanded and said part in the housing also having notches therein for receiving the bar for holding the parts with the rings in normal position.

1,760,708. ROLLER CLUTCH. WILLIAM MILLER, Dunston-on-Tyne, England. Original application filed Feb. 3, 1927, Serial No. 165,668, and in Great Britain Feb. 17, 1926. Divided and this application filed June 21, 1928. Serial No. 287,232. 6 Claims. (Cl. 192—44.)

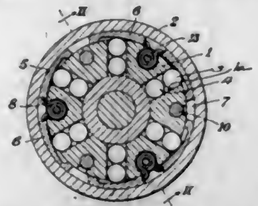
1. A roller clutch comprising two members, an even number of circumferentially contacting rolling elements arranged in one of said members substantially transverse

to the direction of movement of the clutch members, a pair of flanges on the other clutch member, said flanges embracing the outer of said rolling elements, wedges cooperating with said rolling elements, each of said wedges



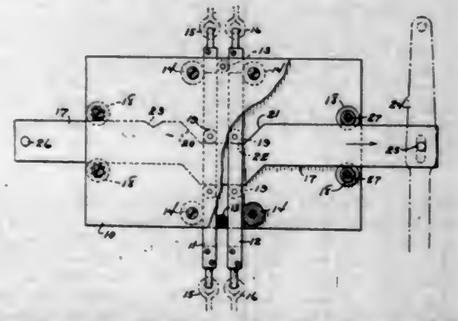
having oppositely disposed wedge faces and a neutral portion, and means for moving the wedges relatively to the said rollers so that the latter may be made to engage either wedge face according to the direction in which the driven clutch member is to operate.

1,760,709. ROLLER CLUTCH. WILLIAM MILLER, Dunston-on-Tyne, England. Original application filed Feb. 3, 1927, Serial No. 165,068, and in Great Britain Feb. 17, 1926. Divided and this application filed June 21, 1928. Serial No. 287,233. 6 Claims. (Cl. 192—47.)



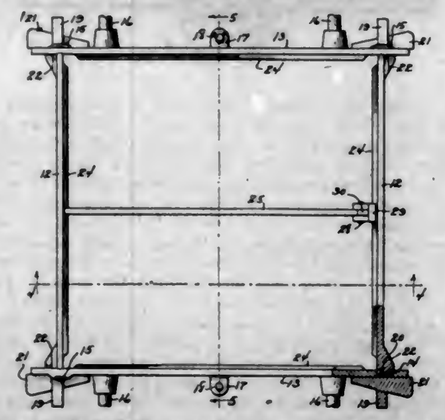
1. A clutch comprising two members, an even number of circumferentially-contacting rolling elements arranged in one of said members substantially transverse to the direction of movement of the clutch members, a pair of flanges on the other clutch member, said flanges embracing the outer of said rolling elements, wedges adapted to cooperate with one of said flanges and its adjacent rolling elements so that when one of the clutch members is moved the clutch is engaged, and controlling means adapted to cooperate with the ends of the wedges and to be operated so as to move transversely to the direction of movement of the wedges, so that on movement of the said controlling means the position of the wedges relatively to their rolling elements may be changed.

1,760,710. MULTIPLE-CONTROL DEVICE. JESSE J. MITCHELL, Chattanooga, Tenn. Filed Jan. 25, 1929. Serial No. 335,137. 2 Claims. (Cl. 74—39.)



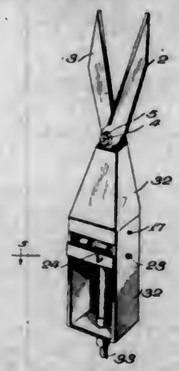
1. In a multiple control device for excavating machines, spaced parallel slidingly mounted individual control bars, one of said bars being adapted to have its opposite ends connected with means to open and close the bucket of an excavating machine, and the other of said bars adapted to have its opposite ends connected with bucket raising and lowering means, a main control bar slidable transversely of and engaging the individual bars, an offset portion included in the main control bar to selectively operate the individual control bars, said offset portion including an intermediate straight section and reversely inclined sections, and cooperating means between the main control bar and one of the invidual control bars to provide an equalizing position for the latter.

1,760,711. MOLDER'S FLASK. WILLARD A. MOORE and KENNETH L. MOORE, Muncie, Ind. Filed Feb. 27, 1929. Serial No. 343,067. 1 Claim. (Cl. 22—96.)



In a molder's flask, separate pairs of side members and separate pairs of end members, each of said members defining an interchangeable unit, one pair of said members having openings adjacent each end, ears extending from opposite ends of each of the other pair of members for passage through the openings of the first referred to pair, said ears also having openings therethrough, shoulders extending laterally from the ear carrying members adjacent to and parallel with said openings to engage the other members between the openings and outer ends of said other members to engage the other members, and wedges removably positioned within the openings of the ears and also engaging said other members to clamp the latter between the shoulders and wedges and removably hold the parts assembled.

1,760,712. VARIABLE-SPEED MECHANISM. TATSUJI MORIMOTO, Paia, Territory of Hawaii. Filed June 18, 1927, Serial No. 199,807, and in Japan December, 1926. 1 Claim. (Cl. 74—58.)

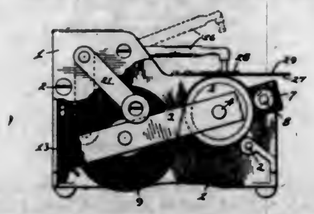


In a variable speed mechanism, a support, a shaft mounted on the support, pinions fixed to the ends of the shaft, a driven gear supported below the shaft, a longitudinally shiftable sleeve arranged parallel to the shaft, a bevelled gear fixed to each end of the sleeve and each carrying a pinion upon its outer face, one of which being normally in mesh with one of the first mentioned pinions, and a manually rotatable cam element mounted on the support and lying between the opposed bevelled gears and movable against either of the latter to shift the sleeve in a direction to cause the shaft to be driven through either one of the pinions carried thereby.

1,760,713. COMPOSITION BLOCK. GEORGE F. A. OCHS, Newark, N. J. Filed July 25, 1927. Serial No. 208,411. 1 Claim. (Cl. 106—24.)

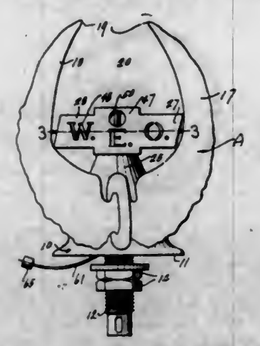
A composition of the kind indicated consisting substantially of thirty pounds of gypsum, twenty pounds of cement, fifteen pounds of asbestos, five pounds of asphalt and thirty pounds of vegetable fiber.

1,760,714. IMPRINT-TESTING DEVICE. JEROME F. O'CONNOR, San Francisco, Calif. Filed Dec. 27, 1927. Serial No. 242,878. 10 Claims. (Cl. 265—13.)



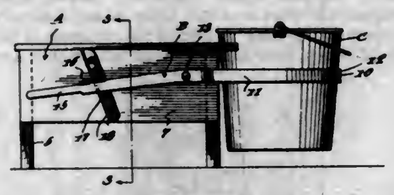
1. A testing device comprising a housing; a platen rotatably mounted within the housing; a frame mounted within the housing; a roll of paper mounted upon the frame and threaded over the platen, said frame being arranged to be moved outwardly from the housing to permit replacement of the roll; an imprinting member pivotally mounted within the housing and arranged to strike against the platen and the paper to impress marks upon said paper through an imprinting web held thereagainst for testing; and means for actuating the impressing member to make a succession of impressions.

1,760,715. RADIATOR CAP. WALTER EDWIN OTWELL, Linn, Kans. Filed Nov. 12, 1928. Serial No. 318,986. 6 Claims. (Cl. 240—8.11.)



1. In a radiator cap of the class described a supporting base, spaced wings carried by the base extending upwardly therefrom in spaced relation, a horizontally elongated casing mounted between and engaging said wings at its ends and having a separate compartment therein, a thermometer connected with the base and extending upwardly into the casing at its upper end, and illuminating means in the casing for illuminating the thermometer, the rear wall of the casing being transparent to permit the thermometer in the casing to be seen.

1,760,716. MILKING STOOL. ED E. PERT, Chetek, Wis. Filed Sept. 20, 1929. Serial No. 394,016. 2 Claims. (Cl. 31—57.)



1. In a device of the class described, a milking stool and a milk pail holder including a substantially U-shaped yoke having the rear ends of the arms thereof pivotally secured to the sides of the stool, a rearwardly extending resilient lever connected with one of said arms in rear of the pivot point thereof and extending along side of the stool, a dog carried by the lever, and a bar secured to one side of the stool having a plurality of notches therein for the reception of said dog.

1,760,717. GAUGE. ALBERT F. PEGLOW, Grosse Pointe Park, Mich. Filed Oct. 24, 1927. Serial No. 228,345. 3 Claims. (Cl. 33—178.)

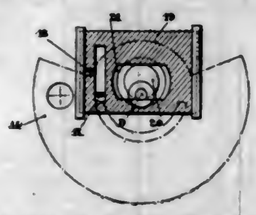


2. In a gauge for measuring the diameters of apertures, bores and the like, comprising a hollow body, a sleeve arranged thereon and having a scale, a head at one end of said body and having slideways formed therein, plungers in the slideways and having cam surfaces formed thereon, means yieldably supporting said plungers, a longitudinally slidable rod in said body having cams thereon in cooperative relationship with said cam surfaces, a second rod threadedly connected with the bore of said body for rotary and longitudinal movement relative thereto, and a metallic ball centrally located between said rods.

1,760,718. METHOD AND APPARATUS FOR THE SIMULTANEOUS RECORDING OR REPRODUCTION OF MOTION AND SOUND. ARTURO QUINTILIANI and LAMBERTO PINESCHI, Rome, Italy. Filed Jan. 28, 1927, Serial No. 164,351, and in Italy Apr. 15, 1926. 2 Claims. (Cl. 88—16.2.)

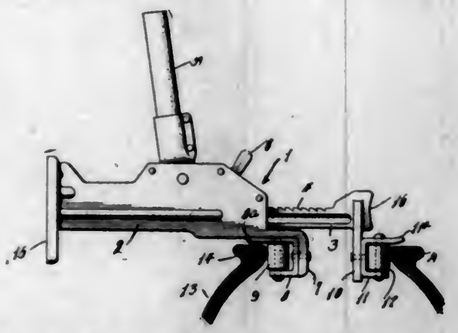
1. In synchronized motion picture and sound apparatus, comprising in combination, a picture aperture, means for feeding a film in step by step progression past said picture aperture, in the usual manner for receiving a series of occular-images, said film having a sound receiving strip adjacent the ocular-image receiving portion, a shutter ob-

securing said picture aperture during the moving periods of the film, between successive ocular-images, a source of light, the luminous intensity of which is varied in accordance with suitable sound responsive means, apertured diaphragms, one fixed and the other movable rectilinearly in the opposite direction to that of the progress of the film, said diaphragms and shutter being cooperably arranged



as to obscure the aperture in the movable diaphragm and to uncover the aperture in the fixed diaphragm during the moving periods of the film, and to obscure the aperture in the fixed diaphragm and uncover the aperture in the movable diaphragm during the stationary periods of the film, whereby a continuous sound record is made irrespective of the intermittent character of the recording of the ocular images upon the film.

1,760,719. TIRE SPREADER. JOSEPH A. REKENTHALER, Cushing, Iowa. Filed Oct. 20, 1927. Serial No. 227,567. 1 Claim. (Cl. 152—27.)



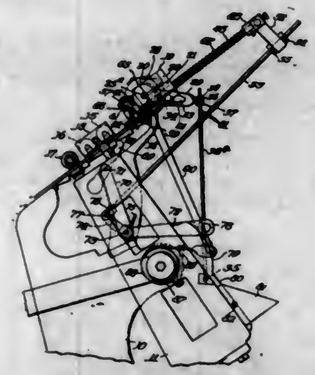
A tool of the character set forth, comprising a bar consisting of telescopically associated members, means by which the members may be adjusted relatively to effect the extension of the bar, a downwardly extending lug on the front end of one of the members, a bearing bracket secured to said member and to the rear side of the lug and fully open at its rear side, a roller journaled in the bearing bracket, a cross head on the front end of the other member and extending laterally beyond the same, bearing brackets secured to the front side of the cross head and fully open at their front sides, and rollers journaled in the bearing brackets, said bearing brackets being of U-shape and having their upper arms extended outwardly beyond the rollers and the lower arms, so that they may engage the edge portions of a tire.

1,760,720. OBSTETRICAL FORCEPS. RICHARD D. RODERICK, Jermyn, Pa. Filed July 6, 1929. Serial No. 376,306. 4 Claims. (Cl. 128—328.)



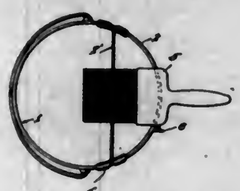
1. In obstetrical forceps, jaws included in said forceps, segmental gear portions formed with said jaws, shanks having pivotal connection with said segmental gear portions, handles for said shanks, arms having teeth formed therewith and meshing with the teeth of the segmental gear portions, said arms being movably mounted on said shanks for adjusting the jaws with respect to each other, means for securing the arms in adjusted positions, and means for indicating the adjusted positions of said jaws.

1,760,721. INKING MECHANISM FOR PRINTING PRESSES. JOHN H. SCHUSSLER, Chicago, Ill. Filed May 22, 1922. Serial No. 562,626. 9 Claims. (Cl. 101—341.)



1. Inking mechanism for printing presses comprising in combination a pair of rocker arms, an inking carriage carried by said rocker arms, an inking plate, an inking fountain adjacent said plate, a feed roller mounted upon said inking fountain, a pair of rods, mounting members for said rods, an inking member carried by said rods adapted to alternately engage the said feed roller and the said ink plate, the roller being adapted to travel over the inking face of the inking plate, a cam, a crank member operated by the said cam, and means adapted to co-act with the said crank member whereby the said inking member is moved from said inking plate against the said feed roller.

1,760,722. ATTACHMENT FOR PAINT BUCKETS. HARRY SILL, Mineola, N. Y. Filed Apr. 11, 1928. Serial No. 269,261. 1 Claim. (Cl. 248—49.)

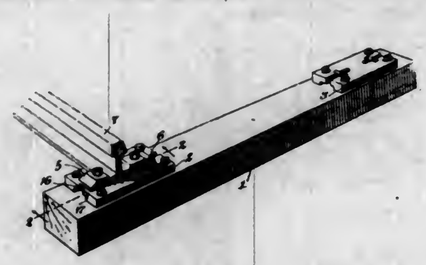


A brush support for paint buckets formed from a single strip of metal which is folded longitudinally and bent upon itself to provide a two-ply plate, the ends of the plate being formed with lateral extensions which are rounded to correspond with the inner contour of a paint bucket, said lateral extensions having their upper edges curved outwardly and downwardly to provide jaws and which jaws are designed for frictional engagement with the rim of a paint bucket.

1,760,723. RAIL FASTENING. JOHN G. SNYDER and ARTHUR N. SNYDER, New York, N. Y. Filed Apr. 19, 1929. Serial No. 356,451. 8 Claims. (Cl. 238—304.)

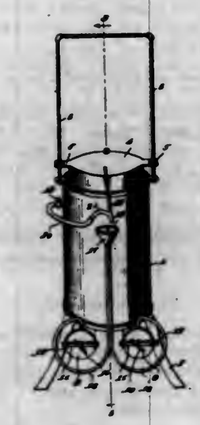
1. A rail fastening, comprising a plate adapted to be connected to a tie, said plate being formed with a pair of

overhanging shoulders extending from each end inwardly, a clip for engaging and holding a rail on said plate, means



movable from the ends of said plate along said shoulders interlocking with said shoulders for securing the clip in place.

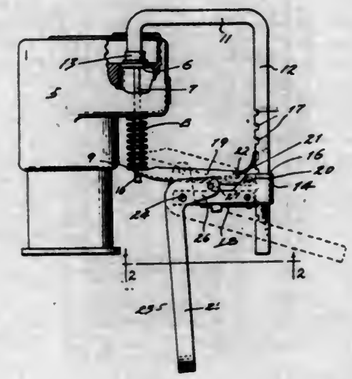
1,760,724. ACETYLENE-GAS GENERATOR. MARTIN STEINER, Belleville, Ill., assignor of forty per cent to John L. Porter, Wilmer Vogt, and Herbert E. Barnard, St. Louis, Mo. Filed May 2, 1928. Serial No. 274,642. 1 Claim. (Cl. 48—8.)



An acetylene gas generating machine comprising a tank, a bell therein, a pair of cylinders under the tank, a removable tray containing carbide in each cylinder, an upwardly extending pipe connected to each cylinder, a double funnel connected to the upper ends of said pipes, a rod extending transversely from the bell, a vertically arranged rod adjustably connected with the first rod, a curved spout connected with the lower end of the vertical rod, a cock carried by the tank below the water level therein, a hose connecting the cock with the spout and means for leading the gas generated in each cylinder into the bell.

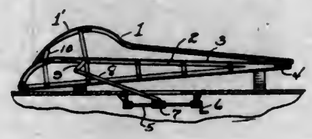
1,760,725. VALVE TOOL. JESSE C. STRIBLING, Anderson, S. C., assignor of one-half to Ralph J. Ramer, Anderson, S. C. Filed Apr. 5, 1929. Serial No. 352,804. 2 Claims. (Cl. 29—86.3.)

1. In a valve-displacing device, the combination with a support comprising angularly disposed arms, one of said arms having an abutment at its extremity, the other arm having a series of notches spaced along said arm, of a bracket having a socket at one end slidable on the notched arm, a catch pivoted on the bracket to engage the notches of the notched arm to hold the bracket in its adjustments



on said arm, a claw pivoted to the bracket to operate in opposition to the abutment, and a lever pivoted to the bracket to actuate the claw.

1,760,726. AEROPLANE WING. WILLIAM F. TRIPLETT, Grand Junction, Colo. Filed Mar. 22, 1929. Serial No. 349,203. 2 Claims. (Cl. 244—12.)

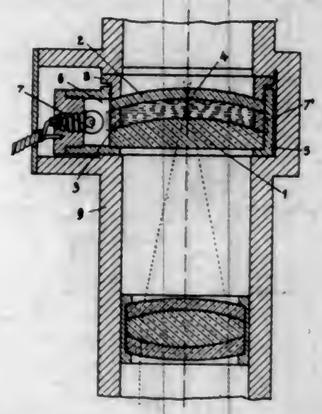


1. An aeroplane wing having means thereon for increasing or decreasing the thickness of certain portions thereof whereby the pressure of the wind on the front edge of the wing can be controlled, which in turn controls the volume of the vacuum above the wing, such means comprising a member arranged below certain parts of the wing and having a straight rear part and a curved front part, means for hingedly connecting the rear end of the member to a part of the wing, means for raising and lowering the member whereby its curved part can be raised into the wing or lowered to increase the thickness of the nose of the wing, the operating means comprising a screw shaft, means for turning the same, a nut on the shaft, cranks connected with the curved part of the member, links connecting the cranks with the nut and links connecting parts of the member with the wing.

1,760,727. FOCUS WATER LEVEL. CHRISTIAN VON HOFE, Vienna, Austria, assignor to The Czechoslovak Company: C. P. Goerz, Optische Anstalt Aktiengesellschaft, Akciova Spolecnost K. P. Goerz, Opticky Ustav, Bratislava, Czechoslovakia. Filed Apr. 5, 1929, Serial No. 352,816, and in Germany Apr. 14, 1928. 3 Claims. (Cl. 240—2.)

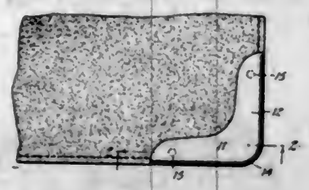
2. A focus water level comprising a bottom lens, a top lens concave at its bottom side, a transparent ring interposed between the peripheries of the said two lenses, whereby the two lenses are held at a distance from each other and a space is formed between them and the transparent ring, a transparent liquid and an air bubble con-

tained in such space and means for illuminating the said space from the periphery of the said transparent interposed



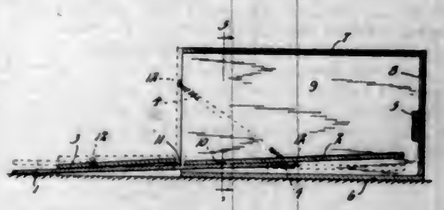
ring, the end faces of the said ring being ground spherically to the curvature of the lens surfaces with which such end faces are contacting.

1,760,728. MOUNTING ANCHOR. MURRAY A. WACHS, Brooklyn, N. Y. Filed Jan. 17, 1928. Serial No. 247,406. 5 Claims. (Cl. 150—28.)



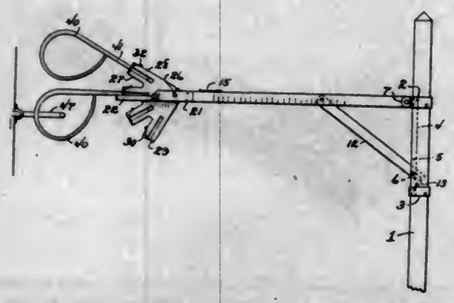
1. In a clip, including parallel outer and inner spaced leaves connected by a bight, means concealed by the outer leaf for positively securing the clip to the object to which it is applied, said means anchored to and extending completely through the object and through the inner leaf of the clip.

1,760,729. BOX-SHAPED CAGE RAT TRAP. DAN D. WARNER, Jamestown, N. Dak. Filed Jan. 9, 1928. Serial No. 245,497. 4 Claims. (Cl. 43—67.)



1. A trap comprising a casing having an open end, a platform pivoted to said casing, extending into the same through said end and extending some distance outward from said end, a door carried by said platform adapted to close said casing and resilient means connected to said casing and door constructed and arranged to be positioned below the axis of said platform pivot when said door is in open position and the outer end of said platform depressed and to be raised above said pivot when the inner end of said platform is depressed whereby when said inner end is depressed, said resilient means will quickly close said door.

1,760,730. AUTOMATIC TRAIN-ORDER AND MESSAGE HOOP HOLDER. EARL A. WEBB, Whitman, Nebr. Filed Mar. 13, 1929. Serial No. 346,703. 8 Claims. (Cl. 258—2.)



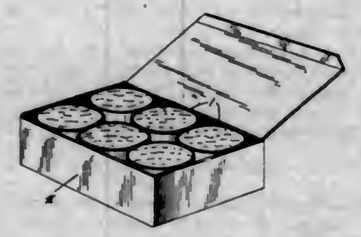
1. A train order hoop delivery apparatus, comprising a horizontal support, a frame-like member attached to the outer end thereof, a segmental holder pivoted for vertical swinging downwardly through the frame and having its widened end formed with extending pairs of fingers designed to receive therebetween the arms of a train order hoop, means for normally retaining said arms between said fingers and the arm of each hoop designed to successively rest on the outer end of the frame-like member as the hoops are sequentially withdrawn from between the fingers and the holder swings upon the removal of said hoops, and means for preventing an upward swinging of the holder.

1,760,731. INTERCHANGEABLE BARREL FOR GUNS. EDGAR A. WILLIAMS, Upper Black Eddy, Pa. Filed Nov. 1, 1928. Serial No. 316,481. 6 Claims. (Cl. 42—76.)



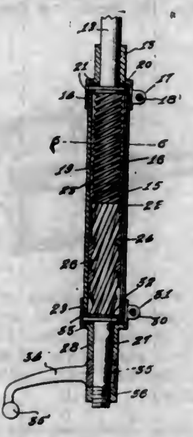
5. A firearm barrel having a bore of one gauge and a chamber at the breach of said barrel for a shell of larger gauge than the gauge of the bore, and a shoulder in the barrel surrounding the breech end of the bore adapted to engage a wad in a shell.

1,760,732. BISCUIT PACKAGE. LIVELY B. WILLOUGHBY, Bowling Green, Ky. Filed Jan. 31, 1925, Serial No. 6,101. Renewed Feb. 13, 1930. 1 Claim. (Cl. 206-46.)



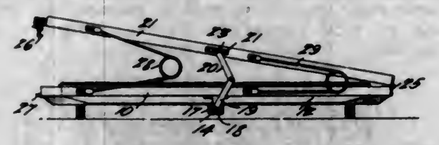
An article of manufacture, a narrow ring formed of cardboard or the like and having its inner surface coated with paraffine, an uncooked biscuit, circular in shape, inserted in said ring with its sides in contact with the paraffine thereon, said biscuit and ring being closed in a waxed wrapper.

1,760,733. STEERING GEAR. JAMES A. BARNHART, Constantine, Mich. Filed May 25, 1927. Serial No. 194,189. 1 Claim. (Cl. 74—79.)



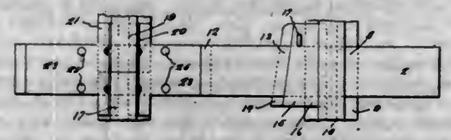
In a steering mechanism for vehicles, a steering post, a steering rod journally mounted therethrough and carrying a steering wheel, a housing member into which said rod extends, a screw member on said rod rotatably mounted within the housing, a sleeve splined within the housing and having a threaded portion coacting with the screw member, the sleeve further having a spirally grooved portion, a shaft member journaled through the opposite end of the housing and carrying a spirally formed portion coacting with the spirally grooved portion of the sleeve, an arm carried by said shaft, end members telescoped upon the housing and having hub portions constituting bearings respectively for said rod and shaft, and thrust takeup means located within said end members, said thrust takeup means including thrust collars on the rod and shaft, and a pair of washers within each end member located at opposite sides of the collar therein, one being confined between the collar and the end member and the other being confined between the collar and the end of the threaded member or spirally grooved portion, respectively.

1,760,734. COPYHOLDER. GEORGE C. BEIDLER, Rochester, N. Y. Filed Mar. 13, 1928. Serial No. 261,319. 9 Claims. (Cl. 45—85.)



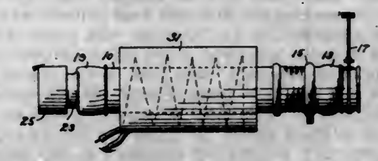
1. In a copy holder, a copy support, division elements projecting above the copy support, and mechanism for projecting and retracting the division elements with respect to the surface of the coup support.

1,760,735. RAIL TIE. JAMES E. BLISS, Faust, N. Y. Filed Feb. 21, 1928. Serial No 256,023. 1 Claim. (Cl. 238—65.)



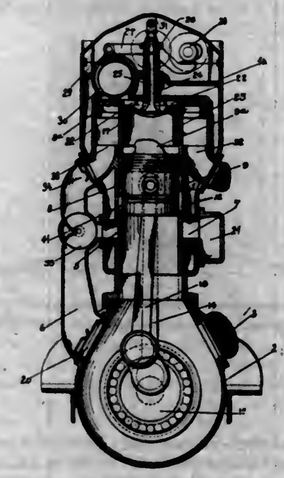
A rail tie comprising a member having its upper face, from points adjacent to its ends depressed to provide rail seats, one of said seats having its end wall grooved for the reception of the base flange of the rail and the second and inner wall arranged at an angle and also grooved, a rail engaging plate having its outer edge arranged at an angle and said angle edge formed with a tongue to be received in the last mentioned groove, a wedge element passing through the wedge plate, and frictionally contacting with one of the sides of the tie, the second rail seat having its inner end wall grooved transversely and its outer end wall straight, plates to be received in the rail seat to engage with the rail on said seat, the inner plate having a tongue to be received in the inner groove, the second plate having its end straight to contact with the straight outer wall of the rail seat, both of said plates having rail engaging elements on the confronting ends thereof, together with means for fastening said plates to the tie.

1,760,736. PERMANENT-WAVING TUBE. HIRAM BLOCK, Baltimore, Md. Filed Sept. 12, 1928. Serial No. 305,510. 2 Claims. (Cl. 132—36.)



1. A hair waving device comprising inner and outer concentrically arranged tubular members spaced apart and defining an inner hair receiving compartment open at each end and an outer steam generating chamber surrounding the hair receiving compartment, said inner tubular member having openings spaced substantially throughout its length, an absorbent material between the hair receiving compartment and steam generating chamber, a source of heat for said chamber, a compressible ring at one open end of the device for the passage of hair into the hair receiving compartment, and means at the opposite end of the device to yieldingly close said end of the hair receiving compartment.

1,760,737. TWO-STROKE-CYCLE INTERNAL-COMBUSTION ENGINE. GEORG BODEN, Leipzig-Gohlis, Germany. Filed Oct. 31, 1928, Serial No. 316,298, and in Germany Nov. 9, 1927. 6 Claims. (Cl. 123—66.)



2. In a two stroke cycle internal combustion engine, the combination of: a stationary stepped cylinder pro-

vided with a removable cover and having a crank case attached to it; a movable stepped cylinder provided with a flange at one end and slidably mounted within stationary cylinder, said movable cylinder being driven from the crank shaft of the engine; a fixed cover for said movable cylinder arranged on the under side of said removable cover and carried by ribs attached thereto, said fixed cover projecting from above into said movable cylinder, and said movable cylinder sliding on the projecting part of said fixed cover; a working piston slidably mounted within said stationary cylinder and driven from the crank shaft of the engine in such manner that it moves in the same direction with regard to the stationary cylinder as that in which said movable cylinder moves, but with a stroke about three times as long as that of the latter; a fuel supply admission valve in said fixed cover; an exhaust port arranged in the lower part of said movable cylinder; an exhaust port in said stationary cylinder co-operating with said first named exhaust port; an air inlet arranged in the lower part of said movable cylinder opposite to said first-named exhaust port; an air inlet in said stationary cylinder co-operating with said first named air inlet; said movable cylinder being adapted to operate in conjunction with said fixed cylinder as a pump for the admission of fuel through said valve into said movable cylinder, and said piston being adapted to suck a supply of air into said crank case on the upward movement of said piston; a throttle valve adapted when fully closed to shut off completely the supply of said air under pressure so as to enable the engine to run as a normal two stroke cycle engine; the steppings of said stationary and said movable cylinder being so dimensioned that the suction space in the fixed cylinder is at least equal in volume to the content of the movable cylinder.

1,760,738. PROCESS FOR INCREASING THE LUSTER OF GOODS MADE OF ANIMAL HAIR AND WOOL. ERICH BÖHM, Vienna, Austria. Original application filed Nov. 22, 1927, Serial No. 235,125, and in Austria Dec. 1, 1926. Divided and this application filed Sept. 18, 1928. Serial No. 306,784. 7 Claims. (Cl. 8—21.)

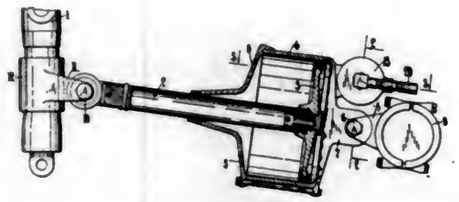
1. A process for increasing the luster of goods made of animal hair and wool comprising the step of bringing into contact therewith an aqueous solution containing chlorine and hydrogen ions and an aqueous solution of peroxide of hydrogen, and causing the two solutions to react with each other in contact with the said goods.

1,760,739. CLOTHES HANGER. CHARLES M. BOLINGER, St. Louis, Mo. Filed Jan. 21, 1928. Serial No. 248,480. 1 Claim. (Cl. 223—62.)



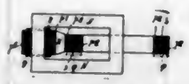
A garment hanger comprising a length of wire bent upon itself at one end and forming multiple spring loops at an intermediate point, a guide slidably mounted upon the spring loops, and a supporting hook slidably connected with the guide to occupy an out of the way position.

1,760,740. CONTROL OF AEROPLANES AND THE LIKE. MOGENS LOUIS BRAMSON, Hendon, London, England. Filed Aug. 10, 1925, Serial No. 49,396, and in Great Britain Mar. 30, 1925. 19 Claims. (Cl. 244—20.)



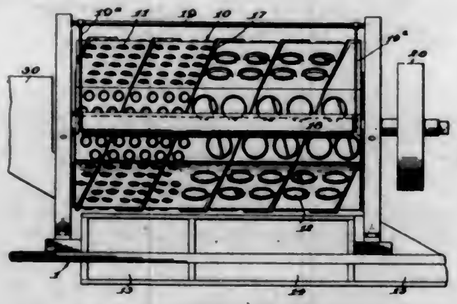
1. In or for use with an aeroplane or like aerial craft means including a device settable to operate at one predetermined angle of incidence of said craft for applying a sudden warning force automatically to the pilot through the sense of touch when said craft reaches said predetermined angle of incidence.

1,760,741. MAGNETIC-CORE INDUCTION FURNACE. PAUL EMMANUEL BUNET, Versailles, France, assignor to Societe Acieries de Gennevilliers, Gennevilliers, Seine, France, a Corporation of France. Filed May 25, 1928, Serial No. 280,584, and in France June 2, 1927. 3 Claims. (Cl. 266—1.5.)



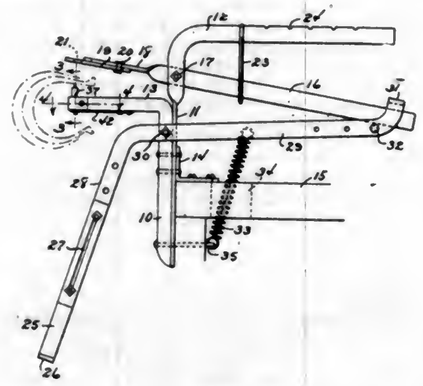
1. In a magnetic core induction furnace, comprising a primary heating circuit, consisting of a very small number of turns arranged as close as possible to the secondary heated circuit, and transformer means for feeding the said primary circuit with current of very low tension, the provision of the said primary and secondary circuits around one of the branches of a single closed magnetic circuit, the other branch of which forms the core of the said transformer means.

1,760,742. GRADER FOR VEGETABLES, FRUITS, AND THE LIKE. WILLIAM G. BUNKER, Augusta, Me. Filed Aug. 13, 1927. Serial No. 212,665. 1 Claim. (Cl. 209—397.)



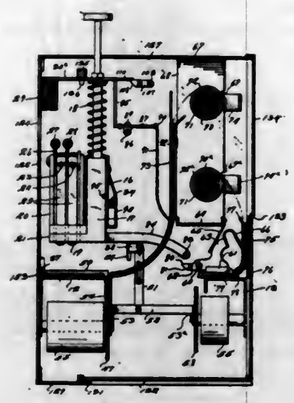
A grader or sorter for vegetables, fruits, and the like, comprising a revoluble container having side walls formed of connected spirally arranged strips, edge-wise disposed spirals secured between said strips, said walls being provided with a plurality of discharge openings of different sizes to permit the selective discharge of the articles being graded.

1,760,743. RIVETING MACHINE. TOM G. BURNETT, Social Hill, Ark. Filed Nov. 26, 1928. Serial No. 322,065. 8 Claims. (Cl. 218—1.)



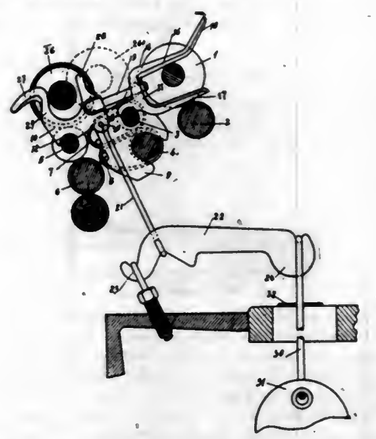
1. A riveting machine comprising a leg, a fulcrum bar carried thereby, a foot pedal mounted upon one end of the fulcrum bar, one end of the leg being offset and having a rivet support thereon, an arm having one end connected with said leg, and a pressure bar pivotally mounted upon the arm and having connection at one end with the fulcrum bar.

1,760,744. CASH REGISTER. JESUS L. CARRILLO, Wilmington, Calif., assignor of one-half to Mary Cherry, Wilmington, Calif. Filed Dec. 27, 1928. Serial No. 328,763. 8 Claims. (Cl. 235—31.)



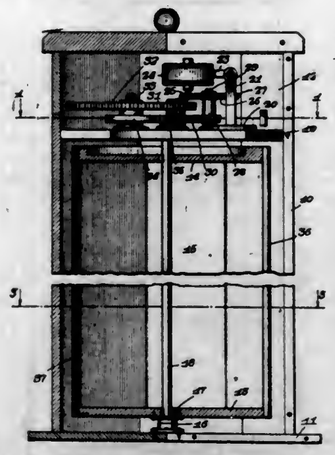
1. A cash register including an outer casing, a plurality of manually and independently operable dating and amount indicating stamps, a plurality of paper strip rolls corresponding in number to the stamps, means for directing the strips from the rolls beneath the stamps, a second series of amount indicating stamps, corresponding in number to the first named stamps, a second series of corresponding paper strip rolls, means for directing the strips therefrom beneath the second series of stamps, means for causing the simultaneous actuation of any one of the first named and corresponding second named stamps, and means for feeding the corresponding paper strips to a definite amount beneath the stamps in each actuation thereof, the casing having a slot through which the paper strips issuing from beneath the first named stamps may be projected.

1,760,745. MECHANISM FOR DRAWING TEXTILE ROVING. FERNANDO CASABLANCAS, Sabadell, Spain. Filed Aug. 12, 1929, Serial No. 385,407, and in Spain Oct. 19, 1928. 3 Claims. (Cl. 19—139.)



1. In a drawing mechanism for textile rovings, the arrangement of a pressure member which rests on the two rear pairs of rollers, means for transmitting to said pressure member the action of a weight to charge the said cylinders, said pressure member forming at its anterior end a bearing by which it bears on the pair of intermediate rollers and at its rear two branches, the upper branch pressing on the top feed roller and the lower branch remaining over the neck of the bottom feed roller and at a short distance from it.

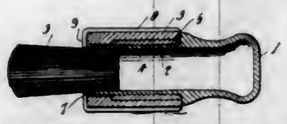
1,760,746. ADVERTISING DEVICE. MELVILLE C. CHAPMAN, Framingham, Mass. Filed Oct. 5, 1928. Serial No. 310,558. 1 Claim. (Cl. 40—33.)



An advertising device comprising a cabinet having a sight opening in one side and a dome upon its top, a drum included within the cabinet having a shaft journaled within the bottom thereof, side portions for the drum being adapted for disposition in parallelism with that of the sight opening, gripping elements carried upon the side edges of the drum side portions to retain placards thereagainst, an operating mechanism included within the cabinet and dome therefor being adapted to intermittently rotate the shaft to exhibit the placards through the sight opening, said drum having a recess within one end, a spring finger constituting a stop carried by an extending

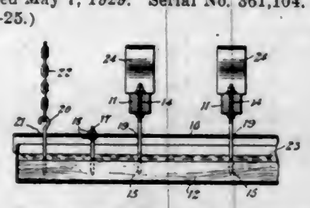
from the adjacent portion of the dome and projecting for an appreciable distance within the recess and frictionally engaging the upstanding wall of the latter, and an adjusting element for said finger whereby the drum will be restricted as to movement when disengaged from the operating mechanism to preserve alignment of the placards within the sight opening.

1,760,747. MASSAGE ATTACHMENT FOR SHAVING BRUSHES. FREDERICK DIETRICHSON, New Rochelle, N. Y. Filed Aug. 21, 1929. Serial No. 387,481. 3 Claims. (Cl. 15—110.)



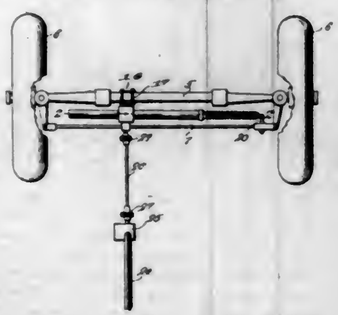
1. A massage attachment for shaving brushes, comprising in combination with a handle having a reduced and threaded extension, a brush body secured in said extension, a sleeve of pliable material mounted on said extension, a bushing of rigid material secured in said sleeve and interiorly threaded and engaging the threads on the extension, said bushing and sleeve being adapted to be unscrewed outwardly of the handle to protect the brush body when not in use and also for use as a massage applicator, and the bushing and sleeve adapted to be screwed inwardly towards the handle when the brush is in use.

1,760,748. CHICKEN ROOST. HENRY FINTEL, Hardy, Nebr. Filed May 7, 1929. Serial No. 361,104. 1 Claim. (Cl. 119—25.)



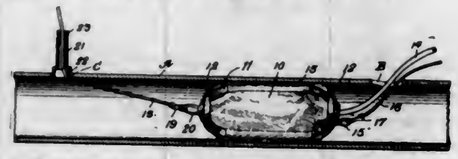
A chicken roost structure having the combination of spaced wooden roost members, metal trough members, a non-metallic member secured inside of each trough member and of the same length thereof, bolts projecting upwardly from said non-metallic members and secured to said roost members, to rigidly fasten said roost members and trough members together, a metallic cover supported over each trough member and having holes therein through which said bolts project, the trough members serving to contain an insecticide.

1,760,749. STEERING GEAR. JOHN F. P. GILLESPIE, Montgomery, Ala. Filed Jan. 10, 1928. Serial No. 245,761. 1 Claim. (Cl. 280—96.)



In combination, a two part cylindrical casing to be attached to a steering axle and arranged in a horizontal plane, a gear housing formed in one end of one of the casing sections and having one end open, a cover plate formed with the other section and closing the open end of the gear housing, a longitudinally shiftable screw passing through the casing and gear housing, and having one end adaptable to be attached to the transversely shiftable rod of the steering gear mechanism, an internally threaded gear received on the screw and held between the cover plate and opposite wall of the gear housing, and a second gear supported within the gear housing and meshing with the internally threaded gear.

1,760,750. STOPPER FOR GAS AND WATER MAINS. PATRICK GOODMAN, Brooklyn, N. Y. Filed Apr. 25, 1928. Serial No. 272,792. 2 Claims. (Cl. 137—76.)



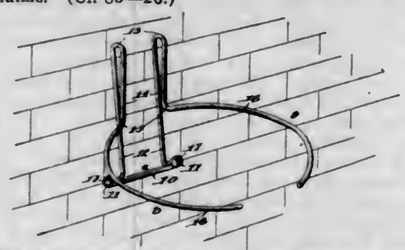
1. In a conduit stopper including an elongated flexible inflatable element having a flexible inflating and deflating tube attached to and communicating with one end of said element, a reinforcing means therefor comprising tapes extending longitudinally of said element and crossing at the ends thereof and end reinforcing tapes crossing the longitudinal tapes at the ends of the stopper and secured to the longitudinal tapes and means carried by the crossed tape ends for connection with haul cables.

1,760,751. WOMB MEDICAL APPLICATOR. JOSÉ LEANDRO MONTALVO GUENARD, Ponce, P. R. Filed Dec. 13, 1928. Serial No. 325,801. 5 Claims. (Cl. 128—271.)



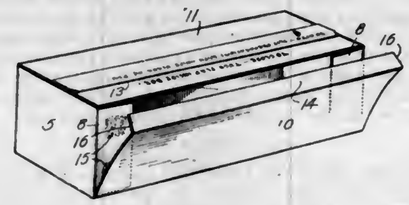
1. A medicinal applicator, including an annular ring of semi-flexible material, and a mesh medicine receiving bag associated therewith, said bag being associated with said ring through inwardly extending loops formed integral with said ring, said bag being associated with said ring to close the aperture thereof.

1,760,752. ARTICLE SUPPORT. GEORGE D. HAPPER, Norfolk, Va. Filed Apr. 7, 1928. Serial No. 268,237. 2 Claims. (Cl. 83—26.)



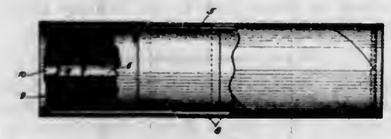
1. A holder of the class described, comprising an attaching portion, resilient members depending from the upper ends of and at the forward side of said attaching portion, and oppositely arranged resilient supporting members projecting outwardly from the lower ends of said depending members and adapted to be engaged within the open end of a bag, said depending members being arranged to bear against the said attaching portions at their lower ends and to clamp an engaged portion of the edge of the container therebetween.

1,760,753. CARTON OR BOX. ROBERT P. HAYDEN, New Brunswick, N. J., assignor to Johnson & Johnson, New Brunswick, N. J., a Corporation of New Jersey. Filed May 16, 1927. Serial No. 191,749. 1 Claim. (Cl. 229—51.)



A carton formed from a blank which is scored to provide top, bottom and side walls, end half tucks and full end tucks secured relatively to the half tucks and having tabs in supporting and sealing relation with the top wall, said top wall having its free edge scored and extended to overhang the proximate side wall, the longitudinal edge of the extension being glued to the side wall, and the area intermediate the edge and the scored portion being free from glue and constituting a potential tucking flap which becomes effective when separated from the glued edge portion, there being a defined line of weakness adjacent said glued edge portion to facilitate the separation.

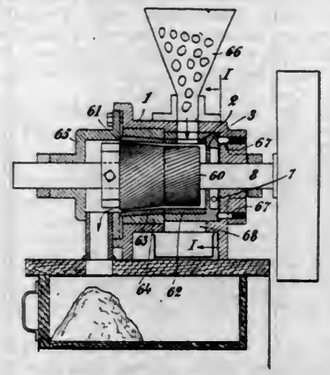
1,760,754. PLASTER-ROLL PACKAGE. ROBERT P. HAYDEN, New Brunswick, N. J., assignor to Johnson & Johnson, New Brunswick, N. J., a Corporation of New Jersey. Filed Jan. 18, 1928. Serial No. 247,663. 4 Claims. (Cl. 206—59.)



1. A package comprising a roll of plaster consisting of co-axially supported variable widths of plaster, a hollow core constituting such support and having ventilating apertures throughout its length, and a packer carton comprising carton sections having heads equipped with means adapted to penetrate the ends of the core to provide for rotary support of the roll.

1,760,755. COFFEE MILL. JØRGEN HERTZ, Copenhagen, Denmark. Filed Aug. 30, 1928, Serial No. 303,057, and in Denmark Sept. 7, 1927. 7 Claims. (Cl. 83—13.)

1. In a coffee mill, in combination; a mill-casing, an outer grinding body adapted to be maintained stationary within said mill-casing under normal running conditions, a driven mill-shaft adapted to carry an inner grinding body for co-operation with said outer grinding body, said outer grinding body being arranged to rotate within said mill-casing if the torque transmitted to the same exceeds a predetermined amount, and means which when

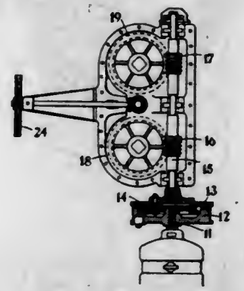


the outer grinding body has been so rotated through a predetermined angle establish a driving connection between said outer grinding body and said mill-shaft.

1,760,756. PROCESS OF DESENSITIZING SILVER-BROMIDE EMULSIONS AND PLATES OR FILMS COVERED WITH SUCH EMULSIONS. BENNO HOMOLKA, deceased, Frankfort-on-the-Main, Germany; by Rudolf Rosenthal, executor, Frankfort-on-the-Main, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Dec. 20, 1927, Serial No. 241,447, and in Germany June 15, 1927. 3 Claims. (Cl. 97—88.)

1. The process of desensitizing photographic silver-bromide layers, which consists in treating the layer with an amine of a phenylphenazonium salt in which at least two amino groups are situated in one and the same carbon ring belonging to the azine complex.

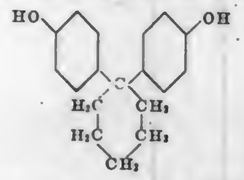
1,760,757. PILGERING ROLLING MILL. HERMANN IDEL, Duisburg, Germany, assignor to Demag Aktiengesellschaft, Duisburg, Germany. Filed June 16, 1927. Serial No. 199,378. 6 Claims. (Cl. 80—56.)



1. Adjusting mechanism for the upper roll of pilgering rolling mills, comprising a frame, superposed rolls in the said frame, pressure spindles for applying pressure upon the upper roll, and a motor for the operation of the said pressure spindles, the said adjusting mechanism consisting of a crosshead carrying the bearings for the upper roll, and movable from said pressure spindles, an adjustable stop upon which the crosshead comes to lie when the upper roll falls, and a friction coupling between the motor and the pressure spindles adapted to operate as a positive coupling when the upper roll is raised and as a friction coupling when the upper roll is lowered, whereby the motor may continue to run after the crosshead comes to rest upon the stop, substantially as described.

1,760,758. PROCESS FOR MANUFACTURING CONDENSATION PRODUCTS FROM HYDROXY-BENZENES AND HYDROAROMATIC RINGKETONES. ERNST KORTEN, Fechenheim, near Frankfort-on-the-Main, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Jan. 5, 1928, Serial No. 244,777, and in Germany Jan. 20, 1927. 3 Claims. (Cl. 260—64.)

1. Process for manufacturing condensation products, corresponding probably to the general formula:

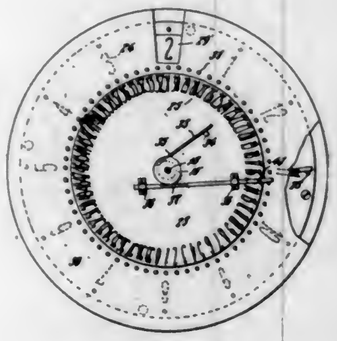


in which formula all of the three nuclei may contain further substituents, which process comprises condensing a hydroxy benzene compound with a hydro aromatic ring ketone compound of the cyclohexane series by means of a hydrohalic acid.

1,760,759. SEA-SALT SOAP. LOUIS C. LAURENT, Denver, Colo., assignor to Herbert J. Lenicheck, Denver, Colo. Filed Apr. 18, 1927. Serial No. 184,833. 4 Claims. (Cl. 87—5.)

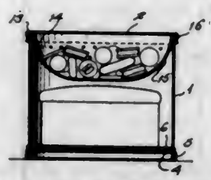
1. A bath soap containing sea salt and a gluten binder.

1,760,760. TIMEPIECE. KENNETH D. LONG, Centerville, Iowa. Filed Dec. 27, 1926. Serial No. 157,806. 2 Claims. (Cl. 58—125.)



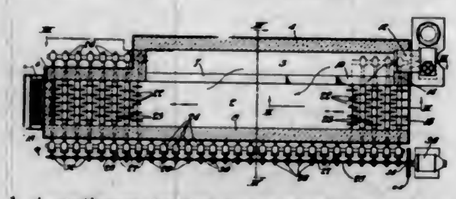
1. In a clock mechanism, a driven member, a hub fixed on said driven member having a gear formed thereon, a clock dial mounted on said hub, a rack bar slidably supported by said dial and operable by said gear for longitudinal movement, a pin extending from the clock dial, a resilient member secured to said hub and engaging the pin, pin members circumferentially supported about the peripheral edge of the clock dial in spaced relation with respect to each other, the outer end of said rack bar being disposed between adjacent pin members, said gear moving the rack bar in one direction and tensioning said resilient member, the movement of said rack bar causing the retraction of the outer end thereof from engagement between said adjacent pin members, said resilient member when under tension acting upon the dial to move said dial intermittently when said outer end of the rack bar is disposed from a position between said adjacent pin members.

1,760,761. BREAD BOX. CARL MARCH, Chicago, Ill. Filed Apr. 7, 1928. Serial No. 268,183. 1 Claim. (Cl. 45—71.)



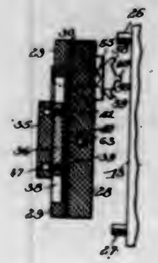
A bread and pastry storage device comprising a hollow cylindrical body, a separate bottom therefor, an annular bead formed with said body adjacent its lower edge and providing an annular depression about the outer surface thereof, a flange formed on said bottom and being provided with a bead adapted to be received in said depression, a disk supported by said bead and being apertured to allow for the passage of crumbs therethrough, a top for said body, a flange for said top and being curved to frictionally engage the upper edge of said body, and a container means detachably arranged in said body.

1,760,762. HEATING FURNACE. ARTHUR R. MCARTHUR, Gary, Ind., and HOWARD G. MCILVRIED, McCandless Township, Allegheny County, Pa., assignors to American Sheet and Tin Plate Company, Pittsburgh, Pa., a Corporation of New Jersey. Filed Jan. 24, 1928. Serial No. 249,147. 5 Claims. (Cl. 263—6.)



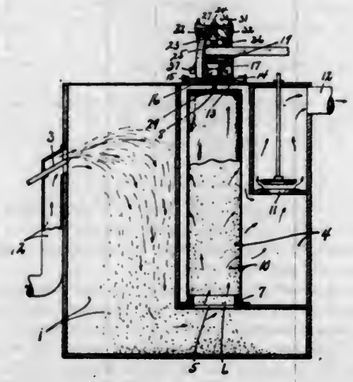
1. A continuous heating furnace for heating sheets and packs of sheets comprising an elongated heating chamber having an entrance port in one end and a discharge port in the other end, a combustion chamber along one side of said heating chamber and separated therefrom for at least a part of its length by a partition wall, an elongated port formed above said partition wall for at least a part of its length, said port being reduced in area from the entrance end toward the discharge end of the furnace, and a source of combustibles at the entrance end of said combustion chamber.

1,760,768. ELECTRIC-CIRCUIT-CONTROL MEANS. ADAM J. MAY, Rochester, N. Y., assignor, by mesne assignments, to The Ritter Dental Manufacturing Company, Inc., Rochester, N. Y., a Corporation of Delaware. Original application filed Nov. 20, 1925, Serial No. 70,241. Divided and this application filed Sept. 10, 1926. Serial No. 134,741. 11 Claims. (Cl. 200—76.)



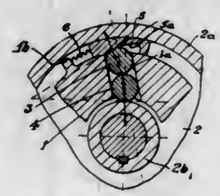
1. An electric switch comprising a support having three fixed contacts thereon, a holder reciprocably mounted upon the support having a contact adapted for engagement with said fixed contacts and arranged to have three circuit closing positions, in one of which it engages all of the fixed contacts and in any position of which it engages two of said fixed contacts, spring-pressed means adapted to resist movement of the holder to and from its different positions, and yieldable operating means for moving the holder in opposite directions adapted to overcome the resistance of said spring-pressed means whereby to afford a relatively quick movement of the holder to and from each of its operating positions.

1,760,764. COLLECTOR FOR FINELY-DIVIDED SOLIDS. IRVING S. MERRELL and OLIVER EDWARD MERRELL, Syracuse, N. Y., assignors, by mesne assignments, to Merrell-Soule Company, Inc., New York, N. Y., a Corporation of Delaware. Filed Jan. 12, 1926. Serial No. 80,831. 4 Claims. (Cl. 183—54.)



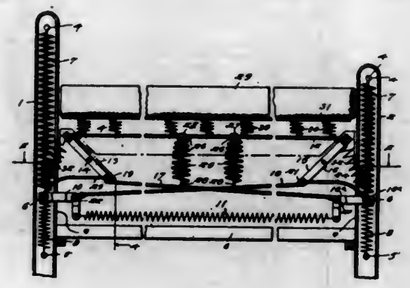
2. A collecting apparatus for finely divided solids including a ring, a collecting element supported thereby, a shaft, means for producing a gyratory movement of the shaft including a universal joint and a weight, and spring means tending to return the shaft to a vertical position during such gyratory movement.

1,760,765. ROLLER CLUTCH. WILLIAM MILLER, Dunston-on-Tyne, England. Original application filed Feb. 3, 1927, Serial No. 165,668, and in Great Britain Feb. 17, 1926. Divided and this application filed June 21, 1928. Serial No. 287,234. 4 Claims. (Cl. 192—45.)



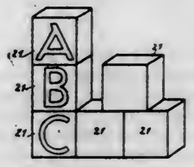
1. A clutch comprising two members, an even number of circumferentially contacting rolling elements arranged in one of said members offset from the normal to the direction of movement of the clutch members, a pair of flanges on the other clutch member, said flanges embracing the outer faces of said rolling elements, and camming means on one of the clutch members, said camming means being independent of said rolling elements, with which camming means the said rolling elements are adapted to cooperate so that when one of the clutch members is moved the clutch is engaged.

1,760,766. BEDSTEAD AND BED BOTTOM. CHARLES R. MINTER, Gordon, Ga. Filed Oct. 20, 1927. Serial No. 227,523. 7 Claims. (Cl. 5—210.)



1. A bed-bottom comprising levers, pivot members therefor, spring means supporting the levers, pivot members connecting the levers to the spring supporting means, inclined links, flexible rods secured to the upper ends of the links, spring rods secured to the lower ends of the links and to the levers, stay springs secured to and between the flexible rods and spring rods, and stay rods secured to the lower ends of the links and to the pivot members of the levers.

1,760,767. ILLUMINATING STRUCTURE. GEORG GUIDO MÜLLER, Berlin-Wilmersdorf, Germany; Flora Müller, inheritress of said Georg Guido Müller, deceased, assignor to Atrax Gesellschaft mit beschrankter Haftung, Berlin, Germany, a Corporation of Germany. Filed June 23, 1928, Serial No. 287,678, and in Germany Sept. 3, 1927. 3 Claims. (Cl. 40—130.)

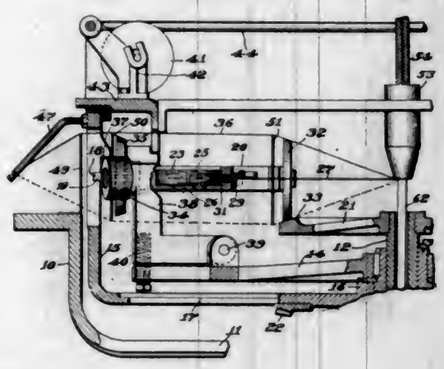


1. An illuminating body for advertising purposes comprising a structure composed of brick-like elements of substantially equal shape and size, characterized in that each of said elements consists of a single piece of light transparent material of the shape of a hollow polyhedron whose lateral faces are alike and whose edges at the junction of the lateral faces are convexed in order that a variety of possibilities for assembling the bodies is inherent in the structure of each body, and means for illuminating each body.

1,760,768. BRAIDING MACHINE. DANIEL H. MURPHY, West Hartford, Conn., assignor to The Wire-Mold Company, Hartford, Conn., a Corporation of Connecticut. Filed Nov. 16, 1928. Serial No. 319,884. 10 Claims. (Cl. 96—7.)

3. In a machine for forming a tubular fabric of interlocked strands, in combination, a carrier for supplying one of said strands to the fabric forming point and adapted to support a ribbon-like mass of paper, and means

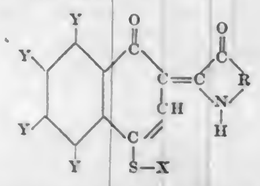
mounted between said mass and the fabric forming point to act upon the paper as it is advanced by the fabric



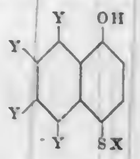
forming mechanism and adapted to crumple the strip of paper into a more or less rounded strand that is delivered to the fabric forming point.

1,760,769. VAT DYESTUFFS OF THE INDIGOID SERIES. WILHELM NEELMEIER, Leverkusen, near Cologne-on-the-Rhine, and THEODOR NOCKEN, Wiesdorf, near Cologne-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Mar. 25, 1927, Serial No. 178,495, and in Germany Apr. 3, 1926. 3 Claims. (Cl. 260—48.)

1. As new compounds vat dyestuffs, having most probably the general formula:—



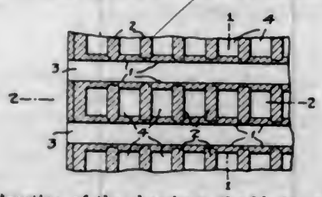
in which X represents an alkyl, aralkyl or aryl group, Y represents hydrogen which may be substituted by an halogen or by an alkyl group, and R represents an aryl residue which may contain further substituents; which dyestuffs are, when dry, powders having a metallic luster yielding with alkaline hydrosulfite a yellow to orange vat from which fibres are dyed in blue-green to greenish shades of excellent fastness especially to light, and which are substantially identical with the dyestuffs obtainable by condensing with an isatin body a thio ether of a 4-mercapto-1-naphthol compound corresponding most probably to the formula—



wherein V represents an alkyl, aralkyl or aryl group, and Y represents hydrogen which may be substituted by an halogen or by an alkyl group.

1,760,770. COKE OVEN. CARL OTTO, Essen-Ruhr, Germany. Filed Jan. 20, 1928, Serial No. 248,235, and in Germany Nov. 16, 1926. 2 Claims. (Cl. 202—139.)

1. In a coke oven having a row of alternate horizontally elongated oven chambers and parallel heating walls therefor arranged side by side, and an oven cover therefor, each of said heating walls comprising a pair of separated runner walls running in the direction of the oven chambers, and a series of parallel faced transverse binder walls extending between each of the pairs of runner walls, the binder walls in each of said series being spaced apart in the direction of the chambers, the alternate binder walls in each of said series extending vertically to the oven cover, and the intermediate binder walls extending to a lesser height providing vertical hairpin flues extending in a row

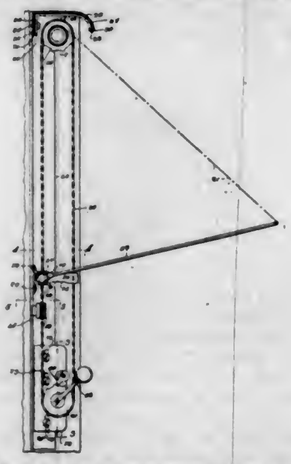


in the direction of the chambers, the binder walls forming the two end faces of the flues; said alternate binder walls constituting supporting columns and being of materially greater thickness than the maximum thickness of the runner walls, so as to support the major part of the weight of the cover and loads resting thereon, and enabling the thickness of the runner walls to be decreased to permit quick transmission of heat, the thickness of the runner walls being sufficient to resist transverse stresses produced in coke pushing.

1,760,771. PROCESS FOR PURIFYING PEARL ESSENCE. JEAN PAISSEAU, Paris, France. Filed Feb. 9, 1925, Serial No. 8,053, and in France Oct. 3, 1924. 3 Claims. (Cl. 252—1.)

1. A process for purifying pearl essence which consists in agitating pearl essence in a prepared and purified aqueous suspension, in bringing the pearl essence to the state of an aqueous paste, in adding to the said paste in small quantities and while mixing a liquid which is not miscible with water, capable of moistening the particles of pearl essence and of forming with the same a new paste the muddy water of which separates spontaneously, and in washing this new paste by mixing the same with water until the latter after having carried along the impurities contained in this paste flows out in a pure state.

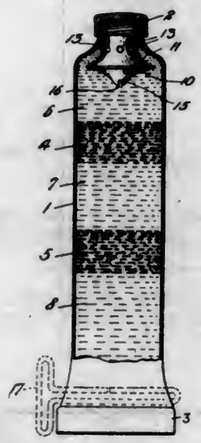
1,760,772. JOURNAL AND GUIDE BRACKET. ORVILLE E. PEASE, Baldwin, N. Y., and NORBERT G. JOSEPH, Bogota, N. J., assignors to F. J. Kloes, Inc., New York, N. Y., a Corporation of New York. Filed Aug. 14, 1928. Serial No. 299,528. 2 Claims. (Cl. 156—44.)



1. A journal and guide bracket comprising an arm having openings adapted to guide the sprocket chain of a chain

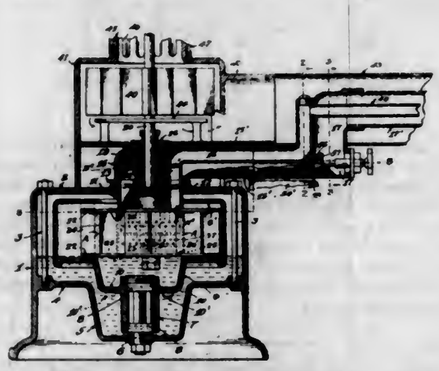
gear operated window awning, a pivot extending from the arm adapted to have hinged thereto one end of a curtain supporting rod.

1,760,773. CONTAINER OR TUBE FOR DENTIFRICE. CLARENCE J. PENNEY, New York, N. Y. Filed Sept. 29, 1928. Serial No. 309,155. 8 Claims. (Cl. 221—60.)



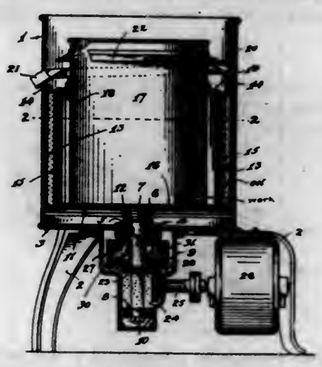
1. The combination with a collapsible container tube of the customary type which is closed at one end and has a restricted discharge opening at the other end, of means for rendering the flow of material from points in each cross section of the tube to said restricted opening substantially uniform as the tube is uniformly collapsed from its closed end, including a spreading device mounted in said discharge opening and projecting inwardly therefrom.

1,760,774. FUEL-OIL BURNER. WILLIAM G. PETERS, Peoria, Ill. Filed Mar. 2, 1926. Serial No. 91,803. 25 Claims. (Cl. 158—77.)



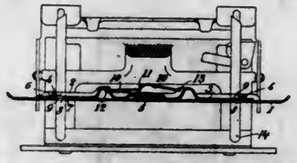
1. Apparatus of the character named including a container for oil, a receptacle therein, supporting means central of the receptacle on which it is free to rotate, said receptacle arranged for free entrance of oil thereto from said container, a hollow cylindrical valve depending into the receptacle in fixed position disposed eccentrically to the walls of the same and having two passages separate from each other, a carburetor connected by a passage with one of the valve passages, a fuel nozzle connected by a passage with the other of the valve passages, a cylindrical sleeve rotatable upon the valve in a snug turning fit, said sleeve having two series of perforations, each series lying in position to communicate with one of the passages having the fuel nozzle and carburetor, a pair of spaced walls paralleling the plane of rotation of the sleeve and connected with said sleeve, a series of blades erected between the walls substantially perpendicular to said plane of rotation and abutting upon and radiating from said sleeve, and means to rotate said sleeve and its connected structure.

1,760,775. ROTARY OR SPINNING EXTRACTOR. WILLIAM G. PETERS, Peoria, Ill. Filed Aug. 17, 1928. Serial No. 300,360. 17 Claims. (Cl. 210—72.)



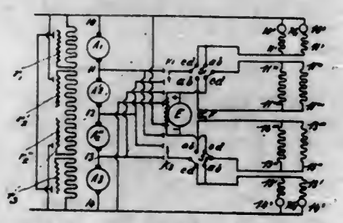
1. An extractor including in its construction a rotatable liquid holding container, and a receptacle therein displacing a bulb of the liquid and free to shift in a lateral direction.

1,760,776. PAPER FILE. THURE RENGMANN, Berlin-Charlottenburg, Germany. Filed Aug. 30, 1929, Serial No. 389,548, and in Germany Aug. 10, 1928. 3 Claims. (Cl. 129—4.)



1. In a paper file of the post or prong type, a binding device comprising two strips one of which is superimposed and slidably guided on the other, said strips being provided with apertures whereby they are threaded on the prongs, a spring tending to maintain the strips in a relative position wherein they are freely movable on said prongs, and a toggle mechanism whereby the strips can be relatively displaced so as to grip the prongs.

1,760,777. ELECTRIC INSTALLATION IN COMBINATION WITH PRESSURE-SPLITTING DEVICE. ANGELO DELLA RICCIA, Brussels, Belgium. Original application filed Dec. 2, 1921, Serial No. 519,558, and in France Dec. 16, 1920. Divided and this application filed Aug. 12, 1927. Serial No. 212,570. 6 Claims. (Cl. 172—179.)



1. In combination with a main distributing line of substantially constant pressure,—a direct current pressure

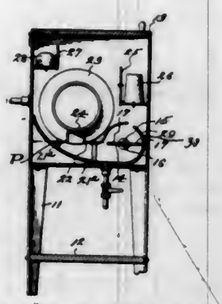
splitting device with two extreme and at least two intermediate symmetrical terminals, with means symmetrically disposed to vary the pressures at the intermediate terminals with respect to the pressures applied to the extreme terminals of said pressure splitting device,—and two balanced groups of electric apparatus to be controlled, the apparatus of each group being connected in parallel and each group being connected permanently to one of the two terminals of the main line, means to connect each of said balanced groups first in shunt with the end part of the device connected to the same terminal of the main line, then in shunt with this end and the intermediate parts of the device, finally in shunt between the two terminals of the line.

1,760,778. COMB. HENRY J. RIES, Iowa City, Iowa. Filed July 17, 1929. Serial No. 378,976. 11 Claims. (Cl. 132—15.)



1. A comb comprising a case, and a multiplicity of separate and independent teeth pivotally supported by the case and capable of being swung to an unseen position within the case and also capable of being swung to a position to extend from the case and serve to form a comb.

1,760,779. DISHWASHING MACHINE. ALBERT B. SCHMIDT and LEWIS A. JAMES, Independence, Kans. Filed June 16, 1927. Serial No. 199,290. 1 Claim. (Cl. 141—9.)



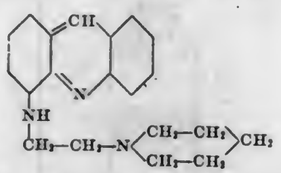
A dish washing machine of the class described comprising a tank, an agitator rotatably mounted in said tank, a substantially upstanding curved baffle plate partly surrounding said agitator, a rack for the support of articles to be washed arranged substantially within the height of the edge portions of the plate and in the path of fluid thrown by the agitator, and another rack secured to the tank above the baffle plate, said baffle plate being adapted to direct fluid at the first mentioned rack and having a slot therethrough relatively close to the top through which fluid will be directed at the second mentioned rack.

1,760,780. LIGHT-SENSITIVE LAYERS AND PROCESS OF PREPARING THEM. MAXIMILIAN PAUL SCHMIDT and WILHELM KRIEGER, Wiesbaden-Biebrich, Germany, assignors to Kalle & Co., Aktiengesellschaft, a Corporation of Germany. Filed Aug. 7, 1928, Serial No. 298,125, and in Germany Sept. 6, 1927. 20 Claims. (Cl. 95—7.)

1. The process of preparing light-sensitive layers by means of diazo compounds which consists in applying on a base a mixture of at least two different diazo compounds.

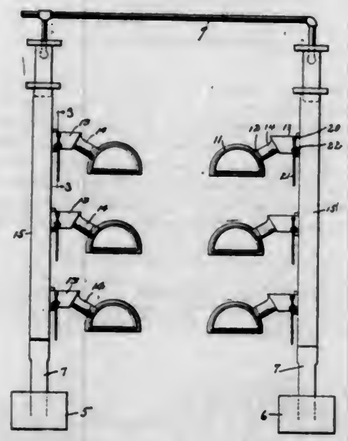
1,760,781. MANUFACTURE OF NEW PHARMACEUTICAL PRODUCTS. WERNER SCHULEMANN, Vohwinkel, near Elberfeld, and FRITZ SCHÖNHÖFER and AUGUST WINGLER, Elberfeld, Germany, assignors to Winthrop Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed Dec. 16, 1927, Serial No. 240,621, and in Germany Dec. 20, 1926. 7 Claims. (Cl. 260—36.)

7. The process of producing a compound of the formula:



which process comprises reacting upon 4-amino-acridine with the hydrochloric salt of α-piperidyl-ethylchloride.

1,760,782. GAS-PRODUCING APPARATUS. ASA SEELEY, Owosso, Mich. Filed July 18, 1925. Serial No. 44,593. 3 Claims. (Cl. 202—241.)

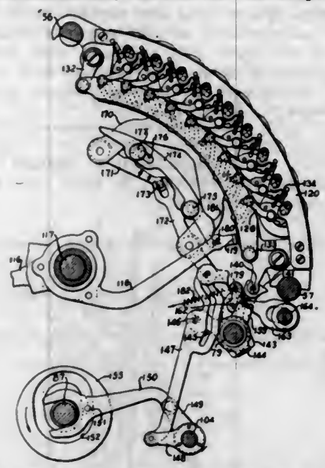


1. In a gas producing apparatus, the combination with a retort having a mouth piece, two substantially parallel flues adjacent to each other, one of the flues constituting a stand-pipe and the other flue a waste heat flue, an opening into each of these flues, a casing which overlies the openings and communicates with the mouth piece, and a cut-off movable in the casing so as to close either of the openings alternately and allow the other to remain open simultaneously.

1,760,783. CASH REGISTER. BERNIS M. SHIPLEY, Dayton, Ohio, assignor to The National Cash Register Company, Dayton, Ohio, a Corporation of Maryland. Filed Dec. 17, 1927. Serial No. 240,725. 7 Claims. (Cl. 235—6.)

7. In a machine of the class described, the combination with a plurality of groups of counters; and means individual to the respective groups of counters to select the counter in its respective group for operation; of means individual to each group, to operate any counter in the respective groups; driving means connected with the operating means of one of such groups of counters; a releasable coupling to connect the operating means for a plurality of groups of counters, and disabling means

controlled by the selecting means for one of said groups of counters, to automatically disconnect the coupling be-



tween the operating means for the plurality of groups of counters, when the selecting arm is adjusted to one of its positions.

1,760,784. WRENCH. EMIL O. SKARKE, Schulenburg, Tex. Filed Nov. 4, 1929. Serial No. 404,830. 2 Claims. (Cl. 81—90.)



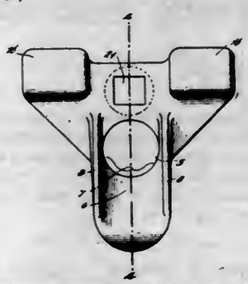
1. A handle member having a plate extension that provides a shank and which has an angularly arranged stud adjacent one end thereof, a second flat plate comprising a shank underlying the first mentioned shank and having an elongated opening to receive the stud of the first mentioned shank therethrough, said last mentioned shank having a depending stud adjacent its outer end, guide means carried by the last mentioned shank for the first mentioned shank and binding means between one of said guide means and the first mentioned shank.

1,760,785. HOLDER FOR MAPS, ETC. CECIL B. SLEDGE and DANIEL J. O'CONNOR, Jr., Augusta, Ga. Filed Sept. 13, 1929. Serial No. 392,380. 1 Claim. (Cl. 40—86.)



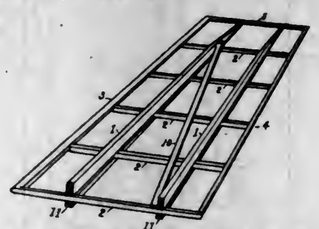
A holder of the class described comprising a body part and a cover part formed of one piece of material, said parts including end and side flaps, one end flap connecting the two parts together, the opposite end flap of the body part and the side flaps of said part having holes therein, the holes of said end flap registering with a pair of holes in the side flaps when said flaps are bent at right-angles and the ends of the end flap turned inwardly, a shaft passing through said registering holes, a second shaft passing through the other holes in the side flaps, knobs on the ends of the shafts, the connecting end flap and the adjacent ends of the side flaps of the cover part having curved notches therein which will register with each other when said end flap and the side flaps are bent at right-angles and the ends of the end flap turned inwardly, the other end flap of the cover part and the adjacent ends of the side flaps thereof having straight notches therein which will register with each other when the flaps are bent at rightangles and the ends of the end flap bent inwardly, said curved and straight notches passing over the ends of the shafts when the cover part is moved to closing position, said cover part having an opening in its top, a strip connected with the ends of the shaft and passing under the opening when either shaft is turned and a supporting member in the body part over which the strip passes.

1,760,786. COUPLING FOR INSULATORS. HAROLD P. SLEEMAN, Lisbon, Ohio, assignor to The R. Thomas & Sons Company, Lisbon, Ohio, a Corporation of Ohio. Filed Oct. 17, 1928. Serial No. 313,151. 6 Claims. (Cl. 24—123.)



1. An adapter composed of two parts, means whereby said parts may be secured together to grip the legs and feet of a U-link, said parts each having an aperture therein combining to form an eye, and means integral with each part of said adapter cooperating with said eye to form a thimble.

1,760,787. AIRPLANE WING. JAMES B. SLINN, Bonaparte, Iowa. Filed June 24, 1927. Serial No. 201,179. 14 Claims. (Cl. 244—81.)



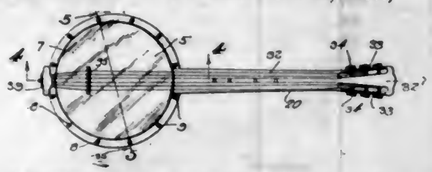
1. An airplane wing including a framing forming the body thereof having extensions projecting from opposite sides in two spaced positions disposed longitudinally thereof in spaced relation to and substantially paralleling the longitudinal edge thereof, and a covering for the structure, the same presenting substantially straight surfaces between the members and the said edges of said frame.

1,760,788. PRODUCTION OF CHROMATES WITH SIMULTANEOUS RECOVERY OF ALUMINA. HEINRICH SPECKETER and GEORG HENSCHEL, Griesheim-on-the-Main, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed June 23, 1927, Serial No. 201,016, and in Germany July 1, 1926. 3 Claims. (Cl. 23—56.)

1. The process of producing sodium chromate with simultaneous recovery of alumina, which comprises the steps

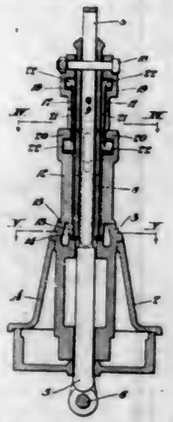
of subjecting a mixture of a chrome ore and bauxite with the amount of soda ash required for forming chromates, aluminates and ferrates in an oxidizing atmosphere to a temperature of about 900–1000° C., extracting the hot mass with water to produce a solution of about 1.26 specific gravity, keeping the said solution at a temperature of at least 100° C. until the separation of the silicic acid in form of sodium-aluminum silicate is completed, filtering off the solution, precipitating the alumina from the latter by carbonic acid, filtering off the sodium carbonate and chromate solution, concentrating the same until the main quantity of sodium carbonate is separated, filtering off the chromate solution and separating the chromate therefrom.

1,760,789. STRINGED MUSICAL INSTRUMENT. JOHN SPERDUTI, Pleasantville, N. Y. Filed Aug. 16, 1928. Serial No. 300,101. 4 Claims. (Cl. 84—269.)



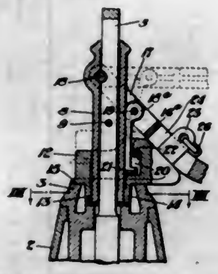
1. A stringed musical instrument of the banjo type comprising a cylindrical body having a membranous head, and means for tensioning said head, said body being provided with a closed back in the form of a flattened ring and a central, detachable, closure disk, said ring being provided with spaced apertures.

1,760,790. SWITCH STAND. JOSEPH W. STANLEY, Johnstown, Pa. Filed Oct. 10, 1929. Serial No. 398,688. 2 Claims. (Cl. 246—418.)



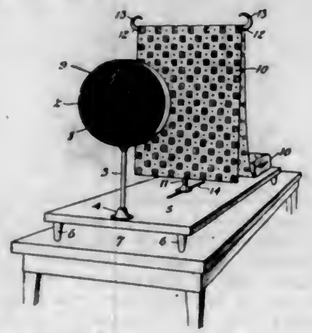
1. In a switch-stand the combination of a base, a vertical shaft mounted centrally within said base and rotatable relative thereto, a sleeve mounted around said shaft and rotatable therewith, said sleeve being held against downward movement, and means for preventing vertical movement of said shaft relative to said sleeve, a second sleeve mounted around said first named sleeve and slidable vertically relative thereto, said second sleeve being held against rotation relative to said first named sleeve, said second named sleeve engaging said base and being held against rotation when in its lowermost position and being out of engagement with said base and free to rotate with said first named sleeve and said base when in its upper position, a forked operating lever pivotally mounted on said first named sleeve for vertical swinging movement, and a pair of link members connecting the opposite forked ends of said lever with diametrically opposite points of said second named sleeve, said forked ends of said lever being provided with hollow cylindrical enlargements adjacent their ends and opening inwardly, said second named sleeve being also provided with hollow cylindrical enlargements at diametrically opposite points adjacent its upper end, and said links being provided with cylindrical projections adjacent each end which fit loosely within said hollow enlargements forming pivotal connections.

1,760,791. SWITCH STAND. JOSEPH W. STANLEY, Johnstown, Pa. Filed Oct. 10, 1929. Serial No. 398,689. 2 Claims. (Cl. 246—418.)



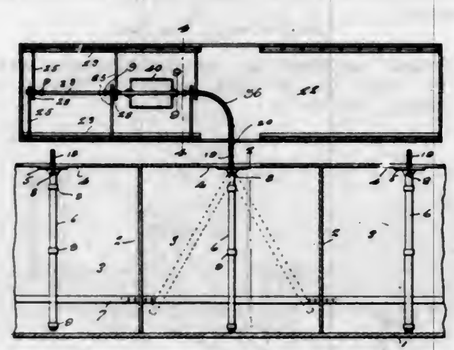
1. In a switch-stand the combination of a base, a vertical shaft mounted centrally within said base and rotatable relative thereto, a sleeve mounted around said shaft and rotatable therewith, said sleeve being held against downward movement, and means for preventing vertical movement of said shaft relative to said sleeve, a second sleeve mounted around said first named sleeve and slidable vertically relative thereto, said second sleeve being held against rotation relative to said first named sleeve, said second named sleeve engaging said base and being held against rotation when in its lowermost position and being out of engagement with said base and free to rotate with said first named sleeve and said base when in its upper position, a forked operating lever pivotally mounted on said first named sleeve for vertical swinging movement, a link member pivotally mounted on said operating lever and depending therefrom, said second named sleeve being provided with an enlargement into which said link member depends, said link member having its free lower end bent at right angles forming a hook portion, a projection on the inside of the rear wall of said enlargement forming a shoulder, said link having a limited free movement within said enlargement and being adapted to be moved upwardly by said operating lever to engage said shoulder and move said second named sleeve upwardly.

1,760,792. DISPLAY DEVICE. BERNARD F. STENZ, New York, N. Y., assignor to Simplex Sampling Association, Inc., New York, N. Y., a Corporation of New York. Filed Sept. 7, 1929. Serial No. 390,974. 3 Claims. (Cl. 35—17.)



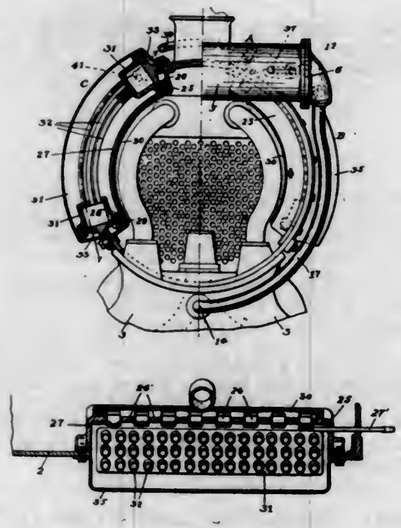
1. A display device comprising a reducing lens and an opaque stencil defining in reduced size a picture of an object, the reducing lens and stencil being in close relation to each other whereby a patterned material may be viewed through the picture and lens, with the pattern of the material reduced with relation to the size of the picture.

1,760,793. COAL CARRIER. HENRY E. STREITWIESER, Worden, Mont., assignor of one-half to John E. Peterson, Huntley, Mont. Filed July 25, 1927. Serial No. 208,319. 2 Claims. (Cl. 104—92.)



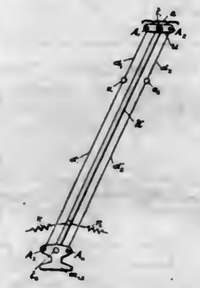
1. A means for conveying coal from a box car into a bin located along side of the box car, comprising a vertically adjustable pivotally supported horizontally swingable track in the bin, a vertically adjustable centrally supported track in the car, and removable short track members connected together and to the first mentioned tracks.

1,760,794. FEED-WATER-HEATING APPARATUS FOR BOILERS. EDWARD F. SULLIVAN, South Portland, Me. Filed Nov. 25, 1927. Serial No. 235,618. 3 Claims. (Cl. 122—423.)



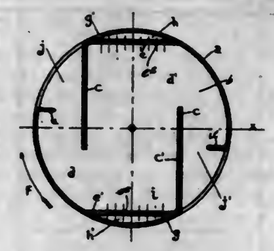
1. In feed-water heating apparatus adapted for use on locomotives, comprising in combination with the smoke-box therefor, an aperture cut in the side wall of said smoke-box, a multitubular water heater disposed within said aperture, a section of a casing within said smoke-box, coextensive in length and breadth with said aperture and adapted to partially enclose the space within which is located said water heater, slots in the wall of said section of a casing adapted to provide means for the admission of hot gases from said smoke-box into the space immediately surrounding said water heater, an outer section of a casing adapted to complete the enclosing of said water heater within the before mentioned space, means to wholly exclude the hot gases from said smoke-box from said heater space, means operable to supply feed water to said heater, and means for conveying the water from the heater to the boiler.

1,760,795. DEVICE FOR THE PREVENTION OF THE TILTING MOVEMENT OF CURRENT COLLECTOR BOWS. FERENC SZALAY, Budapest, Hungary. Filed Oct. 18, 1928, Serial No. 313,344, and in Hungary Oct. 31, 1927. 3 Claims. (Cl. 191—55.)



1. A device for preventing the overturning of a collector bow rotatably arranged on the trolley frame, including an abutment arranged below the bow and spaced therefrom to permit a limited free swinging of the bow, and means whereby the abutment is held in substantially horizontal position independent of the inclination of the trolley frame.

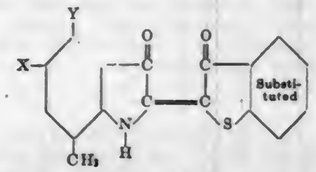
1,760,796. MACHINE FOR TREATING HIDES, SKINS, LEATHER, AND OTHER SIMILAR PIECES OF WORK. CONSTANTIN SZMUKLER, Grenoble, France. Filed Dec. 1, 1926, Serial No. 152,043, and in France Dec. 8, 1925. 13 Claims. (Cl. 149—11.)



12. A hide treating machine comprising a rotary drum having end panels for closing it at both ends, and having partitions therein to form a cell within the drum, two of the partitions being arranged to extend in opposite directions from the inner surface of the drum in spaced relation to each other and considerably past the center of rotation of the drum so as to form the long sides of the cell, said two partitions being each secured to the inner surface of the drum along one line only so as to leave unobstructed openings from the cell into spaces within the drum and outside of the cell.

1,760,797. INDIGOID VAT DYESTUFFS. KARL THIESS, THEODOR MEISSNER, and CARL JOSEF MÜLLER, Hochst-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Dec. 17, 1927, Serial No. 240,922, and in Germany Dec. 24, 1926. 12 Claims. (Cl. 260—49.)

1. As new products, vat dyestuffs of the following formula:



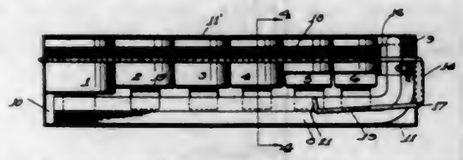
wherein X stands for halogen or CH_3, and Y stands for hydrogen, halogen or CH_3 being, when dry, violet powders forming with alkaline hydrosulfite yellow to green vats from which the fiber is dyed reddish to bluish-violet tints of good fastness.

1,760,798. DYEING MACHINE. JAMES H. THOMPSON, Trenton, N. J., assignor to Hussong Dyeing Machine Company, Groveville, N. J., a Corporation of New Jersey. Filed Apr. 15, 1927. Serial No. 184,091. 1 Claim. (Cl. 184—106.)



A drip pan for vertical shafts, said pan having a slot formed in an edge thereof through which the shaft may be removed, a peripheral flange on the pan and around the said slot, and a cap secured to said pan and covering the outer end of said slot while leaving an opening at the inner end of the slot for said shaft.

1,760,799. SOCKET-WRENCH SET. CLARENCE E. WAKEFIELD, JOSEPH P. FLEMING, and JOSEPH F. OLIVER, Worcester, Mass., assignors to Wakefield All-Steel Wrench Company, Inc., Worcester, Mass., a Corporation of Massachusetts. Filed Apr. 1, 1927. Serial No. 180,235. 4 Claims. (Cl. 206—16.)



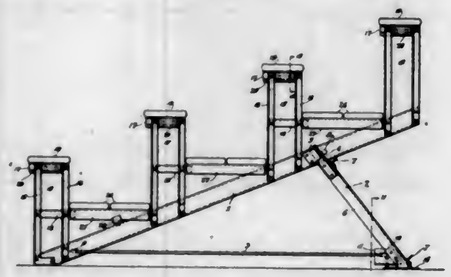
1. A tray or container for the reception on its bottom of the interchangeable socket members and the common handle member of a socket wrench set, and a wire hinged to one end wall of said tray and providing two sections overlying the tray bottom, one section for contact with said socket members and the other section for contact with said handle member, and a slot in the other end wall of said tray, to provide a latch for the free end of said wire.

1,760,800. JOINT FOR ARTIFICIAL LIMBS. WILLIAM H. WAMBSGANS, Peoria, Ill. Filed Oct. 24, 1928. Serial No. 314,815. 3 Claims. (Cl. 287—101.)



1. A joint for artificial limbs including in its construction two members each for attaching to a part of a limb, a hollow stem extending from and being integral with one of said members and provided with screw threads on both its inner and outer surfaces, the other member having a bore through it of greater diameter than the said stem, and receiving the latter, a cap having a threaded bore engaging the threads of the stem and extending into the bore of the last named member, said cap being counterbored, a ring seated in the counterbore encircling the stem, the latter and the ring having provision for preventing one turning with respect to the other, and a screw engaging the threaded inner surface of the stem, its head bearing upon the ring and clamping it and the cap in fixed relation.

1,760,801. GRANDSTAND. CHARLES H. WETZEL, Wayne, Pa. Filed Apr. 16, 1928. Serial No. 270,304. 22 Claims. (Cl. 189—2.)



1. In a grandstand structure, the combination with a pair of rearwardly inclined stringers, of a forwardly inclined stringer-supporting section including side bars whose upper ends directly engage the under sides of said stringers, interlocking means on the said stringers and on the supporting section preventing transverse relative movements of the parts, and tie rods connecting the forward lower ends of the stringers with the bottom of said supporting section.

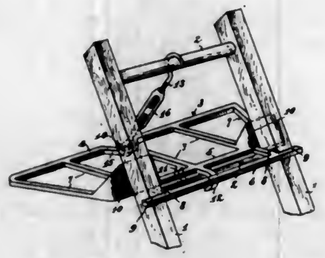
1,760,802. SAFETY CATCH FOR PINS. KARL F. WILD, Peoria, Ill. Filed Oct. 24, 1928. Serial No. 314,814. 9 Claims. (Cl. 24—157.)



1. A safety catch including a body for attachment at one end to a support and having an open head at its other end provided with a bore, said head also having a slot partially severing it lying in a plane at right angles to the axis of the bore, a cylindrically curved open ring fitting the bore adapted to be inserted endwise into the said bore from one side of said head, and a stud adapted to be inserted through the slot to meet the ring and secured thereto, said stud adapted for rotating the ring and for retaining the same within said bore.

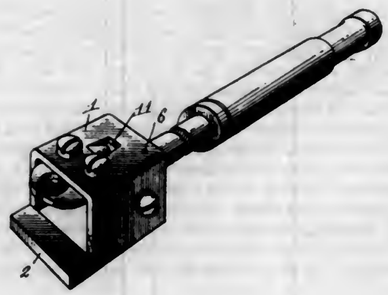
1,760,803. COMBINATION LADDER STEP AND SUPPORT. JOHN WIRTH, New York, N. Y. Filed Oct. 11, 1927. Serial No. 225,501. 1 Claim. (Cl. 304—34.)

A device of the character described, including a platform wider than the ladder to which it is to be connected and having recessed ends adapted to receive the stiles of a ladder, upwardly projecting enlargements at the outer wall of said recesses constituting abutments to engage the stiles of the ladder, a hook pivotally connected to the outer end of the platform and adapted to engage a rung of the ladder either above or below the platform and to force the abutments against the faces of the stiles of the ladder,



said hook having a turnbuckle intermediate its ends whereby the hook may be adjusted longitudinally, and a double hook member on the under face of the platform adapted to engage the rungs of a ladder and co-operate with the first-mentioned hook to rigidly secure the platform to the ladder.

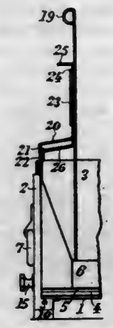
1,760,804. STAPLE AND NAIL EXTRACTOR. FREDERICK N. YOUNG, Claremont, N. H. Filed Oct. 2, 1926. Serial No. 139,199. 1 Claim. (Cl. 254—24.)



An extractor comprising a housing, a fixed jaw secured in the housing and having its outer engaging end projecting longitudinally from one end of the housing, a pivoted jaw mounted in opposed position to the fixed jaw and adapted to adjustably co-act therewith, and a handle arranged rearwardly of and contiguously with said movable jaw and extending longitudinally from the opposite end of the housing, said handle being pivoted to said housing for swinging movement in a plane at right angles to the swinging movement of the pivoted jaw and formed with an angular projection engageable with the inner end of the pivoted jaw to actuate the jaw to article engaging position.

1,760,805. POSTING TRAY. PHILIP BERGMANN, Philadelphia, Pa., assignor to Columbia Steel Equipment Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Oct. 27, 1927. Serial No. 229,174. 3 Claims. (Cl. 129—16.)

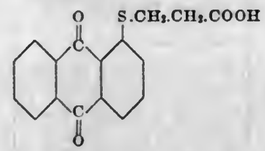
3. In combination with a posting tray having an end formed with an upstanding rib and a bottom, a tiltable front mounted on said bottom and having means fixed with relation thereto engaging said rib alternately with the front to limit swinging movement of said front, and means



for locking the tiltable front with the first-named means in engagement with said rib, said means being carried by the tiltable front and having engagement with said rib.

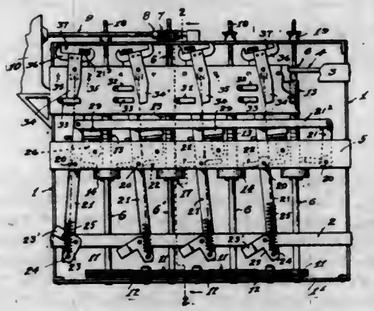
1,760,806. β-MERCAPTO-PROPIONIC ACID ANTHRAQUINONE DYE. HERMANN BERTHOLD, Leverkusen-on-the-Rhine, Germany, assignor to General Aniline Works, Inc, New York, N. Y., a Corporation of Delaware. Filed Dec. 16, 1927, Serial No. 240,641 and in Germany Dec. 18, 1926. 4 Claims. (Cl. 260—158.)

1. The products having in their free form the probable formula:



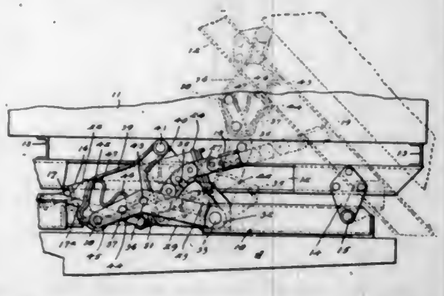
wherein the anthraquinone nucleus may be further substituted, said products being in form of their alkali metal salts colored powders, soluble in water, dyeing cellulose acetate silk strong and fast shades.

1,760,807. SIGNALING MECHANISM. WILLIAM E. BIRKET, Peoria, Ill. Filed Jan. 8, 1927. Serial No. 159,006. 22 Claims. (Cl. 200—92.)



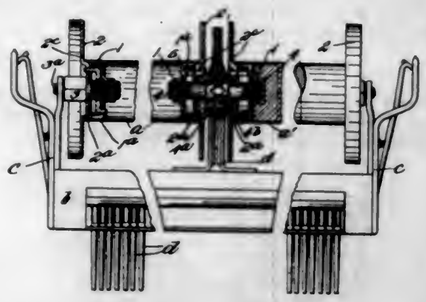
1. Mechanism, in a signaling system, including a pivotally mounted arm adapted for movement in opposite directions on its pivot, an extension on the arm, a constantly rotating part, the same in addition adapted for movement in a direction paralleling its axis of rotation adapted to engage the extension for swinging the arm, a second rotatable part, and a member operated by the arm in one direction of its movement to engage said member with said second part for shifting it axially.

1,760,808. LIFTING MECHANISM FOR DUMP BODIES. FRED BISZANTZ, Galion, Ohio, assignor to The Central Ohio Steel Products Company, Galion, Ohio, a Corporation of Ohio. Filed Feb. 25, 1930. Serial No. 431,317. 9 Claims. (Cl. 298—22.)



1. In a dumping truck, a supporting frame, a dumping body tiltable on the frame, a shaft on the frame, means for causing rotation of the shaft in one direction at a uniform speed, lifting arms carried by the shaft, means carried by the body and shiftable with relation thereto with which said arms engage, and means for engaging the arms with said means initially at a point inward of the ends of said arms when the arms are in a horizontal position, and then as the arms and body rise, shifting the point of operative engagement away from the pivotal axis of the arms and simultaneously shifting said means toward the pivotal axis of the body.

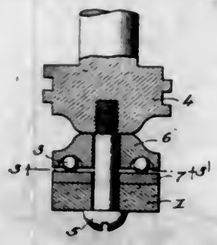
1,760,809. YARN SPOOL FOR TUBE FRAMES AND THE LIKE. WALTER BIXBY, Boston, Mass., assignor to Shawmut Engineering Company, Boston, Mass., a Corporation of Massachusetts. Filed Nov. 4, 1927, Serial No. 231,005. Renewed Jan. 26, 1929. 11 Claims. (Cl. 242—123.)



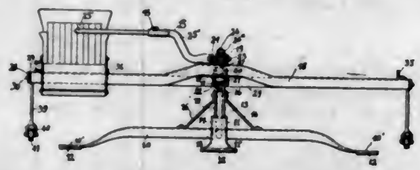
1. A yarn spool for tube frames embracing in combination with a tubular barrel member, a centrally apertured anchoring member secured interiorly and transversely thereof, a detachable end head adapted to abut against the end edge of said barrel member, a head attaching member passing axially through said end head and having its inner end releasably engaged with the apertured anchoring member and having an axial extension projecting outside said end head, thereby permitting removal and replacement of journals and heads on the same spool.

1,760,810. FAUCET. WINSLOW P. BRADFORD, Buffalo, N. Y. Filed Oct. 3, 1928. Serial No. 310,071. 3 Claims. (Cl. 251—46.)

1. In a device for the purpose specified, the combination of a valve stem, a washer, a stem screw securing the washer to the stem, the washer being rotatable relative thereto, a casing slidably arranged on the stem screw above the washer and comprising upper and lower portions, one of which is provided with a kerf on its lower face and balls arranged in the kerf whereby when pressure is exerted by the stem on the upper portion of the casing, the lower portion of the casing and washer will be moved downwardly, substantially as and for the purpose specified.

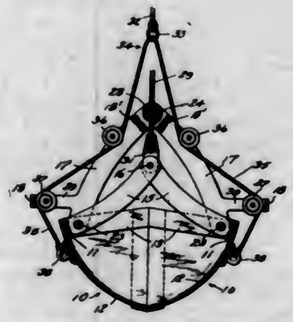


1,760,811. OCCUPANT-PROPELLED CARROUSEL. LEOPOLD BUSTIN, New York, N. Y., and FRANK PRAVDA, Dunellen, N. J. Filed June 23, 1928. Serial No. 287,730. 2 Claims. (Cl. 272—33.)



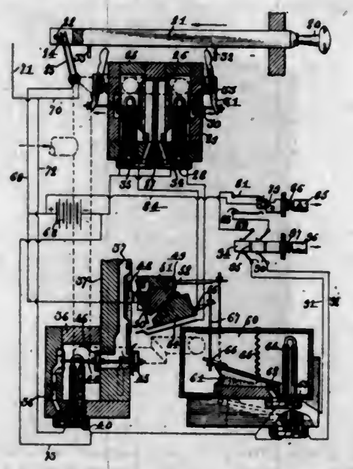
1. In an occupant-propelled carrousel, in combination, a stationary element; a movable element rotatable thereabout; said stationary member comprising a base having a vertical shaft secured in its center and said movable element comprising beams having holes therein to receive said shaft; a sleeve encircling said shaft and secured thereto; antifriction means between said beams and said sleeve; a ratchet wheel secured adjacent to the top of said shaft; a lever rotatable around said shaft and carrying a pawl to engage said ratchet wheel; radially adjustable seats for the users on said beams; said lever being made of two radially adjustable sections, the outer section being removable for adjusting the operative length of said lever and for making the same operable from any of the seats.

1,760,812. CLAMSHELL BUCKET. THEODORE CARLSON, Seattle, Wash. Filed Aug. 1, 1927. Serial No. 209,812. 6 Claims. (Cl. 37—184.)



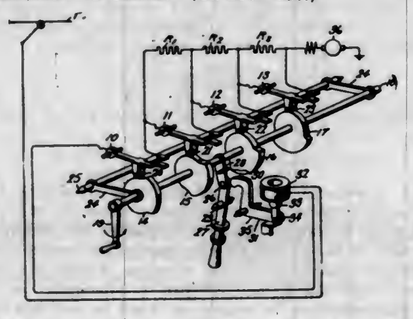
1. In a clamshell bucket, two scoop members, each scoop having a reinforcing frame provided with side elements and a rigid arm extending inwardly and upwardly of the scoop, a pin pivotally connecting the upper ends of said arms together, bucket supporting means comprising companion yokes hingedly connected at their lower ends to the outer portions of the respective scoops between the side walls of the latter and the side elements of the respective reinforcing frames, means for pivotally connecting the upper portions of both yokes together, a bucket hoisting cable connected to said pin, a bucket opening cable having leads connected to the respective scoops, and means associated with the yokes for guiding the hoisting cable and the leads of the bucket opening cable through the upper portion of the yoke assembly.

1,760,813. COMBINATION ORGAN-STOP ACTION. SAMUEL CASAVANT, JOSEPH HEVEY, and ARTHUR LETIECQ, St. Hyacinthe, Quebec, Canada. Filed Jan. 7, 1929. Serial No. 330,876. 3 Claims. (Cl. 84—345.)



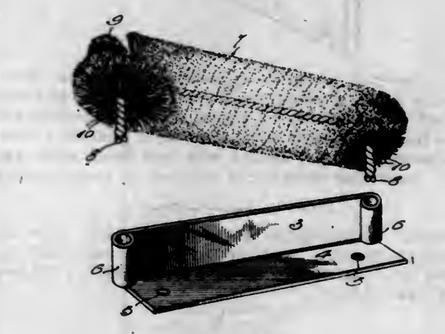
1. In an organ including a plurality of stop actions, a plurality of stop controlling knobs, mechanism for actuating the knobs to on or off positions, electric circuits connecting the knob actuating mechanism with a source of electrical energy, knob controlling switches interposed in the said circuits, mechanism for setting the controlling switches of selected knobs, and means including a pneumatically controlled pivoted strip adapted to be retained in a setting block and to contact with one or the other of contacts for operation of the pre-selected stop actions electro-pneumatically.

1,760,814. CIRCUIT CONTROLLER. FRANK E. CASE, Erie, Pa., assignor to General Electric Company, a Corporation of New York. Filed Aug. 24, 1927. Serial No. 215,228. 12 Claims. (Cl. 200—107.)



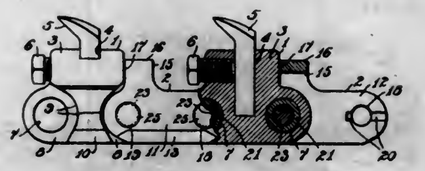
1. The combination of a plurality of movable switch members, a movable operating member therefor, means for movably mounting the operating member in a spaced relation with the switch members to effect operation of the switch members in sequence between a plurality of circuit controlling positions upon corresponding movement of the switch operating member, and automatic means associated with the mounting means for automatically effecting movement of the operating member from said spaced relation with the switch members in accordance with certain conditions to effect operation of the switch members to a predetermined circuit controlling position.

1,760,815. SHOE CLEANER. CASSIUS E. CAZEL, Covington, Ky., assignor to The Metal Bound Brush & Broom Co., Cincinnati, Ohio. Filed Dec. 6, 1928. Serial No. 324,159. 2 Claims. (Cl. 15—112.)



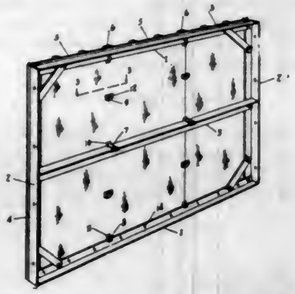
1. A device of the class described comprising a straight metal bar of right angular form in transverse section, the horizontal portion of said bar being provided with openings to receive attaching fasteners, the vertical portion of said bar being provided at its ends with rigid vertical tubular sockets, a horizontal brush lying upon the upper edge of said vertical portion of said bar, said brush having a wire center whose ends are bent downwardly and received in said sockets, some of the brush bristles being bent downwardly with said wire ends and projecting in numerous directions from the upper ends of said sockets, whereby when cleaning a shoe with the brush there is little liability of striking said shoe upon any part of the bar and its sockets.

1,760,816. MINE CUTTER CHAIN. FRANK CARTLIDGE, Cincinnati, Ohio, assignor to Cincinnati Mine Machinery Co., Cincinnati, Ohio, a Corporation of Ohio. Filed July 8, 1926. Serial No. 121,106. 4 Claims. (Cl. 262—33.)



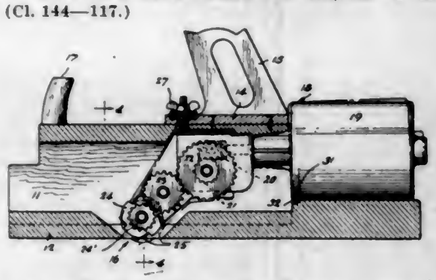
1. In a cutter chain the combination with bit blocks having an upwardly extending bit-holding projection, of connecting links alternating with the bit blocks and each comprising elongated side members having on their front upper edge integral ears extending upwardly, said ears being connected by a transversely extending bridge member, the front edge of said bridge member and ears being substantially flat and adapted to abut the rear end of the projections on the bit block.

1,760,817. BUILDING STRUCTURE. SYLVESTER B. CREAMER and HARRY R. ANSEL, Columbus, Ohio, assignors to The International Derrick & Equipment Company, Columbus, Ohio, a Corporation of Ohio. Filed May 21, 1928. Serial No. 279,337. 2 Claims. (Cl. 189—1.)



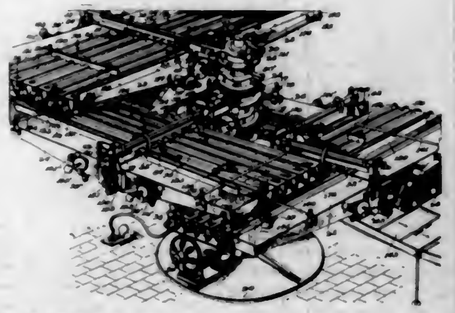
2. A building structure comprising a skeleton metal frame, a metal sheeting unit mounted thereon and constructed of a plurality of panels of metal sheeting and means for securing said metal sheeting in position, a sheet of insulating material carried with said frame work, and means connecting these parts together to form a panel.

1,760,818. PORTABLE HAND-OPERATED POWER-DRIVEN PLANE. MICHAEL DADERKO, Summit Hill, Pa. Filed Dec. 10, 1929. Serial No. 413,081. 4 Claims. (Cl. 144—117.)



1. A portable power driven hand plane comprising a housing having a groove therein, a power delivering unit including a motor casing having a rib thereon, said rib pivotally movable in said groove, and manually operable means retainable in said housing and carried by said unit for adjusting the position of the latter.

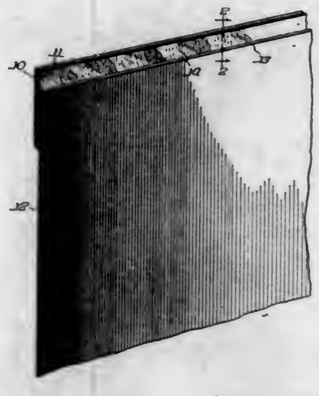
1,760,819. FOLDING MACHINE. CARL E. CHRISTOPHEL, Pearl River, N. Y., assignor to Dexter Folder Company, New York, N. Y., a Corporation of New York. Filed Oct. 2, 1925. Serial No. 60,108. 29 Claims. (Cl. 270—84.)



1. In a folding machine, the combination of a plurality of tables arranged one above the other, means for positioning said tables angularly with respect to one another, folding means carried by said tables, delivery means between said tables, and means for changing the direction of said delivery means.

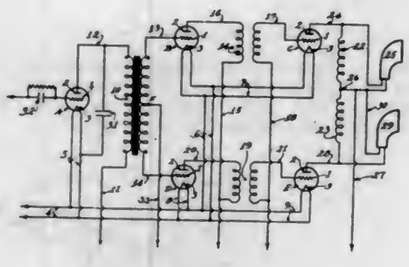
28. In a folding machine, a table, folding mechanism arranged on the table between opposite extremities thereof, and means for selectively moving sheets in opposite directions past the folding mechanism to position the sheets with respect thereto.

1,760,820. ADHESIVE TAPE. RICHARD GURLEY DREW, St. Paul, Minn., assignor to Minnesota Mining & Manufacturing Company, St. Paul, Minn., a Corporation of Minnesota. Filed May 28, 1928. Serial No. 281,104. 5 Claims. (Cl. 91—68.)



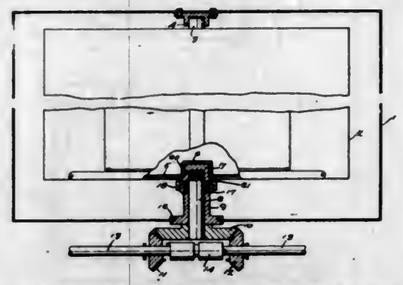
2. As a new article of manufacture, a removable adhesive tape comprising a paper backing formed with rugosites by creping or toweling and a pressure sensitive adhesive coating on one face thereof.

1,760,821. AMPLIFYING AND REPRODUCING SYSTEM. LEON F. DOUGLASS, Menlo Park, Calif. Filed Oct. 19, 1927. Serial No. 227,245. 4 Claims. (Cl. 179—1.)



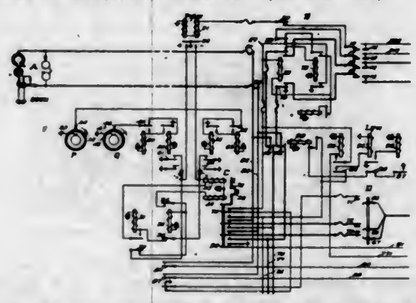
1. Apparatus of the class described comprising a source of audio frequency energy including a transformer winding, parallel amplifying circuits connected to opposite ends of said winding, said amplifying circuits having dissimilar characteristics, an output winding having its opposite ends connected to said circuits, intermediate connections to said windings for supplying power to said circuits, and a pair of loud speakers each receiving the output of one of said circuits.

1,760,822. WASHING MACHINE. WALTER A. FRANTZ, Cleveland Heights, Ohio, assignor to The Apex Electrical Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Original application filed Sept. 24, 1923, Serial No. 664,838. Divided and this application filed Nov. 26, 1926. Serial No. 150,773. 1 Claim. (Cl. 308—148.)



Operating means for a washing machine wherein the mechanism to be operated comprises a non-circular recess having driving faces and arranged to receive a driving head, comprising a shaft, and an aluminum head adapted to cooperate with said recess and cast upon said shaft, said head being complementary in shape to said recess.

1,760,823. AUTOMATIC TELEPHONE SYSTEM. HERBERT M. FRIENDLY, Chicago, Ill. Filed Mar. 19, 1928. Serial No. 262,626. 26 Claims. (Cl. 179—18.)



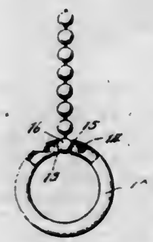
1. In an automatic telephone system, a calling line, called lines, switch mechanism for extending connection from the calling line to a random one of the called lines, a register for receiving impulses, an impulse sending device, means controlled over the calling line for registering the designation of a random one of said called lines to prepare the impulse sending device for thereafter sending impulses to direct the operation of the switch mechanism to complete a connection from the calling line to the random called line, and means controlled over the calling line after the designation has been registered and without initiating a new call for causing the impulse sending device to direct the operation of said switch mechanism in accordance with said registered designation to effect a connection from the calling line to said random called line.

1,760,824. FOUNTAIN PEN. ROCKEL ALEXANDER FRITSCH, Chicago, Ill., assignor to John Lawrie, Chicago, Ill. Filed Oct. 17, 1927. Serial No. 226,701. 13 Claims. (Cl. 120—47.)



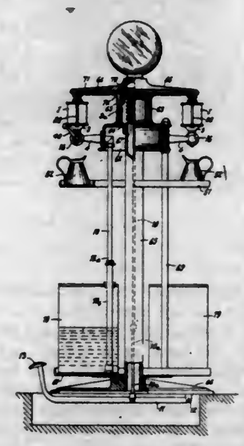
1. A fountain pen comprising in combination, a barrel and a bushing which constitute a rigid cylindrical reservoir having an opening only in the writing end, a hollow stem adapted to slide in said opening, a piston upon one end of said stem adapted to be reciprocated thereby in said reservoir, a point-carrier external to said reservoir upon the opposite end of said stem, said point-carrier being adapted to seat in said bushing, and ink and air channels through said point-carrier and through said stem into said reservoir.

1,760,825. RING ATTACHMENT FOR CHAINS. WILLIAM J. GAGNON, Bridgeport, Conn., assignor to The Bead Chain Manufacturing Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Sept. 26, 1929. Serial No. 395,448. 7 Claims. (Cl. 24—116.)



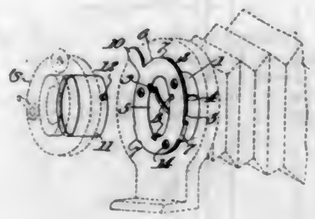
1. An attachment for a chain comprising an open-ended ring having a notch adjacent one of its ends, and a loop fastened adjacent the unnotched end of the ring, adapted to engage with the notch.

1,760,826. LIQUID MEASURING AND DELIVERING APPARATUS. JAMES GARVIE, London, England. Filed Oct. 20, 1928, Serial No. 313,919, and in Great Britain Mar. 15, 1928. 10 Claims. (Cl. 221—100.)



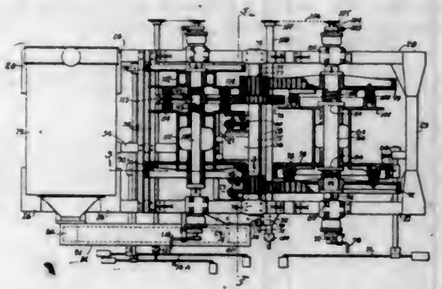
1. Apparatus for measuring and delivering liquid comprising a number of measuring chambers connected at their upper ends to a common manually operated pump for extracting air from the chambers and supplying air under presseure thereto, a separate main liquid container for each measuring chamber, a pipe with each measuring chamber connecting it to its own liquid container, and a hand cock fitted to the base of each measuring chamber for controlling the flow of liquid into and out of each chamber.

1,760,827. LENS MOUNTING. LEO GOLDHAMMER, Munich, Germany, assignor, by mesne assignments, to Agfa Ansco Corporation, Binghamton, N. Y., a Corporation of New York. Filed June 18, 1926, Serial No. 116,966, and in Germany Nov. 16, 1925. 6 Claims. (Cl. 95—45.)



1. A lens mounting of the type comprising an outer fixed sleeve, a central rotatable sleeve and an inner axially-movable sleeve, characterized by the fact that the outer and central sleeves have radial flanges in contact with each other, and a plurality of circumferentially spaced U-shaped flanges on one sleeve engage the peripheral edge of the flange of the other sleeve to prevent relative axial movement of the said outer and central sleeves.

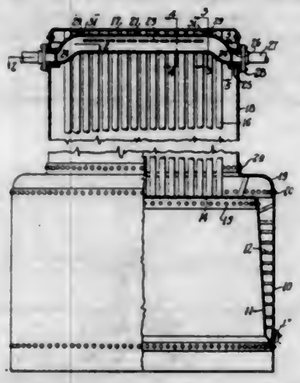
1,760,828. LOGGING ENGINE. SIDNEY B. GORBUTT, Portland, Oreg., assignor to Willamette Iron and Steel Works, Portland, Oreg. Filed Apr. 6, 1927. Serial No. 181,382. 10 Claims. (Cl. 254—185.)



1. In a logging engine, the combination of a frame; a motor mounted on the rearward end of said frame; a two speed main drum at the forward end of said frame; a one speed drum between said engine and main drum; a first intermediate shaft driven by said motor; a change gear mechanism and a two speed second intermediate shaft driven by said first intermediate shaft and driving all of said drums in the same direction and adapted to double the number of speeds obtainable from each of said drums.

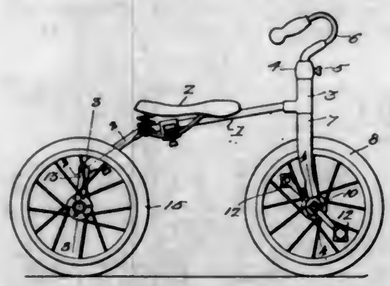
1,760,829. STEAM BOILER. SIDNEY B. GORBUTT, Portland, Oreg., assignor to Willamette Iron and Steel Works, Portland, Oreg. Filed Apr. 6, 1927. Serial No. 181,385. 3 Claims. (Cl. 122—491.)

1. An upright cylindrical boiler having a plurality of vertical fire tubes passing through the top thereof, a dry pipe positioned diametrically across same close to the top thereof between said fire tubes, said pipe having downwardly offset ends, a plurality of inlet openings formed in the top side thereof, said offset ends having ferrules therein slidably mounted in the sides of the boiler, and



means for preventing said pipe from rotating on its supports to prevent the contacting of said pipe with said fire tubes.

1,760,830. VELOCIPEDE CONSTRUCTION. FRANK J. GRABOWSKI, Philadelphia, Pa. Filed Aug. 24, 1927. Serial No. 215,185. 5 Claims. (Cl. 208—38.)



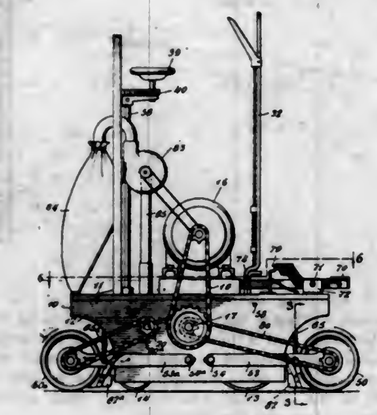
1. A velocipede comprising a longitudinal frame bar having an upright socket at the front, a shaft journaled in the socket and having a bifurcated section at the bottom in and between which the forward wheel of the velocipede is journaled and having at the top means for rotating the shaft to guide the vehicle, a transverse bar detachably secured at the rear of said longitudinal bar, an axle supported in said transverse bar, and rear wheels journaled on the axle.

1,760,831. WEFT NEEDLE. EDGAR F. HATHAWAY, Wellesley, and WALTER BIXBY, Boston, Mass., assignors to Shawmut Engineering Company, Boston, Mass., a Corporation of Massachusetts. Filed Nov. 4, 1927. Serial No. 231,048. 6 Claims. (Cl. 139—123.)



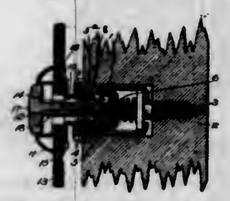
1. A weft needle embracing in its construction, an elongated hollow shank, a separable eye piece having telescopic connection with said shank and provided with a thread eye in its forward end and having its underside recessed to provide for the passage of a selvage thread between the eye piece and the yarn carried thereby and removable fastening devices penetrating both the shank and the eye piece transversely to permit removal of the eye-piece while preventing its rotation in relation to the shank member.

1,760,832. FLOOR-SURFACING MACHINE. GUSTAV JACOBSON and GUNNAR F. ERICSON, New York, N. Y., assignors to Superior Floor Surfacing Machine Corporation, New York, N. Y., a Corporation of New York. Filed Aug. 4, 1926. Serial No. 126,951. 7 Claims. (Cl. 51—176.)



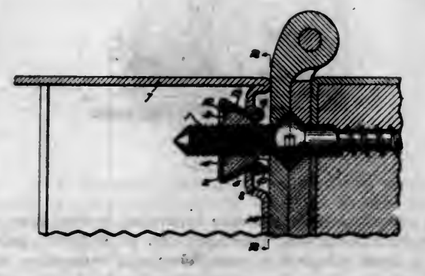
1. In a floor surfacing machine having a carriage and a rotary grinding drum, a pair of normally horizontal arms pivoted independently to the carriage at their inner ends and free to tip with respect to the carriage and to each other during the operation of the machine, self-aligning bearings at the outer ends of the arms, and a shaft secured to the grinding drum and journaled in said bearings, the length of each of the arms being several times as great as the radius of the drum.

1,760,833. SEPARABLE FASTENER. GUSTAV JOHNSON, West Roxbury, Mass., assignor, by mesne assignments, to United-Carr Fastener Corporation, Cambridge, Mass., a Corporation of Massachusetts. Filed July 23, 1926. Serial No. 124,430. 13 Claims. (Cl. 24—211.)



1. A separable fastener comprising, in combination, a stud member secured to a support and having a neck, a socket member provided with a front face having a stud-receiving aperture therethrough surrounded by a wall of substantial width, an axially shiftable spring-pressed clutch element located in said socket member and having yieldable jaws for engagement with the neck of the stud member, said jaws adapted to cooperate with the neck of the stud member and the wall surrounding the stud-receiving aperture to lock said stud member and socket member against accidental separation when said neck is opposite the wall surrounding said aperture and extended shank means forming part of the stud assembly and spacing the stud member support from the front face of the socket member to permit for axial movement of one of said fastener members toward the other member thereby to move the neck of the stud member away from the wall surrounding the stud-receiving aperture to permit separation of the jaws of the clutch element from the neck of the stud member.

1,760,834. NUT AND SCREW FASTENING. FRED S. CARR, Newton, Mass., assignor, by mesne assignments, to United-Carr Fastener Corporation, Cambridge, Mass., a Corporation of Massachusetts. Filed July 22, 1925. Serial No. 45,267. 4 Claims. (Cl. 85—32.)



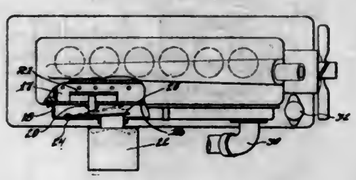
1. A fastening element comprising a nut unit including a nut-holder having a base portion and an inwardly tapered side wall, said side wall being slit to provide a number of yieldable fingers having means at their free ends for attaching the nut-holder to a support and a nut of substantially the same height as said fingers, said nut being seated upon said base and held in assembly with the holder by said tapered side wall and means providing a clearance between the side wall of the nut and the yieldable fingers to permit contraction of said fingers.

1,760,835. TACK-ATTACHED BUTTON. MOSES F. CARR, Lexington, Mass., assignor to United-Carr Fastener Corporation, Cambridge, Mass., a Corporation of Massachusetts. Filed Aug. 6, 1928. Serial No. 297,809. 3 Claims. (Cl. 24—95.)



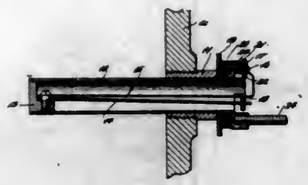
1. In a tack-attached fastener installation, a tack having a head, a shank and a cap secured to said head, said cap being secured to said head by a wall formed integral with said cap and located between the periphery of said tack head and the periphery of said cap, said wall being turned over the edge of the tack head.

1,760,836. CRANK-CASE VENTILATION. RAGNAR CLASON, Flint, Mich., assignor to A C Spark Plug Company, Flint, Mich., a Company of Michigan. Filed Oct. 29, 1927. Serial No. 229,687. 9 Claims. (Cl. 123—119.)



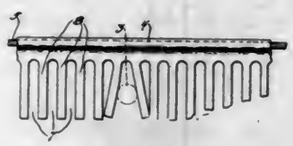
1. An engine having a crankcase, means for admitting air to the crankcase, said crankcase being provided with an air outlet port, a suction connection communicating with said outlet port, a port opened to the atmosphere communicating with said suction connection, and means cooperating with both of said ports and normally closing one of said ports, said means being movable to vary the opening or closing of the ports.

1,760,837. ELECTRICAL APPARATUS. WILLIAM A. COLLINS, Toledo, Ohio, assignor to Moto Meter Gauge & Equipment Corporation, New York, N. Y., a Corporation of Delaware. Filed Sept. 13, 1928. Serial No. 305,823. 1 Claim. (Cl. 201—55.)



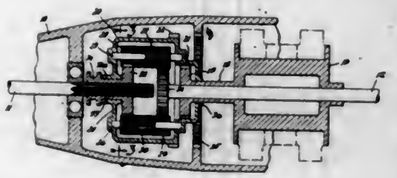
In a temperature responsive apparatus, a resistance coil, contacts tapping said resistance coil at different points, and a brush adapted to make electrical connection with said contacts thus short-circuiting a part of said resistance coil, in combination with a spring carrying said brush adapted to hold said brush at one extreme of said contacts, and a bi-metallic thermostat in adjustable contact with said spring adapted upon heating to flex, oppose said spring and move said brush toward the other extreme of said contacts.

1,760,838. ANTISQUEAK STRIP. RAGNVALD DRANGEID, Detroit, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Feb. 6, 1928. Serial No. 252,277. 14 Claims. (Cl. 280—153.)



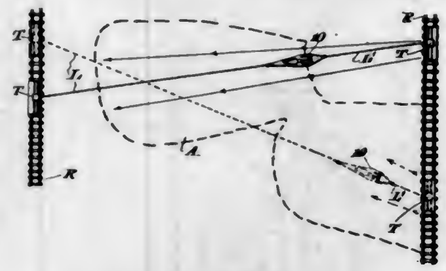
12. An anti-squeak strip for disposition between abutting members joined together by bolts or the like passing through the members, which has throughout its entire extent a continuous succession of regularly spaced flexible tongues, any of which may be displaced laterally to accommodate the passage of bolts.

1,760,839. COMBINED DIFFERENTIAL AND REVERSING GEAR. HAROLD DREW, Lansing, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Apr. 30, 1927. Serial No. 187,894. 15 Claims. (Cl. 74—99.)



1. In combination with a motor vehicle, a divided drive axle having an inclosing housing, teeth on said housing, a rotatable differential housing within said axle housing and surrounding and driving the axle ends, teeth on said differential housing, means for shifting said differential housing to cause to interengagement of said teeth on the two housings to thereby prevent rotation of said differential housing, and means operative upon the engagement of said housings to cause reverse rotation of said axle.

1,760,840. POWER RAKE. HANS ENARD, Portland, Me., assignor to The Maine Electric Company, Portland, Me., a Corporation of Maine. Filed Mar. 20, 1929. Serial No. 348,636. 7 Claims. (Cl. 294—82.)



1. In a handling device for pulp wood or the like, a drag frame having a flat face and adapted to be drawn from either end, and a plurality of spaced log engaging members movably mounted in said frame and each having a claw protrudable upon engagement with a load upon movement in one direction, and recedable upon movement of the drag in the opposite direction.

1,760,841. BOTTLE. NATHAN K. GARHART, Watertown, Mass., assignor to Garhart Dental Specialty Co., Somerville, Mass., a Corporation of Massachusetts. Filed Oct. 30, 1928. Serial No. 315,955. 3 Claims. (Cl. 215—73.)

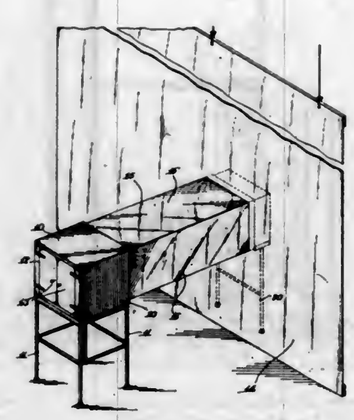


1. The combination of a bottle and a dispensing stopper therefor comprising an elastic rubber plug fitting into the neck of the bottle, and a vulcanized slightly flexible rubber tube of substantial stiffness projecting from and integral with the plug, said tube being selfsustaining and of materially greater stiffness than the elastic rubber plug, said plug and tube having a passage extending therethrough.

1,760,842. APPARATUS FOR PRODUCING THEATRICAL ILLUSIONS. FERGUS GREENWOOD, London, England, assignor to Howard Thurston, Beechhurst, N. Y. Filed Aug. 1, 1928. Serial No. 296,758. 1 Claim. (Cl. 272—9.)

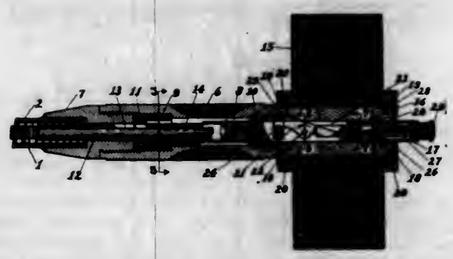
Apparatus for producing theatrical illusions comprising a receptacle, means for supporting said receptacle in a seemingly isolated position upon a theatre stage, a back scene member arranged behind the receptacle and apparently separated therefrom, a tube extending from the receptacle to the back scene member, said tube having mirrors on its outer faces, the mirrored faces of said tube being arranged at right angles to the back scene

member, the back scene member having an opening through which the tube extends thereby to permit access to the interior of the tube from behind the back scene member, the receptacle having an opening in the front through



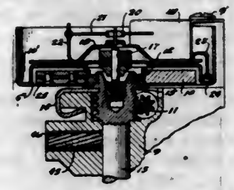
which objects may be inserted in and removed from said receptacle, doors for closing said opening, the receptacle also having an opening in the back for communication between the receptacle and the interior of the tube, and doors for closing said opening.

1,760,843. DRIVE FOR ROTATING BRUSHES, WHEELS, ETC. OTIS R. HASTY, Elgin, Ill., assignor to Hasty-Johnson Corporation, Elgin, Ill., a Corporation of Illinois. Filed Dec. 20, 1926. Serial No. 156,055. 2 Claims. (Cl. 192—71.)



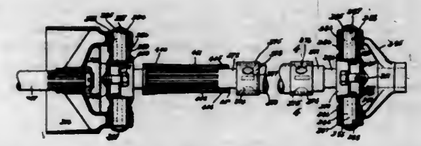
2. A shaft, means for driving the said shaft, a wheel of the character set forth having a hollow recessed hub structure adapted to slip over an end of the said shaft, mechanism carried by the said shaft and co-operating with the said recessed hub structure when the said wheel is placed onto the said shaft whereby the said wheel is retained on the said shaft and is driven therewith when the latter is rotated, and spring-controlled manually-depressible mechanism extending into the said end of the said shaft and co-operating with the first said mechanism when depressed, for causing the first said mechanism to release the drive on the said wheel and simultaneously unlock the wheel retainer, while the said shaft is rotating, to permit the said wheel to be removed from the said shaft, without rotating, while the said shaft continues to rotate.

1,760,844. SPEEDOMETER. RALPH O. HELGEBY, Flint, Mich., assignor to A C Spark Plug Company, Flint, Mich., a Company of Michigan. Filed June 22, 1928. Serial No. 287,629. 6 Claims. (Cl. 264—13.)



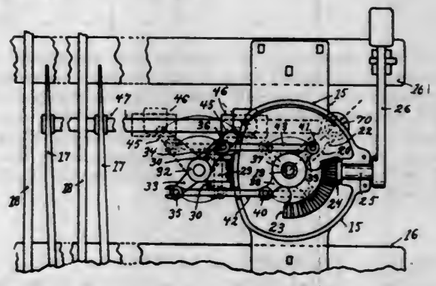
1. In a measuring instrument, a rotatable speed indicating cup, an independently rotatable annular magnet influencing the rotation of said cup, said speed cup having a closed bottom provided with a depression, and the rotating magnet being positioned concentric with the cup and in said depression.

1,760,845. DRIVE-SHAFT CONNECTION FOR MOTOR-DRIVEN VEHICLES. CHARLES F. KETTERING, Dayton, Ohio, and CHARLES R. SHORT, Detroit, Mich., assignors to General Motors Research Corporation, Dayton, Ohio, a Corporation of Delaware. Original application filed Apr. 15, 1922, Serial No. 553,075. Divided and this application filed Jan. 24, 1927. Serial No. 163,218. 1 Claim. (Cl. 287—109.)



In a universal joint of the class described, a yoke member having a short shaft section formed integrally therewith, and a keyway formed in the peripheral surface thereof, and having also a depression substantially conical in form in its peripheral surface; a tubular shaft fitting over said shaft section and having a keyway arranged to register with said first mentioned keyway; a key within said keyway; and a ring surrounding the end of said tubular shaft and overlying said key to keep it in place within said keyways, portions of the walls of said ring and shaft being forced into the depression aforesaid to thereby fasten the parts together in a permanent manner.

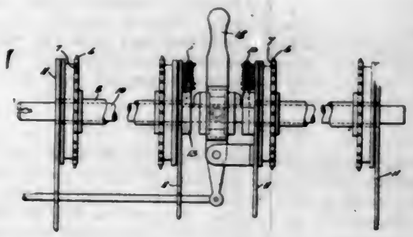
1,760,846. RAILWAY-SWITCH MECHANISM. JOHN T. MCGARRY, Cincinnati, Ohio, assignor to The American Valve and Meter Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Jan. 11, 1928. Serial No. 246,019. 5 Claims. (Cl. 246—289.)



1. Switch mechanism comprising switch rails, a connecting rod, a crank shaft having a crank operatively connected to one end of said connecting rod and adapted when rocked to throw said switch rails from one position to another position, signal targets and a signal lamp

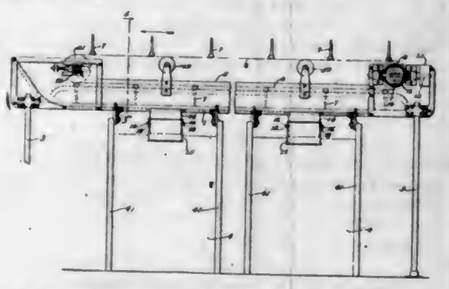
mounted to rock in unison with the movements of said crank shaft and to thereby indicate at a distance the position of the switch rails, and tiltable means actuated by an abnormal displacement of one of the switch rail actuating members serving to modify the signal sent out from the switch so as to indicate an inoperative condition of the switch mechanism.

1,760,847. MULTIPLEX AUTOGRAPHIC REGISTER. ALBERT W. METZNER, Dayton, Ohio, assignor to The Standard Register Company, Dayton, Ohio, a Corporation of Ohio. Filed Apr. 25, 1928. Serial No. 272,689. 14 Claims. (Cl. 282—21.)



3. In an autographic register, a single housing having in its top spaced openings, means for feeding separate record strips in registry with said openings to receive entries therethrough, operating means for said strip feeding means, and a manually operable setting element common to the feeding means for the separate strips for connecting the operating means therewith to actuate the feeding means singly to advance one record strip independent of the other.

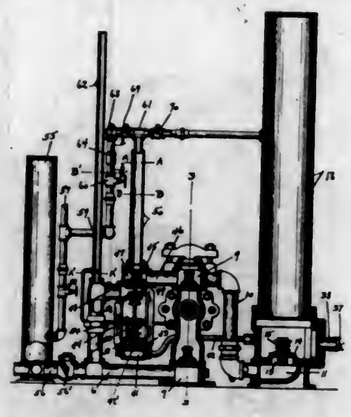
1,760,848. MECHANISM FOR HANDLING AND DISTRIBUTING FIBERS. JOSEPH MOSS, Woonsocket, R. I., assignor to Woonsocket Machine & Press Co., Inc., Woonsocket, R. I., a Corporation of Rhode Island. Filed Mar. 12, 1929. Serial No. 346,479. 14 Claims. (Cl. 19—74.)



1. In a mechanism for handling and distributing fiber to a series of hoppers, comprising a trough, and means for propelling fiber along said trough, the combination therewith of chutes less in cross-sectional dimensions than the hoppers receiving the fiber as it is propelled along the trough, depending into the said hoppers, below the tops of the walls of the latter, and controlling the height of accumulation within the hoppers.

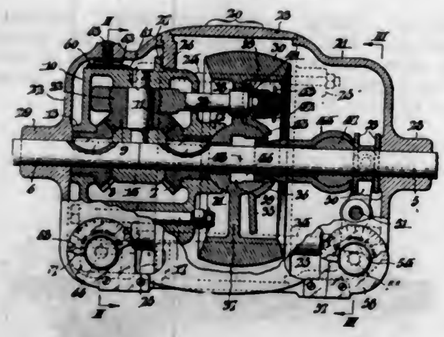
1,760,849. CAR-WASHING APPARATUS. WILLIAM D. POMEROY, Seneca Falls, N. Y., assignor to Gould Pumps, Inc., Seneca Falls, N. Y., a Corporation of New York. Filed Feb. 6, 1928. Serial No. 252,389. 18 Claims. (Cl. 103—9.)

1. In a device of the class described, a pump, a discharge air chamber in communication with the discharge side of the pump, a cushioning air chamber in communication with the discharge side of the pump, an auxiliary air chamber in communication with the suction side of the



pump, means of communication between the cushioning air chamber and the auxiliary air chamber, a valve controlling such means of communication, and means for introducing air into the cushioning air chamber when the valve is open.

1,760,850. VARIABLE-SPEED GEARING. JOSEPH P. REMINGTON, Philadelphia, Pa., assignor to James H. Bell, Philadelphia, Pa. Filed Jan. 21, 1928. Serial No. 248,333. 5 Claims. (Cl. 74—34.)

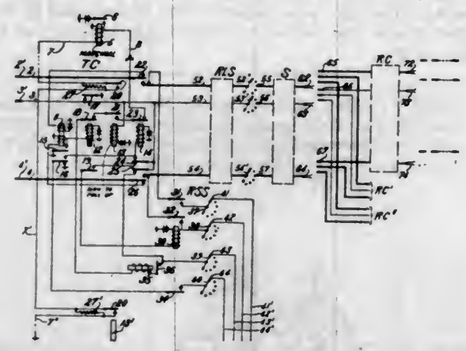


1. The combination with an epicyclic train having a movable ratio-controlling device, of a gyroscope driven from the source of power of the train and operatively connected to said ratio-controlling device to be deflected relative to its own axis of rotation by the movement of said device, and thus yieldingly opposing the motion of said ratio-controlling device, with means for varying the effective ratio of the connection between said devices.

1,760,851. AUTOMATIC TELEPHONE SYSTEM. RODNEY G. RICHARDSON, Chicago, Ill., assignor, by mesne assignments, to Automatic Electric Inc., Chicago, Ill., a Corporation of Delaware. Filed Apr. 8, 1926. Serial No. 100,494. 22 Claims. (Cl. 179—18.)

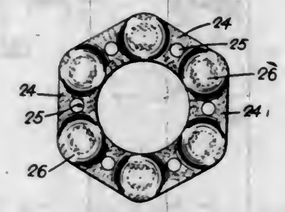
1. In a telephone system, a plurality of private branch exchanges, said exchanges having assigned thereto consecutive telephone numbers, one for each exchange, a plurality of groups of rotary connectors, trunks accessible in the banks of said rotary connectors extending to said exchanges, means responsive to the dialing of a complete telephone number for controlling the operation of a rotary connector

to connect with a trunk extending to the exchange corresponding to the telephone number dialed, and means whereby the position of said trunks in the banks of said rotary



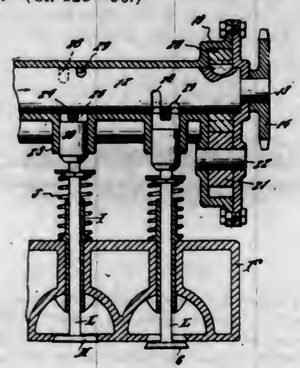
connectors may be changed from one level to another, and from one group of rotary connectors to another without affecting the telephone numbers of the corresponding exchanges.

1,760,852. FLEXIBLE COUPLING. CHARLES R. SHORT, Detroit, Mich., assignor to General Motors Research Corporation, Detroit, Mich., a Corporation of Delaware. Filed Aug. 28, 1926. Serial No. 132,284. 7 Claims. (Cl. 64—96.)



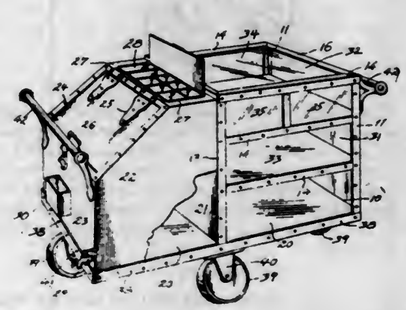
1. A flexible coupling element comprising strands and cores of deformable resilient substance completely enveloped by the strands at separated location, said cores deflecting the strands enveloping them.

1,760,853. ENGINE-VALVE-OPERATING MEANS. WALTER A. WOOD, Flint, Mich., assignor to General Motors Research Corporation, Detroit, Mich., a Corporation of Delaware. Filed Dec. 10, 1928. Serial No. 325,061. 4 Claims. (Cl. 123—90.)



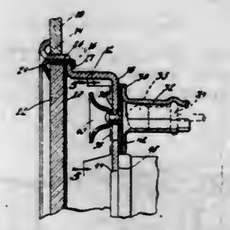
1. In an engine, one or more cylinders each having intake and exhaust ports, valves or controlling the opening and the closing of the ports, the valves having stems, a piston mounted on each valve stem, a casing extending longitudinally of the engine transversely of all of the cylinders thereof, the casing being formed with relatively small cylinders slidably receiving said pistons, the casing having a cylindrical bore and being formed with longitudinally extending intake and exhaust manifolds communicating through ports with the bore, said bore communicating with the relatively small cylinders through other ports, means for supplying liquid pressure to the intake manifold and removing it from the exhaust manifold, and a rotary valve member within the casing having ports therein adapted to establish communication successively between the intake ports and the last named ports and between the last named ports and the second named ports.

1,760,854. VENDER'S CART. MAX WRIGHT, Atlanta, Ga., assignor to The Wright Company, Atlanta, Ga., a Corporation of Georgia. Filed Jan. 8, 1929. Serial No. 331,055. 2 Claims. (Cl. 296—24.)



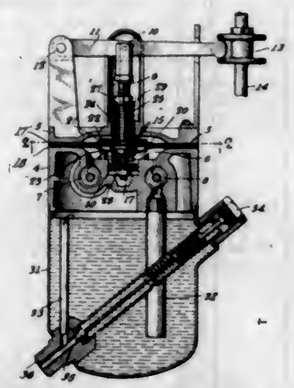
1. In a vender's cart, the combination with a wheeled platform, of a frame mounted on the platform, an upright partition mounted in the frame to extend across the platform at an intermediate part of the platform, walls secured to the frame to form a closed compartment on the platform on one side of the partition, the top wall of the compartment including a horizontal plate provided with an opening, a till seated in the plate approximately flush therewith, and display means mounted on the frame on the other side of the partition.

1,760,855. INSTRUMENT PANEL. JOSEPH ZUBATY and DON E. KEENEY, Flint, Mich., assignors to A C Spark Plug Company, Flint, Mich., a Company of Michigan. Filed Oct. 13, 1927. Serial No. 225,923. 3 Claims. (Cl. 240—8.16.)



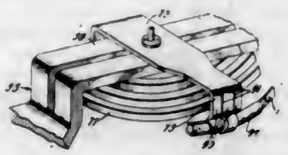
1. In a device of the class described, an instrument board provided with an aperture and a tongue in said aperture, a lighting means supported on the rear of said board adjacent said aperture, a reflector supported on said tongue on the front side of said board, and an instrument carried by said board.

1,760,856. LIQUID-FUEL PUMP. ALBERT E. BERDON, Detroit, Mich., assignor to A C Spark Plug Company, Flint, Mich., a Corporation of Michigan. Original application filed Oct. 6, 1927, Serial No. 224,325. Divided and this application filed Jan. 27, 1928. Serial No. 249,809. 18 Claims. (Cl. 103—150.)



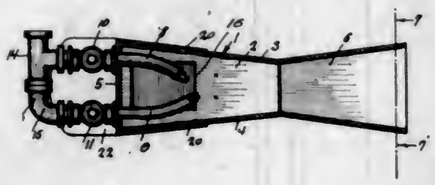
1. In a pump of the character disclosed, the combination of a diaphragm, spring fingers restraining said diaphragm to a normal flexure but yieldable to permit abnormal flexure of the diaphragm, means for imparting pumping strokes of substantially uniform length to the body of said diaphragm independently of said spring retaining fingers, and resiliently yieldable means engaging a portion of said fingers.

1,760,857. HAIR-SPRING-SECURING MEANS FOR INSTRUMENTS. LOUIS BERG, Flint, Mich., assignor to A C Spark Plug Company, Flint, Mich., a Company of Michigan. Filed Sept. 17, 1928. Serial No. 306,424. 3 Claims. (Cl. 264—13.)



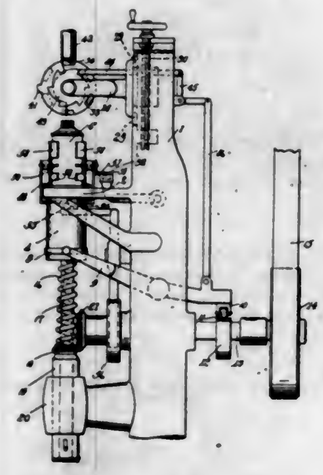
1. In a measuring instrument, a rotary indicating member, a hair spring to restore said indicating member to a predetermined position, a retaining means for said spring holding an end of said spring in substantially concentric relation to the remainder of the spring, said retaining means including an arc-shaped tube, the end of the spring received within said tube.

1,760,858. GAS BURNER FOR FURNACES. ROBERT BERT FANNING, Thurber, Tex. Filed Jan. 13, 1928. Serial No. 246,573. 6 Claims. (Cl. 158—99.)



1. In a burner of the class described, a mixing chamber having an air inlet, means for controlling the admission of air through said inlet, burner nozzles extending into the chamber opposite the air inlet and having their delivery ends curved toward each other and presented in proximity to each other, the said delivery end of one nozzle being displaced rearwardly with respect to the delivery end of the other nozzle, and means for supplying a gaseous fuel to said nozzles.

1,760,859. CAN-CAPPING MACHINE. JOHN J. LACH, Chicago, Ill., assignor to The Anderson Company, Gary, Ind., a Corporation of Indiana. Filed Dec. 10, 1921. Serial No. 521,417. 22 Claims. (Cl. 226—88.)



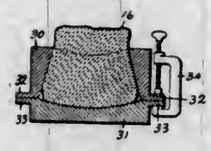
1. Mechanism of the class described comprising a rotatable can carrying platform; cap holding mechanism cooperating with said platform; means for centering said can on said platform; gripping means for holding said can on said platform; means for raising said platform; and means whereby said centering means and said gripping means are successively engaged prior to the actuation of said raising means, substantially as described.

1,760,860. FEED FINGER. CHARLES F. MINNIER and BENJAMIN M. DANIEL, Harrisburg, Pa.; said Daniel assignor to said Minnier; Central Trust Company, Harrisburg, Pa., executor of said Minnier, deceased. Filed May 1, 1928. Serial No. 274,326. 11 Claims. (Cl. 29—61.)



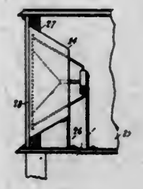
1. A feed finger for metal-working machines comprising, a metal shell; a tubular member within said shell, said member having an inclined inner wall diverging toward one end of said shell; a sleeve slidable within said member, said sleeve having a plurality of apertures therein; balls within said apertures and cooperating with said inclined wall; and a spring within said shell for normally forcing said member forward to move said balls to operative position.

1,760,861. METHOD OF MAKING REFRACTORY BLOCKS. GEORGE W. PARKER, St. Louis, Mo. Filed May 7, 1928. Serial No. 275,599. 9 Claims. (Cl. 25—156.)



1. The method of making refractory blocks which consists in hand kneading a wauk of refractory clay, separating a portion of said wauk from the remainder thereof and then giving to said separated portion the desired shape in such a manner that the grain formed therein during the kneading will extend at right angles to the wearing face of the block.

1,760,862. LOUD-SPEAKER. JULIUS WEINBERGER and IRVING WOLFF, New York, N. Y., assignors to Radio Corporation of America, a Corporation of Delaware. Filed Mar. 31, 1927. Serial No. 179,743. 17 Claims. (Cl. 181—31.)



1. The combination of a loud speaker device having a vibratile diaphragm, with a frame member, a plate secured to the front of said frame, a driving unit secured to said frame rearwardly of said plate, said vibratile diaphragm being connected to said plate and to said driving unit, and a casing embracing said vibratile diaphragm and a portion only of said frame.

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[Decisions of the Court of Customs and Patent Appeals are indicated by a star *.]

ERRATA

1,761,388, page 179, first claim, line 2, after the word "throttle" insert the word *to*.

292399

ALPHABETICAL LIST OF REGISTRANTS OF TRADE-MARKS

Admiral Ready Coffee Refining Corporation, New York, N. Y. Coffee. 271,352; June 3; Serial No. 288,369; published Mar. 25, 1930. Class 46.

Alitak Fish Company, Bellingham, Wash., and Kodia Island, Alaska. Canned salmon. 271,362; June 3; Serial No. 294,556; published Mar. 25, 1930. Class 46.

Alvarez, M. Vidal, & Co., Ponce, Porto Rico. Suits and overcoats. 271,417; June 3; Serial No. 292,383; published Mar. 11, 1930. Class 39.

American Chicle Company, Long Island City, N. Y. Chewing gum. 271,363; June 3; Serial No. 294,411; published Mar. 25, 1930. Class 46.

American Eagle Aircraft Corporation, Kansas City, Kans. Airplanes. 271,406; June 3; Serial No. 295,245; published Mar. 18, 1930. Class 19.

Anchor Sawmills Company, Pelham Manor, N. Y. Canoe paddles. 271,447; June 3; Serial No. 294,658; published Mar. 18, 1930. Class 19.

Arnold Shirt Company, New York, N. Y. Shirts. 271,461; June 3; Serial No. 293,947; published Mar. 11, 1930. Class 39.

Atkins, E. C., and Company, Indianapolis, Ind. Handsaw handles, handsaws, crosscut saws, etc. 271,387; June 3; Serial No. 289,436; published Mar. 25, 1930. Class 23.

Baker, Geo., & Sons, Inc., Brockton, Mass. Tacks. 271,440; Serial No. 293,402; published Mar. 18, 1930. Class 13.

Ballantine, P., and Sons, Newark, N. J. Malt syrup. 271,480; June 3. Class 46.

Bamberger, L., & Co., Newark, N. J. Hair nets. 271,432; June 3; Serial No. 289,225; published Mar. 18, 1930. Class 42.

Bankette Co., The, Boston, Mass. Pocket coin holders. 271,331; June 3; Serial No. 295,325; published Mar. 18, 1930. Class 3.

Baum, Joseph G., New York, N. Y. Underwear and shirts and trunks. 271,375; June 3; Serial No. 285,440; published Mar. 11, 1930. Class 39.

Berhalter's Health Food Factory, Chicago, Ill. Coffee substitute. 271,351; June 3; Serial No. 290,810; published Mar. 25, 1930. Class 46.

Black Manufacturing Co., The, Seattle, Wash. Shirts. 271,412; June 3; Serial No. 294,912; published Mar. 11, 1930. Class 39.

Black Servant Manufacturing Company, St. Louis, Mo. Coal stokers for furnaces. 271,451; June 3; Serial No. 294,382; published Mar. 18, 1930. Class 34.

Blackman & Blackman, Inc., New York, N. Y. Bandages. 271,371; June 3; Serial No. 284,666; published Mar. 18, 1930. Class 44.

Boott Mills, Lowell, Mass. Scrim. 271,379; June 3; Serial No. 274,868; published Feb. 19, 1929. Class 42.

Boy-Craft, Inc., New York, N. Y. Boys' blouses, shirts, and pajamas. 271,408; June 3; Serial No. 295,011; published Mar. 11, 1930. Class 39.

Brooklyn Overall Co., Brooklyn, N. Y. Overalls. 271,442; June 3; Serial No. 294,868; published Mar. 18, 1930. Class 39.

Brown, Victor, doing business as Victor Brown Co., New York, N. Y. Women's silk underwear. 271,446; June 3; Serial No. 294,758; published Mar. 18, 1930. Class 39.

Browning, King & Co., New York, N. Y. Handkerchiefs. 271,332; June 3; Serial No. 295,148; published Mar. 18, 1930. Class 42.

Burnett, George H., jr., Houston, Tex. Mechanical toy. 271,431; June 3; Serial No. 291,048; published Mar. 18, 1930. Class 22.

Caldor, Ernestine, doing business as Kant-Fall Hanger, New York, N. Y. Garment hangers. 271,468; June 3. Class 50.

Carborundum Company, The, Niagara Falls, N. Y. Furnaces and parts thereof, hearths and parts thereof, furnace roofs, etc. 271,385; June 3; Serial No. 292,095; published Mar. 25, 1930. Class 34.

Carroll, Thomas F., New York, N. Y. Treated cleaning, polishing, and wiping cloths. 271,341; June 3; Serial No. 294,286; published Mar. 18, 1930. Class 4.

Cassoff, L. Francis, doing business as The Central Paint and Varnish Works, Brooklyn, N. Y. Paint, paint enamels, varnishes, etc. 271,342; June 3; Serial No. 294,247; published Mar. 18, 1930. Class 16.

Celanese Corporation of America, New York, N. Y. Fabrics. 271,334; June 3; Serial No. 294,913; published Mar. 18, 1930. Class 42.

Celanese Corporation of America, New York, N. Y. Fabrics. 271,433; June 3; Serial No. 288,845; published Oct. 1, 1929. Class 42.

Central Alloy Steel Corporation, doing business as Toncan Culvert Manufacturing Association, Massillon, Ohio. Culvert gates. 271,462; June 3; Serial No. 293,870; published Mar. 18, 1930. Class 13.

Central Paint and Varnish Works, The. (See Cassoff, L. Francis.)

Charlestein, Julius, doing business as Premier Dental Products Co., Philadelphia, Pa. Alloy, cement, impression compounds, etc. 271,317; June 3; Serial No. 294,622; published Mar. 18, 1930. Class 44.

Chicago Fig & Date Co. (See Cobb, Edmond P.)

Chidlow, Dorothy C., Fort Myers, Fla. Bread and biscuits. 271,430; June 3; Serial No. 291,324; published Mar. 18, 1930. Class 46.

Cleveland Heater Company, The, Cleveland, Ohio. Blow-off valves, gas cocks, relief valves, etc. 271,377; June 3; Serial No. 276,516; published Mar. 18, 1930. Class 13.

Cleveland Heater Company, The, Cleveland, Ohio. Water heaters, hot-water heating systems, bath-water heaters, etc. 271,398; June 3; Serial No. 294,007; published Mar. 25, 1930. Class 34.

Cluett, Peabody & Co., Inc., Troy, N. Y. Underwear. 271,455; June 3; Serial No. 294,248; published Mar. 11, 1930. Class 39.

Cobb, Edmond P., doing business as Chicago Fig & Date Co., Chicago, Ill. Dried dates, figs, and prunes and nut meats. 271,475; June 3. Class 46.

Colgate-Palmolive-Peet Company, Chicago, Ill. Soap. 271,434; June 3; Serial No. 292,486; published Mar. 25, 1930. Class 4.

Cook, Albert E., Kankakee, Ill. Agricultural machinery. 76,227; renewed Dec. 28, 1929.

Cube Steak Machine Company. (See Spang, Joseph P.)

Diamond Match Company, The, Chicago, Ill. Dishes of paper or fibre. 271,456; June 3; Serial No. 294,208; published Mar. 18, 1930. Class 2.

Di-Ox Products Co., Inc., New York, N. Y. General cleanser. 271,338; June 3; Serial No. 294,626; published Mar. 18, 1930. Class 4.

Dunlop's, Jno., Sons, Inc. (See Spurr, Gregory W., trustee.)

Eagle, C. K., & Co., Inc., Shamokin, Pa. and New York, N. Y. Piece goods. 271,323; June 3; Serial No. 293,132; published Mar. 4, 1930. Class 42.

Electrolux Servel Corporation, New York, N. Y. Refrigerators, refrigerator parts, automatic refrigerators, etc. 271,324; June 3; Serial No. 296,053; published Mar. 25, 1930. Class 31.

Eljer Company, Ford City, Pa. Plumbing fixtures. 271,388–9; June 3; Serial Nos. 286,748–9; published Mar. 25, 1930. Class 13.

Enterprise Aluminum Company, The, Massillon, Ohio. Coffeepots. 271,378; June 3; Serial No. 275,949; published Apr. 9, 1929. Class 13.

Every Day Products Supply Company, The. (See Synvita Medicine Co., The.)

Forest City Mfg. Co., St. Louis, Mo. Outer wearing apparel. 271,424; June 3; Serial No. 287,749; published Mar. 11, 1930. Class 39.

Frands, Erwin Z., doing business as Frands Sales Agency, Chicago, Ill. Polish and cleaner. 271,401; June 3; Serial No. 287,440; published Mar. 11, 1930. Class 16.

Franklin Steel Works, Joliet, Ill. Toe calks for horseshoes. 271,335; June 3; Serial No. 294,667; published Mar. 18, 1930. Class 3.

Friedberger-Aaron Manufacturing Company, Philadelphia, Pa. Banding in the nature of trimming. 271,465; June 3. Class 40.

Friedlander, A. L., doing business as E. Friedlander & Sons, San Francisco, Calif. Knit underwear, pajamas, and nightgowns. 271,439; June 3; Serial No. 293,577; published Mar. 18, 1930. Class 39.

Fruit Belt Preserving Company, East Williamson, N. Y. Canned soups, vegetables, and fruits. 271,356; June 3; Serial No. 296,009; published Mar. 25, 1930. Class 46.

Garfield Manufacturing Company. (See Hemming Manufacturing Company, assignor.

Gay Brothers Company, Cavendish, Vt. Woolen piece goods. 271,326; June 3; Serial No. 295,671; published Mar. 18, 1930. Class 42.

General Electric Company, Schenectady, N. Y. Mixed paints, varnishes, prepared shellac, etc. 271,345; June 3; Serial No. 293,999; published Mar. 25, 1930. Class 16.

General Electric Company, Schenectady, N. Y. Pressure gauges, compasses, temperature indicators, etc. 271,399; June 3; Serial No. 293,998; published Mar. 25, 1930. Class 26.

General Electric Company, Schenectady, N. Y. Shut-off valves. 271,460; June 3; Serial No. 293,995; published Mar. 18, 1930. Class 13.

Goldenberg, Morton H., doing business as Goldenberg's, Washington, D. C. Shirts, underwear, and pajamas. 271,422; June 3; Serial No. 290,021; published Mar. 11, 1930. Class 39.

Golden Dawn Hosiery Shops, Wilmington, Del. Hosiery and underwear. 271,381; June 3; Serial No. 271,437; published Nov. 13, 1928. Class 39.

Golden Eagle Soap Co., San Francisco, Calif. Soaps. 271,471; June 3. Class 4.

Great Falls Meat Company, Great Falls, Mont. Lard. 271,361; June 3; Serial No. 294,581; published Mar. 25, 1930. Class 46.

Grunewald Novick Company, Chicago, Ill. Dresses for misses. 271,454; June 3; Serial No. 294,250; published Mar. 18, 1930. Class 39.

Guilford Mfg. Co., The. (See Haigh, William, Company, The.)
Guy Motors Ltd., Wolverhampton, England. Automobiles, motor boats, aeroplanes, and motor cycles. 271,448; June 3; Serial No. 294,633; published Mar. 18, 1930. Class 19.
Haas Brothers Fabrics Corporation, New York, N. Y. Piece goods made of silk, cotton, and wool. 271,322; June 3; Serial No. 294,069; published Mar. 18, 1930. Class 42.
Haigh, William, Company, The, doing business as The Guilford Mfg. Co., Baltimore, Md. Composition of malt and hops. 271,464; June 3. Class 46.
Hampden Automotive Products, Inc., Springfield, Mass. Mud guards. 271,405; June 3; Serial No. 295,370; published Mar. 18, 1930. Class 19.
Handmacher-Michel Company, Chicago, Ill. Coats. 271,437; June 3; Serial No. 293,730; published Mar. 11, 1930. Class 39.
Hansen, John, & Sons, Oakland, Calif. Coffee. 271,349; June 3; Serial No. 291,980; published Mar. 25, 1930. Class 46.
Haworth & Dewhurst, Limited, Pittsburgh, Pa., to Satisfaction Coffee Co., Braddock, Pa., successor. Coffee. 33,966; renewed Jan. 2, 1930.
Heddon's, James, Sons, Dowagiac, Mich. Artificial baits. 271,330; June 3; Serial No. 295,429; published Mar. 18, 1930. Class 22.
Hemming Manufacturing Company, as assignee of George L. Prentiss, New York, N. Y., assignor, by mesne assignments, to Garfield Manufacturing Company, Garfield, N. J. Electrical supplies. 78,633; renewed June 28, 1930.
Hewitt-Gutta Percha Rubber Corporation, Buffalo, N. Y. Hose and belting. 271,364; June 3; Serial No. 295,176; published Mar. 25, 1930. Class 35.
Hewitt-Gutta Percha Rubber Corporation, Buffalo, N. Y. Hose, belting, and packing. 271,390; June 3; Serial No. 295,175; published Mar. 25, 1930. Class 35.
Hewitt-Gutta Percha Rubber Corporation, Buffalo, N. Y. Belting. 271,391; June 3; Serial No. 295,173; published Mar. 25, 1930. Class 35.
Hewitt-Gutta Percha Rubber Corporation, Buffalo, N. Y. Packing. 271,392; June 3; Serial No. 295,170; published Mar. 25, 1930. Class 35.
Hewitt-Gutta Percha Rubber Corporation, Buffalo, N. Y. Hose and belting. 271,393; June 3; Serial No. 295,167; published Mar. 25, 1930. Class 35.
Horsey, Edgar T., Inc., Cleveland, Ohio. Dye for leather. 271,478; June 3. Class 6.
Hyrum Syrup Company. (See Richter, Morris.)
Industrial Chemical Sales Company, Inc., New York, N. Y. Diatomaceous earth. 271,320; June 3; Serial No. 294,638; published Mar. 18, 1930. Class 1.
International Printing Ink Corporation, The, New York, N. Y. Varnishes and lacquers. 271,463; June 3; Serial No. 294,534; published Mar. 18, 1930. Class 16.
International Products Corporation, New York, N. Y. Cooked meats. 271,357–8; June 3; Serial Nos. 295,374–5; published Mar. 25, 1930. Class 46.
Janov-Abeles, I., Shirt Co., New York, N. Y. Shirts. 271,421; June 3; Serial No. 290,255; published Mar. 18, 1930. Class 39.
Johnson & Johnson, New Brunswick, N. J. Bandages. 271,368; June 3; Serial No. 277,801; published Mar. 11, 1930. Class 44.
K. K. Crystal Company, Inc., New York, N. Y. Metal cabinets. 271,384; June 3; Serial No. 293,838; published Mar. 25, 1930. Class 32.
Kant-Fall Hanger. (See Caldor, Ernestine.)
Kaufmann Department Stores, Inc. (See Power, Lorenzo A. R.)
Kaylon Incorporated, Troy and New York, N. Y. Shirts. 271,413–16; June 3; Serial Nos. 294,878–81; published Mar. 11, 1930. Class 39.
Kemp, Edward F., Somerville, Mass. Candies, and bonbons, nuts, etc. 271,348; June 3; Serial No. 292,534; published Mar. 25, 1930. Class 46.
Klauer Manufacturing Company, Dubuque, Iowa. Gutter hangers, trough hangers, wire strainers, etc. 271,366; June 3; Serial No. 280,717; published Mar. 25, 1930. Class 13.
Klauer Manufacturing Company, Dubuque, Iowa. Stock and storage tanks and underground garbage receivers. 271,369; June 3; Serial No. 280,713; published Mar. 25, 1930. Class 2.
Koch, William C., doing business as The Wm. C. Koch Co., St. Paul, Minn. Medicinal vaporizers. 271,319; June 3; Serial No. 295,337; published Mar. 25, 1930. Class 44.
Lebanon Textile Mills, Inc., Lebanon, Pa. Play suits, overalls, knickers, etc. 271,404; June 3; Serial No. 295,682; published Mar. 18, 1930. Class 39.
Lehman Bros., Inc., Jersey City, N. J. Wood filler. 271,367; June 3; Serial No. 279,482; published Apr. 16, 1929. Class 16.
Leitz, Louis, Feuerbach, near Stuttgart, Germany. Certain articles of stationery. 77,654; renewed Apr. 26, 1930.
Logan Laboratories, Ltd., New York, N. Y. Electrical device. 271,346; June 3; Serial No. 293,926; published Mar. 11, 1930. Class 44.
Mason, Frederic S., to Parfumerie Rigaud, Inc., New York, N. Y., successor. Perfumes. 78,535; renewed June 21, 1930.
Mayer, Sig. C., & Co. Inc., Philadelphia, to J. C. Winter & Co., Inc., Red Lion, Pa., successor. Cigars. 77,577; renewed Apr. 19, 1930.
McDonnell, Anthony F., Dunmore and Scranton, to Anthony F. McDonnell, Dunmore, Pa. Glass bottles. 77,405; renewed Apr. 5, 1930.
Milloy Laboratory, Philadelphia, Pa. Preparation for rheumatism, neutritis, gout, etc. 271,438; June 3; Serial No. 293,629; published Feb. 18, 1930. Class 6.
Miller, Charles H., Baltimore, Md. Christmas-tree decorations. 271,466; June 3. Class 22.
Miller, Du Brul & Peters Mfg. Co., Norwood, Cincinnati, Ohio. Machinery, tools, and supplies. 34,804; renewed June 19, 1930.
Miller's, Jacob, Sons Co., Philadelphia, Pa. Necktles. 271,441; June 3; Serial No. 293,003; published Mar. 11, 1930. Class 39.
Milton, Lloyd W., doing business as Milton Laboratories, Chicago, Ill. Metal-polishing cream, windshield cloth, and glass cleaner. 271,402; June 3; Serial No. 287,261; published Mar. 18, 1930. Class 4.
Milwaukee Tool & Forge Co., South Milwaukee, Wis. Wrenches, brake tools, drills, etc. 271,470; June 3. Class 23.
Missouri Chromium Plating Company, St. Louis, Mo. Metal cleaner and polish. 271,343; June 3; Serial No. 294,167; published Mar. 18, 1930. Class 4.
Mock, Judson, Voehringer Co. Inc., Long Island City, N. Y. Hosiery. 271,418; June 3; Serial No. 291,630; published Mar. 11, 1930. Class 39.
Monite Explosives, Inc., Reno, Nev. Explosives. 271,467; June 3. Class 9.
Morris & Company, Incorporated, Baltimore, Md. Cotton piece goods. 271,321; June 3; Serial No. 294,360; published Mar. 18, 1930. Class 42.
Naamlooze Vennootschap E. Noack's Koninklijke Fijne Vleeschwaren- en Conservenfabrieken, Amersfoort, Netherlands. Hams, corned beef, sausages, and preserved and canned beef. 271,476; June 3. Class 46.
Nappanee Lumber & Manufacturing Co., Nappanee, Ind. Card tables and folding tables. 271,386; June 3; Serial No. 290,374; published Mar. 25, 1930. Class 32.
National Washboard Company, Chicago, Ill. Washboards. 271,410; June 3; Serial No. 294,990; published Mar. 18, 1930. Class 24.
New England Fish Company, Seattle, Wash. Canned salmon. 271,353–4; June 3; Serial Nos. 288,350–1; published Mar. 25, 1930. Class 46.
New Waterford Furniture Company, The, New Waterford, Ohio. Furniture. 271,395; June 3; Serial No. 295,043; published Mar. 25, 1930. Class 32.
North American Polish Company, The, Cleveland, Ohio. Soaps, scouring powders, spot removers, etc. 271,382; June 3; Serial No. 266,946; published Mar. 18, 1930. Class 4.
Northern Illinois Cereal Company, Lockport, Ill. Grits. 271,325; June 3; Serial No. 295,747; published Mar. 18, 1930. Class 46.
Northland Milling Company, Minneapolis, Minn. Wheat flour. 271,383; June 3; Serial No. 251,409; published Mar. 18, 1930. Class 46.
Nunnally & McCrea Co., Atlanta, Ga. Overalls, work jackets, work shirts, and work pants. 271,443–4; June 3; Serial Nos. 294,855–6; published Mar. 11, 1930. Class 39.
Nu-Rex Products Co. (See Weeks, Elling O.)
Old English Candy Company, Inc., Dover, N. J. Candy and peppermint drops. 271,360; June 3; Serial No. 295,272; published Mar. 25, 1930. Class 46.
O'Sullivan, David L., New York, N. Y. Hypodermic syringes. 271,336; June 3; Serial No. 294,992; published Mar. 11, 1930. Class 44.
Otesaga Silk Co. (See Spurr, Gregory W., trustee.)
Ozark Smelting & Mining Company, Chicago, Ill. Lithopone and combinations of lithopone with zinc oxide, etc. 271,344; June 3; Serial No. 294,083; published Mar. 11, 1930. Class 16.
Pacific States Cast Iron Pipe Company, Provo, Utah. Metal pipe and pipe fittings. 271,394; June 3; Serial No. 295,046; published Mar. 25, 1930. Class 13.
Parfumerie Rigaud, Inc. (See Mason, Frederic S.)
Parsons Paper Company, Holyoke, Mass. Writing and printing papers. 271,427; June 3; Serial No. 287,262; published Dec. 24, 1929. Class 37.
Perkins Dry Goods Company, Dallas, Tex. Hosiery. 271,423; June 3; Serial No. 288,721; published Mar. 18, 1930. Class 39.
Perrone, Giovanni, Genoa, Italy. Metal polish. 271,370; June 3; Serial No. 284,743; published Mar. 25, 1930. Class 4.
Power, Lorenzo A. R., doing business as Kaufmann Department Stores, Inc., Pittsburgh, Pa. Mufflers and scarfs. 271,425; June 3; Serial No. 287,717; published Mar. 11, 1930. Class 39.
Premier Dental Products Co. (See Charlestein, Julius.)
Prentiss, George L. (See Hemming Manufacturing Company, as assignee.)
Raab, M. H., Co. Inc., Philadelphia, Pa. Shirts. 271,453; June 3; Serial No. 294,362; published Mar. 11, 1930. Class 39.
Reichenbaum, D., Milwaukee, Wis. Suits, dress suits, coats, show habits, etc. 271,473; June 3. Class 39.

Reynolds, Wm. T., & Co., to Wm. T. Reynolds & Co., Inc., Poughkeepsie, N. Y., successor. Canned fruits and vegetables. 78,444; renewed June 14, 1930.
Richter, Morris, doing business as Hyrum Syrup Company, Philadelphia, Pa. Maltless beverages and fountain syrups. 271,333; June 3; Serial No. 295,135; published Mar. 25, 1930. Class 45.
Rollodor Company, Los Angeles, Calif. Ash-tray stands. 271,397; June 3; Serial No. 294,181; published Mar. 25, 1930. Class 32.
Roxalin Flexible Lacquer Company, Incorporated, Long Island City, N. Y. Lacquers and lacquer enamels. 271,435; June 3; Serial No. 291,478; published Mar. 18, 1930. Class 16.
Ryerson, Joseph T., & Son Inc., Chicago, Ill. Steel. 271,469; June 3. Class 14.
S. M. Supplies Co., Boston, Mass. Leather belting. 271,365; June 3; Serial No. 295,393; published Mar. 25, 1930. Class 35.
Safeway Sales Corporation, Boston, Mass. Merchandise and photograph envelopes. 271,445; June 3; Serial No. 294,827; published Mar. 18, 1930. Class 2.
San Dimas Orange Growers Association, San Dimas, Calif. Fresh citrus fruits. 271,355; June 3; Serial No. 273,321; published July 30, 1929. Class 46.
San-Nap-Pak Mfg. Co., Inc., New York, N. Y. Absorbent cotton and gauze and sanitary napkins. 271,318; June 3; Serial No. 295,763; published Mar. 25, 1930. Class 44.
Satisfaction Coffee Co. (See Haworth & Dewhurst, Limited.)
Schnefel Brothers, Inc., Newark, N. J. Manicure appliances. 271,481; June 3. Class 44.
Schulze, Paul, Biscuit Co., Chicago, Ill. Crackerlike or biscuitlike food product. 271,329; June 3; Serial No. 295,539; published Mar. 18, 1930. Class 46.
Sears, Roebuck and Co., Chicago, Ill. Shirts, pajamas, and nightshirts. 271,373; June 3; Serial No. 283,144; published July 2, 1929. Class 39.
Sherwin & Jaller, New York, N. Y. Boys' shirts and blouses. 271,407; June 3; Serial No. 295,085; published Mar. 18, 1930. Class 39.
Siegel & Alenikoff, New York, N. Y. Women's cloaks and suits. 271,472; June 3. Class 39.
Sloan Valve Company, Chicago, Ill. Valves. 271,429; June 3; Serial No. 286,846; published Mar. 18, 1930. Class 13.
Southern Fruit Distributors, Inc., Orlando, Fla. Fresh citrus fruits and vegetables. 271,350; June 3; Serial No. 291,742; published Mar. 25, 1930. Class 46.
Spang, Joseph P., doing business as Cube Steak Machine Company, Boston, Mass. Machine for slitting meat. 271,479; June 3. Class 23.
Spurr, Gregory W., trustee for Jno. Dunlop's Sons, Inc., doing business as Otesaga Silk Co., New York, N. Y. Silk piece goods. 271,328; June 3; Serial No. 205,580; published Mar. 18, 1930. Class 42.
Stanco Incorporated, Wilmington, Del., and New York, N. Y. Solvents for paints. 271,347; June 3; Serial No. 293,644; published Mar. 18, 1930. Class 16.
Standard Oil Company of New York, New York, N. Y. Substitute for turpentine. 271,372; June 3; Serial No. 284,549; published Mar. 25, 1930. Class 16.
Step-In-All Underwear Corporation, The, Springfield, Mass. Sport shirts. 271,409; June 3; Serial No. 294,998; published Mar. 11, 1930. Class 39.
Strathmore Paper Company, Mittineague, Mass. Papetries, Bristol board, etc. 271,428; June 3; Serial No. 287,026; published Oct. 29, 1929. Class 37.
Structural Slate Co., The, Pen Argyl, Pa. Slate products. 271,449; June 3; Serial No. 294,600; published Mar. 18, 1930. Class 13.
Structural Slate Co., The, Pen Argyl, Pa. Slate products. 271,450; June 3; Serial No. 294,597; published Mar. 18, 1930. Class 13.
Swartzbaugh Manufacturing Co., The, Toledo, Ohio. Electric inhaler device. 271,337; June 3; Serial No. 294,746; published Mar. 18, 1930. Class 44.
Syuvita Medicine Co., The, to The Every Day Products Supply Company, Lima, Ohio, successor. Remedies for certain diseases. 76,169; renewed Dec. 21, 1929.
Taylor, G. C., Co., Fairport, N. Y. Soap powder. 271,400; June 3; Serial No. 289,305; published Mar. 18, 1930. Class 4.
"Tech Laboratories". (See Teubner, Karl L.)
Teubner, Karl L., doing business at "Tech Laboratories", Asheville, N. C. Polish. 271,339; June 3; Serial No. 294,497; published Mar. 18, 1930. Class 16.
Thomas, Florence L., Palo Alto, Calif. Art paints and plastic or stucco paint and paint diluter. 271,374; June 3; Serial No. 282,380; published Mar. 18, 1930. Class 16.
Toncan Culvert Manufactures Association. (See Central Alloy Steel Corporation.)
Tryon, Edward K., Jr., & Co., assignor to Edw. K. Tryon Company, Philadelphia, Pa. Golf clubs and balls. 33,171; renewed June 27, 1929.
Turner, Albert D., Philadelphia, Pa. Loose-leaf forms, indexes, and loose-leaf binders. 271,474; June 3. Class 37.
Twin City Manufacturing Company, Minneapolis, Minn. Overalls, jackets, pants, etc. 271,420; June 3; Serial No. 290,227; published Nov. 19, 1929. Class 39.
Twin Coupler Company, Inc., Poughkeepsie, N. Y. Pyrophoric cigarette and cigar lighters. 271,426; June 3; Serial No. 287,599; published Mar. 11, 1930. Class 34.
Utility Manufacturing Co., Inc., Baltimore, Md. Strainers, plain ladles, soap savers, etc. 271,457; June 3; Serial No. 294,100; published Mar. 18, 1930. Class 13.
Utility Manufacturing Co., Inc., Baltimore, Md. Strainers, plain ladles, soap savers, etc. 271,458; June 3; Serial No. 294,098; published Mar. 18, 1930. Class 13.
Valway Rug Mills, Inc., Lagrange, Ga. Textiles. 271,376; June 3; Serial No. 276,672; published Mar. 18, 1930. Class 42.
Van Dyk, James, Company, New York, N. Y. Butter and eggs. 271,327; June 3; Serial No. 295,586; published Mar. 18, 1930. Class 46.
Van Raalte Company, New York, N. Y. Women's and children's underwear. 271,417; June 3; Serial No. 294,936; published Mar. 11, 1930. Class 39.
Walker & Pratt Manufacturing Co., Boston, Mass. Stoves, furnaces, and steam and hot-water heating boilers. 79,311; renewed Aug. 23, 1930.
Wanamaker, John, New York, New York, N. Y. Bath robes, shoes, hats, etc. 271,419; June 3; Serial No. 290,636; published Mar. 11, 1930. Class 39.
Weeks, Elling O., doing business as Nu-Rex Products Co., Milwaukee, Wis. Surface-refinishing liquids. 271,380; June 3; Serial No. 271,463; published Mar. 11, 1930. Class 16.
Wentworth, O. E., & Co., Baltimore, Md. Raw oysters. 271,359; June 3; Serial No. 295,285; published Mar. 25, 1930. Class 46.
Wertheimer, Moses, Philadelphia, Pa. Children's combination garment. 271,459; June 3; Serial No. 294,033; published Mar. 18, 1930. Class 39.
Western Shade Cloth Company, The, Chicago, Ill. Ornamental hand grips applied to lower edges of window shades. 271,477; June 3. Class 32.
Whittemore Bros. Corp., Cambridge, Mass. Powder for cleaning and recoloring all undressed leathers. 271,340; June 3; Serial No. 294,455; published Mar. 18, 1930. Class 4.
Wilson Brothers, Chicago, Ill. Necktles and cravats. 271-403; June 3; Serial No. 295,703; published Mar. 18, 1930. Class 39.
Winter, J. C., & Co., Inc. (See Mayer, Sig. C., & Co., Inc.)
Wire & Steel Products Co., Inc., The, Brooklyn, N. Y. Metal box strapping, steel strapping, and crimp fastenings for same. 271,396; June 3; Serial No. 294,283; published Mar. 25, 1930. Class 13.
Wiscassett Mills Company, Albemarle, N. C. Hosiery. 271,452; June 3; Serial No. 294,372; published Mar. 11, 1930. Class 39.
Wishnick-Tumpeer, Inc., New York, N. Y. Carbon black. 271,436; June 3; Serial No. 290,865; published Mar. 18, 1930. Class 16.
Witte, Alexis, Cutlery Co., New York, N. Y. Razors and scissors. 77,433; renewed Apr. 12, 1930.
Woodward & Lothrop, Washington, D. C. Sanitary napkins. 271,316; June 3; Serial No. 295,312; published Mar. 25, 1930. Class 44.

ALPHABETICAL LIST OF REGISTRANTS OF LABELS

All Fair Incorporated, Churchville, N. Y. Tennis and Baseball. For Game. 37,496; June 3.
All Fair Incorporated, Churchville, N. Y. Hi-Ho Rolo. For Game. 37,497; June 3.
Arcturus Radio Tube Company, Newark, N. J. Arcturus A-C Tubes. For Radiotubes. 37,498; June 3.
Better Grocers Incorp., The, Sharon, Pa. Cream & Red Brand Coffee. For Coffee. 37,499; June 3.
Borden's Farm Products Company, Inc., New York, N. Y. Borden's—Quality Service—Grade B Milk. For Pasteurized Fluid Milk. 37,500; June 3.
Caravacci, Virgilio, doing business as Hollywood Stars Laboratories, Los Angeles, Calif. Hollywood Stars. For Cosmetics. 37,501; June 3.
Chase Varnish Company, Inc., Long Island City, N. Y. Justakote. For Paint. 37,502; June 3.
Coco-Cola Bottling Co., The, Wichita, Kan. Campbell's Scotch. For Ginger Ale. 37,503; June 3.
Dedenbach Chemical Company, Detroit, Mich. De Xald—B. For Eczema Medicine. 37,504; June 3.
Dedenbach Chemical Company, Detroit, Mich. De Xald—A. For Eczema Medicine. 37,505; June 3.
Douthitt Engineering Co., Chicago, Ill. Sunburst. For Dried Skim Milk. 37,506; June 3.
Hitt Fireworks Co., Seattle, Wash. Hitt's Searchlight Fiery Niagara. For Pyrotechnique Novelties. 37,507; June 3.

Hitt Fireworks Co., Seattle, Wash. Hitt's Baby Niagara. For Pyrotechnique Novelties. 37,508; June 3.
Hoague-Sprague Corporation, Lynn, Mass. G. B. S. Co. For Boxes. 37,509; June 3.
Hoague-Sprague Corporation, Lynn, Mass. Graham's Arch Fitter. For Boxes. 37,510; June 3.
Hoague-Sprague Corporation, Lynn, Mass. Ruben's. For Boxes. 37,511; June 3.
Hoague-Sprague Corporation, Lynn, Mass. Molly Stark. For Boxes. 37,512; June 3.
Hoague-Sprague Corporation, Lynn, Mass. Princess Chic. For Boxes. 37,513; June 3.
Hoague-Sprague Corporation, Lynn, Mass. The Joseph Corcoran Shoe. For Boxes. 37,514; June 3.
Hoague-Sprague Corporation, Lynn, Mass. Fashionia. For Boxes. 37,515; June 3.
Hoague-Sprague Corporation, Lynn, Mass. The Camden Shoe. For Boxes. 37,516; June 3.
Hoague-Sprague Corporation, Lynn, Mass. Venus Vogues. For Boxes. 37,517; June 3.
Hoague-Sprague Corporation, Lynn, Mass. The Sure Fitter Shoe. For Boxes. 37,518; June 3.
Hoague-Sprague Corporation, Lynn, Mass. Marylyn Modes. For Boxes. 37,519; June 3.
Hoague-Sprague Corporation, Lynn, Mass. Allen's Modish Stouts. For Boxes. 37,520; June 3.
Hoague-Sprague Corporation, Lynn, Mass. Combination Fitting. For Boxes. 37,521; June 3.
Hoague-Sprague Corporation, Lynn, Mass. Morris Shoe Company. For Boxes. 37,522; June 3.
Hoague-Sprague Corporation, Lynn, Mass. They See The Box First. For Boxes. 37,523; June 3.
Hoague-Sprague Corporation, Lynn, Mass. Child-Life. For Boxes. 37,524; June 3.
Hoague-Sprague Corporation, Lynn, Mass. Bay State Sport Girl. For Boxes. 37,525; June 3.
Hoague-Sprague Corporation, Lynn, Mass. Miss Anna May. For Boxes. 37,526; June 3.
Hoague-Sprague Corporation, Lynn, Mass. Union Shoe Co. For Boxes. 37,527; June 3.
Hoague-Sprague Corporation, Lynn, Mass. Blue Bird. For Boxes. 37,528; June 3.
Hoague-Sprague Corporation, Lynn, Mass. Dr. Austin's. For Boxes. 37,529; June 3.
Hoague-Sprague Corporation, Lynn, Mass. Jim Nastick. For Boxes. 37,530; June 3.
Hoague-Sprague Corporation, Lynn, Mass. Riorita. For Boxes. 37,531; June 3.
Hoague-Sprague Corporation, Lynn, Mass. Peppy Peggy. For Boxes. 37,532; June 3.
Hoague-Sprague Corporation, Lynn, Mass. Richard Health Shoe. For Boxes. 37,533; June 3.
Hoague-Sprague Corporation, Lynn, Mass. Dr. Nathan's. For Boxes. 37,534; June 3.
Hoague-Sprague Corporation, Lynn, Mass. Kimmel & Marbach Shoe Co. For Boxes. 37,535; June 3.
Hoague-Sprague Corporation, Lynn, Mass. The Paul Shoe. For Boxes. 37,536; June 3.
Hoague-Sprague Corporation, Lynn, Mass. The Bona Allen Shoe. For Boxes. 37,537; June 3.
Hoague-Sprague Corporation, Lynn, Mass. Betsy Ross. For Boxes. 37,538; June 3.
Hoague-Sprague Corporation, Lynn, Mass. Graham Custom-Made. For Boxes. 37,539; June 3.
Hoague-Sprague Corporation, Lynn, Mass. Style Maid. For Boxes. 37,540; June 3.
Hoague-Sprague Corporation, Lynn, Mass. Kaber's. For Boxes. 37,541; June 3.
Hollywood Stars Laboratories. (See Caravacci, Virgilio.)
Macintosh, Walter, Los Angeles, Calif. Tornado Twist. For Men's Suits. 37,542; June 3.
Malotte, Nelson K., doing business as Malotte Products Co., Buffalo, N. Y. The Complete A. C. Aerial Kit. For Radio Aerial Kits. 37,543; June 3.
Par-X Service Corp, Philadelphia, Pa. H-G Bread. For Bread. 37,544; June 3.
Red Arrow Bottling Works. (See Seput, Alexander P.)
Seput, Alexander P., doing business as Red Arrow Bottling Works, Detroit, Mich. Family Dry. For Ginger Ale. 37,545; June 3.
Virginia Products Corporation, New York, N. Y. Green Canoe. For Cigarettes. 37,546; June 3.
Ward, Augusta C., Schenectady, N. Y. Butter Browns Salted Peanuts. For Salted Peanuts. 37,547; June 3.
Wessels Baking Company, The, Seattle, Wash. $1000 Loaf. For Bread. 37,548; June 3.
Wigly Candy Co., Inc., Brooklyn, N. Y. I'se Regusted. For Candy Figures. 37,549; June 3.
Wigly Candy Co., Inc., Brooklyn, N. Y. Check and Double Check. For Candy Figures. 37,550; June 3.
Wissig, Henry L., San Francisco, Calif. Shurkleen Hand Soap. For Soap. 37,551; June 3.
Woelffel, Richard, Inc., Cupertino, Calif. Barbecue Chicken. For Chicken. 37,552; June 3.

ALPHABETICAL LIST OF REGISTRANTS OF PRINTS

American Tobacco Company, The, New York, N. Y. Happy-Go-Luckies. For Cigarettes and Advertising Novelties. 12,576; June 3.
Arden, Elizabeth, Inc., doing business as Elizabeth Arden, New York, N. Y. The Second Step is Toning. For Special Astringent, Skin Tonic, Muscle Oil, Pore Cream and Patter. 12,577; June 3.
Bamberger, L., and Co., Newark, N. J. Jean Lambert Dale. For China, Glassware, Clothing, and Accessories. 12,578; June 3.
Carnegie Dock & Fuel Company, Minneapolis, Minn. Carco. For Coal. 12,579; June 3.
Foley & Company, Chicago, Ill. Before The Days Of Foley's #1. For Medicinal Preparation for Coughs Due to Colds. 12,580; June 3.
Foley & Company, Chicago, Ill. Before The Days Of Foley's #2. For Medicinal Preparation for Coughs Due to Colds. 12,581; June 3.
Foley & Company, Chicago, Ill. Before The Days Of Foley's #3. For Medicinal Preparation for Coughs Due to Colds. 12,582; June 3.

ALPHABETICAL LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Aktiebolaget Elektrolux, Stockholm, Sweden. Filters. 285,543; June 3. Class 31.
Allison, Jess J., Newark, N. J. Disinfectants, deodorants. 298,875; June 3. Class 6.
Alpha Epsilon Pi Fraternity, Inc., New York, N. Y. Publication. 299,244; June 3. Class 38.
American Appliance Company. (See Ostdiek, Clarence J.)
American Braiding Company, Holyoke, Mass. Insulated radioantennæ. 298,775; June 3. Class 21.
American Hard Rubber Company, New York, N. Y. Steel tanks, barrels, bottles, pails, etc. 299,029; June 3. Class 2.
American Hard Rubber Company, New York, N. Y. Fans. 299,032; June 3. Class 34.
American Hard Rubber Company, Hempstead and New York, N. Y. Tank cars. 299,034; June 3. Class 19.
American Paint Journal Company, St. Louis, Mo. Periodicals. 294,835; June 3. Class 38.
Ancient Greek Laboratories. (See Sotiriades, George.)
Anderson-Clayton Industries, Inc. (See Plainview Cotton Oil Co., Inc., assignor.)
Aplin & Barrett & The Western Counties Creameries, Limited, Yeovil, England. Plum puddings. 298,780; June 3. Class 46.
Arkoma Grain Corporation, Fort Smith, Ark. Corn meal, chicken, dairy, etc., feed. 294,136; June 3. Class 46.
Art Metal Works, Inc., Newark, N. J. Removable cap devices for cigarette packages. 290,990; June 3. Class 46.
Artloom Corporation, Philadelphia Pile Fabric Mills Division, Philadelphia, Pa. Pile fabrics. 298,264; June 3. Class 42.
Ash Grove Lime & Portland Cement Co., Kansas City, Mo. Lime and cement. 297,716; June 3. Class 12.
Astoria Silk Works, New York, N. Y. Piece goods of silk, artificial silk, and silk having a novelty stripe of rayon or celanese. 294,413; June 3. Class 42.
Atkinson, Fenlon Co. Inc., New York, N. Y. Printed cotton, linen, and silk piece goods. 297,352; June 3. Class 42.
Augstein, S., & Co., New York, N. Y. Children's sweaters. 296,944; June 3. Class 39.
Autoil Soapolish Company, Not Inc. (See Bryant, John P.)
Ayer Company, The, Lowell, Mass. Cold cream. 297,885; June 3. Class 6.
Babbitt, B. T., Inc., New York, N. Y. Lye. 294,568–9; June 3. Class 6.
Babbitt, B. T., Inc., New York, N. Y. Drainpipe solvent. 294,570; June 3. Class 6.
Bab's Mfg. Co. (See Gardiner, Robert O.)
Barnett Pharmacal Co., The, New Haven, Conn. Emulsion for external treatment. 298,880; June 3. Class 6.

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Bastian, W. B., Manufacturing Co., Los Angeles, Calif. Gas water heaters. 288,542; June 3. Class 34.
Bay State Rug Co., Inc., Lowell, Mass. Textile rugs. 298,269; June 3. Class 42.
Bayly, Alice, Los Angeles, Calif. Perfume, lip sticks, and rouge. 293,768; June 3. Class 6.
Beck, Freda, doing business as Cherihirst Medical Company, Winnett, Mont. Medicine. 296,945; June 3. Class 6.
Bendix Brake Company, Chicago, Ill. Rivets. 281,892; June 3. Class 13.
Bernard & Heller. (See Heller, David.)
Beveridge Paper Company, The, Indianapolis, Ind. Cover paper, calendar stock, tablet cover, etc. 295,820; June 3. Class 37.
Black Star Coal Company, Louisville, Ky. Coal. 298,370; June 3. Class 1.
Blue Diamond Soap Co. (See Widmann, Frank C.)
Böhme, H. Th. A. G., Chemnitz, Germany. Chemical dye aids. 298,740; June 3. Class 6.
Bonded Materials Company, Louisville, Ky. Roof coating and waterproofing compound. 298,007; June 3. Class 12.
Boza, Gonzalo, & Co. Inc., New York, N. Y. Galvanized-iron sheets for roofing. 298,321; June 3. Class 12.
Boza, Gonzalo, & Co. Inc., New York, N. Y. Malt beverages. 298,322; June 3. Class 48.
Bradfield, Company, The, Atlanta, Ga. Preparation for the treatment of female disorders. 294,795; June 3. Class 6.
Bradley, Milton, Company, Springfield, Mass. Magazines. 299,483; June 3. Class 38.
Brandon Stove Company, Little Rock, Ark. Stoves. 296,392; June 3. Class 34.
Breitung, Albert, Chicago, Ill. Cigars. 298,976; June 3. Class 17.
Briar Products Co., Inc., Chicago, Ill. Hair-waving fluid, powder, and shampoo. 298,144; June 3. Class 6.
Brockman, Israel, doing business as I. Brockman & Co., Boston, Mass. Cotton cloth linings as piece goods. 296,576; June 3. Class 42.
Brogdex Company, Winter Haven, Fla., and Los Angeles, Calif. Fruits surface treated to enhance their marketability. 294,463; June 3. Class 46.
Brogdex Company, Winter Haven, Fla., and Los Angeles, Calif. Fruit treating and handling machinery. 296,173; June 3. Class 23.
Brooks Costume & Uniform Co. Inc., New York, N. Y. Men's clothing. 298,809; June 3. Class 39.
Bryant, John P., doing business as Autoil Soapolish Company, Not Inc., Chicago, Ill. Polishing and cleaning compound. 297,956; June 3. Class 16.
Buffalo Evening News, Buffalo, N. Y. Newspaper column. 298,930; June 3. Class 38.
Bulletin Printing Company, Walla Walla, Wash. Daily newspaper. 299,551; June 3. Class 38.
Burkhardt Brewing Company. (See Royal and Ancient Company, Ltd.)
Burton Brothers & Co. Inc., New York, N. Y. Cotton piece goods. 296,256–7; June 3. Class 42.
C-O Orchards, Inc. (See Columbia-Okanogan Orchards, Inc.)
Campanella, Biagio, doing business as Skalp-O-Rite Products Co., Bronx, N. Y. Hair tonics, hair dressings, etc. 296,688; June 3. Class 6.
Canton Glass Company, Marion, Ind. Glassware. 299,180; June 3. Class 33.
Carleton, E. Everett, & Co., Inc., New York, N. Y. Coffee. 294,416; June 3. Class 46.
Cellastic Manufacturing Company, Modesto, Calif. Expansion-joint material in sheet form. 297,792; June 3. Class 12.
Central Press Association, Inc., New York, N. Y. Newspaper cartoons. 299,256–8; June 3. Class 38.
Central Press Association, Inc., New York, N. Y. Newspaper cartoons. 299,260; June 3. Class 38.
Central Steel & Wire Company, Chicago, Ill. Welding rods and welding wire. 298,311; June 3. Class 14.
Chapin, Ada L., doing business as Chapin's Bird Store, East St. Louis, Ill. Bird food. 294,574; June 3. Class 46.
Cherihirst Medical Company. (See Beck, Freda.)
Cherry-Burrell Corporation, Wilmington, Del., Chicago, Ill., Little Falls, N. Y. Metal pipes and pipe fittings. 296,509; June 3. Class 13.
Churchill Mfg. Co., Sioux City, Iowa. Wax and gum preparation. 295,464; June 3. Class 16.
Clinical Laboratories Co., The, Cleveland, Ohio. Nasal inhalant. 297,859; June 3. Class 6.
Club & Campus Publishing Co., Chicago, Ill. Publications. 299,184; June 3. Class 38.
Cohen, S., & Co., New York, N. Y. Pajamas, coolie coats, and nightgowns. 280,473; June 3. Class 39.
Columbia-Okanogan Orchards, Inc., doing business as C-O Orchards, Inc., Brewster, Wash. Fruits. 287,635–6; June 3. Class 46.
Conde Nast Publications, Inc., The, New York, N. Y. Periodical. 299,496; June 3. Class 38.
Connell-Ross Co., Inc., San Benito, Tex. Fresh vegetables. 298,078; June 3. Class 46.
Consolidated Tea Co. Inc., New York, N. Y. Tea. 298,428; June 3. Class 46.
Consolidation Coal Company, The, New York, N. Y. Coal 299,047–8; June 3. Class 1.
Constantine, Euripides H., New York, N. Y. Soap. 297,520; June 3. Class 4.
Corder, Sylvester H., Dallas, Tex. Bread, cakes, and pies. 296,104; June 3. Class 46.
Coshocton Glove Co., The, Coshocton, Ohio. Gloves and mittens. 276,707; June 3. Class 39.
Dade City Packing Company, Dade City, Fla. Fresh citrus fruits and canned orange and grapefruit juices. 298,081; June 3. Class 46.
Darrow, W. C., doing business as Wm. C. Darrow Chemical Company, Kansas City, Mo. Cleanser. 289,668; June 3. Class 4.
Daussa, P., Corporation, Brooklyn, N. Y. Cornstarch. 298,688; June 3. Class 46.
Dawe, Charles C., Denver, Colo. Poultry and stock feed. 298,795; June 3. Class 46.
Deauville Specialty Corporation, New York, N. Y. Rubber wash cloths. 297,244; June 3. Class 29.
Dehart, Everett E., doing business as Hottentot Oil Burner Mfg. Co., Des Moines, Iowa. Oil burners. 297,729; June 3. Class 34.
De Mars, Arthur J., Washington, D. C. Periodical publication. 299,262; June 3. Class 38.
Denker, Emma, doing business as Saddle Creek Laboratories, Omaha, Nebr. Chicken feed. 298,084; June 3. Class 46.
Dickens, Charles, Oakland, Calif. Concentrated extract of vitamins A, B, C, D, and E. 290,746; June 3. Class 6.
Donovan Provision Co. Inc., Birmingham, Ala. Coffee. 293,031; June 3. Class 46.
Dragon Manufacturing Company, Inc., Chicago, Ill. Incense. 297,895; June 3. Class 6.
Driesen, Meyer & Oronsky, New York, N. Y. Woolen piece goods. 299,190; June 3. Class 42.
Dürener Metallwerke Aktien-Gesellschaft, Duren, Germany. Aluminium alloys. 289,400; June 3. Class 14.
E. & S. Packing Co. (See Emery and Shields.)
Egland Poultry Farm, The. (See Marnell, David.)
Elliott Knitting Mills, Inc., Hickory, N. C. Hosiery. 263,079; June 3. Class 39.
Emery and Shields, doing business as E. & S. Packing Co., Niagara Falls, N. Y. Fish. 286,106; June 3. Class 46.
Enterprise Paint Manufacturing Co., Chicago, Ill. Plastic sound-insulating composition. 298,316; June 3. Class 12.
Evans-Winter-Hebb, Inc., Detroit, Mich. Printed publications or house organs. 298,802; June 3. Class 38.
Excelsior Mills, Union, S. C. Yarns. 298,985; June 3. Class 43.
Federal Metal Bed Company, Hoboken, N. J. Bed springs. 298,745; June 3. Class 32.
Feminaid Laboratories. (See Scher, Robert S.)
Fink, Isidore, Astoria, Long Island, N. Y. Malt syrup. 298,382; June 3. Class 46.
Fischer Baking Co., Newark, N. J. Bread. 298,235; June 3. Class 46.
Floral Park Milling Co. (See Orvañanos, Miguel.)
Florence Macaroni Co., Los Angeles, Calif. Alimentary pastes. 298,892; June 3. Class 46.
Florida Citrus Products Corporation, New York, N. Y. Canned citrus fruits and citrus-fruit juices. 271,746; June 3. Class 46.
Florida Sponge & Chamois Co., New York, N. Y. Sponges and chamois. 298,276; June 3. Class 1.
Follmer Clogg & Co., New York, N. Y.; Philadelphia, Pa.; San Francisco, Calif.; and Lancaster and Columbia, Pa. Silk textile fabrics. 298,221; June 3. Class 42.
Forest City Mfg. Co., St. Louis, Mo. Dresses, jackets, and coats. 287,129; June 3. Class 39.
Fort Howard Paper Company, Green Bay, Wis. Toilet paper. 298,438–9; June 3. Class 37.
Fulton, E. E., Co., Chicago, Ill. Floor test solution, perfumes, insecticide, etc. 294,721; June 3. Class 6.
Gage Publishing Company, Inc., The, New York, N. Y. Periodical. 299,193; June 3. Class 38.
Gallagher, James J., Baltimore, Md. Coffee and tea. 299,116; June 3. Class 46.
Gardiner, Robert O., doing business as Bab's Mfg. Co., Wilmington, Mass. Shampoo preparation and a tonic preparation. 297,665; June 3. Class 6.
Garrison, Lloyd W., Hollywood, Calif., and Hartford, Conn. Shaving cream. 298,806; June 3. Class 4.
General Electric Company, Schenectady, N. Y. Boron carbide, soldering paste, soldering flux, etc. 294,000; June 3. Class 6.
General Fireproofing Company, The, Youngstown, Ohio. Safes, filing safes, note cases, and bond boxes. 296,417; June 3. Class 25.
Gernsbak Publications, Inc., New York, N. Y. Publication. 282,406; June 3. Class 38.
Goldstein, Isidore M., doing business as Pedi-Rest Laboratories, Jamaica, N. Y. Medicinal liquid solution for healing the feet. 296,863; June 3. Class 6.
Good Story Magazine Company, Inc., New York, N. Y. Magazine. 298,626; June 3. Class 38.

Great Lakes Industrial Laboratories. (See Rex, Clarence R.)
Greif, L., & Bro. Incorporated, Baltimore, Md. Topcoats, overcoats, coats, etc. 281,490; June 3. Class 39.
Gross, A., & Co., Kommanditgeselischaft, Vienna, Austria. Embroidery canvas and unfinished textile material. 298,278; June 3. Class 42.
Guardure Company. (See Shaw, James W.)
Gude's, Inc., Los Angeles, Calif. Shoes. 298,534; June 3. Class 39.
Halberstadt & Co. Inc., New York, N. Y. Ladies' pocketbooks, purses, and empty vanities. 297,965; June 3. Class 3.
Hall Brothers (Whitefield) Ltd., Whitefield, near Manchester, England. Medicated sweetmeats. 291,388; June 3. Class 6.
Haller, Edward W., doing business as Kao Products Co., Erie, Pa. Salve. 283,791; June 3. Class 6.
Hammond, Mark O., doing business as Mohbestos Brake Lining Company, Akron, Ohio. Brake linings. 299,197; June 3. Class 35.
Hanson-Van Winkle-Munning Company, Matawan, N. J. Polishing abrasives. 298,992; June 3. Class 4.
Hart, Etta H., Chicago, Ill. Detachable skirts for corsetlettes. 298,445; June 3.
Hartford Steel Ball Company, The, Hartford, Conn. Mixture of steel balls and pins for polishing silverware. 298,446; June 3. Class 23.
Heller, David, doing business as Bernard & Heller, New York, N. Y. Machines made to specification and for use in quantity production. 294,528; June 3. Class 23.
Hendel, Hyman, doing business as The Utility Printing Co., New York, N. Y. Neckties, mufflers, and handkerchiefs. 295,215; June 3. Class 39.
Hensel, Otto A., doing business as O. A. Hensel Laboratories, Pittsburgh, Pa. Scalp and hair treating pomatum. 292,874; June 3. Class 6.
Holden-Leonard Company, New York, N. Y. Worsted and woolen fabrics. 299,122; June 3. Class 42.
Holden-Leonard Company, New York, N. Y. Worsted and woolen fabrics. 299,124–6; June 3. Class 42.
Holden-Leonard Company, New York, N. Y. Worsted and woolen fabrics. 299,128–9; June 3. Class 42.
Holden-Leonard Company, New York, N. Y. Worsted and woolen fabrics. 299,131–34; June 3. Class 42.
Hollander, A., & Son, Inc., Newark, N. J. Furskins. 298,698–9; June 3. Class 1.
Hoover Company, The, North Canton, Ohio. Dust filtering and collecting containers for suction cleaners. 295,846–7; June 3. Class 2.
Hottentot Oil Burner Mfg. Co. (See Dehart, Everett E.)
Howerton, Jno. L., doing business as Howerton Chemical Company, Durham, N. C. Medicinal preparation. 297,715; June 3. Class 6.
Hudson River Woolen Mills, New York, N. Y. Woolen piece goods. 298,539; June 3. Class 42.
Hynson, Westcott & Dunning, Incorporated, Baltimore, Md. Antiseptics, germicides, and disinfectants. 297,600; June 3. Class 6.
I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Chemical product. 298,397; June 3. Class 6.
International Association of Lions Clubs, Chicago, Ill. Periodical. 297,740; June 3. Class 38.
Jacobson, F., & Sons, New York, N. Y. Shirts. 296,060; June 3. Class 39.
Jaquet, Inc., Hoboken, N. J. Porous textile pads containing treatment chemicals. 261,514; June 3. Class 44.
Kao Products Co. (See Haller, Edward W.)
Karaveras, Danes, Baltimore, Md. Beverage. 298,753; June 3. Class 45.
Karl Laboratories. (See Pomerance, Tulley J.)
Keighley, John F. M., doing business as Keighley Laboratory, Providence, R. I. Astringent and deodorant preparation. 298,448; June 3. Class 6.
Kelly Graphite Mills, Inc., Stockertown, Pa. Facings and facing products for use in casting metals. 281,005; June 3. Class 1.
Kennedy-Detroit Orange Juice Company, Detroit, Mich. Maltless beverages and fruit juices. 297,959; June 3. Class 45.
Keyes Fibre Company, Inc., Waterville, Me. Plates and dishes. 292,582; June 3. Class 2.
King Features Syndicate, Inc., New York, N. Y. Periodical publication. 299,266; June 3. Class 38.
Kline, B. A., & Co., Inc., Passaic, N. J., and New York, N. Y. Cigars, cheroots, and little cigars. 296,529; June 3. Class 17.
Knipe Bros. Inc., Haverhill, Mass. Leather shoes. 297,807; June 3. Class 39.
Koppers Products Company, Pittsburgh, Pa. Fertilizers. 280,502; June 3. Class 10.
Kroger Grocery & Baking Co., The, Cincinnati, Ohio. Galvanized ware and screens. 296,751; June 3. Class 13.
Kroger Grocery & Baking Co., The, Cincinnati, Ohio. Glass ware. 299,065; June 3. Class 33.
Leggett & Platt Spring Bed & Mfg. Company, Carthage, Mo., and Louisville, Ky. Spring beds. 297,684–5; June 3. Class 32.
Lesser Company, Inc., Chicago, Ill. Bath powder. 282,661; June 3. Class 6.
Lewman's, Incorporated, New York, N. Y. Shirts. 297,687; June 3. Class 39.
Long-Bell Lumber Company, The, Kansas City, Mo. Wooden posts. 294,751; June 3. Class 12.
Lord & Taylor, New York, N. Y. Hosiery. 298,828; June 3. Class 39.
Lord & Taylor, New York, N. Y. Purses and hand bags. 299,397; June 3. Class 3.
Louisiana State Rice Milling Company, Inc., Abbeville, La. Stock and poultry feed. 299,398; June 3. Class 46.
Lowe-Nanas Company, Los Angeles, Calif. Coats, dresses, and topcoats. 297,920; June 3. Class 39.
Ludwig Medical Co., Elkhart, Ind. Medicine. 298,948; June 3. Class 6.
M and R Grain Corporation, Indianapolis, Ind. Farinaceous feed mixtures. 297,613; June 3. Class 46.
Macfadden Publications, Inc., New York, N. Y. Magazine. 299,072; June 3. Class 38.
Maker, John A., Duluth, Minn. Tooth paste, tooth powders, mouth washes, etc. 299,206; June 3. Class 6.
Marnell, David, doing business as The Egland Poultry Farm, Butler, Pa. Medicine for baby chicks. 265,227; June 3. Class 6.
Mathews, Geo. C., Balaclava, Victoria, Australia. Preparations for the hair. 295,035; June 3. Class 6.
Matthews, Ernest W., Rock Island, Ill. Newspaper page, feature, or section. 296,430; June 3. Class 38.
Mayer, Oscar, & Co. Inc., doing business as Oscar Mayer's, Chicago, Ill. Frankfurters. 295,950; June 3. Class 46.
Mazelle & Company, New York, N. Y. Liquid inhalant. 297,816; June 3. Class 6.
McCall Company, The, New York, N. Y. Fiction magazine. 293,842; June 3. Class 38.
Meredith Publishing Company, Des Moines, Iowa. Publication. 298,831–2; June 3. Class 38.
Meredith Publishing Company, Des Moines, Iowa. Publication. 298,833–5; June 3. Class 38.
Millar, Geo. W., & Co. Inc., New York, N. Y. Wrapping paper. 297,486; June 3. Class 37.
Mme Marceau, Société à Responsabilité Limitée, Bordeaux, France. Wines. 298,453; June 3. Class 47.
Mishawaka Rubber and Woolen Manufacturing Company, Mishawaka, Ind. Shoes and composition soles for shoes. 298,407; June 3. Class 39.
Mitsui Bussan Kaisha, Ltd., doing business as Mitsui & Co., Ltd., Tokyo, Japan, and San Francisco, Calif. Canned beef. 282,560; June 3. Class 46.
Mohbestos Brake Lining Company. (See Hammond, Mark O.)
Monocacy Valley Canning Company, Frederick, Md. Canned fruits and vegetables. 298,649–51; June 3. Class 46.
Moores Lime Company, The, Durbin, Ohio. Lime and lime products. 298,286; June 3. Class 12.
Mower, R. H., San Francisco, Calif. Foreign and domestic postage stamps. 298,196; June 3. Class 38.
Mustad, O., & Son, Oslo, Norway. Fishhooks. 298,839; June 3. Class 22.
Mysore India Drugget Corporation, New York, N. Y. Rugs of spun woolen yarns. 297,753; June 3. Class 42.
Nalbach, Alex, doing business as Nalbach's Bottling Works, Nanticoke, Pa. Beverages. 298,583; June 3. Class 45.
National Association of Waste Material Dealers, Inc., New York, N. Y. Periodicals. 298,251; June 3. Class 38.
National Canners Association, The, Washington, D. C. Periodical. 299,148–9; June 3. Class 38.
National Drug Co., The, Philadelphia, Pa. Composition composed of highly-concentrated solution of purified enzymes. 297,376; June 3. Class 6.
National Enameling & Stamping Co. Inc. (See Nufold Furniture Company, assignor.)
National Selectograph Corporation, San Francisco, Calif. Office machines for the mechanical selection of cards, ledger sheets, stencils, etc. 290,716; June 3. Class 26.
Naylor, Ford, Inc., New York, N. Y. Suits and overcoats. 293,922; June 3. Class 39.
Neenah Paper Company, Neenah, Wis. Paper. 297,265; June 3. Class 37.
Newberry, J. J., Company, New York, N. Y. Hosiery. 296,814; June 3. Class 39.
New England Cranberry Sales Company, Middleboro, Mass. Cranberries. 276,976; June 3. Class 46.
New England Cranberry Sales Company, Middleboro, Mass. Cranberries. 276,980–1; June 3. Class 46.
New Era Milling Company, The, Arkansas City, Kans. Wheat flour. 298,544–5; June 3. Class 46.
Newspaper Feature Service, Inc., New York, N. Y. Newspaper section. 298,111; June 3. Class 38.
New York Coffee Pot, Milwaukee, Wis. Prepared foods. 281,157; June 3. Class 46.
North American Refractories Company, Cleveland, Ohio. Mortar. 298,113; June 3. Class 12.
Northwestern Supply House, Chicago, Ill. Articles customarily put up and sold by a stationery store. 297,094; June 3. Class 37.
Nufold Furniture Company, Chicago, Ill., assignor to National Enameling & Stamping Co. Inc., Milwaukee, Wis. Tables and folding chairs. 283,966; June 3. Class 32.

Oliver Farm Equipment Company, Chicago, Ill. Tractors and parts thereof. 294,237; June 3. Class 23.
Oliver Trunk Manufacturing Co., Fort Worth, Tex. Automobile trunks, suitcases, hatboxes. 294,819; June 3. Class 3.
Orvañanos, Miguel, doing business as Floral Park Milling Co., New York, N. Y. Plantain flour. 296,979; June 3. Class 46.
Ostberg, Ivan, doing business as Ostberg Seed Co. (Not Inc.), Chicago, Ill. Lawn grass seed. 297,979–80; June 3. Class 1.
Ostdick, Clarence J., doing business as American Appliance Company, Minneapolis, Minn. Mops. 294,023; June 3. Class 29.
Oswego Rayon Corporation, Oswego, N. Y. Underwear. 298,656; June 3. Class 39.
Pacific Western Chemical Co., Los Angeles, Calif. Preparation for intestinal cleanliness. 298,510; June 3. Class 6.
Paige and Paul, Minneapolis, Minn. Tablet for treatment of ulcers and disorders of the stomach. 297,692; June 3. Class 6.
Parfumerie Roger et Gallet, Société Anonyme, Paris, France. Perfumery. 276,456; June 3. Class 6.
Pedi-Rest Laboratories. (See Goldstein, Isidore M.)
Pennsylvania Textile Mills, Inc., New York, N. Y. Pile fabrics. 297,929; June 3. Class 42.
Penryn Fruit Co., Penryn, Calif. Fresh pears. 298,511; June 3. Class 46.
Petty, George P., Wilmington, N. C. Liquid hair tonic and hair restorer. 296,357; June 3. Class 6.
Phillfuels Company, Bartlesville, Okla. Liquefied petroleum gases. 298,764; June 3. Class 6.
Plainview Cotton Oil Co., Inc., Plainview, Tex., assignor to Anderson-Clayton Industries, Inc., Wilmington, Del. Feeds. 299,226; June 3. Class 46.
Pomerance, Tulley J., doing business as Karl Laboratories, Detroit, Mich. Reducing salts. 285,638; June 3. Class 6.
Prebol, Bronislaw, doing business as B. Prebol Drug Co., Elizabeth, N. J. Preparation of herbs. 298,358; June 3. Class 6.
Press-Union Publishing Company, Atlantic City, N. J. Newspaper. 297,787; June 3. Class 38.
Purvin, Julius L., doing business as J. L. Purvin Manufacturing Company, Dallas, Tex. Bloomers, vests, pajama suits, etc. 298,967; June 3. Class 39.
Rankin, Wm. H., Company, Chicago, Ill. Composition shingles and composition roofing. 289,476; June 3. Class 12.
Reliable Coal & Mining Co., Chicago, Peoria, and Springfield, Ill.; Moberly and Kansas City, Mo.; and Omaha, Nebr. Coal. 291,147; June 3. Class 1.
Rengaw Company. (See Wagner, Matthias A.)
Research Laboratories, The. (See Scarff, Fred W.)
Rex, Clarence R., doing business as Great Lakes Industrial Laboratories, Toledo, Ohio. Stucco and plaster, mortar and cement plastic construction materials. 297,820; June 3. Class 12.
Rossi, Peter, & Sons, Inc., Braidwood, Ill. Alimentary pastes. 298,850; June 3. Class 46.
Rossie Velvet Company, Mystic, Conn. Pile fabrics. 299,281; June 3. Class 42.
Roth Büchner Aktiengesellschaft, Berlin-Tempelhof, Germany. Cutlery. 271,827; June 3. Class 23.
Royal and Ancient Company, Ltd., and doing business in part as Burkhardt Brewing Company, Boston, Mass. Beverage. 281,524; June 3. Class 48.
Saddle Creek Laboratories. (See Denker, Emma).
Saetta Bros., Coney Island, N. Y. Ice-cream, ice-cream bricks, and ice-cream sandwiches. 298,667; June 3. Class 46.
St. John's Bread Co., St. Louis, Mo. Bread. 298,290; June 3. Class 46.
San-Nap-Pak Mfg. Co., Inc., New York, N. Y. Absorbent cotton and gauze and sanitary napkins. 299,085; June 3. Class 44.
Saunders, George W., doing business as G. W. Saunders Company, New York, N. Y. Woolens in the piece. 295,576; June 3. Class 42.
Scarff, Fred W., doing business as The Fred W. Scarff Co., Chicago, Ill. Face powder, bath salts, beauty lotion, etc. 299,019; June 3. Class 6.
Scarff, Fred W., doing business as The Research Laboratories, Chicago, Ill. Vanishing cream, liquid preparation for the scalp, preparation for sallow and oily skins, etc. 299,230; June 3. Class 6.
Scher, Robert S., doing business as Feminaid Laboratories, Baltimore, Md. Medicine. 299,087; June 3. Class 6.
Schlesinger, Leo Company, Inc., New York, N. Y. Score-pad-holding device, pads therefor, and score cards. 298,360; June 3. Class 22.
Schrag, Bernhard, & Co. Inc., New York, N. Y. Uniforms. 295,239–40; June 3. Class 39.
Schwabe, Irwin B., New York, N. Y. Children's play suits, and men's and boys' work shirts, suits, and jumpers. 297,877; June 3. Class 39.
Selick, C. H., Inc., New York, N. Y. Perfumes and cosmetics. 297,878; June 3. Class 6.

Servus Rubber Company, The, Rock Island, Ill. Boots and shoes. 292,638; June 3. Class 39.
Shaw, James W., doing business as Guardure Company, Chicago, Ill. Blank checks. 294,184; June 3. Class 37.
Skalp-O-Rite Products Co. (See Campanella, Biagio.)
Sotiriades, George, doing business as Ancient Greek Laboratories, Pittsburgh, Pa. Medicinal preparations. 289,906; June 3. Class 6.
Sperry Candy Co., Milwaukee, Wis. Candy. 294,280; June 3. Class 46.
Squibb, E. R., & Sons, New York, N. Y. Cod-liver-oil concentrate tablets. 298,859; June 3. Class 6.
Stanco Incorporated, Wilmington, Del., and New York, N. Y. White mineral oil. 296,928; June 3. Class 6.
Standard Gage Company, Inc., Poughkeepsie, N. Y. Snap gages. 297,942; June 3. Class 26.
Standard-Tilton Milling Company, St. Louis, Mo. Wheat flour. 294,783; June 3. Class 46.
Stat-Amatic Instrument and Appliance Company. (See States Company, The.)
State Title and Mortgage Company, New York, N. Y. Publication. 298,259; June 3. Class 38.
States Company, The, doing business as Stat-Amatic Instrument and Appliance Company, Hartford, Conn. Thermostatic-controlled temperature-regulating apparatus and parts thereof. 298,597; June 3. Class 26.
Stitzinger, Arthur E., doing business as Stitzinger Lumber Company, Philadelphia, Pa. Stained shingles. 297,824; June 3. Class 12.
Style Dress Co., Inc., The, New York, N. Y. Dresses and suit and coat ensembles. 298,468; June 3. Class 39.
Suns Sporting Goods Co., Inc., New York, N. Y. Sporting and athletic goods. 296,721; June 3. Class 22.
Super Orange Beverage, Inc., Brooklyn, N. Y. Fruit juices and extracts for beverage purposes. 298,598; June 3. Class 45.
Swift and Company, Chicago, Ill. Gelatin. 298,865; June 3. Class 46.
Szelagowski, A., & Son, Buffalo, N. Y. Sausages. 284,751; June 3. Class 46.
Talens & Son, Inc., Irvington, N. J. Oil and water colors. 299,096; June 3. Class 16.
Tile-Tex Company, The, Chicago Heights, Ill. Tile flooring. 282,955–6; June 3. Class 12.
Top Notes, Inc., New York, N. Y. Periodical. 299,352; June 3. Class 38.
Touraine Company, The, Boston, Mass. Candy. 289,136; June 3. Class 46.
Traders Oil Mill Company, Fort Worth, Tex. Cottonseed meal. 297,708; June 3. Class 46.
Traders Oil Mill Company, Fort Worth, Tex. Mixed cottonseed meal and hulls. 297,709; June 3. Class 46.
Tropic Weld Inc., Minneapolis, Minn. Tube patches. 298,417; June 3. Class 35.
Tuteur, Charles, doing business as Charles Tuteur Co., Chicago, Ill. Smoking and flower stands, stools, metal benches. 297,103; June 3. Class 32.
Tuttle & Bailey Manufacturing Company, New York, N. Y. Heating and ventilating grilles. 296,371; June 3. Class 34.
Ucoline Products Company, Chicago, Ill. Medicinal preparation. 297,554–5; June 3. Class 6.
Ullman Aluminum Division, Inc., New York, N. Y. Mechanical fruit-juice extractors. 295,701; June 3. Class 23.
Ulmer, H. D., Inc., Largo, Fla. Orange jelly, orange marmalade, grapefruit jelly, etc. 279,974; June 3. Class 46.
United Publishing Company, Kansas City, Mo. Periodical. 298,773; June 3. Class 38.
United States Gypsum Company, Chicago, Ill. Plastic wall coverings in the nature of paint. 277,230; June 3. Class 16.
United States Pencil Co., Inc., New York, N. Y. Lead pencils. 296,373; June 3. Class 37.
U. S. Phosphoric Products Corporation, New York, N. Y., and Hillsboro Bay, Tampa, Fla. Blocks, tiles, and plaster. 297,994; June 3. Class 12.
United States Playing Card Company, The, East Norwood, Cincinnati, Ohio. Playing cards. 299,097; June 3. Class 22.
Utility Printing Co., The. (See Hendel, Hyman.)
Von Damm, Henry W., doing business as F. H. von Damm, Brooklyn, N. Y. Tonic food for birds. 298,217; June 3. Class 46.
Vulrox Corporation, The, St. Louis, Mo. Hydrocarbon material. 295,877; June 3. Class 12.
Wagner, Matthias A., doing business as Rengaw Company, Toledo, Ohio. Preparation for treatment of skin irritations. 298,871; June 3. Class 6.
Walsh, Christy, New York, N. Y. Heading for a series of articles. 291,187; June 3. Class 38.
Ward, A. T., Manufacturing Company, The, Cincinnati, Ohio. Preparation for the treatment of corns, bunions, and callouses. 296,165; June 3. Class 6.
Ward Baking Company, New York, N. Y. Fruit cake. 293,564; June 3. Class 46.
Webb, Frank V., Cincinnati, Ohio. Laxative and tonic. 293,498; June 3. Class 6.

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Weiss, Harry, doing business as Weiss Shirt Co., New York, N. Y. Shirts. 298,918; June 3. Class 39.
Western Electric Company, Incorporated, New York, N. Y. Sound-picture apparatus. 297,219; June 3. Class 26.
Widmann, Frank C., doing business as Blue Diamond Soap Co., Cleveland, Ohio. Hand soap. 297,392; June 3. Class 4.
Wright, W. H., & Sons Company, Ogden, Utah. Creamery butter. 298,057; June 3. Class 46.
Wurlitzer Grand Piano Company, De Kalb, Ill. Art panels, medallions, plaques, etc. 292,147; June 3. Class 50.
Yale & Towne Mfg. Co., The, Stamford, Conn. Builder's hardware. 293,394; June 3. Class 13.
Yale & Towne Mfg. Co., The, Stamford, Conn. Locks, padlocks, rim latches, lock sets, etc. 296,840; June 3. Class 25.
York Heating & Ventilating Corporation, Bridgeport and Philadelphia, Pa. Radiators, fans, blowers, etc. 298,059; June 3. Class 34.
Young, L. A., Spring and Wire Corporation, Detroit, Mich., and Oakland, Calif. Spring mattresses and bed springs. 299,240; June 3. Class 32.

CLASSIFIED LIST OF TRADE-MARKS REGISTERED

CLASS 1

Earth, Diatomaceous. Industrial Chemical Sales Company. 271,320; June 3; Serial No. 294,638; published Mar. 18, 1930.

CLASS 2

Dishes. Diamond Match Company. 271,456; June 3; Serial No. 294,208; published Mar. 18, 1930.
Envelopes, Merchandise and photograph. Safeway Sales Corporation. 271,445; June 3; Serial No. 294,827; published Mar. 18, 1930.
Machinery, tools, and supplies. Miller, Du Brul & Peters Mfg. Co. 34,804; renewed June 19, 1930.
Tanks and underground garbage receivers, Stock and storage. Klauer Manufacturing Company. 271,369; June 3; Serial No. 280,713; published Mar. 25, 1930.

CLASS 3

Calks for horseshoes, Toe. Franklin Steel Works. 271,335; June 3; Serial No. 294,667; published Mar. 18, 1930.
Coin holders, Pocket. Bankette Co. 271,331; June 3; Serial No. 295,325; published Mar. 18, 1930.

CLASS 4

Cleaner and polish, Metal. Missouri Chromium Plating Company. 271,343; June 3; Serial No. 294,167; published Mar. 18, 1930.
Cleaning, polishing, and wiping cloths, Treated. T. F. Carroll. 271,341; June 3; Serial No. 294,286; published Mar. 18, 1930.
Cleanser, General. Di-Ox Products Co. 271,338; June 3; Serial No. 294,626; published Mar. 18, 1930.
Metal polishing cream, windshield cloth, and glass cleaner. L. W. Milton. 271,402; June 3; Serial No. 287,261; published Mar. 18, 1930.
Polish, Metal. G. Perrone. 271,370; June 3; Serial No. 284,743; published Mar. 25, 1930.
Powder for cleaning and recoloring all undressed leathers. Whittemore Bros. Corp. 271,340; June 3; Serial No. 294,455; published Mar. 18, 1930.
Soap. Colgate-Palmolive-Peet Company. 271,434; June 3; Serial No. 292,486; published Mar. 25, 1930.
Soap powder. G. C. Taylor Co. 271,400; June 3; Serial No. 289,305; published Mar. 18, 1930.
Soaps. Golden Eagle Soap Co. 271,471; June 3.
Soaps, scouring powders, spot removers, etc. North American Polish Company. 271,382; June 3; Serial No. 266,946; published Mar. 18, 1930.

CLASS 6

Dye for leather. Edgar T. Horsey, Inc. 271,478; June 3.
Perfumes. F. S. Mason. 78,535; renewed June 21, 1930.
Preparation for rheumatism, neuritis, gout, etc. Miljay Laboratory. 271,438; June 3; Serial No. 293,629; published Feb. 18, 1930.
Remedies for certain diseases. Synvita Medicine Co. 76,169; renewed Dec. 21, 1929.

CLASS 9

Explosives. Monite Explosives, Inc. 271,467; June 3.

CLASS 13

Coffeepots. Enterprise Aluminum Company. 271,378; June 3; Serial No. 275,949; published Apr. 9, 1929.
Gates, Culvert. Central Alloy Steel Corporation. 271,462; June 3; Serial No. 293,870; published Mar. 18, 1930.
Gutter hangers, trough hangers, wire strainers, etc. Klauer Manufacturing Company. 271,366; June 3; Serial No. 280,717; published Mar. 25, 1930.
Metal box strapping, steel strapping, and crimp fastenings for same. Wire & Steel Products Co. 271,396; June 3; Serial No. 294,283; published Mar. 25, 1930.
Pipe and pipe fittings, Metal. Pacific States Cast Iron Pipe Company. 271,394; June 3; Serial No. 295,046; published Mar. 25, 1930.
Plumbing fixtures. Eljer Company. 271,388–9; June 3; Serial Nos. 286,748–9; published Mar. 25, 1930.
Slate products. Structural Slate Co. 271,449; June 3; Serial No. 294,600; published Mar. 18, 1930.
Slate products. Structural Slate Co. 271,450; June 3; Serial No. 294,597; published Mar. 18, 1930.
Strainers, plain ladles, soap savers, etc. Utility Manufacturing Co. 271,457; June 3; Serial No. 294,100; published Mar. 18, 1930.
Strainers, plain ladles, soap savers, etc. Utility Manufacturing Co. 271,458; June 3; Serial No. 294,098; published Mar. 18, 1930.
Tacks. Geo. Baker & Sons, Inc. 271,440; June 3; Serial No. 293,402; published Mar. 18, 1930.
Valves. General Electric Company. 271,460; June 3; Serial No. 293,995; published Mar. 18, 1930.
Valves. Sloan Valve Company. 271,429; June 3; Serial No. 286,846; published Mar. 18, 1930.
Valves, gas cocks, relief valves ,etc., Blow-off. Cleveland Heater Company. 271,377; June 3; Serial No. 276,516; published Mar. 18, 1930.

CLASS 14

Steel. Joseph T. Ryerson & Son Inc. 271,469; June 3.

CLASS 16

Carbon black. Wishnick-Tumpeer, Inc. 271,436; June 3; Serial No. 290,865; published Mar. 18, 1930.
Filler, Wood. Lehman Bros., Inc. 271,367; June 3; Serial No. 279,482; published Apr. 16, 1929.
Lacquers and lacquer enamels. Roxalin Flexible Lacquer Company. 271,435; June 3; Serial No. 201,478; published Mar. 18, 1930.
Lithopone and combinations of lithopone with zinc oxide, etc. Ozark Smelting & Mining Company. 271,344; June 3; Serial No. 294,083; published Mar. 11, 1930.
Paint, paint enamels, varnishes, etc. L. F. Cassoff. 271,342; June 3; Serial No. 294,247; published Mar. 18, 1930.
Paints and plastic or stucco paint and paint diluter, Art. F. L. Thomas. 271,374; June 3; Serial No. 282,380; published Mar. 18, 1930.
Paints, Solvents for. Stanco Incorporated. 271,347; June 3; Serial No. 293,644; published Mar. 18, 1930.
Paints, varnishes, prepared shellac, etc., Mixed. General Electric Company. 271,345; June 3; Serial No. 293,909; published Mar. 25, 1930.
Polish. K. L. Teubner. 271,339; June 3; Serial No. 294,497; published Mar. 18, 1930.
Polish and cleaner. E. Z. Frands. 271,401; June 3; Serial No. 287,440; published Mar. 11, 1930.
Refinishing liquids, Surface-. E. O. Weeks. 271,380; June 3; Serial No. 271,463; published Mar. 11, 1930.
Turpentine substitute. Standard Oil Company of New York. 271,372; June 3; Serial No. 284,549; published Mar. 25, 1930.
Varnishes and lacquers. International Printing Ink Corporation. 271,463; June 3; Serial No. 294,534; published Mar. 18, 1930.

CLASS 17

Cigars. Sig. C. Mayer & Co. Inc. 77,577; renewed Apr. 19, 1930.

CLASS 19

Airplanes. American Eagle Aircraft Corporation. 271,466; June 3; Serial No. 295,245; published Mar. 18, 1930.
Automobiles, motor boats, etc. Guy Motors Ltd. 271,448; June 3; Serial No. 294,633; published Mar. 18, 1930.
Canoe paddles. Anchor Sawmills Company. 271,447; June 3; Serial No. 294,658; published Mar. 18, 1930.
Mud guards. Hampden Automotive Products, Inc. 271,405; June 3; Serial No. 295,370; published Mar. 18, 1930.

CLASS 21

Electrical supplies. Hemming Manufacturing Company. 78,633; renewed June 28, 1930.

CLASS 22

Artificial baits. James Heddon's Sons. 271,330; June 3; Serial No. 295,429; published Mar. 18, 1930.
Christmas-tree decorations. C. H. Miller. 271,466; June 3.
Golf clubs and balls. Edward K. Tryon, Jr., & Co. 33,171; renewed June 27, 1929.

Toy, Mechanical. George H. Burnett, jr. 271,431; June 3; Serial No. 291,048; published Mar. 18, 1930.

CLASS 23

Agricultural machinery. A. E. Cook. 76,227; renewed Dec. 28, 1929.
Handsaw handles, handsaws, crosscut saws, etc. E. C. Atkins and Company. 271,387; June 3; Serial No. 289,436; published Mar. 25, 1930.
Machine for slitting meat. J. P. Spang. 271,479; June 3.
Razors and scissors. Alexis Witte Cutlery Co. 77,433; renewed Apr. 12, 1930.
Wrenches, brake tools, drills, etc. Milwaukee Tool & Forge Co. 271,470; June 3.

CLASS 24

Washboards. National Washboard Company. 271,410; June 3; Serial No. 294,990; published Mar. 18, 1930.

CLASS 26

Pressure gauges, compasses, temperature indicators, etc. General Electric Company. 271,399; June 3; Serial No. 293,998; published Mar. 25, 1930.

CLASS 31

Refrigerators, refrigerator parts, automatic refrigerators, etc. Electrolux Servel Corporation. 271,324; June 3; Serial No. 296,053; published Mar. 25, 1930.

CLASS 32

Cabinets, Metal. K. K. Crystal Company. 271,384; June 3; Serial No. 293,838; published Mar. 25, 1930.
Furniture. New Waterford Furniture Company. 271,395; June 3; Serial No. 295,043; published Mar. 25, 1930.
Ornamental hand grips applied to lower edges of window shades. Western Shade Cloth Company. 271,477; June 3.
Stands, Ash-tray. Rollodor Company. 271,397; June 3; Serial No. 294,181; published Mar. 25, 1930.
Tables and folding tables, Card. Nappanee Lumber & Manufacturing Co. 271,386; June 3; Serial No. 290,374; published Mar. 25, 1930.

CLASS 33

Glass bottles. A. F. McDonnell. 77,405; renewed Apr. 5, 1930.

CLASS 34

Furnaces and parts thereof, hearths and parts thereof, furnace roofs, etc. Carborundum Company. 271,385; June 3; Serial No. 292,095; published Mar. 25, 1930.
Furnaces, Coal stokers for. Black Servant Manufacturing Company. 271,451; June 3; Serial No. 294,382; published Mar. 18, 1930.
Lighters, Pyrophoric cigarette and cigar. Twin Coupler Company. 271,426; June 3; Serial No. 287,590; published Mar. 11, 1930.
Stoves, furnaces, and steam and hot-water heating boilers. Walker & Pratt Manufacturing Co. 79,311; renewed Aug. 23, 1930.
Water heaters, hot-water heating systems, bath-water heaters, etc. Cleveland Heater Company. 271,398; June 3; Serial No. 294,007; published Mar. 25, 1930.

CLASS 35

Belting. Hewitt-Gutta Percha Rubber Corporation. 271,391; June 3; Serial No. 295,173; published Mar. 25, 1930.
Belting, Leather. S. M. Supplies Co. 271,365; June 3; Serial No. 295,393; published Mar. 25, 1930.
Hose and belting. Hewitt-Gutta Percha Rubber Corporation. 271,364; June 3; Serial No. 295,176; published Mar. 25, 1930.
Hose and belting. Hewitt-Gutta Percha Rubber Corporation. 271,393; June 3; Serial No. 295,167; published Mar. 25, 1930.
Hose, belting, and packing. Hewitt-Gutta Percha Rubber Corporation. 271,390; June 3; Serial No. 295,175; published Mar. 25, 1930.
Packing. Hewitt-Gutta Percha Rubber Corporation. 271,392; June 3; Serial No. 295,170; published Mar. 25, 1930.

CLASS 37

Forms, indexes, and loose-leaf binders, Loose-leaf. A. D. Turner. 271,474; June 3.
Papers, Writing and printing. Parsons Paper Company. 271,427; June 3; Serial No. 287,262; published Dec. 24, 1929.
Papetries, Bristol board, etc. Strathmore Paper Company. 271,428; June 3; Serial No. 287,026; published Oct. 29, 1929.
Stationery, Certain articles of. L. Leitz. 77,654; renewed Apr. 26, 1930.

CLASS 39

Aprons, Pinafore. Forest City Mfg. Co. 271,424; June 3; Serial No. 287,749; published Mar. 11, 1930.
Blouses, shirts, and pajamas, Boys'. Boy-Craft, Inc. 271,408; June 3; Serial No. 295,011; published Mar. 11, 1930.
Cloaks and suits, Women's. Siegel & Alenikoff. 271,472; June 3.
Coats. Handmacher-Michel Company. 271,437; June 3; Serial No. 293,730; published Mar. 11, 1930.
Dresses for misses. Grunewald Novick Company. 271,454; June 3; Serial No. 294,250; published Mar. 18, 1930.
Garment, Child's combination. M. Wertheimer. 271,459; June 3; Serial No. 294,033; published Mar. 18, 1930.
Hosiery. Mock, Judson, Voehringer Co. Inc. 271,418; June 3; Serial No. 291,630; published Mar. 11, 1930.
Hosiery. Perkins Dry Goods Company. 271,423; June 3; Serial No. 288,721; published Mar. 18, 1930.
Hosiery. Wiscassett Mills Company. 271,452; June 3; Serial No. 294,372; published Mar. 11, 1930.
Hosiery and underwear. Golden Dawn Hosiery Shops. 271,381; June 3; Serial No. 271,437; published Nov. 13, 1928.
Mufflers and scarfs. L. A. R. Power. 271,425; June 3; Serial No. 287,717; published Mar. 11, 1930.
Neckties. Jacob Miller's Sons Co. 271,441; June 3; Serial No. 293,003; published Mar. 11, 1930.
Neckties and cravats. Wilson Brothers. 271,403; June 3; Serial No. 295,703; published Mar. 18, 1930.
Overalls. Brooklyn Overall Co. 271,442; June 3; Serial No. 294,868; published Mar. 18, 1930.
Overalls, jackets, pants, etc. Twin City Manufacturing Company. 271,420; June 3; Serial No. 290,227; published Nov. 19, 1929.
Overalls, jackets, shirts, and pants. Nunnally & McCrea Co. 271,443–4; June 3; Serial Nos. 294,855–6; published Mar. 11, 1930.
Robes, shoes, hats, etc., Bath. John Wanamaker New York. 271,419; June 3; Serial No. 290,636; published Mar. 11, 1930.
Shirts. Arnold Shirt Company. 271,461; June 3; Serial No. 293,047; published Mar. 11, 1930.
Shirts. Black Manufacturing Co. 271,412; June 3; Serial No. 294,912; published Mar. 11, 1930.
Shirts. I. Janov-Abeles Shirt Co. 271,421; June 3; Serial No. 290,255; published Mar. 18, 1930.
Shirts. Kaylon Incorporated. 271,413–16; June 3; Serial Nos. 294,878–81; published Mar. 11, 1930.
Shirts. M. H. Raab Co. 271,453; June 3; Serial No. 294,362; published Mar. 11, 1930.
Shirts and blouses, Boys'. Sherwin & Jaller. 271,407; June 3; Serial No. 295,085; published Mar. 18, 1930.
Shirts, pajamas, and nightshirts. Sears, Roebuck and Co. 271,373; June 3; Serial No. 283,144; published July 2, 1929.
Shirts, Sport. Step-In-All Underwear Corporation. 271,409; June 3; Serial No. 294,998; published Mar. 11, 1930.
Shirts, underwear, and pajamas. M. H. Goldenberg. 271,422; June 3; Serial No. 290,021; published Mar. 11, 1930.
Suits and overcoats. M. Vidal Alvarez & Co. 271,417; June 3; Serial No. 292,383; published Mar. 11, 1930.
Suits, coats, breeches, show habits, etc. D. Reichenbaum. 271,473; June 3.
Suits, overalls, knickers, etc., Play. Lebanon Textile Mills, Inc. 271,404; June 3; Serial No. 295,682; published Mar. 18, 1930.
Underwear. Cluett, Peabody & Co. 271,455; June 3; Serial No. 294,248; published Mar. 11, 1930.
Underwear and shirts and trunks. J. G. Baum. 271,375; June 3; Serial No. 285,440; published Mar. 11, 1930.
Underwear, pajamas, and nightgowns, Knit. A. L. Friedlander. 271,439; June 3; Serial No. 293,577; published Mar. 18, 1930.
Underwear, Women's and children's. Van Raalte Company. 271,411; June 3; Serial No. 294,936; published Mar. 11, 1930.
Underwear, Women's silk. V. Brown. 271,446; June 3; Serial No. 294,758; published Mar. 18, 1930.

CLASS 40.

Banding in the nature of trimming. Friedberger-Aaron Manufacturing Company. 271,465; June 3.

CLASS 42

Cotton piece goods. Morris & Company. 271,321; June 3; Serial No. 294,360; published Mar. 18, 1930.
Fabrics. Celanese Corporation of America. 271,334; June 3; Serial No. 294,913; published Mar. 18, 1930.
Fabrics. Celanese Corporation of America. 271,433; June 3; Serial No. 288,845; published Oct. 1, 1929.
Goods, Piece. C. K. Eagle & Co. 271,323; June 3; Serial No. 293,132; published Mar. 4, 1930.
Hair nets. L. Bamberger & Co. 271,432; June 3; Serial No. 289,225; published Mar. 18, 1930.
Handkerchiefs. Browning, King & Co. 271,332; June 3; Serial No. 295,148; published Mar. 18, 1930.
Scrim. Boott Mills. 271,379; June 3; Serial No. 274,868; published Feb. 19, 1929.
Silk, cotton, and wool, Piece goods made of. Haas Brothers Fabrics Corporation. 271,322; June 3; Serial No. 294,069; published Mar. 18, 1930.
Silk piece goods. G. W. Spurr. 271,328; June 3; Serial No. 295,580; published Mar. 18, 1930.
Textiles. Valway Rug Mills, Inc. 271,376; June 3; Serial No. 276,672; published Mar. 18, 1930.
Woolen piece goods. Gay Brothers Company. 271,326; June 3; Serial No. 295,671; published Mar. 18, 1930.

CLASS 44

Absorbent cotton and gauze and sanitary napkins. San-Nap-Pak Mfg. Co. 271,318; June 3; Serial No. 295,763; published Mar. 25, 1930.
Alloy, cement, impression compound, etc. J. Charlestein. 271,317; June 3; Serial No. 294,622; published Mar. 18, 1930.
Bandages. Blackman & Blackman, Inc. 271,371; June 3; Serial No. 284,666; published Mar. 18, 1930.
Bandages. Johnson & Johnson. 271,368; June 3; Serial No. 277,801; published Mar. 11, 1930.
Electrical device. Logan Laboratories, Ltd. 271,346; June 3; Serial No. 293,926; published Mar. 11, 1930.
Inhaler device, Electric. Swartzbaugh Manufacturing Co. 271,337; June 3; Serial No. 294,746; published Mar. 18, 1930.
Manicure appliances. Schnefel Brothers, Inc. 271,481; June 3.
Medicinal vaporizers. W. C. Koch. 271,319; June 3; Serial No. 295,337; published Mar. 25, 1930.
Sanitary napkins. Woodward & Lothrop. 271,316; June 3; Serial No. 295,312; published Mar. 25, 1930.
Syringes, Hypodermic. D. L. O'Sullivan. 271,336; June 3; Serial No. 294,992; published Mar. 11, 1930.

CLASS 45

Beverages and fountain syrups, Maltless. M. Richter. 271,333; June 3; Serial No. 295,135; published Mar. 25, 1930.

CLASS 46.

Bread and biscuits. D. C. Chidlow. 271,430; June 3; Serial No. 291,324; published Mar. 18, 1930.
Butter and eggs. James Van Dyk Company. 271,327; June 3; Serial No. 295,586; published Mar. 18, 1930.
Candies and bonbons, nuts, etc. E. F. Kemp. 271,348; June 3; Serial No. 292,534; published Mar. 25, 1930.
Candy and peppermint drops. Old English Candy Company. 271,360; June 3; Serial No. 295,272; published Mar. 25, 1930.
Canned fruits and vegetables. Wm. T. Reynolds & Co. 78,444; renewed June 14, 1930.
Canned salmon. Alitak Fish Company. 271,362; June 3; Serial No. 294,556; published Mar. 25, 1930.
Canned salmon. New England Fish Company. 271,353–4; June 3; Serial Nos. 288,350–1; published Mar. 25, 1930.
Canned soups, vegetables, and fruits. Fruit Belt Preserving Company. 271,356; June 3; Serial No. 296,009; published Mar. 25, 1930.
Citrus fruits, Fresh. San Dimas Orange Growers Association. 271,355; June 3; Serial No. 273,321; published July 30, 1929.
Coffee. Admiral Ready Coffee Refining Corporation. 271,352; June 3; Serial No. 288,369; published Mar. 25, 1930.
Coffee. John Hansen & Sons. 271,349; June 3; Serial No. 291,980; published Mar. 25, 1930.
Coffee. Haworth & Dewhurst, Limited. 33,966; renewed Jan. 2, 1930.
Coffee Substitute. Berhalter's Health Food Factory. 271,351; June 3; Serial No. 290,810; published Mar. 25, 1930.
Composition of malt and hops. William Haigh Company. 271,464; June 3.
Dates, figs, and prunes and nut meats, Dried. E. P. Cobb. 271,475; June 3.
Flour, Wheat. Northland Milling Company. 271,383; June 3; Serial No. 251,409; published Mar. 18, 1930.
Food product. Paul Schulze Biscuit Co. 271,329; June 3; Serial No. 295,539; published Mar. 18, 1930.
Fruits and vegetables, Fresh citrus. Southern Fruit Distributors, Inc. 271,350; June 3; Serial No. 291,742; published Mar. 25, 1930.
Grits. Northern Illinois Cereal Company. 271,325; June 3; Serial No. 295,747; published Mar. 18, 1930.
Gum, Chewing. American Chicle Company. 271,363; June 3; Serial No. 294,411; published Mar. 25, 1930.
Hams, corned beef, sausages, and preserved and canned beef. Naamlooze Vennootschap E. Noack's Koninklijke Fijne Vleeschwaren- en Conservenfabrieken. 271,476; June 3.
Lard. Great Falls Meat Company. 271,361; June 3; Serial No. 294,581; published Mar. 25, 1930.
Meats, Cooked. International Products Corporation. 271,357–8; June 3; Serial Nos. 295,374–5; published Mar. 25, 1930.
Oysters, Raw. O. E. Wentworth & Co. 271,359; June 3; Serial No. 295,285; published Mar. 25, 1930.
Syrup, Malt. P. Ballantine and Sons. 271,480; June 3.

CLASS 50

Hangers, Garment. E. Caldor. 271,468; June 3.

ALPHABETICAL LIST OF LABELS

Allen's Modish Stouts. For Boxes. Hoague-Sprague Corporation. 37,520; June 3.
Arcturus A-C Tubes. For Radio Tubes. Arcturus Radio Tube Company. 37,498; June 3.
Barbecue Chicken. For Chicken. Richard Woelffel Inc. 37,552; June 3.
Bay State Sport Girl. For Boxes. Hoague-Sprague Corporation. 37,525; June 3.
Betsy Ross. For Boxes. Hoague-Sprague Corporation. 37,539; June 3.
Blue Bird. For Boxes. Hoague-Sprague Corporation. 37,528; June 3.
Borden's—Quality Service—Grade B Milk. For Pasteurized Fluid Milk. Borden's Farm Products Company, Inc. 37,500; June 3.
Butter Browns Salted Peanuts. For Salted Peanuts. A. C. Ward. 37,547; June 3.
Campbell's Scotch. For Ginger Ale. Coco-Cola Bottling Co. 37,503; June 3.
Check and Double Check. For Candy Figures. Wigly Candy Co., Inc. 37,550; June 3.
Child-Life. For Boxes. Hoague-Sprague Corporation. 37,524; June 3.
Combination Fitting. For Boxes. Hoague-Sprague Corporation. 37,521; June 3.
Cream & Red Brand Coffee. For Coffee. Better Grocers Incorp. 37,499; June 3.
De Xald—A. For Exzema Medicine. Dedenbach Chemical Company. 37,505; June 3.
De Xald—B. For Eczema Medicine. Dedenbach Chemical Company. 37,504; June 3.
Dr. Austin's. For Boxes. Hoague-Sprague Corporation. 37,529; June 3.
Dr. Nathan's. For Boxes. Hoague-Sprague Corporation. 37,534; June 3.
Family Dry. For Ginger Ale. A. P. Seput. 37,545; June 3.
Fashionia. For Boxes. Hoague-Sprague Corporation. 37,515; June 3.
G. B. S. Co. For Boxes. Hoague-Sprague Corporation. 37,509; June 3.
Graham Arch Fitter. For Boxes. Hoague-Sprague Corporation. 37,510; June 3.
Graham Custom-Made. For Boxes. Hoague-Sprague Corporation. 37,539; June 3.
Green Canoe. For Cigarettes. Virginia Products Corporation. 37,546; June 3.
H-G Bread. For Bread. Par-X Service Corp. 37,544; June 3.
Hi-Ho Rolo. For Game. All Fair Incorporated. 37,497; June 3.
Hitt's Baby Niagara. For Pyrotechnique Novelties. Hitt's Fireworks Co. 37,508; June 3.
Hitt's Searchlight Fiery Niagara. For Pyrotechnique Novelties. Hitt's Fireworks Co. 37,507; June 3.
Hollywood Stars. For Cosmetics. Virgilio Caravacci. 37,501; June 3.
I'se Regusted. For Candy Figures. Wigly Candy Co., Inc. 37,549; June 3.
Jim Nastick. For Boxes. Hoague-Sprague Corporation. 37,530; June 3.
Justakote. For Paint. Chase Varnish Company, Inc. 37,502; June 3.
Kaber's. For Boxes. Hoague-Sprague Corporation. 37,541; June 3.
Kimmel & Marbach Shoe Co. For Boxes. Hoague-Sprague Corporation. 37,535; June 3.
Marylyn Modes. For Boxes. Hoague-Sprague Corporation. 37,519; June 3.
Miss Anna May. For Boxes. Hoague-Sprague Corporation. 37,526; June 3.
Molly Stark. For Boxes. Hoague-Sprague Corporation. 37,512; June 3.
Morris Shoe Company. For Boxes. Hoague-Sprague Corporation. 37,522; June 3.
$1000 Loaf. For Bread. Wessels Baking Company. 37,548; June 3.
Peppy Peggy. For Boxes. Hoague-Sprague Corporation. 37,532; June 3.
Princess Chic. For Boxes. Hoague-Sprague Corporation. 37,513; June 3.
Richard Health Shoe. For Boxes. Hoague-Sprague Corporation. 37,533; June 3.
Riorita. For Boxes. Hoague-Sprague Corporation. 37,531; June 3.
Ruben's. For Boxes. Hoague-Sprague Corporation. 37,511; June 3.
Shurkleen Hand Soap. For Soap. H. L. Wissig. 37,551; June 3.
Style Maid. For Boxes. Hoague-Sprague Corporation. 37,540; June 3.
Sunburst. For Dried Skim Milk. Douthitt Engineering Co. 37,506; June 3.
Tennis and Baseball. For Game. All Fair Incorporated. 37,496; June 3.
The Bona Allen Shoe. For Boxes. Hoague-Sprague Corporation. 37,537; June 3.
The Camden Shoe. For Boxes. Hoague-Sprague Corporation. 37,516; June 3.
The Complete A. C. Aerial Kit. For Radio Aerial Kits. N. K. Malotte. 37,543; June 3.

The Joseph Corcoran Shoe. For Boxes. Hoague-Sprague Corporation. 37,514; June 3.
The Paul Shoe. For Boxes. Hoague-Sprague Corporation. 37,536; June 3.
The Sure Fitter Shoe. For Boxes. Hoague-Sprague Corporation. 37,518; June 3.
They See The Box First. For Boxes. Hoague-Sprague Corporation. 37,523; June 3.
Tornado Twist. For Men's Suits. Walter Macintosh. 37,542; June 3.
Union Shoe Co. For Boxes. Hoague-Sprague Corporation. 37,527; June 3.
Venus Vogues. For Boxes. Hoague-Sprague Corporation. 37,517; June 3.

ALPHABETICAL LIST OF PRINTS

Before the Days of Foley's. #1. For Medicinal Preparation for Coughs Due to Colds. Foley & Company. 12,580; June 3.
Before The Days of Foley's #2. For Medicinal Preparation for Coughs Due to Colds. Foley & Company. 12,581; June 3.
Before The Days Of Foley's #3. For Medicinal Preparation for Coughs Due to Colds. Foley & Company. 12,582; June 3.
Carco. For Coal. Carnegie Dock & Fuel Company. 12,579; June 3.
Happy-Go-Luckies. For Cigarettes and Advertising Novelties. American Tobacco Company. 12,576; June 3.
Jean Lambert Dale. For China, Glassware, Clothing, and Accessories. L. Bamberger and Co. 12,578; June 3.
The Second Step is Toning. For Special Astringent, Skin Tonic. Muscle Oil, Pore Cream, and Patter. Elizabeth Arden Inc. 12,577; June 3.

ALPHABETICAL LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 3D DAY OF JUNE, 1930

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). **Includes patents, reissues, and designs.**

A C Spark Plug Company. (See Babitch, Abraham M., assignor.)
A C Spark Plug Company. (See Berdon, Albert E., assignor.)
A C Spark Plug Company. (See Clason, Ragnar, assignor.)
A C Spark Plug Company. (See Eshbaugh, Jesse E., assignor.)
A C Spark Plug Company. (See Haus, Edmund E., assignor.)
A C Spark Plug Company. (See Harwood, M. P., and McKinley, assignors.)
A C Spark Plug Company. (See Helgeby, Ralph O., assignor.)
A C Spark Plug Company. (See Kamrath, Herbert G., assignor.)
A C Spark Plug Company. (See McKinley, Charles W., assignor.)
A C Spark Plug Company. (See Nutt, Frank N., assignor.)
A C Spark Plug Company. (See Wedin, Ivar T., assignor.)
A C Spark Plug Company. (See Zubaty, Joseph, assignor.)
Abel, Frank J., New York, N. Y., assignor to Sun Rise Lamp Mfg. Co., Inc. Lamp. Des. 81,268; June 3.
Achatz, John, assignor of one-half to R. B. Spruill, Hooper, Colo. Clevis. 1,762,113; June 3.
Adams, Arthur J., Renton, Wash., assignor to W. S. Ferris, Elkhart, Ind., trading as Domore Chair Company. Swiveling chair. Re17,686; June 3.
Adams Coal Machinery Company. (See Adams, Henry, assignor.)
Adams, Henry, assignor to Adams Coal Machinery Company, Plainfield, N. J. Trestle unloading apparatus. 1,761,166; June 3.
Adams Industries, Inc. (See Jacques, Raynaldo P., assignor.)
Adlake Company, The. (See Hamm, W. S., and Greist, assignors.)
Adrian, Edward H., Port Byron, Ill. Grain bin or crib. 1,761,287; June 3.
Agner, Raymond C., Burlington, Wis. Antenna for radio systems. 1,761,608; June 3.
Air Line Transportation Company. (See Davis, John H., assignor.)
Air Reduction Company. (See Anderson, James L., assignor.)
Akalis, Charles J., Sugar Notch, Pa. Rotary table-silverware server. 1,761,382; June 3.
Akro-Agate Company, The. (See Early, John F., assignor.)
Akron Standard Mold Company, The. (See Fleiter, Andrew J., assignor.)
Alaska Packers Association. (See Clark, Frederick, assignor.)
Alcott, James R. (See Johnston, C. S., and Alcott.)
Aldrich, Alonzo, Chicago, Ill. Fourdrinier paper machine. 1,761,183; June 3.
Aldrich, Alonzo, Beloit, Wis. Fourdrinier paper machine. 1,761,184; June 3.
Aldrich, Alonzo, Beloit, Wis. Shaking mechanism for Fourdrinier machines. 1,761,185; June 3.
Aldrich, Elbert C., Granby, Mass. Door knocker. Des. 81,269; June 3.
Alexander, Johann, Berlin-Zehlendorf, Germany, assignor to General Electric Company. Electric motor. 1,761,767; June 3.
Alfes, John H. (See Wood, J. G., and Alfes.)
Alkonis, James F., Cambridge, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Tack-supplying apparatus. 1,761,031; June 3.
Allbright-Nell Company, The. (See Laabs, William, assignor.)
Allen, Howard G., assignor to H. R. Bliss Company, Inc., Niagara Falls, N. Y. Wire-stitching machine. 1,760,863; June 3.
Allis-Chalmers Manufacturing Company. (See Binder, H. P., and Suter, assignors.)
Allis-Chalmers Manufacturing Company. (See Dahlstrand, Hans P., assignor.)
Allis-Chalmers Manufacturing Company. (See Davis, Rae W., assignor.)
Allis-Chalmers Manufacturing Company. (See Gross, Emil, assignor.)
Allis-Chalmers Manufacturing Company. (See Marsh, Albert M., assignor.)
Allis-Chalmers Manufacturing Company. (See Newhouse, Ray C., assignor.)
Allis-Chalmers Manufacturing Company. (See Nichols, Louis C., assignor.)
Allis-Chalmers Manufacturing Company. (See Pfau, Arnold, assignor.)
Allis-Chalmers Manufacturing Company. (See Reynolds, Irving H., assignor.)
Allis-Chalmers Manufacturing Company. (See Ringland, George L., assignor.)
Allis-Chalmers Manufacturing Company. (See Shaw, Ernest C., assignor.)
Allis-Chalmers Manufacturing Company. (See Taylor, C. B., and Schindler, assignors.)
Almen, John O., Royal Oak, and O. Rasmussen, assignors to General Motors Research Corporation, Detroit, Mich. Steering arm. 1,761,957; June 3.
Aluminum Company of America, The. (See Bjornson, Ingvard B., assignor.)
Aluminum Products Company. (See McClure, Elmer P., assignor.)
Aluminum Solder Corporation of America. (See Geisel, Karl, assignor.)
Alvey-Ferguson Company, The. (See Dionne, Arthur A., assignor.)
American Bank Note Company. (See Wood, Frank T., assignor.)
American Bemberg Corporation. (See Winkelmann, Heinz, assignor.)
American Brake Materials Corporation. (See Thompson, James S., assignor.)
American Cyanamid Company. (See Moore, William, assignor.)
American Electric Fusion Corporation. (See von Henke, Edmund J., assignor.)
American Lace Paper Company. (See De Vries, George, assignor.)
American La France and Foamite Corporation. (See Richards, Benjamin, assignor.)
American Optical Company. (See Merry, Fred C., assignor.)
American Solvents & Chemical Corporation. (See Crowell, Russell B., assignor.)
American Telephone and Telegraph Company. (See Gordon, C. S., and Lowe, assignors.)
American Telephone and Telegraph Company. (See Hamilton, Harold S., assignor.)
American Telephone and Telegraph Company. (See Ohl, Russell S., assignor.)
American Telephone and Telegraph Company. (See Stromberg, Sven E., assignor.)
American Telephone and Telegraph Company. (See Zobel, Otto J., assignor.)
Anchor Cap and Closure Corporation. (See Jaeger, Max, assignor.)
Ancia, Rufino M., New York, N. Y. Bill holder. 1,761,809; June 3.
Anderson, Asbery J. (See Potts, Oscar L., assignor.)
Anderson, David E., Detroit, Mich. Dual intake manifold. 1,761,958; June 3.
Anderson, David E., Detroit, Mich. Crank-case-ventilating system. 1,761,959; June 3.
Anderson, George W., et al. (See Wells, Don W., assignor.)
Anderson, James L., Tenafly, N. J., assignor to Air Reduction Company, Incorporated, New York, N. Y. Welding. 1,761,167; June 3.
Anderson, Karl G., Seattle, Wash. Denture. 1,761,902; June 3.
Andrea, F. A. D., Inc. (See Clement, Lewis M., assignor.)
Andrews, Roger W. (See Bradshaw, G. D., and Andrews.)
Andrews, Roger W., Pittsburgh, assignor, by mesne assignments, to Blaw-Knox Company, Blawnox, Pa. Fluid separator. 1,761,168; June 3.
Andrews, Roger W., Pittsburgh, assignor, by mesne assignments, to Blaw-Knox Company, Blawnox, Pa. Fluid separator. 1,761,169; June 3.
Andrews, Roger W., Pittsburgh, assignor to Blaw-Knox Company, Blawnox, Pa. Fluid separator. 1,761,170; June 3.
Antiss, George P., Oak Park, Ill., assignor to G. S. Blakeslee & Co., Cicero, Ill. Water-throwing apparatus for washing machines. 1,761,699; June 3.
Apel, Hermann, Berlin-Wilmersdorf, Germany. Switchboard and the like. 1,761,461; June 3.
Armitage, Sylvester, assignor to General Motors Corporation, Detroit, Mich. Ignition apparatus. 1,761,512; June 3.
Armitage, Sylvester, Highland Park, assignor to General Motors Corporation, Detroit, Mich. Butterfly-valve exhaust pipe. 1,761,960; June 3.
Armour Fertilizer Works. (See Meyers, Herbert H., assignor.)
Armstrong Cork Company. (See Grupe, William F., assignor.)

Arnold, Charles F., assignor to General Motors Corporation, Detroit, Mich. Vacuum gasoline-supply system. 1,761,961; June 3.

Arnold, Charles H., assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio. Cash register. 1,761,555; June 3.

Arnold, Charles H., assignor to The National Cash Register Company, Dayton, Ohio. Cash register. 1,761,556; June 3.

Arnold, Frederick H., Reading, Pa. Glare shield for automobile headlight bulbs. 1,761,974; June 3.

Aronson, Louis V., Newark, N. J. Receptacle with removable jacket. 1,760,933; June 3.

Aronson, Louis V., Newark, N. J., assignor to Art Metal Works, Inc. Pocket lighter and the like. 1,762,123; June 3.

Art Metal Works, Inc. (See Aronson, Louis V., assignor.)

Artesian Well & Equipment Co. (See Every, Elmer D., assignor.)

Arthur, James L., assignor to Delco-Remy Corporation, Anderson, Ind. Ignition device. 1,761,513; June 3.

Arthur, James L., assignor to Delco-Remy Corporation, Anderson, Ind. Ignition device. 1,761,514; June 3.

Ashton, George, assignor to The Central Frog & Switch Company, Cincinnati, Ohio. Track brace. 1,760,934; June 3.

Associated Electrical Industries Limited. (See Robinson, Ernest Y., assignor.)

Associated Lead Manufacturers Limited. (See Waring, Horace, assignor.)

Athey, Isaac H., assignor to Athey Truss Wheel Co., Chicago, Ill. Vehicle. 1,761,861; June 3.

Athey Truss Wheel Co. (See Athey, Isaac H., assignor.)

Augenstein, Karl C. (See Speidel, E. F. M., and Augenstein.)

Augstein, Adolph M., Great Neck, assignor to S. Augstein & Co., New York, N. Y. Knitted fabric. Des. 81,270; June 3.

Augstein, S., & Co. (See Augstein, Adolph M., assignor.)

Auguste, Léon, and R. des Moutis, Paris, France. Apparatus for cutting threads applicable to all horizontal lathes. 1,761,768; June 3.

Auto Specialties Manufacturing Co. (See Peteler, Adolph, assignor.)

Autodrink Corporation. (See Smith, Harry C., assignor.)

Automatic Electric Inc. (See Bellamy, J. I., and Richardson, assignors.)

Automatic Gold Chain Company. (See Speidel, E. F. M., and Augenstein, assignors.)

Auvil, Daniel M., Ryderwood, Wash. Saw-supporting device. 1,761,249; June 3.

Avery, Walter B. (See Brimer, Robert F., assignor.)

Avril, Arthur C., Cincinnati, Ohio. Container for transporting and mixing concrete. 1,761,063; June 3.

Ayres, Elwood B., Melrose Park, assignor to Proctor & Schwartz, Incorporated, Philadelphia, Pa. Machine for chilling and flaking soap. 1,762,043; June 3.

Babcock & Wilcox Company, The. (See Jones, William A., assignor.)

Babitch, Abraham M., assignor to A C Spark Plug Company, Flint, Mich. Laminated worm gear. 1,761,962; June 3.

Babitch, Abraham M., assignor to A C Spark Plug Company, Flint, Mich. Oil filter. 1,761,963; June 3.

Bachofen, Jacob. (See Dunning, W. E., and Bachofen.)

Bailey, Otterbein A., Chicago, Ill., assignor to Chicago Bridge & Iron Co. Drainage apparatus for floating roofs. 1,761,700; June 3.

Baird, Arthur J., Portland, Oreg. Preheater apparatus for oil burners. 1,761,975; June 3.

Baker, James F., Los Angeles, Calif. Safety attachment for pocketbooks and the like. 1,760,864; June 3.

Baker, Marlin C., and W. A. Dingman, assignors, by mesne assignments, to Parker Rust Proof Company, Detroit, Mich. Treating ferrous metal articles. 1,761,186; June 3.

Baker, Russell W., Anderson, Ind., assignor, by mesne assignments, to Delco-Remy Corporation, Dayton, Ohio. Commutator-sawing machine. 1,761,032; June 3.

Baker, Russell W., Anderson, Ind., assignor to Delco-Remy Corporation, Dayton, Ohio. Machine for removing surplus insulation from the armatures of dynamo-electric machines. 1,761,033; June 3.

Baldwin, Nathaniel, East Mill Creek, Utah. Acoustic diaphragm and loud-speaker combination. 1,761,100; June 3.

Ball, Charles O., Birmingham, assignor to Yellow Truck and Coach Manufacturing Company, Pontiac, Mich. Interlock mechanism. 1,761,964; June 3.

Ball, Henry P., Brooklyn, N. Y. Music roll. 1,761,862; June 3.

Ball, Orlando R., Wheatland, Iowa. Force oiler. 1,761,462; June 3.

Ballantine, Stuart, Mountain Lakes, assignor of one-half to Radio Frequency Laboratories, Incorporated, Boonton, N. J. Preventing radiation and extra reradiation in radioreceivers. 1,760,871; June 3.

Ballou, B. A., & Co. (See Ballou, Frederick A., jr., assignor.)

Ballou, Frederick A., jr., assignor to B. A. Ballou & Co., Inc., Providence, R. I. Combined pin stem, joint, and catch. 1,761,187; June 3.

Balls, Arnold K., Philadelphia, Pa., assignor of one-third to M. Nilsson, deceased, Peekskill, N. Y., and one-third to A. W. Hixson, Leonia, N. J.; The National City Bank of New York, executor. Method of growing yeast. 1,761,515; June 3.

Baltes, Walter H., San Diego, Calif. Building-wall ventilator. 1,761,250; June 3.

Barber-Colman Company. (See Edgar, John, assignor.)

Barco Manufacturing Company. (See Markel, Charles, assignor.)

Barker, William S., Pana, Ill. Agricultural implement. 1,760,894; June 3.

Barnes, Helen, Butte, Mont. Wallet or bill holder. 1,761,976; June 3.

Barrows, Donald S., Rochester, assignor to The Gould Coupler Company, New York, N. Y. Draft rigging. 1,761,171; June 3.

Barth, Otto J., Kansas City, Mo. Airplane. 1,760,865; June 3.

Bassist, Ellis, Milwaukee, Wis., assignor to F. Wesel Manufacturing Company, Brooklyn, N. Y. Negative locating device for step-and-repeat printing apparatus. 1,761,863; June 3.

Bastian-Morley Co. (See Ginther, Howard E., assignor.)

Baum, Isaac A., Chicago, Ill. Metal frame for all-plaster walls. 1,761,288; June 3.

Bausch & Lomb Optical Company. (See Foster, Leon V., assignor.)

Bausch and Lomb Optical Company. (See Gallasch, George B., assignor.)

Bausman, Alonzo L., Springfield, Mass. Confection-making machine. 1,761,065; June 3.

Bausman, Alonzo L., assignor to National Equipment Company, Springfield, Mass. Delivery apparatus for confectionery machines. 1,761,064; June 3.

Beacon Accessories Corporation. (See Lyle, Frederick W., assignor.)

Beale, David, North Chattanooga, Tenn. System of house construction. 1,761,289; June 3.

Beardsley, Earl W., and R. W. Beardsley, assignors to The Ohio Grease Company, Loudonville, Ohio. Grease can. 1,761,650; June 3.

Beardsley & Piper Company, The. (See Naylor, Walter E., assignor.)

Beardsley, Ray W. (See Beardsley, Earl W., and R. W.)

Becker, Benjamin, St. Louis, Mo. Sanitary garment. 1,761,609; June 3.

Becker, Hazen K. (See Jurgens, E. G., and Becker.)

Becker, Heinrich, assignor to the firm Maschinenfabrik Augsburg-Nuernberg Aktiengesellschaft, Augsburg, Germany. Piston-cooling device for internal-combustion engines. 1,761,864; June 3.

Beckett, Govenor K., Bakersfield, Calif. Fishing tool. 1,761,463; June 3.

Beckwith, Harry H. (See Jennings, Melvin O., assignor.)

Bedient, Clarence E., Cincinnati, Ohio. Blasting unit. 1,762,044; June 3.

Belin, Edouard, Paris, France. Method and apparatus for transmitting documents electrically. 1,760,866; June 3.

Bellamy, John I., Brookfield, and R. G. Richardson, assignors to Automatic Electric Inc., Chicago, Ill. Testing equipment. 1,761,251; June 3.

Bendry, William H., Hancock, Mich. Rotary engine. 1,761,977; June 3.

Bennett, George H., Poteau, Okla. Transmission. 1,760,867; June 3.

Bennett, John C., et al. (See Haubert, Leo, assignor.)

Benson, Arthur E., Clarendon, Tex. Cotton harvester. 1,762,045; June 3.

Berdon, Albert E., Detroit, assignor to A C Spark Plug Company, Flint, Mich. Liquid-fuel pump. 1,762,114; June 3.

Berger, Friedrich W. F., Berlin, Germany assignor to The National Cash Register Company, Dayton, Ohio. Cash register. 1,761,701; June 3.

Bergmann, Christian N., assignor to Bergmann Packaging Machine Company, Pittsburgh, Pa. Receptacle-filling apparatus. 1,761,383; June 3.

Bergmann Packaging Machine Company. (See Bergmann, Christian N., assignor.)

Berthold, George H. E., East Orange, assignor to The Rajah Company, Bloomfield, N. J. Spark plug. 1,761,865; June 3.

Betts, John D., Chicago, Ill. Water heater. 1,761,172; June 3.

Biltmore Ero Manufacturing Company, The. (See Connor, A. W., and Schwartz, assignors.)

Binder, Homer P., Wauwatosa, and J. D. Suter, Waukesha, assignors to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Power system. 1,762,115; June 3.

Bindschedler, Theodore S., Detroit, and P. J. Koster, Pleasant Ridge, Mich., assignors to Burrougha Adding Machine Company. Brush holder for dynamos. 1,761,066; June 3.

Bishop Company, The. (See Bishop, Frederick R., assignor.)

Bishop, Frederick R., assignor to The Bishop Company, North Attleboro, Mass. Ophthalmic mounting. 1,761,252; June 3.

Bissell, Richard E., Cleveland Heights, Ohio, assignor to Thompson Products, Inc. Alloy steel and making the same. 1,761,866; June 3.

Bixler, L. B. Henry, and W. L., Fresno, Calif. Automatic dump for carrier systems. 1,761,188; June 3.

Bixler, William L. (See Bixler, L. B. Henry, and W. L.)

Bjerregaard, August P., Okmulgee, Okla., assignor to Doherty Research Company, New York, N. Y. Treating gasoline and the product thereof. 1,761,810; June 3.

Bjornson, Ingvard B., New Kensington, assignor to The Aluminum Company of America, Pittsburgh, Pa. Culinary utensil. 1,761,067; June 3.

Black, Arthur L., Coffeyville, Kans. Separable or detachable bolt eye. 1,761,978; June 3.

Blackmore, Lloyd, Highland Park, assignor to General Motors Corporation, Detroit, Mich. Snubber. 1,761,965; June 3.

Blackmore, Lloyd, Highland Park, assignor to General Motors Research Corporation, Detroit, Mich. Rubber spring shackle. 1,761,967; June 3.

Blackmore, Lloyd, assignor to General Motors Research Corporation, Detroit, Mich. Transmission. 1,761,966; June 3.

Blaeker, Joseph, and F. A. Smith, New York, N. Y. Dual wear-compensating piston packing ring. 1,760,974; June 3.

Blair, Frank M. (See Howard, C. O., and Blair.)

Blaisdell Pencil Company. (See O'Sullivan, Patrick J., assignor.)

Blake, Harry D., Boston, Mass. Adjustable bracket for display cases. 1,761,004; June 3.

Blakely, William W., Detroit, Mich. Wheel block. 1,761,068; June 3.

Blakeslee, G. S., & Co. (See Anstiss, George P., assignor.)

Bland, Byron B., and F. B. De Tienne, Vandalia, Mo. Device for receiving and delivering packages to and from aircraft while in flight. 1,761,290; June 3.

Blaskewitz, William, assignor, by mesne assignments, to Clayton and Lambert Manufacturing Company, Detroit, Mich. Handle. 1,760,868; June 3.

Blaskewitz, William, assignor, by mesne assignments, to Clayton and Lambert Manufacturing Company, Detroit, Mich. Fire-pot structure. 1,760,869; June 3.

Blaw-Knox Company. (See Andrews, Roger W., assignor.)

Blaw-Knox Company. (See Bradshaw, G. D., and Andrews, assignors.)

Bliss, H. R., Company. (See Allen, Howard G., assignor.)

Block, Abraham, San Francisco, Calif., assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio. Cash-register attachment. 1,761,557; June 3.

Blood, Frank J., assignor to Pioneer Broom Company, Inc., Amsterdam, N. Y. Broom. 1,761,101; June 3.

Bluemel, Gustave, assignor of one-half to Drying Systems, Inc., Chicago, Ill. Sheet-metal air heater. 1,761,173; June 3.

Blumenberg, Albert B., New York, N. Y. Motor-vehicle seat. 1,762,046; June 3.

Bly, Robert S., Lakeland, Fla., assignor, by mesne assignments, to Cutler-Hammer, Inc. Aniline-sulphur resin and making same. 1,761,201; June 3.

Bobroff, Bornett L., Milwaukee, Wis. Push button. 1,761,867; June 3.

Bock, Carl J., assignor to Yellow Truck and Coach Manufacturing Company, Pontiac, Mich. Tire carrier. 1,761,968; June 3.

Boeing Airplane Company. (See Minshall, Robert J., assignor.)

Boesger, George A., assignor to The W. W. Sly Manufacturing Company, Cleveland, Ohio. Automatic air-escape valve for sand-blast pressure tanks. 1,761,174; June 3.

Bohn, Donald I. (See Carpenter, C. F., and Bohn.)

Bol, Cornelis, Eindhoven, and J. J. Numans, Hilversum, Netherlands, assignors to Radio Corporation of America. Electric discharge device. 1,761,175; June 3.

Boll, Lester P., Maplewood, and A. C. Hansen, jr., assignors to W. N. Matthews Corporation, St. Louis, Mo. Disconnecting choke-coil switch. 1,760,895; June 3.

Bolles, Julius H., Detroit, and F. C. Pearson, Lansing, assignors to General Motors Corporation, Detroit, Mich. Transmission lock. 1,762,116; June 3.

Bone, Evan P., Cincinnati, Ohio. Head lamp. 1,761,811; June 3.

Bone, Joseph G., Long Beach, Calif. Core barrel. 1,761,292; June 3.

Booth, Levis M., Plainfield, N. J. Manufacture of pulp and paper. 1,761,069; June 3.

Bowser, S. F., & Company. (See Warner, Joseph R., assignor.)

Bowzer, Augustus M., Lynn, Mass. Printer's quoin. 1,761,979; June 3.

Bradford, Nathan T., Terra Bella, and R. E. Early, San Jose, Calif. Pump. 1,761,702; June 3.

Bradley, Irwin C., Brattleboro, Vt. Penholder. 1,761,903; June 3.

Bradshaw, Grant D., Pittsburgh, Pa. Pen supporter. 1,761,176; June 3.

Bradshaw, Grant D., Beaver, and R. W. Andrews, Wilkinsburg, assignors, by mesne assignments, to Blaw-Knox Company, Blawnox, Pa. Fluid separator. 1,761,177; June 3.

Brand, Samuel, assignor to The National Cash Register Company, Dayton, Ohio. Autographic register. 1,761,558; June 3.

Brand, Samuel, assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio. Cash register. 1,761,651; June 3.

Brandenburg, Samuel L. (See Hunt, W. P., Hallene, and Brandenburg.)

Brassert, H. A., & Company. (See Wilic, Fredrik, assignor.)

Breeze, Victor, Kingstonville, near Lewes, England. Electric controller of the liquid type. 1,762,007; June 3.

Breithaupt, Oscar, Detroit, Mich. Nail holder. 1,761,769; June 3.

Breitling, Ernst, Essen, assignor to Fried. Krupp Aktiengesellschaft, Essen-on-the-Ruhr, Germany. Line-adjusting mechanism. 1,760,870; June 3.

Brennan, Mark O., and G. Schuler, assignors to Swift and Company, Chicago, Ill. Machine for applying flexible casings to magazines. 1,761,189; June 3.

Breton, Jules L., Bellevue, France. Machine for washing, drying, and sterilizing dishes. 1,761,812; June 3.

Brewer, William R., Duluth, Minn. Hinge. 1,761,178; June 3.

Bridgeport Brass Company. (See Oakley, Erastus G., assignor.)

Brimer, Robert F., assignor of one-half to Walter B. Avery, Washington, D. C. Combined wrapper or envelope and guard for frozen confections. 1,761,703; June 3.

Brinsmere Boat and Cycle Company. (See Froedtert, Kurtis R., assignor.)

Brinsmere Boat & Cycle Company. (See Gorski, Michael, assignor.)

British Dyestuffs Corporation Limited. (See Shepherdson, A., and Tatum, assignors.)

Brockway, John P., Coronado, Calif. Reproducing images on rubber surfaces. 1,761,424; June 3.

Brockway, Scott A., Lincoln, Nebr. Rocking-horse. 1,761,253; June 3.

Bronson Reel Company. (See Schafer, John V., assignor.)

Brown & Sharpe Manufacturing Company. (See Graves, B. P., and Smith, assignors.)

Brown, Wilbur F., assignor to Libbey-Owens Glass Company, Toledo, Ohio. Glass-tank furnace. 1,761,190; June 3.

Brown, Wilbur F., assignor to Libbey-Owens Glass Company, Toledo, Ohio. Producing laminated glass. 1,761,770; June 3.

Brownell, Charles O., assignor to The Wrap-Rite Corporation, Chicago, Ill. Paper-feeding and cut-off mechanism. 1,761,771; June 3.

Browning, George, Wilmette, assignor to Chicago Flexible Shaft Company, Chicago, Ill. Lawn sprinkler. 1,761,191; June 3.

Browning, George, Wilmette, assignor to Chicago Flexible Shaft Company, Chicago, Ill. Electric laundry iron. 1,761,192; June 3.

Brugmann, William F., et al. (See Schoettler, Frederick H., assignor.)

Brune, Rudolf. (See Wagner, H., Brune, Hessenland, Hoffa, Müller, and Heyna.)

Bruson, Herman A., Philadelphia, Pa., assignor to The Resinous Products & Chemical Company. Softener for cellulose derivatives. 1,761,813; June 3.

Bruson, Herman A., Philadelphia, Pa., assignor to The Resinous Products & Chemical Company. Coating rubber with cellulosic derivatives. 1,761,814; June 3.

Bryant, Fred L. (See Chappelow, E. G., and Bryant.)

Bryce, David A., Darien, Conn. Office cabinet. 1,761,704; June 3.

Brzozowski, Frank, Slickville, Pa. Chest. 1,761,254; June 3.

Buckley, John P., et al. (See Zim, Jesse G., assignor.)

Buehler, Fred, Lincoln, Nebr. Tree lifter. 1,761,425; June 3.

Buente, Charles F., Pittsburgh, Pa. Cementitious beam member. 1,761,705; June 3.

Buffalo Brake Beam Company. (See Busch, Charles R., assignor.)

Bundy, Harry W., assignor, by mesne assignments, to Bundy Tubing Company, Detroit, Mich. Making finned tubing. 1,761,980; June 3.

Bundy, Harry W., assignor by mesne assignments to Bundy Tubing Company, Detroit, Mich. Finned tube. 1,761,981; June 3.

Bundy Tubing Company. (See Bundy, Harry W., assignor.)

Burchiel, Ernest R., Tacoma, Wash. Cooler. 1,761,610; June 3.

Burdett, Horace H., assignor to Draper Corporation, Hopedale, Mass. Let-off mechanism for looms. 1,761,611; June 3.

Burdette, Richard S., Akron, Ohio. Automobile steering gear. 1,760,935; June 3.

Burke, William E., Minneapolis, Minn. Electric house number and auto number. 1,761,868; June 3.

Burkhardt, Thomas E., Detroit, Mich. Fused quartz valve. 1,762,088; June 3.

Burmeister, Hans, Berlin, Germany, assignor to Pyrene-Minimax Corporation. Apparatus for producing foam for fire-extinguishing purposes. 1,761,179; June 3.

Burmeister, Hans, Berlin, Germany, assignor to Pyrene-Minimax Corporation. Fire-fighting apparatus. 1,762,089; June 3.

Burnengo, Giuseppe, Genoa, Italy. Regulating transformer. 1,762,008; June 3.

Burns, Alfred, assignor to West Boylston Manufacturing Company, Easthampton, Mass. Making printed fabrics. 1,761,005; June 3.

Burroughs Adding Machine Company. (See Bindschedler, T. S., and Koster, assignors.)
Burson, Joel J., Mineral Wells, Tex. Chicken coop. 1,761,325; June 3.
Busch, Charles R., Orange, N. J., assignor to Buffalo Brake Beam Company, New York, N. Y. Side bearing for railway cars. 1,761,815; June 3.
Bushemi, Anthony J., Carnegie, Pa. Check protector. 1,761,102; June 3.
Bushey, Joseph S., Los Angeles, Calif. Adjusting cambers in automobile wheels. 1,761,516; June 3.
Butcher, Charles A., East Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Protective system. 1,761,006; June 3.
Byers Machine Company. (See Lotte, Charles H., assignor.)
Cadman, Addi B., Beloit, Wis., assignor, by mesne assignments, to Warner Electric Brake Corporation, South Beloit, Ill. Trailer vehicle. 1,761,816; June 3.
California Cyanide Company. (See Dolley, Paul T., assignor.)
Camp, Kingsland, Newark, N. J. Photometer. 1,762,047; June 3.
Camp, Kingsland, Newark, N. J. Exposure control. 1,762,048; June 3.
Campbell, Ernest P., Stockton, Calif. Universal valve seating and counterboring tool. 1,761,326; June 3.
Campbell, Malcolm A., Chicago, Ill., assignor of one-third to B. Heerey and one-third to F. M. Utt. Seat-back support and adjuster. 1,762,127; June 3.
Caps, Arthur W., Kansas City, Mo., assignor to Photostat Corporation, Providence, R. I. Paper-roll-holder. 1,761,464; June 3.
Carathanasis, Evangelos L., Detroit, Mich. Vaporizer for internal-combustion engines. 1,761,327; June 3.
Carlson, Hjalmar, Duluth, Minn. Cuff button. 1,761,869; June 3.
Carlson, Hjalmar G., assignor to Rockwood Sprinkler Company of Massachusetts, Worcester, Mass. Constant-alarm device. 1,762,009; June 3.
Carlson, Hjalmar G., assignor to Rockwood Sprinkler Company of Massachusetts, Worcester Mass. Protecting device for bleed passages. 1,762,010; June 3.
Carpenter, Charles F., Schenectady, N. Y., assignor to General Electric Company. Motor-starting switch. 1,761,773; June 3.
Carpenter, Charles F., Schenectady, N. Y., and D. I. Bohn, Badin, N. C., assignors to General Electric Company. Time-element electroresponsive device and system employing the same. 1,761,772; June 3.
Carr, Moses F., Lexington, assignor to United-Carr Fastener Company, Cambridge, Mass. Separable snap fastener. 1,761,612; June 3.
Carroll, Fred M., Yonkers, assignor to The Tabulating Machine Company, Endicott, N. Y. One-revolution clutch. 1,761,774; June 3.
Carter, Edgar B., assignor, by mesne assignments, to Eli Lilly and Company, Indianapolis, Ind. Ephedrine inhalant and producing same. 1,762,128; June 3.
Carter, Elmer C., Oakwood Village, Dayton, assignor to The National Cash Register Company, Dayton, Ohio. Speed controller. 1,761,775; June 3.
Carter, Emmett F., Schenectady, N. Y., assignor to General Electric Company. Communication system. 1,761,776; June 3.
Carter, William, Company, The. (See Redmond, Harriet L., assignor.)
Case, J. I., Company. (See Hendrickson, R. O., and Larsen, assignors.)
Causan, Némorin L., Suresnes, France. Shock absorber. 1,761,870; June 3.
Cave, Henry, Hartford, and C. F. Smith, West Hartford, assignors to The Fuller Brush Company, Hartford, Conn. Cleaning tool. 1,761,180; June 3.
Cement Gun Contracting Company. (See Collier, Bryan C., assignor.)
Central Frog & Switch Company, The. (See Ashton, George, assignor.)
Chace, Norman B., assignor to The Fosdick Machine Tool Company, Cincinnati, Ohio. Tool-dislodging device. 1,761,181; June 3.
Chain Belt Company. (See Longenecker, Charles I., assignor.)
Chalmers, Raymond W., Highland Park, assignor to General Motors Corporation, Detroit, Mich. Export-shipping device. 1,761,969; June 3.
Champ Electric Company. (See Chandler, Daniel L., assignor.)
Champion, William L., Muskogee, Okla. Mowing attachment. 1,761,904; June 3.
Chandler, Daniel L., assignor to Champ Electric Company, Boston, Mass. Electric time switch. 1,761,652; June 3.
Channing, R. H., jr., agent. (See Fischer, Oscar A., assignor.)
Chapin, Philip P., and W. J. Kupec, New York, N. Y. Sign. 1,761,871; June 3.
Chappell, Marvin L., Watson, assignor, by mesne assignments, to Richfield Oil Company of California, Los Angeles, Calif. Purifying lubricating-oil distillates. 1,761,328; June 3.
Chappelow, Earl G., and F. L. Bryant, Greeley, Colo. Cultivator blade. 1,761,405; June 3.
Charlton, Harry J., assignor to Frank Holton & Company, Elkhorn, Wis. Wind musical instrument. 1,761,329; June 3.
Chase, March F., Ardsley-on-the-Hudson, and F. E. Pierce and J. Skogmark, New York, assignors to The Cos Procesa Company, Inc., New York, N. Y. Making producer gas. 1,761,384; June 3.
Chicago Bridge & Iron Co. (See Bailey, Otterbein A., assignor.)
Chicago Bridge & Iron Company. (See Williams, D. D., and Murphey, assignors.)
Chicago Flexible Shaft Company. (See Browning, George, assignor.)
Chicago Lock Company. (See Shinn, William C., assignor.)
Chicago Mica Company. (See Frederick, Louis T., assignor.)
Chicago Pneumatic Tool Company. (See Maxmillian, Max, assignor.)
Chicknavorian, Hagop, Fitchburg, Mass. Spotting table. 1,761,706; June 3.
Chilowsky, Constantin, Paris, France, and B. Nagaoheff, Boston, Mass. Apparatus for the production of sounds from electric current and inversely. 1,760,896; June 3.
Chorlton, Alan E. L., London, England. Integral camshaft bearing. 1,761,872; June 3.
Christensen Air Brake Company, The. (See Neale, Fred, assignor.)
Christensen, Anker L., New York, N. Y. Back spot facer. 1,761,070; June 3.
Christman, Peter J., Green Bay, Wis. Folding or interfolding machine. 1,761,517; June 3.
Chrul, Teofil J., Baltimore, Md. Manual stirrer and container for sirups. 1,761,613; June 3.
Chryst, William A., Dayton, Ohio, assignor to Delco-Remy Corporation, Anderson, Ind. Making a clutch shell and pinion assembly for engine-starter drives. 1,761,518; June 3.
Chubb, Lewis W., Edgewood, Pa., assignor to Westinghouse Electric and Manufacturing Company. Vacuum-type inverted converter. Re17,693; June 3.
Chute, Harold G., Seattle, Wash. Pack carrier. 1,761,426; June 3.
Ciccolanni, Joseph, Detroit, Mich. Aeroplane. 1,761,777; June 3.
Cincinnati Milling Machine Company, The. (See Nenninger, Lester F., assignor.)
Circle F Mfg. Co. (See Petersen, Carl M., assignor.)
Clark, Frederick, Alameda, assignor to Alaska Packers Association, San Francisco, Calif. Can-filling machine. 1,761,653; June 3.
Clark Lighter Co. Inc. (See Pollak, A., and O'Brien, assignors.)
Clark, Rex W. (See Gates, G. C., Clark, and Wills.)
Clark, Robert G., Brooklyn, N. Y. Circular loom. 1,761,293; June 3.
Clarkson, Edwin S., Washington, D. C., assignor to The L. C. L. Corporation. Freight-container car. 1,761,873; June 3.
Clarkson, Edwin S., Washington, D. C., assignor to The L. C. L. Corporation. Freight-container car. 1,761,874; June 3.
Clason, Ragnar, assignor to A C Spark Plug Company, Flint, Mich. Ventilator-control valve. 1,761,970; June 3.
Claudel, Charles H., Neuilly-sur-Seine, France. Carburetor for internal-combustion engines. 1,761,007; June 3.
Clavel, René, Basel-Augst, Switzerland. Treatment of artificial silks. 1,761,707; June 3.
Clayton and Lambert Manufacturing Company. (See Blaskewitz, William, assignor.)
Clearwater Lumber Company. (See Laursen, Bruno L., assignor.)
Cleary, Edward T. (See Rutledge, A. E., and Cleary.)
Clemence, Walter S., Battle Creek, Mich. Child's chair. Des. 81,271; June 3.
Clemens, John G., Eggertsville, N. Y., assignor to Pierce Renewable Fuses, Inc., Buffalo, N. Y. Refillable fuse. 1,761,466; June 3.
Clement, Lewis M., Mountain Lakes, N. J., assignor to F. A. D. Andrea, Inc., New York, N. Y. Sound-reproducing device. 1,762,090; June 3.
Cleveland Gas Burner & Appliance Company, The. (See Kerr, Harry E., assignor.)
Cleveland Heater Company, The. (See Smith, J. A., and Hansen, assignors.)
Cleveland Trust Company, The. (See McCoy, William C., assignor.)
Cleveland Trust Company, The. (See McKechnie, Robert R., assignor.)
Clinton, Harry D., Johnson City, N. Y. Tension device. 1,762,049; June 3.
Cobb, Willard H., Brooklyn, N. Y., assignor to The Shoe Hardware Company, Waterbury, Conn. Fastening device. 1,761,385; June 3.
Coe, Daniel W., Montreal, Quebec, Canada. Grab bucket. 1,761,778; June 3.
Colbert, Clarence F., assignor to Zastrow Machine Company, Inc., Baltimore, Md. Exhauster for canned goods. 1,762,129; June 3.
Cole, George H., Milwaukee, assignor, by mesne assignments, to Line Material Company, South Milwaukee, Wis. Refractor bowl. 1,761,654; June 3.
Colen, Bernard D. (See Strongson, H. L., and Colen.)

Collar, Lloyd D., assignor to Collar Valve Corporation, Berkeley, Calif. Bonnet construction for self-grinding valves. 1,761,655; June 3.
Collar Valve Corporation. (See Collar, Lloyd D., assignor.)
Colley, Arthur R., assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio. Cash register. 1,761,656; June 3.
Collier, Bryan C., assignor to Cement Gun Contracting Company, Allentown, Pa. Pile and wall construction. 1,761,614; June 3.
Collins, Charles W., Seattle, Wash. Brake-operating mechanism. Re17,687; June 3.
Colodor Company, The. (See Newdick, Norton A., assignor.)
Colson Company, The. (See Roe, De Forest, assignor.)
Colucci, John M., Brooklyn, assignor to Majestic Lamp Works, New York, N. Y. Clock case. Des. 81,272; June 3.
Columbia Engineering and Management Corporation. (See Odell, William W., assignor.)
Columbia Mixers Corporation, The. (See Goetz, Joseph F., assignor.)
Columbian Carbon Company. (See Peck, Le Roy E., assignor.)
Concentric Air Cells Automatic Company. (See Jurgensen, August P., assignor.)
Conoky, H. D., & Company. (See Kettleborough, Harry J., assignor.)
Connor, Albert W., and S. H. Schwartz, assignors to The Biltmore Ero Manufacturing Company, Cincinnati, Ohio. Removable seat cover. 1,761,657; June 3.
Continental Can Company. (See Fink, Henry A., assignor.)
Continental Can Company. (See O'Neil, James H., assignor.)
Cook, Bernard, Roanoke, Va. Gauge cock for steam boilers. 1,761,467; June 3.
Cook, Charles G., Portsmouth, N. H. Loud-speaker. 1,762,050; June 3.
Cook, Thomas R., and D. N. Smith, assignors to The Hudson Coal Company, Scranton, Pa. Mine-hoist alarm switch. 1,761,708; June 3.
Cooney, John T., Keseda, Calif. Toy. 1,762,051; June 3.
Copeland, Clint M., Marland, Okla. Beam hanger. 1,761,658; June 3.
Copony, Alfred, Mount Clemens, assignor to Copony Auto Loading Company, Detroit, Mich. Decking device. 1,761,103; June 3.
Copony Auto Loading Company. (See Copony, Alfred, assignor.)
Cordell, Henry, Wilmette, and E. P. Shultis, Waukegan, assignors to U. S. Sanitary Specialties Corporation, Chicago, Ill. Soap-dispensing apparatus. 1,761,875; June 3.
Coryell, Charles N., Mamaroneck, N. Y. Vanity case. 1,761,615; June 3.
Cos Process Company, The. (See Chase, M. F., Pierce, and Skogmark, assignors.)
Cram, Leroy V., Flint, assignor to General Motors Corporation, Detroit, Mich. Muffler. 1,761,971; June 3.
Crary, Cecil R., Detroit,--Mich. Closure. 1,761,427; June 3.
Crary, Cecil R., Detroit, Mich. Closure. 1,761,428; June 3.
Crawford, James M., assignor to General Motors Corporation, Detroit, Mich. Clutch pressure lever plate. 1,761,972; June 3.
Crocker-Wheeler Electric Manufacturing Company. (See Spencer, Millard C., assignor.)
Crompton, Inc. (See Crompton, R., and Knowlton, assignors.)
Crompton & Knowles Loom Works. (See Findlay, George P., assignor.)
Crompton & Knowles Loom Works. (See Gordon, Albert A., assignor.)
Crompton & Knowles Loom Works. (See Gordon, A. A., and Verry, assignors.)
Crompton & Knowles Loom Works. (See Lindegren, Carl J., assignor.)
Crompton & Knowles Loom Works. (See Lundgren, William E., assignor.)
Crompton & Knowles Loom Works. (See Olch, Jacob B., assignor.)
Crompton & Knowles Loom Works. (See Paine, Arthur P., assignor.)
Crompton & Knowles Loom Works. (See Payne, Oscar V., assignor.)
Crompton & Knowles Loom Works. (See Robertson, William W., assignor.)
Crompton & Knowles Loom Works. (See Shutt, George H., assignor.)
Crompton & Knowles Loom Works. (See Turner, Richard G., assignor.)
Crompton & Knowles Loom Works. (See Wakefield, Walter H., assignor.)
Crompton & Knowles Loom Works. (See Wattie, William M., assignor.)
Crompton, Randolph, Worcester, and C. E. Knowlton, Grafton, assignors to Crompton, Inc., Boston, Mass. Feeler mechanism. 1,761,817; June 3.
Crothers, William G., Oakfield, N. Y. Twyer. 1,761,182; June 3.
Crowell, Russell B., Agnew, Calif., assignor to American Solvents & Chemical Corporation, New York, N. Y. Manufacturing absolute alcohol. 1,761,779; June 3.
Crowley, Frank P., North Bergen, N. J. Door-operating mechanism. 1,761,008. June 3.
Crowley, Joseph P., assignor to Libbey-Owens Glass Company, Toledo, Ohio. Sheet-glass-handling device. 1,761,193; June 3.
Crowson, Herbert W., New York, N. Y., assignor to Pullclean Manufacturing Corporation, Bridgeport, Conn. Towel cabinet. 1,761,071; June 3.
Crull, Harold L., Tulsa, Okla. Oil-well pump. 1,761,876; June 3.
Cummings, Frank D., Los Angeles, Calif. Building construction (quakeproof building). 1,761,659; June 3.
Cummings, Frank D., Los Angeles, Calif. Building construction (quakeproof building). 1,761,660; June 3.
Cunningham, Frederick W. (See Hardy, A. C., and Cunningham.)
Currlin, Bernard, Toledo, Ohio. Traffic signal. 1,761,519; June 3.
Cutler, Archibald, Toronto, Ontario, Canada. Carving bracc. 1,761,104; June 3.
Cutler-Hammer, Inc. (See Bly, Robert S., assignor.)
Cutler-Hammer, Inc. (See Meuer, George J., assignor.)
Dagger, Jacob. (See Shilling, Edward C., assignor.)
Dahlstrand, Hans P., Wauwatosa, assignor to Allis-Chalmers Manufacturing Company, Wilwaukee, Wis. Adjusting mechanism. 1,762,117; June 3.
Dalzell, Donald P. (See Kaempf, E., and Dalzell.)
Daniels, Eugene O., Toledo, Ohio. Duplex burner. 1,761,905; June 3.
Daubner, George H., Pontiac, assignor to Yellow Truck & Coach Manufacturing Company, Pontiac, Mich. Engine support. 1,761,973; June 3.
Daudy, Marc H., assignor to North American Lace Company, Philadelphia, Pa. Lace. Des. 81,274; June 3.
Davies, Thomas D., McKeesport, Pa., assignor to National Tube Company. Drill tube. 1,761,709; June 3.
Davis, Albert G., Pueblo, Colo. Railway switch. 1,761,105; June 3.
Davis, Augustine, jr. (See Shield, Paul S., assignor.)
Davis, Cortland W., Oak Park, assignor to The Mantle Lamp Company of America, Chicago, Ill. Chimney. 1,761,616; June 3.
Davis, George H., Providence, R. I. Vending machine. 1,761,386; June 3.
Davis, Harry A., assignor to Draper Corporation Hopedale, Mass. Automatically-threading loom shuttle. 1,761.617; June 3.
Davis, Harry A., assignor to Draper Corporation, Hopedale, Mass. Feeler mechanism for looms. 1,761,618; June 3.
Davis, John H., New York, N. Y., assignor to Air Line Transportation Company, Philadelphia, Pa. Airplane. 1,761,710; June 3.
Davis, John U., assignor of one-half to T. E. Westbrook, Eldorado, Kans. Long-stroke pumping mechanism. 1,761,330; June 3.
Davis, Rae W., West Allis, assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Motor drive. 1,762,130; June 3.
Davis, Robert L., Pittsburgh, and J. P. Stakel, Edgewood, Pa., assignors to Westinghouse Electric and Manufacturing Company. Inductor. 1,760,975; June 3.
Davy, Mary J. A., New York, and A. P. Komow, Brooklyn, N. Y.; said Komow assignor to said Davy Punching and cutting machine 1,761,906; June 3.
Dawson, George H., Boston, assignor to Service Bureau, Inc., Cambridge, Mass. Visible strip index. 1,761,877; June 3.
Day, Herschel M., Cannonsburg, Pa. Furnace for burning garbage and other refuse. 1,761,878; June 3.
Day, J. H., Company, The. (See Schiff, Sigmund, assignor.)
Dean, George, Armthorpe, near Doncaster, England. Conversion of reciprocatory motion to rotary motion, or the converse. 1,761,429; June 3.
Dean, Walter C., assignor to Union Steel Products Company, Albion, Mich. Poultry coop or crate. 1,760,936; June 3.
Deere, John, Tractor Company. (See Witry, Louis W., assignor.)
De Forest, Lee, New York, N. Y., assignor, by mesne assignments, to General Talking Pictures Corporation. Sound and picture recording camera. 1,761,619; June 3.
Degener, Gustave O., San Francisco, Calif., assignor to Royal Typewriter Company, Inc., New York, N. Y. Adding attachment for typewriting machines. 1,761,430; June 3.
Degener, Gustave O., San Francisco, Calif., assignor to Royal Typewriter Company, Inc., New York, N. Y. Adding attachment for typewriting machines. 1,761,431; June 3.
Degener, Gustave O., San Francisco, Calif., assignor to Royal Typewriter Company, Inc., New York, N. Y. Adding attachment for typewriting machines. 1,761,432; June 3.
Deinet, Joseph, Milwaukee, assignor to The Newport Company, Carrollville, Wis. Preparation of chlorinated anthraquinones. 1,761,620; June 3.
Del'co Products Corporation. (See Elsey, George W., assignor.)

Delco Products Corporation. (See Pontis, William G., assignor.)
Delco Products Corporation. (See Whelan, James F., assignor.)
Delco-Remy Corporation. (See Arthur, James L., assignor.)
Delco-Remy Corporation. (See Baker, Russell W., assignor.)
Delco-Remy Corporation. (See Chryst, William A., assignor.)
Delco-Remy Corporation. (See Emmert, Rodger J., assignor.)
Delco-Remy Corporation. (See Fitzsimmons, J. T., and White, assignors.)
Delco-Remy Corporation. (See Parker, Leslie O., assignor.)
Delco-Remy Corporation. (See Perkins, Laurence M., assignor.)
Delco-Remy Corporation. (See Phelps, Alva W., assignor.)
Demuth, William, & Company. (See Rubsamen, Charles, assignor.)
Denecklau, Karl R., Plainfield, N. J. Carbon pack and sheet-form holder. 1,761,106; June 3.
Denmire, Harold A., assignor to The General Tire & Rubber Company, Akron, Ohio. Watchcase beater. 1,762,131; June 3.
De Roo, William C., assignor to The Fosdick Machine Tool Company, Cincinnati, Ohio. Radial drill. 1,761,107; June 3.
Desautels, Charles H., Springfield, assignor to The Fisk Rubber Company, Chicopee Falls, Mass. Sectional repair bag and method of making. 1,760,897; June 3.
Des Jardins, Wilfrid H., Haverhill, Mass. Work receptacle for machine benches. 1,761,780; June 3.
Desmarquest, Louis, Neuilly-sur-Seine, France. Manufacture of cellular building materials. 1,761,108; June 3.
Des Moutis, Robert. (See Auguste, L., and des Moutis.)
De Spuches Principe di Galati, Antonino, Palermo, Italy. Hydraulic wheels acting either as motors or as propellers. 1,761,818; June 3.
De Tienne, Frederick B. (See Bland, B. B., and De Tienne.)
De Tour, Frank W. (See Maxwell, W., and De Tour.)
De Vries, George, Oak Park, Ill., assignor to American Lace Paper Company, Milwaukee, Wis. Cup dispenser. 1,761,009; June 3.
Dewey, Clarence L., Elkhart, Ind., assignor to Outing Manufacturing Company. Making boxes and covers therefor. 1,761,331; June 3.
Dichter, Isador, Chicago, Ill. Ornamental figure. 1,761,879; June 3.
Dickinson, Thomas A. E., Poland, Ohio. Safety control device for furnaces. 1,761,880; June 3.
Diehl, Peter B., York, assignor to United States Chain & Forging Company, Pittsburgh, Pa. Chain fastener. 1,761,559; June 3.
Dietrich, Carl W., North Bergen, N. J. Storage-battery indicator. 1,760,937; June 3.
Dietz, Franz. (See Dietz, Leo S., assignor.)
Dietz, Leo S., assignor of one-half to F. Dietz, Zion, Ill. Plasterer's float. 1,761,109; June 3.
Dietzgen, Eugene, Company. (See Langsner, Adolph, assignor.)
Dijksterhuis, Popko R., and Yme B. F. J. Groeneveld, Eindhoven, Netherlands, assignors to Radio Corporation of America. Transformer. 1,761,110; June 3.
Di Neuberg, Ferdinando B., Treviso, Italy. Hub cap. 1,761,468; June 3.
Dingman, Wilbert A. (See Baker, M. C., and Dingman.)
Dionne, Arthur A., Chicago, Ill., assignor to The Alvey-Ferguson Company, Cincinnati, Ohio. Record and record holder. 1,762,137; June 3.
Ditto, Incorporated. (See Williams, William E., assignor.)
Dixson, Harry, Pella, assignor to Roiscreen Company, Des Moines, Iowa. Guide and mounting for screens or the like. 1,761,332; June 3.
Dodds, Charles, Tipton, Iowa. Adjustable step for vehicles. 1,762,052; June 3.
Doering, Charles and H. H., Chicago, Ill. Butter-cutting machine. 1,761,010; June 3.
Doering, Henry H. (See Doering, Charles and H. H.)
Doherty-Brehm Company. (See Doherty, George D., assignor.)
Doherty, George D., assignor to Doherty-Brehm Company, Minneapolis, Minn. Humidifying apparatus. 1,760,976; June 3.
Doherty Research Company. (See Bjerregaard, August P., assignor.)
Doherty Research Company. (See Greenfield, Benjamin, assignor.)
Doherty Research Company. (See Skillman, E., and Harmon, assignors.)
Dohrmann, Henry A., assignor to Midland Specialties Company, Chicago, Ill. Container for oils, etc. 1,761,072; June 3.
Dolke, William M., Stevens Point, Wis. Belt buckle. 1,761,520; June 3.
Dollack, Charles, Glendale, assignor to The Jacobs Brothers Co., Inc., Brooklyn, N. Y. Scale. 1,760,898; June 3.
Dolley, Paul T., Los Angeles County, Calif., assignor to California Cyanide Company, Incorporated, New York, N. Y. Production of hydrocyanic acid. 1,761,433; June 3.
Dominion Electrical Mfg. Company. (See McLelland, W. H., and Knutson, assignors.)
Domore Chair Company. (See Adams, Arthur J.)
Donkel, Mathias, assignor to Mathias Klein & Sons, Inc., Chicago, Ill. Tree trimmer. 1,761,469; June 3.
Donnelly, Enos L., Huntington, W. Va. Automatic sheet stacker. 1,761,881; June 3.
Dorcey, Thomas R. (See Forsythe, Calvin L., assignor.)
Doser, Arnold, Cologne-Mulheim, G. Mauthe, Cologne-Holweide, and A. Thauss, Cologne-Deutz, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Treatment of animal fibers and products thereof. 1,762,011; June 3.
Doty, Jeptha W., Detroit, Mich. Toilet-paper roll. 1,761,111; June 3.
Douglas, Harry A., Bronson, Mich. Electric switch. 1,761,434; June 3.
Douglas, Harry A., Bronson, Mich. Electric switching mechanism. 1,761,435; June 3.
Douglas, Harry A., Bronson, Mich. Circuit-continuing device. 1,761,436; June 3.
Douglas, Harry A., Bronson, Mich. Circuit-continuing device. 1,761,437; June 3.
Douglas, Harry A., Bronson, Mich. Electric lamp. 1,761,438; June 3.
Douglass, Eldridge P., Marianna, Ark. Portable crane. 1,761,194; June 3.
Dow Gas Engine Starter Corporation. (See Vingheroets, Louis, assignor.)
Drake, John L., assignor to Libbey-Owens Glass Company, Toledo, Ohio. Apparatus for forming sheet glass. 1,761,195; June 3.
Drake, John L., assignor to Libbey-Owens Glass Company, Toledo, Ohio. Sheet-glass-surfacing apparatus. 1,761,196; June 3.
Drake, John L., assignor to Libbey-Owens Glass Company, Toledo, Ohio. Glass-tank-furnace construction. 1,761,197; June 3.
Drake, John L., assignor to Libbey-Owens Glass Company, Toledo, Ohio. Drawing sheet glass. 1,761,198; June 3.
Drake, John L., assignor to Libbey-Owens Glass Company, Toledo, Ohio. Sheet-glass-handling apparatus. 1,761,199; June 3.
Drake, John L., assignor to Libbey-Owens Glass Company, Toledo, Ohio. Process and apparatus for producing sheet glass. 1,761,200; June 3.
Draper, Clare H., assignor to Draper Corporation, Hopedale, Mass. Feeler mechanism for looms. 1,761,621; June 3.
Draper Corporation. (See Burdett, Horace H., assignor.)
Draper Corporation. (See Davis, Harry A., assignor.)
Draper Corporation. (See Draper, Clare H., assignor.)
Draper Corporation. (See Harris, Frank, assignor.)
Draper Corporation. (See Leonard, Harry A., assignor.)
Draper Corporation. (See MacArthur, Elvin D., assignor.)
Dreher, Otto. (See Meyer, G. J., Shodron, and Dreher.)
Dreis & Krump Manufacturing Co. (See Kutscheid, John J., assignor.)
Drew, Harold, Lansing, assignor to General Motors Corporation, Detroit, Mich. Overgear transmission. 1,761,907; June 3.
Driskell, George P., San Diego, Calif. Adz-finish ornamental woodworking machine. 1,761,439; June 3.
Dronberger, Effie L., Three Sands, Okla. Combined awning and shade. 1,760,899; June 3.
Drost, Joseph, Detroit, Mich. Combination water and ice boat. 1,761,440; June 3.
Dryice Equipment Corporation. (See Martin, James W., jr., assignor.)
Drying Systems, Inc. (See Bluemel, Gustave, assignor.)
Dubbs, Carbon P., Wilmette, assignor to Universal Oil Products Company, Chicago, Ill. Treating petroleum oil. 1,761,622; June 3.
Duerler, G. A., Manufacturing Company. (See Gebhardt, William, assignor.)
Duff-Norton Manufacturing Company, The. (See Schwerin, Frank H., assignor.)
Duffy, Charles H., Miami, Fla. Incasing lock. 1,760,977; June 3.
Dugan, James N., Terrace Park, Ohio. Gear lock for automobiles. 1,761,073; June 3.
Dunham, C. A., Company. (See Dunham, Clayton A., assignor.)
Dunham, Clayton A., Glencoe, Ill., assignor to C. A. Dunham Company, Marshalltown, Iowa. Exhausting mechanism. 1,761,819; June 3.
Dunn, John L. (See Etter, T., and Dunn.)
Dunn, William C., Chicago, Ill. Fluid-transmission mechanism. 1,761,255; June 3.
Dunning, Carson S., et al. (See Dunning, James A., assignor.)
Dunning, James A., Suffolk, assignor of one-third to V. S. Mayberry, Portsmouth, Va., and one-third to C. S. Dunning, Rocky Mount, N. C. Piston. 1,761,982; June 3.
Dunning, William E., and J. Bachofen, assignors to The McCaskey Register Company, Alliance, Ohio. Filing appliance. 1,761,661; June 3.
Dunsford, Reuben. (See Layhon, Arthur J., assignor.)
Early, John F., Clarksburg, W. Va., assignor to The Akro-Agate Company, Akron, Ohio. Machine for making spherical glass bodies. 1,761,623; June 3.
Early, Robert E. (See Bradford, N. T., and Early.)

Eastman, Joseph P., assignor to Eastman Mfg. Co., Manitowoc, Wis. Machine for contracting ferrules. 1,761,521; June 3.
Eastman Mfg. Co. (See Eastman, Joseph P., assignor.)
Eberhard, Heinrich, Berlin, Germany. Piezo-electric crystal-controlled oscillation generator. 1,761,882; June 3.
Eberly, Sylvester, assignor of one-half to K. Fiensted, Toledo, Ohio. Article feeder. 1,761,781; June 3.
Eckley, Paul, Walnut Creek, Calif. Trifocal lens. 1,761,201; June 3.
Eclipse Machine Company. (See Lansing, Raymond P., assignor.)
Economy Baler Company. (See MacLean, J. H., and Heinzman, assignors.)
Eddy, R. M., Foundry Company. (See Simonsen, Edward H., assignor.)
Edgar, John, assignor to Barber-Colman Company, Rockford, Ill. Micrometer device. 1,760,938; June 3.
Edgar, Ray, et al. (See Wells, Don W., assignor.)
Edward, Carl. (See Freeland, Albert M., assignor.)
Edwards, William A., Chicago, Ill. Carburetor. 1,761,074; June 3.
Eutenbeck, Alfred, Vohwinkel, Germany. Process of and device for making spring insertions for cushions and the like. 1,761,711; June 3.
Ehrenreich, Alfred, London, England. Treatment of fish skins. 1,762,053; June 3.
Electric Machinery Manufacturing Company. (See Hibbard, Charles T., assignor.)
Electrolux Servel Corporation. (See Lenning, A., and Taylor, assignors.)
Electromatic Typewriters, Inc. (See Thompson, Russell G., assignor.)
Ellis Adding Typewriter Company. (See Perkins, Nathan W., assignor.)
Elsey, George W., assignor to Delco Products Corporation, Dayton, Ohio. Core box. 1,761,522; June 3.
Elting, Edwin J. (See Gillett, Harry S., assignor.)
Emerson, Millard F., Richmond, Ind. Mower. 1,760,939; June 3.
Emmert, Rodger J., assignor to Delco-Remy Corporation, Dayton, Ohio. Conveyer for dynamo armatures. 1,761,523; June 3.
Emmert, Rodger J., Dayton, Ohio, assignor to Delco-Remy Corporation, Anderson, Ind. Manufacture of the clutch cam for engine-starter drives. 1,761,712; June 3.
Endorf, Charles, Chicago, Ill. Flatiron. 1,761,202; June 3.
English, Stephen C., Hamburg, Iowa. Cultivator attachment. 1,760,940; June 3.
Erickson, Frederic W., Larchmont, N. Y., assignor to Westinghouse Electric & Manufacturing Company. Electric meter and the mounting thereof. Re17,694; June 3.
Erskine, Ralph W., Mishawaka, Ind., assignor to Westinghouse Electric & Manufacturing Company. Holder for lamp housings. 1,760,978; June 3.
Eshbaugh, Jesse E., assignor to A C Spark Plug Company, Flint, Mich. Ammeter. 1,761,908; June 3.
Eshbaugh, Jesse E., assignor to A C Spark Plug Company, Flint, Mich. Ammeter. 1,761,909; June 3.
Eshbaugh, Jesse E., assignor to A C Spark Plug Company, Flint, Mich. Thermostat. 1,761,910; June 3.
Etter, Thomas, and J. L. Dunn, Philadelphia, Pa. Perforated edible. Des. 81,273; June 3.
Evans, Edwin R., Chicago, Ill. Vehicle brake mechanism. Re17,688; June 3.
Evans, Robert M., Seattle, Wash. Slide-plate and tie-bar construction for railroads. 1,761,256; June 3.
Every, Elmer D., Rochelle Park, N. J., assignor to Artesian Well & Equipment Co., Inc., New York, N. Y. Well-casing shoe. 1,762,012; June 3.
Excelsior Hardware Company, The. (See Komenak, Albert J., assignor.)
Expanded Metal Company, The. (See Smith, Walter, assignor.)
Eyster, Aden I., Philadelphia, Pa. Cigar. 1,761,713; June 3.
Faas, Henry R. (See Wirshing, R. J., and Faas.)
Fabrizio, Achillo, Willow Street, Pa. Salute. 1,761,820; June 3.
Fagan, Charles D., Sharon, assignor to Sharpsville Boiler Works Co., Sharpsville, Pa. Self-closing valve. 1,761,821; June 3.
Fahey, Patrick H. (See Foreman, Frederick F., assignor.)
Falge, Robert N., assignor to General Motors Research Corporation, Detroit, Mich. Lamp-focusing mechanism. 1,761,911; June 3.
Fawn, Richard E., Cleveland, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Hot-water bottle. Des. 81,275; June 3.
Federal Telegraph Company. (See Hough, Clinton W., assignor.)
Feldman, Frank, Randsburg, Calif. Towing cable. 1,761,112; June 3.
Felten & Guilleaume Carlswerk Actien-Gesellschaft. (See Laubenthal, Johann, assignor.)
Fenstemaker, Howard M., Bloomsburg, Pa. Silk flyer for spinning machines. 1,760,941; June 3.
Fenton, Paul E., Thomaston, assignor to Scovill Manufacturing Company, Waterbury, Conn. Pin fastener. 1,762,118; June 3.
Ferris, William I., Westfield, N. J., assignor to L. E. Waterman Company, New York, N. Y. Fountain pen and stand therefor. 1,762,103; June 3.
Ferris, William S. (See Adams, Arthur J., assignor.)
Ferry, Joseph D., Harrisburg, Pa. Material treating and handling apparatus. 1,760,979; June 3.
Fiber-Glass Food Cover Co. (See Nelson, Leigh G., assignor.)
Fibroc Insulation Company. (See Frederick, Louis T., assignor.)
Fifield, William A., Abbey, Saskatchewan, Canada. Shocker. 1,761,333; June 3.
Finckel, William H., jr. (See Linn, G. E., and Finckel, jr.)
Findlay, George P., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Tube frame for Axminster looms. 1,760,942; June 3.
Fink, Henry A., Chicago, Ill., assignor to Continental Can Company, Inc., New York, N. Y. Metal container. 1,761,714; June 3.
Finkelstein, William, Philadelphia, Pa. Hand-bag frame. 1,762,013; June 3.
Finn, Sidney J., Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Trimming machine. 1,761,011; June 3.
Finnell, Simpson, Hamburg, Iowa. Cornstalk cutter. 1,761,983; June 3.
First National Bank, The. (See Petroff, G., and Shestakoff, assignors.)
Fischer, Friedrich G., Detroit, Mich. Household heating utensil. 1,762,014; June 3.
Fischer, Oscar A., Denver, Colo., assignor to R. H. Channing, jr., agent, San Francisco, Calif. Purification of zinc sulphate liquors. 1,761,782; June 3.
Fishburn, Otto E., assignor to Warner Gear Company, Muncie, Ind. Gear-shifter lever. 1,762,132; June 3.
Fisher, Alexander D., Toronto, Ontario, Canada. Manufacture of chocolate confectionery. 1,760,900; June 3.
Fisk, Gustaf L., Midland, assignor to Mesta Machine Company, West Homestead, Pa. Cooling bed. 1,761,470; June 3.
Fisk Rubber Company. (See Desautels, Charles H., assignor.)
Fisk Rubber Company, The. (See Little, Thomas P., assignor.)
Fisk Rubber Company, The. (See Maynard, Charles E., assignor.)
Fisk Rubber Company, The. (See Midgley, Thomas, assignor.)
Fisk Rubber Company, The. (See Wikle, George F., assignor.)
Fisler, John R., St. Louis, Mo. Purse. 1,762,091; June 3.
Fitz-Empire Double Pivot Last Company. (See Fitz, Guy B., assigner.)
Fitz, Guy B., assignor to Fitz-Empire Double Pivot Last Company, Auburn, Me. Shoe stretcher. 1,761,012; June 3.
Fitzsimmons, John T., and J. White, Anderson, Ind., assignors to Deloc-Remy Corporation, Dayton, Ohio. Generator-regulating system. 1,761,524; June 3.
Fixel, Arthur E. (See Marx, Karl F., assignor.)
Flarsheim, Edwin S. (See Liebel, J. G. H., and Flarsheim.)
Fleetwood, Dorothy, Fort Lauderdale, Fla. Decorating. 1,761,715; June 3.
Fleiter, Andrew J., assignor to The Akron Standard Mold Company, Akron, Ohio. Vulcanizer. 1,762,119; June 3.
Fleming, Wells S., Portland, Oreg. Roof-drain fixture. 1,761,257; June 3.
Flensted, Knud. (See Eberly, Sylvester, assignor.)
Foote, Charles E., assignor to The Foote Company, Inc., Nnuda, N. Y. Boom drive. 1,761,716; June 3.
Foote Company, The. (See Foote, Charles E., assignor.)
Ford Motor Company. (See Hicks, Harold A., assignor.)
Ford Motor Company. (See Stout, William B., assignor.)
Foreman, Dave, Lenorah, assignor of one-fourth to J. L. Hall and one-fourth to J. R. Vance, Stanton, Tex. Camera. 1,762,054; June 3.
Foreman, Frederick F., Lansing, assignor of one-half to P. H. Fahey, Hubbardston, Mich. Valve-spring compressor and lifter. 1,760,980; June 3.
Förstel, Willfried, Spandau, Germany. Closed exhaust box for silencing internal-combustion engines. 1,761,471; June 3.
Forsythe, Calvin L., assignor of one-half to T. R. Dorcey, Chicago, Ill. Banjo mute. 1,761,294; June 3.
Fosdick Machine Tool Company, The. (See Chace, Norman B., assignor.)
Fosdick Machine Tool Company, The. (See De Roo, William C., assignor.)
Foster, Leon V., assignor to Bausch & Lomb Optical Company, Rochester, N. Y. Lens system. 1,761,441; June 3.
Fostoria Glass Co. (See Sakler, George, assignor.)
Fox, Morris J., Downers Grove, assignor to The Railroad Supply Company, Chicago, Ill. Junction - box. 1,761,203; June 3.
Fox, Vernie A., assignor to Young Brothers Company, Detroit, Mich. Oven. 1,761,472; June 3.
Francis, George J., Durham, Conn. Cash-box latch. 1,762,015; June 3.
Frank, Charles W., Elizabeth, N. J. Check nozzle. 1,762,055; June 3.

Franson, Frank J., Tower, Minn. Portable tourist sink. 1,761,258; June 3.
Fraser, Frank, assignor to Libbey-Owens Glass Company, Toledo, Ohio. Process and apparatus for producing sheet glass. 1,761,204; June 3.
Frederick, Louis T., assignor, by mesne assignments, to Chicago Mica Company, Valparaiso, Ind. Mica-sorting machine. 1,761,113; June 3.
Frederick, Louis T., assignor to Fibroc Insulation Company, Valparaiso, Ind. Composite gear. 1,761,114; June 3.
Freeland, Albert M., assignor to C. Edward, Chicago, Ill. Pump or engine. 1,761,259; June 3.
Frehse, Albert W., assignor to General Motors Corporation, Detroit, Mich. Front-wheel brake. 1,761,912; June 3.
Freiburghouse, Edward H., Schenectady, N. Y., assignor to General Electric Company. Ventilation of dynamoelectric machines. 1,761,783; June 3.
French, Silas, Rochester, N. Y. Guard support. 1,761,717; June 3.
Frick, Mary E., administratrix. (See Frick, William C.)
Frick, William C., deceased, Danville, Pa.; M. E. Frick admin'stratrix. Mechanism for salvaging tin cans. 1,761,984; June 3.
Fried. Krupp Aktiengesellschaft. (See Breitling, Ernst, assignor.)
Frigidaire Corporation. (See Hull, Harry B., assignor.)
Frigidaire Corporation. (See King, Jesse G., assignor.)
Froedtert, Kurtis R., assignor to Brinsmere Boat and Cycle Company, Milwaukee, Wis. Water vehicle. 1,761,883; June 3.
Frøland, Peder E., Hoyanger, Norway. Furnace for the production of aluminum. 1,761,442; June 3.
Frontier Development Company, The. (See Manifold, Richard G., assignor.)
Fry, Benjamin L., St. Louis, Mo. Coin-actuated mechanism. 1,761,784; June 3.
Fry, Benjamin L., St. Louis, Mo. Coin-actuated mechanism. 1,761,785; June 3.
Fry, Orlander W., Los Angeles, assignor to O. R. Fuller Co., Los Angeles, Calif. Truck-frame extension. 1,761,334; June 3.
Fuller, Bert F., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Theater switch panel. 1,760,943; June 3.
Fuller Brush Company, The. (See Cave, H., and Smith, assignors.)
Fuller, Frederick L., Bridgeport, Conn., assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio. Cash register. 1,761,718; June 3.
Fuller, Frederick L., Ilion, N. Y., assignor to The National Cash Register Company, Dayton, Ohio. Cash register. 1,761,719; June 3.
Fuller Lehigh Company. (See Kerr, Howard J., assignor.)
Fuller, O. R., Co. (See Fry, Orlander W., assignor.)
Fyrberg, Nils J. A., Dexter, Me. Reflector for light projectors. 1,761,528; June 3.
Galan, George, Pittsburgh, Pa. Pulverizing mill. 1,762,056; June 3.
Gallasch, George B., assignor to Bausch and Lomb Optical Company, Rochester, N. Y. Optical measuring instrument. 1,761,260; June 3.
Galloway, Robert M., assignor to The National Automatic Tool Company, Richmond, Ind. Oil housing for drill heads. 1,762,092; June 3.
Gardner, John E., Chicago, Ill. Automatic telephone system. 1,761,115; June 3.
Garoff, Barney C. (See Smith, Robert A., assignor.)
Gas Research Company, The. (See Smith, Harry F., assignor.)
Gates, George C., R. W. Clark, and P. C. Wills, Montrose, Colo. Coupling for drill rods. 1,762,057; June 3.
Gathmann, Emil. (See Jones, James D., assignor.)
Gay, Frazer W., Newark, N. J. Heat transfer means for electrical apparatus. 1,761,387; June 3.
Gaynor, Arthur C., Stratford, Conn. Snap switch. 1,762,016; June 3.
Gaynor, Arthur C., Stratford, Conn. Snap switch. 1,762,093; June 3.
Gebhardt, William, assignor to G. A. Duerler Manufacturing Company, San Antonio, Tex. Feeding mechanism for nut-cracking machines. 1,761,822; June 3.
Gebhardt, William, assignor to G. A. Duerler Manufacturing Company, San Antonio, Tex. Nut-cracking machine. 1,761,823; June 3.
Geisel, Karl, Levallois-Perret, France, assignor, by mesne assignments, to Aluminum Solder Corporation of America, New York, N. Y. Composition for soldering metals. 1,761,116; June 3.
Geistert, Albert G. (See Hunt, O. E., and Geistert.)
General Aniline Works, Inc. (See Doser, A., Mauthe, and Thauss, assignors.)
General Aniline Works, Inc. (See Hoffa, E., and Thoma, assignors.)
General Aniline Works, Inc. (See Kahn, Myrtil, assignor.)
General Aniline Works, Inc. (See Krünzlein, G., Heyse, and Ochwat, assignors.)
General Aniline Works, Inc. (See Laska, L., and Zitscher, assignors.)
General Aniline Works, Inc. (See Wagner, H., Brune, Hessenland, Hoffa, Müller, and Heyna, assignors.)
General Electric Company. (See Alexander, Johann, assignor.)
General Electric Company. (See Carpenter, Charles F., assignor.)
General Electric Company. (See Carpenter, C. F., and Bohn, assignors.)
General Electric Company. (See Carter, Emmett F., assignor.)
General Electric Company. (See Freiburghouse, Edward H., assignor.)
General Electric Company. (See Hamlyn, W. P., and Hunter, assignors.)
General Electric Company. (See Hardy, A. C., and Cunningham, assignors.)
General Electric Company. (See Köchling, Wilhelm, assignor.)
General Electric Company. (See Nordlander, Birger W., assignor.)
General Electric Company. (See Runner, Claude C., assignor.)
General Electric Company. (See Selz, Walter, assignor.)
General Electric Company. (See Trombetta, Panfilo, assignor.)
General Electric Company. (See Van Der Bogart, James, assignor.)
General Electric Company. (See Witherow, Harry M., assignor.)
General Motors Corporation. (See Armitage, Sylvester, assignor.)
General Motors Corporation. (See Arnold, Charles F., assignor.)
General Motors Corporation. (See Blackmore, Lloyd, assignor.)
General Motors Corporation. (See Bolles, J. H., and Pearson, assignors.)
General Motors Corporation. (See Chalmers, Raymond W., assignor.)
General Motors Corporation. (See Cram, Leroy V., assignor.)
General Motors Corporation. (See Crawford, James M., assignor.)
General Motors Corporation. (See Drew, Harold, assignor.)
General Motors Corporation. (See Frehse, Albert W., assignor.)
General Motors Corporation. (See Green, John T., assignor.)
General Motors Corporation. (See Hebner, Arthur, assignor.)
General Motors Corporation. (See Hunt, O. E., and Geistert, assignors.)
General Motors Corporation. (See Hutchinson, Roland V., assignor.)
General Motors Corporation. (See Lampman, George W., assignor.)
General Motors Corporation. (See Landers, Charles H., assignor.)
General Motors Corporation. (See Main, Frank L., assignor.)
General Motors Corporation. (See McCuen, Charles L., assignor.)
General Motors Corporation. (See Olivier, Herman C., assignor.)
General Motors Corporation. (See Schwager, Henry A., assignor.)
General Motors Corporation. (See Schwarze, Herman, assignor.)
General Motors Corporation. (See Spencer, Louis M., assignor.)
General Motors Corporation. (See Strickland, William R., assignor.)
General Motors Corporation. (See Taylor, Paul B., assignor.)
General Motors Corporation. (See Wood, J. G., and Alfes, assignors.)
General Motors Radio Corporation. (See Marvel, Orin E., assignor.)
General Motors Research Corporation. (See Almen, J. O., and Rasmussen, assignors.)
General Motors Research Corporation. (See Blackmore, Lloyd, assignor.)
General Motors Research Corporation. (See Falge, Robert N., assignor.)
General Motors Research Corporation. (See Hunt, John H., assignor.)
General Motors Research Corporation. (See Hutchinson, Roland V., assignor.)
General Motors Research Corporation. (See Ormsby, D. D., and Swinscoe, assignors.)
General Motors Research Corporation. (See Schluchter, Alfred W., assignor.)
General Motors Research Corporation. (See Short, Charles R., assignor.)
General Motors Research Corporation. (See Shutts, Leroy W., assignor.)
General Motors Research Corporation. (See Summers, C. E., and Lampman, assignors.)
General Motors Research Corporation. (See Van Degrift, Thomas C., assignor.)
General Motors Research Corporation. (See Williams, Harry M., assignor.)
General Motors Research Corporation. (See Wirshing, R. J., and Faas, assignors.)
General Talking Picture Corporation. (See de Forest, Lee, assignor.)

General Tire & Rubber Company, The. (See Denmire, Harold A., assignor.)
Gest, Guion M., Noroton, Conn. Underground conduit. 1,761,075; June 3.
Getchell, Benjamin E., assignor to The Trumbull Electric Manufacturing Company, Plainville, Conn. Safety switch. 1,761,117; June 3.
Geyer, Harvey D., assignor to The Inland Manufacturing Company, Dayton, Ohio. Refrigerator cabinet. 1,761,013; June 3.
Geyer, Harvey D., assignor to The Inland Manufacturing Company, Dayton, Ohio. Steering wheel. 1,761,525; June 3.
Geyer, Harvey D., assignor to The Inland Manufacturing Company, Dayton, Ohio. Shock-absorbing pitman arm. 1,761,526; June 3.
Geyer, Harvey D., assignor to The Inland Manufacturing Company, Dayton, Ohio. Shock-absorbing pitman arm. 1,761,527; June 3.
Gibbs, Robert C. (See King, C. G., and Gibbs.)
Gibson, John W., Oakland, Calif. Cigarette mouthpiece. 1,761,205; June 3.
Gilburg, Roy O., assignor to Marathon Electric Mfg. Co., Wausau, Wis. Short-circuiting switch. 1,761,786; June 3.
Glidea, Frank S. (See Pelton, William F., assignor.)
Gillett, Harry S., deceased; I. L. Gillett, executrix, assignor to E. J. Elting, Chicago, Ill. Tube. 1,761,034; June 3.
Gillett, Ida L., executrix. (See Gillett, Harry S.)
Gillis, Isidor. (See Projahn, Karl F., assignor.)
Ginther, Howard E., assignor to Bastian-Morley Co., La Porte, Ind. Operating mechanism. 1,762,120; June 3.
Gipe, John C., assignor to Libbey-Owens Glass Company, Toledo, Ohio. Sheet-glass-surfacing table. 1,761,720; June 3.
Gipe, John C., assignor to Libbey-Owens Glass Company, Toledo, Ohio. Valve. 1,761,721; June 3.
Glahe, Fred, Chicago, Ill., assignor to A. G. Spalding & Bros., New York, N. Y. Shoulder pad. 1,761,206; June 3.
Gleaner Combine Harvester Corporation, The. (See Pierson, Torvald N., assignor.)
Glynn, Edwin A., assignor to The Super Mould Co., Lodi, Calif. Tire-retreading mold. 1,760,944; June 3.
Goebel, George H., Clayton, Mo. Mixing device. 1,761,473; June 3.
Goepel, Margaret, New York, N. Y. Bill bank. 1,760,901; June 3.
Goerz, C. P., optische Anstalt Aktiengesellschaft, Akciova Spolecnost K. P. Goerz opticky ustav. (See von Hofe, Christian, assignor.)
Goetz, Joseph F., Dayton, assignor to The Columbia Mixers Corporation, Hamilton, Ohio. Mixing apparatus. 1,762,094; June 3.
Goldberg, Maximilian M., assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio. Auditing machine. 1,761,662; June 3.
Goldsmith, Alfred N., New York, N. Y., assignor to Radio Corporation of America. Radio signaling system. 1,761,118; June 3.
Good Inventions Co. (See Good, John, assignor.)
Good, John, Garden City, assignor to Good Inventions Co., New York, N. Y. Engine-heating device. 1,761,388; June 3.
Goodnow, Harry L., Chicago, Ill. Combined cigarette case and lighter. 1,761,985; June 3.
Goodrich, B. F., Company, The. (See Fawn, Richard E., assignor.)
Goodrich, Chauncey M., Windsor, Ontario, Canada. Monorail structure. 1,761,824; June 3.
Goodrich, Robert J. (See Gubelmann, I., Goodrich, and Howell.)
Gordenstein, Harry, Springfield, Mass. Dry stencil. 1,761,722; June 3.
Gordon, Albert A., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Thread holder for weft-replenishing looms. 1,760,982; June 3.
Gordon, Albert A., and I. H. Verry, assignor to Crompton & Knowles Loom Works, Worcester, Mass. Picking motion for looms. 1,760,981; June 3.
Gordon, Chester S., Boonton, and J. T. Lowe, Newark, N. J., assignor to American Telephone and Telegraph Company. Insulator. 1,760,983; June 3.
Gordon Hollon Blast & Grate Company. (See Tower, Francis E., assignor.)
Gorman, Thomas J., jr., Newark, N. J. Sealing can-containing cartons. 1,761,787; June 3.
Gorski, Michael, assignor to Brinsmere Boat & Cycle Company, Milwaukee, Wis. Water vehicle. 1,761,884; June 3.
Gould, Alonzo C., Everett, Wash. Combination bed davenport. 1,761,261; June 3.
Gould Coupler Company, The. (See Barrows, Donald S., assignor.)
Gould Coupler Company, The. (See Richards, Willard F., assignor.)
Gouldbourn, Joseph, Leicester, England, assignor to United Shoe Machinery Corporation, Paterson, N. J. Nail. 1,761,119; June 3.
Govers, Francis X., Lawrenceville, Ill. Condenser. 1,761,035; June 3.
Graham, Louis A., Evanston, and C. L. Low, assignors of one-third to G. E. Wallis, Chicago, Ill. Composition sign. 1,761,120; June 3.
Grand Rapids Brass Company. (See Roedding, Gordon E., assignor.)
Grattan, David, Los Angeles, Calif. Lubricant-distributing apparatus. 1,760,902; June 3.
Graves, Benjamin P., Edgewood, and W. F. Smith, assignors to Brown & Sharpe Manufacturing Company, Providence, R. I. Tripping mechanism. 1,761,121; June 3.
Graves, Carl O., Cincinnati, Ohio. Plug connecter. 1,761,335; June 3.
Gray, Milton C., Spokane, Wash. Boring machine. 1,761,663; June 3.
Gray Processes Corporation, The. (See Miller, Walter, assignor.)
Gray, William C., et al. (See Zim, Jesse G., assignor.)
Green, John T., assignor to General Motors Corporation, Detroit, Mich. Striping fixture. 1,761,913; June 3.
Green, Jonathan S., et al., trustees. (See Magidson, Frank, assignor.)
Green, M. E., Manufacturing Co. (See Scott, Charlie B., assignor.)
Greene, Herman L. (See Taylor, C., and Greene.)
Greenfield, Benjamin, Bartlesville, Okla., assignor, by mesne assignments, to Doherty Research Company, New York, N. Y. Fluid meter. 1,761,295; June 3.
Greenwald, Harold A., assignor to T. C. Whitehead, Detroit, Mich. Pump for refrigerating apparatus. 1,761,036; June 3.
Greer, Edward R., Minneapolis, Minn. Sprinkling apparatus. 1,761,723; June 3.
Greist, Raymond L. (See Hamm, W. S., and Greist.)
Grenzer, Ferdinand, Cannstatt-Stuttgart, assignor to Maschinenfabrik Esslingen, Esslingen, Germany. Manufacture of squirrel-edge rotors for electric machines. 1,762,017; June 3.
Greve, Edgar E., Bellevue, assignor to Oil Well Supply Company, Pittsburgh, Pa. Eccentric strap construction for pumping powers. 1,761,389; June 3.
Greve, Edgar E., Bellevue, assignor to Oil Well Supply Company, Pittsburgh, Pa. Sheave. 1,761,825; June 3.
Greve, Edgar E., Bellevue, assignor to Oil Well Supply Company, Pittsburgh, Pa. Swivel for rotary drilling apparatus. 1,761,826; June 3.
Greve, Edgar E., Bellevue, assignor to Oil Well Supply Company, Pittsburgh, Pa. Cable and brake-drum construction. 1,761,827; June 3.
Grigsby, Edward S., Lodi, Calif. Tube evacuator. 1,760,945; June 3.
Griscom Russell Company, The. (See Jones, Russell C., assignor.)
Griswold, Walter R., assignor to Packard Motor Car Company, Detroit, Mich. Internal-combustion engine. 1,761,474; June 3.
Groeneveld, Yme B. F. J. (See Dijksterhuis, P. R., and Groeneveld.)
Groetken, Joseph J., Aurora, Ill. Liquid-dispensing apparatus. 1,761,885; June 3.
Groff, Joseph C., Allentown, Pa. Valve-lift-control device for fuel-injecting valves. 1,761,122; June 3.
Gross, Arthur R., assignor, by mesne assignments, to Trussbilt Steel Doors, Inc., St. Paul, Minn. Hollow sheet-metal unit. 1,761,037; June 3.
Gross, Emil, Wauwatosa, assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Hydraulic machine. 1,762,121; June 3.
Grothe, Arthur A. (See Wantz, J. B., and Grothe.)
Grummer, Joseph H., assignor of one-half to R. W. McPherson, Cleveland, Ohio. Ice-cream dipper. 1,761,986; June 3.
Grupe, William F., Rutherford, N. J., assignor to Armstrong Cork Company, Lancaster, Pa. Composite cork body, sheet, block, etc., and producing same. 1,762,138; June 3.
Gruver, Perry F., Amarillo, Tex. Cylinder and piston. 1,761,123; June 3.
Gubelmann, Ivan, R. J. Goodrich, and E. T. Howell, South Milwaukee, assignors to The Newport Company, Carrollville, Wis. Preparing coloring matter of the dibenzanthrone series. 1,761,624; June 3.
Gubelmann, Ivan, H. J. Weiland, and O. Stallmann, South Milwaukee, assignors to The Newport Company, Carrollville, Wis. Side chain chlorination products of meta nitrotoluene and making the same. 1,761,475; June 3.
Guertin, Augustus E., Belmont, Mass. Punch. 1,761,207; June 3.
Guggenheim, Paul, assignor to Philadelphia Metal Drying Form Company, Philadelphia, Pa. Hosiery-drying-form machine. 1,761,296; June 3.
Guide Lamp Corporation. (See Schwarze, Herman, assignor.)
Guiden, Nicholas C., assignor to J. H. Sessions & Son, Bristol, Conn. Apparatus for bundling scrap stock. 1,761,124; June 3.
Gumeiner, Samuel, assignor to H. Sokolow, Brooklyn, N. Y. Pocketbook. 1,761,390; June 3.
Guth, Jacob, St. Louis, Mo. Traction-wheel-cleaning device. 1,761,262; June 3.
Guth, John A., Covington, Ky. Attachment for dust collectors. 1,761,336; June 3.
Gypsy Oil Company. (See Porter, Hollis P., assignor.)
Haack, Frank F. (See Redmond, J. P., and Haack.)

Hahnemann, Walter. (See Schmidt, K., and Hahnemann.)
Haist, Foster A., assignor to The Keystone Mfg. Co., Buffalo, N. Y. Making ratchet wrenches. 1,761,263; June 3.
Hall, Edwin T., Boston, Mass., assignor to Sullivan Machinery Company. Drilling mechanism. 1,761,337; June 3.
Hall, Joe L., et al. (See Foreman, Dave, assignor.)
Halle & Co. Aktiengesellschaft. (See Schmidt, M. P., Zahn, and Krieger, assignors.)
Hallene, Clarence W. (See Hunt, W. P., Hallene, and Brandenburg.)
Hamilton, George W., Evanston, Ill. Wood-pole-protective means. 1,761,076; June 3.
Hamilton, Harold S., Phoenix, Ariz., assignor to American Telephone and Telegraph Company. Transoceanic radio telephone system. 1,760,984; June 3.
Hamilton Standard Propeller Corporation, The. (See McCauley, Ernest G., assignor.)
Hamlyn, William P., Acton, London, and Marcus C. I. Hunter, Kew Gardens, England, assignors to General Electric Company. Electric-switch-operating mechanism. 1,761,724; June 3.
Hamm, William S., Elkhart, Ind., and R. L. Greist, assignors to The Adlake Company, Chicago, Ill. Sash guide. 1,761,297; June 3.
Hammerstein, Arthur, New York, N. Y. Self-acting closure for receptacles. 1,760,946; June 3.
Hampden, Wellesley R., Readville, Oreg., assignor of one-half to W. F. Woolard, Wauwatosa, Wis. Washing machine. 1,761,338; June 3.
Hamwi, Ernest, St. Louis, Mo. Edible pastry cup. Des. 81,276; June 3.
Hamwi, Ernest, St. Louis, Mo. Edible pastry cup. Des. 81,277; June 3.
Hamwi, Ernest, St. Louis, Mo. Edible pastry cup. Des. 81,278; June 3.
Hanrahan, John C., Los Angeles, Calif. Water-tube steam boiler. 1,762,136; June 3.
Hans, Edmund E., Detroit, assignor to A C Spark Plug Company, Flint, Mich. Instrument panel. 1,761,914; June 3.
Hansen, Arnold C., jr. (See Boll, L. P., and Hansen.)
Hansen Canning Machinery Corporation. (See Hansen, Oswald H., assignor.)
Hansen, Earl J. (See Smith, J. A., and Hansen.)
Hansen, Oswald H., assignor to Hansen Canning Machinery Corporation, Cedarburg, Wis. Apparatus for grading granular material. 1,761,788; June 3.
Hardy, Arthur C., Wellesley, Mass., and F. W. Cunningham, Stamford, Conn., assignors to General Electric Company. Method of and apparatus for producing standard illumination. 1,761,725; June 3.
Harley-Davidson Motor Company. (See Harley, William S., assignor.)
Harley, William S., assignor to Harley-Davidson Motor Company, Milwaukee, Wis. Pump. 1,761,038; June 3.
Harmon, Guy. (See Skillman, E., and Harmon.)
Harris, Burton S., and H. M. Johnston, Toronto, Ontario, assignors to Massey-Harris Company, Limited, Toronto, Canada. Reaper thrasher. 1,761,264; June 3.
Harris, Burton S., and H. M. Johnston, Toronto, Ontario, assignors to Massey-Harris Company, Toronto, Canada. Reaper thrasher. 1,761,265; June 3.
Harris, Clara F., Kansas City, Mo. Sanitary shield for toilet seats. 1,761,391; June 3.
Harris, Frank, Baltimore, Md., assignor to Draper Corporation, Hopedale, Mass. Thread-parting mechanism for filling-replenishing looms. 1,761,625; June 3.
Harris, Harry G., Los Angeles, Calif. Nose protector. 1,761,664; June 3.
Harris, Herbert H., Woodville, W. T. Whittingslowe, New Mile End, and S. J. Jolly, Woodville West, South Australia, Australia. Lining gun nozzle. 1,762,058; June 3.
Harris, Ora E., Kearney, Nebr. Combination cream and milk stirrer and sampler. 1,761,298; June 3.
Harris, William J., jr., assignor to The Surface Combustion Company, Inc., Toledo, Ohio. Regulating apparatus for gas-burning equipment. 1,762,133; June 3.
Harrison, Arthur P., Yonkers, N. Y., assignor, by mesne assignments, to Standard Brands Incorporated, Dover, Del. Manufacture of yeast. 1,761,789; June 3.
Hartford-Empire Company. (See Tucker, O. M., and Reeves, assignors.)
Harvey, Roy W., Chicago, Ill. High and low audio frequency amplification control. 1,761,626; June 3.
Harwood, Mark P., and C. W. McKinley, assignors to A C Spark Plug Company, Flint, Mich. Oil filter. 1,761,915; June 3.
Hase, Rudolf, Hanover, Germany. Device for measuring the temperature of hot fluids. 1,761,892; June 3.
Haseltine, Stacy B., assignor, by mesne assignments, to W. H. Miner, Inc., Chicago, Ill. Door-operating mechanism. 1,761,208; June 3.
Hasenstab, Bernhard, assignor to Markel Electric Products, Inc., Buffalo, N. Y. Wall bracket for an electric lamp. Des. 81,279; June 3.
Hasenstab, Bernhard, assignor to Markel Electric Products, Inc., Buffalo, N. Y. Wall bracket for an electric lamp. Des. 81,280; June 3.
Hasenstab, Bernhard, assignor to Markel Electric Products, Inc., Buffalo, N. Y. Wall bracket for an electric lamp. Des. 81,281; June 3.
Hasenstab, Bernhard, assignor to Markel Electric Products Inc., Buffalo, N. Y. Electric-light fixture. Des. 81,282; June 3.
Hasenstab, Bernhard, assignor to Markel Electric Products, Inc., Buffalo, N. Y. Electric-light fixture. Des. 81,283; June 3.
Haspel, Harry S., et al. (See Haspel, Joseph, assignor.)
Haspel, Joseph, assignor of one-third to H. S. Haspel and one-third to W. Haspel, New Orleans, La. Garment sleeve. 1,761,886; June 3.
Haspel, William, et al. (See Haspel, Joseph, assignor.)
Hathaway, Starke R., Athens, Ohio. Apparatus for measuring psychogalvanic responses. 1,761,476; June 3.
Haubert, Leo, assignor of one-third to J. C. Bennett and one-third to J. A. Wolfe, Tulsa, Okla. Power-delivering attachment for tractors. 1,761,828; June 3.
Hauser, William C., Forest Park, Ill. Closure plug. 1,761,339; June 3.
Havens, Homer M., Columbus, Ohio, assignor to The Seagrave Company, Columbus, Ohio. Truck ladder. 1,761,726; June 3.
Haynes Stellite Company. (See Smith, Edward F., assignor.)
Hazel-Atlas Glass Co. (See Kirkpatrick, John, assignor.)
Hazel-Atlas Glass Co. (See Stenhouse, Thomas, assignor.)
Hazeltine, Reginald, Chicopee Falls, Mass. Golf-practice apparatus. 1,761,039; June 3.
Healey, William J., Bloomfield, N. J., assignor to Westinghouse Electric and Manufacturing Company. Graphic instrument. 1,760,947; June 3.
Habner, Arthur, Pontiac, assignor to General Motors Corporation, Detroit, Mich. Tire carrier. 1,761,916; June 3.
Hecker, Ernst, Milwaukee, Wis. Apparatus for processing and cooking dried fruit. 1,761,727; June 3.
Heckman, Homer H., Detroit, Mich. Metallic electrode holder. 1,761,728; June 3.
Heerey, Bernard, et al. (See Campbell, Malcolm A., assignor.)
Heinemann, Otto, Brooklyn, N. Y. Electrically-heated boot. 1,761,829; June 3.
Heinzmann, Albert O. (See MacLean, J. H., and Heinzmann.)
Helsey, A. H., & Company. (See Helsey, Edgar W., assignor.)
Helsey, Edgar W., assignor to A. H. Helsey & Company, Newark, Ohio. Holder for candles. 1,761,299; June 3.
Helgeby, Ralph O., assignor to A C Spark Plug Company, Flint, Mich. Ammeter. 1,761,917; June 3.
Helgeby, Ralph O., assignor to A C Spark Plug Company, Flint, Mich. Location and design of a magnet for speedometers. 1,761,918; June 3.
Hellvik, Rasmus R., New York, and S. Perla, Brooklyn, N. Y.; said Hellvik assignor to said Perla. Lighting fixture. Des. 81,284; June 3.
Hemings, Albin J., assignor to Powers Regulator Company, Chicago, Ill. Thermostatic regulator. 1,761,300; June 3.
Hendey Machine Company, The. (See Knight, George H., assignor.)
Hendrickson, Robert O. and C. B. Larsen, assignors to J. I. Case Company, Racine, Wis. Air cleaner for internal-combustion engines. 1,761,014; June 3.
Henkel, Frederick, Los Angeles, Calif. Sprinkler head. 1,760,903; June 3.
Herrmann, Paul E., assignor to Herrmann Supply Company Inc., New York, N. Y. Hair clamp. 1,761,830; June 3.
Herrmann Supply Company Inc. (See Herrmann, Paul E., assignor.)
Herthel, Eugene C., Chicago, Ill., assignor to Sinclair Refining Company, New York, N. Y. Cracking hydrocarbons. 1,761,340; June 3.
Herthel, Eugene C., Chicago, Ill., assignor to Sinclair Refining Company, New York, N. Y. Manufacture of acid extracts, alcohols, and the like from gas or vapor mixtures. 1,761,341; June 3.
Hesseniand, Max. (See Wagner, H., Brune, Hesseniand, Hoffa, Müller, and Heyna.)
Heyna, Hans. (See Wagner, H., Brune, Hesseniand, Hoffa, Müller, and Heyna.)
Heyse, Max. (See Kränzlein, G., Hayse, and Ochwat.)
Hibbard, Charles T., assignor to Electric Machinery Manufacturing Company, Minneapolis, Minn. Electrically-operated valve. Re17,689; June 3.
Hicks, Harold A., Detroit, assignor to Ford Motor Company, Dearborn, Mich. Device for cooling aircraft engines. 1,761,560; June 3.
Hildebrand, Reinhard, Webster Groves, Mo. Combined internal and external combustion engine. 1,761,561; June 3.
Hill, Midgley W., Flushing, N. Y. Information device for automobiles. 1,761,790; June 3.
Hillman Syndicate, Limited, The. (See Hillmann, Hans, assignor.)
Hillmann, Hans, Dresden-Strehlen, Germany, assignor to The Hillman Syndicate, Limited, London, England. Glass-blowing machine. 1,761,665; June 3.
Hine, Charles F., San Francisco, Calif. Material classifier. 1,761,627; June 3.
Hinnekens, Florent, Paterson, assignor to Van Vlaanderen Machine Company, Paterson, N. J. Dyeing machine. 1,761,562; June 3.

Hinnekens, Florent, assignor to Van Vlaanderen Machine Company, Paterson, N. J. Apparatus for treating fabrics. 1,761,563; June 3.
Hinternesch, Herman D., Baltimore, Md. Ear trumpet. 1,761,666; June 3.
Hi-Power Manufacturing Company. (See Van Etten, William V., assignor.)
Hitner, Harry F., Oakmont, Pa., assignor to Pittsburgh Plate Glass Company. Apparatus for making sheet glass. 1,761,342; June 3.
Hixson, Arthur W., et al. (See Balls, Arnold K., assignor.)
Hoe, Robert, Hyde Park, N. Y. Washing apparatus. 1,761,564; June 3.
Hoegger, Joseph A., Jersey City, N. J. Shaving mirror. 1,761,393; June 3.
Hoerr, Louis A., assignor to Railway Devices Company, St. Louis, Mo. Hand brake. 1,761,209; June 3.
Hof, Wilhelm, et al. (See Lüdorf, Gustav, assignor.)
Hoffa, Erwin. (See Wagner, H., Brune, Hesseniand, Hoffa, Müller, and Heyna.)
Hoffa, Erwin, and E. Thoma, Hochst-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Chlorine-substitution products of 4-nitro-1.3-dimethylbenzone and preparing them. 1,762,018; June 3.
Holderness, John, Chicago, Ill. Box-car door. 1,761,301; June 3.
Holton, Frank, & Company. (See Charlton, Harry J., assignor.)
Holzapfel, Albert C., New York, N. Y. Protecting the interiors of oil-cracking retorts. 1,761,343; June 3.
Homann, Albert, Pittsburgh, Pa. Multiple propeller drive for airplanes. 1,761,077; June 3.
Hooper, Ted F., assignor to The Miller Rubber Company, Akron, Ohio. Ornamented rubber article and making same. 1,761,443; June 3.
Hopkins, Robert C., Alliance, Ohio. Recuperative oil burner. 1,716,628; June 3.
Hormes, William T., Baltimore, Md. Shoe shelving. 1,761,667; June 3.
Hough, Clinton W., Boonville, N. Y., assignor, by mesne assignments, to Federal Telegraph Company. Piezo-electric phonograph pick-up. 1,761,831; June 3.
House, Frank R., Baldwin Harbor, Long Island, N. Y., assignor, by mesne assignments, to Sperry Gyroscope Company, Inc. Searchlight. 1,761,668; June 3.
Houston, Salem W., Pittsburgh, Pa. Door holder. 1,762,095; June 3.
Howard, Charles O., Columbus, and F. M. Blair, Newark, Ohio. Tractor. 1,761,669; June 3.
Howarth, Harry A. S., Philadelphia, assignor to Kingsbury Machine Works, Inc., Philadelphia, Pa. Bearing. 1,760,904; June 3.
Howell, Edward T. (See Gubelmann, I., Goodrich, and Howell.)
Howland, Thomas J., Long Branch, N. J. Bathing cap. 1,761,302; June 3.
Huber, John, Cincinnati, Ohio. Electrical-appliance connection. 1,761,344; June 3.
Hudson Coal Company, The. (See Cook, T. R., and Smith, assignors.)
Huff, Walter, Harwood, Tex. Planter. 1,761,701; June 3.
Hughes, Charles R., Altoona, Pa. Mining machine. 1,761,670; June 3.
Hughes, Leonard, assignor of one-third to B. V. Zillman, St. Louis, Mo. Method for photogravures. 1,761,125; June 3.
Hull, Harry B., Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation. Refrigerating apparatus. 1,761,040; June 3.
Hull, Lewis M., Mountain Lakes, assignor to Radio Frequency Laboratories, Incorporated, Boonton, N. J. Apparatus for amplifying electric oscillations. 1,760,872; June 3.
Hull, Samuel P. (See Lundy, B. A., and Hull.)
Hunt, Howard M., Huntington Park, assignor to Smoot-Holman Co., Inglewood, Calif. Combination drip pan and baffle member for refrigerating cases. 1,761,629; June 3.
Hunt, John H., assignor to General Motors Research Corporation, Detroit, Mich. Reflector. 1,761,919; June 3.
Hunt, Ormond E., and A. G. Geistert, assignors to General Motors Corporation, Detroit, Mich. Truck-tire carrier. 1,761,920; June 3.
Hunt, Wilson P., C. W. Hallene, and S. L. Brandenburg, assignors to Moline Tool Company, Moline, Ill. Grinding machine. 1,761,126; June 3.
Hunter, David E., assignor to Shaw-Walker Company, Muskegon, Mich. Drawer construction for filing cabinets. 1,761,303; June 3.
Hunter, Marcus C. I. (See Hamlyn, W. P., and Hunter.)
Huntington, Leland W., Oakland, Calif. Invalid table. Des. 81,285; June 3.
Husted, Norris C., Niles, Ohio. Secondary rack. 1,761,671; June 3.
Hutchins, William H., assignor, by mesne assignments, to North East Appliance Corporation, Rochester, N. Y. Electric ignition apparatus. 1,761,015; June 3.
Hutchinson, Roland V., Lansing, assignor to General Motors Research Corporation, Detroit, Mich. Supercharger drive. 1,761,921; June 3.
Hutchinson, Roland V., Lansing, assignor to General Motors Corporation, Detroit, Mich. Worm-gear axle. 1,761,922; June 3.
I. G. Farbenindustrie Aktiengesellschaft. (See Meiser, Wilhelm, assignor.)
Ice Cream Smack Corporation. (See Myers, Wilson R., assignor.)
Ingersoll-Rand Company. (See Jimerson, Francis A., assignor.)
Ingersoll-Rand Company. (See Lear, Earl B., assignor.)
Ingersoll-Rand Company. (See Metzgar, Chester W., assignor.)
Inland Manufacturing Company, The. (See Geyer, Harvey D., assignor.)
International Business Machines Corporation. (See Peirce, John R., assignor.)
Isackson, Walter E., Renton, Wash. Auto light. 1,761,345; June 3.
Jacobs Brothers Co., The. (See Dollack, Charles, assignor.)
Jacobus, Edward, Newark, N. J. Radiator vent valve. 1,761,394; June 3.
Jacques, Raynaldo P., Woonsocket, R. I., assignor to Adams Industries, Inc., New York, N. Y. Grease gun. 1,761,127; June 3.
Jaeger, Max, assignor to Anchor Cap and Closure Corporation, Long Island City, N. Y. Glass machine. 1,761,792; June 3.
Jaenichen, Louis, Springfield Township, Oakland County, assignor to The Standard Computing Scale Company, Detroit, Mich. Counting scale. 1,761,210; June 3.
Jandl, Mary K., Marble Rock, Iowa. Corncrib. 1,762,019; June 3.
Jeffrey Manufacturing Company, The. (See Liggett, William K., assignor.)
Jeffrey Manufacturing Company, The. (See Van Slyke, Frederick E., assignor.)
Jelbart, Thomas, Ballarat, Victoria, Australia. Reaper thrasher and like harvesting machine. 1,761,346; June 3.
Jennings, Melvin O., Lexington, assignor to H. H. Beckwith, Brookline, Mass. Shoe heater. 1,760,905; June 3.
Jenizen, George H., Jersey City, N. J. Clothespin. 1,761,630; June 3.
Jimerson, Francis A., Athens, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Spring handle for percussive tools. 1,760,985; June 3.
Johansson, Johan P., Enkoping, Sweden. Adjustable support for electric lamps. 1,761,832; June 3.
Johnson, Carl W. (See Shott, C. F., Luce, and Johnson.)
Johnson, Chester F., Detroit, Mich. Carburetor. 1,761,729; June 3.
Johnson, Elmer L., Celoron, N. Y. Combination pen holder and ash tray. Des. 81,286; June 3.
Johnson, Horace, and W. A. Ramsay, Honolulu, Hawaii. Cane cutting and delivering mechanism. 1,761,987; June 3.
Johnson, John E., Litchfield, Minn. Mixing machine for viscous and granular materials. 1,760,906; June 3.
Johnson, Marvin. (See Millis, P. A., and Johnson.)
Johnson, Oscar, Glendale, Calif. Mechanical movement. 1,761,128; June 3.
Johnston, Charles S., and J. R. Alcott, Chicago, Ill. Draft-gear key retainer. 1,761,266; June 3.
Johnston, Howard M. (See Harris, B. S., and Johnston.)
Jolly, Samuel J. (See Harris, H. H., Whittingslowe, and Jolly.)
Jones, Charles W., Glen Ridge, N. J., assignor to Sons-Cunningham Reed & Rattan Co., Inc., New York, N. Y. Chair. Des. 81,287; June 3.
Jones, Edward P., New York, N. Y. Aircraft construction. 1,761,444; June 3.
Jones, George S., Christchurch, New Zealand. Controlling the discharge of liquids from containers. 1,762,059; June 3.
Jones, James D., Sault Ste. Marie, Ontario, Canada, assignor to E. Gathmann, Baltimore, Md. Manufacture of rails and tie plates. 1,761,672; June 3.
Jones, James E., N. A. Newdick, and W. E. Moody, Columbus, Ohio, said Newdick and said Moody assignors to said Jones. Loading machines. 1,762,060; June 3.
Jones, Lester L., Oradell, N. J., and J. Yolles, Brooklyn, assignors to Technidyne Corporation, New York, N. Y. Antenna tuning apparatus. 1,761,211; June 3.
Jones, Maldwyn E., Indianapolis, Ind. Speedometer drive for motor cycles. 1,761,833; June 3.
Jones, Russell C., Bronxville, assignor to The Griscom Russell Company, New York, N. Y. Bow-tube film-type evaporator. 1,760,907; June 3.
Jones, Willard E., Highland Park, Philadelphia, Pa. Dolly. Des. 81,288; June 3.
Jones, William A., West New Brighton, N. Y., assignor to The Babcock & Wilcox Company, Bayonne, N. J. Economizer. 1,762,134; June 3.
Jordahl, Anders, New York, N. Y. Air filter. 1,760,986; June 3.
Junkers, Hugo, Dessau, Germany. Upsetting sheet metal. 1,761,887; June 3.
Junkers, Hugo, Dessau, Germany. Upsetting sheet metal. 1,761,888; June 3.
Junkers, Hugo, Dessau, Germany. Discharging insecticides from aircraft. 1,761,889; June 3.
Jurgens, Emil G., and H. K. Becker, assignors to Peters Machinery Company, Chicago, Ill. Carton-blank separating and feeding mechanism. 1,761,794; June 3.
Jurgensen, August P., assignor to Concentric Air Cells Automatic Company, Philadelphia, Pa. Air-cell pipe covering. 1,761,793; June 3.

Juvenile Wood Products, Inc. (See Van Arnam, George H., assignor.)
Kaempf, Emil, and D. P. Dalzell, Aldwych, London, England, assignors to Western Electric Company, Incorporated, New York, N. Y. Cable. 1,761,565; June 3.
Kahle, John R., Oil City, Pa. Can spout. 1,761,477; June 3.
Kahn, Myrtil, Cologne, Germany, assignor to General Aniline Works, Inc., New York, N. Y. New azo dyestuffs. 1,762,020; June 3.
Kalada, Gustav, Pittsburgh, Pa. Account book. 1,761,078; June 3.
Kalman Steel Company. (See White, William E., assignor.)
Kamrath, Herbert G., assignor to A C Spark Plug Company, Flint, Mich. Air cleaner. 1,761,923; June 3.
Kamrath, Herbert G., assignor to A C Spark Plug Company, Flint, Mich. Oil filter. 1,761,924; June 3.
Kanengeiser, Paul A. (See Keplinger, R. B., and Kanengeiser.)
Karlovitz, Laszló, Budapest, Hungary. Driving gear for motor-driven vehicles. 1,761,478; June 3.
Karmazin, John, East Elmhurst, N. Y. Radiator. 1,761,395; June 3.
Karmazin, John, Detroit, Mich. Pressure valve and condenser. 1,761,396; June 3.
Karmazin, John, Detroit, Mich. Heat exchanger. 1,761,397; June 3.
Karsten, Ben, What Cheer, Iowa. Valve. 1,761,129; June 3.
Kassapian, Vincent, Berlin, assignor to the firm Müller & Grünstein, Elgersburger Feuerzeugfabrik, Elgersburg, Germany. Pyrophoric lighter. 1,762,061; June 3.
Kauffman, Edmund J., Girard, assignor to Valley Mould & Iron Corporation, Hubbard, Ohio. Ingot mold. 1,762,098; June 3.
Kean, Otho V., Providence, R. I. Plaster-board structure. 1,761,730; June 3.
Kelso, William. (See McConway, W., jr., and Kelso.)
Kelso, William, assignor to The McConway & Torley Company, Pittsburgh, Pa. Uncoupling mechanism. 1,761,445; June 3.
Kennedy, John E., Los Angeles, Calif. Pressure gauge for pneumatic tires. 1,761,130; June 3.
Keplinger, Robert B., Canton, Ohio, and P. A. Kanengeiser, Bessemer, Pa., assignors to The Metropolitan Paving Brick Company, Canton, Ohio. Clay texturing and coloring apparatus. 1,761,631; June 3.
Kerr, Harry E., assignor to The Cleveland Gas Burner & Appliance Company, Cleveland, Ohio. Gas burner. 1,761,566; June 3.
Kerr, Howard J., Westfield, N. J., assignor, by mesne assignments, to Fuller Lehigh Company. Furnace wall. 1,761,567; June 3.
Kersten, Jacob, assignor to Kersten Radio Equipment Inc., Kalamazoo, Mich. Sectional form. 1,761,568; June 3.
Kersten Radio Equipment Inc. (See Kersten, Jacob, assignor.)
Kersten, Samuel, Chicago, Ill. Faucet handle. Des. 81,314; June 3.
Kettleborough, Harry J., assignor to H. D. Conkey & Company, Mendota, Ill. Bird cage. Des. 81,289; June 3.
Keystone Mfg. Co., The. (See Halst, Foster A., assignor.)
Kharasch, Morris S., Riverdale, Md. Marking process and material and producing said marking material. 1,761,347; June 3.
Kimball, Andrew L., Detroit, Mich., assignor to The Wheeler-Schebler Carburetor Co., Indianapolis, Ind. Carburetor. 1,761,569; June 3.
Kimbell, Arthur W., Newton Center, Mass. Snap-fastener cap. Des. 81,290; June 3.
Kimbell, Arthur W., Newton Center, Mass. Snap-fastener cap. Des. 81,292; June 3.
King, Clifford G., Barrington, and R. C. Gibbs, East Providence, R. I. Shoe buckle. 1,761,834; June 3.
King, Jesse G., Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation. Refrigerating apparatus. 1,761,041; June 3.
Kingsbury Machine Works, Inc. (See Howarth, Harry A. S., assignor.)
Kirkpatrick, John, Clarksburg, assignor to Hazel-Atlas Glass Co., Wheeling, W. Va. Plate. Des. 81,293; June 3.
Kirschbraun, Lester, Leonia, N. J., assignor, by mesne assignments, to The Patent and Licensing Corporation, Boston, Mass. Roofing element with thickened butt edges and method of making the same. 1,760,873; June 3.
Klages, G. W., & Son, Inc. (See Klages, Norman H., assignor.)
Klages, Norman H., Pittsburgh, Pa., assignor to G. W. Klages & Son, Inc. Grinding machine. 1,760,987; June 3.
Klapper, Max. (See Lasky, Charles assignor.)
Klausner, Edward S. (See Sitzman, A., and Klausner.)
Klein, Mathias, & Sons, Inc. (See Donkel, Mathias, assignor.)
Knight, George H., assignor to The Hendey Machine Company, Torrington, Conn. Unit construction and two-speed driving-gear arrangement for crank-shaping machines. 1,762,062; June 3.
Knight, George H., assignor to The Hendey Machine Company, Torrington, Conn. Mechanical movement. 1,762,063; June 3.
Knight, Julian G., Brooklyn, N. Y. Outlet or junction box. 1,761,398; June 3.
Knopp, Rudolph, Brooklyn, N. Y. Phonograph record and treating same. 1,761,212; June 3.
Knott, Warren E., Grand Rapids, Mich., assignor to Pioneer Pearl Button Company, Poughkeepsie, N. Y. Self-adjusting plug support. 1,761,731; June 3.
Knowlton, Charles E. (See Crompton, R., and Knowlton.)
Knutson, George O. (See McLelland, W. H., and Knutson.)
Kochka, Norbert F., Chicago, Ill. Switch and indicator. 1,761,348; June 3.
Köchling, Wilhelm, Berlin-Waidmannslust, Germany, assignor to General Electric Company. Transformer. 1,761,732; June 3.
Koeck, William, Oshkosh, Wis. Luggage carrier. 1,761,213; June 3.
Koeck, William, Oshkosh, Wis. Luggage carrier. 1,761,214; June 3.
Koehler, Andrew R., Buffalo, N. Y. Plate-stacking mechanism. 1,761,632; June 3.
Koehring Company. (See Robb, John F., assignor.)
Koehring, Roland P., Dayton, Ohio, and C. R. Short, Detroit, Mich., assignors to The Moraine Products Company, Dayton, Ohio. Drying metal powders. 1,761,010; June 3.
Kohr, Robert F., assignor to The Studebaker Corporation, South Bend, Ind. Brake-operating means. 1,760,908; June 3.
Komenak, Albert J., assignor to The Excelsior Hardware Company, Stamford, Conn. Trunk lock. 1,761,570; June 3.
Komow, Albert P. (See Davy, M. J. A., and Komow.)
Koster, Peter J. (See Bindschedler, T. S., and Koster.)
Kozlowski, Leo, St. Paul, Minn. Looper-thread controller for buttonhole-sewing machines. 1,761,349; June 3.
Krake, Foster, Lexington, Ky. Violin-bow hair-adjusting device. 1,761,350; June 3.
Krinzlein, Georg, M. Heyse, and P. Ochwat, Hochst-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Condensation products of the naphthostyril series and preparing the same. 1,762,021; June 3.
Krause, Richard F., Massillon, Ohio. Drip-coffee maker. 1,761,633; June 3.
Kremmling, Otto, Hamersleben, near Oschersleben, Germany. Method of and machine for working pieces of dough. 1,761,399; June 3.
Krieger, Wilhelm. (See Schmidt, M. P., Zahn, and Krieger.)
Kropff, Wilhelm, Berlin-Charlottenburg, Germany, assignor to The National Cash Register Company, Dayton, Ohio. Cash register. 1,761,571; June 3.
Kropff, Wilhelm, Berlin-Charlottenburg, Germany, assignor to The National Cash Register Company, Dayton, Ohio. Cash register. 1,761,572; June 3.
Küch, Karl, et al. (See Lüdorf, Gustav, assignor.)
Kuck, Henry G., assignor to Stuber & Kuck Co., Peoria, Ill. Egg beater. 1,761,634; June 3.
Kupec, William J. (See Chapin, P. P., and Kupec.)
Kupfer, Theodore W., Rochester, N. Y. Key guard. 1,761,131; June 3.
Kupferschmid, Karl. (See Rosin, E. A., and Kupferschmid.)
Kurowski, Alfred G. F., Brooklyn, assignor to Underwood Elliott Fisher Company, New York, N. Y. Typewriting machine. 1,761,795; June 3.
Kutscheid, John J., assignor to Dreis & Krump Manufacturing Co., Chicago, Ill. Holddown for squaring shears. 1,761,351; June 3.
Kuykendall, Aleck G., Grandview, Wash. Apparatus for liquefying solidified honey. 1,761,479; June 3.
Kyle, Robert H., Grandview, Calif. Safety plug. 1,762,064; June 3.
L. C. L. Corporation, The. (See Clarkson, Edwin S., assignor.)
Laabs, William, Milwaukee, Wis., assignor to The Allbright-Nell Company, Chicago, Ill. Rendering process. 1,761,480; June 3.
Lacina, Mertina, administratrix. (See Lacina, Peter W.)
Lacina, Peter W., deceased, by M. Lacina, administratrix, Leney, Saskatchewan, Canada. Flying machine. 1,761,481; June 3.
Lally, John T., Wilmington, Del. Coupling for suction hose. 1,762,005; June 3.
Lambert, Leo J., Salem, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Folding machine and method. 1,761,017; June 3.
Lamm, Francis A., Afton, Okla., assignor to Richards-Wilcox Manufacturing Company, Aurora, Ill. Door hanger. 1,761,215; June 3.
Lampman, George W. (See Summers, C. E., and Lampman.)
Lampman, George W., Pontiac, assignor to General Motors Corporation, Detroit, Mich. Valve-spring retainer. 1,761,925; June 3.
Landers, Charles H., Lansing, assignor to General Motors Corporation, Detroit, Mich. Making bearings. 1,761,926; June 3.
Langer, Julius J., Astoria, N. Y. Automobile lock. 1,761,042; June 3.
Langsner, Adolph, assignor to Eugene Dietzgen Company, Chicago, Ill. Developing apparatus. 1,761,304; June 3.
Lanigan, James A. (See Perry, J. E., and Lanigan.)

Lansing, Raymond P., Montclair, N. J., assignor to Eclipse Machine Company, Elmira, N. Y. Engine starter. 1,760,874; June 3.
Lansing, Raymond P., Montclair, N. J., assignor to Eclipse Machine Company, Elmira, N. Y. Engine starter. 1,760,988; June 3.
Larsen, Carl B. (See Hendrickson, R. O., and Larsen.)
Laska, Lepold, and A. Zitscher, Offenbach-on-the-Main, Germany, assignor to General Aniline Works, Inc., New York, N. Y. Azodyestuffs insoluble in water and making same. 1,762,022; June 3.
Lasky, Charles, assignor of one-half to M. Klapper, St. Louis, Mo. Arch support. 1,761,079; June 3.
La Tessa, Tully, assignor to J. A. Olson Company, Chicago, Ill. Mirror frame. Des. 81,308; June 3.
Laubenthal, Johann, assignor to Felten & Guilleaume Carlswerk Actien-Gesellschaft, Cologne-Mulheim, Germany. Apparatus for manufacturing wire rope. 1,761,482; June 3.
Lauhoff, Henry A., Detroit, Mich. Sprayer for cake bodies. 1,761,132; June 3.
Laursen, Bruno L., Dunedin, Fla., assignor, by mesne assignments, of forty-eight per cent to Clearwater Lumber Company, Incorporated, Clearwater, Fla. Folding seat. 1,761,673; June 3.
Laury, Napoleon A., Rockville Center, assignor to John C. Wiarda & Company, Brooklyn, N. Y. Manganese-compound recovery. 1,761,133; June 3.
Lavoie, Alphonse J., Montreal, Quebec, Canada. Vehicle brake. 1,761,043; June 3.
Layhon, Arthur J., Lowell, assignor of one-half to Reuben Dunsford, Chelmsford, Mass. Wrench. 1,761,988; June 3.
Lear, Arthur F., Brooklyn, assignor to Underwood Elliott Fisher Company, New York, N. Y. Typewriting machine. 1,761,080; June 3.
Lear, Earl B., Phillipsburg, assignor to Ingersoll-Rand Company, Jersey City, N. J. Valve for rock drills. 1,761,134; June 3.
Le Bus, John E., Electra, assignor, by mesne assignments, to O'Donohoe Detachable Blade Drilling Bit Company, Wichita Falls, Tex. Rotary drill. 1,761,216; June 3.
Lechler, Paul. (See Mezger, Robert, assignor.)
Lecocq, Eugène, assignor to Société Générale de Fours a Coke, Systémes Lecôcq Société Anonyme, Brussels, Belgium. Coke oven. 1,761,835; June 3.
Lecocq, Maurice C. H. O., Cambrai, France. Weaving loom. 1,760,948; June 3.
Le Moon, Axel R., assignor to Nelson-Le Moon Truck Company, Chicago, Ill. Motor-truck-drive mechanism. 1,761,135; June 3.
Lenning, Alvar, Jackson Heights, New York, and R. S. Taylor, assignors to Electrolux Servel Corporation, New York, N. Y. Valve. 1,761,573; June 3.
Leonard, Harry A., assignor to Draper Corporation, Hopedale, Mass. Builder mechanism for spinning or winding machines. 1,761,574; June 3.
Leschen, William F., St. Louis, Mo. Pump for elevating liquid. 1,761,081; June 3.
Leviton Manufacturing Company. (See Slady, Frank, assignor.)
Lewis, Charles H., Cleburne, Tex. Piston puller and cylinder bushing press. 1,760,989; June 3.
Libbey-Owens Glass Company. (See Brown, Wilbur F., assignor.)
Libbey-Owens Glass Company. (See Crowley, Joseph P., assignor.)
Libbey-Owens Glass Company. (See Drake, John L., assignor.)
Libbey-Owens Glass Company. (See Fraser, Frank, assignor.)
Libbey-Owens Glass Company. (See Gipe, John C., assignor.)
Libbey-Owens Glass Company. (See Mambourg, Leopold, assignor.)
Libbey-Owens Glass Company. (See Pedersen, Ingvald O., assignor.)
Libbey-Owens Glass Company. (See Powlesson, William H., assignor.)
Libbey-Owens Glass Company. (See Rosin, E. A., and Kupferschmid, assignors.)
Libbey-Owens Glass Company. (See Rowley, Clifford A., assignor.)
Libbey-Owens Glass Company. (See Wildermuth, Jesse W., assignor.)
Liddell, Robert C., Little Falls, N. J., assignor to L. E. Waterman Company, New York, N. Y. Stand for fountain pens. 1,762,104; June 3.
Liebel-Flarsheim Company, The. (See Liebel, J. G. H., and Flarsheim, assignors.)
Liebel, John G. H., and E. S. Flarsheim, assignors to The Liebel-Flarsheim Company, Cincinnati, Ohio. Spark-gap mechanism. 1,761,082; June 3.
Liggett, William K., assignor to The Jeffrey Manufacturing Company, Columbus, Ohio. Pulverizing apparatus. 1,761,083; June 3.
Liljenroth, Frans G., Stockholm, Sweden. Producing a mixed manure, containing phosphoric acid and nitrogen. 1,761,400; June 3.
Lilly, Ell, and Company. (See Carter, Edgar B., assignor.)
Lilly, Ell, and Company. (See Stuart, Elmer H., assignor.)
Linde Air Products Company, The. (See Moss, Herbert H., assignor.)
Lindegren, Carl J., Providence, R. I., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Multi-color-weft-replenishing mechanism. 1,760,949; June 3.
Lindstrom, Bernhard F., Mount Vernon, N. Y. Armor-cutting pliers. 1,761,446; June 3.
Line Material Company. (See Cole, George H., assignor.)
Ling, Francis E. (See Reif, Joseph, assignor.)
Linn, Guy E., Rittman, Ohio, and W. H. Finckel, jr., Washington, D. C., assignors to The Ohio Boxboard Company, Cleveland, Ohio. Container-taping machine. 1,762,135; June 3.
Lissauer, Adolph W., Louisville, assignor to Louisville Drying Machinery Co. Inc., Jefferson County, Ky. Inner-conduit suspension. 1,761,084; June 3.
Little, George, Boise, Idaho. Nail puller. 1,761,575; June 3.
Little, Thomas P., assignor to The Fisk Rubber Company, Chicopee Falls, Mass. Mandrel-delivering apparatus. 1,760,875; June 3.
Locke, Arthur A., Walkerville, Ontario, Canada, assignor to Wolverine Tube Company, Detroit, Mich. Integral finned tubing and manufacturing the same. 1,761,783; June 3.
Logan, Henry H., Chicago, Ill. Hose coupling. 1,761,352; June 3.
Long, Albert E., assignor to Stromberg Electric Company, Chicago, Ill. Ribbon-shift mechanism. 1,761,529; June 3.
Longenecker, Charles I., assignor to Chain Belt Company, Milwaukee, Wis. Sawing machine. 1,762,023; June 3.
Lord, Robert, Culver City, assignor to Southwestern Engineering Company, Los Angeles, Calif. Mineral flotation apparatus. 1,761,136; June 3.
Lorenz, C., Aktien-Gesellschaft. (See Schmidt, Karl, assignor.)
Lorenz, C., Aktiengesellschaft. (See Schmidt, K., and Habnemann, assignors.)
Los Angeles First National Trust and Savings Bank, Guardian. (See Mooney, Ernest S.)
Lotte, Charles H., Massillon, assignor to Byers Machine Company, Ravenna, Ohio. Power steering machine. 1,761,267; June 3.
Louden Machinery Company, The. (See Louden, William, assignor.)
Louden, William, assignor to The Louden Machinery Company, Fairfield, Iowa. Metallic angle bar. 1,761,137; June 3.
Louisville Drying Machinery Co. (See Lissauer, Adolph W., assignor.)
Low, Charles L. (See Graham, L. A., and Low.)
Lowe, James T. (See Gordon, C. S., and Lowe.)
Luce, Claude E. (See Shott, C. F., Luce, and Johnson.)
Lüdorf, Gustav, Barmen, assignor to A. Schulte, Velbert, Küch, Barmen, and W. Hof, Elberfeld, Germany. Polishing disk. 1,761,890; June 3.
Lukomski, Stanley, Detroit, Mich. Back-water trap. 1,761,217; June 3.
Lundgren, William E., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Rack for fingers of dobby looms. 1,760,909; June 3.
Lundgren, William E., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Box motion for looms. 1,760,950; June 3.
Lundy, Beverly A., Larchmont, and S. P. Hull, Yonkers, N. Y. Jar holder. 1,761,218; June 3.
Lykken, Henry G., Minneapolis, Minn. Device for reducing materials. 1,761,138; June 3.
Lyle, Frederick W., Waltham, Mass., assignor to Beacon Accessories Corporation. Electrical apparatus. 1,761,635; June 3.
MacArthur, Elvin D., Wollaston, assignor to Draper Corporation, Hopedale, Mass. Intermittent feeler mechanism for looms. 1,761,576; June 3.
MacFarlane, James C., and W. A. MacFarlane, Glasgow, Scotland. Dynamo-electric machine. 1,761,836; June 3.
MacFarlane, William A. (See MacFarlane, James C. and W. A.)
Mackey, Walter J., Detroit, Mich. Valve-actuated switch. 1,762,066; June 3.
MacLean, John H., and A. O. Heinzmann, assignors to Economy Baler Company, Ann Arbor, Mich. Baling press. 1,761,447; June 3.
Maclennan, Francis W., Miami, Ariz. Crushing-roll apparatus. 1,761,268; June 3.
Magidson, Frank, assignor to J. S. Green, Pittsburgh, Pa., and F. Magidson, trustees. Marking tag. 1,761,448; June 3.
Magidson, Frank, et al., trustees. (See Magidson, Frank, assignor.)
Main, Frank L., Jackson, assignor to General Motors Corporation, Detroit, Mich. Wheel construction. 1,761,928; June 3.
Main, Frank L., Jackson, assignor to General Motors Corporation, Detroit, Mich. Disk wheel. 1,761,937; June 3.
Majestic Lamp Works. (See Colucci, John M., assignor.)
Major, Joseph D., Philadelphia, Pa. Awning clip. 1,762,024; June 3.
Malleable Iron Fittings Company. (See Williams, Rolland G., assignor.)
Malloy, William W., San Pedro, Calif. Wave motor. 1,761,674; June 3.

Mambourg, Leopold, Lancaster, assignor to Libbey-Owens Glass Company, Toledo, Ohio. Sheet-glass-width-maintaining device. 1,761,219; June 3.

Mambourg, Leopold, Lancaster, assignor to Libbey-Owens Glass Company, Toledo, Ohio. Draw pot for sheet-glass apparatus. 1,761,220; June 3.

Mancusi, Pasquale, Philadelphia, Pa. Tobacco pipe. 1,761,636; June 3.

Manfredi, James, Corona, N. Y. Game board. Des. 81,294; June 3.

Manifold, Richard G., assignor to The Frontier Development Company, Los Angeles, Calif. Rotary gate valve. 1,760,951; June 3.

Manker, Forrest W., assignor to The Surface Combustion Company, Inc., Toledo, Ohio. Conveyer system for heat-treating furnaces. 1,762,067; June 3.

Manning, Alfred B., Louisville, Ky. Material conveyer. 1,761,353; June 3.

Mantle Lamp Company of America, The. (See Davis, Cortland W., assignor.)

Manzel, Charles W., Buffalo, N. Y. Lubricating system. 1,761,891; June 3.

Marathon Electric Mfg. Co. (See Gilburg, Roy O., assignor.)

Marcum, Arthur I., Oakland, Calif., assignor to E. Winship, Macon, Ga. Steering wheel and brake. 1,761,044; June 3.

Marcus, Charles L., New York, N. Y. Lip stick or similar article. Des. 81,295; June 3.

Maris, Claude A., Indianapolis, Ind. Adjustable thrust bearing. 1,761,139; June 3.

Markel, Charles, Schenectady, N. Y., assignor to Barco Manufacturing Company, Chicago, Ill. Crosshead and shoe. 1,760,910; June 3.

Markel Electric Products, Inc. (See Hasenstab, Bernhard, assignor.)

Marks, James N., London, England. Foot support. 1,762,025; June 3.

Marsh, Albert M., Wauwatosa, assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Disintegrating mill. 1,762,122; June 3.

Marshall, James T., Harrogate, England. Motive-fluid engine. 1,760,952; June 3.

Martin, Dorr D., Detroit, Mich. Control system for oil burners. 1,761,018; June 3.

Martin, James W., jr., Yonkers, assignor, by mesne assignments, to Dryice Equipment Corporation, New York, N. Y. Making and dispensing liquid carbon dioxide. 1,760,953; June 3.

Martin, Perry S., Harrisonburg, Va. Thermostat. 1,760,878; June 3.

Marvel, Orin E., assignor, by mesne assignments, to General Motors Radio Corporation, Dayton, Ohio. Radio apparatus. 1,761,019; June 3.

Marvel, Orin E., assignor, by mesne assignments, to General Motors Radio Corporation, Dayton, Ohio. System for amplifying radiant-energy oscillations. 1,761,530; June 3.

Marx, Karl F., assignor to A. E. Fixel, Detroit, Mich. Reduction of fire hazards in vehicles. 1,761,221; June 3.

Maschinenfabrik Augsburg Nuernberg Aktiengesellschaft. (See Becker, Heinrich, assignor.)

Maschinenfabrik Augsburg-Nuernberg, Aktiengesellschaft. (See Riehm, Wilhelm, assignor.)

Maschinenfabrik Esslingen. (See Grenzer, Ferdinand, assignor.)

Massey-Harris Company. (See Harris, B. S., and Johnston, assignors.)

Mattern, Heinrich M. M., jr., Hilversum, Netherlands. Hydraulic actuating mechanism. 1,762,068; June 3.

Matthews, W. N., Corporation. (See Boll, L. P., and Hansen, assignors.)

Mauthe, Gustav. (See Doser, A., Mauthe, and Thauss.)

Maximilian, Max, Chicago, Ill., assignor to Chicago Pneumatic Tool Company, New York, N. Y. Fluid-pressure hammer. 1,761,734; June 3.

Maxwell, William and F. W. De Tour, Beverly, Mass., assignors to United Shoe Machinery Corporation, Paterson, N. J. Method of and machine for making soles. 1,761,020; June 3.

Mayberry, Vernon S., et al. (See Dunning, James A., assignor.)

Maynard, Charles E., Northampton, assignor to The Fisk Rubber Company, Chicopee Falls, Mass. Method and apparatus for applying tire treads. 1,760,879; June 3.

Maytag, Frederick L., jr., Newton, Iowa. Signaling device for kinetographs or the like. 1,760,911; June 3.

Mazade, Louis, San Diego, Calif. Sanitary hair drier. 1,761,269; June 3.

McArdle, Michael W., Chicago, Ill. Heel rest for electric iron. Des. 81,296; June 3.

McCarthy, William T., Brooklyn, N. Y. Film fastener for reels. 1,761,837; June 3.

McCartney, Will C., Cambridge, Ohio. Tray or similar article. Des. 81,309; June 3.

McCaskell, Jasper A., Salt Lake City, Utah. Filter and controlling the pulp level therein. 1,761,401; June 3.

McCaskey Register Company, The. (See Dunning, W. E., and Bachofen, assignors.)

McCauley, Ernest G., Dayton, Ohio, assignor to The Hamilton Standard Propeller Corporation. Airplane propeller. 1,760,876; June 3.

McClure, Elmer P., Western Springs, assignor to Aluminum Products Company, La Grange, Ill. Coffeepot. 1,761,354; June 3.

McConway & Torley Company, The. (See Kelso, William, assignor.)

McConway & Torley Company, The. (See McConway, W., jr., and Kelso, assignors.)

McConway, William, jr., and W. Kelso, assignors to The McConway & Torley Company, Pittsburgh, Pa. Transition car coupling. 1,761,449; June 3.

McCormick, Thomas J., Detroit, Mich. Tire cover. 1,761,735; June 3.

McCoy, William C., assignor to The Cleveland Trust Company, Cleveland, Ohio. Piston. 1,761,140; June 3.

McCoy, William C., Shaker Heights, assignor to The Cleveland Trust Company, Cleveland, Ohio. Piston. 1,761,141; June 3.

McCoy, William C., Shaker Heights, assignor to The Cleveland Trust Company, Cleveland, Ohio. Piston. 1,761,142; June 3.

McCuean, George A., Sharpsburg, Pa. Window construction. 1,761,892; June 3.

McCuen, Charles L., Lansing, Mich., assignor to General Motors Corporation, Detroit, Mich. Crank-case ventilation. 1,761,929; June 3.

McCuen, Charles L., Lansing, assignor to General Motors Corporation, Detroit, Mich. Oil pan. 1,761,930; June 3.

McCullough, Dulcie, New York, N. Y. Sanitary-napkin-supporting belt. 1,761,222; June 3.

McCullough, Frederick S., Edgewood, Pa. Manufacturing wire and porcelain elements. 1,761,577; June 3.

McFall, Thurlow E., assignor to Sparta Foundry Company, Sparta, Mich. Molding machine. 1,761,736; June 3.

McGinley, James M., Fort Worth, assignor of twenty-seven and one-half per cent to W. L. McGinley, San Antonio, and seventy-two and one-half per cent to Tray Service Company, Dallas, Tex. Detachable support. 1,760,912; June 3.

McGinley, W. L., et al. (See McGinley, James M., assignor.)

McGinnis, George M., Rome, Ga. Food preserver. 1,761,483; June 3.

McGuire, George M., Los Angeles, Calif. Producing marbleized flexible sheets. 1,761,305; June 3.

McKechnie, Robert R., assignor, by mesne assignments, to The Cleveland Trust Company, Cleveland, Ohio. Apparatus for cleaning bottles. 1,761,450; June 3.

McKeown, John L., Winnetka, Ill. Mold for constructing trusses. 1,761,306; June 3.

McKinley, Carl S., Dallas, Tex. Cellular screen. 1,760,877; June 3.

McKinley, Charles W. (See Harwood, M. P., and McKinley.)

McKinley, Charles W., assignor to A C Spark Plug Company, Flint, Mich. Carbon-removing liquid injector. 1,761,931; June 3.

McKissick, Clyde, Sand Springs, Okla. Multiple pumping unit. 1,761,355; June 3.

McLaughlin, F. L., Corporation. (See Mitchel, Edward W., assignor.)

McLelland, William H., and G. O. Knutson, assignors to Dominion Electrical Mfg. Company, Minneapolis, Minn. Toaster. Des. 81,297; June 3.

McLeod, Warren H., Boulder, Colo. Golf tee. Des. 81,315; June 3.

McMillan, Angus, Windsor, Ontario, Canada. Station indicator. 1,761,737; June 3.

McNamara, Grace E., Los Angeles, Calif. Finger protector. 1,761,356; June 3.

McNee, George G., Santa Barbara, Calif. Dirigible headlight. 1,761,484; June 3.

McNeil, William, Sydney, New South Wales, Australia. Automatic damper for vehicle suspension springs. 1,761,485; June 3.

McPherson, Roderick W. (See Grummer, Joseph H., assignor.)

McQuay Radiator Corporation. (See Scott, Clifford E., assignor.)

Mead, Fred J., East Orange, N. J. Greenhouse bed. 1,761,796; June 3.

Meade, Arthur F. (See Reis, Manuel D., jr., and Meade.)

Meinig, E. Richard, Co. (See Meinig, Ernst R., assignor.)

Meinig, Ernst R., Wyomissing, assignor to E. Richard Meinig Co., Inc., Reading, Pa. Holder device for stockings. 1,761,402; June 3.

Meiser, Wilhelm, Ludwigshafen-on-the-Rhine, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Manufacture of urea. 1,761,893; June 3.

Merry, Fred C., New York, N. Y., assignor to American Optical Company, Southbridge, Mass. Ophthalmic mounting. Des. 81,298; June 3.

Merrylees, Thomas S., Yeadon, Pa. Cooling of liquids. 1,761,085; June 3.

Merrylees, Thomas S., Yeadon, Pa. Liquid cooler. 1,761,086; June 3.

Merrylees, Thomas S., Yeadon, Pa. Water cooler. 1,761,087; June 3.

Mesta Machine Company. (See Fisk, Gustaf L., assignor.)

Metropolitan Paving Brick Company, The. (See Keplinger, R. B., and Kanengeiser, assignors.)

Metzgar, Chester W., Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Starting device for compressors. 1,761,578; June 3.

Meuer, George J., assignor, by mesne assignments, to Cutler-Hammer, Inc., Milwaukee, Wis. Electric-lamp socket. 1,761,307; June 3.

Meyer, Geo. J., Manufacturing Company. (See Meyer, G. J., Shodron, and Dreher, assignors.)

Meyer, George J., P. G. Shodron, and O. Dreher, assignors to Geo. J. Meyer Manufacturing Company, Milwaukee, Wis. Automatic feeder for soda-water-bottle fillers. 1,761,223; June 3.

Meyers, Herbert H., Pittsburgh, Pa., assignor to Armour Fertilizer Works, Chicago, Ill. Manufacture of concentrated fertilizer material. 1,760,990; June 3.

Mezger, Robert, assignor to the firm Paul Lechler, Stuttgart, Germany. Bituminous paint. 1,762,069; June 3.

Michelson, Lawrence M., St. Louis, Mo. Counter-seat pedestal. Des. 81,299; June 3.

Mick, John N., Van Meter, Iowa. Post puller. 1,761,675; June 3.

Midgley, Thomas, Hampden, assignor to The Fisk Rubber Company, Chicopee Falls, Mass. Expanding flat-band tire casing. 1,760,880; June 3.

Midland Specialties Company. (See Dohrmann, Henry A., assignor.)

Mildren, Lory J., et al. (See Taylor, James S., assignor.)

Miller, Charles F., Anderson, Ind. Pastry recipe. 1,761,738; June 3.

Miller, Charles H., York, assignor to United States Chain & Forging Company, Pittsburgh, Pa. Chain fastener. 1,761,676; June 3.

Miller, Edward E., Paris, France, assignor to Sullivan Machinery Company. Drilling mechanism. 1,761,357; June 3.

Miller Rubber Company, The. (See Hooper, Ted F., assignor.)

Miller, Walter, Ponca City, Okla, assignor to The Gray Processes Corporation, Newark, N. J. Apparatus for contacting vapors with solids. 1,761,270; June 3.

Millis, Phineas A., and M. Johnson, Uxbridge, Mass. Self-threading loom shuttle. 1,761,989; June 3.

Miner, W. H., Inc. (See Haseltine, Stacy B., assignor.)

Miner, W. H., Inc. (See O'Connor, John F., assignor.)

Minerals Separation North American Corporation. (See Trotter, W., and Wilkinson, assignors.)

Minshall, Robert J., assignor to Boeing Airplane Company, Seattle, Wash. Landing hook for aircraft. 1,760,881; June 3.

Mitchel, Edward W., assignor to F. L. McLaughlin Corporation, Detroit, Mich. Clinch-on nut. 1,761,358; June 3.

Modern Metal Furniture Company. (See Whitman, John F., jr.)

Moline Tool Company. (See Hunt, W. P., Hallene, and Brandenburg, assignors.)

Molybdenum Corporation of America. (See Taylor, C., and Greene, assignors.)

Moodt, Ralph, Rome, Ohio. Door fastener. 1,762,070; June 3.

Moody, Lewis F., Philadelphia, Pa. Runner for turbines. 1,762,124; June 3.

Moody, William E. (See Jones, J. E., Newdick, and Moody.)

Mooney, Ernest S., incompetent, by Los Angeles First National Trust and Savings Bank, guardian, Los Angeles, Calif. Toy animal. 1,761,143; June 3.

Moore Push Pin Company. (See Storck, Emil G., assignor.)

Moore, William, Chappaqua, assignor to American Cyanamid Company, New York, N. Y. Insecticide. 1,761,144; June 3.

Moraine Products Company, The. (See Koehring, R. P., and Short, assignors.)

Moraine Products Company, The. (See Patch, Earl S., assignor.)

Morgan, David W. R., Swarthmore, Pa., assignor to Westinghouse Electric & Manufacturing Company. Feed-water heater. 1,760,954; June 3.

Morgan, Edmund C., deceased; O. E. Morgan, executrix, New York, N. Y. Loading machine. 1,761,145; June 3.

Morgan, Mathew B., assignor to The Timken-Detroit Axle Company, Detroit, Mich. Two-speed gearing. 1,761,308; June 3.

Morgan, Olive E., executrix. (See Morgan, Edmund C.)

Morris, Albert S., Oakland, Calif. Device for locking windshield wipers. 1,761,531; June 3.

Morris, Benjamin F. C. (See Porter, L. N., and Morris.)

Morris Paper Mills Company. (See Powell, Henry K., assignor.)

Morris, Walter S., Toronto, Ontario, Canada. Golf tee. 1,761,532; June 3.

Morrison, George W., Holliday, Tex. Transmission. 1,760,991; June 3.

Morrow, Lloyd E., Milan, Ohio. Attachment for farm tractors. 1,760,882; June 3.

Moss, Herbert H., Brooklyn, N. Y., assignor to The Linde Air Products Company. Structural joint and making the same. 1,760,883; June 3.

Moss, Herbert H., Belleville, N. J., assignor to The Linde Air Products Company. Joint for structural shapes and making the same. 1,760,955; June 3.

Moss, Herbert H., Belleville, N. J., assignor to The Linde Air Products Company. Metallic structure and making same. 1,760,956; June 3.

Mowery, Eldred, Washington, D. C. Wall insulation. 1,761,838; June 3.

Muck, Otto, Munich, Germany. Resonance-spring driving device. 1,761,146; June 3.

Müller, Fritz. (See Wagner, H., Brune, Hessenland, Hoffa, Müller, and Heyna.)

Muller, George W., Washington, D. C., assignor to Muller Railway Track Systems, Incorporated, Wilmington, Del. Arrangement of base plates on ties. 1,761,147; June 3.

Muller, George W., Washington, D. C., assignor to Muller Railway Track Systems, Incorporated, Wilmington, Del. Railroad-track structure. 1,761,148; June 3.

Müller & Grünstein, Eigersburger Feuerzeugfabrik. (See Kassapian, Vincent, assignor.)

Müller, Henry, Philadelphia, Pa. Device for applying protectors to toilet seats. 1,761,637; June 3.

Muller Railway Track Systems, Incorporated. (See Muller, George W., assignor.)

Munters, Anders J. E., Stockholm, Sweden. Absorption refrigerating machine. 1,761,839; June 3.

Murphey, Howard B. (See Williams, D. D., and Murphey.)

Mutch, Robert M., South Hadley Falls, Mass. Safety guard apparatus for platers. 1,761,045; June 3.

Myers, Wilson R., assignor to Ice Cream Smack Corporation, New York, N. Y. Crimping mechanism for cylinder-forming machines. 1,761,990; June 3.

Nagacheff, Boris. (See Chilowsky, C., and Nagacheff.)

National Automatic Tool Company, The. (See Galloway, Robert M., assignor.)

National Blank Book Company. (See Schade, John, assignor.)

National Cash Register Company, The. (See Arnold, Charles H., assignor.)

National Cash Register Company, The. (See Berger, Friedrich W. F., assignor.)

National Cash Register Company, The. (See Block, Abraham, assignor.)

National Cash Register Company, The. (See Brand, Samuel, assignor.)

National Cash Register Company, The. (See Carter, Elmer C., assignor.)

National Cash Register Company, The. (See Colley, Arthur R., assignor.)

National Cash Register Company, The. (See Fuller, Frederick L., assignor.)

National Cash Register Company, The. (See Goldberg, Maximilian M., assignor.)

National Cash Register Company, The. (See Kropff, Wilhelm, assignor.)

National Cash Register Company, The. (See Robertson, William H., assignor.)

National Cash Register Company, The. (See Scott, Howard B., assignor.)

National Cash Register Company, The. (See Shipley, Bernis M., assignor.)

National Cash Register Company, The. (See Tyler, Frederick H., assignor.)

National Cash Register Company, The. (See Von Pein, Edward J., assignor.)

National City Bank of New York, The, executor. (See Balla, Arnold K.)

National Equipment Company. (See Bausman, Alonzo L., assignor.)

National India Rubber Company. (See Tiffany, Edward L., assignor.)

National Seal Company. (See Wainwright, Herbert, assignor.)

National Tube Company. (See Davies, Thomas D., assignor.)

Naylor, Walter E., assignor to The Beardsley & Piper Company, Chicago, Ill. Sand cutter. 1,761,224; June 3.

Neale, Fred, assignor, by mesne assignments, to The Christensen Air Brake Company, Cleveland, Ohio. Motor cylinder. 1,761,309; June 3.

Neidich, Samuel A., Edgewater Park, N. J. Making tubes of celluloid and the like. 1,761,403; June 3.

Neilson, Albert H., Tulsa, Okla. Sucker-rod socket. 1,761,840; June 3.

Nelson, Leigh G., assignor to Fiber-Glass Food Cover Co., Chicago, Ill. Transparent display ring. 1,761,271; June 3.

Nelson-Le Moon Truck Company. (See Le Moon, Axel R., assignor.)

Nemcovsky, Louis A., assignor to Sun Typewriter Company, New York, N. Y. Typewriting machine. 1,761,404; June 3.

Nemcovsky, Louis A., assignor to Sun Typewriter Company, New York, N. Y. Typewriting machine. 1,761,405; June 3.

Nenninger, Lester F., assignor to The Cincinnati Milling Machine Company, Cincinnati, Ohio. Milling machine. 1,761,841; June 3.

Newdick, Norton A. (See Jones, J. E., Newdick, and Moody.)

Newdick, Norton A., Columbus, Ohio. Loading machine. 1,762,072; June 3.

Newdick, Norton A., assignor to The Coloder Company, Columbus, Ohio. Loading machine. 1,762,071; June 3.

New England Wood Heel Co. (See Shaw, Wesley J., assignor.)

Newhouse, Ray C., Chicago, Ill., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Pumping and lubricating apparatus. 1,761,579; June 3.

Newman, Thomas J., assignor to The Superior Switchboard & Devices Company, Canton, Ohio. Meter-testing switch. 1,761,638; June 3.

Newport Company, The. (See Deinet, Joseph, assignor.)
Newport Company, The. (See Gubelmann, I., Goodrich, and Howell, assignors.)
Newport Company, The. (See Gubelmann, I., Weiland, and Stallmann, assignors.)
Newton, Edward C., Los Angeles, Calif. Timer for ignition systems. 1,761,225; June 3.
Nichols, Arthur W., New York, N. Y. Sounding device. 1,761,486; June 3.
Nichols, Louis C., Wauwatosa, assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Transformer and operating same. 1,761,580; June 3.
Nielsen, Herman C., Memphis, Tenn. Waxing composition. 1,761,677; June 3.
Nigro, Michel, assignor to Sleeper & Hartley, Inc., Worcester, Mass. Spring-coiling machine. 1,761,739; June 3.
Nilsson, Martin, et al. (See Balls, Arnold K., assignor.)
Noble, Warren, Detroit, Mich. Metering instrument. 1,761,678; June 3.
Nordlander, Birger W., Schenectady, N. Y., assignor to General Electric Company. Moldable product and preparing the same. 1,761,740; June 3.
North American Lace Company. (See Daudy, Marc H., assignor.)
Northcutt, Jacob, Huntington Beach, Calif. Vegetable knife. 1,761,639; June 3.
North East Appliance Corporation. (See Hutchins, William H., assignor.)
Northey, John P. and R. V., Toronto, Ontario, Canada. Manufacture of key bolts. 1,761,581; June 3.
Northey, Rodney V. (See Northey, John P. and R. V.)
Numans, Johannes J. (See Bol, C., and Numans.)
Nutt, Frank N., assignor to A C Spark Plug Company, Flint, Mich. Oil filter. 1,761,932; June 3.
Nutt, William H., Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Heel covering. 1,761,021; June 3.
Nutt, William H., Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Heel and covering the same. 1,761,359; June 3.
Nyrop, Aage, Copenhagen, Denmark. Atomizing and drying liquids. 1,762,026; June 3.
O. K. Tool Company, The. (See Weddell, Ralph R., assignor.)
Oakley, Erastus G., Southport, assignor to Bridgeport Brass Company, Bridgeport, Conn. Tire-valve stem. 1,761,487; June 3.
Ober, Beverly, assignor to G. Ober & Sons Company, Baltimore, Md. Manufacturing acid phosphate. 1,761,991; June 3.
Ober, Beverly, assignor to G. Ober & Sons Company, Baltimore, Md. Apparatus for manufacturing acid phosphate. 1,761,992; June 3.
Ober, G., & Sons Company. (See Ober, Beverly, assignor.)
Oberg, Anton J., and R. R. Stoefen, Los Angeles, Calif. Projector. 1,761,360; June 3.
Oberg, Anton J., and R. R. Stoefen, Los Angeles, Calif. Control mechanism for color-projecting machines. 1,761,361; June 3.
O'Brien, Joseph F. (See Polak, A., and O'Brien.)
O'Brien, John O. (See Thornton, John E., assignor.)
Ochwat, Paul. (See Kränzlein, G., Heyse, and Ochwat.)
O'Connor, John F., assignor to W. H. Miner, Inc., Chicago, Ill. Shock-absorbing mechanism for automobiles. 1,761,226; June 3.
O'Connor, John F., assignor to W. H. Miner, Inc., Chicago, Ill. Shock absorber. 1,761,272; June 3.
O'Connor, John F., assignor to W. H. Miner, Inc., Chicago, Ill. Shock absorber for vehicles. 1,761,273; June 3.
O'Connor, John F., assignor to W. H. Miner, Inc., Chicago, Ill. Shock-absorbing mechanism for vehicles. 1,761,274; June 3.
O'Connor, John F., assignor to W. H. Miner, Inc., Chicago, Ill. Anti-friction bearing. 1,761,275; June 3.
O'Connor, John F., assignor, by mesne assignments, to W. H. Miner, Inc., Chicago, Ill. Friction shock-absorbing mechanism. 1,762,096; June 3.
Odell, William W., Minneapolis, Minn., assignor to Columbia Engineering and Management Corporation, Cincinnati, Ohio. Making combustible gas. 1,762,100; June 3.
O'Donohoe Detachable Blade Drilling Bit Company. (See Le Bus, John E., assignor.)
Ohio Boxboard Company, The. (See Linn, G. E., and Finckel, assignors.)
Ohio Grease Company, The. (See Beardsley, Earl W. and R. W., assignors.)
Ohl, Russell S., New York, N. Y., assignor to American Telephone and Telegraph Company. Vacuum-tube detector. 1,760,957; June 3.
Ohnstrand, Enoch, Kenmore, N. Y. Aluminum boat. 1,761,451; June 3.
Oil Well Supply Company. (See Greve, Edgar E., assignor.)
Olch, Jacob B., Providence, R. I., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Weft-replenishing loom. 1,760,958; June 3.
Olivier, Herman C., assignor to General Motors Corporation, Detroit, Mich. Internal brake. 1,761,933; June 3.
Olson, J. A., Company. (See La Tessa, Tully, assignor.)
O'Neil, James H., Syracuse, assignor to Continental Can Company, Inc., New York, N. Y. Apparatus for closing vacunmized containers. 1,761,488; June 3.
Ormsby, Donald D., and J. Swinscoe, Syracuse, N. Y., assignors to General Motors Research Corporation, Detroit, Mich. Adjusting device. 1,761,934; June 3.
Orsenigo, Henry, Mount Vernon, N. Y. Automobile body. Des. 81,310; June 3.
Orsenigo, Henry, Mount Vernon, N. Y. Automobile body. Des. 81,311; June 3.
Ortner, John F., Buffalo, N. Y. Carton-filling device. 1,760,959; June 3.
Osgood, Charles F., Claremont, N. H., assignor to Sullivan Machinery Company. Drilling mechanism. 1,761,310; June 3.
O'Sullivan, Patrick J., Brooklyn, N. Y., assignor to Blaisdell Pencil Company, Philadelphia, Pa. Pencil. 1,761,407; June 3.
Oswego Falls Corporation. (See Wright, W. L., and Pierce, assignors.)
Otten, Lawrence F., Fort Thomas, assignor to The Wadsworth Watch Case Company, Dayton, Ky. End connecter for bracelets. 1,760,913; June 3.
Outing Manufacturing Company. (See Dewey, Clarence L. assignor.)
Oveson, William, Roseau, Minn. Stump puller. 1,762,073; June 3.
Pacini, August J., assignor to C. M. Richter, Chicago, Ill. Synthesizing vitamius. 1,762,105; June 3.
Packard Motor Car Company. (See Griswold, Walter R., assignor.)
Paine, Arthur P., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Intermittent needle motion for Axminster looms. 1,760,960; June 3.
Pais, Alexandre, Bucharest, Rumania. Heating device containing a fluid in its heating element. 1,760,884; June 3.
Paisley, James A., Cleveland, Ohio. Apparatus for loading mine cars. 1,762,074; June 3.
Palmer, Ralph M., New York, N. Y. Producing titanium oxide. 1,760,992; June 3.
Palmgren, Carl A., Chicago, Ill. Stapling device. 1,761,640; June 3.
Pancoast, Donald F., Cleveland, Ohio. Resistance-welding apparatus. 1,761,276; June 3.
Pan-Ross Laboratories, Inc. (See Parsons, John, assignor.)
Pansky, Adolphe, Paris, France. Preparation of gelatin. 1,761,362; June 3.
Paque, Edward J., assignor to The Pollak Steel Company, Cincinnati, Ohio. Wire-fence clip. 1,761,452; June 3.
Paramount Famous Lasky Corporation. (See Pomeroy, Roy J., assignor.)
Parker, Leslie O., Anderson, Ind., assignor to Delco-Remy Corporation, Dayton, Ohio. Electric lamp. 1,761,022; June 3.
Parker Rust Proof Company. (See Baker, M. C., and Dingman, assignors.)
Parker, Thomas L., assignor to The Standard Electric Manufacturing Co., Chicago, Ill. Mail box. 1,760,961; June 3.
Parsons, John, Newton Center, Mass., assignor to Pan-Ross Laboratories, Inc., New York, N. Y. Holder for cigarette packages. 1,761,408; June 3.
Pasley, Woodson C., Wichita Falls, Tex. Oil-well heater. 1,761,227; June 3.
Patch, Earl S., assignor to The Moraine Products Company, Dayton, Ohio. Bearing for steering columns. 1,761,533; June 3.
Patent and Licensing Corporation, The. (See Kirschbraun, Lester, assignor.)
Paulin, Josua G., Stockholm, Sweden. Instrument for measuring variable forces. 1,761,489; June 3.
Payne, Oscar V., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Needle motion for Axminster looms. 1,761,277; June 3.
Pearson, Frank C. (See Bolles, J. H., and Pearson.)
Peck, Jacob G., Portland, Oreg. Oil and gas separator. 1,762,097; June 3.
Peck, Jess W. (See Yerrick, W. D., and Peck.)
Peck, Le Roy E., Riverton, Wyo., assignor to Columbian Carbon Company, New York, N. Y. Packing of carbon black. 1,761,228; June 3.
Pedersen, Ingvald O., Pittsburgh, Pa., assignor to Libbey-Owens Glass Company, Toledo, Ohio. Batch-feeding mechanism. 1,761,229; June 3.
Peebles, David D., Eureka, Calif. Drying apparatus and method. 1,761,149; June 3.
Peirce, John R., assignor to International Business Machines Corporation, New York, N. Y. Record comparing and posting machine. 1,761,741; June 3.
Pelton, William F., assignor of one-half to F. S. Gildea, Brooklyn, N. Y. Hand or finger grip. 1,761,582; June 3.
Penfield, Raymond C., New York, N. Y. Method of and automatic means for backing brick. 1,760,993; June 3.
Penner, Otto H., Minneapolis, Minn. Adjustable double roller bearing. 1,761,490; June 3.
Pennington, T. R. (See Phillips, Roy, assignor.)
Peoples Clamp Corporation. (See Ross, Frederick N., assignor.)
Perkins, Laurence M., Anderson, Ind., assignor to Delco-Remy Corporation, Dayton, Ohio. Condenser and transformer unit. 1,761,535; June 3.
Perkins, Nathan W., East Orange, assignor to Ellis Adding Typewriter Company, Newark, N. J. Subtraction control for calculating machines. 1,761,742; June 3.
Perla, Samuel. (See Hellvik, R. R., and Perla.)

Perry, John E., and J. A. Lanigan, Youngstown, assignors to Valley Mould and Iron Corporation, Hubbard, Ohio. Molding apparatus for ingot molds. 1,672,125; June 3.
Peteler, Adolph, Freeport, N. Y., assignor to Auto Specialties Manufacturing Co., San Francisco, Calif. Jack. 1,761,150; June 3.
Peters Machinery Company. (See Jurgens, E. G., and Beckers, assignors.)
Petersen, Carl M., assignor to Circle F Mfg. Co., Trenton, N. J. Electrical switch device. 1,762,075; June 3.
Petersen, Thorvald A. M., assignor to Union Tank & Pipe Co., Los Angeles, Calif. Gas trap. 1,761,743; June 3.
Peterson, Alfred, Denver, Colo. Machine for applying adhesive substance to sheets of material. 1,761,230; June 3.
Petroff, Grigori, Moscow, Russia, and P. Shestakoff, Paris, France, assignors to The First National Bank, Cincinnati, Ohio. Production of sulpho acids from hydrocarbon oils. 1,761,744; June 3.
Pew, Arthur E., jr., Bryn Mawr, assignor to Sun Oil Company, Philadelphia, Pa. Apparatus for distilling lubricating oil. 1,761,151; June 3.
Pew, Arthur E., jr., Bryn Mawr, assignor to Sun Oil Company, Philadelphia, Pa. Deodorizing petroleum. 1,761,152; June 3.
Pew, Arthur E., jr., Bryn Mawr, assignor to Sun Oil Company, Philadelphia, Pa. Distilling oil. 1,761,153; June 3.
Pfau, Arnold, assignors to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Controlling prime-mover dynamo plants. 1,761,797; June 3.
Pfantz, Christian E., Riverhead, N. Y., assignor to Radio Corporation of America. Transposition device. 1,761,046; June 3.
Phelps, Alva W., assignor to Delco-Remy Corporation Anderson, Ind. Method and apparatus for making rubber wiper blades. 1,761,534; June 3.
Phelps Manufacturing Company. (See Phelps, Morton F., assignor.)
Phelps, Morton F., Little Rock, Ark., assignor to Phelps Manufacturing Company. Exhaust fan. 1,762,028; June 3.
Philadelphia Metal Drying Form Company. (See Guggenheim, Paul, assignor.)
Philadelphia Storage Battery Company. (See Roberts, David, assignor.)
Phillips, Ernest B., East Chicago, Ind., and J. G. Stafford, assignors to Sinclair Refining Company, Chicago, Ill. Regeneration of aluminum chloride sludge. 1,760,962; June 3.
Phillips, Roy, assignor of one-fifth to T. R. Penningston, Dallas, Tex. Wall construction. 1,762,099; June 3.
Photostat Corporation. (See Caps, Arthur W., assignor.)
Pickering, Chester E., Ottawa, Ontario, Canada. Sanitary block holder. 1,761,154; June 3.
Pickup, George A., East Nashville, Tenn. Rubber time stamp and dater. 1,762,027; June 3.
Pierce, Frederic E. (See Chase, M. F., Pierce, and Skogmark.)
Pierce, Lee D. (See Wright, W. L., and Pierce.)
Pierce Renewable Fuses, Inc. (See Clemens, John G., assignor.)
Pierson, Torvald N., assignor to The Gleaner Combine Harvester Corporation, Independence, Mo. Elevator boot. 1,761,842; June 3.
Pike, Robert D., Piedmont, Calif. Metallurgical process. 1,761,641; June 3.
Pioneer Broom Company. (See Blood, Frank J., assignor.)
Pioneer Pearl Button Company. (See Knott, Warren E., assignor.)
Pioneer Suspender Company. (See Simmons, Frederick C., assignor.)
Piotti, Miguel A., New York, N. Y. Window sash. 1,760,994; June 3.
Pittoni, Louis E., Jamaica, N. Y., assignor to The Rome Company, Inc. Mattress and mattress boxing. 1,762,106; June 3.
Pittsburgh Plate Glass Company. (See Hitner, Harry F., assignor.)
Plein, Mathias, Roseland, Nebr. Lister corn harrow. 1,761,491; June 3.
Pohlson, Carl V., Pawtucket, R. I. Combined brush and hat holder. Des. 81,300; June 3.
Polák, Bohumil, Prague, Czechoslovakia. Device for opening containers such as boxes, tins, or the like. 1,762,076; June 3.
Polar Vend Corporation. (See Webber, George R., assignor.)
Pollak, Abraham, Far Rockaway, N. Y., and J. F. O'Brien, Englewood, N. J., assignors to Clark Lighter Co. Inc. Pocket lighter. 1,760,995; June 3.
Pollak Steel Company, The. (See Paque, Edward J., assignor.)
Pomeroy, Percy W., assignor to The Studebaker Corporation, South Bend, Ind. Brake. 1,761,231; June 3.
Pomeroy, Roy J., Hollywood, assignor of one-half to Paramount Famous Lasky Corporation, Los Angeles, Calif. Speaker. 1,761,745; June 3.
Pontis, William G., assignor, by mesne assignments, to Delco Products Corporation, Dayton, Ohio. Counterbalancing device. 1,761,023; June 3.
Pontrello, John and P., Buffalo, N. Y. Internal-combustion engine. 1,761,843; June 3.
Pontrello, Pasquale. (See Pontrello, John and P.)
Pool, Chester A., Twin Falls, Idaho. Milk-bottle retriever. 1,761,894; June 3.
Pope, Henry, Croydon Park, South Australia, Australia. Fastening device for pipes of irrigation systems. 1,761,409; June 3.
Pope, Thomas E., Sayre, Okla. Ironing board. 1,761,583; June 3.
Porcelain Enamel & Manufacturing Co., The. (See Stevenson, Lawrence J., assignor.)
Porcelain Enamel and Manufacturing Company of Baltimore, The. (See Türk, Karl, assignor.)
Porter, Hollis P., assignor to Gypsy Oil Company, Tulsa, Okla. Apparatus for and method of flowing wells. 1,761,363; June 3.
Porter, Louis N., and B. F. C. Morris, El Reno, Okla. Incubator. 1,761,364; June 3.
Potter, Fred B., Los Angeles, Calif. Bending device for pipes and bars. 1,761,798; June 3.
Potts, Oscar L., Hendersonville, assignor of one-half to A. J. Anderson, Nashville, Tenn. Fare register. 1,762,029; June 3.
Powell, Henry K., assignor to Morris Paper Mills Company, Chicago, Ill. Display box. 1,761,232; June 3.
Powell, William G., Altoona, Pa. Car roof. 1,761,047; June 3.
Powell, Wilton, Prescott, Ariz. Merry-go-round. 1,761,895; June 3.
Powers Regulator Company. (See Hemings, Albin J., assignor.)
Powlesson, William H., assignor to Libbey-Owens Glass Company, Toledo, Ohio. Sheet-glass-surfacing table. 1,761,746; June 3.
Prache, Charles, Paris, France. Apparatus for mixing gaseous fluids. 1,761,799; June 3.
Pratt, Harry K., Long Beach, N. Y. Liquid-dispensing device. 1,760,914; June 3.
Preis, Carl G., Lynbrook, N. Y. Concrete anchor. 1,761,800; June 3.
Prelesnik, Anton, Eveleth, Minn. Gripping device. 1,760,885; June 3.
Price, Arthur, Freeport, N. Y. Strip forming and assembling machine. 1,761,536; June 3.
Proctor & Schwartz, Incorporated. (See Ayres, Elwood B., assignor.)
Projahn, Karl F., Aschaffenburg, assignor of one-half to I. Gillis, Frankfort-on-the-Main, Germany. Pyrophoric pocket igniter. 1,761,048; June 3.
Prosperity Company, The. (See Schremp, Edward J., assignor.)
Prosser, Robert H., Oakland, Calif. Resilient connection for structures. 1,761,584; June 3.
Provost, Anatole, Montreal, Quebec, Canada. Grate bar. 1,761,024; June 3.
Pryde Robert D., Orange, Conn. Display stand. 1,761,088; June 3.
Pullclean Manufacturing Corporation. (See Crowson, Herbert W., assignor.)
Pyrene-Minimax Corporation. (See Burmeister, Hans, assignor.)
Quickert, Fred F., Gilroy, Calif. Velocipede. 1,761,679; June 3.
Radio Corporation of America. (See Bol, C., and Numans, assignors.)
Radio Corporation of America. (See Dijksterhuis, P. R., and Groeneveld, assignors.)
Radio Corporation of America. (See Goldsmith, Alfred N., assignor.)
Radio Corporation of America. (See Pfautz, Christian E., assignor.)
Radio Corporation of America. (See Ranger, Richard H., assignor.)
Radio Frequency Laboratories, Incorporated. (See Ballantine, Stuart, assignor.)
Radio Frequency Laboratories, Incorporated. (See Hull, Lewis M., assignor.)
Railroad Supply Company, The. (See Fox, Morris J., assignor.)
Railway Devices Company. (See Hoerr, Louis A., assignor.)
Rajah Company, The. (See Berthold, George H. E., assignor.)
Ramsay, William A. (See Johnson, H., and Ramsay.)
Ranger, Richard H., New York, N. Y., assignor to Radio Corporation of America. Interference-reducing means for radio-receiving apparatus. 1,761,049; June 3.
Rankin, Dorsey L., Spokane, Wash. Tool kit. 1,761,453; June 3.
Rasmussen, Olaf. (See Almen, J. O., and Rasmussen.)
Rastetter, William C., Fort Wayne, Ind. Table top. 1,761,585; June 3.
Ratty, John J., New York, N. Y. Coffee or tobacco humidor. 1,762,030; June 3.
Ravenor, Wilfred F., Vancouver, British Columbia, Canada. Oil burner and method of effecting the combustion of oil fuels. 1,761,537; June 3.
Rawlings, William E., San Jose, Calif. Float. 1,761,680; June 3.
Redmond, Harriet L., Needham, assignor to The William Carter Company, Needham Heights, Mass. Woman's undergarment. 1,761,278; June 3.

Redmond, James D., Earlswood, England. Lowering mechanism applicable for use in portable life-saving apparatus. 1,761,311; June 3.
Redmond, Joseph P., and F. F. Haack, Milwaukee, Wis. Electric coach fare-recorder. 1,761,050; June 3.
Reed, C. E., et al. (See Taylor, James S., assignor.)
Reed, John A., Riderwood, Ala. Fish-net hoist. 1,761,365; June 3.
Reeves, Paul B., assignor to Reeves Pulley Company, Columbus, Ind. Belt splice. 1,761,155; June 3.
Reeves Pulley Company. (See Reeves, Paul B., assignor.)
Reeves, William A. (See Tucker, O. M., and Reeves.)
Reif, Joseph, assignor of one-half to F. E. Ling, Hebron, Ind. Wrench. 1,761,586; June 3.
Reilly, Frank B., Santa Barbara, Calif. Bottle-washing machine. 1,761,402; June 3.
Reis, Manuel D., jr., and Arthur F. Meade, San Anselmo, Calif. Safety switch. 1,761,681; June 3.
Reo Motor Car Company. (See Thomas, Horace T., assignor.)
Reserve Holding Company. (See Tharp, Victor S., assignor.)
Resinous Products & Chemical Company, The. (See Bruson, Herman A., assignor.)
Reutter, Frederick, assignor to Scovill Manufacturing Company, Waterbury, Conn. Holder for soap sticks and the like. 1,760,886; June 3.
Reutter, John W., Wilmington, Del. Piston-pin vise. 1,761,366; June 3.
Rewald, Bruno, Hamburg, Germany. Production of egg-yolk substitutes. 1,762,077; June 3.
Reynolds, Irving H., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Condenser. 1,762,107; June 3.
Reynolds, Lynus C., Chicago, Ill., assignor to The Tabulating Machine Company, Endicott, N. Y. Punch. 1,761,682; June 3.
Rice, Barton & Fales, Incorporated. (See Vedder, John W., assignor.)
Rich, Leon W., et al. (See Zim, Jesse G., assignor.)
Richards, Benjamin, Kenilworth, Ill., assignor, by mesne assignments, to American La France and Foamite Corporation. Automatic fire-protection device. 1,761,406; June 3.
Richards, Frank E., Jackson, Miss. Folding pants press. 1,762,078; June 3.
Richards-Wilcox Manufacturing Company. (See Lamm, Francis A., assignor.)
Richards, Willard F., Depew, N. Y., assignor to The Gould Coupler Company, New York, N. Y. Coupler. Re17,690; June 3.
Richardson, Annie. (See Richardson, Sidney, assignor.)
Richardson, Rodney G. (See Bellamy, J. I., and Richardson.)
Richardson, Sidney, Hollywood, assignor to A. Richardson, Los Angeles, Calif. Forming attachments for dentures. 1,761,312; June 3.
Richfield Oil Company of California. (See Chappell, Marvin L., assignor.)
Richter, Charles M. (See Pacini, August J., assignor.)
Riehm, Wilhelm, assignor to the firm: Maschinenfabrik Augsburg-Nuernberg, Aktiengesellschaft, Augsburg, Germany. Heating device for the suction air of combustion engines. 1,761,844; June 3.
Riley Stoker Corporation. (See Yerrick, W. D., and Peck, assignors.)
Ringland, George L., Norwood, Ohio, assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Dynamo-electric machine. 1,761,587; June 3.
Ritchie, Claude C., and I. D. Ritchie, Wichita Falls, Tex. Built-in telephone cabinet. 1,761,683; June 3.
Ritchie, Isaac D. (See Ritchie, C. C. and I. D.)
Rivard, Wilfred J., Feeding Hills, Mass. Deckling machine. 1,761,051; June 3.
Robb, John F., Cleveland Heights, Ohio, assignor to Koehring Company, Milwaukee, Wis. Automatic tilting-type concrete-mixing machine. 1,761,801; June 3.
Roberts, David, Collingswood, N. J., assignor to Philadelminster looms. 1,760,963; June 3.
phia Storage Battery Company, Philadelphia, Pa. Cabinet. Des. 81,291; June 3.
Roberts, James H., Atlanta, Ga. Fruit cutter and squeezer. 1,762,031; June 3.
Robertson, Charles H., et al. (See Utsman, George W., assignor.)
Robertson, William H., assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio. Auditing machine. 1,761,684; June 3.
Robertson, William W., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Tube frame for Ax-
Robinson, Ernest Y., Lymm, England, assignor to Associated Electrical Industries Limited. Vacuum-tube generator. 1,760,996; June 3.
Robinson, Joseph, New York, N. Y. Automatic train-pipe connecter. 1,761,845; June 3.
Robinson, Joseph, New York, N. Y. Automatic train-pipe coupling. 1,762,032; June 3.
Robson, John, Waterbury, Conn., assignor to Universal Engineering Corporation, Montreal, Quebec, Canada. Fluid-controlled mechanism. 1,760,915; June 3.
Rockwell, Edward A., New York, N. Y. Tire valve for indicating pressures. 1,761,454; June 3.
Rockwood Sprinkler Company of Massachusetts. (See Carlson, Hjalmar G., assignor.)
Roe, De Forest, Shaker Heights, assignor to The Colson Company, Elyria, Ohio. Buffer. 1,761,233; June 3.
Roedding, Gordon E., assignor to Grand Rapids Brass Company, Grand Rapids, Mich. Hinge. Des. 81,312; June 3.
Rogers, Ernest H., Atlanta, Ga. Pneumatic cotton picker or lapper. 1,761,493; June 3.
Rolscreen Company. (See Dixson, Harry, assignor.)
Rome Company, The. (See Pittoni, Louis E., assignor.)
Roof, Charles R., Baltimore, Md. Apparatus for forming nuts. 1,761,642; June 3.
Root Spring Scraper Company. (See Weeks, Ernest A., assignor.)
Rosan, Ferdinand R., Bendigo, Australia. Turning tool applicable to remove refractory screws. 1,761,156; June 3.
Rose, Joseph, assignor to Structural Waterproofing Company, New York, N. Y. Dampproof building. 1,761,410; June 3.
Rose, William H., Jersey City, N. J. Container closure. 1,761,367; June 3.
Rosin, Edwin A., and K. Kupferschmid, assignors to Libbey-Owens Glass Company, Toledo, Ohio. Bumper means. 1,761,747; June 3.
Ross, Frederick N., Detroit, assignor, by mesne assignments, to Peoples Clamp Corporation, Wyandotte, Mich. Machine for manufacturing hose clamps. 1,761,455; June 3.
Ross, John S., et al. (See Wells, Don W., assignor.)
Rotawasher Corporation, The. (See Wagner, Ernest E., assignor.)
Roth Bros. & Co. (See Williams, Ralph T., assignor.)
Rowe, Andrew R., Midland, Pa. Hot top. 1,761,494; June 3.
Rowley, Clifford A., assignor to Libbey-Owens Glass Company, Toledo, Ohio. Drawing sheet glass. 1,761,234; June 3.
Rowley, Clifford A., assignor to Libbey-Owens Glass Company, Toledo, Ohio. Drawing sheet glass. 1,761,235; June 3.
Royal Typewriter Company. (See Degener, Gustave O., assignor.)
Ruberoid Co., The. (See Winch, Harry E., assignor.)
Rubsamen, Charles, Richmond Hill, assignor to William Demuth & Company. Cigar lighter. 1,762,079; June 3.
Rundqvist, Thore R. E., Claremont, N. H., assignor to Sullivan Machinery Company. Rock-drilling mechanism. 1,761,313; June 3.
Runner, Claude C., Schenectady, N. Y., assignor to General Electric Company. Variable-speed motor-control apparatus. 1,761,748; June 3.
Russell Manufacturing Company. (See Tower, Elmer V. J., assignor.)
Russell, W. A., & Company. (See Russell, William A., assignor.)
Russell, William A., Yonkers, assignor to W. A. Russell & Company, New York, N. Y. Air-relief valve. 1,761,685; June 3.
Ruth, Harold M., Huntington Park, Calif. Load-ejecting apparatus for conveyers. 1,760,964; June 3.
Ruth, Joseph P., jr., Denver, Colo. Flotation apparatus. 1,760,916; June 3.
Rutledge, Arthur E., and E. T. Cleary, Rockford, Ill. Trip device. 1,761,052; June 3.
Ryder, Robert W., San Francisco, Calif. Spiral-conveyer coupling. 1,761,591; June 3.
Rystedt, Ingemar K., Dayton, Ohio. Airplane. 1,761,053; June 3.
Sabath, Albert, assignor to Scene-In-Action Corporation, Chicago, Ill. Transparency. 1,761,802; June 3.
Sadtler, Samuel S., Springfield Township, Montgomery County, Pa. Water softener. 1,761,411; June 3.
Safety Grinding Wheel & Machine Company, The. (See Vance, George E., assignor.)
Sakier, George, New York, N. Y., assignor to Fostoria Glass Co., Moundsville, W. Va. Goblet or similar article. Des. 81,301; June 3.
Sakier, George, New York, N. Y., assignor to Fostoria Glass Co., Moundsville, W. Va. Goblet. Des. 81,302; June 3.
Salerni, Nicholas B., Indianapolis, Ind. Vaginal syringe. 1,761,588; June 3.
Salmi, Joseph, New York, N. Y. Novelty can. 1,761,495; June 3.
Sather, Jack, New England, N. Dak. Hat. 1,761,868; June 3.
Sato, Ryuji, New York, N. Y. Hermetic tube closure. 1,761,236; June 3.
Saugman, Hartvig P., Glendale, Calif. Beverage display. 1,760,887; June 3.
Sawyer, Gregory E., and J. W. Smith, Independence, Kans. Lead-wool and ground-cork packing. 1,761,749; June 3.
Scene-In-Action Corporation. (See Sabath, Albert, assignor.)
Schade, John, assignor to National Blank Book Company, Holyoke, Mass. Loose-leaf book. 1,761,589; June 3.
Schaeffer, Charles, assignor to Société Anonyme des Anciens Etablissements Panhard & Levassor, Paris, France. Speed-changing mechanism. 1,762,080; June 3.
Schafer, John V., assignor to Bronson Reel Company, Bronson, Mich. Reel. 1,761,750; June 3.
Schatz, William A., Long Island, N. Y. Faucet. 1,761,089; June 3.
Schellin, John C., Wooster, Ohio. Hose-coupling adapter. 1,761,157; June 3.

Schemmel, Robert C., Union City, Ind. Ornamental conductor for electric wires. Re17,691; June 3.
Schiff, Sigmund, assignor to The J. H. Day Company, Cincinnati, Ohio. Cake mixer. 1,761,237; June 3.
Schindler, Carl. (See Taylor, C. B., and Schindler.)
Schjolin, Eric O., Birmingham, assignor to Yellow Truck & Coach Manufacturing Company, Pontiac, Mich. Reversed-flow water-cooled engine. 1,761,935; June 3.
Schlaich, Herman, Elmhurst, N. Y. Indicating device. 1,761,751; June 3.
Schleicher, George, New York, N. Y. Beater. 1,762,081; June 3.
Schlichter, Henry G., Fitchburg, Mass. Expansion and contraction switch. 1,761,456; June 3.
Schloerb, Edwin W., San Diego, Calif. Lubricant heat-dissipating means. 1,761,686; June 3.
Schluchter, Alfred W., Dearborn, assignor to General Motors Research Corporation, Detroit, Mich. Rust-proofing iron or steel. 1,761,936; June 3.
Schmeisser, Hugo, Suhl, Germany. Air pistol. 1,761,993; June 3.
Schmidt, Karl, Berlin-Lichtenrade, assignor to C. Lorenz, Aktien-Gesellschaft, Berlin-Tempelhof, Germany. Mechanical rectifier. 1,760,966; June 3.
Schmidt, Karl, Berlin-Lichtenrade, and W. Hahnemann, Berlin-Marienfelde, assignors to C. Lorenz Aktiengesellschaft, Berlin-Tempelhof, Germany. Iron core for magnetic apparatus. 1,760,965; June 3.
Schmidt, Maximilian P., R. Zahn, and W. Krieger, Wiesbaden-Biebrich, Germany, assignor to Halle & Co. Aktiengesellschaft. Preparing pictures to be produced by tanning action. 1,762,033; June 3.
Schneider, John M., Albany, N. Y. Styptic pencil. 1,761,025; June 3.
Schnell, William, assignor to Ternstedt Manufacturing Company, Detroit, Mich. Radiator cap or similar article for an automotive vehicle. Des. 81,303; June 3.
Schoettler, Frederick H., assignor of thirty-five per cent to J. H. Taft, Chicago, and twenty-five per cent to W. F. Brugmann, Evanston, Ill. Carburetor. 1,761,846; June 3.
Schremp, Edward J., Beachhurst, Long Island, assignor to The Prosperity Company, Inc., Syracuse, N. Y. Hosiery-pressing tray. 1,760,917; June 3.
Schrupp, Walter H., Granite Falls, Minn. Renewable fuse. 1,761,054; June 3.
Schuler, Gustave. (See Brennan, M. O., and Schuler.)
Schulte, Arthur, et al. (See Lüdorf, Gustav, assignor.)
Schwager, Henry A., assignor to General Motors Corporation, Detroit, Mich. Throttle-operated spark control. 1,761,588; June 3.
Schwalge, William, Elmhurst, Ill. Vulcanizer for automobile tires. 1,761,687; June 3.
Schwartz, Sidney H. (See Connor, A. W., and Schwartz.)
Schwarze, Herman, Pontiac, Mich., assignor to Guide Lamp Corporation, Anderson, Ind. Fender lamp for motor vehicles. Des. 81,304; June 3.
Schwarze, Herman, Pontiac, assignor to General Motors Corporation, Detroit, Mich. Engine-starting apparatus. 1,761,539; June 3.
Schwarze, Herman, Pontiac, assignor to General Motors Corporation, Detroit, Mich. Engine-starting apparatus. 1,761,540; June 3.
Schwarze, Herman, Birmingham, assignor to General Motors Corporation, Detroit, Mich. Headlamp mounting. 1,761,937; June 3.
Schweiker, Roy W., Lansdale, Pa. Canopy for lighting fixtures. 1,761,090; June 3.
Schweitzer, Edmund O., Chicago, Ill. Current-interrupting and arc-extinguishing means. 1,761,091; June 3.
Schwerin, Frank H., Bellevue, assignor to The Duff-Norton Manufacturing Company, Pittsburgh, Pa. Pinion puller. 1,761,412; June 3.
Scott, Charlie B., assignor to M. E. Green Manufacturing Co., St. Louis, Mo. Eye-testing device. 1,761,238; June 3.
Scott, Charlie B., assignor to M. E. Green Manufacturing Co., St. Louis, Mo. Eye-testing device. 1,761,239; June 3.
Scott, Clifford E., assignor to McQuay Radiator Corporation, Minneapolis, Minn. Motor mounting. 1,761,752; June 3.
Scott, Howard B., assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio. Rubbing pad. 1,761,541; June 3.
Scott, Walter J., Woonsocket, R. I. Stop motion for drawing frames. 1,761,413; June 3.
Scovill Manufacturing Company. (See Fenton, Paul E., assignor.)
Scovill Manufacturing Company. (See Reutter, Frederick, assignor.)
Seagrave Company, The. (See Havens, Homer M., assignor.)
Seidel, Morris, Brooklyn, N. Y. Pipe-cleaning or cable-laying device. 1,761,592; June 3.
Seiz, Walter, Baden, Switzerland, assignor to General Electric Company. Exciter and exciting system for dynamo-electric machines. 1,761,753; June 3.
Selway, Edward B., Leetsdale, Pa. Adjustable metallic form for concrete walls. 1,761,055; June 3.
Semet-Solvay Engineering Corporation. (See Tymstra, Sybren R., assignor.)
Semple-Lee Processes, Inc. (See Shook, Florain J., assignor.)
Seng, Fred J., New Albany, Ind. Shock-forming machine. 1,76,314; June 3.
Service Bureau, Inc. (See Dawson, George H., assignor.)
Sessions, J. H., & Son. (See Guiden, Nicholas C., assignor.)
Sfiris, George, Corpus Christi, Tex. Door latch. 1,760,968; June 3.
Shallcrass, Herbert L., Philadelphia, Pa. Power brake. 1,761,896; June 3.
Sharples, Laurence P., Chester, assignor to The Sharples Specialty Company, Philadelphia, Pa. Centrifugal treatment of substances. 1,761,593; June 3.
Sharples Specialty Company, The. (See Sharples, Laurence P., assignor.)
Sharpsville Boiler Works Co. (See Fagan, Charles D., assignor.)
Shaw, Ernest C., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Setworks. 1,761,590; June 3.
Shaw-Walker Company. (See Hunter, David E., assignor.)
Shaw, Wesley J., assignor to New England Wood Heel Co., Haverhill, Mass. Machine for concaving wood-heel blocks. 1,761,026; June 3.
Sheehan, John F., et al. (See Zim, Jesse G., assignor.)
Shelton, William G., St. Louis, Mo. Hair drier. 1,760,997; June 3.
Sheperd, Raymond E., Mount Vernon, N. Y. Combined insulator and shunt-circuit closer. 1,761,496; June 3.
Shepherdson, Arnold, and W. W. Tatum, assignors to British Dyestuffs Corporation Limited, Manchester, England. Anthraquinone dyes. 1,761,369; June 3.
Shepherdson, Arnold, and W. W. Tatum, assignors to British Dyestuffs Corporation Limited, Manchester, England. New anthraquinone dye and dyeing therewith. 1,761,370; June 3.
Shestakoff, Peter. (See Petroff, G., and Shestakoff.)
Shield, Paul S., assignor to A. Davis, jr., Cincinnati, Ohio. Lock cover for cans. 1,760,888; June 3.
Shilling, Edward C., Columbus, assignor of one-half to J. Dagger, Urbana, Ohio. Safety bumper for automobiles. 1,761,994; June 3.
Shiner, Harry M., York, assignor to United States Chain & Forging Company, Pittsburgh, Pa. Chain fastener. 1,761,688; June 3.
Shinn, William C., assignor to Chicago Lock Company, Chicago, Ill. Lock. 1,761,092; June 3.
Shipley, Bernis M., assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio. Cash register. 1,761,542; June 3.
Shipley, Bernis M., assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio. Indicating mechanism for cash registers. 1,761,643; June 3.
Shipley, Bernis M., assignor to The National Cash Register Company, Dayton, Ohio. Cash register. 1,761,644; June 3.
Shipley, Bernis M., assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio. Cash register. 1,761,689; June 3.
Shiraishi, Paul M., Paauilo, Hawaii. Vase. 1,762,082; June 3.
Shodron, Peter G. (See Meyer, G. J., Shodron, and Dreher.)
Shoe Hardware Company, The. (See Cobb, Willard H., assignor.)
Shoemaker, John V., Detroit, Mich. Wiper for oil gauges. Des. 81,305; June 3.
Shook, Florain J., assignor to Semple-Lee Processes, Inc., Akron, Ohio. Tube-splicing apparatus. 1,761,754; June 3.
Short, Charles R. (See Koehring, R. P., and Short.)
Short, Charles R., Dayton, Ohio, assignor to General Motors Research Corporation, Detroit, Mich. Engine mounting. 1,761,938; June 3.
Short, Charles R., assignor to General Motors Research Corporation, Detroit, Mich. Electric booster brake. 1,761,939; June 3.
Shott, Charles F., and C. E. Luce, Acme, and C. W. Johnson, Sheridan, Wyo. Wire stretcher. 1,760,918; June 3.
Shotwell, Joe E., Stockton, Calif. Resilient knee pad. 1,761,063; June 3.
Shultis, Earl P. (See Cordell, H., and Shultis.)
Shunk, James H., jr., Roscoe, Ill. Fireworks construction. 1,761,094; June 3.
Shutt, George H., New Bedford, assignor to Crompton & Knowles Loom Works, Worcester, Mass. Warp-stop-motion separator. 1,760,967; June 3.
Shutts, Leroy W., assignor to General Motors Research Corporation, Detroit, Mich. Oil-filtering means. 1,761,940; June 3.
Siebe, John P., Sacramento, Calif. Price-tag holder. 1,761,995; June 3.
Silberberger, Cecil M., Frederick, S. Dak. Roller drive. 1,762,034; June 3.
Simmons Company. (See Volmer, William A., assignor.)
Simmons, Frederick C., Highland Park, Pa., assignor to Pioneer Suspender Company. Beveling. 1,761,414; June 3.
Simonsen, Edward H., assignor to R. M. Eddy Foundry Company, Chicago, Ill. Machine tool. 1,761,847; June 3.
Simonton, Hugh E., Memphis, Tenn. Adjustable attachment for paper hangers' straight edge and trimming boards. 1,761,315; June 3.
Sinclair Refining Company. (See Herthel, Eugene C., assignor.)
Sinclair Refining Company. (See Phillips, E. B., and Stafford, assignors.)

Singer, George G., jr., Bismarck, N. Dak. Art shield. 1,762,083; June 3.
Sitzman, Arthur, Brooklyn, N. Y., and E. S. Klausner, Asbury Park, N. J. Concrete building unit. 1,761,848; June 3.
Skillman, Edward, and G. Harmon, Bartlesville, Okla., assignors to Doherty Research Company, New York, N. Y. Automatic system for burning fuel under boilers. 1,761,158; June 3.
Skogmark, John. (See Chase, M. F., Pierce, and Skogmark.)
Skvortzoff, Alexander A., Sharon, Pa., assignor to Westinghouse Electric & Manufacturing Company. Conductor for transformers. 1,760,889; June 3.
Slady, Frank, assignor to Leviton Manufacturing Company, Brooklyn, N. Y. Switch. 1,761,803; June 3.
Sleeper, Frank H., assignor to Sleeper & Hartley, Inc., Worcester, Mass. Machine for making lock washers. 1,761,279; June 3.
Sleeper & Hartley, Inc. (See Nigro, Michel, assignor.)
Sleeper & Hartley, Inc. (See Sleeper, Frank H., assignor.)
Slick, Edwin E., Pittsburgh, Pa. Cake plate or similar article. Des. 81,306; June 3.
Sly, W. W., Manufacturing Company, The. (See Boesger, George A., assignor.)
Smith, Charles F., assignor to Smith Engineering Works, Milwaukee, Wis. Feeding device for crushers and the like. 1,761,240; June 3.
Smith, Curtis F. (See Cave, H., and Smith.)
Smith, Donald N. (See Cook, T. R., and Smith.)
Smith, Edward F., Chicago, Ill., assignor to Haynes Stellite Company, Kokomo, Ind. Making metal-working tools. 1,761,755; June 3.
Smith Engineering Works. (See Smith, Charles F., assignor.)
Smith, Frederick A. (See Blaeker, J., and Smith.)
Smith, Harry C., New York, N. Y., assignor, by mesne assignments, to Autodrink Corporation, Dover, Del. Beverage-dispensing device. 1,762,126. June 3.
Smith, Harry F., assignor to The Gas Research Company, Dayton, Ohio. Control mechanism. 1,761,849; June 3.
Smith, Jesse A. B., Stamford, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y. Typewriting machine. 1,761,056; June 3.
Smith, Joseph A., and E. J. Hansen, assignors to The Cleveland Heater Company, Cleveland, Ohio. Adjustable and detachable gas burner. 1,761,594; June 3.
Smith, John W. (See Sawyer, G. E., and Smith.)
Smith, Paul W., assignor to Stockland Road Machinery Company, Minneapolis, Minn. Tractor hitch for road machines. 1,760,919; June 3.
Smith, Raymond D., Pleasantville, N. Y., assignor, by mesne assignments, to Tremont Products Corporation, Boston, Mass. Timer-mechanism. 1,762,101; June 3.
Smith, Robert A., assignor of one-half to B. C. Garoff, Portland, Oreg. Supporter for fishing rods. 1,761,497; June 3.
Smith, Wallace W. (See Wilson, H. R., and Smith.)
Smith, Walter, West Hartlepool, assignor to The Expanded Metal Company, Limited, London, England. Coating, impregnating, or alloying metals and other materials with aluminum and aluminum alloys. 1,761,850; June 3.
Smith, Walter F. (See Graves, B. P., and Smith.)
Smith, William W., Buffalo, N. Y. Casting readily-oxidizable metals. 1,761,408; June 3.
Smithson, Arthur, Minneapolis, Minn. Nailless horseshoe. 1,761,241; June 3.
Smolensky, Michael, Cleveland, Ohio. Valve. 1,761,595; June 3.
Smoot-Holman Co. (See Hunt, Howard M., assignor.)
Snyder, Carrie M., Plainfield, N. J. Mailing sheet and envelope. 1,762,084; June 3.
Snyder, Frank L., assignor to The White Motor Company, Cleveland, Ohio. Boring bar. 1,761,804; June 3.
Sobczak, John. (See Werner, P. J., and Sobczak.)
Sobolew, Wilho, Vilpuri, Finland. Automatic bailer. 1,761,645; June 3.
Société Anonyme des Andiens Etablissements Panhard & Levassor. (See Schaeffer, Charles, assignor.)
Société Générale de Fours a Coke, Systémes Lecöcq Société Anonyme. (See Lecöcq, Eugène, assignor.)
Sokolow, Hyman. (See Gumeiner, Samuel, assignor.)
Sommerfield, George H., Cleveland, Ohio. Cleaning device. 1,761,499; June 3.
Sons-Cunningham Reed & Rattan Co. (See Jones, Charles W., assignor.)
Sorensen, Anton, Astoria, Oreg. Float-impregnating process and apparatus. 1,761,500; June 3.
Sorensen, Sam, Houston, Tex. Pipe wrench. 1,761,280; June 3.
Southwestern Engineering Company. (See Lord, Robert, assignor.)
Soylian, George, New York, N. Y. Revolving broiler. 1,762,035; June 3.
Spalding, A. G., & Bros. (See Glahe, Fred, assignor.)
Sparhawk, Charles E., Stellacoom, Wash. Airplane. 1,761,242; June 3.
Sparta Foundry Company. (See McFall, Thurlow E., assignor.)
Speidel, Edwin F. M., and K. C. Augenstein, Edgewood, assignors to Automatic Gold Chain Company, Providence, R. I. Machine and method for making chain. 1,761,415; June 3.
Spencer, Edmonson, Calcutta, British India. Apparatus for and process of separating or extracting cellulose or paper pulp. 1,761,543; June 3.
Spencer, Edmonson, Calcutta, British India. Separating or extracting cellulose or paper pulp. 1,761,544; June 3.
Spencer, Louis M., assignor to General Motors Corporation, Detroit, Mich. Underslung tire carrier. 1,761,941; June 3.
Spencer, Millard C., East Orange, assignor to Crocker-Wheeler Electric Manufacturing Company, Ampere, N. J. Electric motor. 1,761,159; June 3.
Sperry Gyroscope Company. (See House, Frank R., assignor.)
Spitzer, Charles, Warrensburg, Ill. Cigar lighter. 1,761,316; June 3.
Spottswood, Edwin E., Cincinnati, Ohio. Protective structure for cashiers and the like. 1,761,005; June 3.
Spratt, Baylor, Evansville, Ind. Boiler-scale-removing device. 1,761,371; June 3.
Sprulll, Rudolph B. (See Achatz, John, assignor.)
Stafford, James G. (See Phillips, E. B., and Stafford.)
Stakel, John P. (See Davis, R. L., and Stakel.)
Stallmann, Otto. (See Gubelmann, I., Weiland, and Stallmann.)
Standard Brands Incorporated. (See Harrison, Arthur P., assignor.)
Standard Computing Scale Company, The. (See Jaenichen, Louis, assignor.)
Standard Electric Manufacturing Co., The. (See Parker, Thomas L., assignor.)
Statham, Noel, Irvington-upon-Hudson, N. Y. Fabricating fastener-operating means and blanks therefor. 1,761,805; June 3.
Stator Refrigeration, Inc. (See Weaver, Eastman A., assignor.)
Stator Refrigeration, Inc. (See Whitney, Lyman F., assignor.)
Stedefeld, Curt, Heidelberg, Germany. Apparatus for jointlessly welding rails. 1,762,085; June 3.
Stedefeld, Curt, Heidelberg, Germany. Jointlessly welding rails. 1,762,086; June 3.
Steedle, Joseph J., Scranton, Pa. Disk chart to determine color relations. 1,762,036; June 3.
Steel Wheel Corporation. (See Williams, William E., assignor.)
Stegeman, Harry M., Fort Thomas, Ky., assignor to The Wadsworth Watch Case Company, Dayton, Ky. Wristband. 1,761,545; June 3.
Steinmetz, Benjamin J., New York, N. Y. Variable pitch and reversible propeller. 1,761,690; June 3.
Steinmetz, Benjamin J., New York, N. Y. Venturi slot for aeroplane wings. 1,761,691; June 3.
Stenhouse, Thomas, Washington, Pa., assignor to Hazel-Atlas Glass Co., Wheeling, W. Va. Plunger-operating mechanism for glass furnaces. 1,761,372; June 3.
Stepp, Eddie H., Knoxville, assignor of one-half to Horace Van Deventer, Knoxville, Tenn. Auxiliary air-admission device. 1,761,692; June 3.
Stevenson, Lawrence J., assignor to The Porcelain Enamel & Manufacturing Co., Baltimore, Md. Apparatus for loading and unloading enameling furnaces. 1,761,996; June 3.
Steward, John W., Paterson, N. J. Shuttle. 1,761,416; June 3.
Stockland Road Machinery Company. (See Smith, Paul D., assignor.)
Stoefen, Robert R. (See Oberg, A. J., and Stoefen.)
Stone, August W. (See Wheat, W. T., and Stone.)
Stoner-Ames Brake Company. (See Stoner, George H., assignor.)
Stoner, George H., East Boston, assignor, by mesne assignments, to Stoner-Ames Brake Company, Inc., Boston, Mass. Brake. 1,761,027; June 3.
Stopford, Alice M., New York, N. Y. Medicament applicator for feet. 1,761,501; June 3.
Storck, Emil G., assignor to Moore Push Pin Company, Philadelphia, Pa. Merchandise-display card. 1,761,417; June 3.
Stouffer, Howard O., Watsontown, Pa. Sight level. 1,761,851; June 3.
Stout, William B., Detroit, assignor to Ford Motor Company, Highland Park, Mich. Airplane landing gear. 1,760,890; June 3.
Stowell, Byron F. (See Van Norman, C. E., and Stowell.)
Strasser Automatic Golf Systems, Inc. (See Strasser, Richard H., assignor.)
Strasser, Richard H., assignor to Strasser Automatic Golf Systems, Inc., Newark, N. J. Automatic golf link. 1,761,317; June 3.
Straus, Edith G. (See Whitman, John F., jr., assignor.)
Strickland, William R., assignor to General Motors Corporation, Detroit, Mich. Temperature control for oil. 1,761,942; June 3.
Stromberg Electric Company. (See Long, Albert E., assignor.)
Stromberg, Sven E., New York, N. Y., assignor to American Telephone and Telegraph Company. Testing system. 1,760,920; June 3.
Strongson, Herman L., Brooklyn, and R. D. Colen, New York, N. Y. Plug connecter. 1,760,921; June 3.
Structural Waterproofing Company. (See Rose, Joseph, assignor.)
Struthers, James A., Minneapolis, Minn. Hosiery. Des. 81,307; June 3.

Stryker, George B., jr., assignor to The Weatherproof Products Company, Memphis, Tenn. Shingle construction and composition. 1,761,756; June 3.
Stuart, Elmer H., assignor to Eli Lilly and Company, Indianapolis, Ind. Ephedrine oil solution. 1,762,108; June 3.
Stuber & Kuck Co. (See Kuck, Henry G., assignor.)
Studebaker Corporation, The. (See Kohr, Robert F., assignor.)
Studebaker Corporation, The. (See Pomeroy, Percy W., assignor.)
Sturk, Ewald E., Hollywood, Calif. Cap and tube for tooth paste and the like. 1,761,693; June 3.
Sullivan, Lambert W., Woonsocket, R. I. Bearing. 1,761,757; June 3.
Sullivan Machinery Company. (See Hall, Edwin T., assignor.)
Sullivan Machinery Company. (See Miller, Edward E., assignor.)
Sullivan Machinery Company. (See Osgood, Charles F., assignor.)
Sullivan Machinery Company. (See Rundqvist Thore R. E., assignor.)
Sullivan, Michael H., Wilkes-Barre, Pa. Shock-absorbing attachment for crutches. 1,761,502; June 3.
Summers, Caleb E., and G. W. Lampman, Pontiac, assignors to General Motors Research Corporation, Detroit, Mich. Valve-spring retainer. 1,761,943; June 3.
Summey, Thomas O., et al. (See Utsman, George W., assignor.)
Sun Oil Company. (See Pew, Arthur E., jr., assignor.)
Sun Rise Lamp Mfg. Co. (See Abel, Frank J., assignor.)
Sun Typewriter Company. (See Nemcovsky, Louis A., assignor.)
Super Mould Co., The. (See Glynn, Edwin A., assignor.)
Superior Switchboard & Devices Company, The. (See Newman, Thomas J., assignor.)
Surface Combustion Company, The. (See Harris, William J., jr., assignor.)
Surface Combustion Company, The. (See Manker, Forrest W., assignor.)
Suter, Jesse D. (See Binder, H. P., and Suter.)
Sweet, Donald H., Evanston, Ill. Speedometer. 1,761,694; June 3.
Swift and Company. (See Brennan, M. O., and Schuler, assignors.)
Swinscoe, John. (See Ormsby, D. D., and Swinscoe.)
Tabulating Machine Company, The. (See Carroll, Fred M., assignor.)
Tabulating Machine Company, The. (See Reynolds, Lynus C., assignor.)
Taft, John H., et al. (See Schoettler, Frederick H., assignor.)
Tanner, Arnold J., North Haven, Conn. Packing and display container. 1,761,598; June 3.
Tatum, William W. (See Shepherdson, A., and Tatum.)
Taub, Alex, Detroit, Mich. Condenser and making the same. 1,761,281; June 3.
Taylor, Charles B., Milwaukee, and C. Schindler, West Allis, assignors to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Prime-mover control system. 1,761,596; June 3.
Taylor, Clifton, Pittsburgh, Pa., and H. L. Greene, Toledo, Ohio, assignors to Molybdenum Corporation of America, Pittsburgh, Pa. Cast-iron alloy. 1,762,109; June 3.
Taylor, James S., Wynona, Okla., assignor of three-eighths to L. J. Mildren, Ponca City, Okla., and two-eighths to C. E. Reed, Wichita, Kans. Pipe holder and elevator. 1,762,037; June 3.
Taylor, Minnie B., Los Angeles, Calif. Milk-bottle cap. 1,761,597; June 3.
Taylor, Paul B., Pontiac, assignor to General Motors Corporation, Detroit, Mich. Crank-case ventilator. 1,761,944; June 3.
Taylor, Robert S. (See Lenning, A., and Taylor.)
Technidyne Corporation. (See Jones, L. L., and Yolles, assignors.)
Tegmeyer, Charles H., St. Louis, Mo. Boat drive. 1,761,373; June 3.
Ternstedt Manufacturing Company. (See Schnell, William, assignor.)
Tessé, Félix, La Courneuve, France. Pneumatic suspension wheel. 1,761,997; June 3.
Test, William H., Redondo Beach, Calif. Composition of matter. 1,760,922; June 3.
Texas Company, The. (See White, George D., assignor.)
Textile Machine Works. (See Zwicky, Melchior, assignor.)
Tharp, Victor S., Elmhurst, Ill., assignor to Reserve Holding Company, Kansas City, Mo. Telephone system. 1,761,160; June 3.
Thauss, Alfred. (See Doser, A., Mauthe, and Thauss.)
Thekan, Charles A., Milwaukee, Wis. Combination gas cock and automatic lighter. 1,762,038; June 3.
Thoma, Erwin. (See Hoffa, E., and Thoma.)
Thomas, Albin A., York, assignor to United States Chain & Forging Company, Pittsburgh, Pa. Chain fastener. 1,761,646; June 3.
Thomas, Albin A., York, assignor to United States Chain & Forging Company, Pittsburgh, Pa. Chain fastener. 1,761,647; June 3.
Thomas, Albin A., York, assignor to United States Chain & Forging Company, Pittsburgh, Pa. Chain fastener. 1,761,648; June 3.
Thomas, Horace T., assignor to Reo Motor Car Company, Lansing, Mich. Windshield. 1,761,161; June 3.
Thompson, Arthur W., and F. J. Vogel, Sharon, Pa., assignors to Westinghouse Electric and Manufacturing Company. Transformer core. 1,760,998; June 3.
Thompson, James S., assignor to American Brake Materials Corporation, New York, N. Y. Composition of matter. 1,761,057; June 3.
Thompson, James S., assignor to American Brake Materials Corporation, New York, N. Y. Friction brake. 1,761,318; June 3.
Thompson Products, Inc. (See Bissell, Richard E., assignor.)
Thompson, Russell G., assignor to Electromatic Typewriters, Inc., Rochester, N. Y. Typewriter. 1,761,758; June 3.
Thorne, Delmont M., Galesburg, Ill. Tool. 1,761,999; June 3.
Thornton, John E., London, assignor to J. O. O'Brien, Manchester, England. Multicolor cinematographic and other film and making same. 1,761,897; June 3.
Tiffany, Edward L., West Barrington, assignor to National India Rubber Company, Bristol, R. I. Automatic stop motion. 1,761,418; June 3.
Timken-Detroit Axle Company, The. (See Morgan, Mathew B., assignor.)
Todd, Augustus H., Fleischmanns, N. Y. Priming chamber for pump lines. 1,761,504; June 3.
Tomlinson, Charles H., assignor to The Tomlinson Coupler Company, Mansfield, Ohio. Deenergizing circuit for coupled cars. 1,761,419; June 3.
Tomlinson Coupler Company, The. (See Tomlinson, Charles H., assignor.)
Tönhardt, Walter, Neumunster, Germany. Hand excavator. 1,761,503; June 3.
Topping, John A., Bronxville, N. Y. Roofing cleat. 1,761,599; June 3.
Tower, Elmer V. J., North Syracuse, N. Y., assignor to Russell Manufacturing Company, Middletown, Conn. Steering wheel. 1,761,374; June 3.
Tower, Francis E., assignor to Gordon Hollow Blast & Grate Company, Greenville, Mich. Trimming machine. 1,761,096; June 3.
Townsend, H. P., Company, The. (See Townsend, Harry P., assignor.)
Townsend, Harry P., West Hartford, assignor to The H. P. Townsend Company, Hartford, Conn. Machine for cutting multiple threads on wood screws. 1,761,243; June 3.
Tramer, Arnold H., Elizabeth, N. J. Condiment holder. 1,761,806; June 3.
Travis, Simeon E., jr., Hattiesburg, Miss. Siguboard structure for truck bodies. 1,761,999; June 3.
Travis, Simeon E., jr., Hattiesburg, Miss. Floor and corner structure for truck bodies. 1,762,000; June 3.
Tray Service Company, et al. (See McGinley, James M., assignor.)
Tremont Products Corporation. (See Smith, Raymond D., assignor.)
Trenholm, William E., Eveleth, Minn. Bathing-beach float. 1,761,058; June 3.
Trombetta, Panfilo, Milwaukee, Wis., assignor to General Electric Company. Electromagnet. 1,761,759; June 3.
Trotter, William, New York, and E. W. Wilkinson, Queens Village, assignors to Minerals Separation North American Corporation, New York, N. Y. Concentration of phosphate-bearing material. 1,761,546; June 3.
Trumbull Electric Manufacturing Company, The. (See Getchell, Benjamin E., assignor.)
Truscon Steel Company. (See White, Herbert E., assignor.)
Trussbilt Steel Doors, Inc. (See Gross, Arthur R., assignor.)
Tucker, Oliver M., and W. A. Reeves, Columbus, Ohio, assignors, by mesne assignments, to Hartford-Empire Company, Hartford, Conn. Timing mechanism for glass feeders. 1,760,999; June 3.
Turk, Karl, assignor to The Porcelain Enamel & Manufacturing Company of Baltimore, Baltimore, Md. Ball or handle for gear-shift levers. 1,761,898; June 3.
Türk, Karl, assignor to The Porcelain Enamel and Manufacturing Company of Baltimore, Baltimore, Md. Grate or burning bar for enameling furnaces. 1,762,001; June 3.
Turner, George A., Stockton, Calif. Self-cleaning screen. 1,761,244; June 3.
Turner, Richard G., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Thread clearer for looms. 1,760,969; June 3.
Tyler, Frederick H., assignor to The National Cash Register Company, Dayton, Ohio. Cash register. 1,761,547; June 3.
Tymstra, Sybren R., Flushing, assignor to Semet-Solvay Engineering Corporation, New York, N. Y. Cylinder and mechanism operated thereby. 1,761,600; June 3.
Underwood Elliott Fisher Company. (See Kurowski, Alfred G. F., assignor.)
Underwood Elliott Fisher Company. (See Lear, Arthur F., assignor.)
Underwood Elliott Fisher Company. (See Smith, Jesse A. B., assignor.)
Union Steel Products Company. (See Dean, Walter C., assignor.)
Union Switch & Signal Company, The. (See Vencill, Albert L., assignor.)

Union Tank & Pipe Co. (See Petersen, Thorvald A. M., assignor.)
United-Carr Fastener Company. (See Carr, Moses F., assignor.)
United Shoe Machinery Corporation. (See Alkonis, James F., assignor.)
United Shoe Machinery Corporation. (See Finn, Sidney J., assignor.)
United Shoe Machinery Corporation. (See Gouldbourn, Joseph, assignor.)
United Shoe Machinery Corporation. (See Lambert, Leo J., assignor.)
United Shoe Machinery Corporation. (See Maxwell, W., and De Tour, assignors.)
United Shoe Machinery Corporation. (See Nutt, William H., assignor.)
United States Chain & Forging Company. (See Diehl, Peter B., assignor.)
United States Chain & Forging Company. (See Miller, Charles H., assignor.)
United States Chain & Forging Company. (See Shiner, Harry M., assignor.)
United States Chain & Forging Company. (See Thomas, Albin A., assignor.)
U. S. Sanitary Specialties Corporation. (See Cordell, H., and Shultis, assignors.)
Universal Engineering Corporation. (See Robson, John, assignor.)
Universal Oil Products Company. (See Dubbs, Carbon P., assignor.)
Utsman, George W., assignor of one-half to C. H. Robertson, and one-half to T. O. Summey, West Hillsboro, N. C. Quill-cleaning machine. 1,761,695; June 3.
Utt, Frank M., et al. (See Campbell, Malcolm A., assignor.)
Valley Mould & Iron Corporation. (See Kauffman, Edmund J., assignor.)
Valley Mould and Iron Corporation. (See Perry, J. E., and Lanigan, assignors.)
Van Arnam, George H., Fort Wayne, Ind., assignor to Juvenile Wood Products, Inc. Folding foot rest for toilet seats. 1,761,602; June 3.
Vance, George E., assignor to The Safety Grinding Wheel & Machine Company, Springfield, Ohio. Sectional ring grinder. 1,761,852; June 3.
Vance, John R., et al. (See Foreman, Dave, assignor.)
Van Degrift, Thomas C., assignor to General Motors Research Corporation, Detroit, Mich. Balancing and apparatus therefor. 1,761,945; June 3.
Van de Putte, John, San Antonio, Tex. Variable surface wing for aeroplanes. 1,762,002; June 3.
Van Der Bogart, James, Ossining, N. Y., assignor to General Electric Company. Fuse cutter. 1,761,760; June 3.
Van Deventer, Horace. (See Stepp, Eddie H., assignor.)
Van Etten, William V., Bellingham, Wash. Roller skate. 1,761,807; June 3.
Van Etten, William V., Bellingham, assignor to Hi-Power Manufacturing Company, Seattle, Wash. Foot-power scooter. 1,761,601; June 3.
Van Gelderen, Frederik M., Enschede, Netherlands. Insulating cap for the joints of electrical conductors and conductive coating for use therein. 1,762,039; June 3.
Van Norman, Charles E., and B. F. Stowell, assignors to Van Norman Machine Tool Co., Springfield, Mass. Polishing machine. 1,761,050; June 3.
Van Norman Machine Tool Co. (See Van Norman, C. E., and Stowell, assignors.)
Van Slyke, Frederick E., assignor to The Jeffrey Manufacturing Company, Columbus, Ohio. Mining apparatus. 1,761,060; June 3.
Van Vlaanderen Machine Company. (See Hinnekens, Florent, assignor.)
Van Zile, Harry L., New York, N. Y. Ventilator. 1,761,061; June 3.
Vaught, Simmie C., Pueblo, Colo. Barber's resilient razor wiper. 1,761,375; June 3.
Vedder, John W., assignor to Rice, Barton & Fales, Incorporated, Worcester, Mass. Paper drier. 1,760,923; June 3.
Vencill, Albert L., Pittsburgh, assignor to The Union Switch & Signal Company, Swissvale, Pa. Car retarder. 1,761,649; June 3.
Verein für Chemische Industrie Aktiengesellschaft. (See Walter, Hans, assignor.)
Verry, Irving H. (See Gordon, A. A., and Verry.)
Vicente, Saturnino G., Madrid, Spain. Set of instruments for the passage of the glottis by means of the touch. 1,761,761; June 3.
Victor V-ray Corporation. (See Wantz, J. B., and Grothe, assignors.)
Vingheroets, Louis, Grand Rapids, Mich., assignor to Dow Gas Engine Starter Corporation, Wilmington, Del. Starter for internal-combustion engines. 1,761,457; June 3.
Vitto, Ben, Chicago, Ill. Multiple xylophone finger. 1,761,245; June 3.
Vogel, Fred J. (See Thompson, A. W., and Vogel.)
Volf, Christian A., jr., Brooklyn, N. Y. Vehicle siren. 1,761,162; June 3.
Vollmer, William A., assignor to Simmons Company, Kenosha, Wis. Caster socket. 1,761,319; June 3.
Von Henke, Edmund J., assignor to American Electric Fusion Corporation, Chicago, Ill. Apparatus for welding with high-frequency currents. 1,761,420; June 3.
Von Henke, Edmund J., assignor to American Electric Fusion Corporation, Chicago, Ill. Electrical welding apparatus. 1,761,421; June 3.
Von Henke, Edmund J., assignor to American Electric Fusion Corporation, Chicago, Ill. Apparatus for electric welding. 1,761,458; June 3.
Von Hofe, Christian, Vienna, Austria, assignor to C. P. Goerz optische Anstalt Aktiengesellschaft, Frankfort-on-the-Main, Germany. Manufacture of santalol compounds. 1,761,376; June 3.
Von Pein, Edward J., assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio. Cash register. 1,761,548; June 3.
Von Pein, Edward J., assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio. Cash register. 1,761,549; June 3.
Wadsworth Watch Case Company, The. (See Otten, Lawrence F., assignor.)
Wadsworth Watch Case Company, The. (See Stegeman, Harry M., assignor.)
Wagner Electric Corporation. (See Welchsel, Hans, assignor.)
Wagner, Ernest E., Minneapolis, Minn., assignor, by mesne assignments, to The Rotawasher Corporation, Cleveland, Ohio. Nozzle. 1,761,422; June 3.
Wagner, Hermann, Bad-Soden-on-the-Taunus, R. Brune, Hochst-on-the-Main, M. Hesseniand, Konigsberg, E. Hoffa, F. Müller, and H. Heyna, Hochst-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Vat dyestuff. 1,762,040; June 3.
Wahl Clipper Corporation. (See Wahl, Leo J., assignor.)
Wahl, Leo J., assignor to Wahl Clipper Corporation, Sterling, Ill. Blade attachment for clippers. 1,761,550; June 3.
Wainwright, Herbert, assignor to National Seal Company, Inc., Brooklyn, N. Y. Closure. 1,761,603; June 3.
Wakefield, Walter H., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Protector mechanism for looms. 1,760,970; June 3.
Wakefield, Walter H., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Protector mechanism for looms. 1,760,971; June 3.
Wakenshaw, Adam, Bearcreek, Mont. Car coupler. 1,762,041; June 3.
Walker, William D., Kansas City, Mo. Starting motor-control mechanism. 1,761,853; June 3.
Wallis, George E. (See Graham, L. A., and Low, assignors.)
Walter, Hans, Mainz-Mombach, assignor to Verein für Chemische Industrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Manufacture of santalol compounds. 1,761,376; June 3.
Wantz, Julius B., and A. A. Grothe, Oak Park, assignors to Victor X-ray Corporation, Chicago, Ill. Rectifier. 1,761,246; June 3.
Ward, Charles C., Houston, Tex. Plow. 1,761,320; June 3.
Waring, Horace, Lancashire, assignor to Associated Lead Manufacturers Limited, London House, London, England. Apparatus for collecting suspended dust. 1,761,377; June 3.
Warner, Douglas K., Bristol, Conn. Appartus for manufacturing ice. 1,760,972; June 3.
Warner, Douglas K., Bristol, Conn. Float-controlled valve. 1,761,000; June 3.
Warner Electric Brake Corporation. (See Cadman, Addi B., assignor.)
Warner Gear Company. (See Fishburn, Otto E., assignor.)
Warner, Joseph R., assignor to S. F. Bowser & Company, Inc., Fort Wayne, Ind. Lubricator. 1,161,097; June 3.
Warriken, Richard W., New York, N. Y. Railroad spike. 1,761,854; June 3.
Waterman, L. E., Company. (See Ferris, William I., assignor.)
Waterman, L. E., Company. (See Liddell, Robert C., assignor.)
Watkins, Clayton S., Amarillo, Tex. Muffler for internal-combustion engines. 1,760,924; June 3.
Wattie, William M., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Thread-controlling device for loom magazines. 1,760,925; June 3.
Weatherproof Products Company, The. (See Stryker, George B., jr., assignor.)
Weaver, Eastman A., Brookline, Mass., assignor, by mesne assignments, to Stator Refrigeration, Inc. Refrigerating system. 1,761,551; June 3.
Weaver, Ira A., Springfield, Ill. Piston. 1,761,808; June 3.
Weaver, Ira A., assignor to Weaver Manufacturing Company, Springfield, Ill. King-pin-testing appliance. 1,761,163; June 3.
Weaver Manufacturing Company. (See Weaver, Ira A., assignor.)
Webber, George R., assignor to Polar Vend Corporation, Augusta, Me. Combination vending machine and change tray. 1,761,604; June 3.
Webster, Lewis E., assignor to The Wyoming Shovel Works, Wyoming, Pa. Shovel. 1,761,378; June 3.
Weddell, Ralph R., Shelton, Conn., assignor to The O. K. Tool Company, Inc., New York, N. Y. Compound taper insertable blade lock. 1,762,110; June 3.

Weddell, Ralph R., Shelton, Conn., assignor to The O. K. Tool Company, Inc., New York, N. Y. Angular serrated adjustable cutter. 1,762,111; June 3.
Wedin, Ivar T., assignor to A C Spark Plug Company, Flint, Mich. Thermostat. 1,761,946; June 3.
Wedin, Ivar T., assignor to A C Spark Plug Company, Flint, Mich. Pressure gauge. 1,761,947; June 3.
Weeks, Ernest A., assignor to Root Spring Scraper Company, Kalamazoo, Mich. Hydraulic scraper structure. 1,760,926; June 3.
Weeks, Ernest A., assignor to Root Spring Scraper Company, Kalamazoo, Mich. Road-scraper attachment for trucks. 1,761,605; June 3.
Wegner, John, Thorp, Wis. Whipping device. 1,762,003; June 3.
Welchsel, Hans, assignor to Wagner Electric Corporation, St. Louis, Mo. Electric-current-generating apparatus. 1,761,855; June 3.
Weiland, Henry J. (See Gubelmann, I., Weiland, and Stallmann.)
Weiss, Carl W., Brooklyn, N. Y. Power-transmission device. 1,760,927; June 3.
Wellman Casing Spear Company, The. (See Wellman, Fred F., assignor.)
Wellman, Charles O., Binghamton, N. Y. Infinitely-variable speed-ratio power-transmitting device. 1,762,004; June 3.
Wellman, Fred F., Wichita, Kans., assignor to The Wellman Casing Spear Company. Well-casing puller. 1,762,087; June 3.
Wells, Don W., El Centro, assignor of one-fourth to G. W. Anderson, Los Angeles, one-fourth to R. Edgar, and one-fourth to J. S. Ross, El Centro, Calif. Foundation construction. 1,761,321; June 3.
Wells, Don W., assignor of one-fourth to G. W. Anderson, Los Angeles, one-fourth to R. Edgar, and one-fourth to J. S. Ross, El Centro, Calif. Foundation construction. 1,761,322; June 3.
Wenzel, Ann M., Brooklyn, N. Y. Adjustable gauge for sewing machines. 1,761,856; June 3.
Wenzel, Anna M., Brooklyn, N. Y. Gauge for sewing machines. 1,761,857; June 3.
Wenzel, Anna M., Brooklyn, N. Y. Automatic presser-foot-lifting mechanism. 1,761,899; June 3.
Werk, Henry T., Cleveland, Ohio. Sod-trimming machine. 1,761,858; June 3.
Werner, Peter J., and J. Sobczak, Milwaukee, Wis. Miniature domicile tree holder. 1,761,062; June 3.
Wesel, F., Manufacturing Company. (See Bassist, Ellis, assignor.)
West Boylston Manufacturing Company. (See Burns, Alfred, assignor.)
Westbrook, Thomas E. (See Davis, John U., assignor.)
Western Electric Company. (See Kaempf, E., and Dalzell, assignors.)
Westinghouse Electric & Manufacturing Company. (See Butcher, Charles A., assignor.)
Westinghouse Electric and Manufacturing Company. (See Chubb, Lewis W., assignor.)
Westinghouse Electric and Manufacturing Company. (See Davis, R. L., and Stakel, assignors.)
Westinghouse Electric & Manufacturing Company. (See Erickson, Frederic W., assignor.)
Westinghouse Electric & Manufacturing Company. (See Erskine, Ralph W., assignor.)
Westinghouse Electric & Manufacturing Company. (See Fuller, Bert F., assignor.)
Westinghouse Electric and Manufacturing Company. (See Healey, William J., assignor.)
Westinghouse Electric & Manufacturing Company. (See Morgan, David W. R., assignor.)
Westinghouse Electric & Manufacturing Company. (See Skvortzoff, Alexander A., assignor.)
Westinghouse Electric and Manufacturing Company. (See Thompson, A. W., and Vogel, assignors.)
Whaley Engine Patents, Inc., The. (See Whaley, William B. S., assignor.)
Whaley, Isabelle E., executrix. (See Whaley, William B. S.)
Whaley, William B. S., deceased; I. E. Whaley, executrix, assignor to The Whaley Engine Patents, Inc., New York, N. Y. Starting valve. 1,761,282; June 3.
Whatley, Arthur C., Opelika, Ala. Power take-off. 1,761,900; June 3.
Wheat, William T., and A. W. Stone, Malin, Oreg. Pump. 1,761,379; June 3.
Wheeler-Schebler Carburetor Co., The. (See Kimball, Andrew L., assignor.)
Whelan, James F., assignor to Delco Products Corporation, Dayton, Ohio. Electric motor. 1,761,552; June 3.
White, George D., Port Arthur, Tex., assignor to The Texas Company, New York, N. Y. Insulation for heating vessels. 1,761,696; June 3.
White, Herbert E., assignor to Truscon Steel Company, Youngstown, Ohio. Metal section. 1,762,112; June 3.
White, Joe. (See Fitzsimmons, J. T., and White.)
White Motor Company, The. (See Snyder, Frank L., assignor.)
White Oil Separators Limited. (See White, William A., assignor.)
White, William A., assignor to White Oil Separators Limited, Hebburn-on-Tyne, England. Separation of liquids of different specific gravities. 1,761,505; June 3.
White, William E., assignor to Kalman Steel Company, Chicago, Ill. Lath clip. 1,761,323; June 3.
Whitehead, Thomas C. (See Greenwald, Harold A., assignor.)
Whitlock, George E., Toledo, Ohio. Tread for automobile running boards. 1,761,247; June 3.
Whitman, John F., jr., assignor to E. G. Straus, doing business as Modern Metal Furniture Company, New York, N. Y. Chair frame. Des. 81,313; June 3.
Whitney, Lyman F., Boston, Mass., assignor, by mesne assignments to Stator Refrigeration, Inc. Household apparatus. 1,761,553; June 3.
Whitney, Lyman F., Boston, Mass., assignor, by mesne assignments, to Stator Refrigeration, Inc. Refrigeration. 1,761,606; June 3.
Whitney, Lyman F., Boston, Mass., assignor, by mesne assignments, to Stator Refrigeration, Inc. Refrigerating apparatus and method. 1,761,762; June 3.
Whitney, Samuel W., Denver, Colo. Comb and glove therefor. 1,760,928; June 3.
Whittingslowe, William T. (See Harris, H. H., Whittingslowe, and Jolly.)
Wiarda, John C., & Company. (See Laury, Napoleon A., assignor.)
Wicker, John, Sprague, Wash. Weeder. 1,761,001; June 3.
Wickersham, Joyce, Des Moines, Iowa. Fuel and exhaust gas control device for engines. Re17,692; June 3.
Wickstrum, Cecil M., Omaha, Nebr. Sidewalk canopy. 1,761,901; June 3.
Wikle, George F., Milwaukee, Wis., assignor to The Fisk Rubber Company, Chicopee Falls, Mass. Stitcher for tire-building machines. 1,760,929; June 3.
Wildermuth, Jesse W., Lancaster, assignor to Libbey-Owens Glass Company, Toledo, Ohio. Sheet-glass apparatus. 1,761,763; June 3.
Wilkey, B. Taylor, Nogales, Ariz. Combined four-wheel jack and shock absorber. 1,760,891; June 3.
Wilkinson, Eltoft W. (See Trotter, W., and Wilkinson.)
Wille, Fredrik, Wilmette, assignor to H. A. Brassert & Company, Chicago, Ill. Manufacturing metal sheets or strips. 1,761,248; June 3.
Williams, Djalma D., and H. B. Murphey, Dallas, Tex., assignors to Chicago Bridge & Iron Company, Chicago, Ill. Liquid-storage tank. 1,761,697; June 3.
Williams, Harry M., Dayton, Ohio, assignor to General Motors Research Corporation, Detroit, Mich. Heating furnace. 1,761,028; June 3.
Williams, Harry M., Dayton, Ohio, assignor to General Motors Research Corporation. Making articles of lead-copper and analogous alloys. 1,761,506; June 3.
Williams, Ralph T., assignor to Roth Bros. & Co., Chicago, Ill. Emergency lighting system. 1,761,002; June 3.
Williams, Rolland G., assignor to Malleable Iron Fittings Company, Branford, Conn. Mount for steel poles. 1,761,507; June 3.
Williams, Rolland G., assignor to Malleable Iron Fittings Company, Branford, Conn. Mount for metal poles. 1,761,508; June 3.
Williams, Rolland G., assignor to Malleable Iron Fittings Company, Branford, Conn. Gain fixture for poles. 1,761,509; June 3.
Williams, Theophilus G., Morristown, N. J. Sound amplifier. 1,760,892; June 3.
Williams, William E., Wilmette, assignor to Ditto, Incorporated, Chicago, Ill. Copy machine using the hectograph method. 1,761,283; June 3.
Williams, William E., Chicago, Ill., assignor, by mesne assignments, to Steel Wheel Corporation, Lansing, Mich. Felly portion of wheels. 1,761,284; June 3.
Wills, Preslay C. (See Gates, G. C., Clark, and Wills.)
Wilson, Elihu C., Los Angeles, Calif. Well-pipe coupling. 1,760,930; June 3.
Wilson, Howard R., Carnegie, Pa., and W. W. Smith, Chicago, Ill. Mandrel. 1,761,859; June 3.
Wilson, Onnolee M. Wilton, Conn. Dispensing bottle. 1,761,164; June 3.
Winch, Harry E., Medway, Mass., assignor, by mesne assignments, to The Ruberoid Co., Boundbrook, N. J. Road and walk construction. 1,761,165; June 3.
Windhurst, Clark C., West Union, Iowa. Sewer-pipe cleaner. 1,761,324; June 3.
Winkelmann, Heinz, Barmen, Germany, assignor to American Bemberg Corporation, New York, N. Y. Process and apparatus for the production of artificial threads by the cupro-ammonium stretch spinning process. 1,761,860; June 3.
Winship, Emory. (See Marcum, Arthur I., assignor.)
Winter, John, Albion, Mich. Heating stove. 1,760,931; June 3.
Wirshing, Ralph J., and H. R. Faas, asignors to General Motors Research Corporation, Detroit, Mich. Electroplating process. 1,761,948; June 3.
Wise, Herbert A., Luxora, Ark. Auto awning. 1,761,698; June 3.
Witherow, Harry M., Lynn, Mass., assignor to General Electric Company. Temperature-responsive inductance. 1,761,764; June 3.
Witherow, Harry M., Fort Wayne, Ind., assignor to General Electric Company. Temperature-responsive inductance. 1,761,765; June 3.
Witry, Louis W., assignor to John Deere Tractor Company, Waterloo, Iowa. Tractor. 1,760,932; June 3.

Wojtan, Stanley, Chicago, Ill. Table-leg fastening. 1,762,042; June 3.
Wolarsky, Isidore, Mount Vernon, N. Y. Tool for manipulating lamp-socket parts. 1,761,510; June 3.
Wolassky, Isidore, Mount Vernon, N. Y. Light-fixture shade holder. 1,761,511; June 3.
Wolfe, John A., et al. (See Haubert, Leo, assignor.)
Wolverine Tube Company. (See Locke, Arthur A., assignor.)
Womrath, George F., Minneapolis, Minn. Pulley structure. 1,761,003; June 3.
Wood, Frank T., Larchmont, assignor to American Bank Note Company, New York, N. Y. Printing press. 1,761,607; June 3.
Wood, John G., and J. H. Alfes, Lansing, assignors to General Motors Corporation, Detroit, Mich. Horn button switch. 1,761,949; June 3.
Woodruff, Joseph W., Elizabeth, N. J. Pressure grease measuring and distributing apparatus. 1,761,423; June 3.
Woolard, William F. (See Hampden, Wellesley R., assignor.)
Woolfork, James B., Philadelphia, Pa. Shoe-shining machine. 1,762,005; June 3.
Woolley, George W., Pasadena, Calif. Parking device for motor vehicles. 1,761,554; June 3.
Wrap-Rite Corporation, The. (See Brownell, Charles O., assignor.)
Wright, Wilbur L., and L. D. Pierce, assignors to Oswego Falls Corporation, Fulton, N. Y. Apparatus for applying binders and the like to paper hood caps and other articles. 1,760,893; June 3.
Wulf, Herman W., Ainsworth, Nebr. Automatic oiler. 1,761,699; June 3.
Wyoming Shovel Works, The. (See Webster, Lewis E., assignor.)
Wyre, Dwight E., Wausau, Wis. Dry battery. 1,761,098; June 3.
Yellow Truck and Coach Manufacturing Company. (See Ball, Charles O., assignor.)
Yellow Truck and Coach Manufacturing Company. (See Bock, Carl J., assignor.)
Yellow Truck & Coach Manufacturing Company. (See Daubner, George H., assignor.)
Yellow Truck & Coach Manufacturing Company. (See Schjolin, Eric O., assignor.)
Yeomans, Fred H., Detroit, Mich. Spacing strip for bottle-shipping crates. 1,761,459; June 3.
Yerrick, William D., Worcester, Mass., and J. W. Peck, New York, N. Y., assignors to Riley Stoker Corporation, Worcester, Mass. Traveling-grate stoker. 1,761,029; June 3.
Yolles, Jacob. (See Jones, L. L., and Yolles.)
Yoshimura, Sotoo, Shanghai, China. Duplicating ribbon mechanism. 1,761,460; June 3.
Young Brothers Company. (See Fox, Vernie A., assignor.)
Young, Harry A., Cross Plains, Tex. Fishing tool. 1,762,006; June 3.
Zahn, Rudolf. (See Schmidt, M. P., Zahn, and Krieger.)
Zastrow Machine Company. (See Colbert, Clarence F., assignor.)
Zentner, Paul H., Milwaukee, Wis. Safety turn light. 1,761,285; June 3.
Zeun, Louis H., Baltimore, Md. Printing machine. 1,761,380; June 3.
Zillman, Ben V. (See Hughes, Leonard, assignor.)
Zim, Jesse G., Medford, assignor of 15 per cent to J. F. Sheehan, Everett, 15 per cent to W. C. Gray, Cambridge, 15 per cent to L. W. Rich, Medford, and 10 per cent to J. P. Buckley, Boston, Mass. Proof-reader's table. 1,761,766; June 3.
Zitscher, Arthur. (See Laska, L., and Zitscher.)
Zobel, Otto J., New York, N. Y., assignor to American Telephone and Telegraph Company. Electrical network. 1,760,973; June 3.
Zubaty, Joseph, assignor to A C Spark Plug Company, Flint, Mich. Service indicator. 1,761,950; June 3.
Zubaty, Joseph, assignor to A C Spark Plug Company, Flint, Mich. Temperature compensator. 1,761,951; June 3.
Zubaty, Joseph, assignor to A C Spark Plug Company, Flint, Mich. Oil rectifier. 1,761,952; June 3.
Zubaty, Joseph, assignor to A C Spark Plug Company, Flint, Mich. Instrument casing. 1,761,953; June 3.
Zubaty, Joseph, assignor to A C Spark Plug Company, Flint, Mich. Speed-cup dampener. 1,761,954; June 3.
Zubaty, Joseph, assignor to A C Spark Plug Company, Flint, Mich. Mounting means for speedometers. 1,761,955; June 3.
Zubaty, Joseph, assignor to A C Spark Plug Company, Flint, Mich. Speedometer magnet mounting. 1,761,956; June 3.
Zuckerman, Roscoe C., Stockton, Calif. Potato-digging machine. 1,761,286; June 3.
Swicky, Melchior, Berkshire Heights, assignor to Textile Machine Works, Wyomissing, Pa. Spring-bar-operating mechanism for full-fashioned-knitting machines. 1,761,381; June 3.
Zwiebel, Carl C., Dayton, Ohio. Safety switch for clothes wringers. 1,761,030; June 3.

ALPHABETICAL LIST OF INVENTIONS

FOR WHICH

PATENTS WERE ISSUED ON THE 3D DAY OF JUNE, 1930

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). **Includes patents, reissues, and designs.**

Acid extracts, alcohols, and the like from gas or vapor mixtures, Manufacture of. E. C. Herthel. 1,761,341; June 3.
Acid phosphate, Apparatus for manufacturing. B. Ober. 1,761,992; June 3.
Acid phosphate, Manufacturing. B. Ober. 1,761,991; June 3.
Acid, Production of hydrocyanic. P. T. Dolley. 1,761,433; June 3.
Acoustic diaphragm and loud-speaker combination. N. Baldwin. 1,761,100; June 3.
Adjustable cutter, Angular serrated. R. R. Weddell. 1,762,111; June 3.
Adjusting device. D. D. Ormsby and J. Swinscoe. 1,761,934; June 3.
Adjusting mechanism. H. P. Dahlstrand. 1,762,117; June 3.
Aeroplane. J. Ciccolanni. 1,761,777; June 3.
Aeroplane. J. H. Davis. 1,761,710; June 3.
Aeroplane wings, Venturi slot for. B. J. Steinmetz. 1,761,691; June 3.
Aeroplanes, Variable-surface wing for. J. Van de Putte. 1,762,002; June 3.
Agricultural implement. W. S. Barker. 1,760,894; June 3.
Air-admission device, Auxiliary. E. H. Stepp. 1,761,692; June 3.
Air cleaner. H. G. Kamrath. 1,761,923; June 3.
Aircraft construction. E. P. Jones. 1,761,444; June 3.
Aircraft, Landing hook for. R. J. Minshall. 1,760,881; June 3.
Air heater, Sheet-metal. G. Bluemel. 1,761,173; June 3.
Airplane. O. J. Barth. 1,760,865; June 3.
Airplane. I. K. Rystedt. 1,761,053; June 3.
Airplane. C. E. Sparhawk. 1,761,242; June 3.
Alarm device, Constant-. H. G. Carlson. 1,762,009; June 3.
Alarm switch, Mine-hoist. T. R. Cook and D. N. Smith. 1,761,708; June 3.
Alcohol, Manufacturing absolute. R. B. Crowell. 1,761,779; June 3.
Alloy, Cast-iron. C. Taylor and H. L. Greene. 1,762,109; June 3.
Alloy steel and making the same. R. E. Bissell. 1,761,866; June 3.
Aluminum-chloride sludge, Renegeration of. E. B. Phillips and J. G. Stafford. 1,760,962; June 3.
Ammeter. J. E. Eshbaugh. 1,761,908–9; June 3.
Ammeter. R. O. Helgeby. 1,761,917; June 3.
Amplifier, Sound. T. G. Williams. 1,760,892; June 3.
Anchor, Concrete. C. G. Preis. 1,761,800; June 3.
Angle bar, Metallic. W. Louden. 1,761,137; June 3.
Animal fibers and product thereof, Treatment of. A. Doser, G. Mauthe, and A. Thauss. 1,762,011; June 3.
Antenna for radio systems. R. C. Agner. 1,761,608; June 3.
Antenna-tuning apparatus. L. L. Jones and J. Yolles. 1,761,211; June 3.
Apparatus for collecting suspended dust. H. Waring. 1,761,377; June 3.
Apparatus for processing and cooking dried fruit. E. Hecker. 1,761,727; June 3.
Article feeder. S. Eberly. 1,761,781; June 3.
Articles of lead-copper and analogous alloys, Making. H. M. Williams. 1,761,506; June 3.
Audiofrequency amplification control, High and low. R. W. Harvey. 1,761,626; June 3.
Auditing machine. M. M. Goldberg. 1,761,662; June 3.
Auditing machine. W. H. Robertson. 1,761,684; June 3.
Autographic register. S. Brand. 1,761,558; June 3.
Auto light. W. E. Isackson. 1,761,345; June 3.
Automobile body. H. Orsenigo. Des. 81,310–11; June 3.
Automobile lock. J. J. Langer. 1,761,042; June 3.
Awning and shade, Combined. E. L. Dronberger. 1,760,899; June 3.
Awning, Auto. H. A. Wise. 1,761,698; June 3.
Awning clip. J. D. Major. 1,762,024; June 3.
Axle, Worm-gear. R. V. Hutchinson. 1,761,922; June 3.
Azo dyestuffs insoluble in water and making same. L. Laska and A. Zitscher. 1,762,022; June 3.
Back spot facer. A. L. Christensen. 1,761,070; June 3.
Backwater trap. S. Lukomski. 1,761,217; June 3.
Bag and making the same, Sectional repair. C. H. Desautels. 1,760,897; June 3.
Bailer, Automatic. W. Sobolew. 1,761,645; June 3.
Balancing and apparatus therefor. T. C. Van Degrift. 1,761,945; June 3.
Baling press. J. H. MacLean and A. O. Heinzmann. 1,761,447; June 3.
Bank, Bill. M. Goepel. 1,760,901; June 3.
Bar: *See*—
Angle bar.
Boring bar.
Grate bar.
Barrel, Core. J. G. Bone. 1,761,292; June 3.
Batch-feeding mechanism. I. O. Pedersen. 1,761,229; June 3.
Bathing cap. T. J. Howland. 1,761,302; June 3.
Battery: *See*—
Dry battery.
Battery indicator, Storage-. C. W. Dietrich. 1,760,937; June 3.
Beam hanger. C. M. Copeland. 1,761,658; June 3.
Beam member, Cementitious. C. F. Buente. 1,761,705; June 3.
Bearing. H. A. S. Howarth. 1,760,904; June 3.
Bearing. L. W. Sullivan. 1,761,757; June 3.
Bearing, Adjustable double roller. O. H. Penner. 1,761,490; June 3.
Bearing, Adjustable thrust. C. A. Maris. 1,761,139; June 3.
Bearing, Antifriction. J. F. O'Connor. 1,761,275; June 3.
Bearing for railway cars, Side. C. R. Busch. 1,761,815; June 3.
Bearing for steering columns. E. S. Patch. 1,761,533; June 3.
Bearing, Integral cam-shaft. A. E. L. Chorlton. 1,761,872; June 3.
Bearings, Making. C. H. Landers. 1,761,926; June 3.
Beater. G. Schleicher. 1,762,081; June 3.
Bed davenport, Combination. A. C. Gould. 1,761,261; June 3.
Belt, Sanitary-napkin-supporting. D. McCullough. 1,761,222; June 3.
Belt splice. P. B. Reeves. 1,761,155; June 3.
Bending device for pipes and bars. F. B. Potter. 1,761,798; June 3.
Beveling. F. C. Simmons. 1,761,414; June 3.
Beverage-dispensing device. H. C. Smith. 1,762,126; June 3.
Beverage display. H. P. Saugman. 1,760,887; June 3.
Bin or crib, Grain. E. H. Adrian. 1,761,287; June 3.
Binders and the like to paper hood caps and other articles, Apparatus for applying. W. L. Wright and L. D. Pierce. 1,760,893; June 3.
Blade attachment for clippers. L. J. Wahl. 1,761,550; June 3.
Blade, Cultivator. E. G. Chappelow and F. L. Bryant. 1,761,465; June 3.
Blade lock, Compound-taper insertable-. R. R. Weddell. 1,762,110; June 3.
Blasting unit. C. E. Bedient. 1,762,044; June 3.
Block: *See*—
Wheel block.
Board: *See*—
Ironing board.
Boat, Aluminum. E. Ohnstrand. 1,761,451; June 3.
Boat, Combination water and ice. J. Drost. 1,761,440; June 3.
Boat drive. C. H. Tegmeyer. 1,761,373; June 3.
Boiler: *See*—
Steam boiler.
Boiler-scale-removing device. B. Pratt. 1,761,371; June 3.
Boilers, Gauge cock for steam. B. Cook. 1,761,467; June 3.
Bolt eye, Separable or detachable. A. L. Black. 1,761,978; June 3.
Book, Account. G. Kalada. 1,761,078; June 3.
Book, Loose-leaf. J. Schade. 1,761,589; June 3.
Booster brake, Electric. C. R. Short. 1,761,939; June 3.
Boot, Electrically-heated. O. Heinemann. 1,761,829; June 3.
Boring bar. F. L. Snyder. 1,761,804; June 3.
Boring machine. M. C. Gray. 1,761,663; June 3.
Bottle cap, Milk-. M. B. Taylor. 1,761,597; June 3.
Bottle, Dispensing. O. M. Wilson. 1,761,164; June 3.
Bottle fillers, Automatic feeder for soda-water-. G. J. Meyer, P. G. Shodron, and O. Dreher. 1,761,223; June 3.
Bottle, Hot-water. R. E. Fawn. Des. 81,275; June 3.
Bottle retriever, Milk-. C. A. Pool. 1,761,894; June 3.
Bottle-washing machine. F. B. Reily. 1,761,492; June 3.
Bottles, Apparatus for cleaning. R. R. McKechnie. 1,761,450; June 3.

Bowl, Refractor. G. H. Cole. 1,761,654; June 3.
Box: *See*—
Core box. Mail box.
Display box. Outlet or junction box.
Junction box.
Boxes and covers therefor, Making. C. L. Dewey. 1,761,331; June 3.
Brace: *See*—
Carving brace. Track brace.
Bracket for an electric lamp, Wall. B. Hasenstab. Des. 81,279–81; June 3.
Bracket for display cases, Adjustable. H. D. Blake. 1,761,004; June 3.
Brake: *See*—
Booster brake. Power brake.
Friction brake. Vehicle brake.
Hand brake. Wheel brake.
Internal brake.
Brake. P. W. Pomeroy. 1,761,231; June 3.
Brake. G. H. Stoner. 1,761,027; June 3.
Brake-operating means. R. F. Kohr. 1,760,908; June 3.
Brake-operating mechanism. C. W. Collins. Re17,687; June 3.
Brick, Method of and automatic means for backing. R. C. Penfield. 1,760,993; June 3.
Broiler, Revolving. G. Soyllan. 1,762,035; June 3.
Broom. F. J. Blood. 1,761,101; June 3.
Bucket, Grab. D. W. Coe. 1,761,778; June 3.
Buckle, Belt. W. M. Dolke. 1,761,520; June 3.
Buckle, Shoe. C. G. King and R. C. Gibbs. 1,761,834; June 3.
Buffer. D. Roe. 1,761,233; June 3.
Builder mechanism for spinning or winding machines. H. A. Leonard. 1,761,574; June 3.
Building construction (quakeproof buildings). F. D. Cummings. 1,761,659–60; June 3.
Building, Dampproof. J. Rose. 1,761,410; June 3.
Bumper for automobiles, Safety. E. C. Shilling. 1,761,994; June 3.
Bumper means. E. A. Rosin and K. Kupferschmid. 1,761,747; June 3.
Burner: *See*—
Duplex burner. Oil burner.
Gas burner.
Burners, Preheater apapratus for oil. A. J. Baird. 1,761,975; June 3.
Butter-cutting machine. C. and H. H. Doering. 1,761,010; June 3.
Button, Cuff. H. Carlson. 1,761,869; June 3.
Button switch, Horn. J. G. Wood and J. H. Alfes. 1,761,949; June 3.
Cabinet. D. Roberts. Des. 81,291; June 3.
Cabinet, Built-in telephone. C. C. and I. D. Bitchie. 1,761,683; June 3.
Cabinet, Office. D. A. Bryce. 1,761,704; June 3.
Cabinet, Refrigerator. H. D. Geyer. 1,761,013; June 3
Cabinet, Towel. H. W. Crowson. 1,761,071; June 3.
Cable. E. Kaempf and D. P. Dalzell. 1,761,565; June 3.
Cable and brake-drum construction. E. E. Greve. 1,761,827; June 3.
Cable, Towing. F. Feldman. 1,761,112; June 3.
Cage, Bird. H. J. Kettleborough. Des. 81,289; June 3.
Cake mixer. S. Schiff. 1,761,237; June 3.
Calculating machines, Substriction control for. N. W. Perkins. 1,761,742; June 3.
Cambers in automobile wheels, Adjusting. J. S. Bushey. 1,761,516; June 3.
Camera. D. Foreman. 1,762,054; June 3.
Camera, Sound and picture recording. L. De Forest. 1,761,619; June 3.
Can: *See*—
Grease can. Novelty can.
Can-filling machine. F. Clark. 1,761,653; June 3.
Can spout. J. R. Kahle. 1,761,477; June 3.
Cane cutting and delivering mechanism. H. Johnson and W. A. Ramsay. 1,761,937; June 3.
Canopy for lighting fixtures. R. W. Schweiker. 1,761,090; June 3.
Canopy, Sidewalk. C. M. Wickstrum. 1,761,901; June 3.
Cap and tube for tooth paste and the like. E. E. Sturk. 1,761,693; June 3.
Car coupler. A. Wakensbaw. 1,762,041; June 3.
Car coupling, Transition. W. McConway, jr., and W. Kelso. 1,761,449; June 3.
Car, Freight container. E. S. Clarkson. 1,761,873; June 3.
Car, Freight container. E. S. Clarkson. 1,761,874; June 3.
Car retarder. A. L. Vencill. 1,761,649; June 3.
Carbon dioxide, Making and dispensing liquid. J. W. Martin, jr. 1,760,953; June 3.
Carbon-pack and sheet-form holder. K. R. Denecklau. 1,761,106; June 3.
Carburetor. W. A. Edwards. 1,761,074; June 3.
Carburetor. C. F. Johnson. 1,761,729; June 3.
Carburetor. A. L. Kimball. 1,761,569; June 3.
Carburetor. F. H. Schoettler. 1,761,846; June 3.
Carburetor for internal-combustion engines. C. H. Claudel. 1,761,007; June 3.
Card, Merchandise-display. E. G. Storck. 1,761,417; June 3.
Carrier: *See*—
Luggage carrier. Tire carrier.
Pack carrier.
Carton-blank separating and feeding mechanism. E. G. Jurgens and H. K. Becker. 1,761,794; June 3.
Carton-filling device. J. F. Ortner. 1,760,959; June 3.
Cartons, Sealing can-containing. T. J. Gorman, jr. 1,761,787; June 3.
Carving brace. A. Cutler. 1,761,104; June 3.
Case: *See*—
Vanity case.
Cash register. C. H. Arnold. 1,761,555–6; June 3.
Cash register. F. W. F. Berger. 1,761,701; June 3.
Cash register. S. Brand. 1,761,651; June 3.
Cash register. A. R. Colley. 1,761,656; June 3.
Cash register. F. L. Fuller. 1,761,718–19; June 3.
Cash register. W. Kropff. 1,761,571–2; June 3.
Cash register. B. M. Shipley. 1,761,642; June 3.
Cash register. B. M. Shipley. 1,761,644; June 3.
Cash register. B. M. Shipley. 1,761,689; June 3.
Cash register. F. H. Tyler. 1,761,547; June 3.
Cash register. E. J. Von Pein. 1,761,548–9; June 3.
Cash registers, Indicating mechanism for. B. M. Chipley. 1,761,643; June 3.
Casing, Expanding flat-band tire. T. Midgley. 1,760,880; June 3.
Cellular building materials, Manufacture of. L. Desmarquest. 1,761,108; June 3.
Cellular screen. C. S. McKinley. 1,760,877; June 3.
Celluloid and the like, Making tubes of. S. A. Neidich. 1,761,403; June 3.
Cellulose or paper pulp, Apparatus for and process of separating or extracting. E. Spencer. 1,761,543; June 3.
Cellulose or paper pulp, Separating or extracting. E. Spencer. 1,761,544; June 3.
Chair: *See*—
Swiveling chair.
Chair. C. W. Jones. Des. 81,287; June 3.
Chair frame. J. F. Whitman, jr. Des. 81,313; June 3.
Chart to determine color relations, Disk. J. J. Steedle. 1,762,036; June 3.
Chest. F. Brzozowski. 1,761,254; June 3.
Child's chair. W. S. Clemence. Des. 81,271; June 3.
Chimney. C. W. Davis. 1,761,616; June 3.
Chlorinated anthraquinones, Preparation of. J. Deinet. 1,761,620; June 3.
Chlorination products of meta nitrotoluene and making the same, Side-chain. I. Gubelmann, H. J. Weiland, and O. Stallmann. 1,761,475; June 3.
Chlorine substitution products of 4-nitro-1.3-dimethylbenzene and preparing them. E. Hoffa and E. Thoma. 1,762,018; June 3.
Cigar. A. I. Eyster. 1,761,718; June 3.
Cigarette case and lighter, Combined. H. L. Goodnow. 1,761,985; June 3.
Cigarette mouthpiece. J. W. Gibson. 1,761,205; June 3.
Circuit-continuing device. H. A. Douglas. 1,761,436–7; June 3.
Circuit for coupled cars, Deenergizing. C. H. Tomlinson. 1,761,419; June 3.
Clamp: *See*—
Hair clamp.
Cleaner: *See*—
Air cleaner. Pipe cleaner.
Cleaner for internal-combustion engines, Air. R. O. Hendrickson and C. B. Larsen. 1,761,014; June 3.
Cleaning device. G. H. Sommerfield. 1,761,499; June 3.
Cleat, Roofing. J. A. Topping. 1,761,599; June 3.
Clevis. J. Achatz. 1,762,113; June 3.
Clip: *See*—
Awning clip. Lath clip.
Fence clip.
Clock case. J. M. Colucci. Des. 81,272 June 3.
Closure. C. R. Crary. 1,761,427–8; June 3.
Closure. H. Wainwright. 1,761,603; June 3.
Closure, Container. W. H. Rose. 1,761,367; June 3.
Closure for receptacles, Self-acting. A. Hammerstein. 1,760,946; June 3.
Closure, Hermetic tube. R. Sato. 1,761,236; June 3.
Clothespin. G. H. Jentzen. 1,761,630; June 3.
Clutch cam for engine-starter drives, Manufacture of. R. J. Emmert. 1,761,712; June 3.
Clutch, One-revolution. F. M. Carroll. 1,761,774; June 3.
Clutch shell and pinion assembly for engine-starter drives, Making a. W. A. Chryst. 1,761,518; June 3.
Cock and automatic lighter, Combination gas. C. A. Thekan. 1,762,038; June 3.
Coffee maker, Drip-. R. F. Krause. 1,761,633; June 3.
Coffeepot. E. P. McClure. 1,761,354; June 3.
Coil switch, Disconnecting choke-. L. P. Boll and A. C. Hansen, jr. 1,760,895; June 3.
Coin-actuated mechanism. B. L. Fry. 1,761,784–5; June 3.
Coloring matter of the dibenzanthrone series, Preparing. I. Gubelmann, R. J. Goodrich, and E. T. Howell. 1,761,624; June 3.
Comb and glove therefor. S. W. Whitney. 1,760,928; June 3.
Communication system. E. F. Carter. 1,761,776; June 3.
Composition for soldering metals. K. Geisel. 1,761,116; June 3.

Composition of matter. W. H. Test. 1,760,922; June 3.
Composition of matter. J. S. Thompson. 1,761,057; June 3.
Concrete building unit. A. Sitzman and E. S. Klausner. 1,761,848 June 3.
Condensation products of the napthostyril series and preparing the same. G. Krünslein, M. Heyse, and P. Ochwat. 1,762,021; June 3.
Condenser. F. X. Govers. 1,761,035; July 3.
Condenser. I. H. Reynolds. 1,762,107; June 3.
Condenser and making the same. A. Taub. 1,761,281; June 3.
Condenser and transformer unit. L. M. Perkins. 1,761,535; June 3.
Conductor for transformers. A. A. Skvortzoff. 1,760,889; June 3.
Conduit suspension, Inner. A. W. Lissauer. 1,761,084; June 3.
Conduit, Underground. G. M. Gest. 1,761,075; June 3.
Confection-making machine. A. L. Bausman. 1,761,065; June 3.
Confectionery, Manufacture of chocolate. A. D. Fisher. 1,760,900; June 3.
Connecter, Automatic train-pipe. J. Robinson. 1,761,845; June 3.
Connecter for bracelets, End. L. F. Otten. 1,760,918; June 3.
Connecter, Plug. C. O. Graves. 1,761,335; June 3.
Connecter, Plug. H. L. Strongson and B. D. Colen. 1,760,921; June 3.
Connection, Electrical-appliance. J. Huber. 1,761,844; June 3.
Connection for structures, Resilient. R. H. Prosser. 1,761,584; June 3.
Container for oils, etc. H. A. Dohrmann. 1,761,072; June 3.
Container for transporting and mixing concrete. A. C. Avril. 1,761,063; June 3.
Container, Metal. H. A. Fink. 1,761,714; June 3.
Container, Packing and display. A. J. Tanner. 1,761,598; June 3.
Container-taping machine. G. E. Linn and W. H. Finckel, jr. 1,762,135; June 3.
Containers, Apparatus for closing vacuumized. J. H. O'Neil. 1,761,488; June 3.
Control apparatus, Variable-speed motor-. C. C. Runner. 1,761,748; June 3.
Control mechanism. H. F. Smith. 1,761,849; June 3.
Control mechanism for color-projecting machines. A. J. Oberg and R. R. Stoefen. 1,761,361; June 3.
Control system for oil burners. D. R. Martin. 1,761,018; June 3.
Control, Throttle-operated spark. H. A. Schwager. 1,761,538; June 3.
Conveyer for dynamo armatures. B. J. Emmert. 1,761,523; June 3.
Conveyer, Material. A. B. Manning. 1,761,353; June 3.
Conveyer system for heat-treating furnaces. F. W. Manker. 1,762,067; June 3.
Conveyers, Load-ejecting apparatus for. H. M. Ruth. 1,760,964; June 3.
Cooler: *See*—
Liquid cooler. Water cooler.
Cooler. E. R. Burchiel. 1,761,610; June 3.
Cooling bed. G. L. Fisk. 1,761,470; June 3.
Coop, Chicken. J. J. Burson. 1,761,325; June 3.
Coop or crate, Poultry. W. C. Dean. 1,760,936; June 3.
Copy machine using the hectograph method. W. E. Williams. 1,761,283; June 3.
Core box. G. W. Elsey. 1,761,522; June 3.
Cork body, sheet, block, etc., and producing same, Composite. W. F. Grupe. 1,762,138; June 3.
Corn crib. M. K. Jandl. 1,762,019; June 3.
Cornstalk cutter. S. Finnell. 1,761,983; June 3.
Cotton picker or lapper, Pneumatic. E. H. Rogers. 1,761,493; June 3.
Counterbalancing device. W. G. Pontis. 1,761,023; June 3.
Coupler. W. F. Richards. Re17,690; June 3.
Coupling: *See*—
Car coupling. Pipe coupling.
Hose coupling. Spiral conveyer coupling.
Coupling for drill rods. G. C. Gates, R. W. Clark, and P. C. Wills. 1,762,057; June 3.
Coupling for suction hose. J. T. Lally. 1,762,065; June 3.
Cover for cans, Lock. P. S. Shield. 1,760,888; June 3.
Cover, Removable seat. A. W. Connor and S. H. Schwartz. 1,761,657; June 3.
Cover, Tire. T. J. McCormick. 1,761,735; June 3.
Covering, Air-cell pipe. A. P. Jurgensen. 1,761,793; June 3.
Covering, Heel. W. H. Nutt. 1,761,021; June 3.
Crane, Portable. E. P. Douglass. 1,761,194; June 3.
Crank-case ventilator. P. B. Taylor. 1,761,944; June 3.
Crates, Spacing strip for bottle-shipping. F. H. Yeomans. 1,761,459; June 3.
Crimping mechanism for cylinder-forming machines. W. R. Myers. 1,761,990; June 3.
Crosshead and shoe. C. Markel. 1,760,910; June 3.
Crushers and the like, Feeding device for. C. F. Smith. 1,761,240; June 3.
Crushing-roll apparatus. F. W. Maclennan. 1,761,268; June 3.
Cultivator attachment. S. C. English. 1,760,940; June 3.
Current-generating apparatus, Electric-. H. Weichsel. 1,761,855; June 3.
Current-interrupting and arc-extinguishing means. E. O. Schweitzer. 1,761,091; June 3.
Cutter: *See*—
Adjustable cutter. Fuse cutter.
Cornstalk cutter. Sand cutter.
Cutting threads applicable to all horizontal lathes, Apparatus for. L. Auguste and R. des Moutis. 1,761,768; June 3.
Cylinder and mechanism operated thereby. S. R. Tymstra. 1,761,600; June 3.
Cylinder and piston. P. F. Gruver. 1,761,123; June 3.
Cylinder, Motor. F. Neale. 1,761,309; June 3.
Damper for vehicle suspension springs, Automatic. W. McNeil. 1,761,485; June 3.
Decking device. A. Copony. 1,761,103; June 3.
Deckling machine. W. J. Rivard. 1,761,051; June 3.
Decorating. D. Fleetwood. 1,761,715; June 3.
Delivery apparatus for confectionery machines. A. L. Bausman. 1,761,064; June 3.
Denture. K. G. Anderson. 1,761,902; June 3.
Dentures, Forming attachments for. S. Richardson. 1,761,312; June 3.
Detector: *See*—
Vacuum-tube detector.
Developing apparatus. A. Langsner. 1,761,304; June 3.
Digging machine, Potato-. R. C. Zuckerman. 1,761,286; June 3.
Dipper, Ice-cream. J. H. Grummer. 1,761,986; June 3.
Discharging insecticides from aircraft. H. Junkers. 1,761,889; June 3.
Disintegrating mill. A. M. Marsh. 1,762,122; June 3.
Disk, Polishing. G. Lüdorf. 1,761,890; June 3.
Disk wheel. F. L. Main. 1,761,927; June 3.
Dispenser, Cup. G. De Vries. 1,761,009; June 3.
Dispensing apparatus, Liquid-. J. J. Groetken. 1,761,885; June 3.
Dispensing apparatus, Soap-. H. Cordell. 1,761,875; June 3.
Dispensing device, Liquid-. H. K. Pratt. 1,760,914; June 3.
Display box. H. K. Powell. 1,761,282; June 3.
Display ring, Transparent. L. G. Nelson. 1,761,271; June 3.
Display stand. R. D. Pryde. 1,761,088; June 3.
Dolly. W. E. Jones. Des. 81,288; June 3.
Door, Box-car. J. Holderness. 1,761,301; June 3.
Door hanger. F. A. Lamm. 1,761,215; June 3.
Door knocker. E. C. Aldrich. Des. 81,269; June 3.
Door-operating mechanism. F. P. Crowley. 1,761,008; June 3.
Door-operating mechanism. S. B. Haseltine. 1,761,208; June 3.
Dough, Method of and machine for working pieces of. O. Kremmling. 1,761,899; June 3.
Draft rigging. D. S. Barrows. 1,761,171; June 3.
Drainage apparatus for floating roofs. O. A. Bailey. 1,761,700; June 3.
Drawer construction for filing cabinets. D. E. Hunter. 1,761,303; June 3.
Draw pot for sheet-glass apparatus. L. Manabourg. 1,761,220; June 3.
Drier: *See*—
Hair drier. Paper drier.
Drill: *See*—
Radial drill. Rotary drill.
Drill tube. T. D. Davies. 1,761,709; June 3.
Drilling mechanism. E. T. Hall. 1,761,337; June 3.
Drilling mechanism. E. E. Miller. 1,761,357; June 3.
Drilling mechanism. C. F. Osgood. 1,761,310; June 3.
Drilling mechanism, Rock-. T. R. E. Rundqvist. 1,761,313; June 3.
Drip pan and baffle member for refrigerating cases, Combination. H. M. Hunt. 1,761,629; June 3.
Drive, Boom. C. E. Foote. 1,761,716; June 3.
Drive mechanism, Motor-truck-. A. R. Le Moon. 1,761,135; June 3.
Drive, Motor. R. W. Davis. 1,762,130; June 3.
Drive, Roller. C. M. Silberberger. 1,762,084; June 3.
Dry battery. D. E. Wyre. 1,761,098; June 3.
Drying apparatus and method. D. D. Peebles. 1,761,149; June 3.
Drying-form machine, Hosiery-. P. Guggenheim. 1,761,296; June 3.
Dual intake manifold. D. B. Anderson. 1,761,958; June 3.
Dump for carrier systems, Automatic. L. B. H. Bixler and W. L. Bixler. 1,761,188; June 3.
Duplex burner. E. O. Daniels. 1,761,905; June 3.
Duplicating ribbon mechanism. S. Yoshimura. 1,761,460; June 3.
Dust collectors, Attachment for. J. A. Guth. 1,761,336; June 3.
Dye and dyeing therewith, New anthraquinone. A. Shepherdson and W. W. Tatum. 1,761,370; June 3.
Dyeing machine. F. Hinnekens. 1,761,562; June 3.
Dyes, Anthraquinone. A. Shepherdson and W. W. Tatum. 1,761,369; June 3.
Dyestuff, Vat. H. Wagner, R. Brune, M. Hessenland, E. Hoffa, F. Müller, and H. Heyna. 1,762,040; June 3.
Dyestuffs, New azo. M. Kahn. 1,762,020; June 3.
Dynamo plants, Controlling prime-mover. A. Pfau. 1,761,797; June 3.

Economizer. W. A. Jones. 1,762,134; June 3.
Edible, Perforated. T. Etter and J. L. Dunn. Des. 81,273; June 3.
Egg beater. H. G. Kuck. 1,761,634; June 3.
Egg-yolk substitutes, Production of. B. Rewald. 1,762,077; June 3.
Electric controller of the liquid type. V. Breeze. 1,762,007; June 3.
Electric discharge device. C. Bol and J. J. Numans. 1,761,175; June 3.
Electric machine, Dynamo-. J. C. MacFarlane and W. A. MacFarlane. 1,761,836; June 3.
Electric machine, Dynamo-. G. L. Ringland. 1,761,587; June 3.
Electric machines, Exciter and exciting system for dynamo-. W. Seiz. 1,761,753; June 3.
Electric motor. J. Alexander. 1,761,767; June 3.
Electric motor. M. C. Spencer. 1,761,159; June 3.
Electric motor. J. F. Whelan. 1,761,552; June 3.
Electric switch. H. A. Douglas. 1,761,434; June 3.
Electric wires, Ornamental conductor for. R. C. Schemmel. Re17,691; June 3.
Electrical apparatus. F. W. Lyle. 1,761,635; June 3.
Electrical network. O. J. Zobel. 1,760,973; June 3.
Electromagnet. P. Trombetta. 1,761,759; June 3.
Electroplating process. R. J. Wirshing and H. R. Faas. 1,761,948; June 3.
Elevator boot. T. N. Pierson. 1,761,842; June 3.
Engine: *See*—
Fluid engine.
Internal and external combustion engine.
Internal-combustion engine.
Rotary engine.
Water-cooled engine.
Engines, Device for cooling aircraft. H. A. Hicks. 1,761,560; June 3.
Engines, Fuel and exhaust-gas control device for. J. Wickersham. Re17,692; June 3.
Ephedrine inhalant and producing same. E. B. Carter. 1,762,128; June 3.
Evaporator, Bow-tube film-type. R. C. Jones. 1,769,907; June 3.
Excavator, Hand. W. Tönhardt. 1,761,503; June 3.
Exhaust box for silencing internal-combustion engines, Closed. W. Förstel. 1,761,471; June 3.
Exhaust pipe, Butterfly-valve. S. Armitage. 1,761,960; June 3.
Exhauster for canned goods. C. F. Colbert. 1,762,129; June 3.
Exhausting mechanism. C. A. Dunham. 1,761,819; June 3.
Expansion and contraction switch. H. G. Schlichter. 1,761,456; June 3.
Exposure control. K. Camp. 1,762,048; June 3.
Eye-testing device. C. B. Scott. 1,761,238–9; June 3.
Fabrics, Apparatus for treating. F. Hinnekens. 1,761,563; June 3.
Fabrics, Making printed. A. Burns. 1,761,005; June 3.
Fan, Exhaust. M. F. Phelps. 1,762,028; June 3.
Fare recorder, Electric-coach. J. P. Redmond and F. F. Haack. 1,761,050; June 3.
Fare register. O. L. Potts. 1,762,029; June 3.
Fastener, Chain. P. B. Diehl. 1,761,559; June 3.
Fastener, Chain. C. H. Miller. 1,761,676; June 3.
Fastener, Chain. H. M. Shiner. 1,761,688; June 3.
Fastener, Chain. A. A. Thomas. 1,761,646–8; June 3.
Fastener, Door. R. Moodt. 1,762,070; June 3.
Fastener for reels, Film. W. T. McCarthy. 1,761,837; June 3.
Fastener-operating means and blank therefor. Fabricating. N. Statham. 1,761,805; June 3.
Fastener, Pin. P. E. Fenton. 1,762,118; June 3.
Fastener, Separable snap. M. F. Carr. 1,761,612; June 3.
Fastening device. W. H. Cobb. 1,761,385; June 3.
Fastening device for pipes of irrigation systems. H. Pope. 1,761,409; June 3.
Fastening, Table-leg. S. Wojtan. 1,762,042; June 3.
Faucet. W. A. Schatz. 1,761,089; June 3.
Faucet handle. S. Kersten. Des. 81,314; June 3.
Feeler mechanism. R. Crompton and C. E. Knowlton. 1,761,817; June 3.
Fence clip, Wire-. E. J. Paque. 1,761,452; June 3.
Fertilizer material, Manufacture of concentrated. H. H. Meyers. 1,760,990; June 3.
Figure, Ornamental. I. Dichter. 1,761,879; June 3.
Filing appliance. W. E. Dunning and J. Bachofen. 1,761,661; June 3.
Filter-Air. A. Jordahl. 1,760,986; June 3.
Filter and controlling the pulp-level therein. J. A. McCaskell. 1,761,401; June 3.
Filter, Oil. A. M. Babitch. 1,761,963; June 3.
Filter, Oil. M. P. Harwood and C. W. McKinley. 1,761,915; June 3.
Filter, Oil. H. G. Kamrath. 1,761,924; June 3.
Filter, Oil. F. N. Nutt. 1,761,932; June 3.
Finned tube. H. W. Bundy. 1,761,981; June 3.
Finned tubing, Making. H. W. Bundy. 1,761,980; June 3.
Fire-fighting apparatus. H. Burmeister. 1,762,089; June 3.
Fire hazards in vehicles, Reduction of. K. F. Marx. 1,761,221; June 3.
Fire-pot structure. W. Blaskewitz. 1,760,869; June 3.
Fire-protection device, Automatic. B. Richards. 1,761,406; June 3.
Fireworks construction. J. H. Shunk, jr. 1,761,094; June 3.
Fish skins, Treatment of. A. Ehrenreich. 1,762,053; June 3.
Fixture for poles, Gain. R. G. Williams. 1,761,509; June 3.
Flatiron. C. Endorf. 1,761,202; June 3.
Float. W. E. Rawlings. 1,761,680; June 3.
Float, Bathing-beach. W. E. Trenholm. 1,761,058; June 3.
Float-impregnating process and apparatus. A. Sorensen. 1,761,500; June 3.
Flotation apparatus. J. P. Ruth, jr. 1,760,916; June 3.
Fluid-controlled mechanism. J. Robson. 1,760,915; June 3.
Fluid engine, Motive-. J. T. Marshall. 1,760,952; June 3.
Fluid meter. B. Greenfield. 1,761,205; June 3.
Fluid separator. R. W. Andrews. 1,761,168–70; June 3.
Fluid separator. G. D. Bradshaw and R. W. Andrews. 1,761,177; June 3.
Fluids, Apparatus for mixing gaseous. C. Prache. 1,761,799; June 3.
Fluids, Device for measuring the temperature of hot. R. Hase. 1,761,892; June 3.
Flying machine. P. W. Lacina. 1,761,481; June 3.
Foam for fire-extinguishing purposes, Apparatus for producing. H. Burmeister. 1,761,179; June 3.
Folding machine and method. L. J. Lambert. 1,761,017; June 3.
Folding or interfolding machine. P. J. Christman. 1,761,517; June 3.
Folding seat. B. L. Lauresen. 1,761,673; June 3.
Food preserver. G. M. McGinnis. 1,761,483; June 3.
Foot rest for toilet seats, Folding. G. H. Van Arnam. 1,761,602; June 3.
Form for concrete walls, Adjustable metallic. E. B. Selway. 1,761,055; June 3.
Foundation construction. D. W. Wells. 1,761,321–2; June 3.
Fourdrinier machines, Shaking mechanism for. A. Aldrich. 1,761,185; June 3.
Frame: *See*—
Hand-bag frame.
Frame extension, Truck-. O. W. Fry. 1,761,334; June 3.
Frame for all plaster walls, Metal. I. A. Baum. 1,761,288; June 3.
Frame for Axminster looms, Tube. G. P. Findlay. 1,760,942; June 3.
Friction brake. J. S. Thompson. 1,761,318; June 3.
Fruit cutter and squeezer. J. H. Roberts. 1,762,031; June 3.
Fuel under boilers, Automatic system for burning. E. Skillman and G. Harmon. 1,761,158; June 3.
Furnace: *See*—
Glass-tank furnace.
Heating furnace.
Furnace construction, Glass-tank-. J. L. Drake. 1,761,197; June 3.
Furnace for burning garbage and other refuse. H. M. Day. 1,761,878; June 3.
Furnace for the production of aluminum. P. E. Frøland. 1,761,442; June 3.
Fuse cutter. J. Van Der Rogart. 1,761,760; June 3.
Fuse, Refillable. J. G. Clemens. 1,761,466; June 3.
Fuse, Renewable. W. H. Schrupp. 1,761,054; June 3.
Game board. J. Manfredi. Des. 81,294; June 3.
Garment, Sanitary. B. Becker. 1,761,609; June 3.
Garment sleeve. J. Haspel. 1,761,886; June 3.
Gas burner. H. E. Kerr. 1,761,566; June 3.
Gas burner, Adjustable and detachable. J. A. Smith and E. J. Hansen. 1,761,594; June 3.
Gas-burning equipment, Regulating apparatus for. W. J. Harris, jr. 1,762,133; June 3.
Gas, Making combustible. W. W. Odell. 1,762,100; June 3.
Gas, Making producer. M. F. Chase, F. E. Pierce, and J. Skogmark. 1,761,384; June 3.
Gas trap. T. A. M. Petersen. 1,761,743; June 3.
Gasoline and the product thereof, Treating. A. P. Bjerregaard. 1,761,810; June 3.
Gasoline supply system, Vacuum. C. F. Arnold. 1,761,961; June 3.
Gauge: *See*—
Pressure gauge.
Gauge for pneumatic tires, Pressure. J. E. Kennedy. 1,761,130; June 3.
Gauge for sewing machines. A. M. Wenzel. 1,761,857; June 3.
Gauge for sewing machines, Adjustable. A. M. Wenzel. 1,761,856; June 3.
Gear, Airplane landing. W. B. Stout. 1,760,890; June 3.
Gear arrangement for crank-shaping machines, unit construction and two-speed driving-. G. H. Knight. 1,762,062; June 3.
Gear, Composite. L. T. Frederick. 1,761,114; June 3.
Gear for motor-driven vehicles, Driving. L. Karlovitz. 1,761,478; June 3.
Gear-key retainer, Draft-. C. S. Johnston and J. R. Alcott. 1,761,266; June 3.
Gear, Laminated worm. A. M. Babitch. 1,761,962; June 3.
Gearing, Two-speed. M. B. Morgan. 1,761,308; June 3.

Gelatin, Preparation of. A. Pansky. 1,761,862; June 3.
Generator: *See*—
Oscillation generator.
Vacuum-tube generator.
Generator-regulating system. J. T. Fitzsimmons and J. White. 1,761,524; June 3.
Glare shield for automobile headlight bulbs. E. H. Arnold. 1,761,974; June 3.
Glass, Apparatus for forming sheet. J. L. Drake. 1,761,195; June 3.
Glass, Apparatus for making sheet. H. F. Hitner. 1,761,342; June 3.
Glass apparatus, Sheet-. J. W. Wildermuth. 1,761,763; June 3.
Glass-blowing machine. H. Hillmann. 1,761,665; June 3.
Glass, Drawing sheet. J. L. Drake. 1,761,198; June 3.
Glass, Drawing sheet. C. A. Rowley. 1,761,234–5; June 3.
Glass-handling apparatus, Sheet-. J. L. Drake. 1,761,199; June 3.
Glass-handling device, Sheet-. J. P. Crowley. 1,761,193; June 3.
Glass machine. M. Jaeger. 1,761,792; June 3.
Glass, Process and apparatus for producing sheet. J. L. Drake. 1,761,200; June 3.
Glass, Process and apparatus for producing sheet. F. Fraser. 1,761,204; June 3.
Glass, Producing laminated. W. F. Brown. 1,761,770; June 3.
Glass-surfacing apparatus, Sheet-. J. L. Drake. 1,761,196; June 3.
Glass-surfacing table, Sheet-. W. H. Powlesson. 1,761,746; June 3.
Glass-tank furnace. W. F. Brown. 1,761,190; June 3.
Glass width-maintaining device, Sheet-. L. Mambourg. 1,761,219; June 3.
Goblet. G. Sakier. Des. 81,302; June 3.
Goblet or similar article. G. Sakier. Des. 81,301; June 3.
Golf link, Automatic-. R. H. Strasser. 1,761,317; June 3.
Golf practice apparatus. R. Hazeltine. 1,761,039; June 3.
Golf tee. W. H. McLeod. Des. 81,315; June 3.
Golf tee. W. S. Morris. 1,761,532; June 3.
Granular material, Apparatus for grading. O. H. Hansen. 1,761,788; June 3.
Graphic instrument. W. J. Healey. 1,760,947; June 3.
Grate bar. A. Provost. 1,761,024; June 3.
Grate or burning bar for enameling furnaces. K. Türk. 1,762,001; June 3.
Grease can. E. W. and R. W. Beardsley 1,761,650; June 3.
Grease gun R. P. Jacques. 1,761,127; June 3.
Greenhouse bed. F. J. Mead. 1,761,796; June 3.
Grinder, Sectional ring. G. E. Vance. 1,761,852; June 3.
Grinding machine. W. P. Hunt, C. W. Hallene, and S. L. Brandenburg. 1,761,126; June 3.
Grinding machine. N. H. Klages. 1,760,987; June 3.
Gripping device. A. Prelesnik. 1,760,885; June 3.
Guard apparatus for platers, Safety. R. M. Mutch. 1,761,045; June 3.
Guide and mounting for screens or the like. H. Dixson. 1,761,332; June 3.
Hair clamp. P. E. Herrmann. 1,761,830; June 3.
Hair drier. W. G. Shelton. 1,760,997; Jan. 3.
Hair drier, Sanitary. L. Mazade. 1,761,269; June 3.
Hammer, Fluid-pressure. M. Maximilian. 1,761,734; June 3.
Hand-bag frame. W. Finkelstein. 1,762,013; June 3.
Hand brake. L. A. Hoerr. 1,761,209; June 3.
Hand or finger grip. W. F. Pelton. 1,761,582; June 3.
Handle. W. Blaskewitz. 1,760,868; June 3.
Handle for percussive tools, Spring. F. A. Jimerson. 1,760,985; June 3.
Hanger: *See*—
Beam hanger.
Door hanger.
Harrow, Lister corn. M. Plein. 1,761,491; June 3.
Harvester, Cotton. A. E. Benson. 1,762,045; June 3.
Hat. J. Sather. 1,761,368; June 3.
Headlight, Dirigible. G. G. McNee. 1,761,484; June 3.
Heat exchanger. J. Karmazin. 1,761,397; June 3.
Heat-transfer means for electrical apparatus. F. W. Gay. 1,761,387; June 3.
Heater: *See*—
Air heater.
Case heater.
Oil-well heater.
Shoe heater.
Water heater.
Heating device containing a fluid in its heating element. A. Pais. 1,760,884; June 3.
Heating device, Engine-. J. Good. 1,761,388; June 3.
Heating device for the suction air of combustion engines. W. Riehm. 1,761,844; June 3.
Heating furnace. H. M. Williams. 1,761,028; June 3.
Heel and covering the same. W. H. Nutt. 1,761,359; June 3.
Heel rest for electric iron. M. W. McArdle. Des. 81,296; June 3.
Hinge. W. R. Brewer. 1,761,178; June 3.
Hinge. G. E. Roedding. Des. 81,312; June 3.
Hitch for road machines, Tractor. P. D. Smith. 1,760,919; June 3.
Hoist, Fish-net. J. A. Reed. 1,761,365; June 3.
Holddown for squaring shears. J. J. Kutscheid. 1,761,351; June 3.
Holder and ash tray, Combination pen. E. L. Johnson. Des. 81,286; June 3.
Holder and elevator, Pipe. J. S. Taylor. 1,762,037; June 3.
Holder, Bill. R. M. Ancla. 1,761,809; June 3.
Holder, Combined brush and hat. C. V. Pohlson. Des. 81,300; June 3.
Holder, Condiment. A. H. Tramer. 1,761,806; June 3.
Holder device for stockings. E. R. Meinig. 1,761,402; June 3.
Holder, Door. S. W. Houston. 1,762,095; June 3.
Holder for candles. E. W. Heisey. 1,761,299; June 3.
Holder for cigarette packages. J. Parsons. 1,761,408; June 3.
Holder for dynamos, Brush. T. S. Bindschedler and P. J. Koster. 1,761,066; June 3.
Holder for lamp housings. R. W. Erskine. 1,760,978; June 3.
Holder for soap sticks and the like. F. Reutter. 1,760,886; June 3.
Holder, Jar. B. A. Lundy and S. P. Hull. 1,761,218; June 3.
Holder, Lighting-fixture-shade. I. Wolarsky. 1,761,511; June 3.
Holder, Metallic electrode. H. H. Heckman. 1,761,728; June 3.
Holder, Miniature-domicile tree. P. J. Werner and J. Sobczak. 1,761,062; June 3.
Holder, Nail. O. Breithaupt. 1,761,769; June 3.
Holder, Paper-roll. A. W. Caps. 1,761,464; June 3.
Holder, Price-tag. J. P. Siehe. 1,761,995; June 3.
Holder, Sanitary block. C. E. Pickering. 1,761,154; June 3.
Holder, Wallet or bill. H. Barnes. 1,761,976; June 3.
Honey, Apparatus for liquefying solidified. A. G. Kuykendall. 1,761,479; June 3.
Horseshoe, Nailless. A. Smithson. 1,761,241; June 3.
Hose coupling. H. H. Logan. 1,761,352; June 3.
Hose-coupling adapter. J. C. Schellin. 1,761,157; June 3.
Hosiery. J. A. Struthers. Des. 81,307; June 3.
House construction, System of. D. Beale. 1,761,289; June 3.
House number and auto number, Electric. W. E. Burke. 1,761,868; June 3.
Household apparatus. L. F. Whitney. 1,761,553; June 3.
Housing for drill heads, Oil. R. M. Galloway. 1,762,092; June 3.
Hub cap. F. B. di Neuberg. 1,761,468; June 3.
Humidifying apparatus. G. D. Doherty. 1,760,976; June 3.
Humidor, Coffee or tobacco. J. J. Ratty. 1,762,030; June 3.
Hydraulic actuating mechanism. H. M. M. Mattern, jr. 1,762,068; June 3.
Hydraulic machine. E. Gross. 1,762,121; June 3.
Hydrocarbons, Cracking. E. C. Herthel. 1,761,340; June 3.
Ice, Apparatus for manufacturing. D. K. Warner. 1,760,972; June 3.
Ignition apparatus. S. Armitage. 1,761,512; June 3.
Ignition apparatus, Electric. W. H. Hutchins. 1,761,015; June 3.
Ignition device. J. L. Arthur. 1,761,513–14; June 3.
Illumination, Method of and apparatus for producing standard. A. C. Hardy and F. W. Cunningham. 1,761,725; June 3.
Images on rubber surfaces, Reproducing. J. P. Brockway. 1,761,424; June 3.
Incasing lock. C. H. Duffy. 1,760,977; June 3.
Incubator. L. N. Porter and B. F. C. Morris. 1,761,364; June 3.
Index, Visible strip. G. H. Dawson. 1,761,877; June 3.
Indicating device. H. Schlaich. 1,761,751; June 3.
Indicator: *See*—
Battery indicator.
Service indicator.
Station indicator.
Inductor. R. L. Davis and J. P. Stakel. 1,760,975; June 3.
Information device for automobiles. M. W. Hill. 1,761,790; June 3.
Ingot mold. E. J. Kauffman. 1,762,098; June 3.
Insecticide. W. Moore. 1,761,144; June 3.
Instrument casing. J. Zubaty. 1,761,953; June 3.
Instrument for measuring variable forces. J. G. Paulin. 1,761,489; June 3.
Instrument panel. E. E. Hans. 1,761,914; June 3.
Instruments for the passage of the glottis by means of the touch, Set of. S. G. Vicente. 1,761,761; June 3.
Insulating cap for the joints of electrical conductors and conductive coating for use therein. F. M. van Gelderen. 1,762,039; June 3.
Insulation for heating vessels. G. D. White. 1,761,696; June 3.
Insulator. C. S. Gordon and J. T. Lowe. 1,760,983; June 3.
Insulator and shunt-circuit closer. R. E. Sheperd. 1,761,496; June 3.
Interlock mechanism. C. O. Ball. 1,761,964; June 3.
Internal and external combustion engine, Combined. R. Hildebrand. 1,761,561; June 3.
Internal brake. H. C. Olivier. 1,761,933; June 3.
Internal-combustion engine. W. R. Griswold. 1,761,474; June 3.
Internal-combustion engine. J. and P. Pontrello. 1,761,843; June 3.

Invalid table. L. W. Huntington. Des. 81,285; June 3.
Iron: *See*—
Laundry iron.
Iron core for magnetic apparatus. K. Schmidt. 1,760,965; June 3.
Ironing board. T. E. Pope. 1,761,583; June 3.
Jack. A. Peteler. 1,761,150; June 3.
Jack and shock absorber, Combined four wheel. B. T. Wilkey. 1,760,891; June 3.
Joint and making the same, Structural. H. H. Moss. 1,760,883; June 3.
Joint for structural shapes and making the same. H. H. Moss. 1,760,955; June 3.
Junction box. M. J. Fox. 1,761,203; June 3.
Key bolts, Manufacture of. J. P. and R. V. Northey. 1,761,581; June 3.
Key guard. T. W. Kupfer. 1,761,131; June 3.
King-pin-testing appliance. I. A. Weaver. 1,761,163; June 3.
Kit, Tool. D. L. Rankin. 1,761,453; June 3.
Knee pad, Resilient. J. E. Shotwell. 1,761,093; June 3.
Knife, Vegetable. J. Northcutt. 1,761,639; June 3.
Knitted fabric. A. M. Adigstein. Des. 81,270; June 3.
Knitting machines, Spring-bar-operating mechanism for full-fashioned. M. Zwicky. 1,761,331; June 3.
Lace. M. H. Dandy. Des. 81,274; June 3.
Ladder, Truck. H. M. Havens. 1,761,726; June 3.
Lamp. F. J. Abel. Des. 81,268; June 3.
Lamp, Electric. H. A. Douglas. 1,761,438; June 3.
Lamp, Electric. L. O. Parker. 1,761,022; June 3.
Lamp-focusing mechanism. R. N. Falge. 1,761,911; June 3.
Lamp for motor vehicles, Fender. H. Schwarze. Des. 81,304; June 3.
Lamp, Head. E. P. Bone. 1,761,811; June 3.
Latch, Cash-box. G. J. Francis. 1,762,015; June 3.
Latch, Door. G. Sfiris. 1,760,968; June 3.
Lath clip. W. E. White. 1,761,323; June 3.
Laundry iron, Electric. G. Browning. 1,761,192; June 3.
Lawn sprinkler. G. Browning. 1,761,191; June 3.
Lens system. L. V. Foster. 1,761,441; June 3.
Lens, Trifocal. P. Eckley. 1,761,201; June 3.
Level, Sight. H. O. Stouffer. 1,761,851; June 3.
Lever, Gear-shifter. O. E. Fishburn. 1,762,132; June 3.
Lever plate, Clutch pressure. J. M. Crawford. 1,761,972; June 3.
Levers, Ball or handle for gear-shift. K. Turk. 1,761,898; June 3.
Lifter: *See*—
Tree lifter.
Light: *See*—
Auto light. Safety turn light.
Light fixtures, Electric-. B. Hasenstab. Des. 81,282–3; June 3.
Lighter, Cigar. C. Rubsamen. 1,762,079; June 3.
Lighter, Cigar. C. Spitzer. 1,761,316; June 3.
Lighter and the like, Pocket. L. V. Aronson. 1,762,123; June 3.
Lighter, Pocket. A. Pollak and J. F. O'Brien. 1,760,995; June 3.
Lighter, Pyrophoric. V. Kassapian. 1,762,061; June 3.
Lighting fixture. R. R. Hellvik and S. Perls. Des. 81,284; June 3.
Lighting system, Emergency. R. T. Williams. 1,761,002; June 3.
Line-adjusting mechanism. E. Breitling. 1,760,870; June 3.
Lip stick or similar article. C. L. Marcus. Des. 81,295; June 3.
Liquid cooler. T. S. Merrylees. 1,761,086; June 3.
Liquid injector, Carbon-removing. C. W. McKinley. 1,761,931; June 3.
Liquids, Atomizing and drying. A. Nyrop. 1,762,026; June 3.
Liquids, Cooling of. T. S. Merrylees. 1,761,085; June 3.
Liquids from containers, Controlling the discharge of. G. S. Jones. 1,762,059; June 3.
Liquids of different specific gravities, Separation of. W. A. White. 1,761,505; June 3.
Liquors, Purification of zinc sulphate. O. A. Fischer. 1,761,782; June 3.
Loading and unloading enameling furnaces, Apparatus for. L. J. Stevenson. 1,761,996; June 3.
Loading machine. J. E. Jones, N. A. Newdick, and W. E. Moody. 1,762,060; June 3.
Loading machine. E. C. Morgan. 1,761,145; June 3.
Loading machine. N. A. Newdick. 1,762,071–2; June 3.
Loading mine cars, Apparatus for. J. A. Paisley. 1,762,074; June 3.
Lock: *See*—
Automobile lock. Transmission lock.
Blade lock. Trunk lock.
Incasing lock.
Lock. William C. Shinn. 1,761,092; June 3.
Lock for automobiles, Gear. J. M. Dugan. 1,761,073; June 3.
Locking windshield wipers, Device for. A. S. Morris. 1,761,531; June 3.
Loom, Circular. R. G. Clark. 1,761,293; June 3.
Loom magazines, Thread-controlling device for. W. M. Wattie. 1,760,925; June 3.
Loom shuttle, Automatically-threading. H. A. Davis. 1,761,617; June 3.
Loom shuttle, Self-threading. P. A. Millis and M. Johnson. 1,761,989; June 3.
Loom, Weaving. M. C. H. O. Lecocq. 1,760,948; June 3.
Loom, Weft-replenishing. J. B. Olch. 1,760,958; June 3.
Looms, Box motion for. W. E. Lundgren. 1,760,950; June 3.
Looms, Feeler mechanism for. H. A. Davis. 1,761,618; June 3.
Looms, Feeler mechanism for. C. H. Draper. 1,761,621; June 3.
Looms, Intermittent feeler mechanism for. E. D. MacArthur. 1,761,576; June 3.
Looms, Intermittent needle motion for Axminster. A. P. Paine. 1,760,960; June 3.
Looms, Let-off mechanism for. H. H. Burdett. 1,761,611; June 3.
Looms, Needle motion for Axminster. O. V. Payne. 1,761,277; June 3.
Looms, Picking motion for. A. A. Gordon and I. H. Verry. 1,760,981; June 3.
Looms, Protector mechanism for. W. H. Wakefield. 1,760,970–1; June 3.
Looms, Thread clearer for. R. G. Turner. 1,760,969; June 3.
Looms, Thread holder for weft-replenishing. A. A. Gordon. 1,760,982; June 3.
Looms, Thread-parting mechanism for filling-replenishing. F. Harris. 1,761,625; June 3.
Looms, Tube frame for Axminster. W. W. Robertson. 1,760,963; June 3.
Loud-speaker. C. G. Cook. 1,762,050; June 3.
Lowering mechanism for applicable use in portable life-saving apparatus. J. D. Redmond. 1,761,311; June 3.
Lubricant-distributing apparatus. D. Grattan. 1,760,902; June 3.
Lubricant heat-dissipating means. E. W. Schloerb. 1,761,686; June 3.
Lubricating system. C. W. Manzel. 1,761,891; June 3.
Lubricator. J. R. Warner. 1,761,097; June 3.
Luggage carrier. W. Koeck. 1,761,213–14; June 3.
Machine and method for making chain. E. F. M. Speidel and K. C. Augenstein. 1,761,415; June 3.
Machine for applying adhesive substance to sheets of material. A. Peterson. 1,761,230; June 3.
Machine for applying flexible casings to magazines. M. O. Brennan and G. Schuler. 1,761,189; June 3.
Machine for chilling and flaking soap. E. B. Ayres. 1,762,043; June 3.
Machine for concaving wood-heel blocks. W. J. Shaw. 1,761,026; June 3.
Machine for contracting ferrules. J. P. Eastman. 1,761,521; June 3.
Machine for cutting multiple threads on wood screws. H. P. Townsend. 1,761,243; June 3.
Machine for making lock washers. F. H. Sleeper. 1,761,279; June 3.
Machine for making spherical glass bodies. J. F. Early. 1,761,623; June 3.
Machine for manufacturing hose clamps. F. N. Ross. 1,761,455; June 3.
Machine for removing surplus insulation from the armatures of dynamo-electric machines. R. W. Baker. 1,761,033; June 3.
Machine for viscous and granular materials, Mixing. J. E. Johnson. 1,760,906; June 3.
Machine for washing, drying, and sterilizing dishes. J. L. Breton. 1,761,812; June 3.
Mail box. T. L. Parker. 1,760,961; June 3.
Mandrel. H. R. Wilson and W. W. Smith. 1,761,859; June 3.
Mandrel-delivering apparatus. T. P. Little. 1,760,875; June 3.
Manganese-compound recovery. N. A. Laury. 1,761,133; June 3.
Manure containing phosphoric acid and nitrogen, Producing a mixed. F. G. Liljenroth. 1,761,400; June 3.
Marbleized flexible sheets, Producing. G. M. McGuire. 1,761,305; June 3.
Marking process and material and producing said marking material. M. S. Kharasch. 1,761,347; June 3.
Material classifier. C. F. Hine. 1,761,627; June 3.
Material treating and handling apparatus. J. D. Ferry. 1,760,979; June 3.
Materials, Device for reducing. H. G. Lykken. 1,761,138; June 3.
Mattress and mattress boxing. L. E. Pittoni. 1,762,106; June 3.
Measuring and distributing apparatus. Pressure grease. J. W. Woodruff. 1,761,423; June 3.
Measuring instrument, Optical. G. B. Gallasch. 1,761,260; June 3.
Mechanical movement. O. Johnson. 1,761,128; June 3.
Mechanical movement. G. H. Knight. 1,762,063; June 3.
Medicament applicator for feet. A. M. Stopford. 1,761,501; June 3.
Merry-go-round. W. Powell. 1,761,895; June 3.
Metal articles, Treating ferrous. M. C. Baker and W. A. Dingman. 1,761,186; June 3.
Metal section. H. E. White. 1,762,112; June 3.
Metal sheets or strips, Manufacturing. F. Wille. 1,761,248; June 3.

Metal unit, Hollow sheet-. A. R. Gross. 1,761,037; June 3.
Metallic structure and making same. H. H. Moss. 1,760,956; June 3.
Metallurgical process. R. D. Pike. 1,761,641; June 3.
Metals and other materials with aluminium and aluminum alloys, Coating, impregnating, or alloying. W. Smith. 1,761,850; June 3.
Metals, Casting readily-oxidizable. W. W. Smith. 1,761,498; June 3.
Meter: *See*—
Fluid meter.
Meter and the mounting thereof, Electric. F. W. Erickson. Re17,694; June 3.
Metering instrument. W. Noble. 1,761,678; June 3.
Mica-sorting machine. L. T. Frederick. 1,761,113; June 3.
Micrometer device. J. Edgar. 1,760,938; June 3.
Mill: *See*—
Disintegrating mill. Pulverizing mill.
Milling machine. L. F. Nenninger. 1,761,841; June 3.
Mineral flotation apparatus. R. Lord. 1,761,136; June 3.
Mining apparatus. F. E. Van Slyke. 1,761,060; June 3.
Mining machine. C. R. Hughes. 1,761,670; June 3.
Mirror frame. T. La Tessa. Des. 81,308; June 3.
Mirror, Shaving. J. A. Hoegger. 1,761,393; June 3.
Mixer: *See*—
Cake mixer.
Mixing apparatus. J. F. Geets. 1,762,094; June 3.
Mixing device. G. H. Goebel. 1,761,473; June 3.
Mold: *See*—
Ingot mold. Tire-retreading mold.
Mold for constructing trusses. J. L. McKeown. 1,761,306; June 3.
Moldable product and preparing the same. B. W. Nordlander. 1,761,740; June 3.
Molding apparatus for ingot molds. J. E. Perry and J. A. Lanigan. 1,762,225; June 3.
Molding machine. T. E. McFall. 1,761,736; June 3.
Monorail structure. C. M. Goodrich. 1,761,824; June 3.
Motor: *See*—
Electric motor. Wave motor.
Motor-control mechanism, Starting-. W. D. Walker. 1,761,853; June 3.
Motor-starting switch. C. F. Carpenter. 1,761,773; June 3.
Mount for metal poles. R. G. Williams. 1,761,508; June 3.
Mount for steel poles. R. G. Williams. 1,761,507; June 3.
Mounting, Engine. C. R. Short. 1,761,938; June 3.
Mounting, Head-lamp. H. Schwarze. 1,761,937; June 3.
Mounting, Motor. C. E. Scott. 1,761,752; June 3.
Mower. M. F. Emerson. 1,760,939; June 3.
Mowing attachment. W. L. Champion. 1,761,904; June 3.
Muffler. L. V. Gram. 1,761,971; June 3.
Muffler for internal-combustion engines. C. S. Watkins. 1,760,924; June 3.
Multicolor cinematographic and other film and making same. J. E. Thornton. 1,761,897; June 3.
Music roll. H. P. Ball. 1,761,862; June 3.
Musical instrument, Wind. H. J. Charlton. 1,761,329; June 3.
Mute, Banjo. C. L. Forsythe. 1,761,294; June 3.
Nail. J. Gouldbourn. 1,761,119; June 3.
Nail puller. G. Little. 1,761,575; June 3.
Nose protector. H. G. Harris. 1,761,864; June 3.
Novelty can. J. Salmi. 1,761,495; June 3.
Nozzle. E. E. Wagner. 1,761,422; June 3.
Nozzle, Check. C. W. Frank. 1,762,055; June 3.
Nozzle, Lining gun. H. H. Harris, W. T. Whittingslowe, and S. J. Jolly. 1,762,058; June 3.
Nut, Clinch-on. E. W. Mitchel. 1,761,358; June 3.
Nut-cracking machine. W. Gebhardt. 1,761,823; June 3.
Nut-cracking machines, Feeding mechanism for. W. Gebhardt. 1,761,822; June 3.
Nuts, Apparatus for forming. C. R. Roof. 1,761,642; June 3.
Oil and gas separator. J. G. Peck. 1,762,097; June 3.
Oil, Apparatus for distilling lubricating. A. E. Pew, jr. 1,761,151; June 3.
Oil burner and method of effecting the combustion of oil fuels. W. F. Ravenor. 1,761,537; June 3.
Oil burner, Recuperative. R. C. Hopkins. 1,761,628; June 3.
Oil-cracking retorts, Protecting the interiors of. A. C. Holzapfel. 1,761,343; June 3.
Oil distillates, Purifying lubricating. M. L. Chappell. 1,761,328; June 3.
Oil, Distilling. A. E. Pew, jr. 1,761,153; June 3.
Oil-filtering means. L. W. Shutts. 1,761,940; June 3.
Oil pan. C. L. McCuen. 1,761,930; June 3.
Oil rectifier. J. Zubaty. 1,761,952; June 3.
Oil solution, Ephedrine. E. H. Stuart. 1,762,108; June 3.
Oil, Treating petroleum. C. P. Dubbs. 1,761,622; June 3.
Oil-well heater. W. C. Pasley. 1,761,227; June 3.
Oiler, Automatic. H. W. Wulf. 1,761,699; June 3.
Oiler, Force. O. R. Ball. 1,761,462; June 3.
Opening containers such as boxes, tins, or the like, Device for. B. Polák. 1,762,076; June 3.
Operating mechanism. H. E. Ginther. 1,762,120; June 3.
Ophthalmic mounting. F. R. Bishop. 1,761,252; June 3.
Ophthalmic mounting. F. C. Merry. Des. 81,298; June 3.
Oscillation generator, Piezo-electric crystal-controlled. H. Eberhard. 1,761,882; June 3.
Oscillations, Apparatus for amplifying electric. L. M. Hull. 1,760,872; June 3.
Outlet or junction box. J. G. Knight. 1,761,398; June 3.
Oven. V. A. Fox. 1,761,472; June 3.
Oven, Coke. E. Lecocq. 1,761,835; June 3.
Oxide, Producing titanium. R. M. Palmer. 1,760,992; June 3.
Pack carrier. H. G. Chute. 1,761,426; June 3.
Packages to and from aircraft while in flight, Device for receiving and delivering. B. B. Bland and F. B. De Tienne. 1,761,290; June 3.
Packing, Lead-wool and ground-cork. G. E. Sawyer and J. W. Smith. 1,761,749; June 3.
Packing of carbon black. L. E. Peck. 1,761,228; June 3.
Pad: *See*—
Knee pad. Shoulder pad.
Rubbing pad.
Paint, Bituminous. R. Mezger. 1,762,069; June 3.
Pan: *See*—
Oil pan.
Pants press, Folding. F. E. Richards. 1,762,078; June 3.
Paper drier. J. W. Vedder. 1,760,923; June 3.
Paper-feeding and cut-off mechanism. C. O. Brownell. 1,761,771; June 3.
Paper hangers' straightedge and trimming boards, Adjustable attachment for. H. E. Simonton. 1,761,315; June 3.
Paper machine, Fourdrinier. A. Aldrich. 1,761,183–4; June 3.
Paper roll, Toilet-. J. W. Doty. 1,761,111; June 3.
Parking device for motor vehicles. G. W. Woolley. 1,761,554; June 3.
Pastry cup, Edible. E. Hamwi. Des. 81,276–8; June 3.
Pedestal, Counter-seat. L. M. Michelson. Des. 81,299; June 3.
Pen and stand therefor, Fountain. W. I. Ferris. 1,762,103; June 3.
Pen supporter. G. D. Bradshaw. 1,761,176; June 3.
Pencil. P. J. O'Sullivan. 1,761,407; June 3.
Pencil, Styptic. J. M. Schneider. 1,761,025; June 3.
Penholder. I. C. Bradley. 1,761,903; June 3.
Petroleum, Deodorizing. A. E. Pew, jr. 1,761,152; June 3.
Phonograph pick-up, Piezo-electric. C. W. Hough. 1,761,831; June 3.
Phonograph record and treating same. R. Knopp. 1,761,212; June 3.
Phosphate-bearing material, Concentration of. W. Trotter and E. W. Wilkinson. 1,761,546; June 3.
Photogravures, Method for. L. Hughes. 1,761,125; June 3.
Photometer. K. Camp. 1,762,047; June 3.
Pictures to be produced by tanning action, Preparing. M. P. Schmidt, R. Zahn, and W. Krieger. 1,762,033; June 3.
Pile and wall construction. B. C. Collier. 1,761,614; June 3.
Pin stem, joint, and catch, Combined. F. A. Ballou, jr. 1,761,187; June 3.
Pinion puller. F. H. Schwerin. 1,761,412; June 3.
Pipe: *See*—
Exhaust pipe. Tobacco pipe.
Pipe cleaner, Sewer-. C. C. Windburst. 1,761,324; June 3.
Pipe-cleaning or cable-laying device. M. Seidel. 1,761,592; June 3.
Pipe coupling, Automatic train-. J. Robinson. 1,762,032; June 3.
Pipe coupling, Well-. E. C. Wilson. 1,760,930; June 3.
Pipe wrench. S. Sorensen. 1,761,280; June 3.
Pistol, Air. H. Schmelsser. 1,761,093; June 3.
Piston. J. A. Dunning. 1,761,982; June 3.
Piston. W. C. McCoy. 1,761,140–2; June 3.
Piston. I. A. Weaver. 1,761,808; June 3.
Piston-cooling device for internal-combustion engines. H. Becker. 1,761,864; June 3.
Piston packing ring, Dual wear-compensating. J. Blacker and F. A. Smith. 1,760,974; June 3.
Piston puller and cylinder-bushing press. C. H. Lewis. 1,760,989; June 3.
Planter. W. Huff. 1,761,791; June 3.
Plaster-board structure. O. V. Kean. 1,761,730; June 3.
Plasterer's float. L. S. Dietz. 1,761,109; June 3.
Plate. J. Kirkpatrick. Des. 81,293; June 3.
Plate or similar article, Cake. E. E. Slick. Des. 81,306; June 3.
Plate-stacking mechanism. A. R. Koehler. 1,761,632; June 3.
Plates on ties, Arrangement of base. G. W. Muller. 1,761,147; June 3.
Pliers, Armor-cutting. B. F. Lindstrom. 1,761,446; June 3.
Plow. C. C. Ward. 1,761,320; June 3.
Plug, Closure. W. C. Hauser. 1,761,339; June 3.
Plug, Safety. R. H. Kyle. 1,762,064; June 3.
Plunger-operating mechanism for glass furnaces. T. Stenhouse. 1,761,372; June 3.
Pocketbook. S. Gumeiner. 1,761,390; June 3.
Pocketbooks and the like, Safety attachment for. J. F. Baker. 1,760 864; June 3.
Pole protective means, Wood-. G. W. Hamilton. 1,761,076; June 3.

Polishing machine. C. E. Van Norman and B. F. Stowell. 1,761,059; June 3.
Post puller. J. N. Mick. 1,761,675; June 3.
Powders, Drying metal. R. P. Koehring and C. R. Short. 1,761,016; June 3.
Power brake. H. L. Shallcross. 1,761,896; June 3.
Power-delivering attachment for tractors. L. Haubert. 1,761,828; June 3.
Power steering machine. C. H. Lotte. 1,761,267; June 3.
Power system. H. P. Binder and J. D. Suter. 1,762,115; June 3.
Power-transmission device. C. W. Weiss. 1,760,927; June 3.
Power-transmitting device, Infinitely-variable speed-ratio. C. O. Wellman. 1,762,004; June 3.
Press: *See*—
Baling press. Printing press.
Pants press.
Presser-foot-lifting mechanism, Automatic. A. M. Wenzel. 1,761,899; June 3.
Pressure gauge. I. T. Wedin. 1,761,947; June 3.
Prime-mover-control system. C. B. Taylor and C. Schindler. 1,761,596; June 3.
Printing apparatus, Negative-locating device for step-and-repeat. E. Bassist. 1,761,863; June 3.
Printing machine. L. H. Zeun. 1,761,380; June 3.
Printing press. F. T. Wood. 1,761,607; June 3.
Projector. A. J. Oberg and R. R. Stoefen. 1,761,360; June 3.
Proof-reader's table. J. G. Zim. 1,761,766; June 3.
Propeller, Airplane. E. G. McCauley. 1,760,876; June 3.
Propeller drive for airplanes, Multiple-. A. Homann. 1,761,077; June 3.
Propeller, Variable pitch and reversible. B. J. Steinmetz. 1,761,690; June 3.
Protecting device for bleed passages. H. G. Carlson. 1,762,010; June 3.
Protective structure for cashiers and the like. E. E. Spottswood. 1,761,095; June 3.
Protective system. C. A. Butcher. 1,761,006; June 3.
Protector, Check. A. J. Bushemi. 1,761,102; June 3.
Protector, Finger. G. E. McNamara. 1,761,356; June 3.
Psychogalvanic responses, Apparatus for measuring. S. R. Hathaway. 1,761,476; June 3.
Puller: *See*—
Nail puller. Stump puller.
Pinion puller. Well-casing puller.
Post puller.
Pulley structure. G. F. Womrath. 1,761,003; June 3.
Pulp and paper, Manufacture of. L. M. Booth. 1,761,069; June 3.
Pulverizing apparatus. W. K. Liggett. 1,761,083; June 3.
Pulverizing mill. G. Galan. 1,762,056; June 3.
Pump. N. T. Bradford and R. E. Early. 1,761,702; June 3.
Pump. W. S. Harley. 1,761,038; June 3.
Pump. W. T. Wheat and A. W. Stone. 1,761,379; June 3.
Pump for elevating liquid. W. F. Leschen. 1,761,081; June 3.
Pump for refrigerating apparatus. H. A. Greenwald. 1,761,036; June 3.
Pump lines, Priming chamber for. A. H. Todd. 1,761,504; June 3.
Pump, Liquid-fuel. A. E. Berdon. 1,762,114; June 3.
Pump, Oil-well. H. L. Crull. 1,761,876; June 3.
Pump or engine. A. M. Freeland. 1,761,259; June 3.
Pumping and lubricating apparatus. R. C. Newhouse. 1,761,579; June 3.
Pumping mechanism, Long-stroke. J. U. Davis. 1,761,330; June 3.
Pumping unit, Multiple. C. McKissick. 1,761,355; June 3.
Punch. A. E. Guertin. 1,761,207; June 3.
Punch. L. C. Reynolds. 1,761,682; June 3.
Punching and cutting machine. M. J. A. Davy and A. P. Komow. 1,761,906; June 3.
Purse. J. R. Fisler. 1,762,091; June 3.
Push button. B. L. Bobroff. 1,761,867; June 3.
Pyrophoric pocket igniter. K. F. Projahn. 1,761,048; June 3.
Quill-cleaning machine. G. W. Utsman. 1,761,695; June 3.
Quoin, Printer's. A. M. Bowzer. 1,761,979; June 3.
Rack: *See*—
Secondary rack.
Rack for fingers of dobby looms. W. E. Lundgren. 1,760,909; June 3.
Radial drill. W. C. De Roo. 1,761,107; June 3.
Radiant-energy oscillations, System for amplifying. O. E. Marvel. 1,761,530; June 3.
Radiator. J. Karmazin. 1,761,395; June 3.
Radiator cap or similar article for an automotive vehicle. W. Schnell. Des. 81,803; June 3.
Radio apparatus. O. E. Marvel. 1,761,019; June 3.
Radio receivers, Preventing radiation and extra reradiation in. S. Ballantine. 1,760,871; June 3.
Radio receiving apparatus. Interference-reducing means for. R. H. Ranger. 1,761,049; June 3.
Radio signaling system. A. N. Goldsmith. 1,761,118; June 3.
Radio telephone system, Transoceanic. H. S. Hamilton. 1,760,984; June 3.
Rails and tie plates, Manufacture of. J. D. Jones. 1,761,672; June 3.
Rails, Apparatus for jointlessly welding. C. Stedefeld. 1,762,085; June 3.
Rails, Jointlessly welding. C. Stedefeld. 1,762,086; June 3.
Railway switch. A. G. Davis. 1,761,105; June 3.
Reaper thrasher. B. S. Harris and H. M. Johnston. 1,761,264–5; June 3.
Reaper thrasher and like harvesting machine. T. Jelbart. 1,761,346; June 3.
Receptacle-filling apparatus. C. N. Bergmann. 1,761,383; June 3.
Receptacle for machine benches, Work. W. H. Des Jardins. 1,761,780; June 3.
Receptacle with removable jacket. L. V. Aronson. 1,760,933; June 3.
Recipe, Pastry. C. F. Miller. 1,761,738; June 3.
Reciprocatory motion to rotary motion, or the converse, Conversion of. G. Dean. 1,761,429; June 3.
Record and record holder. A. A. Dionne. 1,762,187; June 3.
Record comparing and posting machine. J. R. Peirce. 1,761,741; June 3.
Recorder: *See*—
Fare recorder.
Rectifier. J. B. Wantz and A. A. Grothe. 1,761,246; June 3.
Rectifier, Mechanical. K. Schmidt. 1,760,966; June 3.
Reel. J. V. Schafer. 1,761,750; June 3.
Reflector. J. H. Hunt. 1,761,919; June 3.
Reflector for light projectors. N. J. A. Fyrberg. 1,761,528; June 3.
Refrigerating apparatus. H. B. Hull. 1,761,040; June 3.
Refrigerating apparatus. J. G. King. 1,761,041; June 3.
Refrigerating apparatus and method. L. F. Whitney. 1,761,762; June 3.
Refrigerating machine, Absorption. A. J. E. Munters. 1,761,839; June 3.
Refrigerating system. E. A. Weaver. 1,761,551; June 3.
Refrigeration. L. F. Whitney. 1,761,606; June 3.
Register: *See*—
Autographic register. Fare register.
Cash register.
Register attachment, Cash-. A. Block. 1,761,557; June 3.
Regulator: *See*—
Thermostatic regulator.
Rendering process. W. Laabs. 1,761,480; June 3.
Resin and making same, Aniline-sulphur. R. S. Bly. 1,761,291; June 3.
Ribbon-shift mechanism. A. E. Long. 1,761,529; June 3.
Ring: *See*—
Display ring. Piston packing ring.
Road and walk construction. H. E. Winch. 1,761,165; June 3.
Road-scraper attachment for trucks. E. A. Weeks. 1,761,605; June 3.
Rocking horse. S. A. Brockway. 1,761,253; June 3.
Roof, Car. W. G. Powell. 1,761,047; June 3.
Roof-drain fixture. W. S. Fleming. 1,761,257; June 3.
Roofing element with thickened butt edges and making the same. L. Kirschbraun. 1,761,873; June 3.
Rope, Apparatus for manufacturing wire. J. Laubenthal. 1,761,482; June 3.
Rotary drill. J. E. Le Bus. 1,761,216; June 3.
Rotary engine. W. H. Bendry. 1,761,977; June 3.
Rotors for electric machines, Manufacture of squirrel-cage. F. Grenzer. 1,762,017; June 3.
Rubber article and making same, Ornamental. T. F. Hooper. 1,761,443; June 3.
Rubber with cellulosic derivatives, Coating. H. A. Bruson. 1,761,814; June 3.
Rubbing pad. H. B. Scott. 1,761,541; June 3.
Rust-proofing iron or steel. A. W. Schluchter. 1,761,936; June 3.
Safety control device for furnaces. T. A. E. Dickinson. 1,761,880; June 3.
Safety switch. B. E. Getchell. 1,761,117; June 3.
Safety switch. M. D. Reis, jr., and A. F. Meade. 1,761,681; June 3.
Safety turn light. P. H. Zentner. 1,761,285; June 3.
Salute. A. Fabrizio. 1,761,820; June 3.
Salvaging tin cans, Mechanism for. W. C. Frick. 1,761,984; June 3.
Sand cutter. W. E. Naylor. 1,761,224; June 3.
Santalol compounds, Manufacture of. H. Walter. 1,761,376; June 3.
Sash guide. W. S. Hamm and R. L. Greist. 1,761,297; June 3.
Sash, Window. M. A. Piotti. 1,760,994; June 3.
Sawing machine, C. I. Longenecker. 1,762,023; June 3.
Sawing machine, Commutator-. R. W. Baker. 1,761,032; June 3.
Scale. C. Dollack. 1,760,898; June 3.
Scale, Counting. L. Jaenichen. 1,761,210; June 3.
Scooter, Foot-power. W. V. Van Etten. 1,761,601; June 3.
Scraper structure, Hydraulic. E. A. Weeks. 1,760,926; June 3.
Screen: *See*—
Cellular screen. Self-cleaning screen.
Searchlight. F. R. House. 1,761,668; June 3.
Seat: *See*—
Folding seat. Vehicle seat.
Seats, Device for applying protectors to toilet. H. Müller. 1,761,637; June 3.
Secondary rack. N. C. Husted. 1,761,671; June 3.

Sectional form. J. Kersten. 1,761,568; June 3.
Self-cleaning screen. G. A. Turner. 1,761,244; June 3.
Separator: *See*—
Fluid separator. Stop-motion separator.
Oil and gas separator.
Service indicator. J. Zubaty. 1,761,950; June 3.
Setworks. E. C. Shaw. 1,761,590; June 3.
Sewing machines, Looper-thread controller for buttonhole-. L. Kozlowski. 1,761,349; June 3.
Shackle, Rubber spring. L. Blackmore. 1,761,967; June 3.
Sheave. E. E. Greve. 1,761,825; June 3.
Sheet and envelope, Mailing. C. M. Snyder. 1,762,084; June 3.
Sheet stacker, Automatic. E. L. Donnelly. 1,761,881; June 3.
Shelving, Shoe. W. T. Hormes. 1,761,667; June 3.
Shield, Art. G. G. Singer, jr. 1,762,083; June 3.
Shield for toilet seats, Sanitary. C. F. Harris. 1,761,391; June 3.
Shingle construction and composition. G. B. Stryker, jr. 1,761,756; June 3.
Shipping device, Export. R. W. Chalmers. 1,761,969; June 3.
Shock absorber. N. L. Causan. 1,761,870; June 3.
Shock absorber. J. F. O'Connor. 1,761,272; June 3.
Shock absorber for vehicles. J. F. O'Connor. 1,761,273; June 3.
Shock-absorbing attachment for crutches. M. H. Sullivan. 1,761,502; June 3.
Shock-absorbing mechanism for automobiles. J. F. O'Connor. 1,761,226; June 3.
Shock-absorbing mechanism for vehicles. J. F. O'Connor. 1,761,274; June 3.
Shock-absorbing mechanism, Friction. J. F. O'Connor. 1,762,096; June 3.
Shock-absorbing pitman arm. H. D. Geyer. 1,761,526–7; June 3.
Shock-forming machine. F. J. Seng. 1,761,314; June 3.
Shocker. W. A. Fifield. 1,761,333; June 3.
Shoe heater. M. O. Jennings. 1,760,905; June 3.
Shoe-shining machine. J. B. Woolfork. 1,762,005; June 3.
Shoe stretcher. G. B. Fitz. 1,761,012; June 3.
Short-circuiting switch. R. O. Gilburg. 1,761,786; June 3.
Shoulder pad. F. Glahe. 1,761,206; June 3.
Shovel. L. E. Webster. 1,761,378; June 3.
Shuttle. J. W. Steward. 1,761,416; June 3.
Sign. P. P. Chapin and W. J. Kupec. 1,761,871; June 3.
Sign, Composition. L. A. Graham and C. L. Low. 1,761,120; June 3.
Signal: *See*—
Traffic signal.
Signaling device for kinetographs or the like. F. L. Maytag, jr. 1,760,911; June 3.
Silks, Treatment of artificial. R. Clavel. 1,761,707; June 3.
Silverware server, Rotary table. C. J. Akalis. 1,761,382; June 3.
Sink, Portable tourist. F. J. Franson. 1,761,258; June 3.
Siren, Vehicle. C. A. Volf, jr. 1,761,162; June 3.
Skate, Roller. W. V. Van Etten. 1,761,807; June 3.
Slide-plate and tie-bar construction for railroads. R. M. Evans. 1,761,256; June 3.
Snap-fastener cap. A. W. Kimbell. Des. 81,290; June 3.
Snap-fastener cap. A. W. Kimbell. Des. 81,292; June 3.
Snap switch. A. C. Gaynor. 1,762,016; June 3.
Snap switch. A. C. Gaynor. 1,762,093; June 3.
Snubber. L. Blackmore. 1,761,965; June 3.
Socket, Caster. W. A. Vollmer. 1,761,319; June 3.
Socket, Electric-lamp. G. J. Neuer. 1,761,307; June 3.
Socket, Sucker-rod. A. H. Neilson. 1,761,840; June 3.
Sod-trimming machine. H. T. Werk. 1,761,858; June 3.
Softener for cellulose derivatives. H. A. Bruson. 1,761,813; June 3.
Soles, Method of and machine for making. W. Maxwell and F. W. De Tour. 1,761,020; June 3.
Sound-direction-determining apparatus. C. Von Hofe. 1,762,102; June 3.
Sound-reproducing device. L. M. Clement. 1,762,090; June 3.
Sounding device. A. W. Nichols. 1,761,486; June 3.
Sounds from electric current and inversely, Apparatus for the production of. C. Chilowsky and B. Nagaceff. 1,760,896; June 3.
Spark-gap mechanism. J. G. H. Liebel and E. S. Flarsheim. 1,761,082; June 3.
Spark plug. G. H. E. Berthold. 1,761,865; June 3.
Speaker. R. J. Pomeroy. 1,761,745; June 3.
Speed-changing mechanism. C. Schaeffer. 1,760,080; June 3.
Speed controller. E. C. Carter. 1,761,775; June 3.
Speed-cup dampener. J. Zubaty. 1,761,954; June 3.
Speedometer. D. H. Sweet. 1,761,694; June 3.
Speedometer drive for motor cycles. M. E. Jones. 1,761,833; June 3.
Speedometer-magnet mounting. J. Zubaty. 1,761,956; June 3.
Speedometers, Location and design of a magnet for. R. O. Helgeby. 1,761,918; June 3.
Speedometers, Mounting means for. J. Zubaty. 1,761,955; June 3.
Spike, Railroad. R. W. Warnken. 1,761,854; June 3.
Spinning machines, Silk flyer for. H. M. Fenstemaker. 1,760,941; June 3.
Spiral conveyer coupling. R. W. Ryder. 1,761,591; June 3.
Spotting table. H. Chicknavorian. 1,761,706; June 3.
Sprayer for cake bodies. H. A. Lauhoff. 1,761,182; June 3.
Spring-coiling machine. M. Nigro. 1,761,739; June 3.
Spring driving device, Resonance. O. Muck. 1,761,146; June 3.
Spring insertions for cushions and the like, Process of and device for making. A. Ehlenbeck. 1,761,711; June 3.
Sprinkler: *See*—
Lawn sprinkler.
Sprinkler head. F. Henkel. 1,760,903; June 3.
Sprinkling apparatus. E. R. Greer. 1,761,723; June 3.
Stamp and dater, Rubber time. G. A. Pickup. 1,762,027; June 3.
Stand: *See*—
Display stand.
Stand for fountain pens. R. C. Liddell. 1,762,104; June 3.
Stapling device. C. A. Palmgren. 1,761,640; June 3.
Starter, Engine. R. P. Lansing. 1,760,874; June 3.
Starter, Engine. R. P. Lansing. 1,760,988; June 3.
Starter for internal-combustion engines. L. Vingberoets. 1,761,457; June 3.
Starting apparatus, Engine. H. Schwarze. 1,761,539–40; June 3.
Starting device for compressors. C. W. Metzgar. 1,761,578; June 3.
Station indicator. A. McMillan. 1,761,737; June 3.
Steam boiler, Water-tube. J. C. Hanrahan. 1,762,136; June 3.
Steering arm. J. O. Almen and O. Rasmussen. 1,761,957; June 3.
Steering gear, Automobile. R. S. Burdette. 1,760,935; June 3.
Steering wheel. H. D. Geyer. 1,761,525; June 3.
Steering wheel. E. V. J. Tower. 1,761,374; June 3.
Steering wheel and brake. A. I. Marcum. 1,761,044; June 3.
Stencil, Dry. H. Gordenstein. 1,761,722; June 3.
Step for vehicles, Adjustable. C. Dodds. 1,762,052; June 3.
Stirrer and container for sirup, Manual. T. J. Cbrul. 1,761,613; June 3.
Stirrer and sampler, Combination cream and milk. O. E. Harris. 1,761,298; June 3.
Stitcher for tire-building machines. G. F. Wikle. 1,760,929; June 3.
Stock, Apparatus for bundling scrap. N. C. Guiden. 1,761,124; June 3.
Stoker, Traveling grate. W. D. Yerrick and J. W. Peck. 1,761,029; June 3.
Stop motion, Automatic. E. L. Tiffany. 1,761,418; June 3.
Stop motion for drawing frames. W. J. Scott. 1,761,413; June 3.
Stop-motion separator, Warp-. G. H. Shutt. 1,760,967; June 3.
Storage tank, Liquid-. D. D. Williams and H. B. Murphey. 1,761,697; June 3.
Stove, Heating. J. Winter. 1,760,931; June 3.
Strap construction for pumping powers, Eccentric. E. E. Greve. 1,761,389; June 3.
Strip forming and assembling machine. A. Price. 1,761,536; June 3.
Striping fixture. J. T. Green. 1,761,913; June 3.
Stump puller. W. Oveson. 1,762,073; June 3.
Substances, Centrifugal treatment of. L. P. Sharples. 1,761,593; June 3.
Sulpho-acids from hydrocarbon oils, Production of. G. Petroff and P. Shestakoff. 1,761,744; June 3.
Supercharger drive. R. V. Hutchinson. 1,761,921; June 3.
Support and adjuster, Seat-back. M. A. Campbell. 1,762,127; June 3.
Support, Arch. C. Lasky. 1,761,079; June 3.
Support, Detachable. J. M. McGinley. 1,760,912; June 3.
Support, Engine. G. H. Daubner. 1,761,973; June 3.
Support, Foot. J. N. Marks. 1,762,025; June 3.
Support for electric lamps, Adjustable. J. P. Johansson. 1,761,832; June 3.
Support, Guard. S. French. 1,761,717; June 3.
Support, Self-adjusting plug. W. E. Knott. 1,761,731; June 3.
Supporter for fishing rods. R. A. Smith. 1,761,497; June 3.
Supporting device, Saw-. D. M. Auvil. 1,761,249; June 3.
Surfacing table, Sheet-glass-. J. C. Gipe. 1,761,720; June 3.
Suspension wheel, Pneumatic. F. Tessé. 1,761,997; June 3.
Switch: *See*—
Alarm switch. Railway switch.
Button switch. Safety switch.
Coil switch. Short-circuiting switch.
Electric switch. Snap switch.
Expansion and construction switch. Testing switch.
Time switch.
Motor-starting switch. Valve-actuated switch.
Switch. F. Slady. 1,761,803; June 3.
Switch and indicator. N. F. Kochka. 1,761,348; June 3.
Switchboard and the like. H. Apel. 1,761,461; June 3.

Switch device, Electrical. C. M. Petersen. 1,762,075; June 3.
Switch for clothes wringers, Safety. C. C. Zwiebel. 1,761,030; June 3.
Switch-operating mechanism, Electric-. W. P. Hamlyn and M. C. I. Hunter. 1,761,724; June 3.
Switching mechanism, Electric. H. A. Douglas. 1,761,435; June 3.
Swivel for rotary drilling apparatus. E. E. Greve. 1,761,826; June 3.
Swiveling chair. A. J. Adams. Re17,686; June 3.
Syringe, Vaginal. N. B. Salerni. 1,761,588; June 3.
Table: *See*—
Glass-surfacing table. Spotting table.
Proof-reader's table. Surfacing table.
Tack-supplying apparatus. J. F. Alkonis. 1,761,031; June 3.
Tag, Marking. F. Magidson. 1,761,448; June 3.
Take-off, Power. A. C. Whatley. 1,761,900; June 3.
Tank: *See*—
Storage tank.
Telephone system. V. S. Tharp. 1,761,160; June 3.
Telephone system, Automatic. J. E. Gardner. 1,761,115; June 3.
Temperature compensator. J. Zubaty. 1,761,051; June 3.
Temperature control for oil. W. R. Strickland. 1,761,942; June 3.
Temperature responsive inductance. H. M. Witherow. 1,761,764–5; June 3.
Tension device. H. D. Clinton. 1,762,049; June 3.
Testing equipment. J. I. Bellamy and R. G. Richardson. 1,761,251; June 3.
Testing switch, Meter-. T. J. Newman. 1,761,638; June 3.
Testing system. S. B. Stromberg. 1,760,920; June 3.
Texturing and coloring apparatus, Clay. R. B. Keplinger and P. A. Kanengeiser. 1,761,631; June 3.
Theater switch panel. B. F. Fuller. 1,760,043; June 3.
Thermostat. J. E. Eshbaugh. 1,761,910; June 3.
Thermostat. P. S. Martin. 1,760,878; June 3.
Thermostat. I. T. Wedin. 1,761,946; June 3.
Thermostatic regulator. A. J. Hemings. 1,761,300; June 3.
Threads by the cupro-ammonium stretch spinning process, Process and apparatus for the production of artificial. H. Winkelmann. 1,761,860; June 3.
Time-element electroresponsive device and system employing the same. C. F. Carpenter and D. I. Bohn. 1,761,772; June 3.
Time switch, Electric. D. L. Chandler. 1,761,652; June 3.
Timer for ignition systems. E. C. Newton. 1,761,225; June 3.
Timer mechanism. R. D. Smith. 1,762,101; June 3.
Timing mechanism for glass feeders. O. M. Tucker and W. A. Reeves. 1,760,999; June 3.
Tire carrier. C. J. Bock. 1,761,968; June 3.
Tire carrier. A. Hebner. 1,761,916; June 3.
Tire carrier, Truck-. O. E. Hunt and A. G. Geistert. 1,761,920; June 3.
Tire carrier, Underslung. L. M. Spencer. 1,761,941; June 3.
Tire-retreading mold. E. A. Glynn. 1,760,944; June 3.
Toaster. W. H. McLelland and G. O. Knutson. Des. 81,297; June 3.
Tobacco pipe. P. Mancusi. 1,761,636; June 3.
Tool. D. M. Thorne. 1,761,998; June 3.
Tool applicable to remove refractory screws, Turning. F. R. Rosan. 1,761,156; June 3.
Tool, Cleaning. H. Cave and C. F. Smith. 1,761,180; June 3.
Tool-dislodging device. N. B. Chace. 1,761,181; June 3.
Tool, Fishing. G. K. Beckett. 1,761,463; June 3.
Tool, Fishing. H. A. Young. 1,762,006; June 3.
Tool for manipulating lamp-socket parts. I. Wolarsky. 1,761,510; June 3.
Tool, Machine. E. H. Simonsen. 1,761,847; June 3.
Tool, Universal valve seating and counter-boring. E. P. Campbell. 1,761,326; June 3.
Tools, Making metal-working. E. F. Smith. 1,761,755; June 3.
Top, Hot. A. R. Rowe. 1,761,494; June 3.
Top, Table. W. C. Rastetter. 1,761,585; June 3.
Toy. J. T. Cooney. 1,762,051; June 3.
Toy animal. E. S. Mooney. 1,761,143; June 3.
Track brace. G. Ashton. 1,760,934; June 3.
Track structure, Railroad-. G. W. Muller. 1,761,148; June 3.
Tractor. C. O. Howard and F. M. Blair. 1,761,660; June 3.
Tractor. L. W. Witry. 1,760,932; June 3.
Tractors, Attachment for farm. L. E. Morrow. 1,760,882; June 3.
Traffic signal. B. Currlin. 1,761,519; June 3.
Trailer vehicle. A. B. Cadman. 1,761,816; June 3.
Transformer. P. R. Dijksterhuis and Y. B. F. J. Groeneveld. 1,761,110; June 3.
Transformer. W. Köchling. 1,761,732; June 3.
Transformer and operating same. L. C. Nichols. 1,761,580; June 3.
Transformer core. A. W. Thompson and F. J. Vogel. 1,760,998; June 3.
Transformer, Regulating. G. Burnengo. 1,762,008; June 3.
Transmission. G. H. Bennett. 1,760,867; June 3.
Transmission. L. Blackmore. 1,761,966; June 3.
Transmission. G. W. Morrison. 1,760,991; June 3.
Transmission lock. J. H. Bolles and F. C. Pearson. 1,762,116; June 3.
Transmission mechanism, Fluid-. W. C. Dunn. 1,761,255; June 3.
Transmission, Overgear. H. Drew. 1,761,907; June 3.
Transmitting documents electrically, Method and apparatus for. E. Belin. 1,760,866; June 3.
Transparency. A. Sabath. 1,761,802; June 3.
Transposition device. C. E. Pfauts. 1,761,046; June 3.
Trap: *See*—
Back-water trap. Gas trap.
Tray, Hosiery-pressing. E. J. Schremp. 1,760,917; June 3.
Tray or similar article. W. C. McCartney. Des. 81,309; June 3.
Tread for automobile running boards. G. E. Whitlock. 1,761,247; June 3.
Treads, Method and apparatus for applying tire. C. E. Maynard. 1,760,879; June 3.
Tree lifter. F. Buehler. 1,761,425; June 3.
Tree trimmer. M. Donkel. 1,761,469; June 3.
Trestle unloading apparatus. H. Adams. 1,761,166; June 3.
Trimmer: *See*—
Tree trimmer.
Trimming machine. S. J. Finn. 1,761,011; June 3.
Trimming machine. F. B. Tower. 1,761,096; June 3.
Trip device. A. E. Rutledge and E. T. Cleary. 1,761,052; June 3.
Tripping mechanism. B. P. Graves and W. F. Smith. 1,761,121; June 3.
Truck bodies, Floor and corner strucutre for. S. E. Travis, jr. 1,762,000; June 3.
Truck bodies, Sign-board structure for. S. E. Travis, jr. 1,761,999; June 3.
Trumpet, Ear. H. D. Hinternesch. 1,761,666; June 3.
Trunk lock. A. J. Komenak. 1,761,570; June 3.
Tube: *See*—
Drill tube. Finned tube.
Tube. H. S. Gillett. 1,761,034; June 3.
Tube evacuator. E. S. Grigsby. 1,760,945; June 3.
Tube-splicing apparatus. F. J. Shook. 1,761,754; June 3.
Tubing and manufacturing the same, Integral finned. A. A. Locke. 1,761,733; June 3.
Turbines, Runner for. L. F. Moody. 1,762,124; June 3.
Twyer. W. G. Crothers. 1,761,182; June 3.
Type concrete-mixing machine, Automatic tilting-. J. F. Robb. 1,761,801; June 3.
Typewriter. R. G. Thompson. 1,761,758; June 3.
Typewriting machine. A. G. F. Kurowski. 1,761,795; June 3.
Typewriting machine. A. F. Lear. 1,761,080; June 3.
Typewriting machine. L. A. Nemcovsky. 1,761,404–5; June 3.
Typewriting machine. J. A. B. Smith. 1,761,056; June 3.
Typewriting machines, Adding attachment for. G. O. Degener. 1,761,430–32; June 3.
Uncoupling mechanism. W. Kelso. 1,761,445; June 3.
Undergarment, Woman's. H. L. Redmond. 1,761,278; June 3.
Upsetting sheet metal. H. Junkers. 1,761,887–8; June 3.
Urea, Manufacture of. W. Meiser. 1,761,893; June 3.
Utensil, Culinary. I. B. Bjornson. 1,761,067; June 3.
Utensil, Household heating. F. G. Fischer. 1,762,014; June 3.
Vacuum-tube detector. R. S. Ohl. 1,760,957; June 3.
Vacuum-tube generator. E. Y. Robinson. 1,760,996; June 3.
Vacuum-type inverted converter. L. W. Chubb. Re17,693; June 3.
Valve. J. C. Gipe. 1,761,721; June 3.
Valve. B. Karsten. 1,761,120; June 3.
Valve. A. Lenning. 1,761,573; June 3.
Valve. M. Smolensky. 1,761,595; June 3.
Valve-actuated switch. W. J. Mackey. 1,762,066; June 3.
Valve, Air-relief. W. A. Russell. 1,761,685; June 3.
Valve and condenser, Pressure. J. Karmazin. 1,761,396; June 3.
Valve, Electrically-operated. C. T. Hibbard. Re17,689; June 3.
Valve, Float-controlled. D. K. Warner. 1,761,000; June 3.
Valve for indicating pressures, Tire. E. A. Rockwell. 1,761,454; June 3.
Valve for rock drills. E. B. Lear. 1,761,134; June 3.
Valve for sand-blast pressure tanks, Automatic air escape. G. A. Goesger. 1,761,174; June 3.
Valve, Fused-quartz. T. E. Burkhardt. 1,762,088; June 3.
Valve-lift-control device for fuel-injection valves. J. C. Groff. 1,761,122; June 3.
Valve, Radiator vent. E. Jacobus. 1,761,394; June 3.
Valve, Rotary gate. R. G. Manifold. 1,760,951; June 3.
Valve, Self-closing. C. D. Fagan. 1,761,821; June 3.
Valve-spring compressor and lifter. F. F. Foreman. 1,760,980; June 3.
Valve-spring retainer. G. W. Lampman. 1,761,925; June 3.
Valve-spring retainer. C. E. Summers and G. W. Lampman. 1,761,943; June 3.
Valve, Starting. Whaley, W. B. S. 1,761,282; June 3.
Valve stem, Tire-. E. G. Oakley. 1,761,487; June 3.

Valve, Ventilator control. R. Clason. 1,761,970; June 3.
Valves, Bonnet construction for self-grinding. L. D. Collar. 1,761,655; June 3.
Vanity case. C. N. Coryell. 1,761,615; June 3.
Vaporizer for internal-combustion engines. E. L. Carathanasis. 1,761,327; June 3.
Vapors with solids, Apparatus for contacting. W. Miller. 1,761,270; June 3.
Vase. P. M. Shiraishi. 1,762,082; June 3.
Vehicle. I. H. Athey. 1,761,861; June 3.
Vehicle brake. A. J. Levoie. 1,761,043; June 3.
Vehicle brake mechanism. E. R. Evans. Re17,688; June 3.
Vehicle seat, Motor. A. B. Blumenberg. 1,762,046; June 3.
Vehicle, Water. K. R. Froedtert. 1,761,883; June 3.
Vehicle, Water. M. Gorski. 1,761,884; June 3.
Velocipede. F. F. Quickert. 1,761,679; June 3.
Vending machine. C. H. Davis. 1,761,386; June 3.
Vending machine and change tray, Combination. G. R. Webber. 1,761,604; June 3.
Ventilating system, Crank-case-. 1,761,959; June 3.
Ventilation, Crank-case. C. L. McCuen. 1,761,929; June 3.
Ventilation of dynamo-electric machines. E. H. Freiburghouse. 1,761,783; June 3.
Ventilator: *See*—
Crank-case ventilator. Wall ventilator.
Ventilator. H. L. Van Zile. 1,761,061; June 3.
Violin-bow hair-adjusting device. F. Krake. 1,761,350; June 3.
Vise, Piston-pin. J. W. Reutter. 1,761,366; June 3.
Vitamines, Synthesizing. A. J. Pacini. 1,762,105; June 3.
Vulcanizer. A. J. Fleiter. 1,762,119; June 3.
Vulcanizer for automobile tires. W. Schwalge. 1,761,687; June 3.
Wall construction. R. Phillips. 1,762,099; June 3.
Wall, Furnace. H. J. Kerr. 1,761,567; June 3.
Wall insulation. E. Mowery. 1,761,838; June 3.
Wall ventilator, Building-. W. H. Baltes. 1,761,250; June 3.
Washing apparatus. R. Hoe. 1,761,564; June 3.
Washing machine. W. R. Hampden. 1,761,338; June 3.
Washing machines, Water-throwing apparatus for. G. P. Anstiss. 1,761,099; June 3.
Watchcase heater. H. A. Denmire. 1,762,131; June 3.
Water-cooled engine, Reverse-flow. E. O. Schjolin. 1,761,935; June 3.
Water cooler. T. S. Merrylees. 1,761,087; June 3.
Water heater. J. D. Betts. 1,761,172; June 3.
Water heater, Feed-. D. W. R. Morgan. 1,760,954; June 3.
Water softener. S. S. Sadtler. 1,761,411; June 3.
Wave motor. W. W. Malloy. 1,761,674; June 3.
Waxing composition. H. C. Nielsen. 1,761,677; June 3.
Weeder. J. Wicker. 1,761,001; June 3.
Weft-replenishing mechanism, Multicolor. C. J. Lindegren. 1,760,949; June 3.
Welding. J. L. Anderson. 1,761,167; June 3.
Welding apparatus, Electrical. E. J. von Henke. 1,761,421; June 3.
Welding, Apparatus for electric. E. J. von Henke. 1,761,458; June 3.
Welding apparatus, Resistance. D. F. Pancoast. 1,761,276; June 3.
Welding with high-frequency currents, Apparatus for. E. J. von Henke. 1,761,420; June 3.
Well-casing puller. F. F. Wellman. 1,762,087; June 3.
Well-casing shoe. E. D. Every. 1,762,012; June 3.
Wells, Apparatus for and method of flowing. H. P. Porter. 1,761,363; June 3.
Wheel: *See*—
Disk wheel. Suspension wheel.
Steering wheel.
Wheel block. W. W. Blakely. 1,761,068; June 3.
Wheel brake, Front-. A. W. Frehse. 1,761,912; June 3.
Wheel-cleaning device, Traction-. J. Guth. 1,761,262; June 3.
Wheel construction. F. L. Main. 1,761,928; June 3.
Wheels acting either as motors or as propellers, Hydraulic. A. De Spuches Principe di Galati. 1,761,818; June 3.
Wheels, Felley portion of. W. E. Williams. 1,761,284; June 3.
Whipping device. J. Wegner. 1,762,003; June 3.
Window construction. G. A. McCuean. 1,761,892; June 3.
Windshield. H. T. Thomas. 1,761,161; June 3.
Wiper, Barber's resilient razor. S. C. Vaught. 1,761,375; June 3.
Wiper blades, Method and apparatus for making rubber. A. W. Phelps. 1,761,534; June 3.
Wiper for oil gauges. J. V. Shoemaker. Des. 81,305; June 3.
Wire and porcelain elements, Manufacturing. F. S. McCullough. 1,761,577; June 3.
Wire-stitching machine. H. G. Allen. 1,760,863; June 3.
Wire stretcher. C. F. Schott, C. E. Luce, and C. W. Johnson. 1,760,918; June 3.
Woodworking machine, Adz-finish ornamental. G. P. Driskell. 1,761,439; June 3.
Wrapper or envelope and guard for frozen confections, Combined. R. F. Brimer. 1,761,703; June 3.
Wrench: *See*—
Pipe wrench.
Wrench. A. J. Layhon. 1,761,988; June 3.
Wrench. J. Relf. 1,761,586; June 3.
Wrenches, Making ratchet. F. A. Haist. 1,761,263; June 3.
Wristband. H. M. Stegeman. 1,761,545; June 3.
Xylophone finger, Multiple. B. Vitto. 1,761,245; June 3.
Yeast, Growing. A. K. Balls. 1,761,515; June 3.
Yeast, Manufacture of. A. P. Harrison. 1,761,789; June 3.

CLASSIFICATION OF PATENTS

ISSUED JUNE 3, 1930

NOTE.—First number—class, second number—subclass, third number—patent number.

1— 2: 1,761,536
15: 1,760,863
48: 1,761,640
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237: 1,761,637
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10— 27: 1,761,581
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124: 1,761,582
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138: 1,761,630
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181— 25: 1,761,666
26: 1,762,102
27: 1,760,892
31: 1,761,745
1,762,090
182— 15: 1,761,217
31: 1,761,257
183— 2.7: 1,761,743
15: 1,761,014
21: 1,761,336
44: 1,760,986
58: 1,761,377
75: 1,761,168
90: 1,761,923
106: 1,761,169
109: 1,761,177
111: 1,761,170
1,762,097
184— 7: 1,761,891
26: 1,761,699
27: 1,761,097
29: 1,761,423
104: 1,761,686
106: 1,761,927
189— 32: 1,761,068
62: 1,761,649
78: R.17,688
1,761,027
1,761,043
1,761,933
130: 1,761,485
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140: R.17,687
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158: 1,761,939
194: 1,761,044
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251: 1,761,318
264: 1,761,827
189— 28: 1,761,507
1,761,508
33: 1,761,509
34: 1,761,037
36: 1,760,883
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37: 1,762,112
75: 1,761,297
190— 12: 1,761,254
54: 1,762,013
192— 4: 1,761,073
53: 1,761,966
61: 1,761,255
68: 1,761,972
143: 1,761,121

192— 149: 1,761,774
193— 4: 1,761,166
194— 1: 1,761,785
55: 1,761,386
63: 1,761,604
71: 1,761,784
195— 20: 1,761,515
1,761,789
196— 38: 1,761,328
48: 1,761,622
50: 1,761,340
77: 1,761,152
96: 1,761,270
119: 1,761,153
139: 1,761,151
8: 1,761,728
197— 34: 1,761,758
73: 1,761,404
91: 1,761,405
126: 1,761,056
153: 1,761,460
155: 1,761,795
198— 10: 1,761,145
11: 1,762,060
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21: 1,760,875
22: 1,761,223
27: 1,761,781
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37: 1,762,067
144: 1,760,964
177: 1,761,523
188: 1,762,074
207: 1,761,842
213: 1,761,591
200— 4: 1,761,435
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16: 1,761,867
21: 1,761,015
24: 1,761,225
39: 1,761,652
52: 1,761,030
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53: 1,762,066
59: 1,761,853
67: 1,762,016
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68: 1,761,434
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114: 1,760,895
116: 1,761,117
118: 1,761,496
131: 1,761,054
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137: 1,761,456
142: 1,762,064
153: 1,761,724
159: 1,761,949
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201— 57: 1,762,007
202— 42: 1,761,779
144: 1,761,835
204— 14: 1,761,948
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53: 1,761,703
206— 16: 1,761,453
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56: 1,760,886
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80: 1,761,417
208— 24: 1,761,679
37: 1,761,601
42: 1,761,143
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209— 137: 1,761,113
144: 1,761,627
166: 1,761,546
169: 1,760,916
173: 1,761,788
393: 1,760,877
397: 1,761,244
210— 23: 1,761,411
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57: 1,761,930
164: 1,761,963
170: 1,762,010
178: 1,761,915
183: 1,761,924
192: 1,761,401
199: 1,761,940
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213— 30: 1,761,171
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61: 1,761,266
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126: R.17,690
169: 1,761,445
191: 1,762,041

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26: 1,761,996
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215— 58: 1,762,059
63: 1,761,597
217— 17: 1,761,013
22: 1,761,459
219— 4: 1,761,276
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8: 1,761,728
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37: 1,762,014
220— 1: 1,761,697
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43: 1,762,076
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102: 1,761,875
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223— 17: 1,760,917
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224— 4: 1,761,545
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29: 1,761,214
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225— 21: 1,760,887
23: 1,761,089
28: 1,762,126
226— 19: 1,760,959
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119: 1,761,383
227— 6: 1,761,726
229— 5.7: 1,761,367
47: 1,761,787
53: 1,761,708
92.7: 1,762,084
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58: 1,761,036
132: 1,762,028
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25: 1,760,961
41: 1,761,894
233— 2: 1,761,593
234— 1: 1,760,947
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41: 1,761,529
235— 1: 1,761,656
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3: 1,761,557
1,761,718
7: 1,761,644
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237— 78: 1,760,976
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53: 1,760,934
87: 1,761,705
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8.2: 1,761,345
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25: 1,760,978
41: 1,761,528
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44: 1,761,911
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48.6: 1,761,974
57: 1,761,937
62: 1,761,484
73: 1,761,832
78: 1,761,090
99: 1,761,616
106: 1,761,654
128: 1,761,511
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68: 1,761,111
70: 1,761,837
71: 1,761,464
84.1: 1,761,750
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244— 1: 1,761,889
2: 1,760,881
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246— 62: 1,761,419
446: 1,761,105
453: 1,761,256
247— 2: R.17,694
15: 1,761,398
18: 1,761,203
34: 1,761,075
40: R.17,691
248— 15: 1,761,752
16.5: 1,761,080
37: 1,761,497
38: 1,761,062
65: 1,761,218
250— 6: 1,761,118
9: 1,760,984
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27.5: 1,761,176
33: 1,761,608
36: 1,760,996
1,761,882
38: 1,761,082
40: 1,761,211
251— 38: 1,761,655
69: 1,761,129
84: 1,761,595
102: 1,760,951
134: 1,761,821
144: 1,761,925
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253— 9: 1,761,674
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148: 1,762,124
254— 23: 1,761,575
39: 1,762,095
41: 1,761,979
77: 1,760,918
111: 1,761,160
132: 1,761,675
145: 1,761,425
146: 1,762,073
158: 1,761,311
190: 1,761,008
255— 28: 1,760,930
51: 1,761,337
61: 1,761,216
72: 1,761,292
256— 1: 1,762,003
57: 1,761,452
257— 1: 1,760,884
25: 1,761,396
43: 1,762,107
45: 1,761,035
52: 1,760,954
129: 1,761,306
139: 1,761,397
240: 1,761,173
262: 1,761,981
258— 1: 1,761,290

259—	9: 1,760,906	260—	160: 1,761,473	267—	31: 1,760,891	280—	89: 1,760,935	290—	48: 1,760,988	301—	108: 1,761,468
	88: 1,762,094	261—	18: 1,761,946		45: 1,761,273		124: 1,761,135	292—	106: 1,760,968	305—	10: 1,761,861
	102: 1,761,237		39: 1,761,729		56: 1,761,965		158: 1,761,262		228: 1,762,070	306—	24: 1,761,378
	1,762,081		41: 1,761,007	268—	58: 1,761,008		166: 1,762,052	293—	55: 1,761,994	308—	3: 1,760,910
	108: 1,761,613		1,761,074		72: 1,761,208		169: 1,761,247	294—	25: 1,761,356		59: 1,762,117
	123: 1,761,564		48: 1,761,569		104: 1,761,892	281—	38: 1,761,978		65: 1,761,198		120: 1,761,757
	131: 1,761,634		91: 1,761,136	270—	39: 1,761,517		44: 1,762,137		69: 1,761,778		138: 1,761,815
	144: 1,761,224	262—	5: 1,761,670	271—	2: 1,761,794	282—	16: 1,761,558		96: 1,762,087		160: 1,760,904
	1,761,338		8: 1,761,060	272—	1: 1,761,058		29: 1,761,106		100: 1,762,006		167: 1,761,139
260—	2: 1,761,291	263—	8: 1,761,028		14: 1,761,486	285—	58: 1,761,845		102: 1,761,840		226: 1,761,275
	29: 1,762,021	264—	1: 1,761,953		37: 1,761,895		1,762,032		104: 1,760,885		230: 1,761,826
	53: 1,762,040		13: 1,761,694		53: 1,761,253		146: 1,761,709		115: 1,761,463		236: 1,761,490
	57: 1,761,620		1,761,918	273—	33: 1,761,532		147: 1,762,065	296—	30: 1,762,000		237: 1,761,533
	59: 1,761,369		1,761,951		35: 1,761,039		180: 1,761,157		84: 1,761,161	312—	7: 1,761,019
	1,761,370		1,761,954	274—	25: 1,762,050		177: 1,761,352	297—	12: 1,760,878		38: 1,761,071
	61: 1,761,624		1,761,956		29: 1,761,213	287—	108: 1,761,324	299—	27: 1,760,903		44: 1,761,009
	72: 1,762,020	265—	20: 1,761,317		41: 1,761,212		125: 1,762,057		36: 1,761,723		113: 1,761,683
	77: 1,762,022		33: 1,761,210	277—	36: 1,761,282	290—	2: 1,761,849		53: 1,761,191		176: 1,761,704
	98: 1,761,341		49: 1,760,898		68: 1,761,467		7: 1,761,797		63: 1,761,099		
	99: 1,761,376	267—	8: 1,761,226	278—	96: 1,762,113		29: 1,762,004		127: 1,761,422		
	125: 1,761,893		9: 1,761,272	280—	33.1: 1,761,816		37: 1,761,540		133: 1,761,122		
	142: 1,762,018		1,761,274		33.14: 1,761,112		38: 1,760,874	301—	6: 1,761,928		
	159: 1,761,744		30: 1,761,967		33.44: 1,760,919		1,761,539		22: 1,761,284		

U. S. GOVERNMENT PRINTING OFFICE: 1930

ALPHABETICAL LIST OF REGISTRANTS OF TRADE-MARKS

Acme White Lead & Color Works, Detroit, Mich. Colors in oil. 79,637; renewed Sept. 27, 1930.

Actien-Gesellschaft für Anilin-Fabrikation, Berlin, Germany, assignor, by mesne assignments, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y. Medicines and pharmaceutical preparations. 78,758; renewed July 12, 1930.

Adams, Frank. (See Brandt, Randolph.)

Agol Chemical Co., Inc., The, Washington, D. C. Toothbrushes. 271,518; June 10; Serial No. 295,720; published Mar. 25, 1930. Class 29.

Ahrens Brothers, Wilmington, N. C. Veterinary remedy. 77,351; renewed Mar. 29, 1930.

Aires, Aubre, Ltd., Chicago, Ill. Creams, powder, rouge, skin tonic, etc. 271,611; June 10. Class 6.

Aluminum Goods Manufacturing Co., Manitowoc, Wis. Electric percolators, baby-bottle warmers, and lamps. 271,553; June 10; Serial No. 294,333; published Mar. 18, 1930. Class 21.

American Cement Paint Co., Rossville, Ga. Dry paint. 271,558, June 10; Serial No. 271,107; published Oct. 9, 1928. Class 16.

American Central Office of Saint Therese, Manchester, N. H. Statues and medals, badges, etc. 271,503; June 10; Serial No. 285,766; published Mar. 25, 1930. Class 50.

American Manufacturing Company, Brooklyn, N. Y. Thread and yarn. 271,514; June 10; Serial No. 289,170; published Mar. 25, 1930. Class 43.

American Metal Crafts Company, Inc., Attleboro, Mass. Articles made of nonprecious metal. 271,515–16; June 10; Serial Nos. 292,516–17; published Mar. 25, 1930. Class 50.

American Steel Products Co., Macomb, Ill. Brooders. 271,568; June 10; Serial No. 289,955; published Mar. 25, 1930. Class 50.

American Steel & Wire Company of New Jersey, The, Cleveland, Ohio; Chicago, Ill.; Pittsburgh, Pa.; New York, N. Y.; and Worcester, Mass., to The American Steel and Wire Company of New Jersey, Cleveland, Ohio. Barbed wire. 78,480; renewed June 21, 1930.

American Tissue Mills, Holyoke, Mass. Waxed wrapping paper. 271,571; June 10; Serial No. 290,736; published Mar. 25, 1930. Class 37.

Anciens Etablissements Baignol et Farjon, Boulogne-sur-Mer, France. Cologne, toilet waters, bath salts, etc. 271,517; June 10; Serial No. 292,919; published Mar. 18, 1930. Class 6.

Auto Supplies Manufacturing Co., The, Pueblo, Colo. Chemically-treated cleaning cloths. 271,606; June 10. Class 4.

Bacon Banjo Co., Inc., The, Groton, Conn. Banjo. 271,541; June 10; Serial No. 294,910; published Mar. 18, 1930. Class 36.

Bankers' Service Advertising. (See Cannon, Ralph S.)

Bensmann, Hermann, Bremen, Germany, assignor, by mesne assignments, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y. Mineral powder for decolorizing oil. 79,186; renewed Aug. 16, 1930.

Berst-Forster-Dixfield Company. (See Forster Manufacturing Company, assignor.)

Besson and Company Limited, London, England. Wind musical instruments. 77,982; renewed May 24, 1930.

Bethlehem Textiles Company, Bethlehem, Pa. Fabrics. 271,567; June 10; Serial No. 289,178; published Mar. 25, 1930. Class 42.

Biber, Arnold, Pforzheim, Germany, assignor, by mesne assignments, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y. Plastic compositions for making gums for artificial teeth. 78,933; renewed July 26, 1930.

Blue Grass Pipless Clothesline Machine. (See Peavyhouse, William W.)

Boott Mills, Lowell, Mass. Cotton piece goods. 79,402; renewed Sept. 6, 1930.

Bowman, Thomas B., Boone, Nebr. Remedy for blood poisoning in colts. 78,397; renewed June 14, 1930.

Brame, Robert M., jr., doing business as The Jake Co., North Wilkesboro, N. C. Medicinal preparation. 271,483; June 10; Serial No. 295,824; published Mar. 25, 1930. Class 6.

Brandt, Randolph, to Frank Adams, New York, N. Y., successor. Machinery packings. 78,860; renewed July 19, 1930.

Brannan, Bunyan B., Roanoke, Ala. Preparation for the treatment of coughs and colds. 271,532; June 10; Serial No. 293,951; published Mar. 25, 1930. Class 6.

Brown Company, Portland, Me., and Berlin, N. H. Artificial leather. 271,554; June 10; Serial No. 294,205; published Mar. 25, 1930. Class 50.

Brown, O. R., Company, to Fred Lutz, doing business as O. R. Brown Paper Company, Indianapolis, Ind., successor. Carbon paper and typewriter ribbons. 77,901; renewed May 17, 1930.

Brown & Williamson Tobacco Corporation, Winston-Salem, N. C. Cigarettes. 271,559; June 10; Serial No. 275,658; published Mar. 25, 1930. Class 17.

Burns, Edward N., New York, N. Y. Phonograph records. 271,595; June 10. Class 36.

Burrows, Dudley A., doing business as M. B. S. Prod. Co., Baltimore, Md. Salve. 271,519; June 10; Serial No. 294,108; published Mar. 25, 1930. Class 6.

Buzza Company, The, Minneapolis, Minn. Score pads and tallies. 271,597; June 10. Class 37.

Cannon, Ralph S., doing business as Bankers' Service Advertising, York, Pa. Paper book covers. 271,617; June 10. Class 37.

Cauchois Coffee Company, New York, N. Y. Cocoa preparation combined with milk, skimmed milk, and sugar. 271,580; June 10; Serial No. 295,780; published Mar. 25, 1930. Class 46.

Cellulo Company, The, Sandusky, Ohio. Toilet tissues. 271,504; June 10; Serial No. 287,174; published Feb. 4, 1930. Class 37.

Champion Coated Paper Company, The, Hamilton, Ohio. Mineral-coated paper. 271,492–3; June 10; Serial Nos. 295,461–2; published Mar. 25, 1930. Class 37.

Chemical Foundation, Incorporated, The. (See Actien-Gesellschaft für Anilin-Fabrikation, assignor.)

Chemical Foundation, Incorporated, The. (See Bensmann, Hermann, assignor.)

Chemical Foundation, Incorporated, The. (See Biber, Arnold, assignor.)

Chemical Foundation, Incorporated, The. (See Chemische Fabriken vorm. Weiler-ter Meer, assignor.)

Chemische Fabriken vorm. Weiler-ter Meer, Uerdingen, Germany, assignor, by mesne assignments, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y. Substitute for camphor in celluloid manufacture. 79,036; renewed Aug. 2, 1930.

Chemosan-Union und Fritz-Pezoldt A. G., Vienna, Austria. Medicaments. 271,524–5; June 10; Serial Nos. 293,465–6; published Mar. 25, 1930. Class 6.

Chrysler Corporation, Detroit, Mich. Automobiles and their structural parts. 271,506–7; June 10; Serial Nos. 287,330–1; published Mar. 25, 1930. Class 19.

Claremore Watch Company. (See Enggass Jewelry Company.)

Compagnie Generale de Phonographes, Cinematographes et Appareils de Precision, by changes of name to Pathe-Cinema Anciens Etablissements Pathe Freres, Paris, France. Placards advertising kinematograph shows. 76,964; renewed Mar. 1, 1930.

Conan, Elsie I., doing business as Helene Crystal Laboratory, Venice, Los Angeles, Calif. Skin preparation. 271,560; June 10; Serial No. 276,460; published Mar. 25, 1930. Class 6.

Crown Willamette Paper Company, San Francisco, Calif. Paper towels. 271,615; June 10. Class 37.

Davis & Lawrence Co., New York, N. Y. Vegetable remedy for malaria. 79,652; renewed Sept. 27, 1930.

Dermato Salve Company, Columbus, Ohio. Salves. 80,111; renewed Nov. 8, 1930.

Diversey Manufacturing Company, Chicago, Ill. Cleanser. 271,596; June 10. Class 4.

Duplan Silk Corporation, New York, N. Y. Piece goods of silk and rayon and mixtures thereof. 271,502; June 10; Serial No. 296,051; published Mar. 25, 1930. Class 42.

Du Pont, E. I., de Nemours and Company, Wilmington, Del. Fungicide, seed disinfectant. 271,484; June 10; Serial No. 295,838; published Mar. 25, 1930. Class 6.

Du Pont, E. I., de Nemours and Company, Wilmington, Del. Fungicide, seed disinfectant. 271,498; June 10; Serial No. 295,839; published Mar. 25, 1930. Class 6.

Earl, Le-Roy W., doing business as Hi-Rise Baking Powder Company, Chicago, Ill. Baking powder. 271,491; June 10; Serial No. 295,425; published Mar. 25, 1930. Class 6.

Earl Radio Corporation. (See Freshman, Charles, Company, Inc.)

Eastman Kodak Company, New York, N. Y. Chemicals used in treating photographic prints and negatives. 78,872; renewed July 19, 1930.

Eastman Kodak Company, Rochester, N. Y. Adhesive tape. 271,487; June 10; Serial No. 295,366; published Mar. 25, 1930. Class 5.

Eastman Kodak Company, Rochester, N. Y. Developing powders. 271,538; June 10; Serial No. 294,961; published Mar. 18, 1930. Class 6.

Electrolux, Inc., New York, N. Y. Electrical floor polishers and vacuum cleaners and parts therefor. 271,565; June 10; Serial No. 284,978; published Mar. 18, 1930. Class 21.

Enggass Jewelry Company, doing business as Webster Watch Company, Detroit, Mich. Watches. 271,598; June 10. Class 27.

Enggass Jewelry Company, doing business as Claremore Watch Company, Detroit, Mich. Watches. 271,599; June 10. Class 27.

Fay Metal Patch Company, The, Cleveland, Ohio. Semi-drying oil compound. 271,612; June 10. Class 6.

Felch, Arthur E., Camp Megono, Natick, Mass. Alkaline antiseptic. 77,689; renewed Apr. 26, 1930.

Ferodo and Asbestos Incorporated. (See Frood, Herbert, Company Limited, The, assignor.)
Ferris & Wright of New York City. (See Gray, Elsie.)
Fleetwood Hosiery Corporation, Fleetwood, Pa. Hosiery. 271,592; June 10. Class 39.
Florian, Inc., Detroit, Mich. Face powder. 271,586; June 10. Class 6.
Forster Manufacturing Company, Dixfield, Me., assignor, by mesne assignments, to Berst-Forster-Dixfield Company, New York, N. Y., and Dixfield, Me. Toothpicks. 77,991; renewed May 24, 1930.
Foss, H. D., & Co., Inc., Cambridge, Mass. Candy. 271,500; June 10; Serial No. 295,896; published Mar. 25, 1930. Class 46.
Freshman, Charles, Company, Inc., Brooklyn, N. Y., by change of name Earl Radio Corporation. Radio broadcast receiving sets. 271,585; June 10. Class 21.
Frood, Herbert, Company Limited, The, Chapelen-le-Frith, England, assignor, by mesne assignments, to Ferodo and Asbestos Incorporated, New Brunswick, N. J. Brake blocks. 79,487; renewed Sept. 13, 1930.
Frost, George, Company, Boston, Mass. Garters. 79,118; renewed Aug. 9, 1930.
Frost, George, Company, Boston, Mass. Hose supporters and garters. 79,972; renewed Oct. 25, 1930.
Galena Manufacturing Company of Illinois, Galena, Ill. Lubricating oil. 271,584; June 10. Class 15.
Gemex Company, Newark, N. J. Watch bracelets, straps, and attachments, neck chains, etc. 271,545–50; June 10; Serial Nos. 294,515–20; published Mar. 18, 1930. Class 28.
Gemex Company, Newark, N. J. Watch bracelets, straps, and attachments, neck chains, etc. 271,551–2; June 10; Serial Nos. 294,512–13; published Mar. 18, 1930. Class 28.
General Dyestuff Corporation, New York, N. Y. Sulphonated oil. 271,499; June 10; Serial No. 295,842; published Mar. 25, 1930. Class 6.
General Electric Company. (See Sprague Electric Company, assignor.)
General Electric Company, Schenectady, N. Y. Electric lamps. 77,779; renewed May 3, 1930.
General Electric Company, Schenectady, N. Y. Insulating oil. 79,120; renewed Aug. 9, 1930.
General Electric Company, Schenectady, N. Y. Babbitt metal and cemented tungsten carbide. 271,533; June 10; Serial No. 293,997; published Mar. 25, 1930. Class 14.
General Electric Company, Schenectady, N. Y. Nonmetallic sheet material. 271,534; June 10; Serial No. 294,003; published Mar. 25, 1930. Class 50.
Goldberg, Maurice M., New York, N. Y. Bridge-game lessons, problems, and solutions. 271,522; June 10; Serial No. 293,096; published Mar. 25, 1930. Class 22.
Goldex. (See Wilkin & Adler, Inc.)
Granulator Soap Company, to Soap Soapitor Co. Inc., New York, N. Y., successor. Devices for holding and delivering soap. 77,129; renewed Mar. 15, 1930.
Granulator Soap Company, to Soapitor Co. Inc., New York, N. Y., successor. Soap. 77,806; renewed May 10, 1930.
Gray, Calvin B., Wilmington, Del. Desk reminders. 271,494; June 10; Serial No. 295,560; published Mar. 25, 1930. Class 37.
Gray, Elsie, doing business as Ferris & Wright of New York city, Flushing, N. Y. Tonic medicine. 271,542; June 10; Serial No. 294,772; published Mar. 18 1930. Class 6.
Gray Envelope Manufacturing Company, Inc., The, Brooklyn, N. Y. Envelopes. 271,603; June 10. Class 37.
Grendel Mills, Greenwood, S. C. Brown cotton sheeting. 78,433; renewed June 14, 1930.
Harris Watch Importing Company, Inc., New York, N. Y. Time recorders, clocks, and watches. 271,482; June 10; Serial No. 295,735; published Mar. 25, 1930. Class 27.
Hearn, James A., & Son, Inc., New York, N. Y. Shirts, union suits, pajamas, and collars. 271,605; June 10. Class 39.
Helene Crystal Laboratory. (See Conan, Elsie I.)
Hi-Rise Baking Powder Company. (See Earl, Le-Roy W.)
Hoffmann, Ernst G., New Rochelle, N. Y., assignor to The Hoffmann Manufacturing Company Limited, Chelmsford, England. Steel balls. 78,605; renewed June 28, 1930.
Hu-Kel Chemical Co. (See Kelly, Edward J.)
I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Writing paper, envelopes, wrapping paper, etc. 271,505; June 10; Serial No. 287,183; published Mar. 25, 1930. Class 37.
I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Artificial silk thread and artificial spinning fibers. 271,521; June 10; Serial No. 294,156; published Mar. 18, 1930. Class 43.
Illinois Watch Case Company, Elgin, Ill. Watchcases and watch movements. 79,494; renewed Sept. 13, 1930.
Illinois Watch Case Company, Elgin, Ill. Watchcases and watch movements. 79,676; renewed Sept. 27, 1930.
International Extract Co. (See Paul, Milton.)
International Nickel Company, Inc., The, New York, N. Y. Ferrous castings. 271,511; June 10; Serial No. 288,558; published Mar. 25, 1930. Class 14.
Jackson, Viola, doing business as W. V. L. Jackson, Catskill, N. Y. Salve. 271,575; June 10; Serial No. 291,510; published Mar. 18, 1930. Class 6.
Jake Co., The. (See Brame, Robert M., jr.)
Johnson, Marjorie, Inc., New York, N. Y. Finishing lotion, foundation cream, rouges, etc. 271,528; June 10; Serial No. 293,738; published Mar. 18, 1930. Class 6.
Kantor, Edward, Brooklyn, N. Y. Sweaters, slip-over sweaters, lounging robes, bathing suits. 271,601; June 10. Class 39.
Keen-Point Products Company. (See Keeran, Charles R.)
Keeran, Charles R., doing business as Keen-Point Products Company, Evanston, Ill. Pens, pencils, and leads. 271,610; June 10. Class 37.
Kelly, Edward J., doing business as Hu-Kel Chemical Co., Washington, Pa. Preparation for treating pain, burns, and soreness. 271,573; June 10; Serial No. 291,058; published Mar. 25, 1930. Class 6.
Kilsem Manufacturing Company, Baltimore, Md. Liquid insecticide. 271,496; June 10; Serial No. 295,623; published Mar. 25, 1930. Class 6.
Klauer Manufacturing Company, Dubuque, Iowa. Sheet steel and anvils. 271,563; June 10; Serial No. 280,712; published Mar. 25, 1930. Class 14.
Knight, Emma L., Baltimore, Md. Educational amusement device for children. 271,544; June 10; Serial No. 294,536; published Mar. 25, 1930. Class 22.
Krummenacher, William, doing business as The Millwood Company, Overland, Mo. Insecticides. 271,510; June 10; Serial No. 288,382; published Oct. 8, 1929. Class 6.
Laboratoires Darrasse, Societe a Responsabilite Limitee, Nanterre, France. Solution of iodine and caffeine. 271,530; June 10; Serial No. 293,881; published Mar. 25, 1930. Class 6.
Lazarus, S., & Sons, Chicago, Ill. Finger rings. 271,581; June 10. Class 28.
Lee, H. D., Mercantile Company, The, Salina, Kans., to The H. D. Lee Mercantile Company, Kansas City, Mo. Blended coffee. 79,590; renewed Sept. 20, 1930.
Lewis, Max, doing business as Lewis Laboratories, Los Angeles, Calif. Vaginal antiseptic jelly. 271,509; June 10; Serial No. 287,879; published Mar. 25, 1930. Class 6.
Leyde & Kleswetter, Milwaukee, Wis. Prepaartion for treating sore throat, etc. 271,562; June 10; Serial No. 279,053; published Mar. 25, 1930. Class 6.
Lotan Products Company, The, Cleveland, Ohio. Medicine. 271,561; June 10; Serial No. 278,473; published Mar. 18, 1930. Class 6.
Luke, Stevens, doing business as Rose City Chemical Company and Stevens Luke Co., Thomasville, Ga. Preparation used as a mouth wash, etc. 271,574; June 10; Serial No. 291,093; published Mar. 25, 1930. Class 6.
Lust's Health Food Bakery, Inc., New York, N. Y. Pumpernickel. 271,604; June 10. Class 46.
Lutz, Fred. (See Brown, O. R., Company.)
M. B. S. Prod. Co. (See Burrows, Dudley A.)
Mack-Elliott Paper Company, St. Louis, Mo. Paper. 271,512; June 10; Serial No. 288,968; published Mar. 25, 1930. Class 37.
Meneray, Roscoe C., doing business as Radiator Seal Company, Council Bluffs, Iowa. Sealing solution. 271,569; June 10; Serial No. 289,792; published Mar. 25, 1930. Class 6.
Merrell, Wm. S., Company, The, Cincinnati, Ohio. Medicinal preparation. 271,555; June 10; Serial No. 294,164; published Mar. 18, 1930. Class 6.
Merrell, Wm. S., Company, The, Cincinnati, Ohio. Medicated alcohol. 271,616; June 10. Class 6.
Millar, E. B., & Company, Chicago, Ill. Coffee. 79,071; renewed Aug. 2, 1930.
Millwood Company, The. (See Krummenacher, William.)
Miniature Golf Courses of America, Inc., New York, N. Y., assignor to Tee-O-Matic Golf Company, Inc. Automatic golf teeing device. 271,529; June 10; Serial No. 293,742; published Mar. 25, 1930. Class 22.
Minneapolis-Honeywell Regulator Company, Minneapolis, Minn. Thermally-operated electric cut-out switches. 271,566; June 10; Serial No. 268,621; published Sept. 24, 1929. Class 21.
Mittag & Volger, Incorporated, Park Ridge, N. J. Carbon paper. 271,488; June 10; Serial No. 295,381; published Mar. 25, 1930. Class 11.
Moore, Edward M., Warrenville, Ill. Books, bookplates, pamphlets, etc. 271,556; June 10; Serial No. 292,543; published Mar. 25, 1930. Class 38.
Morley Button Manufacturing Company, Portland, Me., and Portsmouth, N. H. Dry mats for use in the stereotyping process of printing. 271,485; June 10; Serial No. 295,039; published Mar. 25, 1930. Class 50.
National Publishing Co., Philadelphia, Pa. Albums. 271,537; June 10; Serial No. 294,988; published Mar. 25, 1930. Class 37.
Ohio Textile Products Company, The, Mansfield, Ohio. Neckties or cravats. 271,609; June 10. Class 39.
Pacatome Company, San Francisco, Calif. Diatomaceous silica. 271,513; June 10; Serial No. 288,978; published Mar. 25, 1930. Class 1.
Pacific Coast Glass Company, San Francisco, Calif. Glass bottles, jars, jugs, etc. 271,523; June 10; Serial No. 293,444; published Mar. 25, 1930. Class 33.
Packard Electric Company, The, Warren, Ohio. Electric insulated wire. 271,600; June 10. Class 21.
Pansy Dress Company. (See Solomon, Abraham.)

Pathe-Cinema Anciens Etablissements Pathe Freres. (See Compagnie Generale de Phonographes, Cinematographes et Appareils de Precision.)
Paul, Milton, doing business as International Extract Co., New York, N. Y. True fruit and imitation food-flavoring extracts. 271,578; June 10; Serial No. 295,756; published Mar. 25, 1930. Class 46.
Payton, Clifford A., doing business as Pleco Products Company, Philadelphia, Pa. Caulking compounds. 271,486; June 10; Serial No. 293,591; published Mar. 25, 1930. Class 12.
Peavyhouse, William W., doing business as Blue Glass Pinless Clothesline Machine, Lexington, Ky. Machines for making pinless clotheslines. 271,557; June 10; Serial No. 294,398; published Apr. 8, 1930. Class 23.
Petroleum Products Corporation, Milwaukee, Wis. Lubricating oils. 271,589; June 10. Class 15.
Pharmazeutische Industrie A. G., Vienna, Austria. Medicinal preparation. 271,526; June 10; Serial No. 293,484; published Mar. 25, 1930. Class 6.
Phi Alpha Delta Law Fraternity, Los Angeles, Calif. Fraternity badges, lapel buttons, cuff links, etc. 271,577; June 10; Serial No. 292,368; published Mar. 18, 1930. Class 28.
Pittsburgh Metallurgical Co., Inc., Niagara Falls, N. Y. Alloys. 271,593; June 10. Class 14.
Pleco Products Company. (See Payton, Clifford A.)
Pugsley & Morrison, Yuba City, Calif. Neutral noncaustic emulsion for covering fruit trees and plants. 271,583; June 10. Class 6.
Quaker State Oil Refining Co., Oil City, Pa. Lubricating oils and greases. 271,572; June 10; Serial No. 290,086; published Feb. 25, 1930. Class 15.
Radiator Seal Company. (See Meneray, Roscoe C.)
Rogers & Thompson, West New York, N. J., and New York, N. Y., to L. O. Thompson, New York, N. Y., successor. Silk piece goods. 77,381; renewed Apr. 5, 1930. Class 42.
Rose City Chemical Company. (See Luke, Stevens.)
Rupert, F. A., Company, Inc., Gloversville, N. Y. Washable leather. 271,520; June 10; Serial No. 294,122; published Mar. 25, 1930. Class 1.
S. M. Supplies Co., Boston, Mass. Cut-out paper. 271,480; June 10; Serial No. 295,395; published Mar. 25, 1930. Class 37.
Sands, Percival T., Vancouver, British Columbia, Canada. Tobacconists' supplies. 271,508; June 10; Serial No. 287,429; published Mar. 25, 1930. Class 8.
Schiff Bros., New York, N. Y. Blouses and shirts. 271,590; June 10. Class 39.
Schmitt, Arthur J., doing business as The Tassel-Liter Co., Chicago, Ill. Electric cigar lighters. 271,608; June 10. Class 21.
Schreiber Products Corporation, Buffalo, N. Y. Maltose powder for food purposes. 271,591; June 10. Class 46.
Scott, O. M., & Sons Company, Marysville, Ohio. Seeds. 271,613; June 10. Class 1.
Sharp, Kelley N., Commerce, Ga. Preparation for treating skin irritations. 271,588; June 10. Class 6.
Sheffield Bronze Powder & Stencil Co., The, Cleveland, Ohio. Wood composition. 271,614; June 10. Class 16.
Siegel & Alenikoff, New York, N. Y. Cloaks and suits. 271,587; June 10. Class 39.
Siegel, William, doing business as Williams Specialty Co., New York, N. Y. Tonic. 271,535; June 10; Serial No. 294,089; published Mar. 18, 1930. Class 6.
Sims Malt-O-Wheat Company, St. Paul, Minn. Breakfast cereal. 271,607; June 10. Class 46.
Skinner, William, & Sons, Holyoke, Mass., and New York, N. Y. Silk crepes in the piece. 271,543; June 10; Serial No. 294,745; published Mar. 25, 1930. Class 42.
Smith, Elmer, Wichita, Kans. Salve. 271,540; June 10; Serial No. 294,930; published Mar. 18, 1930. Class 6.
Smith, Mrs. C. H., Noodle Co., Ellwood City, Pa. Egg noodles, elbow macaroni, spaghetti, and long macaroni. 271,602; June 10. Class 46.
Smith, W. A., and Son., Detroit, Mich. Ointment. 271,536; June 10; Serial No. 294,996; published Mar. 25, 1930. Class 6.
Soapitor Co. Inc. (See Granulator Soap Company.)
Societe a Responsabilite Limitee Rodier, Paris, France. Piece goods of wool, cotton, and silk, and mixtures of the same. 271,501; June 10; Serial No. 295,957; published Mar. 25, 1930. Class 42.
Solomon, Abraham, to Pansy Dress Company, New York, N. Y., successors. Ladies' outer waists and shirt waists. 77,840; renewed May 10, 1930. Class 39.
Solomon, Louis, Paterson, N. J. Hosiery and underwear. 271,582; June 10. Class 39.
Sprague Electric Company, New York, N. Y., assignor to General Electric Company, Schenectady, N. Y. Electric-outlet boxes. 77,887; renewed May 10, 1930. Class 21.
Stanco Incorporated, Wilmington, Del., and New York, N. Y. Insecticides, deodorants, disinfectants, etc. 271,570; June 10; Serial No. 290,623; published Mar. 18, 1930. Class 6.
Standard Brands Incorporated, Dover, Del.; Cincinnati, Ohio; and New York, N. Y. Phosphate and inctate mixture. 271,490; June 10; Serial No. 295,398; published Mar. 25, 1930. Class 6.
Swedish Iron & Steel Corporation, New York, N. Y. Bar steel. 78,551; renewed June 21, 1930.
Swedish Iron & Steel Corporatoin, New York, N. Y. Anvils. 79,376; renewed Aug. 30, 1930.
Swedish Iron & Steel Corporation, New York, N. Y., and New Orleans, La., to Swedish Iron & Steel Corporation, New York, N. Y. Bar steel. 79,612; renewed Sept. 20, 1930.
Taboas, Maximo, New York, N. Y. General tonic. 271,495; June 10; Serial No. 295,583; published Mar. 25, 1930. Class 6.
Tassel-Liter Co., The. (See Schmitt, Arthur J.)
Tavannes Watch Co., S. A., Tavannes, Switzerland. Clocks, watches, and parts thereof. 271,497; June 10; Serial No. 295,646; published Mar. 25, 1930. Class 27.
Tee-O-Matic Golf Company, Inc. (See Miniature Golf Courses of America, Inc., assignor.)
Thompson, Loren O., (See Rogers & Thompson.)
Titanium Alloy Manufacturing Company, The, Niagara Falls, N. Y. Ceramic materials. 271,539; June 10; Serial No. 294,934; published Mar. 18, 1930. Class 6.
Tyler, W. S., Company, The, Cleveland, Ohio. Woven-wire fabrics for screens. 78,553; renewed June 21, 1930.
Tyler, W. S., Company, The, Cleveland, Ohio. Woven-wire fabrics for screens. 79,615; renewed Sept. 20, 1930.
Union Card & Paper Company, New York, N. Y. Writing and printing paper. 79,616; renewed Sept. 20, 1930.
Wangemann, Dr. Paul, Berlin-Wilmersdorf, Germany. Medicinal preparation. 271,531; June 10; Serial No. 293,945; published Mar. 25, 1930. Class 6.
Weber Oil Company, Inc., New York, N. Y. Lubricating oils. 271,527; June 10; Serial No. 293,504; published Mar. 18, 1930. Class 15.
Webster Watch Company. (See Enggass Jewelry Company.)
Weidlich Sterling Spoon Co., Bridgeport, Conn. Silverware. 271,594; June 10. Class 28.
Western Clock Mfg. Co., The, assignor to Western Clock Company, Peru, Ill. Clocks. 79,089; renewed Aug. 2, 1930.
Western Electric Company, Incorporated, New York, N. Y. Apparatus for recording sound effects upon and projecting sound effects from records of the phonograph type and parts thereof. 271,576; June 10; Serial No. 291,648; published Mar. 18, 1930. Class 36.
White-Stokes Co. Inc., Chicago, Ill. Chocolate covering prepared for ice cream. 271,579; June 10; Serial No. 295,706; published Mar. 25, 1930. Class 46.
Wilkin & Adler, Inc., doing business as Goldex, New York, N. Y. Cotton and woolen piece goods. 271,564; June 10; Serial No. 284,105; published July 30, 1920. Class 42.
Williams Specialty Co. (See Siegel, William.)

ALPHABETICAL LIST OF REGISTRANTS OF LABELS

Auto Supplies Manufacturing Co., The, Pueblo, Colo. Git Um Dust Cloth. For Dust Cloths. 37,553; June 10.
Barbasol Company, The, Indianapolis, Ind. Per-Od-Ex. For Ointment Deodorant. 37,554; June 10.
Barbasol Company, The, Indianapolis, Ind. Barbasol. For Shaving Cream. 37,555; June 10.
Ellis, H. S., Hollywood, Calif. The Original Black Cat Top Dressing. For Top Dressing. 37,556; June 10.
Hoague-Sprague Corporation, Lynn, Mass. Sommer and Kaufmann. For Boxes. 37,557; June 10.
Hoague-Sprague Corporation, Lynn, Mass. Prosperity. For Boxes. 37,558; June 10.
Kasper, Peter J., Company, Chicago, Ill. Gingham. For Raspberry Preserves. 37,559; June 10.
Millett, J. C., Company, doing business as H. C. Schwartz Company, San Francisco, Calif., and Milwaukee, Wis. Young's Essence. For Flavoring Extract. 37,560; June 10.
Packing and Marketing, Incorporated, San Francisco, Calif. Blue Diamond. For Honey. 37,561; June 10.
Prune Growers Co-Operative Association, Freewater, Oreg. Jucy-Bite. For Prunes. 37,562; June 10.
Savoia Macaroni Mfg. Co. Inc., Brooklyn, N. Y. Giglio Brand. For Macaroni. 37,563; June 10.
Schwartz, H. C., Company. (See Millett, J. C., Company.)
Standard Brands Incorporated, New York, N. Y. Royal. For Sandwich Spread. 37,564; June 10.
Thorobread Company, The, Cincinnati, Ohio. Thorobread. For Canned Dog Food. 37,565; June 10.
Uecker, Milton W., Elkader, Iowa. Flavor Fed Poultry Products. For Poultry Products. 37,566; June 10.
Uzit, Michael L., Chicago, Ill. Uzit. For Chemicals. 37,567; June 10.
Warren-Teed Seed Company, Chicago, Ill. Seedtown Lawn Grass Mixture. For Lawn-Grass Seed. 37,568; June 10.

ALPHABETICAL LIST OF REGISTRANTS OF PRINTS

Arden, Elizabeth, Inc., doing business as Elizabeth Arden, New York, N. Y. Elizabeth Arden Opens Her New Doorway to Loveliness at 691 Fifth Avenue. For Toilet Preparations. 12,583; June 10.

Arden, Elizabeth, Inc., doing business as Elizabeth Arden, New York, N. Y. Love may be the purpose of life but Beauty is its Song. For Vienna Youth Mask, a Face Treatment. 12,584; June 10.

Arden, Elizabeth, Inc., doing business as Elizabeth Arden, New York, N. Y. Joy. For Perfume. 12,585; June 10.

B. V. D. Company, Inc., The, New York, N. Y. There is a Movement Among Men. For Athletic Underwear. 12,589; June 10.

Bock, Harry, doing business as Cureodor Drug and Chemical Company, New York, N. Y. Morning, Noon & Night. For Toilet Powder. 12,586; June 10.

Brown Durrell Company, Boston, Mass. And Now . . Palm Beach Colors in Gordon Individually-Proportioned Stockings. For Hosiery. 12,587; June 10.

Brown Durrell Company, Boston, Mass. If a Loom Actually Wove Stockings on your Legs. For Hosiery. 12,588; June 10.

Cureodor Drug and Chemical Company. (See Bock, Harry.)

Heinz, H. J., Company, Pittsburgh, Pa. Every House Wife Knows that there's nothing like Oven-Baking to make Beans Tender. For Oven-Baked Beans. 12,590; June 10.

Heinz, H. J., Company, Pittsburgh, Pa. In Keeping. For Olives, Mayonnaise, Salad Dressing, Sandwich Relish, Sweet Mustard Pickles, and Sweet Pickles. 12,591; June 10.

Heinz, H. J., Company, Pittsburgh, Pa. The Sun-Kissed Flavor of Old Gardens. For Vinegar, Ketchup, and Oven-Baked Beans. 12,592; June 10.

Hercules Gas Munitions Co. (See Von Frantzius, Peter.)

Hills Bros., San Francisco, Calif. Hills Bros. Coffee—Buy It Here! For Coffee. 12,593; June 10.

Roberts, F. H., Company, Boston, Mass. Mammy. For Chocolates. 12,594; June 10.

Von Frantzius, Peter, doing business as Hercules Gas Munitions Co., Chicago, Ill. Hercules Tear Gas Fountain Pen Gun. For Tear-Gas Pistols or Guns. 12,595; June 10.

ALPHABETICAL LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Aerometric Valve Corporation, Portland, Oreg. Tire-inflating devices. 292,361; June 10. Class 13.

Aeronautical Chamber of Commerce of America, Inc., New York, N. Y. Annual publication. 294,951; July 10. Class 38.

Aktiebolaget Elektrolux, Stockholm, Sweden. Filters and parts therefor and water-filtering masses. 285,613; June 10. Class 31.

Albany Perforated Wrapping Paper Company, Albany, N. Y. Toilet paper. 299,479; June 10. Class 37.

Albert, Alexander, Brooklyn, N. Y. Lip stick, rouges, powders, creams, etc. 298,301; June 10. Class 6.

Alpha Delta Alpha Fraternity, Cedar Falls, Iowa. Fraternity badges, lapel buttons, cuff links, etc. 299,296; June 10. Class 28.

American Floor Surfacing Machine Company, The, Toledo, Ohio. Abrasives. 297,290; June 10. Class 4.

American Hard Rubber Company, Hempstead and New York, N. Y. Jars, cells, covers, etc. 296,249; June 10. Class 21.

American Hard Rubber Company, Hempstead and New York, N. Y. Plating racks and tanks. 299,035; June 10. Class 21.

American Hat Co. Inc., The, Norwalk, Conn. Hats. 297,644; June 10. Class 39.

American Hat Co. Inc., The, Norwalk, Conn. Hats. 297,646; June 10. Class 39.

American Hat Co. Inc., The, Norwalk, Conn. Hats. 297,648; June 10. Class 39.

American Hat Co. Inc., The, Norwalk, Conn. Hats. 297,650; June 10. Class 39.

American Hat Co. Inc., The, Norwalk, Conn. Men's hats. 297,789; June 10. Class 39.

American Hat Co. Inc., The, Norwalk, Conn. Men's hats. 298,224; June 10. Class 39.

Artistic Novelty Co., Inc., New York, N. Y. Necklaces, bracelets, brooches, etc. 298,226; June 10. Class 28.

Ash, Ed, doing business as The Maidwell Garment Company, Forrest City, Ark. House dresses and aprons. 299,174; June 10. Class 39.

Associated Apparel Industries, Inc., Chicago, Ill. Abdominal belts. 298,000; June 10. Class 39.

Associated Oil Company, San Francisco, Calif. Furnace fuel oils. 298,265; June 10. Class 15.

Austin Oil Corporation, Detroit, Mich. Lubricating oil. 297,950; June 10. Class 15.

Automotive Jobbers Association, Chicago, Ill. Brake-band linings. 296,043; June 10. Class 35.

Badger State Sales Co. (See Schwertfeger, Edward H.)

Baker Extract Company, Springfield, Mass. Root-beer extract. 285,702; June 10. Class 45.

Balkcom, C. C., Jacksonville, Fla. Sweaters, knitted jackets, and knitted bathing suits. 297,722; June 10. Class 39.

Barron County Canning & Pickle Company, Chetek, Wis. Canned vegetables. 299,646; June 10. Class 46.

Bartels, William, Company, New York, N. Y. Live canary birds. 295,993; June 10. Class 1.

Barton Corporation, The, West Bend, Wis. Laundry washing machines. 298,136; June 10. Class 24.

Baude, Paul E. P., Paris, France. Anæsthetics. 299,424; June 10. Class 6.

Behrman, E., Inc., New York, N. Y. Hand bags, pocketbooks, purses, etc. 297,170; June 10. Class 3.

Bell Company, The, Worcester, Mass. Woolen, worsted, and mixed worsted and cotton piece goods. 299,425; June 10. Class 42.

Betterton Coffee Company, Ashland, Ky. Coffee. 299,672; June 10. Class 46.

Betterton Coffee Company, Ashland, Ky. Coffee. 299,673; June 10. Class 46.

Birnbaum, Irving J., doing business as Whip Publishing Co., New York, N. Y. Magazine. 298,306; June 10. Class 38.

Bonin, Alfred, doing business as Pawtucket Pure Food Store, Central Falls, R. I. Malt syrup and malt extract. 298,613; June 10. Class 46.

Bourjois, Inc., New York, N. Y. Perfume, toilet water, face powder, etc. 299,366; June 10. Class 6.

Bowron Bros., Limited, Hamilton, Ontario, Canada. Salad dressing or mayonnaise. 294,289; June 10. Class 46.

Bradner Smith & Company, Chicago, Ill. Paper. 298,974–5; June 10. Class 37.

Bristol Seamless Ring Co. (See Kronstadt, Max.)

Brown, Clarence S., & Company, Inc., New York, N. Y. Cotton piece goods. 299,647; June 10. Class 42.

Brown Company, Portland, Me., and Berlin, N. H. Cellulose pulps. 299,547; June 10. Class 1.

Buckley Brothers Company, New York, N. Y. Hosiery and underwear. 298,742; June 10. Class 39.

Burkhardt Bros. Co., The, Cincinnati, Ohio. Men's hats, suits, topcoats, etc. 297,845; June 10. Class 39.

Burkhardt Bros. Co., The, Cincinnati, Ohio. Men's hats, shirts, pajamas, etc. 297,846; June 10. Class 39.

Burr, L. C., & Co. (See Butler Brothers.)

Butler Brothers, doing business as L. C. Burr & Co., Inc., Chicago, Ill. Overalls. 290,513; June 10. Class 39.

Byk-Gnldenwerke Chemische Fabrik Aktiengesellschaft, Berlin, Germany. Medicinal preparations. 295,014; June 10. Class 6.

Canada Foundries & Forgings, Limited, Brockville, Ontario, Canada. Rail anchors. 289,503; June 10. Class 14.

Carew Manufacturing Company, South Hadley Falls, Mass. Writing and printing paper. 299,552; June 10. Class 37.

Carew Manufacturing Company, South Hadley Falls, Mass. Paper. 299,896; June 10. Class 37.

Celanese Corporation of America, New York, N. Y. Fabrics. 298,615; June 10. Class 42.

Celanese Corporation of America, New York, N. Y. Fabrics. 299,489; June 10. Class 42.

Certified Personal Needs, Inc., New York, N. Y. Toilet preparations, cosmetics, and dentifrices. 297,236; June 10. Class 6.

Champion Mfg. Co. (See Lindfelt Mfg. Co.)

Chemical Laboratory Co., Inc., The, Boston, Mass. Toilet seats. 299,490; June 10. Class 13.

Chemical & Pigment Company, The, Baltimore, Md.; Collinsville, Ill; and Oakland, Calif. Paint pigments. 299,183; June 10. Class 16.

Clark Thread Company, The, Newark, N. J. Thread. 299,371; June 10. Class 43.

Cleveland Sales & Service Co., Minneapolis, Minn. Paint, varnishes, lacquers, and polishes. 297,057; June 10. Class 16.

Codman, F. L. & J. C., Company, South Boston, Mass. Buffing wheels. 298,152; June 10. Class 4.

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Columbia Plush & Puff Co., Inc., Brooklyn, N. Y. Powder puffs. 299,557; June 10. Class 29.

Commonwealths Collieries, Incorporated, Cincinnati, Ohio. Coal. 299,766; June 10. Class 1.

Dalton Thibault Corp., The, Stamford, Conn. Ash receivers and trays. 299,377; June 10. Class 8.

Daniels, Claude H., Newton and Boston, Mass. Boots, shoes and slippers. 299,111; June 10. Class 39.

Dessledess Paint Co. (See Lubel, Abner.)

Develon, Thomas, jr., Philadelphia, Pa. Textile rugs and textile floor coverings. 298,689; June 10. Class 42.

Dictatype Incorporated, Wilmington, Del. Typewriter paper and paper rolls for use on typewriting machines. 295,256; June 10. Class 37.

Dixon, Joseph, Crucible Company, Jersey City, N. J. Pencils, crayons, and rubber erasers. 299,651; June 10. Class 37.

Du Pont Viscoloid Company, New York, N. Y. Hand mirrors and picture frames. 299,834; June 10. Class 32.

Earle, C. E., jr., Highpoint, N. C. Hosiery, overalls, shirts, etc. 293,266; June 10. Class 39.

Eastern Oil Equipment, Inc., Portland, Me. Oil burners. 299,433; June 10. Class 34.

Endicott Johnson Corporation, Endicott, N. Y. Boots, shoes, or slippers. 298,230; June 10. Class 39.

Eola Coffee Co., Inc., Orlando, Fla. Coffee. 299,114; June 10. Class 46.

Evans', L. B., Sons Company, Wakefield, Mass. Leather house slippers. 298,984; June 10. Class 39.

Faber, A. W., Inc., Newark, N. J. Pencils, crayons. 297,899–900; June 10. Class 37.

Fabrica de Manteca Industrial de Cueto y Co., S. A., Habana, Cuba. Margarine. 288,554; June 10. Class 46.

Fair, Robert W., doing business as Fair's Beauty Sales Agency, Tyler, Tex. Trees. 296,269–70; June 10. Class 1.

Father's Day Club, Inc., New York, N. Y. Circulars, pamphlets, and other printed matter. 291,087; June 10. Class 38.

Federal Knitting Mills Company, Cleveland, Ohio. Knitted apparel. 299,055; June 10. Class 39.

Fischer Baking Co., Newark, N. J. Bread. 298,234; June 10. Class 46.

Foremost Dairy Products, Inc., Jacksonville, Fla. Fresh milk, buttermilk, and sour milk. 291,504; June 10. Class 46.

Forest City Walworth Run Foundries Co., The, Cleveland, Ohio. Hot-air furnaces. 297,906; June 10. Class 34.

Franklin, Morris I., Turnerville, La. Especially-prepared olive oil. 298,318; June 10. Class 6.

Freundlich, Ralph A., Inc., New York, N. Y. Dolls. 299,842; June 10. Class 22.

Gallagher, James J., Baltimore, Md. Coffee and tea. 299,436; June 10. Class 46.

Garcia, Anna L., Los Angeles, Calif. Medicinal salve. 299,437; June 10. Class 6.

Gay Dress Corp., New York, N. Y. Ladies' dresses. 298,987; June 10. Class 39.

General Cable Corporation, New York, N. Y. Electrical wires and cables. 298,096; June 10. Class 21.

General Cosmetics Corporation, New York, N. Y. Cleansing creams. 299,568; June 10. Class 6.

Gimbel Brothers, Inc., New York, N. Y. Hosiery. 299,315; June 10. Class 39.

Gingasol Laboratories, Inc., Winner, S. Dak. Medicinal preparation. 299,570; June 10. Class 6.

Governor and Company of Adventurers of England Trading into Hudson's Bay, The, London, England. Blankets. 278,731; June 10. Class 42.

Grant, W. T., Company, New York, N. Y. Work shirts. 299,119; June 10. Class 39.

Grasselli Chemical Company, The, Cleveland, Ohio. Fertilizers. 298,442; June 10. Class 10.

Gross, Benjamin & Edward J., Co. Inc., New York, N. Y. Finger rings and mountings therefor. 299,316; June 10. Class 28.

Gross, Benjamin & Edward J., Co. Inc., New York, N. Y. Finger rings and mountings therefor. 299,318; June 10. Class 28.

Guth, Stern & Co., Inc., New York, N. Y. Portable electric lamps and dry-cell electric batteries. 298,747; June 10. Class 21.

Guttknecht, J. W., Stein, near Nuremberg, Germany. Lead pencils, pencil holders, blotters, etc. 298,387; June 10. Class 37.

Hammel, Mrs. Henry, Reading, Pa. Douche powder. 298,496; June 10. Class 6.

Haskell, William H., Manufacturing Company, Pawtucket, R. I. Machine and other bolts. 295,976; June 10. Class 13.

Helme, George W., Company, Jersey City, N. J., and New York, N. Y. Ground tobacco. 298,396; June 10. Class 17.

Herbert, W. P., & Company, Troy, N. Y. Women's cloaks, coats, suits, and overcoats. 297,911; June 10. Class 39.

Hibbard, John S., Chicago, Ill. Polish. 298,179; June 10. Class 16.

Hitt, Thomas G., doing business as Northwest Flower Extractions Co., Seattle, Wash. Perfume. 299,709; June 10. Class 6.

Hohner, M., Inc., New York, N. Y. Piano accordions. 298,571; June 10. Class 36.

Hookless Fastener Company, Meadville, Pa. Trunks for gym suits or swimming suits, boots and shoes, etc. 294,254; June 10. Class 39.

Horn, A. C., Company, New York and Long Island City, N. Y. Matting made of a paper and fabric composition. 298,242; June 10. Class 50.

Hotel and Restaurant Employees' and Beverage Dispensers' International Alliance, Cincinnati, Ohio. Printed books, periodicals, and circulars. 296,383; June 10. Class 38.

Hubbs, Charles F., & Company, New York, N. Y. Paper slippers and shoes. 297,674; June 10. Class 39.

Hudson Motor Car Company, Detroit, Mich. Gasoline passenger automobiles. 299,504; June 10. Class 19.

Hudson, Sumpter W., East Jamestown, Kannapolis, N. C. Compounds and salves. 296,191; June 10. Class 6.

Hug Company, The, Highland, Ill. Motor trucks and motor-truck bodies. 297,598; June 10. Class 19.

Hugo, Walter E., Hammond, Ind. Beverages and compounds for making the same. 299,973; June 10. Class 45.

Iota Tau Sigma, Kirksville, Mo. Fraternity badges, lapel buttons, cuff links, etc. 298,398; June 10. Class 28.

Jacobs, Leon E., & Bro., New York, N. Y. Shirts, hosiery, and pajamas. 299,060; June 10. Class 39.

James, Edmund L., New York, N. Y. Belts, suspenders, and garters. 297,806; June 10. Class 39.

James, Leonard, Co., San Saba, Tex. Laxative medicine for poultry. 297,833; June 10. Class 6.

Johnson Manufacturing Company, Marshfield, Wis. Canton flannel gloves and mittens, and ladies' house dresses. 298,946; June 10. Class 39.

Kappa Sigma Tau, Chicago, Ill. Official badges, pledge pins, recognition buttons, etc. 298,185; June 10. Class 28.

Kapstein, Edward M., doing business as Pincho Hair Pin Co., Boston, Mass. Hairpins. 297,138; June 10. Class 40.

Kirgan's Arcadia Farms, Inc., doing business as The Sohomey Company, Cincinnati, Ohio. Sweet vegetable relish, garnishing cherries, peach preserves, etc. 297,439; June 10. Class 46.

Koch, Leonhard, doing business as Kock & Te Kock, Oelsnitz, Vogtland, Germany. Carpets and stair carpets of textiles. 286,180; June 10. Class 42.

Korhonen, John A., Brooklyn, N. Y. Chemical preparations. 299,582; June 10. Class 6.

Krelitz, Benjamin, doing business as Twin City Drug Company, Minneapolis, Minn. Drug sundries and prophylactic rubber goods. 295,820; June 10. Class 44.

Kress, S. H., & Co., New York, N. Y. Garters. 296,526–7; June 10. Class 39.

Kress, S. H., & Co., New York, N. Y. Garters. 297,604; June 10. Class 39.

Kronstadt, Max, doing business as Bristol Seamless Ring Co., New York, N. Y. Finger rings. 298,635–6; June 10. Class 28.

Kronstadt, Max, doing business as Bristol Seamless Ring Co., New York, N. Y. Finger rings. 298,638; June 10. Class 28.

Lebanon Shirt Company, Lebanon, Lititz, Lexington, and Hebron, Pa., and New York, N. Y. Men's and boys' hats, caps, garters, etc. 288,917; June 10. Class 39.

Limit Engineering Co. Ltd., London, England. Wireless apparatus. 279,944; June 10. Class 21.

Lindfelt Mfg. Co., doing business as Champion Mfg. Co., Des Moines, Iowa. Handball-players' gloves. 283,616; June 10. Class 22.

Logan-Long Company, The, Franklin, Ohio; Atlanta, Ga.; Fulton, N. Y.; and Chicago, Ill. Asphalt paint and asbestos fibre roof coating. 283,957; June 10. Class 16.

Lubel, Abner, doing business as Dessledess Paint Co., New York, N. Y. Varnishes, ready-mixed paints, and prepared shellac. 299,068–71; June 10. Class 16.

Lutz, Henry R., Rogersville, Tenn. Cooking ranges. 295,524; June 10. Class 34.

Macklanburg-Duncan Company, Oklahoma City, Okla. Metal letters and numbers. 298,640; June 10. Class 50.

Mallory Hat Company, The, Danbury, Conn. Hats and caps. 289,470; June 10. Class 39.

Malva Medicine Co., The. (See Webb, Frank V.)

Mascunana, Aurelio, Tampa, Fla. Cigars. 297,815; June 10. Class 17.

Mavis Bottling Company of America, New York, N. Y. Ginger ale. 295,434; June 10. Class 45.

May Department Stores Company, New York, N. Y. Shoes. 286,254; June 10. Class 39.

McCarthy, Charles M., Miami Beach, Fla. Oil used for sunburn. 284,150; June 10. Class 6.

McKesson & Robbins, Incorporated, Bridgeport, Conn. Mouth wash. 287,307; June 10. Class 6.

Meador and Young, Incorporated, Nashville, Tenn. Coal. 297,024; June 10. Class 1.

Merchandise & Research Bureau, New York, N. Y. Sheets and pillowcases. 296,538; June 10. Class 42.

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Merchant Trading Company, Limited, The, London, England. Compositions made from vegetable fibres and pulps. 297,260–1; June 10. Class 1.
Meyerhoff, Paul F., New York, N. Y. Hosiery. 299,144; June 10. Class 39.
Middleby, Jos., Jr., Inc., Boston, Mass. Beverages and flavoring syrups for making the same. 299,147; June 10. Class 45.
Midland Utilities Company of Indiana, Chicago, Ill. Gas water heaters. 299,006; June 10. Class 34.
Miller, Henry, doing business as Miller's Photo Service, Los Angeles, Calif. Photographic prints. 298,034; June 10. Class 38.
Mittelman, I., & Co. Inc., New York, N. Y. Ladies' dresses. 298,110; June 10. Class 39.
Model Mill Company, Johnson City, Tenn. Chicken feed, dairy feed, horse feed, cattle feed. 299,750; June 10. Class 46.
Monarch Insulated Wire Corp., New York, N. Y. Electric wire and cable, battery and starting cables, battery terminals, etc. 297,448; June 10. Class 21.
Monticello Drug Company, Jacksonville, Fla. Medicines. 287,932; June 10. Class 6.
Morrell, John, & Co., Ottumwa, Iowa. Canned ham. 296,764; June 10. Class 46.
Moss, Lee M., New York, N. Y. Finger rings, bracelets, chains, etc. 295,549; June 10. Class 28.
Mueller Brass Co., Port Huron, Mich. Metal fluid conduits and fittings therefor. 296,711; June 10. Class 13.
Murdock Mfg. & Supply Company, The, Cincinnati, Ohio. Fluid-control valves. 295,971; June 10. Class 13.
Nabon, James M., Madrid, Spain. Antislipping devices or metal creepers. 295,980; June 10. Class 13.
National Brake Service, Inc., Chicago, Ill. Brakes and parts thereof and rivets. 282,422; June 10. Class 13.
National Enameling & Stamping Co. Inc., Milwaukee, Wis. Stoves. 296,021; June 10. Class 34.
National Licorice Company, Brooklyn, N. Y. Candy. 299,215; June 10. Class 46.
National Union Radio Corporation, Newark, N. J. Radio electron tubes. 298,408; June 10. Class 21.
Nella, Sociedad Anónima, Barcelona, Spain. Chocolates, cocas, bonbons, etc. 273,786; June 10. Class 46.
North Bergen Varnish Corporation, North Bergen, N. J. Varnishes, paint enamels, lacquers, and paints. 297,029; June 10. Class 16.
Northern California Fruit Company, Victor, Calif. Fresh grapes. 290,474; June 10. Class 46.
Northwest Flower Extractions Co. (See Hiltt, Thomas G.)
Paper Specialty Company, Wausau, Wis. Waxed and parchment paper, paper table covers and napkins. 299,590; June 10. Class 37.
Parfumerie Roger et Gallet, Société Anonyme, Paris, France. Perfumery. 298,411; June 10. Class 6.
Park & Tilford, New York, N. Y. Dry cleaner. 298,354; June 10. Class 4.
Parker Brothers Inc., Portland, Me., and Salem, Mass. Board game. 299,793–4; June 10. Class 22.
Patterson, Thomas A., doing business as T. A. Patterson Laboratories, Cleveland, Ohio. Liquid bleach. 298,905; June 10. Class 6.
Pawtucket Pure Food Store. (See Bonin, Alfred.)
Philadelphia Waterproofing Corp., Philadelphia, Pa. Fabrics treated to render them waterproof and fireproof. 299,015; June 10. Class 50.
Phoenix Manufacturing Company, Joliet, Ill. Calks for horse and mule shoes. 295,864; June 10. Class 3.
Phoenix Manufacturing Company, Joliet, Ill. Metal horse and mule shoes, rubber pads for horse and mule shoes, etc. 296,145; June 10. Class 3.
Phoenix Manufacturing Company, Joliet, Ill. Calks for horse and mule shoes. 296,196; June 10. Class 3.
Pincho Hair Pin Co. (See Kapstein, Edward M.)
Popper, E., & Company, Inc., New York, N. Y. Cigars, cigarettes, and smoking tobacco. 298,355; June 10. Class 17.
Popsicle Corporation of the United States, The, New York, N. Y. Molds for the manufacture of frozen confectionery and the like. 298,356; June 10. Class 13.
Posner-Fox Inc., New York, N. Y. Dresses. 296,610; June 10. Class 39.
Premier Co., Inc., The, New York, N. Y. Nail files. 298,547; June 10. Class 44.
Primeau, Clifford G., Cranston, R. I. Antacid. 299,337; June 10. Class 6.
Quaker Hosiery Company, Inc., Philadelphia, Pa. Hosiery. 299,278; June 10. Class 39.
Quaker Oats Company, The, Chicago, Ill. Feed for turkeys. 299,461; June 10. Class 46.
Rauh, E., & Sons Fertilizer Company, Indianapolis, Ind. Fertilizers. 299,229; June 10. Class 10.
Reliable Coal & Mining Co., Chicago, Peoria, and Springfield, Ill, Moberly and Kansas City, Mo., and Omaha, Nebr. Coal. 291,143; June 10. Class 1.
Reliable Coal & Mining Co., Chicago, Peoria, and Springfield, Ill., Moberly and Kansas City, Mo., and Omaha, Nebr. Coal. 291,145–6; June 10. Class 1.
Roberts, Clifford P., doing business as Roberts Feed & Produce Co., Brookville, Ind. Poultry, hog, and cattle feeds. 299,624; June 10. Class 46.
Roberts Feed & Produce Co. (See Roberts, Clifford P.)
Robins, G. S., & Company, St. Louis, Mo. Deodorizing and disinfecting preparation. 296,924; June 10. Class 6.
Roessler & Hasslacher Chemical Company, The, New York, N. Y. Liquid in the nature of a paint. 297,497; June 10. Class 16.
Romane, Georges, St.-Mande, France. Fabrics. 294,826; June 10. Class 42.
Romary, A., & Company Limited, Tunbridge Wells, England. Biscuits and wafers. 298,548; June 10. Class 46.
Rufrano, Raffaele, Brooklyn, N. Y. Hair tonic. 296,825; June 10. Class 6.
Sager, Solomon M., Evanston, Ill. Combined pen and pencil. 297,938; June 10. Class 37.
Samiljan, Jeanette, Brooklyn, N. Y. Face powders, perfumes, shampoos, etc. 291,026; June 10. Class 6.
Schneider, Clarence A., doing business as Schneider's Laboratories, Detroit, Mich. Mouth wash. 286,598; June 10. Class 6.
Schulze Baking Company, Kansas City, Mo., and Chicago, Ill. Cakes and cookies. 298,853; June 10. Class 46.
Schwertfeger, Edward H., doing business as Badger State Sales Co., Milwaukee, Wis. Preparation for use as a water softener and cleanser. 295,137; June 10. Class 6.
Seacoast Laboratories, Inc., New York, N. Y. Disinfectant, germicides, and sterilizers. 299,521; June 10. Class 6.
Seaman Paper Company, Chicago, Ill. Book papers, cover papers, postcard, etc. 280,287; June 10. Class 37.
Semon Bache & Company, New York, N. Y. Mirrors. 299,801; June 10. Class 32.
Serra, Arthur, & Co., Chicago, Ill. Fresh pineapples. 299,465; June 10. Class 46.
Shaler Company, The, Waupun, Wis. Iron and wood head golf clubs. 299,802; June 10. Class 22.
Sibley-Almy Company, Inc., Olean, N. Y. Coffee. 298,464; June 10. Class 46.
Sinclair Refining Company, New York, N. Y. Spray guns. 299,466–7; June 10. Class 23.
Smith and Goldberg Cloak and Suit Company Inc., New York, N. Y. Coats and suits. 295,498; June 10. Class 39.
Smith, Walter C., Mineral Products, Inc., New York, N. Y. Prepared and sterilized sand. 298,594; June 10. Class 1.
Snyder, W. E. & J. P., Port Trevorton, Pa. Medicine. 298,595; June 10. Class 6.
Société Anonyme des Hauts Fourneaux de la Chiers, Longway (Meurthe-et-Moselle), France. Hoop irons. 298,717; June 10. Class 14.
Société des Usines Chemiques Rhone-Poulenc, Paris, France. Anesthetic products, antipyretic products, salicylates, etc. 285,229; June 10. Class 6.
Société des Usines Chimiques Rhone-Poulenc, Paris, France. Perfumes, disinfectant materials, antipyretic products, etc. 285,231; June 10. Class 6.
Société des Usines Chimiques Rhone-Poulenc, Paris, France. Anesthetic products, antipyretic products, salicylates, etc. 285,233; June 10. Class 6.
Sohomey Company, The. (See Kirgan's Arcadia Farms, Inc.)
Southern Tablet & Manufacturing Company, Atlanta, Ga. Tablets, composition books, and filler paper. 299,524; June 10. Class 37.
Squibb, E. R., & Sons, New York, N. Y. Colloidal bismuth solution for hypodermic use. 298,258; June 10. Class 6.
Stanco Incorporated, Wilmington, Del., and New York, N. Y. White mineral oil. 297,941; June 10. Class 6.
Steel Shot & Grit Co., Amesbury, Mass., and Pittsburgh, Pa. Abrasive steel shot. 298,291; June 10. Class 4.
Sterling Company, The, Chicago, Ill. Ladies' washable house frocks. 297,823; June 10. Class 39.
Sterling Company, The, Chicago, Ill. Ladies' house dresses. 298,726; June 10. Class 39.
Stern Bros. Motorcycles, Inc., New York, N. Y. Motor cycle equipped with delivery bodies. 295,699; June 10. Class 19.
Stone Shoe Co. Inc., New York, N. Y. Slippers. 297,701; June 10. Class 39.
Strauss, Samuel R., doing business as Strauss Laboratories, New York, N. Y. Blood and nerve tonic. 299,415; June 10. Class 6.
Sudbeaz, Joseph, Mount Vernon, N. Y. Ferment for the treatment of intestinal disorders. 299,815; June 10. Class 6.
Sutliff, Henry, doing business as H. Sutliff Pipe Shop, San Francisco, Calif. Smoking tobacco. 299,473; June 10. Class 17.
Thanhouser & Weiller, Baltimore, Md. Girls' dresses. 282,072; June 10. Class 39.
Tingue, Brown & Co., New York, N. Y. Piece goods, napped cotton flannel, knitted cotton, etc. 298,520; June 10. Class 42.
Tinsler, Silvey-Pearle, New York, N. Y. Printed publication. 299,522; June 10. Class 38.
Todd, A. Jaquelin, Washington, D. C. Clothesline. 297,993; June 10. Class 7.
Tuttle Press Company, The, Appleton, Wis. Wrapping paper and napkins. 299,168; June 10. Class 37.

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Twin City Drug Company. (See Krelitz, Benjamin.)
United Baking Company, Schenectady, N. Y. Doughnuts and cup cakes. 297,634; June 10. Class 46.
Vacuumizer Mfg. Corporation, Rochester, N. Y. Waterproof and heatproof pads, mats, etc. 299,534; June 10. Class 50.
Van Dyk, James, Company, New York, N. Y. Coffee. 299,293; June 10. Class 46.
Visol Laboratories, The, Boston, Mass. Ointments and lotions. 299,535; June 10. Class 6.
Waber, Morris, New York, N. Y. Clothing. 297,106; June 10. Class 39.
Wall-Streeter Shoe Co., North Adams, Mass. Men's leather shoes. 262,539; June 10. Class 39.
Wallace & Co., Brooklyn, N. Y. Chocolates and candies. 299,169; June 10. Class 46.
Warwick Chemical Company, West Warwick, R. I. Assistant in the boiling off of cotton and cotton goods. 294,457; June 10. Class 6.
Warwick Chemical Company, West Warwick, R. I. Scouring assistant used in the scouring of wool and wool fabrics. 294,458; June 10. Class 6.
Warwick Chemical Company, West Warwick, R. I. Dyeing assistant used in the dyeing of textile fibres and fabrics. 294,459; June 10. Class 6.
Warwick Chemical Company, West Warwick, R. I. Water-softening product. 294,460; June 10. Class 6.
Webb, Frank V., doing busines as The Malva Medicine Co., Cincinnati, Ohio. Laxative and tonic. 299,610; June 10. Class 6.
Wenner, Barney H., doing business as Wenvo Medicine Co., Sedalia and Kansas City, Mo. Liquid medicine. 299,611; June 10. Class 6.
Wenvo Medicine Co. (See Wenner, Barney H.)
Whip Publishing Co. (See Birnbaum, Irving J.)
Wickwire Spencer Steel Company, New York, N. Y. Metallic shoe fasteners or lacings. 296,166; June 10. Class 13.
Wilcox Novelty Company, The, Athol, Mass. Clock and watch casings. 299,477; June 10. Class 27.
Wonderlite Company of America, San Francisco, Calif. Signs and tubes. 297,220; June 10. Class 21.
Woodhouse Bros., Indio, Calif. Fresh citrus fruits, vegetables, etc. 299,612; June 10. Class 46.
Write-Dri, Inc., New York, N. Y. Writing fluids. 299,295; June 10. Class 11.
Ybry, Inc., New York, N. Y. Perfumes and toilet water, face powders, etc. 299,643; June 10. Class 6.
Yoshkys Dairies, Inc., New York, N. Y. Milk, butter, cheese, cream, and eggs. 296,207; June 10. Class 46.
Young's Candy Products Co., Inc., Philadelphia, Pa. Candy. 298,608; June 10. Class 46.

CLASSIFIED LIST OF TRADE-MARKS REGISTERED

CLASS 1

Leather, Washable. F. A. Rupert Company. 271,520; June 10; Serial No. 294,122; published Mar. 25, 1930.
Seeds. O. M. Scott & Sons Company. 271,613; June 10.
Silica, Diatomaceous. Pacatome Company. 271,513; June 10; Serial No. 288,978; published Mar. 25, 1930.

CLASS 4

Cleaning cloths, Chemically-treated. Auto Supplies Manufacturing Co. 271,606; June 10.
Cleanser. Diversey Manufacturing Company. 271,596; June 10.
Soap. Granulator Soap Company. 77,806; renewed May 10, 1930.

CLASS 5

Adhesive tape. Eastman Kodak Company. 271,487; June 10; Serial No. 295,366; published Mar. 25, 1930.

CLASS 6

Alkaline antiseptic. A. E. Feich. 77,689; renewed Apr. 26, 1930.
Antiseptic jelly, Vaginal. M. Lewis. 271,509; June 10; Serial No. 287,879; published Mar. 25, 1930.
Baking powder. Le-R. W. Earl. 271,491; June 10; Serial No. 295,425; published Mar. 25, 1930.
Camphor in celluloid manufacture, Substitute for. Chemische Fabriken vorm. 79,036; renewed Aug. 2, 1930.
Ceramic materials. Titanium Alloy Manufacturing Company. 271,539; June 10; Serial No. 294,934; published Mar. 18, 1930.
Chemicals. Eastman Kodak Company. 78,872; renewed July 19, 1930.
Cologne, toilet waters, bath salts, etc. Anciens Etablissements Baignol et Farjon. 271,517; June 10; Serial No. 292,919; published Mar. 18, 1930.
Creams, powder, rouge, skin tonic, etc. Aubre Aires, Ltd. 271,611; June 10.
Emulsion, Neutral noncaustic. Pugsley & Morrison. 271,583; June 10.
Fungicide, seed disinfectant. E. I. du Pont de Nemours and Company. 271,484; June 10; Serial No. 295,838; published Mar. 25, 1930.
Fungicide, seed disinfectant. E. I. du Pont de Nemours and Company. 271,498; June 10; Serial No. 295,839; published Mar. 25, 1930.
Insecticide, Liquid. Kilsem Manufacturing Company. 271,496; June 10; Serial No. 295,623; published Mar. 25, 1930.
Insecticides. W. Krummenacher. 271,510; June 10; Serial No. 288,382; published Oct. 8, 1929.
Insecticides, deodorants, disinfectants, etc. Stanco Incorporated. 271,570; June 10; Serial No. 290,623; published Mar. 18, 1930.
Iodine and caffeine, Solution of. Laboratoires Darrasse, Societe A Responsabilite Limitee. 271,530; June 10; Serial No. 293,881; published Mar. 25, 1930.
Lotion, foundation cream, rouges, etc., Finishing. Marjorie Johnson, Inc. 271,528; June 10; Serial No. 293,738; published Mar. 18, 1930.
Medicaments. Chemosan-Union und Fritz-Pezoldt A. G. 271,524–5; June 10; Serial Nos. 293,465–6; published Mar. 25, 1930.
Medicated alcohol. Wm. S. Merrell Company. 271,616; June 10.
Medicinal preparation. R. M. Brame, jr. 271,483; June 10; Serial No. 295,824; published Mar. 25, 1930.
Medicinal preparation. Wm. S. Merrell Company. 271,555; June 10; Serial No. 294,164; published Mar. 18, 1930.
Medicinal preparation. Pharmazentische Industrie A. G. 271,526; June 10; Serial No. 293,484; published Mar. 25, 1930.
Medicinal preparation. Dr. P. Wangemann. 271,531; June 10; Serial No. 293,945; published Mar. 25, 1930.
Medicine. Lotan Products Company. 271,561; June 10; Serial No. 278,473; published Mar. 18, 1930.
Medicines and pharmaceutical preparations. Actien-Gesellschaft für Anilin-Fabrikation. 78,758; renewed July 12, 1930.
Oil compound. Semidrying. Fay Metal Patch Company. 271,612; June 10.
Ointment. W. A. Smith and Son. 271,536; June 10; Serial No. 294,996; published Mar. 25, 1930.
Phosphate and lactate mixture. Standard Brands Incorporated. 271,490; June 10; Serial No. 295,398; published Mar. 25, 1930.
Powder, Face. Florian, Inc. 271,586; June 10.
Powder for decolorizing oil. Mineral. H. Bensmann. 79,186; renewed Aug. 16, 1930.
Powders, Developing. Eastman Kodak Company. 271,538; June 10; Serial No. 294,961; published Mar. 18, 1930.
Preparation for the treatment of coughs and colds. B. B. Brannan. 271,532; June 10; Serial No. 293,951; published Mar. 25, 1930.
Preparation for treating pain, burns, and soreness. E. J. Kelly. 271,573; June 10; Serial No. 291,058; published Mar. 25, 1930.
Preparation for treating skin irritations. K. N. Sharp. 271,588; June 10.
Preparation for treating sore throat, etc. Leyde & Kieswetter. 271,562; June 10; Serial No. 279,053; published Mar. 25, 1930.
Preparation used as a mouth wash, etc. S. Luke. 271,574; June 10; Serial No. 291,093; published Mar. 25, 1930.
Remedy for blood poisoning in colts. T. B. Bowman. 78,397; renewed June 14, 1930.
Remedy for malaria. Vegetable. Davis & Lawrence Co. 79,652; renewed Sept. 27, 1930.
Remedy, Veterinary. Ahrens Brothers. 77,351; renewed Mar. 20, 1930.
Salve. D. A. Burrows. 271,519; June 10; Serial No. 294,108; published Mar. 25, 1930.
Salve. V. Jackson. 271,575; June 10; Serial No. 291,510; published Mar. 18, 1930.
Salve. E. Smith. 271,540; June 10; Serial No. 294,930; published Mar. 18, 1930.
Salves. Dermato Salve Company. 80,111; renewed Nov. 8, 1930.
Sealing solution. R. C. Meneray. 271,569; June 10; Serial No. 289,792; published Mar. 25, 1930.
Skin preparation. E. I. Conan. 271,560; June 10; Serial No. 276,460; published Mar. 25, 1930.
Sulphonated oil. General Dyestuff Corporation. 271,499; June 10; Serial No. 295,842; published Mar. 25, 1930.
Tonic. W. Siegel. 271,535; June 10; Serial No. 294,089; published Mar. 18, 1930.
Tonic, General. M. Tabons. 271,495; June 10; Serial No. 295,583; published Mar. 25, 1930.
Tonic medicine. E. Gray. 271,542; June 10; Serial No. 294,772; published Mar. 18, 1930.

CLASS 8

Tobacconists' supplies. P. T. Sands. 271,508; June 10; Serial No. 287,429; published Mar. 25, 1930.

CLASS 11

Carbon paper. Mittag & Volger, Incorporated. 271,488; June 10; Serial No. 295,381; published Mar. 25, 1930.
Carbon paper and typewriter ribbons. O. R. Brown Company. 77,901; renewed May 17, 1930.

CLASS 12

Caulking compounds. C. A. Payton. 271,486; June 10; Serial No. 293,591; published Mar. 25, 1930.

CLASS 13

Devices for holding and delivering soap. Granulator Soap Company. 77,129; renewed Mar. 15, 1930.
Wire, Barbed. American Steel & Wire Company of New Jersey. 78,480; renewed June 21, 1930.
Wire fabrics for screens, Woven. W. S. Tyler Company. 78,553; renewed June 21, 1930.
Wire fabrics for screens, Woven. W. S. Tyler Company. 79,615; renewed Sept. 20, 1930.

CLASS 14

Alloys. Pittsburgh Metallurgical Co. 271,593; June 10.
Anvils. Swedish Iron & Steel Corporation. 79,376; renewed Aug. 30, 1930.
Babbitt metal and cemented tungsten carbide. General Electric Company. 271,533; June 10; Serial No. 293,997; published Mar. 25, 1930.
Brake blocks. Herbert Frood Company Limited. 79,487; renewed Sept. 13, 1930.
Castings, Ferrous. International Nickel Company. 271,511; June 10; Serial No. 288,558; published Mar. 25, 1930.
Steel and anvils, Sheet. Klauer Manufacturing Company. 271,563; June 10; Serial No. 280,712; published Mar. 25, 1930.
Steel balls. E. G. Hoffmann. 78,605; renewed June 28, 1930.
Steel, Bar. Swedish Iron & Steel Corporation. 78,551; renewed June 21, 1930.
Steel, Bar. Swedish Iron & Steel Corporation. 79,612; renewed Sept. 20, 1930.

CLASS 15

Oil, Insulating. General Electric Company. 79,120; renewed Aug. 9, 1930.
Oil, Lubricating. Galena Manufacturing Company of Illinois. 271,584; June 10.
Oils and greases, Lubricating. Quaker State Oil Refining Co. 271,572; June 10; Serial No. 290,086; published Feb. 25, 1930.
Oils, Lubricating. Petroleum Products Corporation. 271,589; June 10.
Oils, Lubricating. Weber Oil Company. 271,527; June 10; Serial No. 293,504; published Mar. 18, 1930.

CLASS 16

Colors in oil. Acme White Lead & Color Works. 78,637; renewed Sept. 27, 1930.
Paint, Dry. American Cement Paint Co. 271,558; June 10; Serial No. 271,107; published Oct. 9, 1928.
Wood composition. Sheffield Bronze Powder & Stencil Co. 271,614; June 10.

CLASS 17

Cigarettes. Brown & Williamson Tobacco Corporation. 271,559; June 10; Serial No. 275,658; published Mar. 25, 1930.

CLASS 19

Automobiles and their structural parts. Chrysler Corporation. 271,506–7; June 10; Serial Nos. 287,330–1; published Mar. 25, 1930.

CLASS 21

Electric lamps. General Electric Company. 77,779; renewed May 3, 1930.
Electric outlet boxes. Sprague Electric Company. 77,887; renewed May 10, 1930.
Electric percolators, baby-bottle warmers, and lamps. Aluminum Goods Manufacturing Co. 271,553; June 10; Serial No. 294,333; published Mar. 18, 1930.
Electrical floor polishers and vacuum cleaners and parts therefor. Electrolux, Inc. 271,565; June 10; Serial No. 284,978; published Mar. 18, 1930.
Insulated wire, Electric. Packard Electric Company. 271,600; June 10.
Lighters, Electric cigar. A. J. Schmitt. 271,608; June 10.
Radio broadcast receiving sets. Charles Freshman Company. 271,585; June 10.
Switches. Thermally-operated electric cut-out. Minneapolis-Honeywell Regulator Company. 271,566; June 10; Serial No. 268,621; published Sept. 24, 1929.

CLASS 22

Bridge game lessons, problems, and solutions. M. M. Goldberg. 271,522; June 10; Serial No. 293,096; published Mar. 25, 1930.
Educational amusement device for children. E. L. Knight. 271,544; June 10; Serial No. 294,536; published Mar. 25, 1930.
Golf teeing device, Automatic. Miniature Golf Courses of America, Inc. 271,529; June 10; Serial No. 293,742; published Mar. 25, 1930.

CLASS 23

Machines for making pinless clothes lines. W. W. Peavyhouse. 271,557; June 10; Serial No. 294,398; published Apr. 8, 1930.

CLASS 27

Clocks. Western Clock Mfg. Co. 79,089; renewed Aug. 2, 1930.
Clocks, watches, and parts thereof. Tavannes Watch Co., S. A. 271,497; June 10; Serial No. 295,646; published Mar. 25, 1930.
Time recorders, clocks, and watches. Harris Watch Importing Company. 271,482; June 10; Serial No. 295,735; published Mar. 25, 1930.
Watchcases and watch movements. Illinois Watch Case Company. 79,494; renewed Sept. 13, 1930.
Watchcases and watch movements. Illinois Watch Case Company. 79,676; renewed Sept. 27, 1930.
Watches. Enggass Jewelry Company. 271,598–9; June 10.

CLASS 28

Badges, lapel buttons, cuff links, etc., Fraternity. Phi Alpha Delta Law Fraternity 271,577; June 10; Serial No. 292,368; published Mar. 18, 1930.
Rings, Finger. S. Lazarus & Sons. 271,581; June 10.
Silverware. Weidlich Sterling Spoon Co. 271,594; June 10.
Watch bracelets, straps, and attachments, neck chains, etc. Gemex Company. 271,545–50; June 10; Serial Nos. 294,515–20; published Mar. 18, 1930.
Watch bracelets, straps, and attachments, neck chains, etc. Gemex Company. 271,551–2; June 10; Serial Nos. 294,512–13; published Mar. 18, 1930.

CLASS 29

Toothbrushes. Agol Chemical Co. 271,518; June 10; Serial No. 295,720; published Mar. 25, 1930.

CLASS 33

Bottles, jars, jugs, etc., Glass. Pacific Coast Glass Company. 271,523; June 10; Serial No. 293,444; published Mar. 25, 1930.

CLASS 35

Packings, Machinery. R. Brandt 78,860; renewed July 19, 1930.

CLASS 36

Apparatus for recording sound effects upon and projecting sound effects from records of the phonograph type, and parts thereof. Western Electric Company. 271,576; June 10; Serial No. 291,648; published Mar. 18, 1930.
Banjo. Bacon Banjo Co. 271,541; June 10; Serial No. 294,910; published Mar. 18, 1930.
Musical instruments, Wind. Besson and Company Limited. 77,982; renewed May 24, 1930.
Records, Phonograph E. N. Burns. 271,595; June 10.

CLASS 37

Albums. National Publishing Co. 271,537; June 10; Serial No. 294,988; published Mar. 25, 1930.
Desk reminders. C. B. Gray. 271,494; June 10; Serial No. 295,560; published Mar. 25, 1930.
Envelopes. Gray Envelope Manufacturing Company. 271,603; June 10.
Pads and tallies, Score. Buzza Company 271,597; June 10.
Paper. Mack-Elliott Paper Company. 271,512; June 10; Serial No. 288,968; published Mar. 25, 1930.
Paper book covers. R. S. Cannon. 271,617; June 10.
Paper, Cut-out. S. M. Supplies Co. 271,489; June 10; Serial No. 295,395; published Mar. 25, 1930.
Paper, envelopes, wrapping paper, etc., Writing. I. G. Farbenindustrie Aktiengesellschaft. 271,505; June 10; Serial No. 287,183; published Mar. 25, 1930.
Paper, Mineral-coated. Champion Coated Paper Company. 271,492–3; June 10; Serial Nos. 295,461–2; published Mar. 25, 1930.
Paper towels. Crown Willamette Paper Company. 271,615; June 10.
Paper, Waxed wrapping. American Tissue Mills. 271,571; June 10; Serial No. 290,736; published Mar. 25, 1930.
Paper, Writing and printing. Union Card & Paper Company. 79,616; renewed Sept. 20, 1930.
Pens, pencils, and leads. C. R. Keeran. 271,610; June 10.
Tissues, Toilet. Celiulo Company. 271,504; June 10; Serial No. 287,174; published Feb. 4, 1930.

CLASS 38

Books, bookplates, pamphlets, etc. E. M. Moore. 271,556; June 10; Serial No. 292,543; published Mar. 25, 1930.
Placards advertising cinematograph shows. Compagnie Generale de Phonographes, Cinematographes et Appareils de Precision. 76,964; renewed Mar. 1, 1930.

CLASS 39

Blouses and shirts. Schiff Bros. 271,590; June 10.

Cloaks and suits. Siegel & Alenikoff. 271,587; June 10.
Garters. George Frost Company. 79,118; renewed Aug. 9, 1930.
Hosiery. Fleetwood Hosiery Corporation. 271,592; June 10.
Hosiery and underwear. L. Solomon. 271,582; June 10.
Neckties or cravats. Ohio Textile Products Company. 271,609; June 10.
Shirts, union suits, pajamas, and collars. James A. Hearn & Son, Inc. 271,605; June 10.
Supporters and garters, Hose. George Frost Company. 79,972; renewed Oct. 25, 1930.
Sweaters, slip-over sweaters, lounging robes, bathing suits. E. Kantor. 271,601; June 10.
Waists and shirt waists, Ladies'. A. Solomon. 77,840; renewed May 10, 1930.

CLASS 42

Cotton and woolen piece goods. Wilkin & Adler, Inc. 271,564; June 10; Serial No. 284,105; published July 30, 1929.
Cotton piece goods. Boott Mills. 79,402; renewed Sept. 6, 1930.
Cotton sheeting, Brown. Grendel Mills. 78,433; renewed June 14, 1930.
Fabrics. Bethlehem Textiles Company. 271,567; June 10; Serial No. 289,178; published Mar. 25, 1930.
Goods, Piece. Duplan Silk Corporation. 271,502; June 10; Serial No. 296,051; published Mar. 25, 1930.
Goods, Piece. Societe A Responsabilite Limitee Rodier. 271,501; June 10; Serial No. 295,957; published Mar. 25, 1930.
Silk crepes in the piece. William Skinner & Sons. 271,543; June 10; Serial No. 294,745; published Mar. 25, 1930.
Silk piece goods. Rogers & Thompson. 77,381; renewed Apr. 5, 1930.

CLASS 43

Thread and artificial spinning fibers, Artificial silk. I. G. Farbenindustrie Aktiengesellschaft. 271,521; June 10; Serial No. 294,156; published Mar. 18, 1930.
Thread and yarn. American Manufacturing Company. 271,514; June 10; Serial No. 289,170; published Mar. 25, 1930.

CLASS 44

Plastic compositions for making gums for artificial teeth. A. Biber. 78,933; renewed July 26, 1930.

Toothpicks. Forster Manufacturing Company. 77,991; renewed May 24, 1930.

CLASS 46

Candy. H. D. Foss & Co. 271,500; June 10; Serial No. 295,896; published Mar. 25, 1930.
Cereal, Breakfast. Sims Malt-O-Wheat Company. 271,607; June 10.
Chocolate covering prepared for ice cream. White-Stokes Co. Inc. 271,579; June 10; Serial No. 295,706; published Mar. 25, 1930.
Cocoa preparation combined with milk, skimmed milk, and sugar. Cauchois Coffee Company. 271,580; June 10; Serial No. 295,780; published Mar. 25, 1930.
Coffee. E. B. Millar & Company. 79,071; renewed Aug. 2, 1930.
Coffee, Blended. H. D. Lee Mercantile Company. 79,590; renewed Sept. 20, 1930.
Fruit and imitation food-flavoring extract, True. M. Paul. 271,578; June 10; Serial No. 295,756; published Mar. 25, 1930.
Maltose powder for food purposes. Schreiber Products Corporation. 271,591; June 10.
Noodles, macaroni, spaghetti, Egg. Mrs. C. H. Smith Noodle Co. 271,602; June 10.
Pumpernickel. Lust's Health Food Bakery, Inc. 271,604; June 10.

CLASS 50

Articles made of nonprecious metal. American Metal Crafts Company. 271,515–16; June 10; Serial Nos. 292,516–17; published Mar. 25, 1930.
Artificial leather. Brown Company. 271,554; June 10; Serial No. 294,205; published Mar. 25, 1930.
Brooders. American Steel Products Co. 271,568; June 10; Serial No. 289,955; published Mar. 25, 1930.
Mats for use in the stereotyping process of printing, Dry. Morley Button Manufacturing Company. 271,485; June 10; Serial No. 295,039; published Mar. 25, 1930.
Nonmetallic sheet material. General Electric Company. 271,534; June 10; Serial No. 294,003; published Mar. 25, 1930.
Statues and medals, badges, etc. American Central Office of Saint Therese. 271,503; June 10; Serial No. 285,760; published Mar. 25, 1930.

ALPHABETICAL LIST OF LABELS

Barbasol. For Shaving Cream. Barbasol Company. 37,555; June 10.
Blue Diamond. For Honey. Packing and Marketing, Incorporated. 37,561; June 10.
Flavor Fed Poultry Products. For Poultry Products. M. W. Uecker. 37,566; June 10.
Giglio Brand. For Macaroni. Savoia Macaroni Mfg. Co. Inc. 37,563; June 10.
Gingham. For Raspberry Preserves. Peter J. Kasper Company. 37,559; June 10.
Git Um Dust Cloth. For Dust Cloths. Auto Supplies Manufacturing Co. 37,553; June 10.
Jucy-Bite. For Prunes. Prune Growers Co-Operative Association. 37,562; June 10.
Per-Od-Ex. For Ointment Deodorant. Barbasol Company. 37,554; June 10.
Prosperity. For Boxes. Hoague-Sprague Corporation. 37,558; June 10.
Royal. For Sandwich Spread. Standard Brands Incorporated. 37,564; June 10.
Seedtown Lawn Grass Mixture. For Lawn Grass Seed. Warren-Teed Seed Company. 37,568; June 10.
Sommer and Kaufmann. For Boxes. Hoague-Sprague Corporation. 37,557; June 10.
The Original Black Cat Top Dressing. For Top Dressing. H. S. Ellis. 37,556; June 10.
Thorobread. For Canned Dog Food. Thorobread Company. 37,565; June 10.
Uzit. For Chemicals. M. L. Uzit. 37,567; June 10.
Young's Essence. For Flavoring Extract. J. C. Millett Company. 37,560; June 10.

ALPHABETICAL LIST OF PRINTS

And Now . . . Palm Beach Colors in Gordon Individually-Proportioned Stockings. For Hosiery. Brown Durrell Company. 12,587; June 10.
Elizabeth Arden Opens Her New Doorway to Loveliness at 691 Fifth Avenue. For Toilet Preparations. Elizabeth Arden Inc. 12,583; June 10.
Every House Wife Knows that there's nothing like Oven-Baking to make Beans Tender. For Oven-Baked Beans. H. J. Heinz Company. 12,590; June 10.
Hercules Tear Gas Fountain Pen Gun. For Tear Gas Pistols or Guns. P. Von Frantzius. 12,595; June 10.
Hills Bros. Coffee—But It Here! For Coffee. Hills Bros. 12,593; June 10.
If a Loom Actually Wove Stockings on your Legs. For Hosiery. Brown Durrell Company. 12,588; June 10.
In Keeping. For Olives, Mayonnaise, Salad Dressing, Sandwich Relish, Sweet Mustard Pickles, and Sweet Pickles. H. J. Heinz Company. 12,591; June 10.
Joy. For Perfume. Elizabeth Arden Inc. 12,585; June 10.
Love may be the Purpose of Life but Beauty is its Song. For Vienna Youth Mask, a Face Treatment. Elizabeth Arden Inc. 12,584; June 10.
Mammy. For Chocolates. F. H. Roberts Company. 12,594; June 10.
Morning, Noon & Night. For Toilet Powder. H. Bock. 12,586; June 10.
The Sun-Kissed Flavor of Old Gardens. For Vinegar, Ketchup, and Oven-Baked Beans. H. J. Heinz Company. 12,592; June 10.
There is a Movement Among Men. For Athletic Underwear. B. V. D. Company. 12,589; June 10.

ALPHABETICAL LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 10TH DAY OF JUNE, 1930

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). **Includes patents, reissues, and designs.**

Abbott, Adrian O., jr., assignor to Morgan & Wright, Detroit, Mich. Apparatus and method for making tire casings. 1,762,146; June 10.

Abbott, Adrian O., jr., assignor to Morgan and Wright, Detroit, Mich. Method of and apparatus for manufacturing pneumatic tires. 1,762,752; June 10.

Aberfoyle Manufacturing Company. (See Ashton, Francis E., assignor.)

Aborn, Edward, East Orange, N. J. Coffeepot construction. 1,762,207; June 10.

Aborn, Edward, East Orange, N. J. Coffee-brewing apparatus. 1,762,208; June 10.

Aborn, Edward, East Orange, N. J. Coffee extraction. 1,762,209; June 10.

Abrahamson, Edwin W., assignor to Twin-Plex Metal Manufacturing Corporation, Buffalo, N. Y. Window. 1,762,460; June 10.

Adams, Edgar L., assignor to R. H. Angell, Dayton, Ohio. Producing embossed escutcheons, name plates, labels, and the like. 1,762,539; June 10.

Adams, Fred E., assignor to U. S. Bobbin & Shuttle Company, Providence, R. I. Shuttle tension. 1,763,547; June 10.

Adams, Joseph W., Lexington, Ky. Gate. 1,763,414; June 10.

Agfa Ansco Corporation. (See Miller, Alfred, assignor.)

Agobian, George, Brooklyn, N. Y. Vise. 1,763,634; June 10.

Ainsworth, Chester D., Wollaston, assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass. Electric switch and contact structure therefor. 1,762,604; June 10.

Aircraft Development Corporation. (See Upson, Ralph H., assignor.)

Air Development Company. (See Shadle, Clinton F., assignor.)

Aktiebolaget Ljungströms Angturbin. (See Ljungström, Fredrik, assignor.)

Aktiebolaget Ljungströms Angturbin. (See Söhr, E., and Ljungström, assignors.)

Aktiengesellschaft Brown, Boveri and Cie. (See Prantl, Franz, assignor.)

Albrecht, Albert W., University City, Mo. Cast-metal car body. 1,762,375; June 10.

Albrecht, Eduard, et al. (See Herz, R., Runne, and Albrecht.)

Alemite Corporation. (See Davis, Ernest W., assignor.)

Alemite Corporation. (See Murphy, Howard J., assignor.)

Alemite Corporation. (See Wedeberg, Reuben, assignor.)

Alland, Maurice, Atlantic City, N. J. Elastic-propelled sound-emitting toy vehicle. 1,762,461; June 10.

Allen, Grosvenor N., and C. A. Bennett, assignors to Oneida Community, Limited, Oneida, N. Y. Spoon or similar article. Des. 81,317; June 10.

Allen, Grosvenor N., Oneida, and L. V. M. Helander, Niagara Falls, assignors to Oneida Community, Limited, Oneida, N. Y. Spoon or similar article. Des. 81,316; June 10.

Allen, Scott E., and O. N. Wiswell, assignors, by mesne assignments, to C-O-Two Fire Equipment Company, Los Angeles, Calif. Diaphragm head for puncturing closure disks. 1,762,806; June 10.

Allen, Vera, Seattle, Wash. Domestic baking oven. 1,762,540; June 10.

Allis-Chalmers Manufacturing Company. (See Kane, John J., assignor.)

Allis-Chalmers Manufacturing Company. (See Paatsch, Frank H., assignor.)

Allison, Harry S., assignor to W. D. Allison, Indianapolis, Ind. Examining and irrigating table. 1,762,944; June 10.

Allison, William D. (See Allison, Harry S., assignor.)

Alloy Welding Processes Limited. (See Clarke, Edward J., assignor.)

Allred, Byron H., Boise, Idaho. Pump. 1,762,708; June 10.

Allyne, Edmund E. (See Schickler, Albert C., assignor.)

Allyne, Edmund E., Cleveland Heights, Ohio. Absorption refrigerating apparatus. 1,762,147; June 10.

Altgelt, Herman E., South Bend, Ind., assignor, by mesne assignments, to Oliver Farm Equipment Company. Gear-transmission lubrication. 1,762,210; June 10.

Altman, Fred E., assignor to Eastman Kodak Company, Rochester, N. Y. Light system for photographic-printing machines. 1,763,208; June 10.

Altmar Steel Products Company. (See De Garay, Francis, assignor.)

Aluminum Company of America. (See Petrey, Arthur W., assignor.)

Alvord, Earl B., assignor, by mesne assignments, to The Grasselli Chemical Company, Cleveland, Ohio. Fungicide. 1,762,709; June 10.

Amendolara, Joseph. (See Bolger, Robert S., assignor.)

Amendolara, Joseph A., New York, N. Y. Loading apparatus. 1,763,560; June 10.

American Car and Foundry Company. (See Rohlfing, John M., assignor.)

American Cuptor Corporation. (See Wicks, Clifford P., assignor.)

American Cyanamid Company. (See Cooper, K. F., and Moore, assignors.)

American Electrical Heater Company. (See Kuhn, F., and Thomas, assignors.)

American Fixture & Showcase Manufacturing Company. (See Mendle, Milton D., assignor.)

American Laundry Machinery Company, The. (See Pauly, Robert C., assignor.)

American Laundry Machinery Company, The. (See Sando, Joseph B., assignor.)

American Manganese Steel Company. (See Blakemore, Arthur L., assignor.)

American Paper Bottle Company, The. (See Van Wormer John R., assignor.)

American Rolling Mill Company, The. (See Tytus, John B., assignor.)

American Safety Device Co. (See Davidson, Frederic A., assignor.)

American Sheet and Tin Plate Company. (See Holden, J. H., O'Brien, Whetzel, and Zimmerman, assignors.)

American Smelting and Refining Company. (See Rathbun, Ross B., assignor.)

American Telephone and Telegraph Company. (See Baldwin, Charles E., assignor.)

American Telephone and Telegraph Company. (See Carter, Charles W., jr., assignor.)

American Telephone and Telegraph Company. (See Singer, Fred J., assignor.)

American Telephone and Telegraph Company. (See Vernam, Gilbert S., assignor.)

American Tool & Machine Company. (See Arnold, Henry F., assignor.)

American Window Shade Machine Co. Inc. (See Mathewson, Wilfred B., assignor.)

Amos, Otto A., Chicago, Ill. Air valve. 1,762,148; June 10.

Anchor Corrugating Construction Co. (See Braunstein, Achille, assignor.)

Andersen, Harry A., assignor to Hamilton Beach Manufacturing Company, Racine, Wis. Drink mixers. 1,762,376; June 10.

Anderson, Carl E., Stratford, and W. H. Keefe, jr., assignors to The Bryant Electric Company, Bridgeport, Conn. Circuit breaker. 1,763,384; June 10.

Anderson, Carl F., Brookfield, and R. W. Janda, Berwyn, assignors to Conlon Corporation, Cicero, Ill. Table structure. 1,762,605; June 10.

Anderson, Harry J. (See Anderson, James B., and H. J.)

Anderson, James B. and H. J., Shaler Township, Allegheny County, Pa. Burner. 1,763,289; June 10.

Anderson, Sidney E., Maplewood, N. J., assignor to Western Electric Company, Incorporated. Radio receiving system. 1,762,945; June 10.

Anderson, Thomas F. (See Carpenter, R. F., and Anderson.)

Anderson, Walter E., Pocatello, Idaho. Door latch. 1,763,548; June 10.

Andrews, Franklin O., Willoughby, and L. Steinfurth, Cleveland, assignors to The Economy Engineering Company, Willoughby, Ohio. Combined automatic bolt pointing and threading machine. 1,762,649; June 10.

Andrews, L. V., assignor to Riley Stoker Corporation, Worcester, Mass. Burning powdered fuel. 1,762,462; June 10.

Andrews, L. V., assignor to Riley Stoker Corporation, Worcester, Mass. Pulverizing apparatus. 1,763,496; June 10.

Angell, Robert H. (See Adams, Edgar L., assignor.)

Apple, Vincent G., Dayton, Ohio. Electric starting device for internal-combustion engines. 1,763,549; June 10.

Appleton Electric Company. (See Brachtl, Henry, assignor.)

Archer, Capelle H., Tampa, Fla. Nozzle holder and sprinkler. 1,763,119; June 10.

Archer Rubber Company. (See Emery, Herbert W., assignor.)

Archini, Angelo. (See Nicolayson, Jens K., assignor.)

Armor Electric Manufacturing Company. (See Preedit, Anton, assignor.)

Arnold, Harry C. (See Hartwick, F. H., and Arnold.)

Arnold, Henry F., Hyde Park, assignor to American Tool & Machine Company, Boston, Mass. Idler pulley. 1,762,149; June 10.

Arnold, Otto, Schmiedefeld, Germany. Blood pipette. 1,762,807; June 10.

Arones, George B., Minneapolis, Minn. Device for feeding cutting compounds and the like. 1,763,290; June 10.

Aronson, Louis V., Newark, N. J. Lamp stand or similar article. Des. 81,318; June 10.

Aronson, Louis V., Newark, N. J., assignor to Art Metal Works, Inc. Indicating device. 1,762,753; June 10.

Arsem, William C., assignor to Industrial Technics Corporation, Schenectady, N. Y. Production of dry levulose or carbohydrate mixtures. 1,763,080; June 10.

Art Metal Construction Company. (See Ulrich, Charles B., assignor.)

Art Metal Works, Inc. (See Aronson, Louis V., assignor.)

Aseltine, Fred E., and W. H. Teeter, assignors, by mesne assignments, to Delco Products Corporation, Dayton, Ohio. Charge-forming device. 1,762,463; June 10.

Ashton, Francis E., assignor to Aberfoyle Manufacturing Company, Chester, Pa. Weft-inserting mechanism. 1,762,377; June 10.

Aspinwall, Louis M., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Electropneumatic brake. 1,763,120; June 10.

Atkinson, Herbert S., East Orange, N. J., assignor to The Hayward Company, New York, N. Y. Bucket or grapple. 1,762,946; June 10.

Atlantic Refining Company, The. (See Ehlers, Carl H., assignor.)

Atlas Bolt & Screw Company, The. (See Schellentrager Eugene W., assignor.)

Atwood, Seth B., Rockofrd, Ill. Making covered-joint hinge members. 1,763,337; June 10.

Auberlin, William, Northfield, Ohio. Advertising-card holder. 1,762,321; June 10.

Aubertin, Vilhelm T., Valby, near Copenhagen, Denmark. Woodworking machine. 1,763,497; June 10.

Auerbach, Karl, Saalfeld-on-the-Saale, Germany, assignor to H. F. Hoevel, New York, N. Y. Machine for forming cranks. 1,763,338; June 10.

Aull, Harry, assignor to Friedberger-Aaron Manufacturing Company, Philadelphia, Pa. Elastic webbing. Des. 81,319; June 10.

Aultman, Joseph T., Milwaukee, Wis. Billboard. Des. 81,320; June 10.

Austin, John B., Cleveland, Ohio, assignor to The Ohio Brass Company, Mansfield, Ohio. Rail bond and method of applying. 1,763,032; June 10.

Auto Specialties Mfg. Co. (See Lucker, Millard B., assignor.)

Automatic Electric Inc. (See Lomax, Clarence E., assignor.)

Automatic Transportation Company, The. (See Gfrorer, Albert H., assignor.)

Avers, Franklin H., Portage, Wis. Motion-picture machine. 1,762,378; June 10.

Ayers, Owen H., and C. Mobley, Dayton, Ohio. Bathroom equipment. 1,763,209; June 10.

B. G. Corporation, The. (See Hurley, Roy T., assignor.)

B. O. T. Mfg. Co. (See Tilden, Bert O., assignor.)

Babcock & Wilcox Company, The. (See Shannon, Don H., assignor.)

Babcock & Wilcox Tube Company, The. (See Ornitz, Nathaniel B., assignor.)

Bach, Adolph D., Newtonville, Mass. Spring forming and hardening device. 1,763,610; June 10.

Bach, George W., assignor to Union Iron Works, Erie, Pa. Furnace. 1,763,210; June 10.

Backus, Rodman T. (See Gunderson, G., Erickson, and Backus.)

Baerk Perkins Co. Inc. (See Baker, George R., assignor.)

Bailey, Charles H. (See Chamberlain, T. B., and Bailey.)

Bailey, Joseph O., Atlanta, Ga. Agitating conveyer. 1,763,121; June 10.

Bailey, Joseph O., Atlanta, Ga. Spray conveyor. 1,763,122; June 10.

Bakelite Corporation. (See Peakes, Gilbert L., assignor.)

Baker, George R., London, England, assignor to Baker Perkins Co. Inc., Saginaw, Mich. Mold such as used in the manufacture of wafer biscuits and for other purposes. 1,763,211; June 10.

Baker, Herbert K., Detroit, Mich., assignor to Penn Metal Company, Cambridge, Mass. Metal lath. 1,7623,322; June 10.

Baker, Hugh J., Indianapolis, Ind. Adjustable shore. 1,762,567; June 10.

Baker Perkins Company. (See Devlin, Henry, assignor.)

Baker Perkins Company. (See Eggert, Gustav B., assignor.)

Baker Perkins Company. (See Engels, Eugene O., assignor.)

Baker Perkins Company. (See Paterson, John C., assignor.)

Baker Perkins Company. (See Thurm, R., and Schmierer, assignors.)

Baker Perkins Company Incorporated. (See Pointon, J. E., and Harber, assignors.)

Bakken, Andrew H. (See MacNeill, J. B., Bakken, and Tucker.)

Baldwin, Charles E., Stanhope, N. J., assignor to American Telephone and Telegraph Company. Plugging cables. 1,762,255; June 10.

Baldyzar, Stephen, Racine, Wis. Radiator-heating connection for boilers. 1,762,808; June 10.

Bamford, Frank L., assignor to C. M. Hall Lamp Company, Detroit, Mich. Reflector-gasket retainer. 1,762,150; June 10.

Barber-Greene Company. (See Barber, Harry H., assignor.)

Barber, Harry H., assignor to Barber-Greene Company, Aurora, Ill. Ditch-digging machine. 1,762,568; June 10.

Barber, Harry H., assignor to Barber-Greene Company, Aurora, Ill. Ditching machine. 1,762,569; June 10.

Barber, Howard M., Pawcatuck, Conn., assignor to C. B. Cottrell & Sons Company, Westerly, R. I. Rotary web-printing press for bag blanks. 1,763,123; June 10.

Barber, Howard M., Pawcatuck, Conn., assignor to C. B. Cottrell & Sons Company, Westerly, R. I. Plate cylinder for printing presses. 1,763,124; June 10.

Barber, Lee W., and E. W. Webb, assignors to Standard Car Truck Company, Chicago, Ill. Side bearing for cars. 1,763,081; June 10.

Barbieri, Cesare, New York, N. Y., assignor, by mesne assignments, to Vortex Cup Company, Chicago, Ill. Blank-feeding machine. 1,762,947; June 10.

Barbieri, Cesare, New York, N. Y., assignor, by mesne assignments, to Vortex Cup Company, Chicago, Ill. Conical-cup dispenser. 1,762,948; June 10.

Barnett, Arthur J., New York, N. Y., assignor to The Worcester Knitting Co., Worcester, Mass. Bathing suit. 1,763,212; June 10.

Baron, Charles S., Tiffin, Ohio. Container, handle, and top therefor and means of union thereof. 1,763,125; June 10.

Baron, E. E., et al. (See Stephenson, Preston C., assignor.)

Barrows, Allan S., Los Angeles, Calif., assignor to The Youngstown Steel Door Company, Cleveland, Ohio. Metallic car door. 1,762,151; June 10.

Barry, Jerry, Melfort, Saskatchewan, Canada. Cooker. 1,763,126; June 10.

Barth, Paul, et al. (See Dopyera, John, assignor.)

Bartling, Friedrich, Munich, Germany. Charging device for ovens of the rotary annular sole-plate type. 1,763,453; June 10.

Bashara, Joseph F., et al. (See Rains, Joshua C., assignor.)

Bassett, Robert S., Buffalo, N. Y. Liquid meter. 1,762,949; June 10.

Bassett, Robert S., Buffalo, N. Y. Liquid meter. 1,763,213; June 10.

Bates, Harry H., Ridley Park, Pa., assignor to Westinghouse Electric & Manufacturing Company. Coal pulverizer. 1,762,379; June 10.

Bates & Klinke, Inc. (See Klinke, Oscar F., assignor.)

Bauch, Kurt. (See Helma, P., and Bauch.)

Bauer, Charles A., and C. B. Gustafson, assignors to Indian Motorcycle Company, Springfield, Mass. Air-cooled cylinder. 1,763,082; June 10.

Bauer, Emil. (See Steinhardt, M., and Bauer.)

Bauer, Emory L., Fort Wayne, Ind. Clamping device. 1,762,323; June 10.

Baumé, Edwall J., Santa Monica, Calif. Latch-bolt structure. 1,762,499; June 10.

Bausch & Lomb Optical Company. (See Williamson, Milton C., assignor.)

Bausman, Alonzo L., assignor to National Equipment Company, Springfield, Mass. Feeding apparatus for confectionery machines. 1,763,083; June 10.

Bausman, Alonzo L., assignor to National Equipment Company, Springfield, Mass. Feeding apparatus for confectionery machines. 1,763,084; June 10.

Bausman, Alonzo L., assignor to National Equipment Company, Springfield, Mass. Apparatus for forming confection shells. 1,763,085; June 10.

Bausman, Alonzo L., assignor to National Equipment Company, Springfield, Mass. Apparatus for tempering chocolate and the like. 1,763,086; June 10.

Beach, George F., assignor, by mesne assignments, to Ryan, Scully & Company, Philadelphia, Pa. Valve apparatus. 1,763,385; June 10.

Beach, George F., assignor, by mesne assignments, to Ryan, Scully & Company, Philadelphia, Pa. Furnace conveyer. 1,763,386; June 10.

Beach, George F., assignor, by mesne assignments, to Ryan, Scully & Company, Philadelphia, Pa. Oil burner. 1,763,387; June 10.

Beail, Louis H., Louisville, Ky. License and registry lock. 1,763,087; June 10.

Beauchamp, Dora F., Forest Hills, N. Y. Adjustable reflector. 1,763,550; June 10.

Beauchamp, George D., et al. (See Dopyera, John, assignor.)

Beck, Andrew E., Sarasota, Fla. Edge-trimming attachment for lawn mowers. 1,763,339; June 10.

Beck-Frost Corporation. (See Pembleton, James D., assignor.)

Beer, Georg, Wiesbaden, Germany. Piston ring. 1,763,127; June 10.

Beers, Henry S., Westport, Conn., assignor to The Turbo-Mixer Corporation, New York, N. Y. Mixing apparatus. 1,762,950; June 10.

Beese, Herman, assignor to Ribside Furnace Company, Wausau, Wis. Drum for furnaces. 1,762,951; June 10.

Behnke, Cord H., Flushing, assignor, by mesne assignments, to Moto Meter Gauge & Equipment Corporation, Long Island City, N. Y. Retaining device. 1,762,757; June 10.

Behnke, Guy E., assignor to Reed Roller Bit Company, Houston, Tex. Roller-cutter mounting. 1,762,570; June 10.

Behr, Siegfried. (See Samuels, Frances, assignor.)

Beissel, P. G., executor. (See Towner, Heber F.)

Belden Manufacturing Company. (See Wermine, Hugo H., assignor.)

Belfield, Stafford C., Twickenham, England. Apparatus for regulating the temperature of the oil contained in the sumps of internal-combustion engines. 1,762,464; June 10.

Bell, John H., South Orange, N. J., assignor to Western Electric Company, Inc., New York, N. Y. Duplex telegraph system. 1,762,952; June 10.

Bell Telephone Laboratories, Incorporated. (See Bennett, A. F., and Mitchell, assignors.)

Bell Telephone Laboratories, Incorporated. (See Black, Harold S., assignor.)

Bell Telephone Laboratories, Incorporated. (See Buckley, Oliver E., assignor.)

Bell Telephone Laboratories, Incorporated. (See Burkholder, John C., jr., assignor.)

Bell Telephone Laboratories, Incorporated. (See Collis, Raymond E., assignor.)

Bell Telephone Laboratories Incorporated. (See Dickieson, Alton C., assignor.)

Bell Telephone Laboratories, Incorporated. (See Entz, Ferdinand S., assignor.)

Bell Telephone Laboratories, Incorporated. (See Farnsworth, Frank F., assignor.)

Bell Telephone Laboratories, Incorporated. (See Field, Joseph C., assignor.)

Bell Telephone Laboratories, Incorporated. (See Frederick, Halsey A., assignor.)

Bell Telephone Laboratories, Incorporated. (See Fry, Jacob R., assignor.)

Bell Telephone Laboratories Incorporated. (See Ganz Albert G., assignor.)

Bell Telephone Laboratories, Incorporated. (See Gilbert, John J., assignor.)

Bell Telephone Laboratories, Incorporated. (See Goodrum, Charles L., assignor.)

Bell Telephone Laboratories, Incorporated. (See Hartley, Ralph V. L., assignor.)

Bell Telephone Laboratories, Incorporated. (See Heising, Raymond A., assignor.)

Bell Telephone Laboratories, Incorporated. (See Hinrichsen, Edward E., assignor.)

Bell Telephone Laboratories, Incorporated. (See Jones, Warren C., assignor.)

Bell Telephone Laboratories, Incorporated. (See King, Gerald V., assignor.)

Bell Telephone Laboratories, Incorporated. (See Koechling, C. D., and King, assignors.)

Bell Telephone Laboratories, Incorporated. (See Krom, Myron E., assignor.)

Bell Telephone Laboratories, Incorporated. (See Legg, Victor E., assignor.)

Bell Telephone Laboratories, Incorporated. (See Manderfeld, Emanuel C., assignor.)

Bell Telephone Laboratories, Incorporated. (See Marrison, Warren A., assignor.)

Bell Telephone Laboratories, Incorporated. (See Mathes, Robert C., assignor.)

Bell Telephone Laboratories, Incorporated. (See McKeehan, Louis W., assignor.)

Bell Telephone Laboratories, Incorporated. (See Mead, Edward D., assignor.)

Bell Telephone Laboratories, Incorporated. (See Meyer, Delbert C., assignor.)

Bell Telephone Laboratories, Incorporated. (See Miller, O. R., and Mead, assignors.)

Bell Telephone Laboratories, Incorporated. (See Murphy, Paul B., assignor.)

Bell Telephone Laboratories, Incorporated. (See Peterson, Eugene, assignor.)

Bell Telephone Laboratories, Incorporated. (See Priessman, Neil Y., assignor.)

Bell Telephone Laboratories, Incorporated. (See Schwartz, E. L., and Williams, assignors.)

Bell Telephone Laboratories, Incorporated. (See Shann, Oscar A., assignor.)

Bell Telephone Laboratories, Incorporated. (See Sivian, Leon J., assignor.)

Bell Telephone Laboratories, Incorporated. (See Stacy, L. J., and Krom, assignors.)

Bell Telephone Laboratories, Incorporated. (See Stevenson, George H., assignor.)

Bell Telephone Laboratories, Incorporated. (See Vieth, William F., assignor.)

Bell Telephone Laboratories, Incorporated. (See Wood, Ernest B., assignor.)

Bellini, Ettore, Paris, France. Multiple-amplifier arrangement. 1,763,388; June 10.

Bendix Brake Company. (See Bendix, Vincent, assignor.)

Bendix Brake Company. (See Dodge, Adiel Y., assignor.)

Bendix Brake Company. (See La Brie, Ludger E., assignor.)

Bendix Brake Company. (See Long, L. E., and Whitworth, assignors.)

Bendix Brake Company. (See Norton, Raymond J., assignor.)

Bendix Brake Company. (See Sanford, Roy S., assignor.)

Bendix, Vincent, assignor to Bendix Brake Company, Chicago, Ill. Brake backing plate. 1,762,710; June 10.

Bennett, Arthur F., Richmond Hill, and C. E. Mitchell, assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y. Signaling system. 1,762,139; June 10.

Bennett, Charles A. (See Allen, G. N., and Bennett.)

Bennett, Edson L., Hudson, N. Y. Florist's pick. 1,762,908; June 10.

Bentley Motors Limited. (See Burgess, F. T., and Sewell, assignors.)

Berbeck, Train, Baltimore, Md. Safety device for airplanes. 1,763,498; June 10.

Bernard, William A., assignor to The William Schollhorn Company, New Haven, Conn. Wrench. 1,762,324; June 10.

Bernhard, Annie M., executrix. (See Schrader, Gustave, C. C.)

Bernhard, Harry I. See Schrader, Gustave, C. C., assignor.)

Berry, Edwin D., Palmerston North, New Zealand. Apparatus for use in coating cheeses with paraffin wax or the like and in other analogous operations. 1,762,909; June 10.

Berry, John F., Lewis, Iowa. Auxiliary sustaining means for airplanes. 1,763,454; June 10.

Bessant, George M., San Bernardino, Calif. Electromagnetic locomotive bell ringer. 1,762,500; June 10.

Best Die Casting & Stamping Co. (See Mariani, Frank N., assignor.)

Bestelmeyer, Adolf, Frankfort-on-the-Main, assignor to Hartmann & Braun Aktiengesellschaft, Frankfort (Main), West, Germany. Optical pyrometer. 1,762,380; June 10.

Bethlehem Steel Company. (See Fosdick, Alexander H., assignor.)

Bethlehem Steel Company. (See Hoffman, Philip J., assignor.)

Bettendorf Company, The. (See Clasen, Claus J. W., assignor.)

Bianchi, Valentino L. (See Francesconi, E., and Bianchi.)

Biddle, Arthur, Trenton, N. J., assignor to United Products Corporation of America. Composition of matter comprising resins and rubber in aqueous disperson and making the same. 1,762,152; June 10.

Biddle, Arthur, Trenton, N. J., assignor to United Products Corporation of America. Treating aqueously-dispersed colloidal substances. 1,762,153; June 10.

Birch, Charles H., Joliet, Ill. Apparatus for comminuting materials. 1,762,881; June 10.

Bissell, Richard E., Cleveland Heights, assignor to Thompson Products Inc., Cleveland, Ohio. Poppet valve. 1,763,340; June 10.

Bjorklund, Arvid, Minneapolis, Minn. Abrading machine. 1,762,606; June 10.

Black, Harold S., East Orange, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Phantom carrier circuit. 1,762,754; June 10.

Black, Harold S., East Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Signaling system. 1,762,953; June 10.

Black, Harold S., Montclair, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Reducing crosstalk in carrier-current signaling systems. 1,762,755; June 10.

Blackstone Silver Company. (See Ittig, George P., assignor.)

Blair, Daniel W. (See Strauss, A. C., and Blair.)

Blair, John H., Chicago, Ill. Mining machine. 1,762,154; June 10.

Blair, John H., assignor to W. F. Hollingsworth, San Francisco, Calif. Lawn mower. 1,762,287; June 10.

Blair, Robert S., Sound Beach, and B. D. Wells, Danbury, Conn.; said Wells assignor to said Blair. Heating apparatus. 1,762,325; June 10.

Blake Manufacturing Company. (See Shannon, James L., assignor.)

Blakemore, Arthur L., Chicago Heights, assignor to American Manganese Steel Company, Chicago, Ill. Balancing rotary bodies having radiating blades. 1,762,140; June 10.

Bliss, E. W., Company. (See Klocke, William, assignor.)

Blowers, William R., Detroit, Mich. Piston. 1,762,541; June 10.

Boden, Oliver, Birmingham, England. Mounting dynamos on motor vehicles. 1,762,571; June 10.

Boehle, Frederick. (See Merolle, A. L., and Boehle.)

Bolger, Robert S., Jamaica, assignor to J. Amendolara, New York, N. Y. Loading apparatus. 1,763,499; June 10.

Bolin, Leonard M. (See Bolin, Stanley, assignor.)

Bolin, Stanley, assignor of one-half to L. M. Bolin, Chicago, Ill. Cover for vehicle springs. 1,762,954; June 10.

Bolin, Stanley, assignor of one-half to L. M. Bolin, Chicago, Ill. Cover for vehicle springs. 1,762,955; June 10.

Boll, Lester P., Maplewood, assignor to W. N. Matthews Corporation, St. Louis, Mo. Cartridge. 1,762,607; June 10.

Bolland, Arthur M., Lockport, N. Y. Safety holder. 1,763,128; June 10.

Bondziulis, Charles A., Waterbury, Conn. Automatic stop for double-pile-fabric looms. 1,762,882; June 10.

Booe, John A. (See Seward, R. R., and Booe.)

Booraem, John F. (See Sutphen, R. M., and Booraem.)

Booraem, John F., Greenwich, Conn. Subaqueous illumination of swimming pools. 1,762,883; June 10.

Booth, William N., assignor to Kelsey-Hayes Wheel Corporation, Detroit, Mich. Apparatus for forming spoke holes in wire wheel rims. 1,762,542; June 10.

Borden Company, The. (See McClatchie, John M., assignor.)

Bossert, William F., and W. R. Burke, assignors to Signal Accessories Corporation, Utica, N. Y. Circuit controller for mechanical interlocking machines. 1,762,141; June 10.

Boughton, John A., Everett, Ohio. Internal-combustion engine. 1,762,650; June 10.

Bovey, Sidney J. V., Chicago, Ill., assignor, by mesne assignments, to Metalcraft Heater Corporation, Grand Rapids, Mich. Combined muffler and heater for vehicles. 1,762,465; June 10.

Bovey, Sidney J. V., Chicago, Ill., assignor, by mesne assignments, to Metalcraft Heater Corporation, Grand Rapids, Mich. Heater for vehicles and the like. 1,762,466; June 10.

Bovey, Sidney J. V., Chicago, Ill., assignor, by mesne assignments, to Metalcraft Heater Corporation, Grand Rapids, Mich. Automobile heaters and the silencing of automobile heaters. 1,762,467; June 10.

Bow, Charles R., Thornlie Bank, Scotland. Seat indicator. 1,762,384; June 10.

Bowen, Charles A., Portsmouth, Ohio. Saw. 1,763,500; June 10.

Bowers, William J. (See Moore, W. D., Loring, and Bowers.)

Bowles, Edward L., Watertown, Mass. Binding post. 1,762,543; June 10.

Bowman, Geo. H., Company, The. (See Pfefferkorn, Frederick F., assignor.)

Boyce, Edwin, Pine Bluff, Ark. Marine craft. 1,763,415; June 10.

Boyuls, Cecil H., Louisville, Ky. Ironing machine. 1,763,597; June 10.

Brachtl, Henry, assignor, by mesne assignments, to Appleton Electric Company, Chicago, Ill. Grounding device. 1,763,214; June 10.

Bradford, Ada G., Oakland, Calif. Dial-telephone attachment. 1,762,809; June 10.

Bradford, William G., Long Beach, Calif., assignor of one-fourth to H. P. Shoebridge and one-fourth to J. L. Foutz. Oil saver and packing head. 1,762,211; June 10.

Bradley, Harry L., et al. (See Wilms, Gustav O., assignor.)

Bradley, Lynde, et al. (See Wilms, Gustav O., assignor.)

Braine, Daniel L., Brooklyn, assignor to The Rail Joint Company, New York, N. Y. Compromise rail-joint bar. 1,763,501; June 10.

Branchu, Paul J., Guerande, France. Extra-rapid circuit breaker. 1,763,502; June 10.

Brantingham, Charles A., assignor to Emerson-Brantingham Corporation, Rockford, Ill. Table. 1,763,341; June 10.

Braun, William F. H., Wynnewood, Pa. Lawn mower. 1,763,215; June 10.

Braunstein, Achille, Brooklyn, assignor to Anchor Corrugating Construction Co., New York, N. Y. Building construction. 1,762,756; June 10.

Bredbury, Thomas, Andover, assignor to Patent Protection Corporation, trustee, Lowell, Mass. Device for cleaning gill-box fallers. 1,762,853; June 10.

Brehmer, Carl F., Philadelphia, Pa. Magic card box. 1,762,501; June 10.

Breton, Paul, Bellevue, France. Vacuum cleaning machine. 1,762,142; June 10.

Brett, Ernest E., Coral Gables, Fla. Bucking machine for football players. 1,762,435; June 10.

Brewer, Eva G., Dallas, Tex. Diaper. 1,762,468; June 10.

Bridgeport Brass Company. (See Oakley, Erastus G., assignor.)

Brierley, Clifton, assignor to Tasty Baking Company, Philadelphia, Pa. Separator for containers. 1,763,416; June 10.

Briggs & Stratton Corporation. (See Stuckert, Felix J., jr., assignor.)

Brill, J. G., Company, The. (See Latshaw, Elmer, assignor.)

British Petroleum Company. (See Fraser, John, assignor.)

British Synthetics Limited. (See Higgins, Eric B., assignor.)

Brittain, Richard J., jr., Newark, and W. H. Chapman, Montclair, N. J., assignors to General Motors Corporation, Detroit, Mich. Headstock and gauge support. 1,762,810; June 10.

Brittingham, Elisha F., Los Angeles, Calif., assignor to Sargent & Company, New Haven, Conn. Lock strike. 1,762,320; June 10.

Broadhurst, Jean, assignor of one-half to S. J. Stanley, New York, N. Y. Making stoppers. 1,763,129; June 10.

Brohman, Alexander W., San Francisco, Calif. Vehicle construction. 1,763,088; June 10.

Brookby, Harry E., Evanston, assignor to The United States Gypsum Co., Chicago, Ill. Chemical printing. 1,763,291; June 10.

Brooks, Ralph O., New York, N. Y. Garment accessory. 1,762,502; June 10.

Brown, Bert L., Long Beach, Calif. Drainpipe cleaner. 1,762,608; June 10.

Brown, Edwin M., Jackson, Mich. Sugar dispenser. 1,763,551; June 10.

Brown, Harold M., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Tire-lining apparatus. 1,763,611; June 10.

Brown Lynch Scott Co. (See Johnson, R. H., and Szekely, assignors.)

Brown, Robert E., Olean, N. Y. Ax guard. 1,762,256; June 10.

Browne-Morse Company. (See Soper, Raymond H., assignor.)

Brun, Etienne (known as Stephane) J., Lyon, France. Apparatus for selecting luminous points of an image for reproduction by television. 1,763,528; June 10.

Bryan, Artis C., Syracuse, N. Y. Oil burner. 1,762,078; June 10.

Bryant Electric Company, The. (See Anderson, C. E., and Keefe, assignors.)

Bryce, James W., Bloomfield, N. J., assignor to The Tabulating Machine Company, Endicott, N. Y. Automatic control system. 1,763,033; June 10.

Bucherer, Hans T., Munich, Germany, assignor to General Aniline Works, Inc., New York, N. Y. 2,3-benzocarbazole-1,4-quinones and preparing the same. 1,763,216; June 10.

Buckeye Traction Ditcher Company, The. (See Van Scoit, Harry B., assignor.)

Buckley, Oliver E., Maplewood, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Signaling conductor. 1,762,956; June 10.

Buckner, William A., Fresno, Calif. Self-closing valve. 1,762,503; June 10.

Buckwalter, Tracy V., assignor to The Timken Roller Bearing Company, Canton, Ohio. Roller-bearing-axle construction. 1,762,609; June 10.

Buerk, August H., Curtice, and H. Gschwend, Waterville, Ohio. Gas plant. 1,763,503; June 10.

Buffalo Foundry & Machine Company. (See Van Marle, Dirk, J., assignor.)

Buffalo Wire Works Co. (See Scheeler, John C., assignor.)

Bull, Clinton H. M., assignor to Reed Roller Bit Company, Houston, Tex. Roller bit. 1,762,504; June 10.

Bultman, George H., and J. C. Horgan, St. Paul, Minn. Ironing board. 1,763,089; June 10.

Bunker, Charles A., assignor to Bunker-Clancey Manufacturing Company, Kansas City, Mo. Adjustable support for clothes hangers or shade fixtures. 1,763,034; June 10.

Bunker-Clancey Manufacturing Company. (See Bunker, Charles A., assignor.)

Bunte Brothers. (See Coffey, John B., assignor.)

Burdette, Richard S., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Wheel assembly. 1,763,576; June 10.

Burz, Eugen, Essen, Germany. Fireplace. 1,762,505; June 10.

Burgess, Frederick T., and C. W. Sewell, assignors of one-third to Bentley Motors Limited, Cricklewood, England. Brake for vehicles. 1,762,758; June 10.

Burke, William R. (See Bossert, W. F., and Burke.)

Burkhardt, Charles F., Washington, D. C. Culinary utensil. 1,762,257; June 10.

Burkholder, John C., jr., East Orange, N. J. assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Volume-control system. 1,762,759; June 10.

Burns, Jabez, & Sons, Inc. (See Kopf, Joseph L., assignor.)

Burson Knitting Company. (See Parker, William S., assignor.)

Bushner, William F. A., Miami, Fla., assignor, by mesne assignments, to Outboard Motors Corporation. Outboard motor. 1,762,957; June 10.

Buss, William D., assignor to The Hammond Manufacturing Company, Cleveland, Ohio. Clutch mechanism for setting threaded articles. 1,762,155; June 10.

Buys, Orville, Pittsburgh, Pa. Movably-supported meter. 1,763,217; June 10.

Buzza, George E., Minneapolis, Minn. Printer's chase and composing stick. 1,763,090; June 10.

C-O-Two Fire Equipment Company. (See Allen, S. E., and Wiswell, assignors.)

Cadman, Addl B., Beloit, Wis., assignor to Warner Electric Brake Corporation, South Beloit, Ill. Magnet construction. 1,762,544; June 10.

Caldwell, Frank W., Dayton, Ohio, assignor to The Hamilton Standard Propeller Corporation, West Homestead, Pa. Propeller for airplanes and dirigible balloons. 1,763,218; June 10.

Callahan, George F., Bloomfield, N. J., assignor to Westinghouse Lamp Company. Mercury switch. 1,762,213; June 10.

Calvert, Landon R., Newark, N. J., assignor to Westinghouse Lamp Company. Apparatus for controlling a fluid flow. 1,762,156; June 10.

Campbell, Benjamin G., assignor of one-half to C. C. Wing, Oakland, Calif. Milk-cap-securing means. 1,762,506; June 10.

Campbell, Harry E., assignor to Campbell Metal Window Corporation, Baltimore, Md. Sash lift. 1,763,577; June 10.

Campbell Metal Window Corporation. (See Campbell, Harry E., assignor.)

Campbell, Samuel J., assignor of one-half to Hudson-Sharp Machine Company, Green Bay, Wis. Paper-creping machine. 1,762,157; June 10.

Campbell, Wallace H., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Deflating machine. 1,763,578; June 10.

Cangemi, Rosario, Boston, Mass. Tailor's square. 1,763,091; June 10.

Caprio, Cleveland, Hawley, Pa. Starting gauge for looms. 1,763,504; June 10.

Capstaff, John G., assignor to Eastman Kodak Company, Rochester, N. Y. Filter and preparing same. 1,762,143; June 10.

Carey, Philip, Manufacturing Company, The. (See Fischer, Albert C., assignor.)

Carpenter, Robert F. and T. F. Anderson, assignors to Sanymetal Products Company, Cleveland, Ohio. Costumer. 1,762,545; June 10.

Carroll, Jack. (See Sealy, P. M., and Carroll.)

Carroll, Stewart J., assignor to Eastman Kodak Company, Rochester, N. Y. Cellulose-ether film and composition for making the same. 1,763,035; June 10.

Carter, Charles W., jr., Brooklyn, N. Y., assignor to American Telephone nad Telegraph Company. Thermionic vacuum tube. 1,762,212; June 10.

Carter, Lionel A., Webster Groves, and C. P. Steinmetz, assignors to Koken Companies, St. Louis, Mo. Electrically-operated barber pole. 1,762,958; June 10.

Cartwright, Edney B., Chattanooga, Tenn. Grave marker and flower stand. 1,763,130; June 10.

Cartwright, Horace A., Toledo, Ohio. Internal-combustion motor. 1,762,214; June 10.

Case, Francis M., Cleveland Heights, assignor to The Enterprise Manufacturing Company, Akron. Lubricating cap nut for fishing reels. 1,762,158; June 10.

Cash, Robert J., Los Angeles, Calif.* Golf-club head. Des. 81,321; June 10.

Castelli, Luigi, et al. (See Righetto, Ruggero, assignor.)

Casto, Lloyd V., assignor to Oxford Varnish Corporation, Detroit, Mich. Reproducing surface appearance of natural objects. 1,762,711; June 10.

Cauley, C. L., et al. (See Crowe, Frederic C., assignor.)

Cauley, S. H., et al. (See Crowe, Frederic C., assignor.)

Caux, Théophile, Lawrence, Mass. Drawing-in-filling preventer. 1,763,456; June 10.

Cavagnaro, John J., Ridgewood, N. J. Press. 1,763,131; June 10.

Chalkley, Lyman, jr., State College, Pa. Machine for exhibiting photoluminescent images. 1,762,760; June 10.

Chamberlain, Thomas B., Boston, and C. H. Bailey, Hingham, Mass. Display holder for lamp shades. 1,762,761; June 10.

Chamberlin Metal Weatherstrip Co. (See Glaser, J. P., and Julien, assignors.)

Chapman, Penrose E., St. Louis, Mo. Ice-cream spoon. 1,763,389; June 10.

Chapman, William H. (See Brittain, R. J. jr., and Chapman.)

Chappory, Andrew C., jr. (See Crossmore, E. Y., and Chappory, and Posey.)

Charlton, Ernest E., Schenectady, N. Y., assignor to General Electric Company. Glow-tube-measuring device. 1,762,712; June 10.

Charlton, Ernest E., Schenectady, N. Y., assigonr to General Electric Company. Electric timing device. 1,762,811; June 10.

Chase, Ethel K., New Bedford, Mass. Apparel clasp. 1,763,132; June 10.

Chase, Stephen, 4th, Chicago, Ill. Method and apparatus for forming loaves. 1,762,159; June 10.

Chemical Toilet Corporation. (See Walters, Herbert H., assignor.)

Chemische Fabrik Pott & Co. (See Pospiech, Friedrich, assignor.)

Chenoweth, Charles A. (See Chenoweth, Oliver G. and C. A.)

Chenoweth, Oliver G. and C. A., Lynn, Ind. Roller attachment for plows. 1,762,258; June 10.

Chester, Thomas, Pittsburgh, Pa. Drying apparatus for gelatin carbon tissue. 1,762,910; June 10.

Chism, William J., Rock Haven, Ky. Nut-locking washer. 1,762,651; June 10.

Christians, George W., Chattanooga, Tenn. Apparatus for sealing crevices in rock formations or the like. 1,763,219; June 10.

Christophel, Carl E., Pearl River, assignor to Dexter Folder Company, New York, N. Y. Sheet-feeding device. 1,763,598; June 10.

Chromy, Ben J., Hopkins, Minn., assignor to Wired Radio, Inc., New York, N. Y. Sound-recording apparatus. 1,763,220; June 10.

Chrysler Corporation. (See Henderson, Herbert V., assignor.)

Churchill, Charles R., and J. R. Haynen, assignors to Electric Appliance Company, New Orleans, La. Road-working apparatus. 1,763,457; June 10.

Churchill, Ralph H., Chicago, Ill. Heat-conducting system. 1,762,547; June 10.

Cincinnati Bickford Tool Company, The. (See Klausmeyer, D. C., and Norris, assignors.)

Clark Equipment Company. (See Mogford, E. E., and Spatta, assignors.)

Clark Manufacturing Company, The. (See Strong, Leslie P., assignor.)

Clark, Richard L., Cleveland, Ohio, and C. T. Craker, Corry, Pa., assignors to Strong-Carlisle & Hammond Company, Cleveland, Ohio. Combined separator and trap assembly. 1,762,385; June 10.

Clarke, Alexander F., Verona, Pa., assignor to Copper Plate Sheet and Tube Company, New York, N. Y. Feeding mechanism for metal-treating machines. 1,763,092; June 10.

Clarke, Edward J., Charing Cross, assignor to Alloy Welding Processes Limited, Charing Cross, England. Electrode for electric welding or soldering. 1,763,417; June 10.

Clasen, Claus J. W., Davenport, assignor to The Bettendorf Company, Bettendorf, Iowa. Railway truck. 1,763,221; June 10.

Clasen, Claus J. W., Davenport, assignor to The Bettendorf Company, Bettendorf, Iowa. Railway truck. 1,763,222; June 10.

Clauser, Herbert, assignor to Victory Sparkler & Specialty Company, Elkton, Md. Sealing compound for pyrotechnic devices. 1,762,911; June 10.

Clayton, Andrew B., Union, assignor to The Singer Manufacturing Company, Elizabeth, N. J. Sewing machine. 1,762,812; June 10.

Cleveland, Sim, jr., Macon, Ga. Fire shovel. 1,762,912; June 10.

Cleveland Trust Company, The, trustee. (See Jardine, Frank, assignor.)

Clifford, Albert M., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Antioxidant or age retarder. 1,763,579; June 10.

Cline, Harry P., Philadelphia, Pa., I. Scheinberg and J. G. Watson, assignors to Silverglo Lamps, Inc., Baltimore, Md. Table reflector. 1,762,469; June 10.

Clum Manufacturing Company. (See Fiedler, Edward F., assignor.)

Clum Manufacturing Company. (See Winning, Robert K., assignor.)

Coates, Wallace R., et al. (See Steele, Carmi J., assignor.)

Coates, William A., Hale, and J. Fowler, Leeds, England, assignors to Westinghouse Electric and Manufacturing Company. Tap charger for electric transformers. 1,763,133; June 10.

Coddington, Vantyle W., assignor to Lakeside Bridge & Steel Co., North Milwaukee, Wis. Truck body. 1,763,342; June 10.

Coffey, Barton H., Elizabeth, N. J., assignor to The Cooling Tower Co., Inc., New York, N. Y. Device for cooling water. 1,762,762; June 10.

Coffey, John B., Nashville, Tenn., assignor to Bunte Brothers, Chicago, Ill. Shaping machine for candy canes and the like. 1,762,327; June 10.

Coffman, John A., Sedgwick, Kan. Necktie. Des. 81,322; June 10.

Cohen, Joseph H., Bridgeport, Conn. Electrical device and the manufacture thereof. 1,763,343; June 10.

Cohrs, Walter L. (See Willis, Frank E., assignor.)

Colagiuri, Carmelo, Houston, Tex. Combination wheel with piston-spring tire. 1,763,599; June 10.

Coles, Peyton S., Atlanta, Ga. Garment hanger. 1,763,134; June 10.

Collingbourne, Albert B., assignor to Collingbourne Mills, Inc., Elgin, Ill. Package of yarn or the like. 1,762,386; June 10.

Collingbourne Mills, Inc. (See Collingbourne, Albert B., assignor.)

Collis, Raymond E., East Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Telephone system. 1,762,763; June 10.

Colson Company, The. (See Roe, Mayo E., assignor.)

Colt's Patent Fire Arms Manufacturing Company. (See Webb, George, assignor.)

Columbian Rope Company. (See Dodge, Milo C., assignor.)

Columbus Vending Company, The. (See Vogel, Frank H., assignor.)

Combined Metal Reduction Company. (See Snyder, E. H., and Green, assignors.)

Comeau, Melburn A., Haverhill, Mass. Shoe and heel therefor. 1,762,546; June 10.

Communication Patents, Inc. (See Nicolson, Alexander M., assignor.)

Compagnie d'Applications Mecaniques. (See Rouanet, Louis, assignor.)

Conard, Frederick U., Bridgeport, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y. Typewriting machine. 1,763,344; June 10.

Condit Electrical Manufacturing Corporation. (See Ainsworth, Chester D., assignor.)

Condit Electrical Manufacturing Corporation. (See Jansson, Gustav, assignor.)

Congoleum-Nairn, Inc. (See McConoughey, Merle S., assignor.)

Conlon Corporation. (See Anderson, C. F., and Janda, assignors.)

Conn, C. G., Ltd. (See Dotson, Ora, assignor.)

Conn, C. G., Ltd. (See Gulick, Edward J., assignor.)

Consolidated Ashcroft Hancock Company. (See Ileman, Emil A., assignor.)

Consolidated Machine Tool Corporation of America. (See Metzger, Claude W., assignor.)

Continental Can Company. (See Coyle, John, assignor.)

Cook Electric Company. (See Folds, G. R., and Persons, assignors.)

Cook, John W., Miami, Fla. Drill rig. 1,763,552; June 10.

Cooling Tower Co., The. (See Coffey, Barton H., assignor.)

Cooper, Kenneth F., Great Neck, N. Y., and W. Moore, Rutherford, N. J., assignors to American Cyanamid Company, New York, N. Y. Insecticide barrier. 1,762,610; June 10.

Cooper, Simon, assignor to Cooper Tea Packet Company, Brooklyn, N. Y. Cloth folder. 1,762,612; June 10.

Cooper Tea Packet Company. (See Cooper, Simon, assignor.)

Cooper, William, and S. H. Mullikin, Van Nuys, Calif. Saw-sharpening machine. 1,762,854; June 10.

Copper Plate Sheet and Tube Company. (See Clarke, Alexander F., assignor.)

Corbett, Daniel C. (See Guthmann, E. B., and Corbett.)

Corbi, Joseph L., assignor of one-third to V. Galotta, Washington, D. C., and one-third to H. Pizzutiello, Bronx, N. Y. Shirt. 1,762,913; June 10.

Cornelius, Lee R., near Danville, assignor of one-half to W. P. Winther, Danville, Ill. Artificial bait. 1,762,914; June 10.

Costello, Elizabeth R., et al., administrators. (See Costello, William, jr.)

Costello, John L., et al., administrators. (See Costello, William, jr.)

Costello, William, jr., deceased, Philadelphia, Pa., E. R. Costello and J. L. Costello, administrators, assignors to National Biscuit Company, New York, N. Y. Feeding mechanism. 1,762,764; June 10.

Cottrell, C. B., & Sons Company. (See Barber, Howard M., assignor.)

Coulombe, Joseph C., Kokomo, Ind. Fuel-feeding apparatus. 1,763,628; June 10.

Coultas, Wilbur J. (See Paradise, L. A., and Coultas.)

Coulter, Hugh A., Winnipeg, Manitoba, Canada. Automobile signal. 1,762,288; June 10.

Courtaulds, Limited. (See Glover, W. H., and Diamond, assignors.)

Cox, Harold N., Glen Ridge, N. J., assignor to Cox Multi-Color Photo Company, Pittsburgh, Pa. Lens system for color photography. 1,762,144; June 10.

Cox, Luther, Smackover, Ark. Pipe die. 1,762,652; June 10.

Cox, Luther, Smackover, Ark. Pipe wrench. 1,763,135; June 10.

Cox Multi-Color Photo Company. (See Cox, Harold N., assignor.)

Coyle, John, Baltimore, Md., assignor to Continental Can Company, Inc., New York, N. Y. Machine for double-seaming can ends to can bodies. 1,763,458; June 10.

Craigon, Adam, Toronto, Ontario, assignor to Craigon Engines Limited, Hamilton, Canada. Fuel-injection valve. 1,762,611; June 10.

Craigon, Adam, Toronto, Ontario, assignor to Craigon Engines Limited, Hamilton, Canada. Internal-combustion engine. 1,762,613; June 10.

Craigon Engines Limited. (See Craigon, Adam, assignor.)

Craker, Charles T. (See Clark, R. L., and Craker.)

Cramer, Albert N., assignor to Owens-Illinois Glass Company, Toledo, Ohio. Glassware-annealing leer. 1,763,223; June 10.

Cramer, Robert E., Pittsburgh, Pa. Oven. 1,763,418; June 10.

Cricchio, Paul, assignor to Majestic Lamp Works, New York, N. Y. Combined clock case and lamp. Des. 81,323; June 10.

Cricchio, Paul, assignor to Majestic Lamp Works, New York, N. Y. Lamp or article of analogous nature. Des. 81,324; June 10.

Crocker, Harry J., Binghamton, N. Y. Foot arch and metatarsal support. 1,762,161; June 10.

Crookston, James B., Pittsburgh, Pa. Cue tip. 1,763,612; June 10.

Crosman, George J., jr., Newark, N. Y. Handle for tools. 1,762,679; June 10.

Crossmore, Edward Y., Yonkers; A. C. Chappory, jr., Brooklyn; and J. B. Posey, White Plains, assignors to National Biscuit Company, New York, N. Y. Display rack and bin. 1,763,419; June 10.

Crossmore, Edward Y., Yonkers; A. C. Chappory, jr., Brooklyn; and J. B. Posey, White Plains, assignors to National Biscuit Company, New York, N. Y. Display rack and bin. 1,763,420; June 10.

Crowe, Frederic C., assignor of two-thirds to S. H. Cauley and C. L. Cauley, Erie, Pa. Picture-transmission system. 1,762,470; June 10.

Crowley, Guy F., Milford, Conn., and R. C. Pierce, Niles, assignors to National Standard Company, Niles, Mich. Insulating head for extrusion machines. 1,763,136; June 10.

Cumfer, Donald A. (See Mickelson, A. O., and Cumfer.)

Cummins, Clessie L., assignor to Oil Engine Development Company, Columbus, Ind. Oil-burning engine. 1,762,653; June 10.

Cunningham, Lewis L., assignor, by mesne assignments, to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn. Automatic safety device. 1,763,093; June 10.

Cunningham, Lewis L., assignor, by mesne assignments, to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn. Circuit-controlling device. 1,763,094; June 10.

Curello, John J., assignor to The G & O Manufacturing Company, New Haven, Conn. Radiator support. 1,762,328; June 10.

Currie, William E., and P. de Vries, Detroit, Mich.; said de Vries assignor to said Currie. Cattle stanchion. 1,762,259; June 10.

Curry, B. V., trustee. (See Towner, Heber F., assignor.)

Curtis, Alfred S., East Orange, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Wave analysis. 1,762,160; June 10.

Custer, Levitt L., Dayton, Ohio. Aerial amusement device. 1,762,507; June 10.

Dahlquist, Theodore W., Dedham, Mass. Hot-water boiler. 1,762,215; June 10.

Dahlstrom, Frank P., assignor to Morgan Construction Company, Worcester, Mass. Coil-handling apparatus. 1,762,289; June 10.

Dalton, Donald M., Washington, D. C. Signaling system. 1,763,581; June 10.

Daly, George F., and R. E. Page, Binghamton, assignors to The Tabulating Machine Company, Endicott, N. Y. Tabulating machine. 1,762,145; June 10.

Daniels, John L. (See Suris, H. I., and Daniels.)

Daniels & Schuck, Inc. (See Schuck, Harold P., assignor.)

Davids, George L. (See Palmer, William H., assignor.)

Davidson, Frederic A., Chicago, Ill., assignor to American Safety Device Co., New York, N. Y. Coupling device. 1,762,572; June 10.

Davies, W. Sanders, et al., trustees. (See Davis, Kenneth, assignor.)

Davis, Augustine, jr. (See Shield, Paul S., assignor.)

Davis, Chester L., Keokuk, Iowa, assignor to Wired Radio, Inc., New York, N. Y. Frequency-adjusting means for high-frequency signaling systems. 1,763,224; June 10.

Davis, Chester L., Keokuk, Iowa, assignor to Wired Radio, Inc., New York, N. Y. Indicator system. 1,763,225; June 10.

Davis, Durrel H., assignor to Highway Trailer Company, Edgerton, Wis. Heavy-duty trailer. 1,762,915; June 10.

Davis, Ernest W., Oak Park, assignor to Alemite Corporation, Chicago, Ill. Joint. 1,762,548; June 10.

Davis & Furber Machine Company. (See Randall, Joseph W., assignor.)

Davis, Harry A., assignor to Draper Corporation, Hopedale, Mass. Loom. 1,763,613; June 10.

Davis, Henry K. B., New York, N. Y., assignor to Swingrite Co., Inc., Providence, R. I. Golf-club shaft. 1,762,216; June 10.

Davis, Herbert L. (See Perrault, J. E., and Davis.)

Davis, Kenneth, St. Benedict, Pa., assignor, by mesne assignments, to Rembrandt Peale, W. S. Davies, and W. S. Wallace, trustees. Cable-actuating mechanism. 1,762,765; June 10.

Davis, Wilfred J., Plymouth, England, assignor to Radio Corporation of America. Selective calling device. 1,763,390; June 10.

Day, David T., deceased, Washington, D. C.; F. J. Goble, administrator. Obtaining nicotine carbolates from crude shale oil. 1,762,471; June 10.

Day, William P., Cleveland Heights, assignor to The International Steel Tie Company, Cleveland, Ohio. Railroad tie. 1,763,037; June 10.

Dayton Scale Company. (See Strachan, Thomas H., assignor.)

Deagan, J. C., Inc. (See Jones, Murvin L., assignor.)

Deason, Roy, Small Heath, England. Receiving apparatus. 1,763,459; June 10.

Debelack, Alexander F., assignor to M. Mannis, Sheboygan, Wis. Baby conveyance. 1,762,680; June 10.

De Bruijn, Emil, Roslyn, Pa. Folding chair. 1,763,455; June 10.

Deere & Company. (See Paradise, L. A., and Coultas, assignors.)

De Garay, Francis, Brooklyn, assignor to Altmar Steel Products Company, Inc., New York, N. Y. Pipe sleeve. 1,762,766; June 10.

De Goyer, Roy E., Houston, Tex. Nutcracker. 1,762,573; June 10.

De Haven, Thomas H., Bellingham, Wash. Chain saw. 1,763,095; June 10.

De Lancy, Imogene, New York, N. Y., assignor to Otis Company, Inc., Boston, Mass. Textile fabric. Des. 81,325; June 10.

Delco Products Corporation. (See Aseltine, F. E., and Teeter, assignors.)

Deleray, Bert R., Los Angeles, Calif. Juice extractor. 1,762,855; June 10.

Delfino, Willie, Bakersfield, Calif. Internal-combustion motor. 1,762,614; June 10.

De Motte, Maurice P., Buffalo, and R. C. Pierce, New York, N. Y., assignors to The Linde Air Products Company. Cutting and welding apparatus. 1,762,260; June 10.

Denaro, James, Cambridge, Mass. Ice-cream-cone-making machine. 1,762,959; June 10.

Dengler, Josef, Poderaam, Czechoslovakia. Machine and process of manufacture of pottery or ceramic articles. 1,762,387; June 10.

Dennis, Charles B., Conneaut Lake, Pa. Method of and apparatus for use in taking impressions of edentulous mouths. 1,763,553; June 10.

Desautels, Charles H., Springfield, assignor to The Fisk Rubber Company, Chicopee Falls, Mass. Turn-under stitching device. 1,762,856; June 10.

Desmond, William J., Harrison, N. J. Duplex electron-discharge device. 1,762,960; June 10.

Dessauer, Norman, assignor to The International Seal and Knot Protector Co., New York, N. Y. Seal. 1,762,961; June 10.

De Vilbiss Company, The. (See Gradolph, William F., assignor.)

Devlin, Henry, assignor to Baker Perkins Company, Inc., Saginaw, Mich. Dough divider. 1,763,345; June 10.

De Voe, Ray T., Flint, Mich., assignor to Marvel Carburetor Company. Strainer and assembling same. 1,763,346; June 10.

De Vries, Peter. (See Currie, W. E., and de Vries.)

De Vries, Ralph P., Newtonville, N. Y. Stable-surface alloy steel. 1,763,421; June 10.

De Wolf, Ernest A., Cranston, R. I., assignor to Universal Winding Company, Boston, Mass. Cop holder. 1,762,261; June 10.

Dexter, Benjamin R., Oakland, Calif. Collapsible rest. 1,762,217; June 10.

Dexter Folder Company. (See Christophel, Carl E., assignor.)

Diamond, Claude. (See Glover, W. H., and Diamond.)

Diamond Power Specialty Corporation. (See Snow, N. L., and Thomas, assignors.)

Di Bono, Saverio, Genoa, Italy. Cork-grinding machine. 1,762,681; June 10.

Dick, A. B., Company. (See Horn, Thomas W., assignor.)

Dickieson, Alton C., Brooklyn, assignor to Bell Telephone Laboratories Incorporated, New York, N. Y. Transmission system. 1,762,768; June 10.

Diehl, Harry L. (See Matthews, Guy L., assignor.)

Diether, Charles F., St. Paul, Minn. Shoe closure. 1,762,615; June 10.

Dietz, William C. F., Cincinnati, Ohio. Safety disengaging mechanism for wringers. 1,762,916; June 10.

Dill, Richard E., Alexandria, Nebr. Joint construction. 1,762,713; June 10.

Dillon-Gaw Motor Company. (See Gaw, Luther A., assignor.)

Dillon, William A., and C. O. Weingand, Los Angeles, Calif. Shaving brush. 1,762,616; June 10.

Dispersions Process, Inc. (See Pratt, William B., assignor.)

Dodge, Adiel Y., South Bend, Ind., assignor to Bendix Brake Company, Chicago, Ill. Brake control. 1,762,290; June 10.

Dodge, Adiel Y., assignor to Perrot Brake Corporation, South Bend, Ind. Brake control. 1,762,714; June 10.

Dodge, Milo C., assignor to Columbian Rope Company, Auburn, N. Y. Tape and making the same. 1,762,917; June 10.

Dodge, Milo C., assignor to Columbian Rope Company, Auburn, N. Y. Flat paper-tape marker for rope. 1,762,918; June 10.

Doehler Furniture Co. Inc. (See Paull, Erwin J., assignor.)

Doléjal, Oscar, Kansas City, Kans. Garter. 1,762,472; June 10.

Dolling, Thomas H., assignor of one-half to R. McTaggart, Huntington Park, Calif. Beet gripping and conveying means. 1,763,422; June 10.

Dolomite Products Company. (See Odenbach, J. H., Goldman, and Henry, assignors.)

Doman, John P., Los Angeles, Calif. Ironing-board construction. 1,762,436; June 10.

Domestic Stoker Company. (See Hall, Cortice H., assignor.)

Domkee, John H., assignor to The Wire Novelty Manufacturing Co., West Haven, Conn. Button loop. 1,762,262; June 10.

Domkee, John H., assignor to The Wire Novelty Manufacturing Co., West Haven, Conn. Slide buckle. 1,762,263; June 10.

Domkee, John H., assignor to The Wire Novelty Manufacturing Company, New Haven, Conn. Button loop. 1,762,264; June 10.

Donahue, Dennis A., assignor to The Studebaker Corporation, South Bend, Ind. Windshield weather strip. 1,763,003; June 10.

Dopyera, John, assignor to G. D. Beauchamp, T. E. Kleinmeyer, and P. Barth, Los Angeles, Calif. Stringed musical instrument. 1,762,617; June 10.

Doran, James F., Danbury, Conn. Hat-clipping machine. 1,763,347; June 10.

Dorau, John P., Horicon, Wis. Folding ironing table. 1,762,962; June 10.

Dorfman, Hiller D., Mansfield, Ohio, assignor to Westinghouse Electric & Manufacturing Company. Thermostatic device. 1,763,137; June 10.

Dotson, Ora, assignor to C. G. Conn, Ltd., Elkhart, Ind. Horn. 1,763,038; June 10.

Douglas, Fredric E., assignor to Draper Corporation, Hopedale, Mass. Cop skewer for loom shuttles. 1,763,614; June 10.

Douglas, Harry A. (See Nelson, John H., assignor.)

Douglas, Harry A., Bronson, Mich. Igniter. 1,762,162; June 10.

Dowd, Andrew D., Hoboken, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Synchronizing rotary devices. 1,762,963; June 10.

Doyle, Edgar D., Philadelphia, Pa., assignor to Electrical Testing Laboratories, Inc., New York, N. Y. Circuit arrangement for the measurement of the light emitted by and the watts or current consumed by incandescent lamps. 1,762,769; June 10.

Drabek, Thomas, Winner, S. Dak. Tractor hitch. 1,762,919; June 10.

Drake, John L., assignor to Libbey-Owens Glass Company, Toledo, Ohio. Apparatus for producing sheet glass. 1,762,508; June 10.

Draper Corporation. (See Davis, Harry A., assignor.)

Draper Corporation. (See Douglas, Fredric E., assignor.)

Droutman, Abraham, Brooklyn, assignor of one-half to J. N. Lowe, New York, N. Y. Holder for keys or the like. 1,762,770; June 10.

Druhe, George W., Piedmont, Calif. Can puncher. 1,763,391; June 10.

Duant, William W. (See Wolfarth, F. J., and Duant.)

Dubilier Condenser Corporation. (See Dubilier, William, assignor.)

Dubilier, William, New York, N. Y., assignor to Dubilier Condenser Corporation. Variable condenser. 1,763,554; June 10.

Duce, Bert J., and S. J. Orent, Buena Park, Calif. Mop holder. 1,762,920; June 10.

Dudleston, William G., Chicago Heights, Ill., assignor, by mesne assignments, to The Patent and Licensing Corporation, Boston, Mass. Method of and apparatus for saturating sheet material by calenders. 1,762,320; June 10.

Duffy, Michael J., Brooklyn, N. Y. Self-tightening nut. 1,763,505; June 10.

Duncan Electric Manufacturing Company. (See Emens, Albert L., assignor.)

Duncan Foundry and Machine Works, Inc. (See Duncan, George D., jr., assignor.)

Duncan Foundry and Machine Works, Inc. (See Polsler, John P., assignor.)

Duncan, George D., jr., assignor to Duncan Foundry and Machine Works, Inc., Alton, Ill. Portable swivel-truck conveyer. 1,763,423; June 10.

Duncan, William M., assignor to Duncan Foundry and Machine Works, Inc., Alton, Ill. Portable conveyer. 1,763,424; June 10.

Duncan Foundry and Machine Works, Inc. (See Duncan, William M., assignor.)

Du Pont, E. I., de Nemours & Company. (See Elley, Harold W., assignor.)

Du Pont, E. I., de Nemours & Company. (See Powers, Donald H., assignor.)

Dwan, Pauline, New York, N. Y. Vanity case. 1,762,767; June 10.

Dyer, James D., Kansas City, Mo. Window-screen hanger. 1,763,348; June 10.

Dymock, Raymond, Hamburg, N. J. Stake lock. 1,762,618; June 10.

Eastman Kodak Company. (See Altman, Fred E., assignor.)

Eastman Kodak Company. (See Capstaff, John G., assignor.)

Eastman Kodak Company. (See Carroll, Stewart J., assignor.)

Eastman Kodak Company. (See Fritts, Edwin C., assignor.)

Eastman Kodak Company. (See Hopkins, Roy S., assignor.)

Eastman Kodak Company. (See Jones, L. A., and Tuttle, assignors.)

Eastman Kodak Company. (See Mihalyi, Joseph, assignor.)

Eastman Kodak Company. (See Seel, Paul C., assignor.)

Eastman Kodak Company. (See Seymour, Merrill W., assignor.)

Eastman Kodak Company. (See Sheppard, S. E., and McNally, assignors.)

Eastman Kodak Company. (See Staud, Cyril J., assignor.)

Eastman Kodak Company. (See Stewart, Donald H., assignor.)

Eastman Kodak Company. (See Wittel, Otto, assignor.)

Eaton, A. M., Paper Company. (See Eaton, Carleton G., assignor.)

Eaton, Carleton G., Waltham, assignor to A. M. Eaton Paper Company, Boston, Mass. Device for positioning string handles on paper bags. 1,762,857; June 10.

Ebeling, August, Charlottenburg, assignor to Siemens & Halske Aktiengesellschaft, Siemensstadt, near Berlin, Germany. Loaded cable circuit. 1,762,964; June 10.

Eble, Grover S., Belle Harbor, N. Y. Pipe fitting. 1,762,771; June 10.

Eckstein, Reuben, Bronx, and M. Polis, Brooklyn, N. Y. Electrical connecting device. 1,762,163; June 10.

Eclipse Textile Devices Incorporated. (See Gere, Ward N., assignor.)

Economy Engineering Company, The. (See Andrews, F. O., and Steinfurth, assignors.)

Edelmann, Otto, Newark, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Signaling system. 1,763,138; June 10.

Edge Moor Iron Company. (See Marquand, Philip, assignor.)

Edison, Thomas A., Incorporated. (See Huenlich, Charles, assignor.)

Edland, Ingval, Monitor, Oreg. Feed mixer. 1,762,654; June 10.

Edmonds, George P., assignor to G. & W., Electric Specialty Co., Chicago, Ill. Single-conductor disconnecter. 1,762,509; June 10.

Edmonds, George P., assignor to G. & W., Electric Specialty Co., Chicago, Ill. Pothead. 1,762,510; June 10.
Edwards, Sherman T., Chicago, Ill. Measuring feeder. 1,763,139; June 10.
Eger, Ernst, assignor to Morgan and Wright, Detroit, Mich. Testing machine. 1,762,164; June 10.
Eggert, Gustav B., assignor to Baker Perkins Company, Inc., Saginaw, Mich. Mixing and kneading machine. 1,763,292; June 10.
Eglinton, Lillie, Featherston, Wellington, New Zealand. Passing light. 1,763,555; June 10.
Ehlers, Carl H., Penfield, assignor to The Atlantic Refining Company, Philadelphia, Pa. Liquid-dispensing system. 1,762,965; June 10.
Ehrenfeld, Ralph, Springfield, Mass., assignor to Westinghouse Electric & Manufacturing Company. Lamp support. 1,763,226; June 10.
Electric Appliance Company. (See Churchill, C. R., and Haynen, assignors.)
Electrical Testing Laboratories, Inc. (See Doyle, Edgar D., assignor.)
Electrical Testing Laboratories, Inc. (See Smith, Hardick A., assignor.)
Electro Metallurgical Company. (See Miller, Wilber B., assignor.)
Electro Metallurgical Company. (See Norwood, Stanley M., assignor.)
Elley, Harold W., Wilmington, Del. Age-resisting rubber composition and preparing same. 1,763,615; June 10.
Elley, Harold W., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Rubber composition and method of preserving rubber. 1,763,293; June 10.
Ellinger, Flora, Milwaukee, Wis. Combined iron holder and card take-up. 1,762,966; June 10.
Elm City Cotton Mills. (See Herring, Eugene, assignor.)
Elmendorf, Armin, Chicago, Ill. Method of and apparatus for facing panels with metal. 1,763,227; June 10.
Elwell, George H., New Haven, Conn., assignor to The Greist Manufacturing Company. Electric-lamp socket. 1,762,511; June 10.
Elwell, George H., New Haven, Conn., assignor to The Greist Manufacturing Company. Electric-lamp socket. 1,762,512; June 10.
Emens, Albert L., assignor to Duncan Electric Manufacturing Company, La Fayette, Ind. Electricity meter. 1,762,218; June 10.
Emerson-Brantingham Corporation. (See Brantingham, Charles A., assignor.)
Emerson-Brantingham Corporation. (See Hendrickson, Walter H., assignor.)
Emerson, George H., Baltimore, Md. Locomotive water-tube boiler. 1,763,140; June 10.
Emery, Herbert W., Holliston, assignor to Archer Rubber Company, Milford, Mass. Surface-finished rubber goods and making the same. 1,762,165; June 10.
Emery, Roy, Brooklyn, N. Y. Selective mechanism. 1,763,425; June 10.
Emmert, John R., Chicago, Ill., assignor to Emil J. Paidar Company. Headrest socket for barber chairs. 1,763,294; June 10.
Empire Metal Cap Co. et al. (See Merolle, A. L., and Boehle, assignors.)
Empire Printing & Box Company. (See Smith, Sidney M., assignor.)
Engels, Eugene O., assignor to Baker Perkins Company, Inc., Saginaw, Mich. Tubular burner jacket. 1,763 349; June 10.
Englund, Wolke, Chicago, Ill. Individual pilot light for gas burners. 1,763,295; June 10.
Enterprise Manufacturing Company, The. (See Case, Francis M., assignor.)
Entz, Ferdinand S., Mount Vernon, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Trunking system. 1,763,036; June 10.
Epple, Carl H., Oakland, Calif. Check protector. 1,763,392; June 10.
Erdman, George, assignor to Gifford-Wood Company, Hudson, N. Y. Conveyer flight. 1,763,141; June 10.
Erdos, William J., Budapest, Hungary. Fire bar for furnaces. 1,762,655; June 10.
Erickson, John. (See Gunderson, G., Erickson, and Backus.)
Ernst, Walter, assignor to Hydraulic Press Manufacturing Company, Mount Gilead, Ohio. Hydraulic press. 1,763,142; June 10.
Everett, Edward A., Long Island City, N. Y. Light-signal support. 1,762,388; June 10.
Ever Hot Heater Company. (See Ledbetter, Elmer E., assignor.)
Everlasting Valve Company. (See Wilson, Wylie G., assignor.)
Faber, Guy S., assignor to Jas. P. Marsh & Company, Chicago, Ill. Electrical contact mechanism. 1,762,219; June 10.
Faber, Guy S., assignor to Jas. P. Marsh & Company, Chicago, Ill. Electrical tubular device. 1,762,220; June 10.
Fagan, Richard C., assignor to Russell Manufacturing Company, Middletown, Conn. Resilient fabric. 1,762,389; June 10.
Fairchild, Charles N., New Haven, Conn., assignor to Fairchild Lock Corporation, New York, N. Y. Key-imprisoning lock. 1,762,921; June 10.
Fairchild, Charles N., New Haven, Conn., assignor to Fairchild Lock Corporation, New York, N. Y. Cam-operated ignition lock. 1,762,922; June 10.
Fairchild Lock Corporation. (See Fairchild, Charles N., assignor.)
Fallon, William J., Jr., Boston, Mass. Welting. 1,762,967; June 10.
Fariss, Aubrey, et al. (See Rains, Joshua C., assignor.)
Farley, William R., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Tap changer. 1,763,143; June 10.
Farnsworth, Frank F., Flushing, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Composite conductor. 1,762,968; June 10.
Farnum, John A., Worcester, Mass. Account book. 1,763,506; June 10.
Farrell, James W., Cincinnati, Ohio, assignor to Standard Oil Company, Chicago, Ill. Candle. Des. 81,326; June 10.
Farrington, John F., Flushing, N. Y., assignor, by mesne assignments, to Western Electric Company, Incorporated. High-frequency attenuating network. 1,762,969; June 10.
Fausek, Arthur J. and I. F., St. Louis, Mo. Tip for gas-burning apparatus. 1,762,166; June 10.
Fausek, Irwing F. (See Fausek, Arthur J. and I. F.)
Featheredge Rubber Company. (See Hood, Harry M., assignor.)
Federal Telegraph Company. See Gebhard, Louis A., assignor.)
Federal Telegraph Company. (See Hough, Clinton W., assignor.)
Federal Telegraph Company. (See Worrall, Robert H., assignor.)
Fegely, John P., assignor of one-half to G. B. Peters, Allentown, Pa. Display box. 1,762,923; June 10.
Fegley, Thomas J., and G. O. Leopold, assignors to North Bro's. Mfg. Co., Philadelphia, Pa. Portable power-driven-saw frame. Des. 81,365; June 10.
Fehely, Ralph C., and R. F. Stevenson, Keno, Oreg.; said Stevenson assignor to said Fehely. Ore concentrator. 1,762,265; June 10.
Feldman, Emil. (See Kanter, E., and Feldman.)
Felshin, Joe S., New York, N. Y. Bookcase. Des. 81,327; June 10.
Ferro Stamping Mfg. Co. (See Moore, Benjamin S., assignor.)
Fiedler, Edward F., Wauwatosa, assignor to Clum Manufacturing Company, Milwaukee, Wis. Ignition-circuit-control mechanism. 1,762,970; June 10.
Fiedler, Herman R., Lockland, and A. Grau, Sharon, Ohio., assignors, by mesne assignments, to The Patent and Licensing Corporation, Boston, Mass. Strip-shingle-cutting machine. 1,762,330; June 10.
Field, Joseph C., Maplewood, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Remote-control power system. 1,762,971; June 10.
Fifth Avenue Coach Company. (See Richardson, Joseph, assignor.)
Fire Proof Well Company. (See Makowski, John F., assignor.)
Fischer, Albert C., Chicago, Ill., assignor to The Philip Carey Manufacturing Company. Combined contraction and expansion joint. 1,762,682; June 10.
Fischer, Oskar, Plauen/Vogtland, Germany. Warp-knotting machine. 1,762,656; June 10.
Fisher, Gathorne J., Briarlea, Penygarn, Pontypool, Wales. Belt conveyer. 1,762,772; June 10.
Fisher, Henry H., Detroit, Mich. Sleeve protector. 1,762,549; June 10.
Fisk, Jesse F., Chicago, Ill., assignor of one-half F. P Walsh, New York, N. Y. Valve mechanism for internal-combustion engines. 1,763,460; June 10.
Fisk Rubber Company, The. (See Desautels, Charles H., assignor.)
Fisk Rubber Company, The. (See Kroll, Harold J., assignor.)
Fisk Rubber Company, The. (See Krusell, Lars G., assignor.)
Fisk Rubber Company, The. (See Lehman, Paul W., assignor.)
Fisk Rubber Company, The. (See Little, Thomas P., assignor.)
Fisk Rubber Company, The. (See Mather, George L., assignor.)
Fisk Rubber Company, The. (See Maynard, Charles E., assignor.)
Fisk Rubber Company, The. (See Mead, George J., assignor.)
Fisk Rubber Company, The. (See Scherner, John, assignor.)
Fisk Rubber Company, The. (See Smith, Harry L., assignor.)
Fisk Rubber Company, The. (See Vrbanac, John, assignor.)
Fisk Rubber Company, The. (See Wikle, George F., assignor.)
Fitch, Clyde J., Brooklyn, assignor, by mesne assignments, to Radio Corporation of America, New York, N. Y. Tuned transformer. 1,762,221; June 10.
Fitzpatrick, Horace C., et al. (See Wolfe, John A., assignor.)
Fixen, Martin O., Minneapolis, Minn. Toy. 1,762,620; June 10.

Flanzer, Joseph A. (See Jones, L. L., and Flanzer.)
Fleming, Wells S., Portland, Oreg. Cross-over connection for back-to-back plumbing fixtures. 1,762,619; June 10.
Fluellen, John A., Plymouth, W. Va. Mail and parcel tube. 1,763,393; June 10.
Fokker Aircraft Corporation of America. (See Fokker, Anthony H. G., assignor.)
Fokker, Anthony H. G., Amsterdam, Netherlands, assignor to Fokker Aircraft Corporation of America. Airplane and the like. 1,763,228; June 10.
Folds, George R., and L. M. Persons, assignors to Cook Electric Company, Chicago, Ill. Combined safety device and resetting mechanism. 1,763,394; June 10.
Forbes, Ferry M., assignor to Premier Cushion Spring Company, Detroit, Mich. Helical coiler and assembler. 1,762,167; June 10.
Ford, Edward, Plate Glass Company, The. (See Fowler, Ival G., assignor.)
Ford, Eugene A., Scarsdale, assignor to The Tabulating Machine Company, Endicott, N. Y. Magazine throat. 1,763,039; June 10.
Forney, Cal A., Goshen, Ind. Folding ironing table. 1,762,924; June 10.
Fors, Eric H., Sheffield, England, assignor to Morgan Construction Company, Worcester, Mass. Device for selective handling of metal bars or billets. 1,762,291; June 10.
Forsberg, Gunner O. (See Thomas, B. B., and Forsberg.)
Fortier, Charles L., Montreal, Quebec, Canada. Aircraft. 1,763,507; June 10.
Fosdick, Alexander H., Bethlehem, Pa., assignor to Bethlehem Steel Company, Tuyère. 1,762,814; June 10.
Foster Machine Company. (See McKean, John O., assignor.)
Foster, Thomas H., assignor to Topeka Tent & Awning Co., Topeka, Kans. Awning frame structure. 1,763,296; June 10.
Foulds, Charles V., Berkeley, assignor to The Pelton Water Wheel Company, San Francisco, Calif. Hydraulic control system. 1,762,813; June 10.
Fountain, Joseph N., assignor to Old Colony Envelope Company, Westfield, Mass. Sheet-feeding apparatus. 1,762,537; June 10.
Fourment, Marcel, Paris, France. Apparatus for the treatment of gases at high temperatures. 1,763,229; June 10.
Foutz, Jerry L., et al. (See Bradford, William G., assignor.)
Fowler, Charles, Ardsley-on-Hudson, N. Y. Test-tube rack. 1,763,461; June 10.
Fowler, Daniel E., San Antonio, assignor of one-half to N. M. Hawkins, El Paso, Tex. Vaporizing device. 1,763,508; June 10.
Fowler, Fred D., Newton, Mass., assignor, by mesne assignments, to Hood Rubber Company, Inc., Wilmington, Del. Machine for covering tire beads. 1,763,297; June 10.
Fowler, Ival G., Toledo, assignor to The Edward Ford Plate Glass Company, Rossford, Ohio. Glass-cutting device. 1,762,575; June 10.
Fowler, John. (See Coates, W. A., and Fowler.)
Fox, Earle D., Winnetka, assignor of forty-nine per cent to B. A. Schiff, Chicago, Ill. Mechanical toy. 1,762,574; June 10.
Francesconi, Ezzio, San Francisco, and V. L. Bianchi, Oakland, Calif. Flying machine. 1,762,657; June 10.
Francis, Harry G., Rushville, Ind. Plate glue spreader. 1,762,972; June 10.
Francis, Jacob R., Flint, Mich. Valve bearing. 1,763,350; June 10.
Frank, John J., Pittsfield, Mass. Valve. 1,762,266; June 10.
Franklin, Charles B., assignor to Indian Motocycle Co., Springfield, Mass. Front-wheel-brake mounting for motor cycles. 1,763,096; June 10.
Franklin, George E., Miles City, Mont. Engine. 1,762,437; June 10.
Franklin, H. H., Manufacturing Company. (See Haven, Kent C., assignor.)
Franklin Railway Supply Company. (See Knight, Ronald F., assignor.)
Franzen, Eric T., Newark, N. J. Wire end splicing device and connecting guard. 1,763,298; June 10.
Fraser Furnace Company. (See Fraser, Richard E., assignor.)
Fraser, John, Leckmelm-by-Garve, Scotland, assignor to British Petroleum Company, Limited, London, England. Apparatus for the measurement of liquids by volume. 1,763,426; June 10.
Fraser, John, Leckmelm-by-Garve, Scotland, assignor to British Petroleum Company, Limited, London, England. Apparatus for the measurement of liquids. 1,763,427; June 10.
Fraser, Richard E., assignor to Fraser Furnace Company, Stockton, Calif. Gas furnace. 1,762,683; June 10.
Frazier, Cephas U., Orosi, Calif. Raisin-cleaning apparatus. 1,762,684; June 10.
Frazzano, Antonio, Orange, N. J. Convertible table. 1,762,773; June 10.
Fred, Selim. (See Stinson, G., and Fred.)
Frederick, Charles P., Seattle, Wash. Pump. 1,763,395; June 10.
Frederick, Halsey A., Mountain Lakes, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Alarm system. 1,762,973; June 10.
Freedman, Charles S., Los Angeles, Calif. Rectal suppository and holder therefor. 1,762,858; June 10.
Freivogel, Ernest, assignor of one-half to R. A. Jackson, Ridgefield, Conn. Tire remover and carrier. 1,762,168; June 10.
French, Louis O., Milwaukee, Wis. Internal-combustion engine. 1,762,550; June 10.
Freret, William A., assignor to National Lime Association, Washington, D. C. Filler for building units and process of preparation. 1,762,267; June 10.
Frey, Elmer E., assignor to J. P. Meehan and E. F. Leonard, Los Angeles, Calif., doing business as Leonard Machinery Company. Stapling machine. 1,763,040; June 10.
Freydberg Bros. Inc. (See Thomas, O. K., and Malkin, assignors.)
Fried. Krupp Grusonwerk Aktiengesellschaft. (See Johannsen, Friedrich, assignor.)
Friedberger-Aaron Manufacturing Company. (See Aull, Harry, assignor.)
Friis, Harald T., Red Bank, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Radio receiving system. 1,762,974; June 10.
Frisch, Walter P., Rochester, N. Y. Time-control mechanism. 1,763,230; June 10.
Fritts, Edwin C., assignor to Eastman Kodak Company, Rochester, N. Y. Motion-picture title-making machine. 1,763,231; June 10.
Frohring, William O., Shaker Heights, Ohio, and W. F. Richards, Mason, Mich., assignors, by mesne assignments, to The Laboratory Products Company, Cleveland, Ohio. Producing caseinates. 1,762,169; June 10.
Fry, Jacob R., Montclair, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Electromagnetic device. 1,762,774; June 10.
Fuld, H. & Co., Telephon- und Telegraphenwerke Aktiengesellschaft. (See Schneider, J., and Heckmann, assignors.)
Fuller, Lewis J., Cleveland, Ohio. Jack. 1,763,144; June 10.
Fulton Syphon Company, The. (See Giesler, Jean V., assignor.)
G & O Manufacturing Company, The. (See Curcllo, John J., assignor.)
G. & W. Electric Specialty Co. (See Edmonds, George P., assignor.)
G. & W. Electric Specialty Company. (See Rah, Joseph. assignor.)
G & W Electric Specialty Company. (See Williams, Paul F., assignor.)
Gabbe, Herman, Brooklyn, N. Y. Combined drying, drumming, cleaning, caking, and finishing fur machine. 1,763,462; June 10.
Gahagan, Orren M., Wewoka, Okla. Cathead. 1,762,715; June 10.
Galbraith, Joseph B., Kaysville, Utah. Cutter. 1,763,299; June 10.
Galotta, Victor, et al. (See Corbi, Joseph L., assignor.)
Gambito, Nemesio, and D. Sumabat, Pasadena, assignors to W. F. Lemon and J. S. Tolentino, Los Angeles, Calif. Kite. 1,762,551; June 10.
Ganz, Albert G., Union City, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Inductance device. 1,762,775; June 10.
Gardner, Charles W., New York, N. Y. Furniture leg. 1,762,776; June 10.
Gardner, Henry A., Washington, D. C. Laminated glass. 1,762,513; June 10.
Garnett Church Furniture Co. (See Gray, George, assignor.)
Garthe, John, Pontiac, Mich. Dado cutter. 1,763,463; June 10.
Gast, William H. (See Stephan, Emil H., assignor.)
Gates, Frank M., assignor of one-third to W. P. Kelley, Rockford, Ill. Exposure meter. 1,763,509; June 10.
Gaubert, John Q., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Contact finger. 1,763,145; June 10.
Gauthier, André, Villepauche, France. Wheel for vehicles. 1,763,580; June 10.
Gavaza, George V., Quincy, Mass. Combined filling and draining device. 1,762,390; June 10.
Gaw, Luther A., Charlottesville, Va., assignor to Dillon-Gaw Motor Company, Fayetteville, W. Va. Cylinder-head construction for internal-combustion engines. 1,763,232; June 10.
Gebhard, Louis A., Washington, D. C., assignor, by mesne assignments, to Federal Telegraph Company. Tube-temperature and loss-indicating device. 1,762,859; June 10.
Gebhard, Louis A., Washington, D. C., assignor to Wired Radio, Inc., New York, N. Y. Inductance system. 1,763,233; June 10.
Gemmer Manufacturing Company. (See Marles, Henry, assignor.)
General Aniline Works, Inc. (See Bucherer, Hans T., assignor.)
General Aniline Works, Inc. (See Herz, R., Runne, and Albrecht, assignors.)
General Aniline Works, Inc. (See Hoffa, E., and Heyna, assignors.)

General Aniline Works, Inc. (See Kalischer, G., Scheyer and Keller, assignors.)
General Electric Company. (See Charlton, Ernest E., assignor.)
General Electric Company, The. (See Mellor, George A., assignor.)
General Motors Corporation. (See Brittain, R. J., jr., and Chapman, assignors.)
General Spring Bumper Corporation. (See Jandus, Herbert S., assignor.)
Gentile, Frank, and F. Maccarone, Brooklyn, N. Y. Removable top lift for shoes. 1,762,170; June 10.
George, Jerome R., assignor to Morgan Construction Company, Worcester, Mass. Rolling-mill housing and bearing construction. 1,762,292; June 10.
George, Jerome R., and J. W. Sheperdson, assignors to Morgan Construction Company, Worcester, Mass. Rolling mill. 1,762,293; June 10.
Gere, Ward N., Syracuse, assignor, by mesne assignments, to Eclipse Textile Devices Incorporated, Elmira Heights, N. Y. Method and apparatus for perforating the cores of yarn packages. 1,762,222; June 10.
Gericke, William F., Berkeley, Calif. Fertilizing solution for seed treatment. 1,762,294; June 10.
Gernandt Motor Corporation. (See Gernandt, Waldo G., assignor.)
Gernandt, Waldo G., assignor to Gernandt Motor Corporation, South Bend, Ind. High-compression internal-combustion engine. 1,762,295; June 10.
Gesellschaft für drahtlose Telegraphie m. b. H. (See Osnos, Mendel, assignor.)
Getz, Frank J., assignor, by mesne assignments, to Vortex Cup Company, Chicago, Ill. Dish dispenser. 1,762,975; June 10.
Gfrorer, Albert H., assignor to The Automatic Transportation Company, Inc., Buffalo, N. Y. Conveying apparatus. 1,763,351; June 10.
Giesler, Jean V., assignor to The Fulton Syphon Company, Knoxville, Tenn. Thermostatically-controlled valve unit. Re17,696; June 10.
Giesler, Jean V., assignor to The Fulton Syphon Company, Knoxville, Tenn. Toy. Des. 81,328; June 10.
Gifford-Wood Company. (See Erdman, George, assignor.)
Gilbert, A. C., Company, The. (See Gilbert, Alfred C., assignor.)
Gilbert, Alfred C., Hamden, assignor, by mesne assignments, to The A. C. Gilbert Company, New Haven, Conn. Toy building construction. 1,763,300; June 10.
Gilbert, Alfred C., Hamden, assignor, by mesne assignments, to The A. C. Gilbert Company, New Haven, Conn. Mixing device. 1,763,301; June 10.
Gilbert, Alfred C., Hamden, assignor, by mesne assignments, to The A. C. Gilbert Company, New Haven, Conn. Construction toy. 1,763,302; June 10.
Gilbert, Alva B., assignor to The Willys-Overland Company, Toledo, Ohio. Balancer for reciprocating engines. 1,762,860; June 10.
Gilbert, John J., Douglaston, assignor to Western Electric Company, Incorporated, New York, N. Y. Loaded signaling conductor. 1,762,976; June 10.
Gilbert, John J., Douglaston, assignor to Western Electric Company, Incorporated, New York, N. Y. Loaded signaling conductor. 1,763,042; June 10.
Gilbert, John J., Douglaston, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Loading of conductors. 1,763,043; June 10.
Gilbert, John J., Port Washington, assignor to Western Electric Company, Incorporated, New York, N. Y. Loaded signaling conductor and method of signaling. 1,763,041; June 10.
Gilchrist, Agnes C., executrix. (See Gilchrist, Raymond B.)
Gilchrist Company, The. (See Gilchrist, Raymond B., assignor.)
Gilchrist, Raymond B., deceased, Newark, N. J., by A. C. Gilchrist, executrix, New York, N. Y., assignor to The Gilchrist Company, Newark, N. J. Drink mixer. 1,762,391; June 10.
Giles, Harvey, Brooklyn, assignor to Artemas Ward, Inc., New York, N. Y. Coin-controlled vending machine. 1,763,352; June 10.
Gill, Harry, and O. R. Platter, North Vernon, Ind. Child's aeroplane swing. 1,763,510; June 10.
Gilman, George H., Claremont, N. H., assignor to Sullivan Machinery Company. Hoisting mechanism. 1,763,600; June 10.
Gjesdahl, Frederick H., Crookston, Minn. Cylinder-grinding attachment for lathes. 1,762,658; June 10.
Glaeser Research Corporation. (See Glaeser, Walter, assignor.)
Glaeser, Walter, Brooklyn, assignor to Glaeser Research Corporation, New York, N. Y. Producing mercury. 1,762,861; June 10
Glaser, Joseph P., and L. F. Julien, assignors to Chamberlin Metal Weatherstrip Co., Detroit, Mich. Weather strip. 1,762,514; June 10.
Gloeser, Otto, Niklasdorf, near Freiwaldau, Czechoslovakia. Manufacture of reinforced concrete. 1,762,815; June 10.
Glover, H. B., Company. (See Schrup, Alfred F., assignor.)
Glover, Walter H., Leamington, and C. Diamond, Coventry, assignors to Courtaulds, Limited, London, England. Manufacture of cellulose derivatories. 1,763,428; June 10.
Gluck, Julius, New York, N. Y., assignor, by mesne assignments, to Ohmer Fare Register Company, Dayton, Ohio. Taximeter. 1,762,862; June 10.
Goble, Fred J., administrator. (See Day, David T.)
Godard, Luis. (See Larrey, T., and Godard.)
Goertz, August, & Co. (See Wacker, William E., assignor.)
Goeser, Edwin W., Los Angeles, Calif. Two-post three-shaft draw works. 1,763,511; June 10.
Goldman, Herman. (See Odenbach, J. H., Goldman, and Henry.)
Goldsmith, Aaron H., Cleveland, Ohio. Electric baby-bottle warmer. 1,762,171; June 10.
Goldstein, Adolph O., Santa Cruz, Calif. Ice-shaving machine. 1,763,512; June 10.
Goldstein, Joseph. (See Weissman, J. I., and Goldstein, assignors.)
Goldstein, Morris. (See Weissman, J. I., and Goldstein.)
Goodman Manufacturing Company. (See Hicks, Frank V., assignor.)
Goodrich, B. F., Company, The. (See Reed, Marion C., assignor.)
Goodrich, B. F., Company, The. (See Snyder, Clarence E., assignor.)
Goodrum, Charles L., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Transmission system. 1,762,777; June 10.
Goodwin, Ernest G., Pelham, assignor to Standard Coupler Company, New York, N. Y. Spring. 1,763,146; June 10.
Goodwin, Ernest G., Pelham, assignor to Standard Coupler Company, New York, N. Y. Coupler key. 1,763,429; June 10.
Goodwin, Percy E., assignor to The Steel Scaffolding Company, Evansville, Ind. Scaffold bracket. 1,762,659; June 10.
Goodyear Tire & Rubber Company, The. (See Brown, Harold M., assignor.)
Goodyear Tire & Rubber Company, The. (See Burdette, Richard S., assignor.)
Goodyear Tire & Rubber Company, The. (See Campbell, Wallace H., assignor.)
Goodyear Tire & Rubber Company, The. (See Clifford, Albert M., assignor.)
Goodyear Tire & Rubber Company, The. (See Haase, Jorgen I., assignor.)
Goodyear Tire & Rubber Company, The. (See Kirk, Raphael S., assignor.)
Goodyear Tire & Rubber Company, The. (See Maas, Elov F., assignor.)
Goodyear Tire & Rubber Company, The. (See Nelson, Max C., assignor.)
Goodyear Tire & Rubber Company, The. (See Sebrell, Lorin B., assignor.)
Goodyear Tire & Rubber Company, The. (See Templeton, Edwin G., assignor.)
Goodyear Tire & Rubber Company, The. (See Van Orman, Ward T., assignor.)
Goodyear-Zeppelin Corporation. (See Helma, P., and Bauch, assignors.)
Goodyear-Zeppelin Corporation. (See Helma, P., and Klemperer, assignors.)
Goodyear-Zeppelin Corporation. (See Huerttle, Karl, assignor.)
Goodyear-Zeppelin Corporation. (See Klemperer, Wolfgang B., assignor.)
Gosner, William K., Atlantic City, N. J. Aircraft construction. 1,763,147; June 10.
Gould, John R., Aldwych, London, England, assignor to Western Electric Company, Incorporated, New York, N. Y. Telephone system. 1,762,778; June 10.
Gradolph, William F., assignor to The De Vilbiss Company, Toledo, Ohio. Spray gun. 1,762,552; June 10.
Graham, Walter F., assignor to The Ohio Brass Company, Mansfield, Ohio. Trolley wheel. 1,763,303; June 10.
Granat, Joseph, San Francisco, Calif. Wedding ring. Des. 81,329; June 10.
Grasselli Chemical Company, The. (See Alvord, Earl B., assignor.)
Grasselli Chemical Company, The. (See Grine, Harry A., assignor.)
Grau, Amandus. (See Fiedler, H. R., and Grau.)
Gray, Charles B., Millbourne, Pa. Shearing mechanism. 1,762,392; June 10.
Gray, Ellsworth, Houston, Tex. Spear. 1,762,621; June 10.
Gray, George, assignor to Garnett Church Furniture Co., Kansas City, Mo. Wedge. 1,762,622; June 10.
Gray, Hubert M., assignor of one-half to C. I. Hyland, Toledo, Ohio. Locomotive-cab curtain. 1,762,576; June 10.
Green, Harry J. (See Rooney, John, assignor.)
Green, Thomas L., Indianapolis, Ind. Dough-sheeting machine. 1,762,268; June 10.
Green, William A., Toronto, Ontario, Canada, assignor, by mesne assignments, to Vortex Cup Company, Chicago, Ill. Sundae dish and holder and assembling the same. 1,762,977; June 10.
Green, William D. (See Snyder, E. H., and Green.)
Greenberg, Samuel J., Brooklyn, N. Y. Thermometer card. Des. 81,330; June 10.
Greist, Hubert M., Scarsdale, N. Y. Auxiliary container. 1,762,331; June 10.
Greist Manufacturing Company, The. (See Elwell, George H., assignor.)

Grine, Harry A., Clarksburg, W. Va., assignor, by mesne assignments, to The Grasselli Chemical Company, Cleveland, Ohio. Preparing zinc dust and apparatus therefor. 1,762,716; June 10.
Grondahl, Lars O., Pittsburgh, assignor to The Union Switch & Signal Company, Swissvale, Pa. Power-supply means. 1,763,097; June 10.
Gross, William J., assignor, by mesne assignments, to Trussbilt Steel Doors, Inc., St. Paul, Minn. Louver. 1,762,223; June 10.
Grove, Ralph M., Brooklyn, N. Y., assignor to Mergenthaler Linotype Company. Typographical distributing machine. 1,762,863; June 10.
Gschwend, Herman. (See Buerk, A. H., and Gschwend.)
Gubelmann, Ivan, and C. O. Henke, South Milwaukee, assignors to The Newport Company, Carrollville, Wis. Recovering resorcinol. 1,762,979; June 10.
Gubelmann, Ivan, H. J. Weiland, and O. Stallmann, South Milwaukee, assignors to The Newport Company, Carrollville, Wis. 3'-amino-4'-alkyl ethers of ortho benzoyl benzoic acid and making the same. 1,762,978; June 10.
Guber, Frederick H. (See Van Dyck, A. F., and Guber.)
Gulick, Edward J., assignor to C. G. Conn, Ltd., Elkhart, Ind. Horn. 1,762,577; June 10.
Gulick, Edward J., assignor to C. G. Conn, Ltd., Elkhart, Ind. Manufacture of metal tubes. 1,763,582; June 10.
Gullborg, Arthur V., Chicago, Ill. Filter. 1,763,513; June 10.
Gunderson, George, J. Erickson, and R. T. Backus, Salerno, Fla. Attachment for motor boats. 1,763,464; June 10.
Gunnlaugsson, Skuli, Rio Vista, Calif. Tobacco pipe. 1,763,514; June 10.
Gurshtel, Harry, et al. (See Stephenson, Preston C., assignor.)
Gusdorf, Harold M., Indianapolis, Ind. Forming insoles. 1,763,148; June 10.
Gustafson, Carl B. (See Bauer, C. A., and Gustafson.)
Guthmann, Edward B., Warren, and D. C. Corbett, Bisbee, Ariz. Gravity-flow visible filter. 1,762,224; June 10.
Gutmann, Victor, Nuremberg, and L. Steiner, Berlin, Germany, assignors to Westinghouse Electric and Manufacturing Company. Inclosed submersible machine. 1,763,149; June 10.
Guy, John H., Richmond, Va. Educational device. 1,762,864; June 10.
Gyger, Joseph, Ottawa, assignor to Ottawa Silica Company, Ottawa, Ill. Sand pump. 1,763,234; June 10.
Gyger, Wayne B., assignor to Ottawa Silica Company, Ottawa, Ill. Sand pump. 1,763,235; June 10.
Gyllin, Bert, Chicago, Ill. Gear-shift control. 1,762,172; June 10.
Gyro Process Company. (See Weaver, Joseph B., assignor.)
Gyro Process Company. (See Weaver, J. B., Stahl, and Wagner, assignors.)
Haase, Jorgen I., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Control device for sheet-feeding mechanisms. 1,763,583; June 10.
Hahn, Arthur W., jr., Bronx, N. Y. Soaping device. 1,763,236; June 10.
Hahnemann, Paul R., assignor to Niagara Machine and Tool Works, Buffalo, N. Y. Slip-roll-forming machine. 1,763,304; June 10.
Hahnemann, Walter, Berlin-Marienfelde, assignor to C. Lorenz Aktiengesellschaft, Berlin-Tempelhof, Germany. Piezo-electric device. 1,763,515; June 10.
Hall, C. M., Lamp Company. (See Bamford, Frank L., assignor.)
Hall, Cortice H., Glen Rock, N. J., assignor to Domestic Stoker Company, New York, N. Y. Furnace. 1,762,816; June 10.
Hall, George E. (See Witten, Arthur P., assignor.)
Hall, Richard L. (See Robinson, Earl M., assignor.)
Hall, Walter H., Winchendon, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Work-positioning device for wood-heel jacks. 1,762,296; June 10.
Haller, Louis G., Chattanooga, Tenn. Boiler. 1,762,779; June 10.
Hamachek, Frank, assignor to Frank Hamachek Machine Company, Kewaunee, Wis. Screen drum for green-pea-vine hullers. 1,762,225; June 10.
Hamachek, Frank, Machine Company. (See Hamachek, Frank, assignor.)
Hamilton, Adolph. (See Hamilton, H. E., Krueger, and Hamilton.)
Hamilton Beach Manufacturing Company. (See Anderson, Harry A., assignor.)
Hamilton Beach Mfg. Co. (See Robinson, Patrick H., assignor.)
Hamilton, Henry E. (See Krueger, Frederick C., assignor.)
Hamilton, Henry E., F. C. Krueger, and A. Hamilton, New London, Wis., assignors, by mesne assignments, to said Henry E. Hamilton. Coring machine. 1,762,438; June 10.
Hamilton Standard Propeller Corporation, The. (See Caldwell, Frank W., assignor.)
Hammond Manufacturing Company, The. (See Buss, William D., assignor.)
Hampden Manufacturing Co. (See Underhill, J. A., and Hemenway, assignors.)
Hancock, William L., assignor to The Murray Company, Dallas, Tex. Pin and mounting therefor. 1,762,473; June 10.
Hanzlik, Henry J., Swarthmore, Pa., assignor to Westinghouse Electric & Manufacturing Company. Turbine. 1,762,332; June 10.
Harber, Laurence S. (See Pointon, J. E., and Harber.)
Hardy, Charles, assignor to Wales Novelties Corporation, New York, N. Y. Pocket cigar lighter. 1,762,980; June 10.
Harnsberger, Audley E., assignor to The Pure Oil Company, Chicago, Ill. Vacuum system of oil conversion. 1,763,604; June 10.
Harris, Carl C., Orange, Mass. Game and game piece. 1,762,269; June 10.
Harris, Jesse, La Fayette, Ind. Maximum-demand meter. 1,762,226; June 10.
Harris, John C., and J. Wood, Otiake, New Zealand. Heating device. 1,763,516; June 10.
Hartford Special Machinery Company. (See Standish, Edward K., assignor.)
Hartley, Ralph V. L., South Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Acoustic device. 1,762,981; June 10.
Hartman, Milton, G. L. Ohmart, and T. H. Hawkinson, assignors to Localized Advertising Corporation, Detroit, Mich. Display apparatus. 1,762,685; June 10.
Hartmann & Braun Aktiengesellschaft. (See Bestelmeyer, Adolf, assignor.)
Hartwick, Frederick H., and H. C. Arnold, Columbus, Ohio. Projector lamp. 1,763,517; June 10.
Haseltine, Stacy B., assignor to W. H. Miner, Inc., Chicago, Ill. Drawbar and yoke connection. 1,762,333; June 10.
Haskell, David I., Brookline, Mass. Shoe. Des. 81,331; June 10.
Haskell, David I., Brookline, Mass. Shoe. 1,763,605; June 10.
Hasselbach, Alexander, and F. Inther, assignors to G. Polysius, a firm of Dessau, Germany. Apparatus for burning coal dust. 1,762,982; June 10.
Haven, Kent C., assignor to H. H. Franklin Manufacturing, Syracuse, N. Y. Motor-vehicle body. Des. 81,332; June 10.
Haweis, Stephen, Washington, D. C. Musical instrument. 1,763,518; June 10.
Hawkins, Nettie M. (See Fowler, Daniel E., assignor.)
Hawkinson, Theodore H. (See Hartman, M., Ohmart, and Hawkinson.)
Haynshi, Ken, Evansburgh, Alberta, Canada. Leaf holder for books. 1,762,686; June 10.
Haynen, Joseph R. (See Churchill, C. R., and Haynen.)
Hayward Company, The. (See Atkinson, Herbert S., assignor.)
Hazeltine Corporation. (See Trube, Carl E., assignor.)
Heath, Robert E., Monroe, N. C. Portable vending machine. 1,763,044; June 10.
Hebbeler, George W., St. Louis, Mo. Tire-casing expander. 1,762,227; June 10.
Hebrew, Joseph S., Sharon, Pa., assignor to Westinghouse Electric & Manufacturing Company. Reactor system. 1,763,150; June 10.
Heckmann, Georg. (See Schneider, J., and Heckmann.)
Hehn, Louis F., Chicago, Ill. Coin-controlled apparatus. 1,763,045; June 10.
Heldbrink, Jay A., Minneapolis, Minn. Anæsthetizing apparatus. 1,763,305; June 10.
Heimburger, Douglas D., St. Louis, Mo., assignor to Marquette Manufacturing Company, St. Paul, Minn. Automobile washing apparatus. 1,763,046; June 10.
Hein, Bernhard, Cologne, Germany, assignor to Le Treillage Ceramique Francais, Paris, France. Weaving loom, especially for heavy webs such as metallic wire webbing. 1,762,393; June 10.
Heinemann, Wilhelm, Baden, Germany. Lathe with capstan and cross-slide rests. 1,763,519; June 10.
Heinrich, Hugo, Zwickau, Germany. Engine, pump, compressor, and the like. 1,762,983; June 10.
Heinrich, Paul G., Eden, N. Y. Trapper's glove. 1,762,865; June 10.
Heising, Raymond A., Millburn, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Secret communicating system. 1,762,984; June 10.
Helander, Lillian V. M. (See Allen, G. N., and Helander.)
Heller, Walter M., Newark, N. J. Wrench. 1,763,353; June 10.
Helma, Paul, and K. Bauch, assignors to Goodyear-Zeppelin Corporation, Akron, Ohio. Wire netting for airships. 1,763,584; June 10.
Helma, Paul, and W. B. Klemperer, assignors to Goodyear-Zeppelin Corporation, Akron, Ohio. Bulkhead for airships. 1,763,585; June 10.
Helmond, William F., West Hartford, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y. Typewriting machine. 1,762,173; June 10.
Hemenway, George C. (See Underhill, J. A., and Hemenway.)
Henderson, Herbert V., assignor to Chrysler Corporation, Detroit, Mich. Foot rest. Des. 81,333; June 10.
Hendrickson, Walter H., assignor to Emerson-Brantingham Corporation, Rockford, Ill. Kitchen cabinet and refrigerator. 1,763,306; June 10.
Henke, Clyde O. (See Gubelmann, I., and Henke.)
Henry, William C. (See Odenbach, J. H., Goldman, and Henry.)

Hensing, Johann C., Arnhem, and J. W. Lubberhuizen, Ede, assignors to Naamlooze Vennootschap Nederlandsche Kuntstzijdefabriek, Arnhem, Netherlands. Spinning bowl. 1,763,520; June 10.

Hepburn, William M., assignor to The Surface Combustion Company, Inc., Toledo, Ohio. Burning explosive gaseous mixtures. 1,763,047; June 10.

Herring, Eugene, New Orleans, La., assignor to Elm City Cotton Mills, La Grange, Ga. Loom. 1,762,717; June 10.

Hersh, Harry, Milwaukee, Wis. Cover. 1,762,985; June 10.

Hervey, David F., Logansport, Ind. Handle for implements. 1,762,718; June 10.

Herz, Richard, Frankfort-on-the-Main, E. Runne, Hochst-on-the-Main, and E. Albrecht, Fechenheim, near Frankfort-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Tri halogen benzene sulphochloride and preparing the same. 1,763,556; June 10.

Hess, Carl F., Comstock Park, Mich. Automobile seat construction. 1,762,623; June 10.

Hevi Duty Electric Company. (See Smalley, Edwin L., assignor.)

Heyna, Hans. (See Hoffa, E., and Heyna.)

Heywood-Wakefield Company. (See Stinson, G., and Fred, assignors.)

Hibbard, Frank H., Arlington, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Electrical measuring instrument. 1,762,780; June 10.

Hickok Manufacturing Company. (See Koeth, Charles E., assignor.)

Hicks, Frank V., Rock Springs, Wyo., assignor to Goodman Manufacturing Company, Chicago, Ill. Draft-operated scraper. 1,762,334; June 10.

Hiersch, Fredrick A., Seattle, Wash. Speed wrench. 1,762,515; June 10.

Higbee, Ray P., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Signaling system. 1,763,151; June 10.

Higgins, Eric B., assignor of one-half to British Synthetics Limited, Brentford, England. Preparation of arylides of 2-hydroxy-3-naphthoic acid. 1,762,474; June 10.

Higgins, Eugene, Jackson, Mich. Friction clutch. 1,762,624; June 10.

High, John M., jr., New York, N. Y., assignor to Hopkins Corporation, Jersey City, N. J. Sound-producing device. 1,763,056; June 10.

Highway Trailer Company. (See Davis, Durrel H., assignor.)

Hild, William F., East Rutherford, N. J. Signal mechanism for automobiles. 1,763,405; June 10.

Hill, Leland H., Swissvale, Pa., assignor to Westinghouse Electric & Manufacturing Company. Transformer. 1,763,152; June 10.

Hinrichsen, Edward E., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Telephone system. 1,762,986; June 10.

Hirsch, Henry, Jersey City, N. J. Portable laundry receptacle. 1,762,475; June 10.

Hiser, Charles H., assignor to The Springfield Metallic Casket Company, Springfield, Ohio. Clamping device. 1,762,578; June 10.

Hlavac, Anthony, Chicago, assignor to E. J. Hubbard, Berwyn, Ill. Cop holder. 1,762,516; June 10.

Hoague-Sprague Corporation. (See Smith, Harry B., assignor.)

Hobbins, William J., Madison, Wis. Combined windshield wiper and ice remover. 1,763,153; June 10.

Hodges, James M., Louisville, Ky. Recording device for poultry. 1,762,687; June 10.

Hodgkins, Reginald R., Los Angeles, Calif. Punching-bag hook and swivel. 1,762,439; June 10.

Hodgkinson, Francis, Swarthmore, Pa., assignor to Westinghouse Electric & Manufacturing Company. Combined turbine and condenser. 1,763,237; June 10.

Hoevel, Herman F. (See Auerbach, Karl, assignor.)

Hoffa, Erwin, and H. Heyna, Frankfort-on-the-Main-Hochst, Germany, assignors to General Aniline Works, Inc., New York, N. Y. 2-substituted-1-methyl-phenyl-3-mercaptans. 1,762,270; June 10.

Hoffa, Erwin, and H. Heyna, Frankfort-on-the-Main-Hochst, Germany, assignors to General Aniline Works, Inc., New York, N. Y. 2-substituted-1-methyl-3-thioglycolic acid. 1,762,719; June 10.

Hoffa, Erwin, and H. Heyna, Hochst-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y. New vat dyestuffs and preparing them. 1,762,817; June 10.

Hoffman, Philip J., Johnstown, Pa., assignor to Bethlehem Steel Company. Valve. 1,762,818; June 10.

Hoffmann, Ernst, Salza, near the Harz, assignor to Schmidt, Kranz & Co. Nordhäuser Maschinenfabrik Aktien-Gesellschaft, Nordhäusen, near the Harz, Germany. Propulsion conveyer. 1,763,307; June 10.

Hoffmann, Willibald, Milwaukee, Wis. Display device for show cases, windows, and similar places. 1,762,987; June 10.

Hofmann, Fritz, Breslau, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Oxidizing paraffins, waxes, and the like. 1,762,688; June 10.

Hogg, William J., assignor to The National Acme Company, Cleveland, Ohio. Threading-die-operating attachment. 1,762,988; June 10.

Holden, James H., Brentwood; T. O'Brien, Sharon; and J. C. Whetzel and R. E. Zimmerman, assignors to American Sheet and Tin Plate Company, Pittsburgh, Pa. Removing, purifying, and recovering oil from tin plate. 1,763,430; June 10.

Hollinger, Emil F., assignor to Hudson Electrical Heating Corporation, New York, N. Y. Apparatus for thermostatic control of electrical circuits. 1,762,174; June 10.

Hollingsworth, William F. (See Blair, John H., assignor.)

Hollins, Jack, Middlewich, and D. J. Glossop, assignors to Imperial Chemical Industries Limited, London, England. Reeling machine. 1,762,866; June 10.

Holmes, George A., Newton, assignor, by mesne assignments, to United-Carr Fastener Corporation, Cambridge, Mass. Fastener. 1,763,521; June 10.

Holmes, Harry N., Oberlin, Ohio. Preparation of absorptive gels. 1,762,228; June 10.

Holmes, Morris P., Claremont, N. H., assignor to Sullivan Machinery Company. Hoisting mechanism. 1,763,631; June 10.

Holophane Company. (See Jenkins, Howard L., assignor.)

Holophane Company. (See Rucker, George, assignor.)

Holt, Claude G., St. Johns Station, Mo. Pump. 1,762,625; June 10.

Holyoke Heater Company. (See Sinclair, Peter S., assignor.)

Holzwarth Gas Turbine Co. (See Holzwarth, Hans, assignor.)

Holzwarth, Hans, Dusseldorf, Germany, assignor to Holzwarth Gas Turbine Co., San Francisco, Calif. Controlling device. 1,763,154; June 10.

Hood, Harry M., Chicago, Ill., assignor to Featheredge Rubber Company, Inc. Head construction for automobile windows. 1,763,522; June 10.

Hood Rubber Company, The. (See Fowler, Fred D., assignor.)

Hood Rubber Company. (See Perrault, J. E., and Davis, assignors.)

Hooton, Gordon B., Grand Rapids, Mich. Hydroplane. 1,762,626; June 10.

Hopkins, Arthur C., assignor to National Standard Company, Niles, Mich. Lifting jack. 1,762,627; June 10.

Hopkins Corporation. (See High, John M., jr., assignor.)

Hopkins Corporation. (See Hopkins, Marcus C., assignor.)

Hopkins, Elton R., San Francisco, Calif. Generator-circuit protector. 1,762,297; June 10.

Hopkins, Marcus C., Washington, D. C., assignor to Hopkins Corporation, Jersey City, N. J. Loud-speaker. 1,763,048; June 10.

Hopkins, Marcus C., Washington, D. C., assignor to Hopkins Corporation, Jersey City, N. J. Loud-speaker. 1,763,049; June 10.

Hopkins, Marcus C., Washington, D. C., assignor to Hopkins Corporation, Jersey City, N. J. Loud-speaker. 1,763,050; June 10.

Hopkins, Marcus C., Washington, D. C., assignor to Hopkins Corporation, Jersey City, N. J. Loud-speaker. 1,763,051; June 10.

Hopkins, Marcus C., Washington, D. C., assignor to Hopkins Corporation, Jersey City, N. J. Loud-speaker. 1,763,052; June 10.

Hopkins, Marcus, C., Washington, D. C., assignor to Titanafram Corporation, Jersey City, N. J. Loud-speaker. 1,763,053; June 10.

Hopkins, Marcus, C., Washington, D. C., assignor to Titanafram Corporation, Jersey City, N. J. Loud-speaker. 1,763,054; June 10.

Hopkins, Marcus, C., Washington, D. C., assignor to Titanafram Corporation, Jersey City, N. J. Loud-speaker. 1,763,055; June 10.

Hopkins, Roy S., Rochester, N. Y. Photographic-print drier. 1,763,629; June 10.

Hopkins, Roy S., assignor to Eastman Kodak Company, Rochester, N. Y. Photographic printer. 1,763,630; June 10.

Horgan, James C. (See Bultman, G. H., and Horgan.)

Horn, Thomas W., Cleveland, Ohio, assignor to A. B. Dick Company, Chicago, Ill. Interleaving device for printing machines. 1,763,308; June 10.

Hosking, Richard T., Wilmette, assignor, by mesne assignments, to Shakesproof Lock Washer Company, Incorporated, Chicago, Ill. Bolt lock. 1,762,394; June 10.

Hosner, Avery L., Telluride, Colo. Reclosing mechanism for circuit breakers. 1,762,298; June 10.

Hotstream Heater Company, The. (See Morrow, Clarence H., assignor.)

Hough, Clinton W., Boonville, N. Y., assignor, by mesne assignments, to Federal Telegraph Company. System for generation of polyphase current. 1,763,309; June 10.

Houghton, John M., et al. (See Houghton, Lewis T., assignor.)

Houghton, John M., et al., executors. (See Houghton, Lewis T.)

Houghton, Lewis T., deceased, Worcester, Mass.; J. M. Houghton and O. M. Lambert, executors, assignors to J. M. Houghton and O. M. Lambert. Tension device. 1,762,476; June 10.

Howard Hosiery Company. (See Tait, John, W., and F., jr., assignors.)

Howe, Charles S., assignor to Los Angeles Testing Laboratory, Los Angeles, Calif. Device for making concrete test samples. 1,762,440; June 10.

Hower, Charles C., Cleveland, Ohio. Power-transmission mechanism. 1,762,553; June 10.

Howland, Judson C., Galveston, Tex. Centrifugal grain distributor. 1,763,396; June 10.

Hoyns, George T., Brooklyn, N. Y. Clothes-drying rack. 1,762,628; June 10.

Hubbard, Eber J. (See Hlavac, Anthony, assignor.)

Hubbs, Henry E., and L. D. Malone, assignors to The Shelby Spring Hinge Company, Shelby, Ohio. Door stop and holder. 1,763,238; June 10.

Huber, Otto E., Reading, assignor to The Narrow Fabric Co., West Reading, Pa. Lace braid. Des. 81,334; June 10.

Hudson Electrical Heating Corporation. (See Holinger, Emil F., assignor.)

Hudson Motor Car Company. (See Whisler, Ralph H., assignor.)

Hudson-Sharp Machine Company. (See Campbell, Samuel J., assignor.)

Huenlich, Charles, Bloomfield, assignor to Thomas A. Edison, Incorporated, West Orange, N. J. Electrical sound recording and reproducing apparatus. 1,762,175; June 10.

Huerttle, Karl, assignor to Goodyear-Zeppelin Corporation, Akron, Ohio. Gas container for aircrafts. 1,763,586; June 10.

Huesman, Burton L., assignor to Limousine Body Company, Kalamazoo, Mich. Vehicle body structure. 1,762,629; June 10.

Hughes, Frederick G., assignor to The New Departure Manufacturing Company, Bristol, Conn. Antifriction bearing and mounting. 1,762,819; June 10.

Hughes, George H., Philadelphia, Pa. Air pump. 1,763,155; June 10.

Hughes, Myron E., Iron Mountain, Mich. Mail box. 1,762,477; June 10.

Huil, Romuald, et al. (See Jaorsz, John, assignor.)

Hume, John R., Chicago, Ill. Fountain pen. 1,762,554; June 10.

Huntley, Reginald C., Sturgis, Mich. Adjustable chair. 1,762,630; June 10.

Hurley, Roy T., Dobbs Ferry, N. Y., assignor to The B. G. Corporation. Spark plug. 1,762,989; June 10.

Hutchings, Edward W., Perry, Fla. Lumber cradle. 1,762,271; June 10.

Hutchinson, Job, Saugerties, N. Y. Vacuum cleaner. 1,763,397; June 10.

Hydraulic Press Manufacturing Company. (See Ernst, Walter, assignor.)

Hyland, Charles I. (See Gray, Hubert M., assignor.)

I. G. Farbenindustrie Aktiengesellschaft. (See Hofmann, Fritz, assignor.)

I. G. Farbenindustrie Aktiengesellschaft. (See Reppe, Walter, assignor.)

Ileman, Emil A., assignor, by mesne assignments, to Consolidated Ashcraft Hancock Company, Inc., New York, N. Y. Pressure gauge. 1,763,354; June 10.

Imperial Chemical Industries Limited. (See Hollins, J., and Jepson, assignors.)

Indian Motocycle Company. (See Bauer, C. A., and Gustafson, assignors.)

Indian Motocycle Co. (See Franklin, Charles B., assignor.)

Industrial Technics Corporation. (See Arsem, William C., assignor.)

Ingersoll-Rand Company. (See Lear, Earl B., assignor.)

Ingrassia, Leon, Astoria, N. Y. Pad and associated tube forming means for permanent hair waving. 1,763,355; June 10.

International Combustion Engineering Corporation. (See Jackson, George P., assignor.)

International Combustion Engineering Corporation. (See Kreisinger, Henry, assignor.)

International Combustion Engineering Corporation. (See Wood, Wilfred R., assignor.)

International Derrick & Equipment Company, The. (See Schuler, Charles E., assignor.)

International Harvester Company. (See Kane, Paul, assignor.)

International Motor Company. (See Masury, Alfred F., assignor.)

International Seal and Knot Protector Co., The. (See Dessauer, Norman, assignor.)

International Steel Tie Company, The. (See Day, William P., assignor.)

Isley, George H., assignor to Morgan Construction Company, Worcester, Mass. Control and reversal of regenerative furnaces. 1,762,299; June 10.

Isley, George H., assignor to Morgan Construction Company, Worcester, Mass. Reversing and controlling apparatus for regenerative heating furnaces. 1,762,300; June 10.

Isom, Edward W., Scarsdale, assignor to Sinclair Refining Company, New York, N. Y. Cracking hydrocarbon oils. 1,762,229; June 10.

Ittig, George P., assignor to Blackstone Silver Company, Incorporated, Bridgeport, Conn. Metal border strip. Des. 81,335; June 10.

Jackson, George P., Flushing, assignor to International Combustion Engineering Corporation, New York, N. Y. Boiler furnace. 1,762,335; June 10.

Jackson, Maunsell B., Toronto, Ontario, Canada. Engine starter. 1,762,631; June 10.

Jackson, Richard A. (See Freivogel, Ernest, assignor.)

Janda, Rudolph W. (See Anderson, C. F., and Janda.)

Jandus, Herbert S., assignor to General Spring Bumper Corporation, Detroit, Mich. Bumper. 1,763,587; June 10.

Jansson, Gustav, Wollaston, assignor, by mesne assignments, to Condit Electrical Manufacturing Corporation, Boston, Mass. Contact member for electric switches. 1,763,356; June 10.

Jardine, Frank, assignor, by mesne assignments, to The Cleveland Trust Company, Cleveland, Ohio, trustee. Piston. 1,763,523; June 10.

Jarosz, John, assignor of one-third to R. Hull and one-third to J. A. Pikor, Central Falls, R. I. Dirigible headlight for automobiles. 1,763,621; June 10.

Jarvis, W. B., Company. (See Ruppel, Frederick C., assignor.)

Jeffrey Manufacturing Company, The. (See Liggett, William K., assignor.)

Jenkins, Charles F., assignor to Jenkins Laboratories, Washington, D. C. Arc-lamp lens-disk transmitter. 1,763,357; June 10.

Jenkins, Charles F., assignor to Jenkins Laboratories, Washington, D. C. Code transmitter receiver. 1,763,358; June 10.

Jenkins, Howard L., Newark, Ohio, assignor to Holophane Company, Inc., New York, N. Y. Shade support. 1,762,781; June 10.

Jenkins Laboratories. (See Jenkins, Charles F., assignor.)

Jepsen, Henry, Collinsville, Conn. Packaging cementing compounds. 1,762,782; June 10.

Jepson, Douglas. (See Hollins, J., and Jepson.)

Johannsen, Friedrich, assignor to the firm Fried. Krupp Grusonwerk Aktiengesellschaft, Magdeburg, Magdeburg-Buckau, Germany. Working up complex ores and metallurgical products. 1,762,867; June 10.

Johnson, Clarence V., assignor to one-third to H. L. Ream and one-third to F. Kimball, Wichita, Kans. Street and highway marker. 1,763,431; June 10.

Johnson, Harry C., Chicago, Ill., assignor to Self Locking Carton Company. Egg container. 1,763,588; June 10.

Johnson, Harry L., Minneapolis, Minn. Grain separator. 1,762,632; June 10.

Johnson, Hjalmar E., San Francisco, Calif. Machine for cleaning and digging ditches. 1,762,441; June 10.

Johnson, Martin E., Chicago, assignor of one-half to I. J. Wilson, Winnetka, Ill. Pipe bender. 1,762,230; June 10.

Johnson, Russell H., and O. E. Szekely, Moline, assignors to Brown Lynch Scott Co., Monmouth, Ill. Wheeled harrow. 1,762,633; June 10.

Johnson, William C., assignor to Machinery Development Company, Milwaukee, Wis. Apparatus for setting out leather. 1,763,359; June 10.

Johnston, Howard L., Forest Hills, Pa., assignor to Westinghouse Electric & Manufacturing Company. Post structure. 1,763,156; June 10.

Joiner, William C. H., jr., Camden, N. J. Closet. 1,763,524; June 10.

Jones, Charles W. Glen Ridge, N. J., assignor to Sons-Cunningham Reed & Rattan Co., Inc., New York, N. Y. Frame of a chair or settee. Des. 81,366; June 10.

Jones, George F., London, England. Rotary fan and heat exchanger. 1,762,272; June 10.

Jones, Harry S., Chicago, Ill. Machine posting binder. 1,763,525; June 10.

Jones, Lester L., Oradell, N. J., and J. A. Flanzer, Brooklyn, assignors to Technidyne Corporation, New York, N. Y. Preparation of electrical resistance units. 1,762,990; June 10.

Jones, Loyd A., and C. M. Tuttle, assignors to Eastman Kodak Company, Rochester, N. Y. Sound film with sensitometric scale. 1,762,925; June 10.

Jones, Murvin L., assignor to J. C. Deagan, Inc., Chicago, Ill. Musical instrument. 1,763,526; June 10.

Jones, Rodney, Kenner, La. Pliers. 1,763,527; June 10.

Jones, Warren C., Flushing, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Electromagnetic reproducer or recorder. 1,762,991; June 10.

Jorgensen, Olav E., Forest Hills, N. Y. Piston for internal-combustion engines. 1,672,442; June 10.

Joseph, Felix A. Hampstead, London, England. Pack of playing cads. Des. 81,336; June 10.

Julien, Louis F. (See Glaser, J. P., and Julien.)

Jyumi, Motogo, Oakland, Calif. Fish bowl and lamp combination. 1,762,634; June 10.

Kais, Achille, Detroit, Mich. Oil burner. 1,762,868; June 10.

Kalischer, Georg, and H. Scheyer, Frankfort-on-the-Main, and K. Keller, Mainkur, near Frankfort-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Introducing an aldehydic group into heterocyclic nitrogen compounds. 1,763,557; June 10.

Kane, John J., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Power system. 1,763,616; June 10.

Kane, Paul, Neuss, Germany, assignor to International Harvester Company. Clutch-control lever for reapers. 1,762,395; June 10.

Kanter, Edward, and E. Feldman, Cleveland Heights, Ohio. Article-dispensing stand. Des. 81,337; June 10.

Karfiol, Edward, Brooklyn, N. Y. Doily. Des. 81,338; June 10.

Karfiol, Edward, Brooklyn, N. Y. Doily. Des. 81,339; June 10.

Karolus, August, Leipzig, Germany, assignor to Radio Corporation of America. Receiver arrangement for electric television apparatus. 1,762,231; June 10.

Kascak, Stephen O., Hugoton, Kans. Animal trap. 1,762,783; June 10.

Kean, Otho V., Providence, R. I. Noncorrodible reenforced pipe. 1,763,360; June 10.

Keefe, William H., Jr. (See Anderson, C. E., and Keefe.)

Keene, Alvin D., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Electric furnace. 1,763,239; June 10.

Keller, Karl. (See Kallscher, G., Scheyer, and Keller.)

Kelley, Walter P. (See Gates, Frank M., assignor.)

Kelly, Roy H., assignor to Marathon Paper Mills Company, Rothschild, Wis. Surface-marking roll. 1,762,992; June 10.

Kelsey-Hayes Wheel Corporation. (See Booth, William N., assignor.)

Kendall, Ira H., assignor to The Kendall Patents, Inc., Potsdam, N. Y. Connected pipe system and making the same. 1,762,820; June 10.

Kendall Patents, Inc., The. (See Kendall, Ira H., assignor.)

Kenney Manufacturing Company. (See Smith, Walter E., assignor.)

Kersting, Albert H., Los Angeles, Calif. Sash balance. 1,762,821; June 10.

Kesses, Charles, New York, N. Y. Parachute for aeroplanes. 1,762,396; June 10.

Khoury, Amin M. (See Lavigne, Michael A. S., assignor.)

Khun, Albert M., Elizabeth, N. J. Plumbing fixture. 1,763,406; June 10.

Kiefer, Karl, Cincinnati, Ohio. Filling machine. 1,763,240; June 10.

Kiefer, William R., assignor to The Sundstrand Engineering Co., Rockford, Ill. Oil burner. 1,762,555; June 10.

Kilburn, Karl, Boston, and T. H. Seely, Melrose, Mass., assignors to United Shoe Machinery Corporation, Paterson, N. J. Shoe support. 1,762,720; June 10.

Kimball, Frouze, et al. (See Johnson, Clarence V., assignor.)

Kindel Furniture Company. (See Kindel, Thomas G., assignor.)

Kindel, Thomas G., Grand Rapids, Mich., assignor to Kindel Furniture Company. Bed or similar article. Des. 81,340; June 10.

King, Gerald V. (See Koechling, C. D., and King.)

King, Gerald V., St. Albans, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Telephone system. 1,763,157; June 10.

Kinser, James W., Terre Haute, Ind. Wall-board hoist. 1,762,397; June 10.

Kirby, Charles H., assignor to Marvel Carbureter Company, Flint, Mich. Carburetor. 1,763,361; June 10.

Kirk, Raphael S., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Tire-forming machine. 1,763,589; June 10.

Kirkman, James H., Smithfield, N. C. Road-marking machine. 1,763,432; June 10.

Kirsch, Louis F., Cleveland, Ohio. Radiocabinet. Des. 81,341; June 10.

Kirschbraun, Lester, Leonia, N. J., assignor, by mesne assignments, to The Patent and Licensing Corporation, Boston, Mass. Method of and apparatus for saturating sheet material. 1,762,336; June 10.

Kirschbraun, Lester, Leonia, N. J., assignor, by mesne assignments, to The Patent and Licensing Corporation, Boston, Mass. Roofing and making same. 1,763,601; June 10.

Klausmeyer, David C., and H. M. Norris, assignors to The Cincinnati Bickford Tool Company, Cincinnati, Ohio. Thirty-six-speed head. 1,763,158; June 10.

Klein, Georges, and P. Massot, Paris, France. Ticket-canceling machine. 1,762,301; June 10.

Klein, Herman, Chicago, Ill. Incinerator. 1,763,159; June 10.

Klein, Herman, Chicago, Ill. Incinerator. 1,763,398; June 10.

Klein, Louis. (See Nordlinger, M. W., and Klein.)

Kleinmeyer, T. E., et al. (See Dopyera, John, assignor.)

Klemm, William J., assignor to Ruda Manufacturing Company, Chicago, Ill. Window structure. 1,762,993; June 10.

Klemperer, Wolfgang B. (See Helma, P., and Klemperer.)

Klemperer, Wolfgang B., assignor to Goodyear-Zeppelin Corporation, Akron, Ohio. Stabilizing apparatus for airships. 1,763,590; June 10.

Klingner, Herman R., Dresden, Germany, assignor to A. Wagner, New York, N. Y. Gas connection. 1,762,721; June 10.

Klinke, Oscar F., assignor to Bates & Klinke, Inc., Attleboro, Mass. Finger ring. Des. 81,342; June 10.

Klinker, Herman H. D., New York, N. Y. Toy palpitating heart. 1,763,467; June 10.

Klocke, William, Woodhaven, assignor to E. W. Bliss Company, Brooklyn, N. Y. Toggle drawing press. 1,762,898; June 10.

Kneen, Herbert L., Hamden, Conn. Tire support. 1,762,994; June 10.

Knight, Julian G., Brooklyn, N. Y. Fixture support. 1,762,995; June 10.

Knight, Julian G., Brooklyn, N. Y. Outlet or junction box or the like. 1,763,160; June 10.

Knight, Ronald F., Ramsey, N. J., assignor to Franklin Railway Supply Company, New York, N. Y. Railway driving-wheel crank-pin device. 1,762,337; June 10.

Koechling, Charles D., Brooklyn, and G. V. King, Jamaica, assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y. Telephone system. 1,763,161; June 10.

Koehring Company. (See Lichtenberg, Erich H., assignor.)

Koenen, Henry J., Clara City, Minn. Windmill power for washing machines. 1,763,529; June 10.

Koeth, Charles E., assignor to Hickok Manufacturing Company, Inc., Rochester, N. Y. Display device for jewelry. 1,762,478; June 10.

Kohn, Koby, New York, N. Y. Removable receptacle closure. 1,762,680; June 10.

Koken Companies. (See Carter, L. A., and Steinmetz, assignors.)

Kolar, Henry, Exeter, Nebr. Agitator for washing machines. 1,762,660; June 10.

Konoff, Alexander. (See Marcus, S., and Konoff.)

Kopf, Joseph L., East Orange, N. J., assignor to Jabez Burns & Sons, Inc., New York, N. Y. Coffee product and making same. 1,762,690; June 10.

Kops Bros. Inc. (See Kops, Waldemar, assignor.)

Kops, Waldemar, assignor to Kops Bros. Inc., New York, N. Y. Apparel garment. 1,762,399; June 10.

Kranz, Philip, and A. P. Schmid, assignors to B. Wilmsen, Philadelphia, Pa. Reflector and supporting tongues therefor. 1,763,310; June 10.

Kratochwill, Rudolph A., Greenville, Tenn. Umbrella handle. 1,762,869; June 10.

Kreisinger, Henry, Piermont, assignor to International Combustion Engineering Corporation, New York, N. Y. Gas washer. 1,762,338; June 10.

Kreiss, Henry. (See Noe, C., and Kreiss.)

Krenz, Reinhold W., Toledo, Ohio. Incinerator. 1,762,579; June 10.

Kretzschmar, George W., Garfield, N. J., assignor to Triplex Safety Glass Company of North America, New York, N. Y. Apparatus for use in the manufacture of laminated glass. 1,762,722; June 10.

Kriegsheim, Heinrich, assignor to The Permutit Company, New York, N. Y. Treatment of boiler water. 1,762,784; June 10.

Kroll, Harold J., Wauwatosa, Wis., assignor to The Fisk Rubber Company, Chicopee Falls, Mass. Feeding and cutting device. 1,762,822; June 10.

Krom, Myron E. (See Stacy, L. J., and Krom.)

Krom, Myron E., Madison, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Regulator system. 1,763,057; June 10.

Kruckenberg, Franz, Heidelberg, Germany. Securing rails to high-speed suspension monorailways. 1,763,558; June 10.

Krueger, Frederick C. (See Hmilton, H. E., Krueger, and Hamilton.)

Krueger, Frederick C., New London, Wis., assignor, by mesne assignments, to H. E. Hamilton. Canning machine. 1,762,443; June 10.

Krusell, Lars G., assignor to The Fisk Rubber Company, Chicopee Falls, Mass. Tube-deflating valve. 1,762,823; June 10.

Kucher, Andrew A., Chester, Pa., assignor to Westinghouse Electric & Manufacturing Company. Refrigerator-motor-lubricating system. 1,763,162; June 10.

Kuhn, Frank, and L. H. Thomas, assignors to American Electrical Heater Company, Detroit, Mich. Electric toaster. 1,762,176; June 10.

Kurtz, Alfred, Brooklyn, N. Y. Plaited hat lining and method and apparatus for making the same. 1,763,468; June 10.

L. G. S. Devices Corporation. (See Starkey, William C., assignor.)

Laboratory Products Company, The. (See Frohring, W. O., and Richards, assignors.)

La Brie, Ludger E., assignor to Bendix Brake Company, South Bend, Ind. Brake. 1,762,691; June 10.

Ladd, James B., Ardmore, Pa., assignor to United States Cast Iron Pipe & Foundry Company, Burlington, N. J. Centrifugal casting machine. 1,762,177; June 10.

Lade, Archibald, Northampton, assignor to B. F. Perkins & Son, Inc., Holyoke, Mass. Journal bearing. 1,762,444; June 10.

Lair, Abraham W., Los Angeles, Calif. Massage machine. 1,762,692; June 10.

Lakeside Bridge & Steel Co. (See Coddington, Vantyle W., assignor.)

Lambert, Frank P., Oakland, Calif. Steam-table pan. 1,762,636; June 10.

Lambert, Olive M., et al. (See Houghton, Lewis T., assignor.)

Lambert Tire & Rubber Company. (See Whitlark, Henry B., assignor.)

Lamson Campany, The. (See Taylor, William J., assignor.)

Lane, Louis, Habana, Cuba. Flat asbestos-cement roof and wall sheet. 1,763,469; June 10.

Lane, M Helen, Chicago, Ill. Game board. Des. 81,343; June 10.

Lange, Wilhelm, Berlin-Spandau, Germany. Bufferlike guard for vehicles. 1,762,870; June 10.

Langlois, Earl H., assignor to The Victor Racing Plate Company, Baltimore, Md. Horseshoe. 1,763,433; June 10.

Larrey, Teodoro, and L. Godard, Mexico, Mexico. Steam-superheating system. 1,763,241; June 10.

Larsen, Gautier H. T., Eindhoven, Netherlands, assignor to Radio Corporation of America. Loud-speaker. 1,763,399; June 10.

Larson, Ernest, Turlock, Calif. Cream siphon. 1,762,517; June 10.

Larsson, Thure, assignor to Norton Company, Worcester, Mass. Tunnel kiln. 1,763,624; June 10.

Larus & Brother Company. (See Wysong, James R., assignor.)

Lasker, William W., Brooklyn, assignor, by mesne assignments, to Remington Rand Inc., New York, N. Y. Automatic visible-card perforator. 1,763,163; June 10.

Latham Machinery Company. (See Metcalf, I. R., Richardson, and Wolf, assignors.)

Latshaw, Elmer, assignor to The J. G. Brill Company, Philadelphia, Pa. Car truck. 1,763,434; June 10.

Latty, Xavier, Paris, France. Railroad-signal lock. 1,763,530; June 10.

Lavigne, Michael A. S., Winsted, Conn., assignor of seventeen per cent to A. M. Khoury, Burlington, Vt. Oil burner. 1,763,164; June 10.

Lear, Earl B., Phillipsburg, assignor to Ingersoll-Rand Company, Jersey City, N. J. Air-feed-controlling device. 1,762,178; June 10.

Ledbetter, Elmer E., assignor to Ever Hot Heater Company, Detroit, Mich. Oven thermostat. 1,762,179; June 10.

Legg, Joseph W., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Oscillograph galvanometer. 1,763,242; June 10.

Legg, Victor E., East Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Loading of signaling conductors. 1,762,990; June 10.

Lehman, Paul W., Milwaukee, Wis., assignor to The Fisk Rubber Company, Chicopee Falls, Mass. Tire-building machine. 1,762,824; June 10.

Lehman, Paul W., Milwaukee, Wis., assignor to The Fisk Rubber Company, Chicopee Falls, Mass. Tire-building machine. 1,762,825; June 10.

Lehman, Paul W., Milwaukee, Wis., assignor to The Fisk Rubber Company, Chicopee Falls, Mass. Stock-trimming device. 1,762,826; June 10.

Lemon, George E., Brooklyn, N. Y. Steering gear. 1,763,470; June 10.

Lemon, Warren F., et al. (See Gambito, N., and Sumabat, assignors.)

Leon, Hermon and J. W., Atlantic City, N. J. Self-lighting cigarette. 1,763,531; June 10.

Leon, Jack W. (See Leon, Hermon and J. W.)

Leonard, Edward F., et al. (See Frey, Elmer E., assignor.)

Leonard Machinery Company. (See Frey, Elmer E.)

Leopold, George O. (See Fegley, T. J., and Leopold.)

Le Treillage Ceramique Francais. (See Hein, Bernhard, assignor.)

Levy, Maurice M., and W. I. Smith, Brooklyn, N. Y. Embossed display figure. Des. 81,344; June 10.

Lewis, Robert B., assignor to Tinius Olsen Testing Machine Company, Philadelphia, Pa. Testing machine. 1,763,400; June 10.

Lewis, Wilfred, Haverford, assignor to The Tabor Manufacturing Company, Philadelphia, Pa. Piston and cylinder construction for molding machines. 1,763,058; June 10.

Libbey-Owens Glass Company. (See Drake, John L., assignor.)

Lichtenberg, Erich H., assignor to Koehring Company, Milwaukee, Wis. Worm-drive crane. 1,763,617; June 10.

Liggett, William K., assignor to The Jeffrey Manufacturing Company, Columbus, Ohio. Loading device. 1,762,827; June 10.

Liggett, William K., assignor to The Jeffrey Manufacturing Company, Columbus, Ohio. Apparatus for breaking coal. 1,763,165; June 10.

Lightford, William L., Indianapolis, Ind. Wheel chock. 1,762,997; June 10.

Limousine Body Company. (See Huesman, Burton L., assignor.)

Lindblad, Axel R., Djursholm, Sweden. Treating arsenious ore. 1,763,435; June 10.

Lindburg, Cecil B., Darlington, Idaho. Rotary land corrugator. 1,763,166; June 10.

Linde Air Products Company, The. (See De Motte, M. P., and Pierce, assignors.)

Linebarger, Charles E., Chicago, Ill. Method and apparatus for making pellets. 1,762,693; June 10.

Lines, Frederick F., Annapolis, Md. Reverberatory furnace. 1,763,471; June 10.

Link-Belt Company. (See Tark, Marcus B., assignor.)

Linkert, Howard W., assignor to The Wheeler-Schebler Carburetor Co., Indianapolis, Ind. Carburetor. 1,763,362; June 10.

Lipe, W. C., Inc. (See Tyler, Warren C., assignor.)

Lisenby Manufacturing Company. (See Low, Charles L., assignor.)

Little, Arthur D., Brookline, assignor to Arthur D. Little, Incorporated, Cambridge, Mass. Process for the solvent extraction of woods. 1,762,785; June 10.

Little, Arthur D., Incorporated. (See Little, Arthur D., assignor.)

Little, John, Plainfield, N. J., assignor to Wood Newspaper Machinery Corporation, New York, N. Y. Center clip. 1,762,302; June 10.

Little, Thomas P., assignor to The Fisk Rubber Company, Chicopee Falls, Mass. Cutting machine. 1,762,828; June 10.

Littler, Martha E. (See Littler, Robert, sr., assignor.)

Littler, Robert, sr., assignor to M. E. Littler, Philadelphia, Pa. Safety device for automobile starters. 1,762,926; June 10.

Ljungström, Bertil A. (See Söhr, E., and Ljungström.)

Ljungström, Fredrik, Lidingo-Brevik, Sweden. Air preheater for locomotives. 1,762,445; June 10.

Ljungström, Fredrik, Brevik, Lidingon, assignor to Aktiebolaget Ljungströms Angturbin, Stockholm, Sweden. Regenerative air preheater. 1,762,446; June 10.

Llauró, Alfredo. (See Sinno, E., and Llauró.)

Llauró, Elisco. (See Sinno, E., and Llauró.)

Llauró, Jaime A. (See Sinno, E., and Llauró.)

Localized Advertising Corporation. (See Hartman, M., Ohmart, and Hawkinson, assignos.)

Lockwood Manufacturing Company, The. (See Schultz, Fred, assignor.)

Loftin, Edward H., assignor, by mesne assignments, to Radio Corporation of America, New York, N. Y. Methods of and apparatus for operating electrical amplifiers. 1,763,401; June 10.

Lomax, Clarence E., assignor, by mesne assignments, to Automatic Electric Inc., Chicago, Ill. Telephone system. 1,763,602; June 10.

Long, Leland E., and S. Whitworth, South Bend, Ind., assignors to Bendix Brake Company, Chicago, Ill. Manufacture of brake shoes. 1,762,694; June 10.

Lord, Devereux, Brooklyn, N. Y. Attachment for telephones. 1,762,998; June 10.

Lorenz, C., Aktiengesellschaft. (See Habnemann, Walter, assignor.)

Lorenz, C., Aktiengesellschaft. (See Scheppmann, Wilhelm, assignor.)

Loring, Joseph B. (See Moore, W. D., Loring and Bowers.)

Los Angeles Testing Laboratory. (See Howe, Charles S., assignor.)

Louis, Terrence G., Springfield, assignor to Wico Electric Company, West Springfield, Mass. Magneto. 1,763,098; June 10.

Low, Charles L., assignor to Lisenby Manufacturing Company, Fresno, Calif. Paper feeding and elevating mechanism for printing presses. 1,762,561; June 10.

Lowe, Joseph N. (See Droutman, Abraham, assignor.)

Lowery, Hugh, Alton, Ill., assignor to Standard Oil Company, Whiting, Ind. Revivifying fuller's earth and other filtering clays. 1,763,167; June 10.

Lowes, Ernest W., Harley, Ontario, Canada. Doorknob. 1,762,447; June 10.

Lubberhuizen, Jan W. (See Hensing, J. C., and Lubberhuizen.)

Lucker, Millard B., Benton Harbor, Mich., assignor to Auto Specialties Mfg. Co., San Francisco, Calif. Lifting jack. 1,762,400; June 10.

Ludington, Frank E., Waterbury, Conn. Machine for producing lined pouches. 1,762,829; June 10.

Luftschiffbau Zeppelin G. m. b. H. (See Strobl, Hans, assignor.)

Lundgren, Jacob, assignor to Tinius Olsen Testing Machine Company, Philadelphia, Pa. Means for and method of balancing. 1,763,402; June 10.

Lundgren, Jacob, assignor to Tinius Olsen Testing Machine Company, Philadelphia, Pa. Balancing device. 1,763,403; June 10.

Luther, Fritz. (See Hasselbach, A., and Luther.)

Lytle, Arthur R., Elmhurst, N. Y., assignor to Union Carbide & Carbon Research Laboratories, Inc. Welding alloy. 1,762,871; June 10.

Maas, Elov F., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Fabric-shaping device. 1,763,591; June 10.

Maas, Elov F., assignor to The Goodyear Tire and Rubber Company, Akron, Ohio. Band-building machine. 1,763,592; June 10.

MacAllister, Perry F. (See McPherson, Arthur D., assignor.)

Maccarone, Fred. (See Gentile, F., and Maccarone.)

MacDuffee, Robert J., and G. W. Young, Seattle, Wash. Heater and sterilizer. 1,762,448; June 10.

Macfadden, Bernarr, New York, N. Y. Golf game apparatus. 1,763,243; June 10.

Machinery Development Company. (See Johnson, William C., assignor.)

MacKenzie, Daniel P., assignor of one-half to R. L. Odiorne, Roslindale, Mass. Sprinkler with soap-holding attachment. 1,762,518; June 10.

Mackenzie, David B., Muscatine, Iowa. Automatic sash machine. 1,762,273; June 10.

MacNeill, John B., Wilkinsburg, A. H. Bakken and C. A. Tucker, Edgewood Park, Pa., assignors to Westinghouse Electric and Manufacturing Company. Control mechanism. 1,763,168; June 10.

Magee, Gerald M., Kansas City, Mo. Railway-track rail. 1,763,472; June 10.

Mahler, Johann, assignor to the firm: Maschinenfabrik Augsburg-Neurnberg, Aktiengesellschaft, Augsburg, Germany. Fuel pump of internal-combustion engines. 1,762,232; June 10.

Maier, Karl, assignor to Union Special Maschinenfabrik, Gesellschaft mit beschränkter Haftung, Stuttgart, Germany. Festoon-sewing machine. 1,762,479; June 10.
Majestic Lamp Works. (See Cricchio, Paul, assignor.)
Makowski, John F., Stockton, Calif., assignor to Fire Proof Wall Company, Reno, Nev. Lintel construction. 1,762,662; June 10.
Malkin, Joseph D. (See Thomas, O. K., and Malkin.)
Malleable Iron Fittings Company. (See Pickop, George B., assignor.)
Mallickh, Hermann, Duren, Rhineland, Germany. Refining engine. 1,763,532; June 10.
Malone, Devi D. (See Hubs, H. E., and Malone.)
Mancha Storage Battery Locomotive Company. (See Teipel, Joseph, assignor.)
Manderfeld, Emanuel C., Boonton, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Regulator system. 1,762,999; June 10.
Manley Manufacturing Company. (See Manley, Robert E., assignor.)
Manley, Robert E., assignor to Manley Manufacturing Company, York, Pa. Brake-band drilling and countersinking machine. 1,762,872; June 10.
Manly, Basil M., et al., executors. (See Manly, Charles M.)
Manly, Charles M., deceased, Richmond Hill; J. M. Manly, W. G. Manly, and B. M. Manly, executors, assignors to Overman Cushion Tire Company, Inc., New York, N. Y. Making tires. 1,762,723; June 10.
Manly, John M., et al., executors. (See Manly, Charles M.)
Manly, William G., et al., executors. (See Manly, Charles M.)
Manneschmidt, Jacob, jr., Brooklyn, N. Y. Lamp guard. 1,762,724; June 10.
Mannis, Marie. (See Debelack, Alexander F., assignor.)
Manny, Fred L., assignor to F. P. Rosback Company, Benton Harbor, Mich. Stitching machine. 1,762,927; June 10.
Manson, George J., Hawkesbury, Ontario, Canada. Water-resistant paper. 1,762,928; June 10.
Manson, George J., Hawkesbury, Ontario, Canada. Treating paper pulp to obtain paper of improved water resistance. 1,762,929; June 10.
Manson, George J., Hawkesbury, Ontario, Canada. Paper making. 1,762,930; June 10.
Manson, George J., Hawkesbury, Ontario, Canada. Grease-proof paper or paper which retains its strength in contact with grease. 1,762,931; June 10.
Marathon Paper Mills Company. (See Kelly, Roy H., assignor.)
Marchal, Clarence, Plainfield, Ind. Colter attachment for plows. 1,763,559; June 10.
Marcus, Samuel, Riverdale, assignor to Markon Manufacturing Co., Inc., New York, N. Y. Artificial eye. 1,763,312; June 10.
Marcus, Samuel, Brooklyn, and A. Konoff, assignor to Markon Manufacturing Co., Inc., New York, N. Y. Rolling eyes with lashes. 1,763,311; June 10.
Marenti, Gus, Washington, D. C. Antiglare attachment. 1,762,480; June 10.
Mariani, Frank N., assignor to Best Die Casting & Stamping Co., New York, N. Y. Mirror stand. Des. 81,345; June 10.
Markon Manufacturing Co. (See Marcus, S., and Konoff, assignors.)
Marks, Arthur H., New York, N. Y., assignor to Skinner Organ Company, Boston, Mass. Apparatus for the propagation of music and other correlated sounds. 1,762,449; June 10.
Markstein, Bernard M., Cincinnati, Ohio. Tobacco pipe. 1,762,636; June 10.
Marles, Henry, assignor to Gemmer Manufacturing Company, Detroit, Mich. Bushing. 1,762,181; June 10.
Marquand, Philip, Newburyport, Mass., assignor to Edge Moor Iron Company, Edge Moor, Del. Boiler construction. 1,762,180; June 10.
Marquette Manufacturing Company. (See Helmburger, Douglas D., assignor.)
Marr, David, Warsaw, N. Y. Organ. 1,762,274; June 10.
Marr, Robert A., assignor to Ramar Syndicate Incorporated, Norfolk, Va. Cementitious product and obtaining same. 1,762,481; June 10.
Marrison, Warren A., Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Indicating synchronism. 1,762,725; June 10.
Marrison, Warren A., Bloomfield, N. J., assignor, by mesne assignments, to Western Electric Company, Incorporated. Synchronous motor. 1,763,000; June 10.
Marsh, Jas. P., & Company. (See Faber, Guy S., assignor.)
Marsh, Jas. P., & Company. (See Rudolph, Walter J., assignor.)
Marsh, Jas. P., & Company. (See Schylander, John F., assignor.)
Marsh, Jas. P., & Company. (See Thommes, John A., assignor.)
Marshall, Lewis C., Walpole, Mass. Process and apparatus for making piston rings. 1,762,556; June 10.
Martin, Ida M., Hillside Township, Union County, N. J. Telephone-dial protector. 1,762,726; June 10.
Martin, John H., Baldwin, N. Y. Preparation of fur for shrinking and felting. 1,762,233; June 10.
Marvel Carburetor Company. (See De Voe, Ray T., assignor.)
Marvel Carbureter Company. (See Kirby, Charles H., assignor.)
Maschinenfabrik Augsburg-Nuernberg, Aktiengesellschaft. (See Mahler, Johann, assignor.)
Massot, Pierre. (See Klein, G., and Massot.)
Masury, Alfred F., assignor to International Motor Company, New York, N. Y. Seat upholstery. 1,763,001; June 10.
Mather, George L., Milwaukee, Wis., assignor to The Fisk Rubber Company, Chicopee Falls, Mass. Manufacture of pneumatic-tire casings. 1,762,830; June 10.
Mathes, Robert C., Wyoming, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Volume-control system. 1,762,727; June 10.
Mathes, Robert C., Wyoming, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Sound recording. 1,763,169; June 10.
Mathewson, Wilfred B., Weymouth, assignor to American Window Shade Machine Co. Inc., Boston, Mass. Tack forming and driving machine. 1,762,450; June 10.
Mattern, Heinrich M. M., jr., Hilversum, Netherlands. Reversing gear for reciprocating engines with hydraulically-operated valves. 1,763,474; June 10.
Matthews, Charles N., Los Angeles, Calif. Tube bender. 1,762,234; June 10.
Matthews, Guy L., assignor to H. L. Diehl, Chicago, Ill. Method of and apparatus for cleaning gut. 1,763,002; June 10.
Matthews, W. N., Corporation. (See Boll, Lester P., assignor.)
Mattison, Carl L., assignor to Mattison Machine Works, Rockford, Ill. Abrading machine. 1,762,339; June 10.
Mattison, Carl L., assignor to Mattison Machine Works, Rockford, Ill. Latch device. 1,763,244; June 10.
Mattison Machine Works. (See Mattison, Carl L., assignor.)
Mattison Machine Works. (See Vivarttas, William O., assignor.)
May, Adam J., assignor, by mesne assignments, to Ritter Dental Manufacturing Company, Inc., Rochester, N. Y. Electric-circuit-control means. 1,763,245; June 10.
Mayer, Daniel J., Belleville, assignor to Metal Textile Corporation, West Orange, N. J. Scouring implement. 1,762,182; June 10.
Maynard, Charles E., Northampton, assignor to The Fisk Rubber Company, Chicopee Falls, Mass. Method of and mold for splicing rubber tubes. 1,762,831; June 10.
Maynard, Charles E., Northampton, assignor to The Fisk Rubber Company, Chicopee Falls, Mass. Valve-pad press. 1,762,832; June 10.
Maynard, Charles E., Northampton, assignor to The Fisk Rubber Company, Chicopee Falls, Mass. Guide for pneumatic-tire treads. 1,762,833; June 10.
Mayo, John, Fairmont, W. Va., assignor to Thermal Engineering Corporation, Long Island City, N. Y. Leer. 1,762,340; June 10.
McArthur, Charles J., Glen Ridge, N. J. Combined memorandum device and memory tickler. 1,762,728; June 10.
McCabe, Ira E., Chicago, Ill. Thermostatically-actuated electric switch. 1,762,183; June 10.
McCallen, Perry S. (See Sanford, H. W., and McCallen.)
McCarthy, Francis J., Portland, assignor of one-half to H. F. Wagner, Multnomah County, Oreg. Floor cleaning, waxing, and polishing device. 1,762,637; June 10.
McClatchie, John M., assignor to The Borden Company, New York, N. Y. Valve for homogenizing devices. 1,763,313; June 10.
McCloskey, Nellie, Philadelphia, Pa. Hedge trimmer. 1,762,401; June 10.
McClure, Raymond A., Ottumwa, Iowa. Cap for cans, tubes, and the like. 1,762,873; June 10.
McConoughey, Merle S., Llanerch, Pa., assignor to Congoleum Nairn, Inc. Method of and apparatus for sheeting linoleum or the like. 1,763,314; June 10.
McConoughey, Merle S., East Orange, N. J., assignor to Congoleum Nairn, Inc. Machine for the manufacture of inlaid linoleum. 1,763,315; June 10.
McBride, James P., assignor to Munke Jack Corporation, New York, N. Y. Hydraulic jack. 1,763,404; June 10.
McBride, John A., Elko, Nev. Electric tea urn or percolator. 1,762,303; June 10.
McGavack, John, Jackson Heights, N. Y., assignor to The Naugatuck Chemical Company, Naugatuck, Conn. Treating latex and product obtained thereby. 1,762,729; June 10.
McKean, John O., assignor to Foster Machine Company, Westfield, Mass. Package-winding machine. 1,763,246; June 10.
McKeehan, Louis W., Maplewood, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Heat treatment of magnetic materials. 1,762,730; June 10.
McKellip, Spencer W., Philadelphia, assignor to Wirt Company, Germantown, Pa. Acoustic device. 1,762,184; June 10.
McKeown, John L., Chicago, Ill. Truss. 1,762,786; June 10.
McLeod, Donald B., Vancouver, British Columbia, Canada. Bed-warming device. 1,762,663; June 10.
McLind, Herman, Los Angeles, Calif. Aeroplane. 1,762,874; June 10.
McMillan Book Company. (See McMillan, John L., assignor.)
McMillan Book Company. (See Unger, Paul O., assignor.)

McMillan, John L., assignor to McMillan Book Company, Syracuse, N. Y. Guide plate for loose-leaf binders. 1,763,059; June 10.
McNally, James G. (See Sheppard, S. E., and McNally.)
McPherson, Arthur D., Elmhurst, Ill., assignor of one-half to P. F. MacAllister. Pile support. 1,762,341; June 10.
McTaggart, Russell. (See Dolling, Thomas H., assignor.)
McWilliam, Renwick, Pittsburgh, Pa. Holder adapter for reflectors. 1,763,436; June 10.
Mead, Edward D. (See Miller, O. R., and Mead.)
Mead, Edward D., Caldwell, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Magnetic device. 1,762,731; June 10.
Mead, Edward D., Caldwell, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Electromagnetic device. 1,763,003; June 10.
Mead, George J., Milwaukee, Wis., assignor to The Fisk Rubber Company, Chicopee Falls, Mass. Skiving device. 1,763,099; June 10.
Mechanics Universal Joint Company. (See Swenson, Carl E., assignor.)
Mecum, William F., Douglas, Wyo. Welding device. 1,762,402; June 10.
Meehan, John P., et al. (See Frey, Elmer E., assignor.)
Mehl, Frederic M., Fremont, Nebr. Hand-operated wheel rake. 1,763,473; June 10.
Mellor, George A., Welling, assignor of one-half to The General Electric Company Limited, London, England. Piston for internal-combustion engines. 1,763,625; June 10.
Mendle, Milton D., Clayton, assignor to American Fixture & Showcase Manufacturing Company, St. Louis, Mo. Display stand. 1,762,185; June 10.
Mendle, Milton D., Clayton, assignor to American Fixture & Showcase Mfg. Co., St. Louis, Mo. Display rack. 1,763,247; June 10.
Mendosa, John A., Manteca, Calif. Belt buckle. 1,763,100; June 10.
Menk, William, Philadelphia, Pa. Combined portable case and collapsible seat. 1,762,580; June 10.
Mergenthaler Linotype Company. (See Grove, Ralph M., assignor.)
Mergenthaler Linotype Company. (See Rogers, John R., assignor.)
Merolle, Augustus L., et al. (See Merolle, A. L., and Boehle, assignors.)
Merolle, Augustus L., and F. Boehle, assignors of one-half to said Augustus L. Merolle and one-half to Empire Metal Cap Co., Inc., Brooklyn, N. Y. Closure for glass receptacles. 1,762,342; June 10.
Merwin, Burton P., Weston, Conn., assignor to The Weston Toy Company, Inc. Dancing toy. 1,763,004; June 10.
Messier, Georges L. R. J., Montrouge, France. Brake-control system for the wheels of airplanes. 1,763,405; June 10.
Metal Textile Corporation. (See Mayer, Daniel J., assignor.)
Metalcraft Heater Corporation. (See Bovey, Sidney J. V., assignor.)
Metcalf, Irving R., G. L. Richardson, and J. Wolf, Chicago, Ill., assignors to Latham Machinery Company. Wire-stitcher head. 1,762,235; June 10.
Metzer, Claude W., Los Angeles, Calif., assignor, by mesne assignments, to Consolidated Machine Tool Corporation of America. Milling cutter. 1,762,875; June 10.
Meyer, Delbert C., East Orange, N. J., assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y. Telephone-exchange equipment. 1,763,060; June 10.
Meyer, George J., Milwaukee, assignor to Geo. J. Meyer Manufacturing Company, Cudahy, Wis. Load-reducing means for conveyers. 1,763,005; June 10.
Meyer, Geo. J., Manufacturing Company. (See Meyer, George J., assignor.)
Meyerson, Max, New York, N. Y. Temporary binder. 1,762,403; June 10.
Mickelson, Alfred O., and D. A. Cumfer, Chicago, Ill., assignors, by mesne assignments, to The Patent and Licensing Corporation, Boston, Mass. Prepared roofing. 1,762,404; June 10.
Mickelson, Alfred O., and D. A. Cumfer, Chicago, Ill., assignors, by mesne assignments, to The Patent and Licensing Corporation, Boston, Mass. Producing shingle elements. 1,762,405; June 10.
Mihalyi, Joseph, assignor to Eastman Kodak Company, Rochester, N. Y. Projection system for color pictures. 1,762,932; June 10.
Mihalyi, Joseph, assignor to Eastman Kodak Company, Rochester, N. Y. Projection system for color pictures. 1,762,933; June 10.
Miles, Beverly H. (See Simmons, A. T., and Miles.)
Miller, Alfred, Dessau, Germany, assignor, by mesne assignments, to Agfa Ansco Corporation, Binghamton, N. Y. Hardening colloids. 1,763,533; June 10.
Miller, Charles F., Columbus, Ohio. Stool. 1,762,275; June 10.
Miller, Charles F., Moores, Pa., assignor to Westinghouse Electric & Manufacturing Company. Dump-grate-operating mechanism. 1,762,406; June 10.
Miller, Frederic H., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Insulator. 1,763,170; June 10.
Miller, Frederic H., Wilkinsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Insulator. 1,763,171; June 10.
Miller, Joseph H., Houston, Tex. Dispensing can. 1,763,316; June 10.
Miller, Ohmer R., Floral Park, N. Y., and E. D. Mead, Caldwell, N. J., assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y. Electropolarized relay. 1,763,172; June 10.
Miller, Stephen J., Danbury, Conn. Hat-brim-curling machine. 1,762,557; June 10.
Miller, Wilber B., Flushing, N. Y., assignor to Electro Metallurgical Company. Welding rod. 1,762,482; June 10.
Miller, William J., Swissvale, Pa. Pottery-forming machine. 1,762,236; June 10.
Millers Falls Company. (See Swain, D. B., and Ryther, assignors.)
Millie Patent Holding Co. (See Mitchell, William K., assignor.)
Miner, W. H., Inc. (See Haseltine, Stacy B., assignor.)
Miner, W. H., Inc. (See O'Connor, John F., assignor.)
Minneapolis Engineering Company. (See Mummé, Ernest A., assignor.)
Minneapolis-Honeywell Regulator Company. (See Cunningham, Lewis L., assignor.)
Minnium, Byron B., assignor, by mesne assignments, to Story & Clark Radio Corp., Chicago, Ill. Radio receiving apparatus. 1,762,186; June 10.
Mitchell, Clifford E. (See Bennett, A. F., and Mitchell.)
Mitchell, William K., Yonkers, assignor to Millie Patent Holding Co., Inc., New York, N. Y. Tea-ball box and method of mounting tea balls therein. 1,762,558; June 10.
Mobley, Charles. (See Ayers, O. H., and Mobley.)
Mogford, Edmund C., and G. Spatta, assignors to Clark Equipment Company, Buchanan, Mich. Making axles. 1,762,407; June 10.
Möller, Jacob A. L., New York, N. Y. Equalizer rod. 1,763,363; June 10.
Monier, Francis, Neuilly-sur-Seine, France. Carburetor for internal-combustion engines. 1,763,061; June 10.
Monro, Randolph, Edgewood Arsenal, Md. Gas mask. 1,762,695; June 10.
Monroe, Andrew J. and G. W., Arthur, Ill. Road planer. 1,763,534; June 10.
Monroe, George W. (See Monroe, Andrew J. and G. W.)
Moore, Benjamin S., assginor to Ferro Stamping Mfg. Co., Detroit, Mich. Facilitating shipment of door handles and the like. 1,762,559; June 10.
Moore, Charles A., Edina, Minn. Brine cooler. 1,762,519; June 10.
Moore, Charles A., Edina, Minn. Air conditioning and circulating apparatus. 1,762,520; June 10.
Moore, Charles A., Edina, Minn. Air-conditioning appliance for precooling rooms. 1,762,521; June 10.
Moore, Kenneth G., Cannon Falls, Minn. Self-arighting dental syringe. 1,762,237; June 10.
Moore, William. (See Cooper, K. F., and Moore.)
Moore, William D., J. B. Loring, and W. J. Bowers, Birmingham, Ala., assignors to Sand Spun Patents Corporation, New York, N. Y. Mold for head cores. 1,762,876; June 10.
Moore, William E., assignor to Pittsburgh Research Corporation, Pittsburgh, Pa. Electric-furnace method. 1,763,248; June 10.
Moreton, Henry H., Santa Monica, Calif. Lamp for motor vehicles. 1,762,877; June 10.
Moreton, Henry H., Santa Monica, Calif. Gas heater. 1,762,878; June 10.
Morgan Construction Company. (See Dahlstrom, Frank P., assignor.)
Morgan Construction Company. (See Fors, Eric H., assignor.)
Morgan Construction Company. (See George, J. R., and Sheperdson, assignors.)
Morgan Construction Company. (See Isley, George H., assignor.)
Morgan Construction Company. (See Morgan, Myles, assignor.)
Morgan Construction Company. (See Quinn, Edward J., assignor.)
Morgan Hurrycane Company, The. (See Morgan, William H., assignor.)
Morgan, Myles, assignor to Morgan Construction Company, Worcester, Mass. Handling of coils of wire or the like. 1,762,304; June 10.
Morgan, William H., Alliance, Ohio, assignor, by mesne assignments, to The Morgan Hurrycane Company, New York, N. Y. Cane harvester. 1,763,632; June 10.
Morgan and Wright. (See Abbott, Adrian O., jr., assignor.)
Morgan and Wright. (See Eger, Ernst, assignor.)
Morgan and Wright. (See Waseluk, Jacob, assignor.)
Morral, Samuel E. and W. W., Morral, Ohio. Butt removing mechanism. 1,763,173; June 10.
Morral, William W. (See Morral, Samuel E. and W. W.)
Morris, Agnes A., Minneapolis, Minn. Drainer. 1,763,174; June 10.
Morris, John K., Richmond Hill, N. Y. Device for expanding short pipes. 1,762,732; June 10.
Morris, Joseph E., assignor of one-quarter to C. M. Tuck, Seattle, Wash. Transit concrete mixer. 1,763,240; June 10.

Morris, Joseph W., Tonkawa, Okla. Game indicator for card tables. 1,763,475; June 10.
Morris, Joseph W., Tonkawa, Okla. Card-table indicator. 1,763,476; June 10.
Morrow, Clarence H., assignor to The Hotstream Heater Company, Cleveland, Ohio. Thermostatic valve control. 1,762,187; June 10.
Morrow, Clarence H., assignor to Hotstream Heater Company, Cleveland, Ohio. Thermostat. 1,762,188; June 10.
Morton, Charles D., assignor to Morton System, Inc., New York, N. Y. Filtering. 1,762,560; June 10.
Morton System, Inc. (See Morton, Charles D., assignor.)
Most, Guy A., et al. (See Wolfe, John A., assignor.)
Moto Meter Gauge & Equipment Corporation. (See Behnke, Cord H., assignor.)
Motor and Plane Accessories, Inc. (See O'Brien, John J., assignor.)
Mott, William T., Washington, D. C. Plastering gauge for door or window openings. 1,762,664; June 10.
Moulton, Albert B., Riverhead, N. Y., assignor to Radio Corporation of America. Capacity neutralized switch. 1,763,406; June 10.
Mueller Co. (See Mueller, Philip, assignor.)
Mueller, Moritz L., Seattle, Wash. Drying lumber. 1,762,879; June 10.
Mueller, Philip, assignor, by mesne assignments, to Mueller Co., Decatur, Ill. Service clamp. 1,762,305; June 10.
Mueller, Robert H., assignor to Mueller Co., Decatur, Ill. Ball cock. 1,762,306; June 10.
Mulder, Jentje, Detroit, Mich. Tool for cleaning commutators. 1,763,561; June 10.
Mulder, Jentje, Detroit, Mich. Drain-pipe fitting. 1,763,562; June 10.
Muller, Edward A., Cincinnati, Ohio. Turning and boring mill. 1,762,561; June 10.
Muller, Jacques, La Garenne Colombes, France. Distributing pump for lubricants and other viscous substances in variable and determined quantities. 1,763,189; June 10.
Mullikin, Samuel H. (See Cooper, W., and Mullikin.)
Multipost Company. (See Schweiger, William F., assignor.)
Mummé, Ernest A., assignor to Minneapolis Engineering Company, Minneapolis, Minn. Pump jack. 1,763,364; June 10.
Mummert, Calvin J. (See Rodier, Hilmer F., assignor.)
Mundlos, Rudolf, Magdeburg, Germany. Driving gear for material feeders for sewing machines. 1,762,880; June 10.
Munke Jack Corporation. (See McBride, James P., assignor.)
Munkelwitz, Carl H., Sayville, N. Y. Clam tongs. 1,763,437; June 10.
Munster, Andreas, Seattle, Wash. Retaining wall. 1,762,343; June 10.
Murphy, Arthur C. (See Rousseau, Joseph E., assignor.)
Murphy, Daniel F., Galveston, Tex. Boat. 1,762,451; June 10.
Murphy, Howard J., Reading, Mass., assignor, by mesne assignments, to Alemite Corporation, Chicago, Ill. Lubricating apparatus. 1,763,062; June 10.
Murphy, Paul B., Nyack, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Telephone-exchange equipment. 1,763,006; June 10.
Murray Company, The. (See Hancock, William L., assignor.)
Myers, Marcus A., Gloversville, N. Y., assignor to Myers' Woolly Animals, Inc. Carrying bag. Des. 81,346; June 10.
Myers, Marcus A., Gloversville, N. Y., assignor to Myers' Woolly Animals, Inc. Carrying bag. Des. 81,347; June 10.
Myers' Woolly Animals, Inc. (See Myers, Marcus A., assignor.)
N. V. Nederlandsche Instrumenten Compagnie. (See Steinle, Adolf, assignor.)
Naamlooze Vennootschap Nederlandsche Kunstzijdefabriek. (See Hensing, J. C., and Lubberhuizen, assignors.)
Nagel, George E., Columbus, Ohio. Crossing slab. 1,763,477; June 10.
Narrow Fabric Co., The. (See Huber, Otto E., assignor.)
National Acme Company, The. (See Hogg, William J., assignor.)
National Biscuit Company. (See Costello, William, jr., assignor.)
National Biscuit Company. (See Crossmore, E. Y., Chappory, jr., and Posey, assignors.)
National Equipment Company. (See Bausman, Alonzo L., assignor.)
National-Erie Company. (See Vandergrift, Frank C., assignor.)
National Laundry Machine Company. (See Seifert, John W., assignor.)
National Lime Association. (See Freret, William A., assignor.)
National Standard Company. (See Crowley, G. F., and Pierce, assignors.)
National Standard Company. (See Hopkins, Arthur C., assignor.)
National-Standard Company. (See Pierce, Robert C., assignor.)
National Standard Company. (See Wideman, Harold B., assignor.)
National Supply Company of Delaware, The. (See Youngken, Ben N., assignor.)
Naugatuck Chemical Company, The. (See McGavck, John, assignor.)
Nekiutin, Constantine N., Ferguson, assignor to The Universal Match Corporation, St. Louis, Mo. Strip machine. 1,762,344; June 10.
Nelson, Herman, Corporation, The. (See Shurtleff, Wilfred, assignor.)
Nelson, John H., Chicago, Ill., assignor to H. A. Douglass, Bronson, Mich. Electric snap switch. 1,762,787; June 10.
Nelson, Max C., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Valve for acid tanks. 1,763,593; June 10.
Nelson, Max C., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Tensioning device for fabrics. 1,763,594; June 10.
Nelson, William W., Brookline, Mass. Top for guitars and similar stringed instruments. 1,762,408; June 10.
Neon, Claude, Lights, Inc. (See Smalley, Robert C., assignor.)
Nettles, Isaac, Detroit, Mich. Velocipede. 1,763,250; June 10.
New Departure Manufacturing Company, The. (See Hughes, Frederick G., assignor.)
Newell, Leland B., Springfield, Ill. Advertising device. 1,762,409; June 10.
Newell, Robert E., Irwin, Pa. Water heater. 1,762,522; June 10.
New Idea Spreader Co., The. (See Oppenheim, T. H., and Selhorst, assignors.)
Newpher, Charles F., Shaker Heights, assignor to Republic Steel Corporation, Youngstown, Ohio. Making bolts. 1,762,410; June 10.
Newport Company, The. (See Gubelmann, I., and Henke, assignors.)
Newport Company, The. (See Gubelmann, I., Weiland, and Stallmann, assignors.)
Newport Manufacturing Company. (See Schroeter, Georg, assignor.)
Niagara Machine and Tool Works. (See Hahnemann, Paul R., assignor.)
Nicolayson, Jens K., Oakland, assignor of one-fourth to A. Archini, San Francisco, Calif. Fish trap. 1,762,881; June 10.
Nicolson, Alexander, M., assignor to Communication Patents, Inc., New York, N. Y. Cathode for thermionic devices and producing same. 1,762,581; June 10.
Niemeyer, Fernando. (See Weber, H., and Niemeyer.)
Niesen, Otto B., Allentown, Pa., assignor to Trojan Powder Company, New York, N. Y. Explosive cartridge and loading high explosives in drill holes. 1,763,407; June 10.
Ninnermun, Richard R. O., Fero, N. Dak. Snap or clasp. 1,762,882; June 10.
Nobbs, George H., Watertown, Mass. Surfacing machine. 1,763,365; June 10.
Noe, Charles, and H. Kreiss, Elizabeth, N. J. Valve for cellar drains. 1,762,190; June 10.
Noe, Harold C., East Orange, N. J., assignor to William R. Noe & Sons, New York, N. Y. Adjustable lamp-shade support. 1,762,189; June 10.
Noe, William R., & Sons. (See Noe, Harold C., assignor.)
Noelle, William, assignor of one-half to H. Wernicke, Chicago, Ill. Seat construction. 1,762,788; June 10.
Noonan, Thomas F., Chicago, Ill. Cementing composition. 1,763,366; June 10.
Nordholm, Leon E., Des Moines, Iowa. Circuit controller. 1,762,789; June 10.
Nordlinger, Maurice W., and L. Klein, Norfolk, Va. Display apparatus. 1,763,317; June 10.
Norin, Carl E., Jersey City, N. J., assignor to Underwood Elliott Fisher Company, New York, N. Y. Typewriting machine. 1,762,345; June 10.
Norman, William, Grand Island, Nebr. Door catch. 1,762,883; June 10.
Norris, Henry M. (See Klausmeyer, D. C., and Norris.)
North Bro's Mfg. Co. (See Fegley, T. J., and Leopold.)
Northwest Engineering Corporation. (See Orloff, Arthur, assignor.)
Norton Company. (See Larsson, Thure, assignor.)
Norton Company. (See Smith, George H., assignor.)
Norton, George, Birmingham, England. Coal breaker. 1,763,408; June 10.
Norton, Raymond J., Washington, D. C., assignor to Bendix Brake Company, South Bend, Ind. Brake-drum structure. 1,763,251; June 10.
Norwood, Harry G., Washington, D. C., assignor to T. F. von Dorn, New York, N. Y. Railway-rail anchor. 1,763,438; June 10.
Norwood, Stanley M., Brooklyn, N. Y., assignor to Electro Metallurgical Company. Welding rod. 1,762,483; June 10.
Novick, Abraham, Flushing, assignor to F. L. Smithe Machine Co., Inc., New York, N. Y. Envelope machine. 1,762,452; June 10.
Novidoff, Raymond, New York, N. Y. Press feeder and receiver. 1,762,484; June 10.
Noyes, Mayhew E., Canton, Ohio. Adjustable window screen. 1,762,884; June 10.
Nunes, Tony C., Hughson, Calif. Drum plug and faucet lock. 1,762,582; June 10.

Nuttall, Richard, Waverley, near Sydney, New South Wales, Australia. Elevating hand truck. 1,763,535; June 10.
Nützelberger, Hans, Nuremberg, Germany, assignor to Westinghouse Electric & Manufacturing Company. Integrating meter. 1,763,175; June 10.
Oakley, Erastus G., Southport, assignor to Bridgeport Brass Company, Bridgeport, Conn. Waste fitting for sinks or the like. 1,762,734; June 10.
Ober, Dean C., Cleveland, Ohio. High-voltage underground cable system. 1,762,191; June 10.
Oberle, Alfred, Oak Park, Ill. Making carbonaceous material. 1,763,063; June 10.
Oberle, Alfred, Oak Park, Ill. Carbonnceous material and making the same. 1,763,101; June 10.
Oberle, Alfred, Oak Park, Ill. Carbonaceous material and making the same. 1,763,102; June 10.
Oberlin, Carl, Mansfield, Ohio. Corncrib or the like. 1,763,627; June 10.
Oberst, Frank, Fosterdale, N. Y., assignor to Wilbur Products Company. Automatic stop device. 1,762,638; June 10.
O'Brien, James J., Chicago, Ill. Display device. 1,763,318; June 10.
O'Brien, John J., Rosemont, Pa., assignor, by mesne assignments, to Motor and Plane Accessories, Inc., Detroit, Mich. Lubricating system. 1,762,238; June 10.
O'Brien, Richard J., assignor to Waugh Equipment Company, Depew, N. Y. Spring-plank cushion. 1,762,886; June 10.
O'Brien, Richard J., assignor to Waugh Equipment Company, Depew, N. Y. Cushion for side bearings. 1,762,887; June 10.
O'Brien, Thomas. (See Holden, J. H., O'Brien, Whetzel, and Zimmerman.)
O'Connor, John F., assignor to W. H. Miner, Inc., Chicago, Ill. Journal bearing. 1,762,411; June 10.
O'Connor, John F., assignor to W. H. Miner, Inc., Chicago, Ill. Journal bearing. 1,762,412; June 10.
O'Connor, John F., assignor to W. H. Miner, Inc., Chicago, Ill. Hand brake. 1,762,413; June 10.
O'Connor, John F., assignor to W. H. Miner, Inc., Chicago, Ill. Railway draft rigging. 1,762,414; June 10.
O'Connor, John F., assignor to W. H. Miner, Inc., Chicago, Ill. Friction shock-absorbing mechanism. 1,762,415; June 10.
Odenbach, John H., H. Goldman, and W. C. Henry, assignors to Dolomite Products Company, Inc., Rochester, N. Y. Rotary grizzly. 1,762,790; June 10.
Odlorne, Ralph L. (See MacKenzie, Daniel P., assignor.)
Offerman, Louis, New York, N. Y. Cigarette holder. Des. 81,348; June 10.
Ohio Brass Company, The. (See Austin, John B., assignor.)
Ohio Brass Company, The. (See Graham, Walter F., assignor.)
Ohmart, Grayston L. (See Hartman, M., Ohmart, and Hawkinson.)
Ohmer Fare Register Company. (See Gluck, Julius, assignor.)
Ohmer Fare Register Company. (See Wheelbarger, Albert S., assignor.)
Oil Engine Development Company. (See Cummins, Clessie L., assignor.)
Old Colony Envelope Company. (See Fountain, Joseph N., assignor.)
Old Colony Trust Company. (See Spencer, Percy L., assignor.)
Oliver Farm Equipment Company. (See Altgelt, Herman E., assignor.)
Olsen, Tinius, Testing Machine Company. (See Lewis, Robert B., assignor.)
Olsen, Tinius, Testing Machine Company. (See Lundgren, Jacob, assignor.)
Oneida Community, Limited. (See Allen, G. N., and Helander, assignors.)
Oneida Community, Limited. (See Waldman, George H., assignor.)
O'Neill, Henry W., Elmhurst, N. Y. Chronographic system. 1,762,791; June 10.
Oppenheim, Theodore H., and B. Selhorst, assignors to The New Idea Spreader Co., Coldwater, Ohio. Feed table. 1,762,885; June 10.
Orent, Solomon J. (See Duce, B. J., and Orent.)
Orloff, Arthur, assignor to Northwest Engineering Corporation, Green Bay, Wis. Excavator trip. 1,762,523; June 10.
Ornitz, Nathaniel B., Pittsburgh, assignor to The Babcock & Wilcox Tube Company, Beaver Falls, Pa. Coating articles with enamel. 1,762,239; June 10.
O'Rourke, John, South Bend, Wash. Clam-digger fork. 1,763,176; June 10.
Orsett, Coy, Boston, Mass. Flying machine. 1,763,409; June 10.
Orthmann, August C., assignor to Pfister & Vogel Leather Co., Milwaukee, Wis. Unhairing agent. 1,763,319; June 10.
Osgood Bradley Car Company. (See Turner, Charles H., assignor.)
Osgood, Charles F., Claremont, N. H., assignor to Sullivan Machinery Company. Hoist. 1,762,696; June 10.
Osnos, Mendel, assignor to Gesellschaft für Drahlose Telegraphie m. b. H., Berlin, Germany. Arrangement for frequency changing. 1,762,346; June 10.
Östberg, Karl G., Stockholm, Sweden. Valve gear, particularly for internal-combustion motors. 1,763,563; June 10.
Ostler, Ernest S., assignor to Stromberg Electric Company, Chicago, Ill. Clock-controlled contact device. 1,763,252; June 10.
Ostrowski, Benjamin F., San Francisco, Calif. Electric hair curler. 1,762,792; June 10.
Oswald, Alfred E., Hackensack, N. J., assignor to Underwood Elliott Fisher Company, New York, N. Y. Electric motor. 1,762,735; June 10.
Otis Company, Inc. (See De Lancy, Imogene, assignor.)
Ottawa Silica Company. (See Gyger, Joseph, assignor.)
Outboard Motors Corporation. (See Buehner, William F. A., assignor.)
Overman Cushion Tire Company. (See Manly, Charles M., assignor.)
Owens, Dabney P., Lake Worth, Fla. Attaching means for brake-testing devices. 1,763,564; June 10.
Owens-Illinois Glass Company. (See Cramer, Albert N., assignor.)
Oxford Varnish Corporation. (See Casto, Lloyd V., assignor.)
Oxx, Henry G., assignor to A. T. Wall Co., Providence, R. I. Clip for tubular shells. 1,762,793; June 10.
Paatsch, Frank H., Wauwatosa, assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Pump. 1,763,595; June 10.
Paff, James N. (See Smith, Frederick P., assignor.)
Page, Albert E., Brooklyn, assignor to Scott & Williams, Incorporated, New York, N. Y. Tucking attachment for knitting machines. 1,763,439; June 10.
Page, Ralph E. (See Daly, G. F., and Page.)
Paidar, Emil J., Company. (See Emmert, John R., assignor.)
Palmer, William H., Monrovia, assignor of one-half to G. L. Davids, Indianapolis, Ind. Merchandise warmer. 1,763,253; June 10.
Palmeter, Clarence E., Mount Sterling, Ky. Saw table. 1,763,478; June 10.
Paradise, Louis A., assignor to Deere & Company, Moline, Ill. Twine holder for grain binders. 1,762,583; June 10.
Paradise, Louis A., and W. J. Coultas, Moline, assignors to Deere & Company, Moline, Ill. Tongue support for mowers. 1,762,584; June 10.
Paraffine Companies, The. (See Rosener, Leland S., assignor.)
Paris, August F., Brockway, Pa. Washing-machine cylinder. 1,762,665; June 10.
Parker, Arthur H. (See Sebell, Harry, assignor.)
Parker, Charles Co., The. (See Turner, Lewis L., assignor.)
Parker, William E., Philadelphia, Pa. Hydraulic transmission mechanism. 1,763,565; June 10.
Parker, William S., assignor to Burson Knitting Company, Rockford, Ill. Stocking and method of making. 1,763,367; June 10.
Parkins, Virgil, Tiffin, Ohio. Fuel-saving valve. 1,762,308; June 10.
Parsons Company, The. (See Vaughn, George A., assignor.)
Patent and Licensing Corporation, The. (See Dudleston, William G., assignor.)
Patent and Licensing Corporation, The. (See Fiedler, H. R., and Grau, assignors.)
Patent and Licensing Corporation, The. (See Kirschbraun, Lester, assignor.)
Patent and Licensing Corporation. (See Mickelson, A. O., and Cumfer, assignors.)
Patent Protection Corporation, trustee. (See Bredbury, Thomas, assignor.)
Paterson, John C., Willesden, London, England, assignor to Baker Perkins Company, Inc., Saginaw, Mich. Dough-cutting machine and the like. 1,763,320; June 10.
Paton, Clyde R., and T. S. Sligh, jr., assignors to The Studebaker Corporation, South Bend, Ind. Automobile construction. 1,763,064; June 10.
Pauli, Erwin J., Brooklyn, N. Y., assignor to Doehler Furniture Co., Inc. Desk or the like. Des. 81,364; June 10.
Pauly, Robert C., assignor to The American Laundry Machinery Company, Cincinnati, Ohio. Neckband clamp for pressing machines. 1,763,536; June 10.
Peakes, Gilbert L., Bloomfield, N. J., assignor to Bakelite Corporation, New York, N. Y. Twist drill. 1,762,736; June 10.
Peale, Rembrandt, et al., trustees. (See Davis, Kenneth, assignor.)
Pearl, James W., Chicago, Ill. Analyzer. 1,762,585; June 10.
Pearson, Laurence H., Nottingham, England. Apparatus for the electrical transmission of sound from gramophone records. 1,762,834; June 10.
Pearson Manufacturing Company. (See Pearson, Martin, assignor.)
Pearson, Martin, assignor to Pearson Manufacturing Company, Inc., Robbinsdale, Minn. Can cleaning and sterilizing apparatus. 1,763,321; June 10.
Peebles, Herbert L., Denver, Colo. Dustless ash shovel. 1,762,347; June 10.
Peirce, William B., Coraopolis, assignor to Pittsburgh Screw & Bolt Corporation, Pittsburgh, Pa. Magnetic machine for operating on bolts, nuts, and the like. 1,762,192; June 10.

Pelton Water Wheel Company, The. (See Foulds, Charles V., assignor.)
Pembleton, James D., Pontiac, Mich., assignor to Beck-Frost Corporation, Toledo, Ohio. Composite gear-shift handle grip. 1,763,566; June 10.
Pencil Mechanism Corporation. (See Woelm, Alfred, assignor.)
Penn Metal Company. (See Baker, Herbert K., assignor.)
Perfect Circle Company, The. (See Teetor, Macy O., assignor.)
Perkins, B. F., & Son, Inc. (See Lade, Archibald, assignor.)
Perkins, Julian L., assignor to Perkins Machine & Gear Company, West Springfield, Mass. Laying out gears. 1,763,177; June 10.
Perkins Machine & Gear Company. (See Perkins, Julian L., assignor.)
Permutit Company, The. (See Kriegsheim, Heinrich, assignor.)
Perrault, Joseph E., Watertown, and H. L. Davis, Walpole, Mass., assignors, by mesne assignments, to Hood Rubber Company, Inc., Wilmington, Del. Machine for manufacturing casings for pneumatic tires. 1,762,453; June 10.
Perrot Brake Corporation. (See Dodge, Adiel Y., assignor.)
Perry, Oscar B., San Francisco, Calif. Dredging machine. 1,762,794; June 10.
Perry, William C., London, England, assignor to The Western Union Telegraph Company, New York, N. Y. Combination telegraph transmitter and regenerator. 1,762,795; June 10.
Persons, Lawrence M. (See Folds, G. R., and Persons.)
Peters, Granville B. (See Fegely, John P., assignor.)
Peters, Louis H., Oakland, Calif. Method of and apparatus for testing cans. Re17,697; June 10.
Petersen, Heinrich A. W., Gary, Ind. Liquid-pump governor. 1,762,348; June 10.
Petersen, Henry, Mount Auburn, Iowa. Rotary force pump. 1,762,418; June 10.
Peterson, Eugene, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. System employing space-discharge device. 1,762,737; June 10.
Petrey, Arthur W., Parnassus, assignor to Aluminum Company of America, Pittsburgh, Pa. Filtration apparatus. 1,762,738; June 10.
Petroleum Rectifying Company of California. (See Worthington, John T., assignor.)
Pettis, Walter D., Oxford, Miss. Sewage-disposal fixture. 1,762,419; June 10.
Petzing, Erwin W., Chicago, Ill. Electromagnet. 1,763,007; June 10.
Pfahl, Daniel S., Cleveland, Ohio. Filling attachment for tanks. 1,762,524; June 10.
Pfefferkorn, Frederick F., Lakewood, assignor to The Geo. H. Bowman Company, Cleveland, Ohio. Portable food safe. 1,762,417; June 10.
Pfister & Vogel Leather Co. (See Orthmann, August C., assignor.)
Phillips, John E., New York, N. Y. Nut lock. 1,762,739; June 10.
Phillips, John H., Chicago, Ill. Anchoring apparatus. 1,762,349; June 10.
Phipps, De Clifford, Los Angeles, Calif. Device for assisting hearing. 1,763,103; June 10.
Pickard, Nathan C., Colorado Springs, Colo. Automatic unloading device for vehicles. 1,762,240; June 10.
Pickop, George B., New Haven, assignor to Malleable Iron Fittings Company, Branford, Conn. Vibrator. 1,762,416; June 10.
Pierce, Raymond C. (See De Motte, M. P., and Pierce.)
Pierce, Raymond T., Milburn, N. J., assignor to Westinghouse Electric & Manufacturing Company. Meter casing. 1,763,178; June 10.
Pierce, Robert C. (See Crowley, G. F., and Pierce.)
Pierce, Robert C., assignor to National-Standard Company, Niles, Mich. Tire-bead reenforcement. 1,763,179; June 10.
Pikor, John A., et al. (See Jarosz, John, assignor.)
Pittsburgh Research Corporation. (See Moore, William E., assignor.)
Pittsburgh Screw & Bolt Corporation. (See Peirce, William B., assignor.)
Pittsburgh Screw and Bolt Corporation. (See Shrum, Peter J., assignor.)
Pizzutiello, Henry, et al. (See Corbi, Joseph L., assignor.)
Platter, Orval R. (See Gill, H., and Platter.)
Plaut, Antoine P., assignor of one-half to Roberts Brass Manufacturing Company, Detroit, Mich. Fluid-control device. 1,762,193; June 10.
Poeppelmeier, Frank H., assignor to The Typographic Machines Company, Dayton, Ohio. Forming metal tubes. 1,762,835; June 10.
Pointon, John E., and L. S. Harber, Peterborough, England, assignors to Baker Perkins Company Incorporated, New York, N. Y. Dough-dividing machine. 1,763,322; June 10.
Polls, Max. (See Eckstein, R., and Polls.)
Pollak, Fritz. (See Ripper, Kurt, assignor.)
Polster, John P., assignor to Duncan Foundry and Machine Works, Inc., Alton, Ill. Portable conveyer loader. 1,763,440; June 10.
Polysius, G. (See Hasselbach, A., and Luther, assignors.)
Pontoppidan, Carl, Copenhagen, Denmark, assignor to F. L. Smidth & Co., New York, N. Y. Grinding cement materials, etc. 1,762,241; June 10.
Posey, John B. (See Crossmore, E. Y., Chappory, and Posey.)
Pospiech, Friedrich, assignor to Chemische Fabrik Pott & Co., Dresden, Germany. Accelerating and improving tanning processes. 1,763,368; June 10.
Potdevin, Adolph, Garden City, assignor to Potdevin Machine Company, Brooklyn, N. Y. Bag machine. 1,762,350; June 10.
Potdevin Machine Company. (See Potdevin, Adolph, assignor.)
Potter, Robert S., Greenwich, assignor to The Yale & Towne Manufacturing Company, Stamford, Conn. Door closer. 1,763,323; June 10.
Potter, Robert S., Greenwich, assignor to The Yale & Towne Manufacturing Company, Stamford, Conn. Door holder. 1,763,324; June 10.
Poulos, Stivin, Boston, Mass. Mop. 1,762,454; June 10.
Powell, Herbert S. (See Roberts, Charles F., assignor.)
Power Regulator Company. (See Powers, Fred W., assignor.)
Powers, Donald H., Penns Grove, N. J., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Vulcanization of rubber. 1,763,325; June 10.
Powers, Fred W., assignor to Powers Regulator Company, Chicago, Ill. Thermostatic regulator. 1,763,180; June 10.
Prantl, Franz, Wettingen, near Baden, assignor to Aktiengesellschaft Brown, Boveri and Cie., Baden, Switzerland. Control of single-phase motors. 1,763,537; June 10.
Pratt, William B., Wellesley, Mass., assignor, by mesne assignments, to Dispersions Process, Inc., Dover, Del. Composition of matter. 1,762,194; June 10.
Preedit, Anton, assignor to Armor Electric Manufacturing Company, Erie, P. Electric machine. 1,762,455; June 10.
Premier Cushion Spring Company. (See Forbes, Ferry M., assignor.)
Pressed Steel Car Company. (See Schmohl, Alfred C., assignor.)
Pribnow, John F., San Diego, assignor to Pribnow Saw Sharpening Machinery Company, Los Anegels, Calif. Saw-tooth grinder. 1,763,065; June 10.
Pribnow Saw Sharpening Machinery Company. (See Pribnow, John F., assignor.)
Priebe, Herman C., Blue Island, Ill. Brake gearing for railway cars. 1,762,586; June 10.
Priebe, Herman C., Blue Island, Ill. Draft gear. 1,762,587; June 10.
Priessman, Nell Y., Wyoming, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Electromagnetic device. 1,763,008; June 10.
Prime, Edward J., Groveland, Mass. Combined manually and magnetically operated vehicle brake. 1,762,420; June 10.
Prows, Joseph T., Cynthiana, Ky. Bedspring. 1,763,254; June 10.
Pure Oil Company, The. (See Harnsberger, Audley E., assignor.)
Pure Oil Company, The. (See Sullivan, Daniel E., assignor.)
Pyle, Virgil M., Stockton, Mo. Agitator. 1,762,421; June 10.
Quarles, Donald A., Englewood, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Loading system. 1,763,009; June 10.
Quinn, Edward J., assignor to Morgan Construction Company, Worcester, Mass. Conveying mechanism. 1,762,307; June 10.
R. C. Can Company. (See Rutkowski, Walter L., assignor.)
Radio Corporation of America. (See Davis, Wilfred J., assignor.)
Radio Corporation of America. (See Fitch, Clyde J., assignor.)
Radio Corporation of America. (See Karolus, August, assignor.)
Radio Corporation of America. (See Larsen, Gautier H. T., assignor.)
Radio Corporation of America. (See Loftin, Edward H., assignor.)
Radio Corporation of America. (See Moulton, Albert B., assignor.)
Radio Corporation of America. (See Shapiro, Lazarus, assignor.)
Radio Corporation of America. (See Van Dyck, Arthur F., assignor.)
Radio Corporation of America. (See Van Dyck, A. F., and Guber, assignors.)
Rah, Joseph, assignor to G. & W. Electric Specialty Company, Chicago, Ill. Distribution box. 1,762,485; June 10.
Rah, Joseph, assignor to G. & W. Electric Specialty Co., Chicago, Ill. Distribution box for cables of same polarity. 1,762,525; June 10.
Rail Joint Company, The. (See Braine, Daniel L., assignor.)
Rainey, James W., St. Louis, Mo. Hair drier. 1,762,588; June 10.
Rains, Joshua C., Houston, assignor of one-third to J. F. Bashara, Harris County, Tex., and one-third to Aubrey Fariss. Draw-works brace. 1,762,740; June 10.
Raithel, John G., Little Falls, N. Y. Convertible gear for vehicles. 1,762,741; June 10.

Ramar Syndicate Incorporated. (See Marr, Robert A., assignor.)
Randall, Joseph W., assignor to Davis & Furber Machine Company, North Andover, Mass. Spindle drive for spinning frames. 1,762,351; June 10.
Randolph, Oliver W., Toledo, Ohio. Sterilizer. 1,763,538; June 10.
Rankin, William A., Rochester, N. Y. Binding the ends of electrical conductor cords and to an apparatus used in such method. 1,763,255; June 10.
Rathbun, Ross B., El Paso, Tex., assignor to American Smelting and Refining Company, New York, N. Y. Electrostatic precipitator. 1,763,010; June 10.
Ray, James L., Swarthmore, Pa., assignor to Westinghouse Electric & Manufacturing Company. Turbine blade. 1,762,352; June 10.
Ray, James L., Swarthmore, Pa., assignor to Westinghouse Electric & Manufacturing Company. Turbine blade. 1,763,256; June 10.
Raytheon, Inc. (See Spencer, John A., assignor.)
Ream, Harry L., et al. (See Johnson, Clarence V., assignor.)
Redington, John C., Geneva, Ill., assignor, by mesne assignments, to St. Regis Paper Company, New York, N. Y. Closing the valves of valve bags. 1,762,697; June 10.
Reed, Marion C., Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Stabilizing aldehydes. 1,763,326; June 10.
Reed Roller Bit Company. (See Behnke, Guy E., assignor.)
Reed Roller Bit Company. (See Bull, Clinton H. M. assignor.)
Reeves, Oda A., Charleston, Mo. Animal holder. 1,763,181; June 10.
Regan Safety Devices Company, The. (See Shaver, Archibald G., assignor.)
Reichenau, Harry. (See Schandua, E. J., and Reichenau.)
Reisner, W. H., Manufacturing Company, The. (See Reisner, William H., assignor.)
Reisner, William H., assignor to The W. H. Reisner Manufacturing Company, Hagerstown, Md. Organ valve. 1,763,182; June 10.
Remington Rand Inc. (See Lasker, William W., assignor.)
Reppe, Walter, Ludwigshafen-on-the-Rhine, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the Main, Germany. Producing primary amines. 1,762,742; June 10.
Republic Steel Corporation. (See Newpher, Charles F., assignor.)
Reserve Holding Company. (See Saunders, Norman H., assignor.)
Reyrolle, A., & Company Limited. (See Willoughby, Ralph, assignor.)
Ribside Furnace Company. (See Beese, Herman, assignor.)
Rice, Thomas E., Des Moines, Iowa. Cotton picker. 1,763,480; June 10.
Richards, William F. (See Frohring, W. O., and Richards.)
Richardson, Ernest S., Fort Wayne, Ind. Diamond tool holder. 1,763,479; June 10.
Richardson, George L. (See Metcalf, I. R., Richardson, and Wolf.)
Richardson, Joseph, Ridgefield, N. J., assignor to Fifth Avenue Coach Company. Device for use in determining turning radius of motor busses. 1,763,441; June 10.
Richie, Peter, Waterbury, Conn. Pencil attachment. 1,763,327; June 10.
Riddle, Edward N., Company, The. (See Riddle, John K., assignor.)
Riddle, John K., assignor to The Edward N. Riddle Company, Toledo, Ohio. Lighting fixture. 1,762,526; June 10.
Ridenour, Arch P., Los Angeles, Calif. Liner puller. 1,762,796; June 10.
Rieger, William F., assignor, by mesne assignments, to The Stoker Matic Corporation, Salt Lake City, Utah. Retort. 1,763,442; June 10.
Rieger, William F., assignor, by mesne assignments, to The Stoker Matic Corporation, Salt Lake City, Utah. Retort. 1,763,539 June 10.
Righetto, Ruggero, assignor of one-half to S. Trisoglio and one-half to L. Castelli, Turin, Italy. Electromagnetic ignition device. 1,763,443; June 10.
Riley Stoker Corporation. (See Andrews, L. V., assignor.)
Ripper, Kurt, assignor to F. Polisk, Vienna, Austria. Making condensation products of urea and aldehyde. 1,762,456; June 10.
Ritchie, George E., Halifax, Nova Scotia, Canada. Support for reading and writing matter. Des., 81,349; June 10.
Ritter Dental Manufacturing Company. (See May, Adam J., assignor.)
Rivers, Bernard C., Rudolph, Wis. Salt cup. 1,762,589; June 10.
Robbins & Meyers, Inc. (See Wright, Edwin M., assignor.)
Roberts Brass Manufacturing Company. (See Plaut, Antoine P., assignor.)
Roberts Brass Manufacturing Company. (See Roberts, Earl W., assignor.)
Roberts, Charles F., assignor to H. S. Powell, Utica, N. Y. Thread-swelling machine. 1,762,562; June 10.
Roberts, Earl W., assignor to Roberts Brass Manufacturing Company, Detroit, Mich. Gas cock. 1,762,195; June 10.
Roberts, George P., Tarpon Springs, Fla. Dental forceps. 1,762,888; June 10.
Robertson, H. H., Company. (See Thomas, George W., assignor.)
Robertson, Robert R., Chicago, Ill. Contraction center-strip mold cap. 1,763,369; June 10.
Robinson, Earl M., assignor to R. L. Hall, Waterloo, Iowa. Ice-cream-shipping case. 1,762,527; June 10.
Robinson, Patrick H., assignor to Hamilton Beach Mfg. Co., Racine, Wis. Drink mixer. 1,762,353; June 10.
Robinson, William H., assignor to Thermo Electric Research Corporation, Buffalo, N. Y. Electric radiator. 1,763,328; June 10.
Robson, Frank S., Basalt, Idaho. Lawn-mower sharpener. 1,763,481; June 10.
Rock, Michael B., Staten Island, N. Y. Music-teaching device. 1,763,444; June 10.
Rocke, Louis, Brooklyn, assignor to Waldes-Koh-i-noor, Inc., Long Island City, N. Y. Hook-and-eye tape. 1,763,540; June 10.
Roden, Louis, Berwyn, Ill. Gate-valve-box cleaner. 1,762,486; June 10.
Rodler, Hilmer F., Davenport, Iowa, assignor to C. J. Mummert, West New York, N. J. Liquid-fuel heating apparatus. 1,762,242; June 10.
Roe, Mayo E., assignor to The Colson Company, Elyria, Ohio. Vehicle. 1,763,183; June 10.
Roesen, Oscar C., Brooklyn, assignor to Wood Newspaper Machinery Corporation, New York, N. Y. Mat roaster. 1,762,309; June 10.
Rogers, Edmund. (See Werder, John F., assignor.)
Rogers, John R., Brooklyn, N. Y., assignor to Mergenthaler Linotype Company, Typographical distributing machine. 1,762,889; June 10.
Rogers, John R., Brooklyn, N. Y., assignor to Mergenthaler Linotype Company. Typographical casting machine. 1,762,890; June 10.
Rohlfing, John M., Plainfield, N. J., assignor to American Car and Foundry Company, New York, N. Y. Cupola-charging bucket. 1,762,797; June 10.
Rohrdanz, Harold, Inglewood, Calif. Swivel electric connecter. 1,762,422; June 10.
Rollason, Charles H., assignor to Wheeling Steel Corporation, Wheeling, W. Va. Sheet-metal container. 1,763,329; June 10.
Romero, Luis, Mexico, Mexico. Tortilla-forming machine. 1,763,445; June 10.
Ronning, Adolph, et al, executors. (See Ronning, Andrean G.)
Ronning, Andrean G., deceased, Minneapolis, Minn., J. A. Ronning and A. Ronning, executors. Hydraulic transmission system. 1,762,590; June 10.
Ronning, Jacob A., et al, executors. (See Ronning, Andrean G.)
Rooney, John, assignor of one-half to H. J. Green, Cleveland, Ohio. Plasterer's trowel. 1,763,066; June 10.
Rosback, F. P., Company. (See Manny, Fred L., assignor.)
Roscoe, David L., San Diego, Calif. Aerofoil. 1,763,257; June 10.
Rosener, Leland S., assignor to The Paraffine Companies, Inc., San Francisco, Calif. Westooning apparatus. 1,762,243; June 10.
Ross, Thomas W., Manchester, England, assignor to Westinghouse Electric & Manufacturing Company. Electric relay. 1,763,258; June 10.
Rouanet, Louis, assignor to Compagnie D'Applications Mecaniques, Ivry-Port, France. Mounting single and double row ball bearings. 1,762,891; June 10.
Roudié, Pierre P., Paris, France. Implement for measuring the hardness of metals. 1,762,639; June 10.
Rouse, H. B., & Company. (See Stuckeman, William F., assignor.)
Rousseau, Ernest J., et al. (See Rousseau, Leo J., assignor.)
Rousseau, Joseph E., assignor of one-half to A. C. Murphy, Haverhill, Mass. Rotary cutter. 1,763,370; June 10.
Rousseau, Leo J., et al. (See Rousseau, Leo J., assignor.)
Rousseau, Leo J., assignor of one-third to L. J. Rousseau, one-third to E. J. Rousseau, and one-third to R. J. Rousseau, Detroit, Mich. Toy seesaw. Des. 81,350; June 10.
Rousseau, Ranol J., et al. (See Rousseau, Leo J., assignor.)
Rubber Latex Research Corporation. (See Wescott, William B., assignor.)
Rubber Service Laboratories Company, The. (See Scott, Winfield, assignor.)
Rubinstein, Wilton, St. Louis, Mo. Collar fastener. 1,762,528; June 10.
Rucker, George, San Francisco, Calif., assignor to Holophane Company, Inc., New York, N. Y. Luminair. 1,762,743; June 10.
Ruda Manufacturing Company. (See Klemm, William J., assignor.)
Rudolph, Walter J., assignor to Jas. P. Marsh & Company, Chicago, Ill. Air valve. 1,762,487; June 10.
Runge, Alfred O. A., Windsor, Ontario, Canada. Internal-combustion engine. 1,762,666; June 10.
Runne, Ernst et al. (See Herz, R., Runne, and Albrecht.)

Ruppel, Frederick C., assignor to W. B. Jarvis Company, Grand Rapids, Mich. Radiator for motor vehicles. 1,763,184; June 10.
Russell, George W., Stockton, Calif. Auto screen attachment. 1,762,244; June 10.
Russell Manufacturing Company. (See Fagan, Richard C., assignor.)
Russell Manufacturing Company, The. (See Taylor, Schuyler J., assignor.)
Ruther, Walter H., St. Louis, Mo. Electric coin-operated switch. 1,762,892; June 10.
Rutkowski, Walter L., St. Louis, Mo., assignor to R. C. Can Company, St. Louis, Mo. Closure for receptacles. 1,762,310; June 10.
Ryan, Scully & Company. (See Beach, George F., assignor.)
Ryther, Henry A. (See Swain, D. B., and Ryther.)
St. Regis Paper Company. (See Redington, John C., assignor.)
Sall Brothers Company. (See Sall, John A., assignor.)
Sall, John A., assignor to Sall Brothers Company, Rockford, Ill. Battery-terminal clamp and making the same. 1,762,529; June 10.
Samson-United Corporation. (See Samuels, Abe O., assignor.)
Samter, L., & Sons. (See Samter, Samuel L., assignor.)
Samter, Samuel L., assignor to L. Samter & Sons, San Francisco, Calif. Four-in-hand tie, method of making the same, and material used in the manufacture thereof. 1,762,591; June 10.
Samuels, Abe O., assignor to Samson-United Corporation, Rochester, N. Y. Knife sharpener. 1,762,698; June 10.
Samuels, Frances, Flushing, assignor to S. Behr, New York, N. Y. Hat support. Des. 81,351; June 10.
Sancken, Carl C., Saunemin, Ill. Automatic bundle-tripping mechanism for binders. 1,763,446; June 10.
Sand Spun Patents Corporation. (See Moore, W. D., Loring, and Bowers, assignors.)
Sandell, Carl A., Wilkeson, Wash. Fuel chest. 1,762,530; June 10.
Sandholm, Hazel A. (See Schoenberg, J. A., and Sandholm.)
Sando, Joseph B., Norwood, assignor to The American Laundry Machinery Company, Cincinnati, Ohio. Dry room. 1,763,541; June 10.
Sanford, Hugh W., and P. S. McCallen, Knoxville, Tenn., assignors to Sanford Investment Company, Wilmington, Del. Mine car. 1,762,667; June 10.
Sanford Investment Company. (See Sanford, H. W., and McCallen, assignors.)
Sanford, Roy S., South Bend, Ind., assignor to Bendix Brake Company, Chicago, Ill. Motor-vehicle body. 1,762,640; June 10.
Sanford, Roy S., South Bend, Ind., assignor to Bendix Brake Company, Chicago, Ill. Brake-operating means. 1,762,699; June 10.
Sanymetal Products Company. (See Carpenter, R. F., and Anderson, assignors.)
Sargent & Company. (See Brittingham, Elisha F., assignor.)
Sasser, Edward C., Washington, D. C. Tobacco pipe. 1,763,185; June 10.
Saul, Siegfried, Aachen, Germany. Filling tube for inflatable bodies. 1,762,893; June 10.
Saunders, Norman H., Homewood, Ill., assignor to Reserve Holding Company, Kansas City, Mo. Connecter switch. 1,762,700; June 10.
Sause, Richard, New York, N. Y. Coin-controlled timing device for electrically-actuated refrigerators and like machines. 1,762,354; June 10.
Savage, Linnaeus T., East Orange, N. J. Toy climbing tractor. Des. 81,352; June 10.
Schaaff, John T., Washington, D. C., assignor to The Tabulating Machine Company, New York, N. Y. Punching device. 1,763,067; June 10.
Schaaff, John T., Washington, D. C., assignor to The Tabulating Machine Company, Endicott, N. Y. Ribbon mechanism. 1,763,068; June 10.
Schachat, Abraham B., New York, assignor to N. Statham, Irvington-on-Hudson, N. Y. Slide-operable fastening device. 1,763,186; June 10.
Schandua, Emil J., and H. Reichenau, Fredericksburg, Tex. Blowfly trap. 1,762,668; June 10.
Schaper, George F., and J. A. Schmitz, Burbank, Calif. Saw rig. 1,762,798; June 10.
Scharpenberg, Henry A., Bakersfield, Calif. Transporting petroleum products. 1,762,423; June 10.
Schauman, Karl O. and L. M., New York, N. Y.; said Karl O. Schauman assignor to said L. M. Schauman. Window guard. 1,762,424; June 10.
Schauman, Lucy M. (See Schauman, Karl O. and L. M.)
Scheeler, John C., assignor to Buffalo Wire Works Co., Inc., Buffalo, N. Y. Screen mounting. 1,763,371; June 10.
Scheinberg, Isidore. (See Cline, H. P., Scheinberg, and Watson.)
Schellentrager, Eugene W., Cleveland Heights, assignor to The Atlas Bolt & Screw Company, Cleveland, Ohio. Automatic recording means for dump cars. 1,762,196; June 10.
Schenck, Le Roy C., Moline, Ill., assignor to Troy Laundry Machinery Company, Inc., New York, N. Y. Ironing machine. 1,763,190; June 10.
Schenker, Walter, assignor to the firm: Sulzer Frères Société Anonyme, Winterthur, Switzerland. Cylinder for internal-combustion engines. 1,762,425; June 10.
Scheppmann, Wilhelm, assignor to C. Lorenz Aktiengesellschaft, Berlin-Tempelhof, Germany. Scanning device. 1,763,482; June 10.
Scherner, John, Milwaukee, Wis., assignor to The Fisk Rubber Company, Chicopee Falls, Mass. Mold breaker. 1,762,836; June 10.
Schettler, Gustav A., Leeds, England, assignor to The Turner Tanning Machinery Company, Portland, Me. Leather measuring and marking machine. 1,762,355; June 10.
Scheyer, Heinz. (See Kalischer, G., Scheyer, and Keller.)
Schickler, Albert C., assignor to E. E. Allyne, Cleveland, Ohio. Liquid trap for refrigerating systems. 1,762,197; June 10.
Schiff, Benjamin A. (See Fox, Earle D., assignor.)
Schilling, Louis F., deceased, Salem, Ohio., R. Schilling, administratrix. Folding bed. 1,763,447; June 10.
Schilling, Ray, administratrix. (See Schilling, Louis F.)
Schlossberger, Hermann A., Buenos Aires, Argentina. Toilet-paper-distributing apparatus. 1,763,259; June 10.
Schmid, Albert P. (See Kranz, P., and Schmid.)
Schmidt, Henry F., Lansdowne, Pa., assignor to Westinghouse Electric & Manufacturing Company. Liquid-fuel burner. 1,762,356; June 10.
Schmidt, Henry F., Lansdowne, Pa., assignor to Westinghouse Electric & Manufacturing Company. Fluid-pressure governor. 1,762,357; June 10.
Schmidt, Henry F., Lansdowne, Pa., assignor to Westinghouse Electric & Manufacturing Company. Propeller-type blower. 1,762,358; June 10.
Schmidt, Henry F., Lansdowne, Pa., assignor to Westinghouse Electric & Manufacturing Company. Blower. 1,762,359; June 10.
Schmidt, Henry F., Lansdowne, Pa., assignor to Westinghouse Electric & Manufacturing Company. Thrust bearing. 1,762,360; June 10.
Schmidt, Henry F., Lansdowne, Pa., assignor to Westinghouse Electric & Manufacturing Company. Turbine blade. 1,762,361; June 10.
Schmidt, Kranz & Co. Nordhäuser Maschinenfabrik Aktien-Gesellschaft. (See Hoffmann, Ernst, assignor.)
Schmierer, Eugene. (See Thurm, R., and Schmierer.)
Schmitz, John A. (See Schaper, G. F., and Schmitz.)
Schmohl, Alfred C., Beaver Falls, assignor to Pressed Steel Car Company, Pittsburgh, Pa. Car construction. 1,762,245; June 10.
Schneider, Johann, and G. Heckmann, assignors to the firm H. Fuld & Co., Telephon-und Telegraphenwerke, Aktiengesellschaft, Frankfort-on-the-Main, Germany. Telephone instrument. 1,762,641; June 10.
Schneider, Josef C. M., assignor to Underwood Elliott Fisher Company, New York, N. Y. Typewriting machine. 1,763,372; June 10.
Schnell, Conrad, Woodhaven, N. Y. Snowplow attachment. 1,763,373; June 10.
Schoenberg, Jake A., and H. A. Sandholm, Spokane, Wash. Truck. 1,763,542; June 10.
Schollhorn, William, Company, The. (See Bernard, William A., assignor.)
Schrader, Gustave C. C., Woodstock, assignor to H. I. Bernhard, deceased, Brooklyn, N. Y.; A. M. Bernhard, executrix. Apparatus for distributing fertilizer in soluble condition. 1,763,374; June 10.
Schreier, George J., Chicago, Ill. Pipe insulation. 1,762,276; June 10.
Schroeter, Georg, Berlin, Germany, assignor to Newport Manufacturing Company, Carrollville, Wis. Purification of naphthalene. 1,763,410; June 10.
Schrup, Alfred F., assignor to H. B. Glover Company, Dubuque, Iowa. Combined garment and hood. 1,763,375; June 10.
Schuck, Harold P., San Francisco, Calif. Box-end-making machine. 1,762,643; June 10.
Schuck, Harold P., San Francisco, Calif., assignor to Daniels & Schuck, Inc., East Orange, N. J. Box-end-making machine. 1,762,642; June 10.
Schuler, Charles E., assignor to The International Derrick & Equipment Company, Columbus, Ohio. Adjustable platform. 1,763,069; June 10.
Schultz, Fred, assignor to The Lockwood Manufacturing Company, Cincinnati, Ohio. Pan connecting and reenforcing strip. 1,762,563; June 10.
Schurman, John, Cleveland, Ohio, assignor to York Ice Machinery Corporation, York, Pa. Refrigerating apparatus. 1,762,644; June 10.
Schwab, Edward L., Chicago, Ill. Bracket. 1,762,311; June 10.
Schwartz, Ernest L., East Orange, N. J., and A. J. Williams, jr., Media, Pa., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Retardation coil for composite sets. 1,762,744; June 10.
Schwarz, Henry G., Denver, Colo. Shredding machine. 1,762,592; June 10.
Schwarz, Henry G., Denver, Colo. Separator. 1,762,593; June 10.
Schweiger, William F., assignor to Multipost Company, Incorporated, Rochester, N. Y. Stamp-dispensing machine. 1,762,277; June 10.
Schweiter, Hans, Horgen, near Zurich, Switzerland. Pirn-winding machine. 1,762,894; June 10.

Schylander, John F., assignor to Jas. P. Marsh & Company, Chicago, Ill. Air valve. 1,762,488; June 10.
Scott & Williams, Incorporated. (See Page, Albert E., assignor.)
Scott, Winfield, Nitro, W. Va., assignor to The Rubber Service Laboratories Company, Akron, Ohio. Vulcanizing rubber and products obtained thereby. 1,762,531; June 10.
Sealy, Paul M., and J. Carroll, Rock Hill, S. C. Tide or wave motor. 1,763,191; June 10.
Sebell, Harry, Boston, assignor of one-half to A. H. Parker, Lexington, Mass. Making cans. 1,762,532; June 10.
Sebrell, Lorin B., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Liner and treating the same. 1,763,618; June 10.
Sebrell, Lorin B., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Vulcanizing caoutchouc and the product derived therefrom. 1,763,619; June 10.
Seel, Paul C., assignor to Eastman Kodak Company, Rochester, N. Y. Combined humidifier and projector. 1,762,934; June 10.
Seely, Thomas H. (See Kilburn, K., and Seely.)
Seiders, Irwin A., Reading, Pa. Locomotive appliance. 1,762,362; June 10.
Seifert, John W., assignor to National Laundry Machine Company, Houston, Tex. Drying tumbler. 1,762,594; June 10.
Seigle, William, Hinton, Okla. Coil-spring metartarsal-arch support. 1,763,260; June 10.
Seigle, William, Hinton, Okla. Coil-spring longitudinal arch support. 1,763,261; June 10.
Self Locking Carton Company. (See Johnson, Harry C., assignor.)
Self Locking Carton Company. (See Walsh, John E., assignor.)
Selhorst, Bernard. (See Oppenheim, T. H., and Selhorst.)
Sergent, Flay T., Belvidere, Ill. Roof rafter. 1,762,363; June 10.
Seward, Roy R., and J. A. Booe, Indianapolis, Ind. Construction cleat. 1,763,483; June 10.
Sewell, Charles W. (See Burgess, F. T., and Sewell.)
Seymour, Merrill W., assignor to Eastman Kodak Company, Rochester, N. Y. Photographic reversal process. 1,762,936; June 10.
Shadle, Clinton F., Indianapolis, Ind., assignor to Air Development Company, Inc. Air conditioner for compartments and railway cars. 1,762,837; June 10.
Shakeproof Lock Washer Company. (See Hosking, Richard T., assignor.)
Shand & Jurs Company. (See Shand, Reginald C., assignor.)
Shand, Reginald C., Piedmont, assignor to Shand & Jurs Company, Berkeley, Calif. Roof drain. 1,762,838; June 10.
Shanks, Henry R., Dallas, Tex. Plaster construction. 1,763,262; June 10.
Shanks, Henry R., Dallas, Tex. Hanging wall board. 1,763,263; June 10.
Shanks, Henry R., Dallas, Tex. Suspending wall board. 1,763,264; June 10.
Shann, Oscar A., Brooklyn, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Substation apparatus. 1,762,745; June 10.
Shann, Oscar A., Brooklyn, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Substation locking apparatus. 1,762,746; June 10.
Shannon, Don H., Detroit, Mich., assignor to The Babcock & Wilcox Company, Bayonne, N. J. Steam boiler. 1,762,246; June 10.
Shannon, James L., Springfield, Mass., assignor to Blake Manufacturing Company. Electric hand flash light. 1,762,895; June 10.
Shapiro, Lazarus, Bronx, N. Y., assignor to Radio Corporation of America. Sound-reproducing machine. 1,762,247; June 10.
Sharp, Frederick E., Prescott, Wash. Traction control for combined harvesters. 1,763,265; June 10.
Shaver, Archibald G., Chicago, Ill., assignor to The Regan Safety Devices Company, Inc., New York, N. Y. Switch-control apparatus. 1,763,011; June 10.
Shears, Sumner S., Brooklyn, N. Y. Vehicle spring. 1,763,192; June 10.
Shelby Spring Hinge Company, The. (See Hubbs, H. E., and Malone, assignors.)
Sheperdson, John W. (See George, J. R., and Sheperdson.)
Sheppard, Samuel E., and J. G. McNally, assignors to Eastman Kodak Company, Rochester, N. Y. Antiabrasion photographic coating. 1,762,935; June 10.
Sherlock, Robert, Toronto, Ontario, Canada. Pipe roof flashing. 1,762,896; June 10.
Shield, Paul S., assignor to A. Davis, jr., Cincinnati, Ohio. Tank delivery structure. 1,762,533; June 10.
Shields, George A., San Rafael, Calif. Shelf. 1,762,669; June 10.
Shields, Harry A., Grand Rapids, Mich. Steaming and drying machine. 1,763,193; June 10.
Shinn, Forrest S., Aurora, Ill. Seasoning wood. 1,763,070; June 10.
Shipman, Robert L., assignor of one-half to E. D. Sprague, Bridgeport, Conn. Eccentric-concentric heat exchanger. 1,763,012; June 10.
Shoebridge, Harold P., et al. (See Bradford, William G., assignor.)
Shone, Louis E., Highland Park, Mich. Automatic lubricator for vehicles. 1,762,198; June 10.
Shrum, Peter J., Monaca Heights, Pa., assignor to Pittsburgh Screw and Bolt Corporation. Thread protector. 1,762,248; June 10.
Shurtleff, Wilfred, assignor to The Herman Nelson Corporation, Moline, Ill. Variable-speed A. C. motors. 1,763,104; June 10.
Siemens & Halske, Aktiengesellschaft. (See Ebeling, August, assignor.)
Siesko, Emil T., Nanticoke, Pa. Reamer for pipe threaders. 1,762,670; June 10.
Signal Accessories Corporation. (See Bossert, W. F., and Burke, assignors.)
Signode Steel Strapping Company. (See Treat, Sidney W., assignor.)
Silverglo Lamps, Inc. (See Cline, H. P., Scheinberg, and Watson, assignors.)
Simmons, Aaron T., and B. H. Miles, assignors to Williams Oil-O-Matic Heating Corporation, Bloomington, Ill. Automatically-controlled ice-cream freezer. 1,763,567; June 10.
Simmons, Felix, New York, N. Y. Apparel garment. 1,763,266; June 10.
Simmons, Nicholas L., Wausau, Wis. Making whey products. 1,763,633; June 10.
Simplex Cap Company, The. (See Zarobsky, Charles A., assignor.)
Sinclair, Peter S., assignor to Holyoke Heater Company, Holyoke, Mass. Air-inlet device for oil burners. 1,762,897; June 10.
Sinclair Refining Company. (See Isom, Edward W., assignor.)
Singer, Fred J., Rockville Center, N. Y., assignor to American Telephone and Telegraph Company. Transmission system. 1,762,278; June 10.
Singer, Fred J., Rockville Center, N. Y., assignor to American Telephone and Telegraph Company. Transmission system. 1,762,279; June 10.
Singer Manufacturing Company, The. (See Clayton, Andrew B., assignor.)
Sinno, Emilio, and J. A., A., and E. Llauró, Buenos Aires, Argentina. Radiator hearth for boilers and similar apparatus. 1,763,187; June 10.
Sivian, Leon J., East Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Communication system. 1,763,194; June 10.
Skarbek-Kozietulski, Wladyslaw. (See Willimek, G., and Skarbek-Kozietulski.)
Skillman, Thomas S., Aldwych, London, England, assignor to Western Electric Company, Incorporated, New York, N. Y. Telephone system. 1,763,013; June 10.
Skinner, Mortimer B., Wilmette, Ill. Valve-reseating tool. 1,763,330; June 10.
Skinner Organ Company. (See Marks, Arthur H., assignor.)
Slathar, Fritz, deceased, by M. Slathar, executrix, Minneapolis, Minn. Seed planter. 1,762,671; June 10.
Slathar, Marie, executrix. (See Slathar, Fritz.)
Sleeper, Harvey P., Elizabeth, N. J. Relay-testing apparatus. 1,763,195; June 10.
Slepian, Joseph, Swissvalve, Pa., assignor to Westinghouse Electric & Manufacturing Company. Insulator string. 1,763,196; June 10.
Slepian, Joseph, Swissvale, Pa., assignor to Westinghouse Electric & Manufacturing Company. Resistance plate. 1,763,267; June 10.
Slepian, Joseph, Swissvale, Pa., assignor to Westinghouse Electric & Manufacturing Company. Resistor material and making same. 1,763,268; June 10.
Sligh, Tom S., jr. (See Paton, C. R., and Sligh.)
Slinger, John P., St. Louis, Mo. Art clay. 1,763,105; June 10.
Slingerland, Arthur J., Chicago, Ill. Window fastener. 1,762,280; June 10.
Smalley, Edwin L., Whitefish Bay, assignor to Hevi Duty Electric Company, Milwaukee, Wis. Heating-element-mounting means. 1,762,701; June 10.
Smalley, Robert C., Arlington, N. J., assignor to Claude Neon Lights, Inc., New York, N. Y. Producing vacuum-tube-lamp envelopes of special design. 1,763,071; June 10.
Smidth, F. L., & Co. (See Pontoppidan, Carl, assignor.)
Smith, Andrew F., Seattle, Wash. Compressed-spring machine. 1,762,747; June 10.
Smith, Frederick P., Glassboro, assignor of one-half to J. N. Paff, Glen Lake, N. J. Attachment for gas governors. 1,763,376; June 10.
Smith, George H., assignor to Norton Company, Worcester, Mass. Feeding mechanism for grinding machines. 1,763,626; June 10.
Smith, George T., Indianapolis, Ind. Squirrel-cage rotor for induction motors. 1,762,564; June 10.
Smith, Guy W., Kalamazoo Township, Kalamazoo County, Mich. Rosin-reclaiming machine. 1,762,595; June 10.
Smith, Hardick A., New Rochelle, assignor to Electrical Testing Laboratories, Inc., New York, N. Y. Photoelectric photometer. 1,762,748; June 10.
Smith, Harry B., Brooklyn, N. Y., assignor, by mesne assignments, to Hoague-Sprague Corporation, Lynn, Mass. Making boxes and box-blank assemblies. 1,762,702; June 10.
Smith, Harry B., Brooklyn, N. Y., assignor, by mesne assignments, to Hoague-Sprague Corporation, Lynn, Mass. Box and making same. 1,762,703; June 10.

Smith, Harry B., New York, N. Y., assignor to Hoague-Sprague Corporation, Lynn, Mass. Box blank and box. 1,762,704; June 10.

Smith, Harry L., Cudahy, Wis., assignor to The Fisk Rubber Company, Chicopee Falls, Mass. Building tire casings. 1,762,839; June 10.

Smith, Sidney M., assignor to Empire Printing & Box Company, Atlanta, Ga. Box. 1,763,072; June 10.

Smith, Walter E., Providence, assignor to Kenney Manufacturing Company, Cranston, R. I. Center ornament for drapery rods or the like. Des. 81,353; June 10.

Smith, Walter E., Providence, assignor to Kenney Manufacturing Company, Cranston, R. I. End ornament for draper rods or the like. Des. 81,354; June 10.

Smith, William I. (See Levy, M. M., and Smith.)

Smith, William S., Port Moody, British Columbia, Canada. Preparatory process in the manufacture of resawn shake shingles. 1,763,269; June 10.

Smithe, F. L., Machine Co. (See Novick, Abraham, assignor.)

Snow, Norman L., assignor to Diamond Power Specialty Corporation, Detroit, Mich. Boiler cleaner. 1,762,312; June 10.

Snow, Norman L., and W. P. Thomas, assignors to Diamond Power Specialty Corporation, Detroit, Mich. Boiler cleaner. 1,762,313; June 10.

Snyder, Clarence E., Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Making rubber tubes. 1,763,106; June 10.

Snyder, Edward H., and W. D. Green, Bauer, Utah, assignors to Combined Metals Reduction Company, Stockton, Utah. Concentration of oxidized ores of lead, silver, and copper. 1,762,364; June 10.

Söhr, Edvin, Lidingo, and B. A. Ljungström, Stockholm, assignors to Aktiebolaget Ljungströms Angturbin, Stockholm, Sweden. Heat exchanger. 1,762,426; June 10.

Sons-Cunningham Reed & Rattan Co. (See Jones, Charles W., assignor.)

Soper, Raymond H., assignor to Brown-Morse Company, Muskegon, Mich. Correspondence rack or tray. 1,762,596; June 10.

Sorensen, Albert, Washington, D. C. Water still. 1,762,898; June 10.

Sorensen, Clarence S., Los Angeles, Calif. Power transmission. 1,762,534; June 10.

Sorenson, Arthur E., Aurora, Nebr. Ticker holder. 1,763,484; June 10.

Sothen, Albert L., Chicago, Ill. Shoe attachment. 1,763,543; June 10.

Spalleno, John, Streator, Ill. Mouth-organ stand. 1,762,645; June 10.

Spangler, William I., Tarlton, Ohio. Signal clarifier for radio receiving apparatus. 1,763,270; June 10.

Spatta, George. (See Mogford, E. C., and Spatta.)

Speck, William C., Lamesa, Tex. Cultivator attachment. 1,763,271; June 10.

Speiser, Gottlieb, Nuremberg, Germany, assignor to Westinghouse Electric & Manufacturing Company. Circuit breaker. 1,763,197; June 10.

Spencer, John A., Revere, assignor to Raytheon Inc., Cambridge, Mass. Regulating system. 1,763,107; June 10.

Spencer, Percy L., Medford, Mass., assignor, by mesne assignments, to Old Colony Trust Company. Glow lamp. 1,763,108; June 10.

Spencer, Sam E., Elland, England. Grid for gas purifiers. 1,762,840; June 10.

Spennemann, Walter, Cassel, Germany. Electric power distribution. 1,762,672; June 10.

Sperry Development Company. (See Sperry, Elmer A., assignor.)

Sperry, Elmer A., Brooklyn, N. Y., assignor, by mesne assignments, to Sperry Development Company. Sounding device. 1,763,377; June 10.

Sprague, Earl D. (See Shipman, Robert L., assignor.)

Sprague, Frank J., New York, N. Y., assignor to Westinghouse Electric & Manufacturing Company. Dual elevator system and control. 1,763,198; June 10.

Springfield Metallic Casket Company, The. (See Hiser, Charles H., assignor.)

Stacy, Leland J., Caldwell, and M. E. Krom, Madison, N. J., assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y. Regulator system. 1,763,014; June 10.

Staege, Stephen A., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Regulator system. 1,763,199; June 10.

Staege, Stephen A., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Regulator system. 1,763,272; June 10.

Stahl, Rodolphe. (See Weaver, J. B., Stahl, and Wagner.)

Stallmann, Otto. (See Gubelmann, I., Weiland, and Stallmann.)

Standard Car Truck Company. (See Barber, L. W., and Webb, assignors.)

Standard Coupler Company. (See Goodwin, Ernest G., assignor.)

Standard Neckwear Company. (See Weinstein, Otto, assignor.)

Standard Oil Company. (See Farrell, James W., assignor.)

Standard Oil Company. (See Lowery, Hugh, assignor.)

Standish, Edward K., assignor to Hartford Special Machinery Company, Hartford, Conn. Variable-speed transmission. 1,762,199; June 10.

Stanley, Stanley J. (See Broadhurst, Jean, assignor.)

Starkey, William C., Allisonville, assignor to L. G. S. Devices Corporation, Indianapolis, Ind. Spring clutch. 1,762,799; June 10.

Statham, Noel. (See Schachat, Abraham B., assignor.)

Staud, Cyril J., assignor to Eastman Kodak Company, Rochester, N. Y. Spray drying cellulose-acetate solutions. 1,762,937; June 10.

Stecker, Alfred J., St. Petersburg, Fla. Tobacco lighter. 1,762,281; June 10.

Steel Scaffolding Company, The. (See Goodwin, Percy E., assignor.)

Steele, Carmi J., assignor of one-third to W. R. Coates and one-third to R. C. Troeger, oLs Angeles, Calif. Core gate for bathtub molds and the like. 1,762,841; June 10.

Steiner, Ludwig. (See Gutmann, V., and Steiner.)

Steinfurth, Louis. (See Andrews, F. O., and Steinfurth.)

Steinhardt, Max, Munich, Germany, and E. Bauer, Yonkers, N. Y. Carburetor. 1,762,200; June 10.

Steinle, Adolf, Jena, Germany, assignor to the firm N. V. Nederlandsche Instrumenten Compagnie, Haag, Netherlands. Fire-control apparatus for firing at movable targets. 1,762,800; June 10.

Steinmetz, Christian P. (See Carter, L. A., and Steinmetz.)

Stephan, Emil H., assignor to W. H. Gast, Bridgman, Mich. Spray gun. 1,762,282; June 10.

Stephenson, Preston C., assignor of two-sixths to H. Gurshtel and one-sixth to E. E. Baren, Sioux City, Iowa. Bushing-removing tool. 1,763,331; June 10.

Stepp, Eddie H. (See Van Deventer, H., and Stepp.)

Stern, Ottokar, Vienna, Austria. Machine for laying foundations of structures. 1,763,485; June 10.

Stevenson, George H., Sound Beach, Conn., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Operation of electric space-discharge devices. 1,763,015; June 10.

Stevenson, Raymond F. (See Fehely, R. C., and Stevenson.)

Stewart, Donald H., assignor to Eastman Kodak Company, Rochester, N. Y. Optical equipment for photographic cameras. 1,762,938; June 10.

Stiefel, Ralph C., Ellwood City, Pa. Tube-rotating apparatus. 1,762,427; June 10.

Stinson, George, and S. Fred. Gardner, assignors to Heywood-Wakefield Company, Boston, Mass. Hinge for desk lids and the like. 1,762,489; June 10.

Stockton, William S., assignor to The Willys-Overland Company, Toledo, Ohio. Vehicle brake. 1,762,842; June 10.

Stoker Matic Corporation, The. (See Rieger, William F., assignor.)

Stoller, Hugh M., Mountain Lakes, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Electric regulator. 1,763,016; June 10.

Stoller, Hugh M., Mountain Lakes, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Regulator system. 1,763,017; June 10.

Story & Clark Radio Corp. (See Minnium, Byron B., assignor.)

Strachan, Thomas H., Lynbrook, N. Y., assignor to Dayton Scale Company, Dayton, Ohio. Weighing scale. 1,762,204; June 10.

Straub, Charles J., Gowanda, N. Y. Holder for cut flowers. 1,762,843; June 10.

Strauss, Arthur C., and D. W. Blair, Los Angeles, Calif. Tooth-paste dispenser. 1,763,273; June 10.

Strobl, Hans, Berlin-Tempelhof, assignor, by mesne assignments, to Luftschiffbau Zeppelin G. m. b. H., Friedrichshafen, Bodensee, Germany. Manufacturing balloon material. 1,763,109; June 10.

Stromberg-Carlson Telephone Manufacturing Company, The. (See Worthington, Everett, assignor.)

Stromberg Electric Company. (See Ostler, Ernest S., assignor.)

Strong-Carlisle & Hammond Company. (See Clark, R. L., and Craker, assignors.)

Strong, Carlisle and Hammond Company, The. (See Strong, Herbert W., assignor.)

Strong Electric Corporation, The. (See Strong, Harry H., assignor.)

Strong, Harry H., Toledo, Ohio, assignor to The Strong Electric Corporation, Wilmington, Del. Projection apparatus. 1,762,801; June 10.

Strong, Harry H., Toledo, Ohio, assignor to The Strong Electric Corporation, Wilmington, Del. Projection apparatus. 1,762,802; June 10.

Strong, Harry H., Toledo, Ohio, assignor to The Strong Electric Corporation, Wilmington, Del. Projection apparatus. 1,762,803; June 10.

Strong, Harry H., Toledo, Ohio, assignor to The Strong Electric Corporation, Wilmington, Del. Projection apparatus. 1,762,804; June 10.

Strong, Herbert W., assignor to The Strong, Carlisle and Hammond Company, Cleveland, Ohio. Electric furnace. 1,762,201; June 10.

Strong, Leslie P., Lakewood, assignor to The Clark Manufacturing Company, Cleveland, Ohio. Valve. 1,763,486; June 10.

Stuckeman, William F., assignor to H. B. Rouse & Company, Chicago, Ill. Printer's composing stick. 1,762,365; June 10.

Stuckert, Felix J., jr., assignor to Briggs & Stratton Corporation, Milwaukee, Wis. Automobile switch. 1,763,018; June 10.

Studebaker Corporation, The. (See Donahue, Dennis A., assignor.

Studebaker Corporation, The. (See Paton, C. R., and Sligh, assignors.)

Stürmer, Kurt, Pruhlitz, Germany. Tanning animal hides with salts. 1,763,596; June 10.

Sullivan, Daniel E., Evanston, assignor to The Pure Oil Company, Chicago, Ill. Replaceable wall structure for furnaces. 1,763,606; June 10.

Sullivan Machinery Company. (See Gilman, George H.)

Sullivan Machinery Company. (See Holmes, Morris P., assignor.)

Sullivan Machinery Corporation. (See Osgood, Charles F., assignor.)

Sulzer Frères Société Anonyme. (See Schenker, Walter, assignor.)

Sumabat, Doroteo. (See Gambito, N., and Sumabat.)

Sundstrand Engineering Co., The. (See Kiefer, William R., assignor.)

Surface Combustion Company, The. (See Hepburn, William M., assignor.)

Suris, Hampton I., and J. L. Daniels, Iowa Falls, Iowa. Electrical paint and varnish remover. 1,762,646; June 10.

Sutphen, Robert M., Newark, N. J., and J. F. Booraem, Greenwich, Conn. Maintaining swimming pools in a sanitary condition. 1,762,314; June 10.

Swain, Donald B., and H. A. Ryther, assignors to Millers Falls Company, Millers Falls, Mass. Ratchet screw driver. 1,762,315; June 10.

Swallow, Francis P., Worcester, assignor to United States Envelope Company, Springfield, Mass. Holder for drinking cups. 1,762,490; June 10.

Swanstrom, Martin S., Chicago, Ill. Pneumatic pump. 1,762,597; June 10.

Sweet, Burton W., assignor to The Van Dorn Electric Tool Company, Cleveland, Ohio. Self-opening switch lock. 1,762,202; June 10.

Swenson, Carl E., assignor to Mechanics Universal Joint Company, Rockford, Ill. Clutch disk. 1,762,673; June 10.

Swingrite Co. (See Davis, Henry K. B., assignor.)

Swope, Grady R., St. Petersburg, Fla. Artificial golf-course covering. 1,763,411; June 10.

Swoyer, Harry, Dunkirk, N. Y. Driving box for locomotive engines. 1,763,019; June 10.

Sykes, William E., Buffalo, N. Y. Universal shaft coupling. 1,763,332; June 10.

Szekely, Otto E. (See Johnson, R. H., and Szekely.)

Tabor Manufacturing Company, The. (See Lewis, Wilfred, assignor.)

Tabulating Machine Company, The. (See Bryce, James W., assignor.)

Tabulating Machine Company, The. (See Daly, G. F., and Page, assignors.)

Tabulating Machine Company, The. (See Ford, Eugene A., assignor.)

Tabulating Machine Company, The. (See Schaaff, John T., assignor.)

Tait, Francis, jr. (See Tait, John, W., and F., jr.)

Tait, John, W., and F., jr., assignors to Howard Hosiery Company, Philadelphia, Pa. Stripping attachment for circular spring beard-needle knitting machines. 1,763,378; June 10.

Tait, William. (See Tait, John, W., and F., jr.)

Tark, Marcus B., Philadelphia, Pa., assignor to Link-Belt Company, Chicago, Ill. Sewage-disposal apparatus. 1,763,412; June 10.

Tasty Baking Company. (See Brierley, Clifton, assignor.)

Tauschek, Gustav, Vienna, Austria. Paper-feeding mechanism. 1,762,749; June 10.

Taylor, Cyrus, Hartford, Conn. Valve or control mechanism for machines for filling materials into containers. 1,763,487; June 10.

Taylor, Henry P., Winston-Salem, N. C. Container for manufactured tobacco. 1,762,428; June 10.

Taylor, Henry P., Winston-Salem, N. C. Container for packing tobacco. 1,762,429; June 10.

Taylor, Schuyler J., Portland, assignor to The Russell Manufacturing Company, Middletown, Conn. Fabric. 1,763,074; June 10.

Taylor, William J., Winthrop Harbor, Ill., assignor to The Lamson Company, Syracuse, N. Y. Automatic conveying system for merchandise. 1,763,073; June 10.

Teal, Charles A., jr., Jenkintown, Pa. Nail file or similar instrument and carrier therefor. 1,763,274; June 10.

Technidyne Corporation. (See Jones, L. L., and Flanzer, assignors.)

Teeter, Wilford H. (See Aseltine, F. E., and Teeter.)

Teetor, Macy O., assignor to The Perfect Circle Company, Hagerstown, Ind. Art of and mold for casting piston rings. 1,762,598; June 10.

Teipel, Joseph, assignor to Mancha Storage Battery Locomotive Company, St. Louis, Mo. Connecting device for storage batteries. 1,762,203; June 10.

Teitscheid, Alfred F., Wharton, N. J. Fuse for projectiles. 1,762,674; June 10.

Templeton, Edwin G., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Trimming device for tire-building machines. 1,763,568; June 10.

Test, Skiles E., Indianapolis, Ind. Process of and apparatus for warming and cleaning pools. 1,762,366; June 10.

Texas Company, The. (See Titus, Leon D., assignor.)

Textile Machine Works. (See Ullrich, Rudolf, assignor.)

Thermal Engineering Corporation. (See Mayo, John, assignor.)

Thermo Electric Research Corporation. (See Robinson, William H., assignor.)

Thomas, Ben B., and G. O. Forsberg, Portland, Oreg. Flushing valve. 1,763,188; June 10.

Thomas, George W., assignor to H. H. Robertson Company, Pittsburgh, Pa. Glazing construction. 1,763,276; June 10.

Thomas, Laurence H. (See Kuhn, F., and Thomas.)

Thomas, Olive K., and J. D. Malkin, Philadelphia, Pa., assignors of one-half to Freydberg Bros. Inc., New York, N. Y. Waistband curtain. 1,762,283; June 10.

Thomas, Olive K., and J. D. Malkin, Philadelphia, Pa., assignors of one-half to Freydberg Bros. Inc., New York, N. Y. Producing waistband curtains. 1,762,284; June 10.

Thomas, Phillips, Edgewood, Pa., assignor to Westinghouse Electric & Manufacturing Company. Compensated paralleling system. 1,763,276; June 10.

Thomas, Willis P. (See Snow, N. L., and Thomas.)

Thommes, John A., assignor to Jas. P. Marsh & Company, Chicago, Ill. Indicating circuit-controlling apparatus. 1,762,491; June 10.

Thompson, Allison J., Cleveland, Ohio. Shock absorber for inverted lamps. 1,762,285; June 10.

Thompson Products Inc. (See Bissell, Richard E., assignor.)

Thompson, Somerville W., trustee. (See Tillson, Edwin D., assignor.)

Thomson, Catherine E. (See Thomson, James and C. E.)

Thomson, James and C. E., Dunedin, assignors of three-fifths to J. Winsloe, Dunedin, Otago, New Zealand. Machine for separating solids from liquids. 1,762,899; June 10.

Thorud, Arthur, Minneapolis, Minn. Combined sprinkler and surfacer for ice rinks. 1,762,599; June 10.

Thurm, Richard, and E. Schmierer, Saginaw, Mich., assignors to Baker Perkins Company, Inc., White Plains, N. Y. Machine for dissolving cellulose xanthate and the like. 1,763,379; June 10.

Ties, Fred M., Brodhead, Wis. Puddler for tanks of sewaged sposal plants. 1,763,448; June 10.

Tilden, Bert O., assignor to B. O. T. Mfg., Co., Trenton, N. J. Water-closet combination. 1,763,277; June 10.

Tillson, Edwin D., Evanston, assignor to Somerville W. Thompson, trustee, Chicago, Ill. Indirect-lighting fixture. 1,762,565; June 10.

Timken Roller Bearing Company, The. (See Buckwalter, Tracy V., assignor.)

Titanafram Corporation. (See Hopkins, Marcus C., assignor.)

Titcomb, Fred E., Cleveland, Ohio. Barber's tool chest. 1,763,488; June 10.

Titus, Leon D., Port Arthur, Tex., assignor to The Texas Company, New York, N. Y. Capping apparatus. 1,763,020; June 10.

Tjoflat, Gerald B., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Induction furnace. 1,763,200; June 10.

Todd, Charles O., assignor to The Wilson Fastener Company, Cleveland, Ohio. Display box. 1,762,900; June 10.

Tokheim, John J., Cedar Rapids, Iowa. Gasoline-dispensing device. 1,763,544; June 10.

Tokita, Kamekichi, Seattle, Wash. Syringe. 1,762,430; June 10.

Tolentino, José S., et al. (See Gambito, N., and Sumabat, assignors.)

Topeka Tent & Awning Co. (See Foster, Thomas H., assignor.)

Towner, Heber F., deceased, Santa Ana, Calif.; P. G. Beissel, executor, assignor to B. V. Curry, trustee. Disk cultivator. 1,762,844; June 10.

Townsend, Harry P., Hartford, Conn. Screw-threading machine. 1,763,635; June 10.

Trautvetter, Henry T., Clifton, N. J. Dispensing container. 1,763,449; June 10.

Treat, Sidney W., Chicago, Ill., assignor, by mesne assignments, to Signode Steel Strapping Company. Stretcher. 1,762,535; June 10.

Trench, Harry G., Hartford, Conn., assignor to The Union Trust Company, Cleveland, Ohio. Spring shackle. 1,763,110; June 10.

Triplex Safety Glass Company of North America. (See Kretzschmar, George W., assignor.)

Trisoglio, Severino, et al. (See Righetto, Ruggero, assignor.)

Troeger, Roy C., et al. (See Steele, Carmi J., assignor.)

Trogner, Arthur M., East Orange, N. J., assignor to Wired Radio, Inc., New York, N. Y. Inductance system. 1,763,278; June 10.

Trojan Powder Company. (See Nielsen, Otto B., assignor.)

Troy Laundry Machinery Company. (See Schenck, Le Roy C., assignor.)

Trube, Carl E., Maplewood, assignor to Hazeltine Corporation, Jersey City, N. J. Electric coupling system. 1,762,431; June 10.

Trube, Carl E., Orange, assignor to Hazeltine Corporation, Jersey City, N. J. Electric coupling system. 1,763,380; June 10.

Trumble, Milton J., Alhambra, Calif. Absorption trap. 1,762,432; June 10.

Trumble, Milon J., Los Angeles, Calif. Cracking still and process. 1,762,433; June 10.

Trussbilt Steel Doors, Inc. (See Gross, William J., assignor.)

Tuck, Clarence M. (See Morris, Joseph E., assignor.)

Tucker, Curtis A. (See MacNeill, J. B., Bakken, and Tucker.)

Tucker, James D., Sierra Madre, Calif. Mixing-bowl holder. 1,762,805; June 10.

Turbo-Mixer Corporation, The. (See Beers, Henry S., assignor.)

Turner, Charles H., assignor to Osgood Bradley Car Company, Worcester, Mass. Metal window sash. 1,763,489; June 10.

Turner, Charles H., assignor to Osgood Bradley Car Company, Worcester, Mass. Sleeping-car structure. 1,763,490; June 10.

Turner, Lewis L., assignor to The Charles Parker Co., Meriden, Conn. Nut. 1,763,021; June 10.

Turner Tanning Machinery Company, The. (See Schettler, Gustav A., assignor.)

Tuteur, Charles, Chicago, Ill. Flower stand. Des. 81,355; June 10.

Tuttle, Clifton M. (See Jones, L. A., and Tuttle.)

Twin-Flex Metal Manufacturing Corporation. (See Abrahamson, Edwin W., assignor.)

Tychie, William, Grosse Isle, Manitoba, Canada. Mowing machine. 1,763,022; June 10.

Tyler, Warren C., East Orange, N. J., assignor, by mesne assignments, to W. C. Lipe, Inc., Syracuse, N. Y. Hoisting mechanism. 1,763,023; June 10.

Typographic Machines Company, The. (See Poeppelmeier, Frank H., assignor.)

Tytus, John B., assignor to The American Rolling Mill Company, Middletown, Ohio. Metal rolling. 1,763,279; June 10.

Uhrin, Louis, Westminster, Md. Mortising tool. 1,762,457; June 10.

Ulrich, Rudolf, assignor, by mesne assignments, to Textile Machine Works, Wyomissing, Pa. Tension-bar mechanism for knitting machines. 1,763,280; June 10.

Ulrich, Charles B., assignor to Art Metal Construction Company, Jamestown, N. Y. Flooring. 1,762,249; June 10.

Underhill, Joseph A., and G. C. Hemenway, assignors to Hampden Manufacturing Co., New York, N. Y. Card-holding clip. 1,763,024; June 10.

Underwood Elliott Fisher Company. (See Conard, Frederick U., assignor.)

Underwood Elliott Fisher Company. (See Helmond, William F., assignor.)

Underwood Elliott Fisher Company. (See Norin, Carl E., assignor.)

Underwood Elliott Fisher Company. (See Oswald, Alfred E., assignor.)

Underwood Elliott Fisher Company. (See Schneider, Josef C. M., assignor.)

Unger, Paul O., assignor to McMillan Book Company, Syracuse, N. Y. Looseleaf record book. 1,763,075; June 10.

Union Carbide & Carbon Research Laboratories, Inc. (See Lytle, Arthur R., assignor.)

Union Iron Works. (See Bach, George W., assignor.)

Union Special Maschinenfabrik, Gesellschaft mit beschränkter Haftung. (See Maier, Karl, assignor.)

Union Switch & Signal Company, The. (See Grondahl, Lars O., assignor.)

Union Trust Company, The. (See Trench, Harry G., assignor.)

United-Carr Fastener Corporation. (See Holmes, George A., assignor.)

United Products Corporation of America. (See Biddle, Arthur, assignor.)

United Shoe Machinery Corporation. (See Hall, Walter H., assignor.)

United Shoe Machinery Corporation. (See Kilburn, K., and Seely, assignors.)

U. S. Bobbin & Shuttle Company. (See Adams, Fred E., assignor.)

United States Cast Iron Pipe & Foundry Company. (See Ladd, James B., assignor.)

United States Envelope Company. (See Swallow, Francis P., assignor.)

United States Gypsum Co., The. (See Brookby, Harry E., assignor.)

Universal Match Corporation, The. (See Neklutin, Constantine N., assignor.)

Universal Winding Company. (See De Wolf, Ernest A., assignor.)

Upson, Ralph H., Brooklyn, N. Y., assignor to Aircraft Development Corporation, Detroit, Mich. Dirigible. 1,762,845; June 10.

Vandergrift, Frank C., Akron, Ohio, assignor, by mesne assignments, to National-Erie Company, Erie, Pa. Extrusion apparatus. 1,762,367; June 10.

Vandergrift, Frank C., Akron, Ohio, assignor, by mesne assignments, to National-Erie Company, Erie, Pa. Extrusion apparatus. 1,762,368; June 10.

Van Deventer, Harry R., New York, N. Y., assignor to Westinghouse Electric and Manufacturing Company. Refrigerating system. 1,763,281; June 10.

Van Deventer, Horace, and E. H. Stepp, Knoxville, Tenn. Charge-blending device. 1,763,450; June 10.

Van Dorn Electric Tool Company, The. (See Sweet, Burton W., assignor.)

Van Dorn, Theodore F. (See Norwood, Harry G., assignor.)

Van Dyck, Arthur F., Yonkers, N. Y., assignor to Radio Corporation of America. Loop antenna. 1,763,382; June 10.

Van Dyck, Arthur F., Rye, N. Y., and F. H. Guber, Roselle, N. J., assignors to Radio Corporation of America. Loud-speaker horn. 1,763,381; June 10.

Van Etten, William V., Bellingham, Wash. Dirigible headlight. 1,762,536; June 10.

Van Marle, Dirk J., assignor to Buffalo Foundry & Machine Company, Inc., Buffalo, N. Y. Drying liquid materials. 1,762,250; June 10.

Van Norman, Frederick D., assignor to Van Norman Machine Tool Company, Springfield, Mass. Magnetic throw-off for grinding machines. 1,763,201; June 10.

Van Norman Machine Tool Company. (See Van Norman, Frederick D., assignor.)

Van Orman, Ward T., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Apparatus for and method of treating fabrics. 1,763,569; June 10.

Van Scoit, Harry B., assignor to The Buckeye Traction Ditcher Company, Findlay, Ohio. Manual control means for bucket cleaners. 1,762,492; June 10.

Van Sickle, Roswell C., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Circuit breaker. 1,763,202; June 10.

Van Wormer, John R., assignor to The American Paper Bottle Company, Toledo, Ohio. Paper-box sealing. 1,763,025; June 10.

Vaughn, George A., assignor to The Parsons Company, Newton, Iowa. Outrigger for cranes or the like. 1,762,705; June 10.

Vaughn, Robert L., Crestview, Fla. Lady's hand bag. Des. 81,356; June 10.

Vegors, Albert L., Webster City, Iowa. Plowshare. 1,762,251; June 10.

Vernam, Gilbert S., River Edge, N. J., assignor to American Telephone and Telegraph Company. Printing-telegraph exchange system. 1,762,252; June 10.

Verpillier, Henry E., Newark, N. J. Device for stretching nets and the like. 1,762,205; June 10.

Verwayen, Henderikus J., Astoria, N. Y. Vase. Des. 81,357; June 10.

Victory Racing Plate Company, The. (See Langlois, Earl H., assignor.)

Victory Sparkler & Specialty Company. (See Clauser, Herbert, assignor.)

Viera, Raphael, Scranton, Pa. Screen awning. 1,763,383; June 10.

Vieth, William F., Jackson Heights, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Remote control system. 1,763,203; June 10.

Vining, Merritt A., Grand Rapids, Mich. Ventilating apparatus. 1,763,282; June 10.

Vivarttas, William O., assignor to Mattison Machine Works, Rockford, Ill. Multiple gauge. 1,763,333; June 10.

Vogel, Frank H., assignor to The Columbus Vending Company, Columbus, Ohio. Vending-machine casing. Des. 81,358; June 10.

Voltz, William, Ridgefield, Wash. Wave producer for swimming tanks. 1,763,491; June 10.

Voorhees, Gardner T., Boston, Mass. Refrigerating process and apparatus. 1,762,369; June 10.

Vortex Cup Company. (See Barbieri, Cesare, assignor.)

Vortex Cup Company. (See Getz, Frank J., assignor.)

Vortex Cup Company. (See Green, William A., assignor.)

Voss, James D., Oakleigh, near Melbourne, Victoria, Australia. Breathing apparatus. 1,763,492; June 10.

Vrbanac, John, Milwaukee, Wis., assignor to The Fisk Rubber Company, Chicopee Falls, Mass. Tire-building machine. 1,762,850; June 10.

Wacker, William E., Maplewood, N. J., assignor to August Goertz & Co., Inc. Fastener catch for containers. 1,762,600; June 10.

Wagner, Alfred. (See Klingner, Hermann R., assignor.)

Wagner, Cary R. (See Weaver, J. B., Stahl, and Wagner.)

Wagner, Henry F. (See McCarthy, Francis J., assignor.)

Waldes-Koh-i-noor, Inc. (See Rocke, Louis.)

Waldman, George H., New York, assignor to Oneida Community, Limited, Oneida, N. Y. Storage and display device for flat tableware articles. 1,763,334; June 10.

Wales Novelties Corporation. (See Hardy, Charles, assignor.)

Wall, A. T. Co. (See Oxx, Henry G., assignor.)

Wall, Ethel M., Omaha, Nebr. Stocking. 1,762,601; June 10.

Wallace, Charles F., Westfield, assignor to Wallace & Tiernan Company, Inc., Belleville, N. J. Apparatus for producing a proportionately-varying negative pressure. 1,762,706; June 10.

Wallace, Edwin C., Newton, Mass. Paving mixture and preparing same. 1,763,204; June 10.

Wallace & Tiernan Company. (See Wallace, Charles F., assignor.)

Wallace, William S., et al., trustees. (See Davis, Kenneth, assignor.)

Wallerstein Company. (See Wallerstein, Leo, assignor.)

Wallerstein, Leo, assignor to Wallerstein Company, Inc., New York, N. Y. Degumming silk. 1,763,112; June 10.

Walliser, Robert E., Chicago, Ill. Combined power and hand loom. 1,763,111; June 10.

Walper, Gordon R., Royal Oak, Mich. Plastering construction. 1,762,707; June 10.

Walsh, Frank P. (See Fisk, Jesse F., assignor.)

Walsh, John E., Chicago, Ill., assignor to Self Locking Carton Company. Cushioning means for egg cartons. 1,763,570; June 10.

Walter, B., & Co. (See Walter, Frederick B., assignor.)

Walter, Frederick B., assignor to B. Walter & Co., Wabash, Ind. Table lock. 1,763,571; June 10.

Walter, Frederick B., assignor to B. Walter & Co., Wabash, Ind. Extension table. 1,763,572; June 10.

Walters, Herbert H., assignor to Chemical Toilet Corporation, Syracuse, N. Y. Fireplace dome. 1,763,076; June 10.

Ward, Artemas, Inc. (See Giles, Harvey, assignor.)

Ward, Eugene B., assignor, West Springfield, Mass. Shoe. 1,763,283; June 10.

Warner Aircraft Corporation, The. (See Warner, William O., assignor.)

Warner Electric Brake Corporation. (See Cadman, Addi B., assignor.)

Warner, William O., assignor to The Warner Aircraft Corporation, Detroit, Mich. Cylinder and head connection for internal-combustion engines. 1,762,370; June 10.

Warren, Simon L., Quincy, Mass. Upholstery-spring-attaching device. 1,763,077; June 10.

Waseluk, Jacob, assignor to Morgan and Wright, Detroit, Mich. Apparatus for treating rubber articles. 1,762,846; June 10.

Watkins, Julian E., Navasota, Tex. Cotton harvester. 1,763,607; June 10.

Watrous, Roy E., Evanston, Ill. Air cleaner. 1,762,493; June 10.

Watson, John G. (See Cline, H. P., Scheinberg, and Watson.)

Watts, John S., West Chester, Pa. Liquid-mixing device. 1,763,335; June 10.

Waugh Equipment Company. (See O'Brien, Richard J., assignor.)

Wearn, James S., assignor to Wearns Automatic Drive Company, Limited, Christchurch, New Zealand. Belt-driven power-transmission appliance. Re17,698; June 10.

Wearns Automatic Drive Company, Limited. (See Wearn, James S., assignor.)

Weaver, Joseph B., Chicago, Ill., assignor, by mesne assignments, to Gyro Process Company. Apparatus for treating hydrocarbon oils. 1,763,608; June 10.

Weaver, Joseph B., R. Stahl, Toledo, Ohio, and C. R. Wagner, Chicago, Ill., assignors to Gyro Process Company, Detroit, Mich. Treating hydrocarbon oils. 1,763,609; June 10.

Webb, Edwin W. (See Barber, L. W., and Webb.)

Webb, George, West Hartford, assignor to Colt's Patent Fire Arms Manufacturing Company, Hartford, Conn. Dishwashing machine. 1,762,847; June 10.

Weber, Hermann, Reisholz, near Dusseldorf, and F. Niemeyer, Holthausen, near Dusseldorf, Germany. Treating glycerin. 1,763,451; June 10.

Wedeberg, Reuben, assignor to Alemite Corporation, Chicago, Ill. Signal for lubricating systems. 1,762,566; June 10.

Weiland, Henry J. (See Gubelmann, I., Weiland, and Stallmann.)

Weinberg, Werner, Ludenscheid, Germany. Delivering apparatus for liquid soap. 1,762,901; June 10.

Weingand, Claude O. (See Dillon, W. A., and Weingand.)

Weinstein, Otto, Boston, Mass., assignor to Standard Neckwear Company. Bow necktie. 1,762,647; June 10.

Weissman, Joseph I., Brooklyn, and M. Goldstein, Ozone Park; said Goldstein assignor to J. Goldstein, Brooklyn, N. Y. Tire-chain connection. 1,762,750; June 10.

Wells, Burling D. (See Blair, R. S., and Wells.)

Wensley, Roy J., Edgewood, Pa., assignor to Westinghouse Electric & Manufacturing Company. Theater-light-control apparatus. 1,763,113; June 10.

Werder, John F., Cleveland, Ohio, assignor of one-half to E. Rogers. System of lubrication. 1,762,902; June 10.

Werder, John F., Cleveland, Ohio, assignor of one-half to E. Rogers. Self-dispensing liquid package. 1,762,903; June 10.

Wermine, Hugo H., Villa Park, assignor to Belden Manufacturing Company, Chicago, Ill. Electric coil and transformer and making same. 1,763,114; June 10.

Wermine, Hugo H., Villa Park, assignor to Belden Manufacturing Company, Chicago, Ill. Weatherproof electric winding. 1,763,115; June 10.

Wernicke, Herman. (See Noelle, William, assignor.)

Wescott, William B., assignor to Rubber Latex Research Corporation, Boston, Mass. Treating rubber latex and product thereof. 1,762,494; June 10.

West, Charles P., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Converter-polarizing system. 1,763,622; June 10.

Western Electric Company. (See Anderson, Sidney E., assignor.)

Western Electric Company. (See Bell, John H., assignor.)

Western Electric Company. (See Black, Harold S., assignor.)

Western Electric Company. (See Curtis, Alfred S., assignor.)

Western Electric Company. (See Dowd, Andrew D., assignor.)

Western Electric Company. (See Edelmann, Otto, assignor.)

Western Electric Company. (See Farrington, John F., assignor.)

Western Electric Company. (See Friis, Harald T., assignor.)

Western Electric Company. (See Gilbert, John J., assignor.)

Western Electric Company. (See Gould, John R., assignor.)

Western Electric Company. (See Hibbard, Frank H., assignor.)

Western Electric Company. (See Marrison, Warren A., assignor.)

Western Electric Company. (See Quarles, Donald A., assignor.)

Western Electric Company. (See Skillman, Thomas S., assignor.)

Western Electric Company. (See Stoller, Hugh M., assignor.)

Western Electric Company. (See Wright, Esmond P. G., assignor.)

Western Electric Company. (See Wright, J. C., Wheeler, and Wood, assignors.)

Western Union Telegraph Company, The. (See Perry, William C., assignor.)

Westinghouse Electric & Manufacturing Company. (See Aspinwall, Louis M., assignor.)

Westinghouse Electric & Manufacturing Company. (See Bates, Harry H., assignor.)

Westinghouse Electric and Manufacturing Company. (See Coates, W. A., and Fowler, assignors.)

Westinghouse Electric & Manufacturing Company. (See Dorfman, Hiller D., assignor.)

Westinghouse Electric & Manufacturing Company. (See Ehrenfeld, Ralph, assignor.)

Westinghouse Electric & Manufacturing Company. (See Farley, William R., assignor.)

Westinghouse Electric & Manufacturing Company. (See Gaugert, John Q., assignor.)

Westinghouse Electric and Manufacturing Company. (See Gutmann, V., and Steiner, assignors.)

Westinghouse Electric & Manufacturing Company. (See Hanzlik, Henry J., assignor.)

Westinghouse Electric & Manufacturing Company. (See Hebrew, Joseph S., assignor.)

Westinghouse Electric & Manufacturing Company. (See Higbee, Ray P., assignor.)

Westinghouse Electric & Manufacturing Company. (See Hill, Leland H., assignor.)

Westinghouse Electric & Manufacturing Company. (See Hodgkinson, Francis, assignor.)

Westinghouse Electric & Manufacturing Company. (See Johnston, Howard L., assignor.)

Westinghouse Electric & Manufacturing Company. (See Keene, Alvin D., assignor.)

Westinghouse Electric & Manufacturing Company. (See Kucher, Andrew A., assignor.)

Westinghouse Electric & Manufacturing Company. (See Legg, Joseph W., assignor.)

Westinghouse Electric & Manufacturing Company. (See MacNeill, J. B., Bakken, and Tucker, assignors.)

Westinghouse Electric & Manufacturing Company. (See Miller, Charles F., assignor.)

Westinghouse Electric & Manufacturing Company. (See Miller, Frederic H., assignor.)

Westinghouse Electric & Manufacturing Company. (See Nützelberger, Hans, assignor.)

Westinghouse Electric & Manufacturing Company. (See Pierce, Raymond T., assignor.)

Westinghouse Electric & Manufacturing Company. (See Ray, James L., assignor.)

Westinghouse Electric & Manufacturing Company. (See Ross, Thomas W., assignor.)

Westinghouse Electric & Manufacturing Company. (See Schmidt, Henry F., assignor.)

Westinghouse Electric & Manufacturing Company. (See Slepian, Joseph, assignor.)

Westinghouse Electric & Manufacturing Company. (See Speiser, Gottlieb, assignor.)

Westinghouse Electric & Manufacturing Company. (See Sprague, Frank J., assignor.)

Westinghouse Electric & Manufacturing Company. (See Staege, Stephen A., assignor.)

Westinghouse Electric & Manufacturing Company. (See Thomas, Phillips, assignor.)

Westinghouse Electric & Manufacturing Company. (See Tjoflat, Gerald B., assignor.)

Westinghouse Electric and Manufacturing Company. (See Van Deventer, Harry R., assignor.)

Westinghouse Electric & Manufacturing Company. (See Van Sickle, Roswell C., assignor.)

Westinghouse Electric & Manufacturing Company. (See Wensley, Roy J., assignor.)

Westinghouse Electric & Manufacturing Company. (See West, Charles P., assignor.)

Westinghouse Electric & Manufacturing Company. (See White, Harold E., assignor.)

Westinghouse Electric & Manufacturing Company. (See Woodson, James C., assignor.)

Westinghouse Electric & Manufacturing Company. (See Zworykin, Vladimir K., assignor.)

Westinghouse Lamp Company. (See Callahan, George F., assignor.)
Westinghouse Lamp Company. (See Calvert, Landon R., assignor.)
Weston Toy Company, The. (See Merwin, Burton P., assignor.)
Wharton, Edward R., Medford, Mass. Starter machanism. 1,762,434; June 10.
Wheelbarger, Albert S., assignor to Ohmer Fare Register Company, Dayton, Ohio. Register flash mechanism. 1,762,904; June 10.
Wheeler, Edmund B. (See Wright, J. C., Wheeler, and Wood.)
Wheeler-Schebler Carburetor Co., The. (See Linkert, Howard W., assignor.)
Wheeler, Walter C., St. Louis, Mo. Spout sampler. 1,762,253; June 10.
Wheeling Steel Corporation. (See Rollason, Charles H., assignor.)
Whetzel, Joshua C. (See Holden, J. H., O'Brien, Whetzel, and Zimmerman.)
Whisler, Ralph H., Halfway, assignor to Hudson Motor Car Company, Detroit, Mich. Electrical connecter. 1,762,848; June 10.
White, Harold E., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Magnetic contactor. 1,763,116; June 10.
White, Harold E., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Thermal relay. 1,763,284; June 10.
Whitlark, Henry B., Tarboro, N. C., assignor, by mesne assignments, to Lambert Tire & Rubber Company, Barberton, Ohio. Pneumatic tire. 1,762,905; June 10.
Whitworth, Stanley. (See Long, L. E., and Whitworth.)
Wickert, Gustav A., jr., Elsmere, N. Y. Coin box. 1,762,458; June 10.
Wicks, Clifford P., Stamford, Conn., assignor to American Cuptor Corporation, New York, N. Y. Coin-tripped starting mechanism. 1,763,285; June 10.
Wico Electric Company. (See Louis, Terrence G., assignor.)
Wideman, Harold B., assignor to National Standard Company, Niles, Mich. Piston or plunger. 1,762,602; June 10.
Wiener, Simon W., Sauk Center, Minn. Display easel. 1,762,675; June 10.
Wikle, George F., Milwaukee, Wis., assignor to The Fisk Rubber Company, Chicopee Falls, Mass. Manufacture of pneumatic-tire casings. 1,762,849; June 10.
Wilbur Products Company. (See Oberst, Frank, assignor.)
Wilcox, Alva N., Dayton, Ohio. Wheel. 1,763,413; June 10.
Wilder, Samuel M., Gloucester City, N. J. Horn. 1,763,336; June 10.
Wilhelm, John C., Bartlesville, Okla. Safety-lock stop. 1,762,371; June 10.
Willard, Donald E., Danville, Ill. Desk watch holder. 1,763,026; June 10.
Willett, Albert B., Sacramento, Calif. Aeroplane-control apparatus. 1,762,851; June 10.
Williams, Albert J., jr. (See Schwartz, E. L., and Williams.)
Williams, Ernest A., Elyria, Ohio. Rotary cutter. 1,762,648; June 10.
Williams Oil-O-Matic Heating Corporation. (See Simmons, A. T., and Miles, assignors.)
Williams Oil-O-Matic Heating Corporation. (See Williams, Walter W., assignor.)
Williams, Paul F., assignor to G & W Electric Specialty Company, Chicago, Ill. Pothead. 1,762,495; June 10.
Williams, Paul F., assignor to G & W Electric Specialty Company, Chicago, Ill. Connecting means for electrical conductors. 1,762,496; June 10.
Williams, Paul F., assignor to G & W Electric Specialty Co., Chicago, Ill. Connecter for electrical conductors. 1,763,623; June 10.
Williams, Walter W., assignor to Williams-Oil-O-Matic Heating Corporation, Bloomington, Ill. Thermostatically-actuated electric control. 1,763,573; June 10.
Williams, Walter W., assignor to Williams Oil-O-Matic Heating Corporation, Bloomington, Ill. Expanding stuffing box. 1,763,574; June 10.
Williams, Walter W., assignor to Williams Oil-O-Matic Heating Corporation, Bloomington, Ill. Electric-circuit control. 1,763,575; June 10.
Williamson, Bert, McKeesport, Pa. Combination cleaver, knife, and saw. 1,763,452; June 10.
Williamson, Milton C., assignor to Bausch & Lomb Optical Company, Rochester, N. Y. Reading glass. Des. 81,359; June 10.
Willimek, Gustaw, and Wladyslaw Skarbek-Kozietulski, Grudziadz, Poland. Discharging means for open railway wagons. 1,763,545; June 10.
Willis, Frank E., assignor of one-half to W. L. Cohrs, Chicago, Ill. Combined counter stiffener and arch support. 1,762,372; June 10.
Willoughby, Ralph, Stocksfield, assignor to A. Reyrolle & Company Limited, Hebburn-on-Tyne, England. Electric signaling or control system. 1,762,906; June 10.
Willys-Overland Company, The. (See Gilbert, Alva B., assignor.)
Willys-Overland Company, The. (See Stockton, William S., assignor.)
Wilman, Zygmunt, Paris, France. Damping or absorbing device for firearms for the prevention of sounds, flames, and recoil. 1,763,286; June 10.
Wilman, Zygmunt, Paris, France. Damping apparatus for the prevention of noise, flames and recoil in firearms of the automatic type. 1,763,287; June 10.
Wilms, Gustav O., assignor, by mesne assignments, to H. L. Bradley and L. Bradley, Milwaukee, Wis. Electric switch. 1,763,027; June 10.
Wilmsen, Bernard. (See Kranz, P., and Schmid, assignor.)
Wilson, Charles H., Pelham, assignor to Wilson-Maeulen Company, Inc., New York, N. Y. Automatic hardness tester. 1,762,497; June 10.
Wilson, Charles H., Pelham, assignor to Wilson-Maeulen Company, Inc., New York, N. Y. Hardness-testing method and apparatus. 1,762,498; June 10.
Wilson Fastener Company, The. (See Todd, Charles O., assignor.)
Wilson, Ira J. (See Johnson, Martin E., assignor.)
Wilson, Lewis K., Philadelphia, Pa. Siphon device for watering livestock. 1,762,316; June 10.
Wilson-Maeulen Company. (See Wilson, Charles H., assignor.)
Wilson, Wylie G., Jersey City, N. J., assignor to Everlasting Valve Company. Gate valve. 1,763,029; June 10.
Winbigler, Cecil M., Los Angeles, Calif. Playing implement. 1,763,205; June 10.
Wing, C. C. (See Campbell, Benjamin G., assignor.)
Winning, Robert K., Wauwatosa, assignor to Clum Manufacturing Company, Milwaukee, Wis. Light-dimming switch. 1,763,028; June 10.
Winsloe, John. (See Thomson, James and C. E., assignors.)
Winther, William P. (See Cornelius, Lee R., assignor.)
Winton Engine Company, The. (See Winton, James M., assignor.)
Winton, James M., assignor to The Winton Engine Company, Cleveland, Ohio. Air starter timing means. 1,762,206; June 10.
Wire Novelty Manufacturing Co., The. (See Domkee, John H., assignor.)
Wired Radio, Inc. (See Chromy, Ben J., assignor.)
Wired Radio, Inc. (See Davis, Chester L., assignor.)
Wired Radio, Inc. (See Gebhard, Louis A., assignor.)
Wired Radio, Inc. (See Trogner, Arthur M., assignor.)
Wirt Company. (See McKellip, Spencer W., assignor.)
Wiswell, Ozro N. (See Allen, S. E., and Wiswell.)
Wittel, Otto, assignor to Eastman Kodak Company, Rochester, N. Y. Film-moving mechanism. 1,762,939; June 10.
Witten, Arthur P., assignor to G. E. Hall and himself, Akron, Ohio. Toy balloon. 1,762,603; June 10.
Woelm, Alfred, Berlin, Germany, assignor, by mesne assignments, to Pencil Mechanism Corporation. Magazine pencil. 1,762,317; June 10.
Woelm, Alfred, Berlin, Germany, assignor, by mesne assignments, to Pencil Mechanism Corporation. Magazine pencil. 1,762,318; June 10.
Wolf, Benjamin C., Cheboygan, Mich. Harrow. 1,762,907; June 10.
Wolf, John. (See Metcalf, I. R., Richardson, and Wolf.)
Wolf, John M., Devils Lake, N. Dak. Hay stacker and loader. 1,762,459; June 10.
Wolfarth, Frank J., and W. W. Duant, Saginaw, Mich.; said Duant assignor to said Wolfarth. Machine for forming buns and the like. 1,763,620; June 10.
Wolfe, John A., Tulsa, Okla., assignor of one-third to H. C. Fitzpatrick, Independence, Kans., and one-third to G. A. Most, Tulsa, Okla. Pneumatic flow means for deep wells. 1,763,030; June 10.
Woltstem, Ralph R., Ozone Park, Long Island, N. Y. Breast support. 1,762,676; June 10.
Wood, Ernest B. (See Wright, J. C., Wheeler, and Wood.)
Wood, Ernest B., Chatham, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Paper-insulated conductor. 1,762,941; June 10.
Wood, Henry A. W., assignor to Wood Newspaper Machinery Corporation, New York, N. Y. Paper-throw-out and count-rectifying device. 1,762,286; June 10.
Wood, James. (See Harris, J. C., and Wood.)
Wood Newspaper Machinery Corporation. (See Little, John, assignor.)
Wood Newspaper Machinery Corporation. (See Roesen, Oscar S., assignor.)
Wood Newspaper Machinery Corporation. (See Wood, Henry A. W., assignor.)
Wood, Philip C., Johnstonville, Calif. Safety device for boilers. 1,762,940; June 10.
Wood, Straud K., Hutchinson, Kans. Car-identifying appliance. 1,762,677; June 10.
Wood, Wilfred R., London, England, assignor to International Combustion Engineering Corporation, New York, N. Y. Generating steam by the burning of fuel in suspension. 1,762,319; June 10.
Wood, Wilfred R., London, England, assignor to International Combustion Engineering Corporation, New York, N. Y. Rotary air heater. 1,762,320; June 10.
Woodson, James C., East Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Electric heating unit. 1,763,117; June 10.
Worcester Knitting Co., The. (See Barnett, Arthur J., assignor.)

Worrall, Robert H., Washington, D. C., assignor, by mesne assignments, to Federal Telegraph Company. Piezo-electric crystal apparatus. 1,763,288; June 10.
Worthington, Everett, Chicago, Ill., assignor to The Stromberg-Carlson Telephone Manufacturing Company, Rochester, N. Y. Radiocabinet or similar article. Des. 81,360; June 10.
Worthington, Everett, Chicago, Ill., assignor to The Stromberg-Carlson Telephone Manufacturing Company, Rochester, N. Y. Radiocabinet or similar article. Des. 81,361; June 10.
Worthington, Everett, Chicago, Ill., assignor to The Stromberg-Carlson Telephone Manufacturing Company, Rochester, N. Y. Radiocabinet or similar article. Des. 81,362; June 10.
Worthington, Everett, Chicago, Ill., assignor to The Stromberg-Carlson Telephone Manufacturing Company, Rochester, N. Y. Radiocabinet or similar article. Des. 81,363; June 10.
Worthington, John T., Whittier, assignor to Petroleum Rectifying Company of California, San Francisco, Calif. Water-level-controlling device. 1,762,538; June 10.
Woveris, Joseph F., Chicago, Ill. Universal joint. 1,763,206; June 10.
Wright, Edwin M., assignor, by mesne assignments, to Robbins & Myers, Inc., Springfield, Ohio. Lubricating device. 1,762,373; June 10.
Wright, Esmond P. G., Burwood, England, assignor to Western Electric Company, Incorporated, New York, N. Y. Telephone system. 1,762,751; June 10.
Wright, James C., Maplewood, N. J., E. B. Wheeler, New York, N. Y., and E. B. Wood, Chatham, N. J., assignors to Western Electric Company, Incorporated, New York, N. Y. Measuring and recording device. 1,762,942; June 10.
Wysong, James R., assignor to Larus & Brother Company, Richmond, Va. Package conveying, closing, and sealing machine. 1,763,493; June 10.
Wysong, James R., assignor to Larus & Brother Co., Richmond, Va. Tobacco measuring and feeding device. 1,763,546; June 10.
Yale & Towne Manufacturing Company, The. (See Potter, Robert S., assignor.)
Yancey, William O., Chicago, Ill. Figure doll. 1,762,374; June 10.
Yates, John C., Baltimore, Md. Spoon hook. 1,763,031; June 10.
Yinger, Lawrence N., Zanesville, Ohio. Ceramic-tile-mounting machine. 1,763,494; June 10.
York Ice Machinery Corporation. (See Schurman, John, assignor.)
Young, George W. (See MacDuffee, R. J., and Young.)
Young, William B., Pulaski, Va. Adjustable mounting for electric bulbs. 1,763,495; June 10.
Youngken, Ben N., Los Angeles, Calif., assignor to The National Supply Company of Delaware, New York, N. Y. Air-cooled brake rim for rotary draw works. 1,763,078; June 10.
Youngstown Steel Door Company, The. (See Barrows, Allan S., assignor.)
Yuclus, Casimir, Chicago, Ill. Sugar-dispensing apparatus. 1,763,118; June 10.
Zacsek, Stefan, Los Angeles, Calif. Urethral syringe. 1,763,079; June 10.
Zarba, Joseph, East Boston, Mass. Straightedge and reenforcing device. 1,762,254; June 10.
Zarobsky, Charles A., assignor to The Simplex Cap Company, Cleveland, Ohio. Closure. 1,762,852; June 10.
Zauder, Aaron, Brooklyn, N. Y. Container. 1,762,943; June 10.
Zimmerman, Rufus E. (See Holden, J. H., O'Brien, Whetzel, and Zimmerman.)
Zworykin, Vladimir K., Swissvale, Pa., assignor to Westinghouse Electric & Manufacturing Company. Photoelectric device. 1,763,207; June 10.

ALPHABETICAL LIST OF INVENTIONS

FOR WHICH

PATENTS WERE ISSUED ON THE 10TH DAY OF JUNE, 1930

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). **Includes patents, reissues, and designs.**

A. C. motors, Variable-speed. W. Shurtleff. 1,763,104; June 10.
Abrading machine. A. Bjorklund. 1,762,606; June 10.
Abrading machine. C. L. Mattison. 1,762,339; June 10.
Absorption trap. M. J. Trumble. 1,762,432; June 10.
Absorptive gels, Preparation of. H. N. Holmes. 1,762,228; June 10.
Acid and making same, 3'-amino-4'-alkyl ethers of ortho benzoyl benzoic. I. Gubelmann, H. J. Weiland, and O. Stallmann. 1,762,978; June 10.
Acid, 2-substituted 1-methyl-phenyl-3-thioglycolic. E. Hoffa and H. Heyna. 1,762,719; June 10.
Acoustic device. R. V. L. Hartley. 1,762,981; June 10.
Acoustic device. S. W. McKellip. 1,762,184; June 10.
Adjustable chair. R. C. Huntley. 1,762,630; June 10.
Advertising device. L. B. Newell. 1,762,409; June 10.
Aerofoil. D. L. Roscoe. 1,763,257; June 10.
Aeroplane. H. McLind. 1,762,874; June 10.
Aeroplane-control apparatus. A. B. Willett. 1,762,851; June 10.
Aeroplane swing, Child's. H. Gill and O. R. Platter. 1,763,510; June 10.
Agitator. V. M. Pyle. 1,762,421; June 10.
Agitator for washing machines. H. Kolar. 1,762,660; June 10.
Air cleaner. R. E. Watrous. 1,762,493; June 10.
Air conditioner for compartments and railway cars. C. F. Shadle. 1,762,837; June 10.
Air conditioning and circulating apparatus. C. A. Moore. 1,762,520; June 10.
Air-conditioning appliance for precooling rooms. C. A. Moore. 1,762,521; June 10.
Aircraft. C. L. Fortier. 1,763,567; June 10.
Aircraft construction. W. K. Gosner. 1,763,147; June 10.
Air-feed-controlling device. E. B. Lear. 1,762,178; June 10.
Air heater, Rotary. W. R. Wood. 1,762,320; June 10.
Airplane and the like. A. H. G. Fokker. 1,763,228; June 10.
Airplanes, Auxiliary sustaining means for. J. F. Berry. 1,763,454; June 10.
Air preheater for locomotives. F. Ljungström. 1,762,445; June 10.
Air preheater, Regenerative. F. Ljungström. 1,762,446; June 10.
Airships, Bulkhead for. P. Helma and W. B. Klemperer. 1,763,585; June 10.
Airships, Stabilizing apparatus for. W. B. Klemperer. 1,763,590; June 10.
Alarm system. H. A. Frederick. 1,762,073; June 10.
Aldehydic group into heterocyclic nitrogen compounds, Introducing an. G. Kalischer and H. Scheyer, and K. Keller. 1,763,557; June 10.
Alloy, Welding. A. R. Lytle. 1,762,871; June 10.
Amines, Producing primary. W. Reppe. 1,762,742; June 10.
Amplifier arrangement, Multiple. E. Bellini. 1,763,388; June 10.
Amusement device, Aerial. L. L. Custer. 1,762,507; June 10.
Anæsthetizing apparatus. J. A. Heidbrink. 1,763,305; June 10.
Analyzer. J. W. Pearl. 1,762,585; June 10.
Anchor, Railway-rail. H. G. Norwood. 1,763,438; June 10.
Anchoring apparatus. J. H. Phillips. 1,762,349; June 10.
Animal trap. S. O. Kascak. 1,762,783; June 10.
Antenna, Loop. A. F. Van Dyck. 1,763,382; June 10.
Antiglare attachment. G. Marenti. 1,762,480; June 10.
Antioxidant or age retarder. A. M. Clifford. 1,763,579; June 10.
Apparatus for burning coal dust. A. Hasselbach and F. Inther. 1,762,982; June 10.
Apparatus for distributing fertilizer in soluble condition. C. C. Schrader. 1,763,374; June 10.
Apparatus for regulating the temperature of the oil contained in the sumps of internal-combustion engines. S. C. Belfield. 1,762,464; June 10.
Apparel clasp. E. K. Chase. 1,763,132; June 10.
Arylides of 2-hydroxy-3-naphthoic acid, Preparation of. E. R. Higgins. 1,762,474; June 10.
Ash shovel, Dustless. H. L. Peebles. 1,762,347; June 10.
Automobile construction. C. R. Paton and T. S. Sligh, jr. 1,763,064; June 10.
Automobile signal. H. A. Coulter. 1,762,288; June 10.
Automobile switch. F. J. Stuckert, Jr. 1,763,018; June 10.
Awning-frame structure. T. H. Foster. 1,763,296; June 10.
Awning, Screen. R. Viera. 1,763,383; June 10.
Ax guard. R. E. Brown. 1,762,256; June 10.
Axle construction, Roller-bearing-. T. V. Buckwalter. 1,762,609; June 10.
Axles, Making. E. C. Mogford and G. Spatta. 1,762,407; June 10.
Baby conveyance. A. F. Debelack. 1,762,680; June 10.
Bag machine. A. Potdevin. 1,762,350; June 10.
Bait, Artificial. L. R. Cornelius. 1,762,914; June 10.
Balancing device. J. Lundgren. 1,763,403; June 10.
Balancing, Means for and method of. J. Lundgren. 1,763,402; June 10.
Balancing rotary bodies having radiating blades. A. L. Blakemore. 1,176,140; June 10.
Balloon material, Manufacturing. H. Strobl. 1,763,109; June 10.
Band-building machine. E. F. Maas. 1,763,592; June 10.
Bar: *See*—
Rail-joint bar.
Bathroom equipment. O. H. Ayers and C. Mobley. 1,763,209; June 10.
Bearing and mounting, Antifriction. F. G. Hughes. 1,762,819; June 10.
Bearing for cars, Side. L. W. Barber and E. W. Webb. 1,763,081; June 10.
Bearing, Journal. A. Lade. 1,762,444; June 10.
Bearing, Journal. J. F. O'Connor. 1,762,411–12; June 10.
Bearing, Thrust. H. F. Schmidt. 1,762,360; June 10.
Bearing, Valve. J. R. Francis. 1,763,350; June 10.
Bearings, Mounting single and double row ball. L. Rouanet. 1,762,891; June 10.
Bed, Folding. L. F. Schilling. 1,763,447; June 10.
Bed or similar article. T. G. Kindel. Des. 81,340; June 10.
Bedspring. J. T. Prows. 1,763,254; June 10.
Bed-warming device. D. B. McLeod. 1,762,663; June 10.
Belt conveyer. G. J. Fisher. 1,762,772; June 10.
Billboard. J. T. Aultman. Des. 81,320; June 10.
Binder. Machine posting. H. S. Jones. 1,763,525; June 10.
Binder, Temporary. M. Meyerson. 1,762,403; June 10.
Binders, Guide plate for loose-leaf. J. L. McMillan. 1,763,059; June 10.
Binding post. E. L. Bowles. 1,762,543; June 10.
Bit: *See*—
Roller bit.
Blade, Turbine. J. L. Ray. 1,763,256; June 10.
Blank-feeding machine. C. Barbieri. 1,762,947; June 10.
Blower. H. F. Schmidt. 1,762,359; June 10.
Blowfly trap. E. J. Schandua and H. Reichenau. 1,762,668; June 10.
Board: *See*—
Ironing board.
Boat. D. F. Murphy. 1,762,451; June 10.
Boats, Attachment for motor. G. Gunderson, J. Erickson, and R. T. Backus. 1,763,464; June 10.
Body, Motor-vehicle. K. C. Haven. Des. 81,332; June 10.
Body structure, Vehicle. B. L. Huesman. 1,762,629; June 10.
Boiler: *See*—
Steam boiler. Water-tube boiler.
Water boiler.
Boiler. L. G. Haller. 1,762,779; June 10.
Boiler cleaner. N. L. Snow. 1,762,312; June 10.
Boiler cleaner. N. L. Snow and W. P. Thomas. 1,762,313; June 10.
Boiler construction. P. Marquand. 1,762,180; June 10.
Boiler furnace. G. P. Jackson. 1,762,335; June 10.
Boilers, Safety device for. P. C. Wood. 1,762,940; June 10.
Bolt lock. R. T. Hosking. 1,762,394; June 10.
Bolt pointing and threading machine, Combined automatic. F. O. Andrews and L. Steinfurth. 1,762,649; June 10.
Bolts, Making. C. F. Newpher. 1,762,410; June 10.
Book, Account. J. A. Farnum. 1,763,506; June 10.
Bookcase. J. S. Felshin. Des. 81,327; June 10.
Book, Loose-leaf record. P. O. Unger. 1,763,075; June 10.
Bottle warmer, Electric baby-. A. H. Goldsmith. 1,762,171; June 10.
Bowl, Spinning. J. C. Hensing and J. W. Lubberhuizen. 1,763,520; June 10.
Box: *See*—
Card box. Distribution box.
Coin box. Mail box.
Display box. Stuffing box.
Box. S. M. Smith. 1,763,072; June 10.
Box and making same. H. B. Smith. 1,762,703; June 10.
Box blank and box. H. B. Smith. 1,762,704; June 10.
Box cleaner, Gate-valve-. L. Roden. 1,762,486; June 10.
Box-end-making machine. H. P. Schuck. 1,762,643; June 10.

Box for cables of same polarity, Distribution. J. Rah. 1,762,525; June 10.
Box sealing, Paper-. J. R. Van Wormer. 1,763,025; June 10.
Boxes and box-blank assemblies, Making. H. B. Smith. 1,762,702; June 10.
Brace: *See*—
Draw-works brace.
Bracket: *See*—
Scaffold bracket.
Bracket. E. L. Schwab. 1,762,311; June 10.
Brake: *See*—
Hand brake. Vehicle brake.
Pneumatic brake.
Brake. L. E. La Brie. 1,762,691; June 10.
Brake-backing plate. V. Bendix. 1,762,710; June 10.
Brake-band drilling and countersinking machine. R. E. Manley. 1,762,872; June 10.
Brake control. A. Y. Dodge. 1,762,290; June 10.
Brake control. A. Y. Dodge. 1,762,714; June 10.
Brake-control system for the wheels of airplanes. G. L. R. J. Messier. 1,763,405; June 10.
Brake-drum structure. R. J. Norton. 1,763,251; June 10.
Brake for vehicles. F. T. Burgess and C. W. Sewell. 1,762,758; June 10.
Brake mounting for motor cycles, Front-wheel-. C. B. Franklin. 1,763,096; June 10.
Brake-operating means. R. S. Sanford. 1,762,699; June 10.
Brake rim for rotary draw works, Air-cooled. B. N. Youngken. 1,763,078; June 10.
Brake shoes, Manufacture of. L. E. Long and S. Whitworth. 1,762,694; June 10.
Brake-testing devices, Attaching means for. D. P. Owens. 1,763,564; June 10.
Breathing apparatus. J. D. Voss. 1,763,492; June 10.
Brine cooler. C. A. Moore. 1,762,519; June 10.
Brush, Shaving. W. A. Dillon and C. O. Weingand. 1,762,616; June 10.
Bucket, Cupola-charging. J. M. Rohlfing. 1,762,797; June 10.
Bucket or grapple. H. S. Atkinson. 1,762,946; June 10.
Bucking machine for football players. E. E. Brett. 1,762,435; June 10.
Buckle, Belt. J. A. Mendosa. 1,763,100; June 10.
Buckle, Slide. J. H. Domkee. 1,762,263; June 10.
Building construction. A. Braunstein. 1,762,756; June 10.
Bumper. H. S. Jandus. 1,763,587; June 10.
Bundle-tripping mechanism for binders, Automatic. C. C. Sancken. 1,763,446; June 10.
Buns and the like, Machine for forming. F. J. Wolfarth and W. W. Duant. 1,763,620; June 10.
Burner: *See*—
Liquid-fuel burner. Oil burner.
Burner. J. B. and H. J. Anderson. 1,763,289; June 10.
Burner jacket, Tubular. E. O. Engels. 1,763,349; June 10.
Burners, Air-inlet device for oil. P. S. Sinclair. 1,762,897; June 10.
Bushing. H. Marles. 1,762,181; June 10.
Butt-removing mechanism. S. E. and W. W. Morral. 1,763,173; June 10.
Button loop. J. H. Domkee. 1,762,262; June 10.
Button loop. J. H. Domkee. 1,762,264; June 10.
Cabinet and refrigerator, Kitchen. W. H. Hendrickson. 1,763,306; June 10.
Cable-actuating mechanism. K. Davis. 1,762,765; June 10.
Cables, Plugging. C. E. Baldwin. 1,762,255; June 10.
Calling device, Selective. W. J. Davis. 1,763,390; June 10.
Can: *See*—
Dispensing can.
Can cleaning and sterilizing apparatus. M. Pearson. 1,763,321; June 10.
Can puncher. G. W. Druhe. 1,763,391; June 10.
Canning machine. F. C. Krueger. 1,762,443; June 10.
Cans, Making. H. Sebell. 1,762,532; June 10.
Cans, Method of and apparatus for testing. L. H. Peters. Re17,697; June 10.
Cans, tubes, and the like, Cap for. R. A. McClure. 1,762,873; June 10.
Candle. J. W. Farrell. Des. 81,326; June 10.
Cap, Contraction center-strip mold. R. R. Robertson. 1,763,369; June 10.
Cap-securing means, Milk-. B. G. Campbell. 1,762,506; June 10.
Capping apparatus. L. D. Titus. 1,763,020; June 10.
Car body, Cast-metal. A. W. Albrecht. 1,762,375; June 10.
Car construction. A. C. Schmohl. 1,762,245; June 10.
Car-identifying appliance. S. K. Wood. 1,762,677; June 10.
Car, Mine. H. W. Sanford and P. S. McCallen. 1,762,667; June 10.
Car structure, Sleeping-. C. H. Turner. 1,763,490; June 10.
Carbonaceous material and making the same. A. Oberle. 1,763,101–2; June 10.
Carbonaceous material, Making. A. Oberle. 1,763,063; June 10.
Carburetor. C. H. Kirby. 1,763,361; June 10.
Carburetor. H. W. Linkert. 1,763,362; June 10.
Carburetor. M. Steinhardt and E. Bauer. 1,762,200; June 10.
Carburetor for internal-combustion engines. F. Monier. 1,763,061; June 10.
Card box, Magic. C. F. Brehmer. 1,762,501; June 10.
Card-holding clip. J. A. Underhill and G. C. Hemenway. 1,763,024; June 10.
Card-table indicator. J. W. Morris. 1,763,476; June 10.
Card, Thermometer. S. J. Greenberg. Des. 81,330; June 10.
Cards, Pack of playing. F. A. Joseph. Des. 81,336; June 10.
Carrying bag. M. A. Myers Des. 81,346–7; June 10.
Cartridge. L. P. Boll. 1,762,607; June 10.
Cartridge and loading high explosives in drill holes, Explosive. O. B. Niesen. 1,763,407; June 10.
Case: *See*—
Shipping case. Vanity case.
Case and collapsible seat, Combined portable. W. Menk. 1,762,580; June 10.
Case'nates, Producing. W. O. Frobring and W. F. Richards. 1,762,169; June 10.
Casing, Meter. R. T. Pierce. 1,763,178; June 10.
Casing, Vending-machine. F. H. Vogel. Des. 81,358; June 10.
Casings, Apparatus and method for making tire. A. O. Abbott, jr. 1,762,146; June 10.
Casting machine, Centrifugal. J. B. Ladd. 1,762,177; June 10.
Catch, Door. W. Norman. 1,762,883; June 10.
Cathead. O. M. Gabagan. 1,762,715; June 10.
Cathode for thermionic devices and producing same. A. McL. Nicolson. 1,762,581; June 10.
Cellulose acetate solutions, Spray-drying. C. J. Staud. 1,762,937; June 10.
Cellulose derivatives, Manufacture of. W. H. Glover and C. D'amond. 1,763,428; June 10.
Cellulose-ether film and composition for making the same. S. J. Carroll. 1,763,035; June 10.
Cementing composition. T. F. Noonan. 1,763,366; June 10.
Cementing compounds, Packaging. H. Jepsen. 1,762,782; June 10.
Cementitious product and obtaining same. R. A. Marr. 1,762,481; June 10.
Center clip. J. Little. 1,762,302; June 10.
Chain connection, Tire-. J. I. Weissman and M. Goldstein. 1,762,750; June 10.
Chair: *See*—
Adjustable chair. Folding chair.
Charge-blending device. H. Van Deventer and E. H. Stepp. 1,763,450; June 10.
Charge-forming device. F. E. Aseltine and W. H. Teeter. 1,762,463; June 10.
Charging device for ovens of the rotary annular sole-plate type. F. Bartling. 1,763,453; June 10.
Chase and composing stick, Printer's. G. E. Buzza. 1,763,090; June 10.
Check protector. C. H. Epple. 1,763,392; June 10.
Cheeses with paraffin wax or the like and in other analogous operations, Apparatus for use in coating. E. D. Berry. 1,762,909; June 10.
Chest: *See*—
Fuel chest. Tool chest.
Chocolate and the like, Apparatus for tempering. A. L. Bausman. 1,763,086; June 10.
Chronographic system. H. W. O'Neill. 1,762,791; June 10.
Cigarette, Self-lighting. H. and J. W. Leon. 1,763,531; June 10.
Circuit arrangement for the measurement of the light emitted by and the watts or current consumed by incandescent lamps. E. D. Doyle. 1,762,769; June 10.
Circuit breaker. C. E. Anderson and W. H. Keefe, jr. 1,763,384; June 10.
Circuit breaker. G. Speiser. 1,763,197; June 10.
Circuit breaker. R. C. Van Sickle. 1,763,202; June 10.
Circuit breaker, Extra-rapid. P. J. Branchu. 1,763,502; June 10.
Circuit breakers, Reclosing mechanism for. A. L. Hosner. 1,762,298; June 10.
Circuit control, Electric-. W. W. Williams. 1,763,575; June 10.
Circuit-control means, Electric-. A. J. May. 1,763,245; June 10.
Circuit-control mechanism, Ignition-. E. F. Fiedler. 1,762,970; June 10.
Circuit controller. L. E. Nordholm. 1,762,789; June 10.
Circuit controller for mechanical interlocking machines. W. F. Bossert and W. R. Burke. 1,762,141; June 10.
Circuit-controlling apparatus, Indicating. J. A. Thommes. 1,762,491; June 10.
Circuit-controlling device. L. L. Cunningham. 1,763,094; June 10.
Circuit, Loaded cable. A. Ebeling. 1,762,964; June 10.
Circuit, Phantom carrier. H. S. Black. 1,762,754; June 10.
Circuit protector, Generator-. E. R. Hopkins. 1,762,297; June 10.
Circuits, Apparatus for thermostatic control of electric. E. F. Hollnger. 1,762,174; June 10.
Clam-digger fork. J. O'Rourke. 1,763,176; June 10.

Clam tongs. C. H. Munkelwitz. 1,763,437; June 10.
Clamp: *See*—
Service clamp.
Clamp and making the same, Battery-terminal. J. A. Sall. 1,762,529; June 10.
Clamp for pressing machines, Neckband. R. C. Pauly. 1,763,536; June 10.
Clamping device. E. L. Bauer. 1,762,323; June 10.
Clamping device. C. H. Hiser. 1,762,578; June 10.
Clasp: *See*—
Apparel clasp.
Clay. Art. J. P. Slinger. 1,763,105; June 10.
Cleaner: *See*—
Air cleaner. Pipe cleaner.
Boiler cleaner. Vacuum cleaner.
Box cleaner.
Cleaning, waxing, and polishing device, Floor. F. J. McCarthy. 1,762,637; June 10.
Cleat, Construction. R. R. Seward and J. A. Booe. 1,763,483; June 10.
Cleaver, knife, and saw, Combination. B. Williamson. 1,763,452; June 10.
Clip: *See*—
Card-holding clip. Center clip.
Clip for tubular shells. H. G. Oxx. 1,762,793; June 10.
Clock case and lamp, Combined. P. Cricchio. Des. 81,323; June 10.
Clock-controlled contact device. E. S. Ostler. 1,763,252; June 10.
Closet. W. C. H. Joiner, jr. 1,763,524; June 10.
Closure. C. A. Zarobsky. 1,762,852; June 10.
Closure for glass receptacles. A. L. Merolle and F. Boehle. 1,762,342; June 10.
Closure for receptacles. W. L. Rutkowski. 1,762,810; June 10.
Closure, Removable receptacle. K. Kohn. 1,762,680; June 10.
Closure, Shoe. C. F. Diether. 1,762,615; June 10.
Cloth folder. S. Cooper. 1,762,612; June 10.
Clothes-drying rack. G. T. Hoyns. 1,762,628; June 10.
Clutch, Friction. E. Higgins. 1,762,624; June 10.
Clutch mechanism for setting threaded articles. W. D. Buss. 1,762,155; June 10.
Clutch, Spring. W. C. Starkey. 1,762,799; June 10.
Coal, Apparatus for breaking. W. K. Liggett. 1,763,165; June 10.
Coal breaker. G. Norton. 1,763,408; June 10.
Coating articles with enamel. N. B. Ornitz. 1,762,239; June 10.
Cock, Ball. R. H. Mueller. 1,762,306; June 10.
Code transmitter receiver. C. F. Jenkins. 1,763,358; June 10.
Coffee-brewing apparatus. E. Aborn. 1,762,208; June 10.
Coffee extraction. E. Aborn. 1,762,209; June 10.
Coffeepot construction. E. Aborn. 1,762,207; June 10.
Coffee product and making same. J. L. Kopf. 1,762,690; June 10.
Coil and transformer and making same, Electric. H. H. Wermine. 1,763,114; June 10.
Coil for composite sets, Retardation. E. L. Schwartz and A. J. Williams, jr. 1,762,744; June 10.
Coil-handling apparatus. F. P. Dahlstrom. 1,762,289; June 10.
Coiler and assembler, Helical. F. M. Forbes. 1,762,107; June 10.
Coin box. G. A. Wickert, jr. 1,762,458; June 10.
Coin-controlled apparatus. L. F. Hehn. 1,763,045; June 10.
Coin-controlled timing device for electrically-actuated refrigerators and like machines. R. Sause. 1,762,354; June 10.
Coin-operated switch, Electric. W. H. Ruther. 1,762,892; June 10.
Coin-tripped starting mechanism. C. P. Wicks. 1,763,285; June 10.
Colloidal substances, Treating aqueously-dispersed. A. Biddle. 1,762,153; June 10.
Colloids, Hardening. A. Miller. 1,763,533; June 10.
Comminuting materials, Apparatus for. C. H. Birch. 1,762,381; June 10.
Communication system. L. J. Sivian. 1,763,194; June 10.
Compensated paralleling system. P. Thomas. 1,763,276; June 10.
Concrete, Manufacture of reenforced. O. Gloeser. 1,762,815; June 10.
Concrete mixer, Transit. J. E. Morris. 1,763,249; June 10.
Concrete test samples, Device for making. C. S. Howe. 1,782,440; June 10.
Condensation products of urea and aldehyde, Making. K. Ripper. 1,762,456; June 10.
Condenser, Variable. W. Dubilier. 1,763,554; June 10.
Conductor, Composite. F. F. Farnsworth. 1,762,908; June 10.
Conductor disconnecter, Single-. G. P. Edmonds. 1,762,509; June 10.
Conductor, Loaded signaling. J. J. Gilbert. 1,762,976; June 10.
Conductor, Paper-insulated. E. B. Wood. 1,762,941; June 10.
Conductor, Signaling. O. E. Buckley. 1,762,956; June 10.
Confection shells, Apparatus for forming. A. L. Bausman. 1,763,085; June 10.
Confectionery machines, Feeding apparatus for. A. L. Bausman. 1,763,083–4; June 10.
Connecter, Electrical. R. H. Whisler. 1,762,848; June 10.
Connecter for electrical conductors. P. F. Williams. 1,763,623; June 10.
Connecter switch. N. H. Saunders. 1,762,700; June 10.
Connecting device, Electrical. R. Eckstein and M. Polis. 1,762,163; June 10.
Connecting device for storage batteries. J. Teipel. 1,762,203; June 10.
Connecting means for electrical conductors. P. F. Williams. 1,762,496; June 10.
Connection, Drawbar and yoke. S. B. Haseltine. 1,762,333; June 10.
Connection for back-to-back plumbing fixtures, Cross-over. W. S. Fleming. 1,762,619; June 10.
Connection for internal-combustion engines, Cylinder and head. W. O. Warner. 1,762,370; June 10.
Contact finger. J. Q. Gaubert. 1,763,145; June 10.
Contact mechanism, Electrical. G. S. Faber. 1,762,219; June 10.
Contact member for electric switches. G. Jansson. 1,763,356; June 10.
Container. A. Zauder. 1,762,943; June 10.
Container, Auxiliary. H. M. Greist. 1,762,331; June 10.
Container, Dispensing. H. T. Trautvetter. 1,763,449; June 10.
Container, Egg. H. C. Johnson. 1,763,588; June 10.
Container for aircrafts, Gas. K. Huerttle. 1,763,586; June 10.
Container for manufactured tobacco. H. P. Taylor. 1,762,428; June 10.
Container for packing tobacco. H. P. Taylor. 1,762,429; June 10.
Container, handle, and top therefor and means of union thereof. C. S. Baron. 1,763,125; June 10.
Container, Sheet-metal. C. H. Rollason. 1,763,329; June 10.
Containers, Separator for. C. Brierley. 1,763,416; June 10.
Contraction and expansion joint, Combined. A. C. Fischer. 1,762,682; June 10.
Control device, Fluid-. A. P. Plaut. 1,762,193; June 10.
Control mechanism. J. B. MacNeill, A. N. Bakken, and C. A. Tucker. 1,763,168; June 10.
Control system, Automatic. J. W. Bryce. 1,763,033; June 10.
Control system, Hydraulic. C. V. Foulds. 1,762,813; June 10.
Control system, Remote. W. F. Vieth. 1,763,203; June 10.
Controlling device. H. Holzwarth. 1,763,154; June 10.
Convertible table. A. Frazzano. 1,762,773; June 10.
Conveyer, Agitating. J. O. Bailey. 1,763,121; June 10.
Conveyer flight. G. Erdman. 1,763,141; June 10.
Conveyer, Portable. W. M. Duncan. 1,763,424; June 10.
Conveyer, Portable swivel-truck. G. D. Duncan, jr. 1,763,423; June 10.
Conveyer, Propulsion. E. Hoffmann. 1,763,307; June 10.
Conveyer, Spray. J. O. Bailey. 1,763,122; June 10.
Conveying apparatus. A. H. Gfrorer. 1,763,351; June 10.
Conveying, closing, and sealing machine, Package. J. R. Wysong. 1,763,493; June 10.
Conveying mechanism. E. J. Quinn. 1,762,307; June 10.
Conveying system for merchandise, Automatic. W. J. Taylor. 1,763,073; June 10.
Cooker. J. Barry. 1,763,126; June 10.
Cooler: *See*—
Brine cooler.
Core gate for bath-tub molds and the like. C. J. Steele. 1,762,841; June 10.
Coring machine. H. B. Hamilton, F. C. Krueger, and A. Hamilton. 1,762,488; June 10.
Cork-grinding machine. S. di Bono. 1,762,681; June 10.
Corncrib or the like. C. Oberlin. 1,763,627; June 10.
Costumer. R. F. Carpenter and T. F. Anderson. 1,762,545; June 10.
Cotton picker. T. E. Rice. 1,763,480; June 10.
Counter stiffener and arch support, Combined. F. E. Willis. 1,762,372; June 10.
Coupler key. E. G. Goodwin. 1,763,429; June 10.
Coupling: *See*—
Shaft coupling.
Coupling device. F. A. Davidson. 1,762,572; June 10.
Coupling system, Electric. C. E. Trube. 1,762,431; June 10.
Coupling system, Electric. C. E. Trube. 1,763,380; June 10.
Cover. H. Hersh. 1,762,985; June 10.
Cover for vehicle springs. S. Bolin. 1,762,954–5; June 10.
Covering, Artificial-golf-course. G. R. Swope. 1,763,411; June 10.
Cracking still and process. M. J. Trumble. 1,762,433; June 10.
Crane, Worm-drive. E. H. Lichtenberg. 1,763,617; June 10.
Cranes or the like, Outrigger for. G. A. Vaughn. 1,762,705 June 10.
Crank-pin device, Railway-driving-wheel. R. F. Knight. 1,762,337; June 10.
Crevices in rock formations or the like, Method and apparatus for sealing. G. W. Christians. 1,763,219; June 10.
Cue tip. J. B. Crookston. 1,763,612; June 10.
Culinary utensil. C. F. Burkhardt. 1,762,257; June 10.
Cultivator attachment. W. C. Speck. 1,763,271; June 10.

Cultivator, Disk. H. F. Towner. 1,762,844; June 10.
Cup: *See*—
Salt cup.
Curler, Electric hair. B. F. Ostrowski. 1,762,792; June 10.
Current, System for generation of polyphase. C. W. Hough. 1,763,309; June 10.
Curtain, Locomotive-cab. H. M. Gray. 1,762,576; June 10.
Curtain, Waistband. O. K. Thomas and J. D. Malkin. 1,762,283; June 10.
Curtains, Producing waistband. O. K. Thomas and J. D. Malkin. 1,762,284; June 10.
Cushion: *See*—
Spring-plank cushion.
Cushion for side bearings. R. J. O'Brien. 1,762,887; June 10.
Cushioning means for egg cartons. J. E. Walsh. 1,763,570; June 10.
Cutter: *See*—
Dado cutter. Rotary cutter.
Milling cutter.
Cutter. J. B. Galbraith. 1,763,299; June 10.
Cutting and welding apparatus. M. R. De Motte and R. C. Pierce. 1,762,260; June 10.
Cutting compounds and the like, Device for feeding. G. B. Arones. 1,763,290; June 10.
Cutting machine. T. P. Little. 1,762,828; June 10.
Cylinder, Air-cooled. C. A. Bauer and C. B. Gustafson. 1,763,082; June 10.
Cylinder for internal-combustion engines. W. Schenker. 1,762,425; June 10.
Cylinder for printing presses, Plate. H. M. Barber. 1,763,124; June 10.
Cylinder-head construction for internal-combustion engines, L. A. Gaw. 1,763,232; June 10.
Cylinder, Washing-machine. A. F. Paris. 1,762,665; June 10.
Dado cutter. J. Garthe. 1,763,463; June 10.
Damping apparatus for the prevention of noise, flames, and recoil in firearms of the automatic type. Z. Wilman. 1,763,287; June 10.
Damping or absorbing device for firearms for the prevention of sounds, flames, and recoil. Z. Wilman. 1,763,286; June 10.
Deflating machine. W. H. Campbell. 1,763,578; June 10.
Delivering apparatus for liquid soap. W. Weinberg. 1,762,901; June 10.
Demand meter, Maximum-. J. Harris. 1,762,226; June 10.
Desk or the like. E. J. Pauli. Des. 81,364; June 10.
Device for assisting hearing. D. Phipps. 1,763,103; June 10.
Device for cleaning gill-box fallers. T. Bredbury. 1,762,853; June 10.
Device for positioning string handles on paper bags. C. G. Eaton. 1,762,857; June 10.
Dial protector, Telephone-. I. M. Martin. 1,762,726; June 10.
Diaper. E. G. Brewer. 1,762,468; June 10.
Diaphragm head for puncturing closure disks. S. E. Allen and O. N. Wiswell. 1,762,806; June 10.
Die: *See*—
Pipe die.
Dirigible. R. H. Upson. 1,762,845; June 10.
Dish and holder and assembling the same, Sundae. W. A. Green. 1,762,977; June 10.
Dishwashing machine. G. Webb. 1,762,847; June 10.
Disk, Clutch. C. E. Swenson. 1,762,673; June 10.
Dispenser, Conical-cup. C. Barbieri. 1,762,948; June 10.
Dispenser, Dish. F. J. Getz. 1,762,975; June 10.
Dispenser, Sugar. E. M. Brown. 1,763,551; June 10.
Dispenser, Tooth-paste. A. C. Strauss and D. W. Blair. 1,763,273; June 10.
Dispensing apparatus, Sugar-. C. Yucius. 1,763,118; June 10.
Dispensing can. J. H. Miller. 1,763,316; June 10.
Dispensing device, Gasoline-. J. J. Tokheim. 1,763,544; June 10.
Dispensing stand, Article-. E. Kanter and E. Feldman. Des. 81,337; June 10.
Display apparatus. M. Hartman, G. L. Obmart, and T. H. Hawkinson. 1,762,685; June 10.
Display apparatus. M. W. Nordlinger and L. Klein. 1,763,317; June 10.
Display box. J. P. Fegely. 1,762,923; June 10.
Display box. C. O. Todd. 1,762,900; June 10.
Display device. J. J. O'Brien. 1,763,318; June 10.
Display device for jewelry. C. E. Koeth. 1,762,478; June 10.
Display device for show cases, windows, and similar places. W. Hoffmann. 1,762,987; June 10.
Display figure, Embossed. M. M. Levy and W. I. Smith. Des. 81,344; June 10.
Display rack. M. D. Mendle. 1,763,247; June 10.
Display stand. M. D. Mendle. 1,762,185; June 10.
Distribution box. J. Rab. 1,762,485; June 10.
Ditch-digging machine. H. H. Barber. 1,762,568; June 10.
Ditching machine. H. H. Barber. 1,762,569; June 10.
Doily. E. Kardiol. Des. 81,338–9; June 10.
Door closer. R. S. Potter. 1,763,323; June 10.
Doorknob. E. W. Lowes. 1,762,447; June 10.
Door, Metallic car. A. S. Barrows. 1,762,151; June 10.
Door stop and holder. H. E. Hubbs and L. D. Malone. 1,763,238; June 10.
Dough-cutting machine and the like. J. C. Paterson. 1,763,320; June 10.
Dough divider. H. Devlin. 1,763,345; June 10.
Dough-dividing machine. J. E. Pointon and L. S. Harber. 1,763,322; June 10.
Dough-sheeting machine. T. L. Green. 1,762,268; June 10.
Drainer. A. A. Morris. 1,763,174; June 10.
Draw-works brace. J. C. Rains. 1,762,740; June 10.
Drawing-in-filling preventer. T. Caux. 1,763,456; June 10.
Drawing press, Toggle. W. Klocke. 1,762,398; June 10.
Dredging machine. O. B. Perry. 1,762,794; June 10.
Drier: *See*—
Hair drier.
Drill: *See*—
Twist drill.
Drill rig. J. W. Cook. 1,763,552; June 10.
Drink mixer. H. A. Andersen. 1,762,376; June 10.
Drink mixer. R. B. Gilchrist. 1,762,391; June 10.
Drink mixer. P. H. Robinson. 1,762,353; June 10.
Driving box for locomotive engines. H. Swoyer. 1,763,019; June 10.
Drum for furnaces. H. Beese. 1,762,951; June 10.
Drum for green-pea-vine hullers, Screen. F. Hamachek. 1,762,225; June 10.
Drum plug and faucet lock. T. C. Nunes. 1,762,582; June 10.
Dry room. J. B. Sando. 1,763,541; June 10.
Drying apparatus for gelatin carbon tissue. T. Chester. 1,762,910; June 10.
Drying, drumming, cleaning, caging, and finishing fur machine, Combined. H. Gabbe. 1,763,462; June 10.
Drying liquid materials. D. J. Van Marle. 1,762,250; June 10.
Drying tumbler. J. W. Seifert. 1,762,594; June 10.
Dyestuffs and preparing them, New vat. E. Hoffa and H. Heyna. 1,762,817; June 10.
Dynamos on motor vehicles, Mounting. O. Boden. 1,762,571; June 10.
Earth and other filtering clays, Revivifying fuller's. H. Lowery. 1,763,167; June 10.
Easel, Display. S. W. Wiener. 1,762,675; June 10.
Edentulous mouths, Method and apparatus for use in taking impressions of. C. B. Dennis. 1,763,553; June 10.
Educational device. J. H. Guy. 1,762,864; June 10.
Elastic webbing. H. Aull. Des. 81,319; June 10.
Electric control, Thermostatically-actuated. W. W. Williams. 1,763,573; June 10.
Electric furnace. A. D. Keene. 1,763,239; June 10.
Electric furnace. H. W. Strong. 1,762,201; June 10.
Electric machine. A. Preedit. 1,762,455; June 10.
Electric motor. A. E. Oswald. 1,762,735; June 10.
Electric power distribution. W. Spennemann. 1,762,672; June 10.
Electric regulator. H. M. Stoller. 1,763,016–17; June 10.
Electric space-discharge devices, Operation of. G. H. Stevenson. 1,763,015; June 10.
Electric switch. C. O. Wilms. 1,763,027; June 10.
Electric switch, Thermostatically-actuated. I. E. McCabe. 1,762,183; June 10.
Electric winding, Weatherproof. H. H. Wermine. 1,763,115; June 10.
Electrical amplifiers, Methods of and apparatus for operating. E. H. Loftin. 1,763,401; June 10.
Electrical conductor cords and to an apparatus used in such method, Method of binding the ends of. W. A. Rankin. 1,763,255; June 10.
Electrical device and the manufacture thereof. J. H. Cohen. 1,763,343; June 10.
Electrical resistance units, Preparation of. L. L. Jones and J. A. Flanzer. 1,762,990; June 10.
Electricity meter. A. L. Emens. 1,762,218; June 10.
Electrode for electric welding or soldering. E. J. Clarke. 1,763,417; June 10.
Electromagnet. E. W. Petzing. 1,763,007; June 10.
Electromagnetic device. J. R. Fry. 1,762,774; June 10.
Electromagnetic device. E. D. Mead. 1,763,003; June 10.
Electromagnetic device. N. Y. Priessman. 1,763,008; June 10.
Electromagnetic reproducer or recorder. W. C. Jones. 1,762,991; June 10.
Electron-discharge device, Duplex. W. J. Desmond. 1,762,960; June 10.
Electropneumatic brake. L. M. Aspinwall. 1,763,120; June 10.
Electrostatic precipitator. R. B. Rathbun. 1,763,010; June 10.
Elevator system and control, Dual. F. J. Sprague. 1,763,198; June 10.
Engine: *See*—
Internal-combustion engine. Refining engine.
Oil-burning engine.
Engine. G. E. Franklin. 1,762,437; June 10.
Engine, pump, compressor, and the like. H. Heinrich. 1,762,983; June 10.
Engines, Balancer for reciprocating. A. B. Gilbert. 1,762,860; June 10.
Envelope machine. A. Novick. 1,762,452; June 10.
Equalizer rod. J. A. L. Möller. 1,763,863; June 10.
Escutcheons, name plates, labels, and the like, Producing embossed. E. L. Adams. 1,762,539; June 10.
Examining and irrigating table. H. S. Allison. 1,762,944; June 10.
Excavator trip. A. Orloff. 1,762,523; June 10.

Exposure meter. F. M. Gates. 1,763,509; June 10.
Extension table. F. B. Walter. 1,763,572; June 10.
Extractor: *See*—
Juice extractor.
Extrusion apparatus. F. C. Vandergrift. 1,762,367–8; June 10.
Eye, Artificial. S. Marcus. 1,763,312; June 10.
Eyes with lashes, Rolling. S. Marcus and A. Konoff. 1,763,311; June 10.
Fabric: *See*—
Resilient fabric.
Fabric. S. J. Taylor. 1,763,074; June 10.
Fabric-shaping device. E. F. Maas. 1,763,591; June 10.
Fabrics, Apparatus for and method of treating. W. T. Van Orman. 1,763,569; June 10.
Fabrics, Tensioning device for. M. C. Nelson. 1,763,594; June 10.
Fan and heat exchanger, Rotary. G. F. Jones. 1,762,272; June 10.
Fastener. G. A. Holmes. 1,763,521; June 10.
Fastener catch for containers. W. E. Wacker. 1,762,600; June 10.
Fastener, Collar. W. Rabinstein. 1,762,528; June 10.
Fastener, Window. A. J. Slingerland. 1,762,280; June 10.
Fastening device, Slide-operable. A. B. Schachat. 1,763,186; June 10.
Feed mixer. I. Edland. 1,762,654; June 10.
Feed table. T. H. Oppenheim and B. Selhorst. 1,762,885; June 10.
Feeding and cutting device. H. J. Kroll. 1,762,822; June 10.
Feeding mechanism. W. Costello, jr. 1,762,764; June 10.
Fertilizing solution for seed treatment. W. F. Gericke. 1,762,294; June 10.
Festooning apparatus. L. S. Rosener. 1,762,243; June 10.
Figure doll. W. O. Yancey. 1,762,374; June 10.
Filler for building units and process of preparation. W. A. Freret. 1,762,267; June 10.
Filling and draining device, Combined. G. V. Gavaza. 1,762,390; June 10.
Filling machine. K. Kiefer. 1,763,240; June 10.
Film-moving mechanism. O. Wittel. 1,762,939; June 10.
Film with sensitometric scale, Sound. L. A. Jones and C. M. Tuttle. 1,762,925; June 10.
Filter. A. V. Gullborg. 1,763,513; June 10.
Filter and preparing same. J. G. Capstaff. 1,762,143; June 10.
Filter, Gravity-flow visible. E. B. Guthmann and D. C. Corbett. 1,762,224; June 10.
Filtering. C. D. Morton. 1,762,560; June 10.
Filtration apparatus. A. W. Petrey. 1,762,738; June 10.
Finger ring. O. F. Klinke. Des. 81,342; June 10.
Fire-control apparatus for firing at movable targets. A. Steinle. 1,762,800; June 10.
Fireplace. E. Burg. 1,762,505; June 10.
Fireplace dome. H. H. Walters. 1,763,076; June 10.
Fish-bowl and lamp combination. M. Jyuml. 1,762,634; June 10.
Fish trap. J. K. Nicolayson. 1,762,881; June 10.
Fishing reels, Lubricating cap nut for. F. M. Case. 1,762,158; June 10.
Flash light, Electric hand. J. L. Shannon. 1,762,895; June 10.
Flooring. C. B. Ulrich. 1,762,249; June 10.
Flower stand. C. Tuteur. Des. 81,355; June 10.
Fluid flow, Apparatus for controlling a. L. R. Culvert. 1,762,156; June 10.
Flying machine. E. Francesconi and V. L. Bianchi. 1,762,657; June 10.
Flying machine. C. Orsett. 1,763,409; June 10.
Folding chair. E. de Bruijin. 1,763,455; June 10.
Foot rest. H. V. Henderson. Des. 81,333; June 10.
Forceps, Dental. G. P. Roberts. 1,762,888; June 10.
Fork: *See*—
Clam-digger fork.
Frame of a chair or settee. C. W. Jones. Des. 81,366; June 10.
Frequency changing, Arrangement for. M. Osnos. 1,762,346; June 10.
Fuel, Burning powdered. L. V. Andrews. 1,762,462; June 10.
Fuel chest. C. A. Sandell. 1,762,530; June 10.
Fuel-feeding apparatus. J. C. Coulombe. 1,763,628; June 10.
Fungicide. E. B. Alvord. 1,762,709; June 10.
Fur for shrinking and felting, Preparation of. J. H. Martin. 1,762,233; June 10.
Furnace: *See*—
Boiler furnace. Induction furnace.
Electric furnace. Reverberatory furnace.
Gas furnace.
Furnace. G. W. Bach. 1,763,210; June 10.
Furnace. C. H. Hall. 1,762,816; June 10.
Furnace conveyer. G. F. Beach. 1,763,386; June 10.
Furnace method, Electric-. W. E. Moore. 1,763,248; June 10.
Furnaces, Control and reversal of regenerative. G. H. Isley. 1,762,299; June 10.
Furnaces, Fire bar for. W. J. Erdos. 1,762,655; June 10.
Furnaces, Reversing and controlling apparatus for regenerative heating. G. H. Isley. 1,762,300; June 10.
Furniture leg. C. W. Gardner. 1,762,776; June 10.
Fuse for projectiles. A. F. Teitscheid. 1,762,674; June 10.
Game and game piece. C. C. Harris. 1,762,269; June 10.
Game board. M. H. Lane. Des. 81,343; June 10.
Game indicator for card tables. J. W. Morris. 1,763,475; June 10.
Garment accessory. R. O. Brooks. 1,762,502; June 10.
Garment and hood, Combined. A. F. Schrup. 1,763,375; June 10.
Garment, Apparel. W. Kops. 1,762,399; June 10.
Garment, Apparel. F. Simmons. 1,763,266; June 10.
Garment hanger. P. S. Coles. 1,763,134; June 10.
Garter. O. Doléjal. 1,762,472; June 10.
Gas cock. E. W. Roberts. 1,762,195; June 10.
Gas connection. H. R. Klingner. 1,762,721; June 10.
Gas furnace. R. E. Fraser. 1,762,683; June 10.
Gas governors, Attachment for. F. P. Smith. 1,763,376; June 10.
Gas heater. H. H. Moreton. 1,762,878; June 10.
Gas mask. R. Monro. 1,762,695; June 10.
Gas plant. A. H. Buerk and H. Gschwend. 1,763,503; June 10.
Gas washer. H. Kreisinger. 1,762,338; June 10.
Gaseous mixtures, Burning explosive. W. M. Hepburn. 1,763,047; June 10.
Gases at high temperatures, Apparatus for the treatment of. M. Fourment. 1,763,229; June 10.
Gate. J. W. Adams. 1,763,414; June 10.
Gauge: *See*—
Multiple gauge. Pressure gauge.
Gauge for door or window openings, Plastering. W. T. Mott. 1,762,664; June 10.
Gauge for looms, Starting. C. Caprio. 1,763,504; June 10.
Gear, Draft. H. C. Priebe. 1,762,587; June 10.
Gear for material feeders for sewing machines, Driving. R. Mundlos. 1,762,880; June 10.
Gear for reciprocating engines with hydraulically-operated valves, Reversing. H. M. M. Mattern, jr. 1,763,474; June 10.
Gear for vehicles, Convertible. J. G. Raithel. 1,762,741; June 10.
Gear, particularly for internal-combustion motors, Valve. K. G. Ostberg. 1,763,563; June 10.
Gear-shift control. B. Gyllin. 1,762,172; June 10.
Gear-transmission lubrication. H. E. Altgelt. 1,762,210; June 10.
Gearing for railway cars, Brake. H. C. Priebe. 1,762,586; June 10.
Gears, Laying out. J. L. Perkins. 1,763,177; June 10.
Glass: *See*—
Laminated glass.
Glass, Apparatus for producing sheet. J. L. Drake. 1,762,508; June 10.
Glass, Apparatus for use in the manufacture of laminated. G. W. Kretzschmar. 1,762,722; June 10.
Glass-cutting device. I. G. Fowler. 1,762,575; June 10.
Glassware-annealing leer. A. N. Cramer. 1,763,223; June 10.
Glazing construction. G. W. Thomas. 1,763,275; June 10.
Glove, Trapper's. P. G. Heinrich. 1,762,865; June 10.
Glue spreader, Plate. H. G. Francis. 1,762,972; June 10.
Glycerine, Treating. H. Weber and F. Niemeyer. 1,763,451; June 10.
Golf-club head. R. J. Cash. Des. 81,321; June 10.
Golf-club shaft. H. K. B. Davis. 1,762,216; June 10.
Golf game apparatus. B. Macfadden. 1,763,243; June 10.
Governor, Fluid-pressure. H. F. Schmidt. 1,762,357; June 10.
Governor, Liquid-pump. H. A. W. Petersen. 1,762,348; June 10.
Grain distributor, Centrifugal. J. C. Howland. 1,763,396; June 10.
Grain separator. H. L. Johnson. 1,762,632; June 10.
Grate-operating mechanism, Dump-. C. F. Miller. 1,762,406; June 10.
Grave marker and flower stand. E. B. Cartwright. 1,763,130; June 10.
Grid for gas purifiers. S. E. Spencer. 1,762,840; June 10.
Grinder, Saw-tooth. J. F. Pribnow. 1,763,065; June 10.
Grinding attachment for lathes, Cylinder. F. H. Gjesdahl. 1,762,658; June 10.
Grinding cement materials, etc. C. Pontoppidan. 1,762,241; June 10.
Grinding machines, Feeding mechanism for. G. H. Smith. 1,763,626; June 10.
Grinding machines, Magnetic throw-off for. F. D. Van Norman. 1,763,201; June 10.
Gripping and conveying means, Beet. T. H. Dolling. 1,763,422; June 10.
Grizzly, Rotary. J. H. Odenbach, H. Goldman, and W. C. Henry. 1,762,790; June 10.
Grounding device. H. Brachtl. 1,763,214; June 10.
Guard for vehicles, Bufferlike. W. Lange. 1,762,870; June 10.
Guide for pneumatic-tire treads. C. E. Maynard. 1,762,833; June 10.
Guitars and similar stringed instruments, Top for. W. W. Nelson. 1,762,408; June 10.
Gut, Method of and apparatus for cleaning. G. L. Matthews. 1,763,002; June 10.
Hair drier. J. W. Rainey. 1,762,588; June 10.
Hand bag, Lady's. R. L. Vaughn. Des. 81,356; June 10.

Hand brake. J. F. O'Connor. 1,762,413; June 10.
Handle: *See*—
Umbrella handle.
Handle for implements. D. F. Hervey. 1,762,718; June 10.
Handle for tools. G. J. Crossman, jr. 1,762,679; June 10.
Handle grip, Composite gear-shift. J. D. Pembleton. 1,763,566; June 10.
Hanger: *See*—
Garment hanger. Screen hanger.
Hardness tester, Automatic. C. H. Wilson. 1,762,497; June 10.
Hardness-testing method and apparatus. C. H. Wilson. 1,762,498; June 10.
Harrow. B. C. Wolf. 1,762,907; June 10.
Harrow, Wheeled. R. H. Johnson and O. E. Szekely. 1,762,633; June 10.
Harvester, Cane. W. H. Morgan. 1,763,632; June 10.
Harvester, Cotton. J. E. Watkins. 1,763,607; June 10.
Hat-brim-curling machine. S. J. Miller. 1,762,557; June 10.
Hat-clipping machine. J. F. Doran. 1,763,347; June 10.
Hat lining and apparatus for making the same, Pleated. A. Kurtz. 1,763,468; June 10.
Headlight, Dirigible. W. V. Van Etten. 1,762,536; June 10.
Headlight for automobiles, Dirigible. J. Jarosz. 1,763,621; June 10.
Headrest socket for barber chairs. J. R. Emmert. 1,763,294; June 10.
Heat-conducting system. R. H. Churchill. 1,762,547; June 10.
Heat exchanger. E. Söhr and B. A. Ljungström. 1,762,426; June 10.
Heat exchanger, Eccentric-concentric. R. L. Shipman. 1,763,012; June 10.
Heat treatment for magnetic materials. L. W. McKeehan. 1,762,730; June 10.
Heater: *See*—
Air heater. Water heater.
Gas heater.
Heater and sterilizer. R. J. MacDuffee and G. W. Young. 1,762,448; June 10.
Heater and the silencing of automobile heaters, Automobile. S. J. V. Bovey. 1,762,467; June 10.
Heater for vehicles and the like. S. J. V. Bovey. 1,762,466; June 10.
Heating apparatus. R. S. Blair. 1,762,325; June 10.
Heating apparatus, Liquid-fuel. H. F. Rodier. 1,762,242; June 10.
Heating device. J. C. Harris and J. Wood. 1,763,516; June 10.
Heating-element-mounting means. E. L. Smalley. 1,762,701; June 10.
Heating unit, Electric. J. C. Woodson. 1,763,117; June 10.
Hedge trimmer. N. McCloskey. 1,762,401; June 10.
Hides with salts of iron, Tanning animal. K. Stürmer. 1,763,596; June 10.
Hinge for desk lids and the like. G. Stinson and S. Fred. 1,762,489; June 10.
Hinge members, Making covered-joint. S. B. Atwood. 1,763,337; June 10.
Hoist. C. F. Osgood. 1,762,696; June 10.
Hoist, Wall-board. J. W. Kinser. 1,762,397; June 10.
Hoisting mechanism. G. H. Gilman. 1,763,600; June 10.
Hoisting mechanism. M. P. Holmes. 1,763,631; June 10.
Hoisting mechanism. W. C. Tyler. 1,763,023; June 10.
Holder adopter for reflectors. R. McWilliam. 1,763,436; June 10.
Holder, Advertising-card. W. Auberlin. 1,762,321; June 10.
Holder and cord take-up, Combined iron. F. Ellinger. 1,762,966; June 10.
Holder and sprinkler, Nozzle. C. H. Archer. 1,763,119; June 10.
Holder, Animal. O. A. Reeves. 1,763,181; June 10.
Holder, Cigarette. L. Offerman. Des. 81,348; June 10.
Holder, Cop. E. A. De Wolf. 1,762,261; June 10.
Holder, Cop. A. Hlavac. 1,762,516; June 10.
Holder, Desk watch. D. E. Willard. 1,763,026; June 10.
Holder, Diamond-tool. E. S. Richardson. 1,763,479; June 10.
Holder, Door. R. S. Potter. 1,763,324; June 10.
Holder for books, Leaf. K. Hayashi. 1,762,686; June 10.
Holder for cut flowers. C. J. Straub. 1,762,843; June 10.
Holder for drinking cups. F. P. Swallow. 1,762,490; June 10.
Holder for keys or the like. A. Droutman. 1,762,770; June 10.
Holder for lamp shades, Display. T. B. Chamberlain and C. H. Bailey. 1,762,761; June 10.
Holder, Mixing-bowl. J. D. Tucker. 1,762,805; June 10.
Holder, Mop. B. J. Duce and S. J. Orent. 1,762,920; June 10.
Holder, Safety. A. M. Bolland. 1,763,128; June 10.
Holder, Ticket. A. E. Sorenson. 1,763,484; June 10.
Hook: *See*—
Spoon hook.
Hook and swivel, Punching-bag. R. R. Hodgkins. 1,762,439; June 10.
Horn. O. Dotson. 1,763,038; June 10.
Horn. E. J. Gulick. 1,762,577; June 10.
Horn. S. M. Wilder. 1,763,336; June 10.
Horn, Loud-speaker. A. F. Van Dyck and F. H. Guber. 1,763,381; June 10.
Horseshoe. E. H. Langlois. 1,763,433; June 10.
Humidifier and projector, Combined. P. C. Seel. 1,762,934; June 10.
Hydraulic jack. J. P. McBride. 1,763,404; June 10.
Hydraulic press. W. Ernst. 1,763,142; June 10.
Hydroplane. G. B. Hooton. 1,762,626; June 10.
Ice-cream-cone-making machine. J. Denaro. 1,762,959; June 10.
Ice-cream freezer, Automatically-controlled. A. T. Simmons and B. H. Miles. 1,763,567; June 10.
Ice-shaving machine. A. O. Goldstein. 1,763,512; June 10.
Igniter. H. A. Douglas. 1,762,162; June 10.
Ignition device, Electromagnetic. R. Righetto. 1,763,443; June 10.
Ignition lock, Cam-operated. C. N. Fairchild. 1,762,922; June 10.
Illumination of swimming pools, Subaqueous. J. F. Booraem. 1,762,383; June 10.
Incinerator. H. Klein. 1,763,159; June 10.
Incinerator. H. Klein. 1,763,398; June 10.
Incinerator. R. W. Krens. 1,762,579; June 10.
Indicating device. L. V. Aronson. 1,762,753; June 10.
Indicator: See—
Card-table indicator. Seat indicator.
Indicator system. C. L. Davis. 1,763,225; June 10.
Inductance device. A. G. Ganz. 1,762,775; June 10.
Inductance system. L. A. Gebhard. 1,763,233; June 10.
Inductance system. A. M. Trogner. 1,763,278; June 10.
Induction furnace. G. B. Tjofiat. 1,763,200; June 10.
Insecticide barrier. K. F. Cooper and W. Moore. 1,762,610; June 10.
Insoles, Forming. H. M. Gusdorf. 1,763,148; June 10.
Instrument for measuring the hardness of metals. P. P. Roudié. 1,762,639; June 10.
Insulating head for extrusion machines. G. F. Crowley and R. C. Pierce. 1,763,136; June 10.
Insulator. F. H. Miller. 1,763,170–1; June 10.
Insulator string. J. Slepian. 1,763,196; June 10.
Integrating meter. H. Nützelberger. 1,763,175; June 10.
Internal-combustion engine. J. A. Boughton. 1,762,650; June 10.
Internal-combustion engine. A. Craigon. 1,762,613; June 10.
Internal-combustion engine. L. O. French. 1,762,550; June 10.
Internal-combustion engine. A. O. A. Runge. 1,762,666; June 10.
Internal-combustion engine, High-compression. W. G. Gernandt. 1,762,295; June 10.
Internal-combustion motor. H. A. Cartwright. 1,762,214; June 10.
Internal-combustion motor. W. Delfino. 1,762,614; June 10.
Ironing board. G. H. Bultman and J. C. Horgan. 1,763,089; June 10.
Ironing-board construction. J. P. Doman. 1,762,436; June 10.
Ironing machine. C. H. Boyuls. 1,763,597; June 10.
Ironing machine. Le R. C. Schenck. 1,763,190; June 10.
Ironing table, Folding. J. P. Dorau. 1,762,962; June 10.
Ironing table, Folding. C. A. Forney. 1,762,924; June 10.
Jack: *See*—
Hydraulic jack. Pump jack.
Lifting jack.
Jack. L. J. Fuller. 1,763,144; June 10.
Jacks, Work-positioning device for wood-heel. W. H. Hall. 1,762,296; June 10.
Joint: *See*—
Universal joint.
Joint. E. W. Davis. 1,762,548; June 10.
Joint construction. R. E. Dill. 1,762,713; June 10.
Juice extractor. B. R. Deleray. 1,762,855; June 10.
Key-imprisoning lock. C. N. Fairchild. 1,762,921; June 10.
Kiln, Tunnel. T. Larsson. 1,763,624; June 10.
Kite. N. Gambito and D. Sumabat. 1,762,551; June 10.
Knitting machines, Striping attachment for circular spring-beard needle. J. W., and F. Tait, jr. 1,763,378; June 10.
Knotting machine, Warp-. O. Fischer. 1,762,656; June 10.
Lace braid. O. E. Huber. Des. 81,334; June 10.
Laminated glass. H. A. Gardner. 1,762,513; June 10.
Lamp for motor vehicles. H. H. Moreton. 1,762,877; June 10.
Lamp, Glow. P. L. Spencer. 1,763,108; June 10.
Lamp guard. J. Manneschmidt, jr. 1,762,724; June 10.
Lamp or article of analogous nature. P. Cricchio. Des. 81,324; June 10.
Lamp, Projector. F. H. Hartwick and H. C. Arnold. 1,763,517; June 10.
Land corrugator, Rotary. C. B. Lindburg. 1,763,166; June 10.
Latch-bolt structure. E. J. Baumé. 1,762,499; June 10.
Latch device. C. L. Mattison. 1,763,244; June 10.
Latch, Door. W. E. Anderson. 1,763,548; June 10.
Latex and product obtained thereby, Treating. J. McGavack. 1,762,729; June 10.
Lath, Metal. H. K. Baker. 1,762,322; June 10.
Lathes with capstan and cross-slide rests. W. Heinemann. 1,763,519; June 10.

Leather, Apparatus for setting out. W. C. Johnson. 1,763,359; June 10.
Leer. J. Mayo. 1,762,340; June 10.
Lens system for color photography. H. N. Cox. 1,762,144; June 10.
Lever for reapers, Clutch-control. P. Kane. 1,762,395; June 10.
Levulose or carbohydrate mixtures, Production of dry. W. C. Arsem. 1,763,080; June 10.
License and registry lock. L. H. Beall. 1,763,087; June 10.
Lifting jack. A. C. Hopkins. 1,762,627; June 10.
Lifting jack. M. B. Lucker. 1,762,400; June 10.
Light: *See*—
Flash light. Passing light.
Light-control apparatus, Theater-. R. J. Wensley. 1,763,113; June 10.
Light-dimming switch. R. K. Winning. 1,763,028; June 10.
Light for gas burners, Individual pilot. W. Englund. 1,763,295; June 10.
Light system for photographic-printing machines. F. E. Altman. 1,763,208; June 10.
Lighter, Pocket cigar. C. Hardy. 1,762,980; June 10.
Lighter, Tobacco. A. J. Stecker. 1,762,281; June 10.
Lighting fixture. J. K. Riddle, assignor to The Edward N. Riddle Company, Toledo, Ohio. 1,762,526; June 10.
Lighting fixture, Indirect-. E. D. Tillson. 1,762,565; June 10.
Liner and treating the same. L. B. Sebrell. 1,763,618; June 10.
Liner puller. A. P. Ridenour. 1,762,796; June 10.
Linoleum, Machine for the manufacture of inlaid. M. S. McConoughey. 1,763,315; June 10.
Linoleum or the like, Method of and apparatus for sheeting. M. S. McConoughey. 1,763,314; June 10.
Lintel construction. J. F. Makowski. 1,762,662; June 10.
Liquid-dispensing system. C. H. Ehlers. 1,762,965; June 10.
Liquid-fuel burner. H. F. Schmidt. 1,762,356; June 10.
Liquid meter. R. S. Bassett. 1,762,949; June 10.
Liquid meter. R. S. Bassett. 1,763,213; June 10.
Liquid package, Self-dispensing. J. F. Werder. 1,762,903; June 10.
Load-reducing means for conveyers. G. J. Meyer. 1,763,005; June 10.
Loader, Portable conveyer. J. P. Polster. 1,763,440; June 10.
Loading apparatus. J. A. Amendolara. 1,763,560; June 10.
Loading apparatus. R. S. Bolger. 1,763,499; June 10.
Loading device. W. K. Liggett. 1,762,827; June 10.
Loading of conductors. J. J. Gilbert. 1,763,043; June 10.
Loading of signaling conductors. V. E. Legg. 1,762,996; June 10.
Loading system. D. A. Quarles. 1,763,009; June 10.
Loaves, Method and apparatus for forming. S. Chase, 4th. 1,762,159; June 10.
Lock: *See*—
Belt lock. Signal lock.
Ignition lock. Stake lock.
Key-imprisoning lock. Switch lock.
License and registry lock. Table lock.
Lock stop, Safety-. J. C. Wilhelm. 1,762,371; June 10.
Lock strike. E. F. Brittingham. 1,762,326; June 10.
Locking apparatus, Substation. O. A. Shann. 1,762,746; June 10.
Locomotive appliance. I. A. Selders. 1,762,362; June 10.
Locomotive-bell ringer, Electromagnetic. G. M. Bessant. 1,762,500; June 10.
Loom. H. A. Davis. 1,763,613; June 10.
Loom. E. Herring. 1,762,717; June 10.
Loom, Combined power and hand. R. E. Walliser. 1,763,111; June 10.
Loom, especially for heavy webs such as metallic wire webbing, Weaving. B. Hein. 1,762,393; June 10.
Looms, Automatic stop for double-pile-fabric. C. A. Bondziulis. 1,762,382; June 10.
Loud-speaker. M. C. Hopkins. 1,763,048–50; June 10.
Loud-speaker. M. C. Hopkins. 1,763,051–5; June 10.
Loud-speaker. G. H. T. Larsen. 1,763,399; June 10.
Louver. W. J. Gross. 1,762,223; June 10.
Lubricating apparatus. H. J. Murphy. 1,763,062; June 10.
Lubricating device. E. M. Wright. 1,762,373; June 10.
Lubricating system. J. J. O'Brien. 1,762,238; June 10.
Lubricating system, Refrigerator-motor-. A. A. Kucher. 1,763,162; June 10.
Lubrication, System of. J. F. Werder. 1,762,902; June 10.
Lubricator for vehicles, Automatic. L. E. Shone. 1,762,198; June 10.
Lumber cradle. E. W. Hutchings. 1,762,271; June 10.
Lumber, Drying. M. L. Mueller. 1,762,879; June 10.
Luminair. G. Rucker. 1,762,743; June 10.
Luminous points of an image for reproduction by television, Apparatus for selecting. E. (known as Stephane) J. Brun. 1,763,528; June 10.
Machine and process of manufacture of pottery or ceramic articles. J. Dengler. 1,762,387; June 10.
Machine for cleaning and digging ditches. H. E. Johnson. 1,762,441; June 10.
Machine for covering tire beads. F. D. Fowler. 1,763,297; June 10.
Machine for dissolving cellulose xanthate and the like. R. Thurm and E. Schmierer. 1,763,379; June 10.
Machine for double seaming can ends to can bodies. J. Coyle. 1,763,458; June 10.
Machine for exhibiting photoluminescent images. L. Chalkley, jr. 1,762,760; June 10.
Machine for forming cranks. K. Auerbach. 1,763,338; June 10.
Machine for laying foundations of structures. O. Stern. 1,763,485; June 10.
Machine for manufacturing casings for pneumatic tires. J. E. Perrault and H. L. Davis. 1,762,453; June 10.
Machine for operating on bolts, nuts, and the like, Magnetic. W. B. Peirce. 1,762,192; June 10.
Machine for producing lined pouches. F. E. Ludington. 1,762,829; June 10.
Machine for separating solids from liquids. J. and C. E. Thomson. 1,762,899; June 10.
Magazine throat. E. A. Ford. 1,763,039; June 10.
Magnet construction. A. B. Cadman. 1,762,544; June 10.
Magnetic contactor. H. E. White. 1,763,116; June 10.
Magnetic device. E. D. Mead. 1,762,731; June 10.
Magneto. T. G. Louis. 1,763,098; June 10.
Mail and parcel tube. J. A. Fluellen. 1,763,393; June 10.
Mail box. M. E. Hughes. 1,762,477; June 10.
Making machine, Box-end-. H. P. Schuck. 1,762,642; June 10.
Manual control means for bucket cleaners. H. B. Van Scoit. 1,762,492; June 10.
Manually and magnetically operated vehicle brake, Combined. E. J. Prime. 1,762,420; June 10.
Marine craft. E. Boyce. 1,763,415; June 10.
Marker, Street and highway. C. V. Johnson. 1,763,431; June 10.
Massage machine. A. W. Lair. 1,762,602; June 10.
Mat roaster. O. C. Roesen. 1,762,309; June 10.
Matter, Composition of. W. B. Pratt. 1,762,194; June 10.
Measurement of liquids, Apparatus for the. J. Fraser. 1,763,427; June 10.
Measurement of liquids by volume, Apparatus for the. J. Fraser. 1,763,426; June 10.
Measuring and feeding device, Tobacco. J. R. Wysong. 1,763,546; June 10.
Measuring and marking machine, Leather. G. A. Schettler. 1,762,355; June 10.
Measuring and recording device. J. C. Wright, E. B. Wheeler and E. B. Wood. 1,762,942; June 10.
Measuring device, Glow-tube. E. E. Charlton. 1,762,712; June 10.
Measuring feeder. S. T. Edwards. 1,763,139; June 10.
Measuring instrument, Electrical. F. H. Hibbard. 1,762,780; June 10.
Memorandum device and memory tickler, Combined. C. J. McArthur. 1,762,728; June 10.
Merchandise warmer. W. H. Palmer. 1,763,253; June 10.
Mercury, Producing. W. Glaeser. 1,762,861; June 10.
Mercury switch. G. F. Callahan. 1,762,213; June 10.
Metal bars or billets, Device for selective handling of. E. H. Fors. 1,762,291; June 10.
Metal border strip. G. P. Ittig. Des. 81,335; June 10.
Metal rolling. J. B. Tytus. 1,763,279; June 10.
Metal-treating machine, Feeding mechanism for. A. F. Clarke. 1,763,092; June 10.
Metal tubes, Forming. F. H. Poeppelmeier. 1,762,835; June 10.
Metal tubes, Manufacture of. E. J. Gulick. 1,763,582; June 10.
Meter: *See*—
Demand meter. Integrating meter.
Electricity meter. Liquid meter.
Exposure meter. Supported meter.
Mill: *See*—
Rolling mill. Turning and boring mill.
Mill housing and bearing construction, Rolling-. J. R. George. 1,762,292; June 10.
Milling cutter. C. W. Metzer. 1,762,875; June 10.
Mining machine. J. H. Blair. 1,762,154; June 10.
Mirror stand. F. N. Mariani. Des. 81,345; June 10.
Mixer: *See*—
Concrete mixer. Feed mixer.
Drink mixer.
Mixing and kneading machine. G. B. Eggert. 1,763,292; June 10.
Mixing apparatus. H. S. Beers. 1,762,950; June 10.
Mixing device. A. C. Gilbert. 1,763,301; June 10.
Mixing device, Liquid-. J. S. Watts. 1,763,335; June 10.
Mold breaker. J. Scherner. 1,762,836; June 10.
Mold for head cores. W. D. Moore, J. B. Loring and W. J. Bowers. 1,762,876; June 10.
Mold such as used in the manufacture of wafer biscuits and for other purposes. G. R. Baker. 1,763,211; June 10.
Mop. S. Poulos. 1,762,454; June 10.
Motor: *See*—
Electric motor. Synchronous motor.
Internal-combustion motor. Tide or wave motor.
Outboard motor.
Motors, Control of single-phase. F. Prantl. 1,763,537; June 10.
Mounting for electric bulbs, Adjustable. W. B. Young. 1,763,495; June 10.
Mouth-organ stand. J. Spalleno. 1,762,645; June 10.
Mower, Lawn. J. H. Blair. 1,762,287; June 10.
Mower, Lawn. W. F. M. Braun. 1,763,215; June 10.
Mowers, Edge-trimming attachment for lawn. A. E. Beck. 1,763,339; June 10.

Mowers, Tongue support for. L. A. Paradise and W. J. Coultas. 1,762,584; June 10.
Mowing machine. W. Tychie. 1,763,022; June 10.
Muffler and heater for vehicles, Combined. S. J. V. Bovey. 1,762,465; June 10.
Multiple gauge. W. O. Vivarttas. 1,763,333; June 10.
Music and other correlated sounds, Apparatus for the propagation of. A. H. Marks. 1,762,449; June 10.
Music-teaching device. M. B. Rock. 1,763,444; June 10.
Musical instrument. S. Hawels. 1,763,518; June 10.
Musical instrument. M. L. Jones. 1,763,526; June 10.
Musical instrument, Stringed. J. Dopyera. 1,762,617; June 10.
Nail file or similar instrument and carrier therefor. C. A. Teal, jr. 1,763,274; June 10.
Naphthalene, Purification of. G. Schroeter. 1,763,410; June 10.
Natural objects, Reproducing surface appearance of. L. V. Casto. 1,762,711; June 10.
Necktie. J. A. Coffman. Des. 81,322; June 10.
Necktie, Bow. O. Weinstein. 1,762,647; June 10.
Netting for airships, Wire. P. Helma and K. Bauch. 1,763,584; June 10.
Network, High-frequency attenuating. J. F. Farrington. 1,762,969; June 10.
Neutralized switch, Capacity. A. B. Moulton. 1,763,406; June 10.
Nicotine carbolates from crude shale oil, Obtaining. D. T. Day. 1,762,471; June 10.
Noncorrodible reenforced pipe. O. V. Kean. 1,763,360; June 10.
Nut. L. L. Turner. 1,763,021; June 10.
Nutcracker. R. E. DeGolyer. 1,762,573; June 10.
Nut, Lock. J. E. Phillips. 1,762,739; June 10.
Nut-locking washer. W. J. Chism. 1,762,651; June 10.
Nut, Self-tightening. M. J. Duffy. 1,763,505; June 10.
Oil burner. G. F. Beach. 1,763,387; June 10.
Oil burner. A. C. Bryan. 1,762,678; June 10.
Oil burner. A. Kais. 1,762,868; June 10.
Oil burner. W. R. Kiefer. 1,762,555; June 10.
Oil burner. M. A. S. Lavigne. 1,763,164; June 10.
Oil-burning engine. C. L. Cummins. 1,762,653; June 10.
Oil saver and packing head. W. G. Bradford. 1,762,211; June 10.
Oils, Apparatus for treating hydrocarbon. J. B. Weaver. 1,763,608; June 10.
Oils, Cracking hydrocarbon. E. W. Isom. 1,762,229; June 10.
Oils, Treating hydrocarbon. J. B. Weaver, R. Stahl, and C. R. Wagner. 1,763,609; June 10.
Optical equipment of photographic cameras. D. H. Stewart. 1,762,938; June 10.
Ore-concentrator. R. C. Fehely and R. F. Stevenson. 1,762,265; June 10.
Ore, Treating arsenious. A. R. Lindblad. 1,763,435; June 10.
Ores and metallurgical products, Working up complex. F. Johannsen. 1,762,867; June 10.
Ores of lead, silver, and copper, Concentration of oxidized. E. H. Snyder and W. D. Green. 1,762,364; June 10.
Organ. D. Marr. 1,762,274; June 10.
Ornament for drapery rods or the like, Center. W. E. Smith. Des. 81,353; June 10.
Ornament for drapery rods or the like, End. W. E. Smith. Des. 81,354 June 10.
Oscillograph galvanometer. J. W. Legg. 1,763,242; June 10.
Outboard motor. W. F. A. Buehner. 1,762,957; June 10.
Outlet or junction box or the like. J. G. Knight. 1,763,160; June 10.
Oven. R. E. Cramer. 1,763,418; June 10.
Oven, Domestic baking. V. Allen. 1,762,540; June 10.
Package of yarn or the like. A. B. Collingbourne. 1,762,386; June 10.
Pad and associated tube forming means for permanent hair waving. L. Ingrassia. 1,763,355; June 10.
Paint and varnish remover, Electrical. H. I. Suris and J. L. Daniels. 1,762,646; June 10.
Pan: *See*—
Steam-table pan.
Pan connecting and reenforcing strip. F. Schultz. 1,762,563; June 10.
Panels with metal, Method of and apparatus for facing. A. Elmendorf. 1,763,227; June 10.
Paper-creping machine. S. J. Campbell. 1,762,157; June 10.
Paper-distributing apparatus, Toilet-. H. A. Schlossberger. 1,763,259; June 10.
Paper feeding and elevating mechanism for printing presses. C. L. Low. 1,762,661; June 10.
Paper-feeding mechanism. G. Tauschek. 1,762,749; June 10.
Paper, Making. G. J. Manson. 1,762,930; June 10.
Paper or paper which retains its strength in contact with grease, Greaseproof. G. J. Manson. 1,762,931; June 10.
Paper pulp to obtain paper of improved water resistance, Treating. G. J. Manson. 1,762,929; June 10.
Paper-throw-out and count-rectifying device. H. A. W. Wood. 1,762,286; June 10.
Paper, Water-resistant. G. J. Manson. 1,762,928; June 10.
Parachute for aeroplanes. C. Kesses. 1,762,396; June 10.
Paraffins, waxes, and the like, Oxidizing. F. Hofmann. 1,762,688; June 10.
Passing light. L. Eglinton. 1,763,555; June 10.
Paving mixture and preparing same. E. C. Wallace. 1,763,204; June 10.
Pellets, Method and apparatus for making. C. E. Linebarger. 1,762,693; June 10.
Pen, Fountain. J. R. Hume. 1,762,554; June 10.
Pencil attachment. P. Richle. 1,763,327; June 10.
Pencil, Magazine. A. Woelm. 1,762,317–18; June 10.
Perforating the cores of yarn packages, Method and apparatus for. W. N. Gere. 1,762,222; June 10.
Perforator, Automatic visible-card. W. W. Lasker. 1,763,163; June 10.
Petroleum products, Transporting. H. A. Scharpenberg. 1,762,423; June 10.
Photo-electric device. V. K. Zworykin. 1,763,207; June 10.
Photo-electric photometer. H. A. Smith. 1,762,748; June 10.
Photographic coating, Antiabrasion. S. E. Sheppard and J. G. McNally. 1,762,935; June 10.
Photographic-print drier. R. S. Hopkins. 1,763,629; June 10.
Photographic printer. R. S. Hopkins. 1,763,630; June 10.
Photographic reversal process. M. W. Seymour. 1,762,936; June 10.
Pick, Florist's. E. L. Bennett. 1,762,908; June 10.
Picker: *See*—
Cotton picker.
Picture machine, Motion-. F. H. Avers. 1,762,378; June 10.
Picture-title-making machine, Motion-. E. C. Fritts. 1,763,231; June 10.
Picture-transmission system. F. C. Crowe. 1,762,470; June 10.
Piezo-electric crystal apparatus. R. H. Worrall. 1,763,288; June 10.
Piezo-electric device. W. Hahnemann. 1,763,515; June 10.
Pin and mounting therefor. W. L. Hancock. 1,762,473; June 10.
Pipe: *See*—
Tobacco pipe.
Pipe bender. M. E. Johnson. 1,762,230; June 10.
Pipe cleaner, Drain-. B. L. Brown. 1,762,608; June 10.
Pipe die. L. Cox. 1,762,652; June 10.
Pipe fitting. G. S. Eble. 1,762,771; June 10.
Pipe fitting, Drain-. J. Mulder. 1,763,562; June 10.
Pipe insulation. G. J. Schreier. 1,762,276; June 10.
Pipe sleeve. F. De Garay. 1,762,766; June 10.
Pipe system and making the same, Connected. I. H. Kendall. 1,762,820; June 10.
Pipe wrench. L. Cox. 1,763,135; June 10.
Pipes, Device for expanding short. J. K. Morris. 1,762,732; June 10.
Pipette, Blood. O. Arnold. 1,762,807; June 10.
Pirn-winding machine. H. Schweiter. 1,762,894; June 10.
Piston. W. R. Blowers. 1,762,541; June 10.
Piston. F. Jardine. 1,763,523; June 10.
Piston and cylinder construction for molding machines. W. Lewis. 1,763,058; June 10.
Piston for internal-combustion engines. O. E. Jorgensen. 1,762,442; June 10.
Piston for internal-combustion engines. G. A. Mellor. 1,763,625; June 10.
Piston or plunger. H. B. Wideman. 1,762,802; June 10.
Piston ring. G. Beer. 1,763,127; June 10.
Piston rings, Art of and mold for casting. M. O. Teetor. 1,762,598; June 10.
Piston rings, Process and apparatus for making. L. C. Marshall. 1,762,556; June 10.
Planer, Road. A. J. and G. W. Monroe. 1,763,534; June 10.
Planter, Seed. F. Slathar. 1,762,671; June 10.
Plaster construction. H. R. Shanks. 1,763,262; June 10.
Plastering construction. G. R. Walper. 1,762,707; June 10.
Platform, Adjustable. C. E. Schuler. 1,763,069; June 10.
Playing implement. C. M. Winbigler. 1,763,205; June 10.
Pliers. R. Jones. 1,763,527; June 10.
Plows, Colter attachment for. C. Marchal. 1,763,559; June 10.
Plows, Roller attachment for. O. G. and C. A. Chenoweth. 1,762,258; June 10.
Plowshare. A. L. Vegors. 1,762,251; June 10.
Plumbing fixture. A. M. Khun. 1,763,466; June 10.
Pneumatic flow means for deep wells. J. A. Wolfe. 1,763,030; June 10.
Polarizing system, Converter. C. P. West. 1,763,622; June 10.
Pole, Electrically-operated barber. L. A. Carter and C. P. Steinmetz. 1,762,958; June 10.
Pools, Process of and apparatus for warming and cleaning. S. E. Test. 1,762,366; June 10.
Post: *See*—
Binding post.
Post structure. H. L. Johnston. 1,763,156; June 10.
Pothead. G. P. Edmonds. 1,762,510; June 10.
Pothead. P. F. Williams. 1,762,495; June 10.
Pottery-forming machine. W. J. Miller. 1,762,236; June 10.
Power-supply means. L. O. Grondahl. 1,763,097; June 10.

Power system. J. J. Kane. 1,763,616; June 10.
Power system, Remote-control. J. C. Field. 1,762,971; June 10.
Power transmission. C. S. Sorensen. 1,762,534; June 10.
Power-transmission mechanism. C. C. Hower. 1,762,553; June 10.
Press: *See*—
Drawing press. Valve-pad press.
Hydraulic press.
Press. J. J. Cavagnaro. 1,763,131; June 10.
Press feeder and receiver. R. Novidoff. 1,762,484; June 10.
Pressure, Apparatus for producing a proportionately-varying negative. C. F. Wallace. 1,762,706; June 10.
Pressure gauge. E. A. Ileman. 1,763,354; June 10.
Printer's composing stick. W. F. Stuckeman. 1,762,365; June 10.
Printing, Chemical. H. E. Brookby. 1,763,291; June 10.
Printing machines, Interleaving device for. T. W. Horn. 1,763,308; June 10.
Printing press for bag blanks, Rotary web-. H. M. Barber. 1,763,123; June 10.
Projection apparatus. H. H. Strong. 1,762,801–4; June 10.
Projection system for color pictures. J. Mihalyi. 1,762,932–3; June 10.
Propeller for airplanes and dirigible balloons. F. W. Caldwell. 1,763,218; June 10.
Propeller-type blower. T. F. Schmidt. 1,762,358; June 10.
Puddler for tanks of sewage-disposal plants. F. M. Ties. 1,763,448; June 10.
Puller: *See*—
Liner puller.
Pulley, Idler. H. F. Arnold. 1,762,149; June 10.
Pulverizing apparatus. L. V. Andrews. 1,763,496; June 10.
Pulverizer, Coal. H. H. Bates. 1,762,379; June 10.
Pump. B. H. Allred. 1,762,708; June 10.
Pump. C. P. Frederick. 1,763,395; June 10.
Pump. C. G. Holt. 1,762,625; June 10.
Pump. F. H. Paatsch. 1,763,595; June 10.
Pump, Air. G. H. Hughes. 1,763,155; June 10.
Pump for lubricants and other viscous substances in variable and determined quantities, Distributing. J. Muller. 1,763,189; June 10.
Pump jack. E. A. Mummé. 1,763,364; June 10.
Pump of internal-combustion engines, Fuel. J. Mahler. 1,762,232; June 10.
Pump, Pneumatic. M. S. Swanstrom. 1,762,597; June 10.
Pump, Rotary force. H. Petersen. 1,762,418; June 10.
Pump, Sand. J. Gyger. 1,763,234–5; June 10.
Punching device. J. T. Schaaff. 1,763,067; June 10.
Pyrometer, Optical. A. Bestelmeyer. 1,762,380; June 10.
Rack: *See*—
Clothes-drying rack. Test-tube rack.
Display rack.
Rack and bit, Display. E. Y. Crossmore, A. C. Chappory, jr., and J. B. Posey. 1,763,419–20; June 10.
Rack or tray, Correspondence. R. H. Soper. 1,762,596; June 10.
Radiator, Electric. W. H. Robinson. 1,763,328; June 10.
Radiator for motor vehicles. F. C. Ruppel. 1,763,184; June 10.
Radiator hearth for boilers and similar apparatus. E. Sinno, J. A. Llauró, A. Llauró, and E. Llauró. 1,763,187; June 10.
Radiator heating connection for boilers. S. Baldyzar. 1,762,808; June 10.
Radiocabinet. L. F. Kirsch. Des. 81,341; June 10.
Radiocabinet or similar article. E. Worthington. Des. 81,360–3; June 10.
Radio receiving apparatus. B. B. Minnium. 1,762,186; June 10.
Radio receiving system. S. E. Anderson. 1,762,945; June 10.
Radio receiving system. H. T. Friis. 1,762,974; June 10.
Radius of motor busses, Device for use in determining turning. J. Richardson. 1,763,441; June 10.
Rail bond and method of applying. J. B. Austin. 1,763,032; June 10.
Rail-joint bar, Compromise. D. L. Braine. 1,763,501; June 10.
Rail, Railway-track. G. M. Magee. 1,763,472; June 10.
Rails to high-speed suspension monorailways, Securing. F. Kruckenberg. 1,763,558; June 10.
Railroad tie. W. P. Day. 1,763,037; June 10.
Railway draft rigging. J. F. O'Connor. 1,762,414; June 10.
Raisin-cleaning apparatus. C. U. Frazier. 1,762,884; June 10.
Rake: *See*—
Wheel rake.
Reactor system. J. S. Hebrew. 1,763,150; June 10.
Reading glass. M. C. Williamson. Des. 81,359; June 10.
Reamer for pipe threaders. E. T. Siesko. 1,762,670; June 10.
Receiver arrangement for electric television apparatus. A. Karolus. 1,762,231; June 10.
Receiving apparatus. R. Deason. 1,763,459; June 10.
Receptacle, Portable laundry. H. Hirsch. 1,762,475; June 10.
Recording device for poultry. J. M. Hodges. 1,762,687; June 10.
Recording means for dump cars, Automatic. E. W. Schellentrager. 1,762,196; June 10.
Reeling machine. J. Hollins and D. Jepson. 1,762,866; June 10.
Refining engine. H. Mallickh. 1,763,532; June 10.
Reflector, Adjustable. D. E. Beauchamp. 1,763,550; June 10.
Reflector and supporting tongues therefor. P. Kranz and A. P. Schmid. 1,763,310; June 10.
Reflector-gasket retainer. F. L. Bamford. 1,762,150; June 10.
Reflector, Table. H. P. Cline, I. Scheinberg, and J. G. Watson. 1,762,469; June 10.
Refrigerating apparatus. J. Schurman. 1,762,644; June 10.
Refrigerating apparatus, Absorption. E. E. Allyne. 1,762,147; June 10.
Refrigerating process and apparatus. G. T. Voorhees. 1,762,369; June 10.
Refrigerating system. H. R. Van Deventer. 1,763,281; June 10.
Register flash mechanism. A. S. Wheelbarger. 1,762,904; June 10.
Regulating system. J. A. Spencer. 1,763,107; June 10.
Regulator: *See*—
Electric regulator. Thermostatic regulator.
Regulator system. M. E. Krom. 1,763,057; June 10.
Regulator system. E. C. Manderfeld. 1,762,999; June 10.
Regulator system. L. J. Stacy, Caldwell, and M. E. Krom. 1,763,014; June 10.
Regulator system. S. A. Staege. 1,763,199; June 10.
Regulator system. S. A. Staege. 1,763,272; June 10.
Regulator system. H. M. Stoller. 1,763,017; June 10.
Relay, Electric. T. W. Ross. 1,763,258; June 10.
Relay, Electropolarized. O. R. Miller and E. D. Mead. 1,763,172; June 10.
Relay-testing apparatus. H. P. Sleeper. 1,763,195; June 10.
Relay, Thermal. H. E. White. 1,763,284; June 10.
Removing, purifying, and recovering oil from tin plate. J. H. Holden, T. O'Brien, J. C. Whetzel and R. E. Zimmerman. 1,763,430; June 10.
Resilient fabric. R. C. Fagan. 1,762,389; June 10.
Resins and rubber in aqueous dispersion and making the same, Composition of matter comprising. A. Biddle. 1,762,152; June 10.
Resistance plate. J. Slepian. 1,763,267; June 10.
Resistor material and making same. J. Slepian. 1,763,268; June 10.
Resorcinol, Recovering. I. Gubelmann and C. O. Henke. 1,762,979; June 10.
Rest, Collapsible. B. R. Dexter. 1,762,217; June 10.
Retaining device. C. H. Behnke. 1,762,757; June 10.
Retort. W. F. Rieger. 1,763,442; June 10.
Retort. W. F. Rieger. 1,763,539; June 10.
Reverberatory furnace. F. F. Lines. 1,763,471; June 10.
Ribbon mechanism. J. T. Schaaff. 1,763,068; June 10.
Rims, Apparatus for forming spoke holes in wire-wheel. W. N. Booth. 1,762,542; June 10.
Ring: *See*—
Piston ring.
Road-marking machine. J. H. Kirkman. 1,763,432; June 10.
Road-working apparatus. C. R. Churchill and J. R. Haynen. 1,763,457; June 10.
Rod: *See*—
Equalizer rod. Welding rod.
Roller bit. C. H. M. Bull. 1,762,504; June 10.
Roller-cutter mounting. G. E. Behnke. 1,762,570; June 10.
Rolling mill. J. R. George and J. W. Sheperdson. 1,762,293; June 10.
Roof and wall sheet, Flat asbestos-cement. L. Lane. 1,763,469; June 10.
Roof drain. R. C. Shand. 1,762,838; June 10.
Roof flashing, Pipe. R. Sherlock. 1,762,896; June 10.
Roof rafter. F. T. Sergent. 1,762,363; June 10.
Roofing and making same. L. Kirschbraun. 1,763,601; June 10.
Roofing, Prepared. A. O. Mickelson and D. A. Cumfer. 1,762,404; June 10.
Rosin-reclaiming machine. G. W. Smith. 1,762,595; June 10.
Rotary cutter. J. E. Rousseau. 1,763,370; June 10.
Rotary cutter. E. A. Williams. 1,762,648; June 10.
Rotor for induction motors, Squirrel-cage. G. T. Smith. 1,762,564; June 10.
Rubber and products obtained thereby, Vulcanizing. W. Scott. 1,762,531; June 10.
Rubber articles, Apparatus for treating. J. Waseluk. 1,762,846; June 10.
Rubber composition and preparing the same, Age-resisting. H. W. Elley. 1,763,615; June 10.
Rubber composition and preserving rubber. H. W. Elley. 1,763,293; June 10.
Rubber goods and making the same, Surface-finished. H. W. Emery. 1,762,165; June 10.
Rubber latex and product thereof, Treating. W. B. Wescott. 1,762,494; June 10.
Rubber tubes, Method of and mold for splicing. C. E. Maynard. 1,762,831; June 10.
Safe, Portable food. F. F. Pfefferkorn. 1,762,417; June 10.

Safety device and resetting mechanism, Combined. G. R. Folds and L. M. Persons. 1,763,394; June 10.
Safety device, Automatic. L. L. Cunningham. 1,763,093; June 10.
Safety device for airplanes. T. Berbeck. 1,763,498; June 10.
Safety device for automobile starters. R. Littler, ar. 1,762,926; June 10.
Salt cup. B. C. Rivers. 1,762,589; June 10.
Sash balance. A. H. Kersting. 1,762,821; June 10.
Sash lift. H. E. Campbell. 1,763,577; June 10.
Sash machine, Automatic. D. B. Mackenzie. 1,762,273; June 10.
Sash, Metal window. C. H. Turner. 1,763,489; June 10.
Saw. C. A. Bowen. 1,763,500; June 10.
Saw, Chain. T. H. De Haven. 1,763,095; June 10.
Saw frame, Portable power-driven. T. J. Fegley and G. O. Leopold. Des. 81,365; June 10.
Saw rig. G. F. Schaper and J. A. Schmitz. 1,762,798; June 10.
Saw-sharpening machine. W. Cooper and S. H. Mullikin. 1,762,854; June 10.
Saw table. C. E. Palmeter. 1,763,478; June 10.
Scaffold bracket. P. E. Goodwin. 1,762,659; June 10.
Scale, Weighing. T. H. Strachan. 1,762,204; June 10.
Scanning device. W. Scheppmann. 1,763,482; June 10.
Scouring implement. D. J. Mayer. 1,762,182; June 10.
Scraper, Draft-operated. F. V. Hicks. 1,762,334; June 10.
Screen: *See*—
Window screen.
Screen attachment, Auto. G. W. Russell. 1,762,244; June 10.
Screen hanger, Window-. J. D. Dyer. 1,763,348; June 10.
Screen mounting. J. C. Scheeler. 1,763,371; June 10.
Screw driver, Ratchet. D. B. Swain and H. A. Ryther. 1,762,315; June 10.
Screw-threading machine. H. P. Townsend. 1,763,635; June 10.
Seal. N. Dessauer. 1,762,961; June 10.
Sealing compound for pyrotechnic devices. H. Clauser. 1,762,911; June 10.
Seat construction. W. Noelle. 1,762,788; June 10.
Seat construction, Automobile. C. F. Hess. 1,762,623; June 10.
Seat indicator. C. R. Bow. 1,762,384; June 10.
Secret communicating system. R. A. Heising. 1,762,984; June 10.
Selective mechanism. R. Emery. 1,763,425; June 10.
Separator: *See*—
Grain separator.
Separator. H. G. Schwarz. 1,762,593; June 10.
Separator and trap assembly, Combined. R. L. Clark and C. T. Craker. 1,762,385; June 10.
Service clamp. P. Mueller. 1,762,305; June 10.
Sewage-disposal apparatus. M. B. Tark. 1,763,412; June 10.
Sewage-disposal fixture. W. D. Pettis. 1,762,419; June 10.
Sewing machine. A. B. Clayton. 1,762,812; June 10.
Sewing machine, Festoon-. K. Maier. 1,762,479; June 10.
Shackle, Spring. H. G. Trench. 1,763,110; June 10.
Shaft coupling, Universal. W. E. Sykes. 1,763,332; June 10.
Shaping machine for candy canes and the like. J. B. Coffey. 1,762,327; June 10.
Sharpener, Knife. A. O. Samuels. 1,762,698; June 10.
Sharpener, Lawn-mower. F. S. Robson. 1,763,481; June 10.
Shearing mechanism. C. B. Gray. 1,762,392; June 10.
Sheet-feeding apparatus. J. N. Fountain. 1,762,537; June 10.
Sheet-feeding device. C. E. Christophel. 1,763,598; June 10.
Sheet-feeding mechanism, Control device for. J. I. Haase. 1,763,583; June 10.
Sheet material by calenders, Method of and apparatus for saturating. W. G. Dudleston. 1,762,329; June 10.
Sheet material, Method of and apparatus for saturating. L. Kirschbraun. 1,762,336; June 10.
Shelf. G. A. Shields. 1,762,669; June 10.
Shingle-cutting machine, Strip-. H. R. Fiedler and A. Grau. 1,762,330; June 10.
Shingle elements, Producing. A. O. Mickelson and D. A. Cumfer. 1,762,405; June 10.
Shingles, Preparatory process in the manufacture of re-sawn shake. W. S. Smith. 1,763,269; June 10.
Shipment of door handles and the like, Facilitating. B. S. Moore. 1,762,559; June 10.
Shipping case, Ice-cream-. E. M. Robinson. 1,762,527; June 10.
Shirt. J. L. Corbi. 1,762,913; June 10.
Shock absorber for inverted lamps. A. J. Thompson 1,762,285; June 10.
Shock-absorbing mechanism, Friction. J. F. O'Connor 1,762,415; June 10.
Shoe. D. I. Haskell. Des. 81,331; June 10.
Shoe. D. I. Haskell. 1,763,605; June 10.
Shoe. E. B. Ward. 1,763,283; June 10.
Shoe and heel therefor. M. A. Comeau. 1,762,546; June 10.
Shoe attachment. A. L. Sothen. 1,763,543; June 10.
Shoes, Removable top lift for. F. Gentile and F. Maccarone. 1,762,170; June 10.
Shore, Adjustable. H. J. Baker. 1,762,567; June 10.
Shovel: *See*—
Ash shovel.
Shovel, Fire. S. Cleveland, jr. 1,762,912; June 10.
Shredding machine. H. G. Schwarz. 1,762,592; June 10.
Shuttle tension. F. E. Adams. 1,763,547; June 10.
Signal: *See*—
Automobile signal.
Signal clarifier for radio receiving apparatus. W. I. Spangler. 1,763,270; June 10.
Signal lock, Railroad-. X. Latty. 1,763,530; June 10.
Signal for lubricating systems. R. Wedeberg. 1,762,566; June 10.
Signal mechanism for automobiles. W. F. Hild. 1,763,465; June 10.
Signaling conductor and method of signaling, Loaded. J. J. Gilbert. 1,763,041; June 10.
Signaling conductor, Loaded. J. J. Gilbert. 1,763,042; June 10.
Signaling or control system, Electric. R. Willoughby. 1,762,906; June 10.
Signaling system. A. F. Bennett and C. E. Mitchell. 1,762,139; June 10.
Signaling system. H. S. Black. 1,762,953; June 10.
Signaling system. D. M. Dalton. 1,763,581; June 10.
Signaling system. O. Edelmann. 1,763,138; June 10.
Signaling system. R. P. Higbee. 1,763,151; June 10.
Signaling systems, Frequency-adjusting means for high-frequency. C. L. Davis. 1,763,224; June 10.
Signaling systems, Reducing cross talk in carrier-current. H. S. Black. 1,762,755; June 10.
Silk, Degumming. L. Wallerstein. 1,763,112; June 10.
Sinks or the like, Waste fitting for. E. G. Oakley. 1,762,734; June 10.
Siphon, Cream. E. Larson. 1,762,517; June 10.
Siphon device for watering livestock. L. K. Wilson. 1,762,316; June 10.
Skewer for loom shuttles, Cop. F. E. Douglas. 1,763,614; June 10.
Skiving device. G. J. Mead. 1,763,099; June 10.
Slab, Crossing. G. E. Nagel. 1,763,477; June 10.
Sleeve protector. H. H. Fisher. 1,762,549; June 10.
Slip-roll-forming machine. P. R. Hahnemann. 1,763,304; June 10.
Snap or clasp. R. R. O. Ninnermun. 1,762,882; June 10.
Snap switch, Electric. J. H. Nelson. 1,762,787; June 10.
Snowplow attachment. C. Schnell. 1,763,373; June 10.
Soaping device. A. W. Hahn, jr. 1,763,236; June 10.
Socket, Electric-lamp. G. H. Elwell. 1,762,511–12; June 10.
Sound-producing devices. J. M. High, jr. 1,763,056; June 10.
Sound recording. R. C. Mathes. 1,763,169; June 10.
Sound recording and reproducing apparatus, Electrical. C. Huenlich. 1,762,175; June 10.
Sound-recording apparatus. B. J. Chromy. 1,763,220; June 10.
Sound-reproducing machine. L. Shapiro. 1,762,247; June 10.
Sounding device. E. A. Sperry. 1,763,377; June 10.
Space-discharge device, System employing. E. Peterson. 1,762,737; June 10.
Spark plug. R. T. Hurley. 1,762,989; June 10.
Spear. E. Gray. 1,762,621; June 10.
Speed transmission, Variable-. E. K. Standish. 1,762,199; June 10.
Speed wrench. F. A. Hiersch. 1,762,515; June 10.
Spindle drive for spinning frames. J. W. Randall. 1,762,351; June 10.
Spoon hook. J. C. Yates. 1,763,031; June 10.
Spoon, Ice-cream. P. E. Chapman. 1,763,389; June 10.
Spoon or similar article. G. N. Allen and C. A. Bennett. Des. 81,317; June 10.
Spoon or similar article. G. N. Allen and L. V. M. Helander. Des. 81,316; June 10.
Spout sampler. W. C. Wheeler. 1,762,253; June 10.
Spray gun. W. F. Gradolph. 1,762,552; June 10.
Spray gun. E. H. Stephan. 1,762,282; June 10.
Spring: *See*—
Vehicle spring.
Spring. E. G. Goodwin. 1,763,146; June 10.
Spring forming and hardening device. A. D. Bach. 1,763,610; June 10.
Spring machine, Compressed-. A. F. Smith. 1,762,747; June 10.
Spring-plank cushion. R. J. O'Brien. 1,762,886; June 10.
Sprinkler and surfacer for ice rinks, Combined. A. Thorud. 1,762,599; June 10.
Sprinkler with soap-holding attachment. D. P. MacKenzie. 1,762,518; June 10.
Square, Tailor's. R. Cangemi. 1,763,091; June 10.
Stabilizing aldehydes. M. C. Reed. 1,763,326; June 10.
Stacker and loader, Hay. J. M. Wolf. 1,762,459; June 10.
Stake lock. R. Dymock. 1,762,618; June 10.
Stamp-dispensing machine. W. F. Schweiger. 1,762,277; June 10.
Stanchion, Cattle. W. E. Currie and P. de Vries. 1,762,259; June 10.
Stand: *See*—
Display stand. Mouth-organ stand.
Stand or similar article, Lamp. L. Y. Aronson. Des. 81,318; June 10.
Stapling machine. E. E. Frey. 1,763,040; June 10.
Starter, Engine. M. B. Jackson. 1,762,631; June 10.

Starter mechanism. E. R. Wharton. 1,762,434; June 10.
Starting device for internal-combustion engines, Electric. V. G. Apple. 1,763,549; June 10.
Steam boiler. D. H. Shannon. 1,762,246; June 10.
Steam by the burning of fuel in suspension, Generating. W. R. Wood. 1,762,319; June 10.
Steam superheating system. T. Larrey and L. Godard. 1,763,241; June 10.
Steam-table pan. F. P. Lambert. 1,762,635; June 10.
Steaming and drying machine. H. A. Shields. 1,763,193; June 10.
Steel, Stable-surface alloy. R. P. De Vries. 1,763,421; June 10.
Steering gear. G. E. Lemon. 1,763,470; June 10.
Sterilizer. O. W. Randolph. 1,763,538; June 10.
Still, Water. A. Sorensen. 1,762,898; June 10.
Stitching device, Turn-under. C. H. Desautels. 1,762,856; June 10.
Stitching machine. F. L. Manny. 1,762,927; June 10.
Stock-trimming device. P. W. Lehman. 1,762,826; June 10.
Stocking. E. M. Wall. 1,762,601; June 10.
Stocking and making. W. S. Parker. 1,763,367; June 10.
Stool. C. F. Miller. 1,762,275; June 10.
Stop device, Automatic. F. Oberst. 1,762,638; June 10.
Stoppers, Making. J. Broadhurst. 1,763,129; June 10.
Storage and display device for flat tableware articles. G. H. Waldman. 1,763,334; June 10.
Straightedge and reenforcing device. J. Zarba. 1,762,254; June 10.
Strainer and assembling same. R. T. De Voe. 1,763,346; June 10.
Stretcher. S. W. Treat. 1,762,535; June 10.
Stretching nets and the like, Device for. H. E. Verpillier. 1,762,205; June 10.
Strip machine. C. N. Neklutin. 1,762,344; June 10.
Stuffing box, Expanding. W. W. Williams. 1,763,574; June 10.
Submersible machine, Inclosed. V. Gutmann and L. Steiner. 1,763,149; June 10.
Substation apparatus. O. A. Shann. 1,762,745; June 10.
Suit, Bathing. A. J. Barnett. 1,763,212; June 10.
Support, Adjustable lamp-shade. H. C. Noe. 1,762,189; June 10.
Support, Breast. R. R. Woltstem. 1,762,676; June 10.
Support, Coil-spring longitudinal arch. W. Seigle. 1,763,261; June 10.
Support, Coil-spring metatarsal-arch. W. Seigle. 1,763,260; June 10.
Support, Fixture. J. G. Knight. 1,762,995; June 10.
Support, Foot arch and metatarsal. H. J. Crocker. 1,762,161; June 10.
Support for clothes hangers or shade fixtures, Adjustable. C. A. Bunker. 1,763,034; June 10.
Support for reading and writing matter. G. E. Ritchie. Des. 81,340; June 10.
Support, Hat. F. Samuels. Des. 81,851; June 10.
Support, Headstock and gauge. R. J. Brittain, jr., and W. H. Chapman. 1,762,810; June 10.
Support, Lamp. R. Ehrenfeld. 1,763,226; June 10.
Support, Light-signal. E. A. Everett. 1,762,388; June 10.
Support, Pile. A. D. McPherson. 1,762,341; June 10.
Support, Radiator. J. J. Curello. 1,762,328; June 10.
Support, Shade. H. L. R. Jenkins. 1,762,781; June 10.
Support, Shoe. K. Kilburn and T. H. Seely. 1,762,720; June 10.
Support, Tire. H. L. Kneen. 1,762,994; June 10.
Supported meter, Movably-. O. Buys. 1,763,217; June 10.
Suppository and holder therefor, Rectal. C. S. Freedman. 1,762,858; June 10.
Surface-marking roll. R. H. Kelly. 1,762,992; June 10.
Surfacing machine. G. H. Nobbs. 1,763,365; June 10.
Swimming pools in a sanitary condition, Maintaining. R. M. Sutphen and J. F. Booraem. 1,762,314; June 10.
Switch: *See*—
Automobile switch. Light-dimming switch.
Coin-operated switch. Mercury switch.
Connecter switch. Neutralized switch.
Electric switch. Snap switch.
Switch and contact structure therefor, Electric. C. D. Ainsworth. 1,762,604; June 10.
Switch-control apparatus. A. G. Shaver. 1,763,011; June 10.
Switch lock, Self-opening. B. W. Sweet. 1,762,202; June 10.
Swivel electric connecter. H. Rohrdanz. 1,762,422; June 10.
Synchronism, Indicating. W. A. Marrison. 1,762,725; June 10.
Synchronizing rotary devices. A. D. Dowd. 1,762,963; June 10.
Synchronous motor. W. A. Marrison. 1,763,000; June 10.
Syringe. K. Tokita. 1,762,430; June 10.
Syringe, Self-arighting dental. K. G. Moore. 1,762,237; June 10.
Syringe, Urethal. S. Zacsek. 1,763,079; June 10.
Table: *See*—
Convertible table. Feed table.
Examining and irrigating table. Ironing table. Saw table.
Extension table.
Table. C. A. Brantingham. 1,763,341; June 10.
Table lock. F. B. Walter. 1,763,571; June 10.
Table structure. C. F. Anderson and R. W. Janda. 1,762,605; June 10.
Tabulating machine. G. F. Daly and R. E. Page. 1,762,145; June 10.
Tack forming and driving machine. W. B. Mathewson. 1,762,450; June 10.
Tank delivery structure. P. S. Shield. 1,762,533; June 10.
Tanks, Filling attachment for. D. S. Pfahl. 1,762,524; June 10.
Tanning processes, Accelerating and improving. F. Pospiech. 1,763,368; June 10.
Tap changer. W. R. Farley. 1,763,143; June 10.
Tape and making the same. M. C. Dodge. 1,762,917; June 10.
Tape, Hook-and-eye. L. Rocke. 1,763,540; June 10.
Tape marker for rope, Flat paper-. M. C. Dodge. 1,762,918; June 10.
Taximeter. J. Gluck. 1,762,862; June 10.
Tea-ball box and mounting tea balls therein. W. K. Mitchell. 1,762,558; June 10.
Telegraph exchange system, Printing-. G. S. Vernam. 1,762,252; June 10.
Telegraph system, Duplex. J. H. Bell. 1,762,952; June 10.
Telegraph transmitter and regenerator, Combination. W. C. Perry. 1,762,795; June 10.
Telephone attachment. D. Lord. 1,762,998; June 10.
Telephone attachment, Dial-. A. G. Bradford. 1,762,809; June 10.
Telephone-exchange equipment. D. C. Meyer. 1,763,060; June 10.
Telephone-exchange equipment. P. B. Murphy. 1,763,006; June 10.
Telephone instrument. J. Schneider and G. Heckmann. 1,762,641; June 10.
Telephone system. R. E. Collis. 1,762,763; June 10.
Telephone system. J. R. Gould. 1,762,778; June 10.
Telephone system. E. E. Hinrichsen. 1,762,986; June 10.
Telephone system. G. V. King. 1,763,157; June 10.
Telephone system. C. D. Koechling and G. V. King. 1,763,161; June 10.
Telephone system. C. E. Lomax. 1,763,602; June 10.
Telephone system. T. S. Skillman. 1,763,013; June 10.
Telephone system. E. P. G. Wright. 1,762,751; June 10.
Tension-bar mechanism for knitting machines. R. Ulrich. 1,763,280; June 10.
Tension device. L. T. Houghton. 1,762,476; June 10.
Test-tube rack. C. Fowler. 1,763,461; June 10.
Testing machine. E. Eger. 1,762,164; June 10.
Testing machine. R. B. Lewis. 1,763,400; June 10.
Textile fabric. I. De Lancy. Des. 81,325; June 10.
Thermostat. C. H. Morrow. 1,762,188; June 10.
Thermostat, Oven. E. E. Ledbetter. 1,762,179; June 10.
Thermostatic device. H. D. Dorfman. 1,763,137; June 10.
Thermostatic regulator. F. W. Powers. 1,763,180; June 10.
Thirty-six-speed head. D. C. Klausmeyer and H. M. Norris. 1,763,158; June 10.
Thread protector. P. J. Shrum. 1,762,248; June 10.
Thread-swelling machine. C. F. Roberts. 1,762,562; June 10.
Threading-die-operating attachment. W. J. Hogg. 1,762,988; June 10.
Ticket-canceling machine. G. Klein and P. Massot. 1,762,301; June 10.
Tide or wave motor. P. M. Sealy and J. Carroll. 1,763,191; June 10.
Tie: *See*—
Railroad tie.
Tie, making the same, and material used in the manufacture thereof, Four-in-hand. S. L. Samter. 1,762,591; June 10.
Tile-mounting machine, Ceramic-. L. N. Yinger. 1,763,494; June 10.
Time-control mechanism. W. P. Frisch. 1,763,230; June 10.
Timing device, Electric. E. E. Charlton. 1,762,811; June 10.
Timing means, Air starter. J. M. Winton. 1,762,206; June 10.
Tip for gas-burning apparatus. A. J. and I. F. Fausek. 1,762,166; June 10.
Tire-bead reenforcement. R. C. Pierce. 1,763,179; June 10.
Tire-building machine. P. W. Lehman. 1,762,824–5; June 10.
Tire-building machine. J. Vrbanac. 1,762,850; June 10.
Tire-casing expander. G. W. Hebbeler. 1,762,227; June 10.
Tire casings, Building. H. L. Smith. 1,762,839; June 10.
Tire casings, Manufacture of pneumatic-. G. L. Mather. 1,762,830; June 10.
Tire casings, Manufacture of pneumatic. G. F. Wikle. 1,762,849; June 10.
Tire-forming machine. R. S. Kirk. 1,763,589; June 10.
Tire-lining apparatus. H. M. Brown. 1,763,611; June 10.
Tires, Making. C. M. Manly. 1,762,723; June 10.
Tire, Pneumatic. H. B. Whitlark. 1,762,905; June 10.
Tire remover and carrier. E. Freivogel. 1,762,168; June 10.
Tires, Method of and apparatus for manufacturing pneumatic. A. O. Abbott, jr. 1,762,752; June 10.
Toaster, Electric. F. Kuhn and L. H. Thomas. 1,762,176; June 10.
Tobacco pipe. S. Gunnlaugsson. 1,763,514; June 10.

Tobacco pipe. B. M. Markstein. 1,762,636; June 10.
Tobacco pipe. E. C. Sasser. 1,763,185; June 10.
Tool, Bushing-removing. P. C. Stephenson. 1,763,331; June 10.
Tool chest, Barber's. F. E. Titcomb. 1,763,488; June 10.
Tool for cleaning commutators. J. Mulder. 1,763,561; June 10.
Tool, Mortising. L. Ubrin. 1,762,457; June 10.
Tool, Valve-reseating. M. B. Skinner. 1,763,330; June 10.
Tortilla-forming machine. L. Romero. 1,763,445; June 10.
Toy. M. O. Fixen. 1,762,620; June 10.
Toy. J. V. Giesler. Des. 81,328; June 10.
Toy balloon. A. P. Witten. 1,762,603; June 10.
Toy building construction. A. C. Gilbert. 1,763,300; June 10.
Toy climbing tractor. L. T. Savage. Des. 81,352; June 10.
Toy, Construction. A. C. Gilbert. 1,763,302; June 10.
Toy, Dancing. B. P. Merwin. 1,763,004; June 10.
Toy, Mechanical. E. D. Fox. 1,762,574; June 10.
Toy palpitating heart. H. H. D. Klinker. 1,763,467; June 10.
Toy seesaw. L. J. Rousseau. Des. 81,350; June 10.
Toy vehicle, Elastic-propelled sound-emitting. M. Alland. 1,762,461; June 10.
Traction control for combined harvesters. F. E. Sharp. 1,763,265; June 10.
Tractor hitch. T. Drabek. 1,762,919; June 10.
Trailer, Heavy-duty. D. H. Davis. 1,762,915; June 10.
Transformer. L. H. Hill. 1,763,152; June 10.
Transformer, Tuned. C. J. Fitch. 1,762,221; June 10.
Transformers, Tap changer for electric. W. A. Coates and J. Fowler. 1,763,133; June 10.
Transmission appliance, Belt-driven power-. J. S. Wearn. Re17,698; June 10.
Transmission mechanism, Hydraulic. W. E. Parker. 1,763,565; June 10.
Transmission of sound from gramophone records, Apparatus for the electrical. L. H. Pearson. 1,762,834; June 10.
Transmission system. A. C. Dickieson. 1,762,768; June 10.
Transmission system. C. L. Goodrum. 1,762,777; June 10.
Transmission system. F. J. Singer. 1,762,278–9; June 10.
Transmission system, Hydraulic. A. G. Ronning. 1,762,590; June 10.
Transmitter, Arc-lamp lens-disk. C. F. Jenkins. 1,763,357; June 10.
Trap: *See*—
Absorption trap. Blowfly trap.
Animal trap. Fish trap.
Trap for refrigerating systems, Liquid. A. C. Schickler. 1,762,197; June 10.
Tri halogen benzene sulphochloride and preparing the same. R. Herz, E. Runne, and E. Albrecht. 1,763,556; June 10.
Trimmer: *See*—
Hedge trimmer.
Trimming device for tire-building machines. E. G. Templeton. 1,763,568; June 10.
Trolley wheel. W. F. Graham. 1,763,303; June 10.
Trowel, Plasterer's. J. Rooney. 1,763,066; June 10.
Truck. J. A. Schoenberg and H. A. Sandholm. 1,763,542; June 10.
Truck body. V. W. Coddington. 1,763,342; June 10.
Truck, Car. E. Latshaw. 1,763,434; June 10.
Truck, Elevating hand. R. Nuttall. 1,763,535; June 10.
Truck, Railway. C. J. W. Clasen. 1,763,221–2; June 10.
Trunking system. F. S. Entz. 1,763,036; June 10.
Truss. J. L. McKeown. 1,762,786; June 10.
Tube: *See*—
Mail and parcel tube. Vacuum tube.
Tube bender. C. N. Matthews. 1,762,234; June 10.
Tube for inflatable bodies, Filling. S. Saul. 1,762,893; June 10.
Tube-rotating apparatus. R. C. Stiefel. 1,762,427; June 10.
Tube temperature and loss indicating device. L. A. Gebhard. 1,762,859; June 10.
Tubes, Making rubber. C. E. Snyder. 1,763,106; June 10.
Tubular device, Electrical. G. S. Faber. 1,762,220; June 10.
Tucking attachment for knitting machines. A. E. Page. 1,763,439; June 10.
Turbine. H. J. Hanzlik. 1,762,332; June 10.
Turbine and condenser, Combined. F. Hodgkinson. 1,763,237; June 10.
Turbine blade. J. L. Ray. 1,762,352; June 10.
Turbine blade. H. F. Schmidt. 1,762,361; June 10.
Turning and boring mill. E. A. Muller. 1,762,561; June 10.
Tuyère. A. H. Fosdick. 1,762,814; June 10.
Twine holder for grain binders. L. A. Paradise. 1,762,583; June 10.
Twist drill. G. L. Peakes. 1,762,736; June 10.
Two-post three-shaft draw works. E. W. Goeser. 1,763,511; June 10.
2-substituted-1-methyl-phenyl-3-mercaptans. E. Hoffa and H. Heyna. 1,762,270; June 10.
2,3-benzocarbazole-1,4-quinones and preparing the same. H. T. Bucherer. 1,763,216; June 10.
Typewriting machine. F. U. Conard. 1,763,344; June 10.
Typewriting machine. W. F. Helmond. 1,762,173; June 10.
Typewriting machine. C. E. Norin. 1,762,845; June 10.
Typewriting machine. C. E. Norin. 1,762,733; June 10.
Typewriting machine. J. C. M. Schneider. 1,763,372; June 10.
Typographical casting machine. J. R. Rogers. 1,762,890; June 10.
Typographical distributing machine. R. M. Grove. 1,762,863; June 10.
Typographical distributing machine. J. R. Rogers. 1,762,889; June 10.
Umbrella handle. R. A. Kratochwill. 1,762,869; June 10.
Underground cable system, High-voltage. D. C. Ober. 1,762,191; June 10.
Unhairing agent. A. C. Orthmann. 1,763,319; June 10.
Universal joint. J. F. Woveria. 1,763,206; June 10.
Unloading device for vehicles, Automatic. N. C. Pickard. 1,762,240; June 10.
Upholstery, Seat. A. F. Masury. 1,763,001; June 10.
Upholstery-spring-attaching device. S. L. Warren. 1,763,077; June 10.
Urn or percolator, Electric tea. J. A. McBride. 1,762,303; June 10.
Vacuum cleaner. J. Hutchinson. 1,763,397; June 10.
Vacuum cleaning machine. P. Breton. 1,762,142; June 10.
Vacuum system of oil conversion. A. E. Harnesberger. 1,763,604; June 10.
Vacuum-tube-lamp envelopes of special design, Producing. R. C. Smalley. 1,763,071; June 10.
Vacuum tube, Thermionic. C. W. Carter, jr. 1,762,212; June 10.
Valve. J. J. Frank. 1,762,266; June 10.
Valve. P. J. Hoffman. 1,762,818; June 10.
Valve. L. P. Strong. 1,763,486; June 10.
Valve, Air. O. A. Amos. 1,762,148; June 10.
Valve, Air. W. J. Rudolph. 1,762,487; June 10.
Valve, Air. J. F. Schylander. 1,762,488; June 10.
Valve apparatus. G. F. Beach. 1,763,385; June 10.
Valve control, Thermostatic. C. H. Morrow. 1,762,187; June 10.
Valve, Flushing. B. B. Thomas and G. O. Forsberg. 1,763,188; June 10.
Valve for acid tanks. M. C. Nelson. 1,763,593; June 10.
Valve for cellar drains. C. Noe and H. Kreiss. 1,762,190; June 10.
Valve for homogenizing devices. J. M. McClatchie. 1,763,313; June 10.
Valve, Fuel-injection. A. Craigon. 1,762,611; June 10.
Valve, Fuel-saving. V. Parkins. 1,762,308; June 10.
Valve, Gate. W. G. Wilson. 1,763,029; June 10.
Valve mechanism for internal-combustion engines. J. F. Fisk. 1,763,460; June 10.
Valve or control mechanism for machines for filling materials into containers. C. Taylor. 1,763,487; June 10.
Valve, Organ. W. H. Reisner. 1,763,182; June 10.
Valve-pad press. C. E. Maynard. 1,762,832; June 10.
Valve, Poppet. R. E. Bissell. 1,763,340; June 10.
Valve, Self-closing. W. A. Buckner. 1,762,503; June 10.
Valve, Tube-deflating. L. G. Krusell. 1,762,823; June 10.
Valve unit, Thermostatically-controlled. J. V. Giesler. Re17,696; June 10.
Valves of valve bags, Closing the. J. C. Redington. 1,762,697; June 10.
Vanity case. P. Dwan. 1,762,767; June 10.
Vaporizing device. D. E. Fowler. 1,763,508; June 10.
Vase. H. J. Verwayen. Des. 81,357; June 10.
Vehicle. M. E. Roe. 1,763,183; June 10.
Vehicle body, Motor-. R. S. Sanford. 1,762,640; June 10.
Vehicle brake. W. S. Stockton. 1,762,842; June 10.
Vehicle construction. A. W. Brohman. 1,763,088; June 10.
Vehicle spring. S. S. Shears. 1,763,192; June 10.
Velocipede. I. Nettles. 1,763,250; June 10.
Vending machine, Coin-controlled. H. Giles. 1,763,352; June 10.
Vending machine, Portable. R. E. Heath. 1,763,044; June 10.
Ventilating apparatus. M. A. Vining. 1,763,282; June 10.
Vibrator. G. B. Pickop. 1,762,416; June 10.
Vise. G. Agobian. 1,763,634; June 10.
Volume-control system. J. C. Burkholder, jr. 1,762,759; June 10.
Volume-control system. R. C. Mathes. 1,762,727; June 10.
Vulcanization of rubber. D. H. Powers. 1,763,325; June 10.
Vulcanizing caoutchouc and the product derived therefrom. L. B. Sebrell. 1,763,619; June 10.
Wagons, Discharging means for open railway. G. Willimek and W. Skarbek-Kozietulski. 1,763,454; June 10.
Wall board, Hanging. H. R. Shanks. 1,763,263; June 10.
Wall board, Suspending. H. R. Shanks. 1,763,264; June 10.
Wall, Retaining. A. Munster. 1,762,343; June 10.
Wall structure for furnaces, Replaceable. D. E. Sullivan. 1,763,606; June 10.
Washer: *See*—
Nut-locking washer.
Washing apparatus, Automobile. D. D. Heimburger. 1,763,046; June 10.
Washing machines, Windmill power for. H. J. Koenen. 1,763,529; June 10.
Water boiler, Hot-. T. W. Dahlquist. 1,762,215; June 10.

Water-closet combination. B. O. Tilden. 1,763,277; June 10.
Water, Device for cooling. B. H. Coffey. 1,762,762; June 10.
Water heater. R. E. Newell. 1,762,522; June 10.
Water-level-controlling device. J. T. Worthington. 1,762,538; June 10.
Water, Treatment of boiler. H. Kriegsheim. 1,762,784; June 10.
Water-tube boiler, Locomotive. G. H. Emerson. 1,763,140; June 10.
Wave analysis. A. S. Curtis. 1,762,160; June 10.
Wave producer for swimming tanks. W. Woltz. 1,763,491; June 10.
Weather strip. J. P. Glaser and L. F. Julien. 1,762,514; June 10.
Weather strip, Windshield. D. A. Donahue. 1,763,603; June 10.
Wedding ring. J. Granat. Des. 81,329; June 10.
Wedge. G. Gray. 1,762,622; June 10.
Weft-inserting mechanism. F. E. Ashton. 1,762,377; June 10.
Welding device. W. F. Mecum. 1,762,402; June 10.
Welding rod. W. B. Miller. 1,762,482; June 10.
Welding rod. S. M. Norwood. 1,762,483; June 10.
Welting. W. J. Fallon, jr. 1,762,967; June 10.
Wheel: *See*—
Trolley wheel.
Wheel. A. N. Wilcox. 1,763,413; June 10.
Wheel assembly. R. S. Burdette. 1,763,576; June 10.
Wheel chock. W. L. Lightford. 1,762,997; June 10.
Wheel for vehicles. A. Gauthier. 1,763,580; June 10.
Wheel rake, Hand operated. F. M. Mehl. 1,763,473; June 10.
Wheel with piston-springs tire, Combination. C. Colagiuri. 1,763,599; June 10.
Whey products, Making. N. L. Simmons. 1,763,633; June 10.
Winding machine, Package-. J. O. McKean. 1,763,246; June 10.
Window. E. W. Abrahamson. 1,762,460; June 10.
Window guard. K. O. and L. M. Schauman. 1,762,424; June 10.
Window screen, Adjustable. M. E. Noyes. 1,762,884; June 10.
Window structure. W. J. Klemm. 1,762,993; June 10.
Windows, Head construction for automobile. H. M. Hood. 1,763,522; June 10.
Wiper and ice remover, Combined windshield. W. J. Hobbins. 1,763,153; June 10.
Wire-end-splicing device and connecting guard. E. T. Franzen. 1,763,298; June 10.
Wire or the like, Handling of coils of. M. Morgan. 1,762,304; June 10.
Wire-stitcher head. I. R. Metcalf, G. L. Richardson and J. Wolf. 1,762,235; June 10.
Wood, Seasoning. F. S. Shinn. 1,763,070; June 10.
Woodworking machine. V. T. Aubertin. 1,763,497; June 10.
Woods, Solvent extraction of. A. D. Little. 1,762,785; June 10.
Wrench: *See*—
Pipe wrench.
Speed wrench.
Wrench. W. A. Bernard. 1,762,324; June 10.
Wrench. W. M. Heller. 1,763,353; June 10.
Wringers, Safety disengaging mechanism for. W. C. F. Dietz. 1,762,916; June 10.
Zinc dust and apparatus therefor, Preparing. H. A. Grine. 1,762,716; June 10.

CLASSIFICATION OF PATENTS

ISSUED JUNE 10, 1930

NOTE—First number—class, second number—subclass, third number—patent number.

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141: 1,762,605
158: 1,762,530

U. S. GOVERNMENT PRINTING OFFICE: 1930

ALPHABETICAL LIST OF REGISTRANTS OF TRADE-MARKS

Acheson Graphite Corporation. (See International Acheson Graphite Company, assignor.)
Adelson, Joseph, & Sons, New York, N. Y. Ladies' underwear of silk, rayon, and a mixture of rayon and silk. 271,826; June 17; Serial No. 295,064; published Mar. 25, 1930. Class 39.
Aktiebolaget Elektrolux, Stockholm, Sweden. Filters and parts therefor. 271,924; June 17; Serial No. 285,489; published Apr. 1, 1930. Class 31.
Alberene Stone Company, New York, N. Y. Laundry trays and kitchen sinks. 271,659; June 17; Serial No. 293,612; published Apr. 1, 1930. Class 13.
Allen & Wheeler Co., The, Troy, Ohio. Wheat flour. 79,544; renewed Sept. 20, 1930.
American Braiding Company, Holyoke, Mass. Electric-current-conducting cords and connectors therefor. 271,912; June 17; Serial No. 276,444; published Mar 12, 1929. Class 21.
American Nut Company, Indianapolis, Ind. Edible nuts. 271,802; June 17; Serial No. 294,050; published Apr. 8, 1930. Class 46.
American Steel and Wire Company of New Jersey, The, Cleveland, Ohio; Chicago, Ill.; Pittsburgh, Pa.; New York, N. Y.; Worcester, Mass., and Hoboken, N. J. Wire fencing, and particularly straight-line poultry netting. 271,814; June 17; Serial No. 295,599; published Apr. 1, 1930. Class 13.
Anchor Box & Lumber Company, Millvale, Pa. Wooden boxes, steel products, batteries, etc. 271,838; June 17; Serial No. 283,024; published Dec. 3, 1929. Class 2.
Anderson, D., & Son, Limited, Belfast, Ireland, and Manchester, England. Roofing, sarking, sheathing, and lining felts. 79,097; renewed Aug. 9, 1930.
Animal Trap Company of America. (See Oneida Community, Limited, assignor.)
Antrim, C. W., & Sons, Richmond, Va. Coffee. 79,806; renewed Oct. 11, 1930.
Aquino, Giovanni, to John Aquino, Inc., New York, N. Y., successor. White wine. 78,481; renewed June 21, 1930.
Armstrong, A. J., Co. Inc., New York, N. Y. Ladies', misses', and children's knit underwear. 271,906; June 17; Serial No. 268,766; published Nov. 26, 1929. Class 39.
Armstrong, Mildred A., Glendale, Calif. Salves and ointments. 271,780; June 17; Serial No. 291,077; published Jan. 7, 1930. Class 6.
Augstein, S., & Co., New York, N. Y. Sweaters for children. 271,825; June 17; Serial No. 295,112; published Mar. 25, 1930. Class 39.
Avenarius, R. & Co., Stuttgart, Germany. Chemical preparations. 271,868; June 17; Serial No. 295,203; published Mar. 18, 1930. Class 6.
Babbitt, B. T., Inc., New York, N. Y. Lye. 271,668; June 17; Serial No. 294,563; published Mar. 25, 1930. Class 6.
Babbitt, B. T., Inc., New York, N. Y. Lye. 271,669; June 17; Serial No. 294,567; published Mar. 25, 1930. Class 6.
Babbitt, B. T., Inc., New York, N. Y. Lye. 271,670; June 17; Serial No. 294,571; published Mar. 25, 1930. Class 6.
Baby Health Products, Inc., Brooklyn, N. Y. Talcum powder for babies. 271,925; June 17; Serial No. 285,617; published Apr. 1, 1930. Class 6.
Bailey, Aubrey G., Norfolk, Va. Fresh oysters. 79,714; renewed Oct. 4, 1930.
Baldauf Drug Company, Milwaukee, Wis. Compound to be used in the treatment of chapped hands, face, and lips; talcum powder, etc. 271,792; June 17; Serial No. 295,723; published Apr. 8, 1930. Class 6.
Baldwin Company, The, Cincinnati, Ohio. Radio receiving sets and loud-speakers, transformers, tube sockets, etc. 271,846; June 17; Serial No. 278,923; published Apr. 1, 1930. Class 21.
Baldwin Tool Works, Parkersburg, W. Va. Shovels, spades, ditching forks, etc. 271,727-8; June 17; Serial Nos. 295,826-7; published Apr. 8, 1930. Class 23.
Bay View Creamery. (See Suchman & McRoberts, Inc.)
Beacon Fisheries Company, Boston, Mass. Fresh fish and fillets. 271,932; June 17; Serial No. 287,520; published Apr. 8, 1930. Class 46.
Beich, Paul F., Company, Bloomington and Chicago, Ill. All kinds of candy. 79,547; renewed Sept. 20, 1930.
Bigelow Carpet Company, Clinton, Lowell, and Boston, Mass., assignor to Bigelow-Sanford Carpet Co., Inc., New York, N. Y. Rugs. 78,301–2; renewed June 7, 1930.
Bigelow Carpet Company, Clinton, Lowell, and Boston, Mass., assignor to Bigelow-Sanford Carpet Co., Inc., New York, N. Y. Carpets. 78,303; renewed June 7, 1930.
Bigelow Carpet Company, Clinton, Lowell, and Boston, Mass., assignor to Bigelow-Sanford Carpet Co., Inc., New York, N. Y. Rugs. 78,488; renewed June 21, 1930.
Bird Machine Company, South Walpole, Mass. Pulp and paper-making machinery. 271,704; June 17; Serial No. 295,291; published Apr. 8, 1930. Class 23.
Birk, Walter, Candy Company. (See Central Candy Company.)
Blosser Company, The, Atlanta, Ga. Medicinal smoking preparations. 271,699; June 17; Serial No. 294,203; published Mar. 18, 1930. Class 6.
Boe Manufacturing Company, Minneapolis, Minn. Oil-dispensing devices. 271,707–8; June 17; Serial Nos. 295,249–50; published Apr. 8, 1930. Class 23.
Bohn, Harry, doing business as The Coffield Washer Company, Dayton, Ohio. Clothes-washing machines and clothes wringers. 271,658; June 17; Serial No. 293,867; published Apr. 1, 1930. Class 24.
Bokoshe Smokeless Coal Co., Bokoshe, Okla. Coal. 271,917; June 17; Serial No. 272,126; published Apr. 1, 1930. Class 1.
Bond Pickle Company, Oconto, Wis. Canned sauerkraut. 271,681; June 17; Serial No. 295,830; published Apr. 1, 1930. Class 46.
Bowen Flour Mills Company, The, Independence, Kans. Wheat flour. 271,651; June 17; Serial No. 283,979; published June 25, 1929. Class 46.
Bragno and Mustari, Chicago, Ill. Olive oil. 78,813; renewed Oct. 11, 1930.
Brentano's, Inc., New York, N. Y. Books. 79,553; renewed Sept. 20, 1930.
Brown & Haley, Tacoma, Wash. Candy. 271,749; June 17; Serial No. 296,577; published Apr. 8, 1930. Class 46.
Bullock's, Inc., Los Angeles, Calif. Women's and children's hosiery. 271,832; June 17; Serial No. 294,338; published Mar. 25, 1930. Class 39.
Burton, Malcome L., Inman, S. C. Electric churns. 271,768; June 17; Serial No. 291,113; published Mar. 25, 1930. Class 21.
Cadet Hosiery Company, Inc. (See Oneida Hosiery Company, assignor.)
Campbell, Doris E., doing business as Campbell X-Ray Company, Boston, Mass. X-ray apparatus. 271,628; June 17; Serial No. 295,772; published Apr. 1, 1930. Class 44.
Carroll, Chas. C., Jacksonville, Fla. Medicinal preparation. 271,858; June 17; Serial No. 290,451; published Mar. 18, 1930. Class 6.
Causa y Ramirez, Angeles, Habana, Cuba. Medicinal preparation. 271,871; June 17; Serial No. 295,328; published Mar. 18, 1930. Class 6.
Central Candy Company, to Walter Birk Candy Company, Chicago, Ill., successor. Candies. 79,719; renewed Oct. 4, 1930.
Central Farm Products Company, Waco, Tex. Dairy-cow feed, sweet feed, beef fattener, etc. 271,748; June 17; Serial No. 293,406; published Apr. 1, 1930. Class 46.
Champion Coated Paper Company, The, Hamilton, Ohio. Mineral-coated paper. 271,664; June 17; Serial No. 296,262; published Apr. 1, 1930. Class 37.
Champion Coated Paper Company, The, Hamilton, Ohio. Mineral-coated paper. 271,736; June 17; Serial No. 294,710; published Mar. 25, 1930. Class 37.
Champion Coated Paper Company, The, Hamilton, Ohio. Paper. 271,754–5; June 17; Serial Nos. 294,708–9; published Mar. 25, 1930. Class 37.
Champion Coated Paper Company, The, Hamilton, Ohio. Mineral-coated paper. 271,756–7; June 17; Serial Nos. 294,705–6; published Mar. 25, 1930. Class 37.
Charred Bag Company, Salisbury, N. C. Liquid-purifying device. 271,770; June 17; Serial No. 292,976; published Apr. 1, 1930. Class 50.
Chex Chemical Company. (See Shavelson, Abraham N.)
Citti, Giuseppe, Chicago, Ill. Olive oil. 271,689; June 17; Serial No. 295,254; published Apr. 1, 1930. Class 46.
Coffield Washer Company, The. (See Bohn, Harry.)
Columbia Phonograph Company, Inc., Bridgeport, Conn. Phonograph records. 271,766; June 17; Serial No. 291,204; published Apr. 1, 1930. Class 36.
Columbus Coated Fabrics Corporation, Columbus, Ohio. Pyroxylin-coated fabrics. 271,639; June 17; Serial No. 294,915; published Apr. 8, 1930. Class 50.
Continental Scale Works, Chicago, Ill. Therapeutic lamps and attachments. 271,913; June 17; Serial No. 276,408; published Apr. 23, 1929. Class 44.
Couture, E. A., Modesto, Calif. Fresh grapes. 271,909; June 17; Serial No. 266,790; published Apr. 8, 1930. Class 46.
Crescent Chemical Corporation, Philadelphia, Pa. Laundry sours. 271,851; June 17; Serial No. 277,104; published Mar. 5, 1929. Class 6.
Crescent Chemical Corporation, Philadelphia, Pa. Laundry sours. 271,852; June 17; Serial No. 277,103; published Feb. 19, 1929. Class 6.
Curelljo G. m. b. H., Wernigerode, near the Harz, Germany. Preparations for the hair. 271,674; June 17; Serial No. 293,822; published Mar. 18, 1930. Class 6.
Cutino Company, The, Kansas City, Mo. Dentifrice. 271,862; June 17; Serial No. 289,391; published Dec. 17, 1929. Class 6.
Daily Graphic, Inc., New York, N. Y. Series of cartoons or comic strips. 271,769; June 17; Serial No. 292,985; published Mar. 25, 1930. Class 38.

Dainty Tiny Togs, Inc., New York, N. Y. Baby boys' suits. 271,892; June 17; Serial No. 295,926; published Apr. 1, 1930. Class 39.

Dampney, J., & Co. Ld., Cardiff, to J. Dampney & Co. Limited, Newcastle-on-Tyne, England. Compound in the nature of a paint. 78,944; renewed July 26, 1930.

D'Arrigo Bros. Co., Boston, Mass., and San Jose, Calif. Fresh broccoli, fresh prickly pears, and fresh tomatoes. 271,918; June 17; Serial No. 271,535; published Apr. 8, 1930. Class 46.

Day, Allan C., doing business as A. C. Day Laboratories, South Orange, N. J. Liniment. 271,872; June 17; Serial No. 295,332; published Apr. 1, 1930. Class 6.

Dean, Clyde, doing business as Dean Ink Company, Chicago, Ill. Writing ink. 271,629; June 17; Serial No. 295,507; published Apr. 8, 1930. Class 11.

Decatur Pump Company, Decatur, Ill. Pumps and pumping units. 271,725–6; June 17; Serial Nos. 295,929–30; published Apr. 8, 1930. Class 23.

De Cue's Laboratories. (See Dornbusch, Edward C.)

Dell Publishing Company, New York, N. Y. Bimonthly publication. 271,741; June 17; Serial No. 295,508; published Mar. 25, 1930. Class 38.

Dell Publishing Company, New York, N. Y. Cartoons. 271,857; June 17; Serial No. 290,497; published Nov. 12, 1929. Class 38.

Deming & Gould Co., Chicago, Ill., and South Bellingham, Wash. Canned salmon. 271,907; June 17; Serial No. 267,645; published Apr. 1, 1930. Class 46.

Dempster Mill Manufacturing Company, Beatrice, Nebr. Cup leathers for pumps. 271,729; June 17; Serial No. 295,562; published Apr. 8, 1930. Class 35.

De Musset, Inc., New York, N. Y. Perfumes, face powders, and creams, rouge, etc. 271,865; June 17; Serial No. 295,118; published Mar. 18, 1930. Class 6.

De Musset, Inc., New York, N. Y. Perfumes, face powders, toilet waters, etc. 271,866; June 17; Serial No. 295,119; published Mar. 25, 1930. Class 6.

Design Mfg. Co. Inc., Rochester, N. Y. Optical frames. 271,706; June 17; Serial No. 295,255; published Apr. 8, 1930. Class 26.

Detmer, Bruner & Mason, Inc., New York, N. Y. Woolen and worsted fabrics in the piece. 271,891; June 17; Serial No. 295,932; published Apr. 1, 1930. Class 42.

Deutschmann, Tobe C., doing business as Tobe Deutschmann Company, Cambridge, Mass. Accessory unit for electrical apparatus. 271,849; June 17; Serial No. 277,617; published Apr. 1, 1930. Class 21.

Deutschmann, Tobe, Company, Canton, Mass., assignor to Tobe Deutschmann Company. Combination of condensers and inductances forming filter units. 271,920; June 17; Serial No. 269,374; published Apr. 1, 1930. Class 21.

Dewey & Almy Chemical Company, North Cambridge, Mass. Porous rubber sheets for use as filtering media. 271,618; June 17; Serial No. 294,063; published Apr. 1, 1930. Class 31.

Dick, A. B., Company, Chicago, Ill. Stencil paper. 271,654; June 17; Serial No. 295,559; published Apr. 1, 1930. Class 37.

Dickinson & Co., Eureka, assignor, by mesne assignments, to Dickinson & Co., Chicago, Ill. Canned vegetables. 79,902–3; renewed Oct. 18, 1930.

Dolly Dress Co., Inc., Derby, Conn. Dresses. 271,896; June 17; Serial No. 295,786; published Apr. 1, 1930. Class 39.

Dominican Sugar Refining Company, C. por A., Ingenio Boca Chica, Dominican Republic. Sugar. 271,904; June 17; Serial No. 257,535; published Apr. 1, 1930. Class 46.

Dornbusch, Edward C., doing business as De Cue's Laboratories, Cleveland, Ohio. Ointment. 271,673; June 17; Serial No. 294,343; published Mar. 25, 1930. Class 6.

Drug Products Co., Inc., The, Long Island City, N. Y. Biliary stimulant. 271,877; June 17; Serial No. 295,936; published Mar. 25, 1930. Class 6.

Du Pont, E. I., de Nemours and Company, Wilmington, Del. Trade publication of magazine. 271,897; June 17; Serial No. 295,777; published Apr. 1, 1930. Class 38.

Eclipse Fountain Pen and Pencil Co. Inc., New York, N. Y. Fountain pens and pencils. 271,663; June 17; Serial No. 296,267; published Apr. 1, 1930. Class 37.

Edwards Manufacturing Company, The, Cincinnati, Ohio. Tops. 271,943; June 17; Serial No. 288,469; published Apr. 1, 1930. Class 22.

Elam Mills, Inc., Chicago, Ill. Breakfast cereal. 271,662; June 17; Serial No. 296,328; published Apr. 1, 1930. Class 46.

Electric Storage Battery Company, The, Philadelphia, Pa. Storage batteries. 271,808; June 17; Serial No. 295,367; published Apr. 1, 1930. Class 21.

Electrodaire Company, Detroit, Mich. Storage-type automatic electrical water heaters. 271,821; June 17; Serial No. 294,916; published Mar. 25, 1930. Class 21.

Electrotrim, Inc., Union City, Ind. Conduits for electric wires and fittings for the same. 271,806; June 17; Serial No. 295,212; published Mar. 25, 1930. Class 21.

Ely & Walker Dry Goods Company, St. Louis, Mo. Luggage. 271,621; June 17; Serial No. 293,033; published Apr. 1, 1930. Class 3.

Elz, Lorenz P., doing business as Norine Co., St. Louis, Mo. Medicinal preparation. 271,785; June 17; Serial No. 296,222; published Apr. 1, 1930. Class 6.

Emery, Elmer O., doing business as Sally Lynn Kitchen, Washington, D. C. Cakes and pies. 271,619; June 17; Serial No. 293,619; published Mar. 25, 1930. Class 46.

Ethyl Gasoline Corporation, New York, N. Y. Chemical carbon remover. 271,784; June 17; Serial No. 296,410; published Apr. 1, 1930. Class 6.

Etna Watch Company, New York, N. Y. Time recorders, clocks, and watches. 271,622; June 17; Serial No. 296,413; published Apr. 8, 1930. Class 27.

Everwine, Chas. L., Newark, N. J. Chemical preparation. 271,878; June 17; Serial No. 295,941; published Mar. 25, 1930. Class 6.

Every Day Products Supply Co., The. (See Synvita Medicine Co., The.)

Excelsior Supply Company. (See Mulherin, William F.)

Exhibit Supply Co. (See Meyer, J. Frank.)

Farmers' Stone-Picking Machine Company, The, Baltimore, Md. Stone-picking machines. 271,723; June 17; Serial No. 296,223; published Apr. 8, 1930. Class 23.

Fashionlane Jewelry Co. (See Wrazlowsky, Arno.)

Federal Phosphorus Company, Birmingham, Ala. Chlorinated aromatic hydrocarbons and their derivatives. 271,947; June 17; Serial No. 289,015; published Mar. 25, 1930. Class 6.

Feinstein, Louis, doing business as Scientific Research Laboratories, Los Angeles, Calif. Digestive tonic. 271,948; June 17; Serial No. 289,068; published Apr. 8, 1930. Class 6.

Feldman, Nathan, doing business as Felko Supply Co., New Brunswick, N. J. Canned malt syrup. 271,677; June 17; Serial No. 296,007; published Apr. 1, 1930. Class 46.

Felko Supply Co. (See Feldman, Nathan.)

Field, Edwin, & Sons, Limited, Skelmanthorpe, near Huddersfield, England. Floor rugs and mats. 271,842; June 17; Serial No. 280,329; published Apr. 1, 1930. Class 42.

Fiak & Easter Company, The, Baltimore, Md. Umbrellas and parasols. 271,895; June 17; Serial No. 295,789; published Apr. 1, 1930. Class 41.

First National Stores Inc., Boston and Somerville, Mass. Toilet and wax paper. 271,666; June 17; Serial No. 295,666; published Apr. 1, 1930. Class 37.

First National Stores Inc., Boston and Somerville, Mass. Baking soda, starch, borax, etc. 271,793; June 17; Serial No. 295,669; published Apr. 8, 1930. Class 6.

First National Stores Inc., Boston and Somerville, Mass. Mops, brooms, and scrub brushes. 271,817; June 17; Serial No. 295,668; published Apr. 1, 1930. Class 29.

Firth-Sterling Steel Company, McKeesport, Pa. Steel bars, forgings, and blocks, etc. 271,644; June 17; Serial No. 293,921; published Apr. 8, 1930. Class 14.

Fitzgerald Manufacturing Company, The, Torrington, Conn. Electric heating pads. 271,632–3; June 17; Serial Nos. 295,213–14; published Apr. 1, 1930. Class 44.

Forsell, John E., doing business as Old Trusty Co., Clay Center, Nebr. Radio and automobile batteries and radiotubes. 271,650; June 17; Serial No. 284,262; published Sept. 3, 1929. Class 21.

Forsinger, J. W., Co., Chicago, Ill. Diamonds and diamond rings. 271,710; June 17; Serial No. 294,666; published Apr. 1, 1930. Class 28.

Fried, Krupp, Aktiengesellschaft, Grusonwerk, to Fried. Krupp Grusonwerk Aktiengesellschaft, Magdeburg-Buckau, Germany, successor. Certain machinery. 77,229; renewed Mar. 22, 1930.

Friedrichs, Wilhelm, Reinickendorf-Ost, near Berlin, Germany. Postal franking machines, parcel-post-stamping machines, etc. 271,774; June 17; Serial No. 292,626; published Apr. 8, 1930. Class 23.

Fulton, E. E., Co., Chicago, Ill. Polish. 271,638; June 17; Serial No. 294,967; published Apr. 1, 1930. Class 16.

Fulton, E. E., Co., Chicago, Ill. Mineral oil and a compounded oil. 271,818; June 17; Serial No. 294,968; published Apr. 1, 1930. Class 15.

Fulwear Hosiery Mills, The, Columbus, Ga. Hosiery. 271,893; June 21; Serial No. 295,841; published Apr. 1, 1930. Class 39.

Garber Tool Co., Inc., Garber, Okla. Rotary rock-bit cones. 271,709; June 17; Serial No. 294,722; published Apr. 8, 1930. Class 23.

Garland Creamery. (See Southern Properties, Inc.)

Garners Inc., Memphis, Tenn. Coffee. 271,934; June 17; Serial No. 287,658; published Apr. 1, 1930. Class 46.

Gemex Company, Newark, N. J. Watch bracelets, watch straps, watch attachments. 271,731; June 17; Serial No. 295,372; published Mar. 25, 1930. Class 28.

General Candy Corporation, Chicago, Ill. Candy. 271,675; June 17; Serial No. 296,182; published Apr. 1, 1930. Class 46.

General Distributors Company, Brooklyn, N. Y. Citrate of magnesia. 271,803; June 17; Serial No. 293,923; published Apr. 1, 1930. Class 6.

General Electric Company, Schenectady, N. Y. Arc tubes. 271,660; June 17; Sernal No. 293,526; published Apr. 1, 1930. Class 21.

Gerhart, R. L., doing business as R. L. Gerhart & Co., Lancaster, Pa. Coffee and tea. 271,698; June 17; Serial No. 294,384; published Apr. 1, 1930. Class 46.

Gilpin, Henry B., Company, The, Baltimore, Md. Toilet powder. 271,788; June 17; Serial No. 296,118; published Apr. 1, 1930. Class 6.

Globe-Union Mfg. Co., Milwaukee, Wis. Wet storage batteries. 271,944; June 17; Serial No. 288,555; published Apr. 1, 1930. Class 21.

Godchaux, Leon, Clothing Co., Ltd., The, New Orleans, La. Suits and overcoats. 271,885; June 17; Serial No. 296,117; published Apr. 1, 1930. Class 39.

Gold Bond Sterilizing Powder Co., Inc., Fairhaven, Mass. Baby powder. 271,879; June 17; Serial No. 295,945; published Mar. 25, 1930. Class 6.

Goldberg Seed & Feed Company, Fargo, N. Dak. Seed. 271,861; June 17; Serial No. 289,513; published Apr. 1, 1930. Class 1.

Gorham and Wing, Lexington, Ky. Rubbing liniment. 271,798; June 17; Serial No. 295,106; published Apr. 1, 1930. Class 6.

Gotham Silk Hosiery Company, Inc., assignor to "Onyx" Hosiery, Inc., New York, N. Y. Hosiery. 271,782; June 17; Serial No. 291,724; published Mar. 25, 1930. Class 39.

Governor and Company of Adventurers of England, Trading into Hudson's Bay, The, doing business as Hudson's Bay Company, Winnipeg, Manitoba, Canada. Teas and coffees. 271,795–7; June 17; Serial Nos. 295,613–15; published Apr. 8, 1930. Class 46.

Graham-Paige Motors Corporation, Dearborn, Mich. Automobiles and constructive parts thereof. 271,657; June 17; Serial No. 294,420; published Apr. 1, 1930. Class 19.

Granat, Joseph, doing business as Granat Bros., San Francisco, Calif. Finger rings. 271,716–17; June 17; Serial Nos. 294,111–12; published Mar. 25, 1930. Class 28.

Green Brothers Company, doing business as Green Bros. Co., Springfield, Mass. Candy. 271,676; June 17; Serial No. 296,057; published Apr. 1, 1930. Class 46.

Greenberg Bros. Farm Produce, Inc., New York, N. Y. Eggs. 271,746; June 17; Serial No. 294,300; published Apr. 1, 1930. Class 46.

Greenhouse, Martin E., Philadelphia, Pa. Safety-razor blades. 271,942; June 17; Serial No. 288,453; published Apr. 8, 1930. Class 23.

Gretsch & Brenner, Inc., New York, N. Y. Musical instruments. 271,700; June 17; Serial No. 295,122; published Mar. 25, 1930. Class 36.

Gristede Bros., Inc., New York, N. Y. Tea. 271,753; June 17; Serial No. 296,419; published Apr. 8, 1930. Class 46.

Gross, Benjamin & Edward J., Co., Inc., New York, N. Y. Finger rings and mountings therefor. 271,701–2; June 17; Serial Nos. 295,354–5; published Mar. 25, 1930. Class 28.

Grossman, Jacob D., doing business as Narragansett Wholesale Grocery Co., Providence, R. I. Canned vegetables, fruits, jams, etc. 271,921; June 17; Serial No. 284,611; published Apr. 1, 1930. Class 46.

Haartz, J. C., Company, New Haven, Conn. Mats. 271,805; June 17; Serial No. 295,125; published Apr. 1, 1930. Class 50.

Halif, Rebecca, doing business as Madame Halif, Lynbrook, N. Y. Preparation for the treatment of the scalp. 271,931; June 17; Serial No. 287,297; published Apr. 1, 1930. Class 6.

Hamilton Ross Factories, Inc., Chicago, Ill. Lamps. 271,848; June 17; Serial No. 278,539; published Apr. 1, 1930. Class 21.

Hardtmuth, L. & C., London, England, and Budweis, Austria-Hungary, assignor to Koh-I-Noor Bleistiftfabrik L. & C. Hardtmuth, Budweis, Czechoslovakia. Lead pencils. 78,970; renewed July 26, 1930.

Harris, Nathan A., Conway, Mo. Remedy for certain diseases. 78,094; renewed May 31, 1930.

Heddon's, James, Sons, Dowagiac, Mich. Artificial baits. 271,678; June 17; Serial No. 295,977; published Apr. 1, 1930. Class 22.

"Hellit" Chemisches Laboratorium, Salzwedel, Germany. Medicinal tea. 271,839; June 17; Serial No. 282,820; published Mar. 18, 1930. Class 6.

Herrmann Handkerchief Co., Inc., The, New York, N. Y. Handkerchiefs. 271,828; June 17; Serial No. 294,670; published Apr. 1, 1930. Class 42.

Hervey, Paul S., Des Moines, Iowa. Printed cards, printed leaflets, folders, etc. 271,777; June 17; Serial No. 292,208; published Mar. 25, 1930. Class 38.

Herzog, Joseph L., & Company, New York, N. Y. Certain precious-metal ware. 79,054; renewed Aug. 2, 1930.

Higgins and Burke, Limited, Toronto, Ontario, Canada. Coffee and tea. 271,855; June 17; Serial No. 290,951; published Apr. 1, 1930. Class 46.

Hoggson & Pettis Manufacturing Company, The, New Haven, Conn. Card or ticket punch. 271,714; June 17; Serial No. 294,304; published Apr. 8, 1930. Class 23.

Hollywood Laboratories, Inc., Iowa City, Iowa, and Hollywood, Calif. Skin cream. 271,643; June 17; Serial No. 293,970; published Apr. 8, 1930. Class 6.

Home Heating Corporation, The, Baltimore, Md. Steam and hot-water heating boilers. 271,815; June 17; Serial No. 295,620; published Apr. 1, 1930. Class 34.

Hookless Fastener Company, Meadville, Pa. Bridge sets, tennis-racket covers, and golf bags. 271,679–80; June 17; Serial Nos. 295,946–7; published Apr. 1, 1930. Class 22.

Hudson Motor Car Company, Detroit, Mich. Automobile bodies. 271,656; June 17; Serial No. 294,427; published Apr. 1, 1930. Class 19.

Hudson Motor Car Company, Detroit, Mich. Gasoline passenger automobiles. 271,819; June 17; Serial No. 295,030; published Apr. 1, 1930. Class 19.

Hudson's Bay Company. (See Governor and Company of Adventurers of England, Trading into Hudson's Bay, The.)

Hughes, E. Griffiths, Limited, Manchester, England. Inhalant for the relief of catarrh and cold in the head. 271,791; June 17; Serial No. 295,737; published Apr. 1, 1930. Class 6.

Hyde Manufacturing Company, Southbridge, Mass. Wallpaper trimmers, parts thereof, paper-trimming outfits, shears, etc. 271,778; June 17; Serial No. 292,071; published Apr. 8, 1930. Class 23.

Hyman, S. E., Company, The, Fremont, Ohio. Covers for automobile cushions, seats, and seat backs. 271,820; June 17; Serial No. 295,073; published Apr. 1, 1930. Class 19.

I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Odoriferous and aromatic chemicals. 271,936; June 17; Serial No. 287,744; published Apr. 8, 1930. Class 6.

Inland Milling Company, Des Moines, Iowa. Wheat flour. 271,743; June 17; Serial No. 295,223; published Apr. 1, 1930. Class 46.

Inland Milling Company, Des Moines, Iowa. Wheat flour. 271,744; June 17; Serial No. 295,221; published Apr. 1, 1930. Class 46.

International Acheson Graphite Company, assignor to Acheson Graphite Corporation, Niagara Falls, N. Y. Lubricants containing graphite and grease. 78,519; renewed June 21, 1930.

International Gas Products, Inc., Monroe, La. Carbon black. 271,875–6; June 17; Serial Nos. 295,849–50; published Mar. 25, 1930. Class 6.

International Products Corporation, New York, N. Y. Bouillon cubes and bouillon in powdered form. 271,937; June 17; Serial No. 287,927; published Apr. 8, 1930. Class 46.

Iodo Chemical Co. (See Philippe, Louis.)

Jaeckel Mfg. Co., Inc., Providence, R. I. Necklaces, pendants, bracelets, etc. 271,719; June 17; Serial No. 293,777; published Mar. 25, 1930. Class 28.

Jaeger Company Inc., The, New York, N. Y. Woolen rugs and blankets, vehicle robes. 271,783; June 17; Serial No. 291,771; published Apr. 1, 1930. Class 42.

Jameson, John, & Son Limited, Dublin, Ireland. Straight Irish whiskey. 79,343; renewed Aug. 30, 1930.

Joester Company. (See Puetz, Peter J.)

Johnsonburg Radio Corporation, Johnsonburg, Pa. Radiotubes. 271,649; June 17; Serial No. 294,774; published Mar. 25, 1930. Class 21.

Jordan, Marian W., Los Angeles, Calif. Exercising devices for the teeth and gums. 271,641; June 17; Serial No. 294,357; published Apr. 1, 1930. Class 44.

Jubilee Perfumer. (See Singer, Louis.)

Karl-Keen Manufacturing Co., Inc., Sioux City, Iowa. Luggage carrier. 271,694; June 17; Serial No. 294,808; published Apr. 1, 1930. Class 3.

Karsten Statistical Laboratory, Inc., New Haven, Conn. Statistical charts. 271,745; June 17; Serial No. 294,979; published Mar. 25, 1930. Class 38.

Kaufmann Bros. & Bondy, Inc., West New York, N. J., assignor to Reiss-Premier Pipe Co., New York, N. Y. Cigar and cigarette holders. 271,860; June 17; Serial No. 289,747; published Nov. 26, 1929. Class 8.

Kaylon Incorporated, Troy and New York, N. Y. Shirts. 271,888–9; June 17; Serial Nos. 296,014–15; published Apr. 1, 1930. Class 39.

Keen, Eliot, doing business as Passing Show Publishing Company, New York, N. Y. Periodical. 271,761; June 17; Serial No. 291,166; published Mar. 25, 1930. Class 38.

Kelley Island Lime & Transport Company, The, Cleveland, Ohio. Lime, hydrated lime, and plaster. 79,840; renewed Oct. 11, 1930.

Kendall Company, The, Boston, Mass., and Chicago, Ill. Corn and bunion plasters. 271,939; June 17; Serial No. 288,076; published Apr. 1, 1930. Class 6.

Kessinger, Harry, doing business as The Harry Kessinger Company, Houston, Tex. Laxative preparation. 271,752; June 17; Serial No. 296,426; published Apr. 8, 1930. Class 6.

Kibler Company, The, Columbus, Ohio. Men's and boys' suits, trousers, etc. 271,834–5; June 17; Serial Nos. 283,873–4; published Aug. 20, 1929. Class 39.

Kiger, C. A., Co., doing business as Virgin Diamond Syndicate, Kansas City, Mo. Diamonds. 271,705; June 17; Serial No. 295,265; published Mar. 25, 1930. Class 28.

Klauer Manufacturing Company, Dubuque, Iowa. Electric welders and portable electric-lighting plants. 271,841; June 17; Serial No. 280,715; published Mar. 25, 1930. Class 21.

Kleinschmidt, E. Walter, doing business as Lido Sweet Shop, Maywood, Ill. Buttered and dried pop corn, roasted and salted peanuts. 271,950; June 17; Serial No. 289,280; published Apr. 8, 1930. Class 46.

Knoll, Willy, doing business as Wilhelm Knoll, Stuttgart, Germany. Chairs, love seats, couches, etc. 271,765; June 17; Serial No. 291,340; published Apr. 1, 1930. Class 32.

Koh-I-Noor Bleistiftfabrik L. & C. Hardtmuth. (See Hardtmuth, L. & C., assignors.)

Koncen, Viola F., St. Louis, Mo. Ladies' slips and suspenders therefor. 271,899; June 17; Serial No. 295,481; published Mar. 25, 1930. Class 39.

Ko-Tar Products Co., Cedar Rapids, Iowa. Poultry medicine. 271,869; June 17; Serial No. 295,227; published Apr. 1, 1930. Class 6.

Laboratoire de Pharmacologie, Inc., New York, N. Y. Ampoules containing magnesia. 271,625; June 17; Serial No. 296,279; published Apr. 8, 1930. Class 6.
Laboratoire de Pharmacologie, Inc., New York, N. Y. Horse-radish syrup. 271,867; June 17; Serial No. 295,182; published Mar. 18, 1930. Class 6.
Ladd, H. L., Chemist, Inc., San Francisco, Calif. Antacid and digestant. 271,863; June 17; Serial No. 289,356; published Mar. 18, 1930. Class 6.
La Gerardine, Inc., New York, N. Y. Preparation for curling and waving hair. 271,627; June 17; Serial No. 295,800; published Apr. 1, 1930. Class 6.
Lambert, Adjutor J., doing business as A. J. Lambert, Auburn, Me. Liniment. 271,945; June 17; Serial No. 288,750; published Apr. 1, 1930. Class 6.
Lamicel Products Inc., New York, N. Y. Laminated sheets. 271,640; June 17; Serial No. 294,639; published Apr. 8, 1930. Class 50.
Lane, Charles D. (See Lipps, Frederick W., Company of Baltimore City.)
Lane Company, Inc., The, Altavista, Va. Cedar wardrobes, cedar chiffarobes, cedar closets, cedar chests. 271,946; June 17; Serial No. 288,967; published Apr. 1, 1930. Class 32.
Lenksville Woolen Mills, Inc., The, Charlotte, N. C. Part-wool blankets. 271,833; June 17; Serial No. 293,475; published Apr. 1, 1930. Class 42.
Lebanon Shirt Company, Lebanon, Lititz, Lexington, and Hebron, Pa., and New York, N. Y. Shirts. 271,804; June 17; Serial No. 292,407; published Apr. 1, 1930. Class 39.
Lelong, Lucien, Inc., Chicago, Ill. Face powder. 271,880; June 17; Serial No. 295,949; published Mar. 25, 1930. Class 6.
Les Grands Parfums de France, Inc., New York, N. Y. Perfumes. 271,933; June 17; Serial No. 287,536; published Apr. 1, 1930. Class 6.
Les Parfums de Molyneux, Inc., New York, N. Y. Perfumes, lotions, bath powders, etc. 271,776; June 17; Serial No. 292,452; published Apr. 1, 1930. Class 6.
Lewis Bros., Inc., New York, N. Y. Hair tonic. 271,624; June 17; Serial No. 296,281; published Apr. 8, 1930. Class 6.
Lido Sweet Shop. (See Kleinschmidt, E. Walter.)
Lipps, Frederick W., Company of Baltimore City, as assignee of Charles D. Lane, Bridgeport, Conn., assignor, by mesne assignments, to The Frederick W. Lipps Co., Baltimore, Md. Candles. 79,766; renewed Oct. 4, 1930.
Lockwoven Hosiery Company, St. Louis, Mo. Hosiery, underwear, and dresses. 271,843; June 17; Serial No. 280,128; published Dec. 24, 1929. Class 39.
Los Angeles Grain and Feed Company. (See Wheeler, Jay W.)
Louisiana Furs, Inc., Chicago, Ill. Pelts or unfinished furs. 271,759; June 17; Serial No. 294,537; published Apr. 1, 1930. Class 1.
Lutton, William H., Company, Jersey City, N. J. Greenhouse benches for soil and potted plants, plant supports, etc. 271,930; June 17; Serial No. 287,146; published Apr. 1, 1930. Class 50.
Lynch-Cross Corporation, Milwaukee, Wis. Preparation for driving moths and other insects from clothing. 271,738; June 17; Serial No. 296,353; published Apr. 1, 1930. Class 6.
MacAndrews & Forbes Company, Camden, N. J. Medicinal preparation. 271,882; June 17; Serial No. 296,068; published Apr. 1, 1930. Class 6.
Madison Woolen Company, Madison, Me. Woolen piece goods. 271,902; June 17; Serial No. 295,338; published Apr. 1, 1930. Class 42.
Maier, Sophia, Chicago, Ill. Candy. 271,908; June 17; Serial No. 266,867; published Apr. 8, 1930. Class 46.
Management Magazines, Inc., Chicago, Ill. Periodical. 271,830–1; June 17; Serial Nos. 294,394–5; published Apr. 1, 1930. Class 38.
Mannings, Inc., San Francisco, Calif. Coffee. 271,686; June 17; Serial No. 295,626; published Apr. 1, 1930. Class 46.
Marmite Food Extract Co., Limited, The, London, England. Extract of yeast for human food. 79,220; renewed Aug. 16, 1930.
Marsh, Lucien A., doing business as L. A. Marsh Manufacturing Co., San Francisco, Calif. Bridge tables. 271,703; June 17; Serial No. 295,339; published Apr. 8, 1930. Class 32.
Matchless Electric Company, Chicago, Ill. Vacuum tubes. 271,915; June 17; Serial No. 274,840; published May 7, 1929. Class 21.
McGraw-Hill Publishing Company, Inc., New York, N. Y. Magazine published monthly. 271,735; June 17; Serial No. 294,925; published Mar. 25, 1930. Class 38.
Merriam, David H., doing business as Ye House of John L. Bailey, Fitchburg, Mass. Candy. 271,697; June 17; Serial No. 294,396; published Apr. 1, 1930. Class 46.
Mexican Gulf Packing Co. Inc., Pascagoula, Miss. Canned shrimp and oysters. 271,801; June 17; Serial No. 294,676; published Apr. 8, 1930. Class 46.
Meyer, J. Frank, doing business as Exhibit Supply Co., Chicago, Ill. Picture post cards, picture cards, and cards. 271,919; June 17; Serial No. 270,433; published Mar. 25, 1930. Class 38.
Midwest Wall Paper & Paint Co., Kansas City, Mo. Paints, paint pigments, paint enamel, etc. 271,840; June 17; Serial No. 281,960; published June 11, 1929. Class 16.
Milbrandt, Gottfried, Croswell, Mich. Bitters, catarrh medicine, fever powder, etc. 271,836; June 17; Serial No. 283,577; published Mar. 18, 1930. Class 6.
Miles, Dr., Medical Company, Elkhart, Ind. Medicinal preparation. 271,789; June 17; Serial No. 296,074; published Apr. 1, 1930. Class 6.
Milgrim, H., & Bros., Inc., New York, N. Y. Perfumes. 271,787; June 17; Serial No. 296,131; published Apr. 1, 1930. Class 6.
Millar, E. B., & Company, Chicago, Ill. Coffee. 79,996; renewed Oct. 25, 1930.
Mogira Products Co. (See Molinelli Giannusa & Rao, Inc.)
Molinelli Giannusa & Rao, Inc., doing business as Mogira Products Co., Brooklyn, N. Y. Canned tuna fish, peas, corn, etc. 271,773; June 17; Serial No. 292,741; published Apr. 1, 1930. Class 46.
Monomac Spinning Company, Boston, Mass. Yarns. 271,682; June 17; Serial No. 295,803; published Apr. 1, 1930. Class 43.
Montgomery Brothers, Chicago, Ill. Electric ozone-generating machines. 271,926; June 17; Serial No. 285,685; published Feb. 25, 1930. Class 21.
Montgomery, H. A., Co., Inc., Detroit, Mich. Liquid ink eradicator. 271,647; June 17; Serial No. 293,061; published Apr. 1, 1930. Class 6.
Montgomery Ward & Co., Incorporated, Chicago, Ill. Internal-combustion engines. 271,772; June 17; Serial No. 292,743; published Apr. 8, 1930. Class 23.
Moser, Charles, Company, The, Cincinnati, Ohio. Paint enamels. 271,652; June 17; Serial No. 283,884; published Apr. 1, 1930. Class 16.
Mother's Favorite Cookie Company, Glendale, Calif. Cookies and macaroons. 271,620; June 17; Serial No. 293,337; published Mar. 25, 1930. Class 46.
Muir Laboratories, Grand Rapids, Mich. Laxative tonic. 271,626; June 17; Serial No. 296,231; published Apr. 1, 1930. Class 6.
Mulherin, William F., doing business as Excelsior Supply Company, Syracuse, N. Y. Malt syrup. 271,684; June 17; Serial No. 295,684; published Apr. 1, 1930. Class 46.
Muncy Textile Company, Muncy, Pa. Wool bed blankets. 271,903; June 17; Serial No. 295,304; published Apr. 1, 1930. Class 42.
Munroe, R., & Sons Mfg. Corp. Pittsburgh, Pa. Covers for manholes and hand-holes. 79,850; renewed Oct. 11, 1930.
Narragansett Wholesale Grocery Co. (See Grossman, Jacob D.)
Nasco Company. (See National Art Sign Corporation.)
National Art Sign Corporation, Minneapolis, Minn. Preparation for the treatment of stomach ills. 271,799; June 17; Serial No. 294,681; published Apr. 1, 1930. Class 6.
National Art Sign Corporation, doing business as Nasco Company, Minneapolis, Minn. Preparation for the treatment of rheumatism, neuritis, lumbago, etc. 271,800; June 17; Serial No. 294,680; published Apr. 1, 1930. Class 6.
National Electric Products Corporation, Pittsburgh, Pa. Connectors for armored cables and wires. 271,810; June 17; Serial No. 295,569; published Apr. 1, 1930. Class 21.
National Electric Products Corporation, Pittsburgh, Pa. Armored electric conductors or cables. 271,837; June 17; Serial No. 283,464; published July 16, 1929. Class 21.
National Electric Products Corporation, Pittsburgh, Pa. Armored electric conductors or cables. 271,911; June 17; Serial No. 276,495; published Sept. 3, 1929. Class 21.
National Tube Company, Pittsburgh, Pa. Metal pipes and tubes. 78,628; renewed June 28, 1930.
Neustadter Brothers, San Francisco, Calif. Certain clothing. 77,479; renewed Apr. 12, 1930.
Newark Wire Cloth Company, Newark, N. J. Wire cloth and metal screening. 271,648; June 17; Serial No. 294,777; published Apr. 1, 1930. Class 13.
New Era Treatment Company, The, London, England. Medicinal preparations. 271,873; June 17; Serial No. 295,384; published Apr. 1, 1930. Class 6.
Newman, Victor L., doing business as Trisales Company, New York, N. Y. Ottomans, hassocks, cushions, and footstools. 271,940; June 17; Serial No. 288,443; published Apr. 1, 1930. Class 32.
"Niesо" Stahl- und Metallwarenfabrik Gebr. Niepenberg, Wald-Solingen, Germany. Safety-razor blades. 271,718; June 17; Serial No. 293,785; published Apr. 8, 1930. Class 23.
Norine Co. (See Elz, Lorenz P.)
North and Judd Manufacturing Company, New Britain, Conn. Harness hardware. 77,878; renewed May 10, 1930.
North and Judd Manufacturing Company, New Britain, Conn. Certain horse equipments. 79,441; renewed Sept. 6, 1930.
Norwich Knitting Company, Norwich, N. Y. Union suits, undershirts, and drawers. 271,829; June 17; Serial No. 294,589; published Apr. 1, 1930. Class 39.

Nuccio, Ignazio, doing business as Orazi & Curiazi Olive Oil Company, Cleveland, Ohio. Compounds of olive oil and cottonseed oil. 271,693; June 17; Serial No. 294,926; published Apr. 1, 1930. Class 46.
Nu-Craft Hosiery Mills, Inc., Mohnton, Pa. Hosiery. 271,898; June 17; Serial No. 295,634; published Mar. 25, 1930. Class 39.
Oelwein Chemical Company, Oelwein, Iowa. Mineral compounds. 271,775; June 17; Serial No. 292,592; published Mar. 18, 1930. Class 6.
Ohio Brass Company, The, Mansfield, Ohio. Trolley-clamps and suspension devices. 77,879; renewed May 10, 1930.
Old Trusty Co. (See Forsell, John E.)
Olean Glass Company, Inc., Olean, N. Y. Glass jars or containers. 271,692; June 17; Serial No. 295,133; published Apr. 1, 1930. Class 33.
Oneida Community Limited, Oneida, N. Y., assignor to Animal Trap Company of America, Lititz, Pa. Animal traps. 79,513; renewed Sept. 13, 1930.
Oneida Hosiery Company, assignor, by mesne assignments, to Cadet Hosiery Company, Inc., Philadelphia, Pa. Hosiery. 79,780; renewed Oct. 4, 1930.
"Onyx" Hosiery, Inc. (See Gotham Silk Hosiery Company, Inc., assignor.)
Orazi & Curiazi Olive Oil Company. (See Nuccio, Ignazio.)
Osetkowski, Andrew A., doing business as Union Products Company, Detroit, Mich. Liniments, castor oil, cough and cold medicines, Epsom salts. 271,847; June 17; Serial No. 278,803; published Apr. 1, 1930. Class 6.
O'Sullivan, David L., New York, N. Y. Vaginal sprayer. 271,637; June 17; Serial No. 294,991; published Apr. 1, 1930. Class 44.
O-Tas-O Products Company. (See Thayer, J. Earl.)
Owens & Minor Drug Co., Inc., Richmond, Va. Medicinal preparation for the relief of itch, mange, scratches, etc. 271,635; June 17; Serial No. 295,045; published Apr. 1, 1930. Class 6.
Package Paper Company, Holyoke, Mass. Waxed paper. 271,665; June 17; Serial No. 295,693; published Apr. 1, 1930. Class 37.
Pacific Egg Producers Cooperative, Inc., New York, N. Y. Eggs and dressed poultry. 271,691; June 17; Serial No. 295,188; published Apr. 1, 1930. Class 46.
Parfumerie Roger et Gallet, Société Anonyme, Paris, France. Soaps. 271,914; June 17; Serial No. 275,293; published Mar. 18, 1930. Class 4.
Passing Show Publishing Company. (See Keen, Eliot.)
Pasteurol Company. (See Ruskin, Simon L.)
Patton, W. A., Catlettsburg, Ky. Fresh apples. 271,910; June 17; Serial No. 264,902; published Apr. 8, 1930. Class 46.
Penn-Standard Sole Cementing Process, Inc., Philadelphia, Pa. Bottom finish for shoe soles. 271,732; June 17; Serial No. 294,889; published Mar. 18, 1930. Class 6.
Penn-Standard Sole Cementing Process, Inc., Philadelphia, Pa. Bottom finish for shoe soles. 271,864; June 17; Serial No. 294,890; published Mar. 18, 1930. Class 6.
Penn Worsted Company, Philadelphia, Pa. Cotton-warp worsted. 271,894; June 17; Serial No. 295,808; published Apr. 1, 1930. Class 42.
People's Outfitting Company, Detroit, Mich. Radio receiving sets and parts thereof. 271,653; June 17; Serial No. 294,737; published Mar. 25, 1930. Class 21.
Pep Boys—Manny, Moe & Jack, The, doing business as Sturdee Storage Battery Co., Philadelphia, Pa. Storage batteries. 271,928; June 17; Serial No. 286,710; published Apr. 1, 1930. Class 21.
Permatite Manufacturing Co. Inc., Minneapolis, Minn. Electrical crank-case heaters. 271,883; June 17; Serial No. 293,639; published Apr. 1, 1930. Class 21.
Pfaffinger, Maxmillian, doing business as Quality Poultry Ranch, Van Nuys, Calif. Preparation used in the treatment of poultry diseases. 271,695; June 17; Serial No. 294,686; published Mar. 18, 1930. Class 6.
Pharmacal Manufacturing Co., Cleveland, Ohio. Pyorrhea solution. 271,751; June 17; Serial No. 296,439; published Apr. 8, 1930. Class 6.
Philippe, Louis, doing business as Iodo Chemical Co., New York, N. Y. Medicinal preparation. 271,923; June 17; Serial No. 285,468; published Sept. 24, 1929. Class 6.
Phillips Petroleum Company, Bartlesville, Okla. Liquid motor fuel or gasoline. 271,916; June 17; Serial No. 274,494; published Jan. 8, 1929. Class 15.
Photoscript Company, The, Philadelphia, Pa. Writing paper and mailing and correspondence envelopes. 271,758; June 17; Serial No. 294,540; published Apr. 1, 1930. Class 37.
Pille Bros., Inc., Denver, Colo. Storage batteries and parts thereof. 271,811; June 17; Serial No. 295,572; published Apr. 1, 1930. Class 21.
Plaza Music Company, New York, N. Y. Phonograph apparatus for recording and reproducing sounds. 271,715; June 17; Serial No. 294,715; published Mar. 25, 1930. Class 36.
Prentiss Vise Company, New York, N. Y. Vise. 78,634–5; renewed June 28, 1930.
Prentiss Vise Company, New York, N. Y. Vise. 78,637; renewed June 28, 1930.
Pryce, John, & Co., Batavia, Java, Dutch East Indies. Skins. 271,949; June 17; Serial No. 289,128; published Apr. 1, 1930. Class 1.
Psi Omega, Pittsburgh, Pa. Pins, badges, watch charms, and bracelets. 271,712; June 17; Serial No. 294,441; published Mar. 25, 1930. Class 28.
Publishers' Fiscal Corporation, New York, N. Y. Periodical. 271,667; June 17; Serial No. 295,638; published Mar. 25, 1930. Class 38.
Puetz, Peter J., doing business as Joester Company, Fort Wayne, Ind. Permanent-waving preparation. 271,786; June 17; Serial No. 296,146; published Apr. 1, 1930. Class 6.
Quality Poultry Ranch. (See Pfaffinger, Maxmillian.)
Quality Publications, Inc., New York, N. Y. Periodicals. 271,761–2; June 17; Serial Nos. 294,484–5; published Mar. 25, 1930. Class 38.
Rath Packing Company, The, Waterloo, Iowa. Lard and smoked picnic hams. 271,690; June 17; Serial No. 295,237; published Apr. 1, 1930. Class 46.
Raybestos-Manhattan, Incorporated, Bridgeport, Conn. Fan belts, radiator hose, tubing, etc. 271,713; June 17; Serial No. 294,400; published Apr. 8, 1930. Class 35.
Red Wing Milling Company, Red Wing, Minn. Wheat flour. 79,858; renewed Oct. 11, 1930.
Regent Import Corporation, New York, N. Y. Bead-stringing chain and silk cords. 271,711; June 17; Serial No. 294,442; published Apr. 1, 1930. Class 28.
Regent Waist & Dress Co., Inc., New York, N. Y. Women's and misses' dresses. 271,827; June 17; Serial No. 295,052; published Mar. 25, 1930. Class 39.
Risler & Cie., Freiburg, to Risler & Cie., Aachen, Germany. Porcelain buttons and beads. 79,231; renewed Aug. 16, 1930.
Rob, Alois, Weil-Friedlingen, Germany. Chemical substances. 271,881; June 17; Serial No. 296,027; published Mar. 25, 1930. Class 6.
Rohm & Haas Company, Philadelphia, Pa. Preparation for dehairing hides and preparing them for tanning. 271,672; June 17; Serial No. 294,544; published Mar. 18, 1930. Class 6.
Rorer, William H., Inc., Philadelphia, Pa. Ointment. 271,771; June 17; Serial No. 292,752; published Apr. 1, 1930. Class 6.
Ross Tobacco Company, Louisville, Ky. Leaf tobacco. 271,636; June 17; Serial No. 294,995; published Apr. 8, 1930. Class 17.
Roush, Hubert E., doing business as Roush Drug Company, Humeston, Iowa. Inhalant for the treatment of head colds, hay fever, nasal catarrh, etc. 271,646; June 17; Serial No. 293,448; published Apr. 8, 1930. Class 6.
Routh, W. C., & Co., Logansport, Ind. Hams, bacon, and lard. 79,787; renewed Oct. 4, 1930.
Royal Baking Powder Company, Jersey City, N. J., and New York, N. Y. Baking powder. 271,853–4; June 17; Serial Nos. 277,085–6; published Apr. 1, 1930. Class 6.
Ruskin, Simon L., doing business as Pasteurol Company, Brooklyn, N. Y. Medicinal preparation. 271,687; June 17; Serial No. 295,537; published Mar. 18, 1930. Class 6.
S. M. Supplies Co., Boston, Mass. Brushes. 271,809; June 17; Serial No. 295,394; published Apr. 1, 1930. Class 29.
Sally Lynn Kitchen. (See Emery, Elmer O.)
San Joaquin Cotton Oil Company, Los Angeles, Calif. Cattle feed. 271,740; June 17; Serial No. 295,538; published Apr. 1, 1930. Class 46.
Savidge, Louis A., Kansas City, Mo. Cards and books for budget or like accounting. 271,929; June 17; Serial No. 287,017; published Sept. 3, 1929. Class 37.
Schallern's Drug Store. (See von Schallern, Eugene.)
Schindler's Peanut Products, Inc., Washington, D. C. Salted peanuts. 271,790; June 17; Serial No. 296,202; published Apr. 8, 1930. Class 46.
Schram, Frank X., doing business as F. X. Schram Laboratories, Chicago, Ill. Medicinal preparation. 271,844; June 17; Serial No. 279,887; published Apr. 1, 1930. Class 6.
Scientific Research Laboratories. (See Feinstein, Louis.)
Shavelson, Abraham N., doing business as Chex Chemical Company, Guttenberg Township, Hudson County, N. J. Tablets, a medicinal preparation. 271,645; June 17; Serial No. 293,559; published Apr. 1, 1930. Class 6.
Sheepshead Malt Products Co. (See Weiss, Morris.)
Silva, Manuel S., Decota, Calif. Electric signal lights. 271,661; June 17; Serial No. 293,490; published Mar. 25, 1930. Class 21.
Singer, Louis, doing business as Jubilee Perfumer, New York, N. Y. Cleansing cream, sachet powder, paste rouge, etc. 271,874; June 17; Serial No. 295,392; published Apr. 1, 1930. Class 6.
Societe a Responsabilite Limitee Rodier, Paris, France. Piece goods of wool, cotton, and silk, and mixtures of the same. 271,890; June 17; Serial No. 295,958; published Apr. 1, 1930. Class 42.
Sonneborn Brothers, Inc., New York, N. Y. Boys' and young men's coats, vests, trousers, and overcoats. 271,884; June 17; Serial No. 296,083; published Apr. 1, 1930. Class 39.
Sonneborn Brothers, Inc., New York, N. Y. Coats, vests, trousers, and overcoats. 271,886; June 17; Serial No. 296,084; published Apr. 1, 1930. Class 39.
Southern Properties, Inc., doing business as Garland Creamery, Dallas, Tex. Butter. 271,696; June 17; Serial No. 294,405; published Mar. 25, 1930. Class 46.

Spangler Inc., Chicago, Ill. Beads and jewelry. 271,720; June 17; Serial No. 293,761; published Apr. 1, 1930. Class 28.
Spruance, Gilbert, Company, The, Philadelphia, Pa. Wax for polishing floors, etc. 271,634; June 17; Serial No. 295,156; published Apr. 1, 1930. Class 16.
Standard Brake Shoe & Foundry Company, Pine Bluff, Ark. Finished steel castings. 271,631; June 17; Serial No. 295,282; published Apr. 8, 1930. Class 14.
Starr Fruit Products Co., Portland, Oreg. Canned fruits. 271,737; June 17; Serial No. 290,366; published Apr. 8, 1930. Class 46.
Sterchi Bros. Stores, Inc., Knoxville, Tenn. Phonographs. 271,781; June 17; Serial No. 291,589; published Mar. 25, 1930. Class 36.
Sturdee Storage Battery Co. (See Pep Boys-Manny, Moe & Jack.)
Suchman & McRoberts, Inc., doing business as Bay View Creamery, Jersey City, N. J. Dairy products. 271,760; June 17; Serial No. 294,493; published Apr. 1, 1930. Class 46.
Sunshine Coal Company, Centerville, Iowa. Coal. 271,747; June 17; Serial No. 293,800; published Mar. 11, 1930. Class 1.
Superior Cabinet Corporation, New York, N. Y. Radio receiving sets. 271,779; June 17; Serial No. 291,845; published Apr. 1, 1930. Class 21.
Synvita Medicine Co., The, to The Everyday Products Supply Co., Lima, Ohio, successor. Remedies for coughs, colds, grippe, and certain other affections. 79,533; renewed Sept. 13, 1930.
Tacoma Brewing Co., San Francisco, Calif. Cereal malt beverages, containing less than one-half of one per cent alcohol. 271,905; June 17; Serial No. 257,904; published Apr. 1, 1930. Class 48.
Tec-Art Studios, Inc., Los Angeles, Calif. Motion-picture and sound-producing film. 271,721; June 17; Serial No. 294,095; published Apr. 8, 1930. Class 26.
Temme Manufacturing Co., Chicago, Ill. Signal horn. 271,655; June 17; Serial No. 294,649; published Mar. 25, 1930. Class 21.
Termiteol Corporation, Inc., New Orleans, La. Preparation used as a preventative against all forms of wood-destroying organisms. 271,794; June 17; Serial No. 295,647; published Apr. 1, 1930. Class 6.
Thayer, J. Earl, doing business as O-Tas-O Products Company, Sidney, Nebr., and Denver, Colo. Preparation for use in treating head colds, hay fever, etc. 271,734; June 17; Serial No. 296,299; published Apr. 8, 1930. Class 6.
Thermatomic Carbon Company, Pittsburgh, Pa. Carbon black. 271,750; June 17; Serial No. 296,555; published Apr. 8, 1930. Class 6.
Thompson, Caleb, St. Louis, Mo. Tonic. 271,856; June 17; Serial No. 290,531; published Apr. 1, 1930. Class 6.
Thornton, Renée, New York, N. Y. Astringents, astringent cerates, almond meal, etc. 271,733; June 17; Serial No. 294,862; published Mar. 25, 1930. Class 6.
Trio Specialty Company, Inc., New York, N. Y. Canvas laced stockings for therapeutic purposes. 271,630; June 17; Serial No. 295,401; published Apr. 1, 1930. Class 44.
Trisales Company. (See Newman, Victor L.)
Tulsa Overall & Manufacturing Company, Tulsa, Okla. Overalls, jumpers, pants, etc. 271,859; June 17; Serial No. 289,854; published Apr. 1, 1930. Class 39.
USL Battery Corporation, Niagara Falls, N. Y. Storage batteries. 271,812–13; June 17; Serial Nos. 295,584–5; published Apr. 1, 1930. Class 21.
Ultra-Violet Generator Corporation, Chicago, Ill. Food tablets. 271,850; June 17; Serial No. 277,327; published Apr. 1, 1930. Class 46.
Union Fishermen's Co-operative Packing Co., Astoria, Oreg. Canned salmon. 77,967; renewed May 17, 1930.
Union Fishermen's Co-operative Packing Co., Astoria, Oreg. Canned salmon. 78,388; renewed June 7, 1930.
Union Products Company. (See Osetkowski, Andrew A.)
United States Air Compressor Company, The, Cleveland, Ohio. Air compressors, unitary articles, and a motor for operating the same. 271,922; June 17; Serial No. 284,593; published Apr. 8, 1930. Class 23.
United States Refining Company, Los Angeles, Calif. Oils and greases or petroleum products. 271,722; June 17; Serial No. 293,389; published Mar. 25, 1930. Class 15.
Utility Manufacturing Co., Inc., Baltimore, Md. Ice picks, kitchen forks, spoons, etc. 271,730; June 17; Serial No. 295,405; published Apr. 8, 1930. Class 23.
Vicilaire, Inc., New York, N. Y. Medicinal preparation. 271,870; June 17; Serial No. 295,310; published Apr. 1, 1930. Class 6.
Virgin Diamond Syndicate. (See Kiger, C. A., Co.)
Von Schallern, Eugene, doing business as Schallern's Drug Store and Von Schallern Drug Co., Ripon, Wis. Effervescent powdered salt. 271,935; June 17; Serial No. 287,683; published Apr. 8, 1930. Class 6.
Wallace, George, Jacksonville, Fla. Maltless beverages. 271,941; June 17; Serial No. 288,445; published Apr. 1, 1930. Class 45.
Walsh, Christy, New York, N. Y. Heading for a series of articles. 271,764; June 17; Serial No. 295,143; published Apr. 1, 1930. Class 38.
Washington Manufacturing Company, Nashville, Tenn. Shirts. 271,900; June 17; Serial No. 295,409; published Apr. 1, 1930. Class 39.
Washington Manufacturing Company, Nashville, Tenn. Cotton piece goods for making shirts. 271,901; June 17; Serial No. 295,408; published Apr. 1, 1930. Class 42.
Webster Electric Company, Racine, Wis. Audio frequency amplifiers. 271,763; June 17; Serial No. 294,327; published Mar. 25, 1930. Class 21.
Webster Rubber Company, Sabbatus, Me. Rubber dollies. 271,642; June 17; Serial No. 294,197; published Apr. 8, 1930. Class 50.
Weiss, Morris, doing business as Sheepshead Malt Products Co., Brooklyn, N. Y. Malt syrup for food purposes. 271,685; June 17; Serial No. 295,640; published Apr. 1, 1930. Class 46.
Wenner, Peter, Bozeman, Mont. Preparation for piles. 271,845; June 17; Serial No. 279,512; published Apr. 8, 1930. Class 6.
Western Clock Company, Peru, Ill. Clocks and watches. 271,938; June 17; Serial No. 287,985; published Apr. 8, 1930. Class 27.
Western Clock Mfg. Co., The, assignor to Western Clock Company, Peru, Ill. Clocks and watches. 79,874–5; renewed Oct. 11, 1930.
Western Grocer Co., Marshalltown, Iowa. Certain foods. 77,683; renewed Apr. 26, 1930.
Wheeler, Jay W., doing business as Los Angeles Grain and Feed Company, Los Angeles, Calif. Poultry feed. 271,742; June 17; Serial No. 295,412; published Apr. 1, 1930. Class 46.
Wilhelm, Henry N., Memphis, Nebr. Compound used for external application to horses. 271,739; June 17; Serial No. 296,304; published Apr. 8, 1930. Class 6.
Williams, John T., jr., doing business as Williams & Co., Brooklyn, N. Y. Two per centum (2%) solution of the drug dibrom-oxymercuri fluoresceln. 271,671; June 17; Serial No. 294,832; published Mar. 18, 1930. Class 6.
Windram Manufacturing Co., Boston, Mass. Waterproof fabrics. 271,807; June 17; Serial No. 295,286; published Apr. 1, 1930. Class 40.
Wood, F. A., & Co., Atlantic City, N. J. Cookies. 271,683; June 17; Serial No. 295,707; published Mar. 25, 1930. Class 46.
Wood, Jesse L., Jackson, Mich. Clothes and drying racks. 271,816; June 17; Serial No. 295,651; published Apr. 1, 1930. Class 24.
Worthington Pump and Machinery Corporation, New York, N. Y. Power-transmission machinery. 271,724; June 17; Serial No. 295,970; published Apr. 8, 1930. Class 23.
Wrazlowsky, Arno, doing business as Fashionlane Jewelry Co., Providence, R. I. Finger rings, earrings, bracelets, etc. 271,927; June 17; Serial No. 286,060; published Mar. 25, 1930. Class 28.
Wright, Wm. E., & Sons Co., Orange, N. J. Ribbons. 271,887; June 17; Serial No. 296,041; published Apr. 1, 1930. Class 42.
Ye House of John L. Bailey. (See Merriam, David H.)
Zapon Company, The, Wilmington, Del. Pyroxylin or otherwise coated fabrics. 271,822–4; June 17; Serial Nos. 294,939–41; published Apr. 1, 1930. Class 50.
Zimmerman Bros., Lock Haven, Pa. Malt syrup. 271,688; June 17; Serial No. 295,314; published Apr. 1, 1930. Class 46.
Ziv Steel & Wire Co., Chicago, Ill. Tool and die steel. 271,623; June 17; Serial No. 296,379; published Apr. 8, 1930. Class 14.

ALPHABETICAL LIST OF REGISTRANTS OF LABELS

Abbotts Dairies, Inc. (See Menasha Products Company, The, assignor.)
Absorene Manufacturing Company, The, St. Louis, Mo. Zev. For Floor Cleaner. 37,569; June 17.
Betsy Ross Mint Co., Philadelphia, Pa. Betsy Ross Old Fashioned Peppermints. For Peppermints. 37,570; June 17.
Cannon Mills, Inc., New York, N. Y. Cannon Caroleen Sheeting. For Sheeting. 37,571; June 17.
Cannon Mills, Inc., New York, N. Y. Cannon Caroleen Pillow Cases. For Pillowcases. 37,572; June 17.
Cannon Mills, Inc., New York, N. Y. Cannon Caroleen Sheets. For Sheets. 37,573–4; June 17.
Cannon Mills, Inc., New York, N. Y. Cannon Caroleen Pillow Cases. For Pillowcases. 37,575; June 17.
Diamond Coffee Mills, Inc., Shreveport, La. Southern Girl Coffee. For Coffee. 37,576; June 17.
Diamond Coffee Mills, Inc., Shreveport, La. Brown Mug Coffee. For Coffee. 37,577; June 17.
Diamond Coffee Mills, Inc., Shreveport, La. Liquid Gold Coffee. For Coffee. 37,578; June 17.
Gelfand Mfg. Company of California Inc., The, Los Angeles, Calif. Salad Bowl Salad Dressing. For Salad Dressing. 37,579; June 17.
Gold Rolled Food Products Co. (See Traficanti Bros.)

Grauer, F. M., & Company, Philadelphia, Pa. Grau-Stark. For Golf Hose. 37,580; June 17.
Hall Baking Co., Buffalo, N. Y. Happy Home. For Bread. 37,581; June 17.
Hydrosal Company, The, Cincinnati, Ohio. Hydrosal. For Ointment. 37,582; June 17.
Hydrosal Company, The, Cincinnati, Ohio. Hydrosal. For Antiseptic. 37,583; June 17.
Jewel Tea Company, Inc., Barrington, Ill. Jewel Dessert. For Lemon Dessert. 37,584; June 17.
Krank, A. J., Company, St. Paul, Minn. Latherkreem. For Shaving Cream. 37,585; June 17.
Menasha Products Company, The, Chicago, Ill., assignor to Abbotts Dairies, Inc., Philadelphia, Pa. Abbotts Grade A. For Butter. 37,586; June 17.
Orocide Chemical Company. (See Stearn, Boris J.)
Ridgewood Fruit Growers, Inc., Winchester, Va. Apple-Candy. For Candy. 37,587; June 17.
Standard Brands Incorporated, New York, N. Y. Seal Brand. For Tea. 37,588; June 17.
Stearn, Boris J., doing business as Orocide Chemical Company, Chicago, Ill. Orocide. For Mouth Wash. 37,589; June 17.
Sycamore Preserve Works, Sycamore, Ill. White Lily. For Sweet Corn. 37,590; June 17.
Traficanti Bros., doing business as Gold Rolled Food Products Co., Chicago, Ill. Golden Glow. For Egg Noodles. 37,591; June 17.
Wax Paper Products Company, Omaha, Nebr. Little Pal. For Cinnamon Rolls. 37,592; June 17.
Wigly Candy Co., Inc., Brooklyn, N. Y. Fresh Air Taxi. For Candy Figures. 37,593; June 17.
Williams, George E., Houston, Tex. Uncle Sam's Kwik-Deth. For Insecticide. 37,594; June 17.

ALPHABETICAL LIST OF REGISTRANTS OF PRINTS

Ajay Milling Company, Marshalltown, Iowa. Red Heart Feeds. For Pig Meal and Poultry Mash. 12,596; June 17.
B. V. D. Company, Inc., The, New York, N. Y. The Three Letters B. V. D. For Athletic Underwear. 12,597; June 17.
B. V. D. Company, Inc., The, New York, N. Y. The B. V. D. Union Suit. For Athletic Underwear. 12,598; June 17.
B. V. D. Company, Inc., The, New York, N. Y. The Underwear Of Quality. For Athletic Underwear. 12,599; June 17.
Cream of Wheat Corporation, The, Minneapolis, Minn. No Summer Fears For Young Edward Everett Hale IV. He Has This Protection Many Mothers Give. For Wheat Breakfast Food. 12,600; June 17.
Driscoll Coal Company. (See Gamble, Alfred F.)
Gamble, Alfred F., doing business as Driscoll Coal Company, Lansing, Mich. Beacon Coal. For Coal. 12,601; June 17.
Lafayette, O. J., & Co., Los Angeles, Calif. The Otkoffe Bottle Securitas. For Bottle Treated to Hold Hot Coffee. 12,602; June 17.
Leather Goods Novelty Co., Inc., Los Angeles, Calif. The New Improved Kanfels Key Container. For Key Containers. 12,603; June 17.
Perpetual Self Winding Watch Company of America, Inc., New York, N. Y. The Watch You Can Forget To Wind. For Self-Winding Watches. 12,604; June 17.
Pruden, Harry B., Deland, Fla. 'Take A Tip' use 'Razip' On Your Stropper. 'First Aid For a Dull Blade'. For Razor Strops. 12,605; June 17.
Savoy Park Shop, Inc., New York, N. Y. Savoy Park Shop Combination Basket. For Corsage Baskets Containing Six Corsages of Flowers. 12,606; June 17.
Spun Silk Research Committee (Spun Silk Division Of The Silk Association Of America, Inc.), New York, N. Y. 1930 Sports Silk Week. For Silk. 12,607; June 17.
Swaback, Edwin R., doing business as E. R. Swaback, New York, N. Y. No Milk To-Day. For Milk. 12,608; June 17.

ALPHABETICAL LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Agosta, Paul, Detroit, Mich. Preparation for piles. 293,459; June 17. Class 6.
Akron Ace Specialty Company, Akron, Ohio. Prophylactic rubber articles. 296,311; June 17. Class 44.
Allied Drug Supply Company, doing business as Allied Drug Stores, Chicago, Ill. Spirit ammonia aromatic, glycerin, castor oil, etc. 297,788; June 17. Class 6.
Almondol Co. (See Blesch, Blanche A.)
American Crayon Company, The, Sandusky, Ohio. Writing ink. 298,420; June 17. Class 11.
American Cyanamid Company, New York, N. Y. Fertilizer mixtures. 292,310–11; June 17. Class 10.
American Fruit Growers, Inc. of California, Los Angeles, Calif. Fresh citrus fruits. 298,876; June 17. Class 46.
American Mills Company, The, Waterbury, Conn. Wide elastic fabric. 299,036; June 17. Class 42.
American Optical Company, Southbridge, Mass. Magazines or periodicals. 299,944; June 17. Class 38.
Anderson, Endre, doing business as Dakota Breeders Hatchery, Fargo, N. Dak. Baby chicks. 300,161; June 17. Class 46.
Argy Products Company, New York, N. Y. Capsules of oxsiodo-cinchophen. 296,100; June 17. Class 6.
Arrow Tee Company. (See Winston, Peter.)
Atomol Mfg. Company, New Haven, Conn., and New York, N. Y. Liquid concentrated inhalent. 297,842; June 17. Class 6.
Balmer-Westite Co., now by change of name Westite Co., Weston, W. Va. Glass and china bathroom fixtures. 293,816; June 17. Class 13.
Bamberger, L., & Co., Newark, N. J. Protective pads. 297,292; June 17. Class 44.
Barker, Moore & Mein Co., Inc., The, Philadelphia, Pa. Mineral appetizer and condition powders for poultry, cows, and hogs. 298,071; June 17. Class 6.
Barnes Shoe Company, Centralia, Ill. Shoes. 298,565; June 17. Class 39.
Battendier, Berthe, Paris, France. Sterilized-milk serum used as surgical dressing and internal treatment. 296,047; June 17. Class 6.
Bausch & Lomb Optical Company, Rochester, N. Y. Periodical publication. 300,164; June 17. Class 38.
Becken, A. C., Company, Chicago, Ill. Watches and clocks. 299,670; June 17. Class 27.
Bendix Brake Company, Chicago, Ill. Brakes and parts thereof and operating connections therefor. 281,893–4; June 17. Class 19.
Benjamin & Herzog, New York, N. Y. Size for finishing felt hats and straw hats. 296,316; June 17. Class 6.
Bergen Evening Record Corporation, The, Hackensack, N. J. Newspaper. 296,255; June 17. Class 38.
Berman, Benjamin, doing business as Stonbard Company, Philadelphia, Pa. Liquid mixture as a hardener, lightener, waterproofing, etc., used in the manufacture of concrete for paving and construction work. 294,661; June 17. Class 12.
Berman, Benjamin, doing business as Stonbard Company, Philadelphia, Pa. Asphalt-coated stone. 294,662; June 17. Class 12.
Beverage Industries, Inc., West Orange, N. J. Maltless beverages sold as soft drinks and syrups for making the same. 297,888; June 17. Class 45.
Blesch, Blanche A., doing business as Almondol Co., Chicago, Ill. Healing salve. 297,723; June 17. Class 6.
Bloomingdale Bros., Inc., New York, N. Y. Suits, coats, trousers, etc. 297,228–30; June 17. Class 39.
Blumenthal, Sydney, & Co. Inc., New York, N. Y. Pile fabrics in the piece. 300,101; June 17. Class 42.
Bobinski, Maxim, Riverhead, Calverton, Jamesport, Watermill, and Bridgehampton, N. Y. Potatoes in their natural state. 298,307; June 17. Class 46.
Bonney Forge & Tool Works, Allentown, Pa. Wrenches. 251,603; June 17. Class 23.
Bovinine Company, The, Chicago, Ill. Tonic. 299,949; June 17. Class 6.
Breeders Service Inc., Troy, N. Y. Cattle tonic. 283,919; June 17. Class 6.
Browning, King & Co., New York, N. Y. Men's suits and overcoats. 281,814–15; June 17. Class 39.
Bruce Publishing Company, The, Milwaukee, Wis. Periodicals. 300,325; June 17. Class 38.
Cameron Brothers, McDonald, Pa. Ginger ale. 300,326; June 17. Class 45.
Carillon Association, The, Washington, D. C. Magazine. 298,787; June 17. Class 38.
Case, Paul, doing business as Vitala Tea Co., Brockton, Mass. Boxed tea. 299,255; June 17. Class 46.
Chain Belt Company, Milwaukee, Wis. Transit concrete mixers. 299,898; June 17. Class 23.
Chandler, Joseph M., East Bridgewater, Mass. Refrigerating units and parts thereof. 300,169; June 17. Class 31.
Churchill Mfg. Co., Sioux City, Iowa. Soap. 295,467; June 17. Class 4.

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Churchill Mfg. Co., Sioux City, Iowa. Neutral soap. 299,553; June 17. Class 4.
Clapp, Otis, & Son, Inc., Boston, Mass. Nasal inhalant. 298,980; June 17. Class 6.
Clark, Helen, & Co. (See Stevens, Blanch.)
Co-Fos Chemical Products Co. (See Cole, James T.)
Cohen, Goldman & Co. Inc., New York, N. Y. Woven fabric. 300,337; June 17. Class 42.
Cohen, Ruth, Denver, Colo. Dresses. 277,998; June 17. Class 39.
Cole, James T., doing business as Co-Fos Chemical Products Co., Highland Park, Mich. General tonic, blood purifier, and rheumatic medicine. 298,489; June 17. Class 6.
Colt's Patent Fire Arms Manufacturing Co., Hartford, Conn. Dish, silver, and glass cleaning machines. 300,108; June 17. Class 23.
Commonwealths Collieries, Incorporated, Cincinnati, Ohio. Coal. 299,956; June 17. Class 1.
Converse Rubber Company, Malden, Mass. Ladies' and misses' gaiters and rubbers and cloth overshoes. 296,693; June 17. Class 39.
Corwin, D. Stanley, Greenport, Long Island, N. Y. Plaster, stucco, bricks, etc. 298,616; June 17. Class 12.
Covell, Abraham I., New York, N. Y. Periodical. 296,105; June 17. Class 38.
Daigger Corporation, Chicago, Ill. Chocolate beverage and syrups and extracts for making the same. 280,543; June 17. Class 45.
Daily Graphic, Inc., New York, N. Y. Series of cartoons or comic strips. 299,768; June 17. Class 38.
Dakota Breeders Hatchery. (See Anderson, Endre.)
Darneé, Inc., New York, N. Y. Face powder, lotion, rouge, and cream. 283,094; June 17. Class 6.
Davis-Edge Company, The, Quakertown, Pa. Leather belts. 298,981; June 17. Class 39.
Deming & Gould Co., Chicago, Ill., and South Bellingham, Wash. Canned salmon. 267,641; June 17. Class 46.
Dobbs & Co., New York, N. Y. Cigar holders, cigarette holders, cigar cases, etc. 299,903; June 17. Class 8.
Dobbs & Co., New York, N. Y. Travelling clocks. 299,904; June 17. Class 27.
Dobbs & Co., New York, N. Y. Hat brushes, derby wipers, and leurs for smoothing silk hats. 299,906; June 17. Class 29.
Doederlein, Hildegard, Woodridge, N. J. Curtain laces in the piece. 280,108; June 17. Class 42.
Douthitt Engineering Co., Chicago, Ill. Butter, dried skim milk, fresh milk, buttermilk, and cream. 299,052; June 17. Class 46.
Duke Manufacturing Company, St. Louis, Mo. Cereal cookers, food warmers, steam tables, etc. 291,054; June 17. Class 13.
Du Pont Viscoloid Company, New York, N. Y. Hair brushes and cloth brushes. 299,835; June 17. Class 29.
Du Pont Viscoloid Company, New York, N. Y. Clocks. 299,838; June 17. Class 27.
Du Pont, E. I., de Nemours, and Company, Wilmington, Del. Rubberized fabrics. 298,743; June 17. Class 50.
Du Pont, E. I., de Nemours, and Company, Wilmington, Del. Rubberized fabrics. 299,833; June 17. Class 50.
Eagle, C. K., & Co. Inc., New York, N. Y. Piece goods, silk, or a combination of silk and artificial silk. 300,111; June 17. Class 42.
Eastman Kodak Company, Rochester, N. Y. Light-sensitive photographic paper. 298,691; June 17. Class 26.
Eaton, Crane & Pike Company, Pittsfield, Mass. Paperteries, correspondence cards, writing tablets, etc. 294,873; June 17. Class 37.
Eau De Cologne- & Parfümerie-Fabrik "Glockengasse No. 4711" gegenüber der Pferdepost von Ferd. Mülhens. (See Mülhens, Paul P.)
Economy Paint Mills, Geneva, Nebr. Paints. 281,946; June 17. Class 16.
Eggerss-O'Flyng Co., Omaha, Nebr. Corrugated strawboard. 285,199; June 17. Class 37.
Engelhardt, G., & Co., "Chasalla" Schuhfabrik Aktiengesellschaft, Cassel, Germany. Shoes, rubber heels, rubber soles, etc. 292,662–3; June 17. Class 39.
Engineers Publishing Company. (See Shirk, Wesley H.)
Eros Chemical Company. (See Rossi, Donato.)
Evanko, John G., Pittsburgh, Pa. Preparation used as a hair grower, hair tonic, and for scalp irritations. 297,181; June 17. Class 6.
Federal Rubber Company, The, Chicago, Ill.; Cudahy, Wis.; and Chicopee Falls, Mass. Dressing for auto tops and rubber tires. 290,015; June 17. Class 4.
Filtret, Inc., Seattle, Wash. Smoking pipes and filters for smoking devices. 299,963; June 17. Class 8.
Fink & Easter Company, The, Baltimore, Md. Umbrellas and holders therefor. 299,309; June 17. Class 41.
Fisher Flouring Mills Company, West Waterway, Harbor Island, Seattle, Wash. Wheat flour. 300,014; June 17. Class 46.
Fitger Company, The, Duluth, Minn. Maltless beverages sold as soft drinks. 299,311; June 17. Class 45.
Fleischmann Transportation Company, The, Cincinnati, Ohio and New York, N. Y. Balsa-wood lumber. 291,088–9; June 17. Class 12.
Florasynth Laboratories, Inc., New York, N. Y. Natural and synthetic essential oils suitable for food-flavoring purposes. 298,875; June 17. Class 46.
Forstmann & Huffmann Company, Passaic, N. J. Woolen piece goods. 298,384; June 17. Class 42.
Franks Bird Store, Inc., New York, N. Y. Birdseed. 298,893; June 17. Class 46.
Fujii, S. R., doing business as Noxache Chemical Laboratory, San Francisco, Calif. Bath salts. 298,532; June 17. Class 6.
Gahns, Henrik, Aktiebolag, Uppsala, Sweden. Hair tonic, pomades, skin creams, etc. 293,578; June 17. Class 6.
Gallaher Limited, Belfast, Ireland. Smoking tobacco, cigarettes, cigars, etc. 300,015; June 17. Class 17.
Garcia, Luz E., San Antonio, Tex. Cold preparation. 298,940; June 17. Class 6.
Gay Jay Candy Co. (See Joseph, Elias G.)
General Seating Company, Chicago, Ill. Cement with which to fasten articles to a concrete floor, brick or cement wall, and other things of such nature. 297,593; June 17. Class 12.
Geneser, Frank A., doing business as Geneser Chemical Company, Des Moines, Iowa. Oily substance for the elimination of poultry lice. 283,272; June 17. Class 6.
Gibraltar Corrugated Paper Company, Inc., North Bergen, N. J. Boxes and cartons. 297,733; June 17. Class 2.
Goldberg, Bertram, Johnstown, N. Y. Underwear. 298,319; June 17. Class 39.
Goldberg, Isadore, doing business as Ideal Malt & Supply Co., Cleveland, Ohio. Malt syrup. 299,422; June 17. Class 46.
Goldschmidt, Th. A.-G., Essen-on-the-Ruhr, Germany. Cosmetic ointments and creams. 289,348; June 17. Class 6.
Greenfield Tap and Die Corporation, Greenfield, Mass. Screw plates, including taps, dies, pipe wrenches, and stocks. 300,188; June 17. Class 23.
Grip Manufacturing Company, Philadelphia, Pa. Firebrick cement. 297,804; June 17. Class 12.
Gross & Hurwitz, New York, N. Y. Dresses, suits, and creepers. 299,057; June 17. Class 39.
Gulf & Valley Cotton Oil Company, Inc., New Orleans, La. Shortening or cooking fat. 291,977; June 17. Class 46.
Haas, Baruch & Company, Los Angeles, Calif. Canned fruits, vegetables, fish, etc. 299,386; June 17. Class 46.
Hall, Horace W., doing business as Speedwood Manufacturing Company, Newton, Mass. Tennis rackets. 294,971; June 17. Class 22.
Hamm, Theo., Brewing Company, St. Paul, Minn. Malt and hop tonic. 297,966; June 17. Class 48.
Harris Manufacturing Co. (See O'Donnell, Edwin A.)
Hashemesh, Inc., New York, N. Y. Olive oil and sesame oil. 298,447; June 17. Class 46.
Heckelman, Jacob C., doing business as The Olympic Glove Company, New York, N. Y. Gloves and mittens, aprons, etc. 297,805; June 17. Class 39.
Hirsch-Weis Manufacturing Company, Portland, Oreg. Overalls. 297,531; June 17. Class 39.
Hollywood Candy Co. (See Martoccio, F. A. Company.)
Ideal Malt & Supply Co. (See Goldberg, Isadore.)
Independent Grocers' Alliance Distributing Company, Chicago, Ill. Starch, bluing, ammonia, salt, and baking powder. 275,041; June 17. Class 6.
Independent Grocers' Alliance Distributing Company, Chicago, Ill. Toys, especially small toy wagons operating by spring mechanism. 275,048; June 17. Class 22.
Independent Grocers' Alliance Distributing Company, Chicago, Ill. Toothpicks. 275,055; June 17. Class 44.
International Radiator Corp., Port Chester, N. Y. Heating radiators. 298,996; June 17. Class 34.
Jamestown Ginger Ale Corp., Norfolk, Va. Ginger ale. 300,200; June 17. Class 45.
Jones & Kroeger Company, Winona, Minn. Combination memorandum and calendar desk pad. 291,127; June 17. Class 37.
Joseph, Elias G., doing business as Gay Jay Candy Co., Flint, Mich. Candy and salted nuts. 289,463; June 17. Class 46.
Juvena Pharmacal Co. (See Warner, John J.)
Keeler, Louis V., New York, N. Y. Liquid latex. 298,998; June 17. Class 1.
King Features Syndicate, Inc., New York, N. Y. Newspaper section. 299,780; June 17. Class 38.
Kingan & Co., Incorporated, Indianapolis, Ind. Canned cooked chicken. 297,083; June 17. Class 46.
Kirby, Block and Fischer, Inc., New York, N. Y. Sanitary napkins. 299,579; June 17. Class 44.
Klen-Zit Company. (See Mims, F. Cobb.)
Korth, John C., New York, N. Y. Oil burners. 299,000; June 17. Class 34.
Krank, Walter A., St. Paul, Minn., executor of the estate of Alfred J. Krank, deceased. Hairdressing preparation. 281,954; June 17. Class 6.
Kroger Grocery & Baking Co., The, Cincinnati, Ohio. Paper shopping bags, wooden shipping baskets, and sugar cartons. 298,338; June 17. Class 2.
Krone-Sebek Die Casting & Mfg. Co., Chicago, Ill. Die castings. 291,513; June 17. Class 14.
Kuppenheimer, B., & Co. Inc., Chicago, Ill. Men's and boys' ready-to-wear topcoats or overcoats. 293,735; June 17. Class 39.
L. B. Co., Chicago, Ill. Bags. 298,190; June 17. Class 2.

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Laidlaw Co., Inc., The, New York, N. Y. Top covering for tops of motor cars, motor boats, tire covers, etc. 295,032; June 17. Class 50.
Lanman & Kemp, Inc., New York, N. Y. Almanacs. 299,003; June 17. Class 38.
Lea Manufacturing Company, The, Waterbury, Conn. Finishing compositions for buffing and polishing. 298,826; June 17. Class 4.
Lee, Roy C., Newark, N. J. Protecting devices made of rubber substance applicable to a shoe or the like. 295,902; June 17. Class 39.
Letone Company, The, West Milton, Ohio. Preparation for the treatment of diabetes and purifying the blood. 299,720; June 17. Class 6.
Levy, Michael, doing business as The Levy Corporation, St. Louis, Mo. Periodicals. 299,918; June 17. Class 38.
L'Hommedieu, Chas. F., & Sons Co., Chicago, Ill. Polishing, cutting, buffing, and finishing compositions. 277,311; June 17. Class 4.
Lieb, Joseph A., doing business as Star Dental Mfg. Co., Philadelphia, Pa. Dental instruments. 299,721; June 17. Class 44.
Lin-Erin Limited, Lurgan, Northern Ireland. Handkerchiefs, linen piece goods, piece goods, etc. 289,896; June 17. Class 42.
Lindenoid Sole Leather Co., Inc., Newark, N. J. Shoe soles and heels. 280,446; June 17. Class 39.
Lothamer, H. J., doing business as H. J. Lothamer & Co., Los Angeles, Calif. Undercoat for paints, primer paints. 291,460; June 17. Class 16.
Manicu-Kit Co. (See Singer Box Co.)
Marcus Brothers, New York, N. Y. Sheets and pillowcases. 277,073; June 17. Class 42.
Martoccio, F. A., Company, doing business as Hollywood Candy Co., Minneapolis, Minn. Candy bars. 291,680; June 17. Class 46.
Master-All Chemical Company, Sioux City, Iowa. Drycleaning fluid. 297,689; June 17. Class 4.
Matterhorn Malt Products Company, Chicago, Ill. Syrup. 294,450; June 17. Class 46.
Mayer, Oscar & Co. Inc., doing business as Oscar Mayer's, Chicago, Ill. Frankfurters. 296,227; June 17. Class 46.
McCarthy, Charles H., Minneapolis, Minn. Publication. 292,271; June 17. Class 38.
McClure, Benjamin C., New York, N. Y. Machines to put moisture in the air. 299,921; June 17. Class 34.
McGee, Malachi C., Winchester, Ark. Medical preparation. 300,077; June 17. Class 6.
McLaren-Consolidated Cone Corp., Dayton, Ohio. Ice-cream cones. 299,452–3; June 17. Class 46.
McNeil, Robert, Philadelphia, Pa. Catalogue. 300,215; June 17. Class 38.
Melliand, Inc., The, New York, N. Y. Periodicals. 300,253; June 17. Class 38.
Menihan Company, The, Rochester, N. Y. Leather shoes. 297,445; June 17. Class 39.
Mentodene Company, The, Atlanta, Ga. Cough medicine. 300,216; June 17. Class 6.
Mesler, Bertram E., New York, N. Y. Shade-roller stops. 299,725; June 17. Class 13.
Midvale Company, The, Nicetown, Philadelphia, Pa. Alloy steels. 299,923; June 17. Class 14.
Midway Chemical Co., Chicago, Ill. Stock spray. 299,983; June 17. Class 6.
Mims, F. Cobb, doing business as Klen-Zit Company, Philadelphia, Pa. Paint and varnish cleaners and hardstone cleaners. 297,447; June 17. Class 4.
Mosinee Paper Mills Company, Mosinee, Wis. Paper. 290,268; June 17. Class 37.
Mülhens, Paul P., doing business as Eau de Cologne- & Parfümerie-Fabrik "Glockengasse No. 4711" gegenüber der Pferdepost von Ferd. Mülhens, Cologne-on-the-Rhine, Germany. Soaps. 293,890; June 17. Class 4.
Mülhens, Paul P., doing business as Eau de Cologne- & Parfümerie-Fabrik "Glockengasse No. 4711" gegenüber der Pferdepost von Ferd. Mülhens, Cologne-on-the-Rhine, Germany. Soaps. 293,892; June 17. Class 4.
Mullins Manufacturing Corporation, Salem, Ohio. Sheet-metal stampings. 298,349; June 17. Class 14.
Myers, Frank S., doing business as Old Dominion Company, Grand Rapids, Mich. Salad dressing. 293,850; June 17. Class 46.
National Lime & Stone Company, The, Findlay, Ohio. Finishing lime, powdered lime, mason's lime, lump lime, and brick mortar. 285,897; June 17. Class 12.
National Skate Corporation, New York, N. Y. Ice skates. 299,008; June 17. Class 22.
National Vitamin Corporation, Wilmington, Del., and New York, N. Y. Cereal food product. 294,989; June 17. Class 46.
Natural Oil Products, Inc., San Francisco, Calif. Medicinal mineral oil used for treatment of skin eruption, burns, bruises, etc. 294,169; June 17. Class 6.
New Era Milling Company, The, Arkansas City, Kans. Wheat flour. 297,205; June 17. Class 46.
Newhall, H. M., & Co., San Francisco, Calif. Burlap bags. 298,584–5; June 17. Class 2.
Noxache Chemical Laboratory. (See Fujii, S. R.)
Nutrine Candy Co., Chicago, Ill. Candy. 299,986; June 17. Class 46.
O-P Craft Co., Inc., The, Sandusky, Ohio. Mediums used in setting colors. 296,978; June 17. Class 16.
Ochee Spring Water Co., Providence, R. I. Maltless beverages sold as soft drinks and syrups and extracts for making the same. 300,141; June 17. Class 45.
O'Donnell, Edwin A., doing business as Harris Manufacturing Co., Philadelphia, Pa. Adhesive liquid cement. 298,841; June 17. Class 6.
Old Dominion Company. (See Myers, Frank S.)
Old Town Woolen Co., Inc., Old Town, Me. Wool blankets and wool and camel-hair blankets. 298,252; June 17. Class 42.
Olympia Knitting Mills, Inc., Olympia, Wash. Swimming suits. 298,762; June 17. Class 39.
Olympic Glove Company, The. (See Heckelman, Jacob C.)
One Swipe Company, Minneapolis, Minn. Nonsoap-containing substance for cleaning finished surfaces. 292,547; June 17. Class 4.
Opco Company, Inc., Buffalo, N. Y. Lubricators. 298,458; June 17. Class 23.
Overland Silk Co., Inc., New York, N. Y. Silks and satins. 271,659; June 17. Class 42.
Palcila and Mondelli, Gilroy, Calif. Fresh vegetables. 279,875; June 17. Class 46.
Paper Service Company. (See Welsh, William A.)
Penn Bros., Chicago, Ill. Preparation for the treatment of rheumatism, cramp, and all kinds of foot irritations. 299,860; June 17. Class 6.
Petro-Flex Tubing Company Limited, Watford, England. Tubular hose. 299,152; June 17. Class 35.
Phoenix Manufacturing Company, Joliet, Ill. Rubber goods. 296,144; June 17. Class 35.
Photo Marketing Corporation, New York, N. Y. Photographic articles, printing frames, enlargers, cameras, etc. 298,588; June 17. Class 26.
Photo Marketing Corporation, New York, N. Y. Photographic exposure meters and photometers, photographic lenses, lens mountings, etc. 298,589; June 17. Class 26.
Piver, L. T., Inc., Wilmington, Del., and New York, N. Y. Perfume, toilet water, face powder, etc. 297,148; June 17. Class 6.
Pollari, Ferdinand, doing business as Fratelli Pollari, Buffalo, N. Y., and Parma, Italy. Wine tonic. 298,956; June 17. Class 6.
Prest, Clarence O., doing business as Prest Airplanes & Motors, Arlington, Calif. Airplanes. 281,312; June 17. Class 19.
Procter & Gamble Company, The, Cincinnati, Ohio. Package soap. 299,338; June 17. Class 4.
Prym, William, G. m. b. H., Stolberg-Rhineland, Germany. Smallwares. 283,513; June 17. Class 40.
Pusey, J. Carver, Wrightstown, Pa. Comic-cartoon strip. 299,622; June 17. Class 38.
R-Own Laboratories, Inc., Brooklyn, N. Y. Antiseptic ointment. 298,765; June 17. Class 6.
Rauh, E., & Sons Fertilizer Company, doing business as E. Rauh & Sons Animal Feed Co., Indianapolis, Ind. Farinaceous feed mixtures for poultry, cattle, horses, and hogs. 296,359; June 17. Class 46.
Red Sun Products Company, Chicago, Ill. Malt syrup. 299,409; June 17. Class 46.
Regal Typewriter Company, Inc., New York, N. Y. Typewriting machines and parts thereof. 300,234; June 17. Class 23.
Regelson & Rostow, New Haven, Conn. Prophylactic rubber articles. 299,993; June 17. Class 44.
Remedal Manufacturing Company, doing business as Standard Drug Co., Santa Rosa, Calif. Preparation for prevention of cannibalism among chickens. 300,087; June 17. Class 6.
Remington Arms Company, Inc., Bridgeport, Conn., and Ilion, N. Y. Military and sporting rifles, shot-guns, pistols, etc. 293,345; June 17. Class 9.
Rhode Island Plush Mills, Inc., Woonsocket, R. I. Pile fabrics. 300,031; June 17. Class 42.
Riona Products Co. Inc., McAllen, Tex. Grapefruit juice for soft-drink purposes. 298,849; June 17. Class 45.
Rock-Hill Asphalt & Construction Company, St. Louis, Mo. Asphalt. 298,461; June 17. Class 12.
Roeg, Louis M., Buffalo, N. Y. Laxative having a fruity lime taste. 294,594; June 17. Class 6.
Rossi, Donato, doing business as Eros Chemical Company, Brooklyn, N. Y. Preparation for the treatment of whooping cough. 295,919; June 17. Class 6.
Saginaw Stamping & Tool Company, Saginaw, Mich. Conveyor trolley roller turns, wheels, gravity rollers, etc. 297,333; June 17. Class 23.
Scharf, Brothers Company, Inc., New York, N. Y. Candy. 300,144; June 17. Class 46.
Schoeller-Bleckmann Stahlwerke, A. G., Vienna, Austria. Blocks, bars, etc., of iron and steel. 275,299; June 17. Class 14.
Scholastic Publishing Company, The, Chicago, Ill., and Jefferson City, Mo. Magazine. 299,599; June 17. Class 38.
Sears Roebuck and Co., Chicago, Ill. Electric refrigerators. 299,231; June 17. Class 31.

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Selby, Battersby & Co., Philadelphia, Pa. Materials for plastic and mastic floor coverings intended to be manufactured in place and plastic and mastic floors in connection for laying. 280,576–7; June 17. Class 12.
Selig Company, The, Atlanta, Ga. Deodorizing blocks. 297,696; June 17. Class 6.
Selig Company, The, Atlanta, Ga. Liquid soap. 298,669; June 17. Class 4.
Selig Company, The, Atlanta, Ga. Insecticide. 299,160; June 17. Class 6.
Seminole Fruit Flavor Co. Chattanooga, Tenn. Beverages and syrups, concentrates, and extracts used in making the same. 297,700; June 17. Class 45.
Shirk, Wesley H., doing business as Engineers Publishing Company, Philadelphia, Pa. Loose-leaf forms and binders therefor. 296,464; June 17. Class 38.
Shockley, Elmer N., Bassett, Va. Preparation for removing dandruff. 299,999; June 17. Class 6.
Sichel, Ferdinand, Kommandit-Gesellschaft, Hanover-Limmer, Germany. Adhesive glues, gums, and pastes. 297,183–4; June 17. Class 5.
Singer Box Co., doing business as Manicu-Kit Co., New York, N. Y. Manicure kits. 297,624; June 17. Class 44.
Smith, Isidor, doing business as Snib Chemists, New York, N. Y. Preparation for the treatment of aches and pains. 298,911; June 17. Class 6.
Snib Chemists. (See Smith, Isidor.)
Societa Anonima Doctor Leopoldo Zambeletti, Milan, Italy. Solution of arsenical acid. 285,182; June 17. Class 6.
Speedwood Manufacturing Company. (See Hall, Horace W.)
Spieker, Dr. Eduard, Munich, Germany. Fermented food products obtained by adding yoghurt and acidophilus ferments to Camembert cheese and ferments for making the same. 287,378–9; June 17. Class 46.
Squibb, E. R., & Sons, New York, N. Y. Preparation for the treatment of poison-ivy dermatitis. 298,858; June 17. Class 6.
Squibb, E. R., & Sons, New York, N. Y. Analgeso hypnotic. 300,304; June 17. Class 6.
Staedtler, J. S., Inc., New York, N. Y. Lead pencils, pencil leads, penholders, etc. 297,881; June 17. Class 37.
Standard Drug Co. (See Remedal Manufacturing Company.)
Standard Oil Company of California, San Francisco, Calif., and Wilmington, Del. Volatile odorant. 299,870; June 17. Class 6.
Sta-Put Manufacturing Co., The, Columbus, Nebr. Fly repellent for live stock, a disinfectant, and healing lotion. 300,306; June 17. Class 6.
Star Dental Mfg. Co. (See Lieb, Joseph A.)
Stevens, Blanch, doing business as Helen Clark & Co., Los Angeles, Calif. Preparation for the treatment of the hair and scalp. 300,307; June 17. Class 6.
Stonhard Company. (See Berman, Benjamin.)
Stump, T. J. & Son, Ashland, Tenn. Hand tools for cutting weeds. 299,235; June 17. Class 23.
Superior Type Company, The, Chicago, Ill. Rubber stamps, rubber-stamp printing outfits, rubber type, etc. 295,870; June 17. Class 37.
Swezey, William O., doing business as W. O. Swezey Company, Cleveland, Ohio. Prepared flour for cakes, waffles, doughnuts. 298,470; June 17. Class 46.
Swift and Company, Chicago, Ill. Soap. 299,416; June 17. Class 4.
Swisher, John H., & Son, Inc., Jacksonville, Fla. Cigars. 297,101; June 17. Class 17.
Synthetic Resins Co, Inc., New York, N. Y. Synthetic resin. 298,471; June 17. Class 6.
Texas Canning Company, Laredo, Tex. Peppers in vinegar and pepper sauce for foods. 291,300; June 17. Class 46.
Thayer, N. B., Shoe Company, East Rochester, N. H. Shoes. 298,915; June 17. Class 39.
Tildesley Coal Company, The, Cincinnati, Ohio. Coal. 282,504; June 17. Class 1.
2 in 1-Shinola-Bixby Corporation, New York, N. Y. Shoe polish. 297,882; June 17. Class 4.
2 in 1-Shinola-Bixby Corporation, New York, N. Y. Cleaning, polishing, and renovating composition. 298,293–4; June 17. Class 4.
United Drug Company, Boston, Mass. Medicinal preparation. 298,730; June 17. Class 6.
V. E. P. Company, Newark, N. J., St. Louis, Mo., and Pontiac, Mich. Lacquers, lacquer enamels, lacquer finishes, etc. 292,062; June 17. Class 16.
Valentine Laboratories. (See Walgreen Co.)
Vaughan, Lester H., Taunton, Mass. Pitchers, bowls, porringers, etc. 299,098; June 17. Class 13.
Vitala Tea Co. (See Case, Paul.)
Vitalite Co., The, New York, N. Y. Reticular metallic base covered with cellulose-derivative film. 295,770; June 17. Class 50.
Voisophone Company, The, Wausau, Wis. Unitary phonographic reproducing apparatus. 292,132; June 17. Class 36.
Vulcan Match Co., Inc., New York, N. Y. Matches. 291,942; June 17. Class 9.
Walgreen Co., doing business as Valentine Laboratories, Chicago, Ill. Tablets for the relief of distress and discomfort due to simple headache, etc. 298,366; June 17. Class 6.
Warner, John J., doing business as Juvena Pharmacal Co., Rochester, N. Y. Lotions. 300,250; June 17. Class 6.
Waterbury Chemical Company, Inc., New York, N. Y. Medicines and pharmaceutical preparations. 294,699; June 17. Class 6.
Waterfalls Paper Mills, New York, N. Y. Bond and writing paper. 296,619; June 17. Class 37.
Watson and Midgley, Manchester, England. Dress, negligee, and work shirts, collars, cuffs, and pyjamas. 296,838; June 17. Class 39.
Welsh, William A., doing business as Paper Service Company, Philadelphia, Pa. Box-covering paper. 295,588; June 17. Class 37.
Wesson, Harry B., Tampa, Fla. Trap for roaches and water bugs. 299,941; June 17. Class 50.
Western Clock Company, Peru, Ill. Clocks and watches. 299,747; June 17. Class 27.
Westite Co. (See Balmer-Westite Co.)
Whitman, Stephen F., & Sons, Inc., Philadelphia, Pa. Candy. 296,621; June 17. Class 46.
Williams Patent Crusher and Pulverizer Company, St. Louis, Mo. Presses and parts thereof for manufacturing animal and poultry feed in granular form. 299,942; June 17. Class 23.
Windsor Mills, Inc., The, Philadelphia, Pa. Hosiery. 297,786; June 17. Class 39.
Winston, Peter, doing business as Arrow Tee Company, Richmond, Va. Golf tee. 298,418; June 17. Class 22.
Woll, F. P., & Company, Philadelphia, Pa. Hair for stuffing mattresses, furniture, and upholstery. 293,304; June 17. Class 32.
Worumbo Manufacturing Company, Bath, Me. Woolen fabrics. 299,878; June 17. Class 42.

CLASSIFIED LIST OF TRADE-MARKS REGISTERED

CLASS 1

Coal. Bokoshe Smokeless Coal Co. 271,917; June 17; Serial No. 272,126; published Apr. 1, 1930.
Coal. Sunshine Coal Company. 271,747; June 17; Serial No. 293,800; published Mar. 11, 1930.
Pelts or unfinished furs. Louisiana Furs, Inc. 271,759; June 17; Serial No. 294,537; published Apr. 1, 1930.
Seed. Goldberg Seed & Feed Company. 271,861; June 17; Serial No. 289,513; published Apr. 1, 1930.
Skins. John Pryce & Co. 271,949; June 17; Serial No. 289,128; published Apr. 1, 1930.

CLASS 2

Boxes, steel products, batteries, etc., Wooden. Anchor Box & Lumber Company. 271,838; June 17; Serial No. 283,024; published Dec. 3, 1929.

CLASS 3

Harness hardware. North and Judd Manufacturing Company. 77,878; renewed May 10, 1930.
Horse equipments, Certain. North and Judd Manufacturing Company. 79,441; renewed Sept. 6, 1930.
Luggage. Ely & Walker Dry Goods Company. 271,621; June 17; Serial No. 293,033; published Apr. 1, 1930.
Luggage carrier. Kari-Keen Manufacturing Company. 271,694; June 17; Serial No. 294,808; published Apr. 1, 1930.

CLASS 4

Soaps. Parfumerie Roger et Gallet, Société Anonyme. 271,914; June 17; Serial No. 275,293; published Mar. 18, 1930.

CLASS 6

Ampoules containing magnesia. Laboratoire de Pharmacologie, Inc. 271,625; June 17; Serial No. 296,279; published Apr. 8, 1930.
Antacid and digestant. H. L. Ladd Chemist, Inc. 271,863; June 17; Serial No. 289,356; published Mar. 18, 1930.
Astringents, astringent cerates, almond meal, etc. R. Thornton. 271,733; June 17; Serial No. 294,862; published Mar. 25, 1930.
Baking powder. Royal Baking Powder Company. 271,853–4; June 17; Serial No. 277,085–6; published Apr. 1, 1930.
Baking soda, starch, borax, etc. First National Stores Inc. 271,793; June 17; Serial No. 295,669; published Apr. 8, 1930.

Biliary stimulant. Drug Products Co. 271,877; June 17; Serial No. 295,936; published Mar. 25, 1930.
Bitters, catarrh medicine, fever powder, etc. G. Milbrandt. 271,836; June 17; Serial No. 283,577; published Mar. 18, 1930.
Carbon black. International Gas Products, Inc. 271,875–6; June 17; Serial Nos. 295,849–50; published Mar. 25, 1930.
Carbon black. Thermatomic Carbon Company. 271,750; June 17; Serial No. 296,555; published Apr. 8, 1930.
Chemical carbon remover. Ethyl Gasoline Corporation. 271,784; June 17; Serial No. 296,410; published Apr. 1, 1930.
Chemical preparation. C. L. Everwine. 271,878; June 17; Serial No. 295,941; published Mar. 25, 1930.
Chemical preparations. R. Avenarius & Co. 271,868; June 17; Serial No. 295,203; published Mar. 18, 1930.
Chemical substances. A. Rob. 271,881; June 17; Serial No. 296,027; published Mar. 25, 1930.
Chemicals. I. G. Farbenindustrie Aktiengesellschaft. 271,936; June 17; Serial No. 287,744; published Apr. 8, 1930.
Citrate of magnesia. General Distributing Company. 271,803; June 17; Serial No. 293,923; published Apr. 1, 1930.
Compound to be used in the treatment of chapped hands, face and lips; talcum powder, etc. Baldauf Drug Company. 271,792; June 17; Serial No. 295,723; published Apr. 8, 1930.
Compound used for external application to horses. H. N. Wilhelm. 271,739; June 17; Serial No. 296,304; published Apr. 8, 1930.
Cream, sachet powder, paste rouge, etc., Cleansing. L. Singer. 271,874; June 17; Serial No. 295,392; published Apr. 1, 1930.
Cream, Skin. Hollywood Laboratories, Inc. 271,643; June 17; Serial No. 293,970; published Apr. 8, 1930.
Dentifrice. Cutino Company. 271,862; June 17; Serial No. 289,391; published Dec. 17, 1929.
Finish for shoe soles, Bottom. Penn-Standard Sole Cementing Process, Inc. 271,732; June 17; Serial No. 294,889; published Mar. 18, 1930.
Hair tonic. Lewis Bros., Inc. 271,624; June 17; Serial No. 296,281; published Apr. 8, 1930.
Horse-radish syrup. Laboratoire de Pharmacologie, Inc. 271,867; June 17; Serial No. 295,182; published Mar. 18, 1930.
Hydrocarbons and their derivatives, Chlorinated aromatic. Federal Phosphorus Company. 271,947; June 17; Serial No. 289,015; published Mar. 25, 1930.
Inhalant for the relief of catarrh and cold in the head. E. Griffiths Hughes, Limited. 271,791; June 17; Serial No. 295,737; published Apr. 1, 1930.
Inhalent for the treatment of head colds, hay fever, nasal catarrh, etc. H. E. Roush. 271,646; June 17; Serial No. 293,448; published Apr. 8, 1930.
Ink eradicator, Liquid. H. A. Montgomery Co. 271,647; June 17; Serial No. 293,061; published Apr. 1, 1930.
Laundry sours. Crescent Chemical Corporation. 271,852; June 17; Serial No. 277,103; published Feb. 19, 1929.
Laxative preparation. H. Kessinger. 271,752; June 17; Serial No. 296,426; published Apr. 8, 1930.
Laxative tonic. Muir Laboratories. 271,626; June 17; Serial No. 296,231; published Apr. 1, 1930.
Liniment. A. C. Day. 271,872; June 17; Serial No. 295,332; published Apr. 1, 1930.
Liniment. A. J. Lambert. 271,945; June 17; Serial No. 288,750; published Apr. 1, 1930.
Liniment, Rubbing. Gorham and Wing. 271,798; June 17; Serial No. 295,106; published Apr. 1, 1930.
Liniments, castor oil, cough and cold medicines, Epsom salts. A. A. Osetkowski. 271,847; June 17; Serial No. 278,803; published Apr. 1, 1930.
Lye. B. T. Babbitt, Inc. 271,668; June 17; Serial No. 294,563; published Mar. 25, 1930.
Lye. B. T. Babbitt, Inc. 271,669; June 17; Serial No. 294,567; published Mar. 25, 1930.
Lye. B. T. Babbitt, Inc. 271,670; June 17; Serial No. 294,571; published Mar. 25, 1930.
Medicinal preparation. C. C. Carroll. 271,858; June 17; Serial No. 290,451; published Mar. 18, 1930.
Medicinal preparation. A. Causa y Ramirez. 271,871; June 17; Serial No. 295,328; published Mar. 18, 1930.
Medicinal preparation. Dr. Miles Medical Company. 271,789; June 17; Serial No. 296,074; published Apr. 1, 1930.
Medicinal preparation. L. P. Elz. 271,785; June 17; Serial No. 296,222; published Apr. 1, 1930.
Medicinal preparation. MacAndrews & Forbes Company. 271,882; June 17; Serial No. 296,068; published Apr. 1, 1930.
Medicinal preparation. L. Philippe. 271,923; June 17; Serial No. 285,468; published Sept. 24, 1929.
Medicinal preparation. S. L. Ruskin. 271,687; June 17; Serial No. 295,537; published Mar. 18, 1930.
Medicinal preparation. F. X. Schram. 271,844; June 17; Serial No. 279,887; published Apr. 1, 1930.
Medicinal preparation. Viclaire, Inc. 271,870; June 17; Serial No. 295,310; published Apr. 1, 1930.
Medicinal preparation for the relief of itch, mange, scratches, etc. Owens & Minor Drug Co. 271,635; June 17; Serial No. 295,045; published Apr. 1, 1930.
Medicinal preparations. New Era Treatment Company. 271,873; June 17; Serial No. 295,384; published Apr. 1, 1930.
Medicinal smoking preparations. Blosser Company. 271,699; June 17; Serial No. 294,203; published Mar. 18, 1930.
Medicinal tea. "Heilit" Chemisches Laboratorium. 271,839; June 17; Serial No. 282,820; published Mar. 18, 1930.
Medicine, Poultry. Ko-Tar Products Co. 271,869; June 17; Serial No. 295,227; published Apr. 1. 1930.
Mineral compounds. Oelwein Chemical Company. 271,775; June 17; Serial No. 292,592; published Mar. 18, 1930.
Ointment. E. C. Dornbusch. 271,673; June 17; Serial No. 248,343; published Mar. 25, 1930.
Ointment. William H. Rorer, Inc. 271,771; June 17; Serial No. 292,752; published Apr. 1, 1930.
Perfumes. Les Grands Parfums de France, Inc. 271,933; June 17; Serial No. 287,536; published Apr. 1, 1930.
Perfumes. H. Milgrim & Bros., Inc. 271,787; June 17; Serial No. 296,131; published Apr. 1, 1930.
Perfumes, face powders and creams, rouge, etc. De Musset, Inc. 271,865; June 17; Serial No. 295,118; published Mar. 18, 1930.
Perfumes, face powders, toilet waters, etc. De Musset, Inc. 271,866; June 17; Serial No. 295,119; published Mar. 25, 1930.
Perfumes, lotions, bath powders, etc. Les Parfums de Molyneux, Inc. 271,776; June 17; Serial No. 292,452; Apr. 1, 1930.
Plasters, Corn and bunion. Kendall Company. 271,939; June 17; Serial No. 288,076; published Apr. 1, 1930.
Powder, Baby. Gold Bond Sterilizing Powder Co. 271,879; June 17; Serial No. 295,945; published Mar. 25, 1930.
Powder, Face. Lucien Lelong, Inc. 271,880; June 17; Serial No. 295,949; published Mar. 25, 1930.
Powder, Toilet. Henry B. Gilpin Company. 271,788; June 17; Serial No. 296,118; published Apr. 1, 1930.
Preparation for driving moths and other insects from clothing. Lynch-Cross Corporation. 271,738; June 17; Serial No. 296,353; published Apr. 1. 1930.
Preparation for piles. P. Wenner. 271,845; June 17; Serial No. 279,512; published Apr. 8, 1930.
Preparation for the treatment of rheumatism, neuritis, lumbago, etc. National Art Sign Corporation. 271,800; June 17; Serial No. 294,680; published Apr. 1, 1930.
Preparation for the treatment of stomach ills. National Art Sign Corporation. 271,799; June 17; Serial No. 294,681; published Apr. 1, 1930.
Preparation for the treatment of the scalp. R. Halif. 271,931; June 17; Serial No. 287,297; published Apr. 1, 1930.
Preparation for use in treating head colds, hay fever, etc. J. E. Thayer. 271,734; June 17; Serial No. 296,299; published Apr. 8, 1930.
Preparation, Permanent-waving. P. J. Puetz. 271,786; June 17; Serial No. 296,146; published Apr. 1, 1930.
Preparation used as a preventative against all forms of wood-destroying organisms. Termiteol Corporation, Inc. 271,794; June 17; Serial No. 295,647; published Apr. 1, 1930.
Preparation used in the treatment of poultry diseases. M. Pfaffinger. 271,695; June 17; Serial No. 294,686; published Mar. 18, 1930.
Preparations for curling and waving hair. La Gerardine, Inc. 271,627; June 17; Serial No. 295,800; published Apr. 1, 1930.
Preparations for dehairing hides and preparing them for tanning. Rohm & Haas Company. 271,672; June 17; Serial No. 294,544; published Mar. 18, 1930.
Preparations for the hair. Curellio G. m. b. H. 271,674; June 17; Serial No. 293,822; published Mar. 18, 1930.
Remedies for coughs, colds, grippe, and certain other affections. Synvita Medicine Co. 79,533; renewed Sept. 13, 1930.
Remedy for certain diseases. N. A. Harris. 78,094; renewed May 31, 1930.
Salt, Effervescent powdered. E. von Schallern. 271,935; June 17; Serial No. 287,683; published Apr. 8, 1930.
Salves and ointments. M. A. Armstrong. 271,780; June 17; Serial No. 291,077; published Jan. 7, 1930.
Shoe soles, Bottom finish for. Penn-Standard Sole Cementing Process, Inc. 271,864; June 17; Serial No. 294,890; published Mar. 18, 1930.
Solution of the drug dibrom-oxymercuri fluorescein, Two per centum (2%). J. T. Williams, jr. 271,671; June 17; Serial No. 294,832; published Mar. 18, 1930.
Solution, Pyorrhea. Pharmacal Manufacturing Co. 271,751; June 17; Serial No. 296,439; published Apr. 8, 1930.
Sours, Laundry. Crescent Chemical Corporation. 271,851; June 17; Serial No. 277,104; published Mar. 5, 1929.
Tablets, a medicinal preparation. A. N. Shavelson. 271,645; June 17; Serial No. 293,559; published Apr. 1, 1930.
Talcum powder. Baby Health Products, Inc. 271,925; June 17; Serial No. 285,617; published Apr. 1, 1930.
Tonic. C. Thompson. 271,856; June 17; Serial No. 290,531; published Apr. 1, 1930.
Tonic, Digestive. L. Feinstein. 271,948; June 17; Serial No. 289,068; published Apr. 8, 1930.

CLASS 8

Cigar and cigarette holders. Kaufmann Bros. & Bondy, Inc. 271,860; June 17; Serial No. 289,747; published Nov. 26, 1929.

CLASS 11

Ink, Writing. C. Dean. 271,629; June 17; Serial No. 295,507; published Apr. 8, 1930.

CLASS 12

Lime, hydrated lime, and plaster. Kelley Island Lime & Transport Company. 79,840; renewed Oct. 11, 1930.
Roofing, sarking, sheathing, and lining felts. D. Anderson & Son, Limited. 79,097; renewed Aug. 9, 1930.

CLASS 13

Cloth and metal screening, Wire. Newark Wire Cloth Company. 271,648; June 17; Serial No. 294,777; published Apr. 1, 1930.
Covers for manholes and handholes. R. Munroe & Sons Mfg. Corp. 79,850; renewed Oct. 11, 1930.
Laundry trays and kitchen sinks. Alberene Stone Company. 271,639; June 17; Serial No. 293,612; published Apr. 1, 1930.
Pipes and tubes, Metal. National Tube Company. 78,628; renewed June 28, 1930.
Wire fencing. American Steel and Wire Company of New Jersey. 271,814; June 17; Serial No. 295,599; published Apr. 1, 1930.

CLASS 14

Castings, Finished steel. Standard Brake Shoe & Foundry Company. 271,631; June 17; Serial No. 295,282; published Apr. 8, 1930.
Steel bars, forgings, and blocks, etc. Firth-Sterling Steel Company. 271,644; June 17; Serial No. 293,921; published Apr. 8, 1930.
Steel, Tool and die. Ziv Steel & Wire Co. 271,623; June 17; Serial No. 296,379; published Apr. 8, 1930.

CLASS 15

Fuel or gasoline, Liquid motor. Phillips Petroleum Company. 271,916; June 17; Serial No. 274,494; published Jan 8, 1929.
Lubricants. International Acheson Graphite Company. 78,519; renewed June 21, 1930.
Oil, Mineral and compounded. E. E. Fulton Co. 271,818; June 17; Serial No. 294,968; published Apr. 1, 1930.
Oils and greases or petroleum products. United States Refining Company. 271,722; June 17; Serial No. 293,389; published Mar. 25, 1930.

CLASS 16

Compound in the nature of a paint. J. Dampney & Co. Ld. 78,944; renewed July 26, 1930.
Paint enamels. Charles Moser Company. 271,652; June 17; Serial No. 283,884; published Apr. 1, 1930.
Paint in liquid and paste form, paint pigments, paint enamel, etc. Midwest Wall Paper & Paint Co. 271,840; June 17; Serial No. 281,960; published June 11, 1929.
Polish. E. E. Fulton Co. 271,638; June 17; Serial No. 294,967; published Apr. 1, 1930.
Wax for polishing floors. Gilbert Spruance Company. 271,634; June 17; Serial No. 295,156; published Apr. 1, 1930.

CLASS 17

Tobacco, Leaf. Ross Tobacco Company. 271,636; June 17; Serial No. 294,095; published Apr. 8, 1930.

CLASS 19

Automobile bodies. Hudson Motor Car Company. 271,656; June 17; Serial No. 294,427; published Apr. 1, 1930.
Automobiles and constructive parts thereof. Graham-Paige Motors Corporation. 271,657; June 17; Serial No. 294,420; published Apr. 1, 1930.
Automobiles, Gasoline passenger. Hudson Motor Car Company. 271,819; June 17; Serial No. 295,030; published Apr. 1, 1930.
Covers for automobile cushions, seats, and seat backs. S. E. Hyman Company. 271,820; June 17; Serial No. 295,073; published Apr. 1, 1930.

CLASS 21

Amplifiers, audio frequency. Webster Electric Company. 271,763; June 17; Serial No. 294,327; published Mar. 25, 1930.
Batteries and parts thereof, Storage. Pille Bros., Inc. 271,811; June 17; Serial No. 295,572; published Apr. 1, 1930.
Batteries and radio tubes, Radio and automobile. J. E. Forsell. 271,650; June 17; Serial No. 284,262; published Sept. 3, 1929.
Batteries, Storage. Electric Storage Battery Company, The. 271,808; June 17; Serial No. 295,367; published Apr. 1, 1930.
Batteries, Storage. Pep Boys—Manny, Moe & Jack. 271,928; June 17; Serial No. 286,710; published Apr. 1, 1930.
Batteries, Storage. USL Battery Corporation. 271,812–13; June 17; Serial Nos. 295,584–5; published Apr. 1, 1930.
Batteries, Wet storage. Globe-Union Mfg. Co. 271,944; June 17; Serial No. 288,555; published Apr. 1, 1930.
Cables and wires, Connectors for armored. National Electric Products Corporation. 271,810; June 17; Serial No. 295,569; published Apr. 1, 1930.
Clamps and suspension devices, Trolley. Ohio Brass Company. 77,879; renewed May 10, 1930.
Condensers and inductances forming filter units, Combination of. Tobe Deutschmann Company. 271,920; June 17; Serial No. 269,374; published Apr. 1, 1930.
Conduits for electric wires and fittings for the same. Electrotrim, Inc. 271,806; June 17; Serial No. 295,212; published Mar. 25, 1930.
Electric churns. M. L. Burton. 271,768; June 17; Serial No. 291,113; published Mar. 25, 1930.
Electric conductors or cables, Armored. National Electric Products Corporation. 271,837; June 17; Serial No. 283,464; published July 16, 1929.
Electric conductors or cables, Armored. National Electric Products Corporation. 271,911; June 17; Serial No. 276,495; published Sept. 3, 1929.
Electric-current-conducting cords, etc. American Braiding Company. 271,912; June 17; Serial No. 276,444; published Mar. 12, 1929.
Electric ozone-generating machines. Montgomery Brothers. 271,926; June 17; Serial No. 285,685; published Feb. 25, 1930.
Electric signal lights. M. S. Silva. 271,661; June 17; Serial No. 293,490; published Mar. 25, 1930.
Electric welders, and portable electric-lighting plants. Klauer Manufacturing Company. 271,841; June 17; Serial No. 280,715; published Mar. 25, 1930.
Electrical apparatus, Accessory unit for. T. C. Deutschmann. 271,849; June 17; Serial No. 277,617; published Apr. 1, 1930.
Electrical water heaters. Electrodaire Company. 271,821; June 17; Serial No. 294,916; published Mar. 25, 1930.
Electrically-operated signal horn. Temme Manufacturing Co. 271,655; June 17; Serial No. 294,649; published Mar. 25, 1930.
Heaters, Electrical crank case. Permatite Manufacturing Co. Inc. 271,883; June 17; Serial No. 293,639; published Apr. 1, 1930.
Lamps. Hamilton Ross Factories, Inc. 271,848; June 17; Serial No. 278,539; published Apr. 1, 1930.
Radio receiving sets. Superior Cabinet Corporation. 271,779; June 17; Serial No. 291,845; published Apr. 1, 1930.
Radio receiving sets and loud-speakers, transformers, tube sockets, etc. Baldwin Company. 271,846; June 17; Serial No. 278,923; published Apr. 1, 1930.
Radio receiving sets and parts thereof. People's Outfitting Company. 271,653; June 17; Serial No. 294,737; published Mar. 25, 1930.
Radiotubes. Johnsonburg Radio Corporation. 271,649; June 17; Serial No. 294,774; published Mar. 25, 1930.
Tubes, Arc. General Electric Company. 271,660; June 17; Serial No. 293,526; published Apr. 1, 1930.
Tubes, Vacuum. Matchless Electric Company. 271,915; June 17; Serial No. 274,840; published May 7, 1929.

CLASS 22

Baits, Artificial. James Heddon's Sons. 271,678; June 17; Serial No. 295,977; published Apr. 1, 1930.
Bridge sets, tennis-racket covers, and golf bags. Hookless Fastener Company. 271,679–80; June 17; Serial Nos. 295,946–7; published Apr. 1, 1930.
Tops. Edwards Manufacturing Company. 271,943; June 17; Serial No. 288,469; published Apr. 1, 1930.

CLASS 23

Bit cones, Rotary rock-. Garber Tool Co. 271,709; June 17; Serial No. 294,722; published Apr. 8, 1930.
Blades, Safety-razor. M. E. Greenhouse. 271,942; June 17; Serial No. 288,453; published Apr. 8, 1930.
Blades, Safety-razor. "Niess" Stahl- und Metallwarenfabrik Gebr. Niepenberg. 271,718; June 17; Serial No. 293,785; published Apr. 8, 1930.
Compressors, unitary articles, and a motor for operating the same. United States Air Compressor Company. 271,922; June 17; Serial No. 284,593; published Apr. 8, 1930.
Dispensing devices, Oil-. Boe Manufacturing Company. 271,707–8; June 17; Serial Nos. 295,249–50; published Apr. 8, 1930.
Engines, Internal-combustion. Montgomery Ward & Co. 271,772; June 17; Serial No. 292,743; published Apr. 8, 1930.
Franking machines, parcel-post-stamping machines, etc., Postal. W. Friedrichs. 271,774; June 17; Serial No. 292,626; published Apr. 8, 1930.
Ice picks, kitchen forks, spoons, etc. Utility Manufacturing Co. 271,730; June 17; Serial No. 295,405; published Apr. 8, 1930.
Machinery. Fried. Krupp, Aktiengesellschaft, Grusonwerk. 77,229; renewed Mar. 22, 1930.
Machinery, Pulp and paper-making. Bird Machine Company. 271,704; June 17; Serial No. 295,291; published Apr. 8, 1930.
Power-transmission machinery. Worthington Pump and Machinery Corporation. 271,724; June 17; Serial No. 295,970; published Apr. 8, 1930.
Pumps and pumping units. Decatur Pump Company. 271,725–6; June 17; Serial Nos. 295,929–30; published Apr. 8, 1930.
Punch, Card or ticket. Hoggson & Pettis Manufacturing Company. 271,714; June 17; Serial No. 294,304; published Apr. 8, 1930.

Shovels, spades, ditching forks, etc. Baldwin Tool Works. 271,727–8; June 17; Serial No. 295,826–7; published Apr. 8, 1930.
Stone-picking machines. Farmers' Stone-Picking Machine Company. 271,723; June 17; Serial No. 296,223; published Apr. 8, 1930.
Trimmers, parts thereof, paper-trimming outfits, shears, etc. Hyde Manufacturing Company. 271,778; June 17; Serial No. 292,071; published Apr. 8, 1930.
Vise. Prentiss Vise Company. 78,634–5; renewed June 28, 1930.
Vise. Prentiss Vise Company. 78,637; renewed June 28, 1930.

CLASS 24

Racks, Clothes and drying. J. L. Wood. 271,816; June 17; Serial No. 295,651; published Apr. 1, 1930.
Washing machines and clothes wringers, Clothes-. H. Bohn. 271,658; June 17; Serial No. 293,867; published Apr. 1, 1930.

CLASS 26

Film, Motion-picture and sound-producing. Tec-Art Studios, Inc. 271,721; June 17; Serial No. 294,095; published Apr. 8, 1930.
Optical frames. Design Mfg. Co. Inc. 271,706; June 17; Serial No. 295,255; published Apr. 8, 1930.

CLASS 27

Clocks and watches. Western Clock Mfg. Co. 79,874–5; renewed Oct. 11, 1930.
Clocks and watches. Western Clock Company. 271,938; June 17; Serial No. 287,985; published Apr. 8, 1930.
Time recorders, clocks, and watches. Etna Watch Company. 271,622; June 17; Serial No. 296,413; published Apr. 8, 1930.

CLASS 28

Bead-stringing chain and silk cords. Regent Import Corporation. 271,711; June 17; Serial No. 294,442; published Apr. 1, 1930.
Beads and jewelry. Spangler Inc. 271,720; June 17; Serial No. 293,761; published Apr. 1, 1930.
Diamonds. C. A. Kiger Co. 271,705; June 17; Serial No. 295,265; published Mar. 25, 1930.
Diamonds and diamond rings. J. W. Forsinger Co. 271,710; June 17; Serial No. 294,666; published Apr. 1, 1930.
Metal ware, Precious-. Joseph L. Herzog & Company. 79,054; renewed Aug. 2, 1930.
Necklaces, pendants, bracelets, etc. Jaeckel Mfg. Co., Inc. 271,719; June 17; Serial No. 293,777; published Mar. 25, 1930.
Pins, badges, watch charms, and bracelets, etc. Psi Omega. 271,712; June 17; Serial No. 294,441; published Mar. 25, 1930.
Rings, and mountings therefor, Finger. Benjamin & Edward J. Gross Co. 271,701–2; June 17; Serial No. 295,354–5; published Mar. 25, 1930.
Rings, earrings, bracelets, etc., Finger. A. Wrazlowsky. 271,927; June 17; Serial No. 286,060; published Mar. 25, 1930.
Rings, Finger. J. Granat. 271,716–17; June 17; Serial No. 294,111–2; published Mar. 25, 1930.
Watch bracelets, watch straps, watch attachments. Gemex Company. 271,731; June 17; Serial No. 295,372; published Mar. 25, 1930.

CLASS 29

Brushes. S. M. Supplies Co. 271,809; June 17; Serial No. 295,394; published Apr. 1, 1930.
Mops, brooms, and scrub brushes. First National Stores Inc. 271,817; June 17; Serial No. 295,668; published Apr. 1, 1930.

CLASS 31

Filtering media, Porous rubber sheets for use as. Dewey & Almy Chemical Company. 271,618; June 17; Serial No. 294,063; published Apr. 1, 1930.
Filters and parts therefor. Aktiebolaget Elektrolux. 271,924; June 17; Serial No. 285,489; published Apr. 1, 1930.

CLASS 32

Chairs, love seats, couches, etc. W. Knoll. 271,765; June 17; Serial No. 291,340; published Apr. 1, 1930.
Ottomans, hassocks, cushions, and footstools. V. L. Newman. 271,940; June 17; Serial No. 288,443; published Apr. 1, 1930.
Tables, Bridge. L. A. Marsh. 271,703; June 17; Serial No. 295,339; published Apr. 8, 1930.
Wardrobes, chifforobes, closets, and chests, Cedar. Lane Company. 271,946; June 17; Serial No. 288,967; published Apr. 1, 1930.

CLASS 33

Jars or containers, Glass. Olean Glass Company. 271,692; June 17; Serial No. 295,133; published Apr. 1, 1930.

CLASS 34

Boilers, Steam and hot-water. Home Heating Corporation, The. 271,815; June 17; Serial No. 295,620; published Apr. 1, 1930.

CLASS 35

Belts, radiator hose, generator tubing, etc., Fan. Raybestos-Manhattan, Incorporated. 271,713; June 17; Serial No. 294,400; published Apr. 8, 1930.
Leathers for pumps, Cup. Dempster Mill Manufacturing Company. 271,729; June 17; Serial No. 295,562; published Apr. 8, 1930.

CLASS 36

Musical instruments. Gretsch & Brenner, Inc. 271,700; June 17; Serial No. 295,122; published Mar. 25, 1930.
Phonograph apparatus for recording and reproducing sounds. Plaza Music Company. 271,715; June 17; Serial No. 294,176; published Mar. 25, 1930.
Phonograph records. Columbia Phonograph Company. 271,766; June 17; Serial No. 291,204; published Apr. 1, 1930.
Phonographs. Sterchi Bros. Stores, Inc. 271,781; June 17; Serial No. 291,589; published Mar. 25, 1930.

CLASS 37

Cards and books for budget or like accounting. L. A. Savidge. 271,929; June 17; Serial No. 287,017; published Sept. 3, 1929.
Paper. Champion Coated Paper Company. 271,754–5; June 17; Serial No. 294,708–9; published Mar. 25, 1930.
Paper, and mailing and correspondence envelopes, Writing. Photoscript Company. 271,758; June 17; Serial No. 294,540; published Apr. 1, 1930.
Paper, Mineral-coated. Champion Coated Paper Company. 271,664; June 17; Serial No. 296,262; published Apr. 1, 1930.
Paper, Mineral-coated. Champion Coated Paper Company. 271,736; June 17; Serial No. 294,710; published Mar. 25, 1930.
Paper, Mineral-coated. Champion Coated Paper Company. 271,756–7; June 17; Serial Nos. 294,705–6; published Mar. 25, 1930.
Paper, Stencil. A. B. Dick Company. 271,654; June 17; Serial No. 295,559; published Apr. 1, 1930.
Paper, Toilet and wax. First National Stores Inc. 271,666; June 17; Serial No. 295,666; published Apr. 1, 1930.
Paper, Waxed. Package Paper Company. 271,665; June 17; Serial No. 295,693; published Apr. 1, 1930.
Pencils, Lead. L. & C. Hardtmuth. 78,970; renewed July 26, 1930.
Pens and pencils, Fountain. Eclipse Fountain Pen and Pencil Co. Inc. 271,663; June 17; Serial No. 296,267; published Apr. 1, 1930.

CLASS 38

Books. Brentano's, Inc. 79,553; renewed Sept. 20, 1930.
Cards. J. F. Meyer. 271,919; June 17; Serial No. 270,433; published Mar. 25, 1930.
Cards, printed leaflets, folders, etc., Printed. P. S. Hervey. 271,777; June 17; Serial No. 292,208; published Mar. 25, 1930.
Cartoons. Dell Publishing Company. 271,857; June 17; Serial No. 290,497; published Nov. 12, 1929.
Cartoons or comic strips, Series of. Daily Graphic, Inc. 271,769; June 17; Serial No. 292,985; published Mar. 25, 1930.
Charts, Statistical. Karsten Statistical Laboratory, Inc. 271,745; June 17; Serial No. 294,979; published Mar. 25, 1930.
Heading for a series of articles. C. Walsh. 271,764; June 17; Serial No. 295,143; published Apr. 1, 1930.
Magazine. McGraw-Hill Publishing Company. 271,735; June 17; Serial No. 294,025; published Mar. 25, 1930.
Periodical. E. Keen. 271,767; June 17; Serial No. 291,166; published Mar. 25, 1930.
Periodical. Management Magazines, Inc. 271,830–1; June 17; Serial Nos. 294,394–5; published Apr. 1, 1930.
Periodical. Publishers' Fiscal Corporation. 271,667; June 17; Serial No. 295,638; published Mar. 25, 1930.
Periodicals. Quality Publications, Inc. 271,761–2; June 17; Serial Nos. 294,484–5; published Mar. 25, 1930.
Publication. Dell Publishing Company. 271,741; June 17; Serial No. 295,508; published Mar. 25, 1930.
Publication or magazine. E. I. du Pont de Nemours and Company. 271,897; June 17; Serial No. 295,777; published Apr. 1, 1930.

CLASS 39

Clothing. Neustadter Brothers. 77,479; renewed Apr. 12, 1930.
Coats, vests, trousers, and overcoats, Boys' and young men's. Sonneborn Brothers, Inc. 271,884; June 17; Serial No. 296,083; published Apr. 1, 1930.
Coats, vests, trousers, and overcoats. Sonneborn Brothers, Inc. 271,886; June 17; Serial No. 296,084; published Apr. 1, 1930.
Dresses. Dolly Dress Co. 271,896; June 17; Serial No. 295,786; published Apr. 1, 1930.
Dresses. Regent Waist & Dress Co., Inc. 271,827; June 17; Serial No. 295,052; published Mar. 25, 1930.
Hosiery. Fulwear Hosiery Mills. 271,893; June 17; Serial No. 295,841; published Apr. 1, 1930.
Hosiery. Gotham Silk Hosiery Company. 271,782; June 17; Serial No. 291,724; published Mar. 25, 1930.

Hosiery. Nu-Craft Hosiery Mills, Inc. 271,898; June 17; Serial No. 295,634; published Mar. 25, 1930.
Hosiery. Oneida Hosiery Company. 79,780; renewed Oct. 4, 1930.
Hosiery, underwear, and dresses. Lockwoven Hosiery Company. 271,843; June 17; Serial No. 280,128; published Dec. 24, 1929.
Hosiery, women's and children's. Bullock's, Inc. 271,832; June 17; Serial No. 294,338; published Mar. 25, 1930.
Overalls, jumpers, pants, etc. Tulsa Overall & Manufacturing Company. 271,859; June 17; Serial No. 289,854; published Apr. 1, 1930.
Shirts. Kaylon Incorporated. 271,888–9; June 17; Serial Nos. 296,014–15; published Apr. 1, 1930.
Shirts. Lebanon Shirt Company. 271,804; June 17; Serial No. 292,407; published Apr. 1, 1930.
Shirts. Washington Manufacturing Company. 271,900; June 17; Serial No. 295,409; published Apr. 1, 1930.
Slips and suspenders therefor, Ladies'. V. F. Koncen. 271,899; June 17; Serial No. 295,481; published Mar. 25, 1930.
Suits and overcoats. Leon Godchaux Clothing Co., Ltd. 271,885; June 17; Serial No. 296,117; published Apr. 1, 1930.
Suits, Baby boys'. Dainty Tiny Togs, Inc. 271,892; June 17; Serial No. 295,926; published Apr. 1, 1930.
Suits, trousers, hats, etc., Men's and boys'. Kibler Company. 271,834–5; June 17; Serial Nos. 283,873–4; published Aug. 20, 1929.
Sweaters for children. S. Augstein & Co. 271,825; June 17; Serial No. 295,112; published Mar. 25, 1930.
Underwear, Ladies'. Joseph Adelson & Sons. 271,826; June 17; Serial No. 295,064; published Mar. 25, 1930.
Underwear, Ladies', misses', and children's knit. A. J. Armstrong Co. Inc. 271,906; June 17; Serial No. 268,766; published Nov. 26, 1929.
Union suits, undershirts, and drawers. Norwich Knitting Company. 271,829; June 17; Serial No. 294,589; published Apr. 1, 1930.

CLASS 40

Buttons and beads, Porcelain. Risler & Cie. 79,231; renewed Aug. 16, 1930.

CLASS 41

Umbrellas and parasols. Fink & Easter Company. 271,895; June 17; Serial No. 295,789; published Apr. 1, 1930.

CLASS 42

Blankets, Part-wool. Leaksville Woolen Mills, Inc. 271,833; June 17; Serial No. 293,475; published Apr. 1, 1930.
Blankets, Wool bed. Muncy Textile Company. 271,903; June 17; Serial No. 295,304; published Apr. 1, 1930.
Carpets. Bigelow Carpet Company. 78,303; renewed June 7, 1930.
Cotton piece goods for making shirts. Washington Manufacturing Company. 271,901; June 17; Serial No. 295,408; published Apr. 1, 1930.
Goods, Piece. Societe n Responsabilite Limitee Rodier. 271,890; June 17; Serial No. 295,958; published Apr. 1, 1930.
Handkerchiefs. Herrmann Handkerchief Co. 271,828; June 17; Serial No. 294,670; published Apr. 1, 1930.
Ribbons. Wm. E. Wright & Sons Co. 271,887; June 17; Serial No. 296,041; published Apr. 1, 1930.
Rugs. Bigelow Carpet Company. 78,301–2; renewed June 7, 1930.
Rugs. Bigelow Carpet Company. 78,488; renewed June 21, 1930.
Rugs and blankets, vehicle robes, Woolen. Jaeger Company Inc. 271,783; June 17; Serial No. 291,771; published Apr. 1, 1930.
Rugs and mats, Floor. Edwin Field & Sons, Limited. 271,842; June 17; Serial No. 280,329; published Apr. 1, 1930.
Woolen and worsted fabrics in the piece. Detmer, Bruner & Mason, Inc. 271,891; June 17; Serial No. 295,932; published Apr. 1, 1930.
Woolen piece goods. Madison Woolen Company. 271,902; June 17; Serial No. 295,338; published Apr. 1, 1930.
Worsted, Cotton warp. Penn Worsted Company. 271,894; June 17; Serial No. 295,808; published Apr. 1, 1930.

CLASS 43

Yarns. Monomac Spinning Company. 271,682; June 17; Serial No. 295,803; published Apr. 1, 1930.

CLASS 44

Electric heating pads. Fitzgerald Manufacturing Company. 271,632–3; June 17; Serial Nos. 295,213–4; published Apr. 1, 1930.
Exercising devices for the teeth and gums. M. W. Jordan. 271,641; June 17; Serial No. 294,357; published Apr. 1, 1930.
Lamps and attachments, Therapeutic. Continental Scale Works. 271,913; June 17; Serial No. 276,408; published Apr. 23, 1929.
Stockings for therapeutic purposes. Canvas laced. Trio Specialty Company. 271,630; June 17; Serial No. 295,401; published Apr. 1, 1930.
Vaginal sprayer. D. L. O'Sullivan. 271,637; June 17; Serial No. 294,991; published Apr. 1, 1930.
X-ray apparatus. D. E. Campbell. 271,628; June 17; Serial No. 295,772; published Apr. 1, 1930.

CLASS 45

Beverages, Maltless. G. Wallace. 271,941; June 17; Serial No. 288,445; published Apr. 1, 1930.

CLASS 46

Apples, Fresh. W. A. Patton. 271,910; June 17; Serial No. 264,902; published Apr. 8, 1930.
Bouillon cubes and bouillon in powdered form. International Products Corporation. 271,937; June 17; Serial No. 287,927; published Apr. 8, 1930.
Broccoli, Pears, and tomatoes, Fresh. D'Arrigo Bros. Co. 271,918; June 17; Serial No. 271,535; published Apr. 8, 1930.
Butter. Southern Properties, Inc. 271,696; June 17; Serial No. 294,405; published Mar. 25, 1930.
Butter. Suchman & McRoberts, Inc. 271,760; June 17; Serial No. 294,493; published Apr. 1, 1930.
Cakes and pies. E. O. Emery. 271,619; June 17; Serial No. 293,619; published Mar. 25, 1930.
Candies. Central Candy Company. 79,719; renewed Oct. 4, 1930.
Candies. Frederick W. Lipps Company of Baltimore City. 79,766; renewed Oct. 4, 1930.
Candy. Brown & Haley. 271,749; June 17; Serial No. 296,577; published Apr. 8, 1930.
Candy. General Candy Corporation. 271,675; June 17; Serial No. 296,182; published Apr. 1, 1930.
Candy. Green Brothers Company. 271,676; June 17; Serial No. 296,057; published Apr. 1, 1930.
Candy. S. Maier. 271,908; June 17; Serial No. 266,867; published Apr. 8, 1930.
Candy. D. H. Merriam. 271,697; June 17; Serial No. 294,396; published Apr. 1, 1930.
Candy, All kinds of. Paul F. Beich Company. 79,547; renewed Sept. 20, 1930.
Canned fruits. Starr Fruit Products Co. 271,737; June 17; Serial No. 296,366; published Apr. 8, 1930.
Canned malt syrup. N. Feldman. 271,677; June 17; Serial No. 296,007; published Apr. 1, 1930.
Canned salmon. Deming & Gould Co. 271,907; June 17; Serial No. 267,645; published Apr. 1, 1930.
Canned salmon. Union Fishermen's Co-operative Packing Co. 77,967; renewed May 17, 1930.
Canned salmon. Union Fishermen's Co-operative Packing Co. 78,388; renewed June 7, 1930.
Canned sauerkraut. Bond Pickle Company. 271,681; June 17; Serial No. 295,830; published Apr. 1, 1930.
Canned shrimp and oysters. Mexican Gulf Packing Co. Inc. 271,801; June 17; Serial No. 294,676; published Apr. 8, 1930.
Canned tuna fish, peas, corn, etc. Molinelli Giannusa & Rao, Inc. 271,773; June 17; Serial No. 292,741; published Apr. 1, 1930.
Canned vegetables. Dickinson & Co. 79,902–3; renewed Oct. 18, 1930.
Canned vegetables, fruits, jams, etc. J. D. Grossman. 271,921; June 17; Serial No. 284,611; published Apr. 1, 1930.
Cereal, Breakfast. Elam Mills, Inc. 271,662; June 17; Serial No. 296,328; published Apr. 1, 1930.
Coffee. C. W. Antrim & Sons. 79,806; renewed Oct. 11, 1930.
Coffee. Garners Inc. 271,934; June 17; Serial No. 287,658; published Apr. 1, 1930.
Coffee. Mannings, Inc. 271,686; June 17; Serial No. 295,626; published Apr. 1, 1930.
Coffee. E. B. Millar & Company. 79,996; renewed Oct. 25, 1930.
Coffee and tea. R. L. Gerhart. 271,698; June 17; Serial No. 294,384; published Apr. 1, 1930.
Coffee and tea. Higgins and Burke, Limited. 271,855; June 17; Serial No. 290,951; published Apr. 1, 1930.
Cookies. F. A. Wood & Co. 271,683; June 17; Serial No. 295,707; published Mar. 25, 1930.
Cookies and macaroons. Mother's Favorite Cookie Company. 271,620; June 17; Serial No. 293,337; published Mar. 25, 1930.
Eggs. Greenberg Bros. Farm Produce, Inc. 271,746; June 17; Serial No. 294,300; published Apr. 1, 1930.
Eggs and dressed poultry. Pacific Egg Producers Cooperative, Inc. 271,691; June 17; Serial No. 295,188; published Apr. 1, 1930.
Feed, Cattle. San Joaquin Cotton Oil Company. 271,740; June 17; Serial No. 295,538; published Apr. 1, 1930.
Feed, Poultry. J. W. Wheeler. 271,742; June 17; Serial No. 295,412; published Apr. 1, 1930.
Feed, sweet feed, beef fattener, etc., Dairy cow. Central Farm Products Company. 271,748; June 17; Serial No. 293,406; published Apr. 1, 1930.
Fish and fillets, Fresh. Beacon Fisheries Company. 271,932; June 17; Serial No. 287,520; published Apr. 8, 1930.
Flour, Wheat. Allen & Wheeler Co. 79,544; renewed Sept. 20, 1930.
Flour, Wheat. Bowen Flour Mills Company. 271,651; June 17; Serial No. 283,979; published June 25, 1929.

Flour, Wheat. Inland Milling Company. 271,743; June 17; Serial No. 295,223; published Apr. 1, 1930.
Flour, Wheat. Inland Milling Company. 271,744; June 17; Serial No. 295,221; published Apr. 1, 1930.
Flour, Wheat. Red Wing Milling Company. 79,858; renewed Oct. 11, 1930.
Food tablets. Ultra-Violet Generator Corporation. 271,850; June 17; Serial No. 277,327; published Apr. 1, 1930.
Foods, Certain. Western Grocer Co. 77,683; renewed Apr. 26, 1930.
Grapes, Fresh. E. A. Couture. 271,909; June 17; Serial No. 266,790; published Apr. 8, 1930.
Hams, bacon, and lard. W. C. Routh & Co. 79,787; renewed Oct. 4, 1930.
Lard and smoked picnic hams. Rath Packing Company. 271,690; June 17; Serial No. 295,237; published Apr. 1, 1930.
Malt syrup. W. F. Mulherin. 271,684; June 17; Serial No. 295,684; published Apr. 1, 1930.
Malt syrup for food purposes. M. Weiss. 271,685; June 17; Serial No. 295,649; published Apr. 1, 1930.
Nuts, Edible. American Nut Company. 271,802; June 17; Serial No. 294,050; published Apr. 8, 1930.
Olive oil. Bragno and Mustari. 79,813; renewed Oct. 11, 1930.
Olive oil. G. Citti. 271,689; June 17; Serial No. 295,254; published Apr. 1, 1930.
Olive oil and cottonseed oil, Compounds of. I. Nuccio. 271,693; June 17; Serial No. 294,926; published Apr. 1, 1930.
Oysters, Fresh. A. G. Bailey. 79,714; renewed Oct. 4, 1930.
Peanuts, Salted. Schindler's Peanut Products, Inc. 271,790; June 17; Serial No. 296,202; published Apr. 8, 1930.
Pop corn, roasted and salted peanuts, Buttered and dried. E. W. Kleinschmidt. 271,950; June 17; Serial No. 289,280; published Apr. 8, 1930.
Sugar. Dominican Sugar Refining Company, C. Por A. 271,904; June 17; Serial No. 257,535; published Apr. 1, 1930.
Syrup, Malt. Zimmerman Bros. 271,688; June 17; Serial No. 295,314; published Apr. 1, 1930.
Tea. Gristede Bros., Inc. 271,753; June 17; Serial No. 296,419; published Apr. 8, 1930.
Teas and coffees. Governor and Company of Adventurers of England, Trading into Hudson's Bay. 271,795–7; June 17; Serial Nos. 295,613–15; published Apr. 8, 1930.
Yeast for human food, Extract of. Marmite Food Extract Co. 79,220; renewed Aug. 16, 1930.

CLASS 47

Wine, White. G. Aquino. 78,481; renewed June 21, 1930.

CLASS 48

Cereal malt beverages. Tacoma Brewing Co. 271,905; June 17; Serial No. 257,904; published Apr. 1, 1930.

CLASS 49

Whiskey. John Jameson & Son Limited. 79,343; renewed Aug. 30, 1930.

CLASS 50

Benches for soil and potted plants, plant supports, etc., Greenhouse. William H. Lutton Company. 271,930; June 17; Serial No. 287,146; published Apr. 1, 1930.
Doilies, Rubber. Webster Rubber Company. 271,642; June 17; Serial No. 294,197; published Apr. 8, 1930.
Fabrics, Waterproof. Windram Manufacturing Co. 271,807; June 17; Serial No. 295,286; published Apr. 1, 1930.
Laminated sheets. Lamicel Products Inc. 271,640; June 17; Serial No. 294,639; published Apr. 8, 1930.
Liquid-purifying device. Charred Bag Company. 271,770; June 17; Serial No. 292,976; published Apr. 1, 1930.
Mats. J. C. Haartz Company. 271,805; June 17; Serial No. 295,125; published Apr. 1, 1930.
Pyroxylin-coated fabrics. Columbus Coated Fabrics Corporation. 271,639; June 17; Serial No. 294,915; published Apr. 8, 1930.
Pyroxylin or otherwise coated fabrics. Zapon Company. 271,822–4; June 17; Serial Nos. 294,939–41; published Apr. 1, 1930.
Traps, Animal. Oneida Community Limited. 79,513; renewed Sept. 13, 1930.

ALPHABETICAL LIST OF LABELS

Abbotts Grade A. For Butter. Menasha Products Company. 37,586; June 17.
Apple-Candy. For Candy. Ridgewood Fruit Growers, Inc. 37,587; June 17.
Betsy Ross Old Fashioned Peppermints. For Peppermints. **Betsy Ross Mint Co.** 37,570; June 17.
Brown Mug Coffee. For Coffee. Diamond Coffee Mills, Inc. 37,577; June 17.
Cannon Caroleen Pillow Cases. For Pillowcases. Cannon Mills, Inc. 37,572; June 17.
Cannon Caroleen Pillow Cases. For Pillowcases. Cannon Mills, Inc. 37,575; June 17.
Cannon Caroleen Sheeting. For Sheeting. Cannon Mills, Inc. 37,571; June 17.
Cannon Caroleen Sheets. For Sheets. Cannon Mills, Inc. 37,573–4; June 17.
Fresh Air Taxi. For Candy Figures. Wigly Candy Co. 37,593; June 17.
Golden Glow. For Egg Noodles. Traficanti Bros. 37,591; June 17.
Gran-Stark. For Golf Hose. F. M. Grauer & Company. 37,580; June 17.
Happy Home. For Bread. Hall Baking Co. 37,581; June 17.
Hydrosal. For Antiseptic. Hydrosal Company. 37,583; June 17.
Hydrosal. For Ointment. Hydrosal Company. 37,582; June 17.
Jewel Dessert. For Lemon Dessert. Jewel Tea Co. 37,584; June 17.
Latherkreem. For Shaving Cream. A. J. Krank. Company. 37,585; June 17.
Liquid Gold Coffee. For Coffee. Diamond Coffee Mills, Inc. 37,578; June 17.
Little Pal. For Cinnamon Rolls. Wax Paper Products Company. 37,592; June 17.
Orocide. For Mouth Wash. B. J. Stearn. 37,589; June 17.
Salad Bowl Salad Dressing. For Salad Dressing. Gelfand Mfg. Company of California Inc. 37,579; June 17.
Seal Brand. For Tea. Standard Brands Incorporated. 37,588; June 17.
Southern Girl Coffee. For Coffee. Diamond Coffee Mills, Inc. 37,576; June 17.
Uncle Sam's Kwik-Deth. For Insecticide. G. E. Williams. 37,594; June 17.
White Lily. For Sweet Corn. Sycamore Preserve Works. 37,590; June 17.
Zev. For Floor Cleaner. Absorene Manufacturing Company. 37,569; June 17.

ALPHABETICAL LIST OF PRINTS

Beacon Coal. For Coal. A. F. Gamble. 12,601; June 17.
1930 Sports Silk Week. For Silk. Spun Silk Research Committee (Spun Silk Divis'on of The Silk Association of America, Inc.) 12,607; June 17.
No Milk To-Day. For Milk. E. R. Swaback. 12,608; June 17.
No Summer Fears For Young Edward Everett Hale IV. He Has This Protection Many Mothers Give. For Wheat Breakfast Food. Cream of Wheat Corporation. 12,600; June 17.
Red Heart Feeds. For Pig Meal and Poultry Mash. Ajay Milling Company. 12,596; June 17.
Savoy Park Shop Combination Basket. For Corsage Baskets Containing Six Corsages of Flowers. Savoy Park Shop, Inc. 12,606; June 17.
'Take A Tip' Use 'Razin' On Your Stropper. 'First Aid For A Dull Blade.' For Razor Strops. H. B. Pruden. 12,605; June 17.
The B. V. D. Union Suit. For Athletic Underwear. B. V. D. Company. 12,598; June 17.
The New Improved Kanfels Key Container. For Key Containers. Leather Goods Novelty Co. 12,603; June 17.
The Otkoffe Bottle Securitas. For Bottle Treated to Hold Hot Coffee. O. J. Lafayette & Co. 12,602; June 17.
The Three Letters B. V. D. For Athletic Underwear. B. V. D. Company. 12,597; June 17.
The Underwear of Quality. For Athletic Underwear. B. V. D. Company. 12,599; June 17.
The Watch You Can Forget To Wind. For Self-Winding Watches. Perpetual Self Winding Watch Company of America, Inc. 12,604; June 17.

ALPHABETICAL LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 17TH DAY OF JUNE, 1930

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). **Includes patents, reissues, and designs.**

A. J. & K. Company, The. (See Janer, Andre, assignor.)
Aab, William, New Ulm, Minn. Reaming tool for connecting rods. 1,763,917; June 17.
Abbotts Alderney Dairies, Inc. (See High, Antony, assignor.)
Abbott, Ernest A., Sale England. Mount for calendars. 1,764,236; June 17.
Abbott, Lyle S., Chicago, Ill. Furnace-arch construction. 1,764,707; June 17.
Abbott, Lyle S., Chicago, Ill. Integral roof construction for furnaces. 1,764,708; June 17.
Abriani, Mario, Genoa, Italy. Ship-unloading device. 1,765,118; June 17.
Ackley, Raymond E., assignor to R. R. Donnelley and Sons Company, Chicago, Ill. Book-sewing machine. 1,764,863; June 17.
Adams, Arthur H., La Grange, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Making conductor terminals. 1,764,592; June 17.
Adams, Henry T., Chicago, Ill. Bookholder. 1,764,818; June 17.
Adams, Peter E., Brule, Wis. Snowplow. 1,763,736; June 17.
Adams, William, Lawrence, and C. W. Wickersham, Cedarhurst, assignors to Adwick Corporation, New York, N. Y. Spark arrester. 1,763,643; June 17.
Adamson, George P., assignor to General Chemical Company, New York, N. Y. Generating hydrochloric-acid gas. 1,764,593; June 17.
Addicks, Diedrich C., Rockmart, Ga. Disintegrating machine. 1,764,138; June 17.
Adjusta Company. (See Hirsh, Fred, assignor.)
Adjusto Equipment Company. (See Buchet, Conrad R., assignor.)
Adolph, Gustav. (See Pietzsch, A., and Adolph.)
Advance Machine Company. (See Richardson, M. H., and Antoine, assignors.)
Adwick Corporation. (See Adams, W., and Wickersham, assignors.)
Agasote Millboard Company, The. (See Harvey, H. C., and Becher, assignors.)
Aircraft Development Corporation. (See Upson, Ralph H., assignor.)
Air Cruisers, Inc. (See Boyle, J. F., and Van Muffling, assignors.)
Air Reduction Company, Incorporated. (See Rooke, Robert M., jr., assignor.)
Akeley Camera, Inc. (See Howell, John F., assignor.)
Akron Lamp Company, The. (See Steese, J. C., and Hoff, assignors.)
Aktiengesellschaft Brown, Boveri and Cie. (See Klingelfuss, E., and Baumann, assignors.)
Aktiengesellschaft Brown Boveri & Cie. (See Stoecklin, Josef, assignor.)
Alden Manufacturing Company, The. (See Alden, Milton, assignor.)
Alden, Milton, Springfield, assignor to The Alden Manufacturing Company, Brockton, Mass. Vacuum-tube socket and contact terminals therefor. 1,764,489; June 17.
Aldrich, Carlton J., et al. (See Forget, Arthur, assignor.)
Alex, Max, Bloomington, Ill., assignor to The Summit Corporation, Davenport, Iowa. Heater. 1,764,139; June 17.
Allard, Elmer P., Bradley, Wis. Automatic milk-cooling device. 1,764,140; June 17.
Allbright-Nell Company The. (See Ozouf, Arthur E., assignor.)
Allen, Edward H., Palmyra, N. J. Clamp. 1,764,380; June 17.
Allen, Grosvenor N., and C. A. Bennett, assignors to Oneida Community, Limited, Oneida, N. Y. Spoon or similar article. Des. 81,367; June 17.
Allen, Grosvenor N., and L. V. M. Helander, assignors to Oneida Community, Limited, Oneida, N. Y. Spoon or similar article. Des. 81,368; June 17.
Allen, Howard G., assignor to H. R. Bliss Company, Inc., Niagara Falls, N. Y. Wire-stitching machine. 1,765,120; June 17.
Allmon, Joseph G., Melrose, Mass. Antiskid chain. 1,763,998; June 17.
Aluminum Company of America. (See Andersen, E. F., and Sharp, assignors.)
American Air-Cooled Block-Arch Combustion Co. Inc. (See Gates, John W., assignor.)
American Chemical Paint Company. (See Gravell, James H.)
American District Telegraph Company. (See Hopkins, Richard M., assignor.)
American Dressler Tunnel Kilns, Inc. (See Meehan, Paul A., assignor.)
American Gasaccumulator Company. (See Goodwin, George, assignor.)
American Gasaccumulator Company. (See Luce, Richard W., assignor.)
American Gasaccumulator Company. (See Steel, Robert R., assignor.)
American Laundry Machinery Company, The. (See Hanney, Angus F., assignor.)
American Laundry Machinery Company, The. (See Matthews, Albert, assignor.)
American Laundry Machinery Company, The. (See Pauly, R. C., and Nottage, assignors.)
American Laundry Machinery Company, The. (See Schramm, A. O., and Schreiber, assignors.)
American Manganese Steel Company. (See Young, Donald H., assignor.)
American Mine Door Co., The. (See Miller, James B., assignor.)
American Ore Reclamation Company. (See Shallock, Edward W., assignor.)
American Rolling Mill Company, The. (See Wehr, E. R., and Mahlie, assignors.)
American Rubber Company. (See Hopkinson, E., and Teague, assignors.)
American Steel Products Co. (See Harvey, William D., assignor.)
American Steel Products Co. (See Tolley, Donald B., assignor.)
American Sterilizer Company. (See Jewell, Raymond L., assignor.)
American Telephone and Telegraph Company. (See Bown, Ralph, assignor.)
American Telephone and Telegraph Company. (See Fish, L. B., and St. John, assignors.)
American Tool Works Company, The. (See Sosa, A. M., and Hoelscher, assignors.)
American Welding Company. (See Rowland, Charles L., assignor.)
Ames, Caroline F., administratrix. (See Ames, Elmer U.)
Ames, Edgar, et al. (See Bjork, Carl, assignor.)
Ames, Elmer U., deceased, Collingswood, by C. F. Ames, administratrix. Haddonfield, N. J. Knitting machine. Re17,705; June 17.
Amrhein, Adam, assignor of one-half to E. Glanz, Munich, Germany. Car coupling. 1,764,594; June 17.
Andersen, Eli F., Arnold, and J. E. Sharp, New Kensington, assignors to Aluminum Company of America, Pittsburgh, Pa. Closure seal. 1,764,864; June 17.
Andersen, Waldemar F., Alameda, Calif. Advertising machine. 1,764,141; June 17.
Anderson, Albert E., Milwaukee, Wis. Metallic shield for stoves. 1,764,595; June 17.
Anderson, Carl J., Chicago, Ill. Contact closer. 1,764,819; June 17.
Anderson, Carl L., et al. (See Swenson, Carl E., assignor.)
Anderson, Charles, Rochester, N. Y. Device for measuring the load on vehicles. 1,763,636; June 17.
Anderson, Gordon R., Indianapolis, Ind., assignor to Fairbanks, Morse & Co., Chicago, Ill. Brush lifter for electric motors. 1,764,709; June 17.
Anderson, John E. (See Kingsbury, E. J., and Anderson.)
Anderson, Robert, New York, N. Y. Apparatus for perforating jewelry elements. 1,764,924; June 17.
Anderson, Russell J., assignor to Belle City Malleable Iron Company, Racine, Wis. Skimmer. 1,763,637; June 17.
Anderson, William, Ferndale, Mich. Wall structure. 1,763,916; June 17.
André, Henri G., Paris, France. Rectifying apparatus and method of making. 1,764,770; June 17.
Andrew, Frederick W., Andalusia, Pa., assignor, by mesne assignments, to The Electrolock Manufacturing Company, Vicksburg, Miss. Electric switch. 1,764,596; June 17.
Andrews, Charles, jr., Rockford, Ill., assignor to The Washburn Company, Worcester, Mass. Beater. 1,764,597; June 17.
Andrews, Lionel T., North Jamaica, assignor to E. R. Squibb & Sons, New York, N. Y. Stable effervescent composition. 1,764,996; June 17.
Anthony, Leon P., assignor of fifty-five per cent to R. W. Reynolds, Los Angeles, Calif. Nut-cracking machine. 1,763,875; June 17.
Antonic, Alfred D. (See Richardson, M. H., and Antoine.)

Applebaker, Theron J., assignor of one-half to A. S. Kleinhammer, Jacksonville, Oreg. Equalizer bar. 1,764,237; June 17.

Apex Electrical Manufacturing Company, The. (See Frantz, Walter A., assignor.)

Arbuthnot, Claude H., Lake Alfred, Fla. Universal joint. 1,764,381; June 17.

Armitage, Joseph B., Wauwatosa, assignor to Kearney & Trecker Corporation, West Allis, Wis. Transmission and control mechanism for machine tools. Re17,699; June 17.

Armstrong, Eliot, assignor to Niagara Metal Stamping Corporation, Niagara Falls, N. Y. Curtain or other article support or bracket. 1,763,737; June 17.

Arndt, William F., assignor of one-half to McAdams, Watertown, Wis. Buckle. 1,764,670; June 17.

Arnold Electric Company. (See Poplawski, Stephen J., assignor.)

Arnott, Peter, Palo Alto, Calif. Rack for automobiles. 1,764,771; June 17.

Arps, Bruno F., New Holstein, Wis. Traction belt. 1,764,671; June 17.

Arras, George, Chicago, Ill. Fixture support. 1,764,997; June 17.

Artigue, Pierre, Los Angeles, Calif. Making motion pictures. 1,764,490; June 17.

Ashbaugh, John H., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Regulator system. 1,764,382; June 17.

Asbeck, Gustav, Dusseldorf-Rath, Germany. Rolling mill. 1,764,598; June 17.

Asbury, Dorsey F., Broomes Island, Md. Radio apparatus. 1,765,191; June 17.

Ash, Charles S., assignor to California Packing Corporation, San Francisco, Calif. Stabilized pineapple and producing the same. 1,764,491; June 17.

Ashbury, Dorsey F., Broomes Island, Md. Radio apparatus. 1,765,190; June 17.

Ashleman, Adolph E., Waco, Tex. Nutcracker. 1,764,238; June 17.

Askew, Earle. (See Hart, F. A., and Askew.)

Associated Telephone & Telegraph Company. (See Ostline, John E., assignor.)

Atlas Bolt & Screw Company. (See Schellentrager, E. W., and Clarkson, assignors.)

Atlas Powder Company. (See Bacon, Gilbert C., assignor.)

Audet, Alfred, Salem, Mass. Ridge cap. 1,765,119; June 17.

Audet, Alfred, Salem, Mass. Angle piece for roofs or sidings. 1,765,121; June 17.

Aulbach, Charles J., Passaic, N. J., assignor to Continental Can Company, Inc., New York, N. Y. Mechanism for curling the edges of irregular-shaped containers. 1,764,239; June 17.

Austin, John T., assignor to The Austin Organ Company, Hartford, Conn. Swell-shutter-controlling mechanism. 1,765,492; June 17.

Austin, Herbert, Bromsgrove, England. Crank-shaft bearing. 1,764,672; June 17.

Austin Organ Company, The. (See Austin, John T., assignor.)

Auto Research Corporation. (See Bloom, Edgar J., assignor.)

Automatic Sprinkler Company of America. (See Hamilton, John R., assignor.)

Avery, B. F., & Sons. (See Ray, Charles T., assignor.)

Avis, Samuel W., West Hartford, assignor to The Fuller Brush Company, Hartford, Conn. Conveyer. 1,763,738; June 17.

Ax, Simon J., Longmont, Colo. Controlling mechanism for aeroplanes. 1,765,195; June 17.

Axe, Roy T., assignor to The O. M. Edwards Company, Inc., Syracuse, N. Y. Window-guide construction for removable sashes. 1,764,599; June 17.

Babson, Roger W., Wellesley, Mass. Combined package and holder. 1,764,673; June 17.

Bacon, Gilbert C., Tamaqua, Pa., assignor to Atlas Powder Company, Wilmington, Del. Delay-action detonator. 1,765,294; June 17.

Badger Meter Manufacturing Company. (See Krueger, Emil M., assignor.)

Baer, Lawrence E., assignor to Baer & Wilde Co., Attleboro, Mass. Collar holder. Des. 81,369; June 17.

Baer & Wilde Co. (See Baer, Lawrence E., assignor.)

Bailey, Earl W., et al. (See Stephens, R. W., and Wilcox, assignors.)

Bailey, Ervin G., Cleveland Heights, Ohio, assignor, by mesne assignments, to Fuller Lehigh Company. Apparatus for feeding and metering pulverulent material. 1,764,998; June 17.

Baits, Stuart G., Grosse Pointe Park, assignor to Hudson Motor Car Company, Detroit, Mich. Power-transmitting mechanism. 1,763,739; June 17.

Baker Brothers, Inc. (See Hallenbeck, George E., assignor.)

Baker, Gilbert L., Oakland, assignor to W. P. Grant, Berkeley, Calif. Valve. 1,763,942; June 17.

Baker, Joseph J., Kokomo, Ind. Floating power plant. 1,764,820; June 17.

Baker Perkins Company. (See Prescott, William E., assignor.)

Baker, W. E. B. (See Baker, W. E. B., and Roberts, assignors.)

Baker, Webster E. B., York Haven, Pa. Sulphite waste-liquor product and making same. 1,764,600; June 17.

Baker, Webster E. B., and F. G. Roberts, York Haven, Pa., assignors by mesne assignments to W. E. B. Baker, Brooklyn, N. Y. Product and process of making the same from sulphite waste liquors. 1,764,601; June 17.

Baldwin, Luther C., assignor to U. S. Bobbin & Shuttle Company, Providence, R. I. Tension device for shuttles. 1,764,710; June 17.

Baldwin, Nathaniel, East Mill Creek, Utah. Acoustic diaphragm and mounting. 1,763,876; June 17.

Ball, Fred, Spokane, Wash. Drift valve. 1,764,493; June 17.

Bandla, Stephen H., Buffalo, N. Y. Antiskid brake for self-propelled vehicles. 1,764,602; June 17.

Bandow, Ada, Appleton, Wis. Furnace-door opener. 1,764,142; June 17.

Bangert, Heinrich, and M. Peters, assignors to Ofenbau-Gesellschaft mit beschrankter Haftunk, Dusseldorf, Germany. Apparatus for moving ingots or masses in furnaces. 1,763,918; June 17.

Bankson, William R., Pittsburgh, Pa. Conveyer. 1,764,143; June 17.

Banta, Len A., Clearfield, Pa. Building wall. 1,765,255; June 17.

Barber, Albert W., assignor to Union Special Machine Company, Chicago, Ill. Needle bar for sewing machines. 1,764,865; June 17.

Barber Asphalt Company, The. (See Darrow, M. S., Hart, Gronemeyer, and Watkins, assignors.)

Barber-Colman Company. (See Peterson, Burt A., assignor.)

Barco Manufacturing Company. (See Markel, Charles, assignor.)

Barbour, Rolland M., and H. H. Knipe, Lawrenceville, Ill. Time-recording machine. 1,763,740; June 17.

Barili, Arthur E. H., and J. A. Hyle, Los Angeles, Calif., assignors of one-half to said Hyle, one-eighth to J. H. Green, Philadelphia, Pa., one-fourth to D. F. Morris, Boston, Mass., and one-eighth to S. E. Holdzkom, Pleasantville, N. J. Railway-rail anchor. 1,765,122; June 17.

Barker, Harry B., Chicago, Ill., assignor, by mesne assignments, to C. W. Raynor, New York, N. Y. Display device. 1,763,741; June 17.

Barker, Harry B., Chicago, Ill., assignor, by mesne assignments, to C. W. Raynor, New York, N. Y. Display sign. 1,763,742; June 17.

Barnard, Walter E., assignor to Barr-Morse Corporation, Ithaca, N. Y. Typewriter carrying case. 1,763,999; June 17.

Barnes-Gibson-Raymond Co. Inc. (See Rodemeyer, Harry, assignor.)

Barnes, Robert O., Phoenix, Ariz. Safety razor. 1,765,256; June 17.

Barr-Morse Corporation. (See Barnard, Walter E., assignor.)

Bart, Blasius, East Orange, assignor to Bart Reflector Co., Inc., Newark, N. J. Method and apparatus for forming molds. 1,765,320; June 17.

Bart Reflector Co. (See Bart, Blasius, assignor.)

Bartels, Ida M., et al, executors. (See Bartels, Reinhard E.)

Bartels, R. Burleigh, et al., executors. (See Bartels, Reinhard E.)

Bartels, Reinhard B., Melrose, Mass. Shoe-shank stiffener. 1,763,744; June 17.

Bartels, Reinhard E., deceased, Lynn, Mass.; I. M. Bartels and R. B. Bartels, executors. Repairing shoes. 1,763,743; June 17.

Bartels, Reinhard E., deceased, Lynn, Mass.; I. M. Bartels and R. B. Bartels, executors. Shank stiffener. 1,764,064; June 17.

Bartlett, Edward E., Sapulpa, Okla. Tumbler. Des. 81,427; June 17.

Bartley, Charles B., and V. H. Dake, Pittsburgh, Pa. Control system. 1,765,045; June 17.

Bartling, Friedrich, Munich, Germany. Rotary-hearth oven. 1,765,196; June 17.

Barton, Annie E., Roy, Utah. Flower table. 1,764,543; June 17.

Barton, Charles R. (See Fownes, W. C., jr., Barton, and Benninghoff.)

Barton, John T., San Angelo, Tex. Fence. 1,764,284; June 17.

Barton, Sidney O. (See Dievendorff, H. H., and Barton.)

Batcheller, Clements, Portsmouth, N. H., assignor to Bemis Industries, Incorporated, Boston, Mass. Roofing starter. 1,765,197; June 17.

Bates, Albert J., jr., Chicago, Ill., assignor to Bates Expanded Steel Truss Co., East Chicago, Ind. Metal joist and the manufacture thereof. 1,763,943; June 17.

Bates, Albert J., jr., Chicago, Ill., assignor to Bates Expanded Steel Truss Co., East Chicago, Ind. Shearing machine. 1,764,285; June 17.

Bates Expanded Steel Truss Co. (See Bates, Albert J., jr., assignor.)

Bates Expanded Steel Truss Co. (See Wallen, Arthur C., assignor.)

Bates Manufacturing Co. (See Stewart, Samuel, assignor.)

Bates, Richard A., assignor to Bates Expanded Steel Truss Company, East Chicago, Ind. Joist and the manufacture thereof. 1,763,944; June 17.

Bauer, Alfred, Weimar, Calif. Device for testing light-sensitive materials. 1,765,198; June 17.

Bauer, Bruno, Vienna, Austria. Reenforced-concrete bridge. 1,764,494; June 17.

Baumann, Adolf. (See Klingelfuss, E., and Baumann.)

Baumgardner, Hurlbut L., Chicago, Ill. Coating for surfacing permanent molds. 1,764,544; June 17.

Bausch & Lomb Optical Company. (See Patterson, W. L., and Gallasch, assignors.)

Bausch & Lomb Optical Co. (See Scott, Murray R., assignor.)

Bayer, Julius L., Cleveland, and J. J. N. Van Hamersveld, Cleveland Heights, assignors to The Warner & Swasey Company, Cleveland, Ohio. Taper turning or boring mechanism for machine tools. 1,763,745; June 17.

Bayles, Lewis C., Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Oiling device. 1,763,683; June 17.

Beach, Will W., Los Angeles, Calif. Sun's rays magnifying lens. 1,764,925; June 17.

Beal, George D., and R. R. McGregor, Pittsburgh, Pa. Manufacture of felt. 1,765,046; June 17.

Bean, Lafayette, assignor to Virginia Shoe Company, Inc., Fredericksburg, Va. Shoe. 1,764,821; June 17.

Beattey, Earle J. R., Edgewood, assignor to Universal Optical Corporation, Providence, R. I. Ophthalmic mounting. 1,764,495; June 17.

Becher, Hubert L. (See Harvey, H. C., and Becher.)

Beck, Charles F., Park Ridge, Ill. Mail box. 1,764,674; June 17.

Becker, Joseph, assignor to The Koppers Company, Pittsburgh, Pa. Coking retort oven. 1,764,496; June 17.

Becker, Joseph, assignor to The Koppers Company, Pittsburgh, Pa. Coking retort oven. 1,764,497; June 17.

Beckert, Frank R., Schenectady, N. Y., assignor to General Electric Company. Loud-speaker. 1,765,257; June 17.

Beckman, Fred G., Muskogee, Okla. Tractor boom crane. 1,765,295; June 17.

Bedford, Charles S., Leeds, England. Dyeing and like machine. 1,763,945; June 17.

Beers, Henry S., Westport, Conn., assignor to The Turbo-Mixer Corporation, New York, N. Y. Mixing and discharging apparatus. 1,764,498; June 17.

Bek, Ernst G. (See Brunhübner, Georg, assignor.)

Bell, Daniel, assignor to Invincible Laundry Equipment Co., Chicago, Ill. Oscillating washer. 1,763,644; June 17.

Bell, Ivan C. (See Crickmer, C. S., and Bell.)

Bell, John E., Brooklyn, assignor to Foster Wheeler Corporation, New York, N. Y. Apparatus for cleaning economizer tubes. 1,764,189; June 17.

Bell, John E., Brooklyn, assignor to Foster Wheeler Corporation, New York, N. Y. Oil-vapor separation and condensation. 1,764,190; June 17.

Bell, John E., Brooklyn, assignor to Foster Wheeler Corporation, New York, N. Y. Welded tubular element. 1,764,603; June 17.

Bell Telephone Laboratories, Incorporated. (See Burton, Everett T., assignor.)

Bell Telephone Laboratories, Incorporated. (See Jones, Warren C., assignor.)

Bell Telephone Laboratories, Incorporated. (See Krecek, Joseph A., assignor.)

Bell Telephone Laboratories, Incorporated. (See Stoller, H. M., and Morton, assignors.)

Belle City Malleable Iron Company. (See Anderson, Russell J., assignor.)

Belles, Albert C., New Brighton, assignor to Union Drawn Steel Company, Beaver Falls, Pa. Drawing machine. 1,765,047; June 17.

Bemis Industries, Incorporated. (See Batcheller, Clements, assignor.)

Bendix Brake Company. (See Dodge, Adiel Y., assignor.)

Bendix Brake Company. (See Lyman, Kenneth E., assignor.)

Benkiser, Paul, Cleveland, Ohio. Gas and vapor separator. 1,763,746; June 17.

Bennett, Charles A. (See Allen, G. N., and Bennett.)

Bennett Pumps Corporation. (See Bennett, Thomas B., assignor.)

Bennett Pumps Corporation. (See Prescott, Le Roy A., assignor.)

Bennett, Thomas B., assignor to Bennett Pumps Corporation, Muskegon, Mich. Pneumatic grease pump. 1,764,926; June 17.

Benninghoff, William G. (See Fownes, W. C., jr., Barton, and Benninghoff.)

Bennington, Earl T., Cleveland Heights, Ohio, assignor to The Cleveland Crane & Engineering Company, Wickliffe, Ohio. Overhead traveling bridge. 1,764,144; June 17.

Bentz, Maude M., Montclair, N. J. Humidifier and deflector device. 1,764,499; June 17.

Berg, Bengt E., Charlotte, N. C. Hollow metal propeller. 1,764,927; June 17.

Bergami, Fred. (See Falla, H., and Bergami.)

Berger, George R., et al. (See Haunz, Charles F., assignor.)

Berger, Joseph, Utica, N. Y., assignor to Union Special Machine Company, Chicago, Ill. Feeding mechanism for sewing machines. 1,763,946; June 17.

Berger Manufacturing Company, The. (See Schmitz, Fred A., assignor.)

Bergmann, Max, Dresden, Germany. Depilating hides and skins. 1,765,199; June 17.

Bernier, Wilfred L., Gardner, assignor of one-half to A. G. Pelletier, Winchendon, Mass. Detachable rubber heel. 1,764,000; June 17.

Berresford, A. W., et al. (See Low, Frank S., assignor.)

Berry, Francois J. B., Lille, Nord, France. Boring machine. 1,765,296; June 17.

Best, Clarence L., assignor to Caterpillar Tractor Co., San Leandro, Calif. Hoisting and transporting apparatus. 1,763,747; June 17.

Best, Harry S., assignor to John H. Best & Sons, Galva, Ill. Joint for costumers and other articles. 1,763,748; June 17.

Best, John H., & Sons. (See Best, Harry S., assignor.)

Bethenod, Joseph, Paris, France. Electrical signaling system. 1,763,947; June 17.

Beverly, Orton L., Indianapolis, Ind. Device for preventing safe robberies. 1,764,191; June 17.

Bezek, Frank A., San Francisco, Calif., assignor to General Automotive Equipment Company. Device for locking a motor-vehicle in gear. 1,764,383; June 17.

Bibby, James, London, England, assignor to The Falk Corporation, Milwaukee, Wis. Machine coupling. 1,763,842; June 17.

Biddle, Arthur, Trenton, N. J., assignor to United Products Corporation of America. Abrasive composition. 1,764,928; June 17.

Bierce, Fred N., Cincinnati, Ohio. Reverse stop for automobiles. 1,764,286; June 17.

Biller, David J., assignor to Day-Brite Reflector Company, St. Louis, Mo. Electric-lighting fixture. 1,764,999; June 17.

Bishop & Babcock Manufacturing Company, The. (See Levy, Edward J., assignor.)

Bishop Company, The. (See Bishop, Frederick R., assignor.)

Bishop, Frederick R., assignor to The Bishop Company, North Attleboro, Mass. Ophthalmic mounting and making the same. 1,765,123; June 17.

Bitney, Dewey H., assignor to Union Steel Products Company, Albion, Mich. Anchor insert for concrete work. 1,764,772; June 17.

Bitney, Dewey H., assignor to Union Steel Products Company, Albion, Mich. Structural unit. 1,764,773; June 17.

Bjork, Carl, Seattle, Wash., assignor of one-third to E. Ames and one-third to M. B. Oakes, New York, N. Y. Carbureting device for caloric motors. 1,763,948; June 17.

Black-Clawson Company, The. (See Kutter, Herman L., assignor.)

Black & Decker Manufacturing Company, The. (See Fleming, Jared B., assignor.)

Blackburn, Jasper, Webster Groves, Mo. Gear shift. 1,764,145; June 17.

Blackhawk Mfg. Co. (See Pfauser, Edward M., assignor.)

Blakesley, George L., Merced, Calif. Nonglare attachment for hats. 1,764,500; June 17.

Blanchard, Hymen A., Buffalo, N. Y. Building construction. 1,764,001; June 17.

Bliss, H. R., Company. (See Allen, Howard G., assignor.)

Bliss, E. W., Company. (See Kruse, Peter, assignor.)

Bloom, Edgar J., Tiffin, Ohio, assignor, by mesne assignments, to Auto Research Corporation. Lubricating fixture. 1,764,774; June 17.

Blumenberg, Henry, jr., Moapa, Nev. Making aluminum chloride. 1,764,501; June 17.

Blumenberg, Henry, jr., Los Angeles, Calif. Making aluminum chloride. 1,764,502; June 17.

Blustein, Abraham, Washington, D. C. Safety spring clasp. 1,764,240; June 17.

Bockus, Harry N., Maplewood, assignor to Solar Compounds Corporation, Linden, N. J. Coating for flame-retarding coverings and manufacturing the same. 1,765,000; June 17.

Bodmer, Christian, assignor to The Stanley Works, New Britain, Conn. Bench vise. 1,765,321; June 17.

Boecking, Ewald. (See Frappier, L. S., and Boecking.)

Boehm, Nicholas, A., et al. (See Dearmann, James, assignor.)

Bogle, John C., River Forest, assignor, by mesne assignments, to Time-O-Stat Controls Company, Elkhart, Ind. Electrical switch. 1,765,297; June 17.

Bollinger, Elmer N., et al. (See Bollinger, William A., assignor.)

Bollinger, William A., assignor of one-fourth to W. A. Bollinger and one-fourth to E. N. Bollinger, Pittsburgh, Pa. Heating apparatus. 1,765,048; June 17.

Bollinger, William A., et al. (See Bollinger, William A., assignor.)

Bommer, Fred W., Everett, Mass. Thread cutting and forming machine. 1,764,775; June 17.

Bond, Clark W., Denver, Colo. Stationary-padding device. 1,763,749; June 14.

Bonnat, Max P., assignor of one-half to Peter Podell Co., Inc., New York, N. Y. Acoustic device. 1,765,124; June 17.

Bonner, Sibley, Detroit, Mich. Window-sash fastener. 1,763,638; June 17.

Bonney-Floyd Company, The. (See Edmunds, Glenn E., assignor.)

Boornaem, John F., and E. J. Hatton, Greenwich, Conn. Furnace structure. 1,763,919; June 17.

Boorum & Pease Company. (See Finley, Charles A., assignor.)

Boorum & Pease Company. (See Von Auw, Alwin, assignor.)
Booth, Augustus D., Columbus, Ohio. Roller bearing. 1,763,750; June 17.
Borchert, Fred L., Rockford, Ill. Work holding and transferring mechanism. 1,763,684; June 17.
Borchert, Fred L., Rockford, Ill. Workholder. 1,763,685; June 17.
Borden Company, The. (See Elmer, Albert O., assignor.)
Borgeson, Gustav, Syracuse, N. Y. Heater. 1,765,201; June 17.
Borzin, Milon H., Chicago, Ill. Container. 1,764,241; June 17.
Bott, Wister P., Homer, La. Show case. 1,764,822; June 17.
Bowen, William S., Westfield, N. J. Cooling tower. 1,765,001; June 17.
Bowlus, Claude A., Birmingham, Mich. Lubricating device. 1,764,823; June 17.
Bowlzer, Daniel H., assignor, by mesne assignments, to Bucknell Supply Company, Los Angeles, Calif., doing business as Sphinx Manufacturing Company. Combination spout and diverter. 1,763,877; June 17.
Bowman, Louis G., Chicago, Ill., assignor to Sexton Mfg. Company, Fairfield, Ill. Adjustable needle-lever bearing for sewing machines. 1,763,949; June 17.
Bown, Ralph, Maplewood, N. J., assignor to American Telephone and Telegraph Company. Radio receiving system. 1,763,751; June 17.
Bownan, A. M., et al. (See Latimer, Paul D., assignor.)
Boyd, Harold A. (See Boyd, Thomas A. and H. A.)
Boyd, Harold A., Shettleston, near Glasgow, Scotland. Applying drag to the spinning bobbins in flyer spinning and like frames. 1,763,752; June 17.
Boyd, Thomas A. and H. A., Shettleston, near Glasgow, Scotland. Winding frame for yarns or threads. 1,763,753; June 17.
Boye, James H., Chicago, Ill. Curtain rod or similar article. Des. 81,370; June 17.
Boye Needle Company, The. (See Carlson, Gustav A., assignor.)
Boykow, Johann-Maria, Berlin, assignor to the firm Messgeräte Boykow, G. m. b. H., Berlin-Lichterfelde-West, Germany. Gyroscope. 1,764,714; June 17.
Boyle, James F., New Haven, Conn., and A. Van Muffling, assignors to Air Cruisers, Inc., New York, N. Y. Pneumatic water craft. 1,765,002; June 17.
Brackett, Wellby A., and W. E. Richard, assignors to Sunbeam Electric Manufacturing Company, Evansville, Ind. Carburetor. 1,764,711; June 17.
Brackett, Wellby A., and W. E. Richard, assignors to Sunbeam Electric Manufacturing Company, Evansville, Ind. Pump. 1,764,712; June 17.
Bramberry, Harry M., Norfolk, Va. Ring tool. 1,764,146; June 17.
Brandenstein, Errol W., Schenectady, N. Y., assignor to General Electric Company. Self-propelled vehicle. 1,765,298; June 17.
Brandt, Carl A. W., Great Neck, assignor to The Superheater Company, New York, N. Y. Locomotive. 1,764,430; June 17.
Brandt, Carl A. W., Great Neck, assignor to The Superheater Company, New York, N. Y. High-pressure locomotive. 1,764,431; June 17.
Breaux, Wilson J., New Orleans, La. Razor-blade sharpener. 1,764,776; June 17.
Breeze Corporation. (See Lewis, James R., assignor.)
Breisky, John V., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Protective system. 1,764,385; June 17.
Breune, Arild M., Chicago, Ill., assignor, by mesne assignments, to W. H. Miner, Inc. Side bearing. 1,763,843; June 17.
Bresters, William, Berwyn, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Testing system. 1,763,878; June 17.
Brewer, Charles A., Noroton Heights, Conn. Forced-feed vaporizer. 1,765,125; June 17.
Brewster, Charles W., assignor, by mesne assignments, to Sprague Safety Control and Signal Corporation, New York, N. Y. Automatic train control and signal. 1,765,355; June 17.
Bridges, Charles E., Long Beach, Calif. Pressure regulator. 1,764,503; June 17.
Briggs & Stratton Corporation. (See Jacobi, Edward N., assignor.)
Brill, Clinton M., Petersburg, W. Va. Gasoline-storage tank. 1,763,950; June 17.
Brockway, Carl P., Paterson, N. J., and D. D. Myers, assignors to Industrial Research Corporation, Toledo, Ohio. Sleeve-valve gas engine. 1,764,386; June 17.
Bronk, Charles W., Binghamton, N. Y. Attachment for screw drivers. 1,764,504; June 17.
Bronson, Fred L., Los Angeles, Calif. Well-boring bit. 1,764,432; June 17.
Brookby, Harry E., and G. D. King, assignors to United States Gypsum Company, Chicago, Ill. Cellular structural material. 1,764,824; June 17.
Broughton, Arthur E., Minneapolis, Minn. Condensate removal device for high-speed paper driers. 1,764,713; June 17.
Broughton, Arthur E., Minneapolis, Minn. Eliminating wet streaks in paper. 1,764,777; June 17.
Brouillard, Julian C., Bemidji, Minn. Rail tie. 1,765,126; June 17.
Brown, Arthur, Lake City, Iowa. Workholding device. 1,764,242; June 17.
Brown, Carl D., assignor to Draper Corporation, Hopedale, Mass. Beam lock for looms. 1,765,322; June 17.
Brown, Frances R., assignor to I. B. Kleinert Rubber Company, New York, N. Y. Hot-water bottle or article of similar nature. Des. 81,371; June 17.
Brown, Frances R., assignor to I. B. Kleinert Rubber Company, New York, N. Y. Hot-water bottle or article of similar nature. Des. 81,372; June 17.
Brown, George S., Harriman, Tenn. Cistern agitator and purifier. 1,764,545; June 17.
Brown Package Company. (See Brown, W. R., and Towne, assignors.)
Brown, William R., and A. C. Towne, assignors to Brown Package Company, Winchendon, Mass. Latching device for shipping containers. 1,764,002; June 17.
Browne, Lyle W., assignor to The Fisher Governor Company, Inc., Marshalltown, Iowa. Remote-control structure for valves. 1,764,825; June 17.
Bruehl, Lawrence, Brooklyn, N. Y., assignor to Gas Refrigeration Corporation, Scranton, Pa. Evaporator for refrigerating apparatus. 1,764,192; June 17.
Bruehl, Lawrence, Brooklyn, N. Y., assignor to Gas Refrigeration Corporation, Scranton, Pa. Fluid control. 1,764,193; June 17.
Bruehl, Lawrence, and L. Reichert, Brooklyn, N. Y., assignors to Gas Refrigeration Corporation, Scranton, Pa. Controlling device for heat transference in refrigerators. 1,764,194; June 17.
Bruehl, Lawrence, Brooklyn, N. Y., assignor to Gas Refrigeration Corporation, Scranton, Pa. Evaporator. 1,764,195; June 17.
Bruehl, Lawrence, Brooklyn, N. Y., assignor to Gas Refrigeration Corporation, Scranton, Pa. Automatic controller for refrigerating systems. 1,764,196; June 17.
Bruehl, Lawrence, and L. Reichert, Brooklyn, N. Y., assignors to Gas Refrigeration Corporation, Scranton, Pa. Ammonia condenser and rectifier. 1,764,197; June 17.
Brunhübner, Georg, assignor to Ernst G. Bek, Pforzheim, Germany. Soldering. 1,764,604; June 17.
Brunner, Matthew J., assignor of one-half to C. G. Buscaglia, Buffalo, N. Y. Curtain rod. 1,764,037; June 17.
Brush Laboratories Company, The. (See Sawyer, Charles B., assignor.)
Brysselbout, Henri A., Detroit, Mich., assignor to Copeland Products, Inc. Expansion element. 1,763,754; June 17.
Buchet, Conrad R., Long Beach, assignor to Adjusto Equipment Company, Los Angeles, Calif. Apparatus for flushing grease containers. 1,764,387; June 17.
Buchet, Conrad R., Long Beach, assignor to Adjusto Equipment Company, Los Angeles, Calif. Electric motor and propeller unit. 1,764,388; June 17.
Buckeye Traction Ditcher Company, The. (See George, Charles L., assignor.)
Bucknell Supply Company. (See Bowlzer, Daniel H., assignor.)
Budd, Edward G., assignor to Budd Wheel Company, Philadelphia, Pa. Pilot pin for rolling mills. 1,764,929; June 17.
Budd Wheel Company. (See Budd, Edward G., assignor.)
Budd Wheel Company. (See Evans, Gordon M., assignor.)
Buffalo Electro-Chemical Company. (See Pietzsch, A., and Adolph, assignors.)
Buford, William J., assignor of fifty per cent to W. R. Jones, Houston, Tex. Snare. 1,763,921; June 17.
Buhrle, Joseph H., Yukon, Pa. Toy. 1,765,258; June 17.
Bullough, Enoch, Ashton-in-Makerfield, England. Pit prop. 1,765,200; June 17.
Bundy, Harry W., assignor, by mesne assignments, to Bundy Tubing Company, Detroit, Mich. Tubing. 1,763,755; June 17.
Bundy Tubing Company. (See Bundy, Harry W., assignor.)
Burford, James C., Winston-Salem, N. C. Flange oiler. 1,765,202; June 17.
Burgess Battery Company. (See Lorig, Robert A., assignor.)
Burgess Battery Company. (See Zook, John S., assignor.)
Burgmann, Carl F., Chicago, Ill. Valve. 1,763,951; June 17.
Burnley, William B., Los Angeles, Calif. Street-marking apparatus. 1,764,546; June 17.
Burnett, Robert N., et al. (See Latimer, Paul D., assignor.)
Burns, Louis J., Nutley, and L. E. Coon, Chatham, N. J., assignors, by mesne assignments, to Western Electric Company, Incorporated. Selector supervisory system. 1,763,879; June 17.
Burns, William W., Baltimore, Md. Burglarproof safe. 1,765,049; June 17.
Burroughs, Joseph N. (See Warner, Willard, assignor.)
Burt, Henry C., Laingsburg, assignor of one-half to C. W. Lee, Detroit, Mich. Caiking ring. 1,764,675; June 17.
Burtnett, Everett R., Santa Rosa, Calif. Internal-combustion engine. 1,764,147; June 17.
Burton, Everett T., East Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Signaling system. 1,763,880; June 17.
Burton, Ralph J., Detroit, Mich. Combined spotlight and hinge structure. 1,764,605; June 17.
Buscaglia, Charles G. (See Brunner, Matthew J., assignor.)
Bush, Sergius K., Canton, Ohio. Price tag. 1,764,003; June 17.
Bussy, Alfred, assignor to Compagnie Francaise des Machines-Outils de Précision, Paris, France. Machine tool. 1,765,203; June 17.

Butler, Arthur C., Boston, Mass. Drawing mechanism. 1,765,050; June 17.
Buttolph, Leroy J., Grantwood, N. J., assignor to General Electric Vapor Lamp Company. Mercury-vapor lamp and apparatus. 1,764,148; June 17.
Byck, Sylvan M., Savannah, Ga. Light. 1,764,930; June 17.
Byrider, William, et al. (See Denmead, Perry T., assignor.)
Byrnes, Clarence P., trustee. (See James, Joseph H., assignor.)
Cadwallader, Clyde T., Buffalo, N. Y. Dry closet. 1,764,149; June 17.
Cadwell, Walter W., La Grange, Ga. Vending machine. 1,765,259; June 17.
Caldor, Earl S., New York, N. Y. Bust supporter. 1,765,003; June 17.
Caldwell, Harry J., assignor to The Ingersoll Milling Machine Company, Rockford, Ill. Gearing. 1,763,645; June 17.
California Packing Corporation. (See Ash, Charles S., assignor.)
Callahan, Charles F., assignor to Callahan Cotton Harvester Inc., Memphis, Tenn. Cotton harvester. 1,763,646; June 17.
Callahan Cotton Harvester Inc. (See Callahan, Charles F., assignor.)
Callier, Frank J., San Antonio, Tex. String-fastening device for musical instruments. 1,764,548; June 17.
Calvert, Robert. (See Van Schaack, R. H., jr., and Calvert.)
Cambridge Instrument Company. (See Hindle, Charles F., assignor.)
Camp, Curtis B., trustee. (See Stokes, Charles L., assignor.)
Campana, Domenic M., Wilmette, Ill. Clothes hanger. 1,763,686; June 17.
Campbell, Samuel J., Green Bay, Wis. Creping machine. 1,764,676; June 17.
Candee, George G., Long Beach, Calif. Closure-operating mechanism. 1,764,150; June 17.
Candlish, William C., Berkeley, Calif., assignor to J. R. Palmenberg's Sons, Inc., New York, N. Y. Pedestal for display fixtures. Des. 81,383; June 17.
Capps, Frank L., Milford, assignor to Columbia Phonograph Company, Inc., Bridgeport, Conn. Recording means. 1,765,051; June 17.
Carbide and Carbon Chemicals Corporation. (See Davidson, Joseph G., assignor.)
Card, Clarence D., Rivers, Manitoba, Canada. Wagon box. 1,765,204; June 17.
Carey, Philip, Manufacturing Company, The. (See Steffens, Walter L., assignor.)
Carfagno, Massimino, Philadelphia, Pa. Knicker buckle. 1,764,547; June 17.
Carley, William O., Walla Walla, Wash. Twine cutter. 1,764,287; June 17.
Carlson, Enock A., Delvalle, Tex. Twine holder. 1,764,826; June 17.
Carlson, Gustaf, Buffalo, N. Y. Cage for roller bearings. 1,764,198; June 17.
Carlson, Gustav A., assignor to The Boye Needle Company, Chicago, Ill. Extensible closet pole. 1,764,931; June 17.
Carlson, Julius, Brooklyn, N. Y. Adjustable cap. 1,764,505; June 17.
Carlson, Oscar, East Providence, assignor to Dolan & Bullock, Providence, R. I. Tie clasp. 1,764,778; June 17.
Caroselli, Bernard, and H. G. Essman, New York, N. Y.; said Caroselli assignor to said Essman. Hand signal light. 1,764,549; June 17.
Carothers, Charles F., Salome, Ariz. Cattle poke. 1,764,827; June 17.
Carpenter Container Corporation. (See Carpenter, Herbert L. and J. N., assignors.)
Carpenter, Herbert L. and J. N., Brooklyn, assignors to Carpenter Container Corporation, New York, N. Y. Container head. 1,764,389; June 17.
Carpenter, James N. (See Carpenter, Herbert L. and J. N.)
Carr, Fred S., Newton, assignor, by mesne assignments, to United-Carr Fastener Corporation, Cambridge, Mass. Separable fastener. 1,765,052; June 17.
Carr, Fred S., Newton, assignor, by mesne assignments to United-Carr Fastener Corporation, Cambridge, Mass. Fastener stud. 1,765,053; June 17.
Carr, John O. (See Krum, H. L., and Carr.)
Carr, Moses F., Lexington, assignor to United-Carr Fastener Corporation, Cambridge, Mass. Sheet-metal button and making the same. 1,765,054; June 17.
Carr, Moses F., Lexington, assignor to United-Carr Fastener Corporation, Cambridge, Mass. Tack-attached sheet-metal button. 1,765,055; June 17.
Carrey, John O., assignor to Carrey-Morse Engineering Company, St. Louis, Mo. Composition for oilless bearings and producing same. 1,764,094; June 17.
Carrey-Morse Engineering Company. (See Carrey, John O., assignor.)
Carroll, John P. (See Newman, W. J., and Carroll.)
Carson Pirie Scott & Co. (See Farago, Joe, assignor.)
Carsten, William H., Seattle, Wash. Pump. 1,764,433; June 17.
Casablancas, Fernando, Sabadell, Spain. Drawing mechanism for textile rovings. 1,765,127; June 17.
Casapollo, Nicholas, New York, N. Y. Garbage can. 1,763,756; June 17.
Case, Dean J., Little Valley, N. Y. Razor. 1,764,506; June 17.
Caster-Udell, Bessie, assignor of one-tenth to N. S. Olive, Dodge City, Kans. Shield. 1,764,912; June 17.
Caterpillar Tractor Co. (See Best, Clarence L., assignor.)
Catron, Frederick O., assignor of one-half to N. P. Catron, Memphis, Tenn. Filter for liquids. 1,765,323; June 17.
Catron, Nettie P. (See Catron, Frederick O., assignor.)
Caulkins, Cecil P. (See Spear, L. Y., and Caulkins.)
Cave, Henry, assignor to The Fuller Brush Company, Hartford, Conn. Brace for broom handles. 1,764,095; June 17.
Chadbourne, Philip R., Everett, Wash. Aeroplane. 1,764,932; June 17.
Chadwick, Lee S., Shaker Heights, and M. Resek, Cleveland Heights, assignors to Perfection Stove Company, Cleveland, Ohio. Retort. 1,763,687; June 17.
Chamberlin, Benjamin D., assignor to Eastman Kodak Company, Rochester, N. Y. Automatic camera. 1,764,066; June 17.
Champion, John W., Evanston, assignor to Reliance Manufacturing Company, Chicago, Ill. Cigarette pocket for shirts. 1,763,688; June 17.
Chapman, Samuel B., Baltimore, Md. Watchman's electric clock. 1,765,205; June 17.
Chapman Self-Locking Nut Co. (See Hamman, Carl F., assignor.)
Charles, Reuben A., Great Bend, Kans. Lawn rake and fertilizing machine. 1,763,757; June 17.
Charlton, Arthur H., assignor of one-half to T. B. Rowe and Company, Limited, Brantford, England. Production of soap threads. 1,764,866; June 17.
Cheley, William J. (See Morrison, J. A., and Williams, assignors.)
Chew, Clarence. (See Flexon, F., and Chew.)
Chicago Pneumatic Tool Company. (See Reed, Clarence E., assignor.)
Chinski, Charles C., Beaumont, Tex. Changeable advertising device. 1,765,260; June 17.
Christensen, Norman V., and W. M. Hanneman, assignors to Union Special Machine Company, Chicago, Ill. Feeding mechanism for sewing machines. 1,763,952; June 17.
Christensen, Norman V., and H. J. Le Vesconte, assignors to Union Special Machine Company, Chicago, Ill. Feeding mechanism for sewing machines. 1,765,206; June 17.
Christophersen, Hagbart S., Odense, Denmark. Tire-deflation signal. 1,763,639; June 17.
Christy, Theodore. (See Stefanide, Nick, assignor.)
Chrysler Corporation. (See Maynard, Howard E., assignor.)
Cincinnati Bickford Tool Company, The. (See Klausmeyer, David C., assignor.)
Ciotti, Paul P., Brooklyn, assignor to Western Electric Company, Incorporated, New York, N. Y. Variable inductance. 1,763,881; June 17.
Clark, Edward F., North Attleboro, and J. H. Murdock, Holbrook, assignors, by mesne assignments, to Clark Lighter Co., Inc., North Attleboro, Mass. Pocket vapor cigar lighter. 1,765,004; June 17.
Clark, Ernest W. (See Schramm, C., and Clark.)
Clark Lighter Co. (See Clark, E. F., and Murdock, assignors.)
Clarke, Alex A. (See Manthey, Edward F., assignor.)
Clarkson, Bradley E. (See Schellentrager, E. W., and Clarkson.)
Claybourn Process Corporation. (See Sweet, Carl C., assignor.)
Claytor, Edward M., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Thermal relay. 1,765,305; June 17.
Clearwater Lumber Company. (See Laursen, Bruno L., assignor.)
Cleary, Walter D., Brooklyn, assignor to The De Laval Separator Company, New York, N. Y. Recovering grease from garbage. 1,764,390; June 17.
Clements, Melville F., and N. F. Helmers, St. Paul, Minn. Constructing subaqueous foundations. 1,764,779; June 17.
Clemmans, Edmund H., et al, executors. (See Griffiths, J. P., and Street-Wilson.)
Cleveland Crane & Engineering Company, The. (See Bennington, Earl T., assignor.)
Cleveland Graphite Bronze Company, The. (See Palm, John V. O., assignor.)
Cleveland Trust Company, The. (See Sawyer, Charles B., assignor.)
Cline, McGarvey, Jacksonville, assignor to Wood Process Company, Inc., Eastport, Fla. Apparatus for subjecting materials to the action of indirect heat. 1,763,758; June 17.
Clouse, William L., assignor to The National Machinery Co., Tiffin, Ohio. Bolt-trimming machine. 1,763,759; June 17.
Cochin, John D., San Francisco, Calif. Valve for lifting devices. 1,764,004; June 17.
Cochin, John D., San Francisco, Calif. Control valve for lifting devices. 1,764,005; June 17.
Cochran, Clyde E., assignor to The Elwell-Parker Electric Company, Cleveland, Ohio. System and apparatus for handling freight. 1,764,780; June 17.

Cochran, Paul B., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Insulator. 1,764,434; June 17.
Coffee, John M., Gainesville, Ga. Latching means for the covers of laundry apparatus. 1,765,207; June 17.
Coffey, Oscar L., assignor to Whiting Corporation, Harvey, Ill. Cupola bucket. 1,765,348; June 17.
Cohen, Joseph E., assignor to Sentry Safety Control Corporation, Philadelphia, Pa. Safety device for motion-picture-projecting machine. 1,763,922; June 17.
Cohen, Joseph H., Bridgeport, Conn. Switch for cable-carrying drums. 1,763,953; June 17.
Cohn, Edward, Brooklyn, N. Y. Reenforced safety tool handle. 1,764,677; June 17.
Cole, Sandford S., Pittsburgh, Pa., assignor to The Koppers Company. Refractory product. 1,763,882; June 17.
Colella, Louis A., Detroit, Mich. Toy vehicle. 1,764,199; June 17.
Coleman, Roy E. (See Hodson, W. D., and Coleman.)
Collier, Freeman E., assignor to Foley Saw Tool Company, Incorporated, Minneapolis, Minn. Saw set. 1,763,760; June 17.
Collins, A. M., Manufacturing Company. (See Gillbee, Manuel T., assignor.)
Columbia Phonograph Company. (See Capps, Frank L., assignor.)
Columbian Rope Company. (See Reber, James B., assignor.)
Colvin, Fred S., and J. V. Rogers, Yakima, Wash. Fruit tumbler and conveyer. 1,763,883; June 17.
Combs, Edward L., assignor to Philadelphia Storage Battery Company, Philadelphia, Pa. Radiocabinet. Des. 81,426; June 17.
Combustion Fuel Oil Burner Company. (See Rogers, H. S., and Raddatz, assignors.)
Commercial Shearing and Stamping Company, The. (See White, Thomas L., assignor.)
Compagnie des Forges et Acieries de la Marine et d'Homecourt. (See Granat, Elie, assignor.)
Compagnie Francaise des Machines-Outils de Précision. (See Bussy, Alfred, assignor.)
Comstock, Corry B., assignor to Comstock Oven Company, Inc., New York, N. Y. Feeding apparatus for bakers' ovens. 1,764,550; June 17.
Comstock Oven Company. (See Comstock, Corry B., assignor.)
Cone, Frank L., Windsor, Vt. Automatic spindle lathe. 1,765,130; June 17.
Conkey, G. E., Company, The. (See Placak, Harry, assignor.)
Conlon, Thomas A., Silver Spring, Md. Suspension for vehicles. 1,764,038; June 17.
Conn, C. G., Ltd. (See Gulick, Edward J., assignor.)
Conover, Claude A., Newburgh, N. Y. Closure for toothpaste tubes. 1,765,128; June 17.
Continental Can Company (See Aulbach, Charles J., assignor.)
Continental Can Company. (See O'Brien, F. J., and Punte, assignors.)
Continental Can Company. (See Tomkins, Walter M., assignor.)
Continental-Diamond Fibre Company. (See Haas, Paul C., assignor.)
Continental Motors Corporation. (See Kreis, Oscar C., assignor.)
Continental Motors Corporation. (See Lundborg, G. L., and Israel, assignors.)
Continental Motors Corporation. (See Meyer, Andre J., assignor.)
Continental Motors Corporation. (See Niven, Archie M., assignor.)
Continental Motors Corporation. (See Willi, Albert B., assignor.)
Cook, A. D., Inc. (See Willers, George E., assignor.)
Cook, James M., La Grange, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Material-working apparatus. 1,764,606; June 17.
Cook, James M., La Grange, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Screw-threading apparatus. 1,764,607; June 17.
Cook, Lawrence H., Menlo Park, assignor to J. T. Lemos, Palo Alto, Calif. Textile crayon process. 1,764,006; June 17.
Cooke, Hugh J. D., London, England. Beverage mixer. 1,765,129; June 17.
Coon, Leslie E. (See Burns, L. J., and Coon.)
Cooper, Duluth G., Honolulu, Hawaii. Valve-operating mechanism. 1,763,640; June 17.
Cooper, Israel W., New York, N. Y. Pin hinge. 1,765,131; June 17.
Cooper, Ruth J., Dallas, Tex. Rice-cooking device. 1,764,039; June 17.
Cope, Frank T., assignor to The Electric Furnace Company, Salem, Ohio. Roller-hearth furnace. 1,764,007; June 17.
Copeland Products, Inc. (See Brysselbout, Henri A., assignor.)
Copeland Products, Inc. (See Muffly, Glenn, assignor.)
Coplans, Myer, London, England. Stable salicylate composition. 1,764,933; June 17.
Corda, Attilio. (See Ferretti, A., and Corda.)
Cornwell, Arthur L., Wellsville, N. Y. Wheel puller. 1,764,243; June 17.
Coshockton Glove Co., The. (See McKinley, Melvin, assignor.)
Coslow, Carl W. (See John K. B., Coslow, and Schwindt.)
Cosper, Cecil, Walla Walla, Wash. Self-cleaning hutch. 1,764,151; June 17.
Cotton, Harold H., Rochester, N. Y. Book-index notcher and printer. 1,764,828; June 17.
Cover & Company. (See Johns, Harold E., assignor.)
Cowan, George W., Bartlett, Ill. Air-brake system for railway rolling stock. 1,764,152; June 17.
Cox, Ella, Magnolia, N. C. Insertable grate for box stoves. 1,763,641; June 17.
Cox, Irwin W., Denver, Colo. Dry-steam finisher. 1,763,761; June 17.
Craigo, John M., Hartford, Conn. Dental impression instrument. 1,764,244; June 17.
Craigo, John M., Hartford, Conn., assignor to E. H. Rowan, New York, N. Y. Orthodontic appliance. 1,764,067; June 17.
Cramer, Albert N., assignor to Owens-Illinois Glass Company, Toledo, Ohio. Leer feeder. 1,764,153; June 17.
Cramer, Otto P., San Francisco, Calif. Latch. 1,764,154; June 17.
Crane Company of Minnesota. (See Hougland, Albert C., assignor.)
Cricchio, Paul, assignor to Majestic Lamp Works, New York, N. Y. Lamp base or article of analogous nature. Des. 81,384; June 17.
Crickmer, Charles S., assignor to The Guiberson Corporation, Dallas, Tex. Fulcrum plate for spiders. 1,764,245; June 17.
Crickmer, Charles S., and I. C. Bell, assignors to The Guiberson Corporation, Dallas, Tex. Multiple-disk drill bit. Re17,700; June 17.
Criteser, Fred F., Roseburg, Oreg. Rotary current-reversing switch. 1,765,132; June 17.
Crocker, Ernest C. (See Dewey, B., and Crocker.)
Cronkhite, Charles M. (See Keck, G. S., and Cronkhite.)
Crook, Welton J., Stanford University, assignor, by mesne assignments, to Emsco Derrick & Equipment Company, Los Angeles, Calif. Steel sucker rod and the like and its production. 1,764,068; June 17.
Cross Paper Feeder Company. (See Hallstream, Henning, assignor.)
Cross, William M., Chicago, Ill. Air-actuated mechanism for locking throttle levers. 1,763,954; June 17.
Crossmore, Edward Y., Yonkers, assignor to National Biscuit Company, New York, N. Y. Display container. 1,765,299; June 17.
Crowley, Arthur J., assignor to Humboldt Sulphur Company, Sulphur, Nev. Extracting sulphur. 1,763,762; June 17.
Crozier, William D., Geneva, Ill., assignor, by mesne assignments, to United Reproducers Patents Corporation, St. Charles, Ill. Push-pull electrostatic sound reproducer. 1,764,008; June 17.
Curtis Companies. (See Madsen, Sern, assignor.)
Curtiss-Reid Aircraft Company Limited. (See Reid, Wilfrid T., assignor.)
Cusick, George M., Grand Rapids, Mich. Magneto coupling. 1,764,608; June 17.
Cusick, Walter M. (See Daley, Joseph J., assignor.)
Cunningham, James I., assignor of one-half to E. H. Waldrop, Shawnee, Okla. Boiler flue and pipe cutter. 1,765,208; June 17.
Cunningham, Lewis L., assignor, by mesne assignments, to Minneapolis Honeywell Regulator Company, Minneapolis, Minn. Automatic device. 1,765,056; June 17.
Cunningham, Orin D. (See Derby, I. H., and Cunningham.)
Cutting, Charles D., Detroit, Mich. Universal joint. 1,764,829; June 17.
Dabrohun, Castro M., Chicago, Ill. Poster display means. 1,765,057; June 17.
Dake, Virgil H. (See Bartley, C. B., and Dake.)
Daley, Joseph J., assignor to W. M. Cusick, Boston, Mass. Amplification of radiant energy. 1,764,934; June 17.
Dalton, George A., and J. R. Dunham, Highland Park, assignors to John Waldron Corporation, New Brunswick, N. J. Flexible coupling pin. 1,765,209; June 17.
Daly, Kerfoot W., et al. (See Harger, Martin L., assignor.)
Daniel, Fidel F., Ironwood, Mich. Aeroplane catapult. 1,765,210; June 17.
Daniels, Lee G., Rockford, Ill. Water softener. 1,764,155; June 17.
Danielson, Gus O., Clarkia, Idaho. Bench vise. 1,764,507; June 17.
Dann, Walter M. (See Hill, L. H., and Dann.)
Danner, Edward, Newark, assignor to The Libbey Glass Manufacturing Company, Toledo, Ohio. Grinding machine. 1,763,647; June 17.
Darrow, Marius S., St. Louis, Mo., W. J. Hart, East St. Louis, Ill., F. G. Gronemeyer, St. Louis, Mo., and Francis B. Watkins Edwardsville, Ill., assignors to The Barber Asphalt Company, Philadelphia, Pa. Machinery for manufacturing shingles. 1,765,058; June 17.
Davey, James A. (See Davey, Paul H. and J. A.)
Davey, Paul H., Kent, Ohio, and J. A. Davey, Sound Beach, Conn. Tree-moving apparatus. 1,764,935; June 17.

Davidson, Joseph G., Yonkers, N. Y., assignor to Carbide and Carbon Chemicals Corporation. Refrigerant. 1,765,211; June 17.
Davies, David R., Didsbury, England, assignor to Westinghouse Electric & Manufacturing Company. Switch mechanism. 1,764,435; June 17.
Davis, Alex B., Cincinnati, Ohio, assignor to A. B. Dick Company, Chicago, Ill. Stencil sheet and manufacturing the same. 1,763,955; June 17.
Davis, Augustine, jr. (See Duerr, Leonard H., assignor.)
Davis, Ernest, assignor to The Prosperity Company Inc., Syracuse, N. Y. Pressing machine and actuating mechanism therefor. 1,763,648; June 17.
Davis, Harry A., assignor to Draper Corporation, Hopedale, Mass. Thread-parting mechanism for looms. 1,765,324; June 17.
Davis, Joseph R., Clarksburg, W. Va. Shoulder strap. 1,765,300; June 17.
Day-Brite Reflector Company. (See Biller, David J., assignor.)
Day, David E., Los Angeles, Calif. Process of and apparatus for distilling and cracking hydrocarbon oils. 1,764,391; June 17.
Day, James C., South Orange, assignor to The Whitehead and Hoag Company, Newark, N. J. Button receptacle. 1,765,325; June 17.
Day and Night Auto Safety Signal Company. (See Jamison, Claude T., assignor.)
Dayton Pump and Mfg. Co., The. (See Horvath, Anthony G., assignor.)
Dayton Pump & Manufacturing Company, The. (See Hufnagle, O. C., and Reichelderfer, assignors.)
Dean, Dion K., Rahway, N. J., assignor to Foster Wheeler Corporation, New York, N. Y. Heat exchanger. 1,764,200; June 17.
Dean, Peter P., New Canaan, Conn., assignor to The Limitorque Corporation. Control means for power-operated mechanisms. 1,764,936; June 17.
Dean, Reginald S., Oak Park, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Oxidation inhibitor. 1,764,609; June 17.
De Angelis, Aniceto, Clairton, Pa. Level. 1,765,060; June 17.
Dearmann, James, assignor to N. A. Boehm and S. Rosen, Milwaukee, Wis. Fuel mixer. 1,764,096. June 17.
De Atley, Carroll, assignor to Superior Steam Iron Company, Inc., Baltimore, Md. Electric iron. 1,764,246; June 17.
De Boer, Rudolph, assignor to Grand Rapids Metalcraft Corporation, Grand Rapids, Mich. Automobile instrument panel. Des. 81,373; June 17.
De Bonal, Guy, Genas, and P. Masson, Villeurbanne, France. Self-locking control device. 1,764,937; June 17.
Decker, Frank L., Maywood, Ill. Footlight structure. 1,763,956; June 17.
Decker, James W., assignor to News Projection Corporation New York, N. Y. Rewinding mechanism for the tape of news-projecting machines. 1,763,844; June 17.
Decker, Jay J., Garrett, Pa. Shade holder for electric lamps. 1,765,212; June 17.
De Forest, Lee, assignor to De Forest Phonofilm Corporation, New York, N. Y. Producing talking-motion-picture films. 1,764,938; June 17.
De Forest Phonofilm Corporation. (See De Forest, Lee, assignor.)
De Laval Separator Company, The. (See Cleary, Walter D., assignor.)
De Leeuw, Adolph L., Plainfield, N. J., assignor to The Goss and De Leeuw Machine Company, New Britain, Conn. Air-cushioned mechanism. 1,765,059; June 17.
Delevoye, Robert E. C., Paris, assignor to Societe Anonyme des Anciens Etablissements Hotchkiss & Cie., St.-Denis, Seine, France. Gear box. 1,765,133; June 17.
De Lisle, Harold L., Chicago, Ill. Container for sheets. 1,764,610; June 17.
De Lisle, Harold L., Chicago, Ill. Curtain support. 1,764,611; June 17.
Demuth, Wm., & Co. (See Negbaur, Harry, assignor.)
Denmead, Ada, et al. (See Denmead, Perry T., assignor.)
Denmead, John W., et al. (See Denmead, Perry T., assignor.)
Denmead, John W. (See Palmer, T. A., and Denmead.)
Denmead, Perry T., assignor to A. Denmead and J. W. Denmead, Akron, and W. Byrider, Cleveland, Ohio. Match folder. 1,763,763; June 17.
Dennison, French E., assignor to National Refrigeration Corporation, Beloit, Wis. Refrigerating apparatus. 1,763,923; June 17.
Dennison, Robert A., Dallas, Tex. Top-securing means for baskets. 1,765,301; June 17.
Depee, Roy, Century, Okla. Tire-deflation indicator. 1,765,213; June 17.
Derby, Ira H., and O. D. Cunningham, assignors to P. C. Reilly, Indianapolis, Ind. Ore-flotation process and reagent. 1,765,302; June 17.
Desha, Orville U., assignor of one-fifth to The Desha Typelex Trust Estate, Fort Collins, Colo. Key action for typewriters and other machines. 1,765,061; June 17.
Desha, Orville U., assignor of one-fifth to The Desha Typelex Trust Estate, Fort Collins, Colo. Key action for typewriters and other machines. 1,765,326; June 17.
Desha Typelex Trust Estate, The. (See Desha, Orville U., assignor.)
Design-O-Graph Limited, The. (See Fisher, Alexander D., assignor.)
Deutsch, Lester, Bronx, N. Y. Pin. Des. 81,374; June 17.
Devon Manufacturing Company. (See Lundgaard, Ivar, assignor.)
Dewey, Bradley, Cambridge, and E. C. Crocker, Belmont, Mass.; said Crocker assignor to said Dewey. Sealing composition. 1,765,134; June 17.
Dewing, Charles W. (See Johnson, A. G., and Dewing.)
Dingo, Federico G., Habana, Cuba. Amphibian airplane. 1,765,214; June 17.
Diamond Power Specialty Corporation. (See Snow, Norman L., assignor.)
Dick, A. B., Company. (See Davis, Alex B., assignor.)
Dick, A. B., Company. (See Klein, Frederick, assignor.)
Dickey, Ernest. (See Kellholtz, L. S., and Dickey.)
Dickinson, John D., Chicago, Ill., assignor to Yawman & Erbe Manufacturing Co., Rochester, N. Y. Ledger desk. 1,764,612; June 17.
Diebold, Fritz, Zurich, Switzerland, and O. Friedeberg, Berlin, Germany. Composition for cleaning glass windows. 1,764,392; June 17.
Dievendorff, Horton H., Santa Paula, and S. O. Barton, Ventura, assignors to Pacific Oil Well Cementing Company, Incorporated, Los Angeles, Calif. Apparatus for cementing wells. 1,763,642; June 17.
Diggins, Thomas L., Milton, Oreg., assignor of one-half to E. Harris, Seattle, Wash. Stubble remover and seed-bed fertilizer. 1,765,005; June 17.
Dignan, Eugene, Boyne City, Mich. Curtain-bracket-fixture block. 1,763,764; June 17.
Dina, Augusto, Jersey City, N. J., assignor to International Projector Corporation, New York, N. Y. Pedestal lever for picture-projection machines. 1,764,201; June 17.
Dina, Augusto, Jersey City, N. J., assignor to International Projector Corporation, New York, N. Y. Pad-roller arm. 1,764,939; June 17.
Dina, Augusto, Jersey City, N. J., assignor to International Projector Corporation, New York, N. Y. Shutter for projection machines (bent edges) for motion-picture-projection machines. 1,765,006; June 17.
Dinhofer, Julius, New York, N. Y. Precious, semi-precious, or synthetic cut stone. Des. 81,375; June 17.
Dinhofer, Julius, New York, N. Y. Precious, semi-precious, or synthetic cut stone. Des. 81,376; June 17.
Dinhofer, Julius, New York, N. Y. Precious, semi-precious, or synthetic cut stone. Des. 81,377; June 17.
Dinhofer, Julius, New York, N. Y. Precious, semi-precious, or synthetic cut stone. Des. 81,378; June 17.
Dinhofer, Julius, New York, N. Y. Precious, semi-precious, or synthetic cut stone. Des. 81,379; June 17.
Dinhofer, Julius, New York, N. Y. Precious, semi-precious, or synthetic cut stone. Des. 81,380; June 17.
Dinhofer, Julius, New York, N. Y. Precious, semi-precious, or synthetic cut stone. Des. 81,381; June 17.
Dinhofer, Julius, New York, N. Y. Precious, semi-precious, or synthetic cut stone. Des. 81,382; June 17.
Discenza, John, and J. Filippone, New York, N. Y. Repairing last. 1,763,765; June 17.
Doane, Leroy C., assignor to The Miller Company, Meriden, Conn. Lighting fixture. 1,764,393; June 17.
Doane, Leroy C., assignor to The Miller Company, Meriden, Conn. Shade holder. 1,764,394; June 17.
Doane, Leroy C., assignor to The Miller Company, Meriden, Conn. Lighting fixture. 1,764,395; June 17.
Doble, Charles, Mount Carmel, Pa. Combined player piano and phonograph. 1,765,261; June 17.
Dodge, Adiel Y., South Bend, Ind., assignor to Bendix Brake Company. Brake mechanism. 1,765,350; June 17.
Dodge, Adiel Y., South Bend, Ind., assignor to Bendix Brake Company. Brake mechanism. 1,765,351; June 17.
Doerr, Harry E., assignor to Scullin Steel Co., St. Louis, Mo. Side frame. 1,764,940; June 17.
Doherty Research Company. (See Lowe, Russell E., assignor.)
Dolan & Bullock. (See Carlson, Oscar, assignor.)
Doland, Eben G., Starksboro, Vt. Cover holder. 1,765,135; June 17.
Dolzer, John J., Elm Grove, W. Va. Hog-snout puller. 1,764,551; June 17.
Domestic Electric Company, The. (See Soule, George M., assignor.)
Domestic Electric Company, The. (See Spielman, M. H., and Poesse, assignors.)
Donald, Forrest V., assignor to Gilson Manufacturing Company, Port Washington, Wis. Cultivator. 1,765,358; June 17.
Donnelley, Edward J., Western Springs, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Apparatus for filing sheets of material. 1,764,613; June 17.
Donnelley, R. R., and Sons Company. (See Ackley, Raymond E., assignor.)
Douglas, David H., Cropseyville, N. Y. Magazine pencil. 1,764,156; June 17.
Dow Chemical Company, The. (See Dow, Herbert H., assignor.)
Dow Chemical Company, The. (See Hale, William J., assignor.)
Dow Chemical Company, The. (See Heath, S. B., and Keller, assignors.)
Dow Chemical Company, The. (See Hoy, John E., assignor.)

Dow, Herbert H., assignor to The Dow Chemical Company, Midland, Mich. Automatic furnace control. 1,764,715; June 17.
Downer, Charles O., et al. (See Harger, Martin L., assignor.)
Drader, Charles, et al. (See Stephens, R. W., and Wilcox, assignors.)
Drake, Frederick H., assignor to Radio Frequency Laboratories, Incorporated, Boonton, N. J. Electrical amplifier circuit. 1,764,552; June 17.
Drake, John L., assignor to Libbey-Owens Glass Company, Toledo, Ohio. Cooled roll for producing sheet glass. 1,763,689; June 17.
Drane, Charles H., jr., Delray, Fla. Apparatus for utilizing solar heat. 1,765,136; June 17.
Draper, Charles T., assignor to The Draper Manufacturing Company, Cleveland, Ohio. Sheet-metal grease drum and using same. 1,765,062; June 17.
Draper, Clare H., assignor to Draper Corporation, Hopedale, Mass. Automatically-threading loom shuttle. 1,765,327; June 17.
Draper Corporation. (See Brown, Carl D., assignor.)
Draper Corporation. (See Davis, Harry A., assignor.)
Draper Corporation. (See Draper, Clare H., assignor.)
Draper Corporation. (See Jones, David C., assignor.)
Draper Manufacturing Company, The. (See Draper, Charles T., assignor.)
Dravo Contracting Company, The. (See Kersting, Bernard H., assignor.)
Dreibuss, Harry C., assignor, by mesne assignments, to Scullin Steel Co., St. Louis, Mo. Side frame. 1,765,007; June 17.
Dremel, Albert J., Racine, Wis. Clippers. 1,764,614; June 17.
Dreyfus, Henry, London, England. Apparatus for the production of staple fibers. 1,764,202; June 17.
Dreyfuss, Henry, New York, N. Y. Method and apparatus for draping curtains. 1,764,396; June 17.
Dual Motors Ltd. (See Knecht, Emil, assignor.)
Ducart, Guillaume, Paris France. Machine for turning down and folding the ends of box covers. 1,764,247; June 17.
Duchard, Henri M., Paris, France. Publicity apparatus. 1,765,215; June 17.
Dudley, Edward F., Oak Park, assignor to The Miehle Printing Press & Manufacturing Company, Chicago, Ill. Inking roller. 1,764,157; June 17.
Duerr, Leonard H., assignor to A. Davies, jr., Cincinnati, Ohio. Tank-valve-control mechanism. 1,764,436; June 17.
Duff-Norton Manufacturing Company, The. (See Schwerin, Frank H., assignor.)
Duncan, Major, Baltimore, Md. Vending machine. 1,765,216; June 17.
Dunham, John R. (See Dalton, G. A., and Dunham.)
Dunham, Le Roy S., East Orange, assignor to Thomas A. Edison, Incorporated, West Orange, N. J. Galvanic battery. 1,765,137; June 17.
Dunston, Willard J., Somerville, Mass. Valve lifter. 1,765,138; June 17.
Duo-Tor Manufacturing Company, The. (See Epstein, William C., assignor.)
Dutchess Tool Company. (See Van Houten, Frank H., assignor.)
Dyck, Herbert F., Ness City, Kans. Combination stop and drain cock. 1,765,139; June 17.
Eastman Kodak Company. (See Chamberlin, Benjamin D., assignor.)
Eastman Kodak Company. (See Sheppard, S. E., and Wightman, assignors.)
Ebel, John H. (See Rodd, E., and Ebel.)
Eberling, Charles M., Cleveland, Ohio. Clutch. 1,765,063; June 17.
Eberling, Charles M., Cleveland, Ohio. Building-block machine. 1,765,064; June 17.
Ecker, Edward H., New York, N. Y. Dental attachment for removable bridgework. 1,764,781; June 17.
Eckstein, Oliver W. (See Wells, L., and Eckstein.)
Eclipse Machine Company. (See McGrath, William L., assignor.)
Economy Irrigation Company. (See Todd, William C., assignor.)
Edgar, Frank M., and J. B. Flynn, assignors to Ternstedt Manufacturing Company, Detroit, Mich. Lever-control assembly. 1,763,690; June 17.
Edgar, Rilla M. (See Maxwell, William R., assignor.)
Edgerton, Lloyd B., Narberth, assignor to Philadelphia Quartz Company, Philadelphia, Pa. Apparatus for dissolving silicate of soda. 1,763,845; June 17.
Edison Storage Battery Company. (See Mitchell, Roy C., assignor.)
Edison, Thomas A., Incorporated. (See Dunham, Le Roy S., assignor.)
Edmunds, Glenn E., assignor to The Bonney-Floyd Company, Columbus, Ohio. Conveyer. 1,764,288; June 17.
Edson, Elmer R., Portland, Oreg. Safety railway truck. 1,764,941; June 17.
Edwards, George W., assignor to Sunset Gold Packing Company, Oakland, Calif. Machine for extracting juice from citrous fruits. 1,764,158; June 17.
Edwards Iron Works, Incorporated. (See Edwards, William H., assignor.)
Edwards, O. M., Company, Inc., The. (See Axe, Roy T., assignor.)
Edwards, William C., jr., Kansas City, Mo. Combination harvester, thrasher, and separator. 1,764,040; June 17.
Edwards, William C., jr., Kansas City, Mo. Combination harvester thrasher. 1,764,041; June 17.
Edwards, William H., assignor to Edwards Iron Works, Incorporated, South Bend, Ind. Truck-body partition. 1,764,615; June 17.
Ehlers, Clarence W., Junction City, Kans. Farm gate. 1,765,217; June 17.
Ehrhart, Raymond N., Edgewood, assignor to Elliott Company, Pittsburgh, Pa. Condenser. 1,764,716; June 17.
Ehrhart, Raymond N., Edgewood, assignor to Elliott Company, Pittsburgh, Pa. Condenser. 1,764,782; June 17.
Ellers, Frank B., Fort Wayne, Ind., assignor to Tokheim Oil Tank and Pulp Company. Liquid-dispensing apparatus. 1,764,097; June 17.
Ekle, Alexander C., Mankato, Minn. Spark-plug tester. 1,764,248; June 17.
Ekstrom, Eric S., et al. (See Swenson, Carl E., assignor.)
Eldeen Automatic Hosiery Mender Inc. (See Hoffman, Edward J., assignor.)
Electric Boat Company. (See Spear, Lawrence Y., assignor.)
Electric Furnace Company, The. (See Cope, Frank T., assignor.)
Electric Service Supplies Company. (See McFarlin, John R., assignor.)
Electrolock Manufacturing Company, The. (See Andrew, Frederick W., assignor.)
Elithorpe, E. W. (See Strauss, Alfred J., assignor.)
Elliott Company. (See Ehrhart, Raymond N., assignor.)
Elliott Company. (See MacNeill, George L., assignor.)
Elliott-Fisher Company. (See Gibson, Franklin C., assignor.)
Elliott-Fisher Company. (See Pitman, Henry L., assignor.)
Elliott, Harold F., Palo Alto, Calif., assignor to Victor Talking Machine Company, Camden, N. J. Adjustable cam. 1,763,957; June 17.
Elmen, Gustaf W., Leonia, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Heat treatment of loaded conductors. 1,763,884; June 17.
Elmer, Albert O., Otisville, assignor to The Borden Company, New York, N. Y. Type holder. 1,763,958; June 17.
Elsässer, Robert, Berlin-Charlottenburg, assignor to Siemens Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany. Atomizer for liquids. 1,764,437; June 17.
Elwell-Parker Electric Company, The. (See Cochran, Clyde E., assignor.)
Embree, Spencer D., Elizabeth, N. J. Sectional soap cake and making same. 1,764,009; June 17.
Emrick, George W., assignor, by mesne assignments, to Ettco Tool Co. Inc., Brooklyn, N. Y. Spindle for chuck devices. 1,764,289; June 17.
Emrick, George W., assignor, by mesne assignments, to Ettco Tool Co. Inc., Brooklyn, N. Y. Chuck device. 1,764,290; June 17.
Emrick, George W., assignor, by mesne assignments, to Ettco Tool Co. Inc., Brooklyn, N. Y. Drill chuck. 1,764,291; June 17.
Emsco Derrick & Equipment Company. (See Crook, Welton J., assignor.)
Emsco Derrick & Equipment Company. (See Gunn, R. W., and Thompson, assignors.)
Emsco Derrick & Equipment Company. (See Rawson, Leslie A., assignor.)
Emsco Derrick & Equipment Company. (See Stevenson, Edward W., assignor.)
Endicott Johnson Corporation. (See Smith, Elmer H., assignor.)
Engle, Lee O. (See Purcell, Charles H., assignor.)
Enright, Stephen P., Philadelphia, Pa. Flush valve. 1,764,942; June 17.
Epstein, William C., assignor to The Duo-Tor Manufacturing Company, Dayton, Ohio. Combined incinerator and water heater. 1,764,553; June 17.
Erhart, Julius P., assignor of one-half to L. P. Miller and R. M. Miller, Anderson, Calif. Scraper blade. 1,765,218; June 17.
Ericson, Charles G., Toronto, Ontario, Canada. Rail anchor. 1,764,010; June 17.
Ericson, Charles G., Toronto, Ontario, Canada. Rail anchor. 1,764,011; June 17.
Ericson, Charles G., Toronto, Ontario, Canada. Rail anchor. 1,764,012; June 17.
Ericson, Charles G., Toronto, Ontario, Canada. Rail anchor. 1,764,013; June 17.
Erlenbach, Edgar, Berlin, Germany. Treating sawdust. 1,764,249; June 17.
Erskine, Malcolm E. (See Toohey, J. S., and Erskine.)
Erwin, Charles, Akron, Ohio. Platform construction. 1,763,766; June 17.
Erwin, Weldon C., Yorba Linda, Calif. Bottle attachment. 1,763,924; June 17.
Escalante, Maximo, New York, N. Y. Writing instrument. 1,765,219; June 17.
Essman, Herman G. (See Caroselli, B., and Essman.)
Estevez, Andrés Q., Franklin, Mass. Sugar-cane planter. 1,764,159; June 17.
Etat Francais (Ministere de l'Air). (See Marie, Felix, assignor.)

Ettco Tool Co. (See Emrick, George W., assignor.)
Ettco Tool Co. Inc. (See Emrick, George W., assignor.)
Evans Auto Loading Co. Inc., The. (See Snyder, Clifford L., assignor.)
Evans, Gordon M., Detroit, Mich., assignor to Budd Wheel Company, Philadelphia, Pa. Disk-rolling process. 1,764,943; June 17.
Everett, Willard E., Cumberland, Md. Antispreading device. 1,765,220; June 17.
Everwear Manufacturing Company. (See Hoppes, Charles E., assignor.)
Eynon, Thomas M., Philadelphia, Pa. Gasoline indicator. 1,765,008; June 17.
Fageol, Rollie B., Los Angeles, Calif. Vehicle. 1,763,767; June 17.
Fager, Albert H., Los Angeles, Calif. Vehicle running gear. 1,763,768; June 17.
Fagersta Bruks Aktiebolag. (See Gumaelius, Olaf, A. E., assignor.)
Fairbanks, Morse & Co. (See Anderson, Gordon R., assignor.)
Fairbanks, Morse & Co. (See Hobart, Franklin G., assignor.)
Fairbanks, Morse & Co. (See Jahnke, Charles B., assignor.)
Fairbanks, Morse & Co. (See Kapp, Leonard B., assignor.)
Fairbanks, Morse & Co. (See Seagren, John, assignor.)
Falk Corporation, The. (See Bibby, James, assignor.)
Falkenthal, Erwin, Berlin-Dahlem, Germany. Separating and mixing apparatus. 1,764,250; June 17.
Falla, Hedley, Milford, N. H. Connecter. 1,765,221; June 17.
Falla, Hedley, and F. Bergami, Milford, N. H. Can opener. 1,765,222; June 17.
Faller, Ernest A., Brooklyn, N. Y. Telegraphic recorder. 1,764,830; June 17.
Fanelier, Charles J., Windsor, Vt., and R. A. Johnson, Longmeadow, Mass., assignors, by mesne assignments, to Woodward, Hubbard Company, Hill, N. H. Strip-feeding mechanism. 1,764,831; June 17.
Farago, Joe, assignor to Carson Pirie Scott & Co., Chicago, Ill. Shoe box. 1,764,251; June 17.
Farmers' Underwriters Association. (See Tyler, J. C., and Leavey, assignors.)
Faron, Clifton A., Los Angeles, Calif. Float-operated switch. 1,764,069; June 17.
Farquhar, A. B., Co. Limited. (See Fisher, William J., assignor.)
Farquhar, A. B., Co. Limited. (See Hollinger, Harry C., assignor.)
Farrior, Julian I., Gibsonville, N. C. Counting device. 1,765,262; June 17.
Faust, Levin, et al. (See Swenson, Carl E., assignor.)
Fay, Richard D., Cambridge, Mass., assignor, by mesne assignments, to Radio Corporation of America, New York, N. Y. Telephone receiver. 1,763,846; June 17.
Fear, Arthur, Hastings, New Zealand. Shoe-polishing kit. 1,765,065; June 17.
Featheredge Rubber Company. (See Hood, Harry M., assignor.)
Fedoreak, John, Trenton, N. J. Apron overall. 1,765,009; June 17.
Feeney, William P., Manistee, Mich. Stock regulator. 1,763,691; June 17.
Feid, Friedrich W. C. A., Barmen-Rittershausen, Germany. Apparatus for the generation of steam and hot water. 1,764,873; June 17.
Feldin, Emil, Everett, Wash. Lumber-loading roll. 1,764,397; June 17.
Ferguson, William, Philadelphia, Pa., assignor to National Airoil Burner Company, Incorporated. Furnace. 1,764,292; June 17.
Ferrabee, Gilbert. (See Frazer, J. W., and Ferrabee.)
Ferretti, Antonio, and A. Corda, San Francisco, Calif. Parachute. 1,764,293; June 17.
Ferrier, Albert, et al. (See Forget, Arthur, assignor.)
Ferris, Curzon C., Elmira, N. Y. Display rack. 1,765,223; June 17.
Ferris, William D., assignor to Frantz Manufacturing Co., Sterling, Ill. Door latch. 1,763,692; June 17.
Ferris, William D., assignor to Frantz Manufacturing Co., Sterling, Ill. Latch. 1,763,693; June 17.
Ferris, William D., assignor to Frantz Manufacturing Co., Sterling, Ill. Doorbolt. 1,763,694; June 17.
Fertitta, Joseph J. (See Lewis, E. E. Zito, and Fertitta.)
Fessler, Harrison H., Orwigsburg, Pa. Underwear. 1,764,252; June 17.
Feuerstein, Carl. (See Feuerstein, George M. and C.)
Feuerstein, George M. and C., Algoma, Wis. Beet harvester. 1,765,224; June 17.
Field, Herbert C., Windsor, Ontario, Canada, and E. G. Simpson, assignors to Ternstedt Manufacturing Company, Detroit, Mich. Windshield regulator. 1,763,695; June 17.
Fielder, Frederick D., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. High-voltage voltmeter. 1,764,294; June 17.
Fiero, George M., Pittsburgh, Pa. Tie-rail clamp. 1,765,263; June 17.
Filippone, Joseph. (See Discenza, J., and Filippone.)
Finch, Fred F., San Francisco, Calif. Engine. 1,763,959; June 17.
Finch, Paul R., Des Moines, Iowa. Device for cleaning liquid containers. 1,764,160; June 17.
Finley, Charles A., Rutherford, N. J., assignor to Boorum & Pease Company, Brooklyn, N. Y. Visible-loose-leaf device. 1,765,141; June 17.
Finley, Charles A., Rutherford, N. J., assignor to Boorum & Pease Company, Brooklyn, N. Y. Visible-loose-leaf device. 1,765,225; June 17.
Finney, Alfred C., Upper Darby, Pa., assignor to General Electric Company. Protective arrangement. 1,765,264; June 17.
Fischer, Erich, and C. E. Müller, Hochst-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Dyeing and printing cellulose esters and cellulose ethers. 1,765,142; June 17.
Fischer, H. G., & Co. (See Osborn, Howard H., assignor.)
Fischer, Hinko, assignor to Lübecker Maschinenbau-Gesellschaft, Lubeck, Germany. Excavating tool for ditching or dredging machines. 1,763,769; June 17.
Fish, Fred O., Winchester, Mass. Machine for making golf tees. 1,764,295; June 17.
Fish, Lewin B., Maplewood, N. J., and E. St. John, Brooklyn, N. Y., assignors to American Telephone and Telegraph Company. Cable clamp and bridle ring. 1,763,770; June 17.
Fisher, Alexander D., Toronto, Ontario, assignor to The Design-O-Graph Limited, Toronto, Canada. Geometric scribing machine. 1,763,885; June 17.
Fisher Governor Company, The. (See Browne, Lyle W., assignor.)
Fisher, William J., assignor to A. B. Farquhar Co. Limited, York, Pa. Ground-working implement. 1,764,944; June 17.
Fisk Rubber Company, The. (See Maynard, Charles E., assignor.)
Fitl, James J., Swanton, Nebr. Grave vase. 1,765,140; June 17.
Fitz Gerald, Marion F., Portland, Oreg. Ornamental screen. 1,764,398; June 17.
Fleming, Richard, Plainfield, N. J. Method and apparatus for treating hydrocarbons. 1,764,296; June 17.
Fleming, Jared B., Baltimore County, assignor to The Black & Decker Manufacturing Company, Towson, Md. Valve tester. 1,764,616; June 17.
Flexlume Corporation. (See Wiley, Roy R., assignor.)
Flexon, Floyd, Fairmont, W. Va., and C. Chew, Pitman, N. J., assignors to Owens-Illinois Glass Company, Toledo, Ohio. Polishing machine. 1,764,161; June 17.
Flint, Francis C., Washington, Pa., assignor to Hazel-Atlas Glass Co., Wheeling, W. Va. Method and apparatus for increasing the production of glass. 1,764,832; June 17.
Flynn, John B. (See Edgar, F. M., and Flynn.)
Flynn, John B., Detroit, Mich., assignor to Ternstedt Manufacturing Company, Detroit, Mich. Handle mounting. 1,764,945; June 17.
Flynn, John B., assignor to Ternstedt Manufacturing Company, Detroit, Mich. Spring-clip guide for door-lock bolts. 1,764,946; June 17.
Focke, Henrich, Bremen, Germany. Arrangement of motors on the wings of aircraft. 1,764,554; June 17.
Foerch, John W., jr., Wilkes-Barre, Pa. Baking pan. 1,764,253; June 17.
Fogarty, Orville A., Montreal, Quebec, assignor to Vilas Oil Burners Limited, Cowansville, Canada. Primary mixing chamber in oil-burning mechanisms. 1,764,070; June 17.
Fogger, David I., assignor to Peru Plow & Wheel Co., Peru, Ill. Combined axle and framing structure. 1,765,066; June 17.
Fojtik, Louis L., Needville, Tex. Colter. 1,765,143; June 17.
Fokker Aircraft Corporation of America. (See Fokker, A. H. G., and Gassner, assignors.)
Fokker, Anthony H. G., Tenafly, N. J., and A. A. Gassner, New York, N. Y., assignors to Fokker Aircraft Corporation of America. Amphibian aircraft. 1,765,328; June 17.
Fokker, Anthony H. G., Tenafly, N. J., and A. A. Gassner, New York, N. Y., assignors to Fokker Aircraft Corporation of America. Amphibian aircraft. 1,765,329; June 17.
Foley Saw Tool Company. (See Collier, Freeman E., assignor.)
Ford, Bruce, Philadelphia, Pa. Burned or puddled joint structure. 1,764,617; June 17.
Ford Motor Company. (See Galamb, Joseph, assignor.)
Forest, René. (See Lavergne, Jean, assignor.)
Forget, Arthur, assignor of one-third to C. J. Aldrich and one-third to A. Ferrier, Woonsocket, R. I. Wire clothespin. 1,764,833; June 17.
Fort Pitt Bedding Company. (See Wolf, Harry E., assignor.)
Foster Wheeler Corporation. (See Bell, John E., assignor.)
Foster Wheeler Corporation. (See Dean, Dion K., assignor.)
Foster Wheeler Corporation. (See Keenan, Walter F., jr., assignor.)
Foster Wheeler Corporation. (See Nelis, Joseph J., assignor.)

Foulke, Frank P., assignor of forty-nine per cent to T. E. Grinslade, Indianapolis, Ind. Radio aerial bracket. 1,764,071; June 17.

Fountain, Levi W., assignor to Strawbridge & Clothier, Philadelphia, Pa. Container for dry-ice packs. 1,765,226; June 17.

Foust, Clifford M., Schenectady, N. Y., assignor to General Electric Company. Surge-voltage recorder. 1,765,227; June 17.

Fownes, William C., jr., Pittsburgh; C. R. Barton, Sewickley, Pa.; and W. G. Benninghoff, Cleveland, Ohio, assignors, by mesne assignments, to Spang, Chalfant & Company, Incorporated, Pittsburgh, Pa. Boring and tapping machine. 1,764,717; June 17.

Fox, Nathan H., St. Louis, Mo. Supporting device. 1,764,678; June 17.

Frank, John W., Milo, Iowa. Attachment for corn-picking machines. 1,764,947; June 17.

Frankignoul, Edgard, assignor to Société Anonyme Compagnie Internationale des Pieux Armés Frankignoul, Liege, Belgium. Driving lining tubes for molding concrete piles in the ground. 1,764,948; June 17.

Franklin Simon & Company. (See Long, Dorothy, assignor.)

Franks, Clem H., La Grange, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Strand-distributing apparatus. 1,764,618; June 17.

Frantz Manufacturing Co. (See Ferris, William D., assignor.)

Frantz, Walter A., Cleveland Heights, assignor to The Apex Electrical Manufacturing Company, Cleveland, Ohio. Domestic washing machine. 1,765,067; June 17.

Frappier, Louis S. and E. Boecking, Brooklyn, assignors to International Projector Corporation, New York, N. Y. Lubricating system for projection machines. 1,764,783; June 17.

Fraser, John A., Berkeley, Calif., assignor to The Kawneer Company, Niles, Mich. Latch. 1,764,014; June 17.

Frazer, James W., Moncton, New Brunswick, and G. Ferrabee, Montreal, Quebec, Canada. Clotheshorse. 1,764,072; June 17.

Freas, Francis L., Conshohocken, Pa. Syringe hydrometer. 1,764,254; June 17.

Freeman, Hadley F., Lakewood, Ohio, assignor, by mesne assignments, to Kelvinator Corporation, Detroit, Mich. Mechanical refrigeration. 1,764,784; June 17.

Frenkel, Samuel M., assignor to Superset Brush Co., Inc., New York, N. Y. Paintbrush. 1,763,696; June 17.

Freysinger, John B., assignor to North and Judd Manufacturing Company, New Britain, Conn. Latch-controlling mechanism. 1,764,438; June 17.

Friden, Carl M. F. (See Johnston, C. L., and Friden.)

Friedeberg, Oscar. (See Diebold, F., and Friedeberg.)

Friedlander, Adèle S., San Francisco, Calif. Shield for garments. 1,764,555; June 17.

Friedman, Sam, Atlanta, Ga. Hair clippers. 1,764,556; June 17.

Frigidaire Corporation. (See Kellboltz, L. S., and Dickey, assignors.)

Frigidaire Corporation. (See Wallace, Hugh, assignor.)

Fruth, Hal. F., Chicago, and T. O. Westhafer, Downers Grove, Ill., assignors to Western Electric Company, Incorporated, New York, N. Y. Transmitter. 1,764,619; June 17.

Fry, Charles H. M., Point Pleasant, W. Va. Internal-combustion-engine valve and valve gear. 1,764,255; June 17.

Frykman, August, Bottineau, N. Dak. Tire chain. 1,764,785; June 17.

Fuhrmann, Paul, Philadelphia, Pa. Attachment for vacuum cleaners. 1,764,439; June 17.

Fulco, Anthony, Los Angeles, Calif. Sealing table. 1,764,508; June 17.

Fulford Mfg. Co. (See Saccoccia, Nicolas, assignor.)

Fuller Brush Company, The. (See Avis, Samuel W., assignor.)

Fuller Brush Company, The. (See Cave, Henry, assignor.)

Fuller Brush Company, The. (See Matteson, George F., assignor.)

Fuller Brush Company, The. (See Van Veen, Anton, assignor.)

Fuller, Frederick L., Ilion, N. Y., assignor to Remington Arms Company, Inc. Cash register. 1,763,697; June 17.

Fuller Lehigh Company. (See Bailey, Ervin G., assignor.)

Fulton, Nell, New York, N. Y. Hair waver. 1,765,068; June 17.

Furey, Frederick M., assignor to Union Tank & Pipe Co., Los Angeles, Calif. Universal street button. 1,764,073; June 17.

Gaede, Samuel A., Los Angeles, Calif. Sash-mounted automobile signal. 1,764,256; June 17.

Galamb, Joseph, Detroit, assignor to Ford Motor Company, Dearborn, Mich. Bumper. 1,763,847; June 17.

Gallasch, George B. (See Patterson, W. L., and Gallasch.)

Galloway, Robert M., assignor to The National Automatic Tool Company, Richmond, Ind. Fluid-actuated drill unit. 1,764,098; June 17.

Galloway, Robert M., assignor to The National Automatic Tool Company, Richmond, Ind. Control-valve mechanism. 1,764,099; June 17.

Gammell, Ove L., and R. W. Woodward, assignors to Smith & Rosby, Attleboro, Mass. Expansive member for inseparable bracelets. 1,764,440; June 17.

Garbutt, Frank E., and L. M. Griffith, Los Angeles, Calif., assignors to Paramount Famous Lasky Corporation, New York, N. Y. Strip-feeding mechanism for moving-picture films. 1,764,203; June 17.

Gardner, Donald H. (See Hester, H. P., and Gardner.)

Gardner, Henry A., Washington, D. C. Making acetyl cellulose. 1,764,204; June 17.

Gas Refrigeration Corporation. (See Bruehl, Lawrence, assignor.)

Gas Refrigeration Corporation. (See Bruehl, L., and Reichert, assignors.)

Gas Refrigeration Corporation. (See Otto, S., and Reichert, assignors.)

Gassner, Alfred A. (See Fokker, A. H. G., and Gassner.)

Gast, Theodore A., assignor to The Harmony Co., Chicago, Ill. Guitar. 1,764,679; June 17.

Gates, John W., Montreal, Quebec, Canada, assignor, by mesne assignments to American Air-Cooled Block-Arch Combustion Co. Inc., New York, N. Y. Furnace structure. 1,763,925; June 17.

Gatliff, Robert L., Tampa, Fla. Advertising device. 1,764,834; June 17.

Gausel, Earl, Minneapolis, Minn. Internal-combustion engine. 1,764,557; June 17.

Gear Grinding Company Limited, The. (See Snarry, John W., assignor.)

Gebhardt, Gustav H., assignor to Proctor & Schwartz, Incorporated, Philadelphia, Pa. Wire-loop-bending machine. 1,765,228; June 17.

Gebr, Karges. (See Schmidt, Wilhelm, assignor.)

Geer, Octave B., Willoughby, Ohio. Automatic liquid feeder. 1,764,835; June 17.

Gégauff, Charles, Mulhouse, Alsace, France. Cushioning means for the fallers of gill boxes and intersecting frames. 1,763,926; June 17.

Geloso, John, New York, assignor, by mesne assignments, to Pilot Radio & Tube Corporation, Brooklyn, N. Y. Variable-capacity element. 1,763,771; June 17.

Geloso, John, New York, assignor, by mesne assignments, to Pilot Radio & Tube Corporation, Brooklyn, N. Y. Resistance. 1,763,772; June 17.

Gemex Company. (See Prestinari, Eugen, assignor.)

General Aniline Works, Inc. (See Fischer, E., and Müller, assignors.)

General Automotive Equipment Company. (See Bezek, Frank A., assignor.)

General Chemical Company. (See Adamson, George P., assignor.)

General Electric Company. (See Beckert, Frank R., assignor.)

General Electric Company. (See Brandenstein, Errol W., assignor.)

General Electric Company. (See Finney, Alfred C., assignor.)

General Electric Company. (See Foust, Clifford M., assignor.)

General Electric Company. (See Regenstreif, Jakob, assignor.)

General Electric Company. (See Reiter, Caspar, assignor.)

General Electric Company. (See Steenstrup, Christian, assignor.)

General Electric Company. (See Whelan, Dow O., assignor.)

General Electric Vapor Lamp Company. (See Buttolph, Leroy J., assignor.)

General Electric Vapor Lamp Company. (See Moehler, Otto J., assignor.)

General Ordnance Corporation. (See Spear, L. Y., and Caulkins, assignors.)

General Railway Signal Company. (See Howe, Winthrop K., assignor.)

Genève, Frédéric. (See Pepinster, E. L. H., and Genève.)

Genkin, Vladimir, Marseille, France. Protective system. 1,764,399; June 17.

Genkin, Vladimir, Marseille, France. Protective system. 1,764,400; June 17.

George, Charles L., assignor to The Buckeye Traction Ditcher Company, Findlay, Ohio. Bucket cleaner. 1,764,949; June 17.

Gerceich, Frederick A., assignor to Hammer Bray Company, Oakland, Calif. Gas-burner installation. 1,764,719; June 17.

Gerceich, Frederick A., and W. S. Smith, assignors to Hammer-Bray Company, Oakland, Calif. Air-supplying means for closed-top gas-stove burners. 1,764,718; June 17.

Gerrard Company, The. (See Spoor, Ivan H., assignor.)

Gerrard Company, Inc., The. (See Wright, Parvin, assignor.)

Gesellschaft für Drahtlose Telegraphie m. b. H. Hallesches. (See Meissner, Alexander, assignor.)

Geyer, Albert W., Chicago, Ill. Sound-recording machine. 1,764,786; June 17.

Gibbs, Walter A., Holly Oak, Del. Trap for taking live animals. 1,765,144; June 17.

Gibson, Edwin J., Olean, N. Y. Power steam-feed lever. 1,765,069; June 17.

Gibson, Franklin C., Fairfax County, Va., assignor to Elliott-Fisher Company. Sheet-collating means. 1,764,509; June 17.

Gilbee, Manuel T., assignor to A. M. Collins Manufacturing Company, Philadelphia, Pa. Window shade. 1,765,145; June 17.

Gilpin, Garth G., Riverside, assignor to Union Metal Products Company, Chicago, Ill. Corrugated plate with integral post. 1,764,205; June 17.

Gilson Manufacturing Company. (See Donald, Forrest V., assignor.)

Ginsberg, Harry J., Chicago, assignor to H. T. Windsor, Batavia, Ill. Sign holder. 1,764,558; June 17.

Girard, Joseph, New York, N. Y. Hair-waving device. 1,763,960; June 17.

Gits, Remi J., Chicago, Ill. Multiple oiler. 1,763,961; June 17.

Glaenzer, Harry. (See Vauclain, S. M., and Glaenzer.)

Glaenzer, Harry, Philadelphia, Pa. Smoke box for locomotives. 1,765,229; June 17.

Glanz, Eduard. (See Amrhein, Adam, assignor.)

Glen, Thomas, jr., Coogee, Sydney, New South Wales, Australia. Floor polisher. 1,764,559; June 17.

Globe Automatic Sprinkler Company. (See Rowley, Arthur C., assignor.)

Glucksman, Isidore, Oklahoma City, Okla. Positioning the left elbow of a pupil with relation to the violin. 1,764,162; June 17.

Gminder, Emil, Reutlingen, Germany. Process and apparatus for preparing staple or fibrous material for spinning. 1,764,074; June 17.

Gminder, Emil, Reutlingen, Germany. Extraction of foreign bodies from spinning material. 1,764,680; June 17.

Godbe, Anthony H., Los Angeles, Calif., assignor to Universal Process Company. Method of and apparatus for separating solids from liquids. 1,763,773; June 17.

Goetz, A. Edgar, Far Rockaway, assignor to Underwood Elliott Fisher Company, New York, N. Y. Type writing machine. 1,764,620; June 17.

Goetz, Leo H., assignor of one-half to W. T. Tassler, Fort Wayne, Ind. Electric switch. 1,763,649; June 17.

Golber, Hyman E., Chicago, Ill., assignor to The Miehle Printing Press and Manufacturing Company. Plate hook. 1,764,257; June 17.

Gold Car Heating & Lighting Company. (See Gold, Edward E., assignor.)

Gold, Edward E., New York, assignor to Gold Car Heating & Lighting Company, Brooklyn, N. Y. Nipple-inserting machine. 1,763,886; June 17.

Goldrick, Albert R., Cleveland, Ohio. Electrical swivel connecter. 1,765,330; June 17.

Goldsmith Metal Lath Company, The. (See Goldsmith, William M., assignor.)

Goldsmith, William M., assignor to The Goldsmith Metal Lath Company, Cincinnati, Ohio. Metal tile structure. 1,764,042; June 17.

Gonzalez, Alfredo, Habana, Cuba. Safety envelope. 1,765,146; June 17.

Gonzales, Fred. (See Montano, Antonio, assignor.)

Good Inventions Co. (See Good, John, assignor.)

Good, John, Garden City, assignor to Good Inventions Co., New York, N. Y. Choke-operated throttle. 1,764,621; June 17.

Goodfellow, Sampson J., Regina, Saskatchewan, assignor to Western Implements Limited, Regina, Canada. Grain-treating machine. 1,764,510; June 17.

Goodrich, B. F., Company, The. (See Murphy, Harry J., assignor.)

Goodwin, George, Brentford, England, assignor to American Gasaccumulator Company, Elizabeth, N. J. Optical signal device. 1,764,622; June 17.

Goodyear, Adolph O., Cleveland, Ohio. Loud-speaker. 1,764,015; June 17.

Gordon, George N., and G. Sampson, Brockton, Mass., assignors to United Shoe Machinery Corporation, Paterson, N. J. Buffing machine. 1,763,774; June 17.

Gorman, Charles W., Muskogee, Okla. Quick-make and quick-break switch. 1,763,962; June 17.

Goss and De Leeuw Machine Company, The. (See De Leeuw, Adolph L., assignor.)

Gotham Knitbac Machine Corporation. (See Hohmann, Richard K., assignor.)

Gotham Knitbac Machine Corporation. (See Parlini, Alexander C., assignor.)

Gottwald, Christian, assignor to The Ric-Wil Company, Cleveland, Ohio. Supporting means for pipes in conduits. 1,763,775; June 17.

Gould & Eberhardt. (See Zimmermann, William F., assignor.)

Gould, Roy F., Chicago, Ill., assignor to Reserve Holding Company, Kansas City, Mo. Automatic telephone system. 1,763,887; June 17.

Grabler Manufacturing Company, The. (See Rosenfeld, Edward L., assignor.)

Grace, Richard W., assignor to The Superior Switchboard & Devices Company, Canton, Ohio. Testing jack and plug. 1,764,016; June 17.

Graham, Virgil E., Hershey, Nebr. Frame for calendars and the like. 1,765,070; June 17.

Grahame, Dallas F., Westmount, Quebec, Canada, assignor to Riley Stoker Corporation, Worcester, Mass. Reciprocating mechanism. 1,764,560; June 17.

Granat, Tlie, assignor of one-half to Compagnie des Forges et Acieries de la Marine et d'Homecourt, Paris, France. Static transmitter for polyphase distant-control systems. 1,764,867; June 17.

Grand Rapids Metalcraft Corporation. (See De Boer, Rudolph, assignor.)

Grant, John. (See Weisberber, Edwin C., assignor.)

Grant, William P. (See Baker, Gilbert L., assignor.)

Grasselli Chemical Company, The. (See Howard, Henry, assignor.)

Grasselli Chemical Company, The. (See Lutz, George, assignor.)

Gravell, James H., Elkins Park, assignor to American Chemical Paint Company, Ambler, Pa. Preparing metal for painting. 1,765,331; June 17.

Graves, Herbert C., jr., Verona, Pa., assignor to Westinghouse Electric & Manufacturing Company. Pilot-wire protective system. 1,764,297; June 17.

Gray, Albert E. N., East Orange and S. M. Schenkein, Newark, N. J. Index-card tab. 1,763,776; June 17.

Gray, William B., Chicago, Ill. Windshield wiper. 1,764,868; June 17.

Green, Charles W., Ilion, N. Y., assignor to Remington Arms Company, Inc. Cash register. 1,763,699; June 17.

Green, Joseph H., et al. (See Barili, A. E. H., and Hyle, assignors.)

Greene, William J. (See Raetz, S. J., and Greene.)

Greenhalgh, George H., and E. J. Sweetland, Hazleton, Pa.; said Greenhalgh assignor to said Sweetland. Oil-refining apparatus for combustion-engine lubrication. 1,764,298; June 17.

Greenheck, William, Lone Rock, Wis. Cheese vat. 1,764,681; June 17.

Gregg Company, The. (See Gregg, William B., assignor.)

Gregg, William B., Hackensack, assignor to The Gregg Company, Limited, New York, N. Y. Cane car and the like. 1,763,698; June 17.

Gregory, Harry W., Philadelphia, Pa., assignor to Remington Arms Company, Inc. Cash register. 1,763,650; June 17.

Griffin, Jacob E., Milwaukee, Wis. Radiocabinet. Des. 81,385; June 17.

Griffith, Leigh M. (See Garbutt, F. E., and Griffith.)

Griffiths, James P., and W. Street-Wilson, deceased, Durban, Natal, South Africa, by E. M. Laughton and E. H. Clemmans, executors. Rail chair. 1,765,265; June 17.

Grillot, Jules F. (See Hester, H. P., and Gardner, assignors.)

Griner, Harry B., Oaklyn, N. J. Fastener for awnings. 1,764,950; June 17.

Grinslade, Thomas E. (See Foulke, Frank P., assignor.)

Grison, Joseph, New York, N. Y. Refrigerating device. 1,764,299; June 17.

Griswold, Andrew E., Seattle, Wash. Quick make and break safety switch. 1,764,401; June 17.

Griswold, Roger W., 2d, Erie, Pa. Aeroplane. 1,763,888; June 17.

Groisser, Bennett M. (See Shlager, Abraham E., and L., and Groisser.)

Grondahl, Hans H. C., Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Carrier. 1,764,623; June 17.

Gronemeyer, Fred G. (See Darrow, M. S., Hart, Gronemeyer, and Watkins.)

Gross, Benjamin, New York, N. Y. Finger ring or article of similar nature. Des. 81,386; June 17.

Gross, Oliver, assignor to The Gross Photo Supply Company, Toledo, Ohio. Easel photo holder. 1,765,010; June 17.

Gross Photo Supply Company, The. (See Gross, Oliver, assignor.)

Gruss, John I., Nashua, N. H. Steering mechanism. 1,763,700; June 17.

Guerini, Annibale A., New York, N. Y. Mechanical bricklayer device. 1,764,836; June 17.

Guernsey, Charles O., Philadelphia, Pa. Internal-combustion engine. 1,765,230; June 17.

Guiberson Corporation, The. (See Crickmer, C. S., and Bell, assignors.)

Guiberson Corporation, The. (See Crickmer, Charles S., assignor.)

Guiberson Corporation, The. (See Mills, Theodore H., assignor.)

Gulbenkian Seamless Rug Company. (See Harding, James E., assignor.)

Gulick, Edward J., assignor to C. G. Conn, Ltd., Elkhart, Ind. Shaping tubes. 1,764,561; June 17.

Gulick, Edward J., assignor to C. G. Conn, Ltd., Elkhart, Ind. Wind musical instrument. 1,764,562; June 17.

Gumaelius, Olof A. E., Osterbybruk, assignor to Fagersta Bruks Aktiebolag, Fagersta, Sweden. Manufacturing hollow drill steel. 1,763,651; June 17.

Gunn, Robert W., and W. A. S. Thompson, assignors, by mesne assignments, to Emsco Derrick & Equipment Company, Los Angeles, Calif. Lock-bottom pump. 1,764,075; June 17.

Guth, Edwin F., St. Louis, Mo. Globe for lighting fixtures. 1,763,963; June 17.

Haas, Paul C., Mendon, Mich., assignor, by mesne assignments, to Continental-Diamond Fibre Company, Newark, Del. Composite gear. 1,765,231; June 17.

Haberle, John P., Glen Olden, Pa. Extension for fly swatters. 1,765,147; June 17.

Hadley, Charles R., Company. (See Jones, J. M., and Webb, assignors.)

Haglund, Ture R., Stockholm, Sweden. Producing metals and alloys. 1,764,511; June 17.

Hahnemann, Walter, Kitzeberg, near Kiel, Germany. Arrangement for directional transmission and reception by means of electric waves. 1,764,441; June 17.

Hale, William J., assignor to The Dow Chemical Company, Midland, Mich. Preparation of arylamines. 1,764,869; June 17.

Hall, Earl C., Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Coating material. 1,764,624; June 17.

Hall, Earl C., Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Coating material. 1,764,625; June 17.

Hallack, William, Dearborn, Mich. Electrical measuring instrument. 1,764,258; June 17.

Hallenbeck, George E., assignor to Baker Brothers, Inc., Toledo, Ohio. Boring machine. 1,763,964; June 17.

Hallstream, Henning, Braintree, assignor to Crosa Paper Feeder Company, Boston, Mass. Paper-feeding machine. 1,764,018; June 17.

Halpern, Carl, Atlantic City, N. J. Photographic cut-out. 1,763,652; June 17.

Halpin, Abraham, New York, N. Y. Tennis-racket press or similar article. Des. 81,387; June 17.

Hamilton Beach Manufacturing Company. (See Nielsen, Emanuel, assignor.)

Hamilton, John R., Cleveland Heights, assignor to Automatic Sprinkler Company of America, Cleveland, Ohio. Automatic exhauster. 1,763,777; June 17.

Hamilton, William F., assignor to Ventura Manufacturing and Implement Company, Ventura, Calif. Disk cultivator. 1,764,402; June 17.

Hammann, Carl F., New York, N. Y., assignor to Chapman Self-Locking Nut Co., Baltimore, Md., trustees of a common-law trust estate. Method of and apparatus for making nuts. 1,764,300; June 17.

Hammer-Bray Company. (See Gercich, Frederick A., assignor.)

Hammer-Bray Company. (See Gercich, F. A., and Smith, assignors.)

Hammond, Cecil F., Westminster, London, assignor of one-fifth to W. Shackleton, London, England. Heat-treatment process and apparatus in which a hot liquid mass is employed. 1,765,148; June 17.

Hammond, William P. (See Vernet, Sergius, assignor.)

Hammons, William M. (See Smith, W. B., Hammons, and Mullens.)

Hankins, Cyrus, assignor, by mesne assignments, to T. H. Symington and Son, Inc., Baltimore, Md. Railway-car-truck spring. 1,764,163; June 17.

Hankins, Cyrus, assignor, by mesne assignments, to T. H. Symington and Son, Inc., Baltimore, Md. Railway-car-truck spring. 1,764,164; June 17.

Hankins, Cyrus, assignor, by mesne assignments, to T. H. Symington and Son, Inc., Baltimore, Md. Railway-car-truck spring. 1,764,165; June 17.

Hankins, Cyrus, assignor, by mesne assignments, to T. H. Symington and Son, Inc., Baltimore, Md. Railway-car-truck spring. 1,764,720; June 17.

Hanna Engineering Works. (See Hanna, J. C., and Norin, assignors.)

Hanna, John C., Chicago, Ill. Riveter. 1,765,011; June 17.

Hanna, John C., and A. Norin, assignors to Hanna Engineering Works, Chicago, Ill. Turret riveter. 1,765,012; June 17.

Hanneman, Walter M. (See Christenson, N. V., and Hanneman.)

Hanneman, Walter M., Oak Park, assignor to Union Special Machine Company, Chicago, Ill. Covering-thread-laying mechanism for sewing machines. 1,765,150; June 17.

Hanneman, Walter M., Oak Park, assignor to Union Special Machine Company, Chicago, Ill. Presser foot for sewing machines. 1,765,332; June 17.

Hanney, Angus F., assignor to The American Laundry Machinery Company, Cincinnati, Ohio. Laundry-marking tag. 1,763,778; June 17.

Hano, Edward, Holyoke, Mass., assignor to Philip Hano Company, Inc., New York, N. Y. Tensioning device. 1,765,149; June 17.

Hano, Philip Company. (See Hano, Edward, assignor.)

Hansen, Charles C., Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Feeding device for rock drills. 1,763,701; June 17.

Hansen, Charles C., Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Portable pumping unit. 1,764,259; June 17.

Hansen, Christian, Puyallup, Wash. Tree protector. 1,764,442; June 17.

Hansen, Hans P. K., Staplehurst, Nebr. Attachment for pencils. 1,765,151; June 17.

Hanson, Bengt, M. W., deceased, Hartford, Conn., E. A. Hanson, executor. Method of and apparatus for truing serrated grinding wheels. 1,764,643; June 17.

Hanson, Einar A., executor. (See Hanson, Bengt, M. W.)

Hardenbergh, Nathan W., North Canaan, Conn. Machine for spreading road materials. 1,764,019; June 17.

Harding, James E., assignor to Gulbenkian Seamless Rug Company, New Brunswick, N. J. Shuttle guide for looms. 1,765,266; June 17.

Hare, George, St. Petersburg, Fla. Attachment for saws. 1,764,951; June 17.

Harger, Martin L., Newell, Pa., assignor of one-third to C. O. Downer, Newell, and one-third to K. W. Daly, Charlerol, Pa. Journal box. 1,764,017; June 17.

Harmony Co., The. (See Gast, Theodore A., assignor.)

Harnischfeger Corporation. (See Standfuss, Ernest R., assignor.)

Harper Electric Furnace Corporation. (See Kelleher, James, assignor.)

Harpster, Clyde C., Mansfield, Ohio, assignor to Westinghouse Electric & Manufacturing Company. Heating unit. 1,764,301; June 17.

Harris, Ernest. (See Diggins, Thomas L., assignor.)

Harris, James W., Rumford, Me., assignor, by mesne assignments, to Paper Machinery Corporation, Dayton, Ohio. Deckle for paper-making machines. 1,764,260; June 17.

Harris, Ralph B., Wilder, Kans. Copyholder. 1,765,306; June 17.

Hart, Frank A., and E. Askew, New York, N. Y. Condiment holder. 1,765,152; June 17.

Hart, William J. (See Darrow, M. S., Hart, Gronemeyer, and Watkins.)

Hartford-Empire Company. (See Howard, George E., assignor.)

Hartford-Empire Company. (See Ingle, Henry W., assignor.)

Hartford-Empire Company. (See Peller, Karl E., assignor.)

Hartinger, Hans, assignor to the firm Carl Zeiss, Jena, Germany. Appliance for examination of the eyes. 1,764,870; June 17.

Hartley, Bernard H., Lewistown, Pa. Whistle. 1,765,153; June 17.

Hartman, Jacob, Cleveland Heights, Ohio. Sink bucket. 1,765,267; June 17.

Harvey, Harold C., and H. L. Becher, Trenton, N. J., assignors to The Agasote Millboard Company. Resin-coated pulpboard. 1,763,653; June 17.

Harvey, William D., assignor to American Steel Products Co., Macomb, Ill. Oil burner. 1,763,779; June 17.

Haseltine, Stacy B., Chicago, Ill., assignor, by mesne assignments, to W. H. Miner, Inc. Door-operating mechanism. 1,764,443; June 17.

Haseltine, Stacy B., assignor to W. H. Miner, Inc., Chicago, Ill. Car construction. 1,764,444; June 17.

Haseltine, Stacy B., assignor to W. H. Miner, Inc., Chicago, Ill. Car construction. 1,764,445; June 17.

Haseltine, Stacy B., assignor to W. H. Miner, Inc., Chicago, Ill. Car construction. 1,764,446; June 17.

Hashimoto, Takichi, Kamakura-Gun Kanagawa, Japan. Steam-pressure cooker. 1,765,072; June 17.

Haskelite Manufacturing Corporation. (See Norris, Charles B., assignor.)

Hasselbring, John, Jr., New York, N. Y., assignor to Royalty Holding Corporation, Brooklyn, N. Y. Starter for internal-combustion engines. 1,763,702; June 17.

Hasselkus, William E. B., Jamaica, assignor to International Motor Comapny, New York, N. Y. Reclining chair. 1,765,071; June 17.

Hatch, Charles T., assignor to Union Steel Products Company, Albion, Mich. Ice-cube tray for refrigerators. 1,764,787; June 17.

Hatch, Charles T., assignor to Union Steel Products Company, Albion, Mich. Fan guard. 1,764,788; June 17.

Hater, Harry J. (See Redmond, Harold A., assignor.)

Hater, Harry J., Cincinnati, Ohio. Piston. 1,764,871; June 17.

Hathaway, Edgar F., Wellesley, assignor to Shawmut Engineering Company, Boston, Mass. Variable-speed-transmission device. 1,765,268; June 17.

Hatley, Fred J., Blue Mound, Ill. Basket-ball retriever. 1,765,269; June 17.

Hatton, Edward J. (See Booraem, J. F., and Hatton.)

Hatton, Samuel W., Villa Park, N. Y. Acoustic diaphragm. 1,763,780; June 17.

Hauna, Charles F., Bath, assignor of one-half to G. R. Berger, Chicago, Ill., and one-half to A. McGary, New York, N. Y. Combined electric light and radio power plant and battery-charging system. 1,764,447; June 17.

Hauser, George D., assignor to Utica Products, Inc., Utica, N. Y. Washing and drying machine. 1,764,302; June 17.

Hausken, Hans J., Myers, Mont. Angle or joint bar for insulating railway rail joints. 1,764,563. June 17.

Hay, Clarence B., Sumter, S. C. Insect destroyer. 1,764,952; June 17.

Hayden, Arthur C., Brockton, Mass. Support for panoramic cameras. 1,764,721; June 17.

Hayes, James L., Ottawa, Ill. Inner tube. 1,764,076; June 17.

Haynes Stellite Co. (See Wissler, William A., assignor.)

Hazel-Atlas Glass Co. (See Flint, Francis C., assignor.)

Hazeltine Corporation. (See MacDonald, William A., assignor.)

Head, Carrel V., Slaton, Tex. Building construction. 1,765,154; June 17.

Heady, Harry, Los Angeles, Calif. Rubber heel. 1,765,155; June 17.

Heald, John, Pasadena, Calif. Window shade. 1,764,789; June 17.

Healy, Cornelius D., Newark, N. J. Bell for conduits. 1,765,156; June 17.

Heath, Delos P., Detroit, Mich. Compressor. 1,764,953; June 17.

Heath, Sheldon B., and M. O. Keller, assignors to The Dow Chemical Company, Midland, Mich. Making cuprous compounds. 1,763,781; June 17.

Heckman, Martin, Merrill, Wis. Pneumatic grooming device for animals. 1,764,626; June 17.

Heilman, Herman F., assignor to Heyer Duplicate Company, Inc., Chicago, Ill. Duplicatig machine. 1,764,261; June 17.

Heinrich, Walter W., assignor to W. N. Matthews Corporation, St. Louis, Mo. Switch. 1,764,403; June 17.

Heintz, George W., Hamilton, Ohio. Electrically-operated car for racing apparatus. 1,764,627; June 17.

Heisey, A. H., & Company. (See Heisey, T. Clarence, assignor.)

Heisey, T. Clarence, assignor to A. H. Heisey & Company, Newark, Ohio. Flower bowl or article of similar nature. Des. 81,388; June 17.

Helander, Lillian V. M. (See Allen, G. N., and Helander.)

Helezer, Walter, assignor of one-tenth to J. Zajaczek, Chicago, Ill. Envelope. 1,765,157; June 17.

Helmers, Nick F. (See Clements, M. F., and Helmers.)

Helweg, Svend J. (See Smith, C. F., and Helweg.)

Henderson, William W., San Francisco, and R. A. Isenberg, Los Altos, Calif. Outdoor sports field. 1,763,782; June 17.

Henry, George W., jr., and S. J. Thackeray, assignors to Sonbar Company, Philadelphia, Pa. Ticket and label printing machine. 1,765,158; June 17.

Hensley, William T., Indianapolis, Ind., and R. H. Lewis, Cleveland, Ohio; said Lewis assignor to said Hensley. Apparatus for making laminated pulley units. 1,765,270; June 17.

Hentschel, Paul J., assignor to Monarch Products Company, Baltimore, Md. Grease absorbing and deflecting attachment for gas-stove flues. 1,764,954; June 17.

Herlach, Fritz. (See Schüler, H., and Herlach.)

Hershman, Paul R., assignor of one-fourth to C. O. Sethness, one-fourth to C. H. Sethness, and one-fourth to P. Rudnick, Chicago, Ill. Hypochlorite in colloidal form and making the same. 1,765,013; June 17.

Herzfeld, Harry, Hartford, Conn. Educational appliance. 1,764,448; June 17.

Hess, Charles E., Donna, Tex. Agricultural implement. 1,764,449; June 17.

Hess, Max, Maplewood, assignor to George Kilgen & Son, Inc., St. Louis, Mo. Pipe organ. 1,764,682; June 17.

Hester, Hayden P., and D. H. Gardner, assignors of one-third to J. F. Grillot, New Orleans, La. Electric sign. 1,765,073; June 17.

Heuser, Herman, Evanston, Ill. Stabilization of cereal beverages. 1,764,955; June 17.

Hewitt, Stanley L., Glassboro, N. J., assignor to Owens-Illinois Glass Company, Toledo, Ohio. Glassware-forming machine. 1,764,166; June 17.

Heyer Duplicator Company. (See Heileman, Herman F., assignor.)

Higbee, Ray P., Philadelphia, Pa., assignor to Westinghouse Electric & Manufacturing Company. Safety device for elevators. 1,764,303; June 17.

High, Antony, assignor to Abbotts Alderney Dairies, Inc., Philadelphia, Pa. Receptacle lifter. 1,763,965; June 17.

Highberg, Carle J., Worcester, and J. A. Thompson, Cambridge, Mass. Mouth gag. 1,764,167; June 17.

Hildebrandt, Edward, Tacoma, Wash. Can and slip cover. 1,764,304; June 17.

Hileman, Ernest J., Detroit, Mich. Electrically-driven agitating machine. 1,764,404; June 17.

Hill, Joseph M., Ogden, Utah. Smoke condenser. 1,765,159; June 17.

Hill, Leland H., Sharon, Pa., assignor to Westinghouse Electric & Manufacturing Company. Transformer-cooling system. 1,764,305; June 17.

Hill, Leland H., and W. M. Dann, Sharon, Pa., assignors to Westinghouse Electric and Manufacturing Company. Tap-changing interlock. 1,764,405; June 17.

Hilpert, Meier G., Bethlehem, Pa. Trackway. 1,764,306; June 17.

Hinderliter, Frank J., Tulsa, Okla. Heat treating bits. 1,763,704; June 17.

Hinderliter, Frank J., assignor to Hinderliter Tool Company, Tulsa, Okla. Oil-well fishing tool. 1,763,703; June 17.

Hinderliter Tool Company. (See Hinderliter, Frank J., assignor.)

Hindle, Charles F., Ossining, assignor to Cambridge Instrument Company, Inc., Ossining-on-Hudson, N. Y. Film-camera apparatus. 1,764,450; June 17.

Hine, James H. (See Walter, Frank K., assignor.)

Hirsh, Fred, assignor to Adjusta Company, New York, N. Y. Belt buckle. Des. 81,389; June 17.

Hoague-Sprague Corporation. (See Smith, Harry B., assignor.)

Hobart, Franklin G., Beloit, Wis., assignor to Fairbanks, Morse & Co., Chicago, Ill. Oil filter. 1,764,722; June 17.

Hobbs Manufacturing Company. (See Lenston, Charles S., assignor.)

Hobson, Stanley H., assignor to Geo. D. Roper Corporation, Rockford, Ill. Gas range. 1,763,705; June 17.

Hobson, Stanley H., assignor to Geo. D. Roper Corporation, Rockford, Ill. Water-system pumping apparatus. 1,763,706; June 17.

Hobson, Stanley H., assignor to Geo. D. Roper Corporation, Rockford, Ill. Water-system pump unit. 1,764,307; June 17.

Hochriem, Gustav F., Chicago, Ill. Check-controlled machine. 1,765,014; June 17.

Hodkinson, George F., Philadelphia, Pa., assignor to The Permutit Company, New York, N. Y. Zeolite water softener. 1,763,783; June 17.

Hodkinson, George F., Blue Bell, near Ambler, Pa., assignor to The Permutit Company, New York, N. Y. Water softener for base-exchanging substances. 1,763,784; June 17.

Hodson Corporation, The. (See Hodson, W. D., and Coleman, assignors.)

Hodson, Walter D., and R. E. Coleman, assignors, by mesne assignments, to The Hodson Corporation, Chicago, Ill. Lubricating compound. 1,764,837; June 17.

Hoe, R., & Co. (See Rodd, E., and Ebel, assignors.)

Hoegger, Joseph A., Jersey City, N. J. Wall bottle opener. 1,763,848; June 17.

Hoegger, Joseph A., Jersey City, N. J. Bottle opener. 1,763,849; June 17.

Hoelscher, William G. (See Sosa, A. M., and Hoelscher.)

Hoetger, Bernhard, Worpswede, near Bremen, Germany. Traveling signboard. 1,764,683; June 17.

Hoff, Chester A. (See Steese, J. C., and Hoff.)

Hoffman, Edward J., assignor to Eldeen Automatic Hosiery Mender Inc., Boston, Mass. Reknitting needle. 1,765,303; June 17.

Hoffman, Edward L., Dayton, Ohio. Separable fastener. 1,764,044; June 17.

Hoffman, Louis, San Francisco, Calif. Panel construction. 1,763,966; June 17.

Hofstetter, Robert, Downers Grove, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Indicating apparatus. 1,764,628; June 17.

Hochmann, Richard K., Brooklyn, assignor, by mesne assignments, to Gotham Knitbac Machine Corporation, New York, N. Y. Knitting needle. 1,764,406; June 17.

Holaday, Fred M., Virginia Place Tract, Calif. Steering apparatus for automobiles. 1,763,785; June 17.

Holden, John W. W., Providence, R. I. Bead-chain connecter. 1,763,850; June 17.

Holdzkom, Samuel E., et al. (See Barili, A. E. H., and Hyle, assignors.)

Holland, Walter E., assignor to Philadelphia Storage Battery Company, Philadelphia, Pa. Battery separator. 1,765,271; June 17.

Hollinger, Harry C., assignor to A. B. Farquhar Co. Limited, York, Pa. Wide-spread. 1,764,956; June 17.

Holmes, George A., Newton, assignor, by mesne assignments, to United-Carr Fastener Corporation, Cambridge, Mass. Key holder. 1,764,451; June 17.

Holther, Oscar, Attleboro, Mass. Piano lamp. 1,764,308; June 17.

Home Heating Corporation, The. (See Muller, George J., assignor.)

Hood, Harry M., Chicago, Ill., assignor to Featheredge Rubber Company, Inc. Sealing means for cowl ventilators for automobiles. 1,765,333; June 17.

Hood Rubber Company. (See Wydom, Herbert H., assignor.)

Hoodless, William H., Philadelphia, Pa. Raw-sugar conveyer. 1,764,100; June 17.

Hook, Charles H., Pittsburgh, and N. L. Mercur, McKeesport, Pa. Pressure-regulating and shut-off valve. 1,764,790; June 17.

Hooper, James P., Ruxton, assignor to Wm. E. Hooper & Sons Company, Baltimore, Md. Wading pool. 1,765,074; June 17.

Hooper, Wm. E., & Sons Company. (See Hooper, James P., assignor.)

Hoover Company, The. (See White, Harry B., assignor.)

Hopkins, Richard M., Rutherford, N. J., assignor to American District Telegraph Company, New York, N. Y. Retard alarm device. 1,763,967; June 17.

Hopkins, Robert C., Alliance, Ohio. Rotary cutting, mixing, and attrition mill. 1,764,020; June 17.

Hopkinson, Ernest, New York, and M. C. Teague, Elmhurst, L. I., N. Y., assignors to American Rubber Company, East Cambridge, Mass. Treating rubber latex, composition and article formed thereby. 1,765,015; June 17.

Hoppenrath, Albert A., Minneapolis, Minn. Refrigerating show case. 1,764,723; June 17.

Hoppes, Charles E., assignor to Everwear Manufacturing Company, Springfield, Ohio. Hanger. 1,764,077; June 17.

Horne, Newton H., Kansas City, Mo. Hydraulic pulsator. 1,764,838; June 17.

Horning, Harry L., assignor to Waukesha Motor Co., Waukesha, Wis. Oiling system. 1,764,078; June 17.

Horowitz, Samuel, assignor to Royal Robes Co., Inc., New York, N. Y. Bath-robe package and the like. 1,764,262; June 17.

Horvath, Anthony G., assignor to The Dayton Pump and Mfg. Co., Dayton, Ohio. Electric switch. 1,765,016; June 17.

Hosking, Richard T., Wilmette, assignor, by mesne assignments, to Shakeproof Lock Washer Company, Incorporated, Chicago, Ill. Self-locking screw. 1,764,168; June 17.

Hoskins, William, Chicago, Ill. Plastic composition. 1,764,839; June 17.

Hotchkiss, Clifford. (See Phelan, L. A. M., and Hotchkiss.)

Hougland, Albert C., assignor to Crane Company of Minnesota, St. Paul, Minn. Valve. 1,765,272; June 17.

Houts, Guy J., Oak Park, E. P. Tournier, Chicago, and J. F. Wulff, Oak Park, Ill., assignors to Western Electric Company, Incorporated, New York, N. Y. Apparatus for supporting strands. 1,764,629; June 17.

Houts, Guy J., Oak Park, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Device for supporting and distributing strands. 1,764,630; June 17.

Howard, George E., Butler, Pa., assignor, by mesne assignments, to Hartford-Empire Company, Hartford, Conn. Delivering and shaping molten glass. 1,763,968; June 17.

Howard, Henry, assignor, by mesne assignments, to The Grasselli Chemical Company, Cleveland, Ohio. Preparing colloidal sulphur. 1,765,307; June 17.

Howard, Henry, assignor, by mesne assignments, to The Grasselli Chemical Company, Cleveland, Ohio. Manufacture of sulphuric acid of high purity. 1,764,309; June 17.

Howe, Winthrop K., assignor to General Railway Signal Company, Rochester, N. Y. Train control. 1,765,334; June 17.

Howell, Carleton E., New York, N. Y. Insulator. 1,764,724; June 17.

Howell, John F., Baldwin, assignor to Akeley Camera, Inc., New York, N. Y. Mount for moving-picture cameras. 1,764,407; June 17.

Hoy, John E., assignor to The Dow Chemical Company, Midland, Mich. Composite casting. 1,764,725; June 17.

Hoyt, Daniel, East Orange, assignor to National Lock Washer Company, Newark, N. J. Curtain fixture. 1,764,310; June 17.

Huber, Otto E., Reading, Pa., assignor to The Narrow Fabric Co., West Reading, Pa. Elastic narrow textile fabric. Des. 81,390; June 17.

Huber, Otto E., Reading, Pa., assignor to The Narrow Fabric Co., West Reading, Pa. Elastic narrow textile fabric. Des. 81,391; June 17.

Huber, William F., Coraopolis, Pa. Extension link fastener for swinging doors. 1,764,101; June 17.

Hubinger, Roland A., Milwaukee, Wis. Washing machine. 1,764,631; June 17.

Hudler, Earle S., Everett, Wash. Memorandum card. 1,764,102; June 17.

Hudson, Joseph H., Brooklyn, N. Y. Globe support and the like. 1,763,889; June 17.

Hudson Motor Car Company. (See Baits, Stuart G., assignor.)

Hudson Motor Car Company. (See McCurley, Charles, assignor.)

Huffman, William M., Kentenia, Ky. Material excavating and conveying machine. 1,763,786; June 17.

Hufnagle, Oliver C., and W. F. Reichelderfer, assignors to The Dayton Pump & Manufacturing Company, Dayton, Ohio. Liquid-dispensing pump or the like. 1,765,273; June 17.

Hug, Christian J., Highland, Ill. Truck body. 1,765,232; June 17.

Hull, Lewis M., Mountain Lakes, assignor to Radio Frequency Laboratories, Incorporated, Boonton, N. J. Electron-tube circuit. 1,764,206; June 17.

Hull, Lewis M., assignor to Radio Frequency Laboratories, Incorporated, Boonton, N. J. Audion amplifier. 1,764,564; June 17.

Hull, Lewis M., Mountain Lakes, assignor to Radio Frequency Laboratories, Incorporated, Boonton, N. J. Amplifier circuit. 1,764,565; June 17.

Hultgren, Charles R., assignor to S. Karpen & Bros., Chicago, Ill. Sofa bed. 1,764,874; June 17.

Hultgren, Charles R., assignor to S. Karpen & Bros., Chicago, Ill. Sofa bed. 1,764,875; June 17.

Humboldt Sulphur Company. (See Crowley, Arthur J., assignor.)

Hume, George C., Chilton, Wis. Hoisting tackle. 1,764,512; June 17.

Humphreys, Chester C. (See Jones, W. N., and Humphreys.)

Hunt, Marsden H., East Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Resistor material and making the same. 1,764,311; June 17.

Hunter, Campbell M., London, England. Burner. 1,765,274; June 17.

Hunter, Percy E., Pittsburgh, Pa. Flanging and welding machine. 1,763,787; June 17.

Hupp Motor Car Corporation. (See Punke, John J., assignor.)

Hurley, Harry A., Los Angeles, H. J. Jones, Fullerton, and H. Jimenez, Los Angeles, Calif. Apparatus for automatically determining and recording the specific gravities of fluids. 1,764,103; June 17.

Hussey, William J. (See Jones, C. H. L., and Hussey.)

Hutchinson, Job, Great Neck, N. Y. Fuel rectifier. 1,763,654; June 17.

Hydraulic Brake Company. (See Loughead, Malcolm, assignor.)

I. G. Farbenindustrie Aktiengesellschaft. (See Staib, Karl, assignor.)

Idonas, Angeles, Orange, and J. C. Potter, West Orange, N. J. Coffee roaster. 1,764,872; June 17.

Illinois Tool Works. (See Olson, Carl G., assignor.)

Imperial Chemical Industries Limited. (See Smith, Frank E., assignor.)

Imperial Typewriter Company Limited. (See Pateman, Arthur, assignor.)

Indestructible Pearl Bead Makers, Inc. (See Rubenstein, Gustave D., assignor.)

Industrial Research Corporation. (See Brockway, C. P., and Myers, assignors.)

Ingersoll Milling Machine Company. (See Morgan, Everette K., assignor.)

Ingersoll Milling Machine Company, The. (See Caldwell, Harry J., assignor.)

Ingersoll Milling Machine Company, The. (See Johnson, John R., assignor.)

Ingersoll-Rand Company. (See Bayles, Lewis C., assignor.)

Ingersoll-Rand Company. (See Hansen, Charles C., assignor.)

Ingle, Henry W., West Hartford, assignor to Hartford-Empire Company, Hartford, Conn. Conveyer drive for glass-annealing leers. 1,764,791; June 17.

Ingrassia, Leon, Astoria, N. Y. Self-winder for hair curlers. 1,763,655; June 17.

International Business Machines Corporation. (See Mittendorf, William R., assignor.)

International Motor Company. (See Hasselkus, William E. B., assignor.)

International Motor Company. (See Masury, A. F., Jupp, and Queeney, assignors.)

International Motor Company. (See Shields, Henry B., assignor.)

International Pavement Company, The. (See Stuart, William B., assignor.)

International Precipitation Company. (See Jakosky, John J., assignor.)

International Projector Corporation. (See Dina, Augusto, assignor.)

International Projector Corporation. (See Frappier, L. S., and Boeckling, assignors.)

Invincible Laundry Equipment Co. (See Bell, Daniel, assignor.)

Invincible Laundry Equipment Company. (See Kalk, Albert C., assignor.)

Ireland, Ward S., assignor to National Refrigeration Corporation, Beloit, Wis. Valve. 1,763,927; June 17.

Irish, Charles F., Bratenahl, Ohio. Tree-transplanting device. 1,763,707; June 17.

Irwin, Herbert G., Amarillo, Tex. Acetylene generator. 1,763,890; June 17.

Isenberg, Rudolf A. (See Henderson, W. W., and Isenberg.)

Israel, Richard B. (See Lundborg, G. L., and Israel.)

Jackson, Byron, Co. (See Smith, Nelson K., assignor.)

Jackson, Byron, Co. (See Woods, Walter T., assignor.)

Jackson, John G., Chatham, Ontario, Canada. Electric dry cell. 1,763,969; June 17.

Jackson, Sylvester V., Indianapolis, Ind. Engine preheater. 1,764,021; June 17.

Jacobi, Edward N., assignor to Briggs & Stratton Corporation, Milwaukee, Wis. Steering-column switch. 1,764,169; June 17.

Jacobs, Clarence E., Detroit, Mich. Oil-pump screen cage. 1,764,170; June 17.

Jacobson, Arthur G., assignor to The Miehle Printing Press & Mfg. Company, Chicago, Ill. Transfer-gripper-operating mechanism. 1,764,104; June 17.

Jacobus School Products Co. (See Prosnitz, Ludwig B., assignor.)

Jacquelet, Robert C., Norwood, Ohio. Electric-current valve. 1,765,335; June 17.

Jaeger, Alphons O., Crafton, assignor to The Selden Company, Pittsburgh, Pa. Esters of phthalic acid. 1,764,022; June 17.

Jaeger, Alphons O., Crafton, assignor to The Selden Company, Pittsburgh, Pa. Oxidation of fluorene. 1,764,023; June 17.

Jaeger, Alphons O., Crafton, assignor to The Selden Company, Pittsburgh, Pa. Catalytic oxidation of ammonia. 1,765,352; June 17.

Jaffe, Elias, New York, N. Y. Self-fastening button. 1,763,656; June 17.

Jahnke, Charles B., Beloit, Wis., assignor to Fairbanks, Morse & Co., Chicago, Ill. Carburetor. 1,764,726; June 17.

Jakosky, John J., assignor to International Precipitation Company, Los Angeles, Calif. Phonograph reproducer. 1,764,957; June 17.

James, Frederic W. (See Nelson, N. P., and James.)

James, Joseph H., Pittsburgh, assignor to C. P. Byrnes, trustee, Sewickley, Pa. Insecticide and fungicide compound. 1,764,792; June 17.

Jamison, Claude T., assignor to Day and Night Auto Safety Signal Company, Alton, Ill. Automobile signal switch. 1,764,958; June 17.

Janer, Andre, Flushing, assignor to The A. J. & K. Company, Incorporated, New York, N. Y. Container for lip sticks and the like. 1,764,452; June 17.

Janeway, Jacob J., deceased, New Brunswick, N. J.; L. P. Janeway and C. J. Scudder, executors. Manufacture of wall paper. 1,764,408; June 17.

Janeway, Lucius P., et al., executors. (See Janeway, Jacob J.)

Jasper, Peter P., Cokeville, Pa. Burial casket. 1,764,566; June 17.

Javitch, Grégori, Levallois-Perret, France. Filter for liquids under pressure. 1,764,567; June 17.

Jenks, Harold C., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Control system for rolling mills. 1,764,312; June 17.

Jensen, Hans E., Huntington, Utah. Brake block. 1,765,275; June 17.

Jensen, Henry K., St. Paul, Minn. Drink-mixing device. 1,764,079; June 17.

Jewell, Raymond L., Millcreek Township, Erie County, assignor to American Sterilizer Company, Erie, Pa. Steam-generator-controlling mechanism. 1,764,453; June 17.

Jimenez, Honorato. (See Hurley, H. A., Jones, and Jimenez.)

Jobe, Walter L., sr., Topeka, Kans. Radio toy. 1,763,788; June 17.

John, Kenneth B., Wilmington, Del., C. W. Coslow and C. J. Schwindt, Pittsburgh, Pa., assignors to The Selden Company, Pittsburgh, Pa. Preparing contact mass. 1,764,024; June 17.

Johnsen, Alfred J., Durban, South Africa. Spring wheel for vehicles. 1,765,160; June 17.

Johnson Albert G., Fellows, and C. W. Dewing, Taft, Calif. Safety chamber for submerged vessels. 1,765,233; June 17.

Johnson, Alexander E., Chicago, Ill. Astronomical apparatus. 1,765,336; June 17.

Johnson, Benjamin L., Garfield, Utah. Concentration of ores. 1,763,851; June 17.

Johnson, Benjamin L., Garfield, Utah. Tetrathio diphospho organic compound. 1,763,852; June 17.

Johnson Brothers Engineering Corporation. (See Johnson, Louis J., assignor.)

Johnson, Carl E., assignor to United States Electrical Manufacturing Company, Los Angeles, Calif. Bottom attachment for nonreversing attachment for motor-driven pump heads. 1,764,263; June 17.

Johnson, Carl E., assignor to United States Electrical Manufacturing Company, Los Angeles, Calif. Weather-proof pump motor. 1,764,793; June 17.

Johnson, Edward G., Cape May, N. J. Parachute and aerial life buoy. 1,765,075; June 17.

Johnson, John G., Dennison, Minn. Fence post. 1,764,207; June 17.

Johnson, John R., assignor to The Ingersoll Milling Machine Company, Rockford, Ill. Universal milling machine. 1,763,708; June 17.

Johnson, Lawrence E., Melrose, and E. C. Leach, West Peabody, assignors to Lynn Products Co., Lynn, Mass. Fuel-oil burner. 1,764,794; June 17.

Johnson, Louis J., Waukegan, Ill., assignor to Johnson Brothers Engineering Corporation, South Bend, Ind. Stream-line construction. 1,763,970; June 17.

Johnson, Robert A. (See Fancher, C. J., and Johnson.)

Johnson, Wallace D., assignor to Yates American Machine Company, Beloit, Wis. Cutter-head quick release. 1,763,928; June 17.

Johnston, Clarence L., Oakland, and C. M. Friden, Piedmont, assignors to Marchant Calculating Machine Company, Oakland, Calif. Calculating machine. 1,764,959; June 17.

Johnston, Robert T., New Brunswick, N. J., assignor to The Patent and Licensing Corporation, Boston, Mass. Machine for coating. 1,764,080; June 17.

Jones, Benjamin N. (See Lewis, J. D., Jones, and Schlaf.)

Jones, Charles H. Le P., Sault Ste. Marie, Ontario, and W. J. Hussey, Espanola, Ontario, Canada. Automatic wrapping machine. 1,764,081; June 17.

Jones, Clifford C., Detroit, Mich. Airfoil. 1,764,842; June 17.

Jones, David C., Chesnee, S. C., assignor to Draper Corporation, Hopedale, Mass. Mechanism for weaving striped cloth. 1,765,339; June 17.

Johns, Harold E., Lansdowne, Pa., assignor to Cover & Company, Philadelphia, Pa. Leather-sorting machine. 1,765,234; June 17.

Jones, Herbert J. (See Hurley, H. A., Jones, and Jimenez.)

Jones Jesse M., and R. R. Webb, assignors to Charles R. Hadley Company, Los Angeles, Calif. Tray binder. 1,764,264; June 17.

Jones, John E., Minneapolis, Minn. Boiler. 1,764,960; June 17.

Jones & Lamson Machine Company. (See Lovely, John E., assignor.)

Jones, Lyman D., New York, N. Y. Tobacco-smoking appliance. 1,764,795; June 17.

Jones, Maldwyn E., assignor to The Wheeler-Schebler Carburetor Co., Indianapolis, Ind. Carburetor. 1,763,709; June 17.

Jones, Walter R. (See Buford, William J., assignor.)

Jones, Warren C., Flushing, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Sound recording. 1,763,891; June 17.

Jones, William N., and C. C. Humphreys, Tampa, Fla., assignors to Rotex Engineering Company. Agitator, aerator, and mixer. 1,765,338; June 17.

Jordan, O. F., Company. (See Tellis, Vsevolod G., assignor.)

Jordan, William M. (See Nichols, C. S., and Jordan.)

Jorgenson, John, assignor of one-half to M. Jorgenson, Racine, Wis. Cylinder for laundry machines. 1,764,265; June 17.

Jorgenson, Michael. (See Jorgenson, John, assignor.)

Josepho, Anatol M. (See Kousminsky, Mischa, assignor.)

Judson, Edgar T., Westfield, N. J. Apparatus for handling bricks. 1,763,657; June 17.

Judy, Carl, New Philadelphia, Ohio. Mulch-paper-laying machine. 1,763,789; June 17.

Jung, Alvin L., assignor to Albert H. Weinbrenner Company, Milwaukee, Wis. Making shoes. 1,764,105; June 17.

Jung, Manner O., Boulder, Colo. Mountain-climbing pick. 1,765,076; June 17.

Jungerheld, Arthur F., Bridgeport, Mich. Can cover. 1,764,684; June 17.

Jupp, William B. (See Masury, A. F., Jupp, and Queeney.)

Just Manufacturing Company, The. (See Schmitz, Fred A., assignor.)

Just Right Lock Company. (See Raphael, Sylvester, assignor.)

Kachline, John F., Reading, Pa. Adjustable form for box-covering machines. 1,764,632; June 17.

Kadow, August, assignor to The Vacuum Casting Company, Toledo, Ohio. Metal-casting apparatus. 1,763,710; June 17.

Kaempf, Roman, Nawojowa, and A. Lankoff, Lwow, Poland. Cask, barrel, or like container. 1,765,161; June 17.

Kaiser, Charles J., West Hartford, Conn. Blotter. 1,764,796; June 17.

Kalfus, Victor, New York, N. Y. Convertible tool. 1,764,513; June 17.

Kalk, Albert C., Chicago, Ill., assignor to Invincible Laundry Equipment Company. Reversing mechanism for laundry driers. 1,763,658; June 17.

Kalmeijer, Adrianus A. M. A., The Hague, Netherlands. Sound-transforming apparatus. 1,765,276; June 17.

Kaltenbach, Robert W., Cleveland Heights, Ohio. Grab bucket. 1,763,790; June 17.

Kantor, James, and C. H. Miller, Chicago, Ill. Dispensing device. 1,763,971; June 17.

Kapp, Leonard B., Beloit, Wis., assignor to Fairbanks, Morse & Co., Chicago, Ill. Lubrication of bearings. 1,764,727; June 17.

Karnasch, Leopold M., San Francisco, Calif. Torque transmitter. 1,764,266; June 17.

Karolus, August, Leipzig, Germany, assignor to Radio Corporation of America. Mechanical oscillator of constant-frequency value. 1,763,853; June 17.

Karpen, S., & Bros. (See Hultgren, Charles R., assignor.)

Kaskouras, Thomas, Chicago, Ill. Dispensing device. 1,764,728; June 17.

Katzinger, Edward, Company. (See Kollman, Jacob, assignor.)

Kaufman, John, A. Seymour, Ind. Brick-mason tool. 1,764,106; June 17.

Kawneer Company, The. (See Fraser, John A., assignor.)

Kay, Oscar, Los Angeles, Calif. Atomizer. 1,764,107; June 17.

Kearney, Edward J., Wauwatosa, assignor to Kearney & Trecker Corporation, West Allis, Wis. Machine-tool attachment. 1,763,711; June 17.

Kearney & Trecker Corporation. (See Armitage, Joseph B., assignor.)

Kearney & Trecker Corporation. (See Kearney, Edward J., assignor.)

Kearns, Anthony P., Newark, N. J. Dustcap device. 1,764,208; June 17.

Keck, George S., Pasadena, and C. M. Cronkhite, Glendale, Calif., assignors to Pilot Ray Corporation, Wilmington, Del. Dirigible headlight. 1,764,171; June 17.

Keenan, Thomas J., Steubenville, Ohio. Safety valve and drain for boilers. 1,765,162; June 17.

Keenan, Walter F., jr., Pelham, assignor to Foster Wheeler Corporation, New York, N. Y. Locomotive boiler. 1,764,172; June 17.

Keenan, Walter F., jr., Pelham, assignor to Foster Wheeler Corporation, New York, N. Y. Furnace wall. 1,764,173; June 17.

Keenan, Walter F., jr., Pelham, assignor to Foster Wheeler Corporation, New York, N. Y. Making fluid-heating element. 1,764,174; June 17.

Keffer, Joseph W., Chicago, Ill. Clamp. 1,765,238; June 17.

Keilholtz, Lester S., and E. Dickey, Dayton, Ohio, assignors, by mesne assignments, to Frigidaire Corporation. Refrigerating apparatus. 1,763,659; June 17.

Keiser, Herman C., Rock Springs, Wyo. Pipe-handling apparatus. 1,765,163; June 17.

Kelleher, James, Chippawa, Ontario, Canada, assignor to Harper Electric Furnace Corporation, Philadelphia, Pa. Terminal. 1,764,045; June 17.

Keller, Frederick L., Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Manufacturing dies. 1,764,633; June 17.

Keller, Merlin O. (See Heath, S. B., and Keller.)

Kellner, Paul, New York, N. Y. Wrist-watch protector for bathers. 1,763,929; June 17.

Kelvinator Corporation. (See Freeman, Hadley F., assignor.)

Kelvinator Corporation. (See Pope, Harold L., assignor.)

Kelvinator Corporation. (See Replogle, John R., assignor.)

Kelvinator Corporation. (See Sealey, Percy T., assignor.)

Kelvinator Corporation. (See Spreen, Charles C., assignor.)

Kemp, Vivian F., Brixton, London, England. Diaphragm support for personal wear. 1,764,209; June 17.

Keney, Victor, New York, N. Y. Eyelashes for dolls. 1,763,930; June 17.

Kennedy, Joseph E., New York, N. Y. Feeding device for materials. 1,764,108; June 17.
Kenny, Elizabeth, Sydney, New South Wales, Australia. Transport stretcher. 1,764,568; June 17.
Kent, George C., Turtle Creek, and R. Siegfried, Pittsburgh, Pa., assignors to Westinghouse Electric & Manufacturing Company. Gear. 1,764,409; June 17.
Kerner Incinerator Company. (See Kummer, Frederick C., assignor.)
Kerkhoff, Joseph, assignor to F. L. Torrey & Company, Attleboro, Mass. Insignia attachment. 1,764,175; June 17.
Kersting, Bernard H., Ben Avor, assignor to The Dravo Contracting Company, Pittsburgh, Pa. Rail clamp for traveling bridges. 1,764,797; June 17.
Keyser, Johann J., Aarau, Switzerland. Spinning and twisting machine. 1,765,236; June 17.
Khoury, Harry E. (See Menzer, J. G., and Khoury.)
Khoury Warp Stop Motion, Inc. (See Menzer, J. H., and Khoury, assignors.)
Khun, Albert M., Elizabeth, N. J. Plumbing fixture. 1,765,678; June 17.
Kicherer, Harry J., and R. B. Niles, Minneapolis, assignors to Marquette Manufacturing Company, St. Paul, Minn. Automobile frame straightener. 1,764,840; June 17.
Kilgen, George, & Son, Inc. (See Hess, Max, assignor.)
Kimball, Franklin E., Watson, Calif. Process and apparatus for concentrating sulphuric acid. 1,764,210; June 17.
King, C. G., & Co. (See Smith, Walter E., assignor.)
King, Fred H., Canton, Ohio. Triple-cam-drive gasoline engine. 1,765,237; June 17.
King, George D. (See Brookby, H. E., and King.)
Kingsbury, Edward J., and J. E. Anderson, assignors to Kingsbury Machine Tool Corporation, Keene, N. H. Frictional drive. 1,764,211; June 17.
Kingsbury Machine Tool Corporation. (See Kingsbury, E. J., and Anderson, assignors.)
Kirkpatrick, Hugh, Waltham, Mass. Pin board. 1,765,164; June 17.
Kirsten, Frederick B. A., Mason City, Iowa. Soft-collar support. 1,764,212; June 17.
Kissock, Alan, Forest Hills, N. Y. Making calcium molybdate. 1,763,712; June 17.
Kittilsen, Coom, Porsgrund, Norway. Planet gearing. 1,764,961; June 17.
Klausmeyer, David C., assignor to The Cincinnati Bickford Tool Company, Cincinnati, Ohio. Self-oiling centralized change gears. 1,763,713; June 17.
Klausmeyer, David C., assignor to The Cincinnati Bickford Tool Company, Oakley, Cincinnati, Ohio. Equalized arm clamp. 1,764,514; June 17.
Klausmeyer, David C., assignor to The Cincinnati Bickford Tool Company, Cincinnati, Ohio. Direct-reading gear-shift mechanism. 1,764,515; June 17.
Kleen Kap Corporation. (See Pease, John A., assignor.)
Klein, Frederick, New York, N. Y., assignor to A. B. Dick Company. Slip sheeter, particularly adapted for mimeographs. 1,763,972; June 17.
Kleinert, I. B., Rubber Company. (See Brown, Frances R., assignor.)
Kleinert, I. B., Rubber Company. (See Thayer, Henry E., assignor.)
Kleinhammer, A. S. (See Applebaker, Theron J., assignor.)
Kline, Julius R. (See Schylander, John F., assignor.)
Klingelfuss, Emil, and A. Baumann, assignors to Aktiengesellschaft Brown, Boveri and Cie., Baden, Switzerland. Air scavenging and charging blower for engines. 1,763,791; June 17.
Klotz, Lee Dell S., Malvern, assignor to The Whitacre-Greer Fireproofing Company, Waynesburg, Ohio. Kiln bottom. 1,764,025; June 17.
Knecht, Emil, Erkner, near Berlin, Germany, assignor, by mesne assignments, to Dual Motors Ltd., London, England. Adjustable winding spindle for spring motors. 1,763,792; June 17.
Knee, Aaron A., assignor to The Lance Packing Company, Charlotte, N. C. Bag for bulk edibles and the like. 1,764,569; June 17.
Knight, Charles T., Denver, Colo. Ore furnace. 1,764,313; June 17.
Knipe, Henry H. (See Barbour, R. M., and Knipe.)
Knoernschild, William C., assignor to Milwaukee Tanning & Clothing Company, Milwaukee, Wis. Coat. 1,763,892; June 17.
Knopp, Julius W., Toledo, Ohio. Violin-bow attachment. 1,763,660; June 17.
Knox, George W., Oklahoma City, Okla. Conductor for oil-well heaters. 1,764,213; June 17.
Koch, Fritz, St. Paul, Minn. Hollow tile for building purposes. 1,764,798; June 17.
Koch, Gustav H., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Gear-reduction mechanism. 1,764,314; June 17.
Koch, William C., St. Paul, Minn. Building construction. 1,764,729; June 17.
Kock, Hans, Lubeck, Germany. Fermenting vat. 1,764,841; June 17.
Kohl, Charles, A., assignor to St. Louis Butcher's Supply Co., St. Louis, Mo. Apparatus for and method of refrigeration. 1,764,267; June 17.
Kollman, Jacob, assignor to Edward Katzinger Company, Chicago, Ill. Baking pan. 1,764,685; June 17.
Konop, John S., Flushing, N. Y. Table. 1,763,931; June 17.
Konop, John S., Flushing, N. Y. Combined wall table and seat. 1,763,932; June 17.
Kopp Glass, Incorporated. (See Kopp, Nicholas, assignor.)
Kopp, Nicholas, Pittsburgh, Pa., assignor to Kopp Glass, Incorporated, Swissvale, Pa. Illuminating glass bowl or similar article. Des. 81,392; June 17.
Koppers Company, The. (See Becker, Joseph, assignor.)
Koppers Company, The. (See Cole, Sanford S., assignor.)
Kousminsky, Mischa, assignor to A. M. Josepho, New York, N. Y. Photographic reproducing apparatus. 1,765,277; June 17.
Kraeft, Herman L., assignor to The Murray Ohio Manufacturing Company, Cleveland, Ohio. Wheel and bearing construction. 1,764,731; June 17.
Kraeft, Herman L., assignor to Murray Ohio Manufacturing Company, Cleveland, Ohio. Sheet-metal toy construction. 1,764,732; June 17.
Kraeft, Herman L., assignor to Murray Ohio Manufacturing Company, Cleveland, Ohio. Wheeled toy. 1,764,733; June 17.
Kraeft, Herman L., East Cleveland, assignor to The Murray Ohio Manufacturing Company, Cleveland, Ohio. Steering mechanism. 1,764,730; June 17.
Kramer, Isidore, New York, N. Y. Button. 1,765,077; June 17.
Kraut, Samuel B., South Bend, Ind., assignor to Westinghouse Electric & Manufacturing Company. Lamp socket. 1,764,315; June 17.
Krebs, Carlos, Boston, Mass. Reproducing mechanism. 1,763,793; June 17.
Krecek, Joseph A., Brooklyn, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Telephone system. 1,763,893; June 17.
Kreider, John M., Neffsville, Pa. Centrifugal extractor. 1,764,214; June 17.
Kreis, Oscar C., assignor to Continental Motors Corporation, Detroit, Mich. Internal-combustion engine. 1,764,734; June 17.
Krosta, Frederick, New York, N. Y. Tool. 1,765,165; June 17.
Krueger, Emil M., assignor to Badger Meter Manufacturing Company, Milwaukee, Wis. Signaling attachment for meters. 1,765,337; June 17.
Krum, Howard L., and J. O. Carr, assignors, by mesne assignments, to Teletype Corporation, Chicago, Ill. Telegraph system. 1,764,316; June 17.
Kruse, Peter, assignor to E. W. Bliss Company, Brooklyn, N. Y. Safety clutch. 1,764,317; June 17.
Kruse, Peter, Brooklyn, assignor to E. W. Bliss Company, New York, N. Y. Marginal hook-forming mechanism for can-body-making machines. 1,764,318; June 17.
Kuen, Eugene A., Cincinnati, Ohio. Radio frequency circuits. 1,764,454; June 17.
Kuhlman, Henry J., Colesburg, Iowa. Gathering, snapping, and husking rolls for corn harvesters. 1,764,686; June 17.
Kulik, Irving, Brooklyn, N. Y. Air-emitting and electric-light-actuating mirror. 1,764,455; June 17.
Kummer, Frederick C., assignor to Kerner Incinerator Company, Wauwatosa, Wis. Saw guard. 1,764,634; June 17.
Küpper, Josef, Cologne, Germany. Method of manufacturing face masks, pseudo reproductions of articles and the like, and a device for carrying this method into practice. 1,764,215; June 17.
Kurda, Karl, Nuremberg, Germany, assignor to Westinghouse Electric & Manufacturing Company. Voltage-control system. 1,764,319; June 17.
Kurda, Karl, and P. Schade, Nuremberg, Germany, assignors to Westinghouse Electric & Manufacturing Company. Regulating transformers. 1,764,320; June 17.
Kurowski, Alfred G. F., Brooklyn, assignor to Underwood Elliott Fisher Company, New York, N. Y. Typewriting machine. 1,764,321; June 17.
Kutter, Hermann L., assignor to The Black-Clawson Company, Hamilton, Ohio. Paper machinery. 1,764,322; June 17.
Kysor, Walter A., Cadillac, Mich. Heating means for motor vehicles. 1,764,799; June 17.
Laboratory Products Company, The. (See Richards, William F., assignor.)
La Branch, Louis, Dayton, Ohio. Oil burner. 1,764,109; June 17.
Lacy, Kenneth B., assignor to Van Schaack Bros. Chemical Works, Inc., Chicago, Ill. Dehydrogenating alcohols. 1,764,982; June 17.
La Forest, Louis Z., Ilion, N. Y., assignor to Remington Arms Company, Inc. Cash register. 1,763,661; June 17.
La France, Richard, assignor to Owens-Illinois Glass Company, Toledo, Ohio. Glass-forming machine. 1,764,268; June 17.
Lagier, Celestin I., Stockton, Calif. Flesh cutting and searing shears. 1,763,894; June 17.
Lamplough, Frederick, Middlesex, England. Conversion of heavy hydrocarbon oils into light hydrocarbon oils or spirits. 1,765,167; June 17.
Lance Packing Company, The. (See Knee, Aaron A., assignor.)
Landers, Frary & Clark. (See Smart, Joseph F., assignor.)

Landers, Frary & Clark. (See Smith, C. F., and Helweg, assignors.)
Landis, Harry G., Marshall, Mo. Metal aeroplane wing. 1,765,079; June 17.
Landon, Vernon D., East Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Radio receiving system. 1,764,323; June 17.
Landsiedel, Walter W., Cincinnati, Ohio, assignor to Remington Rand Inc., Buffalo, N. Y. Adjustable control cam. 1,765,340; June 17.
Lankoff, Antoni. (See Kaempf, R., and Lankoff.)
Lansing, Raymond P., Montclair, N. J. Vehicle spring controller. 1,764,046; June 17.
Lasker, William W., Brooklyn, assignor, by mesne assignments, to Remington Rand Inc., New York, N. Y. Pinbox selective mechanism for accounting machines. 1,764,735; June 17.
Laster, Harry W., Oak Park, Ill. Paving roller. 1,764,963; June 17.
Latimer, Paul D., Ennis, assignor of seven-tenths to R. N. Burnett and one-fourth to A. M. Bownan, Houston, Tex. Belt connection. 1,765,080; June 17.
Latterell, Ralph B., Kandiyohi, Minn. Milk cooler and aerator. 1,764,269; June 17.
Laubenheimer, Walter J., Chicago, Ill. Display carton. 1,764,216; June 17.
Lauber, Leo, Chicago, Ill. Broom construction. 1,764,876; June 17.
Laughton, Edmund M., et al., executors. (See Griffiths, J. P., and Street-Wilson.)
Laursen, Bruno L., Dunedin, assignor, by mesne assignments, of forty-eight per cent to Clearwater Lumber Company, Incorporated, Clearwater, Fla. Folding furniture. 1,765,168; June 17.
Lavergne, Jean, assignor to R. Forest, Paris, France. Mechanical device for the supply of explosible gas to internal-combustion engines. 1,765,278; June 17.
Law, Albert, Jackson Heights, N. Y. Method and mold for casting hollow metal articles. 1,763,895; June 17.
Leach, Ernest C. (See Johnson, L. E., and Leach.)
Leavey, Thomas E. (See Tyler, J. C., and Leavey.)
Ledger, Irene E., Lake Geneva, Wis. Portable toilet. 1,764,843; June 17.
Lee, Charles W. (See Burt, Henry C., assignor.)
Lee, Elmer, Livingston, Mont. Animal trap. 1,765,081; June 17.
Lee, Reginald, Windsor, Victoria, Australia. Postal envelope. 1,765,166; June 17.
Lefebure, Victor, Fulham, London, England. Manufacture of hose. 1,763,973; June 17.
Legg, Joseph W., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Control of electrical instruments. 1,764,410; June 17.
Le Grand, Harry R. (See Reich, G., and Le Grand.)
Lehman, Edward H., assignor to W. H. Miner, Inc., Chicago, Ill. Railway draft rigging. 1,763,974; June 17.
Lehmann, Gotthilf, Bronx, N. Y. Electrically-illuminated Santa Claus. Des. 81,393; June 17.
Lehmer, Herman K., Rockford, Ill. Road-shoulder-finishing machine. 1,764,270; June 17.
Leichtman, Alex. (See Somergary, J. J., and Leichtman.)
Leindorf, Emil, and N. P. Norman, New York, N. Y. Sliding and swinging window and sashes. 1,763,896; June 17.
Leindorf, Emil, and N. P. Norman, New York, N. Y. Sliding and swinging window and sashes. 1,763,897; June 17.
Lemmons, Samuel C., Cedar Hill, Tenn., assignor of one-half to J. L. Sparks, Russellville, Ky. Harrow tooth. 1,765,082; June 17.
Lemos, John T. (See Cook, Lawrence H., assignor.)
Lenston, Charles S., assignor to Hobbs Manufacturing Company, Worcester, Mass. Expanding shaft for winding paper and the like. 1,763,794; June 17.
Leonard, Frederick C., assignor to Leonard-Rooke Co., Providence, R. I. Producing a composite metal. 1,764,271; June 17.
Leonard-Rooke Co. (See Leonard, Frederick C., assignor.)
Lethiecq, Amédée, Neville, Saskatchewan, Canada. Grain stooker. 1,764,272; June 17.
Leverich, Lester B., Red Barn, Tex. Swivel sucker-rod joint. 1,765,279; June 17.
Le Vesconte, Harold J. (See Christensen, N. V., and Le Vesconte.)
Levy, Cyril C., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Automatic station. 1,764,326; June 17.
Levy, Edward J. (now by judicial change of name Edward L. Mayo), assignor to The Bishop & Babcock Manufacturing Company, Cleveland, Ohio. Thermostat. 1,763,802; June 17.
Lewis, Edward E., N. D. Zito, and J. J. Fertitta, Kenner, La. Washboard. 1,765,083; June 17.
Lewis, Goodrich Q., Wheaton, assignor to W. H. Miner, Inc., Chicago, Ill. Draft-rigging key retainer. 1,763,975; June 17.
Lewis Invisible Stitch Machine Company. (See Mueller, Charles W., assignor.)
Lewis, Jacob D., Yonkers, N. Y., B. N. Jones, Glen Ridge, N. J., and A. H. Schlaf, Yonkers, N. Y., assignors to Otis Elevator Company, Jersey City, N. J. Control system. 1,764,877; June 17.
Lewis, James R., Philadelphia, Pa., assignor to Breeze Corporation, Newark, N. J. Brake-lining machine. 1,764,082; June 17.
Lewis, Robert H. (See Hensley, W. T., and Lewis.)
Lewis, Wilfred, Haverford, Pa. Pneumatic jar-ramming molding machine. 1,763,662; June 17.
Libbey Glass Manufacturing Company, The. (See Danner, Edward, assignor.)
Libbey-Owens Glass Company. (See Drake, John L., assignor.)
Lilly, George E. (See Lilly, Scott H. and G. E.)
Lilly, Scott H. and G. E., Toledo, Ohio, assignors, by mesne assignments, to St. Regis Paper Company, New York, N. Y. Bag closure and making the same. 1,763,663; June 17.
Limitorque Corporation, The. (See Dean, Peter P., assignor.)
Lindemann, A. J., & Hoverson Company. (See Lindemann, Albert J., assignor.)
Lindemann, Albert J., assignor to A. J. Lindemann & Hoverson Company, Milwaukee, Wis. Heater. 1,764,635; June 17.
Link, Albert C., assignor to L. A. Young Company, Detroit, Mich. Shaft for golf clubs and the like. 1,764,800; June 17.
Linkenheld, Clarence F., Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Controlling system. 1,764,636; June 17.
Lippincott, John W., Little Rock, Ark. Endless water course. 1,763,976; June 17.
Livingstone, James, assignor of one-tenth to H. E. Stanley, Seattle, Wash. Air motor. 1,764,324; June 17.
Locke, Edwin A., jr., Arlington, Mass., assignor to The Nevins Church Press, New York, N. Y. Box. 1,765,084; June 17.
Lohman, John C., Detroit, Mich. Sprinkler head. 1,764,570; June 17.
Loomis, Crawford C., Ilion, N. Y., assignor to Remington Arms Company, Inc. Firearm. 1,763,714; June 17.
Loomis, Harold S. (See McWhirter, W. C., and Loomis.)
Loomis, Oliver H., Ilion, N. Y., assignor to Remington Arms Company, Inc. Firearm. 1,763,665; June 17.
Lonas, Frank E., New York, N. Y. Sleeve-valve engine. 1,763,664; June 17.
Long, Dorothy, assignor to Franklin Simon & Company, Inc., New York, N. Y. Ensemble suit. Des. 81,394; June 17.
Long, Dorothy, assignor to Franklin Simon & Company, Inc., New York, N. Y. Ensemble suit. Des. 81,395; June 17.
Long, George A., assignor to The Long Security Lock Company, Hartford, Conn. Lock and key therefor. 1,765,280; June 17.
Long Security Lock Company, The. (See Long, George A., assignor.)
Lopez, Miguel, deceased, Santa Clara; E. Perez y Perez, executrix, assignor of one-third to M. Q. Lopez y Perez and two-thirds to E. Perez y Perez, Habana, Cuba. Strainer for cane mills. 1,763,795; June 17.
Lopez y Perez, Mauricio Q. (See Nalon, Thomas M., assignor.)
Lopez y Perez, Mauricio Q., et al. (See Lopez, Miguel, assignor.)
Lorig, Robert A., assignor to Burgess Battery Company, Madison, Wis. Hand lamp. 1,763,898; June 17.
Loughead, Malcolm, Detroit, Mich., assignor, by mesne assignments, to Hydraulic Brake Company, Los Angeles, Calif. Hydraulic brake. 1,764,176; June 17.
Loughead, Malcolm, assignor to Hydraulic Brake Company, Detroit, Mich. Braking apparatus for motor vehicles. 1,764,177; June 17.
Loughead, Malcolm, Detroit, Mich., assignor to Hydraulic Brake Company, Los Angeles, Calif. Multicylinder hydraulic brake. 1,764,178; June 17.
Loughead, Malcolm, Detroit, Mich., assignor to Hydraulic Brake Company, Los Angeles, Calif. Hydraulic brake mechanism. 1,764,179; June 17.
Lovell, Clarence V., assignor to The Reynolds Spring Company, Jackson, Mich. Welt lock for spring constructions. 1,764,878; June 17.
Lovely, John E., assignor to Jones & Lamson Machine Company, Springfield, Vt. Fixture for holding ring gears. 1,764,026; June 17.
Low, Frank S., et al. (See Low, Frank S., assignor.)
Low, Frank S., Niagara Falls, N. Y., assignor, by mesne assignments, to the said Low, and A. W. Berresford, Detroit, Mich. Tanning composition and method of producing same, etc. 1,764,516; June 17.
Low, Frank S., Niagara Falls, N. Y., assignor, by mesne assignments, to the said Low, and A. W. Berresford, Detroit, Mich. Tanning. 1,764,517; June 17.
Lowe, Russell E., assignor to Doherty Research Company, New York, N. Y. Surface protection for magnesium alloys. 1,765,341; June 17.
Lowell Machine Company. (See Reynolds, Frank A., assignor.)
Löwy, Ludwig, assignor to Schloemann Aktiengesellschaft, Dusseldorf, Germany. Mandrel moving and cooling apparatus. 1,764,736; June 17.
Lubecker Maschinenbau-Gesellschaft. (See Fischer, Hinko, assignor.)
Luce, Richard W., Mountainside, assignor to American Gasaccumulator Company, Elizabeth, N. J. Light-reflector sign and signal. 1,764,687; June 17.
Lufkin Rule Co. (See Witchger, Eugene J., assignor.)
Lukasczyk, Jacob, Rosenberg, Oberpfalz, Germany. Improving the heads of railway rails. 1,764,844; June 17.
Lundborg, Gustav L., and R. B. Israel, Muskegon, assignors to Continental Motors Corporation, Detroit, Mich. Method and apparatus for shipping engines. 1,764,737; June 17.

Lundgaard, Ivar, Worcester, assignor to Devon Manufacturing Company, Boston, Mass. Air drier. 1,764,110; June 17.
Lupien, Louis A., assignor to Edwin B. Stimpson Company, Brooklyn, N. Y. Bookholder. 1,764,325; June 17.
Lutz, Alois V., Zurich, Switzerland. Device for preventing the formation of gullies. 1,764,047; June 17.
Lutz, Friedrich, assignor to Union Special Maschinenfabrik, G. m. b. H., Stuttgart, Germany. Presser foot and chain cutter for sewing machines. 1,765,342; June 17.
Lutz, George, Rocky River, assignor, by mesne assignments, to The Grasselli Chemical Company, Cleveland, Ohio. Flotation process. 1,765,308; June 17.
Lyman, Kenneth E., assignor to Bendix Brake Company, Chicago, Ill. Brake. 1,763,854; June 17.
Lynn Products Co. (See Johnson, L. E., and Leach, assignors.)
Lytle, Arthur R., Elmhurst, N. Y., assignor to U. C. & C. Research Labs. Inc. Brazing rod. 1,764,571; June 17.
MacDonald, Frederick L., Waltham, Mass. Dispensing tube. 1,765,281; June 17.
MacDonald, William A., Little Neck, N. Y., assignor to Hazeltine Corporation. Vacuum-tube socket. 1,763,796; June 17.
MacGregor, Peter G., Pequanock, assignor to Pyrene Manufacturing Company, Newark, N. J. Fire extinguisher. 1,764,964; June 17.
Machlet, George F., Elizabeth, N. J. Regulating device. 1,763,666; June 17.
MacKenzie, Leon R., Des Moines, Iowa. Pavement grid structure. 1,764,845; June 17.
MacNeill, George L., Wilkinsburg, assignor to Elliott Company, Pittsburgh, Pa. Condenser. 1,764,801; June 17.
Madine, John J., assignor to Sun Ray Gas Corporation, Cleveland, Ohio. Luminous electrical discharge tube. 1,764,048; June 17.
Madsen Iron Works. (See Madsen, Martin, assignor.)
Madsen, Martin, assignor to Madsen Iron Works, Huntington Park, Calif. Batch box. 1,764,327; June 17.
Madsen, Sern, assignor to Curtis Companies, Incorporated, Clinton, Iowa. Straight-line overhead cut-off saw. 1,764,965; June 17.
Madsen, Sern, assignor to Curtis Companies, Incorporated, Clinton, Iowa. Ironing-board structure. 1,765,343; June 17.
Magee, Wilber R., Ann Arbor, Mich. Gauge for sheet-metal-edge-bending machines. 1,763,797; June 17.
Magill, Ellen W., Chicago, Ill. Convertible vehicle body. 1,764,328; June 17.
Mahlie, Carl C. (See Wehr, E. R., and Mahlie.)
Mahlstedt, John F., Los Angeles, Calif. Egg-inspection apparatus. 1,764,802; June 17.
Maier, Karl, assignor to Union Special Maschinenfabrik, G. m. b. H., Stuttgart, Germany. Apparatus for producing trimming strips. 1,764,846; June 17.
Majestic Lamp Works. (See Cricchio, Paul, assignor.)
Mann, Arthur H., Nyack, N. Y., assignor, by mesne assignmens, to Morse Boulger Destructor Co. Apparatus for destroying waste. 1,764,637; June 17.
Mann, Frederick E., Cherrydale, Va. Receptacle support. 1,763,798; June 17.
Mann, Joseph, Philadelphia, Pa., assignor to Union Special Machine Company, Chicago, Ill. Folder support for sewing machines. 1,765,169; June 17.
Manthey, Edward F., Fennville, Mich., assignor to A. A. Clarke, Chicago, Ill. Electrically-driven saw. 1,764,111; June 17.
Mantius, Otto, New York, N. Y. Fiber-board machine. 1,764,456; June 17.
Marchant Calculating Machine Company. (See Johnston, C. L., and Friden, assignors.)
Marie, Felix, Cazaux, assignor to État Français (Ministère de l'Air), Paris, France. Drill projectile for bombarding planes. 1,765,017; June 17.
Markel, Charles, Schenectady, N. Y., assignor to Barco Manufacturing Company, Chicago, Ill. Crosshead. 1,764,049; June 17.
Markey, Harley H., Homer, La. Pump. 1,765,085; June 17.
Marks, Howard, Newman, Calif. Excavator. 1,764,518; June 17.
Marquette Manufacturing Company. (See Kicherer, H. J., and Niles, assignors.)
Marquette Manufacturing Company. (See Nilson, Leonard D., assignor.)
Marsters, Ernest R., Arlington, Mass. Casting device for live bait. 1,764,738; June 17.
Martin, Albert, New York, N. Y. Ornamenting foodstuffs. 1,765,086; June 17.
Martin, Wesley C., Donnelsville, Ohio. Two-cycle valveless internal-combustion engine. 1,764,329; June 17.
Marx, Louis, New York, N. Y. Walking mannikin. 1,764,330; June 17.
Marx, Robert D., Brooklyn, N. Y. Vehicle body construction. 1,763,715; June 17.
Mase, Roscoe P., Wilkinsburg, Pa. Liquid and gas contact apparatus. 1,765,087; June 17.
Masek, James C., Irwin, Pa., assignor to Westinghouse Electric & Manufacturing Company. Theater-lighting-control apparatus. 1,764,411; June 17.
Massardo, Domingo, Santiago, Chile. Car-tacking indicator. 1,764,217; June 17.
Masson, Pierre. (See de Bonal, G., and Masson.)
Masury, Alfred F., W. B. Jupp, New York, N. Y., and F. E. Queeney, Teaneck, N. J., assignors to International Motor Company, New York, N. Y. Control for direct-current generators. 1,765,088; June 17.
Matteson, George F., Rocky Hill, assignor to The Fuller Brush Company, Hartford, Conn. Mop-making machine. 1,763,799; June 17.
Matteson, George F., Rocky Hill, assignor to The Fuller Brush Company, Hartford, Conn. Feeding mechanism for mop-making machines. 1,763,800; June 17.
Matthews, Albert, assignor to The American Laundry Machinery Company, Cincinnati, Ohio. Automatic feeding device for flat-work ironers. 1,765,018; June 17.
Matthews, W. N., Corporation. (See Heinrich, Walter A., assignor.)
Maxwell, Francis, Wallington, England. Sugar-cane-crushing apparatus. 1,763,855; June 17.
Maxwell, William R., Brooklyn, N. Y., assignor to R. M. Edgar. Ball puzzle device. 1,765,019; June 17.
Mayfield, Thomas H., Roby, Tex. Grain shoe. 1,764,218; June 17.
Maynard, Charles E., Northampton, assignor to The Fisk Rubber Company, Chicopee Falls, Mass. Device for laminating rubberized material. 1,763,801; June 17.
Maynard, Howard E., assignor to Chrysler Corporation, Detroit, Mich. Brake shoe. 1,764,847; June 17.
Mayo, Edward L. (See Levy, Edward J.)
Mazigian, Garabed, Bridgeport, Conn. Mechanical toy. 1,763,804; June 17.
Mazer, Alfred M., Jeannette, Pa. Glass-cutting apparatus. 1,764,966; June 17.
McAdams, Edward. (See Arndt, William F., assignor.)
McClay, Charles E. (See McClay, Margaret E. and C. E.)
McClay, Margaret E. and C. E., Los Angeles, Calif. Visor. 1,763,899; June 17.
McCurley, Charles, Halfway, assignor to Hudson Motor Car Company, Detroit, Mich. Sheet-metal-working tool. 1,764,457; June 17.
McDonald, Alexander, Pittsburgh, and W. O. Smith, Wilkinsburg, assignors of thirty per cent to said Smith and seventy per cent to J. C. Young, Pittsburgh, Pa. Chimney ventilator. 1,764,219; June 17.
McElroy, Robert E., assignor to Reynolds Spring Company, Jackson, Mich. Connecter element for spring structures. 1,764,967; June 17.
McEvoy Wireless Well Strainer Corporation. (See Trumble, M. J., and Woodward, assignors.)
McFarlin, John R., assignor to Electric Service Supplies Company, Philadelphia, Pa. Lightning arrester and making the same. 1,763,667; June 17.
McGary, Alexander, et al. (See Haunz, Charles F., assignor.)
McGrath, William L., assignor to Eclipse Machine Company, Elmira, N. Y. Engine starter. 1,764,027; June 17.
McGregor, Rob R. (See Beal, G. D., and McGregor.)
McHugh, Joseph W. (See Williams, H., and McHugh.)
McIntosh Electrical Corporation. (See Pullwitt, Herman P., assignor.)
McKale, Frank, Plymouth, Pa. Toy. 1,765,238; June 17.
McKeon, Elisha J., Plainfield, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Article-holding device. 1,764,638; June 17.
McKinley, Melvin, assignor to The Coshocton Glove Co., Coshocton, Ohio. Glove-blank forming. 1,765,282; June 17.
McLaughlin, Denis P., San Diego, Calif. Safety attachment for typesetting machines. 1,764,803; June 17.
McLean, Andy, Fullerton, Calif. Externally-expanded piston. 1,764,458; June 17.
McLeod, Donald B., Vancouver, British Columbia, Canada. Light-reflecting bed device. 1,764,220; June 17.
McNeely, Marion G., Oakland, Calif. Bullet mold. 1,763,977; June 17.
McNees, Oliver J., New Castle, Pa. Vine-lifting attachment. 1,764,572; June 17.
McTarnahan, John T., Boston, Mass. Liquid-fuel-burning apparatus. 1,764,459; June 17.
McWane Cast Iron Pipe Company. (See McWane, James R., assignor.)
McWane, James R., assignor to McWane Cast Iron Pipe Company, Birmingham, Ala. Core-bar support. 1,765,020; June 17.
McWane, James R., assignor to McWane Cast Iron Pipe Company, Birmingham, Ala. Flask section for molding cast-iron pipes and the like. 1,765,021; June 17.
McWane, James R., assignor to McWane Cast Iron Pipe Company, Birmingham, Ala. Apparatus for removing cores from cast-iron pipes and the like. 1,765,022; June 17.
McWane, James R., assignor to McWane Cast Iron Pipe Company, Birmingham, Ala. Crane rig. 1,765,023; June 17.
McWane, James R., assignor to McWane Cast Iron Pipe Company, Birmingham, Ala. Core guide. 1,765,024; June 17.
McWhirter, William C., and H. S. Loomis, Wilkinsburg, assignors to The Union Switch & Signal Company, Swissvale, Pa. Railway braking apparatus. 1,764,804; June 17.
Meehan, Paul A., assignor to American Dressler Tunnel Kilns, Inc., Cleveland, Ohio. Tunnel kiln. 1,764,460; June 17.

Meem, James C., Brooklyn, N. Y. Conveyer. 1,764,461; June 17.
Megraw, Albert B., assignor to The Miller Company, Meriden, Conn. Lighting fixture. 1,764,112; June 17.
Meissner, Alexander, assignor to Gesellschaft für Drahtlose Telegraphie m. b. H. Hallesches, Berlin, Germany. Arrangement for protecting vacuum tubes. 1,763,805; June 17.
Melby, Charles J., Everett, Wash. Shingle. 1,764,412; June 17.
Mendenhall, Bayard W., Salt Lake City, Utah. Grease-dispensing container. 1,764,968; June 17.
Menzer, Joseph G., and H. K. Khoury, assignors to Khoury Warp Stop Motion, Inc., New Bedford, Mass. Warp stop motion. 1,764,879; June 17.
Mercur, Nathan L. (See Hook, C. H., and Mercur.)
Mermigis, James S., Kansas City, Kans. Washtub. 1,763,803; June 17.
Mero, Ralph M. (See Troyer, N., and Mero.)
Mershon, W. B., Co. (See Rhinevalt, Glenn G., assignor.)
Mesler, Bertram E., Brooklyn, N. Y. Shade-roller stop. 1,765,170; June 17.
Messgräte, G. m. b. H. (See Boykow, Johann-M., assignor.)
Metal Forms Corporation. (See Miller, George H., assignor.)
Methvin, Gerald E., Baltimore, Md. Stabilized gyroscopic instrument. 1,763,806; June 17.
Mettler, Arthur L., Lomita, Calif. Valve-spring-lifting tool. 1,764,519; June 17.
Meurling, Ivar, Ridley Park, assignor to The Viscose Company, Marcus Hook, Pa. Retaining ring for spinning-box lids. 1,765,239; June 17.
Meyer, Andre J., assignor to Continental Motors Corporation, Detroit, Mich. Internal-combustion engine; 1,764,739; June 17.
Meyers, Roy L., Janesville, Wis. Heating apparatus. 1,763,668; June 17.
Michaelson, Henry G., Rockford, Ill. Show case. 1,763,716; June 17.
Michell, Anthony G. M., Melbourne, Australia, assignor, by mesne assignments, to Michell-Crankless Engines Corporation, New York, N. Y. Mechanism for the interconversion of reciprocating and rotary motions. Re17,701; June 17.
Michell-Crankless Engines Corporation. (See Michell, Anthony, G. M., assignor.)
Miehle Printing Press & Manufacturing Company, The. (See Dudley, Edward F., assignor.)
Miehle Printing Press & Manufacturing Company, The. (See Golber, Hyman E., assignor.)
Miehle Printing Press & Mfg. Company, The. (See Jacobson, Arthur G., assignor.)
Miles, James C. (See Teare, Albert R., assignor.)
Miller, Arthur E. (See Salisbury, H. M., and Miller.)
Miller, Charles H. (See Kantor, J., and Miller.)
Miller Company, The. (See Doane, Leroy C., assignor.)
Miller Company, The. (See Megraw, Albert B., assignor.)
Miller, Frank P., Meadville, Pa. Reamer. 1,765,171; June 17.
Miller, Frank P., Meadville, Pa. Rotary cutter. 1,765,172; June 17.
Miller, George H., assignor to Metal Forms Corporation, Milwaukee, Wis. Curb form. 1,764,029; June 17.
Miller, George H., Milwaukee, Wis., assignor to Metal Forms Corporation, Milwaukee, Wis. Road rail or form. 1,764,028; June 17.
Miller, H. H., Industries Company, The. (See Thompson, William H., assignor.)
Miller, James B., St. Louis, Mo., assignor to The American Mine Door Co., Canton, Ohio. Apparatus for rock-dusting mines. 1,764,113; June 17.
Miller, Leon P., et al. (See Erhart, Julius P., assignor.)
Miller, Ralph M., et al. (See Erhart, Julius P., assignor.)
Miller, Thomas J. (See Sibson, W. W., and Miller.)
Miller, William L., Winona, Minn. Machine and method for forming mineral-wool bats. 1,765,025; June 17.
Miller, William L., Winona, Minn. Making mineral or rock wool bats. 1,765,026; June 17.
Millikan, Robert A., Chicago, Ill. Electrical power-transmitting system. 1,764,278; June 17.
Mills, Theodore H., Fresno, Calif., assignor of one-half to The Guiberson Corporation, Dallas, Tex. Tongs. 1,764,221; June 17.
Milwaukee Tanning & Clothing Company. (See Knoernschild, William C., assignor.)
Miner, W. H., Inc. (See Brenne, Arild M., assignor.)
Miner, W. H., Inc. (See Haseltine, Stacy B., assignor.)
Miner, W. H., Inc. (See Lehman, Edward H., assignor.)
Miner, W. H., Inc. (See Lewis, Goodrich Q., assignor.)
Miner, W. H., Inc. (See O'Connor, John F., assignor.)
Minich, Verne E. (See Wilhelm, Harold F., assignor.)
Minneapolis-Honeywell Regulator Company. (See Cunningham, Lewis L., assignor.)
Miskella, William J., Oak Park, Ill. Color guide. 1,764,083; June 17.
Mitchell, Roy C., East Orange, assignor to Edison Storage Battery Company, West Orange, N. J. Storage-battery cell. 1,765,027; June 17.
Mittendorf, William R., Cincinnati, Ohio, assignor, by mesne assignments, to International Business Machines Corporation, New York, N. Y. Balancing mechanism. 1,764,274; June 17.
Mittendorf, William R., Cincinnati, Ohio, assignor, by mesne assignments, to International Business Machines Corporation, New York, N. Y. Counting scale. 1,764,275; June 17.
Möckel, Wilhelm, Berlin-Neutempelhof, Germany. Rapid printing press. 1,764,969; June 17.
Moehler, Otto J., Newark, N. J., assignor to General Electric Vapor Lamp Company. Adjustable support stand for electric lamps. 1,765,028; June 17.
Moffatt, James R., assignor to Union Special Machine Company, Chicago, Ill. Hem for sewed articles and making the same. 1,764,848; June 17.
Monarch Products Company. (See Hentschel, Paul J., assignor.)
Montano, Antonio, assignor of one-half to F. Gonzales, La Jara, Colo. Road grader. 1,763,807; June 17.
Mooney, William, Waterloo, Iowa. Flush valve. 1,764,276; June 17.
Moore, John T., near Wernersville, Pa., assignor, by mesne assignments, to Rex-Watson Corporation, Canastota, N. Y. Creeper attachment for tractor wheels. 1,764,120; June 17.
Moran, John F., Jersey City, N. J. Electromagnetic bell. 1,764,277; June 17.
Moratz, Paul O., Bloomington, Ill. Matched hardwood flooring. 1,764,331; June 17.
Moravec, Joseph E. (See Vorel, Frank, assignor.)
Moreland, William, Newark, N. J. Air-driven novelty. 1,764,180; June 17.
Morgan, Everette K., assignor to The Ingersoll Milling Machine Company, Rockford, Ill. Tapping chuck. 1,763,717; June 17.
Morin, George G., Holyoke, Mass. Semiautomatic dipper trip and monkey-line winder. 1,765,089; June 17.
Morin, George G., Holyoke, Mass. Balanced three-way valve. 1,765,090; June 17.
Morris, D. F., et al. (See Barili, A. E. H., and Hyle, assignors.)
Morris, Edward A., Sacramento, Calif. Certificate holder. 1,764,114; June 17.
Morris, Louis, Kansas City, Mo. Automatic variable-pitch propeller blade for airplanes. 1,765,091; June 17.
Morris, Nathan, Brooklyn, N. Y. Soldering iron. 1,763,900; June 17.
Morrison, Jesse A., Salt Creek, and E. T. William, Casper, Wyo., assignors, by mesne assignments, to W. J. Cheley, Tulsa, Okla. Well-shooting device. 1,764,222; June 17.
Morrow, Dean S., Eugene, Oreg. Remote control means for cranes. 1,765,173; June 17.
Morse Boulger Destructor Co. (See Mann, Arthur H., assignor.)
Morse Boulger Destructor Company. (See Thompson, Samuel H., assignor.)
Morton, Edmund R. (See Stoller, H. M., and Morton.)
Mosier, Donald C., Sultan, Wash. Hair drier. 1,764,462; June 17.
Moss, Charles M., Pittsburgh, and A. J. A. Peterson, Wilkinsburg, Pa., assignors to Westinghouse Electric and Manufacturing Company. Automatic station. 1,764,332; June 17.
Moulton, Rollin H., Berwyn, Ill. Portable grease dispenser. 1,764,970; June 17.
Mueller, Charles W., assignor to Lewis Invisible Stitch Machine Company, St. Louis, Mo. Sewing-machine work support. 1,764,573; June 17.
Muffly, Glenn, Detroit, Mich, assignor to Copeland Products, Inc. Fountain head. 1,763,808; June 17.
Mulcahy, Frank J., Bay City, Mich. Obtaining central occlusion in the construction of artificial dentures. 1,764,115; June 17.
Mullaney, John F., Colorado Springs, Colo. Check valve. 1,764,521; June 17.
Mullens, John B. (See Smith, W. B., Hammons, and Mullens.)
Müller, Carl E. (See Fischer, E., and Müller.)
Muller, George J., assignor to The Home Heating Corporation, Baltimore, Md. Steam-generating apparatus. 1,764,740; June 17.
Muller, Richard O., assignor to The Terry Steam Turbine Company, Hartford, Conn. Speed-governing mechanism. 1,764,463; June 17.
Murdock, Julian H. (See Clark, E. F., and Murdock.)
Murphy, Harry J., Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Conveyer apparatus. 1,763,809; June 17.
Murray, Howard J., Brooklyn, N. Y. Resilient synchronizer. 1,764,335; June 17.
Murray, Howard J., Brooklyn, N. Y., assignor to R. M. Company, Inc., East Pittsburgh, Pa. Sliding-clutch gear synchronizer. 1,764,334; June 17.
Murray, Howard J., Brooklyn, N. Y., assignor to R. M. Company, Inc., East Pittsburgh, Pa. Sound-reproducing apparatus. 1,765,029; June 17.
Murray, Howard J., New York, N. Y., assignor to R. M. Company, Inc., East Pittsburgh, Pa. Double-clutch synchronizer. 1,764,333; June 17.
Murray Ohio Manufacturing Company, The. (See Kraeft, Herman L., assignor.)
Myers, Don D. (See Brockway, C. P., and Myers.)
Myers, Don D., Toledo, Ohio. Loose-leaf binder and manufacturing the same. 1,765,353; June 17.

Nalon, Thomas M., Ansonia, Conn., assignor, by mesne assignments, of two-thirds to E. Perez y Perez and one-third to M. Q. Lopez y Perez, Habana, Cuba. Juice strainer. 1,763,978; June 17.
Narrow Fabric Co., The. (See Huber, Otto E., assignor.)
Narusch, Joseph T., Akron, Ohio. Lighter-than-air craft. 1,764,336; June 17.
Nathansohn, Henry, Oslo, Norway. Display sign. 1,764,639; June 17.
National Airoil Burner Company. (See Ferguson, William, assignor.)
National Automatic Tool Company, The. (See Galloway, Robert M., assignor.)
National Biscuit Company. (Crossmore, Edward Y., assignor.)
National Cash Register Company, The. (See Shipley, Bernis M., assignor.)
National Cash Register Company, The. (See Von Pein, Edward J., assignor.)
National Lock Washer Company. (See Hoyt, Daniel, assignor.)
National Machinery Co., The. (See Clouse, William L., assignor.)
National Refrigeration Corporation. (See Dennison, French E., assignor.)
National Refrigeration Corporation. (See Ireland, Ward S., assignor.)
Negbaur, Harry, New York, N. Y., assignor to Wm. Demuth & Co. Bill clip. Des. 81,396; June 17.
Neils, Joseph J., Brooklyn, assignor to Foster Wheeler Corporation, New York, N. Y. Superheater boiler. 1,764,050; June 17.
Nelson, Charles G., assignor to Zouri Drawn Metals Company, Chicago Heights, Ill. Sash construction. Re17,706; June 17.
Nelson, John N., Cranston, assignor to Universal Optical Corporation, Providence, R. I. Ophthalmic mounting. Des. 81,397; June 17.
Nelson, Lewen R., Peoria, Ill. Sprinkler. 1,763,979; June 17.
Nelson, Lewen R., Peoria, Ill. Sprinkler. 1,763,980; June 17.
Nelson, N. P., Iron Works, Inc. (See Nelson, N. P., and James, assignors.)
Nelson, Nels H., Des Moines, Iowa. Window-awning construction. 1,764,881; June 17.
Nelson, Nels H., assignor to Rolscreen Company, Des Moines, Iowa. Guide track for rolling window screens. 1,764,880; June 17.
Nelson, Nels P., and F. W. James, Brooklyn, N. Y., assignors to N. P. Nelson Iron Works Inc., Passaic, N. J. Tractor attachment for feeding and elevating snow. 1,764,084; June 17.
Nenzel, Frederick C., Pittsburgh, Pa. Fluid-pressure brake. 1,764,741; June 17.
Nevins Church Press, The. (See Locke, Edwin A., jr., assignor.)
Newman, Arnold W., Alvin, Tex. Jack. 1,763,669; June 17.
Newman, William J., and J. P. Carroll, Chicago, Ill. Excavating machine. 1,763,810; June 17.
Newquist, Frederick, Essex, Iowa. Glazier's point. 1,764,882; June 17.
News Projection Corporation. (See Decker, James W., assignor.)
Niagara Metal Stamping Corporation. (See Armstrong, Elliot, assignor.)
Nichols, Charles S., and W. M. Jordan, Lincoln, Nebr. Belt buckle. 1,763,981; June 17.
Nichols, Guy R., Sanger, Calif. Linoleum-seam spreader. 1,765,240; June 17.
Nicolet, Walter, Leipzig, Germany. Weaving. 1,764,574; June 17.
Nicolet, Walter, Leipzig, Germany. Making a textile product. 1,764,575; June 17.
Nicolet, Walter, Leipzig, Germany. Weaving. 1,764,576; June 17.
Nicolet, Walter, Leipzig, Germany. Weaving fabrics. 1,764,577; June 17.
Nielsen, Emanuel, assignor to Hamilton Beach Manufacturing Company, Racine, Wis. Electric switch. 1,764,337; June 17.
Nielsen, Emanuel, assignor to Hamilton Beach Manufacturing Company, Racine, Wis. Drink mixer. 1,764,338; June 17.
Nielsen, Laurits A., Seattle, Wash. Display stand. 1,764,413; June 17.
Niles, R. B. (See Kicherer, H. J., and Niles.)
Nilson, Leonard D., Wayzata, assignor to Marquette Manufacturing Company, St. Paul, Minn. Towing dolly. 1,764,971; June 17.
Niven, Archie M., assignor to Continental Motors Corporation, Detroit, Mich. Sleeve-valve engine. 1,764,742; June 17.
Niven, Archie M., assignor to Continental Motors Corporation, Detroit, Mich. Sleeve-valve engine. 1,764,743; June 17.
Niven, Archie M., assignor to Continental Motors Corporation, Detroit, Mich. Internal-combustion engine. 1,764,744; June 17.
Niven, Archie M., assignor to Continental Motors Corporation, Detroit, Mich. Internal-combustion engine. 1,764,745; June 17.
Niven, Archie M., assignor to Continental Motors Corporation, Detroit, Mich. Sleeve-valve-actuating mechanism. 1,764,972; June 17.
Noble, Ronald B., Spokane, Wash. Pull-off mechanism for roller bearings. 1,764,116; June 17.
Noell, Elmer F., assignor to The Printing Machinery Company, Cincinnati, Ohio. Printer's registering device. 1,764,030; June 17.
Norin, Adolf. (See Hanna, J. C., and Norin.)
Norman, Noah P. (See Leindorf, E., and Norman.)
Norris, Charles B., Grand Rapids, Mich., assignor to Haskelite Manufacturing Corporation. Machine for bending panels. 1,764,464; June 17.
North and Judd Manufacturing Company. (See Freysinger, John B., assignor.)
Norton, Robert A., Crafton, assignor to The Selden Company, Pittsburgh, Pa. Purification of crude anthracene. 1,764,031; June 17.
Norton, Robert A., Crafton, assignor to The Selden Company, Pittsburgh, Pa. Hydraulic transmission fluid. 1,764,032; June 17.
Norwood, Harry G., Washington, D. C., assignor to T. F. von Dorn, New Yorn, N. Y. Railway-rail anchor. 1,765,092; June 17.
Nottage, Steuart. (See Pauly, R. C., and Nottage.)
Novelties Incorporated. (See Ostrander, William H., assignor.)
Nute, Arthur P., Seattle, Wash. Piston. 1,764,465; June 17.
Nutt, Harry G. (See Wurzbach, H. E., Wadsworth and Nutt.)
Oakes, Mary B., et al. (See Bjork, Carl, assignor.)
Oberascher, Franz, Salzburg, Austria. Device for evacuating pumps. 1,764,640; June 17.
O'Brien, Frank J., Baltimore, and W. Punte, Fullerton, Md., assignors, by mesne assignments, to Continental Can Company, Inc., New York, N. Y. Replaceable receptacle closure. 1,764,883; June 17.
O'Brien, Richard J., assignor to Waugh Equipment Company, Depew, N. Y. Journal-box cushion. 1,763,982; June 17.
O'Brien, Sidney M., Rochester, N. Y. Lifting device and lock for automobile hoods. 1,764,578; June 17.
Occhiuzzo, William, New York, N. Y. Automatic curtain tie-back. 1,763,811; June 17.
O'Connor, John F., assignor to W. H. Miner, Inc., Chicago, Ill. Tandem draft rigging. 1,763,856; June 17.
O'Connor, Thomas J., Charleston, W. Va. Transmission. 1,764,849; June 17.
Oesterle, Frank D., Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Tool. 1,764,641; June 17.
Ofenbau-Gesellschaft mit beschrankter Haftung. (See Bangert, H., and Peters, assignors.)
Ohmart, Grayston L., Detroit, Mich. Closure for containers. 1,764,973; June 17.
Ohmer Fare Register Company. (See Ohmer, John F., jr., assignor.)
Ohmer, John F., jr., assignor to Ohmer Fare Register Company, Dayton, Ohio. Penny multiple register. 1,763,718; June 17.
Oildraulic Lift Company. (See Stukenborg, Louis C., assignor.)
Olby, Odin, Ashland, Wis. Implement. 1,764,278; June 17.
Olive, Naomi S. (See Caster-Udell, Bessie, assignor.)
Olson, Carl G., assignor to Illinois Tool Works, Chicago, Ill. Hob. 1,763,983; June 17.
Olson, Peter, Oak Park, assignor to Samuel Olson & Company, Inc., Chicago, Ill. Automatic safety control for conveyers. 1,763,812; June 17.
Olson, Samuel, & Company. (See Olson, Peter, assignor.)
Oman, Carl, Swissvale, Pa., assignor to Westinghouse Electric & Manufacturing Company. Electrical measuring instrument. 1,764,339; June 17.
Oman, Carl, Swissvale, Pa., assignor to Westinghouse Electric & Manufacturing Company. Maximum-demand meter. 1,764,340; June 17.
Oneida Community, Limited. (See Allen, G. N., and Bennett, assignors.)
Oneida Community, Limited. (See Allen, G. N., and Helander, assignors.)
O'Neil, Fred, Redlands, Calif. Glove. 1,763,813; June 17.
O'Neill, Benjamin A., assignor to Schutz-O'Neill Company, Minneapolis, Minn. Pulverizing machine. 1,765,309; June 17.
Oplinger, Kirk A., Sharon, Pa., assignor to Westinghouse Electric & Manufacturing Company. Electrical transforming system. 1,764,341; June 17.
Ornamental Brass Shops. (See Truesbury, Eugene D., assignor.)
Osborn, Howard H., assignor to H. G. Fischer & Co., Chicago, Ill. Spark gap. 1,764,279; June 17.
Osgood, Frederick M., Boston, assignor to Tilton & Cook Co., Leominster, Mass. Trick egg toy. 1,763,814; June 17.
Osten, James H., White City, Kans. Post-driving head. 1,764,223; June 17.
Ostline, John E., Liverpool, England, assignor, by mesne assignments, to Associated Telephone & Telegraph Company, Kansas City, Mo. Telephone system. 1,763,901; June 17.
Ostrander, William H., assignor to Novelties Incorporated, Chicago, Ill. Cardcase. 1,763,857; June 17.

Otis Elevator Company. (See Lewis, J. D., Jones, and Schlaf, assignors.)
Otis Elevator Company. (See Pinto, Anthony, assignor.)
Ott, Arthur W., Dubuque, Iowa. Innertube for pneumatic tires. 1,765,093; June 17.
Otto, Stuart, Wilton, Conn., and L. Reichert, Brooklyn, N. Y., assignors to Gas Refrigeration Corporation, Scranton, Pa. Boiler absorber for refrigerating machines. 1,764,051; June 17.
Owen, Levi F., San Francisco, Calif. String-dispensing device. 1,765,174; June 17.
Owens Illinois Glass Company. (See Cramer, Albert N., assignor.)
Owens-Illinois Glass Company. (See Flexon, F., and Chew, assignors.)
Owens-Illinois Glass Company. (See Hewitt, Stanley L., assignor.)
Owens-Illinois Glass Company. (See La France, Richard, assignor.)
Owens-Illinois Glass Company. (See Soubier, Leonard D., assignor.)
Ozouf, Arthur E., assignor to The Allbright-Nell Company, Chicago, Ill. Meat cutting and handling apparatus. 1,764,850; June 17.
Pacific Oil Well Cementing Company. (See Dievendorff, H. H., and Barton, assignors.)
Paff, James N., Pitman, N. J. Water-cooled air and steam nozzle for gas generators. 1,764,746; June 17.
Page, Bruno, New York, N. Y. Device for squeezing fruit sections. 1,764,466; June 17.
Page Steel & Wire Company. (See Snedeker, James W., assignor.)
Pajeau, Charles H., Glencoe, assignor to The Toy Tinkers, Inc., Evanston, Ill. Flash light. 1,763,815; June 17.
Pall, Louis H., Cincinnati, Ohio. Fabric-sample binder and folding said samples. 1,764,033; June 17.
Palm, Hugo W., Pequannock, N. J. Parallel drive attachment for lawn mowers. 1,764,851; June 17.
Palm, John V. O., Cleveland Heights, assignor to The Cleveland Graphite Bronze Company, Cleveland, Ohio. Alloy. 1,764,034; June 17.
Palmenberg's, J. R., Sons, Inc. (See Candlish, William C., assignor.)
Palmer Match Company. (See Palmer, T. A., and Denmead, assignors.)
Palmer, Thomas A., and J. W. Denmead, Akron, Ohio, assignors to Palmer Match Company. Strip-printing machine. 1,764,688; June 17.
Pannier Bros. Stamp Company. (See Pannier, Oscar M., assignor.)
Pannier, Oscar M., assignor to Pannier Bros. Stamp Company, Inc., Pittsburgh, Pa. Metallic tag strip. 1,764,884; June 17.
Paper Machinery Corporation. (See Harris, James W., assignor.)
Paquette, William G., Asheville, N. C. Gas generator. 1,764,974; June 17.
Paramount Famous Lasky Corporation. (See Garbutt, F. E., and Griffith, assignors.)
Parker, Charles K., Richmond, assignor, by mesne assignments, to Standard Oil Company of California, San Francisco, Calif. Lye treatment of petroleum oils. 1,764,117; June 17.
Parkes, William N., Brooklyn, N. Y., assignor to The Singer Manufacturing Company, Elizabeth, N. J. Looptaker mechanism for sewing machines. 1,763,670; June 17.
Parlini, Alexander C., Woodside, assignor to Gotham Knitbac Machine Corporation, New York, N. Y. Knitting needle. 1,764,342; June 17.
Partlow, Howard W., Utica, N. Y. Automatic fire extinguisher. 1,764,689; June 17.
Pateman, Arthur, assignor of one-half to Imperial Typewriter Company Limited, Leicester, England. Platen-roller clutch for typewriters. 1,764,224; June 17.
Patent and Licensing Corporation, The. (See Johnston, Robert T., assignor.)
Patron, Joaquin R., Campeche, Mexico. Flash light. 1,763,902; June 17.
Patterson, William L., and G. B. Gallasch, assignors to Bausch & Lomb Optical Company, Rochester, N. Y. Microtome knife holder. 1,765,283; June 17.
Pauly, Robert C., Cincinnati, and S. Nottage, Norwood, assignors to The American Laundry Machinery Company, Cincinnati, Ohio. Clamping mechanism for pressing machines. 1,763,816; June 17.
Pease, John A., assignor to Kleen Kap Corporation, Syracuse, N. Y. Apparatus for applying bottle closures. 1,765,030; June 17.
Peck, John W., Fresno, Calif. Ditch cleaner. 1,765,031; June 17.
Peelle Company, The. (See Peelle, John W., assignor.)
Peelle Company, The. (See Peelle, Robert S., assignor.)
Peelle, John W., New York, assignor to The Peelle Company, Brooklyn, N. Y. Elevator door. 1,763,858; June 17.
Peelle, Robert S., New York, assignor to The Peelle Company, Brooklyn, N. Y. Warehouse door. 1,763,859; June 17.
Peelle, Robert S., New York, assignor to The Peelle Company, Brooklyn, N. Y. Elevator door. 1,763,860; June 17.
Peller, Karl E., West Hartford, assignor to Hartford-Empire Company, Hartford, Conn. Suction bottle machine. 1,764,805; June 17.
Pelletier, Alfred G. (See Bernier, Wilfred L., assignor.)
Peltier, Remy, Riverside, N. J. Stop light for automobiles. Des. 81,398; June 17.
Pentecost, Arthur, Montclair, N. J. Call register. 1,763,719; June 17.
Pepinster, Ernest L. H., and F. Genève, Paris, France. Carburetor. 1,765,175; June 17.
Perez y Perez, Estela, et al. (See Lopez, Miguel, assignor.)
Perez y Perez, Estela, executrix. (See Lopez, Miguel.)
Perez y Perez, Estela. (See Nalon, Thomas M., assignor.)
Perfection Stove Company. (See Chadwick, L. S., and Resek, assignors.)
Perfection Stove Company. (See Resek, Marc., assignor.)
Perkins, Jonathan, Los Angeles, Calif. Toy. 1,763,903; June 17.
Permutit Company, The. (See Hodkinson, George F., assignor.)
Persons, Charles A., assignor to Persons-Majestic Manufacturing Company, Worcester, Mass. Saddle for motor cycles and the like. 1,763,817; June 17.
Persons-Majestic Manufacturing Company. (See Persons, Charles A., assignor.)
Peru Plow & Wheel Co. (See Fogger, David I., assignor.)
Peters, Mathieu. (See Bangert, H., and Peters.)
Petersen, Nels P., Los Angeles, Calif. Slug ejector for coin machines. 1,764,579; June 17.
Peterson, Alfred J. A. (See Moss, C. McL., and Peterson.)
Peterson, Burt A., assignor to Barber-Colman Company, Rockford, Ill. Yarn carrier. 1,763,861; June 17.
Peterson, Harold O., Riverhead, N. Y., assignor to Radio Corporation of America. Direction finder. 1,764,747; June 17.
Petrelli, Joseph V., New Rochelle, N. Y. Ventilator thimble. 1,764,343; June 17.
Pfauser, Edward M., assignor to Blackhawk Mfg. Co., Milwaukee, Wis. Tool handle. 1,764,690; June 17.
Pfeifer, Ferdinand A., assignor of one-half to S. W. Waring, Springfield, Ohio. Windmill. 1,764,052; June 17.
Pfenning, Henry M., Mandan, N. Dak. Fence-post anchor. 1,764,975; June 17.
Phelan, Louis A. M., Beloit, Wis., assignor, by mesne assignments, to Time-O-Stat Controls Company, Elkhart, Ind. Thermostatic switch. 1,764,345; June 17.
Phelan, Louis A. M., and C. Hotchkiss, Beloit, Wis., assignors, by mesne assignments, to Time-O-Stat Controls Company, Elkhart, Ind. Temperature-control apparatus. 1,764,344; June 17.
Phelan, Louis A. M., Elkhart, Ind., and C. Hotchkiss, Milwaukee, Wis., assignors, by mesne assignments, to Time-O-Stat Controls Company, Elkhart, Ind. Thermally-operated circuit breaker. 1,764,346; June 17.
Philadelphia Drying Machinery Company, The. (See Sibson, W. W., and Miller, assignors.)
Philadelphia Quartz Company. (See Edgerton, Lloyd B., assignor.)
Philadelphia Storage Battery Company. (See Combs, Edward L., assignor.)
Philadelphia Storage Battery Company. (See Holland, Walter E., assignor.)
Philadelphia Thermometer Co. (See Schwartz, John L., assignor.)
Phillips, Ellis J. G., assignor to Richards-Wilcox Manufacturing Company, Aurora, Ill. Folding door. 1,764,976; June 17.
Phillips, Thomas, Eisternwick, Melbourne, Victoria, Australia. Buoyant seat or like device for aquatic purposes. 1,764,852; June 17.
Pickup, George E., assignor to The Wehrle Company, Newark, Ohio. Molding machine. 1,763,862; June 17.
Pletzsch, Albert, and G. Adolph, Solln, near Munich, Germany, assignors to Buffalo Electro-Chemical Company, Inc., Buffalo, N. Y. Alkaline oxidant and aluminum metal. 1,765,344; June 17.
Pilot Radio & Tube Corporation. (See Geloso, John, assignor.)
Pilot Ray Corporation. (See Keck, G. S., and Cronkhite, assignors.)
Pinkerton, Edward E., Chicago, Ill. Phonograph. 1,764,977; June 17.
Pinto, Anthony, New York, N. Y., assignor to Otis Elevator Company, Jersey City, N. J. Control system for elevators. 1,764,885; June 17.
Pinto, Anthony, New York, N. Y., assignor to Otis Elevator Company, Jersey City, N. J. Control system. 1,764,886; June 17.
Pioneer Suspender Company. (See Simmons, Frederick C., assignor.)
Pitman, Henry L., Westfield, assignor, by mesne assignments, to Elliott Fisher Company, New York, N. Y. Combined typewriting and computing machine. 1,764,978; June 17.
Pittsburgh Plate Glass Company. (See Raleigh, Walter P., assignor.)
Pittsburgh Steel Foundry Corporation. (See Williams, J. and McHugh, assignors.)
Placak, Harry, assignor to The G. E. Conkey Company Cleveland, Ohio. Vitamin food and producing same. 1,764,085; June 17.
Plum, John, Bridgeport, Conn. Drop keel for submarines. 1,764,979; June 17.
Podell, Peter, Co. (See Bonnat, Max P., assignor.)
Poesse, Walter H. (See Spielman, M. H., and Poesse.)
Polk, David P., and J. P. Remington, Philadelphia, Pa. Dispensing device. 1,764,642; June 17.

Pollack, Isidore, Evanston, Ill. Velvet-holding device. 1,764,691; June 17.

Poniatowski, Joseph, Huntington Park, Calif. Parachute attachment for aeroplanes. 1,765,094; June 17.

Ponton, Thomas R., Los Angeles, Calif. Floor-polishing device. 1,763,818; June 17.

Pope, Harold L., Grand Rapids, assignor to Kelvinator Corporation, Detroit, Mich. Refrigerator lining. 1,764,643; June 17.

Poplawski, Stephen J., assignor to Arnold Electric Company, Racine, Wis. Drink mixer. 1,765,095; June 17.

Portis, James A., jr., Baytown, Tex. Internal-combustion motor. 1,764,477; June 17.

Posey, Alfred W., Long Beach, assignor of one-half to J. M. Queen, Los Angeles, Calif. Safety device for rotary catheads. 1,764,887; June 17.

Potter, John C. (See Idonas, A., and Potter.)

Potterf, Albert A., Kansas City, Mo. Window-sash fastener. 1,764,118; June 17.

Pratt & Florea, Inc. (See Pratt, Lewellyn E., assignor.)

Pratt, Lewellyn E., Nutley, N. J., assignor to Pratt & Florea, Inc., New York, N. Y. Display and dispensing device. 1,764,468; June 17.

Premo, Albert F., Springfield, Mass. Sink or similar article. Des. 81,399; June 17.

Prescott, Le Roy A., assignor to Bennett Pumps Corporation, Muskegon, Mich. Illuminating device. 1,764,980; June 17.

Prescott, William E., London, England, assignor to Baker Perkins Company, Saginaw, Mich. Machine for baking wafers and the like. 1,763,720; June 17.

Prestinari, Eugen, Irvington, assignor to Gemex Company, Newark, N. J. Bracelet. Des. 81,400; June 17.

Prestinari, Eugen, Irvington, assignor to Gemex Company, Newark, N. J. Bracelet. Des. 81,401; June 17.

Pridgen, Jesse C., Norlina, N. C. Distributing attachment for harrows and the like. 1,764,853; June 17.

Primm, William N., Kenesaw, Nebr. Hog crate. 1,764,522; June 17.

Prindle, Frank P., assignor to The Stanley Works, New Britain, Conn. Scrap-bundling machine. 1,765,356; June 17.

Printing Machinery Company, The. (See Noell, Elmer F., assignor.)

Proctor & Schwartz, Incorporated. (See Gebhardt, Gustav H., assignor.)

Prosnitz, Ludwig B., assignor to Jacobus School Products Co., Inc., New York, N. Y. Inkwell closure. 1,765,284; June 17.

Prosperity Company Inc., The. (See Davis, Ernest, assignor.)

Puller, Rudolf, Berling-Siemensstadt, Germany, assignor to Westinghouse Electric & Manufacturing Company. Voltage-control system. 1,764,414; June 17.

Pullwitt, Herman P., Oak Park, assignor to McIntosh Electrical Corporation, Chicago, Ill. Electrotherapeutic machine. 1,764,347; June 17.

Punke, John J., assignor to Hupp Motor Car Corporation, Detroit, Mich. Vehicle bumper. Des. 81,402; June 17.

Punte, William. (See O'Brien, F. J., and Punte.)

Purcell, Charles H., Bloomingdale, Ind., assignor of one-half to L. O. Engle, Danville, Ill. Fencing tool. 1,765,241; June 17.

Putzel, John L., Baltimore, Md. Arch-support shoe. 1,764,523; June 17.

Pyrene Manufacturing Company. (See MacGregor, Peter G., assignor.)

Queen, James M. (See Posey, Alfred W., assignor.)

Queeney, Frank E. (See Masury, A. F., Jupp, and Queeney.)

Quipp, Carolyne H. (See Stephen, James, assignor.)

R. M. Company. (See Murray, Howard J., assignor.)

Raby, Guy, Vermont, Ill. Wheel-cleaning attachment for tractors. 1,763,984; June 17.

Racine Tool & Machine Company. (See Toohey, J. S., and Erskine, assignors.)

Raddatz, Richard. (See Rogers, H. S., and Raddatz.)

Radio Corporation of America. (See Fay, Richard D., assignor.)

Radio Corporation of America. (See Karolus, August, assignor.)

Radio Corporation of America. (See Peterson, Harold O., assignor.)

Radio Corporation of America. (See Roberts, Walter Van B., assignor.)

Radio Frequency Laboratories, Incorporated. (See Drake, Frederick H., assignor.)

Radio Frequency Laboratories, Incorporated. (See Hull, Lewis M., assignor.)

Raetz, Stephen J., and W. J. Greene, Proctor, Minn. Safety valve for injector overflow. 1,764,181; June 17.

Raleigh, Walter P., Ames, Iowa, assignor to Pittsburgh Plate Glass Company. Disinfecting seeds. 1,764,888; June 17.

Ramage, John H., Bloomfield, N. J., assignor to Westinghouse Lamp Company. Thoriated tungsten filament. 1,764,644; June 17.

Rampacher, Fritz, Berlin-Charlottenburg, Germany, assignor to Westinghouse Electric & Manufacturing Company. Locomotive drive mechanism. 1,764,348; June 17.

Randall, Meredith S. (See Woodall, H. J., and Randall.)

Raphael, Sylvester, Brooklyn, assignor to Just Right Lock Company, New York, N. Y. Fastening device. 1,765,345; June 17.

Rastetter, William C., Fort Wayne, Ind. Folding table. 1,763,671; June 17.

Raviglione, Eugenio, Turin, Italy. Abstract-card system or index. 1,764,580; June 17.

Rawlings Manufacturing Company. (See Whitley, William P., assignor.)

Rawlins, Rufus B., El Paso, Tex. Booth. Des. 81,403; June 17.

Rawson, Leslie A., assignor to Emsco Derrick & Equipment Company, Los Angeles, Calif. Strut-type-base construction. 1,764,182; June 17.

Ray, Charles T., assignor to B. F. Avery & Sons, Louisville, Ky. Draft mechanism. 1,764,086; June 17.

Raymond, William I., Portland, Oreg. Mole and gopher trap. 1,764,225; June 17.

Raynor, Charles W. (See Barker, Harry B., assignor.)

Raynor, John S., Holmesburg, Pa. Solid-wall construction. 1,764,748; June 17.

Reading Sheet Metal Products Co. (See Van de Mark, Eugene S., assignor.)

Reavis, Winfred E., Los Angeles, Calif. Locking means for assembled types. 1,764,119; June 17.

Reber, James B., assignor to Columbian Rope Company, Auburn, N. Y. Apparatus for making combined paper and fiber cordage. 1,764,524; June 17.

Redmond, Harold A., assignor to H. J. Hater, Cincinnati, Ohio. Mold. 1,764,889; June 17.

Reed, Clarence E., Wichita, Kans., assignor to Chicago Pneumatic Tool Company, New York, N. Y. Deep-well-drilling apparatus. 1,764,854; June 17.

Reed, Edwin W., and A. Werme, assignors to Reed and Prince Manufacturing Company, Worcester, Mass. Rolled-thread wood screw. 1,764,053; June 17.

Reed, F. E., Glass Company. (See Thomas, Allen B., assignor.)

Reed, Francis O., Paris, Tex. Aeroplane. 1,763,819; June 17.

Reed and Prince Manufacturing Company. (See Reed, E. W., and Werme, assignors.)

Regal Shoe Company. (See White, William H., assignor.)

Regenstreif, Jakob, Berlin, Germany, assignor to General Electric Company. Filament-mounting machine. 1,765,357; June 17.

Rehfuss, Louis A., Philadelphia, Pa. Locomotive boiler and fire box. 1,764,981; June 17.

Reich, George, and H. R. Le Grand, Corydon, Ind. Toy. 1,764,982; June 17.

Reichel, Walter, Berlin-Lankwitz, assignor to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany. Attaching laminated sheet-metal rings. 1,764,890; June 17.

Reichelderfer, Wilton F. (See Hufnagle, O. C., and Reichelderfer.)

Reichert, Ludwig. (See Bruehl, L., and Reichert.)

Reichert, Ludwig. (See Otto, S., and Reichert.)

Reid, Wilfrid T., St. Laurent, Quebec, assignor to Curtiss-Reid Aircraft Company Limited, Montreal, Quebec, Canada. Operating alighting gear brakes. 1,763,985; June 17.

Reilly, Peter C. (See Derby, I. H., and Cunningham, assignors.)

Reimer, Otto E., Elm Springs, S. Dak. Disk-harrow seeder attachment. 1,765,176; June 17.

Reingold, Meyer, Brooklyn, N. Y. Waterproof overalls. 1,765,096; June 17.

Reiter, Casper, Berlin, Germany, assignor to General Electric Company. Lamp bulb. 1,765,242; June 17.

Reliance Manufacturing Company. (See Champion, John W., assignor.)

Remington Arms Company. (See Fuller, Frederick L., assignor.)

Remington Arms Company. (See Green, Charles W., assignor.)

Remington Arms Company. (See Gregory, Harry W., assignor.)

Remington Arms Company. (See La Forest, Louis Z., assignor.)

Remington Arms Company. (See Loomis, Crawford C., assignor.)

Remington Arms Company. (See Loomis, Oliver H., assignor.)

Remington, Joseph P. (See Polk, D. P., and Remington.)

Remington Rand Inc. (See Landsiedel, Walter W., assignor.)

Remington Rand Inc. (See Lasker, William W., assignor.)

Rennack, Paul A., Genesee Depot, Wis. Leg-holding casting. 1,764,226; June 17.

Replogle, John R., assignor, by mesne assignments, to Kelvinator Corporation, Detroit, Mich. Refrigerating apparatus. 1,764,645; June 17.

Replogle, John R., assignor, by mesne assignments, to Kelvinator Corporation, Detroit, Mich. Control mechanism for mechanical refrigerating apparatus. 1,764,749; June 17.

Resek, Marc. (See Chadwick, L. S., and Resek.)

Resek, Marc, Cleveland Heights, assignor to Perfection Stove Company, Cleveland, Ohio. Starting burner for retort stoves. 1,763,672; June 17.

Resek, Marc, Cleveland Heights, assignor to Perfection Stove Company, Cleveland, Ohio. Refrigerator. 1,763,673; June 17.

Resek, Marc, Cleveland Heights, assignor to Perfection Stove Company, Cleveland, Ohio. Automatic heat regulator. 1,763,721; June 17.

Reserve Holding Company. (See Gould, Roy F., assignor.)

Rex-Watson Corporation. (See Moore, John T., assignor.)

Reynolds, Frank A., Lowell, Mass., assignor, by mesne assignments, to Lowell Machine Company. Continuous fruit-cutting and seed-celling machine. 1,765,310; June 17.

Reynolds, Ralph W. (See Anthony, Leon P., assignor.)

Reynolds Spring Company, The. (See Lovell, Clarence V., assignor.)

Reynolds Spring Company. (See McElroy, Robert E., assignor.)

Reynolds Spring Company. (See Wisner, Abram C., assignor.)

Rhea, George F., Greeneville, Tenn. Wire and pick holder for florists. 1,763,986; June 17.

Rheinische Metallwaaren- und Maschinenfabrik. (See Schüler, H., and Herlach, assignors.)

Rhinevault, Glenn G., assignor to W. B. Mershon Co., Saginaw, Mich. Guide for bandsaws. 1,764,183; June 17.

Riblet, Byron C., Spokane, Wash. Cable grip. 1,764,469; June 17.

Ricard, Eloi, Melle, France, assignor, by mesne assignments, to U. S. Industrial Alcohol Co., New York, N. Y. Dehydration of impure ethyl alcohol. 1,763,722; June 17.

Rice, Charles A., Dunnegan, Mo. Shifting-shovel cultivator gang. 1,765,177; June 17.

Richard, William E. (See Brackett, W. A., and Richard.)

Richards-Wilcox Manufacturing Company. (See Phillips, Ellis J. G., assignor.)

Richards, William F., Mason, Mich., assignor to The Laboratory Products Company, Cleveland, Ohio. Baffle. 1,764,983; June 17.

Richardson, Myron H., and A. D. Antoine, assignors to Advance Machine Company, Chicago, Ill. Vending machine. 1,763,723; June 17.

Richheimer, Isaac D., New York, N. Y. Coffee-making apparatus. 1,763,863; June 17.

Richmond, Leon H., Fort H. G. Wright, N. Y. Seasoning condensers. 1,765,032; June 17.

Richter, Hans, Vienna, Austria. Elastic or resilient connecting member. 1,764,750; June 17.

Rick, Erich H., Kiel, Wis. Highway-crossing barrier. 1,765,178; June 17.

Ric-Wil Company, The. (See Gottwald, Christian, assignor.)

Riesner, Michael, Cincinnati, Ohio, assignor to Worthington Pump and Machinery Corporation, New York, N. Y. Variable-capacity compressor. 1,764,646; June 17.

Riker, Samuel M., Chester, N. J. Shoe ornament. Des. 81,404; June 17.

Riker, Samuel M., Chester, N. J. Shoe ornament. 81,405; June 17.

Riker, Samuel M., Chester, N. J. Shoe ornament. 81,406; June 17.

Riley, Lynn G., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Control apparatus. 1,764,415; June 17.

Riley Stoker Corporation. (See Grahame, Dallas F., assignor.)

Robbins, Percy A., Highland Park, Ill. Sound-reproducing mechanism. 1,764,120; June 17.

Roberts, Fred G. (See Baker, W. E. B., and Roberts.)

Roberts, Walter Van B., Princeton, N. J., assignor to Radio Corporation of America. Superheterodyne receiver. 1,764,751; June 17.

Robertson, Edwin A., Lake Wawasee, assignor to Wayne Company, Fort Wayne, Ind. Pump plunger. 1,765,097; June 17.

Robertson, Elmer K., Louisville, Ky., assignor to Standard Sanitary Manufacturing Company. Sink strainer. 1,763,864; June 17.

Robeson-Rochester Corporation. (See Strauss, Herman M. A., assignor.)

Robinson, Douglas G., Weymouth, England. Electric coupling member. 1,764,227; June 17.

Robinson, Jacob J., Washington, D. C. Liquid-dispensing device. 1,764,525; June 17.

Robinson, Lula H., Dallas, Tex. Machine for cutting doughy substances. 1,765,285; June 17.

Robison, Merle, Detroit, Mich., assignor to Westinghouse Electric & Manufacturing Company. Control system. 1,764,349; June 17.

Rocamora, Fermin, Sabadell, Spain. Machine for cleaning, improving, and softening wool and other textile materials. 1,764,892; June 17.

Rocke, John, Bloomington, Ill. Gearing for washing machines. 1,763,865; June 17.

Rodd, Edgar, Chicago, Ill., and J. H. Ebel, Mahwah, N. J., assignors to R. Hoe & Co. Inc., New York, N. Y. Wax-matrix black-leading machine. 1,763,866; June 17.

Rodemeyer, Harry, assignor to Barnes-Gibson-Raymond Co. Inc., Detroit, Mich. Grinding apparatus and method. 1,763,820; June 17.

Röders, Wilhelm, jr., Soltau-Hannover, Germany. Tensioning spring. 1,765,179; June 17.

Rodger, John, East Lansdowne, Pa. Clutch check. 1,764,752; June 17.

Rodman, Clarence J., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Breathing attachment. 1,764,350; June 17.

Roesen, Oscar C., Brooklyn, N. Y. Taxicab indicator. 1,763,821; June 17.

Rogers, Homer S., and R. Raddatz, assignors to Combustion Fuel Oil Burner Company, Milwaukee, Wis. Oil-burning apparatus. 1,764,984; June 17.

Rogers, John V. (See Colvin, F. S., and Rogers.)

Roiscreen Company. (See Nelson, Nels H., assignor.)

Romero, Antonio S., Santurce, Porto Rico. Fountain pen. 1,764,470; June 17.

Rondolin, Laurent, Bermondsey, London, assignor to L. Rondolin and Peek Frean & Company, Limited, London, England. Machine for cutting biscuits from dough. 1,764,280; June 17.

Rondolin, Laurent, and Peek Frean & Company. (See Rondolin, Laurent, assignor.)

Rooke, Robert M., jr., Jersey City, N. J., assignor to Air Reduction Company, Incorporated, New York, N. Y. Rail-cutting appliance. 1,764,471; June 17.

Roozendaal, Siegfried J., Cologne-on-the-Rhine, Germany. Repairing damaged spots in fabrics. 1,765,098; June 17.

Roper, Geo. D., Corporation. (See Hobson, Stanley H., assignor.)

Roscoe, Robert, Clarendon Hills, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Heat-treating apparatus. 1,764,647; June 17.

Rosen, Abraham W., New York, N. Y. Device for supporting articles on tires or the like. 1,765,099; June 17.

Rosen, Samuel, et al. (See Dearmann, James, assignor.)

Rosenblatt, Abraham I., Brooklyn, and G. H. Webb, Glendale, N. Y. Jewelry pin, tongue, and catch. 1,763,933; June 17.

Rosenfeld, Edward L., Cleveland Heights, assignor to The Grabler Manufacturing Company, Cleveland, Ohio. Bag holding and filling device. 1,765,346; June 17.

Rosenthal, Ambrose H., Brooklyn, N. Y. Collapsible container. 1,763,724; June 17.

Rosenthal, Henry S. (See Unker, I., and Rosenthal.)

Ross, Albert S., Dallas, Tex. Slug ejector. 1,764,985; June 17.

Ross, David N., assignor to David N. Ross, Incorporated, Indianapolis, Ind. Securing name plates. 1,763,674; June 17.

Ross, David N., Incorporated. (See Ross, David N., assignor.)

Ross, Samuel E. (See Scott, B. H., and Ross.)

Rotex Engineering Company. (See Jones, W. N., and Humphreys, assignors.)

Rothermund, Werner F., Keyport, N. J. Engine starter. 1,764,893; June 17.

Rothmann, Gerhard, Herne, Germany. Working piston for high-speed reciprocating compressors. 1,764,526; June 17.

Rouse, Chester W., Hopkinton, Iowa. Apparatus for washing and drying utensils. 1,763,904; June 17.

Rouse, Elmer R., Rolfe, Iowa. Adjustable belt pulley. 1,764,855; June 17.

Rowan, Edward. (See Craigo, John M., assignor.)

Rowe, Edgar E., Chicago, Ill., assignor to United Shoe Machinery Corporation, Paterson, N. J. Machine for shaping shoe uppers. 1,763,822; June 17.

Rowe, T. B., and Company. (See Charlton, Arthur H., assignor.)

Rowland, Charles L., assignor to American Welding Company, Carbondale, Pa. Welding machine. 1,763,867; June 17.

Rowley, Arthur C., assignor to Globe Automatic Sprinkler Company, Philadelphia, Pa. Fusible link. 1,765,243; June 17.

Rowley, Edward G., Belleville, N. J., assignor to Underwood Elliott Fisher Company, New York, N. Y. Typewriting machine. 1,764,416; June 17.

Royal Railway Improvements Corporation. (See Sauvage, William H., assignor.)

Royal Robes Co. (See Horowitz, Samuel, assignor.)

Royalty Holding Corporation. Hasselbring, John, jr., assignor.)

Rubenstein, Gustave D., Brooklyn, assignor to Indestructible Pearl Bead Makers, Inc., New York, N. Y. Ash tray. 1,764,692; June 17.

Rudmick, Paul. (See Hershman, Paul R., assignor.)

Rudzinski, John T., New York, N. Y. Hip-reducing garment. 1,760,984; June 17.

Rupe, William B., Louisville, Ky. Broom. 1,764,527; June 17.

Rupp, Louis C. (See Schmitz, I. W., and Rupp.)

Rusell, Alexander C., New York, N. Y. Fountain shaving brush. 1,763,905; June 17.

Ruskin, Simon L. (See Silberman, David, assignor.)

Russell Manufacturing Company, The. (See Zimmerer, Frederick J., assignor.)

Rutter, Argyle R., East Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Electrical measuring instrument. 1,764,351; June 17.

Rutter, Joseph E., Fort Lee, N. J. Furnace for burning liquid fuel. 1,764,528; June 17.

Rutter, Joseph E., Fort Lee, N. J. Furnace for burning liquid fuel. 1,764,529; June 17.

Ryder, Forest C., Elgin, Oreg. Automobile glare shield. 1,764,856; June 17.

Saccoccia, Nicolas, Cranston, assignor to Fulford Mfg. Co., Providence, R. I. Fastener. 1,764,806; June 17.

Sacerdote, Guido M., New York, N. Y. Dispensing container. 1,764,352; June 17.
Sächsische Metallwaren fabrik August Wellner Söhne, Aktiengesellschaft. (See Vogelsang, Fritz, assignor.)
St. John, Everett. (See Fish, L. B., and St. John.)
St. Louis Butcher's Supply Co. (See Kohl, Charles A., assignor.)
St. Regis Paper Company. (See Lilly, Scott H. and G. E., assignors.)
Salazar, Antonio J., San Francisco, Calif. Vehicle signal. 1,764,121; June 17.
Salisbury, Hervey M., Walnut Grove, and A. E. Miller, Sacramento, Calif. Variable-area wing structure for airplanes. 1,764,122; June 17.
Saltzman, Joseph, Chicago, Ill. Cushion pad for foot treadles. 1,763,987; June 17.
Sampson, George. (See Gordon, G. N., and Sampson.)
Sander, Paul, Chemitz, Germany. Endless pattern band for textile machinery. 1,765,286; June 17.
Sansone, Frank, New Orleans, La. Cushion heel. 1,764,353; June 17.
Sarkisian, Carapiet D., Ciubad, Juarez, Mexico. Doorlock. 1,764,807; June 17.
Sarkisian, Dickran M., Forest Hills, N. Y. Drapery support. 1,764,891; June 17.
Satow, Teikichi, Tokyo, Japan. Preparing colloidal silver. 1,764,417; June 17.
Sautai, Pierre E. M. J., Amiens, France. Automatically-variable-speed fan for motor cars. 1,764,054; June 17.
Sauvage, William H., assignor, by mesne assignments, to Royal Railway Improvements Corporation, New York, N. Y. Regulator for brake rigging. 1,764,228; June 17.
Savage, David P., Sydney, New South Wales, Australia. Internal-combustion engine. 1,764,530; June 17.
Savidge, Albert C., Indianapolis, Ind. Valve-seat reamer. 1,764,184; June 17.
Sawyer, Charles B., Cleveland Heights, assignor to The Brush Laboratories Company, Cleveland, Ohio. Thermostat cartridge. 1,764,087; June 17.
Sawyer, Charles B., Cleveland Heights, assignor, by mesne assignments, to The Cleveland Trust Company, Cleveland, Ohio. Cutting sections of piezo crystals. 1,764,088; June 17.
Schaap, Walter P., St. Louis, Mo. Can opener. 1,764,648; June 17.
Schade, Paul. (See Kurda, K., and Schade.)
Schaper, Harry C., assignor to Schaper Scale Company, St. Louis, Mo. Scale bearing. 1,764,649; June 17.
Schaper Scale Company. (See Schaper, Harry C., assignor.)
Schellentrager, Eugene W., Shaker Heights, and B. E. Clarkson, assignors to Atlas Bolt & Screw Company, Cleveland, Ohio. Battery-handling apparatus. 1,764,354; June 17.
Schellentrager, Eugene W., Shaker Heights, and B. E. Clarkson, assignors to Atlas Bolt & Screw Company, Cleveland, Ohio. Battery-handling method. 1,764,355; June 17.
Schenck, John F., sr. (See Wright, W. C., and Schenck.)
Schenkein, Samuel M. (See Gray, A. E. N., and Schenkein.)
Scherz, Louis, Wilkes-Barre, Pa. Direction signal for motor vehicles. 1,765,100; June 17.
Schiano, Salvatore, Brooklyn, N. Y. Perfume-vending machine. 1,764,693; June 17.
Schierenbeck, John, Albany, N. Y. Submarine salvaging apparatus. 1,765,101; June 17.
Schlaf, Arthur H. (See Lewis, J. D., Jones, and Schlaf.)
Schlesinger, Harry, Des Moines, Iowa. Plait-holding apparatus. 1,764,808; June 17.
Schloemann Aktiengesellschaft. (See Löwy, Ludwig, assignor.)
Schlotz, Elmer E., Denver, Colo. Illusion apparatus. 1,764,356; June 17.
Schmid, August W., Connersville, Ind. Pull-tight molding. 1,764,531; June 17.
Schmidt, Arthur L., Baldwin Park, Calif. Grass-cutting device. 1,765,288; June 17.
Schmidt, Wilhelm, Peine, assignor to the firm Gebr. Karges, Brunswick, Germany. Transporting vessel. 1,763,823; June 17.
Schmitz, Fred A., assignor to The Just Manufacturing Company, Canton, Ohio. Game board. Des. 81,407; June 17.
Schmitz, Fred A., assignor, by mesne assignments, to The Berger Manufacturing Company, Canton, Ohio. Casing for boilers and the like. 1,764,281; June 17.
Schmitz, Isabelle W., Los Angeles, Calif., and L. C. Rupp, Bisbee, Ariz. Ornamental hand bell. 1,764,532; June 17.
Schnaier, Milton, New York, N. Y. Frozen confectionery. 1,764,282; June 17.
Schneider, George A. (See Steinhauer, Fritz P., assignor.)
Schnell, William, assignor to Ternstedt Manufacturing Company, Detroit, Mich. Rear corner light for vehicle bodies. 1,763,824; June 17.
Schoen, August C., Lansdale, Pa. Stocking-inspecting device. 1,764,986; June 17.
Schramm, Albert O., St. Louis, Mo., assignor, by mesne assignments, to The American Laundry Machinery Company, Cincinnati, Ohio. Laundry drier. 1,763,676; June 17.
Schramm, Albert O., and J. H. Schreiber, St. Louis, Mo., assignor, by mesne assignments, to The American Laundry Machinery Company, Cincinnati, Ohio. Nap-raising machine. 1,763,675; June 17.
Schramm, Carl, West Hartford, and E. W. Clark, assignors to The Smyth Manufacturing Company, Hartford, Conn. Casing-in machine. 1,765,349; June 17.
Schramm, Walter H., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Insulator. 1,764,418; June 17.
Schramm, Walter H., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Insulator. 1,764,419; June 17.
Schreiber, John H. (See Schramm, A. O., and Schreiber.)
Schroder, George H., Oakland, Calif. Clamping tongs for shoe repairing. 1,764,533; June 17.
Schrum, Chris, Lincoln, Nebr. Tire-valve-core-vending machine. 1,765,180; June 17.
Schüler, Hermann, and F. Herlach, Dusseldorf, assignors to Rheinische Metallwaaren-und Maschinenfabrik, Dusseldorf-Derendorf, Germany. Gun mounted on a wheel carriage. 1,763,988; June 17.
Schultz, Joseph B., Cleveland, Ohio. Nonslipping wrench. 1,764,990; June 17.
Schumacher, John, Los Angeles, Calif. Applying edge-covering strips to plaster board. 1,764,123; June 17.
Schumaker, Lorraine J., Philadelphia, Pa. Ice-cream cone. Des. 81,408; June 17.
Schutz-O'Neill Company. (See O'Neill, Benjamin A., assignor.)
Schwartz, Carl, Detroit, Mich. Change-making machine. 1,764,357; June 17.
Schwartz, John L., assignor to Philadelphia Thermometer Co., Philadelphia, Pa. Pocket thermometer. 1,764,987; June 17.
Schwein, Bruce, Turon, Kans. Screen bracket for automobile windows and the like. 1,765,244; June 17.
Schwerin, Frank H., Bellevue Borough, assignor to The Duff-Norton Manufacturing Company, Pittsburgh, Pa. Lifting jack. 1,764,472; June 17.
Schwerin, Frank H., Bellevue Borough, assignor to The Duff-Norton Manufacturing Company, Pittsburgh, Pa. Motor-operated jack. 1,764,988; June 17.
Schwindt, Christian J. (See John, K. B., Coslow, and Schwindt.)
Schylander, John F., Chicago, Ill. Lock. 1,764,056; June 17.
Schylander, John F., assignor to J. R. Kline, Chicago, Ill. Centrifugal switch. 1,764,055; June 17.
Scintilla A. G. (See Steiner, Gottlieb, assignor.)
Scofield, Virgil A., Cohise, Ariz. Needle threader. 1,765,102; June 17.
Scott, Bernard H., Glendale, and S. E. Ross, Long Beach, assignors to Scott-Ross and Company, Los Angeles, Calif. Liquid pump. 1,764,473; June 17.
Scott, George M., Tulsa, Okla. Piston. 1,765,103; June 17.
Scott, Holland S., St. Paul, Minn. Case for phonograph records. 1,764,754; June 17.
Scott, James W., Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Electrolytic system. 1,764,650; June 17.
Scott, John P., Pittsburgh, Pa. Flag holder. 1,765,245; June 17.
Scott, Murray R., assignor to Bansch & Lomb Optical Co., Rochester, N. Y. Optical glass. 1,765,287; June 17.
Scott, Orville O., Houston, Tex. Falsework clamp. 1,763,677; June 17.
Scott-Ross and Company. (See Scott, B. H., and Ross, assignors.)
Scott-Ross and Company. (See Yungling, Paul F., assignor.)
Scudder, Charles J., et al, executors. (See Janeway, Jacob J.)
Scullin Steel Co. (See Doerr, Harry E., assignor.)
Scullin Steel Co. (See Dreibuss, Harry C., assignor.)
Seagren, John, Beloit, Wis., assignor to Fairbanks Morse & Co., Chicago, Ill. Fluid-compressing means. 1,764,753; June 17.
Sealey, Percy T., Grand Rapids, assignor to Kelvinator Corporation, Detroit, Mich. Refrigerator-gasket mold. 1,764,857; June 17.
Seattle Astoria Iron Works. (See Troyer, N., and Mero, assignors.)
Seegmuller, Jules, Strasbourg, France. Electric meat and like roaster. 1,765,247; June 17.
Segal Automatic Tweezer Corporation. (See Segal, Samuel, assignor.)
Segal Lock & Hardware Co. (See Segal, Samuel, assignor.)
Segal, Samuel, New York, N. Y. Lock. 1,764,895; June 17.
Segal, Samuel, assignor to Segal Automatic Tweezer Corporation, New York, N. Y. Lighter. 1,764,896; June 17.
Segal, Samuel, assignor to Segal Automatic Tweezer Corporation, New York, N. Y. Lighter. 1,764,897; June 17.
Segal, Samuel, assignor to Segal Lock & Hardware Co., Inc., New York, N. Y. Lock. 1,764,898; June 17.
Selden Company, The. (See Jaeger, Alphons O., assignor.)
Selden, Company, The. (See John, K. B., Coslow, and Schwindt, assignors.)
Selden Company, The. (See Norton, Robert A., assignor.)
Selector Corporation, The. (See Wurzbach, H. E., Wadsworth, and Nutt, assignors.)

Semet-Solvay Engineering Corporation. (See Steere, Frank W., assignor.)
Sentry Safety Control Corporation. (See Cohen, Joseph E., assignor.)
Serota, Samuel, Ossining, N. Y. Ornamental cigarette and cigar holder and the like article and making same. 1,764,694; June 17.
Séry, Claude, Aix-en-Provence, assignor to Société à Responsabilité Limitée "Etablissements Rotatiss," Paris, France. Circular-weaving loom. 1,765,246; June 17.
Sethness, C. H. (See Hershman, Paul R., assignor.)
Sethness, C. O. (See Hershman, Paul R., assignor.)
Sexton Mfg. Company. (See Bowman, Louis G., assignor.)
Shackleton, William. (See Hammond, Cecil F., assignor.)
Shakeproof Lock Washer Company. (See Hosking, Richard T., assignor.)
Shallock, Edward W., assignor to American Ore Reclamation Company, Chicago, Ill. Sintering machine. 1,764,695; June 17.
Shallock, Edward W., assignor to American Ore Reclamation Company, Chicago, Ill. Sintering machine. 1,764,696; June 17.
Shannon, Meldrum D., Sacramento, Calif. Preparing pavement composition. 1,764,534; June 17.
Shapiro, Edward, Chelsea, Mass. Ice-cream cone. Des. 81,410; June 17.
Sharp, John E. (See Andersen, E. F., and Sharp.)
Shawmut Engineering Company. (See Hathaway, Edgar F., assignor.)
Shearer, John P., Newark, N. Y. Folding paper boxes. 1,765,104; June 17.
Shelgren, Walter F., Bradford, Pa. Vanity case. 1,765,033; June 17.
Shepard, James A., assignor to Shepard-Niles Crane & Hoist Corporation, Montour Falls, N. Y. Crane hoist. 1,765,347; June 17.
Shepard-Niles Crane & Hoist Corporation. (See Shepard, James A., assignor.)
Sheppard, Samuel E., and E. P. Wightman, assignors to Eastman Kodak Company, Rochester, N. Y. Photographic light-sensitive material and making same. 1,763,989; June 17.
Sheppard, Samuel E., and E. P. Wightman, assignors to Eastman Kodak Company, Rochester, N. Y. Photographic light-sensitive material and making same. 1,763,990; June 17.
Shibuya, Sojiro F., San Francisco, Calif. Angle trisector. 1,764,581; June 17.
Shields, Henry B., Freeport, assignor to International Motor Company, New York, N. Y. Brake system for six-wheel drives. 1,763,868; June 17.
Shipley, Bernis M., assignor to The National Cash Register Company, Dayton, Ohio. Cash register. Des. 81,411; June 17.
Shippee, Charles W., Boston, Mass. Automobile headlight. 1,764,474; June 17.
Shlager, Abraham E. and L., and B. M. Groisser, Boston, Mass. Clamp. 1,764,697; June 17.
Shlager, Abraham E. and L., and B. M. Groisser, Boston, Mass. Stair construction. 1,764,698; June 17.
Shlager, Louis. (See Shlager, Abraham E. and L., and Groisser.)
Sibson, Walter W., and T. J. Miller, assignors to The Philadelphia Drying Machinery Company, Philadelphia, Pa. Fabric-treating machine. 1,764,089; June 17.
Siebs, William H., Floral Park, N. Y. Valve. 1,764,991; June 17.
Siegfried, Rudolf. (See Kent, G. C., and Siegfried.)
Siemens & Halske Aktiengesellschaft. (See Waschnack, Adolf, assignor.)
Siemens Schuckertwerke Aktiengesellschaft. (See Elsässer, Robert, assignor.)
Siemens-Schuckertwerke Aktiengesellschaft. (See Riechel, Walter, assignor.)
Sifton, Clifford, Toronto, Ontario, Canada. Variable-speed transmission. Re17,704; June 17.
Signell, Carl A. and O., Jamestown, N. Y. Drill. 1,764,989; June 17.
Signell, Otto. (See Signell, Carl A. and O.)
Signode Steel Strapping Company. (See Treat, Sidney W., assignor.)
Silberman, David, assignor to Simon L. Ruskin, trustee, New York, N. Y. Stitchless hook tape. 1,765,181; June 17.
Simmon, Hans, Vienna, Austria. Apparatus for exchange of heat. 1,764,535; June 17.
Simmons, Frederick C., Highland Park, Pa., assignor to Pioneer Suspender Company. Finishing wheel. 1,764,651; June 17.
Simola, Emil, and S. F. Smokes, South Ozone Park, N. Y. Mixing implement. 1,764,699; June 17.
Simpson, Emory G. (See Field, H. C., and Simpson.)
Singer Manufacturing Company ,The. (See Parkes, William N., assignor.)
Sinko, John, Chicago, Ill. Mounting for cigar lighters. 1,764,899; June 17.
Skinner, Bertha B., Chicago, Ill. Garment. 1,765,105; June 17.
Skreen, Orlando O., Minneapolis, Minn. Device for introducing water into engine cylinders. 1,764,755; June 17.
Slaten, Albert, Minneapolis, Minn. Faucet. 1,765,106; June 17.
Slee, Robert W., Three Rivers, Mich. Automobile creeper. 1,764,756; June 17.
Slee, Robert W., Lansing, Mich. Auto creeper. 1,764,757; June 17.
Slining, Henry G., Walnut Park, Calif. Lawn sprinkler. 1,764,758; June 17.
Small, Bertram A., Chicago, Ill., assignor of one-third to W. D. Thompson, Racine, Wis. Tire-chain-applying device. 1,763,906; June 17.
Smart, Joseph F., assignor to Landers, Frary & Clark, New Britain, Conn. Device for indicating cooking temperatures of waffle irons and the like. 1,763,991; June 17.
Smiley, Edwin, Penfield, Pa. Furnace structure. 1,764,475; June 17.
Smith, Albert W., Lakewood, Ohio. Dishwasher. 1,763,992; June 17.
Smith, Charles F., New Britain, and S. J. Helweg, Hartford, assignors to Landers, Frary & Clark, New Britain, Conn. Washing machine. 1,764,476; June 17.
Smith & Crosby. (See Gammell, O. L., and Woodward, assignors.)
Smith, Elijah H., Morgantown, W. Va. Dresser. 1,764,229; June 17.
Smith, Elmer H., assignor to Endicott Johnson Corporation, Endicott, N. Y. Machine for scrubbing and oiling leather. 1,764,809; June 17.
Smith, Frank E., Billingham, Stockton-on-Tees, assignor to Imperial Chemical Industries Limited, London, England. Automatic regulator. 1,764,536; June 17.
Smith, Franklin S., Brooklyn, N. Y. Ash receiver. 1,763,678; June 17.
Smith, George L., Boston, Mass. Radiator shield. 1,764,759; June 17.
Smith, Harry B., Brooklyn, N. Y., assignor, by mesne assignments, to Hoague-Sprague Corporation, Lynn, Mass. Machine for making paper-box blanks and boxes. 1,764,358; June 17.
Smith, Jesse A. B., Stamford, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y. Typewriting machine. 1,764,900; June 17.
Smith, Nelson K., Los Angeles, assignor to Byron Jackson Co., West Berkeley, Calif. Pipe tong. 1,764,124; June 17.
Smith, Oscar, Jump River, Wis. Banking plow for snow fencing. 1,763,825; June 17.
Smith, Walter R., W. M. Hammons, and J. B. Mullens, Corbin, Ky. Safety appliance for air-brake systems. 1,764,359; June 17.
Smith, Walter E., Warwick Downs, assignor to C. G. King & Co., Inc., Providence, R. I. Shoe buckle. Des. 81,412; June 17.
Smith, Walter E., Warwick Downs, assignor to C. G. King & Co., Inc., Providence, R. I. Shoe buckle. Des. 81,413; June 17.
Smith, Walter E., Warwick Downs, assignor to C. G. King & Co., Inc., Providence, R. I. Shoe buckle. Des. 81,414; June 17.
Smith, Walter E., Warwick Downs, assignor to C. G. King & Co., Inc., Providence, R. I. Shoe ornament. Des. 81,415; June 17.
Smith, Walter E., Warwick Downs, assignor to C. G. King & Co., Inc., Providence, R. I. Shoe ornament. Des. 81,416; June 17.
Smith, Walter E., Warwick Downs, assignor to C. G. King & Co., Inc., Providence, R. I. Shoe buckle. Des. 81,417; June 17.
Smith, Walter E., Warwick Downs, assignor to C. G. King & Co., Inc., Providence, R. I. Shoe ornament. Des. 81,418; June 17.
Smith, Walter H., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Control apparatus. 1,764,420; June 17.
Smith, William O. (See McDonald, A., and Smith.)
Smith, William S. (See Gercich, F. A., and Smith.)
Smokes, Stanley F. (See Simola, E., and Smokes.)
Smyth Manufacturing Company, The. (See Schramm, C., and Clark, assignors.)
Smyth, William H., Berkeley, Calif. Cushion-tire track layer tractor. 1,763,826; June 17.
Snarry, John W., assignor to The Gear Grinding Company Limited, Birmingham, England. Trimming mechanism for grinding wheels. 1,764,901; June 17.
Snedeker, James W., Adrain, Mich., assignor to Page Steel & Wire Company. Chain hoist. 1,764,421; June 17.
Snow, Norman L., New Canaan, Conn., assignor to Diamond Power Specialty Corporation, Detroit, Mich. Boiler cleaner. 1,765,311; June 17.
Snyder, Clifford L., assignor to The Evans Auto Loading Co. Inc., Detroit, Mich. Tie-bar hanger. 1,765,107; June 17.
Soabar Company. (See Henry, G. W., jr., and Thackeray, assignors.)
Société à Responsabilité Limitée "Etablissements Rotatiss". (See Séry, Claude, assignor.)
Société Anonyme Compagnie Internationale des Pieux Armés Frankignoul. (See Frankignoul, Edward, assignor.)
Societe Anonyme des Anciens Etablissements Hotchkiss & Cie. (See Delevoye, Robert E. C., assignor.)
Société Anonyme des Laboratories Robert & Carriere. (See Varinois, Marcel, assignor.)
Solar Compounds Corporation. (See Bockus, Harry N., assignor.)
Soltis, John W., Yonkers, N. Y. Fishing rod. 1,763,934; June 17.
Somergary, Jesse J., and A. Leichtman, assignors of one-third to Mrs. J. A. Urbanek, Detroit, Mich. Vending machine. 1,765,108; June 17.

Sommers, Benjamin, New York, N. Y. Garbage receptacle. 1,763,907; June 17.
Sosa, Augustus M., Cincinnati, and W. G. Hoelscher, Norwood, assignors to The American Tool Works Company, Cincinnati, Ohio. Elevating mechanism for drilling machines. 1,764,810; June 17.
Soubier, Leonard D., assignor to Owens-Illinois Glass Company, Toledo, Ohio. Glass-blowing machine. 1,764,360; June 17.
Soubier, Leonard D., assignor to Owens-Illinois Glass Company, Toledo, Ohio. Glass-forming machine. 1,764,361; June 17.
Soule, George M., assignor to The Domestic Electric Company, Cleveland, Ohio. Material-treating machine. 1,764,760; June 17.
Souleyret, Fred C., White Star, Ky. Hinge joint for anchor jacks. 1,765,248; June 17.
Spang, Chalfant & Company. (See Fownes, W. C., jr., Barton, and Benninghoff, assignors.)
Sparks, James L. (See Lemmons, Samuel C., assignor.)
Spear, Lawrence Y., New London, Conn., assignor to Electric Boat Company, Groton, Conn. Combined testing dock and salvage vessel. 1,764,903; June 17.
Spear, Lawrence Y., New London, assignor to Electric Boat Company, Groton, Conn. Compensating system. 1,764,904; June 17.
Spear, Lawrence Y., and C. P. Caulkins, New London, Conn., assignors to General Ordnance Corporation, New York, N. Y. Traction vehicle. 1,764,902; June 17.
Spencer, Owen H., Indianapolis, Ind. Explosive-engine piston. 1,763,993; June 17.
Sphinx Manufacturing Company. (See Bowlzer, Daniel H.)
Spielman, Milton H., and W. H. Poesse, Shaker Heights, assignors to The Domestic Electric Company, Cleveland, Ohio. Material-treating machine. 1,764,700; June 17.
Spiers, William W., London, England. Machine for punching holes in documents and the like. 1,763,869; June 17.
Spinney, Burton A., Des Moines, Iowa. Self-adjusting tire-chain device. 1,764,811; June 17.
Spoor, Ivan H., Berwyn, assignor to The Gerrard Company, Inc., Chicago, Ill. Reel. 1,764,125; June 17.
Sprague Safety Control and Signal Corporation. (See Brewster, Charles W., assignor.)
Spreen, Charles C., Detroit, Mich. Bearing seal. 1,764,701; June 17.
Spreen, Charles C., assignor, by mesne assignments, to Kelvinator Corporation, Detroit, Mich. Mechanical refrigeration. 1,764,652; June 17.
Spreen, Charles C., assignor to Kelvinator Corporation, Detroit, Mich. Mechanical refrigeration. 1,764,653; June 17.
Spreen, Charles C., assignor to Kelvinator Corporation, Detroit, Mich. Compressor-condenser unit. 1,764,654; June 17.
Spreen, Charles C., assignor to Kelvinator Corporation, Detroit, Mich. Compressor. 1,764,655; June 17.
Spreen, Charles C., assignor to Kelvinator Corporation, Detroit, Mich. Refrigeration. 1,764,702; June 17.
Spreen, Charles C., assignor to Kelvinator Corporation, Detroit, Mich. Machine support. 1,764,761; June 17.
Spreen, Charles C., assignor to Kelvinator Corporation, Detroit, Mich. Refrigeration. 1,764,762; June 17.
Spreen, Charles C., assignor to Kelvinator Corporation, Detroit, Mich. Refrigeration. 1,764,858; June 17.
Squibb, E. R., & Sons. (See Andrews, Lionel T., assignor.)
Stabile, Michele, Milford, Mass. Sprue-forming device. 1,765,109; June 17.
Staege, Stephen A., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Regulator. 1,764,362; June 17.
Staege, Stephen A., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Speed-regulator system. 1,764,422; June 17.
Stalb, Karl, Bitterfeld, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Carrying out exothermic reactions. 1,764,582; June 17.
Stalder, Louis, Turtle Creek, Pa., assignor to Westinghouse Electric & Manufacturing Company. Electrical measuring instrument. 1,764,363; June 17.
Standard Oil Company of California. (See Parker, Charles K., assignor.)
Standard Sanitary Manufacturing Company. (See Robertson, Elmer K., assignor.)
Standfuss, Ernest R., assignor to Harnischfeger Corporation, Milwaukee, Wis. Stump puller. 1,764,905; June 17.
Stang, Henry A., Minneapolis, Minn. Brush holder. 1,764,763; June 17.
Stange, Charles L., St. Louis, Mo. Badge. Des. 81,419; June 17.
Stanley, Harry E. (See Livingstone, James, assignor.)
Stanley Works, The. (See Bodmer, Christian, assignor.)
Stanley Works, The. (See Prindle, Frank P., assignor.)
Starr, Morton H., Highland Park, Mich. Balance indicator for platform scales. 1,764,537; June 17.
Statham, Noel, Irvington-upon-Hudson, N. Y. Spring-fastening device and operating the same. 1,765,034; June 17.
Steel, Robert R., Brentford, England, assignor to American Gasaccumulator Company, Elizabeth, N. J. Lighthouse and the like. 1,764,656; June 17.
Steen, Arthur B., Houston, Tex., assignor, by mesne assignments, to The Texas Company, New York, N. Y. Pump. 1,764,657; June 17.
Steenstrup, Christian, Schenectady, N. Y., assignor to General Electric Company. Water cooler. Des. 81,420; June 17.
Steenstrup, Christian, Schenectady, N. Y., assignor to General Electric Company. Refrigerating machine. 1,765,289; June 17.
Steere, Frank W., Detroit, Mich., assignor to Semet-Solvay Engineering Corporation, New York, N. Y. Gas generator. 1,764,992; June 17.
Steese, Jay C., and C. A. Hoff, assignors to The Akron Lamp Company, Akron, Ohio. Sadiron construction. 1,764,126; June 17.
Stefanide, Nick, assignor of one-half to T. Christy, Linwood, Pa. Refrigerator attachment. 1,765,290; June 17.
Steffens, Walter L., Wyoming, Ohio, assignor to The Philip Carey Manufacturing Company. Insulating materials and manufacture of same. 1,765,312; June 17.
Steindorff, Ulrich F. L., New York, and G. A. Ungar, Pelham, Manor, N. Y., assignors to Unishear Company, Inc. Portable shears. 1,765,318; June 17.
Steiner, Gottlieb, assignor to Scintilla A. G. Solothurn, Switzerland. Electric starter for internal-combustion engines. 1,764,906; June 17.
Steinhauer, Fritz P., assignor of one-fifth to G. A. Schneider, Chicago, Ill. Portable oil and gas service station. 1,764,057; June 17.
Stephen, Airlie E., Los Angeles, Calif. Hair-ornament device. 1,763,935; June 17.
Stephen, James, assignor of sixty per cent to C. H. Quipp, Toronto, Ontario, Canada. Observation instrument. 1,763,827; June 17.
Stephens, Roscoe W., Los Angeles, and C. E. Wilcox, Anaheim, assignors of one-fourth to C. Drader, Beverly, and one-fourth to E. W. Bailey, Bakersfield, Calif. Pump and packing the same. 1,764,364; June 17.
Stern, Eugene J., Little Rock, Ark. Concrete mixer and the like. 1,764,583; June 17.
Stern, Harry A., New York, N. Y. Ash tray. 1,764,907; June 17.
Stevenson, Edward E., assignor, by mesne assignments, to Emsco Derrick & Equipment Company, Los Angeles, Calif. Pump jack. 1,764,058; June 17.
Steward, Robert B., New York, N. Y. Ship's davit. 1,763,908; June 17.
Stewart, James B., Los Angeles, Calif. Grip. 1,763,828; June 17.
Stewart, Robert H., Vancouver, British Columbia, Canada, assignor to Texas Gulf Sulfur Company, New York, N. Y. Mining of sulphur. 1,764,538; June 17.
Stewart, Samuel, assignor to Bates Manufacturing Company, Lewiston, Me. Bedspread. 1,764,764; June 17.
Stickney, Burnham C., Hillside, N. J. Printing press. 1,763,679; June 17.
Stickney, Burnham C., Hillside, N. J., assignor to Underwood Elliott Fisher Company, New York, N. Y. Typewriting machine. 1,763,936; June 17.
Stievater, Harry J., Buffalo, N. Y. Extender for paints, etc. 1,763,937; June 17.
Stimpson, Edwin B., Company. (See Lupien, Louis A., assignor.)
Stinson, Joseph S., Denver, Colo. Water elevator and conveyer. 1,764,539; June 17.
Stoecklin, Josef, Zurich, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland. Rotary magnet. 1,764,658; June 17.
Stokes, Charles L., Los Angeles, Calif., assignor to C. B. Camp, trustee, Glencoe, Ill. Automatic fuel regulator. 1,764,659; June 17.
Stoler, Edward W., Mansfield, Ohio. Swaging mechanism for nipples. 1,763,938; June 17.
Stoller, Hugh M., Mountain Lakes, N. J., and E. R. Morton, Brooklyn, assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y. Speed regulator. 1,763,909; June 17.
Stolpe, David E., New York, N. Y. Vacuum-cleaner bag. 1,764,127; June 17.
Stoltz, Glenn E., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Series exciter. 1,764,365; June 17.
Stone, Henry A., Bogota, N. J. Apparatus for coating articles. 1,764,423; June 17.
Straubel, Frederick L. G., Green Bay, Wis. Sorting device. 1,764,128; June 17.
Strauss, Alfred J., Louisville, Ky., assignor, by mesne assignments, to E. W. Ellithorpe, Minneapolis, Minn. Show case for store doors. Re17,702; June 17.
Strauss, Herman M. A., assignor to Robeson-Rochester Corporation, Rochester, N. Y. Waffle iron. 1,764,908; June 17.
Strawbridge & Clothier. (See Fountain, Levi W., assignor.)
Street-Wilson, William. (See Griffiths, J. P., and Street-Wilson.)
Streeter, Edwin H., assignor to Wood Conversion Company, Cloquet, Minn. Suction box. 1,763,910; June 17.
Stringer, Thomas F., assignor to The Thew Shovel Company, Lorain, Ohio. Power trip. 1,764,993; June 17.
Stroke, Edgar, Los Angeles, Calif. Electric lantern. 1,765,110; June 17.

Strong Electric Corporation, The. (See Strong, Harry H., assignor.)
Strong, Harry H., Toledo, Ohio, assignor to The Strong Electric Corporation, Wilmington, Del. Vacuum-tube rectifier. 1,764,283; June 17.
Stuart, William B., Tampa, Fla., assignor to The International Pavement Company, Hartford, Conn. Control for presses. 1,765,314; June 17.
Stubbs, Marie M., Dallas, Tex. Cord protector for electric plugs. 1,765,035; June 17.
Stuebing, Albert F., Scarsdale, N. Y. Locomotive throttle valve. 1,764,366; June 17.
Stukenborg, Louis C., assignor to Olidraulic Lift Company, Memphis, Tenn. Hydraulic jack. 1,764,859; June 17.
Suiter, Charles B., Bluefield, W. Va. Penholder. 1,763,829; June 17.
Summers, Samuel L., Fort Washington, Pa. Methylenedisalicylic acid derivative. 1,764,035; June 17.
Summers, Samuel L., Fort Washington, Pa. Methylenedisalicylic acid derivative. 1,764,036; June 17.
Summit Corporation, The. (See Alex, Max, assignor.)
Sunbeam Electric Manufacturing Company. (See Brackett, W. A., and Richard, assignors.)
Sunnen, Joseph, St. Louis, Mo. Split-lock catcher. 1,764,185; June 17.
Sun Oil Company. (See Walt, Justin F., assignor.)
Sun Ray Gas Corporation. (See Madine, John J., assignor.)
Sunset Gold Packing Company. (See Edwards, George W., assignor.)
Superheater Company, The. (See Brandt, Carl A. W., assignor.)
Superheater Company, The. (See Thiele, Otto V., assignor.)
Super Mould Corporation. (See Woock, Herber J., assignor.)
Superior Steam Iron Company. (See De Atley, Carroll, assignor.)
Superior Switchboard & Devices Company, The. (See Grace, Richard W., assignor.)
Superset Brush Co. (See Frenkel, Samuel M., assignor.)
Swanson, Hugo R., Brooklyn, assignor to Triangle Kapok Machine Corporation, New York, N. Y. Cleaning machine. 1,764,424; June 17.
Swart, Scovil. (See Talley, Benjamin F., assignor.)
Sweet, Carl C., assignor to Claybourn Process Corporation, Milwaukee, Wis. Chase. 1,763,725; June 17.
Sweetland, Ernest J. (See Greenhalgh, G. H., and Sweetland.)
Sweetland, Ernest J., Hazleton, Pa. Filter and forming the same. 1,764,660; June 17.
Swenson, Carl E., assignor of one-fourth to L. Faust, one-fourth to E. S. Ekstrom, and one-fourth to C. L. Anderson, Rockford, Ill. Transmission. 1,764,994; June 17.
Symington, T. H., and Son, Inc. (See Hankins, Cyrus, assignor.)
Symington, T. H., & Son, Inc. (See Symington, Thomas H., assignor.)
Symington, Thomas H., assignor to T. H. Symington & Son, Inc., Baltimore, Md. Absorption mechanism. 1,763,830; June 17.
Szymanski, Vincent, Detroit, Mich. Lock. 1,764,367; June 17.
Tack, Robert F., New York, N. Y. Sound amplifier. 1,764,059; June 17.
Talley, Benjamin F., assignor of one-half to S. Swart, Drummond, Okla. Disk sharpener. 1,764,812; June 17.
Talmage, Everett, Sabina, Ohio. Metal-roof construction. 1,763,870; June 17.
Tannenbaum, Max, New York, N. Y. Cigarette lighter. 1,763,911; June 17.
Tarrier, Fred A., Columbus, Ohio. Fence construction. 1,764,584; June 17.
Tassler, William T. (See Goetz, Leo H., assignor.)
Tastenhoye, Wynant, Brussels, Belgium. Multiway liquid-pressure-distributing pump, with return of the liquid to the reservoir after use. 1,765,249; June 17.
Tauber, Joseph M., Chicago, Ill. Lawn mower. 1,763,831; June 17.
Taylor, Ada M. (See Taylor, William H., and A. M.)
Taylor, Clarence W. (See Taylor, William H. and A. M., assignors.)
Taylor, Elmer H., Long Beach, Calif. Spooling device. 1,763,871; June 17.
Taylor, Ewing H., Beaumont, Tex. Rotary teeter. 1,764,230; June 17.
Taylor, Ewing H., Beaumont, Tex. Rotary teeter. 1,764,231; June 17.
Taylor, John L., West View, Pa. Barge. 1,764,585; June 17.
Taylor, William A., Detroit, Mich. Scalp-treating brush. 1,763,832; June 17.
Taylor, William H. and A. M., Baltimore, Md., assignors of twelve per cent to C. W. Taylor. Leather-treating composition. 1,763,833; June 17.
Teague, Merwyn C. (See Hopkinson, E., and Teague.)
Teare, Albert R., Lakewood, assignor to J. C. Miles, Cleveland, Ohio. Heating and ventilating apparatus. 1,764,703; June 17.
Teare, Albert R., Lakewood, assignor to J. C. Miles, Cleveland, Ohio. Heating and ventilating apparatus. 1,764,704; June 17.
Teesdale, John B., East Grand Rapids, Mich. Combined check valve and union. 1,764,186; June 17.
Teletype Corporation. (See Krum, H. L., and Carr, assignors.)
Tellis, Vsevolod G., assignor to O. F. Jordan Company, East Chicago, Ind. Hinge plate for railroad spreader wings. 1,763,680; June 17.
Ternstedt Manufacturing Company. (See Edgar, F. M., and Flynn, assignors.)
Ternstedt Manufacturing Company. (See Field, H. C., and Simpson, assignors.)
Ternstedt Manufacturing Company. (See Flynn, John B., assignor.)
Ternstedt Manufacturing Company. (See Schnell, William, assignor.)
Terry Steam Turbine Company, The. (See Muller, Richard O., assignor.)
Terwilliger, Charles W., Brooklyn, N. Y. Centrifugal drier. 1,764,909; June 17.
Texas Company, The. (See Steen, Arthur B., assignor.)
Texas Gulf Sulfur Company. (See Stewart, Robert H., assignor.)
Thackeray, Samuel J. (See Henry, G. W., jr., and Thackeray.)
Thayer, Henry E., Pleasantville, assignor to I. B. Kleinert Rubber Company, New York, N. Y. Hot-water bottle or article of similar nature. Des. 81,421; June 17.
Thew Shovel Company, The. (See Stringer, Thomas F., assignor.)
Thew Shovel Company, The. (See Wilson, Emery J., assignor.)
Thiele, Otto V., Ridgewood, N. J., assignor to Superheater Company, New York, N. Y. Superheater header. 1,764,860; June 17.
Thoma, Hans, Munich, Germany. Frictionless sliding valve for self-acting regulators or governors. 1,763,994; June 17.
Thomas, Allen B., assignor to F. E. Reed Glass Company, Rochester, N. Y. Bottle. Des. 81,422; June 17.
Thomas, Logan E., Choctaw, Okla. Apparatus for skinning animals. 1,764,425; June 17.
Thomas, Phillips, Edgewood, Pa., assignor to Westinghouse Electric & Manufacturing Company. Receptacle for light-sensitive units. 1,764,368; June 17.
Thomas, Stephen S., Lebanon, Ohio. Door and the like. 1,765,036; June 17.
Thompson, James A. (See Highberg, S. J., and Thompson.)
Thompson, Samuel H., New York, N. Y., assignor, by mesne assignments, to Morse Boulger Destructor Company. Furnace for destroying waste. 1,764,661; June 17.
Thompson, William D. (See Small, Bertram A., assignor.)
Thompson, William H., assignor to The H. H. Miller Industries Company, Canton, Ohio. Freezing mechanism. 1,765,315; June 17.
Thompson, Willsie A. S. (See Gunn, R. W., and Thompson.)
Thornley, Olney, Coyle, Okla. Snap. 1,764,813; June 17.
Thornton, Wilfred R., Toronto, Ontario, Canada. Spraying device. 1,763,912; June 17.
Thrasher, Ray H., Ferndale, Mich. Priming device. 1,764,060; June 17.
Tidmarsh, Ralph E., Sonora, Calif. Nonglare shield. 1,764,478; June 17.
Tilton & Cook Co. (See Osgood, Frederick M., assignor.)
Time-O-Stat Controls Company. (See Bogle, John C., assignor.)
Time-O-Stat Controls Company. (See Phelan, Louis A. M., assignor.)
Time-O-Stat Controls Company. (See Phelan, L. A. M., and Hotchkiss, assignors.)
Timian, Harold H., assignor to Wheeler-Schebler Carburetor Company, Indianapolis, Ind. Duplex carburetor system. 1,763,726; June 17.
Tinnerman, Albert H., Cleveland, Ohio. Thermostatic control for stove ovens. 1,764,765; June 17.
Titgen, Harry W., Glenside, Pa. Tumbling-mill structure. 1,765,291; June 17.
Tobias, Wilfred R., Los Angeles, Calif. Roof. 1,764,479; June 17.
Todd, William C., Victoria, British Columbia, Canada, assignor to Economy Irrigation Company, Inc., Seattle, Wash. Sprinkler. 1,764,910; June 17.
Tokheim Oil Tank and Pulp Company. (See Ellers, Frank B., assignor.)
Tolley, Donald R., assignor to American Steel Products Co., Macomb, Ill. Check-draft damper and soot eliminator for heaters. 1,764,370; June 17.
Tomkins, Walter M., San Francisco, Calif., assignor to Continental Can Company, Inc., New York, N. Y. Nested can body and method therefor. 1,765,182; June 17.
Tomlin, James H., Cicero, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Molding articles. 1,764,662; June 17.
Toohey, John S., and M. E. Erskine, assignors to Racine Tool & Machine Company, Racine, Wis. Metal-sawing machine. 1,765,316; June 17.
Tool, Harold W., Murdock, Nebr. Corncob container. 1,765,111; June 17.
Torrabadella, Pedro, Concepcion Del Uruguay, Argentina. System of television. 1,764,232; June 17.
Torrey, F. L., & Company. (See Kerkhoff, Joseph, assignor.)
Tournier, Edward P. (See Houts, G. J., Tournier, and Wulff.)

Towne, Archie C. (See Brown, W. R., and Towne.)
Townsend, John R., South Bend, Ind, assignor, by mesne assignments, to Westinghouse Electric & Manufacturing Company, East Pittsburgh, Pa. Traffic-signal device. 1,764,426; June 17.
Toy Tinkers, Inc., The. (See Pajeau, Charles H., assignor.)
Trane, Reuben N., Le Crosse, Wis. Radiator. 1,764,187; June 17.
Travis, Francis A., Dallas, Tex. Sign adjuster or seat-indicating device. 1,765,250; June 17.
Treat, Sidney W., Chicago, Ill., assignor, by mesne assignments, to Signodé Steel Strapping Company. Pneumatic strap sealer. 1,764,911; June 17.
Trebarne, Thomas W., Xenia Pike, Ohio. Surgical inatrument. 1,763,939; June 17.
Triangle Kapok Machine Corporation. (See Swanson, Hugo R., assignor.)
Trojan Powder Company. (See Wyler, Joseph A., assignor.)
Troyer, Nelson, and R. M. Mero, assignors to Seattle Astoria Iron Works, Seattle, Wash. Can-end-drying machine. 1,765,183; June 17.
Truesbury, Eugene D., assignor to Ornamental Brass Shops, Rockford, Ill. Operating device for a desk fall support. 1,764,188; June 17.
Trumble, Milon J., Alhambra, and R. C. Woodward, assignors to McEvoy Wireless Well Strainer Corporation, Los Angeles, Calif. Apparatus for perforating casings. 1,764,129; June 17.
Trump, Elno H., Akron, Ohio. Sheet-cutting machine. 1,765,184; June 17.
Tunstall, William B., Worcester, Mass. Pneumatic striker unit for player pianos. 1,765,112; June 17.
Turbo-Mixer Corporation, The. (See Beers, Henry S., assignor.)
Turner, Aubrey D., Minneapolis, Minn. Clamp. 1,765,113; June 17.
Turner, Edward T., Dayton, Ohio. Water-softening apparatus. 1,763,727; June 17.
Turner, Edward T., Dayton, Ohio. Valve-actuating device. 1,763,728; June 17.
Turner, Edward T., Dayton, Ohio. Valve-actuating device. 1,763,729; June 17.
Turner, George S., New Brunswick, N. J. Attachment for collapsible tubes. 1,765,114; June 17.
Tyden, Emil, Evanston, Ill. Sprinkler-system main valve. 1,763,834; June 17.
Tyler, John C., and T. E. Leavey, assignors to Farmers' Underwriters Association, Los Angeles, Calif. Badge. Des. 81,425; June 17.
U. C. & C. Research Labs. Inc. (See Lytle, Arthur R., assignor.)
Uhrig, Richard V., Alhambra, Calif. Slip. 1,763,872; June 17.
Umbarger, Harlow I., Buford, Alberta, Canada. Blind ditcher. 1,765,185; June 17.
Underwood Elliott Fisher Company. (See Goetz, A. Edgar, assignor.)
Underwood Elliott Fisher Company. (See Kurowski, Alfred G. F., assignor.)
Underwood Elliott Fisher Company. (See Rowley, Edward G., assignor.)
Underwood Elliott Fisher Company. (See Smith, Jesse A. B., assignor.)
Underwood Elliott Fisher Company. (See Stickney, Burnham C., assignor.)
Ungar, Gustave A. (See Steindorff, U. F. L., and Ungar.)
Ungar, Gustave A., Pelham Manor, N. Y., assignor to Unishear Company, Inc. Cutting blade for shears. 1,765,317; June 17.
Union Drawn Steel Company, The. (See Belles, Albert C., assignor.)
Union Iron Works. (See Wickey, Edward V., assignor.)
Union Metal Products Company. (See Gilpin, Garth G., assignor.)
Union Special Machine Company. (See Barber, Albert W., assignor.)
Union Special Machine Company. (See Berger, Joseph, assignor.)
Union Special Machine Company. (See Christensen, N. V., and Hanneman, assignors.)
Union Special Machine Company. (See Christensen, N. V., and Le Vesconte, assignors.)
Union Special Machine Company. (See Hanneman, Walter M., assignor.)
Union Special Machine Company. (See Mann, Joseph, assignor.)
Union Special Machine Company. (See Moffatt, James R., assignor.)
Union Special Maschinenfabrik, G. m. b. H. (See Lutz, Friedrich, assignor.)
Union Special Maschinenfabrik, G. m. b. H. (See Maier, Karl, assignor.)
Union Steel Products Company. (See Bitney, Dewey H., assignor.)
Union Steel Products Company. (See Hatch, Charles T., assignor.)
Union Switch & Signal Company, The. (See McWhirter, W. C., and Loomis, assignors.)
Union Tank & Pipe Co. (See Furey, Frederick M., assignor.)
Unishear Company. (See Steindorff, U. F. L., and Ungar, assignors.)
Unishear Company. (See Ungar, Gustave A., assignor.)
United-Carr Fastener Corporation. (See Carr, Fred S., assignor.)
United-Carr Fastener Corporation. (See Carr, Moses F., assignor.)
United-Carr Fastener Corporation. (See Holmes, George A., assignor.)
United Products Corporation of America. (See Biddle, Arthur, assignor.)
United Reproducers Patents Corporation. (See Crozier, William D., assignor.)
United Shoe Machinery Corporation. (See Gordon, G. N., and Sampson, assignors.)
United Shoe Machinery Corporation. (See Rowe, Edgar E., assignor.)
U. S. Bobbin & Shuttle Company. (See Baldwin, Luther C., assignor.)
United States Electrical Manufacturing Company. (See Johnson, Carl E., assignor.)
United States Gypsum Company. (See Brookby, H. E., and King, assignors.)
U. S. Industrial Alcohol Co. (See Ricard, Eloi, assignor.)
U. S. Slicing Machine Company. (See van Lammeren, William P., assignor.)
Universal Optical Corporation. (See Beattey, Earle J. R., assignor.)
Universal Optical Corporation. (See Nelson, John N., assignor.)
Universal Process Company. (See Godbe, Anthony H., assignor.)
"Universelle" Cigaretten-Maschinen-Fabrik J. C. Müller & Co. (See Voigt, Robert W., assignor.)
Unker, Isidore, and H. S. Rosenthal, New York, N. Y. Garment guard or protector. 1,764,427; June 17.
Upson, Ralph H., Birmingham, assignor to Aircraft Development Corporation, Detroit, Mich. Airship. 1,763,835; June 17.
Urbanek, Mrs. John A. (See Somergary, J. J., and Leichtman, assignors.)
Utica Products, Inc. (See Hauser, George D., assignor.)
Vacuum Casting Company, The. (See Kadow, August, assignor.)
Vaicekauckas, Albert, Rockford, Ill. Lock. 1,765,186; June 17.
Vande Mark, Eugene S., Springmont, assignor to Reading Sheet Metal Products Co., Reading, Pa. Window ventilator and screen. 1,764,913; June 17.
Vande Mark, Eugene S., Springmont, assignor to Reading Sheet Metal Products Co., Reading, Pa. Baby walker and stroller. 1,764,914; June 17.
Van Gelder, Johannes P., Granville, New South Wales, Australia. Apparatus for separating dust or fume from air. 1,764,861; June 17.
Van Hamersveld, John J. N. (See Bayer, J. L., and Van Hamersveld.)
Van Houten, Frank H., assignor to Dutchess Tool Company, Beacon, N. Y. Dough divider and rounder. 1,704,586; June 17.
Van Lammeren, Willem P., Rotterdam, Netherlands, assignor to U. S. Slicing Machine Company, La Porte, Ind. Feeding mechanism for slicing machines. 1,763,681; June 17.
Van Muffling, Adrian. (See Boyle, J. F., and Van Muffling.)
Van Schaack Bros. Chemical Works, Inc. (See Lacy, Kenneth B., assignor.)
Van Schaack Bros. Chemical Works, Inc. (See Van Schaack, R. H., jr., and Calvert, assignors.)
Van Schaack, Robert H., jr., Evanston and R. Calvert, Wilmette, assignors to Van Schaack Bros. Chemical Works, Inc., Chicago, Ill. Manufacture of acetic acid. 1,765,318; June 17.
Van Sickle, Roswell, C., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Circuit interrupter. 1,764,369; June 17.
Van Veen, Anton, West Hartford, assignor to The Fuller Brush Company, Hartford, Conn. Cutting mechanism for mop-making machines. 1,763,836; June 17.
Vardeman, Robert W., Independence, Mo. Fountain toothbrush. 1,764,130; June 17.
Varinois, Marcel, assignor to Société Anonyme des Laboratories Robert & Cariere, Paris, France. String from animal origin and manufacturing the same. 1,764,233; June 17.
Vauclain, Samuel M., Rosemont, and H. Ghaenzer, Philadelphia, Pa. Locomotive. 1,765,251; June 17.
Vauthier, Alfred E., New York, N. Y. Safety clothesline pulley. 1,763,913; June 17.
Ventura Manufacturing and Implement Company. (See Hamilton, William F., assignor.)
Venzie, Frederick M., Philadelphia, Pa. Building partition. 1,764,428; June 17.
Venzie, Frederick M., Philadelphia, Pa. Building construction. 1,764,587; June 17.
Vernay, Jean B., Villeurbanne, France. Rotating filter apparatus. 1,765,252; June 17.
Vernet, Sergius, Brooklyn, N. Y. Radiator shutter. 1,763,837; June 17.
Vernet, Sergius, Brooklyn, N. Y. Radiator shutter. 1,763,838; June 17.
Vernet, Sergius, Brooklyn, assignor of one-half to W. P. Hammond, Scarsdale, N. Y. Automatic radiator shutter. 1,764,371; June 17.

Vethe, Anders E., Chicago, Ill. Calculating apparatus. 1,764,915; June 17.
Victor Talking Machine Company. (See Elliott, Harold F., assignor.)
Vilas Oil Burners Limited. (See Fogarty, Orville A., assignor.)
Virginia Shoe Company. (See Bean, Lafayette, assignor.)
Viscose Company, The. (See Meurling, Ivar, assignor.)
Vitale, Carmine, New York, N. Y. Window lock. 1,763,914; June 17.
Vogelsang, Fritz, Berlin, Germany, assignor, to Sächsische Metallwarenfabrik August Wellner Söhne, Aktiengesellschaft, Auel Sa. Saxony. Cigar or cigarette extinguisher. 1,764,862; June 17.
Voigt, Robert W., assignor to the firm "Universelle" Cigarettenmaschinen-Fabrik J. C. Müller & Co., Dresden, Germany. Device for forming groups of a definite number of articles. 1,764,663; June 17.
Voigt, Robert W., assignor to the firm "Universelle" Cigarettenmaschinen-Fabrik J. C. Müller & Co., Dresden, Germany. Apparatus for collecting and superposing groups of cigarettes. 1,764,664; June 17.
Von Auw, Alwin, Brooklyn, assignor to Boorum & Pease Company, New York, N. Y. Visible index. 1,765,192; June 17.
Von Auw, Alwin, assignor to Boorum & Pease Company, Brooklyn, N. Y. Visible index. 1,765,193; June 17.
Von Auw, Alwin, assignor to Boorum & Pease Company, Brooklyn, N. Y. Temporary book of sheets. 1,765,194; June 17.
Von Borosini, August, Lugano, Switzerland. Syringe nozzle or tube. 1,764,588; June 17.
Von Dorn, Theodore F. (See Norwood, Harry G., assignor.)
Von Lackum, Herman J., administrator. (See von Lackum, Herman L.)
Von Lackum, Herman L., deceased, New York, N. Y., by H. J. Von Lackum, administrator, Dysart, Iowa. Surgical saw. 1,763,730; June 17.
Von Pein, Edward J., assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio. Cash register. 1,763,915; June 17.
Vorel, Frank assignor of one-half to J. E. Moravec, Cleveland, Ohio. Internal-combustion engine. 1,764,480; June 17.
Vydra, Robert, Nuremberg, Germany. Artificial tree. 1,764,540; June 17.
Wach, Hans, Westermunde-Lehe, Germany. Combined reciprocating engine and turbine. 1,764,061; June 17.
Wadsworth, Leslie H. (See Wurzbach, H. E., Wadsworth, and Nutt.)
Wagner, Carl J., Cleveland, Ohio. Television sending and receiving apparatus. 1,765,292; June 17.
Wahlberg, Nils A., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Strain clamp. 1,764,372; June 17.
Wahlberg, Nils A., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Conductor clamp. 1,764,429; June 17.
Wahlberg, Nils A., Derry, Pa., assignor to Westinghouse Electric & Manufacturing Company. Conductor clamp. 1,764,916; June 17.
Waln, Walter, Fulton, N. Y. Cocoa-cooling apparatus. 1,765,037; June 17.
Walt, Justin F., New York, N. Y., assignor to Sun Oil Company, Philadelphia, Pa. Apparatus for transferring heat. 1,765,038; June 17.
Waldron, John, Corporation. (See Dalton, G. A., and Dunham, assignors.)
Waldrop, Earl H. (See Cunningham, James I., assignor.)
Walker, Jeffery, Birmingham, England. Ship log. 1,765,039; June 17.
Wall, William E., Lancaster, S. C. Harness shaft for looms. 1,764,917; June 17.
Wallace, Hugh, Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation. Refrigerating apparatus. 1,763,682; June 17.
Wallen, Arthur C., Chicago, Ill., assignor to Bates Expanded Steel Truss Co., East Chicago, Ind. Metal joist and the manufacture thereof. 1,763,940; June 17.
Walter, Edward H., Woodlynne, N. J. Abdominal baby band. 1,764,995; June 17.
Walter, Frank K., Minneapolis, Minn., assignor to J. H. Hine, New York, N. Y. Shelf extension. 1,764,131; June 17.
Wanders, Hans H., Boston, Mass. Automatic looper and knotter. 1,763,731; June 17.
Ward, Charles E., Charleston, W. Va. Flanking vane for ships. 1,764,918; June 17.
Ward, James W., Pittsburgh, Pa. Book repairing. 1,764,234; June 17.
Ward, William J., Philadelphia, Pa. Necktie holder. 1,764,705; June 17.
Waring, Spencer W. (See Pfeifer, Ferdinand A., assignor.)
Warner & Swasey Company, The. (See Bayer, J. L., and Van Hamersveld, assignors.)
Warner, Willard, Sacramento, assignor of one-half to J. N. Burroughs, Oakland, Calif. Ironing-machine attachment. 1,765,040; June 17.
Warnock, Wallace S., Chicago, Ill. Printer's register hook. 1,764,062; June 17.
Warrenfeltz, John P., Elyria, Ohio. Tree pruner. 1,765,187; June 17.
Waschnack, Adolf, Neu Finkenkrug, near Berlin, Germany, assignor to Siemens & Halske Aktiengesellschaft, Wernerwerk, Siemensstadt, near Berlin, Germany. Telephone system. Re17,703; June 17.
Washburn Company. (See Andrews, Charles, jr., assignor.)
Waters, Michael, Sioux City, Iowa. Channel-forming device for silt-carrying rivers. 1,765,041; June 17.
Watkins, Albert B., Los Angeles, Calif. Combined fishing and swaging tool. 1,764,481; June 17.
Watkins, Francis B. (See Darrow, M. S., Hart, Gronemeyer, and Watkins.)
Watkins, William E., Clearlake Highlands, Calif. Overalls with detachable pockets. 1,764,483; June 17.
Watling, Burns S., Chicago, Ill. Combined duty and thrust bearing. 1,763,840; June 17.
Watling, Burns S., Chicago, Ill. Display apparatus. 1,763,841; June 17.
Watling, Thomas W. B., Chicago, Ill. Amusement apparatus. 1,763,839; June 17.
Watson, Charles L., Strawn, Tex. Radio dial and log. 1,764,814; June 17.
Waugh Equipment Company. (See O'Brien, Richard J., assignor.)
Wnukesha Motor Co. (See Horning, Harry L., assignor.)
Wayne Company. (See Robertson, Edwin A., assignor.)
Webb, Forrest E., Defiance, Ohio. Power take-off for tractors. 1,765,188; June 17.
Webb, George H. (See Rosenblatt, A. I., and Webb.)
Webb, Robert R. (See Jones, J. M., and Webb.)
Weber, Henry E., Canton, Ohio. Controller for dental engines. 1,763,995; June 17.
Weber-Stierlin, Ernst, Zurich, Switzerland. Stretcher. 1,764,477; June 17.
Weeden, Daniel J., East Greenwich, R. I. Tongs. 1,764,919; June 17.
Wehr, Earl R., and C. C. Mahlie, assignors to The American Rolling Mill Company, Middletown, Ohio. Heat-resistant metal sheet. 1,764,132; June 17.
Wehrle Company, The. (See Pickup, George E., assignor.)
Weinbrenner, Albert H., Company. (See Jung, Alvin L., assignor.)
Weisgerber, Edwin C., Long Beach, assignor to John Grant, Los Angeles, Calif. Underreamer. 1,764,133; June 17.
Welles, William G., Lebanon, Wis. Ensilage-distributing apparatus. 1,765,115; June 17.
Wells, Lennie, and O. W. Eckstein, Long Beach, Calif. Combination expansion mill and underreamer. 1,764,373; June 17.
Wemp, Ernest E., Detroit, Mich. Clutch friction device. 1,765,304; June 17.
Wennerberg, August, Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Power-driven apparatus. 1,764,665; June 17.
Wentz, George F., Colorado Springs, Colo. Device for dispensing liquids. 1,763,732; June 17.
Werme, Adolph. (See Reed, E. W., and Werme.)
Werner, Oscar, South Bend, Ind., assignor to Westinghouse Electric & Manufacturing Company. Airport flood-lighting projector. 1,765,354; June 17.
Western Electric Company. (See Adrams, Arthur H., assignor.)
Western Electric Company. (See Bresters, William, assignor.)
Western Electric Company. (See Cioffi, Paul P., assignor.)
Western Electric Company. (See Burns, L. J., and Coon, assignors.)
Western Electric Company. (See Elmen, Gustaf W., assignor.)
Western Electric Company. (See Franks, Clem H., assignor.)
Western Electric Company. (See Fruth, H. F., and Westhafer, assignors.)
Western Electric Company. (See Grondahl, Hans H. C., assignor.)
Western Electric Company. (See Hall, Earl C., assignor.)
Western Electric Company. (See Hofstetter, Robert, assignor.)
Western Electric Company. (See Houts, Guy J., assignor.)
Western Electric Company. (See Houts, G. J., Tournier and Wulff, assignors.)
Western Electric Company. (See Keller, Frederick L., assignor.)
Western Electric Company. (See Linkenheld, Clarence F., assignor.)
Western Electric Company. (See McKeon, Elisha J., assignor.)
Western Electric Company. (See Oesteri, Frank D., assignor.)
Western Electric Company. (See Roscoe, Robrt, assignor.)
Western Electric Company. (See Scott, James W., assignor.)
Western Electric Company. (See Tomlin, James H., assignor.)
Western Electric Company. (See Wennerberg, August, assignor.)
Western Electric Company. (See Weston, William K., assignor.)
Western Electric Company, Incorporated. (See Cook, James M., assignor.)
Western Electric Company, Incorporated. (See Dean, Reginald S., assignor.)
Western Electric Company, Incorporated. (See Donnelley, Edward J., assignor.)

Western Implements Limited. (See Goodfellow, Sampson J., assignor.)
Western Union Telegraph Company, The. (See Wheeler, Evan R., assignor.)
Westhafer, Terrence O. (See Fruth, H. F., and Westhafer.)
Westinghouse Electric & Manufacturing Company. (See Ashbaugh, John H., assignor.)
Westinghouse Electric & Manufacturing Company. (See Breisky, John V., assignor.)
Westinghouse Electric & Manufacturing Company. (See Claytor, Edward M., assignor.)
Westinghouse Electric & Manufacturing Company. (See Cochran, Paul B., assignor.)
Westinghouse Electric & Manufacturing Company. (See Davies, David R., assignor.)
Westinghouse Electric & Manufacturing Company. (See Fielder, Frederick D., assignor.)
Westinghouse Electric & Manufacturing Company. (See Graves, Herbert C., jr., assignor.)
Westinghouse Electric & Manufacturing Company. (See Harpster, Clyde C., assignor.)
Westinghouse Electric & Manufacturing Company. (See Higbee, Ray P., assignor.)
Westinghouse Electric & Manufacturing Company. (See Hill, Leland H., assignor.)
Westinghouse Electric and Manufacturing Company. (See Hill, L. H., and Dann, assignors.)
Westinghouse Electric & Manufacturing Company. (See Hunt, Marsden H., assignor.)
Westinghouse Electric & Manufacturing Company. (See Jenks, Harold C., assignor.)
Westinghouse Electric & Manufacturing Company. (See Kent, G. C., and Siegfried, assignors.)
Westinghouse Electric & Manufacturing Company. (See Koch, Gustav H., assignor.)
Westinghouse Electric & Manufacturing Company. (See Kraut, Samuel B., assignor.)
Westinghouse Electric & Manufacturing Company. (See Kurda, Karl, assignor.)
Westinghouse Electric & Manufacturing Company. (See Kurda, K., and Schade, assignors.)
Westinghouse Electric & Manufacturing Company. (See Landon, Vernon D., assignor.)
Westinghouse Electric & Manufacturing Company. (See Legg, Joseph W., assignor.)
Westinghouse Electric & Manufacturing Company. (See Levy, Cyril C., assignor.)
Westinghouse Electric & Manufacturing Company. (See Masek, James C., assignor.)
Westinghouse Electric and Manufacturing Company. (See Moss, C. M., and Peterson, assignors.)
Westinghouse Electric & Manufacturing Company. (See Oman, Carl, assignor.)
Westinghouse Electric & Manufacturing Company. (See Oplinger, Kirk A., assignor.)
Westinghouse Electric & Manufacturing Company. (See Puller, Rudolf, assignor.)
Westinghouse Electric & Manufacturing Company. (See Rampacher, Fritz, assignor.)
Westinghouse Electric & Manufacturing Company. (See Riley, Lynn G., assignor.)
Westinghouse Electric & Manufacturing Company. (See Robison, Merle, assignor.)
Westinghouse Electric & Manufacturing Company. (See Rodman, Clarence J., assignor.)
Westinghouse Electric & Manufacturing Company. (See Rutter, Argyle R., assignor.)
Westinghouse Electric & Manufacturing Company. (See Schramm, Walter H., assignor.)
Westinghouse Electric & Manufacturing Company. (See Smith, Walter H., assignor.)
Westinghouse Electric & Manufacturing Company. (See Staege, Stephen A., assignor.)
Westinghouse Electric & Manufacturing Company. (See Stalder, Louis, assignor.)
Westinghouse Electric & Manufacturing Company. (See Stoltz, Glenn E., assignor.)
Westinghouse Electric & Manufacturing Company. (See Thomas, Phillips, assignor.)
Westinghouse Electric & Manufacturing Company. (See Townsend, John R., assignor.)
Westinghouse Electric & Manufacturing Company. (See Van Sickle, Roswell C., assignor.)
Westinghouse Electric & Manufacturing Company. (See Wahlberg, Nils A., assignor.)
Westinghouse Electric & Manufacturing Company. (See Werner, Oscar, assignor.)
Westinghouse Electric & Manufacturing Company. (See White, Harold E., assignor.)
Westinghouse Electric & Manufacturing Company. (See Whittaker, Charles C., assignor.)
Westinghouse Lamp Company. (See Ramage, John H., assignor.)
Westgate, Alice C., San Fernando, Calif. Gift-dispensing apparatus. 1,763,733; June 17.
Weston, William K., Sanderstead, England, assignor to Western Electric Company, Incorporated, New York, N. Y. Telephone cable. 1,763,873; June 17.
Wheeler, Evan R., North Plainfield, N. J., assignor to The Western Union Telegraph Company, New York, N. Y. Automatic tape-controlled transmission for tickers. 1,765,042; June 17.
Wheeler-Schebler Carburetor Co., The. (See Jones, Maldwyn E., assignor.)
Wheeler-Schebler Carbureter Company. (See Timian, Harold H., assignor.)
Whelan, Dow O., Schenectady, N. Y., assignor to General Electric Company. Amplification of electrical impulses. 1,765,293; June 17.
Whitacre-Greer Fireproofing Company, The. (See Klotz, Lee Dell S., assignor.)
White, Harold E., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Thermal relay. 1,764,374; June 17.
White, Harold E., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Thermal relay. 1,764,375; June 17.
White, Harry B., Canton, Ohio, assignor to The Hoover Company. Suction sweeper. 1,764,666; June 17.
White, Thomas L., assignor to The Commercial Shearing and Stamping Company, Youngstown, Ohio. Supporting bracket. 1,764,766; June 17.
White, William H., East Rutherford, N. J., assignor to Regal Shoe Company, Whitman, Mass. Display holder for socks or other articles. 1,765,043; June 17.
Whitehead and Hoag Company, The. (See Day, James C., assignor.)
Whiting Corporation. (See Coffey, Oscar L., assignor.)
Whitley, William P., assignor to Rawlings Manufacturing Company, St. Louis, Mo. Shoulder and chest protecting device. 1,764,667; June 17.
Whittaker, Charles C., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Commutator-rocking device. 1,764,376; June 17.
Whittaker, James B., Rochester, N. Y. Apparatus for marking patterns on cloth. 1,763,734; June 17.
Wickersham, Cornelius W. (See Adams, W., and Wickersham.)
Wickersham, Harry P., Brea, assignor to H. G. Yahraus, Los Angeles, Calif. Reamer. 1,764,377; June 17.
Wickey, Edward V., assignor to Union Iron Works, Spokane, Wash. Furnace grate. 1,764,484; June 17.
Wickizer, Mont. Brookfield, Mo. Journal box. 1,764,541; June 17.
Wiedner, Arthur, Port Lavaca, Tex. Electric motor. 1,764,921; June 17.
Wightman, Eugene P. (See Sheppard, S. E., and Wightman.)
Wilcox, Charles E. (See Stephens, R. W., and Wilcox.)
Wiley, Roy R., Buffalo, assignor to Flexlume Corporation, Tonawanda, N. Y. Electric sign. 1,764,485; June 17.
Wilhelm, Harold F., East Orange, N. J., assignor to V. E. Minich, Scarsdale, N. Y. Automatic belt-tightening device. 1,764,767; June 17.
Willers, George E., assignor to A. D. Cook, Inc., Lawrenceburg, Ind. Making well strainers. 1,763,996; June 17.
Willi, Albert B., assignor to Continental Motors Corporation, Detroit, Mich. Pump. 1,764,706; June 17.
Williams, Arthur A., Holliston, Mass. Shoe. 1,763,997; June 17.
Williams, Eugene T. (See Morrison, J. A., and Williams.)
Williams, Harvey, Massilon, Ohio, and J. W. McHugh, Pittsburgh, assignors to Pittsburgh Steel Foundry Corporation, Glassport, Pa. Annealing box. 1,764,768; June 17.
Williams, John W., Tampa, Fla. Surgical instrument for circumcisions. 1,765,319; June 17.
Williams, Judson, Philadelphia, Pa. Piston ring. 1,764,815; June 17.
Williams, Linwood R., Orange, N. J. Swimming device. 1,765,116; June 17.
Williamson, Alice L. (See Williamson, John A. and A. L.)
Williamson, John A. and A. L., Parsons, Kans. Coin-controlled mechanism. 1,765,253; June 17.
Wilmking, Friedrich, Gutersloh, Westphalia, Germany. Holder for cutting fruit. 1,764,235; June 17.
Wilson, Emery J., Cleveland, assignor to The Thew Shovel Company, Lorain, Ohio. Back-digging excavator. 1,764,922; June 17.
Wilson, Emery J., Cleveland, assignor to The Thew Shovel Company, Lorain, Ohio. Friction control mechanism. 1,764,923; June 17.
Wiltermood, Oliver P. and O. E., Spokane, Wash. Ventilating system. 1,764,816; June 17.
Wiltermood, Olive E. (See Wiltermood, Oliver P. and O. E.)
Windsor, H. T. (See Ginsberg, Harry J., assignor.)
Winters, William H., Willamina, Oreg. Log turner. 1,764,817; June 17.
Wisner, Abram C., assignor to Reynolds Spring Company, Jackson, Mich. Welt-lock frame. 1,764,920; June 17.
Wissler, William A., Jackson Heights, N. Y., assignor to Haynes Stellite Co. Coating for welding rods. 1,764,589; June 17.
Witchger, Eugene J., assignor to Lufkin Rule Co., Saginaw, Mich. Micrometer caliper. 1,763,941; June 17.
Wolf, Harry E., assignor to Fort Pitt Bedding Company, Pittsburgh, Pa. Soft spring cushion. 1,765,044; June 17.
Woock, Herbert J., Lodi, Calif., assignor, by mesne assignments, to Super Mould Corporation, Reno, Nev. Tire-retreading mold. 1,764,378; June 17.
Wood Conversion Company. (See Streeter, Edwin H., assignor.)
Wood Process Company. (See Cline, McGarvey, assignor.)
Wood, Ural E., Long Beach, Calif. Rotary motion-control device. 1,764,690; June 17.

Woodall, Herbert J., and M. S. Randall, Detroit, Mich. Automobile closed-body construction. 1,764,668; June 17.
Woods, Clinton E., deceased, Yeadon, Pa., by J. E. Woods, Upper Darby, Pa., administratrix. Casing for a floor-polishing brush. Des. 81,423; June 17.
Woods, Julia E., administratrix. (See Woods, Clinton E.)
Woods, Walter T., Long Beach, assignor, by mesne assignments, to Byron Jackson Co., San Francisco, Calif. Device for preventing abrasion between drill pipes and surrounding well casings. 1,764,769; June 17.
Woodward, Hubbard Company. (See Fancher, C. J., and Johnson, assignors.)
Woodward, Richard C. (See Trumble, M. J., and Woodward.)
Woodward, Roland W. (See Gammell, O. L., and Woodward.)
Woolgar, William A., jr., Detroit, Mich. Aeroplane-wing construction. 1,765,189; June 17.
Woolley, George W., Pasadena, Calif. Parking gear for motor vehicles. 1,764,486; June 17.
Worthington Pump and Machinery Corporation. (See Riesner, Michael, assignor.)
Wright, Parvin, Seattle, Wash., assignor to The Gerrard Company, Inc., Chicago, Ill. Tag-addressing machine. 1,764,669; June 17.
Wright, William C., and J. F. Schenck, sr., Lawndale, N. C. Braiding machine. 1,765,117; June 17.
Wulff, John F. (See Houts, G. J., Tournier, and Wulff.)
Wurzbach, Hugh E., and L. H. Wadsworth, Magna, Utah, and H. G. Nutt, Altadena, Calif., assignors to The Selector Corporation, Salt Lake City, Utah. Check-controlled mechanism. 1,764,091; June 17.
Wydom, Herbert H., Boston, Mass., assignor, by mesne assignments, to Hood Rubber Company, Inc., Wilmington, Del. Feeding mechanism for sheet material. 1,763,735; June 17.
Wyler, Joseph A., Allentown, Pa., assignor to Trojan Powder Company, New York, N. Y. Concentrating nitrous gases. 1,765,254; June 17.
Yachyra, Frank J., Port Chester, N. Y. Door-holding device. 1,764,590; June 17.
Yahraus, Henry G. (See Wickersham, Harry P., assignor.)
Yates American Machine Company. (See Johnson, Wallace D., assignor.)
Yawman & Erbe Manufacturing Co. (See Dickinson, John D., assignor.)
Young, Andrew P., Pleasantville, N. Y. Supplemental lock for motor-car doors. 1,764,487; June 17.
Young, Donald H., Berkeley, Calif., assignor to American Manganese Steel Company, Chicago, Ill. Choker hook for logging industry. 1,764,135; June 17.
Young, Howard F., Kalamazoo, Mich. Concrete beam. 1,764,134; June 17.
Young, John C. (See McDonald, A., and Smith, assignors.)
Young, L. A. Company. (See Link, Albert C., assignor.)
Youngberg, Theodore, Minneapolis, Minn. Indicating device. 1,764,063; June 17.
Yungling, Paul F., assignor to Scott-Ross and Company, Los Angeles, Calif. Well packer. 1,764,136; June 17.
Yungling, Paul F., assignor to Scott-Ross & Company, Los Angeles, Calif. Fluid-operated pump. 1,764,482; June 17.
Zagorski, Johann, Frankfort-on-the-Main, Germany. Brake device for laying electrical open-air lines, cables, and the like. 1,764,591; June 17.
Zajaczek, Joseph. (See Helezer, Walter, assignor.)
Zeiss, firm Carl. (See Hartinger, Hans, assignor.)
Zilliox, John, Orchard Park, N. Y. Wrench. 1,764,379; June 17.
Zimmerer, Frederick J., assignor to The Russell Manufacturing Company, Middletown, Conn. Webbing for suspenders, garters, and similar articles. Des. 81,424; June 17.
Zimmermann, William F., Maplewood, assignor to Gould & Eberhardt, Newark, N. J. Shaper feed mechanism. 1,764,092; June 17.
Zimmermann, William F., Maplewood, assignor to Gould & Eberhardt, Newark, N. J. Stroke adjuster for idle shapers. 1,764,093; June 17.
Zimmermann, William F., Maplewood, assignor to Gould & Eberhardt, Newark, N. J. Rail guide and clamping surface for shapers. 1,764,542; June 17.
Zito, Nick D. (See Lewis, E. E., Zito, and Fertitta.)
Zook, John S., assignor to Burgess Battery Company, Madison, Wis. Battery hand lamp. 1,763,874; June 17.
Zouri Drawn Metals Company. (See Nelson, Charles G., assignor.)
Zublin, John A., Los Angeles, Calif. Floating supporter for drill pipe. 1,764,488; June 17.
Zundel, Eugene A., Chicago, Ill. Closet chair. 1,764,137; June 17.

ALPHABETICAL LIST OF INVENTIONS

FOR WHICH

PATENTS WERE ISSUED ON THE 17TH DAY OF JUNE, 1930

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). **Includes patents, reissues, and designs.**

Abdominal baby band. E. H. Walter. 1,764,995; June 17.
Abrasive composition. A. Biddle. 1,764,928; June 17.
Absorption mechanism. T. H. Symington. 1,763,830; June 17.
Accounting machines, Pin-box selective mechanism for. W. W. Lasker. 1,764,735; June 17.
Acetylcellulose, Making. H. A. Gardner. 1,764,204; June 17.
Acetylene generator. H. G. Irwin. 1,763,890; June 17.
Acid derivative, Methylene-disalicylic. S. L. Summers. 1,764,035–6; June 17.
Acid, Esters of phthalic. A. O. Jaeger. 1,764,022; June 17.
Acid, Manufacture of acetic. R. H. Van Schaack, jr. 1,765,318; June 17.
Acid of high purity, Manufacture of sulphuric. H. Howard. 1,764,309; June 17.
Acid, Process and apparatus for concentrating sulphuric. F. E. Kimball. 1,764,210; June 17.
Acoustic device. M. P. Bonnat. 1,765,124; June 17.
Acoustic diaphragm. S. W. Hatton. 1,763,780; June 17.
Addressing machine, Tag-. P. Wright. 1,764,669; June 17.
Advertising device. R. L. Gatliff. 1,764,834; June 17.
Advertising device, Changeable. C. C. Chinski. 1,765,260; June 17.
Advertising machine. W. F. Andersen. 1,764,141; June 17.
Aeroplane. P. R. Chadbourne. 1,764,932; June 17.
Aeroplane. R. W. Griswold, 2d. 1,763,888; June 17.
Aeroplane. F. O. Reed. 1,763,819; June 17.
Aeroplane catapult. F. F. Daniel. 1,765,210; June 17.
Aeroplane-wing construction. W. A. Woolgar, jr. 1,765,189; June 17.
Aeroplane wing, Metal. H. G. Landis. 1,765,079; June 17.
Aeroplanes, Controlling mechanism for. S. J. Ax. 1,765,195; June 17.
Agitator, aerator, and mixer. W. N. Jones and C. C. Humphreys. 1,765,338; June 17.
Agricultural implement. C. E. Hess. 1,764,449; June 17.
Aircraft, Amphibian. A. H. G. Fokker. 1,765,328–9; June 17.
Air-cushioned mechanism. A. L. De Leeuw. 1,765,059; June 17.
Air drier. I. Lundgaard. 1,764,110; June 17.
Airfoil. C. C. Jones. 1,764,842; June 17.
Air motor. J. Livingstone. 1,764,324; June 17.
Airplane, Amphibian. F. G. Diago, Habana, Cuba. 1,765,214; June 17.
Airport flood-lighting projector. O. Werner. 1,765,354; June 17.
Air scavenging and charging blower for engines. E. Klingelfuss and A. Baumann. 1,763,791; June 17.
Airship. R. H. Upson. 1,763,835; June 17.
Air-supplying means for closed-top gas-stove burner. F. A. Gercich and W. S. Smith. 1,764,718; June 17.
Alarm device, Retard. R. M. Hopkins. 1,763,967; June 17.
Alcohol, Dedydration of impure ethyl. E. Ricard. 1,763,722; June 17.
Alcohols, Dehydrogenating. K. B. Lacy. 1,764,962; June 17.
Alkaline oxidant and aluminum metal. A. Pietzsch and G. Adolph. 1,765,344; June 17.
Alloy. J. V. O. Palm. 1,764,034; June 17.
Alloys, Surface protection for magnesium. R. E. Lowe. 1,765,341; June 17.
Aluminum chloride, Making. H. Blumenberg, jr. 1,764,501–2; June 17.
Ammonia, Catalytic oxidation of. A. C. Jaeger. 1,765,352; June 17.
Amplification of electrical impulses. D. O. Whelan. 1,765,293; June 17.
Amplifier, Sound. R. F. Tack. 1,764,059; June 17.
Amusement apparatus. T. W. B. Watling. 1,763,839; June 17.
Anchor, Fence-post. H. M. Pfenning. 1,764,975; June 17.
Anchor insert for concrete work. D. H. Bitney. 1,764,772; June 17.
Anchor, Rail. C. G. Ericson. 1,764,010–13; June 17.
Anchor, Railway-rail. A. E. H. Barili and J. A. Hyle. 1,765,122; June 17.
Anchor, Railway-rail. H. G. Norwood. 1,765,092; June 17.
Angle piece for roofs or sidings. A. Audet. 1,765,121; June 17.
Angle trisector. S. F. Shibuya. 1,764,581; June 17.
Animal trap. E. Lee. 1,765,081; June 17.
Annealing box. H. Williams and J. W. McHugh 1,764,768; June 17.

Anthracene, Purification of crude. R. A. Norton. 1,764,031; June 17.
Antispreading device. W. E. Everett. 1,765,220; June 17.
Apparatus for flushing grease containers. C. R. Buchet. 1,764,387; June 17.
Apparatus for skinning animals. L. E. Thomas. 1,764,425; June 17.
Apparatus for transferring heat. J. F. Wait. 1,765,038; June 17.
Apron overall. J. Fedorcak. 1,765,009; June 17.
Arm clamp, Equalized. D. C. Klausmeyer. 1,764,514; June 17.
Artificial tree. R. Vydra. 1,764,540; June 17.
Arylamines, Preparation of. W. J. Hale. 1,764,869; June 17.
Ash receiver. F. S. Smith. 1,763,678; June 17.
Astronomical apparatus. A. E. Johnson. 1,765,336; June 17.
Atomizer. O. Kay. 1,764,107; June 17.
Atomizer for liquids. R. Elsässer. 1,764,437; June 17.
Audion amplifier. L. M. Hull. 1,764,564; June 17.
Auto creeper. R. W. Slee. 1,764,757; June 17.
Automatic device. L. L. Cunningham. 1,765,056; June 17.
Automatic regulator. F. E. Smith. 1,764,536; June 17.
Automobile creeper. R. W. Slee. 1,764,756; June 17.
Automobile instrument panel. R. De Boer. Des. 81,373; June 17.
Automobile signal, Sash-mounted. S. A. Gaede. 1,764,256; June 17.
Awning construction, Window. N. H. Nelson. 1,764,881; June 17.
Axle and framing structure, Combined. D. I. Fogger. 1,765,066; June 17.
Baby walker and stroller. E. S. VandeMark. 1,764,914; June 17.
Badge. C. L. Stange. Des. 81,419; June 17.
Badge. J. C. Tyler and T. E. Leavey. Des. 81,425; June 17.
Baffle. W. F. Richards. 1,764,983; June 17.
Bag: *See*—
Vacuum-cleaner bag.
Bag for bulk edibles and the like. A. A. Knee. 1,764,569; June 17.
Bag holding and filling device. E. L. Rosenfeld. 1,765,346; June 17.
Baking pan. J. W. Foerch, jr. 1,764,253; June 17.
Baking pan. J. Kollman. 1,764,685; June 17.
Balance indicator for platform scales. M. H. Starr. 1,764,537; June 17.
Balancing mechanism. W. R. Mittendorf. 1,764,274; June 17.
Ball-puzzle device. W. R. Maxwell. 1,765,019; June 17.
Bar: *See*—
Equalizer bar.
Bar for insulated railway-rail joints, Angle or joint. H. J. Hansken. 1,764,563; June 17.
Barge. J. L. Taylor. 1,764,585; June 17.
Basket-ball retriever. F. J. Hatley. 1,765,269; June 17.
Batch box. M. Madsen. 1,764,327; June 17.
Bathrobe package and the like. S. Horowitz. 1,764,262; June 17.
Battery: *See*—
Galvanic battery.
Battery cell, Storage-. R. C. Mitchell. 1,765,027; June 17.
Battery-handling apparatus. E. W. Schellentrager and B. E. Clarkson. 1,764,354; June 17.
Battrey-handling method. E. W. Schellentrager and B. E. Clarkson. 1,764,355; June 17.
Battery separator. W. E. Holland. 1,765,271; June 17.
Beam, Concrete. H. F. Young. 1,764,134; June 17.
Bearing, Combined duty and thrust. B. S. Watling. 1,763,840; June 17.
Bearing, Crank-shaft. H. Austin. 1,764,672; June 17.
Bearing for sewing machines, Adjustable needle-lever. L. G. Bowman. 1,763,949; June 17.
Bearing, Roller. A. D. Booth. 1,763,750; June 17.
Bearing, Scale. H. C. Schaper. 1,764,649; June 17.
Bearing seal. C. C. Spreen. 1,764,701; June 17.
Bearing, Side. A. M. Brenne. 1,763,843; June 17.
Bearings, Pull-off mechanism for roller. R. B. Noble. 1,764,116; June 17.
Beater. C. Andrews, jr. 1,764,597; June 17.
Bed, Sofa. C. R. Hultgren. 1,764,874–5; June 17.
Bedspread. S. Stewart. 1,764,764; June 17.
Bell, Electromagnetic. J. F. Moran. 1,764,277; June 17.
Bell for conduits. C. D. Healy. 1,765,156; June 17.
Bell, Ornamental band. I. W. Schmitz and L. C. Rupp. 1,764,532; June 17.

Belt-tightening device, Automatic. H. F. Wilhelm. 1,764,767; June 17.
Belt, Traction. B. F. Arps. 1,764,671; June 17.
Beverage mixer. H. J. D. Cooke. 1,765,129; June 17.
Bill clip. H. Negbaur. Des. 81,396; June 17.
Binder and folding said samples, Fabric-sample. L. H. Pall. 1,764,033; June 17.
Binder and manufacturing the same, Loose-leaf. D. D. Myers. 1,765,353; June 17.
Binder, Tray. J. M. Jones and R. R. Webb. 1,764,264; June 17.
Bit: *See*—
Boring bit. Drill bit.
Blade for shears, Cutting. G. A. Ungar. 1,765,317; June 17.
Blade, Scraper. J. P. Erhart. 1,765,218; June 17.
Block: *See*—
Bracket-fixture block. Brake block.
Blotter. C. J. Kaiser. 1,764,796; June 17.
Board: *See*—
Pin board.
Body construction, Automobile closed-. H. J. Woodall and M. S. Randall. 1,764,668; June 17.
Body, Convertible vehicle. E. W. Magill. 1,764,328; June 17.
Body, Truck. C. J. Hug. 1,765,232; June 17.
Boiler: *See*—
Locomotive boiler. Superheater boiler.
Boiler. J. E. Jones. 1,764,960; June 17.
Boiler and fire box, Locomative. L. A. Rehfuss. 1,764,981; June 17.
Boiler cleaner. N. L. Snow. 1,765,311; June 17.
Boiler flue and pipe cutter. J. I. Cunningham. 1,765,208; June 17.
Bolt-trimming machine. W. L. Clouse. 1,763,759; June 17.
Bookholder. H. T. Adams. 1,764,818; June 17.
Bookholder. L. A. Lupien. 1,764,325; June 17.
Book of sheets, Temporary. A. Von Auw. 1,765,194; June 17.
Book repairing. J. W. Ward. 1,764,234; June 17.
Booth. R. B. Rawlins. Des. 81,403; June 17.
Boring and tapping machine. W. C. Fownes, jr., C. R. Barton, and W. G. Benninghoff. 1,764,717; June 17.
Boring bit, Well-. F. L. Bronson. 1,764,432; June 17.
Boring machine. F. J. B. Berry. 1,765,296; June 17.
Boring machine. G. E. Hallenbeck. 1,763,964; June 17.
Bottle. A. B. Thomas. Des. 81,422; June 17.
Bottle attachment. W. C. Erwin. 1,763,924; June 17.
Bottle or article of similar nature, Hot-water. F. R. Brown. Des. 81,371–2; June 17.
Bottle or article of similar nature, Hot-water. H. E. Thayer. Des. 81,421; June 17.
Bowl or article of similar nature, Flower. T. C. Heisey. Des. 81,388; June 17.
Bowl or similar article, Illuminating glass. N. Kopp. Des. 81,392; June 17.
Box: *See*—
Annealing box. Mail box.
Batch box. Shoe-box.
Gear box. Suction box.
Journal box. Wagon box.
Box. E. A. Locke, jr. 1,765,084; June 17.
Box for locomotives, Smoke. H. Glaenzer. 1,765,229; June 17.
Boxes, Folding paper. J. P. Shearer. 1,765,104; June 17.
Brace for broom handles. H. Cave. 1,764,095; June 17.
Bracelet. E. Prestinari. Des. 81,400–1; June 17.
Bracelets, Expansive member for inseparable. O. L. Gammell and R. W. Woodward. 1,764,440; June 17.
Bracket: *See*—
Radio aerial bracket. Supporting bracket.
Bracket-fixture block, Curtain-. E. Dignan. 1,763,764; June 17.
Bracket for automobile windows and the like, Screen. B. Schwein. 1,765,244; June 17.
Braiding machine. W. C. Wright and J. F. Schenck, sr. 1,765,117; June 17.
Brake: *See*—
Fluid-pressure brake. Hydraulic brake.
Brake. K. E. Lyman. 1,763,854; June 17.
Brake block. H. E. Jensen. 1,765,275; June 17.
Brake device for laying electrical open-air lines, cables, and the like. J. Zagorski. 1,764,591; June 17.
Brake for self-propelled vehicles, Antiskid. S. H. Bandla. 1,764,602; June 17.
Brake-lining machine. J. R. Lewis. 1,764,082; June 17.
Brake mechanism. A. Y. Dodge. 1,765,350–1; June 17.
Brake mechanism, Hydraulic. M. Loughead. 1,764,179; June 17.
Brake shoe. H. E. Maynard. 1,764,847; June 17.
Brake system for railway rolling stock, Air-. G. W. Cowan. 1,764,152; June 17.
Braking apparatus for motor vehicles. M. Loughead. 1,764,177; June 17.
Braking apparatus, Railway. W. C. McWhirter and H. S. Loomis. 1,764,804; June 17.
Brazing rod. A. R. Lytle. 1,764,571; June 17.
Breathing attachment. C. J. Rodman. 1,764,350; June 17.
Bricklayer device, Mechanical. A. A. Guerini. 1,764,836; June 17.
Bricks, Apparatus for handling. E. T. Judson. 1,763,657; June 17.
Bridge, Overhead traveling. E. T. Bennington. 1,764,144; June 17.
Bridge, Reenforced-concrete. B. Bauer. 1,764,494; June 17.
Broom. W. B. Rupe. 1,764,527; June 17.
Broom construction. L. Lauber. 1,764,876; June 17.
Brush, Fountain shaving. A. C. Rusell. 1,763,905; June 17.
Brush, Fountain tooth. R. W. Vardeman. 1,764,130; June 17.
Brush lifter for electric motors. G. R. Anderson. 1,764,709; June 17.
Brush, Scalp-treating. W. A. Taylor. 1,763,832; June 17.
Bucket cleaner. C. L. George. 1,764,949; June 17.
Bucket, Cupola. O. L. Coffey. 1,765,348; June 17.
Bucket, Grab. R. W. Kaltenbach. 1,763,790; June 17.
Bucket, Sink. J. Hartman. 1,765,267; June 17.
Buckle. W. F. Arndt. 1,764,670; June 17.
Buckle, Belt. F. Hirsh. Des. 81,389; June 17.
Buckle, Belt. C. S. Nichols and W. M. Jordan. 1,763,981; June 17.
Buckle, Knicker. M. Carfagno. 1,764,547; June 17.
Buckle, Shoe. W. E. Smith. Des. 81,412–14; June 17.
Buckle, Shoe. W. E. Smith. Des. 81,417; June 17.
Buffing machine. G. N. Gordon and G. Sampson. 1,763,774; June 17.
Building-block machine. C. M. Eberling. 1,765,064; June 17.
Building construction. H. A. Blanchard. 1,764,001; June 17.
Building construction. C. V. Head. 1,765,154; June 17.
Building construction. W. C. Koch. 1,764,729; June 17.
Building construction. F. M. Venzie. 1,764,587; June 17.
Building partition. F. M. Venzie. 1,764,428; June 17.
Bullet mold. M. G. McNeely. 1,763,977; June 17.
Bumper. J. Galamb. 1,763,847; June 17.
Bumper, Vehicle. J. J. Punke. Des. 81,402; June 17.
Buoyant seat or like device for aquatic purposes. T. Phillips. 1,764,852; June 17.
Burner: *See*—
Oil burner.
Burner. C. M. Hunter. 1,765,274; June 17.
Burner for retort stoves, Starting. M. Resek. 1,763,672; June 17.
Burner installation, Gas-. F. A. Gercich. 1,764,719; June 17.
Button. I. Kramer. 1,765,077; June 17.
Button and making the same, Sheet-metal. M. F. Carr. 1,765,054; June 17.
Button, Self-fastening. E. Jaffe. 1,763,656; June 17.
Button, Tack-attached sheet-metal. M. F. Carr. 1,765,055; June 17.
Cable clamp and bridle ring. L. B. Fish and E. St. John. 1,763,770; June 17.
Cable grip. B. C. Riblet. 1,764,469; June 17.
Cable, Telephone. W. K. Weston. 1,763,873; June 17.
Cage for roller bearings. G. Carlson. 1,764,198; June 17.
Calcium molybdate, Making. A. Kissock. 1,763,712; June 17.
Calculating apparatus. A. E. Vethe. 1,764,915; June 17.
Calculating machine. C. L. Johnston and C. M. F. Friden. 1,764,959; June 17.
Calendar mount. E. A. Abbott. 1,764,236; June 17.
Calking ring. H. C. Burt. 1,764,675; June 17.
Call register. A. Pentecost. 1,763,719; June 17.
Cam, Adjustable. H. F. Elliott. 1,763,957; June 17.
Cam, Adjustable control. W. W. Landsiedel. 1,765,340; June 17.
Camera, Automatic. B. D. Chamberlin. 1,764,066; June 17.
Can: *See*—
Garbage can.
Can bodies and method therefor, Nested. W. M. Tomkins. 1,765,182; June 17.
Can-body-making machines, Marginal hook-forming mechanism for. P. Kruse. 1,764,318; June 17.
Can-end-drying machine. N. Troyer and R. M. Mero. 1,765,183; June 17.
Can opener. H. Falla and F. Bergami. 1,765,222; June 17.
Can opener. W. P. Schaap. 1,764,648; June 17.
Cap, Adjustable. J. Carlson. 1,764,505; June 17.
Car and the like, Cane. W. B. Gregg. 1,763,698; June 17.
Car construction. S. B. Haseltine. 1,764,444–6; June 17.
Car coupling. A. Amrhein. 1,764,594; June 17.
Car for racing apparatus, Electrically-operated. G. W. Heintz. 1,764,627; June 17.
Carrier: *See*—
Yarn carrier.
Car-truck spring, Railway-. C. Hankins. 1,764,720; June 17.
Carbureting device for caloric motors. C. Bjork. 1,763,948; June 17.
Carburetor. W. A. Brackett and W. E. Richard. 1,764,711; June 17.
Carburetor. C. B. Jahnke. 1,764,726; June 17.
Carburetor. M. E. Jones. 1,763,709; June 17.
Carburetor. E. L. H. Pepinster and F. Genève. 1,765,175; June 17.
Carburetor system, Duplex. H. H. Timian. 1,763,726; June 17.
Cardcase. W. H. Ostrander. 1,763,857; June 17.
Card, Memorandum. E. S. Hudler. 1,764,102; June 17.

Card system or index, Abstract-. E. Raviglione. 1,764,580; June 17.
Carrier. H. H. C. Grondahl. 1,764,623; June 17.
Car-tacking indicator. D. Massardo. 1,764,217; June 17.
Carton, Display. W. J. Laubenheimer. 1,764,216; June 17.
Case: *See*—
Show case. Vanity case.
Typewriter carrying case.
Case for phonograph records. H. S. Scott. 1,764,754; June 17.
Cash register. F. L. Fuller. 1,763,697; June 17.
Cash register. C. W. Green. 1,763,699; June 17.
Cash register. H. W. Gregory. 1,763,650; June 17.
Cash register. L. Z. La Forest. 1,763,661; June 17.
Cash register. B. M. Shipley. Des. 81,411; June 17.
Cash register. E. J. Von Pein. 1,763,915; June 17.
Casing for a floor-polishing brush. C. E. Woods. Des. 81,423; June 17.
Casing for boilers and the like. F. A. Schmitz. 1,764,281; June 17.
Casing in machine. C. Schramm and E. W. Clark. 1,765,349; June 17.
Casings, Apparatus for perforating. M. J. Trumble and R. C. Woodward. 1,764,129; June 17.
Cask, barrel, or like container. R. Kaempf and A. Lankoff. 1,765,161; June 17.
Casket, Burial. P. P. Jasper. 1,764,566; June 17.
Casting apparatus, Metal-. A. Kadow. 1,763,710; June 17.
Casting, Composite. J. E. Hoy. 1,764,725; June 17.
Casting device for live bait. E. R. Marsters. 1,764,738; June 17.
Casting, Leg-holding. P. A. Rennack. 1,764,226; June 17.
Cattle poke. C. F. Carothers. 1,764,827; June 17.
Cellular structural material. H. E. Brookby and G. D. King. 1,764,824; June 17.
Cellulose esters and cellulose ethers, Dyeing and printing. E. Fischer and C. E. Müller. 1,765,142; June 17.
Centrifugal drier. C. W. Terwilliger. 1,764,909; June 17.
Centrifugal extractor. J. M. Kreider. 1,764,214; June 17.
Centrifugal switch. J. F. Schylander. 1,764,055; June 17.
Cereal beverages, Stabilization of. H. Heuser. 1,764,955; June 17.
Chain, Antiskid. J. G. Allmon. 1,763,998; June 17.
Chain-applying device, Tire-. B. A. Small. 1,763,906; June 17.
Chain device, Self-adjusting tire-. B. A. Spinney. 1,764,811; June 17.
Chair: *See*—
Closet chair. Reclining chair.
Rail chair.
Change-making machine. C. Schwartz. 1,764,357; June 17.
Channel-forming device for silt-carrying rivers. M. Waters. 1,765,041; June 17.
Chase. C. C. Sweet. 1,763,725; June 17.
Check-controlled machine. G. F. Hochriem. 1,765,014; June 17.
Check-controlled mechanism. H. E. Wurzbach, L. H. Wadsworth and H. G. Nutt. 1,764,091; June 17.
Cheese vat. W. Greenheck. 1,764,681; June 17.
Chimney ventilator. A. McDonald and W. O. Smith. 1,764,219; June 17.
Chuck device. G. W. Emrick. 1,764,290; June 17.
Chuck, Tapping. E. K. Morgan. 1,763,717; June 17.
Cigarettes, Apparatus for collecting and superposing groups of. R. W. Voigt. 1,764,664; June 17.
Cigar or cigarette extinguisher. F. Vogelsang. 1,764,862; June 17.
Circuit, Amplifier. L. M. Hull. 1,764,565; June 17.
Circuit breaker, Thermally-operated. L. A. M. Phelan and C. Hotchkiss. 1,764,346; June 17.
Circuit, Electrical amplifier. F. H. Drake. 1,764,552; June 17.
Circuit, Electron-tube. L. M. Hull. 1,764,206; June 17.
Circuit interrupter. R. C. Van Sickle. 1,764,369; June 17.
Cistern agitator and purifier. G. S. Brown. 1,764,545; June 17.
Clamp: *See*—
Arm clamp. Rail clamp.
Conductor clamp. Strain clamp.
False-work clamp.
Clamp. E. H. Allen. 1,764,380; June 17.
Clamp. J. W. Keffer. 1,765,235; June 17.
Clamp. A. D. Turner. 1,765,113; June 17.
Clamp. A. E. and L. Shlager and B. M. Groisser. 1,764,697; June 17.
Clamp for traveling bridges, Rail. B. H. Kersting. 1,764,797; June 17.
Clamping mechanism for pressing machines. R. C. Pauly and S. Nottage. 1,763,816; June 17.
Clamping tongs for shoe repairing. G. H. Schroder. 1,764,533; June 17.
Clasp: *See*—
Safety spring clasp. Tie clasp.
Cleaner: *See*—
Boiler cleaner. Ditch cleaner.
Bucket cleaner.
Cleaning attachment for tractors, Wheel-. G. Raby. 1,763,984; June 17.
Cleaning machine. H. R. Swanson. 1,764,424; June 17.
Clippers. A. J. Dremel. 1,764,614; June 17.
Clippers, Hair. S. Friedman. 1,764,556; June 17.
Clock, Watchman's electric. S. B. Chapman. 1,765,205; June 17.
Closet: *See*—
Dry closet.
Closet chair. E. A. Zundel. 1,764,137; June 17.
Closet pole, Extensible. G. A. Carlson. 1,764,931; June 17.
Closure and making the same, Bag. S. H. and G. E. Lilly. 1,763,663; June 17.
Closure for containers. G. L. Ohmart. 1,764,973; June 17.
Closure for tooth-paste tubes. C. A. Conover. 1,765,128; June 17.
Closure, Inkwell. L. B. Prosnitz. 1,765,284; June 17.
Closure-operating mechanism. G. G. Candee. 1,764,150; June 17.
Closure, Replaceable receptacle. F. J. O'Brien and W. Punte. 1,764,883; June 17.
Closure seal. E. F. Andersen and J. E. Sharp. 1,764,864; June 17.
Closures, Apparatus for applying bottle. J. A. Pease. 1,765,030; June 17.
Clothes hanger. D. M. Campana. 1,763,686; June 17.
Clotheshorse. J. W. Frazer. 1,764,072; June 17.
Clothespin, Wire. A. Forget. 1,764,833; June 17.
Clutch. C. M. Eberling. 1,765,063; June 17.
Clutch check. J. Rodger. 1,764,752; June 17.
Clutch for typewriters, Platen-roller. A. Pateman. 1,764,224; June 17.
Clutch friction device. E. E. Wemp. 1,765,304; June 17.
Clutch, Safety. P. Kruse. 1,764,317; June 17.
Clutch synchronizer, Double-. H. J. Murray. 1,764,333; June 17.
Coat. W. C. Knoernschild. 1,763,892; June 17.
Coating articles, Apparatus for. H. A. Stone. 1,764,423; June 17.
Coating for flame-retarding coverings and manufacturing the same. H. N. Bockus. 1,765,000; June 17.
Coating for surfacing permanent molds. H. L. Baumgardner. 1,764,544; June 17.
Coating for welding rods. W. A. Wissler. 1,764,589; June 17.
Coating material. E. C. Hall. 1,764,624–5; June 17.
Cock. Combination stop and drain. H. F. Dyck. 1,765,139; June 17.
Cocoa-cooling apparatus. W. Wain. 1,765,037; June 17.
Coffee-making apparatus. I. D. Richheimer. 1,763,863; June 17.
Coffee roaster. A. Idonas and J. C. Potter. 1,764,872; June 17.
Coin-controlled mechanism. J. A. and A. L. Williamson. 1,765,253; June 17.
Color guide. W. J. Miskella. 1,764,083; June 17.
Colter. L. L. Fojtik. 1,765,143; June 17.
Commutator-rocking device. C. C. Whittaker. 1,764,376; June 17.
Compensating system. L. Y. Spear. 1,764,904; June 17.
Composition for cleaning glass windows. F. Diebold and O. Friedeberg. 1,764,392; June 17.
Composition for oilless bearings and producing same. J. O. Carrey. 1,764,094; June 17.
Compressor. D. P. Heath. 1,764,953; June 17.
Compressor. C. C. Spreen. 1,764,655; June 17.
Compressor, Variable-capacity. M. Riesner. 1,764,646; June 17.
Concrete mixer and the like. E. J. Stern. 1,764,583; June 17.
Condenser. R. N. Ehrhart. 1,764,716; June 17.
Condenser. R. N. Ehrhart. 1,764,782; June 17.
Condenser. G. L. MacNelli. 1,764,801; June 17.
Condenser and rectifier, Ammonia. L. Bruehl and L. Reichert. 1,764,197; June 17.
Condenser unit, Compressor-. C. C. Spreen. 1,764,654; June 17.
Condensers, Seasoning. L. H. Richmond. 1,765,032; June 17.
Conductor clamp. N. A. Wahlberg. 1,764,429; June 17.
Conductor clamp. N. A. Wahlberg. 1,764,916; June 17.
Conductor for oil-well heaters. G. W. Knox. 1,764,213; June 17.
Confectionery, Frozen. M. Schnaier. 1,764,282; June 17.
Connecter. H. Falla. 1,765,221; June 17.
Connecter, Bead-chain. J. W. W. Holden. 1,763,850; June 17.
Connecter, Electrical swivel. A. R. Goldrick. 1,765,330; June 17.
Connecter element for spring structures. R. E. McElroy. 1,764,967; June 17.
Connecting member, Elastic or resilient. H. Richter. 1,764,750; June 17.
Connection, Belt. P. D. Latimer. 1,765,080; June 17.
Contact apparatus, Liquid and gas. R. P. Mase. 1,765,087; June 17.
Contact closer. C. J. Anderson. 1,764,819; June 17.
Contact mass, Preparing. K. B. John, C. W. Coslow, and C. J. Schwindt. 1,764,024; June 17.
Container. M. H. Borzin. 1,764,241; June 17.
Container, Collapsible. A. H. Rosenthal. 1,763,724; June 17.
Container, Corncob. H. W. Tool. 1,765,111; June 17.
Container, Dispensing. G. M. Sacerdote. 1,764,352; June 17.

Container, Display. E. Y. Crossmore. 1,765,299; June 17.
Container for dry-ice packs. L. W. Fountain. 1,765,226; June 17.
Container for lip sticks and the like. A. Janer. 1,764,452; June 17.
Container for sheets. H. L. De Lisle. 1,764,610; June 17.
Container, Grease-dispensing. B. W. Mendenhall. 1,764,968; June 17.
Container head. H. L. and J. N. Carpenter. 1,764,389; June 17.
Containers, Device for cleaning liquid. P. R. Finch. 1,764,160; June 17.
Containers, Mechanism for curling the edges of irregular-shaped. C. J. Aulbach. 1,764,239; June 17.
Control apparatus. L. G. Riley. 1,764,415; June 17.
Control apparatus. W. H. Smith. 1,764,420; June 17.
Control device, Rotary-motion-. U. E. Wood. 1,764,090; June 17.
Control for direct-current generators. A. F. Masury, W. B. Jupp, and F. E. Queeney. 1,765,088; June 17.
Control means for power-operated mechanisms. P. P. Dean. 1,764,936; June 17.
Control mechanism for mechanical refrigerating apparatus. J. R. Replogle. 1,764,749; June 17.
Control system. C. B. Bartley and V. H. Dake. 1,765,045; June 17.
Control system. J. D. Lewis, B. N. Jones, and A. H. Schlaf. 1,764,877; June 17.
Control system. A. Pinto. 1,764,886; June 17.
Control system. M. Robison. 1,764,349; June 17.
Control system for elevators. A. Pinto. 1,764,885; June 17.
Control system for rolling mills. H. C. Jenks. 1,764,312; June 17.
Controller for dental engines. H. E. Weber. 1,763,995; June 17.
Controller for refrigerating systems, Automatic. L. Bruehl. 1,764,196; June 17.
Controlling device for heat transference in refrigerators. L. Bruehl and L. Reichert. 1,764,194; June 17.
Controlling system. C. F. Linkenheld. 1,764,636; June 17.
Conveyer. S. W. Avis. 1,763,738; June 17.
Conveyer. W. R. Bankson. 1,764,143; June 17.
Conveyer. G. E. Edmunds. 1,764,288; June 17.
Conveyer. J. C. Meem. 1,764,461; June 17.
Conveyer apparatus. H. J. Murphy. 1,763,809; June 17.
Conveyer drive for glass-annealing leers. H. W. Ingle. 1,764,791; June 17.
Conveyer, Raw-sugar. W. H. Hoodless. 1,764,100; June 17.
Cooker, Steam-pressure. T. Hashimoto. 1,765,072; June 17.
Cooler and aerator, Milk. R. B. Latterell. 1,764,269; June 17.
Cooling device, Automatic milk-. E. P. Allard. 1,764,140; June 17.
Cooling system, Transformer. L. H. Hill. 1,764,305; June 17.
Cooling tower. W. S. Bowen. 1,765,001; June 17.
Copyholder. R. B. Harris. 1,765,306; June 17.
Cord protector for electric plugs. M. M. Stubbs. 1,765,035; June 17.
Cordage, Apparatus for making combined paper and fiber. J. B. Reber. 1,764,524; June 17.
Core guide. J. R. McWane. 1,765,024; June 17.
Cores from cast-iron pipes and the like, Apparatus for removing. J. R. McWane. 1,765,022; June 17.
Corn-picking machine, Attachment for. J. W. Frank. 1,764,947; June 17.
Costumers and other articles, Joint for. H. S. Best. 1,763,748; June 17.
Counting device. J. I. Farrior. 1,765,262; June 17.
Coupling: *See*—
Car coupling. Magnet coupling.
Machine coupling.
Coupling pin, Flexible. G. A. Dalton and J. R. Dunham. 1,765,209; June 17.
Cover, Can. A. F. Jungerheld. 1,764,684; June 17.
Cover, Can and slip. E. Hildebrandt. 1,764,304; June 17.
Crane rig. J. R. McWane. 1,765,023; June 17.
Crane, Tractor boom. F. G. Beckman. 1,765,295; June 17.
Crate, Hog. W. N. Primm. 1,764,522; June 17.
Creping machine. S. J. Campbell. 1,764,676; June 17.
Crosshead. C. Markel. 1,764,049; June 17.
Crushing apparatus, Sugar-cane-. F. Maxwell. 1,763,855; June 17.
Cultivator. F. V. Donald. 1,765,358; June 17.
Cultivator, Disk. W. F. Hamilton. 1,764,402; June 17.
Cuprous compounds, Making. S. B. Heath and M. O. Keller. 1,763,781; June 17.
Curb form. G. H. Miller. 1,764,029; June 17.
Current reversing switch, Rotary. F. F. Criteser. 1,765,132; June 17.
Curtain fixture. D. Hoyt. 1,764,310; June 17.
Curtain rod. M. J. Brunner. 1,764,037; June 17.
Curtain rod or similar article. J. H. Boye. Des. 81,370; June 17.
Curtain tie-back, Automatic. W. Occhiuzzo. 1,763,811; June 17.
Curtains, Method and apparatus for draping. H. Dreyfuss. 1,764,396; June 17.
Cushion: *See*—
Journal-box cushion. Soft spring cushion.
Cushioning means for the fallers of gill boxes and intersecting frames. C. Gégauff. 1,763,926; June 17.
Cutter: *See*—
Rotary cutter. Twine cutter.
Cutter-head quick release. W. D. Johnson. 1,763,928; June 17.
Cutting machine, Sheet-. E. H. Trump. 1,765,184; June 17.
Cutting mechanism for mop-making machines. A. Van Veen. 1,763,836; June 17.
Cutting, mixing, and attrition mill, Rotary. R. C. Hopkins. 1,764,020; June 17.
Cutting sections of piezo crystals. C. B. Sawyer. 1,764,088; June 17.
Cylinder for laundry machines. J. Jorgenson. 1,764,265; June 17.
Damper and soot eliminator for heaters, Check-draft. D. B. Tolley. 1,764,370; June 17.
Davit, Ship's. R. B. Steward. 1,763,908; June 17.
Deckle for paper-making machines. J. W. Harris. 1,764,260; June 17.
Dental attachment for removable bridgework. E. H. Ecker. 1,764,781; June 17.
Dental impression instrument. J. M. Craigo. 1,764,244; June 17.
Dentures, Obtaining central occlusion in the construction of artificial. F. J. Mulcahy. 1,764,115; June 17.
Desk, Ledger. J. D. Dickinson. 1,764,612; June 17.
Detonator, Delay-action. G. C. Bacon. 1,765,294; June 17.
Device for preventing abrasion between drill pipes and surrounding well casings. W. T. Woods. 1,764,769; June 17.
Device for preventing safe robberies. O. L. Beverly. 1,764,191; June 17.
Diaphragm and mounting, Acoustic. N. Baldwin. 1,763,876; June 17.
Diaphragm support for personal wear. V. F. Kemp. 1,764,209; June 17.
Dies, Manufacturing. F. L. Keller. 1,764,633; June 17.
Dipper trip and monkey-line winder, Semiautomatic. G. G. Morin. 1,765,089; June 17.
Direction finder. H. O. Peterson. 1,764,747; June 17.
Dishwasher. A. W. Smith. 1,763,992; June 17.
Disintegrating machine. D. C. Addicks. 1,764,138; June 17.
Disk-harrow seeder attachment. O. E. Reimer. 1,765,176; June 17.
Disk-rolling process. G. M. Evans. 1,764,943; June 17.
Dispenser, Portable grease. R. H. Moulton. 1,764,970; June 17.
Dispensing apparatus, Gift-. A. C. Westgate. 1,763,783; June 17.
Dispensing apparatus, Liquid-. F. B. Eilers. 1,764,097; June 17.
Dispensing device. J. Kantor and C. H. Miller. 1,763,971; June 17.
Dispensing device. T. Kaskouras. 1,764,728; June 17.
Dispensing device. D. P. Polk and J. P. Remington. 1,764,642; June 17.
Dispensing device, Liquid-. J. J. Robinson. 1,764,525; June 17.
Dispensing liquids, Device for. G. F. Wentz. 1,763,732; June 17.
Dispensing tube. F. L. MacDonald. 1,765,281; June 17.
Display and dispensing device. L. E. Pratt. 1,764,468; June 17.
Display apparatus. B. S. Watling. 1,763,841; June 17.
Display device. H. B. Barker. 1,763,741; June 17.
Display means, Poster-. C. M. Dabrohua. 1,765,057; June 17.
Display rack. C. C. Ferris. 1,765,228; June 17.
Display stand. L. A. Nielsen. 1,764,413; June 17.
Ditch cleaner. J. W. Peck. 1,765,031; June 17.
Ditcher, Blind. H. I. Umbarger. 1,765,185; June 17.
Dolls, Eyelashes for. V. Keney. 1,763,930; June 17.
Door and the like. S. S. Thomas. 1,765,036; June 17.
Doorbolt. W. D. Ferris. 1,763,694; June 17.
Door, Elevator. J. W. Peelle. 1,763,858; June 17.
Door, Elevator. R. S. Peelle. 1,763,860; June 17.
Door, Folding. E. J. G. Phillips. 1,764,976; June 17.
Door-holding device. F. J. Yachyra. 1,764,590; June 17.
Doorlock. C. D. Sarkisian. 1,764,807; June 17.
Door opener, Furnace-. A. Bandow. 1,764,142; June 17.
Door-operating mechanism. S. B. Haseltine. 1,764,443; June 17.
Door, Warehouse. R. S. Peelle. 1,763,859; June 17.
Dough divider and rounder. F. H. Van Houten. 1,764,586; June 17.
Draft mechanism. C. T. Ray. 1,764,086; June 17.
Draft rigging, Railway. E. H. Lehman. 1,763,974; June 17.
Drag to the spinning bobbins in flyer spinning and like frames, Applying. H. A. Boyd. 1,763,752; June 17.
Drawing machine. A. C. Belles. 1,765,047; June 17.
Drawing mechanism. A. C. Butler. 1,765,050; June 17.
Drawing mechanism for textile rovings. F. Casablancas. 1,765,127; June 17.

Dresser. E. H. Smith. 1,764,229; June 17.
Drier: *See*—
Air drier. Hair drier.
Centrifugal drier. Laundry drier.
Drill. C. A. and O. Signell. 1,764,989; June 17.
Drill bit, Multiple-disk. C. S. Crickmer and I. C. Bell. Re17,700; June 17.
Drill chuck. G. W. Emrick. 1,764,291; June 17.
Drill pipe, Floating supporter for. J. A. Zublin. 1,764,488; June 17.
Drill projectile for bombarding planes. F. Marie. 1,765,017; June 17.
Drill unit, Fluid-actuated. R. M. Galloway. 1,764,098; June 17.
Drills, Feeding device for rock. C. C. Hansen. 1,763,701; June 17.
Drilling apparatus, Deep-well-. C. E. Reed. 1,764,854; June 17.
Drink mixer. E. Nielsen. 1,764,338; June 17.
Drink mixer. S. J. Poplawski. 1,765,095; June 17.
Drink-mixing device. H. K. Jensen. 1,764,079; June 17.
Drive attachment for lawn mowers, Parallel. H. W. Palm. 1,764,851; June 17.
Driving lining tubes for molding concrete piles in the ground. E. Frankignoul. 1,764,948; June 17.
Dry cell, Electric. J. G. Jackson. 1,763,969; June 17.
Dry closet. C. T. Cadwallader. 1,764,149; June 17.
Duplicating machine. H. F. Helleman. 1,764,261; June 17.
Dustcap device. A. P. Kearns. 1,764,208; June 17.
Dust or fume from air, Apparatus for separating. J. P. Van Gelder. 1,764,861; June 17.
Dyeing and like machine. C. S. Bedford. 1,763,945; June 17.
Educational appliance. H. Herzfeld. 1,764,448; June 17.
Effervescent composition, Stable. L. T. Andrews. 1,764,996; June 17.
Egg-inspection apparatus. J. F. Mahlstedt. 1,764,802; June 17.
Electric coupling member. D. G. Robinson. 1,764,227; June 17.
Electric discharge tube, Luminous. J. J. Madine. 1,764,048; June 17.
Electric iron. C. De Atley. 1,764,246; June 17.
Electric light and radio power plant and battery-charging system, Combined. C. F. Hauntz. 1,764,447; June 17.
Electric meat and like, Roaster. J. Seegmuller. 1,765,247; June 17.
Electric motor. A. Wiedner. 1,764,921; June 17.
Electric switch. F. W. Andrew. 1,764,590; June 17.
Electric switch. L. H. Goetz. 1,763,649; June 17.
Electric switch. A. G. Horvath. 1,765,016; June 17.
Electric switch. E. Nielsen. 1,764,337; June 17.
Electrical instruments, Control of. J. W. Legg. 1,764,410; June 17.
Electrical switch. J. C. Bogle. 1,765,297; June 17.
Electrical transforming system. K. A. Oplinger. 1,764,341; June 17.
Electrically-driven agitating machine. E. J. Hileman. 1,764,404; June 17.
Electrolytic system. J. W. Scott. 1,764,630; June 17.
Electrotherapeutic machine. H. P. Pullwitt. 1,764,347; June 17.
Elevating mechanism for drilling machines. A. M. Sosa and W. G. Hoelscher. 1,764,810; June 17.
Elevator and conveyer, Water. J. S. Stinson. 1,764,539; June 17.
Endless pattern band for textile machinery. P. Sander. 1,765,286; June 17.
Engine: *See*—
Gas engine. Sleeve-valve engine.
Gasoline engine. Valve engine.
Internal-combustion engine.
Engine. F. F. Finch. 1,763,959; June 17.
Engine and turbine, Combined reciprocating. H. Wach. 1,764,061; June 17.
Engine preheater. S. V. Jackson. 1,764,021; June 17.
Engines, Method and apparatus for shipping. G. L. Lundborg and R. B. Israel. 1,764,737; June 17.
Ensilage-distributing apparatus. W. G. Welles. 1,765,115; June 17.
Envelope. W. Helezer. 1,765,157; June 17.
Envelope, Postal. R. Lee. 1,765,166; June 17.
Envelope, Safety. A. Gonzalez. 1,765,146; June 17.
Equalizer bar. T. J. Applebaker. 1,764,237; June 17.
Evaporator. L. Bruehl. 1,764,195; June 17.
Evaporator for refrigerating apparatus. L. Bruehl. 1,764,192; June 17.
Excavating and conveying machine, Material. W. M. Huffman. 1,763,786; June 17.
Excavating machine. W. J. Newman and J. P. Carroll. 1,763,810; June 17.
Excavator. H. Marks. 1,764,518; June 17.
Excavator, Back-digging. E. J. Wilson. 1,764,922; June 17.
Exhauster, Automatic. J. R. Hamilton. 1,763,777; June 17.
Exothermic reactions, Carrying out. K. Staib. 1,764,582; June 17.
Expansion element. H. A. Brysselbout. 1,763,754; June 17.
Extractor: *See*—
Centrifugal extractor.
Eyes, Appliance for examination of the. H. Hartinger. 1,764,870; June 17.
Fabric-treating machine. W. W. Sibson and T. J. Miller. 1,764,089; June 17.
Fabric, Weaving. W. Nicolet. 1,764,577; June 17.
Face masks, pseudo reproductions of articles and the like, and a device for carrying this method into practice, Method of manufacturing. J. Kupper. 1,764,215; June 17.
Falsework clamp. O. O. Scott. 1,763,677; June 17.
Fan for motor cars, Automatically-variable-speed. P. E. M. J. Sautal. 1,764,054; June 17.
Fan guard. C. T. Hatch. 1,764,788; June 17.
Farm gate. C. W. Ehlers. 1,765,217; June 17.
Fastener. N. Saccoccia. 1,764,806; June 17.
Fastener for awnings. H. B. Griner. 1,764,950; June 17.
Fastener for swinging doors, Extension link. W. F. Huber. 1,764,101; June 17.
Fastener, Separable. F. S. Carr. 1,765,052; June 17.
Fastener, Separable. E. L. Hoffman. 1,764,044; June 17.
Fastener stud. F. S. Carr. 1,765,053; June 17.
Fastener, Window-sash. S. Bonner. 1,763,638; June 17.
Fastener, Window-sash. A. A. Potterf. 1,764,118; June 17.
Fastening device. S. Raphael. 1,765,345; June 17.
Faucet. A. Sinten. 1,765,106; June 17.
Frame: *See*—
Side frame. Welt-lock frame.
Frame for calendars and the like. V. E. Graham. 1,765,070; June 17.
Felt, Manufacture of. G. D. Beal and R. R. McGregor. 1,765,046; June 17.
Fence. J. T. Barton. 1,764,284; June 17.
Fence construction. F. A. Tarrier. 1,764,584; June 17.
Fence post. J. G. Johnson. 1,764,207; June 17.
Fermenting vat. H. Kock. 1,764,841; June 17.
Fiber-board machine. O. Mantius. 1,764,456; June 17.
Fibers, Apparatus for the production of staple. H. Dreyfus. 1,764,202; June 17.
Fibrous material for spinning, Process and apparatus for preparing staple or. E. Gminder. 1,764,074; June 17.
Field, Outdoor-sports. W. W. Henderson and R. A. Isenberg. 1,763,782; June 17.
Filament-mounting machine. J. Regenstreif. 1,765,357; June 17.
Film-camera apparatus. C. F. Hindle. 1,764,450; June 17.
Films, Producing talking-motion-picture. L. de Forest. 1,764,938; June 17.
Filter and forming the same. E. J. Sweetland. 1,764,660; June 17.
Filter apparatus, Rotating. J. B. Vernay. 1,765,252; June 17.
Filter for liquids. F. O. Catron. 1,765,323; June 17.
Filter for liquids under pressure. G. Javitch. 1,764,567; June 17.
Filter, Oil. F. G. Hobart. 1,764,722; June 17.
Finger ring or article of similar nature. B. Gross. Des. 81,386; June 17.
Finishing wheel. F. C. Simmons. 1,764,651; June 17.
Firearm. C. C. Loomis. 1,763,714; June 17.
Firearm. O. H. Loomis. 1,763,665; June 17.
Fire extinguisher. P. G. MacGregor. 1,764,964; June 17.
Fire extinguisher, Automatic. H. W. Partlow. 1,764,689; June 17.
Fishing rod. J. W. Soltis. 1,763,934; June 17.
Fixture for holding ring gears. J. E. Lovely. 1,764,026; June 17.
Fixture, Plumbing. A. M. Khun. 1,765,078; June 17.
Flanging and welding machine. P. E. Hunter. 1,763,787; June 17.
Flash light. C. H. Pajeau. 1,763,815; June 17.
Flash light. J. R. Patron. 1,763,902; June 17.
Flask section for molding cast-iron pipes and the like. J. R. McWane. 1,765,021; June 17.
Flesh cutting and searing shears. C. I. Lagier. 1,763,894; June 17.
Float-operated switch. C. A. Faron. 1,764,069; June 17.
Flooring, Matched hardwood. P. O. Moratz. 1,764,331; June 17.
Flotation process. G. Lutz. 1,765,308; June 17.
Flower table. A. E. Barton. 1,764,543; June 17.
Fluid-compressing means. J. Seagren. 1,764,753; June 17.
Fluid control. L. Bruehl. 1,764,193; June 17.
Fluid-pressure brake. F. C. Nenzel. 1,764,741; June 17.
Fluids, Apparatus for automatically determining and recording the specific gravities of. H. A. Hurley, H. J. Jones, and H. Jimenez. 1,764,103; June 17.
Fluorene, Oxidation of. A. O. Jaeger. 1,764,023; June 17.
Folder, Match. P. T. Denmead. 1,763,763; June 17.
Folding table. W. C. Rastetter. 1,763,671; June 17.
Foodstuffs, Ornamenting. A. Martin. 1,765,086; June 17.
Footlight structure. F. L. Decker. 1,763,956; June 17.
Form for box-covering machines, Adjustable. J. F. Kachline. 1,764,632; June 17.
Foundations, Constructing subaqueous. M. F. Clements and N. F. Helmers. 1,764,779; June 17.
Fountain head. G. Muffly. 1,763,808; June 17.
Frame for yarns or threads, Winding. T. A. Boyd and H. A. Boyd. 1,763,753; June 17.
Frame straightener, Automobile. H. J. Kicherer and R. B. Niles. 1,764,840; June 17.
Freezing mechanism. W. H. Thompson. 1,765,315; June 17.

Freight, System and apparatus for handling. C. E. Cochran. 1,764,780; June 17.
Friction-control mechanism. E. J. Wilson. 1,764,923; June 17.
Frictional drive. E. J. Kingsbury and J. E. Anderson. 1,764,211; June 17.
Fruit-cutting and seed-celling machine, Continuous. F. A. Reynolds. 1,765,310; June 17.
Fruit sections, Device for squeezing. B. Page. 1,764,466; June 17.
Fuel-burning apparatus, Liquid. J. T. McTarnahan. 1,764,459; June 17.
Fuel mixer. J. Dearmann. 1,764,096; June 17.
Fuel rectifier. J. Hutchinson. 1,763,654; June 17.
Fuel regulator, Automatic. C. L. Stokes. 1,764,659; June 17.
Fulcrum plate for spiders. C. S. Grickmer. 1,764,245; June 17.
Furnace: *See*—
Ore furnace. Roller-hearth furnace.
Furnace. W. Ferguson. 1,764,292; June 17.
Furnace-arch construction. L. S. Abbott. 1,764,707; June 17.
Furnace control, Automatic. H. H. Dow. 1,764,715; June 17.
Furnace for burning liquid fuel. J. E. Rutter. 1,764,528–9; June 17.
Furnace for destroying waste. S. H. Thompson. 1,764,661; June 17.
Furnace structure. J. F. Booraem. 1,763,919–20; June 17.
Furnace structure. J. W. Gates. 1,763,925; June 17.
Furnace structure. E. Smiley. 1,764,475; June 17.
Furnace wall. W. F. Keenan, jr. 1,764,173; June 17.
Furniture, Folding. B. L. Laursen. 1,765,168; June 17.
Gag, Mouth. C. J. Highberg and J. A. Thompson. 1,764,167; June 17.
Galvanic battery. LeR. S. Dunham. 1,765,137; June 17.
Game board. F. A. Schmitz. Des. 81,407; June 17.
Garbage can. N. Casapollo. 1,763,756; June 17.
Garment. B. B. Skinner. 1,765,105; June 17.
Garment, Hip-reducing. J. T. Rudzinski. 1,764,894; June 17.
Gas and vapor separator. P. Benkiser. 1,763,746; June 17.
Gas engine, Sleeve-valve. C. P. Brockway and D. D. Myers. 1,764,886; June 17.
Gas, Generating hydrochloric acid. G. P. Adamson. 1,764,593; June 17.
Gas generator. W. G. Paquette. 1,764,974; June 17.
Gas generator. F. W. Steere. 1,764,992; June 17.
Gas to internal combustion engines, Mechanical device for the supply of explosible. J. Lavergne. 1,765,278; June 17.
Gases, Concentrating nitrous. J. A. Wyler. 1,765,254; June 17.
Gasket mold, Refrigerator-. P. T. Sealey. 1,764,857; June 17.
Gasoline engine, Triple-cam-drive. F. H. King. 1,765,237; June 17.
Gasoline indicator. T. M. Eynon. 1,765,008; June 17.
Gate: *See*—
Farm gate.
Gauge for sheet-metal-edge-bending machines. W. R. Magee. 1,763,797; June 17.
Gear. G. C. Kent and R. Siegfried. 1,764,409; June 17.
Gear box. R. E. C. Delevoye. 1,765,133; June 17.
Gear brakes, Operating alighting. W. T. Reid. 1,763,985; June 17.
Gear, Composite. P. C. Haas. 1,765,231; June 17.
Gear for motor vehicles, Parking. G. W. Woolley. 1,764,486; June 17.
Gear-reduction mechanism. G. H. Roch. 1,764,314; June 17.
Gear shift. J. Blackburn. 1,764,145; June 17.
Gear-shift mechanism, Direct-reading. D. C. Klausmeyer. 1,764,515; June 17.
Gear synchronizer, Sliding clutch-. H. J. Murray. 1,764,334; June 17.
Gear, Vehicle running. A. H. Fager. 1,763,768; June 17.
Gearing. H. J. Caldwell. 1,763,645; June 17.
Gearing for washing machines. J. Rocke. 1,763,865; June 17.
Gearing, Planet. C. Kittilsen. 1,764,961; June 17.
Gears, Self-oiling centralized change. D. C. Klausmeyer. 1,763,713; June 17.
Generator: *See*—
Acetylene generator. Gas generator.
Generator-controlling mechanism, Steam-. R. L. Jewell. 1,764,453; June 17.
Glare shield, Automobile. F. C. Ryder. 1,764,856; June 17.
Glass: *See*—
Optical glass.
Glass-blowing machine. L. D. Soubier. 1,764,360; June 17.
Glass, Cooled roll for producing sheet. J. L. Drake. 1,763,689; June 17.
Glass-cutting apparatus. A. M. Mazer. 1,764,966; June 17.
Glass, Delivering and shaping molten. G. E. Howard. 1,763,968; June 17.
Glass-forming machine. R. La France. 1,764,268; June 17.
Glass-forming machine. L. D. Soubier. 1,764,361; June 17.
Glass, Method and apparatus for increasing the production of. F. C. Flint. 1,764,832; June 17.
Glassware-forming machine. S. L. Hewitt. 1,764,166; June 17.
Glazier's point. F. Newquist. 1,764,882; June 17.
Glove. F. O'Neill. 1,763,813; June 17.
Glove-blank forming. M. McKinley. 1,765,282; June 17.
Grain shoe. T. H. Mayfield. 1,764,218; June 17.
Grain-treating machine. S. J. Goodfellow. 1,764,510; June 17.
Grass-cutting device. A. L. Schmidt. 1,765,288; June 17.
Grate for box stoves, Insertable. E. Cox. 1,763,641; June 17.
Grate, Furnace. E. V. Wickey. 1,764,484; June 17.
Grease absorbing and deflecting attachment for gas-stove flues. P. J. Hentschel. 1,764,854; June 17.
Grease drum and using same, Sheet-metal. C. T. Draper. 1,765,062; June 17.
Grease from garbage, Recovering. W. D. Cleary. 1,764,390; June 17.
Grinding apparatus and method. H. Rodemeyer. 1,763,820; June 17.
Grinding machine. E. Danner. 1,763,647; June 17.
Grip. J. B. Stewart. 1,763,828; June 17.
Grooming device for animals, Pneumatic. M. Heckman. 1,764,626; June 17.
Groups of a definite number of articles, Device for forming. R. W. Voigt. 1,764,663; June 17.
Guard or protector, Garment. I. Unker and H. S. Rosenthal. 1,764,427; June 17.
Guide for band saws. G. G. Rhinevault. 1,764,183; June 17.
Guide track for rolling window screens. N. H. Nelson. 1,764,880; June 17.
Guitar. T. A. Gast. 1,764,679; June 17.
Gullies, Device for preventing the formation of. A. V. Lutz. 1,764,047; June 17.
Gun mounted on a wheel carriage. H. Schüler and F. Herlach. 1,763,988; June 17.
Gyroscope. J. M. Boykow. 1,764,714; June 17.
Gyroscopic instrument, Stabilied. G. E. Methvin. 1,763,806; June 17.
Hair drier. D. C. Mosier. 1,764,462; June 17.
Hair waver. N. Fulton. 1,765,068; June 17.
Hair-waving device. J. Girard. 1,763,960; June 17.
Handle: *See*—
Tool handle.
Handle mounting. J. B. Flynn. 1,764,945; June 17.
Hanger: *See*—
Clothes hanger. Tie-bar hanger.
Hanger. C. E. Hoppes. 1,764,077; June 17.
Harrow tooth. S. C. Lemmons. 1,765,082; June 17.
Harrows and the like, Distributing attachment for. J. C. Pridgen. 1,764,853; June 17.
Harvester, Beet. G. M. and C. Feuerstein. 1,765,224; June 17.
Harvester, Cotton. C. F. Callahan. 1,763,646; June 17.
Harvester, thrasher, and separator, Combination. W. C. Edwards, jr. 1,764,040; June 17.
Harvester thrasher, Combination. W. C. Edwards, jr. 1,764,041; June 17.
Harvesters, Gathering, snapping, and husking rolls for corn. H. J. Kuhlman. 1,764,686; June 17.
Headlight, Automobile. C. W. Shippee. 1,764,474; June 17.
Headlight, Dirigible. G. S. Keck and C. M. Cronkhite. 1,764,171; June 17.
Heat, Apparatus for exchange of. H. Simmon. 1,764,535; June 17.
Heat, Apparatus for utilizing solar. C. H. Drane, jr. 1,765,186; June 17.
Heat exchanger. D. K. Dean. 1,764,200; June 17.
Heat regulator, Automatic. M. Resek. 1,763,721; June 17.
Heat-treating apparatus. R. Roscoe. 1,764,647; June 17.
Heat treating bits. F. J. Hinderliter. 1,763,704; June 17.
Heat-treatment process and apparatus in which a hot liquid mass is employed. C. F. Hammond. 1,765,148; June 17.
Heater. M. Alex. 1,764,139; June 17.
Heater. G. Borgeson. 1,765,201; June 17.
Heater. A. J. Lindemann. 1,764,635; June 17.
Heating and ventilating apparatus. A. R. Teare. 1,764,703–4; June 17.
Heating apparatus. W. A. Bollinger. 1,765,048; June 17.
Heating apparatus. R. L. Meyers. 1,763,668; June 17.
Heating element, Making fluid-. W. F. Keenan, jr. 1,764,174; June 17.
Heating means for motor vehicles. W. A. Kysor. 1,764,799; June 17.
Heating unit. C. C. Harpster. 1,764,301; June 17.
Heel, Cushion. F. Sansone. 1,764,353; June 17.
Heel, Detachable rubber. W. L. Bernier. 1,764,000; June 17.
Heel, Rubber. H. Heady. 1,765,155; June 17.
Hem for sewed articles and making the same. J. R. Moffatt. 1,764,848; June 17.
Hides and skins, Depilating. M. Bergmann. 1,765,199; June 17.
Highway-crossing barrier. E. H. Rick. 1,765,178; June 17.
Hinge joint for anchor jacks. F. C. Souleyret. 1,765,248; June 17.
Hinge, Pin. I. W. Cooper. 1,765,131; June 17.

Hinge plate for railroad spreader wings. V. G. Tellis. 1,763,680; June 17.
Hob. C. G. Olson. 1,763,983; June 17.
Hog-snout puller. J. J. Dolzer. 1,764,551; June 17.
Hoist, Chain. J. W. Snedeker. 1,764,421; June 17.
Hoist, Crane. J. A. Shepard. 1,765,347; June 17.
Hoisting and transporting apparatus. C. L. Best. 1,763,747; June 17.
Hoisting tackle. G. C. Hume. 1,764,512; June 17.
Holder and the like article and making same, Ornamental cigarette and cigar. S. Serota. 1,764,694; June 17.
Holder, Brush. H. A. Stang. 1,764,763; June 17.
Holder, Certificate. E. A. Morris. 1,764,114; June 17.
Holder, Collar. L. E. Baer. Des. 81,369; June 17.
Holder, Condiment. F. A. Hart and E. Askew. 1,765,152; June 17.
Holder, Cover. E. G. Doland. 1,765,135; June 17.
Holder, Easel photo. O. Gross. 1,765,010; June 17.
Holder, Flag. J. P. Scott. 1,765,245; June 17.
Holder for cutting fruit. F. Wiimking. 1,764,235; June 17.
Holder for electric lamps, Shade. J. J. Decker. 1,765,212; June 17.
Holder for florists, Wire and pick. G. F. Rhea. 1,763,986; June 17.
Holder for socks or other articles, Display. W. H. White. 1,765,043; June 17.
Holder, Key. G. A. Holmes. 1,764,451; June 17.
Holder, Microtome knife. W. L. Patterson and G. B. Gallasch. 1,765,283; June 17.
Holder, Necktie. W. J. Ward. 1,764,705; June 17.
Holder, Shade. L. C. Doane. 1,764,394; June 17.
Holder, Sign. H. J. Ginsberg. 1,764,558; June 17.
Holder, Twine. E. A. Carlson. 1,764,826; June 17.
Holder, Type. A. O. Elmer. 1,763,958; June 17.
Holding and transferring mechanism, Work. F. L. Borchert. 1,763,684; June 17.
Holding device, Article-. E. J. McKeon. 1,764,638; June 17.
Holding device, Velvet-. I. Pollack. 1,764,691; June 17.
Holding device, Work-. A. Brown. 1,764,242; June 17.
Hook: *See*—
Plate hook. Printer's register hook.
Hook for logging industry, Choker. D. H. Young. 1,764,135; June 17.
Hose, Manufacture of. V. Lefebure. 1,763,973; June 17.
Humidifier and deflector device. M. M. Bentz. 1,764,499; June 17.
Hutch, Self-cleaning. C. Cosper. 1,764,151; June 17.
Hydraulic brake. M. Loughead. 1,764,176; June 17.
Hydraulic brake, Multicylinder. M. Loughead. 1,764,178; June 17.
Hydraulic jack. L. C. Stukenborg. 1,764,859; June 17.
Hydrocarbons, Method and apparatus for treating. R. Fleming. 1,764,296; June 17.
Hypochlorite in colloidal form and making the same. P. R. Hershman. 1,765,013; June 17.
Ice-cream cone. L. J. Schumaker. Des. 81,408; June 17.
Ice-cream cone. E. Shapiro. Des. 81,410; June 17.
Illuminating device. L. A. Prescott. 1,764,980; June 17.
Illusion apparatus. E. E. Schlotz. 1,764,356; June 17.
Implement. O. Olby. 1,764,278; June 17.
Implement, Ground-working. W. J. Fisher. 1,764,944; June 17.
Incinerator and water heater, Combined. W. C. Epstein. 1,764,553; June 17.
Index-card tab. A. E. N. Gray and S. M. Schenkein. 1,763,776; June 17.
Index notcher and printer, Book-. H. H. Cotton. 1,764,828; June 17.
Index, Visible. A. Von Auw. 1,765,192–3; June 17.
Indicating apparatus. R. Hofstetter. 1,764,628; June 17.
Indicating device. T. Youngberg. 1,764,063; June 17.
Indicator: *See*—
Car-tacking indicator. Taxicab indicator.
Gasoline indicator. Tire-deflation indicator.
Inductance, Variable. P. P. Cioffi. 1,763,881; June 17.
Ingots or masses in furnaces, Apparatus for moving. H. Bangert and M. Peters. 1,763,918; June 17.
Inking roller. E. F. Dudley. 1,764,157; June 17.
Inner tube. J. L. Hayes. 1,764,076; June 17.
Inner tube for pneumatic tires. A. W. Ott. 1,765,093; June 17.
Insect destroyer. C. B. Hay. 1,764,952; June 17.
Insecticide and fungicide compound. J. H. James. 1,764,792; June 17.
Insignia attachment. J. Kerkhoff. 1,764,175; June 17.
Insulating materials and manufacture of same. W. L. Steffens. 1,765,312; June 17.
Insulator. P. B. Cochran. 1,764,434; June 17.
Insulator. C. E. Howell. 1,764,724; June 17.
Insulator. W. H. Schramm. 1,764,418–19; June 17.
Interlock, Tap-changing. L. H. Hill and W. M. Dann. 1,764,405; June 17.
Internal-combustion engine. E. R. Burtnett. 1,764,147; June 17.
Internal-combustion engine. E. Gausel. 1,764,557; June 17.
Internal-combustion engine. C. O. Guernsey. 1,765,230; June 17.
Internal-combustion engine. O. C. Kreis. 1,764,734; June 17.
Internal-combustion engine. A. J. Meyer. 1,764,739; June 17.
Internal-combustion engine. A. M. Niven. 1,764,744–5; June 17.
Internal-combustion engine. D. P. Savage. 1,764,530; June 17.
Internal-combustion engine. F. Vorel. 1,764,480; June 17.
Internal-combustion engine, Two-cycle valveless. W. C. Martin. 1,764,329; June 17.
Internal-combustion motor. J. A. Portis, jr. 1,764,467; June 17.
Iron: *See*—
Electric iron. Waffle iron.
Soldering iron.
Ironers, Automatic feeding device for flat-work. A. Matthews. 1,765,018; June 17.
Ironing-board structure. S. Madsen. 1,765,343; June 17.
Ironing-machine attachment. W. Warner. 1,765,040; June 17.
Jack: *See*—
Hydraulic jack. Motor-operated jack.
Lifting jack. Pump jack.
Jack. A. W. Newman. 1,763,669; June 17.
Jack and plug, Testing. R. W. Grace. 1,764,016; June 17.
Jewelry elements, Apparatus for perforating. R. Anderson. 1,764,924; June 17.
Jewelry pin, tongue, and catch. A. I. Rosenblatt and G. H. Webb. 1,763,933; June 17.
Joint: *See*—
Rod joint. Universal joint.
Joint structure, Burned or puddled. B. Ford. 1,764,617; June 17.
Joist and the manufacture thereof. R. A. Bates. 1,763,944; June 17.
Joist and the manufacture thereof, Metal. A. J. Bates, jr. 1,763,943; June 17.
Journal box. M. L. Harger. 1,764,017; June 17.
Journal box. M. Wickizer. 1,764,541; June 17.
Journal-box cushion. R. J. O'Brien. 1,763,982; June 17.
Keel for submarines, Drop. J. Plum. 1,764,979; June 17.
Key action for typewriters and other machines. O. U. Desha. 1,765,061; June 17.
Key retainer, Draft-rigging. G. Q. Lewis. 1,763,975; June 17.
Kiln bottom. L. D. S. Klotz. 1,764,025; June 17.
Kiln, Tunnel. P. A. Meehan. 1,764,460; June 17.
Kit, Shoe-polishing. A. Fear. 1,765,065; June 17.
Knitting machine. E. U. Ames. Re17,705; June 17.
Knitting needle. R. K. Hohmann. 1,764,406; June 17.
Laminating rubberized material, Device for. C. E. Maynard. 1,763,801; June 17.
Lamp and apparatus, Mercury vapor. L. J. Buttolph. 1,764,148; June 17.
Lamp base or article of analogous nature. P. Cricchio. Des. 81,384; June 17.
Lamp, Battery hand. J. S. Zook. 1,763,874; June 17.
Lamp bulb. C. Reiter. 1,765,242; June 17.
Lamp, Hand. R. A. Lorig. 1,763,898; June 17.
Lamp, Piano. O. Holther. 1,764,308; June 17.
Lantern, Electric. E. Stroke. 1,765,110; June 17.
Last, Repairing. J. Discenza and J. Filippone. 1,763,705; June 17.
Latch. O. P. Cramer. 1,764,154; June 17.
Latch. W. D. Ferris. 1,763,693; June 17.
Latch. J. A. Fraser. 1,764,014; June 17.
Latch-controlling mechanism. J. B. Freysinger. 1,764,438; June 17.
Latch, Door. W. D. Ferris. 1,763,692; June 17.
Latching device for shipping containers. W. R. Brown and A. C. Towne. 1,764,002; June 17.
Latching means for the covers of laundry apparatus. J. M. Coffee. 1,765,207; June 17.
Lathe, Automatic spindle. F. L. Cone. 1,765,130; June 17.
Laundry drier. A. O. Schramm. 1,763,676; June 17.
Laundry driers, Reversing mechanism for. A. C. Kalk. 1,763,658; June 17.
Lawn sprinkler. H. G. Slining. 1,764,758; June 17.
Leather-sorting machine. H. E. Johns. 1,765,234; June 17.
Leather-treating composition. W. H. and A. M. Taylor. 1,763,833; June 17.
Leer feeder. A. N. Cramer. 1,764,153; June 17.
Lens, Sun's rays magnifying. W. W. Beach. 1,764,925; June 17.
Level. A. De Angelis. 1,765,060; June 17.
Lever-control assembly. F. M. Edgar and J. B. Flynn. 1,763,690; June 17.
Lifter: *See*—
Receptacle lifter. Valve lifter.
Lifting device and lock for automobile hoods. S. M. O'Brien. 1,764,578; June 17.
Lifting jack. F. H. Schwerin. 1,764,472; June 17.
Light: *See*—
Flash light. Signal light.
Light. S. M. Byck. 1,764,930; June 17.
Light for automobiles, Stop. R. Peltier. Des. 81,398; June 17.
Light for vehicle bodies, Rear corner. W. Schnell. 1,763,824; June 17.
Light-reflecting bed device. D. B. McLeod. 1,764,220; June 17.

Light-sensitive material and process for making same, Photographic. S. E. Sheppard and E. P. Wightman. 1,763,989–90; June 17.
Light-sensitive materials, Device for testing. A. Bauer. 1,765,198; June 17.
Lighter. S. Segal. 1,764,896–7; June 17.
Lighter, Cigarette. M. Tannenbaum. 1,763,911; June 17.
Lighter, Pocket vapor cigar. E. F. Clark and J. H. Murdock. 1,765,004; June 17.
Lighter-than-air craft. J. T. Narusch. 1,764,336; June 17.
Lighting-control apparatus, Theater-. J. C. Masek. 1,764,411; June 17.
Lighting fixture. L. C. Doane. 1,764,393; June 17.
Lighting fixture. L. C. Doane. 1,764,395; June 17.
Lighting fixture. A. B. Megraw. 1,764,112; June 17.
Lighting fixture, Electric-. D. J. Biller. 1,764,999; June 17.
Lighting-fixture globe. E. F. Guth. 1,763,963; June 17.
Lighthouse and the like. R. R. Steel. 1,764,656; June 17.
Lightning arrester and making the same. J. R. McFarlin. 1,763,667; June 17.
Link, Fusible. A. C. Rowley. 1,765,243; June 17.
Linoleum-seam spreader. G. R. Nichols. 1,765,240; June 17.
Liquid feeder, Automatic. O. B. Geer. 1,764,835; June 17.
Lock: *See*—
Window lock.
Lock. J. E. Schylander. 1,764,056; June 17.
Lock. S. Segal. 1,764,895; June 17.
Lock. S. Segal. 1,764,898; June 17.
Lock. V. Szymanski. 1,764,367; June 17.
Lock. A. Valcekauckas. 1,765,186; June 17.
Lock and key therefor. G. A. Long. 1,765,280; June 17.
Lock catcher, Split-. J. Sunnen. 1,764,185; June 17.
Lock for looms, Beam. C. D. Brown. 1,765,322; June 17.
Lock for motor-car doors, Supplemental. A. P. Young. 1,764,487; June 17.
Lock for spring constructions, Welt. C. V. Lovell. 1,764,878; June 17.
Locking a motor vehicle in gear, Device for. F. A. Bezek. 1,764,383; June 17.
Locking means for assembled types. W. E. Reavis. 1,764,119; June 17.
Locking throttle levers, Air-actuated mechanism for. W. M. Cross. 1,763,954; June 17.
Locomotive. C. A. W. Brandt. 1,764,430; June 17.
Locomotive. S. M. Vauclain and H. Glaenzer. 1,765,251; June 17.
Locomotive boiler. W. F. Keenan, jr. 1,764,172; June 17.
Locomotive drive mechanism. F. Rampacher. 1,764,348; June 17.
Locomotive, High-pressure. C. A. W. Brandt. 1,764,431; June 17.
Log turner. W. H. Winters. 1,764,817; June 17.
Loom, Circular-weaving. C. Séry. 1,765,246; June 17.
Loom shuttle, Automatically-threading. C. H. Draper. 1,765,327; June 17.
Looms, Harness shaft for. W. E. Wall. 1,764,917; June 17.
Looms, Shuttle guide for. J. E. Harding. 1,765,266; June 17.
Looms, Thread-parting mechanism for. H. A. Davis. 1,765,324; June 17.
Looper and knotter, Automatic. H. H. Wanders. 1,763,731; June 17.
Loose-leaf device, Visible. C. A. Finley. 1,765,141; June 17.
Loose-leaf device, Visible. C. A. Finley. 1,765,225; June 17.
Loud-speaker. F. R. Beckert. 1,765,257; June 17.
Loud-speaker. A. O. Goodyear. 1,764,015; June 17.
Lubricating compound. W. D. Hodson and R. E. Coleman. 1,764,837; June 17.
Lubricating device. C. A. Bowlus. 1,764,823; June 17.
Lubricating mixture. E. J. Bloom. 1,764,774; June 17.
Lubricating system for projection machines. L. S. Frappier and E. Boecking. 1,764,783; June 17.
Lubrication of bearings. L. B. Kapp. 1,764,727; June 17.
Lumber-loading roll. E. Feldin. 1,764,397; June 17.
Machine and method for forming mineral-wool bats. W. L. Miller. 1,765,025; June 17.
Machine coupling. J. Bibby. 1,763,842; June 17.
Machine for baking wafers and the like. W. E. Prescott. 1,763,720; June 17.
Machine for bending panels. C. B. Norris. 1,764,464; June 17.
Machine for cleaning, improving, and softening wool and other textile materials. F. Rocamora. 1,764,892; June 17.
Machine for coating. R. T. Johnston. 1,764,080; June 17.
Machine for cutting biscuits from dough. L. Rondolin. 1,764,280; June 17.
Machine for cutting doughy substances. L. H. Robinson. 1,765,285; June 17.
Machine for extracting juice from citrus fruits. G. W. Edwards. 1,764,158; June 17.
Machine for making golf tees. F. O. Fish. 1,764,295; June 17.
Machine for making paper box blanks and boxes. H. B. Smith. 1,764,358; June 17.
Machinery for manufacturing shingles. M. S. Darrow, W. J. Hart, F. G. Gronemeyer, and F. B. Watkins. 1,765,058; June 17.
Machine for punching holes in documents and the like. W. W. Spiers. 1,763,869; June 17.
Machine for scrubbing and oiling leather. E. H. Smith. 1,764,809; June 17.
Machine for shaping shoe uppers. E. E. Rowe. 1,763,822; June 17.
Machine for spreading road materials. N. W. Hardenbergh. 1,764,019; June 17.
Machine for turning down and folding the ends of box covers. G. Ducart. 1,764,247; June 17.
Magnet, Rotary. J. Stoecklin. 1,764,658; June 17.
Magneto coupling. G. M. Cusick. 1,764,608; June 17.
Mail box. C. F. Beck. 1,764,674; June 17.
Mandrel moving and cooling apparatus. L. Löwy. 1,764,736; June 17.
Manikin, Walking. L. Marx. 1,764,330; June 17.
Marking patterns on cloth, Apparatus for. J. B. Whittaker. 1,763,734; June 17.
Material-feeding device. J. E. Kennedy. 1,764,108; June 17.
Material-treating machine. G. M. Soule. 1,764,760; June 17.
Material-treating machine. M. H. Spielman and W. H. Poesse. 1,764,700; June 17.
Material-working apparatus. J. M. Cook. 1,764,606; June 17.
Materials to the action of indirect heat, Apparatus for subjecting. M. Cline. 1,763,758; June 17.
Maximum-demand meter. C. Oman. 1,764,340; June 17.
Measuring instrument, Electrical. W. Hallack. 1,764,258; June 17.
Measuring instrument, Electrical. C. Oman. 1,764,339; June 17.
Measuring instrument, Electrical. A. R. Rutter. 1,764,351; June 17.
Measuring instrument, Electrical. L. Stalder. 1,764,363; June 17.
Measuring the load on vehicles, Device for. C. Anderson. 1,763,636; June 17.
Meat cutting and handling apparatus. A. E. Ozouf. 1,764,850; June 17.
Mechanism for the interconversion of reciprocating and rotary motions. A. G. M. Mitchell. Re17,701; June 17.
Mechanism for weaving striped cloth. D. C. Jones. 1,765,339; June 17.
Metal articles, Method and mold for casting hollow. A. Law. 1,763,895; June 17.
Metal for painting, Preparing. J. H. Gravell. 1,765,331; June 17.
Metal joist and the manufacture thereof. A. C. Wallen. 1,763,940; June 17.
Metal, Producing a composite. F. C. Leonard. 1,764,271; June 17.
Metal rings, Attaching laminated sheet-. W. Reichel. 1,764,890; June 17.
Metal sheet, Heat-resistant. E. R. Wehr and C. C. Maidle. 1,764,132; June 17.
Metal tile structure. W. M. Goldsmith. 1,764,042; June 17.
Metals and alloys, Producing. T. R. Haglund. 1,764,511; June 17.
Meter: *See*—
Maximum-demand meter.
Micrometer caliper. E. J. Witchger. 1,763,941; June 17.
Mill: *See*—
Rolling mill.
Mill and underreamer, Combination expansion. L. Wells and O. W. Eckstein. 1,764,373; June 17.
Mill structure, Tumbling-. H. W. Titgen. 1,765,291; June 17.
Milling machine, Universal. J. R. Johnson. 1,763,708; June 17.
Mineral or rock wool bats, Making. W. L. Miller. 1,765,026; June 17.
Mirror, Air-emitting and electric-light-actuating. I. Kulik. 1,764,455; June 17.
Mixer: *See*—
Beverage mixer. Fuel mixer.
Drink mixer.
Mixing and discharging apparatus. H. S. Beers. 1,764,498; June 17.
Mixing implement. E. Simola and S. F. Smokes. 1,764,699; June 17.
Mold: *See*—
Bullet mold. Tire-retreading mold.
Gasket mold.
Mold. H. A. Redmond. 1,764,889; June 17.
Molding articles. J. H. Tomlin. 1,764,662; June 17.
Molding machine. G. E. Pickup. 1,763,862; June 17.
Molding machine, Pneumatic jar-ramming. W. Lewis. 1,763,662; June 17.
Molding, Pull-tight. A. W. Schmid. 1,764,531; June 17.
Molds, Method and apparatus for forming. B. Bart. 1,765,320; June 17.
Mole and gopher trap. W. I. Raymond. 1,764,225; June 17.
Mop-making machine. G. F. Matteson. 1,763,799; June 17.
Mop-making machines, Feeding mechanism for. G. F. Matteson. 1,763,800; June 17.
Motor: *See*—
Air motor. Internal-combustion motor.
Electric motor. Pump motor.
Motor and propeller unit, Electric. C. R. Buchet. 1,764,388; June 17.

Motor-operated jack. F. H. Schwerin. 1,764,988; June 17.
Motors on the wings of aircraft, Arrangement of. H. Focke. 1,764,554; June 17.
Mount for moving-picture cameras. J. F. Howell. 1,764,407; June 17.
Mounting for cigar lighters. J. Sinko. 1,764,899; June 17.
Mower, Lawn. J. M. Tauber. 1,763,831; June 17.
Mulch-paper-laying machine. C. Judy. 1,763,789; June 17.
Musical instrument, Wind. E. J. Gulick. 1,764,562; June 17.
Musical instruments, String-fastening device for. F. J. Callier. 1,764,548; June 17.
Name plates, Securing. D. N. Ross. 1,763,674; June 17.
Nap-raising machine. A. O. Schramm and J. H. Schreiber. 1,763,675; June 17.
Needle, Knitting. A. C. Parlini. 1,764,342; June 17.
Needle, Reknitting. E. J. Hoffman. 1,765,303; June 17.
Needle threader. V. A. Scofield. 1,765,102; June 17.
Nipple-inserting machine. E. E. Gold. 1,763,886; June 17.
Nonglare attachment for hats. G. L. Blakesley. 1,764,500; June 17.
Nonslipping wrench. J. B. Schultz. 1,764,990; June 17.
Nozzle for gas generators, Water-cooled air and steam. J. N. Paff. 1,764,746; June 17.
Nozzle or tube, Syringe. A. von Borosini. 1,764,588; June 17.
Novelty, Air-driven. W. Moreland. 1,764,180; June 17.
Nut cracker. A. E. Ashleman. 1,764,238; June 17.
Nut-cracking machine. L. P. Anthony. 1,763,875; June 17.
Nuts, Method of and apparatus for making. C. F. Hamman. 1,764,300; June 17.
Observation instrument. J. Stephen. 1,763,827; June 17.
Oil burner. W. D. Harvey. 1,763,779; June 17.
Oil burner. L. La Branch. 1,764,109; June 17.
Oil burner, Fuel. L. E. Johnson and E. C. Leach. 1,764,794; June 17.
Oil-burning apparatus. H. S. Rogers and R. Raddatz. 1,764,984; June 17.
Oil-burning mechanisms, Primary mixing chamber in. O. A. Fogarty. 1,764,070; June 17.
Oil-refining apparatus for combustion-engine lubrication. G. H. Greenhalgh and E. J. Sweetland. 1,764,298; June 17.
Oil-vapor separation and condensation. J. E. Bell. 1,764,190; June 17.
Oiler, Flange. J. C. Burford. 1,765,202; June 17.
Oiler, Multiple. R. J. Gits. 1,763,961; June 17.
Oiling device. L. C. Bayles. 1,763,683; June 17.
Oiling system. H. L. Horning. 1,764,078; June 17.
Oils into light hydrocarbon oils or spirits, Conversion of heavy hydrocarbon. F. Lamplough. 1,765,167; June 17.
Oils, Lye treatment of petroleum. C. K. Parker. 1,764,117; June 17.
Oils, Process of and apparatus for distilling and cracking hydrocarbon. D. E. Day. 1,764,301; June 17.
Opener, Bottle. J. A. Hoegger. 1,763,849; June 17.
Opener, Wall bottle. J. A. Hoegger. 1,763,848; June 17.
Ophthalmic mounting. J. N. Nelson. Des. 81,397; June 17.
Ophthalmic mounting. E. J. R. Beattey. 1,764,495; June 17.
Ophthalmic mounting and making the same. F. R. Bishop. 1,765,123; June 17.
Optical glass. M. R. Scott. 1,765,287; June 17.
Ore flotation process and reagent. I. H. Derby and O. D. Cunningham. 1,765,302; June 17.
Ore furnace. C. T. Knight. 1,764,313; June 17.
Ores, Concentration of. B. L. Johnson. 1,763,851; June 17.
Organ, Pipe. M. Hess. 1,764,682; June 17.
Ornament device, Hair-. A. E. Stephen. 1,763,935; June 17.
Ornament, Shoe. S. M. Riker. Des. 81,404–6; June 17.
Ornament, Shoe. W. E. Smith. Des. 81,415–16; June 17.
Ornament, Shoe. W. E. Smith. Des. 81,418; June 17.
Ornamented screen. M. F. Fitz Gerald. 1,764,398; June 17.
Orthodontic appliance. J. M. Craigo. 1,764,067; June 17.
Oscillating washer. D. Bell. 1,763,644; June 17.
Oscillator of constant-frequency value, Mechanical. A. Karolus. 1,763,853; June 17.
Oven, Coking retort. J. Becker. 1,764,065; June 17.
Oven, Coking retort. J. Becker. 1,764,496–7; June 17.
Oven, Rotary hearth. F. Bartling. 1,765,196; June 17.
Ovens, Feeding apparatus for bakers'. C. B. Comstock. 1,764,550; June 17.
Overalls, Waterproof. M. Reingold. 1,765,096; June 17.
Overalls with detachable pockets. W. E. Watkins. 1,764,483; June 17.
Oxidation inhibitor. R. S. Dean. 1,764,609; June 17.
Package and holder, Combined. R. W. Babson. 1,764,673; June 17.
Pad roller arm. A. Dina. 1,764,939; June 17.
Padding device, Stationery. C. W. Bond. 1,763,749; June 17.
Paintbrush. S. M. Frenkel. 1,763,696; June 17.
Paints, etc., Extender for. H. J. Stievater. 1,763,937; June 17.
Pan: *See*—
Baking pan.
Panel construction. L. Hoffman. 1,763,966; June 17.
Paper driers, Condensate-removal device for high-speed. A. E. Broughton. 1,764,718; June 17.
Paper, Eliminating wet streaks in. A. E. Broughton. 1,764,777; June 17.
Paper-feeding machine. H. Hallstream. 1,764,018; June 17.
Paper machinery. H. L. Kutter. 1,764,322; June 17.
Parachute. A. Ferretti and A. Corda. 1,764,293; June 17.
Parachute and aerial life buoy. E. G. Johnson. 1,765,075; June 17.
Parachute attachment for aeroplanes. J. Poniatowski. 1,765,094; June 17.
Pavement composition, Preparing. M. D. Shannon. 1,764,534; June 17.
Pavement grid structure. L. R. MacKenzie. 1,764,845; June 17.
Paving roller. H. W. Laster. 1,764,963; June 17.
Pedestal for display fixtures. W. C. Candlish. Des. 81,383; June 17.
Pen, Fountain. A. S. Romero. 1,764,470; June 17.
Pencil, Magazine. D. H. Douglas. 1,764,156; June 17.
Pencils, Attachment for. H. P. K. Hansen. 1,765,151; June 17.
Penholder. C. B. Suiter. 1,763,829; June 17.
Penny multiple register. J. F. Ohmer, jr. 1,763,718; June 17.
Phonograph. E. E. Pinkerton. 1,764,977; June 17.
Phonograph reproducer. J. J. Jakosky. 1,764,957; June 17.
Photographic cut-out. C. Halpern. 1,763,652; June 17.
Photographic reproducing apparatus. M. Kousminsky. 1,765,277; June 17.
Piano and phonograph, Combined player. C. Doble. 1,765,261; June 17.
Pianos, Pneumatic striker unit for player. W. B. Tunstall. 1,765,112; June 17.
Pick, Mountain-climbing. M. O. Jung. 1,765,076; June 17.
Picture films, Strip-feeding mechanism for moving-. F. E. Garbutt and L. M. Griffith. 1,764,203; June 17.
Picture-projection machines, Pedestal lever for. A. Dina. 1,764,201; June 17.
Pictures, Making motion. P. Artigue. 1,764,490; June 17.
Pilot pin for rolling mills. E. G. Budd. 1,764,929; June 17.
Pin: *See*—
Coupling pin.
Pin. L. Deutsch. Des. 81,374; June 17.
Pin board. H. Kirkpatrick. 1,765,164; June 17.
Pineapple and producing the same, Stabilized. C. S. Ash. 1,764,491; June 17.
Pipe-handling apparatus. H. C. Keiser. 1,765,163; June 17.
Pipe tong. N. K. Smith. 1,764,124; June 17.
Piston. H. J. Hater. 1,764,871; June 17.
Piston. A. P. Nute. 1,764,465; June 17.
Piston. G. M. Scott. 1,765,103; June 17.
Piston, Explosive-engine. O. H. Spencer. 1,763,993; June 17.
Piston, Externally-expanded. A. McLean. 1,764,458; June 17.
Piston for high-speed reciprocating compressors, Working. G. Rothmann. 1,764,526; June 17.
Piston ring. J. Williams. 1,764,815; June 17.
Plait-holding apparatus. H. Schlesinger. 1,764,808; June 17.
Planter, Sugar-cane. A. Q. Estevez. 1,764,159; June 17.
Plastic composition. W. Hoskins. 1,764,839; June 17.
Plate hook. H. E. Golber. 1,764,257; June 17.
Plate with integral post, Corrugated. G. G. Gilpin. 1,764,205; June 17.
Platform construction. C. Erwin. 1,763,766; June 17.
Plow for snow fencing, Banking. O. Smith. 1,763,825; June 17.
Pocket for shirts, Cigarette. J. W. Champion. 1,763,688; June 17.
Polisher, Floor. T. Glen, jr. 1,764,559; June 17.
Polishing device, Floor-. T. R. Ponton. 1,763,818; June 17.
Polishing machine. F. Flexon and C. Chew. 1,764,161; June 17.
Pool, Wading. J. P. Hooper. 1,765,074; June 17.
Portable shears. U. F. L. Steindorff and G. A. Ungar. 1,765,313; June 17.
Positioning the left elbow of a pupil with relation to the violin. I. Glucksman. 1,764,162; June 17.
Post: *See*—
Fence post.
Post driving head. J. H. Osten. 1,764,223; June 17.
Power-driven apparatus. A. Wennerberg. 1,764,665; June 17.
Power plant, Floating. J. J. Baker. 1,764,820; June 17.
Power steam-feed lever. E. J. Gibson. 1,765,069; June 17.
Power-transmitting mechanism. S. G. Baits. 1,763,789; June 17.
Power-transmitting system, Electrical. R. A. Millikan. 1,764,273; June 17.

Power trip. T. F. Stringer. 1,764,993; June 17.
Press: *See*—
Printing press.
Presses, Control for. W. B. Stuart. 1,765,314; June 17.
Pressing machine and actuating mechanism therefor. E. Davis. 1,763,648; June 17.
Pressure regulator. C. E. Bridges. 1,764,503; June 17.
Priming device. R. H. Thrasher. 1,764,060; June 17.
Printer's register hook. W. S. Warnock. 1,764,062; June 17.
Printer's registering device. E. F. Noell. 1,764,030; June 17.
Printing machine, Strip-. T. A. Palmer and J. W. Denmead. 1,764,688; June 17.
Printing machine, Ticket and label. G. W. Henry, jr., and S. J. Thackeray. 1,765,158; June 17.
Printing press. B. C. Stickney. 1,763,679; June 17.
Printing press, Rapid. W. Mockel. 1,764,969; June 17.
Product and making the same from sulphite waste liquors. W. E. B. Baker and F. G. Roberts. 1,764,601; June 17.
Prop, Pit. E. Bullough. 1,765,200; June 17.
Propeller blade for airplanes, Automatic variable-pitch. L. Morris. 1,765,091; June 17.
Propeller, Hollow metal. B. E. Berg. 1,764,927; June 17.
Protective arrangement. A. C. Finney. 1,765,264; June 17.
Protective system. J. V. Breisky. 1,764,385; June 17.
Protective system. V. Genkin. 1,764,399–400; June 17.
Publicity apparatus. H. M. Duchard. 1,765,215; June 17.
Puller: *See*—
Hog-snout puller.
Stump puller.
Wheel puller.
Pulley, Adjustable belt. E. R. Rouse. 1,764,855; June 17.
Pulley, Safety clothesline. A. E. Vauthier. 1,763,913; June 17.
Pulley units, Apparatus for making laminated. W. T. Hensley and R. H. Lewis. 1,765,270; June 17.
Pulpboard, Resin-coated. H. C. Harvey. 1,763,653; June 17.
Pulsator, Hydraulic. N. H. Horne. 1,764,838; June 17.
Pulverizing machine. B. A. O'Neill. 1,765,809; June 17.
Pulverulent material, Apparatus for feeding and metering. E. G. Bailey. 1,764,998; June 17.
Pump. W. A. Brackett and W. E. Richard. 1,764,712; June 17.
Pump. W. H. Carstens. 1,764,433; June 17.
Pump. H. H. Markey. 1,765,095; June 17.
Pump. A. B. Steen. 1,764,657; June 17.
Pump. A. B. Willi. 1,764,706; June 17.
Pump and packing the same. R. W. Stephens and C. E. Wilcox. 1,764,364; June 17.
Pump, Fluid-operated. P. F. Lungling. 1,764,482; June 17.
Pump heads, Bottom attachment and nonreversing attachment for motor-driven. C. E. Johnson. 1,764,263; June 17.
Pump jack. E. E. Stevenson. 1,764,058; June 17.
Pump, Liquid. B. H. Scott and S. E. Ross. 1,764,473; June 17.
Pump, Lock-bottom. R. W. Gunn and W. A. S. Thompson. 1,764,075; June 17.
Pump motor, Weatherproof. C. E. Johnson. 1,764,793; June 17.
Pump or the like, Liquid-dispensing. O. C. Hufnagle and W. F. Reichenderfer. 1,765,273; June 17.
Pump plunger. E. A. Robertson. 1,765,097; June 17.
Pump, Pneumatic grease. T. B. Bennett. 1,764,926; June 17.
Pump screen cage, Oil-. C. E. Jacobs. 1,764,170; June 17.
Pump unit, Water-system. S. H. Hobson. 1,764,307; June 17.
Pump with return of the liquid to the reservoir after use, Multiway liquid-pressure distributing. W. Tastenhoye. 1,765,249; June 17.
Pumping apparatus, Water-system. S. H. Hobson. 1,763,706; June 17.
Pumping unit, Portable. C. C. Hansen. 1,764,259; June 17.
Pumps, Device for evacuating. F. Oberascher. 1,764,640; June 17.
Quick-make and quick-break switch. C. W. Gorman. 1,763,962; June 17.
Rack: *See*—
Display rack.
Rack for automobiles. P. Arnott. 1,764,771; June 17.
Radiant energy, Amplification of. J. J. Daley. 1,764,934; June 17.
Radiator. R. N. Trane. 1,764,187; June 17.
Radiator shutter, Automatic. S. Vernet. 1,764,371; June 17.
Radio aerial bracket. F. P. Foulke. 1,764,071; June 17.
Radio apparatus. D. F. Asbury. 1,765,190–1; June 17.
Radiocabinet. E. L. Combs. Des. 81,426; June 17.
Radiocabinet. J. E. Griffin. Des. 81,385; June 17.
Radio dial and log. C. L. Watson. 1,764,814; June 17.
Radio frequency circuits. E. A. Kuen. 1,764,454; June 17.
Radio receiving system. R. Bown. 1,763,751; June 17.
Radio receiving system. V. D. Landon. 1,764,323; June 17.
Rail chair. J. P. Griffiths and W. Street-Wilson. 1,765,265; June 17.
Rail clamp, Tie. G. M. Fiero. 1,765,263; June 17.
Rail-cutting appliance. R. M. Rooke, jr. 1,764,471; June 17.
Rail guide and clamping surface for shapers. W. F. Zimmermann. 1,764,542; June 17.
Rail tie. J. C. Brouillard. 1,765,126; June 17.
Rails, Improving the heads of railway. J. Lukasczyk. 1,764,844; June 17.
Railway truck, Safety. E. R. Edson. 1,764,941; June 17.
Rake and fertilizing machine, Lawn. R. A. Charles. 1,763,757; June 17.
Range, Gas. S. H. Hobson. 1,763,705; June 17.
Razor. D. J. Case. 1,764,506; June 17.
Razor, Safety. R. O. Barnes. 1,765,256; June 17.
Reamer. F. P. Miller. 1,765,171; June 17.
Reamer. H. P. Wickersham. 1,764,877; June 17.
Receptacle, Button. J. C. Day. 1,765,325; June 17.
Receptacle for light-sensitive units. P. Thomas. 1,764,268; June 17.
Receptacle, Garbage. B. Sommers. 1,763,907; June 17.
Receptacle lifter. A. High. 1,763,965; June 17.
Reciprocating mechanism. D. F. Grahame. 1,764,560; June 17.
Reclining chair. W. E. B. Hasselkus. 1,765,071; June 17.
Recording means. F. L. Capps. 1,765,051; June 17.
Rectifying apparatus and method of making. H. G. André. 1,764,770; June 17.
Reel. I. H. Spoor. 1,764,125; June 17.
Refractory product. S. S. Cole. 1,763,882; June 17.
Refrigerant. J. G. Davidson. 1,765,211; June 17.
Refrigerating apparatus. F. E. Dennison. 1,763,923; June 17.
Refrigerating apparatus. L. S. Kellholtz and E. Dickey. 1,763,659; June 17.
Refrigerating apparatus. J. R. Replogle. 1,764,645; June 17.
Refrigerating apparatus. H. Wallace. 1,763,682; June 17.
Refrigerating device. J. Grison. 1,764,299; June 17.
Refrigerating machine. C. Steenstrup. 1,765,289; June 17.
Refrigerating machines, Boiler absorber for. S. Otto and L. Reichert. 1,764,051; June 17.
Refrigeration. C. C. Spreen. 1,764,702; June 17.
Refrigeration. C. C. Spreen. 1,764,762; June 17.
Refrigeration. C. C. Spreen. 1,764,858; June 17.
Refrigeration, Apparatus for and method of. C. A. Kohl. 1,764,267; June 17.
Refrigeration, Mechanical. H. F. Freeman. 1,764,784; June 17.
Refrigeration, Mechanical. C. C. Spreen. 1,764,652–3; June 17.
Refrigerator. M. Resek. 1,763,673; June 17.
Refrigerator attachment. N. Stefanide. 1,765,290; June 17.
Refrigerator lining. H. L. Pope. 1,764,643; June 17.
Register: *See*—
Call register.
Cash register.
Penny multiple register.
Regulating device. G. F. Machlet. 1,763,666; June 17.
Regulator: *See*—
Automatic regulator.
Fuel regulator.
Heat regulator.
Pressure regulator.
Speed regulator.
Stock regulator.
Windshield regulator.
Regulator. S. A. Staege. 1,764,362; June 17.
Regulator for brake rigging. W. H. Sauvage. 1,764,228; June 17.
Regulator system. J. H. Ashbaugh. 1,764,382; June 17.
Relay, Thermal. E. M. Claytor. 1,765,305; June 17.
Relay, Thermal. H. E. White. 1,764,374–5; June 17.
Remote control means for cranes. D. S. Morrow. 1,765,173; June 17.
Repairing damaged spots in fabrics. S. J. Roozendaal. 1,765,098; June 17.
Reproducing mechanism. C. Krebs. 1,763,793; June 17.
Resistance. J. Geloso. 1,763,772; June 17.
Resistor material and making the same. M. H. Hunt. 1,764,311; June 17.
Retort. L. S. Chadwick and M. Resek. 1,763,687; June 17.
Rewinding mechanism for the tape of news-projecting machines. J. W. Decker. 1,763,844; June 17.
Rice-cooking device. R. J. Cooper. 1,764,039; June 17.
Ridge cap. A. Audet. 1,765,119; June 17.
Ring: *See*—
Calking ring.
Piston ring.
Tool ring.
Ring for spinning-box lids, Retaining. I. Meurling. 1,765,239; June 17.
Riveter. J. C. Hanna. 1,765,011; June 17.
Riveter, Turret. J. C. Hanna and A. Norin. 1,765,012; June 17.
Road grader. A. Montano. 1,763,807; June 17.
Road rail or form. G. H. Miller. 1,764,028; June 17.
Road-shoulder-finishing machine. H. K. Lehmer. 1,764,270; June 17.
Roaster: *See*—
Coffee roaster.
Electric meat and like roaster.
Rock-dusting mines, Apparatus for. J. B. Miller. 1,764,113; June 17.
Rod: *See*—
Brazing rod.
Curtain rod.
Fishing rod.
Rod joint, Swivel sucker-. L. B. Leverich. 1,765,279; June 17.
Roller: *See*—
Inking roller.
Paving roller.
Roller-hearth furnace. F. T. Cope. 1,764,007; June 17.
Rolling mill. G. Asbeck. 1,764,598; June 17.

Roof. W. R. Tobias. 1,764,479; June 17.
Roof construction for furnaces, Integral. L. S. Abbott. 1,764,708; June 17.
Roof construction, Metal-. E. Talmage. 1,763,870; June 17.
Roofing starter. C. Batcheller. 1,765,197; June 17.
Rotary cutter. F. P. Miller. 1,765,172; June 17.
Rubber latex, composition, and article formed thereby, Treating. E. Hopkinson and M. C. Teague. 1,765,015; June 17.
Saddle for motor cycles and the like. C. A. Persons. 1,763,817; June 17.
Sadiron construction. J. C. Steese and C. A. Hoff. 1,764,126; June 17.
Safe, Burglar-proof. W. W. Burns. 1,765,049; June 17.
Safety appliance for air-brake systems. W. B. Smith, William M. Hammons, and J. B. Mullens. 1,764,359; June 17.
Safety attachment for typesetting machines. D. P. McLaughlin. 1,764,803; June 17.
Safety chamber for submerged vessels. A. G. Johnson and C. W. Dewing. 1,765,233; June 17.
Safety control for conveyers, Automatic. P. Olson. 1,763,812; June 17.
Safety device for elevators. R. P. Higbee. 1,764,303; June 17.
Safety device for motion-picture-projecting machines. J. E. Cohen. 1,763,922; June 17.
Safety device for rotary catheads. A. W. Posey. 1,764,887; June 17.
Safety spring clasp. A. Blustein. 1,764,240; June 17.
Safety switch, Quick-make-and-break. A. E. Griswold. 1,764,401; June 17.
Salicylate composition, Stable. M. Coplans. 1,764,933; June 17.
Santa Claus, Electrically-illuminated. G. Lehmann. Des. 81,393; June 17.
Sash construction. C. G. Nelson. Re17,706; June 17.
Sawdust, Treating. E. Erlenbach. 1,764,249; June 17.
Saw, Electrically-driven. E. F. Manthey. 1,764,111; June 17.
Saw guard. F. C. Kummer. 1,764,634; June 17.
Saw set. F. E. Collier. 1,763,760; June 17.
Saw, Straight-line overhead cut-off. S. Madsen. 1,764,965; June 17.
Saw, Surgical. H. L. von Lackum. 1,763,730; June 17.
Sawing machine, Metal-. J. S. Toohey and M. E. Erskine. 1,765,316; June 17.
Saws, Attachment for. G. Hare. 1,764,951; June 17.
Scale, Counting. W. R. Mittendorf. 1,764,275; June 17.
Scrap-bundling machine. F. P. Prindle. 1,765,356; June 17.
Screen: *See*—
Ornamental screen.
Screw drivers, Attachment for. C. W. Bronk. 1,764,504; June 17.
Screw, Rolled-thread wood. E. W. Reed and A. Werme. 1,764,053; June 17.
Screw, Self-locking. R. T. Hosking. 1,764,168; June 17.
Screw-threading apparatus. J. M. Cook. 1,764,607; June 17.
Scribing machine, Geometric. A. D. Fisher. 1,763,885; June 17.
Sealing composition. B. Dewey and E. C. Crocker. 1,765,134; June 17.
Sealing means for cowl ventilators for automobiles. H. M. Hood. 1,765,333; June 17.
Sealing table. A. Fulco. 1,764,508; June 17.
Seeds, Disinfecting. W. P. Raleigh. 1,764,888; June 17.
Self-locking control device. G. De Bonal and P. Masson. 1,764,937; June 17.
Separating and mixing apparatus. E. Falkenthal. 1,764,250; June 17.
Separator: *See*—
Battery separator.
Series exciter. G. B. Stoltz. 1,764,365; June 17.
Service station, Portable oil and gas. F. P. Steinhauer. 1,764,057; June 17.
Sewing machine, Book-. R. E. Ackley. 1,764,863; June 17.
Sewing machines, Feeding mechanism for. J. Berger. 1,763,946; June 17.
Sewing machines, Feeding mechanism for. N. V. Christensen and W. M. Hanneman. 1,763,952; June 17.
Sewing machines, Feeding mechanism for. N. V. Christensen and H. J. Le Vesconte. 1,765,206; June 17.
Sewing machines, Loop-taker mechanism for. W. N. Parkes. 1,763,670; June 17.
Sewing machines, Needle bar for. A. W. Barber. 1,764,865; June 17.
Sewing machines, Presser foot and chain cutter for. F. Lutz. 1,765,342; June 17.
Sewing machines, Presser foot for. W. M. Hanneman. 1,765,332; June 17.
Shade-roller stop. B. E. Mesler. 1,765,170; June 17.
Shade, Window. M. T. Gillbee. 1,765,145; June 17.
Shade, Window. J. Heald. 1,764,789; June 17.
Shaft for golf clubs and the like. A. C. Link. 1,764,800; June 17.
Shaft for winding paper and the like, Expanding. C. S. Lenston. 1,763,794; June 17.
Shank stiffener. R. E. Bartels. 1,764,064; June 17.
Shaper feed mechanism. W. F. Zimmermann. 1,764,092; June 17.
Sharpener, Disk. B. F. Talley. 1,764,812; June 17.
Sharpener, Razor-blade. W. J. Breaux. 1,764,776; June 17.
Shearing machine. A. J. Bates, jr. 1,764,285; June 17.
Shears: *See*—
Flesh cutting and searing Portable shears.
shears.
Sheet-collating means. F. C. Gibson. 1,764,509; June 17.
Sheet material, Feeding mechanism for. H. H. Wydom. 1,763,735; June 17.
Sheets of material, Apparatus for filing. E. J. Donnelley. 1,764,613; June 17.
Shelf extension. F. K. Walter. 1,764,131; June 17.
Shield. B. Caster-Udell. 1,764,912; June 17.
Shield for garments. A. S. Friedlander. 1,764,555; June 17.
Shield for stoves, Metallic. A. E. Anderson. 1,764,595; June 17.
Shield, Nonglare. R. E. Tidmarsh. 1,764,478; June 17.
Shield, Radiator. G. L. Smith. 1,764,759; June 17.
Shingle. C. J. Melby. 1,764,412; June 17.
Ship log. J. Walker. 1,765,039; June 17.
Ship-unloading device. M. Abriani. 1,765,118; June 17.
Ships, Flanking vane for. C. E. Ward. 1,764,918; June 17.
Shoe. L. Bean. 1,764,821; June 17.
Shoe. A. A. Williams. 1,763,997; June 17.
Shoe, Arch-support. J. L. Putzel. 1,764,523; June 17.
Shoe box. J. Farago 1,764,251; June 17.
Shoe-shank stiffener. R. B. Bartels. 1,763,744; June 17.
Shoes, Making. A. L. Jung. 1,764,105; June 17.
Shoes, Repairing. R. E. Bartels. 1,763,743; June 17.
Shoulder and chest protecting device. W. P. Whitley. 1,764,667; June 17.
Shoulder strap. J. R. Davis. 1,765,300; June 17.
Shovel cultivator gang, Shifting-. C. A. Rice. 1,765,177; June 17.
Show case. W. P. Bott. 1,764,822; June 17.
Show case. H. G. Michaelson. 1,763,716; June 17.
Show case for store doors. A. J. Strauss. Re17,702; June 17.
Show case, Refrigerating. A. A. Hoppenrath. 1,764,723; June 17.
Shutter-controlling mechanism, Swell-. J. T. Austin. 1,764,492; June 17.
Shutter for projection machines (bent edges) for motion-picture-projection machines. A. Dina. 1,765,006; June 17.
Shutter, Radiator. S. Vernet. 1,763,837–8; June 17.
Side frame. H. E. Doerr. 1,764,940; June 17.
Side frame. H. C. Dreibuss. 1,765,007; June 17.
Sign adjuster or seat-indicating device. F. A. Travis. 1,765,250; June 17.
Sign and signal, Light-reflector. R. W. Luce. 1,764,687; June 17.
Sign, Display. H. B. Barker. 1,763,742; June 17.
Sign, Display. H. Nathansohn. 1,764,639; June 17.
Sign, Electric. H. P. Hester and D. H. Gardner. 1,765,073; June 17.
Sign, Electric. R. R. Wiley. 1,764,485; June 17.
Signboard, Traveling. B. Hoetger. 1,764,683; June 17.
Signal: *See*—
Automobile signal. Vehicle signal.
Tire-deflation signal.
Signal device, Optical. G. Goodwin. 1,764,622; June 17.
Signal device, Traffic. J. R. Townsend. 1,764,426; June 17.
Signal for motor vehicles, Direction. L. Scherz. 1,765,100; June 17.
Signal light, Hand. B. Caroselli and H. G. Essman. 1,764,549; June 17.
Signal switch, Automobile. C. T. Jamison. 1,764,958; June 17.
Signaling attachment for meters. E. M. Krueger. 1,765,337; June 17.
Signaling system. E. T. Burton. 1,763,880; June 17.
Signaling system, Electrical. J. Bethenod. 1,763,947; June 17.
Silicate of soda, Apparatus for dissolving. L. B. Edgerton. 1,763,845; June 17.
Silver, Preparing colloidal. T. Satow. 1,764,417; June 17.
Sink or similar article. A. F. Premo. Des. 81,399; June 17.
Sintering machine. E. W. Shallock. 1,764,695–6; June 17.
Six-wheel drives, Brake system for. H. B. Shields. 1,763,868; June 17.
Skimmer. R. J. Anderson. 1,763,637; June 17.
Slicing machines, Feeding mechanism for. W. P. Van Lammeren. 1,763,681; June 17.
Slip. R. V. Uhrig. 1,763,872; June 17.
Slip sheeter particularly adapted for mimeographs. F. Klein. 1,763,972; June 17.
Slug ejector. A. S. Ross. 1,764,985; June 17.
Slug ejector for coin machines. N. P. Petersen. 1,764,579; June 17.
Smoke condenser. J. M. Hill. 1,765,159; June 17.
Smoking appliance, Tobacco-. L. D. Jones. 1,764,795; June 17.
Snap. O. Thornley. 1,764,813; June 17.
Snare. W. J. Buford. 1,763,921; June 17.
Snowplow. P. E. Adams. 1,763,736; June 17.
Soap cake and making same, Sectional. S. D. Embree. 1,764,009; June 17.
Soap threads, Production of. A. H. Charlton. 1,764,866; June 17.

Socket and contact terminals therefor, Vacuum-tube. M. Alden. 1,764,489; June 17.
Socket, Lamp. S. B. Kraut. 1,764,315; June 17.
Socket, Vacuum-tube. W. A. MacDonald. 1,763,796; June 17.
Soft spring cushion. H. E. Wolf. 1,765,044; June 17.
Soldering. G. Brunhübner. 1,764,604; June 17.
Soldering iron. N. Morris. 1,763,900; June 17.
Solids from liquids, Method of and apparatus for separating. A. H. Godbe. 1,763,773; June 17.
Sorting device. F. L. G. Straubel. 1,764,128; June 17.
Sound recording. W. C. Jones. 1,763,891; June 17.
Sound-recording machine. A. W. Geyer. 1,764,786; June 17.
Sound reproducer, Push-pull electrostatic. W. D. Crozier. 1,764,008; June 17.
Sound-reproducing apparatus. H. J. Murray. 1,765,029; June 17.
Sound-reproducing mechanism. P. A. Robbins. 1,764,120; June 17.
Sound-transforming apparatus. A. A. M. A. Kalmeijer. 1,765,276; June 17.
Spark arrester. W. Adams and C. W. Wickersham. 1,763,643; June 17.
Spark gap. H. H. Osborn. 1,764,279; June 17.
Spark-plug tester. A. C. Ekle. 1,764,248; June 17.
Speed-governing mechanism. R. O. Muller. 1,764,463; June 17.
Speed regulator. H. M. Stoller and E. R. Morton. 1,763,909; June 17.
Speed-regulator system. S. A. Staege. 1,764,422; June 17.
Speed-transmission device, Variable-. E. F. Hathaway. 1,765,268; June 17.
Speed transmission, Variable-. C. Sifton. Re17,704; June 17.
Spindle for chuck devices. G. W. Emrick. 1,764,289; June 17.
Spindle for spring motors, Adjustable winding. E. Knecht. 1,763,792; June 17.
Spinning and twisting machine. J. J. Keyser. 1,765,236; June 17.
Spinning material, Extraction of foreign bodies from. E. Gminder. 1,764,680; June 17.
Spooling device. E. H. Taylor. 1,763,871; June 17.
Spoon or similar article. G. N. Allen and C. A. Bennett. Des. 81,367; June 17.
Spoon or similar article. G. N. Allen and L. V. M. Helander. Des. 81,368; June 17.
Spotlight and hinge structure, Combined. R. J. Burton. 1,764,605; June 17.
Spout and diverter, Combination. D. H. Bowlzer. 1,763,877; June 17.
Spraying device. W. R. Thornton. 1,763,912; June 17.
Spring: *See*—
Car-truck spring. Truck spring.
Tensioning spring.
Spring-clip guide for door-lock bolts. J. B. Flynn. 1,764,946; June 17.
Spring controller, Vehicle. R. P. Lansing. 1,764,046; June 17.
Spring-fastening device and operating the same. N. Statham. 1,765,034; June 17.
Sprinkler: *See*—
Lawn sprinkler.
Sprinkler. L. R. Nelson. 1,763,979–80; June 17.
Sprinkler. W. C. Todd. 1,764,910; June 17.
Sprinkler head. J. C. Lohman. 1,764,570; June 17.
Sprue-forming device. M. Stabile. 1,765,109; June 17.
Stair construction. A. E. and Louis Shlager, and M. Groisser. 1,764,698; June 17.
Stand: *See*—
Display stand.
Stand for electric lamps, Adjustable support. O. J. Moehler. 1,765,028; June 17.
Starter, Engine. W. L. McGrath. 1,764,027; June 17.
Starter, Engine. W. F. Rothermund. 1,764,893; June 17.
Starter for internal-combustion engines. J. Hasselbring, jr. 1,763,702; June 17.
Starter for internal-combustion engines, Electric. G. Steiner. 1,764,906; June 17.
Static transmitter for polyphase distant control systems. E. Granat. 1,764,867; June 17.
Station, Automatic. C. C. Levy. 1,764,326; June 17.
Station, Automatic. C. McL. Moss and A. J. A. Peterson. 1,764,332; June 17.
Steam and hot water, Apparatus for the generation of. F. W. C. A. Feld. 1,764,873; June 17.
Steam finisher, Dry-. I. W. Cox. 1,763,761; June 17.
Steam-generating apparatus. G. J. Muller. 1,764,740; June 17.
Steel, Manufacturing hollow drill. O. A. E. Gumaelius. 1,763,651; June 17.
Steering apparatus for automobiles. F. M. Holaday. 1,763,785; June 17.
Steering-column switch. E. N. Jacobi. 1,764,169; June 17.
Steering mechanism. J. I. Gruss. 1,763,700; June 17.
Steering mechanism. H. L. Kraeft. 1,764,730; June 17.
Stencil sheet and manufacturing the same. A. B. Davis. 1,763,955; June 17.
Stock regulator. W. P. Feeney. 1,763,691; June 17.
Stocking-inspecting device. A. C. Schoen. 1,764,986; June 17.
Stoker, Grain. A. Lethiecq. 1,764,272; June 17.
Stone, Precious, semiprecious, or synthetic cut. J. Dinhofer. Des. 81,375–82; June 17.
Stop for automobiles, Reverse. F. N. Bierce. 1,764,286; June 17.
Storage tank, Gasoline-. C. M. Brill. 1,763,950; June 17.
Strain clamp. N. A. Wahlberg. 1,764,372; June 17.
Strainer for cane mills. M. Lopez. 1,763,795; June 17.
Strainer, Juice. T. M. Nalon. 1,763,978; June 17.
Strainer, Sink. E. K. Robertson. 1,763,864; June 17.
Strainers, Making well. G. E. Willers. 1,763,996; June 17.
Strand-distributing apparatus. C. H. Franks. 1,764,618; June 17.
Strap: *See*—
Shoulder strap.
Strap sealer, Pneumatic. S. W. Treat. 1,764,911; June 17.
Stream-line construction. L. J. Johnson. 1,763,970; June 17.
Street button, Universal. F. M. Furey. 1,764,073; June 17.
Street-marking apparatus. W. B. Burnley. 1,764,546; June 17.
Stretcher. E. Weber-Stierlin. 1,764,477; June 17.
Stretcher, Transport. E. Kenny. 1,764,568; June 17.
String-dispensing device. L. F. Owen. 1,765,174; June 17.
String from animal origin and manufacturing the same. M. Varinois. 1,764,233; June 17.
Strip-feeding mechanism. C. J. Fancher and R. A. Johnson. 1,764,831; June 17.
Strips to plaster board, Applying edge-covering. J. Schumacher. 1,764,123; June 17.
Stroke adjuster for idle shapers. W. F. Zimmermann. 1,764,093; June 17.
Structural unit. D. H. Bitney. 1,764,773; June 17.
Strut-type-base construction. L. A. Rawson. 1,764,182; June 17.
Stubble remover and seed-bed fertilizer. T. L. Diggins. 1,765,005; June 17.
Stump puller. E. R. Standfuss. 1,764,905; June 17.
Submarine-salvaging apparatus. J. Schierenbeck. 1,765,101; June 17.
Sucker rod and the like and its production, Steel. W. J. Crook. 1,764,068; June 17.
Suction bottle machine. K. E. Peiler. 1,764,805; June 17.
Suction box. E. H. Streeter. 1,763,910; June 17.
Suit, Ensemble. D. Long. Des. 81,394–5; June 17.
Sulphite waste-liquor product and making same. W. E. B. Baker. 1,764,600; June 17.
Sulphur, Extracting. A. J. Crowley. 1,763,762; June 17.
Sulphur, Mining of. R. H. Stewart. 1,764,538; June 17.
Sulphur, Preparing colloidal. H. Howard. 1,765,307; June 17.
Superheater boiler. J. J. Nelis. 1,764,050; June 17.
Superheater header. O. V. Thiele. 1,764,860; June 17.
Superheterodyne receiver. W. V. B. Roberts. 1,764,751; June 17.
Supervisory system, Selector. L. J. Burns and L. E. Coon. 1,763,879; June 17.
Support and the like, Globe. J. H. Hudson. 1,763,889; June 17.
Support, Core-bar. J. R. McWane. 1,765,020; June 17.
Support, Curtain. H. L. De Lisle. 1,764,611; June 17.
Support, Drapery. D. M. Sarkisian. 1,764,891; June 17.
Support, Fixture. G. Arras. 1,764,997; June 17.
Support for panoramic cameras. A. C. Hayden. 1,764,721; June 17.
Support for sewing machines, Folder. J. Mann. 1,765,169; June 17.
Support, Machine. C. C. Spreen. 1,764,761; June 17.
Support, Operating device for a desk-fall. E. D. Truesbury. 1,764,188; June 17.
Support or bracket, Curtain or other article. E. Armstrong. 1,763,737; June 17.
Support, Receptacle. F. E. Mann. 1,763,798; June 17.
Support, Sewing-machine work. C. W. Mueller. 1,764,573; June 17.
Support, Soft-collar. F. B. A. Kirsten. 1,764,212; June 17.
Supporter, Bust. E. S. Caldor. 1,765,003; June 17.
Supporting and distributing strands, Device for. G. J. Houts. 1,764,630; June 17.
Supporting articles on tires or the like, Device for. A. W. Rosen. 1,765,099; June 17.
Supporting bracket. T. L. White. 1,764,766; June 17.
Supporting device. N. H. Fox. 1,764,678; June 17.
Supporting means for pipes in conduits. C. Gottwald. 1,763,775; June 17.
Supporting strands, Apparatus for. G. J. Houts, E. P. Tournice, and J. F. Wulff. 1,764,629; June 17.
Surgical instrument. T. W. Treharne. 1,763,939; June 17.
Surgical instrument for circumcisions. J. W. Williams. 1,765,319; June 17.
Suspension for vehicles. T. A. Conlon. 1,764,038; June 17.
Swaging mechanism for nipples. E. W. Stoler. 1,763,938; June 17.
Swatters, Extension for fly. J. P. Haberle. 1,765,147; June 17.
Sweeper, Suction. H. B. White. 1,764,666; June 17.

Swimming device. L. R. Williams. 1,765,116; June 17.
Switch: *See*—
Centrifugal switch.
Electric switch.
Electrical switch.
Float-operated switch.
Quick-make and quick-break switch.
Safety switch.
Signal switch.
Steering-column switch.
Thermostatic switch.
Switch. W. A. Heinrich. 1,764,403; June 17.
Switch for cable-carrying drums. J. H. Cohen. 1,763,953; June 17.
Switch mechanism. D. R. Davies. 1,764,435; June 17.
Synchronizer, Resilient. H. J. Murray. 1,764,335; June 17.
Syringe hydrometer. F. L. Freas. 1,764,254; June 17.
Table: *See*—
Flower table.
Folding table.
Sealing table.
Table. J. S. Konop. 1,763,931; June 17.
Table and seat, Combined wall. J. S. Konop. 1,763,932; June 17.
Tag, Laundry-marking. A. F. Hanney. 1,763,778; June 17.
Tag, Price. S. K. Bush. 1,764,003; June 17.
Tag strip, Metallic. O. M. Pannier. 1,764,884; June 17.
Tandem draft rigging. J. F. O'Connor. 1,763,856; June 17.
Tanning. F. S. Low. 1,764,517; June 17.
Tanning composition and producing same, etc. F. S. Low. 1,764,516; June 17.
Tape, Stitchless hook. D. Silberman. 1,765,181; June 17.
Taxicab indicator. O. C. Roesen. 1,763,821; June 17.
Teeter, Rotary. E. H. Taylor. 1,764,230–31; June 17.
Telegraph system. H. L. Krum and J. O. Carr. 1,764,310; June 17.
Telegraphic recorder. E. A. Faller. 1,764,830; June 17.
Telephone receiver. R. D. Fay. 1,763,846; June 17.
Telephone system. J. A. Krecek. 1,763,893; June 17.
Telephone system. J. E. Ostline. 1,763,901; June 17.
Telephone system. A. Waschnack. Re17,703; June 17.
Telephone system, Automatic. R. F. Gould. 1,763,887; June 17.
Television sending and receiving apparatus. C. J. Wagner. 1,765,292; June 17.
Television, System of. P. Torrabadella. 1,764,232; June 17.
Temperature-control apparatus. L. A. M. Phelan and C. Hotchkiss. 1,764,344; June 17.
Temperatures of waffle irons and the like, Device for indicating cooking. J. F. Smart. 1,763,991; June 17.
Tennis-racket press or similar article. A. Halpin. Des. 81,387; June 17.
Tension device for shuttles. L. C. Baldwin 1,764,710; June 17.
Tensioning device. E. Hano. 1,765,149; June 17.
Tensioning spring. W. Röders, jr. 1,765,179; June 17.
Terminal. J. Kelleher. 1,764,045; June 17.
Terminals, Making conductor. A. H. Adams. 1,764,592; June 17.
Testing dock and salvage vessel, Combined. L. Y. Spear. 1,764,903; June 17.
Testing system. W. Bresters. 1,763,878; June 17.
Tetrathio diphospho organic compound. B. L. Johnson. 1,763,852; June 17.
Textile crayon process. L. H. Cook. 1,764,006; June 17.
Textile fabric, Elastic narrow. O. E. Huber. Des. 81,390–1; June 17.
Textile product, Making a. W. Nicolet. 1,764,575; June 17.
Thermometer, Pocket. J. L. Schwartz. 1,764,987; June 17.
Thermostat. E. J. Levy. 1,763,802; June 17.
Thermostat cartridge. C. B. Sawyer. 1,764,087; June 17.
Thermostatic control for stove ovens. A. H. Tinnerman. 1,764,765; June 17.
Thermostatic switch. L. A. M. Phelan. 1,764,345; June 17.
Thread cutting and forming machine. F. W. Bommer. 1,764,775; June 17.
Thread-laying mechanism for sewing machines, Covering. W. M. Hanneman. 1,765,150; June 17.
Throttle, Choke-operated. J. Good. 1,764,621; June 17.
Tie: *See*—
Rail tie.
Tie-bar hanger. C. L. Snyder. 1,765,107; June 17.
Tie clasp. O. Carlson. 1,764,778; June 17.
Tile for building purposes, Hollow. F. Koch. 1,764,798; June 17.
Time-recording machine. R. M. Barbour and H. H. Knipe. 1,763,740; June 17.
Tire chain. A. Frykman. 1,764,785; June 17.
Tire-deflation indicator. R. Depee. 1,765,213; June 17.
Tire-deflation signal. H. S. Christiphersen. 1,763,639; June 17.
Tire-retreading mold. H. J. Woock. 1,764,378; June 17.
Toilet, Portable. I. E. Ledger. 1,764,843; June 17.
Tongs. T. H. Mills. 1,764,221; June 17.
Tongs. D. J. Weeden. 1,764,919; June 17.
Top-securing means for baskets. R. A. Dennison. 1,765,301; June 17.
Tool F. D. Oesterle. 1,764,641; June 17.
Tool. F. D. Oesterle. 1,764,641; June 17.
Tool attachment, Machine-. E. J. Kearney. 1,763,711; June 17.
Tool, Brick-mason. J. A. Kaufman. 1,764,106; June 17.
Tool, Combined fishing and swaging. A. B. Watkins. 1,764,481; June 17.
Tool, Convertible. V. Kalfus. 1,764,513; June 17.
Tool for connecting rods, Reaming. W. Aab. 1,763,917; June 17.
Tool for ditching or dredging machines, Excavating. H. Fischer. 1,763,769; June 17.
Tool, Fencing. C. H. Purcell. 1,765,241; June 17.
Tool handle. E. M. Pfauser. 1,764,690; June 17.
Tool handle, Reenforced safety. E. Cohn. 1,764,677; June 17.
Tool, Machine. A. Bussy. 1,765,203; June 17.
Tool, Oil-well fishing. F. J. Hinderliter. 1,763,703; June 17.
Tool, Ring. H. M. Bramberry. 1,764,146; June 17.
Tool, Sheet-metal-working. C. McCurley. 1,764,457; June 17.
Tool, Valve-spring-lifting. A. L. Mettler. 1,764,519; June 17.
Tools, Taper turning or boring mechanism for machine. J. L. Bayer and J. J. N. Van Hamersveld. 1,763,745; June 17.
Torque transmitter. L. M. Karnasch. 1,764,266; June 17.
Towing dolly. L. D. Nilson. 1,764,971; June 17.
Toy. J. H. Buhrle. 1,765,258; June 17.
Toy. F. McKale. 1,765,238; June 17.
Toy. J. Perkins. 1,763,903; June 17.
Toy. G. Reich and H. R. Le Grand. 1,764,982; June 17.
Toy construction, Sheet-metal. H. L. Kraeft. 1,764,732; June 17.
Toy, Mechanical. G. Mazigian. 1,763,804; June 17.
Toy, Radio. W. L. Jobe, sr. 1,763,788; June 17.
Toy, Trick egg. F. M. Osgood. 1,763,814; June 17.
Toy vehicle. L. A. Colella. 1,764,199; June 17.
Toy, Wheeled. H. L. Kraeft. 1,764,733; June 17.
Trackway. M. G. Hilpert. 1,764,306; June 17.
Tractor attachment for feeding and elevating snow. N. P. Nelson and F. W. James. 1,764,084; June 17.
Tractor, Cushion-tire tracklayer. W. H. Smyth. 1,763,826; June 17.
Tractor wheels, Creeper attachment for. J. T. Moore. 1,764,520; June 17.
Tractors, Power take-off for. F. E. Webb. 1,765,188; June 17.
Train control. W. K. Howe. 1,765,334; June 17.
Train control and signal, Automatic. C. W. Brewster. 1,765,355; June 17.
Trap for taking live animals. W. A. Gibbs. 1,765,144; June 17.
Transfer-gripper-operating mechanism. A. G. Jacobson. 1,764,104; June 17.
Transformers, Regulating. K. Kurda and P. Shade. 1,764,320; June 17.
Transmission. T. J. O'Connor. 1,764,849; June 17.
Transmission. C. E. Swenson. 1,764,994; June 17.
Transmission and control mechanism for machine tools. J. B. Armitage. Des. 17,699; June 17.
Transmission and reception by means of electric waves, Arrangement for directional. W. Hahnemann. 1,764,441; June 17.
Transmission fluid, Hydraulic. R. A. Norton. 1,764,032; June 17.
Transmission for tickers, Automatic tape-controlled. E. R. Wheeler. 1,765,042; June 17.
Transmitter. H. F. Fruth and T. O. Westhafer. 1,764,619; June 17.
Transplanting device, Tree-. C. F. Irish. 1,763,707; June 17.
Trap: *See*—
Animal trap.
Mole and gopher trap.
Tray, Ash. G. D. Rubenstein. 1,764,692; June 17.
Tray, Ash. H. A. Stern. 1,764,907; June 17.
Tray for refrigerators, Ice-cube. C. T. Hatch. 1,764,787; June 17.
Treadles, Cushion pad for foot. J. Saltzman. 1,763,987; June 17.
Treatment of loaded conductors, Heat. G. W. Elmen. 1,763,884; June 17.
Tree: *See*—
Artificial tree.
Tree-moving apparatus. P. H. and J. A. Davey. 1,764,935; June 17.
Tree protector. C. Hansen. 1,764,442; June 17.
Tree pruner. J. P. Warrenfeltz. 1,765,187; June 17.
Trimming mechanism for grinding wheels. J. W. Snarry. 1,764,901; June 17.
Trimming strips, Apparatus for producing stitched. K. Maier. 1,764,846; June 17.
Truck-body partition. W. H. Edwards. 1,764,615; June 17.
Truck spring, Railway-car-. C. Hankins. 1,764,163–5; June 17.
Tube: *See*—
Dispensing tube.
Inner tube.
Electrical discharge tube.
Tubes, Apparatus for cleaning economizer. J. E. Bell. 1,764,189; June 17.
Tubes, Attachment for collapsible. G. S. Turner. 1,765,114; June 17.
Tubes, Shaping. E. J. Gulick. 1,764,561; June 17.
Tubing. H. W. Bundy. 1,763,755; June 17.
Tumbler. E. E. Bartlett. Des. 81,427; June 17.
Tumbler and conveyer, Fruit. F. S. Colvin and J. V. Rogers. 1,763,883; June 17.

Tungsten filament, Thoriated. J. H. Ramage. 1,764,644; June 17.
Twine cutter. W. O. Carley. 1,764,287; June 17.
Typewriter-carrying case. W. E. Barnard. 1,763,999; June 17.
Typewriters and other machines, Key action for. O. U. Desha. 1,765,326; June 17.
Typewriting and computing machine, Combined. H. L. Pitman. 1,764,978; June 17.
Typewriting machine. A. E. Goetz. 1,764,620; June 17.
Typewriting machine. A. G. F. Kurowski. 1,764,321; June 17.
Typewriting machine. E. G. Rowley. 1,764,416; June 17.
Typewriting machine. J. A. B. Smith. 1,764,900; June 17.
Typewriting machine. B. C. Stickney. 1,763,936; June 17.
Underreamer. E. C. Weisgerber. 1,764,133; June 17.
Underwear. H. H. Fessler. 1,764,252; June 17.
Universal joint. C. H. Arbuthnot. 1,764,381; June 17.
Universal joint. C. D. Cutting. 1,764,829; June 17.
Utensils, Apparatus for washing and drying. C. W. Rouse. 1,763,904; June 17.
Vacuum-cleaner bag. D. E. Stolpe. 1,764,127; June 17.
Vacuum cleaners, Attachment for. P. Fuhrmann. 1,764,439; June 17.
Vacuum-tube rectifier. H. H. Strong. 1,764,283; June 17.
Vacuum tubes, Arrangement for protecting. A. Meissner. 1,763,805; June 17.
Valve. G. L. Baker. 1,763,942; June 17.
Valve. C. F. Burgmann. 1,763,951; June 17.
Valve. A. C. Hougland. 1,765,272; June 17.
Valve. W. S. Ireland. 1,763,927; June 17.
Valve. W. H. Siebs. 1,764,991; June 17.
Valve-actuating device. E. T. Turner. 1,763,728–9; June 17.
Valve-actuating mechanism, Sleeve-. A. M. Niven. 1,764,972; June 17.
Valve and drain for boilers, Safety. T. J. Keenan. 1,765,162; June 17.
Valve and union, Combined check. J. B. Teesdale. 1,764,186; June 17.
Valve and valve gear, Internal-combustion-engine. C. H. M. Fry. 1,764,255; June 17.
Valve, Balanced three-way. G. G. Morin. 1,765,090; June 17.
Valve, Check. J. F. Mullaney. 1,764,521; June 17.
Valve-control mechanism, Tank-. L. H. Duerr. 1,764,436; June 17.
Valve, Drift. F. Ball. 1,764,493; June 17.
Valve, Electric-current. R. C. Jacquelet. 1,765,335; June 17.
Valve for self-acting regulators or governors, Frictionless sliding. H. Thoma. 1,763,994; June 17.
Valve engine, Sleeve-. F. E. Lonas. 1,763,664; June 17.
Valve engine, Sleeve-. A. M. Niven. 1,764,742–3; June 17.
Valve, Flush. S. P. Enright. 1,764,942; June 17.
Valve, Flush. W. Mooney. 1,764,276; June 17.
Valve for injector overflow, Safety. S. J. Roetz and W. J. Greene. 1,764,181; June 17.
Valve for lifting devices. J. D. Cochin. 1,764,004; June 17.
Valve for lifting devices, Control. J. D. Cochin. 1,764,005; June 17.
Valve lifter. W. J. Dunston. 1,765,138; June 17.
Valve, Locomotive throttle. A. F. Stuebing. 1,764,366; June 17.
Valve mechanism, Control-. R. M. Galloway. 1,764,099; June 17.
Valve-operating mechanism. D. G. Cooper. 1,763,640; June 17.
Valve, Pressure regulating and shut-off. C. H. Hook and N. L. Mercur. 1,764,790; June 17.
Valve-seat reamer. A. C. Savidge. 1,764,184; June 17.
Valve, Sprinkler-system main. E. Tyden. 1,763,834; June 17.
Valve tester. J. B. Fleming. 1,764,616; June 17.
Valves, Remote control structure for. L. W. Browne. 1,764,825; June 17.
Vanity case. W. F. Shelgren. 1,765,033; June 17.
Vaporizer, Forced-feed. C. A. Brewer. 1,765,125; June 17.
Variable-capacity element. J. Geloso. 1,763,771; June 17.
Vase, Grave. J. J. Fitl. 1,765,140; June 17.
Vat: *See*—
Cheese vat.
Fermenting vat.
Vehicle. R. B. Fageol. 1,763,767; June 17.
Vehicle body construction. R. D. Marx. 1,763,715; June 17.
Vehicle, Self-propelled. E. W. Brandenstein. 1,765,298; June 17.
Vehicle signal. A. J. Salazar. 1,764,121; June 17.
Vehicle, Traction. L. Y. Spear and C. P. Caulkins. 1,764,902; June 17.
Vending machine. W. W. Cadwell. 1,765,259; June 17.
Vending machine. M. Duncan. 1,765,216; June 17.
Vending machine. M. H. Richardson and A. D. Antoine. 1,763,723; June 17.
Vending machine. J. J. Somergary and A. Leichtman. 1,765,108; June 17.
Vending machine, Perfume-. S. Schiano. 1,764,693; June 17.
Vending machine, Tire-valve-core-. C. Schrum. 1,765,180; June 17.
Ventilating system. O. P. and O. E. Wiltermood. 1,764,816; June 17.
Ventilator: *See*—
Chimney ventilator.
Ventilator and screen, Window. E. S. Van de Mark. 1,764,913; June 17.
Ventilator thimble. J. V. Petrelli. 1,764,343; June 17.
Vessel, Transporting. W. Schmidt. 1,763,823; June 17.
Vine-lifting attachment. O. J. McNees. 1,764,572; June 17.
Violin-bow attachment. J. W. Knopp. 1,763,660; June 17.
Vise, Bench. C. Bodmer. 1,765,321; June 17.
Vise, Bench. G. O. Danielson. 1,764,507; June 17.
Visor. M. E. and C. E. McClay. 1,763,899; June 17.
Vitamin food and producing same. H. Placak. 1,764,085; June 17.
Voltage-control system. K. Kurda. 1,764,319; June 17.
Voltage-control system. R. Puller. 1,764,414; June 17.
Voltage recorder, Surge-. C. M. Foust. 1,765,227; June 17.
Voltmeter, High-voltage. F. D. Fielder. 1,764,294; June 17.
Waffle iron. H. M. A. Strauss. 1,764,908; June 17.
Wagon box. C. D. Card. 1,765,204; June 17.
Wall, Building. L. A. Banta. 1,765,255; June 17.
Wall construction, Solid-. J. S. Raynor. 1,764,748; June 17.
Wall-paper manufacture. J. J. Janeway. 1,764,408; June 17.
Wall structure. W. Anderson. 1,763,916; June 17.
Warp stop motion. J. G. Menzer and H. K. Khoury. 1,764,879; June 17.
Washboard. E. E. Lewis, N. D. Zito, and J. J. Fertitta. 1,765,083; June 17.
Washer: *See*—
Oscillating washer.
Washing and drying machine. G. D. Hauser. 1,764,302; June 17.
Washing machine. R. A. Hubinger. 1,764,631; June 17.
Washing machine. C. F. Smith and S. J. Helweg. 1,764,476; June 17.
Washing machine, Domestic. W. A. Frantz. 1,765,067; June 17.
Washtub. J. S. Mermigis. 1,763,803; June 17.
Waste, Apparatus for destroying. A. H. Mann. 1,764,637; June 17.
Watch protector for bathers, Wrist-. P. Kellner. 1,763,929; June 17.
Water cooler. C. Steenstrup. Des. 81,420; June 17.
Watercourse, Endless. J. W. Lippincott. 1,763,976; June 17.
Water craft, Pneumatic. J. F. Boyle and A. Van Muffling. 1,765,002; June 17.
Water into engine cylinders, Device for introducing. O. O. Skreen. 1,764,755; June 17.
Water softener. L. G. Daniels. 1,764,155; June 17.
Water softener for base-exchanging substances. G. F. Hodkinson. 1,763,784; June 17.
Water-softening apparatus. E. T. Turner. 1,763,727; June 17.
Wax-matrix black-leading machine. E. Rodd and J. H. Ebel. 1,763,866; June 17.
Weaving. W. Nicolet. 1,764,574; June 17.
Weaving. W. Nicolet. 1,764,576; June 17.
Webbing for suspenders, garters, and similar articles. F. J. Zimmerer. Des. 81,424; June 17.
Welded tubular element. J. E. Bell. 1,764,603; June 17.
Welding machine. C. L. Rowland. 1,763,867; June 17.
Well packer. P. F. Yungling. 1,764,136; June 17.
Well-shooting device. J. A. Morrison and E. T. William. 1,764,222; June 17.
Wells, Apparatus for cementing. H. H. Dievendorff and S. O. Barton. 1,763,642; June 17.
Wheel: *See*—
Finishing wheel.
Welt-lock frame. A. C. Wisner. 1,764,920; June 17.
Wheel and bearing construction. H. L. Kraeft. 1,764,731; June 17.
Wheel for vehicles, Spring. A. J. Johnsen. 1,765,160; June 17.
Wheel puller. A. L. Cornwell. 1,764,243; June 17.
Wheels, Method of and apparatus for truing serrated grinding. B. M. W. Hanson. 1,764,043; June 17.
Whistle. B. H. Hartley. 1,765,153; June 17.
Wide-spread. H. C. Hollinger. 1,764,956; June 17.
Winder for hair curlers, Self-. L. Ingrassia. 1,763,655; June 17.
Windmill. F. A. Pfeifer. 1,764,052; June 17.
Window and sashes, Sliding and swinging. E. Leindorf and N. P. Norman. 1,763,896–7; June 17.
Window-guide construction for removable sashes. R. T. Axe. 1,764,599; June 17.
Window lock. C. Vitale. 1,763,914; June 17.
Windshield regulator. H. C. Field and E. G. Simpson. 1,763,695; June 17.

Wing structure for airplanes, Variable-area. H. M. Salisbury and A. E. Miller. 1,764,122; June 17.
Wiper, Windshield. W. B. Gray. 1,764,868; June 17.
Wire-loop-bending machine. G. H. Gebhardt. 1,765,228; June 17.
Wire protective system, Pilot-. H. C. Graves, jr. 1,764,297; June 17.
Wire-stitching machine. H. G. Allen. 1,765,120; June 17.
Workholder. F. L. Borchert. 1,763,685; June 17.
Wrapping machine, Automatic. C. H. L. Jones and W. J. Hussey. 1,764,081; June 17.
Wrench; *See*—
Nonslipping wrench.
Wrench. J. Zilliox. 1,764,379; June 17.
Writing instrument. M. Escalante. 1,765,219; June 17.
Yarn carrier. B. A. Peterson. 1,763,861; June 17.
Zeolite water softener. G. F. Hodkinson. 1,763.783; June 17.

CLASSIFICATION OF PATENTS

ISSUED JUNE 17, 1930

NOTE—First number=class, second number=subclass, third number=patent number.

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19: 1,764,215
34: 1,764,857
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Abendpost Company, The, Chicago, Ill. Newspaper. 272,064–5; June 24; Serial No. 295,721–2; published Apr. 8, 1930. Class 38.

Abraham & Straus, Inc., New York, N. Y. Men's hats. 272,035; June 24; Serial No. 278,021; published Mar. 25, 1930. Class 39.

Air-Way Electric Appliance Corporation, Toledo, Ohio. Chemical compositions. 272,092; June 24. Class 6.

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American Masters Press. (See Sar, H Stewart.)

American Trade Mark Corporation, New York, N. Y. Transfer patterns. 272,020–21; June 24; Serial Nos. 276,756–7; published Apr. 8, 1930. Class 40.

Arnao, Charles, Company, Minneapolis, Minn. Electrical hair driers and scalp steamers. 272,077; June 24. Class 44.

Artistic Novelty Co., Inc., New York, N. Y. Ornamental appendages and trimmings. 272,040; June 24; Serial No. 293,206; published Apr. 8, 1930. Class 40.

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Barry, Bert B., and Associates, Chicago, Ill. Dolls. 272,070; June 24; Serial No. 295,828; published Apr. 8. 1930. Class 22.

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Bluebird Diamond Syndicate, Chicago, Ill. Diamond rings. 272,066; June 24; Serial No. 295,724; published Apr. 8, 1930. Class 28.

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Carter, J. W., Company, Nashville, Tenn. Boots, shoes, and slippers. 271,985; June 24; Serial No. 295,252; published Apr 8, 1930. Class 39.

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City Machine & Tool Works. (See Poock, O. M.)

Container Sales Company, Inc., New York, N. Y. Jars. 272,029; June 24; Serial No. 248,813; published Apr. 8, 1930. Class 33.

Crocker-Wheeler Electric Manufacturing Company, Ampere, N. J. Electric generators and electric motors and starters for the motors. 272,041; June 24; Serial No. 293,211; published Apr. 8, 1930. Class 21.

Daly, James M., Lynn, Mass. Boots, shoes, and slippers. 271,987; June 24; Serial No. 295,209; published Mar. 25, 1930. Class 39.

Dolgeville Slipper Company, Inc., Dolgeville, N. Y. Slippers. 271,986; June 24; Serial No. 295,211; published Mar. 25, 1930. Class 39.

Donavan, James E., Millis, Mass. Boots and shoes. 272,045; June 24; Serial No. 293,812; published Apr. 8, 1930. Class 39.

Duesenberg Incorporated, Indianapolis, Ind. Automobiles and their structural parts. 272,089; June 24. Class 19.

Dunn & McCarthy, Inc., Auburn, N. Y. Leather shoes. 271,984; June 24; Serial No. 295,296; published Mar. 25, 1930. Class 39.

Duplan Silk Corporation, New York, N. Y. Piece goods of silk and rayon and mixtures thereof. 271,977; June 24; Serial No. 296,588; published Apr. 8, 1930. Class 42.

Eastman Kodak Company, Rochester, N. Y. Sensitized photographic paper. 272,060; June 24; Serial No. 295,609; published Apr. 1, 1930. Class 26.

Ebberts, John, Shoe Co., Inc., Buffalo, N. Y. Shoes. 272,079; June 24. Class 39.

Empire Paper Company, Chicago, Ill. Bond, ledger, and writing papers. 272,003; June 24; Serial No. 292,773; published Apr. 8, 1930. Class 37.

Enid Manufacturing Co. Inc., New York, N. Y. Brassières, garter belts, and girdles. 271,961; June 24; Serial No. 296,005; published Apr. 1, 1930. Class 39.

Enid Manufacturing Co. Inc., New York, N. Y. Brassières, garter belts, and girdles. 271,962; June 24; Serial No. 296,003; published Apr. 1, 1930. Class 39.

Eterne Permanent Wave Corporation, now by change of name Eterne Manufacturing Corporation, Newark, N. J. Hair-waving rolls and envelopes. 272,031; June 24; Serial No. 283,105; published Aug. 6, 1929. Class 44.

First National Stores Inc., Boston and Somerville, Mass. Jar rings. 272,061; June 24; Serial No. 295,667; published Apr. 1, 1930. Class 35.

First National Stores Inc., Boston and Somerville, Mass. Candles. 272,062; June 24; Serial No. 295,670; published Apr. 8, 1930. Class 15.

Firth-Sterling Steel Company, McKeesport, Pa. Steel bars, forgings, blocks, etc. 272,047; June 24; Serial No. 294,110; published Apr. 1, 1930. Class 14.

Freudenberg, Carl, Incorporated, Boston, Mass. Leather. 272,054; June 24; Serial No. 295,369; published Apr. 8, 1930. Class 1.

Friedlen, H. L., & Company, Chicago, Ill. Flying suits, leather coats, leather vests, etc. 272,006; June 24; Serial No. 292,493; published Apr. 8, 1930. Class 39.

General Dry Batteries, Inc., Cleveland, Ohio. Electric batteries. 272,022; June 24; Serial No. 276,074; published Apr. 8, 1930. Class 21.

Good Story Magazine Company, Inc., New York, N. Y. Monthly magazine. 271,951–2; June 24; Serial Nos. 296,742–3; published Apr. 8, 1930. Class 38.

Greast Manufacturing Co., The, New Haven, Conn. Electric lamps. 272,080; June 24. Class 21.

Grigsby-Grunow Company, Chicago, Ill. Radio receiving sets. 272,005; June 24; Serial No. 292,665; published Feb. 11, 1930. Class 21.

Groub, John C., Company, The, doing business as The Jay C. Stores, Seymour and Mitchell, Ind. Wheat flour and coffee. 272,023; June 24; Serial No. 274,108; published Apr. 8, 1930. Class 46.

Gummed Products Company, The, Troy, Ohio. Gummed paper tape, gummed cloth tape, etc. 272,025; June 24; Serial No. 259,730; published Mar. 13, 1928. Class 37.

Hagerty, P., Shoe Company, The, Washington Court House, Ohio. Shoes. 272,038; June 24; Serial No. 293,138; published Mar. 18, 1930. Class 39.

Hanan, Gerbert W., doing business as Hanan & Son, Brooklyn, N. Y. Leather, cloth, and rubber boots, shoes, and slippers. 271,993; June 24; Serial No. 294,972; published Mar. 25, 1930. Class 39.

Herdt and Charton Incorporated, Montreal, Quebec, Canada. Shirts and neckties. 272,032; June 24; Serial No. 282,350; published Mar. 25, 1930. Class 39.

Higgins, E. F., Laboratories, Inc., New York and Brooklyn, N. Y. Imitation pearls and imitation-pearl necklaces. 272,063; June 24; Serial No. 295,675; published Apr. 8, 1930. Class 28.

Huron Beverage Co. (See Poellinger, Jos.)

Huyck, F. C., & Sons, Rensselaer and Albany, N. Y. Bath robes, sleeping bags, children's coats, etc. 272,034; June 24; Serial No. 278,506; published Apr. 23, 1929. Class 39.

Indianapolis Glove Company, Indianapolis, Ind. Gloves. 271,988; June 24; Serial No. 295,179; published Apr. 8, 1930. Class 39.

Indianapolis Glove Company, Indianapolis, Ind. Gloves. 271,989; June 24; Serial No. 295,178; published Apr. 1, 1930. Class 39.

International Extract Co. (See Paul, Milton.)

Jay C. Stores, The. (See Groub, John C., Company, The.)

Jelke, John F., Company, Chicago, Ill. Oleomargarine. 272,050; June 24; Serial No. 294,308; published Apr. 8, 1930. Class 46.

Jevne, H., Co., Los Angeles, Calif. Bakery products. 271,980; June 24; Serial No. 296,424; published Apr. 8, 1930. Class 46.

Junkers, Hugo, Dessau, Germany. Refrigerating machines and apparatus and parts thereof. 272,033; June 24; Serial No. 279,930; published Apr. 8, 1930. Class 31.

Kaufmann Department Stores, Inc., Pittsburgh, Pa. Boots, shoes, slippers, and footwear. 272,046; June 24; Serial No. 293,839; published Apr. 8, 1930. Class 39.

Kickbusch, A., Grocery Co., Wausau, Wis. Writing paper, wrapping paper, and toilet paper. 272,048; June 24; Serial No. 294,264; published Apr. 8, 1930. Class 37.

Klean-Koat Products Co., Chicago, Ill. Polish. 272,082; June 24. Class 16.

Knott, Wm. T., Company, Inc., New York, N. Y. Ladies' aviation outfits. 272,044; June 24; Serial No. 293,779; published Apr. 8, 1930. Class 39.

Kress, S. H., & Co., New York, N. Y. Plain pins, hairpins, safety pins. 272,009; June 24; Serial No. 291,883; published Mar. 25, 1930. Class 40.

Kress, S. H., & Co., New York, N. Y. Ladies' garters. 272,010; June 24; Serial No. 291,880; published Apr. 8, 1930. Class 39.

Kress, S. H., & Co., New York, N. Y. Plain pins, hairpins, and safety pins. 272,011; June 24; Serial No. 291,881; published Mar. 25, 1930. Class 40.

Lepselter & Hoffer, New York, N. Y. Shirts, pajamas, underwear, etc. 272,002; June 24; Serial No. 292,811; published Apr. 1, 1930. Class 39.

Level Hat Co., Inc., South Norwalk, Conn. Men's and boys' hats and caps. 271,982; June 24; Serial No. 294,642; published Mar. 25, 1930. Class 39.

L'Hommedieu, Chas. F., & Sons Co., Chicago, Ill. Cutting compositions. 272,086; June 24. Class 4.

Link-Belt Company, Chicago, Ill. Chains, chain belts, and parts thereof. 272,028; June 24; Serial No. 249,075; published Apr. 8, 1930. Class 13.

Liquid Cooler Corporation, Detroit, Mich. Mechanically-refrigerated water coolers and beverage coolers, cabinets, etc. 271,959; June 24; Serial No. 296,067; published Apr. 8, 1930. Class 31.

Lyon, Waldo, Traverse City, Mich. Booklets, pamphlets, real-estate, and financial publications. 271,955; June 24; Serial No. 296,507; published Apr. 8, 1930. Class 38.

Manufacturers Record Publishing Company, Baltimore, Md. Newspaper. 271,954; June 24; Serial No. 296,536; published Apr. 8, 1930. Class 38.

Merchants' Minute Men of America, Shreveport, La. Bulletins and pamphlets. 271,956; June 24; Serial No. 296,308; published Apr. 8, 1930. Class 38.

Michaels, Stern & Co., Rochester, N. Y. Men's and boys' suits. 272,090; June 24. Class 39.

Michigan City Tanning Company, The, Mich'gan City, Ind. Leather. 272,001; June 24; Serial No. 294,735; published Apr. 8, 1930. Class 1.

Miller, Michael, Fur Dyeing Corporation, New York and Brooklyn, N. Y. Fur skins. 272,076; June 24; Serial No. 295,905; published Apr. 8, 1930. Class 1.

Mishawaka Rubber and Woolen Manufacturing Company, Mishawaka, Ind. Shoes and composition soles for shoes. 272,016; June 24; Serial No. 288,715; published Apr. 1, 1930. Class 39.

Mitchell Wing Company, Cambridge, Mass. Apron duck in the piece. 271,976; June 24; Serial No. 296,662; published Apr. 8, 1930. Class 42.

National Washboard Company, Chicago, Ill. Washboards. 272,067; June 24; Serial No. 295,804; published Apr. 8, 1930. Class 24.

Northwestern Leather Company Trust, Boston, Mass. Leathers. 272,071; June 24; Serial No. 295,860; published Apr. 8, 1930. Class 1.

Northwestern Leather Company Trust, Boston, Mass. Leathers. 272,074; June 24; Serial No. 295,861; published Apr. 8, 1930. Class 1.

No-Slip Rubber Corporation, The, New York, N. Y. Rubber baby pants. 272,078; June 24. Class 39.

Operadio Manufacturing Company, St. Charles, Ill. Radiospeakers. 272,039; June 24; Serial No. 293,149; published Apr. 8, 1930. Class 21.

Panhard Oil Corporation, New York, N. Y. Lubricating oils and greases. 271,991; June 24; Serial No. 295,047; published Apr. 1, 1930. Class 15.

Panipius Company, The, Wilmington, Del. Whole-wheat flour. 271,992; June 24; Serial No. 294,993; published Apr. 8, 1930. Class 46.

Paul, Milton, doing business as International Extract Co., New York, N. Y. True fruit and imitation flavoring extracts. 271,979; June 24; Serial No. 296,438; published Apr. 8, 1930. Class 45.

Peerless Cap Co., Covington, Ky. Tailored caps. 272,027; June 24; Serial No. 258,282; published Apr. 1, 1930. Class 39.

Pellegrin, Joseph, New York, N. Y. Shoe laces. 271,999; June 24; Serial No. 294,888; published Apr. 1, 1930. Class 40.

Perin-Walsh Co., Boston, Mass. Truck bodies. 272,068; June 24; Serial No. 295,809; published Apr. 8, 1930. Class 19.

Poellinger, Jos., doing business as Huron Beverage Co., Huron, S. Dak. Carbonated maltless beverages. 272,075; June 24; Serial No. 295,865; published Apr. 8, 1930. Class 45.

Poock, O. M., doing business as City Machine & Tool Works, Dayton, Ohio. Lathe and grinding arbors, production machinery and tools, etc. 272,014; June 24; Serial No. 289,507; published Apr. 1, 1930. Class 23.

Rackliff & Co., Incorporated, New York, N. Y. Magazines. 272,056; June 24; Serial No. 295,534; published Apr. 8, 1930. Class 38.

Rice-Neuman Co., Milwaukee, Wis. Ladies' hosiery and knitted underwear. 272,036; June 24; Serial No. 277,021; published Apr. 8, 1930. Class 39.

Rice-Stix Dry Goods Co., St. Louis, Mo. Wearing apparel. 272,085; June 24. Class 39.

Richter, Charles M., Chicago, Ill. Magazine. 272,072; June 24; Serial No. 295,866; published Apr. 8, 1930. Class 38.

Rite-Taste Products Co. (See Rogers, P. G.)

Ritter & Meyer, assignor to The Strouss-Hirshberg Co., Youngstown, Ohio. Men's clothing. 272,087; June 24. Class 39.

Rogers, P. G., doing business as Rite-Taste Products Co., Los Angeles, Calif. Jams and jellies, pickles, etc. 272,084; June 24. Class 46.

Roth-Büchner Aktiengesellschaft, Berlin-Tempelhof, Germany. Cutlery ware. 272,024; June 24; Serial No. 271,825; published Apr. 1, 1930. Class 23.

Salz Brothers, Inc., New York, N. Y. Fountain pens and mechanical pencils. 272,091; June 24. Class 37.

Sar, H Stewart, doing business as American Masters Press, Hollywood, Calif. Publications. 272,012; June 24; Serial No. 291,359; published Apr. 8, 1930. Class 38.

Saxone Shoe Co. Limited, Kilmarnock, Scotland. Boots and shoes, soles. 272,007; June 24; Serial No. 292,051; published Apr. 1, 1930. Class 39.

Schaengold, Benjamin, Cincinnati, Ohio. Hats. 271,994–5; June 24; Serial Nos. 294,949–50; published Apr. 8, 1930. Class 39.

Schultz, Samuel, Philadelphia, Pa. Wall paper. 272,037; June 24; Serial No. 293,111; published Apr. 8, 1930. Class 37.

Schwartz, Lillian, Philadelphia, Pa. Storage batteries. 271,990; June 24; Serial No. 295,055; published Apr. 8, 1930. Class 21.

Schweiger, N., Hat Co., New York, N. Y. Hats, hat crowns, and scarfs. 272,055; June 24; Serial No. 295,496; published Apr. 1, 1930. Class 39.

Seed Filter & Manufacturing Co., Inc., New York, N. Y. Paint scrapers. 271,996; June 24; Serial No. 294,927; published Apr. 1, 1930. Class 23.

Sheinker, Elias, doing business as W. Sheinker & Son, New York, N. Y. Flavoring medium. 272,058; June 24; Serial No. 295,577; published Apr. 8, 1930. Class 45.

Shuttles Bros. & Lewis, Dallas, Tex. Finger rings. 272,009; June 24; Serial No. 295,813; published Apr. 8, 1930. Class 28.

Skum-Off Products Company. (See Will, Edward A.)

South Bend Bait Co., South Bend, Ind. Fishing reels. 271,981; June 24; Serial No. 296,363; published Apr. 8, 1930. Class 22.

Southwest Fire Equipment Corporation, San Antonio, Tex. Fire-extinguishing bombs complete with brackets. 272,049; June 24; Serial No. 294,278; published Apr. 1, 1930. Class 23.

Stanco Incorporated, New York, N. Y. Sprayers, pumps, squirt guns, etc. 272,013; June 24; Serial No. 290,624; published Apr. 1, 1930. Class 23.

Storey, William H., Southend on-Sea, England. Board game. 271,997; June 24; Serial No. 294,899; published Apr. 8, 1930. Class 22.

Strouss-Hirshberg Co., The. (See Ritter & Meyer, assignor.)

Tacoma Brewing Co., San Francisco, Calif. Cereal malt syrups. 272,026; June 24; Serial No. 259,471; published Apr. 1, 1930. Class 46.

Tennessee Mineral Products Corporation, Spruce Pine, N. C. Ground feldspar. 272,004; June 24; Serial No. 292,760; published Apr. 8, 1930. Class 1.

Tomby, B., & Co. Inc., New York, N. Y. Glassware. 272,000; June 24; Serial No. 294,051; published Apr. 8, 1930. Class 33.

Universal Gear Corporation, Chicago, Ill. Mechanical speed reducers. 272,051; June 24; Serial No. 294,448; published Apr. 1, 1930. Class 23.

Vanity Fair Silk Mills, Reading, Pa. Hosiery. 272,083; June 24. Class 39.

West India Oil Company, Bayonne, N. J. Candles. 272,042; June 24; Serial No. 293,499; published Apr. 8, 1930. Class 15.

Western Electric Company, Incorporated, New York, N. Y. Sound-picture apparatus and parts thereof. 272,052; June 24; Serial No. 296,090; published Apr. 1, 1930. Class 26.

Whittemore Bros. Corp., Cambridge, Mass. Cleaners for cleaning white kid and calf leathers. 272,081; June 24. Class 4.

Will, Edward A., doing business as Skum-Off Products Company, North Tonawanda, N. Y. Cleaning and polishing compound. 272,094; June 24. Class 16.

Williams Manufacturing Company, Portsmouth, Ohio. Spats. 272,017; June 24; Serial No. 288,211; published Oct. 15, 1929. Class 39.

Wilson, McGown & Tenzer, Inc., New York, N. Y. Ladies' underwear. 272,018; June 24; Serial No. 286,847; published Apr. 1, 1930. Class 39.

Worzalla Publishing Co., Stevens Point, Wis. Monthly magazine. 271,953; June 24; Serial No. 296,622; published Apr. 8, 1930. Class 38.

Wright Aeronautical Corporation, Paterson, N. J. Internal-combustion engines. 271,983; June 24; Serial No. 294,805; published Apr. 1, 1930. Class 23.

Wright, E. T., & Company, Inc., Rockland, Mass. Boots and shoes. 272,073; June 24; Serial No. 295,878; published Apr. 1, 1930. Class 39.

Wright, S. B., doing business as Wright Products Co., Chicago, Ill. Heel pad and hose protector. 271,958; June 24; Serial No. 296,095; published Apr. 1, 1930. Class 39.

Xetal Safety Glass, Limited, Stapleford, England. Glass and strengthened glass. 272,019; June 24; Serial No. 285,316; published Nov. 5, 1929. Class 33.

"Yacco" S. A. F., Paris, France. Lubricating oils and greases. 272,030; June 24; Serial No. 284,432; published Apr. 8, 1930. Class 15.

ALPHABETICAL LIST OF REGISTRANTS OF LABELS

Dayton Spice Mills Company, The, Dayton, Ohio. Old Reliable Coffee. For Coffee. 37,595; June 24.

Hoague-Sprague Corporation, Lynn, Mass. Melanson Shoe Co. For Boxes. 37,596; June 24.

Hoague-Sprague Corporation, Lynn, Mass. Dr. Kimmel's. For Boxes. 37,597; June 24.

Hoague-Sprague Corporation, Lynn, Mass. Vanities. For Boxes. 37,598; June 24.

Hoague-Sprague Corporation, Lynn, Mass. The Slipper Shop. For Boxes. 37,599; June 24.

Hoague-Sprague Corporation, Lynn, Mass. Crystal Shoe Co. Inc. For Boxes. 37,600; June 24.

Hoague-Sprague Corporation, Lynn, Mass. D. S. P. Co. For Boxes. 37,601; June 24.

Hoague-Sprague Corporation, Lynn, Mass. Platell Shoe Co. For Boxes. 37,602; June 24.

Hoague-Sprague Corporation, Lynn, Mass. Pin Money. For Boxes. 37,603; June 24.

Hoague-Sprague Corporation, Lynn, Mass. The Johnny Rhines Four. For Boxes. 37,604; June 24.

Jewel Tea Co., Inc., Barrington, Ill. Jewel Dessert. For Coconut Dessert. 37,605; June 24.

Jewel Tea Co., Inc., Barrington, Ill. Jewel Devil's Food. For Cake Mixture. 37,606; June 24.

Kalamazoo Label Company, Kalamazoo, Mich. Baked Goods. For Baked Goods. 37,607; June 24.

Life Savers, Inc., Port Chester, N. Y. Life Savers. For Packaged Confectionery. 37,608; June 24.

Mountain States Honey Producers Association, Boise, Idaho. Land O'Lakes Honey. For Honey. 37,609; June 24.

ALPHABETICAL LIST OF REGISTRANTS OF PRINTS

Kresge Department Store Corporation, doing business as Kresge Department Store, Newark, N. J. New Jersey's Fastest Growing Store. For Clothing, Furniture, Fabrics, and Novelties, Dresses, Shoes, Suits, Gloves, Hosiery, Underwear, Outer Shirts, Fruit Baskets, Baby Carriages, Typewriters, Lamps, Cushions, and Piece Goods. 12,609; June 24.

ALPHABETICAL LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Alexander, Samuel, New York, N. Y. Woodworking knives, cutters, and scrapers with and without handles. 297,571; June 24. Class 23.

Allied Industrial Products Co., Chicago, Ill. Turkish emerys, buffs, bullneck wheels, etc. 284,213; June 24. Class 4.

Alpha Omega Alpha Honorary Fraternity, Slaterville Springs, N. Y. Fraternity pins, badges, scarf, lapel and breast pins, etc. 298,131; June 24. Class 28.

American Gas Furnace Co., Elizabeth, N. J. Gas furnaces, carbonizing machines, gas burners, etc. 284,520; June 24. Class 34.

American National Live Stock Association Publishing Co., Denver, Colo. Magazine relating to livestock. 299,884; June 24. Class 38.

American Tar Products Company, Inc., Pittsburgh, Pa. Paving material made of or including pitch and tar. 298,682; June 24. Class 12.

Amiesite Asphalt Company of America, Camden, N. J., and Philadelphia, Pa. Paving material. 298,878; June 24. Class 12.

Ampro Corporation, Chicago, Ill. Cameras, motion-picture cameras, motion-picture-projectors, and sound pictures. 299,037; June 24. Class 26.

Amtorg Trading Corporation, New York, N. Y. Canned crab meat. 298,779; June 24. Class 46.

Andrade, Ricardo, New York, N. Y. Coffee. 298,561; June 24. Class 46.

Apex Electrical Manufacturing Company, The, Cleveland, Ohio. Grind wheels, buffing wheels, soaps, and washing powders. 281,870; June 24. Class 4.

Appel, Meyer, New York, N. Y. Goods in the piece. 297,349; June 24. Class 42.

Aron, J., & Company, Inc., New Orleans, La. Green coffee. 300,604; June 24. Class 46.

Asbestoshield Corp., The, Cleveland, Ohio. Household radiator. 292,518; June 24, Class 32.

Ashe, Lulu, Brooklyn, N. Y. Medicinal preparation. 299,821; June 24. Class 6.

Ashworth Advertising Company, Incorporated, New York, N. Y. Automobile polish. 297,721; June 24. Class 16.

Auto Cold Tablet Co. (See Crawford, Beatrice H.)

B & B Manufacturing Company, Orange, N. J. Women's wash frocks. 291,191; June 24. Class 39.

Baker, H. A., Company, Sioux City, Iowa. Overalls, breeches, shirts, trousers, etc. 298,782; June 24. Class 39.

Balch, G. G., Pittsburgh, Pa. Beverages and syrups and concentrates. 300,777; June 24. Class 45.

Balsa Wood Company, Inc., The, New York, N. Y. Balsa wood. 251,477; June 24. Class 12.

Beach, Hamilton, Manufacturing Company, Racine, Wis. Electrically-operated drink mixers. 299,389; June 24. Class 21.

Bee Hat & Cap Co., St. Louis, Mo. Hats and caps. 299,671; June 24. Class 39.

Beh & Co., Inc., New York, N. Y. Curtain stretchers and for ironing boards. 299,948; June 24. Class 24.

Bergman, Arthur, doing business as Star Embroidery Company, New York, N. Y. Sheets, pillowcases, tablecloths, napkins, etc. 298,926; June 24. Class 42.

Bettermade Garment Company. (See Shuwarger, Morris.)

Beverages, Incorporated. (See Sullivan, Elton E., assignor.)

Boston Blacking Company, Inc., Boston, Mass. Sheet fabric coated with adhesive. 300,011; June 24. Class 50.

Bristoy Inc., Knoxville, Tenn. Advertising devices, display figures, images, etc., used in connection therewith. 298,885; June 24. Class 50.

Brown, John F., doing business as National Park Chocolates, Palo Alto, Pa. Candy. 300,706; June 24. Class 46.

Butler Brothers, Chicago, Ill. Boys' blouses and play suits. 297,891; June 24. Class 39.

Butler Brothers, Chicago, Ill. Galvanized wire. 299,370; June 24. Class 14.

Buxton, Incorporated, Springfield, Mass. Key cases, purses, bill folds, and pocketbooks. 298,487; June 24. Class 3.

Cannon, Oscar C., San Antonio, Tex. Coin-controlled cue and ball-game table. 300,327–8; June 24. Class 22.

Carefre Company, The. (See Hertz, Olive M.)

Carson Pirie Scott & Co., Chicago, Ill. Women's underwear. 297,849; June 24. Class 39.

Celanese Corporation of America, New York, N. Y. Underwear and hose. 299,487–8; June 24. Class 39.

Century Tie Company, The, Detroit, Mich. Neckwear. 297,660; June 24. Class 39.

Chelf Chemical Company, Richmond, Va. Nerve sedative, febrifuge, laxative, and diuretic. 298,887; June 24. Class 6.

Clark-McWilliams Coal Company, Clarksville, Ark. Coal. 285,551; June 24. Class 1.

Clinton Motors Corporation, Reading, Pa. Concrete. 297,468; June 24. Class 12.

Coast Manufacturing & Supply Co., Livermore, Calif. Fuses. 299,764; June 24. Class 9.

Coast Manufacturing & Supply Co., Livermore, Calif. Powder-train fuses. 299,763; June 24. Class 9.

Cohen, Harry S., doing business as Stylpax Handkerchief Company, Hartford, Conn. Handkerchiefs. 298,016; June 24. Class 42.

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Cohen, Joseph H., doing business as The Perfection Motor Products Company, Bridgeport, Conn. Electric cigar lighters. 299,045; June 24. Class 21.
Columbia Cheese Company, Newark, N. J. Cheese. 299,261; June 24. Class 46.
Cone Confection Co., Chicago, Ill. Bakery product commonly designated as ice-cream cones. 299,498; June 24. Class 46.
Cooney, Ralph S., doing business as School Service Co., New York, N. Y. Punch-board cards. 300,476; June 24. Class 22.
Cordova Company, The. (See Franklin, John L.)
Crawford, Beatrice H., doing business as Auto Gold Tablet Co., Phoenix, Ariz. Tablets for treating colds. 300,405; June 24. Class 6.
Crepin & Doumin Ltd., London, England. Compound of essential oils and synthetics. 295,423; June 24. Class 6.
Curtice Brothers Co., Rochester, N. Y. Prepared tomato juice. 298,568; June 24. Class 46.
Daniel, Jno. B., Inc., doing business as Regens Laboratories, Atlanta, Ga. Sedative and nervine. 298,490; June 24. Class 6.
David, L. E., & Company, Philadelphia, Pa. Household furniture. 297,361; June 24. Class 32.
Diamond Coffee Mills, Inc., Shreveport, La. Coffee. 299,958–9; June 24. Class 46.
Dickerson, Walker T., Company, The, Columbus, Ohio. Shoes. 299,050; June 24. Class 39.
Dobbs & Co., New York, N. Y. Stud sets, cuff links, necklaces, etc. 299,905; June 24. Class 28.
Dobbs & Co., New York, N. Y. Friction cigar lighters and cigarette lighters. 300,174; June 24. Class 34.
Dollfus-Mieg & Cie., Societe Anonyme, Mulhouse, Haut-Rhin, France. Yarns, twists, and threads. 290,560; June 24. Class 43.
Dollfus-Mieg & Cie., Societe Anonyme, Mulhouse, Haut-Rhin, France. Yarns, twists, and threads. 290,562–3; June 24. Class 43.
Du Pont Viscoloid Company, New York, N. Y. Nail polishers, cuticle pushers, and nail files. 299,837; June 24. Class 44.
Electro Refractories Corporation, The, Buffalo, N. Y. Refractory cement. 298,744; June 24. Class 12.
Elf Dresses, Inc., New York, N. Y. Dresses. 294,578; June 24. Class 39.
Ellis Jones Drug Company, Memphis, Tenn. Insecticides. 299,381; June 24. Class 6.
Embree, Spencer D., doing business as Embree Mfg. Co., Elizabeth, N. J. Deodorants. 298,229, June 24; Class 6.
Empire Metal Cap Co., Inc., Brooklyn, N. Y. Sheet-metal caps for bottles and jars. 300,264; June 24. Class 50.
Etablissements M. Poulet, Societe Anonyme, Paris, France. Ties, scarfs, night robes, etc. 299,115; June 24. Class 39.
Ewaszczyszyn, Michael, Amsterdam, N. Y. Short-sleeve shirts. 299,434; June 24. Class 39.
F & M Chemical Co., The. (See Meyers, Frank.)
Famous Bathrobe Company, Inc., New York, N. Y. Infants' bath robes and buntings. 299,306; June 24. Class 39.
Farnsworth Company, The, Lisbon, Me. Woolen piece goods. 300,484; June 24. Class 42.
Federal Rubber Company, The, Chicago, Ill.; Cudahy, Wis.; and Chicopee Falls, Mass. Vehicle tires, inner tubes, tire flaps, etc. 299,695; June 24. Class 35.
Felker, George S., Boston, Mass. Baseball scoring or counting method. 296,330; June 24. Class 22.
Filmtone Corporation, Astoria, N. Y. Talking-motion-picture film. 296,735; June 24. Class 26.
Filmtone Corporation, Wilmington, Del., and Astoria, N. Y. Tape-record films having sound records thereon. 298,275; June 24. Class 26.
Fisher, Nath'l, & Co., New York, N. Y. Boots and shoes. 299,841; June 24. Class 39.
Florida Greens Corporation, Leesburg, Fla. Natural asparagus plumosus sprays and prepared natural plumosus sprays. 298,531; June 24. Class 1.
Floyd, Robert L., Chicago, Ill. Bed-wetting alarm. 298,494; June 24. Class 44.
Fontanne, Cora. (See Gross, Oscar A.)
Forest City Walworth Run Foundries Co., The, Cleveland, Ohio. Soft-grey-iron castings and bronze, brass, and aluminum castings and semisteel castings. 297,904; June 24. Class 14.
Forstmann & Huffmann Company, Passa'c, N. J. Woolen piece goods. 300,488; June 24, Class 42.
Forstmann & Huffmann Company, Passaic, N. J. Woolen piece goods. 300,490–2; June 24. Class 42.
Forstmann & Huffmann Company, Passaic, N. J. Woolen piece goods. 300,494; June 24. Class 42.
Forstmann & Huffmann Company, Passaic, N. J. Woolen piece goods. 300,503; June 24. Class 42.
Fortuna-Werke Spezialmaschinenfabrik A.-G., Stuttgart-Cannstatt, Germany. Machines and apparatus for working leather and manufacturing shoes, beveling machines, etc. 284,529; June 24. Class 23.
Fortuna-Werke Spezialmaschinenfabrik A.-G., Stuttgart-Cannstatt, Germany. Balancing apparatus, measuring apparatus. 284,531; June 24. Class 26.
Fortuna-Werke Spezialmaschinenfabrik A.-G., Stuttgart-Cannstatt, Germany. Lubricating oils and greases and power transmission oils. 284,533; June 24. Class 15.
Frankfort Distillery, Inc., The, Louisville, Ky. Whiskey. 299,908; June 24. Class 49.
Franklin, John L., doing business as The Cordova Company, Atlanta, Ga. Maltless beverages, syrups, and extracts for making the same. 296,805; June 24. Class 45.
French Importing Co. (See Scharfer, Harry.)
Fyfe, R. H., & Co., Detroit, Mich. Shoes. 299,843; June 24. Class 39.
Gardner, Estella M., doing business as Vevo Laboratories, Boston, Mass. Blood purifier, preparation for high blood pressure, and blood tonic. 299,774; June 24. Class 6.
Gebhard, Inc., New York, N. Y. Drawings, designs and pictorial illustration. 298,941; June 24. Class 38.
Gemex Company, Newark, N. J. Watch bracelets, neck chains, finger rings, etc. 300,114–16; June 24. Class 28.
Gemex Company, Newark, N. J. Watch bracelets, watch straps, watch attachments. 300,117–23; June 24. Class 28.
General Electric Company, Schenectady, N. Y. Turbines, compressors, pumps, etc. 293,994; June 24. Class 23.
Gerber's, Dr. N., Co. M. b. H., Leipzig, Germany. Test chemicals used in the examination of milk samples. 289,271; June 24. Class 6.
Gilbert Paper Company, Menasha, Wis. Bond paper. 300,407; June 24. Class 37.
Glickman, Leopold H., Philadelphia, Pa. Shoes. 286,756; June 24. Class 39.
Globe American Corporation, Kokomo, Ind. Coal-burning and wood-burning kitchen ranges. 299,701–2; June 24. Class 34.
Godde, Albert, Bedin, Inc., New York, N. Y. Silk piece goods. 284,765; June 24. Class 42.
Golden State Milk Products Company, San Francisco, Calif. Butter. 298,942; June 24. Class 46.
Gonzalo Boza & Co. Inc., New York, N. Y. Agricultural machetes and knives. 298,320; June 24. Class 23.
Goodyear Tire & Rubber Company, The, Akron, Ohio. Pneumatic tires and including parts of such tires. 293,830; June 24. Class 35.
Goodyear Tire & Rubber Company, The, Akron, Ohio. Rubber flooring and tiling. 298,924; June 24. Class 12.
Gorman, R. P. & Cobbe, Limited, Belfast, Northern Ireland. Cotton handkerchiefs. 294,521; June 24. Class 42.
Grose, Henry B., Augusta, Ga. Toothbrush. 298,570; June 24. Class 29.
Gross, E. B., Canning Co., Monterey, Calif. Canned sardines and canned pilchards. 286,432; June 24. Class 46.
Gross, Oscar A., doing business as Cora Fontanne, New York, N. Y. Toilet preparations. 292,496; June 24. Class 6.
Groves Mills, Incorporated, Gastonia, N. C. Cotton yarns. 296,914; June 24. Class 43.
Gutterman Bros., Inc., St. Paul, Minn. Working shirts, duck coats, overalls, etc. 291,662; June 24. Class 39.
Gulf & West Indies Company, Inc., The, New York, N. Y. Sponges and chamois skins. 300,514–5; June 24. Class 1.
Halitosine Company. (See Reis, Oliver V.)
Halstead Milling & Elev. Co., The. (See Midland Flour Milling Co., The.)
Hamilton, John D., Company, The, Tacoma, Wash. Candy. 299,319; June 24. Class 46.
Hamm, Theo. Brewing Company, St. Paul, Minn. Medicinal malt tonic. 291,979; June 24. Class 6.
Hano Paper Corporation, New York, N. Y. Paper products. 300,128; June 24. Class 37.
Hanson, Louis, Company, Chicago, Ill. Clocks and parts thereof. 300,516; June 24. Class 27.
Hardin, Roy I., Chicago, Ill. Medicine. 298,443; June 24. Class 6.
Hardock, Benjamin, Incorporated, Philadelphia, Pa. Palm fibre. 300,517; June 24. Class 1.
Haregro Company, Inc., Bellows Falls, Vt. Preparation used on the scalp. 300,411; June 24. Class 6.
Harper's Bazaar, Inc., New York, N. Y. Magazine. 291,826; June 24. Class 38.
Hauswald Bakery, The, Baltimore, Md. Bread, rolls, and buns. 297,191; June 24. Class 46.
Hayne, Charles G., doing business as Hayne's Laboratory, Richmond Hill, N. Y. Vaginal tablet suppositories. 299,575; June 24. Class 6.
Health-O Quality Products Co., The. (See Milson Company, The.)
Herbs, F. & M., Co., Inc., doing business as Hoffman & Co., Red Hook, N. Y. Chewing tobacco. 300,413; June 24. Class 17.
Hertz, Oliver M., doing business as The Carefre Company, Detroit, Mich. Skin lotion. 298,241; June 24. Class 6.
Hicks, H., & Son, Inc., New York, N. Y. Candy, and fruits, foodstuffs, etc. 292,164; June 24. Class 46.
Higginson Manufacturing Company, The, Newburgh, N. Y. Plaster. 298,632; June 24. Class 12.
Hoffman & Co. (See Herbs, F. & M., Co. Inc.)

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Houston Oil Company of Texas, Houston, Tex. Gasoline, kerosene, gas oil, etc. 298,537–8; June 24. Class 15.
Huber, John E., doing business as Hulo Laboratories, Columbus, Ohio. Medical preparation to aid digestion. 298,700; June 24. Class 6.
Hulo Laboratories. (See Huber, John E.)
Huxley Laboratories, Inc., The, New York, N. Y. Liniments. 298,104; June 24. Class 6.
Imperial Brass Manufacturing Company, Chicago, Ill. Tube fittings of brass and bronze. 299,198; June 24. Class 13.
Independent Grocers' Alliance Distributing Company, Chicago, Ill. Mucilage. 279,332; June 24. Class 5.
Indian Motorcycle Company, Springfield, Mass. Outboard motors and parts. 298,243; June 24. Class 23.
International Harvest Hat Co., St. Louis, Mo. Men's hats. 299,442–4; June 24. Class 39.
Isaacs, Harry, New York, N. Y. Ladies' hats. 284,910; June 24. Class 39.
Iserson, A. S., Inc., New York, N. Y. Children's dresses. 299,321; June 24. Class 39.
Jamestown Ginger Ale Corp., Norfolk, Va. Ginger ale. 300,701; June 24. Class 45.
Kairy, Inc., New York, N. Y. Astringents, astringent cerates, bleach and beauty creams, etc. 297,484; June 24. Class 6.
Kiefer-Stewart Company, Indianapolis, Ind. Liquid antiseptic. 297,603; June 24. Class 6.
Kiger, C. A., Co., doing business as Virgin Diamond Syndicate, Kansas City, Mo. Cut diamonds. 290,257; June 24. Class 28.
Kim Chemical Products Company. (See Kimble, Harry E.)
Kimble, Harry E., doing business as Kim Chemical Products Company, Albuquerque, N. Mex. Tooth powder. 299,975; June 24. Class 6.
Kirsch Company, Sturgis, Mich. Curtain poles, brackets, and ornaments therefor, all of wood. 290,842; June 24. Class 32.
Kleinert, I. B., Rubber Company, New York, N. Y. Dolls and apparel therefor. 300,724; June 24. Class 22.
Kline Brothers Co., New York, N. Y. Ladies, misses', children's sweaters and gloves. 297,309; June 24. Class 39.
Kolbalm Chemical Corporation, The, Greensboro, N. C. Liquid analgesique. 299,506; June 24. Class 6.
Kollstede, George, assignor to George Kollstede, Inc., Providence, R. I. Atomizers. 299,327; June 24. Class 44.
Krausz, Armin J., Woodbridge, N. J. Chemical solutions. 297,564; June 24. Class 6.
Kress, S. H., & Co., New York, N. Y. Ladies' garters. 299,202; June 24. Class 39.
Kulp Theftproof Lamp Company, Chicago, Ill. Electrical apparatus. 290,707; June 24. Class 21.
La Conqueror Co., Providence, R. I. Corsets. 299,068; June 24. Class 39.
Langley, James P., doing business as Langley Studios, Berkeley, Calif. Portrait-album leaves and other portrait mountings. 300,026; June 24. Class 37.
Lauritsen, Belle M., doing business as B. M. Lauritsen Company, Manila, P. I. and New York, N. Y. Infants' underwear, dresses, rompers, bibs, etc. 294,076; June 24. Class 39.
La Valliere Company, The, New Orleans, La. Talcum powders, rouges, lip sticks, etc. 299,719; June 24. Class 6.
Levy, Saul J., doing business as Rosaul, Brooklyn, N. Y. Cosmetics, perfume extracts, etc. 292,362; June 24. Class 6.
Light Grain & Milling Co., The, Liberal, Kans. Wheat flour. 293,226; June 24. Class 46.
Lindemann, Adolf D., New York, N. Y. Face powder, rouge, talcum, etc. 300,424; June 24. Class 6.
Lucky Products Inc., Newark, N. J. Safety-razor blades. 292,814; June 24. Class 23.
Luddy, John E., doing business as The Windsor Company, Windsor, Conn. Polishing cloths. 299,507; June 24. Class 29.
Maas & Waldstein Co., Newark, N. J. Lacquers, lacquer enamels, and paint enamels. 298,899; June 24. Class 16.
Maine Steel Products Co., South Portland, Me. Snowplows. 292,270; June 24. Class 23.
Manhattan-Kreole Products, Inc., New York and Brooklyn, N. Y. Staining or dyeing material. 296,657; June 24. Class 6.
Marmite Food Extract Co., Limited, The, London, England. Foods for birds and animals. 299,402; June 24. Class 46.
Marsh, Loren W., Arlington, Mass. Composite sheet. 297,923; June 24. Class 12.
Martin Dennis Company, The, Newark, N. J. Oil for softening leather. 298,982; June 24. Class 4.
Mayer & Mulligan Inc., New York, N. Y. Pendants and stones. 299,142; June 24. Class 28.
Mazzola, L. Charles, Rochester, N. Y. Mayonnaise dressing. 299,509; June 24. Class 46.
Meyers, Frank, doing business as The F & M Chemical Co., Los Angeles, Calif. Liquid preparation for the removal of scratches, grease, and dirt from leather and for polishing same. 300,080; June 24. Class 4.
Meyrowitz, E. B., Inc., New York, N. Y. Goggles and eye protectors. 299,146; June 24. Class 26.
Midland Flour Milling Co., The, Kansas City, Mo., doing business as The Halstead Milling & Elev. Co., Halstead, Kans. Wheat flour. 295,186; June 24. Class 46.
Midway Chemical Company, Chicago, Ill. Mops, brooms, and dusters. 298,837; June 24. Class 29.
Mid-West Box Company, Chicago, Ill. Cartons. 299,455; June 24. Class 2.
Miller, Robert E., New York, N. Y. Pyrophoric lighters. 297,488; June 24. Class 34.
Milson Company, The, doing business as The Health-O Quality Products Co., Cincinnati, Ohio. Vanishing cream and night cream. 291,734; June 24. Class 6.
Milwaukee Chaplet & Mfg. Co., Milwaukee, Wis. Foundry parting compound. 298,346; June 24. Class 1.
Mittag & Volger, Incorporated, Park Ridge, N. J. Carbon paper and typewriter ribbons. 300,226–7; June 24. Class 11.
Mittleburg, Samuel S., Brooklyn, N. Y. Folding and rolling furniture made of metal, wood, and composition. 294,432; June 24. Class 32.
Monadnock Mills, Claremont, N. H. Rayon bedspreads. 298,035; June 24. Class 42.
Morley Button Manufacturing Company, Portland, Me., and Portsmouth, N. H. Dry mats. 300,429; June 24. Class 50.
Morrell, John, & Co., Ottumwa, Iowa. Stock and poultry feeds. 293,844–7; June 24. Class 46.
Morrell, John, & Co., Ottumwa, Iowa. Stock and poultry feeds. 293,849; June 24. Class 46.
Morse, Andrews Company, Attleboro, Mass. Belt buckles, suspender buckles, etc. 294,120; June 24. Class 28.
Moskin Credit Clothing Company, Inc., New York, N. Y. Men's suits, overcoats, work shirts, ties, etc. 297,200; June 24. Class 39.
Mouquin, Incorporated, New York, N. Y. Bouillon tablets, wine sauces. 292,505; June 24. Class 46.
Mueller-Keller Candy Co., St. Joseph, Mo. Candy. 300,737; June 24. Class 46.
National Lime & Stone Company, The, Findlay, Ohio. Lime and brick mortar. 285,900; June 24. Class 12.
National Park Chocolates. (See Brown, John F.)
Newman, Mary, Detroit, Mich. Salve for corns, skin diseases, sores, etc. 288,390; June 24. Class 6.
Noble, R. C., Inc., Cleveland, Ohio. Papers. 298,546; June 24. Class 37.
North American Trading & Import Co., Philadelphia, Pa. Molasses. 298,761; June 24. Class 46.
Northwestern Yeast Company, Chicago, Ill. Bread. 298,351; June 24. Class 46.
Nyanza Mills, Boston, Mass. Yarns. 300,433; June 24. Class 43.
Oneida Community, Limited, Oneida, N. Y. Silver flatware and hollow ware. 299,404–7; June 24. Class 28.
Ott, Marie, Brooklyn, N. Y. Cocoa, chocolate, candy, etc. 298,353; June 24. Class 46.
Packard Electric Company, The, Warren, Ohio. Electric insulated wire. 298,710; June 24. Class 21.
Palestine Oil Mill & Fertilizer Company, Palestine, Tex. Fertilizer, cottonseed meal, and cracked cottonseed cake. 297,759; June 24. Class 10.
Papagni, D., doing business as D. Papagni Fruit Co., Fresno, Calif. Fresh grapes. 289,642; June 24. Class 46.
Perfection Motor Products Company, The. (See Cohen, Joseph H.)
Personality Company, The. (See Shapiro, Joseph M.)
Petroleum Chemical Company, Tulsa, Okla. Chemical preparation. 294,438; June 24. Class 6.
Philadelphia Quartz Company, Philadelphia, Pa. Silicate of soda and silicate of potash. 284,198; June 24. Class 6.
Photo Marketing Corporation, New York, N. Y. Photographic light filters and photographic lenses. 298,587; June 24. Class 26.
Plant Rubber & Asbestos Works, San Francisco, Calif. Vent and flue pipes and fittings therefor. 299,990; June 24. Class 34.
Polar Ware Company, Sheboygan, Wis. Metal refrigerator pans. 298,512; June 24. Class 13.
Polefsky, Jacob S., New York, N. Y. Maltless beverages, flavoring extracts and syrups for making the same. 295,191; June 24. Class 45.
Presto Products Co., New York, N. Y. Miniature electrical interrupter operated by a thermoswitch used to make and break the circuit in electric bulbs. 299,592; June 24. Class 21.
Prismolite Company, The, Los Angeles, Calif. Gas-bombarded electrical signs. 294,440; June 24. Class 21.
Procter & Gamble Company, The, Cincinnati, Ohio. Glycerine. 297,770; June 24. Class 6.
Rafelman, Jesse, Norfolk, Va. Men's felt and straw hats. 297,935; June 24. Class 39.
Rainier Pulp & Paper Company, San Francisco, Calif. Wood pulp. 300,436; June 24. Class 1.
Rasspe, P. D., Söhne, Solingen-Stocken, Germany. Cultivation machinery and implements. 293,749; June 24. Class 23.

ALPHABETICAL LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Raycol Limited, London, England. Apparatus used in optical projection, taking cinematograph films, etc. 293,231; June 24. Class 26.
Regens Laboratories. (See Daniel, Jno. B., Inc.)
Reis, Oliver V., doing business as Halitosine Company, St. Louis, Mo. Antiseptic. 297,819; June 24. Class 6.
Republic Fuel Company, Bay City, Mich. Coal. 285,173; June 24. Class 1.
Roberts, Mrs. Sally, New York, N. Y. Instrument for use in hair waving. 291,148; June 24. Class 44.
Robertson Leather Company, Inc., New York, N. Y. Tanned leather skins. 298,460; June 24. Class 1.
Rosaul. (See Levy, Saul J.)
Sager, Solomon M., Evanston, Ill. Pen points. 300,088; June 24. Class 37.
Sampson & Burnham Company, Lynn, Mass. Mouth wash and gargle. 299,158; June 24. Class 6.
Sasieni London Ltd., New York, N. Y. Smokers' pipes. 300,442; June 24. Class 8.
Sawyer, Jennie K., Dallas, Tex. Sandwiches. 297,997; June 24. Class 46.
Saylor Electric & Manufacturing Company, Detroit, Mich. Insulated cable. 290,033; June 24. Class 21.
Seeman Brothers Inc., New York, N. Y. Desserts in powdered form and sweetened and flavored. 299,283; June 24. Class 46.
Scharfer, Harry, doing business as French Importing Co., Chicago, Ill. Hair nets. 299,086; June 24. Class 42.
Schering-Kahlbaum A. G., Berlin, Germany. Medicine for the treatment of the swelling of the mucous membranes of the nose. 282,060; June 24. Class 6.
Schimmel & Co., Aktiengesellschaft Miltitz, near Leipzig, Germany. Concentrated alcoholic essences. 280,352; June 24. Class 48.
Schimmel & Co., Aktiengesellschaft Miltitz, near Leipzig, Germany. Concentrated alcoholic essences. 298,208; June 24. Class 45.
Schmid, Charles, Long Island City, N. Y. Medicinal preparations. 298,462; June 24. Class 6.
Schoble, Frank, & Co., Philadelphia, Pa. Men's felt hats. 298,852; June 24. Class 39.
Scholl Mfg. Co. Inc., The, Chicago, Ill. Adhesive medicated shields or pads for corns, etc. 296,242; June 24. Class 6.
School Service Co. (See Cooney, Ralph S.)
Schwartz, Samuel, West New York, N. J. Cigars. 300,147; June 24. Class 17.
Shapiro, Joseph M., doing business as The Personality Company, New York, N. Y. Cotton, silk, wool, etc. Fabrics. 293,601; June 24. Class 42.
Shuwarger, Morris, doing business as Bettermade Garment Company, Los Angeles, Calif. Ladies' dresses and coats. 290,151; June 24. Class 39.
Skelly Oil Company, Tulsa, Okla. Gasoline and motor-fuel oils. 299,162–3; June 24. Class 15.
Skittone, John, doing business as Skittone Fruit Co., Modesto, Calif. Fresh grapes. 291,482; June 24. Class 46.
Snyder's Hat Stores, Inc., New York, N. Y. Negligee shirts, caps, garters, hosiery, etc. 298,119; June 24. Class 39.
Societe a Responsabilite Limitee N. G. Payot et y, Beaumecielle, Paris, France. Cream, brilliantine, perfume extracts, etc. 270,520; June 24. Class 6.
Societe Anonyme des Anciens Etablissements Braunstein Freres, Paris, France. Cigarette paper. 266,102; June 24. Class 8.
Société d'Applications des Gas Industriels Liquides, Paris, France. Industrial apparatus for atomizing liquids. 276,436; June 24. Class 23.
Southwestern Lubricant Company, Waco, Tex. Lubricating oil and grease. 299,023; June 24. Class 15.
Sperry-Sun Well Surveying Company, Philadelphia, Pa. Instruments for surveying the courses of bore holes. 299,089; June 24. Class 26.
Squibb, E. R., & Sons, New York, N. Y. Cod-liver-oil preparation. 299,525; June 24. Class 6.
Stanco Incorporated, Wilmington, Del., and New York, N. Y. Insecticides, deodorants, and disinfectants. 297,627; June 24. Class 6.
Standard Safety Razor Corporation, East Norwalk, Conn. Razor blades. 299,091–2; June 24. Class 23.
Standard Safety Razor Corporation, East Norwalk, Conn. Razor blades. 299,094–5; June 24. Class 23.
Star Embroidery Company. (See Bergman, Arthur.)
Stern Brothers, New York, N. Y. Coats, suits, knickers, dresses, hosiery, etc. 290,045; June 24. Class 39.
Stewart's Root Beer Inc., Mansfield, Ohio. Root beer and root-beer concentrate. 299,811; June 24. Class 45.
Stewart's Root Beer Inc., Mansfield, Ohio. Pop corn. 299,812; June 24. Class 46.
Stone Mountain Grit Company, Inc., Lithonia, Ga. Poultry grit. 300,373; June 24. Class 1.
Strietmann Biscuit Company, Cincinnati, Ohio. Crackers and cakes. 298,863; June 24. Class 46.
Stylpax Handkerchief Company. (See Cohen, Harry S.)
Sullivan, Elton E., Audubon, assignor to Beverages, Incorporated, Burlington, N. J. Syrup for soft-drink purposes. 298,673; June 24. Class 45.
Tan-Sad Limited, Tyseley, Birmingham, England. Perambulators and baby carriages. 296,455; June 24. Class 19.
Thompson, Otto W., Chicago, Ill. Hand rake. 299,236; June 24. Class 23.
Time-O-Stat Controls Company, Elkhart, Ind. Electrical switches. 299,346; June 24. Class 21.
Time-O-Stat Controls Company, Elkhart, Ind. Electrical switches. 299,351; June 24. Class 21.
Tripure Products Co., Miami, Fla. Ginger ale and non-alcoholic beverages sold as soft drinks. 300,093; June 24. Class 45.
Trussell Manufacturing Company, Poughkeepsie, N. Y. Account books and binders therefor. 297,552; June 24. Class 37.
Tuscaloosa Coffee Company, Tuscaloosa, Ala. Coffee. 300,694; June 24. Class 46.
Tutelman & Kohn, Philadelphia, Pa. Shirts and blouses. 299,939; June 24. Class 39.
2 In 1-Shinola-Bixby Corporation, New York, N. Y. Polishing, renovating, and cleaning composition. 298,295; June 24. Class 16.
United Oil Company, Inc., Baltimore, Md. Lubricating oil. 299,354; June 24. Class 15.
Utility Blade Corporation, Irvington, N. J. Safety razors and safety-razor blades. 299,533; June 24. Class 23.
Vevo Laboratories. (See Gardner, Estella M.)
Victor Balata & Textile Belting Co., New York, N. Y. Belting. 299,292; June 24. Class 35.
Virgin Diamond Syndicate. (See Kiger, C. A., Co.)
Viscose Company, The, Marcus Hook, Pa. Synthetic yarn. 299,632; June 24. Class 43.
Vogt, F. G., & Sons, Incorporated, Philadelphia, Pa. Sliced meats. 297,828; June 24. Class 46.
Vulcan Match Co., Inc., New York, N. Y. Matches. 291,945; June 24. Class 9.
Vulcan Match Co., Inc., New York, N. Y. Matches. 300,897; June 24. Class 9.
'Vulkan' Gummiwarenfabrik Weiss & Baessler A.-G., Leipzig-Lindenau, Germany. Pessaries, rubber finger stalls, etc. 290,676; June 24. Class 44.
Wade, Elmer E., doing business as Anna Elizabeth Wade, Orange, N. J. Chocolate and other flavored food drinks. 299,635; June 24. Class 46.
Warren-Teed Seed Company, Chicago, Ill. Lawn-grass seeds. 300,380; June 24. Class 1.
Waskis, Peter, Laona, Wis. Preparation for treating rheumatism. 293,250; June 24; Class 6.
Wavenlock Company, The, Detroit, Mich. Shaving cream. 299,239; June 24. Class 4.
Weil & Damsey, Inc., New York, N. Y. Suits, knickers, reefers, and overcoats. 299,355; June 24. Class 39.
Welfare Committee of the Inland Steel Company of Wisconsin, Milwaukee, Wis. Monthly publications. 296,650; June 24. Class 38.
Whitehead, Ernest, doing business as The Whitehead Brokerage Co., Indianapolis, Ind. Laxative preparation. 298,473; June 24. Class 6.
Williams Remedy Company, Ty Ty, Ga. Medicinal preparation. 297,504; June 24. Class 6.
Wilson, Andrew, Incorporated, Springfield, N. J. Insecticide. 300,451; June 24. Class 6.
Windsor Company, The. (See Luddy, John E.)
Wiz-Worl Toy Co., Los Angeles, Calif. Whirling toys. 295,199; June 24. Class 22.
Wolf, Benzion, Chicago, Ill. Garters. 299,536; June 24. Class 39.
Wright-Lamontagne Company, Springfield, Mass. Corsets, girdles, brassière combinations, etc. 298,557; June 24. Class 39.
Young, Peter, Inc., Buffalo, N. Y. Coats, suits, overcoats, etc. 299,421; June 24. Class 39.
Zeve, V. D., Inc., Cleveland, Ohio. Slicing machines. 289,223; June 24. Class 23.

CLASSIFIED LIST OF TRADE-MARKS REGISTERED

CLASS 1

Feldspar, Ground. Tennessee Mineral Products Corporation. 272,004; June 24; Serial No. 292,760; published Apr. 8, 1930.
Fur skins. Michael Miller Fur Dyeing Corporation. 272,076; June 24; Serial No. 295,905; published Apr. 8, 1930.
Leather. Carl Freudenberg, Incorporated. 272,054; June 24; Serial No. 295,360; published Apr. 8, 1930.
Leather. Michigan City Tanning Company. 272,001; June 24; Serial No. 294,735; published Apr. 8, 1930.
Leather, Glove. Bacmo-Postman Co. Inc. 272,053; June 24; Serial No. 296,252; published Apr. 8, 1930.
Leathers. Northwestern Leather Company Trust. 272,071; June 24; Serial No. 295,860; published Apr. 8, 1930.

Leathers. Northwestern Leather Company Trust. 272,074; June 24; Serial No. 295,861; published Apr. 8, 1930.

CLASS 4

Cleaners for cleaning white kid and calf leathers. Whittemore Bros. Corp. 272,081; June 24.
Cutting compositions. Chas. F. L'Hommedieu & Sons Co. 272,086; June 24.

CLASS 6

Chemical compositions for combating insects. Air-Way Electric Appliance Corporation. 272,092; June 24.

CLASS 13

Chains, chain belts, and parts thereof. Link-Belt Company. 272,028; June 24; Serial No. 249,075; published Apr. 8, 1930.
Metal-nursing-bottle warmers. R. Bartholomew. 272,008; June 24; Serial No. 291,902; published Apr. 8, 1930.

CLASS 14

Steel bars, forgings, blocks, etc. Firth-Sterling Steel Company. 272,047; June 24; Serial No. 294,110; published Apr. 1, 1930.

CLASS 15

Candles. First National Stores Inc. 272,062; June 24; Serial No. 295,670; published Apr. 8, 1930.
Candles. West India Oil Company. 272,042; June 24; Serial No. 293,499; published Apr. 8, 1930.
Oils and greases, Lubricating. Panhard Oil Corporation. 271,991; June 24; Serial No. 295,047; published Apr. 1, 1930.
Oils and greases, Lubricating. "Yacco" S. A. F. 272,030; June 24; Serial No. 284,432; published Apr. 8, 1930.

CLASS 16

Cleaning and polishing compound. E. A. Will. 272,094; June 24.
Polish. Kleen-Koat Products Co. 272,082; June 24.

CLASS 19

Aeroplanes, seaplanes, etc. American Aeronautical Corporation. 272,088; June 24.
Automobiles and their structural parts. Duesenberg Incorporated. 272,089; June 24.
Bodies, Truck. Perin-Walsh Co. 272,068; June 24; Serial No. 295,809; published Apr. 8, 1930.

CLASS 21

Batteries, Electric. General Dry Batteries, Inc. 272,022; June 24; Serial No. 276,074; published Apr. 8, 1930.
Batteries, Storage. L. Schwartz. 271,990; June 24; Serial No. 295,055; published Apr. 8, 1930.
Electric generators and electric motors and starters for the motors. Crocker-Wheeler Electric Manufacturing Company. 272,041; June 24; Serial No. 293,211; published Apr. 8, 1930.
Electric lamps. Greist Manufacturing Co. 272,080; June 24.
Radio receiving sets. Grigsby-Grunow Company. 272,005; June 24; Serial No. 292,665; published Feb. 11, 1930.
Radiospeakers. Operadio Manufacturing Company. 272,039; June 24; Serial No. 293,149; published Apr. 8, 1930.

CLASS 22

Dolls. Bert B. Barry and Associates. 272,070; June 24; Serial No. 295,828; published Apr. 8, 1930.
Fishing reels. South Bend Bait Co. 271,981; June 24; Serial No. 296,363; published Apr. 8, 1930.
Game, Board. W. H. Storey. 271,997; June 24; Serial No. 294,899; published Apr. 8, 1930.

CLASS 23

Cutlery ware. Roth-Büchner Aktiengesellschaft. 272,024; June 24; Serial No. 271,825; published Apr. 1, 1930.
Engines, Internal-combustion. Wright Aeronautical Corporation. 271,983; June 24; Serial No. 294,605; published Apr. 1, 1930.
Fire-extinguishing bombs complete with brackets. Southwest Fire Equipment Corporation. 272,049; June 24; Serial No. 294,278; published Apr. 1, 1930.
Lathe and grinding arbors, production machinery and tools, etc. O. M. Poock. 272,014; June 24; Serial No. 289,507; published Apr. 1, 1930.
Mechanical speed reducers. Universal Gear Corporation. 272,051; June 24; Serial No. 294,448; published Apr. 1, 1930.
Scrapers, Paint. Seed Filter & Manufacturing Co. 271,996; June 24; Serial No. 294,927; published Apr. 1, 1930.
Sprayers, pumps, squirt guns, etc. Stanco Incorporated. 272,013; June 24; Serial No. 290,024; published Apr. 1, 1930.

CLASS 24

Washboards. National Washboard Company. 272,067; June 24; Serial No. 295,804; published Apr. 8, 1930.

CLASS 26

Photographic paper, Sensitized. Eastman Kodak Company. 272,060; June 24; Serial No. 295,609; published Apr. 1, 1930.
Picture apparatus and parts thereof, Sound-. Western Electric Company. 272,052; June 24; Serial No. 296,090; published Apr. 1, 1930.

CLASS 28

Diamond rings. Bluebird Diamond Syndicate. 272,066; June 24; Serial No. 295,724; published Apr. 8, 1930.
Pearls and imitation-pearl necklaces, Imitation. E. F. Higgins Laboratories, Inc. 272,063; June 24; Serial No. 295,675; published Apr. 8, 1930.
Rings, Finger. Shuttles Bros. & Lewis. 272,069; June 24; Serial No. 295,813; published Apr. 8, 1930.

CLASS 31

Refrigerated water coolers and beverage coolers, cabinets, etc., Mechanically-. Liquid Cooler Corporation. 271,959; June 24; Serial No. 296,067; published Apr. 8, 1930.
Refrigerating machines and apparatus and parts thereof. H. Junkers. 272,033; June 24; Serial No. 279,930; published Apr. 8, 1930.

CLASS 33

Glass and strengthened glass. Xetal Safety Glass, Limited. 272,019; June 24; Serial No. 285,316; published Nov. 5, 1929.
Glassware. B. Tomby & Co. Inc. 272,000; June 24; Serial No. 294,651; published Apr. 8, 1930.
Jars. Container Sales Company. 272,029; June 24; Serial No. 248,813; published Apr. 8, 1930.

CLASS 34

Boilers, superheaters, furnaces, etc., Steam. Chantiers Navals & Chaudronneries Du Midi. 272,043; June 24; Serial No. 293,518; published Apr. 8, 1930.

CLASS 35

Jar rings. First National Stores Inc. 272,061; June 24; Serial No. 295,667; published Apr. 1, 1930.

CLASS 37

Paper. Champion Coated Paper Company. 271,957; June 24; Serial No. 296,260; published Apr. 8, 1930.
Paper. A. Kickbusch Grocery Co. 272,048; June 24; Serial No. 294,264; published Apr. 8, 1930.
Paper tape, gummed cloth tape, etc., Gummed. Gummed Products Company. 272,025; June 24; Serial No. 259,730; published Mar. 13, 1928.
Paper, Wall. S. Schultz. 272,037; June 24; Serial No. 293,111; published Apr. 8, 1930.
Papers, Bond, ledger, and writing. Empire Paper Company. 272,003; June 24; Serial No. 292,773; published Apr. 8, 1930.
Pens and mechanical pencils, Fountain. Salz Brothers, Inc. 272,091; June 24.

CLASS 38

Booklets, pamphlets, real estate, and financial publications. W. Lyon. 271,955; June 24; Serial No. 296,507; published Apr. 8, 1930.
Bulletins and pamphlets. Merchants' Minute Men of America. 271,956; June 24; Serial No. 296,308; published Apr. 8, 1930.
Magazine. C. M. Richter. 272,072; June 24; Serial No. 295,866; published Apr. 8, 1930.
Magazine, Monthly. Good Story Magazine Company. 271,951–2; June 24; Serial Nos. 296,742–3; published Apr. 8, 1930.
Magazine, Monthly. Worzalla Publishing Co. 271,953; June 24; Serial No. 296,622; published Apr. 8, 1930.
Magazines. Rackliff & Co. Incorporated. 272,056; June 24; Serial No. 295,534; published Apr. 8, 1930.
Newspaper. Abendpost Company. 272,064–5; June 24; Serial Nos. 295,721–2; published Apr. 8, 1930.
Newspaper. Manufacturers Record Publishing Company. 271,954; June 24; Serial No. 296,536; published Apr. 8, 1930.
Periodicals. Benjamin, Hill & Co. 271,960; June 24; Serial No. 296,045; published Apr. 8, 1930.
Periodicals. Beverly Hall Corporation. 272,059; June 24; Serial No. 295,600; published Apr. 8, 1930.
Publications. H. S. Sar. 272,012; June 24; Serial No. 291,359; published Apr. 8, 1930.
Publications of strips and panels consisting of comic features. Associated Press. 271,964–9; June 24; Serial Nos. 295,913–18; published Apr. 8, 1930.

CLASS 39

Apparel, Wearing. Rice-Stix Dry Goods Co. 272,085; June 24.
Bath robes, sleeping bags, children's coats, etc. F. C. Huyck & Sons. 272,034; June 24; Serial No. 278,506; published Apr. 23, 1929.
Boots and shoes. J. E. Donavan. 272,045; June 24; Serial No. 293,812; published Apr. 8, 1930.
Boots and shoes. E. T. Wright & Company. 272,073; June 24; Serial No. 295,878; published Apr. 1, 1930.
Boots and shoes, soles. Saxone Shoe Co. Limited. 272,007; June 24; Serial No. 292,051; published Apr. 1, 1930.

Boots, shoes, and slippers. J. W. Carter Company. 271,985; June 24; Serial No. 295,252; published Apr. 8, 1930.
Boots, shoes, and slippers. J. M. Daly. 271,987; June 24; Serial No. 295,209; published Mar. 25, 1930.
Boots, shoes, and slippers. Leather, cloth, and rubber. H. W. Hanan. 271,993; June 24; Serial No. 294,972; published Mar. 25, 1930.
Boots, shoes, slippers, and footwear. Kaufmann Department Stores, Inc. 272,046; June 24; Serial No. 293,839; published Apr. 8, 1930.
Brassières, garter belts, and girdles. Enid Manufacturing Co. Inc. 271,961; June 24; Serial No. 296,005; published Apr. 1, 1930.
Brassières, garter belts, and girdles. Enid Manufacturing Co. Inc. 271,962; June 24; Serial No. 296,003; published Apr. 1, 1930.
Caps, Tailored. Peerless Cap Co. 272,027; June 24; Serial No. 258,282; published Apr. 1, 1930.
Clothes, Ladies' ready-to-wear. Blair Bros. 271,998; June 24; Serial No. 294,867; published Mar. 18, 1930.
Clothing, Men's. Ritter & Meyer. 272,087; June 24.
Coats, dresses, helmets, etc. Wm. T. Knott Company. 272,044; June 24; Serial No. 293,779; published Apr. 8, 1930.
Garters, Ladies'. S. H. Kress & Co. 272,010; June 24; Serial No. 291,880; published Apr. 8, 1930.
Gloves. Indianapolis Glove Company. 271,988; June 24; Serial No. 295,179; published Apr. 8, 1930.
Gloves. Indianapolis Glove Co. 271,989; June 24; Serial No. 295,178; published Apr. 1, 1930.
Hats. B. Schaengold. 271,994–5; June 24; Serial Nos. 294,949–50; published Apr. 8, 1930.
Hats and caps. Level Hat Co. 271,982; June 24; Serial No. 294,642; published Mar. 25, 1930.
Hats, hat crowns, and scarfs. N. Schweiger Hat Co. 272,055; June 24; Serial No. 295,496; published Apr. 1, 1930.
Hats, Men's. Abraham & Straus, Inc. 272,035; June 24; Serial No. 278,021; published Mar. 25, 1930.
Hosiery. Vanity Fair Silk Mills. 272,083; June 24.
Hosiery and knitted underwear, Ladies'. Rice-Neuman Co. 272,036; June 24; Serial No. 277,021; published Apr. 8, 1930.
Pad and hose protector. Heel. S. B. Wright. 271,958; June 24; Serial No. 296,095; published Apr. 1, 1930.
Pants, Rubber baby. No-Slip Rubber Corporation. 272,078; June 24.
Shirts and necktles. Herdt and Charton Incorporated. 272,032; June 24; Serial No. 282,350; published Mar. 25, 1930.
Shirts, pajamas, underwear, etc. Lepselter & Hoffer. 272,002; June 24; Serial No. 292,811; published Apr. 1, 1930.
Shoes. John Ebberts Shoe Co. 272,079; June 24.
Shoes. P. Hagerty Shoe Company. 272,038; June 24; Serial No. 293,138; published Mar. 18, 1930.
Shoes and composition soles for shoes. Mishawaka Rubber and Woolen Manufacturing Company. 272,016; June 24; Serial No. 288,515; published Apr. 1, 1930.
Shoes, Leather. Dunn & McCarthy, Inc. 271,984; June 24; Serial No. 295,296; published Mar. 25, 1930.
Slippers. Dolgeville Slipper Company. 271,986; June 24; Serial No. 295,211; published Mar. 25, 1930.
Spats. Williams Manufacturing Company. 272,017; June 24; Serial No. 288,211; published Oct. 15, 1929.
Suits, leather coats, leather vests, etc., Flying. H. L. Friedlen & Company. 272,006; June 24; Serial No. 292,493; published Apr. 8, 1930.
Suits, Men's and boys'. Michaels, Stern & Co. 272,090; June 24.
Underwear, Ladies'. Wilson, McGown & Tenzer, Inc. 272,018; June 24; Serial No. 286,847; published Apr. 1, 1930.

CLASS 40

Binding, Bias. Assembled Products Company. 271,963; June 24; Serial No. 295,990; published Apr. 1, 1930.
Laces, Shoe. J. Pellegrin. 271,999; June 24; Serial No. 294,888; published Apr. 1, 1930.
Ornamental appendages and trimmings. Artistic Novelty Co. 272,040; June 24; Serial No. 293,206; published Apr. 8, 1930.
Patterns, Transfer. American Trade Mark Corporation. 272,020–1; June 24; Serial Nos. 276,756–7; published Apr. 8, 1930.
Pins, hairpins, and safety pins. S. H. Kress & Co. 272,009; June 24.
Pins, hairpins, and safety pins, Plain. S. H. Kress & Co. 272,011; June 24; Serial No. 291,881; published Mar. 25, 1930.

CLASS 42

Canton fabric. Carafiol-Silverman Garment Co. 272,015; June 24; Serial No. 289,264; published Apr. 8, 1930.
Duck, Apron. Mitchell Wing Company. 271,976; June 24; Serial No. 296,062; published Apr. 8, 1930.
Piece goods. Duplan Silk Corporation. 271,977; June 24; Serial No. 296,588; published Apr. 8, 1930.
Pile fabrics. Sidney Blumenthal & Co. Inc. 271,970–75; June 24; Serial Nos. 296,680–5; published Apr. 8, 1930.

CLASS 43

Thread. Bullard Thread Company. 272,093; June 24.

CLASS 44

Electrical hair driers and scalp steamers. Charles Arnao Company. 272,077; June 24.
Hair-waving rolls and envelopes. Eterne Permanent Wave Corporation. 272,031; June 24; Serial No. 283,105; published Aug. 6, 1929.

CLASS 45

Beverages, Maltless. J. Poellinger. 272,075; June 24; Serial No. 295,865; published Apr. 8, 1930.
Flavoring medium. E. Sheinker. 272,058; June 24; Serial No. 295,577; published Apr. 8, 1930.
Fruit and imitation flavoring extracts, True. M. Paul. 271,979; June 34; Serial No. 296,438; published Apr. 8, 1930.

CLASS 46

Bakery products. H. Jevne Co. 271,980; June 24; Serial No. 296,424; published Apr. 8, 1930.
Cheese. Burki & Cie. 272,057; June 24; Serial No. 295,555; published Apr. 8, 1930.
Flour and coffee, Wheat. John C. Groub Company, The. 272,023; June 24; Serial No. 274,108; published Apr. 8, 1930.
Flour, Wheat. Buena Vista Mills. 271,978; June 24; Serial No. 296,578 published Apr. 8, 1930.
Flour, Whole-wheat. Paniplus Company. 271,902; June 24; Serial No. 294,993; published Apr. 8, 1930.
Jams and jellies, pickles, etc. P. G. Rogers. 272,084; June 24.
Oleomargarine. John F. Jelke Company. 272,050; June 24; Serial No. 294,308; published Apr. 8, 1930.
Syrups, Cereal malt. Tacoma Brewing Co. 272,026; June 24; Serial No. 259,471; published Apr. 1, 1930.

ALPHABETICAL LIST OF LABELS

Baked Goods. For Baked Goods. Kalamazoo Label Company. 37,607; June 24.
Crystal Shoe Co. Inc. For Boxes. Hoague-Sprague Corporation. 37,600; June 24.
D. S. P. Co. For Boxes. Hoague-Sprague Corporation. 37,601; June 24.
Dr. Kimmel's. For Boxes. Hoague-Sprague Corporation. 37,597; June 24.
Jewel Dessert. For Coconut Dessert. Jewel Tea Co., Inc. 37,605; June 24.
Jewel Devil's Food. For Cake Mixture. Jewel Tea Co., Inc. 37,606; June 24.
Land O'Lakes Honey. For Honey. Mountain States Honey Producers Association. 37,609; June 24.
Life Savers. For Packaged Confectionery. Life Savers, Inc. 37,608; June 24.
Melanson Shoe Co. For Boxes. Hoague-Sprague Corporation. 37,596; June 24.
Old Reliable Coffee. For Coffee. Dayton Spice Mills Company. 37,595; June 24.
Pin Money. For Boxes. Hoague-Sprague Corporation. 37,603; June 24.
Platell Shoe Co. For Boxes. Hoague-Sprague Corporation. 37,602; June 24.
The Johnny Rhines Four. For Boxes. Hoague-Sprague Corporation. 37,604; June 24.
The Slipper Shop. For Boxes. Hoague-Sprague Corporation. 37,599; June 24.
Vanities. For Boxes. Hoague-Sprague Corporation. 37,598; June 24.

ALPHABETICAL LIST OF PRINTS

New Jersey's Fastest Growing Store. For Clothing, Furniture, Fabrics, and Novelties, Dresses, Shoes, Suits, Gloves, Hosiery, Underwear, Outer Shirts, Fruit Baskets, Baby Carriages, Typewriters, Lamps, Cushions, and Piece Goods. Kresge Department Store Corporation. 12,609; June 24.

ALPHABETICAL LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 24TH DAY OF JUNE, 1930

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). **Includes patents, reissues, and designs.**

A. Riebeck'sche Montanwerke Aktiengesellschaft. (See Helithaler, Theodor, assignor.)
A C Spark Plug Company. (See Cram, L. V., and McKinley, assignors.)
A C Spark Plug Company. (See McKinley, C. W., and Kamrath, assignors.)
A C Spark Plug Company. (See Rabezzana, Hector, assignor.)
A. G. Brown Boveri & Cie. (See Holzel, Johannes, assignor.)
A. G. Brown Boveri & Cie. (See Kubler, Johannes, assignor.)
A. G. Brown Boveri & Cie. (See Prantl, F., Luthi, and Schroeder, assignors.)
Abbott Laboratories. (See Adams, Roger, assignor.)
Abbott Laboratories. (See Nielsen, Carl, assignor.)
Abeling, Edward A. and F. W., Cashmere, Wash. Ditcher for tractors. 1,768,019; June 24.
Abeling, Fred W. (See Abeling, Edward A. and F. W.)
Aberfoyle Manufacturing Company. (See Ashton, Francis E., assignor.)
Abrahamson, Henry, Chicago, Ill. Sanitary garment shield. 1,765,896; June 24.
Acclimated Fur Farm. (See McCassey, G. L., and Cox, assignors.)
Accurometer Mfg. Co. (See Phelps, Clyde H., assignor.)
Acetylene Stove Manufacturing Compny, The. (See Davis, Ernest L., assignor.)
Ackerly, Donald G., Wilkinsburg, assignor to The Union Switch & Signal Company, Swissvale, Pa. Rectifier circuit. 1,766,051; June 24.
Ackerman, Albert H., assignor to The studebaker Corporation, South Bend, Ind. Upholstery unit. 1,766,969; June 24.
Ackerman, Eli O., Columbus, Ohio. Vibration-dampening device. 1,765,477; June 24.
Ackerman, Hugo, Godesberg-on-the-Rhine, Germany Molding box. 1,767,163; June 24.
Ackley, Amos, Camden, N. J., assignor to American Type Founders Company, Automatic sheet-feeding mechanism. 1,767,638; June 24.
Acme Card System Company. (See Powell, Frank D., assignor.)
Acoustic Products Company. (See Hutchison, Miller R., assignor.)
Adair, Gus N., Los Angeles, Calif. Sugar dispenser. 1,768,091; June 24.
Adam, Carl, Easton, Pa. Oil-rod wiper. 1,767,954; June 24.
Adams, Arthur H., La Grange, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Method of and apparatus for insulating electrical conductors. 1,765,520; June 24.
Adams, Ralph L., assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa. Automobile body construction. 1,767,500; June 24.
Adams, Roger, Urbana, assignor to Abbott Laboratories, North Chicago, Ill. Arylaminoalcohol compound. 1,767,423; June 24.
Adams, S. G., Stamp & Stationery Company. (See Peele, Hereward J., assignor.)
Adamson, Ernie, New York, N. Y. Internal-combustion engine. 1,765,359; June 24.
Addams, Homer, Oswego, N. Y. Heating boiler. 1,765,857; June 24.
Addington, W. H. (See Ferguson, James R., assignor.)
Addressograph Company. (See Bailey, James A., assignor.)
Addressograph Company. (See Gollwitzer, Walter T., assignor.)
Advance Machine Company. (See Antoine, A. D., and Gebert, assignors.)
Aeby, Louis. (See Kocourek, H., and Aeby.)
Aero Liquid Meter Corporation. (See Baker, Theodore E., assignor.)
Aeromarine Plane & Motor Co. (See Boland, Joseph, J., assignor.)
Agfa Ansco Corporation. (See Goldhammer, Leo., assignor.)
Ahern, James L., and L. G. Ledger, New Orleans, La. Piston and rod packing. 1,767,164; June 24.
Ahrens, Edward G., assignor of one-half to H. A. Gladstone, San Francisco, Calif. Cigarette case and lighter. 1,766,320; June 24.
Ainsworth, Chester D., Wollaston, assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass. Electric switch. 1,765,363; June 24.
Akers, Milton K. (See Rataiczak, T. F., and Akers.)
Aktiebolaget Vacuum-Compressor. (See Berglund, Otto, R. P., assignor.)
Aktiengesellschaft Brown Boveri & Cie. (See Baumann, Adolph, assignor.)
Aktiengesellschaft Brown Boveri & Cie. (See Buchli, Jacob, assignor.)
Aktiengesellschaft Brown Boveri & Cie. (See Frey, Otto, assignor.)
Aktiengesellschaft Brown Boveri & Cie. (See Keller, Gottlieb, assignor.)
Aktiengesellschaft Brown Boveri & Cie. (See Kobel, Ernst, assignor.)
Aktiengesellschaft Brown Boveri & Cie. (See Kuntze, K., Haller, and Wirz, assignors.)
Aktiengesellschaft Brown Boveri & Cie. (See Meyer, Adolf, assignor.)
Aktiengesellschaft Brown Boveri & Cie. (See Noack, Walter G., assignor.)
Aktiengesellschaft Brown Boveri & Cie. (See Schnitzer, Richard, assignor.)
Aktiengesellschaft Brown Boveri & Cie. (See Sieber, Fritz, assignor.)
Aktiengesellschaft Brown Boveri & Cie. (See Wichert, Alfred, assignor.)
Alba Corporation, The. (See Mayer, Waldemar F., assignor.)
Albrecht, Eduard. (See Herz, R., and Albrecht.)
Albrecht, Ernst G., Berlin, Germany. Truing wedge for matrix-setting and line-casting machines. 1,767,110; June 24.
Albrecht, George E. (See Banfield, F. E., jr., and Albrecht.)
Aldendorff, Charlotto. (See Aldendorff, Fritz.)
Aldendorff, Fritz, deceased, Berlin, Germany; C. Aldendorff, widow and sole heir, assignor to Western Electric Company, Incorporated, New York, N. Y. Electromechanical switching system. 1,768,281; June 24.
Aldinger, Otto, Stuttgart, Germany. Carpet dust cleaner. 1,765,784; June 24.
Alemite Corporation. (See Bradbury, Clifford C., assignor.)
Alemite Corporation. (See Buchet, Conrad R., assignor.)
Alemite Corporation. (See Carr, Moses F., assignor.)
Alemite Corporation. (See Davis, Ernest W., assignor.)
Alemite Corporation. (See Jones, Walter I., assignor.)
Alemite Corporation. (See Sweet, Donald H., assignor.)
Alemite Corporation. (See Wedeberg, Reuben, assignor.)
Alexanderson, Ernest F. W., Schenectady, N. Y., assignor to General Electric Company. Radiotelegraphy. 1,768,433; June 24.
Alkan, Robert, and G. Lesourd, Paris, France. Electromechanical apparatus for the automatical dropping of any article. 1,765,897; June 24.
Allanstand Cottage Industries, Incorporated. (See Revis, Margaret C., assignor.)
Allardt, Hans G. (See Schoeller, W., and Allardt.)
Allbright-Nell Company, The. (See Ozouf, Arthur E., assignor.)
Allen, Albert, Winchester, assignor to Atlantic Precision Instrument Company, Boston, Mass. Hygrometer. 1,765,816; June 24.
Allen, Frank E., Boone, Iowa. Disk cultivator. 1,766,164; June 24.
Allen, Jacob S., Philadelphia, Pa. Pan-greasing machine. 1,766,207; June 24.
Allen, Julius L., Sacramento, Calif. Variable-speed transmission. 1,766,240; June 24.
Allen Manufacturing Company. (See Wheless, Wesley E., assignor.)
Allen, Milford L. (See Stewart, S., Allen, and Roy.)
Allen, Werdon H., South Montrose, Pa. Garment hanger. 1,766,275; June 24.
Allen, William R. (See Colquhoun, P. M., and Allen.)
Allgemeine Gesellschaft für chemische Industrie m. b. H. (See Cattaneo, G., and Jodeck, assignors.)
Allibone, Thomas and W., Tacoma, Wash. Lamp table. 1,765,643; June 24.
Allibone, William. (See Allibone, Thomas and W.)
Allis-Chalmers Manufacturing Company. (See Brown, George N., assignor.)
Allred, Thomas W. (See Ivory, M., and Allred.)
Alm, Thure W., Stewart Manor, N. Y., assignor to International Cigar Machinery Company. Flexible knurler for cigar machines. 1,765,817; June 24.
Almetal Universal Joint Company, The. (See Peters, Frederick W., assignor.)
Alox Chemical Corporation. (See Burwell, Arthur W., assignor.)
Alstadt, Henry L., Rector, Ark. Bank-protecting device. 1,768,092; June 24.
Altenkirch, Edmund, Alt-Landsberg-Sud, Germany, assignor to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt. Absorption machine. 1,767,639; June 24.

Altmayer-Delaruelle. (See Altmayer, Jean.)
Altmayer, Jean. Surnamed Altmayer-Delaruelle, St-Germain-En-Laye, France. System of remote control for electric motors. 1,766,808; June 24.
Altner, Waldemar, Pachuca, Mexico. Electric universal indicator. 1,765,898; June 24.
Altvater, Herbert G., Gary, Ind. Multiple-speed transmission mechanism. 1,767,909; June 24.
Alvey, Glenn H., and E. A. Young, assignors to Uvalde Rock Asphalt Company, San Antonio, Tex. Paving material and method of preparing such material. 1,767,830; June 24.
Alvistur, Oscar, Oakland, Calif. Airplane-landing speed-retarding device. 1,765,818; June 24.
American Air Filter Company. (See Goodloe, Alfred M., June 24.
American Bicheroux Company, The. (See Genenger, Richard, assignor.)
American Bicheroux Company, The. (See Von Reis, Lambert, assignor.)
American Bicheroux Company, The. (See Werotte, Séraphin, assignor.)
American Bitumuls Company. (See McKesson, Claude L., assignor.)
American Brass Company, The. (See Coe, James R., assignor.)
American Brown Beveri Electric Corporation. (See Gregory, Harold D., assignor.)
American Brown Boveri Electric Corporation. (See Wilder, Laurence R., assignor.)
American Car and Foundry Company. (See Knight, J. M., and Willoughby, assignors.)
American Car and Foundry Company. (See Stevenson, Frederick A., assignor.)
American Car and Foundry Motor Company. (See Hawkes, Arthur G., assignor.)
American Coach & Body Company, The. (See Holan, James, assignor.)
American Cystoscope Makers, Inc. (See Wappler, Reinhold H. and F. C., assignors.)
American Electric Company. (See Stanton, W. J., and Gosling, assignors.)
American Fibre Corporation. (See Millett, John E., assignor.)
American Fibre Corporation. (See Millett, J. E., and Nordstrom, assignors.)
American Fork & Hoe Company, The. (See Withington, Winthrop, assignor.)
American Gasaccumulator Company. (See Dalén, Gustaf, assignor.)
American Gasaccumulator Company. (See Luce, Richard W., assignor.)
American Laundry Machinery Company, The. (See Pauly, Robert C., assignor.)
American Laundry Machinery Company, The. (See Pearce, Edwin S., assignor.)
American Laundry Machinery Company, The. (See Staley, Alonzo D., assignor.)
American Linen Company. (See Steiner, F. M., and Olson, assignors.)
American Lithographic Company Inc. (See Banzett, William H., assignor.)
American Machine & Foundry Company. (See Apple, Lynford A., assignor.)
American Machine & Foundry Company. (See Bronander, W. B., and Hagquist, assignors.)
American Machine & Foundry Company. (See Fuse, Christian J., assignor.)
American Machine & Foundry Company. (See Royan, George, assignor.)
American Manganese Steel Company. (See Bruton, William C., assignor.)
American Manganese Steel Company. (See McNinch, William T., assignor.)
American Manganese Steel Company. (See Mullally, Walter J., assignor.)
American Medallion Inlaid Linoleum Company (Batten's New Patents) Inc. (See Batten, Edward and J. D., assignors.)
American Moistening Company. (See Trafton, W. M., and Armstrong, assignors.)
American Multigraph Company, The. (See Colquhoun, P. M., and Allen, assignors.)
American Multigraph Company, The. (See Morse, Lawrence H., assignor.)
American Rolling Mill Company, The. (See Freeze, Jonathan R., assignor.)
American Rolling Mill Company, The. (See Naugle, H. M., and Townsend, assignors.)
American Rubber Company. (See Teague, Merwyn C., assignor.)
American Sheet and Tin Plate Company. (See Buccicone, Dario, assignor.)
American Sheet and Tin Plate Company. (See Evans, A. D., and Gravenstreter, assignors.)
American Sheet and Tin Plate Company. (See McArthur, Arthur R., assignor.)
American Sheet and Tin Plate Company. (See Moore, Edwin E., assignor.)
American Steel Foundries. (See Lamont, John A., assignor.)
American Steel Foundries. (See Trowbridge, William S., assignor.)
American Steel Foundries. (See Whitney, Loren L., assignor.)
American Sterilizer Company. (See Hall, George F., assignor.)
American Telephone and Telegraph Company. (See Herman, Joseph, assignor.)
American Telephone and Telegraph Company. (See Ohl, Russell S., assignor.)
American Type Founders Company. (See Ackley, Amos, assignor.)
Anchor Cap & Closure Corporation. (See Podel, Abraham, assignor.)
Andersen Frame Corporation. (See Andersen, Fred C., assignor.)
Andersen, Fred C., assignor to Andersen Frame Corporation, Bayport, Minn. Window and door frame. 1,767,569; June 24.
Anderson, Axel H. (See Steiner, F. M., and Anderson.)
Anderson, Carl G., assignor to S. H. Reynolds Sons Company, Boston, Mass. Machine for shaping hollow metal blanks. 1,766,700; June 24.
Anderson, Charles D., Chicago, Ill. Cover. 1,767,501; June 24.
Anderson Co., The. (See Smulski, Theodore J., assignor.)
Anderson, Edward V., Bellevernon, assignor of one-half to C. E. Golden, Crafton, Pa. Cushioned coke-quenching valve. 1,767,037; June 24.
Anderson, Edward V., Bellevernon, assignor to one-half to C. E. Golden, Crafton, Pa. Balanced coke-quenching valve. 1,767,038; June 24.
Anderson, Edward V., Bellevernon, assignor of one-half to C. E. Golden, Crafton, Pa. Standpipe valve. 1,767,039; June 24.
Anderson, Ernest D. (See Aulbach, C. J., and Anderson.)
Anderson, Frank E., Brooklyn, N. Y. Wheel. 1,765,858; June 24.
Anderson, Gustave H., assignor to The Hart & Hutchinson Company, New Britain, Conn. Gravity hinge. 1,767,111; June 24.
Anderson, Hiram C., New York, N. Y. Punctureproof pneumatic tire. 1,767,502; June 24.
Anderson, John A. (See Hobbs, W. F., and Anderson.)
Anderson, John E., assignor to Plibrico Jointless Firebrick Company, Chicago, Ill. Repairing furnace linings. 1,765,558; June 24.
Anderson, Robert H., San Diego, Calif., assignor to W. C. Fain, Norfolk, Va. Combination table and seats. 1,768,520; June 24.
Anderson, Roy N., Clovis, N. Mex. Lister planter. 1,767,910; June 24.
Anderson, Swan, et al. (See Pollock, Oscar, assignor.)
Anderson, Swan F., Rockford, Ill. Power scraper. 1,767,040; June 24.
Anderson, William. (See Harman, F. B., and Anderson.)
Andre, Joseph M., Montello, Mass. Combination mold and trimmer for rubber heels, soles, and all mechanical molded rubber goods. 1,768,093; June 24.
Andresen, Lauritz B., Minneapolis, assignor to M. F. Patterson Dental Supply Company, St. Paul, Minn. Sterilizer. 1,767,034; June 24.
Andresen, Lauritz B., Minneapolis, assignor to M. F. Patterson Dental Supply Co., St. Paul, Minn. Centrifugal casting machine. 1,767,035; June 24.
Andresen, Lauritz B., and C. W. Paulson, Minneapolis, assignors to M. F. Patterson Dental Supply Co., St. Paul, Minn. Centrifugal casting machine. 1,767,036; June 24.
Andrews, Charles A. (See Votaw, C. L., and Andrews.)
Andrusis, John A., Brooklyn, N. Y. Vegetable slicer. 1,768,094; June 24.
Anheuser-Busch, Incorporated. (See Bratton, George S., assignor.)
Anschicks, Rudolph J., assignor to Protectoseal Company of America, Chicago, Ill. Gauge. 1,767,641; June 24.
Anschicks, Rudolph J., assignor to Protectoseal Company of America, Chicago, Ill. Tank fitting. 1,767,642; June 24.
Anstiss, George P., Oak Park, assignor to G. S. Blakeslee & Co., Cicero, Ill. Apparatus for washing antifriction bearings. 1,766,208; June 24.
Anthony, Alice, Sterling, Ill. Darning support. 1,765,961; June 24.
Antoine, Alfred D., Chicago, and A. E. Gebert, Wilmette, assignors to Advance Machine Company, Chicago, Ill. Vending machine. 1,767,112; June 24.
Apple, Lynford A., Glen Ridge, N. J., assignor to American Machine & Foundry Company. Making articles from casein. 1,765,819; June 24.
Applegate, Benton, Wood Lake, Nebr. Educational game apparatus. 1,767,424; June 24.
Appleton Manufacturing Company. (See Van Nortwick, John, assignor.)
Arcidiacono, Salvatore, Fulton, N. Y. Shingle construction. 1,768,280; June 24.
Armbrust Chain Company. (See Armbrust, Ferdinand, assignor.)
Armbrust, Ferdinand, assignor to Armbrust Chain Company, Providence, R. I. Fastening device for watch bracelets. 1,766,477; June 24.
Armstrong, Adam E., Three Rivers, Mich. Trap. 1,766,970; June 24.
Armstrong, Edward W., Belfast, Northern Ireland. Sewing machine. 1,767,955; June 24.
Armstrong, Fullerton G. G., Beverley, England. Shock-absorbing means for vehicles. 1,767,113; June 24.

Armstrong, John. (See Brutofski, S. J., Armstrong, and Shermak.)
Armstrong, Joseph. (See Trafton, W. M., and Armstrong.)
Armstrong Machine Works. (See Goff, Leonard D., assignor.)
Armstrong, William C., Springfield, assignor to The Ceramic Machinery Company, Hamilton, Ohio. Gasoline engine locomotive. 1,765,559; June 24.
Arnold, David B. (See Edson, J. W., Stone, and Arnold.)
Arnold Electric Company. (See Fiegel, Harrison D., assignor.)
Arnold Electric Company. (See Schmitz, George C., assignor.)
Arnold, Joseph J., New York, N. Y. Tally card. 1,768,020; June 24.
Aron, William P., assignor, by mesne assignments, to W. D. Kennedy, Dallas, Tex. Ventilating and air-purifying unit. 1,765,962; June 24.
Arras, Adams, Frankfort, Germany, assignor to International Precipitation Company, Las Angeles, Calif. Electrical precipitating apparatus. 1,767,338; June 24.
Art Fixtures, Inc. (See Hoffmann, Otto, assignor.)
Art Specialty Company. (See Mugnai, Fred, assignor.)
Arthur, Ernest L., assignor of one-third to C. E. Mahan, jr., Fayetteville, W. Va. Fingernail buffer. 1,766,321; June 24.
Arthur, James F., Dickson, Pa. Tube joint. 1,768,095; June 24.
Ashley, Merwin F., Chicago, Ill. Horn. 1,766,580; June 24.
Ashton, Francis E., assignor to Aberfoyle Manufacturing Company, Chester, Pa. Loom. 1,768,096; June 24.
Ashworth Advertising Company. (See Ashworth, John W., assignor.)
Ashworth, John W., assignor to Ashworth Advertising Company, Incorporated, New York, N. Y. Advertising device. 1,767,570; June 24.
Ashworth, John W., assignor to Ashworth Advertising Company, Incorporated, New York, N. Y. Exhibiting sign. 1,767,571; June 24.
Associated Telephone and Telegraph Company. (See Pearce, Owen A., assignor.)
Atchison, Harold E. (See Melville, H. J., and Atchison.)
Atchity, James A., Kansas City, Mo. Mop. 1,765,364; June 24.
Atlantic Precision Instrument Company. (See Allen, Albert, assignor.)
Atlas Tack Corporation. (See Jacques, George W., assignor.)
Atmospheric Nitrogen Corporation. (See Bramwell, Francis H., assignor.)
Atwater Kent Manufacturing Company. (See Davis, L. H., and Kingsford, assignors.)
Atwood, James T., Rockford, Ill. Seat-back mounting. 1,765,394; June 24.
Atwood, Seth B., Rockford, Ill. Covered-joint hinge. 1,765,393; June 24.
Augenstein, Karl C., Cranston, assignor to Automatic Gold Chain Company, Providence, R. I. Flexible band. 1,766,971; June 24.
Aukenthaler, Richard, Cincinnati, Ohio. Toy blocks and connecting means therefor. 1,765,644; June 24.
Aulbach, Charles J., Passaic, N. J., assignor to Continental Can Company, Inc., New York, N. Y. Pouring spout for containers. 1,768,098; June 24.
Aulbach, Charles J., and E. D. Anderson, Passaic, N. J., assignor to Continental Can Company, Inc., New York, N. Y. Metal container. 1,765,478; June 24.
Aulbach, Charles J., and W. F. Punte, Passaic, N. J., assignors to Continental Can Company, Inc., New York, N. Y. Spice dredge. 1,767,781; June 24.
Ault & Wiborg Co., The. (See Miller, Amos L., assignor.)
Aurich, Peter, Bochum, assignor to the firm Gebr. Eickhoff, Maschinenfabrik, Bochum, Germany. Shaking conveyer. 1,767,425; June 24.
Aurora Steel Products Company. (See Furnas, Don R., assignor.)
Austin, Arthur O., Barberton, assignor, by mesne assignments to The Ohio Brass Company, Mansfield, Ohio. Protective apparatus and circuits. 1,766,738; June 24.
Austin, Arthur O., Barberton, assignor, by mesne assignments, to The Ohio Brass Company, Mansfield, Ohio. Insulator bushing. 1,766,869; June 24.
Auto Prime Pump Company. (See Ferguson, Gale L., assignor.)
Auto Prime Pump Company. (See Ferguson, G. L., and Wood, assignors.)
Auto Prime Pump Company. (See Wood, Clarence G., assignor.)
Automatic Drive and Transmission Company. (See Knapp, David R., assignor.)
Automatic Electric Inc. (See Nelson, Martin L., assignor.)
Automatic Electric Inc. (See Stehlik, Rudolph F., assignor.)
Automatic Gold Chain Company. (See Augenstein, Karl C., assignor.
Automatic Oilingseal Corporation. (See Morrow, Emmet H., assignor.)
Avery, True M., Glens Falls, N. Y., assignor, by mesne assignments, to Marshall Field & Company, Chicago, Ill. Box-bag-packing device. 1,768,097; June 24.
Avey Drilling Machine Company, The. (See Friedl, Joseph, assignor.)
Avlon, Theodore P., Schenectady, N. Y. Nonalcoholic beverage. 1,765,899; June 24.
Awbrey, Ethel. (See Awbrey, Samuel C., assignor.)
Awbrey, Samuel C., assignor to E. Awbrey, Kansas City, Mo. Stair nosing. 1,767,782; June 24.
Ayler, Frank, Tacoma, Wash. Towing bar. 1,768,304; June 24.
Ayres, Eugene E., jr., Swarthmore, assignor to B. A. S. Company, Philadelphia, Pa. Absorption of gasoline from natural gas. 1,768,521; June 24.
B. A. S. Company. (See Ayres, Eugene E., jr., assignor.)
B. R. E. Manufacturing Co. (See Leslie, Howard C., assignor.)
Babbitt, Arthur B., Kent, Ohio. Tamping machine. 1,767,197; June 24.
Babcock & Wilcox Company, The. (See Jacobus, David, assignor.)
Babcock & Wilcox Company, The. (See Jacobus, D. S., and Jones, assignors.)
Baccomo, Michele P., Greenfield, Calif. Bale-hoist hook. 1,766,091; June 24.
Bachelder, Elmer N., Portland, Me. Apparatus for infusing coffee, tea, and the like. 1,767,956; June 24.
Bachman, John S., Rome, assignor to E. Chappell, Atlanta, Ga. Machine for cleaning cotton and the like. 1,767,957; June 24.
Bader, Fred W., Millsdale, N. J. assignor to J. Kridel, Sons & Co. Textile fabric. Des. 81,428; June 24.
Baechtel, Henry A. (See Krause, F. W., and Baechtel.)
Bahan Textile Machinery Company. (See McDaniel, Lee, assignor.)
Bahan, William H., Greenville, S. C. Bobbin Support. 1,766,809; June 24.
Bailey, Albert W., New Haven, Conn. Support for chairs, stands, and the like. 1,766,092; June 24.
Bailey, James A., Chicago, Ill., assignor to Addressograph Company, Wilmington, Del. Printing device. 1,765,365; June 24.
Bailey, John H. (See Jones, W. W., and Bailey.)
Bailey, Lawrence H., assignor to F. J. Stokes Machine Company, Philadelphia, Pa. Compressing machine. 1,768,500; June 24.
Bailey, Walter C., Norwalk, Calif. Continuous cracking still. 1,766,209; June 24.
Baird, Edward P., Evanston, Ill. Lock. 1,767,643; June 24.
Baker, Arthur K., Chicago, assignor to Heggie Simplex Boiler Company, Joliet, Ill. Draft-door apparatus. 1,767,271; June 24.
Baker, Erle K., Chicago, Ill. Spare-wheel carrier. 1,765,785; June 24.
Baker, Harry M., Wilkinsburg, and J. R. Gier, jr., Pittsburgh, Pa. Toilet article. 1766,478; June 24.
Baker, Harry S. (See Borden, P. A., Baker, and Paine.)
Baker Oil Tools, Inc. (See Baker, Reuben C., assignor.)
Baker, P. R. (See Barnes Harold S., assignor.)
Baker Perkins Company. (See Thurm, Richard, assignor.)
Baker-Raulang Company, The. (See Remde, Edward H., assignor.)
Baker, Reuben C., Coalinga, Calif., assignor to Baker Oil Tools, Inc. Well-casing-centering device. 1,767,198; June 24.
Baker, Robert E. (See Frick, C. A., and Baker.)
Baker, Theodore E., Long Beach, assignor to Aero Liquid Meter Corporation, Los Angeles, Calif. Measuring liquids. 1,766,581; June 24.
Ball, Charles F., assignor to Chain Belt Company, Milwaukee, Wis. Mixing drum. 1,766,582; June 24.
Ball, Charles F., assignor to Chain Belt Company, Milwaukee, Wis. Power-transmission unit for concrete mixers. 1,766,583; June 24.
Ball, Charles F., assignor to Chain Belt Company, Milwaukee, Wis. Mixing and agitating machine. 1,766,584; June 24.
Ball, Charles F., assignor to Chain Belt Company, Milwaukee, Wis. Mechanism for timing mechanical operations 1,766,770; June 24.
Ball, Harry V., Concord, Mass., assignor to R. Hoe & Co., Inc., New York, N. Y. Web-roll changer. 1,767,727; June 24.
Ball, Harry V., Concord, Mass., assignor to R. Hoe & Co., Inc., New York, N. Y. Web-joining mechanism. 1,767,728; June 24.
Ballentine, Samuel O., Greenfield, Ohio. Automobile window and the like. 1,767,783; June 24.
Balzer, Howard. (See Donley, H. B., and Balzer.)
Banfield, Frederic E., jr., Saco, Me., and F. O. Hoagland, Bridgeport, Conn., assignors to Saco-Lowell Shops, Boston, Mass. Driving cylinders for spinning frames. 1,766,585; June 24.
Banfield, Frederic E., jr., and G. E. Albrecht, Saco, Me., assignors to Saco-Lowell Shops, Boston, Mass. Driving mechanism for bobbin shafts of roving frames. 1,766,586; June 24.
Banner, Frank H., assignor to General Railway Signal Company, Rochester, N. Y. Ground-rod connection. 1,766,587; June 24.
Banning, Ephraim. (See Edelman, Philip E., assignor.)
Banzett, William H., Bergenfield, N. J., assignor to American Lithographic Company, Inc., New York, N. Y. Applying designs to cylinders. 1,767,644; June 24.
Barbou, Pierre A., assignor to Société Barbou & Cié, Paris, France. Recovery of sodium sulphite from spent sulphite liquors. 1,765,560; June 24.

Barghausen, Louis H., Pittsburgh, Pa. Artificial-limb ankle joint. 1,767,868; June 24.

Barker Manufacturing Company, The. (See Zeilinger, John F., assignor.)

Barks, Frank S., St. Louis, Mo. Dispensing apparatus. 1,767,426; June 24.

Barnes, Ansel, Syracuse, N. Y. Ice creeper. 1,767,427; June 24.

Barnes, Harold S., Allentown, assignor to P. R. Baker, Columbia, Pa., trading as The United States Lock and Hardware Company. Toy. 1,767,503; June 24.

Barnes Scale Company. (See King, Bert W., assignor.)

Barnickel, Wm. S., & Company. (See De Groote, M., and Keiser, assignors.)

Barnickel, Wm. S., & Company. (See De Groote, M., and Monson, assignors.)

Barnickel, Wm. S., & Company. (See De Groote, M., Monson, and Wirtel, assignors.)

Barnickel, Wm. S., & Company. (See De Groote, M., and Wirtel, assignors.)

Barrans, William T., La Grange, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Making composite electrical conductors. 1,765,521; June 24.

Barrett, Thomas J., Los Angeles, Calif. Index. 1,767,645; June 24.

Barrows, Harry E., assignor to Dillingham Manufacturing Co., Sheboygan, Wis. Combination stool and stepladder. 1,766,771; June 24.

Barstow, Edwin O., and S. B. Heath, assignors to The Dow Chemical Company, Midland, Mich. Powdered metallic chloride and making same. 1,768,282; June 24.

Bartel, Englebert A., assignor to P-W Device Corporation, Brooklyn, N. Y. Feed board for printing presses. 1,765,859; June 24.

Bartels, Reinhard B., Melrose, Mass. Shoe and shoe sole and shank stiffener. 1,766,479; June 24.

Bartholdi, Henry, Geneva, Switzerland, assignor to The Egry Register Company, Dayton, Ohio. Autographic register. 1,766,972; June 24.

Bartlett, Albert C., Watford, assignor to The General Electric Company Limited, London, England. Line balance for loaded telephone circuits. 1,767,199; June 24.

Bartlett, Albert C., Watford, assignor to The General Electric Company Limited, Magnet House, London, England. Line balance for loaded telephone circuits. 1,767,200; June 24.

Bartlow, Justin D., Long Beach, Calif. Carpet stretcher. 1,766,423; June 24.

Bashor, Emery E., and E. N. Wray, Berthoud, Colo. Tractor hitch. 1,767,114; June 24.

Bassett, Harry P., Cynthiana, Ky. Making alkali-metal sulphydrates. 1,766,810; June 24.

Bassett, Harry P., Cynthiana, Ky., and R. C. Morrison, Lansdowne, Pa., assignors to C. A. Bianchi, Nutley, N. J., and Meigs, Bassett & Slaughter, Inc., Philadelphia, Pa. Preparing borneol and the like. 1,766,369; June 24.

Bassler, Edwin M., Milwaukee, Wis. Air and gas washing apparatus. 1,766,588; June 24.

Bastian-Blessing Company, The. (See Evleth, Earl M., assignor.)

Batemen, Arthur T., and A. Irvine, assignors to Bohn Aluminum & Brass Corporation, Detroit, Mich. Mold. 1,766,093; June 24.

Bath, John. (See Peterson, H. L., and Burbidge, assignors.)

Bates, Albert H., Cleveland, Ohio, assignor to Motor Terminals Company, Wilmington, Del. Apparatus for transferring freight. 1,766,589; June 24.

Bates, Walter A., assignor to Walter Bates Steel Corporation, Gary, Ind. Expanded-metal structure. 1,768,099; June 24.

Bates, Walter, Steel Corporation. (See Bates, Walter A., assignor.)

Bates, Walter, Steel Corporation. (See Shelden, Charles C., assignor.)

Batte, Joseph E., assignor to Kelsey-Hayes Wheel Corporation, Detroit, Mich. Machine for turning brake drums and the like. 1,766,210; June 24.

Batten, Edward and J. D., London, England, assignors to American Medallion Inlaid Linoleum Company (Batten's New Patents) Inc. Manufacture of inlaid floor cloths. 1,766,322; June 24.

Batten, James D. (See Batten, Edward and J. D.)

Battermann, Ludwig, Rocky Point, N. Y., assignor to Radio Corporation of America. Deflector. 1,766,241; June 24.

Bauch, Richard, Berlin-Charlottenburg, Germany, assignor to Westinghouse Electric & Manufacturing Company, New York, N. Y. Electrical protective system. 1,765,395; June 24.

Bauer, Charles, assignor to Vet Products Laboratory Inc., Westbury, N. Y. Producing liquid food and the products thereof. 1,766,590; June 24.

Bauer, Jacob P., Jeannette, Pa. Combination toy. 1,765,645; June 24.

Bauer, Jacob P., Jeannette, Pa. Combination toy. 1,765,646; June 24.

Bauer, John W., Naperville, Ill. Plant-supporting clip. 1,766,094; June 24.

Bauerband, William E., Elizabeth, N. J. Lock. 1,768,021; June 24.

Baum, David, Livermore Falls, Me. Glove-turning machine. 1,766,502; June 24.

Baum, Isaac A., Chicago, Ill. Metal buck construction. 1,765,711; June 24.

Baum, Isaac A., Chicago, Ill. Door casing. 1,765,712; June 24.

Baumann, Adolph, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland. Rotary pump. 1,765,360; June 24.

Baumberger, William J. (See Yerk, H. H., and Baumberger.)

Baumgarten, Hugo C., assignor to Newcomb-David Company, Inc., Detroit, Mich. Automatic damper. 1,767,869; June 24.

Baumgarten, Paul, Berlin-Wilmersdorf, assignor to A. Riese, Berlin, Germany. Clock. 1,768,100; June 24.

Baxter, William M., assignor to Eskimo Pie Corporation, Louisville, Ky. Vending machine. 1,765,963; June 24.

Bay City Shovels, Inc. (See Kerr, John M., assignor.)

Bayard, Morris L., and M. Harvey, Philadelphia, Pa. Filter-sand-washing machine. 1,767,729; June 24.

Baylis, Walter S., assignor, by mesne assignments, to Filtrol Company of California, Los Angeles, Calif. Purifying gasoline. 1,766,211; June 24.

Beall, Ollie M., Des Moines, Iowa. Sound producing toy. 1,766,095; June 24.

Beaman, Arthur W., Worcester, Mass. Knife-grinder bearing. 1,767,272; June 24.

Beardslee Chandelier Manufacturing Co. (See Williamson, Richard, assignor.)

Beattey, Earle J. R., Edgewood, R. I., assignor to Universal Optical Corporation, Providence, R. I. Bridge for an eyeglass mounting. Des. 81,429; June 24.

Beaty, Glenn, et al. (See Pollock, Oscar, assignor.)

Beauchamp, Wilfred A. (See Tobin, K. J., Beauchamp, and Vegren.)

Beaver Saw Filing Machine Co. (See Klunk, Louis J., assignor.)

Beck, Charles W., assignor to J. E. Goerlich, Toledo, Ohio. Muffler. 1,766,973; June 24.

Becker, Charles M., Brooklyn, N. Y. Lamp stand. Des. 81,430; June 24.

Becker, William E., Waukesha, Wis. Brush. 1,766,870; June 24.

Beckers, Arnold. (See Wilhelm, Rudolf, assignor.)

Beckinsale, Sydney, and H. Waterhouse, Woolwich, London, England. Lead alloy. 1,766,871; June 24.

Beckman, Burchard F., Fort Smith, Ark. Tie-plate. 1,767,647; June 24.

Beckmann, Johannes, Altona, Ottensen, Germany. Electric safety lamp. 1,765,900; June 24.

Beckwith Manufacturing Company. (See Clapp, Albert L., assignor.)

Beebe, Edward M., Shawnee, Okla. Quick-opening blow-off valve. 1,766,165; June 24.

Beecher, Eugene L. (See McElroy, J. J., and Beecher.)

Beerhalter, Rhinehart O., Junction City, Kans. Junction-box fixture. 1,767,339; June 24.

Beidler, George C., Rochester, N. Y. Apparatus for treating photographic films. 1,768,022; June 24.

Beidler, George C., Rochester, N. Y. Apparatus for treating photographic films. 1,768,501; June 24.

Beisner, Lawrence F. (See Morton, W. B., and Beisner.)

Belknap, Doris V., Brooklyn, N. Y., assignor to Monument Mills, Housatonic, Mass. Textile fabric. Des. 81,431; June 24.

Belknap, Doris V., Brooklyn, N. Y., assignor to Monument Mills, Housatonic, Mass. Bedspread. Des. 81,432; June 24.

Bell & Gossett Company. (See Daley, Walter A., assignor.)

Bell & Howell Company, The. (See Howell, Albert S., assignor.)

Bell, Charles H., Cleveland Heights, assignor, by mesne assignments, to The Eaton Axle & Spring Company, Cleveland, Ohio. Closure. 1,767,040; June 24.

Bell, Erwin L., Lebanon, Tenn. Rake construction 1,768,101; June 24.

Bell, James H. (See Remington, Joseph P., assignor.)

Bell, John H., South Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Control system. 1,768,283; June 24.

Bell Telephone Laboratories, Incorporated. (See Bell, John H., assignor.)

Bell Telephone Laboratories, Incorporated. (See Betts, Philander H., assignor.)

Bell Telephone Laboratories, Incorporated. (See Bishop, Nathaniel, assignor.)

Bell Telephone Laboratories, Incorporated. (See Ceccarini, Olindo O., assignor.)

Bell Telephone Laboratories, Incorporated. (See Clark, E. H., and Carpenter, assignors.)

Bell Telephone Laboratories, Incorporated. (See Cousins, Van M., assignor.)

Bell Telephone Laboratories, Incorporated. (See Falk, Arthur H., assignor.)

Bell Telephone Laboratories, Incorporated. (See Heising, Raymond A., assignor.)

Bell Telephone Laboratories, Incorporated. (See Johnson, Herbert B., assignor.)

Bell Telephone Laboratories, Incorporated. (See Marrison, Warren A., assignor.)

Bell Telephone Laboratories, Incorporated. (See Mohr, Franklin, assignor.)

Bell Telephone Laboratories, Incorporated. (See Terry, Roy V., assignor.)

Bell Telephone Laboratories, Incorporated. (See Wente, Edward C., assignor.)

Bellah, George R., Los Angeles, assignor of one-half to E. J. Naffziger, Glendale, Calif. Hand cultivator. 1,766,212; June 24.

Bellem, Louis H. L., Asnieres, France. Pump. 1,768,102; June 24.

Beller, Hans. (See Luther, M., and Beller.)

Beman, Clifford W., North Emporia, Va. Headlight dimmer. 1,767,340; June 24.

Bemelmans, Lampert, Miami, Fla. Can-pouring apparatus. 1,767,504; June 24.

Bendix Brake Company. (See Clapp, Stuart H., assignor.)

Bendix-Cowdrey Brake Tester, Inc. (See Cowdrey, Charles F., assignor.)

Benedict, Edward L., Pittsburgh, Pa. Sheet material and making the same. 1,766,096; June 24.

Benien, William, assignor to Steel Cable Mud Chain Company, Lincoln, Kans. Cable end connecter. 1,768,392; June 24.

Benner, Harry P. (See Egloff, G., and Benner.)

Benner, Harry P. (See Morrell, J. C., and Benner.)

Bennett, Raymond F., Portland, Me. Method of and apparatus for leveling work. 1,766,323; June 24.

Benoit, Léon, Chicago, Ill. Egg carton. 1,768,023; June 24.

Benoit, Leon, Chicago, Ill. Egg carton. 1,768,024; June 24.

Benson, Adolph H., Michigamme, Mich. Electrical testing instrument. 1,765,479; June 24.

Bentley, Warren H., assignor of one-half to J. G. Tingle, Miami, Fla. Water cut-off. 1,768,305; June 24.

Berek, Max, assignor to E. Leitz, Optische Werke, Wetzlar, Germany. Polarimetric apparatus. 1,767,831; June 24.

Berenbruch, Albert. (See von Staden, H. A., Berenbruch, and Höhn.)

Berg, Hans S., Ventura, Calif. Automatic flow nipple and separator for oil wells. 1,767,958; June 24.

Berg, Wilhelm, Bielefeld, Germany. Jaw chuck for machine tools. 1,766,276; June 24.

Berger, Hans, assignor to the Firm Rossel, Schwarz & Co., A. G., Weisbaden, Germany. Massage instrument. 1,768,306; June 24.

Berger, Joseph, Utica, N. Y., assignor to Union Special Machine Company, Chicago, Ill. Producing sewed articles. 1,768,025; June 24.

Berger, Joseph, Utica, N. Y., assignor to Union Special Machine Company, Chicago, Ill. Sewing machine. 1,768,026; June 24.

Berger, Joseph, Utica, N. Y., assignor to Union Special Machine Company, Chicago, Ill. Looper mechanism for sewing machines. 1,768,103; June 24.

Berger, Joseph, Utica, N. Y., assignor to Union Special Machine Company, Chicago, Ill. Feeding mechanism for sewing machines. 1,768,104; June 24.

Berger, Joseph, Utica, N. Y., assignor to Union Special Machine Company, Chicago, Ill. Sewing machine. 1,768,105; June 24.

Berger Manufacturing Company, The. (See Schmitz, F. A., and Sturm, assignors.)

Berglund, Otto R. P., Lidingo-Brevik, assignor to Aktiebolaget Vacuum-Compressor, Stockholm, Sweden. Tightening means for rotary machines. 1,766,872; June 24.

Bergman, Harry K., Shillington, Pa., assignor to Hemphill Company, Central Falls, R. I. Mechanism for forming clocked floated-thread hosiery. 1,766,772; June 24.

Bergstrom, Carl P., Millbury, Mass., and C. J. Lindegren, Providence, R. I., assignors to Crompton & Knowles Loom Works, Worcester, Mass. Mounting for loom-picking spindles. 1,766,739; June 24.

Berko, Benjamin, and J. Brewer, New York, N. Y. Atomizer. 1,767,911; June 24.

Berkshire Knitting Mills. (See Ischinger, Alfred E., assignor.)

Berman, Rita, New York, N. Y. Nursery play apparatus. 1,765,361; June 24.

Berner, Vernon T., Ray, Ariz. Brattice. 1,766,324; June 24.

Berry, George W., Wolfeboro, N. H. Drill operating holder. 1,765,362; June 24.

Berry, Herbert H., London, England. Electric fire or radiator. 1,768,284; June 24.

Berry, Upton C., Lincoln, Nebr. Baseball player's mitt or glove. 1,767,115; June 24.

Bersted, Alfred, and M. Bersted, Chicago, Ill. Balanced cover support. 1,767,730; June 24.

Bersted, Alfred, and M. Bersted, Chicago, Ill. Balanced cover support. 1,767,731; June 24.

Bersted, Martin. (See Bersted, Alfred and M.)

Berton, Orval B., Los Angeles, Calif. Latch for paper boxes. 1,765,904; June 24.

Bertsch, Johann A. (See Jaeger, A. O., and Bertsch.)

Bess, Robert H., Long Beach, Calif., assignor to J. E. B. Daniel. Apparatus for flowing deep wells by stages. 1,766,974; June 24.

Bethenod, Joseph F. J., and A. Jonet, Paris, France. Gear mechanism for driving train-lighting generators. 1,767,648; June 24.

Bettin, Emma A. (See Bettin, John A., assignor.)

Bettin, John A., assignor to E. A. Bettin, Los Angeles, Calif. Conveyer. 1,766,052; June 24.

Betts, Philander H., Belmar, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Indicating system. 1,765,396; June 24.

Beyermann, Karl, Halda, Kreuzgasse, Czechoslovakia. Device for indicating signals on railway vehicles. 1,768,106; June 24.

Beyland, Sidney A., assignor to The Stromberg-Carlson Telephone Manufacturing Company, Rochester, N. Y. Manufacturing capacitors. 1,766,870; June 24.

Bianchi, Charles A., et al. (See Bassett, H. P., and Morrison, assignors.)

Bickett, Le Roy M., assignor to Bickett Rubber Products Corporation, Watertown, Wis. Weather stripping. 1,767,165; June 24.

Bickett Rubber Products Corporation. (See Bickett, Le Roy M., assignor.)

Bigelow, Franklin H., Buffalo, N. Y. Score calculating device. 1,768,285; June 24.

Billing, Wyly M., assignor to The Wm. S. Merrell Company, Cincinnati, Ohio. Castor-oil soap and process of making castor-oil soap. 1,767,041; June 24.

Bimel, Frederick B., Westfield, N. J., assignor to Standard Oil Development Company. Process and apparatus for stabilizing crude petroleum. 1,767,341; June 24.

Binderup, Jul, Denver, Colo. Force pump. 1,766,010; June 24.

Bines, William H. (See Thomas, J. C., and Bines.)

Bingham, Randolph V., Portland, Oreg. Pump. 1,766,591; June 24.

Birch, Leland W., assignor to The Ohio Brass Company, Mansfield, Ohio. Conductor support. 1,766,873; June 24.

Birch, Leland W., assignor to The Ohio Brass Company, Mansfield, Ohio. Conductor support. 1,766,874; June 24.

Birchfield, Robert W., assignor to Heggie Simplex Boiler Company, Joliet, Ill. Boiler. 1,767,235; June 24.

Birkenmaier, Theodore, assignor to W. N. Matthews Corporation, St. Louis, Mo. Slack puller. 1,765,397; June 24.

Birkenmaier, Theodore, assignor to W. N. Matthews Corporation, St. Louis, Mo. Sprayer. 1,765,398; June 24.

Birkenmaier, Theodore, assignor to W. N. Matthews Corporation, St. Louis, Mo. Switch. 1,765,399; June 24.

Birkenmaier, Theodore, assignor to W. N. Matthews Corporation, St. Louis, Mo. Coating apparatus. 1,765,522; June 24.

Birkenmaier, Theodore, assignor to W. N. Matthews Corporation, St. Louis, Mo. Paint gun. 1,766,503; June 24.

Birkenmaier, Theodore, assignor to W. N. Matthews Corporation, St. Louis, Mo. Slack puller. 1,766,504; June 24.

Bishop, Benjamin S. T. (See Gifford, A. J., and Bishop.)

Bishop, Nathaniel, Bridgeport, Conn., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Radioreceiver. 1,768,286; June 24.

Bishton, Robert R., Herkimer, N. Y. Resilient wheel. 1,767,572; June 24.

Bissell, Richard E. (See Spire, W. H., and Bissell.)

Bissell, Richard E. (See Thompson, C. E., and Bissell.)

Bitchman, Oscar, Habana, Cuba. Spark-plug mounting. 1,766,740; June 24.

Bittner, Joseph E., Yakima, Wash. Hydraulic change-speed transmission. 1,765,751; June 24.

Blitzenburger, Frank C., Los Angeles, Calif. Yieldable back support for seats. 1,767,042; June 24.

Black, Walter G. (See Segelhorst, August L., assignor.)

Blackburn, John M., and F. R. Lauden, Franklin, La. Vehicle signal. 1,768,107; June 24.

Blackmore, Benjamin, Cuyahoga Falls, Ohio. Radiator. 1,766,701; June 24.

Blackmore, Charles C., Dayton, Ohio. Toy cannon. 1,765,561; June 24.

Blackmore, Charles C., Dayton, Ohio. Gas cannon. 1,765,562; June 24.

Blackmun, William O., Hays City, Kans. Lawn-mower reel truing and sharpening machine. 1,766,277; June 24.

Blaikie, Kenneth G., Shawinigan Falls, Quebec, assignor to Canadian Electric Products Company, Limited, Montreal, Canada. Preventing polymerization of vinyl compounds and reaction of same with aldehydes. 1,768,434; June 24.

Blair, George W. (See Ferrettie, C., and Blair.)

Blake, Ivan L., Hannibal, N. Y. Armored-conduit-cutting tool. 1,767,342; June 24.

Blakemore, Alfred P., Philadelphia, Pa., assignor to Katz and Blakemore, Philadelphia, Pa. Golf-ball washer. 1,768,229; June 24.

Blakeslee, G. S., & Co. (See Anstiss, George P., assignor.)

Blanchard, Frederick C., Dorchester, Mass. Lubricator. 1,766,702; June 24.

Blanchard Machine Company, The. (See Skillings, Harold F., assignor.)

Blanckertz, Rudolf, assignor to the Firm: Heintze & Blanckertz, Berlin, Germany. Pen for drawing and ruling purposes. 1,765,901; June 24.

Blaun, Herbert L., and L. G. Moskow, Glenwood Landing, N. Y. Double-flush valve. 1,767,043; June 24.

Blauvelt, Frederic D., Montclair, N. J. Liquid heater. 1,766,480; June 24.

Blaw-Knox Company. (See Fisk, Gustaf L., assignor.)
Bleloch, William. (See Bleloch, William E. and W.)
Bleloch, William E., Johannesburg, South Africa, and W. Bieloch, Epsom, England. Safety razor. 1,768,307; June 24.
Bliss, Elmer F., Scotia, N. Y., assignor to General Electric Company. Automatic-reclosing circuit-breaker system. 1,768,393; June 24.
Bludworth, Timothy F., Summit, N. J. Remote control switch. 1,766,372; June 24.
Bludworth, Timothy F., Fanwood, N. J., and I. S. Bobrovsky, New York, N. Y. Remote control system for electric circuits. 1,766,371; June 24.
Blumenauer, Henry P., and F. D. Brisse, Worcester, Mass., and W. C. Brisse, Detroit, Mich. Bolt cutter. 1,768,108; June 24.
Blumenfeld, Joseph, Paris, France, assignor to Commercial Pigments Corporation, New York, N. Y. Production of composite pigments containing titanium dioxide. 1,766,592; June 24.
Bobrovsky, Igor S. (See Bludworth, T. F., and Bobrovsky.)
Bobrovsky, Igor S., Rochester, N. Y. assignor, by mesne assignments, to United Reproducers Corporation. Assembling loud speakers. 1,767,912; June 24.
Bock Laundry Machine Company, The. (See Bock, William E., assignor.)
Bock, Walther, Berlin-Schoneberg, and K. Rath, New York, N. Y., assignors to C. Lorenz-Aktiengesellschaft, Berlin-Tempelhof, Germany. Vibration regulator. 1,767,236; June 24.
Bock, William E., assignor, by mesne assignments, to The Bock Laundry Machinery Company, Toledo, Ohio. Washington machine. 1,766,213; June 24.
Boddie, Clarence A., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Carrier-wave telephony over power lines. 1,765,480; June 24.
Boden, Ernest G., Canton, Ohio, assignor to The Timken Roller Bearing Company, Canton, Ohio. Bearing. 1,768,460; June 24.
Bodin, George, assignor to Goodman Manufacturing Company, Chicago, Ill. Mining-machine truck. 1,765,400; June 24.
Boedtcher, Franz A., Bergenfield, assignor to Otis Elevator Company, Jersey City, N. J. Cut-off switch for elevator annunciators. 1,767,870; June 24.
Boedtcher, Franz A., Bergenfield, assignor to Otis Elevator Company, Jersey City, N. J. Elevator-signal-restoration system. 1,767,871; June 24.
Boedtcher, Franz A., Bergenfield, assignor to Otis Elevator Company, Jersey City, N. J. Electric switch. 1,768,027; June 24.
Boegehold, Alfred L. (See Williams, H. M., and Boegehold.)
Boehm, Albert F., Lake Villa, Ill. Fish lure. Des. 81,433; June 24.
Boehmer, Spencer U., Lombard, Ill. Bottle. Des. 81,434; June 24.
Boehnke, Ulrich J., San Juan, Tex. Rotary conveyer and washer for vegetables and fruits. 1,765,647; June 24.
Bognar, Bela, New York, N. Y. Electric heater. 1,767,044; June 24.
Bohlken, Edward M. (See Buchanan, L. L., and Bohlken.)
Bohn Aluminum & Brass Corporation. (See Bateman, A. T., and Irvine, assignors.)
Bohn Aluminum & Brass Corporation. (See Nelson, Adolph L., assignor.)
Boland, Joseph J., Keyport, N. J., assignor to Aeromarine Plane & Motor Co., Inc. Internal-combustion engine. 1,765,713; June 24.
Bolens, Harry W., Port Washington, Wis. Chair iron. 1,767,166; June 24.
Bollwine, Mary A., Tampico, Mex. Brassière. 1,766,278; June 24.
Bonaventura, Philip, Philadelphia, Pa. Dispensing receptacle for cigars and cigarettes. 1,766,097; June 24.
Bonnar-Vawter Fanform Company. (See Fulk, George L., assignor.)
Bonsor, Walter, Chicago, Ill. Circuit closer. 1,765,752; June 24.
Booth, William N., assignor to Kelsey-Hayes Wheel Corporation, Detroit, Mich. Apparatus for forming cup-shaped members. 1,766,098; June 24.
Booth, William N., assignor to Kelsey-Hayes Wheel Corporation, Detroit, Mich. Device for securing wheel bodies to wheel hubs. 1,766,099; June 24.
Booth, William N., assignor to Kelsey-Hayes Wheel Corporation, Detroit, Mich. Wire wheel. 1,766,100; June 24.
Booth, William N., assignor to Kelsey-Hayes Wheel Corporation, Detroit, Mich. Rim sizing and punching machine. 1,766,214; June 24.
Booth, William N., assignor to Kelsey-Hayes Wheel Corporation, Detroit, Mich. Brake drum. 1,766,215; June 24.
Booth, William N., assignor to Kelsey-Hayes Wheel Corporation, Detroit, Mich. Brake drum. 1,766,216; June 24.
Booth, William N., assignor to Kelsey-Hayes Wheel Corporation, Detroit, Mich. Machine for sizing and perforating rims. 1,766,217; June 24.
Borden Company, The. (See Olsen, Olaf C., assignor.)
Borden, Perry A., Toronto, Ontario, H. S. Baker, Niagara Falls, Ontario, and L. A. Paine, Toronto, assignors to The Lincoln Meter Company, Limited, Toronto, Canada. Measuring electrical quantities. 1,765,563; June 24.
Borg, Henry L., Stamford, Conn., assignor to Postum Company, Incorporated, Battle Creek, Mich. Food product and making same. 1,768,230; June 24.
Borkenhagen, Herbert, and A. Olson, Chicago, Ill. Vault lock protector. 1,767,273; June 24.
Bosch, Robert, Aktiengesellschaft. (See Menzel, Friedrich.)
Bott, George R., assignor to Norma-Hoffmann Bearings Corporation, Stamford, Conn. Roller-bearing cage. 1,765,648; June 24.
Bottger, H. W. (See Bowen, Benjamin F., assignor.)
Boucher, Cyril L. (See Shorter, A. E., and Boucher.)
Boudin, Louis, St. Gobain, assignor to Société-Anonyme des Manufactures des Glaces & Produits Chemiques de Saint-Gobain, Chauny & Cirey, Paris, France. Apparatus for conveying glass from forming devices. 1,767,913; June 24.
Boudin, Louis, St. Gobain, assignor to Société-Anonyme des Manufactures des Glaces & Produits Chemiques de Saint-Gobain, Chauny & Cirey, Paris, France. Method and apparatus for conveying glass from forming devices. 1,767,914; June 24.
Bouer, Bernard L. (See Kaplan, H. E., and Bouer.)
Bowen, Benjamin F., assignor of one-half to H. W. Bottger, Richmond, Calif. Rotary valve. 1,766,101; June 24.
Bowen, Michael B., assignor to Faries Manufacturing Company, Decatur, Ill. Shade support for portable electric lamps. 1,766,975; June 24.
Bowen, Michael B., assignor to Faries Manufacturing Company, Decatur, Ill. Shade holder for portable electric lamps. 1,766,976; June 24.
Bowen, Michael B., assignor to Faries Manufacturing Company, Decatur, Ill. Shade holder for portable electric lamps. 1,766,977; June 24.
Bowers, Claude E., Los Angeles, Calif. Sash weight. 1,766,373; June 24.
Bowes, Marion F., Pensacola, Fla. Holder for check stubs. 1,768,028; June 24.
Boyce, Wirt B., Chicago, Ill. Guard for roller window shades. 1,767,045; June 24.
Boyer, William J., Wilmington, Del. Cross chain. 1,766,218; June 24.
Boynton, Alexander, San Antonio, Tex. Stage-lift flowing device. 1,767,201; June 24.
Boynton, Alexander, San Antonio, Tex. Stage-lift flowing device. 1,767,202; June 24.
Boynton, Alexander, San Antonio, Tex. Stage-lift flowing device. 1,768,109; June 24.
Boynton, Alexander, San Antonio, Tex. Stage-lift flowing device. 1,768,110; June 24.
Boze, George A., Detroit Lakes, Minn. Refuse-treating apparatus. 1,766,325; June 24.
Bozeman, John F., West Lake, La., and J. D. Cole, Hebronville, Tex. Drill stem. 1,766,326; June 24.
Braat, William. (See Engstrand, Gunnar C., assignor.)
Bracke, Oscar, Antwerp, Belgium, assignor to Western Electric Company, Incorporated, New York, N. Y. Selector switch. 1,768,394; June 24.
Bradbury, Clifford C., Glencoe, assignor to Alemite Corporation, Chicago, Ill. Centralized lubricating system. 1,767,505; June 24.
Bradley, Frederick V. N. (See Fisher, C. R., and Bradley.)
Bradshaw, Richard, and R. Ferguson, Montreal, Quebec, Canada, assignors, by mesne assignments, to Simmons Company, New York, N. Y. Day-bed or box-lounge construction. 1,768,435; June 24.
Bragg, Caleb S., Palm Beach, Fla., and V. W. Kliesrath, Port Washington, assignors to Bragg-Kliesrath Corporation, Long Island City, N. Y. Power actuator. 1,766,481; June 24.
Bragg-Kliesrath Corporation. (See Bragg, C. S., and Kliesrath, assignors.)
Bramwell, Francis H., Hartford, England, assignor to Atmospheric Nitrogen Corporation, Solvay, N. Y. Insulator for electric conductors. 1,766,593; June 24.
Brandes, Otto W., Milwaukee, Wis. Window screen. 1,767,116; June 24.
Branger, Maurice L., Paris, France. Luminous projection apparatus. 1,768,111; June 24.
Brassert, H. A., & Company. (See von Maltitz, Edmund, assignor.)
Brassert, H. A., & Company. (See von Maltitz, E., and Wille, assignors.)
Bratlie, Arthur, Snoqualmie Falls, assignor to Weyerhaeuser Timber Company, Tacoma, Wash. Sawmill-block cleaner. 1,768,029; June 24.
Bratton, George S., assignor to Anheuser-Busch, Incorporated, St. Louis, Mo. Manufacturing yeast. 1,767,646; June 24.
Bräuer, Ernst, Voigtsdorf, Germany. Transmission of messages by electromagnetic waves. 1,768,287; June 24.
Braunstein, Milton, New York, N. Y. Address card for shipping containers. 1,767,573; June 24.
Breadon, William C., Astoria, N. Y. Shoe lace. 1,767,737; June 24.

Bremer, William S., St. Charles, Mo., assignor to Economy Aluminum Company. Pipe union. 1,765,753; June 24.
Brendlin, Herman J., assignor to The Hayward Company, New York, N. Y. Excavating shovel. 1,766,053; June 24.
Brenkert, Joseph W. (See Brenkert, Karl and J. W.)
Brenkert, Karl and J. W., Detroit, Mich. Projection apparatus. 1,766,102; June 24.
Brennan, Arthur T., Detroit, Mich. Screen hanger. 1,766,054; June 24.
Brennan, Joseph H., Niagara Falls, N. Y., assignor to Electro Metallurgical Company. Treating manganese ores. 1,768,112; June 24.
Brenzinger, Julius, Fairfield, assignor to The Max Ams Chemical Engineering Corporation, Bridgeport, Conn. Spinning machine. 1,768,231; June 24.
Brewer, Joseph. (See Berko, B., and Brewer.)
Bridgeport Hardware Manufacturing Corporation, The. (See Hobbs, W. F., and Anderson, assignors.)
Bridgham, Arthur L., assignor of one-half to C. H. Sherburne, Boston, Mass. Valve. 1,766,703; June 24.
Briggs, Frederick, assignor to Briggs Packing Co., Washington, D. C. Treating meats. 1,767,054; June 24.
Briggs Packing Co. (See Briggs, Frederick, assignor.)
Bright, Charles G. (See Mahler, E., and Bright.)
Brillon, Louis, Paris, France. Fire extinguisher. 1,767,428; June 24.
Brinckerhoff, Francis McF., Suffern, N. Y., assignor to Pressed Steel Car Company, Pittsburgh, Pa. Articulated car. 1,765,649; June 24.
Brisse, Frank D. (See Blumenauer, H. P., and Brisse.)
Brisse, William C. (See Blumenauer, H. P., and Brisse.)
British Dyestuffs Corporation. (See Mendoza, Mordecai, assignor.)
British Dyestuffs Corporation. (See Saunders, Kenneth H., assignor.)
British Dyestuffs Corporation Limited. (See Mendoza, M., and Saunders, assignors.)
British Dyestuffs Corporation Limited. (See Saunders, Kenneth H., assignor.)
British Dyestuffs Corporation Limited. (See Shepherdson, A., and Hallwood, assignors.)
British Jeffrey Diamond Limited. (See Lithgoe, John, assignor.)
Brittain, Richard J., jr., and P. H. Hutchinson, East Orange, N. J., assignors to General Motors Corporation, Detroit, Mich. Bearing mounting. 1,767,429; June 24.
Britz, Maurice. (See Mueller, Augsto E., assignor.)
Broadmeyer, Albert, assignor to W. O. Hickok Manufacturing Company, Harrisburg, Pa. Sheet feeder. 1,766,482; June 24.
Brochet, Fernand, Fontenay-Tresigny, France. Apparatus for freeing potatoes from germs. 1,765,902; June 24.
Brockway, Carl P., Paterson, N. J., assignor to Industrial Research Corporation, Toledo, Ohio. Vacuum sweeper. 1,766,424; June 24.
Brockway, Carl P., assignor to Industrial Research Corporation, Toledo, Ohio. Vacuum sweeper. 1,766,425; June 24.
Brockway, Carl P., Paterson, N. J., assignor to Industrial Research Corporation, Toledo, Ohio. High-pressure engine. 1,767,506; June 24.
Broderick, Martin T., Minneapolis, Minn. Convertible long and short shopping bag. 1,767,274; June 24.
Brodie, George H. (See Howard, R. S., Brodie, and Westhafer.)
Brodie, Ralph N., Company. (See Granberg, Albert J., assignor.)
Bromwell Wire Goods Company, The. (See Melish, Thomas G., assignor.)
Bronander, Wilhelm B., Montclair, N. J., and G. E. Hagquist, Brooklyn, N. Y., assignor to American Machine & Foundry Company. Hopper for cigarette-packaging machines. 1,765,820; June 24.
Bronander, Wilhelm B., Montclair, N. J., assignor to International Cigar Machinery Company. Volumetric measuring device for cigar machines. 1,765,821; June 24.
Bronander, Wilhelm B., Montclair, N. J., assignor to American Machine & Foundry Company. Variable-speed drive for cigarette machines and the like. 1,765,822; June 24.
Brooks, John W. (See Russell, M. N., and Brooks.)
Broussard, Adelin H., and L. K. Thibodeaux, New Orleans, La. Rail joint. 1,765,650; June 24.
Brower, William M., Palo Alto, assignor to Federal Telegraph Company, San Francisco, Calif. Radio compass compensator. 1,767,117; June 24.
Brown & Bailey Company. (See Brown, Arthur E., assignor.)
Brown, Arthur E., Philadelphia, Pa., assignor to Brown & Bailey Company. Foldable box. 1,767,733; June 24.
Brown, Arthur E., Philadelphia, Pa., assignor to Brown & Bailey Company. Foldable box. 1,767,734; June 24.
Brown, Bank D., assignor to Capstan Glass Company, Connellsville, Pa. Device for replacing checker bricks. 1,767,832; June 24.
Brown Company. (See Burke, Edmund, assignor.)
Brown Company. (See Daw, Joseph, assignor.)
Brown Company. (See Parker, Howard, assignor.)
Brown Company. (See Schur, Milton O., assignor.)
Brown Company. (See Van Arsdel, Wallace B., assignor.)
Brown Company. (See Vogel, Fred W., assignor.)
Brown, Frank E., assignor to Harnischfeger Corporation, Milwaukee, Wis. Hoist-line fair lead. 1,767,735; June 24.
Brown, George N., Pittsburgh, Pa., assignor, by mesne assignments, to Allis-Chalmers Manufacturing Company. Subway transformer. 1,768,522; June 24.
Brown Instrument Company, The. (See Harrison, Thomas R., assignor.)
Brown, John E., Elyria, Ohio. Fishhook and weed guard. 1,766,279; June 24.
Brown, Joseph. (See Metcalf, W. W., and Brown.)
Brown, Newton N., assignor to Gold Medal Camp Furniture Mfg. Co., Racine, Wis. Foldable chair. 1,767,736; June 24.
Brown, Reinhardt H., La Porte, Ind., assignor to J. H. McElroy, trustee. Child's collapsible vehicle. 1,765,786; June 24.
Brown, Robert L., assignor to Harnischfeger Corporation, Milwaukee, Wis. Drag-line fair lead. 1,767,737; June 24.
Brown, Roy W., assignor to The Firestone Tire and Rubber Company, Akron, Ohio. Instrument for controlling temperatures. 1,768,349; June 24.
Brown, Vernie R. (See Waters, H. F., and Brown.)
Brown, Vernie R., assignor to Magnetic Organ Action Company, University City, Mo. Valve action for pipe organs. 1,767,738; June 24.
Brown, Vernie R., University City, assignor to Magnetic Organ Action Company, St. Louis, Mo. Magnetic device for initiating movement. 1,767,739; June 24.
Brown, William, Revere, Mass. Device for operating rear curtains of automobiles. 1,767,046; June 24.
Browne, William G., Yonkers, N. Y., and R. W. Olmsted, San Francisco, Calif. Advertising signboard structure. 1,766,978; June 24.
Browning, George, Wilmette, assignor to Chicago Flexible Shaft Company, Chicago, Ill. Electric laundry-iron switch. 1,765,401; June 24.
Brubaker, Peter. (See Steinour, J. E., and Brubaker.)
Brumbach, Morris G., Laureldale, Pa. Window construction. 1,767,343; June 24.
Brumund, Alvin L. (See Inman, W. A., and Brumund.)
Brunk, Harold J., Chicago, Ill., assignor to C. F. Pease Company. Feeding tracings to blue-print machines. 1,767,833; June 24.
Brunow, Guinther H., Port Arthur, Tex., assignor, by mesne assignments, to The Texas Company, New York, N. Y. Liquid-level-indicating device. 1,767,167; June 24.
Brunswick-Balke-Collender Company, The. (See Townsend, Ralph H., assignor.)
Brush Laboratories Company, The. (See Sawyer, Charles B., assignor.)
Brutofski, Stephen J., J. Armstrong, and L. Shermak, Scranton, Pa. Combination implement. 1,768,232; June 24.
Bruton, William C., Albany, Calif., assignor to American Manganese Steel Company, Chicago, Ill. Can-mangling machine. 1,766,327; June 24.
Bryant, Henry, Waukesha, Wis. Fitting for tubular structures. 1,765,651; June 24.
Bryant, William L., Springfield, Vt. Grinding machine. 1,765,878; June 24.
Brylka, Joseph S., Du Bois, Pa. Water sleigh. 1,768,395; June 24.
Buc, Hyyn E. (See Burgess, L., and Buc.)
Buccicome, Darlo, Gary, Ind., assignor to American Sheet and Tin Plate Company. Hot-mill catcher. 1,767,574; June 24.
Buchanan, Edward A. (See Rudge, C. H., and Buchanan.)
Buchanan, Laurence L., Independence, and E. M. Bohlken, Kansas City, Mo. Printing machine. 1,767,577; June 24.
Buchanan, William A., assignor to The Duplex Paper Bag Company, Cincinnati, Ohio. Paper-bag machine. 1,765,564; June 24.
Buchet, Conrad R., Long Beach, Calif., assignor to Alemite Corporation, Chicago, Ill. Pneumatically-operated greasing apparatus. 1,767,507; June 24.
Buchli, Jacob., assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland. Electrical coupling. 1,766,594; June 24.
Buck, Frank H., Wilmington, Del. Electrolytic-cell hook-up. 1,766,875; June 24.
Buck, Lucien, assignor of one-half to James Hunter Machine Company, North Adams, Mass. Drying apparatus and method. 1,766,595; June 24.
Budd, Edward G., Manufacturing Company. See Adams, Ralph L., assignor.)
Budd, Edward G., Manufacturing Co. See Deisley, Edward J., assignor.)
Budd, Edward G., Manufacturing Company. (See Eksergian, Carolus L., assignor.)
Budd, Edward G., Manufacturing Co. (See Ledwinka, Joseph, assignor.)
Budd, Edward G., Manufacturing Company. (See Paugh, James J., assignor.)
Budd, Edward G., Manufacturing Co. (See Valentine, William A., assignor.)
Budd Wheel Company. (See Evans, Gordon M., assignor.)
Budd Wheel Company. (See Hughes, James W., assignor.)
Budd Wheel Company. (See Scull, Chester, sr., assignor.)
Budd Wheel Company. (See Wiles, Charles L., assignor.)
Buell, Roy D., Chicago, Ill. Horn. 1,767,740; June 24.

Buell Manufacturing Co. (See Flewelling, Edmund T., jr., assignor.)
Buerk, Charles A., Chicago, Ill. Liquid combustible. 1,766,501; June 24.
Bugg, John W., Columbus, Ga. Percolator and strainer. 1,767,915; June 24.
Bugg, Kenly C., St. Louis, Mo. Striping device. 1,767,118; June 24.
Builders Patent Scaffolding Company. (See Welt, Frank L.)
Bujack, Herman C., Chicago, Ill. Sleeper tie. 1,767,575; June 24.
Bulkeley, Claude A., Kenmore, assignor to Niagara Blower Company, Buffalo, N. Y. Fan housing. 1,767,279; June 24.
Bulkeley, Ralph W., Grand Rapids, Mich. Automobile top. 1,765,714; June 24.
Bullen, John H. (See Roberts, Samuel S., assignor.)
Bullock Garden Tool Company. (See Bullock, Orin M., assignor.)
Bullock, Orin M., Oakland, Calif., assignor to Bullock Garden Tool Company. Garden tool. 1,767,119; June 24.
Bunker, Kerney R., Kansas City, Mo., assignor to The Eveready Company, Frederick, Md. Bottle-capping machine. 1,766,773; June 24.
Burbidge, Owen B. (See Peterson, H. L., and Burbidge.)
Burch Corporation, The. (See Kime, Charles G., assignor.)
Burdett, Horace H., assignor to Draper Corporation, Hopedale, Mass. Outgoing thread-control for automatically-replenishing looms. 1,768,502; June 24.
Burdick Corporation, The. (See Hudson, Walter, assignor.)
Burdick, Howard K., Los Angeles, Calif. Velocipede. 1,767,047; June 24.
Burger, Frederick W., Niles, Mich., assignor to Clark Equipment Company, Buchanan, Mich. Making cast-metal wheels. 1,765,754; June 24.
Burger, Frederick W., Niles, assignor to Clark Equipment Company, Buchanan, Mich. Apparatus for making cast-metal wheels. 1,765,755; June 24.
Burger, Frederick W., Niles, assignor to Clark Equipment Company, Buchanan, Mich. Die mechanism for sizing and testing metal-wheel spiders. 1,765,756; June 24.
Burger, Frederick W., Niles, assignor to Clark Equipment Company, Buchanan, Mich. Die mechanism for constructing metallic wheels. 1,765,757; June 24.
Burgess Battery Company. (See Lorig, Robert A., assignor.)
Burgess, C. F., Laboratories, Inc. (See Burgess, Charles F., assignor.)
Burgess, Charles F., Bokeelia, Fla., assignor to C. F. Burgess Laboratories, Inc., Madison, Wis. Apparatus for demonstrating sound-absorbing properties. 1,766,103; June 24.
Burgess, Edward W., assignor to A. O. Smith Corporation, Milwaukee, Wis. Floor or pavement and producing the same. 1,765,652; June 24.
Burgess, Louis, Jersey City, and H. E. Buc, Roselle, N. J., assignors to Standard Oil Development Company. Sulphonic compound and making the same. 1,767,344; June 24.
Burgster, Nathan G., Chicago, Ill. Eliminating static electricity from combustible roofs. 1,767,275; June 24.
Burke, David F., Manchester-by-the-Sea, Mass. Collar support. 1,766,596; June 24.
Burke, Edmund, Portland, Me., assignor to Brown Company, Berlin, N. H. Wire guard. 1,765,823; June 24.
Burke, Paul, assignor to Northwest Engineering Corporation, Green Bay, Wis. Power shovel. 1,767,576; June 24.
Burn, John F., deceased, London, and J. S. Lancaster, Leamington, England; W. D. Forster and T. A. Forster, executors. Supplying liquid to drums of concrete or other mixing machines. 1,767,430; June 24.
Burns, James J., Detroit, Mich. Railway-track construction. 1,765,565; June 24.
Burroughs Adding Machine Company. (See Horton, Allen A., assignor.)
Burroughs Adding Machine Company. (See Horton, A. A., and Martl, assignors.)
Burroughs Adding Machine Company. (See Trew, Arthur S., assignor.)
Burry, Walter H., El Cajon, Calif. Wave power plant. 1,767,048; June 24.
Burson Knitting Company. (See Rolston, Walter F., assignor.)
Burt, Henry J., jr., Wheaton, Ill. Building material. 1,767,168; June 24.
Burt, John P. (See Locher, C. H., and Burt.)
Burtis, William H., Minneapolis, and M. S. Howard, Hastings, Minn. Glare shield device for automobiles. 1,765,566; June 24.
Burwell, Arthur W., Niagara Falls, assignor to Alox Chemical Corporation, New York, N. Y. Emulsions from partially oxidized petroleum wax and making the same. 1,768,523; June 24.
Burzi, Harry, New York, N. Y. Spool rack. 1,768,030; June 24.
Bushy, Robert S., West Palm Beach, Fla., assignor of one-half to R. R. McMahon, Columbus, Ohio. Ventilator for buildings. 1,766,876; June 24.
Bushey, Ernest H. (See Bushey, William and E. H.)
Bushey, William and E. H., Plattsburg, N. Y. Combined window-shade, curtain, and drapery support. 1,768,187; June 24.
Bushnell, Charles S., Rochester, assignor to General Railway Signal Company, Gates, N. Y. Instrument casing for train-control systems. 1,766,597; June 24.
Bushnell, Charles S., Rochester, assignor to General Railway Signal Company, Gates, N. Y. Automatic train-control system. 1,767,578; June 24.
Bushnell, James E., North Plainfield, assignor to Ransome Concrete Machinery Company, Plainfield, N. J. Concrete elevating and distributing apparatus. 1,767,431; June 24.
Busiek, William A., Belleville, Ill. Hinge. 1,767,049; June 24.
Bussard, Emmery J. H., assignor to The Crosley Radio Corporation, Cincinnati, Ohio. Vacuum-tube circuits. 1,767,508; June 24.
Bussard, Emmery J. H., and C. E. Kilgour, assignors to The Crosley Radio Corporation, Cincinnati, Ohio. Variable condenser. 1,767,509; June 24.
Butcher Polish Co., The. (See Butcher, William L., assignor.)
Butcher, William L., Newton, assignor to The Butcher Polish Co., Boston, Mass. Combination wax distributor and polisher. 1,766,774; June 24.
Butterick, Naason Z., Miami, Fla. Accelerator control. 1,766,877; June 24.
Butters, Thomas E., La Crescenta, Calif. Recording speed indicator. 1,766,741; June 24.
Butzen, Thomas F., and T. C. Olson, Madison, Wis. Piston. 1,767,169; June 24.
Byerlein, Arthur A., Detroit, Mich., assignor, by mesne assignments, to General Machinery Corporation, Hamilton, Ohio. Drawing press. 1,768,503; June 24.
Byerlein, Arthur A., Detroit, Mich., assignor, by mesne assignments, to General Machinery Corporation, Hamilton, Ohio. Press. 1,768,504; June 24.
Byers, Dwight, Cleveland, Ohio; Thos. S. Henderson, administrator. Testing leakage through insulated joints. 1,765,715; June 24.
Byrd, Britton E., Gastonia, N. C. Doorcheck. 1,766,011; June 24.
Byrd, Guy W., Raleigh, assignor of one-third to E. W. Inscoe, La Grange, N. C. Shoe horn and buttoner. 1,766,374; June 24.
Byron, James B., Long Beach, Calif. Fishing tool. 1,767,741; June 24.
Byron Jackson Co. (See Holdaway, Hall H., assignor.)
Byron Jackson Co. (See Woods, Walter T., assignor.)
Bysshe, Ernest T., and R. R. Finn, assignors to Jones & Lamson Machine Company, Springfield, Vt. Screw-cutting die. 1,766,598; June 24.
Bythway, Edward M., Swansea, Wales. Linkwork for reciprocating engines and the like. 1,768,436; June 24.
Cable Company, The. (See Hagey, James C., assignor.)
Cahill, Elizabeth, New York, N. Y. Safety carrier. 1,766,599; June 24.
Cahn, Leon J., assignor to Noma Electric Corporation, New York, N. Y. Fuse plug. Re17,713; June 24.
Caldwell, John R., assignor to The General Fireproofing Company, Youngstown, Ohio. Indicator for drawers. 1,768,113; June 24.
Callahan, James P., et al. (See Nee, Daniel J., assignor.)
Callow, John M., New York, N. Y., assignor to Genter Thickener Company, Salt Lake City, Utah. Filtering apparatus. 1,766,166; June 24.
Camel Company. (See Heinen, F. C., and Darrow, assignors.)
Camel Company. (See Lehnhoff, R. A., and Treptow, assignors.)
Camel Company. (See Madland, G., and Darrow, assignors.)
Camel Co. (See Madland, G., and Tobin, assignors.)
Camel Company. (See Tobin, K. J., Beauchamp, and Vegren, assignors.)
Cameron Can Machinery Co. (See Cameron, William, assignor.)
Cameron, John. (See Stone, R., and Cameron.)
Cameron Machine Company. (See Johnstone, Robert McC., assignor.)
Cameron, William, assignor to Cameron Can Machinery Co., Chicago, Ill. Mechanism for operating on can bodies. 1,765,758; June 24.
Campanaro, John, Philadelphia, Pa. Anti-skid device. 1,766,483; June 24.
Campbell, Charles A., Watertown, N. Y., assignor to The New York Air Brake Company. Testing signal systems. 1,766,280; June 24.
Campbell, John B., Salem, N. J., assignor, by mesne assignments to Carthage Mills Incorporated, Cincinnati, Ohio. Ornamentation process and apparatus therefor. 1,766,878; June 24.
Campbell, John B., Salem, N. J., assignor, by mesne assignments, to Carthage Mills Incorporated, Cincinnati, Ohio. Floor covering. 1,766,879; June 24.
Campbell, Joseph, Milner, British Columbia, Canada. Grain-drying device. 1,766,742; June 24.
Campbell, Neil L., Glendale, assignor, by mesne assignments to Carthage Mills Incorporated, Cincinnati, Ohio. Composition flooring. 1,766,811; June 24.
Campbell-Ross, Georgie B., Round Lake, Ill. Plaiting iron. 1,767,618; June 24.

Campbell, William W., et al., executors. (See Harrison, Herbert C.)
Canadian Electric Products Company. (See Blaikie, Kenneth G., assignor.)
Canfield, Dudley, Milwaukee, Wis. Take-off device for aeroplanes. 1,767,120; June 24.
Canfield, Robert W., West Hartford, Conn., assignor to Hartford-Umpire Company, Hartford, Conn. Movable glass-delivery chute. 1,766,979; June 24.
Cangemi, Anthony. (See Cangemi, Sebastiano F., and A.)
Cangemi, Sebastiano F. and A., Houston, Tex. Gate. 1,767,650; June 24.
Cannon, John W., Providence, R. I. Oil-burning system. 1,766,242; June 24.
Cannon, John W., Providence, R. I. Burning liquid fuel. 1,766,243; June 24.
Cannon, William D. (See Milnor, J. W., and Cannon.)
Capstan Glass Company. (See Brown, Banks D., assignor.)
Cara, Dominick J., and J. W. Hough, Memphis, Tenn. Awning for locomotive cabs. 1,768,437; June 24.
Carbonaro, Marius C., Paris, assignor to Societe Hardoll Anciens Etablissements Harivenu & Dollvier et Rene Porte & Cie. Reunis, Levallois-Perret, France. Automatic recording liquid meter. 1,768,031; June 24.
Carborundum Company, The. (See Tone, Frank J., assignor.)
Cardwell, James R., and W. H. Cotton, assignors to Union Draft Gear Company, Chicago, Ill. Draft gear. 1,766,328; June 24.
Carey, Philip, Manufacturing Company, The. (See Fisher, Harry C., assignor.)
Carlson, Eric, assignor to Stewart Die Casting Corporation, Chicago, Ill. Automatic die-casting machine. 1,765,653; June 24.
Carlson, Frederick G., Brooklyn, N. Y. Spacing means for mold forms. 1,767,834; June 24.
Carlson, John A. E., assignor to Jacobsen, Mfg. Co., Racine, Wis. Power-driven lawn mower. 1,767,510; June 24.
Carlson, Philip E., and C. J. Ulrich, Minneapolis, Minn. Lock. 1,765,824; June 24.
Carman, Edwin S., East Cleveland, assignor to The Osborn Manufacturing Company, Cleveland, Ohio. Mechanism for shaking out molds. 1,768,233; June 24.
Carmichael, Andrew J., and A. M. Wunderlich, New Haven, Conn., assignors to The Greist Manufacturing Company. Sewing-machine-attachment holder. 1,765,481; June 24.
Carnahan, Glen C., assignor to James R. Clow & Sons, Chicago, Ill. Gas-fired radiator. 1,765,759; June 24.
Carpenter, Charles F., Schenectady, N. Y., assignor to General Electric Company. Switch-operating mechanism. 1,768,461; June 24.
Carpenter, Davis, New York, N. Y. Hinge structure for sidewalk doors. 1,768,308; June 24.
Carpenter, Warren W. (See Clark, E. H., and Carpenter.)
Carr, Fred S., Newton, assignor, by mesne assignments, to United-Carr Fastener Corporation, Cambridge, Mass. Nut and screw fastening. 1,768,505; June 24.
Carr, Fred S., deceased, Newton, M. F. Carr, executor, assignor, by mesne assignments, to United-Carr Fastener Corporation, Cambridge, Mass. Separable fastener. 1,768,506; June 24.
Carr, Fred S., deceased, Newton, M. F. Cass, executor, assignor, by mesne assignments, to United-Carr Fastener Corporation, Cambridge, Mass. Separable fastener. 1,768,507; June 24.
Carr, George, Pettus, assignor of one-half to T. M. Lewis, Charleston, W. Va. Journal lubricator. 1,768,114; June 24.
Carr, Moses F., executor. (See Carr, Fred S.)
Carr, Moses F., Lexington, Mass., assignor, by mesne assignments, to Alemite Corporation, Chicago, Ill. Lubricating system. 1,767,511; June 24.
Carroll, Dallas C., assignor to The Firestone Steel Products Company, Akron, Ohio. Punch press. 1,768,357; assignor.)
Carter, Alva J. (See Schmidling, Gilbert T., assignor.)
Carter, Andrew G., assignor to The Carter Products Company, Inc., Grand Rapids, Mich. Wheel or pulley for band saws. 1,765,402; June 24.
Carter, Andrew G., assignor to The Carter Products Company, Inc., Grand Rapids, Mich. Wheel or pulley for band saws. 1,765,403; June 24.
Carter Products Company, The. (See Carter, Andrew G., assignor.)
Carter, William C., Flint, Mich. Carburetor. 1,765,654; June 24.
Carter's Ink Company, The. (See Kendrick, Laurence W., assignor.)
Carthage Mills Incorporated. (See Campbell, John B., assignor.)
Carthage Mills Incorporated. (See Campbell, Neil L., assignor.)
Cartier, Francois, Paris, France. Secret-telegraphy system. 1,767,121; June 24.
Carver, Benjamin F., Bayonne, N. J., assignor to Standard Oil Development Company. Detergent. 1,767,345; June 24.
Caruso, Louis, Irvington, N. J., assignor to The Lionel Corporation, New York, N. Y. Reversible electric locomotive. 1,766,329; June 24.
Caruso, Mario, Irvington, N. J., assignor to The Lionel Corporation, New York, N. Y. Locomotive reversing switch. 1,766,600; June 24.
Case, Charles R., Scenic, Wash. Dispensing cover. 1,767,742; June 24.
Case, Francis M., Cleveland, assignor to The Enterprise Manufacturing Company, Akron, Ohio. Salt-water reel. 1,765,903; June 24.
Case, J. I., Company. (See Hendrickson, Robert O., assignor.)
Cassady, George, New Westminster, British Columbia, Canada. Fluid-pressure transmission device. 1,767,270; June 24.
Casto, Lloyd V., assignor to The Oxford Varnish Corporation, Detroit, Mich. Reproduction of the natural appearances of articles on other surfaces. 1,766,426; June 24.
Catellier, Aimee J. (See Hasselblad, C. G., and Catellier.)
Cattaneo, Guiseppe, Hilversum, Netherlands, and P. Jodeck, Berlin, assignors to Allgemeine Gesellschaft für Chemische Industrie m. b. H., Berlin, Germany. Continuous treatment of hydrocarbons with sulphur dioxide. 1,766,281; June 24.
Caulkins, George P., Detroit, Mich. Cable-fastening device. 1,767,432; June 24.
Cavanagh, Hubert L., Indio, assignor of one-half to C. M. Westcott, Los Angeles, Calif. Promoting date culture. 1,765,482; June 24.
Ceccarini, Olindo O., Mahwah, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Signal-transmission system. 1,765,523; June 24.
Celanese Corporation of America. (See Hall, Archibald J., assignor.)
Central Automatic Sprinkler Company. (See Lewis, Leroy M., assignor.)
Central Brass and Fixture Co., The. (See Rosenberg, Ralph H., assignor.)
Central Radio Laboratories. (See Stoekle, Erwin R., assignor.)
Central Scientific Company. (See Redman, Sterling L., assignor.)
Central Scientific Company. (See Sachse, Herman P., assignor.)
Centrifix Corporation. (See Hawley, Charles G., assignor.)
Ceramic Machinery Company, The. (See Armstrong, William C., assignor.)
Cess, Joseph M., Antioch, Calif. Fireplace heater. 1,766,601; June 24.
Ceskomoravska-Kolben-Danek Akciova Spolecnost. (See Marăik, Augustin, assignor.)
Cincinnati Bickford Tool Company, The. (See Klausmeyer, D. C., and Darby, assignors.)
Cincinnati Car Corporation, The. (See Ellis, Charles J., assignor.)
Cincinnati Milling Machine Company. (See Einstein, Sol, assignor.)
Chain Belt Company. (See Ball, Charles F., assignor.)
Chain Belt Company. (See Collings, Byron B., assignor.)
Chain Belt Company. (See Longenecker, Charles I., assignor.)
Chain Belt Company. (See Roddy, Gustav R., assignor.)
Chain Belt Company. (See Shafer, Samuel, jr., assignor.)
Challenge Company. (See Lund, John A., assignor.)
Champion, Earl M., jr., assignor to Royersford Foundry and Machine Company, Incorporated, Royersford, Pa. Door fastener. 1,768,188; June 24.
Chandler, Milton E., assignor to Stromberg Motor Devices Co., Chicago, Ill. Carburetor. 1,767,050; June 24.
Chapman, Fred A., and W. Kotvis, Hillsboro, Wis. Internal-combustion-engine heater. 1,765,655; June 24.
Chappell, Elwin. (See Bachman, John S., assignor.)
Chappory, Andrew C., jr., Brooklyn, and J. B. Posey, White Plains, assignors to National Biscuit Company, New York, N. Y. Display rack. 1,767,433; June 24.
Charavny, Frederick, assignor, by mesne assignments, of one-half to Hartzell Industries, Inc., Piqua, Ohio. Propeller ventilating means. Re17,709; June 24.
Charter Oak Stove and Range Company. (See Dana, Leslie, assignor.)
Chase, Francis E., Chevy Chase, Md. Horticultural marker. 1,766,704; June 24.
Chase Machine Company. (See Palm, George H., assignor.)
Chase, Theron P., assignor to General Motors Research Corporation, Detroit, Mich. Oil filter. 1,768,350; June 24.
Chase, Theron P., assignor to General Motors Research Corporation, Detroit, Mich. Connecting rod. 1,768,508; June 24.
Chase, Theron P., assignor to General Motors Research Corporation, Detroit, Mich. Brake centralizer. 1,768,509; June 24.
Chatfield, Franklin, assignor to The Munsingwear Corporation, Minneapolis, Minn. Track pants. 1,767,649; June 24.
Chavaroux, Pierre, Paris, France. Apparatus adapted for continuous film travel for view taking, printing, and projection of cinematographic films. 1,765,904; June 24.
Chemical Engineering Corporation. (See Jones, Louis C., assignor.)
Chemical Engineering Corporation. (See Richardson, Ralph S., assignor.)

Chemische Fabrik auf Actien vorm. E. Schering. (See Jordan, Hans, assignor.)
Cherry-Burrell Corporation. (See Feldmeier, Harvey, assignor.)
Cherry-Burrell Corporation. (See Strandt, Gustav E., assignor.)
Chevenard, Pierre, Imphy, assignor to Societe Anonyme de Commentry, Fourchambault & Decazeville, Paris, France. Differential recording dilatometer. 1,766,775; June 24.
Chicago Automatic Conveyer Co. (See Shaw, Arthur L., assignor.)
Chicago Flexible Shaft Company. (See Browning, George, assignor.)
Chicago Lubricator Company, The. (See Edwards, Frank W., assignor.)
Chicago Pneumatic Tool Company. (See Funk, Albert H., assignor.)
Chicago Pump Company. (See Lannert, W. H. J., and Cowle, assignors.)
Chicago Pump Company. (See McCarthy, Edward F., assignor.)
Chicago Telephone Supply Company. (See Schellenger, Newton C., assignor.)
Chierighino, Conrad, New York, N. Y. Alarm system. 1,768,115; June 24.
Childs, Adelbert A., Orleans, Mass. Right-angle socket stock. 1,767,434; June 24.
Chilton, Roland, Keyport, N. J., assignor to Eclipse Machine Company, Elmira Heights, N. Y. Engine starter. 1,768,116; June 24.
Chisholm, Lester B., Stoneham, assignor to Everlastik, Inc., Chelsea, Mass. Covered elastic strand. 1,766,776; June 24.
Chrisman, Charles S., West Chester, assignor to The U. G. I. Contracting Company, Philadelphia, Pa. Water-gas apparatus. 1,767,579; June 24.
Christiansen, Ejnar, Birmingham, England. Mixing or stirring machine. 1,767,446; June 24.
Christoph, Edward A., Chicago, Ill. Toy gun. 1,768,117; June 24.
Chrobaltic Tool Company. (See Sullivan, William B., assignor.)
Chryst, William A., assignor, by mesne assignments, to Delco Products Corporation, Dayton, Ohio. Universal joint for shock absorbers. 1,766,880; June 24.
Chryst, William A., assignor, by mesne assignments, to Delco Products Corporation, Dayton, Ohio. Universal joint for shock absorbers. 1,766,881; June 24.
Chryst, William A., assignor to Delco Products Corporation, Dayton, Ohio. Pivot joint. 1,766,882; June 24.
Clapp, Albert L., Danvers, Mass. Liner board or paper. 1,765,860; June 24.
Clapp, Albert L., Danvers, Mass. Metal-coated paper article and making same. 1,765,862; June 24.
Clapp, Albert L., Danvers, Mass. Automobile spring cover. 1,765,863; June 24.
Clapp, Albert L., Danvers, assignor to Beckwith Manufacturing Company, Boston, Mass. Box toe. 1,765,861; June 24.
Clapp, Stuart H., Washington, D. C., assignor by mesne assignments, to Bendix-Brake Company, Chicago, Ill. Brake mechanism. 1,768,351; June 24.
Clark, Edgar H. (See Lundell, A. E., and Clark.)
Clark, Edgar H., Forest Hills, and W. W. Carpenter, Queens Village, assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y. Automatic telephone-exchange system. 1,767,959; June 24.
Clark, Edgar H., Forest Hills, and W. W. Carpenter, Queens Village, assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y. Automatic telephone exchange. 1,767,960; June 24.
Clark, Edgar H., Forest Hills, and W. W. Carpenter, Queens Village, assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y. Automatic telephone-exchange system. 1,767,961; June 24.
Clark, Edgar H., Forest Hills, and W. W. Carpenter, Queens Village, assignors to Bell Telephone Laboratories, New York, N. Y. Automatic telephone-exchange system. 1,767,962; June 24.
Clark Equipment Company. (See Burger, Frederick W., assignor.)
Clark, Frederick J., Buffalo, N. Y., assignor to Steam Pressing Iron Company, Chicago, Ill. Pressing iron or implement. 1,766,602; June 24.
Clark, Frederick J., Buffalo, N. Y., assignor to Steam Pressing Iron Company, Chicago, Ill. Pressing iron. 1,766,603; June 24.
Clark, Geraldine P., Victoria, British Columbia, Canada. Duplicating machine. 1,767,237; June 24.
Clark Israel L., Riverside, R. I. Collapsible drum. 1,768,438; June 24.
Clark, James W., Chicago, Ill. Wrist-watch strap fastener. 1,765,966; June 24.
Clausing, Pieter. (See de Boer, J. H., and Clausing.)
Cleaver, William F., Montreal, Quebec, assignor to H. A. Peck, Montreal, Quebec, Canada. Track-signaling device. 1,768,524; June 24.
Clelland, William H., Huntington, W. Va. Sheet-glass-cutting machine. 1,766,427; June 24.
Clement, Edgar B., and R. J. Thompson, Jackson, Mich. Windshield screen. 1,766,055; June 24.
Clerc, Reinhard. (See Schoeller, W., Jordan, and Clerc.)
Cleveland, Charles F. (See Miller, C. G., and Cleveland.)
Cleveland Crane & Engineering Company, The. (See Elliott, Harmon P., assignor.)
Cleveland Crane & Engineering Company, The. (See Wehr, William G., assignor.)
Cleveland Pneumatic Tool Company, The. (See Greve, Louis W., assignor.)
Cleveland Pneumatic Tool Company, The. (See Greve J. J., and Beecher, assignors.)
Cleveland Pneumatic Tool Company, The. (See Scott, Arthur, assignor.)
Cleveland Pneumatic Tool Company, The. (See McElroy, John F., assignor.)
Climalene Company, The. (See Schoen, Otto A., assignor.)
Clingestein, Heinrich. (See Grimmel, H., and Clingestein.)
Cloud, Raymond T., assignor to Orchestraphone Company, Chicago, Ill. Acoustical device. 1,767,277; June 24.
Clouse, William L., assignor to The National Machinery Co., Tiffin, Ohio. Header. 1,766,484; June 24.
Clow, James B., & Sons. (See Carnahan, Glen C., assignor.)
Clutter, Bird C., and G. E. Wagner, Akron, Ohio, assignors, by mesne assignments, to Clutter-Wagner, Inc. Full-revolving excavator. 1,765,967; June 24.
Clutter, Le Roy P., Deer Lick, Pa., assignor, by mesne assignments, to Clutter-Wagner, Inc. Excavator. 1,765,905; June 24.
Clutter, Le Roy P. (See Wagner, G. E., and Clutter.)
Clutter-Wagner, Inc. (See Clutter, B. C., and Wagner, assignors.)
Clutter-Wagner, Inc. (See Wagner, George E., assignor.)
Clutter-Wagner, Inc. (See Wagner, G. E., and Clutter, assignors.)
Clutter-Wagner, Inc. (See Clutter, Le Roy P., assignor.)
Coates, John W., Detroit, Mich. Truck. 1,766,104; June 24.
Coby, George, Cranston, R. I., assignor to Tripen Manufacturing Co., Inc., Providence, R. I. Pencil. Des. 81,435; June 24.
Coda Appliance Co. (See Cornetta, Henry C., assignor.)
Coder, Harry S., Bridgeton, N. J. Grade-crossing safety equipment. 1,765,906; June 24.
Coe, James R., assignor to The American Brass Company, Waterbury, Conn. Hook for scrap barrels or other articles. 1,766,507; June 24.
Coe, James R., assignor to The American Brass Company, Waterbury, Conn. Barrel. 1,767,051; June 24.
Coffey, Barton H., Elizabeth, N. J. Refrigeration. 1,765,656; June 24.
Coffey, Barton H., Elizabeth, N. J. Refrigeration. 1,765,657; June 24.
Coffield, Willard M., and T. C. Moore, Little Rock, Ark. Clarifier. 1,766,883; June 24.
Cofrin, Austin E., Green Bay, Wis. Napkin dispenser. 1,768,118; June 24.
Coghill, James T., Mishawaka, Ind., assignor to Dodge Manufacturing Corporation. Belt-conveyer roll with lubrication system. 1,767,743; June 24.
Cohen, Henry, New York, N. Y. Cigarette-holding garter. 1,766,604; June 24.
Cohen, Jacob, Middle Village, N. Y. Garter. 1,765,965; June 24.
Cohen, Moses, New York, N. Y. Suspender back. 1,766,485; June 27.
Cohn, Moses L., Brooklyn, N. Y. Bedspring. 1,768,189; June 24.
Cohoe, Wallace P., Riverdale-on-the-Hudson, N. Y., assignor to Wallace P. Cohoe & Company. Cap closure. 1,767,512; June 24.
Cohoe, Wallace P. & Co. (See Cohoe, Wallace P., assignor.)
Colby, Ora A., Irwin, Pa., assignor to Westinghouse Electric & Manufacturing Company. Two-step switch. 1,765,567; June 24.
Colbert, James A., Liberty Center, Ind. Toy. 1,766,282; June 24.
Coldwell, John S., Fall River, Mass., assignor to Leno Elastic Web Company of Massachusetts. Loom. 1,768,510; June 24.
Cole, Arthur W., assignor to Rex Paper Company, Kalamazoo, Mich. Support for paper rolls and the like. 1,766,105; June 24.
Cole, Horace L., Sharon, Pa., assignor to Westinghouse Electric & Manufacturing Company. Transformer core structure. 1,765,483; June 24.
Cole, Jaudon D. (See Bozeman, J. F., and Cole.)
Coleman, Albert M., Brookline, Mass. Sealing compound. 1,767,170; June 24.
Coleman Automatic Transmission Company. (See Coleman, George B., assignor.)
Coleman, Clarence E., Buffalo, assignor by mesne assignments, to Du Pont-Rayon Company, New York, N. Y. Device for applying oil or other liquid to thread. 1,767,203; June 24.
Coleman, George B., Philadelphia, Pa., assignor to Coleman Automatic Transmission Company. Transmission. 1,767,916; June 24.
Collier, David R., Gardner, Mass., assignor to Collier-Keyworth Company, Gardner, Mass. Chair iron. 1,766,486; June 24.
Collier-Keyworth Company. (See Collier, David R., assignor.)
Collings, Byron B., Washington, D. C., assignor to Chain Belt Company, Milwaukee, Wiss. Concrete mixer. 1,766,605; June 24.

Collins, Arthur E., Cuyhoga Falls, Ohio, assignor by mesne assignments, to Miller Rubber Company Inc., Wilmington, Del. Winding machine. 1,768,190; June 24.
Colquhoun, Peter M., Lakewood, and W. R. Allen, Hudson, assignors to The American Multigraph Company, Cleveland, Ohio. Paper-feeding mechanism. 1,766,106; June 24.
Columbus Auto Brass Company, The. (See Donley, H. B., and Balzer, assignors.)
Commercial Iron Works of Los Angeles. (See Rupp, Carl A., assignor.)
Commercial Pigments Corporation. (See Blumenfeld, Joseph, assignor.)
Compagnie d'Applications Mecaniques. (See Rouanet, Louis, assignor.)
Compagnie des Forges et Acieries de la Marine et d'Homecourt. (See Granat, Elie, assignor.)
Compagnie Internationale Des Wagons-Lits Et Des Grands Express Europeens. (See Hautot, Maurice, assignor.)
Condenser Corporation of America. (See Danziger, Harold I., assignor.)
Condit Electrical Manufacturing Corporation. (See Ainsworth, Chester D., assignor.)
Condit Electrical Manufacturing Corporation. (See Jansson, Gustav E., assignor.)
Congdon, Clem H., Cleveland, Ohio. Aircraft. 1,766,167; June 24.
Conner Crouse Corporation. (See Crouse, G. B., and Jatlow, assignors.)
Conner, Julian B., Humble, Tex. Pump. 1,766,487; June 24.
Conrad, William B., Casper, Wyo. Beet harvester. 1,768,396; June 24.
Consolidated Ashcroft Hancock Company. (See Heman, Emil A., assignor.)
Consor, Herbert A., H. L. Matthes, and A. G. Wuest, assignors to The Weis Manufacturing Company, Monroe, Mich. Visible index system. 1,765,568; June 24.
Consortium für Elektrochemische Industrie G. m. b. H. (See Herrmann, W. O., and Deutsch, assignors.)
Contal, Camille St. Cloud, and P. Krettly, Paris, France. Electric drilling apparatus. 1,768,119; June 24.
Continental Can Company. (See Aulbach, Charles J., assignor.)
Continental Can Company. (See Aulbach, C. J., and Anderson, assignors.)
Continental Can Company. (See Aulbach, C. J., and Punte, assignors.)
Continental Can Company. (See Coyle, J., Taliaferro, and Schmitt, assignors.)
Continental Can Company. (See Flook, George, assignor.)
Continental Can Company. (See Hays, Henry C., assignor.)
Continental Can Company. (See Prahl, F. A., and Fink, assignors.)
Continental Can Company. (See Punte, William F., assignor.)
Continental Can Company. (See Schaal, Norbert J., assignor.)
Continental Gin Company. (See Elliott, Thomas, assignor.)
Continental Tool Works. (See Markstrum, John A., assignor.)
Conway, H. M., et al. (See Shotts, William A., assignor.)
Conway, J. S., et al. (See Shotts, William A., assignor.)
Cook Electric Company. (See Persons, Lawrence M., assignor.)
Cook, John F., jr., Detroit, Mich. Aerofoil. 1,766,107; June 24.
Cook, Roland M. (See Gordon, A. A., and Cook.)
Cook, Stanley G., Auburn, Nebr. Heating stove. 1,767,963; June 24.
Cook, William J., Berwyn, assignor to Western Electric Company, Incorporated, New York, N. Y. Apparatus for forming outlets. 1,765,404; June 24.
Cooke, Allen B., Danville, assignor to United Autographic Register Company, Chicago, Ill. Autographic register. 1,767,204; June 24.
Cooke, Allen B., Danville, assignor to United Autographic Register Company, Chicago, Ill. Autographic register. 1,767,205; June 24.
Cooke, Allen B., Danville, assignor to United Autographic Register Company, Chicago, Ill. Autographic register. 1,767,784; June 24.
Coolidge, Joseph R., 3d, Brookline, Mass., assignor to Montan, Inc., Boston, Mass. Impregnated wood and process of treating wood. 1,766,600; June 24.
Coons, Henry A. (See Thomas, G. B., and Coons.)
Cope, Frank T., assignor to The Electric Furnace Company, Salem, Ohio. Resistor grid. 1,767,171; June 24.
Cope, Frank T., assignor to The Electric Furnace Company, Salem, Ohio. Resistor grid and supporting same. 1,767,172; June 24.
Copelin, Leonard S., Compton, Calif. Reciprocating core drill. 1,766,108; June 24.
Copper Plate Sheet and Tube Company. (See Watkins, William E., assignor.)
Copperweld Steel Company. (See McCrery, H. E., and Jesser, assignors.)
Corbett, Alfred, Irwin, Pa., assignor to Westinghouse Electric & Manufacturing Company. Contact for channel-brush switches. 1,765,569; June 24.
Corbo, Giuseppe, Camden, N. J. Lock for windows and doors. 1,767,435; June 24.
Corey, Percival C., assignor of one-third to J. C. Massey and one-third to C. Wallace, jr., Los Angeles, Calif. Trip casing spear oil-well rotary fishing tool. 1,765,864; June 24.
Cork, Herbert V., Chicago, Ill. Machine for screwing couplings on pipe. 1,765,825; June 24.
Cornetta, Henry C., East Boston, Mass., assignor to Coda Appliance Co., Inc., New York, N. Y. Safety attachment for moving-picture projecting machines. 1,766,607; June 24.
Corning Glass Works. (See Githler, Charles E., assignor.)
Corser, John. (See Sardeson, R., LaMere, and Corser.)
Cotten, Caleb, Salt Lake City, Utah, and I. P. Duncan, Los Angeles, Calif., assignors to said I. P. Duncan, as trustee. Can opener. 1,766,109; June 24.
Cotton, Walter H. (See Cardwell, J. R., and Cotton.)
Cotton, William, Hochst-on-the-Main, Germany, assignor to General Aniline Works, Inc., New York, N. Y. Producing fast-colored resists under aniline black. 1,765,658; June 24.
Coulter, Samuel P., Muncie, Ind. Water-tube boiler. 1,767,173; June 24.
Courtney, Benjamin B., New Orleans, La. Surgical saddlette. 1,768,397; June 24.
Cousins, Van M., Lyndhurst, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Vacuum-tube circuits. 1,767,964; June 24.
Coward, William J., Lakeland, Fla., assignor of one-half to C. H. Phillips, Binghamton, N. Y. Time-controlled switch. 1,767,347; June 24.
Cowdrey, Charles F., assignor, by mesne assignments, to Bendix-Cowdrey Brake Tester, Inc., Fitchburg, Mass. Automobile brake-testing machine. 1,767,348; June 24.
Cowle, Paul W. (See Lannert, W. H. J., and Cowle.)
Cox, Charles F., Omaha, Nebr. Glare protector. 1,766,884; June 24.
Cox, Jop W., and E. A. Randall, Hot Springs, Ark. Tire tool. 1,768,032; June 24.
Cox, Ralphe H. (See McCassey, G. L., and Cox.)
Coyle, John, J. C. Taliaferro, jr., and O. A. Schmitt, Baltimore, Md., assignors to Continental Can Company, Inc., New York, N. Y. Machine for closing filled cans. 1,767,965; June 24.
Cozzolino, Donato, Los Angeles, Calif. Stabilizing cereal beverages. 1,766,428; June 24.
Craig, Clay, West Frankfort, Ill. Wheel-attaching device. 1,766,375; June 24.
Cram, Leroy V., and C. W. McKinley, assignors, by mesne assignments, to A C Spark Plug Company, Flint, Mich. Oil-filter installation. 1,768,511; June 24.
Crane Company of Minnesota. (See Hougland, Albert C., assignor.)
Cranston, Albert E., Spokane, Wash. Corrugated-fastener driving mechanism. 1,767,580; June 24.
Crapo, John B., East Wakefield, N. H. Clamping device. 1,766,488; June 24.
Crater, Willard S., Columbus, Ohio. Dermatological instrument. 1,765,366; June 24.
Creveling, John L., Oracle, Ariz, assignor, by mesne assignments, to Simplex Equipment Company, Inc., New York, N. Y. Electric regulation. 1,766,489; June 24.
Creveling, John L., near Tucson, Ariz., assignor, by mesne assignments, to Simplex Equipment Company, Inc., New York, N. Y. Electric system. 1,766,490; June 24.
Crews, Clarence M., Jackson Heights, N. Y. Air-cooled motor. 1,766,608; June 24.
Crill, Alphonso, Nampa, Idaho. Head gate. 1,768,120; June 24.
Crittenden, G. A., et al. (See Ragland, Jack R., assignor.)
Cromar Company, The. (See Dittmar, Irvin F., assignor.)
Crombie, Charles G. (See Shields, B. F., and Crombie.)
Crombie, Robert C. (See Crombie, Thomas J. and R. C.)
Crombie, Rose, executrix. (See Crombie, Thomas J. and R. C.)
Crombie, Thomas J., deceased, and R. C. Crombie, California, Pa.; R. Crombie, executrix, assignor to said Robert C. Crombie. Dirt and dust remover for mining machines. 1,766,429; June 24.
Crompton & Knowles Loom Works. (See Bergstrom, C. P., and Lindegren, assignors.)
Crompton & Knowles Loom Works. (See Favor, Henry S., assignor.)
Crompton & Knowles Loom Works. (See Foster, Herbert V., assignor.)
Crompton & Knowles Loom Works. (See Gordon, Albert A., assignor.)
Crompton & Knowles Loom Works. (See Gordon, A. A., and Cook, assignors.)
Crompton & Knowles Loom Works. (See Holmes, Elbridge R., assignor.)
Crompton & Knowles Loom Works. (See Hutchins, Allan S., assignor.)
Crompton & Knowles Loom Works. (See Jennings, Victor H., assignor.)
Crompton & Knowles Loom Works. (See King, William H., assignor.)
Crompton & Knowles Loom Works. (See Lindegren, Carl J., assignor.)
Crompton & Knowles Loom Works. (See Lundgren, William E., assignor.)
Crompton & Knowles Loom Works. (See Nelson, Samuel A., assignor.)
Crompton & Knowles Loom Works. (See Nelson, Samuel A.)

Crompton & Knowles Loom Works. (See Paine, Arthur P., assignor.)
Crompton & Knowles Loom Works. (See Pasholan, Harry G., assignor.)
Crompton & Knowles Loom Works. (See Payne, Oscar V., assignor.)
Crompton & Knowles Loom Works. (See Shutt, George H., assignor.)
Crompton & Knowles Loom Works. (See Stewart S., Allen, and Roy, assignors.)
Crompton & Knowles Loom Works. (See Tinsley, John F., assignor.)
Crompton & Knowles Loom Works. (See Turner, Richard G., assignor.)
Crompton & Knowles Loom Works. (See Unwin, Kenneth J., assignor.)
Crompton & Knowles Loom Works. (See Wakefield, Walter H., assignor.)
Crompton & Knowles Loom Works. (See Wattie, William M., assignor.)
Crook, Alfred I., Lansdowne, Pa. Traffic-signal projector. 1,768,191; June 24.
Crook, Louis H., Washington, D. C. Wing system with stabilizing vanes for aircraft. 1,767,966; June 24.
Crosby, Earle M., Birmingham, Mich., assignor, by mesne assignments, to United-Carr Fastener Corporation, Cambridge, Mass. Machine for sorting and setting fasteners. 1,767,513; June 24.
Crosley Radio Corporation, The. (See Bussard, Emmery J. H., assignor.)
Crosley Radio Corporation, The. (See Bussard, E. J. H., and Kilgour, assignors.)
Cross Parking Systems, Inc. (See Jenney, Robert T., assignor.)
Cross, Paul A., Takoma Park, Md. Brush. 1,767,349; June 24.
Crossley, Alfred, Washington, D. C., assignor, by mesne assignments, to Federal Telegraph Company. Piezo-electric crystal apparatus. 1,766,036; June 24.
Crouse, George B., Woodcliff, and J. L. Jatlow, Elizabeth, N. J., assignors to Conner Crouse Corporation, New York, N. Y. Voltage regulator. 1,767,052; June 24.
Crouse-Hinds Company. (See Pearson, John T., assignor.)
Crowell, Erd V., Los Angeles, Calif. Rotary drill mechanism. 1,767,350; June 24.
Crowell, William J., jr., Wyncote, Pa. Combustion-control apparatus. 1,766,980; June 24.
Crowell, William J., jr., Wyncote, Pa. Automatic reaction control. 1,766,981; June 24.
Crown Cork & Seal Company. (See Mandrich, Bell, assignor.)
Crull, Alice C., Inglewood, Calif. Extensible and collapsible envelope file. 1,766,777; June 24.
Cudahy Packing Company, The. (See Parsons, Llewellyn B., assignor.)
Cude, Harold E. (See Rose, R. P., and Cude.)
Culver, Bert L. (See Hart, Glenn A., assignor.)
Cumfer, Harry A., assignor to Guyton & Cumfer Mfg. Co., Chicago, Ill. Cutting cylinder. 1,766,244; June 24.
Cumfer, Harry A., Chicago, Ill., assignor of one-half to W. J. Mason, Greenwich, Conn. Plaster-receiving board. 1,766,982; June 24.
Cummings, James G. (See Sullivan, William S., assignor.)
Curtin, Peter A., Buffalo, N. Y. Cuff button. 1,767,436; June 24.
Curtis, Arthur R., Cleveland, Ohio. Supporting and driving means for gyratory shafts. 1,767,053; June 24.
Curtis, Charles G., and E. R. Newton, assignors to Curtis Gas Engine Corporation, New York, N. Y. Power plant. 1,765,716; June 24.
Curtis Gas Engine Corporation. (See Curtis, C. G., and Newton, assignors.)
Curtis, Wallace A., New York, N. Y. Dumbwaiter closing and locking device. 1,768,121; June 24.
Curtiss Candy Company, The. (See Melville, H. J., and Atchison, assignors.)
Cushing, Daniel, Cambridge, Mass. Metallurgical furnace. 1,766,110; June 24.
Cushman, Charles S., Barre, Vt. Stone polisher. 1,766,012; June 24.
Cuthbertson, James W., Los Angeles, assignor to A. L. Erickson, Turlock, Calif. Heater. 1,767,581; June 24.
Cuthbertson, James W., Los Angeles, assignor of one-half to A. L. Erickson, Turlock, Calif. Swimming appliance. 1,767,651; June 24.
Cutler-Hammer Inc. (See Hutton, Ulric O., assignor.)
Cutler-Hammer, Inc. (See Laabs, Eric H., assignor.)
Cutler-Hammer, Inc. (See Lightfoot, Edwin N., assignor.)
Cutler-Hammer, Inc. (See Meuer, G. J., and Stevens, assignors.)
Cutler-Hammer, Inc. (See Mortensen, Niels L., assignor.)
Cutler-Hammer, Inc. (See Packard, Horace N., assignor.)
Cutler-Hammer, Inc. (See Pinkerton, Clarence S., assignor.)
Cutler-Hammer Inc. (See Seeger, Edwin W., assignor.)
Cuyler, George W. (See Stone, G. M., and Cuyler.)
Czemba, Frank C., and H. W. Wilson, Duluth, Minn. Rolling-mill housing. 1,765,907; June 24.
Dady, Arthur O., Portland, Oreg. Automatic stoker. 1,766,056; June 24.
Dain Manufacturing Company of Iowa. (See Toms, Barney, assignor.)
Dake, Charles W., assignor to The Pyle-National Company, Chicago, Ill. Photometer. 1,766,219; June 24.
Daisy Manufacturing Company. (See Lefever, Charles F., assignor.)
Dale Forty and Company. (See Wyndham, John H., assignor.)
Dalén, Gustaf, Stockholm, Sweden, assignor to American Gasaccumulator oCmpany, Elizabeth, N. J. Porous mass for the storage of explosive gases and making same. 1,767,514; June 24.
Daley, Walter A., assignor to Bell & Gossett Company, Chicago, Ill. Tube assembly for heat-transfer devices. 1,767,652; June 24.
Dallas, Charles D., Chicago, Ill. Coiling machine. 1,767,835; June 24.
Dalton, Ernest E., and C. J. Ringle, Chicago, Ill. Investing denture models and patterns. 1,767,351; June 24.
Dambianc, Louis, Paris, France. Crank shaft. 1,767,352; June 24.
Damerell, Mark H., assignor to Wyman-Gordon Company, Worcester, Mass. Centering machine. 1,766,812; June 24.
Dana, Leslie, St. Louis, Mo., assignor to Charter Oak Stove and Range Company. Stove construction. 1,766,111; June 24.
Danforth, George L., jr., and A. E. Peterson, assignors to Open Hearth Combustion Company, Chicago, Ill. Checkerwork. 1,766,283; June 24.
Daniel, Earle H., Springfield, Ohio. Hitching device for tractor-drawn implements. 1,765,788; June 24.
Daniel, J. E. B. (See Bess, Robert H., assignor.)
Danko, Julius, Toledo, Ohio. Airplane. 1,766,284; June 24.
Danziger, Harold I., New York, N. Y., assignor to Condenser Corporation of America, Jersey City, N. J. Foil condenser and making the same. 1,767,206; June 24.
Darby, Howard E. (See Klausmeyer, D. C., and Darby.)
Dark, Ray O., Shreveport, La. Revetment. 1,768,309; June 24.
Darrow, William W. (See Heinen, F. C., and Darrow.)
Darrow, William W. (See Madland, G., and Darrow.)
Dath, Charles E., assignor to W. H. Miner, Inc., Chicago, Ill. Yoke means. 1,766,609; June 24.
Dauvillier, Alexandre, Paris, France. Television system. 1,766,885; June 24.
Davey, William, Cleveland, Ohio. Device for recutting valve seats. 1,759,968; June 24.
Davidoff, Samuel, Milwaukee, Wis. Pocket reenforcement. 1,767,967; June 24.
Davidson, Walter C., North Canton, Ohio, assignor to The Hoover Company. Suction cleaner. 1,767,744; June 24.
Davidson & Company Limited. (See Whitmore, John, assignor.)
Davis, Alvan L., Waterbury, assignor to Scovill Manufacturing Company, Waterbury, Conn. Metal article. 1,767,653; June 24.
David, Aubrey D., assignor to The Universal Oil Products Company, Chicago, Ill. Destructive distillation of petroleum oil. 1,766,983; June 24.
Davis, Cecil J., assignor to The Ohio Machine Tool Company, Kenton, Ohio. Shaper. 1,766,168; June 24.
Davis, Charles E., Chicago, assignor to Goodman Manufacturing Company, Chicago, Ill. Mining machine. 1,765,524; June 24.
Davis, Charles E., Davenport, Fla., assignor to Goodman Manufacturing Company, Chicago, Ill. Apparatus for handling loose material. 1,765,525; June 24.
Davis, Charles E., Davenport, Fla., assignor to Goodman Manufacturing Company, Chicago, Ill. Mining machine. 1,765,570; June 24.
Davis, Clarence K., and A. Dick, Los Angeles, Calif. Thermostatic electric switch. 1,766,430; June 24.
Davis, Ernest L., assignor to The Acetylene Stove Manufacturing Company, Cleveland, Ohio. Burner. 1,768,234; June 24.
Davis, Ernest W., Oak Park, assignor to Alemite Corporation, Chicago, Ill. Lubricating system. 1,767,515; June 24.
Davis, Ernest W., Oak Park, assignor to Alemite Corporation, Chicago, Ill. Lubricating system and apparatus. 1,767,516; June 24.
Davis, Frances W., Waltham, Mass. Pump. 1,766,610; June 24.
Davis, George H., Augusta, Me. Landing gear for airplanes. 1,766,245; June 24.
Davis, Henry K. B., Mamaroneck, assignor to Mavis Machine Corporation, New York, N. Y. Method and apparatus for shaping shafts. 1,767,836; June 24.
Davis, Lee I., New York, N. Y., assignor to Otis Elevator Company, Jersey City, N. J. Control system. 1,768,122; June 24.
Davis, Lewis H., Upper Darby, and R. T. Kingsford, Wyncote, assignors to Atwater Kent Manufacturing Company, Philadelphia, Pa. Loud speaker. 1,767,837; June 24.
Davis, Roy P. M., Mount Union, Pa. Brickmaking machine. 1,766,285; June 24.
Davis, Roy P. M., Mount Union, Pa. Brick-making machine. 1,766,286; June 24.
Davis, Walter B., Aurora, Ill. Speed regulator for motor vehicles. 1,765,659; June 24.

Daw, Joseph, Quebec, Quebec, Canada., assignor to Brown Company, Berlin, N. H. Portable chain saw. 1,766,013; June 24.
Dawes, Arthur W., Cedarhill, assignor to General Aniline Work, Inc., New York, N. Y. Reduction of aromatic nitro compounds. 1,765,660; June 24.
Dawson, Leo H., Washington, D. C., assignor, by mesne assignments, to Federal Telegraph Company. Piezo-electric crystal apparatus. 1,766,037; June 24.
Day, Salisbury M., Rochester, N. Y., assignor to General Railway Signal Company, Gates, N. Y. Sighting attachment for electric semaphore lamps. 1,765,865; June 24.
Day, Salisbury M., assignor to General Railway Signal Company, Rochester, N. Y. Relay. 1,766,611; June 24.
Day, Zeno W., Newark, N. J. Display device. 1,767,745; June 24.
Dean, Charles G., Milwaukee, Wis. Portable electric water heater. 1,767,122; June 24.
Dean, George E., assignor to C. C. Willett, Grand Rapids, Mich. Road scraper. 1,765,969; June 24.
Deane, John B., Brooklyn, N. Y. Loud-speaker diaphragm mounting. 1,766,014; June 24.
Deatz, Adam C., Kansas City, Mo. Weed guard for fishing lines. 1,768,033; June 24.
Deberag, Deutsche Beratungsgellschaft für die Chemische und Metallurgische Industrie m. b. h. (See Kramer, Andreas, assignor.)
Debilcux, John, Opelousas, La. Signaling device for motor vehicles. 1,768,034; June 24.
De Boer, Jan H., and P. Clausing, assignors to N. V. Philips' Gloeilampenfabrieken, Eindhoven, Netherlands. Discharge tube. 1,767,437; June 24.
Decarie Incinerator Corporation. (See Woodman, Joseph C., assignor.)
De Croce, Gennero. (See McCoy, J. L., and De Croce.)
De Dorlodot, Eugène, Paris, France. Separating, disintegrating, and mixing apparatus. 1,767,353; June 24.
Deere & Company. (See Neighbour, Leonard B., assignor.)
Deere & Company. (See Sklovsky, Mas, assignor.)
De Fleury, Raymond, Paris, France. Piston for engines and manufacture of these pistons. 1,766,431; June 24.
De Florez, Luis, Pomfret, Conn., assignor to The Texas Company, New York, N. Y. Apparatus for flow control. 1,768,353; June 24.
De Forest, Lee, New York, N. Y., assignor, by mesne assignments, to General Talking Pictures Corporation. Sound-reproducing device. 1,766,612; June 24.
De Groote, Melvin, St. Louis, and L. T. Monson, Maplewood, assignors to Wm. S. Barnickel & Company, Webster Groves, Mo. Breaking petroleum emulsions. 1,766,057; June 24.
De Groote, Melvin, St. Louis, and L. T. Monson, Maplewood, assignors to Wm. S. Barnickel & Company, Webster Groves, Mo. Breaking petroleum emulsions. 1,766,058; June 24.
De Groote, Melvin, St. Louis, and L. T. Monson, Maplewood, assignors to Wm. S. Barnickel & Company, Webster Groves, Mo. Breaking petroleum emulsions. 1,766,059; June 24.
De Groote, Melvin, St. Louis, and L. T. Monson, Maplewood, assignors to Wm. S. Barnickel & Company, Webster Groves, Mo. Breaking petroleum emulsions. 1,766,060; June 24.
De Groote, Melvin, St. Louis, and B. Keiser, assignors to Wm. S. Barnickel & Company, Webster Groves, Mo. Breaking petroleum emulsions. 1,766,061; June 24.
De Groote, Melvin, St. Louis, and B. Keiser, assignors to Wm. S. Barnickel & Company, Webster Groves, Mo. Breaking petroleum emulsions. 1,766,062; June 24.
De Groote, Melvin, St. Louis, and L. T. Monson, Maplewood, assignors to Wm. S. Barnickel & Company, Webster Groves, Mo. Breaking petroleum emulsions. 1,766,063; June 24.
De Groote, Melvin, St. Louis, and L. T. Monson, Maplewood, assignors to Wm. S. Barnickel & Company, Webster Groves, Mo. Breaking petroleum emulsions. 1,766,064; June 24.
De Groote, Melvin, St. Louis, and L. T. Monson, Maplewood, assignors to Wm. S. Barnickel & Company, Webster Groves, Mo. Breaking petroleum emulsions. 1,766,065; June 24.
De Groote, Melvin, St. Louis, and A. F. Wirtel, assignors to Wm. S. Barnickel & Company, Webster Groves, Mo. Breaking petroleum emulsions. 1,766,066; June 24.
De Groote, Melvin, St. Louis, and L. T. Monson, Maplewood, assignors to Wm. S. Barnickel & Company, Webster Groves, Mo. Breaking petroleum emulsions. 1,766,112; June 24.
De Groote, Melvin, St. Louis, L. T. Monson, Maplewood, and A. F. Wirtel, assignors to Wm. S. Barnickel & Company, Webster Groves, Mo. Breaking petroleum emulsions. 1,766,067; June 24.
Dehne, Karl, Burgstadt, Germany. Molding apparatus for making dentures and plates for dental purposes. 1,766,113; June 24.
Dehnel, Erich, Rossen, near Merseburg, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Stable ammonium bicarbonate. 1,766,705; June 24.
Deisley, Edward J., assignor to Edward G. Budd Manufacturing Co., Philadelphia, Pa. Door-window frame. 1,767,517; June 24.
De Korwin-Sokolowski, Joseph, Brussels, Belgium. Flying machine. 1,766,330; June 24.
De Lannoy, George C., Yountville, Calif., assignor to Holland Furnace Company, Holland, Mich. Instantaneous electric water heater. 1,766,068; June 24.
Delany, Edward L., assignor to Delany Realty Corporation, Brooklyn, N. Y. Flush-valve operating lever. 1,766,491; June 24.
Delany Realty Corporation. (See Delany, Edward L., assignor.)
De Lashmé, Faye, Palisades Park, N. J. Signal device. 1,766,613; June 24.
Delattre-Seguy, Jean, assignor to Universal Oil Products Company, Chicago, Ill. Cracking oil. 1,766,246; June 24.
Delco Products Corporation. (See Chryst, William A., assignor.)
Delco-Remy Corporation. (See Kindl, Carl H., assignor.)
Delco-Remy Corporation. (See Norviel, Harry E., assignor.)
Delco-Remy Corporation. (See Perkins, Laurence M., assignor.)
De Leeuw, Adolph L., Plainfield, N. J., assignor of one-half to A. F. Nathan, New York, N. Y. Hardness-measuring means. 1,768,512; June 24.
De Long, Robert B., assignor of one-half to L. R. Scafe, Cleveland, Ohio. Floating dock. 1,765,405; June 24.
Delpini, José L., Buenos Aires, Argentina. Transport vehicle and the like. 1,766,506; June 24.
Deluca, Giuseppe, Rayland, Ohio. Pipe wrench. 1,766,778; June 24.
De Luna Perez, Miguel, Barcelona, Spain. Station and route indicator for railway trains, trams, and other fixed-route vehicles. 1,768,235; June 24.
Demag Aktien Gesellschaft. (See Heetkamp, Heinrich, assignor.)
Demek, Ambroz, Granger, Tex. Nutcracker. 1,767,917; June 24.
De Marco, Louis, Cleveland, Ohio. Carburetor. 1,765,406; June 24.
Dennis, John W., assignor to The Philadelphia Drying Machinery Company, Philadelphia, Pa. Automatic carrier-turning mechanism for drying machines. 1,766,984; June 24.
Dennis, Oliver C., Wilmette, Ill. Radioreceiver. 1,767,518; June 24.
Denyes, Harry M., Saginaw, assignor to General Motors Corporation, Detroit, Mich. Horn button. 1,768,513; June 24.
Depfer, William, Donora, Pa. License-plate holder for automobiles. 1,768,192; June 24.
Derry, Gardner C., Sharon, assignor to B. F. Sturtevant Company, Hyde Park, Mass. Heat-exchange apparatus. 1,765,970; June 24.
De Sanno, Frederick L. (See Maynard, B. B., and De Sanno.)
De Sushko, Alexander, Chicago, Ill. Urethral bougie. 1,767,785; June 24.
Detzel, Lynn, Brooklyn, N. Y. Parachute. 1,767,968; June 24.
Detrick, M. H., Company. (See Sheahan, Frank I., ascome, assignors.)
Detrick, M. H., Company. (See Sheahon, Frank I., assignor.)
Deuel, Harry A., Pittsburgh, Pa. Method of and apparatus for casting metal ingots. 1,767,055; June 24.
Deutsch, Hans. (See Herrmann, W. O., and Deutsch.)
Deutsche Pyrotechnische Fabriken A.-G. et al. (See Thiecke, Julius, assignor.)
Doutt, Owen, Detroit, Mich., assignor, by mesne assignments, to General Spring Bumper Corporation. Bending machine. 1,765,790; June 24.
De Vita, Salvatore, Philadelphia, Pa. Door latch. 1,768,193; June 24.
Dew, John R., South Jacksonville, Fla., and R. Guffey, Somerset, Ky. Flowerpot holder. Des. 81,436; June 24.
Dewend, William D., South Bend, Ind., assignor, by mesne assignments, to Oliver Farm Equipment Company. Harrow. 1,767,654; June 24.
Dewoitine, Emile J. E., Chatillon-Sous-Bagneux, France. Attaching on fuselages wings having single spars. 1,766,376; June 24.
Dexter Company, The. (See Weller, Randolph V., assignor.)
Diamond Crystal Salt Company. (See Downing, William F., jr., assignor.)
Diamond Power Specialty Corporation. (See Snow, Norman L., assignor.)
Diamond Power Specialty Corporation. (See Snow, Norman L., assignor.)
Diamond Power Specialty Corporation. (See Snow, N. L., and Honywill, assignors.)
Dick, Arthur. (See Davis, C. K., and Dick.)
Dickinson, Wilbur K., Lynn, Mass., assignor to General Electric Company. Transformer protective switch. 1,768,398; June 24.
Dieterle, Paul, Buffalo, assignor to National Aniline & Chemical Company, Inc., New York, N. Y. Reduction of aromatic nitro compounds. 1,765,367; June 24.
Dietrich, William C. (See Roman, H. J., and Dietrich.)
Dillingham Manufacturing Co. (See Barrows, Harry E., assignor.)
Dillon, Oval L., assignor to V. L. Phillips, Kansas City, Mo. Steam-generating plant. 1,768,514; June 24.
Disibio, Angelo, Pittsburg, Calif. Adjustable clamp. 1,765,826; June 24.

Ditchburn, Herbert, Gravenhurst, Ontario. Motor boat. 1,765,789; June 24.

Di Tella, Torcuato, Buenos Aires, Argentina. Liquid-dispensing apparatus. 1,766,287; June 24.

Dittes, Henry, Minneapolis, Minn. Oil burner. 1,765,827; June 24.

Dittmar, Irvin F., assignor to The Cromar Company, Williamsport, Pa. Machine for coating strips of lumber. 1,766,779; June 24.

Ditto, Incorporated. (See Pederson, John P., assignor.)

Dixon, Albert H., T. S. Robson, Seattle, Wash., and F. A. Henschell, Vancouver, British Columbia, Canada. Making shredders. 1,768,462; June 24.

Dixon, Albert H., T. S. Robson, Seattle, Wash., and F. A. Henschell, Vancouver, British Columbia, Canada. Shredder. 1,768,463; June 24.

Dobson, William A., Bridgeport, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y. Typewriting machine. 1,767,278; June 24.

Dodds, Lee L. (See Griffith, T. E., and Dodds.)

Dodge Manufacturing Corporation. (See Coghill, James T., assignor.)

Dodge Manufacturing Corporation. (See Isbell, Donald K., assignor.)

Dodge Manufacturing Corporation. (See Strong, Arthur P., assignor.)

Dodge, Ralph E., San Francisco, Calif. Lift bridge. 1,765,407; June 24.

Doehler Die-Casting Co. (See Corin, Louis H., assignor.)

Doehler Die-Casting Co. (See Pack, C., and Fox, assignors.)

Doehler Vending Machines Inc. (See Corin, Louis H., assignor.)

D'Olive, Charles R., assignor to The Fyr-Fyter Company, Dayton, Ohio. Fire extinguisher. 1,766,985; June 24.

Dollar Savings and Trust Company, The, et al., executors. (See Pince, Alfred G.)

Domaratius, William E., Brooklyn, N. Y. Ice pick. 1,768,035; June 24.

Donley, Harold B., and H. Balzer, assignors to The Columbus Auto Brass Company, Columbus, Ohio. Oil measure. 1,766,069; June 24.

Donmac Products Corporation. (See Mackenzie, Donald G., assignor.)

Donnell, Sophia O., Tampa, Fla. Article carrier for airplane delivery. 1,768,194; June 24.

Donnelly, Edward F., Malden, Mass. Vacuum radiator valve. 1,767,056; June 24.

Donnelly, John R. (See Hall, A. W., and Donnelly.)

Donovan, John J., Lynn, Mass. Machinery used in the manufacture of leather goods and fabrics. 1,768,236; June 24.

Dootson, Norman L., San Francisco, Calif. Shock absorber. 1,766,288; June 24.

Dorer, Oscar H., East Orange, and G. H. van Hengel, Orange, N. J., assignors to Worthington Pump and Machinery Corporation, New York, N. Y. Packing. 1,766,706; June 24.

Dorrance, David W., San Jose, Calif. Artificial hand. 1,768,036; June 24.

Dotter, Arthur L., Pittsburgh, Pa., assignor to Mine Safety Appliances Company. Process and apparatus for purifying air. 1,767,057; June 24.

Doud, Hobart P., and B. A. Logan, Decatur, Ill. Automobile transportation-supporting device. 1,766,289; June 24.

Dow Chemical Company, The. (See Barstow, E. O., and Heath, assignors.)

Dow Chemical Company, The. (See Hoy, John E., assignor.)

Downing, William F., jr., assignor to Diamond Crystal Salt Company, St. Clair, Mich. Method and apparatus for the manufacture of salt. 1,768,390; June 24.

Doyle, William J., assignor to The Williamson Heater Company, Cincinnati, Ohio. Smoke-consuming device. 1,765,828; June 24.

Drake, John L., assignor to Libbey-Owens Glass Company, Toledo, Ohio. Glass-surfacing apparatus. 1,767,123; June 24.

Dranter, John F., and M. Panek, Chicago, Ill. Bolt lock. 1,767,438; June 24.

Draper Corporation. (See Burdett, Horace H., assignor.)

Dreiske, William D., Oak Park, Ill. Automatic regulator. 1,767,655; June 24.

Drennan, Harold W., Conover, Ohio. Automatic clutch release. 1,765,908; June 24.

Drew, Clayton L., San Francisco, Calif. Automobile reverse-control mechanism. 1,766,114; June 24.

Driscoll, Fred, Nisland, S. Dak. Beet-harvesting machine. 1,768,195; June 24.

Driy, John A. (See Pfaff, A. J., Driy, and Sinning.)

Drohen, James L., Dunkirk, N. Y. Adjustable awning. 1,767,969; June 24.

Dubilier, William, New York, N. Y., assignor to Dubilier Condenser Corporation. Condenser. 1,768,439; June 24.

Dubilier, William, assignor to Dubilier Condenser Corporation, New York, N. Y. Condenser kit. 1,768,440; June 24.

Dubilier, William, New Rochelle, assignor to Dubilier Condenser Corporation, New York, N. Y. Electrical condenser. 1,768,441; June 24.

Dubilier, William, New Rochelle, assignor to Dubilier Condenser Corporation, New York, N. Y. Electrical condenser. 1,768,442; June 24.

Dubilier Condenser Corporation. (See Nyman, Alexander, assignor.)

Dubilier Condenser Corporation. (See Van Deventer, Harry R., assignor.)

Dubilier Condenser Corporation. (See Dubilier, William, assignor.)

Dubilier, Condenser Corporation. (See Heiny, Anatole C., assignor.)

Duffy, William J. (See Glidden, A. A., Knowland, and Duffy.)

Dulin, Thomas C., assignor of one-half to H. Fox., Easton, Md. Submarine-escape buoy. 1,768,037; June 24.

Dumonde, Pierre, Inc. (See Weil, Louis B., assignor.)

Duncan, James F., Waterville, Conn. Valve-rod guide for flush tanks. (1,767,519; June 24.

Duncan, Israel P. (See Cotten, C., and Duncan.)

Duncan, Israel P., trustee. (See Cotten, C., and Duncan, assignors.)

Dunn, Clifford E., Short Hills, N. J. Shock absorber. 1,767,520; June 24.

Dunn, Edward L. (See Lindquist, D. L., Dunn, and Larson.)

Dünnebier, Max. (See Winkler, A., and Dünnebier.)

Dunning Compressor Co. (See Myers, Frederick A., assignor.)

Duplex Paper Bag Company, The. (See Buchanan, William A., assignor.)

Du Pont Rayon Company. (See Coleman, Clarence E., assignor.)

Du Pont Rayon Company. (See Gladding, Ernest K., assignor.)

Du Pont Rayon Company. (See Kraft, Fred G., assignor.)

Dupré, Wilfred, Worcester, Mass. Convertible automobile body. 1,766,015; June 24.

Durnell, Harold, G. and S. T. Steel, Bartlesville, Okla. Pull-rod clamp. 1,768,038; June 24.

Duty, Dorsey G., and R. P. Skerritt, Detroit, Mich. Servomotor for brakes. 1,765,760; June 24.

Dyer, James D., Kansas City, Mo. Automobile inclosure and shield construction. 1,765,860; June 24.

Dysthe, Martinius. (See Roberts, G., and Dysthe.)

Eagle Chemical Company. (See Jones, William E., assignor.)

Earl, William B., Leominster, Mass. Folding case for timepieces. 1,765,971; June 24.

Eastern Expanded Metal Company. (See Edson, J. W., Stone, and Arnold, assignors.)

Eastes, James B., Konawa, Okla. Oil-dispensing pump. 1,767,354; June 24.

Eastman Kodak Company. (See Seel, Paul C., assignor.)

Eaton Axle & Spring Company, The. (See Bell, Charles H., assignor.)

Eaton Axle & Spring Company, The. (See Howe, James M., assignor.)

Eaton Axle and Spring Company, The. (See Reed, George R., assignor.)

Eaton Axle and Spring Company, The. (See Reid, James S., assignor.)

Eberhardt, Herman, Breslau, Germany. Apparatus for sorting guts. 1,765,909; June 24.

Eckert, Wilhelm, and H. Greuene, Frankfort-on-the-Main-Hochst, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Derivatives of 1,4,5,8-Naphthalene tetracarboxylic acid and preparing it. 1,765,662; June 24.

Eckert, Wilhelm, and H. Greuene, Hochst-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Derivatives of 1.4.5.8 naphthalene-tetracarboxylic acid and preparing it. 1,765,662; June 24.

Eclipse Machine Company. (See Chilton, Roland, assignor.)

Eclipse Machine Company. (See Lansing, Raymond P., assignor.)

Economy Aluminum Company. (See Bremer, William S., assignor.)

Economy Products Corporation. (See Woodjard, Guy L., assignor.)

Edelman, Philip E., assignor to E. Banning, Chicago, Ill. Loud acoustic condenser. 1,767,656; June 24.

Edelman, Philip E., assignor to Ephraim Banning, Chicago, Ill. Capacity reproducer. 1,767,657; June 24.

Edelmann, E., & Co. (See Edelmann, Leo, assignor.)

Edelmann, Leo, assignor to E. Edelmann & Co., Chicago, Ill. Protective device for hydrometers. 1,767,355; June 24.

Edelmann, Leo, assignor to E. Edelmann & Co., Chicago, Ill. Specific gravity tester. 1,767,439; June 24.

Edgcomb, Leon G., Pasadena, Calif. Device for bunting bars and muntings in sash and door constructions. 1,766,707; June 24.

Ediger, Henry D., Henderson, Nebr. Corn-sheller blower. 1,766,492; June 24.

Edson, John W., Cambridge, H. S. Stone, Walpole, and D. B. Arnold, Brookline, Mass., assignors to Eastern Expanded Metal Company, Cambridge, Mass. Method and apparatus for making lath material. 1,765,571; June 24.

Edwards, Frank W., assignor to The Chicago Lubricator Company, Chicago, Ill. Auxiliary valve for locomotives. 1,867,515; June 24.

Edwards, Frank W., assignor to The Chicago Lubricator Company, Chicago, Ill. Lubricator. 1,768,516; June 24.

Edwards Manufacturing Company, The. (See Richmond, Samuel, assignor.)

Egbert, Charles C., Niagara Falls, N. Y. Implement for filling farinaceous tubular rolls with food products. 1,767,918; June 24.

Egloff, Gustav. (See Morrell, J. C., and Egloff.)

Egloff, Gustav, assignor to Universal Oil Products Company, Chicago, Ill. Process and apparatus for cracking oil. 1,766,331; June 24.

Egloff, Gustav, assignor to Universal Oil Products Company. Chicago, Ill. Apparatus for cracking oil. 1,766,986; June 24.

Egloff, Gustav, assignor to Universal Oil Products Company, Chicago, Ill. Cracking petroleum oil. 1,766,987; June 24.

Egloff, Gustav, assignor to Universal Oil Products Company, Chicago, Ill. Apparatus for converting hydrocarbons. 1,767,838; June 24.

Egloff, Gustav, and H. P. Benner, assignors to Universal Oil Products Company, Chicago, Ill. Converting oil. 1,765,663; June 24.

Egloff, Gustav, and H. P. Benner, assignors to Universal Oil Products Company, Chicago, Ill. Process and apparatus for treating oils. 1,767,839; June 24.

Egry Register Company, The. (See Bartholdi, Henry, assignor.)

Egry Register Company, The. (See Pfeiffer, Frank E., assignor.)

Egry Register Company, The. (See Pfeiffer, William C., assignor.)

Eichenberger, Ferdinand, Aarau, Switzerland, assignor, by mesne assignments, to Globar Corporation, Ningara Falls, N. Y. Producing electrical-resistance elements. 1,765,572; June 24.

Eichenberger, Ferdinand, Aarau, Switzerland, assignor to Globar Corporation, Ningara Falls, N. Y. Electrolytic rectifier. 1,765,573; June 24.

Eichwede, Heinz, and E. Fischer, Hochst-on-the-Main, Germany, assignor to General Aniline Works, Inc., New York, N. Y. Sulfoarylprazolonocarboxylic acid, esters and making same. 1,766,813; June 24.

Elermann, William, Brooklyn, N. Y. Cold-water tube and cleaner for domestic boilers and heaters. 1,768,039; June 24.

Elnstein, Sol, assignor to Cincinnati Milling Machine Company, Cincinnati, Ohio. Profiler and miller. 1,766,115; June 24.

Elseman, Robert J., assignor to The K-W Ignition Corporation, Cleveland, Ohio. Combined ignition transformer and fuel control. 1,767,058; June 24.

Eksergian, Carolus L., assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa. Automatic spot-welding machine. 1,767,521; June 24.

Electrical Engineers Equipment Co. (See Lotz, Alfred F. C., assignor.)

Electric Furnace Company, The. (See Cope, Frank T., assignor.)

Electric Railway Equipment Company, The. (See Johnston, L., and Tice, assignors.)

Electro Metallurgical Company. (See Brennan, Joseph H., assignor.)

Electro-Motive Instrument Co. (See Henze, P., and Gillberg, assignors.)

Elermyer, John. (See Heck, W. E., and Elermeyer.)

Elling, Jens W. A., Christiania, Norway. Gas turbine unit. 1,766,886; June 24.

Ellinger, Julius B., Seattle, Wash. Mechanical animal. 1,766,116; June 24.

Elliott-Fisher Company. (See Stickney, Burnham C., assignor.)

Elliott, Frederick T., Somerville, Mass. Shock absorber. 1,767,059; June 24.

Elliott, Harmon P., Cambridge, Mass., assignor to The Cleveland Crane & Engineering Company, Wickliffe, Ohio. Crane. 1,765,408; June 24.

Elliott, Harold F., Palo Alto, Calif., assignor to Victor Talking Machine Company, Camden, N. J. Radio pick-up system. 1,768,196; June 24.

Elliott, Thomas, Birmingham, Ala., assignor to Continental Gin Company. Shaft coupling. 1,766,247; June 24.

Ellis, Charles J., Hamilton County, Ohio, assignor to The Cincinnati Car Corporation, Cincinnati, Ohio. Rail brake for railway cars. 1,766,016; June 24.

Ellsworth, Carleton J., assignor to The Ellsworth Machine Company, Kansas City, Mo. Paper-stuffing machine. 1,766,117; June 24.

Ellsworth Machine Company, The. (See Ellsworth, Carleton J., assignor.)

Elman, Gustaf W., Leonia, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Magnetic material. 1,768,238; June 24.

Elmen, Gustaf W., Leonia, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Magnetic material and appliance. 1,768,443; June 24.

Elze, Walter C., Forest Hills, assignor to Hauck Manufacturing Company, Brooklyn, N. Y. Structure for adapting oil burners to concrete-mixer apparatus. 1,767,746; June 24.

Elze, Walter C., Forest Hills, assignor to Hauck Manufacturing Company, Brooklyn, N. Y. Oil-burning water heater. 1,767,747; June 24.

Emerson Electric Mfg. Co., The. (See Janca, Joseph J., assignor.)

Emerson Electric Mfg. Co., The. (See Pfaff, A. J., Driy, and Sinning, assignors.)

Empire Hood Seal Corporation. (See O'Neill, Frank, jr., assignor.)

Endsley, Louis E. (See Hunter, P. E., and Endsley.)

Endsley, Louis E., Pittsburgh, Pa. Wrench. 1,767,441; June 24.

Endsley, Louis E., assignor to Fort Pitt Mine Equipment Company, Pittsburgh, Pa. Car retarder. 1,767,440; June 24.

England, Alexander, Wilkinsburg, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Test gauge. 1,765,574; June 24.

England, Alexander, Wilkinsburg, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Hose-coupling gauge. 1,765,575; June 24.

Englund, Carl R., Freheld, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Directive antenna system. 1,768,239; June 24.

Engstrand, Gunnar C., Brooklyn, N. Y., assignor to W. Braat, Englewood, N. J. Propeller. 1,767,786; June 24.

Ensign, Orville H., Pasadena, assignor to Ensign Carburetor Company, Los Angeles, Calif. Carburetor. 1,766,169; June 24.

Ensign Carburetor Company. (See Ensign, Orville H., assignor.)

Enterprise Manufacturing Company, The. (See Case, Francis M., assignor.)

Enterprise Manufacturing Company, The. (See Pfueger, Charles T., assignor.)

Enterprise Railway Equipment Company. (See Zimmer, Albert E., assignor.)

Erickson, Arthur L. (See Cuthbertson, James W., assignor.)

Erickson, Charles W., Los Angeles, Calif. Woodworking. 1,767,970; June 24.

Erickson, Emma J., Reliance, S. Dak. Washing-machine attachment. 1,767,971; June 24.

Erickson, Paul E., Scandia, Kans. Irrigating system. 1,768,310; June 24.

Ericsson, Elov, St. Paul, Minn. Rotary internal-combustion engine. 1,766,248; June 24.

Ericsson, Gunnar, Philadelphia, Pa. High-duty valve structure. 1,765,717; June 24.

Erie Malleable Iron Company. (See Metcalf, George R., jr., assignor.)

Eskimo Pie Corporation. (See Baxter, William M., assignor.)

Eulberg, Adam J., Sunburst, Mont. Well packer. 1,766,887; June 24.

Evans, Archibald D., and H. R. Gravenstreter, New Castle, Pa., assignors to American Sheet and Tin Plate Company. Sheet-packing apparatus. 1,767,442; June 24.

Evans, Gordon M., Detroit, Mich., assignor to Budd Wheel Company, Philadelphia, Pa. Brake drum and making same. 1,767,522; June 24.

Evans, Joseph O. (See Hitt, V. F., and Evans.)

Evers, William A., Martinsburg, W. Va. Railway-rail joint. 1,766,888; June 24.

Everedy Company, The. (See Bunker, Kerney R., assignor.)

Everedy Company, The. (See Lebherz, Harry J., assignor.)

Everett, Arthur C., Boston, assignor to Pneumatic Scale Corporation, Limited, Quincy, Mass. Packaging machine. 1,765,718; June 24.

Everlastik, Inc. (See Chisholm, Lester B., assignor.)

Eversman, Lewis W., Julesburg, assignor to The Eversman Manufacturing Company, Denver, Colo. Automatic land-leveling device. 1,765,910; June 24.

Eversman Manufacturing Company, The. (See Eversman, Lewis W., assignor.)

Evleth, Earl M., Grand Haven, Mich., assignor to The Bastian-Blessing Company, Chicago, Ill. Acetylene generator. 1,766,614; June 24.

Evleth, Earl M., Grand Haven, Mich., assignor to Bastian-Blessing Company, Chicago, Ill. Acetylene generator. 1,766,615; June 24.

Excel Curtain Company. (See Levan, John F., assignor.)

Faber, John P., Dunellen, assignor to Ransome Concrete Machinery Company, Plainfield, N. J. Loader bucket for concrete mixers. 1,767,443; June 24.

Fabianke, Erich, Berlin-Schoneberg, Germany. Electric illumination for tents. 1,765,911; June 24.

Fackler, Louis K., Ridgewood, N. J., assignor to Stein, Hall & Company, Inc. Adhesive and its manufacture. 1,765,761; June 24.

Fahrnkopf, Mary, Bement, Ill. Pan lifter. 1,768,311; June 24.

Fain, Walter C. (See Anderson, Robert H., assignor.)

Fain, Walter C., Norfolk, Va. Concealable furnishings. 1,768,464; June 24.

Fain, Walter C., Norfolk, Va. Concealable furnishings. 1,768,517; June 24.

Fairbanks, Morse & Co. (See Stanley, Fred D., assignor.)

Fairbanks, Morse & Co. (See Whitesell, Frederick N., assignor.)

Fairchild, Charles N., New Haven, Conn., assignor to Fairchild Lock Corporation, New York, N. Y. Push-rod lock. 1,766,493; June 24.
Fairchild, Charles N., Plantsville, Conn., assignor to Fairchild Lock Corporation, New York, N. Y. Automobile lock. 1,768,040; June 24.
Fairchild Lock Corporation. (See Fairchild, Charles N., assignor.)
Faleck, Frank, Brooklyn, N. Y. Shoe and making same. 1,767,748; June 24.
Faige, Robert N., assignor to General Motors Corporation, Detroit, Mich. Rear-view mirror. 1,768,354; June 24.
Falk, Arthur H., Brooklyn, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Loading-coil case. 1,768,240; June 24.
Falley, Samuel J., Rochelle, Ill. Animal-pelt stretcher. 1,768,400; June 24.
Fallot, Alfred, deceased, Plauen; H. Priester, executor, Berlin, Germany. Two-color rotary printing machine. 1,768,312; June 24.
Fanner Mfg. Co., The. (See Schane, Edward H., assignor.)
Fantz, Fred C., Webster Groves, Mo., assignor to Universal Oil Products Company, Chicago, Ill. Flow-control valve. 1,767,658; June 24.
Farber, S. W., Inc. (See Farber, Simon W., assignor.)
Farber, Simon W., assignor to S. W. Farber, Inc., Brooklyn, N. Y. Dish. Des. 81,437; June 24.
Faries Manufacturing Company. (See Bowen, Michael B., assignor.)
Faris, John N., Portland, Oreg. Table. 1,766,616; June 24.
Farmer, Clyde C., Pittsburgh, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Hose coupling. 1,765,576; June 24.
Farmer, Clyde C., Pittsburgh, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Angle-cock device. 1,765,577; June 24.
Farmer, Clyde C., Pittsburgh, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Angle-cock device. 1,765,578; June 24.
Farmers' National Bank, of Greenville, Ohio, trustee. (See Wateman, Russell R., assignor.)
Farr, Willard H., assignor to Stewart-Warner Corporation, Chicago, Ill. Windshield wiper. 1,766,988; June 24.
Favor, Henry S., Providence, R. I., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Thread holder for weft-replenishing looms. 1,766,889; June 24.
Fay, J. A., & Egan Company, The. (See Kistner, F. J., and Williams, assignor.)
Fay, Thomas J., Brooklyn, N. Y. Vehicle. 1,766,617; June 24.
Fechter, Kurt, Joliet, Ill. Aeroplane safety device. 1,765,972; June 24.
Fedelity Machine Company. (See Mahler, Josef, assignor.)
Federal Pneumatic Systems, Inc. (See Prouty, William B., assignor.)
Federal Supply Company, The. (See Williams, William W., assignor.)
Federal Telegraph Company. (See Brower, William M., assignor.)
Federal Telegraph Company. (See Crossley, Alfred, assignor.)
Federal Telegraph Company. (See Dawson, Leo H., assignor.)
Federal Telegraph Company. (See Gebhard, Louis A., assignor.)
Federal Telegraph Company. (See Kolster, Frederick A., assignor.)
Federal Telegraph Company. (See Nicolson, Alexander McL., assignor.)
Federal Telegraph Company. (See Taylor, Albert H., assignor.)
Federal Telegraph Company. (See Trogner, Arthur M., assignor.)
Federal Telegraph Company. (See Young, Leo C., assignor.)
Federal Telegraph Company. (See Prescott, J. O., and Kolster, assignors.)
Fehrmann, Woldemar, Dresden-Strehlen, Germany. Apparatus for dyeing and wet treating of fabric. 1,765,912; June 24.
Feldmeier, Harvey, Little Falls, N. Y., assignor, by mesne assignments, to Cherry-Burrell Corporation, Wilmington, Del. Heat-exchange apparatus. 1,766,618; June 24.
Fenhouse, George G., Melrose Park, Ill. Clamp. 1,767,280; June 24.
Fenno, Grace L., Palos Park, Ill. Beehive. 1,768,041; June 24.
Ferguson, Gale L., Muncie, Ind., assignor, by mesne assignments, to Auto Prime Pump Company, Cleveland, Ohio. Centrifugal pump impeller. 1,768,241; June 24.
Ferguson, Gale L., assignor, by mesne assignments, to Auto Prime Pump Company, Cleveland, Ohio. Pumping apparatus. 1,768,242; June 24.
Ferguson, Gale L., assignor, by mesne assignments, to Auto Prime Pump Company, Cleveland, Ohio. Priming means for centrifugal pumps. 1,768,243; June 24.
Ferguson, Gale L., and C. G. Wood, assignors, by mesne assignments, to Auto Prime Pump Company, Cleveland, Ohio. Pumping apparatus. 1,768,313; June 24.
Ferguson, James R., assignor of one-half to W. H. Addington, Dallas, Tex. Electric motor-driven desk fan. 1,767,060; June 24.
Ferguson, Reginald. (See Bradshaw, R., and Ferguson.)
Ferguson, Reginald, Montreal, Quebec, Canada, assignor, by mesne assignments, to Simmons Company, New York, N. Y. Bed-spring fabric. 1,768,444; June 24.
Ferguson, Robert B., Los Angeles, Calif., assignor to G. E. Harpham, San Francisco, Calif., trustee. Musical stringed instrument. 1,768,471; June 24.
Ferguson, Thomas H. (See Hartzler, M. E., and Ferguson.)
Ferguson, William, Flint, Mich. Sheet-metal bumping-out tool. 1,767,659; June 24.
Fergusson, John R., assignor to Pass & Seymour Incorporated, Syracuse, N. Y. Electric sign. 1,768,042; June 24.
Fern, Millard, Juniata, Pa. Manifold attachment. 1,766,432; June 24.
Ferrettie, Conrad, and G. W. Blair, assignors to Mishawaka Rubber and Woolen Manufacturing Company, Mishawaka, Ind. Combined shoe sole and heel. Des. 81,438; June 24.
Filkins, Oscar B., Stanton, Mich. Separating device. 1,768,244; June 24.
Filtrol Company of California. (See Baylis, Walter S., assignor.)
Finch, James L., Port Jefferson, N. Y., assignor to Radio Corporation of America. Deflector. 1,766,249; June 24.
Finch, Nathaniel, New York, N. Y. Tractor and trailer. 1,766,780; June 24.
Finer, Aubrey C., London, England. Toilet mirror. 1,768,043; June 24.
Fink, Henry A. (See Prahl, F. A., and Fink.)
Finkbeiner, Daniel T., Beaver, Pa. Fence clamp. 1,766,890; June 24.
Finley, William A., Birmingham, Ala. Radiator. 1,766,250; June 24.
Finn, Robert R. (See Bysshe, E. T., and Finn.)
Finnell, Walter S., Elkhart, Ind. Receptacle for mopping machines. 1,767,840; June 24.
Firestone Steel Products Company, The. (See Carroll, Dallas C., assignor.)
Firestone Steel Products Company, The. (See Swain, Joseph G., assignor.)
Firestone Tire and Rubber Company, The. (See Brown, Roy W., assignor.)
Firestone Tire & Rubber Company, The. (See Nichols, George B., assignor.)
Firestone Tire and Rubber Company, The. (See Ritchey, Roscoe V., assignor.)
Firestone Tire and Rubber Company, The. (See Stevens, Horace D., assignor.)
Firestone Tire and Rubber Company, The. (See Stevens, William C., assignor.)
Firestone Tire and Rubber Company, The. (See Thomas, J. C., and Bines, assignors.)
Fischer, Erich. (See Eichwede, H., and Fischer.)
Fischer, Ernst. (See Runne, E., Moldaenke, and Fischer.)
Fischer, Franz J., assignor to Koch & Sterzel, Aktiengesellschaft, Dresden, Germany. Current transformer. 1,765,913; June 24.
Fischer, Fritz. (See Thomas P., and Fischer.)
Fischer, Herbert G. M., Westfield, N. J., assignor to Standard Oil Development Company. Purification of hydrocarbon oils. 1,767,356; June 24.
Fisher, Arthur W., Forest Hills Borough, assignor to The Union Switch & Signal Company, Swissvale, Pa. Apparatus for the control of electric lamps. 1,767,582; June 24.
Fisher Brass Company, The. (See Fisher, George W., assignor.)
Fisher, Charles R., and F. V. N. Bradley, Rogers City, Mich. Protecting ships from collisions and radio apparatus therefor. 1,767,749; June 24.
Fisher, Garfield W., and C. G. Henrikson, assignor to The National Tile Company, Anderson, Ind. Mold for tiles. 1,768,045; June 24.
Fisher, George W., assignor to The Fisher Brass Company, Marysville, Ohio. Dishwashing fixture. 1,767,841; June 24.
Fisher, Harry C., Cincinnati, Ohio, assignor, by mesne assignments, to The Philip Carey Manufacturing Company. Coloring granulated slate. 1,766,891; June 24.
Fisher, Harry C., Cincinnati, Ohio, assignor, by mesne assignments, to The Philip Carey Manufacturing Company. Coloring mineral granules. 1,766,892; June 24.
Fisher, Harry C., Lockland, Ohio, assignor, by mesne assignments, to The Philip Carey Manufacturing Company. Coloring mineral granules. 1,766,814; June 24.
Fisher, Harry C., Lockland, Ohio, assignor, by mesne assignments, to The Philip Carey Manufacturing Company. Coloring mineral matter. 1,766,815; June 24.
Fisher, Lewis J., Reedsburg, Wis. Air-heating system. 1,766,816; June 24.
Fisher, Russell W., Noblesville, Ind. Spring suspension for vehicle bodies. 1,767,750; June 24.
Fisher, Quincy, Ottawa, Kans. Self-cleaning lawn rake. 1,766,017; June 24.
Fisk, Gustaf L., Midland, assignor to Blaw-Knox Company, Pittsburgh, Pa. Flexible roller. 1,768,044; June 24.
Fister, Charlie, Seattle, Wash. Window antirattler and fastener. 1,766,332; June 24.

Fitch, Benjamin F., Greenwich, Conn., assignor to Motor Terminals Company, Wilmington, Del. Apparatus for transferring freight. 1,766,619; June 24.
Fitch, Benjamin F., Greenwich, Conn., assignor to Motor Terminals Company, Wilmington, Del. Apparatus for transferring freight. 1,766,620; June 24.
Fithian, Frank S., Camden, N. J. Necktie appliance. 1,766,290; June 24.
Fitzgerald, James E., Youngstown, assignor to The Niles Steel Products Company, Niles, Ohio. Pouring attachment for pails. 1,765,409; June 24.
Flanagan, David, Bayonne, N. J. Hydraulic jack. 1,767,124; June 24.
Flanagan, James J., assignor to The Louisville Electric Manufacturing Company, Louisville, Ky. Electric-circuit controller. 1,766,949; June 24.
Flath, Otto S., Chicago, Ill. Signal foundation. 1,765,664; June 24.
Flegel, Harrison D., assignor to Arnold Electric Company, Racine, Wis. Ice-cream disher. 1,765,973; June 24.
Fletcher Works. (See Schaum, Fletcher, assignor.)
Fleming, Wells S., Portland, Oreg. Convertible drain fitting. 1,766,621; June 24.
Flewelling, Edmund T., jr., Highland Park, assignor to Buell Manufacturing Co., Chicago, Ill. Receiving circuit. 1,767,751; June 24.
Flintkote Company, The. (See Kirschbraun, Lester, assignor.)
Flintkote Company, The. (See Schutte, August E., assignor.)
Flook, George, Syracuse, assignor to Continental Can Company, Inc., New York, N. Y. Transfer valve for vacuum-closing machines. 1,766,018; June 24.
Floorola Corporation, The. (See Fowler, Elnathan A., assignor.)
Flynn, Henry E., Apache, Okla. Bundle adjuster. 1,766,495; June 24.
Focke, Henrich, assignor to the Firm Focke-Wulfe Flugzeugbau, Aktiengesellschaft, Bremen, Germany. Front wing for flying machines. 1,766,893; June 24.
Focke-Wulfe Flugzeugbau, Aktiengesellschaft. (See Focke, Henrich, assignor.)
Fokker Aircraft Corporation of America. (See Fokker, Anthony H. G., assignor.)
Fokker, Anthony H. G., New York, N. Y., assignor to Fokker Aircraft Corporation of America. Constructing airplane wings, fuselages, and other structures. 1,765,791; June 24.
Folberth, Frederick G. and W. M., Cleveland, Ohio, assignors to Trico Products Corporation, Buffalo, N. Y. Support. 1,765,410; June 24.
Folberth, William M. (See Folberth, Frederick G. and W. M.)
Folta, Emanuel, Prague, Czechoslovakia. Cleaning of filters. 1,768,314. June 24.
Foltis, Anestis, New York, N. Y. Table implement. 1,765,974; June 24.
Fonken, William A., Seattle, Wash. Pear-peeling machine. 1,766,433; June 24.
Fonken, William A., Seattle, Wash. Method of and apparatus for paring fruit. 1,766,496; June 24.
Foote, Arthur F., New Haven, Conn. Undergarment. 1,765,411; June 24.
Forbes Lithograph Manufacturing Company. (See Paige, Paul F., assignor.)
Ford Instrument Company. (See Tanner, Harry L., assignor.)
Ford Instrument Company. (See Uhl, Arthur W., assignor.)
Forehand, Thomas H., Nashville, Tenn. Repair instrument. 1,766,333; June 24.
Forssblad, Nils, Villa Ekbacka, Vasteras, Sweden. Steam generator. 1,766,989; June 24.
Forst, John, assignor to Manhattan Wicker Co., New York, N. Y. Wicker, cane, and reed furniture manufacture. 1,765,412; June 24.
Forster, Thomas A. B. et al., executors. (See Burn, J. F., and Lancaster.)
Forster, William D., et al., executors. (See Burn, J. F., and Lancaster.)
Fort Howard Paper Company. (See Shaffer, Glenn A., assignor.
Fort Pitt Mine Equipment Company. (See Endsley, Louis E., assignor.)
Fort Wayne Engineering & Manufacturing Co. (See Tannehill, Vernon L., assignor.)
Foster, Herbert V., Providence, R. I., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Weight for weft-replenishing-loom thread holders. 1,766,894; June 24.
Foulks, Franklin L., Mount Holly, N. J. Body-handling device. 1,765,792; June 24.
Fournier, Célestine, Lewiston, Me. Button. 1,766,291; June 24.
Fout Advertising Corporation. (See Wood, Joseph E., assignor.)
Fowler, Elnathan A., assignor to The Floorola Corporation, York, Pa. Guard for trigger switches. 1,767,873; June 24.
Fox, Harry. (See Dulin, Thomas C., assignor.)
Fox, John H., and W. Owen, Pittsburgh, Pa., assignors to Pittsburgh Plate Glass Company. Apparatus for making composite glass. 1,765,829; June 24.
Fox, Joseph C. (See Pack, C., and Fox.)
Fox, Vernie A., assignor to Young Brothers Company. Detroit, Mich. Air-circulation system for ovens. 1,767,872; June 24.
Fralim, Carl A., and E. W. Riemenschneider, assignors to The Union Metal Manufacturing Company, Canton, Ohio. Welding. 1,765,368; June 24.
Frampton, William R., Glendale, Calif., assignor to Westinghouse Electric & Manufacturing Company. Service switch. 1,765,369; June 24.
France, John W., et al. (See Salmon, James P., assignor.)
Francis, Daniel R., assignor to The Waterbury Tool Company, Waterbury, Conn. Variable-speed gear transmission. 1,767,787; June 24.
Francis, Daniel R., assignor to The Waterbury Tool Company, Waterbury, Conn. Driving gear for paper calenders. 1,767,788; June 24.
Francis, Jacob R. (See Heginbottom, Walter G., assignor.)
Francis, Jacob R. (See Heitger, Frank H., assignor.
Francis, Jacob R. (See Redmond, Albert G., assignor.)
Francis, Jacob R., Flint, Mich. Carburetor. 1,766,708; June 24.
Francis, Jacob R., Flint, Mich. Heating medium control for charge-forming devices for internal-combustion engines. 1,766,781; June 24.
Francoeur, George J., Kankakee, Ill. Fire-alarm switch. 1,766,497; June 24.
Frank, Emil, Cincinnati, Ohio. Jar or similar article. Des. 81,439; June 24.
Frank, Harry S., Brooklyn, N. Y. Piston-ring spreader. 1,766,498; June 24.
Frankart, Inc. (See von Frankenberg, Arthur, assignor.)
Frankenburger, Walter. (See Mittasch, A., and Frankenburger.)
Frankenhoff, Charles A., Evanston, Ill. Filter cover. 1,767,523; June 24.
Frankle, Richard C., Seattle, Wash. Mechanical driving means for concrete mixers. 1,768,472; June 24.
Fraser, Frank C., Fortuna, Calif. Tree falling and lowering device. 1,767,444; June 24.
Fraser, James S., Warren, Ohio. Mud gun. 1,767,660; June 24.
Fraser, James S., Warren, Ohio. Mud gun. 1,767,661; June 24.
Frederickson, Christian, Rice Lake, and E. J. Gustafson, Superior, assignors to Northway Manufacturing Company, Superior, Wis. Ski sled. 1,768,046; June 24.
Freeman, Samuel, New York, N. Y. Lip stick. 1,766,990; June 24.
Free Sewing Machine Company. (See Kelso, Ralph S., assignor.)
Freeze, Jonathan R., assignor to The American Rolling Mill Company, Middletown, Ohio. Machine for corrugating sheet metal. 1,766,743; June 24.
Freiberg, Stanley B., Cincinnati, Ohio. Easel support. 1,767,753; June 24.
French Oil Mill Machinery Co., The. (See Stacy, Thomas F., assignor.)
Frey, Otto, Windisch, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland. Automatic control for evaporators. 1,766,622; June 24.
Frey, Otto, Windisch, assignor to Aktiengesellschaft Brown, Boveri & Cie., Baden, Switzerland. Steam power plant. 1,766,623; June 24.
Frick, Chester A., and R. E. Baker, Muncie, assignors to Glasscock Brothers Mfg. Company, Muncie, Ind. Bottle-vending machine. 1,767,583; June 24.
Fried. Krupp Germaniawerft Aktiengesellschaft. (See Herkt, Ernst, assignor.)
Fried, Michael. (See Gaven, W. J., and Fried.)
Frieder, Oscar E., Chicago, Ill. Aerial advertising device. 1,765,665; June 24.
Friedl, Joseph, Covington, Ky., assignor to The Avey Drilling Machine Company, Cincinnati, Ohio. Feed mechanism for drilling machines. 1,767,762; June 24.
Friedlander, Hans, Berlin-Wilmersdorf, and A. Janser, Berlin-Charlottenburg, Germany; said Janser assignor to said Friedlander. Substitute for hard paper, ebonite, liber, and the like and a process for manufacturing the same 1,766,817; June 24.
Friedrich, Wilhelm, Berlin-Lankwitz, Germany. Dry fire-extinguisher containing a pressure-gas cylinder. 1,768,047; June 24.
Frohmann, Josef, Newark, N. J. Wash-hanging apparatus. 1,766,624; June 24.
Fruth, Hal F., Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Vibratory element and producing the same. 1,765,413; June 24.
Fulk, George L., Cleveland Heights, assignor by mesne assignments to Bonnar-Vawter Fanform Company, Inc., Cleveland, Ohio. Machine for performing printing, perforating, and other operations on strip material. 1,765,414; June 24.
Fulton, Robert R., Wilkinsburg, Pa., assignor to The Koppers Company. Treating cellulose to produce vulcanized liber and the like. 1,767,662; June 24.
Fulton, Robert R., Pittsburgh, Pa., assignor to The Koppers Company. Treating fabric. 1,767,663; June 24.
Funk, Albert H., Cleveland, Ohio, assignor to Chicago Pneumatic Tool Company, New York, N. Y. Lubrication of fluid-pressure motors. 1,767,061; June 24.
Furnas, Don R., assignor to Aurora Steel Products Company, Aurora, Ill. Electrical switch apparatus. 1,768,245; June 24.

Fuse, Christian J., Brooklyn, N. Y., assignor to American Machine & Foundry Company. Cigarette-machine feed. 1,765,830; June 24.
Fusoid Electric Co. (See Grady, Stephen S., assignor.)
Fyr-Fyter Company, The. (See D'Olive, Charles R., assignor.)
Gaddis, Hugh L., assignor to Globe Machine & Stamping Company, Cleveland, Ohio. Insert for concrete. 1,768,246; June 24.
Gaede, Samuel A., Los Angeles, Calif. Clip for holding glass-tube holders. 1,766,377; June 24.
Gale, Laburton A., Belmont, Mass., assignor, by mesne assignments, to Remington Rand Inc., New York, N. Y. Card-throwing machine. 1,767,207; June 24.
Gallagher, Seneth H. (See Minton, D. E., and Gallagher.)
Galli, Louis C., Ferndale, Md. Tire alarm. 1,768,048; June 24.
Galloway, Robert M., and C. H. Muhl, assignors to The National Automatic Tool Company, Richmond, Ind. Feed control for hydraulically-operated machines. 1,766,118; June 24.
Gang, Harry W., Huntington, W. Va. Automatic feed-water regulator. 1,767,920; June 24.
Garbs, Raymond, Kankakee, Ill. Carpenter's rule. 1,767,789; June 24.
Gardner-Denver Company. (See Gardner, John W., assignor.)
Gardner-Denver Company, The. (See Gustafson, Hjalmer C., assignor.)
Gardner, Edward B., Beloit, Wis. Apparatus for testing surfaces. 1,766,901; June 24.
Gardner, Henry A., Washington, D. C. Translucent artificial silk. 1,768,401; June 24.
Gardner, John E. (See White, T. U., and Gardner.)
Gardner, John W., Quincy, Ill., assignor, by mesne assignments, to Gardner-Denver Company. Pump. 1,766,499; June 24.
Gardner Lumber Company. (See Moses, Charles F., assignor.)
Gardner, Rolland, Lakewood, Ohio. Nonsegregating chute. 1,768,247; June 24.
Garner, James B., Pittsburgh, Pa., assignor to Standard Oil Development Company. Making a fuel gas. 1,767,357; June 24.
Garretson, John L., Buffalo, N. Y. Photographic-film package. 1,767,972; June 24.
Garrett, Richard M., Yonkers, N. Y. Apparatus for detecting leaky cans. 1,766,019; June 24.
Garrison, George H., Bridgeport, Conn., assignor to Remington Arms Company, Inc. Burning kiln. 1,767,281; June 24.
Garrott, John C., Houston, Tex. Sucker-rod guide. 1,766,070; June 24.
Gartling, George. (See Marks, Donn O., assignor.)
Gas Furnace Control Co. (See Payne, El Roy L., assignor.)
Gately, Steve R., Syracuse, Nebr. Cutting and grinding mill. 1,767,921; June 24.
Gathmann, Emil, Baltimore, Md. Ingot mold and ingot. 1,767,174; June 24.
Gaty, John P., Madison, N. J. Sound-propelling diaphragm. 1,768,473; June 24.
Gaven, Mary E., administratrix. (See Gaven, W. J., and Fried.)
Gaven, William J., deceased, Wilkes-Barre, Pa. Mary E. Gaven, administratrix; and M. Fried, Mount Vernon, N. Y. Making composition blanks; 1,765,719; June 24.
Gauchot, Arthur, Parc St. Maur, France. Mudguard system for motor cars and the like. 1,768,445; June 24.
Gay, Norman H., Los Angeles, Calif. Brine tank for ice plants. 1,766,020; June 24.
Gaw-O'Hara Envelope Company. (See Olgay, Albert, assignor.)
Geary, James F., Salt Lake City, Utah. Reagent feeder. 1,766,625; June 24.
Gebauer, Herman C., assignor of one-half to B. J. Malmgren, St. Paul, Minn. Illuminated street sign. 1,766,119; June 24.
Gebert, Albert E. (See Antoine, A. D., and Gebert.)
Gebhard, Louis A., Washington, D. C., assignor, by mesne assignments, to Federal Telegraph Company. Electron-tube circuit. 1,766,038; June 24.
Gebr. Eickhoff Maschinenfabrik. (See Aurich, Peter, assignor.)
Gedney, Stanley L., Maplewood, N. J. Clip. 1,767,973; June 24.
Gehrke, Irene F., Chicago, Ill. Blanket or similar device. 1,767,842; June 24.
Geiger, Edward F., Binghamton, N. Y. Carburetor. 1,767,664; June 24.
Geiger, Edward F., Binghamton, N. Y. Carburetor. 1,767,665; June 24.
Genenger, Richard, Aachen-Forst, Germany, assignor, by mesne assignments, to The American Bicherous Company. Glass-plate-feed track. 1,767,922; June 24.
General Aniline Works, Inc. (See Cotton, William, assignor.)
General Aniline Works, Inc. (See Dawes, Arthur W., assignor.)
General Aniline Works, Inc. (See Eichwede, H., and Fischer, assignors.)
General Aniline Works, Inc. (See Eskert, W., and Greune, assignors.)
General Aniline Works, Inc. (See Grimmel, H., and Clingestein, assignors.)
General Aniline Works, Inc. (See Herz, R., and Albrecht, assignors.)
General Aniline Works, Inc. (See Herz, R., and Schubert, assignors.)
General Aniline Works, Inc. (See Kalischer, G., Scheyer, Nawiasky, and Krauch, assignors.)
General Aniline Works, Inc. (See Kranzlein, G., Greune, and Vollmann, assignors.)
General Aniline Works, Inc. (See Krzikalla, Hans, assignor.)
General Aniline Works, Inc. (See Krzikalla, H., and Kämmerer, assignors.)
General Aniline Works, Inc. (See Laska, L., and Zitscher, assignors.)
General Aniline Works, Inc. (See Lüttringhaus, A., and Kaeer, assignors.)
General Aniline Works, Inc. (See Mayer, F., and Zahn, assignors.)
General Aniline Works, Inc. (See Nawiasky, P., Krause, and Holl, assignors.)
General Aniline Works, Inc. (See Runne, E., Moldaenke, and Fischer, assignors.)
General Aniline Works, Inc. (See Thiess, K., Gmelin, and Zahn, assignors.)
General Aniline Works, Inc. (See Wanger, H., Sohst, and Rachor, assignors.)
General Electric Company. (See Alexanderson, Ernst F. W., assignor.)
General Electric Company. (See Bliss, Elmer F., assignor.)
General Electric Company. (See Carpenter, Charles F., assignor.)
General Electric Company. (See Dickinson, Wilbur K., assignor.)
General Electric Company. (See Heisler, Charles L., assignor.)
General Electric Company. (See Jones, Benjamin W., assignor.)
General Electric Company. (See Kell, Ray D., assignor.)
General Electric Company. (See Matunaga, Yosinobu, assignor.)
General Electric Company. (See Newkirk, Burt L., assignor.)
General Electric Company. (See Rogers, Robert H., assignor.)
General Electric Company. (See Ruggles, William A., assignor.)
General Electric Company. (See Seeley, Harold T., assignor.)
General Electric Company. (See Serduke, James T., assignor.)
General Electric Company. (See Sittel, Alfred, assignor.)
General Electric Company. (See Smith, A., and Matson, assignors.)
General Electric Company. (See Walle, Ludwig S., assignor.)
General Electric Company. (See Weston, Frederick H., assignor.)
General Electric Company Limited. (See Bartlett, Albert C., assignor.)
General Fire Extinguisher Company. (See Loepsinger, Albert J., assignor.)
General Fireproofing Company, The. (See Caldwell, John R., assignor.)
General Gas Light Company. (See Humphrey, Hubert R., assignor.)
General Gas Light Company. (See Humphrey, Hubert R. and G. A., assignors.)
General Machinery Corporation. (See Byerlein, Arthur A., assignor.)
General Motors Corporation. (See Brittain, R. J., jr., and Hutchinson, assignors.)
General Motors Corporation. (See Denyes, Harry M., assignor.)
General Motors Corporation. (See Falge, Robert N., assignor.)
General Motors Corporation. (See Holzhauer, Philo J., assignor.)
General Motors Corporation. (See Kelley, Oliver K., assignor.)
General Motors Corporation. (See Lawton, Stuart R., assignor.)
General Motors Corporation. (See Short, Charles R., assignor.)
General Motors Corporation. (See Thompson, Earl A., assignor.)
General Motors Corporation. (See Trumble, John T., assignor.)
General Motors Radio Corporation. (See Marvel, Orin E., assignor.)
General Motors Research Corporation. (See Chase, Theron, P., assignor.)
General Motors Research Corporation. (See Hallett, George E. A., assignor.)
General Motors Research Corporation. (See Williams, H. M., and Boegehold, assignors.)
General Railway Signal Company. (See Banner, Frank H., assignor.)
General Railway Signal Company. (See Bushnell, Charles S. assignor.)

General Railway Signal Company. (See Day, Salisbury M., assignor.)
General Railway Signal Company. (See Howe, Winthrop K., assignor.)
General Railway Signal Company. (See Leake, Richard C., assignor.)
General Railway Signal Company. (See Merkel, Joseph F., assignor.)
General Railway Signal Company. (See Peabody, James A., assignor.)
General Railway Signal Company. (See Prescott, Charles W., assignor.)
General Railway Signal Company. (See Reichard, Wade H., assignor.)
General Railway Signal Company. (See Stephenson, James E., assignor.)
General Railway Signal Company. (See Twitchell, Morton C., assignor.)
General Railway Signal Company. (See Varley, T. W., and Nein, assignors.)
General Railway Signal Company. (See Willing, Joseph E., assignor.)
General Railway Signal Company, The. (See Richmond, Carl A., assignor.)
General Rubber Company. (See Rose, R. P., and Cude, assignors.)
General Spring Bumper Corporation. (See Doutt, Owen, assignor.)
General Steel Castings Corporation. (See Pflager, Harry M., assignor.)
General Steel Castings Corporation. (See Sheehan, William M., assignor.)
General Steel Castings Corporation. (See Westlake, Charles T., assignor.)
General Talking Pictures Corporation. (See de Forest, Lee, assignor.)
Genter Thickener Company. (See Callow, John M., assignor.)
Genth, Wilfried, Cologne Stammheim, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Manufacture of hollow bodies consisting of vulcanized rubber. 1,765,666; June 24.
Gentile, Marino, et al. (See Von Winkler, Walter T., assignor.)
Gerlach, Erwin, Berlin-Siemensstadt, assignor to Siemens & Halske, Aktiengesellschaft, Siemensstadt, near Berlin, Germany. Process and apparatus for the production and reproduction of phonofilms. 1,767,790; June 24.
Gesellschaft für Drahtlose Telegraphie m. b. H., Hallesches. (See Meissner, Alexander, assignor.)
Gesellschaft für Drahtlose Telegraphie m. b. H. (See Schaffer, Walter, assignor.)
Getman, Orvis, Clearwater, Fla. Railway crossing. 1,766,379; June 24.
Gier, John R., jr. (See Baker, H. M., and Gier.)
Gifford, Albert J., and B. S. T. Bishop, Shrewsbury, assignors to Leland-Gifford Company, Worcester, Mass. Oil pump. 1,765,914; June 24.
Gilbert, Florence L., Los Angeles, Calif. Sock. 1,767,666; June 24.
Gilbert, Israel B., Cincinnati, Ohio. Valve. 1,767,445; June 24.
Gill, Reuben O., Bloomfield, assignor to Packard Motor Car Company, Detroit, Mich. Assembling internal-combustion engines. 1,768,049; June 24.
Gillard, Sarah M., Huntington, W. Va. Kitchen sink. 1,767,874; June 24.
Gillberg, Gustaf S. (See Henze, P., and Gillberg.)
Gillette Rubber Company. (See Krause, Arnold R., assignor.)
Gilligan, James J., assignor to H. K. King, New York, N. Y. Four-wire burglar-alarm system. 1,766,500; June 24.
Gillooly, William, assignor to Metal Stampings Corporation, Streator, Ill. Cutting machine. 1,767,208; June 24.
Ginzler, Frederick G., assignor of one-half to H. C. Wallis, London, England. Closure device. 1,766,120; June 24.
Githler, Charles E., assignor to Corning Glass Works, Corning, N. Y. Making tubing. 1,767,923; June 24.
Gladding, Ernest K., Buffalo, assignor, by mesne assignments, to Du Pont Rayon Company, New York, N. Y. Method and device for applying oil or other liquid to thread. 1,767,209; June 24.
Gladstone, Herbert A. (See Ahrens, Edward G., assignor.)
Glascock Brothers Mfg. Company. (See Frick, C. A., and Baker, assignors.)
Glaser, Herbert, New York, N. Y. Lock. 1,765,526; June 24.
Glasgow, Gordon G., San Francisco, Calif. Automatic ribbon-reversing mechanism. 1,766,626; June 24.
Glass, Isidore B., Waterbury, Conn. Tweezers. 1,767,175; June 24.
Glidden, Alfred A., and T. M. Knowland, Watertown, Mass., assignors, by mesne assignments, to Hood Rubber Company, Inc., Wilmington, Del. Apparatus for manufacturing inner tubes. 1,767,062; June 24.
Glidden, Alfred A., and T. M. Knowland, Watertown, and W. J. Duffy, Melrose, Mass., assignors, by mesne assignments, to Hood Rubber Company, Inc., Wilmington, Del. Manufacturing linings for molded boots. 1,766,627; June 24.
Globar Corporation. (See Eichenberger, Ferdinand, assignor.)
Globar Corporation. (See Shaw, Harold N., assignor.)
Globe Machine & Stamping Company. (See Gaddis, Hugh L., assignor.)
Glossbrenner, Alfred S., and G. L. Glossbrenner, Indianapolis, Ind. Calendar. 1,766,334; June 24.
Glossbrenner, George L. (See Glossbrenner, Alfred S. and G. L.)
Gmelin, Walter. (See Thiess, K., Gmelin, and Zahn.)
Goble, Bert G., Tulsa, Okla., assignor to W. A. Quigley. Pumping power. 1,767,282; June 24.
Godbery, Joseph V., San Francisco, Calif. Mute. 1,767,974; June 24.
Godfrey, Edward L., and G. W. Wrentmore, Stroud, England. Egg-turning tray for incubators. 1,768,197; June 24.
Goerlich, John E. (See Beck, Charles W., assignor.)
Goff, Henry J., assignor of one-third to C. A. Webster and one-third to H. V. Taster, Stockton, Calif. Box end and making same. 1,767,064; June 24.
Goff, Leonard D., assignor to Armstrong Machine Works, Three Rivers, Mich. Steam trap. 1,767,063; June 24.
Going, George G., Middletown, Conn., assignor to Remington Typewriter Company, Ilion, N. Y. Typewriting machine. 1,767,875; June 24.
Going, George G., Middletown, Conn., assignor to Remington Typewriter Company, Ilion, N. Y. Typewriting machine. 1,767,876; June 24.
Going, George G., Stamford, Conn., assignor to Remington Typewriter Company, Ilion, N. Y. Typewriting machine. 1,767,877; June 24.
Going, George G., Stamford, Conn., assignor to Remington Typewriting Company, Ilion, N. Y. Typewriting machine. 1,767,878; June 24.
Goldberg, Samuel I., New York, N. Y. Lighting fixture. Des. 81,440; June 24.
Golden, Charles E. (See Anderson, Edward V., assignor.)
Goldhammer, Leo, Munich, Germany, assignor to Agfa Ansco Corporation, Binghamton, N. Y. Objective-shutter casing. 1,768,315; June 24.
Goldman, May F. (See Goldman, Otto B., assignor.)
Goldman, Otto B., assignor to M. F. Goldman, Long Beach, Calif. Stress-measuring device. 1,766,782; June 24.
Goldman, S. W., et al. (See Schultis, Charles F., assignor.)
Gold Medal Camp Furniture Mfg. Co. (See Brown, Newton N., assignor.)
Goldsmith, Edgar M. (See Harris, Leonard B., assignor.)
Goldsmith, Max S., assignor to The Goldsmith Metal Lath Company, Cincinnati, Ohio. Ceiling tie and spacer. 1,767,065; June 24.
Goldsmith, Max S., assignor to The Goldsmith Metal Lath Company, Cincinnati, Ohio. Floor construction. 1,767,066; June 24.
Goldsmith, Max S., assignor to The Goldsmith Metal Lath Company, Cincinnati, Ohio. Ceiling plate. 1,767,067; June 24.
Goldsmith Metal Lath Company, The. (See Goldsmith, Max S., assignor.)
Goldsmith Metal Lath Company, The. (See Goldsmith, William M., assignor.)
Goldsmith, William M., assignor to The Goldsmith Metal Lath Company, Cincinnati, Ohio. Lath spacer. 1,767,068; June 24.
Goldwood, Gurton L., Toledo, Ohio. Christmas-tree holder. 1,766,170; June 24.
Golinick, Paul A., J. J. Toolan, and G. Harred, assignors, by mesne assignments, to Selectograph Company, Chicago, Ill. Clutch mechanism. 1,765,527; June 24.
Gollwitzer, Walter T., Chicago, Ill., assignor to Addressograph Company, Wilmington, Del. Printing device. 1,765,370; June 24.
Gómez, Ysauno, Ballinger, Tex. Plow. 1,766,380; June 24.
Gomory, William L., Chicago, Ill., assignor to Standard Oil Development Company. Continuous, low-temperature process and apparatus for treating hydrocarbons. 1,767,283; June 24.
Gonyk, Ignatz, Vienna, Austria. Ladle for low-melting materials. 1,767,975; June 24.
Goodloe, Alfred M., Bradford, Pa., assignor, by mesne assignments, to American Air Filter Company, Inc., Louisville, Ky. Air and gas filter. 1,765,720; June 24.
Goodman Manufacturing Company. (See Bodin, George, assignor.)
Goodman Manufacturing Company. (See Davis, Charles E., assignor.)
Goodman Manufacturing Company. (See Gray, Walter S., assignor.)
Goodman Manufacturing Company. (See Hardick, Michael, assignor.)
Goodman Manufacturing Company. (See Packer, Glenn W., assignor.)
Goodman Manufacturing Company. (See Pray, Thomas E., assignor.)
Goodman Manufacturing Company. (See Sloane, William W., assignor.)
Goodman Manufacturing Company. (See Vodoz, Frederick W., assignor.)
Goodwin, Edward J., assignor of one-half to J. O. Paris, Haverhill, Mass. Mold for sole-pressing machines. 1,768,050; June 24.

Gordon, Albert A., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Weft-replenishing loom. 1,766,895; June 24.

Gordon, Albert A., and R. M. Cook, assignors to Crompton & Knowles Loom Works, Worcester, Mass. Dobby lever for looms. 1,766,744; June 24.

Gosling, Henry A. (See Stanton, W. J., and Gosling.)

Goss, Harold J., assignor to The International Paper Box Machine Company, Nashua, N. H. Power-operated counter. 1,765,418; June 24.

Goss, Harold J., assignor to The International Paper Box Machine Company, Nashua, N. H. Envelope machine. 1,765,419; June 24.

Goss, Harold J., assignor to The International Paper Box Machine Company, Nashua, N. H. Machine for making set-up boxes. 1,765,420; June 24.

Goss Printing Press Co., The. (See Richter, Charles J., assignor.)

Gottshall, Tyler B., Souderton, Pa. Megaphone. 1,767,358; June 24.

Goudard, Maurice, Neuilly Sur Seine, France. Carburetor. 1,768,051; June 24.

Gouch, Fred J., Fort Dodge, Iowa, W. M. McNeil, Chicago, Ill., and F. D. Pfeffer, Fort Dodge, Iowa, assignors to United States Gypsum Company, Chicago, Ill. Mixer for stucco compositions. 1,767,791; June 24.

Gould Storage Battery Company. (See Klock, Raymond A., assignor.)

Goyke, Harry A., deceased, and R. C. La Due, Clinton Corners, N. Y.: N. Goyke, administratrix. Road-map holder. 1,766,896; June 24.

Goyke, Naomi, administratrix. (See Goyke, H. A., and La Due.)

Grabich, Nicola, West New York, N. J. Life-saving device for ships and the like. 1,766,021; June 24.

Grady, Stephen S., Magnolia, N. C., assignor to Fusoid Electric Co., Inc. Circuit breaker. 1,767,843; June 24.

Graf, Alfons, New York, N. Y. Baker's pan. 1,766,508; June 24.

Graf, Edward F., assignor, by mesne assignments, to Cyrus B. Newcomb, Grand Rapids, Mich. Loose-leaf binder. 1,765,579; June 24.

Grafenstatt, Emil S., Los Angeles, Calif. Deep-well pump. 1,767,879; June 24.

Grafenstatt, Emil S., Los Angeles, Calif. Deep-well pump. 1,767,880; June 24.

Graham, Thornton G. (See Humphrey, W. E., and Graham.)

Graham, William W., Fremont, Nebr. Hot-air control for windshields and car interiors. 1,767,446; June 24.

Grahek, Frank, assignor of one-half to F. Kufrin, Adah, Pa. Loading apparatus. 1,768,316; June 24.

Gram, Thomas. (See Söderlund, O., and Gram.)

Grambach, Carl, Zurich, Switzerland. Coated glass plate. 1,766,509; June 24.

Granat, Elie, assignor of one-half to Compagnie des Forges et Acieries de la Marine et D'Homecourt, Paris, France. Automatic switch. 1,766,292; June 24.

Granberg, Albert J., Berkeley, assignor to Ralph N. Brodie Company, Oakland, Calif. Fluid meter. 1,767,210; June 24.

Grandjean, Gabriel, Paris, France. Franking machine. 1,766,783; June 24.

Grand Rapids Brass Company. (See Roedding, G. R., and Osbeck, assignors.)

Grand Rapids Store Equipment Corporation. (See Morris, Edmund, assignor.)

Grand Rapids Store Equipment Corporation. (See Vanderveld, A., and Morris, assignors.)

Granger, Henry G., Buskirk, N. Y. Making candy. 1,765,867; June 24.

Grant, John. (See Phippe, John T., assignor.)

Grant, William D., Vanconver, British Columbia, Canada. Subaquatic drill. 1,766,628; June 24.

Grass, Otto R., assignor to The Oro-Tone Company, Chicago, Ill. Phonograph construction. 1,766,992; June 24.

Grasselli Chemical Company, The. (See Taylor, Edward A., assignor.)

Graton & Knight Company. (See Grifith, Winfred S., assignor.)

Graton & Knight Company. (See Standish, Edward K., assignor.)

Grau, Frances M., Washington, Nebr. Leg and ankle protector. 1,765,371; June 24.

Gravenstreter, Harry R. (See Evans, A. D., and Gravenstreter.)

Graves, Henry W., Chicago, Ill. Metal structural toy. 1,766,022; June 24.

Graves, Jacob H., Lexington, Ky. Milk-shipping cabinet. 1,767,976; June 24.

Gray, James M., Webster Groves, Mo. Germicidal compound. 1,767,667; June 24.

Gray, Richard A., Binghamton, N. Y. Display card. 1,765,484; June 24.

Gray, Walter S., assignor to Goodman Manufacturing Company, Chicago, Ill. Mining machine. 1,765,528; June 24.

Graybar Electric Company. (See Reddig, Charles E., assignor.)

Green, Charles W., Millburn, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Attenuation equalizing circuit. 1,768,248; June 24.

Green, Lester C., Seattle Wash. Binder. 1,766,071; June 24.

Greene, Albert G., assignor to Revere Rubber Company, Providence, R. I. Bathing cap. Des. 81,441; June 24.

Greene, Nelson L., Chicago, Ill. Recording device for automobiles. 1,767,924; June 24.

Greene Thomas T. (See Williams, S. T., and Greene.)

Greene, Thomas T., Collingswood, N. J., assignor to Victor Talking Machine Company. Record holder for talking machines. 1,768,052; June 24.

Greenhill, Wm. P., & Son. (See Muhlbacker, Ralph, assignor.)

Greenleaf, Robert M., assignor to Plastoid Products, Inc., Los Angeles, Calif. Handling wet wall board and the like. 1,766,251; June 24.

Gregory, Gorge L., assignor of one-third to W. H. Robbins, McAlester, Okla. Plow. 1,767,359; June 24.

Gregory, Harold D., Philadelphia, Pa., assignor to American Brown Boveri Electric Corporation, Camden, N. J. Control apparatus. 1,766,510; June 24.

Gregory, John C., Milford, Utah. Lock. 1,766,784; June 24.

Greist Manufacturing Company, The. (See Carmichael, A. J., and Wunderlich, assignors.)

Greist Manufacturing Company, The. (See Zeeck, August D., assignor.)

Gresser, Peter, Detroit, Mich. Grease gun. 1,766,897; June 24.

Greune, Heinrich. (See Eckert, W., and Greune.)

Greune, Heinrich. (See Kranzlein, G., Greune, and Vollmann.)

Greve, Louis W., assignor to The Cleveland Pneumatic Tool Company, Cleveland, Ohio. Shock absorber for aircraft. 1,767,069; June 24.

Griessbach, Robert, Ludwigshafen-on-the-Rhine, O. Schliephake and O. Heusler, Mannheim, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the Main, Germany. Production of calcium nitrate, alumina, and phosphorus. 1,766,785; June 24.

Griffin, Dana A., Summit, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Signal reception. 1,765,421; June 24.

Grifith, David W., New York, N. Y. Taking moving pictures. 1,767,668; June 24.

Grifith, Martha G. S., Dudley, England. Protective device for the tonneaus of motor cars and for other purposes. 1,767,447; June 24.

Grifith, Thomas E., and L. L. Dodds, assignors to The W. S. Tyler Company, Cleveland, Ohio. Switch mechanism. 1,768,249; June 24.

Grifith, William B., Audubon, N. J., assignor to Star Sprinkler Corporation. Accelerated dry-pipe valve. 1,765,422; June 24.

Grifith, William B., Audubon, N. J., assignor to Star Sprinkler Corporation. Exhauster for sprinkler systems. 1,765,423; June 24.

Grifith, Winfred S., assignor to Graton & Knight Company, Worcester, Mass. Thickness-gauging device for leather, etc. 1,766,745; June 24.

Grigsby-Grunow Company. (See Grunow, William C., assignor.)

Grimes, William L., Franklin, Minn. Beet loader. 1,766,293; June 24.

Grimmel, Harry, Weisdorf-on-the-Rhine, and H. Clingestein, Cologne-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Naphthocarbazole-hydroxy-azo dyestuffs. 1,766,434; June 24.

Grisham, Edward P., St. Louis, Mo. Ventilating apparatus. 1,766,898; June 24.

Griswold, Walter R., assignor to Packard Motor Car Company, Detroit, Mich. Internal-combustion engine. 1,766,899; June 24.

Griswold, Walter R., assignor to Packard Motor Car Company, Detroit, Mich. Internal-combustion engine. 1,766,900; June 24.

Groehn, Otto J., Grosse Pointe Park, assignor to Hudson Motor Car Company, Detroit, Mich. Making panel joints. 1,765,372; June 24.

Groff, Emory L. (See Wolhaupter, D. P., and Groff.)

Gron, Nicholas, Chicago, Ill. Float switch. 1,768,446; June 24.

Grossman, George J., Chicago, Ill. Toy parachute. 1,765,721; June 24.

Grossman, Samuel, et al. (See Grossman, Samuel, assignor.)

Grossman, Samuel, assignor to D. Klebanoff and S. Grossman, New York, N. Y. Finger ring. Des. 81,442; June 24.

Grosvenor, Graham B., Chicago, Ill., assignor to Otis Elevator Company, Jersey City, N. J. Electric elevator system. 1,767,125; June 24.

Grotnes, Carl C., Chicago, Ill. Metal-working machine. 1,767,753; June 24.

Grotnes, Carl C., Chicago, assignor to C. G. Grotnes, Park Ridge, doing business as Chas. Grotnes Machine Works, Chicago, Ill. Metal-working machine. 1,767,754; June 24.

Grotnes, Chas., Machine Works. (See Grotnes, Carl C.)

Grotnes, Charles G. (See Grotnes, Carl C., assignor.)

Grunow, William C., assignor to Grigsby-Grunow Company, Chicago, Ill. Battery substitute. 1,768,474; June 24.

Guerriero, Anthony, Brooklyn, N. Y. Piston packing ring 1,765,722; June 24.

Guffey, Roy. (See Dew, J. R., and Guffey.)

Guilford, Edward H., Glendale, assignor to The Radiore Company, Los Angeles, Calif. Locating unknown conductive bodies. 1,766,378; June 24.

Guin, Edgar L., Deerwood, Minn. Headlight-glare shield. 1,768,250; June 24.

Gusmer, Ange, Woodbridge, N. J. Treatment of beverages. 1,765,667; June 24.

Gustafson, Elmer J. (See Fredrickson, C., and Gustafson.)

Gustafson, Hjalmer C., Denver, Colo., assignor, by mesne assignments, to The Gardner-Denver Company, Quincy, Ill. Tool retainer. 1,766,511; June 24.

Gustaveson, Joseph C., New York, N. Y. Hat. 1,765,723; June 24.

Gustavson, Arthur, Jamestown, N. Y. Disappearing telephone bracket. 1,766,901; June 24.

Gustin, Jeremiah V., Little Rock, Ark. Bit-forming machine. 1,767,881; June 24.

Guth, Edwin F., Company, The. (See Owen, Raymond V., assignor.)

Guthrie, James M. (See Messler, E. L., and Guthrie.)

Gutbrie, Robert G., and O. J. Wozasek, assignors to Peoples Gas By-Products Corporation, Chicago, Ill. Carburizing iron or steel. 1,768,317; June 24.

Guyton & Cumfer Mfg. Co. (See Cumfer, Harry A., assignor.)

Haas, Paul, assignor to The Stromberg-Carlson Telephone Manufacturing Company, Rochester, N. Y. Combined radio and phonographic radio reproducing system. 1,766,381; June 24.

Haase, Oskar, Kassel, Germany. Automatic apparatus for washing and drying hands. 1,765,915; June 24.

Haber, Eugen, Berlin-Charlottenburg, Germany. Air heater. 1,765,916; June 24.

Haddad, Michael, Sonora, Ariz. High-pressure-valve structure. 1,766,335; June 24.

Haege, Louis, New Memphis, Ill. Animal trap. 1,765,975; June 24.

Hafler, Ida E., Bingen, Pa. Transplanter. 1,766,818; June 24.

Hageman, Aaron M., and W. L. Sullivan, Bloomfield, N. J., assignors to Westinghouse Lamp Company. Neutralization of acid waste waters. 1,765,424; June 24.

Hagey, James C., assignor to The Cable Company, Chicago, Ill. Device for controlling air pressure. Re17,716; June 24.

Haggart, John C., jr., assignor to Republic Truck Sales Corporation, Alma, Mich. Tractor shoe. 1,765,580; June 24.

Hagquist, Gustaf E. (See Bronander, W. B., and Hagquist.)

Hallwood, Anthony J. (See Shepherdson, A., and Hallwood.)

Hain, Henry J., Vermilion, Ohio, assignor to The Sherwin-Williams Company, Cleveland, Ohio. Coating composition. 1,768,447; June 24.

Haley, Michael, West Branch, Mich. Rope fastener. 1,766,121; June 24.

Haley, Michael, West Branch, Mich. Rope stretcher. 1,766,122; June 24.

Hall, Alfred W., and J. R. Donnelly, Portland, Me. Audiphone. 1,767,176; June 24.

Hall, Archibald J., Timbersbrook, Congleton, England, assignor to Celanese Corporation of America. Process in which cellulose acetate, artificial silk, and like products are treated with hot liquors. 1,765,581; June 24.

Hall, Charles L., Great Neck, N. Y., assignor, by mesne assignments, to United-Carr Fastener Corporation, Cambridge, Mass. Separable fastener. 1,768,475. June 24.

Hall & Connolly, Inc. (See Hall, Theodore, assignor.)

Hall, Eddie F., West Lynn, Mass. Shoe fastener. 1,766,435; June 24.

Hall, George D., Kearney, Nebr. Automatic door. 1,767,448; June 24.

Hall, George F., assignor to American Sterilizer Company, Erie, Pa. Bedpan cleaner. 1,766,629; June 24.

Hall, Hubert. (See Thrower, Marion R., assignor.)

Hall, Joseph M., Hamilton, Ontario, Canada, assignor to Universal Draft Gear Attachment Co., Chicago, Ill. Shock absorber. 1,766,336; June 24.

Hall, Theodore, assignor to Hall & Connolly, Inc., New York, N. Y. Rectangular shutter for spotlights. 1,767,756; June 24.

Hall, Thomas. (See Wood, A. C., and Hall.)

Haller, Arnold. (See Kuntze, K., Haller, and Wirz.)

Hallett, George E. A., assignor to General Motors Research Corporation, Dayton, Ohio. Hydraulic braking system for motor vehicles. 1,768,355; June 24.

Hallett, George E. A., assignor to General Motors Research Corporation, Detroit, Mich. Hydraulic mechanism. 1,768,476; June 24.

Halloran, Ralph A., and A. L. Strout, Berkeley, Calif., assignor by mesne assignments, to Universal Oil Products Company, Chicago, Ill. Cracking petroleum oils. 1,765,976; June 24.

Hallowell, Howard T., assignor to Standard Pressed Steel Company, Jenkintown, Pa. Hand truck. 1,768,053; June 24.

Halstead, John F., Brooklyn, N. Y., assignor to International Cigar Machinery Company. Cigar-bunch manipulator. 1,765,831; June 24.

Hamill, Hugh H. (See Wilcox, Walton A., assignor.)

Hammer, Forrester L., Branford, Conn. Control for outboard motors and the like. 1,767,584; June 24.

Hammer, Forrester L., Branford, Conn. Oil burner. 1,767,609; June 24.

Hammermill Paper Company. (See Hibbert, H., and Parsons, assignors.)

Hammond, Clayson R., Salem, Oreg. Connecting rod. 1,767,882; June 24.

Hammond, R. E., et al. (See Pollock, Oscar, assignor.)

Hampton Company. (See McConnell, Thomas.)

Hancock, Eugene M. (See Petty, W. J., and Hancock.)

Handy, Arthur E., Lynbrook, assignor to Otis Elevator Company, New York, N. Y. Bell hoist. 1,768,054; June 24.

Hanks, Marshall W., Madison, Wis. Liquid-conductor heater. 1,767,126; June 24.

Hanley, Michael. (See Miller, J. T., and Hanley.)

Hanlon, William L., Sterling, Kans. Combined harvesting and thrashing machine. 1,765,582; June 24.

Hansen, Asmus, Berlin-Schoneberg, Germany. Aircraft. 1,765,917; June 24.

Hansen, Marcus M., Seattle, Wash. Paper file. 1,766,072; June 24.

Hanna Engineering Works. (See Hanna, John C., assignor.)

Hanna, John C., assignor to Hanna Engineering Works, Chicago, Ill. Mechano-pneumatic cushion for power presses. 1,765,762; June 24.

Hanneman, Walter M., assignor too Union Special Machine Company, Chicago, Ill. Thread-controlling mechanism for sewing machines. 1,766,123; June 24.

Hapgood, Clarence H., assignor to Toledo Scale Company, Toledo, Ohio. Weighing scale. 1,767,844; June 24.

Harasimiak, Waclaw, Camden, N. J. Mine drill. 1,768,318; June 24.

Hardesty, Francis D., Birmingham, Mich. Controlling mechanism. 1,768,518; June 24.

Hardick, Michael, Punxsutawney, Pa., assignor to Goodman Manufacturing Company, Chicago, Ill. Mining machine. 1,765,529; June 24.

Hardie, Charles H., South Gate, and W. Jones, Los Angeles, Calif. Multistage and expansion-fluid pump. 1,766,382; June 24.

Harding, James E., Lyme, Conn. Syringe plug. 1,767,449; June 24.

Hardsocg, Lester C., assignor to Hardsocg Manufacturing Company, Ottumwa, Iowa. Auger or drill. 1,767,883; June 24.

Hardsocg Manufacturing Company. (See Hardsocg, Lester C., assignor.)

Hardtmann, Max. (See Hartmann, E., Hardtmann, and Kummel.)

Harford, Albert K., Oakland, assignor, by mesne assignments, to New Metal Products Company, Emeryville, Calif. Arc-welding system. 1,765,373; June 24.

Hargreaves, Thomas, Hillside, N. J. Combined seat and carrier. 1,767,925; June 24.

Harman, Frank B., and W. Anderson, Kenosha, Wis., assignors to Simmons Company, New York, N. Y. Folding chair. 1,767,211; June 24.

Harman, William E., assignor to Harman Pacific Company, Los Angeles, Calif. Hose nozzle. 1,768,356; June 24.

Harman Pacific Company. (See Harman, William E., assignor.)

Harnischfeger Corporation. (See Brown, Frank E., assignor.)

Harnischfeger Corporation. (See Brown, Robert L., assignor.)

Harnischfeger Corporation. (See Henricks, A. G., and Mitchell, assignors.)

Harnischfeger Corporation. (See Locher, C. H., and Burt, assignors.)

Harnischfeger Corporation. (See Mitchell, Holger L., assignor.)

Harnischfeger Corporation. (See Standfuss, Ernest R., assignor.)

Harpham, G. E. (See Ferguson, Robert B., assignor.)

Harred, George. (See Gollnick, P. A., Toolan, and Harred.)

Harrington, Clarence L., assignor of one-half to H. W. Jackman, Battle Creek, Mich. Sash fastener. 1,767,450; June 24.

Harrington, Edward L., assignor to G. H. Williams Company, Erie, Pa. Sheave. 1,767,070; June 24.

Harris-Seybold-Potter Company. (See Harrold, Charles W., assignor.)

Harris-Seybold-Potter Company, The. (See Valiquette, William L., assignor.)

Harrison, Arthur B. B., et al., executors. (See Harrison, Herbert C.)

Harrison, Florence M., et al., executors. (See Harrison, Herbert C.)

Harrison, Henry C., Port Washington, assignor to Western Electric Company, Incorporated, New York, N. Y. Submarine signaling. 1,765,425; June 24.

Harrison, Herbert C., deceased, Lockport, N. Y.; F. M. Harrison, A. B. B. Harrison, and W. W. Campbell, executors. Electrolytic process and apparatus. 1,768,358; June 24.

Harrison, John S., Cleveland, Ohio, assignor to Standard Oil Development Company. Method and apparatus for cracking oil. 1,767,360; June 24.

Harris, Leonard B., assignor of one-half to E. M. Goldsmith, New York, N. Y. Vehicle seat. 1,767,757; June 24.

Harrison, Marion M., Akron, Ohio. Corrosion prevention of iron and steel. 1,766,902; June 24.
Harrison, Thomas R, Wyncote, assignor to The Brown Instrument Company, Philadelphia, Pa. Method of and apparatus for furnace control. 1,765,977; June 24.
Harrold, Charles W., assignor to Harris-Seybold-Potter Company, Cleveland, Ohio. Plate clamp. 1,765,530; June 24.
Hart, Frederick A., New Britain, Conn., assignor to Remington Accounting Machine Corporation, New York, N. Y. Combined typewriting and computing machine. 1,767,792; June 24.
Hart, Glenn A., assignor of one-half to B. L. Culver, Bell, Calif. Pitman. 1,765,882; June 24.
Hart, Hannah M., Chicago, Ill. Hair-waving device. 1,768,055; June 24.
Hart & Hutchinson Company, The. (See Anderson, Gustave H., assignor.)
Harter, Mary, Thurston, Ohio. Fruit picker. 1,767,977; June 24.
Harter, Ralph W., De Witt, Mich. Cattle poke. 1,767,284; June 24.
Hartford-Empire Company. (See Canfield, Robert W., assignor.)
Hartford-Empire Company. (See Howard, George E., assignor.)
Hartford-Empire Company. (See Parham, Sidney F., assignor.)
Hartford-Empire Company. (See Rendall, William S., assignor.)
Hartford-Empire Company. (See Schroder, John E., assignor.)
Hartford-Empire Company. (See Westin, D. B., and Ingle, assignors.)
Hartley, Henry J., assignor to Nichols Copper Company, New York, N. Y. Treating fuller's earth and the like. 1,768,465; June 24.
Hartmann, Erich, M. Hardtmann, Wiesdorf-on-the-Rhine, and P. Kummel, Leverkusen-on-the-Rhine, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Protecting wool, fur, rugs, and like against the attack of moths and product thereof. 1,766,819; June 24.
Hartmann, Otto H., assignor to Schmidt'sche Heissdampf-G. m. b. H., Cassel-Wilhelmshohe, Germany. Water-tube boiler with steam superheater. 1,768,056; June 24.
Hartmann, Otto H., assignor to Schmidt'sche Heissdampf-G. m. b. H., Cassel-Wilhelmshohe, Germany. Boiler generating steam according to the indirect method. 1,768,057; June 24.
Hartmann, Otto H., assignor to Schmidt'sche Heissdampf-Gesellschaft mit beschrankter Haftung, Cassel-Wilhelmshohe, Germany. Superheating of interstage steam. 1,768,058; June 24.
Hartmann, Otto H., Kassel-Wilhelmshohe, and W. Jung, Kallel, assignors to Schmidt'sche Heissdampf-Gesellschaft m. b. H., Kassel-Wilhelmshohe, Germany. Locomotive boiler. 1,768,198; June 24.
Hartmann, Otto H., assignor to Schmidt'sche Heissdampf-Gesellschaft m. b. H., Cassel-Wilhelmshohe, Germany. Superheating in high-pressure locomotives. 1,768,319; June 24.
Hartmann, Otto H., assignor to Schmidt'sche Heissdampf-Gesellschaft m. b. H., Cassel-Wilhelmshohe, Germany. High-pressure locomotive. 1,768,320; June 24.
Hartmann, Otto H., assignor to Schmidt'sche Heissdampf-Gesellschaft m. b. H., Cassel-Wilhelmshohe, Germany. Apparatus for controlling the working steam in high-pressure locomotives. 1,768,321; June 24.
Hartmann, Otto H., and R. Uhde, assignors to Schmidt'sche, Heissdampf-G. m. b. H., Kassel-Wilhelmshohe, Germany. High-pressure steam generator. 1,768,448; June 24.
Hartwell, Mabel, Lake Geneva, Wis. Combined reading guide and bookmark. 1,767,177; June 24.
Hartzell Industries, Inc. (See Charavay, Frederick, assignor.)
Hartzell, Max W., Woodland, Calif. Computator card holder. 1,765,668; June 24.
Hartzler, Melvin E., Downers Grove, and T. H. Ferguson, Oak Park, Ill.; said Ferguson assignor to said Hartzler. Yielding upright traffic marker. 1,766,073; June 24.
Harvey, Minor. (See Bayard, M. L., and Harvey.)
Hasegawa, Masao, Santa Rosa, Calif. Circuit-controlling device. 1,766,993; June 24.
Haseltine, Stacy B. (See Johnson, G. A., and Haseltine.)
Haseltine, Stacy B., assignor to W. H. Miner, Inc., Chicago, Ill. Car construction. 1,765,833; June 24.
Haseltine, Stacy B., assignor to W. H. Miner, Inc., Chicago, Ill. Car construction. 1,766,630; June 24.
Haseltine, Stacy B., assignor to W. H. Miner, Inc., Chicago, Ill. Car construction. 1,766,631; June 24.
Haskin, Walter E. assignor to Pressed & Welded Steel Products Company, Inc., New York, N. Y. Binder. 1,767,978; June 24.
Haslup, Dodson, Grafton, W. Va. Display cabinet. 1,766,632; June 24.
Hasselblad, Carl G., Grosse Point, and A. J. Catellier, Detroit, Mich. Coating sausages and smoked or cooked meats. 1,765,485; June 24.
Hassensail, Louis W., Toledo, Ohio. Carbon-dioxide-snow compressor. 1,768,039; June 24.
Hastings, Herbert H. (See Swain, J. H., and Hastings.)
Hauck Manufacturing Company. (See Elze, Walter C., assignor.)
Hausmann, Fritz, assignor to the firm Lederwerke Becker & Co., Offenbach-on-the-Main, Germany. Method and device for compensating electricity. 1,766,512; June 24.
Hautot, Maurice, assignor to Compagnie International Des Wagons-Lits Et Des Grands Express Europeens, Paris, France. Railway carriage. 1,767,361; June 24.
Haw, Jakob, Berlin-Staaken, Germany. Adjustable propeller. 1,767,127; June 24.
Hawkes, Arthur G., Detroit, Mich., assignor to American Car and Foundry Motors Company, New York, N. Y. Body for motor vehicles. 1,766,994; June 24.
Hawley, Charles G., Chicago, Ill., assignor to Centrifix Corporation, Cleveland, Ohio. Centrifugal fixture. 1,765,918; June 24.
Hawley, Jesse B., Wilmette, Ill., and R. H. Townsend, Mount Vernon, N. Y., assignor, by mesne assignments, to United Reproducers Corporation, St. Charles, Ill. Sound amplifier. 1,765,486; June 24.
Hays, Henry C., Detroit, Mich., assignor to Continental Can Company, Inc., New York, N. Y. Hand fire extinguisher. 1,765,374; June 24.
Hayward Company, The. (See Brendlih, Herman J., assignor.)
Hazell, Benjamin W., Baltimore, Md. Septum. 1,767,793; June 24.
Hazell, Joseph W., Washington, D. C., assignor to New Process Multi-Castings Company. Making molds. 1,768,359; June 24.
Head, Thomas W., Bridgnorth, England. Loom for weaving tufted pile fabrics. 1,767,758; June 24.
Heat Transfer Products, Inc. (See Jacocks, George T., assignor.)
Heath, Sheldon B. (See Barstow, E. O., and Heath.)
Hebendahl, John P., Elizabeth, N. J. Bracket. 1,767,585; June 24.
Hebenstreit, Karl O., Dresden, Germany. Baking machine. 1,766,023; June 24.
Heck, William E., and J. Ellermeyer, Du Bois, Wash. Side-draft eliminator for gang plows. 1,768,402; June 24.
Heckman, William F., assignor to The Higgin Manufacturing Company, Newport, Ky. Spring-roller-controlling device. 1,766,746; June 24.
Hedberg, Carl W. J. (See Wintermute, H. A., and Hedberg.)
Hedge, Russell H., Delta, Iowa. Fastener. 1,767,451; June 24.
Heer, Joseph F., Washington, Pa. Pipe-bending tool. 1,767,362; June 24.
Heetkamp, Heinrich, Duisburg, assignor to Demag Aktien Gesellschaft, Duisburg, Prussia, Germany. Apparatus for drawing hollow blanks. 1,767,845; June 24.
Heggie Simplex Boiler Company. (See Baker, Arthur K., assignor.)
Heggie Simplex Boiler Company. (See Birchfield, Robert W., assignor.)
Heginbottom, Walter G., assignor of one-half to J. R. Francis, Flint, Mich. Heating-medium control for charge-forming devices. 1,766,709; June 24.
Heidenreich, Isidor, St. Louis, Mo. Scratch sheet or pad holder. 1,766,252; June 24.
Heil, Julius P., assignor to The Heil Co., Milwaukee, Wis. Oil pump. 1,765,724; June 24.
Heil Co., The. (See Heil, Julius P., assignor.)
Heimer, Granville A., Nazareth, Pa. Musical toy. 1,768,199; June 24.
Heinen, Frederick C., and W. W. Darrow, assignors to Camel Company, Chicago, Ill. Door. 1,768,060; June 24.
Heinrich, Harrison, Brooklyn, N. Y. Theftproof tire-valve cap. 1,767,884; June 24.
Heintze & Blanckertz. (See Blanckertz, Rudolf, assignor.)
Heiny, Anatole C., Ridgefield Park, N. J., assignor to Dubilier Condenser Corporation, New York, N. Y. Feeding apparatus for condensers. 1,768,449; June 24.
Heising, Raymond A., Millburn, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Electric wave transmission device. 1,768,251; June 24.
Heisler, Charles L., Schenectady, N. Y., assignor to General Electric Company. Film driving means. 1,768,403; June 24.
Heitger, Frank H., Flint, Mich. Throttle control for internal-combustion engines. 1,766,711; June 24.
Heitger, Frank H., assignor of one-half to J. R. Francis, Flint, Mich. Carburetor. 1,766,710; June 24.
Heizmann, Jules, Strasbourg, France. Heat exchanger. 1,767,794; June 24.
Helgesen, Jacob, White Plains, N. Y. Garbage chute. 1,767,885; June 24.
Heller Brothers Company. (See Logan, Colin M., assignor.)
Heller, Josef, Vienna, Austria. Decorticating machine. 1,766,513; June 24.
Heller, William M. (See Stein, C., and Heller.)
Hellthaler, Theodor, Granschutz, assignor to the firm A. Riebecksche Montanwerke Aktiengesellschaft, Halle, Saale, Germany. Bleaching Montan wax. 1,767,886; June 24.
Helstrom, Julmer, Virginia, Minn. Dirigible headlight. 1,768,252; June 24.
Hem, Halvor O., assignor to Toledo Scale Company, Toledo, Ohio. Counting device. 1,768,477; June 24.

Hem, Halvor O., assignor to Toledo Scale Company, Toledo, Ohio. Weighing scale. 1,768,478; June 24.
Hemphill Company. (See Bergman, Harry K., assignor.)
Henderson, Albert, assignor to Henderson & Hatcher, Inc., Pittsburgh, Pa. Step. 1,768,061; June 24.
Henderson & Hatcher, Inc. (See Henderson, Albert, assignor.)
Henderson, James B., Blackheath, England. Automatic control of the steering of dirigible craft. 1,765,583; June 24.
Henderson, James B., Blackheath, England. Bearing. 1,765,584; June 24.
Henderson, Thos. S., administrator. (See Byers, Dwight.)
Hendrickson, Robert O., assignor to J. I. Case Company, Racine, Wis. Air cleaner for internal-combustion engines. 1,766,124; June 24.
Henricks, Arthur G., and H. L. Mitchell, assignors to Harnischfeger Corporation, Milwaukee, Wis. Steering gear. 1,767,524; June 24.
Henrikson, Carl G. (See Fisher, G. W., and Henrikson.)
Henry, Henry L., Burbank, assignor of one-half to J. R. Preter, Los Angeles, Calif. Lawn sprinkler. 1,766,514; June 24.
Henry, William T. (See Pike, William A. and H. M., and Henry.)
Henschell, Ferdinand A. (See Dixon, A. H., Robson, and Henschell.)
Henze, Paul, and G. S. Gillberg, assignors to Electro-Motive Instrument Co., Detroit, Mich. Therapeutic articulating apparatus. 1,765,669; June 24.
Hepburn, Charles, Beebe, Quebec, Canada. Stonecutting machine. 1,768,525; June 24.
Heppes, George P., Chicago Heights, Ill., assignor, by mesne assignments, to The Patent and Licensing Corporation, Boston, Mass. Machine for making roofing. 1,765,834; June 24.
Herkt, Ernst, Kiel, Germany, assignor to Fried. Krupp Germaniawerft Aktiengesellschaft, Kiel-Gaarden, Germany. Bed for vertical internal-combustion engines. 1,766,383; June 24.
Herman, Joseph, Westfield, N. J., ass'gnor to American Telephone and Telegraph Company. Set for measuring operating time of relays. 1,765,585; June 24.
Herman, Vernal V., Vancouver, Wash. Fog, frost, and snow eliminator. 1,768,404; June 24.
Herr, Homer A., Philadelphia, Pa. Magnetic clutch. 1,765,670; June 24.
Herrick, Horace T., O. E. May, and H. W. Titus, Washington, D. C.; said May and said Titus assignors to said Herrick. Feed. 1,767,178; June 24.
Herrmann, Willy O., and H. Deutsch, Munich, assignors to Consortium für Elektrochemische Industrie G. m. b. H., Munich, Bavaria, Germany. Solid resinous condensation product. 1,767,759; June 24.
Herron, Wilmer B. (See Palmer, N. P., and Herron.)
Hersee, F. C., Company. (See Hersee, F. C., and Wiley, assignors.)
Hersee, Frederick C., Watertown, and N. T. Wiley, Somerville, assignors to F. C. Hersee Company, Watertown, Mass. Lamp socket and terminal therefor. 1,765,793; June 24.
Herz, Richard, and E. Albrecht, Frankfort-on-the-Main, Fechenheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Manufacturing vic. trihalogenbenzenes. 1,766,747; June 24.
Herz, Richard, Frankfort-on-the-Main, and M. Schubert, Fechenheim, near Frankfort-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Ortho-cyanarylsulphocyanogen compounds and making the same. 1,766,820; June 24.
Herzbrun, Isadore, et al. (See Schultis, Charles F., assignor.)
Hestand, Bedford, Verden, ass'gnor of one-half to B. Lackey, Chickasha, Okla. Cotton harvester. 1,767,979; June 24.
Hetherington, John, Los Angeles, Calif. Mixing tool. 1,766,171; June 24.
Heumann, Emil, Itzehoe, Germany. Ditch digging and cleaning machine. 1,765,919; June 24.
Heusler, Otto. (See Griessbach, R., Schliephake, and Heusler.)
Hewitt, William R., New York, N. Y. Fuel-feeding system. 1,767,452; June 24.
Hewitt, William R., New York, N. Y. Railway tie plate. 1,767,453; June 24.
Heyward, Thomas R., jr., Pittsburgh, Pa. Apparatus for heat treating metal articles. 1,766,633; June 24.
Hibbert, Harold, Montreal, Quebec, Canada, and J. L. Parsons, assignors to Hammermill Paper Company, Erie, Pa. Making pyroxylin solutions of low viscosity. 1,768,253; June 24.
Hickok, W. O., Manufacturing Company. (See Brondmeyer, Albert, assignor.)
Hiebert, Erdman R., Gretna, Manitoba, Canada. Storage-battery clamp. 1,766,515; June 24.
Hiering, William C., assignor to J. E. Mergott Company, Newark, N. J. Bag-frame fastener. 1,765,671; June 24.
Hiers, Harvey, Los Angeles, Calif. Airplane brake. 1,766,074; June 24.
Higbie, Henry H., Ann Arbor, Mich. Reflecting material. 1,767,285; June 24.
Higgin Manufacturing Company, The. (See Heckman, William F., assignor.)
Higgin Manufacturing Company, The. (See Traut, Clifford, assignor.)
Higgins, Clark F., Melrose, Mass. Dumping vehicle. 1,766,436; June 24.
High, Jurjen S., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Reproducing device. 1,765,588; June 24.
Hiles, William A., Cleveland, Ohio. Ice-cream freezer. 1,766,172; June 24.
Hilger, Josef, Cologne-Mulheim, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. 2-aryl-4,6-dihydroxypyrimidines. 1,766,748; June 24.
Hill, Grover L., Bagley, Wis. Spraying device. 1,766,062; June 24.
Hill, Mamie E., Walden, Colo. Tire-chain carrier for motor vehicles. 1,766,634; June 24.
Hillborn, Herbert J. (See Schrell, A., and Hillborn.)
Hills Bros. (See Hills, Leslie W., assignor.)
Hills, John C., Melrose, Mass. Device for raising and buoying up ships. 1,767,672; June 24.
Hills, Leslie W., assignor to Hills Bros., San Francisco, Calif. Construction for and method of evacuating cans. 1,766,173; June 24.
Hiltz, George S., Brooklyn, N. Y., and W. F. Purcell, Hoboken, N. J., assignors to Stock Quotation Telegraph Company, New York, N. Y. Printing-telegraph system. 1,767,128; June 24.
Hinderliter, Frank J., Tulsa, Okla. Friction sub. 1,767,286; June 24.
Hintze, Raymond S., Chicago, Ill. Display rack and stand. 1,767,980; June 24.
Hirth, Albert, Nonnenhorn-on-the-Bodensee, Germany. Tubular container for viscuous materials. 1,765,794; June 24.
Hitt, Verlington F., and J. O. Evans, Miami Beach, Fla. Rumble seat. 1,768,466; June 24.
Hoagland, Frank O. (See Banfield, F. E., jr., and Hoagland.)
Hobart Manufacturing Company, The. (See Johnston, H. L., and Meeker, assignors.)
Hobbs, Samuel T., assignor to The Washburn Company, Worcester, Mass. Egg beater. 1,767,454; June 24.
Hobbs, Willis F., and J. A. Anderson, assignors to The Bridgeport Hardware Manufacture Corporation, Bridgeport, Conn. Parallel-jaw wrench or brace. 1,766,174; June 24.
Hobert Manufacturing Company, The. (See Rataiczak, T. F., and Akers, assignors.)
Hodge, Pearle M., Barnston, Nebr. Animal-draft equalizer. 1,766,384; June 24.
Hodgman, Willis K., jr., Taunton, Mass. Dry-pipe valve. 1,767,129; June 24.
Hoe, R., & Co. Inc. (See Ball, Harry V., assignor.)
Hoel, Carey C., Columbus, Ohio, assignor to Jeannette Shade and Novelty Company, Jeannette, Pa. Lighting fixture. 1,768,322; June 24.
Hoffman, Benjamin P., Tulsa, Okla. Rod elevator. 1,768,450; June 24.
Hoffman, Charles T., Washington, D. C. Rail anchor. 1,767,981; June 24.
Hoffman, George R., assignor to Milwaukee Electric Crane & Manufacturing Company, West Allis, Wis. Lumber grapple. 1,767,525; June 24.
Hoffman, Hugo. (See Luedtke, M. A. G., and Hoffman.)
Hoffman, John C., Sioux City, Iowa. Expansible vehicle trunk. 1,768,405; June 24.
Hoffman, John E., Casper, Wyo. Nailing tool. 1,767,926; June 24.
Hoffman, Michael, Brooklyn, N. Y. Indicator for motion-picture-projection apparatus. 1,768,063; June 24.
Hoffman, Michael, Brooklyn, N. Y. Sound-reproducing machine. 1,768,200; June 24.
Hoffman, Rudolph, Cleveland, Ohio. Grate. 1,765,426; June 24.
Hoffmann, Otto, Woodhaven, N. Y., assignor to Art Fixtures, Inc., New York, N. Y. Canopy for lighting fixtures or similar articles. Des. 81,443; June 24.
Hofmann, Johannes W., Kotzschenbroda, near Dresden, Germany. Oscillating-damping device free from radiation for electric lines. 1,766,995; June 24.
Höhn, Anton. (See von Staden, H. A., Berenbruch, and Höhn.)
Holan, James, assignor to The American Coach & Body Company, Cleveland, Ohio. Curtain for motor vehicles. 1,767,071; June 24.
Holben, George O., Allentown, Pa. Container. 1,768,064; June 24.
Holbrook, Art E., Joplin, Mo. Fisherman's outfit. 1,767,887; June 24.
Holdaway, Hall H., Long Beach, assignor to Byron Jackson Co., West Berkeley, Calif. Pin thread for disk-bit mountings. 1,766,635; June 24.
Holl, Alfred. (See Nawiasky, P., Krause, and Holl.)
Holland Furnace Company. (See de Lannoy, George C., assignor.)
Hollestelle, Jan H., St. Louis, Mo., assignor to The Kennedye Corporation, Wilmington, Del. Drilling tool. 1,766,253; June 24.
Hollingsworth, Jeptha G., Kansas City, Mo. Plate frame for supporting artificial teeth and making same. 1,767,130; June 24.
Hollister, Edward E., assignor to Hollister-Whitney Company, Quincy, Ill. Automobile lift. 1,767,982; June 24.

Hollister-Whitney Company. (See Hollister, Edward E., assignor.)
Holly, Ed J., Taylor, Tex. Automatic railroad gate. 1,766,516; June 24.
Holly, Edward B., jr. (See Pichl, Anthony J., assignor.)
Holmes, Daniel T., assignor of one-fourth to O. Rogers and one-fourth to E. Williams, Webb City, Mo. Brake. 1,766,517; June 24.
Holmes, Elbridge R., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Side-slipping movable-plunger weft detector. 1,766,821; June 24.
Holmes, Elbridge R., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Chain guard for narrow-ware looms. 1,766,903; June 24.
Holst, Gilles, Eindhoven, Netherlands, assignor to Radio Corporation of America. Light valve. 1,767,132; June 24.
Holt, Harris B., assignor to Rosedale Foundry & Machine Company, Pittsburgh, Pa. Glass-rolling machine. 1,767,131; June 24.
Holzel, Johannes, Pasing, near Munich, Germany, assignor to A. G. Brown Boveri & Cie., Baden, Switzerland. Insulator guard. 1,766,636; June 24.
Holzhauer, Philo J., assignor to General Motors Corporation, Detroit, Mich. Radiator screen. 1,768,479; June 24.
Honn, Peter, Grand Rapids, Mich. Fluid-pressure pump. 1,767,072; June 24.
Honywill, Albert W., jr. (See Snow, N. L., and Honywill.)
Hood Rubber Company. (See Glidden, A. A., Knowland, and Duffy, assignors.)
Hoover Company, The. (See Davidson, Walter C., assignor.)
Hopewell, Lester H., Brooklyn, N. Y. Color lamp. 1,766,637; June 24.
Hopkins, Marion B., Elizabeth, N. J., assignor to Standard Oil Development Company. Preparing hydrocarbon products. 1,767,363; June 24.
Horner, Edward A., Chambersburg, Pa. Filing device. 1,766,996; June 24.
Horning, Louis P., jr., Elizabeth, assignor to Victor Talking Machine Company, Camden, N. J. Combined phonograph and radio apparatus. 1,768,065; June 24.
Horstmann, Frederick W., Maplewood, N. J. Fur-ornamenting machine. 1,765,375; June 24.
Horton, Allen A., Plymouth, and C. Marti, Livonia Township, Wayne County, assignors to Burroughs Adding Machine Company, Detroit, Mich. Key lock for calculating machines. 1,767,673; June 24.
Horton, Allen A., Plymouth, assignor to Burroughs Adding Machine Company, Detroit, Mich. Transfer mechanism for calculating machines. 1,767,674; June 24.
Horween, Isidore, Chicago, Ill. Paddle wheel for tanning apparatus. 1,767,760; June 24.
Hosbein, Louis H., Winnetka, and O. Welcome, Chicago, assignors to M. H. Detrick Company, Chicago, Ill. Furnace construction. 1,766,175; June 24.
Hosking, Richard T., Wilmette, assignor, by mesne assignments to Shakeproof Lock Washer Company, Incorporated, Chicago, Ill. Bolt lock. 1,767,287; June 24.
Hough, James W. (See Cara, D. J., and Hough.)
Houghland, Albert C., assignor to Crane Company of Minnesota, St. Paul, Minn. Driving mechanism for butter working rolls. 1,766,176; June 24.
House, Frank R., Baldwin Harbor, N. Y., assignor, by mesne assignments, to Sperry Gyroscope Company, Inc. Searchlight-ventilating means. 1,767,526; June 24.
Howard, Frank A., Elizabeth, N. J., assignor to Standard Oil Development Company. Dwelling heater installation. 1,767,364; June 24.
Howard, Frank A., Elizabeth, N. J., assignors to Standard Oil Development Company. Simultaneously producing light hydrocarbon motor-fuel oil and carbureted water gas. 1,767,455; June 24.
Howard, George E., Butler, Pa., assignor to Hartford-Empire Company, Hartford, Conn. Drawing glass tubing. 1,766,638; June 24.
Howard, Monroe S. (See Burtis, W. H., and Howard.)
Howard, Monroe S., Hastings, Minn. Tuning device for radio apparatus. 1,765,587; June 24.
Howard, Russell S., La Grange, G. H. Brodie, Riverside, and T. O. Westhafer, Downers Grove, Ill., assignors to Western Electric Company, Incorporated, New York, N. Y. Protective device. 1,765,531; June 24.
Howarth, Harry A. S., assignor to Kingsbury Machine Works, Inc., Frankford, Philadelphia, Pa. Bearing. 1,767,238; June 24.
Howarth, John F., New York, N. Y. Cooling engines and purifying lubricants. 1,767,675; June 24.
Howe, James M., assignor to The Eaton Axle & Spring Company, Cleveland, Ohio. Automobile bumper. 1,767,212; June 24.
Howe, Winthrop K., assignor to General Railway Signal Company, Rochester, N. Y. Contact shoe. 1,766,639; June 24.
Howell, Albert S., assignor to The Bell & Howell Company, Chicago, Ill. Intermittent-feed mechanism. 1,767,846; June 24.
Howell, Albert S., assignor to The Bell & Howell Company, Chicago, Ill. Motion-picture camera and the like. 1,767,847; June 24.
Howell, Albert S., assignor to The Bell & Howell Company, Chicago, Ill. Motion-picture camera and the like. 1,767,848; June 24.
Howell, Albert S., assignor to The Bell & Howell Company, Chicago, Ill. Plural-lens-adjusting means. 1,767,849; June 24.
Howell, Albert S., assignor to The Bell & Howell Company, Chicago, Ill. Lens structure. 1,767,850; June 24.
Howitz, Gerald J., New York, N. Y., assignor of one-half to L. Seidell, Plainfield, N. J. Process and composition for the generation of chlorine. 1,767,676; June 24.
Hoy, John E., assignor to The Dow Chemical Company, Midland, Mich. Casting mechanism. 1,768,254; June 24.
Hubbert, A. F., et al. (See Ragland, Jack R., assignor.)
Hubert, Emil, L. Lock, and O. Leuchs, Elberfeld, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort, Germany. Preparation of bodies from acidyl celluloses. 1,766,822; June 24.
Hudson, Alexander M. (See Twetten, C. H., and Hudson.)
Hudson Motor Car Company. (See Groehn, Otto J., assignor.)
Hudson, Walter, assignor to The Burdick Corporation, Milton, Wis. Radiant-energy-generating unit and making the same. 1,767,586; June 24.
Huff, Lyman C., assignor to Universal Oil Products Company, Chicago, Ill. Gas burner. 1,765,672; June 24.
Huff, Lyman C., assignor to Universal Oil Products Company, Chicago, Ill. Orchard heater. 1,767,670; June 24.
Huff, Lyman C., assignor to Universal Oil Products Company, Chicago, Ill. Return-bend fitting. 1,767,677; June 24.
Huff, Lyman C., assignor to Universal Oil Products Company, Chicago, Ill. Cleaning apparatus. 1,767,795; June 24.
Huffman, Charles E., Montclair, N. J., assignor to Westinghouse Lamp Company. Electron-discharge device with indirectly-heated cathode. 1,765,487; June 24.
Huffman, John H., Washington, D. C. Tire-rim tool. 1,767,365; June 24.
Hugershoff, Reinhard, Dresden, Germany, assignor to "Ikarus" Internationale Patent-verwertungs A. G. Vaduz, near Furstentum, Liechtenstein, Germany. Aerocartograph. 1,766,294; June 24.
Hughes, James W., assignor to Budd Wheel Company, Philadelphia, Pa. Rolling disks. 1,767,796; June 24.
Hughes Tool Company. (See Scott, Floyd L., assignor.)
Hughes Tool Company. (See Wellensiek, Louis H., assignor.)
Hughes, William H., Falls City, Nebr. Floor polisher. 1,767,983; June 24.
Hüller, Carl. (See Kovács, János, assignor.)
Hülsmeyer, Christian, Dusseldorf, Germany. Apparatus for producing nonoxidizing steam. 1,767,456; June 24.
Hume, Walter R., Melbourne, Victoria, Australia. Method of and apparatus for forming or lining pipes. 1,768,451; June 24.
Humpert, Karl, Pratteln, near Basel, assignor to Stanniolfabrik Burgdorf A. G. Burgdorf, Switzerland. Production of acid-resisting wrapping material. 1,765,920; June 24.
Humphrey, George A. (See Humphrey, Hubert R. and G. A.)
Humphrey, Hubert R., assignor to General Gas Light Company, Kalamazoo, Mich. Gas stove. 1,766,075; June 24.
Humphrey, Hubert R. and G. A., assignors to General Gas Light Company, Kalamazoo, Mich. Heating apparatus. 1,766,076; June 24.
Humphrey, Walter E., and T. G. Graham, assignors, by mesne assignments, to The Mason Tire & Rubber Co., Kent, Ohio. Fluid-conducting tree for vulcanizers. 1,768,406; June 24.
Humphreys, Ira B., Denver, Colo. Pumping apparatus. 1,765,427; June 24.
Hunt, Calvin M., and R. W. Wilkinson, Borger, Tex. Oil-well apparatus. 1,768,323; June 24.
Hunt, Henry G., Granville, Mass. Drum. 1,767,133; June 24.
Hunter, James, Machine Company. (See Buck, Lucien, assignor.)
Hunter, Percy E., assignor of one-half to F. J. Lanahan, Pittsburgh, Pa. Bridge structure. 1,765,488; June 24.
Hunter, Percy E., and L. E. Endsley, Pittsburgh, Pa.; said Endsley assignor to said Hunter. Method of and apparatus for separating metal sheets. 1,767,587; June 24.
Huntley, Alton K., Cleveland, Ohio, assignor to National Carbon Co., Inc. Dry-cell battery. 1,765,673; June 24.
Hupp, Charles A., Indianapolis, assignor of one-half to W. M. Wilt, Syracuse, Ind. Table cover. Re17,714; June 24.
Hurford, George, and N. V. Kipping, Aldwych, London, England, assignors to Western Electric Company, Incorporated, New York, N. Y. Molded finger plate for dial switches. 1,765,428; June 24.
Hurowitz, Jay C., New York, N. Y., assignor to L. W. Jones Tool Company, Incorporated. Tool holder. 1,768,066; June 24.
Hurt, Samuel N., assignor to Toledo Scale Manufacturing Company, Toledo, Ohio. Weighing scale. 1,768,480; June 24.
Husband, John, Montreal, Quebec, Canada. Rotary valve. 1,767,239; June 24.
Husman, Marion M., New York, N. Y. Cap. 1,766,740; June 24.

Husted, Harry F., Winchester, Va., assignor to L. W. Scott, Wyoming, Pa. Cigarette and cigar holder. 1,767,927; June 24.
Hutchen, Edward, Milwaukee, assignor to Utility Manufacturing Co., Cudahy, Wis. Flat-tire-building machine. 1,767,288; June 24.
Hutches, Benjamin F., jr., Allendale, N. J. Mounting and supporting means for time indicators. 1,767,671; June 24.
Hutchings, LeRoi E., and J. D. Lear, Buffalo, assignors, by mesne assignments, to Remington Rand, Inc., New York, N. Y. Filing drawer. 1,768,467; June 24.
Hutchins, Allan, S., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Shuttle tension and take-up mechanism. 1,766,904; June 24.
Hutchinson, Philip H. (See Brittain, R. J., jr., and Hutchinson.)
Hutchison, Miller R., West Orange, N. J., assignor, by mesne assignments, to Acoustic Products Company, New York, N. Y. Sounding board. 1,767,678; June 24.
Hutchison, Miller R., West Orange, N. J., assignor, by mesne assignments, to Acoustic Products Company, New York, N. Y. Truncated horn speaker having plurality of chambers. 1,767,679; June 24.
Hutt, Albert E., New Rochelle, N. Y. Pressure device in dispensing fluids and semifluids. 1,767,680; June 24.
Hutto, Amon A., Samson, Ala. Plow attachment. 1,766,750; June 24.
Hutton, Ulric O., Wauwatosa, Wis., assignor, by mesne assignments, to Cutler-Hammer Inc. Apparatus for proportioning and controlling the rates of flow of fluids. 1,767,588; June 24.
Huye, Joseph G., New Orleans, La. Display stand. 1,767,134; June 24.
Hyatt, Samuel W., assignor to Indiana Lamp Corporation, Connersville, Ind. Ferrule and retainer for head lamps. 1,765,763; June 24.
I. G. Farbenindustrie Aktiengesellschaft. (See Dehnel, Erich, assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Genth, Wilfried, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Griessbach, R., Schliephake, and Heusler, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Hartmann, E., Hardtmann, and Kummel, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Hilger, Josef, assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Hubert, E., Lock, and Leuchs, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Kaufmann, H. P., and Schubert, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Lecher, H., and Zieser, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Leuchs, Otto, assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Luther, M., and Beller, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Michel, Richard, assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Mittasch, A., and Frankenburger, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Müller-Conradi, M., and Wilke, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Nicolai, Fritz, assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Nitzschke, O., and Noack, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Pier, M., Müller-Cunradi, Wietzel, and Winkler, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Schwaebel, G., and Schleicher, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Siedler, P. C. H., and Schulte, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See von Staden, H. A., Berenbruch, and Höhn, assignors.)
Ice Cream Cone Machinery Inc. (See Tatosian, Harry G., assignor.)
Ideal Lighting Novelty Co. (See Scheler, Armin, assignor.)
Ilzuka, Bunpachi, San Mateo, Calif. Match scratcher. 1,766,295; June 24.
"Ikarus" Internationale Patent-verwertungs A. G. (See Hugershoff, Reinhard, assignor.)
Ileman, Emil A., assignor, by mesne assignments, to Consolidated Ashcroft Hancock Company, Inc., New York, N. Y. Pressure gauge. 1,766,997; June 24.
Imbach, Siegfried, Dresden, Germany. Dress shield. 1,765,725; June 24.
Indiana Lamp Corporation. (See Hyatt, Samuel W., assignor.)
Individual Drinking Cup Company. (See Wessman, E. G., and Stone, assignors.)
Industrial Research Corporation. (See Brockway, Carl P., assignor.)
Ingersoll, Robert H., deceased, New York, N. Y., C. S. Smith, Lansing, Mich., and F. C. Leubuscher, Essex Fells, N. J., executors, assignors to Robt. H. Ingersoll, Inc., New York, N. Y. Razor-blade stropper. 1,767,984; June 24.
Ingersoll, Robt. H., Inc. (See Ingersoll, Robert H., assignor.)
Ingle, Henry W. (See Westin, D. B., and Ingle.)
Ingold, Carl F., Milwaukee, Wis. Catheter. 1,767,073; June 24.
Inhoffen, Walther. (See Wetzell, C., and Inhoffen.)
Inman, Harry A., Newark, N. Y. Egg box. 1,767,797; June 24.
Inman, Walter A., and A. L. Brumund, Waukegan, Ill. Refrigeration apparatus. 1,765,674; June 24.
Inscoe, Emily W. (See Byrd, Guy W., assignor.)
Insul, Jack, Chicago, Ill. Vehicle brake. 1,767,761; June 24.
International Cigar Machinery Company. (See Alm, Thure W., assignor.)
International Cigar Machinery Company. (See Bronander, Wilhelm B., assignor.)
International Cigar Machinery Company. (See Halstead, John F., assignor.)
International Cigar Machinery Company. (See Lindblad, Charles V., assignor.)
International Cigar Machinery Company. (See Wheeler, Henry H., assignor.)
International Fireproof Products Corporation. (See Vivas, Fernando S., assignor.)
International Precipitation Company. (See Arras, Adam, assignor.)
International Precipitation Company. (See Welch, Harry V., assignor.)
International Nickel Company, The. (See Kayes, A. E., and Moehling, assignors.)
International Paper Box Machine Company, The. (See Goss, Harold J., assignor.)
Iochum, Maurice, Carcassonne, France. Receptacle for dispensing liquid, semiliquid, or pasty materials. 1,767,457; June 24.
Irons, William A. (See Lemons, R. C., and Irons.)
Irvine, Andrew. (See Bateman, A. T., and Irvine.)
Isbell, Donald K., Mishawaka, Ind., assignor to Dodge Manufacturing Corporation. Bearing. 1,765,978; June 24.
Ischinger, Alfred E., Philadelphia, Pa. Check writer. 1,766,640; June 24.
Ischinger, Alfred E., assignor to Berkshire Knitting Mills, Wyomissing, Pa. Stocking. Des. 81,444; June 24.
Ischinger, Alfred E., assignor to Berkshire Knitting Mills, Wyomissing, Pa. Stocking. Des. 81,445; June 24.
Israel, Eli, assignor of one-half to R. Israel, Wilkes-Barre, Pa. Lamp holder for miners' caps. 1,768,201; June 24.
Israel, Ralph. (See Israel, Eli, assignor.)
Ivory, Mercie, and T. W. Alfred, Nephi, Utah. Urinal. 1,767,240; June 24.
Izzo, Frank, Huntington, W. Va. Safety device for pneumatic hammers. 1,766,296; June 24.
Jachens, John, San Francisco, Calif. Badge. 1,768,067; June 24.
Jackman, Dean M., Kenvil, N. J. Purifying explosives. 1,767,798; June 24.
Jackman, Harold W. (See Harrington, Clarence L., assignor.)
Jackson, Andrew O., Portland, Oreg. Burner for hard fuel. 1,766,641; June 24.
Jackson, Byron, Co. (See Smith, Nelson K., assignor.)
Jackson, Elvin R. (See Johnson, Joseph, assignor.)
Jackson, George M., Chicago, Ill. Window shade. 1,766,905; June 24.
Jackson, Herbert D., and F. White, Walsall, England. Skid chain for motor vehicles. 1,767,366; June 24.
Jackson, John S., Philadelphia, Pa. Internal-combustion engine. 1,766,385; June 24.
Jackson, Ralph G., Woodbury, N. J. Making floor coverings. 1,765,588; June 24.
Jackson, Ralph G., Woodbury, N. J. Smooth-surface textile floor covering. 1,765,589; June 24.
Jacob, Georg, assignor of one-half to the firm Kammgarnspinnerei Gautzsch bei Leipzig Aktiengesellschaft, Gautzsch, near Leipzig, Germany. Ring-spinning frame. 1,767,888; June 24.
Jacobsen Mfg. Co. (See Carlson, John A. E., assignor.)
Jacobson, Henry, Wauwatosa, and C. J. Kruse, assignors to Logemann Brothers Company, Milwaukee, Wis. Baling press. 1,766,642; June 24.
Jacobus, David S., Jersey City, assignor to The Babcock & Wilcox Company, Bayonne, N. J. Fluid heater. 1,765,675; June 24.
Jacobus, David S., Jersey City, N. J., and W. A. Jones, West New Brighton, N. Y., assignors to The Babcock & Wilcox Company, Bayonne, N. J. Economizer. 1,765,532; June 24.
Jacocks, George T., Brooklyn, N. Y., assignor, by mesne assignments, to Heat Transfer Products, Inc. Apparatus for compressing substances. 1,766,998; June 24.
Jacquelet, Robert C., Norwood, Ohio. Alternating-current rectifier. 1,767,367; June 24.
Jacques, George W., New Bedford, Mass., assignor to Atlas Tack Corporation, Fairhaven, Mass. Top gauge mechanism for fastener-setting machines. 1,767,074; June 24.
Jacques, George W., New Bedford, assignor to Atlas Tack Corporation, Fairhaven, Mass. Tension device. 1,767,075; June 24.
Jacques, George W., New Bedford, assignor to Atlas Tack Corporation, Fairhaven, Mass. Edge gauge. 1,767,589; June 24.
Jaeger, Alphons O., Chicago, Ill., and J. A. Bertsch, St. Louis, Mo.; said Jaeger assignor to The Selden Company, Pittsburgh, Pa. Purification of gases. 1,765,869; June 24.

Jaeger, Alphons O., and J. A. Bertsch, St. Louis, Mo.; said Jaeger assignor, by mesne assignments, to The Selden Research & Engineering Corporation, Pittsburgh, Pa. Preparation of vanadic acid. 1,765,870; June 24.
Jaeger Machine Company, The. (See Wilms, Henry F., assignor.)
Jaffe, Joseph L., assignor to The Perfectlite Company, Cleveland, Ohio. Lighting fixture. 1,768,255; June 24.
Jähne, Ernst H., assignor to the firm "Universelle" Cigarettenmaschinen-Fabrik J. C. Muller & Co., Dresden, Germany. Forming paper bags or cardboard boxes. 1,767,799; June 24.
Jahns, Alfred H., Seattle, Wash. Bath cabinet. 1,766,125; June 24.
James, Albert S., Eureka, Calif. Aircraft. 1,766,906; June 24.
Janca, Joseph J., assignor to The Emerson Electric Mfg. Co., St. Louis, Mo. Motor. 1,767,135; June 24.
Janes, Paul, Vienna, Austria. Fluid-mixing device. 1,766,643; June 24.
Janette, John T., Chicago, Ill. Motor control. 1,765,489; June 24.
Janette, John T., Chicago, Ill. Circulating apparatus. 1,765,490; June 24.
Janin, John V., Seattle, Wash. Street marker. 1,766,518; June 24.
Janser, Arthur. (See Friedlander, H., and Janser.)
Jansson, Gustav E., Wollaston, assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass. Transformer. 1,768,256; June 24.
Jaquith, Harold C., Glenbrook, Conn. Vehicle lamp. 1,767,590; June 24.
Jarman, Rush N., Milwaukee, Wis., assignor to Lindsay McMillan Company. Lubricant and producing the same. 1,767,076; June 24.
Jatlow, Jacob L. (See Crouse, G. B., and Jatlow.)
Jauss, Louis, Stuttgart, assignor to E. Kohl, Canstatt, Germany. Ear protector. 1,768,068; June 24.
Javery, Frank B., assignor to Warp Compressing Machine Company, Worcester, Mass. Thread-controlling device for creels. 1,765,590; June 24.
Jeannette Shade and Novelty Company. (See Hoel, Carey C., assignor.)
Jeffrey Manufacturing Company, The. (See Liggett, William K., assignor.)
Jellison, Frederick G., Rowley, Mass. Dispensing device for dental alloy and mercury. 1,767,928; June 24.
Jenkins, Charles F., assignor to Jenkins Laboratories, Washington, D. C. Synchronizing system. 1,766,644; June 24.
Jenkins Laboratories. (See Jenkins, Charles F., assignor.)
Jenney, Robert T., Los Angeles, Calif., assignor, by mesne assignments, to Cross Parking Systems, Inc., Chicago, Ill. Micrometer spring-buffer stop. 1,768,360; June 24.
Jennings, Irving C., South Norwalk, Conn. Rotary pump. 1,766,751; June 24
Jennings, Irving C., South Norwalk, Conn. Hydroturbine pump. 1,766,752; June 24.
Jennings, O. D., & Company. (See Jennings, Ode D., assignor.)
Jennings, Ode D., Chicago, Ill., assignor to O. D. Jennings & Company. Vending-machine casing or similar article. Des. 81,446; June 24.
Jennings, R. G., Yarn Cleaning Machine Co. Inc., The. (See Jennings, Robert G., assignor.)
Jennings, Robert G., assignor to The R. G. Jennings Yarn Cleaning Machine Co. Inc., Elmira, N. Y. Knitting machine for spot-dyeing apparatus. 1,767,762; June 24.
Jennings, Victor H., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Stop motion for box looms. 1,766,907; June 24.
Jensen, Niels H., Portland, Oreg. Combination bench and writing desk. 1,766,077; June 24.
Jenson, Peter W., Princeton, Minn. Snap hook. 1,767,368; June 24.
Jespersen, Helge W., Western Springs, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Method of and apparatus for coating cores. 1,765,533; June 24.
Jessen, Arnold H., Los Angeles, Calif. Multiple-power clutch. 1,766,823; June 24.
Jesser, Albert E. (See McCrery, H. E., and Jesser.)
Jessop, Francis W., Cleveland Heights, Ohio, assignor to The Ohio Electric & Controller Company, Cleveland, Ohio. Lifting magnet. 1,767,458; June 24.
Jett, George C., assignor of two-fifths to W. H. Stiemke, Milwaukee, Wis. Front-axle bumper. 1,765,764; June 24.
Jodeck, Paul. (See Cattaneo, G., and Jodeck.)
Johansson, Karl A. A., Stockholm, Sweden. Conveyer for shoes and the like. 1,766,645; June 24.
Johns, Milton G., Lancaster, Pa. Antiglare device. 1,767,179; June 24.
Johnson, August O., Chicago, Ill. Motor. 1,766,519; June 24.
Johnson Automatic Sealer Co. (See Robinson, George A., assignor.)
Johnson, Axel A., Holly, Mich. Wire cutter. 1,767,077; June 24.
Johnson, Bernice H., Boulder, Colo. Book. 1,765,979; June 24.
Johnson, Carl L., Jamestown, N. Y. Dust collector. 1,765,871; June 24.
Johnson, F. Colt, et al., trustees. (See McConnell, Thomas, assignor.)
Johnson, Frank A., Portland, Oreg. Waste-valve mechanism. 1,766,712; June 24.
Johnson, Frederick H., South Pasadena, Calif. Sprinkler head. 1,766,126; June 24.
Johnson, Fritz R., Providence, R. I. Vanity case. 1,765,726; June 24.
Johnson, George A., and S. B. Haseltine, assignors to W. H. Miner, Inc., Chicago, Ill. Car construction. 1,765,835; June 24.
Johnson, Harry, Sweetwater, Nebr. Traffic signal. 1,767,369; June 24.
Johnson, Herbert B., Flushing, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Telephone system. 1,767,929; June 24.
Johnson, John, Maplewood, N. J. Screen for filter presses. 1,767,078; June 24.
Johnson & Johnson. (See Johnson, Robert W., assignor.)
Johnson, Joseph, Prescott, assignor of one-half to E. R. Jackson, Phoenix, Ariz. Rotary engine. 1,767,985; June 24.
Johnson Laboratories, Inc. (See Polydoroff, Wladimir J., assignor.)
Johnson, Lane, Ingram, assignor to United Engineering & Foundry Company, Pittsburgh, Pa. Automatic cropping shears. 1,767,763; June 24.
Johnson, Leonard T., Newark, N. J. Scale mechanism. 1,767,213; June 24.
Johnson, Oliver L., et al., trustees. (See McConnell, Thomas, assignor.)
Johnson, Robert W., assignor to Johnson & Johnson, New Brunswick, N. J. Belt clasp. 1,766,337; June 24.
Johnson, Ruth, Owls Head, Me. Paintbrush. 1,767,986; June 24.
Johnson, Walter, Houston, Tex. Refining oil. 1,767,459; June 24.
Johnston, Dick, Buffalo, Wyo. Spring equalizer. 1,767,987; June 24.
Johnston, Herbert L., assignor to The Hobart Manufacturing Company, Troy, Ohio. Food-handling machine. 1,766,999; June 24.
Johnston, Herbert L., assignor to The Hobart Manufacturing Company, Troy, Ohio. Waste-food-handling apparatus. 1,767,001; June 24.
Johnston, Herbert L., and D. A. Meeker, assignors to The Hobart Manufacturing Company, Troy, Ohio. Food-handling apparatus. 1,767,000; June 24.
Johnston, Herbert L., and D. A. Meeker, assignors, by mesne assignments, to The Kitchen Aid Manufacturing Company, Troy, Ohio. Food-handling apparatus. 1,767,002; June 24.
Johnston, John, jr., Escondido, assignor of one-half to J. R. Townsend, Los Angeles, Calif. Refining liquid hydrocarbons. 1,766,338; June 24.
Johnston, John, jr., Escondido, assignor of one-half to J. R. Townsend, Los Angeles, Calif. Refining hydrocarbons. 1,766,339; June 24.
Johnston, Lynn, and F. A. Tice, assignors to The Electric Railway Equipment Company, Cincinnati, Ohio. Trolley-suspension clamp. 1,765,836; June 24.
Johnston, Thomas J., Bradford, Pa. Water-heating coil. 1,768,069; June 24.
Johnstone, Robert McC., Roselle Park, N. J., assignor to Cameron Machine Company, Brooklyn, N. Y. Cutting and perforating machine. 1,768,070; June 24.
Johnstone, Robert McC., Roselle Park, N. J., assignor to Cameron Machine Company, Brooklyn, N. Y. Combined slitting and winding machine. 1,768,407; June 24.
Jones, Arthur, assignor to U. S. Smelting Furnace Company, Belleville, Ill. Brick-grinding machine. 1,767,136; June 24.
Jones, Benjamin W., Schenectady, N. Y., assignor to General Electric Company. Time-delay controlling device and system. 1,768,452; June 24.
Jones, David H., Soda Springs, Calif. Egg opener. 1,765,491; June 24.
Jones, Grinnell, Cambridge, assignor to Pacific Mills, Lawrence, Mass. Method and material for preventing the tarnishing of silverware. 1,766,646; June 24.
Jones, Harry S., Chicago, Ill. Sheet-handling tray. 1,767,241; June 24.
Jones, Harry W. (See Sanford, H. W., and Jones.)
Jones, Henry, Antioch, Nebr. Connecting rod for internal-combustion engines. 1,766,024; June 24.
Jones, L. W., Tool Company. (See Hurowitz, Jay C., assignor.)
Jones & Lamson Machine Company. (See Bysshe, E. T., and Finn, assignors.)
Jones, Louis C., Greenwich, Conn., assignor to Chemical Engineering Corporation, New York, N. Y. Production of ammonia. 1,765,534; June 24.
Jones, Louis C., Greenwich, Conn., assignor to Chemical Engineering Corporation, New York, N. Y. Producing hydrogen-nitrogen mixture in the manufacture of synthetic ammonia. 1,765,535; June 24.
Jones, Louis C., Greenwich, Conn. Protective coating. 1,765,676; June 24.
Jones, Percival W., Warwick, assignor to Rosenheim Co., Inc., Providence, R. I. Bracelet chain. 1,767,529; June 24.
Jones, Percival W., Warwick, assignor to Rosenheim Co. Inc., Providence, R. I. Extension device. 1,767,530; June 24.
Jones, Richard B. (See Smith, A. W., and Jones.)

Jones, Walter L., Arlington, Mass., assignor, by mesne assignments, to Alemite Corporation, Chicago, Ill. Lubricating apparatus. 1,767,527; June 24.
Jones, Whitney W., Baltimore, Md. Vegetable-cutting apparatus. 1,766,824; June 24.
Jones, Whitney W., Baltimore, Md., and J. H. Bailey, Phelps, N. Y. Vegetable slicer. 1,766,825; June 24. 1,767,528; June 24.
Jones, William. (See Hardie, C. H., and Jones.)
Jones, William A. (See Jacobus, D. S., and Jones.)
Jones, William E., assignor to Eagle Chemical Company, Milwaukee, Wis. Cleaning and disinfecting compound.
Jonet, Achille. (See Bethenod, J. F. J., and Jonet.)
Jordan, Hans. (See Schoeller, W., Jordan, and Clerc.)
Jordan, Hans, Berlin-Steglitz, assignor to the firm: Chemische Fabrik auf Actein vorm. E. Schering, Berlin, Germany. Producing thymol. 1,768,257; June 24.
Jordan, O. F., Company. (See Tellis, Vsevolod G., assignor.)
Joy, Charles A., Denver, Colo. Deep-well pump. 1,765,921; June 24.
Joyce, Herbert D. (See Maurer, R. D., and Joyce.)
Jung Arch Brace Company, The. (See Jung, George H., jr., assignor.)
Jung, George H., jr., assignor to The Jung Arch Brace Company, Cincinnati, Ohio. Arch support. 1,767,460; June 24.
Jung, Wilhelm. (See Hartmann, O. H., and Jung.)
Junkers, Hugo, Dessau, Germany. Arrangement of rudders for aircraft. 1,766,025; June 24.
Jurgensen, Harvey H., Thorold, Ontario, Canada. Papermaking machine. 1,767,889; June 24.
Jurgenson, Rudolph, Boston, Mass. Reflector for headlights. 1,766,647; June 24.
K-P-C Company. (See Vesey, Wayne E., assignor.)
K-W Ignition Corporation, The. (See Eiseman, Robert J., assignor.)
Kacena, Albert J., assignor of one-half to W. L. Thaler, Chicago, Ill. Lubricating device. 1,767,461; June 24.
Kačer, Filip. (See Lüttringhaus, A., and Kačer.)
Kahl, George F., Vincennes, Ind. Adjustable ventilating toilet seat. 1,767,930; June 24.
Kahlisch, Gustav. (See Reiners, W., and Kahlisch.)
Kalck, Fred R., Philadelphia, Pa. Clock mechanism. 1,765,677; June 24.
Kalischer, Georg, H. Scheyer, Frankfort-on-the-Main, P. Nawiasky and E. Krauch, Ludwigshafen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Condensation products of the benzanthrone series and making same. 1,768,071; June 24.
Kalte, Fred E., assignor to Randall Control & Hydrometric Corporation, Los Angeles, Calif. Control apparatus for electrically-operated elevator signals. 1,768,361; June 24.
Kämmerer, Hans. (See Krzikalla, H., and Kämmerer.)
Kammgarnspinnerei Gautzsch bei Leipzig Aktiengesellschaft. (See Jacob, Georg, assignor.)
Kamrath, Herbert G. (See McKinley, C. W., and Kamrath.)
Kanehl, Hubert E., Solomon, Kans. Attachment for internal-combustion engines. 1,766,437; June 24.
Kaplan, Harry E., and B. L. Bouer, Chicago, Ill. Telephone-pad attachment. 1,767,003; June 24.
Käppler, Felix, Dresden, Germany. Matche. 1,768,202; June 24.
Kapustka, Mae C., Chicago, Ill. End curl fastener. 1,767,681; June 24.
Kath, Alfred W., Detroit, Mich. Rotary reciprocating valve for internal-combustion engines. 1,766,127; June 24.
Kath, Alfred W., Detroit, Mich. Rotary reciprocating valve for internal-combustion engines. 1,766,128; June 24.
Kathe, Leo, Lakewood, Ohio. Translucent decoration and sign. 1,765,981; June 24.
Katz and Blakemore. (See Blakemore, Alfred P., assignor.)
Kaufman, Morris J., Chicago, Ill. Picture frame. 1,765,980; June 24.
Kaufmann, Hans P., J. and M. Schubert, Fechenheim, near Frankfort-on-the-Main, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft. Introducing sulphocyanic groups into organic compounds. 1,765,678; June 24.
Kaupke, Lee H., assignor to Rock Island Plow Company, Rock Island, Ill. Cultivator. 1,767,851; June 24.
Kaupke, Lee H., assignor to Rock Island Plow Company, Rock Island, Ill. Lister. 1,767,852; June 24.
Kaupke, Lee H., assignor to Rock Island Plow Company, Rock Island, Ill. Two-row planter. 1,767,853; June 24.
Kawneer Company, The. (See Plym, Francis J., assignor.)
Kay-Brunner Steel Products Inc. (See Kay, Lloyd D., assignor.)
Kay, Daniel F., jr., Ashland, Oreg. Controlling means for recording pumps. 1,766,386; June 24.
Kay, Lloyd D., assignor to Kay-Brunner Steel Products Inc., Los Angeles, Calif. Making grille work. 1,768,362; June 24.
Kayes, Augustus E., and F. Mochling, Huntington, W. Va., assignors to The International Nickel Company, Inc., New York, N. Y. Mold wash. 1,767,764; June 24.
Kearney, James R., Kansas City, Mo. Cable rack. 1,766,254; June 24.
Keating, John H., Portland, Oreg. Adjustable golf club. 1,765,982; June 24.
Keator, Edward O., Dayton, Ohio. Cable clamp. 1,765,837; June 24.
Keenan, George A., Los Angeles, Calif. Scraper step plate. 1,766,786; June 24.
Keeton, Henry H., Richmond, Va. Vegetable slicer. 1,768,072; June 24.
Kehn, Harry, Goodrich, N. Dak. Washing device for separator disks. 1,767,370; June 24.
Kelser, Bernhard. (See De Groote, M., and Kelser.)
Keith, Irving L. (See Sawyer, Albert F., assignor.)
Kell, Ray D., Scotia, N. Y., assignor to General Electric Company. Transmission of pictures. 1,768,453; June 24.
Keller, Gottlieb, Brugg, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland. Regulation of furnace electrodes. 1,766,648; June 24.
Kellett, William P., New York, N. Y. Package-freight carrier. 1,765,591; June 24.
Kelley, Oliver K., assignor to General Motors Corporation, Detroit, Mich. Transmission. 1,768,481; June 24.
Kelley, Peter, Winsted, Conn. Safety-pin holder. 1,767,137; June 24.
Kellner, Georg, Berlin-Wilmersdorf, Germany. Electrically-controlled braking device for power vehicles. 1,766,078; June 24.
Kellner, Walter H. (See Miller, A. B., and Kellner.)
Kellogg Company. (See McKay, Eugene H., assignor.)
Kellogg, Homer G., assignor to Motor Products Corporation, Detroit, Mich. Metal-working machine. 1,767,289; June 24.
Kelly, John L., Los Angeles, Calif. Vulcanizing apparatus. 1,767,682; June 24.
Kelly, Orin, Columbus, Ohio. Fluid-pressure motor. 1,767,214; June 24.
Kelsey-Hayes Wheel Corporation. (See Batie, Joseph E., assignor.)
Kelsey-Hayes Wheel Corporation. (See Booth, William N., assignor.)
Kelso, Ralph S., assignor to Free Sewing Machine Company, Rockford, Ill. Drive-chain tension adjuster. 1,767,371; June 24.
Kelvinator Corporation. (See Sealey, Percy T., assignor.)
Kendall, Myron A., Aurora, Ill., assignor to Stephens-Adamson Mfg. Co. Roller grizzly. 1,766,340; June 24.
Kendrick, Laurence W., Wellesley, assignor to The Carter's Ink Company, Cambridge, Mass. Box. 1,766,887; June 24.
Kennedy, Allan C., Kelso, Wash. Sawdust burner. 1,767,138; June 24.
Kennedy, Benjamin H. (See Kennedy, Dewey M. and B. H.)
Kennedy, Dewey M. and B. H., Rochester, N. Y. Bath cabinet. 1,767,800; June 24.
Kennedy Manufacturing Company. (See Shriver, Harry P., assignor.)
Kennedy, W. D. (See Aron, William P., assignor.)
Kennedye Corporation, The. (See Hollestelle, Jan H., assignor.)
Kent, James W., Brooklyn, N. Y. Roller mill. 1,767,591; June 24.
Kenyon, Arthur E., Newark, N. J. Wax-applying tool. 1,767,079; June 24.
Kern, Fred T., Milwaukee, Wis. Hoist mechanism. 1,767,683; June 24.
Kern, Leo, Villingen, assignor to Kienzle Uhrenfabriken Aktiengesellschaft, Schwenningen A. N., Schwenningen-on-the-Neckar, Germany. Fare indicator. 1,768,073; June 24.
Kerns, Adolf, Gonzales, Calif. Harvesting machine. 1,768,324; June 24.
Kerr, John M., assignor to Bay City Shovels, Inc., Bay City, Mich. Tensioning device. 1,767,531; June 24.
Kessler, Albert, Mittweida, Germany. Fabric with interwoven metal wire. 1,765,795; June 24.
Keyser, Johann J., Aarau, Switzerland. Reversing gear. 1,767,290; June 24.
Kibby, Enoch B., Youngstown, Ohio. Making pipe tongs. 1,765,838; June 24.
Kiefer, Raymond A., Sellersville, Pa. Microphone. 1,767,242; June 24.
Kienzle Uhrenfabriken Aktiengesellschaft, Schwenningen A. N. (See Kern, Leo, assignor.)
Kilgour, Charles E. (See Bussard, E. J. H., and Kilgour.)
Kimball, Robert E., Cleveland, Ohio. Shock absorber. 1,765,429; June 24.
Kime, Charles G., assignor to The Burch Corporation, Crestline, Ohio. Asphalt spreader. 1,767,243; June 24.
Kindl, Carl H., Anderson, Ind., assignor, by mesne assignments, to Delco-Remy Corporation, Dayton, Ohio. Ignition timer. 1,766,908; June 24.
King, Anna G., administratrix. (See King, Roy D.)
King, Bert W., assignor to Barnes Scale Company, Detroit, Mich. Scale. 1,766,826; June 24.
King, C. G., & Co. (See Recchia, Orlando R., assignor.)
King, Eben W., East Chatham, N. Y. Filler. 1,768,074; June 24.
King, Francis, Los Angeles, assignor to V. M. King, San Bernardino, Calif. Eye-treating device. 1,767,080; June 24.
King, Fred C., Portland, Oreg. Burial vault. 1,766,649; June 24.

King, George A., Waterbury, Conn., assignor to Scovill Manufacturing Company, Waterbury, Conn. Attaching seat covers and the like. 1,768,454; June 24.
King, Henry K. (See Gilligan, James J., assignor.)
King, Horace W., assignor to King-Seeley Corporation, Ann Arbor, Mich. Liquid-depth-indicating device. 1,766,129; June 24.
King, Horace W., assignor to King-Seeley Corporation, Ann Arbor, Mich. Liquid-depth-indicating device. 1,766,130; June 24.
King, Randall A., Pueblo, Colo. Machine for winding coil springs. 1,767,931; June 24.
King, Robert L., Richmond, Va. Condenser. 1,768,258; June 24.
King, Roy D., deceased, by A. G. King, administratrix, assignor to F. R. Wetsel, Chicago, Ill. Material-handling apparatus. 1,767,592; June 24.
King-Seeley Corporation. (See King, Horace W., assignor.)
King, Vera M. (See King, Francis, assignor.)
King, Vernon C., Worcester, Mass., assignor to Wickwire Spencer Steel Company, New York, N. Y. Sectional wire conveyer belt. 1,766,754; June 24.
King, William C., assignor to O'Shea Knitting Mills, Chicago, Ill. Pad. 1,767,372; June 24.
King, William H., Clinton, assignor to Crompton & Knowles Loom Works, Worcester, Mass. Yieldable bobbin support for weft-replenishing looms. 1,766,753; June 24.
King, William H., Clinton, assignor to Crompton & Knowles Loom Works, Worcester, Mass. Revoker for weft-replenishing looms. 1,766,909; June 24.
Kingsbury Machine Works, Inc. (See Howarth, Harry A. S., assignor.)
Kingsford, Russell T. (See Davis, L. H., and Kingsford.)
Kingston, A. Roy, et al. (See Welt, Frank L., assignor.)
Kingston, Frank G., et al. (See Welt, Frank L., assignor.)
Kipper, Herman B., Muskegon, Mich. Manufacture of fertilizer salts. 1,768,075; June 24.
Kipping, Norman V. (See Hurford, G., and Kipping.)
Kirby, James B., West Richfield, Ohio. Radiosocket. 1,767,139; June 24.
Kirkner, John W., and J. O. Snowden, New York, N. Y. Pressing iron. 1,765,679; June 24.
Kirlin, Otis M., Watertown, S. Dak. Spotlight. 1,767,373; June 24.
Kirschbraun, Lester, Leonia, N. J., assignor, by mesne assignments, to The Patent and Licensing Corporation, Boston, Mass. Sealed laminated roofing element. 1,765,796; June 24.
Kirschbraun, Lester, Leonia, N. J., assignor, by mesne assignments, to The Patent and Licensing Corporation, Boston, Mass. Composition board. 1,765,839; June 24.
Kirschbraun, Lester, Leonia, N. J., assignor, by mesne assignments, to The Patent and Licensing Corporation, Boston, Mass. Making roofing elements. 1,767,374; June 24.
Kirschbraun, Lester, Leonia, N. J., assignor to The Flintkote Company, Boston, Mass. Making continuous waterproof sheets and product thereof. 1,767,532; June 24.
Kirschbraun, Lester, Leonia, N. J., assignor to The Flintkote Company, Boston, Mass. Pavement. 1,767,533; June 24.
Kiss, Stephen A., Bayonne, N. J., assignor to Standard Oil Development Company. Carbonyl compound and preparing the same. 1,767,291; June 24.
Kistner, Frederick J., and W. S. Williams, assignors to The J. A. Fay & Egan Company, Cincinnati, Ohio. Woodworking machine. 1,766,650; June 24.
Kitchen Aid Manufacturing Company, The. (See Johnston, H. L., and Meeker, assignors.)
Kitchen, Mabel G., et al. (See Welt, Frank L., assignor.)
Klausmeyer, David C., Cincinnati, and H. E. Darby, Norwood, assignors to The Cincinnati Bickford Tool Company, Cincinnati, Ohio. Single-lever eight-speed shift mechanism. 1,765,592; June 24.
Klebanoff, D., and Grossman. ((See Grossman, Samuel.)
Klein, Melitta, Vienna, Austria, assignor to Ruth-Aldo Company, Inc., New York, N. Y. Apparatus for spinning solutions of cellulose ethers or esters. 1,767,215; June 24.
Kleinewefers, Joh., Söhne. (See Kleinewefers, Johannes, assignor.)
Kleinewefers, Johannes, assignor to the firm: Joh. Kleinewefers Söhne, Krefeld, Germany. Calender. 1,765,922; June 24.
Kleinewefers, Johannes, assignor to the firm: Joh. Kleinewefers, Söhne, Krefeld, Germany. Lustering and embossing machine for leather and the like. 1,768,408; June 24.
Kleinschmidt, Edward E., assignor to Teletype Corporation, Chicago, Ill. Transmitter. 1,766,713; June 24.
Kliesrath, Victor W. (See Bragg, C. S., and Kliesrath.)
Klensch, Arthur E. (See Klensch, John W., jr., and A. E., assignor.)
Klensch, John W., jr., and A. E. Klensch, Forest Hills, N. Y. Conical grater. 1,768,076; June 24.
Klimek, Gustav A., East Rutherford, N. J., assignor to Turbine Patents Corporation, New York, N. Y. Hydraulic power transmitter. 1,766,520; June 24.
Klink, Thomas W., Lebanon, Pa. Educational appliance. 1,766,521; June 24.
Klinke, Walter, Zurich, Switzerland. Armored concrete floor. 1,765,797; June 24.
Klock, Raymond A., Closter, N. J., assignor, by mesne assignments, to Gould Storage Battery Company, Inc., New York, N. Y. Method and apparatus for cooling electrolytic cells and the like. 1,766,026; June 24.
Klunk, Louis J., assignor to Beaver Saw Filing Machine Co., York, Pa. Saw-filing machine. 1,766,438; June 24.
Knapp, Archer L., assignor to Packard Motor Car Company, Detroit, Mich. Window latch. 1,766,910; June 24.
Knapp, David R., Philadelphia, Pa., assignor, by mesne assignments, to Automatic Drive and Transmission Company, Gloucester City, N. J. Automatic clutch device. 1,765,983; June 24.
Knapp, Fred H., Corporation, The. (See Koch, William J., assignor.)
Knapp, Jay F., Great Bend, N. Y. Confectioner's appliance. 1,768,250; June 24.
Knapp, John C., assignor to Otis Elevator Company, New York, N. Y. Ventilating apparatus. 1,767,988; June 24.
Knickerbocker Company, The. (See Knickerbocker, William B., assignor.)
Knickerbocker, William B., Jackson, Mich., assignor to The Knickerbocker Company. Liquid-metering tank. 1,767,244; June 24.
Knight, John M., Atlantic Highlands, and V. Willoughby, Ridgewood, N. J., assignors to American Car and Foundry Company, New York, N. Y. Railway-car seat. 1,766,079; June 24.
Knight, William L., Greensburg, Ind. Lubricator for car journals. 1,766,387; June 24.
Knipe, Aruthur C., Westminster, London, assignor to Modern Concrete Development Company Limited, London, England. Manufacture of cement concrete and apparatus for use therewith. 1,766,911; June 24.
Knochenhauer, Wolfgang, Wernigerode, Germany. Internal-combustion engine. 1,767,932; June 24.
Knotwell, Glenn R. (See Skelton, E. W., and Knotwell.)
Knowland, Thomas M. (See Glidden, A. A., Knowland, and Duffy.)
Knowles, Albert E., Heswall, England. Gas washer for electrolytic apparatus. 1,767,292; June 24.
Knowles, Albert E., Heswall, England. Electrolytic apparatus. 1,767,375; June 24.
Knowlton, Lou F. (See Shea, Thomas J., assignor.)
Kobel, Ernst, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland. Mercury-vapor vacuum pump. 1,766,651; June 24.
Koch, Fritz, St. Paul, Minn. Burning pulverized fuel. 1,766,652; June 24.
Koch & Sterzel, Aktiengesellschaft. (See Fischer, Franz J., assignor.)
Koch, William J., Midland Park, assignor to The Fred H. Knapp Corporation, Ridgewood, N. J. Conveyer mechanism. 1,768,482; June 24.
Kocourek, Henry, and L. Aeby, Chicago, Ill. Connection and valve fitting for automobile water-circulating systems. 1,765,984; June 24.
Kohl, Emil. (See Jauss, Louis, assignor.)
Kole, Lessing L., Milwaukee, Wis. Special package for compacts. 1,768,203; June 24.
Kolisch, Paul. (See Phinney, Edward D., assignor.)
Kolster, Frederick A. (See Prescott, J. O., and Kolster.)
Kolster, Frederick A., Palo Alto, assignor to Federal Telegraph Company, San Francisco, Calif. High-frequency coupling unit. 1,766,039; June 24.
Kolster, Frederick A., Palo Alto, assignor to Federal Telegraph Company, San Francisco, Calif. Signal-transmitting system. 1,766,040; June 24.
Kolster, Frederick A., Palo Alto, assignor to Federal Telegraph Company, San Francisco, Calif. Radio apparatus and method. 1,766 041; June 24.
Kolster, Frederick A., Palo Alto, assignor to Federal Telegraph Company, San Francisco, Calif. Radio compass indicator. 1,767,140; June 24.
Kolster, Frederick A., Palo Alto, assignor to Federal Telegraph Company, San Francisco, Calif. Radio compass system. 1,767,141; June 24.
Kolster, Frederick A., Palo Alto, assignor to Federal Telegraph Company, San Francisco, Calif. Radio transmitting system. 1,767,245; June 24.
Kominz, Jacob S., Rochester, N. Y. Cyto-vaccine of tubercle bacilli. 1,766,131; June 24.
Konzelman, Matthew, Peru, Ill. Automobile bed. 1,767,890; June 24.
Koppers Company, The. (See Fulton, Robert R., assignor.)
Koppers Company, The. (See Puening, Franz, assignor.)
Koppers Company, The. (See Sperr, Frederick W., jr., assignor.)
Körber, Paul, Bad. Homburg-Vor-Der-Hohe, Germany. Producing mosaic designs for porcelain or other fine ceramic materials. 1,767,081; June 24.
Kotvis, William. (See Chapman, F. A., and Kotvis.)
Kovacich, Joseph, Virginia, Minn. Noodle cutter. 1,768,077; June 24.
Kovács, János, Budapest, Hungary, assignor to C. Hüller, Württemberg, Germany. Brush. 1,766,388; June 24.
Kraft, Fred G., Buffalo, assignor, by mesne assignments, to Du Pont Rayon Company, New York, N. Y. Clip for bucket covers. 1,767,217; June 24.
Krämer, Andreas, assignor to Deberag, Deutsche Berantungsgesellschaft für die Chemische und Metallurgische Industrie m. b. H., Berlin, Germany. Disintegrating, kneading, mixing, and drying machine. 1,767,376; June 24.

Kramer, Andrew A., Kansas City, Mo. Floating-deck tank. 1,767,142; June 24.
Krämling, Adolf W., Berlin-Schmargendorf, Germany. Device for spraying fuel into the cylinders of internal-combustion engines. 1,766,380; June 24.
Krämzlein, Georg, H. Greuene, and H. Vollmann, Hochst-on-the-Main, Germany, assignors to General Aniline Works, New York, N. Y. Yellowish vat dyestuffs. 1,767,377; June 24.
Krauch, Emil. (See Kallscher, G., Scheyer, Nawiasky, and Krauch.)
Kraul, Anna E., administratrix. (See Kraul, Magnus R.)
Kraul, Magnus R., deceased, Portland, Oreg.; A. E. Kraul, administratrix. Retort for distilling oil shale and the like. 1,766,132; June 24.
Krause, Arnold R., Eau Claire, Wis., assignor to Gillette Rubber Company. Tread forming and finishing machine. 1,767,246; June 24.
Krause, Artur. (See Nawiasky, P., Krause, and Holl.)
Krause, Fred W., and H. A. Baechtel, Natrona, Pa. Cable-winding drum. 1,768,078; June 24.
Krel, Chris, and F. Krel, Samoa, Calif. Fire kindler. 1,767,293; June 24.
Krel, Fred. (See Krel, Chris, and F.)
Krettly, Pierre. (See Contal, C., and Krettly.)
Kridel, J., Sons & Co. (See Bader, Fred W., assignor.)
Krizek, Jaroslav, New York, N. Y. Sign. 1,765,536; June 24.
Kroupa, Jaroslav F., Kimball, S. Dak. Attachment for listed corn cultivators. 1,767,378; June 24.
Krummacher, Reinold, administrator. (See Thomsen, Peter.)
Kruse, Charles J. (See Jacobson, H., and Kruse.)
Krzikalla, Hans, Mannheim, Germany, assignor to General Aniline Works, Inc., New York, N. Y. Production of complex metal compounds of o-hydroxyazo dyestuffs. 1,765,680; June 24.
Krzikalla, Hans, and H. Kümmerer, Mannheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Treating complex metallic compounds of o-hydroxyazo dyestuffs. 1,767,379; June 24.
Kubik, John, assignor of one-half to J. Lorincz, New York, N. Y. Furnace. 1,765,430; June 24.
Kubler, Johannes, assignor to A. G. Brown Boveri & Cie., Baden, Switzerland. Alternating-current-control system. 1,766,653; June 24.
Kubler, Johannes, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland. Transformer cooling apparatus. 1,766,654; June 24.
Kubler, Johannes, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland. Cooling device. 1,766,655; June 24.
Kucharski, Stanislaus, Berlin-Charlottenburg, Germany. Playing musical instruments. 1,768,079; June 24.
Küchenmeister, Heinrich, Berlin, Germany. Apparatus for making sound records. 1,765,923; June 24.
Kuczorra, Wilhelm, Berlin, Germany. Advertising device. 1,768,409; June 24.
Kudrna, Frank, jr., and N. Yirkosky, Chicago, Ill. Switch for automobile burglar-alarm systems. 1,767,380; June 24.
Kueffer, Frederich W., deceased; M. Kueffer, administratrix, assignor to Safety Oil Tank Company, Independence, Mo. Floating roof for oil tanks. 1,765,593; June 24.
Kueffer, Madge, administratrix. (See Kueffer, Frederich H.)
Kufrin, Frank. (See Grahek, Frank, assignor.)
Kulik, Irving, Brooklyn, N. Y. Absorbent roll. 1,766,341; June 24.
Kummel, Paul. (See Hartmann, E., Hardtmann, and Kummel.)
Kunsman, Charles H., Stone Church, Pa., assignor to A. B. Lamb, trustee. Positive-ion emitter. 1,767,218; June 24.
Kuntze, Karl, A. Haller, and E. Wirz, assignors to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland. Electric control apparatus. 1,766,656; June 24.
Kupfer, William H., Chicago, Ill. Badge. 1,765,431; June 24.
Kurihara, Yasaku, Los Angeles, Calif. Lawn rake. 1,768,080; June 24.
Kurowski, Alfred G. F., Brooklyn, N. Y., assignor to Underwood Elliott Fisher Company, New York, N. Y. Typewriting machine. 1,765,727; June 24.
Kurowski, Alfred G. F., Brooklyn, assignor to Underwood Elliott Fisher Company, New York, N. Y. Typewriting machine. 1,765,728; June 24.
Kurowski, Alfred G. F., and C. M. Lawrence, Brooklyn, assignors to Underwood Elliott Fisher Company, New York, N. Y. Typewriting machine for the blind. 1,767,247; June 24.
Laabs, Eric H., Milwaukee, Wis., assignor, by mesne assignments, to Cutler-Hammer, Inc. Clutch. 1,767,593; June 24.
La Barr, Ralph M., St. Paul, Minn. Door spring and stop. 1,765,798; June 24.
La Bombard, Leon E., West Newton, and M. H. Sidebotham, Newtonville, assignors to Specialty Automatic Machine Company, Chelsea, Mass. Article holder. 1,765,415; June 24.
La Bombard, Leon E., West Newton, assignor to Specialty Automatic Machine Company, Chelsea, Mass. Package of rolled sheets. 1,765,417; June 24.
La Bombard, Leon E., Waltham, and M. H. Sidebotham, Newtonville, assignors to Specialty Automatic Machine Company, Chelsea, Mass. Feeding mechanism for assembling and packaging machines. 1,765,416; June 24.
Lackey, Bert. (See Hestand, Bedford, assignor.)
La Due, Roy C. (See Goyke, H. A., and La Due.)
La Duke, Louis M., assignor to Potter Manufacturing Company, Jackson, Mich. Metallic trunk. 1,767,143; June 24.
Laengel, Henri C., Paris, France. Automatic fire extinguisher. 1,766 912; June 24.
Lafite, Roger G., Kansas City, Mo. Terminal-post attachment for spark plugs. 1,765,868; June 24.
Laible, Charles L., Fort Thomas, Ky. Shoe. 1,767,801; June 24.
Lake, Donald W., Chicago, Ill. Air heater. 1,767,082; June 24.
Lake, Percy C. G., London, England. Loose-leaf binder of the flexible-thong type. 1,767,381; June 24.
Lamb, Arthur B., trustee. (See Kunsman, Charles H., assignor.)
Lambert, Frank B. (See Lammert, G. C., and Lambert.)
La Mere, Frank J. (See Sardeson, R., La Mere, and Corser.)
Lammert, George C., and F. B. Lambert, Chicago, Ill. Nozzle. 1,767,462; June 24.
Lamont, John A., assignor to American Steel Foundries, Chicago, Ill. Roller-bearing truck. 1,765,432; June 24.
LaMorte, William F., New York, N. Y. Strut used in concrete fireproofing. 1,765,729; June 24.
Lampton, Logan B., Los Angeles, Calif. Carburetor. 1,766 657; June 24.
Lanahan, Frank J. (See Hunter, Percy E., assignor.)
Lancaster Iron Works, Inc. (See Luce, Grafton E., assignor.)
Lancaster, John S. (See Burn, J. F., and Lancaster.)
Landeskroener, Carl, Dresden, Germany. Treating artificial filaments. 1,767,294; June 24.
Landiedel, Harry, Cincinnati, Ohio, assignor, by mesne assignments, to Remington Rand Inc., New York, N. Y. for corn pickers. 1,766,439; June 24.
Lane, James W., et al., trustees. (See McConnell, Thomas, assignor.)
Lane, Rollie M., Colorado Springs, Colo. Parachute. 1,767,534; June 24.
Lang, George W., Litchfield, Nebr. Tractor attachment for pickers. 1,766,439; June 24.
Lang, Niels, Cleveland, Ohio. Reflector for directing light. 1,767,144; June 24.
Langos, Otto A., Chicago, Ill. Table cooker. 1,767,802; June 24.
Langstaff, Clinton A., Hawthorne, Calif. Deep-well tool. 1,766,177; June 24.
Lannert, William H. J., and P. W. Cowle, assignors to Chicago Pump Company, Chicago, Ill. Pump. 1,767,535; June 24.
Lanser, Alfred, Corseaux-Vevey, Switzerland. Liquid-fuel apparatus. 1,766,133; June 24.
Lansing, Raymond P., Montclair, N. J., assignor to Eclipse Machine Company, Elmira, N. Y. Engine starter. 1,768,081; June 24.
Lansing, Raymond P., Montclair, N. J., assignor to Eclipse Machine Company, Elmira Heights, N. Y. Engine-starting mechanism. 1,768,082; June 24.
Lansing, Raymond P., Montclair, N. J., assignor to Eclipse Machine Company, Elmira Heights, N. Y. Engine-starting mechanism. 1,768,083; June 24.
Lapin, Charles V., Los Angeles, Calif. Aircraft. 1,766,390; June 24.
Larkey, Charles S., Tulsa, Okla. Electric swivel connection. 1,768,260; June 24.
Larson, August, Chicago, Ill. Guitar. 1,768,261; June 24.
Larson, David C. (See Lindquist, D. L., Dunn, and Larson.)
Laska, Leopold, and A. Zitscher, Offenbach-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Manufacture of fast azo dyestuffs. 1,765,681; June 24.
Lasker, William W., Brooklyn, assignor to Remington Rand Incorporated, New York, N. Y. Alphabetical printing mechanism. 1,768,526; June 24.
Laskey, William B., assignor to Mason, Au & Magenheimer Confectionery Manufacturing Company, Brooklyn, N. Y. Method of and machine for forming confections having irregular shapes. 1,765,872; June 24.
Laskey, William B., assignor to Mason, Au & Magenheimer Confectionery Manufacturing Company, Brooklyn, N. Y. Candy machinery. 1,765,873; June 24.
Laskey, William B., assignor to Mason, Au & Magenheimer Confectionery Manufacturing Company, Brooklyn, N. Y. Forming candy. 1,765,874; June 24.
Lasswell, Jesse D., Chicago, Ill. Railway crossing. 1,766,913; June 24.
Lathrop, Harry D., and W. H. Paulson, Chicago, Ill.; said Paulson assignor to said Lathrop. Can-delivering and cover-applying mechanism. 1,765,594; June 24.
Lauden, Fred R. (See Blackburn, J. M., and Lauden.)
Laurent, Emile M., St.-Mande, Germany. Flying apparatus. 1,765,924; June 24.
Lauterbach, Fredrik, New York, N. Y. Game device. 1,766,134; June 24.
Lavett, Charles O., Buffalo, N. Y. Apparatus for controlling density or viscosity of liquids. 1,765,433; June 24.

Lawrence, Albert J., St. Paul, Minn. Circle cutter. 1,765,799; June 24.

Lawrence, Charles M. (See Kurowski, Alfred G. F., and Lawrence.)

Lawton, Elmer R., Philadelph'a, Pa. Window-shade device. 1,768,410; June 24.

Lawton, John E., Coudersport, Pa. Filer for silk-spinning machines. 1,768,204; June 24.

Lawton, Stuart R., assignor to General Motors Corporation, Detroit, Mich. Top bracket. 1,768,364; June 24.

Layman, Stephen D., East Orange, N. J., assignor to C. Miller, Long Island City, N. Y. Shoe-tree. 1,767,145; June 24.

Lazar, Dave, Brooklyn, N. Y. Vending machien. 1,767,684; June 24.

Leach, Vernon G., assignor to Modern Coal Burner Co., Chicago, Ill. Material feeder. 1,767,248; June 24.

Leake, Richard C., assignor to General Railway Signal Company, Rochester, N. Y. Relay-operating mechanism. 1,766,658; June 24.

Leanhart, Jacob F., Louisville, Ky. Condensing radiator. 1,768,084; June 24.

Lear, Joseph D. (See Hutchings, L. E., and Lear.)

Leasure, David E., Los Angeles, assignor of one-half to R. E. Leasure, Ventura, Calif. Battery tongs. 1,766,827; June 24.

Leasure, Roy E. (See Leasure, David E., assignor.)

Leatherman, Jerry M., Akron, Ohio. Butter-serving machine. 1,767,803; June 24.

Leatherman, Ralph D., Tipton, Ind. Heat controller. 1,768,085; June 24.

Lebherz, Harry J., assignor to The Everedy Company, Frederick, Md. Bottle capper. 1,766,178; June 24.

Lecher, Hans, and W. Zieser, Leverkusen-on-the-Rhine, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Vulcanization accelerntor. 1,766,755; June 24.

Leckie, Herbert V., Stratford, and W. H. Woodford, Bridgeport, Conn., assignors to Remington Arms Company, Inc. Electric heater. 1,767,249; June 24.

Leckie, Herbert V., Stratford, and W. H. Woodford, Bridgeport, Conn., assignors to Remington Arms Company, Inc. Plastic composition. 1,768,363; June 24.

Lecuona, Jose, Stockton, Calif. Windmill. 1,766,391; June 24.

Lederwerke Becker & Co. (See Hausmann, Fritz, assignor.)

Ledger, Letcher G. (See Ahern, J. L., and Ledger.)

Ledwell, P. B., Minerva, Tex. Reversible clutch. 1,767,933; June 24.

Ledwinka, Joseph, assignor to Edward G. Budd Manufacturing Co., Philadelphia, Pa. Windshield construction. 1,767,463; June 24.

Ledwinka, Joseph, assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa. Sill construction. 1,767,464; June 24.

Ledwinka, Joseph, assignor to Edward G. Budd Manufacturing Co., Philadelphia, Pa. Sheet-metal construction for vehicle bodies and other similar built-up sheet-metal structures. 1,767,465; June 24.

Lee Engineering Research Corporation. (See Lee, Royal, assignor.)

Lee, Grover C., Taft, Calif. Oil burner. 1,767,295; June 24.

Lee, Leif, Youngstown, Ohio. Heating system. 1,768,086; June 24.

Lee, Royal, assignor to Lee Engineering Research Corporation, Milwaukee, Wis. Variable-speed electric-motor switch. 1,767,146; June 24.

Leece, Bennett M., assignor to The Leece-Neville Company, Cleveland, Ohio. Regulator. 1,767,180; June 24.

Leece-Neville Company, The. (See Leece, Bennett M., assignor.)

Leek, Albert E., Wigan, England. Heat interchanger. 1,767,989; June 24.

Leeson, Bruce H. (See Scott, E. W. M., and Leeson.)

Lefever, Charles F., assignor to Daisy Manufacturing Company, Plymouth, Mich. Air gun. 1,766,179; June 24.

Lehnhoff, Richard A., and G. R. Treptow, assignors to Camel Company, Chicago, Ill. Hasp construction. 1,768,205; June 24.

Lehon Company, The. (See Moone, Albert E. F., assignor.)

Leitz, Ernst, Optische Werke. (See Berek, Max, assignor.)

Leland-Gifford Company. (See Gifford, A. J., and Bishop, assignors.)

Lemay, Omer V., Powers, Mich. Removable switch plug. 1,767,250; June 24.

Lemieux, Joseph A., Washington, D. C. Aeroplane. 1,766,914; June 24.

Lemons, Robert C., and W. A. Irons, Clifton Forge, Va. Weather shield for freight cars. 1,768,206; June 24.

Le Montree, Jacob H., assignor to The Le Montree Manufacturing Company, Cincinnati, Ohio. Garment bag. 1,767,466; June 24.

Le Montree Manufacturing Company, The. (See Le Montree, Jacob H., assignor.)

Lené, Elmer, Lexington, Nebr. Sanitary iceless shipping container. 1,767,685; June 24.

L'Enfant, Charles, New York, N. Y. Bill and card case. 1,765 730; June 24.

Leno Elastic Web Company. (See Coldwell, John S., assignor.)

Leon, Karl O., London, England. Antifriction bearing. 1,766,440; June 24.

Leopold, Otto, Cincinnati, Ohio. Food product and making same. 1,767,083; June 24.

Le Petit, Charles J. M. M., Paris, France, assignor to Röhm and Haas Company, Philadelphia, Pa. Dehairling hides and skins and preparing them for tanning. 1,767,536; June 24.

Leslie, Howard C., Milton, assignor to B. R. E. Manufacturing Co., Hyde Park, Mass. Water-closet seat and the like. 1,766,659; June 24.

Lesourd, Georges. (See Alkan, R., and Lesourd.)

Letchford, Percy H., Winnipeg, Manitoba, Canada. Heel for boots or shoes. 1,766,027; June 24.

Letchford, Percy H., Winnipeg, Manitoba, Canada. Anti-skid device. 1,766,522; June 24.

Leubscher Frederic C., et al., executors. (See Ingersoll, Robert H.)

Leuchs, Otto. (See Hubert, E., Lock, and Leuchs.)

Leuchs, Otto, Elberfeld, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Conversion of difficultly soluble or insoluble carbohydrate others into a soluble state. 1,767,382; June 24.

Levan, John F., assignor to Excel Curtain Company, Elkhart, Ind. Curtain batten. 1,765,595; June 24.

Leverson, Irving B., Hawley, Minn. Score card. 1,768,087; June 24.

Le Vesconte, Harold J., assignor to Union Special Machine Company, Chicago, Ill. Seam for sewed articles. 1,767,990; June 24.

Le Vesconte, Harold J., assignor to Union Special Machine Company, Chicago, Ill. Seam for sewed articles. 1,767,991; June 24.

Lewellen, Darcy E., Columbus, Ind., and G. R. Zecher, Middletown, Ohio. Control mechanism for paper-making machines. 1,768,088; June 24.

Lewellen, Darcy E., Columbus, Ind., and G. R. Zecher, Middletown, Ohio. Control mechanism for paper-making machines. 1,768,325; June 24.

Lewin, George S., Santa Monica, and C. A. Logue, Venice, Calif. Dehydrant for electric insulators and contact points and restoring normal electric conditions. 1,766,714; June 24.

Lewis, Henry E., Redditch, England. Device for holding and manipulating screw, nuts, and like articles. 1,767,296; June 24.

Lewis, John, St. Louis, Mo. Stove rack. 1,766,523; June 24.

Lewis, Leroy M., Rosemont, assignor to central Automatic Sprinkler Company, Philadelphia, Pa. Torrent valve for sprinkler systems. 1,765,840; June 24.

Lewis, Teela M. (See Carr, George, assignor.)

Lewis, Warren K., Newton, Mass., and N. E. Loomis, Elizabeth, N. J., assignors to Standard Oil Development Company. Obtaining products from hydrocarbons by heat treatment. 1,767,297; June 24.

Lewis, Warren K., Newton, Mass., assignor to Standard Oil Development Company. Process for fractionation and apparatus therefor. 1,767,298; June 24.

Libbey-Owens Glass Company. (See Drake, John L., assignor.)

Libbey-Owens Glass Company. (See Reece, Joseph A., assignor.)

Lieske, Rudolf, Leverkusen, near Cologne, and W. Schepss, Wiesdorf, near Cologne, Germany, assignors, by mesne assignments, to Winthrop Chemical Company, New York, N. Y. Disinfecting, bactericidal, insecticidal, fungicidal, and vermin-destroying preparations. 1,766,441; June 24.

Liggett, William K., assignor to The Jeffrey Manufacturing Company, Columbus, Ohio. Excavating machine. 1,765,682; June 24.

Lightfoot, Edwin N., assignor, by mesne assignments, to Cutler-Hammer, Inc., Milwaukee, Wis. Electric heating device and producing the same. 1,767,084; June 24.

Lighting Appliance Company, Inc. (See Roettges, Frederick W., assignor.)

Lillibridge, Duane M., St. Charles, Ill. Glider. 1,766,028; June 24.

Lilly, Ernest W., Raymond, Wash. Attachment for tractors. 1,767,992; June 24.

Lilly, William J., assignor to H. A. Sutliffe, Tacoma, Wash. Book-match machinery. 1,766,180; June 24.

Lily-Tulip Cup Corporation. (See Nias, H., and Poster, assignors.)

Lincoln Meter Company, The. (See Borden, P. A., Baker, and Paine, assignor.)

Lindblad, Charles V., Brooklyn, N. Y., assignor to International Cigar Machinery Company. Tension-equalizing chianti-belt tightener. 1,765,841; June 24.

Lindegren, Carl J., Providence, R. I., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Loom drop-box connection. 1,766,756; June 24.

Lindegren, Carl J. (See Bergstrom, C. P., and Lindegren.)

Lindner, Herbert, Berlin, Germany. Thread cutter. 1,768,089; June 24.

Lindquist, Alma A. (See Schubert, Kurt E., assignor.)

Lindquist, David L., Hartsdale, N. Y., E. L. Dunn, Montclair, N. J., and D. C. Larson, Yonkers, N. Y., assignors to Otis Elevator Company, Jersey City, N. J. Elevator system. 1,767,891; June 24.

Lindquist, David L., Hartsdale, N. Y., E. L. Dunn, East Orange, N. J., and D. C. Larson, Yonkers, N. Y., assignors to Otis Elevator Company, Jersey City, N. J. Switching mechanism. 1,767,892; June 24.

Lindsay-McMillan Company. (See Jarman, Rush N., assignor.)

Lindstrand, Swan M., Chicago, Ill. Floating air liner. 1,766,915; June 24.

Linendoll, Asa E., Norwalk, Ohio. Valve construction for automobile heaters. 1,767,383; June 24.

Link, Louis. (See Weller, D. R., and Link.)

Linville, Ben M., Mechanicsburg, Ohio. Corn-planter fertilizing-drill attachment. 1,765,683; June 24.

Lionel Corporation, The. (See Caruso, Louis, assignor.)

Lionel Corporation, The. (See Caruso, Mario, assignor.)

Lisse, Lepold, Berlin-Lichterfelde, Germany. Blasting method and tamping cartridge with utilization of liquefied gases. 1,767,181; June 24.

Lisse, Leopold, Berlin-Lichterfelde, Germany. Blasting cartridge with cover and process of production. 1,767,182; June 24.

Litchfield, Dean J., Waterloo, Iowa. Expansible beater wheel. 1,767,686; June 24.

Lithgoe, John, Rawnscliffe, Sandal, Wakefield, assignor to British Jeffrey Diamond Limited, Wakefield, England. Jigging conveyer. 1,766,660; June 24.

Litter, Frederick A., Columbus, Ohio. Bearing-boring apparatus. 1,767,384; June 24.

Livingston, Fremont P., Denver, Colo., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Automotive brake diaphragm. 1,765,376; June 24.

Locher, Charles H., Hancock, Md., and J. P. Burt, Kearny, N. J.; said Burt assignor to Harnischfeger Corporation, Milwaukee, Wis. Trolley hoist. 1,767,467; June 24.

Lock, Ludwig. (See Hubert, E., Lock, and Leuchs.)

Lödige, Wilhelm, jr., near Paderborn, Germany. Pigsty for rearing pigs. 1,765,925; June 24.

Loepsinger, Albert J., assignor, by mesne assignments, to General Fire Extinguisher Company, Providence, R. I. Supplying moisture to hygrometers, humidity regulators, and the like. 1,765,842; June 24.

Loftin, Edward H., New York, N. Y. System of teledynamic control. 1,766,524; June 24.

Logan, Bert A. (See Doud, H. P., and Logan.)

Logan, Colin M., assignor to Heller Brothers Company, Newark, N. J. File machine. 1,767,468; June 24.

Logan, Thomas J., Wapato, Wash. Water expeller. 1,767,385; June 24.

Logemann Brothers Company. (See Jacobson, H., and Kruse, assignors.)

Logue, Charles A. See Lewin, G. S., and Logue.)

Lomax, Clarence E., Oak Park, Ill., assignor to Reserve Holding Company, Kansas City, Mo. Connecter switch. 1,767,594; June 24.

Lombardi, Vincent, Brooklyn, N. Y. Knitting-machine needle. 1,767,595; June 24.

Long, John E., Multnomah, Oreg. Switch control for auxiliary devices. 1,765,596; June 24.

Longenecker, Charles I., assignor to Chain Belt Company, Milwaukee, Wis. Diaphragm pump. 1,767,934; June 24.

Longenecker, Charles I., assignor to Chain Belt Company, Milwaukee, Wis. Portable pump. 1,768,483; June 24.

Loomis, Nathaniel E. (See Lewis, W. K., and Loomis.)

Loomis, Nathaniel E., Westfield, N. J., assignor to Standard Oil Development Company. Condensation of hydrocarbon vapors and apparatus therefor. 1,767,299; June 24.

Lord, Alfred J., Conshohocken, Pa. Plasterer's paddle. 1,768,411; June 24.

Lord, Fred W., assignor to The Oakes Manufacturing Company, Tipton, Ind. Poultry feeder. 1,768,090; June 24.

Lorenz, Adolph G., Little Rock, Ark. Card holder. 1,767,993; June 24.

Lorenz-Aktiengesellschaft, C. (See Bock, W., and Rath, assignors.)

Lorenz, C., Aktiengesellschaft. (See Schmidt, Karl, assignor.)

Lorig, Robert A., Madison, Wis., assignor to Burgess Battery Company. Apparatus for making dry cells. 1,766,661; June 24.

Loring, Benjamin C., New York, N. Y., assignor to R. C. Loring, Detroit, Mich. Identifying attachment for motor vehicles. 1,765,843; June 24.

Lorincz, Joseph. (See Kubik, John, assignor.)

Loring, Rosana C. (See Loring, Benjamin C., assignor.)

Lott, Hermann H., Webster Groves, Mo. Jewelry bacelet. 1,767,596; June 24.

Lotts, William H., River Forest, assignor to The Overland Construction Company, Chicago, Ill. Apparatus for erecting columns on steel structures. 1,768,484; June 24.

Lotz, Alfred F. C., assignor to Electrical Engineers Equipment Co., Chicago, Ill. Adjustable terminal mounting. 1,766,220; June 24.

Louisville Electric Manufacturing Company, The. (See Flanagan, James J., assignor.)

Lovell, Stanley P., Brockton, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Box-toe-conditioning machine. 1,766,442; June 24.

Lucas, Joseph R., Montebello, Calif. Tong-actuating device for well-drilling rigs. 1,765,492; June 24.

Luce, Grafton E., Chicago, Ill., assignor to Lancaster Iron Works, Inc., Lancaster, Pa. Brick-handling apparatus. 1,765,765; June 24.

Luce, Richard W., Maplewood, assignor to American Gas-accumulator Company, Elizabeth, N. J. Traffic-signal reflector. 1,768,412; June 24.

Luedtke, Max A. G., Weehawken, N. J. and H. Hoffmann, New York, N. Y. Marking, printing, and embossing device. 1,766,662; June 24.

Luhan, Joseph F. C. (See Ocenasek, Vaclav, assignor.)

Luhnow, Walter F., Greeley, Colo. Radio receiving device. 1,765,731; June 24.

Lumpkin, Ray E., and R. A. Nove, San Antonio, Tex. Announcing apparatus. 1,768,207; June 24.

Lund, John A., assignor to Challenge Company, Batavia, Ill. Lubricating system. 1,767,386; June 24.

Lundell, Alben E., New York, and E. H. Clark, Richmond Hill, assignors to Western Electric Company, Incorporated, New York, N. Y. Telephone-exchange system. 1,767,854; June 24.

Lundgren, William E., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Shuttle check. 1,766,757; June 24.

Lundgren, William E., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Loom driving mechanism. 1,766,758; June 24.

Lunkenheimer, Frederick N., Johnstown, N. Y. Polishing brush. 1,767,766; June 24.

Luther, Martin, Mannheim, and H. Beller, Oppau, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Production of lactic acid and its derivatives. 1,766,715; June 24.

Luthi, Walter. (See Prantl, F., Luthi and Schroeder.)

Lüttringhaus, Arthur, and F. Kačer, Mannheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Production of alkyl ketones of the anthracene series. 1,766,443; June 24.

Lutz, Friedrich, assignor to Union Special Maschinenfabrik G. m. b. H., Stuttgart, Germany. Chain cutter for sewing machines. 1,765,493; June 24.

Lux Clock Manufacturing Company, The. (See Lux, Paul, assignor.)

Lux, Paul, assignor to The Lux Clock Manufacturing Company, Waterbury, Conn. Alarm clock. 1,767,183; June 24.

Lyle, Thurman F., Bridgeport, Ohio. Plumbing clean-out system. 1,765,926; June 24.

Lynch, George E., Los Angeles, Calif. Air and gas filter. 1,766,221; June 24.

Lynch Glass Machine Company. (See Lynch, James W., assignor.)

Lynch, James W., Anderson, Ind., assignor, by mesne assignments, to Lynch Glass Machine Company. Apparatus for blowing thin-wall glassware. 1,766,135; June 24.

Lyon, Carlos, Decatur, Ill. Furniture. 1,765,766; June 24.

Lyon Metal Products, Incorporated. (See Vance, Walter N., assignor.)

Lyth, John J., Valleyfield, Quebec, Canada. Folding ironing board, table, seat, and the like. 1,768,413; June 24.

Lyth, John J., Valleyfield, Quebec, Canada. Feeding mechanism for cloth-piling machines and the like. 1,768,414; June 24.

M. & M. Sales & Mfg. Co. (See Watson, Lawrence R., assignor.)

Mac-Ad-Co. (See MacLachlan, John D., assignor.)

MacCoull, Neil, jr., Englewood, N. J., assignor to The Texas Company, New York, N. Y. Lubricating oil. 1,767,147; June 24.

Macdonald, Laurie S. (See Richardson, F. L., and Macdonald.)

MacFarlane, Walter C., Kenmore, assignor to The Xylos Rubber Company, Akron, Ohio. Cut-off device for extruding machines. 1,768,365; June 24.

Mack, John R., Caldwell, N. J., assignor to Quigley Furnace Specialties Company, Inc. Apparatus for applying film of fluid materials to surfaces. 1,768,485; June 24.

Macke, Gordon B., Washington, D. C. Vending machine. 1,766,297; June 24.

Macke, Gordon B., Washington, D. C. Vending machine. 1,766,298; June 24.

Mackenzie, Donald G., Montreal, Quebec, Canada, assignor to Donmac Products Corporation, New York, N. Y. Rear-axle structure and driving mechanism. 1,765,986; June 24.

Mackres, Vasilios S., Brockton, Mass. Apparatus for cleaning glassware. 1,767,537; June 24.

MacLachlan, John D., assignor, by mesne assignments, to Mac-Ad-Co., Kansas City, Mo. Automatic advertising machine. 1,767,804; June 24.

MacLagan, Hector P., Oak Park, Ill. Device for producing infra-red rays. 1,768,519; June 24.

MacLean-Fogg Lock Nut Company. (See MacLean, John A., assignor.)

MacLean, John A., assignor to MacLean-Fogg Lock Nut Company, Chicago, Ill. Unit lock nut. 1,767,219; June 24.

MacLiver, Mary, Trinidad, Colo. Gasoline-theftproof device. 1,766,916; June 24.

MacMahon, James D., Niagara Falls, assignor to The Mathieson Alkali Works, Inc., New York, N. Y. Chlorine-weighing apparatus. 1,766,788; June 24.

MacMahon, Richard R. (See Busby, Robert S., assignor.)

MacMiller, Carl A., Hibbing, Minn. Heater. 1,768,123; June 24.

Macomber Steel Company, The. (See Macomber, Stanley, assignor.)

Macomber, Stanley, Edgefield District, assignor to The Macomber Steel Company, Canton, Ohio. Structural unit. 1,766,181; June 24.
Madland, Gabriel, and W. W. Darrow, assignors to Camel Company, Chicago, Ill. Hasp construction. 1,768,124; June 24.
Madland, Gabriel, and K. J. Tobin, assignors to Camel Co., Chicago, Ill. Door-locking mechanism for house cars. 1,767,251; June 24.
Madsen, Martin, Monterey Park, Calif. Air purifier. 1,768,468; June 24.
Maffoni, Henry, Queens Village, N. Y. Thermostat heater for destroying moths. 1,766,525; June 24.
Magazine Repeating Razor Company. (See Schick, Jacob, assignor.)
Magee, James M., et al. (See Palmer, John V., assignor.)
Magnetic Organ Action Company. (See Brown, Vernie R., assignor.)
Magnetic Organ Action Company. (See Waters, Harry F., assignor.)
Magnetic Organ Action Company. (See Waters, H. F., and Brown, assignors.)
Mahan, Charles E., jr. (See Arthur, Ernest L., assignor.)
Mahan, Joseph R., assignor to The National Supply Company, Toledo, Ohio. Back-pressure valve for drill pipes. 1,767,538; June 24.
Maher, James M., et al. (See Pollock, Oscar, assignor.)
Mahler, Ernst, and C. G. Bright, assignors to Paper Patents Company, Neenah, Wis. Apparatus for the manufacture of ornamental paper. 1,767,252; June 24.
Mahler, Johann, assignor to Maschinenfabrik Augsburg-Nuernberg, Aktiengesellschaft, Augsburg, Germany. Fuel-charging pump. 1,767,597; June 24.
Mahler, Josef, Nemecky Brod, Czechoslovakia, assignor to Fidelity Machine Company, Philadelphia, Pa. Producing patterns on plated knitting and the corresponding product. 1,768,125; June 24.
Maiekel, Joseph, Butte, Mont. Dressing device for abrasive wheels. 1,766,029; June 24.
Maier, Karl, assignor to Union Special Maschinenfabrik G. m. b. H., Stuttgart, Germany. Sewing machine and actuating mechanism therefor. 1,765,927; June 24.
Maier, Karl, assignor to Union Special Maschinenfabrik, G. m. b. H., Stuttgart, Germany. Apparatus for forming bags. 1,768,126; June 24.
Majer, Christian, Tubingen, Germany. Process and apparatus for producing paper sleeves and coils with reenforcements wound around. 1,765,928; June 24.
Mallory, Harry C., deceased, New York, N. Y.; S. R. Mallory, administratrix. Engine-cooling system. 1,767,598; June 24.
Mallory, Sue R., administratrix. (See Mallory, Harry C.)
Malm, Royal D., La Grange, Ill. Electric welding. 1,767,220; June 24.
Malmgren, Bernard J. (See Gebauer, Herman C., assignor.)
Malone, Herbert E., Riverside, and R. W. Pryor, La Grange, Ill., assignors to Western Electric Company, Incorporated, New York, N. Y. Composition of matter. 1,765,597; June 24.
Mandrich, Bell, Brooklyn, assignor to Crown Cork & Seal Company, Inc., New York, N. Y. Automatic feeder. 1,765,684; June 24.
Mangan, Michael R., Chicago, Ill. Wire-spring fabric or the like. 1,765,434; June 24.
Manhattan Wicker Co. (See Forst, John, assignor.)
Manley, Everett R., Fairmont, W. Va. Adjustable rotary pressing machine. 1,768,469; June 24.
Manley, Robert E., assignor to Manley Manufacturing Company, York, Pa. Primer for washer pumps. 1,767,707; June 24.
Manley Manufacturing ompany. (See Manley, Robert E., assignor.)
Mansfield, Samuel R., Akron, Ohio. Scaffold. 1,765,685; June 24.
Manske, Frederick A., and W. M. McNeil, assignors to United States Gypsum Company, Chicago, Ill. Machine for forming joint reenforcements. 1,768,127; June 24.
Marbach, Edward R., Cleveland, Ohio. Ornamental prop device. 1,767,184; June 24.
Marciano, Gerardo F., assignor to Universal Optical Corporation, Providence, R. I. Ophthalmic mounting. 1,765,732; June 24.
Marion, Gardner S., Concord, assignor to Pope & Cottle Company, Chelsea, Mass. Machine for sawing timbers. 1,765,987; June 24.
Marko, Paul M., Brooklyn, N. Y., assignor to Willard Storage Battery Company, Cleveland, Ohio. Radio battery construction. 1,767,085; June 24.
Marks, Alexander A., Philadelphia, Pa. Water heater. 1,766,080; June 24.
Marks, Donn O., assignor to G. Gartling, Los Angeles, Calif. Magnetic valve. 1,765,377; June 24.
Marks, James H., assignor to Packard Motor Car Company, Detroit, Mich. Internal-combustion engine. 1,766,917; June 24.
Markstrum, John A., Detroit, Mich., assignor to Continental Tool Works. Cutting tool. 1,766,136; June 24.
Markus, Peter, Kansas City, Mo. Inflating device. 1,766,182; June 24.
Marmon Motor Car Company. (See Updike, James W., assignor.)
Marmonier, Louis, Lyon, France. Gyroscopic group for automatically stabilizing and steering aeroplanes. 1,768,128; June 24.
Marrison, Warren A., Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Phase-measuring system and method. 1,768,262; June 24.
Marschke, Berthold V. (See Marschke, Reinhold B., assignor.)
Marschke, Reinhold B., assignor to Berthold V. Marschke, St. Paul, Minn. Folding and disappearing stairs. 1,767,148; June 24.
Marsh, Esli A., Chicago, Ill., assignor, by mesne assignments, to St. Regis Paper Company, New York, N. Y. Apparatus for filling packages. 1,766,444; June 24.
Marsh, Richard G. (See Walter, C. M., and Marsh.)
Marsh, Samuel L. (See McGonegal, Alfred R., assignor.)
Marsh, Samuel L., New York, N. Y. Hydraulic shock absorber. 1,765,929; June 24.
Marshall Field & Company. (See Avery, True M., assignor.)
Marshall, Frank L., Fergus Falls, Minn. Cream cooling or pasteurizing device. 1,768,263; June 24.
Marshall, Horace E., Los Angeles, Calif. Overshot. 1,767,149; June 24.
Maršík, Augustin, assignor to Ceskomoravska-Kolben-Danek Akciova Spolecnost, Prague, Czechoslovakia. Circuit closer to indicate turns of a vehicle. 1,768,208; June 24.
Marti, Charles. (See Horton, A. A., and Marti.)
Martin, Albert, New York, N. Y. Receptacle. 1,765,686; June 24.
Martin, Glenn L., Company, The. (See Van Dusen, Charles A., assignor.)
Martin, Thomas R., Tyseley, Birmingham, England. Electric switch. 1,766,526; June 24.
Marvel Carbureter Company. (See Molony, Donald P., assignor.)
Marvel Carbureter Company. (See Richard, Eugene C., assignor.)
Marvel, Orin E., assignor, by mesne assignments, to General Motors Radio Corporation, Dayton, Ohio. Electrical apparatus. 1,766,505; June 24.
Maschinenfabrik Augsburg-Nuernberg Aktiengesellschaft. (See Mahler, Johann, assignor.)
Maschinenfabrik Augsburg-Nuernberg Aktiengesellschaft. (See Riehm, Wilhelm, assignor.)
Mason, Au & Magenheimer Confectionery Manufacturing Company. (See Laskey, William B., assignor.)
Mason, Julius H., Duncan Falls, Ohio. Cutting machine for wood gutters. 1,767,994; June 24.
Mason Tire & Rubber Co., The. (See Humphrey, W. E., and Graham, assignors.)
Mason, Willard J. (See Cumfer, Harry A., assignor.)
Mason, William H., Laurel, assignor to Masonite Corporation, Laurel, Miss. Making composition boards and the like and apparatus therefor. 1,767,539; June 24.
Masonite Corporation. (See Mason, William H., assignor.)
Massey, John C., et al. (See Corey, Percival C., assignor.)
Massey, John F., Chicago, Ill. Window structure. 1,766,392; June 24.
Masson, Henry J. (See Miller, A. L., and Masson.)
Mathes, Robert C., Wyoming, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Telephone system. 1,768,264; June 24.
Matheson, Martin H. (See Walsh, H. S., and Matheson.)
Mathieson Alkali Works, Inc., The. (See MacMahon, James D., assignor.)
Matson, Richard M. (See Smith, A., and Matson.)
Matthes, Harold L. (See Consor, H. A., Matthes, and Wuest.)
Matthews, W. N., Corporation. (See Birkenmaier, Theodore, assignor.)
Mattison Machine Works. (See Olsen, Joseph O., assignor.)
Matunaga, Yosinobu, Azabuku, Tokyo, Japan, assignor to General Electric Company. Vacuum gauge. 1,768,415; June 24.
Maurer, Ruth D., and H. D. Joyce, assignors to Ruth D. Maurer Corporation, New York, N. Y. Bottle. Des. 81,447; June 24.
Maurer, Ruth D., Corporation. (See Maurer, R. D., and Joyce, assignors.)
Mavis Machine Corporation. (See Davis, Henry K. B., assignors.)
Max Ams Chemical Engineering Corporation, The. (See Brenzinger, Julius, assignor.)
Maxmoor Corporation. (See Moore, Arlington, assignor.)
May, Albert J., Houston, Tex. Paintbrush. 1,767,540; June 24.
May, Orville E. (See Herrick, H. R., May, and Titus.)
Maybach, Karl, assignor to Maybach-Motorenbau Gesellschaft mit beschrankter Haftung, Friedrichshafen, Germany. Transmission gear. Re17,707; June 24.
Maybach-Motorenbau Gesellschaft mit beschrankter Haftung. (See Maybach, Karl, assignor.)
Mayer, Charles W., and E. F. Siller, Rochester, N. Y. Recording device. 1,765,988; June 24.
Mayer, Fritz, and K. Zahn, Frankfort-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Sulphur-containing hydroxyquinones and preparing them. 1,765,687; June 24.
Mayer, Waldemar F., Rutherford, N. J., assignor to The Alba Corporation, St. Alban, Vt. Adjustable sheet folder. 1,766,789; June 24.

Mayer, Waldemar F., Rutherford, N. J., assignor to The Alba Corporation, St. Albans, Vt. Sheet folder. 1,766,790. June 24.
Mayer, Waldemar F., Rutherford, N. J., assignor to The Alba Corporation, St. Albans, Vt. By-pass sheet folder. 1,766,791; June 24.
Mayer, Waldemar F., Rutherford, N. J., assignor to The Alba Corporation, St. Albans, Vt. Folding machine. 1,766,792; June 24.
Mayer, Waldemar F., Rutherford, N. J., assignor to The Alba Corporation, St. Albans, Vt. Folding sheets. 1,766,793; June 24.
Maynard, Blanshard B., and F. L. De Sanno, Oakland, assignors, by mesne assignments, to Rheem Manufacturing Company, Emeryville, Calif. Liquid dispenser. 1,765,844; June 24.
Maynard, George S., Newtonville, Mass., assignor, by mesne assignments, to United-Carr Fastener Corporation, Cambridge, Mass. Stud for snap fasteners. 1,767,805; June 24.
McAlpine, John E. (See Welch, J. T., and McAlpine.)
McArthur, Arthur R., Gary, Ind., assignor to American Sheet and Tin Plate Company. Pack opener. 1,766,299; June 24.
McBride, Fred J., Toronto, Ontario, Canada. Toy airship. 1,765,435; June 24.
McBride, Henry F., Silao, Mexico. Alternating-current-circuit breaker. 1,767,855; June 24.
McBride, William H., Coatbridge, Scotland. Expanding friction clutch for motor cars. 1,767,387; June 24.
McCain, John L., Atwood, Kans. Multiple-valve dispenser. 1,768,129; June 24.
McCann, Paul S., La Grange, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Producing magnetic materials. 1,765,436; June 24.
McCarthy, Edward F., assignor to Chicago Pump Company, Chicago, Ill. Fluid-displacement pump. 1,767,541; June 24.
McCarthy, Edward F., assignor to Chicago Pump Company, Chicago, Ill. Pneumatic water-supply system. 1,767,542; June 24.
McCassey, George L., and R. H. Cox, assignors to Acclimated Fur Farm, San Diego, Calif. Acclimatizing fur-bearing animals. 1,767,150; June 24.
McChesney, Presley B., Bowling Green, Ky. Current motor. 1,767,995; June 24.
McCloud, Edward H., Columbus, Ohio. Automobile bumper. 1,766,342; June 24.
McClure, Edward E., Portland, Oreg. Lubricating mechanism for edger saws. 1,766,663; June 24.
McConnell, Hugh, et al., trustees. (See McConnell, Thomas, assignor.)
McConnell, Thomas, assignor to F. C. Johnson, J. W. Lane, O. L. Johnson, T. McConnell, and H. McConnell, trustees, doing business as Hampton Company, East Hampton, Mass. Apparatus for bleaching. 1,766,716; June 24.
McConnell, Thomas, et al., trustees. (See McConnell, Thomas, assignor.)
McCord, Claude M., Richmond Heights, Mo. Hand lathe. 1,767,151; June 24.
McCoy, James L., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Supervisory control system. 1,765,494; June 24.
McCoy, James L., and G. De Croce, Forest Hills, Pa., assignors to Westinghouse Electric and Manufacturing Company. Telephonometer. 1,765,598; June 24.
McCrery, Harold E., and A. E. Jesser, Appolio, assignors to Copperweld Steel Company, Glassport, Pa. Apparatus for manufacturing bimetallic billets. Re17,717; June 24.
McCullough, Paul J., St. Louis, Mo. Valve. 1,767,086; June 24.
McCune, Joseph C., Edgewood, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Angle-cock device. 1,765,378; June 24.
McDaniel, James B., Macon, Ga. Watch-crystal-fitting device. 1,767,935; June 24.
McDaniel, Lee, Pacolet Mills, assignor to Bahan Textile Machinery Company, Greenville, S. C. Battery patch. 1,766,759; June 24.
McElroy, John H., trustee. (See Brown, Reinhardt, H., assignor.)
McElroy, John J., and E. L. Beecher, New Haven, Conn., assignors, by mesne assignments, to The Cleveland Pneumatic Tool Company, Cleveland, Ohio. Cup washer. 1,767,936; June 24.
McFarland, Robert E., Cicero, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Strand-working mechanism. 1,765,599; June 24.
McFarland, William A., Bena, Minn. Combined tie plate and rail anchor. 1,767,937; June 24.
McGilvray, John D., San Francisco, Calif. Identification holder. 1,765,600; June 24.
McGinnis, Edward A., Pittsburgh, Pa. Hair drier. 1,765,379; June 20.
McGinnis, Edward A., Pittsburgh, Pa. Hair drier. 1,765,380; June 24.
McGonegal, Alfred R., Clarendon, Va., assignor of seven-eighths to S. L. Marsh, Los Angeles, Calif. Hydraulic shock absorber. 1,765,930; June 24.
McHaffie, Alec C., Brooklyn, N. Y. Porter's truck. 1,765,985; June 24.
McKay, Eugene H., assignor to Kellog Company, Battle Creek, Mich. Method and apparatus for treating food materials 1,766,445; June 24.
McKee, Arthur G., Cleveland Heights, Ohio. Utilizing fuel gas produced under conditions of varying pressure. 1,767,004; June 24.
McKee Glass Company. (See Smith, Maurice A., assignor.)
McKee, Ralph H., and C. M. Salls, New York, N. Y. Chlorinating saturated hydrocarbons. 1,765,601; June 24.
McKee, Ralph H., and C. M. Salls, New York, N. Y. Making sulphuryl chloride. 1,765,688; June 24.
McKee, Ralph H., Jersey City, E. H. Morse, Nutley, and P. E. Rollhaus, East Orange, assignors to Pilot Laboratory, Inc., Arlington, N. J. Bleaching celluluose products. 1,767,543; June 24.
McKenna, John J. (See McKenna, Lawrence F. and J. J.)
McKenna, Lawrence F. and J. J., Abington, Pa. Loop-cutting attachment for circular spring beard knitting machines. 1,767,687; June 24.
McKesson, Claude L., Sacramento, assignor to American Bitumuls Company, San Francisco, Calif. Retaining water in concrete for the hydration of cement. 1,768,366; June 24.
McKim, Wilmer E., New Kensington, assignor to W. E. Spill, trustee, Pittsburgh, Pa. Weighing apparatus. 1,765,495; June 24.
McKinlay, Edward S., Denver, Colo. Chain cutter. 1,765,602; June 24.
McKinley, Charles W. (See Cram, L. V., and McKinley.)
McKinley, Charles W., assignor to The Tillotson Manufacturing Company, Toledo, Ohio. Carburetor. 1,767,599; June 24.
McKinley, Charles W., and H. G. Kamrath, assignors to A C Spark Plug Company, Flint, Mich. Oil filter. 1,768,367; June 24.
McLauthlin, Martin B., Malden, Mass. Car hoisting and dumping apparatus. 1,767,768; June 24.
McLean, James, Glasgow, Scotland. Gallery for electric lamps. 1,767,300; June 24.
McLellan, Eli M. (See Pearson, C. C., and McLellan.)
McMillen, Norman F., Rochester, N. Y. Lumber for forming casings for window and door interior trim. 1,765,931; June 24.
McMullan, Samuel, Downers Grove, and A. E. Schulz, Chicago, Ill., assignors to Western Electric Company, Incorporated, New York, N. Y. Wire-drawing apparatus. 1,765,437; June 24.
McNeil, William M. (See Gough, F. J., McNeil, and Pfeffer.)
McNeil, William M. (See Manske, F. A., and McNeil.)
McNinch, William T., Chicago Heights, assignor to American Manganese Steel Company, Chicago, Ill. Ball bracket for excavating dippers. 1,766,343; June 24.
Mencham, Merle R., and W. J. Seeland, Elizabeth, N. J., assignors to Standard Oil Development Company. Tank sampler. 1,767,301; June 24.
Mend Pulp & Paper Company, The. (See Rawling Francis G., assignor.)
Meaker Co., The. (See Miller, C. G., and Cleveland, assignors.)
Meakin, Edgar T., Berkeley, Calif. Apparatus for and method of treating material. 1,766,030; June 24.
Meakin, Edgar T., Berkeley, Calif. Apparatus for processing animal matter. 1,766,031; June 24.
Meakin, Edgar T., Berkeley, Calif. Processing animal matter. 1,766,032; June 24.
Meakin, Edgar T., Berkeley, Calif. Apparatus for processing animal matter. 1,766,033; June 24.
Mealia, Tony A., Roseville, Calif. Automobile door guide. 1,766,183; June 24.
Meaux, Robert L., Eunice, La. Pump. 1,768,130; June 24.
Mechanical Handling Systems, Inc. (See Moon, Charles L., assignor.)
Mee, Frederick J., London, England. Toy aeroplane. 1,767,769; June 24.
Meeder, Herbert L., assignor of two-fifths to B. F. Price, Denver, Colo. Motor starter. 1,767,688; June 24.
Meeker, David A. (See Johnston, H. L., and Meeker.)
Meigs, Bassett & Slaughter, Inc., et al. (See Bassett, H. P., and Morrison, assignors.)
Meininghaus, Ewald, Lancaster, N. Y. Latch. 1,767,152; June 24.
Meissner, Alexander, assignor to Gesellschaft für Drahtlose Telegraphie m. b. H. Hallesches, Berlin, Germany. Space radiation antenna. 1,765,438; June 24.
Mellish, Thomas G., Cincinnati, Ohio, assignor to The Bromwell Wire Goods Company, Michigan City, Ind. Folding chair. 1,765,845; June 24.
Meligren, Gunnar E., Tidaholm and J. G. Sjöstrom, Jonkoping, Sweden. Machine for making match inner boxes. 1,765,767; June 24.
Meloy, Charles A., Santa Monica, Calif. Tire lock. 1,766,664; June 24.
Melville, Herbert J., Chicago, Ill. Receptacle-closure means. 1,765,989; June 24.
Melville, Herbert J., and H. E. Atchison, assignors to The Curtiss Candy Company, Chicago, Ill. Candy-slab divider. 1,765,990; June 24.
Menchey, Albert J., Philadelphia, Pa. Piston. 1,767,996; June 24.
Mendoza, Mordecai, Blackley, Manchester, assignor to British Dyestuffs Corporation Limited, Manchester, England. Manufacture of new intermediate compounds and of azo dyes therefrom. 1,766,949; June 24.

Mendoza, Mordecai, and K. H. Saunders, assignors to British Dyestuffs Corporation Limited, Manchester, England. Mordant azo dyestuffs. 1,766,948; June 24.

Mendoza, Mordecai, and K. H. Saunders, Blackley, Manchester, assignors to British Dyestuffs Corporation Limited, Manchester, England. Azo dyestuffs. 1,766,950; June 24.

Menzel, Friedrich, assignor to Robert Bosch Aktiengesellschaft, Stuttgart, Germany. Combined automatic switch and regulator. 1,765,381; June 24.

Menzies, James L., Coventry, England. Vehicle roof. 1,768,368; June 24.

Mercil, Elmer J. (See O'Neill, William J., assignor.)

Meredith, Washington, Addyston, Ohio. Marine escape. 1,766,300; June 24.

Mergott, J. E., Company. (See Hiering, William C., assignor.)

Merkel, Joseph F., assignor to General Railway Signal Company, Rochester, N. Y. Alternating-current relay. 1,766,665; June 24.

Merrell, Wm. S., Company, The. (See Billing, Wyly M., assignor.)

Merrill Company, The. (See Mills, Louis D., assignor.)

Messler, Eugene L., and J. M. Guthrie, Pittsburgh, Pa., said Guthrie assignor to said Messler. Cap for hot tops. 1,765,382; June 24.

Metal Stampings Corporation. (See Gillooly, William, assignor.)

Metcalf, George R., jr., assignor to Erie Malleable Iron Company, Erie, Pa. Lighting fixture. 1,767,087; June 24.

Metcalf, Walter W., Hoosick Falls, and J. Brown, Middle Falls, N. Y. Press-roll drive. 1,767,088; June 24.

Metts, William R., Atlanta, Ga. Automobile wheel attachment. 1,766,393; June 24.

Metzner, Albert W., assignor to J. Q. Sherman, Dayton, Ohio. Manifolding device. 1,767,469; June 24.

Metzner, Albert W., assignor to J. Q. Sherman, Dayton, Ohio. Manifolding machine. 1,767,689; June 24.

Meuer, George J., and W. C. Stevens, assignors, by mesne assignments, to Cutler-Hammer, Inc., Milwaukee, Wis. Vacuum-tube socket. 1,767,690; June 24.

Meyer, Adolf, Kusnacht, near Zurich, Switzerland. Control gear for turbine plants. 1,766,527; June 24.

Meyer, Adolf, Kusnacht, near Zurich, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland. Steam separator. 1,766,666; June 24.

Meyer, Felix, Aachen, Germany. Hypodermic syringe for injecting liquids into the body or for taking them therefrom. 1,766,918; June 24.

Meyer, Richard A., New York, N. Y. Strainer. 1,767,221; June 24.

Meyerhauser Timber Company. (See Bratlie, Arthur, assignor.)

Meylein, Andreas, Pforzheim, Germany. Process of soldering ornamental and other chains and chain mail of wire of solid cross section. 1,765,932; June 24.

Michel, Richard, Krefeld, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Condensation products of hydrogenated naphthalenes with ethylene. 1,766,344; June 24.

Michel, Richard, Ueringen, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Manufacture of condensation products from olefines and naphthalene hydrocarbon compounds. 1,767,302; June 24.

Michigan Wire Goods Company. (See Smith, Benjamin H., assignor.)

Micro Machine Company. (See York, H. H., and Baumberger, assignors.)

Mietzsch, Fritz. (See Schulemann, W., Wingler, and Mietzsch.)

Mildren, Lory J. (See Taylor, James S. assignor.)

Miller, Albert B., and W. H. Kellner, Green Bay, Wis. Gas heater. 1,766,394; June 24.

Miller, Amos L., Philadelphia, Pa., assignor to The Ault & Wiborg Co., Cincinnati, Ohio. Method of and apparatus for making ink, etc. 1,765,991; June 24.

Miller, Amos L., Philadelphia, Pa., and H. J. Masson, New York, N. Y. Dealing with particles in gaseous suspension. 1,767,089; June 24.

Miller, Basil, Newton, Iowa. Wind-power generator. 1,767,303; June 24.

Miller, Ben, Kansas City, Mo. Window construction. 1,767,600; June 24.

Miller, Carl D., Millis, Mass. Method and apparatus for reclaiming lubricating oil. 1,768,209; June 24.

Miller, Charles. (See Layman, Stephen D., assignor.)

Miller, Charles. (See Winkler, A., and Miller.)

Miller, Charles, Long Island City, N. Y. Demonstrating shoe sample. 1,767,090; June 24.

Miller, Constantine G., and C. F. Cleveland, assignors to The Meaker Co., Chicago, Ill. Continuous automatic cleaning and plating machine. 1,767,253; June 24.

Miller, Earl R., Cleveland, Ohio. Agitator. 1,767,601; June 24.

Miller, Edward G., Grand Rapids, Mich. Hot-air furnace. 1,765,439; June 24.

Miller, Edward G., Grand Rapids, Mich. Air feed for hot-air heating apparatus. 1,765,537; June 24.

Miller, Ernest E., David City, Nebr. Vehicle heater. 1,765,933; June 24.

Miller, Florence R. (See Miller, Philip M., assignor.)

Miller, Frank P., Meadville, Pa. Inserted-blade cutter. 1,768,131; June 24.

Miller, Frank P., Meadville, Pa. Rotary cutter. 1,768,132; June 24.

Miller, Fred W., Highland Park, Ill. Wrench-display holder. 1,765,496; June 24.

Miller, Frederick B., Scottdale, Pa. Mining machine. 1,766,395; June 24.

Miller, George F., Los Angeles, Calif. Apparatus for spreading fertilizer. 1,766,667; June 24.

Miller, George J., Mankato, Minn. Spring-tooth mounting for cultivators. 1,766,396; June 24.

Miller, Harry, New York, N. Y. Automatic dispensing apparatus. 1,766,717; June 24.

Miller, Henry W., Miami, Fla. Door holder. 1,768,326; June 24.

Miller, John T., and M. Hanley, Chicago, Ill. Gong. 1,765,768; June 24.

Miller, Max R. L., Wilmington, Calif. Apparatus for treating asphaltic oils for the production of asphalt. 1,766,446; June 24.

Miller, Philip M., assignor to F. R. Miller, Brooklyn, N. Y. Manual syringe. 1,766,668; June 24.

Miller Rubber Company Inc. (See Collins, Arthur E., assignor.)

Miller Rubber Company, The. (See Steele, Charles W., assignor.)

Miller, Sherman, Schenectady, N. Y. Locomotive cylinder and associated parts and manufacturing the same. 1,767,005; June 24.

Miller, Theodore C., Brooklyn, N. Y. Coffee-making apparatus. 1,767,544; June 24.

Millett, John E., assignor to American Fibre Corporation, Gardner, Mass. Twisting machine. 1,766,222; June 24.

Millett, John E., and G. E. Nordstrom, assignors to American Fibre Corporation, Gardner, Mass. Method of and mechanism for weaving stake fabric. 1,766,223; June 24.

Mills, Elby R. (See Mills, Perley B. and E. R.)

Mills, Fred L., Oak Park, assignor to Mills Novelty Company, Chicago, Ill. Coin-controlled vending machine. 1,767,602; June 24.

Mills, Fred L., Oak Park, assignor to Mills Novelty Company, Chicago, Ill. Control device for coin-operated machines. 1,767,603; June 24.

Mills, Louis D., Palo Alto, assignor to The Merrill Company, San Francisco, Calif. Apparatus for removing gases from liquids. 1,767,006; June 24.

Mills Novelty Company. (See Mills, Fred L., assignor.)

Mills Novelty Company. (See Radtke, Bruno, assignor.)

Mills, Perley B. and E. R., Sabin, Ohio. Computing meter. 1,766,184; June 24.

Millsap, Robert E., Jersey City, N. J. Knife sharpener. 1,767,091; June 24.

Milnor, Joseph W., Maplewood, and W. D. Cannon, Metuchen, N. J., assignors to The Western Union Telegraph Company, New York, N. Y. Duplex telegraph system. 1,766,919; June 24.

Milwaukee Air Power Pump Co. (See Rogers, H. S., and Raddatz, assignors.)

Milwaukee Electric Crane & Manufacturing Company. (See Hoffman, George R., assignor.)

Mine safety Appliance Company. (See Dotter, Arthur L., assignor.)

Miner, W. H., Inc. (See Dath, Charles E., assignor.)

Miner, W. H., Inc. (See Haseltine, Stacy B., assignor.)

Miner, W. H., Inc. (See Johnson, G. A., and Haseltine, assignors.)

Miner, W. H., Inc. (See O'Connor, John F., assignor.)

Mingus, Clem F., Oakland, Calif. Shoe-cleaning support. 1,768,133; June 24.

Minimax A.-G., et al. (See Thiecke, Julius, assignor.)

Minnium, Byron B., assignor, by mesne assignments, to Story & Clark Radio Corp., Chicago, Ill. Thermionic amplifier system. 1,765,603; June 24.

Minton, Donna E., and S. H. Gallagher, Parsons, Kans. Burial crypt. 1,768,369; June 24.

Mishawaka Rubber and Woolen Manufacturing Company. (See Ferrettie, C., and Blair, assignors.)

Mishawaka Rubber and Woolen Manufacturing Company. (See Van Dinter, George L., assignor.)

Missar, Joseph A., et al. (See Salmon, James P., assignor.)

Mitchell, Carrie, La Junta, Colo. Percolator. 1,765,934; June 24.

Mitchell, Holger L. (See Henricks, A. G., and Mitchell.)

Mitchell, Holger L., assignor to Harnischfeger Corporation, Milwaukee, Wis. Device for stabilizing cranes. 1,767,470; June 24.

Mitchell, Holger L., assignor to Harnischfeger Corporation, Milwaukee, Wis. Drag-line bucket. 1,767,691; June 24.

Mittasch, Alwin, Mannheim, and W. Frankenburger, Ludwigshafen-on-Rhine, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Manufacture of valuable organic compounds. 1,766,718; June 24.

Mock, James C., Detroit, Mich. Light signal and projector. 1,765,689; June 24.

Modern Coal Burner Co. (See Leach, Vernon G., assignor.)

Modern Concrete Development Company Limited. (See Knipe, Arthur C., assignor.)

Modine, Arthur B., assignor to Modine Manufacturing Company, Racine, Wis. Heating apparatus. 1,767,604; June 24.

Modine, Arthur B., assignor to Modine Manufacturing Company, Racine, Wis. Producing heat-exchange units. 1,767,605; June 24.

Modine Manufacturing Company. (See Modine, Arthur B., assignor.)

Moehling, Fritz. (See Kayes, A. E., and Moehling.)

Moffatt, James R., assignor to Union Special Machine Company, Chicago, Ill. Presser foot for sewing machines. 1,765,604; June 24.

Mohr, Franklin, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. System for converting light energy into electrical energy and vice versa. 1,768,288; June 24.

Mohr, Henry P., Morris, Minn. Machine for killing quack grass. 1,768,289; June 24.

Moir, Harry W., Los Angeles, Calif. Process and apparatus for grinding material and extracting volatile matter therefrom. 1,766,447; June 24.

Moldaenke, Karl. (See Runne, E., Moldaenke, and Fischer.)

Molony, Donald P., assignor to Marvel Carbureter Company, Flint, Mich. Automatic charge-heating control for internal-combustion engines. 1,766,794; June 24.

Monnier, George P. (See Monnier, Russel A. and G. P.)

Monnier, Russel A. and G. P., Algonac, Mich. Winding drum and fastening hoisting cables thereto. 1,767,938; June 24.

Monson, Louis T. (See De Graote, M., and Monson.)

Monson, Louis T. (See De Groote, M., Monson, and Wirtel.)

Montan, Inc. (See Coolidge, Joseph R., 3d., assignor.)

Montevaldi, John J., San Jose, Calif. Windshield wiper. 1,766,224; June 24.

Monument Mills. (See Belknap, Doris V., assignor.)

Moody, Joseph F., Tulsa, Okla. Oil-well apparatus. 1,766,920; June 24.

Moon, Charles L., assignor to Mechanical Handling Systems, Inc., Detroit, Mich. Conveyer. 1,766,225; June 24.

Moone, Albert E. F., Chicago, Ill., assignor to The Lehon Company. Roofing. 1,768,134; June 24.

Moore, Arlington, New York, N. Y., assignor, by mesne assignments, to Maxmoor Corporation. Conversion valve. 1,766,669; June 24.

Moore, Arlington, assignor, by mesne assignments, to Maxmoor Corporation, New York, N. Y. Conversion valve. 1,766,670; June 24.

Moore, Arlington, assignor, by mesne assignments, to Maxmoor Corporation, New York, N. Y. Mixture conversion apparatus for internal-combustion engines. 1,766,671; June 24.

Moore, Arlington, assignor, by mesne assignments, to Maxmoor Corporation, New York, N. Y. Conversion valve for internal-combustion engines. 1,766,672; June 24.

Moore, Arlington, assignor, by mesne assignments, to Maxmoor Corporation, New York, N. Y. Preparing charges for combustion in internal-combustion engines. 1,766,673; June 24.

Moore, Arlington, assignor, by mesne assignments, to Maxmoor Corporation, New York, N. Y. Apparatus for control of combustion in internal-combustion engines. 1,766,674; June 24.

Moore, Arlington, assignor, by mesne assignments, to Maxmoor Corporation, New York, N. Y. Exhaust-gas aeration and charge preparation for internal-combustion engines. 1,766,675; June 24.

Moore, Arlington, assignor, by mesne assignments, to Maxmoor Corporation, New York, N. Y. Charge-supplementing apparatus for internal-combustion engines. 1,766,676; June 24.

Moore, Arlington, assignor, by mesne assignments, to Maxmoor Corporation, New York, N. Y. Charge-supplementing apparatus for internal-combustion engines. 1,766,677; June 24.

Moore, Delmer H., assignor to Moore Plow and Implement Company, Greenville, Mich. Plowshare. 1,768,135; June 24.

Moore, Edwin E., Gary, Ind., assignor to American Sheet and Tin Plate Company, Pittsburgh, Pa. Shears. 1,766,301; June 24.

Moore, Frank L., Chatham, N. J. Safety device for elevators. 1,765,690; June 24.

Moore Plow and Implement Company. (See Moore, Delmer H., assignor.)

Moore, Thomas C. (See Coffield, W. M., and Moore.)

Moorhouse, Alfred, assignor to Packard Motor Car Company, Detroit, Mich. Internal-combustion engine. 1,766,921; June 24.

Moorhouse, Alfred, assignor to Packard Motor Car Company, Detroit, Mich. Motor vehicle. 1,766,922; June 24.

Moorhouse, Alfred, assignor to Packard Motor Car Company, Detroit, Mich. Brake-operating mechanism. 1,766,923; June 24.

Moorhouse, Alfred, assignor to Packard Motor Car Company, Detroit, Mich. Motor vehicle. 1,766,924; June 24.

Moorhouse, Alfred, assignor to Packard Motor Car Company, Detroit, Mich. Motor vehicle. 1,766,925; June 24.

Moorhouse, Alfred, assignor to Packard Motor Car Company, Detroit, Mich. Motor vehicle. 1,766,926; June 24.

Moorhouse, Alfred, assignor to Packard Motor Car Company, Detroit, Mich. Internal-combustion engine. 1,767,222; June 24.

Moorhouse, Alfred, assignor to Packard Motor Car Company, Detroit, Mich. Brake-operating mechanism. 1,767,388; June 24.

Moorhouse, Alfred, assignor to Packard Motor Car Company, Detroit, Mich. Internal-combustion engine. 1,768,136; June 24.

Moos, August. (See Wilmoth, J. J., and Moos.)

Moraine Products Corporation, The. (See Short, Charles R., assignor.)

Morgardshammars Mekaniska Verkstads Aktiebolag. (See Salwén, R., and Öhrn, assignors.)

Morin, Louis H., New York, N. Y. Flexible-shaft-making machine. 1,767,692; June 24.

Morin, Louis H., New York, N. Y. Flexible-shaft-making machine. 1,767,693; June 24.

Morin, Louis H., New York, N. Y. Making flexible shafting. 1,767,694; June 24.

Morin, Louis H., New York, N. Y., assignor, by mesne assignments, to Doehler Vending Machines, Inc. Toilet-roll holder. 1,767,007; June 24.

Morin, Louis H., New York, N. Y., assignor to Doehler Die-Casting Co. Metal cabinet. 1,767,008; June 24.

Morin, Louis H., New York, N. Y., assignor, by mesne assignments, to Doehler Vending Machines Inc. Dispenser for particulate materials. 1,767,009; June 24.

Morland & Impey, Limited. (See Power, Richard F., assignor.)

Morrell, Jacque C., and G. Egloff, assignors to Universal Oil Products Company, Chicago, Ill. Producing resins. 1,766,927; June 24.

Morrell, Jacque C., and H. P. Benner, assignors to Universal Oil Products Company, Chicago, Ill. Process and apparatus for cracking petroleum oil. 1,767,695; June 24.

Morris, Edmund. (See Vanderveld, A., and Morris.)

Morris, Edmund, Grand Rapids, assignor to Grand Rapids Store Equipment Corporation, Grand Rapids, Mich. Partition holder for counters. 1,767,806; June 24.

Morris, Lou A., Aurora, Nebr. Making potato chips. 1,767,389; June 24.

Morrison, Charles, Hagerstown, Md., assignor to Westinghouse Electric & Manufacturing Company. Relay. 1,765,497; June 24.

Morrison, Richard C. (See Bassett, H. P., and Morrison.)

Morrison, Robert A., and F. L. Oswald, Portland, Oreg. Ironing table. 1,765,992; June 24.

Morrow, Emmet H., assignor to Automatic Oilingseal Corporation, Chicago, Ill. Attachment for oil cans. 1,767,223; June 24.

Morrow, Howard B., La Porte, Ind. Oil cup. 1,766,345; June 24.

Morse Chain Company. (See Thompson, Fred C., assignor.)

Morse, Earle H. (See McKee, R. H., Morse, and Rollhaus.)

Morse, Lawrence H., assignor to The American Multigraph Company, Cleveland, Ohio. Paper-feeding mechanism. 1,766,137; June 24.

Mortensen, Niels L., Milwaukee, Wis., assignor, by mesne assignments, to Cutler-Hammer, Inc., Milwaukee, Wis. Controller for electric motor-driven machinery. 1,767,606; June 24.

Morton, Harold A., Akron, Ohio. Aldehyde and antioxidant agent and process. 1,766,760; June 24.

Morton, Harry E., Hyde Park, Mass. Toy electric locomotive. 1,766,185; June 24.

Morton, Henry S., Forest Glen, Md. Injection apparatus. 1,767,304; June 24.

Morton, William B., and L. F. Beisner, Beatrice, Nebr. Display equipment. 1,765,935; June 24.

Moser, Frank R., jr., assignor to St. Louis Scale Corporation, St. Louis, Mo. Weighing scale. 1,765,691; June 24.

Moses, Charles F., Sheboygan, Wis., assignor of fifty-one one-hundredths to Gardner Lumber Company. Gang saw. 1,767,390; June 24.

Moskow, Joseph G. (See Blann, H. L., and Moskow.)

Mossbacher, Solomon, assignor of one-half to E. M. Schreiber, New York, N. Y. Necktie rack. 1,767,545; June 24.

Motor Products Corporation. (See Kellogg, Homer G., assignor.)

Motor Terminals Company. (See Bates, Albert H., assignor.)

Motor Terminals Company. (See Fitch, Benjamin F., assignor.)

Moulthrop, Lembert H., South Norwalk, Conn. Electric soldering device. 1,767,607; June 24.

Mouromtseff, Ilia E., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Space-current device. 1,765,605; June 24.

Mueller, Alfons, New York, N. Y. Motor preheater and cooler. 1,766,928; June 24.

Mueller, Augusto E., assignor of one-half to M. Britz, Chicago, Ill. Brush-making machine. 1,765,769; June 24.

Mueller Co. (See Reedy, Emmett M., assignor.)

Mueller, Herman C., Milwaukee, Wis. Sound-reproducing device. 1,767,546; June 24.

Muend, Charles J., Philadelphia, Pa. Swing-joint coupling. 1,765,693; June 24.
Mugnai, Fred, assignor to Art Specialty Company, Chicago, Ill. Bench-end support or the like. Des. 81,448; June 24.
Mugnai, Fred, assignor to Art Specialty Company, Chicago, Ill. Bench-end support or the like. Des. 81,449; June 24.
Mugnai, Fred, assignor to Art Specialty Company, Chicago, Ill. Bench-end arm or the like. Des. 81,450; June 24.
Muhl, Charles H. (See Galloway, R. M., and Muhl.)
Muhlbacker, Ralph, assignor to Wm. P. Greenhill & Son, Chicago, Ill. Calendar-pad stand. 1,767,471; June 24.
Muir, John, assignor of one-half to G. H. Wilkinson, London, England. Adhesive paper and the manufacture of same. 1,766,302; June 24.
Mulka, Friedrich, Suhl in Thuringen, Germany. Automatic lathe. 1,767,224; June 24.
Mullally, Walter J., Chicago Heights, assignor to American Manganese Steel Company, Chicago, Ill. Cushion-back dipper. 1,766,255; June 24.
Müller-Cunradi, Martin. (See Pier, M., Müller-Cunradi, Wietzel, and Winkler.)
Müller-Cunradi, Martin, Ludwigshafen-on-the-Rhine, and W. Wilke, Mannheim, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Motor fuel. 1,765,692; June 24.
Muller, George W., Washington, D. C. Railway-rail joint. 1,766,795; June 24.
Muller, George W., Washington, D. C., assignor to Muller Railway Track Systems, Incorporated, Wilmington, Del. Roadbed. 1,766,796; June 24.
Muller, Jacques, La Garenne Colombes, France. Disconnecting coupling for pipes and the like. 1,767,391; June 24.
Muller Railway Track Systems, Incorporated. (See Muller, George W., assignor.)
Müller, Stephen V., Detroit, Mich. Aeroplane-wing arrangement. 1,765,440; June 24.
Mulligan, Francis, Belfast, Ireland. Manufacture of a cement or plaster from gypsum. 1,766,448; June 24.
Mulroney, Frank M., Fort Dodge, Iowa. Garment fastener. 1,766,828; June 24.
Mulwitz, Robert. (See Rosenberg, I. B., and Mulwitz.)
Münch, Heinrich, Schlagbaum, near Velbert, assignor to the firm Schlossfabrik-Aktiengesellschaft vorm. Wilh. Schulte, Schlagbaum, near Velbert, Germany. Device for adjustably attaching cylinder locks to doors, and furniture locks. 1,766,081; June 24.
Muncherian, Hrand M., Atlanta, Ga. Fuse plug. 1,766,303; June 24.
Munsingwear Corporation, The. (See Chatfield, Franklin, assignor.)
Munz, Elmer G., Detroit, Mich. Sprinkler. 1,766,138; June 24.
Muros, Joseph, New York, N. Y. Safety razor. 1,766,397; June 24.
Muros, Joseph, assignor to F. E. Perry, New York, N. Y. Safety razor. 1,766,398; June 24.
Muros, Joseph, assignor to F. E. Perry, New York, N. Y. Safety razor. 1,766,399; June 24.
Murphy, Clarence, Bridgeport, Conn. Spring clips for belts, garters, and the like. 1,767,608; June 24.
Murray Body Corporation. (See Walsh, H. S., and Matheson, assignors.)
Murray, Howard J., Brooklyn, N. Y. Selective remote control system. 1,767,609; June 24.
Musall, Charles A., Detroit, Mich. Carbureting means. 1,767,305; June 24.
Musmann, Henry F. C., Denver, Colo. Railroad-crossing gate. 1,765,936; June 24.
Myers, Frederick A., assignor to Dunning Compressor Co., Philadelphia, Pa. Preventing oil from passing pistons. 1,766,829; June 24.
Myers, Joseph W., Jackson, Mich. Nut-setting machine. 1,766,139; June 24.
N. V. Internationale Automaten Maatschappij. In Lange Voorhout. (See Wetzell, C., and Inhoffen, assignors.)
Naffziger, E. J. (See Bellah, George R., assignor.)
Nagy, William, Bethlehem, Pa. Water-pumping device. 1,768,210; June 24.
Nakagawa, Shoichi, San Jose, Calif. Cooking utensil. 1,766,797; June 24.
Nakken Patents Corporation. (See Nakken, Theodorus H., assignor.)
Nakken, Theodorus H., Brooklyn, N. Y., assignor to Nakken Patents Corporation. Apparatus for photographically recording and reproducing sound. 1,767,547; June 24.
Narducci, Giulio, South Tacoma, Wash. Rotary brush. 1,766,140; June 24.
Nash, Charles J., Chicago, Ill., assignor to Universal Draft Gear Attachment Company. Bearing for brake hangers. 1,766,346; June 24.
Nathan, Albert F. (See De Leeuw, Adolph L., assignor.)
National Aniline & Chemical Company. (See Dieterle, Paul, assignor.)
National Aniline & Chemical Co. (See Walt, Justin F., assignor.)
National Aniline & Chemical Co. (See Wendler, Adolph F., assignor.)
National Automatic Tool Company, The. (See Galloway, R. M., and Muhl, assignors.)
National Biscuit Company. (See Chappory, A. C., jr., and Posey, assignors.)
National Brick Company. (See Weber, C. J., and Seek, assignors.)
National Carbon Co. (See Huntley, Alton K., assignor.)
National Electric Ticket Register Company. (See Sullivan, William L., assignor.)
National Machinery Co., The. (See Clouse, William L., assignor.)
National Standard Company. (See Pierce, Robert C., assignor.)
National Supply Company, The. (See Mahan, Joseph R., assignor.)
National Tile Company, The. (See Fisher, G. W., and Henrikson, assignors.)
National Tool Company, The. (See Simmons, Oliver G., assignor.)
Naugle, Harry M., and A. J. Townsend, Canton, assignors, by mesne assignments, to The American Rolling Mill Company, Middletown, Ohio. Continuous-pickling process. 1,765,498; June 24.
Naul, James N., Plainfield, N. J., assignor to The Singer Manufacturing Company, Elizabeth, N. J. Electric suction cleaner. 1,766,929; June 24.
Nawiasky, Paul. (See Kallscher, G., Scheyer, Nawiasky, and Krauch.)
Nawiasky, Paul, and A. Krause, Ludwigshafen-on-the-Rhine, and A. Holl, Offenbach-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Alkylation products of pyrazolan thrones. 1,766,719; June 24.
Neaman, Harry I., et al. (See Palmer, John V., assignor.)
Nebiett Engineering Company, The. (See Sykes, Wilfred, assignor.)
Nee, Daniel J., San Francisco, Calif., assignor of one-third to J. P. Callahan and one-third to W. F. Pringle. Cigarette extinguisher. 1,767,092; June 24.
Needelman, Adolf. (See Weiss, H., and Needelman.)
Neely, Rant Y., Willamina, Oreg. Lumber jack. 1,766,400; June 24.
Neighbour, Leonard B., assignor to Deere & Company, Moline, Ill. Manure spreader. 1,765,993; June 24.
Nein, William C. (See Varley, T. W., and Nein.)
Nelson, Adolph L., assignor to Bohn Aluminum & Brass Corporation, Detroit, Mich. Piston. 1,766,449; June 24.
Nelson, Charles E., Los Angeles, Calif. Mechanical movement. 1,766,798; June 24.
Nelson, Harry J., Elizabeth, N. J. Railway rolling stock. 1,768,527; June 24.
Nelson, John, Ericson, Nebr. Automatic transmission mechanism. 1,767,939; June 24.
Nelson, John N., assignor to Universal Optical Corporation, Providence, R. I. Ophthalmic mounting. 1,767,807; June 24.
Nelson, Martin L., assignor, by mesne assignments, to Automatic Electric Inc., Chicago, Ill. Remote control system. 1,765,538; June 24.
Nelson, Samuel A., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Thread cutter for weft-replenishing looms. 1,766,761; June 24.
Nelson, Samuel A., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Weft-carrier magazine. 1,766,830; June 24.
Nelson, Samuel A., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Weft-replenishing mechanism for picks and pick looms. 1,766,831; June 24.
Nelson, Samuel A., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Thread holder and tensioner for weft-replenishing looms. 1,766,832; June 24.
Nesbitt, George W., Sycamore, Ill. Nesting device. 1,765,994; June 24.
Neumann, Paul A., Chicago, Ill. Centrifugal amalgamator and separator. 1,767,893; June 24.
Newcomb, Cyrus B. (See Graf, Edward F., assignor.)
Newcomb-David Company. (See Baumgarten, Hugo C., assignor.)
Newcomer, Ernest J., Baltimore, Md. Floor-polishing machine. 1,768,137; June 24.
New Departure Manufacturing Company, The. (See Simmons, Charles B., assignor.)
New Departure Manufacturing Company, The. (See Vuilleumie, Albert, assignor.)
New Idea Spreader Company, The. (See Synck, Henry, assignor.)
Newkirk, Burt L., Schenectady, N. Y., assignor to General Electric Company. High-speed machine. 1,768,290; June 24.
Newman, Herman F., Rosenberg, and F. A. Williams, Houston, Tex.; said Williams assignor to said Newman. Finger board. 1,766,347; June 24.
New Metal Products Company. (See Hartford, Albert K., assignor.)
New Process Multi-Castings Company. (See Hazell, Joseph W., assignor.)
Newton, Earle R. (See Curtis, C. G., and Newton.)
New York Air Brake Company, The. (See Campbell, Charles A., assignor.)
Niagara Blower Company. (See Bulkeley, Claude A., assignor.)
Nias, Henry, and W. Foster, Brooklyn, assignors, by mesne assignments, to Lily-Tulip Cup Corporation, New York, N. Y. Container. 1,766,226; June 24.
Nice, Everett W. (See Price, H. R., and Nice.)
Nicholas, Edward S., Monroe Center, Ill. Machine to make concrete building blocks. 1,766,930; June 24.

Nicholls, Frederick T., Haberfield, near Sydney, Australia. Collapsible chock for road vehicle wheels. 1,768,265; June 24.
Nicholls, Robert W., Palisade, N. J., assignor, by mesne assignments, to A. J. Sorbello, New York, N. Y. Pipe. 1,767,997; June 24.
Nichols Copper Company. (See Hartley, Henry J., assignor.)
Nichols, Emma F., Lincoln, Nebr. Tool head and fastener. 1,768,138; June 24.
Nichols, George B., assignor to The Firestone Tire & Rubber Company, Akron, Ohio. Inflation apparatus. 1,768,327; June 24.
Nichols, George B., assignor to The Fireatone Tire & Rubber Company, Akron, Ohio. Machine for inserting valves in inner tubes. 1,768,328; June 24.
Nicodemus, William W., Taylorville, Ill. Bracket for supports. 1,768,291; June 24.
Nicolai, Fritz, Ludwigshafen-on-the-Rhine, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Production of phosphoric esters of aliphatic alcohols. 1,766,720; June 24.
Nicolai, Fritz, Ludwigshafen-on-the-Rhine, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Production of phosphoric esters of aliphatic alcohols. 1,766,721; June 24.
Nicolson, Alexander M., New York, N. Y., assignor, by mesne assignments, to Federal Telegraph Company. Composite piezo-electric crystal device. 1,766,042; June 24.
Nicolson, Alexander M., New York, N. Y., assignor, by mesne assignments, to Federal Telegraph Company. Internally-clamped composite piezo-electric torsion device. 1,766,043; June 24.
Nicolson, Alexander M., New York, N. Y., assignor, by mesne assignments, to Federal Telegraph Company. Mechanical coupling for piezo-electric crystal devices. 1,766,044; June 24.
Nicolson, Alexander M., New York, N. Y., assignor, by mesne assignments, to Federal Telegraph Company. Piezo-electric crystal modulation. 1,766,045; June 24.
Nielsen, Anton E., Brooklyn, N. Y. Belt tightener for power units. 1,767,010; June 24.
Nielsen, Carl, Lake Bluff, assignor to Abbott Laboratories, North Chicago, Ill. Food for invalids or infants. 1,767,185; June 24.
Nielsen, Jens P., Chicago, Ill. End closing and protecting means for fabric rolls. 1,766,256; June 24.
Nielsen, Jens P., and J. R. Richer, Chicago, Ill.; said Richer assignor to said Nielsen. End closing and protecting means for fabric rolls. 1,766,257; June 24.
Nielsen, Jens P., and J. R. Richer, Chicago, Ill.; said Richer assignor to said Nielsen. End closure for fabric rolls. 1,766,034; June 24.
Nielsen, Jens P., and J. R. Richer, Chicago, Ill.; said Richer assignor to said Nielsen. Applying wire to packages. 1,766,035; June 24.
Nietman, Charles T., Jamaica, N. Y. Terminal connecter for electric conductors. 1,767,808; June 24.
Niles Steel Products Company, The. (See Fitzgerald, James E., assignor.)
Nitzschke, Oswin, and E. Noack, Wiesdorf, assignors, to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Electrolytic manufacture of compounds containing active oxygen. 1,766,722; June 24.
Noack, Erich. (See Nitzschke, O., and Noack.)
Noack, Walter G., assignor to Aktiengesellschaft Brown, Boveri & Cie., Baden, Switzerland. Fluid-pressure apparatus. 1,766,678; June 24.
Noe, George D., Minneapolis, Minn. Golf-bag bottom. 1,767,548; June 24.
Noma Electric Corporation. (See Cahn, Leon J., assignor.)
Noma Electric Corporation. (See Rudges, Jacob, assignor.)
Nordstrom, Gustaf E. (See Milliett, J. E., and Nordstrom.)
Norelius, Emil F., Davenport, Iowa. Steering mechanism. 1,767,254; June 24.
Norma-Hoffmann Bearings Corporation. (See Bott, George R., assignor.)
Norma-Hoffmann Bearings Corporation. (See Smith, Charles H., assignor.)
Norman, Herbert W., Lodi, N. J. Mousetrap. 1,767,306; June 24.
Norman, Sigurd, Newberg, Oreg. Conserving the heat and pulp from pulp-drying machines. 1,766,082; June 24.
Northway Manufacturing Company. (See Frederickson, C., and Gustafson, assignors.)
Northwest Engineering Corporation. (See Burke, Paul, assignor.)
Norviel, Harry E., Anderson, Ind., assignor to Delco-Remy Corporation, Dayton, Ohio. Coil and switch unit. 1,766,833; June 24.
Novak, Izador J., Bridgeport, Conn., assignor, by mesne assignments, to Raybestos-Manhattan, Inc. Friction elements and making same. 1,766,931; June 24.
Novak, Izador J., Bridgeport, Conn., assignor, by mesne assignments, to Raybestos-Manhattan, Inc. Hardened cellular or fibrous friction elements and producing same. 1,766,932; June 24.
Novak, Izador J., Bridgeport, Conn., assignor, by mesne assignments, to Raybestos-Manhattan, Inc. Friction elements and making same. 1,766,933; June 24.
Novak, Izador J., Bridgeport, Conn., assignor, by mesne assignments, to Raybestos-Manhattan, Inc. Hardened cellular or fibrous friction elements and producing same. 1,766,934; June 24.
Nove, Roy A. (See Lumpkin, R. E., and Nove.)
Novotny, Emil E., Philadelphia, assignor to J. S. Stokes, Huntington Valley Postoffice, Pa. Synthetic resin and making the same. 1,767,696; June 24.
Nowak, Alois K. (See Smith, Frank H.)
Nuber, Otto, Reutlingen, Germany. Knitted fabric. 1,766,349; June 24.
Nugent, William W., Chicago, Ill. Filtering apparatus. 1,767,856; June 24.
Nugent, William W., Chicago, Ill. Filtering system for lubricants. 1,768,139; June 24.
Nyman, Alexander, East Orange, N. J., assignor to Dubilier Condenser Corporation. Electrical condenser. 1,768,416; June 24.
Oakes Manufacturing Company, The. (See Lord, Fred W., assignor.)
Obergfell, Herbert F., River Forest, and T. C. Riebe, Chicago, Ill., assignors to Reserve Holding Company, Kansas City, Mo. Counting meter. 1,768,140; June 24.
O'Brien, John P., Chicago, Ill. Producing rear vents for unlined garments. 1,767,255; June 24.
Ocenasek, Vaclav, assignor, by mesne assignments, to J. F. C. Luhan, New York, N. Y. Fire grate. 1,766,186; June 24.
O'Connell, Thomas P., London, Ontario, Canada. Loose-leaf memorandum-pad holder. 1,768,266; June 24.
O'Connor, John F., assignor to W. H. Miner, Inc., Chicago, Ill. Friction gear. 1,765,875; June 24.
O'Connor, John F., assignor to W. H. Miner, Inc., Chicago, Ill. Friction shock-absorbing mechanism. 1,765,876; June 24.
O'Connor, John F., assignor to W. H. Miner, Inc., Chicago, Ill. Center bearing. 1,765,877; June 24.
Ogden, Dana P., Ottawa, assignor of one-half to E. F. Plumb, Streator, Ill. Continuous car tunnel furnace and operating the same. 1,768,486; June 24.
Ohio Brass Company, The. (See Austin, Arthur O., assignor.)
Ohio Brass Company, The. (See Birch, Leland W., assignor.)
Ohio Electric & Controller Company, The. (See Jessop, Francis W., assignor.)
Ohio Machine Tool Company, The. (See Davis, Cecil J., assignor.)
Ohio Power Shovel Company, The. (See Rauch, John D., assignor.)
Ohl, Russell S., New York, N. Y., assignor to American Telephone and Telegraph Company. Harmonic producer. 1,765,606; June 24.
Ohl, Russell S., Cliffwood, N. J., assignor to American Telephone and Telegraph Company. Amplifying device. 1,765,607; June 24.
Öhrn, Johan. (See Salwén, R., and Öhrn.)
Oishei, John R., assignor to Trico Products Corporation, Buffalo, N. Y. Windshield cleaner. 1,768,329; June 24.
O'Leary, William J., Dayton, Ohio. Acoustic apparatus. 1,767,610; June 24.
Olgay, Albert, Glen Ellyn, assignor to Gaw-O'Hara Envelope Company, Chicago, Ill. Die. 1,765,770; June 24.
Oliver Farm Equipment Company. (See Dewend, William D., assignor.)
Oliver United Filters Inc. (See Sweetland, Ernest J., assignor.)
Olmsted, Roger W. (See Brawne, W. G., and Olmsted.)
Olsen, Joseph O., assignor to Mattison Machine Works, Rockford, Ill. Power-driven saw. 1,765,733; June 24.
Olsen, Neal S., Brooklyn, N. Y. Sealing containers. 1,767,770; June 24.
Olsen, Olaf C., Cleveland, assignor of two-thirds to The Borden Company, Warren, Ohio. Refrigerating apparatus. 1,768,417; June 24.
Olson, August. (See Borkenhagen, H., and Olson.)
Olson, Gottfrid. (See Steiner, F. M., and Olson.)
Olson, Gottfrid, Minneapolis, Minn., assignor to Steiner Sales Company, Salt Lake City, Utah. Towel cabinet. 1,765,608; June 24.
Olson, Samuel, & Company, et al. (See Olson, Samuel, assignor.)
Olson, Samuel, assignor of one-fifth to W. F. Smith, one-fifth to P. Van Horne, one-fifth to Raynor F. Starr, one-fifth to O. T. Weber, and one-fifth to Samuel Olson & Company, Chicago, Ill. Dish-drying apparatus. 1,765,996; June 24.
Olson, Samuel, Oak Park, assignor to Samuel Olson & Company, Inc., Chicago, Ill. Refuse chute. 1,766,141; June 24.
Olson, Samuel, Oak Park, assignor to Samuel Olson & Company Inc., Chicago, Ill. Automatic transfer mechanism for conveyers. 1,766,142; June 24.
Olson, Thomas C. (See Butzen, T. F., and Olson.)
O'Neill, Frank, jr., assignor to Empire Hood Seal Corporation, New York, N. Y. Bottle closure. 1,766,679; June 24.
O'Neill, William J., River Forest, assignor to E. J. Mercil, Oak Park, Ill. Insulated conductor. 1,765,734; June 24.
Open Hearth Combustion Company. (See Danforth, G. L., jr., and Peterson, assignors.)

Orchestraphone Company. (See Cloud, Raymond T., assignor.)
O'Reilly, Francis, San Francisco, Calif. Rotary concrete mixer. 1,767,809; June 24.
Oro-Tone Company, The. (See Grass, Otto R., assignor.)
Orr, Mary L., Hauppauge, N. Y. Legging. 1,765,609; June 24.
Osbeck, Elmer C. (See Roedding, G. E., and Osbeck.)
Osborn, Chesley E., Pasadena, Calif. Lamp globe. Des. 81,451; June 24.
Osborn, Chesley E., Pasadena, Calif. Frame for a lamp globe. Des. 81,452; June 24.
Osborn Manufacturing Company, The. (See Carman, Edwin S., assignor.)
Osgood, Robert C., Claremont, N. H., assignor to Sullivan Machinery Company. Hoisting mechanism. 1,765,604; June 24.
O'Shea Knitting Mills. (See King, William C., assignor.)
Ost, John A., Los Angeles, Calif. Bun-cutting machine. 1,766,450; June 24.
Ostler, Ernest S., Chicago, Ill., assignor, by mesne assignments, to Stromberg Electric Company. Transmission device. 1,767,472; June 24.
Oswald, Arthur A., East Orange, and J. C. Schelleng, Millburn, N. J., assignors to Western Electric Company, Incorporated, New York, N. Y. Space-discharge system. 1,768,418; June 24.
Oswald, Franklin L. (See Morrison, R. A., and Oswald.)
Otis Elevator Company. (See Boedtcher, Franz A., assignor.)
Otis Elevator Company. (See Davis, Lee I., assignor.)
Otis Elevator Company. (See Grosvenor, Graham B., assignor.)
Otis Elevator Company. (See Handy, Arthur E., assignor.)
Otis Elevator Company. (See Knapp, John C., assignor.)
Otis Elevator Company. (See Lindquist, D. L., Dunn, and Larson, assignors.)
Otis Elevator Company. (See Schwab, Martin C., assignor.)
Oursler, Howard B., Pittsburgh, Pa. Nut lock. 1,767,225; June 24.
Outboard Motors Corporation. (See Schrell, A., and Hillburn, assignors.)
Ovaitt, David W., Flint, Mich. Telephone stand. 1,766,143; June 24.
Overbury, Frederick C., Hillsdale, N. J., assignor, by mesne assignments, to The Patent and Licensing Corporation, Boston, Mass. Method of and apparatus for making strip shingles. 1,765,800; June 24.
Overland Construction Company, The. (See Lotts, William H., assignor.)
Owen, Raymond V., assignor to The Edwin F. Guth Company, St. Louis, Mo. Lighting fixture. Des. 81,470; June 24.
Owen, Robert V., New York, N. Y. Automatic electric switch. 1,766,528; June 24.
Owen, William. (See Fox, J. H., and Owen.)
Owen, William, Pittsburgh, Pa., assignor to Pittsburgh Plate Glass Company. Machine for severing composite glass and the like. 1,765,846; June 24.
Owens, Freeman H., New York, N. Y. Synchronizing sound and motion pictures. 1,765,997; June 24.
Owens, Freeman H., New York, N. Y. Title attachment for sound cameras. 1,765,998; June 24.
Owens, Louis E., Peoria, Ill. Rug-drying apparatus. 1,765,695; June 24.
Oxford Varnish Corporation, The. (See Casto, Lloyd V., assignor.)
Ozouf, Arthur E., assignor to The Allbright-Nell Company, Chicago, Ill. Apparatus for drying, smoking, and curing meat products. 1,766,762; June 24.
P-W Device Corporation. (See Bartel, Englebert A., assignor.)
Pabst, Richard, Wurzburg, Germany. Outlet-coupling device for therapeutic bath coils. 1,767,097; June 24.
Pacific Mills. (See Jones, Grinnell, assignor.)
Pack, Charles, Brooklyn, N. Y., and J. C. Fox, Toledo, Ohio, assignors to Doehler Die-Casting Co. Alloy. 1,767,011; June 24.
Packard, Horace N., Milwaukee, Wis., assignor, by mesne assignments, to Cutler-Hammer, Inc. Method and apparatus particularly applicable to measurements of the colorific value of combustible gases. 1,767,771; June 24.
Packard Motor Car Company. (See Gill, Reuben O., assignor.)
Packard Motor Car Company. (See Griswold, Walter R., assignor.)
Packard Motor Car Company. (See Knapp, Archer L., assignor.)
Packard Motor Car Company. (See Marks, James H., assignor.)
Packard Motor Car Company. (See Moorhouse, Alfred, assignor.)
Packard Motor Car Company. (See Roberts, Edward F., assignor.)
Packard Motor Car Company. (See Tibbetts, Milton, assignor.)
Packard Motor Car Company. (See Vincent, Jesse G., assignor.)
Packard Motor Car Company. (See Woolson, Lionel M., assignor.)
Packer, Eben R., New Rochelle, N. Y. Switch-point protector. 1,765,995; June 24.
Packer, Glenn W., assignor to Goodman Manufacturing Company, Chicago, Ill. Current collector. 1,765,441; June 24.
Paddle, Leslie H., London, England. Microphone. 1,768,211; June 24.
Page, Arthur A., Racine, Wis. Adjustable eraser. 1,766,935; June 24.
Pagliani, Fedefico. (See Stragiotti, Pietro, assignor.)
Paige, Paul F., Detroit, Mich., assignor to Forbes Lithograph Manufacturing Company, Boston, Mass. Container with attached circular. 1,767,549; June 24.
Paine, Arthur P., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Tube frame for Axminster looms. 1,766,834; June 24.
Paine, Louis A. (See Borden, P. A., Baker, and Paine.)
Pairpoint Corporation, The. (See Tonelli, Ethil, assignor.)
Paitl, Michael J., Chicago, Ill. Window construction. 1,765,442; June 24.
Palm, George H., assignor to Chase Machine Company, Chicago, Ill. Fabric-cleaning machine. 1,765,610; June 24.
Palmer, Granville E., Cambridge, Mass., assignor, by mesne assignments, to Westinghouse Electric & Manufacturing Company. Distribution system for alternating currents. 1,765,696; June 24.
Palmer, John V., assignor of one-third to H. I. Neaman and one-third to J. M. Magee, Pittsburgh, Pa. Connecter for railway rails. 1,765,801; June 24.
Palmer, John V., assignor of one-third to H. I. Neaman and one-third to J. M. Magee, Pittsburgh, Pa. Connecter for railway rails. 1,765,802; June 24.
Palmer, Nelson P., and W. B. Herron, Butler, Pa. Calculating machine. 1,765,697; June 24.
Panek, Michael. (See Dranter, J. F., and Panek.)
Paper Patents Company. (See Mahler, E., and Bright, assignors.)
Parham, Sidney F., West Hartford, assignor to Hartford-Empire Company, Hartford, Conn. Glass-ribbon-feeding apparatus and method. 1,766,640; June 24.
Paris, Joseph O. (See Goodwin, Edward J., assignor.)
Parker, Francis D., La Farge, Wis. Spring. 1,766,451; June 24.
Parker, Howard, assignor to Brown Company, Berlin, N. H. Branch connecter for fibrous conduits. 1,765,999; June 24.
Parker, Howard, assignor to Brown Company, Berlin, N. H. Pulp-stock vat. 1,766,000; June 24.
Parkerson, Joseph J., Jacksonville, Fla. Ice-carrying device. 1,766,258; June 24.
Parkinson, William B., Le Mars, Iowa. Musical instrument. 1,767,998; June 24.
Parks & Woolson Machine Company. (See Richardson, Charles G., assignor.)
Parks, Charles D., Danbury, Conn. Treating fur. 1,766,452; June 24.
Parsons, John L. (See Hibbert, H., and Parsons.)
Parsons, Llewellyn B., assignor to The Cudahy Packing Company, Omaha, Nebr. Treatment of lard. 1,767,999; June 24.
Partridge, Edwin M., Hammond, Ind., and E. W. Scarritt, Oak Park, Ill., assignors, by mesne assignments, to The Permutit Company, New York, N. Y. Base-exchange material and making same. 1,766,350; June 24.
Paschen, Paul, and G. Reime, Nuremberg, Germany, assignors to Westinghouse Electric and Manufacturing Company. Electrical meter. 1,765,611; June 24.
Pasholan, Harry G., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Loom dobby. 1,766,835; June 24.
Pass & Seymour, Incorporated. (See Fergusson, John R., assignor.)
Pass & Seymour, Incorporated. (See Russell, M. N., and Brooks, assignors.)
Patent and Licensing Corporation, The. (See Heppes, George P., assignor.)
Patent and Licensing Corporation, The. (See Kirschbraun, Lester, assignor.)
Patent and Licensing Corporation, The. (See Overbury, Frederick C., assignor.)
Patent and Licensing Corporation, The. (See Schutte, August E., assignor.)
Patent Gear Hardening Company, The. (See Shorter, A. E., and Boncher, assignors.)
Patten, Ruth H., Bradenton, Fla. Maternity slip. 1,765,937; June 24.
Patterson, Anna M., Long Beach, Calif. Fabric flower and making the same. 1,766,351; June 24.
Patterson, Frank H., Fredonia, Kans. Measuring apparatus. 1,765,612; June 24.
Patterson, M. F., Dental Supply Company. (See Andresen, Lauritz B., assignor.)
Patterson, M. F., Dental Supply Co. (See Andresen, L. B., and Paulson, assignors.)
Patterson, M. F., Dental Supply Co. (See Thomas, G. B., and Coons, assignors.)
Pauch, James J., assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa. Welding machine. 1,767,473; June 24.
Paulson, Clifford W. (See Andresen, L. B., and Paulson.)
Paulson, Walter H. (See Lathrop, H. D., and Paulson.)
Pauly, Robert C., assignor to The American Laundry Machinery Company, Cincinnati, Ohio. Tail clamp. 1,766,187; June 24.
Paxton, Hale, Sanger, Calif. Nail-picking device for nailing machines. 1,766,144; June 24.

Payne, Alfred, Tacoma, Wash. Ship-loading chute. 1,766,681; June 24.
Payne, El Roy L., Los Angeles, Calif., assignor to Gas Furnace Control Co. Electrically-operated valve. 1,767,611; June 24.
Payne, Oscar V., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Harness cord for looms. 1,766,723; June 24.
Payne, Oscar V., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Weft detector for looms. 1,766,836; June 24.
Payne, Samuel G., Howard, R. I. Collar and the like. 1,766,259; June 24.
Peabody Engineering Corporation. (See Sadtler, Edwin B., assignor.)
Peabody, James A., Evanston, Ill., assignor to General Railway Signal Company. Automatic train-control system for railroads. 1,765,803; June 24.
Pearce, Edwin S., Indianapolis, Ind., assignor to The American Laundry Machinery Company, Norwood, Ohio. Waste-reclamation system. Re17,710; June 24.
Pearce, Owen A., Liverpool, England, assignor to Associated Telephone and Telegraph Company, Kansas City, Mo. Telephone system. 1,766,936; June 24.
Pearson, Charles C., North Providence, and E. M. McLellan, Cranston, R. I. Nonskid overshoe. 1,768,370; June 24.
Pearson, John T., assignor to Crouse-Hinds Company, Syracuse, N. Y. Cover for conduit outlet boxes. 1,767,226; June 24.
Pease, C. F., Company. (See Brunk, Harold J., assignor.)
Peck Engraving Company, The. (See Peck, John A., assignor.)
Peck, Hugh A. (See Cleaver, William F., assignor.)
Peck, Irving H., assignor to The Sterling Pin Company, Derby, Conn. Hairpin. 1,765,938; June 24.
Peck, John A., assignor to The Peck Engraving Company, Cleveland, Ohio. Cleaning attachment for presses. 1,768,419; June 24.
Pederson, John P., assignor to Ditto, Incorporated, Chicago, Ill. Margin bar for hektograph machines. 1,766,352; June 24.
Peele, Hereward J., assignor to S. G. Adams Stamp & Stationery Company, St. Louis, Mo. Insignia device. 1,767,550; June 24.
Peirson, Cecil R., Bloomfield, N. J. Windshield cleaner. 1,766,529; June 24.
Penrose, Grace, New Paris, Pa. Holder and protector for artificial flowers. 1,767,940; June 24.
Peoples Gas By-Products Corporation. (See Guthrie, R. G., and Wozasek, assignors.)
Perfectlite Company, The. (See Jaffe, Joseph L., assignor.)
Perkins, George H., assignor to Warren Brothers Company, Cambridge, Mass. Spreading bituminous mixtures. 1,766,188; June 24.
Perkins, Laurence M., Anderson, Ind., assignor, by mesne assignments, to Delco-Remy Corporation, Dayton, Ohio. Electric motor. 1,766,799; June 24.
Permutit Company, The. (See Partridge, E. M., and Scarritt, assignors.)
Perry, Frederick E. (See Muros, Joseph, assignor.)
Persons, Lawrence M., assignor to Cook Electric Company, Chicago, Ill. Pump. 1,765,698; June 24.
Pescara, Raul P., Paris, France. Safety device for air compressors. 1,766,682; June 24.
Pessagno, Joseph, Oakland, Calif. Tile-molding machine. 1,765,847; June 24.
Peters, Frederick W., assignor to The Almetal Universal Joint Company, Cleveland, Ohio. Universal joint. 1,767,551; June 24.
Petersen, Charles M., Shirley, assignor to Samson Cordage Works, Boston, Mass. Cord-making machine. 1,766,683; June 24.
Peterson, Albert E. (See Danforth, G. L., jr., and Peterson.)
Peterson, Alfred J. A., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Circuit-controlling system. 1,765,499; June 24.
Peterson, Harold L., and O. B. Burbidge, assignors, by mesne assignments, to J. Bath, Worcester, Mass. Assembling machine. 1,766,800; June 24.
Peterson, Harold O., Riverhead, N. Y., assignor to Radio Corporation of America. Shielding. 1,765,443; June 24.
Perterson, Henry E., Grapeview, Wash. Grape-stripping machine. 1,766,530; June 24.
Peterson, Henry H., Edmund, Wis. Vending machine. 1,767,307; June 24.
Peterson, Martin A., Fremont, Nebr. Tire protector. 1,766,531; June 24.
Petrino, James. (See Vezzuso, R., and Petrino.)
Petroff, Grigori, Moscow, Union of Socialist Soviet Republics. Separating and purifying sulphoacids of high molecular weight. 1,766,304; June 24.
Petroff, Grigori, Moscow, Union of Socialist Soviet Republics. Treating mineral and naphtha oils. 1,766,305; June 24.
Petty, William J., and E. M. Hancock, Hollis, Okla. Cotton gin. 1,767,894; June 24.
Pfaff, Andrew J., St. Louis, J. A. Driy and C. J. Sinning, Webster Groves, assignors to The Emerson Electric Mfg. Co., St. Louis, Mo. Lubricating device. 1,767,153; June 24.
Pfau, William F., Cincinnati, assignor to John T. Townsley Manufacturing Company, Cincinnati, Ohio. Cut-off saw. 1,767,012; June 24.
Pfaudler Co., The. (See Todd, Ulysses G., assignor.)
Pfeffer, Frederic D. (See Gough, F. J., McNeil, and Pfeffer.)
Pfeffer, Frederic D., and F. Trotter, Fort Dodge, Iowa, assignors to United States Gypsum Company, Chicago, Ill. Apparatus for making blocks. 1,768,141; June 24.
Pfeiffer, Frank E., assignor to The Egry Register Company, Dayton, Ohio. Autographic register. 1,766,353; June 24.
Pfeiffer, William C., assignor to The Egry Register Company, Dayton, Ohio. Autographic register. 1,766,937; June 24.
Pflager, Harry M., St. Louis, Mo., assignor, by mesne assignments, to General Steel Castings Corporation, Granite City, Ill. Apparatus for journaling railway-vehicle axles. 1,765,878; June 24.
Pflager, Harry M., St. Louis, Mo., assignor, by mesne assignments, to General Steel Castings Corporation, Granite City, Ill. Railway-truck structure. 1,765,879; June 24.
Pflueger, Charles T., assignor to The Enterprise Manufacturing Company, Akron, Ohio. Fishing tackle. 1,766,532; June 24.
Phelps, Clyde H., Mount Vernon, assignor to Accurometer Mfg. Co., Inc., New York, N. Y. Tool for measuring the caster of axles. 1,766,306; June 24.
Philadelphia Drying Machinery Company, The. (See Dennis, John W., assignor.)
Philadelphia Drying Machinery Company, The. (See Sibson, Walter W., assignor.)
Philips', N. V., Gloeilampenfabrieken. (See de Boer, J. H., and Clausing, assignors.)
Phillips, Charles H. (See Coward, William J., assignor.)
Phillips, Ellis J. G., assignor to Richards-Wilcox Manufacturing Company, Aurora, Ill. Folding door. 1,768,267; June 24.
Phillips, Homer L., South Bend, Ind. Dishwashing machine. 1,765,444; June 24.
Phillips, John T., Durango, Colo. Bullet. 1,767,308; June 24.
Phillips, Thomas W., Jackson, Mich. Golf tee. 1,766,938; June 24.
Phillips, Victor L. (See Dillon, Oval L., assignor.)
Phinney, Edward D., Mount Vernon, assignor of one-half to P. Kollsch, New York, N. Y. Recording and reproducing system. 1,765,735; June 24.
Phipps, John T., Huntington Park, assignor to J. Grant, Los Angeles, Calif. Underreamer. 1,767,474; June 24.
Pichl, Anthony J., assignor of one-fourth to E. B. Holly, jr., St. Louis, Mo. Theft-prevention apparatus. 1,765,736; June 24.
Pickett, Lyman O., Binghamton, assignor of one-half to P. W. Valentine, New York, N. Y. Shoe. 1,767,698; June 24.
Pieper, Alphonse F., Rochester, N. Y. Coupling for conductors. 1,767,612; June 24.
Pier, Mathias, Heidelberg, M. Müller-Cunradi, G. Wietzel, and K. Winkler, Ludwigshafen-on-the-Rhine, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Producing gases for the manufacture of oxygenated organic compounds. 1,766,763; June 24.
Pierce, Burt N., New York, N. Y. Fuel-feeding device for motor vehicles. 1,766,684; June 24.
Pierce, Burt N., New York, N. Y. Fuel-cleaning device for liquid fuels. 1,767,895; June 24.
Pierce, James B., jr., Charleston, W. Va. Barium sulphate and making same. 1,765,737; June 24.
Pierce, Robert C., Niles, Mich., assignor to National Standard Company. Tire-bead-reenforcing element. 1,767,772; June 24.
Pike, Hutchison M. (See Pike, William A. and H. M., and Henry.)
Pike, Robert D., Piedmont, Calif. Rotary kiln. 1,766,453; June 24.
Pike, William A. and H. M., and W. T. Henry, Springfield, Tenn. Curing of tobacco. 1,768,142; June 24.
Pilon, Gaspard D., Montreal, Quebec, Canada. Fastener. 1,768,371; June 24.
Pilot Laboratory, Inc. (See McKee, R. H. Morse, and Rollhaus, assignors.)
Pimm, Charles C., et al. (See Welt, Frank L., assignor.)
Pinches, Arthur E. assignor of one-half to The Tinsley Rolling Mills Company Limited, Sheffield, England. Eccentric rolls for rolling mills and the like. 1,767,392; June 24.
Pindar Norris T., Valdosta, Ga. Sharpening device for curved edged tools. 1,767,941; June 24.
Pine, Wilber J., Kenosha, Wis. Brake-testing device. 1,765,738; June 24.
Pinkerton, Clarence S., Milwaukee, Wis., assignor, by mesne assignments, to Cutler-Hammer, Inc. Method of and apparatus for measuring the flow of fluids. 1,767,613; June 24.
Pittsburgh Plate Glass Company. (See Fox, J. H., and Owen, assignors.)
Pittsburgh Plate Glass Company. (See Owen, William, assignor.)
Pittsburgh Plate Glass Company. (See Wright, Charles H., assignor.)

Place, Alfred G., deceased, Youngstown, Ohio; E. L. Place and The Dollar Savings and Trust Company, executors. Feeding mechanism for tube mills. 1,767,810; June 24.
Place, Edna L., et al., executors. (See Place, Alfred G.)
Planche, Benjamin R., Villefranche-S-Saone, France. Control plug unit for splash-feed lubricating systems. 1,766,001; June 24.
Planett, Fred E. (See Thrift, M. B., and Planett.)
Planett Mfg. Co. (See Thrift, M. B., and Planett, assignors.)
Plastoid Products, Inc. (See Greenleaf, Robert M., assignor.)
Plato, Gerhardt, Chicago, Ill. Internal-combustion engine. 1,766,401; June 24.
Plibrico Jointless Firebrick Company. (See Anderson, John E., assignor.)
Plumb, Ermin F. (See Ogden, Dana P., assignor.)
Plym, Francis J., assignor to The Kawneer Company, Niles, Mich. Screw. Des. 81,453; June 24.
Plym, Francis J., assignor to The Kawneer Company, Niles, Mich. Stand. 1,765,699; June 24.
Pneumatic Scale Corporation. (See Everett, Arthur C., assignor.)
Pocock, Sylvester J., assignor of one-half to J. K. Richardson, St. Marys, Ontario, Canada. Apparatus for dispensing gasoline and the like. 1,767,256; June 24.
Podel, Abraham, assignor to Anchor Cap & Closure Corporation, Long Island City, N. Y. Vacuum-sealing machine. 1,767,475; June 24.
Podrouzek, William, Chicago, Ill. Coin-controlled electric switch. 1,766,354; June 24.
Pohl, Fritz, Vienna, Austria, and M. Vogel, assignors to the firm M. Vogel A. G. Geschaftsbucherund Metallwaren-Fabrik, Frankfort-on-the-Main, Germany. Clamping device for files, newspaper holders, and the like. 1,765,880; June 24.
Pollard, Raymond M., Los Angeles, Calif. Surf board. 1,767,811; June 24.
Pollock, Oscar, assignor of ten per cent to J. M. Maher, ten per cent to G. Beaty, ten per cent to S. Anderson, 10 per cent to F. H. Rehrhenke, and ten per cent to R. E. Hammond, Fremont, Nebr. Road drag. 1,767,393; June 24.
Polydoroff, Wladimir J., assignor to Johnson Laboratories, Inc., Chicago, Ill. Acoustical horn. 1,767,812; June 24.
Pope & Cottle Company. (See Marion, Gardner S., assignor.)
Porter, Antoinette L., San Francisco, Calif. Dial telephone device. 1,765,445; June 24.
Portevin, Albert, assignor to Société d'Expansion Technique, Paris, France. Apparatus for the manufacture of hollow bodies. 1,767,394; June 24.
Posey, John B. (See Chappory, A. C., jr., and Posey.)
Poster, William. (See Nias, H., and Poster.)
Postum Company. (See Borg, Henry L., assignor.)
Potdevin, Adolph, Garden City, assignor to Potdevin Machine Company, Brooklyn, N. Y. Shopping bag. 1,765,539; June 24.
Potdevin Machine Company. (See Potdevin, Adolph, assignor.)
Potter, Alden A., Montgomery County, Md. Casement. 1,768,143; June 24.
Potter Manufacturing Company. (See LaDuke, Louis M., assignor.)
Powell, Charles S., Macon, Mo. Fore end for shotguns. 1,768,372; June 24.
Powell, Frank D., assignor to Acme Card System Company, Chicago, Ill. Frame and index tab therefor. 1,766,939; June 24.
Powell, Frank D., assignor to Acme Card System Company, Chicago, Ill. Stand for visible indexes. 1,766,940; June 24.
Powell, Herbert S., Utica, N. Y. Machine for making chaplets. 1,766,145; June 24.
Powell, Wilfred T., assignor to The Stromberg-Carlson Telephone Manufacturing Company, Rochester, N. Y. Remote-control telephone system. 1,766,402; June 24.
Power, Henry L., Brandon, Manitoba, Canada. Unloading device. 1,767,013; June 24.
Power, Richart F., London, assignor to Morland & Impey Limited, Birmingham, England. Indicator or protector for visible indexes or the like. 1,768,292; June 24.
Prahl, Frederick A., New York, N. Y., and H. A. Fink, Chicago, Ill., assignors to Continental Can Company, Inc., New York, N. Y. Machine for coating can ends. 1,768,144; June 24.
Prantl, Franz, Wettingen; W. Luthi, Ennetbaden; and E. Schroeder, assignors to A. G. Brown Boveri & Cie., Baden, Switzerland. Regenerative braking system for single-phase electric-railway locomotives. 1,766,533; June 24.
Prat-Daniel Corporation. (See Prat, Emile, assignor.)
Prat, Emile, Paris, France, assignor to Prat-Daniel Corporation, New York, N. Y. Furnace. 1,766,534; June 24.
Pray, Thomas E., assignor to Goodman Manufacturing Company, Chicago, Ill. Mining machine. 1,765,446; June 24.
Prescott, Charles W., assignor to General Railway Signal Company, Rochester, N. Y. Light signal. 1,766,535; June 24.
Prescott, Charles W., Mill Hill, England, assignor to General Railway Signal Company, Rochester, N. Y. Switch-indicating means. 1,766,536; June 24.
Prescott, Charles W., Mill Hill, England, assignor to General Railway Signal Company, Rochester, N. Y. Car retarder for classification yards. 1,766,537; June 24.
Prescott, Charles W., Mill Hill, England, assignor to General Railway Signal Company, Rochester, N. Y. Facilitating operation of railway cars in classification yards. 1,766,538; June 24.
Prescott, Charles W., Mill Hill, England, assignor to General Railway Signal Company, Rochester, N. Y. Car-retarder system for railroads. 1,766,539; June 24.
Prescott, John H., Columbus, Ohio. Clip for securing wood sleepers to concrete floors. 1,768,268; June 24.
Prescott, John O., Glenbrook, Conn., and F. A. Kolster, Palo Alto, Calif., assignors to Federal Telegraph Company, Newark, N. J. Sound-reproducing system. 1,766,046; June 24.
Prescott, Sydney I., New York, N. Y. Dished wheel. 1,765,848; June 24.
Press Products, Inc. (See Sparkes, John G., assignor.)
Pressed & Welded Steel Products Company. (See Haskin, Walter E., assignor.)
Pressed Steel Car Company. (See Brinckerhoff, Francis M., assignor.)
Pressed Steel Car Company. (See Reeder, Nathaniel S., assignor.)
Preston, Frank W., Butler, Pa. Method of and apparatus for making clay pots. 1,765,804; June 24.
Preter, Joseph R. (See Henry, Henry L., assignor.)
Price, Benjamin F. (See Meeder, Herbert L., assignor.)
Price, Harry R., and E. W. Nice, Detroit, Mich.; said Price assignor to said Nice. Portable dispensing device. 1,766,764; June 24.
Price, John L., Indianapolis, Ind. Radio capacitance and inductance regulator. 1,766,002; June 24.
Price, Mary K., executrix. (See Price, William G.)
Price, William G., deceased, Yakima, Wash.; M. K. Price executrix. Hydraulic braking method and apparatus. 1,766,540; June 24.
Priess, William H., Montclair, N. J., assignor to Wireless Specialty Apparatus Company, Boston, Mass. Condenser lead and terminal. 1,767,093; June 24.
Priester, Harry, executor. (See Fallot, Alfred.)
Pringle, William F., et al. (See Nee, Daniel J., assignor.)
Pritchard, Amos D., Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Distributing system. 1,765,447; June 24.
Pritchard, Percy, Smethwick, England. Piston for internal-combustion engines. 1,767,395; June 24.
Progress Gesellschaft fuer Textilmaschinen mit beschraenkter Haftung. (See Werner, Karl, assignor.)
Protectoseal Company of America. (See Anschicks, Rudolph J., assignor.)
Prouty, William B., Evanston, Ill., assignor to Federal Pneumatic Systems, Inc. Separating system. 1,766,941; June 24.
Pryor, Ralph W. (See Malone, H. E., and Pryor.)
Puening, Franz, O'Hara Township, Allegheny County, Pa. Heating apparatus. 1,767,614; June 24.
Puening, Franz, O'Hara Township, Allegheny County, Pa., assignor to The Koppers Company. Preheating system. 1,765,771; June 24.
Punte, William F. (See Aulbach, C. J., and Punte.)
Punte, William F., Passaic, N. J., assignor to Continental Can Company, Inc., New York, N. Y. Combined shipping and display container. 1,765,383; June 24.
Purcell, William F. (See Hiltz, G. S., and Purcell.)
Putterman, Benjamin, Brooklyn, N. Y., assignor to Yankee Metal Products Corp. Smoker's receptacle. 1,767,476; June 24.
Pyle-National Company, The. (See Dake, Charles W., assignor.)
Quigley Furnace Specialties Company. (See Mack, John R., assignor.)
Quigley, W. A. (See Goble, Bert G., assignor.)
Quinteros, Eduardo F., Buenos Aires, Argentina. Submarine saving device. 1,766,837; June 24.
Rabezzana, Hector, assignor to A C Spark Plug Company, Flint, Mich. Spark plug. 1,768,330; June 24.
Rabinowitz (née Brier), Bertha, Brooklyn, N. Y. Apparatus for washing vegetables. 1,767,615; June 24.
Rachor, Joseph. (See Wagner, H., Sohst, and Rachor.)
Rackow, Arthur E., Campbellsport, Wis. Tractor-clutch throw-out means. 1,767,396; June 24.
Raddatz, Richard. (See Rogers, H. S., and Raddatz.)
Radio Corporation of America. (See Batterman, Ludwig, assignor.)
Radio Corporation of America. (See Finch, James L., assignor.)
Radio Corporation of America. (See Holst, Gilles, assignor.)
Radio Corporation of America. (See Peterson, Harold O., assignor.)
Radio Corporation of America. (See Ranger, Richard H., assignor.)
Radio Corporation of America. (See Round, Henry J., assignor.)
Radio Corporation of America. (See White, Sidney Y., assignor.)
Radio Patents Corporation. (See Schmierer, Michel, assignor.)
Radiore Company, The. (See Guilford, Edward H., assignor.)

Raditsch, Carl, Camden, N. J. Gas iron. 1,768,145; June 24.
Radtke, Bruno, Libertyville, Ill., assignor to Mills Novelty Company. Weighing scale. 1,767,186; June 24.
Raffaelli Trading Co. (See Raffaelli, Viola, assignor.)
Raffaelli, Viola, New York, N. Y., assignor to Raffaelli Trading Co., Inc. Combined lamp base and body. Des. 81,454; June 24.
Ragland, Jack R., assignor of one-third to A. F. Hubbert and one-third to G. A. Crittenden, Los Angeles, Calif. Display counter. 1,767,397; June 24.
Ragsdale, Charles M., Louisville, Ky. Key case. 1,766,801; June 24.
Ramey, Winfield S., Utica, Ohio. Retaining device or form when excavating. 1,768,146; June 24.
Ramp Buildings Corporation. (See Williams, James F., assignor.)
Ramsey, Allan, assignor to Schweitzer & Conrad, Chicago, Ill. Insulator cap. 1,767,398; June 24.
Ramsey, Garrie C., Lebanon, N. J. Railway tie. 1,765,613; June 24.
Ramsey, William H., Corpus Christi, Tex. Sign. 1,768,331; June 24.
Rand, James H., North Tonawanda, assignor to Remington Rand Inc., New York, N. Y. Index device. 1,767,257; June 24.
Randall Control & Hydrometric Corporation. (See Kalte, Fred E., assignor.)
Randall, Edwin A. (See Cox, J. W., and Randall.)
Ranger, Richard H., Newark, N. J., assignor to Radio Corporation of America. Recorder for facsimile systems. 1,765,448; June 24.
Ransome Concrete Machinery Company. (See Bushnell, James E., assignor.)
Ransome Concrete Machinery Company. (See Faber, John P., assignor.)
Rapisardi, Alfio, Boston, Mass. Wheeled toy. 1,766,541; June 24.
Ratalczak, Thomas F., and M. K. Akers, assignors to The Hobart Manufacturing Company, Troy, Ohio. Apparatus for treating foodstuffs. 1,766,942; June 24.
Rath, Carl A., Estacada, Oreg. Sound reproducer for the deaf. 1,766,146; June 24.
Rath, Karl. (See Bock, W., and Rath.)
Rauch, John D., assignor to The Ohio Power Shovel Company, Lima, Ohio. Continuous-tread truck. 1,765,739; June 24.
Rausch, Gottfried, Ammendorf, near Halle-on-the-Saale, Germany. Dough dividing and working machine. 1,766,943; June 24.
Rawley, Joseph R., New York, N. Y. Identification receptacle for umbrellas and the like. 1,766,454; June 24.
Rawling, Francis G., Chillicothe, assignor to The Mead Pulp & Paper Company, Dayton, Ohio. Manufacture of pulp. 1,766,944; June 24.
Ray, Eugene J., Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Shoe and making the same. 1,765,849; June 24.
Ray, William H., Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Terminal plug. 1,765,540; June 24.
Ray, William T., Wichita, Kans. Locomotive draft appliance. 1,768,373; June 24.
Raybestos-Manhattan, Inc. (See Novak, Isador J., assignor.)
Raymond, Frederick R., San Francisco, Calif. Soldering iron. 1,768,147; June 24.
Reagan, Maurice E., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Automatic sectionalizing switch. 1,765,500; June 24.
Reardon, Robert E., Columbia, Pa. Safe-heat cooking utensil. 1,768,148; June 24.
Recchia, Orlando R., Cranston, assignor to C. G. King & Co., Inc., Providence, R. I. Shoe buckle. Des. 81,455; June 24.
Recchia, Orlando R., Cranston, assignor to C. G. King & Co., Inc., Providence, R. I. Shoe buckle. Des. 81,456; June 24.
Recchia, Orlando R., Cranston, assignor to C. G. King & Co., Inc., Providence, R. I. Shoe buckle. Des. 81,457; June 24.
Recchia, Orlando R., Cranston, assignor to C. G. King & Co., Inc., Providence, R. I. Shoe buckle. Des. 81,458; June 24.
Recchia, Orlando R., Cranston, assignor to C. G. King & Co., Inc., Providence, R. I. Shoe buckle. Des. 81,459; June 24.
Reddig, Charles E., Kew Gardens, Richmond Hill assignor to Graybar Electric Company, New York, N. Y. Combined washing machine and drier. 1,766,542; June 24.
Redfield, Willis B., Downey, Calif. Spring-seat attachment. 1,766,189; June 24.
Redman, Sterling L., Evanston, Ill., assignor to Central Scientific Company, Chicago, Ill. Educational apparatus. 1,766,355; June 24.
Redmond, Albert G., assignor to J. R. Francis, Flint, Mich. Carburetor. 1,766,685; June 24.
Redmond, Albert G., assignor to J. R. Francis, Flint, Mich. Fuel-feeding system for motor vehicles. 1,766,686; June 24.
Redmond, Albert G., assignor to J. R. Francis, Flint, Mich. Fuel-feeding system for motor vehicles. 1,766,687; June 24.
Reece, Joseph A., assignor to Libbey-Owens Glass Company, Toledo, Ohio. Sheet-edge-forming device. 1,767,094; June 24.
Reed, George R., assignor to The Eaton Axle and Spring Company, Cleveland, Ohio. Spare-tire lock. 1,768,293; June 24.
Reed, Jesse B., Fort Smith, Ark. Violin bow. 1,766,688; June 24.
Reeder, Nathaniel S., New York, N. Y., assignor to Pressed Steel Car Company, Pittsburgh, Pa. Dump car. 1,765,700; June 24.
Reedy, Emmett M., Decatur, assignor to Mueller Co., Decatur, Ill. Built-in valve. 1,768,212; June 24.
Reese, David B., St. Paul, Minn. Sanitary frostproof collar. 1,767,616; June 24.
Reese, John N., Chicago, Ill. Sanding device for automobiles and the like. 1,765,772; June 24.
Reeves, Orwell C., assignor to Toledo Scale Company, Toledo, Ohio. Computing scale. 1,767,813; June 24.
Rehrhenke, F. H., et al. (See Pollock, Oscar, assignor.)
Reichard, Wade H., assignor to General Railway Signal Company, Rochester, N. Y. Track relayless-train-control system. 1,766,543; June 24.
Reichard, Wade H., assignor to General Railway Signal Company, Rochester, N. Y. Train-control system. 1,766,544; June 24.
Reichart, James H., Muncie, Ind. Smoking vase. 1,765,773; June 24.
Reid, Francis A., Phoenix, Ariz. Windbreak. 1,768,000; June 24.
Reid, James S., assignor to The Eaton Axle and Spring Company, Cleveland, Ohio. Closure. 1,767,187; June 24.
Reid, James S., assignor to The Eaton Axle and Spring Company, Cleveland, Ohio. Press. 1,768,294; June 24.
Reifschneider, Conrad, St. Louis, Mo. Window frame. 1,768,001; June 24.
Reiling, Lloyd C., Columbus, Ohio. Producing grape juice. 1,767,399; June 24.
Reime, Georg. (See Paschen, P., and Reime.)
Reiners, Wilhelm, and G. Kahlisch, assignors to W. Schlafhorst & Co., Munich-Gladbach, Germany. Breakage-indicating mechanism for warping machines and the like. 1,765,881; June 24.
Reiss, Theodore, Passaic, N. J. Toy. 1,765,701; June 24.
Remde, Edward H., assignor to The Baker-Raulang Company, Cleveland, Ohio. Raising and lowering apparatus. 1,767,095; June 24.
Remde, Edward H., assignor to The Baker-Raulang Company, Cleveland, Ohio. Industrial truck. 1,768,149; June 24.
Remick, Walter L., Hazleton, Pa. Apparatus for treating mixed materials. 1,767,227; June 24.
Remick, Walter L., Hazleton, Pa. Separation of combustible material from its associated noncombustible material. 1,767,400; June 24.
Remington Accounting Machine Corporation. (See Hart, Frederick A., assignor.)
Remington Arms Company. (See Garrison, George H., assignor.)
Remington Arms Company. (See Leckie, H. V., and Woodford, assignors.)
Remington Arms Company. (See Woodford, Watson H., assignor.)
Remington, Joseph P., Philadelphia, Pa. Fuel pump. 1,768,487; June 24.
Remington, Joseph P., Philadelphia, Pa. Adhesive-applying mechanism for wrapping machines. 1,768,488; June 24.
Remington, Joseph P., assignor to J. H. Bell, Philadelphia, Pa. Variable-speed gearing. 1,768,489; June 24.
Remington Rand Inc. (See Gale, Laburton A., assignor.)
Remington Rand, Inc. (See Hutchings, L. E., and Lear, assignors.)
Remington Rand Inc. (See Landsiedel, Harry, assignor.)
Remington Rand Incorporated. (See Lasker, William W., assignor.)
Remington Rand Inc. (See Rand, James H., assignor.)
Remington Rand Inc. (See Stuart, Nicholas H., assignor.)
Remington Typewriter Company. (See Going, George G., assignor.)
Remington Typewriter Company. (See Straub, Joseph E., assignor.)
Rendall, William S., West Hartford, assignor to Hartford-Empire Company, Hartford, Conn. Leer. 1,766,545; June 24.
Renzulli, Valentino, Bridgeport, Conn. Eaves-trough-drain strainer. 1,767,773; June 24.
Republic Truck Sales Corporation. (See Haggart, John C., jr., assignor.)
Research Corporation. (See Wintermute, H. A., and Hedberg, assignors.)
Reserve Holding Company. (See Lomax, Clarence E., assignor.)
Reserve Holding Company. (See Obergfell, H. F., and Riebe, assignors.)
Reserve Holding Company. (See Saunders, Norman H., assignor.)
Reserve Holding Company. (See Tharp, Victor S., assignor.)
Restucci, Giuseppe, assignor to Francesco Vitale, Naples, Italy. Device for superheating and drying steam. 1,767,096; June 24.
Reuter, Fred M., Chicago, Ill. Building construction. 1,767,401; June 24.

Revere Copper and Brass Incorporated. (See Steele, Maurice G., assignor.)
Revere Rubber Company. (See Greene, Albert G., assignor.)
Revis, Margaret C., Weaverville, assignor to Allanstand Cottage Industries, Incorporated, Asheville, N. C. Cornshuck doll. Des. 81,460; June 24.
Revis, Margaret C., Weaverville, assignor to Allanstand Cottage Industries, Incorporated, Asheville, N. C. Cornshuck doll. Des. 81,461; June 24.
Rex Paper Company. (See Cole, Arthur W., assignor.)
Reynolds, Morley P., Cleveland Heights, assignor to The W. S. Tyler Company, Cleveland, Ohio. Woven-wire screen. 1,767,814; June 24.
Reynolds, S. H., Sons Company. (See Anderson, Carl G., assignor.)
Reyrolle, A., & Company Limited. (See Scott, E. W. M., and Leeson, assignors.)
Rheem Manufacturing Company. (See Maynard, B. B., and de Sanno, assignors.)
Rhodes, William. (See Savage, P. L., and Rhodes.)
Ricardo, Harry R., London, England. Multicylinder reciprocating engine. 1,767,309; June 24.
Rice, Percy F., Tustin, Calif. Liquid-level indicator. 1,767,699; June 24.
Richard, Eugene C., assignor to Marvel Carburetor Company, Flint, Mich. Carburetor. 1,766,689; June 24.
Richards-Wilcox Manufacturing Company. (See Phillips, Ellis J. G., assignor.)
Richardson, Annie. (See Richardson, Sidney, assignor.)
Richardson, Charles G., assignor to Parks & Woolson Machine Company, Springfield, Vt. Cloth-rest construction for cloth shears. 1,768,490; June 24.
Richardson, Emmett W., Oakdale, Calif. Automatic safety pressure gauge for inflating tires. 1,765,850; June 24.
Richardson, Eri H., San Mateo, Calif. Fireplace. 1,768,150; June 24.
Richardson, Ernest A., Cochituate, Mass. Rotary internal-combustion engine. 1,767,097; June 24.
Richardson, Fred L. and L. S. Macdonald, assignors to Thompson Bros. Shoe Co., Brockton, Mass. Corrective shoe. 1,768,491; June 24.
Richardson, John K. (See Pocock, Sylvester J., assignor.)
Richardson, Ralph S., Teaneck, N. J., assignor to Chemical Engineering Corporation, New York, N. Y. Synthetic production of ammonia. 1,765,541; June 24.
Richardson, Sidney, Hollywood, assignor to A. Richardson, Los Angeles, Calif. Adjustable attachment for dentures. 1,765,851; June 24.
Richer, Joseph R. (See Nielsen, J. P., and Richer.)
Richmond, Carl A., New York, N. Y., assignor to The General Railway Signal Company. Speed-control apparatus for railway cars. 1,765,852; June 24.
Richmond, Samuel, Batavia, assignor to The Edwards Manufacturing Company, Cincinnati, Ohio. Roof structure. 1,767,258; June 24.
Richter, Charles J., Berwyn, assignor to The Goss Printing Press Co., Chicago, Ill. Delivery apparatus for printing presses. 1,766,084; June 24.
Riebe, Theodore C. (See Obergfell, H. F., and Riebe.)
Riegel, Austin, Hayward, Calif. Device for grinding valves or the like. 1,767,700; June 24.
Riehm, Wilhelm, assignor to the firm: Maschinenfabrik Augsburg-Nuernberg, Aktiengesellschaft, Augsburg, Germany. Exhaust purifier. 1,766,945; June 24.
Riehm, Wilhelm, assignor to Maschinenfabrik Augsburg-Nuernberg, Aktiengesellschaft, Augsburg, Germany. Internal-combustion engine of the solid-fuel injection type. 1,767,701; June 24.
Riemenschneider, Edmund W. (See Frahm, C. A., and Riemenschneider.)
Riemenschneider, Edmund W., assignor to The Union Metal Manufacturing Company, Canton, Ohio. Tubular-column-forming machine. 1,765,384; June 24.
Riese, Adolf. (See Baumgarten, Paul, assignor.)
Rights, Anna O. (See Rights, Clyde S. and A. O.)
Rights, Clyde S., and A. O. Rights, Tampa, Fla. Plant-protecting device. 1,766,455; June 24.
Ringle, Charles J. (See Dalton, E. E., and Ringle.)
Ringler, William A., Philadelphia, Pa. Loose-leaf binder. 1,768,151; June 24.
Rinker, Charles A., Galesburg, Ill. Drive mechanism. 1,766,307; June 24.
Ritchey, Roscoe V., assignor to The Firestone Tire and Rubber Company, Akron, Ohio. Fabric band expander. 1,768,332; June 24.
Ritz-Woller, Oliver C., Chicago, Ill. Lamp. 1,766,205; June 24.
Rivers, Napoleon R., Ashtabula, Ohio. Guard for leather-shaving machines. 1,768,213; June 24.
Roach, Finis E., Chicago, Ill. Sprinkler. 1,765,939; June 24.
Robberts, Loyal G., Santa Monica, Calif. Advertising apparatus. 1,766,838; June 24.
Robbins, Will H. (See Gregory, George L., assignor.)
Robbins, William H., Springfield, assignor to The Williams Company, London, Ohio. Power-driven wire-steel-wool machine. 1,766,356; June 24.
Roberts, Edward F., assignor to Packard Motor Car Company, Detroit, Mich. Grinding machine. 1,766,839; June 24.
Roberts, Eugene, assignor to The Western States Machine Company, Salt Lake City, Utah. Mount for centrifugal machine. 1,768,492; June 24.
Roberts, Glen, and M. Dysthe, Minneapolis, Minn. Combination sash and screen-door fastener. 1,765,614; June 24.
Roberts, Samuel S., Pittsburgh, assignor of one-half to J. H. Bullen, Oakmont, Pa. Lubricating valve. 1,767,552; June 24.
Robertson, Alexander D. (See Wilson, A. A., and Robertson.)
Robertson, Charles, Seattle, Wash. Automatic snatch block. 1,766,357; June 24.
Robertson, James W., Drymen, Scotland. Two-stroke-cycle internal-combustion engine. 1,767,402; June 24.
Robeson, Evans, Fort Meade, Fla. Heating device for drying machines. 1,768,002; June 24.
Robinson, George A., Braintree, Mass., assignor to Johnson Automatic Sealer Co., Ltd., Battle Creek, Mich. Glue-applying mechanism. 1,767,310; June 24.
Robinson, Jay G., Chicago, Ill. Fire-box door. 1,765,741; June 24.
Robinson, Victor J. (See Smith, Christian L., assignor.)
Robson, Thomas S. (See Dixon, A. H., Robson, and Henschell.)
Rochat, Louis, New York, N. Y. Punching device. 1,766,308; June 24.
Rochon, Charles, Fall River, Mass. Screen exit. 1,767,154; June 24.
Rock Island Plow Company. (See Kaupke, Lee H., assignor.)
Roddy, Gustav R., assignor to Chain Belt Company, Milwaukee, Wis. Trolley conveyer and trip hook therefor. 1,768,493; June 24.
Rodin, Charles F., San Francisco, Calif. Emergency section for ships. 1,768,152; June 24.
Roe, Alpheus E., Oakland, Calif. Can-filling machine. 1,766,147; June 24.
Roeckner, Martin, Mulheim-Ruhr, Germany, assignor to the firm Vereinigte Stahlwerke Aktiengesellschaft, Dusseldorf, Germany. Method of and apparatus for rolling tubes from a hollow block. 1,767,896; June 24.
Roedding, Gordon E., and E. C. Osbeck, assignors to Grand Rapids Brass Company, Grand Rapids, Mich. Latch. 1,765,615; June 24.
Roettges, Frederick W., Brooklyn, assignor to Lighting Appliance Company, Inc., New York, N. Y. Body plate for lighting fixture or article of similar nature. Des. 81,462; June 24.
Rogers, Everett I., jr., Providence, R. I. Clip. Des. 81,463; June 24.
Rogers, Homer S., and R. Raddatz, assignors to Milwaukee Air Power Pump Co., Milwaukee, Wis. Pneumatic pump. 1,767,478; June 24.
Rogers, Oll, et al. (See Holmes, Daniel T., assignor.)
Rogers, Robert H., Schenectady, N. Y., assignor to General Electric Company. Apparatus for towing, mooring, and the like. 1,768,295; June 24.
Rogers, Robert H., Alphans, N. Y., assignor to General Electric Company. Apparatus for towing, mooring, and the like. 1,768,420; June 24.
Röhm and Haas Company. (See Le Petit, Charles J. M. M., assignor.)
Rohrbach, Adolf, Berlin-Wilmersdorf, Germany, assignor to Rohrbach Patents Corporation. Floating body for seaplanes. 1,767,815; June 24.
Rohrbach Patents Corporation. (See Rohrbach, Adolf, assignor.)
Rohrbacher, Earl W., Detroit, Mich. Variable transmission or torque converter. 1,767,311; June 24.
Rohrke, Reinhold W., Norfolk, Nebr. Guard. 1,766,690; June 24.
Roller, Frank W., East Orange, N. J., assignor to Roller Smith Company. Circuit breaker. 1,767,479; June 24.
Roller, Robert H., Mammoth, W. Va. Road cleaner. 1,766,456; June 24.
Roller-Smith Company. (See Roller, Frank W., assignor.)
Rollhaus, Philip E. (See McKee, R. H., Morse, and Rollhaus.)
Rolston, Walter F., assignor of one-half to Burson Knitting Company, Rockford, Ill. Yarn-changing mechanism. 1,767,480; June 24.
Romain, Frederich, Marias, Mont. Tire chain. 1,768,153; June 24.
Roman, Frank L., Chicago, and H. T. Winsemius, Congress Park, Ill., assignors to Western Electric Company, Incorporated, New York, N. Y. Cementitious substance and making the same. 1,765,616; June 24.
Roman, Harry J., and W. C. Dietrich, Dunsmuir, Calif. Hook. 1,767,897; June 24.
Romer, James F., West Hampstead, London, assignor to J. E. Thornton, London, England. Optical device for photographic, cinematographic, and other purposes. 1,765,882; June 24.
Ronning, Adolph, et al., executors. (See Ronning, Adolph and A. G.)
Ronning, Adolph, and A. G. Ronning, deceased; A. Ronning, Minneapolis, and J. A. Ronning, St. Paul, Minn., executors. Road machine. 1,767,617; June 24.
Ronning, Andrean G. (See Ronning, Adolph and A. G.)
Ronning, Jacob A., et al., executors. (See Ronning, Adolph and A. G.)
Rooney, Patrick J., Sugar Notch, Pa. Lantern. 1,768,374; June 24.

Roos, Axel H., Chico, Calif. Combination calipers. 1,766,546; June 24.
Rose, C. W. (See Rose, Walter E., assignor.)
Rose, Carl L., Kansas City, Mo. Egg tongs. 1,767,553; June 24.
Rose, Frank G., Dayton, Ky. Swing seating device. 1,766,840; June 24.
Rose, Reed P., Jackson Heights, and H. E. Cude, Floral Park, assignors to General Rubber Company, New York, N. Y. Insulating paper. 1,765,774; June 24.
Rose, Thad, Van Nuys, Calif. Dirigible. 1,766,358; June 24.
Rose, Walter E., assignor of one-half to C. W. Rose, Denver, Colo. Support for window cleaners. 1,767,554; June 24.
Rosedale Foundry & Machine Company. (See Holt, Harris B., assignor.)
Rosenbaum, Bruno, Berlin, Germany assignor to Westinghouse Electric & Manufacturing Company. Vacuum tube. 1,765,501; June 24.
Rosenbaum, George L., Atlanta, Ga. Filter and storage unit. 1,766,228; June 24.
Rosenberg, Daniel C., Sobieski, Wis. Fruit-drying frame. 1,768,296; June 24.
Rosenberg, Edwin C., Milwaukee, Wis. Brake. 1,767,014; June 24.
Rosenberg, Isadore B., and R. Mulwitz, Port Chester, N. Y. Bed-spring support. 1,766,190; June 24.
Rosenberg, Ralph H., assignor to The Central Brass and Fixture Co., Springfield, Ohio. Bumper bar. 1,765,617; June 24.
Rosenheim Co. Inc. (See Jones, Percival W., assignor.)
Roser, Edmund, Bochum, Germany. Apparatus for gasifying and distilling solid fuel. 1,765,702; June 24.
Ross, David E., assignor to Ross Gear & Tool Company, La Fayette, Ind. Steering gear. 1,767,188; June 24.
Ross Gear & Tool Company. (See Ross, David E., assignor.)
Rossel, Schwarz & Co., A. G. (See Berger, Hans, assignor.)
Roth, Henry, Two Rivers, Wis. Buoy. 1,768,003; June 24.
Rouanet, Louis, assignor to Compagnie D'Applications Mecaniques, Ivry-Port, France. Brake-operating device for motor vehicles. 1,766,309; June 24.
Rouanet, Louis, assignor to Compagnie D'Applications Mecaniques, Ivry-Port, France. Brake-operating device for steering wheels. 1,766,359; June 24.
Round, Henry J., London, England, assignor to Radio Corporation of America. Microphone. 1,765,449; June 24.
Rowan, Walter R. C., Pittsburgh, Pa. Tab. 1,767,555; June 24.
Roy, Simeon O. (See Stewart, S., Allen, and Roy.)
Royal Railway Improvements Corporation. (See Sauvage, William H., assignor.)
Royan, George, Chicago, Ill., assignor, by mesne assignments to American Machine & Foundry Company, New York, N. Y. Mixing machine. 1,767,481; June 24.
Royersford Foundry and Machine Company. (See Champion, Earl M., jr., assignor.)
Rubber Latex Research Corporation. (See Wescott, William B., assignor.)
Ruckstuhl, Alwin, assignor to Swiss Locomotive and Machine Works, Winterthur, Switzerland. Regulating valve. 1,767,702; June 24.
Rudge, Clarence H., and E. A. Buchanan, Nampa, Idaho. Oil-feeding device. 1,765,618; June 24.
Rudges, Jacob, Hollis, assignor, by mesne assignments, to Noma Electric Corporation, New York, N. Y. Decorative device. 1,765,940; June 24.
Rue, Knute, Mapleton, Minn. Quack-grass eradicator. 1,767,619; June 24.
Ruff, William J., Quincy, Ill. Fire-extinguishing device. 1,767,098; June 24.
Rugen, John, New York, N. Y. Automatic gum-tape-dispensing machine. 1,767,942; June 24.
Rugg, Frank D., Greenfield, Mass. Shovel. 1,766,691; June 24.
Ruggles, William A., Schenectady, N. Y., assignor to General Electric Company. Electron-discharge device. 1,768,421; June 24.
Rumer, Frank A., Portland, Oreg. Elevated bath support for infants. 1,766,085; June 24.
Runge, Frederick C., New York, N. Y. Lighting fixture. 1,767,482; June 24.
Runne, Ernst, K. Moldaenke, and E. Fischer, Frankfort-on-the-Main-Hochst, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Alkoxy-3-keto-dihydrothionaphthenes and making them. 1,765,703; June 24.
Rupp, Carl A., assignor to Commercial Iron Works of Los Angeles, Los Angeles, Calif. Stereotype-plate-casting machine. 1,766,692; June 24.
Rusch, Herman C., assignor to Seaman Body Corporation, Milwaukee, Wis. Door. 1,767,703; June 24.
Ruschke, Ewald, Luder, Hanover, Germany. Safety device for boiler feed and delivery pipings. 1,765,883; June 24.
Russell, Frederick T., assignor to Savage Arms Corporation, Utica, N. Y. Automatic clutch. 1,766,227; June 24.
Russell, Mark N., and J. W. Brooks, Syracuse, assignors to Pass & Seymour, Incorporated, Syracuse, N. Y. Electric sign. 1,768,422; June 24.
Russell, Nelson J., Chicago, Ill. Fuel-saving device. 1,766,191; June 24.
Russell, Samuel G., assignor to Shakespeare Company, Kalamazoo, Mich. Fishing reel. 1,766,086; June 24.
Russell, Thomas F., North Lima, Ohio. Dustless ash remover. 1,767,312; June 24.
Russell, William A., Yonkers, assignor to W. A. Russell & Co., New York, N. Y. Air valve. 1,767,704; June 24.
Russell, W. A., & Co. (See Russell, William A., assignor.)
Russow, Marshall A., Chicago, Ill. Irrigator. 1,766,724; June 24.
Ruth-Aldo Company. (See Klein, Melitta, assignor.)
Ruth, Charles H., Huntington Park, Calif. Wave and tide motor. 1,766,457; June 24.
Ruth, William C., Gap, Pa. Baling-press feeder. 1,768,214; June 24.
Ryan, John, Columbus, Ohio. Steam trap. 1,766,725; June 24.
Rybeck, Adolph W., assignor to T. L. Smith Company, Milwaukee, Wis. Material-handling machine. 1,765,450; June 24.
Sachs, Joseph, West Hartford, Conn. Protected electric-meter-service appurtenance. 1,767,259; June 24.
Sachs, Joseph, West Hartford, Conn. Protected electric-meter-service appurtenance. 1,767,260; June 24.
Sachs, Joseph, West Hartford, Conn. Electric-meter-service appliance. 1,767,261; June 24.
Sachse, Herman P., Chicago, Ill., assignor to Central Scientific Company, Chicago, Ill. Educational appliance. 1,767,774; June 24.
Saco-Lowell Shops. (See Banfield, F. E., jr., and Albrecht, assignors.)
Saco-Lowell Shops. (See Banfield, F. E. jr., and Hoagland, assignors.)
Sadtler, Edwin B., assignor to Peabody Engineering Corporation, New York, N. Y. Valve. 1,767,228; June 24.
Safety Oil Tank Company. (See Kueffer, Frederich W., assignor.)
Sailor, Horace P., Cleveland, Ohio. Apparatus for welding hollow metallic articles. 1,766,229; June 24.
St. Louis Scale Corporation. (See Moser, Frank R., jr., assignor.)
St. Regis Paper Company. (See Marsh, Esli A., assignor.)
Sakurai, Sueo. (See Suzuki, T., and Sakurai.)
Salls, Carroll M. (See McKee, R. H., and Salls.)
Salmon, James P., Philadelphia, Pa., assignor of part interest to J. W. France and J. A. Missar, Philadelphia, Pa. Sign. 1,767,483; June 24.
Salvucci, Nunziato, Lynn, Mass. Dusting brush. 1,767,313 June 24.
Salwén, Ragnar, and J. Öhrn, Grangesberg, assignors to Morgardshammars Mekaniska Verstads Aktiebolag, Morgardshammar, Sweden. Dehydration of substances suspended in water. 1,768,215; June 24.
Sampson, Harry O., Beaumont, Tex. Signal recorder. 1,768,154; June 24.
Samson Cordage Works. (See Peterson, Charles M., assignor.)
Sanders, Richard D., Norfolk, Va. Fluid-heating apparatus. 1,766,802; June 24.
Sanford, Hugh W., and H. W. Jones, Knoxville, Tenn., assignors to Sanford Investment Company, Wilmington, Del. Journal box and axle. 1,768,004; June 24.
Sanford Investment Company. (See Sanford, H. W., and Jones, assignors.)
Santhony, Joseph N., Lincoln Park, Mich. Boot and shoe scraper. 1,768,375; June 24.
Sardeson, Robert, F. J. LaMere, and J. Corser, Minneapolis, Minn. Resilient engine mounted. 1,767,015; June 24.
Sargent, August, Challis, Idaho. Fish tongs. 1,767,898; June 24.
Sattler, Hans, Munich, Germany. Guide device for neckties. 1,767,899; June 24.
Sauer, Theodor, Company. (See Sauer, Walter P., assignor.)
Sauer, Walter P., Forest Hills, assignor to Theodor Sauer Company, New York, N. Y. Extension table. 1,767,016; June 24.
Saunders, Kenneth H. (See Mendoza, M., and Saunders.)
Saunders, Kenneth H., assignor to British Dyestuffs Corporation Limited, Manchester, England. Azo dyes derived from aminosulphones. 1,766,946; June 24.
Saunders, Kenneth H., assignor to British Dyestuffs Corporation Limited, Manchester, England. Manufacture of new azo dyestuffs. 1,766,947; June 24.
Saunders, Kenneth H., assignor to British Dyestuffs Corporation Limited, Manchester, England. Intermediate derived from aminosulphones. 1,766,951; June 24.
Saunders, Kenneth H., Manchester, assignor to British Dyestuffs Corporation Limited, Manchester, England. Intermediate derived from aminosulphones. 1,766,952; June 24.
Saunders, Norman H., Homewood, Ill., assignor to Reserve Holding Company, Kansas City, Mo. Party-line telephone system. 1,765,619; June 24.
Sauvage, William H., assignor, by mesne assignments, to Royal Railway Improvements Corporation, New York, N. Y. Regulator for brake rigging. 1,767,403; June 24.
Savage Arms Corporation. (See Russell, Frederick T., assignor.)

Savage-De Remer Corporation. (See Warner, Lawrence E., assignor.)
Savage, Paris L., Bisbee, Ariz., and W. Rhodes, Long Beach, Calif.; said Rhodes assignor to J. Valdin, Bisbee, Ariz. Hammer drill. 1,768,216; June 24.
Savonius, Sigurd J., Helsingfors, Finland. Wind rotor. 1,766,765; June 24.
Sawyer, Albert F., assignor to I. L. Keith, Haverhill, Mass. Combined refrigerating tank and ice-cream freezer. 1,767,857; June 24.
Sawyer, Charles B., assignor to The Brush Laboratories Company, Cleveland, Ohio. Flow meter. 1,766,148; June 24.
Sawyer, Charles B., assignor to The Brush Laboratories Company, Cleveland, Ohio. Flow meter. 1,766,149; June 24.
Sawyer, Howard H., Portland, Oreg. Trap. 1,765,941; June 24.
Scafe, Lincoln R. (See De Long, Robert B., assignor.)
Scarritt, Elwood W. (See Partridge, E. M., and Scarritt.)
Schaal, Norbert J., Seattle, Wash., assignor, by mesne assignments, to Continental Can Company, Inc., New York, N. Y. Solder horn. 1,767,900; June 24.
Schaefer, Leo, New York, N. Y. Frame wallet. 1,766,953; June 24.
Schaer, Charles, Langenthal, assignor to the firm Sulzer Frères Société Anonyme, Winterthur, Switzerland. High-pressure reciprocating-piston compressor. 1,767,404; June 24.
Schaffer, Walter, assignor to Gesellshaft für Drahtlose Telegraphie m. b. H., Berlin, Germany. Method and arrangement for diminishing noise in vacuum tubes. 1,765,542; June 24.
Schane, Edward H., assignor to The Fanner Mfg. Co., Cleveland, Ohio. Intermediate awning bracket. 1,765,451; June 24.
Schane, Edward H., assignor to The Fanner Manufacturing Company, Cleveland, Ohio. Awning support. 1,765,452; June 24.
Schaum, Fletcher, assignor to Fletcher Works, Philadelphia, Pa. Hydroextractor. 1,766,310; June 24.
Schaum, Fletcher, assignor to Fletcher Works, Philadelphia, Pa. Automatic control mechanism. 1,767,901; June 24.
Schauss, Adolf F., Oberursel, near Frankfort-on-the-Main, Germany. Typewriter. 1,768,155; June 24.
Scheckler, Gordon F., Stockton, Calif. Dirt spreader for ditching machines. 1,767,017; June 24.
Scheler, Armin, assignor to Ideal Lighting Novelty Co., New York, N. Y. Lighting-fixture brace. Des. 81,464; June 24.
Schelleng, John C. (See Oswald, A. A., and Schelleng.)
Schelleng, John C., Millburn, N. J., assignor, by mesne assignments, to Western Electric Company, Incorporated. Signaling system. 1,768,269; June 24.
Schellenger, Newton C., assignor to Chicago Telephone Supply Company, Elkhart, Ind. Tube mounting. 1,768,297; June 24.
Schellenger, Newton C., assignor to Chicago Telephone Supply Company, Elkhart, Ind. Tube socket. 1,768,298; June 24.
Schemmel, Robert C., Union City, Ind. Gasket. 1,765,884; June 24.
Schenck, Le Roy C., East Moline, Ill., assignor, by mesne assignments, to Troy Laundry Machinery Company, Inc., Dover, Del. Handle construction. 1,765,775; June 24.
Schenk, Rudolf, Vienna, Austria, assignor to Western Electric Company, Incorporated, New York, N. Y. Telephone system. 1,767,943; June 24.
Schenk, Tamis C., Brooklyn, N. Y. Nut and bolt assembling machine. 1,766,008; June 24.
Schepss, Wilhelm. (See Lieske, R., and Schepss.)
Schering-Kahlbaum A.-G. (See Schoeller, W., and Allardt, assignors.)
Schering-Kahlbaum A.-G. (See Schoeller, W., Jordan, and Clerc, assignors.)
Schering-Kahlbaum A. G. (See Schultz, Wolfgang M., assignor.)
Scherm, Hans, jr., Eschenbach, Germany. Machine for driving in and pulling out nails. 1,765,885; June 24.
Schermerhorn, George D., Reading, Mich. Folding chair. 1,765,942; June 24.
Scheyer, Heinz. (See Kalischer, G., Scheyer, Nawisky, and Krauch.)
Schick, Jacob, East Orange, N. J., assignor to Magazine Repeating Razor Company. Shaving unit. 1,767,705; June 24.
Schick, Jacob, Stamford, Conn., assignor to Magazine Repeating Razor Company. Safety razor. 1,767,706; June 24.
Schick, Jacob, Stamford, Conn., assignor to Magazine Repeating Razor Company. Combined sales package and razor. 1,767,707; June 24.
Schilling, John M., Lima, Ohio. Bottle cooler. 1,766,547; June 24.
Schipper, Alexander C., Hamilton, Ohio. Boat. 1,766,360; June 24.
Schjolin, Eric O., Birmingham, assignor, by mesne assignments, to Yellow Truck & Coach Manufacturing Co., Pontiac, Mich. Spring suspension. 1,768,494; June 24.
Schlacks, Henry J., Chicago, Ill. Window. 1,765,543; June 24.
Schlacks, William J., Chicago, Ill. Locomotive-piston-rod crosshead connection. 1,767,484; June 24.
Schlafhorst, W., & Co. (See Reiners, W., and Kahlisch, assignors.)
Schlegel, Charles P., assignor to Schlegel Mfg. Company, Rochester, N. Y. Gun swab. 1,766,192; June 24.
Schlegel Mfg. Company. (See Schlegel, Charles P., assignor.)
Schleicher, Franz. (See Schwaebel, G., and Schleicher.)
Schleusner, Henry, Garner, Iowa. Aerofoil. 1,767,944; June 24.
Schlick, Albert, Borna B/Leipzig, Germany. Turntable or revolving show stand for shop windows and the like. 1,768,217; June 24.
Schliephake, Otto. (See Griessbach, R., Schleiphake, and Heusler.)
Schlossfabrik-Aktiengesellschaft vorm. Wilh. Schulte. (See Münch, Heinrich, assignor.)
Schlüssler, Alfred, Berlin-Neukolin, Germany. Safety razor. 1,765,805; June 24.
Schmidling, Gilbert T., assignor to A. J. Carter, Chicago, Ill. Television apparatus. 1,765,453; June 24.
Schmid, Werner, Rumlang, Switzerland. Unraveling machine for horsehair, grass wrack, and the like. 1,768,376; June 24.
Schmidt, Hans, Yohwinkel, near Elberfeld, Germany, assignor to Winthrop Chemical Company, Inc., New York, N. Y. Formaldehyde bisulphite amino-aryl antimony compounds. 1,766,361; June 24.
Schmidt, Karl, Berlin-Lichtenrade, assignor to C. Lorenz, Aktiengesellschaft, Berlin-Tempelhof, Germany. Power system. 1,767,405; June 24.
Schmidt, Lambert, Brooklyn, N. Y. Theftproof lamp. 1,765,943; June 24.
Schmidt'sche Heissdampf-G. m. b. H. (See Hartmann, O. H., and Uhde, assignors.)
Schmidt'sche Heissdampf-Gesellschaft m. b. H. (See Hartmann, Otto H., assignor.)
Schmidt'sche Heissdampf-Gesellschaft, m. b. H. (See Hartmann, O. H., and Jung, assignors.)
Schmidt'sche Heissdampf-Gesellschaft mit beschränkter Haftung. (See Thomsen, Peter, assignor.)
Schmidt'sche Heissdampf Gesellschaft mit beschränkter Haftung. (See Uhde, Robert, assignor.)
Schmierer, Michel, Berlin-Lichterfelde, Germany, assignor to Radio Patents Corporation, New York, N. Y. Fluorescent tube. Re17,712; June 24.
Schmitt, Otto A. (See Coyle, J., Taliaferro, and Schmitt.)
Schmitz, Carl, Oelde, Germany. Centrifugal machine for clarifying liquids and the like. 1,767,314; June 24.
Schmitz, Fred A., and J. Sturn, assignors, by mesne assignments, to The Berger Manufacturing Company, Canton, Ohio. Locker latch. 1,766,193; June 24.
Schmitz, George C., assignor to Arnold Electric Company, Racine, Wis. Drink-mixer unit. 1,767,262; June 24.
Schnell, William, assignor to Ternstedt Manufacturing Company, Detroit, Mich. Motor-vehicle door handle or similar article. Des. 81,465; June 24.
Schnell, William, assignor to Ternstedt Manufacturing Company, Detroit, Mich. Motor-vehicle door handle or similar article. Des. 81,466; June 24.
Schnitzer, Richard, Zurich, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland. Apparatus for governing duplex-machine drivers. 1,766,548; June 24.
Schoeller, Walter, Berlin-Charlottenburg, and H. G. Allardt, Berlin-Reinickendorf-West, assignors to Schering-Kahlbaum A.-G., Berlin, Germany. Production of anesthetics. 1,765,621; June 24.
Schoeller, Walter, Berlin-Charlottenburg, H. Jordan, Berlin-Steglitz, and R. Clerc, assignors to Schering-Kahlbaum A.-G., Berlin, Germany. Production of menthol. 1,765,620; June 24.
Schoen, Otto A., assignor to The Climalene Company, Canton, Ohio. Dispensing device. 1,765,622; June 24.
Scholl, William M., Chicago, Ill. Orthopedic shoe. 1,767,229; June 24.
Scholl, William M., Chicago, Ill. Metatarsal-arch support. 1,767,263; June 24.
Scholler, Frederick C., Philadelphia, Pa. Thread oiler or moistener. 1,766,934; June 24.
Schon, Heinrich W., Pomeroy, Iowa. Corn-shock binder. 1,767,556; June 24.
Schreiber, Edward M. (See Mossbacher, Solomon, assignor.)
Schreiber, Harry, New York, N. Y. Wrist-watch protector. 1,767,315; June 24.
Schrell, August, and H. J. Hillborn, Milwaukee, Wis., assignors, by mesne assignments, to Outboard Motors Corporation, Detroit, Mich. Electrical system for outboard motors. 1,765,454; June 24.
Schroder, Howard, Ookland, Calif. Windshield wiper. 1,765,806; June 24.
Schroder, John E., assignor to Hartford-Empire Company, Hartford, Conn. Ware-conveying head. 1,766,549; June 24.
Schröder, Wilhelm G., Lubeck, Germany. Cooling drum. 1,768,156; June 24.
Schroder, William, Covington, Ky., assignor to The Sebastian Lathe Company, Cincinnati, Ohio. Machine-tool stop mechanism. 1,768,495; June 24.
Schroeder, Ernst. (See Prantl, F., Luthi, and Schroeder.)
Schubart, Benno, Nuremberg, assignor to Vereinigte Schuhfabriken Bernels-Wessels A. G., Augsburg-Oberhausen, Germany. Box with folding lid. 1,766,194; June 24.
Schubert, Kurt E., assignor of one-half to A. A. Lindquist, Susanville, Calif. Automatic window cleaner. 1,766,550; June 24.

Schubert, Max. (See Herz, R., and Schubert.)
Schubert, Max. (See Kaufmann, H. P., and Schubert.)
Schuette, Erwin E., Milwaukee, Wis. Belt-replacing device. 1,767,155; June 24.
Schulemann, Werner, Yohwinkel-Hammerstein, A. Wingler, and F. Mietzsch, Elberfeld, Germany, assignors to Winthrop Chemical Company, Inc., New York, N. Y. Pharmaceutical product. 1,766,403; June 24.
Schulte, Edmund, Bronxville, N. Y. Gateway. Des. 81,467; June 24.
Schulte, Eugen. (See Siedler, P. C. H., and Schulte.)
Schultis, Charles F., assignor of one-fourth to I. Herzbrun and one-fourth to S. W. Goldman, Cleveland, Ohio. Pipe-hanging machine. 1,765,704; June 24.
Schultz, Abraham J., Newark, N. J. Collapsible side rail for bedsteads. 1,765,455; June 24.
Schultz, Wolfgang M., Berlin-Karlshorst, assignor to Schering-Kahlbaurn A. G., Berlin, Germany. Washing drum for photographic pictures. 1,767,858; June 24.
Schulz, Arthur E. (See McMullan, S., and Schulz.)
Schulz, George W., Cleveland, Ohio, assignor to Yawman & Erbe Manufacturing Co., Rochester, N. Y. Bookkeeper's desk. 1,765,742; June 24.
Schulze, William H., Detroit, Mich. Piston. 1,766,150; June 24.
Schur, Milton O., assignor to Brown Company, Berlin, N. H. Liquid-flow meter. 1,765,776; June 24.
Schuster, Karl R., Hopatcong, N. J. Mixing machine. 1,765,544; June 24.
Schutte, August E., Northboro, assignor, by mesne assignments, to The Patent and Licensing Corporation, Boston, Mass. Apparatus for saturating fibrous material. 1,765,777; June 24.
Schutte, August E., Northboro, assignor, by mesne assignments, to The Patent and Licensing Corporation, Boston, Mass. Saturating fibrous material. 1,765,778; June 24.
Schwab, Martin C., Chicago, Ill., assignor to Otis Elevator Company, New York, N. Y. Moving stairway. 1,767,945; June 24.
Schwaebel, George, Leverkusen-on-the-Rhine, and F. Schleicher, Wiesdorf-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Concentration of acetic acid. 1,766,404; June 24.
Schwartzman, Harry, Jersey City, N. J. Garment-hanger attachment. 1,768,005; June 24.
Schwarz, Alfred, Montclair, N. J. Apparatus for distilling oil. 1,765,886; June 24.
Schwarz, Gustav, Wauwatosa, Wis. Temperature control. 1,766,260; June 24.
Schwarz, Gustav, Wauwatosa, Wis. Steam or vapor heating system. 1,766,261; June 24.
Schweibold, Alvin W., Monroe, Mich. Lather rubber. 1,765,623; June 24.
Schweigert, Frederick, New York, N. Y. Wrench. 1,766,458; June 24.
Schweigert, Frederick, New York, N. Y. Pliers. 1,766,459; June 24.
Schweitzer & Conrad. (See Ramsay, Allan, assignor.)
Schwerin, Paul, assignor to Western Electric Company, Incorporated, New York, N. Y. Electron-discharge device. 1,766,460; June 24.
Scott, Annie A., E. H., and P. R., Christchurch, New Zealand. Gas-heating burner. 1,766,803; June 24.
Scott, Arthur, assignor to The Cleveland Pneumatic Tool Company, Cleveland, Ohio. Riveter. 1,767,946; June 24.
Scott, Earnest H. (See Scott, Annie A., E. H., and P. R.)
Scott, Eric W. M., Church Stretton, and B. H. Leeson, Tynemouth, England, assignors to A. Reyrolle & Company, Limited, Hebburn-on-Tyne, England. Protective arrangement for sectionalized electric power circuits. 1,765,887; June 24.
Scott, Floyd L., assignor to Hughes Tool Company, Houston, Tex. Roller well drill. 1,765,545; June 24.
Scott, Lawrence W. (See Husted, Harry F., assignor.)
Scott, Percy R. (See Scott, Annie A., E. H., and P. R.)
Scott, Samuel M., West View, Pa. Baker's peel. 1,766,551; June 24.
Scovill Manufacturing Company. (See Davis, Alvan L., assignor.)
Scovill Manufacturing Company. (See King, George A., assignor.)
Scruggs, Frank A., Los Angeles, Calif. Molding machine. Re17,711; June 24.
Scull, Chester, sr., assignor to Budd Wheel Company, Philadelphia, Pa. Brake drum. 1,766,955; June 24.
Scull, Chester, sr., assignor to Budd Wheel Company, Philadelphia, Pa. Making brake drums. 1,766,956; June 24.
Scusa, Lino, Phoenix, N. Y. Support for indicator gauges. 1,765,624; June 24.
Sea, John, Alameda, Calif. Cabinetmaker's clamp. 1,766,230; June 24.
Sealey, Percy T., Grand Rapids, assignor to Kelvinator Corporation, Detroit, Mich. Removable supporting devices for refrigerator shelves. 1,767,316; June 24.
Seaman Body Corporation. (See Rusch, Herman C., assignor.)
Sears, James A., Long Beach, Calif. Sign. 1,766,362; June 24.
Seattle Astoria Iron Works. (See Troyer, Nelson, assignor.)
Sebastian Lathe Company, The. (See Schroder, William, assignor.)
Seberg, Arin G. and H. M., Racine, Wis. Oarlock. 1,768,006; June 24.
Seberg, Harold M. (See Seberg, Arin G. and H. M.)
Seeger, Edwin W., Wauwatosa, assignor, by mesne assignments, to Cutler-Hammer Inc., Milwaukee, Wis. Timing controller for electric motors. 1,767,620; June 24.
Seek, Roy A. (See Weber, C. J., and Seek.)
Seel, Paul C., assignor to Eastman Kodak Company, Rochester, N. Y. Preparing sound and picture films. 1,765,944; June 24.
Seeland, William J. (See Meacham, M. R., and Seeland.)
Seeley, Harold T., Schenectady, N. Y., assignor to General Electric Company. Control system. 1,768,423; June 24.
Seeley, Rica H. (See Wetmore, W. C., and Seeley.)
Segelhorst, August L., assignor of one-half to Walter G. Black, Whittier, Calif. Swinging-cutter cutting-off tool. 1,767,018; June 24.
Seidell, Le Roy. (See Howitz, Gerald J., assignor.)
Selden Company, The. (See Jaeger, A. O., assignor, and Bertsch.)
Selectograph Company. (See Golinick, P. A., Toolan, and Harred, assignors.)
Self Locking Carton Company. (See Troyk, Felix, assignor.)
Sellon, Arthur M. (See Sellon, Roy G., assignor.)
Sellon, Roy G., Hugo, Colo., assignor of one-half to A. M. Sellon, Randolph, Nebr. Tractor guide. 1,766,004; June 24.
Sengbusch, Gustav J., Milwaukee, Wis. Writing pen. 1,767,189; June 24.
Sengbusch, Gustav J., Milwaukee, Wis. Pen support. 1,767,190; June 24.
Serduke, James T., Schenectady, N. Y., assignor to General Electric Company. Sound reproducing and recording device. 1,768,377; June 24.
Sergeeff, George, Detroit, Mich. Dowel. 1,767,019; June 24.
Service Station Equipment Company. (See Wilson, Charles G., assignor.)
Shafer, Samuel, jr., assignor to Chain Belt Company, Milwaukee, Wis. Discharge chute for concrete mixers. 1,766,552; June 24.
Shaffer, Glenn A., assignor to Fort Howard Paper Company, Green Bay, Wis. Interleaved sheet and package thereof. 1,767,859; June 24.
Shaffer, Glenn A., assignor to Fort Howard Paper Company, Green Bay, Wis. Roll of interleaved sheets. 1,767,860; June 24.
Shaft-Pierce Shoe Company. (See Shaft, Willis S., assignor.)
Shaft, Willis S., assignor to Shaft-Pierce Shoe Company, Faribault, Minn. Shoe heel. 1,766,311; June 24.
Shakeproof Lock Washer Company. (See Hosking, Richard T., assignor.)
Shakespeare Company. (See Russell, Samuel G., assignor.)
Shallenberger, John W., Bridgeport, Conn. Power hammer. 1,767,485; June 24.
Sharples, Philip T., Merion, assignor to The Sharples Specialty Company, Philadelphia, Pa. Absorption process. 1,766,195; June 24.
Sharples, Philip T., Merion, assignor to The Sharples Specialty Company, Philadelphia, Pa. Recovery of benzol and the like. 1,766,196; June 24.
Sharples Specialty Company, The. (See Sharples, Philip T., assignor.)
Shaughnessy, Bernhard F., Brooklyn, N. Y. Gas separator. 1,767,317; June 24.
Shaw, Arthur L., Chicago, assignor to Chicago Automatic Conveyer Co., Cicero, Ill. Conveyer chain. 1,765,945; June 24.
Shaw, Charles E., Cranford, N. J. Method and apparatus for operation of filter presses. 1,767,318; June 24.
Shaw, Harold N., Milwaukee, Wis., assignor to Globar Corporation, Niagara Falls, N. Y. Electrical heating unit. 1,767,816; June 24.
Shaw, James G., San Jose, Calif. Package sealing. 1,766,405; June 24.
Shaw Van, Walter S., Philadelphia, Pa. Game-scoring device. 1,765,456; June 24.
Shea, Thomas J., assignor of sixty one-hundredths to L. F. Knowlton, Portland, Oreg. Tank and joint for forming same. 1,765,946; June 24.
Shea, Thomas J., assignor of sixty one-hundredths to L. F. Knowlton, Portland, Oreg. Tank and roof structure therefor. 1,765,947; June 24.
Sheahan, Frank I., assignor to M. H. Detrick Company, Chicago, Ill. Furnace-wall construction. 1,767,406; June 24.
Sheehan, William M., St. Louis, Mo., assignor, by mesne assignments, to General Steel Castings Corporation, Granite City, Ill. Locomotive structure. 1,766,406; June 24.
Shelden, Charles C., assignor to Walter Bates Steel Corporation, Gary, Ind. Grating. 1,768,157; June 24.
Shepard, Carl A., Des Moines, Iowa. Door hinge and stop. 1,766,197; June 24.
Shepard, Hubert L. (See Shepard, Lawrence E. and H. L.)
Shepard, Lawrence E. and H. L., Los Angeles, Calif. Well packer. 1,766,766; June 24.

Shepherdson, Arnold, and A. J. Hallwood, assignors to British Dyestuffs Corporation Limited, Manchester, England. 1 - hydroxylamino - 8 - sulpho - anthraquinone. 1,767,230; June 24.

Sheppard, William H., Worcester, Mass. Patch-applying mechanism for envelope machines. 1,766,693; June 24.

Sherburne, Charles H. (See Bridgham, Arthur L., assignor.)

Sheridan, Leslie M., Coppercliff, Ontario, Canada. Power-transmitting device. 1,765,948; June 24.

Shermak, Louis. (See Brutofski, S. J., Armstrong, and Shermak.)

Sherman, John Q. (See Metzner, Albert W., assignor.)

Sherman, John Q., Dayton, Ohio, assignor to The Standard Register Company. Cash-drawer manifolding device. 1,767,486; June 24.

Sherman, Warren S., Oklahoma City, Okla. Traffic marker. 1,766,841; June 24.

Sherwin-Williams Company, The. (See Hain, Henry J., assignor.)

Shields, Benjamin F., and C. G. Crombie, Seattle, Wash. Friction brake. 1,767,621; June 24.

Shields, Patrick W., Pittsburgh, Pa. Method and apparatus for carbonating. 1,768,158; June 24.

Shogren, Charles A., Chicago, Ill. Metal frame for screens. 1,767,487; June 24.

Short, Charles R., Detroit, Mich., assignor to Moraine Products Corporation, Dayton, Ohio. Bearing. 1,768,528; June 24.

Short, Charles R., Detroit, Mich., assignor to The Moraine Products Corporation, Dayton, Ohio. Making bearings. 1,768,529; June 24.

Short, Charles R., assignor to General Motors Corporation, Detroit, Mich. Fluid control of power plants. 1,768,530; June 24.

Shorter, Albert E., London, and C. L. Boucher, Little Bookham, assignors to The Patent Gear Hardening Company, Ltd., London, England. Apparatus for hardening metal surfaces. 1,768,159; June 24.

Shorter, Albert E., London, and C. L. Boucher, Little Bookham, assignors to The Patent Gear Hardening Company, Ltd., London, England. Machine for hardening irregular metal surfaces. 1,768,160; June 24.

Shotts, William A., assignor of one-third to J. S. Conway and one-third to H. M. Conway, Hackleburg, Ala. Combination plow and cultivator. 1,766,407; June 24.

Shriver, Harry P., Van Wert, assignor to Kennedy Manufacturing Company, Van Wert, Ohio. Kit. 1,766,553; June 24.

Shutt, George H., New Bedford, assignor to Crompton & Knowles Loom Works, Worcester, Mass. Warp stop motion for looms. 1,766,804; June 24.

Shutt, John E., Stuttgart, Ark. Deep-well pump. 1,765,457; June 24.

Sibson, Walter W., assignor to The Philadelphia Drying Machinery Company, Philadelphia, Pa. Fabric-treating machine. 1,768,455; June 24.

Sickel, Helmut, Leipzig, Germany. Ampul-filling device. 1,767,902; June 24.

Sidebotham, Melvin H. (See La Bombard, L. E., and Sidebotham.)

Sieber, Fritz, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland. Device for regulating flow of fluids. 1,766,554; June 24.

Siebs, Claude T., Cranford, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. System and method of electrical distribution. 1,765,458; June 24.

Siebs, Claude T., Cranford, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Forming outlets. 1,765,459; June 24.

Siebs, Claude T., Cranford, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. System of electrical distribution. 1,765,460; June 24.

Siedler, Philipp C. H., Griesheim-on-the-Main, and E. Schulte, Schwanheim-on-the-Main, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Dissociation of sulphur vapor. 1,767,319; June 24.

Siemens & Halske, Aktiengesellschaft. (See Gerlach, Erwin, assignor.)

Siemens & Halske Aktiengesellschaft. (See Thomas, P., and Fischer, assignors.)

Siemens-Schuckertwerke Aktiengesellschaft. (See Altenkirch, Edmund, assignor.)

Siemens-Schuckertwerke, Gesellschaft mit beschränkter Haftung. (See Stender, Waldemar, assignor.)

Sigmund, Fred L., Moorestown, N. J. Chemical compound or tablet for prolonging bloom life of cut flowers. 1,768,007; June 24.

Sillier, Everett F. (See Mayer, C. W., and Sillier.)

Simmen, Paul J., Eden, N. Y. System of train control. 1,767,557; June 24.

Simmons, Charles B., assignor to The New Departure Manufacturing Company, Bristol, Conn. Antifriction-bearing cage. 1,767,407; June 24.

Simmons, Claude, Reno, Nev. Fuel mixer for automobiles. 1,766,222; June 24.

Simmons Company. (See Bradshaw, R., and Ferguson, assignors.)

Simmons Company. (See Ferguson, Reginald, assignor.)

Simmons Company. (See Harman, F. B., and Anderson, assignors.)

Simmons Company. (See Vollmer, William A., assignor.)

Simmons, Oliver G., Lakewood, Ohio. Cutting gear teeth. 1,765,385; June 24.

Simmons, Oliver G., Lakewood, assignor to The National Tool Company, Cleveland, Ohio. Worm-generating hob. 1,765,853; June 24.

Simmons, Oliver G., Lakewood, Ohio. Method of and apparatus for generating helical gears. 1,767,191; June 24.

Simplex Equipment Company (See Creveling, John L., assignor.)

Simplex Piston Ring Co. of America Incorporated, The. (See Solenberger, Dean M., assignor.)

Simpson, Roy B., Webster Groves, Mo. Advertising display device. Des. 81,468; June 24.

Simpson, Roy B., St. Louis, Mo. Wardrobe chair. 1,767,708; June 24.

Simon, Oscar, Kincaid, Ill. Switch. 1,768,299; June 24.

Sinanide, Oreste, London, England. Vacuum medical apparatus. 1,767,320; June 24.

Singer Manufacturing Company The. (See Naul, James N., assignor.)

Sinitzer, Philip, Brooklyn, N. Y. Garment hanger. 1,765,461; June 24.

Sinning, Charles J. (See Pfaff, A. J., Driv, and Sinning.)

Siskin, Harry, Los Angeles, Calif. Extension table. 1,766,694; June 24.

Sittel, Alfred, Berlin-Lankwitz, Germany, assignor to General Electric Company. Stamping device for incandescent lamps and similar articles. 1,768,424; June 24.

Sizer, Albert W. Hessle, England. Machine for the molding of plastic substances. 1,768,008; June 24.

Sjöström, John G. (See Mellgren, G. E., and Sjöström.)

Skelton, Earl W., and G. R. Knotwell, Wauneta, Nebr. Tractor guide. 1,768,218; June 24.

Skerritt, Roy P. (See Duty, D. G., and Skerritt.)

Skillings, Harold F., assignor to The Blanchard Machine Company, Cambridge, Mass. Abrasive wheel. 1,767,321; June 24.

Sklovsky, Max, assignor to Deere & Company, Moline, Ill. Rotary furnace. 1,765,949; June 24.

Slepian, Joseph, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Copper-oxide rectifier. 1,765,502; June 24.

Slick, Edwin E., jr., Pittsburgh, Pa. Grinding machine and method of grinding. 1,767,775; June 24.

Sloane, William W., assignor to Goodman Manufacturing Company, Chicago, Ill. Explosionproof fuse. 1,765,546; June 24.

Sloane, William W., assignor to Goodman Manufacturing Company, Chicago, Ill. Cable-reel locomotive. 1,765,547; June 24.

Slocomb, F. F., & Co. (See Young, Howard P., assignor.)

Slonimsky, Samuel E., Sawtelle, Calif. Propeller for airplanes and the like. 1,767,776; June 24.

Small, Chesley T., St. Louis, Mo. Can-filling machine. 1,766,263; June 24.

Small, Chesley T., St. Louis, Mo. Plunger support. 1,766,264; June 24.

Smid, John D., Wichita, Kans. Shelving. 1,765,888; June 24.

Smillie, Robert H., Oakland, Calif. Reconditioning device for tennis balls. 1,766,198; June 24.

Smith, A. O., Corporation. (See Burgess, Edward W., assignor.)

Smith, Albert W., and R. B. Jones, Youngstown, Ohio. Furnace. 1,767,817; June 24.

Smith, Algernon L., Birmingham, Ala. Hull extractor. 1,766,312; June 24.

Smith, Allen C., assignor to The T-Hold Mfg. Co., Cleveland, Ohio. Plug. 1,768,456; June 24.

Smith, Aubrey, Scotia, and R. M. Matson, Schenectady, N. Y., assignor to General Electric Company. Brake mechanism. 1,768,457; June 24.

Smith, Benjamin B., Tullahoma, Tenn. Golf-club-head construction. 1,768,378; June 24.

Smith, Benjamin H., assignor to Michigan Wire Goods Company, Niles, Mich. Collapsible fork and like implement. 1,768,425; June 24.

Smith, Bryan H., Berkeley, Calif. Direction indicator. 1,766,199; June 24.

Smith, Carlos A., sr., Bellaire, Ohio. Rug-cleansing mechanism. 1,767,558; June 24.

Smith, Charles H., Chelmsford, England, assignor to Norma-Hoffman Bearings Corporation, Stamford, Conn. Bearing for railway cars and the like. 1,765,705; June 24.

Smith, Charles S., et al., executors. (See Ingersoll, Robert H.)

Smith, Charles W., Green Island, N. Y. Extension-bit holder. 1,768,219; June 24.

Smith, Christian L., assignor of one-half to V. J. Robinson, Akron, Ohio. Vapor-supply means for internal-combustion engines. 1,766,363; June 24.

Smith, Davis E., Detroit, Mich. Piston. 1,766,842; June 24.

Smith, Edward J., assignor to Mary E. Smith, Cleveland, Ohio. Resonant shadeless desk. 1,767,156; June 24.

Smith, Frank H., Kent, Ohio, assignor of one-half to A. K. Nowak, Chicago, Ill. Press. 1,766,265; June 24.

Smith, George W., Neosho Falls, Kans. Tag and tag-holding device. 1,768,379; June 24.

Smith, Jesse A. B., Stamford, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y. Typewriting machine. 1,765,503; June 24.

Smith, Joseph, Hoboken, N. Y. Lock for pay toilets. 1,767,622; June 24.

Smith, Mark E., assignor to Union Iron Works, Erie, Pa. Steam boiler. 1,767,020; June 34.

Smith, Mary E. (See Smith, Edward J., assignor.)

Smith, Maurice A., assignor to McKee Glass Company, Jeannette, Pa. Forming glassware. 1,766,555; June 24.

Smith, Nelson K., Los Angeles, assignor to Byron Jackson Co., West Berkeley, Calif. Well tool and appliance. 1,766,556; June 24.

Smith, Ozro P., Passaic, N. J. Machine-printing art. 1,766,957; June 24.

Smith, Raymond D., Pleasantville, N. Y. Sectional barrel for reels. 1,767,710; June 24.

Smith, Raymond D., Pleasantville, N. Y., assignor, by mesne assignments to Tremont Products Corporation, Boston, Mass. Electric switch. 1,767,709; June 24.

Smith, Robert L., Brooklyn, N. Y. Bathing tub for babies. 1,766,557; June 24.

Smith, Robert T., Kansas City, Mo. Multiple-fuse plug. 1,767,559; June 24.

Smith, T. L., Company. (See Rybeck, Adolph W., assignor.)

Smith, William F., et al. (See Olson, Samuel, assignor.)

Smith, William H., Mobile, Ala. Rail joint. 1,768,009; June 24.

Smulski, Theodore J., Lake Zurich, Ill., assignor to The Anderson Co., Gary Ind. Can-capping mechanism. 1,767,818; June 24.

Snelling, Walter O., Allentown, Pa. Detector element. 1,766,461; June 24.

Snelling, Walter O., Allentown, Pa. Current-rectifying device. 1,766,462; June 24.

Snelling, Walter O., Allentown, Pa. Metallurgy of tin. 1,766,463; June 24.

Snelling, Walter O., Allentown, Pa. Current-rectifying device. 1,766,464; June 24.

Snelling, Walter O., Allentown, Pa. Playing cards. 1,766,465; June 24.

Snelling, Walter O., Allentown, Pa. Balance weight. 1,766,466; June 24.

Snelling, Walter O., Allentown, Pa. Current-rectifying device. 1,766,467; June 24.

Snip, John G., Lemar, Mo. Automatic stop signal. 1,768,010; June 24.

Snover, Charles F., Bay City, Mich. Game. 1,765,625; June 24.

Snow, Norman L., assignor to Diamond Power Specialty Corporation, Detroit, Mich. Boiler cleaner. 1,766,958; June 24.

Snow, Norman L., assignor to Diamond Power Specialty Corporation, Detroit, Mich. Boiler cleaner. 1,766,959; June 24.

Snow, Norman L., New Canaan, Conn., assignor to Diamond Power Specialty Corporation, Detroit, Mich. Boiler cleaner. 1,767,408; June 24.

Snow, Norman L., and A. W. Honywill, jr., assignors to Diamond Power Specialty Corporation, Detroit, Mich. Boiler cleaner. 1,766,231; June 24.

Snowden, Joseph O. (See Kirkner, J. W., and Snowden.)

Snyder, Andrew J., Des Moines, Iowa. Floor waxer. 1,767,322; June 24.

Snyder Document Protection Co. (See Snyder, Theodore J., assignor.)

Snyder, Joe, Iroquois, S. Dak. Cattle-treating apparatus. 1,767,560; June 24.

Snyder, Theodore J., Chicago, Ill., assignor to Snyder Document Protection Co. Document paper. Re17,708; June 24.

Snyder, William T., Sodus, N. Y. Gravity hinge. 1,768,161; June 24.

Societe Anonyme de Commentry, Fourchambault & Decazeville. (See Chevenard, Pierre, assignor.)

Société Anonyme des Ateliers de Secheron. (See Wörtmann, Franz, assignor.)

Société Anonyme des Manufactures des Glaces & Produits Chimiques de Saint-Gobain, Chauny & Cirey. (See Boudin, Louis, assignor.)

Société Barbou & Cie. (See Barbou, Pierre A., assignor.)

Société d'Etudes Minières et Industrielles. (See Urfer, Charles, assignor.)

Société d'Expansion Technique. (See Portevin, Albert, assignor.)

Societe Hardoll anciens Establissements Hariveau & Dollivier et Rene Porte & Cie. Reunis. (See Carbonaro, Marius C., assignor.)

Söderlund, Olof, and T. Gram, assignors to Techno-Chemical Laboratories, Limited, London, England. Drying of moist material. 1,766,843; June 24.

Sohst, Adele, administratrix. (See Wagner, H., Sohst, and Rachor.)

Sohst, Otto. (See Wagner, H., Sohst, and Rachor.)

Solar Refining Company, The. (See Werkenthin, Theodore A., assignor.)

Solenberger, Dean M., Cleveland, Ohio, assignor to The Simplex Piston Ring Company of America, Inc. Piston ring. 1,767,711; June 24.

Solenberger, Dean M., assignor to The Simplex Piston Ring Co. of America Incorporated, Cleveland, Ohio. Piston-ring-installing device. 1,767,819; June 24.

Solodar, David, Ephrata, Pa. Advertising device. 1,767,712; June 24.

Somerville, Albert A., Flushing, assignor of two-thirds to R. T. Vanderbilt Company, Incorporated, New York, N. Y. Fatty-oil composition. 1,767,264; June 24.

Sommer, William H., Peoria, Ill. Apparatus for coating metallic articles. 1,765,743; June 24.

Sommer, William H., Peoria, Ill. Die structure. 1,765,744; June 24.

Sorbello, Andrew J. (See Nicholls, Robert W., assignor.)

Sorkind, Abraham, Brawley, Calif. Necktie holder. 1,766,695; June 24.

Sousedík, Josef, Vsetin, Moravia, Czechoslovakia. Automatic starter for induction motors. 1,768,220; June 24.

Sparkes, John G., Great Neck, assignor to Press Products, Inc., Long Island City, N. Y. Storage-battery-terminal clamp. 1,767,903; June 24.

Sparks, Edmund R., Edmonton, Alberta, Canada. Forked kitchen utensil. 1,768,011; June 24.

Specialty Automatic Machine Company. (See La Bombard, Leon E., assignor.)

Specialty Automatic Machine Company. (See La Bombard, L. E., and Sidebotham, assignors.)

Sperr, Frederick W., jr., assignor to The Koppers Company, Pittsburgh, Pa. Apparatus for treating gases. 1,768,162; June 24.

Sperry Gyroscope Company. (See House, Frank R., assignor.)

Spill, Walter E., trustee. (See McKim, Wilmer E., assignor.)

Spire, William H., and R. E. Bissell, assignors to Thompson Products, Incorporated, Cleveland, Ohio. Valve. 1,767,409; June 24.

Sprague, Robert C., Quincy, Mass., assignor to Sprague Specialties Co., Quincy, Mass. Electrical condenser and making the same. 1,767,412; June 24.

Sprague, Robert C., assignor to Sprague Specialties Co., Quincy, Mass. Electrical condenser and making the same. 1,768,333; June 24.

Sprague Specialties Co. (See Sprague, Robert C., assignor.)

Spreen, Charles C., Detroit, Mich. Seal for compressors. 1,767,413; June 24.

Springer, Albert R., Wirt, Okla. Airplane lifter. 1,766,844; June 24.

Squibb, Lloyd Y., Camden, N. J., assignor to Victor Talking Machine Company. Combination talking machine and radio receiving device. 1,767,410; June 24.

Stacy, Thomas F., assignor to The French Oil Mill Machinery Co., Piqua, Ohio. Press. 1,765,626; June 24.

Stacy, Thomas F., assignor to The French Oil Mill Machinery Co., Piqua, Ohio. Hydraulic press and the like. 1,765,627; June 24.

Stadden, William H., Sprinfigeld, Mass. Flush valve. 1,767,561; June 24.

Staker, William J., Cairo, N. Y. Automobile gas-throttle control. 1,768,380; June 24.

Staley, Alonzo D., Pleasant Ridge, assignor to The American Laundry Machinery Company, Cincinnati, Ohio. Drying machine. 1,765,628; June 24.

Stallings, Harry, Boston, Mass. Attachment for headlight lamps. 1,766,696; June 24.

Standard Corset Company, The. (See Von Halle, Millard, assignor.)

Standard Oil Company. (See Wilson, Robert E., assignor.)

Standard Oil Development Company. (See Bimel, Frederick B., assignor.)

Standard Oil Development Company. (See Burgess, L., and Buc, assignors.)

Standard Oil Development Company. (See Carver, Benjamin F., assignor.)

Standard Oil Development Company. (See Fischer, Herbert G. M., assignor.)

Standard Oil Development Company. (See Garner, James B., assignor.)

Standard Oil Development Company. (See Gomory, William L., assignor.)

Standard Oil Development Company. (See Harrison, John S., assignor.)

Standard Oil Development Company. (See Hopkins, Marion B., assignor.)

Standard Oil Development Company. (See Howard, Frank A., assignor.)

Standard Oil Development Company. (See Kiss, Stephen A., assignor.)

Standard Oil Development Company. (See Lewis, W. K., and Loomis, assignors.)

Standard Oil Development Company. (See Lewis, Warren K., assignor.)

Standard Oil Development Company. (See Loomis, Nathaniel E., assignor.)

Standard Oil Development Company. (See Meacham, M. R., and Seeland, assignors.)

Standard Oil Development Company. (See Stratford, Reginald K., assignor.)

Standard Oil Development Company. (See Weller, D. R., and Link, assignors.)

Standard Pressed Steel Company. (See Hallowell, Howard T., assignor.)

Standard Register Company, The. (See Sherman, John Q., assignor.)

Standfuss, Ernest R., assignor to Harnischfeger Corporation, Milwaukee, Wis. Excavator tooth. 1,767,713; June 24.

Standish, Edward K., Hartford, Conn., assignor to Graton & Knight Company, Worcester, Mass. Thickness gauging and stamping machine. 1,766,726 June 24.
Staniolfabrik Burgdorf A. G. (See Humpert, Karl, assignor.)
Stanley, Fred D., Three Rivers, Mich., assignor to Fairbanks, Morse & Co. Stuffing box. 1,765,629; June 24.
Stanley Works, The. (See Waller, John A., assignor.)
Stanton, Willard J., and H. A. Gosling, assignors, by mesne assignments, to American Electric Company, Inc., Chicago, Ill. Portable telephone set. 1,766,960; June 24.
Staples, Eugene A., Brooklyn, N. Y. Floor outlet. 1,767,323; June 24.
Stapleton, William J., Minneapolis, Minn. Flontable-record-instrument lock. 1,767,192; June 24.
Stapp, Sidney A., Louisville, Ky. Photolithographing process. 1,767,414; June 24.
Star Surinkler Corporation. (See Griffith, William B., assignor.)
Starr, Raynor F., et al. (See Olson, Samuel, assignor.)
Steam Pressing Iron Company. (See Clark, Frederick J., assignor.)
Steel Cable Mud Chain Company. (See Benien, William, assignor.)
Steel, Samuel T. (See Durnell, H. G., and Steel.)
Steele, Charles W., assignor to The Miller Rubber Company, Akron, Ohio. Compound tool. 1,766,727; June 24.
Steele, James H., Denver, Colo. Athletic timer. 1,766,558; June 24.
Steele, John G., Latrobe, Pa. Submarine safety device. 1,766,845; June 24.
Steele, Maurice G., Farmington, Conn., assignor to Revere Copper and Brass Incorporated, Rome, N. Y. Clothes drier. 1,767,157; June 24.
Stehlik, Rudolph F., assignor to Automatic Electric Inc., Chicago, Ill. Telephone system. 1,767,861; June 24.
Stein, Charles, and W. M. Heller, Atlantic City, N. J. Doll. 1,768,334; June 24.
Stein, Hall & Company. (See Fackler, Louis K., assignor.)
Stein, Hugo, Vienna, Austria. Fountain pen. 1,766,728; June 24.
Stein, Samuel F., Williamsport, Pa. Construction of trousers. 1,766,697; June 24.
Stein, Samuel F., Williamsport, Pa. Trousers. 1,766,698; June 24.
Steiner, Frank M., Minneapolis, Minn., assignor to Steiner Sales Company, Salt Lake City, Utah. Towel cabinet. 1,765,506; June 24.
Steiner, Frank M., Minneapolis, Minn., assignor to Steiner Sales Company, Salt Lake City, Utah. Towel cabnet. 1,765,630; June 24.
Steiner, Frank M., and A. H. Anderson, Minneapolis, Minn., assignors to Steiner Sales Company, Salt Lake City, Utah. Towel cabinet. 1,765,505; June 24.
Steiner, Frank M., and G. Olson, assignors to American Linen Company, Minneapolis, Minn. Closed-back towel stand. 1,765,504; June 24.
Steiner, Frank M., and G. Olson, Minneapolis, Minn., assignors to Steiner Sales Company, Salt Lake City, Utah. Towel cabinet. 1,765,631; June 24.
Steiner Sales Company. (See Olson, Gottfrid, assignor.)
Steiner Sales Company. (See Steiner, F. M., and Anderson, assignors.)
Steiner Sales Company. (See Steiner, F. M., and Olson, assignors.)
Steinour, John E., and P. Brubaker, Los Angeles, Calif. Push hoe. 1,768,163; June 24.
Stelzer, Adolf, Zurich, Switzerland. Calk for football shoes. 1,768,426; June 24.
Stender, Waldemar, Berlin-Charlottenburg, assignor to Siemens-Schuckertwerke, Gesellschaft mit beschrinkter Haftung, Siemensstadt, near Berlin, Germany. Steam power plant for high pressure. 1,767,714; June 24.
Stentz, Frank W., Gary, Ind. Gate-operating means. 1,767,904; June 24.
Stephens-Adamson Mfg. Co. (See Kendall, Myron A., assignor.)
Stephens, Edward A., Los Angeles, Calif. Valve construction. 1,765,632; June 24.
Stephenson, James E., assignor to General Railway Signal Company, Rochester, N. Y. Railway track brake. 1,766,559; June 24.
Stephenson, Robert F., Los Angeles, Calif. Auxiliary Water-circulating means for automobile engines using thermosiphon systems. 1,766,408; June 24.
Sterling Pin Company, The. (See Peck, Irving H., assignor.)
Sternheimer, Nathan, Richmond, Va. Envelope. 1,768,164; June 24.
Steuart, Arthur B., Baltimore, Md. Fuselage frame. 1,766,961; June 24.
Stevens, Clarence E., assignor to White Sewing Machine Corporation, Cleveland, Ohio. Bracket. 1,767,099; June 24.
Stevens, Clarence E., assignor to White Sewing Machine Corporation, Cleveland, Ohio. Clamp for seat construction. 1,768,427; June 24.
Stevens, Horace D., assignor to The Firestone Tire and Rubber Company, Akron, Ohio. Machine for washing tires, coating air bags, or the like. 1,768,335; June 24.
Stevens, Horace D., assignor to The Firestone Tire and Rubber Company, Akron, Ohio. Tube-polishing machine and method of polishing tubes. 1,768,336; June 24.
Stevens, Horace D., assignor to The Firestone Tire and Rubber Company, Akron, Ohio. Machine for coating air bags. 1,768,337; June 24.
Stevens, William C. (See Meuer, G. J., and Stevens.)
Stevens, William C., assignor to The Firestone Tire and Rubber Company, Akron, Ohio. Wrapping machine. 1,768,338; June 24.
Stevens, William C., assignor to The Firestone Tire and Rubber Company, Akron, Ohio. Mandrel-polishing machine. 1,768,339; June 24.
Stevens, William C., assignor to The Firestone Tire and Rubber Company, Akron, Ohio. Strip-applying device. 1,768,340; June 24.
Stevens, William C., assignor to The Firestone Tire and Rubber Company, Akron, Ohio. Tire-building machine. 1,768,341; June 24.
Stevenson, Arthur G., Rochester, N. Y. Lighter. 1,765,633; June 24.
Stevenson, Frederick A., assignor to American Car and Foundry Company, New York, N. Y. Lined tank. 1,766,468; June 24.
Stewart, Carlton D., Berkeley, Calif., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Fluid-pressure brake. 1,765,634; June 24.
Stewart, Carlton D., Berkeley, Calif., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Brake-valve device. 1,765,635; June 24.
Stewart Die Casting Corporation. (See Carlson, Eric, assignor.)
Stewart, Frank L., and M. Stewart, Framingham, Mass. Reversible shirt. 1,768,381; June 24.
Stewart, Margaret. (See Stewart, Frank L., and Margaret.)
Stewart, Otho V. and E. Urban, Forest Hills, Pa., assignors to Westinghouse Electric and Manufacturing Company. Dual anode. 1,765,706; June 24.
Stewart, Samuel, M. L. Allen, and S. O. Roy, Lewiston, Me., assignors to Crompton & Knowles Loom Works, Worcester, Mass. Weft-replenishing mechanism for double-shuttle looms. 1,766,729; June 24.
Stewart-Warner Corporation. (See Farr, Willard H., assignor.)
Stickney, Burnham C., Hillside, N. J., assignor to Elliott-Fisher Company, New York, N. Y. Combined typewriting and adding machine. 1,765,507; June 24.
Stiemke, Walter H. (See Jett, George C., assignor.)
Stine, Samuel B., Osceola Mills, Pa. Apparatus for molding castings. 1,767,563; June 24.
Stock Quotation Telegraph Company. (See Hiltz, G. S., and Purcell, assignors.)
Stocks, Charles E., El Paso, Tex. Self-service haberdashery. 1,766,409; June 24.
Stockwell, Herbert C., Los Angeles, Calif. Cash protector. 1,766,560; June 24.
Stoekle, Erwin R., assignor to Central Radio Laboratories, Milwaukee, Wis. Electrical resistance. 1,767,715; June 24.
Stockle, Erwin R., assignor to Central Radio Laboratories, Milwaukee, Wis. Electrical resistance and making same. 1,767,716; June 24.
Stokes, Charles L., Los Angeles, Calif. Hub cap. 1,766,313; June 24.
Stokes, Charles L., Los Angeles, Calif. Controlling the output of electrical machines. 1,768,165; June 24.
Stokes, F. J., Machine Company. (See Bailey, Lawrence H., assignor.)
Stokes, John S. (See Novotny, Emil E., assignor.)
Stone, George M., and G. W. Cuyler, Cedar Rapids, Iowa. Locomotive journal box. 1,767,411; June 24.
Stone, Henry A. (See Wessman, E. G., and Stone.)
Stone, Herbert S. (See Edson, J. W., Stone, and Arnold.)
Stone, Randolph, and J. Cameron, Chicago, Ill. Egg beater. 1,768,012; June 24.
Stoney, John T., Cleveland, Ohio. Apparatus for cleaning castings. 1,768,428; June 24.
Stoney, John T., Lakewood, Ohio. Apparatus for discharging cores from castings and for cleaning castings. 1,765,462; June 24.
Stoney, John T., Cleveland, Ohio. Forming sand molds. 1,768,429; June 24.
Story & Clark Radio Corp. (See Minnium, Byron B., assignor.)
Stout, Chauncey H., Orange, Calif. Protecting tray for valve chambers. 1,766,469; June 24.
Stont, William B., Detroit, Mich. Convertible chair. 1,767,488; June 24.
Stover, John L., Kenmore, Ohio. Spring shackle. 1,767,717; June 24.
Stracke, Peter M., Racine, Wis. Variable-speed transmission. 1,766,266; June 24.
Straglotti, Pietro, assignor to F. Pagliani, Turin, Italy. Autotransformer for alternating current having variable transformation ratios. 1,767,947; June 24.
Strain, Harry A., Chicago, Ill. Gas washer. 1,766,267; June 24.
Strain, Robert L., Garnett, Kans. Egg-turning device. 1,766,410; June 24.
Strandt, Gustav E., Milwaukee, Wis., assignor, by mesne assignments, to Cherry-Burrell Corporation, Cedar Rapids, Iowa. Bottle filler and capper unit. 1,766,962; June 24.

Stratford, Reginald K., Sarnia, Ontario, Canada., assignor to Standard Oil Development Company. Process and apparatus for treating hydrocarbon oils. 1,768,342; June 24.
Straub, Francis J., New Kensington, Pa. Building block. 1,766,561; June 24.
Straub, Joseph E., Syracuse, N. Y., assignor to Remington Typewriter Company, Ilion, N. Y. Typewriting machine. 1,768,166. June 24.
Strawn, Marion L., La Grange, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Apparatus for preparing members for assembly. 1,768,270; June 24.
Strom, William, Bronx, N. Y. Window ventilator. 1,765,745; June 24.
Stromberg-Carlson Telephone Manufacturing Company, The. (See Beyland, Sidney A., assignor.)
Stromberg-Carlson Telephone Manufacturing Company, The. (See Haas, Paul, assignor.
Stromberg-Carlson Telephone Manufacturing Company, The. (See Powell, Winfred T., assignor.)
Stromberg Electric Company. (See Ostler, Ernest S., assignor.)
Stromberg Motor Devices Co. (See Chandler, Milton E., assignor.)
Strong, Arthur P., Chicago, Ill., assignor to Dodge Manufacturing Corporation, Mishawaka, Ind. Bearing. 1,767,623; June 24.
Strout, Archie L. (See Halloran, R. A., and strout.)
Strumpf, Theodore, New York, N. Y. Sanitary toilet-seat cover. 1,765,463; June 24.
Strupe, Cecil H., Indianapolis, Ind. Bending machine. 1,766,963; June 24.
Stuart, Nicholas H., assignor to Remington Rand Inc., Buffalo, N. Y. Loose-leaf binder. 1,768,343; June 24.
Stubenberg, Arthur F., Wahiawa, Hawaii. Subsoiler. 1,765,746; June 24.
Studebaker Corporation, The. (See Ackerman, Albert H., assignor.)
Sturm, Joseph. (See Schmitz, F. A., and Sturm.)
Sturtevant, B. F., Company. (See Derry, Gardner C., assignor.)
Sullivan Machinery Company. (See Osgood, Robert C., assignor.)
Sullivan, Nell L., New London, Wis. Music-chart blackboard. 1,766,087; June 24.
Sullivan, William B., assignor to Chrobaltic Tool Company, Detroit, Mich. Heat treatment of steel. 1,766,314; June 24.
Sullivan, William L. (See Hageman, A. M., and Sullivan.)
Sullivan, William L., Ferguson, assignor to National Electric Ticket Register Company, St. Louis, Mo. Ticket-issuing machine. 1,765,951; June 24.
Sullivan, William S., Philadelphia, Pa., assignor of forty-five per cent to J. G. Cumming, Washington, D. C. Rotary engine. 1,766,005; June 24.
Sulzer Frères Société Anonyme. (See Schaer, Charles, assignor.)
Sutcliffe, Edgar R., Leigh, England. Distillation of carbonaceous substances. 1,767,231; June 24.
Sutherlin, Lee, East Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Electrical vacuum-tube structure. 1,765,636; June 24.
Sutliffe, H. A. (See Lilly, William J., assignor.)
Suzuki, Tsuneo, and S. Sakurai, assignors to Zaiden Hojin Rika Gaku Kenkujo, Tokyo, Japan. Filter for absorbing ultra-violet light. 1,766,411; June 24.
Swain, John H., Long Beach, and H. H. Hastings, Anaheim, Calif. Rotary swivel. 1,766,562; June 24.
Swain, Joseph G., assignor to The Firestone Steel Products Company, Akron, Ohio. Wheel construction. 1,768,344; June 24.
Swam, Lois, St. Louis, Mo. Traffic signal. 1,765,508; June 24.
Swartz, Hugh, Seattle, Wash. Spark-plug tester. 1,766,151; June 24.
Sweeney, John T., Kingston, N. Y. Combination tool. 1,767,489; June 24.
Sweet, Donald H., Evanston, assignor to Alemite Corporation, Chicago, Ill. Lubricating method and means. 1,767,490; June 24.
Sweetland, Ernest J., Hazleton, Pa., assignor to Oliver United Filters, Inc., San Francisco, Calif. 1,768,167; June 24.
Swiss Locomotive and Machine Works. (See Ruckstuhl, Alwin, assignor.)
Swoyer, Fred, Silver Grove, Ky. Self-cleaning valve for reserve tanks for motor vehicles. 1,766,268; June 24.
Skyes, Wilfred, assignor to The Neblett Engineering Company, Chicago, Ill. Apparatus for electrical precipitation. 1,767,265; June 24.
Synck, Henry, assignor to The New Idea Spreader Company, Coldwater, Ohio. Corn picker and husker. 1,765,950; June 24.
Szinay, Joseph, New York, N. Y. Fountain-feed drawing pen. 1,767,562; June 24.
T-Hold Mfg. Co., The. (See Smith, Allen C., assignor.)
Tallaferro, John C., jr. (See Coyle, J., Tallaferro, and Schmitt.)
Tallade, Alexandre C., Barcelona, Spain. Valve system for reciprocating engines. 1,767,624; June 24.
Tambert, Elmer A., Culver City, Calif. Scanning device. 1,767,718; June 24.
Tannehill, Vernon L., assignor to Fort Wayne Engineering & Manufacturing Co., Fort Wayne, Ind. Pulsation eliminator for pumps. 1,767,100; June 24.
Tanner, Harry L., Brooklyn, assignor to Ford Instrument Company, Inc., Long Island City, N. Y. Damping gyroscopic compasses. 1,765,548; June 24.
Tanzl, Joseph M., Los Angeles, Calif. Milk pot. 1,768,013; June 24.
Tardy, Michael, Paterson, N. J. Display stand. 1,768,271; June 24.
Tasker, Guy E., Dubuque, Iowa. Air cleaner for internal-combustion engines. 1,767,324; June 24.
Taster, H. V., et al. (See Goff, Henry J., assignor.)
Tatosian, Harry G., Bridgeport, assignor to Ice Cream Cone Machinery Inc., Bridgeport, Conn. Ice-cream-cone machine. 1,765,464; June 24.
Taylor, Albert H., Washington, D. C., assignor, by mesne assignments, to Federal Telegraph Company. Radio transmission system. 1,766,047; June 24.
Taylor, Charles, Beloit, Wis., assignor to Taylor Freezer Corporation, South Beloit, Ill. Freezer fountain. 1,765,747; June 24.
Taylor, Edward A., assignor, by mesne assignments, to The Grasselli Chemical Company, Cleveland, Ohio. Pigment having insecticidal and fungicidal properties and making same. 1,766,412; June 24.
Taylor Freezer Corporation. (See Taylor, Charles, assignor.)
Taylor, James H., Oak Park, Ill. Facing machine. 1,768,272; June 24.
Taylor, James S., Wynona, assignor of one-half to L. J. Mildren, Ponca City, Okla. Becket. 1,767,325; June 24.
Taylor, John C., Anaconda, Mont. Attachment for pencils. 1,767,948; June 24.
Taylor, John R., Portland, Me. Wind and rain deflector for motor-vehicle windows. 1,768,300; June 24.
Taylor, John W., Cincinnati, Ohio. Ball valve. 1,767,021; June 24.
Taylor, Leroy B., Cleveland, Ohio. Reversible window. 1,767,022; June 24.
Taylor, Russell F., Scotts, Mich. Trap. 1,766,200; June 24.
Teague, Merwyn C., Jackson Heights, N. Y., assignor to American Rubber Company, Boston, Mass. Manufacture of floor coverings and products obtained thereby. 1,765,748; June 24.
Techno-Chemical Laboratories, Limited. (See Söderlund, O., and Gram, assignors.)
Tees, Walter W. F., Brooklyn, N. Y. Combined advertising card and mailer for currency, etc. 1,766,006; June 24.
Teletype Corporation. (See Kleinschmidt, Edward E., assignor.)
Telilis, Vsevolod G., assignor to O. F. Jordan Company, East Chicago, Ind. Wing post and carriage structure for railroad spreaders. 1,765,854; June 24.
Telilis, Vsevolod G., assignor to O. F. Jordan Company, East Chicago, Ind. Wing brace arrangement for railroad spreaders. 1,765,855; June 24.
Ternstedt Manufacturing Company. (See Schnell, William, assignor.)
Terry, Roy V., Montclair, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Sound recording. 1,768,273; June 24.
Terzian, Harutyun G., assignor to The U. G. I. Contracting Company, Philadelphia, Pa. Carburetor for carbureted-water-gas apparatus. 1,767,564; June 24.
Tetro, Robert G., Grand Rapids, Mich. Drink-collecting device. 1,767,820; June 24.
Tevander, Swan N., Maywood, Ill. Sharpening punches or the like. 1,766,964; June 24.
Texas, Company, The. (See Brunow, Guinther H., assignor.)
Texas Company, The. (See de Florez, Luis, assignor.)
Texas Company, The. (See MacCoull, Neil, jr., assignor.)
Thaler, William L. (See Kacena, Albert J., assignor.)
Tharp, Victor S., Elmhurst, Ill., assignor to Reserve Holding Company, Kansas City, Mo. Connecter switch. 1,767,719; June 24.
Thayer, Reuel H., New York, N. Y., assignor to Thayer Telkee Corporation, San Francisco, Calif. Pocket key carrier. 1,766,563; June 24.
Thayer Talkee Corporation. (See Thayer, Reuel H., assignor.)
Thibodeaux, Louis K. (See Broussard, A. H., and Thibodeaux.)
Thiecke, Julius, assignor to Minimax A.-G. and Deutsche Pyrotechnische Fabriken A.-G., Berlin, Germany. Combustible mixture and preparing the same. 1,766,269; June 24.
Thiess, Karl, W. Gmelin, and K. Zahn, Hochst-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Alkaline condensation products of bz-1-ethers of benzanthrone. 1,766,413; June 24.
Thoma, Meinard F., Fitchburg, Mass. Forming spinnable silvers from artificial filaments and apparatus therefor. 1,768,221; June 24.
Thomas, Adolph A., New York, N. Y. Electric phonograph. 1,765,707; June 24.
Thomas, Adolph A., New York, N. Y. Electric phonograph. 1,766,206; June 24.
Thomas, Adolph A., New York, N. Y. Thermostat. 1,766,965; June 24.

Thomas, Adolph A., New York, N. Y. Loud-speaker. 1,767,777; June 24.
Thomas, Adolph A., New York, N. Y. Electric transmitter. 1,768,168; June 24.
Thomas, David W., Youngstown, Ohio. Apparatus for making flanged metal spiders. 1,765,807; June 24.
Thomas, George B., and H. A. Coons, Duluth, assignors to M. F. Patterson Dental Supply Co., St. Paul, Minn. Centrifugal casting machine. 1,767,023; June 24.
Thomas, George H., Walla Walla, Wash. Gate. 1,756,564; June 24.
Thomas, Joseph C., and W. H. Bines, assignors to The Firestone Tire and Rubber Company, Akron, Ohio. Device for repairing inner tubes or the like. 1,768,345; June 24.
Thomas, Lawrence W., Marion, S. C. Peanut roaster. 1,766,846; June 24.
Thomas, Paul, New Cologne, Berlin, and F. Fischer, Charlottenburg, Berlin, assignors to Siemens & Halske Aktiengesellschaft, Siemensstadt, near Berlin, Germany. Inductance device for loading phantom circuits. 1,768,274; June 24.
Thomas, Thomas E., Ogden, Utah. Electromagnetic rotary motor. 1,767,158; June 24.
Thomas, Thomas H., Edgewood, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Automatic train-control equipment. 1,765,509; June 24.
Thompson Bros. Boat Mfg. Co. (See Thompson, Peter, assignor.)
Thompson Bros. Shoe Co. (See Richardson, F. L., and Macdonald, assignors.)
Thompson, Charles C., Glendale, Calif. Determining the dip of strata. 1,766,202; June 24.
Thompson, Charles E., and R. E. Bissell, assignors to Thompson Products Inc., Cleveland, Ohio. Making poppet valves. 1,767,415; June 24.
Thompson, Earl A., assignor to General Motors Corporation, Detroit, Mich. Disk clutch. 1,768,346; June 24.
Thompson, Fred C., Detroit, Mich., assignor to Morse Chain Company. Change-speed device. 1,766,414; June 24.
Thompson, Fred C., Detroit, Mich., assignor to Morse Chain Company, Ithaca, N. Y. Gear transmission. 1,766,415; June 24.
Thompson, Harlan, Benicia, assignor to Yuba Manufacturing Company, San Francisco, Calif. Cooling system for marine engines. 1,765,637; June 24.
Thompson, Peter, assignor to Thompson Bros. Boat Mfg. Co., Peshtigo, Wis. Method and apparatus for the manufacture of boats. 1,767,101; June 24.
Thompson Products, Incorporated. (See Spire, W. H., and Bissell, assignors.)
Thompson Products Inc. (See Thompson, C. E., and Bissell, assignors.)
Thompson, Raymond J. (See Clement, E. B., and Thompson.)
Thompson, Robert, Plainfield, N. J. Turntable. 1,768,014; June 24.
Thompson, Thomas V., Beloit, Wis. Disk-grinding wheel. 1,767,821; June 24.
Thompson, Wayne B., Winchester, Mass. Apparatus or tool for applying coating. 1,767,822; June 24.
Thomsen, Peter, deceased, by R. Krummacher, administrator, Cassel, assignor to Schmidt'sche Heissdampf-Gesellschaft mit Beschränkter Haftung, Cassel-Wilhelmshohe, Germany. Superheating system for fire-tube boilers. 1,768,160; June 24.
Thormann, Albert F. W., Pittsburgh, Pa. Copper-coated wire rope. 1,766,201; June 24.
Thorne, Carl B., Hawkesbury, Ontario, Canada. Mixing machine. 1,767,102; June 24.
Thornton, John E. (See Romer, James F., assignor.)
Thrift, Merton B., and F. E. Planett, assignors to Planett Mfg. Co., Oakland, Calif. Furring device. 1,767,565; June 24.
Thrower, Marion R., Tuckerman, assignor of one-half to H. Hall, Tuckerman, Jackson County, Ark. Clipper. 1,766,270; June 24.
Thurm, Richard, assignor to Baker Perkins Company, Saginaw, Mich. Gas-firing system. 1,765,540; June 24.
Tibbetts, Milton, assignor to Packard Motor Car Company, Detroit, Mich. Oil filter for internal-combustion engines. 1,766,847; June 24.
Tibbetts, Milton, assignor to Packard Motor Car Company, Detroit, Mich. Shock absorber. 1,766,848; June 24.
Tibbetts, Milton, assignor to Packard Motor Car Company, Detroit, Mich. Brake mechanism. 1,766,849; June 24.
Tice, Francis A. (See Johnston, L., and Tice.)
Tietjen, Henry. (See Weber, J., and Tietjen.)
Tillotson Manufacturing Company, The. (See McKinley, Charles W., assignor.)
Timken Roller Bearing Company, The. (See Boden, Ernest G., assignor.)
Timmons, Charles W., Lapel, Ind. Alarm switch for automobiles, safes, and the like. 1,767,326; June 24.
Tingle, J. Grady. (See Bentley, Warren H., assignor.)
Tinsley, John F., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Thread holder for weft-replenishing looms. 1,766,850; June 24.
Tinsley, John F., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Resilient thread holder for weft-replenishing looms. 1,766,851; June 24.
Tinsley Rolling Mills Company Limited, The. (See Pinches, Arthur E., assignor.)
Tittle, Walter, Philadelphia, Pa. Dispensing device. 1,767,491; June 24.
Titus, Harry W. (See Herrick, H. T., May, and Titus.)
Tobin, Kenneth J. (See Madland, G., and Tobin.)
Tobin, Kenneth J., W. A. Beauchamp, and C. R. Vegren, assignors to Camel Company, Chicago, Ill. Securing means. 1,768,170; June 24.
Todd, Ulysses G., assignor to The Pfaudler Co., Rochester, N. Y. Pump. 1,766,852; June 24.
Todd, Ulysses G., assignor to The Pfaudler Co., Rochester, N. Y. Pumping apparatus. 1,766,853; June 24.
Todd, Ulysses G., assignor to The Pfaudler Co., Rochester, N. Y. Liquid-extracting means. 1,767,625; June 24.
Toledo Scale Company. (See Hapgood, Clarence H., assignor.)
Toledo Scale Company. (See Hem, Halvor O., assignor.)
Toledo Scale Company. (See Reeves, Orwell C., assignor.)
Toledo Scale Manufacturing Company. (See Hurt, Samuel N., assignor.)
Toms, Barney, assignor to Dain Manufacturing Company of Iowa, Ottumwa, Iowa. Hay loader. 1,768,171; June 24.
Tone, Frank J., assignor to The Carborundum Company, Niagara Falls, N. Y. Surfacing apparatus. 1,765,808; June 24.
Tonelli, Ethil, Fall River, assignor to The Pairpoint Corporation, New Bedford, Mass. Sheet-winding machine. 1,765,779; June 24.
Toolan, John J. (See Golinick, P. A., Toolan, and Harred.)
Touchelay, René, La Calle, Algeria. Automatic thermic ignition device for internal-combustion engines. 1,768,382; June 24.
Townsend, Arthur J. (See Naugle, H. M., and Townsend.)
Townsend, James R. (See Johnston, John, jr., assignor.)
Townsend, Ralph H. (See Hawley, J. B., and Townsend.)
Townsend, Ralph H., Mount Vernon, N. Y., assignor to The Brunswick-Balke-Collender Company, Wilmington, Del. Sound recording and reproducing apparatus. 1,765,889; June 24.
Towsley, John T., Manufacturing Company. (See Pfau, William F., assignor.)
Track Specialties Company. (See Triana, Jorge, assignor.)
Trafton, William M., Providence, R. I., and J. Armstrong, Allston, assignors to American Moistening Company, Boston, Mass. Humidifier. 1,765,780; June 24.
Trager, Benjamin, Bronx, N. Y. Brief bag. 1,768,496; June 24.
Tratsch, Walter A., Chicago, Ill. Control mechanism for vending machines. 1,766,152; June 24.
Tratsch, Walter A., Chicago, Ill. Coin-controlled release for mechanisms. 1,766,203; June 24.
Traut, Clifford, assignor to The Higgin Manufacturing Company, Newport, Ky. Drawbar for screens. 1,766,730; June 24.
Traver, Harry G., Beaver Falls, Pa. Amusement ride. 1,767,626; June 24.
Traver, Harry G., Beaver Falls, Pa. Amusement railway. 1,767,627; June 24.
Trbojevich, Nikola, Highland Park, Mich. Sliding gear and synebronizing the same. 1,766,153; June 24.
Treloar, Daniel E., Seattle, Wash. Hair clasp. 1,767,720; June 24.
Tremont Products Corporation. (See Smith, Raymond D., assignor.)
Trent Process Corporation. (See Trent, Walter E., assignor.)
Trent, Walter E., assignor to Trent Process Corporation, New York, N. Y. Carbonizing coal. 1,767,778; June 24.
Trent, Walter E., New York, N. Y., assignor to The Trent Process Corporation. Apparatus for producing metals from their oxide ores. 1,767,779; June 24.
Treptow, George R. (See Lehnhoff, R. A., and Treptow.)
Trew, Arthur S., assignor to Burroughs Adding Machine Company, Detroit, Mich. Carriage equipment for accounting machines. 1,767,721; June 24.
Triana, Jorge, Bogota, Colombia, assignor to Track Specialties Company, New York, N. Y. Portable tie-boring machine. 1,767,327; June 24.
Trico Products Corporation. (See Folbert, Frederick G. and W. M., assignors.)
Trico Products Corporation. (See Oishei, John R., assignor.)
Tridex Corporation. (See Wier, Stuart A., assignor.)
Triller, Benjamin J., Dubuque, Iowa. Door-concealed ironing board. 1,766,154; June 24.
Tripen Manufacturing Co. (See Coby, George, assignor.)
Triplett, Armstead E., Dallas, Tex. Method for cooking food. 1,768,172; June 24.
Trogner, Arthur M., East Orange, N. J., assignor, by mesne assignments, to Federal Telegraph Company. Current transformer for high-frequency currents. 1,766,048; June 24.
Trogner, Arthur M., East Orange, N. J., assignor, by mesne assignments, to Federal Telegraph Company. High-frequency contact device. 1,766,049; June 24.
Trogner, Arthur M., Takoma Park, Md., assignor, by mesne assignments, to Federal Telegraph Company. Electrical condenser. 1,766,565; June 24.
Trotter, Fred. (See Pfeffer, F. D., and Trotter.)

Trowbridge, William S., assignor to American Steel Foundries, Chicago, Ill. Combined body-bolster and draft-sill casting. 1,765,465; June 24.
Troxell, Joseph N., North Catasauqua, Pa. Horseshoe. 1,767,328; June 24.
Troy Laundry Machinery Company. (See Schenck, Le Roy C., assignor.)
Troyer, Nelson, assignor to Seattle Astoria Iron Works, Seattle, Wash. Outside solder horn. 1,768,015; June 24.
Troyk, Felix, Chicago, Ill., assignor to Self Locking Carton Company. Cushioned carton. 1,766,155; June 24.
Trumble, John T., Lansing, Mich., assignor to General Motors Corporation, Detroit, Mich. Tie-rod construction. 1,768,347; June 24.
Trussell, Homer A., Chicago, Ill. Fuel vaporization and induction system for internal-combustion engines. 1,766,854; June 24.
Trynoski, Kazimier J., Coldwater, N. Y. Mixing apparatus. 1,765,638; June 24.
Tucker, Ela J., National City, Calif. Tractor canopy. 1,765,639; June 24.
Tucker, Frederick E., Vancouver, British Columbia, Canada. Individual fire escape. 1,766,566; June 24.
Tucker, Gordon, Minneapolis, Minn. Door-operating device. 1,768,173; June 24.
Tucker, Herbert E., South Bend, Ind., assignor to Universal Draft Gear Attachment Co. Draft gear. 1,766,232; June 24.
Tucker, Herbert E., South Bend, Ind., assignor to Universal Draft Gear Attachment Co. Draft gear. 1,766,233; June 24.
Tucker, Herbert E., South Bend, Ind., assignor to Universal Draft Gear Attachment Co. Draft gear. 1,766,234; June 24.
Turbine Patents Corporation. (See Klimek, Gustav A., assignor.)
Turner, Henry, Kerry, Oreg. Mechanical pencil. 1,766,271; June 24.
Turner, Richard G., assignor to Crompton & Knowles Loom Works, Worcester, Mass. End-holding means for weft-replenishing looms. 1,766,731; June 24.
Turner, Richard G., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Disposal device for ejected weft carriers. 1,766,732; June 24.
Twetten, Clarence H., and A. M. Hudson, Round Lake, Minn. Automobile direction-signal switch. 1,766,315; June 24.
Twitchell, Morton C., Spencerport, assignor to General Railway Signal Company, Rochester, N. Y. Railway-traffic-controlling system. 1,766,567; June 24.
Tyler, W. S., Company, The. (See Griffith, T. E., and Dodds, assignors.)
Tyler, W. S., Company, The. (See Reynolds, Morley P., assignor.)
Tzinski, Walter C., Baltimore, Md. Shelter cover for rumble seats. 1,767,159; June 24.
U. G. I. Contracting Company, The. (See Chrisman, Charles S., assignor.)
U. G. I. Contracting Company, The. (See Terzian, Harutyun G., assignor.)
U. S. Smelting Furnace Company. (See Jones, Arthur, assignor.)
Uhde, Robert. (See Hartmann, O. H., and Uhde.)
Uhde, Robert, Kassel-Wilhelmshohe, assignor to Schmidt'sche Heissdampf-Gesellschaft mit beschränkter Haftung, Kassel-Wilhelmshohe, Germany. Heat transferrer. 1,768,222; June 24.
Uhl, Arthur W., Brooklyn, assignor to Ford Instrument Company, Inc., Long Island City, N. Y. Electrical signaling device. 1,765,466; June 24.
Uhlig, Karl R., Spiegelau, Germany. Ball catching and throwing device. 1,767,232; June 24.
Uhrig, John H., Beverly, assignor to United States Cast Iron Pipe & Foundry Company, Burlington, N. J. Centrifugal pipe-mold structure. 1,767,024; June 24.
Ulrich, Carl J. (See Carlson, P. E., and Ulrich.)
Underwood-Elliott Fisher Company. (See Dobson, William A., assignor.)
Underwood Elliott Fisher Company. (See Kurowski, Alfred G. F., assignor.)
Underwood Elliott Fisher Company. (See Kurowski, A. G. F., and Lawrence, assignors.)
Underwood Elliott Fisher Company. (See Smith, Jesse A. B., assignor.)
Unger, Nathan, New York, N. Y. Annunciator. 1,767,233; June 24.
Union Draft Gear Company. (See Cardwell, J. R., and Cotton, assignors.)
Union Iron Works. (See Smith, Mark E., assignor.)
Union Metal Manufacturing Company, The. (See Frahm, C. A., and Riemenschneider, assignors.)
Union Metal Manufacturing Company, The. (See Riemenschneider, Edmund W., assignor.)
Union Special Machine Company. (See Berger, Joseph, assignor.)
Union Special Machine Company. (See Hanneman, Walter M., assignor.)
Union Special Machine Company. (See Le Vesconte, Harold J., assignor.)
Union Special Machine Company. (See Moffatt, James R., assignor.)
Union Special Maschinenfabrik G. m. b. H. (See Lutz, Friedrich, assignor.)
Union Special Maschinenfabrik G. m. b. H. (See Maier, Karl, assignor.)
Union Switch & Signal Company, The. (See Ackerly, Donald G., assignor.)
Union Switch & Signal Company, The. (See Fisher, Arthur W., assignor.)
United Autographic Register Company, The. (See Cooke, Allen B., assignor.)
United-Carr Fastener Corporation. (See Carr, Fred S., assignor.)
United-Carr Fastener Corporation. (See Crosby, Earle M., assignor.)
United-Carr Fastener Corporation. (See Hall, Charles L., assignor.)
United-Carr Fastener Corporation. (See Maynard, George S., assignor.)
United Engineering & Foundry Company. (See Johnson, Lane, assignor.)
United Reproducers Corporation. (See Bobrovsky, Igor S., assignor.)
United Reproducers Corporation. (See Hawley, J. B., and Townsend, assignors.)
United Shoe Machinery Corporation. (See Novell, Stanley P., assignor.)
United Shoe Machinery Corporation. (See Ray, Eugene J., assignor.)
United States Cast Iron Pipe & Foundry Company. (See Uhrig, John H., assignor.)
United States Gypsum Company. (See Gough, F. J., McNeil, and Pfeffer, assignors.)
United States Gypsum Company. (See Manske, F. A., and McNeil, assignors.)
United States Gypsum Company. (See Pfeffer, F. D., and Trotter, assignors.)
United States Lock and Hardware Company, The. (See Barnes, Harold S., assignor.)
Universal Draft Gear Attachment Co. (See Hall, Joseph M., assignor.)
Universal Draft Gear Attachment Company. (See Nash, Charles J., assignor.)
Universal Draft Gear Attachment Co. (See Tucker, Herbert E., assignor.)
Universal Oil Products Company, The. (See David, Aubrey D., assignor.)
Universal Oil Products Company. (See Dealttre-Seguy, Jean, assignor.)
Universal Oil Products Company. (See Egloff, G., and Benner, assignors.)
Universal Oil Products Company. (See Egloff, Gustav, assignor.)
Universal Oil Products Company. (See Fantz, Fred C., assignor.)
Universal Oil Products Company. (See Halloran, R. A., and Strout, assignors.)
Universal Oil Products Company. (See Huff, Lyman C., assignor.)
Universal Oil Products Company. (See Morrell, J. C., and Benner, assignors.)
Universal Oil Products Company. (See Morrell, J. C., and Egloff, assignors.)
Universal Optical Corporation. (See Beattey, Earle J. R., assignor.)
Universal Optical Corporation. (See Marciano, Gerado F., assignor.)
Universal Optical Corporation. (See Nelson, John N., assignor.)
"Universelle" Cigarettenmaschinen-Fabrik J. C. Müller & Co. (See Jähne, Ernst H., assignor.)
"Universelle" Cigaretten-Maschinen-Fabrik J. C. Müller & Co. (See Voigt, Robert W., assignor.)
Unwin, Kenneth J., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Loom picker-rod spindle support. 1,766,733; June 24.
Updegraff, William B., Elizabeth, N. J., assignor to The Watson-Stillman Co., New York, N. Y. Erector for tunnel linings. 1,766,568; June 24.
Updike, James W., assignor to Marmon Motor Car Company, Indianapolis, Ind. Driving clutch. 1,767,566; June 24.
Urban, Emil. (See Stewart, O. V., and Urban.)
Urfer, Charles, Geneva, Switzerland, assignor to Société d'Etudes Minières et Industrielles, Paris, France. Manufacture of ammonia. 1,767,780; June 24.
Urschel, William E., Valparaiso, Ind. Bean snipper. 1,765,952; June 24.
Urschel, William E., Valparaiso, Ind. Berry-cleaning device. 1,765,953; June 24.
Urton, William C., Roswell, N. Mex. Air-pressure gauge. 1,768,275; June 24.
Utility Manufacturing Co. (See Hutchen, Edward, assignor.)
Uvalde Rock Asphalt Company. (See Alvey, G. H., and Young, assignors.)
Valdin, John. (See Savage, P. L., and Rhodes, assignors.)
Valentine, Percy W. (See Pickett, Lyman O., assignor.)
Valentine, William A., assignor to Edward G. Budd Manufacturing Co., Philadelphia, Pa. Punching machine. 1,767,492; June 24.

Valiquette, William L., assignor to The Harris-Seybold-Potter Company, Dayton, Ohio. Paper-cutting machine. 1,766,855; June 24.
Vallier, Samuel W., Santa Monica, Calif. Garment. 1,766,272; June 24.
Van Arsdel, Wallace B., assignor to Brown Company, Berlin, N. H. Apparatus for producing nitrogen. 1,765,781; June 24.
Van Bloem, Paul S., Great Neck, assignor to Viking Products Corporation, New York, N. Y. Interchangeable-letter sign. 1,766,470; June 24.
Vance, Forrest, Champaign, Ill. Bleacher structure. 1,766,316; June 24.
Vance, Walter N., Chicago Heights, assignor, by mesne assignments, to Lyon Metal Products, Incorporated, Aurora, Ill. Rack with shallow sliding trays. 1,765,954; June 24.
Vanderbilt, R. T., Company. (See Somerville, Albert A., assignor.)
Vanderveld, Anthony, and E. Morris, assignors to Grand Rapids Store Equipment Corporation, Grand Rapids, Mich. Counter attachment. 1,767,823; June 24.
Van Deventer, Harry R., assignor to Dubilier Condenser Corporation, New York, N. Y. Power condenser and cooling means therefor. 1,768,430; June 24.
Van Dinter, George L., assignor to Mishawaka Rubber and Woolen Manufacturing Company, Mishawaka, Ind. Boot-top fastener. 1,767,722; June 24.
Van Dorn, William E., Pasadena, Calif. Gondola-car body. 1,766,856; June 24.
Van Dorn, William E., Pasadena, Calif. Metal car end. 1,766,857; June 24.
Van Dusen, Charles A., assignor to The Glenn L. Martin Company, Cleveland, Ohio. Structural material. 1,766,471; June 24.
Van Hengel, Gerrit H. (See Dorer, O. H., and van Hengel.)
Van Horne, Philip, et al. (See Olson, Samuel, assignor.)
Van Hove, Desire H., Royal Oak, assignor to L. A. Young Spring & Wire Corporation, Detroit, Mich. Seat cushion structure. 1,768,383; June 24.
Van Nortwick, John, Batavia, Ill., assignor to Appleton Manufacturing Company. Corn picking and husking machine. 1,766,348; June 24.
Van Tuyl, Frank F., Ann Arbor, Mich. System for the pasteurization of liquids. 1,765,550; June 24.
Van Valkenburgh, Cecil J. (See Van Valkenburgh, Randall T. and C. J.)
Van Valkenburgh, Randall T. and C. J., Ann Arbor and Detroit, Mich. Power transmission mechanism. 1,767,329; June 24.
Varaud, André, Geneva, Switzerland. Regulating device for clockwork-operated mechanical fuses for artillery projectiles. 1,767,493; June 24.
Varley, Thomas W., and W. C. Nein, New York, assignors to General Railway Signal Company, Rochester, N. Y. Pneumatic train control. 1,765,782; June 24.
Vasconcellos, John N., Honolulu, Hawaii. Gravity-operated figure toy. 1,768,174; June 24.
Vasilevsky, George. (See Vasilevsky, Vsevolod, assignor.)
Vasilevsky, Vsevolod, assignor of one-half to G. Vasilevsky. New York, N. Y. Fishing-tackle. 1,767,723; June 24.
Vates, Adolf, Cologne-on-the-Rhine, Germany. Device for supplying water to stone saws. 1,765,890; June 24.
Vayda, John E., Bayonne, N. J. Banking and nosing level indicator. 1,765,551; June 24.
Vegren, Conrad R. (See Tobin, K. J., Beauchamp, and Vegren.)
Vereinigte Schuhfabriken Bernels-Wessels A. G. (See Schubart, Benno, assignor.)
Vereinigte Stahlwerke Aktiengesellschaft. (See Roeckner, Martin, assignor.)
Vereinigte Stahlwerke Aktiengesellschaft. (See Werthmann, Fritz, assignor.)
Vesey, Wayne E., Plymouth, Wis., assignor to K-P-C Company, Chicago, Ill. Machine for lining boxes. 1,767,193; June 24.
Vet Products Laboratory Inc. (See Bauer, Charles, assignor.)
Vezzuso, Rocco, and J. Petrino, Brooklyn, N. Y. Toy scenic railway. 1,765,510; June 24.
Victor Talking Machine Company. (See Elliott, Harold F., assignor.)
Victor Talking Machine Company. (See Greene, Thomas T., assignor.)
Victor Talking Machine Company. (See Horning, Louis P., jr., assignor.)
Victor Talking Machine Company. (See Squibb, Lloyd Y., assignor.)
Victor Talking Machine Company. (See Wickes, Clarence S., assignor.)
Victor Talking Machine Company. (See Williams, S. T., and Greene, assignors.)
Victor Talking Machine Company. (See Williams, Selden T., assignor.)
Victor X-Ray Corporation. (See Wantz, Julius B., assignor.)
Viking Products Corporation. (See Van Bloem, Paul S., assignor.)
Villasenor, Eduardo T., New York, N. Y. Collar protector. 1,768,384; June 24.
Vincent, Jesse G., assignor to Packard Motor Car Company, Detroit, Mich. Motor vehicle. 1,766,859; June 24.
Vincent, Sidney C. (See Volkman, F. C., and Vincent.)
Vincent, Sidney C., Baltimore, Md. Electric time switch. 1,767,103; June 24.
Vincent, Sidney C., Baltimore, Md. Light-reflecting unit and means for supporting the same. 1,767,160; June 24.
Vinson, Elmer E., San Francisco, Calif. Pumping system. 1,766,156; June 24.
Vitale, Francesco. (See Restucci, Giuseppe, assignor.)
Vivas, Fernando S., assignor to International Fireproof Products Corporation, New York, N. Y. Treating wood. 1,768,175; June 24.
Vnuk, Frank J., Clarkson, Nebr. Combined portable gasoline tank and pump. 1,768,186; June 24.
Vodoz, Frederick W., assignor to Goodman Manufacturing Company, Chicago, Ill. Device for handling loose materials. 1,765,511; June 24.
Vogel, Frederick W., assignor to Brown Company, Berlin, N. H. Making carbon bisulphide. 1,765,809; June 24.
Vogel, M., A. G. Geschaftsbilicherund Metallwaren-Fabrik. (See Pohl, F., and Vogel, assignors.)
Vogel, Max. (See Pohl, F., and Vogel.)
Voigt, Robert W., assignor to the Firm Universelle Cigarettenmaschinen-Fabrik J. C. Müller & Co., Dresden, Germany. Apparatus for closing packets provided with a closure flap. 1,766,860; June 24.
Voigt, Robert W., assignor to the Firm "Universelle" Cigaretten-Maschinen Fabrik, J. C. Müller & Co., Dresden, Germany. Transferring groups of oval cigarettes. 1,767,824; June 24.
Volkman, Frederick C., and S. C. Vincent, Baltimore, Md. Flasher signal. 1,767,104; June 24.
Vollink, Simon W., Hastings, Mich. Transplanter. 1,765,467; June 24.
Vollink, Simon W., Nashville, Mich. Transplanting machine. 1,765,468; June 24.
Vollink, Simon W., Tecumseh, Mich. Transplanting machine. 1,765,469; June 24.
Vollmann, Heinrich. (See Kranzlein, G., Greune, and Vollmann.)
Vollmer, William A., Kenosha, Wis., assignor to Simmons Company, New York, N. Y. Cushioned tip. 1,767,194; June 24.
Von Frankenberg, Arthur, New York, N. Y. Waterproof receptacle. 1,766,569; June 24.
Von Frankenberg, Arthur, assignor to Frankart, Inc., New York, N. Y. Lamp or similar article. Des. 81,469; June 24.
Von Halle, Millard, Palisades Park, N. J., assignor to The Standard Corset Company, New York, N. Y. Body support and producing same. 1,768,223; June 24.
Von Maltitz, Edmund, Gary, Ind., assignor to H. A. Brassert & Company, Chicago, Ill. Gas-washing apparatus. 1,767,628; June 24.
Von Maltitz, Edmund, Gary, Ind., and F. Wille, Wilmette, Ill., assignors to H. A. Brassert & Company, Chicago, Ill. Apparatus for annealing rolled metal products. 1,765,955; June 24.
Von Reis, Lambert, Herzogenrath, Germany, assignor, by mesne assignments to The American Bicheroux Company. Cutting sheet glass. 1,765,552; June 24.
Von Staden, Hans A., and A. Berenbruch, Neurossen, and A. Höhn, Leuna-Ockendorf, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Apparatus for continuous distillation of difficultly-distillable liquids. 1,766,699; June 24.
Von Winkler Chemical Co., et al. (See Von Winkler, Walter T., assignor.)
Von Winkler, Walter T., assignor of ten one-hundredths to Von Winkler Chemical Co., forty-five one-hundredths to S. W. Weis, and forty-five one-hundredths to M. Gentile, Chicago, Ill. Window envelope. 1,766,416; June 24.
Votaw, Charles L., and C. A. Andrews, Bakersfield, Calif. Treating refractory auriferous ores. 1,766,767; June 24.
Vuilleumier, Albert, assignor to The New Departure Manufacturing Company, Bristol, Conn. Grinding machine and interchanger therefor. 1,767,416; June 24.
Vukosav, Mike P., San Francisco, Calif. Auxiliary drive for electric trucks. 1,766,163; June 24.
Wadsworth, Dwight W., Fennville, Mich. Fruit and vegetable packing machine. 1,768,276; June 24.
Waggoner, Jesse E., Hickory, N. C. Step plate for the running boards of vehicles. 1,765,891; June 24.
Wagner, George E. (See Clutter, B. C., and Wagner.)
Wagner, George E., Akron, Ohio, assignors, by mesne assignments, to Clutter-Wagner, Inc. Back-filling attachment for excavators. 1,765,892; June 24.
Wagner, George E., Akron, Ohio, and L. P. Clutter, Deer Lick, Pa., assignors, by mesne assignments, to Clutter-Wagner, Inc. Power-operated trip for excavator scoops. 1,765,893; June 24.
Wagner, Hermann, Bad-Soden-on-the-Taunus, O. Sohst, deceased, A. Sohst, administratrix, and J. Rachor, Frankfort-on-the-Main-Hochst, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Azo dyestuffs. 1,765,640; June 24.
Wait, Justin F., New York, N. Y., assignor to National Aniline & Chemical Co., Inc. Producing nonturbulent circulation of liquids. 1,765,386; June 24.
Waite Carpet Company. (See Waite, Philip C., assignor.)
Waite, Philip C., assignor to Waite Carpet Company, Oshkosh, Wis. Rug. 1,765,512; June 24.

Wakefield, Walter H., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Thread holder for weft-replenishing looms. 1,766,734; June 24.
Wakefield, Walter H., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Terry fabric with piles of different colors. 1,766,805; June 24.
Wakefield, Walter H., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Bobbin for electric weft detector. 1,766,861; June 24.
Waldes, Jindrich, New York, N. Y. Button. 1,766,204; June 24.
Wales, Charles, La Grange, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Apparatus for assembling and treating articles. 1,765,470; June 24.
Walker, Arthur L., Hinsdale, Ill. Game board. 1,768,016; June 24.
Walker Body Company. (See Wells, George W., assignor.)
Walker, Gus, Huntington, W. Va. Motor-vehicle brake. 1,768,176; June 24.
Walker, William C., New York, N. Y. Continuous centrifugal separator. 1,767,905; June 24.
Wallace, Charlton, jr., et al. (See Corey, Percival C., assignor.)
Wallace, John B., Grove City, Pa. Bale press. 1,766,570; June 24.
Wallace, John F., Shaker Heights, assignor to The Cleveland Pneumatic Tool Company, Cleveland, Ohio. Shock-absorbing strut. 1,767,105; June 24.
Walle, Ludwig S., Scotia, N. Y., assignor to General Electric Company, Electric switch. 1,768,385; June 24.
Wallis, Harry C. (See Ginzler, Frederick G., assignor.)
Walsh, Charles E., deceased, Cleveland Heights, Ohio; W. S. Walsh, administratrix. Steam trap. 1,766,966; June 24.
Walsh, Harry S., and M. H. Matheson, assignors to Murray Body Corporation, Detroit, Mich. Safety device for presses. 1,768,531; June 24.
Walsh, Winifred S., administratrix. (See Walsh, Charles E.)
Walter, Cecil M., Four Oaks, and R. G. Marsh, Birmingham, England. Gramophone and the like. 1,767,330; June 24.
Walter, Harrison B., Chicago, Ill. Fiber-board crate. 1,767,629; June 24.
Wander, Frederick, jr., New York, N. Y. Hellrotor for airplanes. 1,766,472; June 24.
Wance, George M., Red Bluff, Calif. Gun holster. 1,768,177; June 24.
Wantz, Julius B., Oak Park, assignor to Victor X-ray Corporation, Chicago. Circuit for X-ray multiple-tube stands. 1,765,641; June 24.
Wappler, Frederick C. (See Wappler, Reinhold H. and F. C.)
Wappler, Reinhold H., Yonkers, N. Y. Small-sized cystoscope. 1,767,025; June 24.
Wappler, Reinhold H., Yonkers, N. Y. Catheterizing instrument. 1,767,267; June 24.
Wappler, Reinhold H., Yonkers, and F. C. Wappler, assignors to American Cystoscope Makers, Inc., New York, N. Y. Illuminating device for diagnostic instruments. 1,767,266; June 24.
Warner, Clare. (See Welch, D. M., and Warner.)
Warner, Lawrence E., New Hartford, assignor to Savage-De Remer Corporation, New York, N. Y. Temperature control. 1,765,387; June 24.
Warp Compressing Machine Company. (See Javery, Frank B., assignor.)
Warren Brothers Company. (See Perkins, George H., assignor.)
Warren, Henry E., assignor to Warren Telechron Company, Ashland, Mass. Electric clock system. 1,767,949; June 24.
Warren, Henry E., assignor to Warren Telechron Company, Ashland, Mass. Motor rotor. 1,768,386; June 24.
Warren, Henry E., assignor to Warren Telechron Company, Ashland, Mass. Electric clock system. 1,768,431; June 24.
Warren, Roscoe F., Los Angeles, Calif. Pack tree and harness. 1,767,630; June 24.
Warren, Simon L., Quincy, Mass. Upholstery-frame attachment. 1,767,631; June 24.
Warren, Simon L., Quincy, Mass. Upholstery-frame attachment. 1,767,632; June 24.
Warren Telechron Company. (See Warren, Henry E., assignor.)
Washburn Company, The. (See Hobbs, Samuel T., assignor.)
Waterbury Tool Company, The. (See Francis, Daniel R., assignor.)
Waterbury, Webster E., Schodack, N. Y. Plotting device. 1,767,026; June 24.
Waterhouse, Herbert. (See Beckinsale, S., and Waterhouse.)
Waterman, Russell R., Long Beach, Calif., assignor to Farmers' National Bank of Greenville, Ohio, trustee, Greenville, Ohio. Cooling-fan mechanism. 1,767,027; June 24.
Waters, Harry F., St. Louis, assignor to Magnetic Organ Action Company, University City, Mo. Valve action for pipe organs. 1,767,724; June 24.
Waters, Harry F., and V. R. Brown, St. Louis, assignors to Magnetic Organ Action Company, University City, Mo. Electromagnet. 1,767,725; June 24.
Watkins, William E., assignor to Copper Plate Sheet and Tube Company, New York, N. Y. Production of metal films. 1,766,417; June 24.
Watson, Lawrence R., assignor to M. & M. Sales Mfg. Co., Inc., Portland, Oreg. Hydraulic force cup. 1,768,178; June 24.
Watson-Stillman Co., The. (See Updegraff, William B., assignor.)
Watson, William W., Jamestown, N. Y. Screen. 1,765,388; June 24.
Waitie, William M., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Brake-controlling mechanism for looms. 1,766,862; June 24.
Weaver, Thomas J., Provo, Utah. Nozzle support and spray. 1,767,161; June 24.
Webb, James A., Buffalo, N. Y. Treating belt leather. 1,765,553; June 24.
Weber, Clarence J., and R. A. Seek, assignors to National Brick Company, Chicago, Ill. Hoist. 1,766,157; June 24.
Weber, Franz N., assignor of one-half to P. Weber, jr., Dunlap, Iowa. Ditch digger. 1,767,417; June 24.
Weber, Joseph, Jersey City, and H. Tietjen, Hoboken, N. J. Peel-dusting machine for bakery purposes. 1,767,633; June 24.
Weber, Owen T., et al. (See Olson, Samuel, assignor.)
Weber, Peter, jr. (See Weber, Franz N., assignor.)
Weber, Walter P., Watertown, Wis. Fountain toothbrush. 1,768,301; June 24.
Webster, C. A., et al. (See Goff, Henry J., assignor.)
Wecker, Ernst, Heilbronn, Germany. Separating substances of dissimilar volatilities. 1,766,863; June 24.
Wedeberg, Reuben, assignor to Alemite Corporation, Chicago, Ill. Booster pump. 1,767,494; June 24.
Wehr Motor Company, The. (See Wehr, Rudolph, assignor.)
Wehr, Rudolph, Los Angeles, Calif., assignor to The Wehr Motor Company. Lubricating system. 1,766,735; June 24.
Wehr, William G., East Cleveland, assignor to The Cleveland Crane & Engineering Company, Wickliffe, Ohio. Mechanism for handling sheet metal. 1,767,268; June 24.
Weil, Louis B., assignor to Pierre Dumonde, Inc., Chicago, Ill. Make-up case. 1,767,567; June 24.
Weis Manufacturing Company, The. (See Consor, H. A., Matthes, and Wuest, assignors.)
Weis, Samuel W., et al. (See Von Winkler, Walter T., assignor.)
Weisberg, Louis, Brighton Beach, N. Y. Cigarette holder and ash receptacle. 1,766,571; June 24.
Weiss, George, Chicago, Ill. Vending machine. 1,767,634; June 24.
Weiss, George, Chicago, Ill. Coin-controlled mechanism. 1,767,635; June 24.
Weiss, Hersh, and A. Needelman, Philadelphia, Pa.; said Weiss assignor to R. Weiss. Bathing and massaging mitten. 1,766,365; June 24.
Weiss, Rose. (See Weiss, Hersh, assignor, and Needelman.)
Weissmann, Gustave, Paris, France. Electric cell. 1,766,418; June 24.
Welch, Dennis M., and C. Warner, Lansing, Mich. Can cover. 1,766,366; June 24.
Welch, Harry V., assignor to International Precipitation Company, Los Angeles, Calif. Distillation. 1,768,179; June 24.
Welch, Joe T., and J. E. McAlpine, Ten Mile Township, Whatcom County, Wash. Gridiron. 1,766,572; June 24.
Welcome, Otto. (See Hosbein, L. H., and Welcome.)
Wellensiek, Louis H., assignor to Hughes Tool Company, Houston, Tex. Core catcher. 1,765,513; June 24.
Weller, Christian, Atlantic City, N. J. Railway-roadbed construction. 1,766,367; June 24.
Weller, Daniel R., and L. Link, Baton Rouge, La., assignors to Standard Oil Development Company. Coking oils. 1,767,331; June 24.
Weller, Randolph V., Rochester, N. Y., assignor to The Dexter Company, Fairfield, Iowa. Ironing machine. 1,767,863; June 24.
Weller, Randolph V., Rochester, N. Y., assignor to The Dexter Company, Fairfield, Iowa. Ironing machine. 1,767,864; June 24.
Weller, Randolph V., Rochester, N. Y., assignor to The Dexter Company, Fairfield, Iowa. Ironing machine. 1,767,865; June 24.
Wells, Alton J., Bell, Calif. Tool box. 1,767,332; June 24.
Wells, Amos S., Minneapolis, Minn. Tooth-holding device. 1,766,234; June 24.
Wells, George W., assignor of one-half to Walker Body Company, Amesbury, Mass. Door holder. 1,768,458; June 24.
Wells, George W., assignor of one-half to Walker Body Company, Amesbury, Mass. Combined door holder and buffer. 1,768,459; June 24.
Wells, William S., Los Angeles, Calif., assignor, by mesne assignments, to Wonder Weave, Inc., Boston, Mass. Loom. 1,765,708; June 24.
Welsch, Egon, Berlin-Britz, Germany. Automatic locking plant for vehicle doors. 1,768,224; June 24.
Welt, Frank L., deceased; H. L. Welt, administrator, assignor to F. G. Kingston, C. C. Pimm, M. G. Kitchen, Somerville, and A. R. Kingston, Arlington, Mass., doing business as Builders Patent Scaffolding Company. Putlog. 1,167,333; June 24.

Welt, Howard L., administrator. (See Welt, Frank L.)
Wendler, Adolph F., Buffalo, assignor to National Aniline & Chemical Co., Inc., New York, N. Y. Filter press. 1,765,389; June 24.
Wensley, Roy J., Edgewood, Pa., assignor to Westinghouse Electric & Manufacturing Company. Televox controller and supervisor. 1,765,471; June 24.
Wensley, Roy J., Edgewood, Pa., assignor to Westinghouse Electric & Manufacturing Company. Talking televox. 1,765,554; June 24.
Wente, Edward C., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Electrodynamic device. 1,766,473; June 24.
Werkenthin, Theodore A., assignor to The Solar Refining Company, Lima, Ohio. Process and apparatus for the fractional extraction of petroleum hydrocarbons with alcohol. 1,766,768; June 24.
Werner, Edward A., Atlanta, Ga. Joining dissimilar bodies. 1,768,180; June 24.
Werner, Karl, Nuremberg-Eibach, assignor to Progress Gesellschaft fuer Textilmaschinen mit beschraenkter, Haftung, Nuremberg, Germany. Loom-operating device. 1,767,906; June 24.
Werotte, Séraphin, Auvelais, Belgium, assignor, by mesne assignments, to The American Bicheroux Company. Method and apparatus for conveying strips, sheets, or plates of glass. 1,767,907; June 24.
Wershinin, Georg P., Moscow, Union of Soviet Socialist Republics. Double draft arrangement for spinning flax, jute, and similar fiber. 1,766,864; June 24.
Werthmann, Fritz, Duisburg-Ruhrort, assignor to the firm Vereinigte Stahlwerke Aktiengesellschaft, Dusseldorf, Germany. Crossing composed of Vignoles rails. 1,765,856; June 24.
Wertz, Austin L., Lakewood, Ohio. Display device for dispensing pumps. 1,765,956; June 24.
Wertz Company, The. (See Wertz, Louis S., assignor.)
Wertz, Louis S., Shaker Heights, assignor to The Wertz Company, Cleveland, Ohio. Apparatus for treating masonry surfaces. 1,766,419; June 24.
Wescott, William B., Dover, assignor to Rubber Latex Research Corporation, Boston, Mass. Tread stock and making the same. 1,767,234; June 24.
Wescott, William B., assignor to Rubber Latex Research Corporation, Boston, Mass. Composite rubber articles of graded properties and method of making the same. 1,768,346; June 24.
Wessman, Edwin G., Easton, Pa., and H. A. Stone, Bogota, N. J., assignors to Individual Drinking Cup Company, Inc., Easton, Pa. Paper-cup-making machine. 1,766,420; June 24.
Westbrook, William E., Tiffin, Ohio. Table and lap drawing and reading stand. 1,767,950; June 24.
Westcott, C. M. (See Cavanagh, Hubert L., assignor.)
Westerberg, Jennie M., Boring, Oreg. Strainer for milk pails. 1,767,269; June 24.
Western Electric Company. (See Adams, Arthur H., assignor.)
Western Electric Company. (See Aldendorff, Fritz, assignor.)
Western Electric Company. (See Barrans, William T., assignor.)
Western Electric Company. (See Bracke, Oscar, assignor.)
Western Electric Company. (See Cook, William J., assignor.)
Western Electric Company. (See Elmen, Gustaf W., assignor.)
Western Electric Company. (See Englund, Carl R., assignor.)
Western Electric Company. (See Fruth, Hal F., assignor.)
Western Electric Company. (See Green, Charles W., assignor.)
Western Electric Company. (See Griffin, Dana A., assignor.)
Western Electric Company. (See Harrison, Henry C., assignor.)
Western Electric Company. (See Howard, R. S., Brodie, and Westhafer, assignors.)
Western Electric Company. (See Hurford, G., and Kipping, assignors.)
Western Electric Company. (See Jespersen, Helgo W., assignor.)
Western Electric Company. (See Lundell, A. E., and Clark, assignors.)
Western Electric Company. (See Malone, H. E., and Pryor, assignors.)
Western Electric Company. (See Mathes, Robert C., assignor.)
Western Electric Company. (See McCann, Paul S., assignor.)
Western Electric Company. (See McFarland, Robert E., assignor.)
Western Electric Company. See McMullan, S., and Schulz, assignors.)
Western Electric Company. (See Oswald, A. A., and Schelleng, assignors.)
Western Electric Company. (See Pritchard, Amos D., assignor.)
Western Electric Company. (See Ray, William H., assignor.)
Western Electric Company. (See Roman, F. L., and Winsemius, assignors.)
Western Electric Company. (See Schelleng, John C., assignor.)
Western Electric Company. (See Schenk, Rudolf, assignor.)
Western Electric Company. (See Schwerin, Paul, assignor.)
Western Electric Company. (See Siebs, Claude T., assignor.)
Western Electric Company. (See Strawn, Marion L., assignor.)
Western Electric Company. (See Wales, Charles, assignor.)
Western Electric Company. (See Whitefield, Harold B., assignor.)
Western Electric Company. (See Whittle, Horace, assignor.)
Western Electric Company. (See Wier, Harry B., assignor.)
Western States Machine Company, The. (See Roberts, Eugene, assignor.)
Western Supplies Co. (See Woodworth, Roy V., assignor.)
Western Union Telegraph Company, The. (See Milnor, J. W., and Cannon, assignors.)
Westhafer, Terrence O. (See Howard, R. S., Brodie, and Westhafer.)
Westin, Daniel B., assignor to Hartford-Empire Company, Hartford, Conn. Apparatus for handling glassware. 1,766,573; June 24.
Westin, Daniel B., and H. W. Ingle, assignors to Hartford-Empire Company, Hartford, Conn. Apparatus for handling glassware. 1,766,574; June 24.
Westinghouse, Air Brake Company. (See England, Alexander, assignor.)
Westinghouse Air Brake Company, The. (See Farmer, Clyde C., assignor.)
Westinghouse Air Brake Company, The. (See Livingston, Fremont P., assignor.)
Westinghouse Air Brake Company, The. (See McCune, Joseph C., assignor.)
Westinghouse Air Brake Company, The. (See Stewart, Carlton D., assignor.)
Westinghouse Air Brake Company, The. See Thomas, Thomas H., assignor.)
Westinghouse Air Brake Company, The. (See Winter, Harry J., assignor.)
Westinghouse Electric & Manufacturing Company. (See Bauch, Richard, assignor.)
Westinghouse Electric & Manufacturing Company. (See Boddie, Clarence A., assignor.)
Westinghouse Electric & Manufacturing Company. (See Colby, Ora A., assignor.)
Westinghouse Electric & Manufacturing Company. (See Cole, Horace L., assignor.)
Westinghouse Electric & Manufacturing Company. (See Corbett, Alfred, assignor.)
Westinghouse Electric & Manufacturing Company. (See Frampton, William R., assignor.)
Westinghouse Electric & Manufacturing Company. (See High, Jurjen S., assignor.)
Westinghouse Electric & Manufacturing Company. (See McCoy, James L., assignor.)
Westinghouse Electric and Manufacturing Company. (See McCoy, J. L., and DeCroce, assignors.)
Westinghouse Electric & Manufacturing Company. (See Morrison, Charles, assignor.)
Westinghouse Electric & Manufacturing Company. (See Mouromtseff, Ilia E., assignor.)
Westinghouse Electric & Manufacturing Company. (See Palmer, Granville E., assignor.)
Westinghouse Electric and Manufacturing Company. (See Paschen, P., and Reime, assignors.)
Westinghouse Electric & Manufacturing Company. (See Peterson, Alfred J. A., assignor.)
Westinghouse Electric & Manufacturing Company. (See Reagan, Maurice E., assignor.)
Westinghouse Electric & Manufacturing Company. (See Rosenbaum, Bruno, assignor.)
Westinghouse Electric & Manufacturing Company. (See Slepian, Joseph, assignor.)
Westinghouse Electric and Manufacturing Company. (See Stewart, O. V., and Urban, assignors.)
Westinghouse Electric & Manufacturing Company. (See Sutherlin, Lee, assignor.)
Westinghouse Electric & Manufacturing Company. (See Wensley, Roy J., assignor.)
Westinghouse Electric & Manufacturing Company. (See White, Thomas U., assignor.)
Westinghouse Electric & Manufacturing Company. (See White, T. U., and Gardner, assignors.)
Westinghouse Lamp Company. (See Hageman, A. M., and Sullivan, assignors.)
Westinghouse Lamp Company. (See Huffman, Charles E., assignor.)
Westlake, Charles T., deceased; L. A. Westlake, administratrix, St. Louis, Mo., assignor, by mesne assignments, to General Steel Castings Corporation, Granite City, Ill. Rocker bearing. 1,765,810; June 24.
Westlake, Lillian A., administratrix. (See Westlake, Charles T.)
Weston, Frederick H., Bridgeport, Conn., assignor to General Electric Company. Lamp socket. 1,768,432; June 24.
Weston, William S., Dallas, Tex. Anticreeper for railway rails. 1,767,495; June 24.
Westphalen, Leonard, Chicago, Ill. Photographer's twin-arc lamp. 1,765,957; June 24.

Wetmore, Willard C., Saybrook, and R. H. Seeley, Essex, Conn. Bed table. 1,765,514; June 24.
Wetsel, Fred R. (See King, Roy D., assignor.)
Wetzell, Carlos, Friedenau, near Berlin, and W. Inhoffen, Wilmersdorf, near Berlin, Germany, assignors to N. V. Internationale Automaten Maatschappij, la, Lange Voorhout, Den Haag, Holland. Coin-controlled vending apparatus. 1,765,894; June 24.
Weyland, Georg, Frankenthal, Germany. Multistage hot-water centrifugal pump. 1,765,895; June 24.
Weymann, Charles T., Paris, France, assignor, by mesne assignments, to Weymann Motor Bodies, Inc., Wilmington, Del. Assembling vehicle bodies. 1,767,825; June 24.
Weymann Motor Bodies, Inc. (See Weymann, Charles T., assignor.)
Wheeler, Henry H., Brooklyn, N. Y., assignor to International Cigar Machinery Company. Cigar-banding machine. 1,765,811; June 24.
Wheless, Wesley E., assignor to Allen Manufacturing Company, Shreveport, La. Package for knocked-down window-screen frames. 1,766,317; June 24.
Whitaker, Robert D., jr., Tahlequah, Okla. Hoist. 1,768,278; June 24.
White, Ann M., Brooklyn, N. Y. Mop cleaners. 1,768,277; June 24.
White, Ethel F., and M. White, Los Angeles, Calif. Blade holder. 1,765,812; June 24.
White, Frank. (See Jackson, H. D., and White.)
White, Halbert E., Tampa, Fla. Building material. 1,768,181; June 24.
White, James W., assignor of one-fourth to W. C. White, Bainbridge, Ga. Automobile power take-off device. 1,766,007; June 24.
White, John W., Buffalo, N. Y. Carburetor. 1,766,158; June 24.
White, Myron. (See White, E. F., and Myron.)
White Sewing Machine Corporation. (See Stevens, Clarence E., assignor.)
White, Sidney Y., assignor, by mesne assignments, to Radio Corporation of America, New York, N. Y. Electrical detector-amplifier circuits. 1,765,473; June 24.
White, Thomas U., Genoa, Ill., assignor, by mesne assignments, to Westinghouse Electric & Manufacturing Company. Telegraph system. 1,765,472; June 24.
White, Thomas U., Pittsburgh, Pa., assignor, by mesne assignments, to Westinghouse Electric & Manufacturing Company. Telegraph system. 1,765,553; June 24.
White, Thomas U., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Control system. 1,765,474; June 24.
White, Thomas U., Pittsburgh, and J. E. Gardner, Wilkinsburg, Pa., assignors to Westinghouse Electric & Manufacturing Company. Signaling system. 1,765,475; June 24.
White, Wallace C. (See White, James W., assignor.)
Whitemore, John, assignor to Davidson & Company Limited, Belfast, Ireland. Dust collector or separator. 1,766,237; June 24.
Whitesell, Frederick N., assignor to Fairbanks, Morse & Co., Chicago, Ill. Automatic hoisting apparatus. 1,766,236; June 24.
Whitfield, Harold B., La Grange, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Coated core and method of and apparatus for applying the coating thereto. 1,765,515; June 24.
Whitney, Eddy R., Philadelphia, Pa. Double concentric gearing. 1,768,225; June 24.
Whitney, Loren L., Hammond, Ind., assignor to American Steel Foundries, Chicago, Ill. Method of making slack adjuster screws. 1,765,516; June 24.
Whittle, Horace, assignor to Western Electric Company, Incorporated, New York, N. Y. Transmission circuits. 1,767,951; June 24.
Wichert, Alfred, Mannheim, Germany. Railway-motor control. 1,766,474; June 24.
Wichert, Alfred, Mannheim-Neuostheim, Germany, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland. Oil switch. 1,766,575; June 24.
Wick, Louis J., assignor to Wicks Pipe Organ Co., Highland, Ill. Electromagnet. 1,765,958; June 24.
Wickes, Clarence S., Merchantville, N. J., assignor to Victor Talking Machine Company. Stylus-holding means. 1,767,334; June 24.
Wicks Pipe Organ Co. (See Wick, Louis J., assignor.)
Wickwire Spencer Steel Company. (See King, Vernon C., assignor.)
Wickwire Spencer Steel Company. (See Woodman, Francis N., assignor.)
Wier, Harry B., Plainfield, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Recording of music and speech. 1,765,517; June 24.
Wier, Stuart A., assignor to Tridex Corporation, Dallas, Tex. Apparatus for cleaning surfaces. 1,766,088; June 24.
Wietzel, Gustav. (See Pier, M., Müller-Cunradi, Wietzel, and Winkler.)
Wiggins, Gaddis D., La Feria, Tex. Churn. 1,768,387; June 24.
Wigle, Wilson B., Compton, Calif. Oil-well fishing tool. 1,766,368; June 24.
Wilcox, Homer R., Quaker City, Ohio. Plasterer's corner-bead setter. 1,767,335; June 24.
Wilcox, Joseph, jr., assignor to Wilcox Novelty Company, Athol, Mass. Clock movement and dial supporting means. 1,766,806; June 24.
Wilcox Novelty Company. (See Wilcox, Joseph, jr., assignor.)
Wilcox, Walton A., assignor of one-half to H. H. Hamill, Rochester, N. Y. Toy. 1,766,008; June 24.
Wilder, Laurence R., assignor to American Brown Boveri Electric Corporation, New York, N. Y. Insulator structure. 1,766,576; June 24.
Wildhaber, Ernest, Brooklyn, N. Y. Gearing. 1,767,866; June 24.
Wildhaber, Ernest, Brooklyn, N. Y. Gear. 1,767,867; June 24.
Wiles, Charles L., Detroit, Mich., assignor to Budd Wheel Company, Philadelphia, Pa. Feeding device for rim-rolling machines. 1,767,826; June 24.
Wiley, Nathaniel T. (See Hersee, F. C., and Wiley.)
Wilhelm, Rudolf, Essen-Altenessen, assignor to A. Beckers, Cologne-Kalk, Germany. Sealing means for coke-oven doors. 1,765,642; June 24.
Wilhjelm, Christian, Philadelphia, Pa. Periodic circuit maker for electric ovens. 1,767,636; June 24.
Wilhjelm, Christian, Philadelphia, Pa. Temperature-control apparatus. 1,767,637; June 24.
Wilke, Wilhelm. (See Müller-Cunradi, M., and Wilke.)
Wilkinson, George H. (See Muir, John, assignor.)
Wilkinson, John, Syracuse, N. Y. Rotary valve mechanism for internal-combustion engines. 1,765,556; June 24.
Wilkinson, Robert W. (See Hunt, C. M., and Wilkinson.)
Will, Heinrich, Usingen, Taunus, Germany. Whitening knife for treating leather. 1,766,159; June 24.
Willans, Peter W., Pattishall, Towchester, England. Thermionic valve circuits. 1,768,182; June 24.
Willard Storage Battery Company. (See Marko, Paul M., assignor.)
Willard Storage Battery Company. (See Willard, Theodore A., assignor.)
Willard, Theodore A., Cleveland Heights, assignor to Willard Storage Battery Company, Cleveland, Ohio. Container for power units. 1,767,195; June 24.
Wille, Fredrik. (See von Maltitz, E., and Wille.)
Willett, Charles C. (See Dean, George E., assignor.)
Williams, Claude W., Pawhuska, Okla. Golf-stroke-registering device. 1,765,518; June 24.
Williams Company, The. (See Robbins, William H., assignor.)
Williams, Ernest, et al. (See Holmes, Daniel T., assignor.)
Williams, Frank A. (See Newman, H. F., and Williams.)
Williams, G. H., Company. (See Harrington, Edward L., assignor.)
Williams, George A., Los Angeles, Calif. Water-sprinkling device. 1,767,028; June 24.
Williams, Harold E., Carthage, Mo. Awning for automobiles. 1,766,769; June 24.
Williams, Harry M., and A. L. Boegehold, assignors to General Motors Research Corporation, Dayton, Ohio. Alloy structure. 1,766,865; June 24.
Williams, James F., assignor to Ramp Buildings Corporation, New York, N. Y. Building. 1,766,475; June 24.
Williams, Kenneth G., St. Paul, Minn. Electric bell-sounding device for clocks. 1,766,160; June 24.
Williams, Selden T., Woodbury, N. Y., assignor to Victor Talking Machine Company. Sound amplification. 1,768,226; June 24.
Williams, Selden T., Woodbury, and T. T. Greene, Collingswood, assignors to Victor Talking Machine Company, Camden, N. J. Lid hinge and support. 1,767,336; June 24.
Williams, William S. (See Kistner, F. J., and Williams.)
Williams, William W., Lubbock, Tex., assignor to The Federal Supply Company. Gas regulator. 1,766,274; June 24.
Williamson Heater Company, The. (See Doyle, William J., assignor.)
Williamson, Richard, assignor, by mesne assignments, to Beardslee Chandelier Manufacturing Co., Chicago, Ill. Lighting fixture. 1,767,418; June 24.
Williamson, Richard, assignor, by mesne assignments, to Beardslee Chandelier Manufacturing Co., Chicago, Ill. Lighting fixture. 1,767,419; June 24.
Willing, Joseph E., assignor to General Railway Signal Company, Rochester, N. Y. Relay-mounting means. 1,766,577; June 24.
Willoughby, Victor. (See Knight, J. M., and Willoughby.)
Wills, Thomas H., Minneapolis, Minn. Anchor hoist. 1,767,568; June 24.
Willsea, Jasper B., assignor to Willsea Works, Rochester, N. Y. Clip for sheet material. 1,768,497; June 24.
Willsea, Jasper B., assignor to Willsea Works, Rochester, N. Y. Sheet-drying process and apparatus. 1,768,498; June 24.
Willsea Works. (See Willsea, Jasper B., assignor.)
Wilmoth, John J., and A. Moos, Lincoln, Ill. Railway-crossing gate. 1,768,388; June 24.
Wilms, Henry F., Cleveland, assignor, by mesne assignments to The Jaeger Machine Company, Columbus, Ohio. Water-measuring device for concrete mixers. 1,765,476; June 24.
Wilson, Albert A., and A. D. Robertson, Minneapolis, Minn. Shock-absorbing device for automobiles. 1,766,318; June 24.

Wilson, Broadus, Raleigh, N. C. Play airway for amusement purposes. 1,767,496; June 24.
Wilson, Charles G., assignor to Service Station Equipment Company, Bryan, Ohio. Apparatus for supplying air under pressure. 1,767,337; June 24.
Wilson, Ellsworth M., Montclair, N. J., assignor to Wilson Imperial Company, Newark, N. J. Car-cushion-cleaning machine. 1,767,420; June 24.
Wilson, Henry W. (See Czemba, F. C., and Wilson.)
Wilson Imperial Company. (See Wilson, Ellsworth M., assignor.)
Wilson, Robert E., Chicago, Ill., assignor to Standard Oil Company, Whiting, Ind. Vapor outlet for stills. 1,767,196; June 24.
Wilt, Wakefield M. (See Hupp, Charles A., assignor.)
Wine, William E., Toledo, Ohio. Geared hand brake for freight cars. 1,766,273; June 24.
Wine, William E., Toledo, Ohio. Brake mechanism. 1,768,183; June 24.
Wine, William E., Toledo, Ohio. Car-door mechanism. 1,768,227; June 24.
Wine, William E., Toledo, Ohio. Car-door mechanism. 1,768,302; June 24.
Wine, William E., Toledo, Ohio. Railway car. 1,768,389; June 24.
Wing, Roy E., Highland Park, Mich. Automatic ignition-cut-off control for engine idling. 1,768,390; June 24.
Wingler, August. (See Schulemann, W., Wingler, and Mietzsch.)
Winkler, Aaron, Bronx, and C. Miller, Long Island City, New York; said Winkler assignor to said Miller. Molding machine. 1,767,106; June 24.
Winkler, Alfred, and Max Dünnebier, Neuwied, Germany. Apparatus for unpowdering sugar bodies. 1,766,967; June 24.
Winkler, Karl. (See Pier, M., Müller-Cunradi, Wietzel, and Winkler.)
Winsemius, Harry T. (See Roman, F. L., and Winsemius.)
Winter, Harry J., London, England, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Fluid-pressure brake system. 1,765,390; June 24.
Wintermute, Harry A., New York, N. Y., and C. W. J. Hedberg, Middlesex Borough, N. J., assignors to Research Corporation, New York, N. Y. Electrical precipitation. 1,766,421; June 24.
Wintermute, Harry A., Plainfield, N. J., and C. W. J. Hedberg, Middlesex, Borough, N. J., assignors to Research Corporation, New York, N. Y. Method and apparatus for electrical precipitation. 1,766,422; June 24.
Winthrop Chemical Company. (See Lieske, R., and Schepss, assignors.)
Winthrop Chemical Company. (See Schmidt, Hans, assignor.)
Winthrop Chemical Company. (See Schulemann, W., Wingler, and Mietzsch, assignors.)
Wireless Specialty Apparatus Company. (See Priess, William H., assignor.)
Wirtel, Arthur F. (See De Groote, M., Monson, and Wirtel.)
Wirtel, Arthur F. (See De Groote, M., and Wirtel.)
Wirth, Johann K., Berlin-Wilmersdorf, Germany. Producing chemically-stable articles. 1,767,421; June 24.
Wirz, Ernst. (See Küntze, K., Hiller, and Wirz.)
Withington, Winthrop, assignor to The American Fork & Hoe Company, Cleveland, Ohio. Making progressively-reduced tubes. 1,765,709; June 24.
Witter, Lawrie L., Jamaica Plain, Mass. Dirigible headlight. 1,765,813; June 24.
Woerz, Frederick, Weehawken, N. J. Sign. 1,767,726; June 24.
Wohl, Maurice J., Long Island City, N. Y. Multiple hand arc lamp. 1,767,029; June 24.
Wolff, Alfred E., Kansas City, Mo. Valve. 1,768,184; June 24.
Wolhaupter, David P., and E. L. Groff, Washington, D. C. Rail-joint bar. 1,768,301; June 24.
Wollaston, Thomas R., Manchester, England. Gas producer and combined furnace. 1,767,952; June 24.
Wonder Weave, Inc. (See Wells, William S., assignor.)
Wood, A. J., Grand Rapids, Mich. Treadmill exercising device. 1,766,089; June 24.
Wood, Albert C., Philadelphia, and T. Hall, Harrisburg, Pa. Apparatus for manufacturing frozen confections. 1,765,710; June 24.
Wood, Clarence G. (See Ferguson, G. L., and Wood.)
Wood, Clarence G., assignor, by mesne assignments, to Auto Prime Pump Company, Cleveland, Ohio. Air pump. 1,768,279; June 24.
Wood, Henry A. W., assignor to Wood Newspaper Machinery Corporation, New York, N. Y. Cutting cushion for folding cylinders. 1,766,807; June 24.
Wood, Joseph E., assignor, by mesne assignments, to Fout Advertising Corporation, Detroit, Mich. Advertising device. 1,768,303; June 24.
Wood Newspaper Machinery Corporation. (See Wood, Henry A. W.)
Woodford, Watson H. (See Leckie, H. V., and Woodford.)
Woodford, Watson H., Bridgeport, Conn., assignor to Remington Arms Company, Inc. Manufacture of paper tubes. 1,767,827; June 24.
Woodjard, Guy L., San Diego, assignor to Economy Products Corporation, Los Angeles, Calif. Paper and plaster foundation-supporting device. 1,768,532; June 24.
Woodman, Francis N., Clinton, Mass., assignor to Wickwire Spencer Steel Company, New York, N. Y. Selvaged wire conveyer belt. 1,766,736; June 24.
Woodman, Francis N., Clinton, Mass., assignor to Wickwire Spencer Steel Company, New York, N. Y. Conveyer belt. 1,766,737; June 24.
Woodman, Joseph C., Brooklyn, assignor to Decarie Incinerator Corporation, New York, N. Y. Incinerator grate. 1,767,030; June 24.
Woods, James O., Cheyenne, Wyo. Saw set. 1,766,009; June 24.
Woods, Walter T., Long Beach, assignor, by mesne assignments, to Byron Jackson Co., San Francisco, Calif. Rock drill. 1,766,578; June 24.
Woodsome, John O., Detroit, Mich. Pressure-regulating valve. 1,767,270; June 24.
Woodson, William C., Jr., Brooklyn, N. Y. Producing speeds proportional to variations in static force. 1,766,579; June 24.
Woodworth, Roy V., assignor to Western Supplies Co., St. Louis, Mo. Marking machine. Re17,715; June 24.
Woolson, Lionel M., assignor to Packard Motor Car Company, Detroit, Mich. Motor vehicle. 1,766,866; June 24.
Woolson, Lionel M., assignor to Packard Motor Car Company, Detroit, Mich. Internal-combustion engine. 1,766,867; June 24.
Woolson, Lionel M., assignor to Packard Motor Car Company, Detroit, Mich. Internal-combustion engine. 1,766,868; June 24.
Woolson, Lionel M., assignor to Packard Motor Car Company, Detroit, Mich. Hydrocarbon motor. 1,767,422; June 24.
Woolson, Lionel M., assignor to Packard Motor Car Company, Detroit, Mich. Hydrocarbon motor. 1,768,185; June 24.
Worcester, Richard H., Honolulu, Hawaii. Safety coupler. 1,765,959; June 24.
Wörsching, Richard, Starnberg, Germany. Obtaining very sharp photographs with free cameras. 1,766,090; June 24.
Worthington Pump and Machinery Corporation. (See Dorer, O. H., and Van Hengel, assignors.)
Worthington, Wayne H., Battle Creek, Mich. Intake manifold. 1,767,031; June 24.
Wörtmann, Franz, assignor to Société Anonyme des Ateliers de Secheron, Geneva, Switzerland. Regulating transformer for arc welding by alternating current. 1,767,497; June 24.
Wozasek, Oscar J. (See Guthrie, R. G., and Wozasek.)
Wratten, Walter F., Fairbury, Nebr. Track-bed sprayer. 1,767,828; June 24.
Wray, Edward N. (See Bashor, E. E., and Wray.)
Wrenn, John O., Chicago, Ill. Condenser. 1,765,960; June 24.
Wrentmore, George W. (See Godfrey, E. L., and Wrentmore.)
Wright, Charles H., Mount Vernon, Ohio, assignor to Pittsburgh Plate Glass Company. Apparatus for separating glass sheets. 1,765,814; June 24.
Wright, James E., Los Angeles, Calif. Vehicle. 1,767,032; June 24.
Wright, James E., Los Angeles, Calif. Vehicle steering apparatus. 1,767,033; June 24.
Wright, Kirk K., Kenmore, N. Y. Apparatus for cleaning bottles. 1,765,557; June 24.
Wuest, Albert G. (See Consor, H. A., Matthes, and Wuest.)
Wunderlich, Albert M. (See Carmichael, A. J., and Wunderlich.)
Wyman-Gordon Company. (See Damerell, Mark H., assignor.)
Wyman, Robert E., Billerica, Mass. Portable hoist. 1,766,968; June 24.
Wyndham, John H., Leicester, assignor to Dale Forty and Company, Limited, Birmingham, England. Wheel skate or the like. 1,768,228; une 24.
Xylos Rubber Company, The. (See MacFarlane, Walter C., assignor.)
Yackley, Julius, Spokane, Wash. Combination cultivator, weeder, and pulverizer. 1,767,162; June 24.
Yagoda, Rudolph, Old Forge, Pa. Battery connecter. 1,768,017; June 24.
Yaholnitsky, Metro, Rhein, Saskatchewan, Canada. Leaf-turning device. 1,768,018; June 24.
Yankee Metal Products Corp. (See Putterman, Benjamin, assignor.)
Yassenoff, Isidor, Detroit, Mich. Device for equalizing stresses. 1,765,749; June 24.
Yates, Frederick C., New York, N. Y. Ball retainer for antifriction bearings. 1,767,107; June 24.
Yawman & Erbe Manufacturing Co. (See Schulz, George W., assignor.)
Yellow Truck & Coach Manufacturing Co. (See Schjolin, Eric O., assignor.)
Yerges Manufacturing Company, The. (See Zimmerman, Harry, assignor.)
Yerk, Henry H., and W. J. Baumberger, Davenport, Iowa, assignors to Micro Machine Company, Bettendorf, Iowa. Grinding machine. 1,766,161; June 24.
Yetter, Edward J., Denver, Colo. Garter or stocking supporter. 1,765,815; June 24.
Yewdall, Clifford, Great Neck, N. Y. Matrix for composing machines. 1,767,829; June 24.

Yirkosky, Nicholas. (See Kudrna, F., jr., and Yirkosky.)
Young, Bernard, San Pedro, Calif. Piston ring. 1,767,498; June 24.
Young Bernard, San Pedro, Calif. Piston ring. 1,768,470; June 24.
Young Brothers Company. (See Fox, Vernie A., assignor.)
Young, Ernest A. (See Alvey, G. H., and Young.)
Young, George W., London, England. Antidazzle screen for motor vehicles. 1,766,162; June 24.
Young, Howard P., assignor to F. F. Slocomb & Co., Inc., Wilmington, Del. Leather-measuring machine. 1,767,499; June 24.
Young, L. A., Spring & Wire Corporation. (See Van Hove, Desire H., assignor.)
Young, Leo C., Washington, D. C., assignor, by mesne assignments, to Federal Telegraph Company. Multiphase cornet system. 1,766,050; June 24.
Young, Ross W., Oakland, Calif. Pliers. 1,765,783; June 24.
Young, W. J., Machinery Company. (See Young, William J., assignor.)
Young, William J., Peabody, assignor to W. J. Young Machinery Company, Lynn, Mass. Machine for making counters. 1,768,499; June 24.
Yuba Manufacturing Company. (See Thompson, Harlan, assignor.)
Zaidan Hojin Rika Gaku Kenkyujo. (See Suzuki, T., and Sakurai, assignors.)
Zahn, Karl. (See Mayer, F., and Zahn.)
Zahn, Karl. (See Thiess, K., Gmelin, and Zahn.)
Zalesky, Frank J., Buckholts, Tex. Vehicle. 1,766,238; June 24.
Zecher, Granville R. (See Lewellen, D. E., and Zecher.)
Zeeck, August D., New Haven, Conn., assignor to The Greist Manufacturing Company. Sewing-machine ruffler. 1,765,391; June 24.
Zeh, Edward A., Passaic, assignor to Zeh, Incorporated, Clifton, N. J. Method and apparatus for coloring thin glass bodies. 1,767,108; June 24.
Zeh, Incorporated. (See Zeh, Edward A., assignor.)
Zeilinger, John F., assignor to The Barker Manufacturing Company, Inc., David City, Nebr. Weeder. 1,765,392; June 24.
Zeitlin, Louis, Philadelphia, Pa. Preparing hair. 1,766,476; June 24.
Zieser, Waldemar. (See Lecher, H., and Zieser.)
Zimmer, Albert E., assignor to Enterprise Railway Equipment Company, Chicago, Ill. Center-discharge ore car. 1,765,519; June 24.
Zimmerman, Harry, Lakeland, Fla., assignor, by mesne assignments, to The Yerges Manufacturing Company, Freemont, Ohio. Stitching buffing wheel. 1,765,750; June 24.
Zitscher, Arthur. (See Laska, L., and Zitscher.)
Zubick, Harry, Nashua, N. H. Heel-seat-preparing means. 1,766,319; June 24.
Zucker, Abraham H., Cleveland, Ohio. Scrubbing machine. 1,767,109; June 24.
Zuckerman, Benjamin, jr., New York, N. Y. Envelope sealer. 1,767,908; June 24.
Zumwalt, Ross, West Baden, Ind. Engine. 1,767,953; June 24.
Zurndorf, Maxwell, Baltimore, Md. Gum-labeling machine. 1,766,239; June 24.

ALPHABETICAL LIST OF INVENTIONS

FOR WHICH

PATENTS WERE ISSUED ON THE 24TH DAY OF JUNE, 1930

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

Abrasive wheel. H. F. Skillings. 1,767,321; June 24.
Absorbent roll. I. Kulik. 1,766,341; June 24.
Absorption machine. E. Alfenkirch. 1,767,639; June 24.
Absorption process. P. T. Sharples. 1,766,195; June 24.
Accelerator, Vulcanization. H. Lecher and W. Zieser. 1,766,755; June 24.
Acclimatizing fur-bearing animals. G. L. McCassey and R. H. Cox. 1,767,150; June 24.
Accounting machines, Carriage equipment for. A. S. Trew. 1,767,721; June 24.
Acetylene generator. E. M. Evleth. 1,766,614–15; June 24.
Acid, Concentration of acetic. G. Schwaebel and F. Schleicher. 1,766,404; June 24.
Acid esters and making same, Sulphoarylpyrazolonecarboxylic. H. Elchwede and E. Fischer. 1,766,813; June 24.
Acid, Preparation of vanadic. A. O. Jaeger and J. A. Bertsch. 1,765,870; June 24.
Acids and preparing them, Derivatives of 1.4.5.8 naphthalenetetracarboxylic. W. Eckert and H. Greune. 1,765,661; June 24.
Acids of high molecular weight, Separating and purifying sulpho. G. Petroff. 1,766,304; June 24.
Acoustic apparatus. W. J. O'Leary. 1,767,610; June 24.
Acoustical device. R. T. Cloud. 1,767,277; June 24.
Adding machine. H. Landsiedel. 1,767,765; June 24.
Adhesive and its manufacture. L. K. Fackler. 1,765,761; June 24.
Adjustable clamp. A. Disibio. 1,765,826; June 24.
Advertising apparatus. L. G. Robberts. 1,766,838; June 24.
Advertising device. J. W. Ashworth. 1,767,570; June 24.
Advertising device. W. Kuczorra. 1,768,409; June 24.
Advertising device. D. Solodar. 1,767,712; June 24.
Advertising device. J. E. Wood. 1,768,303; June 24.
Advertising device, Aerial. O. E. Frieder. 1,765,665; June 24.
Advertising machine, Automatic. J. D. MacLachlan. 1,767,804; June 24.
Aerocartograph. R. Hugershoff. 1,766,294; June 24.
Aerofoil. J. F. Cook, jr. 1,766,107; June 24.
Aerofoil. H. Schleusner. 1,767,944; June 24.
Aeroplane. J. A. Lemieux. 1,766,914; June 24.
Aeroplane safety device. K. Fechter. 1,765,972; June 24.
Aeroplane wing arrangement. S. V. Müller. 1,765,440; June 24.
Aeroplanes, Take-off device for. D. Canfield. 1,767,120; June 24.
Agitator. E. R. Miller. 1,767,601; June 24.
Air-circulation system for ovens. V. A. Fox. 1,767,872; June 24.
Air cleaner for internal-combustion engines. R. O. Hendrickson. 1,766,124; June 24.
Air cleaner for internal-combustion engines. G. E. Tasker. 1,767,324; June 24.
Air-cooled motor. C. M. Crews. 1,766,608; June 24.
Aircraft. C. H. Congdon. 1,766,167; June 24.
Aircraft. A. Hansen. 1,765,917; June 24.
Aircraft. A. S. James. 1,766,906; June 24.
Aircraft. C. V. Lapin. 1,766,390; June 24.
Aircraft, Arrangement of rudders for. H. Junkers. 1,766,025; June 24.
Air feed for hot-air heating apparatus. E. G. Miller. 1,765,537; June 24.
Air gun. C. F. Lefever. 1,766,179; June 24.
Air heater. E. Haber. 1,765,916; June 24.
Air heater. D. W. Lake. 1,767,082; June 24.
Air-heating system. L. J. Fisher. 1,766,816; June 24.
Airplane. J. Danko. 1,766,284; June 24.
Airplane brake. H. Hiers. 1,766,074; June 24.
Airplane landing-speed-retarding device. O. Alvistur. 1,765,818; June 24.
Airplane lifter. A. R. Springer. 1,766,844 June 24.
Airplane wings, fuslages, and other structures, Constructing. A. H. G. Fokker. 1,765,791; June 1.
Air pressure, Device for controlling. J. C. Hagey. Re17,716; June 24.
Air-pressure gauge. W. C. Urton. 1,768,275; June 24.
Air, Process and apparatus for purifying. A. L. Dotter. 1,767,057; June 24.
Air purifier. M. Madsen. 1,768,468; June 24.
Air under pressure, Apparatus for supplying. C. G. Wilson. 1,767,337; June 24.
Airway for amusement purposes, Play. B. Wilson. 1,767,490; June 24.
Alarm: *See*—
Tire alarm.
Alarm system. C. Chierighino. 1,768,115; June 24.
Aldehyde and antioxidant agent and process. H. A. Morton. 1,766,760; June 24.
Alkali-metal sulphydrates, Making. H. P. Bassett. 1,766,810; June 10.
Alkaline condensation products of bz-1-ethers of benzanthrone. K. Thiess, W. Gmelin, and K. Zahn. 1,766,413; June 24.
Alkoxy-3-keto-dihydrothionapthenes and making them. E. Runne, K. Moldaenke, and E. Fischer. 1,765,703; June 24.
Alkyl ketones of the anthracene series, Production of. A. Lüttringhaus and F. Kačer. 1,766,443; June 24
Alkylation products of pyrazolanthrones. P. Nawiasky, A. Krause, and A. Holl. 1,766,719; June 24.
Alloy. C. Pack and J. C. Fox. 1,767,011. June 24.
Alloy, Lead. S. Beckinsale and H. Waterhouse. 1,766,871; June 24.
Alloy structure. H. M. Williams and A. L. Boegehold. 1,766,865; June 24.
Amalgamator and separator, Centrifugal. P. A. Neumann. 1,767,893; June 24.
Ammonia, Manufacture of. C. Urfer. 1,767,780; June 24.
Ammonia, Production of. L. C. Jones. 1,765,534; June 24.
Ammonia, Synthetic production of. R. S. Richardson. 1,765,541; June 24.
Ammonium bicarbonate, Stable. E. Dehnel. 1,766,705; June 24.
Amplifier, Sound. J. B. Hawley and R. H. Townsend. 1,765,486; June 24.
Amplifier system, Thermionic. B. B. Minnium. 1,765,603; June 24.
Amplifying device. R. S. Ohl. 1,765,607; June 24.
Ampul-filling device. H. Sickel. 1,767,902; June 24.
Amusement railway. H. G. Traver. 1,767,627; June 24.
Amusement ride. H. G. Traver. 1,767,626; June 24.
Anæsthetics, Production of. W. Schoeller and H. G. Allardt. 1,765,621; June 24.
Anchor Rail. C. T. Hoffman. 1,767,981; June 24.
Animal matter, Apparatus for processing. E. T. Meakin. 1,766,031; June 24.
Animal matter, Apparatus for processing. E. T. Meakin. 1,766,033; June 24.
Animal matter, Processing. E. T. Meakin. 1,766,032; June 24.
Animal trap. L. Haege. 1,765,975; June 24.
Ankle joint, Artificial-limb. L. H. Barghausen. 1,767,868; June 24.
Announcing apparatus. R. E. Lumpkin and R. A. Nove. 1,768,207; June 24.
Annunciator. N. Unger. 1,767,233; June 24.
Anode, Dual. O. V. Stewart and E. Urban. 1,765,706; June 24.
Antenna, Space radiation. A. Meissner. 1,765,438; June 24.
Antenna system, Directive. C. R. Englund. 1,768,239; June 24.
Antiglare device. M. G. Johns. 1,767,179; June 24.
Antiskid device. J. Campanaro. 1,766,483; June 24.
Antiskid device. P. H. Letchford. 1,766,522; June 24.
Apparatus for assembling and treating articles. C. Wales. 1,765,470; June 24.
Apparatus for cleaning castings. J. T. Stoney. 1,768,428; June 24.
Apparatus for cleaning surfaces. S. A. Wier. 1,766,088; June 24.
Apparatus for closing packets provided with a closure flap. R. W. Voigt. 1,766,860; June 24.
Apparatus for filling packages. E. A. Marsh. 1,766,444; June 24.
Apparatus for freeing potatoes from germs. F. Brochet. 1,765,902; June 24.
Apparatus for governing duplex machine drivers. R. Schnitzer. 1,766,548; June 24.
Apparatus for handling loose material. C. E. Davis. 1,765,525; June 24.
Apparatus for preparing members for assembly. M. L. Strawn. 1,768,270; June 24.
Apparatus for sorting guts. H. Eberhardt. 1,765,909; June 24.
Apparatus for testing surfaces. E. B. Gardner. 1,766,991; June 24.
Apparatus for washing and drying hands, Automatic. O. Haase. 1,765,915; June 24.
Articles from casein, Making. L. A. Apple. 1,765,819; June 24.
Articles on other surfaces, Reproduction of the natural appearances of. L. V. Casto. 1,766,426; June 24.
Arylaminoalcohol compound. R. Adams. 1,767,423; June 24.

Ash remover, Dustless. T. F. Russell. 1,767,312; June 24.
Asphalt spreader. C. G. Kime. 1,767,243; June 24.
Asphaltic oils for the production of asphalt, Apparatus for treating. M. R. L. Miller. 1,766,446; June 24.
Assembling and packaging machines, Feeding mechanism for. L. E. La Bombard and M. H. Sidebotham. 1,765,416; June 24.
Assembling machine. H. L. Peterson and O. B. Burbidge. 1,766,800; June 24.
Atomizer. B. Berko and J. Brewer. 1,767,911; June 24.
Audiphone. A. W. Hall and J. R. Donnelly. 1,767,176; June 24.
Auger or drill. L. C. Hardsocg. 1,767,883; June 24.
Autographic register. H. Bartholdi. 1,766,972; June 24.
Autographic register. A. B. Cooke. 1,767,204–5; June 24.
Autographic register. A. B. Cooke. 1,767,784; June 24.
Autographic register. F. E. Pfeiffer. 1,766,353; June 24.
Autographic register. W. C. Pfeiffer. 1,766,937; June 24.
Automatic regulator. W. D. Dreiske. 1,767,655; June 24.
Automatic switch. E. Granat. 1,766,292; June 24.
Automobile body construction. R. L. Adams. 1,767,500; June 24.
Automobile body, Convertible. W. Dupré. 1,766,015; June 24.
Automobile lift. E. E. Hollister. 1,767,982; June 24.
Automobile lock. C. N. Fairchild. 1,768,040; June 24.
Automobile power take-off device. J. W. White. 1,766,007; June 24.
Autotransformer for alternating current having variable transformation ratios. P. Stragiotti. 1,767,947; June 24.
Awning, Adjustable. J. L. Drohen. 1,767,969; June 24.
Awning bracket, Intermediate. E. H. Schane. 1,765,451; June 24.
Awning for automobiles. H. E. Williams. 1,766,769; June 24.
Awning for locomotive cabs. D. J. Cara and J. W. Hough. 1,768,437; June 24.
Axle structure and driving mechanism, Rear. D. G. Mackenzie. 1,765,986; June 24.
Axles, Apparatus for journaling railway vehicle. H. M. Pflager. 1,765,878; June 24.
Azodyestuffs, Manufacture of fast. L. Laska and A. Zitscher. 1,765,681; June 24.
Badge. J. Jachens. 1,768,067; June 24.
Badge. W. H. Kupfer. 1,765,431; June 24.
Bag: *See*—
Brief bag. Shopping bag.
Garment bag.
Bag machine, Paper-. W. A. Buchanan. 1,765,564; June 24.
Bags, Apparatus for forming. K. Maier. 1,768,126; June 24.
Bags or cardboard boxes, Forming paper. E. H. Jähne. 1,767,799; June 24.
Bail bracket for excavating dippers. W. T. McNinch. 1,766,343; June 24.
Baker's pan. A. Graf. 1,766,508; June 24.
Baker's peel. S. M. Scott. 1,766,551; June 24.
Baking machine. K. O. Hebenstreit. 1,766,023; June 24.
Balance weight. W. O. Snelling. 1,766,406; June 24.
Bale-hoist hook. M. P. Baccomo. 1,766,091; June 24
Bale press. J. B. Wallace. 1,766,570; June 24.
Baling press. H. Jacobson and C. J. Kruse. 1,766,642; June 24.
Baling-press feeder. W. C. Ruth. 1,768,214; June 24.
Ball catching and throwing device. K. R. Uhlig. 1,767,232; June 24.
Balls, Reconditioning device for tennis. R. H. Smillie. 1,766,198; June 24.
Band, Flexible. K. C. Augenstein. 1,766,971; June 24.
Bank-protecting device. H. L. Alstadt. 1,768,092; June 24.
Bar: *See*—
Bumper bar. Towing bar.
Rail-joint bar.
Barium sulphate and making same. J. B. Pierce. 1,765,737; June 24.
Barrel. J. R. Coe. 1,767,051; June 24.
Barrel for reels, Sectional. R. D. Smith. 1,767,710; June 24.
Base-exchange material and making same. E. M. Partridge and E. W. Scarritt. 1,766,850; June 24
Bath support for infants, Elevated. F. A. Rumer. 1,766,085; June 24.
Battery: *See*—
Dry-cell battery.
Battery clamp, Storage-. E. R. Hiebert. 1,766,515; June 24.
Battery connecter. R. Yagoda. 1,768,017; June 24.
Battery construction, Radio. P. M. Marko. 1,767,085; June 24.
Battery patch. L. McDaniel. 1,766,759; June 24.
Battery substitute. W. C. Grunow. 1,768,474; June 24.
Battery tongs. D. E. Leasure. 1,766,827; June 24.
Bead setter, Plasterer's corner-. H. R. Wilcox. 1,767,335; June 24.
Bean snipper. W. E. Urschel. 1,765,952; June 24.
Bearing. E. G. Boden. 1,768,460; June 24.
Bearing. J. B. Henderson. 1,765,584; June 24.
Bearing. H. A. S. Howarth. 1,767,238; June 24.
Bearing. D. K. Isbell. 1,765,978; June 24.
Bearing. C. R. Short. 1,768,528; June 24.
Bearing. A. P. Strong. 1,767,623; June 24.
Bearing, Antifriction. K. O. Leon. 1,766,440; June 24.
Bearing-boring apparatus. F. A. Litter. 1,767,384; June 24.
Bearing cage, Antifriction-. C. B. Simmons. 1,767,407; June 24.
Bearing, Center. J. F. O'Connor. 1,765,877; June 24.
Bearing for brake hangers. C. J. Nash. 1,766,346; June 24.
Bearing for railway cars and the like. C. H. Smith. 1,765,705; June 24.
Bearing, Knife-grinder. A. W. Beaman. 1,767,272; June 24.
Bearing mounting. R. J. Brittain, jr., and P. H. Hutchinson. 1,767,429; June 24.
Bearing, Rocker. C. T. Westlake. 1,765,810; June 24.
Bearings, Apparatus for washing antifriction. G. P. Anstiss. 1,766,208; June 24.
Bearings, Ball retainer for antifriction. F. C. Yates. 1,767,107; June 24.
Bearings, Making. C. R. Short. 1,768,529; June 24.
Beater wheel, Expansible. D. J. Litchfield. 1,767,686; June 24.
Becket. J. S. Taylor. 1,767,325; June 24.
Bed, Automobile. M. Konzelman. 1,767,890; June 24.
Bed or box-lounge construction, Day-. R. Bradshaw and R. Ferguson. 1,768,435; June 24.
Bedpan cleaner. G. F. Hall. 1,766,629; June 24.
Bedspread. D. V. Belknap. Des. 81,432; June 24.
Bedspring. M. L. Cohn. 1,768,189; June 24.
Bedspring fabric. R. Ferguson. 1,768,444; June 24.
Bedsteads, Collapsible side rail for. A. J. Schultz. 1,765,455; June 24.
Bed table. W. C. Wetmore and R. H. Seeley. 1,765,514; June 24.
Beehive. G. L. Fenno. 1,768,041; June 24.
Beet loader. W. L. Grimes. 1,766,293; June 24.
Belt clasp. R. W. Johnson. 1,766,337; June 24.
Belt-conveyer roll with lubrication system. J. T. Coghill. 1,767,743; June 24.
Belt-replacing device. E. E. Schuette. 1,767,155; June 24.
Belt, Sectional wire conveyer. V. C. King. 1,766,754; June 24.
Belt, Selvaged wire conveyer. F. N. Woodman. 1,766,736; June 24.
Belt tightener for power units. A. E. Nielsen. 1,767,010; June 24.
Belt tightener, Tension-equalizing chianti. C. V. Lindblad. 1,765,841; June 24.
Bench and writing desk, Combination. N. H. Jensen. 1,766,077; June 24.
Bench-end arm or the like. F. Mugnai. Des. 81,450; June 24.
Bench-end support or the like. F. Mugnai. Des. 81,448–9; June 24.
Bend fitting, Return-. L. C. Huff. 1,767,677; June 24.
Bending machine. O. Doutt. 1,765,790; June 24.
Bending machine. C. H. Strupe. 1,766,963; June 24.
Benzol and the like, Recovery of. P. T. Sharples. 1,766,196; June 24.
Beverage, Nonalcoholic. T. P. Avlon. 1,765,899; June 24.
Beverages, Stabilizing cereal. D. Cozzolino. 1,766,428; June 24.
Beverages, Treatment of. A. Gusmer. 1,765,667; June 24.
Bill and card case. C. L'Enfant. 1,765,730; June 24.
Billets, Apparatus for manufacturing bimetallic. H. E. McCrery and A. E. Jesser. Re17,717; June 24.
Binder. L. C. Green. 1,766,071; June 24.
Binder. W. E. Haskin. 1,767,978; June 24.
Binder, Corn-shock. H. W. Schon. 1,767,556; June 24.
Binder, Loose-leaf. E. F. Graf. 1,765,579; June 24.
Binder, Loose-leaf. W. A. Ringler. 1,768,151; June 24.
Binder, Loose-leaf. N. H. Stuart. 1,768,343; June 24.
Binder of the flexible-thong type, Loose-leaf. P. C. G. Lake. 1,767,381; June 24.
Bit-forming machine. J. V. Gustin. 1,767,881; June 24.
Bituminous mixtures, Spreading. G. H. Perkins. 1,766,188; June 24.
Blackboard, Music-chart. N. L. Sullivan. 1,766,087; June 24.
Blade cutter, Inserted-. F. P. Miller. 1,768,131; June 24.
Blanket or similar device. I. F. Gehrke. 1,767,842; June 24.
Blanks, Apparatus for drawing hollow. H. Hectkamp. 1,767,845; June 24.
Blasting cartridge with cover and process of production. L. Lisse. 1,767,182; June 24.
Blasting method and tamping cartridge with utilization of liquefied gases. L. Lisse. 1,767,181; June 24.
Bleacher structure. F. Vance. 1,766,316; June 24.
Bleaching, Apparatus for. T. McConnell. 1,766,716; June 24.
Block: *See*—
Building block. Snatch block.
Blocks and connecting means therefor, Toy. R. Aukenthaler. 1,765,644; June 24.
Blocks, Apparatus for making. F. D. Pfeffer and F. Trotter. 1,768,141; June 24.
Board: *See*—
Composition board. Plaster-receiving board.
Finger board. Sounding board.
Game board. Surf board.
Ironing board.
Board or paper, Liner. A. L. Clapp. 1,765,860; June 24.

Boat. A. C. Schipper. 1,766,360; June 24.
Boat, Motor. H. Ditchburn. 1,765,789; June 24.
Boats, Method and apparatus for the manufacture of. P. Thompson. 1,767,101; June 24.
Bobbin for electric weft detectors. W. H. Wakefield. 1,766,861; June 24.
Bodies, Assembling vehicle. C. T. Weymann. 1,767,825; June 24.
Bodies from acidi celluloses, Preparation of. E. Hubert, L. Lock and O. Leuchs. 1,766,822; June 24.
Body-bolster and draft-sill casting, Combined. W. S. Trowbridge. 1,765,465; June 24.
Body for motor vehicles. A. G. Hawkes. 1,766,994; June 24.
Body for seaplanes, Floating. A. Rohrbach. 1,767,815; June 24.
Body-handling device. F. L. Foulks. 1,765,792; June 24.
Body plate for lighting fixture or article of similar nature. F. W. Roettges. Des. 81,462; June 24.
Boiler: *See*—
Heating boiler. Steam boiler.
Locomotive boiler. Water-tube boiler.
Boiler. R. W. Birchfield. 1,767,235; June 24.
Boiler cleaner. N. L. Snow. 1,766,958–9; June 24.
Boiler cleaner. N. L. Snow. 1,767,408; June 24.
Boiler cleaner. N. L. Snow and A. W. Honywill, jr. 1,766,231; June 24.
Boiler generating steam according to the indirect method. A. H. Hartmann. 1,768,057; June 24.
Boiler with steam superheater. Water-tube. O. H. Hartmann. 1,768,056; June 24.
Bolt cutter. H. P. Blumenauer and F. D. and W. C. Brisse. 1,768,108; June 24.
Bolt lock. J. F. Dranter and M. Panek. 1,767,438; June 24.
Bolt lock. R. T. Hosking. 1,767,287; June 24.
Book. B. H. Johnson. 1,765,979; June 24.
Book-match machinery. W. J. Lilly. 1,766,180; June 24.
Borneol and the like, Preparing. H. P. Bassett and R. C. Morrison. 1,766,369; June 24.
Bottle. S. U. Boehmer. Des. 81,434; June 24.
Bottle. R. D. Maurer and H. D. Joyce. Des. 81,447; June 24.
Bottle capper. H. J. Lebherz. 1,766,178; June 24.
Bottle-capping machine. K. R. Bunker. 1,766,773; June 24.
Bottle cooler. J. M. Schilling. 1,766,547; June 24.
Bottle filler and capper unit. G. E. Strandt. 1,766,962; June 24.
Bottles, Apparatus for cleaning. K. K. Wright. 1,765,557; June 24.
Box: *See*—
Egg box. Molding box.
Foldable box. Stuffing box.
Journal box. Tool box.
Box. L. W. Kendrick. 1,766,787; June 24.
Box and axle, Journal. H. W. Sanford and H. W. Jones. 1,768,004; June 24.
Box end and making same. H. J. Goff. 1,767,064; June 24.
Box fixture, Junction-. R. O. Beerhalter. 1,767,339; June 24.
Box toe. A. L. Clapp. 1,765,861; June 24.
Box-toe-conditioning machine. S. P. Lovell. 1,766,442; June 24.
Box with folding lid. B. Schubart. 1,766,194; June 24.
Bracelet, Jewelry. H. H. Lott. 1,767,596; June 24.
Bracket: *See*—
Awning bracket. Top bracket.
Telephone bracket.
Bracket. J. P. Hebendahl. 1,767,585; June 24.
Bracket. C. E. Stevens. 1,767,099; June 24.
Bracket for supports. W. W. Nicodemus. 1,768,291; June 24.
Brake: *See*—
Airplane brake. Track brake.
Fluid-pressure brake. Vehicle brake.
Friction brake.
Brake. D. T. Holmes. 1,766,517; June 24.
Brake. E. C. Rosenberg. 1,767,014; June 24.
Brake centralizer. T. P. Chase. 1,768,509; June 24.
Brake-controlling mechanism for looms. W. M. Wattie. 1,766,862; June 24.
Brake diaphragm, Automotive. F. P. Livingston. 1,765,376; June 24.
Brake drum. W. N. Booth. 1,766,215; June 24.
Brake drum. W. N. Booth. 1,766,216; June 24.
Brake drum. C. Scull, sr. 1,766,955; June 24.
Brake drum and making same. G. M. Evans. 1,767,522; June 24.
Brake drums, Making. C. Scull, sr. 1,766,956; June 24.
Brake for freight cars, Geared hand. W. E. Wine. 1,766,273; June 24.
Brake for railway cars, Rail. C. J. Ellis. 1,766,016; June 24.
Brake mechanism. S. H. Clapp. 1,768,351; June 24.
Brake mechanism. A. Smith and R. M. Matson. 1,768,457; June 24.
Brake mechanism. M. Tibbetts. 1,766,840; June 24.
Brake mechanism. W. E. Wine. 1,768,183; June 24.
Brake-operating device for motor vehicles. L. Rouanet. 1,766,309; June 24.
Brake-operating device for steering wheels. L. Rouanet. 1,766,359; June 24.
Brake-operating mechanism. A. Moorhouse. 1,766,923; June 24.
Brake-operating mechanism. A. Moorhouse. 1,767,388; June 24.
Brake system, Fluid-pressure. H. J. Winter. 1,765,390; June 24.
Brake-testing device. W. J. Pine. 1,765,738; June 24.
Brake-testing machine, Automobile. C. F. Cowdrey. 1,767,348; June 24.
Brakes, Servo-motor for. D. G. Duty and R. P. Skerritt. 1,765,760; June 24.
Braking device for power vehicles, Electrically-controlled. G. Kellner. 1,766,078; June 24.
Braking method and apparatus, Hydraulic. W. G. Price. 1,766,540; June 24.
Braking system for motor vehicles, Hydraulic. G. E. A. Hallett. 1,768,355; June 24.
Braking system for single-phase electric railway locomotives, Regenerative. F. Prantl, W. Luthi, and E. Schroeder. 1,766,533; June 24.
Branch connecter for fibrous conduits. H. Parker. 1,765,999; June 24.
Brassière. M. A. Bollwine. 1,766,278; June 24.
Brattice. V. T. Berner. 1,766,324; June 24.
Breakage-indicating mechanism for warping machines and the like. W. Reiners and G. Kahlisch. 1,765,881; June 24.
Brick-handling apparatus. G. E. Luce. 1,765,765; June 24.
Brickmaking machine. R. P. M. Davis. 1,766,285–6; June 24.
Bridge for an eyeglass mounting. E. J. R. Beattey. Des. 81,429; June 24.
Bridge, Lift. R. E. Dodge. 1,765,407; June 24.
Bridge structure. P. E. Hunter. 1,765,488; June 24.
Brief bag. B. Trager. 1,768,496; June 24.
Brush. W. E. Becker. 1,766,870; June 24.
Brush. P. A. Cross. 1,767,349; June 24.
Brush. J. Kovács. 1,766,388; June 24.
Brush, Dusting. N. Salvucci. 1,767,313; June 24.
Brush-making machine. A. E. Mueller. 1,765,769; June 24.
Brush, Polishing. F. N. Lunkenheimer. 1,767,766; June 24.
Brush, Rotary. G. Narducci. 1,766,140; June 24.
Bucket, Drag-line. H. L. Mitchell. 1,767,691; June 24.
Bucket for concrete mixers, Loader. J. P. Faber. 1,767,443; June 24.
Buckle, Shoe. O. R. Recchia. Des. 81,455–9; June 24.
Buffer, Finger-nail. E. L. Arthur. 1,766,321; June 24.
Buffing wheel, Stitched. H. Zimmerman. 1,765,750; June 24.
Building. J. F. Williams. 1,766,475; June 24.
Building block. F. J. Straub. 1,766,561; June 24.
Building construction. F. M. Reuter. 1,767,401; June 24.
Building material. H. J. Burt, jr. 1,767,168; June 24.
Building material. H. E. White. 1,768,181; June 24.
Building ventilator. R. S. Busby. 1,766,876; June 24.
Bullet. J. T. Phillips. 1,767,308; June 24.
Bumper, Automobile. J. M. Howe. 1,767,212; June 24.
Bumper, Automobile. E. H. McCloud. 1,766,842; June 24.
Bumper bar. R. H. Rosenberg. 1,765,617; June 24.
Bumper, Front-axle. G. C. Jett. 1,765,764; June 24.
Bundle adjuster H. E. Flynn. 1,766,495; June 24.
Buoy. H. Roth. 1,768,003; June 24.
Buoy, Submarine escape. T. C. Dulin. 1,768,037; June 24.
Burglar-alarm system, Four-wire. J. J. Gilligan. 1,766,500; June 24.
Burner: *See*—
Gas burner. Oil burner.
Gas heating burner. Sawdust burner.
Burner. E. L. Davis. 1,768,234; June 24.
Burner for hard fuel. A. O. Jackson. 1,766,641; June 24.
Butter-serving machine. J. M. Leatherman. 1,767,803; June 24.
Button. C. Fournier. 1,766,291; June 24.
Button. J. Waldes. 1,766,204; June 24.
Button, Cuff. P. A. Curtain. 1,767,436; June 24.
Button, Horn. H. M. Denyes. 1,768,513; June 24.
Cabinet, Bath. A. H. Jahns. 1,766,125; June 24.
Cabinet, Bath. D. M. and B. H. Kennedy. 1,767,800; June 24.
Cabinet, Display. D. Haslup. 1,766,632; June 24.
Cabinetmaker's clamp. J. Sea. 1,766,230; June 24.
Cabinet, Metal. L. H. Moring. 1,767,008; June 24.
Cabinet, Milk-shipping. J. H. Graves. 1,767,976; June 24.
Cabinet, Towel. G. Olson. 1,765,608; June 24.
Cabinet, Towel. F. M. Steiner. 1,765,506; June 24.
Cabinet, Towel. F. M. Steiner. 1,765 630; June 24.
Cabinet, Towel. F. M. Steiner and A. H. Anderson. 1,765,505; June 24.
Cabinet, Towel. F. M. Steiner and G. Olson. 1,765,631; June 24.
Cable clamp. E. O. Keator. 1,765,837; June 24.
Cable-end connecter. W. Benien. 1,768,392; June 24.
Cable rack. J. R. Kearney. 1,766,254; June 24.
Cable-winding drum. F. W. Krause and H. A. Baechtel. 1,768,078; June 24.
Cage, Roller-bearing. G. R. Bott. 1,765,648; June 24.
Calcium nitrate, alumina, and phosphorus, Production of. R. Griessbach, O. Schliepsake, and O. Heausler. 1,766,785; June 24.

Calculating machine. N. P. Palmer and W. B. Herron. 1,765,697; June 24.
Calendar. A. S. and G. L. Glossbrenner. 1,766,334; June 24.
Calendar-pad stand. R. Muhlbacker. 1,767,471; June 24.
Calender. J. Kleinewefers. 1,765,922; June 24.
Calipers, Combination. A. H. Roos. 1,766,546; June 24.
Calk for football shoes. A. Stelzer. 1,768,426; June 24.
Camera and the like, Motion-picture. A. S. Howell. 1,767,847–8; June 24.
Can bodies, Mechanism for operating on. W. Cameron. 1,765,758; June 24.
Can-capping mechanism. T. J. Smulski. 1,767,818; June 24.
Can-delivering and cover-applying mechanism. H. D. Lathrop and W. H. Paulson. 1,765,594; June 24.
Can-filling machine. A. E. Roe. 1,766,147; June 24.
Can-filling machine. C. T. Small. 1,766,263; June 24.
Can-mangling machine. W. C. Bruton. 1,766,327; June 24.
Can opener. C. Cotton and I. P. Duncan. 1,766,109; June 24.
Can pouring apparatus. L. Bemelmans. 1,767,504; June 24.
Caps, Apparatus for detecting leaky. R. M. Garrett. 1,766,019; June 24.
Caps, Attachment for oil. E. H. Morrow. 1,767,223; June 24.
Cans, Construction for and evacuating. L. W. Hills. 1,766,173; June 24.
Candy, Forming. W. B. Laskey. 1,765,874; June 24.
Candy, Making. H. G. Granger. 1,765,807; June 24.
Candy-slab divider. H. J. Melville and H. E. Atchison. 1,765,990; June 24.
Cannon, Gas. C. C. Blackmore. 1,765,562; June 24.
Canopy for lighting fixtures or similar articles. O. Hoffmann. Des. 81,443; June 24.
Canopy, Tractor. E. J. Tucker. 1,765,639; June 24.
Cap. M. M. Husman. 1,766,749; June 24.
Cap, Bathing. A. G. Greene. Des. 81,441; June 24.
Cap for hot tops. E. L. Messler and J. M. Guthrie. 1,765,382; June 24.
Capacitors, Manufacturing. S. A. Beyland. 1,766,870; June 24.
Car, Articulated. F. M. Brinckerhoff. 1,765,649; June 24.
Car, Center-discharge ore. A. E. Zimmer. 1,765,519; June 24.
Car construction. S. B. Haseltine. 1,765,833; June 24.
Car construction. S. B. Haseltine. 1,766,630–31; June 24.
Car construction. G. A. Johnson and S. B. Haseltine. 1,765,835; June 24.
Car, Dump. N. S. Reeder. 1,765,700; June 24.
Car end, Metal. W. E. Van Dorn. 1,766,857; June 24.
Car, Railway. W. E. Wine. 1,768,389; June 24.
Car retarder. L. E. Endsley. 1,767,440; June 24.
Car retarder for classification yards. C. W. Prescott. 1,766,537; June 24.
Car-retarder system for railroads. C. W. Prescott. 1,766,539; June 24.
Cars in classification yards, Facilitating operation of railway. C. W. Prescott. 1,766,538; June 24.
Carbohydrate ethers into a soluble state, Conversion of difficultly-soluble or insoluble. O. Leuchs. 1,767,382; June 24.
Carbonaceous substances, Distillation of. E. R. Sutcliffe. 1,767,231; June 24.
Carbonating, Method and apparatus for. P. W. Shields. 1,768,158; June 24.
Carbon bisulphide, Making. F. W. Vogel. 1,765,809; June 24.
Carbon-dioxide-snow compressor. L. W. Hassensall. 1,768,059; June 24.
Carbonyl compound and preparing the same. S. A. Kiss. 1,767,291; June 24.
Carbureting means. C. A. Musall. 1,767,305; June 24.
Carburetor. W. C. Carter. 1,765,654; June 24.
Carburetor. M. E. Chandler. 1,767,050; June 24.
Carburetor. L. De Marco. 1,765,406; June 24.
Carburetor. O. H. Ensign. 1,766,169; June 24.
Carburetor. J. R. Francis. 1,766,708; June 24.
Carburetor. E. F. Geiger. 1,767,664–5; June 24.
Carburetor. M. Goudard. 1,768,051; June 24.
Carburetor. F. H. Heitger. 1,766,710; June 24.
Carburetor. L. B. Lampton. 1,766,657; June 24.
Carburetor. C. W. McKinley. 1,767,599; June 24.
Carburetor. A. G. Redmond. 1,766,685; June 24.
Carburetor. E. C. Richard. 1,766,689; June 24.
Carburetor. J. W. White. 1,766,158; June 24.
Carburetor for carbureted-water-gas apparatus. H. G. Terzian. 1,767,564; June 24.
Card and mailer for currency, etc., Combined advertising. W. W. F. Tees. 1,766,006; June 24.
Card, Display. R. A. Gray. 1,765,484; June 24.
Card for shipping containers, Address. M. Braunstein. 1,767,573; June 24.
Card, Score. I. B. Leverson. 1,768,087; June 24.
Card, Tally. J. J. Arnold. 1,768,020; June 24.
Card-throwing machine. L. A. Gale. 1,767,207; June 24.
Cards, Playing. W. O. Snelling. 1,766,465; June 24.
Carpet dust cleaner. O. Aldinger. 1,765,784; June 24.
Carpet stretcher. J. D. Bartlow. 1,766,423; June 24.
Carrier: *See*—
Freight carrier. Safety carrier.
Pocket key carrier. Spare-wheel carrier.
Carrier for airplane delivery, Article. S. O. Donnell. 1,768,194; June 24.
Carrier for motor vehicles, Tire-chain. M. E. Hill. 1,766,634; June 24.
Carton, Cushioned. F. Troyk. 1,766,155; June 24.
Carton, Egg. L. Benoit. 1,768,023–4; June 24.
Case: *See*—
Bill and card case. Make-up case.
Coil case. Vanity case.
Key case.
Case and lighter, Cigarette. E. G. Ahrens. 1,766,320; June 24.
Case for timepieces, Folding. W. B. Earl. 1,765,971; June 24.
Casement. A. A. Potter. 1,768,143; June 24.
Cash-drawer manifolding device. J. Q. Sherman. 1,767,486; June 24.
Cash protector. H. C. Stockwell. 1,766,560; June 24.
Casing, Door. I. A. Baum. 1,765,712; June 24.
Casing for train-control systems, Instrument. C. S. Bushnell. 1,766,597; June 24.
Casing, Objective-shutter. L. Goldhammer. 1,768,315; June 24.
Casting machine, Centrifugal. L. B. Andresen. 1,767,035; June 24.
Casting machine, Centrifugal. L. B. Andresen and C. W. Paulson. 1,767,036; June 24.
Casting machine, Centrifugal. G. B. Thomas and H. A. Coons. 1,767,023; June 24.
Casting mechanism. J. E. Hoy. 1,768,254; June 24.
Castings, Apparatus for molding. S. B. Stine. 1,767,563; June 24.
Catheter. C. F. Ingold. 1,767,073; June 24.
Catheterizing instrument. R. H. Wappler. 1,767,267; June 24.
Cattle poke. R. W. Harter. 1,767,284; June 24.
Cattle-treating apparatus. J. Snyder. 1,767,560; June 24.
Ceiling plate. M. S. Goldsmith. 1,767,067; June 24.
Ceiling tie and spacer. M. S. Goldsmith. 1,767,065; June 24.
Cell, Electric. G. Weissmann. 1,766,418; June 24.
Cellulose products, Bleaching. R. H. McKee, E. H. Morse, and P. E. Rollhaus. 1,767,543; June 24.
Cellulose to produce vulcanized fiber and the like, Treating. R. R. Fulton. 1,767,662; June 24.
Cement concrete and apparatus for use therewith, Manufacture of. A. C. Knipe. 1,766,911; June 24.
Cement or plaster from gypsum, Manufacture of. F. Mulligan. 1,766,448; June 24.
Cementitious substance and making the same. F. L. Roman and H. T. Winsemius. 1,765,616; June 24.
Centering machine. M. H. Damerell. 1,766,812; June 24.
Centrifugal machine for clarifying liquids and the like. C. Schmitz. 1,767,314; June 24.
Centrifugal separator, Continuous. W. C. Walker. 1,767 905; June 24.
Chain, Bracelet. P. W. Jones. 1,767,529; June 24.
Chain, Conveyer. A. L. Shaw. 1,765,945; June 24.
Chain, Cross. W. J. Boyer. 1,766,218; June 24.
Chain cutter. E. S. McKinlay. 1,765,602; June 24.
Chain for motor vehicles, Skid. H. D. Jackson and F. White. 1,767,366; June 24.
Chains and chain nail of wire of solid cross section, Soldering ornamental and other. A. Meylein. 1,765,932; June 24.
Chair: *See*—
Convertible chair. Folding chair.
Foldable chair. Wardrobe chair.
Chair iron. H. W. Bolens. 1,767,166; June 24.
Chair iron. D. R. Collier. 1,766,486; June 24.
Charge-heating control for internal-combustion engines, Automatic. D. P. Molony. 1,766,794; June 24.
Charges for combustion in internal-combustion engines, Preparing. A. Moore. 1,766,673; June 24.
Check writer. A. E. Ischinger. 1,766,640; June 24.
Checkerwork. G. L. Danforth, jr. and A. E. Peterson. 1,766,283; June 24.
Chemical compound or tablet for prolonging bloom life of cut flowers. F. L. Sigmund. 1,768,007; June 24.
Chemically-stable article, Producing. J. K. Wirth. 1,767,421; June 24.
Chloride and making same, Powdered metallic. E. O. Barstow and S. B. Heath. 1,768,282; June 24.
Chlorine, Process and composition for the generation of. G. J. Howitz. 1,767,676; June 24.
Chlorine-weighing apparatus. J. D. MacMahon. 1,766,788; June 24.
Chock for road vehicle wheels, Collapsible. F. T. Nicholls. 1,768,265; June 24.
Churn. G. D. Wiggins. 1,768,387; June 24.
Chute for concrete mixers, Discharge. S. Shafer, jr. 1,766,552; June 24.
Chute, Garbage. J. Helgesen. 1,767,885; June 24.
Chute, Movable glass-delivery. R. W. Canfield. 1,766,979; June 24.
Chute, Nonsegregating. R. Gardner. 1,768,247; June 24.
Chute, Refuse. S. Olson. 1,766,141; June 24.
Chute, Ship-loading. A. Payne. 1,766,681; June 24.

Cigar-banding machine. H. H. Wheeler. 1,765,811; June 24.
Cigar-bunch manipulator. J. F. Halstead. 1,765,831; June 24.
Cigarette extinguisher. D. J. Nee. 1,767,092; June 24.
Cigarette-machine feed. C. J. Fuse. 1,765,830; June 24.
Cigarettes, Transferring groups of oval. R. W. Voigt. 1,767,824; June 24.
Circle cutter. A. J. Lawrence. 1,765,799; June 24.
Circuit, Attenuation equalizing. C. W. Green. 1,768,248; June 24.
Circuit breaker. S. S. Grady. 1,767,843; June 24.
Circuit breaker. F. W. Roller. 1,767,479; June 24.
Circuit breaker, Alternating-current. H. F. McBride. 1,767,855; June 24.
Circuit-breaker system, Automatic reclosing. E. F. Bliss. 1,768,393; June 24.
Circuit closer. W. Bonsor. 1,765,752; June 24.
Circuit closer to indicate turns of a vehicle. A. Maršík. 1,768,208; June 24.
Circuit controller, Electric-. J. J. Flanagan. 1,766,494; June 24.
Circuit-controlling device. M. Hasegawa. 1,766,998; June 24.
Circuit-controlling system. A. J. A. Peterson. 1,765,409; June 24.
Circuit, Electron-tube. L. A. Gebhard. 1,766,038; June 24.
Circuit for X-ray multiple-tube stands. J. B. Wantz. 1,765,641; June 24.
Circuit maker for electric ovens, Periodic. C. Wilhjelm. 1,767,636; June 24.
Circuit, Receiving. E. T. Flewelling, jr. 1,767,751; June 24.
Circuit, Rectifier. D. G. Ackerly. 1,766,051; June 24.
Circuits, Electrical detector-amplifier. S. Y. White. 1,765,473; June 24.
Circuits, Protective arrangement for sectionalized electric power. E. W. M. Scott, and B. H. Leeson. 1,765,887; June 24.
Circuits, Thermionic valve. P. W. Willans. 1,768,182; June 24.
Circuits, Transmission. H. Whittle. 1,767,951; June 24.
Circuits, Vacuum-tube. E. J. H. Bussard. 1,767,508; June 24.
Circuits, Vacuum-tube. V. M. Cousins. 1,767,904; June 24.
Circulating apparatus. J. T. Janette. 1,765,490; June 24.
Clamp: *See*—
Adjustable clamp.
Battery clamp.
Cabinetmaker's clamp.
Cable clamp.
Fence clamp.
Plate clamp.
Rod clamp.
Tail clamp.
Terminal clamp.
Trolley suspension clamp.
Clamp. G. G. Fenhouse. 1,767,280; June 24.
Clamp for seat construction. C. E. Stevens. 1,768,427; June 24.
Clamping device. J. B. Crapo. 1,766,488; June 24.
Clamping device for files, newspaper holders, and the like. F. Pohl and M. Vogel. 1,765,880; June 24.
Clarifier. W. M. Coffield and T. C. Moore. 1,766,883; June 24.
Clasp: *See*—
Belt clasp.
Hair clasp.
Cleaner: *See*—
Bedpan cleaner.
Boiler cleaner.
Carpet dust cleaner.
Mop cleaner.
Road cleaner.
Sawmill-block cleaner.
Suction cleaner.
Window cleaner.
Windshield cleaner.
Cleaning and disinfecting compound. W. E. Jones. 1,767,528; June 24.
Cleaning and plating machine, Continuous automatic. C. G. Miller and C. F. Cleveland. 1,767,253; June 24.
Cleaning apparatus. L. C. Huff. 1,767,795; June 24.
Cleaning attachment for presses. J. A. Peck. 1,768,419; June 24.
Cleaning device, Berry-. W. E. Urschel. 1,765,953; June 24.
Cleaning machine, Car-cushion-. E. M. Wilson. 1,767,420; June 24.
Cleaning machine, Fabric-. G. H. Palm. 1,765,610; June 24.
Clip: *See*—
Supporting clip.
Clip. S. L. Gedney. 1,767,973; June 24.
Clip. E. I. Rogers, jr. Des. 81,463; June 24.
Clip for belts, garters, and the like, Spring. C. Murphy. 1,767,608; June 24.
Clip for bucket covers. F. G. Kraft. 1,767,217; June 24.
Clip for holding glass-tube holders. S. A. Gaede. 1,766,377; June 24.
Clip for securing wood sleepers to concrete floors. J. H. Prescott. 1,768,268; June 24.
Clip for sheet material. J. B. Willsea. 1,768,407; June 24.
Clipper. M. R. Thrower. 1,766,270; June 24.
Clock. P. Baumgarten. 1,768,100; June 24.
Clock, Alarm. P. Lux. 1,767,183; June 24.
Clock mechanism. F. R. Kalck. 1,765,677; June 24.
Clock movement and dial-supporting means. J. Wilcox, jr. 1,766,806; June 24.
Clock system, Electric. H. E. Warren. 1,767,949; June 24.
Clock system, Electric. H. E. Warren. 1,768,431; June 24.
Clocks, Electric bell-sounding device for. K. G. Williams. 1,766,160; June 24.
Closure. C. H. Bell. 1,767,040; June 24.
Closure. J. S. Reid. 1,767,187; June 24.
Closure, Bottle-. F. O'Neill, jr. 1,766,679; June 24.
Closure, Cap. W. P. Cohoe. 1,767,512; June 12.
Closure device. F. G. Ginzler. 1,766,120; June 24.
Closure for fabric rolls, End. J. P. Nielsen and J. R. Richer. 1,766,034; June 24.
Cloth-rest construction for cloth shears. C. G. Richardson. 1,768,490; June 24.
Clothes drier. M. G. Steele. 1,767,157; June 24.
Clutch. E. H. Laabs. 1,767,593; June 24.
Clutch, Automatic. F. T. Russell. 1,766,227; June 24.
Clutch device, Automatic. D. R. Knapp. 1,765,983; June 24.
Clutch, Disk. E. A. Thompson. 1,768,346; June 24.
Clutch, Driving. J. W. Updike. 1,767,566; June 24.
Clutch for motor cars, Expanding friction. W. H. McBride. 1,767,387; June 24.
Clutch, Magnetic. H. A. Herr. 1,765,670; June 24.
Clutch mechanism. P. A. Golinick, J. J. Toolan and G. Harred. 1,765,527; June 24.
Clutch, Multiple power. A. H. Jessen. 1,766,823; June 24.
Clutch release, Automatic. H. W. Drennan. 1,765,908; June 24.
Clutch, Reversible. P. B. Ledwell. 1,767,933; June 24.
Coal, Carbonizing. W. E. Trent. 1,767,778; June 24.
Coating apparatus. T. Birkenmaier. 1,765,522; June 24.
Coating, Apparatus or tool for applying. W. B. Thompson. 1,767,822; June 24.
Coating composition. H. J. Hain. 1,768,447; June 24.
Coating, Protective. L. C. Jones. 1,765,676; June 24.
Cock device, Angle-. C. C. Farmer. 1,765,577–8; June 24.
Cock device, Angle-. J. C. McCune. 1,765,878; June 24.
Coffee-making apparatus. T. C. Miller. 1,767,544; June 24.
Coffee, tea, and the like, Apparatus for infusing. E. N. Bachelder. 1,767,956; June 24.
Coil and switch unit. H. E. Norviel. 1,766,933; June 24.
Coil case, Loading-. A. H. Falk. 1,768,240; June 24.
Coil, Water-heating. T. J. Johnston. 1,768,069; June 24.
Coiling machine. C. D. Dallas. 1,767,835; June 24.
Coin-controlled mechanism. G. Weiss. 1,767,635; June 24.
Coin-controlled release for mechanisms. W. A. Trntsch. 1,766,203; June 24.
Coin-operated machines, Control device for. F. L. Mills. 1,767,603; June 24.
Collar and the like. S. G. Payne. 1,766,259; June 24.
Collar protector. E. T. Villasenor. 1,768,384; June 24.
Collar, Sanitary frostproof. D. B. Reese. 1,767,616; June 24.
Coloring mineral granules. H. C. Fisher. 1,766,892; June 24.
Combination implement. S. J. Brutofski, J. Armstrong, and L. Shermak. 1,767,232; June 24.
Combustible, Liquid. C. A. Buerk. 1,766,501; June 24.
Combustible material from its associated noncombustible material, Separation of. W. L. Remick. 1,767,400; June 24.
Combustible mixture and preparing the same. J. Thiecke. 1,766,269; June 24.
Combustion control apparatus. W. J. Crowell, jr. 1,766,980; June 24.
Combustion in internal combustion engines, Apparatus for control of. A. Moore. 1,766,674; June 24.
Compasses, Damping gyroscopic. H. L. Tanner. 1,765,548; June 24.
Composition blanks, Making. W. J. Gaven. 1,765,719; June 24.
Composition board. L. Kirschbraun. 1,765,839; June 24.
Composition boards and the like and apparatus therefor, Making. W. H. Mason. 1,767,539; June 24.
Composition of matter. H. E. Malone and R. W. Pryor. 1,765,597; June 24.
Compounds and of azo dyes therefrom, Manufacture of new intermediate. M. Mendoza. 1,766,949; June 24.
Compounds containing active oxygen, Electrolytic manufacture of. O. Nitzschke and E. Noack. 1,766,722; June 24.
Compressing machine. L. H. Bailey. 1,768,500; June 24.
Compressor, High pressure reciprocating piston. C. Schaer. 1,767,404; June 24.
Computing meter. P. B. Mills and E. R. Mills. 1,766,184; June 24.
Concrete elevating and distributing apparatus. J. E. Bushnell. 1,767,431; June 24.
Concrete mixer. B. B. Collings. 1,766,605; June 24.
Concrete mixer, Rotary. F. O'Reilly. 1,767,809; June 24.
Concrete mixers, Mechanical driving means for. R. C. Frankie. 1,768,472; June 24.
Condensation product of the benzanthrone series and making same. G. Kallacher, H. Scheyer, P. Nawiasky, and E. Krauch. 1,768,302; June 24.
Condensation products from olefines and naphthalene hydrocarbon compounds, Manufacture of. R. Michel. 1,767,302; June 24.
Condensation products of hydrogenated naphthalenes with ethylene, R. Michel. 1,766,344; June 24.
Condenser. W. Dubilier. 1,768,439; June 24.
Condenser. R. L. King. 1,768,258; June 24.
Condenser. J. O. Wrenn. 1,765,960; June 24.
Condenser and cooling means therefor, Power. H. R. Van Deventer. 1,768,430; June 24.

Condenser and making the same, Electrical. R. C. Sprague. 1,767,412; June 24
Condenser and making the same, Electrical. R. C. Sprague. 1,768,333; June 24.
Condenser and making the same, Foil. H. I. Danziger. 1,767,206; June 24.
Condenser, Electrical. W. Dubilier. 1,768,441–2; June 24.
Condenser, Electrical. A. Nyman. 1,768,416; June 24.
Condenser, Electrical. A. M. Trogner. 1,766,565; June 24.
Condenser, Loud acoustic. P. E. Edelman. 1,767,656; June 24.
Condenser, Variable. E. J. H. Bussard and C. E. Kilgour. 1,767,509; June 24.
Condensers, Feeding apparatus for. A. C. Heiny. 1,768,440; June 24.
Condensers, Locating unknown. E .H. Guilford. 1,766,378; June 24.
Conductor, Insulated. W. J. O'Neill. 1,765,734; June 24.
Confectioner's appliance. J. F. Knapp. 1,768,259; June 24.
Confections having irregular shapes, Method of and machine for forming. W. B. Laskey. 1,765,872; June 24.
Confections, Apparatus for manufacturing frozen. A. C. Wood and T. Hall. 1,765,710; June 24.
Connecter for railway rails. J. V. Palmer. 1,765,801–2; June 24.
Connecter switch. C. E. Lomax. 1,767,594; June 24.
Connecter switch. V. S. Tharp. 1,767,719; June 24.
Connecting rod. T. P. Chase. 1,768,508; June 24.
Connecting rod. C. R. Hammond. 1,767,882; June 24.
Connecting rod for internal-combustion engines. H. Jones. 1,766,024; June 24.
Connection and valve fitting for automobile water-circulating systems. H. Kocourek and L. Aeby. 1,765,984; June 24.
Connection, Ground-rod. F. H. Banner. 1,766,587; June 24.
Connection, Locomotive piston-rod crosshead. W. J. Schlacks. 1,767,484; June 24.
Connection, Loom drop-box. C. J. Lindegren. 1,766,756; June 24.
Contact device, High-frequency. A. M. Trogner. 1,766,049; June 24.
Contact for channel brush switches. A. Corbett. 1,765,569; June 24.
Container. G. O. Holben. 1,768,064; June 24.
Container. H. Nias and W. Poster. 1,766,226; June 24.
Container, Combined shipping and display. W. F. Punte. 1,765,383; June 24.
Container for power units. T. A. Willard. 1,767,195; June 24.
Container for viscous materials, Tubular. A. Hirth. 1,765,794; June 24.
Container, Metal. C. J. Aulbach and E. D. Anderson. 1,765,478; June 24.
Container, Sanitary iceless shipping. E. Lené. 1,767,685; June 24.
Container with attached circular. P. F. Paige. 1,767,549; June 24.
Control, Accelerator. N. Z. Butterick. 1,766,877; June 24.
Control apparatus. H. D. Gregory. 1,766,510; June 24.
Control apparatus, Electric. K. Kuntze, A. Haller, and E. Wirz. 1,766,656; June 24.
Control apparatus for electrically-operated elevator signals. F. E. Kalte. 1,768,361; June 24.
Control for electric motors, System of remote. J. Altmayer. 1,766,808; June 24.
Control for evaporators, Automatic. O. Frey. 1,766,622; June 24.
Control for windshields and car interiors, Hot-air. W. W. Graham. 1,767,446; June 24.
Control mechan'sm, Automatic. F. Schaum. 1,767,901; June 24.
Control mechanism for paper-making machines. D. E. Lewellen and G. R. Zecher. 1,768,325; June 24.
Control mechanism for vending machines. W. A. Tratsch. 1,766,152; June 24.
Control system. J. H. Bell. 1,768,283; June 24.
Control system. L. I. Davis. 1,768,122; June 24.
Control system. H. T. Seeley. 1,768,423; June 24.
Control system. T. U. White. 1,765,474; June 24.
Control system, Remote. M. L. Nelson. 1,765,538; June 24.
Control system, Supervisory. J. L. McCoy. 1,765,494; June 24.
Controller for electric-motor-driven machinery. N. L. Mortensen. 1,767,606; June 24.
Controlling mechanism. F. D. Hardesty. 1,768,518; June 24.
Convertible chair. W. B. Stout. 1,767,488; June 24.
Conveyer. J. A. Bettin. 1,766,052; June 24.
Conveyer. C. L. Moon. 1,766,225; June 24.
Conveyer and washer for vegetables and fruits, Rotary. U. J. Boehnke. 1,765,647; June 24.
Conveyer for shoes and the like. K. A. A. Johansson. 1,766,645; June 24.
Conveyer, Jigging. J. Lithgoe. 1,766,660; June 24.
Conveyer mechanism. W. J. Koch. 1,768,482; June 24.
Conveyer, Shaking. P. Aurich. 1,767,425; June 24.
Conveyers, Automatic transfer mechanism for. S. Olson. 1,766,142; June 24.
Cooker, Table. O. A. Langos. 1,767,802; June 24.
Cooler: *See*—
Bottle cooler.
Cooling apparatus, Transformer. J. Kubler. 1,766,654; June 24.
Cooling device. J. Kubler. 1,766,655; June 24.
Cooling, Drum. W. G. Schröder. 1,768,156; June 24.
Cooling engines and purifying lubricants. J. F. Howarth. 1,767,675; June 24.
Cooling or pasteurizing device, Cream. F. L. Marshall. 1,768,263; June 24.
Cooling system, Engine-. H. C. Mallory. 1,767,598; June 24.
Cooling system for marine engines. H. Thompson. 1,765,337; June 24.
Copper-oxide rectifier. J. Slepian. 1,765,502; June 24.
Cord for looms, Harness. O. V. Payne. 1,766,723; June 24.
Cord-making machine. C. M. Petersen. 1,766,683; June 24.
Core and method of and apparatus for applying the coating thereto, Coated. H. B. Whitfield. 1,765,515; June 24.
Core catcher. L. H. Wellensiek. 1,765,513; June 24.
Core drill, Reciprocating. L. S. Copelin. 1,766,108; June 24.
Cores from castings and for cleaning castings, Apparatus for discharging. J. T. Stoney. 1,765,462; June 24.
Cores, Method of and apparatus for coating H. W. Jespersen. 1,765,533; June 24.
Corn picker and husker. H. Synck. 1,765,950; June 24.
Corn picking and husking machine. J. Van Nortwick. 1,766,348; June 24.
Corn-planter fertilizing-drill attachment. B. M. Linville. 1,765,683; June 24.
Corn-sheller blower. H. D. Ediger. 1,766,492; June 24.
Cornet system, Multiphase. L. C. Young. 1,766,050; June 24.
Corrosion prevention of iron and steel. M. M. Harrison. 1,766,902; June 24.
Cotton gin. W. J. Petty and E. M. Hancock. 1,767,894; June 24.
Counter attachment. A. Vanderveld and E. Morris. 1,767,823; June 24.
Counter, Display. J. R. Ragland. 1,767,397; June 24.
Counter, Power-operated. H. J. Goss. 1,765,418; June 24.
Counting device. H. O. Hem. 1,768,477; June 24.
Counting meter. H. F. Obergfell and T. C. Riebe. 1,768,140; June 24.
Coupler, Safety. R. H. Worcester. 1,765,959; June 24.
Coupling: *See*—
Electrical coupling.
Hose coupling.
Joint coupling.
Shaft coupling.
Coupling device for therapeutic bath coils, Outlet. R. Pabst. 1,767,697; June 24.
Coupling for conductors. A. F. Pieper. 1,767,612; June 24.
Coupling for piezo-electric crystal devices, Mechanical. A. McL. Nicolson. 1,766,044; June 24.
Coupling for pipes and the like, Disconnecting. J. Mueller. 1,767,391; June 24.
Coupling unit, High-frequency. F. A. Kolster. 1,766,039; June 24.
Cover. C. D. Anderson. 1,767,501; June 24.
Cover, Automobile spring. A. L. Clapp. 1,765,863; June 24.
Cover, Can. D. M. Welch and C. Warner. 1,766,366; June 24.
Cover, Dispensing. C. R. Case. 1,767,742; June 24.
Cover for conduit outlet boxes. J. T. Pearson. 1,767,226; June 24.
Cover for rumble seats, Shelter. W. C. Tzinski. 1,767,159; June 24.
Cover, Sanitary toilet-seat. T. Strumpf. 1,765,463; June 24.
Cover, Table. C. A. Hupp. Re17,714; June 24.
Covering, Floor. J. B. Campbell. 1,766,879; June 24.
Coverings and product obtained thereby, Manufacture of floor. M. C. Teague. 1,765,748; June 24.
Crane. H. P. Elliott. 1,765,408; June 24.
Cranes, Device for stabilizing. H. L. Mitchell. 1,767,470; June 24.
Crank shaft. L. Damblanc. 1,767,352; June 24.
Crate, Fiber-board. H. B. Walter. 1,767,629; June 24.
Cropping shears, Automatic. L. Johnson. 1,767,763; June 24.
Crossing composed of vignoles rails. F. Werthmann. 1,765,856; June 24.
Crypt, Burial. D. E. Minton and S. H. Gallagher. 1,768,369; June 24.
Cultivator. L. H. Knupke. 1,767,851; June 24.
Cultivator, Disk. F. E. Allen. 1,766,164; June 24.
Cultivator, Hand. G. R. Bellah. 1,766,212; June 24.
Cultivator, weeder, and pulverizer, Combination. J. Yackley. 1,767,162; June 24.
Cultivators, Attachment for listed corn. J. F. Kroupa. 1,767,378; June 24.
Culture, Promoting date. H. L. Cavanagh. 1,765,482; June 24.
Cup: *See*—
Hydraulic force cup.
Oil cup.
Cup-making machine, Paper-. E. G. Wessman and H. A. Stone. 1,766,420; June 24.
Cup-shaped members, Apparatus for forming. W. N. Booth. 1,766,098; June 24.

Cup washer. J. J. McElroy and E. L. Beecher. 1,767,936; June 24.
Current collector. G. W. Packer. 1,765,441; June 24.
Current-control system, Alternating-. J. Kubler. 1,766,653; June 24.
Current motor. P. B. McChesney. 1,767,995; June 24.
Current rectifier, Alternating-. R. C. Jacquelet. 1,767,367; June 24.
Current-rectifying device. W. O. Snelling. 1,766,462; June 24.
Current-rectifying device. W. O. Snelling. 1,766,464; June 24.
Current-rectifying device. W. O. Snelling. 1,766,467; June 24.
Currents, Distribution system for alternating. G. E. Palmer. 1,765,696; June 24.
Curtain batten. J. F. Levan. 1,765,595; June 24.
Curtain for motor vehicles. J. Holan. 1,767,071; June 24.
Curtains of automobiles, Device for operating rear. W. Brown. 1,767,046; June 24.
Cushion-back dipper. W. J. Mullally. 1,766,255; June 24.
Cushioned tip. W. A. Vollmer. 1,767,194; June 24.
Cut-off device for extruding machines. W. C. MacFarlane. 1,768,365; June 24.
Cut-off, Water. W. H. Bentley. 1,768,305; June 24.
Cutter: *See*—
Blade cutter. Noodle cutter.
Bolt cutter. Rotary cutter.
Chain cutter. Thread cutter.
Circuit cutter. Wire cutter.
Cutting and grinding mill. S. R. Gately. 1,767,921; June 24.
Cutting and perforating machine. R. M. Johnstone. 1,768,070; June 24.
Cutting machine. W. Gillooly. 1,767,208; June 24.
Cutting machine, Bun-. J. A. Ost. 1,766,450; June 24.
Cutting machine for wood gutters. J. H. Mason. 1,767,994; June 24.
Cutting machine, Sheet-glass-. W. H. Clelland. 1,766,427; June 24.
Cylinder, Cutting. H. A. Cumfer. 1,766,244; June 24.
Cylinder for spinning frames, Driving. F. E. Banfield, jr., and F. O. Hoagland. 1,766,585; June 24.
Cylinder locks to doors and furniture locks, Device for adjustably attaching. H. Münch. 1,766,081; June 24.
Cylinders, Cutting cushion for folding. H. A. W. Wood. 1,766,807; June 24.
Cystoscope, Small-sized. R. H. Wappler. 1,767,025; June 24.
Cyto-vaccine of tubercle bacilli. J. S. Kominz. 1,766,131; June 24.
Damper, Automatic. H. C. Baumgarten. 1,767,869; June 24.
Decoration and sign, Translucent. L. Kathe. 1,765,981; June 24.
Decorative device. J. Rudges. 1,765,940; June 24.
Decorticating machine. J. Heller. 1,766,513; June 24.
Deflector. L. Buttermann. 1,766,241; June 24.
Deflector. J. L. Finch. 1,766,249; June 24.
Deflector for motor-vehicle windows, Wind and rain. J. R. Taylor. 1,768,300; June 24.
Dehydrant for electric insulators and contact points and restoring normal electric conditions. G. S. Lewin and C. A. Logue. 1,766,714; June 24.
Dehydration of substances suspended in water. R. Salwén and J. Öhrn. 1,768,215; June 24.
Dentures, Adjustable attachment for. S. Richardson. 1,765,851; June 20.
Depth-indicating device. Liquid-. H. W. King. 1,766,129–30; June 24.
Dermatological instrument. W. S. Crater. 1,765,366; June 24.
Designs to cylinders, Applying. W. H. Banzett. 1,767,644; June 24.
Desk, Bookkeeper's. G. W. Schulz. 1,765,742; June 24.
Desk, Resonant shadeless. E. J. Smith. 1,767,156; June 24.
Detector: *See*—
Weft detector.
Detector element. W. O. Snelling. 1,766,461; June 24.
Detergent. B. F. Carver. 1,767,345; June 24.
Device for applying oil or other liquid to thread. C. E. Coleman. 1,767,203; June 24.
Device for equalizing stresses. I. Yassenoff. 1,765,749; June 24.
Device for grinding valves or the like. A. Riegel. 1,767,700; June 24.
Device for handling loose materials. F. W. Vodoz. 1,765,511; June 24.
Device for replacing checker bricks. B. D. Brown. 1,767,832; June 24.
Device for supplying water to stone saws. A. Yates. 1,765,890; June 24.
Die: *See*—
Screw-cutting die.
Die. A. Olgay. 1,765,770; June 24.
Die-casting machine, Automatic. E. Carlson. 1,765,653; June 24.
Die mechanism for constructing metallic wheels. F. W. Burger. 1,765,757; June 24.
Die mechanism for sizing and testing metal wheel spiders. F. W. Burger. 1,765,756; June 24.
Die structure. W. H. Sommer. 1,765,744; June 24.
Digger: *See*—
Ditch digger.
Digging and cleaning machine, Ditch. E. Heumann. 1,765,919; June 24.
Dilatometer, Differential recording. P. Chevenard. 1,766,775; June 24.
Direction indicator. B. H. Smith. 1,766,199; June 24.
Dirigible. T. Rose. 1,766,358; June 24.
Dirigible craft, Automatic control of the steering of. J. B. Henderson. 1,765,583; June 24.
Dirt and dust remover for mining machines. T. J. and R. C. Crombie. 1,766,429; June 24.
Discharge tube. J. H. de Boer and P. Clausing. 1,767,437; June 24.
Dish. S. W. Farber. Des. 81,437; June 24.
Dish-drying apparatus. S. Olson. 1,765,996; June 24.
Dished wheel. S. I. Prescott. 1,765,848; June 24.
Dishwashing fixture. G. W. Fisher. 1,767,841; June 24.
Dishwashing machine. H. L. Phillips. 1,765,444; June 24.
Disinfecting, bactericidal, insecticidal, fungicidal, and vermin-destroying preparation. R. Lieske and W. Schepss. 1,766,441; June 24.
Disintegrating, kneading, mixing, and drying machine. A. Kramer. 1,767,376; June 24.
Disks, Rolling. J. W. Hughes. 1,767,796; June 24.
Dispenser for particulate materials. L. H. Morin. 1,767,009; June 24.
Dispenser, Liquid. B. B. Maynard and F. L. De Sanno. 1,765,844; June 24.
Dispenser, Multiple-valve. J. L. McCain. 1,768,129; June 24.
Dispenser, Napkin. A. E. Cofrin. 1,768,118; June 24.
Dispensing apparatus. F. S. Barks. 1,767,426; June 24.
Dispensing apparatus, Automatic. H. Miller. 1,766,717; June 24.
Dispensing apparatus, Liquid-. T. Di Tella. 1,766,287; June 24.
Dispensing device. O. A. Schoen. 1,765,622; June 24.
Dispensing device. W. Tittle. 1,767,491; June 24.
Dispensing device for dental alloy and mercury. F. G. Jellison. 1,767,928; June 24.
Dispensing device, Portable. H. R. Price and E. W. Nice. 1,766,764; June 24.
Dispensing gasoline and the like, Apparatus for. S. J. Pocock. 1,767,256; June 24.
Dispensing machine, Automatic gum tape-. J. Rugen. 1,767,942; June 24.
Display device. Z. W. Day. 1,767,745; June 24.
Display device, Advertising. R. B. Simpson. Des. 81,468; June 24.
Display device for dispensing pumps. A. L. Wertz. 1,765,956; June 24.
Display equipment. W. B. Morton and L. F. Beisner. 1,765,935; June 24.
Display rack. A. C. Chappory, jr., and J. B. Posey. 1,767,433; June 24.
Display stand. J. G. Huye. 1,767,134; June 24.
Display stand. M. Tardy. 1,768,271; June 24.
Distillation. H. V. Welch. 1,768,179; June 24.
Distributing system. A. D. Pritchard. 1,765,447; June 24.
Ditch digger. F. N. Weber. 1,767,417; June 24.
Ditching machines, Dirt spreader for. G. F. Scheckler. 1,767,017; June 24.
Dock, Floating. R. B. De Long. 1,765,405; June 24.
Doll. C. Stein and W. M. Heller. 1,768,334; June 24.
Doll, Corn-shuck. M. C. Revis. Des. 81,460–1; June 24.
Door. F. C. Heinen and W. W. Darrow. 1,768,060; June 24.
Door. H. C. Rusch. 1,767,703; June 24.
Door, Automatic. A. K. Baker. 1,767,271; June 24.
Door, Automatic. G. D. Hall. 1,767,448; June 24.
Doorcheck. B. E. Byrd. 1,766,011; June 24.
Door, Fire-box. J. G. Robinson. 1,765,740–1; June 24.
Door, Folding. E. J. G. Phillips. 1,768,267; June 24.
Door guide, Automobile. T. A. Mealia. 1,766,183; June 24.
Door handle or similar article, Motor-vehicle. W. Schnell. Des. 81,465–6; June 24.
Door mechanism, Car-. W. E. Wine. 1,768,227; June 24.
Door mechanism, Car-. W. E. Wine. 1,768,302; June 24.
Door-operating device. G. Tucker. 1,768,173; June 24.
Dough dividing and working machine. G. Rausch. 1,766,943; June 24.
Dowel. G. Sergeeff. 1,767,019; June 24.
Draft arrangement for spinning flax, jute, and similar fiber, Double. G. P. Wershinin. 1,766,864; June 24.
Draft equalizer, Animal. P. M. Hodge. 1,766,384; June 24.
Drag-line fair lead. R. L. Brown. 1,767,737; June 24.
Drain fitting, Convertible. W. S. Fleming. 1,766,621; June 24.
Drawer, Filing. LeR. Hutchins and J. D. Lear. 1,768,467; June 24.
Drawing press. A. A. Byerlein. 1,768,503; June 24.
Drier: *See*—
Clothes drier. Hair drier.
Drill: *See*—
Core drill. Rock drill.
Hammer drill. Subaquatic drill.
Mine drill. Well drill.
Drill mechanism, Rotary. E. V. Crowell. 1,767,350; June 24.

Drill stem. J. F. Bozeman and J. D. Cole. 1,766,326; June 24.
Drilling apparatus, Electric. C. Contal and P. Krettly. 1,768,119; June 24.
Drilling machines, Feed mechanism for. J. Friedl. 1,767,752; June 24.
Drink-collecting device. R. G. Tetro. 1,767,820; June 24.
Drink-mixer unit. G. C. Schmitz. 1,767,262; June 24.
Drive for electric trucks, Auxiliary. M. P. Vukosav. 1,766,163; June 24.
Drive mechanism. C. A. Rinker. 1,766,307; June 24.
Driving mechanism for bobbin shafts of roving frames. F. E. Banfield, jr., and G. F. Albrecht. 1,766,586; June 24.
Driving mechanism for butter-working rolls. A. C. Hougland. 1,766,176; June 24.
Drum. H. G. Hunt. 1,767,133; June 24.
Drum, Collapsible. I. L. Clark. 1,768,438; June 24.
Dry-cell battery. A. K. Huntley. 1,765,673; June 24.
Dry cells, Apparatus for making. R. A. Lorig. 1,766,661; June 24.
Drying apparatus and method. L. Buck. 1,766,595; June 24.
Drying machine. A. D. Staley. 1,765,628; June 24.
Drying machines, Automatic carrier-turning mechanism for. J. W. Dennis. 1,766,984; June 24.
Drying machines, Heating device for. E. Robeson. 1,768,002; June 24.
Drying of moist material. O. Söderlund and T. Gram. 1,766,843; June 24.
Dumb-waiter closing and locking device. W. A. Curtis. 1,768,121; June 24.
Duplicating machine. G. P. Clark. 1,767,237; June 24.
Dust collector. C. L. Johnson. 1,765,871; June 24.
Dust collector or separator. J. Whitemore. 1,766,237; June 24.
Dyeing and wet treating of fabric, Apparatus for. W. Fehrmann. 1,765,912; June 24.
Dyeing apparatus, Knitting-machine spot-. R. G. Jennings. 1,767,762; June 24.
Dyes derived from aminosulphones, Azo. K. H. Saunders. 1,766,946; June 24.
Dyestuffs, Azo. M. Mendoza and K. H. Saunders. 1,766,950; June 24.
Dyestuffs, Azo. H. Wagner, O. Sohst, and J. Rachor. 1,765,640; June 24.
Dyestuffs, Manufacture of new azo. K. H. Saunders. 1,766,947; June 24.
Dyestuffs, Mordant azo. M. Mendoza and K. H. Saunders. 1,766,948; June 24.
Dyestuffs, Naphtho-carbazole-hydroxy-azo. H. Grimmel and H. Clingestein. 1,766,434; June 24.
Dyestuffs, Yellowish vat. G. Kränzlein, H. Greune, and H. Vollmann. 1,767,377; June 24.
Ear protector. L. Janss. 1,768,068; June 24.
Economizer. D. S. Jacobus and W. A. Jones. 1,765,532; June 24.
Edge gauge. G. W. Jacques. 1,767,589; June 24.
Educational apparatus. S. L. Redman. 1,766,355; June 24.
Educational appliance. T. W. Klink. 1,766,521; June 24.
Educational appliance. H. P. Sachse. 1,767,774; June 24.
Educational game apparatus. B. Applegate. 1,767,424; June 24.
Egg beater. S. T. Hobbs. 1,767,454; June 24.
Egg beater. R. Stone and J. Cameron. 1,768,012; June 24.
Egg box. H. A. Inman. 1,767,797; June 24.
Egg opener. D. H. Jones. 1,765,491; June 24.
Egg-turning device. R. L. Strain. 1,766,410; June 24.
Elastic strand, Covered. L. B. Chisholm. 1,766,776; June 24.
Electric fire or radiator. H. H. Berry. 1,768,284; June 24.
Electric heater. B. Bognar. 1,767,044; June 24.
Electric heater. H. V. Leckie and W. H. Woodford. 1,767,294; June 24.
Electric motor. L. M. Perkins. 1,766,799; June 24.
Electric regulation. J. L. Creveling. 1,766,489; June 24.
Electric switch. C. D. Ainsworth. 1,765,303; June 24.
Electric switch. F. A. Boedtcher. 1,768,027; June 24.
Electric switch. T. R. Martin. 1,766,526; June 24.
Electric switch. R. D. Smith. 1,767,709; June 24.
Electric switch. L. S. Walle. 1,768,385; June 24.
Electric switch, Coin-controlled. W. Podrouzek. 1,766,354; June 24.
Electric switch, Thermostatic. C. K. Davis and A. Dick. 1,766,430; June 24.
Electric system. J. L. Creveling. 1,766,490; June 24.
Electrical apparatus. O. E. Marvel. 1,766,505; June 24.
Electrical conductors, Making composite. W. T. Barrans. 1,765,521; June 24.
Electrical conductors, Method of and apparatus for insulating. A. H. Adams. 1,765,520; June 24.
Electrical coupling. J. Buchli. 1,766,594; June 24.
Electrical distribution, System and method of. C. T. Siebs. 1,765,458; June 24.
Electrical distribution, System of. C. T. Siebs. 1,765,460; June 24.
Electrical machines, Controlling the output of. C. L. Stokes. 1,768,165; June 24.
Electrical meter. P. Paschen and G. Reime. 1,765,611; June 24.
Electrical precipitating apparatus. A. Arras. 1,767,338; June 24.
Electrical precipitation. H. A. Wintermute and C. W. J. Hedberg. 1,766,421; June 24.
Electrical precipitation, Apparatus for. W. Sykes. 1,767,265; June 24.
Electrical precipitation, Method and apparatus for. H. A. Wintermute and C. W. J. Hedberg. 1,766,422; June 24.
Electrical protective system. R. Bauch. 1,765,395; June 24.
Electrical quantities, Measuring. P. A. Borden, H. S. Baker, and L. A. Paine. 1,765,563; June 24.
Electrical resistance. E. R. Stoekle. 1,767,715; June 24.
Electrical resistance and making same. E. R. Stoekle. 1,767,716; June 24.
Electrical-resistance elements and the like, Producing. F. Eichenberger. 1,765,572; June 24.
Electrical switch apparatus. D. R. Furnas. 1,768,245; June 24.
Electrical switch, Automatic. R. V. Owen. 1,766,528; June 24.
Electrical system for outboard motors. A. Schreil and H. J. Hilliborn. 1,765,454; June 24.
Electrical testing instrument. A. H. Benson. 1,765,479; June 24.
Electrolytic apparatus. A. E. Knowles. 1,767,375; June 24.
Electrolytic-cell hook-up. F. H. Buck. 1,766,875; June 24.
Electrolytic cells and the like, Apparatus for cooling. R. A. Klock. 1,766,026; June 24.
Electrolytic process and apparatus. H. C. Harrison. 1,768,358; June 24.
Electromagnet. H. F. Waters and V. R. Brown. 1,767,725; June 24.
Electromagnet. L. J. Wick. 1,765,958; June 24.
Electromechanical apparatus for the automatical dropping of any article. R. Alkan and G. Lesourd. 1,765,897; June 24.
Electricity on hides, Method and device for compensating. F. Hausmann. 1,766,512; June 24.
Electrodynamic device. E. C. Wente. 1,766,473; June 24.
Electron-discharge device. W. A. Ruggles. 1,768,421; June 24.
Electron-discharge device. P. Schwerin. 1,766,460; June 24.
Electron-discharge device with indirectly-heated cathode. C. E. Huffman. 1,765,487; June 24.
Elevator: *See*—
Rod elevator.
Elevator-signal restoration system. F. A. Boedtcher. 1,767,871; June 24.
Elevator system. D. L. Lindquist, E. L. Dunn, and D. C. Larson. 1,767,891; June 24.
Elevator system, Electric. G. B. Grosvenor. 1,767,125; June 24.
Emergency section for ships. C. F. Rodin. 1,768,152; June 24.
Emulsions from partially-oxidized petroleum wax and making the same. A. W. Burwell. 1,768,523; June 24.
Engine: *See*—
High-pressure engine. Reciprocating engine.
Internal-combustion engine. Rotary engine.
Engine. R. Zumwalt. 1,767,953; June 24.
Engine heater, Internal-combustion-. F. A. Chapman and W. Kotvis. 1,765,655; June 24.
Engine mounting, Resilient. R. Sardeson, F. J. LaMere, and J. Corser. 1,767,015; June 24.
Engine of the solid-fuel-injection type, Internal-combustion. W. Riehm. 1,767,701; June 24.
Engines and the like, Linkwork for reciprocating. E. M. Bythway. 1,768,436; June 24.
Engines, Assembling internal-combustion. R. O. Gill. 1,768,049; June 24.
Engines, Attachment for internal-combustion. H. E. Kanehal. 1,766,437; June 24.
Engines, Bed for vertical internal-combustion. E. Herkt. 1,766,383; June 24.
Engines, Charge-supplementing apparatus for internal-combustion. A. Moore. 1,766,676–7; June 24.
Envelope. N. Sternheimer. 1,768,164; June 24.
Envelope machine. H. J. Goss. 1,765,419; June 24.
Envelope machines, Patch-applying mechanism for. W. H. Sheppard. 1,766,693; June 24.
Envelope sealer. B. Zuckerman, jr. 1,767,908; June 24.
Envelope, Window. W. T. Von Winkler. 1,766,416; June 24.
Eraser, Adjustable. A. A. Page. 1,766,935; June 24.
Erector for tunnel linings. W. B. Updegraff. 1,766,568; June 24.
Esters of aliphatic alcohols, Production of phosphoric. F. Nicolai. 1,766,720–1; June 24.
Excavating machine. W. K. Liggett. 1,765,682; June 24.
Excavating, Retaining device or form when. W. S. Ramey. 1,768,146; June 24.
Excavating shovel. H. J. Brendlin. 1,766,053; June 24.
Excavator. L. P. Clutter. 1,765,905; June 24.
Excavator, Full-revolving. B. C. Clutter and G. E. Wagner. 1,765,967; June 24.
Excavator scoops, Power-operated trip for. G. E. Wagner and L. P. Clutter. 1,765,893; June 24.
Excavator tooth. E. R. Standfuss. 1,767,718; June 24.
Excavators, Back-filling attachment for. G. E. Wagner. 1,765,892; June 24.

Exercising device, Treadmill. A. J. Wood. 1,766,089; June 24.
Exhaust purifier. W. Riehm. 1,766,945; June 24.
Exhauster for sprinkler systems. W. B. Griffith. 1,765,423; June 24.
Explosives, Purifying. D. M. Jackman. 1,767,798; June 24.
Extension device. P. W. Jones. 1,767,530; June 24.
Extension table. W. P. Sauer. 1,767,016; June 24.
Extension table. H. Siskin. 1,766,694; June 24.
Extractor: *See*—
Hull extractor. Hydroextractor.
Eye-treating device. F. King. 1,767,080; June 24.
Fabric: *See*—
Bed-spring fabric. Knitted fabric.
Fabric-band expander. R. V. Ritchey. 1,768,332; June 24.
Fabric flower and making the same. A. M. Patterson. 1,766,351; June 24.
Fabric, Method of and mechanism for weaving stake. J. E. Millett and G. E. Nordstrom. 1,766,223; June 24.
Fabric rolls, End closing and protecting means for. J. P. Nielsen. 1,766,256; June 24.
Fabric rolls, End closing and protecting means for. J. P. Nielsen and J. R. Richer. 1,766,257; June 24.
Fabric, Treating. R. R. Fulton. 1,767,663; June 24.
Fabric-treating machine. W. W. Sibson. 1,768,455; June 24.
Fabric with interwoven metal wire. A. Kessler. 1,765,795; June 24.
Fabric with piles of different colors, Terry. W. H. Wakefield. 1,766,805; June 24.
Facing machine. J. H. Taylor. 1,768,272; June 24.
Fan, Electric motor-driven desk. J. R. Ferguson. 1,767,060; June 24.
Fan housing. C. A. Bulkeley. 1,767,279; June 24.
Fan mechanism, Cooling-. R. R. Waterman. 1,767,027; June 24.
Fare indicator. L. Kern. 1,768,073; June 24.
Fast-colored resists under aniline black, Producing. W. Cotton. 1,765,658; June 24.
Fastener. R. H. Hedge. 1,767,451; June 24.
Fastener. G. D. Pilon. 1,768,371; June 24.
Fastener, Bag-frame. W. C. Hiering. 1,765,671; June 24.
Fastener, Boot-top. G. L. Van Dinter. 1,767,722; June 24.
Fastener, Combination sash and screen-door. G. Roberts and M. Dysthe. 1,765,814; June 24.
Fastener, Door. E. M. Champion, jr. 1,768,188; June 24.
Fastener-driving mechanism, Corrugated. A. E. Cranston. 1,767,580; June 24.
Fastener, End-curl. M. C. Kapustka. 1,767,681; June 24.
Fastener, Garment. F. M. Mulroney. 1,766,828; June 24.
Fastener, Rope. M. Haley. 1,766,121; June 24.
Fastener, Sash. C. L. Harrington. 1,767,450; June 24.
Fastener, Separable. F. S. Carr. 1,768,506–7; June 24.
Fastener, Separable. C. L. Hall. 1,768,475; June 24.
Fastener, Shoe. E. F. Hall. 1,766,435; June 24.
Fastener, Wrist-watch-strap. J. W. Clark. 1,765,966; June 24.
Fastening device, Cable-. G. P. Caulkins. 1,767,432; June 24.
Fastening device for watch bracelets. F. Armbrust. 1,766,477; June 24.
Fastening, Nut and screw. F. S. Carr. 1,768,505; June 24.
Feed. H. T. Herrick. O. E. May, and H. W. Titus. 1,767,178; June 24.
Feed mechanism, Intermittent-. A. S. Howell. 1,767,846; June 24.
Feeder, Automatic. B. Mandrich. 1,765,684; June 24.
Feeder, Poultry. F. W. Lord. 1,768,090; June 24.
Feeding mechanism for cloth-piling machines and the like. J. J. Lyth. 1,768,414; June 24.
Fence clamp. D. T. Finkbeiner. 1,766,890; June 24.
Ferrule and retainer for head lamps. S. W. Hyatt. 1,765,763; June 24.
Fertilizer. Apparatus for spreading. G. F. Miller. 1,766,667; June 24.
Fertilizer salts, Manufacture of. H. B. Kipper. 1,768,075; June 24.
Fibrous material. Apparatus for saturating. A. E. Schutte. 1,765,777–8; June 24.
Figure toy, Gravity-operated. J. N. Vasconcellos. 1,768,174; June 24.
Filaments, Treating artificial. C. Landeskroener. 1,767,294; June 24.
File, Extensible and collapsible envelope. A. C. Crull. 1,766,777; June 24.
File machine. C. M. Logan. 1,767,468; June 24.
File, Paper. M. M. Hansen. 1,766,072; June 24.
Filing device. E. A. Horner. 1,766,996; June 24.
Filing machine, Saw-. L. J. Klunk. 1,766,438; June 24.
Filler. E. W. King. 1,768,074; June 24.
Film-driving means. C. L. Heisler. 1,768,403; June 24.
Film, Preparing sound and picture. P. C. Seel. 1,765,944; June 24.
Film travel, for view taking, printing, and projection of cinematographic films, Apparatus adapted for continuous. P. Chavaroux, Paris, France. 1,765,904; June 24.
Films, Apparatus for treating photographic. G. C. Beidler. 1,768,022; June 24.
Films, Apparatus for treating photographic. G. C. Beidler. 1,768,501; June 24.
Films of fluid materials to surfaces, Apparatus for applying. J. R. Mack. 1,768,485; June 24.
Films, Production of metal. W. E. Watkins. 1,766,417; June 24.
Filter. E. J. Sweetland. 1,768,167; June 24.
Filter, Air and gas. A. M. Goodloe, 1,765,720; June 24.
Filter, Air and gas. G. E. Lynch. 1,766,221; June 24.
Filter and storage unit. G. L. Rosenbaum. 1,766,228; June 24.
Filter cover. C. A. Frankenhoff. 1,767,523; June 24.
Filter for absorbing ultra-violet light. T. Suzuki and S. Sakural. 1,766,411; June 24.
Filter for internal-combustion engines, Oil. M. Tibbetts. 1,766,847; June 24.
Filter installation, Oil. L. V. Cram and C. W. McKinley. 1,768,511; June 24.
Filter, Oil. T. P. Chase. 1,768,350; June 24.
Filter, Oil. C. W. McKinley and H. G. Kamrath. 1,768,367; June 24.
Filter press. A. F. Wendler. 1,765,389; June 24.
Filter presses, Method and apparatus for operation of. C. E. Shaw. 1,767,318; June 24.
Filters, Cleaning of. E. Folta. 1,768,314; June 24.
Filtering apparatus. J. M. Callow. 1,766,166; June 24.
Filtering apparatus. W. W. Nugent. 1,767,856; June 24.
Filtering system for lubricants. W. W. Nugent. 1,768,139; June 24.
Finger board. H. F. Newman and F. A. Williams. 1,766,347; June 24.
Finger plate for dial switches, Molded. G. Hurford and N. V. Kipping. 1,765,428; June 24.
Finger ring. S. Grossman. Des. 81,442; June 24.
Fire-alarm switch. G. J. Francoeur. 1,766,497; June 24.
Fire escape, Individual. F. E. Tucker. 1,766,566; June 24.
Fire extinguisher. L. Brillou. 1,767,428; June 24.
Fire extinguisher. C. R. D'Olive. 1,766,985; June 24.
Fire extinguisher, Automatic. H. C. Laengel. 1,766,912; June 24.
Fire extinguisher containing a pressure-gas cylinder, Dry. W. Friedrich. 1,768,047; June 24.
Fire extinguisher, Hand. H. C. Hays. 1,765,374; June 24.
Fire-extinguishing device. W. J. Ruff. 1,767,098; June 24.
Fire kindler. C. and F. Krei. 1,767,293; June 24.
Fireplace. E. H. Richardson. 1,768,150; June 24.
Fireplace heater. J. M. Cesa. 1,766,601; June 24.
Fishhook and weed guard. J. E. Brown. 1,766,279; June 24.
Fish lure. A. F. Boehm. Des. 81,433; June 24.
Fisherman's outfit. A. E. Holbrook. 1,767,887; June 24.
Fishing reel. S. G. Russell. 1,766,086; June 24.
Fishing tackle. C. T. Pflueger. 1,766,532; June 24.
Fishing tackle. V. Vasilevsky. 1,767,723; June 24.
Fitting for tubular structures. H. Bryant. 1,765,651; June 24.
Fixture, Centrifugal. C. G. Hawley. 1,765,918; June 24.
Flasher signal. F. C. Volkman and S. C. Vincent. 1,767,104; June 24.
Flexible roller. G. L. Fisk. 1,768,044; June 24.
Flier for silk-spinning machines. J. E. Lawton. 1,768,204; June 24.
Float switch. N. Gron. 1,768,446; June 24.
Floating air liner. S. M. Lindstrand. 1,766,915; June 24.
Floating-deck tank. A. A. Kramer. 1,767,142; June 24.
Floor, Armored concrete. W. Klinke. 1,765,797; June 24.
Floor cloths, Manufacture of inlaid. E. and J. D. Batten. 1,766,322; June 24.
Floor construction. M. S. Goldsmith. 1,767,066; June 24.
Floor covering, Smooth-surface textile. R. G. Jackson. 1,765,589; June 24.
Floor coverings, Making. R. G. Jackson. 1,765,588; June 24.
Floor or pavement and producing same. E. W. Burgess. 1,765,652; June 24.
Floor outlet. E. A. Staples. 1,767,323; June 24.
Floor waxer. A. J. Snyder. 1,767,322; June 24.
Flooring, Composition. N. L. Campbell. 1,766,811; June 24.
Flow control, Apparatus for. L. de Florez. 1,768,353; June 24.
Flow meter. C. B. Sawyer. 1,766,148–9; June 24.
Fluid control of power plants. C. R. Short. 1,768,530; June 24.
Fluid heater. D. S. Jacobus. 1,765,675; June 24.
Fluid-heating apparatus. R. D. Sanders. 1,766,802; June 24.
Fluid meter. A. J. Granberg. 1,767,210; June 24.
Fluid-mixing device. P. Janes. 1,766,643; June 24.
Fluid-pressure apparatus. W. G. Noack. 1,766,678; June 24.
Fluid-pressure brake. C. D. Stewart. 1,765,634; June 24.
Fluid-pressure motor. O. Kelly. 1,767,214; June 24.
Fluids, Apparatus for proportioning and controlling the rates of flow of. U. O. Hutton. 1,767,588; June 24.
Fluids, Device for regulating flow of. F. Sieber. 1,766,554; June 24.
Fluids, Method of and apparatus for measuring the flow of. C. S. Pinkerton. 1,767,613; June 24.
Fluorescent tube. M. Schmierer. Re17,712; June 24.
Flying apparatus. E. M. Laurent. 1,765,924; June 24.
Flying machine. J. de Korwin-Sokolowski. 1,766,330; June 24.
Flying machines, Front wing for. H. Focke. 1,766,893; June 24.

Fog, frost, and snow eliminator. V. V. Herman. 1,768,404; June 24.
Foldable box. A. E. Brown. 1,767,733–4; June 24.
Foldable chair. N. N. Brown. 1,767,736; June 24.
Folding chair. F. B. Harman and W. Anderson. 1,767,211; June 24.
Folding chair. T. G. Melish. 1,765,845; June 24.
Folding chair. G. D. Schermerhorn. 1,765,942; June 24.
Folding machine. W. F. Mayer. 1,766,792; June 24.
Food and the products thereof, Producing liquid. C. Bauer. 1,766,590; June 24.
Food for invalids or infants. C. Nielsen. 1,767,185; June 24.
Food-handling apparatus. H. L. Johnston and D. A. Meeker. 1,767,000; June 24.
Food-handling apparatus. H. L. Johnston and D. A. Meeker. 1,767,002; June 24.
Food-handling apparatus, Waste-. H. L. Johnston. 1,767,001; June 24.
Food-handling machine. H. L. Johnston. 1,766,999; June 24.
Food materials, Method and apparatus for treating. E. H. McKay. 1,766,445; June 24.
Food, Method for cooking. A. E. Triplett. 1,768,172; June 24.
Food product and making same. H. L. Borg. 1,768,230; June 24.
Food product and making same. O. Leopold. 1,767,083; June 24.
Foodstuffs, Apparatus for treating. T. F. Rataiczak and M. K. Akers. 1,766,942; June 24.
Fork and like implement, Collapsible. B. H. Smith. 1,768,425; June 24.
Formaldehyde bisulphite amino-aryl-antimony compounds. H. Schmidt. 1,766,361; June 24.
Forming or lining pipes, Method of and apparatus for. W. R. Hume. 1,768,451; June 24.
Fountain: *See*—
Freezer fountain.
Fractionation and apparatus therefor, Process of. W. K. Lewis. 1,767,298; June 24.
Frame: *See*—
Fruit-drying frame. Ring-spinning frame.
Fuselage frame. Window and door frame.
Picture frame. Window frame.
Frame and index tab therefor. F. D. Powell. 1,766,939; June 24.
Frame attachment, Upholstery-. S. L. Warren. 1,767,631–2; June 24.
Frame for a lamp globe. C. E. Osborn. Des. 81,452; June 24.
Frame for screens, Metal. C. A. Shogren. 1,767,487; June 24.
Franking machine. G. Grandjean. 1,766,783; June 24.
Freezer fountain. C. Taylor. 1,765,747; June 24.
Freight, Apparatus for transferring. A. H. Bates. 1,766,589; June 24.
Freight, Apparatus for transferring. B. F. Fitch. 1,766,619–20; June 24.
Freight carrier, Package-. W. P. Kellett. 1,765,991; June 24.
Friction brake. B. F. Shields and C. G. Crombie. 1,767,621; June 24.
Friction elements and making same. I. J. Novak. 1,766,931; June 24.
Friction elements and making same. I. J. Novak. 1,766,933; June 24.
Friction elements and producing same, Hardened cellular or fibrous. I. J. Novak. 1,766,932; June 24.
Friction elements and producing same, Hardened cellular or fibrous. I. J. Novak. 1,766,934; June 24.
Friction sub. F. J. Hinderliter. 1,767,286; June 24.
Fruit-drying frame. D. C. Rosenberg. 1,768,296; June 24.
Fruit, Method of and apparatus for paring. W. A. Fonken. 1,766,496; June 24.
Fruit picker. M. Harter. 1,767,977; June 24.
Fuel, Apparatus for gasifying and distilling solid. E. Roser. 1,765,702; June 24.
Fuel apparatus, Liquid-. A. Lanser. 1,766,133; June 24.
Fuel, Burning liquid. J. W. Cannon. 1,766,243; June 24.
Fuel, Burning pulverized. F. Koch. 1,766,652; June 24.
Fuel-cleaning device for liquid fuels. B. N. Pierce. 1,767,895; June 24.
Fuel-feeding device for motor vehicles. B. N. Pierce. 1,766,684; June 24.
Fuel-feeding system. W. R. Hewitt. 1,767,452; June 24.
Fuel-feeding system for motor vehicles. A. G. Redmond. 1,766,686–7; June 24.
Fuel into the cylinders of internal-combustion engines, Device for spraying. A. W. Krämling. 1,766,389; June 24.
Fuel, Motor. M. Müller-Cunradi and W. Wilke. 1,765,692; June 24.
Fuel-saving device. N. J. Russell. 1,766,191; June 24.
Fuel vaporization and induction system for internal-combustion engines. H. A. Trussell. 1,766,854; June 24.
Fuller's earth and the like, Treating. H. J. Hartley. 1,768,465; June 24.
Fur-ornamenting machine. F. W. Horstmann. 1,765,375; June 24.
Fur, Treating. C. D. Parks. 1,766,452; June 24.
Furnace: *See*—
Gas producer and combined furnace. Metallurgical furnace.
Rotary furnace.
Hot-air furnace.
Furnace. J. Kubik. 1,765,430; June 24.
Furnace. E. Prat. 1,766,534; June 24.
Furnace. A. W. Smith and R. B. Jones. 1,767,817; June 24.
Furnace and operating the same, Continuous-car-tunnel. D. P. Ogden. 1,768,486; June 24.
Furnace construction. L. H. Hosbein and O. Welcome. 1,766,175; June 24.
Furnace control, Method of apparatus for. T. R. Harrison. 1,765,977; June 24.
Furnace electrodes, Regulation of. G. Keller. 1,766,648; June 24.
Furnace linings, Repairing. J. E. Anderson. 1,765,558; June 24.
Furnace-wall construction. F. I. Sheahan. 1,767,406; June 24.
Furnishings, Concealable. W. C. Fain. 1,768,464; June 24.
Furnishings, Concealable. W. C. Fain. 1,768,517; June 24.
Furniture. C. Lyon. 1,765,766; June 24.
Furniture manufacture, Wicker, cane, and reed. J. Forst. 1,765,412; June 24.
Furring device. M. B. Thrift and F. E. Planett. 1,767,565; June 24.
Fuse, Explosionproof. W. W. Sloane. 1,765,540; June 24.
Fuse plug. L. J. Cahn. Re17,713; June 24.
Fuse plug. H. M. Muncherlan. 1,766,303; June 24.
Fuse plug, Multiple. R. T. Smith. 1,767,559; June 24.
Fuses for artillery projectiles, Regulating device for clockwork-operating mechanical. A. Varaud. 1,767,493; June 24.
Fuselage frame. A. B. Steuart. 1,766,961; June 24.
Gallery for electric lamps. J. McLean. 1,767,300; June 24.
Game. C. F. Snover. 1,765,625; June 24.
Game board. A. L. Walker. 1,768,016; June 24.
Game device. F. Lauterbach. 1,766,134; June 24.
Game-scoring device. W. S. Shaw Van. 1,765,456; June 24.
Garment. S. W. Vallier. 1,766,272; June 24.
Garment bag. J. H. Le Montree. 1,767,466; June 24.
Garment hanger. W. H. Allen. 1,766,275; June 24.
Garment hanger. P. Sinitzer. 1,765,461; June 24.
Garments, Producing rear vents for unlined. J. P. O'Brien. 1,767,255; June 24.
Garter. J. Cohen. 1,765,965; June 24.
Garter, Cigarette-holding. H. Cohen. 1,766,604; June 24.
Gas aeration and charge preparation for internal-combustion engines, Exhaust-. A. Moore. 1,766,675; June 24.
Gas burner. L. C. Huff. 1,765,672; June 24.
Gas firing system. R. Thurm. 1,765,549; June 24.
Gas heater. A. B. Miller and W. H. Keliner. 1,766,394; June 24.
Gas heating burner. A. A. Scott, E. H. Scott, and P. B. Scott. 1,766,803; June 24.
Gas iron. C. Raditsch. 1,768,145; June 24.
Gas, Making a fuel. J. B. Garner. 1,767,357; June 24.
Gas produced under conditions of varying pressure, Utilizing fuel. A. G. McKee. 1,767,004; June 24.
Gas producer and combined furnace. T. R. Wollaston. 1,767,952; June 24.
Gas regulator. W. W. Williams. 1,766,274; June 24.
Gas separator. B. F. Shaughnessy. 1,767,317; June 24.
Gas turbine unit. J. W. A. Elling. 1,766,886; June 24.
Gas washer. H. A. Strain. 1,766,267; June 24.
Gas washer for electrolytic apparatus. A. E. Knowles. 1,767,292; June 24.
Gas-washing apparatus. E. von Maltitz. 1,767,629; June 24.
Gases, Apparatus for treating. F. W. Sperr, jr. 1,768,162; June 24.
Gases for the manufacture of oxygenated organic compounds, Producing. M. Pier, M. Müller-Cunradi, G. Wietzel, and K. Winkler. 1,766,763; June 24.
Gases from liquids, Apparatus for removing. L. D. Mills. 1,767,006; June 24.
Gases, Method and apparatus particularly applicable to measurements of the colorific value of combustible. H. N. Packard. 1,767,771; June 24.
Gases, Purification of. A. O. Jaeger. 1,765,869; June 24.
Gasket. R. C. Schemmel. 1,765,884; June 24.
Gasoline from natural gas, Absorption of. E. E. Ayres, jr. 1,768,521; June 24.
Gasoline, Purifying. W. S. Baylis. 1,766,211; June 24.
Gate: *See*—
Head gate. Railroad gate.
Railroad-crossing gate. Railway-crossing gate.
Gate. S. F. and A. Cangemi. 1,767,650; June 24.
Gate. G. H. Thomas. 1,766,564; June 24.
Gate-operating means. F. W. Stentz. 1,767,904; June 24.
Gateway. E. Schulte. Des. 81,467; June 24.
Gauge: *See*—
Air-pressure gauge. Pressure gauge.
Edge gauge. Test gauge.
Hose-coupling gauge. Vacuum gauge.
Gauge. R. J. Auschicks. 1,767,641; June 24.
Gauge for inflating tires, Automatic safety pressure. E. W. Richardson. 1,765,850; June 24.
Gear. E. Wildhaber. 1,767,867; June 24.

Gear and synchronizing the same, Sliding. N. Trbojevich. 1,766,153; June 24.
Gear, Draft. J. R. Cardwell and W. H. Cotton. 1,766,328; June 24.
Gear, Draft. H. E. Tucker. 1,766,232–4; June 24.
Gear for airplanes, Landing. G. H. Davis. 1,766,245; June 24.
Gear for paper calenders, Driving. D. R. Francis. 1,767,788; June 24.
Gear for turbine plants, Control. A. Meyer. 1,766,527; June 24.
Gear, Friction. J. F. O'Connor. 1,765,875; June 24.
Gear mechanism for driving train-lighting generators. J. F. J. Bethenod and A. Jonet. 1,767,648; June 24.
Gear, Reversing. J. J. Keyser. 1,767,290; June 24.
Gear teeth, Cutting. O. G. Simmons. 1,765,385; June 24.
Gear, Transmission. K. Maybach. Re17,707; June 24.
Gearing. E. Wildhaber. 1,767,866; June 24.
Gearing, Double concentric. E. R. Whitney. 1,768,225; June 24.
Gearing, Variable-speed. J. P. Remington. 1,768,489; June 24.
Gears, Method of and apparatus for generating helical. O. G. Simmons. 1,767,191; June 24.
Generating unit and making the same, Radiant-energy. W. Hudson. 1,767,586; June 24.
Generator: *See*—
Acetylene generator.
Power generator.
Steam generator.
Germicidal compound. J. M. Gray. 1,767,667; June 24.
Glare protector. C. F. Cox. 1,766,884; June 24.
Glare-shield device for automobiles. W. H. Burtis and M. S. Howard. 1,765,566; June 24.
Glass, Apparatus for making composite. J. H. Fox and W. Owen. 1,765,829; June 24.
Glass bodies, Method and apparatus for coloring thin. E. A. Zeh. 1,767,108; June 24.
Glass, Cutting sheet. L. von Reis. 1,765,552; June 24.
Glass from forming devices, Apparatus for conveying. L. Boudin. 1,767,913; June 24.
Glass from forming devices, Method and apparatus for conveying. L. Boudin. 1,767,914; June 24.
Glass, Method and apparatus for conveying strips, sheets, or plates of. S. Werotte. 1,767,907; June 24.
Glass plate, Coated. C. Grambach. 1,766,509; June 24.
Glass-plate-feed track. R. Genenger. 1,767,922; June 24.
Glass-ribbon-feeding apparatus and method. S. F. Parham. 1,766,680; June 24.
Glass-rolling machine. H. B. Holt. 1,767,131; June 24.
Glass sheets, Apparatus for separating. C. H. Wright. 1,765,814; June 24.
Glass-surfacing apparatus. J. L. Drake. 1,767,123; June 24.
Glass tubing, Drawing. G. E. Howard. 1,766,638; June 24.
Glassware, Apparatus for blowing thin-wall. J. W. Lynch. 1,766,135; June 24.
Glassware, Apparatus for cleaning. V. S. Mackres. 1,767,537; June 24.
Glassware, Apparatus for handling. D. B. Westin. 1,766,573; June 24.
Glassware, Apparatus for handling. D. B. Westin and H. W. Ingle. 1,766,574; June 24.
Glassware, Forming. M. A. Smith. 1,766,555; June 24.
Glider. D. M. Lillibridge. 1,766,028; June 24.
Glove-turning machine. D. Baum. 1,766,502; June 24.
Glue-applying mechanism. G. A. Robinson. 1,767,310; June 24.
Golf-bag bottom. G. D. Noe. 1,767,548; June 24.
Golf-ball washer. A. P. Blakemore. 1,768,229; June 24.
Golf club, Adjustable. J. H. Kenting. 1,765,982; June 24.
Golf-club-head construction. B. B. Smith. 1,768,378; June 24.
Golf-stroke-registering device. C. W. Williams. 1,765,518; June 24.
Golf tee. T. W. Phillips. 1,766,938; June 24.
Gondola-car body. W. E. Van Dorn. 1,766,856; June 24.
Gong. J. T. Miller and M. Hanley. 1,765,768; June 24.
Grain-drying device. J. Campbell. 1,766,742; June 24.
Gramophone and the like. C. M. Walter and R. G. Marsh. 1,767,330; June 24.
Grape juice, Producing. L. C. Relling. 1,767,390; June 24.
Grape-stripping machine. H. E. Peterson. 1,766,530; June 24.
Grass eradicator, Quack-. K. Rue. 1,767,619; June 24.
Grate. R. Hoffman. 1,765,426; June 24.
Grate, Fire. V. Ocenasek. 1,766,186; June 24.
Grate, Incinerator. J. C. Woodman. 1,767,030; June 24.
Grater, Conical. J. W., jr., and A. E. Klensch. 1,768,076; June 24.
Grating. C. C. Shelden. 1,768,157; June 24.
Grease gun. P. Gresser. 1,766,897; June 24.
Greasing apparatus, Pneumatically-operated. C. R. Buchet. 1,767,507; June 24.
Gridiron. J. T. Welch and J. E. McAlpine. 1,766,572; June 24.
Grille work, Making. L. D. Kay. 1,768,362; June 24.
Grinding machine. W. L. Bryant. 1,765,787; June 24.
Grinding machine. E. F. Roberts. 1,766,839; June 24.
Grinding machine. H. H. York and W. J. Baumberger. 1,766,161; June 24.
Grinding machine and interchanger therefor. A. Vuilleumier. 1,767,416; June 24.
Grinding machine and method of grinding. E. E. Slick, jr. 1,767,775; June 24.
Grinding machine, Brick-. A. Jones. 1,767,136; June 24.
Grinding material and extracting volatile matter therefrom, Process and apparatus for. H. W. Moir. 1,766,447; June 24.
Grinding wheel, Disk-. T. V. Thompson. 1,767,821; June 24.
Guard. R. W. Rohrke. 1,766,690; June 24.
Guard for roller window shades. W. B. Boyce. 1,767,045; June 24.
Guide and bookmark, Combined reading. M. Hartwell. 1,767,177; June 24.
Guide device for neckties. H. Sattler. 1,767,899; June 24.
Guitar. A. Larson. 1,768,261; June 24.
Gun swab. C. P. Schlegel. 1,766,192; June 24.
Gyroscopic group for automatically stabilizing and steering aeroplanes. L. Marmonier. 1,768,128; June 24.
Haberdashery, Self-service. C. E. Stocks. 1,766,409; June 24.
Hair clasp. D. E. Treloar. 1,767,720; June 24.
Hair drier. E. A. McGinnis. 1,765,379–80; June 24.
Hairpin. I. H. Peck. 1,765,938; June 24.
Hair, Preparing. L. Zeitlin. 1,766,476; June 24.
Hair-waving device. H. M. Hart. 1,768,055; June 24.
Hammer drill. P. L. Savage and W. Rhodes. 1,768,216; June 24.
Hammer, Power. J. W. Shallenberger. 1,767,485; June 24.
Hand, Artificial. D. W. Dorrance. 1,768,036; June 24.
Handle construction. Left. C. Schenck. 1,765,775; June 24.
Hanger: *See*—
Garment hanger.
Screen hanger.
Hanger attachment, Garment-. H. Schwartzman. 1,768,005; June 24.
Hardness-measuring means. A. L. De Leew. 1,768,512; June 24.
Harmonic producer. R. S. Ohl. 1,765,606; June 24.
Harrow. W. D. Dewend. 1,767,654; June 24.
Harvester, Beet. W. B. Conrad. 1,768,396; June 24.
Harvester, Cotton. B. Hestand. 1,767,979; June 24.
Harvesting and thrashing machine, Combined. W. L. Hanlon. 1,765,582; June 24.
Harvesting machine. A. Kerns. 1,768,324; June 24.
Harvesting machine, Beet-. F. Driscoll. 1,768,195; June 24.
Hasp construction. R. A. Lehnhoff. 1,768,205; June 24.
Hasp construction. G. Madland and W. W. Darrow. 1,768,124; June 24.
Hat. J. C. Gustaveson. 1,765,723; June 24.
Hay loader. B. Toms. 1,768,171; June 24.
Header. W. L. Clouse. 1,766,484; June 24.
Head gate. A. Crill. 1,768,120; June 24.
Headlight dimmer. C. W. Beman. 1,767,340; June 24.
Headlight, Dirigible. J. Helstrom. 1,768,252; June 24.
Headlight, Dirigible. L. L. Witter. 1,765,813; June 24.
Headlight glare shield. E. L. Guin. 1,768,250; June 24.
Heat controller. R. D. Leatherman. 1,768,085; June 24.
Heat-exchange apparatus. G. C. Derry. 1,765,970; June 24.
Heat-exchange apparatus. H. Feldmeier. 1,766,618; June 24.
Heat-exchange units, Producing. A. B. Modine. 1,767,605; June 24.
Heat exchanger. J. Heizmann. 1,767,794; June 24.
Heat interchanger. A. E. Leek. 1,767,989; June 24.
Heat transferrer. R. Uhde. 1,768,222; June 24.
Heater: *See*—
Air heater.
Electric heater.
Engine heater.
Fireplace heater.
Fluid heater.
Gas heater.
Liquid-conductor heater.
Liquid heater.
Orchard heater.
Vehicle heater.
Water heater.
Heater. J. W. Cuthbertson. 1,767,581; June 24.
Heater. C. A. MacMiller. 1,768,123; June 24.
Heater installation, Dwelling-. F. A. Howard. 1,767,364; June 24.
Heating apparatus. H. R. and G. A. Humphrey. 1,766,076; June 24.
Heating apparatus. A. B. Modine. 1,767,604; June 24.
Heating apparatus. F. Puening. 1,767,614; June 24.
Heating boiler. H. Addams. 1,765,857; June 24.
Heating device and producing the same, Electric. E. N. Lightfoot. 1,767,084; June 24.
Heating-medium control for charge-forming devices. W. G. Heginbottom. 1,766,709; June 24.
Heating-medium control for charge-forming devices for internal-combustion engines. J. R. Francis. 1,766,781; June 24.
Heating system. L. Lee. 1,768,086; June 24.
Heating system, Steam or vapor. G. Schwarz. 1,766,261; June 24.
Heating unit, Electrical. H. N. Shaw. 1,767,816; June 24.
Heel for boots or shoes. P. H. Letchford. 1,766,027; June 24.
Heel-seat-preparing means. H. Zubick. 1,766,319; June 24.
Heel, Shoe. W. S. Shaft. 1,766,311; June 24.
Hektograph machines, Margin bar for. J. P. Pederson. 1,766,352; June 24.

Helirotor for airplanes. F. Wander, jr. 1,766,472; June 24.
Hides and skins and preparing them for tanning, Dehairing. C. J. M. M. Le Petit. 1,767,536; June 24.
High-pressure engine. C. P. Brockway. 1,767,506; June 24.
High-speed machine. B. L. Newkirk. 1,768,290; June 24.
Hinge. W. A. Busiek. 1,767,049; June 24.
Hinge and stop, Door. C. A. Shepard. 1,766,197; June 24.
Hinge and support, Lid. S. T. Williams and T. T. Greene. 1,767,336; June 24.
Hinge, Covered-joint. S. B. Atwood. 1,765,393; June 24.
Hinge, Gravity. G. H. Anderson. 1,767,111; June 24.
Hinge, Gravity. W. T. Snyder. 1,768,161; June 24.
Hinge structure for sidewalk doors. D. Carpenter. 1,768,308; June 24.
Hoe, Push. J. E. Steinour and P. Brubaker. 1,768,163; June 24.
Hoist. C. J. Weber and R. A. Seek. 1,766,157; June 24.
Hoist. R. D. Whitaker, jr. 1,768,278; June 24.
Hoist, Anchor. T. H. Wills. 1,767,568; June 24.
Hoist, Bell. A. E. Handy. 1,768,054; June 24.
Hoist-line fair lead. F. E. Brown. 1,767,735; June 24.
Hoist mechanism. F. T. Kern. 1,767,683; June 24.
Hoist, Portable. R. E. Wyman. 1,766,968; June 24.
Hoisting and dumping apparatus, Car. M. B. McLauthlin. 1,767,768; June 24.
Hoisting apparatus, Automatic. F. N. Whitesell. 1,766,236; June 24.
Hoisting mechanism. R. C. Osgood. 1,765,694; June 24.
Holder and ash receptacle, Cigarette. L. Welsberg. 1,766,571; June 24.
Holder and buffer, Combined door. G. W. Wells. 1,768,459; June 24.
Holder and protector for artificial flowers. G. Penrose. 1,767,940; June 24.
Holder, Article. L. E. La Bombard and M. H. Sidebotham. 1,765,415; June 24.
Holder, Blade. E. F. and M. White. 1,765,812; June 24.
Holder, Card. A. G. Lorenz. 1,767,993; June 24.
Holder, Christmas-tree. G. L. Goldwood. 1,766,170; June 24.
Holder, Cigarette and cigar. H. F. Husted. 1,767,927; June 24.
Holder, Computator-card. M. W. Hartzell. 1,765,668; June 24.
Holder, Door. H. W. Miller. 1,768,326; June 24.
Holder, Door. G. W. Wells. 1,768,458; June 24.
Holder, Drill-operating. G. W. Berry. 1,765,362; June 24.
Holder, Extension-bit. C. W. Smith. 1,768,219; June 24.
Holder, Flowerpot. J. R. Dew and R. Guffey. Des. 81,436; June 24.
Holder for automobiles, License-plate. W. Depfer. 1,768,192; June 24.
Holder for check stubs. M. F. Bowes. 1,768,028; June 24.
Holder for counters, Partition. E. Morris. 1,767,806; June 24.
Holder for miners' caps, Lamp. E. Israel. 1,768,201; June 24.
Holder for portable electric lamps, Shade. M. B. Bowen. 1,766,976–7; June 24.
Holder for talking machines, Record. T. T. Greene. 1,767,052; June 24.
Holder for weft-replenishing looms, Thread. W. H. Wakefield. 1,766,734; June 24.
Holder, Identification. J. D. McGilvray. 1,765,600; June 24.
Holder, Loose-leaf memorandum-pad. T. P. O'Connell. 1,768,266; June 24.
Holder, Necktie. A. Sorkind. 1,766,695; June 24.
Holder, Road-map. H. A. Goyke and R. C. La Due. 1,766,896; June 24.
Holder, Safety-pin. P. Kelley. 1,767,137; June 24.
Holder, Scratch sheet or pad. I. Heidenreich. 1,766,252; June 24.
Holder, Sewing-machine-attachment. A. J. Carmichael and A. M. Wunderlich. 1,765,481; June 24.
Holder, Toilet-roll. L. H. Morin. 1,767,007; June 24.
Holder, Tool. J. C. Hurowitz. 1,768,066; June 24.
Holder, Wrench-display. F. W. Miller. 1,765,496; June 24.
Holding device, Tooth-. A. S. Wells. 1,766,235; June 24.
Holding means, Stylus-. C. S. Wickes. 1,767,334; June 24.
Hollow bodies, Apparatus for the manufacture of. A. Portevin. 1,767,394; June 24.
Hollow bodies consisting of vulcanized rubber, Manufacture of. W. K. Genth. 1,765,666; June 24.
Holster, Gun. G. M. Wance. 1,768,177; June 24.
Hook: *See*—
Bale-hoist hook.
Snap hook.
Hook. H. J. Roman and W. C. Dietrich. 1,767,897; June 24.
Hook for scrap barrels or other article. J. R. Coe. 1,767,507; June 24.
Hopper for cigarette-packaging machines. W. B. Bronander and G. E. Hagquist. 1,765,820; June 24.
Horn. M. F. Ashley. 1,766,580; June 24.
Horn. R. D. Buell. 1,767,740; June 24.
Horn, Acoustical. W. J. Polydoroff. 1,767,812; June 24.
Horn, Outside solder. N. Troyer. 1,768,015; June 24.
Horn, Solder. N. J. Schaal. 1,767,000; June 24.
Horn speaker having plurality of chambers. Truncated. M. R. Hutchison. 1,767,679; June 24.
Horseshoe. J. N. Troxell. 1,767,328; June 24.
Hose coupling. C. C. Farmer. 1,765,576; June 24.
Hose-coupling gauge. A. England. 1,765,575; June 24.
Hosiery, Mechanism for forming clocked, floated thread. H. K. Gergman. 1,766,772; June 24.
Hot-air furnace. E. G. Miller. 1,765,439; June 24.
Hub cap. C. L. Stokes. 1,766,313; June 24.
Hull extractor. A. L. Smith. 1,766,312; June 24.
Humidifier. W. M. Trafton and J. Armstrong. 1,765,780; June 24.
Hydraulic force cup. L. R. Watson. 1,768,178; June 24.
Hydraulic jack. D. Flanagan. 1,767,124; June 24.
Hydraulic mechanism. G. E. A. Hallett. 1,768,476; June 24.
Hydraulic press and the like. T. F. Stacy. 1,765,627; June 24.
Hydrocarbon motor. L. M. Woolson. 1,767,422; June 24.
Hydrocarbon motor. L. M. Woolson. 1,768,185; June 24.
Hydrocarbon products, Preparing. M. B. Hopkins. 1,767,363; June 24.
Hydrocarbon vapors and apparatus therefor, Condensation of. N. E. Loomis. 1,767,299; June 24.
Hydrocarbons, Apparatus for converting. G. Egloff. 1,667,838; June 24.
Hydrocarbons, Chlorinating saturated. R. H. McKee and C. M. Sails. 1,665,601; June 24.
Hydrocarbons, Continuous, low-temperature process and apparatus for treating. W. L. Gomory. 1,767,183; June 24.
Hydrocarbons, Refining. J. Johnston, jr. 1,766,339; June 24.
Hydrocarbons, Refining liquid. J. Johnston, jr. 1,766,338; June 24.
Hydrocarbons with sulphur dioxide, Continuous treatment of. G. Cattaneo and P. Jodeck. 1,766,281; June 24.
Hydro extractor. F. Schaum. 1,766,310; June 24.
Hydrogen-nitrogen mixture in manufacture of synthetic ammonia, Producing. L. C. Jones. 1,765,535; June 14.
Hygrometer. A. Allen. 1,765,816; June 24.
Ice-carrying device. J. J. Parkerson. 1,766,258; June 24.
Ice-cream-cone machine. H. G. Tatosian. 1,765,464; June 24.
Ice-cream disher. H. D. Flegel. 1,765,973; June 24.
Ice-cream freezer. W. A. Hiles. 1,766,172; June 24.
Ice creeper. A. Barnes. 1,767,427; June 24.
Ice pick. W. E. Domaratius. 1,768,035; June 24.
Identifying attachment for motor vehicles. B. C. Loring. 1,765,843; June 24.
Ignition-cut-off control for engine idling, Automatic. R. E. Wing. 1,768,390; June 24.
Ignition device for internal-combustion engines, Automatic thermic. R. Touchelay. 1,768,382; June 24.
Ignition timer. C. H. Kindl. 1,766,908; June 24.
Ignition transformer and fuel control, Combined. R. J. Eiseman. 1,767,058; June 24.
Illuminating device for diagnostic instruments. R. H. Wappler and F. C. Wappler. 1,767,266; June 24.
Illumination for tents, Electric. E. Fabianke. 1,765,911; June 24.
Implement for filling farinaceous tubular rolls with food products. C. C. Egbert. 1,767,918; June 24.
Inclosures and shield construction, Automobile. J. D. Dyer. 1,765,866; June 24.
Index. T. J. Barrett. 1,767,645; June 24.
Index device. J. H. Rand. 1,767,257; June 24.
Index system, Visible. H. A. Consor, H. L. Matthes, and A. G. Wuest. 1,765,568; June 24.
Indication system. P. H. Betts. 1,765,396; June 24.
Indicator: *See*—
Direction indicator.
Fare indicator.
Level indicator.
Liquid-level indicator.
Radio compass indicator.
Speed indicator.
Universal indicator.
Indicator for drawers. J. R. Caldwell. 1,768,113; June 24.
Indicator for motion-picture projection apparatus. M. Hoffman. 1,768,063; June 24.
Indicator for railway trains, trams, and other fixed-route vehicles, Station and route. M. de Luna Perez. 1,768,235; June 24.
Indicator or protector for visible indexes or the like. R. F. Power. 1,768,292; June 24.
Inductance device for loading phantom circuits. P. Thomas and F. Fischer. 1,768,274; June 24.
Inflating device. P. Markus. 1,766,182; June 24.
Inflation apparatus. G. B. Nichols. 1,768,327; June 24.
Infra-red rays, Device for producing. H. P. MacLagan. 1,768,519; June 24.
Ingot mold and ingot. E. Gathmann. 1,767,174; June 24.
Ingots, Method of and apparatus for casting metal. H. A. Deuel. 1,767,055; June 24.
Injection apparatus. H. S. Morton. 1,767,304; June 24.
Ink, etc., Apparatus for making. A. L. Miller. 1,765,991; June 24.
Inner tubes, Apparatus for manufacturing. A. A. Glidden and T. M. Knowland. 1,767,062; June 24.
Inner tubes or the like, Device for repairing. J. C. Thomas and W. H. Bines. 1,768,345; June 24.
Insert for concrete. H. L. Gaddis. 1,768,246; June 24.
Insignia device. H. J. Peele. 1,767,550; June 24.
Instrument for controlling temperatures. R. W. Brown. 1,768,349; June 24.
Instrument lock, Floatable-record-. W. J. Stapleton. 1,767,192; June 24.
Insulator bushing. A. O. Austin. 1,766,869; June 24.

Insulator cap. A. Ramsey. 1,767,398; June 24.
Insulator for electric conductors. F. H. Bramwell. 1,766,593; June 24.
Insulator guard. J. Holzel. 1,766,636; June 24.
Insulator structure. L. R. Wilder. 1,766,576; June 24.
Intermediate derived from aminosulphones. K. H. Saunders. 1,766,951–2; June 24.
Internal-combustion engine. E. Adamson. 1,765,350; June 24.
Internal-combustion engine. J. J. Boland. 1,765,713; June 24.
Internal-combustion engine. W. R. Griswold. 1,766,899–100; June 24.
Internal-combustion engine. J. S. Jackson. 1,766,385; June 24.
Internal-combustion engine. W. Knochenhauer. 1,767,932; June 24.
Internal-combustion engine. J. H. Marks. 1,766,917; June 24.
Internal-combustion engine. A. Moorhouse. 1,766,921; June 24.
Internal-combustion engine. A. Moorhouse. 1,767,222; June 24.
Internal-combustion engine. A. Moorhouse. 1,768,136; June 24.
Internal-combustion engine. G. Plato. 1,766,401; June 24.
Internal-combustion engine. J. G. Vincent. 1,766,858; June 24.
Internal-combustion engine. L. M. Woolson. 1,766,867–8; June 24.
Internal-combustion engine, Rotary. E. Ericsson. 1,766,248; June 24.
Internal-combustion engine, Rotary. E. A. Richardson. 1,767,097; June 24.
Internal-combustion engine, Two-stroke-cycle. J. W. Robertson. 1,767,402; June 24.
Iron: *See*—
Chair iron. Pressing iron.
Gas iron. Soldering iron.
Plaiting iron.
Iron or implement, Pressing. E. J. Clark. 1,766,602; June 24.
Iron or steel, Carburizing of. R. G. Guthrie and O. J. Wozasek. 1,768,317; June 24.
Ironing board, Door-concealed. B. J. Triller. 1,766,154; June 24.
Ironing board, table, seat, and the like, Folding. J. J. Lyth. 1,768,413; June 24.
Ironing machine. R. V. Weller. 1,767,863–5; June 24.
Ironing table. R. A. Morrison and F. L. Oswald. 1,765,992; June 24.
Irrigating system. P. E. Erickson. 1,768,310; June 24.
Irrigator. M. A. Russow. 1,766,724; June 24.
Jack: *See*—
Hydraulic jack. Lumber jack.
Jar or similar article. E. Frank. Des. 81,439; June 24.
Joint: *See*—
Ankle joint. Tube joint.
Pivot joint. Universal joint.
Rail joint.
Joining dissimilar bodies. E. A. Werner. 1,768,180; June 24.
Joint coupling, Swing-. C. J. Muend. 1,765,693; June 24.
Joint for shock absorbers, Universal. W. A. Chryst. 1,766,880–1; June 24.
Journal box, Locomotive. G. M. Stone and G. W. Cuyler. 1,767,411; June 24.
Journal lubricator. G. P. Carr. 1,768,114; June 24.
Key case. C. M. Ragsdale. 1,766,801; June 24.
Kiln, Burning. G. H. Garrison. 1,767,281; June 24.
Kiln, Rotary. R. D. Pike. 1,766,453; June 24.
Kit. H. P. Shriver. 1,766,553; June 24.
Kit, Condenser. W. Dubilier. 1,768,440; June 24.
Knife for treating leather, Whitening. H. Will. 1,766,159; June 24.
Knitted fabric. O. Nuber. 1,766,340; June 24.
Knitting machines, Loop-cutting attachment for circular spring-beard. L. F. and J. J. McKenna. 1,767,687; June 24.
Knurler for cigar machines, Flexible. T. W. Alm. 1,765,817; June 24.
Labeling machine, Gum. M. Zurndorf. 1,766,239; June 24.
Lactic acid and its derivatives, Production of. M. Luther and H. Beller. 1,766,715; June 24.
Ladle for low-melting materials. I. Gonyk. 1,767,975; June 24.
Lamp. O. C. R. Woller. 1,766,205; June 24.
Lamp base and body, Combined. V. Raffaelli. 81,454; June 24.
Lamp, Color. L. H. Hopewell. 1,766,637; June 24.
Lamp, Electric safety. J. Beckmann. 1,765,900; June 24.
Lamp globe. C. E. Osborn. Des. 81,451; June 24.
Lamp, Multiple hand arc. M. J. Wohl. 1,767,029; June 24.
Lamp or similar article. A. von Frankenberg. Des. 81,469; June 24.
Lamp, Photographer's twin-arc. L. Westphalen. 1,765,957; June 24.
Lamp stand. C. M. Becker. Des. 81,430; June 24.
Lamp table. T. and W. Allibone. 1,765,643; June 24.
Lamp, Theftproof. L. Schmidt. 1,765,943; June 24.
Lamp, Vehicle. H. C. Jaquith. 1,767,590; June 24.
Lamps, Apparatus for the control of electric. A. W. Fisher. 1,767,582; June 24.
Lamps, Attachment for headlight. H. Stallings. 1,766,696; June 24.
Lantern. F. J. Roone. 1,768,374; June 24.
Lard, Treatment of. L. B. Parsons. 1,767,999; June 24.
Latch. E. Meininghaus. 1,767,152; June 24.
Latch. G. E. Roedding and E. C. Osbeck. 1,765,615; June 24.
Latch, Door. S. De Vita. 1,768,193; June 24.
Latch for paper boxes. O. B. Berton. 1,765,964; June 24.
Latch, Locker. F. A. Schmitz and J. Sturm. 1,766,193; June 24.
Latch, Window. A. L. Knapp. 1,766,910; June 24.
Lath material, Method and apparatus for making. J. W. Edson, H. S. Stone, and D. B. Arnold. 1,765,571; June 24.
Lath spacer. W. M. Goldsmith. 1,767,068; June 24.
Lathe, Automatic. F. Mulka. 1,767,224; June 24.
Lathe, Hand. C. M. McCord. 1,767,151; June 24.
Lather rubber. A. W. Schweibold. 1,765,623; June 24.
Laundry iron switch, Electric. G. Browning. 1,765,401; June 24.
Lawn rake. Y. Kurihara. 1,768,080; June 24.
Lawn rake, Self-cleaning. Q. Fisher. 1,766,017; June 24.
Lawn sprinkler. H. L. Henry. 1,766,514; June 24.
Lead and terminal, Condenser. W. H. Priess. 1,767,093; June 24.
Leaf-turning device. M. Yaholnitsky. 1,768,018; June 24.
Leakage through insulated joints, Testing. D. Byers. 1,765,715; June 24.
Leather-shaving machines, Guard for. N. R. Rivers. 1,768,213; June 24.
Leather, Treating belt. J. A. Webb. 1,765,553; June 24.
Leer. W. S. Rendall. 1,766,545; June 24.
Logging. M. L. Orr. 1,765,609; June 24.
Lens-adjusting means, Plural. A. S. Howell. 1,767,849; June 24.
Lens structure. A. S. Howell. 1,767,850; June 24.
Lever, Flush-valve-operating. E. L. Delany. 1,766,491; June 24.
Level-indicating device, Liquid. G. H. Brunow. 1,761,167; June 24.
Level indicator, Banking and nosing. J. E. Vayda. 1,765,551; June 24.
Leveling device, Automatic land-. L. W. Eversman. 1,765,910; June 24.
Leveling work, Method of and apparatus for. R. F. Bennett. 1,766,323; June 24.
Life-saving device for ships and the like. N. Grabich. 1,766,921; June 24.
Lifter: *See*—
Airplane lifter. Pan lifter.
Automobile lifter.
Light-reflecting unit and supporting the same. S. C. Vincent. 1,767,160; June 24.
Light signal. C. W. Prescott. 1,766,535; June 24.
Light signal and projector. J. C. Mock. 1,765,689; June 24.
Lighter. A. G. Stevenson. 1,765,633; June 24.
Lighting fixture. S. I. Goldberg. Des. 81,440; June 24.
Lighting fixture. C. C. Hoel. 1,768,322; June 24.
Lighting fixture. J. L. Jaffe. 1,768,255; June 24.
Lighting fixture. G. R. Metcalf, jr. 1,767,087; June 24.
Lighting fixture. R. V. Owen. Des. 81,470; June 24.
Lighting fixture. F. C. Runge. 1,767,482; June 24.
Lighting fixture. R. Williamson. 1,767,418–19; June 24.
Lighting-fixture brace. A. Scheler. Des. 81,464; June 24.
Lined tank. F. A. Stevenson. 1,766,468; June 24.
Linings for molded boots, Manufacturing. A. A. Glidden, T. M. Knowland, and W. J. Duffy. 1,766,627; June 24.
Lip stick. S. Freeman. 1,766,990; June 24.
Liquid-conductor heater. M. W. Hanks. 1,767,126; June 24.
Liquid-extracting means. U. G. Todd. 1,767,625; June 24.
Liquid-flow meter. M. O. Schur. 1,765,776; June 24.
Liquid heater. F. D. Blauvelt. 1,766,480; June 24.
Liquid-level indicator. P. F. Rice. 1,767,690; June 24.
Liquid meter, Automatic recording. M. C. Carbonaro. 1,768,031; June 24.
Liquid-metering tank. W. B. Knickerbocker. 1,767,244; June 24.
Liquid to drums of concrete or other mixing machines, Supplying. J. F. Burn and J. S. Lancaster. 1,767,430; June 24.
Liquids, Apparatus for continuous distillation of difficultly-distillable. H. A. von Staden, A. Berenbruch, and A. Höhn. 1,766,690; June 24.
Liquids, Apparatus for controlling density or viscosity of. C. O. Lavett. 1,765,433; June 24.
Liquids, Measuring. T. E. Baker. 1,766,581; June 24.
Liquids, Producing nonturbulent circulation of. J. F. Wait. 1,765,386; June 24.
Liquids, System for the pasteurization of. F. F. Van Tuyl. 1,765,550; June 24.
Lister. L. H. Kaupke. 1,767,852; June 24.
Loading apparatus. F. Grahek. 1,768,316; June 24.
Lock: *See*—
Automobile lock. Nut lock.
Bolt lock. Push-rod lock.
Car lock. Spare-tire lock.
Instrument lock. Tire lock.
Lock. E. P. Baird. 1,767,648; June 24.
Lock. W. E. Bauerband. 1,768,021; June 24.

Lock. P. E. Carlson and C. J. Ulrich. 1,765,824; June 24.
Lock. H. Glaser. 1,765,526; June 24.
Lock. J. C. Gregory. 1,766,784; June 24.
Lock for calculating machines, Key. A. A. Horton and C. Marti. 1,767,673; June 24.
Lock for pay toilets. J. Smith. 1,767,622; June 24.
Lock for windows and doors. G. Corbo. 1,767,435; June 24.
Locking mechanism for house cars, Door-. G. Madland and K. J. Tobin. 1,767,251; June 24.
Locking plant for vehicle doors, Automatic. E. Welsch. 1,768,224; June 24.
Locomotive boiler. O. H. Hartmann and W. Jung. 1,768,198; June 24.
Locomotive, Cable-reel. W. W. Sloane. 1,765,547; June 24.
Locomotive cylinder and associated parts and manufacturing the same. S. Miller. 1,767,005; June 24.
Locomotive draft appliance. W. T. Ray. 1,768,373; June 24.
Locomotive, Gasoline-engine. W. C. Armstrong. 1,765,559; June 24.
Locomotive, High-pressure. O. H. Hartmann. 1,768,320; June 24.
Locomotive, Reversible electric. L. Caruso. 1,766,329; June 24.
Locomotive structure. W. M. Sheehan. 1,766,406; June 24.
Loom. F. E. Ashton. 1,768,096; June 24.
Loom. J. S. Coldwell. 1,768,510; June 24.
Loom. W. S. Wells. 1,765,708; June 24.
Loom dobby. H. G. Pashoian. 1,766,835; June 24.
Loom driving mechanism. W. E. Lundgren. 1,766,758; June 24.
Loom for weaving tufted pile fabrics. T. W. Head. 1,767,758; June 24.
Loom operating device. K. Werner. 1,767,906; June 24.
Loom, Weft-replenishing. A. A. Gordon. 1,766,895; June 24.
Looms, Chain guard for narrow-ware. E. R. Holmes. 1,766,903; June 24.
Looms, Dobby lever for. A. A. Gordon and R. M. Cook. 1,766,744; June 24.
Looms, End-holding means for weft-replenishing. R. G. Turner. 1,766,731; June 24.
Looms, Outgoing-thread control for automatically replenishing. H. H. Burdett. 1,768,502; June 24.
Looms, Resilient thread holder for weft-replenishing. J. F. Tinsley. 1,766,851; June 24.
Looms, Revoker for weft-replenishing. W. H. King. 1,766,909; June 24.
Looms, Stop motion for box. V. H. Jennings. 1,766,907; June 24.
Looms, Thread cutter for weft-replenishing. S. A. Nelson. 1,766,761; June 24.
Looms, Thread holder and tensioner for weft-replenishing. S. A. Nelson. 1,766,832; June 24.
Looms, Thread holder for weft-replenishing. H. S. Favor. 1,766,889; June 24.
Looms, Thread holder for weft-replenishing. J. F. Tinsley. 1,766,850; June 24.
Looms, Tube frame for Axminster. A. P. Paine. 1,766,834; June 24.
Looms, Warp stop motion for. G. H. Shutt. 1,766,804; June 24.
Looms, Weft detector for. O. V. Payne. 1,766,836; June 24.
Looms, Weft replenishing for double-shuttle. S. Stewart, M. L. Allen, and S. O. Roy. 1,766,729; June 24.
Looms, Weft-replenishing mechanism for pick-and-pick. S. A. Nelson. 1,766,831; June 24.
Looms, Yieldable bobbin support for weft-replenishing. W. H. King. 1,766,753; June 24.
Loud-speaker. L. H. Davis and R. T. Kingsford. 1,767,837; June 24.
Loud-speaker. A. A. Thomas. 1,767,777; June 24.
Loud-speaker diaphragm mounting. J. B. Deane. 1,766,014; June 24.
Loud-speakers, Assembling. I. S. Bobrovsky. 1,767,912; June 24.
Lubricant and producing the same. R. N. Jarman. 1,767,076; June 24.
Lubricating apparatus. W. I. Jones. 1,767,527; June 24.
Lubricating device. A. J. Kacena. 1,767,461; June 24.
Lubricating device. A. J. Pfaff, J. A. Dry, and W. J. Sinning. 1,767,153; June 24.
Lubricating mechanism for edger saws. E. E. McClure. 1,766,663; June 24.
Lubricating method and means. D. H. Sweet. 1,767,490; June 24.
Lubricating oil, Method and apparatus for reclaiming. C. D. Miller. 1,768,209; June 24.
Lubricating system. M. F. Carr. 1,767,511; June 24.
Lubricating system. E. W. Davis. 1,767,515; June 24.
Lubricating system. J. A. Lund. 1,767,386; June 24.
Lubricating system. R. Wehr. 1,766,735; June 24.
Lubricating system and apparatus. E. W. Davis. 1,767,516; June 24.
Lubricating system, Centralized. C. C. Bradbury. 1,767,505; June 24.
Lubricating systems, Control-plug unit for splash-feed. B. R. Planche. 1,766,001; June 24.
Lubrication of fluid-pressure motors. A. H. Funk. 1,767,061; June 24.
Lubricator: *See*—
Journal lubricator.
Lubricator. F. C. Blanchard. 1,766,702; June 24.
Lubricator. F. W. Edwards. 1,768,516; June 24.
Lubricator for car journals. W. L. Knight. 1,766,387; June 24.
Lumber for forming casings for window and door interior trim. N. F. McMillen. 1,765,931; June 24.
Lumber grapple. G. R. Hoffman. 1,767,525; June 24.
Lumber jack. R. Y. Neely. 1,766,400; June 24.
Lustering and embossing machine for leather and the like. J. Kleinewefers. 1,768,408; June 24.
Machine for cleaning cotton and the like. J. S. Bachman. 1,767,957; June 24.
Machine for closing filled cans. J. Coyle, J. C. Tallaferro, jr., and O. A. Schmitt. 1,767,965; June 24.
Machine for coating air bags. H. D. Stevens. 1,768,337; June 24.
Machine for coating can ends. F. A. Prahl and H. A. Fink. 1,768,144; June 24.
Machine for coating strips of lumber. I. F. Dittmar. 1,766,779; June 24.
Machine for corrugating sheet metal. J. R. Freeze. 1,766,743; June 24.
Machine for driving in and pulling out nails. H. Scherm, jr. 1,765,885; June 24.
Machine for forming joint reenforcements. F. A. Manske and W. M. McNeil. 1,768,127; June 24.
Machine for hardening irregular metal surfaces. A. E. Shorter and C. L. Boucher. 1,768,160; June 24.
Machine for inserting valves in inner tubes. G. B. Nichols. 1,768,328; June 24.
Machine for killing quack grass. H. P. Mohr. 1,768,289; June 24.
Machine for lining boxes. W. E. Vesey. 1,767,193; June 24.
Machine for making chaplets. H. S. Powell. 1,766,145; June 24.
Machine for making counters. W. J. Young. 1,768,499; June 24.
Machine for making match inner boxes. G. E. Mellgren and J. G. Sjöström. 1,765,767; June 24.
Machine for making roofing. G. P. Heppes. 1,765,834; June 24.
Machine for making set-up boxes. H. J. Goss. 1,765,420; June 24.
Machine for performing printing, perforating and other operations on strip material. G. L. Fulk. 1,765,414; June 24.
Machine for sawing timbers. G. S. Marion. 1,765,987; June 24.
Machine for screwing couplings on pipe. H. V. Cork. 1,765,825; June 24.
Machine for severing composite glass and the like. W. Owen. 1,765,846; June 24.
Machine for shaping hollow metal blanks. C. G. Anderson. 1,766,700; June 24.
Machine for sizing and perforating rims. W. N. Booth. 1,766,217; June 24.
Machine for sorting and setting fasteners. E. M. Crosby. 1,767,513; June 24.
Machine for the molding of plastic substances. A. W. Sizer. 1,768,008; June 24.
Machine for turning brake drums and the like. J. E. Batie. 1,766,210; June 24.
Machine for washing tires, coating air bags, or the like. H. D. Stevens. 1,768,335; June 24.
Machine for winding coil springs. R. A. King. 1,767,931; June 24.
Machine-printing art. O. P. Smith. 1,766,957; June 24.
Machine to make concrete building blocks. E. S. Nicholas. 1,766,930; June 24.
Machinery, Candy. W. B. Laskey. 1,765,873; June 24.
Machinery used in the manufacture of leather goods and fabrics. J. J. Donovan. 1,768,236; June 24.
Machines, Feed control for hydraulically-operated. R. M. Galloway and C. H. Muhl. 1,766,118; June 24.
Magazine, Weft-carrier. S. A. Nelson. 1,766,830; June 24.
Magnet, Lifting. F. W. Jessop. 1,767,458; June 24.
Magnetic device for initiating movement. V. R. Brown. 1,767,739; June 24.
Magnetic material. G. W. Elmen. 1,768,237; June 24.
Magnetic material. G. W. Elmen. 1,768,238; June 24.
Magnetic material and appliance. G. W. Elmen. 1,768,443; June 24.
Magnetic materials, Producing. P. S. McCann. 1,765,436; June 24.
Make-up case. L. B. Weil. 1,767,567; June 24.
Manifold attachment. M. Fern. 1,766,432; June 24.
Manifold, Intake. W. H. Worthington. 1,767,031; June 24.
Manifolding device. A. W. Metzner. 1,767,469; June 24.
Manifolding machine. A. W. Metzner. 1,767,689; June 24.
Manure spreader. L. B. Neighbour. 1,765,993; June 24.
Marine escape. W. Meredith. 1,766,300; June 24.
Marker, Horticultural. F. E. Chase. 1,766,704; June 24.
Marker, Street. J. V. Janin. 1,766,518; June 24.
Marker, Traffic. W. S. Sherman. 1,766,841; June 24.
Marking machine. R. V. Woodworth. Re17,715; June 24.
Marking, printing, and embossing device. M. A. G. Luedtke and H. Hoffmann. 1,766,662; June 24.
Masonry surfaces, Apparatus for treating. L. S. Wertz. 1,766,419; June 24.

Massage instrument. H. Berger. 1,768,306; June 24.
Match. F. Käppler. 1,768,202; June 24.
Match scratcher. B. Iizuka. 1,766,295; June 24.
Material and making the same, Sheet. E. L. Benedict. 1,766,096; June 24.
Material, Apparatus for and method of treating. E. T. Medkin. 1,766,030; June 24.
Material feeder. V. G. Leach. 1,767,248; June 24.
Material-handling apparatus. R. D. King. 1,767,592; June 24.
Material-handling machine. A. W. Rybeck. 1,765,450; June 24.
Materials, Apparatus for treating mixed. W. L. Remick. 1,767,227; June 24.
Maternity slip. R. H. Patten. 1,765,937; June 24.
Matrix for composing machines. C. Yewdall. 1,767,829; June 24.
Measure, Oil. H. B. Donley and H. Balzer. 1,766,069; June 24.
Measuring apparatus. F. H. Patterson. 1,765,612; June 24.
Measuring device for cigar machines, Volumetric. W. B. Bronander. 1,765,821; June 24.
Measuring device for concrete mixers, Water-. H. F. Wilms. 1,765,476; June 24.
Measuring device, Stress-. O. B. Goldman. 1,766,782; June 24.
Measuring machine, Leather-. H. P. Young. 1,767,409; June 24.
Measuring system and method, Phase. W. A. Marrison. 1,768,262; June 24.
Meat products, Apparatus for drying, smoking, and curing. A. E. Ozouf. 1,766,762; June 24.
Meats, Treating. F. Briggs. 1,767,054; June 24.
Mechanical animal. J. B. Ellinger. 1,766,116; June 24.
Mechanical movement. C. E. Nelson. 1,766,798; June 24.
Medical apparatus, Vacuum O. Sinanide. 1,767,320; June 24.
Megaphone. T. B. Gottshall. 1,767,358; June 24.
Menthol, Production of. W. Schoeller, H. Jordan, and R. Cierc. 1,765,620; June 24.
Metal article. A. L. Davis. 1,767,653; June 24.
Metal articles, Apparatus for heat treating. T. R. Heyward. 1,766,633; June 24.
Metal buck construction. I. A. Baum. 1,765,711; June 24.
Metal compounds of o-hydroxyazo dyestuffs, Production of complex. H. Krzikalla. 1,765,680; June 24.
Metal construction for vehicle bodies and other similar built-up sheet-metal structures, Sheet-. J. Ledwinka. 1,767,465; June 24.
Metal, Mechanism for handling sheet. W. G. Wehr. 1,767,268; June 24.
Metal products, Apparatus for annealing rolled-. E. von Maltitz and F. Wille. 1,765,955; June 24.
Metal sheets, Method of and apparatus for separating. P. E. Hunter and L. E. Endsley. 1,767,587; June 24.
Metal spiders, Apparatus for making flanged. D. W. Thomas. 1,765,807; June 24.
Metal structure, Expanded-. W. A. Bates. 1,768,099; June 24.
Metal surfaces, Apparatus for hardening. A. E. Shorter and C. L. Boucher. 1,768,159; June 24.
Metal-working machine. C. C. Grotnes. 1,767,754–5; June 24.
Metal-working machine. H. G. Kellogg. 1,767,289; June 24.
Metallic articles, Apparatus for coating. W. H. Sommer. 1,765,743; June 24.
Metallic articles, Apparatus for welding hollow. H. P. Sailor. 1,766,229; June 24.
Metallic compounds of o-hydroxyazo dyestuffs, Treating complex. H. Krzikalla and H. Kämmerer. 1,767,379; June 24.
Metallurgical furnace. D. Cushing. 1,766,110; June 24.
Metallurgy of tin. W. O. Snelling. 1,766,463; June 24.
Metals from their oxide ores, Apparatus for producing. W. E. Trent. 1,767,779; June 24.
Meter: *See*—
Computing meter. Fluid meter.
Counting meter. Liquid-flow meter.
Electrical meter. Liquid meter.
Flow meter.
Meter for automobiles, Fuel. C. Simmons. 1,766,262; June 24.
Meter service appliance, Electric-. J. Sachs. 1,767,261; June 24.
Meter service appurtenance, Protected electric-. J. Sachs. 1,767,259–60; June 24.
Micrometer spring buffer stop. R. T. Jenney. 1,768,360; June 24.
Microphone. R. A. Kiefer. 1,767,242; June 24.
Microphone. L. H. Paddle. 1,768,211; June 24.
Microphone. H. J. Round. 1,765,449; June 24.
Milk pot. J. M. Tanzi. 1,768,013; June 24.
Mill: *See*—
Cutting and grinding mill. Roller mill.
Mill catcher, Hot-. D. Bucciocone. 1,767,574; June 24.
Mill housing, Rolling-. F. C. Czemba and H. W. Wilson. 1,765,907; June 24.
Mine drill. W. Harasimiak. 1,768,318; June 24.
Mineral granules, Coloring. H. C. Fisher. 1,766,814; June 24.
Mineral matter, Coloring. H. C. Fisher. 1,766,815; June 24.
Mining machine. C. E. Davis. 1,765,524; June 24.
Mining machine. C. E. Davis. 1,765,570; June 24.
Mining machine. W. S. Gray. 1,765,528; June 24.
Mining machine. M. Hardick. 1,765,529; June 24.
Mining machine. F. B. Miller. 1,766,395; June 24.
Mining machine. T. E. Pray. 1,765,446; June 24.
Mirror, Rear-view. R. N. Falge. 1,768,354; June 24.
Mirror, Toilet. A. C. Finer. 1,768,043; June 24.
Mitt or glove, Baseball-player's. U. C. Berry. 1,767,115; June 24.
Mitten, Bathing and massaging. H. Weiss and A. Needelman. 1,766,365; June 24.
Mixer: *See*—
Concrete mixer.
Mixer for stucco compositions. F. J. Gough, W. M. McNeil, and F. D. Pfeffer. 1,767,791; June 24.
Mixing and agitating machine. C. F. Ball. 1,766,584; June 24.
Mixing apparatus. K. J. Trynoski. 1,765,638; June 24.
Mixing drum. C. F. Ball. 1,766,582; June 24.
Mixing machine. G. Royan. 1,767,481; June 24.
Mixing machine. K. R. Schuster. 1,765,544; June 24.
Mixing machine. C. B. Thorne. 1,767,102; June 24.
Mixing or stirring machine. E. Christiansen. 1,767,346; June 24.
Mixture-conversion apparatus for internal-combustion engines. A. Moore. 1,766,671; June 24.
Models and patterns. Investing denture. E. E. Dalton and C. J. Ringle. 1,767,351; June 24.
Moisture to hygrometers, humidity regulators, and the like, Supplying. A. J. Loepsinger. 1,765,842; June 24.
Mold. A. T. Bateman and A. Irvine. 1,766,003; June 24.
Mold and trimmer for rubber heels, soles, and all mechanical molded rubber goods, Combination. J. M. Andre. 1,768,093; June 24.
Mold for sole pressing machines. E. J. Goodwin. 1,768,050; June 24.
Mold for tiles. G. W. Fisher and C. G. Henrikson. 1,768,045; June 24.
Mold structure, Centrifugal pipe. J. H. Uhrig. 1,767,024; June 24.
Mold wash. A. E. Kayes and F. Moehling. 1,767,764; June 24.
Molding apparatus for making dentures and plates for dental purposes. K. Dehne. 1,766,113; June 24.
Molding box. H. Ackermann. 1,767,163; June 24.
Molding machine. F. A. Scruggs. Re17,711; June 24.
Molding machine. A. Winkler and C. Miller. 1,767,106; June 24.
Molds, Making. J. W. Hazeli. 1,768,359; June 24.
Molds, Mechanism for shaking out. E. S. Carman. 1,768,233; June 24.
Mop. J. A. Atchity. 1,765,364; June 24.
Mop cleaner. A. M. White. 1,768,277; June 24.
Mosaic designs for porcelain or other fine ceramic materials, Producing. P. Körber. 1,767,081; June 24.
Motor: *See*—
Air-cooled motor. Hydrocarbon motor.
Current motor. Rotary motor.
Electric motor. Wave and tide motor.
Fluid pressure motor.
Motor. J. J. Janca. 1,767,135; June 24.
Motor. A. O. Johnson. 1,766,519; June 24.
Motor control. J. T. Janette. 1,765,489; June 24.
Motor control, Railway-. A. Wichert. 1,766,474; June 24.
Motor preheater and cooler. A. Mueller. 1,766,028; June 24.
Motor rotor. H. E. Warren. 1,768,386; June 24.
Motor switch, Variable-speed electric-. R. Lee. 1,767,146; June 24.
Motors and the like, Control for outboard. F. L. Hammer. 1,767,584; June 24.
Mount for centrifugal machines. E. Roberts. 1,768,492; June 24.
Mounting and supporting means for time indicators. B. F. Hutches, jr. 1,767,671; June 24.
Mounting for loom-picking spindles. C. P. Bergstrom and C. J. Lindegren. 1,766,739; June 24.
Mounting, Seat-back. J. T. Atwood. 1,765,394; June 24.
Mounting, Spark-plug. O. Bitchman. 1,766,740; June 24.
Mousetrap. H. W. Norman. 1,767,306; June 24.
Mower, Power-driven lawn. J. A. E. Carlson. 1,767,510; June 24.
Mud-guard system for motor cars and the like. A. Gauchot. 1,768,445; June 24.
Mud gun. J. S. Fraser. 1,767,660–1; June 24.
Muffler. C. W. Beck. 1,766,973; June 24.
Musical instrument. W. B. Parkinson. 1,767,998; June 24.
Musical instruments, Playing. S. Kurcharski. 1,768,079; June 24.
Musical stringed instrument. R. B. Ferguson. 1,768,471; June 24.
Mute. J. V. Godbery. 1,767,974; June 24.
Nailing machines, Nail-picking device for. H. Paxton. 1,766,144; June 24.
Necktie appliance. F. S. Fithian. 1,766,290; June 24.
Necktie rack. S. Mossbacher. 1,767,545; June 24.
Needle, Knitting-machine. V. Lombardi. 1,767,595; June 24.
Nesting device. G. W. Nesbitt. 1,765,994; June 24.

Nipple and separator for oil wells, Automatic flow. H. S. Berg. 1,767,958; June 24.
Nitro compounds, Reduction of aromatic. A. W. Dawes. 1,765,660; June 24.
Nitro compounds, Reduction of aromatic. P. Dieterle. 1,765,367; June 24.
Nitrogen, Apparatus for producing. W. B. Van Arsdel. 1,765,781; June 24.
Noise in vacuum tubes, Method and arrangement for diminishing. W. Schaffer. 1,765,542; June 24.
Noodle cutter. J. Kovacich. 1,768,077; June 24.
Nozzle. G. C. Lammert and F. B. Lambert. 1,767,462; June 24.
Nozzle, Hose. W. E. Harman. 1,768,356; June 24.
Nursery play apparatus. R. Berman. 1,765,361; June 24.
Nut and bolt assembling machine. T. C. Schenk. 1,766,003; June 24.
Nutcracker. A. Demek. 1,767,917; June 24.
Nut lock. H. B. Oursler. 1,767,225; June 24.
Nut-setting machine. J. W. Myers. 1,766,130; June 24.
Nut, Unit Lock. J. A. MacLean. 1,767,219; June 24.
Oarlock. A. G. Seberg and H. M. Weberg. 1,768,006; June 24.
Oil and carbureted water gas, Simultaneously producing light hydrocarbon motor-fuel. F. A. Howard. 1,767,455; June 24.
Oil, Apparatus for cracking. G. Egloff. 1,766,986; June 24.
Oil, Apparatus for distilling. A. Schwarz. 1,765,886; June 24.
Oil burner. H. Dittes. 1,765,827; June 24.
Oil burner. F. L. Hammer. 1,767,669; June 24.
Oil burner. G. C. Lee. 1,767,295; June 24.
Oil-burning system. J. W. Cannon. 1,766,242; June 24.
Oil composition, Fatty-. A. A. Somerville. 1,767,264; June 24.
Oil, Converting. G. Egloff and H. P. Benner. 1,765,663; June 24.
Oil, Cracking. J. Delattre-Seguy. 1,766,246; June 24.
Oil, Cracking petroleum. G. Egloff. 1,766,987; June 24.
Oil cup. H. B. Morrow. 1,766,345; June 24.
Oil, Destructive distillation of petroleum. A. D. David. 1,766,983; June 24.
Oil-feeding device. C. H. Rudge and E. A. Buchanan. 1,765,618; June 24.
Oil from passing pistons, Preventing. F. A. Myers. 1,766,829; June 24.
Oil, Lubricating. N. MacCoull, jr. 1,767,147; June 24.
Oil, Method and apparatus for cracking. J. S. Harrison. 1,767,360; June 24.
Oil or other liquid to thread, Method and device for applying. E. K. Gladding. 1,767,209; June 24.
Oil, Process and apparatus for cracking. G. Egloff. 1,766,331; June 24.
Oil, Process and apparatus for treating hydrocarbon. R. K. Stratford. 1,768,342; June 24.
Oil, Refining. W. Johnson. 1,767,459; June 24.
Oil switch. A. Wichert. 1,766,575; June 24.
Oil-well apparatus. C. M. Hunt and R. W. Wilkinson. 1,768,323; June 24.
Oil-well apparatus. J. F. Moody. 1,766,920; June 24.
Oiler or moistener, Thread. F. C. Scholler. 1,766,954; June 24.
Oils, Cooking. D. R. Weller and L. Link. 1,767,331; June 24.
Oils, Cracking petroleum. R. A. Halloran and A. L. Strout. 1,765,976; June 24.
Oils, Process and apparatus for treating. G. Egloff and H. P. Benner. 1,767,839; June 24.
Oils, Purification of hydrocarbon. H. G. M. Fischer. 1,767,356; June 24.
Oils, Treating mineral and naphtha. G. Petroff. 1,766,305.
1.4.5.8.-naphthalene tetracarboxylic acid and preparing it, Derivatives of. W. Eckert and H. Greune. 1,765,662; June 24.
1-hydroxylamino-8-sulpho-anthraquinone. A. Shepherdson and A. J. Hallwood. 1,767,230; June 24.
Ophthalmic mounting. G. F. Marciano. 1,765,732; June 24.
Ophthalmic mounting. J. N. Nelson. 1,767,807; June 24.
Optical device for photographic, cinematographic, and other purposes. J. F. Romer. 1,765,882; June 24.
Orchard heater. L. C. Huff. 1,767,670; June 24.
Ores, Treating manganese. J. H. Brennan. 1,768,112; June 24.
Ores, Treating refractory auriferous. C. L. Votaw and C. A. Andrews. 1,766,767; June 24.
Organic compounds, Manufacture of valuable. A. Mittasch and W. Frankenburger. 1,766,718; June 24.
Ornamentation process and apparatus therefor. J. B. Campbell. 1,766,878; June 24.
Ortho-cyanarylsulphocyanogen compounds and making same. R. Herz and M. Schubert. 1,766,820; June 24.
Oscillation-damping device free from radiation for electric lines. J. W. Hofmann. 1,766,995; June 24.
Outlets, Apparatus for forming. W. J. Cook. 1,765,404; June 24.
Outlets, Forming. C. T. Siebs. 1,765,459; June 24.
Overshoe, Nonskid. C. C. Pearson and E. M. McLellan. 1,768,370; June 24.
Overshot. H. E. Marshall. 1,767,149; June 24.
Pack opener. A. R. McArthur. 1,766,299; June 24.
Pack tree and harness. R. F. Warren. 1,767,630; June 24.
Package for compacts, Special. L. L. Kole. 1,768,203; June 24.
Package for knocked-down window-screen frames. W. E. Wheless. 1,766,317; June 24.
Package of rolled sheets. L. E. La Bombard. 1,765,417; June 24.
Package sealing. J. G. Shaw. 1,766,405; June 24.
Packaging machine. A. C. Everett. 1,765,718; June 24.
Packing. O. H. Dorer and G. H. van Hengel. 1,766,700; June 24.
Packing device, Box-bag-. T. M. Avery. 1,768,097; June 24.
Packing machine, Fruit and vegetable. D. W. Wadsworth. 1,768,276; June 24.
Pad. W. C. King. 1,767,372; June 24.
Paddle, Plasterer's. A. J. Lord. 1,768,411; June 24.
Pails, Pouring attachment for. J. E. Fitzgerald. 1,765,409; June 24.
Paintbrush. R. Johnson. 1,767,986; June 24.
Paintbrush. A. J. May. 1,767,540; June 24.
Paint gun. T. Birkenmaier. 1,766,503; June 24.
Pan: *See*—
Baker's pan.
Pan-greasing machine. J. S. Allen. 1,766,207; June 24.
Pan lifter. M. Fahrnkopf. 1,768,311; June 24.
Panel joints, Making. O. J. Groehn. 1,765,372; June 24.
Pants, Track. F. Chatfield. 1,767,649; June 24.
Paper and the manufacture of same, Adhesive. J. Muir. 1,766,302; June 24.
Paper, Apparatus for the manufacture of ornamental. E. Mahler and C. G. Bright. 1,767,252; June 24.
Paper article and making same, Metal-coated. A. L. Clapp. 1,765,862; June 24.
Paper-cutting machine. W. L. Valiquette. 1,766,855; June 24.
Paper, Document. T. J. Snyder. Re17,708; June 24.
Paper-feeding mechanism. P. M. Colquhoun and W. R. Allen. 1,766,106; June 24.
Paper-feeding mechanism. L. H. Morse. 1,766,137; June 24.
Paper, Insulating. R. P. Rose and H. E. Cude. 1,765,774; June 24.
Paper-making machine. H. H. Jurgensen. 1,767,889; June 24.
Paper-making machines, Control mechanism for. D. E. Lewellen and G. R. Zecher. 1,768,088; June 24.
Paper-stuffing machine. C. J. Ellsworth. 1,766,117; June 24.
Paper tubes, Manufacture of. W. H. Woodford. 1,767,827; June 24.
Parachute. L. Detzel. 1,767,968; June 24.
Parachute. R. M. Lane. 1,767,534; June 24.
Particles in gaseous suspension, Dealing with. A. L. Miller. 1,767,089; June 24.
Patterns on plated knitting and the corresponding product, Producing. J. N. Mahler. 1,768,125; June 24.
Pavement. L. Kirschbraun. 1,767,533; June 24.
Paving material and preparing such material. G. H. Alvey and E. A. Young. 1,767,830; June 24.
Peanut roaster. L. W. Thomas. 1,766,846; June 24.
Pear-peeling machine. W. A. Fonken. 1,766,433; June 24.
Peel-dusting machine for bakery purposes. J. Weber and H. Tietjen. 1,767,633; June 24.
Pelt stretcher, Animal-. S. J. Falley. 1,768,400; June 24.
Pen for drawing and ruling purposes. R. Blanckertz. 1,765,901; June 24.
Pen, Fountain. H. Stein. 1,766,728; June 24.
Pen, Fountain-feed drawing. J. Szinay. 1,767,562; June 24.
Pen, Writing. G. J. Sengbusch. 1,767,189; June 24.
Pencil. C. Coby. Des. 81,435; June 24.
Pencil attachment. J. C. Taylor. 1,767,948; June 24.
Pencil, Mechanical. H. Turner. 1,766,271; June 24.
Percolator. C. Mitchell. 1,765,934; June 24.
Percolator and strainer. J. W. Bugg. 1,767,915; June 24.
Petroleum emulsions, Breaking. M. De Groote and B. Keiser. 1,766,061–2; June 24.
Petroleum emulsions, Breaking. M. De Groote and L. T. Monson. 1,766,057–60; June 24.
Petroleum emulsions, Breaking. M. De Groote and L. T. Monson. 1,766,063–5; June 24.
Petroleum emulsions, Breaking. M. De Groote and L. T. Monson. 1,766,112; June 24.
Petroleum emulsions, Breaking. M. De Groote and A. F. Wirtel. 1,766,066; June 24.
Petroleum emulsions, Breaking. M. De Groote, L. T. Monson, and A. F. Wirtel. 1,766,067; June 24.
Petroleum hydrocarbons with alcohol, Process and apparatus for the fractional extraction of. T. A. Werkenthin. 1,766,768; June 24.
Petroleum oil, Process and apparatus for cracking. J. C. Morrell and H. P. Benner. 1,767,695; June 24.
Petroleum, Process and apparatus for stabilizing crude. F. B. Bimel. 1,767,341; June 24.
Pharmaceutical product. W. Schulemann, A. Wingler, and F. Mietzsch. 1,766,403; June 24.
Phonofilms, Process and apparatus for the production and reproduction of. E. Gerlach. 1,767,790. June 24.
Phonograph and radio apparatus, Combined. L. P. Horning, jr. 1,768,065; June 24.
Phonograph construction. O. R. Grass. 1,766,992; June 24.
Phonograph, Electric. A. A. Thomas. 1,765,707; June 24.
Phonograph, Electric. A. A. Thomas. 1,766,206; June 24.

Phosphoric esters of aliphatic alcohols, Production of. F. Nicolai. 1,766,721; June 24.
Photographic-film package. J. L. Garretson. 1,767,972; June 24.
Photographs with free cameras, Means for obtaining very sharp. R. Wörsching. 1,766,090; June 24.
Photolithographing process. S. A. Stapp. 1,767,414; June 24.
Photometer. C. W. Dake. 1,766,219; June 24.
Picker: *See*—
Fruit picker.
Pickling process, Continuous. H. M. Naugle and A. J. Townsend. 1,765,498; June 24.
Picture frame. M. J. Kaufman. 1,765,980; June 24.
Pictures, Taking moving. D. W. Griffith. 1,767,668; June 24.
Pictures, Transmission of. R. D. Kell. 1,768,453; June 24.
Piezo-electric crystal apparatus. A. Crossley. 1,766,036; June 24.
Piezo-electric crystal apparatus. L. H. Dawson. 1,766,037; June 24.
Piezo-electric crystal device, Composite. A. M. Nicolson. 1,766,042; June 24.
Piezo-electric crystal modulation. A. M. Nicolson. 1,766,045; June 24.
Piezo-electric torsion device, Internally-clamping composite. A. M. Nicolson. 1,766,043; June 24.
Pigment having insecticidal and fungicidal properties, and making same. E. A. Taylor. 1,766,412; June 24.
Pigments containing titanium dioxide, Production of composite. J. Blumenfeld. 1,766,592; June 24.
Pigsty for rearing pigs. W. Lödige, jr. 1,765,925; June 24.
Pin thread for disk-bit mountings. H. H. Holdaway. 1,766,635; June 24.
Pipe. R. W. Nicholls. 1,767,997; June 24.
Pipe-flanging machine. C. F. Schultis. 1,765,704; June 24.
Pipe tongs, Making. E. B. Kibby. 1,765,838; June 24.
Pipe union. W. S. Bremer. 1,765,753; June 24.
Pipe wrench. G. Deluca. 1,766,778; June 24.
Piston. T. F. Butzen and T. C. Olson. 1,767,169; June 24.
Piston. A. J. Menchey. 1,767,996; June 24.
Piston. A. L. Nelson. 1,766,449; June 24.
Piston. W. H. Schulze. 1,766,150; June 24.
Piston. D. E. Smith. 1,766,842; June 24.
Piston and rod packing. J. L. Abern and L. G. Ledger. 1,767,164; June 24.
Piston for engines and the manufacture of these pistons. R. de Fleury. 1,766,431; June 24.
Piston for internal-combustion engines. P. Pritchard. 1,767,395; June 24.
Piston-packing ring. A. Guerriero. 1,765,722; June 24.
Piston ring. D. M. Solenberger. 1,767,711; June 24.
Piston ring. B. Young. 1,767,498; June 24.
Piston ring. B. Young. 1,768,470; June 24.
Piston-ring-installing device. D. M. Solenberger. 1,767,819; June 24.
Piston-ring spreader. H. S. Frank. 1,766,498; June 24.
Pitman. G. A. Hart. 1,765,832; June 24.
Pivot joint. W. A. Chryst. 1,766,882; June 24.
Plaiting iron. G. B. Campbell-Ross. 1,767,618; June 24.
Plant-protecting device. C. S. and A. O. Rights. 1,766,455; June 24.
Planter, Lister. R. N. Anderson. 1,767,910; June 24.
Planter, Two-row. L. H. Kaupke. 1,767,853; June 24.
Plaster-receiving board. H. A. Cumfer. 1,766,982; June 24.
Plastic composition. H. V. Leckie and W. H. Woodford. 1,768,363; June 24.
Plate clamp. C. W. Harrold. 1,765,530; June 24.
Plate frame for supporting artificial teeth and making same. J. G. Hollingsworth. 1,767,130; June 24.
Pliers. F. Schweigert. 1,766,459; June 24.
Pliers. R. W. Young. 1,765,783; June 24.
Plotting device. W. E. Waterbury. 1,767,026; June 24.
Plow. Y. Gómez. 1,766,380; June 24.
Plow. G. L. Gregory. 1,767,359; June 24.
Plow and cultivator, Combination. W. A. Shotts. 1,766,407; June 24.
Plow attachment. A. A. Hutto. 1,766,750; June 24.
Plow share. D. H. Moore. 1,768,135; June 24.
Plows, Side-draft eliminator for gang. W. E. Heck and J. Ellermeyer. 1,768,402; June 24.
Plug. A. C. Smith. 1,768,456; June 24.
Plug, Terminal. W. H. Ray. 1,765,540; June 24.
Plumbing clean-out system. T. F. Lyle. 1,765,926; June 24.
Pocket key carrier. R. H. Thayer. 1,766,563; June 24.
Pocket reenforcement. S. Davidoff. 1,767,967; June 24.
Polarimetric apparatus. M. Berek. 1,767,831; June 24.
Polisher, Floor. W. H. Hughes. 1,767,983; June 24.
Polisher, Stone. C. S. Cushman. 1,766,012; June 24.
Polishing machine, Floor-. E. J. Newcomer. 1,768,137; June 24.
Polishing machine, Mandrel-. W. C. Stevens. 1,768,330; June 24.
Polymerization vinyl compounds and reaction of same with aldehydes, Preventing. K. G. Blaikie. 1,768,434; June 24.
Positive-ion emitter. C. H. Kunsman. 1,767,218; June 24.
Pot: *See*—
Milk pot.
Pots, Method of and apparatus for making clay. F. W. Preston. 1,765,804; June 24.
Potato chips, Making. L. A. Morris. 1,767,389; June 24.
Power actuator. C. S. Bragg and W. Kliesrath. 1,766,481; June 24.
Power generator, Wind-. B. Miller. 1,767,303; June 24.
Power plant. C. G. Curtis and E. R. Newton. 1,765,716; June 24.
Power plant for high pressure, Steam-. W. Stender. 1,767,714; June 24.
Power plant, Steam-. O. Frey. 1,766,623; June 24.
Power plant, Wave-. W. H. Burry. 1,767,048; June 24.
Power shovel. P. Burke. 1,767,576; June 24.
Power system. K. Schmidt. 1,767,405; June 24.
Power transmission mechanism. R. T. Van Valkenburgh and C. J. Van Valkenburgh. 1,767,329; June 24.
Power transmission unit for concrete mixers. C. F. Ball. 1,766,583; June 24.
Power transmitter, Hydraulic. G. A. Klimek. 1,766,520; June 24.
Power-transmitting device. L. M. Sheridan. 1,765,948; June 24.
Preheating system. F. Puening. 1,765,771; June 24.
Press: *See*—
Bale press. Filter press.
Baling press. Punch press.
Drawing press.
Press. A. A. Byerlein. 1,768,504; June 24.
Press. J. S. Reid. 1,768,294; June 24.
Press. F. H. Smith. 1,766,265; June 24.
Press. T. F. Stacy. 1,765,626; June 24.
Press-roll drive. W. W. Metcalf and J. Brown. 1,767,088; June 24.
Presses, Mechano-pneumatic cushion for power. J. C. Hanna. 1,765,762; June 24.
Pressing iron. F. J. Clark. 1,766,603; June 24.
Pressing iron. J. W. Kirkner and J. O. Snowden. 1,765,679; June 24.
Pressing machine, Adjustable rotary. E. R. Manley. 1,768,469; June 24.
Pressure device in dispensing fluids and semifluids. A. E. Hutt. 1,767,680; June 24.
Pressure gauge. E. A. Ileman. 1,766,997; June 24.
Printing device. J. A. Bailey. 1,765,365; June 24.
Printing device. W. T. Gollwitzer. 1,765,370; June 24.
Printing machine. L. L. Buchanan and E. M. Bohlken. 1,767,577; June 24.
Printing mechanism, Alphabetical. W. W. Lasker. 1,768,526; June 24.
Printing presses, Delivery apparatus for. C. J. Richter. 1,766,083–4; June 24.
Printing presses, Feed board for. E. A. Bartel. 1,765,859; June 24.
Products from hydrocarbons by heat treatment, Obtaining. W. K. Lewis and N. E. Loomis. 1,767,297; June 24.
Profiler and miller. S. Einstein. 1,766,115; June 24.
Projection apparatus. K. and J. W. Brenkert. 1,766,102; June 24.
Projection apparatus, Luminous. M. L. Branger. 1,768,111; June 24.
Prop device, Ornamental. E. R. Marbach. 1,767,184; June 24.
Propeller. G. C. Engstrand. 1,767,786; June 24.
Propeller, Adjustable. J. Haw. 1,767,127; June 24.
Propeller for airplanes and the like. S. E. Slonimsky. 1,767,776; June 24.
Protective apparatus and circuits. A. O. Austin. 1,766,738; June 24.
Protective device. R. S. Howard, G. H. Brodie, and T. O. Westhafer. 1,765,531; June 24.
Protective device for hydrometers. L. Edelmann. 1,767,355; June 24.
Protective device for the tonneau of motor cars and for other purposes. M. G. S. Griffith. 1,767,447; June 24.
Protective switch, Transformer. W. K. Dickinson. 1,768,398; June 24.
Protector, Leg and ankle. F. M. Grau. 1,765,371; June 24.
Protector, Vault-lock. H. Borkenhagen and A. Olson. 1,767,273; June 24.
Puller: *See*—
Slack puller.
Pulp-drying machines, Conserving the heat and pulp from. S. Norman. 1,766,082; June 24.
Pulp, Manufacture of. F. G. Rawling. 1,766,944; June 24.
Pulp-stock vat. H. Parker. 1,766,000; June 24.
Pump. L. H. L. Bellem. 1,768,102; June 24.
Pump. R. V. Bingham. 1,766,591; June 24.
Pump. J. B. Conner. 1,766,487; June 24.
Pump. F. W. Davis. 1,766,610; June 24.
Pump. J. W. Gardner. 1,766,499; June 24.
Pump. W. H. J. Lannert and P. W. Cowie. 1,767,535; June 24.
Pump. R. L. Meaux. 1,768,130; June 24.
Pump. L. M. Persons. 1,765,698; June 24.
Pump. U. G. Todd. 1,766,852; June 24.
Pump, Air. C. G. Wood. 1,768,279; June 24.
Pump, Booster. R. Wedeberg. 1,767,494; June 24.
Pump, Deep-well. E. S. Grafenstatt. 1,767,879–80; June 24.
Pump, Deep-well. C. A. Joy. 1,765,921; June 24.
Pump, Deep-well. J. E. Shutt. 1,765,457; June 24.

Pump, Diaphragm. C. I. Longenecker. 1,767,934; June 24.
Pump, Force. J. Binderup. 1,766,010; June 24.
Pump, Fuel. J. P. Remington. 1,768,487; June 24.
Pump, Fuel-charging. J. Mahler. 1,767,597; June 24.
Pump, Fluid-displacement. E. F. McCarthy. 1,767,541; June 24.
Pump, Fluid-pressure. P. Honn. 1,767,072; June 24.
Pump, Hydroturbine. I. C. Jennings. 1,766,752; June 24.
Pump impeller, Centrifugal-. G. L. Ferguson. 1,768,241; June 24.
Pump, Mercury-vapor vacuum. E. Kobel. 1,766,651; June 24.
Pump, Multistage and expansion-fluid. C. H. Hardie and W. Jones. 1,766,382; June 24.
Pump, Multistage hot-water centrifugal. G. Weyland. 1,765,895; June 24.
Pump, Oil. A. J. G'fford and B. S. T. Bishop. 1,765,914; June 24.
Pump, Oil. J. P. Heil. 1,765,724; June 24.
Pump, Oil-dispensing. J. B. Eastes. 1,767,354; June 24.
Pump, Pneumatic. H. S. Rogers and R. Raddatz. 1,767,477–8; June 24.
Pump, Portable. C. I. Longenecker. 1,768,483; June 24.
Pump, Rotary. A. Baumann. 1,765,360; June 24.
Pump, Rotary. I. C. Jennings. 1,766,751; June 24.
Pumping apparatus. G. L. Ferguson. 1,768,242; June 24.
Pumping apparatus. G. L. Ferguson and C. G. Wood. 1,768,313; June 24.
Pumping apparatus. I. B. Humphreys. 1,765,427; June 24.
Pumping apparatus. U. G. Todd. 1,766,853; June 24.
Pumping device, Water-. W. Nagy. 1,768,210; June 24.
Pumping power. B. G. Goble. 1,767,282; June 24.
Pumping system. E. E. Vinson. 1,766,156; June 24.
Pumps, Controlling means for recording. D. F. Kay, jr. 1,766,386; June 24.
Pumps, Primer for washer. R. E. Manley. 1,767,767; June 24.
Pumps, Priming means for centrifugal. G. L. Ferguson. 1,768,243; June 24.
Pumps, Pulsation eliminator for. V. L. Tannehill. 1,767,100; June 24.
Punch press. D. C. Carroll. 1,768 357; June 24.
Punching device. L. Rochat. 1,766,308; June 24.
Punching machine. W. A. Valentine. 1,767,492; June 24.
Push-rod lock. C. N. Fairchild. 1,766,493; June 24.
Putlog. F. L. Welt. 1,767,333; June 24.
Pyroxylin solutions of low viscosity, Making. H. Hibbert and J. L. Parsons. 1,768,253; June 24.
Rack: *See*—
Cable rack. Spool rack.
Display rack. Stove rack.
Necktie rack.
Rack and stand, Display. R. S. Hintze. 1,767,980; June 24.
Rack with shallow sliding trays. W. N. Vance. 1,765,954; June 24.
Radiator. B. Blackmore. 1,766,701; June 24.
Radiator. W. A. Finley. 1,766,250; June 24.
Radiator, Condensing. J. F. Leanhart. 1,768,084; June 24.
Radiator, Gas-fired. G. C. Carnahan. 1,765,759; June 24.
Radiator screen. P. J. Holzhauer. 1,768,479; June 24.
Radio and phonographic radio reproducing system, Combined. P. Haas. 1,766,381; June 24.
Radio apparatus and method. F. A. Kolster. 1,766,041; June 24.
Radio capacitance and inductance regulator. J. L. Price. 1,766,002; June 24.
Radio compass compensator. W. M. Brower. 1,767,117; June 24.
Radio compass indicator. F. A. Kolster. 1,767,140; June 24.
Radio compass system. F. A. Kolster. 1,767,141; June 24.
Radio pick-up system. H. F. Elliott. 1,768,196; June 24.
Radioreceiver. N. Bishop. 1,768,286; June 24.
Radioreceiver. O. C. Dennis. 1,767,518; June 24.
Radio receiving device. W. F. Luhnow. 1,765,731; June 24.
Radiosocket. J. B. Kirby. 1,767,139; June 24.
Radiotelegraphy. E. F. W. Alexanderson. 1,768,433; June 24.
Radio transmission system. A. H. Taylor. 1,766,047; June 24.
Radio transmitting system. F. A. Kolster. 1,767,245; June 24.
Rail joint. A. H. Broussard and L. K. Thibodeaux. 1,765,650; June 24.
Rail joint. W. H. Smith. 1,768,009; June 24.
Rail-joint bar. D. P. Wolhaupter and E. L. Groff. 1,768,391; June 24.
Rail joint, Railway-. W. A. Evers. 1,766 888; June 24.
Rail joint, Railway-. G. W. Muller. 1,766,795; June 24.
Railroad-crossing gate. H. F. C. Musmann. 1,765,936; June 24.
Railroad gate, Automatic. E. J. Holly. 1,766,516; June 24.
Railway-car seat. J. M. Knight and V. Willoughby. 1,766,079; June 24.
Railway carriage. M. Hautot. 1,767,361; June 24.
Railway crossing. O. Getman. 1,766,379; June 24.
Railway crossing. J. D. Lasswell. 1,766,913; June 24.
Railway-crossing gate. J. J. Wilmoth and A. Moos. 1,768,388; June 24.
Railway rails, Anticreeper for. W. S. Weston. 1,767,495; June 24.
Railway rolling stock. H. J. Nelson. 1,768,527; June 24.
Railway tie. G. C. Ramsey. 1,765,613; June 24.
Railway tie plate. W. R. Hewitt. 1,767,453; June 24.
Raising and lowering apparatus. E. H. Remde. 1,767,095; June 24.
Rake: *See*—
Lawn rake.
Rake construction. E. L. Bell. 1,768,101; June 24.
Ratchet-feeding device. J. A. Waller. 1,766,364; June 24.
Razor, Safety. W. E. Bieloch. 1,768,307; June 24.
Razor, Safety. J. Muros. 1,766,397–9; June 24.
Razor, Safety. J. Schick. 1,767,706; June 24.
Razor, Safety. A. Schlüssler. 1,765,805; June 24.
Reaction control, Automatic. W. J. Crowell, jr. 1,766,981; June 24.
Reagent feeder. J. F. Geary. 1,766,625; June 24.
Receptacle. A. Martin. 1,765,686; June 24.
Receptacle-closure means. H. J. Melville. 1,765,989; June 24.
Receptacle for cigars and cigarettes, Dispensing. P. Bonaventura. 1,766,097; June 24.
Receptacle for dispensing liquid, semiliquid, or pasty materials. M. Iochum. 1,767,457; June 24.
Receptacle for mopping machines. W. S. Finnell. 1,767,840; June 24.
Receptacle for umbrellas and the like, Identification. J. R. Rawley. 1,766,454; June 24.
Receptacle, Smoker's. B. Putterman. 1,767,476; June 24.
Receptacle, Waterproof. A. von Frankenberg. 1,766,569; June 24.
Reciprocating engine, Multicylinder. H. R. Ricardo. 1,767,309; June 24.
Recorder: *See*—
Signal recorder.
Recorder for facsimile systems. R. H. Ranger. 1,765,448; June 24.
Recording and reproducing system. E. D. Phinney. 1,765,735; June 24.
Recording device. C. W. Mayer and E. F. Siller. 1,765,988; June 24.
Recording device for automobiles. N. L. Greene. 1,767,924; June 24.
Recording of music and speech. H. B. Wier. 1,765,517; June 24.
Records, Apparatus for making sound. H. Kühnemeister. 1,765,923; June 24.
Rectifier, Electrolytic. F. Eichenberger. 1,765,573; June 24.
Reel: *See*—
Fishing reel. Salt-water reel.
Reflecting material. H. H. Higbie. 1,767,285; June 24.
Reflector for directing light. N. Lang. 1,767,144; June 24.
Reflector for headlights. R. Jurgenson. 1,766,647; June 24.
Reflector, Traffic-signal. R. W. Luce. 1,768,412; June 24.
Refrigerating apparatus. O. C. Olsen. 1,768 417; June 24.
Refrigerating tank and ice-cream freezer, Combined. A. F. Sawyer. 1,767,857; June 24.
Refrigeration. B. H. Coffey. 1,765,656–7; June 24.
Refrigeration apparatus. W. A. Inman and A. L. Brumund. 1,765,674; June 24.
Refuse-treating apparatus. G. A. Boze. 1,766,325; June 24.
Register: *See*—
Autographic register.
Regulator: *See*—
Automatic regulator. Voltage regulator.
Gas regulator. Water regulator.
Vibration regulator.
Regulator. B. M. Leece. 1,767,180; June 24.
Regulator for brake rigging. W. H. Sauvage. 1,767,403; June 24.
Relay. S. M. Day. 1,766,611; June 24.
Relay. C. Morrison. 1,765,497; June 24.
Relay, Alternating-current. J. F. Merkel. 1,766,665; June 24.
Relay-mounting means. J. E. Willing. 1,766,577; June 24.
Relay-operating mechanism. R. C. Leake. 1,766,658; June 24.
Remote-control switch. T. F. Bludworth. 1,766,372; June 24.
Remote-control system for electric circuits. T. F. Bludworth and I. S. Bobrovsky. 1,766,371; June 24.
Remote-control system, Selective. H. J. Murray. 1,767,609; June 24.
Repair instrument. T. H. Forehand. 1,766,333; June 24.
Reproducer, Capacity. P. E. Edelman. 1,767,657; June 24.
Reproducing device. J. S. High. 1,765,586; June 24.
Resilient wheel. R. R. Bishton. 1,767,572; June 24.
Resinous condensation product, Solid. W. O. Herrmann and H. Deutsch. 1,767,759; June 24.
Resins, Producing. J. C. Morrell and G. Egloff. 1,766,927; June 24.
Resistor grid. F. T. Cope. 1,767,171; June 24.
Resistor grid and supporting same. F. T. Cope. 1,767,172; June 24.

Retort for distilling oil shale and the like. M. R. Kraul. 1,766,132; June 24.
Reverse control mechanism, Automobile. C. L. Drew. 1,766,114; June 24.
Reversing switch, Locomotive. M. Caruso. 1,766,600; June 24.
Revetment. R. O. Dark. 1,768,309; June 24.
Ribbon-reversing mechanism, Automatic. G. G. Glasgow. 1,766,626; June 24.
Rim-rolling machines, Feeding device for. C. L. Wiles. 1,767,826; June 24.
Rim sizing and punching machine. W. N. Booth. 1,766,214; June 24.
Ring: *See*—
Piston packing ring. Piston ring.
Ring-spinning frame. G. Jacob. 1,767,888; June 24.
Riveter. A. Scott. 1,767,940; June 24.
Roadbed. G. W. Muller. 1,766,796; June 24.
Roadbed construction, Railway-. C. Weller. 1,766,367; June 24.
Road cleaner. R. H. Roller. 1,766,456; June 24.
Road drag. O. Pollock. 1,767,393; June 24.
Road machine. A. and A. G. Ronning. 1,767,617; June 24.
Road scraper. G. E. Dean. 1,765,969; June 24.
Roaster: *See*—
Peanut roaster.
Rock drill. W. T. Woods. 1,766,578; June 24.
Rod: *See*—
Connecting rod.
Rod clamp, Pull-. H. G. Durnell and S. T. Steel. 1,768,038; June 24.
Rod elevator. B. P. Hoffman. 1,768,450; June 24.
Roller: *See*—
Flexible roller.
Roller grizzly. M. A. Kendall. 1,766,340; June 24.
Roller mill. J. W. Kent. 1,767,591; June 24.
Rolls for rolling mills and the like, Eccentric. A. E. Pinches. 1,767,392; June 24.
Roof for oil tanks, Floating. F. W. Kueffer. 1,765,593; June 24.
Roof structure. S. Richmond. 1,767,258; June 24.
Roof, Vehicle. J. L. Menzies. 1,768,368; June 24.
Roofing. A. E. F. Moone. 1,768,134; June 24.
Roofing element, Sealed laminated. L. Kirschbraun. 1,765,796; June 24.
Roofing elements, Making. L. Kirschbraun. 1,767,374; June 24.
Rope. Copper-coated wire. A. F. W. Thormann. 1,766,201; June 24.
Rope stretcher. M. Haley. 1,766,122; June 24.
Rotary cutter. F. P. Miller. 1,768,132; June 24.
Rotary engine. J. Johnson. 1,767,985; June 24.
Rotary engine. W. S. Sullivan. 1,766,005; June 24.
Rotary furnace. M. Sklovsky. 1,765,949; June 24.
Rotary motor, Electromagnetic. T. E. Thomas. 1,767,158; June 24.
Rotary printing machine, Two-color. A. Fallot. 1,768,312; June 24.
Rotor, Wind. S. J. Savonius. 1,766,765; June 24.
Rubber article of graded properties and method of making the same, Composite. W. B. Wescott. 1,768,348; June 24.
Rug. P. C. Waite. 1,765,512; June 24.
Rug-cleansing mechanism. C. A. Smith, sr. 1,767,558; June 24.
Rug-drying apparatus. L. E. Owens. 1,765,695; June 24.
Rule, Carpenter's. R. Garbs. 1,767,789; June 24.
Rumble seat. V. F. Hitt and J. O. Evans. 1,768,466; June 24.
Safety attachment for moving-picture-projecting machines. H. C. Cornetta. 1,766,607; June 24.
Safety carrier. E. Cahill. 1,766,599; June 24.
Safety device for air compressors. R. P. Pescara. 1,766,682; June 24.
Safety device for boiler feed and delivery pipings. E. Ruschke. 1,765,883; June 24.
Safety device for elevators. F. L. Moore. 1,765,690; June 24.
Safety device for pneumatic hammers. F. Izzo. 1,766,296; June 24.
Safety device for presses. H. S. Walsh and M. H. Matheson. 1,768,531; June 24.
Safety device, Submarine. J. G. Steele. 1,766,845; June 24.
Safety equipment, Grade-crossing. H. S. Coder. 1,765,906; June 24.
Sales package and razor, Combined. J. Schick. 1,767,707; June 24.
Salt, Method and apparatus for the manufacture of. W. F. Downing, jr. 1,768,399; June 24.
Salt-water reel. F. M. Case. 1,765,903; June 24.
Sand molds, Forming. J. T. Stoney. 1,768,429; June 24.
Sanding device for automobiles and the like. J. N. Reese. 1,765,772; June 24.
Sash and door constructions, Device for hunting bars and mountings in. L. G. Edgcomb. 1,766,707; June 24.
Sash weight. C. E. Bowers. 1,766,373; June 24.
Sausages and smoked or cooked meats, Coating. C. G. Hasselblad and A. J. Catellier. 1,765,485; June 24.
Saw, Cut-off. W. F. Pfau. 1,767,012; June 24.
Sawdust burner. A. C. Kennedy. 1,767,138; June 24.
Saw, Gang. C. F. Moses. 1,767,390; June 24.
Sawmill-block cleaner. A. Bratlie. 1,768,029; June 24.
Saw, Portable chain. J. Daw. 1,766,013; June 24.
Saw, Power-driven. J. O. Olsen. 1,765,733; June 24.
Saw set. J. O. Woods. 1,766,009; June 24.
Scaffold. S. R. Mansfield. 1,765,685; June 24.
Scale. B. W. King. 1,766,826; June 24.
Scale, Computing. O. C. Reeves. 1,767,813; June 24.
Scale mechanism. L. T. Johnson. 1,767,218; June 24.
Scale, Weighing. C. H. Hapgood. 1,767,744; June 24.
Scale, Weighing. H. O. Hem. 1,768,478; June 24.
Scale, Weighing. S. N. Hurt. 1,768,480; June 24.
Scale, Weighing. F. R. Moser, jr. 1,765,691; June 24.
Scale, Weighing. B. Radtke. 1,767,186; June 24.
Scanning device. E. A. Tambert. 1,767,718; June 24.
Score-calculating device. F. H. Bigelow. 1,768,285; June 24.
Scraper, Boot and shoe. J. N. Santhony. 1,768,375; June 24.
Scraper, Power. S. F. Anderson. 1,767,640; June 24.
Scraper step plate. G. A. Keenan. 1,766,786; June 24.
Screen: *See*—
Radiator screen. Windshield screen.
Window screen. Wire screen.
Screen. W. W. Watson. 1,765,388; June 24.
Screen exit. C. Rochon. 1,767,154; June 24.
Screen for filter presses. J. Johnson. 1,767,078; June 24.
Screen for motor vehicles, Antidazzle. G. W. Young. 1,766,162; June 24.
Screen hanger. A. T. Brennan. 1,766,054; June 24.
Screens, Drawbar for. C. Traut. 1,766,730; June 24.
Screw. F. J. Plym. Des. 81,453; June 24.
Screw-cutting die. E. T. Bysshe and R. R. Finn. 1,766,598; June 24.
Screws, Making slack-adjuster. L. L. Whitney. 1,765,516; June 24.
Screws, nuts, and like small articles, Device for holding and manipulating. H. E. Lewis. 1,767,296; June 24.
Scrubbing machine. A. H. Zucker. 1,767,109; June 24.
Seal for compressors. C. C. Spreen. 1,767,413; June 24.
Sealing compound. A. M. Coleman. 1,767,170; June 24.
Sealing containers. N. S. Olsen. 1,767,770; June 24.
Sealing means for coke-oven doors. R. Wilhelm. 1,765,642; June 24.
Seam for sewed articles. H. J. Le Vesconte. 1,767,990-1; June 24.
Seat: *See*—
Railway-car seat. Toilet seat.
Rumble seat. Vehicle seat.
Seat and carrier, Combined. T. Hargreaves. 1,767,925; June 24.
Seat and the like, Water-closet. H. C. Leslie. 1,766,650; June 24.
Seat attachment, Spring-. W. B. Redfield. 1,766,180; June 24.
Seat covers and the like, Attaching. G. A. King. 1,768,454; June 24.
Seat cushion structure. D. H. Van Hove. 1,768,383; June 24.
Sectionalizing switch, Automatic. M. E. Reagan. 1,765,500; June 24.
Securing means. K. J. Tobin, W. A. Beauchamp, and C. R. Vegren. 1,768,170; June 24.
Selector switch. O. Bracke. 1,768,394; June 24.
Separating device. O. B. Filkins. 1,768,244; June 24.
Separating, disintegrating, and mixing apparatus. E. de Dorlodot. 1,767,353; June 24.
Separating system. W. B. Prouty. 1,766,941; June 24.
Separator: *See*—
Centrifugal separator. Steam separator.
Gas separator.
Septum. B. W. Hazell. 1,767,793; June 24.
Service switch. W. R. Frampton. 1,765,369; June 24.
Set for measuring operating time of relays. J. Herman. 1,765,585; June 24.
Sewed articles, Producing. J. Berger. 1,768,025; June 24.
Sewing machine. E. W. Armstrong. 1,767,955; June 24.
Sewing machine. J. Berger. 1,768,026; June 24.
Sewing machine. J. Berger. 1,768,105; June 24.
Sewing machine and actuating mechanism therefor. K. Maier. 1,765,927; June 24.
Sewing machine, Looper mechanism for. J. Berger. 1,768,103; June 24.
Sewing-machine ruffler. A. D. Zecck. 1,765,301; June 24.
Sewing machines, Chain cutter for. F. Lutz. 1,765,493; June 24.
Sewing machines, Feeder mechanism for. J. Berger. 1,768,104; June 24.
Sewing machines, Presser foot for. J. R. Moffatt. 1,765,604; June 24.
Sewing machines, Thread-controlling mechanism for. W. M. Hanneman. 1,766,123; June 24.
Shade, curtain, and drapery support, Combined window. W. and E. H. Bushey. 1,768,187; June 24.
Shade device, Window-. E. R. Lawton. 1,768,410; June 24.
Shade, Window. G. M. Jackson. 1,766,905; June 24.
Shaft coupling. T. Elliott. 1,766,247; June 24.
Shaft-making machine, Flexible. L. H. Morin. 1,767,692-3; June 24.
Shafting, Making flexible. L. H. Morin. 1,767,694; June 24.
Shafts, Method and apparatus for shaping. H. K. B. Davis. 1,767,836; June 24.
Shaper. C. J. Davis. 1,766,168; June 24.

Sharpener, Knife. R. E. Millsap. 1,767,091; June 24.
Sharpening device for curved edged tools. N. T. Pindar. 1,767,941; June 24.
Sharpening punches or the like. S. N. Tevander. 1,766,964; June 24.
Shaving unit. J. Schick. 1,767,705; June 24.
Shears: *See*—
Cropping shears.
Shears. E. E. Moore. 1,766,301; June 24.
Sheave. E. L. Harrington. 1,767,070; June 24.
Sheet and package thereof, Interleaved. G. A. Shaffer. 1,767,859; June 24.
Sheet-drying process and apparatus. J. B. Willsea. 1,768,498; June 24.
Sheet-edge-forming device. J. A. Reece. 1,767,094; June 24.
Sheet feeder. A. Broadmeyer. 1,766,482; June 24.
Sheet-feeding mechanism, Automatic. A. Ackley. 1,767,638; June 24.
Sheet folder. W. F. Mayer. 1,766,790; June 24.
Sheet folder, Adjustable. W. F. Mayer. 1,766,789; June 24.
Sheet folder, By-pass. W. F. Mayer. 1,766,791; June 24.
Sheet-packing apparatus. A. D. Evans and H. R. Gravenstreter. 1,767,442; June 24.
Sheet-winding machine. E. Tonelli. 1,765,779; June 24.
Sheets, Folding. W. F. Mayer. 1,766,792; June 24.
Sheets, Roll of interleaved. G. A. Shaffer. 1,767,860; June 24.
Shelving. J. D. Smid. 1,765,888; June 24.
Shield, Dress. S. Imbach. 1,765,725; June 24.
Shield, Sanitary garment. H. Abrahamson. 1,765,896; June 24.
Shielding. H. O. Peterson. 1,765,443; June 24.
Shift mechanism, Single-lever eight-speed. D. C. Klausmeyer and H. E. Darby. 1,765,592; June 24.
Shingle construction. S. Arcidiacono. 1,768,280; June 24.
Shingles, Method of and apparatus for making strip. F. C. Overbury. 1,765,800; June 24.
Ships, Device for raising and buoying up. J. C. Hills. 1,767,672; June 24.
Ships from collisions and radio apparatus therefor, Protecting. C. R. Fisher and F. V. N. Bradley. 1,767,749; June 24.
Shirt, Reversible. F. L. and M. Stewart. 1,768,381; June 24.
Shock absorber. N. L. Dootson. 1,766,288; June 24.
Shock absorber. C. E. Dunn. 1,767,520; June 24.
Shock absorber. F. T. Elliott. 1,767,059; June 24.
Shock absorber. J. M. Hall. 1,766,336; June 24.
Shock absorber. R. E. Kimball. 1,765,429; June 24.
Shock absorber. M. Tibbetts. 1,766,848; June 24.
Shock absorber for aircraft. L. W. Greve. 1,767,069; June 24.
Shock absorber, Hydraulic. S. L. Marsh. 1,765,929; June 24.
Shock absorber, Hydraulic. A. R. McGonegal. 1,765,930; June 24.
Shock absorbing device for automobiles. A. A. Wilson and A. D. Robertson. 1,766,318; June 24.
Shock-absorbing means for vehicles. F. G. G. Armstrong. 1,767,113; June 24.
Shock-absorbing mechanism, Friction. J. F. O'Connor. 1,765,876; June 24.
Shock-absorbing strut. J. F. Wallace. 1,767,105; June 24.
Shoe. C. L. Laible. 1,767,801; June 24.
Shoe. L. O. Pickett. 1,767,698; June 24.
Shoe and making same. F. Faleck. 1,767,748; June 24.
Shoe and making the same. E. J. Ray. 1,765,849; June 24.
Shoe and shoe sole and shank stiffener therefor. R. B. Bartels. 1,766,479; June 24.
Shoe, Contact. W. K. Howe. 1,766,639; June 24.
Shoe, Corrective. F. L. Richardson and L. S. Macdonald. 1,768,491; June 24.
Shoe horn and buttoner. G. W. Byrd. 1,766,374; June 24.
Shoe lace. W. C. Breadon. 1,767,732; June 24.
Shoe, Orthopedic. W. M. Scholl. 1,767,229; June 24.
Shoe sample, Demonstrating. C. Miller. 1,767,090; June 24.
Shoe sole and heel, Combined. C. Ferrettie and G. W. Blyair. Des. 81,438; June 24.
Shoe-tree. S. D. Layman. 1,767,145; June 24.
Shopping bag. A. Poidevin. 1,765,539; June 24.
Shopping bag, Convertible long and short. M. T. Broderick. 1,767,274; June 24.
Shovel: *See*—
Excavating shovel. Power shovel.
Shovel. F. D. Rugg. 1,766,691; June 24.
Shotguns, Fore end for. C. S. Powell. 1,768,372; June 24.
Shredder. A. H. Dixon, T. S. Robson, and F. A. Henschell. 1,768,463; June 24.
Shredders, Making. A. H. Dixon, T. S. Robson, and F. A. Henschell. 1,768,462; June 24.
Shutter for spotlights, Rectangular. T. Hall. 1,767,756; June 24.
Shuttle check. W. E. Lundgren. 1,766,757; June 24.
Shuttle tension and take-up mechanism. A. S. Hutchins. 1,766,904; June 24.
Sighting attachment for electric semaphore lamps. S. M. Day. 1,765,865; June 24.
Sign. J. Krizek. 1,765,536; June 24.
Sign. W. H. Ramsey. 1,768,331; June 24.
Sign. J. P. Salmon. 1,767,483; June 24.
Sign. J. A. Sears. 1,766,362; June 24.
Sign. F. Woerz. 1,767,726; June 24.
Signboard structure, Advertising. W. G. Browne and R. W. Olmsted. 1,766,978; June 24.
Sign, Electric. J. R. Fergusson. 1,768,042; June 24.
Sign, Electric. M. N. Russell and J. W. Brooks. 1,768,422; June 24.
Sign, Exhibiting. J. W. Ashworth. 1,767,571; June 24.
Sign, Illuminated street. H. C. Gebauer. 1,766,119; June 24.
Sign, Interchangeable-letter. P. S. Van Bloem. 1,766,470; June 24.
Signal: *See*—
Flasher signal. Traffic signal.
Light signal. Vehicle signal.
Stop signal.
Signal device. F. De Lashmé. 1,766,613; June 24.
Signal foundation. O. S. Flath. 1,765,664; June 24.
Signal reception. D. A. Griffin. 1,765,421; June 24.
Signal recorder. H. O. Sampson. 1,768,154; June 24.
Signal switch, Automobile direction-. C. H. Twetten and A. M. Hudson. 1,766,315; June 24.
Signal system, Testing. C. A. Campbell. 1,766,280; June 24.
Signal-transmission system. O. O. Ceccarini. 1,765,523; June 24.
Signal-transmitting system. F. A. Kolster. 1,766,040; June 24.
Signaling device, Electrical. A. W. Uhl. 1,765,466; June 24.
Signaling device for motor vehicles. J. Deblieux. 1,768,034; June 24.
Signaling device, Track-. W. F. Cleaver. 1,768,524; June 24.
Signaling, Submarine. H. C. Harrison. 1,765,425; June 24.
Signaling system. J. C. Schelleng. 1,768,269; June 24.
Signaling system. T. U. White and J. E. Gardner. 1,765,475; June 24.
Signals on railway vehicles, Device for indicating. K. Beyermann. 1,768,106; June 24.
Silk and like products are treated with hot liquors, Process in which cellulose-acetate artificial. A. J. Hall. 1,765,581; June 24.
Silk, Translucent artificial. H. A. Gardner. 1,768,401; June 24.
Sill construction. J. Ledwinka. 1,767,464; June 24.
Silverware, Method and material for preventing the tarnishing of. G. Jones. 1,766,646; June 24.
Sink, Kitchen. S. M. Gillard. 1,767,874; June 24.
Skate or the like, Wheel. J. H. Wyndham. 1,768,228; June 24.
Slack puller. T. Birkenmaier. 1,765,397; June 24.
Slack puller. T. Birkenmaier. 1,766,504; June 24.
Slate, Coloring granulated. H. C. Fisher. 1,766,891; June 24.
Sled, Ski. C. Fredrickson and E. J. Gustafson. 1,768,046; June 24.
Sleeper tie. H. C. Bujack. 1,767,575; June 24.
Sleeves and coils with reenforcements wound around, Process and apparatus for producing paper. C. Majer. 1,765,928; June 24.
Sleigh, Water. J. S. Brylka. 1,768,395; June 24.
Slicer, Vegetable. J. A. Andrusis. 1,768,094; June 24.
Slicer, Vegetable. W. W. Jones and J. H. Bailey. 1,766,825; June 24.
Slicer, Vegetable. H. H. Keeton. 1,768,072; June 24.
Slitting and winding machine, Combined. R. McC. Johnstone. 1,768,407; June 24.
Smoke-consuming device. W. J. Doyle. 1,765,828; June 24.
Snap hook. P. W. Jensen. 1,767,368; June 24.
Snatch block, Automatic. C. Robertson. 1,766,357; June 24.
Soap and making castor-oil soap, Castor-oil. W. M. Billing. 1,767,041; June 24.
Sock. F. L. Gilbert. 1,767,666; June 24.
Socket and terminal therefor, Lamp. F. C. Hersee and N. T. Wiley. 1,765,793; June 24.
Socket, Lamp. F. H. Weston. 1,768,432; June 24.
Socket stock, Right-angle. A. A. Childs. 1,767,434; June 24.
Socket, Vacuum-tube. G. J. Meuer and W. C. Stevens. 1,767,690; June 24.
Sodium sulphite from spent sulphite liquors, Recovery of. P. A. Barbou. 1,765,560; June 24.
Soldering device, Electric. L. H. Moulthrop. 1,767,607; June 24.
Soldering iron. F. R. Raymond. 1,768,147; June 24.
Solutions of cellulose ethers or esters, Apparatus for spinning. M. Klein. 1,767,215-6; June 24.
Sound-absorbing properties, Apparatus for demonstrating. C. F. Burgess. 1,766,103; June 24.
Sound amplification. S. T. Williams. 1,768,226; June 24.
Sound, Apparatus for photographically recording and reproducing. T. H. Nakken. 1,767,547; June 24.
Sound-propagating diaphragm. J. P. Gaty. 1,768,473; June 24.
Sound recording. R. V. Terry. 1,768,273; June 24.
Sound recording and reproducing apparatus. R. H. Townsend. 1,765,889; June 24.

Sound reproducer for the deaf. C. A. Rath. 1,766,146; June 24.
Sound reproducing and recording device. J. T. Serduke. 1,768,377; June 24.
Sound-reproducing device. L. de Forest. 1,766,612; June 24.
Sound-reproducing device. H. C. Mueller. 1,767,546; June 24.
Sound-reproducing machine. M. Hoffman. 1,768,200; June 24.
Sound-reproducing system. J. O. Prescott and F. A. Kolster. 1,766,046; June 24.
Sounding board. M. R. Hutchison. 1,767,678; June 24.
Space current device. I. E. Mouromtseff. 1,765,605; June 24.
Space discharge system. A. A. Oswald and J. C. Schelleng. 1,768,418; June 24.
Spacing means for mold forms. F. G. Carlson. 1,767,834; June 24.
Spare-wheel carrier. E. K. Baker. 1,765,785; June 24.
Spark plug. H. Rabezzana. 1,768,330; June 24.
Spark-plug tester. H. Swartz. 1,766,151; June 24.
Spark plugs, Terminal-post attachment for. R. G. Lafite. 1,765,868; June 24.
Specific-gravity tester. L. Edelmann. 1,767,439; June 24.
Speed-control apparatus for railway cars. C. A. Richmond. 1,765,852; June 24.
Speed device, Change-. F. C. Thompson. 1,766,414; June 24.
Speed drive for cigarette machines and the like, Variable-. W. B. Bronander. 1,765,822; June 24.
Speed indicator, Recording. T. E. Butters. 1,766,741; June 24.
Speed regulator for motor vehicles. W. B. Davis. 1,765,659; June 24.
Speed transmission. Hydraulic change-. J. E. Bittner. 1,765,751; June 24.
Speed transmission mechanism, Multiple-. H. G. Altvater. 1,767,909; June 24.
Spice dredge. C. J. Aulbach and W. F. Punte. 1,767,781; June 24.
Spinnable slivers from artificial filaments and apparatus therefor, Forming. M. F. Thoma. 1,768,221; June 24.
Spinning machine. J. Brenzinger. 1,768,231; June 24.
Spool rack. H. Burzi. 1,768,030; June 24.
Spotlight. O. M. Kirlin. 1,767,373; June 24.
Spout for containers, Pouring. C. J. Aulbach. 1,768,098; June 24.
Sprayer. T. Birkenmaier. 1,765,398; June 24.
Sprayer, Track-bed. W. F. Wratten. 1,767,828; June 24.
Spraying device. G. L. Hill. 1,768,062; June 24.
Spring. F. D. Parker. 1,766,451; June 24.
Spring and stop, Door. R. M. La Barr. 1,765,798; June 24.
Spring equalizer. D. Johnston. 1,767,987; June 24.
Spring-roller-controlling device. W. F. Heckman. 1,766,746; June 24.
Spring shackle. J. L. Stover. 1,767,717; June 24.
Spring suspension. E. O. Schjolin. 1,768,494; June 24.
Spring suspension for vehicle bodies. R. W. Fisher. 1,767,750; June 24.
Spring-tooth mounting for cultivators. G. J. Miller. 1,766,396; June 24.
Sprinkler: *See*—
Lawn sprinkler.
Sprinkler. E. G. Munz. 1,766,138; June 24.
Sprinkler. F. E. Roach. 1,765,939; June 24.
Sprinkler head. F. H. Johnson. 1,766,126; June 24.
Sprinkling device, Water-. G. A. Williams. 1,767,028; June 24.
Stage-lift flowing device. A. Boynton. 1,767,201–2; June 24.
Stage-lift flowing device. A. Boynton. 1,768,109–10; June 24.
Stair nosing. S. C. Awbrey. 1,767,782; June 24.
Stairs, Folding and disappearing. R. B. Marschke. 1,767,148; June 24.
Stairway, Moving. M. C. Schwab. 1,767,945; June 24.
Stamping device for incandescent lamps and similar articles. A. Sittel. 1,768,424; June 24.
Stand: *See*—
Calendar-pad stand.
Display stand.
Telephone stand.
Towel stand.
Stand. F. J. Plym. 1,765,699; June 24.
Stand for visible indexes. F. D. Powell. 1,766,940; June 24.
Starter, Engine. R. Chilton. 1,768,116; June 24.
Starter, Engine. R. P. Lansing. 1,768,081; June 24.
Starter for induction motors, Automatic. J. Sousedik. 1,768,220; June 24.
Starter, Motor. H. L. Meeder. 1,767,688; June 24.
Starting mechanism, Engine-. R. P. Lansing. 1,768,082–3; June 24.
Static electricity from combustible roofs, Eliminating. N. G. Burgster. 1,767,275; June 24.
Static force, Producing speeds proportional to variations in. W. C. Woodson, jr. 1,766,579; June 24.
Steam, Apparatus for producing nonoxidizing. C. Hillsmeyer. 1,767,456; June 24.
Steam boiler. M. E. Smith. 1,767,020; June 24.
Steam-generating plant. O. L. Dillon. 1,768,514; June 24.
Steam generator. N. Forssblad. 1,766,989; June 24.
Steam generator, High-pressure. O. H. Hartmann and R. Uhde. 1,768,448; June 24.
Steam in high-pressure locomotives, Apparatus for controlling the working. O. H. Hartmann. 1,768,321; June 24.
Steam separator. A. Meyer. 1,766,666; June 24.
Steam, Superheating of interstage. O. H. Hartmann. 1,768,058; June 24.
Steam trap. L. D. Goff. 1,767,063; June 24.
Steam trap. J. Ryan. 1,766,725; June 24.
Steam trap. C. E. Walsh. 1,766,966; June 24.
Steel, Heat treatment of. W. B. Sullivan. 1,766,314; June 24.
Steel structures, Apparatus for erecting columns of. W. H. Lotts. 1,768,484; June 24.
Steering apparatus, Vehicle. J. E. Wright. 1,767,033; June 24.
Steering gear. A. G. Henricks and H. L. Mitchell. 1,767,524; June 24.
Steering gear. D. E. Ross. 1,767,188; June 24.
Steering mechanism. E. F. Norelius. 1,767,254; June 24.
Step. A. Henderson. 1,768,061; June 24.
Step plate for the running boards of vehicles. J. E. Waggoner. 1,765,891; June 24.
Stereotype-plate-casting machine. C. A. Rupp. 1,766,692; June 24.
Sterilizer. L. B. Andresen. 1,767,034; June 24.
Still, Continuous-cracking. W. C. Bailey. 1,766,209; June 24.
Stills, Vapor outlet for. R. E. Wilson. 1,767,196; June 24.
Stocking. A. E. Ischinger. Des. 81,444–5; June 24.
Stoker, Automatic. A. O. Dady. 1,766,056; June 24.
Stonecutting machine. C. Hepburn. 1,768,525; June 24.
Stool and stepladder, Combination. H. E. Barrows. 1,766,771; June 24.
Stop signal, Automatic. J. G. Snip. 1,768,010; June 24.
Storage of explosive gases and making same, Porous mass for the. G. Dalen. 1,767,514; June 24.
Stove construction. L. Dana. 1,766,111; June 24.
Stove, Gas. H. R. Humphrey. 1,766,075; June 24.
Stove, Heating. S. G. Cook. 1,767,963; June 24.
Stove rack. J. Lewis. 1,766,523; June 24.
Strainer. R. A. Meyer. 1,767,221; June 24.
Strainer, Eaves-trough-drain. V. Renzulli. 1,767,773; June 24.
Strainer for milk pails. J. M. Westerberg. 1,767,269; June 24.
Strand-working mechanism. R. E. McFarland. 1,765,599; June 24.
Strata, Determining the dip of. C. C. Thompson. 1,766,202; June 24.
Strip-applying device. W. C. Stevens. 1,768,340; June 24.
Striping device. K. C. Bugg. 1,767,118; June 24.
Stropper, Razor-blade. R. H. Ingersoll. 1,767,984; June 24.
Structure for adapting oil burners to concrete-mixer apparatus. W. C. Elze. 1,767,746; June 24.
Structural material. C. A. Van Dusen. 1,766,471; June 24.
Structural unit. S. Macomber. 1,766,181; June 24.
Strut used in concrete fireproofing. W. F. LaMorte. 1,765,729; June 24.
Stud for snap fasteners. G. S. Maynard. 1,767,805; June 24.
Stuffing box. F. D. Stanley. 1,765,629; June 24.
Subaquatic drill. W. D. Grant. 1,766,628; June 24.
Submarine saving device. E. F. Quinteros. 1,766,837; June 24.
Subsoiler. A. F. Stubenberg. 1,765,746; June 24.
Substances, Apparatus for compressing. G. T. Jacocks. 1,766,998; June 24.
Substances of dissimilar volatilities, Separating. E. Wecker. 1,766,863; June 24.
Substitute for hard paper, ebonite, fiber and the like and manufacturing the same. H. Friedlander and A. Janser. 1,766,817; June 24.
Sucker-rod guide. J. C. Garrott. 1,766,070; June 24.
Suction cleaner. W. C. Davidson. 1,767,744; June 24.
Suction cleaner, Electric. J. N. Naul. 1,766,929; June 24.
Sugar bodies, Apparatus for unpowdering. A. Winkler and M. Dünnebier. 1,766,967; June 24.
Sugar dispenser. G. N. Adair. 1,768,091; June 24.
Sulphocyanic groups into organic compounds, Introducing. H. P. Kaufmann and M. Schubert. 1,765,678; June 24.
Sulphonic compound and making the same. L. Burgess and H. E. Buc. 1,767,344; June 24.
Sulphur-containing hydroxyquinones and preparing them. F. Mayer and K. Zahn. 1,765,687; June 24.
Sulphur vapor, Dissociation of. P. C. H. Siedler and E. Schulte. 1,767,319; June 24.
Sulphuryl chlorid, Making. R. H. McKee and C. M. Salls. 1,765,688; June 24.
Superheating and drying steam, Device for. G. Restucci. 1,767,096; June 24.
Superheating in high-pressure locomotives. O. H. Hartmann. 1,768,319; June 24.
Superheating system for fire-tube boilers. P. Thomsen. 1,768,169; June 24.
Support. F. G. and W. M. Folberth. 1,765,410; June 24.
Support and producing same, Body. M. Von Halle. 1,768,223; June 24.
Support and spray, Nozzle. T. J. Weaver. 1,767,161; June 24.

Support, Arch. G. H. Jung, jr. 1,767,460; June 24.
Support, Awning. E. H. Schane. 1,765,452; June 24.
Support, Balanced cover. A. and M. Bersted. 1,767,730–1; June 24.
Support, Bed-spring. I. B. Rosenberg and R. Mulwitz. 1,766,190; June 24.
Support, Bobbin. W. H. Bahan. 1,766,809; June 24.
Support, Collar. D. F. Burke. 1,766,596; June 24.
Support, Conductor. L. W. Birch. 1,766,873–4; June 24.
Support, Darning. A. Anthony. 1,765,961; June 24.
Support, Easel. S. B. Freiberg. 1,767,753; June 24.
Support for chairs, stands, and the like. A. W. Bailey. 1,766,092; June 24.
Support for indicator gauges. L. Scusa. 1,765,624; June 24.
Support for paper rolls and the like. A. W. Cole. 1,766,105; June 24.
Support for portable electric lamps, Shade. M. B. Bowen. 1,766,975; June 24.
Support for seats, Yieldable back. F. C. Bitzenburger. 1,767,042; June 24.
Support for window cleaners. W. E. Rose. 1,767,554; June 24.
Support, Loom picker-rod spindle. K. J. Unwin. 1,766,733; June 24.
Support, Metatarsal-arch. W. M. Scholl. 1,767,263; June 24.
Support, Pen. G. J. Sengbusch. 1,767,190; June 24.
Support, Plunger. C. T. Small. 1,766,264; June 24.
Support, Shoe-cleaning. C. F. Mingus. 1,768,133; June 24.
Supporter, Garter or stocking. E. J. Yetter. 1,765,815; June 24.
Supporting and driving means for gyratory shafts. A. R. Curtis. 1,767,053; June 24.
Supporting clip, Plant-. J. W. Bauer. 1,766,094; June 24.
Supporting device, Automobile transportation. H. P. Doud and B. A. Logan. 1,766,289; June 24.
Supporting device, Paper and plaster foundation. G. L. Woodyard. 1,768,532; June 24.
Supporting devices for refrigerator shelves, Removable. P. T. Sealey. 1,767,316; June 24.
Surf board. R. McM. Pollard. 1,767,811; June 24.
Surfacing apparatus. F. J. Tone. 1,765,808; June 24.
Surgical saddlette. B. B. Courtney. 1,768,397; June 24.
Suspender back. M. Cohen. 1,766,485; June 24.
Sweeper, Vacuum. C. F. Brockway. 1,766,424–5; June 24.
Swimming appliance. J. W. Cuthbertson. 1,767,651; June 24.
Swing-seating device. F. G. Rose. 1,766,840; June 24.
Switch: *See*—
Automatic switch.
Connecter switch.
Control switch.
Electric switch.
Electrical switch.
Fire-alarm switch.
Float switch.
Laundry-iron switch.
Motor switch.
Oil switch.
Protective switch.
Reversing switch.
Sectionalizing switch.
Selector switch.
Service switch.
Signal switch.
Time controlled switch.
Time switch.
Two-step switch.
Switch. T. Birkenmaier. 1,765,399; June 24.
Switch. O. Simon. 1,768,299; June 24.
Switch and regulator, Combined automatic. F. Menzel. 1,765,381; June 24.
Switch control for auxiliary devices. J. E. Long. 1,765,596; June 24.
Switch for automobile burglar-alarm systems. F. Kudrna, jr., and N. Yirkosky. 1,767,380; June 24.
Switch for automobiles, safes, and the like, Alarm. C. W. Timmons. 1,767,326; June 24.
Switch for elevator annunciators, Cut-off. F. A. Boedtcher. 1,767,870; June 24.
Switch-indicating means. C. W. Prescott. 1,766,536; June 24.
Switch mechanism. T. E. Griffith and L. L. Dodds. 1,768,249; June 24.
Switch-operating mechanism. C. F. Carpenter. 1,768,461; June 24.
Switch plug, Removable. O. V. Lemay. 1,767,250; June 24.
Switch-point protector. E. R. Packer. 1,765,995; June 24.
Switching mechanism. D. L. Lindquist, E. L. Dunn, and D. C. Larson. 1,767,892; June 24.
Switching system, Electromechanical. F. Aldendorff 1,768,281; June 24.
Swivel connection, Electric. C. S. Larkey. 1,768,260; June 24.
Swivel, Rotary. J. H. Swain and H. H. Hastings. 1,766,562; June 27.
Synchronizing sound and motion pictures, Method for. F. H. Owens. 1,765,997; June 24.
Synchronizing system. C. F. Jenkins. 1,766,644; June 24.
Synthetic resin and making the same. E. E. Novotny. 1,767,696; June 24.
Syringe for injecting liquids into the body or for taking them therefrom, Hypodermic. F. Meyer. 1,766,918; June 24.
Syringe, Manual. P. M. Miller. 1,766,668; June 24.
Syringe plug. J. E. Harding. 1,767,449; June 24.
System for converting light energy into electrical energy and vice versa. F. Mohr. 1,768,288; June 24.
Tab. W. R. C. Rowan. 1,767,555; June 24.
Table: *See*—
Bed table.
Extension table.
Ironing table.
Lamp table.
Table. J. N. Faris. 1,766,616; June 24.
Table and lap drawing and reading stand. W. E. Westbrook. 1,767,950; June 24.
Table and seats, Combination. R. H. Anderson. 7,768,520; June 24.
Table implement. A. Foltis. 1,765,974; June 24.
Tag and tag-holding device. G. W. Smith. 1,768,379; June 24.
Tail clamp. R. C. Pauly. 1,766,187; June 24.
Talking machine and radio receiving device, Combination. L. Y. Squibb. 1,767,410; June 24.
Tamping machine. A. B. Babbitt. 1,767,197; June 24.
Tank: *See*—
Floating-deck tank.
Lined tank.
Liquid-metering tank.
Tank and joint for forming same. T. J. Shea. 1,765,946; June 24.
Tank and pump, Combined portable gasoline. F. J. Vnuk. 1,768,186; June 24.
Tank and roof structure therefor. T. J. Shea. 1,765,947; June 24.
Tank fitting. R. J. Anschicks. 1,767,642; June 24.
Tank for ice plants, Brine. N. H. Gay. 1,766,020; June 24.
Tank sampler. M. R. Meacham and W. J. Seeland. 1,767,301; June 24.
Teledynamic control system. E. H. Loftin. 1,766,524; June 24.
Telegraph system. T. U. White. 1,765,472; June 24.
Telegraph system. T. U. White. 1,765,555; June 24.
Telegraph system, Duplex. J. W. Milnor and W. D. Cannon. 1,766,919; June 24.
Telegraph system, Printing-. G. S. Hiltz and W. F. Purcell. 1,767,128; June 24.
Telegraphy system, Secret. F. Cartier. 1,767,121; June 24.
Telephone bracket, Disappearing. A. Gustavson. 1,766,901; June 24.
Telephone circuits, Line balance for loaded. A. C. Bartlett. 1,767,199–200; June 24.
Telephone device, Dial. A. L. Porter. 1,765,445; June 24.
Telephone exchange, Automatic. E. H. Clark and W. W. Carpenter. 1,767,960; June 24.
Telephone-exchange system. A. E. Lundell and E. H. Clark. 1,767,854; June 24.
Telephone-exchange system, Automatic. E. H. Clark and W. W. Carpenter. 1,767,959; June 24.
Telephone-exchange system, Automatic. E. H. Clark and W. W. Carpenter. 1,767,961–2; June 24.
Telephone-pad attachment. H. E. Kaplan and B. L. Bouer. 1,767,003; June 24.
Telephone set, Portable. W. J. Stanton and H. A. Gosling. 1,766,960; June 24.
Telephone stand. D. W. Oviatt. 1,766,143; June 24.
Telephone system. H. B. Johnson. 1,767,929; June 24.
Telephone system. R. C. Mathes. 1,768,264; June 24.
Telephone system. O. A. Pearce. 1,766,936; June 24.
Telephone system. R. Schenk. 1,767,943; June 24.
Telephone system. R. F. Stehlik. 1,767,861–2; June 24.
Telephone system, Party-line. N. H. Saunders. 1,765,619; June 24.
Telephone system, Remote-control. W. T. Powell. 1,766,402; June 24.
Telephonometer. J. L. McCoy and G. De Croce. 1,765,598; June 24.
Telephony over power lines, Carrier-wave. C. A. Boddie. 1,765,480; June 24.
Television apparatus. G. T. Schmidling. 1,765,453; June 24.
Television system. A. Dauvillier. 1,766,885; June 24.
Televox controller and supervisor. R. J. Wensley. 1,765,471; June 24.
Televox, Talking. R. J. Wensley. 1,765,554; June 24.
Temperature control. G. Schwarz. 1,766,260; June 24.
Temperature control. L. E. Warner. 1,765,387; June 24.
Temperature-control apparatus. C. Wilhjelm. 1,767,637; June 24.
Tension adjuster, Drive-chain. R. S. Kelso. 1,767,371; June 24.
Tension device. G. W. Jacques. 1,767,075; June 24.
Tensioning device. J. M. Kerr. 1,767,531; June 24.
Terminal clamp, Storage-battery. J. G. Sparkes. 1,767,903; June 24.
Terminal connecter for electric conductors. C. T. Nietman. 1,767,808; June 24.
Terminal mounting, Adjustable. A. F. C. Lotz. 1,766,220; June 24.
Test gauge. A. England. 1,765,574; June 24.
Textile fabric. F. W. Bader. Des. 81,428; June 24.
Textile fabric. D. V. Belknap. Des. 81,431; June 24.
Theft-prevention apparatus. A. J. Pichl. 1,765,736; June 24.
Theftproof device, Gasoline-. M. MacLiver. 1,766,916; June 24.
Therapeutic articulating apparatus. P. Henze and G. S. Gillberg. 1,765,669; June 24.
Thermostat. A. A. Thomas. 1,766,965; June 24.

Thermostat heater for destroying moths. H. Maffoni. 1,766,525; June 24.
Thickness gauging and stamping machine. E. K. Standish. 1,766,726; June 24.
Thickness-gauging device for leather, etc. W. S. Griffith. 1,766,745; June 24.
Thread-controlling device for creels. F. B. Javery. 1,765,590; June 24.
Thread cutter. H. Lindner. 1,768,089; June 24.
Throttle control, Automobile gas. W. J. Staker. 1,768,380; June 24.
Throttle control for internal-combustion engines. F. H. Heitger. 1,766,711; June 24.
Thymol, Producing. H. Jordan. 1,768,257; June 24.
Ticket-issuing machine. W. L. Sullivan. 1,765,951; June 24.
Tie: *See*—
Railway tie. Sleeper tie.
Tie-boring machine, Portable. J. Triana. 1,767,327; June 24.
Tie plate. B. F. Beckman. 1,767,647; June 24.
Tie plate and rail anchor, Combined. W. A. McFarland. 1,767,937; June 24.
Tie-rod construction. J. T. Trumble. 1,768,347; June 24.
Tightening means for rotary machines. O. R. P. Berglund. 1,766,872; June 24.
Tile-molding machine. J. Pessagno. 1,765,847; June 24.
Time-controlled switch. W. J. Coward. 1,767,347; June 24.
Time-delay-controlling device and system. B. W. Jones. 1,768,452; June 24.
Time switch, Electric. S. C. Vincent. 1,767,103; June 24.
Timer, Athletic. J. H. Steele. 1,766,558; June 24.
Timing controller for electric motors. E. W. Seeger. 1,767,620; June 24.
Timing mechanical operations, Mechanism for. C. F. Ball. 1,766,770; June 24.
Tire alarm. L. C. Galli. 1,768,048; June 24.
Tire-bead-reenforcing element. R. C. Pierce. 1,767,772; June 24.
Tire-building machine. W. C. Stevens. 1,768,341; June 24.
Tire-building machine, Flat-. E. Hutchen. 1,767,288; June 24.
Tire chain. F. Romain. 1,768,153; June 24.
Tire lock. C. A. Meloy. 1,766,664; June 24.
Tire lock, Spare-. G. R. Reed. 1,768,293; June 24.
Tire protector. M. A. Peterson. 1,766,531; June 24.
Tire, Punctureproof pneumatic. H. C. Anderson. 1,767,502; June 24.
Tire-valve cap, Theftproof. H. Heinrich. 1,767,884; June 24.
Title attachment for sound cameras. F. H. Owens. 1,765,908; June 24.
Tobacco curing. W. A. Pike, H. M. Pike, and W. T. Henry. 1,768,142; June 24.
Toilet article. H. M. Baker and J. R. Gier, jr. 1,766,478; June 24.
Toilet seat, Adjustable ventilating. G. F. Kahl. 1,767,930; June 24.
Tong-actuating device for well-drilling rigs. J. R. Lucas. 1,765,492; June 24.
Tongs, Egg. C. L. Rose. 1,767,553; June 24.
Tongs, Fish. A. Sargent. 1,767,898; June 24.
Tool and appliance, Well. N. K. Smith. 1,766,556; June 24.
Tool, Armored-conduit-cutting. I. L. Blake. 1,767,342; June 24.
Tool box. A. J. Wells. 1,767,332; June 24.
Tool, Combination. J. T. Sweeney. 1,767,489; June 24.
Tool, Compound. C. W. Steele. 1,766,727; June 24.
Tool, Cutting. J. A. Markstrum. 1,766,136; June 24.
Tool, Deep-well. C. A. Langstaff. 1,766,177; June 24.
Tool, Drilling. J. H. Hollestelle. 1,766,253; June 24.
Tool, Fishing. J. B. Byron. 1,767,741; June 24.
Tool for measuring the caster of axles. C. H. Phelps. 1,766,306; June 24.
Tool, Garden. O. M. Bullock. 1,767,119; June 24.
Tool head and fastener. E. F. Nichols. 1,768,138; June 24.
Tool, Mixing. J. Hetherington. 1,766,171; June 24.
Tool, Nailing. J. E. Hoffman. 1,767,926; June 24.
Tool, Oil-well fishing. W. B. Wigle. 1,766,368; June 24.
Tool, Pipe-bending. J. F. Heer. 1,767,362; June 24.
Tool retainer. H. C. Gustafson. 1,766,511; June 24.
Tool, Sheet-metal bumping-out. W. Ferguson. 1,767,659; June 24.
Tool stop mechanism, Machine-. W. Schroder. 1,768,495; June 24.
Tool, Swinging-cutter cutting-off. A. L. Segelhorst. 1,767,018; June 24.
Tool, Tire. J. W. Cox and E. A. Randall. 1,768,032; June 24.
Tool, Tire-rim. J. H. Huffman. 1,767,365; June 24.
Tool, Trip casing spear oil-well rotary fishing. P. C. Corey. 1,765,864; June 24.
Tool, Wax-applying. A. E. Kenyon. 1,767,079; June 24.
Tools, Jaw chuck for machine. W. Berg. 1,766,276; June 24.
Toothbrush, Fountain. W. P. Weber. 1,768,301; June 24.
Top, Automobile. R. W. Bulkeley. 1,765,714; June 24.
Top bracket. S. R. Lawton. 1,768,364; June 24.
Top gauge mechanism for fastener-setting machines. G. W. Jacques. 1,767,074; June 24.
Towel stand, Closed-back. F. M. Steiner and G. Olson. 1,765,504; June 24.
Towing bar. F. Ayler. 1,768,304; June 24.
Towing, mooring, and the like, Apparatus for. R. H. Rogers. 1,768,295; June 24.
Towing, mooring, and the like, Apparatus for. R. H. Rogers. 1,768,420; June 24.
Toy. H. S. Barnes. 1,767,503; June 24.
Toy. J. A. Colbert. 1,766,282; June 24.
Toy. T. Reiss. 1,765,701; June 24.
Toy. W. A. Wilcox. 1,766,008; June 24.
Toy aeroplane. F. J. Mee. 1,767,760; June 24.
Toy airship. F. J. McBride. 1,765,435; June 24.
Toy cannon. C. C. Blackmore. 1,765,561; June 24.
Toy, Combination. J. P. Bauer. 1,765,645-6; June 24.
Toy electric locomotive. H. E. Morton. 1,766,185; June 24.
Toy gun. E. A. Christoph. 1,768,117; June 24.
Toy, Metal structural. H. W. Graves. 1,766,022; June 24.
Toy, Musical. G. A. Heimer. 1,768,199; June 24.
Toy parachute. G. J. Grossman. 1,765,721; June 24.
Toy scenic railway. R. Vezzuso and J. Petrino. 1,765,510; June 24.
Toy, Sound-producing. O. M. Beall. 1,766,095; June 24.
Toy, Wheeled. A. Rapisardi 1,766,541; June 24.
Tracings to blue-print machines, Feeding. H. J. Brunk. 1,767,833; June 24.
Track brake, Railway-. J. E. Stephenson. 1,766,559; June 24.
Track construction, Railway-. J. J. Burns. 1,765,565; June 24.
Tractor and trailer. N. Finch. 1,766,780; June 24.
Tractor attachment. E. W. Lilly. 1,767,992; June 24.
Tractor attachment for corn pickers. G. W. Lang. 1,766,439; June 24.
Tractor clutch-throw-out means. A. E. Rackow. 1,767,396; June 24.
Tractor-drawn implements, Hitching device for. E. H. Daniel 1,765,788; June 24.
Tractor guide. R. G. Sellon. 1,766,004; June 24.
Tractor guide. E. W. Skelton and G. R. Knotwell. 1,768,218; June 24.
Tractor hitch. E. E. Bashor and E. N. Wray. 1,767,114; June 24.
Tractor shoe. J. C. Haggart, jr. 1,765,580; June 24.
Tractors, Ditcher for. E. A. and F. W. Abeling. 1,768,019; June 24.
Traffic-controlling system, Railway-. M. C. Twitchell. 1,766,567; June 24.
Traffic marker, Yielding upright. M. E. Hartzler and T. H. Ferguson. 1,766,073; June 24.
Traffic signal. H. Johnson. 1,767,369; June 24.
Traffic signal. L. Swam. 1,765,508; June 24.
Traffic-signal projector. A. I. Crook. 1,768,191; June 24.
Train-control equipment, Automatic. T. H. Thomas. 1,765,509; June 24.
Train control, Pneumatic. T. W. Varley and W. C. Nein. 1,765,782; June 24.
Train-montrol system. W. H. Reichard. 1,766,544; June 24.
Train-control system, Automatic. C. S. Bushnell. 1,767,578; June 24.
Train-control system for railroads, Automatic. J. A. Peabody. 1,765,803; June 24.
Train control, System of. P. J. Simmen. 1,767,557; June 24.
Train-control system, Track relayless. W. H. Reichard. 1,766,543; June 24.
Transfer mechanism for calculating machines. A. A. Horton. 1,767,674; June 24.
Transformer. G. E. Jansson. 1,768,256; June 24.
Transformer-core structure. H. L. Cole. 1,765,483; June 24.
Transformer, Current. F. J. Fischer. 1,765,913; June 24.
Transformer for arc welding by alternating current, Regulating. F. Wörtmann. 1,767,497; June 24.
Transformer for high-frequency currents, Current. A. M. Trogner. 1,766,048; June 24.
Transformer, Subway. G. N. Brown. 1,768,522; June 24.
Transmission. G. B. Coleman. 1,767,916; June 24.
Transmission. O. K. Kelley. 1,768,481; June 24.
Transmission device. E. S. Ostler. 1,767,472; June 24.
Transmission device, Fluid-pressure. G. Cassady. 1,767,276; June 24.
Transmission, Gear. F. C. Thompson. 1,766,415; June 24.
Transmission mechanism, Automatic. J. Nelson. 1,767,930; June 24.
Transmission of messages by electromagnetic waves. E. Bräuer. 1,768,287; June 24.
Transmission or torque converter, Variable. E. W. Rohrbacher. 1,767,311; June 24.
Transmission, Variable-speed. J. L. Allen. 1,766,240; June 24.
Transmission, Variable-speed. P. M. Stracke. 1,766,266; June 24.
Transmission, Variable-speed gear. D. R. Francis. 1,767,787; June 24.
Transmitter. E. E. Kleinschmidt. 1,766,713; June 24.
Transmitter, Electric. A. A. Thomas. 1,768,168; June 24.
Transplanter. I. E. Hafer. 1,766,818; June 24.
Transplanter. S. W. Vollink. 1,765,467; June 24.

Transplanting machine. S. W. Vollink. 1,765,468–9; June 24.
Trap: *See*—
Animal trap. Steam trap.
Trap. A. E. Armstrong. 1,766,970; June 24.
Trap. H. H. Sawyer. 1,765,941; June 24.
Trap. R. F. Taylor. 1,766,200; June 24.
Tray for incubators, Egg-turning. E. L. Godfrey and G. W. Wrentmore. 1,768,197; June 24.
Tray for valve chambers, Protecting. C. H. Stout. 1,766,469; June 24.
Tray, Sheet-handling. H. S. Jones. 1,767,241; June 24.
Tread forming and finishing machine. A. R. Krause. 1,767,246; June 24.
Tread stock and making the same. W. B. Wescott. 1,767,234; June 24.
Tree falling and lowering device. F. C. Fraser. 1,767,444; June 24.
Trigger switches, Guard for. E. A. Fowler. 1,767,873; June 24.
Trolley conveyer and trip hook therefor. O. R. Roddy. 1,768,493 June 24.
Trolley hoist. C. H. Locher and J. P. Burt. 1,767,467; June 24.
Trolley suspension clamp. L. Johnston and F. A. Tice. 1,765,836; June 24.
Trousers. S. F. Stein. 1,766,698; June 24.
Trousers, Construction of. S. F. Stein. 1,766,697; June 24.
Truck. J. W. Contes. 1,766,104; June 24.
Truck, Continuous-tread. J. D. Rauch. 1,765,739; June 24.
Truck, Hand. H. T. Hallowell. 1,768,053; June 24.
Truck, Industrial. E. H. Remde. 1,768,149; June 24.
Truck, Mining-machine. G. Bodin. 1,765,400; June 24.
Truck, Porters. A. C. McHaffie. 1,765,985; June 24.
Truck, Roller-bearing. J. A. Lamont. 1,765,432; June 24.
Truck structure. Railway. H. M. Pflager. 1,765,879; June 24.
Truing and sharpening machine, Lawn-mower reel. W. O. Blackmun. 1,766,277; June 24.
Truing wedge for matrix-setting and line-casting machines. E. G. Albrecht. 1,767,110; June 24.
Trunk, Expansible vehicle. J. C. Hoffman. 1,768,405; June 24.
Trunk, Metallic. L. M. La Duke. 1,767,143; June 24.
Tub for babies, Bathing. R. L. Smith. 1,766,557; June 24.
Tube: *See*—
Discharge tube. Vacuum tube.
Fluorescent tube.
Tube assembly for heat-transfer devices. W. A. Daley. 1,767,652; June 24.
Tube and cleaner for domestic boilers and heaters, Cold-water. W. Elermann. 1,767,919; June 24.
Tube and cleaner for domestic boilers and heaters, Cold-water. W. Elermann. 1,768,039; June 24.
Tube joint. J. F. Arthur. 1,768,095; June 24.
Tubing, Making. C. E. Githler. 1,767,923; June 24.
Tube mills, Feeding mechanism for. A. G. Place. 1,767,810; June 24.
Tube mounting. N. C. Schellenger. 1,768,297; June 24.
Tube-polishing machine and method of polishing tubes. H. D. Stevens. 1,768,330; June 24.
Tube socket. N. C. Schellenger. 1,768,298; June 24.
Tubes from a hollow block, Method of and apparatus for rolling. M. Rocckner. 1,767,896; June 24.
Tubes, Making progressively-reduced. W. Withington. 1,765,709; June 24.
Tubular-column-forming machine. E. W. Riemenschneider. 1,765,384; June 24.
Tuning device for radio apparatus. M. S. Howard. 1,765,587; June 24.
Turntable. R. Thompson. 1,768,014; June 24.
Turntable or revolving show stand for shop windows and the like. A. Schlick. 1,768,217; June 24.
Tweezers. I. B. Glass. 1,767,175; June 24.
Twisting machine. J. E. Millett. 1,766,222; June 24.
2-aryl-4,6-dihydroxypyrimidines. J. Hilger. 1,766,748; June 24.
Two-step switch. O. A. Colby. 1,765,567; June 24.
Typewriter. A. F. Schauss. 1,768,155; June 24.
Typewriting and adding machine, Combined. B. C. Stickney. 1,765,507; June 24.
Typewriting and computing machine, Combined. F. A. Hart. 1,767,792; June 24.
Typewriting machine. W. A. Dobson. 1,767,278; June 24.
Typewriting machine. G. G. Going. 1,767,875–8; June 24.
Typewriting machine. A. G. F. Kurowski. 1,765,727–8; June 24.
Typewriting machine. J. A. B. Smith. 1,765,503; June 24.
Typewriting machine. J. E. Straub. 1,768,166; June 24.
Typewriting machine for the blind. A. G. F. Kurowski and C. M. Lawrence. 1,767,247; June 24.
Undergarment. A. F. Foote. 1,765,411; June 24.
Under reamer. J. T. Phipps. 1,767,474; June 24.
Unloading device. H. L. Power. 1,767,013; June 24.
Universal indicator, Electric. W. Altner. 1,765,898; June 24.
Universal joint. F. W. Peters. 1,767,551; June 24.
Unraveling machine for horsehair, grass wrack, and the like. W. Schmid. 1,768,376; June 24.
Upholstery unit. A. H. Ackerman. 1,766,969; June 24.
Urethral bougie. A. De Sushko. 1,767,785; June 24.
Urinal. M. Ivory and T. W. Allred. 1,767,240; June 24.
Utensil, Cooking. S. Makagawa. 1,766,797; June 24.
Utensil, Forked kitchen. E. R. Sparks. 1,768,011; June 24.
Utensil, Safe heat cooking. R. E. Reardon. 1,768,148; June 24.
Vacuum gauge. Y. Matunaga. 1,768,415; June 24.
Vacuum sealing machine. A. Podel. 1,767,475; June 24.
Vacuum tube. B. Rosenbaum. 1,765,501; June 24.
Vacuum-tube structure, Electrical. L. Sutherlin. 1,765,636; June 24.
Valve. A. L. Bridgham. 1,766,703; June 24.
Valve. I. B. Gilbert. 1,767,445; June 24.
Valve. P. J. McCullough. 1,767,086; June 24.
Valve. E. B. Sadtler. 1,767,228; June 24.
Valve. W. H. Spire and R. E. Bissell. 1,767,409; June 24.
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Valve, Accelerated dry-pipe. W. B. Griffith. 1,765,422; June 24.
Valve action for pipe organs. V. R. Brown. 1,767,738; June 24.
Valve action for pipe organs. H. F. Watera. 1,767,724; June 24.
Valve, air. W. A. Russell. 1,767,704; June 24.
Valve, Balanced coke-quenching. E. V. Anderson. 1,767,038; June 24.
Valve, Ball. J. W. Taylor. 1,767,021; June 24.
Valve, Built-in. E. M. Reedy. 1,768,212; June 24.
Valve construction. E. A. Stephens. 1,765,632; June 24.
Valve construction for automobile heaters. A. E. Linendoll. 1,767,383. June 24.
Valve, Conversion. A. Moore. 1,766,669–70; June 24.
Valve, Cushioned coke-quenching. E. V. Anderson. 1,767,037; June 24.
Valve device, Brake-. C. D. Stewart. 1,765,635; June 24.
Valve, Double flush. H. L. Blaun and J. G. Moskow. 1,767,043; June 24.
Valve, Dry-pipe. W. K. Hodgman, jr. 1,767,129; June 24.
Valve, Electrically-operated. E. L. Payne. 1,767,611; June 24.
Valve, Flow-control. F. C. Fantz. 1,767,658; June 24.
Valve, Flush. W. H. Stadden. 1,767,561; June 24.
Valve for drill pipes, Back-pressure. J. R. Mahan. 1,767,538; June 24.
Valve for internal-combustion engines, Conversion. A. Moore. 1,766,672; June 24.
Valve for internal-combustion engines, Rotary reciprocating. A. W. Kath. 1,766,127–8; June 24.
Valve for locomotives, Auxiliary. F. W. Edwards. 1,867,515; June 24.
Valve for reserve tanks for motor vehicles, Self-cleaning. F. Swoyer. 1,766,268; June 24.
Valve for sprinkler systems, Torrent. L. M. Lewis. 1,765,840; June 24.
Valve system for reciprocating engines. A. C. Tallade. 1,767,624; June 24.
Valve for vacuum-closing machines, Transfer. G. Flook. 1,766 018; June 24.
Valve, Light. G. Holst. 1,767,132; June 24.
Valve, Lubricating. S. S. Roberts. 1,767,552; June 24.
Valve, Magnetic. D. O. Marks. 1,765,377; June 24.
Valve mechanism for internal-combustion engines, Rotary. J. Wilkinson. 1,765,556; June 24.
Valve mechanism, Waste-. F. A. Johnson. 1,766,712; June 24.
Valve, Pressure-regulating. J. O. Woodsome. 1,767,270; June 24.
Valve, Quick-opening blow-off. E. M. Beebe. 1,766,165; June 24.
Valve, Regulating. A. Ruckstuhl. 1,767,702; June 24.
Valve-rod guide for flush tanks. J. F. Duncan. 1,767,519; June 24.
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Valve, Rotary. J. Husband. 1,767,239; June 24.
Valve seats, Device for recutting. W. Davey. 1,765,968; June 24.
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Valve structure, High-duty. C. Ericsson. 1,765,717; June 24.
Valve structure, High-pressure. M. Haddad. 1,766,335; June 24.
Valve, Vacuum radiator. E. F. Donnelly. 1,767,056; June 24.
Vanity case. F. R. Johnson. 1,765,726; June 24.
Valves, Making poppet. C. E. Thompson and R. E. Bissell. 1,767,415; June 24.
Vapor-supply means for internal-combustion engines. C. L. Smith. 1,766,363; June 24.
Vase, Smoking. J. H. Reichart. 1,765,773; June 24.
Vault, Burial. F. C. King. 1,766,649; June 24.
Vegetable-cutting apparatus. W. W. Jones. 1,766,824; June 24.
Vehicle. T. J. Fay. 1,766,617; June 24.
Vehicle. J. E. Wright. 1,767,032; June 24.
Vehicle. F. J. Zalesky. 1,766,238; June 24.
Vehicle and the like, Transport. J. L. Delpini. 1,766,506; June 24.
Vehicle brake. J. Insul. 1,767,761; June 24.
Vehicle brake, Motor-. G. Walker. 1,768,176; June 24.
Vehicle, Child's collapsible. R. H. Brown. 1,765,786; June 24.
Vehicle heater. E. E. Miller. 1,765,933; June 24.
Vehicle, Motor. A. Moorhouse. 1,766,922; June 24.
Vehicle, Motor. A. Moorhouse. 1,766,924–6; June 24.

Vehicle, Motor. J. G. Vincent. 1,766,859; June 24.
Vehicle, Motor. L. M. Woolson. 1,766,866; June 24.
Vehicle seat. L. B. Harris. 1,767,757; June 24.
Vehicle signal. J. M. Blackburn. 1,768,107; June 24.
Vehicles, Dumping. C. F. Higgins. 1,766,436; June 24.
Velocipede. H. K. Burdick. 1,767,047; June 24.
Vending apparatus, Coin-controlled. C. Wetzell and W. Imhoffen. 1,765,894; June 24.
Vending machine. A. D. Antoine and A. E. Gebert. 1,767,112; June 24.
Vending machine. W. M. Baxter. 1,765,963; June 24.
Vending machine. D. Lazar. 1,767,684; June 24.
Vending machine. G. B. Macke. 1,766,297–8; June 24.
Vending machine. H. H. Peterson. 1,767,307; June 24.
Vending machine. G. Weiss. 1,767,634; June 24.
Vending machine, Bottle. C. A. Frick and R. E. Baker. 1,767,583; June 24.
Vending-machine casing or similar article. O. D. Jennings. Des. 81,446; June 24.
Vending machine, Coin-controlled. F. L. Mills. 1,767,602; June 24.
Ventilating and air-purifying unit. W. P. Aron. 1,765,962; June 24.
Ventilating apparatus. E. P. Grisham. 1,766,898; June 24.
Ventilating apparatus. J. C. Knapp. 1,767,988; June 24.
Ventilating means, Propeller-. F. Charavay. Re17,709; June 24.
Ventilating means, Searchlight-. F. R. House. 1,767,526; June 24.
Ventilator: *See*—
Building ventilator. Window ventilator.
Vibration-dampening device. E. O. Ackerman. 1,765,477; June 24.
Vibration regulator. W. Bock and K. Rath. 1,767,236; June 24.
Vibratory element and producing the same. H. F. Fruth. 1,765,413; June 24.
Vic. trihalogenbenzenes, Manufacturing. R. Herz and E. Albrecht. 1,766,747; June 24.
Violin bow. J. B. Reed. 1,766,688; June 24.
Voltage regulator. G. B. Crouse and J. L. Jatlow. 1,767,052; June 24.
Vulcanizers, Fluid-conducting tree for. W. E. Humphrey and T. G. Graham. 1,768,406; June 24.
Vulcanizing apparatus. J. L. Kelly. 1,767,682; June 24.
Wall board and the like, Handling wet. R. M. Greenleaf. 1,766,251; June 24.
Wallet, Frame. L. Schaefer. 1,766,953; June 24.
Wardrobe chair. R. B. Simpson. 1,767,708; June 24.
Ware-conveying head. J. E. Schroder. 1,766,549; June 24.
Wash-hanging apparatus. J. Frohmann. 1,766,624; June 24.
Washer: *See*—
Cup washer. Golf-ball washer.
Gas washer.
Washing apparatus, Air and gas. E. M. Bassler. 1,766,588; June 24.
Washing device for separator disks. H. Kehn. 1,767,370; June 24.
Wash'ng drum for photographic pictures. W. M. Schultz. 1,767,858; June 24.
Washing machine. W. E. Bock. 1,766,213; June 24.
Washing machine and drier, Combined. C. E. Reddig. 1,766,542; June 24.
Washing-machine attachment. E. J. Erickson. 1,767,971; June 24.
Washing machine, Filter-sand-. M. L. Bayard and M. Harvey. 1,767,729; June 24.
Washing vegetables, Apparatus for. B. Rabinowitz, née Brier. 1,767,615; June 24.
Waste-reclamation system. E. S. Pearce. Re17,710; June 24.
Watch-crystal-fitting device. J. B. McDaniel. 1,767,935; June 24.
Watch protector, Wrist-. H. Schreiber. 1,767,315; June 24.
Water-circulating means for automobile engines using thermosiphon systems, Auxiliary. R. F. Stephenson. 1,766,408; June 24.
Water expeller. T. J. Logan. 1,767,385; June 24.
Water-gas apparatus. C. S. Chrisman. 1,767,579; June 24.
Water heater. A. A. Marks. 1,766,080; June 24.
Water heater, Instantaneous electric. G. C. DeLannoy. 1,766,068; June 24.
Water heater, Oil-burning. W. C. Elze. 1,767,747; June 24.
Water heater, Portable electric. C. G. Dean. 1,767,122; June 24.
Water in concrete for the hydration of cement, Retaining. C. L. McKesson. 1,768,366; June 24.
Water regulator, Automatic feed-. H. W. Gang. 1,767,920; June 24.
Water-supply system, Pneumatic. E. F. McCarthy. 1,767,542; June 24.
Water-tube boiler. S. P. Coulter. 1,767,173; June 24.
Waterproof sheets and product thereof, Making continuous. L. Kirschbraun. 1,767,532; June 24.
Waters, Neutralization of acid waste. A. M. Hageman and W. L. Sullivan. 1,765,424; June 24.
Wave and tide motor. C. H. Ruth. 1,766,457; June 24.
Wave transmission device, Electric. R. A. Heising. 1,768,251; June 24.
Wax, Bleaching Montan. T. Heilthaler. 1,767,886; June 24.
Wax distributor and polisher, Combination. W. L. Butcher. 1,766,774; June 24.
Weather shield for freight cars. R. C. Lemons and W. A. Irons. 1,768,206; June 24.
Weather stripping. LeR. M. Bickett. 1,767,165; June 24.
Web-joining mechanism. H. V. Ball. 1,767,728; June 24.
Web-roll changer. H. V. Ball. 1,767,727; June 24.
Weeder. J. F. Zeilinger. 1,765,392; June 24.
Weed guard for fishing lines. A. C. Deatz. 1,768,033; June 24.
Weft carriers, Disposal device for ejected. R. G. Turner. 1,766,732; June 24.
Weft detector, Side-slipping movable-plunger. E. R. Holmes. 1,766,821; June 24.
Weighing apparatus. W. E. McKim. 1,765,495; June 24.
Weight for weft-replenishing-loom thread holders. H. V. Foster. 1,766,894; June 24.
Welding. C. A. Frahm and E. W. Riemenschneider. 1,765,368; June 24.
Welding, Electric. R. D. Malm. 1,767,220; June 24.
Welding machine. J. J. Paugh. 1,767,473; June 24.
Welding machine, Automatic spot-. C. L. Eksergian. 1,767,521; June 24.
Welding system, Arc. A. K. Harford. 1,765,373; June 24.
Well drill, Roller. F. L. Scott. 1,765,545; June 24.
Well-casing centering device. R. C. Baker. 1,767,198; June 24.
Well packer. A. J. Eulberg. 1,766,887; June 24.
Well packer. L. E. and H. L. Shepard. 1,766,766; June 24.
Wells by stages, Apparatus for flowing deep. R. H. Bess. 1,766,974; June 24.
Wheel: *See*—
Abrasive wheel. Grinding wheel.
Beater wheel. Resilient wheel.
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Wheel. F. E. Anderson. 1,765,858; June 24.
Wheel attachment, Automobile. W. R. Metts. 1,766,393; June 24.
Wheel-attaching device. C. Crain. 1,766,375; June 24.
Wheel bodies to wheel hubs, Device for securing. W. N. Booth. 1,766,099; June 24.
Wheel construction. J. G. Swain. 1,768,344; June 24.
Wheel for tanning apparatus, Paddle. I. Horween. 1,767,760; June 24.
Wheel or pulley for band saws. A. G. Carter. 1,765,402–3; June 24.
Wheels, Apparatus for making cast-metal. F. W. Burger. 1,765,755; June 24.
Wheels, Dressing device for abrasive. J. Maickel. 1,766,029; June 24.
Wheels, Making cast-metal. F. W. Burger. 1,765,754; June 24.
Windbreak. F. A. Reid. 1,768,000; June 24.
Winding drum and fastening hoisting cables thereto. R. A. and G. P. Monnier. 1,767,938; June 24.
Winding machine. A. E. Collins. 1,768,190; June 24.
Windmill. J. Lacuona. 1,766,391; June 24.
Window. H. J. Schlacks. 1,765,543; June 24.
Window and door frame. F. C. Andersen. 1,767,569; June 24.
Window and the like, Automobile. S. O. Ballentine. 1,767,783; June 24.
Window antirattler and fastener. C. Fister. 1,766,332; June 24.
Window cleaner, Automatic. K. E. Schubert. 1,766,550; June 24.
Window construction. M. G. Brumbach. 1,767,343; June 24.
Window construction. B. Miller. 1,767,600; June 24.
Window construction. M. J. Paitl. 1,765,442; June 24.
Window frame. C. Reifschneider. 1,768,001; June 24.
Window frame, Door. E. J. Deisley. 1,767,517; June 24.
Window, Reversible. L. B. Taylor. 1,767,022; June 24.
Window screen. O. W. Brandes. 1,767,116; June 24.
Window structure. J. F. Massey. 1,766,392; June 24.
Window ventilator. W. Strom. 1,765,745; June 24.
Windshield cleaner. J. R. Oishei. 1,768,329; June 24.
Windshield cleaner. C. R. Peirson. 1,766,529; June 24.
Windshield construction. J. Ledwinka. 1,767,463; June 24.
Windshield screen. E. B. Clement and R. J. Thompson. 1,766,055; June 24.
Wing brace arrangement for railroad spreaders. V. G. Tellis. 1,765,855; June 24.
Wing-post and carriage structure for railroad spreaders. V. G. Tellis. 1,765,854; June 24.
Wing system with stabilizing vanes for aircraft. L. H. Crook. 1,767,966; June 24.
Wings having single spars, Attaching on a fuselage. E. J. E. Dewoitine. 1,766,376; June 24.
Wiper, Oil-rod. C. Adam. 1,767,954; June 24.
Wiper, Windshield. W. H. Farr. 1,766,988; June 24.
Wiper, Windshield. J. J. Montevaldo. 1,766,224; June 24.
Wiper, Windshield. H. Schroder. 1,765,806; June 24.
Wire cutter. A. A. Johnson. 1,767,077; June 24.
Wire guard. E. Burke. 1,765,823; June 24.

Wire-drawing apparatus. S. McMullan and A. E. Schulz. 1,765,437; June 24.
Wire screen, Woven-. M. P. Reynolds. 1,767,814; June 24.
Wire-spring fabric or the like. M. R. Mangan. 1,765,434; June 24.
Wire-steel-wool machine, Power-driven. W. H. Robbins. 1,766,356; June 24.
Wire to packages, Applying. J. P. Nielsen and J. R. Richer. 1,766,035; June 24.
Wire wheel. W. N. Booth. 1,766,100; June 24.
Wood and process of treating wood, Impregnated. J. R. Coolidge, 3d. 1,766,606; June 24.
Wood, Treating. F. S. Vivas. 1,768,175; June 24.
Woodworking. C. W. Erickson. 1,767,970; June 24.
Woodworking machine. F. J. Kistner and W. S. Williams. 1,766,650; June 24.
Wool, fur, rugs, and the like against the attack of moths and products thereof, Protecting. E. Hartmann, M. Hardtmann, and P. Kummel. 1,766,819; June 24.
Worm-generating hob. O. G. Simmons. 1,765,853; June 24.
Wrench: *See*—
Pipe wrench.
Wrench. L. E. Endsley. 1,767,441; June 24.
Wrench. F. Schweigert. 1,766,458; June 24.
Wrench or brace, Parallel jaw. W. F. Hobbs and J. A. Anderson. 1,766,174; June 24.
Wrapping machine. W. C. Stevens. 1,768,338; June 24.
Wrapping machines, Adhesive-applying mechanism for. J. P. Remington. 1,768,488; June 24.
Wrapping material, Production of acid-resisting. K. Humpert. 1,765,920; June 24.
Yarn-changing mechanism. W. F. Rolston. 1,767,480; June 24.
Yeast, Manufacturing. G. S. Bratton. 1,767,846; June 24.
Yoke means. C. E. Dath. 1,766,609; June 24.

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ISSUED JUNE 24, 1930

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Patent Nos. 1,760,863 to 1,762,138

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Prints	7	No. 12,576	to No. 12,582	inclusive.
Reissues	9	No. 17,686	to No. 17,694	inclusive.
Designs	48	No. 81,268	to No. 81,315	inclusive.
Patents	1,276	No. 1,760,863	to No. 1,762,138	inclusive.
Total	1,576			

Adjudicated Patents

(C. C. A. N. Y.) Snelling patent, No. 1,199,124, for food products, claims 2, 3, 10, and 13 *Held* not infringed. *Dernell Potato Products Co.* v. *Snelling*, 38 F. (2d) 788.

(C. C. A. Oreg.) Williams patent, No. 1,219,891, for sectional furniture, *Held* not infringed. *Grand Rapids Show Case Co.* v. *Weber Show Case & Fixture Co.*, 38 F. (2d) 730.

(C. C. A. Oreg.) Cochran and Youngs patent, No. 1,227,557, for make-ready of impression cylinders of printing presses, *Held* infringed. *Portland Telegram* v. *New England Fibre Blanket Co.*, 38 F. (2d) 780.

(C. C. A. Ga.) Finley patent, No. 1,341,458, for method of treating roadways, *Held* invalid. *MacDougald Const. Co.* v. *Finley*, 38 F. (2d) 809.

(C. C. A. Mo.) Kerr patent, No. 1,560,248, for gas burner, claim 5 *Held* invalid. *Cleveland Gas Burner & Appliance Co.* v. *American Heater Corporation*, 38 F. (2d) 760.

(D. C. N. J.) Marshall patent, No. 1,601,575, for piston packing, claims 1, 2, 4, 5, and 6 *Held* valid and infringed. *Simplex Piston Ring Co. of America* v. *Thacher Motor Service Corporation*, 38 F. (2d) 826.

(D. C. Me.) Jeannotte patent, No. 1,635,183, for combined stool, steps, and tool box, *Held* invalid. *Jeannotte* v. *Morrill Adams Co.*, 38 F. (2d) 884.

Adverse Decisions in Interference

In interferences involving the indicated claims of the following patents final decisions have been rendered that the respective patentees were not the first inventors with respect to the claims listed:

Pat. 1,514,720, H. C. Pauly, Bicycle, decided April 25, 1930, claim 1.

Pat. 1,563,762, Edwin Lundgren, Stocker, decided February 25, 1929, claim 2.

Pat. 1,574,126, H. P. Shopneck, Water-laid felt, decided April 21, 1930, claims 1 and 4.

Pat. 1,607,227, A. W. Aitken, Grader attachment for road roller, decided March 26, 1930, claim 1.

Pat. 1,633,160, J. Bennett, Finished fabric and process of making same, decided April 26, 1930, claims 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, and 12.

Pat. 1,653,461, F. Honig, Wire drawing and take-up method, decided April 26, 1930, claims 1, 2, 5, 6, 9, and 10.

Pat. 1,678,336, B. E. Getchell, Motor-starting switch, decided April 30, 1930, claims 2, 3, and 4.

Pat. 1,694,125, Wm. G. Jopson, Decorative wreath, decided April 25, 1930, claims 1, 2, 3, and 4.

Pat. 1,712,965, A. G. Maranville, Laminated board and method of making same, decided May 12, 1930, claims 8 and 9.

Trade-Marks Canceled

77,618. Diuretic preparations. Chemische Werke vorm. Dr. Heinrich Byk, Berlin, Germany. Registered April 26, 1910. Canceled May 5, 1930.

98,259. Artificial teeth. The Dentists' Supply Company, New York, N. Y. Registered July 7, 1914. Canceled May 5, 1930.

200,387. Certain named electrical apparatus and machines. Chicago Pneumatic Tool Company, New York, N. Y. Registered June 30, 1925. Canceled May 5, 1930.

236,788. Blankets of cotton, wool, and cotton-wool mixtures. F. A. Patrick & Co., Duluth, Minn. Registered December 20, 1927. Canceled May 5, 1930.

Condition of Applications Under Examination at Close of Business May 23, 1930

Room No.	(Total number of applications awaiting action, excluding Trade-Mark Division, 118,039; Trade-Mark Division, 2,045. Oldest new case, July 24, 1929; oldest amended, July 24, 1929. The dates given are 1929 except where † indicates 1930.) DIVISIONS, EXAMINERS, AND SUBJECTS OF INVENTIONS	Oldest new application and oldest action by applicant awaiting office action: New	Amended	No. of applications awaiting action
112	1. LOEFFLER, F. A., Closure Operators; Fences; Gates; Tillage; Scattering Unloaders; Handling and Hoist Line Implements.	Sept. 30	Oct. 4	1,316
126	2. HADEN, C. F., Bee Culture; Dairy; Presses; Tobacco	Aug. 19	Aug. 30	2,263
331	3. LINDSEY, A., Heating: Metal Founding; Metallurgy; Metal Treatment	Aug. 23	Dec. 18	1,570
234	4. MERRITT, A. D., Conveyers; Hoists; Handling Apparatus; Excavating	Oct. 15	Nov. 1	1,272
108*	5. MACNAB, J. F., Harvesters; Music; Acoustics; Sound Recording; Knotters	Aug. 24	Sept. 4	1,466
318	6. LEWERS, A. M., Carbon Chemistry	July 24	July 24	2,480
106	7. JARBOE, C. G., Optics; Photography	Aug. 7	Aug. 10	2,619
133	8. HENRY, C. C., Beds; Chairs; Kitchen and Table Articles; Racks and Cabinets	Aug. 31	Oct. 29	1,818
221	9. ADAMS, R. E., Pumps; Fluid and Fluid-Current Motors	Nov. 5	Nov. 2	1,453
118	10. HUNTER, O. F., Land Vehicles—Animal Draft Appliances, Bodies and Tops	Aug. 3	Sept. 11	1,781
148*	11. ARMSTRONG, H. C., Boots, Shoes, and Leggings; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Whip Apparatus.	Nov. 18	Nov. 27	1,039
380	12. PIERCE, P. P., Machine Elements	Oct. 2	Sept. 24	1,634
154*	13. CLIFT, J. W., Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Working; Needle and Pin Making; Turning; Boring and Drilling.	Aug. 2	July 31	1,644
102*	14. BRUMBAUGH, N. J., Farriery; Metal Bending; Metal Tools and Implements, Making; Sheet-Metal Ware, Making; Wire Fabrics; Wire Working; Metal Working, Assembling, and Blanks and Processes.	Aug. 6	Aug. 19	1,461
329	15. WORRELL, L. W., Glass; Plastic Block and Earthenware Apparatus; Plastics	Aug. 6	Aug. 12	3,058
242*	16. SPENCER, C. J., Telegraphy; Telephony	Aug. 13	Oct. 1	1,260
307	17. RAFTER, G. S., Label Pasting and Paper Hanging; Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet-Material Associating or Folding; Sheet or Web Feeding; Type Setting.	Aug. 5	Sept. 19	1,662
229	18. PORTER, M. E., Motors, Expansible-Chamber Type; Power Plants; Speed-Responsive Devices	Sept. 26	Sept. 24	1,511
236	19. GLASCOCK, E. S., Furnaces; Heating Systems; Liquid and Gaseous Fuel Burners; Stoves and Furnaces.	Aug. 12	Aug. 5	2,236
179	20. GROVE, S. D., Miscellaneous Hardware; Closure Fasteners; Locks and Latches; Safes; Undertaking.	Sept. 9	Oct. 1	1,641
212	21. THOMPSON, T. J., Textiles; Cloth Finishing	Sept. 6	Dec. 14	923
244*	22. COLWELL, J. H., Aeronautics; Firearms, Ordnance, and Explosive Devices; Air Guns, Catapults, and Targets; Boats and Buoys; Ships; Marine Propulsion.	Oct. 9	Sept. 24	1,664
217	23. GROESBECK, W. D., Coin Handling; Recorders; Registers	Aug. 8	Aug. 10	1,198
147*	24. DURAS, C. O., Apparel; Apparel Apparatus; Garment Supporters; Sewing Machines	Aug. 2	Aug. 3	1,305
202*	25. LIGHTFOOT, J. H., Agitating; Butchering; Classifying Solids; Centrifugal-Bowl Separators; Mills; Threshing; Vegetable and Meat Cutters and Comminutors.	Sept. 16	Sept. 24	1,645
228*	26. HODGES, J. S., Electricity, Generation; Motive Power	Aug. 30	Aug. 26	1,258
214	27. ANDERSON, L. S., Brush, Broom, and Mop Making; Brushing, Scrubbing, and General Cleaning; Laundry; Washing Apparatus.	Aug. 12	Aug. 12	1,656
225	28. BENSON, A. R., Internal-Combustion Engines	Sept. 7	Sept. 9	2,181
160*	29. MORRIS, B. N., Woodworking; Tools; Compound Tools	Dec. 18	Oct. 2	739
248	30. SHIPMAN, J. L., Automatic Temperature and Humidity Regulation; Illuminating Burners; Illumination; Thermostats and Humidostats.	Aug. 27	†Mar. 7	1,213
312	31. HOLMES, W. N., Distillation; Gas, Heating and Illuminating; Mineral Oils	Aug. 17	Aug. 13	2,705
249	32. BARTHOLOMEW, J. A., Gas and Liquid Contact Apparatus; Heat Exchange; Gas Separation	Oct. 14	Oct. 21	1,717
152	33. WYMAN, W. I., Bridges; Masonry and Concrete Structures; Metallic Building Structures; Roads and Pavements; Roofs; Wooden Buildings.	Aug. 6	Aug. 21	2,601
304	34. SIMPSON, G. R., Electricity, Transmission to Vehicles; Pneumatic Dispatch; Railways, Rolling Stock, Switches, and Signals; Store Service; Vehicle Fenders.	Sept. 13	Oct. 4	1,193
116*	35. REYNOLDS, E. C., Buckles, Buttons, Clasps, Etc.; Card and Sign Exhibiting; Signals; Toilet	Oct. 2	Nov. 11	1,781
105	36. MORTON, G. L., Automatic Weighers; Geometrical and Measuring Instruments; Force Measuring	Sept. 12	Oct. 2	2,329
224*	37. WEAVER, M. E., Electricity, Circuit Makers and Breakers	Sept. 11	Sept. 10	2,099
145	38. KRAFFT, C. F., Animal Husbandry; Earth Boring; Hydraulic and Earth Engineering; Mining, Quarrying, and Ice Harvesting; Stoneworking; Wells.	Aug. 7	Aug. 13	1,453
220	39. COWLES, A. W., Fluid-Pressure Regulators; Multiple Valves; Valves; Water Distribution	July 20	July 25	2,602
262*	40. OBERLIN, J. J., Bottles and Jars; Receptacles	July 26	Oct. 16	3,329
125	41. BROWN, J. I., Land Vehicles, Wheels, and Axles; Resilient Tires and Wheels; Wheel Substitutes; Railway Draft Appliances.	Sept. 12	Sept. 30	1,418
223*	42. CUTTING, H. O., Electric Signaling	Oct. 3	Oct. 29	1,581
124*	43. HOPKINS, F. M., Baths, Closets, Sinks, and Spittoons; Sewerage; Electricity, Medical and Surgical; Medicines; Surgery; Dentistry; Artificial Body Members.	July 29	July 29	2,228
253	44. SHAFFER, C. H., Dispensing; Filling and Closing Portable Receptacles; Refrigeration	July 25	July 24	2,385
379	45. GILES, A. H., Pulleys and Shafting; Lubrication; Bearings and Guides; Spring Devices	Aug. 24	Aug. 26	2,526
233	46. WOLCOTT, C. L., Concentrating Evaporators; Fluid Sprinkling, Spraying, and Diffusing; Fire Extinguishers; Liquid Heaters and Vaporizers.	Sept. 7	Sept. 19	1,670
264	47. BARKER, H., Clutches and Power Stops; Brakes and Motors	July 31	Sept. 5	2,574
212*	48. ROEPKE, O. B., Electricity, General Applications	Aug. 24	Aug. 26	1,392
239	49. EDINBURG, F. P., Check-Controlled Apparatus; Domestic Cooking Vessels; Ventilation; Driers; Liquid Separation or Purification.	Nov. 9	Nov. 23	1,292
322	50. BLAKE, C. L., Plastic and Liquid Coating Compositions; Coating	Aug. 9	Aug. 30	2,930
240*	51. BACKUS, C. D., Radiant Energy, Wave Transmission	Aug. 23	Aug. 23	2,442
144	52. MORGAN, E. T., Supports; Chucks; Joint Packing; Pipe and Rod Joints or Couplings; Tool-Handle Fastenings.	Oct. 1	Oct. 4	2,735
201*	53. PECK, M. K., Books; Manifolding; Printed Matter; Stationery, Educational Appliances; Paper Files and Binders; Tents, Canopies, Umbrellas, and Canes; Curtains, Shades, and Screens.	Nov. 26	Nov. 20	1,300
241	54. LANE, C. H., Electric Lamps; Conductors; Vapor Electric Devices; Space Discharge Tubes	July 27	July 27	2,980
102	55. BOWEN, S. T.—Bread, Pastry, and Confection Making; Cutlery	†Mar. 5	†Mar. 5	389
	Designs	†Apr. 30	†May 5	459
309	56. PORTER, F. J., Electrochemistry; Laminated Fabrics; Paper Making; Substance Preparation	Aug. 12	Aug. 16	2,536
257*	57. NICOLSON, G. D. G., Cutting and Punching; Bolt, Nut, Rivet, Nail, Screw, Chain, and Horseshoe Making; Driven and Screw Fastenings; Jewelry; Nut and Bolt Locks.	Aug. 1	Aug. 24	1,200
270*	58. DOWELL, F. F., Abrading; Typewriting	July 25	July 25	1,521
315	59. RICHARD, V. I., Chemistry; Alcohol; Fertilizers; Cement and Lime; Hides, Skins, and Leather; Fuel	Aug. 3	Aug. 6	2,260
213*	60. GLASS, R. L., Electricity, Heating, and Welding; Batteries; Resistances and Rheostats; Prime Mover Dynamo Plants; Conduits and Housings.	Aug. 17	Aug. 16	2,466
269	61. PARKS, G. E., Elevators; Winding and Reeling; Pushing and Pulling; Fire Escapes; Ladders; Scaffolds; Velocipedes; Horology; Time-Controlling Apparatus.	July 26	Aug. 1	2,660
245*	62. COCHRAN, W. W., Toys; Amusement Devices; Furniture; Fishing and Trapping; Baggage; Package and Article Carriers.	Aug. 16	Aug. 15	2,387
300	63. WINKELSTEIN, A. H., Bleaching and Dyeing; Explosive, Pyrotechnic, and Match Compositions; Oils, Fats, and Glue; Preserving; Sugar, Starch, and Carbohydrates.	Aug. 14	Aug. 14	2,533
163	TRADE-MARKS, LABELS, AND PRINTS: F. A. RICHMOND—Trade-Marks	†Apr. 10	†Apr. 19	1,816
	Labels and Prints	†Apr. 23	†May 9	229

* Refers to room numbers in the annex.

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DECISIONS IN PATENT AND TRADE-MARK CASES

U. S. Court of Customs and Patent Appeals

IN RE THOMAS KERKER

No. 2225. Decided February 21, 1930

[37 F. (2d) 757]

PATENTABILITY—UNION SUIT.

Claims for a union suit *Held* unpatentable over the prior art.

APPEAL from the Patent Office. Affirmed.

Messrs. Fischer & Lagaard and *Mr. John S. Lind* for Kerker.

Mr. T. A. Hostetler for the Commissioner of Patents.

GRAHAM, *P. J.:*

Thomas Kerker, the appellant, seeks a patent on improvements in night garments and filed his application therefor in the Patent Office, said application containing 11 claims. All these claims were rejected by both the Examiner and Board of Appeals, the principal references being:

Jaeger, 236,595, Jan. 11, 1881.
Bernstein, 1,426,540, Aug. 22, 1922.

The appellant's garment consists of what is ordinarily termed a union suit, with the opening in the back, the back portion consisting of two overlapping flaps, extending from the shoulders to the crotch, and fastened by buttons on both shoulders. It is claimed that this arrangement is novel, inasmuch as it permits the garment to be opened in the back without unbuttoning, that the opening will automatically close, and that the child wearing it will not be distressed by buttons upon which it is compelled to lie.

Much of this argument is neutralized by the fact that none of the claims are limited to the use of the article as sleeping garments. The claims should, therefore, be considered as applying to garments generally. The Bernstein reference covers improvements in union overalls. In these, the back consists of two overlapping flaps, not of the exact shape of the appellants, but the same in effect, fastened at the sides and shoulders with buttons. The Jaeger reference describes a union suit, open in front, with overlapping flaps extending from crotch to shoulder, buttoned on the sides and shoulders.

Appellant argues that the Jaeger reference is inapplicable because it shows a front opening, while his discloses a back opening. He also insists that the buttons along the sides of the Jaeger and Bernstein references distinguish them from his garment, which has no such buttons. We are unable to see any invention in either of these ideas. We can not close our eyes to the ordinary things of life. It is a matter of common knowledge that, from time immemorial, garments of all kinds have been opened, some in front, some behind. No mother ever lacked the knowledge that the absence of buttons in the garments of a child was an advantage. To supply buttons or to take them off, is certainly no novel idea. Appellant's device produces no results which are not simply the aggregate of the separate contributions of devices well known in the art.

The decision of the Board of Appeals is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

SUN-MAID RAISIN GROWERS OF CALIFORNIA *v.* AMERICAN GROCER COMPANY

No. 2282. Decided April 14, 1930

1. TRADE-MARKS—REGISTRATION—INTENT OF THE STATUTE.

"Congress was given no constitutional authority to pass legislation concerning trade-marks inconsistent with the common law, and we think it is obvious from the context of the act and the report of the committee which reported the trade-mark bill that it never intended to do so. The dominant purpose of the trade-mark act was to protect the public and purchasers against confusion."

2. SAME—GOODS OF THE SAME DESCRIPTIVE PROPERTIES—FLOUR AND RAISINS AND BAKING POWDER.

Flour *Held* to constitute goods of the same descriptive properites as raisins, syrup, and baking powder.

3. SAME—SAME—HOW DETERMINED.

"In determining what Congress meant by the words 'merchandise of the same descriptive properites' we must read them in connection with the words 'goods of the same class' in the first part of the section and 'merchandise of substantially the same descriptive properties' in section 16 of the act. The provision for opposition in section 6 which provides that 'Any person who believes he would be *damaged* by the registration of a mark' may oppose the same, etc. also should be taken into consideration."

GARRETT, *J.*, and LENROOT, *J.*, concur in the result.

APPEAL from the Patent Office. Reversed.

Messrs. Miller & Boyken, Mr. George W. Dorr, and *Mr. Charles R. Allen* for Sun-Maid Raisin Growers of California.

Mr. B. G. Foster for American Grocer Company.

BLAND, *J.:*

The American Grocer Company, appellee herein, was the applicant in the Patent Office for the registration of a trade-mark hereinafter described. The Sun-Maid Raisin Growers of California were the opposers. The mark which was sought to be registered by the applicant is the word "Sun-Maid" placed above a representation of a small girl in a standing position, holding a bundle of wheat in each arm. Behind the girl's head and shoulders is the upper half of a disk which represents the sun radiating light. It is not disputed but that this proposed trade-mark is quite similar to the trade-mark used by opposer. Appellant styles it "a Chinese copy" of the same. When placed side by side differences are apparent, but only in detail—the maid of applicant appears younger than the maid of opposer and bundles of wheat are substituted for a tray of grapes.

Applicant seeks registration for the mark to be used for wheat flour which is sold in barrels and other containers to bakers and grocers and its al-

leged first date of use is August 5, 1926. Opposer's use of the trademark antedated that of applicant by eleven years, and since 1905 it has been used on a large variety of goods. Its use began on dried raisins, and since 1905 the line of merchandise manufactured and sold by opposer under said trade-mark has been extended until at the date of filing the opposition, opposer had six different registrations in the Patent Office used on many different kinds of dried fruits, also raisinseed salad oil, mince meat, raisins and nuts, dried fruits and raisins, candy, canned raisins, flavoring extracts, nuts, table syrup, rice, sauces for food flavors, vinegar, edible oil, molasses, breakfast cereals, baking powder, cornstarch, pie fruit, and raisin syrup.

One of the trade-marks rregistered by the opposer, in 1924, consists of the words "Sun-Maid Baker," which are placed on a baker's cap worn by a man in baker's uniform, holding a cut loaf of fruit or raisin bread in his hand, the fruit or raisins showing at the end of the loaf.

The Sun-Maid Raisin Growers of California are the manufacturers and sellers of products grown by the Sun-Maid Raisin Growers Association. All of the stock of the latter is owned by the former. The allied companies, according to the record, up to May 31, 1927, had spent over $14,000,000 in advertising the Sun-Maid products, and up to that time, the value of the products handled was more than $198,000,000, and they were sold extensively throughout the entire United States and practically every civilized country in the world.

The Examiner of Trade-Mark Interferences dismissed the notice of opposition and adjudged that the applicant be entitled to registration on the ground that the merchandise upon which applicant sought to use and had used its trade-mark was not of the same descriptive properties as the merchandise of opposer. Upon appeal, the Commissioner affirmed the action of the Examiner and held that table syrup, raisin syrup, cereals and baking powder were not merchandise of the same descriptive properties as wheat flour.

The record discloses that raisin syrup is chiefly used by and sold to the baking trade and is sold in barrels and in five gallon cans and that it is used for making raisin bread and other related pastry products, and is also used to a certain extent for table purposes. The American Grocer Co., applicant, located at Little Rock, Arkansas, sells flour in barrels to the same baking trade in Arkansas and elsewhere to which opposer sells its line of goods, both selling under the trade-mark name "Sun-Maid."

The record offers no reason why applicant seeks to use a trade-mark almost identical with that of opposer, but the reason to us seems obvious. Applicant hopes to profit from the well-advertised and favorably known merchandise sold by opposer. That confusion would result in the mind of the public and to the purchasers of goods, if applicant used his proposed Sun-Maid trade-mark on wheat flour, we think is more than probable. No proof of actual confusion is necessary in this case. *Patton Paint Co.* v. *Orr's Zinc White*, 48 App. D. C. 221, 258 O. G. 814; *A. Leschen & Sons Rope Co.* v. *Broderick & Bascom Rope Co.*, 36 App. D. C. 451, 164 O. G. 977.

It seems to be the position of the Patent Office and of the applicant that as affects the goods at bar, it is immaterial if confusion and deceit result as long as the merchandise of the one is not of the "same descriptive properties" as the merchandise of the other, giving the phrase "same descriptive properties" its ordinary and restricted meaning.

To so conclude is to lose sight of the trade-mark legislation as a whole and the purpose of its enactment. "'The law of trade-marks is but a part of the broader law of unfair competition,' the general purpose of which is to prevent one person from passing off his goods or his business as the goods or business of another." *American Steel Foundries* v. *Robertson*, 269 U. S. 372, 342 O. G. 711. Congress by the enactment of the Trade-Mark Act of 1905 never intended to authorize the registration of a trade-mark, the use of which could be prevented by resort to common law. (See *California Packing Corp.* v. *Tillman & Bendel, Inc.*, Patent Appeal No. 2341, 17 C. C. P. A. ——, —— F. (2d) ——, 394 O. G. 789, and *B. F. Goodrich Co.* v. *Hockmeyer* (Zip-On Mfg. Co., substituted), Patent Appeal No. 2208, 17 C. C. P. A. ——, —— F. (2d) ——, 394 O. G. 795, both decided concurrently herewith. Also see *Yale Electric Co.* v. *Robertson*, 26 F. (2d) 972, and *Levy* v. *Uri*, 31 App. D. C. 441, 135 O. G. 1363.)

[1] Congress was given no constitutional authority to pass legislation concerning trade-marks inconsistent with the common law (*American Steel Foundries* v. *Robertson*, supra), and we think it is obvious from the context of the act and the report of the committee which reported the trade-mark bill that it never intended to do so (idem). The dominant purpose of the trade-mark act was to protect the public and purchasers against confusion. It never intended that a trade-mark should be registered if its use was likely to cause confusion or mistake in the mind of the public or if purchasers were likely to be deceived by its use.

[2] Taking into consideration all the facts in this case, is it free from doubt that a customer who used the above-described flour, raisins, raisin syrup and baking powder in baking bread and pastries would not conclude that the flour was produced and sold by the same person who sold and produced the other articles? Confusion in origin, we think, would be likely to result even though the articles differed in many of their inherent characteristics. The fact that raisin syrup is a liquid, while wheat flour is a powdered grain, and that one is the product of a fruit and the other of a cereal, under the circumstances of this case would not insure against confusion where identical or almost identical trade-marks are used.

In determining whether the merchandise of one is of the same descriptive properties as the merchandise of another, within the meaning of the proviso in section 5 of the Trade-Mark Act, we must take into consideration what Congress was attempting to do. In its attempt to prevent confusion was confusion as to the origin of the goods in mind? If it was not, then its legislative effort would not be in furtherance of and in harmony with the common law but a step in another direction. We must not impute such an intent to the framers of the act.

It will not be seriously contended here or elsewhere, we think, that confusion in origin which results from the fact that one person by the use of another's trade-mark leads the public to believe that his goods are made by the other, is not mischief which equity will prevent. *Aunt Jemima Mills Co.* v. *Rigney*, 247 F. 407; *Del Monte Special Food Co.* v. *California Packing Corp.*, 34 F. (2d) 774.

[3] In sections 16, 17, 18, 19, 20 and 21 of the Trade-Mark Act, great care was taken to provide for actions at law and equity for the purpose of carrying out the intent of the law. "Confusion" in the Patent Office in connection with the registration of a trade-mark should means the same as "confusion" in a court of equity where the use of the trade-mark is in dispute. In determining what Congress meant by the words "merchandise of the same descriptive properties" we must read them in connection with the words "goods of the same class" in the first part of the section and "merchandise of substantially the same descriptive properties" in section 16 of the act. The provision for opposition in section 6 which provides that "Any person who believes he would be *damaged* by the registration of a mark" may oppose the same, etc., also should be taken into consideration. (Italics ours.)

The views herein expressed are in entire harmony with and are supported by the later decisions of the Court of Appeals of the District of Columbia which has probably, during the last quarter of a century, decided more trade-mark cases than all the other courts combined, in the same length of time. See *Duro Pump & Mfg. Co.* v. *California Cedar Products Co.*, 56 App. D. C. 156, 344 O. G. 1058; *Macy & Co.* v. *Carter & Sons*, 56 App. D. C. 249, 350 O. G. 470; *Haas Bros. Fabrics Corp.* v. *Bliss, Fabyan & Co.*, 57 App. D. C. 44, 355 O. G. 157; *Di Santo* v. *Guarneri*, 57 App. D. C. 89, 359 O. G. 248; *Blek Co.* v. *Mishawaka Rubber & Woolen Mfg. Co.*, 57 App. D. C. 149, 363 O. G. 214; *Kassman & Kessner* v. *Rosenberg Bros. Co.*, 56 App. D. C. 109, 346 O. G. 257; *Lincoln Motor Co.* v. *Lincoln Mfg. Co.*, 58 App. D. C. 191, 374 O. G. 251; and In re *Defender Mfg. Co.*, 58 App. D. C. 234, 378 O. G. 4.

We conclude that the use of applicant's trade-mark as proposed would be likely to cause confusion and mistake in the mind of the public and its use would deceive purchasers, because the goods upon which the trade-marks of opposer and applicant are affixed have descriptive properties which are the same. The goods of both parties are used for the same purposes—to make bread and pastries. The use of one may suggest the use of the other. They are sold to and used by the same people and some of them are sold in the same kind of containers. If no confusion resulted under the circumstances of this case, it would be because the goods were so totally dissimilar as to permit of no confusion. It follows that since there is likely to be confusion, it is by reason of the fact that the respective goods have such qualities in common as would make confusion probable.

The decision of the Commissioner of Patents is reversed.

Reversed.

GARRETT, *J.*, and LENROOT, *J.*, concur in the conclusion.

U. S. Court of Customs and Patent Appeals

THE HEEKIN COMPANY *v.* LAWRENCEBURG ROLLER MILLS COMPANY

No. 2,345. Decided April 14, 1930

1. TRADE-MARKS—SIMILARITY—"WHITE CAP" AND "WHITE CAP" AND A REPRESENTATION OF OCEAN WAVES.
   A trade-mark consisting of the words "White Cap" associated with the representation of ocean waves having white surfaces *Held* confusingly similar to a mark consisting of the words "White Cap" alone, since these words are the dominating feature of the former mark.
2. SAME—SAME—DESCRIPTIVE PROPERTIES—BAKING POWDER AND SELF-RISING FLOUR.
   Baking powder and self-rising flour *Held* to be goods of the same descriptive properties.

APPEAL from the Patent Office. Reversed.

Mr. Walter F. Murray and *Mr. Frank L. Zugelter* for The Heekin Company.

Mr. Edward S. Rogers and *Mr. Allen M. Reed* for Lawrenceburg Roller Mills Company.

GARRETT, *J.*:

Lawrenceburg Roller Mills Company of Lawrenceburg, Indiana, on February 27, 1928, made application for the registration of the words "White Cap" as a trade-mark for use for "plain and self-rising flour," alleging that such mark had been continuously used in its business since December 7, 1925.

Registration was at first refused on account of registered Trade-Mark 88,827 to C. W. Antrim & Sons, but subsequent to this refusal there was filed a statement by one of the members of the Antrim firm reciting that the firm was no longer using the mark except for coffees, teas, spices and rice and declaring that the firm had no objection to Lawrenceburg Roller Mills Company registering same for use as applied to flour.

Following this appellant, the Heekin Company, of Cincinnati, Ohio, filed notice of opposition. Proof was taken by both sides and the Examiner of Interferences rendered a decision dismissing the opposition and adjudging appellee entitled to the registration sought. Upon appeal the Commissioner of Patents affirmed the decision of the Examiner and upon a rehearing granted reaffirmed it. The appeal was then taken which brings the issue before this court.

In its notice of opposition appellant alleged that for many years prior to December 7, 1925, it had been engaged in selling teas, coffees, baking powder, spices, flavoring extracts and other food products; that it had applied the trade-mark "White Cap"

to various of its food products, especially "baking powder and flavoring extracts"; that its long-continued use of the mark had associated that mark in the mind of the public with appellant's name, and caused it to become a means for indicating that goods of the same descriptive properties as goods of applicant, bearing the same trade-mark, came from appellant; that appellant is the owner of two registered trade-marks bearing the words "White Cap"; that appellant's goods are generally and commonly mixed with and used in conjunction with flour of various types and kinds for producing various products; that the products of the parties are sold to the same dealers and distributed through the same channels; that confusion in origin of the respective products would result from joint use of the mark; that the marks are the same, and that appellant would be damaged and confusion in trade would result from the use of the mark by appellee.

The mark as registered by appellant on May 6, 1913, for baking powder, and on August 4, 1914, for flavoring extracts for food and ten show the words "White Cap" in a clear but somewhat fancy type arranged in arc formation above a figure which apparently represents a rounded cap such as is frequently worn by chefs.

[1] The specimen filed by appellee with its application shows the words "White Cap" in large, plain, black-faced type, the word "White" being above the word "Cap." While the proceedings were pending in the Patent Office, however, appellee amended its design so as to show a representation of ocean waves having white surfaces, thus constituting a representation of water breaking into waves and forming what are called whitecaps. A sample of this design was permitted to be filed during the hearing before us. It shows the letters in plain, black-faced type imposed upon white background letters of the same shape as the black-faced ones and slightly larger. Notwithstanding the ocean-wave feature of the amended design, the words "White Cap" are left so arranged as that they constitute the dominating feature of the mark, just as the same words constitute the dominating feature of the marks of appellant. It appears to us that the distinctive and predominant features of the two marks are practically identical.

It remains to be determined, therefore, whether the goods to which they are applied are of the same class, or have the same descriptive properties, in the sense of the statute, so that the use of the marks upon them would be likely to create confusion in the mind of the public or deceive purchasers as to origin.

We conclude that they should be so held in the light of numerous adjudicated cases, including the case of *Sun-Maid Raisin Co.* v. *American Grocery Company*, 17 C. C. P. A. ——, decided April 14, 1930, and references therein given.

[2] Baking powder and self-rising flour are, in a sense, competing products. While there is no evidence that they have ever been manufactured by the same producer, still their relation to the art of cooking and their use in the production of bread and other food products is such as to bring them within what we conceive the registration statute to have contemplated in using the phrases "same class" and "same descriptive properties."

In view of the strong probability of confusion as to origin when these articles are offered for sale in the same stores and to the same purchasers for use in the making of the same finished products, we feel appellee should not be permitted the registration it seeks.

The decision of the Commissioner is therefore reversed.

Reversed.

U. S. Court of Customs and Patent Appeals

THE B. F. GOODRICH COMPANY *v.* KENILWORTH MANUFACTURING COMPANY

No. 2,209. Decided April 29, 1930

1. TRADE-MARKS—REGISTRATION STATUTE—INTENT OF.
"The Federal Trade-Mark Act was not intended to interfere with or change the principles of the common law relative to trade-marks but was designed in part at least to supplement these by providing a place and facilities where the owner of one might register it, and thus secure whatever of advantage in interstate and foreign commerce might be derived under the statute."

2. SAME—SAME—JURISDICTION OF COMMISSIONER AND OF COURT.
"The function of the Commissioner of Patents in administering the Trade Mark Act is administrative in character. It is derived wholly from the statute and he is governed by its terms. The jurisdiction of this court in the cases appealed from the Commissioner is likewise purely statutory and we are limited in the same way that the Commissioner is limited."

3. SAME—SAME—DISTINCTION FROM EQUITY JURISDICTION.
"In the construction and application of the registration statute, the Commissioner of Patents and this court naturally find in the decisions of those courts having jurisdiction of litigation arising under the common law, reasoning and principles applicable in determining the right of registration, but the well defined differences of jurisdiction must be recognized and the exact authority vested in this court should be borne in mind. It is entirely statutory and has only to do with the right of registration."

4. SAME—SAME—DUTY OF COMMISSIONER.
"If, therefore, it appears that the mark for which registration is sought so nearly resembles one already registered, or known, owned by another, which latter is being applied to merchandise of the same descriptive properties, as that confusion or mistake in the mind of the public would really result, or purchasers would likely be deceived, then registration must be refused; otherwise it is the imperative duty of the Commissioner to grant registration (unless as of course other features of objection proscribing it under the statute are present)."

5. SAME—SIMILARITY—"ZIPPER" AND "ZIP-KNICK."
"The term "Zip-Knick" as applied to knickers, gymnasium trunks and bathing trunks held not confusingly similar to the term "Zipper" as applied to boots and overshoes of rubber and fabric.

BLAND, *J.*, dissenting.

APPEAL from the Patent Office. Affirmed.

Messrs. Eakin & Avery and *Mr. Willard D. Eakin* for B. F. Goodrich Co.

Mr. Louis Alexander for Kenilworth Manufacturing Company.

GARRETT, *J.*:

This is an appeal from the decision of the Commissioner of Patents affirming the decision of the Examiner of Interferences dismissing the notice of opposition on the part of appellant to granting appellee registration as a trade-mark of the compound word "Zip-Knick."

Appellant (opposer) alleges ownership of the mark "Zipper," as disclosed in registration No. 197,090, of April 7, 1925, used and to be used upon "boots and overshoes of rubber and fabric."

Appellee (applicant) claims the word "Zip-Knick" and seeks registration thereof for use on "wearing apparel for men, women, and children—namely, knickers, gymnasium trunks, bathing trunks, and hiking trunks." Use is claimed from November 17, 1925.

Both classes of merchandise utilize a fastener of a well known sliding type. This fastener was originally a patented article, but the patent expired many years ago and it is now open to public manufacture and use. In neither instance does the mark apply to the fastener, but in both applies to the respective goods in their entirety.

The Trade-Mark Act of February 20, 1905, was designed to be an aid in interstate and foreign commerce by providing a place at which marks or symbols used by a manufacturer or seller of goods to distinguish them from goods manufactured or sold by another might be registered. The United States Patent Office was designated as the place of registration and the Commissioner of Patents was charged with the administration of the statute, in accordance with its provisions and terms.

The common law during a long period of time has recognized certain rights in such trade marks or trade symbols, and litigation over these rights has developed a large body of law as part of the legal systems of our governments.

[1] The Federal Trade-Mark Act was not intended to interfere with or change the principles of the common law relative to trade-marks but was designed in part at least to supplement these by providing a place and facilities where the owner of one might register it, and thus secure whatever of advantage in interstate and foreign commerce might be derived under the statute, but the advantages or rights so acquired naturally remained subject to the common law principles as they have been, and may be, applied in the courts, State and Federal, having jurisdiction of litigation relating to the subject matter.

[2] The function of the Commissioner of Patents in administering the Trade-Mark Act is administrative in character. It is derived wholly from the statute and he is governed by its terms. The jurisdiction of this court in the cases appealed from the Commissioner is likewise purely statutory and we are limited in the same way that the Commissioner is limited Vide *Postum Cereal Co.* v. *Calif. Fig. Nut Co.*, 272 U. S. 693, 698–99, 358 O. G. 811.

The duty of the Commissioner and of this court on appeals from the Commissioner, in all cases, is simply to determine whether an application meets the statutory requirement so as to be entitled to registration. Registration being granted or refused leaves the parties in interest, with their rights and equities, under the common law, legally unaffected, except as they may be enforced under sections 16 and 17, 15 U. S. C. A., sections 96 and 97.

The jurisdiction now vested in the United States Court of Customs and Patent Appeals by the act of March 2, 1929, which by its terms became effective April 1, 1929, was, until the latter date, vested in the Court of Appeals of the District of Columbia. So the latter court for many years had two distinct jurisdictions, viz, appeals from the Patent Office on questions of registration and appeals from the Supreme Court of the District of Columbia on matters of litigation between individuals as provided for in the statute.

The latter that court still has; to this court the former has been transferred.

[3] In the construction and application of the registration statute, the Commissioner of Patents and this court naturally find in the decisions of those courts having jurisdiction of litigation arising under the common law, reasoning and principles applicable in determining the right of registration, but the well defined differences of jurisdiction must be recognized and the exact authority vested in this court should be borne in mind. It is entirely statutory and has only to do with the right of registration.

In *D. & C. Co.* v. *Everett Fruit Products Co.*, 57 App. D. C. 262, 20 F. (2d) 279, 365 O. G. 658, the Court of Appeals of the District of Columbia, through Justice Robb, said:

> As we have observed in other cases, there is a sharp distinction between a statutory registration proceeding and a suit for unfair competition.

The statute appears to be drawn so as to invite and encourage registration. Sections 1, 2, 3, and 4, 15 U. S. C. A., sections 81, 82, 83, and 84, contain the authority and provide the methods for its exercise; section 5, 15 U. S. C. A., section 85, then declares that with certain exceptions specifically set forth:

> No mark by which the goods of the owner of the mark may be distinguished from other goods of the same class shall be refused registration as a trade-mark on account of the nature of such mark * * *.

Among these exceptions is the one in the second proviso of section 85:

> * * * Trade-marks which are identical with a registered or known trade-mark owned and in use by another and appropriated to merchandise of the same descriptive properties, or which so nearly resemble a registered or known trade-mark owned and in use by another and appropriated to merchandise of the same descriptive properties as to be likely to cause confusion or mistake in the mind of the public or to deceive purchasers shall not be registered.

[4] If, therefore, it appears that the mark for which registration is sought so nearly resembles one already registered, or known, owned by another, which latter is being applied to merchandise of the same descriptive properties, as that confusion or mistake in the mind of the public would really result, or purchasers would likely be deceived, then registration must be refused; otherwise it is the imperative duty of the Commissioner to grant registration (unless as of course other features of objection prescribing it under the statute are present). *Vide Beckwith* v. *Commissioner of Patents*, 252 U. S. 538, 546, 274 O. G. 613.

In the case at bar the opposing words are not identical and the only resemblance between them

lies in the fact that both contain a syllable made up of the three letters "Z," "I," and "P"—"Zip."

It seems to us that there is a distinct difference between the contending marks. Their meaning and appearance are not the same nor do they resemble each other in sound when pronounced. As pointed out in the case of *Goodrich Company* v. *Hockmeyer*, 17 C. C. P. A. ——, 394 O. G. 795, decided April 14, 1930, "it appears that the word 'Zip' and other words comprising the word 'Zip' have been registered for various articles."

[5] In view of the manifest distinction between the marks, it is our conclusion that whether the goods be of the same descriptive properties or not the use which appellee proposes to make of its word "Zip-Knick," as set forth in its application, is not likely to cause confusion in the mind of the public or deceive purchasers and that, therefore, its registration should be allowed.

Accordingly the decision of the Commissioner is affirmed.

Affirmed.

BLAND, *J.*, dissenting:

I regret that I cannot concur in the views of my associates and will briefly state the grounds of my dissent.

The appellant, opposer, is the owner of the trade-mark "Zipper" used upon boots and overshoes of rubber and fabric. Appellee seeks to register the term "Zip-Knick" to be used on wearing apparel for men, women, and children—namely, knickers, gymnasium trunks, bathing trunks, and hiking trunks. It is claimed that appellee has used this trade-mark on goods of this character since November 17, 1925. The use of appellant began in 1923 and through large sales and extensive advertising the word "Zipper" is usually associated by the trade with any article which makes use of the hookless fastener.

In *B. F. Goodrich Co.* v. *Hockmeyer*, (Zip-On Mfg. Co., substituted) suit No. 2,208, decided April 14, 1930, by this court, and in *California Packing Corp.* v. *Tillman & Bendel, Inc.*, suit No. 2,341 (the Del Monte case), decided on the same date, this court held in substance that where goods were of the same class, they were of the same descriptive properties and that goods were of the same class and the registration of similar trade-marks was not warranted if the similarity of the goods and the similarity of the trade-marks was likely to cause confusion or mistake in the mind of the public or to deceive purchasers.

For trade-mark purposes, under the Trade-Mark Act of 1905, I think the goods of appellant are in the same class as the goods of appellee, in so far as they are both susceptible of the appropriate use of the hookless fastener. The *zipper* characteristic of the articles is the chief and predominant characteristic which permits confusion in the trade. To the trade and to the public, "knick" means knicker and "zip" carries the implication that it has the zipper construction and, in my judgment, the public will understand, or is likely to understand, that the knickers and the overshoes have the same origin. This, according to the settled view of this court, is one of the kinds of "confusion" Congress had in mind when it gave legislative expression to the common law understanding.

This and other courts have frequently held that there is no poverty in the human language justifying the adoption of a term for trade-mark purposes so similar to that of the trade-mark owned and used by another as to be likely to lead to confusion. That appellee seeks to profit by appellant's use of the term "Zipper" is too obvious for serious contention. The rights of the public as well as those of the parties must not be overlooked.

In this particular case the right to register the term "Zip-Knick" without the use of any other words or device in connection therewith is sought by appellee. Appellee also seeks to register the term "Zip-Knick" with the word "Kenilworth" in a parallel block written across the term "Zip-Knick." While this additional matter may lessen the probability of confusion, it certainly does not remove it.

In *B. F. Goodrich Co.* v. *Hockmeyer*, supra, we denied the right of registration to the Zip-On Mfg. Co. for the word "Zip-On" which was to be used for leggings, and men's, women's, and children's knickerbockers, because it would lead to confusion in the trade by reason of appellant's trade-mark use of the word "Zipper." It is difficult for me to harmonize our views in that case with the views of the majority in this one. Moreover this and other courts have always resolved the doubt against the newcomer. *Aunt Jemima Mills Co.* v. *Blair Milling Co.*, 50 App. D. C. 281, 270 Fed. 1021, 286 O. G. 863; *Lambert Pharmacal Co.* v. *Mentho-Listine Chemical Co.*, 47 App. D. C. 197; 247 O. G. 965.

I can not justify granting the right to one to profit by confusion and deny it to another. I think the decision of the Commissioner of Patents should be reversed.

U. S. Court of Customs and Patent Appeals

THE B. F. GOODRICH COMPANY *v.* KENILWORTH MANUFACTURING COMPANY

No. 2,210. Decided April 29, 1930

TRADE-MARKS — SIMILARITY — "ZIP-MIDY" WITH "KENILWORTH" AND "ZIPPER."

The term "Zip-Midy" having superimposed thereon in a panel the word "Kenilworth" as applied to middies and sport shirts *Held* not confusingly similar to the term "Zipper" as applied to boots and overshoes of rubber and fabric.

BLAND, *J.*, dissenting.

APPEAL from the Patent Office. Affirmed.

Messrs. Eakin & Avery and *Mr. Willard D. Eakin* for B. F. Goodrich Co.

Mr. Louis Alexander for Kenilworth Manufacturing Company.

GARRETT, *J.*:

In this case appellant (opposer) has appealed from the decision of the Commissioner of Patents sustaining the action of the Examiner of Interferences dismissing the opposition to the application of appellee for registration as a trade-mark of the compound word "Zip-Midy," having superimposed thereon in a panel-shaped box or elongated rectangle the word "Kenilworth."

Opposer is the owner of the trade-mark registered April 7, 1925, No. 197,090, comprising the word "Zipper" used on boots and overshoes of rubber and fabric. Appellee (applicant) states use on and for "wearing apparel for men, women, and children—namely middies and sport shirts made of knitted and textile fabrics."

We think the case is on all fours with one between the same parties, No. 2,209, heard and decided concurrently herewith wherein the words at issue are "Zipper" and "Zip-Knick."

The only resemblance in the marks themselves is contained in the single syllable "Zip." In the instant case the imposition of the word "Kenilworth" over or upon the larger letters "Zip-Midy" tends to make the resemblance even more remote than that existing between the marks "Zipper" and "Zip-Knick" in plain letters in case 2,209.

We think the marks are entirely dissimilar and that the use by appellee of "Zip-Midy," as proposed, would not be likely to cause confusion in the mind of the public or deceive purchasers and should be admitted to registration.

The decision of the Commissioner is affirmed.

Affirmed.

BLAND, *J.*, dissenting:

This is a companion case to suit No. 2,209 and suit No. 2,211 between the same parties. In suit No. 2,209 the Kenilworth Mfg. Co. was granted registration for the term "Zip-Knick" as applied to certain kinds of men's, women's, and children's knickers, etc. In suit No. 2,211 it was granted the right to register the term "Zip-Over" in connection with the word "Kenilworth" for use on sweaters and sweat shirts and in this case appellee was granted the right to register "Zip-Midy" in connection with the word "Kenilworth" for use on wearing apparel for men, women, and children, including a middy, etc.

For the reasons set out in suit No. 2,209, decided concurrently herewith, I dissent from the views of my associates.

U. S. Court of Customs and Patent Appeals

THE B. F. GOODRICH COMPANY *v.* KENILWORTH MANUFACTURING COMPANY

No. 2,211. Decided April 29, 1930

TRADE-MARKS—"ZIP-OVER" WITH KENILWORTH AND "ZIPPER."

The term "Zip-Over" having imposed thereon in an elongated rectangle the word "Kenilworth" as used upon sweaters and sweat shirts *Held* not confusingly similar to the term "Zipper" as used on boots and overshoes of rubber and fabric.

BLAND, *J.*, dissenting.

APPEAL from the Patent Office. Affirmed.

Messrs. Eakin & Avery and *Mr. Willard D. Eakin* for B. F. Goodrich Co.

Mr. Louis Alexander for Kenilworth Manufacturing Company.

GARRETT, *J.*:

In this case appellee (applicant) sought registration under the Federal Trade-Mark Act of the compound word "Zip-Over," having imposed upon it in an elongated rectangle the word "Kenilworth," for use "for sweaters and sweat shirts."

Appellant (opposer) filed opposition, alleging ownership of the mark "Zipper" for use on "boots and overshoes of rubber and fabric."

The Examiner of Interferences dismissed the opposition and, his decision being affirmed by the Commissioner of Patents, appeal was taken, which brings the matter before us.

The case was heard by us in connection with cases 2,209 and 2,210 between the same parties and all three are being decided contemporaneously.

In view of the Court's decision in *Goodrich Company* v. *Hockmeyer*, 17 C. C. P. A. ——, 394 O. G. 795, recently decided, the instant case is not altogether on all fours with cases 2,209 and 2,210, supra, because "Zip-Over" standing alone has a significance not possessed by either "Zip-Knick" or "Zip-Midy," but is more nearly in the class of the word "Zip-On," which is refused registration by us in the Hockmeyer proceedings. However, as we pointed out in the beginning, appellee is not proposing to register the plain words "Zip-Over," as was proposed with "Zip-On," but has imposed upon them in a panel the word "Kenilworth." This word is so superimposed upon the compound word, or hyphenated phrase, "Zip-Over," that it becomes really the dominant feature of the mark as printed. It seems to us that in this form there is no likelihood of confusion being caused in the mind of the public, or purchasers being deceived. We, therefore, hold that appellee is entitled to the registration sought, and the decision of the Commissioner is affirmed.

BLAND, *J.*, dissenting.

In this case the same parties are involved as were involved in suit 2,209, and in that instance appellee was granted the right of registration of the term "Zip-Knick," with and without the superimposed parallelogram containing the word "Kenilworth." Here the same party was granted the right to register the term "Zip-Over" with the same superimposed word. For the reasons set out in my dissent in suit No. 2,209, I believe that the use of the term "Zip-Over" is more objectionable than the term "Zip-Knick" and registration should be denied. Registration for "Zip-On" was refused by this court in *B. F. Goodrich Co.* v. *Hockmeyer*, (Zip-On Mfg. Co., substituted), suit No. 2,208, decided April 14, 1930.

In another case before us and decided concurrently herewith, suit No. 2,210, the same appellee was granted registration for the term "Zip-Midy." The question necessarily arises as to whether, if appellee

was entitled to register any form of the word "Zip," how many forms is it entitled to.

The decision of the Commissioner should be reversed.

U. S. Court of Customs and Patent Appeals

CHEEK-NEAL COFFEE COMPANY, (MAXWELL HOUSE PRODUCTS CO. INC. SUBSTITUTED,) *v.* HAL DICK MANUFACTURING COMPANY

No. 2,295. Decided April 14, 1930

1. TRADE-MARKS—SAME DESCRIPTIVE PROPERTIES—STATUTE CONSTRUED.
The word "claims" and the phrase "same descriptive properties" as used in section 5 of the Trade-Mark Act of 1905 *Held* synonymous in meaning.

2. SAME—GOODS OF THE SAME DESCRIPTIVE PROPERTIES.
Horse-radish, olive spread, and similar goods *Held* of the same descriptive properties as coffee and tea.

APPEAL from the Patent Office. Reversed.

Mr. Edward S. Rogers, Mr. Allen M. Reed, and *Mr. John S. Prescott* for Cheek-Neal Coffee Company, Maxwell House Products Co. Inc.

Mr. Clarence A. O'Brien, Mr. Charles E. A. Smith, and *Mr. Thomas E. Turpin* for Hal Dick Manufacturing Company.

LENROOT, *J.:*

This is an appeal from a decision of the Commissioner of Patents affirming a decision of the Examiner of Interferences dismissing a notice of opposition in a trade-mark proceeding.

The facts upon which the dismissal is based are stated in the Commissioner's decision as follows:

> The applicant seeks registration of a mark comprising a composite picture including a pictorial representation of a hotel, the words "Maxwell House" appearing above such representation and a slogan "Good to the Last Bite" appearing below such representation of a hotel, the whole matter being enclosed within an oblong border, and used upon horse-radish, olive spread, cranberry jelly, relish spread composed of a mixture of eggs, oil, vinegar and sweet pickles, sweet relish composed of sweet pickles and curry seed, chili sauce, salad dressing, orange marmalade, mustard, tomato catchup, Thousand Island dressing, peanut butter and mayonnaise.
>
> The opposer alleges prior adoption, use and ownership of a trade mark including the pictorial representation of this same hotel and the slogan "Good to the Last Drop," used upon coffee and tea.
>
> Opposer sets forth certain prior registrations of its mark in 1915, 1924, and 1926, and alleges wide advertising of goods under its mark, very extensive sales and the possession of a valuable good will.
>
> A comparison of the two marks shows that the applicant has substantially availed itself of the principal characteristics of the opposer's mark. The representation of the hotel, as adopted by the applicant, includes even the representation of the street car and the horses and vehicles adopted by the opposer. • • •

The ground of dismissal of the opposition was that the goods of the parties possess different descriptive properties, and therefore the opposer, appellant's assignor, having based his notice of opposition wholly upon confusion in trade, did not present a statutory ground of opposition.

The only question necessary for us to determine is whether the goods of the parties are of the same descriptive properties, as that term is used in section 5 of the act of February 20, 1905, as amended.

The construction of the phrase "same descriptive properties" has frequently been before the courts, and many conflicting decisions can be found upon this point.

This court at the present term, in a number of cases, has had occasion to review this question and the conflicting decisions with respect thereto. In the case of *The B. F. Goodrich Company* v. *Clive E. Hockmeyer (Zip-On Manufacturing Co., substituted)*, 17 C. C. P. A. ——, we definitely held, speaking of said section 5, that:

> • • • the language "same descriptive properties" contained in the first *proviso* was intended by the Congress to relate to goods of the same general class; that such language was not intended to be more or less comprehensive than the term "class" used in the first part of the section; that the language of the first *proviso* was intended to state the converse of the mandates of the first part of the section, namely, that a mark by which the goods of the owner of the mark may not be distinguished from other goods of the same class *shall not be registered;* • • •

[1] In other words, this court holds that the word "class" and the phrase "same descriptive properties," as used in said section 5, are synonymous in their meaning.

Applying this construction to the case at bar we have no difficulty in holding that the goods of the parties to which the marks are applied are of the same descriptive properties.

The Century Dictionary defines "class" as follows:

> 4. A number of objects distinguished by common characters from all others, and regarded as a collective unit or group; a collection capable of a general definition; a kind.

While this definition may not be sufficiently comprehensive, it is a correct statement of the common meaning of the word as ordinarily used.

Do the goods of the parties belong to a collection "capable of a general definition?" We think they do. We may take judicial notice of the fact that the goods of both parties are commonly known as groceries, sold in the same stores and to the same class of purchasers.

The word "groceries" is defined in Funk & Wagnalls New Standard Dictionary as follows:

> Household supplies for the table such as are dealt in by grocers.

The Century Dictionary has the following definition of the word:

> 3. General supplies for the table and for household use, as flour, sugar, spices, coffee, etc; • • •

[2] We are clear that coffee and tea, the goods of appellant to which its mark is applied, and horseradish, olive spread, cranberry jelly, relish spread, composed of a mixture of eggs, oil, vinegar, and sweet pickles, sweet relish, composed of sweet pickles and curry seed, chili sauce, salad dressing, orange marmalade, mustard, tomato catchup, Thousand Island dressing, peanut butter, and mayonnaise, the goods of appellee to which its mark is applied, are of the same class; that they possess the same descriptive properties, as that phrase is construed by this court, and that the Commissioner erred in dismissing the notice of opposition of appellant.

The decision of the Commissioner is reversed and the case remanded for further proceedings not inconsistent with the views here expressed.

Reversed.

Patent Suits

[Notices under sec. 4921, R. S., as amended Feb. 18, 1922]

970,812, A. C. Graham, Shoe guide for well casing, filed Feb. 18, 1930, D. C., S. D. Calif. (Los Angeles), Doc. 3911–M, *A. C. Graham* v. *National Supply Co. of California.*

1,031,789, F. W. Harris, Circuit interrupter, D. C., S. D. Calif. (Los Angeles), Doc. N–14–H, *Westinghouse Electric & Mfg. Co.* v. *Kelman Electric & Mfg. Co.* Dismissed Apr. 23, 1929.

1,045,772, H. E. Coffin, Lubricator, D. C., E. D. Wis. (Milwaukee), Doc. 2140, *W. O. Thompson* v. *Rex Accessories Co. et al.* Decree for plaintiff Mar. 12, 1930.

1,046,615, T. F. Litaker, Drill, D. C., S. D. Calif. (Los Angeles), Doc. E P–7–H, *Byron Jackson Pump Co.* v. *Duro Engineering Co.* Dismissed Feb. 6, 1930.

1,094,761, A. Thousand, Autogenous welding outfit, filed Feb. 10, 1930, D. C., N. D. Ill. (E. Div.), Doc. 9652, *L. Campbell, Jr., et al.* v. *The Bastian Blessing Co.*

1,142,361, G. Ornstein, Process of antisepticizing water, filed Mar. 20, 1930, D. C., E. D. Mich. (S. Div.), Doc. 4043, *Wallace & Tiernan Co., Inc.,* v. *The City of Mt. Clemens, Mich.*

1,184,979, H. C. Miller, Flexible binder post for loose-leaf binders, filed Feb. 26, 1930, D. C., N. D. Ill. (E. Div.), Doc. 9675, *Stationers Loose Leaf Co.* v. *Wilson-Jones Co.*

1,212,189, C. F. Cox, Method of gathering glass, filed Mar. 8, 1930, D. C. Md., Doc. E 1663, *Hartford-Empire Co.* v. *Carr-Lowrey Glass Co.*

1,212,840, F. J. Straub, Building block and method of making, filed Mar. 12, 1930, D. C., E. D. Mich. (S. Div.), Doc. 4019, *Crozier-Straub, Inc., et al.* v. *Standard Cinder Units Corp. et al.* Same, filed Feb. 28, 1930, D. C., N. D. Ohio (E. Div.), Doc. 9701, *Crozier-Straub, Inc.,* v. *Northern Concrete Construction Co.*

1,271,529, M. C. Hopkins, Acoustic device, D. C. Del., Doc. E 712, *Lektophone Corp.* v. *Miller Bros. Co.* Patent held valid and infringed Feb. 12, 1930. Same, filed Mar. 11, 1930, D. C., M. D. Pa., Doc. 652, *Lektophone Corp.* v. *Gehringer-Harlacher Co.* Doc. 653, *Lektophone Corp.* v. *Raub Supply Co., Inc.* Doc. 654, *Lektophone Corp.* v. *The Fromar Co.* Doc. 655, *Lektophone Corp.* v. *Novinger Bros., Inc.* Same, filed Feb. 8, 1930, D. C., N. D. Ill. (E. Div.), Doc. 9651, *Lektophone Corp.* v. *Operadio Mfg. Co.*

1,284,607, H. W. Crane, Door-operating lever, D. C. Minn. (4th Div.), Doc. E 535, *Streeter-Amet Weighing & Recording Co. et al.* v. *Campbell Steel Products Co. et al.* Dismissed Mar. 4, 1930.

1,307,734, A. V. Gullborg, Lubricating means, filed Mar. 10, 1930, D. C., N. D. Calif. (San Francisco), Doc. E 2593–S, *Alemite Corp.* v. *M. D. Cohn (Hughes Equipment Co., Inc.).*

1,341,948, F. B. Totman, Portable paving plant, D. C., S. D. Calif. (Los Angeles), Doc. P–56–H, *F. B. Totman et al.* v. *Union Tank & Pipe Co. et al.* Consent decree holding patent valid Nov. 15, 1929.

1,404,568, A. H. Blackburn, Furnace, appeal filed Nov. 27, 1929, C. C. A., 3d Cir., Doc. 4312, *American Engineering Co.* v. *Underfeed Stoker Co.*

1,460,716, B. F. Greer, Book-form savings bank, filed Jan. 31, 1930, D. C. N. J., Doc. E 3985, *B. B. Deitel* v. *F. Kelley Co., Inc., et al.* Same, appeal filed Mar. 15, 1930, C. C. A., 2d Cir., Doc. 10843, *B. B. Deitel* v. *C. H. Chisholm et al.*

1,482,592, C. H. Thordarson, Machine for winding coils, filed Feb. 14, 1930, D. C., N. D. Ill. (E. Div.), Doc. 9668, *Thordarson Electric Mfg. Co.* v. *W. J. Baker.*

1,490,723, L. E. Baer, Display device, filed Mar. 19, 1930, D. C., S. D. N. Y., Doc. E 52/236, *The Baer & Wilde Co.* v. *P. Ginsberg (Globe Novelty House).*

1,542,693, Gordon and Eckstein, Table, filed Mar. 12, 1930, D. C., S. D. N. Y., Doc. E 52/186, *S. Gordon et al.* v. *Crest-Duo, Inc., et al.*

1,544,806, G. C. Chase, Full-cycle stop for calculating machines, D. C., S. D. N. Y., Doc. E 44/91, *Monroe Calculating Machine Co.* v. *Marchant Calculating Machine Co.* Consent decree for plaintiff Mar. 11, 1930.

1,555,820, F. E. Becka, Portable lamp for sewing machines, D. C., N. D. Ohio, (E. Div.), Doc. 3109, *F. E. Becka* v. *White Sewing Machine Corp.* Dismissed Mar. 12, 1930.

1,568,532, B. Riesner, Hood for cooking ranges, filed Mar. 10, 1930, D. C., S. D. N. Y., Doc. E 52/168, *B. Riesner* v. *G. Mayer et al. (Mayer & Kornbau).*

1,609,428, H. Ringel, Clothing receptacle, appeal filed Mar. 7, 1930, C. C. A., 2d Cir., Doc. 10835, *Converters Paper Co.* v. *Roseth Corp.*

1,625,769, A. J. Ersted, Clutch-engaging device, D. C. Oreg. (Portland), Doc. E 8914, *A. J. Ersted* v. *L. H. Hoffman.* Dismissed Mar. 3, 1930.

1,634,032, H. Leoni, Necktie and lining therefor, filed Mar. 17, 1930, D. C., S. D. N. Y., Doc. E 52/218, *Franc-Strohmenger & Cowan, Inc.,* v. *Flex Thred Corp. et al.*

1,645,491, L. J. Leishman, Telegraphophone reproducer, D. C., S. D. Calif. (Los Angeles), Doc. P–38–H, *The Elec-Tru-Tone Corp.* v. *R. B. Yale (Yale Radio Electric Co.).* Consent decree holding patent valid Oct. 28, 1929.

1,701,093, J. S. Zook, Battery hand lamp, filed Mar. 10, 1930, D. C., S. D. N. Y., Doc. E 52/169, *Burgess Battery Co.* v. *U. S. Electric Mfg. Corp.*

1,704,537, G. D. Haines, Tiled wall, filed Feb. 27, 1930, D. C., N. D. Ill., (E. Div.), Doc. 9676, *Porcelain Tile Co.* v. *O. Chamberlin et al.*

1,719,082, H. S. Regar, Method of producing scallops in knitted fabrics, filed Mar. 18, 1930, D. C., S. D. N. Y., Doc. E 52/234, *H. K. Regar & Sons, Inc.,* v. *Scott & Williams, Inc.*

1,726,832, E. H. Hollingshead, Line marker, filed Mar. 17, 1930, D. C., S. D. Tex. (Houston), Doc. 409, *E. H. Hollingshead* v. *R. Mitchell et al.*

1,737,620, E. R. Talbot, Waffle iron, filed Feb. 5, 1930, D. C., N. D. Ill., (E. Div.), Doc. 9650, *Jiffey Mfg. Co.* v. *S. S. Kresge Co. et al.*

1,744,338, A. B. Shaw, Tire valve, filed Mar. 12, 1930, D. C., S. D. Calif. (Los Angeles), Doc. E R–2–J, *D. S. Shippey et al.* v. *Master Valve Mfg. Co. et al.*

1,747,747, O. B. Walters, Blade-controlling device for road maintainers, filed Mar. 10, 1930, D. C., S. D. Iowa (Des Moines), Doc. E 4442, *O. B. Walters* v. *The C. R. Miller Tractor Co.*

Re. 16,253, Fischer and Kristofek, Pencil, appeal filed Mar. 1, 1930, C. C. A., 8th Cir. (St. Louis), Doc. 8850, *Brown & Bigelow* v. *L. F. Dow Co.*

Des. 79,400, C. Morali, Shoe, D. C., S. D. N. Y., Doc. E 51/320, *Delman, Inc.,* v. *Sommers, Inc.* Consent decree for plaintiff Mar. 13, 1930.

Des. 79,678, A. Von Frankenberg, Lamp, filed Mar. 15, 1930, D. C., S. D. N. Y., Doc. E 51/204, *Frankart, Inc.,* v. *Berman Novelty Co., Inc., et al.*

T. M. 186,823, Libby, McNeill & Libby, Fresh, prepared, pickled, and canned meats, filed Feb. 26, 1930, D. C., N. D. Ill., (E. Div.), Doc. 9674, *Libby, McNeill & Libby* v. *Begley Food Products Co.*

Disclaimers

1,460,716.—*Butler F. Greer,* San Francisco, Calif. BOOK-FORM SAVINGS BANK. Patent dated July 3, 1923. Disclaimer filed May 13, 1930, by *Bankers Utilities Company, Inc.,* as licensees not of record who have exclusive right to use for ten years.

Hereby enters this disclaimer to that part of the claims in said specification which is in the following words, to wit:

"1. A book form savings bank comprising a case simulating the proportions of a book, and an envelope covering simulating the binding of the book detachably interlocked with said case.

"2. A savings bank comprising a case formed with slots in the sides thereof, and an envelope covering for said case having tongues disposed thereon to be engaged in said slots whereby the covering is retained on the case.

"3. A book form savings bank comprising a case simulating the proportions of a book, an envelope covering on said case simulating the binding of a book and detachably interlocked with said case, and metallic plates disposed on the corners of said coverings."

"5. A book form savings bank comprising a case formed with slots in the sides thereof, a covering for the said case simulating the binding of a book, and stiffening boards for said cover formed with tongues for engaging said slots."

1,627,456.—*George Rannie Philip*, Northfield, Vt. METHOD OF SAND-BLAST RELIEF CARVING. Patent dated May 3, 1927. Disclaimer filed May 6, 1930, by the assignee, *Cross Brothers Company*.

Hereby disclaims the subject matter of claims 1, 2, 3, 4, 6, and 7.

1,646,404.—*Frederick D. Herbert*, Upper Montclair, N. J. FILTER. Patent dated October 25, 1927. Disclaimer filed May 13, 1930, by the assignee by mesne assignments, *Kearfott Engineering Company, Inc.*

Hereby enters this disclaimer to claim 12 of said patent, which is in the following words, to wit:

"12. In the manufacture of filtering elements for edge filters, the step which comprises lithographing a design of spaced figures upon a face of a filter element to provide spacing projections."

Transfer of Classes 43, 119, and 208

ORDER NO. 3,153.

U. S. PATENT OFFICE, *Washington, May 17, 1930.*

The transfer of the following classes to Division 2 is hereby directed, effective April 15, 1930:

Class 43, Fishing, Trapping, and Vermin Destroying, from Division 62.

Class 119, Animal Husbandry, from Division 38.

Class 208, Velocipedes, from Division 61.

T. E. ROBERTSON,
Commissioner.

Interference Notices

U. S. PATENT OFFICE, *Washington, D. C., May 7, 1930.*

Carl A. Held, his assigns or legal representatives, take notice:

An interference has been declared by this Office between applications for patents filed by Stanley McClatchie, of 2577 Ashton Road, Cleveland Heights, Ohio, and Carl A. Held, of Waverly Place, Farmingdale, N. Y. Counsel for Held states that he does not know the present whereabouts of Held. Notice is hereby given that unless said Held, his assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the interference will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

U. S. PATENT OFFICE, *Washington, D. C., May 7, 1930.*

Herbert Scheel, his assigns or legal representatives, take notice:

An interference having been declared by this Office between the application for patent of Kent E. Keller, of Ava, Ill., and patent granted December 18, 1928, No. 1,695,348, to Herbert Scheel, of 2210 Pacific Avenue, Dallas, Tex., c/o Ferguson Motors Co., and a notice of such declaration sent by registered mail to said Scheel at the said address having been returned by the post office as undeliverable, noitice is hereby given that unless said Scheel, his assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the interference will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

U. S. PATENT OFFICE, *Washington, May 13, 1930.*

Lewis Newman, his assigns or legal representatives, take notice:

An interference having been declared by this Office between the application for patent of Charles Berg, 501 Fifth Ave., New York, N. Y., and Patent No. 1,679,050, granted July 31, 1928, to Lewis Newman, 10118 Adams Ave., and 1064 East 97th St. or 1748 East 22nd St., Cleveland, Ohio, and a notice of such declaration sent by registered mail to said Newman at said addresses having been returned by the post office undeliverable, notice is hereby given that unless said Newman, his assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the interference will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

Notices of Cancellation

U. S. PATENT OFFICE, *Washington, May 3, 1930.*

Anthony J. Trasso, his assigns or legal representatives, take notice:

A cancellation proceeding having been instituted by this office upon the application of The American Products Company of 3265 Colerain Avenue, Cincinnati, Ohio, to effect the cancellation of the trade-mark registration of Anthony J. Trasso, of 35–37 Sixth Avenue, New York, N. Y., No. 146,149, dated August 30, 1921, and the notice of such proceeding sent by registered mail to the said Trasso at the said address having been returned by the post office as undeliverable, notice is hereby given that unless said Trasso, his assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the cancellation will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

U. S. PATENT OFFICE, *Washington, May 9, 1930.*

The San Aprove Company, its assigns or legal representatives, take notice:

A cancellation proceeding having been instituted by this Office upon the application of The American Products Company, of 3265 Colerain Avenue, Cincinnati, Ohio, to effect the cancellation of the trade-mark registration of The San Aprove Company, of 831 Lafayette Boulevard, Detroit, Mich., No. 156,411, dated June 20, 1922, and the notice of such proceeding sent by registered mail to The San Aprove Company at the said address having been returned by the post office as undeliverable, notice is hereby given that unless The San Aprove Company, its assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the cancellation will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

U. S. PATENT OFFICE, *Washington, May 22, 1930.*

Charles Green, his assigns or legal representatives, take notice:

A cancellation proceeding having been instituted by this Office upon the application of The American Products Company, of 3265 Colerain Avenue, Cincinnati, Ohio, to effect the cancellation of the trade-mark registration of Charles Green, of 78 Walker Street, New York, N. Y., No. 115,447, dated February 13, 1917, and the notice of such proceeding sent by registered mail to the said Green at the said address having been returned by the post-office as undeliverable, notice is hereby given that unless said Green, his assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the cancellation will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

TRADE-MARKS

OFFICIAL GAZETTE, JUNE 3, 1930

[VOL. 395. NO. 1]

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this publication.

Marks applied for "under the ten-year proviso" are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 1 of said act, a fee of ten dollars must accompany each notice of opposition.

CLASS 1

Raw or Partly-Prepared Materials

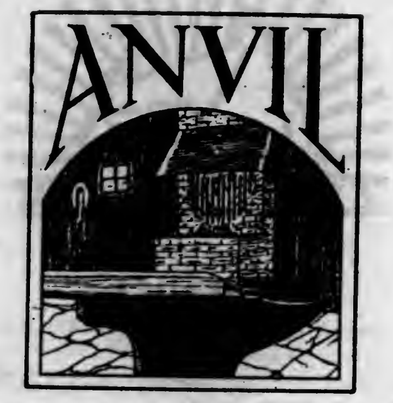
Ser. No. 281,005. KELLY GRAPHITE MILLS, INC., Stockertown, Pa. Filed Mar. 19, 1929.

FACEAMOL

For Facings and Facing Products for Use in Casting Metals.

Claims use since Nov. 1, 1928.

Ser. No. 291,147. RELIABLE COAL & MINING CO., Chicago, Peoria, and Springfield, Ill.; Moberly and Kansas City, Mo.; and Omaha, Nebr. Filed Oct. 16, 1929.



The drawing is lined within the mouth of the forge to indicate the color red.

For Coal.

Claims use since about July 13, 1929.

Ser. No. 297,979. IVAN OSTBERG, doing business as Ostberg Seed Co. (Not Inc.), Chicago, Ill. Filed Mar. 27, 1930.

PALMER PARK

For Lawn Grass Seed.

Claims use since on or about Feb. 1, 1929.

Ser. No. 297,980. IVAN OSTBERG, doing business as Ostberg Seed Co. (Not Inc.), Chicago, Ill. Filed Mar. 27, 1930.

GRANT PARK

For Lawn Grass Seed.

Claims use since on or about Mar. 1, 1929.

Ser. No. 298,276. FLORIDA SPONGE & CHAMOIS CO., New York, N. Y. Filed Apr. 2, 1930.



For Sponges and Chamois.

Claims use since Mar. 1, 1930.

Ser. No. 298,370. BLACK STAR COAL COMPANY, Louisville, Ky. Filed Apr. 4, 1930.

BLACK STAR-HARLAN

The exclusive use of the word "Harlan" is disclaimed except when used with the mark as shown.

For Coal.

Claims use since 1921.

Ser. No. 298,698. A. HOLLANDER & SON, INC., Newark, N. J. Filed Apr. 11, 1930.



For Fur Skins.
Claims use since Apr. 1, 1930.

Ser. No. 298,699. A. HOLLANDER & SON, INC., Newark, N. J. Filed Apr. 11, 1930.



For Fur Skins.
Claims use since June 24, 1929.

Ser. No. 299,047. THE CONSOLIDATION COAL COMPANY, New York, N. Y. Filed Apr. 18, 1930.

Grenadier

For Coal.
Claims use since Apr. 5, 1930.

Ser. No. 299,048. THE CONSOLIDATION COAL COMPANY, New York, N. Y. Filed Apr. 18, 1930.

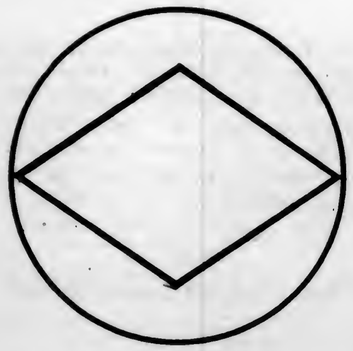
Volunteer

For Coal.
Claims use since Apr. 5, 1930.

CLASS 2

Receptacles

Ser. No. 292,582. KEYES FIBRE COMPANY, INC., Waterville, Me. Filed Nov. 19, 1929.



For Plates and Dishes Made from Paper Pulp or Fibre.
Claims use since July 26, 1928.

Ser. No. 295,846. THE HOOVER COMPANY, North Canton, Ohio. Filed Feb. 10, 1930.

For Dust Filtering and Collecting Containers of Fibrous Material for Suction Cleaners.
Claims use since Aug. 22, 1929.

Ser. No. 295,847. THE HOOVER COMPANY, North Canton, Ohio. Filed Feb. 10, 1930.

HYGIENISAC

For Dust Filtering and Collecting Containers of Fibrous Material for Suction Cleaners.
Claims use since Aug. 22, 1929.

CARNEGIE LIBRARY OF ATLANTA

Ser. No. 299,029. AMERICAN HARD RUBBER COMPANY, New York, N. Y. Filed Apr. 18, 1930.

ACE

For Hard or Soft Rubber, Solid, Lined or Covered Equipment for Chemical Process Industrial Uses—Namely, Steel Tanks for Storing, Pickling and General Purposes, Barrels, Bottles, Ewers, Pails, Storage Tanks, Tank Coverings, and Tank Linings.
Claims use since February, 1921.

CLASS 3

Baggage, Animal Equipments, Portfolios, and Pocketbooks

Ser. No. 294,819. OLIVER TRUNK MANUFACTURING CO., Fort Worth, Tex. Filed Jan. 15, 1930.

Trav-L-Keen

The lining on the drawing is for shading.
For Automobile Trunks, Suitcases, Hatboxes for Luggage Purposes.
Claims use since May 1, 1929.

Ser. No. 297,965. HALBERSTADT & CO. INC., New York, N. Y. Filed Mar. 27, 1930.

PARK LANE

For Ladies' Pocketbooks, Purses, and Empty Vanities of Leather and Textile Fabric, and Combinations Thereof.
Claims use since January, 1930.

Ser. No. 299,397. LORD & TAYLOR, New York, N. Y. Filed Apr. 24, 1930.

CAVALIER

For Purses and Handbags of Leather, Imitation Leather, and/or Silk.
Claims use since on or about Feb. 6, 1930.

CLASS 4

Abrasive, Detergent, and Polishing Materials

Ser. No. 289,668. W. C. DARROW, doing business as Wm. C. Darrow Chemical Company, Kansas City, Mo. Filed Sept. 12, 1929.

Instant

The word "Instant" is disclaimed otherwise than substantially in the form shown in the drawing.
For Cleanser Comprising a Preparation for Dissolving Dirt and Grease with Incidental Water-Softening Properties.
Claims use since Mar. 1, 1927.

Ser. No. 297,392. FRANK C. WIDMANN, doing business as Blue Diamond Soap Co., Cleveland, Ohio. Filed Mar. 15, 1930.

NO PARKING HAND SOAP

The words "Hand Soap" appearing on the drawing of the trade-mark are hereby disclaimed.
For Hand Soap.
Claims use since Feb. 15, 1930.

Ser. No. 297,520. EURIPIDES H. CONSTANTINE, New York, N. Y. Filed Mar. 19, 1930.

El Greco

For Soap.
Claims use since Feb. 15, 1930.

Ser. No. 298,806. LLOYD W. GARRISON, Hollywood, Calif., and Hartford, Conn. Filed Apr. 14, 1930.

ESKIMO

For Shaving Cream.
Claims use since on or about Mar. 1, 1930.

Ser. No. 298,992. HANSON-VAN WINKLE MUNNING COMPANY, Matawan, N. J. Filed Apr. 17, 1930.

JANITE

For Polishing Abrasives.
Claims use since Dec. 13, 1929.

CLASS 6

Chemicals, Medicines, and Pharmaceutical Preparations

Ser. No. 265,227. DAVID MARNELL, doing business as The Egland Poultry Farm, Butler, Pa. Filed Apr. 21, 1928.

MORTI COCCI

No claim is made for the word "Cocci" apart from the mark shown in the drawing.

For Medicine for Coccidiosis in Baby Chicks.

Claims use since Feb. 15, 1927.

Ser. No. 276,456. PARFUMERIE ROGER ET GALLET, SOCIÉTÉ ANONYME, Paris, France. Filed Dec. 8, 1928.

SOLOïL

For Perfumery—Namely, Extracts, Toilet Waters, and Toilet Preparations for Scenting, Beautifying, and Preserving the Skin and Hair.

Claims use since Apr. 3, 1928.

Ser. No. 282,661. LESSER COMPANY, INC., Chicago, Ill. Filed Apr. 19, 1929.



No claim is made to the exclusive use of the words "The Germa Perfumed Beauty and Reducing Bath, Lesser, The Slim Figure Bath," and "Schlankheitsbad" apart from the mark as shown in the drawing.

For Bath Powder.

Claims use since Sept. 16, 1928.

Ser. No. 283,791. EDWARD W. HALLER, doing business as Kao Products Co., Erie, Pa. Filed May 10, 1929.

KAO

For Salve for Use in the Treatment of Burns, Cuts, Bites, Bruises, Sunburn, Chapped Hands, Chilblain, Eczema, Salt Rheum, Pimples, Face Blemishes, and Old Running Sores.

Claims use since July 28, 1928.

Ser. No. 285,638. TULLEY J. POMERANCE, doing business as Karl Laboratories, Detroit, Mich. Filed June 15, 1929.



For Reducing Salts to be Dissolved in the Bath Water for Eliminating Surplus Weight of the Person.

Claims use since May 23, 1929.

Ser. No. 289,906. GEORGE SOTIRIADES, doing business as Ancient Greek Laboratories, Pittsburgh, Pa. Filed Sept. 17, 1929.

"SOTIRION"

For Medicinal Preparations for the Treatment of Ailments Concerning Albumen, Asthma, Gall Trouble, Heart's High Blood Pressure, Heart Trouble and Weak Heart, Kidney Trouble, Hydropsy (Hydrocele), Lung's Inflation, Rheumatism, Sugar Diabetes, First and Second Condition Tuberculosis, and for a Blood Tonic.

Claims use since Dec. 15, 1927.

Ser. No. 290,746. CHARLES DICKENS, Oakland, Calif. Filed Oct. 7, 1929.



Letisine

For Concentrated Extract of Vitamins A, B, C, D, and E.

Claims use since Apr. 1, 1929.

Ser. No. 291,388. HALL BROTHERS (WHITEFIELD) LTD., Whitefield, near Manchester, England. Filed Oct. 22, 1929.

MENTHOLYPTUS

For Medicated Sweetmeats Containing Menthol and Eucalyptus for Use as a Preventative Against Coughs, Colds, Influenza, and Similar Complaints.

Claims use since on or about 1918.

Ser. No. 292,874. OTTO A. HENSEL, doing business as O. A. Hensel Laboratories, Pittsburgh, Pa. Filed Nov. 25, 1929.

KRO-MO-TONE

For Scalp and Hair Treating Pomatum.

Claims use since Sept. 1, 1928.

Ser. No. 293,498. FRANK VIVIAN WEBB, Cincinnati, Ohio. Filed Dec. 10, 1929.



No claim is made to the word "Malva" apart from the other features of the mark shown in the drawing.

For Laxative and Tonic for the Stomach, Liver, and Kidneys.

Claims use since September, 1929.

Ser. No. 293,768. ALICE BAYLY, Los Angeles, Calif. Filed Dec. 17, 1929.

HOLLYWOOD NIGHTS

For Perfume, Lip Sticks, and Rouge.

Claims use since July 19, 1929.

Ser. No. 294,000. GENERAL ELECTRIC COMPANY, Schenectady, N. Y. Filed Dec. 21, 1929.

GE

For Boron Carbide, Soldering Paste, Soldering Flux in Stick Form, Synthetic Resin, and Hand Cream for Application to the Skin.

Claims use since 1924 on soldering paste and soldering stick, June, 1928, on synthetic resin, 1927 on hand cream, 1918 on boron carbide.

Ser. No. 294,568. B. T. BABBITT, INC., New York, N. Y. Filed Jan. 9, 1930.

MENDLESON'S GRANULATED LYE

No claim being made to the exclusive use of the words "Granulated Lye" apart from the mark as shown in the drawing. The name "Mendleson's" has been in actual use as a trade-mark by the applicant, and by those from whom title is derived, for 10 years next preceding Feb. 20, 1905, and such use has been exclusive.

For Lye.

Claims use since Jan. 1, 1907.

Ser. No. 294,569. B. T. BABBITT, INC., New York, N. Y. Filed Jan. 9, 1930.

MENDLESON'S SOLID LYE

No claim being made to the exclusive use of the words "Solid Lye" apart from the mark as shown in the drawing. The name "Mendleson's" has been in actual use as a trade-mark by the applicant, and by those from whom title is derived, for 10 years next preceding Feb. 20, 1905, and such use has been exclusive.

For Lye.

Claims use since Jan. 1, 1907.

Ser. No. 294,570. B. T. BABBITT, INC., New York, N. Y. Filed Jan. 9, 1930.

BABBITT'S COLD WATER DRAIN PIPE SOLVENT

No claim being made to the exclusive use of the words "Cold Water Drain Pipe Solvent" apart from the mark as shown in the drawing. The name "Babbitt" has been in actual use as a trade-mark by the applicant and by those from whom title is derived for 10 years next preceding Feb. 20, 1905, and such use has been exclusive.

For Drain-Pipe Solvent.

Claims use since 1925.

Ser. No. 294,721. E. E. FULTON CO., Chicago, Ill. Filed Jan. 13, 1930.

FULCO

For Floor-Test Solution for Determining Whether or Not a Floor Contains Soap or Alkaline Salts After Washing with Soap and Cleaning with Chemicals, Perfumes, Insecticides, Water Softener, Insect Powder, Sanitary Drain Cleanser, Rat Poison, Sanitary Disinfectant, a Chemical Preparation for Extinguishing Fires, Insect Spray, Deodorant Crystals, Deodorant Cakes, Deodorant Blocks, Deodorant Liquid, Chemical Preparation for Impregnating Fabrics to Prevent the Spreading of Fires, and a Chemical Preparation for Impregnating Fabrics Against Moths and the Spreading of Fires.

Claims use since July, 1928.

Ser. No. 294,795. THE BRADFIELD COMPANY, Atlanta, Ga. Filed Jan. 15, 1930.

BRADFIELD'S VEGETABLE COMPOUND

Applicant is the owner of T. M. Reg. No. 66,899 for the name Bradfield, registered under the 10-year proviso. No claim being made to the exclusive use of the words "Vegetable Compound" apart from the mark as shown in the drawing.

For Preparation for Female Use for the Treatment of Female Disorders.

Claims use since Dec. 11, 1929.

Ser. No. 295,035. GEO. C. MATHEWS, Balaclava, Victoria, Australia. Filed Jan. 21, 1930.

SPRUSO

For Preparations for the Hair.

Claims use since May 15, 1928.

Ser. No. 296,165. THE A. T. WARD MANUFACTURING COMPANY, Cincinnati, Ohio. Filed Feb. 17, 1930.

Prof. A. T. Ward

The name "A. T. Ward" appearing on the drawing is a facsimile of the signature of A. T. Ward, the founder of the business.

For Preparation for the Treatment of Corns, Bunions, and Callouses.

Claims use since June 1, 1914.

Ser. No. 296,357. GEORGE P. PETTY, Wilmington, N. C. Filed Feb. 21, 1930.

PETTY'S QUICK RELIEF

The surname "Petty's" and the words "Quick Relief" appearing in the drawing being disclaimed apart from the mark as shown.

For Liquid Hair Tonic and Hair Restorer.

Claims use since Jan. 15, 1929.

Ser. No. 296,688. BIAGIO CAMPANELLA, doing business as Skalp-O-Rite Products Co., Bronx, N. Y. Filed Mar. 1, 1930.

SKALP-O-RITE

For Hair Tonics, Hair Dressings, Preparations for the Hair, and Scalp Treatments.

Claims use since Dec. 10, 1929.

Ser. No. 296,863. ISIDORE M. GOLDSTEIN, doing business as Pedi-Rest Laboratories, Jamaica, N. Y. Filed Mar. 5, 1930.

PEDI-REST

For Medicinal Liquid Solution for Healing the Feet.

Claims use since Feb. 24, 1930.

Ser. No. 296,928. STANCO INCORPORATED, Wilmington, Del., and New York, N. Y. Filed Mar. 6, 1930.



The drawing is lined for shading purposes only. No claim is made to the representation of a carton or bottle per se and no claim is made to the printed language other than the words "Nujol" and "Stanco Incorporated."

For White Mineral Oil for Chemical, Medicinal, and Pharmaceutical Purposes.

Claims use since Jan 18, 1930.

Ser. No. 296,945. FREDA BECK, doing business as Cherihirst Medical Company, Winnett, Mont. Filed Mar. 7, 1930.

CHERIHIRST

For Medicine for Diabetes, Goitre, and Nervousness.

Claims use since Feb. 6, 1930.

Ser. No. 297,376. THE NATIONAL DRUG CO., Philadelphia, Pa. Filed Mar. 15, 1930.

DIGESTASE

For Composition Composed of Highly-Concentrated Solution of Purified Enzymes Indicated in Cases of Functional Inactivity on the Part of the Alimentary Tract.

Claims use since 1913.

Ser. No. 297,554. UCOLINE PRODUCTS COMPANY, Chicago, Ill. Filed Mar. 19, 1930.

Syrup of Alfemine

No claim being made to the words "Syrup of" apart from the mark shown.

For Medicinal Preparation for Use in the Treatment of Nutrional Anemia.

Claims use since Sept. 6, 1929.

Ser. No. 297,555. UCOLINE PRODUCTS COMPANY, Chicago, Ill. Filed Mar. 19, 1930.

CAPEROID

For Medicinal Preparation for the Treatment of Dental Caries.

Claims use since Aug. 1, 1929.

Ser. No. 297,600. HYNSON, WESTCOTT & DUNNING, INCORPORATED, Baltimore, Md. Filed Mar. 20, 1930.

MERODICEIN

For Antiseptics, Germicides, and Disinfectants.

Claims use since about Mar. 1, 1930.

Ser. No. 297,665. ROBERT O. GARDINER, doing business as Bab's Mfg. Co., Wilmington, Mass. Filed Mar. 21, 1930.

TOPS 'EM ALL BAB B BAB'S BAB B

For Shampoo Preparation and a Tonic Preparation for Removing Dandruff and Restoring the Hair to Its Natural Color.

Claims use since February, 1929.

Ser. No. 297,692. PAIGE AND PAUL, Minneapolis, Minn. Filed Mar. 21, 1930.

PAIGE & PAUL
PURE PRODUCTS

The name "Paige & Paul" and the descriptive words "Pure Products" are disclaimed apart from the other features of the mark shown on the drawing.

For Tablet for Treatment of Ulcers and Disorders of the Stomach.

Claims use since June 1, 1928.

Ser. No. 297,715. JNO. L. HOWERTON, doing business as Howerton Chemical Company, Durham, N. C. Filed Mar. 20, 1930.

Howerton

For Medicinal Preparation for Simple Headache, Neuralgia, and La Grippe Pains.

Claims use since Dec. 1, 1929.

Ser. No. 297,816. MAZELLE & COMPANY, New York, N. Y. Filed Mar. 24, 1930.

BRE-DOL

For Liquid Inhalant to be Used to Relieve Congestion in the Nose and Head Colds.

Claims use since December, 1928.

Ser. No. 297,859. THE CLINICAL LABORATORIES CO., Cleveland, Ohio. Filed Mar. 25, 1930.

FEDREX
NASAL BALM

No claim is herein made to the words "Nasal Balm" apart from the mark as shown.

For Nasal Inhalant for the Relief of Hay Fever, Head Colds, and Nasal Catarrh.

Claims use since about Mar. 14, 1930.

Ser. No. 297,878. C. H. SELICK, INC., New York, N. Y. Filed Mar. 25, 1930.

JUNE MOON
DE VAUCHAY

For Perfumes and Cosmetics—Namely, Cold Cream, Tissue Cream, Foundation Cream, Cleansing Cream, Pore Cream, Skin Lotions, Astringent Balm, Face Powder, Dusting Powder, Talcum Powder, Face and Lip Rouges, Eyebrow Pencils, Face Powder, and Nail Polishes.

Claims use since Feb. 1, 1930.

Ser. No. 297,885. THE AYER COMPANY, Lowell, Mass. Filed Mar. 26, 1930.

Vita-ray

For Cold Cream.

Claims use since abont Mar. 21, 1930.

Ser. No. 297,893. DRAGON MANUFACTURING COMPANY, INC., Chicago, Ill. Filed Mar. 26, 1930.

ENFIN INCENSE
AT LAST

No claim is made to the exclusive use of the word "Incense" apart from the mark shown in the drawing.

For Incense Both in Cones and in Powdered Form.

Claims use since Mar. 3, 1928.

Ser. No. 298,144. BRIAR PRODUCTS CO., INC., Chicago, Ill. Filed Mar. 31, 1930.

BRIAR ROSE
VANKAI

For Hair-Waving Fluid, Hair-Waving Powder, and Shampoo.

Claims use since Dec. 1, 1927.

Ser. No. 298,358. BRONISLAW PREBOL, doing business as B. Prebol Drug Co., Elizabeth, N. J. Filed Apr. 3, 1930.

ŻUBROWINKA

For Preparation of Herbs for Use in Treating Disorders of the Blood, Stomach, Liver, and Kidneys.

Claims use since Aug. 1, 1919.

Ser. No. 298,397. I. G. FARBENINDUSTRIE AKTIENGESELLSCHAFT, Frankfort-on-the-Main, Germany. Filed Apr. 4, 1930.

VINAROL

For Chemical Product for Use as Dressing and Finishing Agents in the Manufacture of Textile Fabrics.

Claims use since about Mar. 1, 1930.

Ser. No. 298,448. JOHN F. M. KEIGHLEY, doing business as Keighley Laboratory, Providence, R. I. Filed Apr. 5, 1930.

K-L

For Astringent and Deodorant Preparation Used After the Extraction of Teeth.

Claims use since March, 1929.

Ser. No. 298,510. PACIFIC WESTERN CHEMICAL CO., Los Angeles, Calif. Filed Apr. 7, 1930.

EGESTOL

For Preparation for Promoting and Safeguarding Intestinal Cleanliness.

Claims use since Dec. 13, 1929.

Ser. No. 298,740. H. TH. BÖHME A. G., Chemnitz, Germany. Filed Apr. 12, 1930.

Propylat

For Chemical Dye Aids—Namely, Moistening Preparations, Thread and Fibre Protecting Preparations, Thread and Fibre Penetrating Preparations, Smoothing Preparations, and Tanning Preparations.

Claims use since Dec. 3, 1929.

Ser. No. 298,764. PHILFUELS COMPANY, Bartlesville, Okla. Filed Apr. 12, 1930.

G

For Liquefied Petroleum Gases.

Claims use since March, 1930.

Ser. No. 298,859. E. R. SQUIBB & SONS, New York, N. Y. Filed Apr. 14, 1930.

ADEX

For Cod-Liver-Oil-Concentrate Tablets.

Claims use since Apr. 1, 1930.

Ser. No. 298,871. MATTHIAS A. WAGNER, doing business as Rengaw Company, Toledo, Ohio. Filed Apr. 14, 1930.

Scalex

For Preparation for External Application for Treatment of Skin Irritations.

Claims use since Apr. 1, 1929.

Ser. No. 298,875. JESS J. ALLISON, Newark, N. J. Filed Apr. 15, 1930.



For Disinfectants, Deodorants.
Claims use since Jan. 1, 1930.

Ser. No. 298,880. THE BARNETT PHARMACAL CO., New Haven, Conn. Filed Apr. 15, 1930.

MASSALGIA

For Emulsion for External Treatment for Muscle and Ligament Pains, Especially Good for Rheumatic Pains.
Claims use since on or about Jan. 10, 1926.

Ser. No. 298,948. LUDWIG MEDICAL CO., Elkhart, Ind. Filed Apr. 16, 1930.

Ci-go

For Medicine for the Treatment of Nasal Catarrh, Hay Fever, Asthma, Colds in the Head, Lagrippe, Sinus Ailments, Diseases of the Nose and Head, Piles, Cuts, Burns, Bruises, Sunburn, and Insect Bites.
Claims use since Mar. 6, 1930.

Ser. No. 299,019. FRED W. SCARFF, doing business as The Fred W. Scarff Co., Chicago, Ill. Filed Apr. 17, 1930.

FRESCA

Applicant is the owner of registered Trade-Mark No. 266,378.
For Face Powder, Body Powder, Bath Salts, Beauty Lotion, Witch-Hazel Lotion, Almond Lotion, Lemon Lotion, Lemon Cleansing Cream, Cold Cream; and a Vanishing-Cream Liniment Used in the Treatment of Tired Feet, Rheumatism, Lumbago, Stiff Neck, Sprains, Bruises, Stiffness, and Soreness of the Muscles After Exercising; Colds in the Chest, and Headache.
Claims use since October, 1917.

Ser. No. 299,087. ROBERT S. SCHER, doing business as Feminaid Laboratories, Baltimore, Md. Filed Apr. 18, 1930.



No claim is made for the name "Dr. Robert's" and the word "Tablets" apart from the mark shown in the drawing.
For Medicine for the Relief of Illness Peculiar to Women.
Claims use since Jan. 1, 1927.

Ser. No. 299,206. JOHN A. MAKER, Duluth, Minn. Filed Apr. 21, 1930.

Neutrozone

For Tooth Paste, Tooth Powders, Mouth Washes, and Mouth-Wash Tablets.
Claims use since Apr. 18, 1930.

Ser. No. 299,230. FRED W. SCARFF, doing business as The Research Laboratories, Chicago, Ill. Filed Apr. 21, 1930.

CALONITE

For Vanishing Cream, a Liquid Preparation for the Treatment of the Diseases of the Scalp, a Preparation in Powder Form for the Treatment of Sallow and Oily Skins and for the Removal of Blackheads, and Cold Cream.
Claims use since 1919.

CLASS 8

Smokers' Articles, Not Including Tobacco Products

Ser. No. 290,990. ART METAL WORKS, INC., Newark, N. J. Filed Oct. 12, 1929.

RONSON
PAK-KAP

The exclusive appropriation of the words "Pak-Kap" is hereby disclaimed except for the fanciful spelling and in the association shown.
For Removable Cap Devices for Cigarette Packages.
Claims use since about Sept. 24, 1929.

CLASS 10

Fertilizers

Ser. No. 280,502. KOPPERS PRODUCTS COMPANY, Pittsburgh, Pa. Filed Mar. 9, 1929.

VELVET LAWN

No claim is made to the exclusive right to use the word "Lawn" apart from the trade-mark shown in the accompanying drawing.
For Fertilizers.
Claims use since Mar. 1, 1929.

CLASS 12

Construction Materials

Ser. No. 282,955. THE TILE-TEX COMPANY, Chicago Heights, Ill. Filed Apr. 24, 1929.

TILE-TEX

Applicant hereby disclaims the right to the registration of the word "Tile" apart from the mark as shown.
For Tile Flooring.
Claims use since Apr. 1, 1929.

Ser. No. 282,956. THE TILE-TEX COMPANY, Chicago Heights, Ill. Filed Apr. 24, 1929.



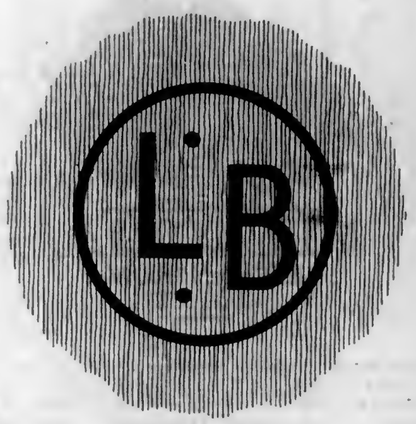
The drawing has been lined to indicate the color red. Applicant hereby disclaims the right to registration of the word "Tile" apart from the mark as shown.
For Tile Flooring.
Claims use since Apr. 1, 1929.

Ser. No. 289,476. WM. H. RANKIN COMPANY, Chicago, Ill. Filed Sept. 7, 1929.

SHELTERITE

For Composition Shingles and Composition Roofing.
Claims use since about Mar. 1, 1929.

Ser. No. 294,751. THE LONG-BELL LUMBER COMPANY, Kansas City, Mo. Filed Jan. 13, 1930.



The circle appearing on the drawing is shaded or lined to indicate a silver color.
For Wooden Posts.
Claims use since Oct. 30, 1929.

Ser. No. 295,877. THE VULROX CORPORATION, St. Louis, Mo. Filed Feb. 10, 1930.

VULROX

For Hydrocarbon Material Useful as an Insulation Against Corrosion and Heat.
Claims use since Sept. 1, 1929.

Ser. No. 297,716. ASH GROVE LIME & PORTLAND CEMENT CO., Kansas City, Mo. Filed Mar. 21, 1930. Under 10-year proviso.

ASH GROVE

For Lime and Cement.
Claims use since 1881.

Ser. No. 297,792. CELLASTIC MANUFACTURING COMPANY, Modesto, Calif. Filed Mar. 24, 1930.

FLEXCELL
EXPANSION
JOINT

The words "Expansion Joint" are disclaimed apart from the mark as shown.

For Expansion Joint Material in Sheet Form for Use Between Adjacent Concrete or Metal Slabs as in Highway and Other Pavements, Bridges, Retaining Walls, Floors, Platforms, and Other Structures.

Claims use since Mar. 11, 1930.

Ser. No. 297,820. CLARENCE R. REX, doing business as Great Lakes Industrial Laboratories, Toledo, Ohio. Filed Mar. 24, 1930.

DOLOROC

For Stucco and Plaster, Mortar and Cement Plastic Construction Materials.

Claims use since July 1, 1926.

Ser. No. 297,824. ARTHUR E. STITZINGER, doing business as Stitzinger Lumber Company, Philadelphia, Pa. Filed Mar. 24, 1930.

"PERMACOLOR"

For Stained Shingles.

Claims use since Dec. 1, 1929.

Ser. No. 297,994. U. S. PHOSPHORIC PRODUCTS CORPORATION, New York, N. Y., and Hillsboro Bay, Tampa, Fla. Filed Mar. 27, 1930.

FLORIGYP

For Blocks, Tiles, and Plaster, All Composed of Gypsum, in Which Gypsum is a Main Ingredient.

Claims use since Dec. 10, 1929.

Ser. No. 298,007. BONDED MATERIALS COMPANY, Louisville, Ky. Filed Mar. 28, 1930.



No exclusive claim is made to the words "Heat, Cold, Rain, Snow, Sleet, Acid Fumes," and "Vibration" apart from the mark shown.

For Roof Coating and Waterproofing Compound.

Claims use since Oct. 16, 1929.

Ser. No. 298,113. NORTH AMERICAN REFRACTORIES COMPANY, Cleveland, Ohio. Filed Mar. 29, 1930.

NARCOSET

For High-Temperature Bonding Mortar.

Claims use since Aug. 1, 1929.

Ser. No. 298,286. THE MOORES LIME COMPANY, Durbin, Ohio. Filed Apr. 2, 1930.

MAG-LI-COOK

For Lime and Lime Products, Particularly Screened Pulverized Quicklime for Use in Connection with the Manufacture of Straw Paper.

Claims use since Mar. 21, 1930.

Ser. No. 298,316. ENTERPRISE PAINT MANUFACTURING CO., Chicago, Ill. Filed Apr. 3, 1930.

Asbestolate

For Plastic Sound-Insulating Composition Applicable to Structural Bodies for the Reduction of Noise and Vibration.

Claims use since Mar. 20, 1930.

CARNEGIE LIBRARY OF ATLANTA

Ser. No. 298,321. GONZALO BOZA & CO. INC., New York, N. Y. Filed Apr. 3, 1930.

"POLLO"

For Galvanized Iron Sheets for Roofing.

Claims use since Feb. 14, 1928.

CLASS 13

Hardware and Plumbing and Steam-Fitting Supplies

Ser. No. 281,892. BENDIX BRAKE COMPANY, Chicago, Ill. Filed Apr. 5, 1929.



For Rivets.

Claims use since Aug. 11, 1925.

Ser. No. 298,394. THE YALE & TOWNE MFG. CO., Stamford, Conn. Filed Dec. 7, 1929.

YALE
JUNIOR

For Builders' Hardware—viz, Butts, Sash Centers, Wrought Escutcheon Plates, Door Closers, Chain Door Fasteners, Drawer Pulls, Casement-Window Fasteners, Sash Fasteners, Cupboard Turns, Door Stops, Casement-Window Adjusters, and Transom Catches.

Claims use since Nov. 1, 1929.

Ser. No. 296,509. CHERRY-BURRELL CORPORATION, Wilmington, Del.; Chicago, Ill.; and Little Falls, N. Y. Filed Feb. 25, 1930.

NoMaR

For Metal Pipes and Pipe Fittings Comprising Right-Angle Bends, T's, Crosses, Elbows, Y's, Unions, Union Nuts, Ferrules, Reducing Ferrules, Caps, Couplings, Coupling Adapters, Bushings, Nipples, Nuts, Valves, Pipe Clamps, Pipe Hangers, Ceiling Plates, Can Fillers, Vat Outlets, Pipe Strainers, and Thermometer Holders, and Thermometer Caps for Applying Thermometers to Pipes and Liquid Heaters and Coolers.

Claims use since Jan. 21, 1930.

Ser. No. 296,751. THE KROGER GROCERY & BAKING CO., Cincinnati, Ohio. Filed Mar. 3, 1930.

Country Club



For Galvanized Ware—Namely, Galvanized Steel Sieves, Sifters, Dustpans, Washbasins, Refrigerator Pans, Baths, Chambers, Teakettles, Dippers, Funnels, Soap Dishes, Trays, Sinks, and Screens.

Claims use since July 1, 1929.

CLASS 14

Metals and Metal Castings and Forgings

Ser. No. 289,400. DÜRENER METALLWERKE AKTIEN-GESELLSCHAFT, Duren, Germany. Filed Sept. 6, 1929.

DURALPLAT

For Aluminium Alloys Containing Magnesium.

Claims use since May 7, 1929.

Ser. No. 298,311. CENTRAL STEEL & WIRE COMPANY, Chicago, Ill. Filed Apr. 3, 1930.

SWEDOX

For Welding Rods and Welding Wire.

Claims use since 1909.

CLASS 16

Paints and Painters' Materials

Ser. No. 277,230. UNITED STATES GYPSUM COMPANY, Chicago, Ill. Filed Dec. 26, 1928.

+EM+BEL+LO+

For Plastic Wall Coverings in the Nature of Paint.

Claims use since Sept. 27, 1928.

Ser. No. 295,464. CHURCHILL MFG. CO., Sioux City, Iowa. Filed Feb. 1, 1930.



No claim is made to the exclusive right to the words "Floor Finish" apart from the other features of the mark as shown.

For Wax and Gum Preparation for Surface Finishing of Floors and Other Woodwork.

Claims use since Jan. 1, 1929.

Ser. No. 297,956. JOHN P. BRYANT, doing business as Autoil Soapolish Company, Not Inc., Chicago, Ill. Filed Mar. 27, 1930.

Autoil

For Polishing and Cleaning Compound for Automobiles, Furniture, and Painted, Varnished, and Other Surfaces.

Claims use since Feb. 8, 1930.

Ser. No. 299,096. TALENS & SON, INC., Irvington, N. J. Filed Apr. 18, 1930.

ORPI

For Oil and Water Colors.

Claims use since Mar. 1, 1930.

CLASS 17

Tobacco Products

Ser. No. 296,529. E. A. KLINE & CO., INC., Passaic, N. J., and New York, N. Y. Filed Feb. 26, 1930.



The portrait shown being that of the dead composer Giuseppi Verdi, and no claim of exclusive right to the use of the word "Product" being made apart from the mark as shown in the accompanying drawing.

For Cigars, Cheroots, and Little Cigars.

Claims use since January, 1913.

Ser. No. 298,976. ALBERT BREITUNG, Chicago, Ill. Filed Apr. 17, 1930.

ALTADENA

For Cigars.

Claims use since Mar. 8, 1906.

CLASS 19

Vehicles, Not Including Engines

Ser. No. 299,034. AMERICAN HARD RUBBER COMPANY, Hempstead and New York, N. Y. Filed Apr. 18, 1930.

ACE

For Hard or Soft Rubber, Solid, Lined, or Covered Equipment for Chemical-Process Industrial Uses—Namely, Tank Cars.

Claims use since about October, 1929.

CLASS 21

Electrical Apparatus, Machines, and Supplies

Ser. No. 298,775. AMERICAN BRAIDING COMPANY, Holyoke, Mass. Filed Apr. 14, 1930.

BLUE STREAK

For Insulated Radioantennæ.

Claims use since Feb. 1, 1929.

CLASS 22

Games, Toys, and Sporting Goods

Ser. No. 296,721. SUNS SPORTING GOODS CO., INC., New York, N. Y. Filed Mar. 1, 1930.



For a Full and Complete Line of Sporting and Athletic Goods—Namely, Baseball Material—Namely, Baseballs, Baseball Gloves, Baseball Bats, Bases, Chest Protectors, Leg Guards, Masks; Tennis Rackets and Accessories—Namely, Tennis Balls, Tennis Markers, Tennis Nets, Tennis Rackets, Tennis Posts, Tennis-Racket Covers; Golf Clubs, Footballs, Basket Balls, Soccer Balls, Ice Skates, and Gymnasium Supplies—Namely, Medicine Balls, Striking Bags, Striking-Bag Gloves, Handball Gloves, Boxing Gloves, Boxing Helmets, Football Helmets, Football Shoulder Pads, and Golf Bags, and Skis.

Claims use since Sept. 3, 1928.

Ser. No. 298,360. LEO SCHLESINGER COMPANY INC., New York, N. Y. Filed Apr. 3, 1930.

SCOROLL

For Devices for Use in Playing the Game of Bridge—Namely, a Score-Pad-Holding Device, Pads Therefor, and Score Cards.

Claims use since Mar. 4, 1930.

Ser. No. 298,839. O. MUSTAD & SÖN, Oslo, Norway. Filed Apr. 14, 1930.



All of the notation shown on the drawing except the words "Mustad, Viking, Key," and "O. Mustad & Sön" is disclaimed apart from the other features of the mark as shown.

For Fishhooks.

Claims use since October, 1929.

Ser. No. 299,097. THE UNITED STATES PLAYING CARD COMPANY, East Norwood, Cincinnati, Ohio. Filed Apr. 18, 1930.

BEAUX ARTS

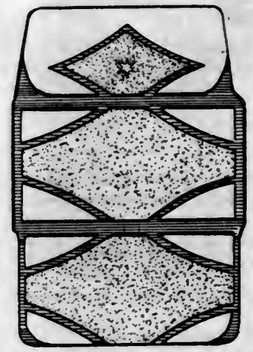
For Playing Cards.

Claims use since Mar. 11, 1930.

CLASS 23

Cutlery, Machinery, and Tools, and Parts Thereof

Ser. No. 271,827. ROTH-BÜCHNER AKTIENGESELLSCHAFT, Berlin-Tempelhof, Germany. Filed Aug. 31, 1928.



The crosshatchings are only illustrated for the purpose of differentiating light and dark coloring and are not intended to indicate particular colors.

For Cutlery—Namely, Safety Razors, Blades Therefor, Shearing Machines, and Hair Clippers.

Claims use since Dec. 16, 1926.

Ser. No. 294,237. OLIVER FARM EQUIPMENT COMPANY, Chicago, Ill. Filed Dec. 30, 1929.



The official color lining is used in the drawing to indicate the colors red, green, gold, and gray.

For Tractors and Parts Thereof.

Claims use since Nov. 8, 1929.

Ser. No. 294,528. DAVID HELLER, doing business as Bernard & Heller, New York, N. Y. Filed Jan. 8, 1930.

MONEY-MAKING

For Machines Made to Specification and for Use in Quantity Production.

Claims use since Oct. 15, 1929.

Ser. No. 295,701. ULLMAN ALUMINUM DIVISION, INC., New York, N. Y. Filed Feb. 6, 1930.

GOLDEN GATE

For Mechanical Fruit-Juice Extractors.

Claims use since about Jan. 10, 1929.

Ser. No. 296,173. BROGDEX COMPANY, Winter Haven, Fla., and Los Angeles, Calif. Filed Feb. 18, 1930.

BROGDEX

For Fruit Treating and Handling Machinery, Including Washers, Cleaners, Polishers, Combined Polishers and Composition Appliers, Conveyors, Soaking Tanks, and Elevators.
Claims use since May 25, 1929.

Ser. No. 298,446. THE HARTFORD STEEL BALL COMPANY, Hartford, Conn. Filed Apr. 5, 1930.

"SILVERGLEAM"

For Mixture of Steel Balls and Pins for Polishing Silverware.
Claims use since Nov. 5, 1929.

CLASS 25

Locks and Safes

Ser. No. 296,417. THE GENERAL FIREPROOFING COMPANY, Youngstown, Ohio. Filed Feb. 24, 1930.

GF Allsteel

No claim is made to the name "Allsteel" apart from the mark shown in the drawing.
For Safes, Filing Safes, Note Cases, and Bond Boxes, Said Note Cases and Bond Boxes being Provided with Covers and Locks.
Claims use since July 1, 1927.

Ser. No. 296,840. THE YALE & TOWNE MFG. CO., Stamford, Conn. Filed Mar. 4, 1930.

YALE

For Locks, Padlocks, Rim Latches, Lock Sets, Chest Locks, Lock Cylinders, Mortise Locks, Barrel Bolts, Bolts, Foot Bolts, Chain Bolts, Surface Bolts, Flush Bolts, Cupboard Turns, Cupboard Catches, Dutch-Door Bolts, Dutch-Door Quadrants, Elbow Catches, Lever Latches, and Parts Thereof, Keys, and Key Blanks.
Claims use since Feb. 1, 1930.

CLASS 26

Measuring and Scientific Appliances

Ser. No. 290,716. NATIONAL SELECTOGRAPH CORPORATION, San Francisco, Calif. Filed Oct. 5, 1929.

SELECTOGRAPH

For Office Machines for the Mechanical Selection of Cards, Ledger Sheets, Stencils, Addressing Plates, Letters, Letter Folders, and General Office Records from Arranged Files.
Claims use since 1918.

Ser. No. 297,219. WESTERN ELECTRIC COMPANY, INCORPORATED, New York, N. Y. Filed Mar. 12, 1930.

Western Electric SOUND SYSTEM — The VOICE of ACTION

Applicant disclaims the words "Sound System" apart from the mark as shown on the drawing.
For Sound-Picture Apparatus—Namely, Apparatus for Recording and Reproducing Sound and Light Effects and Apparatus for Recording Sound Effects Upon and Reproducing Sound Effects from Films and Parts Thereof—Namely, Amplifiers, Photo-Electric Cells, Adapters for Adapting Projector Heads to Sound-Reproducer Sets, Electromagnetic Pick-Ups, Sound Gate Consisting of an Apertured Plate and Pressure Pad, Turntables, Equalizers and Attenuators, Bases, Mounting Brackets, Cable Reels, Camera Drives, Chains Limited to Recording and Reproducing Machines, Shaft Couplings, Sensitometers, Densitometers, Projector Drives, Film Guides, Film-Recording Machines, Film-Reproducing Attachments, Flexible Shafting, Gain Sets Including Potentiometers, Noise-Measuring Sets, Light Valves, Light-Valve Ribbon-Stringing Jigs, Film Magazines, Vibration-Absorbing Drives for Film-Reproducing Sprockets, for Disc Reproducing Turntables, and for Film-Recording Sprockets, Duplicate-Film Printers, Racks, Shaftings, Sound Units Comprising a Source of Light, a Lens Tube, Drive Sprockets, an Apertured Film Guide and a Photo-Electric Cell, Take-Up Pulleys, and Trunks for Apparatus Consisting of the Necessary Equipment for Sound-Picture Reproduction, a Portion of the Apparatus Being Usable While in the Trunk by Means of Switching Connections Mounted on the Trunk.
Claims use since Mar. 11, 1929.

Ser. No. 297,942. STANDARD GAGE COMPANY, INC., Poughkeepsie, N. Y. Filed Mar. 26, 1930.

"MIDGET"

For Snap Gages.
Claims use since Mar. 1, 1930.

Ser. No. 298,597. THE STATES COMPANY, doing business as Stat-Amatic Instrument and Appliance Company, Hartford, Conn. Filed Apr. 9, 1930.

STAT-AMATIC

For Thermostat-Controlled Temperature Regulating Apparatus and Parts Thereof.
Claims use since Feb. 1, 1929.

CLASS 29

Brooms, Brushes, and Dusters

Ser. No. 294,023. CLARENCE J. OSTDIEK, doing business as American Appliance Company, Minneapolis, Minn. Filed Dec. 23, 1929.

DUSTMASTER

For Mops (Floor and Dust.)
Claims use since on or about Dec. 1, 1928.

Ser. No. 297,244. DEAUVILLE SPECIALITY CORPORATION, New York, N. Y. Filed Mar. 13, 1930.

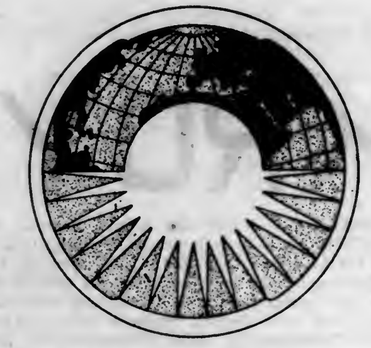
EVER-SWEET

For Rubber Wash Cloths.
Claims use since Feb. 10, 1930.

CLASS 31

Filters and Refrigerators

Ser. No. 285,543. AKTIEBOLAGET ELEKTROLUX, Stockholm, Sweden. Filed June 14, 1929.



For Filters.
Claims use since January, 1927.

CLASS 32

Furniture and Upholstery

Ser. No. 283,966. NUFOLD FURNITURE COMPANY, Chicago, Ill., assignor to National Enameling & Stamping Co. Inc., Milwaukee, Wis. Filed May 13, 1929.

NUFOLD

For Tables and Folding Chairs for Household and Office Use.
Claims use since July 20, 1928.

Ser. No. 297,103. CHARLES TUTEUR, doing business as Charles Tuteur Co., Chicago, Ill. Filed Mar. 10, 1930.

NU-Y-DEA

For Smoking Stands in the Nature of Furniture; Flower Stands, Stools of Metal, Metal Benches.
Claims use since on or about Feb. 1, 1930.

Ser. No. 297,684. LEGGETT & PLATT SPRING BED & MFG. COMPANY, Carthage, Mo. and Louisville, Ky. Filed Mar. 21, 1930.

LURE & SLEEP

For Spring Beds.
Claims use since January, 1921.

Ser. No. 297,685. LEGGETT & PLATT SPRING BED & MFG. COMPANY, Carthage, Mo., and Louisville, Ky. Filed Mar. 21, 1930.

The Main Springs of Rest

For Spring Beds.
Claims use since January, 1921.

Ser. No. 298,745. FEDERAL METAL BED COMPANY, Hoboken, N. J. Filed Apr. 12, 1930.

SLUMBEREST

For Bed Springs.
Claims use since Jan. 21, 1930.

Ser. No. 299,240. L. A. YOUNG SPRING AND WIRE CORPORATION, Detroit, Mich., and Oakland, Calif. Filed Apr. 21, 1930.

STAYOUNG

For Spring Mattresses and Bed Springs.
Claims use since Feb. 1, 1927.

CLASS 33

Glassware

Ser. No. 299,065. THE KROGER GROCERY & BAKING CO., Cincinnati, Ohio. Filed Apr. 18, 1930.

Country Club



For Glassware.
Claims use since Jan. 2, 1930.

Ser. No. 299,180. CANTON GLASS COMPANY, Marion, Ind. Filed Apr. 21, 1930.

FUTURA

For Glassware.
Claims use since Mar. 24, 1930.

CLASS 34

Heating, Lighting, and Ventilating Apparatus, Not Including Electrical Apparatus

Ser. No. 283,542. W. B. BASTIAN MANUFACTURING CO., Los Angeles, Calif. Filed May 6, 1929.



The drawing is lined for blue and gold.
For Gas Water Heaters.
Claims use since 1921.

Ser. No. 296,371. TUTTLE & BAILEY MANUFACTURING COMPANY, New York, N. Y. Filed Feb. 21, 1930.

FERRONIQUE

For Heating and Ventilating Grilles.
Claims use since Feb. 4, 1930.

Ser. No. 296,392. BRANDON STOVE COMPANY, Little Rock, Ark. Filed Feb. 24, 1930.



The exclusive right to the use of the words "Bakes Better" is not claimed apart from the mark as shown.
For Wood, Coal, Coke, Oil, Vapor, and Gas Stoves.
Claims use since spring of 1915.

Ser. No. 297,729. EVERETT E. DEHART, doing business as Hotentot Oil Burner Mfg. Co., Des Moines, Iowa. Filed Mar. 22, 1930.

HOTENTOT

For Oil Burners.
Claims use since Nov. 12, 1926.

Ser. No. 298,059. YORK HEATING & VENTILATING CORPORATION, Bridgeport and Philadelphia, Pa. Filed Mar. 28, 1930.

KROY

For Radiators for Direct and Indirect Heating, Heat-Diffusing Units for Indirect Heating Comprising Coils and Casings Arranged for Circulation of Air About the Coils, Fans, Blowers, Devices for Circulating Air Over Heating Surfaces, Air-Cooling Apparatus Wherein Air is Mechanically Circulated Over Cooling Surfaces, Air-Conditioning Apparatus Comprising a Casing Having an Air Intake and a Spray Chamber Through Which the Air Passes in Contact with Regulated Water Spray and Devices for Circulating the Air Through the Casing.
Claims use since July 10, 1928.

Ser. No. 299,032. AMERICAN HARD RUBBER COMPANY, New York, N. Y. Filed Apr. 18, 1930.



For Hard or Soft Rubber, Solid, Lined, or Covered Equipment for Chemical-Process Industrial Uses—Namely, Fans.
Claims use since December, 1920.

CLASS 35

Belting, Hose, Machinery Packing, and Non-metallic Tires

Ser. No. 298,417. TROPIC WELD INC., Minneapolis, Minn. Filed Apr. 4, 1930.

Tropic Weld

For Tube Patches Made of Rubber.
Claims use since Jan. 6, 1930.

Ser. No. 299,197. MARK O. HAMMOND, doing business as Mohbestos Brake Lining Company, Akron, Ohio. Filed Apr. 21, 1930.

MOHBESTOS

For Brake Linings.
Claims use since Jan. 1, 1925.

CLASS 37

Paper and Stationery

Ser. No. 294,184. JAMES W. SHAW, doing business as Guardure Company, Chicago, Ill. Filed Dec. 28, 1929.

GUARDURE

For Blank Checks Sold to the Trade as Such.
Claims use since Oct. 22, 1926.

Ser. No. 295,829. THE BEVERIDGE PAPER COMPANY, Indianapolis, Ind. Filed Feb. 10, 1930.

SHADOWART

For Cover Paper, Calendar Stock, Photomount, Composition-Book Cover, Tablet Cover, Loose-Leaf-Binder Stock, Writing Paper, Papeterie, Greeting-Card Stock, and Box-Cover Stock.
Claims use since Sept. 1, 1929.

Ser. No. 296,373. UNITED STATES PENCIL CO., INC., New York, N. Y. Filed Feb. 21, 1930.



The trade-mark consists of a brown circumferential band on the tip of the pencil.
For Lead Pencils.
Claims use since July 1, 1928.

Ser. No. 297,094. NORTHWESTERN SUPPLY HOUSE, Chicago, Ill. Filed Mar. 10, 1930.

LANDO

For Articles Customarily Put Up and Sold by a Stationery Store, Particularly Loose-Leaf Fillers, Loose-Leaf Binders, Crepe Paper, Composition Books, and Envelopes.
Claims use since Dec. 1, 1929.

Ser. No. 297,265. NEENAH PAPER COMPANY, Neenah, Wis. Filed Mar. 13, 1930.



For Bond, Ledger, Writing, Map, and Index Paper.
Claims use since July 1, 1915.

Ser. No. 297,486. GEO. W. MILLAR & CO. INC., New York, N. Y. Filed Mar. 18, 1930.



No claim being made to the exclusive use of "Wrapping" apart from the mark shown.
For Wrapping Paper.
Claims use since Apr. 14, 1929.

Ser. No. 298,438. FORT HOWARD PAPER COMPANY, Green Bay, Wis. Filed Apr. 5, 1930.

HELLO WORLD

For Toilet Paper.
Claims use since Mar. 7, 1930.

Ser. No. 298,439. FORT HOWARD PAPER COMPANY, Green Bay, Wis. Filed Apr. 5, 1930.

MINUTE MAN

For Toilet Paper.
Claims use since Mar. 7, 1930.

CLASS 38

Prints and Publications

Ser. No. 282,406. GERNSBACK PUBLICATIONS, INC., New York, N. Y. Filed Apr. 15, 1929.

AIR WONDER • STORIES

For Monthly Publication.
Claims use since Apr. 9, 1929.

Ser. No. 291,187. CHRISTY WALSH, New York, N. Y. Filed Oct. 17, 1929.

The All America Board of Football

For Heading for a Series of Articles.
Claims use since Sept. 22, 1929.

Ser. No. 293,842. THE MCCALL COMPANY, New York, N. Y. Filed Dec. 18, 1929.

Redbook

For Fiction Magazine Published Monthly.
Claims use since May, 1903.

Ser. No. 294,835. AMERICAN PAINT JOURNAL COMPANY, St. Louis, Mo. Filed Jan. 16, 1930.

AMERICAN PAINTER & DECORATOR

For Periodicals.
Claims use since January, 1924.

Ser. No. 296,430. ERNEST W. MATTHEWS, Rock Island, Ill. Filed Feb. 24, 1930.

ZEPPIE

For Newspaper Page, Feature, or Section.
Claims use since Feb. 1, 1930.

Ser. No. 297,740. INTERNATIONAL ASSOCIATION OF LIONS CLUBS, Chicago, Ill. Filed Mar. 22, 1930.

The Lion

For Periodical.
Claims use since April, 1926.

Ser. No. 297,787. PRESS-UNION PUBLISHING COMPANY, Atlantic City, N. J. Filed Mar. 14, 1930.

Atlantic City Press

For Morning Daily and Sunday Morning Newspaper.
Claims use since Mar. 4, 1895, on daily newspaper, and since May 24, 1925, on Sunday newspaper.

Ser. No. 298,111. NEWSPAPER FEATURE SERVICE, INC., New York, N. Y. Filed Mar. 29, 1930.

SUNDAY FOLLIES

For Newspaper Section.
Claims use since Jan. 22, 1930.

Ser. No. 298,196. R. H. MOWER, San Francisco, Calif. Filed Mar. 31, 1930.

SUNSET QUALITY

No claim is made to the word "Quality" apart from the mark shown in the drawing.
For Canceled and Uncanceled Foreign and Domestic Postage Stamps.
Claims use since Jan. 3, 1920.

Ser. No. 298,251. NATIONAL ASSOCIATION OF WASTE MATERIAL DEALERS, INC., New York, N. Y. Filed Apr. 1, 1930.



For Periodicals.
Claims use since Jan. 16, 1930.

Ser. No. 298,259. STATE TITLE AND MORTGAGE COMPANY, New York, N. Y. Filed Apr. 1, 1930.

THE MORTGAGE BANKER

For Publication Issued Monthly.
Claims use since November, 1929.

Ser. No. 298,626. GOOD STORY MAGAZINE COMPANY, INC., New York, N. Y. Filed Apr. 10, 1930.

Courtroom Stories

For Monthly Magazine.
Claims use since Mar. 27, 1930.

Ser. No. 298,773. UNITED PUBLISHING COMPANY, Kansas City, Mo. Filed Apr. 12, 1930.

The HOME Friend MAGAZNE

For Periodical.
Claims use since April, 1903.

Ser. No. 298,802. EVANS-WINTER-HEBB, INC., Detroit, Mich. Filed Apr. 14, 1930.

THE THREE CIRCLES

For Printed Publications or House Organs.
Claims use since July, 1919.

Ser. No. 298,831. MEREDITH PUBLISHING COMPANY, Des Moines, Iowa. Filed Apr. 14, 1930.

Sprouters' Garden Clubs

For Publication Printed at Intermittent Intervals.
Claims use since June, 1929.

Ser. No. 298,832. MEREDITH PUBLISHING COMPANY, Des Moines, Iowa. Filed Apr. 14, 1930.

Climbers' Garden Clubs

For Publication Printed at Intermittent Intervals.
Claims use since June, 1929.

Ser. No. 298,833. MEREDITH PUBLISHING COMPANY, Des Moines, Iowa. Filed Apr. 14, 1930.

Master Garden Clubs

For Publication Printed at Intermittent Intervals.
Claims use since June, 1929.

Ser. No. 298,834. MEREDITH PUBLISHING COMPANY, Des Moines, Iowa. Filed Apr. 14, 1930.

The Kinder Garden Clubs

For Publication Printed at Intermittent Intervals.
Claims use since June, 1929.

Ser. No. 298,835. MEREDITH PUBLISHING COMPANY, Des Moines, Iowa. Filed Apr. 14, 1930.

Junior Garden Clubs of America

For Publication Printed at Intermittent Intervals.
Claims use since June, 1929.

Ser. No. 298,930. BUFFALO EVENING NEWS, Buffalo, N. Y. Filed Apr. 16, 1930.

Kitchen Counsel

For Newspaper Column Containing Kitchen Counsel Published Daily.
Claims use since Jan. 1, 1929.

Ser. No. 299,072. MACFADDEN PUBLICATIONS, INC., New York, N. Y. Filed Apr. 18, 1930.

MIND AND BODY

For Monthly Magazine.
Claims use since Apr. 10, 1930.

Ser. No. 299,148. THE NATIONAL CANNERS ASSOCIATION, Washington, D. C. Filed Apr. 19, 1930.

Canny Cook

For Periodical.
Claims use since Mar. 24, 1930.

Ser. No. 299,149. THE NATIONAL CANNERS ASSOCIATION, Washington, D. C. Filed Apr. 19, 1930.



For Periodical.
Claims use since Mar. 24, 1930.

Ser. No. 299,184. CLUB & CAMPUS PUBLISHING CO., Chicago, Ill. Filed Apr. 21, 1930.



For Quarterly Publications.
Claims use since Mar. 25, 1929.

Ser. No. 299,193. THE GAGE PUBLISHING COMPANY, INC., New York, N. Y. Filed Apr. 21, 1930.

ELECTRICAL SPECIFICATIONS

For Periodical.
Claims use since Mar. 25, 1930.

Ser. No. 299,244. ALPHA EPSILON PI FRATERNITY, INC., New York, N. Y. Filed Apr. 22, 1930.



For Quarterly-Published Publication.
Claims use since November, 1912.

Ser. No. 299,256. CENTRAL PRESS ASSOCIATION, INC., New York, N. Y. Filed Apr. 22, 1930.

BIG SISTER

For Newspaper Cartoons.
Claims use since June 4, 1928.

Ser. No. 299,257. CENTRAL PRESS ASSOCIATION, INC., New York, N. Y. Filed Apr. 22, 1930.

ETTA KETT

For Newspaper Cartoons.
Claims use since Feb. 1, 1926.

Ser. No. 299,258. CENTRAL PRESS ASSOCIATION, INC., New York, N. Y. Filed Apr. 22, 1930.

GOOFEY MOVIES

For Newspaper Cartoons.
Claims use since Sept. 1, 1927.

Ser. No. 299,260. CENTRAL PRESS ASSOCIATION, INC., New York, N. Y. Filed Apr. 22, 1930.

MUGGS McGINNIS

For Newspaper Cartoons.
Claims use since Feb. 4, 1929.

Ser. No. 299,262. ARTHUR JOSEPH DE MARS, Washington, D. C. Filed Apr. 22, 1930.

UNIVERSAL INSURANCE EXCHANGE ADVISER

For Periodical Publication.
Claims use since Apr. 21, 1930.

Ser. No. 299,266. KING FEATURES SYNDICATE, INC., New York, N. Y. Filed Apr. 22, 1930.

THE FEATURE BLUE BOOK

For Periodical Publication.
Claims use since Apr. 9, 1930.

Ser. No. 299,352. TOP NOTES, INC., New York, N. Y. Filed Apr. 23, 1930.

TOP NOTES

For Periodical.
Claims use since Oct. 19, 1929.

Ser. No. 299,483. MILTON BRADLEY COMPANY, Springfield, Mass. Filed Apr. 26, 1930.

AMERICAN CHILDHOOD

For Magazines.
Claims use since April, 1926.

Ser. No. 299,496. THE CONDE NAST PUBLICATIONS, INC., New York, N. Y. Filed Apr. 26, 1930.

Fashion Points

For Periodical.
Claims use since Nov. 1, 1929.

Ser. No. 299,551. BULLETIN PRINTING COMPANY, Walla Walla, Wash. Filed Apr. 28, 1930.

Walla Walla Daily Bulletin

For Daily Newspaper.
Claims use since Jan. 6, 1924.

CLASS 39

Clothing

Ser. No. 263,079. ELLIOTT KNITTING MILLS, INC., Hickory, N. C. Filed Mar. 13, 1928.





For Hosiery.
Claims use since about Oct. 4, 1926.

Ser. No. 276,707. THE COSHOCTON GLOVE CO., Coshocton, Ohio. Filed Dec. 14, 1928.

BEAR KAT

For Gloves and Mittens of Fabric, Leather, Knitted Material, and Combinations Thereof.
Claims use since October, 1927.

Ser. No. 280,473. S. COHEN & CO., New York, N. Y. Filed Mar. 9, 1929.

Vianne

For Pajamas, Coolie Coats, and Nightgowns.
Claims use since Jan. 1, 1929.

Ser. No. 281,490. L. GREIF & BRO. INCORPORATED, Baltimore, Md. Filed Mar. 28, 1929.

Sturdy Thirty-fives

No claim is made to the hyphenated word "Thirty-fives" apart from the mark as shown on the drawing.
For Topcoats, Overcoats, Coats, Vests, Trousers, and Knickerbockers for Men, Youths, and Boys.
Claims use since Mar. 25, 1929.

Ser. No. 287,129. FOREST CITY MFG. CO., St. Louis, Mo. Filed July 15, 1929.



No exclusive claim as a technical trade-mark being made to the words "Sun-Tan" apart from the mark shown.
For Dresses, Jackets, and Coats for Women and Girls.
Claims use since Jan. 10, 1929.

Ser. No. 292,638. THE SERVUS RUBBER COMPANY, Rock Island, Ill. Filed Nov. 20, 1929.



For Boots and Shoes Made Wholly of Rubber or Partly of Rubber and Partly of Fabric.
Claims use since Oct. 6, 1923.

Ser. No. 293,922. FORD NAYLOR, INC., New York, N. Y. Filed Dec. 20, 1929.

GRAMPIAN

For Suits and Overcoats for Men and Young Men.
Claims use since September, 1928.

Ser. No. 295,215. HYMAN HENDEL, doing business as The Utility Printing Co., New York, N. Y. Filed Jan. 25, 1930.

Gee-Whiz

For Men's and Boys' Neckties, Mufflers, and Handkerchiefs in Sets.
Claims use since Dec. 15, 1929.

Ser. No. 295,239. BERNHARD SCHRAG & CO. INC., New York, N. Y. Filed Jan. 25, 1930.

METROPOLITAN LIVERIES

The word "Liveries" is disclaimed apart from the mark as shown on the drawing.

For Chauffeurs' Uniforms, Taxi-Drivers' Uniforms, Police Uniforms, Military Uniforms, Firemen Uniforms, American Legion Uniforms, Theatre-Usher Uniforms, Drum-Corps Uniforms, Yacht Uniforms, Steamship Uniforms, and Military School Uniforms.

Claims use since Sept. 1, 1929.

Ser. No. 295,240. BERNHARD SCHRAG & CO. INC., New York, N. Y. Filed Jan. 25, 1930.

STERLING LIVERIES

The words "Sterling Liveries" are disclaimed apart from the mark as shown on the drawing.

For Chauffeurs' Uniforms, Taxi-Drivers' Uniforms, Police Uniforms, Military Uniforms, Firemen Uniforms, American Legion Uniforms, Theatre-Usher Uniforms, Drum-Corps Uniforms, Yacht Uniforms, Steamship Uniforms, and Military-School Uniforms.

Claims use since Sept. 1, 1929.

Ser. No. 296,060. F. JACOBSON & SONS, New York, N. Y. Filed Feb. 15, 1930.

WAFER WEAVE

No claim being made to the exclusive use of the word "Weave" apart from the mark as shown.

For Dress, Negligee, and Work Shirts.

Claims use since Aug. 17, 1929.

Ser. No. 296,814. J. J. NEWBERRY COMPANY, New York, N. Y. Filed Mar. 4, 1930.

NEWCO

For Hosiery.

Claims use since Feb. 1, 1929.

Ser. No. 296,944. S. AUGSTEIN & CO., New York, N. Y. Filed Mar. 7, 1930.



The drawing is lined to show the colors red and blue.

For Children's Sweaters.

Claims use since Feb. 18, 1930.

Ser. No. 297,687. LEWMAN'S, INCORPORATED, New York, N. Y. Filed Mar. 21, 1930.

TOWER

For Men's Dress, Negligee, and Work Shirts.

Claims use since Mar. 4, 1930.

Ser. No. 297,807. KNIPE BROS. INC., Haverhill, Mass. Filed Mar. 24, 1930.

Five $ Bill

No claim being made for the words "Five" and "Bill" and for the character "$" except in the form shown.

For Leather Shoes.

Claims use since Mar. 14, 1930.

Ser. No. 297,877. IRWIN B. SCHWABE, New York, N. Y. Filed Mar. 25, 1930.

LUCKY LAD



For Children's Play Suits and Men's and Boys' Work Shirts and Work Suits and Jumpers.

Claims use since Mar. 6, 1930.

Ser. No. 297,920. LOWE-NANAS COMPANY, Los Angeles, Calif. Filed Mar. 26, 1930.

Sunnyland

For Ladies' Coats, Dresses, and Topcoats.

Claims use since Nov. 22, 1929.

Ser. No. 298,309. BROOKS COSTUME & UNIFORM CO. INC., New York, N. Y. Filed Apr. 3, 1930.

SALTAIR

For Men's Clothing—Namely, Suits, Uniforms, Trousers, Hats, Caps; Shoes of Leather, Fabric, and Combination Thereof; Slippers of Leather, Fabric, and Combination Thereof; Work Suits, Jersey Coats, Bridge Coats, Oilcoats, Negligee Shirts, Ties, Leather Boots, Reefers, Rubber Boots, Oilskin Coats and Pants, Flannel Outer Shirts, Aprons, Collars, Raincoats, Rubber Hats, Tuxedo Suits, Full-Dress Suits, Cooks' Caps, and Neckcloths.

Claims use since Mar. 1, 1930.

Ser. No. 298,407. MISHAWAKA RUBBER AND WOOLEN MANUFACTURING COMPANY, Mishawaka, Ind. Filed Apr. 4, 1930.

TANEXTRA

For Combination Rubber and Leather Shoes and Composition Soles for Shoes.

Claims use since Jan. 24, 1930.

Ser. No. 298,445. ETTA H. HART, Chicago, Ill. Filed Apr. 5, 1930.

MARIETTA

For Detachable Skirts for Corsetlettes.

Claims use since Oct. 14, 1929.

Ser. No. 298,468. THE STYLE DRESS CO., INC., New York, N. Y. Filed Apr. 5, 1930.

FULL MOON PRINT

The word "Print" is disclaimed apart from the mark shown in the drawing.

For Dresses and Suit and Coat Ensembles for Women, Misses, and Children.

Claims use since Jan. 22, 1930.

Ser. No. 298,534. GUDE'S, INC., Los Angeles, Calif. Filed Apr. 8, 1930.

Bel-Aire

For Shoes Made of Leather and Fabric and Combinations Thereof.

Claims use since about Feb. 1, 1930.

Ser. No. 298,656. OSWEGO RAYON CORPORATION, Oswego, N. Y. Filed Apr. 10, 1930.

Rayon Maid Supertex

No claim is made to the word "Rayon" apart from the mark shown in the drawing.

For Underwear for Men, Women, and Children, Made of Knitted, Netted, and Textile Fabrics and/or any Combination Thereof.

Claims use since Mar. 1, 1930.

Ser. No. 298,828. LORD & TAYLOR, New York, N. Y. Filed Apr. 14, 1930.

Lortay

For Hosiery.

Claims use since on or about July 26, 1929.

Ser. No. 298,918. HARRY WEISS, doing business as Weiss Shirt Co., New York, N. Y. Filed Apr. 15, 1930.

JEWEL

For Men's and Boys' Negligee, Dress, and Work Shirts.

Claims use since February, 1930.

Ser. No. 298,967. JULIUS L. PURVIN, doing business as J. L. Purvin Manufacturing Company, Dallas, Tex. Filed Apr. 8, 1930.

Adelaide

For Ladies' and Misses' Bloomers, Panties (Open Drawers), Shorties (Gathered Drawers), Vests, Teddies, Pajama Suits, Nightgowns, Undershirts, Brassières and Step-Ins (Open Sides); Men's and Boys' Undershirts, Night Gowns, Pajama Suits, Union Suits, Trunks, and Drawers.

Claims use since Feb. 15, 1930.

CLASS 42

Knitted, Netted, and Textile Fabrics

Ser. No. 294,413. ASTORIA SILK WORKS, New York, N. Y. Filed Jan. 6, 1930.

POL-O-SPUN

No claim is made to the word "Spun" alone.
For Piece Goods of Silk, Piece Goods of Artificial Silk, Piece Goods of Silk Having a Novelty Stripe of Rayon or Celanese.
Claims use since October, 1929.

Ser. No. 295,576. GEORGE W. SAUNDERS, doing business as G. W. Saunders Company, New York, N. Y. Filed Feb. 4, 1930.

PINE KNOLL

The lining on the drawing indicates green color.
For Woolens in the Piece.
Claims use since Jan. 2, 1930.

Ser. No. 296,236. BURTON BROTHERS & CO. INC., New York, N. Y. Filed Feb. 20, 1930.

BURTON'S IRISH POPLIN

FINER LIGHTER WEIGHT

The drawing being lined to indicate the colors green and red, no claim being made to the exclusive use of the words "Irish Poplin Finer Lighter Weight" apart from the mark as shown.
For Cotton Piece Goods.
Claims use since 1895, and the name "Burton's" has been used since 10 years next preceding Feb. 20, 1905, and such use has been exclusive.

Ser. No. 296,257. BURTON BROTHERS & CO. INC., New York, N. Y. Filed Feb. 20, 1930.

BURTON'S IRISH POPLIN

IMPROVED STANDARD WEIGHT

The drawing being lined to indicate the colors green and black, no claim being made to the exclusive use of the words "Irish Poplin Improved Standard Weight" apart from the mark as shown in the drawing.
For Cotton Piece Goods.
Claims use since 1895, and the name "Burton's" has been used since 10 years next preceding Feb. 20, 1905, and such use has been exclusive.

Ser. No. 296,576. ISRAEL BROCKMAN, doing business as I. Brockman & Co., Boston, Mass. Filed Feb. 27, 1930.

Ladatex

For Cotton Cloth Linings as Piece Goods.
Claims use since July 1, 1929.

Ser. No. 297,352. ATKINSON, FENLON CO. INC., New York, N. Y. Filed Mar. 15, 1930.

EVELEIGH FABRICS

The word "Eveleigh" and the expression "Fabrics" are disclaimed apart from the other features of the mark shown in the drawings.
For Printed Cotton, Linen, and Silk Piece Goods.
Claims use since Dec. 17, 1929.

Ser. No. 297,753. MYSORE INDIA DRUGGET CORPORATION, New York, N. Y. Filed Mar. 22, 1930.

MYSINDIA

For Rugs of Spun Woolen Yarns.
Claims use since Feb. 27, 1930.

Ser. No. 297,929. PENNSYLVANIA TEXTILE MILLS, INC., New York, N. Y. Filed Mar. 26, 1930.

KARA-KURL

For Pile Fabrics in the Piece.
Claims use since Mar. 8, 1930.

Ser. No. 298,221. FOLLMER CLOGG & CO., New York, N. Y.; Philadelphia, Pa.; San Francisco, Calif.; Lancaster and Columbia, Pa. Filed Mar. 20, 1930.

PANSIPETAL

For Silk Textile Fabrics.
Claims use since Feb. 1, 1930.

Ser. No. 298,264. ARTLOOM CORPORATION, PHILADELPHIA PILE FABRIC MILLS DIVISION, Philadelphia, Pa. Filed Apr. 2, 1930.

Pacafleece

For Pile Fabrics.
Claims use since Jan. 1, 1930.

Ser. No. 298,209. BAY STATE RUG CO., INC., Lowell, Mass. Filed Apr. 2, 1930.

HOMEWOOD

For Textile Rugs.
Claims use since June 1, 1929.

Ser. No. 298,278. A. GROSS & CO., KOMMANDITGESELLSCHAFT, Vienna, Austria. Filed Apr. 2, 1930.



The trade-mark consists of a red, yellow, and blue thread woven in the selvage of the material, the representation of the goods being disclaimed.
For Embroidery Canvas and Unfinished Textile Material in the Piece Used for Making Tapestries.
Claims use since Jan. 20, 1930.

Ser. No. 298,539. HUDSON RIVER WOOLEN MILLS, New York, N. Y. Filed Apr. 8, 1930.

DURODOWN

For Woolen Piece Goods.
Claims use since Mar. 14, 1930.

Ser. No. 299,122. HOLDEN-LEONARD COMPANY, New York, N. Y. Filed Apr. 19, 1930.

CHANTUNE

For Worsted and Woolen Fabrics.
Claims use since about Jan. 10, 1930.

Ser. No. 299,124. HOLDEN-LEONARD COMPANY, New York, N. Y. Filed Apr. 19, 1930.

CHOUFUNG

For Worsted and Woolen Fabrics.
Claims use since about Jan. 10, 1930.

Ser. No. 299,125. HOLDEN-LEONARD COMPANY, New York, N. Y. Filed Apr. 19, 1930.

TUNGSHA

For Worsted and Woolen Fabrics.
Claims use since about Jan. 10, 1930.

Ser. No. 299,126. HOLDEN-LEONARD COMPANY, New York, N. Y. Filed Apr. 19, 1930.

TUNGLO

For Worsted and Woolen Fabrics.
Claims use since about Jan. 10, 1930.

Ser. No. 299,128. HOLDEN-LEONARD COMPANY, New York, N. Y. Filed Apr. 19, 1930.

SUNMING

For Worsted and Woolen Fabrics.
Claims use since about Jan. 10, 1930.

Ser. No. 299,129. HOLDEN-LEONARD COMPANY, New York, N. Y. Filed Apr. 19, 1930.

SENFEN

For Worsted and Woolen Fabrics.
Claims use since about Jan. 10, 1930.

Ser. No. 299,131. HOLDEN-LEONARD COMPANY, New York, N. Y. Filed Apr. 19, 1930.

SHAMAN

For Worsted and Woolen Fabrics.
Claims use since about Jan. 10, 1930.

Ser. No. 299,132. HOLDEN-LEONARD COMPANY, New York, N. Y. Filed Apr. 19, 1930.

SOONTUNG

For Worsted and Woolen Fabrics.
Claims use since about Jan. 10, 1930.

Ser. No. 299,133. HOLDEN-LEONARD COMPANY, New York, N. Y. Filed Apr. 19, 1930.

FENSEN

For Worsted and Woolen Fabrics.
Claims use since about Jan. 10, 1930.

Ser. No. 299,134. HOLDEN-LEONARD COMPANY, New York, N. Y. Filed Apr. 19, 1930.

SUNTUNG

For Worsted and Woolen Fabrics.
Claims use since about Jan. 10, 1930.

Ser. No. 299,190. DRIESEN, MEYER & ORONSKY, New York, N. Y. Filed Apr. 21, 1930.

HEATHERCREST

For Woolen Piece Goods and Woolen Piece Goods to be Used in the Manufacture of Overcoating.
Claims use since Feb. 1, 1930.

Ser. No. 290,281. ROSSIE VELVET COMPANY, Mystic, Conn. Filed Apr. 22, 1930.



The drawing being lined and stippled for shading purposes only, the figures being fanciful, and no claim being made to the exclusive use of the words "The Velvet for All Weather" apart from the mark as shown in the drawing.
For Pile Fabrics.
Claims use since Mar. 13, 1930.

CLASS 43

Thread and Yarn

Ser. No. 298,985. EXCELSIOR MILLS, Union, S. C. Filed Apr. 17, 1930.

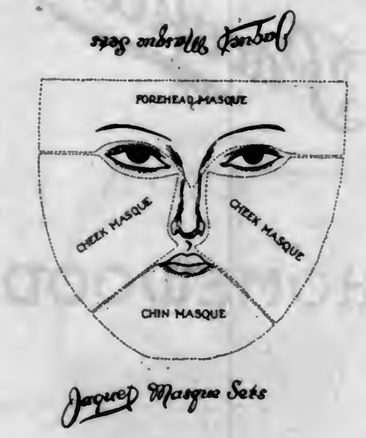


For Yarns.
Claims use since 1904.

CLASS 44

Dental, Medical, and Surgical Appliances

Ser. No. 261,514. JAQUET, INC., Hoboken, N. J. Filed Feb. 10, 1928.



The word "Jaquet" appearing in the application is the autographic signature of Josephine Jaquet. Applicant disclaims the use of the representation of the masque and all wording appearing on the drawing with the exception of the word "Jaquet."
For Porous Textile Pads Containing Treatment Chemicals Adapted to be Applied When in Moistened Condition to Portions of the Face.
Claims use since Jan. 25, 1928.

Ser. No. 299,085. SAN-NAP-PAK MFG. CO., INC., New York, N. Y. Filed Apr. 18, 1930.

SANIGENIC
MŌDÉTTES

For Absorbent Cotton, Absorbent Gauze, and Sanitary Napkins.
Claims use since May 1, 1927.

CLASS 45

Beverages, Nonalcoholic

Ser. No. 297,959. KENNEDY-DETROIT ORANGE JUICE COMPANY, Detroit, Mich. Filed Mar. 27, 1930.

ALL-O-VIT

For Nonalcoholic, Maltless Beverages and Fruit Juices Sold as Soft Drinks.
Claims use since Mar. 12, 1930.

Ser. No. 298,583. ALEX NALBACH, doing business as Nalbach's Bottling Works, Nanticoke, Pa. Filed Apr. 9, 1930.

Sea Gull

For Carbonated, Nonalcoholic, Noncereal, Maltless Beverages Sold as Soft Drinks.
Claims use since Mar. 1, 1930.

Ser. No. 298,598. SUPER ORANGE BEVERAGE, INC., Brooklyn, N. Y. Filed Apr. 9, 1930.

SUPERCO

For Fruit Juices and Extracts for Beverage Purposes.
Claims use since Nov. 25, 1929.

Ser. No. 298,753. DANER KARAVEDAS, Baltimore, Md. Filed Apr. 12, 1930.

New-Gold

For Nonalcoholic, Maltless Beverage Sold as a Soft Drink.
Claims use since Mar. 19, 1930.

CLASS 46

Foods and Ingredients of Foods

Ser. No. 271,746. FLORIDA CITRUS PRODUCTS CORPORATION, New York, N. Y. Filed Aug. 30, 1928.

HONEYMOON

For Canned Citrus Fruits and Citrus-Fruit Juices, Such as Orange, Grapefruit, Lemon, Tangerine, Etc., Used for Food Purposes.
Claims use since about Mar. 1, 1925.

Ser. No. 276,976. NEW ENGLAND CRANBERRY SALES COMPANY, Middleboro, Mass. Filed Dec. 19, 1928.

HARVARD BRAND



The drawing is lined to represent the color red. No claim is made to the exclusive use of the words "Harvard Brand" apart from the mark as shown.
For Fresh Cranberries.
Claims use since Nov. 1, 1907.

Ser. No. 276,980. NEW ENGLAND CRANBERRY SALES COMPANY, Middleboro, Mass. Filed Dec. 19, 1928.

POINTER BRAND



No claim is made to the exclusive use of the word "Brand" apart from the mark as shown.
For Fresh Cranberries.
Claims use since Sept. 1, 1926.

Ser. No. 276,981. NEW ENGLAND CRANBERRY SALES COMPANY, Middleboro, Mass. Filed Dec. 19, 1928.

YALE BRAND



No claim is made to the exclusive use of the words "Yale Brand" apart from the mark as shown.
For Fresh Cranberries.
Claims use since Sept. 1, 1926.

Ser. No. 279,974. H. D. ULMER, INC., Largo, Fla. Filed Feb. 26, 1929.



The words "Indian Rocks" and "Brand" are disclaimed apart from the other features of the mark shown in the drawing.

For Orange Jelly, Orange Marmalade, Grapefruit Jelly, Grapefruit Marmalade, Strawberry Jam, Kumquat Jelly, Kumquat Marmalade, Guava Jelly, Guava Paste, Pure Honey, Grapefruit Candy, Orange Candy, Tangerine Candy, Canned Grapefruit Juice for Food Purposes, Canned Grapefruit, Bottled and Canned Oranges, Bottled and Canned Orange Juice for Food Purposes.

Claims use since Dec. 15, 1928.

Ser. No. 281,157. NEW YORK COFFEE POT, Milwaukee, Wis. Filed Mar. 22, 1929.

New York Coffee Pot

For Prepared Foods—Namely, Sandwiches, Pies, Cakes, Doughnuts, Cookies, and Other Forms of Pastries.

Claims use since July, 1927.

Ser. No. 282,560. MITSUI BUSSAN KAISHA, LTD., doing business as Mitsui & Co., Ltd., Tokio, Japan, and San Francisco, Calif. Filed Apr. 17, 1929.

"MITSUI"



The word "Mitsui" is disclaimed except as used in connection with the balance of the mark as shown.

For Canned Beef.

Claims use since April, 1923.

Ser. No. 284,751. A. SZELAGOWSKI & SON, Buffalo, N. Y. Filed May 28, 1929.



For Sausages.

Claims use since Jan. 1, 1920.

Ser. No. 286,106. EMERY AND SHIELDS, doing business as E. & S. Packing Co., Niagara Falls, N. Y. Filed June 25, 1929.

FISHAGE FISHAUL
THE ORIGINAL SAUSAGE STYLE FISH

No claim is made to the exclusive use of the notation "The Original Sausage Style Fish" apart from the mark as shown.

For Fish Prepared in Sausage Form.

Claims use since May 23, 1929.

Ser. No. 287,635. COLUMBIA-OKANOGAN ORCHARDS, INC., doing business as C-O Orchards, Inc., Brewster, Wash. Filed July 24, 1929.



For Fresh Deciduous Fruits.

Claims use since September, 1919.

Ser. No. 287,636. COLUMBIA-OKANOGAN ORCHARDS, INC., doing business as C-O Orchards, Inc., Brewster, Wash. Filed July 24, 1929.



For Fresh Deciduous Fruits.

Claims use since September, 1919.

Ser. No. 289,136. THE TOURAINE COMPANY, Boston, Mass. Filed Aug. 28, 1929.



No claim is made to the word "Peppermint" or the word "Chocolata" apart from the mark as shown.

For Candy.

Claims use since July 1, 1929.

Ser. No. 293,031. DONOVAN PROVISION CO. INC., Birmingham, Ala. Filed Nov. 29, 1929.

Roebuck Club

For Coffee.

Claims use since August, 1917.

Ser. No. 293,564. WARD BAKING COMPANY, New York, N. Y. Filed Dec. 11, 1929.

Colonial FRUIT CAKE

No claim being made to the words "Fruit Cake."

For Fruit Cake.

Claims use since October, 1925.

Ser. No. 294,136. ARKOMA GRAIN CORPORATION, Fort Smith, Ark. Filed Dec. 28, 1929.

ARKOMA

For Corn Meal, Chicken Feed, Poultry Feed, Dairy Feed, and Horse and Mule Feed.

Claims use since Aug. 15, 1929.

Ser. No. 294,280. SPERRY CANDY CO., Milwaukee, Wis. Filed Dec. 31, 1929.



The words "Delicious" and "Homaid Candies" not being claimed apart from the other features of the mark. The color lines on the drawing are disclaimed.

For Candy.

Claims use since Nov. 29, 1929.

Ser. No. 294,416. E. EVERETT CARLETON & Co., INC., New York, N. Y. Filed Jan. 6, 1930.



No claim is made to the exclusive use of the word "Coffee" on the drawing apart from the mark shown.
For Coffee.
Claims use since Dec. 27, 1929.

Ser. No. 294,463. BROGDEX COMPANY, Winter Haven, Fla., and Los Angeles, Calif. Filed Jan. 7, 1930.

BROGDEX

For Fresh Deciduous and Citrus Fruits Surface Treated to Enhance Their Marketability.
Claims use since May 25, 1929.

Ser. No. 294,574. ADA L. CHAPIN, doing business as Chapin's Bird Store, East St. Louis, Ill. Filed Jan. 9, 1930.

"Canaries Sing For It"

For Bird Food.
Claims use since Nov. 20, 1929.

Ser. No. 294,783. STANARD-TILTON MILLING COMPANY, St. Louis, Mo. Filed Jan. 14, 1930.

LABORATORY AND BAKERY TESTED

Applicant does not claim exclusive right to the use of the word "Laboratory" apart from the mark as shown.
For Wheat Flour.
Claims use since November, 1929.

Ser. No. 295,950. OSCAR MAYER & Co. INC., doing business as Oscar Mayer's, Chicago, Ill. Filed Feb. 12, 1930.

"The Aristocrat of Frankfurts"

No claim is made to the word "Frankfurts" apart from the mark as shown.
For Frankfurters.
Claims use since Dec. 20, 1928.

Ser. No. 296,104. SYLVESTER H. CORDER, Dallas, Tex. Filed Feb. 17, 1930.



No claim is made for the word "Bread" apart from the mark shown on the drawing.
For Bread, Cakes, and Pies.
Claims use since Feb. 10, 1920.

Ser. No. 296,979. MIGUEL ORVAÑANOS, doing business as Floral Park Milling Co., New York, N. Y. Filed Mar. 7, 1930.

PLATANORVA

For Plantain Flour.
Claims use since about May 15, 1929.

Ser. No. 297,613. M AND R GRAIN CORPORATION, Indianapolis, Ind. Filed Mar. 20, 1930.



For Farinaceous Feed Mixtures for Horses, Cows, Hogs, and Chickens.
Claims use since on or about Feb. 1, 1927.

Ser. No. 297,708. TRADERS OIL MILL COMPANY, Fort Worth, Tex. Filed Mar. 21, 1930.



The drawing is lined for red, green, and gold.
For Cottonseed Meal.
Claims use since Oct. 1, 1920.

Ser. No. 297,709. TRADERS OIL MILL COMPANY, Fort Worth, Tex. Filed Mar. 21, 1930.



The drawing is lined for red. The words "Cow Feed" are claimed only as associated with the trade-mark shown.
For Mixed Cottonseed Meal and Hulls.
Claims use since Oct. 1, 1920.

Ser. No. 298,057. W. H. WRIGHT & SONS COMPANY, Ogden, Utah. Filed Mar. 28, 1930.



The lining as shown on the drawing is for the color blue. All wording except the word "Wright" is disclaimed apart from the mark as shown on the drawing.
For Creamery Butter.
Claims use since 1929.

Ser. No. 298,078. CONNELL-ROSS CO., INC., San Benito, Tex. Filed Mar. 29, 1930.

Big River

For Fresh Vegetables.
Claims use since Jan. 1, 1930.

Ser. No. 298,081. DADE CITY PACKING COMPANY, Dade City, Fla. Filed Mar. 29, 1930.

DADDY-O

For Fresh Citrus Fruits and Canned Orange and Grapefruit Juices for Food Purposes.
Claims use since Oct. 20, 1928.

Ser. No. 298,084. EMMA DENKER, doing business as Saddle Creek Laboratories, Omaha, Nebr. Filed Mar. 29, 1930.

PEP-CO-SEN

For Chicken Feed.
Claims use since Feb. 15, 1930.

Ser. No. 298,217. HENRY W. VON DAMM, doing business as F. H. Von Damm, Brooklyn, N. Y. Filed Mar. 31, 1930.



For Tonic Food for Birds.
Claims use since December, 1929.

Ser. No. 298,235. FISCHER BAKING CO., Newark, N. J. Filed Apr. 1, 1930.



No claim is made to the word "Fischer's Whole Wheat, 'The Health Bread'," apart from the mark shown in the drawing.
For Bread.
Claims use since January, 1928.

Ser. No. 298,290. ST. JOHN'S BREAD CO., St. Louis, Mo. Filed Apr. 2, 1930.

CAROBREAD

The word "Bread" is disclaimed apart from the mark as shown.
For Bread.
Claims use since Mar. 28, 1930.

Ser. No. 298,382. ISIDORE FINK, Astoria, Long Island, N. Y. Filed Apr. 4, 1930.



No claim is made to the word "Malt" apart from the mark as shown in the drawing.
For Malt Syrup.
Claims use since Apr. 1, 1921.

Ser. No. 298,428. CONSOLIDATED TEA CO. INC., New York, N. Y. Filed Apr. 5, 1930.



For Tea.
Claims use since February, 1930.

Ser. No. 298,511. PENRYN FRUIT CO., Penryn, Calif. Filed Apr. 7, 1930.



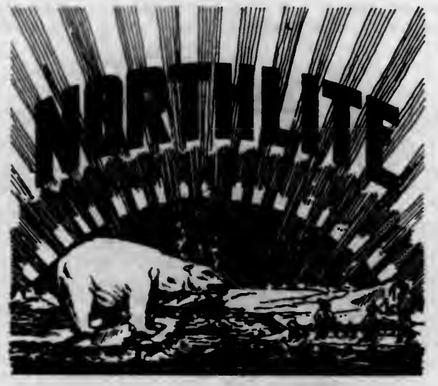
The pictorial representation of the goods and all of the word matter with the exception of the name "Penryn Fruit Co." is disclaimed apart from the mark shown on the drawing.
For Fresh Pears.
Claims use since June 1, 1928.

Ser. No. 298,544. THE NEW ERA MILLING COMPANY, Arkansas City, Kans. Filed Apr. 8, 1930.



For Wheat Flour.
Claims use since Jan. 29, 1907.

Ser. No. 298,545. THE NEW ERA MILLING COMPANY, Arkansas City, Kans. Filed Apr. 8, 1930.



For Wheat Flour.
Claims use since Mar. 22, 1926.

Ser. No. 298,649. MONOCACY VALLEY CANNING COMPANY, Frederick, Md. Filed Apr. 10, 1930.

ARABY

For Canned Fruits and Vegetables.
Claims use since 1901.

Ser. No. 298,650. MONOCACY VALLEY CANNING COMPANY, Frederick, Md. Filed Apr. 10, 1930.

GLADE

For Canned Fruits and Vegetables.
Claims use since 1904.

Ser. No. 298,651. MONOCACY VALLEY CANNING COMPANY, Frederick, Md. Filed Apr. 10, 1930.

UETUM

For Canned Fruits and Vegetables.
Claims use since 1904.

Ser. No. 298,667. SAETTA BROS., Coney Island, N. Y. Filed Apr. 10, 1930.



No claim is made for the word "Saetta's" or the words "Tortoni-Bar" apart from the mark shown.
For Ice Cream, Ice-Cream Bricks, and Ice-Cream Sandwiches.
Claims use since October, 1929.

Ser. No. 298,688. P. DAUSSA CORPORATION, Brooklyn, N. Y. Filed Apr. 11, 1930. Under 10-year proviso.

MAIZ-AL

For Cornstarch.
Claims use since 1865.

Ser. No. 298,780. APLIN & BARRETT & THE WESTERN COUNTIES CREAMERIES, LIMITED, Yeovil, England. Filed Apr. 14, 1930.

GOLDEN ARROW

For Plum Puddings.
Claims use since Mar. 21, 1930.

Ser. No. 298,795. CHARLES C. DAWE, Denver, Colo. Filed Apr. 14, 1930.

TALOMILK

For Poultry and Stock Feed.
Claims use since Mar. 14, 1930.

Ser. No. 298,850. PETER ROSSI & SONS, INC., Braidwood, Ill. Filed Apr. 14, 1930. Under 10-year proviso.

ROSSI

For Alimentary Pastes—viz, Macaroni, Spaghetti, Noodles, Vermicelli, Etc.
Claims use since about June 1, 1886.

Ser. No. 298,865. SWIFT AND COMPANY, Chicago, Ill. Filed Apr. 14, 1930.

ATLAS

For Gelatin.
Claims use since Apr. 2, 1930.

Ser. No. 298,892. FLORENCE MACARONI CO., Los Angeles, Calif. Filed Apr. 15, 1930.

MT. ETNA

For Alimentary Pastes.
Claims use since Dec. 30, 1929.

Ser. No. 299,116. JAMES J. GALLAGHER, Baltimore, Md. Filed Apr. 19, 1930.

GALLAGHER'S
PRIDE

For Coffee and Tea.
Claims use since June 1, 1928.

Ser. No. 299,226. PLAINVIEW COTTON OIL CO., INC., Plainview, Tex., assignor to Anderson-Clayton Industries, Inc., Wilmington, Del., a Corporation of Delaware. Filed Apr. 21, 1930.

Paymaster

For Feeds for Domestic Animals and Poultry.
Claims use since on or about Feb. 18, 1930.

Ser. No. 299,398. LOUISIANA STATE RICE MILLING COMPANY, INC., Abbeville, La. Filed Apr. 24, 1930.

LASTARMCO

For Stock and Poultry Feed.
Claims use since Mar. 1, 1930.

CLASS 47

Wines

Ser. No. 298,453. Mlle MARCEAU, SOCIÉTÉ À RESPONSABILITÉ LIMITÉE, Bordeaux, France. Filed Apr. 5, 1930.

Grands Vins
de
Bordeaux

M. Marceau
Bordeaux
FRANCE

The wording on the drawing being disclaimed apart from the mark shown.
For Wines, Red or White, Sparkling or Not.
Claims use since June 20, 1907.

CLASS 48

Malt Beverages and Liquors

Ser. No. 281,524. ROYAL AND ANCIENT COMPANY, LTD., and doing business in part as Burkhardt Brewing Company, Boston, Mass. Filed Mar. 28, 1929.

For Nonalcoholic, Cereal, Malt Beverage.
Claims use since 1904, having been continuously applied from 1904 to January, 1920, to cereal malt beverages containing more than one-half of one percent of alcohol and since January, 1920, to cereal malt beverages containing less than one-half of one percent of alcohol.

Ser. No. 298,322. GONZALO BOZA & CO. INC., New York, N. Y. Filed Apr. 3, 1930.

El Avion

For Malt Beverages Containing Less than One-Half of One Percent Alcohol, by Volume.
Claims use since Feb. 14, 1928.

CLASS 50

Merchandise Not Otherwise Classified

Ser. No. 292,147. WURLITZER GRAND PIANO COMPANY, De Kalb, Ill. Filed Nov. 7, 1929.

antigua

The word "antigua" is disclaimed apart from the mark as shown.
For Art Panels, Medallions, Plaques, Reliefs, Rosettes, and Other Figures and Shapes Used for Decorating Metal, Wood, Paper, or Other Surfaces.
Claims use since Nov. 2, 1929.

TRADE-MARK REGISTRATIONS GRANTED

[ACT OF FEBRUARY 20, 1905]

JUNE 3, 1930

271,316. SANITARY NAPKINS. WOODWARD & LOTHROP, Washington, D. C.
Filed January 28, 1930. Serial No. 295,312. PUBLISHED MARCH 25, 1930. Class 44.

271,317. CERTAIN NAMED DENTAL INSTRUMENTS AND SUPPLIES. JULIUS CHARLESTEIN, doing business as Premier Dental Products Co., Philadelphia, Pa.
Filed January 10, 1930. Serial No. 294,622. PUBLISHED MARCH 18, 1930. Class 44.

271,318. ABSORBENT COTTON, ABSORBENT GAUZE, AND SANITARY NAPKINS. SAN-NAP-PAK MFG. CO., INC., New York, N. Y.
Filed February 7, 1930. Serial No. 295,763. PUBLISHED MARCH 25, 1930. Class 44.

271,319. MEDICINAL VAPORIZERS. WILLIAM C. KOCH, doing business as The Wm. C. Koch Co., St. Paul, Minn.
Filed January 29, 1930. Serial No. 295,337. PUBLISHED MARCH 25, 1930. Class 44.

271,320. DIATOMACEOUS EARTH. INDUSTRIAL CHEMICAL SALES COMPANY, INC., New York, N. Y.
Filed January 10, 1930. Serial No. 294,638. PUBLISHED MARCH 18, 1930. Class 1.

271,321. COTTON PIECE GOODS. MORRIS & COMPANY, INCORPORATED, Baltimore] Md.
Filed January 3, 1930. Serial No. 294,360. PUBLISHED MARCH 18, 1930. Class 42.

271,322. PIECE GOODS MADE OF SILK, COTTON, AND WOOL. HAAS BROTHERS FABRICS CORPORATION, New York, N. Y.
Filed December 26, 1929. Serial No. 294,069. PUBLISHED MARCH 18, 1930. Class 42.

271,323. PIECE GOODS OF SILK OR OF SILK MIXED WITH COTTON, WOOL, RAYON, OR ARTIFICIAL FIBRE. C. K. EAGLE & CO., INC., Shamokin, Pa., and New York, N. Y.
Filed December 2, 1929. Serial No. 293,132. PUBLISHED MARCH 4, 1930. Class 42.

271,324. REFRIGERATORS, REFRIGERATOR PARTS, AUTOMATIC REFRIGERATORS, AUTOMATIC REFRIGERATING PARTS, AND REFRIGERATING SYSTEMS. ELECTROLUX SERVEL CORPORATION, New York, N. Y.
Filed February 15, 1930. Serial No. 296,053. PUBLISHED MARCH 25, 1930. Class 31.

271,325. GRITS. NORTHERN ILLINOIS CEREAL COMPANY, Lockport, Ill.
Filed February 7, 1930. Serial No. 295,747. PUBLISHED MARCH 18, 1930. Class 46.

271,326. WOOLEN PIECE GOODS. GAY BROTHERS COMPANY, Cavendish, Vt.
Filed February 6, 1930. Serial No. 295,671. PUBLISHED MARCH 18, 1930. Class 42.

271,327. BUTTER AND EGGS. JAMES VAN DYK COMPANY, New York, N. Y.
Filed February 4, 1930. Serial No. 295,586. PUBLISHED MARCH 18, 1930. Class 46.

271,328. CERTAIN SILK PIECE GOODS. GREGORY W. SPURR, trustee for Jno. Dunlop's Sons, Inc., doing business as Otesaga Silk Co., New York, N. Y.
Filed February 4, 1930. Serial No. 295,580. PUBLISHED MARCH 18, 1930. Class 42.

271,329. CRACKERLIKE OR BISCUITLIKE FOOD PRODUCTS. PAUL SCHULZE BISCUIT CO., Chicago, Ill.
Filed February 3, 1930. Serial No. 295,539. PUBLISHED MARCH 18, 1930. Class 46.

271,330. ARTIFICIAL BAITS. JAMES HEDDON'S SONS, Dowagiac, Mich.
Filed January 31, 1930. Serial No. 295,429. PUBLISHED MARCH 18, 1930. Class 22.

271,331. POCKET COIN HOLDERS. THE BANKETTE CO., Boston, Mass.
Filed January 29, 1930. Serial No. 295,325. PUBLISHED MARCH 18, 1930. Class 3.

271,332. HANDKERCHIEFS. BROWNING, KING & CO., New York, N. Y.
Filed January 24, 1930. Serial No. 295,148. PUBLISHED MARCH 18, 1930. Class 42.

271,333. NONALCOHOLIC, NONCEREAL, MALTLESS BEVERAGES SOLD AS SOFT DRINKS AND INCLUDING FOUNTAIN SYRUPS. MORRIS RICHTER, doing business as Hyrum Syrup Company, Philadelphia, Pa.
Filed January 23, 1930. Serial No. 295,135. PUBLISHED MARCH 25, 1930. Class 45.

271,334. FABRICS MADE WHOLLY OR PARTIALLY OF CELLULOSE DERIVATIVES. CELANESE CORPORATION OF AMERICA, New York, N. Y.
Filed January 18, 1930. Serial No. 294,913. PUBLISHED MARCH 18, 1930. Class 42.

271,335. TOE CALKS FOR HORSESHOES. FRANKLIN STEEL WORKS, Joliet, Ill.
Filed January 11, 1930. Serial No. 294,667. PUBLISHED MARCH 18, 1930. Class 3.

271,336. HYPODERMIC SYRINGES. DAVID LEE O'SULLIVAN, New York, N. Y.
Filed January 20, 1930. Serial No. 294,992. PUBLISHED MARCH 11, 1930. Class 44.

271,337. ELECTRIC-INHALER DEVICE. THE SWARTZBAUGH MANUFACTURING CO., Toledo, Ohio.
Filed January 13, 1930. Serial No. 294,746. PUBLISHED MARCH 18, 1930. Class 44.

271,338. GENERAL CLEANSER FOR HOUSEHOLD AND COMMERCIAL USE. DI-OX PRODUCTS CO., INC., New York, N. Y.
Filed January 10, 1930. Serial No. 294,626. PUBLISHED MARCH 18, 1930. Class 4.

271,339. POLISH FOR LACQUERED, VARNISHED, OR PAINTED SURFACES. KARL L. TEUBNER, doing business as "Tech Laboratories," Asheville, N. C.
Filed January 7, 1930. Serial No. 294,497. PUBLISHED MARCH 18, 1930. Class 16.

271,340. POWDER FOR CLEANING AND RECOLORING UNDRESSED LEATHERS. WHITTEMORE BROS. CORP., Cambridge, Mass.
Filed January 6, 1930. Serial No. 294,455. PUBLISHED MARCH 18, 1930. Class 4.

271,341. TREATED CLEANING, POLISHING, AND WIPING CLOTHS. THOMAS FRANCIS CARROLL, New York, N. Y.
Filed December 31, 1929. Serial No. 294,286. PUBLISHED MARCH 18, 1930. Class 4.

271,342. CERTAIN NAMED PAINT PRODUCTS. L. FRANCIS CASSOFF, doing business as The Central Paint and Varnish Works, Brooklyn, N. Y.
Filed December 31, 1929. Serial No. 294,247. PUBLISHED MARCH 18, 1930. Class 16.

271,343. METAL CLEANER AND POLISH. MISSOURI CHROMIUM PLATING COMPANY, St. Louis, Mo.
Filed December 28, 1929. Serial No. 294,167. PUBLISHED MARCH 18, 1930. Class 4.

271,344. LITHOPONE AND COMBINATIONS THEREOF FOR USE IN PAINTS. OZARK SMELTING & MINING COMPANY, Chicago, Ill.
Filed December 26, 1929. Serial No. 294,083. PUBLISHED MARCH 11, 1930. Class 16.

271,345. CERTAIN NAMED PAINT PRODUCTS. GENERAL ELECTRIC COMPANY, Schenectady, N. Y.
Filed December 21, 1929. Serial No. 293,999. PUBLISHED MARCH 25, 1930. Class 16.

271,346. ELECTRICAL DEVICE FOR GENERATING HEALTHFUL VAPORS. LOGAN LABORATORIES, LTD., New York, N. Y.
Filed December 20, 1929. Serial No. 293,926. PUBLISHED MARCH 11, 1930. Class 44.

271,347. SOLVENTS FOR PAINTS. STANCO INCORPORATED, Wilmington, Del., and New York, N. Y.
Filed December 13, 1929. Serial No. 293,644. PUBLISHED MARCH 18, 1930. Class 16.

271,348. ALL KINDS OF CANDIES AND BONBONS, ALSO ALL KINDS OF ROASTED AND SALTED NUTS AND NUTS IN THEIR NATURAL STATE, SHELLED AND UNSHELLED, NUT CANDIES, AND NUT CONFECTIONS. EDWARD F. KEMP, Somerville, Mass.
Filed November 18, 1929. Serial No. 292,534. PUBLISHED MARCH 25, 1930. Class 46.

271,349. COFFEE. JOHN HANSEN & SONS, Oakland, Calif.
Filed November 4, 1929. Serial No. 291,980. PUBLISHED MARCH 25, 1930. Class 46.

271,350. FRESH CITRUS FRUITS. SOUTHERN FRUIT DISTRIBUTORS, INC., Orlando, Fla.
Filed October 29, 1929. Serial No. 291,742. PUBLISHED MARCH 25, 1930. Class 46.

271,351. COFFEE SUBSTITUTE. BERHALTER'S HEALTH FOOD FACTORY, Chicago, Ill.
Filed October 9, 1929. Serial No. 290,810. PUBLISHED MARCH 25, 1930. Class 46.

271,352. COFFEE. ADMIRAL READY COFFEE REFINING CORPORATION, New York, N. Y.
Filed August 10, 1929. Serial No. 288,369. PUBLISHED MARCH 25, 1930. Class 46.

271,353. CANNED SALMON. NEW ENGLAND FISH COMPANY, Seattle, Wash.
Filed August 9, 1929. Serial No. 288,351. PUBLISHED MARCH 25, 1930. Class 46.

271,354. CANNED SALMON. NEW ENGLAND FISH COMPANY, Seattle, Wash.
Filed August 9, 1929. Serial No. 288,350. PUBLISHED MARCH 25, 1930. Class 46.

271,355. FRESH CITRUS FRUITS—NAMELY, ORANGES, LEMONS, AND GRAPEFRUIT. SAN DIMAS ORANGE GROWERS ASSOCIATION, San Dimas, Calif.
Filed October 3, 1928. Serial No. 273,321. PUBLISHED JULY 30, 1929. Class 46.

271,356. CANNED SOUPS, VEGETABLES, AND FRUITS. FRUIT BELT PRESERVING COMPANY, East Williamson, N. Y.
Filed February 14, 1930. Serial No. 296,009. PUBLISHED MARCH 25, 1930. Class 46.

271,357. COOKED MEATS, SPECIFICALLY CANNED CORNED BEEF. INTERNATIONAL PRODUCTS CORPORATION, New York, N. Y.
Filed January 30, 1930. Serial No. 295,375. PUBLISHED MARCH 25, 1930. Class 46.

271,358. COOKED MEATS, AND SPECIFICALLY CANNED TONGUE. INTERNATIONAL PRODUCTS CORPORATION, New York, N. Y.
Filed January 30, 1930. Serial No. 295,374. PUBLISHED MARCH 25, 1930. Class 46.

271,359. RAW OYSTERS. O. E. WENTWORTH & Co., Baltimore, Md.
Filed January 27, 1930. Serial No. 295,285. PUBLISHED MARCH 25, 1930. Class 46.

271,360. CANDY AND PEPPERMINT DROPS. OLD ENGLISH CANDY COMPANY, INC., Dover, N. J.
Filed January 27, 1930. Serial No. 295,272. PUBLISHED MARCH 25, 1930. Class 46.

271,361. LARD. GREAT FALLS MEAT COMPANY, Great Falls, Mont.
Filed January 9, 1930. Serial No. 294,581. PUBLISHED MARCH 25, 1930. Class 46.

271,362. CANNED SALMON. ALITAK FISH COMPANY, Bellingham, Wash., and Kodia Island, Territory of Alaska.
Filed January 9, 1930. Serial No. 294,556. PUBLISHED MARCH 25, 1930. Class 46.

271,363. CHEWING GUM. AMERICAN CHICLE COMPANY, Long Island City, N. Y.
Filed January 6, 1930. Serial No. 294,411. PUBLISHED MARCH 25, 1930. Class 46.

271,364. HOSE AND BELTING MADE OF RUBBER AND FABRIC. HEWITT-GUTTA PERCHA RUBBER CORPORATION, Buffalo, N. Y.
Filed January 24, 1930. Serial No. 295,176. PUBLISHED MARCH 25, 1930. Class 35.

271,365. LEATHER BELTING. S. M. SUPPLIES CO., Boston, Mass.
Filed January 30, 1930. Serial No. 295,393. PUBLISHED MARCH 25, 1930. Class 35.

271,366. GUTTER HANGERS, TROUGH HANGERS, WIRE STRAINERS, ETC. KLAUER MANUFACTURING COMPANY, Dubuque, Iowa.
Filed March 14, 1929. Serial No. 280,717. PUBLISHED MARCH 25, 1930. Class 13.

271,367. WOOD FILLER. LEHMAN BROS., INC., Jersey City, N. J.
Filed February 16, 1929. Serial No. 279,482. PUBLISHED APRIL 16, 1929. Class 16.

271,368. BANDAGES. JOHNSON & JOHNSON, New Brunswick, N. J.
Filed January 10, 1929. Serial No. 277,801. PUBLISHED MARCH 11, 1930. Class 44.

271,369. STOCK AND STORAGE TANKS AND UNDERGROUND GARBAGE RECEIVERS. KLAUER MANUFACTHRING COMPANY, Dubuque, Iowa.
Filed March 14, 1929. Serial No. 280,713. PUBLISHED MARCH 25, 1930. Class 2.

271,370. METAL POLISH. GIOVANNI PERRONE, Genoa, Italy.
Filed May 28, 1929. Serial No. 284,743. PUBLISHED MARCH 25, 1930. Class 4.

271,371. BANDAGES. BLACKMAN & BLACKMAN, INC., New York, N. Y.
Filed May 27, 1929. Serial No. 284,666. PUBLISHED MARCH 18, 1930. Class 44.

271,372. SUBSTITUTE FOR TURPENTINE. STANDARD OIL COMPANY OF NEW YORK, New York, N. Y.
Filed May 23, 1929. Serial No. 284,549. PUBLISHED MARCH 25, 1930. Class 16.

271,373. MEN'S AND YOUNG MEN'S FLANNEL SHIRTS, DRESS SHIRTS, PAJAMAS, AND NIGHTSHIRTS. SEARS, ROEBUCK AND CO., Chicago, Ill.
Filed April 27, 1929. Serial No. 283,144. PUBLISHED JULY 2, 1929. Class 39.

271,374. CERTAIN NAMED PAINT PRODUCTS. FLORENCE L. THOMAS, Palo Alto, Calif.
Filed April 13, 1929. Serial No. 282,380. PUBLISHED MARCH 18, 1930. Class 16.

271,375. MEN'S AND BOYS' UNDERWEAR AND MEN'S AND BOYS' ATHLETIC SHIRTS AND TRUNKS OF KNITTED AND TEXTILE FABRICS. JOSEPH G. BAUM, New York, N. Y.
Filed June 12, 1929. Serial No. 285,440. PUBLISHED MARCH 11, 1930. Class 39.

271,376. TEXTILES COMPRISING TOWELS, TOWELING, WASH CLOTHS, AND BEDSPREADS. VALWAY RUG MILLS, INC., La Grange, Ga.
Filed December 18, 1928. Serial No. 276,672. PUBLISHED MARCH 18, 1930. Class 42.

271,377. BLOW-OFF VALVES, NEEDLE VALVES, GAS COCKS, PRESSURE RELIEF VALVES, WATER VALVES, FUEL STRAINERS AND TRAPS, AND METAL PIPE FITTINGS. THE CLEVELAND HEATER COMPANY, Cleveland, Ohio.
Filed December 10, 1928. Serial No. 276,516. PUBLISHED MARCH 18, 1930. Class 13.

271,378. COFFEEPOTS. THE ENTERPRISE ALUMINUM COMPANY, Massillon, Ohio.
Filed November 28, 1928. Serial No. 275,949. PUBLISHED APRIL 9, 1929. Class 13.

271,379. SCRIM IN THE PIECE AND MADE UP INTO CURTAINS. BOOTT MILLS, Lowell, Mass.
Filed November 6, 1928. Serial No. 274,868. PUBLISHED FEBRUARY 19, 1929. Class 42.

271,380. SURFACE REFINISHING LIQUIDS IN THE NATURE OF A VARNISH OR LACQUER. ELLING O. WEEKS, doing business as Nu-Rex Products Co., Milwaukee, Wis.
Filed August 23, 1928. Serial No. 271,463. PUBLISHED MARCH 11, 1930. Class 16.

271,381. MEN'S, WOMEN'S, AND CHILDREN'S HOSIERY AND UNDERWEAR MADE OF KNITTED AND TEXTILE FABRICS. GOLDEN DAWN HOSIERY SHOPS, Wilmington, Del.
Filed August 23, 1928. Serial No. 271,437. PUBLISHED NOVEMBER 13, 1928. Class 39.

271,382. SOAPS, METAL POLISH, AND CERTAIN NAMED CLEANING PREPARATIONS. THE NORTH AMERICAN POLISH COMPANY, Cleveland, Ohio.
Filed May 24, 1928. Serial No. 266,946. PUBLISHED MARCH 18, 1930. Class 4.

271,383. WHEAT FLOUR. NORTHLAND MILLING COMPANY, Minneapolis, Minn.
Filed July 1, 1927. Serial No. 251,409. PUBLISHED MARCH 18, 1930. Class 46.

271,384. METAL CABINETS FOR HOLDING WATCH CRYSTALS. K. K. CRYSTAL COMPANY, INC., New York, N. Y.
Filed December 18, 1929. Serial No. 293,838. PUBLISHED MARCH 25, 1930. Class 32.

271,385. FURNACES AND PARTS THEREOF, HEARTHS AND PARTS THEREOF, FURNACE ROOFS, ETC. THE CARBORUNDUM COMPANY, Niagara Falls, N. Y.
Filed November 7, 1929. Serial No. 292,095. PUBLISHED MARCH 25, 1930. Class 34.

271,386. CARD TABLES AND FOLDING TABLES. NAPPANEE LUMBER & MANUFACTURING CO., Nappanee, Ind.
Filed September 28, 1929. Serial No. 290,374. PUBLISHED MARCH 25, 1930. Class 32.

271,387. HANDSAW HANDLES, HANDSAWS, CROSS-CUT SAWS, GRASS HOOKS, SAW TOOLS FOR SHARPENING AND SHAPING SAWS, AND WOOD SCRAPERS. E. C. ATKINS AND COMPANY, Indianapolis, Ind.
Filed September 7, 1929. Serial No. 289,436. PUBLISHED MARCH 25, 1930. Class 23.

271,388. PLUMBING FIXTURES. ELJER COMPANY, Ford City, Pa.
Filed July 8, 1929. Serial No. 286,749. PUBLISHED MARCH 25, 1930. Class 13.

271,389. PLUMBING FIXTURES. ELJER COMPANY, Ford City, Pa.
Filed July 8, 1929. Serial No. 286,748. PUBLISHED MARCH 25, 1930. Class 13.

271,390. HOSE, BELTING, AND PACKING, ALL MADE OF RUBBER AND FABRIC, THE PACKING BEING USED IN JOINTS OF MACHINERY AND CONTAINERS TO RENDER SUCH JOINTS LIQUID OR GAS TIGHT. HEWITT-GUTTA PERCHA RUBBER CORPORATION, Buffalo, N. Y.
Filed January 24, 1930. Serial No. 295,175. PUBLISHED MARCH 25, 1930. Class 35.

271,391. RUBBER AND FABRIC BELTING. HEWITT-GUTTA PERCHA RUBBER CORPORATION, Buffalo, N. Y.
Filed January 24, 1930. Serial No. 295,173. PUBLISHED MARCH 25, 1930. Class 35.

271,392. PACKING MADE OF RUBBER AND USED FOR RENDERING JOINTS OF MACHINERY AND CONTAINERS LIQUID AND GAS TIGHT. HEWITT-GUTTA PERCHA RUBBER CORPORATION, Buffalo, N. Y.
Filed January 24, 1930. Serial No. 295,170. PUBLISHED MARCH 25, 1930. Class 35.

271,393. HOSE AND BELTING MADE OF RUBBER AND FABRIC. HEWITT-GUTTA PERCHA RUBBER CORPORATION, Buffalo, N. Y.
Filed January 24, 1930. Serial No. 295,167. PUBLISHED MARCH 25, 1930. Class 35.

271,394. METAL PIPE AND PIPE FITTINGS. PACIFIC STATES CAST IRON PIPE COMPANY, Provo, Utah.
Filed January 21, 1930. Serial No. 295,046. PUBLISHED MARCH 25, 1930. Class 13.

271,395. UPHOLSTERED LIVING-ROOM FURNITURE. THE NEW WATERFORD FURNITURE COMPANY, New Waterford, Ohio.
Filed January 21, 1930. Serial No. 295,043. PUBLISHED MARCH 25, 1930. Class 32.

271,396. METAL BOX STRAPPING, STEEL STRAPPING, AND CRIMP FASTENINGS FOR SAME. THE WIRE & STEEL PRODUCTS CO., INC., Brooklyn, N. Y.
Filed December 31, 1929. Serial No. 294,283. PUBLISHED MARCH 25, 1930. Class 13.

271,397. ASH-TRAY STANDS. ROLLODOR COMPANY, Los Angeles, Calif.
Filed December 28, 1929. Serial No. 294,181. PUBLISHED MARCH 25, 1930. Class 32.

271,398. WATER HEATERS, HOT-WATER HEATING SYSTEMS, BATH-WATER HEATERS, ETC. THE CLEVELAND HEATER COMPANY, Cleveland, Ohio.
Filed December 23, 1929. Serial No. 294,007. PUBLISHED MARCH 25, 1930. Class 34.

271,399. PRESSURE GAUGES, COMPASSES, TEMPERATURE INDICATORS, ETC. GENERAL ELECTRIC COMPANY, Schenectady, N. Y.
Filed December 21, 1929. Serial No. 293,998. PUBLISHED MARCH 25, 1930. Class 26.

271,400. SOAP POWDER. G. C. TAYLOR CO., Fairport, N. Y.
Filed September 3, 1929. Serial No. 289,305. PUBLISHED MARCH 18, 1930. Class 4.

271,401. POLISH WITH INCIDENTAL CLEANING PROPERTIES. ERWIN Z. FRANDS, doing business as Frands Sales Agency, Chicago, Ill.
Filed July 22, 1929. Serial No. 287,440. PUBLISHED MARCH 11, 1930. Class 16.

271,402. METAL-POLISHING CREAM, WINDSHIELD CLOTH, AND GLASS CLEANER. LLOYD WILLIAM MILTON, doing business as Milton Laboratories, Chicago, Ill.
Filed July 17, 1929. Serial No. 287,261. PUBLISHED MARCH 18, 1930. Class 4.

271,403. NECKTIES AND CRAVATS. WILSON BROTHERS, Chicago, Ill.
Filed February 6, 1930. Serial No. 295,703. PUBLISHED MARCH 18, 1930. Class 39.

271,404. BOYS' AND GIRLS' PLAY SUITS, OVERALLS, SHORTS, KNICKERS, WASH SUITS, AND ONE-PIECE SUITS. LEBANON TEXTILE MILLS, INC., Lebanon, Pa.
Filed February 6, 1930. Serial No. 295,682. PUBLISHED MARCH 18, 1930. Class 39.

271,405. MUD GUARDS FOR ATTACHMENT TO THE FENDERS OF AUTOMOBILES. HAMPDEN AUTOMOTIVE PRODUCTS, INC., Springfield, Mass.
Filed January 30, 1930. Serial No. 295,370. PUBLISHED MARCH 18, 1930. Class 19.

271,406. AIRPLANES. AMERICAN EAGLE AIRCRAFT CORPORATION, Kansas City, Kans.
Filed January 27, 1930. Serial No. 295,245. PUBLISHED MARCH 18, 1930. Class 19.

271,407. BOYS' SHIRTS AND BLOUSES. SHERWIN & JALLER, New York, N. Y.
Filed January 22, 1930. Serial No. 295,085. PUBLISHED MARCH 18, 1930. Class 39.

271,408. BOYS' BLOUSES, SHIRTS, AND PAJAMAS. BOY-CRAFT, INC., New York, N. Y.
Filed January 21, 1930. Serial No. 295,011. PUBLISHED MARCH 11, 1930. Class 39.

271,409. SPORT SHIRTS FOR MEN, WOMEN, AND CHILDREN. THE STEP-IN-ALL UNDERWEAR CORPORATION, Springfield, Mass.
Filed January 20, 1930. Serial No. 294,998. PUBLISHED MARCH 11, 1930. Class 39.

271,410. WASHBOARDS. NATIONAL WASHBOARD COMPANY, Chicago, Ill.
Filed January 20, 1930. Serial No. 294,990. PUBLISHED MARCH 18, 1930. Class 24.

271,411. WOMEN'S AND CHILDREN'S KNITTED SILK AND RAYON UNDERWEAR. VAN RAALTE COMPANY, New York, N. Y.
Filed January 18, 1930. Serial No. 294,936. PUBLISHED MARCH 11, 1930. Class 39.

271,412. FLANNEL SHIRTS, WORK SHIRTS, NEGLIGEE SHIRTS. THE BLACK MANUFACTURING CO. Seattle, Wash.
Filed January 18, 1930. Serial No. 294,912. PUBLISHED MARCH 11, 1930. Class 39.

271,413. NEGLIGEE AND DRESS SHIRTS. KAYLON INCORPORATED, Troy and New York, N. Y.
Filed January 17, 1930. Serial No. 294,881. PUBLISHED MARCH 11, 1930. Class 39.

271,414. NEGLIGEE AND DRESS SHIRTS. KAYLON INCORPORATED, Troy and New York, N. Y.
Filed January 17, 1930. Serial No. 294,880. PUBLISHED MARCH 11, 1930. Class 39.

271,415. NEGLIGEE AND DRESS SHIRTS. KAYLON INCORPORATED, Troy and New York, N. Y.
Filed January 17, 1930. Serial No. 294,879. PUBLISHED MARCH 11, 1930. Class 39.

271,416. NEGLIGEE AND DRESS SHIRTS. KAYLON INCORPORATED, Troy and New York, N. Y.
Filed January 17, 1930. Serial No. 294,878. PUBLISHED MARCH 11, 1930. Class 39.

271,417. MEN'S AND BOYS' SUITS AND OVERCOATS. M. VIDAL ALVAREZ & CO., Ponce, Porto Rico.
Filed November 14, 1929. Serial No. 292,383. PUBLISHED MARCH 11, 1930. Class 39.

271,418. HOSIERY. MOCK, JUDSON, VOEHRINGER CO. INC., Long Island City, N. Y.
Filed October 26, 1929. Serial No. 291,630. PUBLISHED MARCH 11, 1930. Class 39.

271,419. BATH ROBES, SHOES, HATS, ETC. JOHN WANAMAKER NEW YORK, New York, N. Y.
Filed October 3, 1929. Serial No. 290,636. PUBLISHED MARCH 11, 1930. Class 39.

271,420. OVERALLS, JACKETS, PANTS, ONE-PIECE SUITS, AND WORK COATS. TWIN CITY MANUFACTURING COMPANY, Minneapolis, Minn.
Filed September 25, 1929. Serial No. 290,227. PUBLISHED NOVEMBER 19, 1929. Class 39.

271,421. MEN'S DRESS SHIRTS AND NEGLIGEE SHIRTS. I. JANOV-ABELES SHIRT CO., New York, N. Y.
Filed September 26, 1929. Serial No. 290,255. PUBLISHED MARCH 18, 1930. Class 39.

271,422. MEN'S DRESS AND NEGLIGEE SHIRTS, MEN'S KNITTED AND TEXTILE UNDERWEAR, AND MEN'S PAJAMAS. MORTON H. GOLDENBERG, doing business as Goldenberg's, Washington, D. C.
Filed September 20, 1929. Serial No. 290,021. PUBLISHED MARCH 11, 1930. Class 39.

271,423. HOSIERY. PERKINS DRY GOODS COMPANY, Dallas, Tex.
Filed August 19, 1929. Serial No. 288,721. PUBLISHED MARCH 18, 1930. Class 39.

271,424. OUTER WEARING APPAREL FOR WOMEN AND GIRLS—NAMELY, PINAFORE APRONS. FOREST CITY MFG. CO., St. Louis, Mo.
Filed July 27, 1929. Serial No. 287,749. PUBLISHED MARCH 11, 1930. Class 39.

271,425. MUFFLERS AND SCARFS FOR MEN, WOMEN, AND/OR CHILDREN. LORENZO A. R. POWER, doing business as Kaufmann Department Stores, Inc., Pittsburgh, Pa.
Filed July 26, 1929. Serial No. 287,717. PUBLISHED MARCH 11, 1930. Class 39.

271,426. PYROPHORIC CIGARETTE AND CIGAR LIGHTERS. TWIN COUPLER COMPANY, INC., Poughkeepsie, N. Y.
Filed July 24, 1929. Serial No. 287,599. PUBLISHED MARCH 11, 1930. Class 34.

271,427. WRITING AND PRINTING PAPERS. PARSONS PAPER COMPANY, Holyoke, Mass.
Filed July 17, 1929. Serial No. 287,262. PUBLISHED DECEMBER 24, 1929. Class 37.

271,428. PAPETERIES, BRISTOL BOARD, PAPER AND CARDS FOR WEDDING, ANNOUNCEMENT, AND GREETING PURPOSES, AND MAILING ENVELOPES. STRATHMORE PAPER COMPANY, Mittineague, Mass.
Filed July 12, 1929. Serial No. 287,026. PUBLISHED OCTOBER 29, 1929. Class 37.

271,429. VALVES FOR USE IN WATER-SUPPLY SYSTEMS. SLOAN VALVE COMPANY, Chicago, Ill.
Filed July 10, 1929. Serial No. 286,846. PUBLISHED MARCH 18, 1930. Class 13.

271,430. BREAD AND BISCUITS. DOROTHY CRANE CHIDLOW, Fort Myers, Fla.
Filed October 21, 1929. Serial No. 291,324. PUBLISHED MARCH 18, 1930. Class 46.

271,431. SECTIONAL, FOLDABLE MECHANICAL TOY COMPOSED OF RECTANGULAR BLOCKS SHIFTABLY CONNECTED BY TIE MEMBERS. GEORGE H. BURNETT, Jr., Houston, Tex.
Filed October 14, 1929. Serial No. 291,048. PUBLISHED MARCH 18, 1930. Class 22.

271,432. HAIR NETS. L. BAMBERGER & CO., Newark, N. J.
Filed August 31, 1929. Serial No. 289,225. PUBLISHED MARCH 18, 1930. Class 42.

271,433. FABRICS MADE WHOLLY OR PARTIALLY OF CELLULOSE DERIVATIVES. CELANESE CORPORATION OF AMERICA, New York, N. Y.
Filed August 22, 1929. Serial No. 288,845. PUBLISHED OCTOBER 1, 1929. Class 42.

271,434. SOAP. COLGATE-PALMOLIVE-PEET COMPANY, Chicago, Ill.
Filed November 16, 1929. Serial No. 292,486. PUBLISHED MARCH 25, 1930. Class 4.

271,435. LACQUERS AND LACQUER ENAMELS. ROXALIN FLEXIBLE LACQUER COMPANY, INCORPORATED, Long Island City, N. Y.
Filed October 23, 1929. Serial No. 291,478. PUBLISHED MARCH 18, 1930. Class 16.

271,436. CARBON BLACK. WISHNICK-TUMPEER, INC., New York, N. Y.
Filed October 9, 1929. Serial No. 290,865. PUBLISHED MARCH 18, 1930. Class 16.

271,437. WOMEN'S AND MISSES' COATS. HANDMACHER-MICHEL COMPANY, Chicago, Ill.
Filed December 16, 1929. Serial No. 293,730. PUBLISHED MARCH 11, 1930. Class 39.

271,438. PREPARATION FOR RHEUMATISM, NEURITIS, GOUT, ETC. MILJAY LABORATORY, Philadelphia, Pa.
Filed December 13, 1929. Serial No. 293,629. PUBLISHED FEBRUARY 18, 1930. Class 6.

271,439. MEN'S, WOMEN'S, AND CHILDREN'S KNIT UNDERWEAR AND PAJAMAS AND NIGHTGOWNS. A. L. FRIEDLANDER, doing business as E. Friedlander & Sons, San Francisco, Calif.
Filed December 12, 1929. Serial No. 293,577. PUBLISHED MARCH 18, 1930. Class 39.

271,440. TACKS. GEO. BAKER & SONS, INC., Brockton, Mass.
Filed December 9, 1929. Serial No. 293,402. PUBLISHED MARCH 18, 1930. Class 13.

271,441. NECKTIES. JACOB MILLER'S SONS CO., Philadelphia, Pa.
Filed November 27, 1929. Serial No. 293,003. PUBLISHED MARCH 11, 1930. Class 39.

271,442. OVERALLS. BROOKLYN OVERALL CO., Brooklyn, N. Y.
Filed January 17, 1930. Serial No. 294,868. PUBLISHED MARCH 18, 1930. Class 39.

271,443. OVERALLS, WORK JACKETS, WORK SHIRTS, AND WORK PANTS FOR MEN AND BOYS. NUNNALLY & MCCREA CO., Atlanta, Ga.
Filed January 16, 1930. Serial No. 294,856. PUBLISHED MARCH 11, 1930. Class 39.

271,444. OVERALLS, WORK JACKETS, WORK SHIRTS, AND WORK PANTS FOR MEN AND BOYS. NUNNALLY & MCCREA CO., Atlanta, Ga.
Filed January 16, 1930. Serial No. 294,855. PUBLISHED MARCH 11, 1930. Class 39.

271,445. MERCHANDISE AND PHOTOGRAPH ENVELOPES. SAFEWAY SALES CORPORATION, Boston, Mass.
Filed January 15, 1930. Serial No. 294,827. PUBLISHED MARCH 18, 1930. Class 2.

271,446. WOMEN'S SILK UNDERWEAR—NAMELY, BLOOMERS, SLIPS, NIGHTGOWNS, CHEMISES, STEP-INS, DANCE SETS, PAJAMAS, AND LOUNGING ROBES. VICTOR BROWN, doing business as Victor Brown Co., New York, N. Y.
Filed January 14, 1930. Serial No. 294,758. PUBLISHED MARCH 18, 1930. Class 39.

271,447. CANOE PADDLES. ANCHOR SAWMILLS COMPANY, Pelham Manor, N. Y.
Filed January 11, 1930. Serial No. 294,658. PUBLISHED MARCH 18, 1930. Class 19.

271,448. AUTOMOBILES, MOTOR BOATS, AEROPLANES, AND MOTOR CYCLES. GUY MOTORS LTD., Wolverhampton, England.
Filed January 10, 1930. Serial No. 294,633. PUBLISHED MARCH 18, 1930. Class 19.

271,449. NATURAL OR ARTIFICIAL COLORED SLATE PRODUCTS—NAMELY, URINAL STALLS, SHOWER STALLS, SINKS, SINK TOPS, AND TOILET ENCLOSURES. THE STRUCTURAL SLATE CO., Pen Argyl, Pa.
Filed January 9, 1930. Serial No. 294,600. PUBLISHED MARCH 18, 1930. Class 13.

271,450. NATURAL OR ARTIFICIAL COLORED SLATE PRODUCTS—NAMELY, URINAL STALLS, SHOWER STALLS, SINKS, SINK TOPS, AND TOILET ENCLOSURES. THE STRUCTURAL SLATE CO., Pen Argyl, Pa.
Filed January 9, 1930. Serial No. 294,597. PUBLISHED MARCH 18, 1930. Class 13.

271,451. AUTOMATIC COAL STOKERS FOR FURNACES. BLACK SERVANT MANUFACTURING COMPANY, St. Louis, Mo.
Filed January 4, 1930. Serial No. 294,382. PUBLISHED MARCH 18, 1930. Class 34.

271,452. HOSIERY. WISCASSETT MILLS COMPANY, Albemarle, N. C.
Filed January 3, 1930. Serial No. 294,372. PUBLISHED MARCH 11, 1930. Class 39.

271,453. MEN'S DRESS, NEGLIGEE, AND WORK SHIRTS. M. H. RAAB CO., INC., Philadelphia, Pa.
Filed January 3, 1930. Serial No. 294,362. PUBLISHED MARCH 11, 1930. Class 39.

271,454. DRESSES FOR MISSES. GRUNEWALD NOVICK COMPANY, Chicago, Ill.
Filed December 31, 1929. Serial No. 294,250. PUBLISHED MARCH 18, 1930. Class 39.

271,455. UNDERWEAR OF WOVEN AND KNITTED FABRICS FOR MEN, WOMEN, AND CHILDREN. CLUETT, PEABODY & CO., INC., Troy, N. Y.
Filed December 31, 1929. Serial No. 294,248. PUBLISHED MARCH 11, 1930. Class 39.

271,456. DISHES OF PAPER OR FIBRE. THE DIAMOND MATCH COMPANY, Chicago, Ill.
Filed December 30, 1929. Serial No. 294,208. PUBLISHED MARCH 18, 1930. Class 2.

271,457. STRAINERS, PLAIN LADLES, SOAP SAVERS, ETC. UTILITY MANUFACTURING CO., INC., Baltimore, Md.
Filed December 26, 1929. Serial No. 294,100. PUBLISHED MARCH 18, 1930. Class 13.

271,458. STRAINERS, PLAIN LADLES, SOAP SAVERS, ETC. UTILITY MANUFACTURING CO., INC., Baltimore, Md.
Filed December 26, 1929. Serial No. 294,098. PUBLISHED MARCH 18, 1930. Class 13.

271,459. CHILD'S COMBINATION GARMENT COMPRISING A DRESS, WAIST, AND PANTY. MOSES WERTHEIMER, Philadelphia, Pa.
Filed December 23, 1929. Serial No. 294,033. PUBLISHED MARCH 18, 1930. Class 39.

271,460. SHUT-OFF VALVES. GENERAL ELECTRIC COMPANY, Schenectady, N. Y.
Filed December 21, 1929. Serial No. 293,995. PUBLISHED MARCH 18, 1930. Class 13.

271,461. MEN'S AND BOYS' DRESS, SPORT, AND NEGLIGEE SHIRTS. ARNOLD SHIRT COMPANY, New York, N. Y.
Filed December 21, 1929. Serial No. 293,947. PUBLISHED MARCH 11, 1930. Class 39.

271,462. CULVERT GATES. CENTRAL ALLOY STEEL CORPORATION, doing business as Toncan Culvert Manufacturers Association, Massillon, Ohio.
Filed December 19, 1929. Serial No. 293,870. PUBLISHED MARCH 18, 1930. Class 13.

271,463. VARNISHES AND LACQUERS. THE INTERNATIONAL PRINTING INK CORPORATION, New York, N. Y.
Filed January 8, 1930. Serial No. 294,534. PUBLISHED MARCH 18, 1930. Class 16.

[ACT OF MARCH 19, 1920, SEC. 1 (b)]
THESE REGISTRATIONS ARE NOT SUBJECT TO OPPOSITION

271,464. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THE WILLIAM HAIGH COMPANY, doing business as The Guilford Mfg. Co., Baltimore, Md. Filed Mar. 28, 1930. Serial No. 298,024.

GUILFORD

For A Composition of Malt and Hops.
Claims use since May, 1919.

271,465. (CLASS 40. FANCY GOODS, FURNISHINGS, AND NOTIONS.) FRIEDBERGER-AARON MANUFACTURING COMPANY, Philadelphia, Pa. Filed Mar. 20, 1930. Serial No. 297,592.

AP-LI-KAY

For Banding in the Nature of Trimming for Women's and Children's Wearing Apparel.
Claims use since about Dec. 12, 1928.

271,466. (CLASS 22. GAMES, TOYS, AND SPORTING GOODS.) CHARLES H. MILLER, Baltimore, Md. Filed Jan. 30, 1930. Serial No. 295,380.

The Bethlehem
Xmas Star



For Christmas-Tree Decorations Suitable for Use on Trees and General Display.
Claims use since Dec. 15, 1908.

271,467. (CLASS 9. EXPLOSIVES, FIREARMS, EQUIPMENTS, AND PROJECTILES.) MONITE EXPLOSIVES, INC., Reno, Nev. Filed Nov. 29, 1929. Serial No. 293,060.

MONITE

For Explosives.
Claims use since Apr. 4, 1927.

271,468. (CLASS 50. MERCHANDISE NOT OTHERWISE CLASSIFIED.) ERNESTINE CALDOR, doing business as Kant-Fall Hanger, New York, N. Y. Filed July 9, 1928. Serial No. 269,295.

KANT-FALL

For Garment Hangers.
Claims use since Mar. 1, 1925.

271,469. (CLASS 14. METALS, METAL CASTINGS, AND FORGINGS.) JOSEPH T. RYERSON & SON INC., Chicago, Ill. Filed July 20, 1928. Serial No. 269,918.)

RYERSON
Since 1842
STEEL-SERVICE

For Steel.
Claims use since Aug. 1, 1927.

271,470. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) MILWAUKEE TOOL & FORGE CO., South Milwaukee, Wis. Filed Aug. 19, 1929. Serial No. 288,714.

TRUE FIT

For Wrenches, Bearing Scrapers, Brake Tools, Center Punches, Chisels, Cutting Pliers, Drift Punches, Drills, Gear Pullers, Glaze Breakers, Hack Saws, Knock-Out Punches, Oil Groovers, Pin Punches, Pinch Bars, Pliers, Prick Punches, Valve-Reseating Tools, Rivet Busters, Rocker-Arm Tools, Screw Drivers, Socket Connectors, Socket-Wrench-Plug Adaptors, Square Back-Outs, Stud Pullers, Swedging Dies, Taps, Universal Wrench Connectors, Valve-Adjusting Tools, Valve-Guide Drivers, Valve Lifters, Wrench Adaptors, Wrench Braces, and Wrench Handles.
Claims use since about March, 1921.

271,471. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) GOLDEN EAGLE SOAP CO., San Francisco, Calif. Filed Sept. 30, 1929. Serial No. 290,404.

REAL AMARILLO

For Soaps.
Claims use since Apr. 1, 1929.

271,472. (CLASS 39. CLOTHING.) SIEGEL & ALENIKOFF, New York, N. Y. Filed Apr. 27, 1929. Serial No. 283,146.

Racoonette

For Women's Cloaks and Suits Made of Fabric.
Claims use since Apr. 16, 1929.

271,473. (CLASS 39. CLOTHING.) D. REICHENBAUM, Milwaukee, Wis. Filed Apr. 22, 1929. Serial No. 282,827.

Doré

For Men's, Women's, and Children's Suits, Dress Suits, Coats, Waistcoats, Breeches, Jodhpurs, Riding Skirts, Show Habits, Hunt Garments Consisting of Caps and Hats, Coats, Vests, Breeches, and Boots, Hunting Suits, Sport Suits, Topcoats, Overcoats, Stocks, Leather and Fabric Gloves, and Dress and Negligee Shirts.
Claims use since first part of the year 1926.

271,474. (CLASS 37. PAPER AND STATIONERY.) ALBERT D. TURNER, Philadelphia, Pa. Filed Apr. 5, 1929. Serial No. 281,926.

FAXON

For Blank, Ruled, and Printed Loose-Leaf Forms, Indexes for Loose-Leaf Books, and Loose-Leaf Binders of Paper, Leather, and Imitation Leather.
Claims use since Mar. 22, 1929.

271,475. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) EDMOND P. COBB, doing business as Chicago Fig & Date Co., Chicago, Ill. Filed Apr. 4, 1929. Serial No. 281,819.

Ben Bey

For Dried Dates, Figs, and Prunes; Salted Nuts, and Nuts in Their Natural State.
Claims use since Mar. 13, 1929.

271,476. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) NAAMLOOZE VENNOOTSCHAP E. NOACK'S KONINKLIJKE FIJNE VLEESCHWAREN- EN CONSERVENFABRIEKEN, Amersfoort, Netherlands. Filed Mar. 14, 1929. Serial No. 280,724.

NOACK

For Tinned, Smoked, Cured, and Preserved Hams; Tinned and Fresh Sausages; Preserved, Canned, and Corned Beef.
Claims use since 1880.

271,477. (CLASS 32. FURNITURE AND UPHOLSTERY.) THE WESTERN SHADE CLOTH COMPANY, Chicago, Ill. Filed Mar. 11, 1929. Serial No. 280,587.

ARABESKS

For Ornamental Hand Grips Applied to Lower Edges of Window Shades, the Same Being in the Nature of Figures in Relief.
Claims use since September, 1927.

271,478. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) EDGAR T. HORSEY, INC., Cleveland, Ohio. Filed Feb. 28, 1929. Serial No. 280,063.

SHU-LAC

For a Dye for Leather.
Claims use since Feb. 19, 1929.

271,479. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) JOSEPH P. SPANG, doing business as Cube Steak Machine Company, Boston, Mass. Filed Apr. 11, 1930. Serial No. 298,718.

Cube Steak

For Machine for Slitting Meat.
Claims use since May, 1925.

271,480. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) P. BALLANTINE AND SONS, Newark, N. J. Filed Apr. 7, 1930. Serial No. 298,482.

BALLANTINE

For Malt Syrup.
Claims use since June, 1928.

271,481. (CLASS 44. DENTAL, MEDICAL, AND SURGICAL APPLIANCES.) SCHNEVEL BROTHERS, INC., Newark, N. J. Filed Oct. 23, 1929. Serial No. 291,480.

"Bring Beauty To Your Finger Tips"

For Manicure Appliances — Namely, Finger-Nail Files, Finger-Nail Scissors, Tweezers, and Nippers Constructed for Manicure Uses.
Claims use since October, 1923.

TRADE-MARK REGISTRATIONS RENEWED

33,171. GOLF CLUBS AND BALLS. Registered June 27, 1899. EDWARD K. TRYON, JR., & Co. Renewed June 27, 1929, to Edw. K. Tryon Company, Philadelphia, Pa., a Corporation of Pennsylvania, assignee.

33,966. COFFEE. Registered January 2, 1900. HAWORTH & DEWHURST, LIMITED, Pittsburgh, Pa. Renewed January 2, 1930, to Satisfaction Coffee Co., Braddock, Pa., a Corporation of Pennsylvania, successor.

34,804. CERTAIN NAMED MACHINERY, TOOLS, AND SUPPLIES. Registered June 19, 1900. MILLER, DU BRUL & PETERS MFG. CO., Norwood, Cincinnati, Ohio, a Corporation of Ohio. Renewed June 19, 1930.

76,169. REMEDIES FOR CERTAIN DISEASES. Registered December 21, 1909. THE SYNVITA MEDICINE CO. Renewed December 21, 1929, to The Every Day Products Supply Company, Lima, Ohio, a Corporation of Ohio, successor.

76,227. CERTAIN AGRICULTURAL MACHINERY. Registered December 28, 1909. ALBERT E. COOK, Kankakee, Ill. Renewed December 28, 1929.

77,405. GLASS BOTTLES. Registered April 5, 1910. ANTHONY F. MCDONNELL, Dunmore and Scranton, Pa. Renewed April 5, 1930, to Anthony F. McDonnell, Dunmore, Pa.

77,433. RAZORS AND SCISSORS. Registered April 12, 1910. ALEXIS WITTE CUTLERY CO., New York, N. Y., a Corporation of New York. Renewed April 12, 1930.

77,577. CIGARS. Registered April 19, 1910. STO. C. MAYER & CO. INC., Philadelphia, Pa. Renewed April 19, 1930, to J. C. Winter & Co., Inc., Red Lion, Pa., a Corporation of Pennsylvania, successor.

77,654. CERTAIN ARTICLES OF STATIONERY. Registered April 26, 1910. LOUIS LEITZ, Feuerbach, near Stuttgart, Germany. Renewed April 26, 1930.

78,444. CANNED FRUITS AND CANNED VEGETABLES. Registered June 14, 1910. WM. T. REYNOLDS & CO. Renewed June 14, 1930, to Wm. T. Reynolds & Co., Inc., Poughkeepsie, N. Y., a Corporation of New York, successor.

78,535. PERFUMES. Registered June 21, 1910. FREDERIC SILVESTER MASON. Renewed June 21, 1930, to Parfumerie Rigaud, Inc., New York, N. Y., a Corporation of New York, successor.

78,633. CERTAIN ELECTRICAL SUPPLIES. Registered June 28, 1910. HEMMING MANUFACTURING COMPANY, as assignee, of George L. Prentiss, New York, N. Y. Renewed June 28, 1930, to Garfield Manufacturing Company, Garfield, N. J., a Corporation of New Jersey, assignee by mesne assignments.

79,311. STOVES, FURNACES, AND STEAM AND HOT-WATER HEATING BOILERS. Registered August 23, 1910. WALKER & PRATT MANUFACTURING CO., Boston, Mass., a Corporation of Massachusetts. Renewed August 23, 1930.

LABELS

REGISTERED JUNE 3, 1930

37,496.—*Title:* TENNIS AND BASEBALL. For Game. ALL FAIR INCORPORATED, Churchville, N. Y. Published February 1, 1930.

37,497.—*Title:* HI-HO-ROLO. For Game. ALL FAIR INCORPORATED, Churchville, N. Y. Published February 1, 1930.

37,498.—*Title:* ARCTURUS A-C TUBES. For Radiotubes. ARCTURUS RADIO TUBE COMPANY, Newark, N. J. Published September 26, 1929.

37,499.—*Title:* CREAM & RED BRAND COFFEE. For Coffee. THE BETTER GROCERS INCORP., Sharon, Pa. Published March 20, 1930.

37,500.—*Title:* BORDEN'S—QUALITY SERVICE—GRADE B MILK. For Pasteurized Fluid Milk. BORDEN'S FARM PRODUCTS COMPANY, INC., New York, N. Y. Published February 7, 1929.

37,501.—*Title:* HOLLYWOOD STARS. For Cosmetics. VIRGILIO CARAVACCI, doing business as Hollywood Stars Laboratories, Los Angeles, Calif. Published March 21, 1930.

37,502.—*Title:* JUSTAKOTE. For Paint. CHASE VARNISH COMPANY, INC., Long Island City, N. Y. Published March 24, 1930.

37,503.—*Title:* CAMPBELL'S SCOTCH. For Ginger Ale. THE COCO-COLA BOTTLING CO., Wichita, Kans. Published April 1, 1930.

37,504.—*Title:* DE XAID—B. For Eczema Medicine. DEDENBACH CHEMICAL COMPANY, Detroit, Mich. Published April 29, 1930.

37,505.—*Title:* DE XAID—A. For Eczema Medicine. DEDENBACH CHEMICAL COMPANY, Detroit, Mich. Published April 29, 1930.

37,506.—*Title:* SUNBURST. For Dried Skim Milk. DOUTHITT ENGINEERING CO., Chicago, Ill. Published December 1, 1929.

37,507.—*Title:* HITT'S SEARCHLIGHT FIERY NIAGARA. For Pyrotechnique Novelties. HITT FIREWORKS CO., Seattle, Wash. Published March 9, 1930.

37,508.—*Title:* HITT'S BABY NIAGARA. For Pyrotechnique Novelties. HITT FIREWORKS CO., Seattle, Wash. Published March 9, 1930.

37,509.—*Title:* G. B. S. CO. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published January 20, 1930.

37,510.—*Title* GRAHAM ARCH FITTER. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published January 20, 1930.

37,511.—*Title:* RUBEN'S For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published January 23, 1930.

37,512.—*Title:* MOLLY STARK. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published January 20, 1930.

37,513.—*Title:* PRINCESS CHIC. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published January 20, 1930.

37,514.—*Title:* THE JOSEPH CORCORAN SHOE. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published January 3, 1930.

37,515.—*Title:* FASHIONIA. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published March 28, 1930.

37,516.—*Title:* THE CAMDEN SHOE. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published January 20, 1930.

37,517.—*Title:* VENUS VOGUES. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published December 30, 1929.

37,518.—*Title:* THE SURE FITTER SHOE. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published December 10, 1929.

37,519.—*Title:* MARYLYN MODES. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published December 30, 1929.

37,520.—*Title:* ALLEN'S MODISH STOUTS. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published December 20, 1929.

37,521.—*Title:* COMBINATION FITTING. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published January 30, 1930.

37,522.—*Title:* MORRIS SHOE COMPANY. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published March 31, 1930.

37,523.—*Title:* THEY SEE THE BOX FIRST. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published December 10, 1929.

37,524.—*Title:* CHILD-LIFE. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published January 20, 1920.

37,525.—*Title:* BAY STATE SPORT GIRL. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published January 7, 1930.

37,526.—*Title:* MISS ANNA MAY. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published January 3, 1930.

37,527.—*Title:* UNION SHOE CO. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published December 12, 1929.

37,528.—*Title:* BLUE BIRD. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published January 22, 1930.

37,529.—*Title:* DR. AUSTIN'S. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published January 20, 1930.

37,530.—*Title:* JIM NASTICK. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published January 3, 1930.

37,531.—*Title:* RIORITA. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published December 16, 1929.

37,532.—*Title:* PEPPY PEGGY. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published March 5, 1930.

37,533.—*Title:* RICHARD HEALTH SHOE. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published March 5, 1930.

37,534.—*Title:* DR. NATHAN'S. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published March 25, 1930.

37,535.—*Title:* KIMMEL & MARBACH SHOE CO. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published January 8, 1930.

37,536.—*Title:* THE PAUL SHOE. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published March 5, 1930.

37,537.—*Title:* THE BONA ALLEN SHOE. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published March 14, 1930.

37,538.—*Title:* BETSY ROSS. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published March 28, 1930.

37,539.—*Title:* GRAHAM CUSTOM-MADE. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published January 20, 1930.

37,540.—*Title:* STYLE MAID. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published December 20, 1929.

37,541.—*Title:* KABER'S. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published February 11, 1930.

37,542.—*Title:* TORNADO TWIST. For Men's Suits. WALTER MACINTOSH, Los Angeles, Calif. Published March 17, 1929.

37,543.—*Title:* THE COMPLETE A. C. AERIAL KIT. For Radio Aerial Kits. NELSON K. MALOTTE, doing business as Malotte Products Co., Buffalo, N. Y. Published January 23, 1930.

37,544.—*Title:* H-G BREAD. For Bread. PAR-X SERVICE CORP., Philadelphia, Pa. Published April 25, 1930.

37,545.—*Title:* FAMILY DRY. For Ginger Ale. ALEXANDER P. SEPUT, doing business as Red Arrow Bottling Works, Detroit, Mich. Published January 15, 1927.

37,546.—*Title:* GREEN CANOE. For Cigarettes. VIRGINIA PRODUCTS CORPORATION, New York, N. Y. Published February 20, 1930.

37,547.—*Title:* BUTTER BROWNS SALTED PEANUTS. For Salt Peanuts. AUGUSTA CHRISTINE WARD, Schenectady, N. Y. Published March 25, 1930.

37,548.—*Title:* $1000 LOAF. For Bread. THE WESSELS BAKING COMPANY, Seattle, Wash. Published February 4, 1930.

37,549.—*Title:* I'SE REGUSTED. For Candy Figures. WIGLY CANDY CO., INC., Brooklyn, N. Y. Published Apr. 26, 1930.

37,550.—*Title:* CHECK AND DOUBLE CHECK. For Candy Figures. WIGLY CANDY CO., INC., Brooklyn, N. Y. Published April 26, 1930.

37,551.—*Title:* SHURKLEEN HAND SOAP. For Soap. HENRY L. WISSIG, San Francisco, Calif. Published February 19, 1930.

37,552.—*Title:* BARBECUE CHICKEN. For Chicken. RICHARD WOELFFEL INC., Cupertino, Calif. Published February 15, 1930.

PRINTS

REGISTERED JUNE 3, 1930

12,576.—*Title:* HAPPY-GO-LUCKIES. For Cigarettes and Advertising Novelties. THE AMERICAN TOBACCO COMPANY, New York, N. Y. Published March 10, 1930.

12,577.—*Title:* THE SECOND STEP IS TONING. For Special Astringent, Skin Tonic, Muscle Oil, Pore Cream, and Patter. ELIZABETH ARDEN INC., doing business as Elizabeth Arden, New York, N. Y. Published March 5, 1930.

12,578.—*Title:* JEAN LAMBERT DALE. For China, Glassware, Clothing, and Accessories. L. BAMBERGER AND CO., Newark, N. J. Published March 8, 1930.

12,579.—*Title:* CARCO. For Coal. CARNEGIE DOCK & FUEL COMPANY, Minneapolis, Minn. Published February 6, 1930.

12,580.—*Title:* BEFORE THE DAYS OF FOLEY'S #1. For edicinal Preparation for Coughs Due to Colds. FOLEY & COMPANY, Chicago, Ill. Published March 28, 1930.

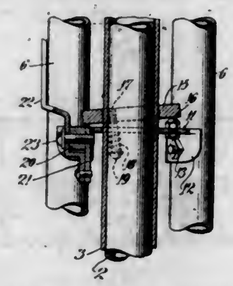
12,581.—*Title:* BEFORE THE DAYS OF FOLEY'S #2. For Medicinal Preparation for Coughs Due to Colds. FOLEY & COMPANY, Chicago, Ill. Published April 11, 1930.

12,582.—*Title:* BEFORE THE DAYS OF FOLEY'S #3. For Medicinal Preparation for Coughs Due to Colds. FOLEY & COMPANY, Chicago, Ill. Published March 14, 1930.

REISSUES

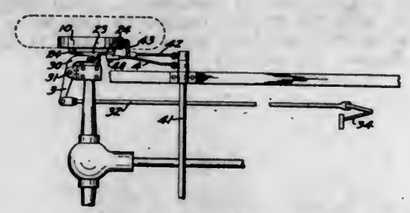
JUNE 3, 1930

17,686. SWIVELING CHAIR. ARTHUR J. ADAMS, Renton, Wash., assignor to William S. Ferris, Elkhart, Ind., trading as Domore Chair Company. Filed Apr. 23, 1930. Serial No. 446,764. Original No. 1,691,035, dated Nov. 13, 1928, Serial No. 46,229, filed July 27, 1925. 3 Claims. (Cl. 155—94.)



1. A chair embodying therein a standard comprising a plurality of legs, top and bottom spiders to which said legs are secured, a seat post, a tube in which said seat post is rotatably mounted and which tube passes through said spiders, a binding ring on said bottom spider, means carried by said spider for normally urging it into binding action upon said tube, and means also carried by said spider and adapted to be actuated to engage said ring to release its binding action on the tube.

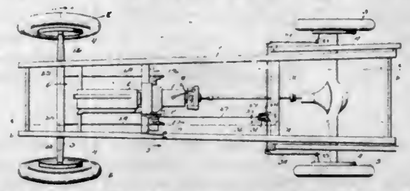
17,687. BRAKE-OPERATING MECHANISM. CHARLES W. COLLINS, Seattle, Wash. Filed Mar. 14, 1929. Serial No. 347,148. Original No. 1,637,440, dated Aug. 2, 1927, Serial No. 122,064, filed July 13, 1926. 6 Claims. (Cl. 188—140.)



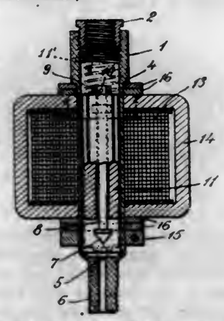
5. In a brake operating mechanism for vehicles having a brake drum secured upon a wheel and a brake acting on said drum, the combination with said drum of a friction clutch device having a friction member carried by and within said drum, a complemental friction member mounted within the drum to oscillate about the wheel axis, a link pivotally connected with said oscillable member and operatively connected with the brake applying mechanism, a hub slidable along the wheel axis and connected with said oscillable member, and operator-controlled means for sliding said hub to engage the friction surfaces of the clutch device.

17,688. VEHICLE BRAKE MECHANISM. EDWIN R. EVANS, Chicago, Ill. Filed Sept. 25, 1929, Serial No. 395,161. Original No. 1,648,168, dated Nov. 8, 1927, Serial No. 660,855, filed Sept. 4, 1923. 38 Claims. (Cl. 188—78.)

1. The combination with a brake drum and a coacting brake shoe having a pivot bearing formed with a lateral opening of lesser transverse extent than the interior diameter of said bearing, a pivot member engaging in said bearing, and a wedge registering with said lateral opening engaging said pivot member and adjustable parallel to the axis of said member for shifting said bearing toward the drum.

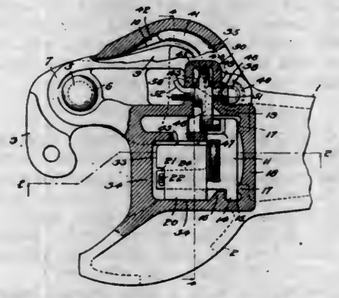


17,689. ELECTRICALLY-OPERATED VALVE. CHARLES TRUMAN HIBBARD, Minneapolis, Minn., assignor to Electric Machinery Manufacturing Company, Minneapolis, Minn., a Corporation of Minnesota. Filed June 27, 1929. Serial No. 374,252. Original No. 1,640,324, dated Aug. 23, 1927, Serial No. 699,171, filed Mar. 14, 1924. 18 Claims. (Cl. 137—139.)



1. A device of the type described, comprising the combination of an electric motor, a valve for controlling the load on the motor, and means responsive to an electric current induced in the field winding of the motor for actuating said valve.

17,690. COUPLER. WILLARD F. RICHARDS, Depew, N. Y., assignor to The Gould Coupler Company, New York, N. Y., a Corporation of Maryland. Filed July 13, 1929. Serial No. 378,189. Original No. 1,703,598, dated Feb. 26, 1929, Serial No. 165,829, filed Feb. 2, 1927. 28 Claims. (Cl. 213—126.)



17. In combination, a coupler head, a swinging knuckle, a locking device for the knuckle, a bell crank lever pivoted

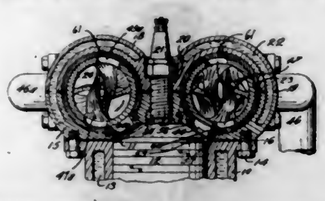
in said head and adapted to be operated by said locking device upon upward movement thereof, and a device pivoted in said head and actuated by said bell crank lever to open said knuckle.

17,691. ORNAMENTAL CONDUCTOR FOR ELECTRIC WIRES. ROBERT C. SCHEMMEL, Union City, Ind. Filed Jan. 13, 1930. Serial No. 420,617. Original No. 1,713,302, dated May 14, 1929, Serial No. 288,747, filed June 27, 1928. 16 Claims. (Cl. 247—40.)



1. An ornamental conduit for electric wires including a relatively thin tape-like base, in combination with wire-receiving tubular beads surmounting said base, arranged and adapted to be spread apart for the introduction of suitable fastening means and to automatically close over said fastening means when in final operative position, and an independent electric conducting wire in each of said tubular beads.

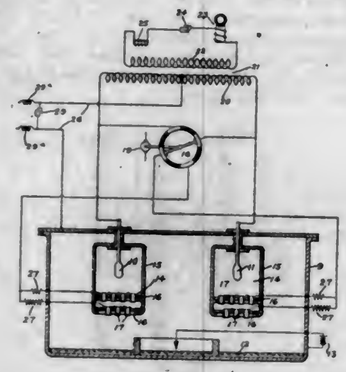
17,692. FUEL AND EXHAUST-GAS CONTROL DEVICE FOR ENGINES. JOYCE WICKERSHAM, Des Moines, Iowa. Filed Sept. 27, 1927. Serial No. 222,408. Original No. 1,599,193, dated Sept. 7, 1926, Serial No. 13,176, filed Mar. 5, 1925. 10 Claims. (Cl. 123—190.)



1. In combination with an engine requiring periodical admission of fuel or compressed gas and the periodical expulsion of exhausted gas, intake and exhaust tubes rotatably mounted in the head of said engine, inlet ports in said intake tubes for receiving the fuel, outlet ports in said intake tube longitudinally spaced on either side of said inlet ports and arranged to register with inlet openings in the cylinders of said engine, fins arranged within said intake tube for respectively diverting the incoming gas to said spaced outlet ports, outlet openings in the cylinders of said engine arranged to register with longitudinally spaced inlet ports in said exhaust tube, outlet ports in said exhaust tube between said inlet ports, fins arranged within said exhaust tube for diverting the exhaust gases respectively from said cylinders to said outlet ports, longitudinally split sleeves surrounding said valve tubes, a plurality of springs adjacent the lower halves of said split sleeves, perforated projections on said sleeves, recesses in said cylinder head designed to receive said projections, portions of said cylinder head extending inside of said projections and terminating adjacent said valve tubes, and means connected with the crank shaft of said engine for rotating said valve tubes.

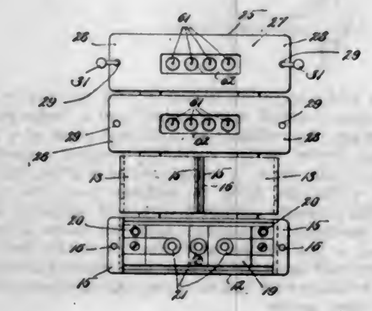
17,693. VACUUM TYPE INVERTED CONVERTER. LEWIS W. CHUBB, Edgewood, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Sept. 23, 1929. Serial No. 394,681. Original No. 1,347,894, dated July 27, 1920, Serial No. 64,154, filed Nov. 29, 1915. Reissue No. 16,363, dated June 15, 1926, Serial No. 476,935, filed June 11, 1921. 18 Claims. (Cl. 175—363.)

1. The combination with a direct-current supply circuit, of an alternating-current consumption circuit, a vacuum-type inverted converter interlinking said two circuits, and means associated with said converter for approximating a sine wave in the alternating current produced thereby.



15. The method of supplying current to an electric load by means of a unidirectionally conducting gaseous space-current path which consists in, at times, rendering said path conductive by initiating a discharge therethrough, forcing a current through said path against the action of an electromotive force tending to send a reverse current therethrough, and providing another path for said current while said opposing action still persists whereby the current is diverted from said space-current path rendering the same nonconductive.

17,694. ELECTRIC METER AND THE MOUNTING THEREOF. FREDERIC W. ERICKSON, Larchmont, N. Y., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Oct. 11, 1928. Serial No. 311,925. Original No. 1,634,098, dated June 28, 1927, Serial No. 102,341, filed Apr. 15, 1926. 16 Claims. (Cl. 247—2.)

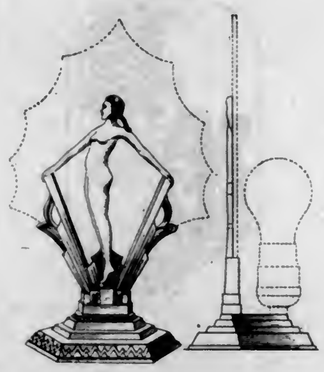


9. The combination with a casing, of an electric meter having a portion thereof proportioned to be received within the casing in engagement with the side walls thereof, the meter and casing having terminals disposed to engage and complete a circuit when the meter is in operative position with respect to said casing.

DESIGNS

JUNE 3, 1930

81,268. LAMP. FRANK J. ABEL, New York, N. Y., assignor to Sun Rise Lamp Mfg. Co., Inc., a Corporation of New York. Filed Apr. 17, 1930. Serial No. 35,282. Term of patent 3½ years.



The ornamental design for a lamp substantially as shown.

81,269. DOOR KNOCKER. ELBERT C. ALDRICH, Granby, Mass. Filed Jan. 10, 1930. Serial No. 34,092. Term of patent 14 years.



The ornamental design for a door knocker, as shown.

81,270. KNITTED FABRIC. ADOLPH M. AUGSTEIN, Great Neck, N. Y., assignor to S. Augstein & Co., a Copartnership, New York, N. Y. Filed Dec. 8, 1928. Serial No. 29,168. Term of patent 3½ years.



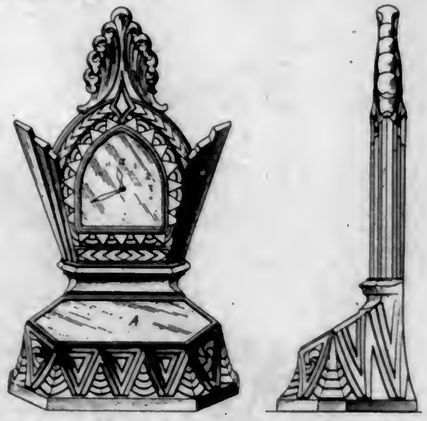
The ornamental design for a knitted fabric, substantially as shown and described.

81,271. CHILD'S CHAIR. WALTER S. CLEMENCE, Battle Creek, Mich. Filed Apr. 12, 1930. Serial No. 35,234. Term of patent 14 years.



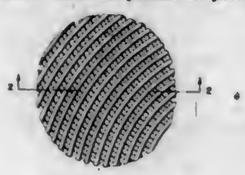
The ornamental design for a child's chair, as shown.

81,272. CLOCK CASE. JOHN M. COLUCCI, Brooklyn, N. Y., assignor to Majestic Lamp Works, New York, N. Y., a partnership consisting of Philip Silberhartz, Jacob Silberhartz, and Harry Scheiner, New York, N. Y. Filed Apr. 17, 1930. Serial No. 35,279. Term of patent 3½ years.



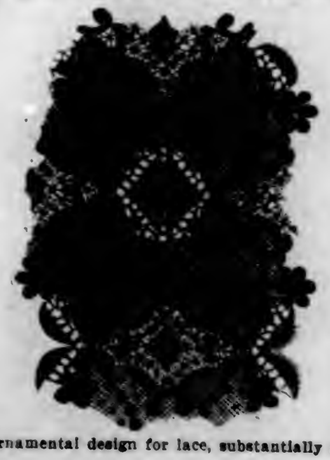
The ornamental design for a clock case substantially as shown and described.

81,273. PERFORATED EDIBLE. THOMAS ETTER and JOHN L. DUNN, Philadelphia, Pa. Filed June 10, 1929. Serial No. 31,620. Term of patent 14 years.



The ornamental design for a perforated edible, as shown.

81,274. LACE. MARC H. DAUDT, Philadelphia, Pa., assignor to North American Lace Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Mar. 21, 1930. Serial No. 34,988. Term of patent 14 years.



The ornamental design for lace, substantially as shown.

81,275. HOT-WATER BOTTLE. RICHARD ERWIN FAWN, Cleveland, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed Mar. 14, 1930. Serial No. 34,858. Term of patent 14 years.



The ornamental design for a hot water bottle as shown and described.

81,276. EDIBLE PASTRY CUP. ERNEST HAMWI, St. Louis, Mo. Filed Sept. 13, 1929. Serial No. 32,747. Term of patent 14 years.



The ornamental design for an edible pastry cup, substantially as shown.

81,277. EDIBLE PASTRY CUP. ERNEST HAMWI, St. Louis, Mo. Filed Sept. 13, 1929. Serial No. 32,748. Term of patent 14 years.



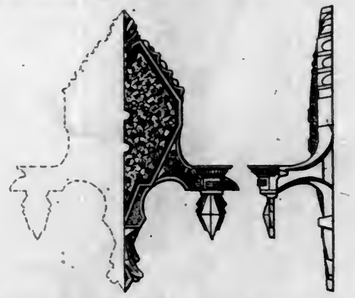
The ornamental design for an edible pastry cup, substantially as shown.

81,278. EDIBLE PASTRY CUP. ERNEST HAMWI, St. Louis, Mo. Filed Sept. 13, 1929. Serial No. 32,749. Term of patent 14 years.



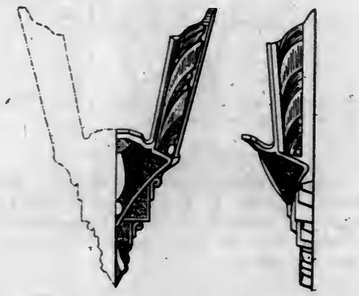
The ornamental design for an edible pastry cup, substantially as shown.

81,279. WALL BRACKET FOR AN ELECTRIC LAMP. BERNHARD HASENSTAB, Buffalo, N. Y., assignor to Markel Electric Products, Inc., Buffalo, N. Y., a Corporation of New York. Filed Mar. 14, 1930. Serial No. 34,864. Term of patent 3½ years.



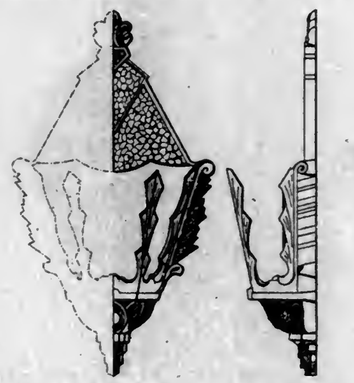
The ornamental design for a wall bracket for an electric lamp, substantially as shown and described.

81,280. WALL BRACKET FOR AN ELECTRIC LAMP. BERNHARD HASENSTAB, Buffalo, N. Y., assignor to Markel Electric Products, Inc., Buffalo, N. Y., a Corporation of New York. Filed Mar. 14, 1930. Serial No. 34,865. Term of patent 3½ years.



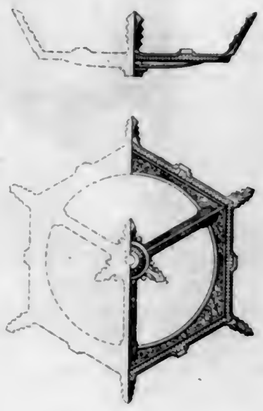
The ornamental design for a wall bracket for an electric lamp, substantially as shown and described.

81,281. WALL BRACKET FOR AN ELECTRIC LAMP. BERNHARD HASENSTAB, Buffalo, N. Y., assignor to Markel Electric Products, Inc., Buffalo, N. Y., a Corporation of New York. Filed Mar. 14, 1930. Serial No. 34,866. Term of patent 3½ years.



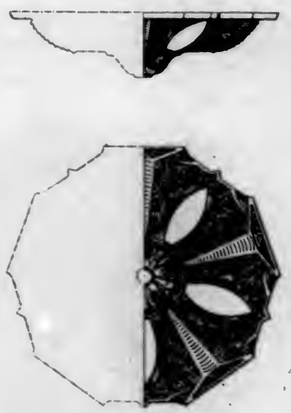
The ornamental design for a wall bracket for an electric lamp, substantially as shown and described.

81,282. ELECTRIC-LIGHT FIXTURE. BERNHARD HASENSTAB, Buffalo, N. Y., assignor to Markel Electric Products, Inc., Buffalo, N. Y., a Corporation of New York. Filed Mar. 14, 1930. Serial No. 34,870. Term of patent 3½ years.



The ornamental design for an electric light fixture, substantially as shown and described.

81,283. ELECTRIC-LIGHT FIXTURE. BERNHARD HASENSTAB, Buffalo, N. Y., assignor to Markel Electric Products, Inc., Buffalo, N. Y., a Corporation of New York. Filed Mar. 14, 1930. Serial No. 34,871. Term of patent 3½ years.



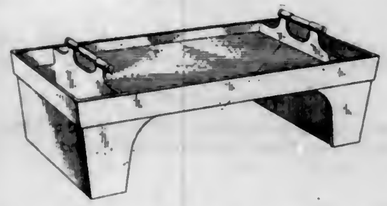
The ornamental design for an electric light fixture, substantially as shown and described.

81,284. LIGHTING FIXTURE. RASMUS R. HELLVIK, New York, and SAMUEL PERLA, Brooklyn, N. Y.; said Hellvik assignor to said Perla. Filed Dec. 27, 1929. Serial No. 33,965. Term of patent 3½ years.



The ornamental design for a lighting fixture substantially as shown and described.

81,285. INVALID TABLE. LELAND W. HUNTINGTON, Oakland, Calif. Filed Nov. 11, 1929. Serial No. 33,400. Term of patent 3½ years.



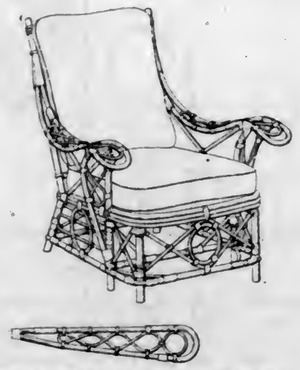
The ornamental design for an invalid table substantially as shown.

81,286. COMBINATION PEN HOLDER AND ASH TRAY. ELMER L. JOHNSON, Celoron, N. Y. Filed Mar. 13, 1930. Serial No. 34,843. Term of patent 7 years.



The ornamental design for a combination pen holder and ash tray as shown.

81,287. CHAIR. CHARLES WESLEY JONES, Glen Ridge, N. J., assignor to Sons-Cunningham Reed & Rattan Co., Inc., New York, N. Y., a Corporation of New York. Filed Nov. 11, 1929. Serial No. 33,413. Term of patent 7 years.



The ornamental design for a chair, as shown.

81,288. DOILY. WILLARD E. JONES, Highland Park, Philadelphia, Pa. Filed Aug. 29, 1929. Serial No. 32,617. Term of patent 14 years.



The ornamental design for a doily as shown.

81,289. BIRD CAGE. HARRY J. KETTLEBOROUGH, Mendota, Ill., assignor to H. D. Conkey & Company, Mendota, Ill., a Corporation of Illinois. Filed Mar. 14, 1930. Serial No. 34,862. Term of patent 7 years.



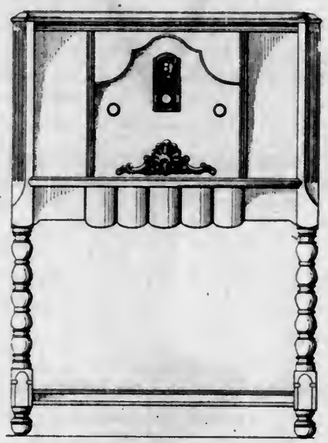
The ornamental design for a bird cage, as shown.

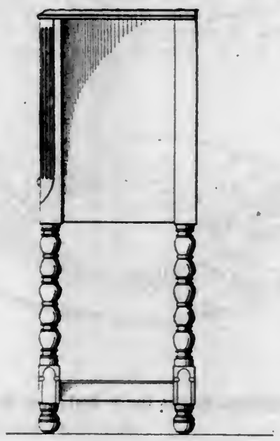
81,290. SNAP-FASTENER CAP. ARTHUR W. KIMBELL, Newton Center, Mass. Filed Jan. 9, 1930. Serial No. 34,058. Term of patent 7 years.



The ornamental design for a snap fastener cap, as shown.

81,291. CABINET. DAVID ROBERTS, Collingswood, N. J., assignor to Philadelphia Storage Battery Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Jan. 17, 1930. Serial No. 34,169. Term of patent 7 years.





81,291—Continued



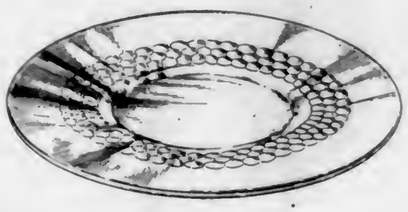
The ornamental design for a cabinet, as shown.

81,292. SNAP-FASTENER CAP. ARTHUR W. KIMBELL, Newton Center, Mass. Filed Jan. 9, 1930. Serial No. 34,059. Term of patent 7 years.



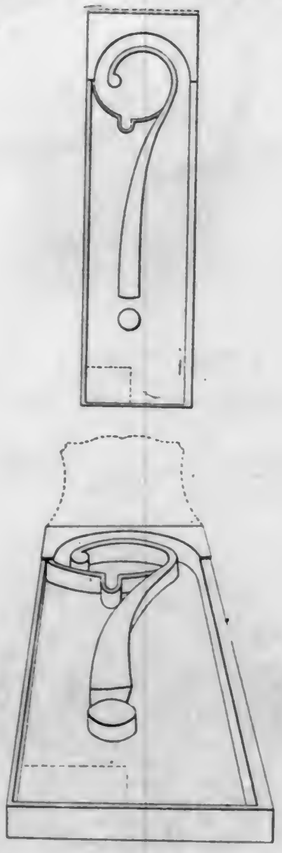
The ornamental design for a snap fastener cap, as shown.

81,293. PLATE. JOHN KIRKPATRICK, Clarksburg, W. Va., assignor to Hazel-Atlas Glass Co., Wheeling, W. Va., a Corporation of West Virginia. Filed Dec. 27, 1929. Serial No. 33,944. Term of patent 7 years.



The ornamental design for a plate, as shown and described.

81,294. GAME BOARD. JAMES MANFREDI, Corona, N. Y. Filed Mar. 27, 1930. Serial No. 35,045. Term of patent 14 years.



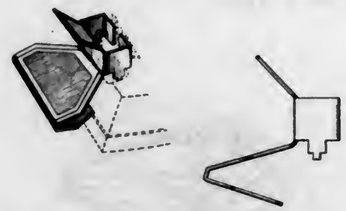
The ornamental design for a game board as shown.

81,295. LIP STICK OR SIMILAR ARTICLE. CHARLES LIONEL MARCUS, New York, N. Y. Filed Jan. 30, 1930. Serial No. 34,347. Term of patent 14 years.



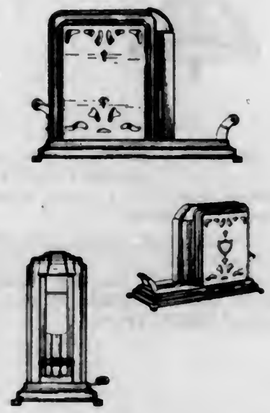
The ornamental design for a lip-stick or similar article as shown.

81,296. HEEL REST FOR ELECTRIC IRON. MICHAEL W. MCARDLE, Chicago, Ill. Filed Oct. 14, 1929. Serial No. 33,030. Term of patent 7 years.



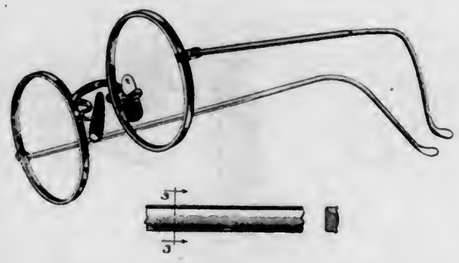
The ornamental design for a heel rest for electric iron, as shown.

81,297. TOASTER. WILLIAM H. MCLELLAND and GEORGE O. KNUTSON, Minneapolis, Minn., assignors to Dominion Electrical Mfg. Company, Minneapolis, Minn., a Corporation of Minnesota. Filed Mar. 28, 1930. Serial No. 35,060. Term of patent 7 years.



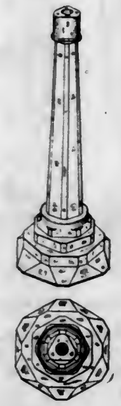
The ornamental design for a toaster substantially as shown.

81,298. OPHTHALMIC MOUNTING. FRED C. MERRY, New York, N. Y., assignor to American Optical Company, Southbridge, Mass., a Voluntary Association of Massachusetts. Filed Sept. 14, 1929. Serial No. 32,756. Term of patent 14 years.



The ornamental design for an ophthalmic mounting substantially as shown.

81,299. COUNTER-SEAT PEDESTAL. LAWRENCE M. MICHELSON, St. Louis, Mo. Filed Mar. 20, 1930. Serial No. 34,983. Term of patent 7 years.



The ornamental design for a counter-seat pedestal substantially as shown.

81,300. COMBINED BRUSH AND HAT HOLDER. CARL V. POHLSON, Pawtucket, R. I. Filed Mar. 31, 1930. Serial No. 35,072. Term of patent 7 years.



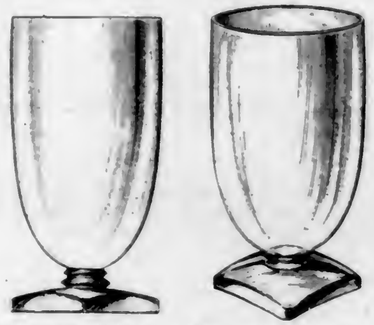
The ornamental design for a combined brush and hat holder, substantially as shown.

81,301. GOBLET OR SIMILAR ARTICLE. GEORGE SAKIER, New York, N. Y., assignor to Fostoria Glass Co., Moundsville, W. Va. Filed Nov. 15, 1929. Serial No. 33,449. Term of patent 14 years.



The ornamental design for a goblet, or similar article, as shown.

81,302. GOBLET. GEORGE SAKIER, New York, N. Y., assignor to Fostoria Glass Co., Moundsville, W. Va. Filed Nov. 15, 1929. Serial No. 33,450. Term of patent 14 years.



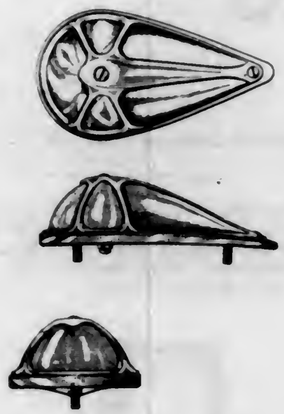
The ornamental design for a goblet, as shown.

81,303. RADIATOR CAP OR SIMILAR ARTICLE FOR AN AUTOMOTIVE VEHICLE. WILLIAM SCHNELL, Detroit, Mich., assignor to Ternstedt Manufacturing Company, Detroit, Mich., a Corporation of Michigan. Filed Jan. 25, 1930. Serial No. 34,286. Term of patent 7 years.



The ornamental design for a radiator cap or similar article for an automotive vehicle substantially as shown.

81,304. FENDER LAMP FOR MOTOR VEHICLES. HERMAN SCHWARZE, Pontiac, Mich., assignor to Guide Lamp Corporation, Anderson, Ind., a Corporation of Delaware. Filed Mar. 31, 1930. Serial No. 35,078. Term of patent 14 years.



The ornamental design for a fender lamp for motor vehicles substantially as shown.

81,305. WIPER FOR OIL GAUGES. JOHN V. SHOEMAKER, Detroit, Mich. Filed Mar. 17, 1930. Serial No. 34,933. Term of patent 7 years.



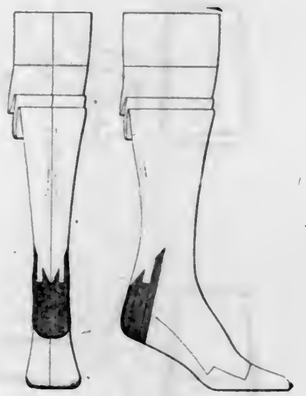
The ornamental design for a wiper for oil gauges as shown.

81,306. CAKE PLATE OR SIMILAR ARTICLE. EDWIN E. SLICK, Pittsburgh, Pa. Filed Sept. 4, 1929. Serial No. 32,667. Term of patent 14 years.



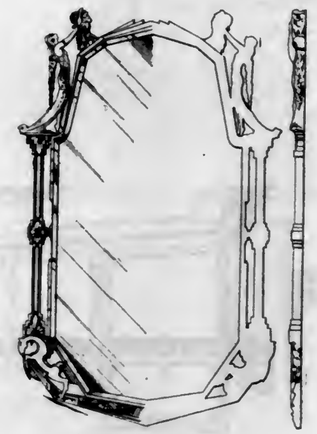
The ornamental design for a cake plate or similar article, substantially as shown.

81,307. HOSIERY. JAMES A. STRUTHERS, Minneapolis, Minn. Filed Mar. 7, 1930. Serial No. 34,777. Term of patent 14 years.



The ornamental design for hosiery substantially as shown.

81,308. MIRROR FRAME. TULLY LA TESSA, Chicago, Ill., assignor to J. A. Olson Company, Chicago, Ill., a Corporation of Illinois. Filed June 6, 1929. Serial No. 31,576. Term of patent 7 years.



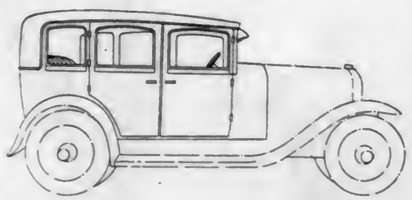
The ornamental design for a mirror frame as shown and described.

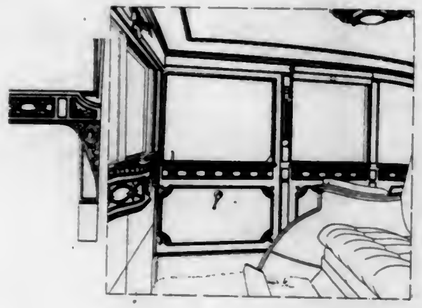
81,309. TRAY OR SIMILAR ARTICLE. WILL CAMERON MCCARTNEY, Cambridge, Ohio. Filed Jan. 25, 1929. Serial No. 29,771. Term of patent 7 years.



The ornamental design for a tray or similar article, as shown and described.

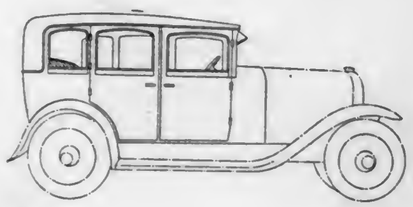
81,310. AUTOMOBILE BODY. HENRY ORSENIGO, Mount Vernon, N. Y. Filed Mar. 9, 1929. Serial No. 30,400. Term of patent 3½ years.

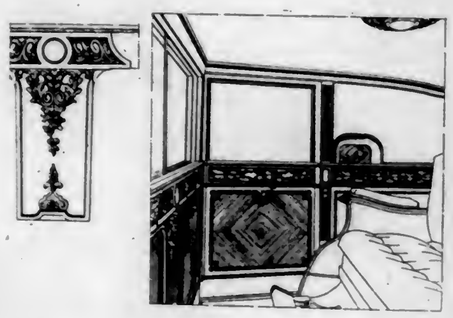




The ornamental design for an automobile body, as shown, and described.

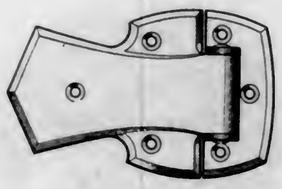
81,311. AUTOMOBILE BODY. HENRY ORSENIGO, Mount Vernon, N. Y. Filed Mar. 20, 1929. Serial No. 30,525. Term of patent 3½ years.





The ornamental design for an automobile body, as shown, and described.

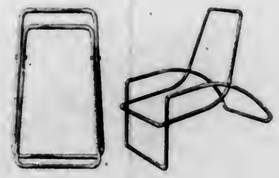
81,312. HINGE. GORDON E. ROEDDING, Grand Rapids, Mich., assignor to Grand Rapids Brass Company, Grand Rapids, Mich., a Corporation of Michigan. Filed Mar. 22, 1930. Serial No. 35,000. Term of patent 3½ years.

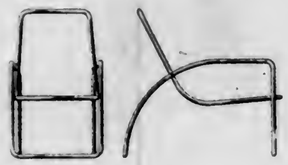




The ornamental design for a hinge substantially as shown.

81,313. CHAIR FRAME. JOHN FRANKLIN WHITMAN, Jr., New York, N. Y., assignor to Edith G. Straus, doing business as Modern Metal Furniture Company, New York, N. Y. Filed Mar. 5, 1930. Serial No. 34,741. Term of patent 7 years.





The ornamental design for a chair frame, as shown.

81,314. FAUCET HANDLE. SAMUEL KERSTEN, Chicago, Ill. Filed Nov. 4, 1929. Serial No. 33,312. Term of patent 14 years.



The ornamental design for a faucet handle as shown.

81,315. GOLF TEE. WARREN H. MCLEOD, Boulder, Colo. Filed Apr. 15, 1930. Serial No. 35,255. Term of patent 14 years.

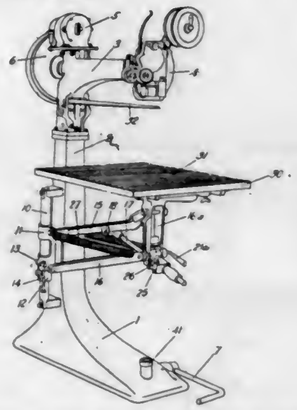


The ornamental design for a golf tee as shown.

PATENTS

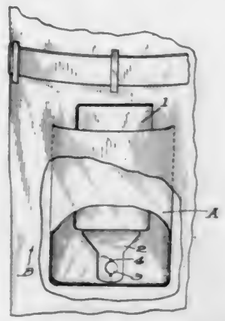
GRANTED JUNE 3, 1930

1,760,863. WIRE-STITCHING MACHINE. HOWARD G. ALLEN, Niagara Falls, N. Y., assignor to H. R. Bliss Company, Inc., Niagara Falls, N. Y., a Corporation of New York. Filed Dec. 9, 1927. Serial No. 238,754. 21 Claims. (Cl. 1—15.)



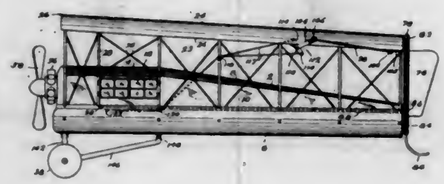
1. The combination with a wire stitching machine having a pedestal and a projecting portion carrying a stitcher head, a blade anvil, a support for one end of the blade anvil, a horizontally extending pivot for carrying the support, a locking pin insertable and removable from the pedestal against which the support abuts to hold the anvil in outwardly projecting position, and an adjustable screw carried by the support and which directly abuts against the said pin.

1,760,864. SAFETY ATTACHMENT FOR POCKETBOOKS AND THE LIKE. JAMES F. BAKER, Los Angeles, Calif. Filed May 22, 1929. Serial No. 365,067. 5 Claims. (Cl. 2—249.)



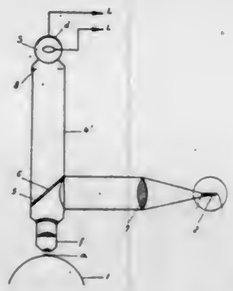
1. In combination, a pocket, a container adapted for reception in the pocket so as to seat against the bottom thereof, a strip projecting beyond that end of the container which is first inserted in the pocket and which seats against the bottom of the pocket, and a button adapted for mounting in the pocket adjacent its lower end and at the interior face of the pocket which is proximate to the palm of the hand inserted in the pocket, the strip having a button hole adapted to receive the button for securing the container in the pocket, and the strip being of a flexible material permitting it to fold over the fastened button when the container seats against the bottom of the pocket.

1,760,865. AIRPLANE. OTTO J. BARTH, Kansas City, Mo. Filed May 27, 1929. Serial No. 366,306. 4 Claims. (Cl. 244—14.)



1. In an airplane, a fuselage, a fuel tank arranged in the lower portion of said fuselage and extending approximately the entire length of the latter, yokes for securing said tank in place, stays secured at their lower ends to said yokes, and a wing supported by said stays.

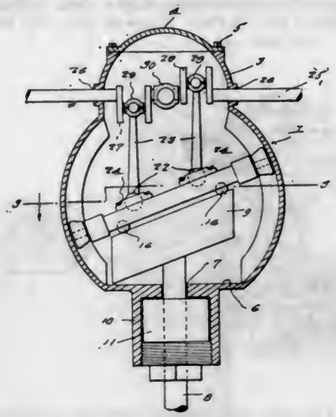
1,760,866. METHOD AND APPARATUS FOR TRANSMITTING DOCUMENTS ELECTRICALLY. EDOUARD BELIN, Paris, France. Filed Mar. 31, 1928, Serial No. 266,355, and in France Apr. 27, 1927. 4 Claims. (Cl. 178—7.)



1. An apparatus of the type described comprising in combination, document holding and displacing means, a tube, said tube having an orifice adjacent one end, a microphotographic objective disposed in one end of said tube in close proximity to said means, a mirror having an elliptical hole obliquely disposed in said tube opposite said orifice, illuminating means for said orifice, a photoelectric cell disposed in the other end of said tube and a local circuit controlled by said cell.

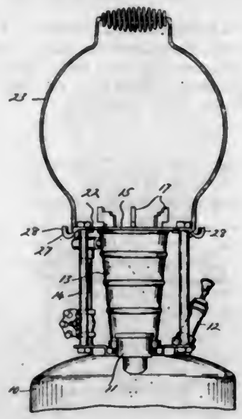
1,760,867. TRANSMISSION. GEORGE H. BENNETT, Poteau, Okla. Filed Dec. 7, 1929. Serial No. 412,531. 3 Claims. (Cl. 74—14.)

1. A transmission of the character described comprising a casing, a drive shaft rotatably extending thereinto, a cam disc fixed on the drive shaft, a transversely extending bar mounted for oscillatory movement in the casing and engaged with the cam disc for actuation thereby, a crank shaft rotatably mounted in the casing and connecting rods



coupling the crank shaft to the oscillating bar at longitudinally spaced points thereof in a manner to rotate the crank shaft when the bar is actuated.

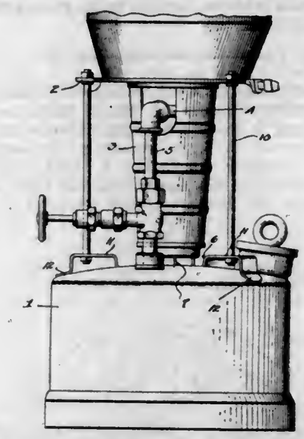
1,760,868. HANDLE. WILLIAM BLASKEWITZ, Detroit, Mich., assignor, by mesne assignments, to Clayton and Lambert Manufacturing Company, Detroit, Mich., a Corporation of Delaware. Filed Aug. 3, 1925. Serial No. 47,938. 2 Claims. (Cl. 126—236.)



1. In a fire pot having a fuel tank, a burner, a handle pivotally connected with the fire pot and normally positioned vertically for carrying the same, lugs for utilizing the inherent resilience of the handle for maintaining the same in its carrying position, said lugs acting upon an abnormal movement of the handle about its pivot to permit positioning of the handle at an angle with the vertical for supporting a soldering iron or the like and to maintain the handle in the iron supporting position, and means engageable with the handle in the latter position for supporting the same.

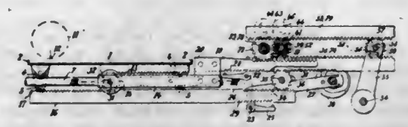
1,760,869. FIRE-POT STRUCTURE. WILLIAM BLASKEWITZ, Detroit, Mich., assignor, by mesne assignments, to Clayton and Lambert Manufacturing Company, Detroit, Mich., a Corporation of Delaware. Filed Jan. 4, 1929. Serial No. 330,281. 6 Claims. (Cl. 126—240.)

1. Fire pot structure, comprising a tank, a burner mounted on the tank and a shield surrounding the burner, a spider member having the central portion thereof in contact with the bottom part of the shield and with the central top portion of the tank, a top plate, means extending between the legs of the spider and the top plate for



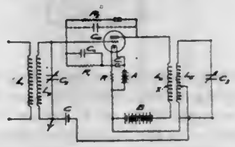
clamping the shield therebetween and for positioning the top plate, the ends of each leg of the spider being in reinforcing contact with the top of the tank and adjacent the outer edge thereof.

1,760,870. LINE-ADJUSTING MECHANISM. ERNST BREITLING, Essen, Germany, assignor to Fried. Krupp Aktiengesellschaft, Essen-on-the-Ruhr, Germany. Filed Feb. 26, 1929, Serial No. 342,882, and in Germany Apr. 13, 1928. 11 Claims. (Cl. 101—93.)



1. A mechanism for adjusting the lines to be printed on a voucher to be introduced in a printing mechanism comprising a table adapted to receive a voucher, a setting mechanism for adjusting said table to the line to be printed, including a separate decimal setting mechanism for each decimal part of the line number whereby the decimal parts of the line number may be set separately.

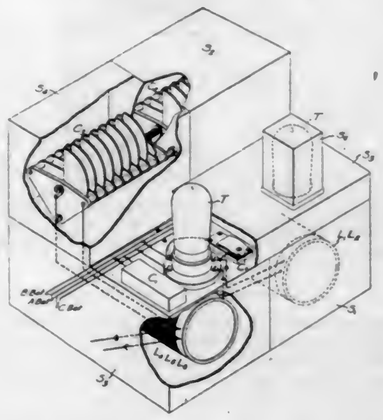
1,760,871. METHOD OF AND MEANS FOR PREVENTING RADIATION AND EXTRA RERADIATION IN RADIORECEIVERS. STUART BALLANTINE, Mountain Lakes, N. J., assignor of one-half to Radio Frequency Laboratories, Incorporated, Boonton, N. J., a Corporation of New Jersey. Filed June 17, 1924. Serial No. 720,708. 6 Claims. (Cl. 179—171.)



1. In a radio receiver, the combination with a current collecting device and an oscillatory element, of a unidirectional repeater located between said current collecting device and said oscillatory element, said unidirectional repeater comprising the combination of an audion tube with means for reducing effects upon the input circuit terminals of variations in potential across the output circuit

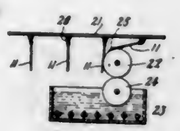
terminals due to the grid-plate capacity of said tube, means for reducing the flow of current from the grid to the filament, means for reducing the flow of alternating plate current through the filament, and means for reducing incidental coupling between elements in the input and output circuits of said tube.

1,760,872. APPARATUS FOR AMPLIFYING ELECTRIC OSCILLATIONS. LEWIS M. HULL, Mountain Lakes, N. J., assignor to Radio Frequency Laboratories, Incorporated, Boonton, N. J., a Corporation of New Jersey. Original application filed Jan. 9, 1925, Serial No. 1,471. Divided and this application filed Mar. 24, 1930. Serial No. 438,591. 6 Claims. (Cl. 179—171.)



1. A radio frequency amplifier comprising a plurality of cascaded vacuum tube stages of the type including means suppressing the effects of capacitive coupling between control grid and plate, characterized by the fact that condenser-tuned transformers interlink said stages, and individual shields are provided for each transformer, for each condenser and for each vacuum tube.

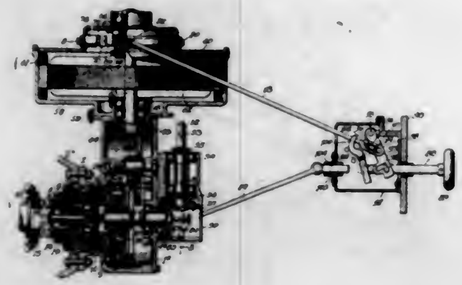
1,760,873. ROOFING ELEMENT WITH THICKENED BUTT EDGES AND METHOD OF MAKING THE SAME. LESTER KIRSCHBRAUN, Leonia, N. J., assignor, by mesne assignments, to The Patent and Licensing Corporation, Boston, Mass., a Corporation of Massachusetts. Filed July 31, 1926. Serial No. 126,279. 8 Claims. (Cl. 91—68.)



1. Steps in the manufacture of roofing elements, which comprise applying a waterproofing coat to the exposed portion of the upper face of a roofing element, and extending said coat to cover the exposed edges of the element and to form a narrow marginal area of coating on the under face thereof adjacent the butt edges.

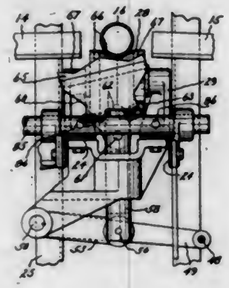
4. A roofing element having a coating of waterproofing material covering the exposed portion of the upper face of the element and the adjacent edges of the element and forming a continuous narrow marginal area of coating on the under face of the element adjacent to said edges, and a surfacing of grit adhering to said coating.

1,760,874. ENGINE STARTER. RAYMOND P. LANSING, Montclair, N. J., assignor to Eclipse Machine Company, Elmira, N. Y., a Corporation of New York. Filed Dec. 4, 1925, Serial No. 73,196. Renewed Aug. 13, 1929. 30 Claims. (Cl. 290—38.)



27. In a starter for cranking internal combustion engines a member adapted to be moved into driving engagement with a member of the engine to be started, an electric motor having brushes and a rotor, said rotor constituting an inertia member in which energy for cranking the engine is adapted to be stored, said inertia member being disconnected from the engine during the storage of energy therein and during the normal operation of said engine, means for moving said brushes out of operative relation with said motor, and reduction means for drivably connecting said inertia member and engine engaging member.

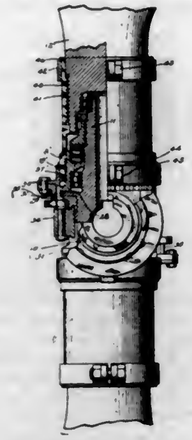
1,760,875. MANDREL-DELIVERING APPARATUS. THOMAS P. LITTLE, Chicopee Falls, Mass., assignor to The Fisk Rubber Company, Chicopee Falls, Mass., a Corporation of Massachusetts. Filed July 12, 1927. Serial No. 205,085. 4 Claims. (Cl. 198—21.)



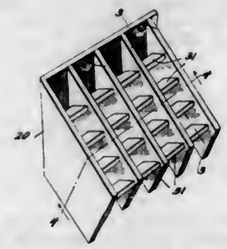
1. A mandrel handling apparatus comprising conveying means for feeding mandrels longitudinally, vertically movable slides underneath the path of the mandrels, rockers pivoted to said slides, each rocker having a double slanted central upper surface and upwardly slanted edges, means for moving the slides, and means for returning the rockers to their initial position after they have ejected a mandrel.

1,760,876. AIRPLANE PROPELLER. ERNEST G. McCAULEY, Dayton, Ohio, assignor to The Hamilton Standard Propeller Corporation, a Corporation of Pennsylvania. Filed Aug. 21, 1925. Serial No. 51,596. 32 Claims. (Cl. 170—162.)

1. In a propeller, a hub having a spindle thereon, a blade mounted on said spindle and held central thereby, there being rotary bearings adjacent the outer and inner ends of said spindle to permit rotation of said blade relative to said spindle, a frictionless thrust bearing intermediate said rotary bearing to assume the end thrust of the blade relative to said spindle in operation, and an annular raised portion at said hub for the end of said blade to assume the stress otherwise communicated to the spindle due to lateral deflection of the blade under heavy load.

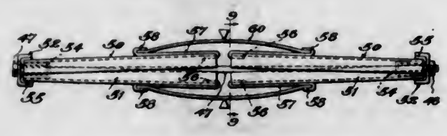


1,760,877. CELLULAR SCREEN. CARL S. McKINLEY, Dallas, Tex. Filed June 2, 1927. Serial No. 196,058. 2 Claims. (Cl. 209—393.)



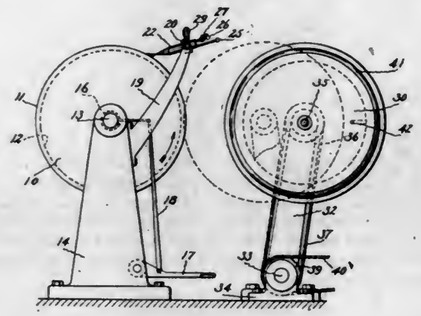
2. In a separating device an inclined cellular screen comprising a plurality of spaced transverse blades, said blades being substantially non-overlapping and rearwardly inclined with respect to the body of the screen, and a plurality of spaced longitudinal ribs extending above the plane of the tops of the blades and forming together with said blades a plurality of rows of separate cells of approximately the correct size for passing the particles to be separated.

1,760,878. THERMOSTAT. PERRY S. MARTIN, Harrisonburg, Va. Filed July 16, 1925. Serial No. 44,045. 7 Claims. (Cl. 297—12.)



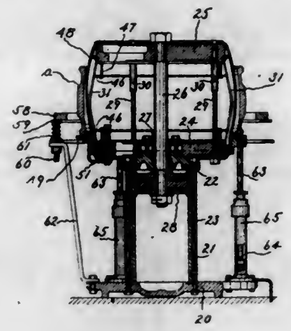
1. In an incubator thermostat, two elongated high expansion members in tandem relation, a low expansion rod connecting the distant ends of the two high expansion members, clips extending from the proximate ends of the high expansion members backward toward the ends of the rod, and a spring engaging each clip, said rod serving not only to hold the members assembled but also acting to limit separation of the far ends of the two members.

1,760,879. METHOD AND APPARATUS FOR APPLYING TIRE TREADS. CHARLES EDGAR MAYNARD, Northampton, Mass., assignor to The Fisk Rubber Company, Chicopee Falls, Mass., a Corporation of Massachusetts. Filed Sept. 13, 1926. Serial No. 134,961. 9 Claims. (Cl. 154—14.)



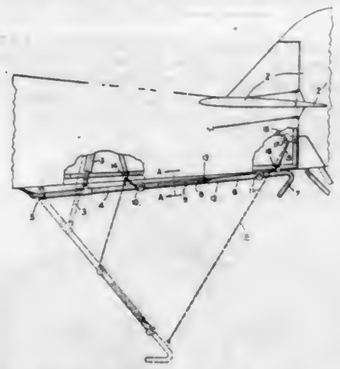
1. A method of applying a coating of rubber to an article which comprises depositing a film of rubber dispersion upon a surface, drying the dispersion to form a coherent layer, and transferring said layer to the article progressively with its formation.

1,760,880. EXPANDING FLAT-BAND TIRE CASING. THOMAS MIDGLEY, Hampden, Mass., assignor to The Fisk Rubber Company, Chicopee Falls, Mass., a Corporation of Massachusetts. Filed Feb. 15, 1926. Serial No. 88,194. 7 Claims. (Cl. 154—10.)



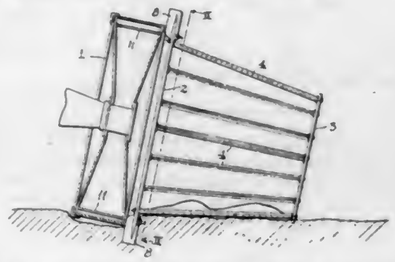
1. An expander for shaping flat band tire casings to tire form which comprises a plurality of layers of flexible strips arranged in annular assembly, the strips in the several layers being arranged so as to break joints, and means for bowing the strips outwardly.

1,760,881. LANDING HOOK FOR AIRCRAFT. ROBERT J. MINSHALL, Seattle, Wash., assignor to Boeing Airplane Company, Seattle, Wash. Filed Jan. 16, 1929. Serial No. 332,780. 4 Claims. (Cl. 244—2.)



4. In an airplane, a landing hook yieldingly and swingably mounted to the fuselage of said airplane, the shank of said hook being made of two parts slidably mounted with respect to each other, cables anchored to said fuselage and embracing a plurality of pulleys carried by each of said slidable hook parts.

1,760,882. ATTACHMENT FOR FARM TRACTORS. LLOYD E. MORROW, Milan, Ohio. Filed Apr. 18, 1927. Serial No. 184,601. 6 Claims. (Cl. 97—6.)



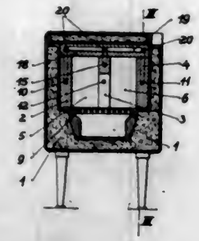
1. In a device of the character described, a support-ring engageable with a carrying wheel, a second ring spaced therefrom, a plurality of bars having outstanding edges and connecting said rings, brace ties extending between said rings, and take up bolts to connect between the carrying wheel and the support ring.

1,760,883. STRUCTURAL JOINT AND METHOD OF MAKING THE SAME. HERBERT H. MOSS, Brooklyn, N. Y., assignor to The Linde Air Products Company, a Corporation of Ohio. Filed Feb. 6, 1926. Serial No. 86,448. 12 Claims. (Cl. 189—36.)



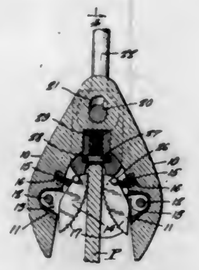
1. The combination with tubular members provided with openings in the walls thereof, of a rigid stress-transferring connector having portions disposed in said openings and welded to each of said members.

1,760,884. HEATING DEVICE CONTAINING A FLUID IN ITS HEATING ELEMENT. ALEXANDRE PAIS, Bucharest, Rumania. Filed Dec. 13, 1926, Serial No. 154,637, and in Austria July 26, 1926. 2 Claims. (Cl. 257—1.)



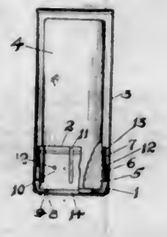
1. In a heating device flues having therein a heat accumulating metal block comprising a horizontal flat portion and a plurality of vertical flat portions projecting from such horizontal portion and constituting walls of the said flues, and passages in the said portions, such passages communicating with each other and forming a closed system permanently filled with a temperature equalizing medium.

1,760,885. GRIPPING DEVICE. ANTON PRELESNIK, Eveleth, Minn. Filed Feb. 8, 1928. Serial No. 252,838. 3 Claims. (Cl. 294—104.)



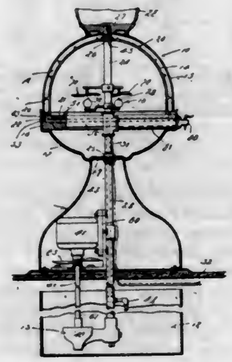
1. In a gripping device, a pair of spaced rigidly connected arms, opposed relatively movable gripping jaws carried thereby, means to movably mount the jaws, spring means to yieldingly force said jaws relatively inward, and means mounted upon the arms and movable toward the jaws to engage and force the latter relatively outward.

1,760,886. HOLDER FOR SOAP STICKS AND THE LIKE. FREDERICK REUTTER, Waterbury, Conn., assignor to Scovill Manufacturing Company, Waterbury, Conn., a Corporation of Connecticut. Filed Feb. 13, 1928. Serial No. 253,830. 6 Claims. (Cl. 206—56.)



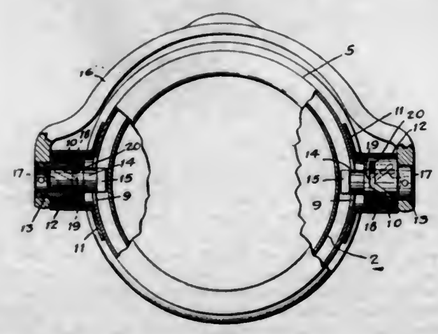
1. In a holder for shaving soap sticks and the like, the combination of a base, a shoulder on the base and a wall inset from the shoulder, a central flange in the bottom of the base, a soap holding cup having a central raised portion fitting in the flange and having frictional engagement with the wall of the base, and a cover having frictional engagement with the base wall and seating on the shoulder.

1,760,887. BEVERAGE DISPLAY. HARTVIG P. SAUGMAN, Glendale, Calif. Filed Oct. 24, 1927. Serial No. 228,208. 5 Claims. (Cl. 225—21.)



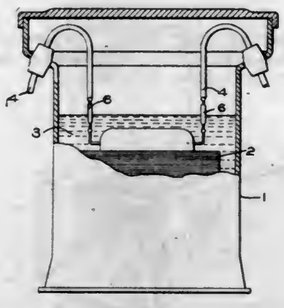
1. A device of the character described, including a dome like body, a transparent hood spaced over the body, a bottom supporting the body and hood and having a drain opening, a liquid conduit extending upwardly to the top of the body to deliver liquid to the space between the body and hood, and a valve controlled liquid outlet connected with said conduit.

1,760,888. LOCK COVER FOR CANS. PAUL S. SHIELD, Cincinnati, Ohio, assignor to Augustine Davis, Jr., Cincinnati, Ohio. Filed Aug. 5, 1927. Serial No. 210,737. 14 Claims. (Cl. 220—55.)



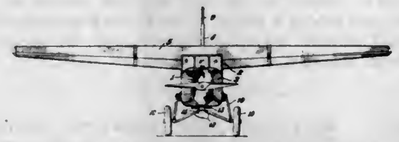
1. In a cover for a vessel having a circumferential overhang, a locking piece turnable and also movable endwise inwardly and outwardly in said cover to operate under said overhang at any point, and a lever, with a sliding connection between said lever and locking piece whereby the locking piece is turned by the lever but moves inwardly and outwardly relatively to the lever, and cam means on the cover cooperating with the locking piece to produce the endwise movement thereof.

1,760,889. CONDUCTOR FOR TRANSFORMERS. ALEXANDER A. SKVORTZOFF, Sharon, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Sept. 2, 1926, Serial No. 133,101. Renewed Jan. 18, 1929. 5 Claims. (Cl. 175—361.)



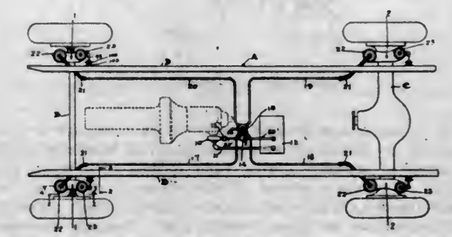
1. In combination, a casing, a liquid therein, and a wire having a coating of porous material extending through the casing and into the liquid, of a section of non-porous material inserted into the coating at approximately the level of the liquid to prevent siphoning and capillary actions in the coating.

1,760,890. AIRPLANE LANDING GEAR. WILLIAM B. STOUT, Detroit, Mich., assignor to Ford Motor Company, Highland Park, Mich. Original application filed July 11, 1925, Serial No. 42,944. Divided and this application filed Oct. 5, 1926. Serial No. 139,592. 3 Claims. (Cl. 244—2.)



1. In an airplane, a landing gear, means for connecting said gear to the fuselage, including a strut extending laterally from said wheels, a strut extending substantially vertical therefrom and means for resiliently connecting each of said struts to the fuselage, said connection including a pivot for one of said struts and means associated with the other of said struts for swinging said wheel about said pivot to retract the landing gear.

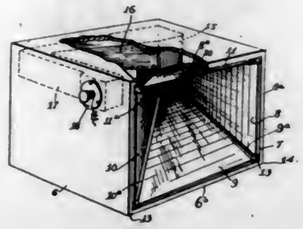
1,760,891. COMBINED FOUR-WHEEL JACK AND SHOCK ABSORBER. B. TAYLOR WILKEY, Nogales, Ariz. Filed July 23, 1927. Serial No. 207,897. 8 Claims. (Cl. 267—31.)



1. As a new article of manufacture a block of metal having two spaced cylinders, one of said cylinders being

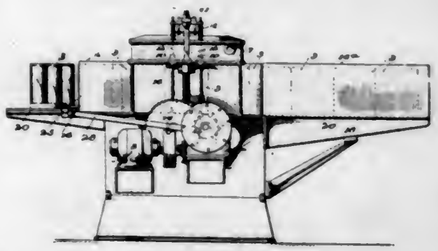
adapted for use as a jack, the other being adapted for use as a shock absorber, said block of metal being also provided with a bridge piece integrally connecting the cylinders each at an intermediate point in their length, and a plate bolted to the ends of the cylinders adapted for clamping a vehicle axle to the bridge piece.

1,760,892. SOUND AMPLIFIER. THEOPHILUS G. WILLIAMS, Morristown, N. J. Filed Apr. 2, 1928. Serial No. 266,707. 10 Claims. (Cl. 181—27.)



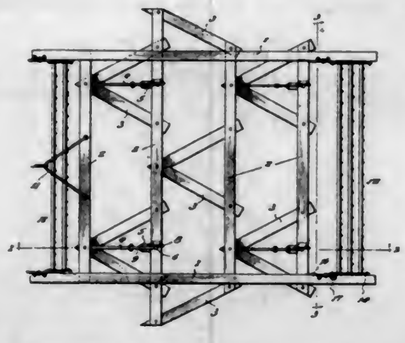
1. In a sound amplifier, a cabinet of rectangular shape open at the front, and a horn within said cabinet constructed of panels connected at the side edge portions to form a chamber having a sound emitting opening of rectangular shape to conform to and at the open front of the cabinet, and a pair of panels extending at a right angle to each other and parallel to the bottom and a side of the cabinet and the connection of said pair of panels extending parallel to the corner of the cabinet formed by said side and bottom of the cabinet, and the connected edges of the other panels inclining from the front toward the back of the cabinet and converging in a direction toward the corner formed by the one side and bottom of the cabinet, and having a sound wave receiving opening at the terminus of said converging corners and the corner of the panels arranged at a right angle.

1,760,893. APPARATUS FOR APPLYING BINDERS AND THE LIKE TO PAPER HOOD CAPS AND OTHER ARTICLES. WILBUR L. WRIGHT and LEE D. PIERCE, Fulton, N. Y., assignors to Oswego Falls Corporation, Fulton, N. Y., a Corporation of New York. Original application filed Aug. 6, 1925, Serial No. 48,564. Divided and this application filed May 4, 1927. Serial No. 188,842. 10 Claims. (Cl. 91—44.)



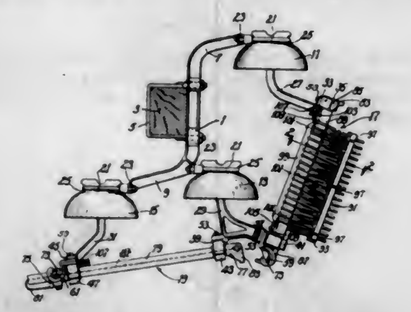
3. In apparatus for applying a binder substance or composition to the skirts of fibrous material hood cap disks, a series of separate crates, each formed to carry a plurality of separate stacks of said disks, a source of hot liquid binder, valve mechanism controlling and normally cutting off the discharge thereof, and a treating chamber, means for moving a row of such crates to successively receive hot liquid binder to flood the stacks of disks therein and successively therefrom to said treating chamber.

1,760,894. AGRICULTURAL IMPLEMENT. WILLIAM S. BARKER, Pana, Ill. Filed Feb. 29, 1928. Serial No. 258,077. 2 Claims. (Cl. 55—23.)



1. An agricultural implement comprising a main frame, soil-deflecting elements secured to the under side of the frame and consisting of rigid rearwardly diverging bars, pivotally mounted arms carried by the frame and disposed on the medial longitudinal lines of the deflecting elements, shoes at the rear free ends of said arms, hand levers mounted on the frame above the rear ends of said arms, and link connections between the respective hand levers and the rear ends of the pivoted arms whereby to adjust the shoes.

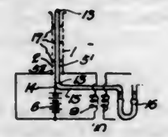
1,760,895. DISCONNECTING CHOKE-COIL SWITCH. LESTER PIERCE BOLL, Maplewood, and ARNOLD CLEMENT HANSEN, Jr., St. Louis, Mo., assignors to W. N. Matthews Corporation, St. Louis, Mo., a Corporation of Missouri. Filed July 27, 1927. Serial No. 208,709. 5 Claims. (Cl. 200—114.)



4. The combination of a choke coil switch and a fuse switch comprising a frame, insulators affixed thereto, brackets affixed to the insulators, contacting clips on the brackets adapted to resiliently hold at least two circuit closing members, one of which comprises a fuse and the other of which comprises a choke coil switch; open hinge members adapted to permit hinging application of the circuit closing members, removal thereof, and to prevent longitudinal movement thereof when positioned in the said clips.

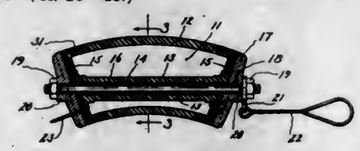
1,760,896. APPARATUS FOR THE PRODUCTION OF SOUNDS FROM ELECTRIC CURRENT AND INVERSELY. CONSTANTIN CHILOWSKY, Paris, France, and BORIS NAGACHEFF, Boston, Mass. Filed July 30, 1927, Serial No. 209,586, and in France Aug. 7, 1926. 5 Claims. (Cl. 179—106.)

1. A device for the production of sounds by means of a modulated electric current, and inversely, which comprises two rigid sheets permeable to air, two vibrating diaphragms placed between said sheets, means for adjusting the distance between the said vibrating diaphragms and the said rigid sheets, means for applying a constant po-



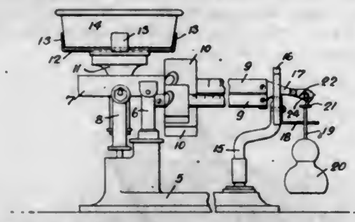
tential between said sheets and vibrating diaphragms, and means whereby the variable modulated potential to be transformed into sounds may be applied to the said vibrating diaphragms.

1,760,897. SECTIONAL REPAIR BAG AND METHOD OF MAKING THE SAME. CHARLES H. DESAUTELS, Springfield, Mass., assignor to The Fisk Rubber Company, Chicopee Falls, Mass., a Corporation of Massachusetts. Filed Mar. 30, 1927. Serial No. 179,455. 3 Claims. (Cl. 18—45.)



1. A sectional repair bag composed of a rubber body portion longitudinally curved to fit a tire casing and formed transversely to a horse-shoe shape corresponding to the shape of the interior of the tire, said body portion being formed with integral walls defining a fluid tight annular chamber and a straight hole extending through the center of the annulus from one end of the body portion to the other, and plates lying against the ends of the body portion and having holes therein in register with the hole through the body portion, and a straight rod extending through the several holes and secured to the end plates, whereby the bag is secured against longitudinal expansion.

1,760,898. SCALE. CHARLES DOLLACK, Glendale, Long Island, N. Y., assignor to The Jacobs Brothers Co., Inc., Brooklyn, N. Y., a Corporation of New York. Filed May 14, 1927. Serial No. 191,298. 8 Claims. (Cl. 265—49.)



1. A scale including a base, a beam rockingly mounted thereon, a counterweight, detachable means for operatively associating said weight with said beam, said weight being gripped by the hand and shifted to associate it with and remove it from association with the beam and means for preventing a removal of said weight from positions adjacent said base.

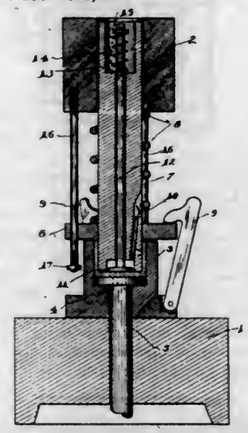
1,760,899. COMBINED AWNING AND SHADE. EFFIE L. DRONBERGER, Three Sands, Okla. Filed Nov. 6, 1926. Serial No. 146,760. 1 Claim. (Cl. 156—44.)

A combination awning and shade bracket for use upon motor vehicles comprising a substantially inverted U-shaped member, indented disks carried upon the opposite ends of the member, disks having embossed portions arranged in circuitous courses thereon and adapted for reception within the indentations of the first mentioned disks, ears offset at right-angles from the peripheries of the embossed disks being adapted for reception within



portions removed in the window openings, pivot bolts carried by the window construction passed centrally through the associated disks, springs carried upon the pivot bolts for the U-shaped member and abutting the adjacent faces of the first mentioned disks, and means carried upon the pivot bolts to regulate tension of the springs against the disks.

1,760,900. MANUFACTURE OF CHOCOLATE CONFECTIONERY. ALEXANDER D. FISHER, Toronto, Ontario, Canada. Filed June 26, 1926. Serial No. 118,741. 4 Claims. (Cl. 107—54.)

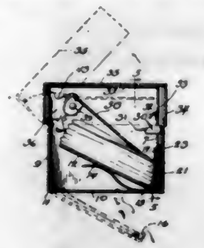


4. A process of producing hollow molded chocolate from non-plastic bulk chocolate maintained at a temperature below that at which it becomes plastic which consists in confining in the bottom of a mold a quantity of the non-plastic chocolate materially less in volume than the interior of the mold, projecting into the mold a plunger of less diameter than the mold to subject the chocolate to a pressure sufficiently great to cause it to flow up between the mold and plunger in a direction contra to that of the molding movement of the plunger, and continuing the pressure movement till the mold about the plunger is substantially filled, surplus chocolate being allowed to escape under the high pressure generated in the mold.

1,760,901. BILL BANK. MARGARET GOEPEL, New York, N. Y. Filed Jan. 25, 1928. Serial No. 249,436. 11 Claims. (Cl. 232—4.)

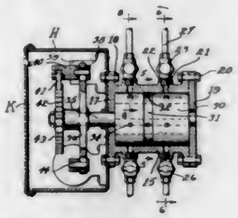
1. A bill bank comprising a substantially closed container having an entrance opening for the bills, a yield-

able rest within the container for the edge of a bill when inserted into the container through the entrance opening, a false cover, means for positioning the inserted bills into an inclined position with the entering edge of the bills below the entrance opening and the rear edge of the bills resting on the yieldable rest, a follower coupled to the



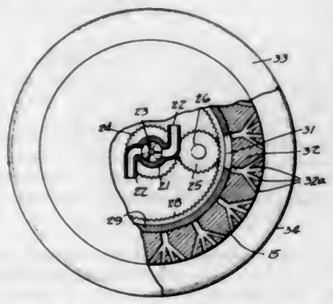
false cover, and moved out of the path of the inserted bills when the false cover is open, and moved down upon the inserted bills to press the bills past the yieldable rest and below the same, upon the closing of the false cover, and means stiffening the edge of a paper bill and holding it temporarily rigid.

1,760,902. LUBRICANT-DISTRIBUTING APPARATUS. DAVID GRATTAN, Los Angeles, Calif. Filed June 15, 1927. Serial No. 199,021. 10 Claims. (Cl. 137—146.)



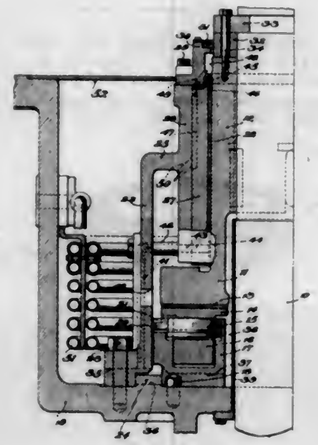
1. An apparatus for distributing lubricant to the movable parts of mechanism, comprising a plurality of distributing pipes, a distributing head adapted for connection to a source of lubricant under pressure and connected to the pipes, and mechanism for actuating the distributing head to cause lubricant from the source of supply to be delivered to each pipe at intervals, the arrangement of the pipes in respect to said head and the operation of said mechanism being such that when said mechanism ceases operation said head ceases to deliver lubricant to any of the pipes.

1,760,903. SPRINKLER HEAD. FREDERICK HENKEL, Los Angeles, Calif. Filed Feb. 2, 1927. Serial No. 165,431. 15 Claims. (Cl. 299—27.)



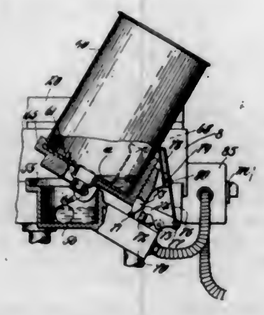
1. A sprinkler head comprising a tubular shaft adapted for rotational mounting in a water supply pipe, tangentially disposed spouts on the shaft through which water is discharged from the shaft in a manner to effect rotational movement of the latter, a bladed propeller within the shaft for assisting the spouts in rotating the shaft, and a member rotatable by the shaft and receiving the water as discharged from said spouts, said member having a port therein through which the water is discharged from the member.

1,760,904. BEARING. HARRY A. S. HOWARTH, Philadelphia, Pa., assignor to Kingsbury Machine Works, Inc., Philadelphia, Pa., a Corporation of Delaware. Filed Apr. 12, 1927. Serial No. 183,135. 30 Claims. (Cl. 308—160.)



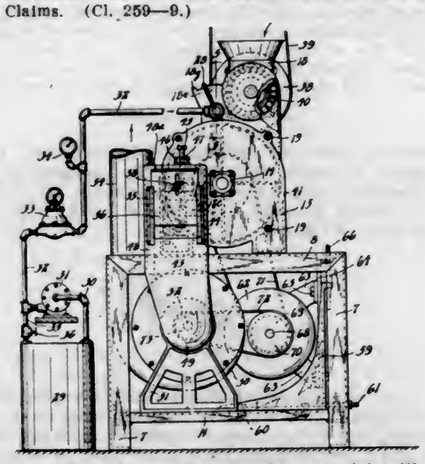
1. In a combined thrust and steady bearing for a shaft provided with relatively rotatable thrust and steady bearing members, in combination with a pot or housing for the thrust bearing, a support for the stationary bearing member of the steady bearing mounted on the base of said pot or housing.

1,760,905. SHOE HEATER. MELVIN O. JENNINGS, Lexington, Mass., assignor to Harry H. Beckwith, Brookline, Mass. Filed Nov. 12, 1923. Serial No. 674,314. 9 Claims. (Cl. 219—19.)



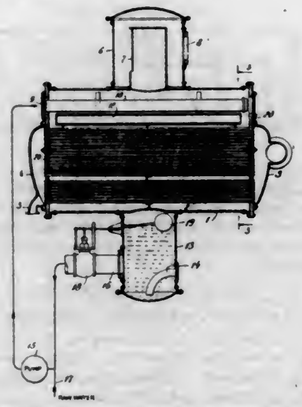
5. In a shoe heater, a receptacle, an electrical heating unit in said receptacle, a switch for controlling the supply of energy to said unit, a water supply tank, a tiltable support for said tank biased to tilted position, the weight of said tank and the water therein acting in opposition to the bias and being sufficient to overcome said bias only when there is a predetermined amount of water in said tank, and means whereby said switch is closed when said support is not tilted and opened when said support is tilted.

1,760,906. MIXING MACHINE FOR VISCOUS AND GRANULAR MATERIALS. JOHN E. JOHNSON, Litchfield, Minn. Filed July 23, 1928. Serial No. 294,707. 5 Claims. (Cl. 259—9.)



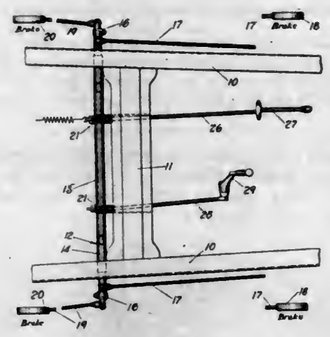
1. A machine for mixing granular material with a viscous liquid, comprising, a substantially horizontally disposed drum, a shaft mounted within said drum, means for rotating said shaft in one direction, means for charging viscous liquid in a thin ribbon parallel to said shaft into the forward end of said drum, means for charging granular material into the forward end of said drum ahead of the point where said liquid is charged into the drum relative to the rotation of said shaft, means for regulating the quantity of viscous liquid discharged into the drum during any interval of time, and indicating means to show the quantity of viscous liquid being discharged into the drum.

1,760,907. BOW-TUBE FILM-TYPE EVAPORATOR. RUSSELL C. JONES, Bronxville, N. Y., assignor to The Griscom Russell Company, New York, N. Y., a Corporation of Delaware. Filed June 26, 1923. Serial No. 647,939. 5 Claims. (Cl. 122—32.)



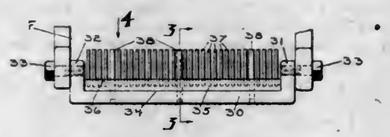
1. Apparatus for treating liquids involving the deposit of scale-forming materials comprising a shell, heating tubes within said shell, distributing means positioned above said heating tubes and substantially coextensive therewith for distributing the incoming liquid above the heating tubes and passing it down upon said tubes, whereby the liquid will cover the tube surfaces in a thin film, rigidly spaced tube sheets wherein the ends of the heating tubes are fixedly supported, said tubes having a curvature which varies in magnitude with changes in temperature and thereby flexes the tube surfaces causing exfoliation of accumulated scale, and means for recirculating the liquid which passes the heating tubes unevaporated.

1,760,908. BRAKE-OPERATING MEANS. ROBERT F. KOHR, South Bend, Ind., assignor to The Studebaker Corporation, South Bend, Ind., a Corporation of New Jersey. Filed Sept. 26, 1929. Serial No. 395,323. 8 Claims. (Cl. 74—39.)



1. In a motor vehicle having brakes and a frame, a brake cross shaft, supporting means for said shaft pivotally supported on said frame, and means pivotally supported by said frame operable to rock said shaft to apply the vehicle brakes.

1,760,909. RACK FOR FINGERS OF DOBBY LOOMS. WILLIAM E. LUNDGREN, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Aug. 2, 1929. Serial No. 383,071. 5 Claims. (Cl. 139—331.)

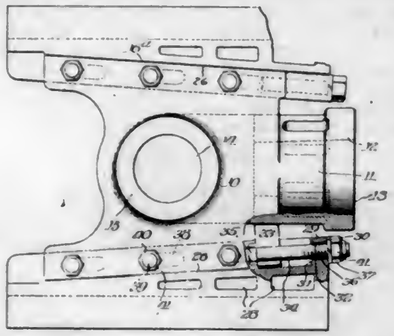


1. In a loom dobby having fingers, a support under the fingers, a wooden bar on the support, and wires projecting upwardly from the bar to space the fingers, certain of said wires extending through the bar and into the support to hold said bar in position on the support.

1,760,910. CROSSHEAD AND SHOE. CHARLES MARKEL, Schenectady, N. Y., assignor to Barco Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 30, 1922. Serial No. 609,963. 4 Claims. (Cl. 308—3.)

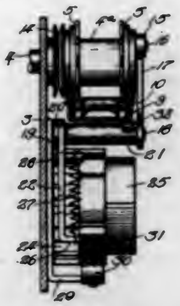
1. In a device of the character described, in combination, a cross-head having inclined surfaces, wearing plates

provided with inclined surfaces engaging the inclined surfaces of the cross-head and extending beyond the ends of said cross-head, said cross-head being provided with lugs,



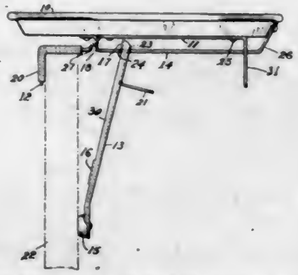
complemental lugs on said wearing plates, and means parallel with said inclined surfaces passing through the lugs adapted to exert a self-centering force on said cross-head and plates for adjusting and securing said plates.

1,760,911. SIGNALING DEVICE FOR KINETOGRAPHS OR THE LIKE. FREDERICK L. MAYTAG, Jr., Newton, Iowa. Filed Aug. 5, 1929. Serial No. 383,667. 10 Claims. (Cl. 116—67.)



1. A signaling device for kinetographs comprising ratchet means for audibly indicating the length of film being used in said kinetograph.

1,760,912. DETACHABLE SUPPORT. JAMES M. McGINLEY, Fort Worth, Tex., assignor, by direct and mesne assignments, of twenty-seven and one-half per cent to W. L. McGinley, San Antonio, Tex., and seventy-two and one-half per cent to Tray Service Company, Dallas, Tex., a Corporation of Texas. Filed Sept. 30, 1924, Serial No. 740,760. Renewed Oct. 23, 1929. 5 Claims. (Cl. 45—51.)



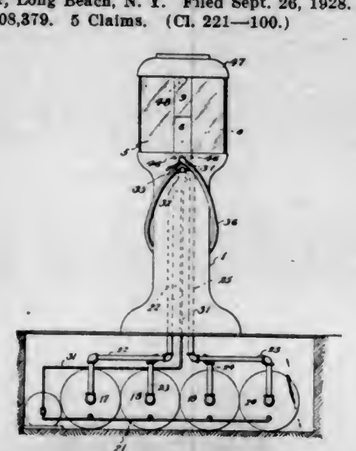
1. The combination of a receptacle having a substantially flat bottom and means for holding the same detachably above and upon the upper edge of a vertical support comprising, spaced bars rigidly secured to the bottom surface of the receptacle and having downwardly-bent ends which are of equal length so that they may support the receptacle substantially horizontally when detached from the vertical support, and the bent ends of bars adjacent the same edges of the receptacle serving as hooks to engage the said upper edge in overhanging relation, an engaging bar secured to the said bottom surface with a portion spaced therefrom, and rigid brace means having a free portion for engaging the side wall of said support and an eye spaced from said free portion for adjustably engaging the said spaced portion of the engaging bar and movable thereon to vary the inclination of the brace means relative to the vertical support whereby the same receptacle and holding means may be used with vertical supports of different thickness.

1,760,913. END CONNECTER FOR BRACELETS. LAWRENCE F. OTTEN, Fort Thomas, Ky., assignor to The Wadsworth Watch Case Company, Dayton, Ky., a Corporation of Kentucky. Filed May 11, 1928. Serial No. 277,043. 8 Claims. (Cl. 24—238.)



7. An end connecter comprising a shell or housing adapted to receive a link of a chain and a removable cover plate adapted to slide into holding engagement with said housing and fit over said link whereby said chain is secured to said connecter.

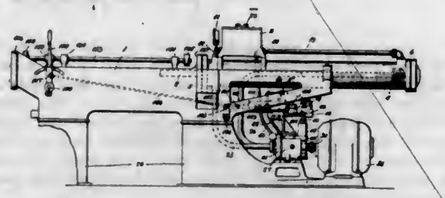
1,760,914. LIQUID-DISPENSING DEVICE. HARRY K. PRATT, Long Beach, N. Y. Filed Sept. 26, 1928. Serial No. 308,379. 5 Claims. (Cl. 221—100.)



1. A liquid dispensing device comprising a plurality of liquid receiving vessels, a measuring tank disposed between the vessels, valve controlled means for transferring liquid from a selected vessel to the tank, and float controlled means associated with the tank for registering the flow of liquid therefrom.

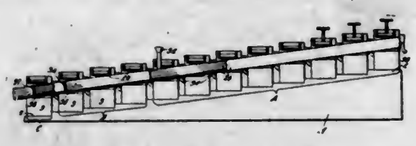
1,760,915. FLUID-CONTROLLED MECHANISM. JOHN ROBSON, Waterbury, Conn., assignor to Universal Engineering Corporation, Montreal, Quebec, Canada, a Corporation of Canada. Filed Apr. 28, 1923. Serial No. 635,319. 7 Claims. (Cl. 60—52.)

2. The combination with a machine tool having an operating member movable in one direction to perform a working or cutting stroke and in an opposite direction to perform an inactive or return stroke, of a fluid pressure actuated device connected to said member for actuating it, a reversible fluid pressure pump for delivering fluid under pressure to said device, adjustable means for reversing said pump or varying the output thereof, a combined mechanical and fluid operated control for actuating said



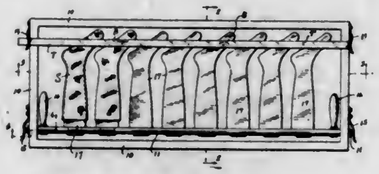
adjustable means, a manually operable rod for governing said control and a fluid actuated means directly associated with said rod and receiving fluid from said pump for automatically actuating said adjustable means through said control to reduce the output of said pump when the pressure of the fluid pumped thereby tends to exceed a predetermined maximum.

1,760,916. FLOTATION APPARATUS. JOSEPH P. RUTH, Jr., Denver, Colo. Filed Mar. 26, 1928. Serial No. 264,798. 10 Claims. (Cl. 209—169.)



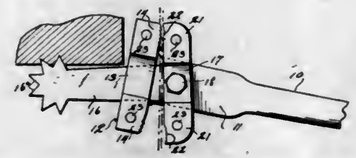
1. A flotation device comprising a plurality of cells, each of which is located at a different level and adapted to feed one into another by gravity, each of said cells having a feed box and a frothing compartment, said box and compartment being joined by a passageway, an impeller in said passageway, the frothing compartment having a froth overflow on the same side as the feed box and above it, the side of the frothing compartment adjacent the next higher cell being provided with a pulp overflow, a chute located beneath the pulp overflow and in communication with the feed box of the next higher cell, and an inclined launder located beneath the froth overflows of the cells and above the feed boxes.

1,760,917. HOSIERY-PRESSING TRAY. EDWARD J. SCHREMP, Beachhurst, Long Island, N. Y., assignor to The Prosperity Company, Inc., Syracuse, N. Y., a Corporation of New York. Filed Mar. 15, 1923, Serial No. 625,428. Renewed Sept. 24, 1925. 12 Claims. (Cl. 223—17.)



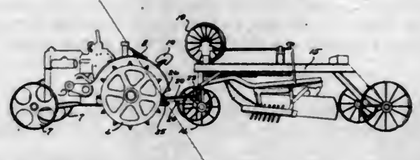
1. A pressing device comprising a frame, a rotatable shaft journaled in the frame, means for rotating the shaft, a lock to fasten the shaft in position, and forms on the shaft to carry work to be pressed.

1,760,918. WIRE STRETCHER. CHARLES F. SHOTT and CLAUD E. LUCE, Acme, and CARL W. JOHNSON, Sheridan, Wyo. Filed May 2, 1929. Serial No. 359,948. 5 Claims. (Cl. 254—77.)



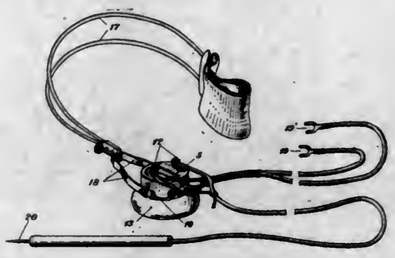
5. A wire stretcher of the character described comprising a handle, a stationary cross head mounted upon the handle and having a jaw facing toward the handle, a shank pivoted to the handle and at its inner end carrying a transversely extending cross head formed with a jaw confronting the first-named jaw, the shank at its outer end being formed to engage against a fixed abutment.

1,760,919. TRACTOR HITCH FOR ROAD MACHINES. PAUL D. SMITH, Minneapolis, Minn., assignor to Stockland Road Machinery Company, Minneapolis, Minn., a Corporation of Minnesota. Filed Mar. 15, 1928. Serial No. 261,799. 6 Claims. (Cl. 280—33.44.)



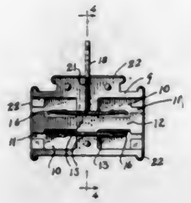
4. The combination with a tractor, of a vehicle having a front axle pivoted for angular steering movements, and front and rear wheels, the former of which are journaled on said axle and held for common steering movements therewith, and a hitch connecting said pivoted front axle to the tractor, holding the same against angular steering movements in respect thereto and permitting free independent vertical movements of the tractor and vehicle in respect to each other.

1,760,920. TESTING SYSTEM. SVEN E. STROMBERG, New York, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Mar. 30, 1929. Serial No. 351,414. 3 Claims. (Cl. 175—183.)



1. A testing system comprising a watchcase receiver, a shell member shaped to be mounted on the outside of the receiver, a condenser carried by the shell member, and means for attaching the shell member and its associated condenser to the receiver.

1,760,921. PLUG CONNECTER. HERMAN L. STRONGSON, Brooklyn, and BERNARD D. COLEN, New York, N. Y. Filed July 5, 1923. Serial No. 649,394. 6 Claims. (Cl. 173—334.)

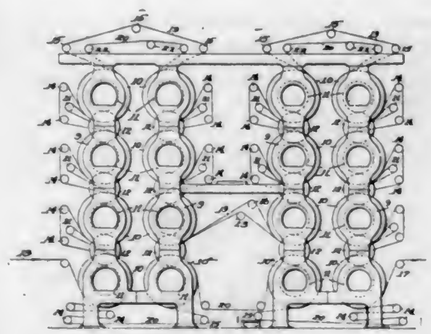


1. A plug connecter comprising a body of molded insulation longitudinally split forming two sections, which sections are made with sockets and connecting plug-in channels extending outwardly through each end of the body sections, a longitudinal rib made centrally of the body sections separating the sockets and channels, a rib made transversely of the sections also separating the sockets and channels, said transverse rib made with retaining grooves therein, metal conductor blades disposed in the retaining grooves and rigidly held therein with the blade ends flexibly projecting into the aforesaid depressions in alignment with the aforesaid plug-in channels, and prong or jack blades joined with the aforesaid blades and retained in the aforesaid grooves and affording electrical and mechanical engaging means with a current supply outlet.

1,760,922. COMPOSITION OF MATTER. WILLIAM H. TEST, Redondo Beach, Calif. Filed Apr. 5, 1927. Serial No. 181,285. 5 Claims. (Cl. 106—23.)

2. A composition of matter including a finely divided titanium nitride and a resilient organic binder.

1,760,923. PAPER DRIER. JOHN WARREN VEDDER, Worcester, Mass., assignor to Rice, Barton & Fales, Incorporated, Worcester, Mass., a Corporation of Massachusetts. Filed July 25, 1928. Serial No. 295,226. 5 Claims. (Cl. 34—48.)



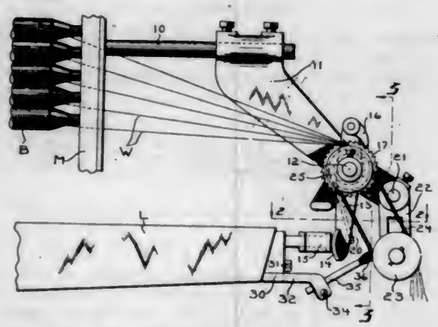
1. In a paper web drier, the combination with a plurality of vertical series of drying drums and means for driving them, of guides located adjacent to the drums for receiving a drying blanket from each drum and delivering it to the next drum, and means for drying the said blanket between the time it leaves the last drum of the drier and the time it is directed to the surface of the first one.

1,760,924. MUFFLER FOR INTERNAL-COMBUSTION ENGINES. CLAYTON S. WATKINS, Amarillo, Tex. Filed Oct. 19, 1928. Serial No. 313,559. 1 Claim. (Cl. 137—160.)



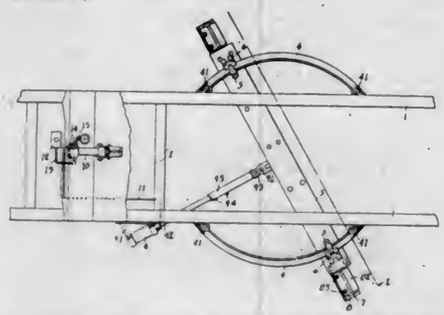
In combination with a muffler for internal combustion engines, means for releasing pressure prior to the muffler, comprising a flaring tube extending longitudinally through said muffler, having an open end at the muffler outlet, and having a portion extending beyond the muffler toward the engine, said portion being apertured to permit pressure to release into the tube, and cones secured to said tube for protecting the apertures from the direct force of an explosion.

1,760,925. THREAD-CONTROLLING DEVICE FOR LOOM MAGAZINES. WILLIAM M. WATTIE, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed July 8, 1929. Serial No. 375,718. 9 Claims. (Cl. 139—247.)



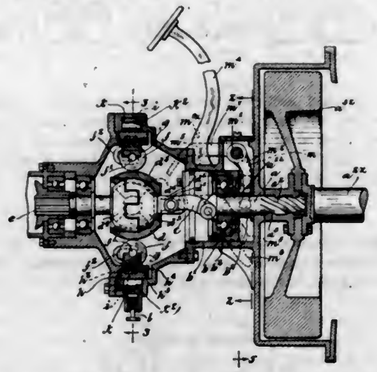
1. In a weft end tensioning device including a travelling surface movable in a given path and adapted to engage the weft ends, a lay, movable in a direction transverse to the movement of the surface, and a clearer on the lay to engage the surface and remove weft ends therefrom.

1,760,926. HYDRAULIC SCRAPER STRUCTURE. ERNEST A. WEEKS, Kalamazoo, Mich., assignor to Root Spring Scraper Company, Kalamazoo, Mich. Filed Nov. 28, 1928. Serial No. 322,554. 3 Claims. (Cl. 37—135.)



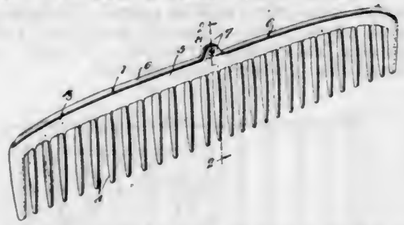
2. The combination of a truck chassis, a scraper adjustably supported beneath the same, a hydraulic cylinder and piston with a support therefor on a side beam of the said chassis, a thrust bar connection from the hydraulic piston to the said scraper, and a pump on said chassis with connection to supply fluid under pressure to actuate said hydraulic cylinder and hold the scraper to the ground.

1,760,927. POWER-TRANSMISSION DEVICE. CARL W. WEISS, Brooklyn, N. Y. Filed Feb. 16, 1929. Serial No. 340,499. 6 Claims. (Cl. 74—14.)



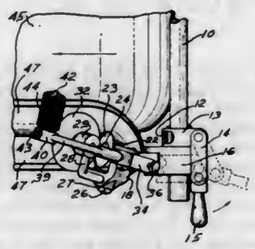
1. A power transmission device comprising a central spherical body, means to support the same with freedom for nutation, a series of gripping elements for coaction with the spherical body, a means to support the same in relatively fixed positions about the spherical body, and driving means in operative relation with the spherical body and a driven part also in operative relation with the spherical body.

1,760,928. COMB AND GLOVE THEREFOR. SAMUEL WILLEY WHITNEY, Denver, Colo. Filed Oct. 23, 1928. Serial No. 314,490. 6 Claims. (Cl. 132—19.)



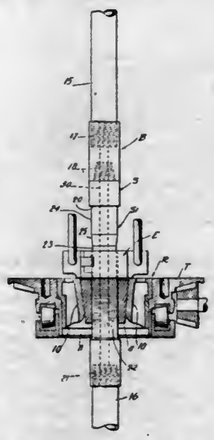
1. A toilet comb having thereon a glove of flexible molded material provided with finger portions molded to fit over and encase its teeth.

1,760,929. STITCHER FOR TIRE-BUILDING MACHINES. GEORGE F. WIKLE, Milwaukee, Wis., assignor to The Fisk Rubber Company, Chicopee Falls, Mass., a Corporation of Massachusetts. Filed Sept. 28, 1928. Serial No. 309,095. 1 Claim. (Cl. 154—10.)



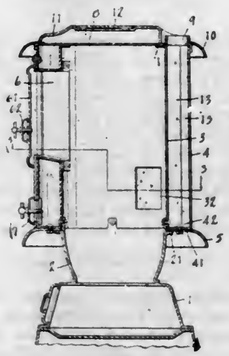
A device of the character described comprising a plow mounted to be positioned in operative relation with a tire carcass supported on a building drum, a roller mounted on the plow, said plow and roller positioned to engage an edge of the carcass plies and turn said edge around the bead core of the carcass, a flanged roller mounted in fixed relation to the plow and adapted to stitch the carcass plies around the bead core, a rotatable spring-backed disk adjustably mounted in relation to the plow to position the turned-over edge of the carcass plies in place on the tire carcass and a yieldable pressure stitching roll adjustably mounted in relation to the plow and adapted to stitch down the said turned-over edge.

1,760,930. WELL-PIPE COUPLING. ELIHU C. WILSON, Los Angeles, Calif. Filed Feb. 12, 1923. Serial No. 618,694. 7 Claims. (Cl. 255—28.)



1. A well pipe coupling device, comprising two members having their upper and lower ends, respectively, adapted for connection with pipe lengths, and having at their other ends means to make a breakable joint between the two members, the lower one of the members having a relatively long and heavy shank between its two ends, said shank including a lower substantially cylindric zone engageable by supporting slips, and having, near its upper end, a downwardly facing elevator engageable shoulder, which shoulder is spaced by an elevator engageable zone above the slip engageable zone.

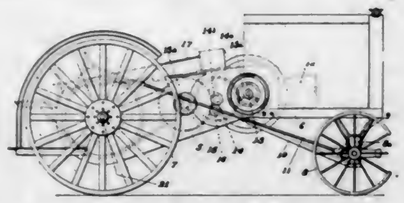
1,760,931. HEATING STOVE. JOHN WINTER, Albion, Mich. Filed Mar. 25, 1929. Serial No. 349,562. 4 Claims. (Cl. 126—58.)



4. In a heating stove, the combination of a firepot with collar flange near its top, a sheet metal combustion cham-

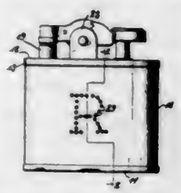
ber having a lateral flue opening near its bottom at the back, a heating drum surrounding said combustion chamber, a top plate over the entire structure and suitably bolted thereto and having a smoke collar, and a vertical partition between the radiating drum wall and the combustion chamber wall disposed between the flue opening in the combustion chamber and the smoke collar in the top plate, whereby the products of combustion are delivered into the heating drum and circulated entirely around the same to the smoke collar to insurate heat.

1,760,932. TRACTOR. LOUIS W. WITRY, Waterloo, Iowa, assignor to John Deere Tractor Company, Waterloo, Iowa, a Corporation of Iowa. Filed Jan. 14, 1921. Serial No. 437,287. 14 Claims. (Cl. 180—54.)



1. A tractor comprising a housing having side walls, differential mechanism mounted in said housing, axle members extending through and supported wholly by said side walls, bearings for said axle members, devices operable to adjust said bearings to move said axle members toward or from said differential mechanism, traction wheels driven by said axle members, sprocket wheel and chain mechanisms separately connecting said axle members with said differential mechanism for driving said axle members, and means independent of said sprocket wheel and chain mechanisms for driving said differential mechanism.

1,760,933. RECEPTACLE WITH REMOVABLE JACKET. LOUIS V. ARONSON, Newark, N. J. Filed Apr. 26, 1928. Serial No. 272,977. 1 Claim. (Cl. 67—7.1.)



A lighter comprising, in combination, a fuel receptacle comprising a side wall, an end wall secured thereto and projecting laterally therebeyond to provide a flange and a top wall secured to the side wall flush with the surface thereof, mechanism supporting means projecting from said top wall, a cover plate having openings through which said supporting means project and formed with a marginal flange overlapping said side wall, a removable jacket of distinctive appearance slipped over said side wall and confined between said bottom flange and said cover flange and means to secure said cover plate to said top wall.

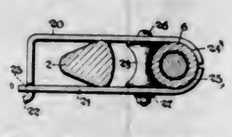
1,760,934. TRACK BRACE. GEORGE ASHTON, Cincinnati, Ohio, assignor to The Central Frog & Switch Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Apr. 9, 1929. Serial No. 353,774. 1 Claim. (Cl. 238—53.)

In combination with a track rail, a pair of rail clips adapted to embrace the rail flanges, respectively, a non-circular hole through each clip and disposed in alinement with each other, a tie rod having a threaded end portion intersected by a non-circular portion, the non-circular portion of said threaded end portion engaging the non-circular



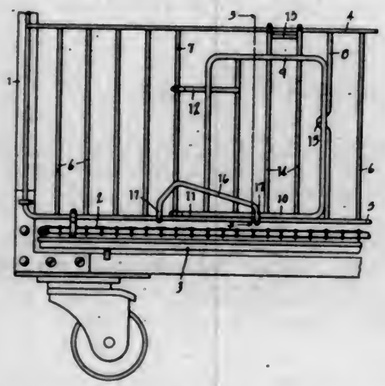
portion of said non-circular holes, respectively, a nut on said tie rod on each side of said rail and adapted to be secrewed toward or away from its adjacent clip whereby said rail may be adjusted laterally in either direction independently of the other track rail.

1,760,935. AUTOMOBILE STEERING GEAR. RICHARD S. BURDETTE, Akron, Ohio. Filed Dec. 1, 1924. Serial No. 753,149. 4 Claims. (Cl. 280—89.)



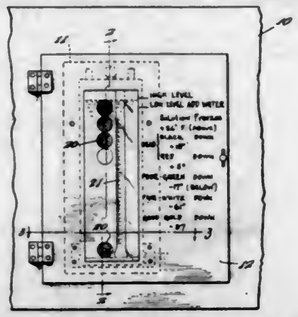
1. A motor driven vehicle comprising a front axle, a steering knuckle pivotally supported from said axle, a pair of interlocking separable arms each having a frictional shoe at one end thereof, a bolt extending through said portions, and resilient means adapted to hold said frictional shoes in yielding contact with a portion of the steering knuckle of an automobile and with a portion of the front axle.

1,760,936. POULTRY COOP OR CRATE. WALTER CLARK DEAN, Albion, Mich., assignor to Union Steel Products Company, Albion, Mich. Filed Sept. 21, 1928. Serial No. 307,528. 2 Claims. (Cl. 220—6.)



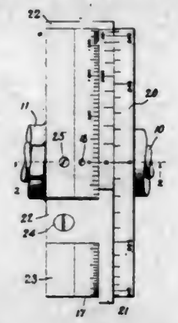
1. In a structure of the class described, the combination of a wall panel comprising horizontal top and bottom bars and vertical slats secured thereto and disposed to provide a door opening, a door comprising top and bottom members and vertical slats, one pair of said slats being formed integrally and connected at their upper ends by a loop, said loop being conformed to provide a hook adapted to engage the top horizontal member when the door is closed, said door being mounted on one of the slats for swinging and vertical movement, and a door retaining member behind which the bottom longitudinal member of the door engages when the door is closed.

1,760,937. STORAGE-BATTERY INDICATOR. CARL W. DIETRICH, North Bergen, N. J. Filed Aug. 24, 1928. Serial No. 301,792. 2 Claims. (Cl. 136—182.)



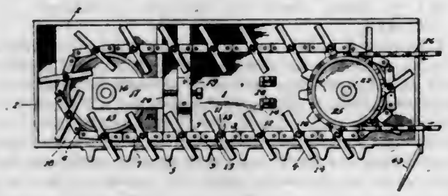
1. The combination with a storage battery, of an indicator to determine condition of electrolyte in said storage battery consisting of a miniature storage battery mounted in position for observation and electrically connected in parallel with the first-mentioned storage battery, and means to indicate the specific gravity of electrolyte in the miniature battery and thereby substantially indicate the specific gravity of electrolyte in said first-mentioned battery.

1,760,938. MICROMETER DEVICE. JOHN EDGAR, Rockford, Ill., assignor to Barber-Colman Company, Rockford, Ill., a Corporation of Illinois. Filed July 11, 1929. Serial No. 377,391. 20 Claims. (Cl. 116—115.)



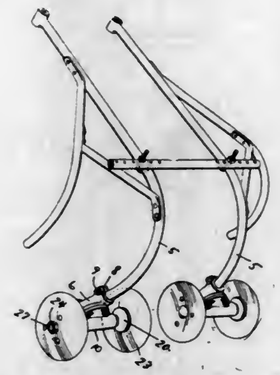
1. A micrometer device comprising, in combination, a support, a member movable relative to said support, and means for indicating the amount of movement of said member comprising a stationary mark, and two scales movable relative to said mark and in timed relation to each other and to said member, one of said scales indicating the total amount of movement of said member.

1,760,939. MOWER. MILLARD F. EMERSON, Richmond, Ind. Filed Apr. 26, 1929. Serial No. 358,346. 5 Claims. (Cl. 56—293.)



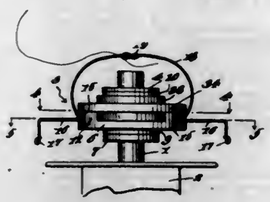
1. A cutting apparatus comprising an endless chain, means for driving the chain, obliquely disposed lugs on the upper side of the several links of the chain, blades having longitudinal slots corresponding to said lugs and engageable thereover, and means for retaining the blades on the lugs.

1,760,940. CULTIVATOR ATTACHMENT. STEPHEN C. ENGLISH, Hamburg, Iowa. Filed Mar. 21, 1929. Serial No. 348,788. 3 Claims. (Cl. 97—54.)



1. In an attachment of the class described comprising a split sleeve, a disk formed on the split sleeve, a tubular housing, a disk formed on the tubular housing, pin and slot means for adjustably securing the disks together, a bushing rotatable in the housing, hubs connected to the bushing and rotatable in the housing, disks, and means for fastening the disks on the hubs.

1,760,941. SILK FLYER FOR SPINNING MACHINES. HOWARD M. FENSTEMAKER, Bloomsburg, Pa. Filed Nov. 26, 1928. Serial No. 322,059. 5 Claims. (Cl. 118—57.)

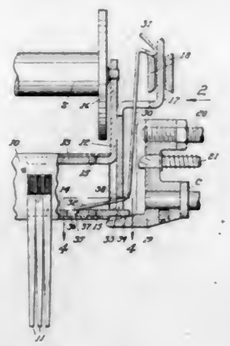


3. A flyer including a base plate or spider provided with relatively spaced lugs having horizontal and vertical grooves and vertical slots communicating with the grooves, and a locking device associated with the lugs and adapted to be moved into and out of operative position with respect thereto.

1,760,942. TUBE FRAME FOR AXMINSTER LOOMS. GEORGE P. FINDLAY, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Feb. 26, 1929. Serial No. 342,792. 8 Claims. (Cl. 139—10.)

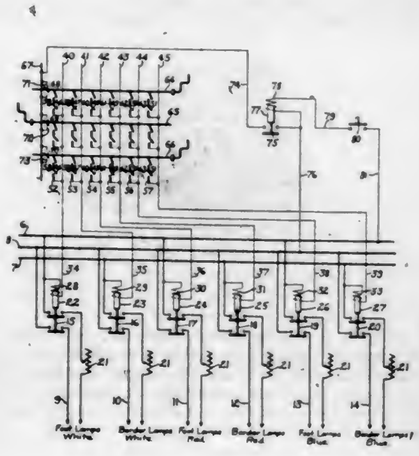
1. In an Axminster tube frame having a hollow metallic bar, a chain engaging bracket secured to the bar, a resilient chain engaging latch having a portion thereof to engage a part of the chain engaging bracket at the upper

end thereof, said bracket having an opening therein, a shoulder on the bracket spaced from the opening, the chain engaging latch having a portion extending through the opening into the hollow bar and having a part ex-



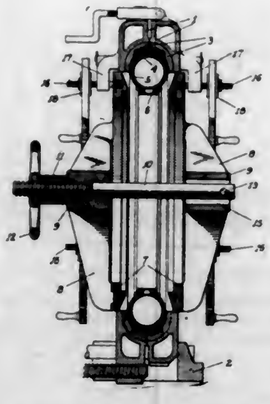
tending transversely of the bar and in engagement with the shoulder to prevent movement of the latch portion parallel to the bar out of the hollow bar, said latch portion projecting into the bar being held in engagement with the shoulder by the resilience of the latch.

1,760,943. THEATER SWITCH PANEL. BERT F. FULLER, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed July 14, 1923. Serial No. 651,658. 8 Claims. (Cl. 171—97.)



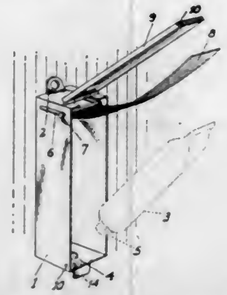
5. In an electrical system, a main feed circuit, a plurality of load circuits connected thereto, control circuits for the load circuits comprising two groups of conductors, there being one conductor of one group for each load circuit, means on the conductors of one group for engaging the other conductors and a separate switch for each means.

1,760,944. TIRE-RETREADING MOLD. EDWIN A. GLYNN, Lodi, Calif., assignor to The Super Mould Co., Lodi, Calif., a Corporation. Filed Dec. 15, 1928. Serial No. 326,322. 4 Claims. (Cl. 18—18.)



1. A tire retreading mold including an annular mold structure to receive the tire to be retreaded, a pair of rigid opposed annular rings to project inwardly of the mold to engage the opposite sides of a tire engaged with the mold, and means applied to the rings from the axis thereof for moving said rings axially toward each other.

1,760,945. TUBE EVACUATOR. EDWARD S. GAIGSBY, Lodi, Calif. Filed Aug. 13, 1928. Serial No. 299,234. 3 Claims. (Cl. 221—60.)

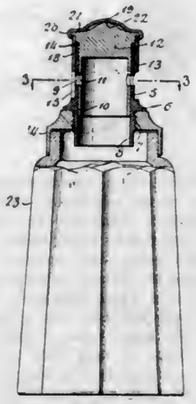


1. A tube evacuator including an open-front casing to support a tube, a flexible presser strip disposed in the casing in front of the tube, a transverse pin on one end of the strip, the sides of the casing adjacent one end having horizontal slots into which the ends of the pin project.

1,760,946. SELF-ACTING CLOSURE FOR RECEPTACLES. ARTHUR HAMMERSTEIN, New York, N. Y. Filed Oct. 3, 1928. Serial No. 309,911. 6 Claims. (Cl. 221—61.)

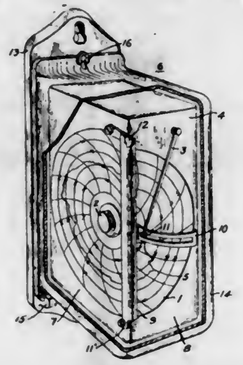
1. A closure of the kind described comprising a tubular member adapted to be secured to a receptacle and provided with an exit opening and with an inclined slot in its peripheral wall, a sleeve axially slidable within said tubular member and normally closing said exit opening from the inside, said sleeve being provided with an exit aperture adapted to be brought into registry with said exit opening, a hood movable with said sleeve and normally closing said exit opening from the outside, said hood being externally slidable upon said tubular member and being provided with a recess adapted to uncover said exit

opening from the outside, a pin carried by said hood and extending through said slot into communication with said sleeve whereby said hood and sleeve are rotated on said tubular member coincidentally with their axial movements thereon to bring the exit aperture of said sleeve into alignment with the exit opening of said tubular member and to cause said hood to uncover said exit open-



ing, and a coil spring in engagement with said tubular member and located between said sleeve and hood so as to be completely enclosed thereby for normally maintaining the sleeve and hood in an outer position and for returning them thereto, whereby said exit aperture is normally out of registry with said exit opening and the latter is closed by said hood.

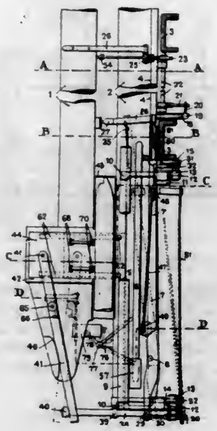
1,760,947. GRAPHIC INSTRUMENT. WILLIAM J. HEALEY, Bloomfield, N. J., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Feb. 28, 1929. Serial No. 343,395. 6 Claims. (Cl. 234—1.)



1. In a measuring instrument, the combination with a rotatable chart and a stylus coacting therewith, of means for rotating said chart in a plurality of planes.

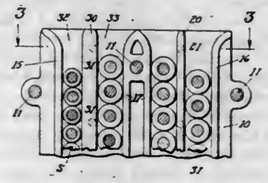
1,760,948. WEAVING LOOM. MAURICE CHARLES HENRI OCTAVE LECOCQ, Cambrai, France. Filed Oct. 1, 1928, Serial No. 309,638, and in Belgium Oct. 5, 1927. 12 Claims. (Cl. 139—237.)

1. Automatic shuttle-changing mechanism for looms operating without altering the speed of the loom, comprising in combination a shuttle box having a back which is adapted to be deflected inwardly and a front which is adapted to be raised, a spring tending to deflect said box back inwardly, a detent maintaining said box back in the normal position, said detent being adapted to be released during a short instant of each beat of the loom



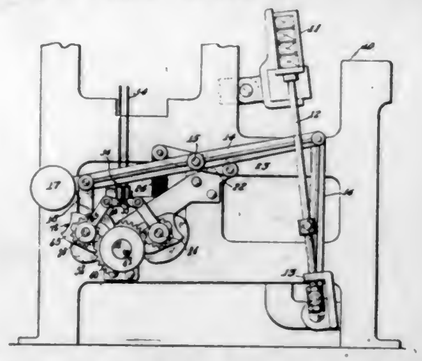
when the lay is in the forward or beating up position, a fixed abutment adapted to restore said box back to normal position and means for releasing said detent retaining said box back, said means operating by a resiliently transmitted impulse which is prevented at every other beat of the loom.

1,760,949. MULTICOLOR WEFT-REPLENISHING MECHANISM. CARL J. LINDEGREN, Providence, R. I., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Jan. 5, 1929. Serial No. 330,633. 2 Claims. (Cl. 139—245.)



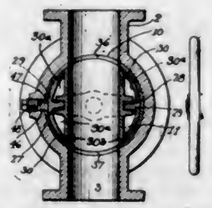
1. In a weft replenishing mechanism having a frame with a pair of relatively spaced bobbin guiding elements, a partition separate from the elements, means cooperating with the frame and located substantially midway between said elements to hold the partition to the frame, said partition defining with the elements a pair of bobbin guides, said partition being wider on one side of the securing means than on the other side thereof to define bobbin guideways of different widths, said partition being reversible so that the narrower compartment may be on either the right or left hand side of said partition.

1,760,950. BOX MOTION FOR LOOMS. WILLIAM E. LUNDGREN, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Aug. 1, 1928. Serial No. 296,769. 3 Claims. (Cl. 139—179.)



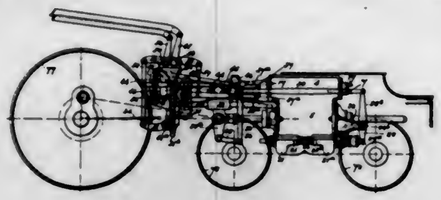
1. In a box motion, a pinion gear, starting teeth therefor, and means to move said starting teeth axially, said means comprising a yoke arm, and a spring actuated plunger on which said yoke arm is mounted, said plunger being effective to give said arm a straight line movement axially of said gear.

1,760,951. ROTARY GATE VALVE. RICHARD G. MANIFOLD, Los Angeles, Calif., assignor to The Frontier Development Company, Los Angeles, Calif., a Corporation of Nevada. Filed Oct. 4, 1927. Serial No. 223,991. 1 Claim. (Cl. 251—102.)



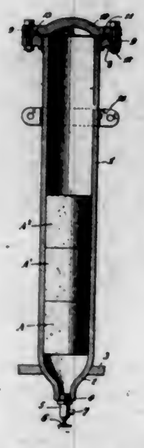
In a valve of the character described, a valve body having an opening therein for allowing the flow of a fluid through the valve body, and a second opening transversely of the first-mentioned opening, the second opening being bounded by a virtually cylindrical wall which forms a valve seat in the valve body; a head secured to the valve body at each end of the second opening, each head being on its inner side centrally provided with a hub so that an annular space is formed around the hub in the head, and each head having therein a bore which is virtually concentric with the valve seat and also extends through the hub; a valve member comprising an element which has at each end a shaft journaled in the bore of the respective head; pairs of ribs provided on the element so that a channel is formed between the ribs of each pair and that the channels are virtually diametrically opposite to each other and virtually parallel with the shafts; and a shoe on each side of the element, the shoe being provided with a rib, which fits slidably in the respective channel, so that the shoes are rotatable with the element and are adapted to engage the valve seat, each shoe being formed so that it fits the valve seat and so that a space, communicating with the annular space of the respective head, is formed on each side of the pair of ribs and that thereby, when the valve member is turned to or from its open position, a quantity of the fluid is allowed to enter, and to be entrapped in, the spaces in order to effect a uniformly cushioned engagement of the shoes with the valve seat.

1,760,952. MOTIVE-FLUID ENGINE. JAMES THOMPSON MARSHALL, Harrogate, England. Filed May 7, 1926, Serial No. 107,417, and in Great Britain May 11, 1925. 10 Claims. (Cl. 121—163.)



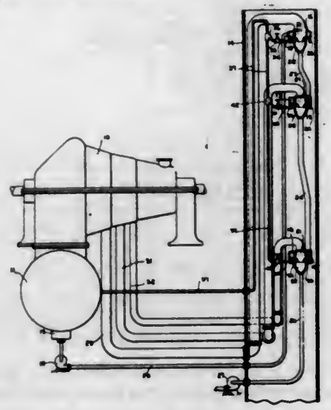
1. In combination with a steam engine embodying a cylinder having a steam admission port, main and expansion valves movable relatively to the port for controlling the steam passage to the cylinder, rods separately connected with said main and expansion valves for cooperatively actuating the same, a piston and a slide block reciprocated thereby, a valve operating gear comprising a floating lever connected near its upper end with the actuating rod of the main valve, a link connecting the lower end of said lever to said slide block, a stationary support, a member pivoted to said support, means for oscillating said member from an eccentric on the crank shaft of the engine, a rod connecting said member with said floating lever at a point in the latter between its connections with said slide block and the actuating rod of the main valve, a slotted link pivoted at one end to said support and having a rod connecting its other end to said floating lever at a point above its connection with said actuating rod, an adjustably movable block in said slotted link and a rod connecting the last mentioned block to the actuating rod of the expansion valve.

1,760,953. METHOD OF MAKING AND DISPENSING LIQUID CARBON DIOXIDE. JAMES W. MARTIN, Jr., Yonkers, N. Y., assignor, by mesne assignments, to Dryice Equipment Corporation, New York, N. Y., a Corporation of Delaware. Filed Apr. 12, 1926, Serial No. 101,606. Renewed Oct. 2, 1929. 10 Claims. (Cl. 62—170.)



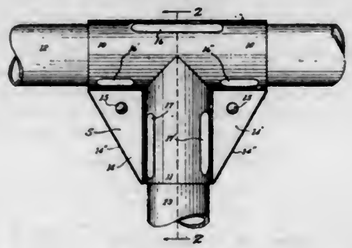
1. The method of charging high pressure containers with predetermined amounts of liquid carbon dioxide, which method includes charging a desired weight of such ice in the container, hermetically sealing the latter and permitting the enclosed ice to liquefy by exposure of the container to normal atmospheric temperatures.

1,760,954. FEED-WATER HEATER. DAVID W. R. MORGAN, Swarthmore, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Jan. 18, 1928. Serial No. 247,662. 2 Claims. (Cl. 257—52.)



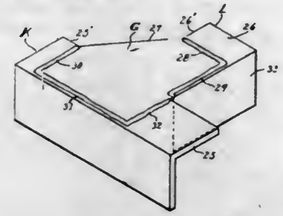
1. The combination with a stack for combustion gases, of jet heaters disposed at different elevations and at least one of said heaters being arranged in the stack, each heater including a heating medium inlet, a water supply inlet, and a heated water outlet; means providing for the supply of heating media at different pressures to said heating medium inlets, the pressures varying inversely with the elevations of the heaters; a tail pipe connecting the outlet of each heater except the last to the water inlet of the succeeding heater, said tail pipe being of sufficient length to provide a barometric column producing flow of water from one heater to the succeeding heater, said succeeding heater being at a higher pressure; and means providing for the withdrawal of heated water from the lowermost heater.

1,760,955. JOINT FOR STRUCTURAL SHAPES AND METHOD OF MAKING THE SAME. HERBERT H. MOSS, Belleville, N. J., assignor to The Linde Air Products Company, a Corporation of Ohio. Filed Dec. 24, 1925. Serial No. 77,611. 5 Claims. (Cl. 113—116.)



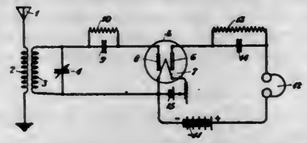
1. For use in joints, a connecting housing comprising a single metal plate folded upon itself to provide complementary sections, the metal adjacent such fold being formed so as to provide a through socket or way to receive a main member, and each section having one or more indentations separated by webs, the indentations of one section being adapted to face those of the other section to provide sockets to receive ends of sub members, all sockets having holes through their walls adjacent to said webs adapted to receive fused metal to unite said members to said housing, and said webs having holes adapted to receive means for securing them together symmetrical with a plane through the axes of said sockets.

1,760,956. METALLIC STRUCTURE AND METHOD OF MAKING SAME. HERBERT H. MOSS, Belleville, N. J., assignor to The Linde Air Products Company, a Corporation of Ohio. Filed Dec. 24, 1925. Serial No. 77,612. 18 Claims. (Cl. 189—36.)



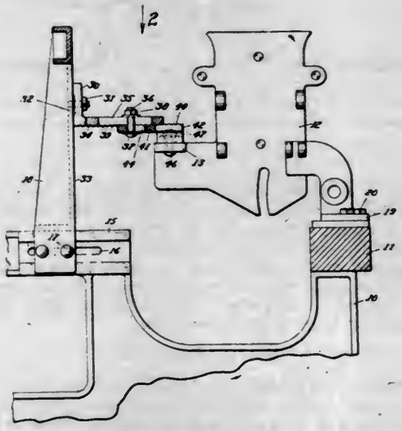
1. A method of joining structural members that comprises removing portions of such members, inserting portions of a gusset plate in place of such removed portions, and welding edges of said members to edges of said plate.

1,760,957. VACUUM-TUBE DETECTOR. RUSSELL S. ORL, New York, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Dec. 9, 1925. Serial No. 74,334. 12 Claims. (Cl. 250—27.)



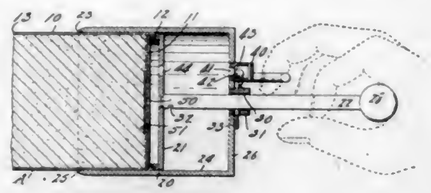
5. A grid leak detector system including a three-element vacuum tube, a high, constant potential plate battery for the vacuum tube, and means to make the output level of the vacuum tube approach the output level of the same tube used as an amplifier.

1,760,958. WEFT-REPLENISHING LOOM. JACOB B. OLCH, Providence, R. I., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Jan. 5, 1929. Serial No. 330,632. 13 Claims. (Cl. 139—224.)



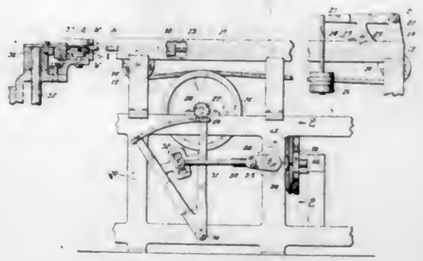
1. In a loom, a magazine, an arch movable to a plurality of positions at different distances from the magazine, and a brace interposed between the magazine and the arch, said brace having provision for effecting an approximate coarse adjustment and having also provision for effecting a limited continuous adjustment between the magazine and arch.

1,760,959. CARTON-FILLING DEVICE. JOHN F. ORTNER, Buffalo, N. Y. Filed Oct. 3, 1928. Serial No. 309,987. 8 Claims. (Cl. 226—19.)



6. In a carton filling and dispensing device, the combination of a tubular holder having one end closed and the other end open, and a tubular carton of predetermined capacity also having one end closed and the other end open and which can be inserted into said holder through said open end thereof and slidably fits within said holder with its open end at the open end of the latter, a valve on said holder which permits the escape of air from between the closed ends of said holder and said carton during the insertion of said carton, and said carton having a vent to permit air to escape from between the substance which enters said carton and the closed end thereof to enable said carton to be filled to capacity, and means for closing said vent when the substance engages said closed end of said carton.

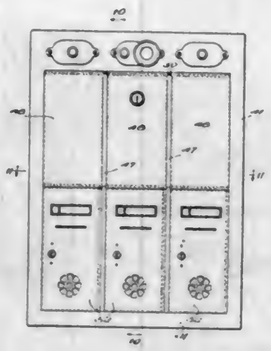
1,760,960. INTERMITTENT NEEDLE MOTION FOR AXMINSTER LOOMS. ARTHUR P. PAINE, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed July 5, 1928. Serial No. 290,331. 12 Claims. (Cl. 139—124.)



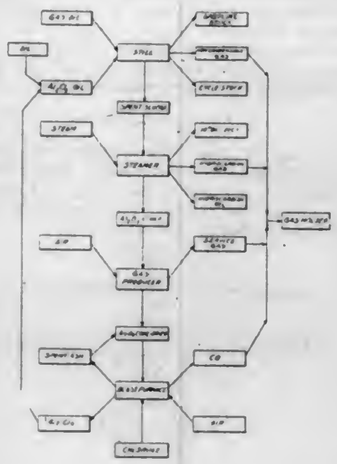
1. In a needle motion for an loom, a continuously rotating pin wheel, a pair of spaced pin members secured to and moving with the pin wheel, a star wheel to cooperate with the pin members, a needle operatively connected to the star wheel, one of said pin members to act on the star wheel to move the needle in one direction, and the other pin member to act on the star wheel to move the needle in the opposite direction.

1,760,961. MAIL BOX. THOMAS L. PARKER, Chicago, Ill., assignor to The Standard Electric Manufacturing Co., Chicago, Ill., a Corporation of Illinois. Filed Sept. 17, 1927. Serial No. 220,163. 4 Claims. (Cl. 232—25.)

1. In a device of the kind described and in combination, a receptacle provided with partitions dividing the same into a plurality of associated compartments, a master door common to a plurality of compartments and arranged to enclose the front thereof, said master door hinged on a horizontal axis and of a size to cover approximately one-half of the front of the compartments, individual doors for said compartments arranged to cover the remainder of the compartments, each of said individual doors hinged independently of the others on a vertical axis, and a hinge for each of said doors anchored by the hinge of said master door.



1,760,962. PROCESS FOR THE REGENERATION OF ALUMINUM-CHLORIDE SLUDGE. ERNEST B. PHILLIPS, East Chicago, Ind., and JAMES G. STAFFORD, Chicago, Ill., assignors to Sinclair Refining Company, Chicago, Ill., a Corporation of Maine. Filed Mar. 13, 1923. Serial No. 624,775. 16 Claims. (Cl. 23—96.)

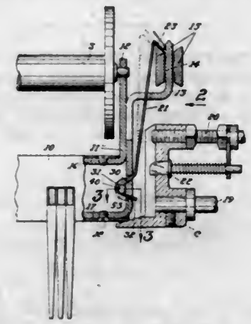


2. The method of treating spent aluminum chloride sludge which comprises subjecting the same to the action of steam at an elevated temperature and thereby removing volatile hydrocarbons and converting the sludge into a porous coke-like mass containing aluminum oxide intimately combined therewith.

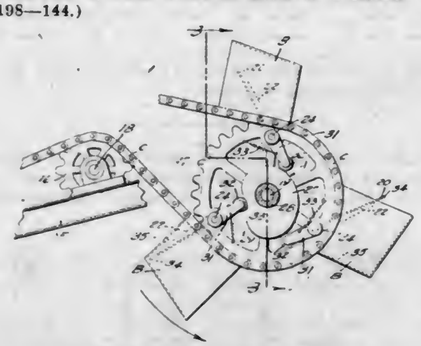
1,760,963. TUBE FRAME FOR AXMINSTER LOOMS. WILLIAM W. ROBERTSON, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Feb. 19, 1929. Serial No. 341,118. 13 Claims. (Cl. 139—10.)

1. In an Axminster tube frame having a longitudinal bar, a bracket secured to the bar and having an opening

therethrough, an inherently resilient spring latch extending through the opening and engaging the bracket on opposite sides of the opening, and latch retaining means held against the bracket by the resilience of that portion of the spring latch which passes through the opening.

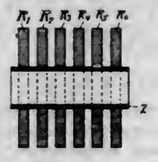


1,760,964. LOAD-EJECTING APPARATUS FOR CONVEYERS. HAROLD M. RUTH, Huntington Park, Calif. Filed June 6, 1928. Serial No. 283,370. 2 Claims. (Cl. 198—144.)



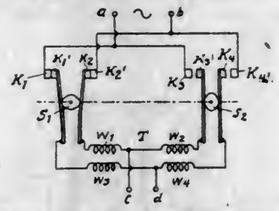
1. Apparatus of the character described comprising an ejector member, means for mounting the member independently of a conveyer bucket having a bottom wall, a rear wall and an open top and front, and a cam for actuating the member and having a contour such that during movement of the conveyer, the member will be caused to enter the open top of the bucket substantially edgewise and move towards the bottom wall of the bucket between the rear wall thereof and a load of material therein, and to then eject the material forwardly from the bucket through its open front.

1,760,965. IRON CORE FOR MAGNETIC APPARATUS. KARL SCHMIDT, Berlin-Lichtenrade, and WALTER HAHNEMANN, Berlin-Marienfelde, Germany, assignors to C. Lorenz, Aktiengesellschaft, Berlin-Tempelhof, Germany. Filed Jan. 9, 1928, Serial No. 245,611, and in Germany Sept. 14, 1926. 1 Claim. (Cl. 175—356.)



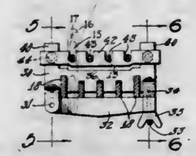
A core for high frequency electromagnetic apparatus comprising a group of core sections arranged in axial alinement, said sections being spaced from each other to provide passages for the free passage of a cooling medium between said sections, each of said sections consisting of a narrow strip of iron spirally wound to form a cylinder having a radial dimension which is a large multiple of the width of the strip, the width dimension of each of said strips being perpendicular to said passages whereby said passages intercept the paths of maximum conduction of heat developed in said core sections.

1,760,966. MECHANICAL RECTIFIER. KARL SCHMIDT, Berlin-Lichtenrade, Germany, assignor to C. Lorenz, Aktien-Gesellschaft, Berlin-Tempelhof, Germany. Filed Jan. 23, 1928, Serial No. 248,902, and in Germany Feb. 3, 1927. 5 Claims. (Cl. 175—365.)



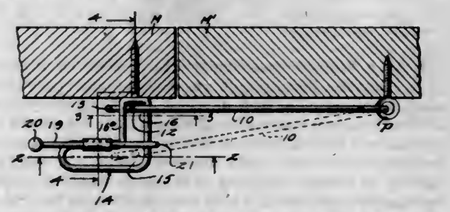
5. A mechanical rectifier comprising input terminals to be connected to an alternating current source, a pair of coils having equal number of turns and wound in an opposite sense with respect to each other, contacts operating synchronously with the alternating current to be rectified for connecting said alternating current source alternately to corresponding terminals of both coils, and tappings at the mid points of said coils to serve as connection for the direct current output circuit of said rectifier.

1,760,967. WARP-STOP-MOTION SEPARATOR. GEORGE H. SHUTT, New Bedford, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Original application filed May 25, 1927, Serial No. 194,178. Divided and this application filed Jan. 5, 1929. Serial No. 330,651. 3 Claims. (Cl. 139—369.)



1. A warp stop motion separator for separator bars and oscillating detector rods, said separator including a body portion having provision for attachment to the separator bars, and a detector rod support movable relatively to the body portion, to be supported thereby, and supporting connections between the body portions and the rod supports to hold the latter securely in any one of a plurality of positions at different distances from the separator bars.

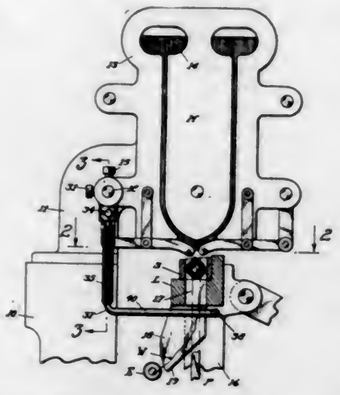
1,760,968. DOOR LATCH. GEORGE SPIRIS, Corpus Christi, Tex. Filed July 14, 1928. Serial No. 292,745. 6 Claims. (Cl. 292—106.)



1. In combination, a pivoted hook bar and eye for engagement with the hook bar having a slot provided with

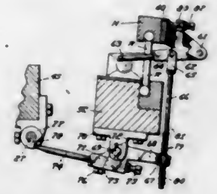
two branches, said hook bar when engaged with one branch of the slot of the eye being disengageable therefrom by oscillation in its general plane of swing and when engaged in the second branch thereof having coaction with the eye preventing such disengagement, the hook bar being transversely oscillatable to shift the same from one to the other of said branches of the slot, and means upon the eye positionable to prevent shifting of the hook bar from one to the other of the branches of the slot.

1,760,969. THREAD CLEARER FOR LOOMS. RICHARD G. TURNER, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Nov. 22, 1928. Serial No. 321,208. 9 Claims. (Cl. 139—261.)



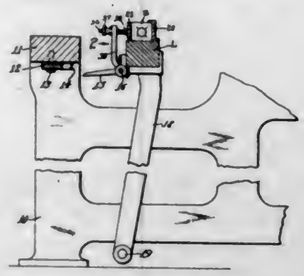
1. In a thread clearer for a loom having a lay with a slot therein for the passage of an ejected bobbin, a fixed support, a notched bar to lie under and behind the slot in the lay when the latter is in its forward transferring position, and a yielding connection between the support and the notched bar whereby the latter may move forwardly from its normal position, said connection constituting the sole means of support for the notched bar and holding the latter in normal position.

1,760,970. PROTECTOR MECHANISM FOR LOOMS. WALTER H. WAKEFIELD, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Mar. 16, 1928. Serial No. 262,315. 15 Claims. (Cl. 139—341.)



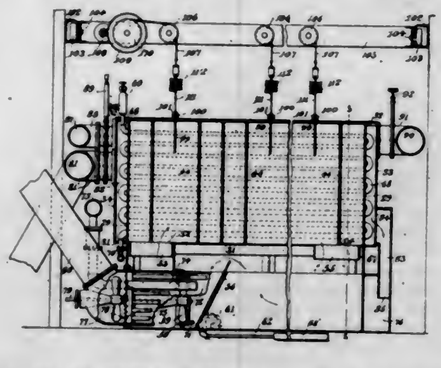
1. In a protector mechanism for a loom having a lay with a shuttle box at each end thereof and a shuttle to move from one shuttle box across the loom to the other shuttle box, detector means positioned to be engaged by a shuttle and located between the boxes, and mechanism operatively connected to the detector means and controlled thereby to initiate stopping of the loom before the shuttle reaches the box toward which it is traveling if said shuttle fails to actuate the detector means at a predetermined point in the forward movement of the lay by reason of the fact that the shuttle is running slower than normal and fails to arrive in position to engage the detector means when the lay reaches said predetermined position.

1,760,971. PROTECTOR MECHANISM FOR LOOMS. WALTER H. WAKEFIELD, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Dec. 14, 1928. Serial No. 325,988. 5 Claims. (Cl. 139—345.)



1. In protector mechanism for a loom having a shuttle binder and a protector rod, a sleeve threaded in the protector finger, a screw slidable through the sleeve and adapted for engagement with the binder, and a compression spring located between the sleeve and that portion of the screw which engages the binder.

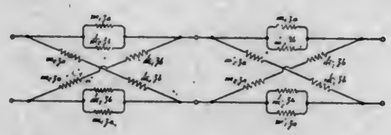
1,760,972. APPARATUS FOR MANUFACTURING ICE. DOUGLAS K. WARNER, Bristol, Conn. Filed Apr. 20, 1928. Serial No. 271,633. 20 Claims. (Cl. 62—158.)



1. An ice making apparatus comprising, a freezing tank having a plurality of cans disposed in spaced relation therein, each of said cans having its bottom formed with an opening adjacent each end thereof, means for continuously circulating water to enter each can through the opening at one end thereof and to leave the can through the opening at the other end thereof, and means for continuously circulating a cooling medium within the tank to surround the cans.

1,760,973. ELECTRICAL NETWORK. OTTO J. ZOBEL, New York, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Mar. 27, 1928. Serial No. 265,200. 4 Claims. (Cl. 178—44.)

1. A smooth line having a certain series impedance and a certain shunt impedance and a network associated therewith and simulating it, said network comprising a plurality of lattice sections each with two impedances in each of its arms, these last mentioned impedances being respectively real number multiples of said series impedance and shunt impedance.

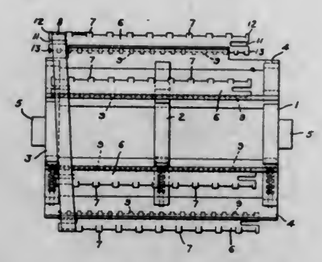


1,760,974. DUAL WEAR-COMPENSATING PISTON PACKING RING. JOSEPH BLAEKER and FREDERICK A. SMITH, New York, N. Y. Filed July 2, 1928. Serial No. 289,776. 11 Claims. (Cl. 74—109.)



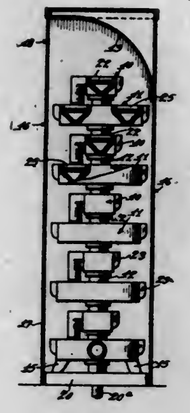
1. A combined dual wear-compensating piston packing ring comprising an axially non-resilient piston ring member and a cooperating thin annular undulated or wavy and axially resilient spring member, said spring member having integral therewith a plurality of spaced angularly extending spring arms around the inner circumference, and said spring arms being located at the lower level of the waves.

1,760,975. INDUCTOR. ROBERT L. DAVIS, Pittsburgh, and JOHN P. STAKEL, Edgewood, Pa., assignors to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 29, 1927. Serial No. 187,408. 1 Claim. (Cl. 175—359.)



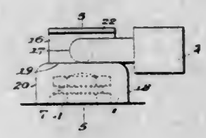
A coil supporting device comprising a frame, and a plurality of elongated approximately rectangular insulating elements removably supported thereby in circumferential spaced relation, an exposed edge of each of said elements being provided with a series of convolution-separating projections, another edge of each of said elements being provided with a plurality of convolution-separating projections differently spaced from the projections on said exposed edge, whereby upon reversal of said elements relative to said frame a conductor may be wound about said elements to constitute a coil having a value of inductance different from that of a coil formed by winding an inductor around said elements before their reversal.

1,760,976. HUMIDIFYING APPARATUS. GEORGE D. DOHERTY, Minneapolis, Minn., assignor to Doherty-Brehm Company, Minneapolis, Minn., a Corporation of Delaware. Filed June 20, 1927. Serial No. 199,904. 16 Claims. (Cl. 237—78.)



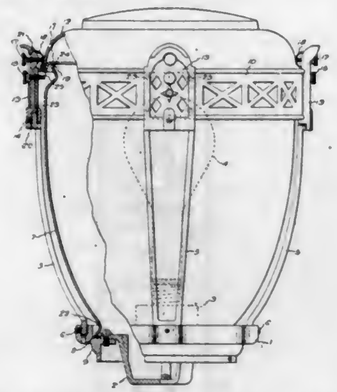
1. A device of the character described comprising a plurality of spaced and superposed heating sections connected to one another for circulating a heating medium therethrough, sections having a smaller number of heating units being alternately disposed with sections having a greater number of heating units and the heating units of said superposed sections being staggered relatively to one another for circulating air around said heating units, and means on each heating unit containing a humidifying medium for imparting humidity to the heated air.

1,760,977. INCASING LOCK. CHARLES HUGH DUFFY, Miami, Fla. Filed Feb. 18, 1928. Serial No. 255,355. 20 Claims. (Cl. 70—122.)



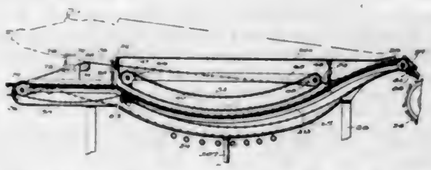
2. A device of the character described including a necked nut, a guard assembly including a pair of swivelling members having their bottoms providing a circular opening and adapted to enter within and encompass the base of the neck in the said nut, said swivelling members including upstanding portions provided with complemental transverse holes, said guard assembly including a cup shaped guard housing having a top and a vertical side wall, the said top being provided with an opening through which the said upstanding portions pass, the said vertical side wall of the guard housing being adapted to envelope the said nut and to engage the said swivelling members to retain the same within the said neck in the said nut, and locking means adapted to pass through the said holes in the upstanding portions of the swivelling member above the top of the said guard housing.

1,760,978. HOLDER FOR LAMP HOUSINGS. RALPH W. ERSKINE, Mishawaka, Ind., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 10, 1927. Serial No. 174,136. 7 Claims. (Cl. 240—25.)



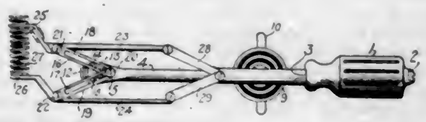
1. A lamp housing comprising a globe, a canopy disposed on the globe, a base for supporting the globe, a plurality of uprights on the base, means on said uprights for engaging the canopy, said means comprising a plate and a spring attached to the said plate for yieldingly retaining said canopy and globe in positon.

1,760,979. MATERIAL TREATING AND HANDLING APPARATUS. JOSEPH D. FERRY, Harrisburg, Pa. Filed July 22, 1927. Serial No. 207,798. 27 Claims. (Cl. 53—7.)



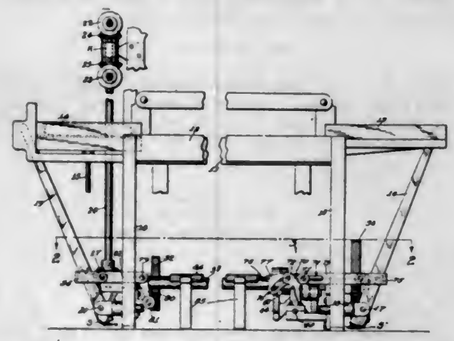
1. A material treating and handling apparatus comprising a tank adapted for the reception of a liquid, a heater for the liquid, a conveyor to conduct the material through the liquid in the tank, and a driving mechanism for said conveyor so correlated with said conveyor that by varying the tension of said driving mechanism the tension of the material-carrying portion of said conveyor is varied, said driving mechanism extending through the liquid in said tank whereby the conveyor and the driving mechanism therefor are maintained at substantially the same temperature.

1,760,980. VALVE-SPRING COMPRESSOR AND LIFTER. FREDERICK F. FOREMAN, Lansing, Mich., assignor of one-half to Patrick H. Fahey, Hubbardston, Mich. Filed Aug. 8, 1928. Serial No. 298,349. 3 Claims. (Cl. 29—86.3.)



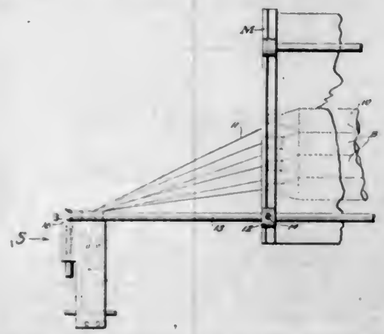
1. In a valve compressor and lifter, the combination with a body portion, of a rod arranged to be reciprocated longitudinally in the body, clamping jaws carried by the said body, means for supporting the jaws upon the body whereby the jaws are movable parallel with each other and towards and from each other, devices carried by the rod and acting upon the said supporting means to move the jaws, and means for actuating the rod comprising a spirally grooved member transversely and rotatively carried by the body, means formed upon the said member for rotating the same by hand, and a tooth borne by the rod in engagement with the said spiral.

1,760,981. PICKING MOTION FOR LOOMS. ALBERT A. GORDON and IRVING H. VERRY, Worcester, Mass., assignors to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Aug. 3, 1928. Serial No. 297,278. 18 Claims. (Cl. 139—147.)



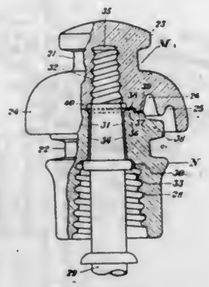
1. In a loom, a loom driving element at one end of the loom, a harness controlling element at the other end of the loom, a shaft extending across the loom and operatively connecting the elements, a shuttle driving member adjacent each end of the loom, a pair of oppositely extending picking arms secured to the shaft at that end of the latter adjacent the driving element, and means operated by one of said arms to actuate the member at one end of the loom and actuated by the other arm to operate the member at the other end of the loom.

1,760,982. THREAD HOLDER FOR WEFT-REPLENISHING LOOMS. ALBERT A. GORDON, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Nov. 24, 1928. Serial No. 321,672. 17 Claims. (Cl. 139—247.)



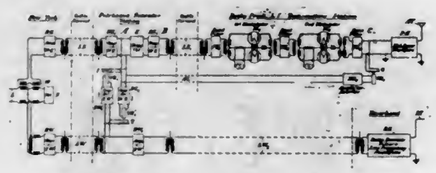
1. In a thread holding and tensioning device for a weft replenishing loom having a supply of weft bobbins from each of which extends a weft end, a thread tensioning element for the weft ends, a thread clamping element for the weft ends, said tensioning element being intermediate the weft supply and clamping element, and means to move the clamping element to thread releasing position when the tensioning element is moved to a position to receive a new weft.

1,760,983. INSULATOR. CHESTER S. GORDON, Boonton, and JAMES T. LOWE, Newark, N. J., assignors to American Telephone and Telegraph Company, a Corporation of New York. Filed Dec. 19, 1925. Serial No. 76,505. 9 Claims. (Cl. 173—28.)



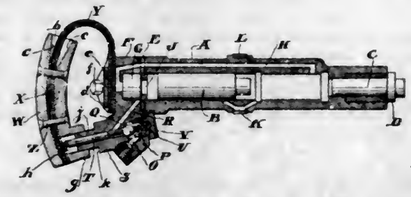
1. An insulator for transmission conductors comprising two bodies of dielectric material, a groove in each of said bodies for the attachment of transmission conductors, the adjacent surfaces of said bodies being correspondingly stepped so as to mate with each other and form a substantially water-tight joint when the two bodies are mounted one upon the other, a downwardly and outwardly extending flange on the upper body below the groove thereof, convolutions arranged in echelon formation on the under side of said flange, and an outwardly extending flange on the lower body above the groove formed therein so related to the convolutions on said first mentioned flange as to form a tortuous passage to prevent moisture from being driven into the joint.

1,760,984. TRANSOCEANIC RADIO TELEPHONE SYSTEM. HAROLD S. HAMILTON, Phoenix, Ariz., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed July 16, 1927. Serial No. 206,342. 7 Claims. (Cl. 250—9.)



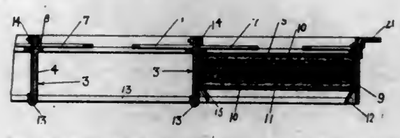
1. In a signaling system, a two-way telephone transmission line, a radio transmitter including a modulator, a radio receiver, a transmitting antenna into which said modulator works, a receiving antenna separate from said transmitting antenna and associated with said radio receiver, a first one-way path between said line and said radio transmitter for transmitting signals from the line to the transmitter, a second one-way path for transmitting signals from said radio receiver to said line, echo suppressor equipment located at a point through which both of said paths pass, said echo suppressor equipment comprising an echo suppressor unit associated with the first path and responsive to signals transmitted thereover to disable the second path, a second echo suppressor unit associated with the second path and responsive to signals transmitted thereover for disabling said first path, a disabling means normally applied on the output side of the modulator of the radio transmitter between said modulator and the transmitting antenna to prevent the radiation of interference during idle periods of the transmitter, and means responsive to the application of signals to said first path for removing said last mentioned disabling means in response to voice currents applied to said first mentioned one-way path.

1,760,985. SPRING HANDLE FOR PERCUSSIVE TOOLS. FRANCIS A. JIMERSON, Athens, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed Jan. 11, 1927. Serial No. 160,396. 1 Claim. (Cl. 121—11.)



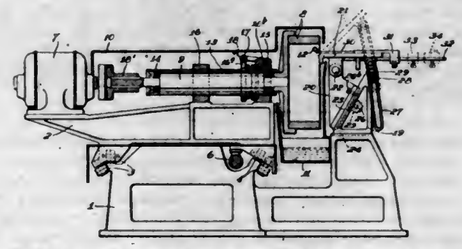
A pneumatic percussive tool comprising a cylinder and a back head, a projection on the back head having a bore, a throttle valve in the bore controlling the admission of pressure fluid into the cylinder, a push rod extending through said projection, a laminated spring secured at one end to the back head, a handle on the other end of the spring for manipulating the tool and for cooperating with said push rod to open the throttle valve upon the application of pressure to the handle for pressing the tool to the work, a boss on the handle having an aperture to slidably receive the projection on the back head for guiding the handle, said boss forming a hood for said projection whereby detritus is excluded from said bore, and a shoulder on the projection forming a stop for limiting the inward movement of the handle.

1,760,986. AIR FILTER. ANDERS JORDAHL, New York, N. Y. Filed May 20, 1924. Serial No. 714,676. 12 Claims. (Cl. 183—44.)



4. An air and gas filter comprising a stationary framework composed of members which form the sides of a plurality of receptacles, each receptacle being open at both ends for the passage of air; flanges on said sides adjacent one end of its respective receptacle; a bent portion forming an interlocking portion on the edges of said members, said bent portions being adapted to interlock with the edges of adjoining members in order to secure the framework together; and a filter unit removably inserted into each receptacle and against said flanges, the width and height of the filter unit being respectively equal, except for a slight clearance, to the width and height of the receptacle.

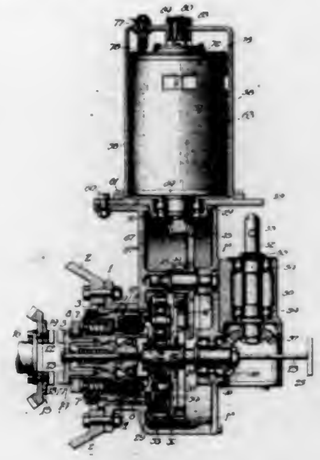
1,760,987. GRINDING MACHINE. NORMAN H. KLAGES, Pittsburgh, Pa., assignor to G. W. Klages & Son, Inc., a Corporation of Pennsylvania. Filed Nov. 3, 1928. Serial No. 317,008. 2 Claims. (Cl. 51—56.)



1. The combination with a plate for supporting a sheet whose edge is to be ground, a supporting bed in front of

said plate, a block carried by the bed, a sleeve threaded through said block for endwise adjustment and provided upon its interior with bearings, a work spindle journalled in said bearings and movable endwise with the sleeve, a grinding wheel carried by said spindle, means for rotating the sleeve to adjust it endwise through said block comprising a worm wheel splined to the sleeve and swivelled against axial movement relative to the bed, and a worm for rotating said wheel, a motor carried by the bed and connecting means between the drive shaft of the motor and the spindle with which said spindle has a splined engagement to permit of the endwise adjustment of the spindle.

1,760,988. ENGINE STARTER. RAYMOND P. LANSING, Montclair, N. J., assignor to Eclipse Machine Company, Elmira, N. Y., a Corporation of New York. Filed Nov. 23, 1925. Serial No. 70,780. Renewed June 21, 1929. 24 Claims. (Cl. 290—48.)

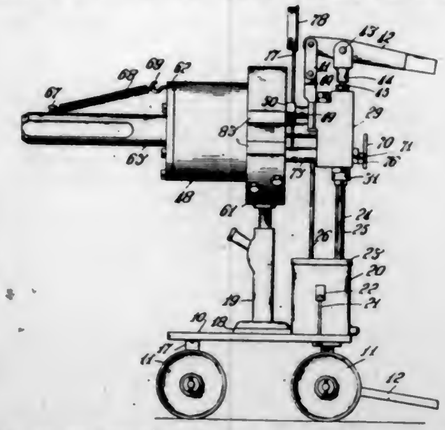


3. In a self-contained engine starter for detachable association with an internal combustion engine, a drive including a driving member adapted to be moved to engage and crank a member of the engine to be started, and a combined electric motor and inertia means operatively and constantly connected with said driving member, such connections including speed-reducing gearing and said motor including a rotatable element which is made abnormal to provide mass and flywheel effect as the inertia means, and manual means operatively connected with said electric motor and inertia means and with said driving member.

20. In a starter for cranking internal combustion engines, a member adapted to be moved into driving engagement with a member of the engine to be cranked, an electric motor having a high speed rotor constituting an inertia member in which substantially all the energy necessary for cranking the engine is adapted to be stored, said inertia member being disconnected from the engine during the storage of energy therein and during the normal operation of said engine, and reduction means for drivably connecting said inertia member and engine-engaging member.

1,760,989. PISTON PULLER AND CYLINDER-BUSHING PRESS. CHARLES H. LEWIS, Cleburne, Tex. Filed Aug. 24, 1928. Serial No. 301,784. 6 Claims. (Cl. 29—86.)

1. A device of the character described comprising a portable fluid medium holding container, fluid controlling means involving high and low pressure valved passages, pistons operable in said passages for controlling the flow of said medium, a cylinder secured to said means and provided with a reciprocable piston having a piston head at its inner end, fluid conveying connections between the head of said reciprocable piston and said passages, means whereby said reciprocable piston is returned to normal

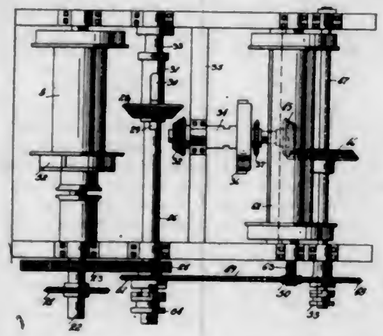


position, and means secured to the cylinder and extending beyond the maximum outward position of the piston whereby the outward moving force of the piston may be effectively applied.

1,760,990. MANUFACTURE OF CONCENTRATED FERTILIZER MATERIAL. HERBERT H. MEYERS, Pittsburgh, Pa., assignor to Armour Fertilizer Works, Chicago, Ill., a Corporation of New Jersey. Filed Apr. 13, 1928. Serial No. 269,874. 6 Claims. (Cl. 71—7.)

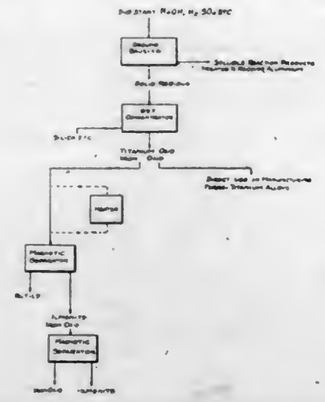
1. The process of making a concentrated fertilizer material, consisting in treating a calcined phosphatic material containing available phosphate, as determined by the standard ammonium citrate method, with ammonia, water and carbon dioxide to yield ammonium phosphate and calcium carbonate.

1,760,991. TRANSMISSION. GEORGE WILLIAM MORRISON, Holliday, Tex. Filed May 16, 1929. Serial No. 364,287. 1 Claim. (Cl. 74—59.)



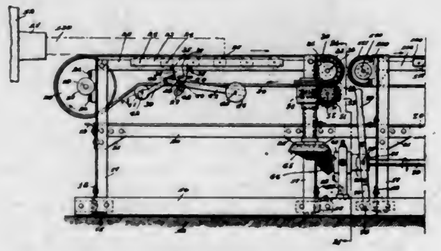
A transmission for mast raising and lowering devices, composed of a drum, a gear connected to the drum, a shaft adjacent the drum having a gear in mesh with the drum gear, a second shaft spaced from the first shaft, means to drive the first shaft from the second shaft, a third shaft disposed transversely across the space between the first and second shafts, means to drive the second shaft from the third shaft, means to selectively drive the first shaft from the third shaft, and a clutch for each of the first and second shafts for controlling said means which drives the first shaft from the second shaft.

1,760,992. PROCESS OF PRODUCING TITANIUM OXIDE. RALPH M. PALMER, New York, N. Y. Filed May 25, 1926. Serial No. 111,629. 8 Claims. (Cl. 23—202.)



1. In the herein described process, the steps of subjecting the residue from a digestion process for recovering the aluminum content of bauxite to wet concentration to separate iron oxide, ferro-titanium oxide and titanium oxide therefrom, magnetically separating titanium oxide from the ferro-titanium oxide and iron oxide, and magnetically separating the ferro-titanium oxide from the iron oxide.

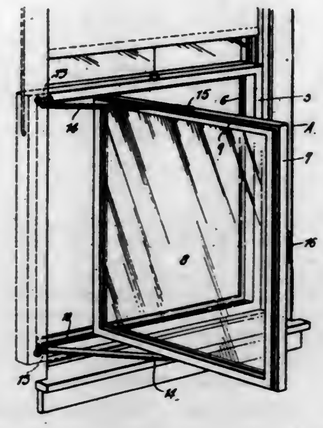
1,760,993. METHOD OF AND AUTOMATIC MEANS FOR HACKING BRICK. RAYMOND C. PENFIELD, New York, N. Y. Filed May 5, 1926. Serial No. 106,875. 9 Claims. (Cl. 25—1.)



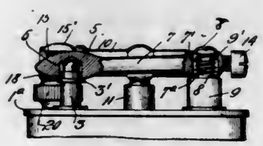
1. That improvement in the art of manufacturing bricks which consists in subdividing a slug of clay of indeterminate length into slugs of predetermined length, taking each slug of predetermined length as it is formed and gradually increasing the speed of travel thereof until it reaches a collecting point, forming said on-coming stream of slugs of predetermined length into a group of parallelly arranged slugs, then moving said group of slugs transversely of the length of said slugs while maintaining the same in a horizontal plane and simultaneously subdividing the plurality of slugs into bricks and then automatically and mechanically arranging said bricks in hacked relation to each other preparatory to forming a kiln.

1,760,994. WINDOW SASH. MIGUEL ANGEL PIOTTI, New York, N. Y. Filed Apr. 12, 1929. Serial No. 354,556. 1 Claim. (Cl. 20—48.)

In a window sash of the character described, a sash frame, a glass panel supporting frame arranged within said sash frame, said sash frame, at its upper and lower sides being provided with inwardly disposed opposed channels extending thereacross, pivot elements mounted on the upper and lower ends of the panel frame adjacent one side thereof and adapted to pivotally and slidably seat in the adjacent channel, and supporting and guiding arms pivotally connected at one end to the upper and lower ends of the panel frame centrally thereof and at their opposite ends to the sash frame, said panel supporting frame adapted to be shifted to a reverse position in the sash frame.

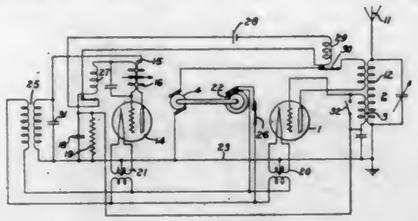


1,760,995. POCKET LIGHTER. ABRAHAM POLLAK, Far Rockaway, N. Y., and JOSEPH F. O'BRIEN, Englewood, N. J., assignors to Clark Lighter Co. Inc., a Corporation of Maryland. Filed Jan. 28, 1928. Serial No. 250,112. 15 Claims. (Cl. 67—7.1.)



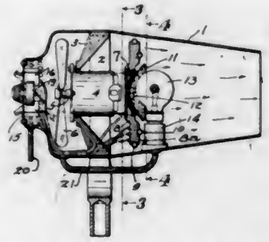
8. A lighter embodying, in combination, a fuel reservoir having a mounting plate, a wick extending perpendicular to said mounting plate, a tube mounted away from but parallel to said top mounting plate having a piece of pyrophoric material mounted therein, sparking mechanism arranged at the end of said tube comprising a sparking wheel and a thumb wheel separably mounted and operatively connected together, a supporting bearing formed on one end of said tube and engaging said sparking mechanism between said thumb wheel and said sparking wheel, a flame extinguishing and wick tube sealing member mounted on said mounting plate comprising a head having a wick extinguishing and sealing notch at one end and pivoted at the other end on a pivot arranged perpendicular to the top plate, the connection between said arm and pivot having sufficient loose motion to permit raising of the rigid arm a limited distance above the wick and a swinging of the same on said perpendicular pivot and a spiral spring having a bearing at one end at the opposite end bearing against an abutment on the arm so as to normally retain the head in a lowered position and also to retain it at any swung-out position to which it may be moved.

1,760,996. VACUUM-TUBE GENERATOR. ERNEST YEOMAN ROBINSON, Lymm, England, assignor to Associated Electrical Industries Limited, a British Company. Filed June 10, 1925, Serial No. 36,139, and in Great Britain June 11, 1924. Renewed Feb. 1, 1930. 7 Claims. (Cl. 250—36.)



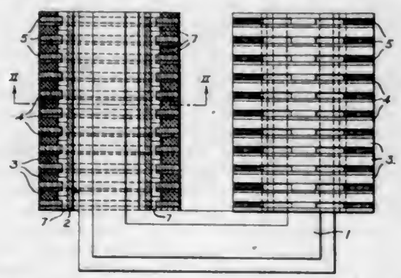
1. In a system for producing alternating current, a vacuum-tube oscillator, a grid biasing means, said grid biasing means including a source of alternating current and a rectifying device, said rectifying device being distinct from the vacuum tubes of said vacuum-tube oscillator, and automatic means for interrupting the supply of anode current to the vacuum-tube oscillator upon failure of the grid biasing means.

1,760,997. HAIR DRIER. WILLIAM G. SHELTON, St. Louis, Mo. Filed Dec. 17, 1928. Serial No. 326,584. 6 Claims. (Cl. 34—26.)



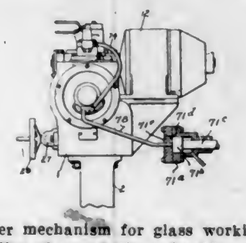
1. In a device of the class described, a frame member, a motor mounted on said member, a fan on one side of said frame and driven by said motor, a pair of clamping elements secured to said motor on the other side of said frame, an insulator gripped between said elements, a reflector in front of said elements, and a lamp in front of said reflector, said frame, elements, insulator and reflector being constructed to allow an air stream to pass through the same and past said lamp.

1,760,998. TRANSFORMER CORE. ARTHUR W. THOMPSON and FRED J. VOGEL, Sharon, Pa., assignors to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed June 23, 1926. Serial No. 117,922. 6 Claims. (Cl. 175—356.)



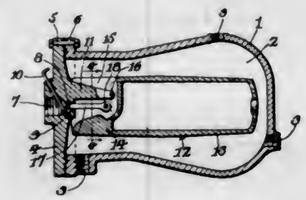
1. In an electrical device, a tube, a plurality of coils surrounding the tube, spacing washers of insulating material disposed between the coils, and keys carried by the several washers, the keys cooperating with each washer extending into the spaces between the tube and the adjacent coils and engaging the keys co-operating with the adjacent washers.

1,760,999. TIMING MECHANISM FOR GLASS FEEDERS. OLIVER MOORE TUCKER and WILLIAM ALBERT REEVES, Columbus, Ohio, assignors, by mesne assignments, to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed June 30, 1920, Serial No. 392,916. Renewed Feb. 21, 1927. 39 Claims. (Cl. 49—14.)



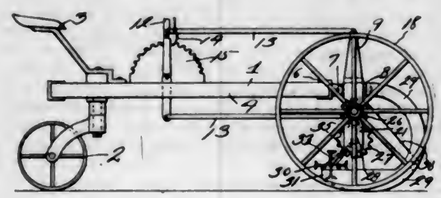
9. In a timer mechanism for glass working machinery, valves controlling the operation of said machinery, a revolving member adapted to actuate said valves, and means for shifting one of said valves in an arc concentric with the axis of rotation of the revolving member, whereby the relative time of actuation of said valves may be varied.

1,761,000. FLOAT-CONTROLLED VALVE. DOUGLAS KENT WARNER, Bristol, Conn. Filed June 20, 1929. Serial No. 372,482. 9 Claims. (Cl. 137—104.)



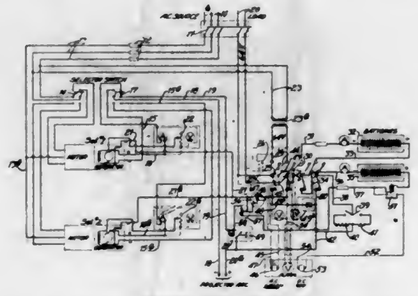
1. In a valve structure, a float including a hollow body portion and further including a counterbalance formed on one end of the body portion, said counterbalance being formed with means for pivotally connecting the float with a support, and a port closing element pivotally connected to said counterbalance and extending longitudinally of the float.

1,761,001. WEEDER. JOHN WICKER, Sprague, Wash. Filed May 14, 1929. Serial No. 363,017. 8 Claims. (Cl. 97—40.)



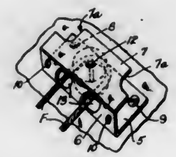
1. A weed cutting machine comprising a main frame, wheel means for supporting the rear end of said main frame, a pivoted reel carrying frame carried by the forward end of the main frame, said reel carrying frame comprising runner members curving forwardly, downwardly and rearwardly, a rotatable cutter reel carried by the rear end of the runners, a ground engaging wheel carried by one side of the reel frame and outside the runners and driving connections between the ground engaging wheel and the reel.

1,761,002. EMERGENCY LIGHTING SYSTEM. RALPH T. WILLIAMS, Chicago, Ill., assignor to Roth Bros. & Co., Chicago, Ill., a Corporation of Illinois. Filed July 16, 1927. Serial No. 206,360. 7 Claims. (Cl. 171—97.)



1. In an emergency lighting system, a source of alternating current, a motor-generator adapted to be driven thereby, a lighting circuit, a storage battery made up of a plurality of sections, and a voltage-controlled switch adapted to connect said battery sections in parallel on said generator while the latter is driven by said alternating current and to connect said battery sections in series to said lighting circuit when the source of alternating current fails.

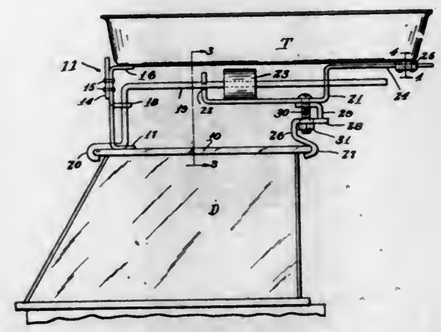
1,761,003. PULLEY STRUCTURE. GEORGE F. WOMRATH, Minneapolis, Minn. Filed Jan. 11, 1928. Serial No. 245,941. 2 Claims. (Cl. 254—190.)



1. Pulley structure comprising a bracket of U-shaped cross section having a pair of parallel sides and an intermediate side extending substantially perpendicular to said parallel sides, a pulley wheel revolubly mounted between said parallel sides and having its axis disposed substantially normal thereto, said intermediate side having a pair of spaced openings through which a flexible member may pass to engage said pulley wheel, means for attaching said bracket to a supporting surface with one of said parallel sides substantially flush thereagainst, and means for attaching said bracket to said surface with said intermediate side disposed substantially flush thereagainst.

1,761,004. ADJUSTABLE BRACKET FOR DISPLAY CASES. HARRY D. BLAKE, Boston, Mass. Filed Aug. 17, 1929. Serial No. 386,635. 4 Claims. (Cl. 211—126.)

1. In an adjustable bracket for display cases, the combination of a clamp member adapted to grip one edge of the top of a display case, a collapsible clamp member adapted to grip the opposite edge of the said top of said display case, a vertically movable tray supporting member attached to the first said clamp member, a transversely and longitudinally movable tray support attached to the second said clamp member, a yieldably and slidably mounted member attached to first said clamp member and adapted

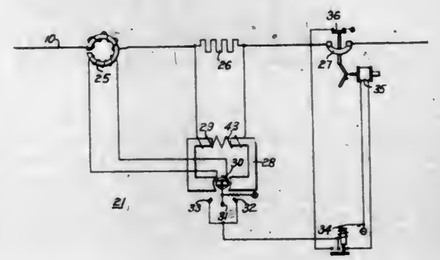


to be compressed by said second clamp member by means of a hook formed on one side of second clamp member and engaged around said first clamp member, substantially as shown and described.

1,761,005. METHOD OF MAKING PRINTED FABRICS. ALFRED BURNS, Easthampton, Mass., assignor to West Boylston Manufacturing Company, Easthampton, Mass., a Corporation of Massachusetts. Filed Dec. 5, 1928. Serial No. 324,069. 2 Claims. (Cl. 28—22.)

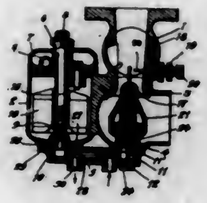
1. The method of preparing a printed warp for use in making a printed fabric which consists in weaving a header on the end of a web of warp threads, the warp threads of said web being otherwise disconnected from each other, printing the desired pattern on the warp threads while in web form, forming the printed web into a warp chain, subjecting the warp chain to steaming and drying operations, converting the warp chain progressively back into a web of warp threads which have the same relative arrangement both longitudinally and laterally as they had during the printed operation, and winding said web onto a warp beam.

1,761,006. PROTECTIVE SYSTEM. CHARLES A. BUTCHER, East Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Jan. 16, 1926. Serial No. 81,858. 17 Claims. (Cl. 175—294.)



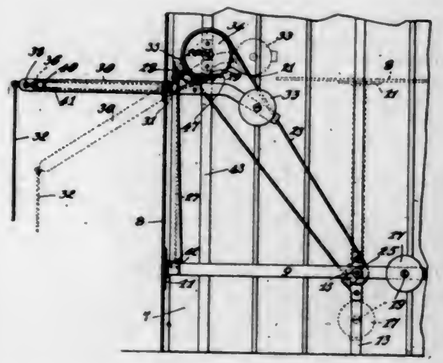
1. A protective system for a plurality of parallel-connected direct-current transmission circuits comprising inverse time-element relays associated with the ends of each of the respective circuits, means for energizing said relays in accordance with the magnitude and the rate of change of the current in the associated circuit, and means controlled by said relays for interrupting the current in a faulty circuit.

1,761,007. CARBURETOR FOR INTERNAL-COMBUSTION ENGINES. CHARLES HENRI CLAUDEL, Neuilly-sur-Seine, France. Filed Dec. 11, 1924, Serial No. 755,296, and in France Oct. 24, 1924. 6 Claims. (Cl. 261—41.)



1. A carburetor comprising in combination, a carburetor body and float chamber solidly joined together, a removable cover cap for said float chamber, a removable hollow connecting member fitting tightly on one side within the bottom of said float chamber and laid on other side on the bottom of said carburetor body, a removable hollow assembling bolt fitted through said cover cap and the float and screwed in the corresponding end of said hollow connecting member and a system of spray nozzles carried by the other end of said hollow connecting member and extending into the vaporizing chamber of the carburetor through a suitable orifice.

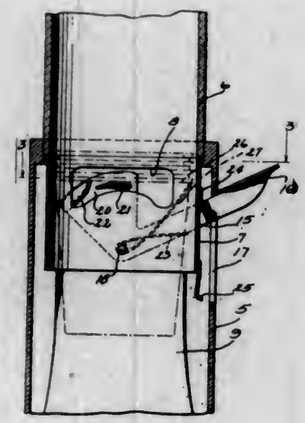
1,761,008. DOOR-OPERATING MECHANISM. FRANK P. CROWLEY, North Bergen, N. J. Filed July 13, 1929. Serial No. 377,936. 8 Claims. (Cl. 268—58.)



1. In a manual door operating mechanism and in combination a door bar, a pivotal support therefor, a counterweight secured adjacent one end of said bar, chain and sprocket mechanism operable to cause said door bar to swing from the normal to the open position of the door, and manually controlled means for initiating the movement of said mechanism.

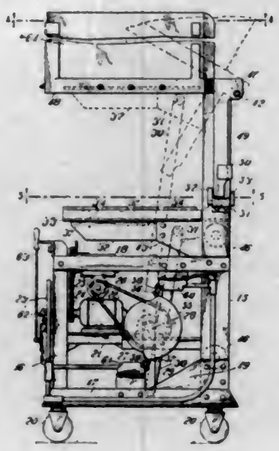
1,761,009. CUP DISPENSER. GEORGE DE VRIES, Oak Park, Ill., assignor to American Lace Paper Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed July 8, 1929. Serial No. 376,515. 9 Claims. (Cl. 312—44.)

1. In a cup dispenser, the combination with a laterally apertured conduit, of cup ejecting means fulcrumed for oscillatory movement between first and second predetermined positions, and flanges carried by said means at different radial distances from the fulcrum thereof, and positioned to traverse different paths across the interior of



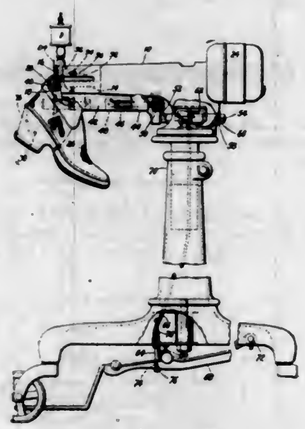
said conduit through the apertures therein, said flanges being angularly offset about said fulcrum for successive traverse of said conduit.

1,761,010. BUTTER-CUTTING MACHINE. CHARLES DOERING and HENRY H. DOERING, Chicago, Ill. Filed Apr. 29, 1926. Serial No. 105,428. 19 Claims. (Cl. 31—26.)



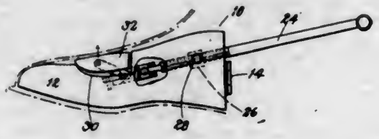
3. A butter cutting machine, comprising a reciprocating frame, power means for reciprocating said frame, means for controlling the direction of reciprocation, a butter holding table mounted on said frame, butter cutting mechanism mounted in the path of said reciprocating frame and table, means whereby the butter holding table and cutter mechanism are tilted into butter delivering position, and means for automatically controlling said direction controlling means when the reciprocating frame reaches predetermined points in its reciprocation.

1,761,011. TRIMMING MACHINE. SIDNEY J. FINN, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed July 17, 1928. Serial No. 293,376. 20 Claims. (Cl. 12—51.)



1. A trimming machine comprising trimming mechanism, and work-supporting means provided with a plurality of work supporting portions, said work-supporting means being movable to place said portions alternatively in dissimilar positions to cooperate with said trimming mechanism.

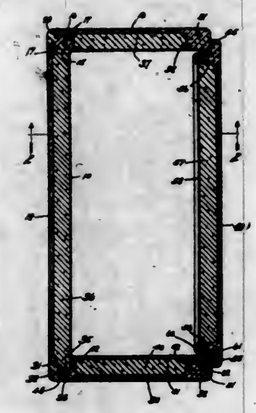
1,761,012. SHOE STRETCHER. GUY B. FITZ, Auburn, Me., assignor to Fitz-Empire Double Pivot Last Company, Auburn, Me., a Corporation of Maine. Filed Oct. 14, 1926. Serial No. 141,640. 16 Claims. (Cl. 12—128.5.)



1. A shoe stretcher, having, in combination, an expansible forepart having two separable sections, a member located between the sections and arranged to separate them, and an instep-engaging member mounted on said member.

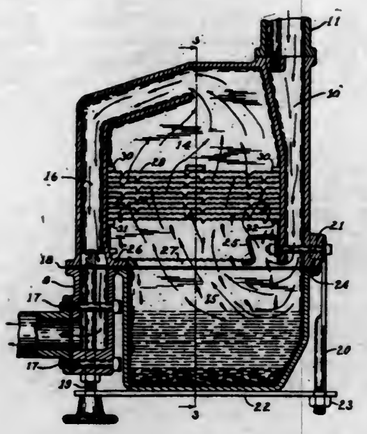
1,761,013. REFRIGERATOR CABINET. HARVEY D. GEYER, Dayton, Ohio, assignor to The Inland Manufacturing Company, Dayton, Ohio, a Corporation of Delaware. Filed Sept. 9, 1927. Serial No. 218,554. 6 Claims. (Cl. 217—17.)

1. A refrigerator cabinet comprising: a one-piece inner metal lining having an open side for the door-way, separate panels molded to shape from plastic material enclosing said lining and forming a cabinet therefor, said panels having inwardly projecting marginal portions abutting the



corners of said lining and leaving a jacket chamber between the panel and lining, and heat insulating material filling said jacket chambers.

1,761,014. AIR CLEANER FOR INTERNAL-COMBUSTION ENGINES. ROBERT O. HENDRICKSON and CARL B. LARSEN, Racine, Wis., assignors to J. I. Case Company, Racine, Wis., a Corporation. Filed Mar. 30, 1928. Serial No. 266,052. 4 Claims. (Cl. 183—15.)

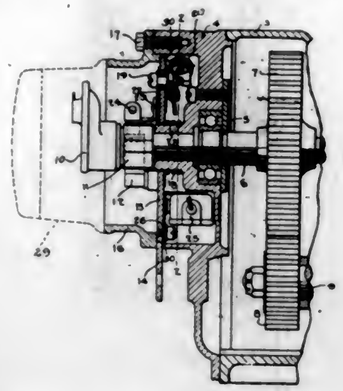


1. An air cleaner, comprising a chamber, an air inlet passage communicating with the chamber, an air discharging passage communicating with the chamber, an oil containing sump detachably connected to the chamber, a strainer comprising superimposed reticulated sheets mounted in the chamber, means integral with said sheets for spacing the sheets from each other, and means for retaining the sheets within the chamber.

1,761,015. ELECTRIC IGNITION APPARATUS. WILLIAM H. HUTCHINS, Rochester, N. Y., assignor, by mesne assignments, to North East Appliance Corporation, Rochester, N. Y., a Corporation of New York. Filed Oct. 6, 1926. Serial No. 139,895. 3 Claims. (Cl. 200—21.)

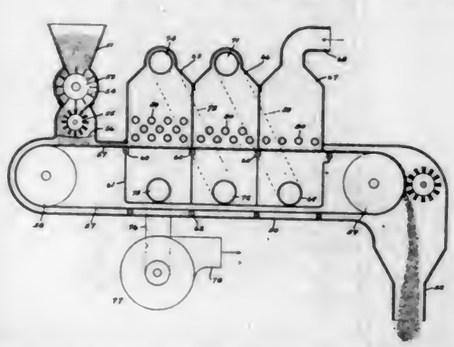
1. In ignition apparatus, the combination of a stationary housing-member, a cam-shaft journalled therein, a base-

plate of generally circular form loosely fitted, at its periphery, within said housing-member and partially rotatable therein, said plate having a central aperture through which the cam-shaft passes, a cam, on the cam-shaft, in front of the base-plate, a circuit-controller, actuated by said cam, mounted on the front of the base-plate, a second



housing-member removably attached to the first housing-member and enclosing said circuit-controller, said second-housing-member having a rearwardly disposed peripheral shoulder against which the base-plate rests, and a spring, within the first housing-member, engaging the base-plate and pressing it constantly against said shoulder.

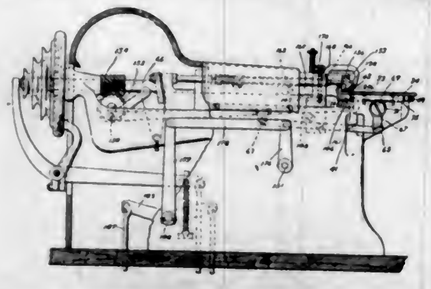
1,761,016. DRYING METAL POWDERS. ROLAND P. KOEHRING, Dayton, Ohio, and CHARLES R. SHORT, Detroit, Mich., assignors to The Moraine Products Company, Dayton, Ohio, a Corporation of Ohio. Filed Nov. 7, 1927. Serial No. 231,410. 3 Claims. (Cl. 34—24.)



1. The method of drying wet copper powder which consists in depositing the powder in such a thin layer that drying air can pass therethrough substantially uniformly over its area on a foraminous support and forcing heated air through said powder at progressively decreasing temperatures as the moisture evaporates whereby tendency toward oxidation of the copper powder is reduced.

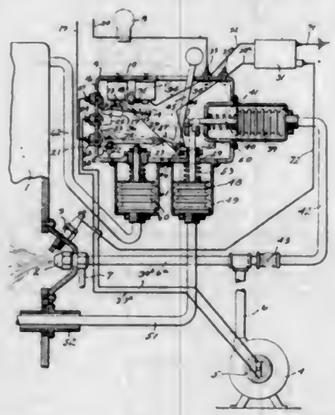
1,761,017. FOLDING MACHINE AND METHOD. LEO J. LAMBERT, Salem, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Apr. 9, 1924. Serial No. 705,228. 68 Claims. (Cl. 12—54.)

68. A machine for folding the margin of a shoe upper over upon the body portion thereof about a line of fold having, in combination, means for relatively feeding the shoe upper, and means for folding successive marginal



portions on one side of the line into contact with selected predetermined successive body portions on the other side of the line.

1,761,018. CONTROL SYSTEM FOR OIL BURNERS. DORR R. MARTIN, Detroit, Mich. Filed June 1, 1926. Serial No. 113,038. 11 Claims. (Cl. 158—28.)

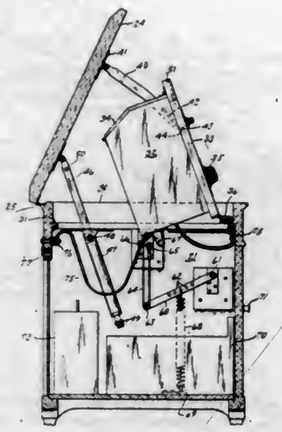


1. A control system for oil burners comprising the combination with the burner and electrically operated means for supplying fuel thereto, of a source of current supply including lead in wires each extending to terminals, a thermostat in one of the lead in wires for controlling the supply of current to said electrically operated means, there being two paths through which the supply circuit may be completed, one of which is normally closed and includes means for completing the other and the other of which includes the said electrically operated means, means caused to operate in a predetermined time period by the closing of the supply circuit through the second of said paths to break the supply circuit, a heat responsive device operating by influence of the heat of combustion to prevent breakage of the current supply circuit by the time operated element, means whereby operation of the heat responsive device breaks the first current path, electrical means in the second path for maintaining said path closed whereby failure of current supply breaks said second path.

1,761,019. RADIO APPARATUS. ORIN E. MARVEL, Dayton, Ohio, assignor, by mesne assignments, to General Motors Radio Corporation, Dayton, Ohio, a Corporation of Ohio. Filed July 13, 1925. Serial No. 43,163. 4 Claims. (Cl. 312—7.)

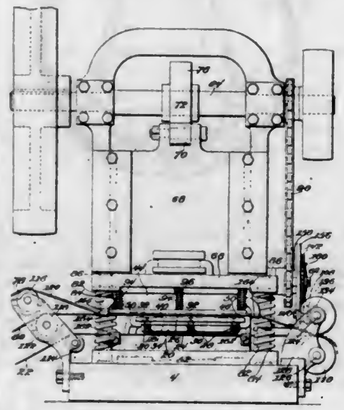
1. A radio apparatus, comprising a cabinet, said cabinet having an opening to give access to the interior thereof and

a movable cover for said opening, a radio unit including a panel mounted in the cabinet, means adjustably mounting said panel so that it may be moved and automatically retained in a plurality of exposed stable positions in rela-



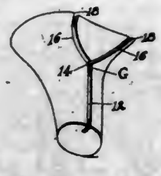
tion to said cover when said cover is fully open, and means connected between the cover and said unit whereby the latter is caused to move concurrently with movement of said cover.

1,761,020. METHOD OF AND MACHINE FOR MAKING SOLES. WILLIAM MAXWELL and FRANK W. DE TOUR, Beverly, Mass., assignors to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Sept. 12, 1919, Serial No. 323,367. Renewed Oct. 12, 1928. 65 Claims. (Cl. 12—20.)



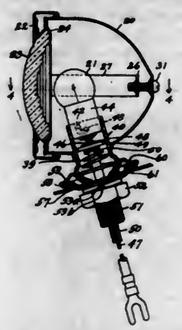
7. A machine for making manufactured insoles having, in combination, means for feeding a plurality of sheets of insole material, and means for forming a sewing-rib upon one of the sheets of insole material, assembling another sheet of insole material with said ribbed sheet and cutting the assembled sheets of insole material to the shape of an insole.

1,761,021. HEEL COVERING. WILLIAM H. NUTT, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Aug. 31, 1927, Serial No. 216,761. Renewed Oct. 1, 1929. 17 Claims. (Cl. 36—24.5.)



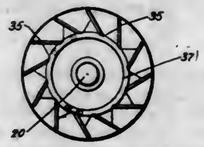
17. In a shoe, a tread sole, a heel having a forwardly projecting lip at the upper portion of its breast, and a groove extending across the heel breast below the lip, a sole flap covering the lipped portion of the heel breast and having a marginal portion tucked into the groove, and a separate covering for the rest of the heel breast having a marginal portion tucked into the groove beside the tucked-in marginal portion of the sole flap.

1,761,022. ELECTRIC LAMP. LESLIE O. PARKER, Anderson, Ind., assignor to Delco-Remy Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Oct. 31, 1927. Serial No. 229,830. 3 Claims. (Cl. 240—7.1.)



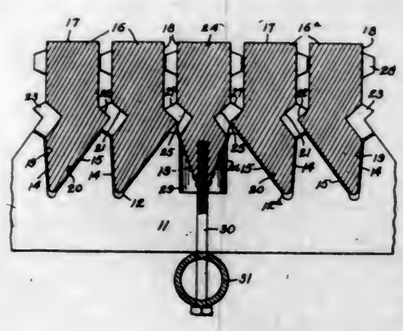
3. An electric lamp having a shell and a threaded supporting stem provided externally with a spherical portion integrally connecting a lamp socket with said threaded stem, an apertured seat member having a corresponding spherical recess for receiving said spherical portion of the stem, a dished member secured to said seat member adapted to be received by a depression in the auto body, and means cooperating with said stem for maintaining said lamp socket and stem in predetermined angular relation with said seat and dished members and said auto body.

1,761,023. COUNTERBALANCING DEVICE. WILLIAM GRANT PONTIS, Dayton, Ohio, assignor, by mesne assignments, to Delco Products Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Jan. 27, 1927. Serial No. 163,941. 5 Claims. (Cl. 74—6.)



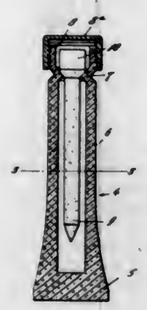
1. A device for counterbalancing shafts, comprising, in combination, a grooved retainer secured to the shaft to be balanced; and a resilient, split, balancing ring in said groove, the ring when in the grooved retainer having a gap equal in length to the material of the ring required to balance the shaft.

1,761,024. GRATE BAR. ANATOLE PROVOST, Montreal, Quebec, Canada. Filed May 16, 1929. Serial No. 363,606. 4 Claims. (Cl. 126—168.)



1. A furnace grate unit having removable fuel supporting bars comprising a supporting member, a central bar detachably secured on the supporting member, a plurality of second bars mounted on the supporting member symmetrically disposed on each side of the central bar, means on the central bar for holding the adjacent bars against vertical movement, and means on the outer sides of each of the second bars for engaging the inner sides of the adjacent bars to prevent relative vertical movement therebetween.

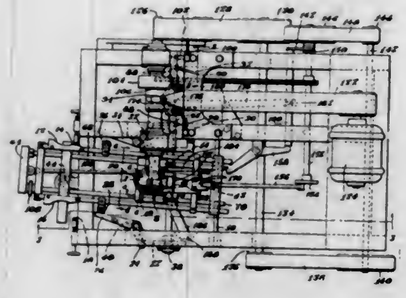
1,761,025. STYPTIC PENCIL. JOHN M. SCHNEIDER, Albany, N. Y. Filed Apr. 30, 1929. Serial No. 359,260. 2 Claims. (Cl. 128—267.)



1. A holder for a styptic pencil comprising a transparent receptacle having an elongated chamber, in which the pencil is adapted to be wholly inserted and housing an integrally formed inwardly directed annular rib adjacent one end of the chamber for separating the latter into separate communicating compartments for connecting the head and shaft respectively of the pencil, said rib providing an annular seat for the head of the pencil.

1,761,026. MACHINE FOR CONCAVING WOOD-HEEL BLOCKS. WESLEY JOHN SHAW, Haverhill, Mass., assignor to New England Wood Heel Co., Haverhill, Mass., a Corporation of Massachusetts. Filed Oct. 14, 1926. Serial No. 141,479. 10 Claims. (Cl. 12—46.)

1. A machine for cutting a concave groove in the top of a block having, in combination, a concaving cutter, means for holding a heel block, means for reciprocating the holding means to two predetermined positions and for rendering the holding means ineffective when occupying one of the predetermined positions, and for rendering the holding means effective at the second predetermined position, the holding means being adapted to present the top of the heel block to the action of the cutter in the second predetermined position, whereby the cutter will produce a concaving cut in the top of the heel block



when the holding means occupies the second predetermined position, and means for adjusting the cutter towards and from the second predetermined position to vary the concaving cut produced in the top of the heel block by the cutter.

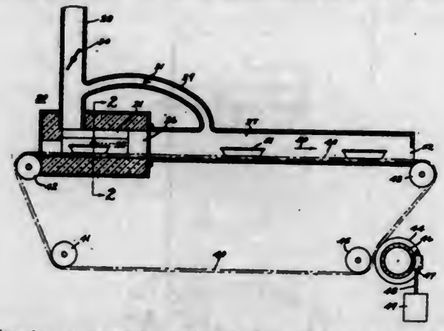
1,761,027. BRAKE. GEORGE H. STONER, East Boston, Mass., assignor, by mesne assignments, to Stoner-Ames Brake Company, Inc., Boston, Mass., a Corporation of Massachusetts. Filed Apr. 22, 1926. Serial No. 103,964. 6 Claims. (Cl. 188—78.)



1. In an internal brake, a pair of flexible arc members, an adjusting chord strut member for each, a rigid piece affixed adjacent an end of each flexible member and comprising a base, an adjusting bearing for the strut member end, a rocket on the rigid piece and having its axis transversely thereof, and a hinge member adjustably connected to said rocker members.

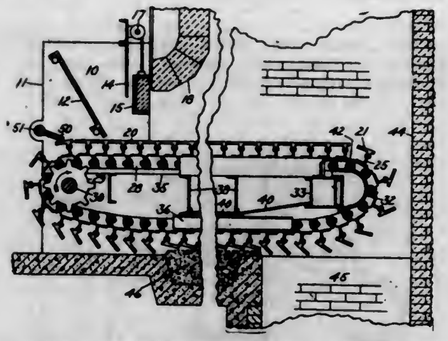
1,761,028. HEATING FURNACE. HARRY M. WILLIAMS, Dayton, Ohio, assignor to General Motors Research Corporation, Detroit, Mich., a Corporation of Delaware. Original application filed Mar. 30, 1926, Serial No. 98,600. Divided and this application filed Nov. 1, 1927. Serial No. 230,326. 4 Claims. (Cl. 263—8.)

3. Apparatus for heat treating articles composed of finely divided metals and graphite, comprising, in combination, a chamber for receiving the combustion products of surface combustion, a non-insulated elongated cooling chamber in open communication with the first



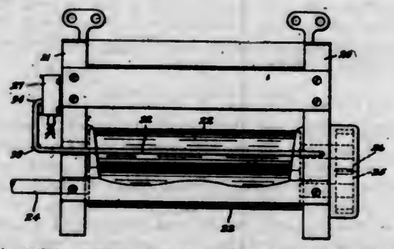
chamber, a passage connecting said chambers and adapted to convey combustion products from the first chamber into the cooling chamber.

1,761,029. TRAVELING-GRATE STOKER. WILLIAM D. YERRICK, Worcester, Mass., and JESS W. PECK, New York, N. Y., assignors to Riley Stoker Corporation, Worcester, Mass., a Corporation of Massachusetts. Filed June 12, 1926. Serial No. 115,622. 6 Claims. (Cl. 110—40.)



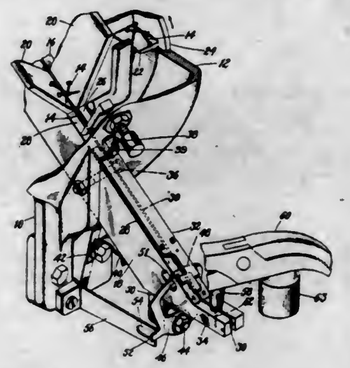
1. A stoker comprising a fuel hopper, an endless traveler to carry fuel therefrom into the furnace, fuel supporting members pivoted on said traveler, and means on said members to limit the pivotal movement thereof in each direction so that the members will each assume a fuel supporting position when moving inwardly and will depend in an ash dumping position when returning outwardly.

1,761,030. SAFETY SWITCH FOR CLOTHES WRINGERS. CARL CLEMENS ZWIEBEL, Dayton, Ohio. Filed June 7, 1927. Serial No. 197,173. 8 Claims. (Cl. 200—52.)



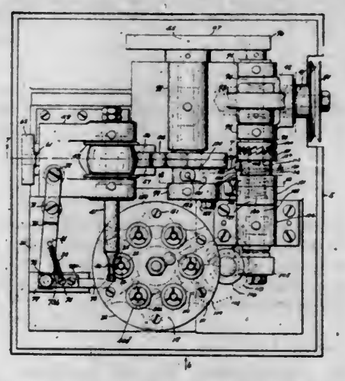
1. A safety switch for a clothes wringer having engaging rolls comprising in combination, a pair of normally engaging contacts either one of which is movable out of engagement with the other; and a guard rail on each side of the wringer, lying adjacent the wringer rolls, each connected with a respective contact, and operable toward the said rolls to disengage one contact from the other.

1,761,031. TACK-SUPPLYING APPARATUS. JAMES F. ALKONIS, Cambridge, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Jan. 14, 1928. Serial No. 246,846. 9 Claims. (Cl. 1—49.5.)



1. A device for supplying fastenings comprising a raceway, a separator arranged to control the fastenings in the raceway and to permit them to pass one by one, means for supporting each fastening which has been permitted to pass the separator in such a manner that it can be conveniently lifted from the rackway and transferred to the point where it is to be driven, and means for causing the removal of a tack to operate the separator, thereby to feed another tack to the tack supporting means.

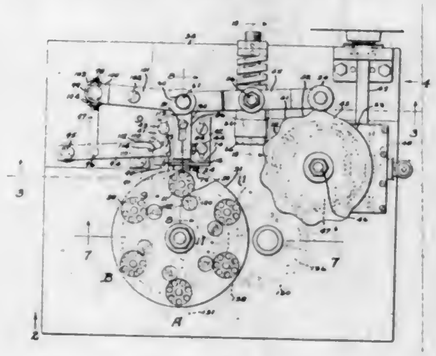
1,761,032. COMMUTATOR-SAWING MACHINE. RUSSELL W. BAKER, Anderson, Ind., assignor, by mesne assignments, to Delco-Remy Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Mar. 15, 1926. Serial No. 94,990. 15 Claims. (Cl. 90—15.)



1. A machine for notching a work piece such as a commutator comprising, in combination, a conveyor carrying a plurality of rotatable work holders each so constructed and arranged as to rotatably support a commutator, a notching saw, automatic means for moving the saw bodily relative to a commutator, automatic spring urged reciprocating means for intermittently rotating each work holder

to locate the bars of the commutator supported thereby successively adjacent the saw, and means for moving the conveyor after the notching operation of all the bars of a single commutator has been completed to locate another commutator work holder adjacent the notching saw.

1,761,033. MACHINE FOR REMOVING SURPLUS INSULATION FROM THE ARMATURES OF DYNAMO-ELECTRIC MACHINES. RUSSELL W. BAKER, Anderson, Ind., assignor to Delco-Remy Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Sept. 23, 1927. Serial No. 221,511. 10 Claims. (Cl. 164—34.)



1. A machine for removing surplus insulation from the armatures of dynamo electric machines, comprising in combination, means for holding an armature having a slotted core, the peripheries of the teeth and the core slots being lined with sheet insulation, reciprocating means cooperating with the adjacent teeth of the slot for shearing the sheet insulation at adjacent edges of the teeth, and automatic means for intermittently moving the armature core in order to bring its core teeth successively into position so that the shearing means may operate successively upon the sheet insulation between adjacent core teeth.

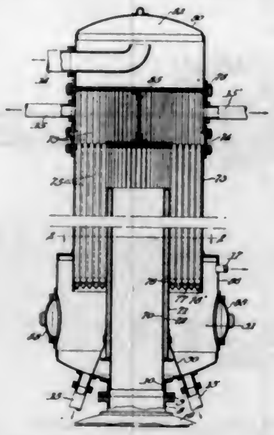
1,761,034. TUBE. HARRY S. GILLETT, Chicago, Ill.; Ida Louise Gillett, executrix of said Harry S. Gillett, deceased, assignor to Edwin J. Elting, Chicago, Ill. Filed Dec. 1, 1927. Serial No. 237,000. 3 Claims. (Cl. 137—75.)



3. A tube having its longitudinal edges secured by a lock joint forming a concealed seam within the periphery of the tube and extending spirally around the tube, said joint permitting longitudinal movement but preventing relative lateral movement of the tube edges.

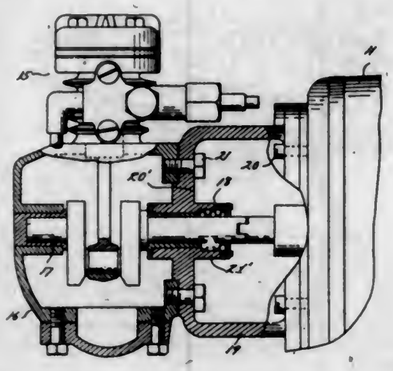
1,761,035. CONDENSER. FRANCIS X. GOVERS, Lawrenceville, Ill. Filed Nov. 5, 1928. Serial No. 317,299. 4 Claims. (Cl. 257—45.)

1. A condenser structure comprising an outer shell, a centrally arranged vapor tube extending upwardly thereinto, a tube-sheet extending across the shell above the upper end of the vapor tube, tubes open at their upper ends and closed at the bottom depending from said tube-sheet into the space between the vapor tube and the outer shell, a second tube sheet extending across the shell, but below its closed top, open ended tubes depending therefrom of less diameter than and extending into the tubes



depending from the first tube-sheet, means for introducing liquid into and withdrawing said liquid from said tubes, and means for withdrawing liquid from the bottom of the condenser.

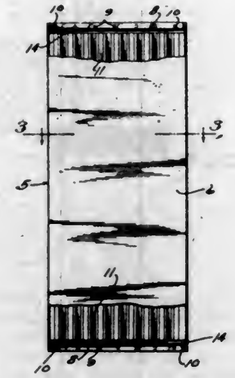
1,761,036. PUMP FOR REFRIGERATING APPARATUS. HAROLD A. GREENWALD, Detroit, Mich., assignor to Thomas C. Whitehead, Detroit, Mich. Filed Sept. 6, 1927. Serial No. 217,774. 5 Claims. (Cl. 230—58.)



1. In combination, a motor, a support therefor, a tubular housing projecting laterally from said motor and carried thereby, a compressor carried solely by said housing, an operative connection between said motor and compressor including a shaft extending through said housing, and a seal surrounding said shaft, a wall of said housing having a portion constituting a bearing for said shaft and having a tubular portion projecting from the bearing portion and constituting a casing for the seal.

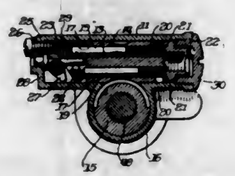
1,761,037. HOLLOW SHEET-METAL UNIT. ARTHUR R. GROSS, St. Paul, Minn., assignor, by mesne assignments, to Trussbilt Steel Doors, Inc., St. Paul, Minn., a Corporation of Delaware. Filed Sept. 15, 1927. Serial No. 219,643. 5 Claims. (Cl. 189—34.)

1. A hollow sheet metal unit comprising a pair of laterally spaced side plates, the longitudinal edge portions of which are shaped to form the edges of the unit, channel end pieces fitted into the ends of the unit with their flanges turned outward and spot welded to the sides of the unit, a metal reinforcement in the unit comprising a corrugated metal sheet welded at its apexes to the sides of the unit and affording a plurality of open-ended tubular



sections that extend longitudinally of the unit and terminate short of the end pieces to afford a chamber at each end of the unit, and liquid-filling and drain holes in the end pieces.

1,761,038. PUMP. WILLIAM S. HARLEY, Milwaukee, Wis., assignor to Harley-Davidson Motor Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Oct. 31, 1927. Serial No. 229,820. 4 Claims. (Cl. 103—38.)



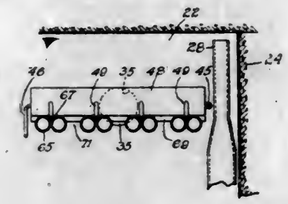
1. In combination with an engine, means driven synchronously with said engine, a plunger movable in response to operation of said synchronously driven means, a plate disposed angularly with reference to the line of movement of said plunger for determining the length of stroke of said plunger, a cam for changing the angularity of said plate, and means operating in synchronism with the power control of said engine for controlling said cam, said cam being provided with adjustment means for shifting the axis of said cam.

1,761,039. GOLF-PRACTICE APPARATUS. REGINALD HAZELTINE, Chicopee Falls, Mass. Filed Feb. 6, 1929. Serial No. 337,964. 13 Claims. (Cl. 273—35.)



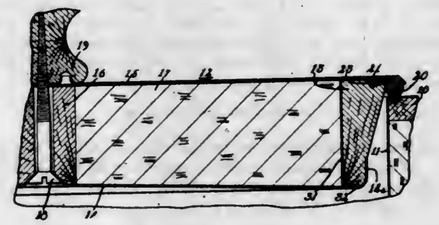
1. A golf putting apparatus comprising a plurality of sections hinged together, certain of the hinge lines being arranged at an angle to other hinge lines, a ball receiving aperture in one section, and means for holding the several sections in various adjusted positions.

1,761,040. REFRIGERATING APPARATUS. HARRY B. HULL, Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation, a Corporation of Delaware. Filed Apr. 30, 1924. Serial No. 710,130. 12 Claims. (Cl. 62—120.)



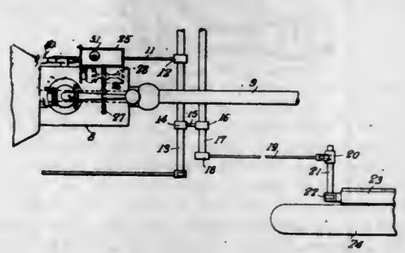
1. In a refrigerating apparatus, a container adapted to receive refrigerant, said container having channels for circulating liquid cooling medium in contact with its outer surface and passages through the container adapted to permit circulation of air in contact with its outer surface.

1,761,041. REFRIGERATING APPARATUS. JESSE G. KING, Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation, a Corporation of Delaware. Filed Dec. 31, 1927. Serial No. 243,987. 9 Claims. (Cl. 220—24.)



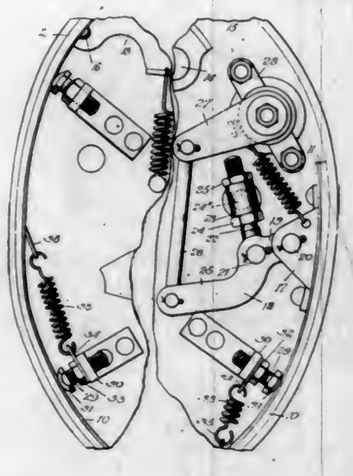
1. A cover for an opening in an ice cream cabinet comprising in combination a top plate, a bottom plate, a spacer separating the plates near their edges, means holding the plates together, a gasket projecting beyond the spacer for engaging the cabinet and means between the top plate and the spacer and projecting beyond the spacer to receive force transmitted to the cover thru the gasket.

1,761,042. AUTOMOBILE LOCK. JULIUS J. LANGER, Astoria, N. Y. Filed Apr. 11, 1928. Serial No. 269,265. 10 Claims. (Cl. 70—90.)



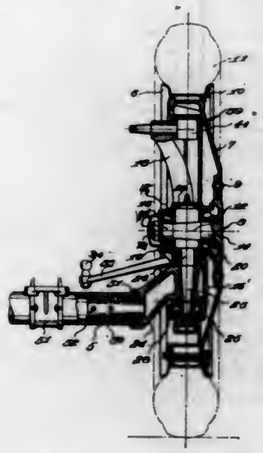
2. The combination with a motor vehicle having a brake rod, a screw shaft operable by a moving part of the vehicle, a nut engageable with and disengageable from said screw shaft, connections from said nut to said brake rod and lock mechanism for governing the relation of the screw shaft and nut.

1,761,043. VEHICLE BRAKE. ALPHONSE JOSEPH LAVOIE, Montreal, Quebec, Canada. Filed July 7, 1924. Serial No. 724,552. 5 Claims. (Cl. 188—78.)



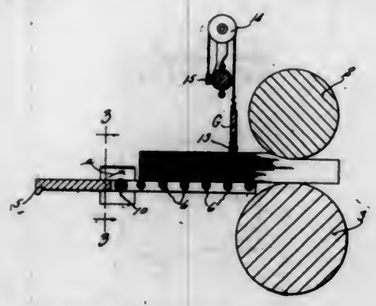
1. In vehicle brakes, a shoe operating lever, a band contact member, an anchorage arm rigidly secured to one end of said band and extending inwardly to a pivot fastening, link bars connecting the aforesaid lever, and the other end of said band, the latter having a pivot bearing rigidly secured thereto for said connection.

1,761,044. STEERING WHEEL AND BRAKE. ARTHUR I. MARCUM, Oakland, Calif., assignor to Emory Winship, Macon, Ga. Filed Aug. 1, 1927. Serial No. 209,767. 19 Claims. (Cl. 188—194.)



1. In a road vehicle, the combination of a stationary axle, a spindle member mounted on said axle so as to rotate freely around a substantially horiontal axis and to swivel about an axis that is slightly inclined with respect to a vertical line, a wheel secured to said spindle member with the plane longitudinally bisecting the wheel tread including said inclined axis, and mechanism to control the movement of said wheel about said inclined axis.

1,761,045. SAFETY GUARD APPARATUS FOR PLATERS. ROBERT M. MUTCH, South Hadley Falls, Mass. Filed Nov. 19, 1927. Serial No. 234,499. 4 Claims. (Cl. 74—105.)



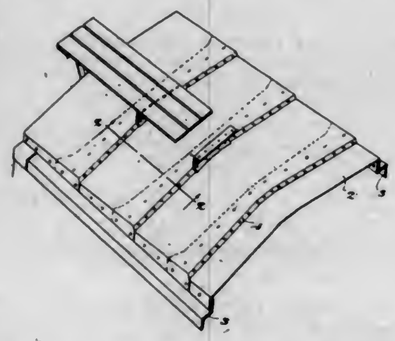
2. Safety guard apparatus for a plater having coacting pressure rolls comprising in combination, a guard slidable between a non-guarding position and a guarding position in front of the bite of said rolls, a roller for supporting material to be moved back and forth between said rolls, and means operable thereby for moving said guard between the positions specified accordingly as said roller is rotated in one direction or the other.

1,761,046. TRANSPOSITION DEVICE. CHRISTIAN E. PRAUTZ, Riverhead, N. Y., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Mar. 21, 1927. Serial No. 177,205. 5 Claims. (Cl. 173—28.)



4. The combination with a transmission line having spaced and parallel wires of a transposition device for transposing spaced wires of the transmission line comprising a single body of insulation having transverse supporting surfaces formed therein for two wires, the extremities of the supporting surfaces for each wire being spaced the same as the spacing of the transmission line.

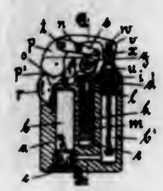
1,761,047. CAR ROOF. WILLIAM G. POWELL, Altoona, Pa. Filed Jan. 6, 1928. Serial No. 244,885. 2 Claims. (Cl. 108—5.4.)



1. A car roof comprising a plurality of roof sheets spanning the distance between the opposite side plates

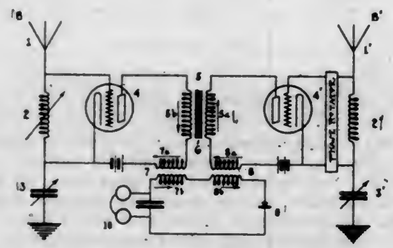
of the car and secured thereto, each of said sheets comprising an inclined body portion having a downwardly inclined oblique portion at one side and an upwardly inclined oblique portion at its opposite side underlapping and secured to the oblique portion of the adjacent roof sheet.

1,761,048. PYROPHORIC POCKET IGNITER. KARL FRIEDRICH PROJAHN, Aschaffenburg, Germany, assignor of one-half to Isidor Gillis, Frankfort-on-the-Main, Germany. Filed Aug. 16, 1927, Serial No. 213,359, and in Germany July 23, 1927. 7 Claims. (Cl. 67—7.1.)



7. A pyrophoric pocket igniter having a container for inflammable liquid, a wick holder in the container, a partition provided with a chamber closed at its inner end extending into said container, a supporting head, a friction member and a spring acting directly thereon carried by the supporting head, a flint, a tubular member disposed in the chamber in the partition, means disposed in said tubular member for pressing the flint into contact with the friction member, a pivotally mounted closing and tension lever, a link associated with the friction member and releasably connected to the closing and tension lever, a releasable stop device for retaining normally the said lever in the closed position and an extinguishing cap disposed at the free end of said lever.

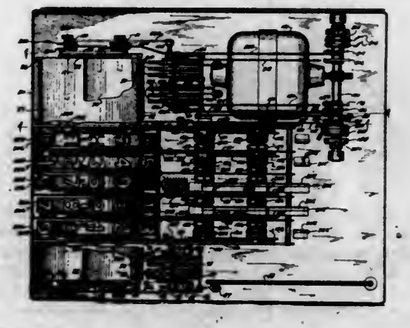
1,761,049. INTERFERENCE REDUCING MEANS FOR RADIO RECEIVING APPARATUS. RICHARD HOWLAND RANGER, New York, N. Y., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Dec. 18, 1922. Serial No. 607,477. 10 Claims. (Cl. 250—20.)



1. In radio signalling apparatus the combination of a plurality of aerials, means for indicating the resultant of signals received upon each aerial and means offering a low impedance to the flow of current controlling said indicating means only when said signals have a predetermined phase relation.

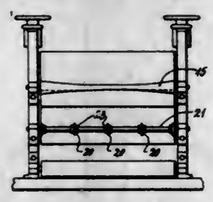
1,761,050. ELECTRIC COACH-FARE RECORDER. JOSEPH P. REDMOND and FRANK F. HAACK, Milwaukee, Wis. Filed July 23, 1927. Serial No. 207,940. 6 Claims. (Cl. 234—9.5.)

2. A coach fare recorder, comprising a revolubly mounted type wheel, a plurality of operating members engaging said type wheel for revolving it, the amount of movement imparted to the type wheel by each of said



members being different, and selective means for setting into operation a predetermined operating member to bring into printing position a desired portion of said type wheel.

1,761,051. DECKLING MACHINE. WILFRID J. RIVARD, Feeding Hills, Mass. Filed Jan. 30, 1929. Serial No. 336,235. 9 Claims. (Cl. 92—68.)



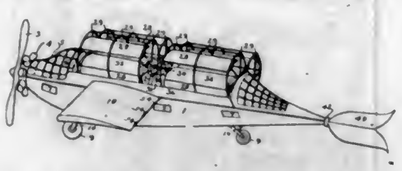
1. A method of deckling paper which comprises running the partially dry paper over rotatable rolls each presenting a narrow edge serving to tear through the paper.

1,761,052. TRIP DEVICE. ARTHUR E. RUTLEDGE and EDWARD T. CLEARY, Rockford, Ill. Filed Jan. 19, 1927. Serial No. 161,985. 7 Claims. (Cl. 214—146.)



1. A trip device for a power shovel comprising in combination with a frame and a shovel carrying boom swingably mounted with reference to the frame, the said shovel having a releasable latch with a dump cable connected thereto and extending to the frame, of a support mounted on said frame, a pulley bracket swiveled on said support and having the aforesaid cable passing over its pulley and through a guide opening adjacent the pulley, a shoe operated in said guideway for gripping the cable, a rocker arm pivotally mounted on the bracket and connected with the shoe to operate the latter, and means for operating said rocker arm comprising a plunger slidably mounted on said support, said plunger having a yoke providing a connection with one end of said rocker arm, the yoke and the end of the rocker arm being disposed approximately on the axis about which the pulley bracket is arranged to swivel, and means for reciprocating said plunger.

1,761,053. AIRPLANE. INGEMAR K. RYSTEDT, Dayton, Ohio. Filed June 11, 1928. Serial No. 284,585. 4 Claims. (Cl. 244—13.)



1. An airplane including a forward driving propeller, a stream line fuselage, a semicylindrical housing, open upward intermediate the ends of the fuselage substantially within the plane thereof, and a rotatable plane operable in the housing, and opposite laterally extended stationary planes intermediate the ends of the rotatable plane.

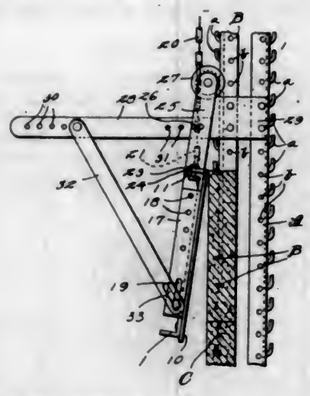
1,761,054. RENEWABLE FUSE. WALTER H. SCHRUPP, Granite Falls, Minn. Filed June 15, 1927. Serial No. 199,047. 3 Claims. (Cl. 200—131.)



1. In a renewable fuse, a tubular shell, a fuse wire, and a terminal connector for the fuse wire comprising a tubular metallic body providing a longitudinal passageway and having an external annular flange formed intermediate its ends providing a plug portion for slidably fitting into the bore of the tubular shell and an externally threaded extension slotted thruout its length, said passageway thru the tubular metallic body having a bell shaped mouth at its inner end flaring into the circumferential surface of the plug portion, and retaining means threaded upon the extension for clamping the terminal portion of the fuse wire in engagement with the outer face of the annular flange.

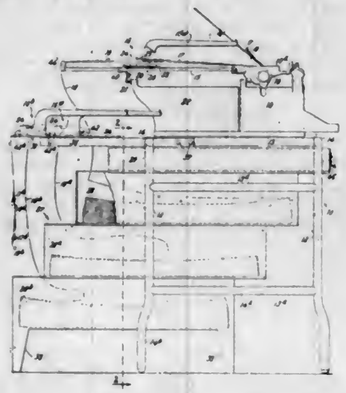
1,761,055. ADJUSTABLE METALLIC FORM FOR CONCRETE WALLS. EDWARD B. SELWAY, Leetsdale, Pa. Filed Jan. 14, 1928. Serial No. 246,858. 13 Claims. (Cl. 25—131.)

3. An adjustable sectional wall form comprising a form proper consisting of a sheet of metal having upper and lower marginal angle irons and lateral angle irons, the lateral angle irons being perforated for the passage of bolts whereby a plurality of forms may be placed side by side and connected to each other, the upper angle iron being apertured, hoisting means connected to the upper angle iron, arms formed for detachable engagement with studding and to project out therefrom, braces adjustably connecting the lateral angle irons at the end of the form with said arms, members mounted upon the upper flanges of the angle irons and extending above the same and carrying rollers, said members being detachably bolted to said arms,



the bolt of said members constituting a pivot permitting the forms to be swung outward upon the arms and the rollers brought in contact with studding.

1,761,056. TYPEWRITING MACHINE. JESSE A. B. SMITH, Stamford, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Filed Jan. 21, 1924. Serial No. 687,484. 4 Claims. (Cl. 197—126.)

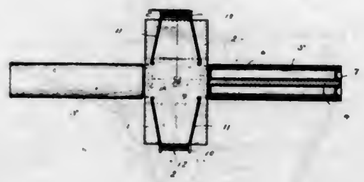


1. The combination with a continuous billing typewriting machine having a carbon-holder for carbons interleaved with the plies of a work web and a carrier on which said carbon-holder may be detachably mounted, a dowel on said carbon-holder for interlocking with a hole in the carrier, said carrier having corner and back stops to automatically align the hole therein with the dowel of the carbon-holder, of a rack having a hole therein and corner and back stops to align the hole with the dowel of the carbon-holder when mounting the latter thereon detached from the carrier.

1,761,057. COMPOSITION OF MATTER. JAMES S. THOMPSON, New York, N. Y., assignor to American Brake Materials Corporation, New York, N. Y., a Corporation of New York. Original application filed Aug. 26, 1927, Serial No. 215,767. Divided and this application filed Feb. 18, 1928. Serial No. 255,497. 7 Claims. (Cl. 106—7.5.)

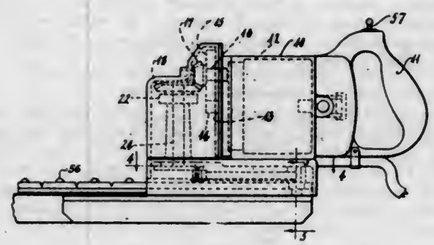
2. A friction composition for brakes and other purposes consisting of a mixture of coal, asbestos, and a binder.

1,761,058. BATHING-BEACH FLOAT. WILLIAM E. TRENHOLM, Eveleth, Minn. Filed Mar. 19, 1928. Serial No. 262,720. 4 Claims. (Cl. 272—1.)



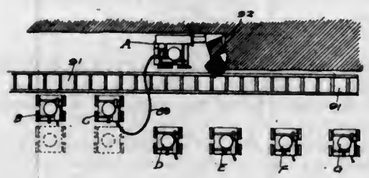
2. A float of the class described comprising a buoyant body portion, having extending from either side thereof an independent, buoyant, rotatable cylinder for the purpose described.

1,761,059. POLISHING MACHINE. CHARLES E. VAN NORMAN and BYRON F. STOWELL, Springfield, Mass., assignors to Van Norman Machine Tool Co., Springfield, Mass., a Corporation of Massachusetts. Filed Dec. 14, 1928. Serial No. 326,010. 9 Claims. (Cl. 51—170.)



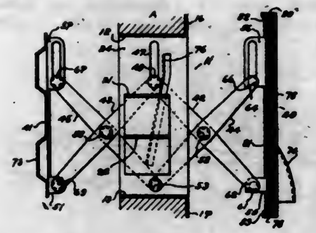
7. A polishing machine comprising a guideway flexible through at least a portion of its length, a flexible slide bearing a rubbing surface and slidable in the guideway, and mechanism for reciprocating the slide.

1,761,060. MINING APPARATUS. FREDERICK E. VAN SLYKE, Columbus, Ohio, assignor to The Jeffrey Manufacturing Company, Columbus, Ohio, a Corporation of Ohio. Filed Oct. 26, 1921. Serial No. 510,459. 21 Claims. (Cl. 262—8.)



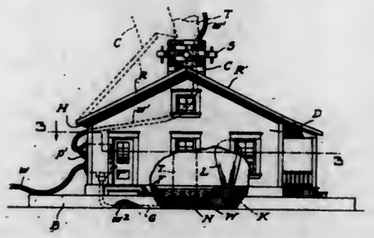
15. The combination of a plurality of roof supports adapted to move over a mine floor, a source of motive force on one of said supports, and means for selectively connecting said source to any of said supports for bodily moving the latter.

1,761,061. VENTILATOR. HARRY L. VAN ZILE, New York, N. Y. Filed June 20, 1928. Serial No. 286,943. 14 Claims. (Cl. 98—87.)



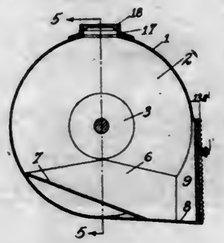
1. A ventilator for doors or the like comprising a frame, a plurality of light-obstructing members interiorly of said frame, a closure structure including a frame-cover and disposed across the face of the frame for movement relatively to but wholly beyond the same, and means for reciprocably connecting said structure to the said frame, said means consisting of sets of lever elements connected directly to said closure and the frame, being projected beyond the latter in open position of the closure.

1,761,062. MINIATURE DOMICILE TREE HOLDER. PETER J. WERNER and JOHN SOBCZAK, Milwaukee, Wis. Filed Feb. 6, 1929. Serial No. 338,008. 1 Claim. (Cl. 248—38.)



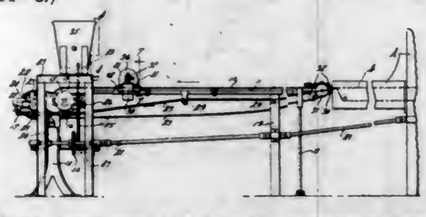
An article of manufacture having, an inclosure accessibly covered, a hinged cover portion integrally combined with a rectangular tube, a fixed centering rest within said inclosure, and means residing in said tube for limiting the hinged portion to complete the inclosure cover when locating the rectangular tube spacedly above and axially aligned with the aforesaid centering rest.

1,761,063. CONTAINER FOR TRANSPORTING AND MIXING CONCRETE. ARTHUR C. AVRIL, Cincinnati, Ohio. Filed Dec. 15, 1928. Serial No. 326,303. 5 Claims. (Cl. 83—73.)



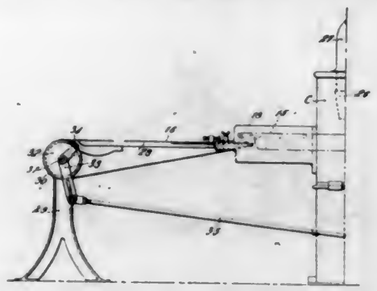
1. In combination with a vehicle for transporting mixed materials, a rotatable non-tilting drum with an outlet port, said port having a bottom wall extending tangentially to the walls of said drum, and baffling means within said drum disposed to direct the flow of material toward said port.

1,761,064. DELIVERY APPARATUS FOR CONFECTIONERY MACHINES. ALONZO LINTON BAUSMAN, Springfield, Mass., assignor to National Equipment Company, Springfield, Mass., a Corporation of Massachusetts. Filed Oct. 7, 1927. Serial No. 224,668. 9 Claims. (Cl. 91—3.)



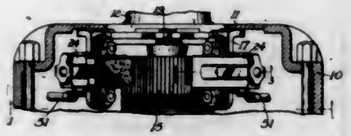
2. The combination with a confectionery machine adapted to deliver confections having sticky surfaces, of a member movable in such relation to said machine as to receive confections therefrom, means for applying a greasy substance to the confection receiving surface of said member, and means for distributing flour or the like over the greased surface of said member.

1,761,065. CONFECTION-MAKING MACHINE. ALONZO LINTON BAUSMAN, Springfield, Mass. Filed June 25, 1928. Serial No. 288,275. 11 Claims. (Cl. 107—1.)



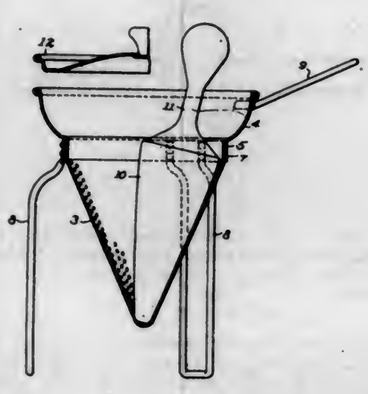
1. A machine for making confection clusters, comprising, an intermittently movable member on which the clusters are formed, means for individually coating the pieces which are to be formed into clusters, and means for successively delivering to and dropping upon said member during each interval of rest thereof a predetermined number of said coated pieces, whereby the several pieces pile up one upon another and adhere to form a cluster.

1,761,066. BRUSH HOLDER FOR DYNAMOS. THEODORE S. BINDSCHEDLER, Detroit, and PETER J. KOSTER, Pleasant Ridge, Mich., assignors to Burroughs Adding Machine Company, a Corporation of Michigan. Filed Oct. 4, 1924. Serial No. 741,758. 3 Claims. (Cl. 171—324.)



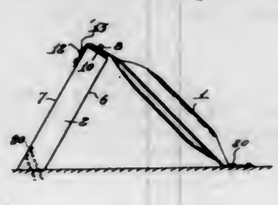
1. In combination, a dynamo having a casing provided with a flange, a plate extending throughout a portion of the periphery of said flange, said plate lying in a plane normal to the axis of the dynamo means for adjusting said plate on said flange about said axis, arms formed integrally with and extending transversely to said plate, and brush holders mounted on and insulated from said arms.

1,761,067. CULINARY UTENSIL. INGVARD B. BJORNSON, New Kensington, Pa., assignor to The Aluminum Company of America, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Aug. 10, 1928. Serial No. 298,802. 2 Claims. (Cl. 146—172.)



1. Utensil structure comprising a vessel having its upper portion flared relative to its lower portion, and a crusher having a crushing portion, a handle portion, and an intermediate portion of reduced diameter, the said portion of reduced diameter normally being disposed in the plane of said flared portion of the vessel.

1,761,068. WHEEL BLOCK. WILLIAM W. BLAKELY, Detroit, Mich. Filed May 21, 1928. Serial No. 279,523. 6 Claims. (Cl. 188—32.)



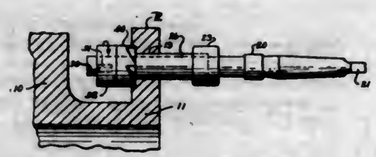
1. In a wheel block, the combination with an inclined wheel engaging member provided at its upper end with a brace engaging portion, and an inclined brace having the upper end thereof constituting a rest for the portion aforesaid of said wheel engaging member, of a separable slot and pin connection between said wheel engaging member and brace.

1,761,069. PROCESS OF MANUFACTURE OF PULP AND PAPER. LEVIS MILLER BOOTH, Plainfield, N. J. Filed Oct. 22, 1927. Serial No. 228,104. 4 Claims. (Cl. 92—21.)

1. The process of treating partially washed or unwashed pulp which has been digested by an alkaline process which consists of adding to such pulp a coagulating metallic salt and chlorine.

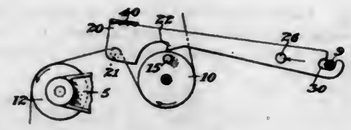
1,761,070. BACK SPOT FACER. ANKER L. CHRISTENSEN, New York, N. Y. Filed June 16, 1927. Serial No. 199,153. 8 Claims. (Cl. 77—58.)

1. A back spot facing tool device comprising a bar having a plurality of keyways, means positioned on said bar for accurately centering said bar with respect to work to be cut, a spot facing cutter, and means for securing said cutter on the end of said bar comprising a plurality of keys



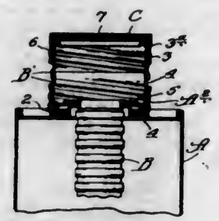
for engaging said keyways to secure a balanced drive, and a ring positioned over said cutter and said keys for maintaining said keys in position and for distributing torsion strains about said device.

1,761,071. TOWEL CABINET. HERBERT W. CROWSON, New York, N. Y., assignor to Pulilean Manufacturing Corporation, Bridgeport, Conn., a Corporation of Delaware. Filed June 24, 1927. Serial No. 201,192. 6 Claims. (Cl. 312—38.)



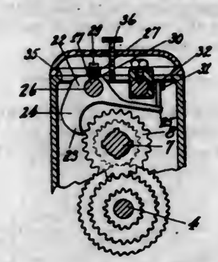
1. In a towel cabinet, a towel measuring device comprising a stop roller having an abutment, said roller engaging with the towel and being rotated thereby during its withdrawal, a pivoted stop device engaged and operated by the towel during its withdrawal to be moved thereby into position for stopping engagement with the roller abutment, said stop device being slidably mounted for movement transversely of its axis, and means operative to disengage the stop device from the roller abutment following its release by the towel and thereafter impart a further movement to the same to bring it out of registry with said abutment.

1,761,072. CONTAINER FOR OILS, ETC. HENRY A. DOHRMANN, Chicago, Ill., assignor to Midland Specialties Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 16, 1927. Serial No. 184,321. 1 Claim. (Cl. 221—24.)



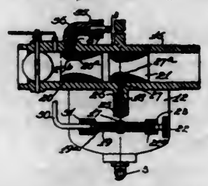
A container comprising a can having an end wall provided with a discharge opening, a threaded nipple secured to said end wall at the margin of said opening and equipped with an internal gasket, a reversible threaded nipple adapted to engage said first-mentioned nipple, and project above the same, a conduit secured to said reversible nipple, said conduit being adapted to be housed within said can during transportation and said reversible nipple being adapted to make sealing contact with said gasket in this condition of the device, and a cap adapted to screw onto the outer end of said reversible nipple when the conduit is housed within said can, said cap having therein a gasket adapted to make sealing contact with the free end of said reversible nipple.

1,761,073. GEAR LOCK FOR AUTOMOBILES. JAMES N. DUGAN, Terrace Park, Ohio. Filed July 16, 1928. Serial No. 293,194. 17 Claims. (Cl. 192—4.)



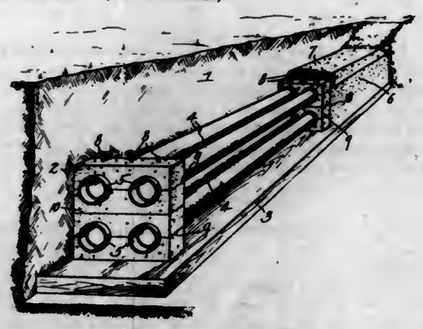
4. In a transmission for motor vehicles, a pawl for engagement with a shifting gear upon the driven shaft, means for shifting said gear, and means operated by said first mentioned means for shifting said pawl with said gear.

1,761,074. CARBURETOR. WILLIAM A. EDWARDS, Chicago, Ill. Filed Feb. 12, 1925. Serial No. 8,704. 7 Claims. (Cl. 261—41.)



1. A fuel mixture forming and feeding apparatus having in combination with a fuel mixture conduit, an initial air inlet, a governed level fuel chamber and fuel flow connections therefrom to said conduit, said conduit having varying cross sectional areas causing varying flow capacity at different portions of its length subsequent to said initial air inlet and antecedent to any additional air inlet, said conduit having openings communicating with said fuel flow connections for fuel discharge in the conduit arranged successively at the localities of said varying cross section and flow capacity, said fuel openings being fixedly positioned at the respective cross sectional areas, the discharge at any cross section of larger area being at higher level than the discharge at a cross section of lesser area, for causing the decline of the ratio of fuel to air at one of said openings to overlap in time of occurrence the rise of ratio at another of said openings.

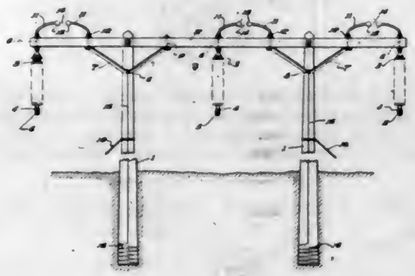
1,761,075. UNDERGROUND CONDUIT. GUION M. GEST, Noroton, Conn. Filed Aug. 11, 1925. Serial No. 49,551 10 Claims. (Cl. 247—34.)



1. In an underground conduit construction, the combination with a plurality of longitudinally-spaced transversely

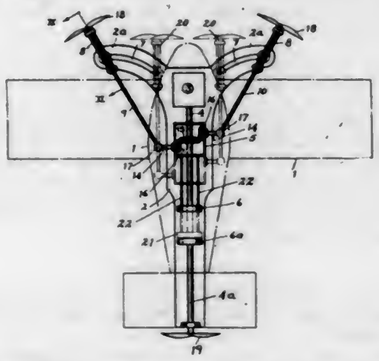
arranged duct-positioning supports, of ducts mounted in and positioned by said duct-positioning supports, and a continuous slab of self-hardening material hardened in position on the upper surfaces of said ducts and extending across and having the upper edges of said duct-positioning supports embedded therein.

1,761,076. WOOD-POLE-PROTECTIVE MEANS. GEORGE WELLINGTON HAMILTON, Evanston, Ill. Filed June 17, 1929. Serial No. 371,680. 5 Claims. (Cl. 175—30.)



1. In a supporting structure for transmission lines including a wooden cross arm, a bolt passing through said cross arm for supporting a string of insulators therefrom, and an arcing horn adapted to seat on said bolt and a cooperating arcing horn on said structure, said last named horn being connected to ground.

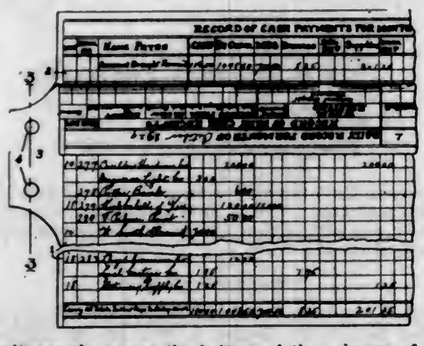
1,761,077. MULTIPLE-PROPELLER DRIVE FOR AIRPLANES. ALBERT HOMANN, Pittsburgh, Pa. Filed Nov. 4, 1929. Serial No. 404,646. 5 Claims. (Cl. 244—25.)



2. In an airplane including two propellers arranged symmetrically thereon, the combination of a motor, a shaft connected to each propeller, each shaft being connected for rotation to said motor, and a bearing for supporting each shaft on the airplane, each of which bearings are movable for permitting the propellers to be shifted along the axis of their shafts as well as angularly to each other.

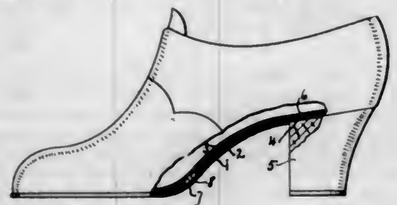
1,761,078. ACCOUNT BOOK. GUSTAV KALADA, Pittsburgh, Pa. Filed Oct. 26, 1929. Serial No. 402,565. 3 Claims. (Cl. 281—38.)

1. In an account book, the combination with the book covers of a plurality of pages bound between the covers, the book covers extending the full height of the pages, the pages being ruled into columns for the entry of items of various characters and the pages being cut away at their upper portion of the bound margin edges whereby portions of the pages remain unbound to permit, when the book is open, a portion of one page to be folded down on itself to



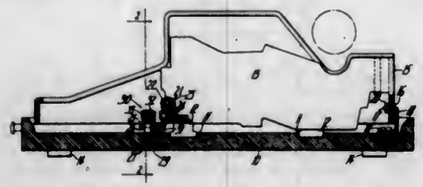
simultaneously expose the bottom of the columns of one page and the tops of the corresponding columns on the other page.

1,761,079. ARCH SUPPORT. CHARLES LASKY, St. Louis, Mo., assignor of one-half to Max Klapper, St. Louis, Mo. Filed Aug. 6, 1928. Serial No. 297,775. 2 Claims. (Cl. 36—76.)



1. In a shoe, the combination with an outer sole and an inner sole, of a metallic strip interposed between said soles and having its forward end and its body portion of uniform thickness throughout their entire areas and having the heel portion reduced in thickness beyond the heel breast line to increase the flexibility thereof, whereby the heel portion of the shoe is allowed at all times to remain in contact with the heel of the wearer's foot, said strip being provided near its forward end with a longitudinally disposed elongated opening, and means passing through said elongated opening for securing said end of the body portion to said soles whereby said body portion has a longitudinal movement relatively to said securing means.

1,761,080. TYPEWRITING MACHINE. ARTHUR F. LEAR, Brooklyn, N. Y., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Filed Dec. 9, 1926. Serial No. 153,507. 4 Claims. (Cl. 248—16.5.)



1. In a portable typewriting machine having a frame with a front wall and a rear wall formed with a central opening and a casing, the combination with means mounted upon the casing and arranged to enter the opening in the frame to center and secure the rear of the frame to the casing, of a pair of brackets secured to the front wall of the

frame, a pair of shouldered screws to pass through the brackets, a pair of springs compressible more or less by the screws against said brackets, and a pair of threaded bushings or nuts secured to the casing to engage the screws, whereby the front wall of the frame will be resiliently clamped to the casing through the compression of the springs, the shoulders of the screws engaging the faces of the nuts as gages to limit the compression of the springs and also by friction to prevent accidental loosening of the screws.

1,761,081. PUMP FOR ELEVATING LIQUID. WILLIAM F. LESCHEN, St. Louis, Mo. Filed Feb. 24, 1925. Serial No. 11,144. 2 Claims. (Cl. 103—46.)



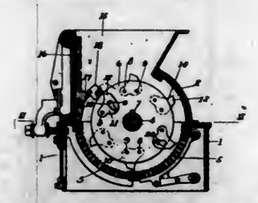
1. A pump for raising fluids from great depths, comprising an outer casing adapted to extend from the level of the liquid upwardly to a point substantially adjacent to the outlet of the well, an inner casing arranged in concentric relation with respect to the outer casing having its lower end terminating above the extremity of the outer casing, and a plurality of independently arranged plungers located within the inner casing, said plungers being so constructed and arranged that movement imparted to one of the plungers to draw upwardly liquid located above the plunger will result in upward movement being imparted to the lower plunger by means of liquid in the outer casing working on the under face of the lower plunger.

1,761,082. SPARK-GAP MECHANISM. JOHN G. H. LIEBEL and EDWIN S. FLARSHEIM, Cincinnati, Ohio, assignors to The Liebel-Flarsheim Company, Cincinnati, Ohio, a Corporation of Ohio. Filed July 13, 1928. Serial No. 292,509. 4 Claims. (Cl. 250—38.)



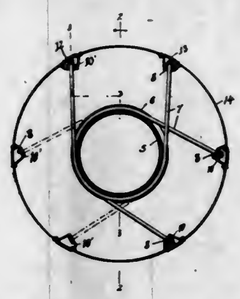
1. A spark gap mechanism particularly adapted for use in high frequency electro-therapeutic instruments and the like, said mechanism, comprising, a stationary member, a member movable in relation thereto, a plurality of spark electrodes supported by the stationary member, a plurality of opposing spark electrodes supported by the movable member constituting adjustable spark gaps in combination with the spark electrodes on the stationary member, said gaps defined by substantially the same planes and shields disposed between said gaps to inhibit the radiation of ultra-violet light from one to another.

1,761,083. PULVERIZING APPARATUS. WILLIAM K. LIGGETT, Columbus, Ohio, assignor to The Jeffrey Manufacturing Company, Columbus, Ohio, a Corporation of Ohio. Filed May 11, 1925, Serial No. 29,522. Renewed Apr. 25, 1929. 35 Claims. (Cl. 83—11.)



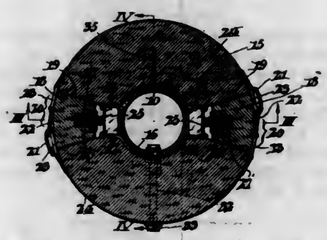
1. In a pulverizing apparatus, the combination with a rotor, a pivot carried by said rotor spaced from the axis thereof, a material engaging element mounted upon said pivot for movement thereon to and from operative position relative to said rotor, means upon said rotor to limit rotary movement of said material engaging element about said pivot, and means releasable by a predetermined pressure applied to said material engaging element adapted to rigidly hold said element in operative position as and for the purpose set forth.

1,761,084. INNER-CONDUIT SUSPENSION. ADOLPH W. LISSAUER, Louisville, Ky., assignor to Louisville Drying Machinery Co. Inc., Jefferson County, Ky. Filed Dec. 22, 1928. Serial No. 327,851. 8 Claims. (Cl. 34—6.)



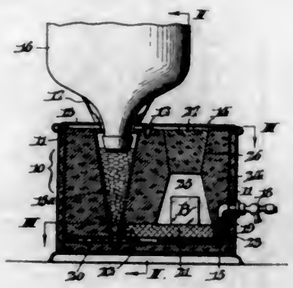
1. A suspension for an inner shell from an outer shell of a dryer, comprising a series of U hangers, each straddling the inner shell and yielding means securing the ends of the hangers to the outer shell, the plurality of said hangers completely embracing the inner shell.

1,761,085. COOLING OF LIQUIDS. THOMAS S. MERRYLEES, Yeadon, Pa. Filed July 16, 1928. Serial No. 293,182. 26 Claims. (Cl. 62—91.5.)



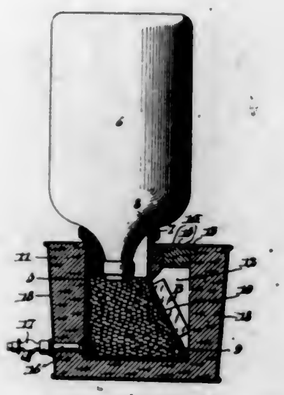
1. In a liquid cooler adapted for use of solidified carbon dioxide, a receptacle for the liquid, and an insulating jacket snugly embracing the receptacle except for provision of a hollow to accommodate a charge of the solid refrigerant in contact with a portion of the wall of said receptacle.

1,761,086. LIQUID COOLER. THOMAS S. MERRYLEES, Yeadon, Pa. Filed Sept. 14, 1928. Serial No. 305,949. 11 Claims. (Cl. 62—91.5.)



1. In a liquid cooler adapted for use of solid carbon dioxide or the like as a refrigerant, a refrigerating coil traversed by the liquid to be cooled, and a thermal transfer element in contact with the coil capable of imparting the cooling effect of the solid carbon dioxide moderated to the extent of precluding freezing of the liquid within the coil.

1,761,087. WATER COOLER. THOMAS S. MERRYLEES, Yeadon, Pa. Filed Jan. 7, 1929. Serial No. 330,863. 3 Claims. (Cl. 62—91.5.)



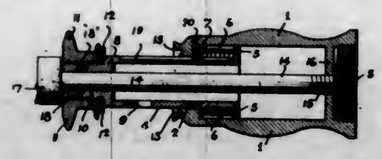
1. In a liquid cooler of the character described, a cooling receptacle having a sloping wall, and a jacket of thermo-insulation snugly surrounding said receptacle while affording a cavity to accommodate a unit block of solid carbon dioxide, said unit block resting under the influence of gravity against the sloping wall of the receptacle and being maintained in effective surface contact therewith by the aid of a coactive wall of the cavity throughout the entire period of sublimation.

1,761,088. DISPLAY STAND. ROBERT D. PEYDE, Orange, Conn. Filed Apr. 22, 1929. Serial No. 357,205. 8 Claims. (Cl. 211—68.)

1. In a device of the character described; a stationary member; a movable member associated therewith; and means for preventing accidental disengagement of the latter from the former, comprising a sliding bolt in the stationary member, which in one of its positions is projected into the path of a part connected with the movable member and thereby prevents relative vertical movement thereof in either direction.

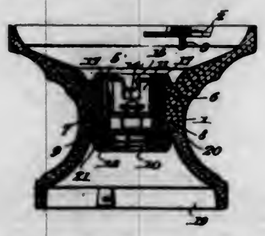


1,761,089. FAUCET. WILLIAM A. SCHATZ, Long Island, N. Y. Filed Aug. 4, 1926. Serial No. 126,992. 11 Claims. (Cl. 225—23.)



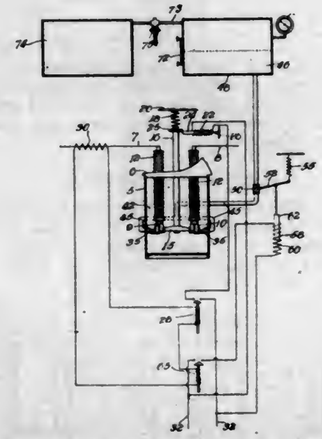
3. A faucet including an outlet member having a bore and a tube slidable within said bore, said tube having a closed end extending beyond said member and being formed with an opening through its side wall, the opening of said tube being sealed by said outlet member, and means for preventing rotation of said tube with respect to said outlet member, and means associated with said tube for sealing the outermost end of said outlet member when said tube is in retracted position.

1,761,090. CANOPY FOR LIGHTING FIXTURES. ROY W. SCHWEIKER, Lansdale, Pa. Filed Feb. 21, 1929. Serial No. 341,725. 2 Claims. (Cl. 240—78.)



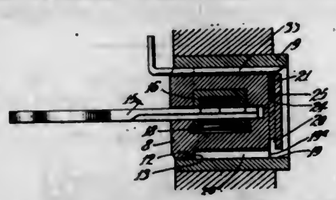
1. A canopy for a lighting fixture, embodying a body of insulating material having an enlarged hollow back or rear part, an enlarged front or outer part, a constricted central part located between the aforesaid rear and outer part, said central part being provided with an internal chamber or cavity having a recess in one of its walls and disposed outwardly in relation to the enlarged hollow back part aforesaid, and having a ring-shaped bottom, in combination with a lamp socket having an insulating base received within, and housed by, said chamber or cavity and provided with a projecting part received in said recess, and a screw threaded metallic shell carried by said body, said shell projecting through the ring-shaped bottom into the enlarged outer part aforesaid.

1,761,091. CURRENT-INTERRUPTING AND ARC-EXTINGUISHING MEANS. EDMUND O. SCHWEITZER, Chicago, Ill. Filed Feb. 26, 1923. Serial No. 621,357. 17 Claims. (Cl. 175—294.)



1. In combination, a tank, a body of oil in the tank, circuit interrupting means submerged in the oil, a body of non-inflammable arc-extinguishing liquid of different characteristics and greater arc-extinguishing ability than the oil, said liquid being contained outside of the tank, and means for injecting said non-inflammable arc-extinguishing liquid into the tank.

1,761,092. LOCK. WILLIAM C. SHINN, Chicago, Ill., assignor to Chicago Lock Company, Chicago, Ill., a Corporation of Illinois. Filed May 6, 1929. Serial No. 360,891. 9 Claims. (Cl. 70—46.)



1. In a lock the combination of a casing adapted to be secured in an element, a plug rotatable in and insertable endwise into the casing, key-operable tumblers for locking the plug in the casing, said casing and plug having grooves adjacent their inner ends, a holding device in the groove in the plug and adapted to extend into the groove in the casing to secure the plug against withdrawal from the casing, and means to permit a releasing device to pass through the front end of the lock to release the holding device.

1,761,093. RESILIENT KNEE PAD. JOE E. SHOTWELL, Stockton, Calif. Filed Sept. 21, 1929. Serial No. 394,261. 2 Claims. (Cl. 2—24.)

1. A resilient knee-pad comprising a shoe, said shoe including a flat base to rest on the ground, a cushion support seating in the shoe, said support having a base and side and front flanges upstanding therefrom, pivot connection means between the shoe and support adjacent the rear end of the latter and maintaining the support-base spaced from the shoe-base, a cushion to engage a knee resting on the support-base between the flanges thereof, vertical compression springs housed in the support at its front corners, pins fixed in and projecting upwardly from the shoe and slidable through the support-base axially of the springs, and shoulders on the base above said base and on which the lower ends of the springs bear.

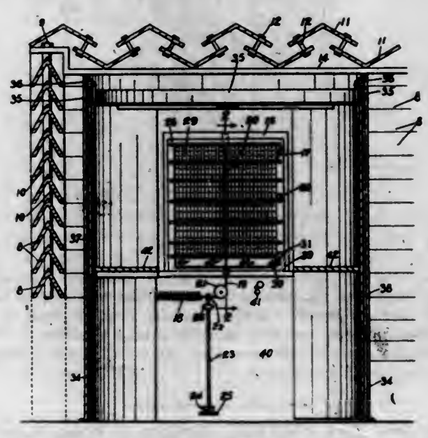


1,761,094. FIREWORKS CONSTRUCTION. JAMES H. SHUNK, Jr., Roscoe, Ill. Filed Mar. 19, 1926. Serial No. 95,850. 7 Claims. (Cl. 102—20.)



1. Fireworks construction comprising a fixed member adapted to be secured to a frame, a lance, securing means fastened to said lance, and interengaging means on the fixed member and securing means whereby the lance is retained at right angles to the frame.

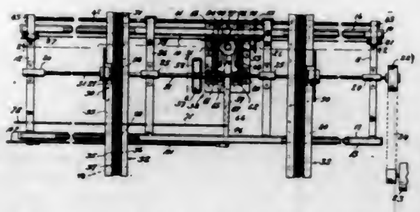
1,761,095. PROTECTIVE STRUCTURE FOR CASHIERS AND THE LIKE. EDWIN EGMONT SPOTTSWOOD, Cincinnati, Ohio. Filed July 15, 1926. Serial No. 122,673. 4 Claims. (Cl. 20—1.01.)



1. In a cashier's cage the combination of a pair of spaced arcuate walls, a second pair of arcuate walls mounted for movement concentrically of the first mentioned walls and adapted at times to lie parallel with the first men-

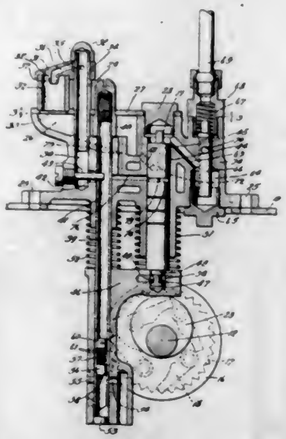
tioned walls and at other times to close the space between said walls, and means for locking the movable walls in the last mentioned position.

1,761,096. TRIMMING MACHINE. FRANCIS E. TOWER, Greenville, Mich., assignor to Gordon Hollow Blast & Grate Company, Greenville, Mich., a Corporation of Michigan. Filed May 21, 1928. Serial No. 279,553. 4 Claims. (Cl. 143—37.)



1. In a trimming machine, a frame, a transfer block adapted for adjustment longitudinally of said frame, a saw movable with said transfer block, a main drive shaft for driving said saw, a sprocket chain carried by said transfer block, for feeding work to said saw, an auxiliary shaft for driving said sprocket chain, a clutch for coupling said main drive shaft to said auxiliary shaft, a flexible member for adjusting said transfer block, and means for driving said flexible member from said auxiliary shaft, said means including a shaft for driving said flexible member, and a friction clutch for coupling said last mentioned shaft to said auxiliary shaft.

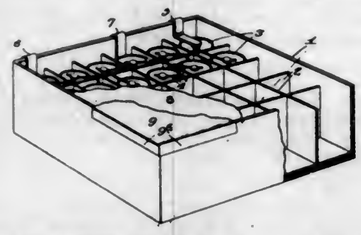
1,761,097. LUBRICATOR. JOSEPH R. WARNER, Fort Wayne, Ind., assignor to S. F. Bowser & Company, Inc., Fort Wayne, Ind., a Corporation of Indiana. Filed Mar. 9, 1927. Serial No. 173,859. 18 Claims. (Cl. 184—27.)



1. Pumping apparatus having a pumping chamber therein, means for alternately expanding and contracting said chamber to effect intake and discharge of fluid to be pumped, and means for connecting said chamber to the atmosphere after said chamber has been contracted and before it begins to expand.

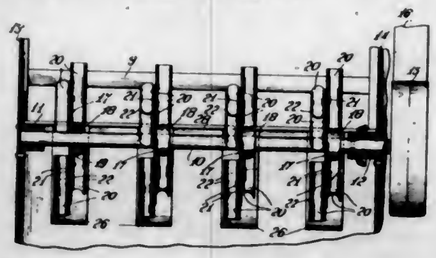
1,761,098. DRY BATTERY. DWIGHT E. WYRE, Wausau, Wis. Filed Mar. 5, 1926. Serial No. 92,462. 2 Claims. (Cl. 136—108.)

1. A dry-battery comprising a pasteboard box having an open vertical side, horizontally disposed cells in said box having their carbon poles presented to the open side of the box, a sealing compound forming a common seal for said cells, the margins of the flanges of said box projecting beyond said sealing compound, a pasteboard plate



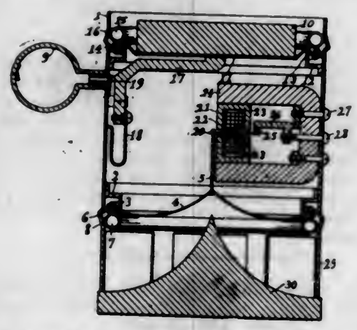
in said box adjacent said sealing compound, a covering cemented to said pasteboard plate and having margins cemented to said box, and terminals connected with cells of the upper row and terminating above and secured to the top wall of said box.

1,761,099. WATER-THROWING APPARATUS FOR WASHING MACHINES. GEORGE P. ANSTISS, Oak Park, Ill., assignor to G. S. Blakeslee & Co., Cicero, Ill., a Corporation of Illinois. Filed Dec. 17, 1925. Serial No. 76,031. 8 Claims. (Cl. 299—63.)



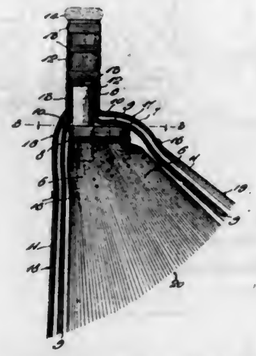
1. In a washing machine, the combination with a paddle wheel comprising a disc-like support and channel plate blades secured thereto at opposite sides thereof, each channel plate curved about an axis parallel to the plane of the disc, of a water holding tank in which the lower portion of said paddle wheel is partially submerged, and means in said tank spaced upwardly from the bottom thereof for directing the water laterally to said paddle wheel.

1,761,100. ACOUSTIC DIAPHRAGM AND LOUD-SPEAKER COMBINATION. NATHANIEL BALDWIN, East Mill Creek, Utah. Filed Jan. 23, 1926. Serial No. 83,297. 10 Claims. (Cl. 179—115.)



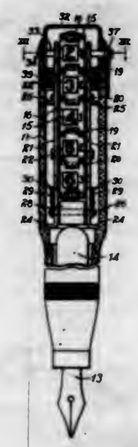
7. An acoustic diaphragm operatively connected with an electrically operated armature, means to apply different pneumatic pressures on opposite sides of said diaphragm, and an elastic member acting in connection with said armature and adapted to counterbalance the excess pressure on said diaphragm.

1,761,101. BROOM. FRANK J. BLOOD, Amsterdam, N. Y., assignor to Pioneer Broom Company, Inc., Amsterdam, N. Y., a Corporation of New York. Filed Sept. 23, 1929. Serial No. 394,516. 2 Claims. (Cl. 15—159.)



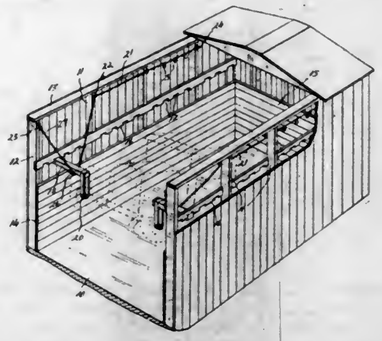
1. A broom comprising a handle, a flattened core of straws secured around said handle and of much greater thickness at its rear portion than at its front and side portions, a covering of straws around the core and secured around said handle above said core, and means binding all of the straws together below the handle, said straws being cut to shorter length toward the rear of the broom than at the front thereof, providing the lower end of the broom with a sweeping surface oblique to the handle.

1,761,102. CHECK PROTECTOR. ANTHONY J. BUSHEMI, Carnegie, Pa. Filed Mar. 5, 1929. Serial No. 344,140. 4 Claims. (Cl. 101—30.)



1. The combination with a fountain pen barrel which is open at one end, of a belt carrying frame, a type belt rotatably supported by said frame, the frame being insertible through the said open end of the barrel, means disposed exteriorly of the barrel for rotating said belt, the said frame being provided with laterally-extending lugs for supporting it against lateral movement within the barrel, and the said rotating means supporting the frame against movement longitudinally of the barrel.

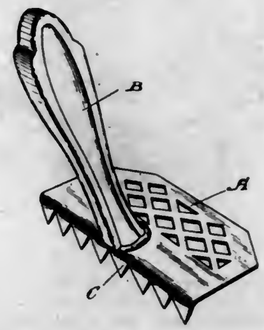
1,761,103. DECKING DEVICE. ALFRED COPONY, Mount Clemens, Mich., assignor to Copony Auto Loading Company, Detroit, Mich., a Corporation of Michigan. Filed July 2, 1928. Serial No. 289,910. 8 Claims. (Cl. 105—368.)



1. In a decking device for freight cars, a footing strip extending longitudinally of the car, a vehicle supporting beam engageable with said footing strip, and a flexible element extending longitudinally of the car and adapted for engagement with said beam for bracing the same to allow selected positioning of the vehicle.

2. The combination with a freight car, of a vehicle decking device including a longitudinally extending footing strip, a beam having one end engageable with said footing strip and a longitudinally extending flexible element adapted for engagement with said beam at a point spaced from said footing strip for bracing said beam.

1,761,104. CARVING BRACE. ARCHIBALD CUTLER, Toronto, Ontario, Canada. Filed Mar. 3, 1927, Serial No. 172,527, and in Canada Nov. 30, 1926. Renewed Nov. 29, 1929. 1 Claim. (Cl. 30—5.)

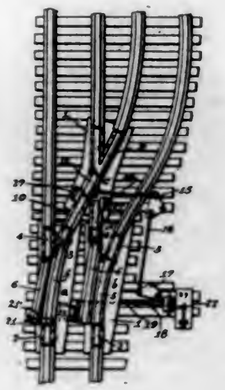


A carving brace comprising a flat pressure plate adapted to engage over the meat, an operating handle formed with the said plate and extending upwardly and rearwardly therefrom, a series of tines formed with the rear edge of the said plate and depending therefrom, the said plate adapted to be pressed down against the meat and embed said tines therein to prevent slipping or displacing when being used for steadying the meat for carving, substantially as described.

1,761,105. RAILWAY SWITCH. ALBERT GALLATIN DAVIS, Pueblo, Colo. Filed Feb. 8, 1927. Serial No. 166,763. 5 Claims. (Cl. 246—446.)

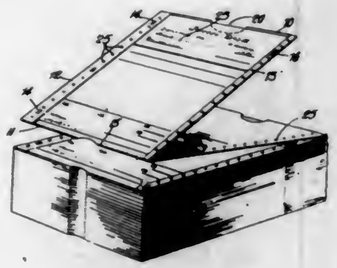
1. In a railway switch, a unit comprising a rigid base, a track member rigid therewith, a pair of hinge plates bent

at one end into concentric and interlocking relation to each other, one of said plates being secured to said track member, and a movable track member secured to the other of



said plates, one end of the movable track member being adjacent on one end of the fixed track member, substantially as described.

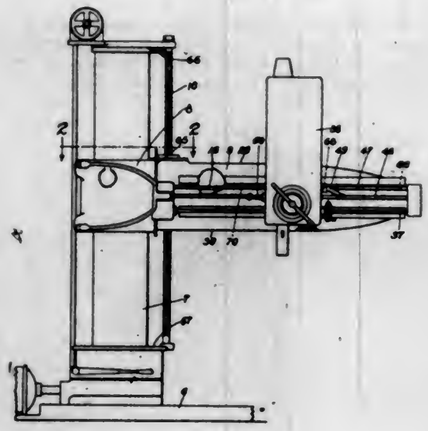
1,761,106. CARBON PACK AND SHEET-FORM HOLDER. KARL R. DENCKLAU, Plainfield, N. J. Filed Oct. 1, 1929. Serial No. 396,452. 7 Claims. (Cl. 282—29.)



1. A combined carbon pack and sheet form holder comprising a back strip of foldable material, and carbon pack units fixedly secured along one of the sides of said back strip at spaced intervals therealong so that the opposite side and edges of each carbon pack unit are free for the insertion of form sheets or tickets therebetween.

1,761,107. RADIAL DRILL. WILLIAM C. DE ROO, Cincinnati, Ohio, assignor to The Fosdick Machine Tool Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Oct. 13, 1927. Serial No. 226,028. 4 Claims. (Cl. 77—28.)

1. In a radial drill the combination of a column, a radial arm movable on the column, a releasable clamp for fixing the arm on the column, an arm elevating mechanism, a head movable on the arm, a traverse mechanism for moving the head, a drive shaft carried by the arm, a transmission means controllable from the head to selectively connect the elevating mechanism and the traverse mechanism with the drive shaft, and an interlock connected with the transmission means whereby the clamp is



released when the elevating mechanism is actuated and whereby the clamp is locked when the traverse mechanism is actuated.

1,761,108. METHOD FOR THE MANUFACTURE OF CELLULAR BUILDING MATERIALS. LOUIS DESMARQUEST, Neuilly-sur-Seine, France. Filed Apr. 16, 1929, Serial No. 355,673, and in Great Britain Apr. 18, 1928. 13 Claims. (Cl. 25—156.)

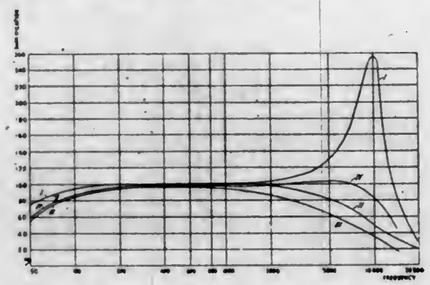
1. A method for manufacturing cellular building materials having a light, heat insulating and highly resistant structure comprising the steps of admixing refractory clay with hydraulic cement and a gas generating powder such as aluminum powder, adding water and thoroughly intermingling the ingredients to form a slip, casting the slip into properly shaped antd sized molds, allowing the molded masses to set and contract, demolding and allowing the blocks so molded to dry, and baking the molded and dried blocks at a temperature sufficient for dehydrating the cement and vitrifying the ingredients in the mass.

1,761,109. PLASTERER'S FLOAT. LEO S. DIETZ, Zion, Ill., assignor of one-half to Franz Dietz, Zion, Ill. Filed Dec. 1, 1927. Serial No. 236,942. 3 Claims. (Cl. 72—136.)



1. A plasterer's float comprising a relatively stiff flat back piece, a handle secured on one side thereof, and a flat, pliable, cellular rubber body portion cemented to the other side of said back piece.

1,761,110. TRANSFORMER. POPKO REINDER DIJKSTERHUIS and YME BOUWINUS FOLKERT JAN GROENEVELD, Eindhoven, Netherlands, assignors to Radio Corporation of America, a Corporation of Delaware. Filed July 9, 1928, Serial No. 291,444, and in the Netherlands June 30, 1927. 1 Claim. (Cl. 175—356.)



A transformer for high frequency current having its secondary coil composed of nickel, whereby the oscillations which lie within the range of the transformer are substantially uniformly amplified.

1,761,111. TOILET-PAPER ROLL. JEPTHA WADE DOTY, Detroit, Mich. Filed Mar. 12, 1928. Serial No. 260,932. 5 Claims. (Cl. 242—68.)



1. A toilet paper roll core formed of a material soluble in water.

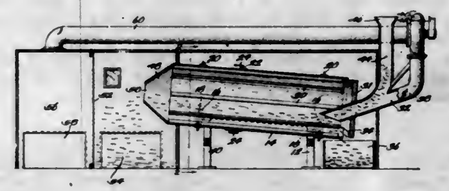
1,761,112. TOWING CABLE. FRANK FELDMAN, Randsburg, Calif. Filed July 20, 1929. Serial No. 379,831. 5 Claims. (Cl. 280—33.14.)



1. An automobile tow line including a cable, yokes on the ends of the cable, and means for rendering the cable rigid for operating purposes, said means including a plurality of sections of tubing on the cable and means for forcing the ends of the said tubing sections together, said means comprising a screw-threaded longitudinal adjustment between certain of the sections, said adjustments comprising an exteriorly screw-threaded tubing section and adjusting nuts on said section, together with reinforcing elements positioned between certain of said tubing sections.

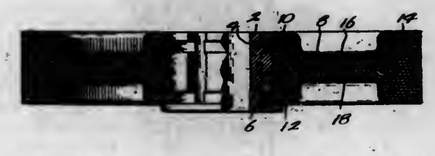
1,761,113. MICA-SORTING MACHINE. LOUIS T. FREDERICK, Valparaiso, Ind., assignor, by mesne assignments, to Chicago Mica Company, Valparaiso, Ind., a Corporation of Indiana. Filed Feb. 23, 1927. Serial No. 170,203. 7 Claims. (Cl. 209—137.)

1. In a machine for sorting mica flakes, an inclined drum, means for rotating the drum, a blower for blowing mica flakes through the drum from the lower end, a compartment into which the flakes from the drum discharge are blown, a screen in said compartment for catching the



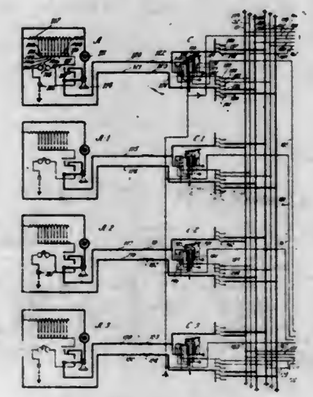
flakes and for passing the dust, and a suction pipe in said compartment in the rear of the screen, said pipe being connected to the inlet of the blower.

1,761,114. COMPOSITE GEAR. LOUIS T. FREDERICK, Valparaiso, Ind., assignor to Fibroc Insulation Company, Valparaiso, Ind., a Corporation of Indiana. Filed June 17, 1927. Serial No. 199,493. 5 Claims. (Cl. 74—28.)



1. A laminated gear comprising a metallic hub provided with a circumferential groove, a plurality of layers of condensation product treated fabric having their inner edges contacting with said metallic hub, and a plurality of smaller layers of similar material disposed in stacks and overlying and underlying the first mentioned layers, certain of said smaller layers being of decreased internal diameter and projecting into the circumferential groove to form a bond with the metallic hub.

1,761,115. AUTOMATIC TELEPHONE SYSTEM. JOHN E. GARDNER, Chicago, Ill. Filed Sept. 2, 1927. Serial No. 217,131. 6 Claims. (Cl. 179—18.)

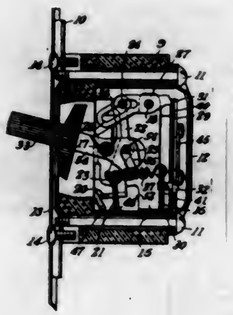


1. In a telephone system, telephone lines, a trunk line common to said lines, means extending a calling and a called one of said lines to said trunk line, and a selecting device controlling the extension of one of said lines to said trunk line and means for controlling said device by varying an electrical characteristic of one of said lines through finite steps.

1,761,116. COMPOSITION FOR SOLDERING METALS. KARL GEISEL, Levallois-Perret, France, assignor, by mesne assignments, to Aluminum Solder Corporation of America, New York, N. Y., a Corporation of Delaware. Filed May 28, 1928, Serial No. 281,364, and in Germany Feb. 20, 1928. 4 Claims. (Cl. 148—23.)

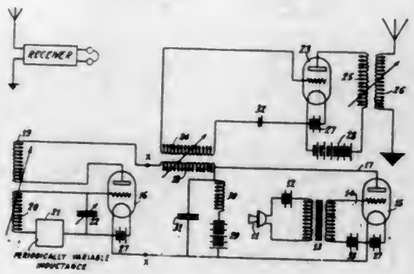
1. A composition for soldering metals, particularly aluminum and its alloys, consisting of a mixture of zinc chloride, ammonium bromide and sodium fluoride.

1,761,117. SAFETY SWITCH. BENJAMIN E. GETCHELL, Plainville, Conn., assignor to The Trumbull Electric Manufacturing Company, Plainville, Conn., a Corporation of Connecticut. Filed Mar. 25, 1929. Serial No. 349,729. 20 Claims. (Cl. 200—116.)



1. A snap switch including a movable switch member having a guide pin, an inclined guide therefor, a catch coacting with one end of said member to hold it and a thermostatic latch for holding said catch, under normal circuit condition.

1,761,118. RADIO SIGNALING SYSTEM. ALFRED N. GOLDSMITH, New York, N. Y., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Nov. 6, 1924. Serial No. 748,035. 23 Claims. (Cl. 250—6.)



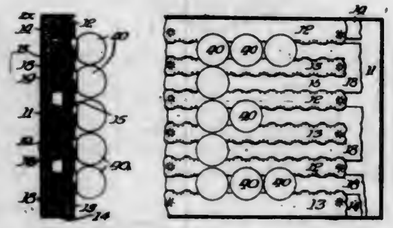
22. The method of reducing fading of radio signals in a receiver tuned at one setting to a single relatively narrow band of frequencies which includes continuously and cyclically varying the frequency of a modulated carrier wave so as to have values within the band of frequencies to which the receiver is tuned.

1,761,119. NAIL. JOSEPH GOULDBOURN, Leicester, England, assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Feb. 28, 1925, Serial No. 12,428, and in Great Britain Mar. 28, 1924. 4 Claims. (Cl. 85—10.)



1. A heel nail having its head offset relatively to its shank and its point beveled toward the side of the shank remote from the offset head so that when the nail is driven its point will be deflected in a direction opposite to the direction of the offset of its head, the top surface of the head of the nail being inclined relatively to the shank of the nail in a direction substantially parallel to the bevel of the point.

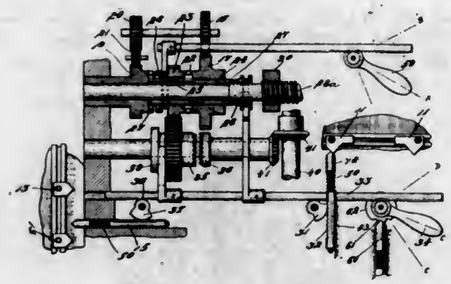
1,761,120. COMPOSITION SIGN. LOUIS A. GRAHAM, Evanston, and CHARLES L. LOW, Chicago, Ill., assignors of one-third to George E. Wallis, Chicago, Ill. Original application filed Sept. 15, 1926, Serial No. 135,520. Divided and this application filed Dec. 20, 1926. Serial No. 155,794. 16 Claims. (Cl. 40—130.)



10. Electric composing signs having a row of lamp receiving sockets comprising a pair of spaced parallel bars, fashioned in their construction to provide complementary lamp positioning and holding portions at least one of said bars being a bus bar and other electrical conducting means for said row of lamp receiving sockets.

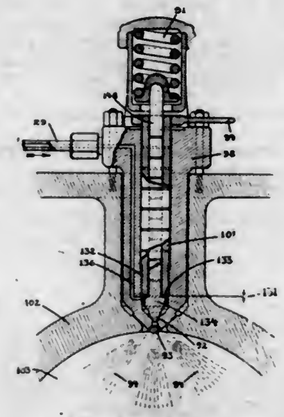
1,761,121. TRIPPING MECHANISM. BENJAMIN P. GRAVES, Edgewood, and WALTER F. SMITH, Providence, R. I., assignors to Brown & Sharpe Manufacturing Company, Providence, R. I., a Corporation of Rhode Island. Filed Aug. 20, 1928. Serial No. 300,912. 11 Claims. (Cl. 192—143.)

2. A trip mechanism for machines having relatively traveling members, a stop dog carried by one of said members, a cooperating stop element carried by another of said members, said stop element being formed in two connected parts, the first part arranged to engage the dog, means connecting the second part with the travel control mechanism, said second part being adapted to be moved relative to the first part, means whereby engagement of said first part with said dog renders the



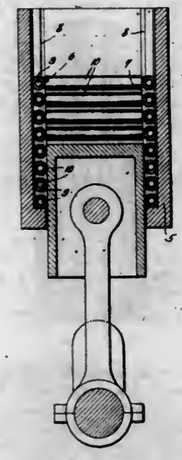
travel control mechanism inoperative, and means for moving said second part independently of the first part, whereby said control mechanism may be restored to operative position without moving said first part from its dog engaging position.

1,761,122. VALVE-LIFT-CONTROL DEVICE FOR FUEL-INJECTING VALVES. JOSEPH C. GROFF, Allentown, Pa. Original application filed Mar. 26, 1927, Serial No. 178,537. Divided and this application filed Mar. 27, 1928. Serial No. 265,092. 3 Claims. (Cl. 299—133.)



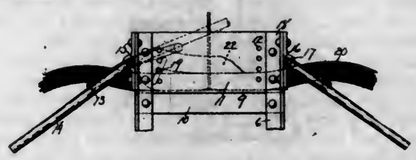
1. A fuel-injecting valve device comprising a needle valve constructed and arranged to be lifted from its seat by the pressure action of the fuel which is to pass such valve, said device including a fuel supplying chamber which always contains a viscous fuel medium under maintained pressure, said valve having a stem and head portion in combination with means for restricting the extent of valve lift, said means comprising a member surrounding the stem of said valve and having an end portion constituting an abutment to engage said valve head and restrict the valve lifting movement, said end portion being axially adjacent the head portion of the valve, said end and head portion extending into said fuel supplying chamber, the aforesaid member which surrounds the valve stem being mounted for relative axial adjustment with respect to the valve for the purpose described.

1,761,123. CYLINDER AND PISTON. PERRY F. GRUVER, Amarillo, Tex. Filed Apr. 27, 1929. Serial No. 358,596. 3 Claims. (Cl. 74—108.)



1. In a device of the character described, a cylinder rectangular in cross section, a piston operating in the cylinder, roller cages positioned within the cylinder, to move longitudinally thereof, and said piston engaging the rollers of the roller cages.

1,761,124. APPARATUS FOR BUNDLING SCRAP STOCK. NICHOLAS C. GUIDEN, Bristol, Conn., assignor to J. H. Sessions & Son, Bristol, Conn., a Corporation of Connecticut. Filed Feb. 21, 1927. Serial No. 169,793. 7 Claims. (Cl. 100—31.)



1. A bundling machine including a table, means for holding scrap stock upon said table, means for locating said holding means in different positions with respect to the length of the said table, and a bender movably mounted to operate upon an end portion of said stock and fold it over said holding means.

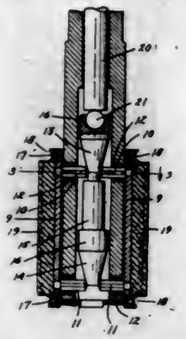
1,761,125. METHOD FOR PHOTOGRAVURES. LEONARD HUGHES, St. Louis, Mo., assignor of one-third to Ben V. Zillman, St. Louis, Mo. Filed Aug. 17, 1927. Serial No. 213,709. 7 Claims. (Cl. 95—88.)

1. That step in the art of photo-gravure consisting of applying a benzole-containing liquid to the back of the carbon tissue for penetrating through the paper backing sheet of the carbon-tissue previous to developing the same with water, to thereby reduce the time required for the separation of the backing sheet and the gelatine thereon.

1,761,126. GRINDING MACHINE. WILSON P. HUNT, CLARENCE W. HALLENE, and SAMUEL L. BRANDENBURG, Moline, Ill., assignors to Moline Tool Company, Moline, Ill. Filed Feb. 4, 1928. Serial No. 251,906. 4 Claims. (Cl. 51—184.3.)

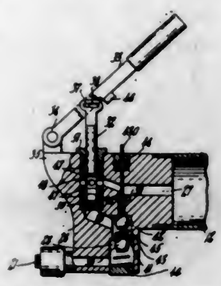
1. In a device of the class described, a housing, a spindle rotatably mounted therein, and provided with a

cylinder on one of its ends provided with external longitudinal channels, a cone member supported in said cylinder, and having a clearance from the sides of the cylinder permitting a limited lateral flexibility of the cone



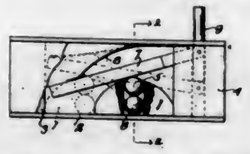
member, frames in said channels capable of radial expansion, contact members connected with said frames in engagement with the cones of said cone-member, means for holding said frames under inward tension, and means for moving the cone member to actuate said frames.

1,761,127. GREASE GUN. RAYNALDO P. JACQUES, Woonsocket, R. I., assignor to Adams Industries, Inc., New York, N. Y., a Corporation of New York. Filed June 7, 1927. Serial No. 197,128. 9 Claims. (Cl. 221—47.3.)



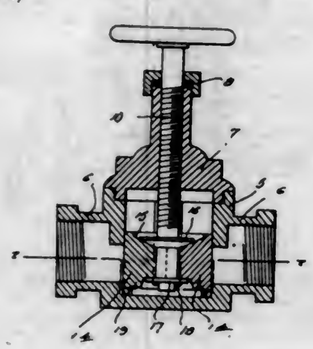
1. A grease gun comprising a booster head having a grease outlet and a duct system connecting the outlet with the storage space of the gun, said system including a plunger-receiving duct, an outlet duct and a pressure-relieving duct, a plunger movable in the plunger duct, means for reciprocating the plunger, and spring-closed check valves including a primary valve normally permitting an outward movement of grease from the outlet duct, and preventing a return movement thereof, and a secondary valve normally preventing a return movement of grease through the pressure-relieving duct, means being provided for opening said valves to permit relief of pressure on grease packed by the plunger outside the head.

1,761,128. MECHANICAL MOVEMENT. OSCAR JOHNSON, Glendale, Calif. Filed Jan. 24, 1928. Serial No. 249,076. 11 Claims. (Cl. 74—14.)



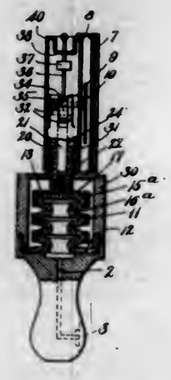
1. A support, an element adapted to be driven to and fro on said support and having anti-friction means for rolling engagement with said support, anti-friction means in engagement with said first named anti-friction means, and a lever arranged to fulcrum upon said last named anti-friction means thereby to propel said element to and fro upon said support.

1,761,129. VALVE. BEN KARSTEN, What Cheer, Iowa. Filed Apr. 9, 1928. Serial No. 268,579. 2 Claims. (Cl. 251—69.)



1. A valve of the class described, comprising a casing provided with inlet and outlet oppositely disposed, a gate movable in the casing, a valve stem extending through the casing, means for threadedly mounting said stem, means for connecting the gate with the stem, and means for preventing rotation of the gate within the casing, said last mentioned means comprising vertically extending cutout portions formed on the opposite sides of said gate, vertically disposed ribs formed on the walls of the casing and extending into said cut-out portions, widened extensions formed on said ribs, at their respective lower ends, arcuate flanges formed on the bottom surface of said gate to rest on the bottom of the casing and adapted to extend between the extensions of the respective ribs and the side walls.

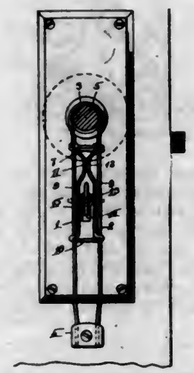
1,761,130. PRESSURE GAUGE FOR PNEUMATIC TIRES. JOHN E. KENNEDY, Los Angeles, Calif. Filed July 26, 1927. Serial No. 208,435. 6 Claims. (Cl. 73—110.)



1. In a pressure gauge for testing pneumatic tires, the combination with a hollow casing provided with an air inlet to admit compressed air, an air-confining tubular diaphragm of plisble air-tight fabric formed with annular convolutions and a closed end wall, the open end of said diaphragm being secured inside the casing to expose its interior to the air admitted into the casing, external

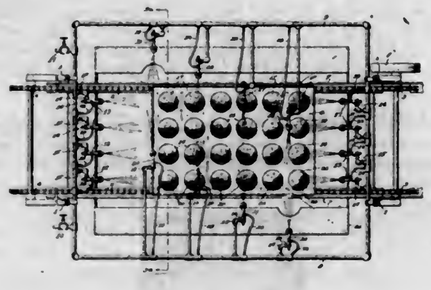
means engaging the exterior convex and concave faces of the convolutions to prevent lateral expansion under internal pressure, while leaving the end wall free to move endwise against a counter-balancing resistance, and pressure indicator devices actuated by the endwise movement of the diaphragm to indicate the different pressures to which the diaphragm is subjected.

1,761,131. KEY GUARD. THEODORE W. KUPFER, Rochester, N. Y. Filed Nov. 28, 1927. Serial No. 236,181. 6 Claims. (Cl. 70—7.)



1. A key guard comprising a stationary guide on the inside of the door engaging over the handle of the door at the top and fastened to the door at the bottom, a guard mounted to slide on said guide and having a tongue adapted to engage the handle of the key and prevent its being turned from the outside of the door, said guard having two jaws adapted to engage below the shank of the key to hold the tongue down on the key handle, said jaws being adapted to close in front of the key hole of the lock when the tongue is holding a key in place therein, said jaws preventing vision through the keyhole.

1,761,132. SPRAYER FOR CAKE BODIES. HENRY A. LAUHOFF, Detroit, Mich. Filed Dec. 17, 1924. Serial No. 756,445. 2 Claims. (Cl. 91—3.)

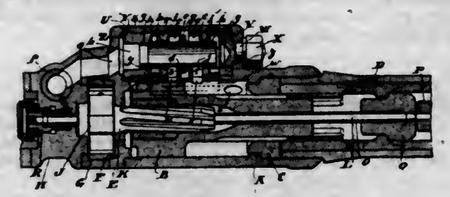


1. In a device of the class described, a conveyor adapted to carry rows of cake bodies, sprayers arranged in pairs over said conveyor, the members of each pair being disposed opposite to each other and at opposite sides of the directional axis of the conveyor, the lines of projection from the sprayers of the several pairs intersecting on the conveyor at points spaced transversely and longitudinally with respect to the line of travel of said conveyor.

1,761,133. PROCESS OF MANGANESE-COMPOUND RECOVERY. NAPOLEON ARTHUR LAURY, Rockville Center, N. Y., assignor to John C. Wiarda & Company, Brooklyn, N. Y., a Corporation of New York. Filed July 22, 1925. Serial No. 45,150. 14 Claims. (Cl. 23—145.)

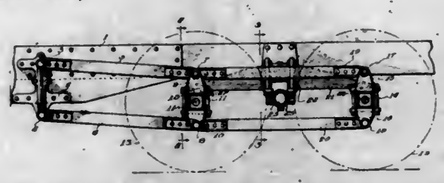
14. A process of recovering manganese values from ore containing manganese dioxide which comprises converting manganese dioxide to manganous oxide, leaching manganous oxide from the ore with a solution capable of dissolving the manganous oxide and incapable of dissolving other material of the ore, said solution being characterised by an acid content sufficient to neutralize the basicity of the manganous oxide dissolved, separating the solution from the other material, and recovering manganese values from the solution.

1,761,134. VALVE FOR ROCK DRILLS. EARL B. LEAR, Phillipsburg, N. J., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed Apr. 6, 1927. Serial No. 181,424. 1 Claim. (Cl. 121—28.)



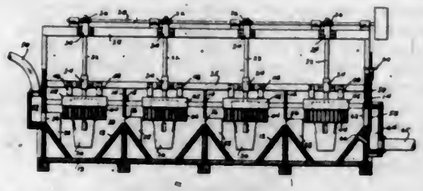
In a fluid actuated rock drill, the combination of a cylinder and piston, a valve chest having a valve chamber, crossed inlet passages leading from the valve chamber to the cylinder, an exhaust port in the valve chest, a hollow distributing valve through which the live motive fluid passes to the inlet passages, said valve having a central enlarged flange to control the exhaust port, actuating pressure areas on the flange, enlarged portions at the ends of the valve forming shoulders having holding pressure areas and reduced end extensions extending from the body of the valve, the valve chest being formed with recesses for receiving said extensions, the live motive fluid passing over the ends of the valve to each end of the cylinder and thereby producing holding pressure on that one of the holding areas subjected to live motive fluid, and exhaust passages for exhausting pressure fluid from the cylinder into the valve chamber to act against the actuating pressure areas for throwing the valve and opening the exhaust port to permit the escape of pressure fluid from the valve chest to the atmosphere.

1,761,135. MOTOR-TRUCK-DRIVE MECHANISM. AXEL R. LE MOON, Chicago, Ill., assignor to Nelson-Le Moon Truck Company, Chicago, Ill., a Corporation of Illinois. Filed July 2, 1928. Serial No. 289,810. 5 Claims. (Cl. 280—124.)



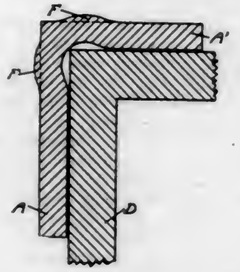
1. A vehicle frame, drive axle housings horizontally spaced apart beneath said frame and connected together by parallel links above and below said housings and pivoted thereto at their ends, parallel links extending from vertically spaced pivots on said frame to pivotal connections with one of said housings, and a leaf spring centrally secured to said frame and having its ends slidably bearing on said axle housings.

1,761,136. MINERAL-FLOTATION APPARATUS. ROBERT LORD, Culver City, Calif., assignor to Southwestern Engineering Company, Los Angeles, Calif., a Corporation of California. Filed Sept. 1, 1926. Serial No. 132,962. 4 Claims. (Cl. 261—91.)



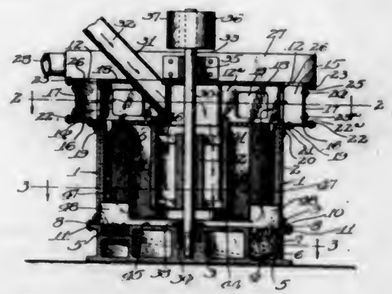
1. In apparatus for mineral flotation, a hollow frustoconical aerator adapted to be partially submerged in pulp and having a central pulp chamber having spiral riffles on its inner wall, said aerator having slots therethrough for the discharge of pulp and also having a pulp inlet opening at the lower portion thereof and openings at its upper end for entrance of air into the aerator, and vertically disposed riffles on its outer wall.

1,761,137. METALLIC ANGLE BAR. WILLIAM LOUDEN, Fairfield, Iowa, assignor to The Louden Machinery Company, Fairfield, Iowa, a Corporation of Iowa. Filed May 20, 1927. Serial No. 192,975. 2 Claims. (Cl. 29—180.)



1. As an article of manufacture, an angle bar formed by rolling heated metal and having flanges at substantially right angle to each other, a rounded recess in its inner corner, said recess being extended into each of the adjacent portions of the flanges, substantially as shown and described.

1,761,138. DEVICE FOR REDUCING MATERIALS. HENRY G. LYKKEN, Minneapolis, Minn. Filed Feb. 23, 1926. Serial No. 89,973. 21 Claims. (Cl. 83—46.)



1. A reducing device of the character described comprising a chamber, a rotor mounted in said chamber and having a passage therethrough, said chamber being of larger diameter than the rotor to provide a substantial clearance space, so that a cyclonic action may be set up within said space by the operation of said rotor, and means for supplying material through said rotor to said clearance space, the difference in the diameters of the rotor and the clearance space being such that the material discharged thereinto through the rotor will be reduced by the whirling action of air within said space produced by the action of the rotor.

1,761,139. ADJUSTABLE THRUST BEARING. CLAUDE A. MARIS, Indianapolis, Ind. Filed Nov. 19, 1927. Serial No. 234,328. 2 Claims. (Cl. 308—167.)



1. As an article of manufacture, a bearing cap comprising a main body, a bearing bushing axially movable in said cap and provided with a flange at one end overlying the main body, one of said parts having a transverse slot tangential to the bearing axis, a wedge mounted in said slot between the main body and the flange, and spring means by which said wedge may be forced between the main body and flange to project the bushing outwardly relative to the main body.

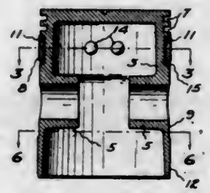
1,761,140. PISTON. WILLIAM C. MCCOY, Cleveland, Ohio, assignor to The Cleveland Trust Company, Cleveland, Ohio, a Corporation of Ohio. Filed Sept. 7, 1926. Serial No. 133,909. 5 Claims. (Cl. 74—108.)

1. A piston for an internal combustion engine comprising a head having depending wrist pin carrying bosses formed integrally therewith, a skirt portion integrally joined to the head independently of said bosses having a primary working face carried thereby, a skirt portion having a secondary working face carried solely by circumferentially extending segments of said primary skirt portion spaced from said head, and a longitudinal split separating the secondary skirt portion from the primary skirt portion.

1,761,141. PISTON. WILLIAM C. MCCOY, Shaker Heights, Ohio, assignor to The Cleveland Trust Company, Cleveland, Ohio, a Corporation of Ohio. Filed Oct. 25, 1926. Serial No. 143,878. 6 Claims. (Cl. 74—108.)

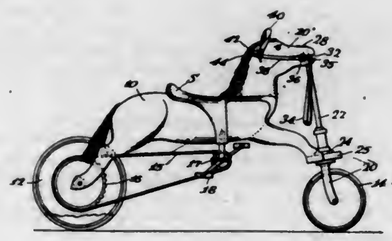
1. A composite piston structure having a separately formed head provided with depending wrist pin bosses, a sheet metal skirt, inwardly offset portions formed in opposite walls of said skirt, and wrist pin bosses formed in said offset portions and adapted to be disposed between said bosses in said head.

1,761,142. PISTON. WILLIAM C. MCCOY, Shaker Heights, Ohio, assignor to The Cleveland Trust Company, Cleveland, Ohio, a Corporation of Ohio. Filed Jan. 10, 1929. Serial No. 331,513. 10 Claims. (Cl. 74—108.)



1. A piston for an engine cylinder, comprising a relatively highly expansive body portion, a bearing ring in the head thereof having a relatively low coefficient of thermal expansion and rigidly secured at one side to said body portion to hold the same against bodily movement relative to said body portion and closely fitting the wall of said cylinder, whereby said body portion may expand and contract independently of said ring.

1,761,143. TOY ANIMAL. ERNEST S. MOONEY, Los Angeles, Calif., incompetent, by Los Angeles First National Trust and Savings Bank, guardian, Los Angeles, Calif. Filed Jan. 2, 1929. Serial No. 329,855. 2 Claims. (Cl. 208—42.)



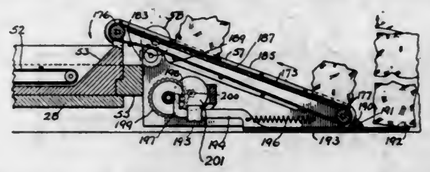
1. A toy animal having a front wheel and a head, ears movably mounted on said head, a steering post connected with said wheel to steer the latter, said steering post being journaled in the head, said head being slotted to simulate a mouth, arms connected with said post to actuate the same and projecting from the mouth, connections between said ears and arms to move the ears when the arms are actuated, and reins connected with said arms.

1,761,144. INSECTICIDE. WILLIAM MOORE, Chappaqua, N. Y., assignor to American Cyanamid Company, New York, N. Y., a Corporation of Maine. Filed June 7, 1927. Serial No. 197,234. 16 Claims. (Cl. 167—22.)

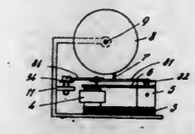
8. An insecticide comprising aminoisobutyronitrile.

1,761,145. LOADING MACHINE. EDMUND C. MORGAN, deceased, New York, N. Y., by Olive Eugenie Morgan, executrix, New York, N. Y. Filed Jan. 26, 1925, Serial No. 4,768. Renewed Aug. 26, 1929. 7 Claims. (Cl. 198—10.)

1. In a loading machine, the combination with a supporting frame, of a gathering conveyer, a plate adapted to reciprocate with advancing and retracting movements under the forward end of said gathering conveyer, means for reciprocating said plate to gather a load of material and deliver the same to said gathering conveyer, and a plurality of spaced-apart upwardly projecting teeth on the forward portion of said reciprocating plate.

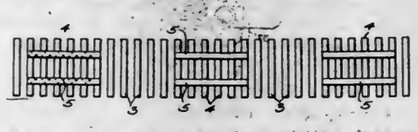


1,761,146. RESONANCE SPRING DRIVING DEVICE. OTTO MUCK, Munich, Germany. Filed July 12, 1926, Serial No. 122,027, and in Germany Dec. 31, 1924. 3 Claims. (Cl. 172—126.)



1. A driving device, comprising an alternating current electromagnet, a mechanical oscillatory system adapted to oscillate when the number of alternations of the alternating current is equal to the natural frequency of said system, a movable part arranged in the path of oscillation of said system and seeking to move toward the position of rest of said system, an impact finger connected with said movable part, a revolubly mounted part arranged in the path of movement of said finger and an adjustable stop adapted to retain said movable part at a predetermined distance from the position of rest of the system.

1,761,147. ARRANGEMENT OF BASE PLATES ON TIES. GEORGE W. MULLER, Washington, D. C., assignor to Muller Railway Track Systems, Incorporated, Wilmington, Del., a Corporation of Delaware. Filed Apr. 28, 1928. Serial No. 273,554. 4 Claims. (Cl. 238—27.)



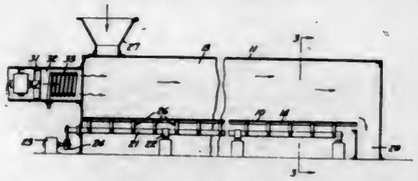
1. In combination, a series of cross ties arranged in parallel groups and having base plates secured thereon at both ends, the said groups being spaced apart and having regularly spaced single ties between them.

1,761,148. RAILROAD-TRACK STRUCTURE. GEORGE W. MULLER, Washington, D. C., assignor to Muller Railway Track Systems, Incorporated, Wilmington, Del., a Corporation of Delaware. Filed June 16, 1928. Serial No. 285,852. 8 Claims. (Cl. 238—243.)



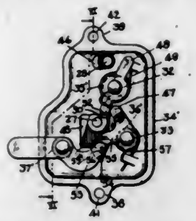
1. A railroad track construction, comprising a succession of cross ties, tie plates each resting upon a segregated group of the ties, rails meeting upon the tie plates, rail joint bars adapted to connect the ends of the rails independently of the plates and means for securing the rails upon the tie plates between the ties.

1,761,149. DRYING APPARATUS AND METHOD. DAVID D' PEEBLES, Eureka, Calif. Filed July 18, 1927. Serial No. 206,440. 11 Claims. (Cl. 34—38.)



1. In a drying apparatus, a flexible sheet arranged in a general horizontal direction, and means for repeatedly tensioning said sheet to cause a whipping effect.

1,761,150. JACK. ADOLPH PETELER, Freeport, N. Y., assignor to Auto Specialties Manufacturing Co., San Francisco, Calif., a Corporation of California. Filed Oct. 10, 1925. Serial No. 61,654. 14 Claims. (Cl. 254—111.)



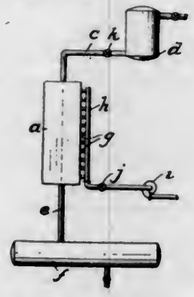
1. A lifting jack comprising a toothed lifter bar, a holding detent, a hand lever with a lifting pawl pivoted thereon, a spring for normally pressing the detent toward said lifter bar, a pivoted lever member engageable with said detent, a spring for rocking said lever member about its pivot to move the detent away from said lifter bar, a pivoted double arm cam-member having one arm engageable with the lever member, a reversing lever to engage with the other arm of the cam member to actuate the same and cause an actuation of the lever member.

1,761,151. APPARATUS FOR DISTILLING LUBRICATING OIL. ARTHUR E. PEW, Jr., Bryn Mawr, Pa., assignor to Sun Oil Company, Philadelphia, Pa., a Corporation of New Jersey. Filed May 29, 1926, Serial No. 112,485. Renewed Aug. 21, 1929. 4 Claims. (Cl. 196—139.)



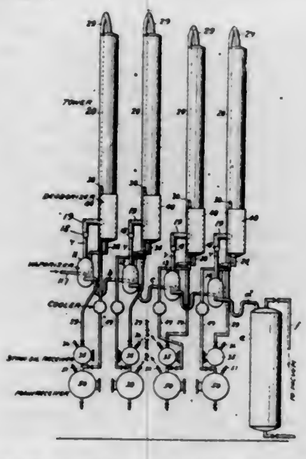
2. In an oil distilling and refining apparatus, the combination with an oil vaporizing apparatus, of a tower, a relatively shallow tier of tiles in the lower part of the tower, a relatively deep tier of tiles above the lower tier of tiles, a conduit for oil vapor communicating with the tower below the lower tier of tiles, an outlet for heavier condensate condensed in the lower tier of tiles, an outlet for lighter condensate condensed in the upper tier of tiles, a deodorizer providing extended surfaces for the travel and distribution of oil in a thin layer, an outlet for odor-producing gases in the upper part of the tower, a conduit leading from said outlet for lighter condensate to the deodorizer, connections to vacuum from the deodorizer for removing odor-producing gases from the oil distributed and flowing through the deodorizer, and a conduit for conveying the deodorized oil from the deodorizer.

1,761,152. METHOD FOR DEODORIZING PETROLEUM. ARTHUR E. PEW, Jr., Bryn Mawr, Pa., assignor to Sun Oil Company, Philadelphia, Pa., a Corporation of New Jersey. Filed Aug. 27, 1926. Serial No. 131,911. 4 Claims. (Cl. 196—77.)



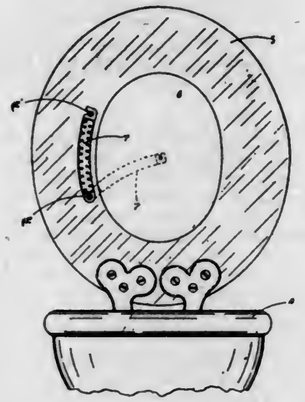
2. The method of removing, from a refined oil product, odoriferous gases which comprises distributing preheated oil in a thin film over a surface of substantial area and simultaneously and without the application of substantial heat, subjecting it to a vacuum sufficiently high to remove such gases without effecting substantial vaporization of the liquid oil.

1,761,153. PROCESS OF DISTILLING OIL. ARTHUR E. PEW, Jr., Bryn Mawr, Pa., assignor to Sun Oil Company, Philadelphia, Pa., a Corporation of New Jersey. Filed Jan. 8, 1927. Serial No. 159,754. 27 Claims. (Cl. 196—119.)



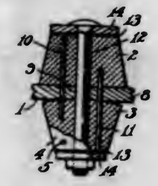
3. The process of producing lubricating oil distillates free from odor-producing gases which comprises subjecting liquid oil to thermal conditions adapted to produce condensible oil vapors containing odor-producing gases, removing the oil vapors and condensing them, and distributing condensate over an extended area and while so distributed subjecting it to a vacuum sufficiently high to remove therefrom odor-producing gases.

1,761,154. SANITARY BLOCK HOLDER. CHESTER EVERETT PICKERING, Ottawa, Ontario, Canada. Filed Jan. 21, 1929. Serial No. 333,930. 1 Claim. (Cl. 4—229.)



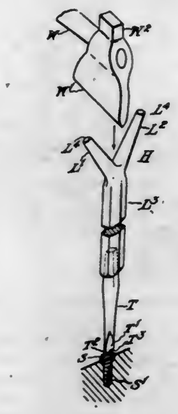
The combination with a commode seat, of a sanitary block holder formed from foraminous material, said holder having an open top through which a block of disinfectant may be positioned in said holder; a means whereby one end of said holder may be pivotally connected to the under face of said commode seat and a means at the other end of said holder for retaining it in normal position under said seat.

1,761,155. BELT SPLICE. PAUL B. REEVES, Columbus, Ind., assignor to Reeves Pulley Company, Columbus, Ind., a Corporation of Indiana. Filed Jan. 10, 1929. Serial No. 331,656. 5 Claims. (Cl. 74—64.)



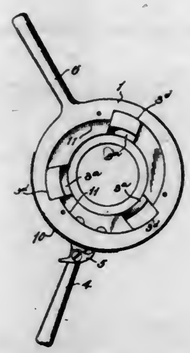
1. In a belt fastener the combination with a belt, of a pair of belt blocks associated therewith, one on the upper face and the other on the lower face of said fastener, each of said blocks being provided with projecting prongs on one side of a line extending transversely through the center of the blocks, said prongs being adapted to pass through a belt end and into the opposite block.

1,761,156. TURNING TOOL APPLICABLE TO REMOVE REFRACTORY SCREWS. FERDINAND ROBERT ROGAN, Bendigo, Australia. Filed Aug. 8, 1929, Serial No. 384,392, and in Australia May 6, 1929. 6 Claims. (Cl. 145—5C.)



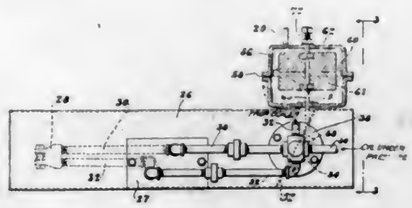
1. A tool having a point to engage a screw and a head having outwardly tapered fingers forming a downwardly directed apex adapted to be struck by an implement to impart pressure, sudden shock and torsional stress to said screw.

1,761,157. HOSE-COUPLING ADAPTER. JOHN C. SCHELLIN, Wooster, Ohio. Filed Jan. 28, 1928. Serial No. 250,281. 2 Claims. (Cl. 285—150.)



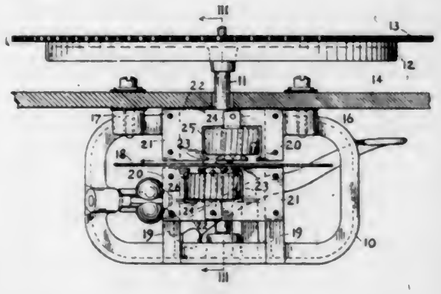
1. A hose coupling adapter, comprising in combination, a pair of circular plates one rotatable upon the other, a series of cam notches in the outer plate, a like series of radial slots in the inner plate, and a like series of jaw-blocks slidable reciprocally in said slots, respectively, each block terminating inwardly with a tooth set spirally thereon, and the several teeth of the series arranged in spiral formation adapted to engage a helical thread on a male plug or coupling, an upstanding shoulder on each block adapted to reciprocate slidingly in the adjacent cam notch when the outer plate is rotated in one direction, and means, including a ratchet on the periphery of the outer plate for locking said plate when said jaw block teeth are in the valley of said helical thread, and for manually unlocking the same, and instantaneously disconnecting the coupling without unscrewing the threaded connection, substantially as set forth.

1,761,158. AUTOMATIC SYSTEM FOR BURNING FUEL UNDER BOILERS. EDWARD SKILLMAN and GUY HARMON, Bartlesville, Okla., assignors to Doherty Research Company, New York, N. Y., a Corporation of Delaware. Filed Oct. 13, 1924. Serial No. 743,367. 7 Claims. (Cl. 236—8.)



1. The combination of a portable conduit adapted to supply air for combustion to the fire-box of a furnace, a casing containing a weighted motor element, a damper for controlling air flow through said conduit, a fuel valve, a steam valve, said fuel and steam valves having movable elements mounted on the axis of said damper and connected to turn therewith, operating connections between said motor element and said axis, a fuel burner, and fuel and steam pipes connecting said valves and said burner.

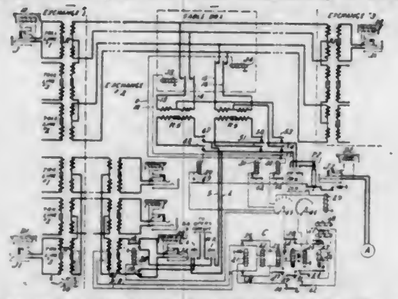
1,761,159. ELECTRIC MOTOR. MILLARD COLE SPENCER, East Orange, N. J., assignor to Crocker-Wheeler Electric Manufacturing Company, Ampere, N. J., a Corporation of New Jersey. Filed Sept. 13, 1928. Serial No. 305,684. 1 Claim. (Cl. 172—278.)



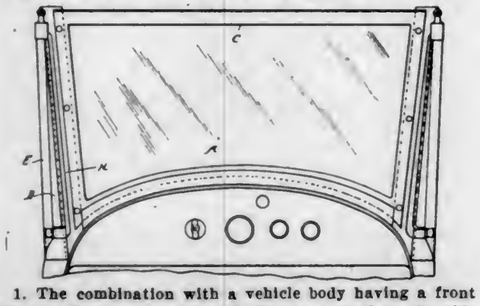
An electric motor comprising a disk rotor, a pair of stator core members each consisting of a main laminated portion with poles having expanded faces at each end and an intermediate separate laminated pole, means for attaching the intermediate pole to the main portion, the core members being disposed on opposite sides of the rotor with the spaces between the poles of each member opposite poles of the other member, formed magnetizing coils surrounding the intermediate poles, and means for supplying alternating current in displaced phase to the coils.

1,761,160. TELEPHONE SYSTEM. VICTOR S. THARP, Elmhurst, Ill., assignor to Reserve Holding Company, Kansas City, Mo., a Corporation of Delaware. Filed Apr. 30, 1927, Serial No. 187,745. Renewed Aug. 30, 1929. 29 Claims. (Cl. 179—41.)

19. In a telephone system, two exchanges, a group of trunks comprising two physical trunks and a phantom trunk superimposed thereon connecting said exchanges and terminating in an operator's switchboard at each exchange, a branch of said phantom trunk terminating in an automatic switch at one exchange, and means at the other exchange for controlling the operation of said switch over said physical trunks in series.

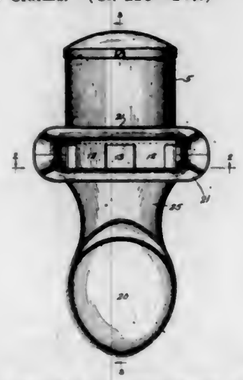


1,761,161. WINDSHIELD. HORACE T. THOMAS, Lansing, Mich., assignor to Reo Motor Car Company, Lansing, Mich., a Corporation of Michigan. Filed Jan. 18, 1926. Serial No. 82,099. 8 Claims. (Cl. 296—84.)



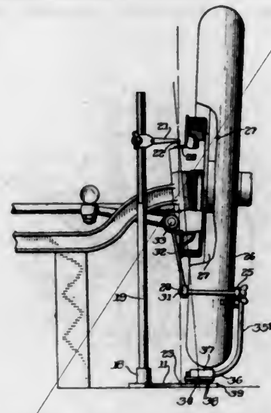
1. The combination with a vehicle body having a front windshield, of a separate side frame secured to the side body in fixed spaced relation to said front shield, the said side frame being provided with a laterally extending shield engaging the front windshield and a transparent panel pivotally attached to the rear edge of said side frame and angularly adjustable with relation to said front shield.

1,761,162. VEHICLE SIREN. CHRISTIAN A. VOLF, Jr., Brooklyn, N. Y. Filed June 30, 1928. Serial No. 289,466. 19 Claims. (Cl. 116—147.)



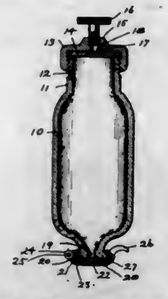
1. A siren, comprising in combination a vertically disposed casing, a motor in the upper part of the casing, an air intake in the lower part of the casing, and a sounding horn at an intermediate part of the casing, on a different level from the air intake.

1,761,163. KING-PIN TESTING APPLIANCE. IRA A. WEAVER, Springfield, Ill., assignor to Weaver Manufacturing Company, Springfield, Ill., a Corporation of Illinois. Filed July 13, 1929. Serial No. 378,008. 8 Claims. (Cl. 234—1.)



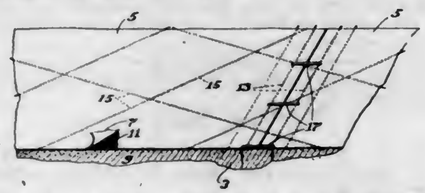
1. In a vehicle-wheel king-pin testing appliance, the combination of marking means and means to cause said marking means to turn with the wheel around the axis of the king-pin, whereby the prolongation of said axis may be determined by the marking effected by said marking means.

1,761,164. DISPENSING BOTTLE. ONNOLEE MAGEE WILSON, Wilton, Conn. Filed Mar. 12, 1929. Serial No. 346,304. 2 Claims. (Cl. 221—1.)



1. A dispensing bottle, comprising a container formed with a discharge opening on one end, an air tight cap secured on the other end, a valve in said cap for admitting air as desired, and a drip cover secured to the lower end of said container.

1,761,165. ROAD AND WALK CONSTRUCTION. HARRY E. WINCH, Medway, Mass., assignor, by mesne assignments, to The Ruberoid Co., Boundbrook, N. J., a Corporation of New Jersey. Filed June 8, 1928. Serial No. 283,803. 3 Claims. (Cl. 94—7.)



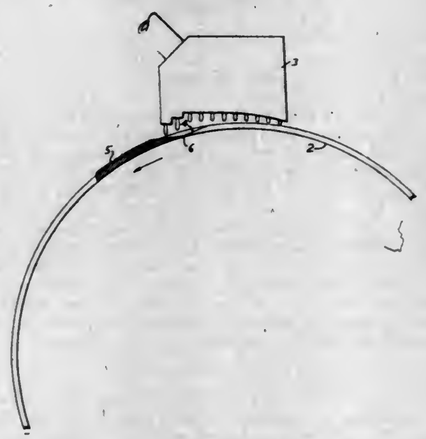
1. Road and walk construction built of a plurality of layers comprising a layer formed of sheets of paper having an asphaltum layer between the paper sheets and reinforcing filaments embedded in the asphaltum layer, and a layer of construction material spread over the paper-and-asphaltum layer.

1,761,166. TRESTLE UNLOADING APPARATUS. HENRY ADAMS, Plainfield, N. J., assignor to Adams Coal Machinery Company, Plainfield, N. J., a Corporation of Connecticut. Filed Sept. 28, 1928. Serial No. 308,994. 3 Claims. (Cl. 198—4.)



1. In combination, a raised track adapted to receive a car thereon having hoppers in the lower part thereof, said hoppers having doors; an elongated plate longitudinally slidably mounted under said hoppers almost in contact therewith upon which the material may pile to be stopped by the plate; an inclined chute under said plate adapted to receive material when said plate is longitudinally drawn away to permit the end of the plate to pass gradually from under the hopper; said chute comprising a rear wall and side walls extending to near the level of the plate; and a chute floor inclined at an angle very slightly steeper than the angle of repose of said material on the floor of the chute and less than the angle of repose of the material on itself and resting on the ground, whereby the material may flow down the inclined chute until it reaches the ground, whereupon the material will pile up to the level of the plate; means in the chute for retarding the flow of material therein, thereby to retard the material flowing from the hopper to prevent any fall of the material at any part of its flow; whereby the material may form a pile from the ground to the plate, and the plate be advanced to pile material upon the forward part of the pile.

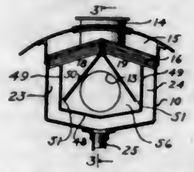
1,761,167. METHOD OF WELDING. JAMES L. ANDERSON, Tenafly, N. J., assignor to Air Reduction Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Jan. 18, 1928. Serial No. 246,451. 1 Claim. (Cl. 113—112.)



The method of autogenously welding a seam involving the opposed edges of sheet metal parts, which comprises

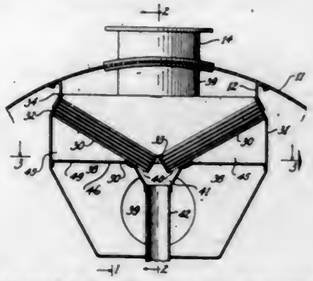
bringing to fusion and fusing the edges by means of a series of preheating and welding flames while the work and the flames are relatively moved at fixed distance in one direction at uniform speed, causing the welding flame or flames to act upon a surface which continually slopes downward toward the congealed weld, thereby progressively producing a cavity the molten metal from which is transferred rearwardly under control of surface tension and the force of gravity, and governing the contour of the weld by the degree of inclination of the slope at the region where the metal of the edges is thoroughly fused.

1,761,168. FLUID SEPARATOR. ROGER W. ANDREWS, Pittsburgh, Pa., assignor, by mesne assignments, to Blaw-Knox Company, Blawnox, Pa., a Corporation of New Jersey. Filed Apr. 19, 1926. Serial No. 102,886. 16 Claims. (Cl. 183—75.)



1. A fluid separator comprising a middle casing having means in its top for purifying the fluid, and an inner casing comprising a steam tight wall mounted beneath said means and extending longitudinally within the middle casing, said wall being inclined downwardly and outwardly toward the sides of said casing from the central portion of said means, the lower edges of the wall being spaced from the walls of the middle casing.

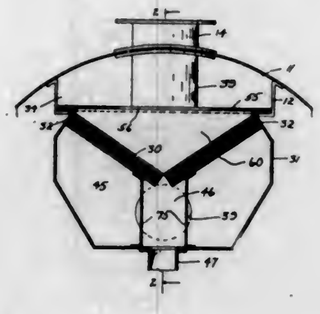
1,761,169. FLUID SEPARATOR. ROGER W. ANDREWS, Pittsburgh, Pa., assignor, by mesne assignments, to Blaw-Knox Company, Blawnox, Pa., a Corporation of New Jersey. Filed Jan. 27, 1927. Serial No. 163,909. 14 Claims. (Cl. 183—106.)



1. A fluid separator comprising an elongated casing, a plurality of elongated baffles mounted in the upper portion of said casing, said baffles extending inwardly and downwardly from the upper portion of one side wall of said casing, a gas chamber in said separator being formed in part by said side wall thereof and the adjacent baffles, a liquid outlet in said separator beneath the inner ends of said baffles, said separator having a gas outlet communicating with said gas chamber, and a partition in said gas chamber between said baffles and said gas outlet extending substantially from one end to the other of the separator, and a slot in said partition extending longitudinally from adjacent one end of the partition to the other.

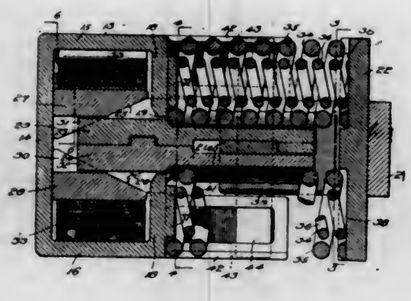
1,761,170. FLUID SEPARATOR. ROGER W. ANDREWS, Pittsburgh, Pa., assignor to Blaw-Knox Company, Blawnox, Pa., a Corporation of New Jersey. Filed Sept. 17, 1927. Serial No. 220,103. 4 Claims. (Cl. 183—111.)

1. A steam separator comprising a casing, baffles mounted in the upper portion of said casing, said casing having a steam and a water chamber mounted beneath said baffles, one side of each chamber being formed by said baffles, said casing having a steam outlet and a water outlet, said steam chamber communicating with said steam outlet, said water chamber communicating with said water outlet, and means mounted over said steam chamber for distributing



the flow of steam to said baffles, said distributing means comprising means for relatively increasing the steam flow at points remote from said steam outlet more than at points nearer said outlet, said means comprising plates mounted over said baffles, the inner adjacent edges thereof being spaced apart.

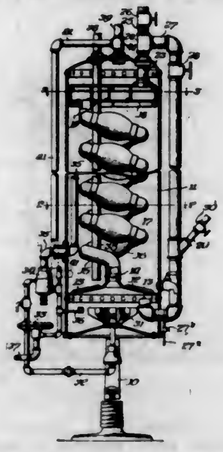
1,761,171. DRAFT RIGGING. DONALD S. BARROWS, Rochester, N. Y., assignor to The Gould Coupler Company, New York, N. Y., a Corporation of Maryland. Filed June 15, 1926. Serial No. 116,186. 16 Claims. (Cl. 213—30.)



1. In a draft gear, in combination, a housing, a wedge block movable inwardly of said housing, friction blocks movable laterally in said housing by said wedge block, springs in said housing laterally compressible by said friction blocks, a follower, and other springs longitudinally positioned between said housing and follower, disposed on either side of said wedge block, and compressible a predetermined amount before the follower engages said wedge block.

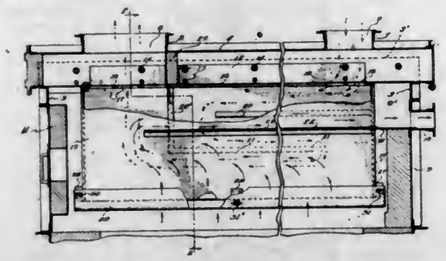
1,761,172. WATER HEATER. JOHN D. BETTS, Chicago, Ill. Filed May 12, 1927. Serial No. 190,735. 4 Claims. (Cl. 122—156.)

1. A water heater comprising in combination, a shell having water inlet means and water outlet means, a burner, a burner plate having an opening therein, a coil in said shell extending longitudinally thereof composed of curved



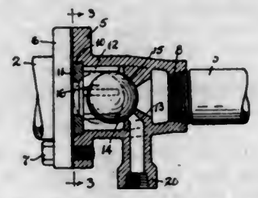
sections and bulbous sections alternately placed with relation to each other, a heat trap, baffles in said heat trap, and an outlet pipe connected to said heat trap.

1,761,173. SHEET-METAL AIR HEATER. GUSTAVE BLUEMEL, Chicago, Ill., assignor of one-half to Drying Systems, Inc., Chicago, Ill., a Corporation of Illinois. Filed Nov. 7, 1928. Serial No. 317,835. 8 Claims. (Cl. 257—240.)



1. In a heat interchanger comprising a substantially enclosed casing, a plurality of air tubes suspended in said casing, brackets on the bottom portions of the end of said tubes, a shoe enclosing the bottom portions of said tubes, and a rod at each end of said tubes extending through registered apertures in said brackets and shoes.

1,761,174. AUTOMATIC AIR-ESCAPE VALVE FOR SAND-BLAST PRESSURE TANKS. GEORGE A. BOESGER, Cleveland, Ohio, assignor to The W. W. Sly Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed Apr. 11, 1927. Serial No. 182,758. 12 Claims. (Cl. 51—12.)



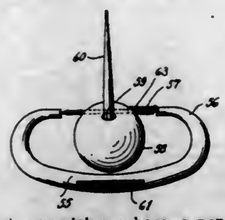
1. In sand blast tank mechanism, the combination of a pressure tank, a main valve for controlling the pressure in said tank, a connecting air pipe from said valve to said tank, and an automatic release valve mounted in said air pipe and provided with an air escape opening to the atmosphere, said valve being adapted to open said air escape automatically upon movement of said main valve to its tank pressure releasing position.

1,761,175. ELECTRIC DISCHARGE DEVICE. CORNELIS BOL, Eindhoven, and JOHANNES JACQUES NUMANS, Hilversum, Netherlands, assignors to Radio Corporation of America, a Corporation of Delaware. Filed Mar. 15, 1928, Serial No. 261,833, and in the Netherlands Mar. 10, 1927. 2 Claims. (Cl. 250—27.5.)



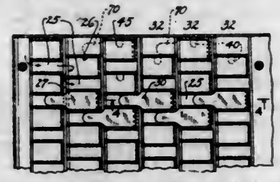
1. A lead-in structure for an electric discharge device comprising a lead, a member having relatively high hysteresis losses encircling said lead and sealed at one end to a glass wall of the discharge device, a second member having relatively low hysteresis losses and having a high thermal conductivity between said first member and said lead, and a screen between said first member and said lead attached to said second member.

1,761,176. PEN SUPPORTER. GRANT D. BRADSHAW, Pittsburgh, Pa. Filed Dec. 10, 1926. Serial No. 153,755. 1 Claim. (Cl. 120—108.)



A pen support comprising a base, a pen socket mounted on said base for relative angular movement, and means tending to return said socket to its original position when it is moved relative to said base, said means comprising a spring.

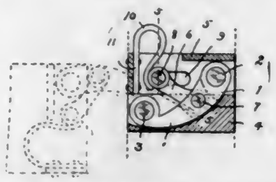
1,761,177. FLUID SEPARATOR. GRANT D. BRADSHAW, Beaver, and ROGER W. ANDREWS, Wilkinsburg, Pa., assignors, by mesne assignments, to Blaw-Knox Company, Blawnox, Pa., a Corporation of New Jersey. Filed Feb. 11, 1927. Serial No. 167,571. 4 Claims. (Cl. 183—109.)



3. A steam separator comprising a bank of baffles, said bank comprising rows of individual elongated baffles, a

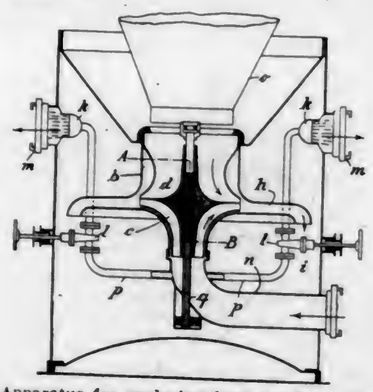
metal strap positioned along the ends of the baffles of each of said rows, means connecting each of said baffles to said strap, flanges projecting angularly from each edge of each strap and clasping the end of each baffle, said rows being assembled with said flanges maintaining them in proper spaced relations, and means projecting from each row into an adjacent row for maintaining the baffles in each row properly staggered relative to the baffles of the adjacent rows.

1,761,178. HINGE. WILLIAM R. BREWER, Duluth, Minn. Filed Nov. 25, 1927. Serial No. 235,530. 1 Claim. (Cl. 16—164.)



A blind hinge for pivotally uniting two members having abutting faces and opposed recesses one within each face, comprising a single major supporting element pivoted at its opposite ends one within each recess, a biasing link pivoted at one end to the major arm intermediate of its ends and at its opposite end slidably pivotally united within one of the recesses and biased against closed relation of the hinged members by resilient means.

1,761,179. APPARATUS FOR PRODUCING FOAM FOR FIRE-EXTINGUISHING PURPOSES. HANS BURMEISTER, Berlin, Germany, assignor to Pyrene-Minimax Corporation, a Corporation of Delaware. Filed Oct. 12, 1927, Serial No. 225,707, and in Germany Oct. 27, 1926. 6 Claims. (Cl. 169—15.)



1. Apparatus for producing foam for fire extinguishing purposes comprising in combination a mixing chamber, a supply chamber for foam forming chemicals, a centrifugal feeding device for feeding chemicals from said supply chamber to said mixing chamber, a turbine connected directly to said centrifugal feeding device, and discharging to said mixing chamber, and an inlet for conducting water to said turbine for actuating the same, substantially as described.

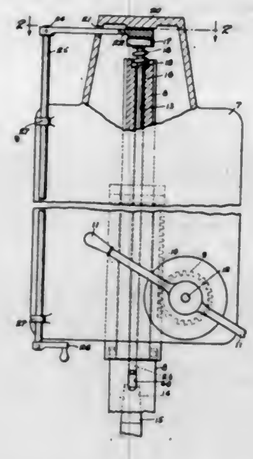
1,761,180. CLEANING TOOL. HENRY CAVE, Hartford, and CURTISS F. SMITH, West Hartford, Conn., assignors to The Fuller Brush Company, Hartford, Conn., a Corporation of Connecticut. Filed Sept. 23, 1927. Serial No. 221,575. 16 Claims. (Cl. 15—117.)

1. A cleaning tool comprising a brush including a frame, clamp plates oppositely located one with respect to the other, one plate having open ended grooves at opposite sides to receive opposite sides of said frame and the other plate being located in engagement with the first plate



between said grooves to clamp opposite sides of said grooves, and means for securing said plates to effect said clamping.

1,761,181. TOOL-DISLODGING DEVICE. NORMAN B. CHACE, Cincinnati, Ohio, assignor to The Fosdick Machine Tool Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Nov. 12, 1927. Serial No. 232,909. 7 Claims. (Cl. 77—5.)

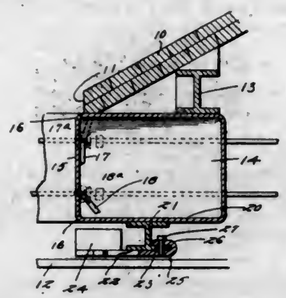


1. In a device of the class described, the combination with a spindle support means, of a hollow spindle reciprocally mounted on the support means, a chuck at one end of the spindle adapted to receive and frictionally hold a tool in alignment with the bore of the spindle, a longitudinal ram reciprocable in the bore of the spindle and adapted for abutting the tool, and a movable abutting means disposed above the ram and adapted to be selectively moved into and out of alignment with the ram, whereby upward movement of the spindle may cause the ram to strike the movable abutting means and impart to the ram a relatively downward movement for striking and dislodging the tool from the chuck.

1,761,182. TWYER. WILLIAM G. CROTHERS, Oakfield, N. Y. Filed May 29, 1928. Serial No. 281,579. 4 Claims. (Cl. 110—72.)

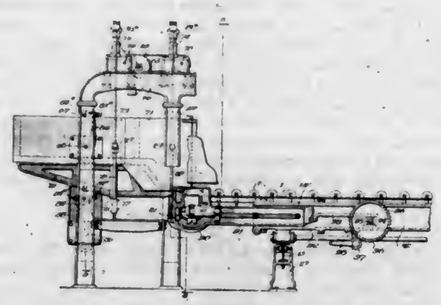
1. A twyer for furnaces of the character described comprising a hollow body having at the upper and lower

edges of one wall thereof a series of openings, independent dampers within the twyer body and mounted on the inner



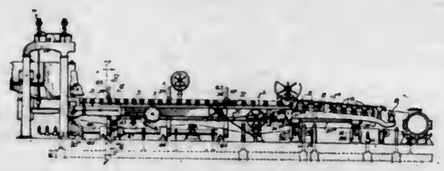
wall thereof controlling the discharge of air through each series of said openings, and means for constantly supplying air to the hollow body.

1,761,183. FOURDRINIER PAPER MACHINE. ALONZO ALDRICH, Chicago, Ill. Filed July 2, 1923, Serial No. 648,960. Renewed Jan. 31, 1927. 39 Claims. (Cl. 92—44.)



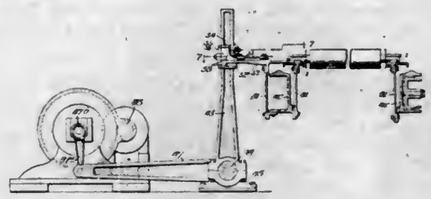
1. A Fourdrinier machine having a laterally removable and vertically adjustable table, means for removing the table and adjusting means for vertically adjusting the feed end of the table, said means being detachably connected with the table and comprising vertically adjustable members and means for elevating and lowering the same, said means comprising yokes having connections with the table and vertically adjustable plungers for raising and lowering said yokes.

1,761,184. FOURDRINIER PAPER MACHINE. ALONZO ALDRICH, Beloit, Wis. Filed July 2, 1923. Serial No. 648,961. 21 Claims. (Cl. 92—45.)



1. A Fourdrinier machine having a laterally removable, shakable and vertically adjustable table combined with power means for shaking the table adapted to permit the removal and vertical adjustment of the table.

1,761,185. SHAKING MECHANISM FOR FOURDRINIER MACHINES. ALONZO ALDRICH, Beloit, Wis. Filed July 2, 1923. Serial No. 648,962. 40 Claims. (Cl. 92—45.)

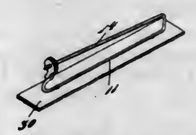


1. Shaking means for a Fourdrinier machine comprising means for imparting a vibratory motion to the machine table and adapted to permit the lateral removal of the portion of the table which is shaken and the vertical adjustment of the same.

1,761,186. PROCESS OF TREATING FERROUS METAL ARTICLES. MARLIN C. BAKER and WILBERT A. DINGMAN, Detroit, Mich., assignors, by mesne assignments, to Parker Rust Proof Company, Detroit, Mich., a Corporation of Michigan. Filed June 30, 1928. Serial No. 289,613. 4 Claims. (Cl. 148—7.)

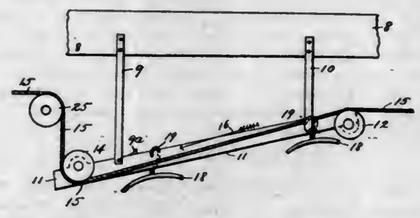
1. The process of treating articles having surfaces of ferrous metal, which comprises heating said articles to a temperature of about 500° to 550° F., immersing the heated articles in a rust-proofing solution, then removing said articles from said solution and baking at a temperature of about 325° to 450° F.

1,761,187. COMBINED PIN STEM, JOINT, AND CATCH. FREDERICK A. BALLOU, Jr., Providence, R. I., assignor to B. A. Ballou & Co., Inc., Providence, R. I., a Corporation of Rhode Island. Filed Feb. 23, 1929. Serial No. 342,150. 6 Claims. (Cl. 24—157.)



1. A device of the safety pin type of construction having an integral pin stem and catch, a rotatable keeper and means to rotatably mount said keeper with its axis substantially that of the pin stem in locked position in said catch to releasably secure said pin stem therein.

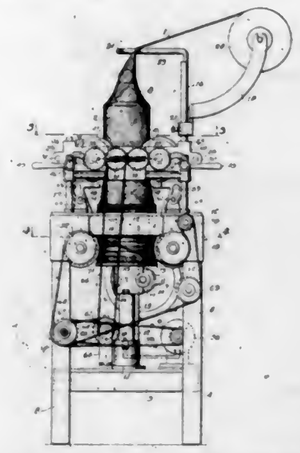
1,761,188. AUTOMATIC DUMP FOR CARRIER SYSTEMS. L. B. HENRY BIXLER and WILLIAM L. BIXLER, Fresno, Calif. Filed Feb. 3, 1928. Serial No. 251,710. 2 Claims. (Cl. 198—28.)



1. In combination with a carrier system having an endless moving rope and means for supporting the load to be carried consisting of a plain open hook adapted to

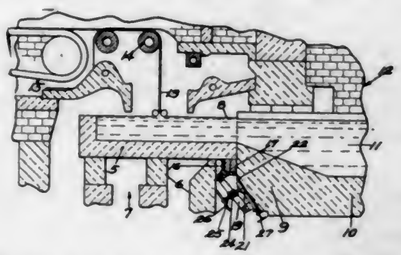
loosely engage the rope, an automatic dump comprising a fixed bar positioned so that the entire top surface of the bar forms an incline sloping in the direction of the travel of the moving rope, the path of travel of said rope being adjacent to, and diagonally across a side face of the bar from the plane of the top surface of said bar.

1,761,189. MACHINE FOR APPLYING FLEXIBLE CASINGS TO MAGAZINES. MARK O. BRENNAN and GUSTAVE SCHULER, Chicago, Ill., assignors to Swift and Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 23, 1929. Serial No. 341,961. 14 Claims. (Cl. 17—42.)



1. A device of the class described comprising a support for a magazine, mechanism for feeding a flexible tubular casing onto said magazine, and reciprocable means for packing said casing in folds upon said magazine.

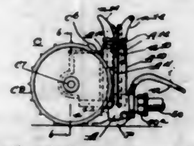
1,761,190. GLASS-TANK FURNACE. WILBUR F. BROWN, Toledo, Ohio, assignor to Libbey-Owens Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Feb. 3, 1927. Serial No. 165,525. 8 Claims. (Cl. 49—17.)



1. A glass tank furnace adapted to contain a mass of molten glass and including a cooling chamber, a draw-pot abutting said cooling chamber, means arranged at the juncture of said draw-pot and cooling chamber for preventing the molten glass from leaking from the furnace at this point, and means for moving said first named means vertically and horizontally to force the same against said draw-pot and cooling chamber.

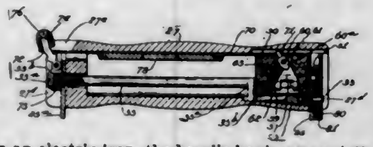
1,761,191. LAWN SPRINKLER. GEORGE BROWNING, Willmette, Ill., assignor to Chicago Flexible Shaft Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 11, 1927. Serial No. 182,675. 10 Claims. (Cl. 299—53.)

1. In a construction for the purpose indicated, in combination with a reel carriage, a reel having a hollow shaft rotatably mounted on the carriage, a water supply pipe terminal positioned on the carriage axially with respect to the reel, a hose pipe wound on the reel having duct connections at the axis of the reel comprising said hollow



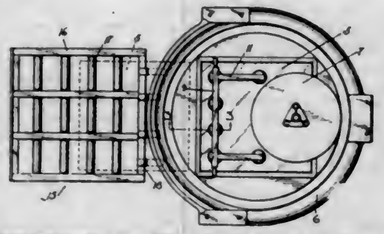
shaft, said connection being made outside the reel at one end of the latter, and a swivel coupling to the water supply terminal at the opposite end of the hollow shaft and outside the opposite end of the reel.

1,761,192. ELECTRIC LAUNDRY IRON. GEORGE BROWNING, Wilmette, Ill., assignor to Chicago Flexible Shaft Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 1, 1927. Serial No. 223,265. 3 Claims. (Cl. 219—25.)



1. In an electric iron, the handle having an axially chambered hand-piece; a switch for controlling the circuit mounted in the chamber of the hand-piece; uprights at whose upper ends, lapped on the hand-piece, the latter is mounted at its front and rear ends; a tie rod extending through the hand-piece secured at its ends to the lapped ends of the uprights; a nut on the front end of the tie rod for securing it to the front upright, and a bracket swivelled on the nut for carrying a switch-operating finger piece, and an operating link extending therefrom in the hand-piece to the switch.

1,761,193. SHEET-GLASS-HANDLING DEVICE. JOSEPH P. CROWLEY, Toledo, Ohio, assignor to Libbey-Owens Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Oct. 9, 1924. Serial No. 742,503. 2 Claims. (Cl. 294—65.)

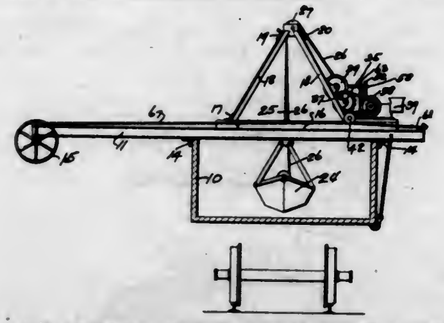


1. Apparatus for handling sheet glass including a substantially U-shaped frame comprising a member substantially the length of the sheets to be handled, arms projecting at substantially right-angles from the member adjacent the opposite ends thereof only, and being disconnected at their outer ends, and a plurality of flexible suction cups carried by the member and arms.

1,761,194. PORTABLE CRANE. ELDRIDGE P. DOUGLASS, Marianna, Ark. Filed Mar. 30, 1928. Serial No. 265,883. 11 Claims. (Cl. 214—44.)

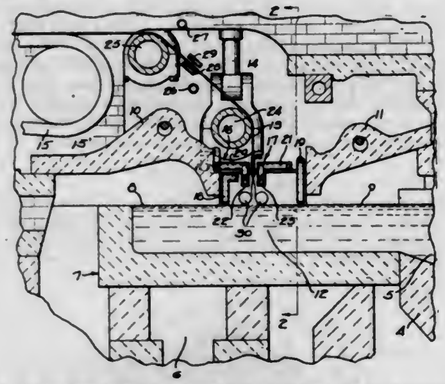
1. In a portable device for unloading open top freight cars, a track-way comprising parallel rails, cross members securing said rails in spaced position, a pair of wheels journalled adjacent one end of said track-way whereby transportation and placing of the opposite end of said track-way on and against a top edge of said car body may be

facilitated, transverse stops adjacent the center portion, and adjacent such opposite end, respectively of said track-way, unloading means adjacent such opposite end, respectively of said track-way, unloading means shiftably mounted on said track-way, latching means carried by said unloading means engageable with said car body, and means for shift-



ing said track-way relatively to said unloading means, whereby said track-way may be shifted upwardly, and transversely across said car body, until said center stop engages said body, and thereafter said unloading means be released from said car and shifted on said track-way to bring the stop end of said track-way downward upon said car body; and latching means for securing said track-way to said car body.

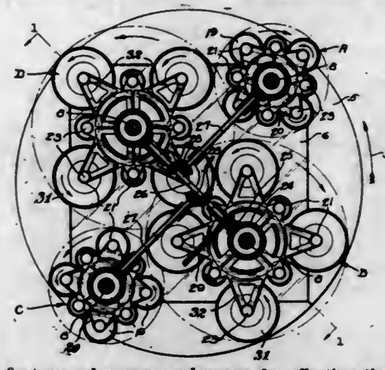
1,761,195. APPARATUS FOR FORMING SHEET GLASS. JOHN L. DRAKE, Toledo, Ohio, assignor to Libbey-Owens Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Feb. 19, 1926. Serial No. 89,266. 6 Claims. (Cl. 49—17.)



1. In sheet glass drawing apparatus, a pot containing molten glass, means for drawing a glass sheet therefrom, a plurality of horizontal and vertical coolers arranged on each side of the glass sheet and cooperating to form a cooled hood-like structure above the portion of the molten glass from which said sheet is drawn for artificially maintaining said portion of molten glass at a relatively low temperature, and means for maintaining a supplying source of molten glass, on each side of said portion of molten glass, at a sustained relatively high temperature.

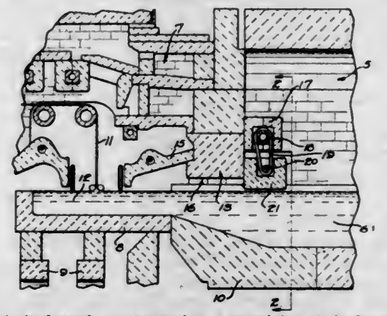
1,761,196. SHEET-GLASS-SURFACING APPARATUS. JOHN L. DRAKE, Toledo, Ohio, assignor to Libbey-Owens Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Feb. 19, 1926. Serial No. 89,267. 5 Claims. (Cl. 51—119.)

1. The combination with a table adapted to support a glass sheet to be surfaced, of a plurality of groups of surfacing members resting upon the glass, a second plurality of groups of surfacing members also resting upon the glass and arranged alternately with the first named groups of surfacing members, the surfacing members of the second named groups being smaller than the surfacing members



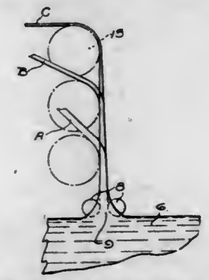
of the first named groups, and means for effecting the rotation of all of said groups, the surfacing members of the second named groups intermeshing with the surfacing members of the first named groups.

1,761,197. GLASS-TANK-FURNACE CONSTRUCTION. JOHN L. DRAKE, Toledo, Ohio, assignor to Libbey-Owens Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Mar. 15, 1926. Serial No. 94,723. 6 Claims. (Cl. 49—54.)



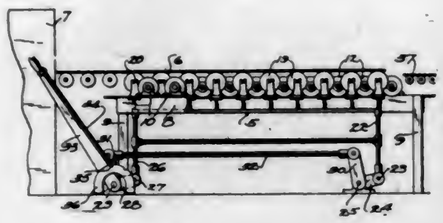
1. A jack-arch construction comprising a body portion adapted to be rigidly mounted in a glass furnace, link members carried by the body, and a slab supported by said links.

1,761,198. PROCESS OF DRAWING SHEET GLASS. JOHN L. DRAKE, Toledo, Ohio, assignor to Libbey-Owens Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed June 21, 1926. Serial No. 117,281. 6 Claims. (Cl. 49—83.1.)



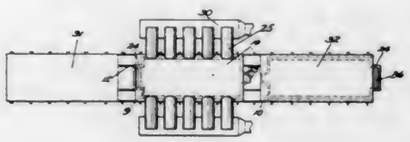
1. The process of producing sheet glass from a mass of molten glass, consisting in drawing a tapered sheet therefrom, and then contacting with and deflecting the sheet at that point which will give the desired thickness.

1,761,199. SHEET-GLASS-HANDLING APPARATUS. JOHN L. DRAKE, Toledo, Ohio, assignor to Libbey-Owens Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Sept. 18, 1926. Serial No. 136,240. 10 Claims. (Cl. 49—48.)



7. In sheet glass handling apparatus, a plurality of idler rollers for supporting a moving ribbon of glass, and a plurality of driven rollers rotatable in the same direction as the idler rollers for carrying away a sheet of glass after it has been cut from the ribbon at a speed relatively greater than the movement of said ribbon.

1,761,200. PROCESS AND APPARATUS FOR PRODUCING SHEET GLASS. JOHN L. DRAKE, Toledo, Ohio, assignor to Libbey-Owens Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Oct. 29, 1927. Serial No. 229,553. 11 Claims. (Cl. 49—54.)



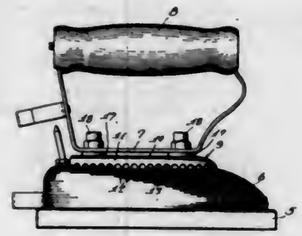
3. In apparatus of the character described, a pair of receptacles, a main cap and a pair of auxiliary caps, one of said receptacles being receivable under the main cap and the other under one of said auxiliary caps, heating means associated with the main cap for producing a mass of molten glass in the receptacle thereunder, means for forming a sheet from molten glass contained within the receptacle under the auxiliary cap, and means by which the relative positions of said receptacles may be changed at predetermined intervals.

1,761,201. TRIFOCAL LENS. PAUL ECKLEY, Walnut Creek, Calif. Original application filed May 6, 1925, Serial No. 28,348. Divided and this application filed Nov. 14, 1927. Serial No. 233,208. 6 Claims. (Cl. 88—54.)



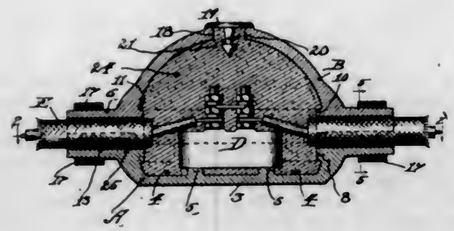
1. The method of making a glass lens which comprises forming a depression in a base glass of a certain index of refraction, inserting a glass of another index of refraction in said depression, said insert having an annular junction surface for cooperation with an annular junction surface formed around the periphery of the depression in the base glass to provide an area of intermediate focal length between the base glass and the insert, permanently securing said glasses together and finally forming and shaping a finished lens.

1,761,202. FLATIRON. CHARLES ENDORF, Chicago, Ill. Filed Feb. 17, 1927. Serial No. 168,878. 3 Claims. (Cl. 68—26.)



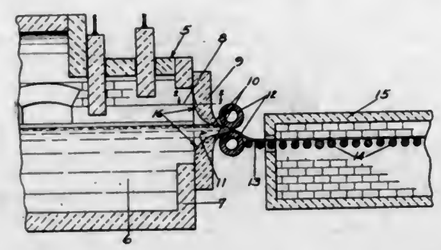
1. In a flatiron, a base plate having a plurality of threaded studs mounted thereon, a pressure plate mounted on said base plate and having openings therein adapted to receive said studs, means co-operable with said studs and said pressure plate for securing said plates together, a ventilating plate adapted to cover said securing means and having openings therein adapted to receive said studs, said veltilating plate being spaced from said pressure plate and having a serrated marginal flange portion extending downwardly toward said pressure plate to engage the top of said pressure plate and form a chamber open to the circulation of air between said ventilating plate and said pressure plate, a handle having openings adapted to receive said studs, a plurality of hollow bosses formed on said ventilating plate adjacent said studs and adapted to receive said pressure plate securing means and to space said handle from said ventilating plate, and means co-operable with said studs for securing said handle and ventilating plate to said pressure plate and said pressure plate securing means.

1,761,203. JUNCTION BOX. MORRIS J. FOX, Downers Grove, Ill., assignor to The Railroad Supply Company, Chicago, Ill., a Corporation of Illinois. Filed May 13, 1927. Serial No. 191,011. 7 Claims. (Cl. 247—18.)



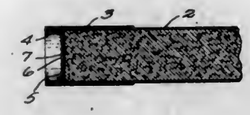
7. A parkway cable junction housing comprising a dished bottom section, a cupped cover section having a sealing compound receiving opening at top, both sections having inner walls sloping toward the juncture of the sections and each provided on the interior with an offset surface extending into a plane removed from the main wall of the section and to be embedded in the sealing compound and thereby lock the sections together, both sections being provided with complementary channeled lobes extending outwardly therefrom to provide cable receiving necks.

1,761,204. PROCESS AND APPARATUS FOR PRODUCING SHEET GLASS. FRANK FRASER, Toledo, Ohio, assignor to Libbey-Owens Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Dec. 17, 1926. Serial No. 155,402. 20 Claims. (Cl. 49—33.)



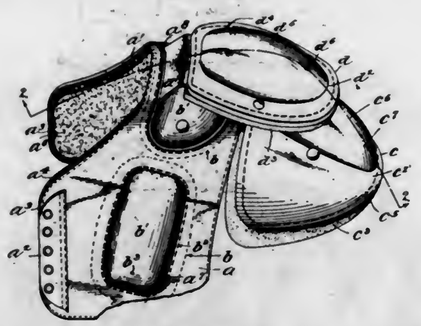
1. In sheet glass apparatus, a tank furnace for supplying a stream of molten glass to sheet forming means, including a slotted member so constructed that the central portion of the stream will contact therewith a longer period than will the border portions as said stream flows from the tank.

1,761,205. CIGARETTE MOUTHPIECE. JOHN W. GIBSON, Oakland, Calif. Filed Mar. 28, 1928. Serial No. 265,311. 2 Claims. (Cl. 131—52.)



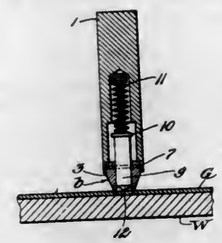
1. In combination with a cigarette, a mouthpiece comprising a tubular body member for receiving therein the end of a cigarette, a thimble within the tubular body member having a perforation in the bottom thereof and a fabricated strainer lying over the perforation.

1,761,206. SHOULDER PAD. FRED GLAHE, Chicago, Ill., assignor to A. G. Spalding & Bros., New York, N. Y., a Corporation of New Jersey. Filed Aug. 14, 1929. Serial No. 385,866. 6 Claims. (Cl. 2—2.)



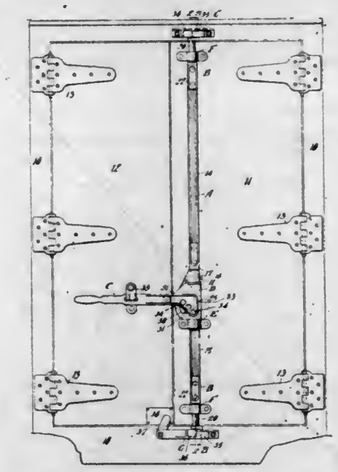
1. A protective device of the character described comprising an outer portion of relatively non-rigid material having apertures at desired points, cup-shaped portions of relatively rigid and fluid tight material in the apertures, a relatively flexible and fluid tight inner portion, and means to secure the inner portion to the periphery of the cup-shaped portion, and spaced therefrom to form an air pocket between the portions.

1,761,207. PUNCH. AUGUSTUS E. GUERTIN, Belmont, Mass. Filed July 26, 1928. Serial No. 295,487. 1 Claim. (Cl. 164—119.)



A hand punch comprising a body member consisting of a bar of metal made interiorly with a chamber that extends to one end of said body, said chamber being formed to provide an annular shoulder adjacent said end and to provide an annular groove between said shoulder and said end; a cutter annulus having a body portion fitting telescopically within the outer end portion of said chamber and against said shoulder, said body portion being made upon its exterior with an annular groove registering with the groove within the chamber, and a resilient split ring loosely and permanently occupying the groove of the cutter annulus and removably confined within the groove of the chamber to separably hold the cutter annulus within the body member, a pilot-ejector plunger slidably mounted within said cutter annulus and provided at its inner end with a head engaging said annulus to limit its outward movement, and a spring within said chamber yieldingly holding said plunger at the limit of its outward movement with its outer end portion projecting beyond said cutter annulus.

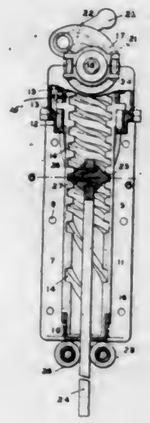
1,761,208. DOOR-OPERATING MECHANISM. STACY B. HASELTINE, Chicago, Ill., assignor, by mesne assignments, to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed Feb. 18, 1924. Serial No. 693,648. 8 Claims. (Cl. 268—72.)



1. In a door operating mechanism for railway cars, the combination with a car structure having a door opening and provided with a pivoted door for closing said opening; of keepers at opposite sides of the door opening; a rotatable shaft mounted on said door, said shaft being provided with eccentric actuating means at each end adapted to co-act with said keepers and operable to impart pressure to said

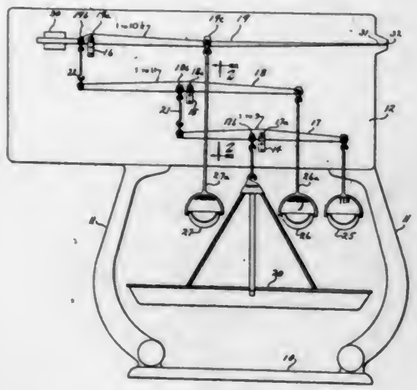
door to positively move the same when said shaft is rotated; and means operable to withdraw said eccentric actuating means to a position within the boundaries of the door, said means being at all times operable, whereby said eccentric means will be positioned to clear a platform or the like in any position of the door.

1,761,209. HAND BRAKE. LOUIS A. HORRA, St. Louis, Mo., assignor to Railway Devices Company, St. Louis, Mo., a Corporation of Missouri. Filed Nov. 24, 1928. Serial No. 321,562. 10 Claims. (Cl. 74—120.)



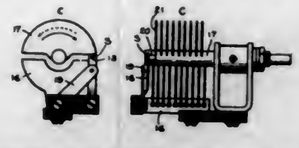
4. In a device of the class described, the combination with a rotary tubular member provided with an internal thread of varying pitch, a bar provided with a nut comprising two parts having relative pivotal movement, and a brake connection actuated by said bar.

1,761,210. COUNTING SCALE. LOUIS JAENICHEN, Springfield Township, Oakland County, Mich., assignor to The Standard Computing Scale Company, Detroit, Mich., a Corporation of Michigan. Filed July 8, 1926. Serial No. 121,121. 5 Claims. (Cl. 265—33.)



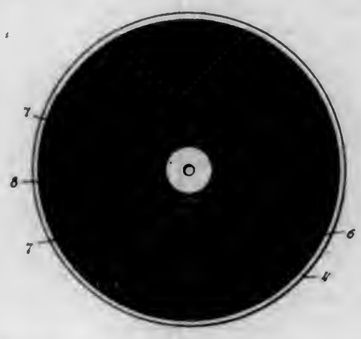
1. A counting scale consisting of a scale pan supported by a plurality of levers in series relation, each of said levers having a free arm carrying a weight pan, the weighing arms of each being so proportioned that a single unit in one of said weight pans will balance a predetermined number of units in said scale pan.

1,761,211. ANTENNA-TUNING APPARATUS. LESTER L. JONES, Oradell, N. J., and JACOB YOLLES, Brooklyn, N. Y., assignors to Technidyne Corporation, New York, N. Y., a Corporation of New York. Filed Dec. 31, 1927. Serial No. 243,789. 3 Claims. (Cl. 250—40.)



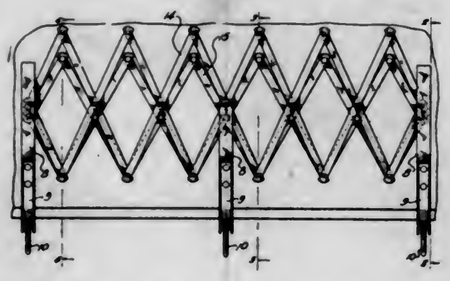
1. An antenna tuning apparatus comprising an inductor and a continuously variable condenser serially arranged in an antenna circuit, the said inductor comprising a plurality of inductance sections and the said condenser including a continuously variable plate set, and means selectively connecting each of the said inductance sections with the said variable condenser, said means being automatically operated by engagement with one of the condenser plates of the variable condenser plate set.

1,761,212. PHONOGRAPH RECORD AND METHOD OF TREATING SAME. RUDOLPH KNOPP, Brooklyn, N. Y. Filed Feb. 2, 1928. Serial No. 251,318. 1 Claim. (Cl. 274—41.)



A phonograph record having a phonic groove, and a guide groove, the latter groove intersecting said phonic groove to by-pass a stylus across a portion thereof at an intermediate interval in the playing of the record, the end of said guide groove first engaged by the stylus being closer to the outer convolution of the record groove than the opposite end thereof.

1,761,213. LUGGAGE CARRIER. WILLIAM KOECK, Oshkosh, Wis. Filed Oct. 27, 1927. Serial No. 229,124. 1 Claim. (Cl. 224—29.)



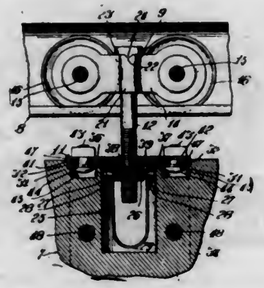
A luggage carrier comprising a plurality of outer L-shaped standards having perforations in the lower portions thereof, a plurality of inner L-shaped standards having perforations in the lower portions thereof, means for securing the outer standards to the inner standards at any of the perforated points, connecting bars having perforations therein pivotally connected at one end to the inner end standards, connecting bars having perforations therein pivotally connected at one end to the outer end standards, removable means for connecting said bars at any of the perforated points, an outer rack of the lazy tong type having a portion pivoted to each of the outer standards, an inner rack of the lazy tong type having a portion pivoted to each of the inner standards, L-shaped clamping arms each having one end secured to one of the outer standards, and means in the lower portions of the clamping arms for clampingly engaging the running board of an automobile between the lower portions of the standards and the lower portions of the clamping arms.

1,761,214. LUGGAGE CARRIER. WILLIAM KOECK, Oshkosh, Wis. Filed Aug. 6, 1928. Serial No. 297,656. 4 Claims. (Cl. 224—29.)



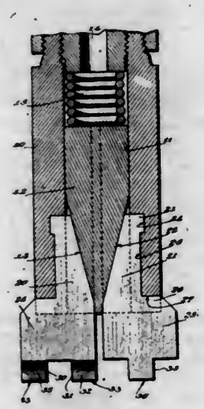
1. A foldable luggage carrier comprising a lower horizontal bar, an upper horizontal bar, U-shaped in cross section, a pair of end links and a pair of intermediate links pivotally connecting said bars together in spaced apart relation, said links each being formed in two pivoted together sections, an intermediate horizontal bar pivoted at one end to one of the end links and at its other end to the adjacent intermediate link at the point where the two sections of said links are pivoted together, a second intermediate horizontal bar pivotally connected at one end to the last mentioned intermediate link and to the first mentioned intermediate horizontal bar and having its other end formed with a pin, a third intermediate horizontal bar pivotally connected to the other end link and to the other intermediate link at the point where the two sections of said links are pivoted together and having an end extending beyond said intermediate link and formed with a slotted opening for engagement with the pin on the second mentioned intermediate horizontal bar when the carrier is in raised position and adjustable means for bracing the carrier when raised at any one of several predetermined heights.

1,761,215. DOOR HANGER. FRANCIS A. LAMM, Afton, Okla., assignor to Richards-Wilcox Manufacturing Company, Aurora, Ill., a Corporation of Illinois. Filed Apr. 22, 1926. Serial No. 103,795. 13 Claims. (Cl. 16—105.)



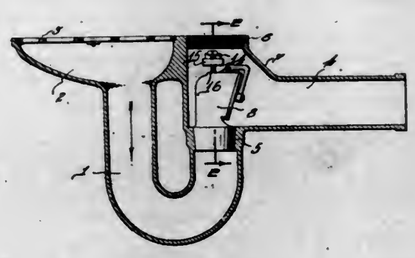
1. In a door hanger of the class described, the combination of a roller carriage for traveling along an overhead rail, a suspension bolt depending therefrom, a yoke member adapted to be recessed in the upper edge of the door, a nut threading over said bolt and having pivotal mounting in said yoke for rocking movement, and a U-shaped structure secured to the sides of the door and comprising a portion extending across the top of said yoke member.

1,761,216. ROTARY DRILL. JOHN E. LE BUS, Electra, Tex., assignor, by mesne assignments, to O'Donohoe Detachable Blade Drilling Bit Company, Wichita Falls, Tex., a Corporation. Filed Aug. 27, 1928. Serial No. 302,247. 1 Claim. (Cl. 255—61.)



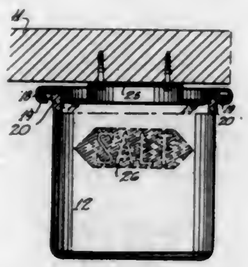
In a drill, a hollow body having axial sockets provided with lateral parts on its interior and each spaced inwardly from the periphery of the body so as to completely close the outer parts of the sockets and said lateral parts thereof, said body also having its bottom edge formed with axial cut-outs in register with the sockets, blades in the sockets having keys received in the lateral parts of the sockets and having shouldered parts engaged in the cutouts and with the end walls formed by the cut-outs, said blades having downwardly and inwardly tapered inner side edges, a mandrel in the body having a tapered part engaging the tapered edges of the blades, and means to hold the mandrel engaged with said blades.

1,761,217. BACK-WATER TRAP. STANLEY LUKOMSKI, Detroit, Mich. Filed Nov. 17, 1928. Serial No. 320,044. 2 Claims. (Cl. 182—15.)



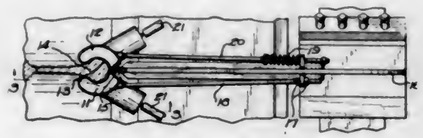
1. A back water trap comprising a body adapted to convey fluid and having a seat formed in the passage thereof, a check valve body fitted in said seat, a pair of lugs formed on the inner walls of said first named body above said seat, a bar engageable beneath said lugs, and a screw threaded through said bar and adapted to bear upon said check valve body.

1,761,218. JAR HOLDER. BEVERLY A. LUNDY, Larchmont, and SAMUEL P. HULL, Yonkers, N. Y. Filed Apr. 18, 1927. Serial No. 184,803. 1 Claim. (Cl. 248—65.)



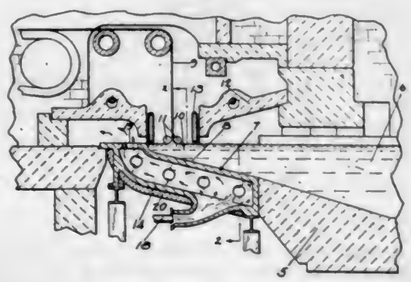
In a jar holder as described, the combination, a shelf, a disc secured to the underside of said shelf having a cylindrical projection and hooks extending from its edges, a rubber gasket placed around said projection, cleats formed integral with said disc for holding said gasket in place and a jar arranged to receive said projection and to engage said gasket at its orifice and having lugs engaging said hooks.

1,761,219. SHEET-GLASS-WIDTH-MAINTAINING DEVICE. LEOPOLD MAMBOURG, Lancaster, Ohio, assignor to Libbey-Owens Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Mar. 5, 1926. Serial No. 92,395. 8 Claims. (Cl. 49—17.)



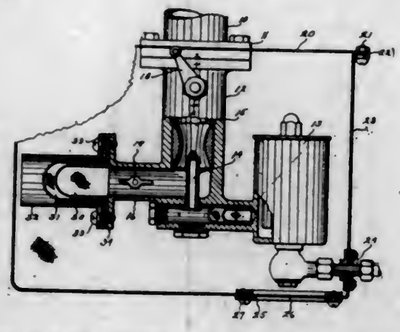
1. In a sheet glass drawing apparatus, means for drawing a sheet from a mass of molten glass, pivotally associated members engaging each of the sheet edges, and means for increasing the temperature of said members.

1,761,220. DRAW POT FOR SHEET-GLASS APPARATUS. LEOPOLD MAMBOURG, Lancaster, Ohio, assignor to Libbey-Owens Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Dec. 9, 1926. Serial No. 153,509. 13 Claims. (Cl. 49—53.)



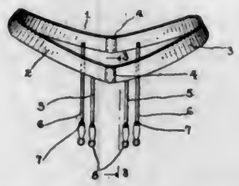
1. In sheet glass apparatus, a draw pot formed from a non-corrosive metal and having compartments therein, and means for heating said compartments.

1,761,221. MEANS FOR REDUCTION OF FIRE HAZARDS IN VEHICLES. KARL F. MARX, Detroit, Mich., assignor to Arthur E. Fixel, Detroit, Mich. Filed July 15, 1927. Serial No. 206,011. 3 Claims. (Cl. 123—142.)



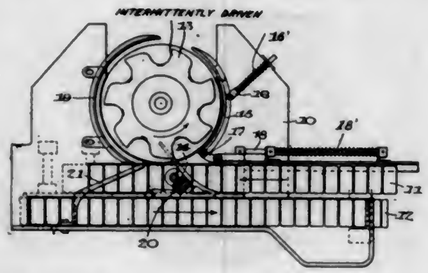
1. An internal combustion engine having a carburetor and an enclosing casing for the latter of finely foraminous metallic material.

1,761,222. SANITARY NAPKIN-SUPPORTING BELT. DULCIE MCCULLOUGH, New York, N. Y. Filed July 16, 1928. Serial No. 292,955. 1 Claim. (Cl. 128—291.)



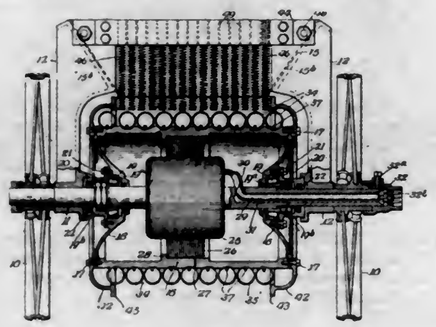
A sanitary napkin supporting belt comprising a belt consisting of two members of elastic material attached together at their ends by fabric strips to form V-shaped dips at the front and rear of the belt, a pair of dependent tapes attached to the belt at the front thereof symmetrically disposed with respect to said dip, and a pair of dependent tapes similarly attached to the belt at the rear thereof, each of said tapes consisting of a narrow strip attached to the belt at its ends to form a dependent loop, and safety pins for attachment to the corners of a sanitary napkin, each of said loops being threaded through the looped end of a safety pin.

1,761,223. AUTOMATIC FEEDER FOR SODA-WATER-BOTTLE FILLERS. GEORGE J. MEYER, PETER G. SHODRON, and OTTO DREHER, Milwaukee, Wis., assignors to Geo. J. Meyer Manufacturing Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed July 2, 1923. Serial No. 649,040. 7 Claims. (Cl. 198—22.)



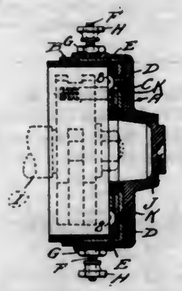
1. In a bottle filler having a star wheel, an incoming conveyer for delivering bottles thereto, a bottle catcher for receiving bottles discharged from the star wheel while they rest on the incoming conveyer, an oppositely traveling outgoing conveyer alongside of the incoming conveyer, and a deflector for transferring the bottles to the outgoing conveyer as they leave the bottle catcher.

1,761,224. SAND CUTTER. WALTER ERVIN NAYLOR, Chicago, Ill., assignor to The Beardsley & Piper Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 4, 1926. Serial No. 152,548. 13 Claims. (Cl. 259—144.)



1. In a sand cutter, the combination of a frame, a shaft non-rotatably held in the frame, a hollow cylinder provided with sand throwing means, and journalled on said shaft, a hopper for delivering sand to the cylinder, and an electric motor for driving the cylinder, comprising an armature on the shaft and fields fixedly secured to the inner periphery of the cylinder, and conductors for the motor extending through one end of the shaft.

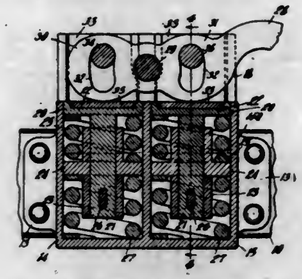
1,761,225. TIMER FOR IGNITION SYSTEMS. EDWARD C. NEWTON, Los Angeles, Calif. Filed Dec. 7, 1926. Serial No. 153,050. 2 Claims. (Cl. 200—24.)



2. A device embodying a flat wall of the class described, comprising a casing of insulating material having fixed metal segments radially positioned therein on a common plane, a reversible commutator adapted to fit within said casing, commutator segments on each side of said commutator, and means for electrically connecting said reversible commutator segments to each of said fixed metal segments.

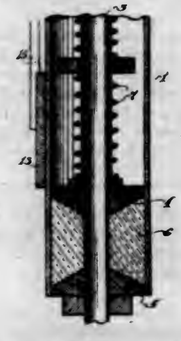
1,761,226. SHOCK-ABSORBING MECHANISM FOR AUTOMOBILES. JOHN F. O'CONNOR, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed Mar. 5, 1927. Serial No. 172,940. 9 Claims. (Cl. 267—8.)

8. In a device of the character described, the combination with the frame member of a vehicle and an axle member of said vehicle; of a housing including a plurality of cylinders secured to said frame member, said housing being provided with extensions having spaced slots therein, said cylinders containing liquid and communicating by means of a port; means for adjusting the size of said port; a piston in each of said cylinders; a lever pivotally connected to said housing adjacent one end and provided with spaced slots arranged at opposite sides of the pivotal



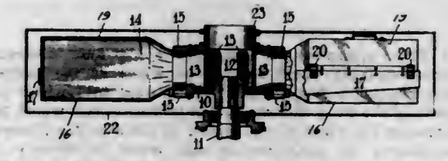
connection of said lever; transmitting members, one of which co-operates with each of said pistons; and elements extending through the slots in said lever, being rotatably connected with said transmitting members, and extending through the slots in the extensions on said housing; and means connecting the free end of said lever with said axle member.

1,761,227. OIL-WELL HEATER. WOODSON C. PARSLEY, Wichita Falls, Tex. Filed Jan. 2, 1929. Serial No. 329,840. 1 Claim. (Cl. 219—33.)



In combination with a string of tubing in an oil well, a casing disposed about said tubing and spaced therefrom and having its upper end closed, a heating unit within said casing, an expansion unit within said casing beneath said heating unit, said expansion unit comprising a pair of spaced conically shaped collars engaging the circumferential wall of the tubing and casing, and heat insulating means disposed between said collars and engaging the circumferential wall of the tubing and casing and filling the space between said walls and said collars.

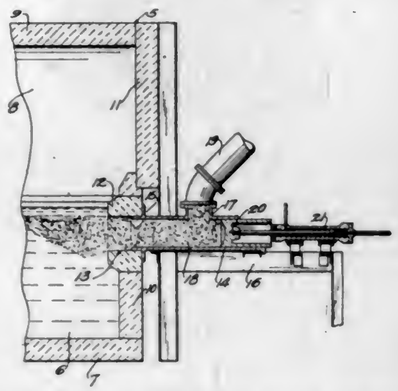
1,761,228. PACKING OF CARBON BLACK. LE ROY ELLSWORTH PECK, Riverton, Wyo., assignor to Columbian Carbon Company, New York, N. Y., a Corporation of Delaware. Filed June 25, 1928. Serial No. 288,266. 8 Claims. (Cl. 226—19.)



2. A carbon black packing apparatus including a distributing head mounted for high speed rotation about a

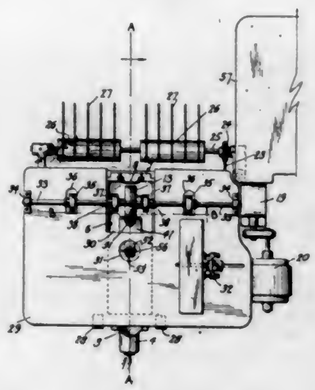
vertical axis and having radially disposed delivery nozzles and an axially disposed inlet, a plurality of frame members secured to said head, a casing carried by each frame member for enclosing and supporting a paper bag, and means for securing the open end of each bag to the corresponding nozzle.

1,761,229. BATCH-FEEDING MECHANISM. INGVALD O. PEDERSEN, Pittsburgh, Pa., assignor to Libbey-Owens Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Oct. 25, 1926. Serial No. 143,817. 2 Claims. (Cl. 49—63.)



2. In combination, a glass melting furnace including a tank, a charge block arranged in one wall of the tank and having an opening therein, and means for forcing a charge of glass batch ingredients through said opening without exposing the interior of the tank to the atmosphere, the inner end of the charge block extending within the tank and beyond the wall with which it is associated.

1,761,230. MACHINE FOR APPLYING ADHESIVE SUBSTANCE TO SHEETS OF MATERIAL. ALFRED PETERSON, Denver, Colo. Filed Oct. 2, 1928. Serial No. 309,800. 5 Claims. (Cl. 91—51.)



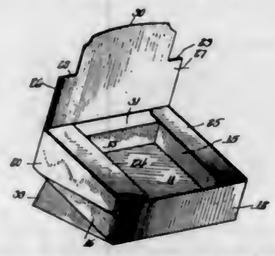
1. In an apparatus for applying strips of fluid to sheets, a fluid applying wheel having the width of the desired strip means for feeding said sheets over said wheel for receiving the fluid therefrom, means beside the wheel for depressing the sheet on either side of the wheel and means for causing the periphery of said wheel to move at a different rate of speed than the sheet being fed thereover, whereby said wheel drags the fluid onto said sheet.

1,761,231. BRAKE. PERCY W. PUMEROY, South Bend, Ind., assignor to The Studebaker Corporation, South Bend, Ind., a Corporation of New Jersey. Filed Aug. 15, 1928. Serial No. 299,807. 7 Claims. (Cl. 188—250.)



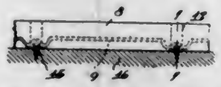
1. A brake shoe having an arcuate pressed metal lining-supporting portion, a U-shaped pressed metal reinforcing portion secured thereto, and a T-shaped cam contact member having its leg telescopically received by said reinforcing member.

1,761,232. DISPLAY BOX. HENRY K. POWELL, Chicago, Ill., assignor to Morris Paper Mills Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 9, 1927. Serial No. 232,027. 8 Claims. (Cl. 206—44.)



1. In combination, a folded box having side members and a box supporting element, said element having portions located between the box side members and a portion joined to the lower edges of the side portions and underlying the box bottom.

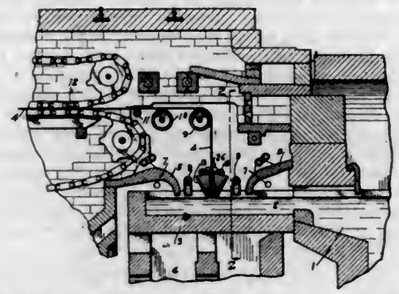
1,761,233. BUFFER. DE FOREST ROE, Shaker Heights, Ohio, assignor to The Colson Company, Elyria, Ohio, a Corporation of Ohio. Filed Sept. 11, 1926. Serial No. 134,842. 10 Claims. (Cl. 45—137.)



6. A guard buffer for a surface of an article of furniture or the like, comprising a plurality of longitudinally alignable rubber strip sections, each of said sections comprising a surface adapted to be pressed into intimate engagement with the article, each of the sections adapted for attachment to the article, said sections having a longitudinally extending bore and a smooth transversely rounded exterior surface, a reinforcing core disposed within said bore, said core being apertured at intervals to admit screws, nails, and the like, adapted thereby to be projected therethrough into the article to be guarded.

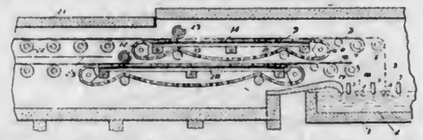
1,761,234. DRAWING SHEET GLASS. CLIFFORD A. ROWLEY, Toledo, Ohio, assignor to Libbey-Owens Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed July 24, 1922, Serial No. 576,922. Renewed July 7, 1924. 17 Claims. (Cl. 49—17.)

1. The method of producing sheet glass, consisting in drawing the sheet from a supply of molten glass, the drawing force being applied to the set sheet at some distance from the molten source, drawing the sheet edges from the source at points adjacent the source at a slower



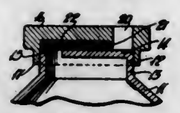
speed than the rate of draw of the sheet, and simultaneously but independently applying lateral or sidewise tension to the sheet edges between the source and the points of application of the edge drawing force.

1,761,235. DRAWING SHEET GLASS. CLIFFORD A. ROWLEY, Toledo, Ohio, assignor to Libbey-Owens Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Jan. 25, 1924. Serial No. 688,358. 6 Claims. (Cl. 49—17.)



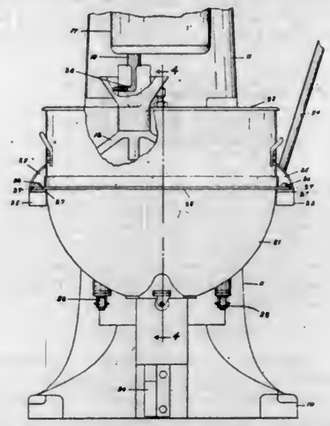
1. In an apparatus for simultaneously drawing a plurality of sheets of glass, a container for a pool of molten glass, a plurality of bending members, one for each sheet, a plurality of horizontal drawing and flattening tables, a roller above each table and the sheet carried thereby for holding the sheet in engagement with the table, the tables being staggered so that the roller for a lower sheet may be positioned in substantial horizontal alignment with the table for the next upper sheet, a leer, and a plurality of superposed conveyors in the leer, for individually carrying the sheets therethrough.

1,761,236. HERMETIC TUBE CLOSURE. RYUJI SATO, New York, N. Y. Filed June 24, 1929. Serial No. 373,116. 1 Claim. (Cl. 221—60.)



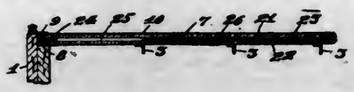
In a collapsible tube, a neck having a screw threaded exterior, a partition extending across the neck and having an opening adjacent one side of the neck, a cap having a body portion and provided with an annular flange screw threaded interiorly to fit the neck, the space within the flange constituting a recess, said body having an opening extending from the outer surface of the top and communicating with the recess, a rib extending across said recess adjacent the opening of the top, an elastic washer held in the recess between the rib and the wall of the recess, said openings being movable into and out of registry by rotation of the cap and the washer being compressed over the first opening by the action of said screw threads upon the openings being moved out of registry, said flange having an arcuate notch therein at its lower edge, and a pin projecting from the neck into said notch to limit rotative movement of the cap.

1,761,237. CAKE MIXER. SIGMUND SCHIFF, Cincinnati, Ohio, assignor to The J. H. Day Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Nov. 21, 1928. Serial No. 320,914. 19 Claims. (Cl. 259—102.)



1. In a device of the class described, the combination with a supporting structure, of a container support frame slidably mounted upon the supporting structure and adapted for reciprocation between upper and lower limits, relative to the supporting structure, means for locking a container to said frame, said means comprising an arm pivotally mounted on the frame, a latch portion on the arm, means for effecting engagement of the latch portion with a container supported by the frame when the frame is moved from the lower position, and a trip lug on the supporting structure for cooperating with the arm to effect release of the container when the frame is returned to the lower limit of travel.

1,761,238. EYE-TESTING DEVICE. CHARLIE B. SCOTT, St. Louis, Mo., assignor to M. E. Green Manufacturing Co., St. Louis, Mo., a Corporation of Missouri. Filed June 13, 1927. Serial No. 198,560. 10 Claims. (Cl. 40—132.)



2. In an eye-testing device, a cabinet having a series of separate illuminable compartments respectively opening through the front of the cabinet, and a reversible unitary panel for said cabinet covering the several compartments thereof, said panel comprising separate rigid transparent glass body-plates disposed flatwise together in registering relation, an interposed sheet of light-penetrable material bearing suitable test characters respectively correlated with the several compartments of the cabinet, and a sheet of opaque fabric covering the opposite faces of said panel and having sight openings therein coincident with the fields of display of the respective test characters of the first sheet, said test characters being displayed in regular order on one side of said panel and reversely on the other side thereof.

1,761,239. EYE-TESTING DEVICE. CHARLIE B. SCOTT, St. Louis, Mo., assignor to M. E. Green Manufacturing Co., St. Louis, Mo., a Corporation of Missouri. Filed June 13, 1927. Serial No. 198,561. 1 Claim. (Cl. 40—132.)

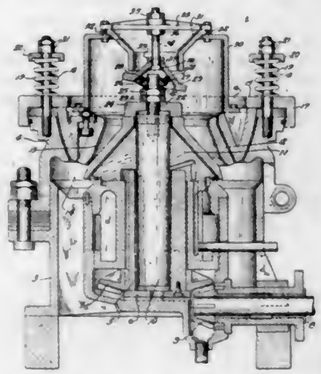
In an eye-testing device, in combination, a cabinet structure comprising top, bottom, and side walls, partition mem-

bers of sheet material disposed within the cabinet, said members having their forward marginal portions turned at right angles to the body portion thereof, a false front element of the same character of material as said partition members disposed upon and secured at adjacent portions of its under face to said right angular portions of said partition members, said false front element having sight open-



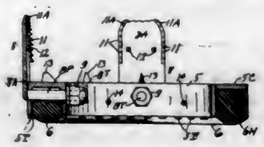
ings therein co-ordinated respectively with and of reduced dimensions relatively to the separate compartments provided in the cabinet by the relative arrangement of said partition members therein, and a paneled front wall disposed flatwise over and upon said front element and disposed at its margin within the confines of the cabinet defined by the walls thereof.

1,761,240. FEEDING DEVICE FOR CRUSHERS AND THE LIKE. CHARLES F. SMITH, Milwaukee, Wis., assignor to Smith Engineering Works, Milwaukee, Wis., a Corporation of Wisconsin. Filed July 29, 1926. Serial No. 125,729. 15 Claims. (Cl. 83—10.)



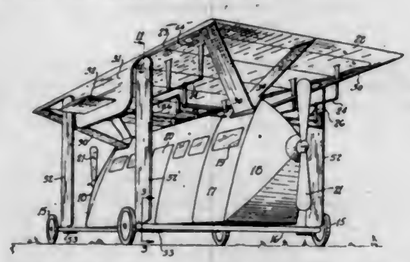
1. In a feeding device for crushers and the like, the combination of a frame provided with a discharge opening for the material, a main hopper or housing mounted on the frame and communicating with the discharge opening of said frame, a supplemental hopper mounted to discharge into the main hopper or housing, a universally mounted feed regulating device mounted below the discharge opening of the supplemental hopper, and means acting upon the feed regulating device to cause alternate rocking or tilting of said device in different directions on its universal mounting, to thereby alternately increase and decrease the width of the discharge opening of the feed regulating device at different points.

1,761,241. NAILLESS HORSESHOE. ARTHUR SMITHSON, Minneapolis, Minn. Filed Dec. 7, 1928. Serial No. 324,485. 1 Claim. (Cl. 168—21.)



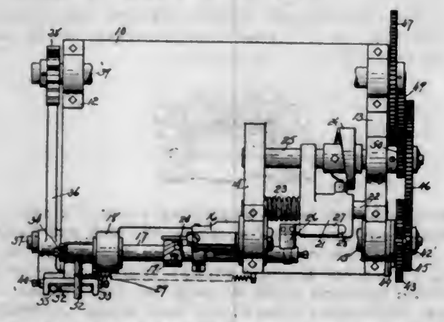
In a nailless horseshoe comprising a metal channel bar formed to the shape of a horse hoof with its channel opening directed downwardly, means slidably insertible and adjustable horizontally in said shoe and arranged to engage and press against the sides of the hoof above its base, a resilient tread insertible in said channel opening and normally projecting outwardly of the channel edges, means formed integral of said channel edges adapted to be bent inwardly to retain said tread, and further tread retaining means consisting in providing a number of horizontally registering pairs of apertures in said channel and a nail driven through each said pair of apertures and through the tread therebetween, said slidably insertible adjustable means comprising each an L-shaped finger with a flat inwardly tapered base and an upright flat finger with an inwardly directed arched row of serrations comprising nearest the shoe a number of downwardly and inwardly directed teeth and at the top of the finger formed as even inwardly directed teeth.

1,761,242. AIRPLANE. CHARLES E. SPARHAWK, Steilacoom, Wash. Filed May 14, 1928. Serial No. 277,462. 3 Claims. (Cl. 244—14.)



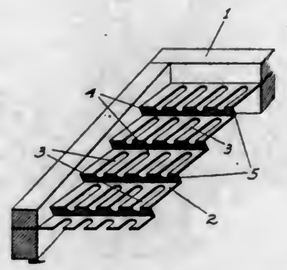
1. An airplane having a landing gear, a fuselage mounted on said landing gear, a plurality of transverse wings removably mounted above said fuselage in a longitudinal row, drift wings at each side of said transverse wings, an aileron on the outer side of each drift wing, and rudders between said wings and landing gear.

1,761,243. MACHINE FOR CUTTING MULTIPLE THREADS ON WOOD SCREWS. HARRY P. TOWNSEND, West Hartford, Conn., assignor to The H. P. Townsend Manufacturing Company, Hartford, Conn., a Corporation of Connecticut. Filed Jan. 13, 1922. Serial No. 529,039. 8 Claims. (Cl. 10—101.)



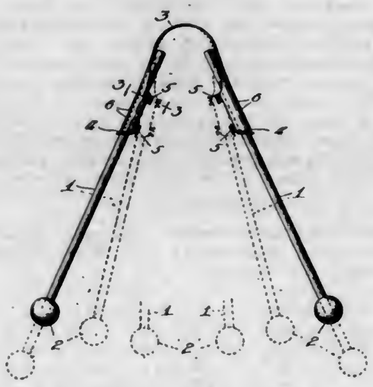
1. An operating mechanism for a wood screw machine comprising a spindle, means for rotating the spindle, a shaft, means for feeding the shaft longitudinally, means for oscillating the shaft on its axis, and intermeshing gears between the spindle and the shaft reciprocating and oscillating means, said gears having such ratio that the spindle turns one-half of a revolution more than a full number of revolutions with relation to the reciprocations and oscillations of the shaft, whereby a tool carried by the shaft will start cutting a blank carried by the spindle alternately on diametrically opposite sides.

1,761,244. SELF-CLEANING SCREEN. GEORGE A. TURNER, Stockton, Calif. Filed July 28, 1926. Serial No. 125,357. 1 Claim. (Cl. 209—397.)



A screen comprising a plate arranged as a plurality of successively descending steps with connecting webs therebetween; each step being provided with longitudinal slots longitudinally alined with those of adjacent steps and extending from adjacent the base of the web of the step above, to and partially down the web at the opposite end of the step, the webs being disposed at an angle to the steps and to a vertical plane such that the forward ends of the slots of one step are disposed in a vertical plane beyond the adjacent ends of the slots of the adjacent step below, such slots at said ends being the same width as the ends of the slots above.

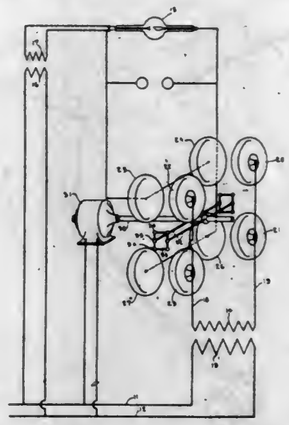
1,761,245. MULTIPLE XYLOPHONE FINGER. BEN VITTO, Chicago, Ill. Filed Sept. 12, 1929. Serial No. 392,000. 7 Claims. (Cl. 84—404.)



1. A device of the character described comprising two xylophone fingers, a bowed spring member, and means for fastening the butt end of each of said fingers to one end of said spring member.

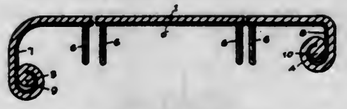
1,761,246. RECTIFIER. JULIUS B. WANTZ and ARTHUR A. GROTHE, Oak Park, Ill., assignors to Victor X-Ray Corporation, Chicago, Ill., a Corporation of New York. Filed May 10, 1924. Serial No. 712,488. 19 Claims. (Cl. 175—364.)

10. A rotary rectifying switch comprising spheroidal electrodes having relatively large conducting surfaces, and a movable electrode comprising conducting members of relatively small conducting surfaces and arranged in series, the amount of separation between said conducting members in series determining the proportion of each alternating current wave to be rectified.



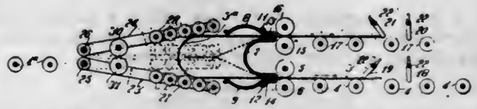
16. In a rectifying switch having alternating current and unidirectional current sides, a plurality of spaced disk-like electrodes, there being four of said disks at one side of said switch with parallel faces, and four at the other side of said switch similarly arranged, so that the most intense lines of electrostatic force in the opposite sides of said switch are at angles of ninety degrees to the most intense lines of electrostatic force across said switch and a movable connector for establishing electrical connection between oppositely disposed electrodes.

1,761,247. TREAD FOR AUTOMOBILE RUNNING BOARDS. GEORGE E. WHITLOCK, Toledo, Ohio. Filed June 3, 1929. Serial No. 367,844. 2 Claims. (Cl. 280—169.)



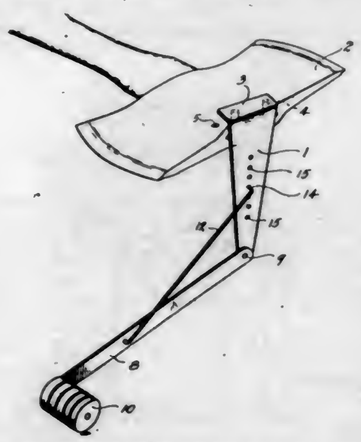
1. A tread for an automobile running board, the board having a downwardly extending flange along its outer edge, the lower edge of the flange curved inwardly, a yieldable sheet material, means for securing the yieldable sheet material along its inner edge, the outer edge of the sheet material having a bead secured by the inturned curved portion of the flange of the running board.

1,761,248. METHOD OF MANUFACTURING METAL SHEETS OR STRIPS. FREDRIK WILLE, Wilmette, Ill., assignor to H. A. Brassert & Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 5, 1927. Serial No. 159,088. 5 Claims. (Cl. 153—28.)



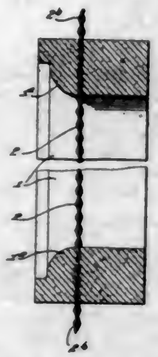
1. The method of doubling metal strips, consisting in moving the strip in one direction a predetermined distance, moving a portion of the strip in the opposite direction to that of its initial movement, thus forming the strip into a loop, and then advancing the loop between flattening means and in the direction in which the strip was first moved.

1,761,249. SAW-SUPPORTING DEVICE. DANIEL M. AUVIL, Ryderwood, Wash. Filed Mar. 28, 1928. Serial No. 265,258. 2 Claims. (Cl. 143—163.)



2. The combination with an axe head having a plurality of holes provided in a face thereof, of a saw supporting device comprising a hanger plate provided with a row of holes in spaced relation and provided at its upper end with a laterally turned portion having studs projected downwardly therefrom adapted to seat within holes in the axe head, an arm pivotally attached to the lower end of the hanger to swing in a plane parallel with the plane of the hanger, a link having an end pivotally connected with the arm and its other end provided with a hook adapted to be applied to any one of the holes of the hanger as a means of supporting the arm at different positions of adjustment and a saw supporting roller at the end of the arm.

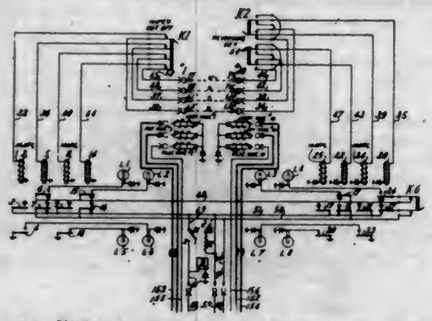
1,761,250. BUILDING-WALL VENTILATOR. WALTER H. BALTES, San Diego, Calif. Filed Oct. 8, 1928. Serial No. 310,976. 5 Claims. (Cl. 98—29.)



1. In a ventilator of the class described, a frame of plastic material and a screen supported thereby extending beyond the outer margin of said frame.

1,761,251. TESTING EQUIPMENT. JOHN I. BELLAMY, Brookfield, and RODNEY G. RICHARDSON, Chicago, Ill., assignors to Automatic Electric Inc., Chicago, Ill., a Corporation of Delaware. Filed July 22, 1926, Serial No. 124,129. Renewed Oct. 21, 1929. 8 Claims. (Cl. 179—175.)

5. In a device for detecting unstandard conditions in the multiple of a telephone exchange system, testing equipment and means for connecting it with the multiple, an audible signal, and means for operating said signal to



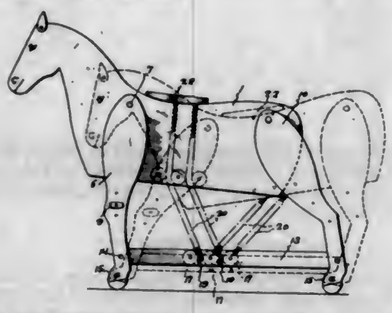
give one distinctive tone when one condition is found and to give a different distinctive tone when a different condition is found.

1,761,252. OPHTHALMIC MOUNTING. FREDERICK RICE BISHOP, North Attleboro, Mass., assignor to The Bishop Company, North Attleboro, Mass., a Corporation of Massachusetts. Filed Apr. 6, 1928. Serial No. 267,990. 7 Claims. (Cl. 88—42.)



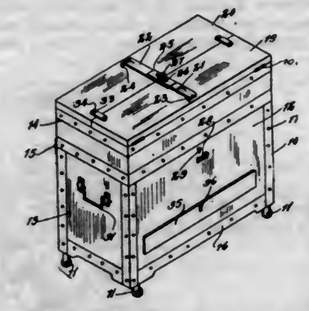
1. An ophthalmic mounting comprising two octagon-shaped lenses disposed so that two corresponding sides of the lenses are adjacent and substantially parallel to each other, each lens having a side joined to the upper end of each said corresponding side and sloping away from the said upper end, a bridge joining the lenses together having an intermediate portion, two terminal portions and a portion joining each terminal portion to the intermediate portion, the terminal portions being substantially parallel to and spaced from the said corresponding sides, the joining portions being substantially parallel to and spaced from the said sloping sides, and means bridging and connecting each terminal portion and each joining portion to the side to which it is parallel.

1,761,253. ROCKING-HORSE. SCOTT A. BROCKWAY, Lincoln, Nebr. Filed Apr. 14, 1928. Serial No. 269,969. 7 Claims. (Cl. 272—53.)



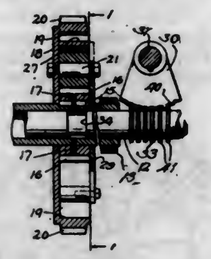
7. A toy horse comprising a body, front and rear legs pivotally connected to the body, a bar extending from the front to the rear legs and pivotally connected thereto below the pivotal connection between the legs and body, an elastic element secured to the body and bar, and rockers secured to the lower ends of the legs and extending transversely of the bar.

1,761,254. CHEST. FRANK BRZOZOWSKI, Slickville, Pa. Filed Mar. 12, 1928. Serial No. 261,073. 1 Claim. (Cl. 190—12.)



A trunk or chest comprising a body and a cover hinged thereto, a pair of boards hingedly connected to said cover and adapted to be folded against the top thereof, a pair of bands hingedly secured to said boards, said bands overlapping with their inner perforated ends, means for holding said bands together but allowing a ready separation of same, and a means for locking said boards in their normal position on top of said cover.

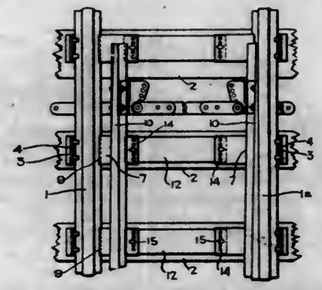
1,761,255. FLUID-TRANSMISSION MECHANISM. WILLIAM C. DUNN, Chicago, Ill. Filed Mar. 16, 1925. Serial No. 15,855. 5 Claims. (Cl. 192—61.)



1. Fluid transmission mechanism including a driving element, a driven element, a normally stationary gear connected with the driven element for rotation therewith, a support rotatable about the same axis as the said driven element, fluid circulation gears carried by the support for rotation with respect thereto and for bodily rotation therewith, a portion only of said gears meshing with the first said gear, said fluid circulation gears being spaced to form a fluid receiving chamber therebetween, portions of the walls of which chamber are formed by the peripheries of said gears, a flange on the support also forming a portion of the wall of said chamber, said chamber having an outlet, the said circulation gears being rotated about the first said gear and also about their axes with respect to the support to circulate the fluid through said chamber when the support is rotated, and means for controlling said outlet to trap the fluid in said chamber for causing pressure to be increased upon the trapped fluid whereby when the said support is then rotated the first recited gear and the said driven element will be rotated, the last recited means including a fluid passage leading from the said chamber through one of said gears and a valve device for controlling said passage.

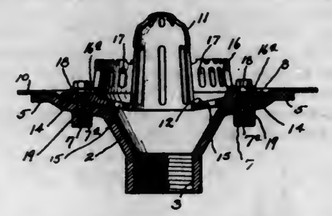
1,761,256. SLIDE-PLATE AND TIE-BAR CONSTRUCTION FOR RAILROADS. ROBERT M. EVANS, Seattle, Wash. Filed Sept. 1, 1928. Serial No. 303,553. 4 Claims. (Cl. 246—453.)

1. In a railway track, the combination with opposite rails and a supporting tie therefor, of relatively adjustable slide plates disposed beneath the rails on said tie, means for securing the rails thereto and to the tie and a tie bar extended between the plates with its ends lapping the latter, said plates and bar each having a series



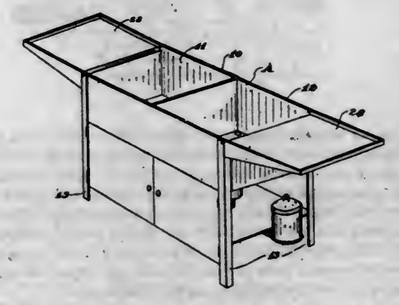
of apertures in the lapped end portions thereof different apertures being adapted to register for different spacings of the plates, and anchor spikes extended through apertures that are in registration and into the tie.

1,761,257. ROOF-DRAIN FIXTURE. WELES S. FLEMING, Portland, Oreg. Filed Apr. 9, 1929. Serial No. 353,789. 3 Claims. (Cl. 182—31.)



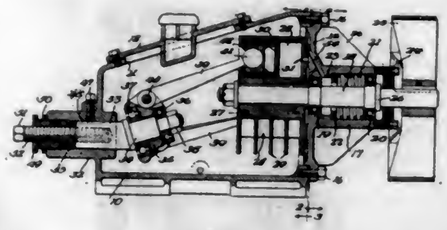
1. In a drainage fixture of the character described, a body having an annular lateral flange and a central chamber connected with a drain pipe, a cover plate adapted to be bolted to said annular flange and provided with an annular depression, perforations provided in said depression, a circular upright guard rail arranged about said depression and adapted to be bolted to said cover plate and bolts securing said guard rail and said cover plate to said drain body.

1,761,258. PORTABLE TOURIST SINK. FRANK J. FRANSON, Tower, Minn. Filed July 16, 1926. Serial No. 122,908. 1 Claim. (Cl. 126—350.)



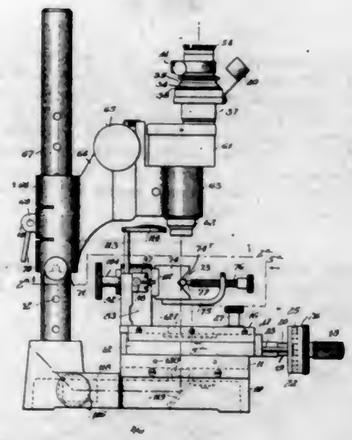
A portable sink including, a body portion having deep sink compartments, heating means for each of the compartments to heat the water within the same, and drain board cover members hinged to the walls of said compartments and having wide portions adjacent the hinges for supporting the drain boards when open for closing said compartments and providing a drain when open.

1,761,259. PUMP OR ENGINE. ALBERT M. FREELAND, Chicago, Ill., assignor to Carl Edward, Chicago, Ill. Filed Sept. 27, 1928. Serial No. 308,784. 11 Claims. (Cl. 230—178.)



1. In combination, a ported valve plate, a rotary member having cylinders arranged to successively communicate with the ports of said plate, pistons in the cylinders, a rotatable element, piston rods pivotally connected with said element and the respective pistons, and means mounting said element for rotation about an axis inclined to the axis of rotation of said cylinders and laterally offset with respect to the axis of said rotary member, whereby the rotation of the cylinders will cause a reciprocatory movement of the pistons.

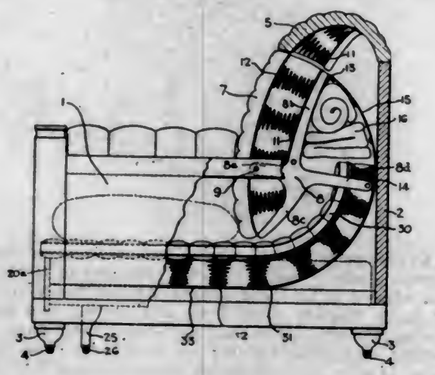
1,761,260. OPTICAL MEASURING INSTRUMENT. GEORGE B. GALLASCH, Rochester, N. Y., assignor to Bausch and Lomb Optical Company, Rochester, N. Y., a Corporation of New York. Filed Nov. 20, 1925. Serial No. 70,260. 28 Claims. (Cl. 88—14.)



1. In an optical measuring instrument, the combination of a base, a screw holder mounted for a tilting movement thereon, a microscope mounted upon the base and including an angle measuring eyepiece by which the mean helix angle of the screw thread may be determined and adjustable tilting means associated with the screw holder adapted to permit the holder to be tilted relative to a plane perpendicular to the optical axis of the microscope objective through an amount corresponding to said helix angle.

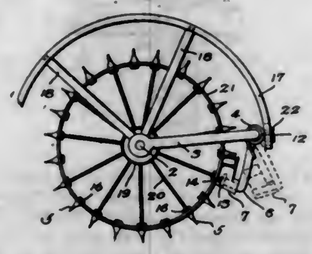
1,761,261. COMBINATION BED DAVENPORT. ALONZO C. GOULD, Everett, Wash. Filed Oct. 29, 1928. Serial No. 315,814. 2 Claims. (Cl. 5—12.)

1. In a combination bed davenport, a main frame structure, a back cushion frame structure disposed within the main frame to provide a downwardly opening compartment back of it, and having means at its ends by which it is pivotally mounted; pivotally mounted in the main frame to swing between normal closed position and horizontal open position, a bed frame having means by which it is slidably adjustable into and from the main frame below



said back cushion frame, and a flexible bed bottom carried by the bed frame and attached along its inner edge to said back cushion frame to be functionally supported thereby when the said frame is in open position and to be carried upwardly therewith into said compartment when the frame is swung from horizontal to normal position.

1,761,262. TRACTION-WHEEL-CLEANING DEVICE. JACOB GUTH, St. Louis, Mo. Filed May 13, 1927. Serial No. 191,215. 2 Claims. (Cl. 280—158.)



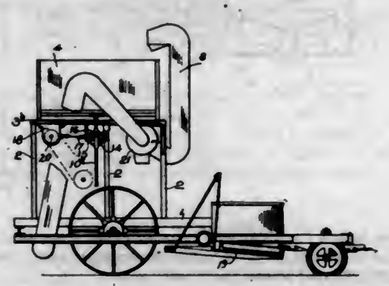
1. In a tractor, the combination with a wheel having traction elements disposed in staggered relation about the periphery thereof, of a scraper, comprising a supporting member and having a leg swingable in the medial plane of said wheel, a spring biasing the leg toward the wheel, and a scraper blade pivoted to said leg for oscillation in a plane tangent to the wheel, whereby the trailing edges of the blade may follow a sinuous path between alternate traction elements as the tractor progresses.

1,761,263. METHOD OF MAKING RATCHET WRENCHES. FOSTER A. HAIST, Buffalo, N. Y., assignor to The Keystone Mfg. Co., Buffalo, N. Y., a Corporation of New York. Filed Aug. 9, 1927. Serial No. 211,783. 2 Claims. (Cl. 76—114.)



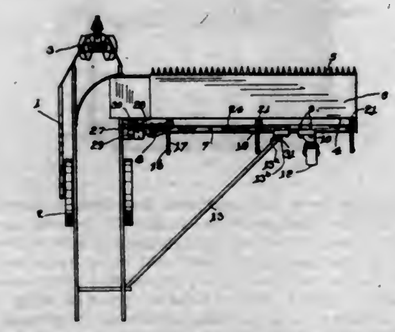
1. The herein described method of making a socket wrench which consists in providing a blank of a body with a circular opening, bending one part of the body on one side of said opening laterally out of line with the part on the diametrically opposite side of said opening, forming a pocket in said body opposite the laterally bent part thereof so that the pocket extends radially outward from said opening and is arranged in a plane extending over the laterally bent part of said body, and returning the laterally bent part of said body to its normal position in line with the part containing said pocket.

1,761,264. REAPER THRASHER. BURTON S. HARRIS and HOWARD M. JOHNSTON, Toronto, Ontario, Canada, assignors to Massey-Harris Company, Limited, Toronto, Canada. Filed Aug. 12, 1927. Serial No. 212,590. 5 Claims. (Cl. 56—20.)



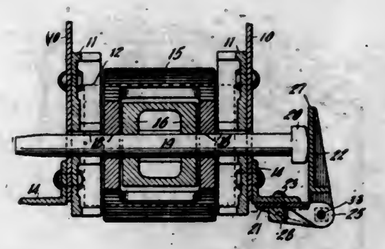
1. In a reaper-thrasher the combination of a frame; a grain tank pivotally mounted on the frame; a screw having one end in engagement with the tank; a yoke carried on the frame; and a nut threaded on the screw and engaging the yoke whereby the tank will be tilted when the nut is rotated in one direction.

1,761,265. REAPER THRASHER. BURTON S. HARRIS and HOWARD M. JOHNSTON, Toronto, Ontario, Canada, assignors to Massey-Harris Company, Toronto, Canada. Filed Aug. 26, 1927. Serial No. 215,562. 2 Claims. (Cl. 56—20.)



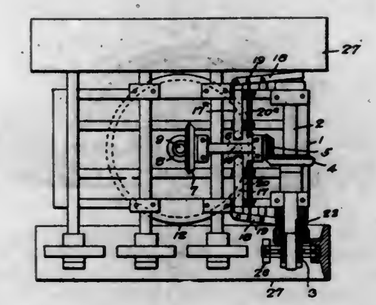
1. In a harvester, the combination of a main frame; a header platform; a header platform supporting bar pivoted on the main frame whereby the platform may be swung from an operative to an inoperative position and vice versa; a caster wheel for supporting the outer end of the supporting bar; a diagonal brace having one end secured to the main frame for bracing the platform in its operative position; spaced lugs carried by the bar for forming a pocket adapted to receive the other end of the brace when the platform is in its operative position; and a lock bar carried by the main frame adapted to be received in the said pocket to releasably retain the header platform in its inoperative position.

1,761,266. DRAFT-GEAR-KEY RETAINER. CHARLES S. JOHNSTON and JAMES R. ALCOTT, Chicago, Ill. Filed June 12, 1925. Serial No. 36,722. 7 Claims. (Cl. 213—61.)



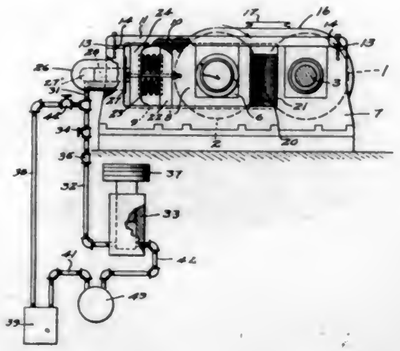
1. In a device of the character described, the combination with the draft mechanism of a railway car including draft sills having key-receiving openings, of a retainer key extending through various elements associated with said mechanism and car and working in the key-receiving openings of the draft sills; means at one end of said key for retaining the same against removal in both directions, said means including an enlarged head upon said retainer key, and a bracket secured to the corresponding draft sill against which said head is adapted to abut.

1,761,267. POWER STEERING MACHINE. CHARLES H. LOTTE, Massillon, Ohio, assignor to Byers Machine Company, Ravenna, Ohio, a Corporation of Maryland. Filed Jan. 10, 1927. Serial No. 160,170. 3 Claims. (Cl. 180—9.2.)



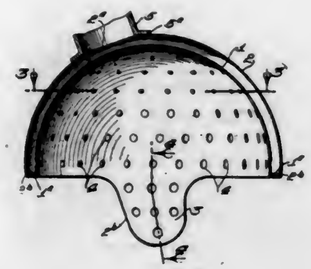
1. In a device of the class described, a frame, a power driven axle revolubly mounted on the frame, a power driven gear, a propelling member at and revolubly mounted on each end of the axle, a double-jaw clutch mechanism adjacent to each propelling member and including a clutch member fixed to the frame, a clutch member fixed to the axle and a clutch member slidably mounted on the axle enclosing and slidably engaging drivable connections on the adjacent propelling member and adapted to engage either of the said fixed clutch members, and means operatively connected to the slidable clutch members and adapted to be operated by the gear when rotated for selectively shifting the latter members to connect either of said slidable clutch members to its associate clutch member fixed to the frame and means to cause the said slidable clutch members to normally engage the fixed clutch members on the axle respectively.

1,761,268. CRUSHING-ROLL APPARATUS. FRANCIS W. MACLENNAN, Miami, Ariz. Filed Aug. 8, 1927. Serial No. 211,341. 8 Claims. (Cl. 83—12.)



1. In combination, a pair of cooperating rolls, a set of fixed and movable bearings at each end of said pair, one bearing of each set providing a support for one of said rolls and the other providing a support for the other roll, spring means for resiliently urging each movable bearing of a set toward the fixed bearing thereof, means for initially stressing said spring means, and hydraulic pressure means common to both of said sets for equalizing the resilient pressures exerted by the spring means of said sets.

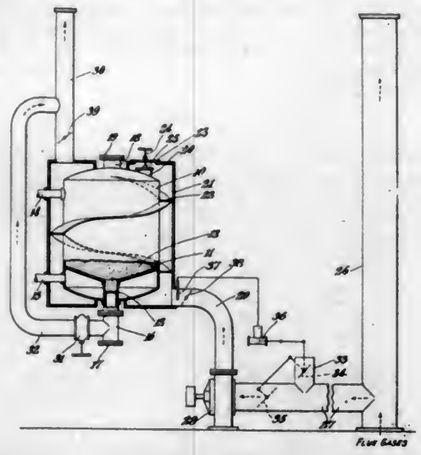
1,761,269. SANITARY HAIR DRIER. LOUIS MAZADE, San Diego, Calif. Filed Oct. 21, 1927. Serial No. 227,684. 3 Claims. (Cl. 34—26.)



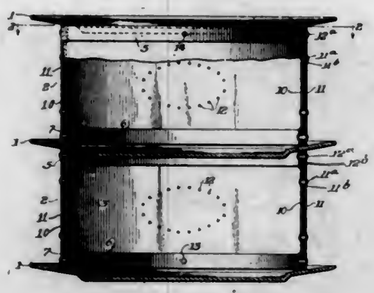
1. In a hair drier, a substantially semi-spherical hood, a plurality of substantially equally distributed perforations in said hood the area of said perforation being graded from a comparatively small area near the apex of said hood, to a substantially greater area near the lower margin thereof, an outer casing surrounding said hood in spaced relation and secured to the lower margin thereof, and an air inlet in said outer casing positioned near the apex of said hood.

1,761,270. APPARATUS FOR CONTACTING VAPORS WITH SOLIDS. WALTER MILLER, Ponca City, Okla., assignor to The Gray Processes Corporation, Newark, N. J., a Corporation of Delaware. Filed Nov. 8, 1926. Serial No. 147,102. 4 Claims. (Cl. 196—96.)

2. In combination, a closed treating tower, fluid-permeable supporting means within said tower, means for passing vapor through said means and a bed of treating material supported thereby, a jacket surrounding said tower, an inlet and an outlet for said jacket whereby hot gases may be circulated around said tower, valve controlled means for admitting heating gases from said jacket into said tower, and a valve controlled outlet for discharging heated gases from said tower.



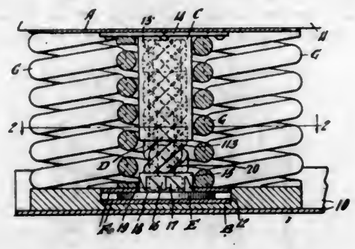
1,761,271. TRANSPARENT DISPLAY RING. LEIGH G. NELSON, Chicago, Ill., assignor to Fiber-Glass Food Cover Co., Chicago, Ill., a Corporation of Illinois. Filed Aug. 28, 1926. Serial No. 132,270. 2 Claims. (Cl. 65—53.)



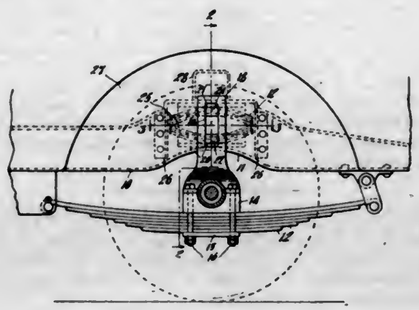
1. In a device of the character described, a thin and readily flexible transparent enclosing wall member having its ends disposed in overlapping relation and provided with registering openings, open inner and outer rings enclosing the ends of said member, a strip riveted at its ends to the rings, a second strip riveted to the first strip and spaced therefrom to permit relative movement between the strips and the ends of the wall member, the second strip being disposed at the opposite side of the wall member from the first strip and the rivets securing said strips and the rings together passing through and of less cross area than said openings.

1,761,272. SHOCK ABSORBER. JOHN F. O'CONNOR, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed July 29, 1926. Serial No. 125,605. 8 Claims. (Cl. 267—9.)

5. In a shock absorber, the combination with a pair of followers relatively movable toward and away from each other; of spring means opposing relative approach of said followers; a pair of interengaging cooperating friction screw elements, one of said elements being fixed to one of said followers and movable in unison therewith toward the other follower, and the other screw element being movable with respect to said follower; and means for limiting relative separation of said screw elements to hold said movable screw elements spaced from said other follower when said followers are separated to the full extent of their movement, said movable screw element engaging said other follower after a predetermined compression of the mechanism, to be actuated by the further relative approach of said followers.



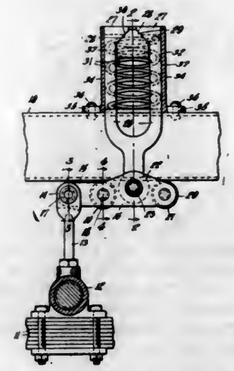
1,761,273. SHOCK ABSORBER FOR VEHICLES. JOHN F. O'CONNOR, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed Oct. 21, 1926. Serial No. 143,032. 6 Claims. (Cl. 267—45.)



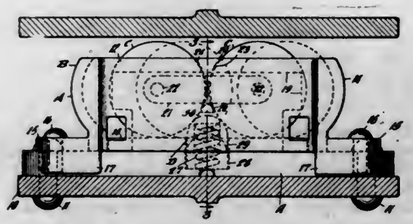
1. In a shock absorbing mechanism, the combination with a vehicle body member and a spring member; of oppositely disposed sets of curved leaf springs mounted on one of said members; and yoke means secured to the other of said members and encircling said leaf springs to flex the same upon relative movement between said spring member and said body member beyond a predetermined extent, said yoke serving to flex one set only of the curved leaf springs when moved in one direction, and to flex the opposite set only of the curved leaf springs when moved in the opposite direction.

1,761,274. SHOCK-ABSORBING MECHANISM FOR VEHICLES. JOHN F. O'CONNOR, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed Nov. 12, 1926. Serial No. 147,901. 10 Claims. (Cl. 267—9.)

9. In a device of the character described, the combination with a frame member and an axle member; of a housing mounted upon said frame member and provided with friction surfaces; of an actuating member reciprocably mounted in said housing and provided with spaced leg portions having friction surfaces and adapted to coact with the friction surfaces of said housing; yieldably resisted wedge means for spreading the legs of said element into frictional engagement with said housing upon downward movement of said element; lever means pivotally connected intermediate its ends to said actuating element; a plurality of fulcrum rollers, one of which is located at one side of the pivotal connection of said lever means with said actuating element, and the other of said rollers at the opposite side of said pivotal connection, each of said rollers including a rubber sleeve, and a metallic tread; and means connected to said axle member for moving said lever means in opposite direction.



1,761,275. ANTIFRICTION BEARING. JOHN F. O'CONNOR, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed Mar. 12, 1927. Serial No. 174,731. 8 Claims. (Cl. 308—226.)

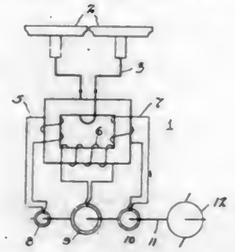


1. In an anti-friction bearing, the combination with a retainer having a bearing surface; of anti-friction means comprising a pair of rollers connected together in spaced relation for movement in unison; and yieldable means disposed beneath said rollers and extending upwardly between the same to maintain them in centered position with reference to said retainer, movement of said rollers to one side or the other of central position causing engagement thereof with said yieldable means to depress the same, said retainer being provided with means for limiting movement of said rollers to dispose the center of gravity of the roller in engagement with said means slightly to one side of the latter in a direction away from the other roller, whereby said yieldable means exert an upward thrust upon said roller to return the rollers toward centered position.

1,761,276. RESISTANCE WELDING APPARATUS. DONALD F. PANCOAST, Cleveland, Ohio. Filed Jan. 19, 1928. Serial No. 247,922. 3 Claims. (Cl. 219—4.)

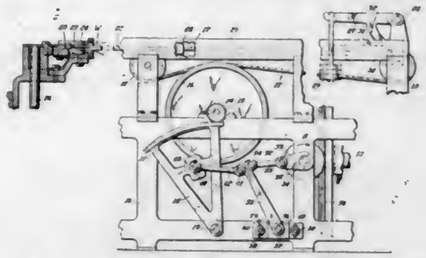
1. An apparatus for resistance welding by means of an alternating current which comprises a transformer core, a plurality of primary windings thereon, a separate alternator connected to each of said windings, one of said

windings and connected alternator being adapted to supply a current of approximately sine wave shape, another winding and connected alternator for producing an odd harmonic wave, said alternators being fixed relatively to each other to produce a resultant substantially flat wave, and a



secondary winding upon said transformer connected with a pair of electrodes whereby a current is supplied to the work having a rapid rise from the zero point to a welding value and a persistence of current above minimum welding value with consequent substantially uninterrupted heating effect at the welding point.

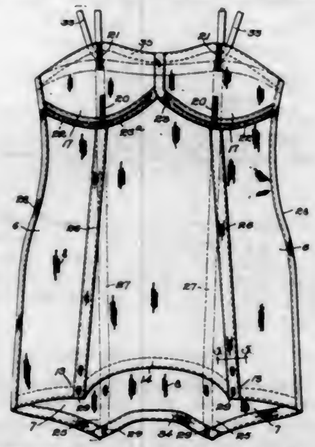
1,761,277. NEEDLE MOTION FOR AXMINSTER LOOMS. OSCAR V. PAYNE, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed June 8, 1928. Serial No. 283,982. 10 Claims. (Cl. 139—124.)



1. In a needle motion for an Axminster loom, a needle, a rotatable drum, means to cause the needle and drum to move in unison, an oscillatable segment operatively connected to the drum to cause the latter to rotate first in one direction and then in the other, a continuously and uniformly rotating crank arm, a pair of links one connected to the crank arm and the other connected to the segment, and movable means to support both of said links and produce a retardation in motion of the segment aside from that which is caused by the motion of the crank arm.

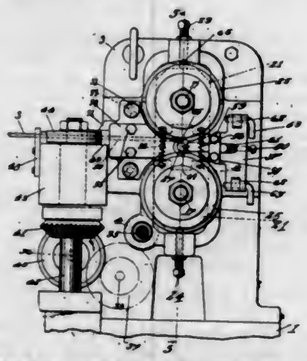
1,761,278. WOMAN'S UNDERGARMENT. HARRIET LYONS REDMOND, Needham, Mass., assignor to The William Carter Company, Needham Heights, Mass., a Corporation of Massachusetts. Filed Jan. 20, 1930. Serial No. 421,902. 6 Claims. (Cl. 2—30.)

4. A knitted foundation garment for women, for wear next the flesh and to serve as shirt or vest, garter-supporting corset and brassière; comprising front and back portions, each formed wholly of a soft, pliant fabric, so tightly knitted as to give it markedly restrained expansibility even in the cross-wale direction, each portion having a decreasing width from approximately its bottom to about mid-height and thereabove increasing in width, said portions united along their vertical edges to form a closed body-covering, shaped so as uniformly to suppress and mold the entire body of the wearer from and including the thighs to the bust, a bust-uplifting and rounding brassière section at the top of the garment portion, constructed of a fabric material of similar markedly restrained expansibility and including two cupped bust portions for roundingly supporting the bust rather than merely flattening it, a plurality of narrow vertical members of knitted fabric secured flatwise against said body-covering, two of said members located at the garment front respectively in line with the central areas of the two portions of the brassière section and terminating at the lower edge thereof, shoulder straps having their front ends secured to the upper edge of the brassière element in substantial line with said front vertical members,



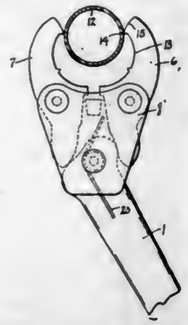
said bust portions of the brassière section having marginal reinforcements acting to transmit the main vertical garment strain around said portions and to said shoulder straps rather than directly through or across said portions, thereby to contribute to the roundingly supporting effect of the brassière section, the said construction of the garment as a whole being such, both in point of said form or shape and of said fabric that said bust-uplifting and body-molding action will be accentuated during wear by a vertical downward pull as by the attachment of garters and stockings at the garment bottom.

1,761,279. MACHINE FOR MAKING LOCK WASHERS. FRANK H. SLEEPER, Worcester, Mass., assignor to Sleeper & Hartley, Inc., Worcester, Mass., a Corporation of Massachusetts. Filed Mar. 4, 1926. Serial No. 92,258. 12 Claims. (Cl. 153—65.)



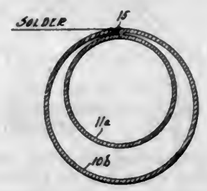
4. In a machine of the class described, the combination with a mandrel, rotatably mounted shafts carrying coiling disks whose plane of rotation are at an angle to each other above and below the axis of said mandrel, and means for feeding stock to said mandrel and disks for formation into a coil, of means for rotatably supporting one end of each of said coiling disk shafts for universal as well as longitudinal adjustment.

1,761,280. PIPE WRENCH. SAM SORENSEN, Houston, Tex. Filed Jan. 23, 1928. Serial No. 248,714. 2 Claims. (Cl. 81—91.)



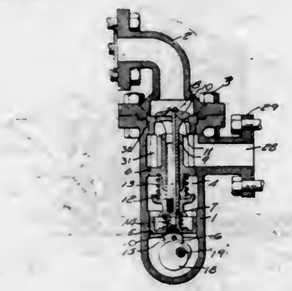
1. A pipe wrench comprising a handle, plates pivotally supported thereon, pipe-engaging jaws pivoted upon said plates in opposed relation, means to hold said jaws normally closed, the forward ends of said jaws being rounded to be forced apart by a pipe, means to limit the closing movement of said jaws, cam-engaging arms on said jaws and cam members on said handle positioned to engage said arms and force said jaws together.

1,761,281. CONDENSER AND PROCESS OF MAKING THE SAME. ALEX TAUB, Detroit, Mich. Filed May 3, 1926. Serial No. 106,315. 2 Claims. (Cl. 137—75.)



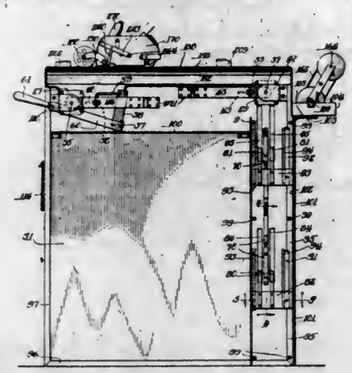
1. A double walled tube formed of a single strip of sheet metal bent upon itself along a line parallel to its edges to constitute inner and outer tubes, the edges of said strip being united at and to the strip at the line where it is bent upon itself.

1,761,282. STARTING VALVE. WILLIAM B. SMITH WHALEY, New York, N. Y.; Isabelle Elliott Whaley, executrix of said William B. Smith Whaley, deceased, assignor to The Whaley Engine Patents, Inc., New York, N. Y., a Corporation of Delaware. Filed Dec. 18, 1924, Serial No. 756,858. Renewed Oct. 15, 1929. 1 Claim. (Cl. 277—36.)



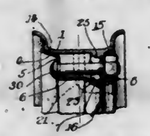
In a device of the character described, the combination of a substantially cylindrical casing, a main valve therein, a relief valve for said main valve, a sleeve within said casing having a cam follower pivotally connected thereto, said sleeve being operatively related to said main valve and said relief valve and a cam engaging said follower whereby said sleeve is actuated to open said relief valve and said main valve in succession.

1,761,283. COPY MACHINE USING THE HECTOGRAPH METHOD. WILLIAM ERASTUS WILLIAMS, Wilmette, Ill., assignor to Ditto, Incorporated, Chicago, Ill., a Corporation of West Virginia. Filed May 10, 1926. Serial No. 108,058. 45 Claims. (Cl. 101—133.)



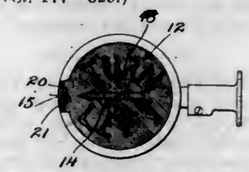
1. In a machine of the class described a series of spools adapted to carry on their spindles a hectograph sheet and a chuteway provided with suitable tracks adapted to hold the supply of said spools and adapted to have them roll downward to a lowermost position in the chuteway, a secondary chuteway vertically arranged and adapted to guide the said spools in an upward travel through this secondary chuteway, mechanism adapted to take spools consecutively from the lower region of the first mentioned chuteway and lift them up by a step by step motion to an upward topmost position of service.

1,761,284. FELLY PORTION OF WHEELS. WILLIAM ERASTUS WILLIAMS, Chicago, Ill., assignor, by mesne assignments, to Steel Wheel Corporation, Lansing, Mich., a Corporation of Michigan. Filed June 5, 1922. Serial No. 565,870. 2 Claims. (Cl. 301—22.)



1. In a device of the class described, a felly portion shaped to simulate a Z-bar in combination with a Z bar wedge ring provided with an inclined flange adapted to seat on one leg of the felly portion and an inclined flange adapted to seat on the surface on the rim, with a suitable demountable rim adapted to be held by the said felly and wedge ring.

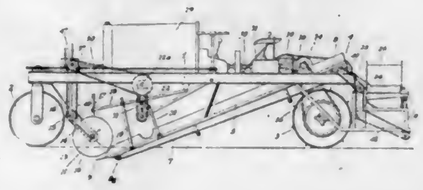
1,761,285. SAFETY TURN LIGHT. PAUL H. ZENTNER, Milwaukee, Wis. Filed July 23, 1927. Serial No. 207,918. 2 Claims. (Cl. 177—329.)



2. A signal light comprising a casing, an electric lamp mounted within said casing, said casing having an open

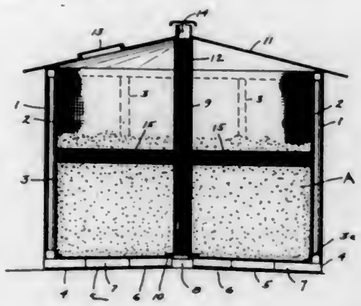
end, said casing having an inwardly pressed annular rib adjacent the end providing an annular groove on the outer side of said casing, a lens in the end of said casing contacting at its inner edge with said rib, a closure cap disposed over the end of the casing and having a cylindrical portion enclosing the end of said casing and provided with spaced inwardly directed projections normally seated in said annular groove, said casing having other grooves extending axially from its outer end to said annular groove and forming ribs upon the interior of the casing, said lens having notches in the periphery thereof to receive said ribs.

1,761,286. POTATO-DIGGING MACHINE. ROSCOE C. ZUCKERMAN, Stockton, Calif. Filed Feb. 21, 1927. Serial No. 169,686. 9 Claims. (Cl. 55—9.)



1. A potato digger comprising a frame structure arranged to move along the ground, a digging structure mounted on the frame including a transverse blade and a conveyor leading upardly therefrom; vertical longitudinally disposed driven cutting discs at the ends of the blade above and partially ahead of the same, means for raising and lowering the forward end of the conveyor to raise and lower the blade, means supporting the discs from the frame, and means between the conveyor and discs for causing the latter to be raised and lowered with the conveyor.

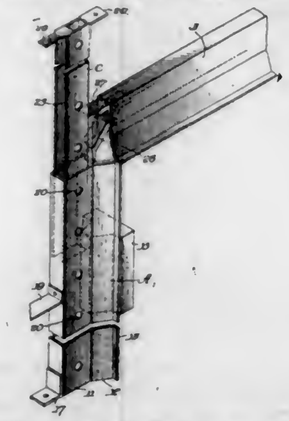
1,761,287. GRAIN BIN OR CRIB. EDWARD H. ADRIAN, Port Byron, Ill. Filed July 9, 1928. Serial No. 291,401. 2 Claims. (Cl. 98—55.)



2. In device of the class described, an outer enclosure, an inner net-work container spaced from the outer enclosure, a central wire mesh cylinder and radial wire mesh cylinders connected therewith, and enclosed air passages connecting with said central cylinder and with the space between said container and said enclosure.

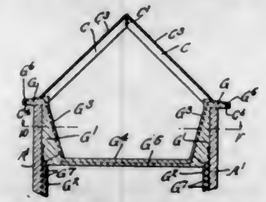
1,761,288. METAL FRAME FOR ALL-PLASTER WALLS. ISAAC A. BAUM, Chicago, Ill. Filed June 14, 1928. Serial No. 285,268. 4 Claims. (Cl. 72—98.)

1. In combination, frame elements composed of metal of channel shape, including vertical and horizontal members, an angular member telescoped within the top end of a vertical member and projecting upwardly for holding engagement with the ceiling, a clip mounted in the upper end of the vertical member, the clip and angular member being



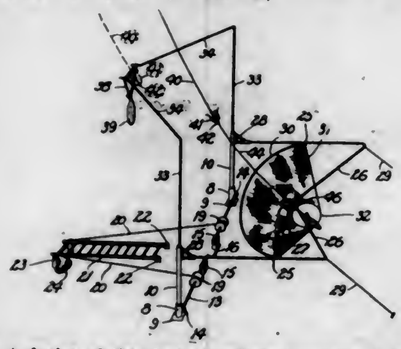
positioned in the channel to define a socket, and a projection from the horizontal frame member adapted to enter said socket.

1,761,289. SYSTEM OF HOUSE CONSTRUCTION. DAVID BEALE, North Chattanooga, Tenn. Filed Apr. 25, 1928. Serial No. 272,623. 8 Claims. (Cl. 72—1.)



1. A house construction, including walls spaced apart, longitudinal beams extending in parallel along the tops of such walls, transverse tension members connecting such beams, such tension members being concealed in transverse walls or partitions, and a roof structure mounted upon and supported upon the longitndinal beams, such roof structure including rafters extending upwardly and inwardly from said beams, the tension members being adapted to resist the outward thrust of said roof and rafters.

1,761,290. DEVICE FOR RECEIVING AND DELIVERING PACKAGES TO AND FROM AIRCRAFT WHILE IN FLIGHT. BYRON B. BLAND and FREDERICK B. DE TIENNE, Vandalia, Mo. Filed Mar. 1, 1929. Serial No. 343,596. 2 Claims. (Cl. 258—1.)



1. A device of the class described comprising a flexible member adapted to be suspended from an aircraft, a hook

member having a plurality of prongs secured to the lower end of said flexible member, a readily detachable member carried by the lower end of said hook, means for detachably securing a package to the lower end of said detachable member, a plurality of vertically extensible members, means for raising and lowering said members, means extending from said members in one direction and substantially at right angles thereto for engaging with said packages whereby said readily detachable member is detached from said hook member, members at substantially right angles to said extensible members and extending in the opposite direction from said package engaging means for removably supporting a package, said package adapted to be engaged with by the prongs of said hook member whereby the same can be raised to the aircraft.

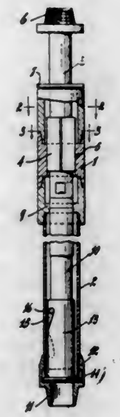
1,761,291. ANILINE-SULPHUR RESIN AND PROCESS OF MAKING SAME. ROBERT S. BLY, Lakeland, Fla., assignor, by mesne assignments, to Cutler-Hammer, Inc., a Corporation of Delaware. Filed June 29, 1925. Serial No. 40,456. 19 Claims. (Cl. 260—2.)

4. The process of producing a thermoplastic resin which comprises heating under a reflux condenser a mixture of sulphur and an amino compound of benzene in the presence of a quantity of nickel.

9. A resin adapted for hot molding which is the product of reaction of about five molecular proportions of aniline and about nine atomic proportions of sulphur in the presence of a catalyst.

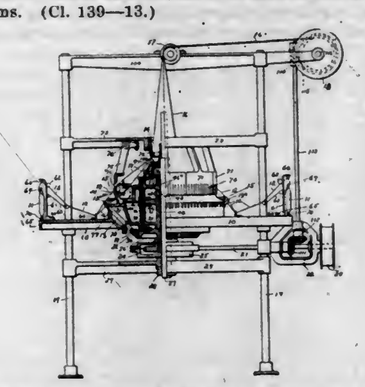
17. The process of producing a thermoplastic molding compound which comprises boiling under a reflux condenser about 576 parts of sulphur and about 930 parts of aniline in the presence of a small quantity of a catalytic agent, and then intimately mixing the resulting reaction product with a suitable filler material.

1,761,292. CORE BARREL. JOSEPH G. BONE, Long Beach, Calif. Filed Aug. 14, 1929. Serial No. 385,838. 7 Claims. (Cl. 255—72.)



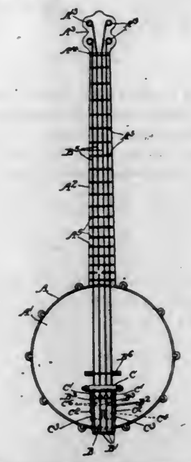
1. A core barrel comprising an outer barrel, an inner barrel within said outer barrel, means slidably mounting said inner barrel, pipe coupling means on the top of said inner barrel, a sleeve rotatably mounted on said inner barrel, means coupling said sleeve and inner barrel whereby the sleeve is rotated as the inner barrel is raised or lowered, and means on said sleeve adapted to extend across the inner barrel when said inner barrel is raised.

1,761,293. CIRCULAR LOOM. ROBERT G. CLARK, Brooklyn, N. Y. Filed Mar. 16, 1928. Serial No. 262,161. 16 Claims. (Cl. 139—13.)



1. In a circular loom; a plurality of bobbins supplying the warp threads; a plurality of radially disposed independent heddles engaging said warp thread; two heddle-actuating cams for lifting alternate warp threads; said heddles being interchangeable so that they may be arranged in various combinations on their respective cams; one or more shuttles supplying the weft thread; and means for revolving said shuttle or shuttles through the alternated warp threads.

1,761,294. BANJO MUTE. CALVIN LEE FORSYTHE, Chicago, Ill., assignor of one-half to Thomas R. Dorcey, Chicago, Ill. Filed Dec. 8, 1927. Serial No. 238,474. 4 Claims. (Cl. 84—273.)

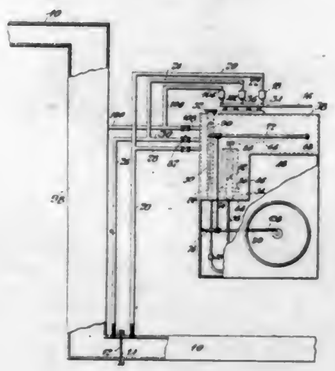


1. In a stringed musical instrument, a bridge, a tail piece, there being a groove on the underside of the tail piece, a mute adapted when in one position to bear on the bridge comprising a transverse bar, spring arms extending rearwardly therefrom from the tail piece, the arms embracing the tail piece, a member associated with said arms and slidable in the groove on the underside of the tail piece.

1,761,295. FLUID METER. BENJAMIN GREENFIELD, Bartlesville, Okla., assignor, by mesne assignments, to Doherty Research Company, New York, N. Y. Filed Aug. 29, 1919. Serial No. 320,685. 19 Claims. (Cl. 73—167.)

1. A method of determining the rate of flow and density of a flowing fluid stream in a closed conduit which com-

prises creating a change in pressure head of said stream having a known relation to the rate of flow thereof, developing a pressure differential in a measuring fluid proportional to the pressure difference between points in said flowing fluid immediately before and immediately after said change in pressure head, causing the said flowing fluid to flow at a low velocity in a vertical direction from



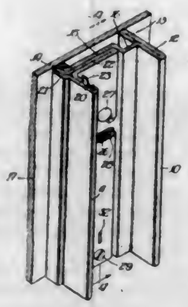
the point of low pressure of the said pressure change, developing in a measuring fluid a pressure differential proportional to the pressure difference between points in said flowing fluid a fixed distance apart in the path of the vertical flow, taking simultaneous measurements of the pressure differentials thus developed, and obtaining simultaneous determinations of the density and rate of flow of the flowing fluid therefrom.

1,761,296. HOSIERY-DRYING-FORM MACHINE. PAUL GUGGENHEIM, Philadelphia, Pa., assignor to Philadelphia Metal Drying Form Company, Philadelphia, Pa., a Corporation of Delaware. Filed Mar. 20, 1928. Serial No. 263,186. 9 Claims. (Cl. 223—17.)



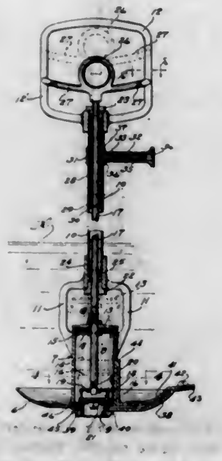
1. In a drying apparatus for drying articles of textile fabric, the combination with a form for receiving the article to be dried and a support on which the form is turnable on an axis extending longitudinally of the form, of manually operable mechanism to turn the form on said axis from a given position, and a spring adapted to return the form to said position.

1,761,297. SASH GUIDE. WILLIAM S. HAMM, Elkhart, Ind., and RAYMOND L. GREIST, Chicago, Ill., assignors to The Adlake Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 8, 1929. Serial No. 353,289. 10 Claims. (Cl. 189—75.)



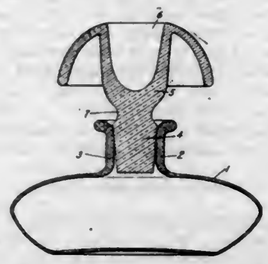
1. In a sash guide, two spaced side walls, one of which is fixed and the other of which is removable, the fixed side wall having a laterally projecting portion which is adapted to extend behind the edge of a sash in the guide, and the removable side wall having a laterally projecting portion which laps with and is detachably secured to the laterally projecting portion of the fixed side wall.

1,761,298. COMBINATION CREAM AND MILK STIRRER AND SAMPLER. ORA E. HARRIS, Kearney, Nebr. Filed Apr. 28, 1928. Serial No. 273,528. 14 Claims. (Cl. 137—18.)



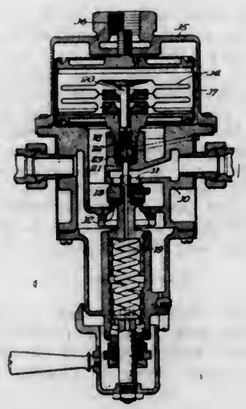
13. A cream and milk stirring and sampling device comprising a stem having on one end a sampling chamber, and a slide on the stem for cleaning the same.

1,761,299. HOLDER FOR CANDLES. EDGAR W. HEISEY, Newark, Ohio, assignor to A. H. Heisey & Company, Newark, Ohio, a Partnership. Filed Jan. 30, 1928. Serial No. 250,659. 3 Claims. (Cl. 67—23.)



2. In a candle holder, a base which takes the form of a glass receptacle, and a closure for said receptacle having a socket therein for the reception of a candle, and an apron carried by said closure.

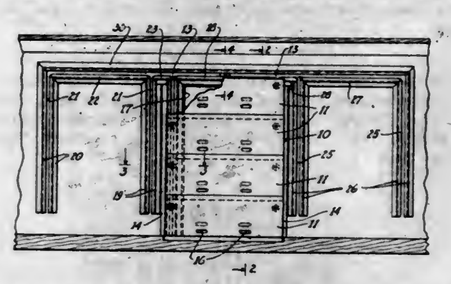
1,761,300. THERMOSTATIC REGULATOR. ALBIN J. HEMINGS, Chicago, Ill., assignor to Powers Regulator Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 22, 1928. Serial No. 314,281. 4 Claims. (Cl. 236—12.)



1. In combination, a casing having hot and cold fluid ports and a mixing chamber, a valve movable between said ports to vary the proportion of the respective fluids admitted to said chamber, a bonnet having a mixed fluid outlet, a rigid thermostatic casing in said bonnet, a bellows in said thermostatic casing, a plunger operated by said bellows, a relatively long bushing, and a hardened steel pin connecting said plunger to said valve, said pin being supported throughout substantially its entire length in said bushing and having a burnished fit therein, thereby avoiding the use of packing.

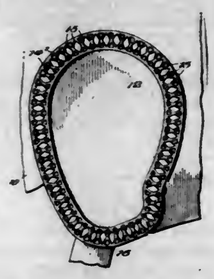
1,761,301. BOX-CAR DOOR. JOHN HOLDERNESS, Chicago, Ill. Filed July 12, 1928. Serial No. 292,102. 1 Claim. (Cl. 94—31.)

In a car, means for closing the doorway of said car, said means comprising a pair of vertical guideways, one of the guideways being fixed inside of the car and at each side of said doorway, a second pair of vertical guideways fixed to the inside of the car at one side of said doorway and spaced apart substantially the same distance as said first mentioned guideways are spaced, a closure for the doorway having guide means fixed thereto and adapted to coact with said vertical guideways, and a horizontal



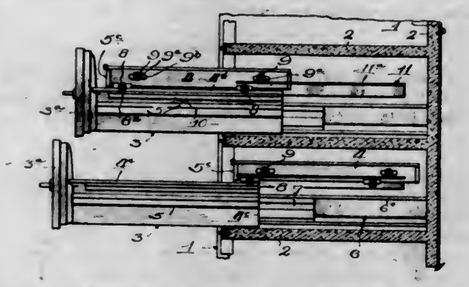
guideway fixed to the inside of said car and extending over the upper ends of all of said guideways and having slots therein registering with said vertical guideways.

1,761,302. BATHING CAP. THOMAS J. HOWLAND, Long Branch, N. J. Filed Dec. 2, 1929. Serial No. 411,102. 6 Claims. (Cl. 2—68.)



1. A bathing cap comprising a main portion of elastic material having ear-receiving openings, portions covering the openings and forming ear pockets and means adjacent the edge of the openings and extending at least a part way therearound and also extending inwardly from the cap towards the head to form with the head a watertight seal.

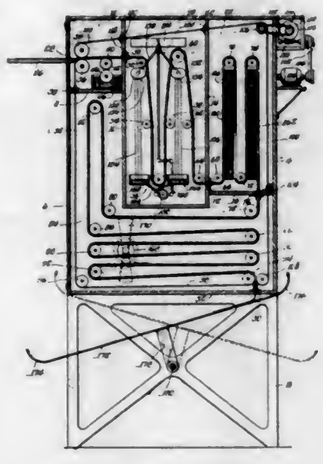
1,761,303. DRAWER CONSTRUCTION FOR FILING CABINETS. DAVID E. HUNTER, Muskegon, Mich., assignor to Shaw-Walker Company, Muskegon, Mich., a Corporation of Michigan. Filed Oct. 18, 1926. Serial No. 142,173. 5 Claims. (Cl. 45—7.)



1. In a filing device, the combination with a drawer compartment, of a main drawer, means for slidably supporting said main drawer in said compartment, an auxiliary drawer having sets of rollers adjacent each end, tracks on opposite sides of said compartment and adapted to be engaged by one set of said rollers to support said auxiliary drawer independently of said main drawer when

both are in closed position, said main drawer having tracks adapted to be engaged by the other set of rollers in the movement of said auxiliary drawer into and out of said compartment when said main drawer is in open position.

1,761,304. DEVELOPING APPARATUS. ADOLPH LANOSNER, Chicago, Ill., assignor to Eugene Dietzgen Company, Chicago, Ill., a Corporation of Delaware. Filed Feb. 8, 1928. Serial No. 252,717. 14 Claims. (Cl. 95—94.)



14. In a developing apparatus for light sensitive material, means for transporting the light sensitive material along a predetermined path and means for creating, adjacent said path, a spray of fluid of a type adapted to evolve gases for developing the light sensitive material whereby light sensitive material carried along said path may be developed by the gases evolved from said spray without becoming moistened by the liquid forming the spray.

1,761,305. METHOD OF PRODUCING MARBLEIZED FLEXIBLE SHEETS. GEORGE MERVIN MCGUIRE, Los Angeles, Calif. Filed Sept. 23, 1927. Serial No. 221,615. 7 Claims. (Cl. 91—68.)

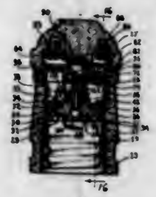
4. The herein described method of marbleizing flexible sheets which consists in immersing flexible sheets in a bath composed of water and alcohol having on its surface a compound containing white lead, a vegetable oil, benzol and coloring substance.

1,761,306. MOLD FOR CONSTRUCTING TRUSSES. JOHN L. MCKEOWN, Winnetka, Ill. Filed June 30, 1924. Serial No. 723,096. 7 Claims. (Cl. 25—131.5.)



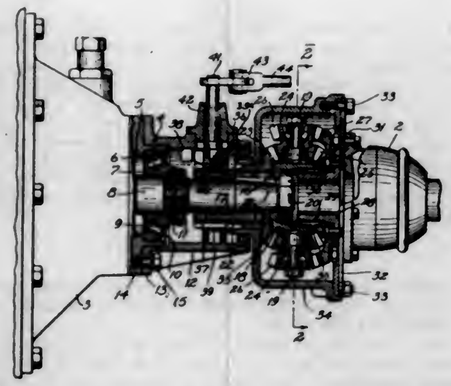
4. A mold form of truss construction for use in constructing trusses having bowed top chords made of concrete, comprising a trough-shaped mold proper comprising spaced side members which are bowed to conform to the curvature of the top chord of the finished truss and which forms the top chord of the truss formed by said mold, a tension member which connects opposite ends of said mold proper and which forms the lower chord of the truss of which said mold proper forms the top chord, bolts for securing the side members of the form together, pipe sections adjusted over said bolts the ends of which abut against the inner sides of said side members, and suspension members the opposite ends of which, respectively, are secured to one of said pipe sections, and to the tension member which forms the lower chord of the truss, the relation being such that when the concrete arch is poured the ends of the tension member, the pipe sections to which the suspension members are secured, and the upper ends of said suspension members will become embedded therein.

1,761,307. ELECTRIC-LAMP SOCKET. GEORGE J. MEUER, Milwaukee, Wis., assignor, by mesne assignments, to Cutler-Hammer, Inc., Milwaukee, Wis., a Corporation of Delaware. Filed Dec. 24, 1928. Serial No. 328,239. 9 Claims. (Cl. 173—354.)



1. In a pull chain lamp socket, in combination, body and cap portions of insulating material and an insulating button interposed between said body and cap portions, wiring terminal plates secured to said cap portion, center and screw shell contacts within said body portion, and a single screw the head of which is in clamping engagement with said screw shell contact and the shank of which takes into a tapped opening in one of said terminal plates in the cap, said screw forming the sole means for holding said cap portion against longitudinal movement with respect to said body portion and said button and also providing a direct electrical connection between said screw shell contact and said terminal plate.

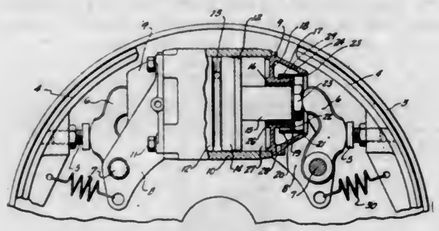
1,761,308. TWO-SPEED GEARING. MATHEW B. MORGAN, Detroit, Mich., assignor to The Timken-Detroit Axle Company, Detroit, Mich., a Corporation of Ohio. Filed July 1, 1929. Serial No. 375,001. 8 Claims. (Cl. 74—34.)



1. The combination with an automotive axle having a propeller shaft of a two speed drive therefor, said drive

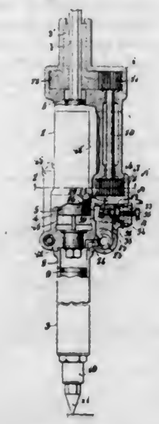
comprising a universal joint, a driving shaft fixed to said universal joint and having a bevel gear fixed thereto, said propeller shaft alined therewith, a spider having an elongated hollow hub fixed to said driven propeller shaft and forming a pocket bearing for said driving shaft and having bevel pinion members thereon, a bevel gear rotatably mounted on the extended hub of said spider and releasable means whereby said last mentioned gear may be locked to said universal joint and to a stationary part alternately, both of said bevel gears engaging said pinion members.

1,761,309. MOTOR CYLINDER. FRED NEALE, Cleveland, Ohio, assignor, by mesne assignments, to The Christensen Air Brake Company, Cleveland, Ohio. Filed July 22, 1927. Serial No. 207,781. 3 Claims. (Cl. 60—62.6.)



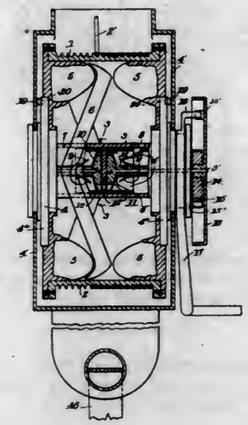
1. In a cylinder, the combination with the cylinder body, of a cover plate secured thereto, a piston working in said cylinder and provided with a rod slidably mounted in said cover plate, said cover plate having a cavity formed therein about said rod and provided with an outlet for foreign matter and an orifice connecting the space in said cylinder behind the piston with said cavity whereby to produce a flow of flushing air into said cavity during the outward movement of the piston.

1,761,310. DRILLING MECHANISM. CHARLES F. OSGOOD, Claremont, N. H., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed May 24, 1923. Serial No. 641,097. 24 Claims. (Cl. 121—5.)



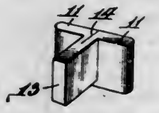
1. In combination, work performing means including a rotary tool actuating motor, a tool actuated thereby, pressure fluid actuated feeding means for said tool, and means having communication with said feeding means and automatically controlled by pressure changes in said feeding means for controlling said rotary motor.

1,761,311. LOWERING MECHANISM APPLICABLE FOR USE IN PORTABLE LIFE-SAVING APPARATUS. JAMES DERMOT REDMOND, Earlswood, England. Filed Mar. 10, 1927, Serial No. 174,223, and in Great Britain Mar. 16, 1926. 10 Claims. (Cl. 254—158.)



1. In a portable fire escape, the combination of a frame, a drum rotatably mounted therein to contain a liquid and adapted to receive a cable, means whereby the liquid in the drum is caused to flow backwards and forwards from one part of the drum to another when the drum is rotated, means for attaching the frame to the operator and means operable by the operator during his descent for controlling the rate of flow of said liquid.

1,761,312. METHOD OF FORMING ATTACHMENTS FOR DENTURES. SIDNEY RICHARDSON, Hollywood, Calif., assignor to Annie Richardson, Los Angeles, Calif. Filed Mar. 3, 1927. Serial No. 172,414. 1 Claim. (Cl. 29—160.6.)

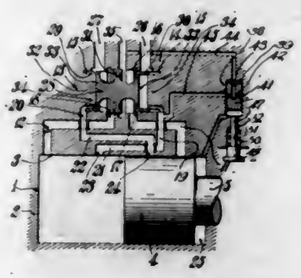


The herein described method of forming an attachment for dentures which consists in cutting a solid block of metal to form a substantially U-shaped member, dividing said member on a medial line to form two identical L-shaped members, arranging said L-shaped members so that two of the legs thereof lie back to back and then integrally connecting portions of the legs of said L-shaped members so as to form a substantially T-shaped member.

1,761,313. ROCK-DRILLING MECHANISM. THORE R. E. RUNDQVIST, Claremont, N. H., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed May 23, 1925. Serial No. 32,462. 10 Claims. (Cl. 121—12.)

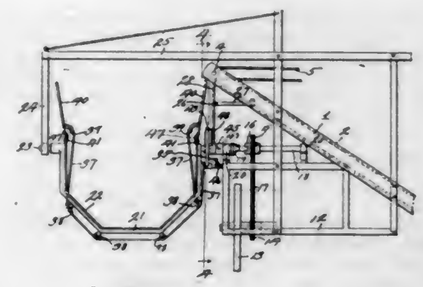
1. In a pressure fluid motor, a cylinder, a piston reciprocable therein, passages for distributing fluid to and from said cylinder, a valve controlling said distributing passages, means including a throwing passage for controlling said valve, and means comprising passages one of which communicates with said throwing passage, and an auxiliary valve for controlling the same operable in response to pressure conditions in a part of said cylinder

to effect a preliminary flow of live pressure fluid to said throwing passage prior to the throwing action thereof on



said valve to advance the time of throwing of said valve and admission to an end of said cylinder when excessive pressures are built up in said end.

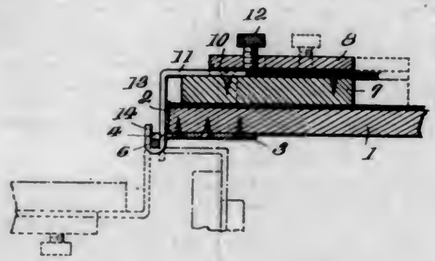
1,761,314. SHOCK-FORMING MACHINE. FRED J. SENG, New Albany, Ind. Filed Apr. 24, 1928. Serial No. 272,395. 6 Claims. (Cl. 56—422.)



1. The combination with the discharge end of a harvester conveyor, of a shocker disposed below said discharge end and into which sheaves are discharged, means for controlling the operation of a discharge conveyor, of a shaft rotatably mounted beneath the conveyor and supporting the shocker, a ground engaging wheel, clutch controlled connections between the ground engaging wheel and the shaft, connections between said last named clutch connections and the conveyor control mechanism whereby upon stopping of the conveyor, the clutch connection will be moved to clutched position and the shaft rotated, a disc rotatably mounted on said shaft, pivoted gripping members carried by the shocker, cable connections between the gripping members and the disc to one side of the center of the disc, detent means for holding the disc against rotation until the shocker reaches a vertical discharge position, an arm carried by said shaft and cooperating with said detent for releasing the same, said pivoted members carried by the shocker having means for imparting pulls on the cables for rotating the disc to initial position.

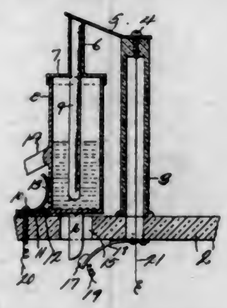
1,761,315. ADJUSTABLE ATTACHMENT FOR PAPER HANGERS' STRAIGHTEDGE AND TRIMMING BOARDS. HUGH ERNEST SIMONTON, Memphis, Tenn. Filed Sept. 10, 1928. Serial No. 304,910. 3 Claims. (Cl. 164—78.)

1. The combination with a paper hanger's trimming board, of a trimming attachment comprising an elongated member resting upon the upper face of the trimming board, hinge members adjustably connected to the elongated trimming member and extending down along one edge of the trimming attachment and removably hinged



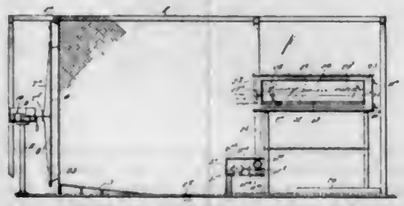
to the trimming board whereby the trimming attachment may be removed from the trimming board or can be swung outwardly and downwardly under the same.

1,761,316. CIGAR LIGHTER. CHARLES SPITZER, Warrensburg, Ill. Filed Oct. 17, 1927. Serial No. 226,671. 1 Claim. (Cl. 175—296.)



A cigar lighter comprising a base, a stationary arm extending upwardly from said base, an inclined contact plate carried by said arm, a hinged leaf secured to the base, said leaf being hingedly connected to the lower outer side of a fuel receptacle, a leaf spring carried by the hinged leaf and engaging the outer side of said receptacle above the hinging point, a leaf spring carried contact beneath the base, a contact arm carried by the lower end of the fuel receptacle and extending through an aperture in the base and positioned whereby upon outward tilting of the fuel receptacle it will engage the leaf spring carried contact beneath the base, said arm having its lower end curved, thereby forming a cam engaging surface for the contact.

1,761,317. AUTOMATIC GOLF LINK. RICHARD H. STRASSER, Newark, N. J., assignor to Strasser Automatic Golf Systems, Inc., Newark, N. J., a Corporation of New Jersey. Filed Feb. 15, 1928. Serial No. 254,354. 5 Claims. (Cl. 265—20.)



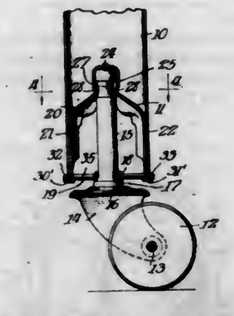
1. An apparatus for playing the game of golf comprising a suspended curtain adapted to receive the impact

of a driven golf ball, a cabinet containing a picture representing a typical hole of a natural golf course, said picture having a scale thereon calibrated in yards, and means associated with the curtain to operate an indicator to register on the scale the exact distance the ball would have been driven on a natural course, and to indicate the position of the ball on the course.

1,761,318. FRICTION BRAKE. JAMES S. THOMPSON, New York, N. Y., assignor to American Brake Materials Corporation, New York, N. Y., a Corporation of New York. Filed Aug. 26, 1927. Serial No. 215,767. 11 Claims. (Cl. 188—251.)

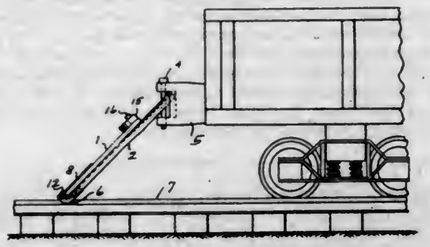
1. A friction block for brakes consisting of a solid compressed mixture of a natural pyrobituminous material, asbestos, and a binder, the pyrobituminous material being finely divided and substantially uniformly distributed throughout the wearing portion of the block.

1,761,319. CASTER SOCKET. WILLIAM A. VOLLMER, Kenosha, Wis., assignor to Simmons Company, Kenosha, Wis., a Corporation of Delaware. Filed Jan. 30, 1924. Serial No. 689,387. 3 Claims. (Cl. 16—39.)



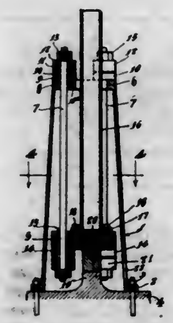
1. A sheet-metal caster socket comprising a base-plate having a central bearing opening for the caster shank and a body member adapted to fit snugly within a tubular furniture leg and comprising a bearing for the upper end of the caster shank and a pair of spaced legs having flanges at their lower ends bent outwardly and inwardly over opposite edge portions of the base-plate, the edge portions of the plate between the legs being folded upwardly and inwardly and cooperating with the leg flanges to form a continuous shoulder seat for the lower end of the furniture leg.

1,761,320. PLOW. CHARLES C. WARD, Houston, Tex. Filed Nov. 17, 1927. Serial No. 233,895. 2 Claims. (Cl. 37—104.)



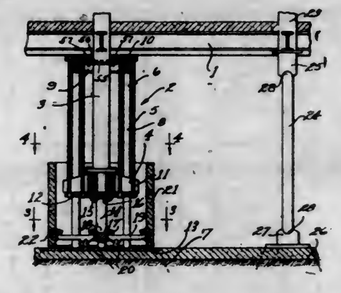
2. A plow for spreading material comprising a mould board, beams supporting said board and connected at their upper ends and one of which has a bearing, flanged shoes attached to the lower ends of said beams, a share formed of thick metal secured across the lower edge of the mould board and whose lower edge extends beneath the lower edge of the mould board, said share having notches opposite said shoes and being adjustable on the mould board, a plurality of guards spaced apart along the lower edge of the share and curved forwardly.

1,761,321. FOUNDATION CONSTRUCTION. DON W. WELLS, El Centro, Calif., assignor of one-fourth to George W. Anderson, Los Angeles, Calif., one-fourth to Ray Edgar, and one-fourth to John Stewart Ross, El Centro, Calif. Filed June 1, 1927. Serial No. 195,670. 5 Claims. (Cl. 72—77.)



3. In a foundation construction for buildings and the like, the combination of a base supported on the ground, a cross-head, suspending means for supporting the cross-head from the base, and a column supported on the cross-head.

1,761,322. FOUNDATION CONSTRUCTION. DON W. WELLS, Los Angeles, Calif., assignor of one-fourth to George W. Anderson, Los Angeles, Calif., one-fourth to Ray Edgar, and one-fourth to John Stewart Ross, El Centro, Calif. Filed Apr. 9, 1928. Serial No. 268,481. 16 Claims. (Cl. 72—77.)

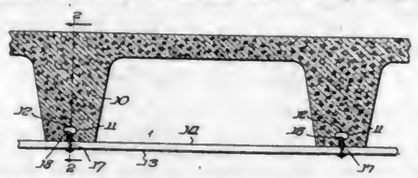


1. In a foundation for a structure, to absorb a force developed by a lateral ground movement, the combination of a cradle supporting the said structure, a base having means for suspending the cradle, and means for resisting the equilibrating movement of the structure consequent to the displacement of the base when said ground movement occurs.

1,761,323. LATH CLIP. WILLIAM E. WHITE, Chicago, Ill., assignor to Kalman Steel Company, Chicago, Ill., a Corporation of Delaware. Filed May 17, 1928, Serial No. 278,457. Renewed Nov. 18, 1929. 6 Claims. (Cl. 72—120.)

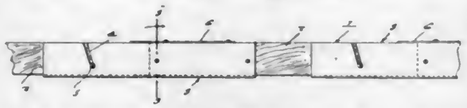
1. In ceiling construction, the combination of a support having a continuous projection, ribbed lath so mounted

that the ribs space the body of the lath from the support, and interlaced wire clips, each clip having a shank terminating in a hook at one end adapted to pass through



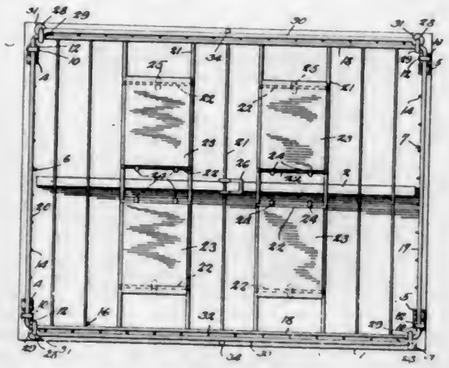
the body of the lath and engage said projection and at the other end shaped to engage with an adjacent cooperating clip.

1,761,324. SEWER-PIPE CLEANER. CLARK C. WINDHURST, West Union, Iowa. Filed Apr. 5, 1927. Serial No. 181,129. 1 Claim. (Cl. 287—108.)



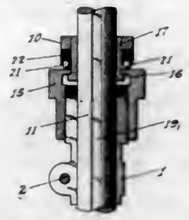
In a structure of the class described, a rod section, a second rod section cooperable with the first rod section and disposed in abutting relation therewith, and a separable coupling for the abutting ends of said rod sections comprising an open-ended member of channel-shaped cross section, having one end portion rigidly fastened to one rod section, and having the other end portion projecting beyond said end and receiving the remaining rod section, said projecting end having its side walls formed with inclined slots providing keeper seats, and said last-named rod section having headed fasteners releasably arranged in said keeper seats, together with a flat retaining strip fastened to the first-named rod section and overlying the adjacent end of the complemental rod section.

1,761,325. CHICKEN COOP. JOEL J. BURSON, Mineral Wells, Tex. Filed July 23, 1928. Serial No. 294,914. 1 Claim. (Cl. 220—6.)



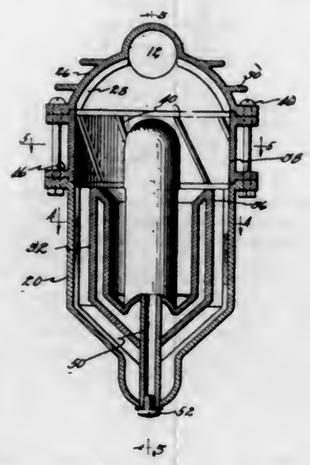
A coop comprising a top, depending sides hinged at their upper edges to the top, a base, ends hinged to the base, means for hingedly-connecting the top to the ends, latches forming a releasable pivotal connection between the sides and the base, a partition extended between the ends, means for connecting the partition hingedly with the base, the top comprising bars, a retainer pivotally and slidably mounted on one of the bars and adapted to straddle the upper edge of the partition to hold the partition at right angles to the base, the partition forming compartments in the coop on opposite sides of the partition, doors hingedly mounted on the bars of the top and giving access to the compartments.

1,761,326. UNIVERSAL VALVE SEATING AND COUNTERBORING TOOL. ERNEST P. CAMPBELL, Stockton, Calif. Filed Aug. 24, 1927. Serial No. 215,058. 2 Claims. (Cl. 90—12.5.)



1. A tool including a sleeve, a mandrel slidable and turnable therethrough, a member slidable on the mandrel, clamping means between said member and mandrel, a shoulder on said member, a feed nut on the sleeve to engage the shoulder to advance said member toward the sleeve, balls mounted in said member to engage the outer face of the nut, and springs acting on the balls to force the same against the nut and to also cause the shoulder to be normally maintained in contact with the opposite face of the nut.

1,761,327. VAPORIZER FOR INTERNAL-COMBUSTION ENGINES. EVANGELOS L. CARATHANASIS, Detroit, Mich. Filed Oct. 13, 1924, Serial No. 743,316, and in Canada June 9, 1924. 9 Claims. (Cl. 48—180.)



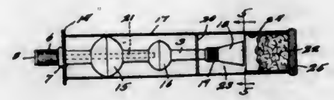
1. A vaporizer for an internal combustion engine provided with an inlet and an outlet for the fuel mixture passing from the carburetor to the combustion chambers, and provided with an outwardly corrugated jacketed baffle cup positioned therein so the fuel mixture will flow over the outer surface thereof, the jacketed wall of said cup provided with an inlet and outlet for exhaust gases, and a drain pipe extending from the bottom of said cup to discharge externally of the vaporizer.

1,761,328. PROCESS OF PURIFYING LUBRICATING-OIL DISTILLATES. MARVIN L. CHAPPELL, Watson, Calif., assignor, by mesne assignments, to Richfield Oil Company of California, Los Angeles, Calif., a Corporation of Delaware. Filed July 31, 1928. Serial No. 296,629. 6 Claims. (Cl. 196—38.)

4. A process of purifying mineral lubricating oil stocks after treatment with sulphuric acid for the removal of

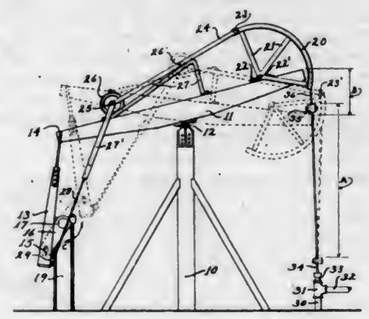
emulsifying constituents, comprising, neutralizing and removing the free mineral acids from an acid treated lubricating oil stock from which the acid sludge has been substantially removed, with a water solution of caustic soda, without any substantial neutralization or removal of the organic acid constituents contained therein and then removing the organic acid constituents by commingling the said acid treated lubricating oil stock from which the free mineral acids have been removed, with an excess of a water solution of potassium hydroxide at a temperature of approximately 250 to 280° F., and finally separating the neutralized organic acids from the lubricating oil stock.

1,761,329. WIND MUSICAL INSTRUMENT. HARRY J. CHARLTON, Elkhorn, Wis., assignor to Frank Holton & Company, Elkhorn, Wis., a Corporation of Wisconsin. Filed May 7, 1928. Serial No. 275,616. 21 Claims. (Cl. 84—380.)



16. A cover for reed equipped mouthpieces of wind musical instruments, comprising a tubular member adapted to slip over the mouthpiece and constructed to accommodate absorbent material for keeping the reed of the mouthpiece moist.

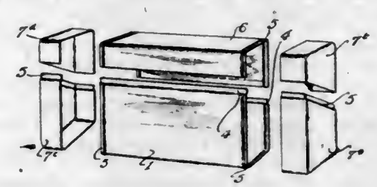
1,761,330. LONG-STROKE PUMPING MECHANISM. JOHN U. DAVIS, Eldorado, Kans., assignor of one-half to Thomas E. Westbrook, Eldorado, Kans. Filed Jan. 2, 1930. Serial No. 417,987. 4 Claims. (Cl. 74—14.)



1. The combination of an oil well crank, pitman, walking beam, and Samson post, said walking beam being pivotally mounted on the Samson post, one end of said walking beam being connected to the said crank by means of said pitman, a curved sector pivotally mounted on the said walking beam and members to connect said curved sector to the pitman as an actuating means for said curved sector.

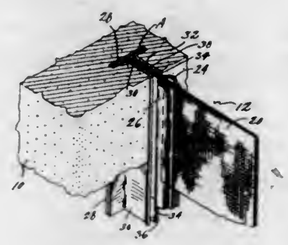
1,761,331. METHOD OF MAKING BOXES AND COVERS THEREFOR. CLARENCE L. DEWEY, Elkhart, Ind., assignor to Outing Manufacturing Company, a Corporation of Indiana. Original application filed June 26, 1926, Serial No. 118,616. Divided and this application filed Dec. 12, 1927. Serial No. 239,329. 3 Claims. (Cl. 113—120.)

1. The method of making a box and cover therefor from sheet metal which consists in stamping suitable sheet metal pieces into complemental channel sections, inwardly offsetting the end margins thereof, stamping a third piece of



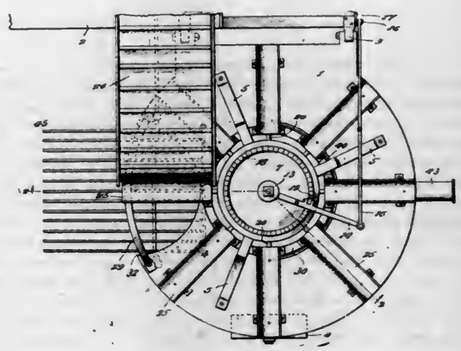
sheet metal into a box-like form, severing said box-like form into two sections, and securing said sections to the ends of said channel sections.

1,761,332. GUIDE AND MOUNTING FOR SCREENS OR THE LIKE. HARRY DIXSON, Pella, Iowa, assignor to Rolscreen Company, Des Moines, Iowa. Original application filed Aug. 16, 1926, Serial No. 129,566. Divided and this application filed Dec. 29, 1927. Serial No. 243,327. 23 Claims. (Cl. 156—39.)



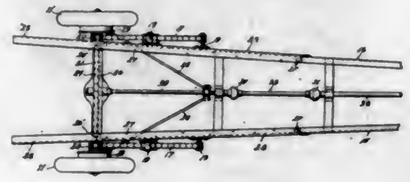
2. A guide and mounting including a guide holder having a slit opening therein, a screen guide adapted to extend into said slit opening and be received between parts of said holder, parts of said holder frictionally engaging the screen guide for holding it in position.

1,761,333. SHOCKER. WILLIAM ALBERT FIFIELD, Abbey, Saskatchewan, Canada. Filed Aug. 14, 1928. Serial No. 299,478. 13 Claims. (Cl. 56—411.)



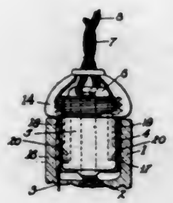
1. In apparatus for the purpose set forth, the combination of a plurality of bundle receivers normally supported in horizontal position, means for transferring bundles from a binder to said receivers, and means for swinging said receivers from a horizontal position toward each other into upright position whereby to deposit the bundles on end in the form of a shock.

1,761,334. TRUCK-FRAME EXTENSION. ORLANDER W. FRY, Los Angeles, Calif., assignor to O. R. Fuller Co., Los Angeles, Calif., a Corporation. Filed May 5, 1928. Serial No. 275,428. 1 Claim. (Cl. 180—1.)



In combination with a motor vehicle frame having side bars and a rear cross bar; an auxiliary frame comprising a pair of side bars adapted to snugly engage with said motor vehicle frame side bars, a cross bar pivotally connected at its ends to said auxiliary side bars inwardly from the rear end of the latter, said cross bar being of a length equal to the width of the rear end of said motor vehicle frame and adapted to abut with the latter, and means for securing said auxiliary side bars near their forward ends to said frame side bars.

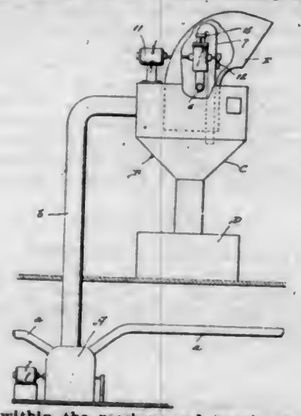
1,761,335. PLUG CONNECTER. CARL O. GRAVES, Cincinnati, Ohio. Filed Feb. 7, 1929. Serial No. 338,270. 6 Claims. (Cl. 173—360.)



1. A plug connecter comprising in combination an unthreaded cylindrical body portion formed of insulating material and of slightly less diameter than the socket in which it is to be used, an electrical contact member extending through said body longitudinally with a contacting portion on the bottom of the body and a portion on the top of said body, means for securing said top portion and a lead-wire to the body, a resilient electrical contact member whose free end extends along the side of the body and has a projection normally outside the cylindrical wall of said body and whose upper portion is bent over against the top end of said body, means for securing said top end of the last named contact member to a lead-wire, and a cap formed of insulating material removably securable to said body and having an opening to admit lead-wires.

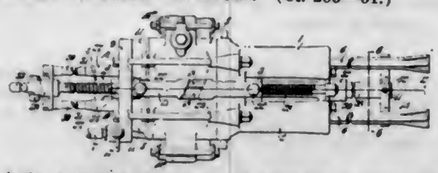
1,761,336. ATTACHMENT FOR DUST COLLECTORS. JOHN ADAM GUTH, Covington, Ky. Filed May 12, 1928. Serial No. 277,281. 7 Claims. (Cl. 183—21.)

1. A moistening attachment for dust collectors, wherein the said collector includes a receiver, a vent pipe extending above the receiver and depending therein, said collector having an inlet; a rotary moisture containing body, a casing for said body, an inlet pipe communicating with said casing at one end and having its remote end



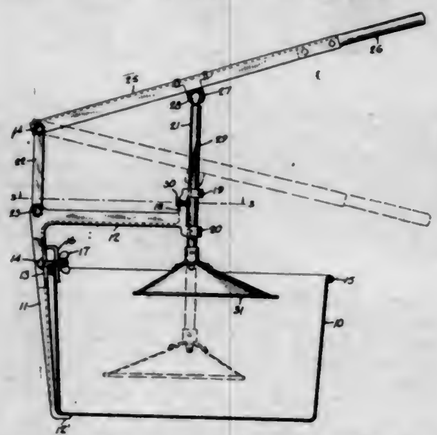
disposed within the receiver and terminating at a point above the open end of the vent pipe, and an outlet for the casing.

1,761,337. DRILLING MECHANISM. EDWIN T. HALL, Boston, Mass., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed Mar. 30, 1926. Serial No. 98,599. 19 Claims. (Cl. 255—51.)



1. In a drilling mechanism, a plurality of unitary drilling tools each having gibs secured thereto at the bottom thereof, a cradle having means cooperating with said gibs for maintaining said tools in juxtaposition with their bottoms parallel to a vertical plane and immediately adjacent each other, a guiding frame on which said cradle is slidably mounted, and means for feeding said cradle relative to said guiding frame.

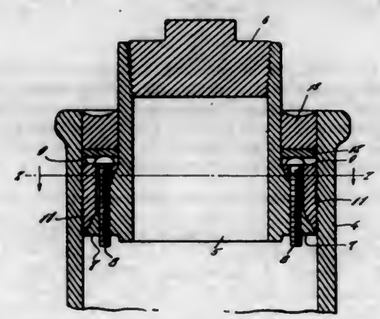
1,761,338. WASHING MACHINE. WELLESLEY R. HAMPDEN, Readville, Oreg., assignor of one-half to William F. Woolard, Wauwatosa, Wis. Filed July 20, 1929. Serial No. 379,756. 10 Claims. (Cl. 259—144.)



1. In a washing machine, a vertically disposed axially reciprocating shaft, a support for guiding the shaft in such

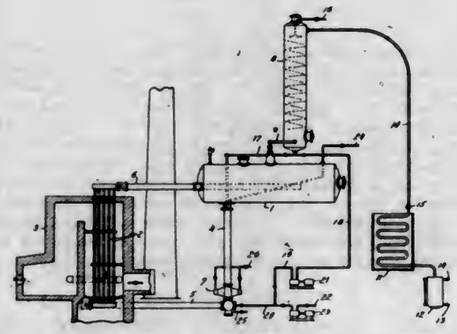
reciprocations, means for imparting rotation to the shaft during its axial movement, and a plunger on the lower end of the shaft and mounted off-center with respect to the latter for agitating the articles to be cleansed, whereby in the downward movement of the plunger a sweeping movement is imparted to the said articles.

1,761,339. CLOSURE PLUG. WILLIAM C. HAUSER, Forest Park, Ill. Filed May 29, 1929. Serial No. 367,053. 1 Claim. (Cl. 137—36.)



In a structure of the class described, in combination, a threadless pipe and a closure therefor comprising a sleeve extending into the pipe, said sleeve being of a diameter less than the pipe and provided with a removable screw cap and further provided on its inner end with external circumferentially spaced wedge shaped extensions, each extension being formed with a screw threaded bolt hole, a toothed wedge shaped anchoring slip cooperable with each extension and having a hole to accommodate the bolt and provided with anchoring teeth, and a bolt cooperable with each slip and its complemental extension, together with calking means interposed between the pipe and sleeve.

1,761,340. ART OF CRACKING HYDROCARBONS. EUGENE C. HERTHEL, Chicago, Ill., assignor to Sinclair Refining Company, New York, N. Y., a Corporation of Maine. Filed Oct. 27, 1927. Serial No. 229,099. 1 Claim. (Cl. 196—50.)

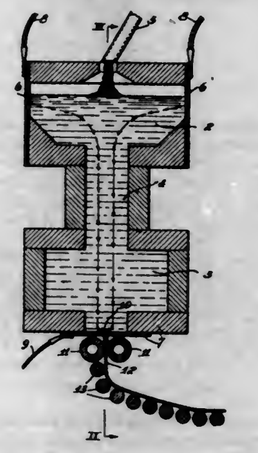


An improved method of cracking high-boiling easily cracked hydrocarbon oils, of which not more than 50% boil off up to 600° F. at atmospheric pressure, for the production of gasoline, which comprises maintaining in cyclic circulation through a heating zone, a vaporising zone and a refluxing operation all under superatmospheric pressure a low-boiling refractory stock, introducing the high-boiling easily cracked stock to be cracked into direct contact with the vapors in the refluxing operation and circulating the unvaporized part of this high-boiling stock preheated by the heat exchange in the refluxing operation to the heating zone in admixture with reflux condensate from the refluxing operation, heating the oil mixture to a cracking temperature under a superatmospheric pressure low enough to permit vaporization of the low-boiling refractory stock at the maximum temperature to which the oil mixture is heated, circulating the vapors separated in the vaporizing zone to the refluxing operation, discharging unvaporized oil from the vaporizing zone, taking off from the refluxing operation and condensing a vapor mixture including vapors of the low-boiling refractory stock and of the cracked gasoline product, and supplying a low-boiling refractory stock not less than 90% of which boils off up to 550° F. to the oil mixture circulating to the heating zone, the average rate of supply of the low-boiling refractory stock not less than 90% of which boils off up to 550° F. being maintained in excess of 5% and the average rate of supply of the high-boiling easily cracked stock not more than 50% of which boils off up to 600° F. being maintained in excess of 50% of the total rate at which fresh stock is supplied during the operation excluding initial charge.

1,761,341. MANUFACTURE OF ACID EXTRACTS, ALCOHOLS, AND THE LIKE FROM GAS OR VAPOR MIXTURES. EUGENE C. HERTHEL, Chicago, Ill., assignor to Sinclair Refining Company, New York, N. Y., a Corporation of Maine. Filed Jan. 7, 1928. Serial No. 245,268. 5 Claims. (Cl. 260—98.)

1. In the treatment of gas and vapor mixtures containing unsaturated hydrocarbons for the production of acid extracts containing alkyl esters of sulphuric acid, the improvement comprising absorbing unsaturated hydrocarbons from the gas or vapor mixture in an acid resistant oil and thereafter subjecting the absorbed constituents to treatment with sulphuric acid under sulphating conditions while in solution in said acid resistant oil.

1,761,342. APPARATUS FOR MAKING SHEET GLASS. HARRY F. HITNER, Oakmont, Pa., assignor to Pittsburgh Plate Glass Company, a Corporation of Pennsylvania. Filed Feb. 4, 1929. Serial No. 337,297. 4 Claims. (Cl. 49—33.)



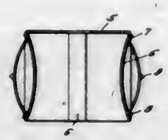
1. In combination in apparatus for making glass, a tank, a metal electrode constituting a part of one of the

walls of the tank and having a slot therethrough, means in opposition to the slot for receiving and carrying away the glass flowing from the slot, a second electrode at a point remote from said first electrode positioned so as to transmit current to the glass in the tank at said point, and means for supplying electric current to the electrodes.

1,761,343. PROCESS OF PROTECTING THE INTERIORS OF OIL-CRACKING RETORTS. ALBERT C. HOLZAPFEL, New York, N. Y. Filed Mar. 30, 1927. Serial No. 179,724. 6 Claims. (Cl. 91—70.)

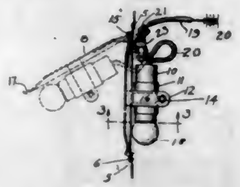
6. A process of protecting the interior surface of oil cracking retorts and the like which comprises applying thereto a coating of a composition comprising water glass, water, powdered magnesite, slaked lime and a powdered refractory material, which composition may be indurated by subjecting it to an oil cracking temperature, and thereafter subjecting said coating to an oil cracking temperature.

1,761,344. ELECTRICAL APPLIANCE CONNECTION. JOHN HUBER, Cincinnati, Ohio. Filed Mar. 13, 1929. Serial No. 346,649. 2 Claims. (Cl. 173—359.)



1. As a new article of manufacture, an appliance connector comprising a cap-like body provided with a plurality of circumferentially spaced longitudinally bowed retaining springs, said body being formed with inwardly curved grooves cooperating with said springs.

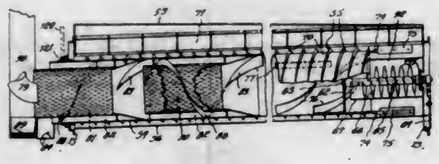
1,761,345. AUTO LIGHT. WALTER E. ISACKSON, Renton, Wash. Filed Mar. 21, 1929. Serial No. 348,957. 1 Claim. (Cl. 240—8.2.)



A lamp adapted to be mounted in the side of an automobile comprising a narrow substantially oval-shaped frame, means securing said frame to the car body, a plate hingedly secured to the frame, a clamp secured to the inner side of said plate, a bulb supported in said clamp, a contact arm secured to the frame, a second contact carried by the hinged plate, said contacts being brought together to complete a circuit upon swinging of the plate and light the bulb, and spring arms secured to the frame to receive the clamp and thereby hold the door secure, the said plate serving to cast the rays of the light downward and sidewise, and as a closure for the opening in the body of the car.

1,761,346. REAPER THRASHER AND LIKE HARVESTING MACHINE. THOMAS JELBART, Ballarat, Victoria, Australia. Filed Mar. 3, 1927, Serial No. 172,462, and in Australia Mar. 8, 1926. 24 Claims. (Cl. 130—27.)

14. In a harvesting machine, the combination with the subject matter of claim 13, of means for rotatably supporting the ends of the drum, helical and longitudinal vanes on the inside and adjacent to the feed end of the drum for periodically raising and dropping the material through the blast of air passing therethrough, one or more screens disposed concentrically within the discharge

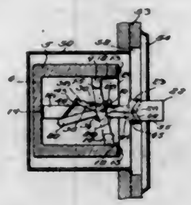


end of the drum, flared ends on the screens remote from the delivery end of the drum adapted to assist in the passage of the material thereto, helical vanes within the flared portions of the screens and helical blades surrounding the screens and adapted to direct the grain passing therethrough towards the discharge end of the drum.

1,761,347. MARKING PROCESS AND MATERIAL AND PROCESS OF PRODUCING SAID MARKING MATERIAL. MORRIS S. KHARASCH, Riverdale, Md. Filed Nov. 18, 1926. Serial No. 149,275. 14 Claims. (Cl. 106—5.)

1. A marking substance completely removably by the heat incident to pressing cloth comprising a mixture of crystalline substances each adapted to readily vaporize upon the application of heat, whereby marks made thereby upon fabric will be caused to disappear in the act of pressing the fabric.

1,761,348. SWITCH AND INDICATOR. NORBERT F. KOCHKA, Chicago, Ill. Filed July 16, 1927. Serial No. 206,208. 2 Claims. (Cl. 200—167.)

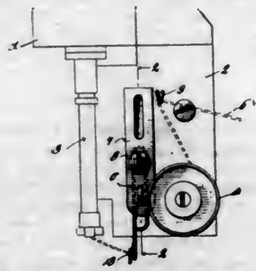


1. In a push button switch, the combination of a switch mechanism, a push button for opening and closing said switch mechanism, means for turning said button unidirectionally 180° by the combined depression and succeeding projection of said button and for turning said button unidirectionally 180° in the opposite direction by the combined succeeding depression and projection of the button and a single indicator marking disposed upon said button to indicate that the switch mechanism is closed in one projected position of the button and inverted by the alternate depressions and projections of the button to indicate that the switch mechanism is open.

1,761,349. LOOPER-THREAD CONTROLLER FOR BUTTONHOLE-SEWING MACHINES. LEO KOZLOWSKI, St. Paul, Minn. Filed Jan. 9, 1928. Serial No. 245,486. 2 Claims. (Cl. 112—241.)

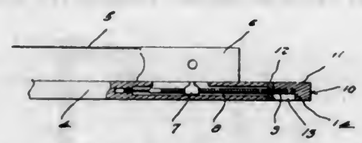
1. In a button hole stitching machine, the combination with the frame and the looper retainer driving bar of the machine, of looper thread tensioning means mounted on the frame, a retainer for the thread mounted on the frame between said driving bar and tensioning means, a

controller for the thread arranged below said retainer and the lower end of said driving bar, and means suspending



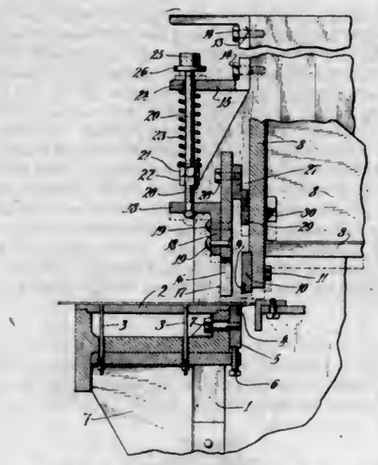
the controller from the frame, the thread passing through said tensioning means, retainer, controller and driving bar in the order named.

1,761,350. VIOLIN-BOW-HAIR-ADJUSTING DEVICE. FOSTER KRAKE, Lexington, Ky. Filed Mar. 25, 1929. Serial No. 349,782. 6 Claims. (Cl. 82—282.)



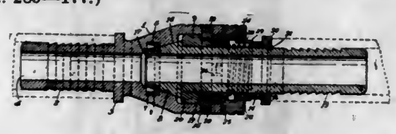
1. In a violin bow, a stick, a frog adjustably mounted on said stick, hair anchored to said frog, a coupling member carried by said frog, a rotatable feed screw threadedly connected with said coupling member and extending through and beyond the inner end of said stick, a pivotally mounted finger grip carried by the projecting end of the screw, a bearing element interposed between said finger grip and stick and turnable as a unit with said finger grip.

1,761,351. HOLDDOWN FOR SQUARING SHEARS. JOHN J. KUTSCHEID, Chicago, Ill., assignor to Dreis & Krump Manufacturing Co., Chicago, Ill., a Corporation of Illinois. Filed Jan. 25, 1929. Serial No. 335,022. 2 Claims. (Cl. 164—51.)



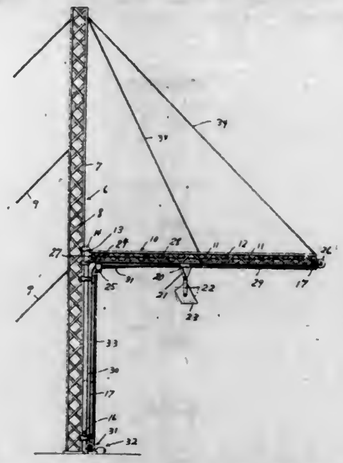
1. In squaring shears comprising ends, a connecting bar joining said ends, said bar provided with a horizontal member, a movable top cutting bar, and a table, in combination, a vertically movable plate, abutments on the rear face of said plate, coacting abutments on said top cutting bar, an angle iron rigidly mounted on said plate, bolts rigidly secured in the horizontal member of said angle iron, said bolts fitting loosely in apertures in the horizontal member of said connecting bar, springs mounted on said bolts and adjusting nuts on said bolts, said plate adapted to be forced downward by the resilience of said springs onto said table.

1,761,352. HOSE COUPLING. HENRY H. LOGAN, Chicago, Ill. Filed May 7, 1926. Serial No. 107,420. 11 Claims. (Cl. 285—177.)



2. A hose coupling comprising a female member having an inner wall, an outer wall, and relatively small openings, keys, pins integral with said keys, said pins disposed in the openings and rigidly secured in place, a male member, a ring carried by said male member, lugs integral with said ring, said lugs being adapted to engage with said keys when said male member is rotated in either direction with respect to said female member, a sleeve carried by said male member, and means carried by said sleeve and cooperating with said ring and said sleeve for holding said ring and said female member against rotation with respect to said sleeve.

1,761,353. MATERIAL CONVEYER. ALFRED B. MANNING, Louisville, Ky. Filed Feb. 25, 1929. Serial No. 342,485. 2 Claims. (Cl. 104—92.)

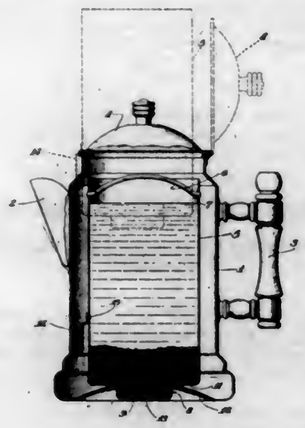


1. In a material handling device for building construction work including a relatively stationary tower and a substantially horizontal boom pivotally mounted on the tower, brackets mounted on said tower, a substantially L-shaped track having its horizontal portion fastened to the under side of said boom and having its vertical portion disposed in spaced parallelism with the tower and hingedly connected with said brackets in the vertical plane of the boom pivot and a conveyer movable on said track.

1,761,354. COFFEEPOT. ELMER P. MCCLURE, Western Springs, Ill., assignor to Aluminum Products Company, La Grange, Ill., a Corporation of Illinois. Filed Aug. 20, 1928. Serial No. 300,626. 2 Claims. (Cl. 53—3.)

1. A coffee pot having a lid, the bottom of said pot being convex inwardly with a central cylindrical depression

formed in said bottom, a container freely movable in said pot, the bottom of said container having a cylindrical projection of such size as to snugly fit the depression in the pot bottom to restrain outflow of solid matter from said



container while said projection is in said depression, the bottom of said cylindrical projection being perforated, means for raising said container, and a hook on said container for securing the same in the upper end of said pot in raised position.

1,761,355. MULTIPLE PUMPING UNIT. CLYDE MCKISSICK, Sand Springs, Okla. Filed Mar. 7, 1929. Serial No. 345,060. 1 Claim. (Cl. 103—184.)



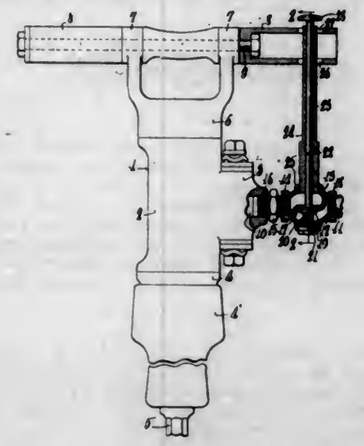
A multiple pumping unit of the character described comprising a casing, aligned upper and lower working barrels disposed in the casing and of less diameter than said casing having ports in the upper portion thereof, a working valve mounted for reciprocation in the lower barrel, a piston mounted for reciprocation in the upper working barrel having a drain valve therein for draining fluid which may leak past the piston and accumulate in the lower part of the upper working barrel, a partition extending between the lower working barrel and the casing having a check valve therein and disposed below the port in said working barrel and a partition extending between the upper working barrel and the casing having a check valve therein and disposed above the port in the upper working barrel.

1,761,356. FINGER PROTECTOR. GRACE E. MCNAMARA, Los Angeles, Calif. Filed Oct. 6, 1928. Serial No. 310,704. 1 Claim. (Cl. 294—25.)



In a protector, a resilient rubber body portion, said body portion including a lower front portion shaped to engage the lower front portion of a finger from a point adjacent to the underside of the finger nail rearwardly, a lower rear portion adapted to engage the lower rear portion of the first joint of the finger, an intermediate bottom portion between the portions, said rear portion being normally upwardly inclined from the intermediate bottom portion and means to hold the protector on a finger.

1,761,357. DRILLING MECHANISM. EDWARD EARL MILLER, Paris, France, assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed Dec. 13, 1924. Serial No. 755,714. 2 Claims. (Cl. 121—35.)



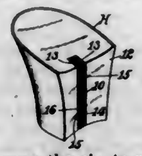
1. A drilling mechanism comprising a fluid actuated drilling motor adapted to actuate a tool, a T-shaped handle attached to said mechanism at the rear end of said motor and having oppositely projecting grasping portions, a throttle valve carried at the side of said motor for controlling the supply of motive fluid in the motor, a valve operating element extending longitudinally rearwardly from said valve through one of said grasping portions at a point adjacent the middle of said portion, a push button on the end of said element adapted to be grasped automatically by the hand of an operator when said handles are grasped to push the drilling mechanism toward the work, and means for automatically returning said valve to closed position when said push button is released as when the drilling mechanism is lifted from the work.

1,761,358. CLINCH-ON NUT. EDWARD W. MITCHEL, Detroit, Mich., assignor to F. L. McLaughlin Corporation, Detroit, Mich., a Corporation of Michigan. Filed Mar. 2, 1929. Serial No. 343,885. 2 Claims. (Cl. 85—32.)



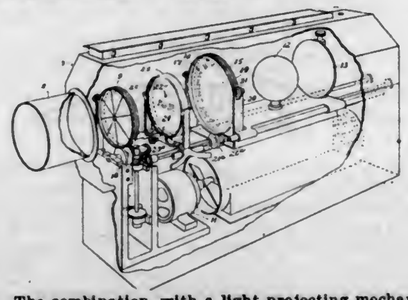
1. As a new article of manufacture, a nut unit of the type adapted to be initially clinched in position for receiving a bolt, comprising a standard nut member for receiving the bolt and a sheet metal casing permanently surrounding said nut on the sides, bottom and top and having an extruded portion extending at right angles to the plane of the nut and adapted to be distorted to serve as the sole means for clinching the nut in position.

1,761,359. HEEL AND METHOD OF COVERING THE SAME. WILLIAM H. NUTT, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Oct. 16, 1929. Serial No. 400,114. 18 Claims. (Cl. 36—34.)



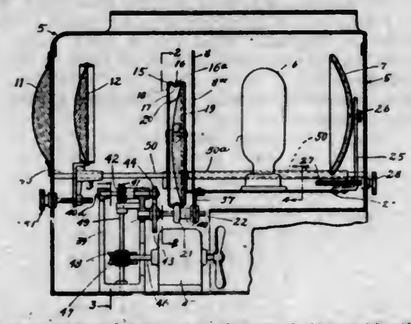
1. A heel having a groove therein to receive a marginal portion of heel covering material applied to the heel, said groove being formed with an outwardly yielding side wall constructed and arranged to facilitate the tucking of said portion of the heel covering material into the groove.

1,761,360. PROJECTOR. ANTON J. OBERG and ROBERT R. STOEFEN, Los Angeles, Calif. Filed Mar. 20, 1928. Serial No. 263,153. 3 Claims. (Cl. 88—24.)



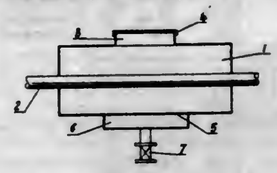
1. The combination, with a light projecting mechanism; of a glass disk having near its periphery prismatic characters, means for rotating said disk, and a lens between said disk and the screen said lens having inscribed thereon another inscription which is thrown upon the screen within the path which is traversed by the inscription upon said glass disk when the latter is rotated, the latter inscription being projected through said lens.

1,761,361. CONTROL-MECHANISM FOR COLOR PROJECTING MACHINES. ANTON J. OBERG and ROBERT R. STOEFEN, Los Angeles, Calif. Filed Mar. 20, 1928. Serial No. 263,154. 10 Claims. (Cl. 88—24.)



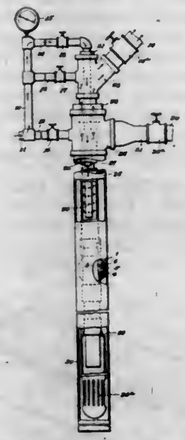
1. In a device of the class described, in combination, a sheet metal annulus having along the mid-width of its periphery an inwardly projecting bend to form a groove around its outer side and a bead along its inner side, a lens fitted within said annulus and at one side abutting against said bead, said annulus being provided with means, which engage the other side of said lens to retain the latter in place, a driving roller frictionally engaging said groove, and means to rotate said roller.

1,761,362. PROCESS FOR THE PREPARATION OF GELATIN. ADOLPHE PANSKY, Paris, France. Filed Dec. 14, 1923, Serial No. 680,774, and in France Nov. 24, 1923. 2 Claims. (Cl. 87—7.)



1. A process for the preparation of gelatine from bones freed of fatty matter without preliminary removal of mineral matter, which comprises subjecting the bones to the action of a dilute solution of a cuastic alkali to dissolve organic matter other than proteins, washing the bones with water to free them of excess alkali, subjecting the so treated bones to the action of low pressure steam to hydrolyze the collagenous matter into gelatine, and treating the hydrolyzed material with water at a temperature not greater than 60° C. to extract the gelatine.

1,761,363. APPARATUS FOR AND METHOD OF FLOWING WELLS. HOLLIS P. PORTER, Tulsa, Okla., assignor to Gypsy Oil Company, Tulsa, Okla., a Corporation of Oklahoma. Filed Aug. 26, 1927. Serial No. 215,677. 16 Claims. (Cl. 103—233.)

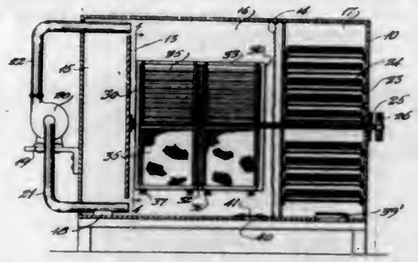


1. In a well flowing apparatus, a casing having a tube extending down into the same, means for supplying an elastic working fluid to said tube at successively lower points in the well to flow liquid through said tube, means for rendering the first mentioned supply means inoperative, means for supplying said fluid to the casing at a point adjacent the lower end thereof to flow liquid through said casing, and a discharge connection for said tube and casing respectively.

1,761,364. INCUBATOR. LOUIS N. PORTER and BENJAMIN FREDK. C. MORRIS, El Reno, Okla. Filed Nov. 10, 1928. Serial No. 318,479. 2 Claims. (Cl. 119—44.)

1. In an incubator, a casing having access doors, a shaft extending horizontally through said casing, motor means to

revolve said shaft, egg tray rack frames fixed to said shaft with the shaft extending centrally between the frames, the frames forming a rectangular prism divided into rectangular quarters, the racks in each quarter being parallel and



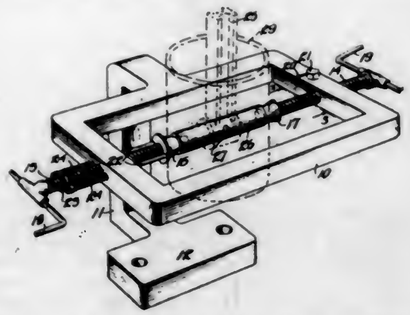
the racks in each quarter being arranged at right angles to the racks in adjacent quarters, said shaft being positioned so that the racks in the respective quarters are horizontal when opposite said doors, and means to secure egg trays in said racks.

1,761,365. FISH-NET HOIST. JOHN A. REED, Riderwood, Ala. Filed Oct. 13, 1928. Serial No. 312,344. 9 Claims. (Cl. 43—102.)



1. A device of the class described, including a fish net body having its front end provided with an inlet opening and the body also being provided at the bottom with tanks and having means for introducing either air or water into the said tanks, whereby the fish net may be caused to rise to the surface of the water or caused to sink to the bottom of a stream, and a weight at the rear end of the body to give inclination to the body and maintain the front end slightly elevated when air is introduced into the tank to raise the body.

1,761,366. PISTON-PIN VISE. JOHN WILLIAM REUTTER, Wilmington, Del. Filed Dec. 14, 1928. Serial No. 326,060. 8 Claims. (Cl. 29—89.)



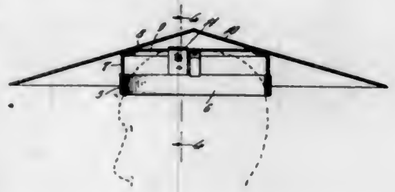
3. A piston-pin vise comprising a frame, jaw supporting members carried by said frame in opposed relation and being adjustable toward and from each other, a jaw carried by one of said members, a floating jaw swivelly mounted on the other of said members, means tending to retract said floating jaw and maintain it against its supporting member, and means for securing one of said jaw supporting members against longitudinal movement, substantially as set forth.

1,761,367. CONTAINER CLOSURE. WILLIAM H. ROSE, Jersey City, N. J. Filed Mar. 13, 1928. Serial No. 261,259. 5 Claims. (Cl. 229—5.7.)



5. In a container closure of sheet-material, in combination, a central portion adapted to cover the open portion of a container; a dependent peripheral flange carried by said central portion to abut upon the sides of a container; a plurality of dependent spaced tongues carried by said flange; a plurality of inwardly extended flat-prongs carried by each side of said tongues, the plane of said tongues being angularly positioned to the plane of said central portion and parallel to the longitudinal axis of a container to which said device is attached.

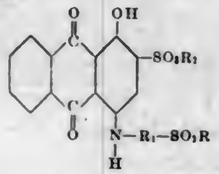
1,761,368. HAT. JACK SATHER, New England, N. Dak. Filed Aug. 20, 1929. Serial No. 387,106. 1 Claim. (Cl. 2—177.)



In a hat, an oval shaped metallic band adapted to encircle the head and having upwardly projecting tabs extending from the upper edge thereof and formed with inwardly directed terminal portions, an endless oval shaped strip secured to the upper surface of said inwardly directed portion and having a substantially smooth upper surface, and a hood mounted on the substantially smooth upper surface and said endless strip and secured directly thereto, and an elastic member secured at the ends thereof to said metallic band and adapted to extend transversely of the metallic band.

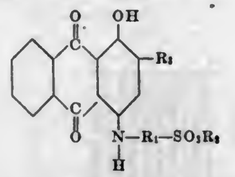
1,761,369. ANTHRAQUINONE DYES. ARNOLD SHEPHERDSON and WILLIAM WYNDHAM TATUM, Manchester, England, assignors to British Dyestuffs Corporation Limited, Manchester, England. Filed Feb. 9, 1927, Serial No. 167,067, and in Great Britain Aug. 19, 1926. 9 Claims. (Cl. 260—59.)

1. The process of making new dyestuffs having the probable formula—



wherein R_1 represents a divalent phenylene residue which may or may not be further substituted with alkyl groups

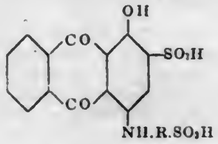
and R_2 represents an alkali-metal or hydrogen, which comprises reacting a halogeno-hydroxyl-anthraquinone compound having the probable formula—



wherein R_1 represents a divalent phenylene residue which may or may not be further substituted with alkyl groups, R_2 represents an alkali metal or hydrogen and R_3 represents a halogen with a solution of an alkali-metal sulphite, removing unchanged mono sulphonate by filtration in the cold and evaporating the filtrate.

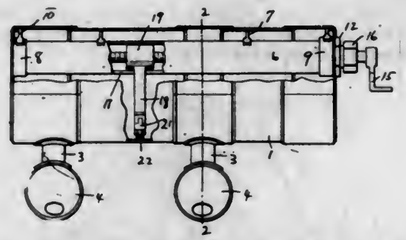
1,761,370. NEW ANTHRAQUINONE DYE AND DYEING THEREWITH. ARNOLD SHEPHERDSON and WILLIAM WYNDHAM TATUM, Manchester, England, assignors to British Dyestuffs Corporation Limited, Manchester, England. Filed Jan. 27, 1928, Serial No. 250,094, and in Great Britain Aug. 19, 1926. Renewed Oct. 21, 1929. 2 Claims. (Cl. 260—59.)

1. The manufacture of new acid dyestuffs of the general type:



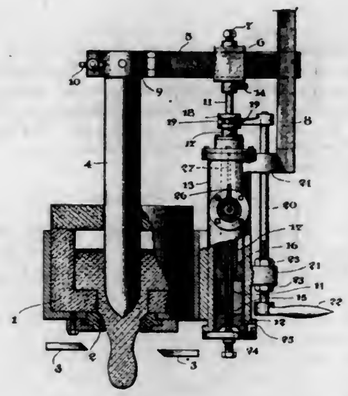
where R represents a divalent aryl residue, in the form of a sodium salt, consisting in treating a sodium salt of a 2-chloro-1-hydroxy-4-sulphoanilinoanthraquinone with a solution of a metal sulphite, removing unchanged monosulphonate by filtration in the cold, and evaporating the filtrate.

1,761,371. BOILER-SCALE-REMOVING DEVICE. BAYLOR SPRATT, Evansville, Ind. Filed July 3, 1928. Serial No. 290,210. 1 Claim. (Cl. 122—379.)



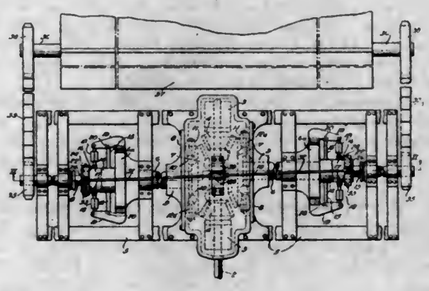
In combination with a boiler of the fire tube type wherein the bottom thereof has communication with the usual sediment chamber, of a scraping device comprising a casing arranged longitudinally within the boiler above the horizontal plane of the tubes and formed with a slot in the bottom thereof, vertically supporting brackets supporting the casing from the top of the boiler, a feed screw arranged in the casing, an arm having its upper portion disposed through said slot, an internally threaded hub formed on the upper end of the arm for receiving the feed screw, means for actuating the feed screw to effect the movement of the hub along the feed screw in the casing from one end of the boiler to the other, said arm extending downwardly to a point adjacent the boiler bottom, and a scraper unit carried by the lower end of the arm for engagement at all times within the bottom of the boiler to remove the sediment therefrom and discharge the same into the sediment chamber, said scraper unit including a segmental body portion detachably secured on the lower end of the arm, and scraping elements protruding from the arcuate body at the bottom thereof.

1,761,372. PLUNGER-OPERATING MECHANISM FOR GLASS FURNACES. THOMAS STENHOUSE, Washington, Pa., assignor to Hazel-Atlas Glass Co., Wheeling, W. Va., a Corporation of West Virginia. Filed Mar. 22, 1922, Serial No. 545,764. Renewed Jan. 19, 1926. 15 Claims. (Cl. 49—55.)



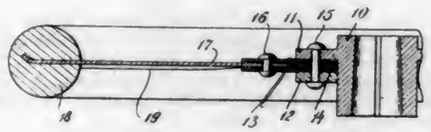
5. In a glass furnace, a flow spout, a plunger adapted to reciprocate in the flow spout, a cylinder and piston adapted to reciprocate the plunger, means for varying the lower limit of the plunger stroke, a second piston mounted in the cylinder and telescopically receiving the piston rod of the first mentioned piston, means for adjusting the second mentioned piston vertically, whereby the upper limit of the first mentioned piston is varied, and means for releasing said second mentioned piston, whereby the first mentioned piston may lift the plunger clear of the flow spout.

1,761,373. BOAT DRIVE. CHARLES H. TEGMEYER, St. Louis, Mo. Filed Apr. 20, 1928. Serial No. 271,464. 16 Claims. (Cl. 115—49.)



1. A boat drive comprising a driving shaft, driven shafts extending in different directions from the driving shaft and positively geared thereto, propelling means, and clutch connections between each of the driven shafts and the propelling means.

1,761,374. STEERING WHEEL. ELMER V. J. TOWER, North Syracuse, N. Y., assignor to Russell Manufacturing Company, Middletown, Conn., a Corporation of Connecticut. Filed Apr. 14, 1927. Serial No. 183,650. 15 Claims. (Cl. 74—33.)



3. A steering wheel comprising a rim, a hub, spokes connected to the rim, the hub ends of the spokes being formed so that they together encircle the hub and are spaced therefrom, yieldable material disposed in the space between the hub ends of the spokes and the hub, and washers connected to the spokes and hub to enclose the yieldable material.

1,761,375. BARBER'S RESILIENT RAZOR WIPER. SIMMIE C. VAUGHT, Pueblo, Colo. Filed Nov. 19, 1928. Serial No. 320,406. 1 Claim. (Cl. 15—218.)



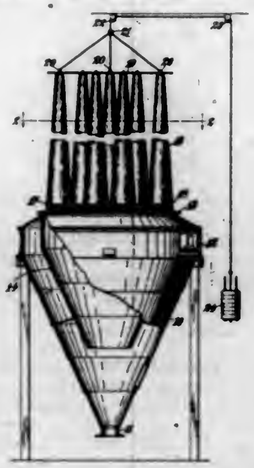
An article of manufacture comprising a dished member of yielding material having a bottom provided with a single centrally located projection having a transverse opening adapted to receive a band by means of which it can be secured to a hand.

1,761,376. MANUFACTURE OF SANTALOL COMPOUNDS. HANS WALTER, Mainz-Mombach, Germany, assignor to Verein für Chemische Industrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a German Company. Original application filed July 15, 1926, Serial No. 122,731, and in Germany July 17, 1925. Divided and this application filed Jan. 3, 1928. Serial No. 244,381. 3 Claims. (Cl. 260—99.)

3. A process for the production of santalol compounds, which comprises reacting on santalol-halogen fatty acid halide compounds with hexamethylenetetramine.

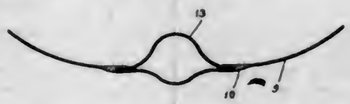
1,761,377. APPARATUS FOR COLLECTING SUSPENDED DUST. HORACE WARING, Lancashire, England, assignor to Associated Lead Manufacturers Limited, London House, London, England, a British Company. Filed Mar. 9, 1927, Serial No. 174,006, and in Great Britain Aug. 28, 1926. 6 Claims. (Cl. 183—58.)

6. In an air filtering apparatus the combination with a plurality of deformable normally tapered bags having bases and apices, of a support for the said bases and a support for the said apices, the said supports being relatively movable, and yielding means holding said relatively movable supports in spaced relation with the walls of the bags when taut, said yielding means being of such strength as may be overcome by the weight of a predetermined quantity of dust collected on the walls of the



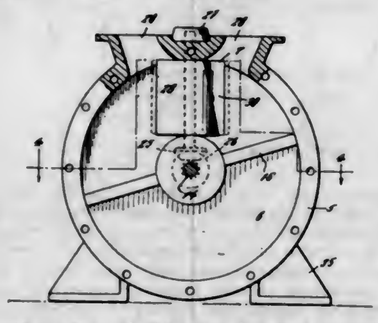
bags, allowing the bags to deform to dislodge the dust whereupon the means becomes active to restore the bags to their normal shape.

1,761,378. SHOVEL. LEWIS E. WEBSTER, Wyoming, Pa., assignor to The Wyoming Shovel Works, Wyoming, Pa., a Corporation of Pennsylvania. Filed Oct. 25, 1923. Serial No. 670,713. 1 Claim. (Cl. 306—24.)



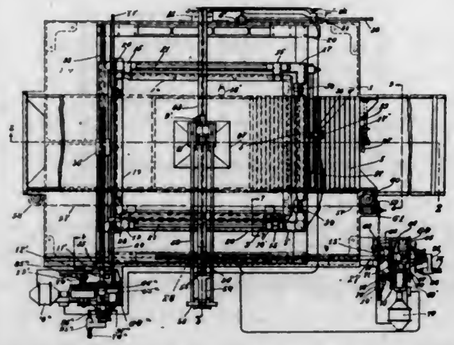
A shovel comprising a part having a blade section beyond the shank of the shovel, and a strap portion, said blade section itself of the aforesaid part having extended lips of the blade section material to embrace the strap portion.

1,761,379. PUMP. WILLIAM T. WHEAT and AUGUST W. STONE, Malin, Oreg. Filed May 31, 1928. Serial No. 281,682. 1 Claim. (Cl. 103—125.)



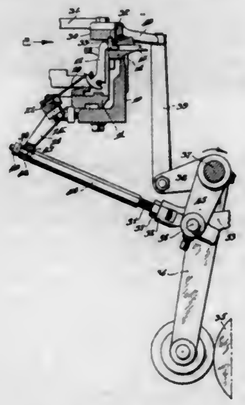
A rotary pump of the class described comprising a casing having an annular displacement compartment therewith with inlet and outlet openings at the top, and a valve compartment rising from the axis of the casing and between said openings, a rotor in the displacement compartment including a hub and a pair of oppositely disposed blades, a shaft journaled in the compartment and on which the hub is fixed, a second shaft journaled in the valve compartment and having a cylindrical valve thereon provided with peripheral longitudinal channels to receive the blades, means gearing the shafts to rotate at the same rate simultaneously, said casing having a head plate to close the displacement compartment, and a bearing in the head plate to receive the first mentioned shaft, and a bearing in the casing to also receive the first mentioned shaft, a cap plate for closing the upper end of the valve compartment, and a bearing in the cap plate for receiving the second mentioned shaft, said cap plate being constructed to accommodate said inlet and outlet.

1,761,380. PRINTING MACHINE. LOUIS H. ZEUN, Baltimore, Md. Filed Dec. 23, 1924. Serial No. 757,646. 2 Claims. (Cl. 95—73.)



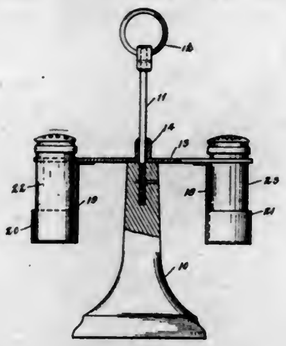
1. An organized printing device for multiplicity duplication, comprising a table, a negative slide having a negative mounted thereon mounted for longitudinal travel on said table, electrical controlling means for moving said slide to a definite position, manual means for completing the movement of said slide, a plate holder, means for vertically operating said plate holder relative to said slide, said means being inoperative during the movement of the negative slide, and means for locking the negative slide in fixed position whereby said plate holder may be moved.

1,761,381. SPRING-BAR-OPERATING MECHANISM FOR FULL-FASHIONED KNITTING MACHINES. MELCHIOR ZWICKY, Berkshire Heights, Pa., assignor to Textile Machine Works, Wyomissing, Pa., a Corporation of Pennsylvania. Filed Nov. 1, 1928. Serial No. 316,498. 9 Claims. (Cl. 66—110.)



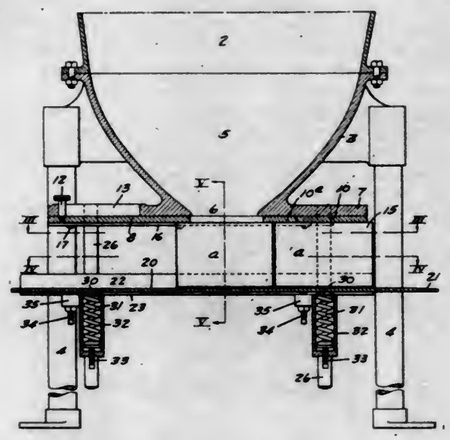
1. In a full fashioned knitting machine comprising sinkers and having a catch bar and jacks for operating the sinkers, a spring bar carrying jack-engaging fingers, a catch bar raising and lowering mechanism, and a spring bar operating mechanism actuated by said catch bar mechanism directly.

1,761,382. ROTARY TABLE-SILVERWARE SERVER. CHARLES JOHN AKALIS, Sugar Notch, Pa. Filed Mar. 7, 1929. Serial No. 344,976. 1 Claim. (Cl. 65—55.)



A combination condiment holder and table-ware support comprising a base, a plate rotatably held thereon, said plate provided with a plurality of radial slots having each of their opposite walls notched pairwise for the reception and suspension of forks and spoons, said plate having also a plurality of radially arranged rows of a multitude of elongated slots for the reception and support of knives, and two open slots for removably guiding a salt and pepper shaker, a pair of brackets suspended from said plate and sockets at the lower ends of said brackets for supporting said salt and pepper shakers.

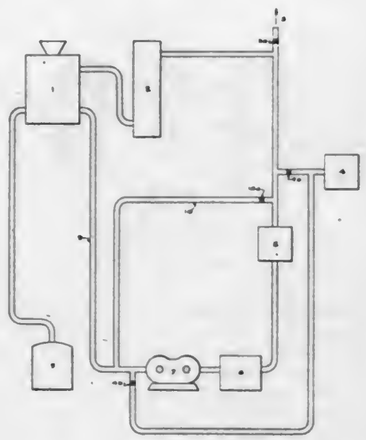
1,761,383. RECEPTACLE-FILLING APPARATUS. CHRISTIAN N. BERGMANN, Pittsburgh, Pa., assignor to Bergmann Packaging Machine Company, Pittsburgh, Pa., a Corporation of Delaware. Filed Apr. 6, 1927. Serial No. 181,545. 3 Claims. (Cl. 226—119.)



1. A receptacle filling apparatus comprising a supply reservoir having a lower outlet opening and a flat bottom face surrounding said opening, and a lower trackway for receptacles to guide them for movement under said opening with their rims contacting with said face, said face

having a removable portion beyond one side of said opening to permit the material to flow into a receptacle before reaching the opening.

1,761,384. MAKING PRODUCER GAS. MARCH F. CHASE, Ardsley-on-the-Hudson, and FREDERIC E. PIERCE and JOHN SKOGMARK, New York, N. Y., assignors to The Cos Process Company, Inc., New York, N. Y., a Corporation of New York. Filed Aug. 10, 1920, Serial No. 402,718. Renewed Mar. 29, 1928. 3 Claims. (Cl. 48—203.)



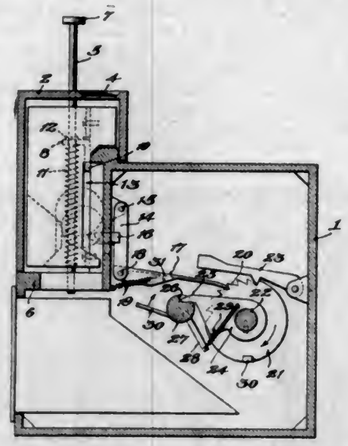
3. In the manufacture of producer gas, a continuous process of producing gas of greater calorific value than 150 B. t. u. per cubic foot, which consists in continuously passing a gaseous mixture through a gas producer, diverting a substantially constant major portion of the produced gas to a place of storage or use, circulating the remainder through a path leading back to and through the gas producer and a combustion unit, thereby developing power and products of combustion, introducing into said path of circulation a substantially constant amount of free oxygen or gaseous medium having a higher free oxygen content than air, and utilizing said developed products of combustion in the operation of said gas producer.

1,761,385. FASTENING DEVICE. WILLARD H. COBB, Brooklyn, N. Y., assignor to The Shoe Hardware Company, Waterbury, Conn., a Corporation of Connecticut. Filed July 24, 1926. Serial No. 124,564. 7 Claims. (Cl. 24—205.)



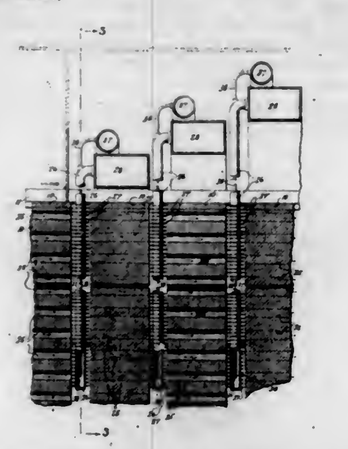
7. A fastener having interengageable elements, each element having a projection and recess arranged in register on opposite sides of the element, said recess having a hollowed out portion to provide material for enlarging the projection, the projections and recesses of the interengageable elements being shaped to interfit.

1,761,386. VENDING MACHINE. GEORGE H. DAVIS, Providence, R. I. Filed Mar. 8, 1929. Serial No. 345,413. 7 Claims. (Cl. 194—55.)



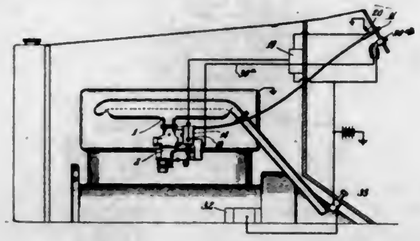
7. In a device of the type set forth, a vending machine operating shaft, and lock releasing means for freeing said operating shaft, and operable by single coins of varying denominations and of a predetermined sum total or by varying combinations of the coins of said predetermined sum total.

1,761,387. HEAT TRANSFER MEANS FOR ELECTRICAL APPARATUS. FRAZER W. GAY, Newark, N. J. Filed Mar. 13, 1928. Serial No. 261,395. 9 Claims. (Cl. 171—252.)



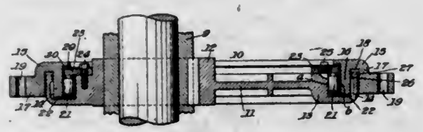
4. A heat transfer means for electric turbo generator stator structures to withdraw heat generated within the internal parts of the latter, comprising a system of cooling tubes containing a volatile refrigerant, said tubes having portions extending into the internal parts of said stator structure, means connected with the outer portions of said tubes to collect the vapor of the refrigerant, a condenser in communication with said collecting means to receive said vapor and condense the same, means to return the condensed refrigerant to said tubes including feed pipes of reduced diameter extending longitudinally into said tubes and terminating adjacent to the inner ends thereof to thereby maintain said inner ends at a minimum temperature and means for circulating a gaseous fluid within the stator structure alternately in contact with the hot parts thereof and said cooling tubes.

1,761,388. ENGINE HEATING DEVICE. JOHN GOOD, Garden City, N. Y., assignor to Good Inventions Co., New York, N. Y., a Corporation of New York. Filed May 21, 1923, Serial No. 640,620. Renewed Sept. 1, 1928. 38 Claims. (Cl. 123—122.)



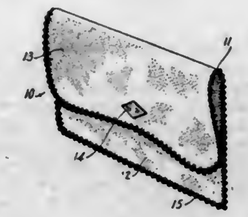
1. The combination in an internal combustion engine, of the intake passage including a carburetor and a throttle supply engine-operating mixture, auxiliary means for supplying hot mixture of fuel and air in proportions substantially the same as the proportions of said carburetor and means at the operator's station, independent of said throttle, for controlling the admission of said hot mixture to the carburetor mixture in said intake.

1,761,389. ECCENTRIC-STRAP CONSTRUCTION FOR PUMPING POWERS. EDGAR E. GREVE, Bellevue, Pa., assignor to Oil Well Supply Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Feb. 27, 1928. Serial No. 257,497. 4 Claims. (Cl. 74—1.)



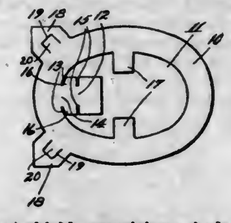
1. An eccentric strap construction of the character described including a plate having an eccentrically disposed hub and an annular chamber, a strap mounted on the plate, said strap having outer and inner annular depending portions straddling the outer wall of the chamber, anti-friction bearings in the chamber, and closure means for said chamber.

1,761,390. POCKETBOOK. SAMUEL GUMEINER, Brooklyn, N. Y., assignor to Hyman Sokolow, Brooklyn, N. Y. Filed Apr. 16, 1928. Serial No. 270,193. 8 Claims. (Cl. 150—28.)



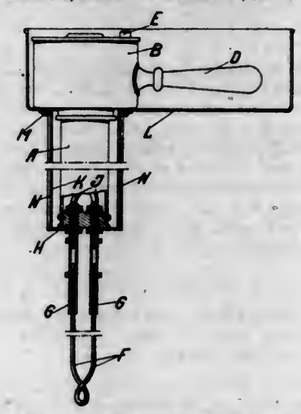
1. The combination with a purse or the like having superimposed parts having meeting edges, of a trimming for said edges to protect said edges from fraying, said trimming means comprising balls and necks connecting said balls, securing means for said trimming, said securing means passing through said superimposed parts adjacent said edges and around the neck portions of the trimming to secure the edges together and to the trimming.

1,761,391. SANITARY SHIELD FOR TOILET SEATS. CLARA F. HARRIS, Kansas City, Mo. Filed Nov. 12, 1928. Serial No. 318,610. 4 Claims. (Cl. 4—248.)



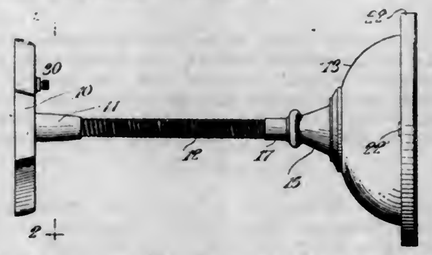
1. A toilet seat shield comprising a body portion having an opening adapted to substantially register with toilet seat opening, an inwardly extending flap adjacent the front portion of said body portion having a narrow neck by means of which it is connected with the body portion, oppositely disposed flaps formed in said inwardly extending flap, adapted to shield a portion of the edge of said seat opening, and outwardly extending flaps having tabs formed therein.

1,761,392. DEVICE FOR MEASURING THE TEMPERATURE OF HOT FLUIDS. RUDOLF HASE, Hanover, Germany. Filed Dec. 15, 1924, Serial No. 755,870, and in Germany Jan. 28, 1924. 5 Claims. (Cl. 73—32.)



1. A portable device for measuring the temperature of hot liquids by dipping it into the liquid, comprising an electrical indicating instrument including a case, a tube projecting from the case of said instrument, a holder at the free end of said tube, a thermo-couple, means for detachably securing said thermo-couple in said holder, and leads within said tube for connecting said thermo-couple to said instrument.

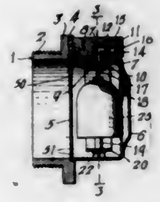
1,761,393. SHAVING MIRROR. JOSEPH A. HOEGGER, Jersey City, N. J. Filed Feb. 16, 1929. Serial No. 340,356. 2 Claims. (Cl. 240—4.)



1. As an improved article of manufacture, a shaving mirror embodying a rigid supporting element or bracket,

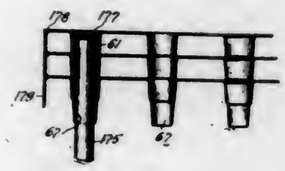
a flexible stem connected to the bracket and of a type which retains its flexed position, a hollow bracket detachably secured to the outer end of the stem, a concavo-convex lamp casing seating in the bracket and acting as a reflector and carried by the outer end of said flexible stem, a lamp within the casing, and a mirror door for the casing having a light opening through the edge portion of the door.

1,761,394. RADIATOR VENT VALVE. EDWARD JACOBUS, Newark, N. J. Filed Dec. 20, 1928. Serial No. 327,251. 5 Claims. (Cl. 236—62.)



1. A valve device of the character described comprising a casing having an inlet and an outlet, a thermostatically operated valve for opening and closing said outlet upon influx of cold and hot fluids respectively into said casing, said outlet having an outwardly opening check valve normally influenced into open position by gravity and adapted to be drawn to its seat by vacuum within the casing to permit fluid to flow out of said casing and prevent influx of air into said casing when said thermostatic valve opens said outlet, respectively.

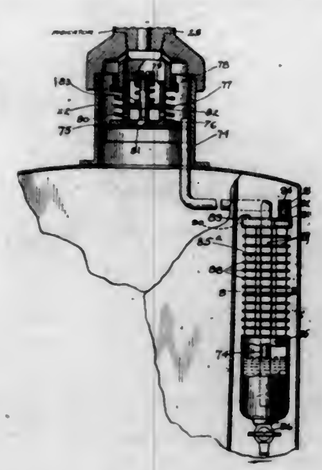
1,761,395. RADIATOR. JOHN KARMAZIN, East Elmhurst, N. Y. Filed May 28, 1923. Serial No. 641,850. 4 Claims. (Cl. 257—129.)



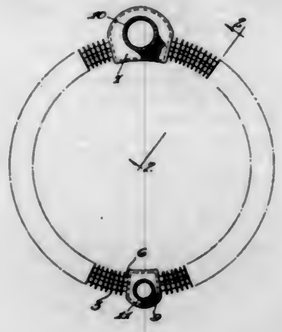
1. A cooling section for radiators comprising a plurality of superimposed elements each having a plurality of rows of integral transverse tubes, the tubes of one element being nested into the tubes of an adjacent element, and rods passed through certain of the tubes and fastened to the outside elements by soldering to the tubes thereon.

1,761,396. PRESSURE VALVE AND CONDENSER. JOHN KARMAZIN, Detroit, Mich. Filed May 12, 1925. Serial No. 29,671. 16 Claims. (Cl. 257—25.)

1. In an internal combustion engine radiator, a fluid chamber, a vent therefor, means to normally prevent the escape of fluid from said chamber into said vent, said means being operable at a predetermined pressure to permit the escape of fluid from said chamber, and means for varying the pressure at which the escape of fluid from said chamber is permitted.



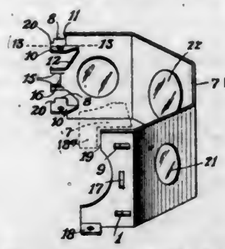
1,761,397. HEAT EXCHANGER. JOHN KARMAZIN, Detroit, Mich. Filed Mar. 31, 1927. Serial No. 179,785. 7 Claims. (Cl. 257—139.)



3. A heat exchange device comprising a plurality of plates each having a plurality of tapering tubular projections extending transversely therefrom and assembled with the projections of each plate in telescoping relation with the projections of adjacent plates, said projections being arranged in rows longitudinally of said plates, the projections in the rows toward one edge of each plate tapering more than the projections toward the opposite edge, whereby the assembled structure is given an arcuate shape.

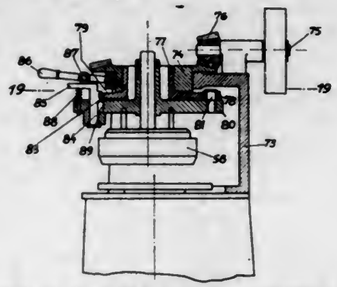
1,761,398. OUTLET OR JUNCTION BOX. JULIAN GORDON KNIGHT, Brooklyn, N. Y. Filed Mar. 3, 1924. Serial No. 696,478. 19 Claims. (Cl. 247—15.)

1. A side wall for outlet boxes and the like having overlapping end portions, one of such portions having a corner section of the same partially severed and bent out at an angle, said section having a shoulder at the outer end edge of the same substantially in line with the outer face of said end portion to act as a stop for the other end portion



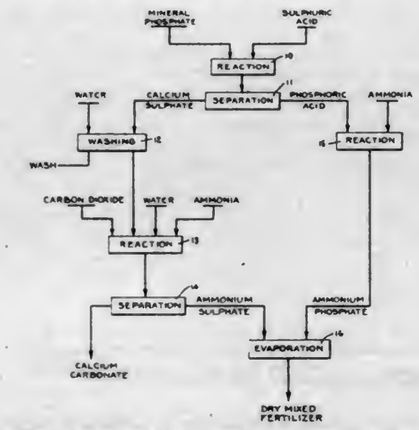
and the other end portion provided with an opening through which the bent-out lug is projected to the limit permitted by said stop.

1,761,399. METHOD OF AND MACHINE FOR WORKING PIECES OF DOUGH. OTTO KREMMLING, Hamersleben, near Oschersleben, Germany. Filed June 1, 1927, Serial No. 195,634, and in Germany Apr. 28, 1926. 10 Claims. (Cl. 107—20.)



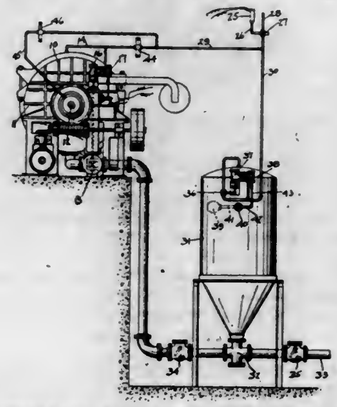
1. A machine for working dough, comprising a working table, a working head having elongated working compartments, means to impart relative gyratory movement to the said working head and compartments, and means to increase the working movement transversely of the length of the compartments relatively to the movement longitudinally thereof.

1,761,400. METHOD OF PRODUCING A MIXED MANURE CONTAINING PHOSPHORIC ACID AND NITROGEN. FRANS GEORG LILJENROTH, Stockholm, Sweden. Filed July 23, 1927, Serial No. 208,067, and in Sweden Aug. 13, 1926. 2 Claims. (Cl. 71—7.)



1. The method of producing mixed fertilizer containing phosphoric acid and nitrogen about in the proportion of 1:1 which comprises leaching phosphatic rock with sulphuric acid sufficient to liberate practically all phosphoric acid, separating the phosphoric acid from the insoluble constituents, reacting upon the calcium sulphate of the insoluble residues by ammonia and carbon dioxide so as to produce an equivalent quantity of ammonium sulphate, separating the ammonium sulphate from the calcium carbonate, neutralizing the acid solution obtained in the leaching operation with ammonia so as to form a solution of ammonium phosphate, and evaporating the solution of ammonium sulphate in mixture with the solution of ammonium phosphate.

1,761,401. FILTER AND MEANS FOR CONTROLLING THE PULP LEVEL THEREIN. JASPER A. MCCASKELL, Salt Lake City, Utah. Filed Oct. 1, 1925. Serial No. 59,759. 6 Claims. (Cl. 210—192.)



3. In combination with a continuous rotary pressure filter of the class described, a monte-jus, said monte-jus and said filter being operated from the same pressure source, a balanced valve in said filter and a balanced valve in said monte-jus, said valves simultaneously operating to prevent changes of pressure or changes in level in the pulp in said filter.

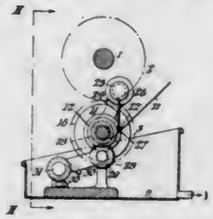
1,761,402. HOLDER DEVICE FOR STOCKINGS. ERNST RICHARD MEINIG, Wyomissing, Pa., assignor to E. Richard Meinig Co., Inc., Reading, Pa., a Corporation of Pennsylvania. Filed Apr. 23, 1929. Serial No. 357,375. 7 Claims. (Cl. 8—19.)



2. A holder device for a stocking being subjected to a dyeing process, comprising a flat stretcher frame of smaller

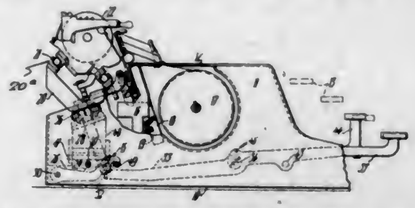
spread than the tubular stocking, and having a toe engaging end and a welt engaging member spaced apart to longitudinally taut a stocking, and a supporting ring spaced from the welt engaging member, said ring having a lateral spread on each side of said flat stretcher to space a contiguous similar stretcher frame therefrom.

1,761,403. METHOD OF AND MEANS FOR MAKING TUBES OF CELLULOID AND THE LIKE. SAMUEL A. NEIDICH, Edgewater Park, N. J. Filed Jan. 2, 1929. Serial No. 329,724. 8 Claims. (Cl. 18—10.)



1. The method of forming a tube from a primarily plane sheet of celluloid or the like, which includes attaching the forward end of said sheet to a mandrel; mounting said mandrel and sheet for rotation, with the sheet upturned to afford a trough-like receptacle for a solvent between said sheet and mandrel at the junction thereof; supplying a solvent in said receptacle in such quantity as to soften the surface of said sheet at said receptacle; and progressively turning said mandrel and winding said sheet thereon until a tube is formed of the successive evolute convolutions of said sheet adhering to each other.

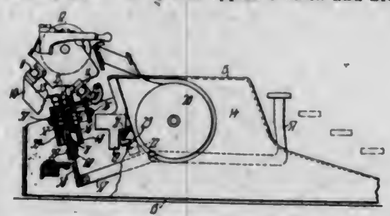
1,761,404. TYPEWRITING MACHINE. LOUIS A. NEMCOVSKY, New York, N. Y., assignor to Sun Typewriter Company, New York, N. Y., a Corporation of New Jersey. Original application filed July 15, 1924, Serial No. 726,063. Divided and this application filed Apr. 23, 1927. Serial No. 185,958. 15 Claims. (Cl. 197—73.)



1. In a typewriting machine, the combination with a stationary segment of upwardly and rearwardly striking type-bars, a platen-carriage, a case-shiftable carriage-frame having a guide-rod secured to each end thereof to depend at right angels therefrom, and a pair of spaced grooved rollers, one roller to engage each guide-rod, of means for individually mounting each roller upon the machine-frame with the groove thereof engaging the adjacent outer side face of a shift-rod, said means including a carrier at each side of the machine-frame and each roller individually adjustable within the carrier to vary the angular direction of the carriage-frame guide-rods.

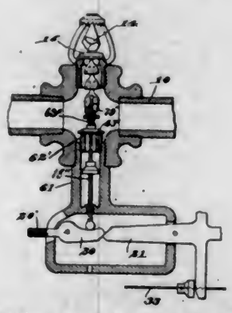
1,761,405. TYPEWRITING MACHINE. LOUIS A. NEMCOVSKY, New York, N. Y., assignor to Sun Typewriter Company, New York, N. Y., a Corporation of New Jersey. Original application filed July 15, 1924, Serial No. 726,063. Divided and this application filed June 3, 1927. Serial No. 196,187. 10 Claims. (Cl. 197—91.)

1. In a portable typewriting machine having a frame provided with a carriage, a key-operated universal bar, and a back-space key, the combination with a rack on said carriage, of a control mechanism in the form of an assembly unit for controlling the carriage in letter-space and back-space direction including a rotatable pinion in mesh with the rack, a ratchet rotatable therewith, a star-wheel coaxial with the same, a pawl connecting the ratchet with the star-wheel, a pair of operating pawls co-acting with the star-wheel and actuated by the universal bar to effect letter-space feeding of the carriage, and auxiliary carriage-control mechanism forming part of said assembly unit, including a pivoted lever provided with a rockable pawl having a pair of spaced opposite teeth and arranged



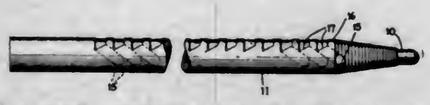
to initially engage one of the teeth with said pinion during advancing operative movement of said lever, in order to reversely rotate said pinion and effect back-spacing of said carriage, and in more advanced position of said lever to directly engage both pawl-teeth with said pinion in such manner as to envelop a group of teeth thereon, whereby to rigidly control the pinion against overthrow, there being means for operatively connecting the back-space key with said pivoted lever and also means for locking the star-wheel during the back-spacing operation.

1,761,406. AUTOMATIC FIRE-PROTECTION DEVICE. BENJAMIN RICHARDS, Kenilworth, Ill., assignor, by mesne assignments, to American La France and Foamite Corporation, a Corporation of New York. Filed Nov. 12, 1921. Serial No. 514,482. 14 Claims. (Cl. 169—19.)



1. The combination with a sprinkler head structure having a thermally responsive closure, of a strut pressing outward on said closure said strut comprising a plurality of separable parts, one of which parts is adapted to be carried out upon the opening of said closure and the whole of which parts are adapted in combination to ferm part of a connection with a second fire protective device and to restrain the operation thereof until the said opening of the closure releases it.

1,761,407. PENCIL. PATRICK J. O'SULLIVAN, Brooklyn, N. Y., assignor to Blaisdell Pencil Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed May 25, 1929. Serial No. 365,802. 10 Claims. (Cl. 120—83.)



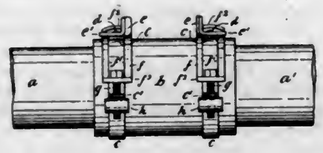
1. A pencil comprising a stick of marking material, a jacket for said stick composed of a set of spirally wound strips fastened together at their outer ends, and a tab on each strip operable to tear through said strip to free it for removal to expose a fresh portion of the marking material.

1,761,408. HOLDER FOR CIGARETTE PACKAGES. JOHN PARSONS, Newton Center, Mass., assignor to Pan-Ross Laboratories, Inc., New York, N. Y., a Corporation of New York. Filed June 26, 1926. Serial No. 118,626. 1 Claim. (Cl. 206—41.)



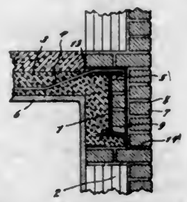
A device of the character described comprising a rectangular base having an integral tongue extending from each side and end perpendicular to the base to form a holder for a package of cigarettes or the like, the adjacent edges of said tongues being spaced apart so that the tongues projecting from the ends of said base may underlie the usual wrapper of a cigarette package and the tongues projecting from the sides of said base may overlie said wrapper.

1,761,409. FASTENING DEVICE FOR PIPES OF IRRIGATION SYSTEMS. HENRY POPE, Croydon Park, South Australia, Australia. Filed Apr. 26, 1928. Serial No. 272,971. 5 Claims. (Cl. 24—19.)



1. In improvements in fastening devices for pipes of irrigation systems, a circumferential band having a crimp or bend near one end, an eccentrically mounted rotatable locking and adjusting element on the opposite end, a link connecting the ends of the band and engaged at one end by said element to adjust the band with respect to the link, and to lock the link and band together, and means to adjustably connect the crimp and the other end of said link.

1,761,410. DAMPPROOF BUILDING. JOSEPH ROSE, New York, N. Y., assignor to Structural Waterproofing Company, New York, N. Y., a Corporation of New York. Filed Aug. 30, 1928. Serial No. 302,941. 2 Claims. (Cl. 72—126.)

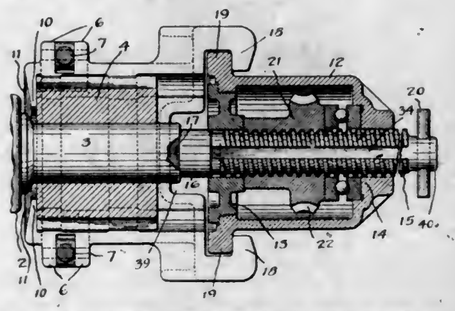


1. In building construction, the combination of a spandrel beam, brickwork on the outside of said beam and reinforced fabric damp-roofing material between said beam and brickwork and extending upwardly over said beam, downwardly below said beam and outwardly to a point near the face of the brickwork.

1,761,411. WATER SOFTENER. SAMUEL S. SADTLER, Springfield Township, Montgomery County, Pa. Filed Jan. 10, 1927. Serial No. 160,304. 8 Claims. (Cl. 210—23.)

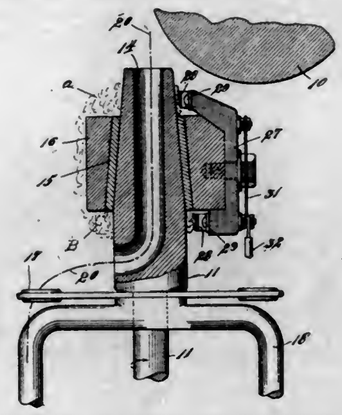
1. A composition of matter for the treatment of water including anhydrous water softening reagents combined with means to indicate when the desired degree of softness of water into which the said composition may be introduced has been attained.

1,761,412. PINION PULLER. FRANK H. SCHWERIN, Bellevue, Pa., assignor to The Duff-Norton Manufacturing Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Mar. 23, 1926. Serial No. 96,749. 15 Claims. (Cl. 29—85.)



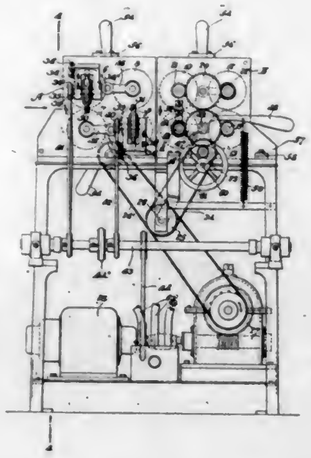
1. A pinion-puller, comprising an adjustable jaw part, and a separate power part, said jaw part comprising a pair of yoke jaws, with pulling lips, said jaws adapted to be applied at varying degrees of separation on pinions of different sizes, the jaw part and the separate power part having formations interengageable at all adjustments after the jaw part has been applied to the member to be pulled.

1,761,413. STOP MOTION FOR DRAWING FRAMES. WALTER J. SCOTT, Woonsocket, R. I. Filed Apr. 19, 1928. Serial No. 271,155. 7 Claims. (Cl. 118—4.)



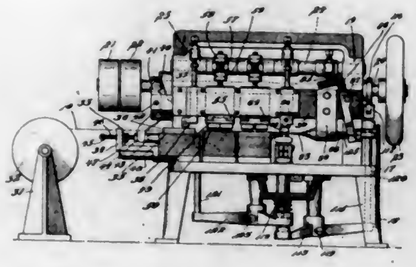
1. In a stop motion for drawing frames, a set of draft rolls, a hollow spindle thru which the roving is led to be laid upon the bobbin, a support for the upper end of said spindle, guiding means carried by the spindle for laying the roving onto the bobbin as fed from said rolls, an electric circuit, a circuit control device carried by said spindle support having a flexible circuit control member whereby the building up of surplus roving on the spindle at a point adjacent said closure member will move the same to affect the circuit and stop the machine.

1,761,414. BEVELING. FREDERICK C. SIMMONS, Highland Park, Pa., assignor to Pioneer Suspender Company, a Corporation of Pennsylvania. Filed Aug. 25, 1926. Serial No. 131,372. 7 Claims. (Cl. 51—87.)



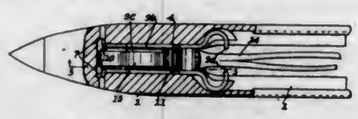
1. In a belt beveling machine, the combination of power driven cooperating pairs of rollers for moving the belt in the direction of its longitudinal extension, one of each pair of rollers provided with a recess in its face to allow the roller to support the work close to the marginal line of bevel without interfering with the abrading element, and rotating abrading elements operating on the corners of the belt during its movement.

1,761,415. MACHINE AND METHOD FOR MAKING CHAIN. EDWIN F. M. SPEIDEL and KARL C. AUGENSTEIN, Edgewood, R. I., assignors to Automatic Gold Chain Company, Providence, R. I., a Firm composed of Edwin F. M. Speidel and Albert E. R. Speidel, Edgewood, R. I. Filed Mar. 28, 1929. Serial No. 350,534. 23 Claims. (Cl. 59—16.)



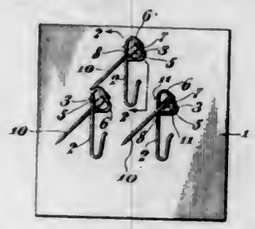
11. In a machine of the character described, means for holding the end of a chain in position to receive an additional articulate part, means for advancing a strip of material in adjacency thereto, means for bending a portion of said strip into engagement with the end link of said chain so held, means for shifting said holding means to grip the portion of the strip bent into engagement and means for subsequently severing the strip to form an additional articulate part of said chain said means being associated to operate in definite timed relation.

1,761,416. SHUTTLE. JOHN W. STEWARD, Paterson, N. J. Filed Oct. 24, 1928. Serial No. 314,598. 8 Claims. (Cl. 139—209.)



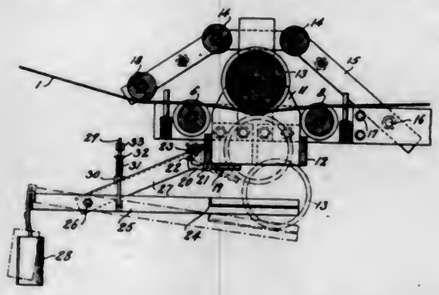
1. In combination, a shuttle body having a mortise and a filling-package-carrying structure comprising a spindle pivoted at its butt on a transverse axis and a support for the spindle in which the latter is pivoted, said support while said structure is so constituted being shiftable in the mortise and said body and support having a spring-interlock normally opposing such shifting of the support.

1,761,417. MERCHANDISE-DISPLAY CARD. EMIL G. STORCK, Philadelphia, Pa., assignor to Moore Push-Pin Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Mar. 22, 1928. Serial No. 263,897. 8 Claims. (Cl. 206—80.)



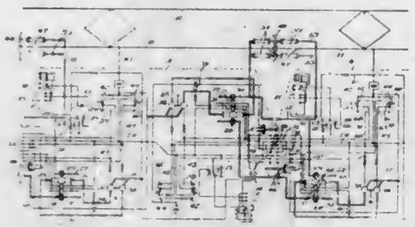
1. Merchandise display means, comprising a card having an opening therein, a staple having its eye projected through said opening and located upon the front side of said card, a device having a portion located in contiguous relation to the eye of said staple, said device having an opening extending therethrough, and a fastening means extending through the said opening and through the eye of said staple.

1,761,418. AUTOMATIC STOP MOTION. EDWARD L. TIFFANY, West Barrington, R. I., assignor to National India Rubber Company, Bristol, R. I., a Corporation of Rhode Island. Filed June 22, 1929. Serial No. 372,972. 2 Claims. (Cl. 28—51.)



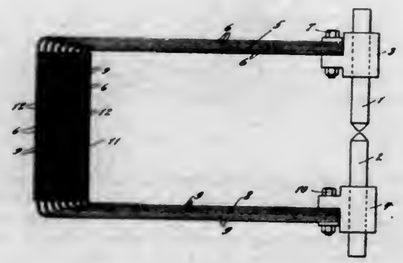
1. An electrical control device actuable by discontinuities in strands which comprises in combination, means for supporting a plurality of moving strands in separated relation, a peripherally grooved disk supported by each of the strands while under tension, the strands being arranged to run in the peripheral grooves, means for maintaining the disks in separated relation, the disk being free to move under the influence of gravity when not supported by the strands, and means actuable by the weight of any of the disks for controlling an electrical circuit.

1,761,419. DEENERGIZING CIRCUIT FOR COUPLED CARS. CHARLES H. TOMLINSON, Mansfield, Ohio, assignor to The Tomlinson Coupler Company, Mansfield, Ohio, a Corporation of Ohio. Filed Oct. 28, 1927. Serial No. 229,356. 31 Claims. (Cl. 246—62.)



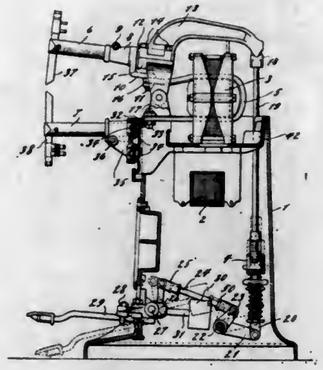
1. The combination with an electrically driven car, of means comprising a controller for controlling the supply of current for driving said car, coupling and uncoupling mechanism for said car, means for automatically deenergizing said controlling means on operation of said coupling or uncoupling mechanism, and automatic means preventing re-energizing of said controlling means until said controller is moved to open circuit position and for permitting re-energizing of said controlling means after said controller has been returned to open circuit position.

1,761,420. APPARATUS FOR WELDING WITH HIGH-FREQUENCY CURRENTS. EDMUND J. VON HENKE, Chicago, Ill., assignor to American Electric Fusion Corporation, Chicago, Ill., a Corporation of Illinois. Filed Apr. 16, 1926. Serial No. 102,419. 6 Claims. (Cl. 219—4.)



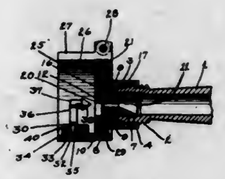
1. An electric welding circuit consisting of a primary adapted for 10,000 cycles per second, or higher, a secondary in inductive relation to said primary, said secondary consisting of a plurality of flat, thin conductors connected to the welding electrodes, insulation between the free ends of said conductors thus forming a condenser which renders the secondary resonant with the primary.

1,761,421. ELECTRICAL WELDING APPARATUS. EDMUND J. VON HENKE, Chicago, Ill., assignor to American Electric Fusion Corporation, Chicago, Ill., a Corporation of Illinois. Filed June 12, 1923. Serial No. 644,843. 14 Claims. (Cl. 219—4.)



1. In a spot welder the combination of a pedestal, an electrode holder pivotally mounted thereon, a transformer, an autocoil and a frame structure carrying said transformer and coil and removable as a unit from said pedestal together with said electrode holder.

1,761,422. NOZZLE. ERNEST E. WAGNER, Minneapolis, Minn., assignor, by mesne assignments, to The Rotawasher Corporation, Cleveland, Ohio, a Corporation of Ohio. Filed Dec. 17, 1927. Serial No. 240,793. 1 Claim. (Cl. 299—127.)

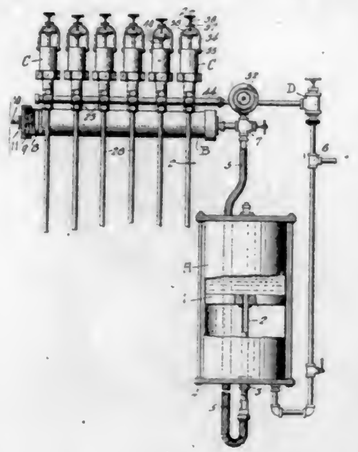


A spray nozzle comprising a tubular nozzle body having threads on the exterior of the discharge end thereof, a removable nozzle tip within the discharge end of the nozzle body, a nut adapted to screw on the nozzle body and to hold the nozzle tip in place, said nut having a head eccentric to the axis of discharge of the nozzle tip, a split tubular support rotatable on said nut, a screw on said support adapted to clamp it in position, and a spray needle carried by said support.

1,761,423. PRESSURE GREASE MEASURING AND DISTRIBUTING APPARATUS. JOSEPH W. WOODRUFF, Elizabeth, N. J. Filed May 29, 1928. Serial No. 281,389. 3 Claims. (Cl. 184—129.)

1. In a grease distributing system, the combination of a reservoir for grease having an outlet pipe, means for ejecting said grease under pressure from said outlet, a distributing manifold connected to said outlet pipe, a plurality of measuring pumps each including a cylinder having an inlet passage connected to said manifold and an outlet passage, an inwardly opening check-valve in said inlet

passage, an outwardly opening check-valve in said outlet passage, and a piston reciprocable in said cylinder whereby forcible movement of said piston in one direction ejects

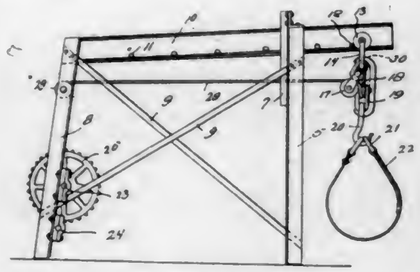


grease from said cylinder through said outlet passage and the pressure of the grease in said manifold causes the grease to flow into said cylinder and actuates said piston in the other direction.

1,761,424. PROCESS OF REPRODUCING IMAGES ON RUBBER SURFACES. JOHN P. BROCKWAY, Coronado, Calif. Filed Feb. 28, 1929. Serial No. 343,575. 7 Claims. (Cl. 95—6.)

1. The herein described process of reproducing images on rubber surfaces, comprising providing the rubber surface with a highly polished surface, then subjecting the surface to a bath of hydrochloric acid, then, wiping said surface dry, then placing an image on a transparent member in front of said rubber surface, then exposing the same to light, and then developing the rubber surface by placing the same in a bath of nitric acid, fifty percent, and water, fifty percent.

1,761,425. TREE LIFTER. FRED BUEHLER, Lincoln, Nebr. Filed Oct. 20, 1927. Serial No. 227,536. 3 Claims. (Cl. 254—145.)



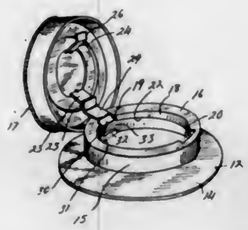
1. A mechanism of the class described comprising a pair of front uprights, an overhead support on the uprights, a second pair of rear uprights converging upwardly toward each other, an I-beam supported by the midportion of the overhead support and the upper ends of the rear uprights, said beam having a plurality of openings, a bolt insertable in said openings, rollers one to each side of the web of the beam on the lower flange thereof, and a hanger frame in which the rollers are journaled, said bolt being adapted to hold the rollers stopped at different positions.

1,761,426. PACK CARRIER. HAROLD GORDON CHUTE, Seattle, Wash. Filed Apr. 25, 1928. Serial No. 272,589. 2 Claims. (Cl. 224—11.)



1. In a device of the class described, a tubular frame comprising curved vertical members connected adjacent their upper ends with cross members and connected at their lower ends to a substantially semi-circular member, all of the said members being curved to conform to the curvature of a person's back, and their upper ends extending slightly over the shoulders, a continuous belt at the waist inside of the said semi-circular member, diagonal straps extending across the back, attached to a cross member of the frame at the point of intersection, the lower ends attached to the belt at points slightly beyond the center of the sides of the person, and the upper ends extending over the opposite shoulder down the front and provided with connections to the belt at the same points where the lower ends of the opposite members are connected, and straps connecting the upper ends of the frame members to the first-mentioned straps at the front.

1,761,427. CLOSURE. CECIL R. CRARY, Detroit, Mich. Filed July 21, 1927. Serial No. 207,481. 5 Claims. (Cl. 220—40.)

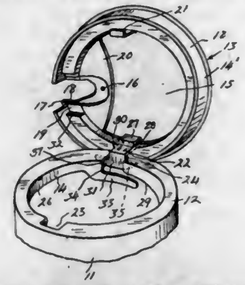


1. The combination with a container having an opening, of a ring projecting from said container surrounding said opening and having an inwardly extending flange formed with diametrically opposed slots, a closure for said opening adapted to seat upon said flange, and means carried by said closure and engageable in one of said slots for establishing a hinge connection between the ring and closure.

1,761,428. CLOSURE. CECIL R. CRARY, Detroit, Mich. Filed Feb. 16, 1928. Serial No. 254,844. 11 Claims. (Cl. 220—31.)

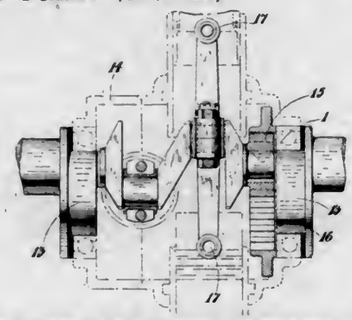
1. In combination, a container, a closure for the container having a vent therein, a ring having the peripheral portions thereof secured to the closure and having a pair of oppositely disposed projections extending downwardly from the inner edge thereof adapted to cooperate with the

container upon rotation of the closure in one direction to subject the latter to a sealing pressure upon the former, and an extension upon the inner edge of the said ring dis-



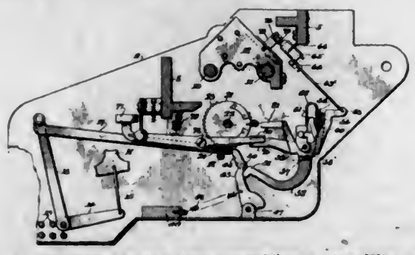
posed between the projections aforesaid and adapted to extend beyond the said vent in spaced relation thereto, the said extension constituting a baffle for preventing fluid in the container from escaping through the said vent.

1,761,429. CONVERSION OF RECIPROCATORY MOTION TO ROTARY MOTION, OR THE CONVERSE. GEORGE DEAN, Armthorpe, near Doncaster, England. Filed Apr. 5, 1926, Serial No. 99,972, and in Great Britain Apr. 16, 1925. 4 Claims. (Cl. 74—14.)



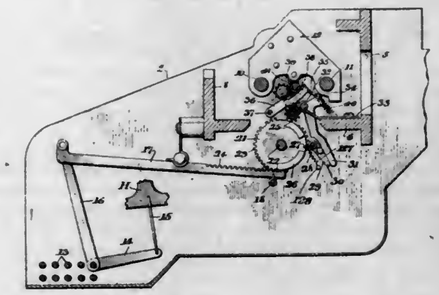
1. In mechanism for converting reciprocatory motion to rotary motion, the combination of stationary cylinders a rotatable crankshaft having a crank pin, a reciprocatory piston, having a gudgeon pin, a connecting rod connecting the gudgeon pin with the crank pin, the axis of the gudgeon pin being at right-angles to the axis of the crank pin, said connecting rod being capable of slight movement or float between it and its guide along a line at right angles to the crank pin axis and hypocyclic gearing between the crank and crankshaft.

1,761,430. ADDING ATTACHMENT FOR TYPEWRITING MACHINES. GUSTAVE O. DEGENER, San Francisco, Calif., assignor to Royal Typewriter Company, Inc., New York, N. Y., a Corporation of New York. Original application filed June 10, 1926, Serial No. 114,950. Divided and this application filed May 25, 1927. Serial No. 194,132. 15 Claims. (Cl. 235—130.)



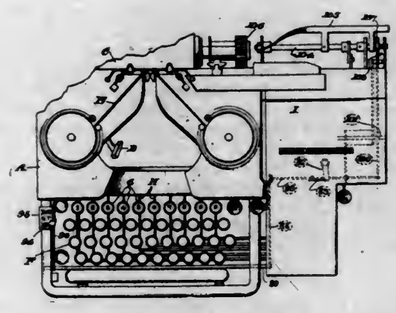
1. A computing mechanism comprising a travelling totalizer, devices for entering numbers in said totalizer when it is in the computing zone, keys for actuating said devices upon full depression of any key, and means set by the keys for preventing the full depression of said keys to enter a number when the totalizer is not correctly positioned.

1,761,431. ADDING ATTACHMENT FOR TYPEWRITING MACHINES. GUSTAVE O. DEGENER, San Francisco, Calif., assignor to Royal Typewriter Company, Inc., New York, N. Y., a Corporation of New York. Original application filed June 10, 1926, Serial No. 114,950. Divided and this application filed May 25, 1927. Serial No. 194,133. 3 Claims. (Cl. 235—131.)



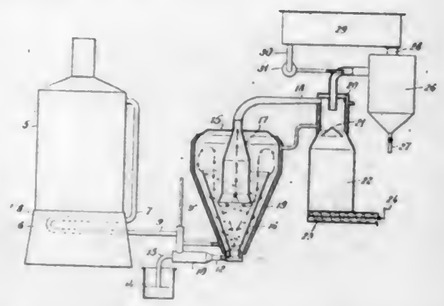
1. In a computing machine, the combination of a totalizer having the usual train of mechanism including gears, key actuated devices including an oscillatory gear carrying a cam for operating the totalizer, an alining pawl for the totalizer, and means actuated by the cam on the oscillatory gear for causing the pawl to engage the totalizer at the end of the oscillation in one direction and to hold the pawl thus engaged during the oscillation in the other direction.

1,761,432. ADDING ATTACHMENT FOR TYPEWRITING MACHINES. GUSTAVE O. DEGENER, San Francisco, Calif., assignor to Royal Typewriter Company, Inc., New York, N. Y., a Corporation of New York. Original application filed June 10, 1926, Serial No. 114,950. Divided and this application filed May 25, 1927. Serial No. 194,134. 5 Claims. (Cl. 235—59.)



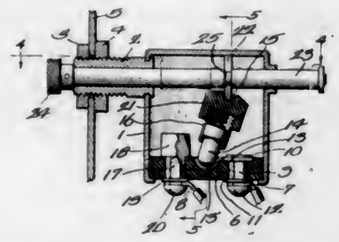
1. In a combined typewriting and computing machine, the combination of an adding and subtracting computing device, a movable carriage for the typewriter, manual means to cause the computing device to add or subtract, and means actuated by a shifting of the carriage to actuate the manual means to restore the computing device to adding condition when during the preceding operation it shall have been caused to subtract.

1,761,433. PRODUCTION OF HYDROCYANIC ACID. PAUL T. DOLLEY, Los Angeles County, Calif., assignor to California Cyanide Company, Incorporated, New York, N. Y., a Corporation of Delaware. Filed Oct. 19, 1927. Serial No. 227,164. 4 Claims. (Cl. 23—151.)



2. The method of producing hydrocyanic acid, which comprises treating a cyanide of the alkali and alkaline earth metal groups as a finely divided solid in gaseous suspension with steam.

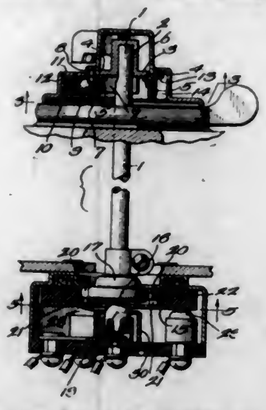
1,761,434. ELECTRIC SWITCH. HARRY A. DOUGLAS, Bronson, Mich. Filed Dec. 21, 1927. Serial No. 241,641. 3 Claims. (Cl. 200—68.)



1. In an electric switch, the combination with two circuit terminals; of a contact member which is inclusive of a compressible spring, a plunger contact pressed upon by the spring and having rocking engagement with one of said circuit terminals, and a carrier for said plunger contact and spring; and a reciprocable handle having a fulcrum formation engaged by said carrier and upon which the carrier may turn in response to reciprocation of the handle, the handle being shiftable to bring the fulcrum formation thereon upon one side or the other of the place of engagement of the plunger contact and the circuit terminal upon which the plunger contact may rock, the aforesaid spring maintaining said carrier in engagement with said fulcrum formation in all positions of the handle, whereby the contact member has the final portions of its alternative movements quickly completed, the other circuit terminal being positioned to be engaged by said contact member when this member is in one of its alternative positions.

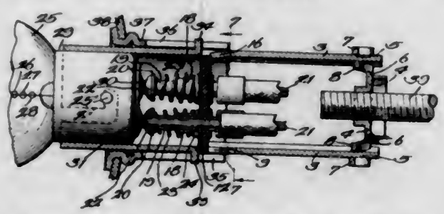
1,761,435. ELECTRIC SWITCHING MECHANISM. HARRY A. DOUGLAS, Bronson, Mich. Filed Feb. 6, 1928. Serial No. 252,283. 5 Claims. (Cl. 200—4.)

1. An electric switch including a rotatable and reciprocable contact actuating rod; a handle upon one end of the rod; an abutment with which the handle is engageable to limit the extent to which the handle and rod are movable in one direction along the axis of the rod; a spring normally pressing the handle into engagement with said abutment; a member having an arcuate row of grooves substantially coaxial with the rod, said grooves extending along the rod; and an additional member which is inclusive of a plunger receivable in and movable along any of said



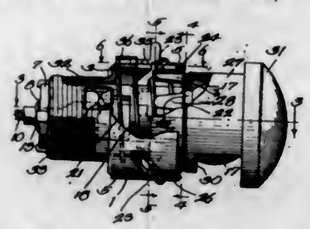
grooves and a spring pressing said plunger into any of said grooves, one of said members being upon said abutment and the other being provided upon said handle.

1,761,436. CIRCUIT-CONTINUING DEVICE. HARRY A. DOUGLAS, Bronson, Mich. Filed May 5, 1928. Serial No. 275,335. 1 Claim. (Cl. 173—328.)



A circuit continuing device including a shell having diametrically opposite openings therein, one of which is formed by striking a single tongue from the shell and the other by striking a pair of tongues therefrom, a contact carrying disc having radiating fingers which are received respectively within the first named opening and within recesses formed in the end of the shell, one of the tongues of the aforesaid pair being bent inwardly to overlie the adjacent face of the disc and the remainder of said tongues being bent outwardly for sliding interfit with a shell receiving tubular socket, and prongs on the shell clinched upon said disc.

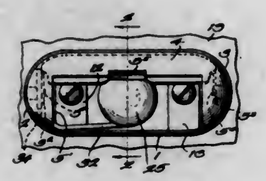
1,761,437. CIRCUIT-CONTINUING DEVICE. HARRY A. DOUGLAS, Bronson, Mich. Filed May 9, 1929. Serial No. 361,676. 2 Claims. (Cl. 173—346.)



1. The combination with a shell; of a socket surrounded by the shell and movable along the bore thereof; a spring pressing upon said socket; a plug within and carried by said socket; complemental contacts respectively disposed upon the plug and shell; a plunger carried by said socket

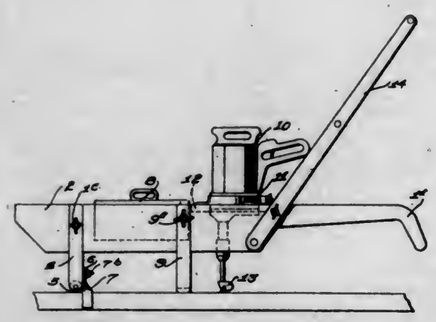
and accessible for engagement at the front end of the shell whereby said socket may be inwardly moved against the force of said spring, said socket and shell having interengaging bayonet projection and channel formations for holding the socket in position to maintain said contacts in engagement; a gate for closing the entrance portion of the bayonet channel; and a sheath for the shell and forming, with the shell, a guiding socket in which said gate is received.

1,761,438. ELECTRIC LAMP. HARRY A. DOUGLAS, Bronson, Mich. Filed June 14, 1929. Serial No. 370,871. 2 Claims. (Cl. 240—8.16.)



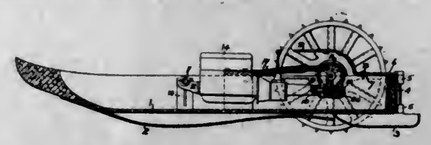
1. The combination with an electric incandescent lamp having a metallic sheath upon its base and a filament having one terminal in electrical connection with this sheath; of a metallic socket receiving the base of the lamp and with which said sheath is engaged; an adjustable shutter for obstructing light emanating from the lamp; and a switch for opening and closing the circuit of the lamp and operable by the shutter, the aforesaid metallic socket having an extension constituting one of the contacts of the switch, the switch and shutter being so related that the switch is opened when the shutter is closed and the switch is closed when the shutter is open.

1,761,439. ADZ-FINISH ORNAMENTAL WOODWORKING MACHINE. GEORGE P. DRISKELL, San Diego, Calif. Filed Mar. 9, 1928. Serial No. 260,328. 11 Claims. (Cl. 144—119.)



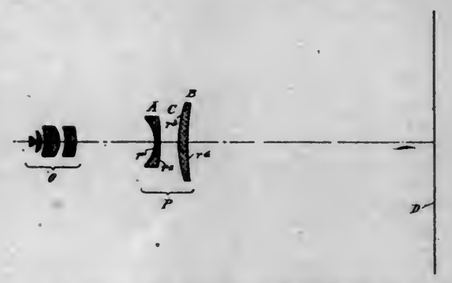
1. In a machine of the class described, a frame member, an adjusting support having a base portion mounted on the front end only thereof, handles on the rear end thereof, a gage intermediate the front support and said handle, an electric motor mounted on said frame with a stock extending downwardly adjacent the said gage and a cutter mounted on the lower end of said stock said frame member being pivotable around the base of said support.

1,761,440. COMBINATION WATER AND ICE BOAT. JOSEPH DROST, Detroit, Mich. Filed May 20, 1929. Serial No. 364,372. 3 Claims. (Cl. 114—43.)



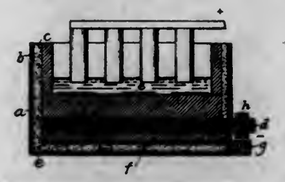
1. A combination water and ice boat having a hull the underside of which is downwardly tapered from the bows, runners extending longitudinally on the underside of said hull for the greater part of its length, propellers, means for rotating said propellers, paddles on said propellers adapted to operate in water, spikes extending radially from the periphery of said propellers adapted to engage a hard surface, rear runners adapted to extend rearwardly in alignment with said first named runners, rods on the lower end of each of which one of said rear runners is fixed, means for mounting each of said rods substantially vertically at the stern of the boat, arms extending forwardly from the upper ends of the rods and fixed thereon, a cross member connecting the front portions of said arms, and a rudder bar fixed to one of said arms so that both the latter are turned together with their respective rods by its movement, said rear runners being adapted to function as rudders either when the boat is in water or on a hard surface.

1,761,441. LENS SYSTEM. LEON V. FOSTER, Rochester, N. Y., assignor to Bausch & Lomb Optical Company, Rochester, N. Y., a Corporation of New York. Filed Apr. 13, 1925. Serial No. 22,638. 2 Claims. (Cl. 88—57.)



1. In a projecting system, lens means negative in power to be used with a microscope objective for projecting the image formed by it on a photographic film or plate in a camera, comprising two elements, one negative in power and one positive in power, the negative element facing the microscope objective and both having their surfaces of greater curvature facing said objective.

1,761,442. FURNACE FOR THE PRODUCTION OF ALUMINUM. PEDER ELIASEN FRØLAND, Hoyanger, Norway. Filed Mar. 1, 1928, Serial No. 258,337, and in Norway Mar. 12, 1927. 5 Claims. (Cl. 204—20.)



1. In an electric furnace for the production of aluminum, a carbon bottom, a core of similar material embedded

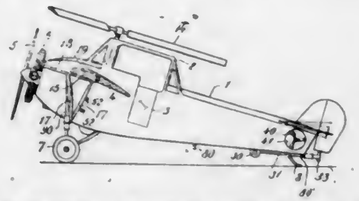
therein and extending outside the furnace for attachment to a source of current, and metal masses in the carbon bottom extending outside the furnace for attachment to the same current source.

1,761,443. ORNAMENTED RUBBER ARTICLE AND METHOD OF MAKING SAME. TED FRANCIS HOOPER, Akron, Ohio, assignor to The Miller Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Aug. 25, 1928. Serial No. 302,095. 8 Claims. (Cl. 41—34.)



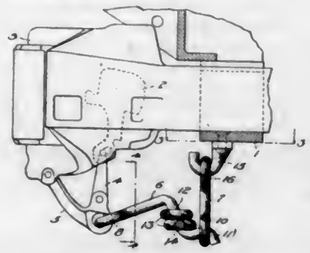
5. A rubber article of manufacture comprising a foundation sheet, and a pair of superposed sheets united thereto and together at their marginal edges and also on intersecting lines within said edges.

1,761,444. AIRCRAFT CONSTRUCTION. EDWARD POWIS JONES, New York, N. Y. Filed June 6, 1929. Serial No. 368,773. 6 Claims. (Cl. 244—14.)



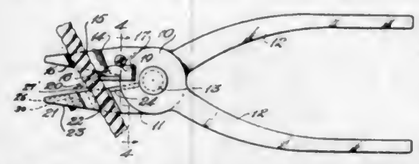
1. In an aircraft of the class described, a main aerofoil pivotally connected to the fuselage, trusses projecting laterally from the fuselage for supporting said aerofoil in a vertical position, and a small aerofoil member pivoted on each of said trusses and controllable from the pilot's seat so as to neutralize the rolling tendency of said aircraft during vertical ascent.

1,761,445. UNCOUPLING MECHANISM. WILLIAM KELSO, Pittsburgh, Pa., assignor to The McConway & Torley Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed May 28, 1927. Serial No. 194,953. 9 Claims. (Cl. 219—169.)



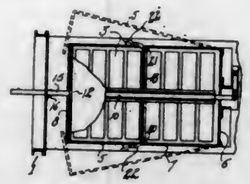
1. In an uncoupling mechanism, the combination with a car coupler and its lock, of means for moving said lock to unlocked position, said means involving a lever operatively connected to the lock, a movable member carried by the car body for supporting the lever, said member constituting a fulcrum for the lever, and rotatable uncoupling means for actuating said lever, said uncoupling means being supported by the lever and being maintained in assembled relation thereto by said movable member.

1,761,446. ARMOR-CUTTING PLIERS. BERNHARD F. LINDSTROM, Mount Vernon, N. Y. Filed May 10, 1927. Serial No. 190,298. 6 Claims. (Cl. 81—9.5.)



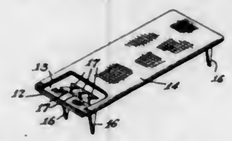
1. In combination, pliers having a pair of pivotally connected jaws each having a slot extending through the respective jaw transversely thereof, said slots being alined and open each on one side to permit entry of an armor conduit into the slots, and a cutter blade carried by one jaw to move longitudinally of the armor conduit and positioned to cut into the armor of said conduit.

1,761,447. BALING PRESS. JOHN H. MACLEAN and ALBERT O. HEINZMANN, Ann Arbor, Mich., assignors to Economy Baler Company, Ann Arbor, Mich., a Corporation of Michigan. Filed Apr. 27, 1925. Serial No. 26,190. 9 Claims. (Cl. 100—19.)



1. In a baling press, a plurality of walls defining a baling chamber, one of said walls being stationary, and an auxiliary wall opposite said stationary wall and movable after the bale has been formed to release the bale.

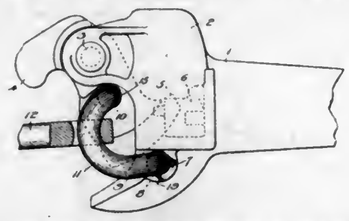
1,761,448. MARKING TAG. FRANK MAGIDSON, Pittsburgh, Pa., assignor to Jonathan S. Green, Pittsburgh, Pa., and Frank Magidson, trustees. Filed Sept. 19, 1928. Serial No. 306,849. 3 Claims. (Cl. 40—25.)



1. A marking tag comprising a flat tubular body with the long edges overlapping and a prong fastening device having relatively long prongs for securing the tag to a garment and oppositely disposed relatively short prongs which clinch the fastening device to the overlapping edges of the body, the single layer forming the top surface being free from any connection with the fastening device itself whereby the top of the tag presents a clear unobstructed marking surface.

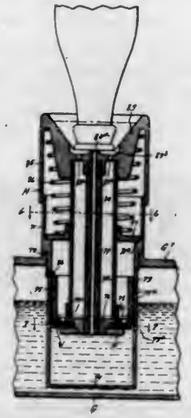
1,761,449. TRANSITION CAR COUPLING. WILLIAM MCCONWAY, Jr., and WILLIAM KELSO, Pittsburgh, Pa., assignors to The McConway & Torley Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Original application filed Sept. 9, 1925, Serial No. 55,319. Divided and this application filed June 21, 1928. Serial No. 287,213. 6 Claims. (Cl. 213—112.)

1. Car coupling mechanism comprising a coupler involving a coupler head provided with a recess toward its guard arm side, a knuckle rotatably mounted on said head and having a tail provided with an opening, and a lock for the knuckle, in combination with means adapted to connect said coupler to a drawhook, said means involving a member formed with a post adapted to enter the opening in the tail of the knuckle when the latter is in open position and having another post adapted to be received by said



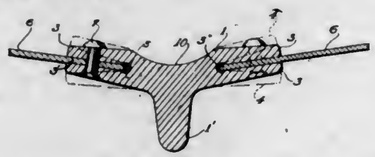
recess in the coupler head and having a curved portion connecting said posts, and a link device movably attached to said curved portion and adapted to cooperate with a drawhook.

1,761,450. APPARATUS FOR CLEANING BOTTLES. ROBERT R. MCKECHNIE, Cleveland, Ohio, assignor, by mesne assignments, to The Cleveland Trust Company, Cleveland, Ohio, a Corporation of Ohio. Filed Feb. 2, 1925. Serial No. 6,191. 18 Claims. (Cl. 141—7.)



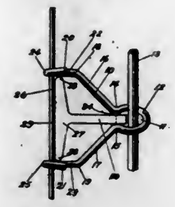
1. In a bottle-cleaning apparatus, a conveyor having a series of seats for supporting bottles in an inverted position, means for moving said conveyor, a tank below the said conveyor and having a series of pumps projecting from the top thereof, each pump having a seat adapted to engage the mouth of a bottle and means for yieldably supporting such seat, each seat having a discharge outlet leading therethrough, means for moving the said tank toward and from the said conveyor and the bottles thereon, and means operative, after the engagement of the mouths of the bottles by such seats, for forcing liquid from each pump through the outlet in the seat thereof into the bottle thereabove.

1,761,451. ALUMINUM BOAT. ENOCH OHNSTRAND, Kenmore, N. Y. Filed Jan. 24, 1928. Serial No. 249,152. 8 Claims. (Cl. 9—6.)



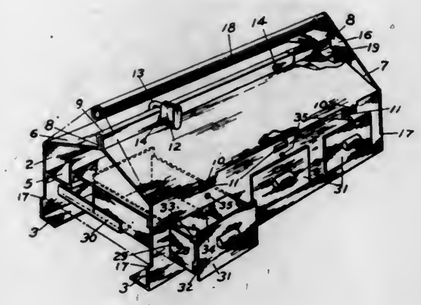
7. An aluminum boat comprising a keel frame member having on its opposite longitudinal sides pairs of plate-attaching flanges opening outwardly, the body portion of said frame member between said pairs of flanges being pliable to permit bending the same on the longitudinal axes of said frame member whereby one pair of flanges may be angularly related relative to the companion pair of flanges in shaping the boat.

1,761,452. WIRE-FENCE CLIP. EDWARD J. PAQUE, Cincinnati, Ohio, assignor to The Pollak Steel Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Dec. 15, 1928. Serial No. 326,297. 6 Claims. (Cl. 256—57.)



1. A clip for securing an object upon a post provided with flanges and a rib, said device comprising a length of material bent to form an eye adapted for receiving the rib of the post, a pair of arms etxending from the eye and adapted to embrace the post, an object holding means on the end of each arm, said holding means being adapted to receive an object when the clip is moved to dispose the rib within the eye, and to dispose the object in abutment upon the flanges upon movement of the clip in the opposite direction.

1,761,453. TOOL KIT. DORSEY L. RANKIN, Spokane, Wash. Filed Apr. 24, 1928. Serial No. 272,398. 6 Claims. (Cl. 206—16.)



1. The combination in a tool kit with a pair of separable and removable cover sections, of a carrier comprising a pair of spaced end plates and a handle bar rigid therewith, means for locking the cover sections together, and means on the inner sides of the end plates for engaging under the joint of the cover sections.

1,761,454. TIRE VALVE FOR INDICATING PRESSURES. EDWARD A. ROCKWELL, New York, N. Y. Filed Feb. 25, 1925. Serial No. 11,392. 4 Claims. (Cl. 152—11.5.)

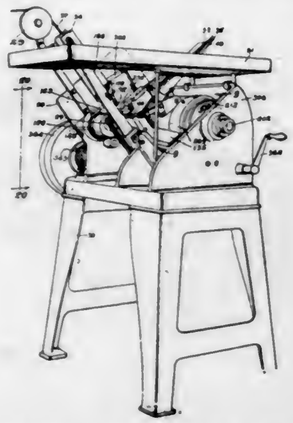
1. A pressure indicating device comprising a movable indicating means having in operative relation thereto a tube made of material which is longitudinally extensible

at a rate determined by said tube itself but which is substantially inextensible laterally, and means for connecting said tube to a pneumatic tire.



4. A pressure indicating device comprising an indicating means, a longitudinally extensible tube adapted to operate the same from a pneumatic tire and a nipple connected to the indicating means for receiving one end of said tube, said nipple having an upwardly directed recess to receive the end of the tube.

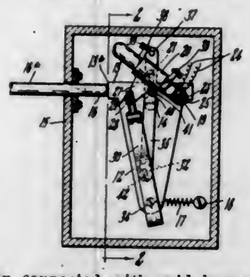
1,761,455. MACHINE FOR MANUFACTURING HOSE CLAMPS. FREDERICK N. ROSS, Detroit, Mich., assignor, by mesne assignments, to Peoples Clamp Corporation, Wyandotte, Mich., a Corporation of Michigan. Filed Apr. 16, 1927. Serial No. 184,413. 21 Claims. (Cl. 153—2.)



21. In combination means for feeding fastening elements, means for feeding retaining elements, means for feeding a tension member and co-operating means for assembling a fastening element, a retaining element and a tension member into a finished clamp.

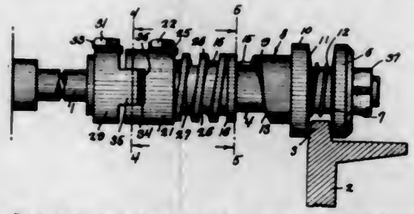
1,761,456. EXPANSION AND CONTRACTION SWITCH. HENRY GERHARD SCHLICHTER, Fitchburg, Mass. Filed Mar. 5, 1928. Serial No. 259,261. 2 Claims. (Cl. 200—137.)

1. A switch comprising, in combination, a theremostatic abutment movable in a predetermined path by expansion and contraction, a holder fixed relative to the abutment, a circuit controller pivotally connected with the holder, said controller including a tiltable guide having spaced apart electrodes insulated from each other, and a circuit closing and breaking element, a series of compounded levers including a biased primary lever fulcrumed on the holder and having a shorter arm maintained in yielding contact with the abutment and a longer arm, an outer



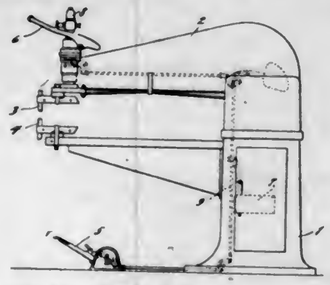
lever pivotally connected with said longer arm, and an intermediate lever pivotally connected with the outer lever, the shorter arm of the primary lever, and the holder, and a crank on the controller engaged with the outer lever, the arrangement being such that limited movements of the abutment are converted into operative circuit closing and breaking movements of the controller.

1,761,457. STARTER FOR INTERNAL-COMBUSTION ENGINES. LOUIS VINGHERHOETS, Grand Rapids, Mich., assignor to Dow Gas Engine Starter Corporation, Wilmington, Del., a Corporation of Delaware. Filed Oct. 14, 1927. Serial No. 226,219. 7 Claims. (Cl. 74—7.)



1. In a starter mechanism for internal combustion engines, a starter motor shaft, members having opposing friction faces for driving engagement with a portion of an engine fly wheel, means connecting one of said members for rotation with the shaft and coacting means upon the members for adjusting the same to driving position and effecting their rotation in unison, upon rotative movement of the shaft.

1,761,458. APPARATUS FOR ELECTRIC WELDING. EDMUND J. VON HENKE, Chicago, Ill., assignor to American Electric Fusion Corporation, Chicago, Ill., a Corporation of Illinois. Filed Dec. 5, 1922. Serial No. 604,976. 17 Claims. (Cl. 219—4.)



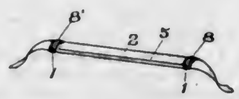
1. In a spot welding system the combination of welding contacts, resilient mechanical means for bringing said contacts into welding relation with the work and means for preventing the movement of said contacts out of welding relation until the operation is completed.

1,761,459. SPACING STRIP FOR BOTTLE-SHIPPING CRATES. FRED H. YEOMANS, Detroit, Mich. Filed Nov. 15, 1928. Serial No. 319,494. 3 Claims. (Cl. 217—22.)



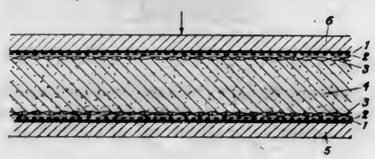
1. As a new article of manufacture, a sheet metal strip provided with a continuous longitudinal rib midway between its lateral edges and having its plane edge portions inbent at spaced intervals to form bottle-engaging surfaces, the rib on each strip being adapted to engage the plane portions of a similar strip arranged at right angles thereto to the exclusion of the contact therewith of the flanking plane portions of its own strip.

1,761,460. DUPLICATING RIBBON MECHANISM. SOTOO YOSHIMURA, Shanghai, China. Filed Sept. 11, 1925, Serial No. 55,841, and in Japan Sept. 11, 1924. 1 Claim. (Cl. 197—153.)



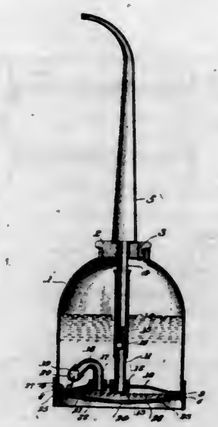
A typewriting mechanism of the class comprising in combination, a typewriter carriage, a platen having an extension axle, a ribbon guide, said guide being arcuate in the cross section and formed to rest concentrically with respect to said platen and extending along the printing line of the platen, means to direct the ribbon along this line, a pair of arms on the typewriter frame for supporting said guide, means on said guide for detachably securing said guide to said arms, spacing means on said guide to space the ribbon from said platen, ribbon reels and means to drive said reels comprising duplicate sets of worm gears attached at each end of the extension axle of the platen.

1,761,461. SWITCHBOARD AND THE LIKE. HERMANN APEL, Berlin-Wilmersdorf, Germany. Filed Feb. 15, 1928, Serial No. 254,574, and in Germany Mar. 15, 1927. 7 Claims. (Cl. 154—2.)



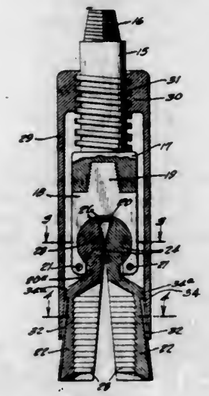
1. As a new article of manufacture a composite board adapted for use as a switchboard, comprising a plate of hardened nonelastic plastic material, a metallic sheet attached to one side of the side plate and a layer of adhesive material embedded between the plate and the sheet firmly uniting the said plate with the said sheet and having a sufficient elasticity to conform to the different coefficients of expansion of the metal sheet and plastic material.

1,761,462. FORCE OILER. ORLANDO R. BALL, Wheatland, Iowa. Filed June 17, 1929. Serial No. 371,568. 5 Claims. (Cl. 221—48.)



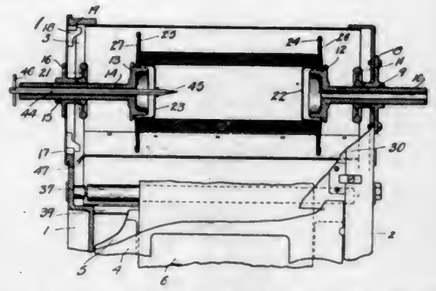
1. In an oil can, a compression chamber in the bottom thereof, the lower wall of the said chamber being of flexible material, a goose neck pipe secured to the inner wall of the chamber and having a valve controlling the entrance thereto, an outlet tube fixed to the inner wall of the said chamber, a pipe member extending from said outlet tube, a closure for the mouth of the can, an outlet spout on the closure having a tube member passing therethrough and received in the pipe, and a spring influenced ball valve for normally closing the outlet tube.

1,761,463. FISHING TOOL. GOVENOR K. BECKETT, Bakersfield, Calif. Filed Oct. 10, 1928. Serial No. 311,644. 13 Claims. (Cl. 294—115.)



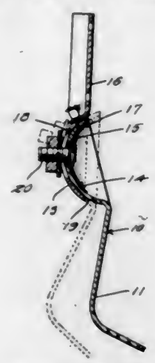
2. A fishing tool comprising a stem, a socket member on the stem, jaws having head members seated in the socket member to permit the jaws to occupy open and closed positions and to allow rotation of the stem independently of the jaws, a shoe threaded on the stem to occupy either of two extreme positions according as the stem is rotated in one direction or the other, said shoe housing the jaws when in one extreme position and exposing the latter when in the other extreme position, and a connection between the jaws and shoe for moving the jaws to open and closed positions according as the shoe is moved to one extreme position and then the other.

1,761,464. PAPER-ROLL HOLDER. ARTHUR W. CAPS, Kansas City, Mo., assignor to Photostat Corporation, Providence, R. I., a Corporation of Rhode Island. Filed June 26, 1925. Serial No. 39,751. 2 Claims. (Cl. 242—71.)



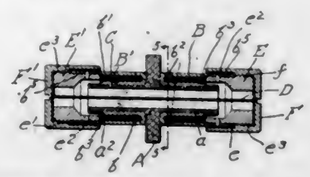
1. A paper roll holder, comprising a casing having a paper discharging opening, hollow shafts in the ends of the casing, hubs concentric with and on the ends of the shafts, and a roll end penetrating tool of non-circular shape insertable through at least one hollow shaft and a spool supported by the hubs and having a central wall adapted to be pierced by the tool for independent turning of the spool thereby.

1,761,465. CULTIVATOR BLADE. EARL G. CHAPPELOW and FRED L. BRYANT, Greeley, Colo. Filed Mar. 19, 1929. Serial No. 348,275. 3 Claims. (Cl. 97—198.)



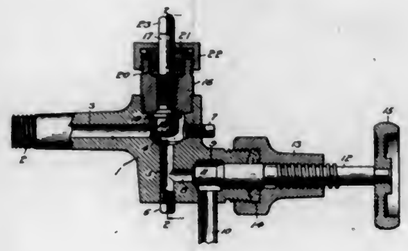
1. A blade of the character described comprising a cultivator blade, a ball-shaped boss upstanding from said blade and integrally formed therewith, an apertured shank adapted to be secured to a cultivator standard, a socket member secured to the lower end portion of said shank and integrally formed therewith, and means for securing said boss to said socket.

1,761,466. REFILLABLE FUSE. JOHN G. CLEMENS, Egertsville, N. Y., assignor to Pierce Renewable Fuses, Inc., Buffalo, N. Y. Filed Jan. 25, 1927. Serial No. 163,411. 9 Claims. (Cl. 200—131.)



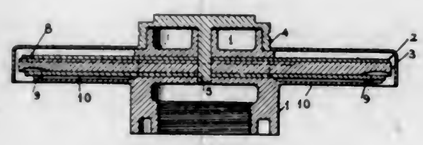
1. A refillable fuse including a substantially tubular body of non-combustible insulating material having annular shoulders, a fuse link extending through said body, vent shells arranged about said body and having passages extending lengthwise of the outer surface of said body for the gaseous products of combustion resulting from the fusing of said link and having portions pressed into engagement with said shoulders to secure said vent shells to said body, and means connected with said vent shells to secure the ends of said fuse link thereto.

1,761,467. GAUGE COCK FOR STEAM BOILERS. BERNARD COOK, Roanoke, Va. Filed June 27, 1923. Serial No. 648,076. 10 Claims. (Cl. 277—68.)



1. A gauge cock for steam boilers embodying a body having a portion thereof adapted for connection to the boiler, a passageway in said portion arranged for fluid communication with the boiler at one end thereof, a chamber formed at the other end of the said passageway, a second fluid passageway, the same extending from the said chamber in a direction at an angle to the first passageway, a third fluid passageway connected to and leading from the second passageway at a point slightly removed from the chamber and being arranged with its axis approximately parallel with the axis of the first passageway but offset slightly therefrom, a valve in the third passageway adapted to control the flow of fluid therethrough, and a valve adapted to control the flow of fluid from the chamber to the said second passageway.

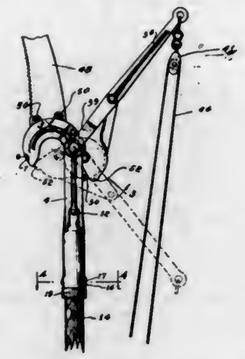
1,761,468. HUB CAP. FERDINANDO BRUSCH DI NEUBERG, Treviso, Italy. Filed Apr. 2, 1929, Serial No. 351,901, and in Italy Apr. 13, 1928. 2 Claims. (Cl. 301—108.)



1. A hub cap including a body, and a telescopic member carried by the body and adapted, when extended, to facilitate application and removal of the hub cap.

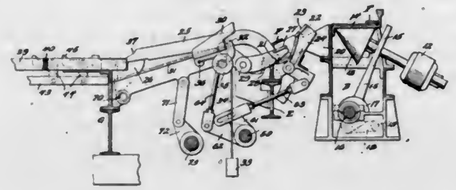
1,761,469. TREE TRIMMER. MATHIAS DONKEL, Chicago, Ill., assignor to Mathias Klein & Sons, Inc., Chicago, Ill., a Corporation of Illinois. Filed July 21, 1927. Serial No. 207,480. 3 Claims. (Cl. 30—11.)

2. In an implement of the class described, the combination of a frame, a rotatable cutter having a circular peripheral cutting edge, a pair of plates carrying said cutter, means for pivotally mounting said plates in said frame, the axis of pivotal movement passing through said cutter, an operating lever secured to said plates, and



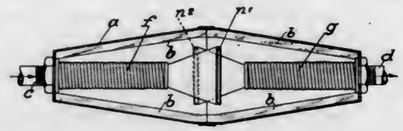
means interposed between the said lever and said frame tending normally to hold said cutter in inoperative position.

1,761,470. COOLING BED. GUSTAF L. FISK, Midland, Pa., assignor to Mesta Machine Company, West Homestead, Pa., a Corporation of Pennsylvania. Filed Sept. 8, 1926. Serial No. 134,277. 48 Claims. (Cl. 80—42.)



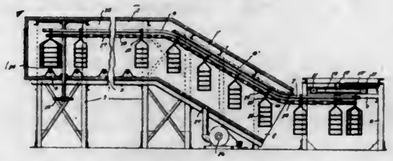
1. A cooling bed for hot metal bars, comprising in combination, a section for slidably supporting a series of bars in pack formation, a second section for slidably supporting bars positioned to receive bars discharged from the first section, means for feeding bars successively onto said first section to form a pack, moving the pack across said section with a step by step motion, and causing the successive discharge of said bars onto said second section, and means for moving the bars thus discharged onto the second section thereacross either singly or in groups.

1,761,471. CLOSED EXHAUST BOX FOR SILENCING INTERNAL-COMBUSTION ENGINES. WILLFRIED FÖRSTEL, Spandau, Germany. Filed June 16, 1927, Serial No. 199,375, and in Germany Oct. 12, 1926. 4 Claims. (Cl. 137—160.)



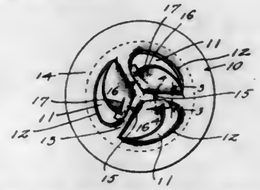
1. A closed exhaust silencer for internal combustion engines, comprising a casing, a resilient inlet pipe for admitting exhaust gases to said casing, a resilient outlet pipe for discharging exhaust gases from said casing, and a nozzle on the inner end of each of said pipes, each of said nozzles being flattened and bent aside.

1,761,472. OVEN. VERNIE A. FOX, Detroit, Mich., assignor to Young Brothers Company, Detroit, Mich., a Corporation of Michigan. Filed June 22, 1928. Serial No. 287,525. 1 Claim. (Cl. 34—12.)



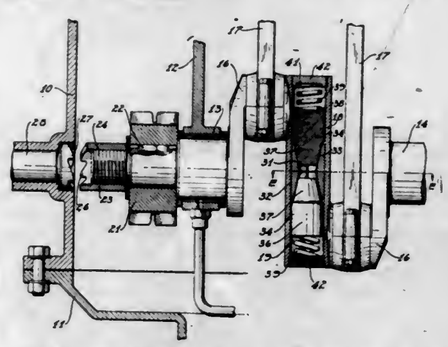
An oven comprising an elevated portion and a downwardly sloping portion, the latter portion being open at its lower end and closed at the upper end, an endless chain extending through both portions and adapted to enter and leave the oven at said end, a partition dividing said portions longitudinally and disposed between the laps of said chain, heating means in the elevated portion and air exhaust means in the sloping portion.

1,761,473. MIXING DEVICE. GEORGE H. GOEBEL, Clayton, Mo. Filed Sept. 14, 1928. Serial No. 306,014. 4 Claims. (Cl. 48—180.)



1. A mixing device adapted to be inserted between an intake manifold and a carbureter, comprising a plate provided with a plurality of apertures disposed to form concentered portions therebetween, a plurality of vanes, one for each of the apertures, the vane of each aperture being connected to an edge of an adjacent one of said portions and disposed over the aperture at an angle to the plate and to its perpendicular axis, and raised flanges struck up about the remaining portions of the apertures designed to form arcuate troughs with the wall of the manifold, said flanges each continuing along the free edge of a concentered portion.

1,761,474. INTERNAL-COMBUSTION ENGINE. WALTER R. GRISWOLD, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Feb. 13, 1928. Serial No. 253,845. 18 Claims. (Cl. 74—38.)

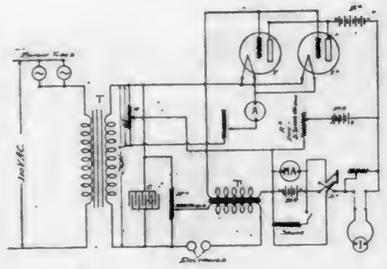


14. The combination with an engine including a crank shaft having an arm, of a slidable friction member on said arm, and inertia means operable on said member to increase the friction upon movement with respect to the shaft.

1,761,475. SIDE CHAIN CHLORINATION PRODUCTS OF META NITROTOLUENE AND PROCESS OF MAKING THE SAME. IVAN GUBELMANN, HENRY J. WEILAND, and OTTO STALLMAN, South Milwaukee, Wis., assignors to The Newport Company, Carrollville, Wis., a Corporation of Delaware. Filed Dec. 8, 1926. Serial No. 153,467. 4 Claims. (Cl. 260—160.)

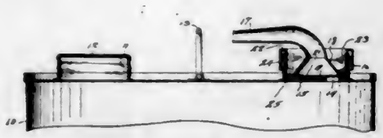
1. A process of preparing side chain chlorination products of meta nitro toluene, which comprises treating meta nitro toluene with chlorine in the presence of a chlorination catalyst at above ordinary room temperatures.

1,761,476. APPARATUS FOR MEASURING PSYCHOGALVANIC RESPONSES. STARKE R. HATHAWAY, Athens, Ohio. Filed Jan. 20, 1928. Serial No. 248,202. 1 Claims. (Cl. 174—177.)



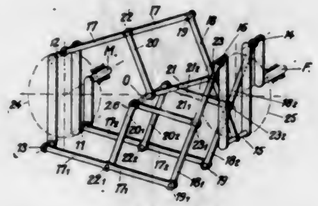
An apparatus for electrically measuring psychogalvanic responses in human beings when subjected to emotional strain, which consists of an electrical alternating current circuit, electrodes in said circuit adapted to be placed in contact with the human being's skin, a thermionic amplification device including a grid potential, means for adjusting the grid potential and means for indicating on an electrical measuring instrument the variations of resistance of the electrodes.

1,761,477. CAN SPOUT. JOHN ROYAL KAHLE, Oil City, Pa. Filed May 21, 1929. Serial No. 364,849. 2 Claims. (Cl. 221—19.)



1. A container having a discharge opening, a flange extending outward from the container around the discharge opening, the flange being circular and eccentrically disposed with reference to the discharge opening, a packing gasket disposed within said flange and having an opening registering with the discharge opening of the can, a spout having a base, the base being formed with an eccentrically disposed discharge opening adapted in one position of the spout to register with the opening of the can and gasket and in another position of the spout to be out of register with said discharge opening, and removable means for holding the base in inoperative engagement with the gasket, said means including a locking ring having an interior flange and an exterior flange extending parallel thereto, the interior flange having screw-threaded engagement with the flange on the can and having an inturned flange on its lower margin adapted to bear against the base of the spout.

1,761,478. DRIVING GEAR FOR MOTOR-DRIVEN VEHICLES. LÁSZLÓ KARLOVITZ, Budapest, Hungary. Filed Aug. 1, 1928, Serial No. 296,816, and in Hungary Aug. 24, 1927. 4 Claims. (Cl. 74—14.)



1. A driving gear for motor driven vehicles, comprising in combination a driving crankshaft having at least two crank pins offset at 180° with respect to one another, a driven crankshaft having crank pins offset at 180° with respect to one another, said crankshafts being arranged with respect to one another with the crank pins of the one opposite the crank pins of the other, and means for coupling the crank pins of the driving crankshaft diagonally crosswise to the opposite crank pins of the driven crankshaft comprising a shaft arranged with its axis of rotation lying in the plane joining the axes of rotation of the crankshafts, and so as to intersect straight lines drawn diagonally crosswise through the axes of the opposite crank pins of the two crank shafts, connecting rods operatively connected to the said crank pins and power transmitting means on said shaft and operatively connected to said connecting rods, so as to couple together the connecting rods of the opposite crank pins with the latter dingonally crosswise to one another, as and for the purposes set forth.

1,761,479. APPARATUS FOR LIQUEFYING SOLIDIFIED HONEY. ALECK G. KUYKENDALL, Grand View, Wash. Filed June 7, 1927. Serial No. 197,087. 4 Claims. (Cl. 221—31.)

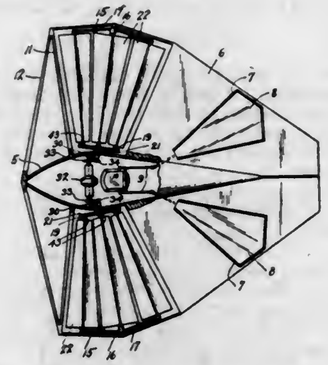


1. In an apparatus for liquefying solidified honey, a breather pipe for promoting drainage of liquids from a receptacle comprising an elongated tubular, perforated and open ended body adapted to be extended through a discharge orifice of a receptacle supported in a position for draining of its contents through its discharge orifice, and means by which the body is adapted to be supported in the receptacle against displacement therefrom and in a position wherein a portion of the body projects from the receptacle to form a spout for the purpose described.

1,761,480. RENDERING PROCESS. WILLIAM LAABS, Milwaukee, Wis., assignor to The Allbright-Nell Company, Chicago, Ill. Filed Mar. 20, 1926. Serial No. 96,313. 7 Claims. (Cl. 87—1.)

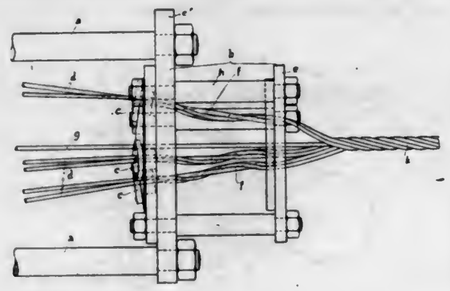
1. In a process of rendering fat and oil containing solids of animal origin, the steps which comprise heating the materials to be rendered sufficiently high while restricting the escape of steam to develop disintegrating steam pressures substantially above atmospheric pressure in the materials from the moisture contained therein, agitating the materials to tumble and grind the same and to aid in the disintegration thereof, and simultaneously removing portions of the moisture therefrom in the form of steam and melting the fats and oils contained in the materials, while maintaining the disintegrating pressures, until the moisture content of the solid residue thereof has been reduced to the range of 17 to 35 percent, thereupon substantially reducing the temperature and lowering the pressure substantially to atmospheric pressure, and continuing the agitation permitting moisture to escape from the materials substantially at atmospheric pressure.

1,761,481. FLYING MACHINE. PETER W. LACINA, deceased, Leney, Saskatchewan, Canada, by Mertina Lacina, administratrix, Leney, Saskatchewan, Canada. Filed Mar. 27, 1929. Serial No. 350,349. 5 Claims. (Cl. 244—16.)



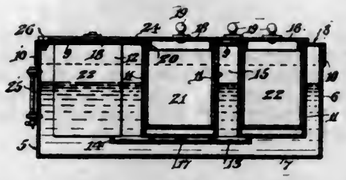
1. A flying machine of the class described including a fuselage, frames extending from the sides of the fuselage, shafts journaled in the fuselage and the frame, spokes radiating from the outer end of the shaft, blades journaled in the ends of the spokes, means for supporting the inner ends of the propellers about the shaft, a casing keyed on said shaft at the inner end thereof, gearing in the casing, means for operating the gearing, and means for operatively connecting the inner ends of the blades with the gearing.

1,761,482. APPARATUS FOR MANUFACTURING WIRE ROPE. JOHANN LAUBENTHAL, Cologne-Mulheim, Germany, assignor to Felten & Guilleaume Carlswerk Actien-Gesellschaft, Cologne-Mulheim, Germany. Filed Dec. 9, 1926, Serial No. 153,675, and in Germany May 31, 1926. 3 Claims. (Cl. 117—20.)



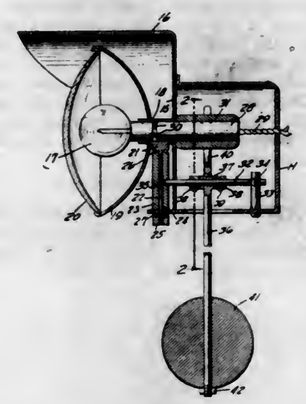
1. A device for prebending rope wires in the helical form which they possess in the completed strand or rope without any twisting around the axes of the wires, comprising a prebending head (*b*) having two discs (*e* and *e'*) and smooth guiding rods (*f*) which are disposed between the said discs and are inclined symmetrically around the axis of the device towards the stranding point, around which rods the wires are intended to be bent whilst passing into the helical form.

1,761,483. FOOD PRESERVER. GEORGE MARTIN MCGINNIS, Rome, Ga. Filed Feb. 4, 1929. Serial No. 337,504. 2 Claims. (Cl. 65—53.)



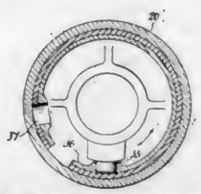
1. A portable prepared food preserver comprising a water receiving receptacle, a cover for the upper end of the receptacle, a plurality of depending cells carried by the cover and opening out through the upper end thereof, the cells extending into the receptacle and into the water contained therein, the cells being arranged in spaced relation to permit the circulation of water between the same, a brace plate for the lower ends of the cells spaced from the bottoms of the cells and having an upstanding flange secured to the bottoms of said cells, removable food containers for the cells, a cover for each food container, a water gage for the water receptacle, and a pop valve carried by the cover.

1,761,484. DIRIGIBLE HEADLIGHT. GEORGE G. MCNEE, Santa Barbara, Calif. Filed June 12, 1928. Serial No. 284,823. 3 Claims. (Cl. 240—62.)



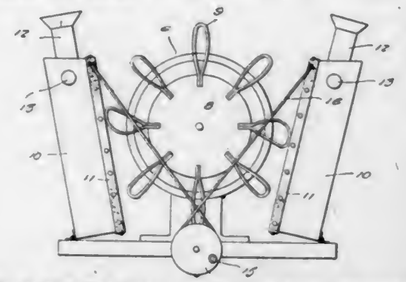
1. A dirigible headlight for vehicles comprising an upright shaft having a lamp thereon, a pendulum at one side of the shaft and operatively associated with the latter to shift the lamp in one direction or the other according as the pendulum is swung in one direction or the other, and a mounting for the pendulum comprising an axle, a pendulum hub on the axle, and collars adjustable on the axle to permit adjustment of the hub longitudinally on the axle whereby the pendulum can be adjusted in its operative association with the lamp to vary the relative movement of the lamp in respect to the pendulum.

1,761,485. AUTOMATIC DAMPER FOR VEHICLE SUSPENSION SPRINGS. WILLIAM MCNEIL, Sydney, New South Wales, Australia. Filed Mar. 24, 1927, Serial No. 178,040, and in Australia Apr. 30, 1926. 1 Claim. (Cl. 188—130.)



A device of the character described, including a drum, an interrupted spring ring arrangeu as a shoe in direct frictional engagement with said drum, a control member, and means for connecting the control member at various points on the ring whereby the device may function in a clockwise or counter-clockwise direction.

1,761,486. SOUNDING DEVICE. ARTHUR W. NICHOLS, New York, N. Y. Filed Oct. 23, 1928. Serial No. 314,354. 3 Claims. (Cl. 272—14.)



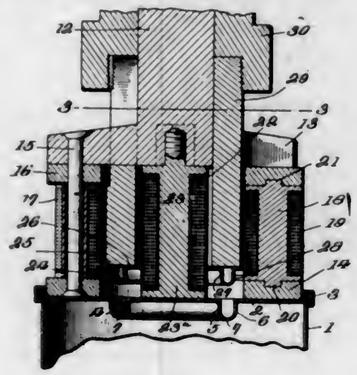
2. In a sounding device of the character described, a base member, a rotary member associated with said base member, means whereby said rotary member may be rotated, looped spaced striker fingers associated with said rotary member, a pair of impact receiving members arranged upon the base at opposite sides of said rotary member and against the adjacent faces of which said striker fingers are adapted to engage during the rotation of said rotary member, said impact receiving members being movably associated with the base, and manual means whereby to move said impact members toward or away from the strikers.

1,761,487. TIRE-VALVE STEM. ERASTUS G. OAKLEY, Southport, Conn., assignor to Bridgeport Brass Company, Bridgeport, Conn. Filed Aug. 27, 1924. Serial No. 734,476. 1 Claim. (Cl. 152—12.)



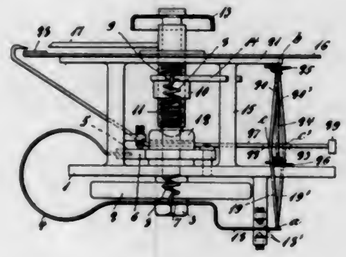
A valve stem comprising a relatively thin drawn metal shell of substantially uniform external diameter between the end portions thereof, said shell being provided with a relatively large bore of substantially uniform diameter between its end portions, the wall of the shell intermediate the ends thereof being displaced inwardly and folded to form an internal shoulder projecting into the bore and having a circular opening therein and a flat upper face at right angles to the axis of the shell, the shell wall at the upper end thereof being displaced inwardly to form an upper round reduced thin walled neck and providing a chamber of relatively large diameter between the neck and shoulder, said neck being threaded internally to receive a valve insides, the flat upper surfsce of the shoulder being adapted to receive the valve shoe of the valve insides thereon, the wall of the shell at the opposite end from said neck being displaced inwardly to provide a relatively small opening therein and being of greater thickness than the body of the shell, and the wall of the shell below said last-named inwardly displaced portion being displaced outwardly to form a flat disk-like base on the end of the shell, the base being of relatively greater diameter and thickness than the walls of the shell.

1,761,488. APPARATUS FOR CLOSING VACUUMIZED CONTAINERS. JAMES H. O'NEIL, Syracuse, N. Y., assignor to Continental Can Company, Inc., New York, N. Y., a Corporation of New York. Filed Feb. 27, 1929. Serial No. 343,131. 7 Claims. (Cl. 113—31.)



1. An apparatus for sealing containers having a friction seated closure, said apparatus comprising magnetic means for supporting the container wall in the region of the friction seat therein, and means for applying pressure to the closure for seating the same.

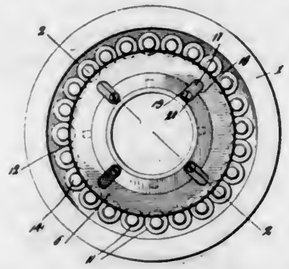
1,761,489. INSTRUMENT FOR MEASURING VARIABLE FORCES. JOSUA GABRIEL PAULIN, Stockholm, Sweden. Filed Nov. 10, 1927, Serial No. 232,430, and in Sweden Nov. 22, 1926. 7 Claims. (Cl. 73—151.)



1. An instrument for measuring variable forces comprising in combination, parts displaceable relative to each other under the influence of the forces to be measured, a number of angularly bent flexible members interconnected between said parts, a spring actuated pointer the axis of rotation of which is substantially parallel with the direction of relative motion of said parts, means connecting said pointer with the apexes of said angularly bent members in such a manner as to keep the latter stretched in different planes tangential to a surface of rotation the axis of which coincides with the axis of rotation of the pointer.

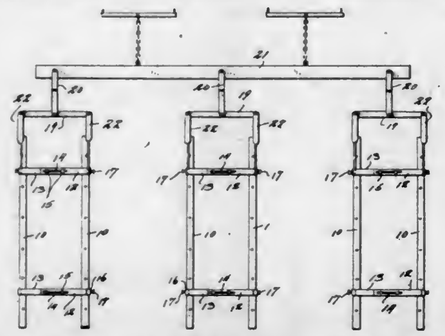
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1,761,490. ADJUSTABLE DOUBLE ROLLER BEARING. OTTO H. PENNER, Minneapolis, Minn. Filed June 3, 1927. Serial No. 196,356. 1 Claim. (Cl. 308—236.)



A roller bearing comprising a cup, a pair of roller carrying sections mounted therein, one of said roller carrying sections slidably mounted upon the other roller carrying section, a ring threaded upon one section and engaging the other section for holding the sections in adjusted relation, one of the sections having a notch formed in the outer face thereof, and a lock clip carried by said ring and being flush with the outer surface thereof, said clip adapted to fit in said notch of one of the sections and extend flush with the outer face thereof for locking the sections against independent rotation.

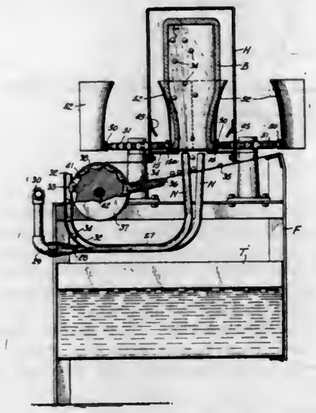
1,761,491. LISTER CORN HARROW. MATHIAS PLEIN, Roseland, Nebr. Filed May 12, 1928. Serial No. 277,259. 3 Claims. (Cl. 55—3.)



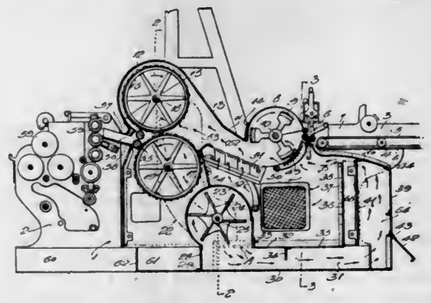
1. A corn harrow of the character described comprising a pair of longitudinally extending bars, arches upon the ends of which said bars are mounted, the arches being transversely adjustable and the bars having downwardly extending radial harrow teeth and being rotatably adjustable in the arches around the longitudinal axis of the bars whereby the harrow teeth may be disposed either vertically or laterally inclined.

1,761,492. BOTTLE-WASHING MACHINE. FRANK B. REILY, Santa Barbara, Calif. Filed Mar. 6, 1928. Serial No. 259,558. 10 Claims. (Cl. 15—95.)

1. In a bottle washing machine, a washing nozzle, a conveyor adapted to position bottles successively over the nozzle, means for supplying a washing fluid under pressure to the washing nozzle to project a jet of fluid into each bottle, means for conducting scouring objects to said fluid supply means to utilize the fluid in delivering and projecting the objects to and from the nozzle into the bottles, means for delivering the objects to the first means in a single file-order, and means for conducting the objects from the bottles to the delivery means.



1,761,493. PNEUMATIC COTTON PICKER OR LAPPER. ERNEST HAROLD ROGERS, Atlanta, Ga. Filed Nov. 11, 1927. Serial No. 232,581. 21 Claims. (Cl. 19—89.)



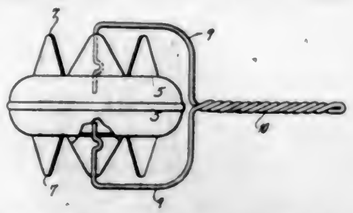
1. In combination with a cotton picker machine, an air circulating system within the confines of the machine, including a cotton conveying stretch and a return stretch, and means for conveying the cotton to and extracting it from the cotton conveying stretch.

1,761,494. HOT TOP. ANDREW R. ROWE, Midland, Pa. Filed Sept. 6, 1928. Serial No. 304,296. 6 Claims. (Cl. 22—147.)



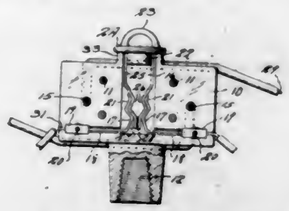
1. Process for reducing the piping in ingots comprising partially filling the mold with metal, then placing on top of the metal a refractory cover that will partially sink into the metal, then allowing the metal to freeze around the cover, then removing a part of the cover to expose the top of the metal and pouring a fresh supply of melted metal, allowing it to pass under a portion of the refractory cover and into the recipient piping below the bottom of the cover to obliterate any preformed piping.

1,761,495. NOVELTY CAN. JOSEPH SALMI, New York, N. Y. Filed May 28, 1929. Serial No. 366,734. 1 Claim. (Cl. 46—14.)



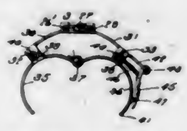
A can of the character described comprising a pair of complemental, interfitting circular sections having centrally disposed openings therein and further having a series of spaced, substantially V-shaped radiating incisions disposed concentrically with the openings, the material within each of the V-shaped incisions adapted to be bent outwardly substantially at right angles to its respective section in a manner to provide outwardly extending wings, the centrally disposed openings adapted for the reception of a holding device.

1,761,496. COMBINED INSULATOR AND SHUNT CIRCUIT CLOSER. RAYMOND B. SHEPERD, Mount Vernon, N. Y. Filed May 14, 1927, Serial No. 191,439. Renewed Feb. 8, 1930. 4 Claims. (Cl. 200—118.)



1. A combined insulator and circuit closer for electric light circuits comprising an insulating body having means whereby it may be mounted on a post and formed with a chamber open at one end, the body being formed with transversely extending apertures through which main line wires may be passed, opposed metallic resilient contacts disposed at the closed end of the chamber and having portions extending longitudinally through the insulator, binding sleeves disposed within the insulator and having electrical engagement with the contacts, the binding sleeves being adapted to receive the ends of the main line wires, binding screws engaging said main line wires and holding them in the sleeves, and a plug having a head adapted to close the open end of the chamber and having a handle whereby it may be removed, the plug carrying oppositely disposed metallic tongs adapted to be inserted between and having interlocking engagement with the contacts and adapted to support a dielectric element holding the tongs apart against the resilience of the contacts.

1,761,497. SUPPORTER FOR FISHING RODS. ROBERT A. SMITH, Portland, Oreg., assignor of one-half to Barney C. Garoff, Portland, Oreg. Filed July 16, 1929. Serial No. 378,683. 2 Claims. (Cl. 248—37.)

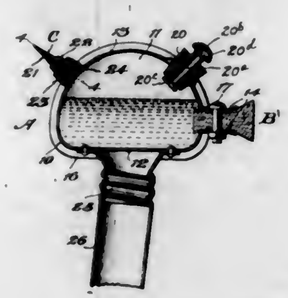


1. In a supporter for fishing-rods, a clasp including a pair of resilient branched arms, a pair of semi-circular jaws pivotally connected to said arms, respectively, and hingedly connected together at their inner ends whereby said jaws may be closed by the tension of said arms and held in open condition through said hinge-connection passing beyond a line through the pivotal connection of the jaws with said arms.

1,761,498. CASTING READILY-OXIDIZABLE METALS. WILLIAM W. SMITH, Buffalo, N. Y. Filed Apr. 18, 1928. Serial No. 271,118. 6 Claims. (Cl. 22—188.)

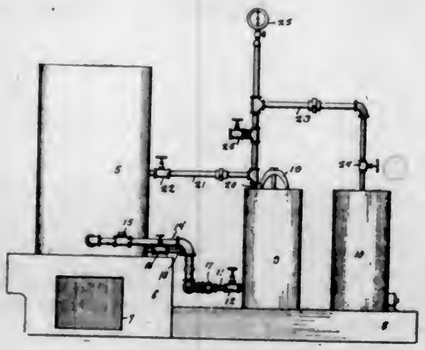
1. A mold containing pulverized carbon, pulverized soapstone, a temporary liquid binder and having magnesium oxide on the portions thereof with which the metal contacts.

1,761,499. CLEANING DEVICE. GEORGE H. SOMMERFIELD, Cleveland, Ohio. Filed Mar. 16, 1929. Serial No. 347,593. 3 Claims. (Cl. 15—126.)



1. A device of the character described comprising a body member, a squeegee having converging side portions, means for connecting said squeegee with said body member comprising a channel member carried by the body member and having converging sides to receive therebetween the converging side portions of the squeegee, and a leaf spring within said channel member adapted to exert pressure against the squeegee to maintain the converging side portions thereof in engagement with the converging sides of said channel member.

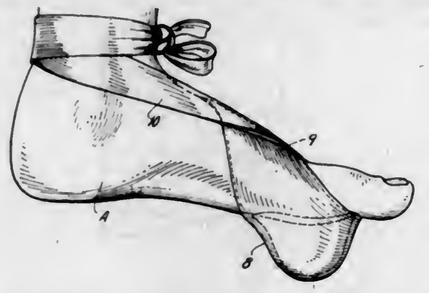
1,761,500. FLOAT IMPREGNATING PROCESS AND APPARATUS. ANTON SORENSEN, Astoria, Oreg. Filed June 1, 1926. Serial No. 112,991. 2 Claims. (Cl. 91—70.)



1. The process of impregnating articles with a fluid which comprises immersing the articles in the fluid, in the presence of heat, to effect initial impregnation of the articles with the fluid, separating the articles from the fluid, immersing the articles in another bath of the fluid

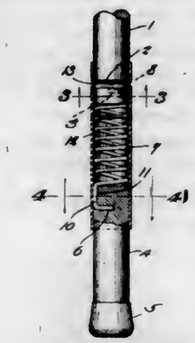
in an airtight compartment, creating a pressure upon the fluid in said compartment to effect further impregnation of the articles by the fluid, delivering an additional volume of the fluid under pressure into the body of fluid under air pressure in said compartment to effect further impregnation of the articles by the fluid, cutting off the supply of additional fluid, relieving the impregnating fluid of the air pressure, and separating the said fluid from the articles.

1,761,501. MEDICAMENT APPLICATOR FOR FEET. ALICE MORIN STOPFORD, New York, N. Y. Filed Apr. 3, 1929. Serial No. 352,214. 1 Claim. (Cl. 128—260.)



In a medicament applicator for foot callouses, a medicament receiving cup for application at its open side to the foot surrounding the callous, a pouch for engagement entirely over the cup, said pouch being of a shape conforming substantially to the outer surface of the cup and means associated with the opposite ends of the pouch whereby it may be tightly secured to the foot.

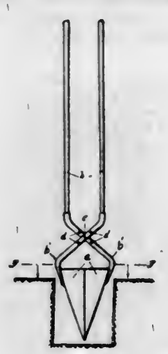
1,761,502. SHOCK-ABSORBING ATTACHMENT FOR CRUTCHES. MICHAEL H. SULLIVAN, Wilkes-Barre, Pa. Filed Oct. 13, 1928. Serial No. 312,343. 1 Claim. (Cl. 135—53.)



The combination with a crutch shank having a radial recess and a longitudinal groove, of a foot having a longitudinal groove and a radial recess, a coiled spring interposed between the shank and foot having end portions seated snugly in the respective grooves and recesses, and a sleeve crimped upon the shank and housing the spring and a portion of the foot to hold the ends of the springs in the grooves and recesses, said foot being slidable.

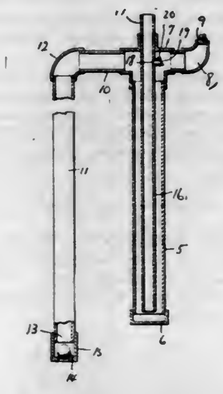
1,761,503. HAND EXCAVATOR. WALTER TÖNHARDT, Neumünster, Germany. Filed Oct. 20, 1928. Serial No. 313,793. 1 Claim. (Cl. 55—71.)

A hand excavator comprising a pair of semi-conical shaped blades, handles removably secured to said blades, said handles being adapted to cross each other and adjacent the crossing position said handles being formed with



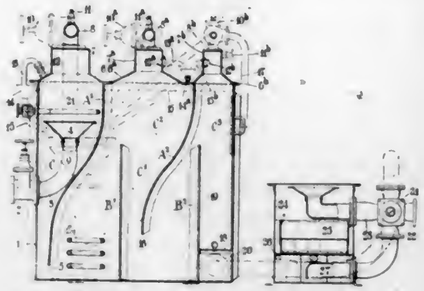
a series of holes, and a pin adapted to pass through any two corresponding holes, thereby forming a pivotal point for the handles.

1,761,504. PRIMING CHAMBER FOR PUMP LINES. AUGUSTUS H. TODD, Fleischmanns, N. Y. Filed June 7, 1928. Serial No. 283,571. 1 Claim. (Cl. 103—203.)



An anti-siphoning attachment for pipe lines comprising a multiway coupling, an elongated tubular casing threadedly connected to the coupling in communication therewith and depending therefrom, a closure cap on the lower end of the casing, a pump feed pipe extending vertically through the coupling and constituting supporting means therefor, said pipe extending longitudinally through the casing in spaced concentric relation thereto and terminating in spaced relation to the free end thereof, said pipe open at its lower end, a vent pipe communicating with the feed pipe and the interior of the coupling, a check valve mounted for operation on the vent pipe in a manner to control the passage therethrough, a fluid intake conduit communicating with the coupling in the horizontal plane of the vent pipe and extending outwardly therefrom and then downwardly in parallelism with the casing, a gravity actuated ball check valve mounted for operation on the free end portion of the intake conduit in a manner to prevent the return flow of the fluid therethrough, and a priming conduit mounted on the coupling in communication therewith and having an upturned free end portion having a closure plug threaded therein.

1,761,505. SEPARATION OF LIQUIDS OF DIFFERENT SPECIFIC GRAVITIES. WILLIAM ALBERT WHITE, Hebburn-on-Tyne, England, assignor to White Oil Separators Limited, Hebburn-on-Tyne, England. Filed Jan. 27, 1928, Serial No. 249,971, and in Great Britain June 7, 1927. 6 Claims. (Cl. 210—51.)

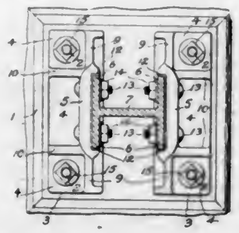


1. A separator of the kind indicated comprising a container having an inlet and an outlet, a first separator chamber therein, having a part converging in an upward direction, and partition means within said container to form downward and upward passages leading mixture from said first separation chamber to the outlet from said container, each of said passages converging in the direction of flow.

1,761,506. METHOD OF MAKING ARTICLES OF LEAD-COPPER AND ANALOGOUS ALLOYS. HARRY M. WILLIAMS, Dayton, Ohio, assignor to General Motors Research Corporation, a Corporation of Delaware. Filed July 22, 1925. Serial No. 45,287. 7 Claims. (Cl. 29—160.5.)

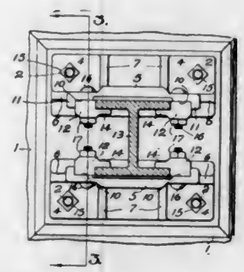
1. A method of making bearings or other articles containing a homogeneous mixture of copper and lead, which consists in compressing solid particles each composed of a copper-lead mixture into the form desired, then heating the blank thus formed in a non-oxidizing environment until the particles cohere.

1,761,507. MOUNT FOR STEEL POLES. ROLLAND G. WILLIAMS, Branford, Conn., assignor to Malleable Iron Fittings Company, Branford, Conn., a Corporation of Connecticut. Filed Mar. 8, 1929. Serial No. 345,541. 1 Claim. (Cl. 189—28.)



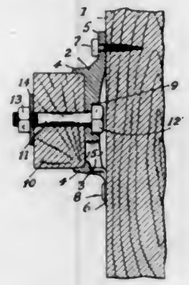
A mounting for a steel pole H-shaped in cross-section, comprising a concrete block embedded in the ground, stanchions anchored within said block and extending above the latter, separate fixtures having bases seated on said block with said stanchions extending through and above said bases, the latter having seats that extend inwardly, upright members rising from said bases and having channels that extend integrally from said seats vertically throughout the length of said members, whereby the pole may be assembled between said fixtures with its flat faces enclosed within said channels and its lower end resting on said seats, two vertically disposed series of bolts passed through said flat faces and upright members, each of said series extending throughout the height of said upright members and located respectively at opposite edges of said faces, nuts driven on said bolts whereby said faces are clamped to said members on opposite sides of the crossbar of the H-shaped pole, and nuts driven on the ends of said stanchions whereby the fixtures are firmly secured to said block.

1,761,508. MOUNT FOR METAL POLES. ROLLAND G. WILLIAMS, Branford, Conn., assignor to Malleable Iron Fittings Company, Branford, Conn., a Corporation of Connecticut. Filed Mar. 20, 1929. Serial No. 348,421. 2 Claims. (Cl. 189—28.)



1. A mounting for a steel pole H-shaped in cross section, comprising a concrete block embedded in the ground, stanchions anchored within said block and extending above the latter, fixtures having bases seated on said block with said stanchions extending through and above said bases, the latter having seats that extend inwardly, upright members rising from said bases and having channels that extend from said seats vertically throughout the length of said members, clamping bars resting upon said seats and having rectangular bodies that fit within the sides of said channels whereby the pole may be assembled between said fixtures with its opposite faces in said channels and intermediate said bars and with its lower end resting upon said seats, said bars having inwardly extending flanges that contact said faces in overlapping relation thereto, bolts passed through said bars and upright members beyond said faces, nuts driven on said bolts whereby the pole is clamped between said bars and upright members, and nuts driven on said stanchions against said bases whereby the fixtures are firmly secured to said block.

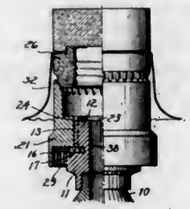
1,761,509. GAIN FIXTURE FOR POLES. ROLLAND G. WILLIAMS, Branford, Conn., assignor to Malleable Iron Fittings Company, Branford, Conn., a Corporation of Connecticut. Filed May 21, 1929. Serial No. 364,858. 1 Claim. (Cl. 189—33.)



The hereindescribed gain fixture for poles comprising a main body portion having an angular recess at the center of its rear face and a plurality of air openings extending through its back from front to rear, a single leg extending from the top of said portion and midway

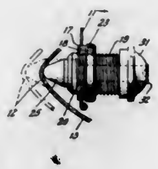
thereof, a pair of legs extending from the lower ends of said portion, said legs having feet that are concaved to closely contact the pole, horizontal spaced ledges formed at the front of said body portion and adapted to house a cross-arm, lag screws driven through said legs into the pole, said body portion being spaced from the pole whereby an air space is provided between said pole and portion, a cross-arm positioned between said ledges, a bolt having an angular head that is housed within said recess, said bolt extending through said cross-arm, and a nut driven on the end of said bolt against said cross-arm.

1,761,510. TOOL FOR MANIPULATING LAMP-SOCKET PARTS. ISIDORE WOLARSKY, Mount Vernon, N. Y. Filed Oct. 16, 1926. Serial No. 142,001. 10 Claims. (Cl. 81—3.)



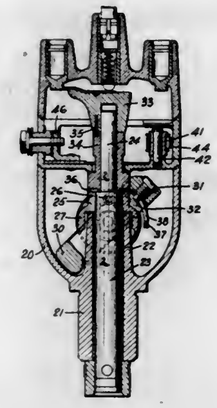
1. In a tool for manipulating lamp-socket parts, a handle and a head carried by the handle, the head having a non-circular upper end of small diameter for detachably and non-rotatably supporting a turning member, and an upwardly directed rim for engaging with the lower end of a metal lamp socket cover for placing the cover on the socket, the said small diameter upper end being within and above the rim capable of entering into the lamp socket.

1,761,511. LIGHTING-FIXTURE SHADE HOLDER. ISIDORE WOLARSKY, Mount Vernon, N. Y. Filed Mar. 2, 1929. Serial No. 344,084. 12 Claims. (Cl. 240—128.)



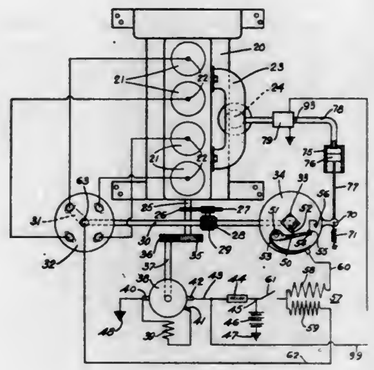
1. In a lighting fixture, a support for shades of the type having a lip, comprising, a shade receiving band adapted to receive the lip of the shade and having a threaded aperture therein, a tubular member threaded into said aperture, and a spring pressed plunger carried in the tubular member and provided with an externally accessible knob and a shade engaging tip, the member being adjustable by threading it in the aperture to compensate for variations in the size of shades, the plunger being capable of being withdrawn by the knob to allow the lip on the shade to pass by the plunger tip.

1,761,512. IGNITION APPARATUS. SYLVESTER ARMITAGE, Detroit, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Mar. 15, 1929. Serial No. 347,432. 11 Claims. (Cl. 123—117.)



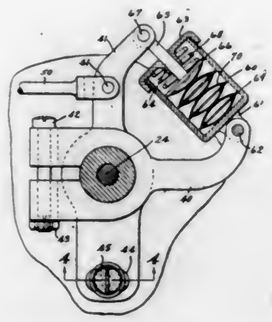
1. An ignition device for an internal combustion engine comprising, in combination, a timer; speed controlled means for adjusting the timer to vary the time of sparking impulses in accordance with engine speeds; yieldable means normally urging the speed controlled means toward the spark retarding position; and thermostatic means adapted to vary the tension of the yieldable means in accordance with the engine temperatures.

1,761,513. IGNITION DEVICE. JAMES L. ARTHUR, Anderson, Ind., assignor to Delco-Remy Corporation, Anderson, Ind., a Corporation of Delaware. Filed Mar. 8, 1929. Serial No. 345,516. 9 Claims. (Cl. 123—117.)



1. An ignition system for an internal combustion engine comprising, in combination, an ignition timer for the engine; a dynamo driven by the engine; means controlled by the suction of the engine for adjusting the timer; and dynamo controlled means for controlling the action of the timer adjusting means.

1,761,514. IGNITION DEVICE. JAMES L. ARTHUR, Anderson, Ind., assignor to Delco-Remy Corporation, Anderson, Ind., a Corporation of Delaware. Filed Mar. 15, 1929. Serial No. 347,277. 8 Claims. (Cl. 123—117.)

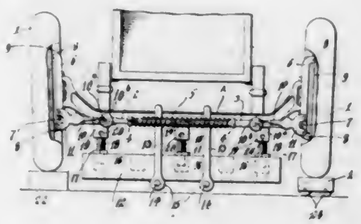


1. An ignition device for an internal combustion engine comprising, in combination a timer; manually operable means for adjusting the timer to vary the time of sparking impulses; and temperature controlled means for adjusting the timer relative to the manually operable means in response to varying engine temperatures.

1,761,515. METHOD OF GROWING YEAST. ARNOLD K. BALLS, Philadelphia, Pa., assignor of one-third to Martin Nilsson, Peekskill, N. Y., and one-third to Arthur W. Hixson, Leonia, N. J.; The National City Bank of New York executor of said Martin Nilsson, deceased. Filed Jan. 24, 1924. Serial No. 688,307. 3 Claims. (Cl. 195—20.)

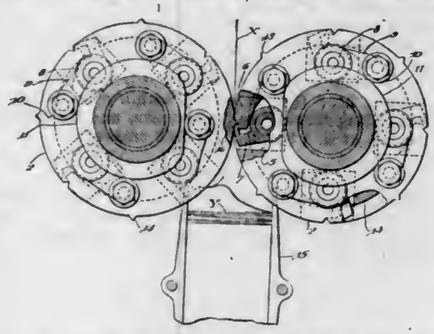
3. The process of growing yeast comprising pressing sugar cane a plurality of times to express sugar can juice therefrom, inoculating with yeast a mixture of molasses and juice obtained from any pressing of the sugar cane other than the first pressing and propagating the yeast by fermentation in said mixture of molasses and sugar cane juice.

1,761,516. METHOD OF ADJUSTING CAMBERS IN AUTOMOBILE WHEELS. JOSEPH S. BUSHEY, Los Angeles, Calif. Filed Aug. 5, 1926. Serial No. 127,356. 4 Claims. (Cl. 153—2.)



1. The method of adjusting the camber of an automobile wheel which consists in supporting the axle on its wheels, subjecting the axle to a bending moment in a plane substantially at right angles to the plane passing through the tread of the wheels sufficient to bend the same, and gauging the wheel to indicate the camber.

1,761,517. FOLDING OR INTERFOLDING MACHINE. PETER J. CHRISTMAN, Green Bay, Wis. Filed June 12, 1929. Serial No. 370,212. 9 Claims. (Cl. 270—39.)



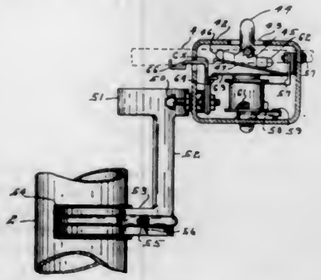
1. In a folding or interfolding machine of the rotary type, a pair of oppositely rotating cylinders each provided with cooperating tuckers and grippers for transversely folding a web of paper, the engaged faces of said grippers lying in a plane disposed between the axes and peripheries of said cylinders.

1,761,518. METHOD OF MAKING A CLUTCH SHELL AND PINION ASSEMBLY FOR ENGINE-STARTER DRIVES. WILLIAM A. CHRYST, Dayton, Ohio, assignor to Delco-Remy Corporation, Anderson, Ind., a Corporation of Delaware. Filed Mar. 21, 1929. Serial No. 348,969. 7 Claims. (Cl. 29—159.2.)



1. The method of making a clutch shell and pinion assembly for an engine starter drive which comprises forming the shell and pinion of alloy steel of substantially the same composition, carbonizing the shell for a longer time than the pinion, assembling these parts together, and in heat-treating the assembly to produce surface hardness, whereby the surface of the shell will be harder than the surface of the pinion.

1,761,519. TRAFFIC SIGNAL. BERNARD CURRLIN, Toledo, Ohio. Filed June 5, 1923. Serial No. 643,515. 2 Claims. (Cl. 177—337.)



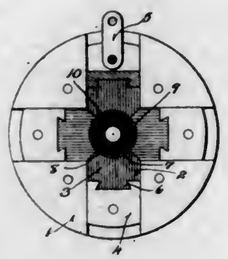
2. In a vehicle signalling system; a stop light; two direction signals; a pedal operated switch to illuminate the stop light; a direction signal controlling switch comprising two depressible contactors of magnetic material; two stationary and one movable, but normally stationary, contacts arranged to be engaged by the depressible contactors; electromagnetic means supported in operative relation with the depressible contactors; means for moving one of the contacts into engagement with the depressible contactors in their normally open position, and means for locking the contact thus moved, in its moved position; a switch connected with the steering mechanism of the vehicle arranged to be closed when the vehicle is steered in a forward direction and opened when the vehicle is steered in either turning direction; a source of current and connecting means between said source, the signals and the switches, whereby the stop light is illuminated upon normal actuation of the pedal; the stop light and a direction signal illuminated upon the depression of either of the depressible contact members, said stop and direction signals remaining illuminated through the magnetic interaction of the depressible members and the electro-magnetic means, until the circuit is interrupted through the opening of the steering wheel operated switch, and whereby the stop signals may be separately and continuously illuminated by locking and movable contact into engagement with the depressible contacts.

1,761,520. BELT BUCKLE. WILLIAM M. DOLKE, Stevens Point, Wis. Filed Apr. 16, 1929. Serial No. 355,519. 3 Claims. (Cl. 24—194.)



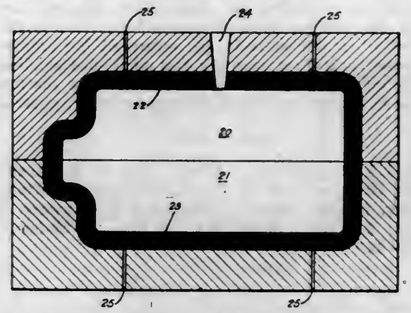
2. In a belt buckle, a channelled body including a front and back wall with the ends of the back wall terminating short of the ends of the front wall, said back wall having a central longitudinal slot and a clamping plate movable within the channelled body and having a headed pin engaged within said slot.

1,761,521. MACHINE FOR CONTRACTING FERRULES. JOSEPH P. EASTMAN, Manitowoc, Wis., assignor to Eastman Mfg. Co., Manitowoc, Wis. Filed Nov. 24, 1924. Serial No. 751,954. 9 Claims. (Cl. 153—1.)



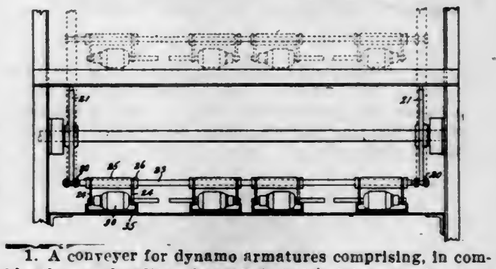
1. A die for a ferrule contracting machine comprising a body portion provided with a cylindrical shaping surface adapted to engage the ferrule, said surface having a smaller radius of curvature than the initial radius of curvature of the ferrule and having a projecting rib adapted to extend into the ferrule and take up excess material in said ferrule when such ferrule is contracted.

1,761,522. CORE BOX. GEORGE W. ELSEY, Dayton, Ohio, assignor to Delco Products Corporation, Dayton, Ohio, a Corporation of Delaware. Filed May 25, 1929. Serial No. 365,886. 4 Claims. (Cl. 22—13.)



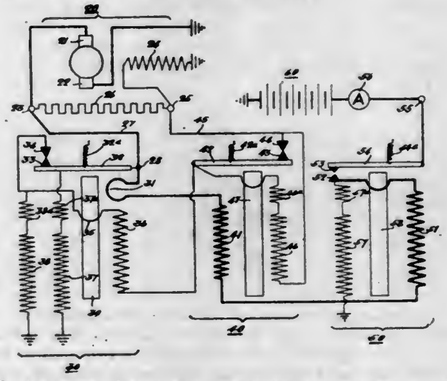
1. A core-box interiorly lined with an elastic, wear resisting material and having a single opening for the introduction of sand and a plurality of smaller openings for the egress of air.

1,761,523. CONVEYER FOR DYNAMO ARMATURES. ROGER J. EMMERT, Dayton, Ohio, assignor to Delco-Remy Corporation, Dayton, Ohio, a Corporation of Delaware. Original application filed Oct. 29, 1925, Serial No. 65,687. Divided and this application filed Jan. 5, 1928. Serial No. 244,719. 2 Claims. (Cl. 198—177.)



1. A conveyer for dynamo armatures comprising, in combination, a plurality of parallel chains driven at the same rate, parallel cross rods supported by the chains, and pairs of spaced hooks pivotally supported by the rods and adapted to engage the shaft of an armature, said hooks being connected to swing together.

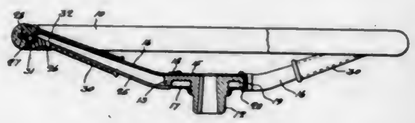
1,761,524. GENERATOR REGULATING SYSTEM. JOHN T. FITZSIMMONS and JOE WHITE, Anderson, Ind., assignors to Delco-Remy Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Nov. 21, 1927. Serial No. 234,609. 8 Claims. (Cl. 171—229.)



1. A system of generator regulation comprising, in combination, a generator having a field circuit, a regulating

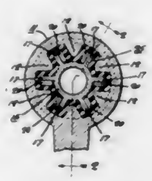
resistance in the field circuit, a normally completed short circuit around the regulating resistance and including a set of interrupter contacts, one operated by a movable armature, a magnetizing winding responsive to generator voltage for attracting the armature to separate the contacts, the winding responsive to self-induction in the field circuit when the contacts are separated for producing a demagnetizing effect upon the first mentioned winding, and a winding for compensating for variations in the function of the system due to variations in speed of the generator.

1,761,525. STEERING WHEEL. HARVEY D. GEYER, Dayton, Ohio, assignor to The Inland Manufacturing Company, Dayton, Ohio, a Corporation of Delaware. Filed Apr. 3, 1928. Serial No. 266,939. 3 Claims. (Cl. 74—33.)



1. A handwheel comprising: an annular rim, and a central spider therefor having the outer ends of the arms turned downwardly and fixed to the rim by headed screws, a separately molded soft rubber boot encasing the outer portion of an arm and having a lip on the under side thereof contacting with said rim and concealing the screw.

1,761,526. SHOCK-ABSORBING PITMAN ARM. HARVEY D. GEYER, Dayton, Ohio, assignor to The Inland Manufacturing Company, Dayton, Ohio, a Corporation of Delaware. Filed May 21, 1928. Serial No. 279,367. 5 Claims. (Cl. 74—38.)



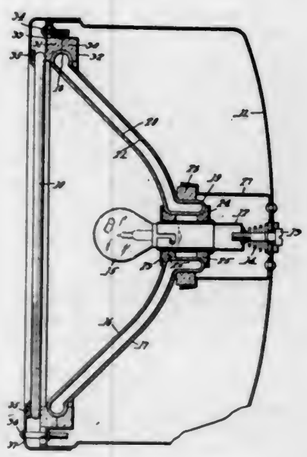
3. A steering mechanism for an automotive vehicle including a pitman arm having an isolating elastic rubber joint therein universally yieldable under bending stresses in said arm.

1,761,527. SHOCK-ABSORBING PITMAN ARM. HARVEY D. GEYER, Dayton, Ohio, assignor to The Inland Manufacturing Company, Dayton, Ohio, a Corporation of Delaware. Filed May 21, 1928. Serial No. 279,368. 5 Claim. (Cl. 74—38.)



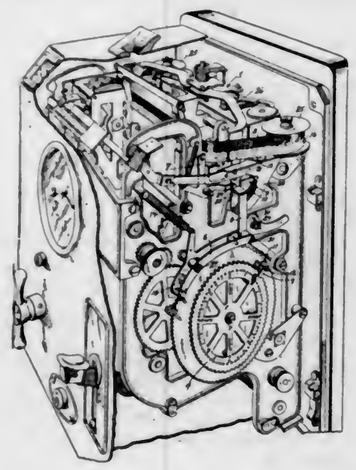
5. A steering mechanism for an automotive vehicle including a pitman arm having an isolating soft resilient rubber joint therein located between the two ends of said pitman arm, said joint being universally yieldable under bending stresses in said arm.

1,761,528. REFLECTOR FOR LIGHT PROJECTORS. NILS J. A. FYRBERG, Dexter, Me. Filed Aug. 10, 1928. Serial No. 298,690. 3 Claims. (Cl. 240—41.)



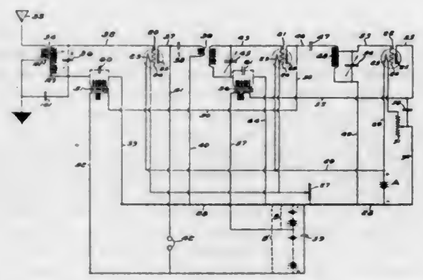
1. As an article of manufacture, an electric lamp for the purpose described comprising a casing, a reflector having a hollow wall, a silvered interior surface, and a space therein, sealed under a vacuum to prevent the effect of moisture on the silvered surface and having a passage through it axially and a neck bounding said passage, a lamp fixture extending through the neck but spaced therefrom, cork gaskets fitting the inner and outer edges of the neck to hold the reflector in position, metallic members surrounding the lamp fixture and holding the cork gaskets firmly in position, whereby the lamp is firmly but yieldingly mounted in the mirror, and a cork gasket outside the neck and supported by the body of the lamp casing to hold the mirror at its center.

1,761,529. RIBBON-SHIFT MECHANISM. ALBERT E. LONG, Chicago, Ill., assignor to Stromberg Electric Company, Chicago, Ill., a Corporation of Maine. Filed May 31, 1929. Serial No. 367,532. 12 Claims. (Cl. 234—41.)



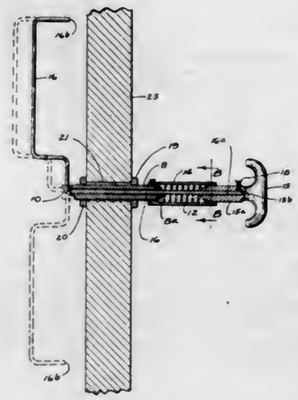
7. In a time recorder, ribbon positioning mechanism shiftable to bring different colors of the ribbon into effective position, and means for controlling the shifting of said mechanism comprising a time-controlled wheel, a trip device adjustably mounted on said wheel, said trip device comprising a member shiftable back and forth to vary the time of operation and mounted for movement on said wheel longitudinally of the axis thereof.

1,761,530. SYSTEM FOR AMPLIFYING RADIANT-ENERGY OSCILLATIONS. ORIN E. MARVEL, Dayton, Ohio, assignor, by mesne assignments, to General Motors Radio Corporation, Dayton, Ohio, a Corporation of Ohio. Filed Aug. 23, 1924. Serial No. 733,774. 1 Claim. (Cl. 250—20.)



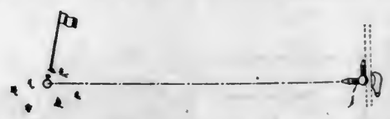
In a receiving apparatus for receiving oscillations of radiant energy, an aperiodic antenna receiving circuit for receiving radiant energy oscillations, said circuit being connected to ground, an air core transformer having variably coupled inductively connected primary and secondary coils, said primary coil being connected in the antenna circuit, means for relatively varying said coils, and a condenser connected at one side to said secondary coil and at the other side to the grounded connection of said primary coil.

1,761,531. DEVICE FOR LOCKING WINDSHIELD WIPERS. ALBERT S. MONAIS, Oakland, Calif. Filed Aug. 15, 1929. Serial No. 386,087. 3 Claims. (Cl. 15—255.)



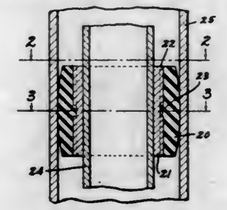
3. In a device of the character described, a hook shaped member having a straight stem slidably and rotatably mountable through the frame of a windshield, a handle on said stem by which the stem may be pushed forward, means to retract said stem and rotate the hook member against a reciprocable wiper, and means to lock said hook member in position.

1,761,532. GOLF TEE. WALTER STADDON MORRIS, Toronto, Ontario, Canada. Filed Jan. 16, 1929. Serial No. 332,999. 4 Claims. (Cl. 273—33.)



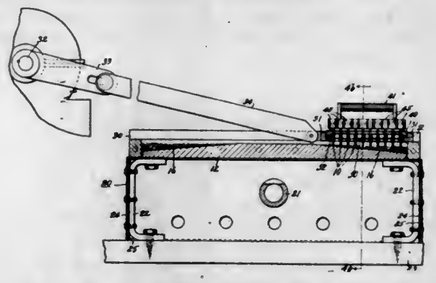
1. A golf tee comprising a base having a ball support formed thereon, the base being L-shaped, one leg of the base forming a pointer, the other leg having its rear edge formed as a straight line to serve as a guide to indicate a line at right angles to the direction of the pointer.

1,761,533. BEARING FOR STEERING COLUMNS. EARL S. PATCH, Dayton, Ohio, assignor to The Moraine Products Company, Dayton, Ohio, a Corporation of Ohio. Filed Dec. 12, 1927. Serial No. 239,323. 11 Claims. (Cl. 308—237.)



4. A bearing adapted to be inserted in supporting sleeves of different diameters comprising an outer tubular member of elastic, compressible material and an inner tubular bearing member formed of porous metallic material capable of absorbing a lubricant, said outer member being tapered at its ends to facilitate insertion of the supporting sleeve.

1,761,534. METHOD AND APPARATUS FOR MAKING RUBBER WIPER BLADES. ALVA W. PHELPS, Anderson, Ind., assignor to Delco-Remy Corporation, Anderson, Ind., a Corporation of Delaware. Filed Mar. 20, 1929. Serial No. 348,647. 10 Claims. (Cl. 18—2.)

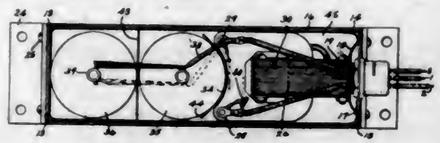


1. The steps in the method of making rubber wiper blades comprising: cutting off strips from a sheet of flexible rubber and then providing a straight wiping edge on each strip by rubbing said wiping edge to and fro a number of strokes across a heated metal plate.

1,761,535. CONDENSER AND TRANSFORMER UNIT. LAURENCE MERTON PERKINS, Anderson, Ind., assignor to Delco-Remy Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Nov. 27, 1928. Serial No. 322,276. 4 Claims. (Cl. 175—357.)

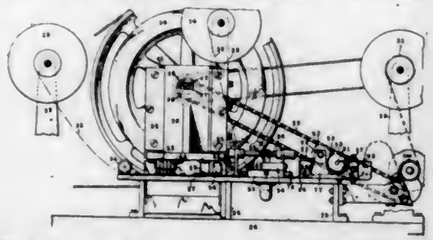
1. In a reactance unit comprising, the combination of a plurality of spiral condensers, each having a tubular core

and a cylindrical surface, with an autotransformer consisting of a rectangular magnetic core, said core having a pair of vertical legs, a coil mounted upon one of said legs, said coil having a plurality of taps, a pair of insulating sheets, each having a concave end, linking said leg for



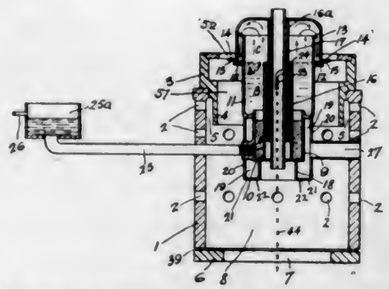
insulating the coil from said magnetic core, the concave end of each of said insulating sheets cooperating with the cylindrical surface of one of said condensers to hold the axis of the tubular core of the condenser in the plane determined by the vertical axes passing through the center of each of the legs.

1,761,536. STRIP FORMING AND ASSEMBLING MACHINE. ARTHUR PRICE, Freeport, N. Y. Filed Dec. 11, 1924. Serial No. 755,170. 24 Claims. (Cl. 1—2.)



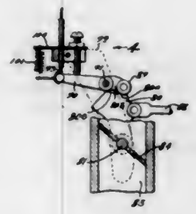
17. A device of the character described including, in combination, means for feeding a metal strip, means for conducting a film to a position adjacent thereto, means for forming said strip with series of openings, one series constituting feed perforations and another series providing light apertures, said latter means providing film retaining members extending from the edges of certain of said openings, and means for causing said retaining members to engage said film to permanently unite the same with said strip.

1,761,537. OIL BURNER AND METHOD OF EFFECTING THE COMBUSTION OF OIL FUELS. WILFRED FRANCIS RAVENOR, Vancouver, British Columbia, Canada. Filed Dec. 3, 1924. Serial No. 753,670. 14 Claims. (Cl. 158—53.)



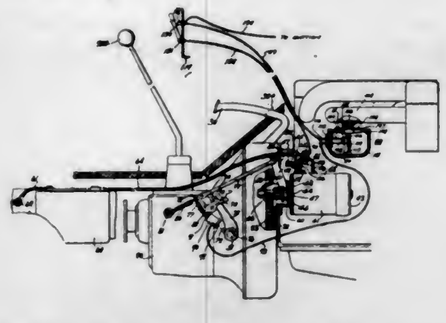
7. An oil burner embodying a shell forming a combustion chamber; an oil retort operatively disposed therein; an oil expanding chamber communicating with said retort from which the oil fuel is withdrawn in two separate portions, the vaporized and non-vaporized; nozzle means for delivering said vaporized portions from said expanding chamber into one part of the shell, a separate withdrawal means from the retort for said non-vaporized portion of the fuel; and a means conducting said non-vaporized fuel to another part of the shell.

1,761,538. THROTTLE-OPERATED SPARK CONTROL. HENRY A. SCHWAGER, Detroit, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed June 1, 1928. Serial No. 282,223. 3 Claims. (Cl. 123—117.)



1. Ignition apparatus for internal combustion engines comprising, a circuit interrupter including a breaker lever and an engine driven cam, speed responsive means for varying the time relation of the cam to the engine in order to advance the timing of the ignition as the speed increases, and means responsive to engine throttle position for varying the position of the breaker lever relative to the cam and comprising, an intake manifold having a rotatable throttle valve, a shaft for operating said lever, a cam connected to the shaft, a bracket secured to the manifold adjacent said shaft, a cam follower supported by said bracket in cooperative relation with said cam, and a Bowden wire connecting said follower and circuit interrupter so that, during movement of the engine throttle from closed to partly-open position, the ignition timing will be advanced and thereafter be retarded as the throttle is opened still wider.

1,761,539. ENGINE-STARTING APPARATUS. HERMAN SCHWARZE, Pontiac, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Mar. 16, 1929. Serial No. 347,605. 12 Claims. (Cl. 290—38.)

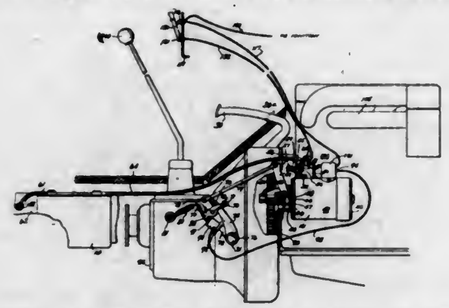


1. Engine starting apparatus comprising, in combination with an engine, a starting motor, a starter actuator for causing the starting motor to operate to crank the engine, a manually operated movable member, means for operatively connecting the starter actuator with the manually operated member, and a device automatically responsive to the running of the engine for rendering the connecting means inoperative.

1,761,540. ENGINE-STARTING APPARATUS. HERMAN SCHWARZE, Pontiac, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Mar. 16, 1929. Serial No. 347,545. 6 Claims. (Cl. 290—37.)

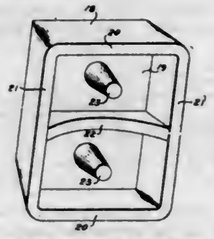
1. Engine starting apparatus comprising, in combination with an engine, a starting motor, a starter actuator for causing the starting motor to operate to crank the engine,

a manually operated movable member, means for operatively connecting the starter actuator with the manually operated



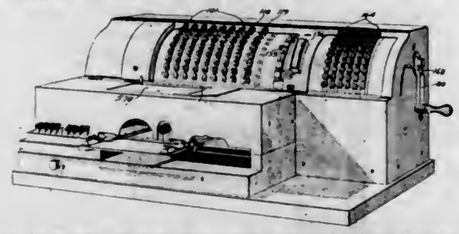
member, an engine driven generator and a device responsive to generator voltage for rendering inoperative said connecting means.

1,761,541. RUBBING PAD. HOWARD B. SCOTT, Dayton, Ohio, assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio, a Corporation of Maryland. Filed Sept. 27, 1922. Serial No. 590,863. 16 Claims. (Cl. 51—185.)



1. A rubbing device comprising horizontally arranged flexible walls set at an angle to the vertical and extending in the direction of movement of the device, other flexible walls set transversely to the direction of movement of said device, and a bracing member between said last mentioned walls.

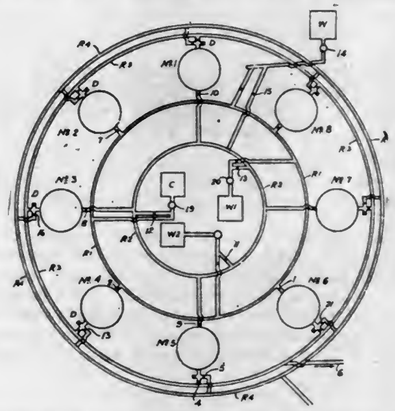
1,761,542. CASH REGISTER. BERNIS M. SHIPLEY, Dayton, Ohio, assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio, a Corporation of Maryland. Filed Jan. 2, 1923. Serial No. 610,273. 67 Claims. (Cl. 101—96.)



1. In a cash register, the combination of printing means, a manually movable table carrying record material, movable means for predetermining at what point on said record material the printing is to take place, and means for arresting the movement of said table at the predetermined point.

1,761,543. APPARATUS FOR AND PROCESS OF SEPARATING OR EXTRACTING CELLULOSE OR PAPER PULP. EDMONDSON SPENCER, Calcutta, British India. Filed Feb. 10, 1928, Serial No. 253,310, and in British India May 28, 1927. 7 Claims. (Cl. 92—7.)

1. Apparatus for the cascade extraction of cellulose pulp from fibre yielding vegetable material comprising a plurality of digesters, ring trunks linking up said digesters in a closed circuit, connections between said digesters and said ring trunks whereby liquor in any one digester may be transferred to any other digester, means connected to said

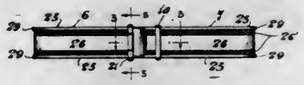


digesters and said ring trunks whereby any digester may be supplied with make up liquor, wash water and digesting liquor, means for supplying steam to said digesters, and means connected to said digesters whereby the spent liquor therefrom may be drawn off.

1,761,544. PROCESS FOR SEPARATING OR EXTRACTING CELLULOSE OR PAPER PULP. EDMONDSON SPENCER, Calcutta, British India. Filed Feb. 10, 1928, Serial No. 253,311, and in British India May 28, 1927. 8 Claims. (Cl. 92—7.)

1. A cascade process for the extraction of cellulose pulp from fibre yielding vegetable material, which comprises treating the material with digester liquor and under pressure in stages in digesters, progressively increasing the pressure and active liquor concentration at each stage until the digestion is nearly complete, and then varying the active liquor concentration in the final stages sufficiently to substantially prevent the hydrolysis of the cellulose fibre in the final stages.

1,761,545. WRISTBAND. HARRY M. STEGEMAN, Fort Thomas, Ky., assignor to The Wadsworth Watch Case Company, Dayton, Ky., a Corporation of Kentucky. Filed Dec. 5, 1927. Serial No. 237,797. 5 Claims. (Cl. 224—4.)

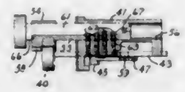


1. A metal wrist watch band comprising a pair of band sections each having outer exposed raised margins at all times, locking means carried by one end of one section and adapted to engage a raised margin of said section, and means for slidably retaining said sections in partly overlapped relation with each other at all times.

1,761,546. CONCENTRATION OF PHOSPHATE-BEARING MATERIAL. WILLIAM TROTTER, New York, and ELTOFT WRAY WILKINSON, Queens Village, N. Y., assignors to Minerals Separation North American Corporation, New York, N. Y., a Corporation of Maryland. Filed Mar. 1, 1929. Serial No. 343,839. 4 Claims. (Cl. 209—166.)

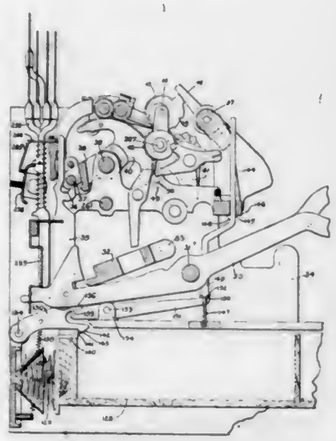
1. The process of concentrating phosphate-bearing material which consists in agitating a pulp of the fine material with a soap produced by the combination of fatty acid and an amine, and separating the float.

1,761,547. CASH REGISTER. FREDERICK H. TYLER, Dayton, Ohio, assignor to The National Cash Register Company, Dayton, Ohio, a Corporation of Maryland. Filed June 15, 1928. Serial No. 285,532. 6 Claims. (Cl. 235—27.)



1. The combination with a depressible register key; of a non-rotatable sliding member, a projection thereon embracing the head of the depressible register key; means to lock the member in its normal position; and a detachable key insertable into the sliding member to actuate said means and unlock the sliding member, said member adapted to be moved by the detachable key to actuate the depressible key.

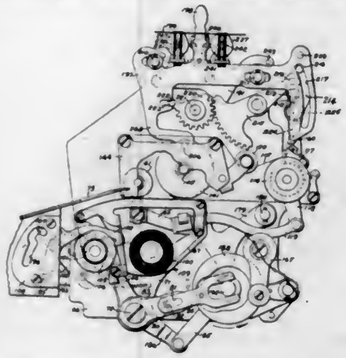
1,761,548. CASH REGISTER. EDWARD J. VON PEIN, Dayton, Ohio, assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio, a Corporation of Maryland. Filed Apr. 23, 1920. Serial No. 376,088. 6 Claims. (Cl. 235—22.)



1. In a machine of the class described, the combination of a totalizer adapted to be restored to zero, means for restoring the totalizer to zero, a money receptacle, a latch to hold the receptacle normally inaccessible, and connections between the restoring means and the latch operable only upon an operatin of said restoring means for rendering the money receptacle accessible.

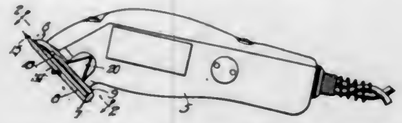
1,761,549. CASH REGISTER. EDWARD J. VON PEIN, Dayton, Ohio, assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio, a Corporation of Maryland. Filed Apr. 26, 1923. Serial No. 634,739. 13 Claims. (Cl. 235—2.)

1. The combination of a total printing mechanism, a totalizer resetting mechanism adapted to be operated by said printing mechanism, a slidable control plate adapted in one position to prevent an operation of said printing mechanism and in other positions to permit an operation of said printing mechanism, and means operated by move-



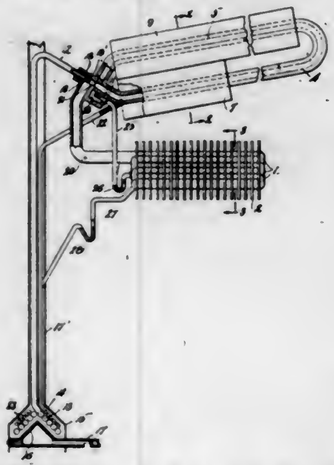
ment of said plate into one of said latter positions to disconnect said resetting mechanism from said printing mechanism.

1,761,550. BLADE ATTACHMENT FOR CLIPPERS. LEO J. WAHL, Sterling, Ill., assignor to Wahl Clipper Corporation, Sterling, Ill., a Corporation of Illinois. Filed Sept. 20, 1929. Serial No. 393,931. 8 Claims. (Cl. 30—1.)



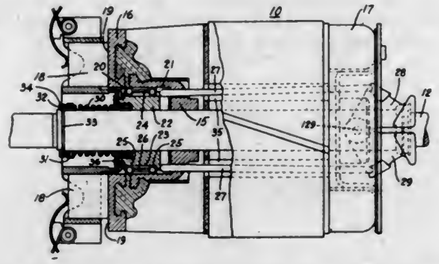
1. Adjusting means for clippers for increasing the effective thickness of the stationary blade comprising longitudinal grooves on the top of the stationary blade and an auxiliary blade having spring arms projecting over the back of the stationary blade and extending forwardly in said grooves whereby to hold the auxiliary blade in position.

1,761,551. REFRIGERATING SYSTEM. EASTMAN A. WEAVER, Brookline, Mass., assignor, by mesne assignments, to Stator Refrigeration, Inc., a Corporation of Delaware. Filed Aug. 23, 1924. Serial No. 733,699. 31 Claims. (Cl. 62—115.)



1. A refrigerating system of the type employing a refrigerant fluid and a propellant fluid, comprising a propellant vaporizer, a propellant condenser in which propellant vapor is condensed at a suitable temperature, a refrigerant condenser, in which refrigerant vapor is condensed at a lower temperature, a cooler, a duct for conducting propellant vapor from the vaporizer to the propellant condenser, a duct for conducting refrigerant liquid from the refrigerant condenser to the cooler, means for maintaining a lower pressure in the cooler than in the refrigerant condenser, an aspirator in said first duct, and a duct leading from the cooler to said aspirator, so that the propellant vapor flowing from the vaporizer to the propellant condenser impels refrigerant vapor from the cooler to the refrigerant condenser, the propellant liquid having a relatively high boiling point and the refrigerant liquid having a relatively low boiling point whereby a high temperature drop can be obtained between the vaporizer and condensing means without employing high pressure in the vaporizer.

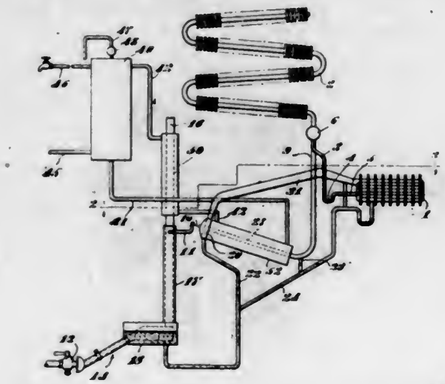
1,761,552. ELECTRIC MOTOR. JAMES F. WHELAN, Dayton, Ohio, assignor to Delco Products Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Jan. 26, 1929. Serial No. 335,171. 10 Claims. (Cl. 172—279.)



1. In an alternating current motor having a commutator, means for short-circuiting said commutator, comprising a deformed helical member, a sliding support for said member, centrifugal elements for sliding said support to move said deformed helical member into contact with the commutator.

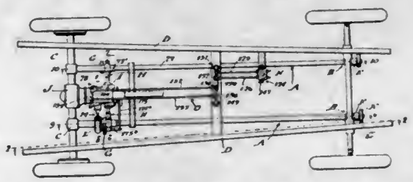
10. In an electrical switching mechanism, a circuit closing garter, said garter simulating a pair of toroids joined by bonds.

1,761,553. HOUSEHOLD APPARATUS. LYMAN F. WHITNEY, Boston, Mass., assignor, by mesne assignments, to Stator Refrigeration, Inc., a Corporation of Delaware. Filed Jan. 6, 1927. Serial No. 159,345. 13 Claims. (Cl. 62—115.)



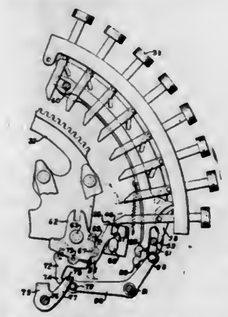
1. The process of providing refrigeration and heating water to a temperature of the order of that ordinarily employed for household uses, which comprises aspirating a refrigerant fluid with a propellent fluid having a boiling temperature which is high compared to that of said refrigerant fluid and that of water, passing the resulting mixture of vapors through a condenser at a temperature above the boiling point of the refrigerant whereby the propellant is condensed out of the refrigerant, effecting the condensation of said propellant by a current of water, whereby the residual heat of condensation is absorbed in the water, and supplying the heated water to a point of household use.

1,761,554. PARKING DEVICE FOR MOTOR VEHICLES. GEORGE W. WOOLLEY, Pasadena, Calif. Filed Aug. 29, 1928. Serial No. 302,702. 21 Claims. (Cl. 180—1.)



1. A parking device for motor vehicles comprising in combination a vehicle frame, a pair of front and rear legs each having parking wheels at the lower end pivotally connected to the vehicle frame adjacent the front and rear end thereof, means to operate said legs to lower and raise said wheels thereby raising and lowering the running wheels of the vehicle, means forming a friction drive with one of said wheels on one side at one end and a shaft having a friction drive to one of the wheels at the other end of the vehicle, and means to operate said friction drives to move the vehicle transversely.

1,761,555. CASH REGISTER. CHARLES H. ARNOLD, Dayton, Ohio, assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio, a Corporation of Maryland. Filed Dec. 17, 1924. Serial No. 756,532. 22 Claims. (Cl. 235—2.)

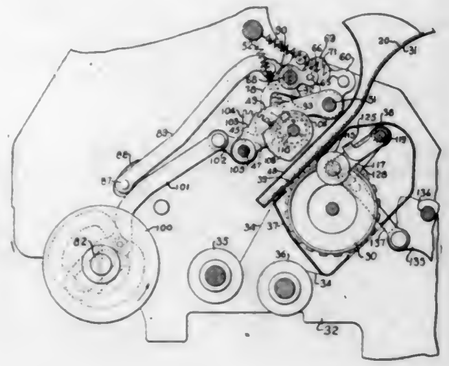


5. The combination of a printing element adapted to be set to a plurality of positions, another printing element in axial alinement with said first printing element adapted to be set in one of two positions, and means intermediate said elements and adjusted by the first-mentioned element for moving the last mentioned element into either of the two positions, said means adapted to be held in the adjusted position by the first-mentioned element to maintain the second-mentioned element in its adjusted position.

1,761,556. CASH REGISTER. CHARLES H. ARNOLD, Dayton, Ohio, assignor to The National Cash Register Company, Dayton, Ohio, a Corporation of Maryland. Filed July 21, 1928. Serial No. 294,492. 23 Claims. (Cl. 101—96.)

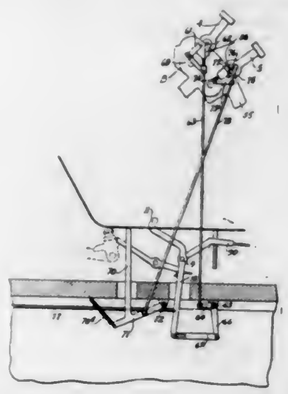
1. In a machine of the class described; the combination with a printing element; and means to take im-

pressions therefrom on record material; of a plurality of means to operate said impression means to effect succes-



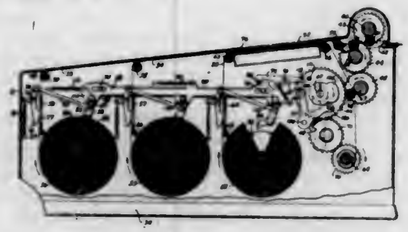
sive imprints; individual means to detain the operating means in their set positions; and a single means to trip said detaining means.

1,761,557. CASH-REGISTER ATTACHMENT. ABRAHAM BLOCK, San Francisco, Cal'f., assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio, a Corporation of Maryland. Filed Nov. 3, 1920. Serial No. 421,433. 15 Claims. (Cl. 235—3.)



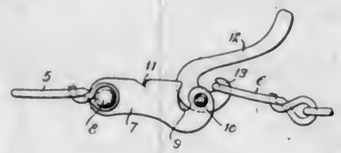
1. In a cash register of the character described, a shelf cooperating with a printing mechanism, said shelf being provided for the reception of tickets printed by the printing mechanism, a lever pivotally mounted below the shelf, a finger on said lever projecting through a slot formed in the shelf, said finger adapted to be held depressed when a ticket is on the shelf, a cash drawer in the register, a latch pivotally attached to the cash drawer, a locking bar with which said latch is engageable, and means including a loose or slip connection intermediate the finger lever and the pivoted latch, and actuated by the finger and the lever to which it is attached to prevent engagement of the latch with the locking bar when the finger assumes a depressed position.

1,761,558. AUTOGRAPHIC REGISTER. SAMUEL BRAND, Dayton, Ohio, assignor to The National Cash Register Company, Dayton, Ohio, a Corporation of Maryland. Filed Feb. 25, 1927. Serial No. 170,850. 18 Claims. (Cl. 282—16.)



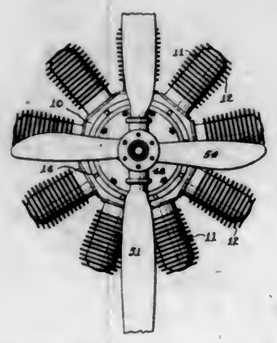
9. In an autographic register, the combination of means for feeding a plurality of superimposed strips; and a separately operable means to limit the extent of feeding movement of each strip at a predetermined point.

1,761,559. CHAIN FASTENER. PETER B. DIEHL, York, Pa., assignor to United States Chain & Forging Company, Pittsburgh, Pa., a Corporation of Delaware. Filed May 18, 1929. Serial No. 364,104. 4 Claims. (Cl. 24—68.)



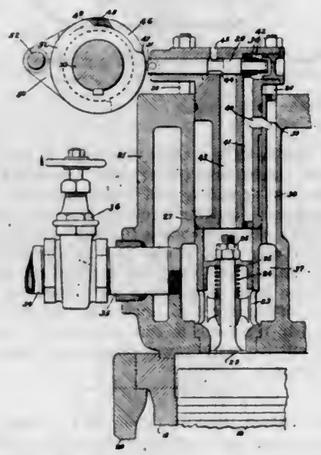
1. A chain fastener comprising a connector bar formed at its forward end for connection to a chain link, a latch lever pivotally supported upon the rear end of the bar and having an outwardly and forwardly curved tail portion for engagement with another chain link, the forward end of the lever being downwardly curved and extending to a point beyond the forward end of the connector bar, and a lug or spur struck from the side of the body portion in position to overlie the lever when said lever is in closed position, the lever being of yieldable material and normally lying flat against the side of the bar.

1,761,560. DEVICE FOR COOLING AIRCRAFT ENGINES. HAROLD A. HICKS, Detroit, Mich., assignor to Ford Motor Company, Dearborn, Mich., a Corporation of Delaware. Filed Dec. 7, 1929. Serial No. 412,522. 7 Claims. (Cl. 244—25.)



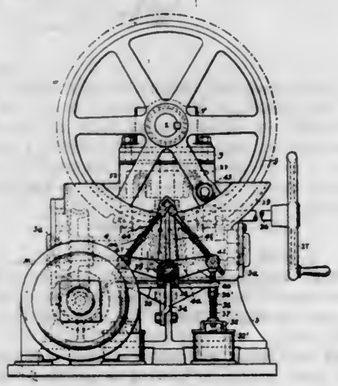
1. In a device for cooling aircraft engines, a relatively large slow speed propeller driven through a speed reducing mechanism by said engine, an auxiliary propeller driven by said engine, and engine heat dissipating means disposed adjacent to said auxiliary propeller having an effective area substantially equaling the area of the auxiliary propeller slip stream at the plane of intersection.

1,761,561. COMBINED INTERNAL AND EXTERNAL COMBUSTION ENGINE. REINHARD HILDEBRAND, Webster Groves, Mo. Filed Feb. 8, 1926. Serial No. 86,895. 10 Claims. (Cl. 123—25.)



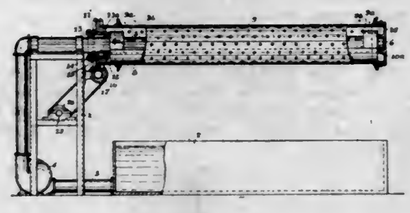
1. A combined internal and external combustion engine provided with means governed by the pressure in the cylinder of the engine for causing an auxiliary power medium under pressure, produced by a combustion externally of the cylinder, to be automatically admitted to the cylinder so as to increase the mean effective pressure exerted on the piston, and means for cutting off the supply of the auxiliary power medium to the cylinder before the completion of the power stroke of the piston.

1,761,562. DYEING MACHINE. FLORENT HINNEKENS, Paterson, N. J., assignor to Van Vlaanderen Machine Company, Paterson, N. J., a Corporation of New Jersey. Filed Aug. 14, 1925. Serial No. 50,264. 3 Claims. (Cl. 172—240.)



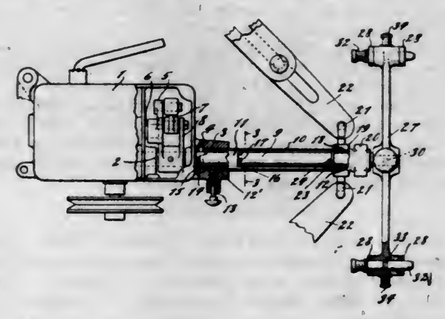
1. In combination, with a rotary system revoluble back and forth and having a rotary prime mover and an eccentric moving abutment, means to reverse the direction of rotation of the prime mover including a pair of cushioned controlling devices, and a rocking actuator for the controlling devices projecting into the path of rotary movement of said abutment and having its rocking in one direction yieldingly opposed by one and in the other direction by the other of said devices.

1,761,563. APPARATUS FOR TREATING FABRICS. FLORENT HINNEKENS, Paterson, N. J., assignor to Van Vlaanderen Machine Company, Paterson, N. J., a Corporation of New Jersey. Filed May 2, 1927. Serial No. 188,165. 4 Claims. (Cl. 8—17.)



1. In combination, a support having a liquid non-revoluble delivery pipe projecting laterally and rigidly therefrom and a perforated revoluble sleeve penetrated by and journaled on the pipe with its outer end free, said pipe affording support for both end portions of the sleeve and having restricted means to deliver liquid into the sleeve at different points throughout substantially the whole length of the latter and said sleeve having its outer end closed against liquid delivery and being adapted to have the roll of goods to be treated looped over the same from its said outer end.

1,761,564. WASHING APPARATUS. ROBERT HOE, Hyde Park, N. Y. Filed Aug. 3, 1927. Serial No. 210,264. 11 Claims. (Cl. 259—123.)

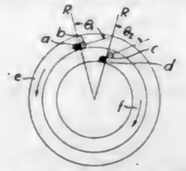


1. A washing apparatus comprising a rock shaft having a portion provided with oppositely disposed flat surfaces, and an arm adapted to support washing devices and having an open recess adapted to receive said portion of the rock shaft, said arm being freely movable with respect to said shaft in a direction parallel to said surfaces, and elements on the shaft and arm engaging each other to prevent tilting movement of said arm longitudinally of said shaft.

1,761,565. CABLE. EMIL KAEMPF and DONALD P. DALZELL, Aldwych, London, England, assignors to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed May 25, 1929, Serial No. 365,846, and in Great Britain May 22, 1928. 5 Claims. (Cl. 173—81.)

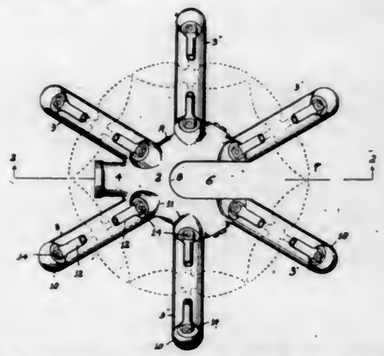
1. A cable comprising stranding units contained in adjacent layers in each of which are at least two dissimilar

stranding units, the specific torsion of each of the two units in one layer differing from one of the numbers, 2n, by less than one-half, and the specific torsion of each



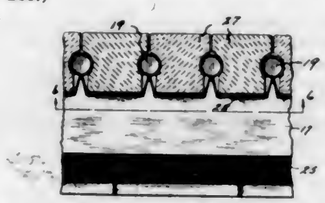
of the two units in the other layer differing from some one of the numbers, 2n + 1, by less than one-half, where n is any integral number.

1,761,566. GAS BURNER. HARRY E. KERR, Cleveland, Ohio, assignor to The Cleveland Gas Burner & Appliance Company, Cleveland, Ohio, a Corporation of Ohio. Filed June 25, 1927. Serial No. 201,476. 3 Claims. (Cl. 158—104.)



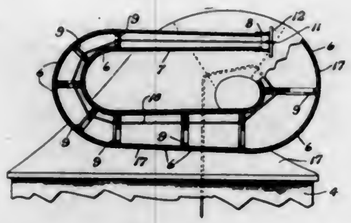
3. A gas burner, comprising a central hollow body portion having a relatively narrow recess extending radially into said body portion beyond the center thereof, thereby adapting said body to be sleeved over a vertical pipe, said pipe being snugly enclosed by the rear wall of said recess, said body having hollow arms extending radially therefrom and a gas intake opposite said recess the recessed part of said body and said intake being each placed between two adjacent arms, and each of said arms having a pair of converging gas and air commingling tubes secured with one end in gas orifices arranged at opposite ends of said arms.

1,761,567. FURNACE WALL. HOWARD J. KERR, Westfield, N. J., assignor, by mesne assignments, to Fuller Lehigh Company, a Corporation of Delaware. Filed Mar. 4, 1926. Serial No. 92,134. 9 Claims. (Cl. 122—235.)



1. A furnace wall having a row of spaced tubes, connections to supply a cooling medium to said tubes, tile between each pair of adjacent tubes and having recesses for the tubes with the sides of said recesses toward the inner faces of said tile substantially closed, and a metallic lining covering the outer face of said wall, said lining comprising a plurality of plates, each contacting with at least one of said tubes.

1,761,568. SECTIONAL FORM. JACOB KERSTEN, Kalamazoo, Mich., assignor to Kersten Radio Equipment Inc., Kalamazoo, Mich., a Corporation of Michigan. Filed Dec. 5, 1927. Serial No. 237,807. 5 Claims. (Cl. 18—45.)



1. In a device of the class described, a horizontal support, a form located over the support comprising a plurality of sections having end to end engagement, the outermost of said sections comprising a tubular sleeve having an outer exposed end, a cable extending through said form having a loop at its outer end, a pin passing through said loop adapted to bear against the outer exposed end of the sleeve section of the form, and means for releasably applying a continuous pulling force to said cable to hold the sections of the form in rigid end to end engagement and, when released, permitting withdrawal of said pin and separation of the sections.

1,761,569. CARBURETOR. ANDREW L. KIMBALL, Detroit, Mich., assignor to The Wheeler-Schebler Carburetor Co., Indianapolis, Ind., a Corporation of Indiana. Filed Sept. 24, 1924. Serial No. 739,479. 5 Claims. (Cl. 261—48.)

1. In a carburetor, the combination of a mixing chamber having a fuel nozzle and an air-admission opening, a fuel-adjusting needle, an air controlling valve, a lever connecting said needle and valve, means for shifting the fulcrum of said lever, a throttle, and means operated by said fulcrum-shifting means for variably limiting the closing of said throttle.

1,761,570. TRUNK LOCK. ALBERT J. KOMENAK, Stamford, Conn., assignor to The Excelsior Hardware Company, Stamford, Conn., a Corporation of Connecticut. Filed Sept. 6, 1928. Serial No. 304,246. 2 Claims. (Cl. 70—115.)

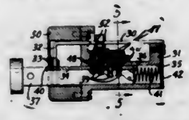
1. A lock for trunks, comprising a hook member and an escutcheon plate structure secured respectively to the lid and body of the trunk, a hasp pivoted to said structure and carrying a pivoted draw-bar adapted for engagement with said member, a casing secured to the inner face of said structure, independently rotatable alined key barrels journaled within said structure and casing the inner barrel

having a laterally extending lug, a resilient slide terminating at its lower end in a bolt, a keeper-hook carried by said hasp and adapted for automatic locking engagement with said bolt when the hasp is forced to locking position,



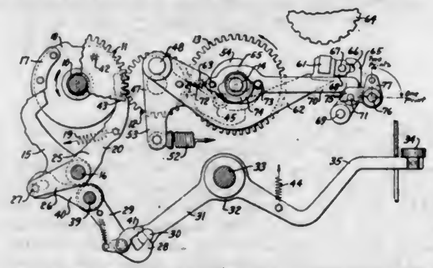
and a spring tumbler having a gate and adapted to be forced downwardly when said lug is rotated to a position in abutment with said slide, said gate embracing said lug after said rotation of the latter.

1,761,571. CASH REGISTER. WILHELM KROPFF, Berlin-Charlottenburg, Germany, assignor to The National Cash Register Company, Dayton, Ohio, a Corporation of Maryland. Filed July 5, 1928, Serial No. 290,543, and in Germany Aug. 4, 1927. 5 Claims. (Cl. 235—27.)



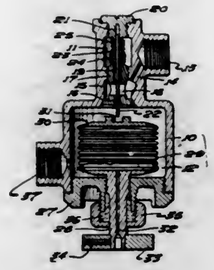
1. In a machine of the class described, the combination with a register key stem shiftable into and out of effective position; of a slidable lock cylinder arranged parallel with the key stem; means to lock the cylinder in normal position; means to connect the key stem and the cylinder; a casing enclosing the key stem and cylinder and apertured to expose the end of the cylinder; the means which connects the key stem and cylinder adapted to coact with the casing to prevent rotation of the cylinder; and a removable key insertable in the lock cylinder to release the locking means and shift the lock cylinder to depress the key stem.

1,761,572. CASH REGISTER. WILHELM KROPFF, Berlin-Charlottenburg, Germany, assignor to The National Cash Register Company, Dayton, Ohio, a Corporation of Maryland. Filed July 14, 1928, Serial No. 292,681, and in Germany Aug. 15, 1927. 5 Claims. (Cl. 101—96.)



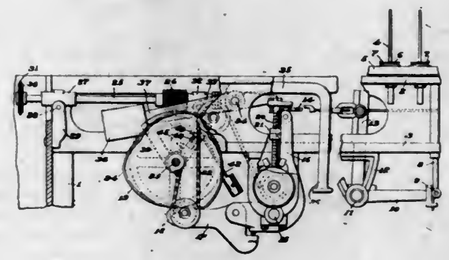
1. In a printing mechanism, the combination with a hammer; and means to cause the hammer to make a plurality of impressions during a single operation of the machine; of a disabling latch adapted to prevent effective movement of the hammer; a pitman connected to the disabling latch; means to shift the disabling latch in opposite directions alternately to render the hammer successively effective and ineffective during a single operation; and a manually operable member to lock the disabling latch in its ineffective position throughout one or more operations of the machine.

1,761,573. VALVE. ALVAR LENNING, Jackson Heights, and ROBERT SETH TAYLOR, New York, N. Y., assignors to Electrolux Servel Corporation, New York, N. Y., a Corporation of Delaware. Filed May 21, 1929. Serial No. 364,787. 9 Claims. (Cl. 236—93.)



1. A valve of the class described comprising a casing having an inlet, a thermostat chamber, said valve having a first communication between said inlet and said thermostat chamber, means to close said first communication, said valve having a second and restricted communication between said inlet and said thermostat chamber, cleaning means within said restricted communication, a thermostatic element within said thermostat chamber for actuating the closing means and said valve having an outlet from said thermostat chamber.

1,761,574. BUILDER MECHANISM FOR SPINNING OR WINDING MACHINES. HARRY A. LEONARD, Hopedale, Mass., assignor to Draper Corporation, Hopedale, Mass., a Corporation of Maine. Filed Apr. 9, 1929. Serial No. 353,750. 13 Claims. (Cl. 242—43.7.)

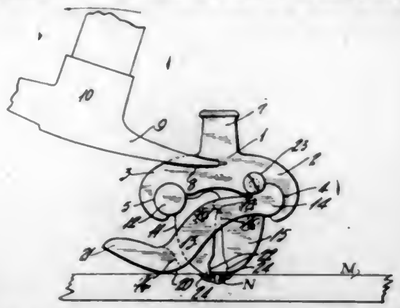


1. In a spinning or winding machine, the combination of yarn receivers, yarn guiding means for directing the yarn to the yarn receivers, traversing mechanism including a main builder cam, operating means for rotating the main builder cam to lay yarn upon the receivers with service traverse, bunch builder mechanism actuated by the operating means, and automatically acting devices for operatively connecting and disconnecting the bunch builder mechanism and main builder cam during the bunch building operation to cause the bunch to be wound with traverse under control of the main builder cam.

1,761,575. NAIL PULLER. GEORGE LITTLE, Boise, Idaho. Filed June 6, 1928. Serial No. 283,431. 1 Claim. (Cl. 254—23.)

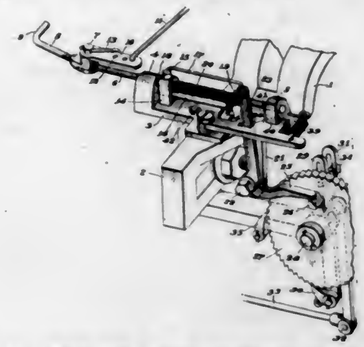
In a device of the kind described, a body member having divergent arm portions, the latter having transversely extended sockets in their outer portions, a nail gripping jaw having a laterally extending pivot post freely seated in one of the said arm sockets, the said jaw having a lug engaging recess upon its inner edge adjacent the said body member,

an integrally formed base member and complementary nail gripping jaw, the base portion having a pivot lug at one end freely seated within the other of the said arm sockets



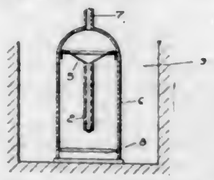
of the body member, being recessed laterally for engaging the first named nail gripping jaw, and having a lug thereon adapted for engaging the said recess at the inner edge of the first named nail gripping jaw.

1,761,576. INTERMITTENT FEELER MECHANISM FOR LOOMS. ELVIN D. MACARTHUR, Wollaston, Mass., assignor to Draper Corporation, Hopedale, Mass., a Corporation of Maine. Filed Jan. 19, 1929. Serial No. 333,676. 9 Claims. (Cl. 139—270.)



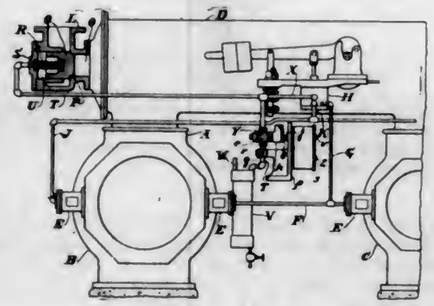
1. An intermittent feeler mechanism for looms, comprising, in combination, a feeler stand, a feeler mounted upon the stand for movement towards and from the front of the loom, a feeler spring, spring controlling means for placing the spring under stress after a plurality of detecting beats to move the feeler to feeling position, and means for tripping the spring controlling means and thus freeing the spring from exerting stress upon the feeler when the feeler is moved frontwardly by a working supply of filling on a detecting beat that the feeler may remain at rest in front position for a plurality of detecting beats.

1,761,577. METHOD OF MANUFACTURING WIRE AND PORCELAIN ELEMENTS. FREDERICK S. MCCULLOUGH, Edgewood, Pa. Filed Jan. 5, 1926. Serial No. 79,351. 5 Claims. (Cl. 18—57.)



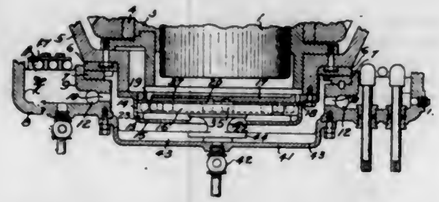
1. A method of making refractory bodies with wires therethrough which consists in forming a length of refractory rod with a hole therethrough, allowing the refractory material to set, then passing a wire through the hole, and fitting the refractory rod with the wire therein under conditions which preclude oxidation of the wire.

1,761,578. STARTING DEVICE FOR COMPRESSORS. CHESTER W. METZGAR, Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed July 17, 1928. Serial No. 293,459. 4 Claims. (Cl. 230—21.)



1. In a compressor, the combination of a cylinder and a pressure actuated unloading device for the cylinder, means for controlling the supply of pressure fluid to the unloading device, a switch for controlling the current supply to a motor connected to actuate the compressor, and means associated with the first said means and the switch to enable the switch to be closed for starting the compressor only when the first said means occupies a position in which the compressor is entirely unloaded.

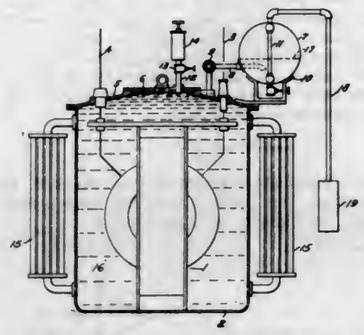
1,761,579. PUMPING AND LUBRICATING APPARATUS. RAY C. NEWHOUSE, Chicago, Ill., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis., a Corporation of Delaware. Filed Mar. 27, 1926. Serial No. 98,048. 9 Claims. (Cl. 103—108.)



1. In combination, a pump including a housing, means for rotating said housing on a substantially vertical axis, two sets of axially spaced impeller means movable with said housing, an intermediate member disposed to be in contact with and supported freely by one of said impeller means and provided with means for conveying fluid pumped by one of said sets to the inlet of the other set, and means for preventing motion about said axis of said intermediate member.

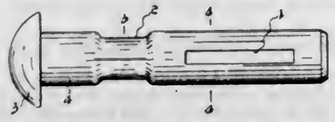
1,761,580. TRANSFORMER AND METHOD OF OPERATING SAME. LOUIS C. NICHOLS, Wauwatosa, Wis., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis., a Corporation of Delaware. Filed Apr. 10, 1922. Serial No. 551,260. 3 Claims. (Cl. 220—85.)

1. In combination, a normally closed receptacle including an oil tight closure, said receptacle containing heat producing apparatus, a body of oil completely filling said receptacle under normal operating conditions, an overflow tank, an oil filled conduct connecting said overflow tank with said body of oil, said conduit passing through said closure, a valve in said conduit, a removable cover



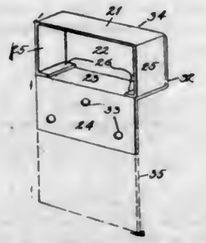
forming part of said closure, said cover being removable independently of said conduit, said cover being provided with a normally closed valve for admitting gas under pressure to said receptacle for the purpose of depressing the oil level in said receptacle.

1,761,581. MANUFACTURE OF KEY BOLTS. JOHN P. NORTHEY and RODNEY V. NORTHEY, Toronto, Ontario, Canada. Filed Mar. 14, 1928. Serial No. 261,565. 8 Claims. (Cl. 10—27.)



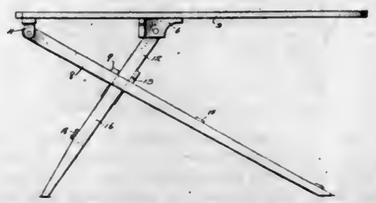
1. A method of forming a key bolt which consists in taking a substantially cylindrical blank, punching out a longitudinal slot adjacent one end thereof without materially increasing the diameter of the blank, forming a head at the other end of the blank, and compressing a portion of the blank between the slot and head to reduce its cross-sectional area by a decrease along one diameter while preventing increase in a direction at right-angles thereto.

1,761,582. HAND OR FINGER GRIP. WILLIAM F. PELTON, Brooklyn, N. Y., assignor of one-half to Frank S. Gildea, Brooklyn, N. Y. Filed Mar. 2, 1928. Serial No. 258,465. 1 Claim. (Cl. 16—124.)



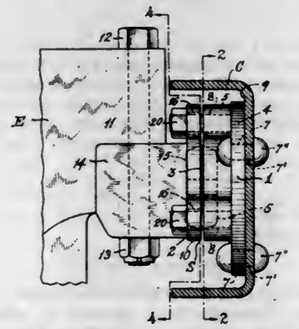
A finger grip for window sash rails comprising a finger receiving portion adapted to be arranged above and extend inwardly beyond the inner face of the rail, and an attaching plate part extending from one side of the first named part and adapted to be arranged on the inner face of said rail, said first named part comprising a hood portion, the inner face of which is in alinement with the corresponding face of the attaching plate.

1,761,583. IRONING BOARD. THOMAS E. POPE, Sayre, Okla. Filed Jan. 9, 1928. Serial No. 245,604. 1 Claim. (Cl. 68—10.)



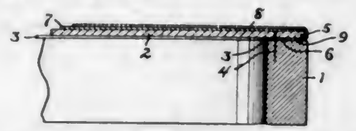
An ironing table comprising a board, legs pivotally connected with the under side of said board adjacent to one end thereof, said legs being spaced apart in a direction transverse of the board, an additional leg pivotally connected to the under surface of the board at a point in advance of the pivotal connections between the first named legs and the other end portion of the board, said last named leg extending between the first named legs, a member carried by the last named leg for contact from above with the first named legs, when all of the legs are extended, a cross member connecting the first named legs and with which the last named leg contacts from below when the legs are extended and the member carried by the last named leg is in contact with the first named legs, straddle legs pivotally connected with the last named leg at a predetermined point above its free end, toggle arms interposed between and operatively engaged with the free end portion of the last named leg and the straddle legs, said toggle arms when extended limiting the straddle legs in their outward movements, said toggle arms also folding to bring the straddle legs close to and substantially in parallelism with the last named leg, said last named leg having a free end spaced from the supporting surface upon which the first named legs rest.

1,761,584. RESILIENT CONNECTION FOR STRUCTURES. ROBERT H. PROSSER, Oakland, Calif. Filed May 3, 1928. Serial No. 274,755. 8 Claims. (Cl. 180—64.)



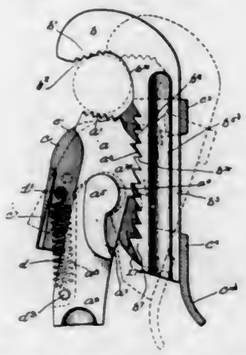
1. In a structure exposed to vibrations, the combination comprising a supporting element, a supported element maintained in resiliently spaced relation to said supporting element by means hereinafter described, said supporting and supported elements being so positioned relatively to each other that neither is rotatable with respect to the other, one or more pockets associated with each element having core-engaging faces, said pockets being opposed to each other to form a split confining chamber, and a resilient core positioned in said confining chamber and seated snugly against the core-engaging faces, said core being thicker than the combined depth of the two pockets and being operative as a coupling agent adapted to absorb relative movements between the two elements by being placed principally under shearing stresses.

1,761,585. TABLE TOP. WILLIAM C. RASTETTER, Fort Wayne, Ind. Filed Nov. 22, 1926. Serial No. 149,948. 2 Claims. (Cl. 45—31.)



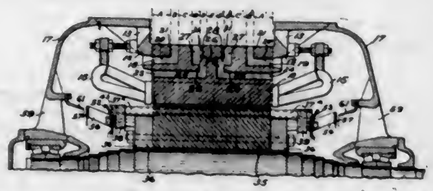
1. A top for a table comprising a wooden marginal frame; a thin strip narrower than the piece of which the frame is formed, and extending on the top of the frame along the inner edge thereof; a top-plate of stiff material covering the top of the frame and positioned upon said strip with its margin overhanging said piece, there being a space extending entirely around the table between the margin of the plate and the top of the frame; a padding superimposed upon said plate; and a cover of sheet material extending over the padding, the margin of said cover extending over the edge and secured under the margin of said plate in the space between the plate and frame.

1,761,586. WRENCH. JOSEPH REIF, Hebron, Ind., assignor of one-half to Francis E. Ling, Hebron, Ind. Filed Sept. 11, 1926, Serial No. 134,791. Renewed Apr. 2, 1930. 7 Claims. (Cl. 81—102.)



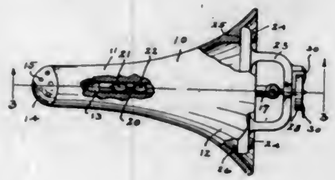
1. In a wrench, the combination of a pair of members, each provided with a gripping jaw, a handle rigid with one of the members, teeth on the members respectively intermeshing to force the jaws together by movement of the handle-member relatively to the other member, a frame for holding the members in connected relation, and a pivotal connection between the frame and the handle-member, said connection comprising lugs formed on the sides of the handle-member and slots formed in the frame, said slots having open ends to permit lateral insertion or withdrawal of the lugs.

1,761,587. DYNAMO-ELECTRIC MACHINE. GEORGE L. RINGLAND, Norwood, Ohio, assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis., a Corporation of Delaware. Filed Nov. 19, 1928. Serial No. 320,268. 18 Claims. (Cl. 171—252.)



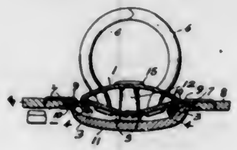
1. A core for electrical apparatus, comprising a group of assembled laminæ having a ventilating duct therethrough, said ventilating duct including two communicating passages formed through the assemblage of said laminæ with perforations through adjacent laminæ in communication with each other, one of said passages extending in the direction of the planes of the laminæ and the other passages extending in a direction at right angles to the first passage, the passage extending in the direction of the planes of the laminæ having an offset portion and formed by perforated portions of a group of said laminæ whose perforations do not extend from the periphery of the core throughout the full depth of the passage in the direction of the planes of said laminæ.

1,761,588. VAGINAL SYRINGE. NICHOLAS B. SALERNI, Indianapolis, Ind. Filed July 26, 1929. Serial No. 381,194. 10 Claims. (Cl. 128—241.)



1. In a vaginal syringe, a nozzle, an outwardly, rearwardly extending flange on the rear of the nozzle, said nozzle having a passage longitudinally disposed therein and an inlet passage communicating with the first passage, and a stem rotatably carried to intercept selectively communication between said first passage and said inlet passage.

1,761,589. LOOSE-LEAF BOOK. JOHN SCHADE, Holyoke, Mass., assignor to National Blank Book Company, Holyoke, Mass., a Corporation of Massachusetts. Filed June 1, 1928. Serial No. 282,090. 1 Claim. (Cl. 129—24.)

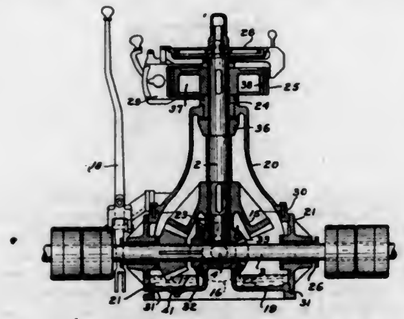


The hereindescribed improvement in loose leaf books, comprising side covers, a metallic cover plate casing, prong carrying members housed within said casing, the sides of said casing having hinged connection with the inner edges of said covers, and a separate rigid back applied in the immediate rear of said members and secured to the cover casing.

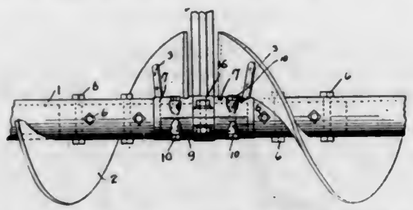
1,761,590. SETWORKS. ERNEST C. SHAW, Milwaukee, Wis., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis., a Corporation of Delaware. Filed May 18, 1928. Serial No. 278,655. 5 Claims. (Cl. 143—120.)

5. In a set works, a base forming an enclosure having side and top openings, a power shaft extending into said enclosure through a side opening, a column shaft extending into said enclosure through a top opening, a set shaft extending through said enclosure through oppositely disposed side openings, each of said shafts having its axis disposed perpendicular to the axes of the others, integral bearings disposed centrally within said enclosure and surrounded by an oil basin, a train of gears connecting said power shaft with said column shaft and said column shaft with said set shaft above said basin, closure

caps for said openings cooperating with surfaces of revolution on said base and providing bearings for said shafts on the sides of said gears remote from said integral bearings, and means associated with said set shaft adjacent to said integral bearings and cooperating with said gears to deliver oil from said basin to all of said bearings during rotation of said shaft.

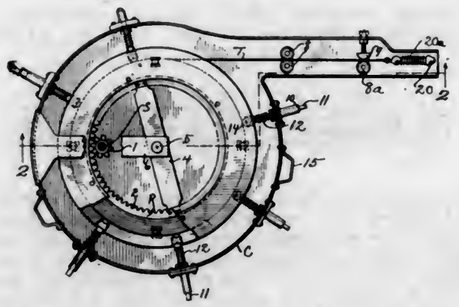


1,761,591. SPIRAL-CONVEYER COUPLING. ROBERT W. RYDER, San Francisco, Calif. Filed May 31, 1928. Serial No. 281,684. 6 Claims. (Cl. 198—213.)



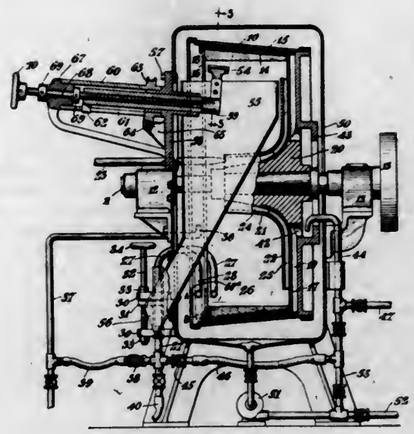
1. A spiral conveyer coupling joint comprising a connecting bar, a pair of sockets for said bar, one on the end of each conveyer flight and each provided with a removable side plate whereby said bar may be placed laterally into said sockets and clamped into place by said plates, said sockets being of angular internal form, the ends of said connecting bar similarly formed to fit therein and notched at their edges, and bolts for securing said side plates in place arranged to engage the notches in said bar.

1,761,592. PIPE-CLEANING OR CABLE-LAYING DEVICE. MORRIS SEIDEL, Brooklyn, N. Y. Filed May 18, 1929. Serial No. 364,058. 5 Claims. (Cl. 137—70.)



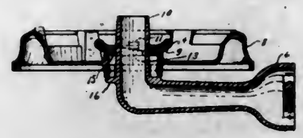
1. A device of the type specified, comprising a reel on which a stiff but resilient metal tape of rectangular cross-section is wound in a close spiral coil, the width of said tape greatly exceeding its thickness, said device being turnable about an axis which is substantially coincident with the central axis of the unwound portion of said tape which is adjacent said reel, radially movable guide means associated with said reel and pressing said bendable tape toward the surface of said reel to maintain the coil in close spiral form, and additional guide means adapted to cause the unwound portion of said tape to be fed in a straight line, said tape being so stiff that it cannot readily be wound to form a close spiral coil without the use of said first mentioned guide means.

1,761,593. CENTRIFUGAL TREATMENT OF SUBSTANCES. LAURENCE P. SHARPLES, Chester, Pa., assignor to The Sharples Specialty Company, Philadelphia, Pa., a Corporation of Delaware. Filed Mar. 12, 1927. Serial No. 174,975. 33 Claims. (Cl. 233—2.)



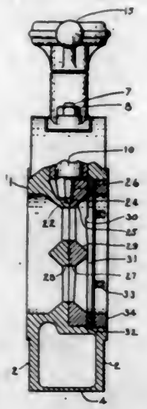
1. In the centrifugal treatment of substances, the process comprising subjecting a mixture of liquid with solid particles to the action of centrifugal force and thereby separating the liquid from the solid particles by sedimentation and retaining the solid particles under the influence of centrifugal force and thereby forming a cake of solid particles, then withdrawing liquid from a radially outward point of the material under the influence of centrifugal force and thereby draining the cake, and treating the solid particles with liquid while the solid particles are still under the influence of centrifugal force.

1,761,594. ADJUSTABLE AND DETACHABLE GAS BURNER. JOSEPH A. SMITH and EARL J. HANSEN, Cleveland, Ohio, assignors to The Cleveland Heater Company, Cleveland, Ohio, a Corporation of Ohio. Filed Apr. 21, 1928. Serial No. 271,761. 6 Claims. (Cl. 122—250.)



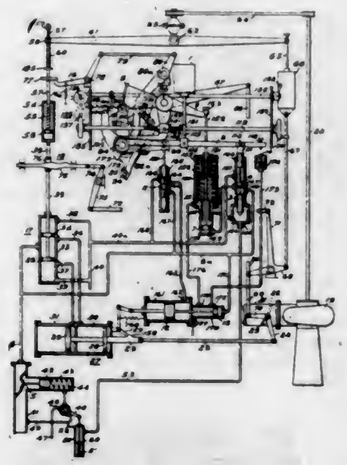
2. In a structure of the class described, the combination of an apertured base member and a horizontally disposed mixing tube having a vertically extending portion adapted to be freely received in the aperture of said base member, and means cooperating with the vertically extending portion of said mixing tube and said base member providing a swivel connection and lock for said tube with said base member.

1,761,595. VALVE. MICHAEL SMOLENSKY, Cleveland, Ohio. Filed May 11, 1928. Serial No. 277,059. 2 Claims. (Cl. 251—84.)



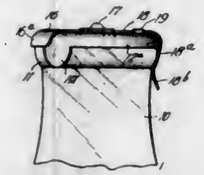
1. A valve comprising an annular body, a rotary disk in said body, the body having a half bearing adjacent said disk, and the disk having a corresponding segmental bearing groove, with teeth adjacent said groove, a radial pinion having a journal stud extending into said half bearing and groove, and means to turn the pinion.

1,761,596. PRIME-MOVER-CONTROL SYSTEM. CHARLES B. TAYLOR, Milwaukee, and CARL SCHINDLER, West Allis, Wis., assignors to Allis-Chalmers Manufacturing Company, Milwaukee, Wis., a Corporation of Delaware. Filed Oct. 14, 1927. Serial No. 226,083. 32 Claims. (Cl. 137—158.)



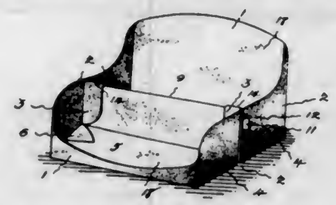
30. In a control system for a prime mover having a gate for controlling the admission of operating fluid thereto, a servo-motor for operating said gate, a regulating valve for controlling said servo-motor, means for releasably holding said regulating valve in the gate-closed position, means for causing movement of said regulating valve to gate-opening position when said holding means releases said valve, and means for predetermining the speed at which said gate opens including means for positioning said regulating valve in predetermined gate-opening positions in accordance with the position of said gate.

1,761,597. MILK-BOTTLE CAP. MINNIE B. TAYLOR, Los Angeles, Calif. Filed June 18, 1928. Serial No. 286,479. 2 Claims. (Cl. 215—63.)



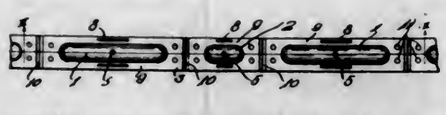
1. In a milk bottle stopper of the character described a disk like member flanged about its periphery to partially cover a bead on the milk bottle top and having a pair of extensions of the peripheral flange adapted to extend entirely around said bead, said disk like member also being excised at one edge at a point midway between the two extensions so as to form on edge opening at one side of the center of the disc a triangular cover for said opening flanged at its edge, a rivet through the disc and one corner of the cover pivoting said cover thereto, a spring member having one end secured by said rivet and extending below the cover, said spring member extending over the disk and secured thereto by projections struck from the body thereof, and said spring member further being shaped to snap around the bead of the bottle to hold the disk in position, and having a prong on its lower end for removal of paper bottle caps.

1,761,598. PACKING AND DISPLAY CONTAINER. ARNOLD J. TANNER, North Haven, Conn. Filed Sept. 4, 1928. Serial No. 303,741. 7 Claims. (Cl. 206—44.)



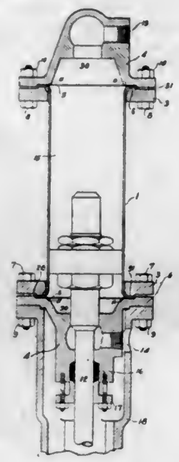
1. A container of the class described composed of a single blank, said blank comprising a body divided into folding portions forming the side and end walls of the container, an extension from said body portion adapted to be folded to form the bottom of the container, said body forming the top of the container and said body being cut and scored so as to be opened to display the contents of the container.

1,761,599. ROOFING CLEAT. JOHN A. TOPPING, Bronxville, N. Y. Filed Dec. 10, 1928. Serial No. 324,886. 1 Claim. (Cl. 108—33.)



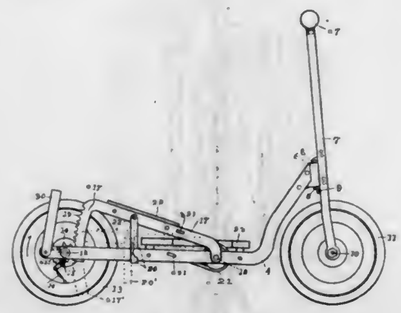
A roofing cleat for use with prepared roofing material and adapted to be bent over overlapping edges of the material, the said cleat comprising a metallic strip having a plurality of spaced portions arched both transversely and longitudinally to form elongated ribs centrally of the cleat with a flat portion along each side and at each end thereof, said flat portions having longitudinal downwardly extending projections parallel to the said ribs and spaced from either side thereof, and transversely disposed downwardly extending projections intermediate and spaced from the said ribs.

1,761,600. CYLINDER AND MECHANISM OPERATED THEREBY. SYBREN R. TYMSTRA, Flushing, N. Y., assignor to Semet-Solvay Engineering Corporation, New York, N. Y., a Corporation of New York. Filed May 5, 1927. Serial No. 188,996. 2 Claims. (Cl. 74—108.)



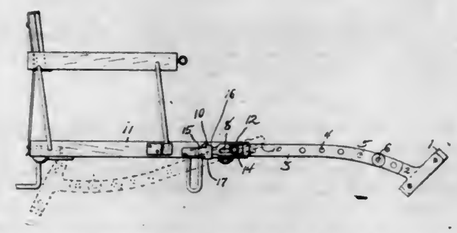
1. In a cylinder construction, in combination a shell having one end thereof formed with a flange which is constructed and arranged to provide a flat annular surface, a head for the shell arranged to contact with one side of said flat annular surface, a ring on said shell arranged to engage the other side of said flat annular surface and means for clamping the flange between said ring and said head so that substantially the entire flat annular surface of said flange engages and contacts with said head and thus forms a fluid tight closure for said shell.

1,761,601. FOOT-POWER SCOOTER. WILLIAM V. VAN ETTEN, Bellingham, Wash., assignor to Hi-Power Manufacturing Company, Seattle, Wash., a Corporation. Filed Jan. 26, 1929. Serial No. 335,172. 1 Claim. (Cl. 208—37.)



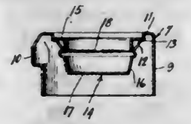
A foot-power scooter consisting of a steering wheel, a driving wheel, a third wheel, a main frame of front and rear parts connected by a hinge, an axle fastened to said front part of said main frame to mount said steering wheel for revolution, an axle fastened to said rear part of said main frame to mount said driving wheel for revolution, a foot plate fastened to said rear part of said main frame, a frame attachment removably fastened to said rear part of said main frame, an axle fastened to said frame attachment to mount said third wheel for revolution, a pinion gear mounted on said driving-wheel axle for revolution, a gear segment pivoted to said rear part of said main frame for oscillation in power-transmission and return strokes engaged with said pinion gear to drive the same forward by said power-transmission strokes, a pedal plate fastened to said gear segment, means to guide and limit the said oscillations of said gear segment, means to cause said return strokes of said power segment, and a pawl pivoted to said driving wheel engageable by said pinion gear only during the said forward revolution thereof.

1,761,602. FOLDING FOOT REST FOR TOILET SEATS. GEORGE H. VAN ARNAM, Fort Wayne, Ind., assignor to Juvenile Wood Products, Inc., a Corporation of Indiana. Filed Dec. 17, 1927. Serial No. 240,677. 2 Claims. (Cl. 155—165.)



1. In combination with a toilet seat, a member constituting a foot-rest; a bracket on each end of said rest, each bracket having a stud and bolt spaced apart; an arm in connection with each of said brackets, said arm having perforations therein spaced apart, into which said stud and bolt of the corresponding bracket extend; a fulcrum bolt disposed in each side of said seat, each arm having in its rear end an elongated slot and notch adjacent to and spaced from the forward end thereof, and having also a hook; and an anchor clip on each side of said seat having a jaw engageable with the hook of the corresponding arm, the fulcrum bolt having engagement in the notch in the corresponding arm when the hook of said arm is engaged with said jaw.

1,761,603. CLOSURE. HERBERT WAINWRIGHT, Brooklyn, N. Y., assignor to National Seal Company, Inc., Brooklyn, N. Y., a Corporation of New York. Filed Mar. 10, 1928. Serial No. 260,740. 7 Claims. (Cl. 220—60.)

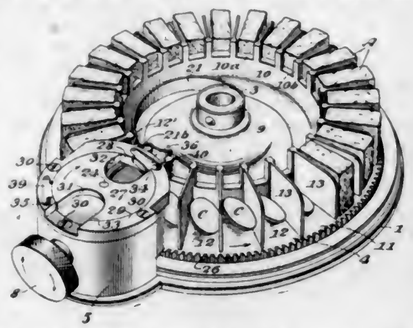


1. In combination, a container nozzle having an inturned rim provided with a plurality of spaced-apart and concentrically projecting resilient members and a closure frictionally clamped by said members.

1,761,604. COMBINATION VENDING MACHINE AND CHANGE TRAY. GEORGE R. WEBBER, Augusta, Me., assignor to Polar Vend Corporation, Augusta, Me., a Corporation of Maine. Filed June 19, 1928. Serial No. 286,635. 5 Claims. (Cl. 194—63.)

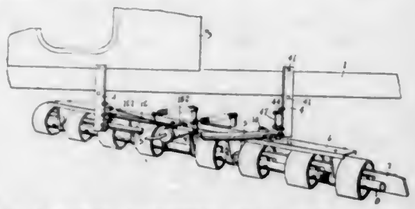
1. In a vending machine, a base, an intermittently revoluble product rotor surmounting said base and having a peripheral series of radially disposed compartments, a cover for said rotor having a laterally disposed delivery opening with which the compartments of said rotor are successively adapted to be registered, manually operable actuating means mounted on said base for intermittently rotating said rotor, and a coin-controlled lock dominant

upon said actuating means and so positioned with reference to said rotor that a coin inserted in said lock to



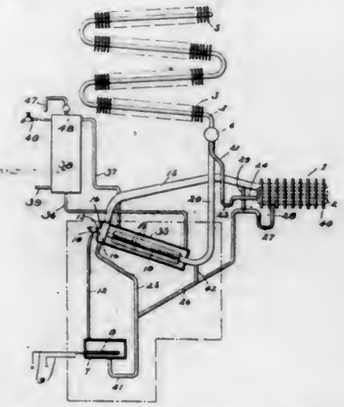
operate the same is delivered by and in the subsequent operation of the lock into an empty compartment of the rotor as the rotor is revolved therepast.

1,761,605. ROAD-SCRAPER ATTACHMENT FOR TRUCKS. ERNEST A. WEEKS, Kalamazoo, Mich., assignor to Root Spring Scraper Company, Kalamazoo, Mich. Filed Nov. 28, 1928. Serial No. 322,553. 6 Claims. (Cl. 37—135.)



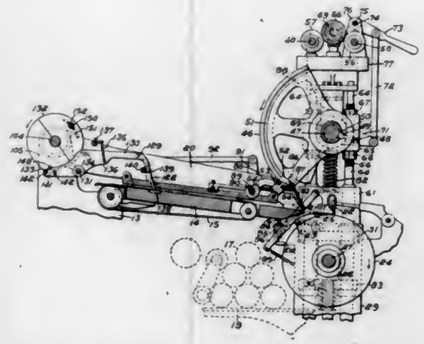
6. In a scraper attachment for a truck chassis, the combination of curved segments at each side of the chassis, a hanger beam with scraper carried by the said segments and adjustable thereon, and a radial connection from the said segments to the center of said hanger beam to guide the same when adjusting the angle thereof to the said chassis, as specified.

1,761,606. REFRIGERATION. LYMAN F. WHITNEY, Boston, Mass., assignor, by mesne assignments, to Stator Refrigeration, Inc., a Corporation of Delaware. Filed Jan. 6, 1927. Serial No. 159,344. 18 Claims. (Cl. 62—115.)



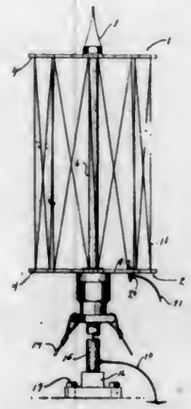
1. The art of refrigeration comprising the pumping of a refrigerant by the aspiration of a propellent fluid to draw refrigerant from a cooler in its vapor phase, condensing the refrigerant and returning it in its liquid phase to the cooler, and freezing a portion of said liquid to stop normal working of the refrigerating cycle.

1,761,607. PRINTING PRESS. FRANK T. WOOD, Larchmont, N. Y., assignor to American Bank Note Company, New York, N. Y., a Corporation of New York. Filed June 22, 1929. Serial No. 373,014. 17 Claims. (Cl. 101—214.)



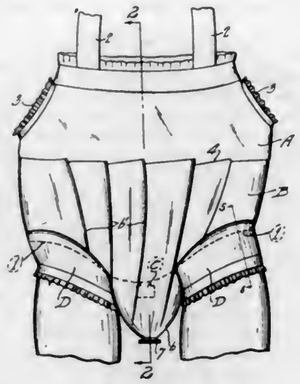
1. In a printing press, the combination of printing instrumentalities which make two successive impressions on each sheet, sheet feeding means by which sheets are fed in succession to said printing instrumentalities, two sheet detectors which are engaged in succession by each sheet on its way to said printing instrumentalities, means controlled by one of said detectors for preventing one impression in the absence of a sheet, and means controlled by the other detector for preventing the other impression in the absence of a sheet which should succeed the first.

1,761,608. ANTENNA FOR RADIO SYSTEMS. RAYMOND C. AONER, Burlington, Wis. Filed May 16, 1927. Serial No. 191,726. 5 Claims. (Cl. 250—33.)



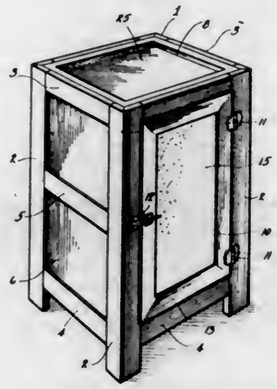
1. A radio antenna comprising a pair of spaced metal spiders, a support for holding said spiders, said support being insulated from said spiders, each of said spiders having radially projecting arms provided with arrow heads at their ends, and a continuous wire looped back and forth between the spiders and electrically joined to the arrow head ends of the arms.

1,761,609. SANITARY GARMENT. BENJAMIN BECKER, St. Louis, Mo. Filed June 4, 1928. Serial No. 282,710. 3 Claims. (Cl. 128—295.)



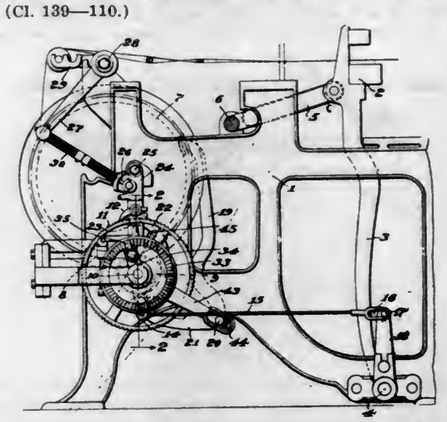
3. As an article of manufacture, a sanitary garment constructed of waterproof material and consisting of a body portion provided with suspension means at its waist line and extending into a closed-in crotch portion provided with leg-openings, an angular discharge opening in the lower extremity of the extended crotch portion, an outwardly-opening check-valve in said angular discharge opening, a plaited skirt portion secured to the body portion at front and rear and surrounding and concealing the extended crotch portion of the body and provided with an extended pouch portion depending between the leg openings of the body, and a stoppered discharge opening in the lower extremity of the extended pouch portion.

1,761,610. COOLER. ERNEST R. BURCHIEL, Tacoma, Wash. Filed Aug. 1, 1927. Serial No. 209,972. 1 Claim. (Cl. 45—134.)



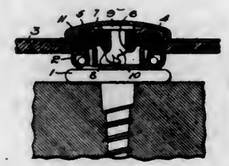
A cooler of the character described comprising a box-like cooling chamber having its walls integrally cast from a water absorbing material, and a basin formed in the top wall in which water may be contained for absorption by the walls and a door for the cooler having a wooden frame encasing it and whereby it is insulated from the body of the cooler, and a panel in said door of an absorbent material for taking up moisture from within the cooler.

1,761,611. LET-OFF MECHANISM FOR LOOMS. HORACE H. BURDEIT, Hopedale, Mass., assignor to Draper Corporation, Hopedale, Mass., a Corporation of Maine. Filed June 11, 1929. Serial No. 370,066. 8 Claims. (Cl. 139—110.)



1. In a let-off mechanism for looms, the combination of the warp beam, a shaft connected to the warp beam to positively rotate it to let-off the warp, a ratchet loosely mounted on the shaft and having an eccentric, an externally toothed gear loosely mounted on the eccentric and held from rotative movement, an internally toothed gear secured to the shaft, and a weight connected to the eccentric for rotative movement therewith to counterbalance the eccentric and externally toothed gear in their movements that the let-off may be rendered uniform throughout the rotation of said shaft.

1,761,612. SEPARABLE SNAP FASTENER. MOSES F. CARR, Lexington, Mass., assignor to United-Carr Fastener Company, Cambridge, Mass., a Corporation of Massachusetts. Filed Dec. 8, 1928. Serial No. 324,675. 1 Claim. (Cl. 24—208.)

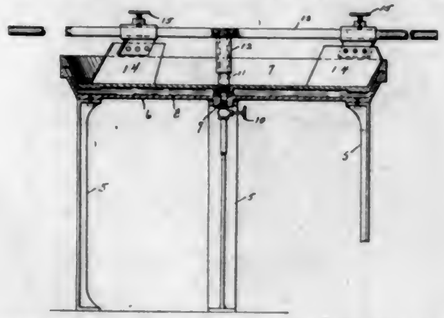


A snap fastener assembly comprising, in combination, a carrying medium, a snap fastener part located at one side of the carrying medium and having a cup-shaped central chamber, said chamber having a bottom provided with an aperture surrounded by a reinforced wall portion, and an attaching tack having a head located at the opposite side of the carrying medium and providing a shank passing through the carrying medium and aperture in the said bottom of the fastener part and having its end upset against said reinforced wall portion thereby securing the snap fastener part to the carrying medium.

1,761,613. MANUAL STIRRER AND CONTAINER FOR SIRUPS. TEOFIL J. CHRUL, Baltimore, Md. Filed Feb. 15, 1928. Serial No. 254,395. 1 Claim. (Cl. 259—108.)

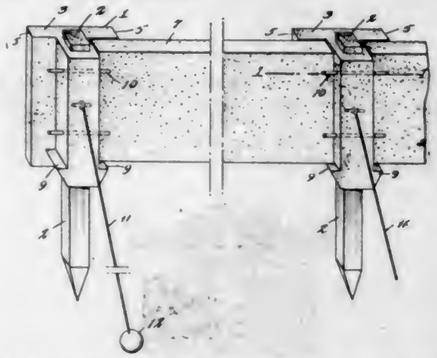
A sirup mixer comprising standards, an open end container secured to the standards, a sirup container telescopically fitted in said first named container and having its peripheral flange overlying the peripheral edge of said first named container so as to support the walls of the sirup container from the adjacent walls of said first named

container, said spacing of the walls providing a cooling chamber between the containers, means for conveying a cooling medium to said chamber, said means being associated through and with the side walls of the container, an outlet for said cooling means formed in the bottom wall of said first named container, a vertical pipe secured



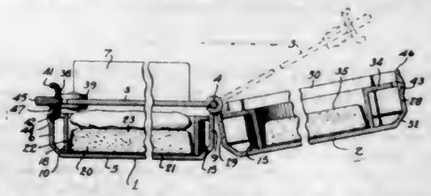
through and to the central axis of the bottom wall of the sirup container, a horizontally positioned handle secured to said pipe and extending beyond the peripheral edges of said containers, and stirring paddles secured to and depending from said handle and located within said sirup container.

1,761,614. PILE AND WALL CONSTRUCTION. BRYAN C. COLLIER, Allentown, Pa., assignor to Cement Gun Contracting Company, Allentown, Pa., a Corporation of Delaware. Filed Nov. 17, 1926. Serial No. 148,791. 2 Claims. (Cl. 61—39.)



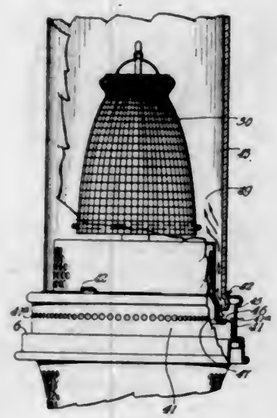
1. A preformed T-section concrete pile adapted for use with the top of the T at the front and forming side extensions, and provided in its rearwardly extending portion with a transverse opening to receive a guide of which the ends serve to direct the edges of adjacent panels into position at the rear of said side extensions.

1,761,615. VANITY CASE. CHARLES N. CORYELL, Mamaroneck, N. Y. Filed Nov. 26, 1928. Serial No. 321,797. 11 Claims. (Cl. 132—138.)



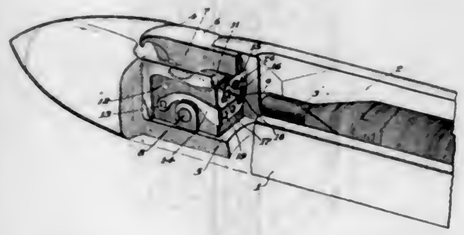
11. In a vanity box, base and top covers each comprising a bottom and upstanding front, back and side walls, the side walls on the base cover disposed outside of the corresponding walls on the top cover and extending substantially to the bottom of the top cover, the front and back walls of each cover meeting substantially midway between the bottom walls of said covers when the box is closed, and hinge means connecting said covers at said back walls.

1,761,616. CHIMNEY. CORTLAND W. DAVIS, Oak Park, Ill., assignor to The Mantle Lamp Company of America, Chicago, Ill., a Corporation of Illinois. Original application filed July 25, 1927, Serial No. 208,286. Divided and this application filed Oct. 18, 1928. Serial No. 313,288. 8 Claims. (Cl. 240—99.)



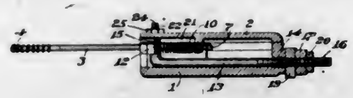
1. A chimney having spaced locking ribs at its lower end, and downwardly-projecting lugs for spacing the lower edge of said chimney from the gallery of a lamp.

1,761,617. AUTOMATICALLY-THREADING LOOM SHUTTLE. HARRY A. DAVIS, Hopedale, Mass., assignor to Draper Corporation, Hopedale, Mass., a Corporation of Maine. Filed May 10, 1929. Serial No. 361,868. 8 Claims. (Cl. 139—215.)



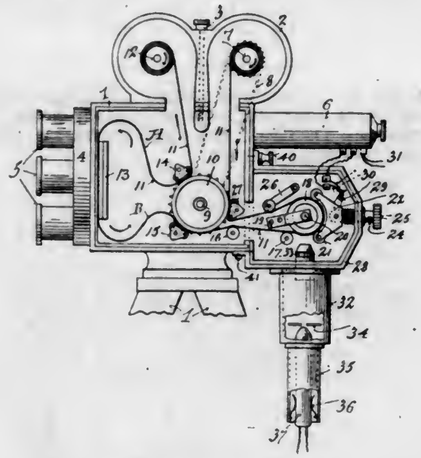
1. An automatically threading loom shuttle having a bobbin chamber and provided with a longitudinal thread passage and side delivery eye, a thread rider having a lateral threading slot by which it is hung upon the thread and a thread guiding portion extending downwardly and laterally of the thread passage to automatically direct the swirling thread into the slot on the first pick of the shuttle following replenishment, and means for supporting the thread rider for movement in a substantially vertical direction by the varying positions of the thread as it is withdrawn from the bobbin chamber during weaving.

1,761,618. FEELER MECHANISM FOR LOOMS. HARRY A. DAVIS, Hopedale, Mass., assignor to Draper Corporation, Hopedale, Mass., a Corporation of Maine. Filed May 14, 1929. Serial No. 362,920. 6 Claims. (Cl. 139—281.)



1. In a feeler mechanism for looms, the combination of a feeler stand, a side slipping feeler mounted for movement towards and from the front of the loom, a spring normally acting upon the feeler to hold it in rearward feeling position, a spring tensioning slide mounted for movement towards and from the front of the loom and connected to the spring, and means for moving the slide towards and from the front of the loom for varying the resistance of the spring to frontward movement of the feeler by the filling while the loom continues to run and feeler continues in action that the feeler action upon the filling may be observed and changed during the loom and feeler operations.

1,761,619. SOUND AND PICTURE RECORDING CAMERA. LEE DE FOREST, New York, N. Y., assignor, by mesne assignments, to General Talking Pictures Corporation, a Corporation of Delaware. Filed Dec. 3, 1927. Serial No. 237,400. 10 Claims. (Cl. 88—16.2.)

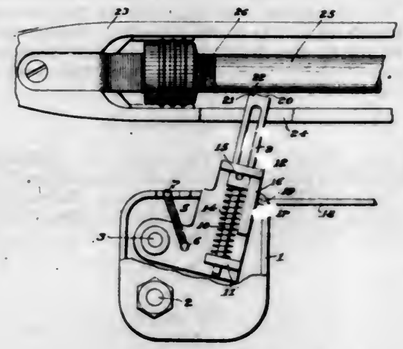


7. The combination with a standard motion picture camera and a sound recording attachment therefor, having a casing in communication with said camera through an opening, of means for passing the film from said camera through the opening into the sound recording attachment and back into the camera.

1,761,620. METHOD FOR THE PREPARATION OF CHLORINATED ANTHRAQUINONES. JOSEPH DEINET, Milwaukee, Wis., assignor to The Newport Company, Carrollville, Wis., a Corporation of Delaware. Filed Dec. 19, 1927. Serial No. 241,273. 5 Claims. (Cl. 760—57.)

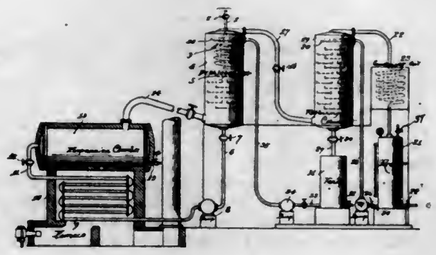
1. The process of preparing chloro-anthraquinones, which comprises treating a boiling solution of anthraquinone sulphonic acids in dilute sulphuric acid with sodium chloride and sodium chlorate.

1,761,621. FEELER MECHANISM FOR LOOMS. CLARE H. DRAPER, Hopedale, Mass., assignor to Draper Corporation, Hopedale, Mass., a Corporation of Maine. Filed June 27, 1929. Serial No. 374,112. 3 Claims. (Cl. 139—287.)



1. A side slipping feeler mounted for movement towards and from the front of the loom and for swinging movement in a direction longitudinally of the shuttle and having a pressure receiving surface of substantial extent to take the impact of the filling on detecting beats, and a single tooth rigid with the feeler extending a slight distance beyond the pressure surface at the trailing end thereof to sink into the filling to hold the feeler from side slipping movement until a denuded surface of the filling carrier is presented to the feeler on a detecting beat and thereupon acting as a fulcrum point bearing against the filling carrier to swing the pressure receiving surface from contact with the filling carrier as the feeler side slips in the direction of the pressure receiving surface that the rigid tooth may pick under any windings on the filling carrier.

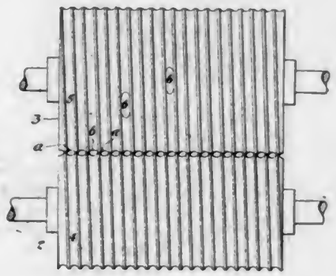
1,761,622. PROCESS FOR TREATING PETROLEUM OIL. CARBON P. DUBBS, Wilmette, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Dec. 21, 1921, Serial No. 523,818. Renewed Mar. 26, 1929. 5 Claims. (Cl. 196—48.)



1. A process for cracking hydrocarbon oil, consisting in heating an advancing stream of oil to a conversion temperature, in delivering the highly heated oil from said stream into an enlarged expansion zone from which no unvaporized oil is permitted to return to said stream, in passing the evolved vapors issuing from said expansion

zone to a primary dephlegmator, in delivering the uncondensed vapors from said primary dephlegmator to a secondary dephlegmator, in passing the uncondensed vapors from said secondary dephlegmator to a final condenser, in collecting the resulting distillate, in returning pressure distillate to said secondary dephlegmator to act as a dephlegmating medium for the vapors therein, in returning the reflux condensate separated from the vapors in said secondary dephlegmator to the primary dephlegmator to act as a dephlegmating medium for the vapors undergoing dephlegmation in said primary dephlegmator, and in maintaining a superatmospheric pressure on the oil undergoing conversion.

1,761,623. MACHINE FOR MAKING SPHERICAL GLASS BODIES. JOHN F. EARLY, Clarksburg, W. Va., assignor to The Akro-Agate Company, Akron, Ohio, a Corporation of Ohio. Filed Mar. 22, 1926. Serial No. 96,427. 6 Claims. (Cl. 49—33.)



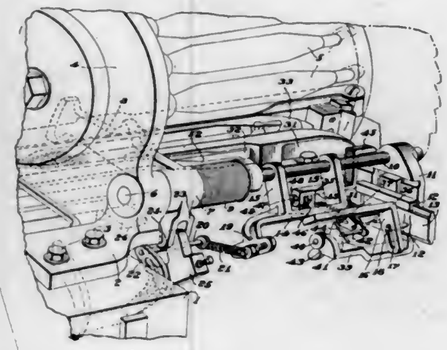
6. In a machine for manufacturing spherical glass bodies, a pair of oppositely arranged rolls having at the working point opposing peripheral grooves; lands at the sides of the grooves, said grooves being disposed out of coincidence with each other with a portion of one of the lands on one of the rolls lying directly opposite a portion of the groove on the opposite roll; means for simultaneously rotating said rolls upwardly and downwardly at their respective working points, the groove on the upwardly moving roll being shallower than the groove on the downwardly moving roll, the said opposite arrangement and the difference in depth of said grooves comprising means whereby the formation of the gob is accelerated and rotation about a single axis prevented.

1,761,624. PROCESS OF PREPARING COLORING MATTER OF THE DIBENZANTHRONE SERIES. IVAN GUBELMANN, ROBERT J. GOODRICH, and EDWARD T. HOWELL, South Milwaukee, Wis., assignors to The Newport Company, Carrollville, Wis., a Corporation of Delaware. Filed July 7, 1928. Serial No. 291,133. 8 Claims. (Cl. 260—61.)

1. The process of preparing coloring matters of the dibenzanthrone series, which comprises treating oxidized dibenzanthrone with ethylene dibromide in the presence of an alkali metal salt of a weak organic acid stronger than carbonic acid.

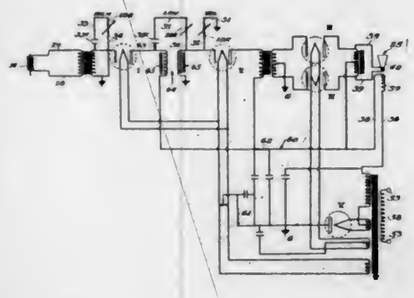
1,761,625. THREAD-PARTING MECHANISM FOR FILLING REPLENISHING LOOMS. FRANK HARRIS, Baltimore, Md., assignor to Draper Corporation, Hopedale, Mass., a Corporation of Maine. Filed Apr. 9, 1929. Serial No. 353,713. 6 Claims. (Cl. 139—263.)

1. In a filling replenishing loom, the combination of transferring mechanism for renewing the filling in the shuttle, a thread parter mounted at the front of the loom to part the outgoing thread between the ends of the shuttle, a carrier for the thread parter movable on call for replenishment of filling to position the parter to part the thread, means mounted in fixed position along the path of the parter for opening the parter before it reaches



thread parting position, and thread parter closing means mounted in fixed position rearwardly of the parter opening means and comprising a one-way rocking trip adapted to actuate the thread parter to part the thread between the ends of the shuttle by frontward movement of the parter relative to the parter closing means.

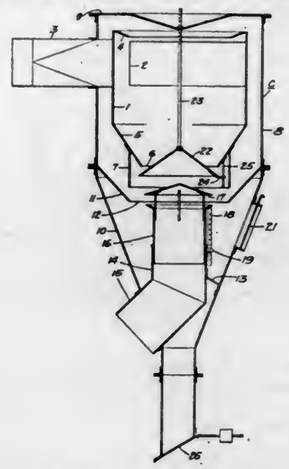
1,761,626. HIGH AND LOW AUDIOFREQUENCY AMPLIFICATION CONTROL. ROY W. HARVEY, Chicago, Ill. Filed May 11, 1928. Serial No. 277,014. 9 Claims. (Cl. 179—171.)



1. In an audio frequency amplifier system, means for controlling the amplification of the volume throughout the entire frequency range, means for varying the amplification of low frequency without appreciably affecting the high frequencies and means for varying the amplification of high frequencies without appreciably affecting low frequencies.

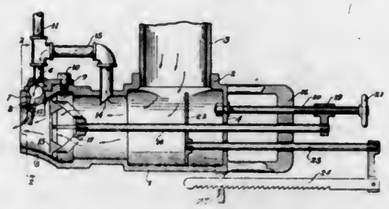
1,761,627. MATERIAL CLASSIFIER. CHARLES F. HINE, San Francisco, Calif. Filed Mar. 6, 1928. Serial No. 259,400. 4 Claims. (Cl. 209—144.)

1. The method of classifying a subdivided solid material conveyed in a vehicular fluid comprising conveying said material in the fluid, substantially separating said material from said fluid, dispersing said separated mate-



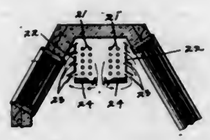
rial, classifying said dispersed material in conjunction with said separated fluid, and receiving said separated fluid carrying a portion of said classified material.

1,761,628. RECUPERATIVE OIL BURNER. ROBERT C. HOPKINS, Alliance, Ohio. Filed Oct. 1, 1925. Serial No. 59,879. 7 Claims. (Cl. 158—76.)



1. An oil burner including a casing having a nozzle at one end, an oil reservoir in the wall portion of the nozzle, an open trough extending from and communicating with the reservoir and extending into the nozzle, said trough being spaced at its sides from the walls of the nozzle and means for producing a blast of air through the nozzle.

1,761,629. COMBINATION DRIP PAN AND BAFFLE MEMBER FOR REFRIGERATING CASES. HOWARD M. HUNT, Huntington Park, Calif., assignor to Smoot-Holman Co., Inglewood, Calif. Filed July 11, 1928. Serial No. 291,732. 5 Claims. (Cl. 62—89.6.)



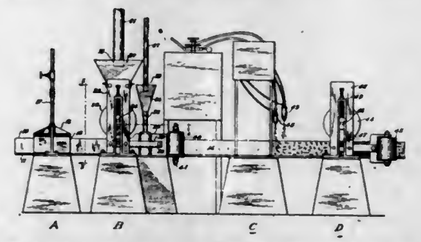
1. In combination with a refrigerating case having a restricted and tapering top portion and refrigerating coils therein, of baffle means along one side of said coils for directing air outside of said coils upwardly over the top of said coils and downwardly therethrough in direct contact therewith, said baffle means having openings therethrough at different levels opposite said coils, substantially as described.

1,761,630. CLOTHESPIN. GEORGE H. JENTZEN, Jersey City, N. J. Filed Aug. 16, 1927. Serial No. 213,288. 1 Claim. (Cl. 24—138.)



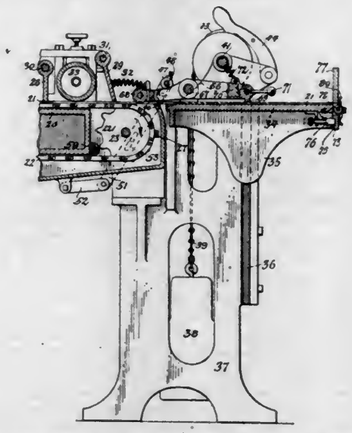
A clothes pin having a body, a split therein, and a series of inclined grooves formed in each of the legs resulting from said split, each of the grooves being of a size to receive a clothes line and adapted to give said split greater holding power to any object placed over the clothes line in the split.

1,761,631. CLAY TEXTURING AND COLORING APPARATUS. ROBERT B. KEPLINGER, Canton, Ohio, and PAUL A. KANENGEISER, Bessemer, Pa., assignors to The Metropolitan Paving Brick Company, Canton, Ohio, a Corporation of Ohio. Filed Mar. 28, 1928. Serial No. 265,398. 8 Claims. (Cl. 25—1.)



1. In apparatus for texturing clay products which includes means for moving a clay column, a sled including a plane inner surface adapted for being pressed against the side of the moving column, and a curved inner surface connecting with the plane surface and forming with the side of the moving column a reservoir for comminuted material.

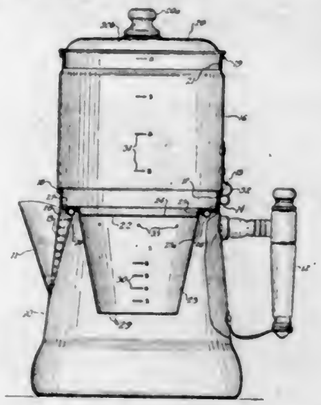
1,761,632. PLATE-STACKING MECHANISM. ANDREW R. KOEHLER, Buffalo, N. Y. Filed Mar. 16, 1927. Serial No. 175,904. 14 Claims. (Cl. 214—6.)



1. A plate stacking mechanism, comprising a frame, a stacking table guided on the frame for vertical movement,

means for delivering plates to the table, means for yieldingly holding said table in an elevated position, and depressing means for successively lowering said table to the same extent as the thickness of each plate as the same is delivered upon the table, said depressing means including a deflectable member which is shifted by engagement with each plate a distance corresponding to the thickness of the respective plate, and a depressing member which is connected with said deflectable member and bears against the top of said table or against a plate resting thereon and is actuated by said deflectable member to depress the table a distance equal to the thickness of the plate to be piled on the table.

1,761,633. DRIP-COFFEE MAKER. RICHARD F. KRAUSE, Massillon, Ohio. Filed Dec. 9, 1929. Serial No. 412,718. 6 Claims. (Cl. 53—3.)



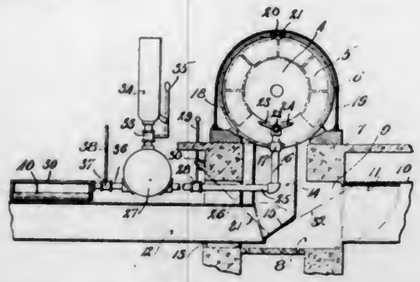
1. A drip coffee maker including a water reservoir having a reduced, central, depending portion in its bottom wall having apertures therein, and a coffee container, of smaller diameter than the water reservoir, arranged to have its upper open end frictionally fit upon the reduced portion of the reservoir, the coffee container having a perforate bottom wall.

1,761,634. EGG BEATER. HENRY G. KUCK, Peoria, Ill., assignor to Stuber & Kuck Co., Peoria, Ill., a Corporation of Illinois. Filed Jan. 28, 1929. Serial No. 335,489. 2 Claims. (Cl. 259—131.)



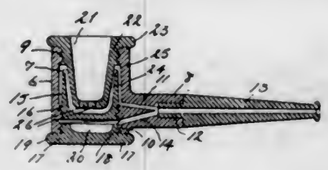
1. A beater structure including a handle-frame portion having a drive wheel journaled thereon, a beater-element leg, a beater-element journaled on the leg including a pinion to engage the drive wheel, and a part for attachment thereto of said handle-frame portion, and constituting a lid or cover for a vessel to contain material to be treated, said handle-frame portion being substantially straight and paralleling the drive-wheel, the same having an outwardly extended part leading away from the said drive-wheel substantially at right angles to the plane thereof, and thence extended substantially parallel to the plane of the wheel and attached to the said lid or cover, said pinion lying in the angle of the frame thus formed, said beater-element leg extending through the outwardly extending part and held thereby, its extremity paralleling and abutting the straight portion of the frame portion and affixed thereto.

1,761,635. ELECTRICAL APPARATUS. FREDERICK W. LYLE, Waltham, Mass., assignor to Beacon Accessories Corporation, a Corporation of Massachusetts. Filed Mar. 19, 1923. Serial No. 625,936. 8 Claims. (Cl. 171—252.)



1. That process of safeguarding against fire hazards electrical apparatus insulated by material which melts above the normal operating temperature of said apparatus which comprises discharging into direct heat exchanging relation to said material only upon occurrence of temperatures causing destruction of said insulating material a gas which is incombustible and a non-supporter of combustion cooled below room temperature.

1,761,636. TOBACCO PIPE. PASQUALE MANCUSI, Philadelphia, Pa. Filed May 19, 1928. Serial No. 279,070. 3 Claims. (Cl. 131—12.)

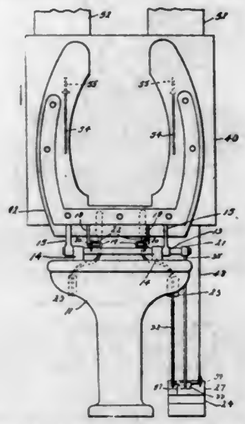


3. A tobacco pipe including a bowl open from end to end, a stem, a tobacco bowl removably mounted in the upper end of the bowl being spaced from the pipe bowl, a cup partition removably mounted in the pipe bowl through the lower end of the latter and positioned to provide spaces between said partition and the lower end of the tobacco bowl and the lower end of the pipe bowl, the interior of said partition being of greater diameter than that portion of the tobacco bowl surrounded thereby and having a smaller exterior diameter than the interior diameter of the pipe bowl thereby providing a circuitous passage from the lower perforated part of the tobacco bowl to a hole through the stem, and a recessed closure removably mounted in the lower end of the pipe and spaced from the bottom wall of the partition to provide a communication between the recess in the closure and another hole in the pipe stem.

1,761,637. DEVICE FOR APPLYING PROTECTORS TO TOILET SEATS. HENRY MÜLLER, Philadelphia, Pa. Filed June 27, 1929. Serial No. 374,014. 8 Claims. (Cl. 4—237.)

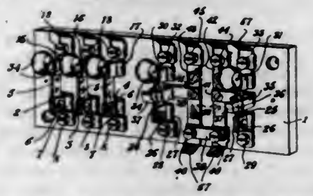
1. In a device of the character described, a pronged seat; strippers carried by said seat; a pintle rod, means for actuating the strippers by the rotation of the pintle rod; a crank secured upon the pintle rod, a compound treadle consisting of a member to be actuated by foot, a second member pivoted to the first named member, and a third member hinged to the first named member, a rod connecting said crank with the third member of the treadle, a latch fin carried by said third member, a pivoted latch carried by the first member of the treadle, said latch having

a notch to be engaged by said fin; a tappet for normally holding the latch out of engagement with the fin while permitting it to engage therewith during the initial depression of the foot-actuated member of the treadle, whereby the said third member of the treadle will be brought into action to rotate the pintle rod, means for disengaging



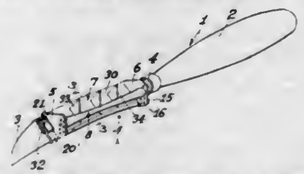
the latch from the fin near the completion of the depression of the foot actuated member; a counter-weighted arm secured to the seat, means for flexibly connecting said arm with the second member of the treadle, and means also connected with the second member of the tradle for flushing the toilet when the foot member of the treadle is depressed.

1,761,638. METER-TESTING SWITCH. THOMAS J. NEWMAN, Canton, Ohio, assignor to The Superior Switchboard & Devices Company, Canton, Ohio, a Corporation of Ohio. Filed July 26, 1924. Serial No. 728,504. 2 Claims. (Cl. 175—183.)



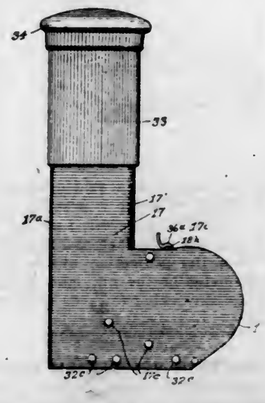
1. A switch of the character described including an insulation base, a bus bar upon the base, wire terminals connected to both ends of the bus bar, an angular bar connected to the bus bar, a yoke mounted upon the angular bar, contact jaws upon the yoke, a pair of spaced terminals adjacent to the bus bar, contact jaws upon one of said terminals and a switch blade pivoted to the other terminal and arranged to selectively engage either of said contact jaws, the contact jaws upon the yoke having an angular flange forming a short circuit clip.

1,761,639. VEGETABLE KNIFE. JACOB NORTHCUTT, Huntington Beach, Calif. Filed Mar. 23, 1927. Serial No. 177,774. 7 Claims. (Cl. 146—210.)



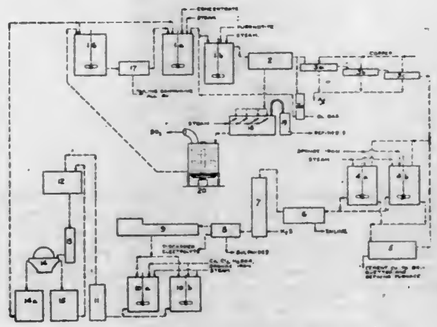
6. In combination with a knife blade, a guard disposed in spaced parallel relation to the edge of the blade serving to limit the thickness of a slice that may be cut by the knife blade, and a series of knives extending outwardly from the knife blade and arranged behind the guard for cutting up the slice.

1,761,640. STAPLING DEVICE. CARL A. PALMGREN, Chicago, Ill. Filed Mar. 3, 1928. Serial No. 258,923. 12 Claims. (Cl. 1—48.)



1. In the combination of a stapling device, a hammer, a staple driving part, a member upon which sections of a strip of stapling material rests while said sections are being severed from said strip and having a cutting edge thereon cooperating with the cutting edge of the driving member, a driving spring, an operating handle, means operated by said handle for compressing said driving spring consisting of a mechanism for increasing the force applied to said operating handle, means for releasing the compression of said driving spring for the purpose of driving a staple, a retracting spring cooperating with said compression mechanism for retracting said hammer, and means operated by said handle for feeding sections of a stapling strip.

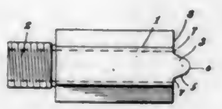
1,761,641. METALLURGICAL PROCESS. ROBERT D. PIKE, Piedmont, Calif. Filed Feb. 11, 1926. Serial No. 87,509. 20 Claims. (Cl. 204—15.)



1. A cyclic process for treating sulphide ores for recovery of their metallic content which consists in leaching with a hot solution containing ferric chloride, precipitating from said solution substantially all metals except iron, adding calcium chloride to the solution, electrodepositing iron and regenerating the ferric chloride leach, roasting the tails from the leaching operations, leaching the cinders from the roast with all or a portion of the regenerated ferric leach before said leach is returned to the first-

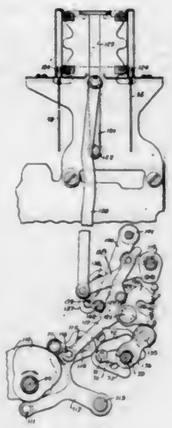
mentioned leaching operation, and so controlling the oxidation of sulphur to sulphate in the cycle that sufficient of the latter ion will be formed to precipitate impurities which form relatively insoluble sulphate compounds.

1,761,642. APPARATUS FOR FORMING NUTS. CHARLES R. ROOF, Baltimore, Md. Filed Nov. 15, 1927. Serial No. 233,879. 1 Claim. (Cl. 10—76.)



In a tool for making nuts, provided with forming and cutting off parts either of which is provided with a crowning face and comprising a recess forming bead placed diametrically across the said face and having an extreme width greater than the projection of the bead and less than the bore diameter of the nut, and having elongated sides progressively converging towards each other.

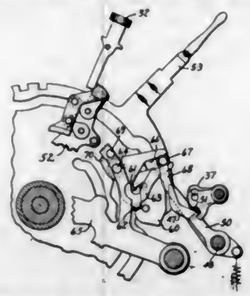
1,761,643. INDICATING MECHANISM FOR CASH REGISTERS. BERNIS M. SHIPLEY, Dayton, Ohio, assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio, a Corporation of Maryland. Filed Oct. 31, 1925. Serial No. 66,056. 13 Claims. (Cl. 235—23.)



1. The combination of a plurality of totalizers, actuators for said totalizers, means for engaging and disengaging the totalizers relatively to the actuators, normally concealed indicators for displaying the amounts entered into said totalizers, means for shifting said indicators into visible positions, and means operated by certain of said totalizers when being engaged with the actuators, for disabling said shifting means.

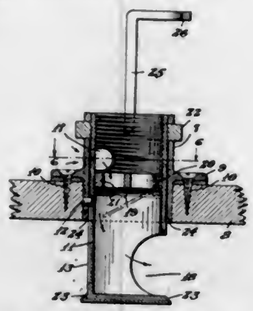
1,761,644. CASH REGISTER. BERNIS M. SHIPLEY, Dayton, Ohio, assignor to The National Cash Register Company, Dayton, Ohio, a Corporation of Maryland. Filed May 24, 1926. Serial No. 111,308. 6 Claims. (Cl. 235—7.)

1. In a machine of the class described, a multiple item key, means for retaining said key in depressed position, a manipulative total control means having an "add" position, a "multiple item total-taking" position, and other



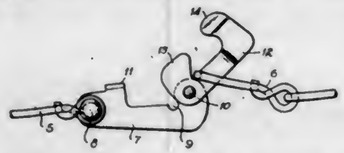
total-taking positions, and means for preventing movement of said manipulative total control means into said other total-taking positions after said key is depressed.

1,761,645. AUTOMATIC BAILER. WILHO SOSOLEW, Viipuri, Finland. Filed Apr. 22, 1929, Serial No. 357,323, and in Finland Aug. 8, 1928. 10 Claims. (Cl. 114—185.)



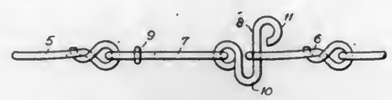
1. In an automatic bailer, the combination with a spout having an intake inside the boat, an outtake outside the boat, and a check-valve intermediate the intake and outtake, of interfitting tube means permanently fastened to the boat for slidably securing the spout, said spout and means being relatively movable to one position for housing the outtake in an inoperative position and having cooperating surfaces to seal the end of the spout outside the boat when the portion containing the check valve is projected within the boat.

1,761,646. CHAIN FASTENER. ALBIN A. THOMAS, York, Pa., assignor to United States Chain & Forging Company, Pittsburgh, Pa., a Corporation of Delaware. Filed May 18, 1929. Serial No. 364,199. 9 Claims. (Cl. 24—68.)



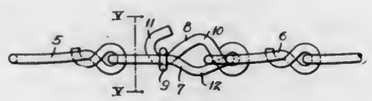
1. A chain fastener comprising a connecter bar having a cut-out portion intermediate its ends, means at its forward end for connection to a chain link, a latch lever pivotally connected to the rear end of the bar and having its rear portion disposed against one side of the bar, and a tongue portion at the forward end of the lever, the lever being laterally deflected intermediate its ends and extending over said cut-out portion to permit movement of said tongue portion into position against the other side of the bar when the lever is closed.

1,761,647. CHAIN FASTENER. ALBIN A. THOMAS, York, Pa., assignor to United States Chain & Forging Company, Pittsburgh, Pa., a Corporation of Delaware. Filed May 18, 1929. Serial No. 364,200. 3 Claims. (Cl. 24—69.)



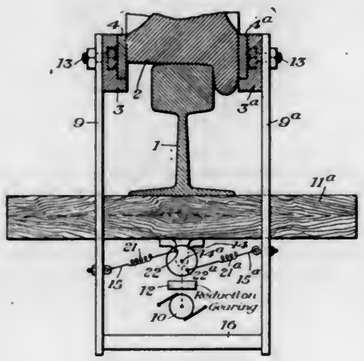
1. A chain fastener comprising a connecting link of elongated loop form, a latch lever pivotally connected at one of its ends to one end of said link and having its free end movable between and to a point below the sides of the loop, and a keeper of yoke-like form having each of its ends partially embracing one side of the loop and slidable longitudinally of the loop in position above the free end of the lever when said lever is in closed position.

1,761,648. CHAIN FASTENER. ALBIN A. THOMAS, York, Pa., assignor to United States Chain & Forging Company, Pittsburgh, Pa., a Corporation of Delaware. Filed June 22, 1929. Serial No. 373,010. 5 Claims. (Cl. 24—69.)



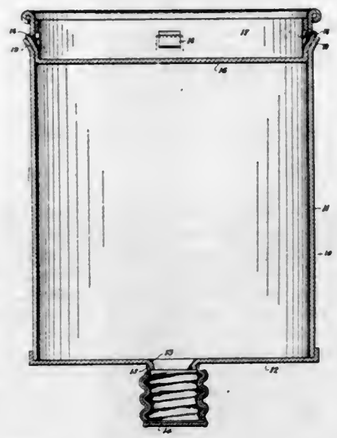
1. A chain fastener comprising a connecting link, a latch lever pivotally connected to said link, and means for releasably holding said latch lever in closed position, the said lever and link being oppositely offset at points adjacent to their point of pivotal connection, to form a seat for a link that is to be connected to said fastener.

1,761,649. CAR RETARDER. ALBERT L. VENCILL, Pittsburgh, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Apr. 25, 1925. Serial No. 25,775. 5 Claims. (Cl. 188—62.)



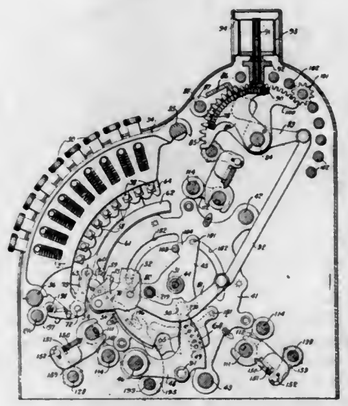
1. A car retarder comprising a pair of retarder bars mounted on opposite sides of a car wheel, a pair of resilient operating arms one attached to each bar, means co-acting with said arms at points a considerable distance from said bars for drawing the arms together, and a rotating electric motor for operating said means.

1,761,650. GREASE CAN. EARL WAYNE BEARDSLEY and RAY WILSON BEARDSLEY, Loudonville, Ohio, assignors to The Ohio Grease Company, Loudonville, Ohio, a Corporation of Ohio. Filed Nov. 20, 1926. Serial No. 149,679. 1 Claim. (Cl. 206—56.)



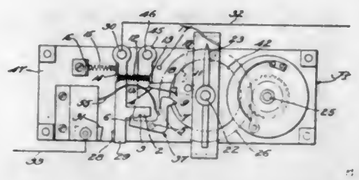
A grease can and the like including a can body having a smooth inner surface, an end having an opening therein and a removable closure for the opening, a plunger end in the can body adapted for movement therein for ejecting grease and the like from the can through the opening, and tongues on the plunger end cooperating with openings in the can body for normally preventing withdrawal of the plunger end from the can body.

1,761,651. CASH REGISTER. SAMUEL BRAND, Dayton, Ohio, assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio, a Corporation of Maryland. Filed Feb. 2, 1924. Serial No. 690,239. 39 Claims. (Cl. 235—7.)



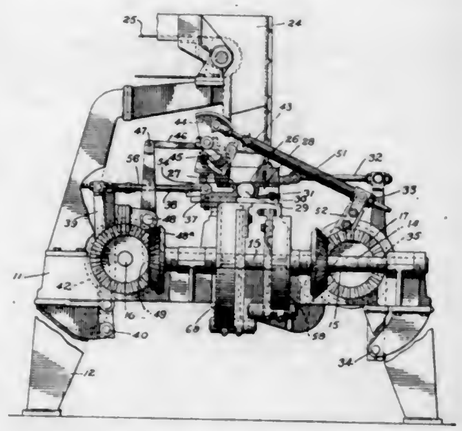
30. In a machine of the class described, the combination with an actuator; and a driving member therefor; of a latch to connect the actuator and its driving member, and shiftable in opposite directions from its normal intermediate position; and devices manipulative at will to effect the shifting of the latch in one direction or the other to disconnect the actuator from its drive member.

1,761,652. ELECTRIC TIME SWITCH. DANIEL L. CHANDLER, Boston, Mass., assignor to Champ Electric Company, Boston, Mass., a Corporation of Massachusetts. Filed July 13, 1926. Serial No. 122,131. 5 Claims. (Cl. 200—39.)



1. A device of the character described having a fixed contact member, a pivotally mounted switch arm carrying a contact member, a spring tending to move the said pivoted arm to bring the contact member carried thereby into engagement with the fixed contact member, a second spring of less power than the first spring tending to actuate the movable arm to break the contact, a pivoted locking lever and a spring adapted to actuate said locking lever, said movable switch arm having two separate locking portions with one of which said locking lever is adapted to engage when the switch is closed and with the other of which the locking lever is adapted to engage when the switch is open and thereby to lock the switch in its respective closed and opened positions.

1,761,653. CAN-FILLING MACHINE. FREDERICK CLARK, Alameda, Calif., assignor to Alaska Packers Association, San Francisco, Calif., a Corporation of California. Filed Jan. 10, 1927. Serial No. 160,075. 3 Claims. (Cl. 226—101.)



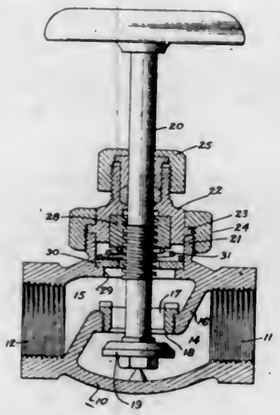
1. In a machine of the character described, a frame, spaced parallel transverse cam shafts mounted on the frame at opposite end portions thereof and provided with cams, a measuring box located between the transverse shafts, a stationary block positioned beneath the measuring box at one side of the center thereof, a reciprocable block at the other side of the center of the measuring box, said blocks forming opposite walls of a compression chamber, an upper knife reciprocably mounted intermediate the measuring box and the stationary block, a lower knife carried by the reciprocable block, means for operatively connecting the reciprocable knife and the reciprocable block with the cams of the proximate shafts, and means for rotating the cam shafts.

1,761,654. REFRACTOR BOWL. GEORGE H. COLE, Milwaukee, Wis., assignor, by mesne assignments, to Line Material Company, South Milwaukee, Wis., a Corporation of Delaware. Filed July 5, 1928. Serial No. 290,466. 2 Claims. (Cl. 240—106.)



1. A refractor bowl formed of glass of equal thickness throughout and having its surface composed of a multiplicity of substantially diamond shaped pyramids arranged with their major axes substantially vertical and whereby the rays of light are broken up and the resistance of the outer surface of the bowl to rain is considerably reduced.

1,761,655. BONNET CONSTRUCTION FOR SELF-GRINDING VALVES. LLOYD D. COLLAR, Berkeley, Calif., assignor to Collar Valve Corporation, Berkeley, Calif., a Corporation of California. Filed July 18, 1928, Serial No. 293,571. Renewed Feb. 25, 1930. 3 Claims. (Cl. 251—38.)

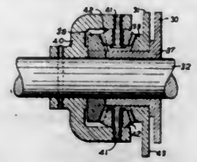


2. A bonnet construction for a valve of the character described, said bonnet construction including a bonnet adapted to be clamped on a valve body, the inner end of said bonnet being cylindrically bored and then broached to form a cylindrical chamber having six parallel grooves at equally spaced distances apart, a stem block formed of hexagonal stock reciprocably mounted in the bore with its corners engaging the grooves to keep the block from revolving in the bonnet.

1,761,656. CASH REGISTER. ARTHUR R. COLLEY, Dayton, Ohio, assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio, a Corporation of Maryland. Filed June 4, 1924. Serial No. 717,747. 6 Claims. (Cl. 235—1.)

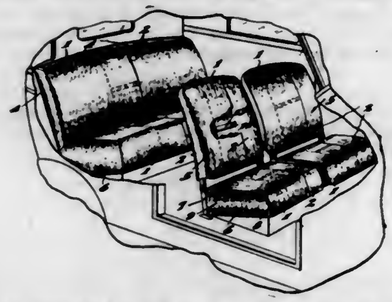
1. In a machine of the class described, the combination of a pair of wheels of corresponding denomination,

the members of which pair of wheels lie closely adjacent each other; a supporting rod for the pair of wheels and relatively to which the wheels rotate; a driving connection between the wheels, including a sleeve attached to



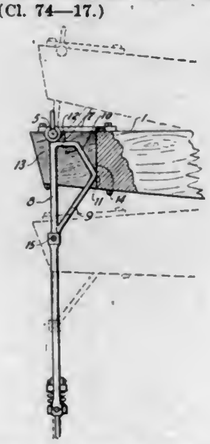
one of the wheels and projecting through the other of the wheels; a gear on the sleeve; a gear on the wheel through which the sleeve projects; a beveled pinion in mesh with the gears; and means secured to the supporting rod on one side of the pair of wheels, to support the pinion.

1,761,657. REMOVABLE SEAT COVER. ALBERT W. CONNOR and SIDNEY H. SCHWARTZ, Cincinnati, Ohio, assignors to The Biltmore Ero Manufacturing Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Apr. 14, 1928. Serial No. 270,120. 4 Claims. (Cl. 155—182.)



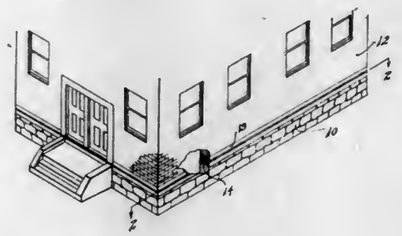
4. An extensible cover for a cushion, comprising sections, each section adapted to enclose respectively opposite portions of the cushion for covering the top and sides thereof and including a margin adapted to be turned under the cushion, and a draw string in said margin having its loose ends disposed inwardly for attachment to the cushion whereby the sections may be drawn inwardly into overlapped relation about the cushion.

1,761,658. BEAM HANGER. CLINT M. COPELAND, Marland, Okla. Filed July 13, 1927. Serial No. 205,386. 5 Claims. (Cl. 74—17.)



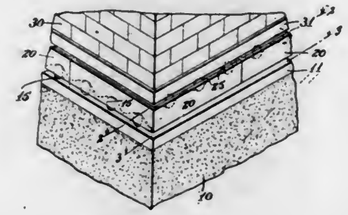
1. A beam hanger comprising a rod having means for attachment to a walking beam having a slot in its end, a rearwardly projecting elbow-shaped camming portion on the rod to bear against the base of the slot in the walking beam and means for attaching the rod to a polish rod.

1,761,659. BUILDING CONSTRUCTION (QUAKEPROOF BUILDING). FRANK D. CUMMINGS, Los Angeles, Calif. Filed Jan. 18, 1928. Serial No. 247,607. 1 Claim. (Cl. 72—77.)



A structure divided with horizontal foundation cleavage and provided at the cleavage with anti friction bearing devices; adjustable means associated with one member of a bearing for adjustment of said member vertically with respect to the building and the other member, thereby to set the position of that bearing for carrying load equally with other bearings.

1,761,660. BUILDING CONSTRUCTION (QUAKEPROOF BUILDING). FRANK D. CUMMINGS, Los Angeles, Calif. Filed Oct. 16, 1928. Serial No. 312,849. 12 Claims. (Cl. 72—77.)

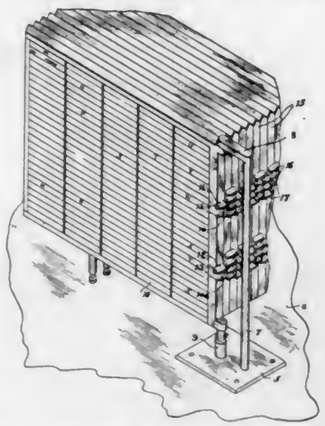


9. A structure having two horizontal foundation cleavages with load-supporting rollers at each cleavage, all rollers in the same cleavage being parallel and being at a substantial angle to those in the other cleavage.

1,761,661. FILING APPLIANCE. WILLIAM E. DUNNING and JACOB BACHOFEN, Alliance, Ohio, assignors to The McCaskey Register Company, Alliance, Ohio, a Corporation of Ohio. Filed Oct. 27, 1926. Serial No. 144,620. 3 Claims. (Cl. 40—102.)

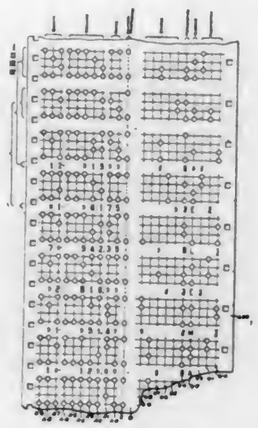
1. A filing appliance including a base, an upright support on the base, a series of upright holders hinged to-

gether at their rear ends for swinging apart at their forward ends mounted on the support and sliding means on



each holder cooperating with the base for holding the holders in any position to which they are swung relative to each other and to the base.

1,761,662. AUDITING MACHINE. MAXIMILIAN M. GOLDBERG, Dayton, Ohio, assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio, a Corporation of Maryland. Filed Feb. 26, 1923. Serial No. 621,286. 136 Claims. (Cl. 235—58.)

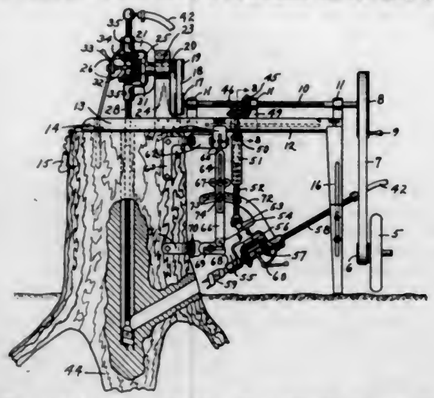


1. In a machine of the class described, the combination of groups of totalizers, means for selecting any totalizer in any group, means for restoring the selected totalizer to zero, a plurality of recording devices one for each group of totalizers, and means for selecting the device associated with the group from which the totalizer is selected.

107. In a machine of the class described, the combination of a plurality of totalizers, a control strip, means controlled by said strip for selecting totalizers in any order for restoring them to zero, and electro-magnetic means for recording the totalizers as selected.

1,761,663. BORING MACHINE. MILTON C. GRAY, Spokane, Wash. Filed July 2, 1929. Serial No. 375,509. 2 Claims. (Cl. 144—104.)

1. A stump boring machine comprising a frame with a bifurcated end portion adapted to be mounted on the top of a stump, adjustable legs for said frame, a main operating shaft, a spool bevel gear, means for shifting said gear into direct reverse or neutral with relation to the main shaft, a worm shaft, a detachable bit for said worm



shaft, means for adjusting the direction of the worm shaft, another worm shaft having a detachable bit directed to bore holes in the side of the stump, and said last named worm shaft adjustably geared to the main shaft.

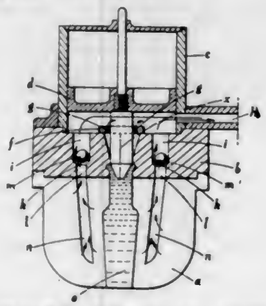
1,761,664. NOSE PROTECTOR. HARRY G. HARRIS, Los Angeles, Calif. Filed Sept. 26, 1928. Serial No. 308,405. 1 Claim. (Cl. 2—206)



As a new article of manufacture, a nose protector comprising a substantially triangular section of thin flexible material bent to fit over and cover the nose and the lower corners of which section of material are rounded and bent inwardly to approach each other and engage in the recesses between the lower portions of the sides of the nose and the cheeks of the wearer

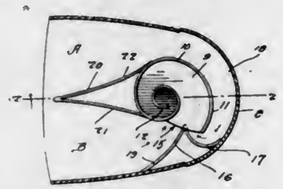
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1,761,665. GLASS-BLOWING MACHINE. HANS HILLMANN, Dresden-Strehlen, Germany, assignor to The Hillman Syndicate, Limited, London, England. Filed June 10, 1929, Serial No. 369,853, and in Germany June 22, 1928. 8 Claims. (Cl. 49—5.)



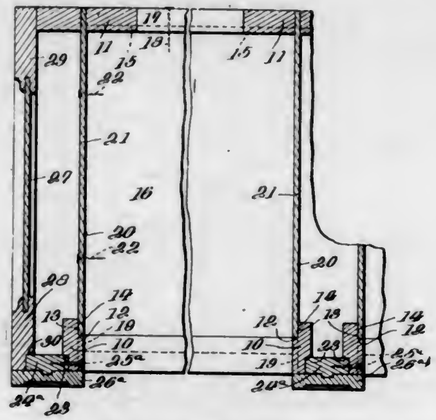
5. In a glass-blowing machine, the combination of a divided blank mould having passages disposed in the divisional planes, a coacting divided neck mould having bores to align with said passages and a central opening to align with the mould cavity, a cylinder surmounting said neck mould to form a common space in communication with said bores and central opening, means for alternately connecting said space with a source of suction and with a source of supply of pressure air, valves for automatically closing said passages during the air supply, a piston slidable in said cylinder, and a plug carried by said piston.

1,761,666. EAR TRUMPET. HERMAN D. HINTERNESCH, Baltimore, Md. Filed May 17, 1929. Serial No. 363,915. 12 Claims. (Cl. 181—25.)



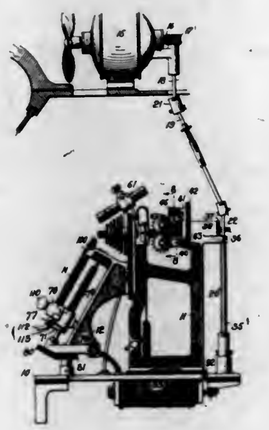
1. An ear trumpet of the class described comprising a casing open at one end, said casing having its end remote from the opening curved, a centripetal air chamber arranged within the casing with one end opening into the casing and with one of its walls disposed in spaced relation from the curved end of said casing to form an air passage communicating with the open end of the chamber, a partition arranged within the casing for directing sound waves from said air passage into the opening of the air chamber, said casing having a discharge port formed therein and communicating with the center of said air chamber, a tubular extension attached to said discharge port and a rubber nipple carried at the end of said extension for snugly fitting within the ear orifice, said nipple having a reduced opening at its discharge end.

1,761,667. SHOE SHELVING. WILLIAM T. HORMES, Baltimore, Md. Filed May 2, 1928. Serial No. 274,602. 10 Claims. (Cl. 211—148.)



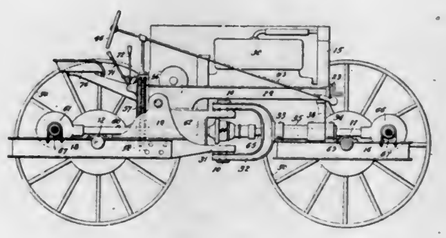
1. A shelving structure comprising front spacer strips each having one longitudinal face provided with a transverse groove, a shelf having a widened front portion coextensive with and extended into said grooves, one corner of each strip adjacent to said shelf having a cutaway portion to provide a recess between the edge of the shelf and said strip, means for supporting the rear portion of said shelf, and end walls engaging said shelf and each having a front edge fitting in one of said recesses.

1,761,668. SEARCHLIGHT. FRANK R. HOUSE, Baldwin Harbor, Long Island, N. Y., assignor, by mesne assignments, to Sperry Gyroscope Company, Inc., a Corporation of New York. Filed Mar. 19, 1924. Serial No. 700,385. 13 Claims. (Cl. 176—51.)



1. In a searchlight having a pair of electrodes, means for rotating one of said electrodes, means operated from said first-named means for feeding said electrode, and means for driving said rotating means at a less rate than that necessary to feed the electrode to compensate for the normal rate of consumption thereof, and for feeding said electrode at faster rate when the tip thereof has burned back a predetermined degree.

1,761,669. TRACTOR. CHARLES O. HOWARD, Columbus, and FRANK M. BLAIR, Newark, Ohio. Filed Oct. 26, 1925. Serial No. 64,875. 9 Claims. (Cl. 180—50.)

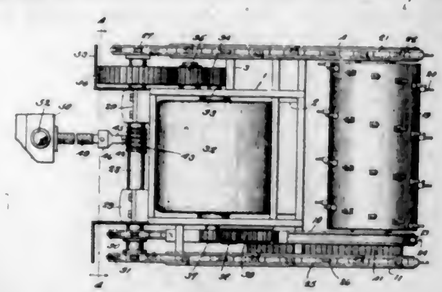


1. In a tractor, a pair of pivoted trucks, a superstructure pivotally carried by one of said trucks and resting on a non-resilient support carried by the other truck characterized by said support having pivotal movement in one truck and being constrained to tilt with the other truck.

1,761,670. MINING MACHINE. CHARLES ROBERT HUGHES, Altoona, Pa. Filed Apr. 4, 1928. Serial No. 267,327. 6 Claims. (Cl. 262—5.)

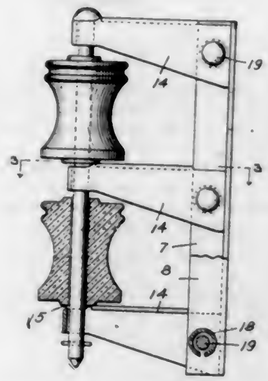
2. A mining machine including a frame, a shaft journaled therein, a drum mounted for rotation with the shaft, cutting elements extending from the periphery of the drum, bearings for the shaft adjacent the ends of the drum, arcuate guides concentric with the shaft ad-

jacent the bearings cut in chains slidably mounted on the guides, and means remote from the drum for actu-



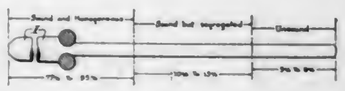
ating the chains to slide along the guides, said means being located to travel in the path cut by the drum and chains.

1,761,671. SECONDARY RACK. NORRIS C. HUSTED, Niles, Ohio. Filed Dec. 3, 1923. Serial No. 678,128. 5 Claims. (Cl. 173—321.)



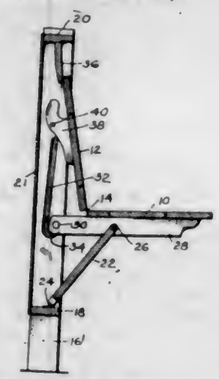
5. In a secondary rack, two angle sections arranged in reverse, parallel and spaced relation to form a rack base having a flat back and a longitudinal channel flanked on opposite sides by the adjacent forwardly projecting legs of said sections, support arms extending outwardly from the base and arranged so that their inner ends straddle said forwardly projecting legs so as to bear against the legs of the sections extending at an angle to the forwardly projecting legs, securing means extending through the ends of said arms and the forwardly projecting legs of the sections and means for mounting insulators between the outer ends of said support arms.

1,761,672. MANUFACTURE OF RAILS AND TIE PLATES. JAMES D. JONES, Sault Ste. Marie, Ontario, Canada, assignor to Emil Gathmann, Baltimore, Md. Filed Dec. 7, 1926. Serial No. 153,066. 2 Claims. (Cl. 80—60.)



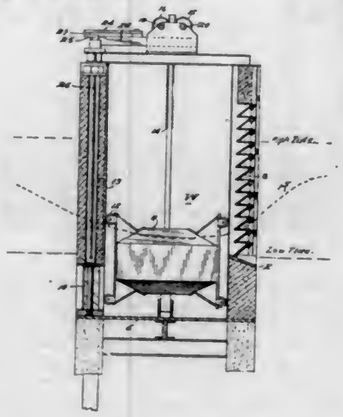
2. The method herein described of producing rails and tie plates from ingots containing less than 10% by weight of phyhically unsound structure and less than 25% by weight of relatively highly segregated structure, which consists in discarding and scrapping the physically unsound portion of the bloom and rolling that portion of the bloom which is physically sound but relatively highly segregated into relatively small tie plates and rolling that portion of the bloom which is both physically sound and substantially chemically homogeneous into rails without reheating the bloom in the formation of tie plates.

1,761,673. FOLDING SEAT. BRUNO LAURIS LAURSEN, Dunedin, Fla., assignor, by mesne assignments, of forty-eight per cent to Clearwater Lumber Company, Incorporated, Clearwater, Fla., a Corporation of Florida. Refile for application Serial No. 185,971, filed Apr. 23, 1927. This application filed Apr. 11, 1928. Serial No. 269,292. 3 Claims. (Cl. 155—83.)



1. In a device of the class described, in combination with a unit having a horizontal operative position and a vertical inoperative position, a stationary upright member having spaced uprights and grooves at opposed sides thereof, each groove with a lower short section extending forwardly at substantially the level of said unit when in operative position and then upwardly and also with a long section extending upwardly from the rear end of the short section and inclined toward the front of the upright member, means on said unit to engage said grooves of said upright member, means for supporting said unit in operative position, and a back for the unit having an inclined operative position and a vertical inoperative postion.

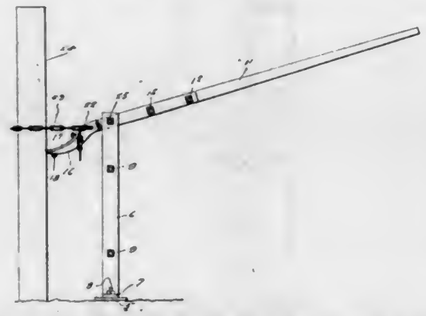
1,761,674. WAVE MOTOR. WILLIAM W. MALLOY, San Pedro, Calif. Filed Apr. 25, 1928. Serial No. 272,765. 6 Claims. (Cl. 253—9.)



1. Power conserving apparatus including an impounding well in a body of water subject to wave

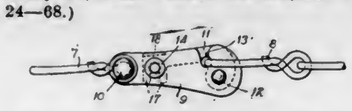
action, a buoyant body vertically operative in the well, check valve means in the wave side of the well to freely admit of wave inflow to submerge the said body, and means in the opposite side to discharge the trapped water, said check valve and discharge means being wholly independent of each other.

1,761,675. POST PULLER. JOHN N. MICK, Van Meter, Iowa. Filed Apr. 19, 1929. Serial No. 356,489. 1 Claim. (Cl. 254—132.)



In an apparatus of the class described, a base, a standard rising from the base, a handle pivoted to the standard, a pair of shanks fixed to opposite sides of the handle extending therebeyond at one end and merging into diverging extensions which in turn merge into curved terminals, a curved plate fixed across the terminal, the outer edge of said curved plate being sharpened, an eye on one of the extensions, a hook on the other extension, a chain engaged with said eye and engageable with said hook, a pair of bolts engaged with the plate and extending through the terminals and a second pair of bolts engaged with the plate and having hooked extensions engaging under the terminals, said standards comprising a pair of spaced parallel members rising from the base, spacing collars disposed between intermediate portions of the members, the handle and shanks being pivotally mounted between the upper extremities thereof.

1,761,676. CHAIN FASTENER. CHARLES H. MILLER, York, Pa., assignor to United States Chain & Forging Company, Pittsburgh, Pa., a Corporation of Delaware. Filed May 18, 1929. Serial No. 364,075. 4 Claims. (Cl. 24—68.)

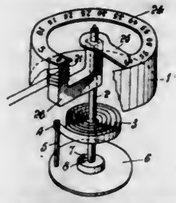


1. A fastener comprising a connecter bar, a lever pivotally mounted on said bar, a pin extending through said bar, a spring for holding one end of the pin in laterally spaced relation to one side of the bar, a shoulder adjacent to the opposite end of the pin, a depending tongue portion carried by the forward end of the lever and terminating at its upper end in a shoulder, the last-named shoulder being so arranged as to pass behind the first-named shoulder when the pin is depressed against the said spring and to lie beneath said shoulder when said pin is released.

1,761,677. WAXING COMPOSITION. HERMAN C. NIELSEN, Memphis, Tenn. Filed Mar. 14, 1929. Serial No. 347,043. 4 Claims. (Cl. 134—24.)

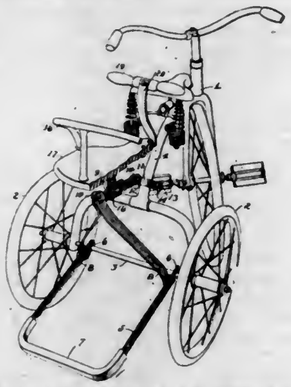
1. A waxing composition suitable for use on finished floors, comprising the following in substantially the proportions specified:—15% beeswax, 10% carnauba wax, 10% paraffin wax, 37% turpentine, 9% wood flour, 12% pigment, 5% sulfur, 2% camphor-like material.

1,761,678. METERING INSTRUMENT. WARREN NOBLE, Detroit, Mich. Filed Aug. 22, 1927. Serial No. 214,615. 11 Claims. (Cl. 171—95.)



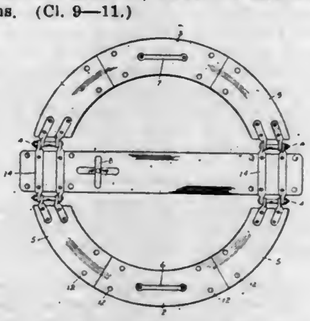
1. In an electric speedometer, a support, a revoluble graduated drum on said support, a plurality of iron elements, at least one of which is carried by said drum, an iron path connecting all of said elements, all of said elements comprising an armature, an electro-magnet having one of its pole pieces exposed to an element carried by said drum, rotation of said drum under influence of said magnet reducing the magnetic distance between the pole pieces thereof, means for exciting said magnet and yielding means for resisting rotation of said drum.

1,761,679. VELOCIPEDE. FRED F. QUICKERT, Gilroy, Calif. Filed Sept. 18, 1928. Serial No. 306,716. 7 Claims. (Cl. 208—24.)



1. An attachment for velocipedes, comprising a member mountable upon the rear portion of a velocipede to extend rearwardly therefrom, upstanding supporting means mounted on said member, a member mounted on said means and extending forwardly thereof, and means mounted on said last member adapted to engage a velocipede frame.

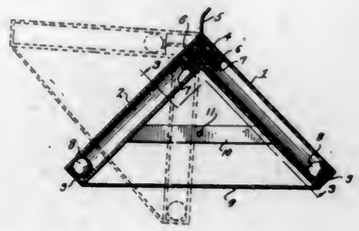
1,761,680. FLOAT. WILLIAM E. RAWLINGS, San Jose, Calif. Filed Mar. 31, 1928. Serial No. 266,351. 4 Claims. (Cl. 9—11.)



1. A float having in combination an annular frame, a seat athwart said annular frame and hinged to said frame,

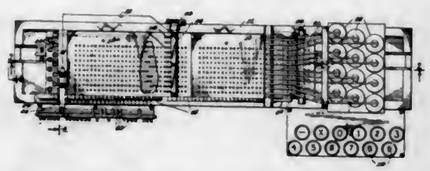
clamps bolted to the underside of said frame, an annular inflatable tube retained by said clamps, handles on said annular frame and a handle bar mounted upon a standard arising from said seat.

1,761,681. SAFETY SWITCH. MANUEL DOS REIS, JR., and ARTHUR F. MEADE, San Anselmo, Calif. Filed July 22, 1927. Serial No. 207,761. 1 Claim. (Cl. 200—52.)



A switch of the class set forth, comprising angularly related metallic cylinders arranged in a vertical plane and having their adjacent or upper ends connected together and having their remote or lower ends closed, a body of insulation arranged in the upper ends of the cylinders, a contact arranged in each cylinder and carried by the body of insulation, a wire connected to the contacts and extending beyond the cylinders, a metallic ball movably arranged in and normally resting against the closed end of each cylinder, a reinforcing bar extending from one cylinder to the other and fixed at its ends to the closed lower ends of the cylinders, and a second bar extending from one cylinder to the other and fixed at its ends to the cylinders above said first bar, said second bar being provided centrally between its ends with an opening for the reception of an element adapted to pivotally support the switch.

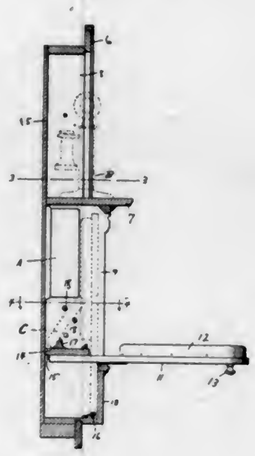
1,761,682. PUNCH. LYNUS CLYDE REYNOLDS, Chicago, Ill., assignor to The Tabulating Machine Company, Endicott, N. Y., a Corporation of New Jersey. Filed May 2, 1922. Serial No. 557,955. Renewed Jan. 8, 1926. 24 Claims. (Cl. 164—113.)



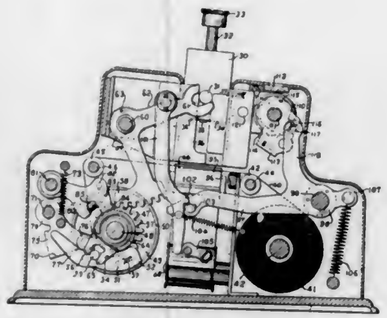
1. A punching machine, comprising, in combination, means for feeding a sheet to punching position and then to controlling position, manually controlled means for punching the said sheets, and means under the control of the previously perforated sheet when in the controlling position for automatically controlling said punching means at some previously selected positions only of the sheet to perform predetermined repetition punchings without manual aid, leaving the rest of the puncming for manual control in the other positions of the sheet.

1,761,683. BUILT-IN TELEPHONE CABINET. CLAUDE C. RITCHIE and ISAAC D. RITCHIE, Wichita Falls, Tex. Filed July 9, 1928. Serial No. 291,389. 3 Claims. (Cl. 312—113.)

1. In a telephone cabinet of the class described, a cabinet construction of predetermined dimensions opened at its front side and adapted to be arranged within a wall pocket, a horizontal partition arranged within the cabinet for dividing the same into upper and lower compartments, a seat member hinged intermediate its ends to the lower compartment and adapted to provide a seat when in extended horizontal position, and further adapted to close the lower compartment when in a vertical position, a horizontal wall within the lower compartment, said seat having the inner end thereof disposed within the lower compartment and in abutment with the horizontal wall when in horizontal extended position to support the weight of the occupant, a latch within the lower compartment, means on the inner end of the seat member engageable with said latch for holding the seat in vertical closed position, and means on the wall co-acting with means extending between the side walls of the cabinet for supporting a telephone directory.

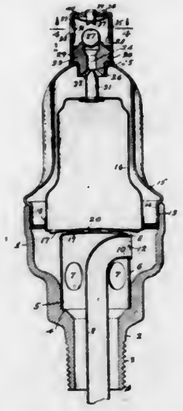


1,761,684. AUDITING MACHINE. WILLIAM H. ROBERTSON, Dayton, Ohio, assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio, a Corporation of Maryland. Filed June 14, 1924. Serial No. 720,049. 12 Claims. (Cl. 101—66.)



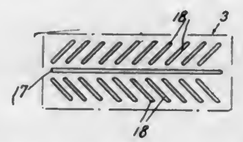
1. In a machine of the class described, the combination of a record receiving medium, impression means, and a plurality of detachable devices, the insertion and depression of which directly actuates said impression means to produce an impression from said devices on said medium.

1,761,685. AIR-RELIEF VALVE. WILLIAM A. RUSSELL, Yonkers, N. Y., assignor to W. A. Russell & Company, New York, N. Y., a Corporation of New York. Filed Aug. 18, 1926. Serial No. 129,967. 12 Claims. (Cl. 236—64.)



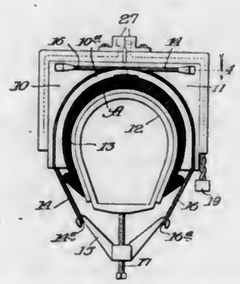
1. An air valve having in combination a casing, a float in the casing, a valve operated by the float through which air may pass to the casing, a member associated with the casing and provided with a plurality of air ports, and a second member movably associated with the ported member for controlling the flow of air from the ports.

1,761,686. LUBRICANT HEAT-DISSIPATING MEANS. EDWIN W. SCHLOERB, San Diego, Calif. Filed Mar. 13, 1929. Serial No. 346,733. 1 Claim. (Cl. 184—104b.)



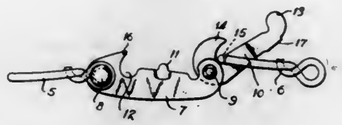
A heat dissipating device for motors comprising a trough for attachment to a motor, in place of the usual oil pan, a pan, a plurality of tubular connections between said pans and the trough through which the oil from the trough may flow, said tubes each being of elongated cross section, and an elongated hollow wall mounted between said trough and pan, said tubes being disposed vertically between the trough and pan and in a forwardly diverged relation with respect to the partition.

1,761,687. VULCANIZER FOR AUTOMOBILE TIRES. WILLIAM SCHWALGE, Elmhurst, Ill. Filed Mar. 29, 1928. Serial No. 265,708. 1 Claims. (Cl. 18—18.)



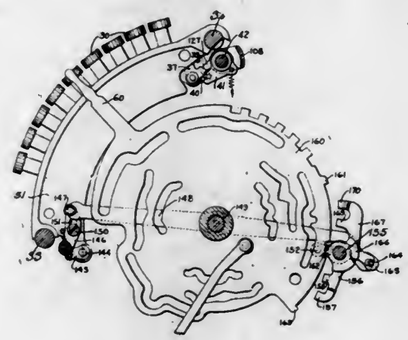
In a vulcanizer for automobile tires, a casing made up of two sections adapted to fit around an automobile tire, a shoe adapted to conform to the inner surface of said tire, means in said sections for heating them, flexible members secured to each section and passing around the other, and means for tensioning these members and simultaneously pressing said shoe inwardly toward said sections.

1,761,688. CHAIN FASTENER. HARRY M. SHINER, York, Pa., assignor to United States Chain & Forging Company, Pittsburgh, Pa., a Corporation of Delaware. Filed May 18, 1929. Serial No. 364,186. 7 Claims. (Cl. 24—68.)



1. A chain fastener comprising a connecter bar having means at its forward end for connection to a chain link and provided in one edge with a curved recess having an overhanging portion, and a latching lever pivotally mounted on the rear end of the said bar and having a nose portion adapted to fit within the said recess and beneath the said overhanging portion when the lever is in closed position, the nose portion of said lever normally occupying the same plane as said overhanging portion, but being laterally yieldable to permit movement into and out of said recess in lateral directions.

1,761,689. CASH REGISTER. BERNIS M. SHIPLEY, Dayton, Ohio, assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio, a Corporation of Maryland. Filed Mar. 17, 1924. Serial No. 699,919. 34 Claims. (Cl. 235—7.)

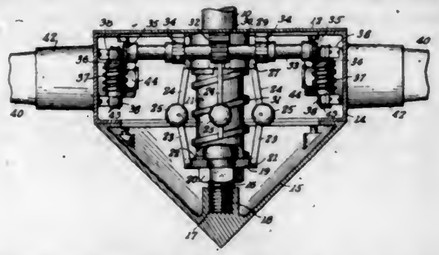


1. In a cash register, the combination of a plurality of banks of classification control keys, a substantially circular plate adapted to be oscillated on its axis, and means for stopping said plate in any one of a plurality of positions under control of said banks of keys.

1,761,690. VARIABLE PITCH AND REVERSIBLE PROPELLER. BENJAMIN J. STEINMETZ, New York, N. Y. Filed Sept. 14, 1927. Serial No. 219,453. 5 Claims. (Cl. 170—163.)

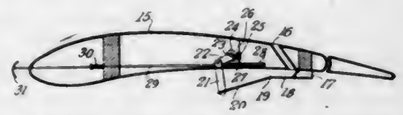
1. A flying machine having a propeller shaft, an acutely pointed conical casing on the extending end thereof, opposed radial propeller blades journalled to rotate in said

casing, worm wheels fixed directly on the inner ends of said blades, train gears operatively engaging the worm wheels,



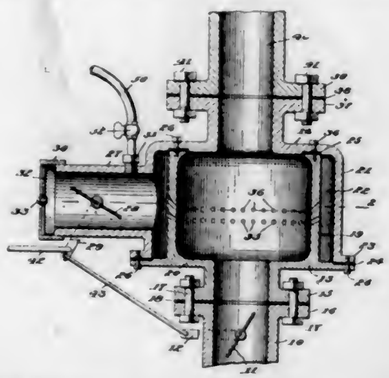
a centrifugal governor in said casing and rack and pinion means controlled by the action of said governor to actuate said train gears.

1,761,691. VENTURI SLOT FOR AEROPLANE WINGS. BENJAMIN JAY STEINMETZ, New York, N. Y. Filed July 25, 1929. Serial No. 380,851. 2 Claims. (Cl. 244—12.)



1. An aeroplane wing having a duct extending lengthwise through its rear portion the walls of the duct being inclined rearwardly at an angle to the upper face of the wing, a fixed plate spaced below the duct, a deflector plate hinged to the front edge of said fixed plate to extend forwardly, and automatic means for varying the inclination of said deflector plate.

1,761,692. AUXILIARY-AIR-ADMISSION DEVICE. EDDIE H. STEPP, Knoxville, Tenn., assignor of one-half to Horace Van Deventer, Knoxville, Tenn. Filed Aug. 29, 1927. Serial No. 216,193. 3 Claims. (Cl. 48—180.)



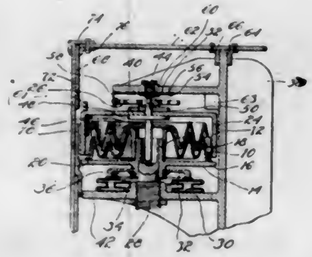
1. An auxiliary air admission device for employment between a carburetor and the intake of an internal combustion engine, comprising a chamber traversed by the fuel mixture, an outer jacket defining an annular space about said chamber, and means to regulate the flow of air into said space, said chamber having a plurality of rows of apertures therethrough so that jets of air flow from the annular space into the interior of said chamber by the suction effect of the engine, the apertures being constructed and arranged so that an aperture of each row delivers its jet in convergence with the adjacent jet of an aperture of the other row.

1,761,693. CAP AND TUBE FOR TOOTH PASTE AND THE LIKE. EWALD ERNEST STURK, Hollywood, Calif. Filed Apr. 14, 1928. Serial No. 269,996. 1 Claim. (Cl. 221—60.)



1. A collapsible tube embodying a conical head having an opening in its side communicating with the interior of the tube and with a circumferentially extending groove in the head spaced from the opening, a neck underlying and of less diameter than the head and separated therefrom by a cylindrical part, said cone, neck, and cylindrical part being coaxial, a cap fitting upon the cone and having a port properly positioned to register with the opening, a cylindrical part having a knurled band as an exterior and fitting upon the cylindrical head, a flange extending below the cylindrical part and bent inwardly toward the neck, and an inwardly upset part of the cap engaging in the groove and limiting rotary movement of the cap to proper registration.

1,761,694. SPEEDOMETER. DONALD H. SWEET, Evanston, Ill. Filed Mar. 10, 1921, Serial No. 451,379. Renewed June 12, 1929. 13 Claims. (Cl. 264—13.)

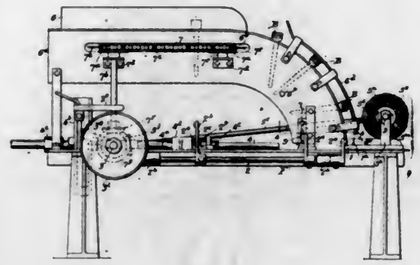


1. In a device of the class described, a driving and a driven element, a layer of fluid separating said elements and constituting the driving connection between them, a single element sensitive to variations in temperature and pressure, and means for varying the thickness of said fluid layer in proportion to the response of the sensitive element.

1,761,695. QUILL-CLEANING MACHINE. GEORGE W. UTSMAN, West Hillsboro, N. C., assignor of one-half to Charles H. Robertson, West Hillsboro, N. C., and one-half to Thomas O. Summey, West Hillsboro, N. C. Filed Mar. 21, 1929. Serial No. 348,960. 8 Claims. (Cl. 28—20.)

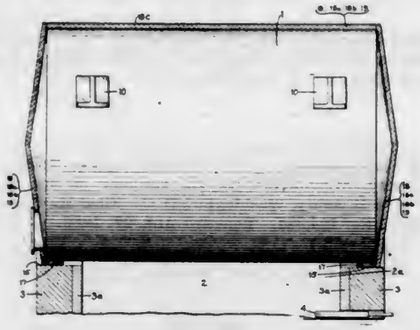
1. In a quill cleaning machine strippers adapted to engage the stem of the quill, means adapted to engage the

stem of the quill and push it between the strippers, means for feeding quills to the strippers, and a reciprocatory



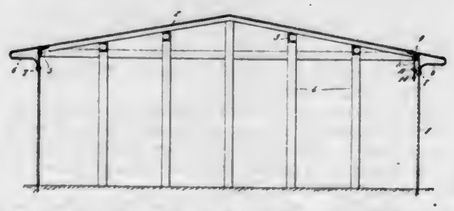
member adapted to raise the stem of a quill overlying the quill in stripping position to prevent the raised stem being engaged by the pusher.

1,761,696. INSULATION FOR HEATING VESSELS. GEORGE D. WHITE, Port Arthur, Tex., assignor to The Texas Company, New York, N. Y., a Corporation of Delaware. Filed Dec. 15, 1928. Serial No. 326,400. 4 Claims. (Cl. 122—494.)



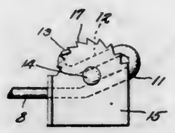
1. In a horizontal heating vessel with a lower portion included in a furnace and end portions and an upper portion excluded therefrom, furnace walls supporting said vessel, means for insulating the excluded portions comprising a plurality of layers of insulating materials extended entirely over said excluded portions, clips secured to said end portions, a layer of wire mesh extended over the end portions and the upper portion of the vessel between layers of insulating material and secured on the end portions to said clips.

1,761,697. LIQUID-STORAGE TANK. DJALMA DOWNEY WILLIAMS and HOWARD BRUCE MURPHEY, Dallas, Tex., assignors to Chicago Bridge & Iron Company, Chicago, Ill., a Corporation of Illinois. Filed July 7, 1927. Serial No. 204,024. 3 Claims. (Cl. 220—1.)



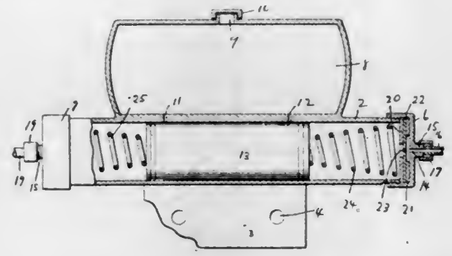
1. A storage tank for volatile liquids comprising a shell, a roof with its peripheral marginal portion normally resting on and contacting with the top of said shell, and means for movably connecting said roof to said shell, said connecting means comprising an annular spring loop constituting a peripheral extension of the roof beyond its point of contact with the shell and having sufficient flexibility to allow vertical movement of the roof upon expansion of gases within the tank.

1,761,698. AUTO AWNING. HERBERT A. WISE, Luxora, Ark. Filed Oct. 28, 1927. Serial No. 229,443. 1 Claim. (Cl. 156—44.)



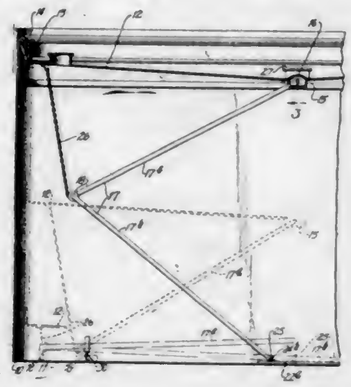
In an awning, a frame having side members, one of the side members having its ends disposed at an oblique angle with respect to the main portion thereof, the end of said side member being extended forwardly in parallel spaced relation with the side member, providing an elongated space, a bracket associated with one side member of the frame, a pin extending laterally from the bracket and disposed in the space of the side member associated therewith to adjustably support the frame, a laterally extended finger formed at one end of the side member, and teeth on the bracket to be engaged by the finger to hold the frame in its positions of adjustment.

1,761,699. AUTOMATIC OILER. HERMAN WALTER WULF, Ainsworth, Nebr. Filed Feb. 24, 1928. Serial No. 256,746. 2 Claims. (Cl. 184—26.)



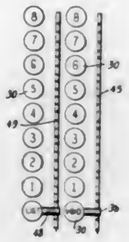
1. In an automatic oiling device of the class described, a horizontally disposed cylinder open at its respective ends, caps providing closures for the ends of the cylinder, oil delivery pipes extending from the caps and communicating with the cylinder, an oil tank arranged on the top of the cylinder, the bottom of said tank being provided with a pair of spaced oil outlet passages that communicate with the intermediate portion of the cylinder, a reciprocable piston mounted in the cylinder, said piston being of a length greater than the distance between the oil passages and adapted to normally close said passages, said passages being uncovered intermittently during the recipfocating movement of the piston in the cylinder from one end to the other whereby oil will enter the cylinder and be discharged into the respective delivery pipes, means for returning and normally holding the piston in a position to close the openings, said last mentioned means comprising a pair of expansible coil springs arranged in the ends of the cylinder for disposition between the ends of the piston and the respective cap members.

1,761,700. DRAINAGE APPARATUS FOR FLOATING ROOFS. OTTERBEIN A. BAILEY, Chicago, Ill., assignor to Chicago Bridge & Iron Co., a Corporation of Illinois. Filed Dec. 10, 1927. Serial No. 239,132. 5 Claims. (Cl. 220—26.)



1. Drainage apparatus for a movable roof for a container comprising; a down drain pipe of rigid sections connected by one or more swivel joints in the container having its upper end connected to the roof by a swivel joint and its lower end laterally slidable on the bottom of the container; and an outlet drain pipe leading from said lower end of the down drain pipe to the outside of the container.

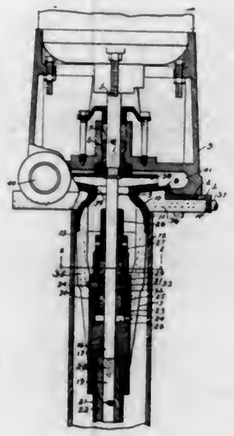
1,761,701. CASH REGISTER. FRIEDRICH W. F. BERGER, Berlin, Germany, assignor to The National Cash Register Company, Dayton, Ohio, a Corporation of Maryland. Filed Apr. 20, 1929, Serial No. 356,809, and in Germany Apr. 21, 1928. 3 Claims. (Cl. 101—93.)



1. In a machine of the class described; the combination with a type wheel; a hammer to take impressions therefrom; a plurality of groups of keys; and a control arm adapted to be shifted by depression of certain of said keys; of a twin arm connected to the control arm; a projecting stud carried by the twin arms; a bifurcated arm embracing the projecting end of the stud, a shaft on which the bifurcated arm is fast; a suspending arm fast on the shaft; another shaft having a plurality of arms fast thereon, one of the arms being operatively connected to the suspending arm; and a hammer disabling latch operatively connected to the remaining arm.

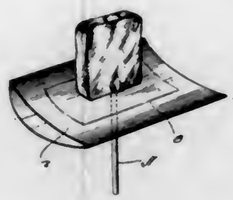
1,761,702. PUMP. NATHAN T. BRADFORD, Terra Bella, and ROBERT E. EARLY, San Jose, Calif. Filed Dec. 27, 1928. Serial No. 328,785. 3 Claims. (Cl. 103—102.)

1. A base member adapted to be mounted at the top of a well and adapted to support a pump head, a pump head mounted thereon to form a pressure chamber therewith, an impeller disposed within said chamber, a depending bowl



formed integrally with the base member and threaded to engage a discharge casing, and a bearing member formed integrally with and depending from the bowl.

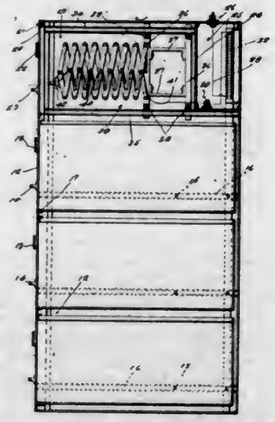
1,761,703. COMBINED WRAPPER OR ENVELOPE AND GUARD FOR FROZEN CONFECTIONS. ROBERT F. BRIMER, Washington, D. C., assignor of one-half to Walter B. Avery, Washington, D. C. Filed May 26, 1927, Serial No. 194,354. Renewed Apr. 22, 1930. 6 Claims. (Cl. 229—53.)



2. A combined envelope and guard for confections provided with handles, comprising a container adapted to receive the confection, and a perforated reinforcement on one surface of the container, whereby the handle of the confection may be forced through two sides of the container and through the reinforcement to position the container under the confection and on the handle.

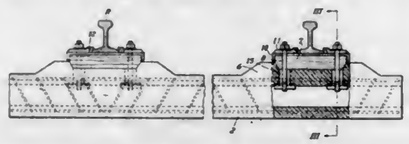
1,761,704. OFFICE CABINET. DAVID A. BRYCE, Darien, Conn. Filed Sept. 6, 1928. Serial No. 304,319. 1 Claim. (Cl. 312—176.)

In a structure of the class described, comprising, a vertically elongated cabinet, said cabinet being formed in its top with a special compartment, tracks mounted in the compartment, a hinged door for closing said compartment, a partition plate in said compartment forming a special resistance chamber at the rear end thereof, resistance coils mounted in said chamber, and adjustable and extensible wire supporting means mounted in said compartment and including wires connected with said resistance coils, said means embodying a roller supported



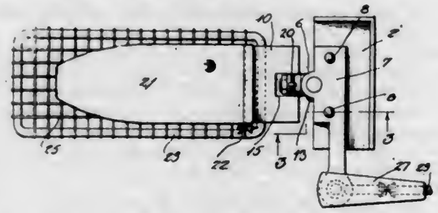
carrier slidably mounted on the tracks in said compartment, and lazy tong devices mounted on said carrier, said wires being connected with said devices.

1,761,705. CEMENTITIOUS BEAM MEMBER. CHARLES F. BUENTE, Pittsburgh, Pa. Filed June 22, 1928. Serial No. 287,572. 3 Claims. (Cl. 238—87.)



1. A railroad tie comprising a centrifugally cast cementitious body which is generally rectangular in cross section and has an opening through the central portion thereof, the body having longitudinal reinforcements therein, and also having diagonally extending reinforcements in the side walls thereof.

1,761,706. SPOTTING TABLE. HAGOP CHICKNAVORIAN, Fitchburg, Mass. Filed Apr. 6, 1929. Serial No. 353,158. 8 Claims. (Cl. 8—8.)



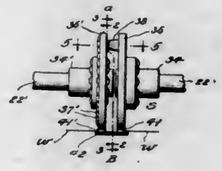
1. In a device of the character described, a frame stand, a vertical post rotatable therein, a spotting table carried by the upper end of the post, and a garment rack on the post beneath the spotting table.

3. In a device of the character described, a post and a spotting table reversibly mounted thereon.

1,761,707. TREATMENT OF ARTIFICIAL SILKS. RENÉ CLAVEL, Basel-Augst, Switzerland. Filed May 27, 1927, Serial No. 194,859, and in Germany Sept. 17, 1926. 19 Claims. (Cl. 8—13.)

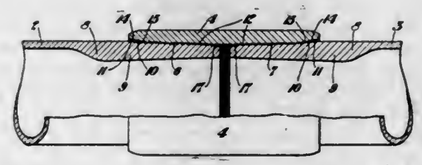
1. Process for weighting artificial silks, comprising treating them with a plurality of weighting agents without intermediate washing or neutralization, at least one substance being employed which is adapted to hinder premature precipitation.

1,761,708. MINE-HOIST ALARM SWITCH. THOMAS R. COOK and DONALD N. SMITH, Scranton, Pa., assignors to The Hudson Coal Company, Scranton, Pa. Original application filed Mar. 24, 1927, Serial No. 178,052. Divided and this application filed Dec. 22, 1927. Serial No. 241,896. 6 Claims. (Cl. 200—52.)



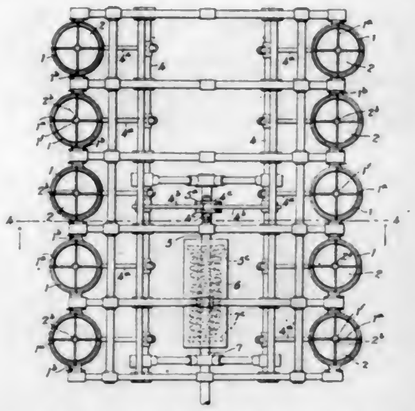
1. An operating switch for mine hoist slip indicater, comprising two axially alined rotatable members, a disk secured to one member and having a track concentric therewith and disposed at the side thereof toward the other member, said track consisting of arcuate contact portions and dead spots between them, said dead spots corresponding to the different levels at which the hoist must operate, a brush mounted on said other member for rotation bodily therewith, said brush normally engaging one of said dead spots, and current conducting means for said contact portions and said brush, said arcuate contact portions occupying substantially 360°, said dead spots being of infinitesimal dimension in degrees compared to the length of said arcuate contact portions.

1,761,709. DRILL TUBE. THOMAS D. DAVIES, McKeesport, Pa., assignor to National Tube Company, a Corporation of New Jersey. Filed Dec. 21, 1925. Serial No. 76,867. 1 Claim. (Cl. 285—146.)



In combination two sections of drill pipe arranged with their ends opposite each other and having their end portions threaded on the exterior surface, and an internally threaded coupling member screwed onto said abutting ends of said pipe sections to connect the same, said coupling being recessed at each end and provided with vanishing threads at the bottom of the recess portions, and said pipe sections having the ends of their threaded portions chamfered to the same angle as the angle of the vanishing threads at the bottom of the recess portions of said coupling, to assist in stabbing the joint and preventing injury to the starting threads.

1,761,710. AIRPLANE. JOHN H. DAVIS, New York, N. Y., assignor to Air Line Transportation Company, Philadelphia, Pa., a Corporation of Delaware. Filed Apr. 22, 1929. Serial No. 357,035. 14 Claims. (Cl. 244—11.)



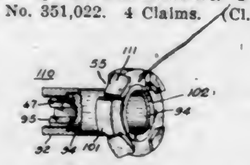
1. In an airplane, an air beater, a driving shaft and a connection between the driving shaft and the beater whereby more than 180 degrees of rotation of the driving shaft is required to move the beater on one stroke, and on the return stroke less than 180 degrees of movement of the driving shaft.

1,761,711. PROCESS OF AND DEVICE FOR MAKING SPRING INSERTIONS FOR CUSHIONS AND THE LIKE. ALFRED EHLENBECK, Vohwinkel, Germany. Filed Dec. 26, 1928, Serial No. 328,434, and in Germany Apr. 9, 1927. 2 Claims. (Cl. 140—3.)



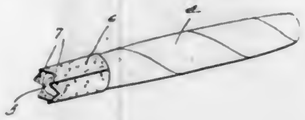
1. A process of making wire spring structures for use in cushions and the like consisting in forming the entire length of wire into a coil spring, threading said spring on a reel, pressing off the turns one by one from said reel, turning the reel through 180°, transversely of its axis, each time a given number of turns has been pressed off so as to form a plurality of cylindrical coils and so as to place said coils in juxtaposition in the same plane, and passing the reel with the remaining turns through a turn in the adjacent coil or coils each time a fresh turn is pressed off from the reel.

1,761,712. MANUFACTURE OF THE CLUTCH CAM FOR ENGINE-STARTER DRIVES. RODGER J. EMMERT, Dayton, Ohio, assignor to Delco-Remy Corporation, Anderson, Ind., a Corporation of Delaware. Filed Mar. 29, 1929. Serial No. 351,022. 4 Claims. (Cl. 29—159.2.)



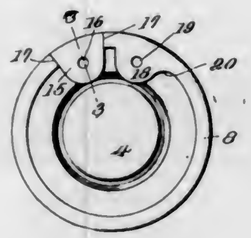
1. The method of making the cam-member of an overrunning clutch which consists in axially deforming a metal disc to increase its diameter and in notching the disc to provide ball or roller recesses.

1,761,713. CIGAR. ADEN I. EYSTER, Philadelphia, Pa. Filed Sept. 6, 1928. Serial No. 304,285. 1 Claim. (Cl. 131—52.)



As a new article of manufacture, a blunt end cigar and a mouthpiece for permanent attachment to the blunt end butt, said mouthpiece being in the form of a sleeve, said sleeve extending to a point inward of the blunt end to a point outwardly beyond the blunt end, the outwardly extending portion being circumferentially serrated to form bendable tongues, said tongues being folded against the blunt end after it is punctured, said tongues being of less length than the radius of the sleeve, whereby the tongues will terminate short of the axial center of the cigar so as to form a partial closure for the blunt end to permit the free passage of smoke and air therethrough but to minimize the passage of particles of the filler within the body of the cigar from the mouthpiece.

1,761,714. METAL CONTAINER. HENRY A. FINK, Chicago, Ill., assignor to Continental Can Company, Inc., New York, N. Y., a Corporation of New York. Filed July 24, 1928. Serial No. 294,982. 4 Claims. (Cl. 220—61.)

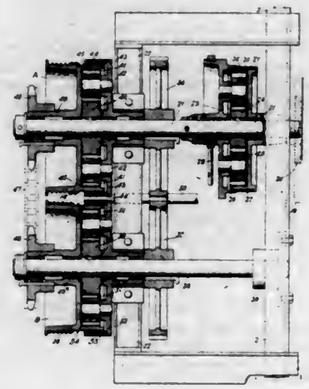


1. A metal container comprising a body portion having a flange, a closure for said body portion including an end having a flange adapted to overlie the flange on the body and an integral vertical wall adapted to extend into and frictionally engage the body, a sealing ring having a portion adapted to overlie the end and a vertical wall at its extreme outer edge, and means whereby said ring can be torn across for opening said container, said end being placed within said sealing ring and secured thereto by insetting the vertical wall of the sealing ring, said closure having a gasket of sealing material between the vertical walls, the vertical wall of said sealing ring being adapted to be bent beneath the flange on the container body for securing the closure to the container body and sealing the end thereof.

1,761,715. METHOD OF DECORATING. DOROTHY FLEETWOOD, Fort Lauderdale, Fla. Filed Apr. 13, 1929. Serial No. 354,984. 4 Claims. (Cl. 41—26.)

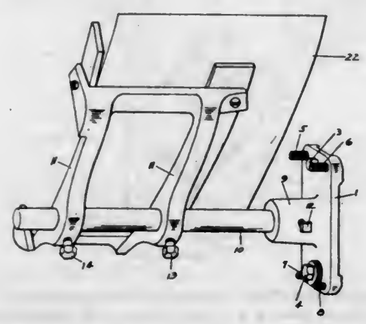
1. The method of decorating articles of the class described, which consists in imposing upon the article a foundation coat of paint to form the design motif, drying such foundation coat to the extent that it will not soften and mingle with other paints subsequently imposed thereon, thereafter painting on such foundation coat a decorative design of such form and color as to contrast with the foundation coat, subjecting the article to a second drying sufficient to set the foundation and decorative design against softening and mingling with other coatings subsequently imposed thereon, and finally applying a colorless finishing and protecting coating such as shellac, and drying such finishing coating.

1,761,716. BOOM DRIVE. CHARLES E. FOOTE, Nunda, N. Y., assignor to The Foote Company, Inc., Nunda, N. Y., a Corporation of Delaware. Filed Aug. 20, 1928. Serial No. 300,832. 14 Claims. (Cl. 104—92.)



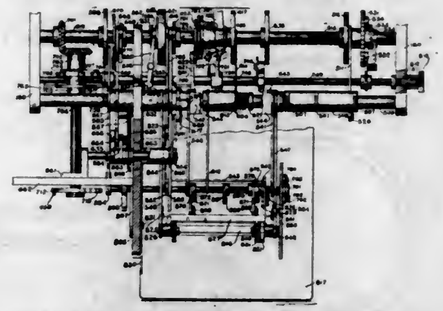
1. A boom drive for concrete pavers comprising a boom and bucket, a cable attached to the bucket for advancing and retracting the same along the boom, a planetary driving system including two drums, the inner ends of the cable attached respectively to the said drums, said drums being normally idle, means for selectively driving either of said drums, and the drums interlocked with each other at all times.

1,761,717. GUARD SUPPORT. SILAS FRENCH, Rochester, N. Y. Filed Mar. 30, 1929. Serial No. 351,423. 2 Claims. (Cl. 74—56.)



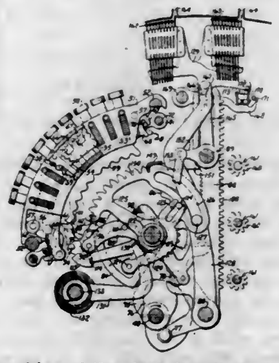
1. A guard for a moving part of a machine, and a support for said guard, said support including a base plate, cap screws by which said plate is fastened to the frame of the machine, studs threaded in said plate and bearing against the frame of the machine by which it is adjusted on the uneven surface of the machine, a boss on said base plate, a shaft supported by said boss, a cradle supported on said shaft, said cradle being adapted to support and hold the guard in correct position.

1,761,718. CASH REGISTER. FREDERICK LINCOLN FULLER, Bridgeport, Conn., assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio, a Corporation of Maryland. Filed May 23, 1919. Serial No. 299,112. 23 Claims. (Cl. 235—3.)



1. In a machine of the class described, the combination of printing elements for printing upon record material any desired data, means adapted to be moved to press the printing elements against the record material, a plurality of cams for giving said means one or more movements as desired, a plurality of keys, and means controlled thereby for establishing a cooperative relation between said means and any desired one of said cams.

1,761,719. CASH REGISTER. FREDERICK L. FULLER, Ilion, N. Y., assignor to The National Cash Register Company, Dayton, Ohio, a Corporation of Maryland. Original application filed May 23, 1919, Serial No. 299,112. Divided and this application filed Apr. 30, 1927. Serial No. 187,861. 13 Claims. (Cl. 235—23.)



2. In a machine of the class described, the combination of a series of keys, a pivoted actuator common to all of said keys and adapted to be controlled as to extent of travel by said keys, a driven member pivoted concentric with said actuator, a beam supported by the actuator and said driven member on the opposite sides of the axis of the actuator and member, whereby said driven member may be given an extent of adjustment commensurate to the extent of travel of the actuator.

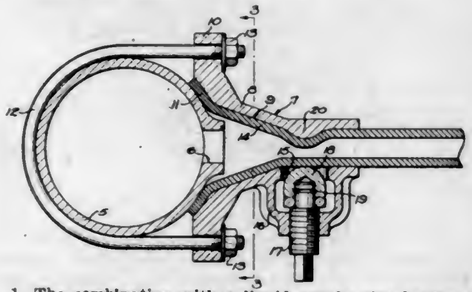
1,761,720. SHEET-GLASS-SURFACING TABLE. JOHN C. GIPE, Toledo, Ohio, assignor to Libbey-Owens Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed June 24, 1925. Serial No. 39,252. 1 Claim. (Cl. 51—240.)



In sheet glass surfacing apparatus a table having a sheet receiving recess therein, and a pad loosely mounted

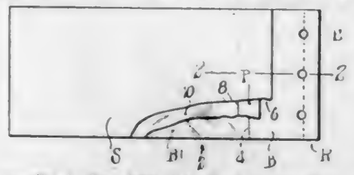
within the recess for freely supporting the sheet of glass to be surfaced, said recess being of a shape to prevent turning of the pad and sheet therein.

1,761,721. VALVE. JOHN C. GIPE, Toledo, Ohio, assignor to Libbey-Owens Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Sept. 1, 1926. Serial No. 133,026. 5 Claims. (Cl. 137—73.)



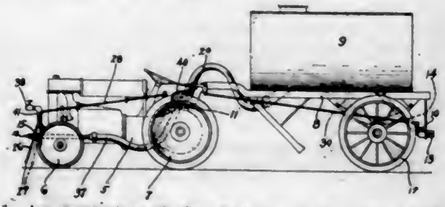
1. The combination with a liquid supply pipe having a lateral outlet therein, of a valve for controlling and varying the flow of liquid from said pipe including a hollow compressible member surrounding said outlet, said member continuing beyond the valve to form a permanent part of a fluid delivery line, means for clamping said member onto the pipe, and means for compressing said compressible member.

1,761,722. DRY STENCIL. HARRY GORDENSTEIN, Springfield, Mass. Filed Dec. 8, 1928, Serial No. 324,605. Renewed Feb. 13, 1930. 3 Claims. (Cl. 41—3.5.)



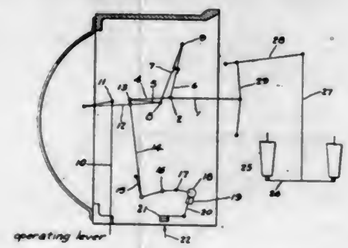
1. A stencil of the class described comprising in combination, a back sheet of paper having its upper end doubled upon itself to provide a reinforced end portion and provided with a line of perforations and a plurality of eyelets, the said perforations being disposed at a distance from said reinforced end portion and the said eyelets being disposed in said reinforced portion, a protective sheet of paper overlying said back having its upper end secured thereto adjacent said perforations and being provided with a line of perforations thereacross disposed towards the main body of the sheet and away from the perforations of the back sheet and a stencil sheet overlying said protective sheet having its upper end secured to said back sheet between the upper end of the protective sheet and the eyelets of said body sheet.

1,761,723. SPRINKLING APPARATUS. EDWARD R. GREEN, Minneapolis, Minn. Filed Dec. 7, 1925. Serial No. 73,845. 2 Claims. (Cl. 299—36.)



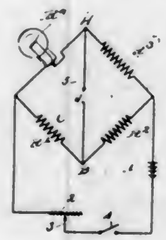
1. An apparatus of the class described, comprising in combination, a tractor having a semi-trailer connected thereto, a tank on the trailer, a pump secured to the tractor at the forward end thereof and having its shaft coupled directly to the tractor engine crank shaft, a flexible connection between the pump and tank, a distributing head mounted on the pump casing and connected to the discharge of the pump, pipe connections oppositely extending from said head and having nozzles terminally provided thereon for directing the water against the surface of a pavement, control valves in said pipe connections, and a valved discharge opening in said head having means for attaching a hose thereto whereby the water may be directed to a remote point as when used to extinguish a fire.

1,761,724. ELECTRIC-SWITCH-OPERATING MECHANISM. WILLIAM PANCRAS HAMLYN, Acton, London, and MARCUS CHARLES INMAN HUNTER, Kew Gardens, England, assignors to General Electric Company, a Corporation of New York. Filed Jan. 6, 1928, Serial No. 244,868, and in Great Britain Feb. 5, 1927. 4 Claims. (Cl. 200—153.)



1. Switch operating mechanism comprising a switch actuating member, an operating member, a toggle arranged between said members, tripping means connected with the intermediate pivot of the toggle and means for adjustably supporting one of the end pivots of said toggle to vary the relative position of the toggle pivots in the closed switch position of the mechanism.

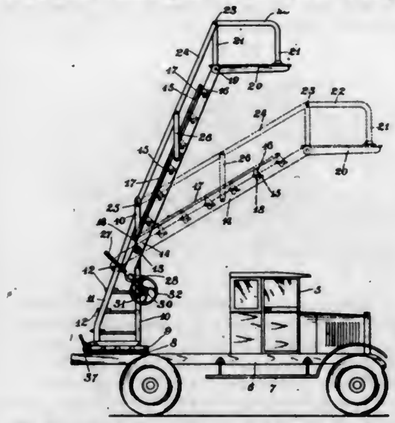
1,761,725. METHOD OF AND APPARATUS FOR PRODUCING STANDARD ILLUMINATION. ARTHUR C. HARDY, Wellesley, Mass., and FREDERICK W. CUNNINGHAM, Stamford, Conn., assignors to General Electric Company, a Corporation of New York. Filed July 12, 1927. Serial No. 205,108. 6 Claims. (Cl. 176—10.)



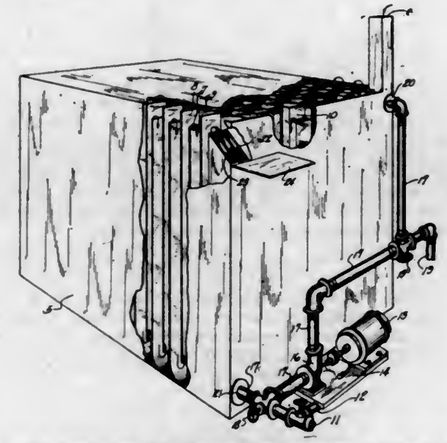
1. Apparatus of the class described comprising a Wheatstone bridge having an electric lamp in substitution for one of the usual resistance arms and a switch in substitution for the usual galvanometer, a source of electric current, and means for adjustably varying said current.

1,761,726. TRUCK LADDER. HOMER M. HAVENS, Columbus, Ohio, assignor to The Seagrave Company, Columbus, Ohio, a Corporation of Ohio. Filed May 14, 1928. Serial No. 277,519. 6 Claims. (Cl. 228—6.)

1. An aerial platform ladder including a truck, a ladder pivoted at one end for vertical and horizontal movement on said truck, said ladder having therein a series of pivoted steps and means for maintaining said steps in horizontal position during the raising and lowering of the ladder, a platform pivoted to the other end of said ladder and means for maintaining said platform in horizontal position during the raising and lowering of the ladder.

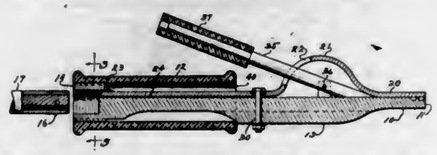


1,761,727. APPARATUS FOR PROCESSING AND COOKING DRIED FRUIT. ERNST HECKER, Milwaukee, Wis. Filed Nov. 17, 1927. Serial No. 234,002. 5 Caims. (Cl. 99—2.)



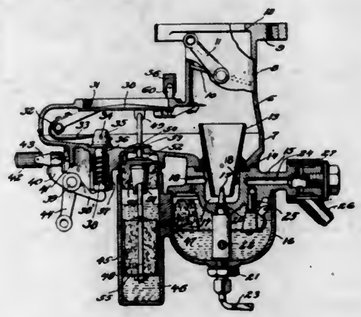
1. An apparatus for cooking and processing food material, comprising a casing having a fluid inlet and an opening for receiving the food material, and a common means for cooking the food material and for carrying it through the casing to a point of delivery.

1,761,728. METALLIC ELECTRODE HOLDER. HOMER H. HECKMAN, Detroit, Mich. Filed Nov. 19, 1926. Serial No. 149,343. 2 Claims. (Cl. 219—8.)



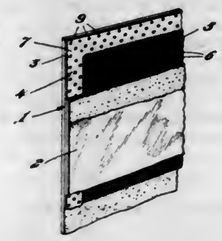
1. An electrode holder for electric welding comprising a tubular handle of insulating material, a pair of metallic jaw members secured together with insulating material between and extending into said handle, one of said members being composed of metal of high conductivity and sufficiently large cross section to conduct without material heating the welding current and adapted to be connected to a source of current, the other of said members being flexible material and adapted to have its free end sprung away from the free end of the other member.

1,761,729. CARBURETOR. CHESTER F. JOHNSON, Detroit, Mich. Filed Jan. 14, 1922. Serial No. 529,210. 7 Claims. (Cl. 261—39.)



7. In a carburetor, a mixing chamber, means for supplying fuel thereto, a valve adapted to admit air to said chamber under the influence of suction therein, a spring adapted to resist opening movement of said valve, a plunger providing an abutment for said spring, means for moving said plunger in a direction to increase the resistance to opening movement of the valve exerted by said spring to provide a rich mixture, resilient means for returning the plunger to normal position and means for adjusting the normal position of said plunger.

1,761,730. PLASTER-BOARD STRUCTURE. OTHO V. KEAN, Providence, R. I. Filed Apr. 25, 1927. Serial No. 186,278. 4 Claims. (Cl. 154—45.9.)

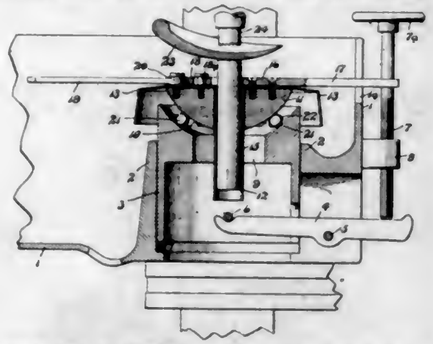


1. An improved article of manufacture comprising a wire mesh formed of wire which is of segmental cross-section, a metal border for said wire mesh provided with a plurality of openings, the ends of the several strands of said wire mesh being secured to the border, and a composition material overlying the opposite sides of said wire mesh and border to form a plaster board section.

1,761,731. SELF-ADJUSTING PLUG SUPPORT. WARREN E. KNOTT, Grand Rapids, Mich., assignor to Pioneer Pearl Button Company, Poughkeepsie, N. Y., a Corporation of New York. Filed May 11, 1927. Serial No. 190,406. 4 Claims. (Cl. 79—18.)

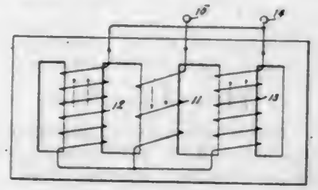
1. In a construction of the class described, a supporting member, a plug support located above the supporting mem-

ber, anti-friction balls disposed between the under side of the plug support and the upper side of the first named support, the upper end of said first named support having a concave recess therein and the lower side of the plug support being curved to correspond therewith, a vertical plug extending downwardly through the plug support and at



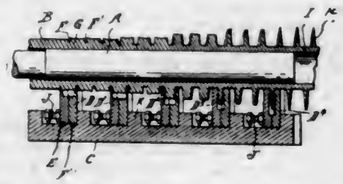
its upper end extending a short distance thereabove, a member attached to the upper side of the plug support against which one side of the plug bears, a clamping jaw slidably mounted on the plug support on the opposite side of the plug, and manually operable means for moving said clamping jaw against the plug.

1,761,732. TRANSFORMER. WILHELM KÖCHLING, Berlin-Waidmannslust, Germany, assignor to General Electric Company, a Corporation of New York. Filed Jan. 18, 1929, Serial No. 333,390, and in Germany Jan. 28, 1928. 4 Claims. (Cl. 175—356.)



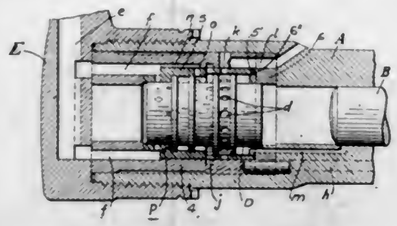
1. A transformer including a magnetic core having three winding legs and a winding including a section surrounding each of said winding legs, two of said winding sections being connected in parallel with each other and in series with the third winding section, said third winding section being connected to one line terminal and said parallel winding sections being connected together and to a second line terminal, whereby said transformer may be operated single phase.

1,761,733. INTEGRAL FINNED TUBING AND METHOD OF MANUFACTURING THE SAME. ARTHUR A. LOCKE, Walkerville, Ontario, Canada, assignor to Wolverine Tube Company, Detroit, Mich., a Corporation of Michigan. Filed Dec. 5, 1927. Serial No. 237,930. 7 Claims. (Cl. 78—81.)



1. A finned tube having the fins thereof integral with and developed from the outer surface portion of the wall of the tube by the axial compression and radial deflection thereof.

1,761,734. FLUID-PRESSURE HAMMER. MAX MAXIMILIAN, Chicago, Ill., assignor to Chicago Pneumatic Tool Company, New York, N. Y., a Corporation of New Jersey. Filed May 20, 1925. Serial No. 31,504. 1 Claim. (Cl. 121—26.)



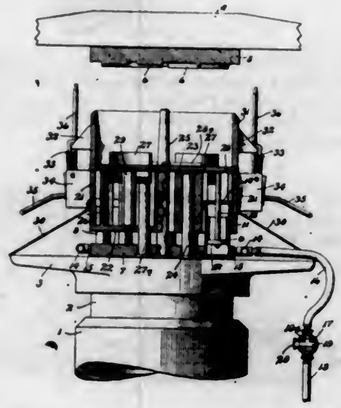
A separate valve unit for a fluid pressure tool comprising a valve block having ports and passages for the pressure fluid, a valve movable in said block to control said ports and passages, a removable lining sleeve between said valve and said block to take the wear of the valve and having ports and passages to register with those of said block, a renewable lid for said block, a dowel pin for maintaining said lid and said block in fixed relation, and a projection on said liner cooperating with a recess in said lid for maintaining said liner and said block in registering relation.

1,761,735. TIRE COVER. THOMAS J. MCCORMICK, Detroit, Mich. Filed Feb. 1, 1928. Serial No. 251,039. 5 Claims. (Cl. 150—54.)



1. A tire cover comprising a circular face piece of fabric having a tread strip sewed thereto with a retaining rear face strip sewed to said tread strip, distending rings secured to said face piece and tread strip and means for contracting the free edge of said retaining strip.

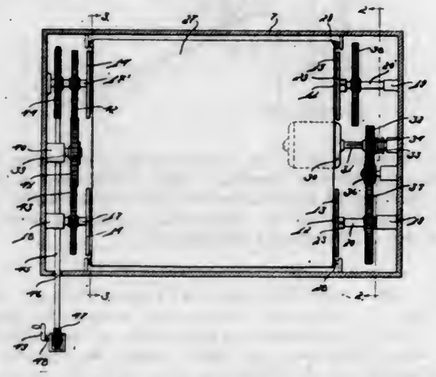
1,761,736. MOLDING MACHINE. THURLOW E. MCFALL, Sparta, Mich., assignor to Sparta Foundry Company, Sparta, Mich., a Corporation of Michigan. Filed Apr. 23, 1928. Serial No. 272,010. 12 Claims. (Cl. 22—47.)



1. A molding machine comprising, a squeezing head, a vertically reciprocable ram located under said squeezing

head, a table at the upper end of the ram, a member mounted for vertical movements with respect to the table located above said table, a stripping plate carried at the upper side of said member, patterns connected with said table and adapted to extend through said stripping plate, and pneumatic means for separating said member and table.

1,761,737. STATION INDICATOR. ANGUS MCMILLAN, Windsor, Ontario, Canada. Filed Jan. 17, 1929. Serial No. 333,126. 1 Claim. (Cl. 40—93.)

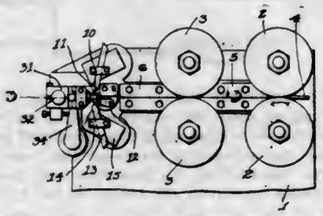


In a device of the class described a housing having end walls; a bearing mounted in each of said end walls; a shaft projecting inwardly from each of said bearings; a sleeve slidably mounted on one end of one of said shafts, said sleeve having elongated longitudinally oppositely positioned slots formed therein; a spring positioned in said sleeve, and normally resisting slidable movement of the same on its shaft; a pin projected through said shaft and engaging in said slots; a reduced portion on the end of said sleeve; a reduced portion on the end of the other shaft; and a spool having a socket formed in opposite ends for reception of said reduced portions, the slidable movement of said sleeve on its shaft effecting a disengagement of its reduced portion from said socket.

1,761,738. PASTRY RECIPE. CHARLES F. MILLER, Anderson, Ind. Filed Oct. 29, 1926. Serial No. 145,104. 2 Claims. (Cl. 99—11.)

1. A self-preserving stock sponge for forming a base for confections consisting of the following ingredients in approximately the proportions specified, Irish potatoes one peck, lard twenty-five pounds, sugar twenty-five pounds, and eggs four dozen, the potatoes being first cooked until soft and beaten into a creamy mass, and the lard, sugar and eggs thoroughly intermingled therewith.

1,761,739. SPRING-COILING MACHINE. MICHEL NIGRO, Worcester, Mass., assignor to Sleeper & Hartley, Inc., Worcester, Mass., a Corporation of Massachusetts. Filed Nov. 1, 1928. Serial No. 316,586. 4 Claims. (Cl. 153—65.)

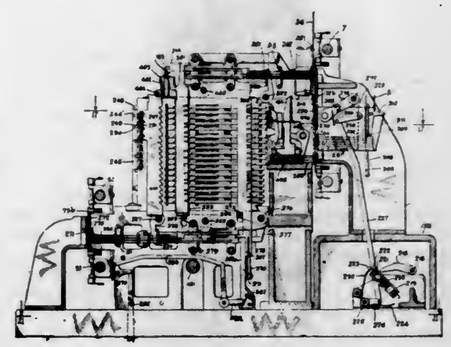


1. In a machine for the coiling of wire into spiral form, an arbor providing at its end a projecting web bounded by parallel faces, one of which is beveled to provide a coiling nose around which wire is adapted to be deflected into a spiral having an internal diameter of less than twice the diameter of the wire being coiled.

1,761,740. MOLDABLE PRODUCT AND PROCESS OF PREPARING THE SAME. BIRGER W. NORDLANDER, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed May 14, 1929. Serial No. 363,100. 6 Claims. (Cl. 18—55.)

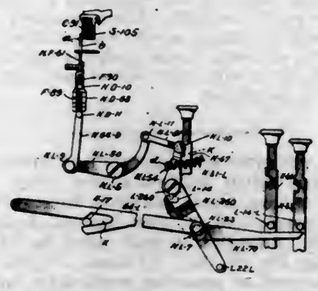
1. The process of forming a thermo-plastic material which consists in heating selenium sulphide with a filler and subsequently converting the mass to a hard, dense product.

1,761,741. RECORD COMPARING AND POSTING MACHINE. JOHN ROYDEN PEIRCE, New York, N. Y., assignor to International Business Machines Corporation, New York, N. Y., a Corporation of New York. Filed Jan. 8, 1923. Serial No. 611,491. 100 Claims. (Cl. 164—114.)



10. In a card controlled machine, card feeding means, means for reading a plurality of cards simultaneously, and means controlled by said reading means for controlling said feeding means.

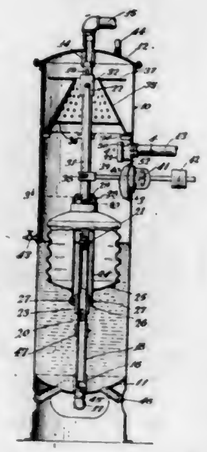
1,761,742. SUBTRACTION CONTROL FOR CALCULATING MACHINES. NATHAN W. PERKINS, East Orange, N. J., assignor to Ellis Adding Typewriter Company, Newark, N. J., a Corporation of New Jersey. Filed Jan. 28, 1926. Serial No. 84,471. 7 Claims. (Cl. 235—58.)



1. In a calculating machine, the combination with a travelling carriage, of spring-operated means normally

subject to automatic operation by the carriage whenever the latter is in a predetermined position but being otherwise unaffected by the carriage, said means controlling the performance of an operation of the machine, and a manually operable key also adapted to control the same operation as that controlled by the carriage, control by the carriage and by the key being without dependance on each other and without interference.

1,761,743. GAS TRAP. THORVALD A. M. PETERSEN, Los Angeles, Calif., assignor to Union Tank & Pipe Co., Los Angeles, Calif., a Corporation of California. Filed Oct. 5, 1925. Serial No. 60,640. 3 Claims. (Cl. 183—2.7.)



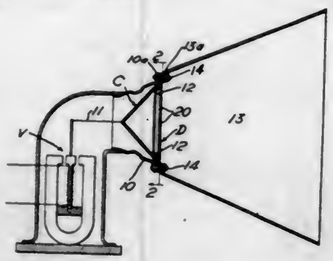
1. An oil and gas separator comprising a container, means forming an inlet to the container, means forming gas and oil outlets from the container adjacent its top and bottom respectively, a pipe disposed within the container having its ends connected to the outlets, there being apertures formed in the pipe adjacent its top and bottom respectively, sleeves slidable upon the pipe adapted to close said apertures, a float arranged about said pipe and movable thereon, and means pivotally connecting the float to the sleeves so that the sleeves may be actuated thereby, said sleeves being pivoted for rotation upon axes at right angles to each other so that a universal connection is provided between the sleeves.

3. In a gas trap, a screen comprising a frusto-conical part, an inwardly extending flange extending inwardly from adjacent the bottom of said frusto-conical part, and an outwardly extending flange extending outwardly from adjacent the top of said frusto-conical part, said part and flanges being perforated.

1,761,744. PROCESS FOR THE PRODUCTION OF SULPHO-ACIDS FROM HYDROCARBON OILS. GRIGORI PETROFF, Moscow, Russia, and PETER SHESTAKOFF, Paris, France, assignors to the First National Bank, Cincinnati, Ohio. Filed Dec. 30, 1925, Serial No. 78,486, and in Germany Jan. 26, 1925. 6 Claims. (Cl. 260—159.)

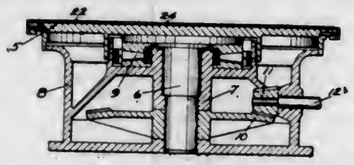
1. The process of preparing sulpho-acids from crude petroleum distillates no longer susceptible to sulfonation which comprises dehydrogenating the crude petroleum distillate by treatment with air and thereafter sulfonating the oil.

1,761,745. SPEAKER. ROY J. POMEROY, Hollywood, Calif., assignor of one-half to Paramount Famous Lasky Corporation, Los Angeles., Calif., a Corporation of New York. Filed Aug. 9, 1927. Serial No. 211,835. 9 Claims. (Cl. 181—32.)



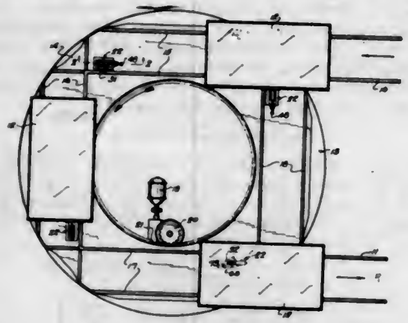
1. In sound producing apparatus, the combination of a primary vibratory diaphragm flexibly supported so that in vibration the diaphragm moves substantially bodily, and an auxiliary vibratory diaphragm enclosing a space at one side of the primary diaphragm.

1,761,746. SHEET-GLASS-SURFACING TABLE. WILLIAM H. POWLESSON, Toledo, Ohio, assignor to Libbey-Owens Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Jan. 10, 1927. Serial No. 160,100. 4 Claims. (Cl. 51—240.)



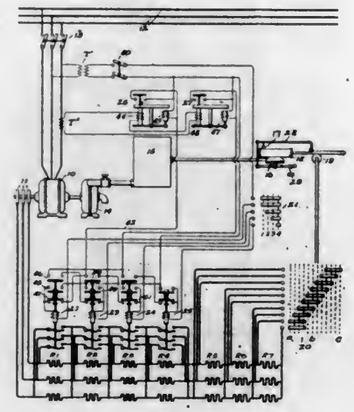
1. In sheet glass surfacing apparatus, a glass supporting table, and an asbestos pad carried by said table and adapted to support the sheet to be surfaced.

1,761,747. BUMPER MEANS. EDWIN A. ROSIN and KARL KUPFERSCHMID, Toledo, Ohio, assignors to Libbey-Owens Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Mar. 9, 1929. Serial No. 345,770. 13 Claims. (Cl. 104—35.)



1. In the continuous system for surfacing sheet glass, the combination with two substantially parallel tracks, glass supporting cars adapted to run along said tracks, and a turn-table connecting the tracks at their ends and for effecting the transfer of the cars from one track to the other, of means carried by the turntable for arresting the movement of the cars and bringing such cars to a stop when they reach a substantially predetermined position thereupon.

1,761,748. VARIABLE-SPEED MOTOR-CONTROL APPARATUS. CLAUDE C. RUNNER, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed May 29, 1926. Serial No. 112,658. 8 Claims. (172—274.)

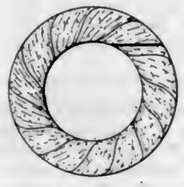


1. The combination with a variable speed electric motor, of automatic means responsive to predetermined conditions for controlling the speed of the motor to maintain different normal operating speeds varying in accordance with said predetermined conditions between each pair of a consecutive series of predetermined maximum and minimum speed limits, and independently operable means cooperating with said first means to determine the limits of control thereof.

2. The combination with a variable speed electric motor, of automatic means for increasing and decreasing the normal operating speed of the motor to different values within a limited range in accordance with predetermined conditions, and independently operable speed controlling means for the motor cooperating with said first means to shift said range of control of said first means between each pair of a consecutive series of minimum and maximum limits.

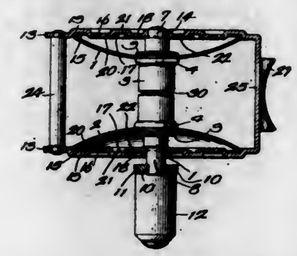
3. The combination with a variable speed electric motor and a speed controlling resistor therefor, of automatic means responsive to predetermined conditions for controlling said resistor to control the speed of the motor to maintain different normal operating speeds varying in accordance with said predetermined conditions between predetermined maximum and minimum speed limits, and independently operable means cooperating with said first means to vary said minimum and maximum limits of speed control of said first means through substantially an arithmetical series of values.

1,761,749. LEAD-WOOL AND GROUND-CORK PACKING. GREGORY E. SAWYER and JOHN W. SMITH, Independence, Kans. Filed May 10, 1928. Serial No. 276,768. 3 Claims. (Cl. 106—8.)



3. A packing for a piston rod or the like, comprising a body portion of lead wool formed of strands of lead having voids between the same, and oil impregnated granular cork embedded within the lead wool body portion, the grains of cork being arranged within the voids between the strands of the lead wool, said grains of cork being adapted to expand and to impart to the body portion a suitable resiliency.

1,761,750. REEL. JOHN V. SCHAFER, Bronson, Mich., assignor to Bronson Reel Company, Bronson, Mich., a Corporation of Michigan. Filed Aug. 8, 1928. Serial No. 298,288. 3 Claims. (Cl. 242—84.1.)



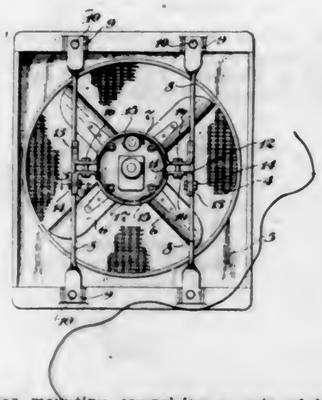
1. In a reel structure, the combination with the winding spool thereof having circular heads whose outer faces are concave; of journals coaxial with said spool heads and projecting outwardly from and in fixed connection with the central portions of said heads; a U-shaped member formed of sheet material and whose sides have coaxial sleeves pressed therefrom which constitute bearings for said journals and each of which sides has concentric annular grooves of differing diameters pressed therein and whose centers lie substantially in the common axis of said sleeves and which grooves are alternately located in the opposite faces of such U-shaped member side and whose differing diameters are such as to form concentric annular ribs of differing diameters which are alternately located upon opposite faces of such U-shaped member side, the periphery of each of said spool heads extending into one of the grooves formed in the adjacent face of the adjacent U-shaped member side; and a mounting ear formation made integrally with the base of said U-shaped member.

1,761,751. INDICATING DEVICE. HERMAN SCHLAICH, Elmhurst, N. Y. Filed Apr. 6, 1928. Serial No. 267,842. 9 Claims. (Cl. 116—114.)



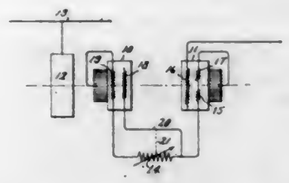
1. In a temperature-indicating device adapted to give motor temperatures, a main indicator giving values over the operating range of the instrument, means for actuating same in response to variation in motor temperatures, and an auxiliary indicator actuated through said main indicator giving a warning signal at substantially the boiling point of alcohol and a warning signal for that of water.

1,761,752. MOTOR MOUNTING. CLIFFORD E. SCOTT, Minneapolis, Minn., assignor to McQuay Radiator Corporation, Minneapolis, Minn., a Corporation of Delaware. Filed Dec. 24, 1927. Serial No. 242,487. 2 Claims. (Cl. 248—15.)



1. A motor mounting comprising a pair of laterally spaced longitudinal bars applicable to a support, a pair of transverse bars between the longitudinal bars and having a motor seat, the transverse bars being directly mounted on the longitudinal bars, the ends of one of the transverse bars being free for movement longitudinally of the longitudinal bars, and adjustable devices connecting the two transverse bars.

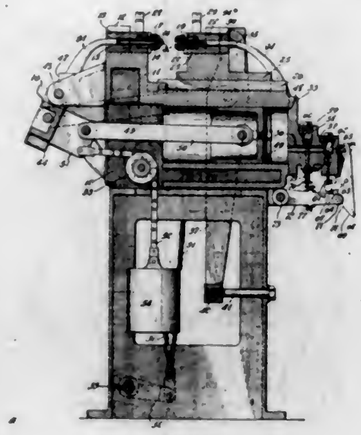
1,761,753. EXCITER AND EXCITING SYSTEM FOR DYNAMO-ELECTRIC MACHINES. WALTER SEIZ, Baden, Switzerland, assignor to General Electric Company, a Corporation of New York. Filed Jan. 29, 1929, Serial No. 335,841, and in Germany Jan. 30, 1928. 7 Claims. (Cl. 172—274.)



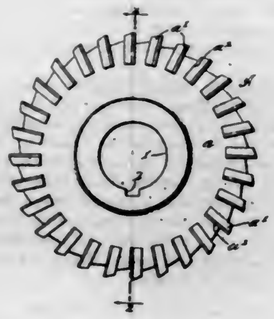
1. In combination with a variable impedance circuit, apparatus for energizing such circuit with a current substantially independent of impedance variations therein comprising a pair of commutator type alternating current dynamo electric machines having their armature windings connected in series with said impedance. A separately excited field winding and a series exciting winding on one of said machines having opposed exciting influences, and an exciting winding on the other of said machines energized from the first mentioned machine.

1,761,754. TUBE-SPLICING APPARATUS. FLORAIN J. SHOOK, Akron, Ohio, assignor to Semple-Lee Processes, Inc., Akron, Ohio, a Corporation of Delaware. Filed Apr. 9, 1927. Serial No. 182,332. 13 Claims. (Cl. 154—9.)

1. Tube-splicing apparatus comprising a pair of splicing sleeves and means for forcing one of the sleeves toward the other in axial alignment therewith, each of the said sleeves comprising complemental sections separable for removal of an annular tube therefrom, and interconnected means for concurrently separating the sections of both sleeves.



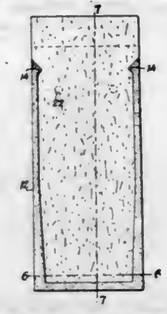
1,761,755. PROCESS OF MAKING METAL-WORKING TOOLS. EDWARD F. SMITH, Chicago, Ill., assignor to Haynes Stellite Company, Kokomo, Ind., a Corporation of Indiana. Filed Aug. 14, 1926. Serial No. 129,252. 3 Claims. (Cl. 76—101.)



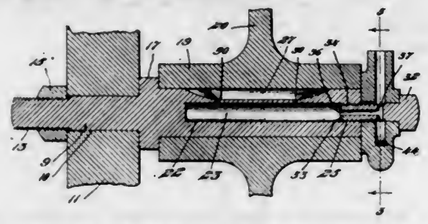
1. The process of making cutting tools consisting of a slotted body having preformed and tempered cutting teeth secured in the slots which comprises inserting the tempered teeth in the slotted body and immersing the assembled parts in melted soft solder at a temperature sufficiently low to preclude drawing the temper of the teeth.

1,761,756. SHINGLE CONSTRUCTION AND COMPOSITION. GEORGE B. STRYKER, Jr., Memphis, Tenn., assignor to The Weatherproof Products Company, Memphis, Tenn., a Corporation of Tennessee. Filed July 31, 1928. Serial No. 296,603. 4 Claims. (Cl. 108—10.)

3. A composite shingle comprising a base member and a top member, said top member having depending flanges along its sides and butt edge providing a central recess between said flanges, said base member being thinner than the depth of said recess and fitting tightly between said flanges against the top of the recess, whereby the base member will be spaced from the bottom plane of the flanges, substantially as set forth.

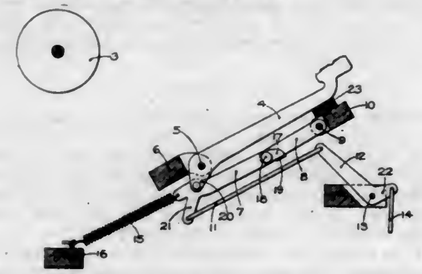


1,761,757. BEARING. LAMBERT W. SULLIVAN, Woonsocket, R. I. Filed Dec. 5, 1927. Serial No. 237,676. 1 Claim. (Cl. 308—120.)



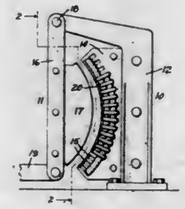
A bearing of the character described comprising a stationary shaft provided with a bearing portion continuous with a flattened extension adapted to traverse a slot in a support, said extension having a threaded stem, said shaft having a shoulder constituting an abutment for the hub of a pulley, and a longitudinal bore forming an axial chamber, said bore formed with a screw thread, said shaft having a central longitudinal peripheral cavity with tapered ends and passages connecting with said chamber, a headed hollow clamping screw engaged with the thread of the shaft, and a hollow abutment collar of greater diameter than the said shaft and mounted on the projecting part of the screw and engaging the face of the pulley and having a filling neck and supply chamber through which the screw passes and with which the axial chamber is in communication.

1,761,758. TYPEWRITER. RUSSELL G. THOMPSON, Rochester, N. Y., assignor to Electromatic Typewriters, Inc., Rochester, N. Y., a Corporation of New York. Filed Feb. 11, 1928, Serial No. 253,727. Renewed Oct. 31, 1929. 3 Claims. (Cl. 197—34.)



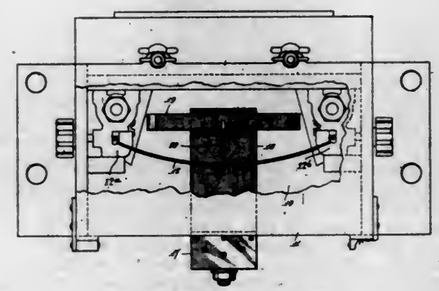
1. In a typewriting machine, the combination, with normally stationary frame members, of a type bar pivoted on the frame and having a short depending arm adjacent its pivot, an actuating lever pivoted to said arm and having a depending arm and a forwardly extending arm, a link pivoted to the frame and to said forwardly extending arm and constituting, with the latter, a toggle to lock the type bar against rebound, and means engaging said depending arm of the actuating lever to move the arm forwardly to bend the toggle and actuate the type bar.

1,761,759. ELECTROMAGNET. PANFILO TROMBETTA, Milwaukee, Wis., assignor to General Electric Company, a Corporation of New York. Filed Jan. 15, 1929. Serial No. 332,634. 8 Claims. (Cl. 175—338.)



1. An alternating current electromagnet having opposed magnetic members, and a distributed, polyphase winding arranged to establish a flux which pulls the members together and which moves transversely of the direction of pull of said magnet.

1,761,760. FUSE CUTTER. JAMES VAN DER BOGART, Ossining, N. Y., assignor to General Electric Company, a Corporation of New York. Filed May 2, 1927. Serial No. 188,389. 5 Claims. (Cl. 200—113.)



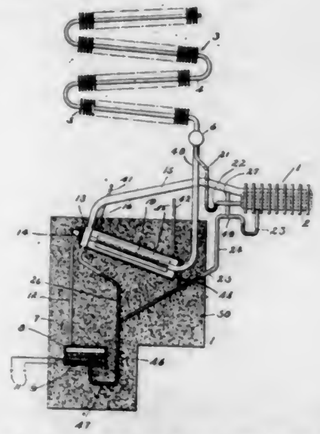
1. As a new article of manufacture, a fuse cutter and spreader for a ribbon fuse including a pointed metal blade having diverging cutting edges for transversely severing the ribbon fuse each way from the center of the fuse outward, and an insulating member for holding the severed ends of the ribbon fuse apart.

1,761,761. SET OF INSTRUMENTS FOR THE PASSAGE OF THE GLOTTIS BY MEANS OF THE TOUCH. SATURNINO GARCIA VICENTE, Madrid, Spain. Filed Aug. 8, 1928, Serial No. 298,385, and in Spain June 2, 1928. 2 Claims. (Cl. 128—303.)



1. An instrument for the passage of the glottis having an entrance element of elongated wedge formation, said element consisting of two mating members meeting on the longitudinal axis of the element.

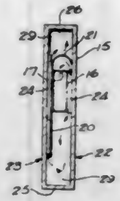
1,761,762. REFRIGERATING APPARATUS AND METHOD. LYMAN F. WHITNEY, Boston, Mass., assignor, by mesne assignments, to Stator Refrigeration, Inc., a Corporation of Delaware. Filed Jan. 6, 1927. Serial No. 159,343. 19 Claims. (Cl. 62—178.)



1. The art of refrigeration which comprises vaporizing a refrigerant in the region to be cooled, condensing the refrigerant vapor in another region, pumping the refrigerant vapor from the first to the second region by means of the vapor of a propellent liquid having a higher boiling point than the refrigerant liquid, and condensing the propellent vapor out from the refrigerant vapor in a region which is substantially out of heat-transfer relation with the region in which the refrigerant vapor is condensed.

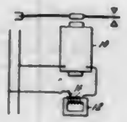
1,761,763. SHEET-GLASS APPARATUS. JESSE W. WILDERMUTH, Lancaster, Ohio, assignor to Libbey-Owens Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Oct. 4, 1926. Serial No. 139,318. 18 Claims. (Cl. 49—17.)

5. In sheet glass apparatus, a heat absorbing member adapted to be positioned at one side of the sheet comprising a casing, a conduit extending within the casing for receiving a cooling medium and having a series of openings in the top thereof through which said cooling medium is adapted to pass into the casing, and a curved



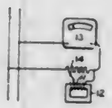
deflector plate arranged above said openings for directing the cooling medium, as it issues from the conduit, downwardly along the wall of the casing adjacent the glass sheet.

1,761,764. TEMPERATURE RESPONSIVE INDUCTANCE. HARRY M. WITHEROW, Lynn, Mass., assignor to General Electric Company, a Corporation of New York. Filed Dec. 13, 1927. Serial No. 239,802. 12 Claims. (Cl. 171—34.)



4. In combination with an alternating current circuit, temperature compensating means therefor, comprising a magnetic core reactance coil conductively associated with said circuit the magnetic core of which has a negative temperature coefficient of permeability.

1,761,765. TEMPERATURE-RESPONSIVE INDUCTANCE. HARRY M. WITHEROW, Fort Wayne, Ind., assignor to General Electric Company, a Corporation of New York. Original application filed Dec. 13, 1927, Serial No. 239,802. Divided and this application filed Oct. 30, 1928. Serial No. 316,057. 4 Claims. (Cl. 171—242.)

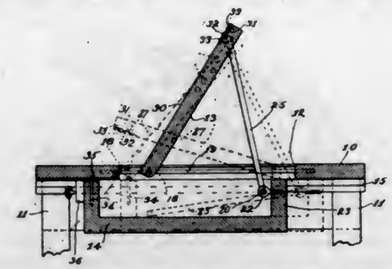


1. A temperature responsive reactance having a core member made of a material which is magnetic at zero degrees centigrade and which is substantially non-magnetic at 100 degrees centigrade and an energizing winding on said core member.

1,761,766. PROOF-READER'S TABLE. JESSE G. ZIM, Medford, Mass., assignor of fifteen per cent to John F. Sheehan, Everett, Mass., fifteen per cent to William C. Gray, Cambridge, Mass., fifteen per cent to Leon W. Rich, Medford, Mass., and ten per cent to John P. Buckley, Boston, Mass. Filed Feb. 13, 1928. Serial No. 253,853. 6 Claims. (Cl. 45—31.)

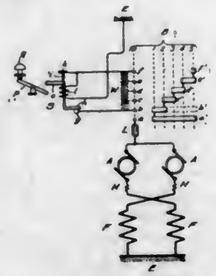
1. In a table, the combination with the table top having an opening, a closure for said opening, a drawer slidably mounted below said opening, a slide pivotally connected with said closure, slideways cooperating with said slide

mounted in said table top adjacent the edges of said opening, and means for holding said closure in an inverted



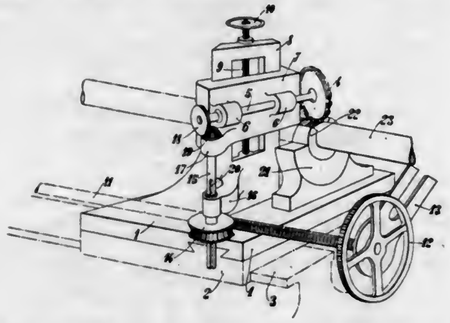
inclined position in said opening including a support pivotally mounted in said drawer and adapted to engage said closure.

1,761,767. ELECTRIC MOTOR. JOHANN ALEXANDER, Berlin-Zehlendorf, Germany, assignor to General Electric Company, a Corporation of New York. Filed Nov. 5, 1926, Serial No. 146,420, and in Germany Nov. 14, 1925. 7 Claims. (Cl. 172—179.)



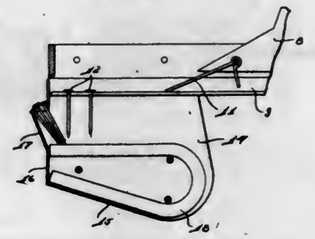
1. Means for braking series-wound direct current motors comprising a stepped braking resistance, a controller operable through a series of positions for establishing a braking circuit for the motors through said resistance and then cutting out the resistance step by step, and means associated with the controller for temporarily short-circuiting said motors when the braking circuit is initially established.

1,761,768. APPARATUS FOR CUTTING THREADS APPLICABLE TO ALL HORIZONTAL LATHES. LÉON AUGUSTE and ROBERT DES MOUTIS, Paris, France. Filed Nov. 5, 1923, Serial No. 672,980, and in France Apr. 17, 1923. 2 Claims. (Cl. 10—102.)



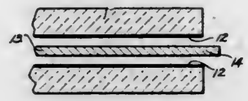
1. A thread cutting attachment for lathes having a carriage and driving means, comprising a base member mounted on said carriage, a tool support slidably mounted on said base member, means for adjusting the tool support vertically with respect to said base member, a horizontal shaft mounted in said support, a cutting tool on said shaft, a feed screw, gears connecting said screw to said lathe driving means for rotation in timed relation thereto, a worm driven by said screw, and gearing connecting said tool shaft to said worm.

1,761,769. NAIL HOLDER. OSCAR BREITHAUPT, Detroit, Mich. Filed Aug. 10, 1928. Serial No. 298,661. 2 Claims. (Cl. 1—49.6.)



1. In a nail holder of the class described: a nail container; a nail receiving trough positioned beneath said container for receiving nails dropping from said container, said trough having a longitudinally extending slot formed therein; a container mounted on and positioned adjacent the forward end of said trough and below the same for reception of nails from said trough; and a magnet positioned in said second mentioned container.

1,761,770. PROCESS FOR PRODUCING LAMINATED GLASS. WILBUR F. BROWN, Toledo, Ohio, assignor to Libbey-Owens Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Jan. 21, 1928. Serial No. 248,386. 1 Claim. (Cl. 49—81.)

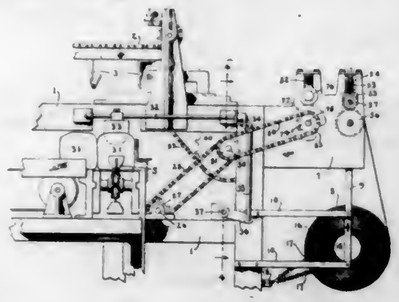


The process of producing laminated glass, consisting in assembling the laminations, including a non-brittle lamination, to be joined in proper superimposed relation, the non-brittle lamination being of a size greater than the other laminations, then placing clamping means on the non-brittle lamination on that part thereof extending beyond the other laminations, and arranging the clamping means in abutting association with the edges of the other laminations whereby to prevent relative movement between the various laminations.

1,761,771. PAPER-FEEDING AND CUT-OFF MECHANISM. CHARLES OWEN BROWNELL, Chicago, Ill., assignor to The Wrap-Rite Corporation, Chicago, Ill., a Corporation of Illinois. Original application filed Feb. 21, 1925, Serial No. 10,826. Divided and this application filed Nov. 8, 1926. Serial No. 146,958. 10 Claims. (Cl. 93—2.)

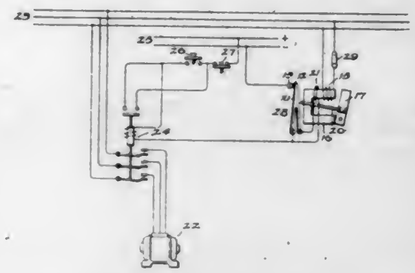
1. A paper feed and cutoff device comprising a cutoff mechanism, a feed roller, a pressure roller, pawl and ratchet driving means mounted on the shaft of the feed roller, a reciprocable rack bar, a pinion meshing with said rack bar and actuating said pawl and ratchet means, an

intermittently operating clutch-controlled shaft, a connecting rod eccentrically connected at one end to said shaft and connected at its other end to said rack bar to re-



ciprocate the same, and means operated by said shaft for actuating said cutoff mechanism while the feed roller is inactive.

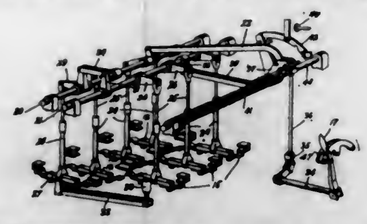
1,761,772. TIME-ELEMENT ELECTRORESPONSIVE DEVICE AND SYSTEM EMPLOYING THE SAME. CHARLES F. CARPENTER, Schenectady, N. Y., and DONALD I. BOHN, Badin, N. C., assignors to General Electric Company, a Corporation of New York. Filed Oct. 20, 1925. Serial No. 63,794. 13 Claims. (Cl. 175—294.)



10. A time element under-voltage circuit protective system including an electroresponsive switch for controlling the circuit, said switch being biased for operation to the circuit-interrupting position, master switch mechanism for controlling the energizing connections of said switch to close and open the circuit at will, and automatic electroresponsive time element means connected to be energized in accordance with the voltage of the circuit and having normally open circuit-controlling means electrically operated to the closed position and connected to cooperate with said master switch to establish energizing connections for said electroresponsive switch when the voltage of the circuit is above a predetermined value and operable with a time delay independently of said master switch mechanism to interrupt the energizing connections of the electroresponsive switch an interval after a reduction in the voltage of the circuit below a predetermined value.

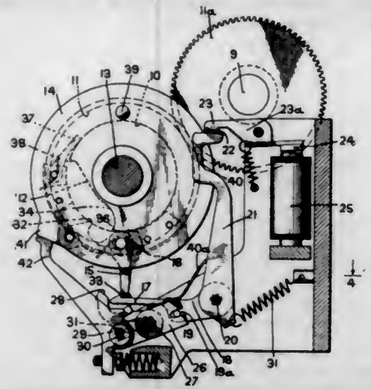
1,761,773. MOTOR-STARTING SWITCH. CHARLES F. CARPENTER, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Oct. 21, 1926. Serial No. 143,270. 7 Claims. (Cl. 200—5.)

1. In an electric switch, a set of switch contacts, a second set of switch contacts relatively movable with respect to said first set, an operating member, connections between said sets of contacts and said member through which a unidirectional movement of said member first closes the first set of contacts and then closes the second set while maintaining the first set closed with substan-



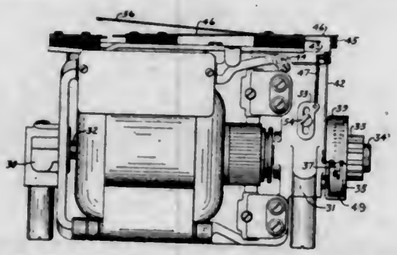
tially no increase in the closing pressure thereof, and means for temporarily arresting the movement of said operating member upon the closure of said first set of contacts.

1,761,774. ONE-REVOLUTION CLUTCH. FRED M. CARROLL, Yonkers, N. Y., assignor to The Tabulating Machine Company, Endicott, N. Y., a Corporation of New Jersey. Filed June 15, 1927. Serial No. 198,905. 4 Claims. (Cl. 192—149.)



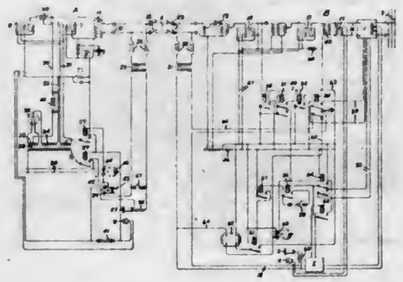
1. A clutch mechanism comprising a driving element and a driven element, a clutching pawl mounted on one of said elements, the other of said elements provided with a notch having a curved camming surface joining a straight edge portion, means for moving said pawl into the notch to effect camming action thereon by the curved surface followed by clutching cooperation with the straight edge portion and means coacting with the pawl during the camming action to start and accelerate the driven element prior to the clutching operation.

1,761,775. SPEED CONTROLLER. ELMER C. CARTER, Oakwood Village, Dayton, Ohio, assignor to The National Cash Register Company, Dayton, Ohio, a Corporation of Maryland. Filed Dec. 17, 1927. Serial No. 240,758. 9 Claims. (Cl. 171—222.)



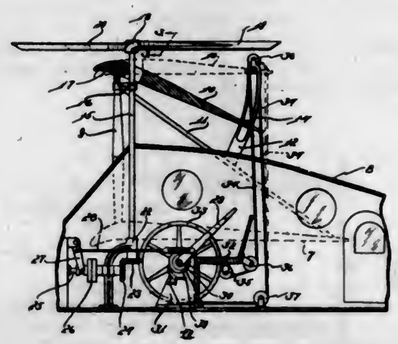
1. In a speed governor, the combination with a rotatable shaft; means to drive the shaft; and means to control the supply of power to the driving means; of a rotatable member; means operable by the member to actuate the controlling means to cut off the supply of power; centrifugally operated devices driven by the shaft; and friction shoes directly on the devices to operate the rotatable member.

1,761,776. COMMUNICATION SYSTEM. EMMETT F. CARTER, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Aug. 15, 1927. Serial No. 212,880. 14 Claims. (Cl. 179—2.5.)



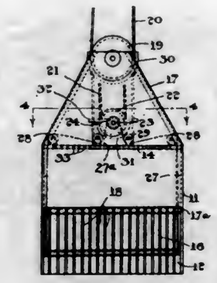
1. In a signaling system, a line, signaling stations at different points on said line, said line being subject to noise currents of magnitude sufficient to prevent satisfactory two-way audio communication between said stations, means for impressing a carrier wave modulated by signaling currents upon said line at one of said stations, means at another of said stations for detecting said signaling currents from said carrier wave, means at said other station for impressing signaling currents directly upon said line having a desired intensity ratio with respect to noise currents appearing in said line, and means at said first station for attenuating said noise currents sufficiently to permit desired reception of the signal currents.

1,761,777. AEROPLANE. JOSEPH CICCOLANNI, Detroit, Mich. Filed Oct. 14, 1929. Serial No. 390,489. 3 Claims. (Cl. 244—12.)



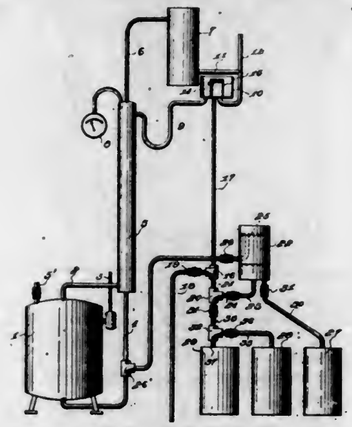
1. In an aeroplane, a pair of wings positioned one above the other, one of said wings being of less width than the other; vertically extending supporting members; means for connecting said supporting members at their upper end pivotally to the upper wing adjacent its forward edge; a brace connecting said supporting members adjacent their upper end to the lower wing adjacent its rear edge; arcuate guide members mounted upon and projecting upwardly from said brace intermediate the ends thereof and provided with an elongated slot and rollers mounted on said tiltable wing and engageable in said slot.

1,761,778. GRAB BUCKET. DANIEL W. COE, Montreal, Quebec, Canada. Filed Jan. 24, 1927. Serial No. 163,256. 2 Claims. (Cl. 294—69.)



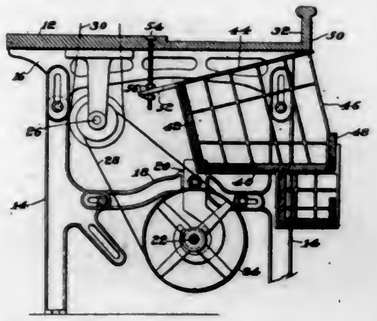
1. A hoisting bucket having top and side walls and bottom closures hinged to certain of said side walls, a sheave disposed above the top wall of the bucket and free to move vertically with respect thereto, a sheaf hoisting cable trained around said sheave, pulleys carried at opposite sides of said sheave and movable vertically therewith, guide members carried by the top wall of the bucket, flexible elements trained around the pulleys and guide members, each of said flexible elements having one end secured to one of said bottom closures and the other end secured to the body portion of the bucket, the arrangement being such that the bottom closures swing to and from operative position as the sheave and pulleys are raised and lowered with respect to the top wall of the bucket.

1,761,779. PROCESS FOR MANUFACTURING ABSOLUTE ALCOHOL. RUSSELL B. CROWELL, Agnew, Calif., assignor to American Solvents & Chemical Corporation, New York, N. Y., a Corporation of Maryland. Filed Dec. 9, 1926. Serial No. 153,550. 16 Claims. (Cl. 202—42.)



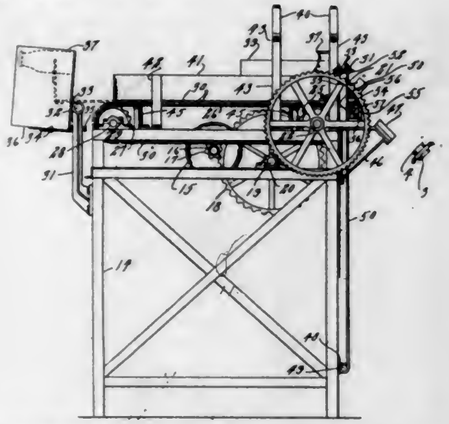
1. In a batch process of manufacturing anhydrous alcohol from aqueous alcohol, the step of forming a mixture of aqueous alcohol and a liquid substance capable of forming an azeotropic ternary mixture of minimum with alcohol and water, the said substance being present in an amount not exceeding that required to form said ternary mixture, distilling said mixture to separate an azeotropic mixture of alcohol, water and said substance therefrom and maintaining sufficient said third substance in the batch mixture during the distillation to completely dehydrate the alcohol.

1,761,780. WORK RECEPTACLE FOR MACHINE BENCHES. WILFRID H. DES JARDINS, Haverhill, Mass. Filed Nov. 10, 1927. Serial No. 232,372. 2 Claims. (Cl. 45—75.)



2. A self-contained work receptacle for suspension beneath a power sewing machine bench, having a shelf, end sections carrying hinges at one upper corner and outwardly projecting arms at the opposite upper corner, and means depending from the bench cooperating with said outwardly projecting arms for clamping said arms in various vertical positions and thereby effect an angular adjustment of the receptacle with respect to the power mechanism beneath the bench.

1,761,781. ARTICLE FEEDER. SYLVESTER EBERLY, Toledo, Ohio, assignor of one-half to Knud Flensted, Toledo, Ohio. Filed Feb. 24, 1925. Serial No. 11,146. 6 Claims. (Cl. 198—27.)

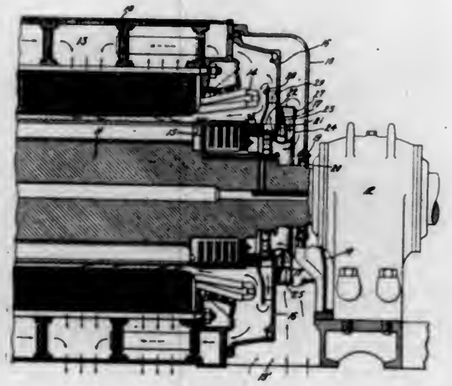


1. A delivery device embodying a conveyor, a platform to which conveyor carried articles are delivered, an abutment providing a chute holding conveyor-delivered articles upon the platform, and means for shifting the abutment discharge end downward to discharge platform carried articles in sequence.

1,761,782. PURIFICATION OF ZINC SULPHATE LIQUORS. OSCAR A. FISCHER, Denver, Colo., assignor to R. H. Channing, Jr., agent, San Francisco, Calif. Filed Feb. 10, 1927. Serial No. 167,375. 4 Claims. (Cl. 23—125.)

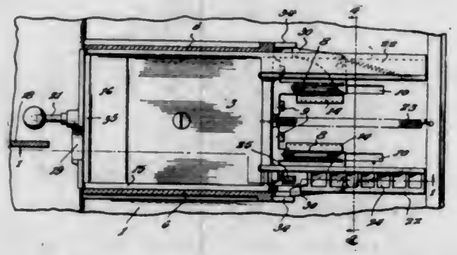
3. The step of oxidizing soluble iron salts in a zinc sulphate solution consisting of dispersing upwardly through the solution a mixture of minute bubbles of SO_2 and a gaseous oxidizing agent, the height of the liquid through which the gas passes being such as to afford sufficient time of contact for oxidation.

1,761,783. VENTILATION OF DYNAMO-ELECTRIC MACHINES. EDWARD H. FREIBURGHOUSE, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Dec. 18, 1928. Serial No. 326,875. 3 Claims. (Cl. 171—252.)



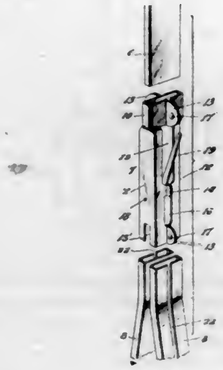
1. An enclosed dynamo-electric machine comprising stationary and rotatable members, the end wall of said stationary member having an air inlet opening about said rotatable member, an air intake casing surrounding said air inlet opening, a fan carried by said rotatable member and arranged adjacent said opening, said fan having a shroud spaced axially from said rotatable member and blades arranged between them for delivering air outwardly from said rotatable member into said stationary member, and an air director including a plurality of annular curved members, guide vanes spacing said members apart and bolts extending through said guide vanes for securing said curved members to the end wall of said stationary member about the opening therein, said curved member having edges presented outwardly in said casing to take in air flowing toward the opening in the end wall of said stationary member and having edges presented outwardly in said fan so that air will be directed from said intake casing outwardly into said fan and thereby minimize eddying of air flowing thereto.

1,761,784. COIN-ACTUATED MECHANISM. BENJAMIN L. FRY, St. Louis, Mo. Filed Mar. 13, 1929. Serial No. 346,608. 4 Claims. (Cl. 194—71.)



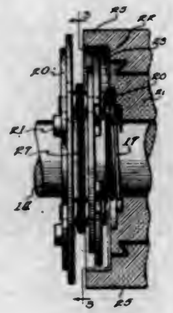
1. A coin-controlled unit for vending machines, the same comprising a guiding element, an article deliverer slidable along and guided by said element, a latch pivotally mounted upon and extending horizontally across the deliverer in position to impinge against the rear end of the guiding element and prevent forward movement of the deliverer, and means whereby the latch may be rocked by a deposited coin to clear the guiding element and permit forward movement of the deliverer.

1,761,785. COIN-ACTUATED MECHANISM. BENJAMIN L. FRY, St. Louis, Mo. Filed Aug. 19, 1929. Serial No. 386,871. 5 Claims. (Cl. 194—1.)



1. A coin chute for vending machines comprising an upper section, an intermediate coupling section having its upper end fitted to the lower end of the upper section, and lower sections having their ends fitted to the lower end of the intermediate coupling section and diverging downwardly therefrom, the upper end of each lower section extending partly around the lower end of the intermediate section and having one wall extending into and across said section.

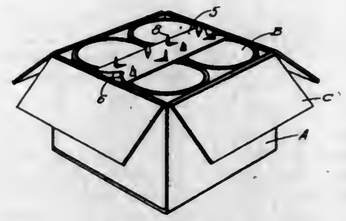
1,761,786. SHORT-CIRCUITING SWITCH. ROY O. GILBURG, Wausau, Wis., assignor to Marathon Electric Mfg. Co., Wausau, Wis., a Corporation of Wisconsin. Filed July 2, 1928. Serial No. 289,878. 7 Claims. (Cl. 172—279.)



1. A short circuiting switch for repulsion motors comprising a supporting member, an expansible contact member mounted on said supporting member and comprising a series of segments, and means on said supporting member operatively connected with said expansible contact member for camming the segments thereof radially to expanded position.

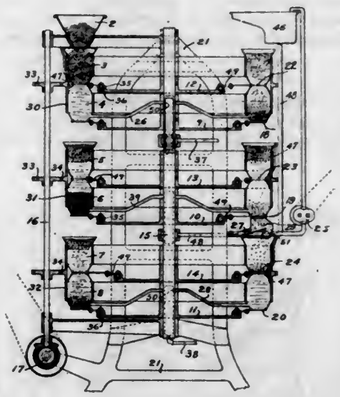
1,761,787. METHOD OF AND MEANS FOR SEALING CAN-CONTAINING CARTONS. THOMAS JOHN GORMAN, Jr., Newark, N. J. Filed Feb. 18, 1929. Serial No. 340,816. 4 Claims. (Cl. 229—47.)

4. In means for sealing container cartons having flaps at their upper open ends, a strip of metal adapted to be laid upon the upper ends of the containers within the carton, upstanding prongs struck from the strip adapted to pierce the flaps when they are folded inwardly and



said prongs adapted to be bent over at their projecting ends, and means at the opposite ends of the strip for preventing sliding movement thereof upon the containers.

1,761,788. APPARATUS FOR GRADING GRANULAR MATERIAL. OSWALD H. HANSEN, Cedarburg, Wis., assignor to Hansen Canning Machinery Corporation, Cedarburg, Wis., a Corporation of Wisconsin. Filed Nov. 17, 1926. Serial No. 148,814. 14 Claims. (Cl. 209—173.)

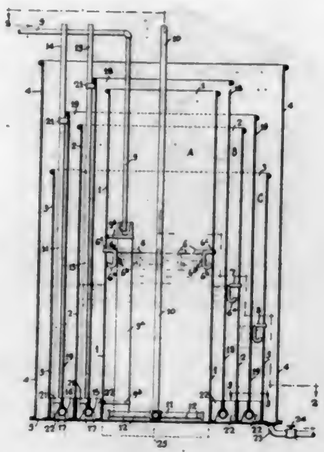


1. In combination, means forming a series of pockets, means for moving said pockets in a non-vertical plane, means for admitting liquid of definite density to the successive pockets of said series, means for introducing mixed granules of different specific gravity to the successive pockets, means for dividing the successive pockets while in motion into upper and lower chambers to segregate the settled granules from the floats, and means for removing the separated materials from the successive pockets together with the liquid.

1,761,789. PROCESS FOR THE MANUFACTURE OF YEAST. ARTHUR PENNOYER HARRISON, Yonkers, N. Y., assignor, by mesne assignments, to Standard Brands Incorporated, Dover, Del., a Corporation of Delaware. Filed Oct. 6, 1925. Serial No. 60,818. 12 Claims. (Cl. 195—20.)

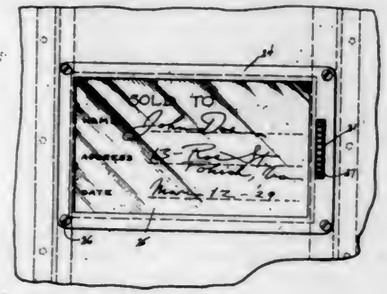
10. In a continuous withdrawal process of manufacturing yeast with aeration, passing the yeast propagating liquid through an apparatus which includes a plurality of compartments arranged in series and so feeding yeast nutrients to at least one of the compartments, so aerating the liquid in each compartment, and so rating passage of liquid through the compartments that the density of the propagating liquid in the first of said com-

partments is maintained substantially constant and the density of the propagating liquid in the last two of the



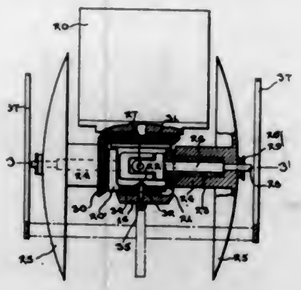
series of compartments is maintained both substantially equal and substantially constant and is somewhat lower than the density in the first mentioned compartment.

1,761,790. INFORMATION DEVICE FOR AUTOMOBILES. MIDGLEY W. HILL, Flushing, N. Y. Filed Apr. 6, 1929. Serial No. 353,123. 1 Claim. (Cl. 40—95.)



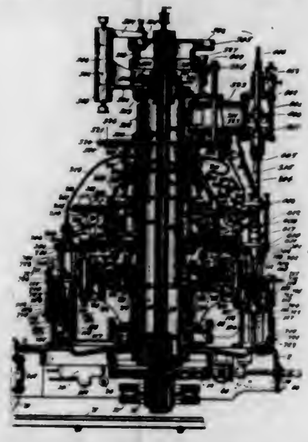
In combination, an automobile embodying an instrument board, said instrument board having an elongated opening formed therein, a casing carried by said instrument board and provided with an opening adapted for alignment with the opening in the instrument board, a guide plate in said casing rearwardly of said opening, a pair of drums rotatable in the casing, a web operatively associated with the drums and having suitable information inscribed thereon for selective alinement with said openings, a frame including vertical side members surrounding the opening in the instrument board and having a transparent medium disposed therein, said frame having an elongated opening formed in a side member thereof and the instrument board and casing having corresponding openings in alinement with said frame opening, a disk rotatable within the casing and provided with teeth on the periphery thereof in mesh with the gears on each of said drums for rotating the drums, said disk extending through the opening in the frame and the alined openings in the instrument board and casing to expose a portion thereof for operative engagement.

1,761,791. PLANTER. WALTER HUFF, Harwood, Tex. Filed Oct. 5, 1928. Serial No. 310,630. 2 Claims. (Cl. 111—77.)



1. A planter comprising a seed dropping mechanism and a seed covering mechanism, the latter embodying a base member having means for supporting the seed dropping mechanism, angular brackets having a common pivotal mounting on the base member, rotary disks mounted one each on each of the brackets and one of said disks being operatively connected with the seed dropping mechanism, those portions of the brackets engaged with the pivotal mounting having a series of notches registerable in different angular positions of said brackets, and a key carried by the base member and engageable with certain of said registered notches to lock said brackets in selected angular positions.

1,761,792. GLASS MACHINE. MAX JAEGER, Long Island City, N. Y., assignor to Anchor Cap and Closure Corporation, Long Island City, N. Y., a Corporation of New York. Filed Apr. 17, 1922. Serial No. 553,900. 41 Claims. (Cl. 49—5.)



8. In a machine of the class described, a rotatable mold table, a plurality of molds associated with said mold table, means pivoted coaxially with said mold table to guide charges into said molds, means to enter the molds and form a depression in the glass to shape said charges therein, and intermittently operated means to lock said guiding and shaping means in fixed angular position with respect to said mold table whereby said guiding and shaping means rotate at the same angular velocity as said mold table.

20. In a machine of the class described, a vertical column, a mold table rotatable about said column, a plurality of molds associated with said mold table, a bracket mounted for oscillatory movement about said column, a jacketed funnel supported by said bracket and adapted

to guide glass charges into said molds, an air operated pressing cylinder also supported by said bracket, an exhaust line connecting said pressing cylinder with the jacket of said funnel, a second exhaust line connecting the pressing cylinder with the interior of said funnel, and an oil cup positioned to mix oil with the air exhausted through said second exhaust line.

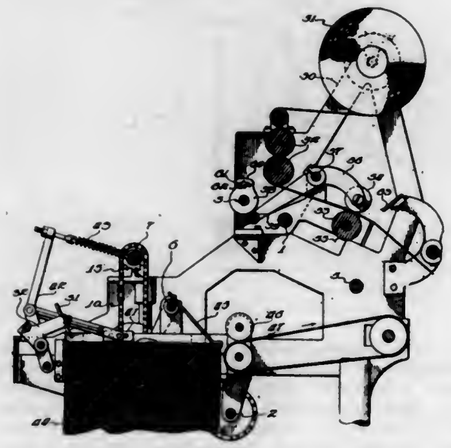
23. In combination, a glass feeding device, glass shaping mechanism having an operative and non-operative position relative to said glass feeding device, means to set said glass shaping mechanism in operation, and means to automatically move said glass shaping mechanism to its operative position relative to said feeder and to change the rate of operation of said feeder from one rate to another upon actuation of said means to set said glass shaping mechanism in operation.

1,761,793. AIR-CELL PIPE COVERING. AUGUST P. JURGENSEN, Philadelphia, Pa., assignor to Concentric Air Cells Automatic Company, Philadelphia, Pa., a Corporation of Delaware. Original application filed Jan. 30, 1929, Serial No. 336,163. Divided and this application filed July 23, 1929. Serial No. 380,445. 3 Claims. (Cl. 154—44.)



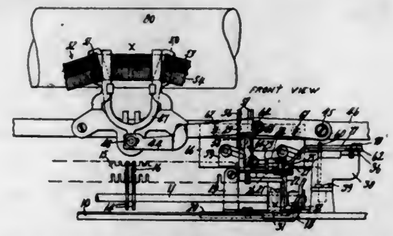
3. As a new article of manufacture, an air-cell pipe covering formed of a plurality of pyramidally superimposed sheets of heat insulating material of the same length but of gradually decreasing widths, said sheets being superimposed with the widest sheet at the bottom and the narrowest sheet on top and cemented and moulded in concentric relation to each other to form a longitudinally split covering of cylindrical formation and of uniform cross section with the juxtaposed longitudinal edges of said sheets in the same plane.

1,761,794. CARTON-BLANK SEPARATING AND FEEDING MECHANISM. EMIL G. JURGENS and HAZEN K. BECKER, Chicago, Ill., assignors to Peters Machinery Company, Chicago, Ill., a Corporation of Illinois. Filed June 8, 1928. Serial No. 283,882. 1 Claim. (Cl. 271—2.)



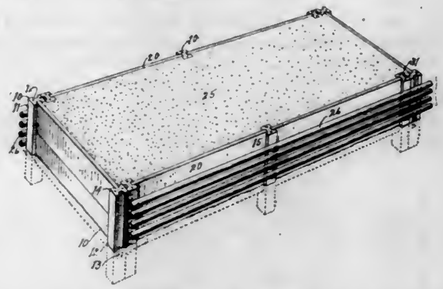
In a carton blank separating and feeding mechanism, a supporting frame, a support for a stack of carton blanks, a friction device and a retainer for respectively engaging the surface and the edge of the uppermost blank, means for moving said friction device toward said retainer whereby the engaged blank is moved relative to the next lower blank and separated from the stack by buckling, and guide fingers on said frame located in registering cutout portions of said blanks for guiding the edges of the cutout portions of the engaged blank clear of the edges of the cutout portions of the next lower blank.

1,761,795. TYPEWRITING MACHINE. ALFRED G. F. KUROWSKI, Brooklyn, N. Y., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Filed Sept. 18, 1925. Serial No. 57,053. 21 Claims. (Cl. 197—155.)



14. In a bichrome ribbon mechanism for a typewriting machine, the combination with a ribbon-vibrator normally operative to vibrate one field of the ribbon to cover and uncover the typing position on the platen at each keystroke in typing, of manually settable means connectible, at will, to reset the normal position of the ribbon to the typing line and proportionately reduce the extent of key-actuated vibration thereof necessary to present the other field of the ribbon to the typing position to provide a substantially uniform touch for the keys.

1,761,796. GREENHOUSE BED. FRED J. MEAD, East Orange, N. J. Filed Sept. 21, 1925. Serial No. 57,496. 1 Claim. (Cl. 47—19.)

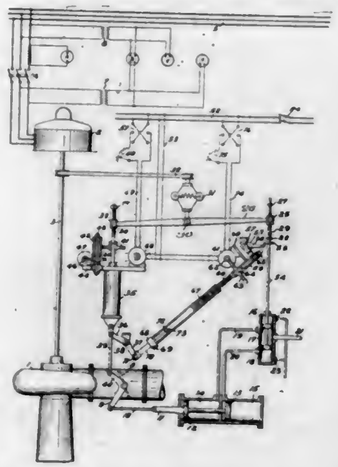


In a polygonal framework, a set of similar posts having longitudinal grooves along opposite sides thereof, a set of duplicate boards, some of said posts being installed with the grooved side of one in contact with an ungrooved side of another one and with others spaced apart with the grooves of successive posts facing each other, said boards extending from the groove of one post to that of another.

1,761,797. METHOD OF AND MEANS FOR CONTROLLING PRIME-MOVER DYNAMO PLANTS. ARNOLD PFAU, Milwaukee, Wis., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis., a Corporation of Delaware. Original application filed Sept. 11, 1924, Serial No. 737,021. Divided and this application filed Jan. 14, 1928. Serial No. 246,663. 1 Claim. (Cl. 290—7.)

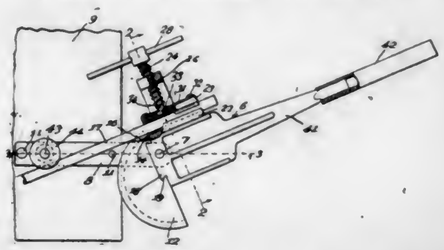
The method of starting from rest, bringing to synchronous speed with a distribution system, and causing

a prime mover operatively connected to a generator to take a load, said prime mover being controlled by means including a gate for admitting operating fluid thereto, a motor for actuating said gate, means for controlling said motor, means responsive to the speed of said prime mover for governing said motor-controlling means, and means acting on said controlling means for preventing said gate from opening, which comprises moving said pre-



venting means to gradually release said controlling means for movement toward gate-open position whereby said gate gradually opens under the control of said speed responsive means and said preventing means, continuing said movement until said prime mover reaches synchronous speed, connecting said generator to said distribution system when they are in phase, and then continuing said movement a predetermined desired amount to permit the generator to take a load.

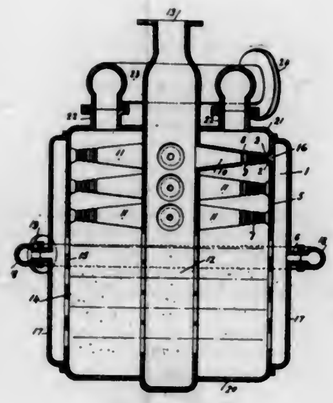
1,761,798. BENDING DEVICE FOR PIPES AND BARS. FRED B. POTTER, Los Angeles, Calif. Filed June 6, 1928. Serial No. 283,324. 4 Claims. (Cl. 153—46.)



3. A clamping device comprising a base, a jaw rigid therewith, an extension on said base, a shank threaded through said extension, an adjustable jaw having a recess in the outer face thereof, for the reception of the end of said shank, and resilient plates secured at one end of each to said adjustable jaw with the other end engaging behind a shoulder on said shank to resiliently retain the end of the shank within said recess.

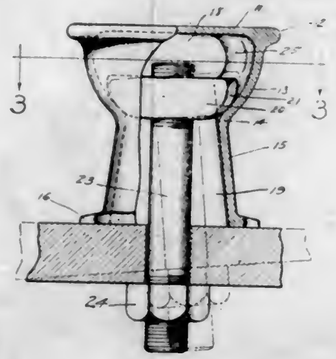
1,761,799. APPARATUS FOR MIXING GASEOUS FLUIDS. CHARLES PRACHE, Paris, France. Filed Apr. 22, 1927, Serial No. 185,872, and in France Mar. 29, 1927. 8 Claims. (Cl. 48—180.)

2. In a device for mixing gaseous fluids of the type described, a central discharge conduit, a plurality of groups of Venturi mixing tubes radiating from said conduit and each having one end remote from the restricted portion of said Venturi opening into said conduit, a supply pipe into which the other end of said mixing tubes open, said supply pipe being common to said groups of mixing tubes,



means for supplying said supply pipe with a gaseous fluid, a casing surrounding said mixing tubes, means for supplying said casing with a second gaseous fluid and means in said mixing tubes for causing the introduction of said second fluid into said tubes when said first fluid passes therethrough.

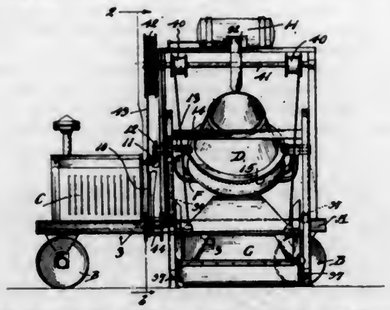
1,761,800. CONCRETE ANCHOR. CARL G. PREIS, Lynbrook, N. Y. Filed Mar. 28, 1928. Serial No. 265,300. 4 Claims. (Cl. 72—105.)



1. In a concrete anchor in combination, an anchor housing having a rounded upper chamber, a constricted throat a substantial distance from the housing entrance and a lower chamber with outwardly flaring wall, a rocker shaped anchor nut removably positioned in said rounded upper chamber and supported by said throat and forming with said chamber a ball and socket joint, and a supporting bolt threadedly engaged with said nut and radially tiltable in all directions.

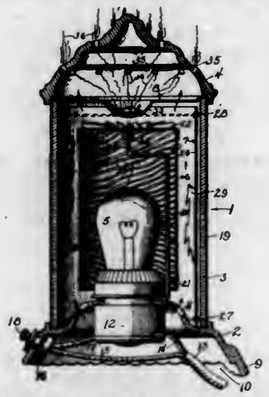
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1,761,801. AUTOMATIC TILTING-TYPE CONCRETE-MIXING MACHINE. JOHN F. ROBB, Cleveland Heights, Ohio, assignor to Koehring Company, Milwaukee, Wis., a Corporation. Filed Sept. 22, 1928. Serial No. 307,580. 20 Claims. (Cl. 83—73.)



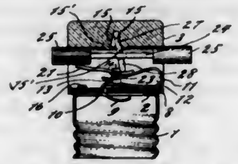
1. In a concrete mixing machine of the class described, the combination, with a mixing drum adapted to be tilted into a discharging position, of driving means for constantly rotating the drum during successive mixing and discharging cycles, and means for automatically tilting the drum into a discharging position.

1,761,802. TRANSPARENCY. ALBERT SABATH, Chicago, Ill., assignor to Scene-In-Action Corporation, Chicago, Ill., a Corporation of Illinois. Filed Oct. 18, 1928. Serial No. 313,293. 2 Claims. (Cl. 40—40.)



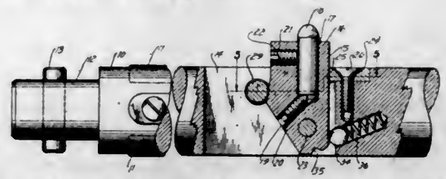
1. A device of the character described comprising a pictorially decorated transparency part of cylindrical shape adapted and arranged to pictorially simulate ascending smoke, and a burner part mounted in the upper portion of said transparency part and being adapted and arranged to discharge real smoke substantially in alinement with the simulated smoke, said parts having draft passageways formed therein.

1,761,803. SWITCH. FRANK SLADY, Brooklyn, N. Y., assignor to Leviton Manufacturing Company, Brooklyn, N. Y., a Copartnership consisting of Isidor Leviton and Evser Leviton, Brooklyn, N. Y. Filed June 26, 1925. Serial No. 39,635. 15 Claims. (Cl. 173—355.)



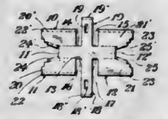
1. In a switch, the combination of a switch member, spring means for pressing against one side of said member, and operating means longitudinally movable with respect to said switch member to opposite sides of the point where said spring means presses.

1,761,804. BORING BAR. FRANK L. SNYDER, Cleveland, Ohio, assignor to The White Motor Company, Cleveland, Ohio, a Corporation of Ohio. Filed Oct. 29, 1926. Serial No. 144,984. 6 Claims. (Cl. 77—58.)



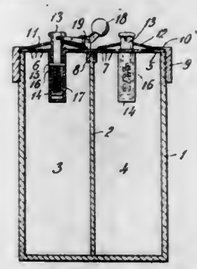
1. In a boring bar having a slot extending longitudinally therethrough, a tool holder pivoted to the slot-separated portions of the bar, a cutting tool projecting from an end of the holder, said holder being rotatable on its pivot to two alternative positions, in one of which the cutter is projected laterally of the bar, and in the other of which the cutter is telescoped between the slot-separated portions of the bar, rigid retaining means to position and lock the holder with the cutter in its first said position, and a spring pressed ball co-operatively associated with an indentation in said tool holder to retain the holder in its second said position.

1,761,805. METHOD OF FABRICATING FASTENER-OPERATING MEANS AND BLANK THEREFOR. NOEL STATHAM, Irvington-upon-Hudson, N. Y. Original application filed Mar. 25, 1926, Serial No. 97,216. Divided and this application filed June 9, 1926. Serial No. 114,766. 26 Claims. (Cl. 113—1.)



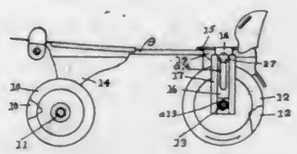
1. The method of forming an operating member for flexible fastening devices and the like, which comprises providing a blank including a plurality of trough member blank portions, and thereafter forming said trough member blank portions into a plurality of trough members each defining its separate fastener-receiving passageway.

1,761,806. CONDIMENT HOLDER. ARNOLD H. TRAMER, Elizabeth, N. J. Filed May 14, 1928. Serial No. 277,443. 3 Claims. (Cl. 65—45.)



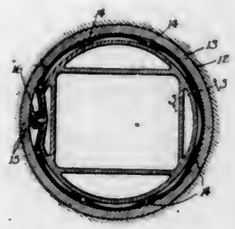
1. In a condiment holder a cover having a group of perforations, an exterior dome shaped cap for covering said group of perforations, said cap being movable vertically relatively to said cover, and means for controlling the movement of said cap comprising a vertically movable spring pressed plunger acting to maintain said cap against the cover, and a manually actuated lever for moving the cap against the pressure of the spring.

1,761,807. ROLLER SKATE. WILLIAM V. VAN ETTEN, Bellingham, Wash. Filed Nov. 24, 1928. Serial No. 321,572. 1 Claim. (Cl. 208—174.)



In roller skates, a skate frame, a front axle fastened to said skate frame, a pair of wheels mounted for revolution on said front axle, a rear axle, guides fastened to said rear axle, slides fastened to said skate frame engaged with said guides for limited reciprocation therein, a gear and ratchet pinion mounted loose for revolution on said rear axle, two rear wheels mounted loose for revolution on said rear axle on opposite sides of said pinion, spring-pressed pawls pivoted on each of said rear wheels to engage with said pinion only when said pinion revolves to drive said rear wheels forward through said pawls, and a rack fastened to said skate frame for continuous engagement with said pinion during said oscillations of said rear axle adapted to revolve said pinion to engage said pawls and drive said rear wheels forward when said rack moves downward on said pinion.

1,761,808. PISTON. IRA A. WEAVER, Springfield, Ill. Filed Oct. 8, 1927. Serial No. 224,805. 10 Claims. (Cl. 74—109.)



1. The combination of a piston having a piston-ring groove, a piston-ring in said groove of an external diameter to snugly fit the cylinder in which the piston is to be used, and a thermostatic ring in said groove behind the piston-ring and pressing outwardly on the latter.

1,761,809. BILL HOLDER. RUFINO MALARAN ANCLA, New York, N. Y. Filed June 3, 1929. Serial No. 367,982. 6 Claims. (Cl. 24—17.)

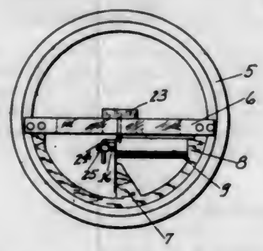


1. A bill holder comprising a strip of stiff material having an opening near one end thereof, and a piece of elastic material having its ends extending through said opening.

1,761,810. PROCESS OF TREATING GASOLINE AND THE PRODUCT THEREOF. AUGUST P. BJERREGAARD, Okmulgee, Okla., assignor to Doherty Research Company, New York, N. Y., a Corporation of Delaware. Filed July 30, 1926. Serial No. 126,090. 12 Claims. (Cl. 44—9.)

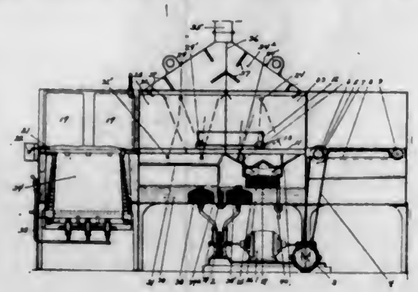
12. A gum and cloud-free motor fuel comprising gasoline and an aromatic benzene homologue acting as an anti-catalyst selected from a group consisting of anthracene, phenanthrene, phenol, ortho-cresol, meta-cresol, para-cresol and guaiacol, said homologue being present in a ratio of not more than two pounds to 100 barrels of gasoline.

1,761,811. HEAD LAMP. EVAN P. BONE, Cincinnati, Ohio. Filed Feb. 17, 1928. Serial No. 255,121. 3 Claims. (Cl. 240—45.)



1. In combination with a headlamp having a source of light and means for projecting a light image, a rotatable screen which when in operative position intercepts part of the light rays to form a shadow in the light image, a solenoid having a rotating core and means for rigidly securing said screen to said core for rotation.

1,761,812. MACHINE FOR WASHING, DRYING, AND STERILIZING DISHES. JULES LOUIS BARTON, Bellevue, France. Filed Jan. 16, 1926, Serial No. 81,636, and in France Jan. 21, 1925. 2 Claims. (Cl. 141—9.)



1. A machine of the class described comprising in combination a washing compartment, a rinsing head positioned in said washing compartment and adapted to direct a jet of water on articles to be cleaned, a drying compartment communicating with the washing compartment, means for conveying articles to be cleaned first into the washing and then into the drying compartment, a water heater positioned under the drying compartment and in communication therewith so as to discharge heated air into the latter, a flue mounted over the washing compartment, a chimney connected to said flue and positioned to draw the heated air from the water-heater through the drying compartment into the washing compartment in the direction opposite to that of the movement of the articles being cleaned and finally into the flue, and a feed conduit extending from the water-heater to the rinsing head in the washing compartment.

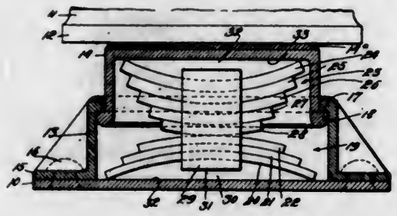
1,761,813. SOFTENER FOR CELLULOSE DERIVATIVES. HERMAN ALEXANDER BRUSON, Philadelphia, Pa., assignor to The Resinous Products & Chemical Company, a Corporation of Delaware. Original application filed Oct. 8, 1928, Serial No. 311,256. Divided and this application filed Jan. 18, 1929. Serial No. 333,525. 6 Claims. (Cl. 134—26.)

1. A composition of matter containing nitro-cellulose and a condensation product of sebacic acid and glycerol.

1,761,814. METHOD OF COATING RUBBER WITH CELLULOSIC DERIVATIVES. HERMAN ALEXANDER BRUSON, Philadelphia, Pa., assignor to The Resinous Products & Chemical Company, a Corporation of Delaware. Filed Mar. 5, 1929. Serial No. 344,601. 12 Claims. (Cl. 91—68.)

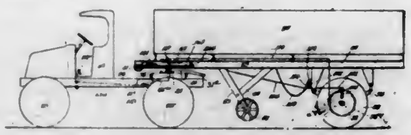
1. A method of coating rubber which consists in applying a mixture of nitro-cellulose and a condensation product of sebacic acid and glycerol dissolved in a mutual solvent.

1,761,815. SIDE BEARING FOR RAILWAY CARS. CHARLES R. BUSCH, Orange, N. J., assignor to Buffalo Brake Beam Company, New York, N. Y., a Corporation of New York. Filed Jan. 6, 1928. Serial No. 244,875. 21 Claims. (Cl. 308—138.)



1. In a side bearing for railway cars, a two-fold spring device comprising a primary laminated spring and a secondary laminated spring of less resiliency than the primary spring, the two springs being arranged for mutual opposition, and the primary spring serving as a cushion for excess weights and the secondary spring serving to maintain a permanent bearing relation between the side bearing and the car body.

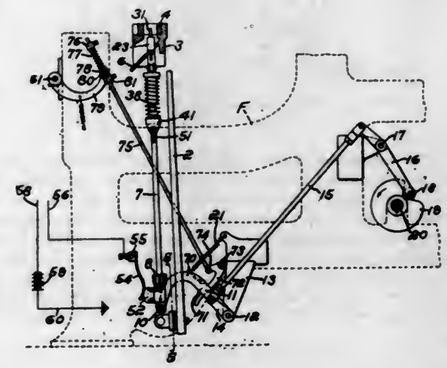
1,761,816. TRAILER VEHICLE. ADDI BENJAMIN CADMAN, Beloit, Wis., assignor, by mesne assignments, to Warner Electric Brake Corporation, South Beloit, Ill., a Corporation of Illinois. Filed May 11, 1927, Serial No. 190,491. Renewed Nov. 9, 1929. 37 Claims. (Cl. 280—33.1.)



11. A combined vehicle of the character described comprising, in combination, a tractor, a trailer, a brake for said trailer, coupling mechanism by which said trailer may be connected to said tractor for combined operation therewith, means operable to lock said coupling mechanism in coupled position, a hand-actuated lever operable upon oscillation in one direction only from its normal position when the trailer is uncoupled from the tractor to condition said brakes and coupling mechanism for uncoupling of the tractor and trailer.

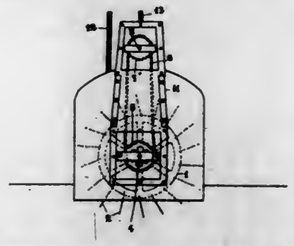
34. A combined vehicle of the character described comprising, in combination, a tractor, a trailer adapted to be coupled to the tractor, a brake on the trailer, operating means therefor on the trailer including an electromagnet, means on the tractor for controlling the energization and de-energization of said electromagnet, and mechanically operating control means on the trailer to retain said brake in set position and thereby maintain the position of the trailer when detached from the tractor.

1,761,817. FEELER MECHANISM. RANDOLPH CROMPTON, Worcester, and CHARLES E. KNOWLTON, Grafton, Mass., assignors, by direct and mesne assignments, to Crompton, Inc., Boston, Mass., a Corporation of Delaware. Filed Apr. 21, 1927. Serial No. 185,432. 11 Claims. (Cl. 139—272.)



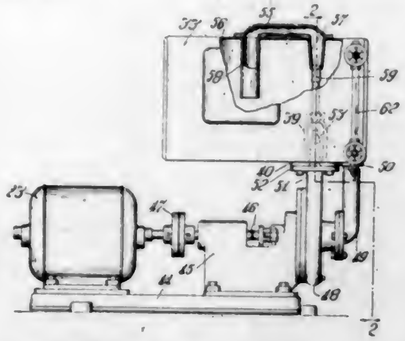
1. In an automatic weft-replenishing loom having at one end thereof a magazine or battery of fresh weft supplies, in combination with a shuttle box at said end of the loom, a feeler adapted to enter through the bottom of the active shuttle when in said box to detect substantial exhaustion of its filling, spring means to effect the feeling movement of said feeler, cam operated mechanism to withdraw said feeler prior to the next pickout of the shuttle, and means effective upon detection by said feeler to lock the latter against a further feeling movement until replenishment has occurred.

1,761,818. HYDRAULIC WHEELS ACTING EITHER AS MOTORS OR AS PROPELLERS. ANTONINO DE SPUCHES PRINCIPE DI GALATI, Palermo, Italy. Filed Oct. 15, 1928, Serial No. 312,601, and in Italy Oct. 20, 1927. 2 Claims. (Cl. 170—142.)



1. A submerged hydraulic hermetically sealed power plant comprising a main casing provided with an open bottom, an auxiliary casing, a hydraulic wheel rotatably mounted in said main casing and having paddles projecting through said open bottom, an axle mounted in said auxiliary casing, transmission means connecting said hydraulic wheel and said axle, a transmission means sheath covering said transmission means and connecting the interiors of said casing and a compressed air tube leading into said main casing.

1,761,819. EXHAUSTING MECHANISM. CLAYTON A. DUNHAM, Glencoe, Ill., assignor to C. A. Dunham Company, Marshalltown, Iowa, a Corporation of Iowa. Filed Apr. 20, 1928. Serial No. 271,635. 7 Claims. (Cl. 103—5.)



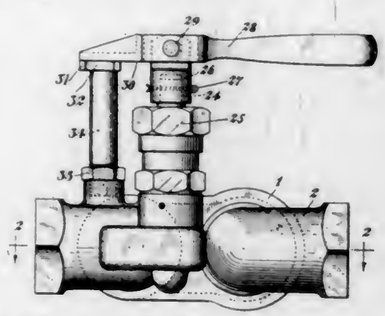
1. An apparatus of the character described comprising a tank, a fluid outlet in one side of the tank determining the water level therein, an exhauster mounted in the bottom of the tank below the water level but sealed to prevent the direct inflow of water from the tank, the outlet of the exhauster discharging into the tank above the water level, a water pump having its inlet connected with the lower portion of the tank and its outlet connected with the water inlet of the exhauster, and means for driving the pump.

1,761,820. SALUTE. ACHILLO FABRIZIO, Willow Street, Pa. Filed Aug. 14, 1928. Serial No. 299,503. 7 Claims. (Cl. 102—22.)



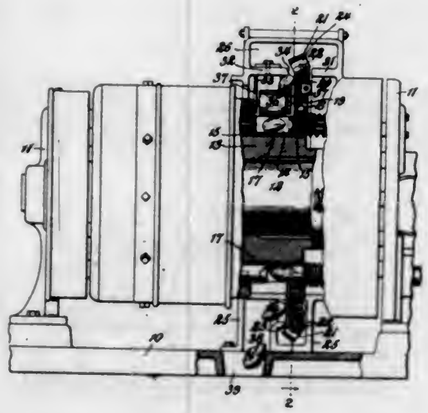
1. A plural salute comprising a plurality of abutting closed cylinders a separate coupling member connecting said cylinders in end to end relation, each cylinder having an explosive charge therein and means for igniting the same.

1,761,821. SELF-CLOSING VALVE. CHARLES D. FAGAN, Sharon, Pa., assignor to Sharpsville Boiler Works Co., Sharpsville, Pa., a Corporation of Pennsylvania. Filed July 5, 1927. Serial No. 203,432. 7 Claims. (Cl. 251—134.)



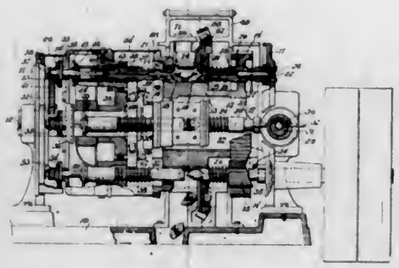
1. A valve comprising a casing provided with a pair of openings, a screen member seat beneath one of said openings and a valve seat beneath the other of said openings, a screw cap adapted to close one of said openings and provided with an open framework adapted to support a screen and to permit fluids to pass through said framework, a screen supported substantially throughout its length by said frame, said casing being provided with a valve chamber beneath said openings, a valve adapted to be seated upon the valve seat, a cap screw adapted to close the opening over said valve seat, and means to operate said valve.

1,761,822. FEEDING MECHANISM FOR NUT-CRACKING MACHINES. WILLIAM GEBHARDT, San Antonio, Tex., assignor to G. A. Duerler Manufacturing Company, San Antonio, Tex., a Corporation of Texas. Filed Apr. 11, 1928. Serial No. 269,174. 15 Claims. (Cl. 146—12.)



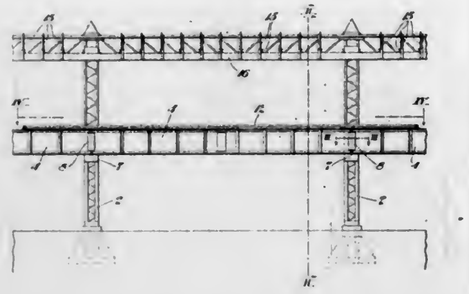
6. In combination with a rotary drum nut cracking machine, a feeder comprising an annular rim connected to the drum; and a plurality of of pick-up spoons detachably connected to the rim and having inclined polished surfaces over which the nuts are adapted to slide.

1,761,823. NUT-CRACKING MACHINE. WILLIAM GEBHARDT, San Antonio, Tex., assignor to G. A. Duerler Manufacturing Company, San Antonio, Tex., a Corporation of Texas. Filed Apr. 11, 1928. Serial No. 269,175. 20 Claims. (Cl. 146—12.)



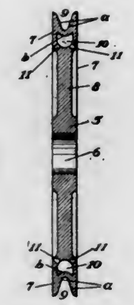
6. In a nut cracking machine of the rotary drum type, coacting pairs of hammer and anvil plungers; and friction driving mechanism associated with one set of said plungers arranged to grip the nuts with uniform pressure before they are cracked.

1,761,824. MONORAIL STRUCTURE. CHAUNCEY MARSH GOODRICH, Windsor, Ontario, Canada. Filed Aug. 20, 1929. Serial No. 387,240. 4 Claims. (Cl. 104—118.)



1. The combination with a series of posts at spaced intervals, of transverse supporting plates secured to the opposite sides of each of said posts, a series of longitudinal girders extending between said posts and connected to and supported on said plates on the near side of the posts between which they extend, said girders having their end faces spaced to permit longitudinal movement of said girders.

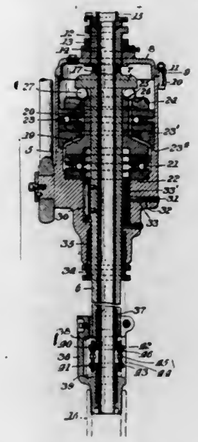
1,761,825. SHEAVE. EDGAR E. GREVE, Bellevue, Pa., assignor to Oil Well Supply Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed June 24, 1926. Serial No. 118,212. 3 Claims. (Cl. 64—17.)



3. A cast metal sheave having a hub, a body portion extending therefrom, a rim surrounding the body portion, the transverse extent of metal used in the body portion and rim being substantially the same, said rim having a peripheral groove and an annular space relatively close to the groove, and openings communicating with said space arranged at substantially the junction of said body and rim and the wall between said groove and space being chilled on opposite sides.

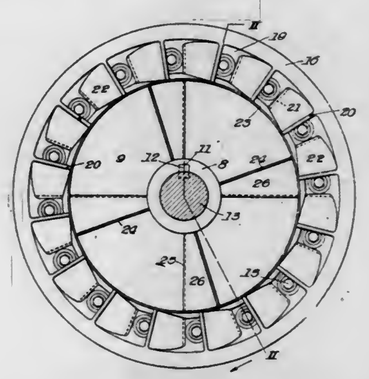
1,761,826. SWIVEL FOR ROTARY DRILLING APPARATUS. EDGAR E. GREVE, Bellevue, Pa., assignor to Oil Well Supply Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Apr. 6, 1927. Serial No. 181,594. 2 Claims. (Cl. 308—230.)

1. In an equalizing bearing for a revolving shaft having a fixed head, a plurality of bearings comprising upper and lower bearings, means for equalizing the load among the bearings disposed above the upper bearing and comprising a series of balls and movable load transmitting elements disposed on the respective bearings, each of said elements



having an inclined face, said balls arranged in contact with the fixed head and resting upon said inclined faces and cooperating therewith.

1,761,827. CABLE AND BRAKE-DRUM CONSTRUCTION. EDGAR E. GREVE, Bellevue, Pa., assignor to Oil Well Supply Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Feb. 27, 1928. Serial No. 257,498. 7 Claims. (Cl. 188—264.)

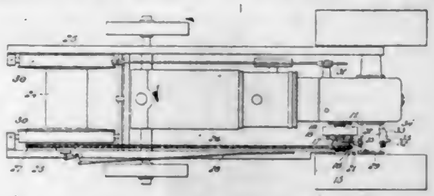


1. A drum of the character described including a cable-drum member, a brake-drum member, and air cooling means carried thereby including an inner and an outer set of concentrically arranged blades and curved walls, the latter respectively carried by the cable and brake-drum members and co-acting with the blades to effect a circulation of air within the drum.

1,761,828. POWER-DELIVERING ATTACHMENT FOR TRACTORS. LEO HAUBERT, Okla., assignor of one-third to John C. Bennett and one-third to John A. Wolfe, Tulsa, Okla. Filed Aug. 21, 1928. Serial No. 301,134. 13 Claims. (Cl. 180—53.)

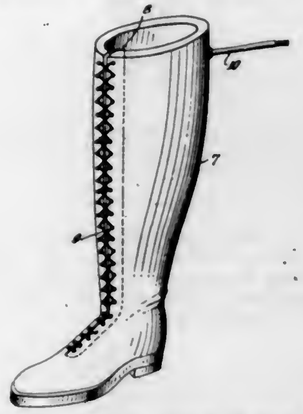
1. In combination with a tractor having a bull pinion shaft in its driving mechanism arranged forwardly of the rear-axle housing, a stub shaft aligned with the bull

pinion shaft; a bracket on the rear axle housing providing a support for the outer end of the stud shaft supported



by the bull pinion shaft; a power delivering sprocket on the stub shaft; and a clutch to connect the sprocket to be driven by the bull pinion shaft.

1,761,829. ELECTRICALLY-HEATED BOOT. OTTO HEINEMANN, Brooklyn, N. Y. Filed May 28, 1928. Serial No. 280,990. 1 Claim. (Cl. 128—264.)



A thermo-therapeutic boot, having asbestos walls slit in front and having an aperture in its upper rear wall, comprising a flap covering said slit, a lace closing said slit, resistance units positioned in parallel in the walls of the boot and the foot portion of the same, and a cable connected to said units and to a source of electric current passing through the aperture in the rear wall of the boot.

1,761,830. HAIR CLAMP. PAUL E. HERRMANN, New York, N. Y., assignor to Herrmann Supply Company Inc., New York, N. Y., a Corporation of New York. Filed Nov. 9, 1927. Serial No. 232,067. 9 Claims. (Cl. 132—33.)



1. A hair clamp comprising a portion arranged to engage a curling rod, a yielding hair engaging portion, and a hair smoothing member extending from said hair engaging portion, said hair smoothing member having a curved hair collecting edge.

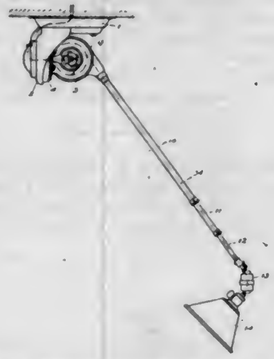
1,761,831. PIEZO-ELECTRIC PHONOGRAPH PICK-UP. CLINTON W. HOUGH, Boonville, N. Y., assignor, by mesne assignments, to Federal Telegraph Company, a Corporation of California. Filed Sept. 22, 1926. Serial No. 137,129. 3 Claims. (Cl. 179—100.41.)

1. In a piezo electric phonograph pick-up, a piezo electric crystal element having piezo electrically active faces at its opposite ends, a conductive cap closely conforming to the piezo electrically active face at each end of said crystal element, a yoke member including a pair of arms extending parallel to the plane of said conductive caps, one of said conductive caps being secured to the inner face of one of said arms, a screw device extending through the opposite one of said arms to a position adjacent the other



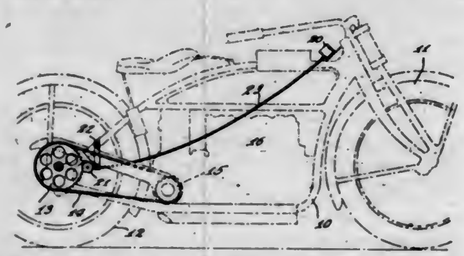
one of said conductive caps, and means connected to said last mentioned conductive cap for impressing mechanical vibrations on said piezo electric crystals for the generation of electrical energy therein, according to the impressed vibrations.

1,761,832. ADJUSTABLE SUPPORT FOR ELECTRIC LAMPS. JOHAN PETTER JOHANSSON, Enkoping, Sweden. Filed Nov. 4, 1927. Serial No. 231,047. 7 Claims. (Cl. 240—73.)



3. Adjustable support for electric lamps in which the lamp is supported by a telescopic tube connected with a rotary friction joint which is connected with a second friction joint arranged in right angles to the first friction joint characterized by the fact that the first friction joint is hollow and contains a spring-actuated winding-up drum for an electric two-wire strand extending through the telescopic tube, the two-wire strand on the winding up drum being connected with one side of a double-row ball bearing through which the electric current is transported and from the other side of which ball bearing the current in another two-wire strand leads further to the second friction joint in which also a double-row ball bearing is mounted.

1,761,833. SPEEDOMETER DRIVE FOR MOTOR CYCLES. MALDWYN EVANS JONES, Indianapolis, Ind. Filed Oct. 27, 1924. Serial No. 746,013. 5 Claims. (Cl. 74—7.)



1. In combination with a motorcycle frame having rearwardly convergent upper and lower frame bars providing

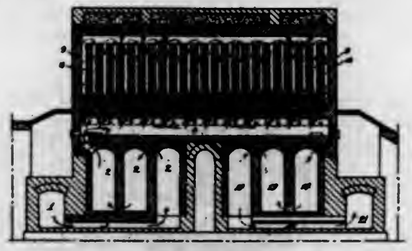
a space therebetween, a road wheel journaled in the frame, a chain sprocket carried by said road wheel and having teeth separated by rounded roller cavities, a driving chain extending from the lower portion of the sprocket, about the rear and over the top of the same and leaving the front portion of the sprocket bare and exposed to the unoccupied space between the convergent frame bars, a bracket mounted on one of the said frame bars partly in the space between the two, a pinion having rounded substantially cylindrical faced teeth to fit the roller cavities in the chain sprocket, said round tooth sprocket being supported by said bracket in the space between the frame bars in mesh with the unused teeth of the chain sprocket at the forward uncovered side of the same and thereby directly driven by said chain driven sprocket and a speedometer or like drive shaft actuated by said round tooth pinion.

1,761,834. SHOE BUCKLE. CLIFFORD G. KING, Barrington, and ROBERT C. GIBBS, East Providence, R. I. Filed Oct. 22, 1929. Serial No. 401,484. 2 Claims. (Cl. 2—245.)



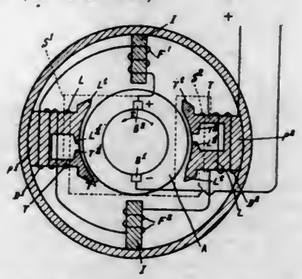
1. A buckle having a strip of flexible material secured to the underside thereof, said strip terminating at one end in a flange disposed at right angles thereto and having forwardly extending lugs on the respective ends thereof, the other end of said strip terminating in a perforated arm substantially equal in length to said strip and having at the further end thereof a flange disposed at right angles thereto, said flange ending in a forwardly extending piece parallel to said arm and constructed and arranged to be received in the space between said lugs when said arm is bent over said strip.

1,761,835. COKE OVEN. EUGÈNE LECOCQ, Brussels, Belgium, assignor to Société Générale De Fours A Coke, Systémes Lecôcq Société Anonyme, Brussels Belgium, a Belgian Company. Filed Mar. 23, 1925, Serial No. 17,480, and in Belgium Mar. 29, 1924. 2 Claims. (Cl. 202—144.)



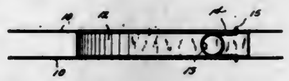
1. In a coke oven, a series of alternate carbonization chambers and heating walls therefor arranged side by side in a row, each of said heating walls containing a row of vertical combustion flues communicably connected together in pairs of contiguous flues at the tops thereof, the alternate combustion flues in each of said heating walls constituting alternate flues and the other combustion flues constituting intermediate flues, a pair of horizontal primary bus flues extending beneath each of said carbonization chambers and parallel to said heating walls, the alternate pairs of horizontal primary bus flues communicating with said alternate flues at the bottoms thereof and the intermediate pairs of horizontal primary bus flues communicating with said intermediate flues at the bottoms thereof, a pair of horizontal secondary bus flues extending beneath each of said heating walls and parallel thereto, one of the members of each of the pairs of secondary bus flues communicating with saidalternate flues approximately midway the tops and bottoms thereof, the other member of each of the pairs of secondary bus flues communicating with said intermediate flues approximately midway the tops and bottoms thereof, fuel-gas ducts beneath said series communicating with said alternate flues at the bottoms thereof, and other fuel-gas ducts beneath said series communicating with said intermediate flues at the bottoms thereof.

1,761,836. DYNAMO-ELECTRIC MACHINE. JAMES COLQUHOUN MACFARLANE and WILLIAM ALLAN MACFARLANE, Glasgow, Scotland. Filed Apr. 19, 1928, Serial No. 271,124, and in Great Britain Apr. 25, 1927. 10 Claims. (Cl. 171—223.)



1. A constant current dynamo comprising in combination, an armature, an armature winding on said armature, and at least one pair of poles, each pole having two pole horns, a leading pole horn and a trailing pole horn, the magnetic reluctance of the trailing pole horn being so much larger than that of the leading pole horn, that, under short circuit conditions, the flux in the leading horn will be reversed due to armature reaction while the trailing horn will be so saturated that the flux thereof will be substantially equal to the flux in the leading horn, and thereby the inter-polar flux will be reduced to an amount which is just sufficient to maintain the short circuit current circulating in the armature winding.

1,761,837. FILM FASTENER FOR REELS. WILLIAM T. MCCARTHY, Brooklyn, N. Y. Filed Aug. 11, 1927. Serial No. 212,171. 7 Claims. (242—70.)



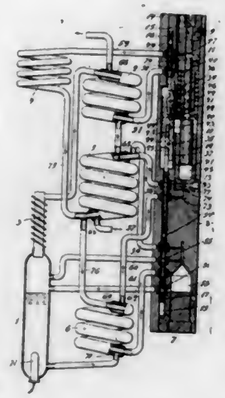
2. A fastener for a film wound on a reel, said fastener including means to engage the end of a film, and means including a pair of members to detachably engage the sides of the reel, said means being resilient to actuate said mmebers into engagement with the reel.

1,761,838. WALL INSULATION. ELDRED MOWERY, Washington, D. C. Filed Feb. 11, 1929. Serial No. 339,075. 3 Claims. (20—4.)



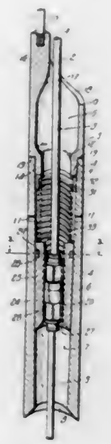
2. As a new article of manufacture, an insulating sheet provided with tapering flexible opposite edges adapted to be bent against partitioning elements for entirely holding said sheet in position.

1,761,830. ABSORPTION REFRIGERATING MACHINE. ANDERS JOHAN E: SON MUNTERS, Stockholm, Sweden. Filed June 3, 1926, Serial No. 113,445, and in Sweden July 10, 1925. 2 Claims. (Cl. 62—5.)



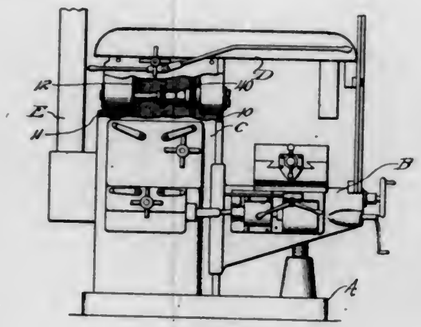
1. An absorption refrigerating machine having a mechanical circulating device arranged to be driven by means of power generated within the machine, characterized by all the pipes connecting the circulating device with other parts of the machine being connected up to a cover plate of the housing of the circulating device, to which cover plate the said housing is detachably secured so as to allow the latter to be removed without changing the pipe connections.

1,761,840. SUCKER-ROD SOCKET. ALBERT H. NEILSON, Tulsa, Okla. Filed Nov. 24, 1928. Serial No. 321,579. 2 Claims. (Cl. 294—102.)



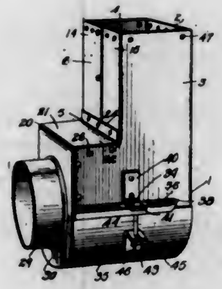
1. A fishing tool including a coupling head having its upper end provided with an opening formed by upwardly curved walls merging into an extended shank at one side of said opening, the lower end of said head provided with shoulders forming a reduced neck, a barrel having a tapered bore secured to the lower end of the head, slips in the barrel, and means confined in the barrel for normally urging said slips downwardly.

1,761,841. MILLING MACHINE. LESTER F. NENNINGER, Cincinnati, Ohio, assignor to The Cincinnati Milling Machine Company, Cincinnati, Ohio, a Corporation of Ohio. Filed June 16, 1926. Serial No. 116,446. 6 Claims. (Cl. 90—11.)



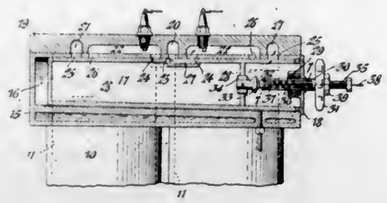
1. A milling machine spindle mounting, including a spindle support, having an aperture, a sleeve secured in the aperture against movement relative thereto and having an inwardly projecting annular rib, spaced roller bearing cups engaging said rib, antifriction rollers disposed within the cups, bearing cones for the rollers, and a milling machine spindle disposed within the cones and having a shouldered head engaging one of the cones for limiting relative movement of the bearing and spindle, said spindle being additionally formed with a threaded portion and a clamp nut adjustable mounted on said threaded portion and adapted to urge the other cone toward the shoulder on the spindle, whereby the adjustment of the nut serves to adjust jointly both bearings and to secure the parts in position determined by the rib and prevent relative axial movement of the spindle and spindle support.

1,761,842. ELEVATOR BOOT. TORVALD N. PIERSON, Independence, Mo., assignor to The Gleaner Combine Harvester Corporation, Independence, Mo., a Corporation of Delaware. Filed Feb. 11, 1929. Serial No. 339,236. 4 Claims. (Cl. 198—207.)



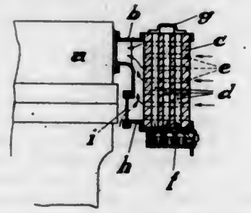
1. An elevator boot including a body member shaped from a single piece of metal bent to form a front wall and side walls, upper portions of the side walls having wings bent inwardly and secured together to form an upper rear wall section and shoulders below said section, a plate covering the lower, rear and shouldered portions of said body and having an upturned flange attached to said upper rear wall section, and a cover removably attached to said body for closing the lower end thereof.

1,761,843. INTERNAL-COMBUSTION ENGINE. JOHN PONTRELLO and PASQUALE PONTRELLO, Buffalo, N. Y. Filed May 16, 1928. Serial No. 278,270. 6 Claims. (Cl. 123—190.)



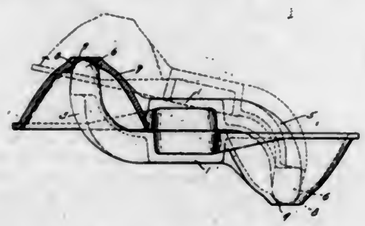
1. An internal combustion engine, comprising a tapering valve chamber, a correspondingly-shaped rotary valve arranged therein, said chamber being longer than said valve, a driving element operatively connected to the valve, means applied to said driving element for constantly urging the valve toward the tapered end of its chamber, and a gage for indicating the relative position of the valve in said chamber.

1,761,844. HEATING DEVICE FOR THE SUCTION AIR OF COMBUSTION ENGINES. WILHELM RIEHM, Augsburg, Germany, assignor to the Firm: Maschinenfabrik Augsburg-Nuernberg, Aktiengeselischaft, Augsburg, Germany, a Corporation of Germany. Filed Apr. 11, 1925, Serial No. 22,331, and in Germany Feb. 14, 1925. 5 Claims. (Cl. 123—179.)



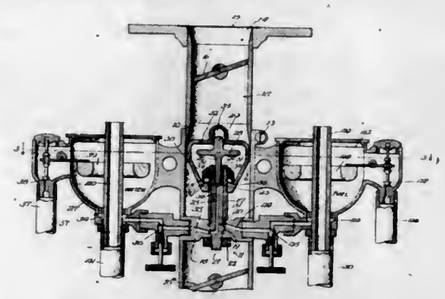
1. In a high-compression self-igniting internal combustion engine of the constant-pressure-cycle-type adapted to operate upon fuel injection, a cylinder, a combustion air inlet for said cylinder, means associated with said inlet for heating the combustion air admitted to said engine on starting, to provide a sufficiently high compression temperature within said cylinder upon starting of the engine to secure self-ignition of fuel injected therein and means for bypassing unheated combustion air to the engine.

1,761,845. AUTOMATIC TRAIN-PIPE CONNECTER. JOSEPH ROBINSON, New York, N. Y. Filed Feb. 20, 1922, Serial No. 537,827. Renewed May 3, 1929. 12 Claims. (Cl. 285—58.)



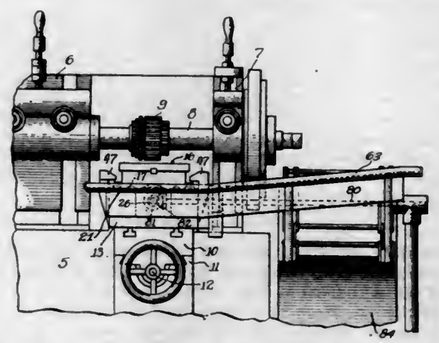
1. In an automatic connecter of the class described, the combination of mating coupling heads, each having a pin member cooperative with a receiving funnel member therefor, the funnel members having a gathering area much greater than the cross section of the largest portion of the pin member, the pin member being relatively short in its formation, and the funnel member comprising a relatively shallow body the inner walls of which have a variable curvature permitting free sliding movement of the pin member thereon when said pin member engages the funnel member near the mouth of the latter, the curvature of the funnel member being steep adjacent to the mouth thereof and in relation to its longitudinal axis and then becoming more abrupt as said curvature approaches said axis.

1,761,846. CARBURETOR. FREDERICK H. SCHOETTLER, Chicago, Ill., assignor of thirty-five per cent to John H. Taft, Chicago, Ill., and twenty-five per cent to William F. Brugmann, Evanston, Ill. Filed Aug. 15, 1923. Serial No. 657,543. 3 Claims. (Cl. 261—18.)



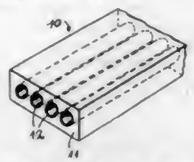
1. A carburetor including a mixing chamber, a nozzle discharging into the chamber, means for separately supplying two different fluids to the nozzle, said means embodying outlets extending through the end of the nozzle, a floating valve for controlling one of said outlets, an imperforate baffle connected with the valve and extending across both of said outlets, said baffle being disposed between said outlets and the intake of the engine and against which baffle both of the fluids are directed to mix them, and means mounted upon the nozzle for limiting the movement of the valve.

1,761,847. MACHINE TOOL. EDWARD H. SIMONSEN, Chicago, Ill., assignor to R. M. Eddy Foundry Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 6, 1928. Serial No. 304,252. 20 Claims. (Cl. 90—21.)



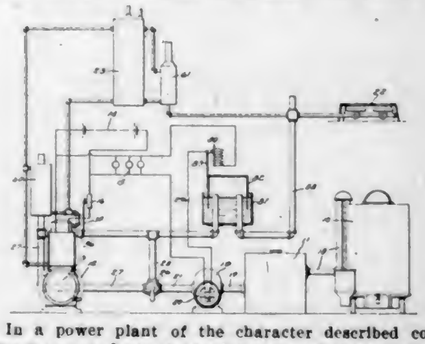
5. In a machine tool, the combination of a cutter, a work support extending past the cutter, a plurality of individual work holders movable along said work support, means for latching the work holders together, and means arranged to utilize movement of the leading work table transversely of the support to cause an automatic unlatching of the leading work table.

1,761,848. CONCRETE BUILDING UNIT. ARTHUR SITZMAN, Brooklyn, N. Y., and EDWARD S. KLAUSNER, Asbury Park, N. J. Filed Sept. 28, 1928. Serial No. 309,060. 5 Claims. (Cl. 72—40.)



1. A building unit of the character described comprising a precast cementitious elongated body, a stiff tubular nonmetallic member permanently embedded lengthwise through said body, and reinforcing means parallelly spaced from said member embedded in said body, the ends of said means being exposed as and for the purpose described and specified.

1,761,849. CONTROL MECHANISM. HARRY F. SMITH, Dayton, Ohio, assignor to The Gas Research Company, Dayton, Ohio, a Corporation of Ohio. Filed Sept. 2, 1924. Serial No. 735,523. 14 Claims. (Cl. 290—2.)



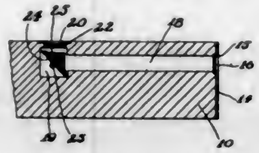
5. In a power plant of the character described comprising a gas producer, an engine operated therefrom, an electric generator driven by the engine, and a storage battery and a distribution circuit connected with the generator; the method of operation which consists in normally operating the engine at a fraction of its maximum capacity to carry the minimum distribution load and to charge the battery at predetermined rate, and varying the engine operation in accordance with increased load, to increase the dynamo output to meet increased demands in the distribution circuit and to also continue the charging of the battery at a predetermined rate.

11. A gas-power plant of the character described comprising a gas producer, means for blasting said producer to produce a combustible gas and for feeding said gas to a delivery main, means operating upon the generated gas for driving said blasting and gas feeding means, said means being of such operative characteristics as to operate upon the gas generated at minimum driving rate of the producer, an electric generator driven by said operating means, and means controlled by said electric generator for effecting control of the said operating means.

1,761,850. PROCESS FOR COATING, IMPREGNATING, OR ALLOYING METALS AND OTHER MATERIALS WITH ALUMINUM AND ALUMINUM ALLOYS. WALTER SMITH, West Hartlepool, England, assignor to The Expanded Metal Company, Limited, London, England. Filed Mar. 2, 1927, Serial No. 172,207, and in Great Britain Mar. 17, 1926. 2 Claims. (Cl. 91—70.2.)

1. A process of impregnating a foundation article with a surface alloy of a substance comprising aluminum, which consists in first treating the article with cadmium and then treating the article with a substance comprising aluminum, the second treatment being carried out at a temperature below 900° C.

1,761,851. SIGHT LEVEL. HOWARD O. STOUFFER, Watsontown, Pa. Filed Feb. 3, 1928. Serial No. 251,473. 1 Claim. (Cl. 88—2.4.)



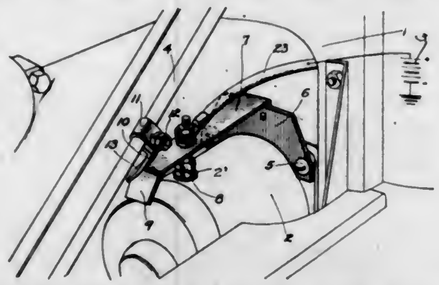
A device of the class described comprising a leveling bar having a longitudinal channel, a compartment at the inner end of said channel and a passageway communicating with the compartment at right angles to the channel, an eye glass covering the passageway, an object glass covering the channel, said eye and object glass having a hair line thereon, a reflecting prism in said compartment, a table rotatably supporting said prims, a stud having said table mounted thereon, the axis of said stud being aligned with the reflecting surface of said prism, a graduated disk rigidly mounted on said body, said stud passing thru said disk, a knob on said stud, and a resilient finger on said knob in frictional contact with the disk for positioning the prism in adjusted position.

1,761,852. SECTIONAL RING GRINDER. GEORGE E. VANCE, Springfield, Ohio, assignor to The Safety Grinding Wheel & Machine Company, Springfield, Ohio, a Corporation of Ohio. Filed Jan. 16, 1928. Serial No. 247,006. 2 Claims. (Cl. 51—209.)



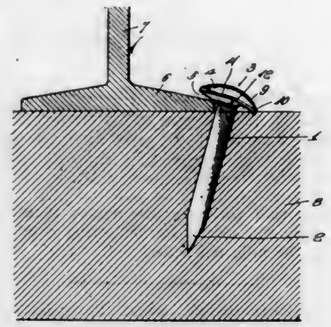
1. A grinding wheel having a series of segments, the meeting lines of which extend parallel to the axis of the wheel, means for holding said segments against radial displacement, and means for holding said segments against axial displacement relatively to each other consisting of overlapping radially-disposed faces between said segments to prevent independent axial displacement of the segments.

1,761,853. STARTING-MOTOR-CONTROL MECHANISM. WILLIAM D. WALKER, Kansas City, Mo. Filed Aug. 17, 1925. Serial No. 50,696. 1 Claim. (Cl. 200—59.)



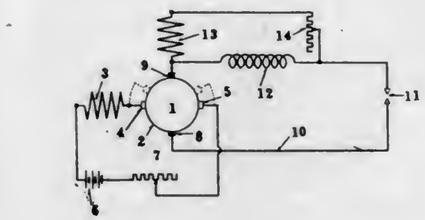
In an automobile starting motor control switch, a bracket comprising a plate secured to the frame of the automobile in spaced relation with said motor and a flexible arm normally spaced from the motor and having a downwardly inclined free end, a contact carried by said arm, and a cam-like finger on the spark control rod of the automobile movable into wiping engagement with said inclined free end when the rod is turned in spark retarding direction for flexing the arm to move said contact into engagement with the stationary contact of the starting motor.

1,761,854. RAILROAD SPIKE. RICHARD W. WARNKEN, New York, N. Y. Filed Apr. 15, 1926. Serial No. 102,231. 1 Claim. (Cl. 85—28.)



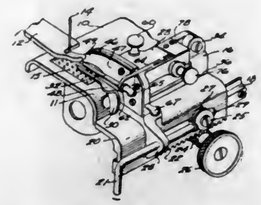
A railway spike having a shank and a flange engaging head, said shank designed to be driven into a tie at a downward and inward angle to the rail flange engaged by the head, and said head having a flange to bear upon the rail and a flange to bear upon the tie, and laterally extending shoulders of less depth than the head and of maximum width substantially in line with the face of the shank beyond which the rail engaging flange projects, the said tie engaging flange having its upper and lower faces arched downwardly and rearwardly and of gradually decreasing thickness to its outer edge and having its side edges continuous with the side edges of the shoulders, the outer end of said flange having a central inwardly constricted notch cut therein to divide the end into a pair of relatively broad prongs lying on opposite sides of the longitudinal center of the head and arranged to bear with their ends upon the tie when the head is forced outward by lateral pressure from the rail, the tie engaging flange having its upper surface lying below the horizontal plane of the bottom faces of the shoulders and the width of the head progressively diminishing between the point of maximum width of the shoulders and the sides of the said tie engaging flange.

1,761,855. ELECTRIC-CURRENT-GENERATING APPARATUS. HANS WEICHSEL, St. Louis, Mo., assignor to Wagner Electric Corporation, St. Louis, Mo., a Corporation of Delaware. Filed July 8, 1927. Serial No. 204,169. 4 Claims. (Cl. 171—223.)



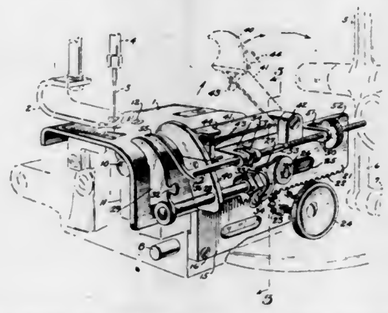
1. A direct current generator provided with an exciting circuit comprising an exciting winding and brushes, an output circuit comprising a set of working brushes displaced from the exciting brushes, an auxiliary winding on the generator displaced from the exciting winding and in circuit with the working brushes, and an inductance connected in the output circuit in shunt to said auxiliary winding.

1,761,856. ADJUSTABLE GAUGE FOR SEWING MACHINES. ANN MADELINE WENZEL, Brooklyn, N. Y. Filed Dec. 17, 1927. Serial No. 240,812. 5 Claims. (Cl. 112—23.)



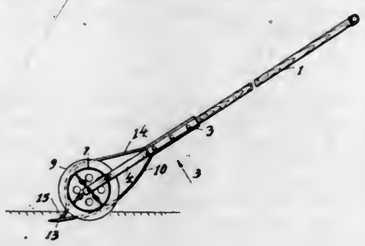
1. A gauge device comprising a base, a housing pivoted on said base, a guide in said housing, a pressure arm pivotally mounted on said housing for vertical bodily movement, a guide face on said housing and a resilient guide member on said face.

1,761,857. GAUGE FOR SEWING MACHINES. ANNA MADELINE WENZEL, Brooklyn, N. Y. Filed Aug. 7, 1928. Serial No. 298,026. 3 Claims. (Cl. 112—23.)



1. A gauge device for sewing machines comprising a support secured to said machine; a gauge unit horizontally movable over said support; an edge guide provided with means for positively securing the same against horizontal displacement; a divided braid guide the lower portion fixed with respect to said unit but the upper portion movable with respect thereto in a vertical plane; brackets carried by said unit; a squared shaft passing through said brackets and provided with threads at one end engaging a nut confined by one of said brackets; a pressure arm integral with said shaft and adapted to occupy the space between said edge guide and said brake guide; and spring controlled means for securing said edge guide and pressure arm in operative and inoperative positions.

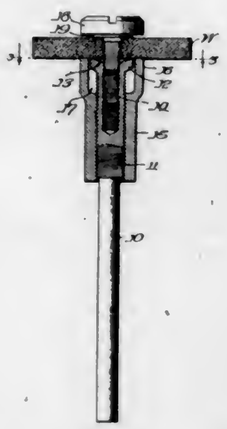
1,761,858. SOD-TRIMMING MACHINE. HENRY T. WERK, Cleveland, Ohio. Filed Mar. 1, 1928. Serial No. 258,300. 3 Claims. (Cl. 97—227.)



1. A tool of the class described, comprising, in combination, a handle, rollers carried by the handle, a plow

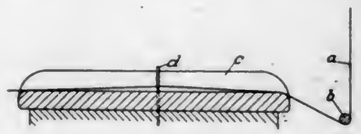
member also carried by the handle, cutting disks rearwardly disposed from said plow member, and means associated with the plow member, whereby sod is lifted up and thrust into the cutting disks.

1,761,859. MANDREL. HOWARD R. WILSON, Carnegie, Pa., and WALLACE W. SMITH, Chicago, Ill. Filed Jan. 14, 1928. Serial No. 246,818. 5 Claims. (Cl. 51—168.)



3. In a dental mandrel, a spindle, a screw arranged to clamp a wheel to the end of the spindle, and a nut screw-threaded in the same direction upon the spindle with a coarser pitch than the pitch of the screw and contacting the wheel at a larger radius than the wheel is contacted by said screw.

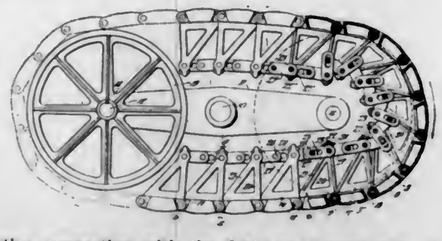
1,761,860. PROCESS AND APPARATUS FOR THE PRODUCTION OF ARTIFICIAL THREADS BY THE CUPRO-AMMONIUM STRETCH-SPINNING PROCESS. HEINZ WINKELMANN, Barmen, Germany, assignor to American Bemberg Corporation, New York, N. Y. Filed Jan. 19, 1928, Serial No. 247,845, and in Germany Jan. 20, 1927. 10 Claims. (Cl. 18—8.)



1. A process for the production of artificial threads by the cupro-ammonium stretch spinning process, consisting in conducting the threads through a thread guide in a channelled member and subjecting the said threads simultaneously to an acid treatment in said channelled member.

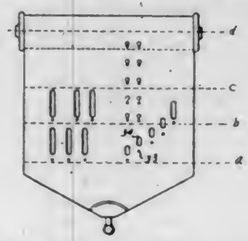
1,761,861. VEHICLE. ISAAC H. ATHEY, Chicago, Ill., assignor to Athey Truss Wheel Co., Chicago, Ill., a Corporation of Illinois. Filed Feb. 1, 1923. Serial No. 616,405. 6 Claims. (Cl. 305—10.)

2. A track chain for a vehicle formed of a plurality of shoes each of which comprises a tread member having bearing means on opposite edges thereof, a truss arm extending inwardly from said tread member and supporting an inner bearing member directly over one of said first-named bearing members, a truss link pivotally mounted on each of said inner bearing members, a second truss link pivotally mounted on each of said inner bearing members and extending in the opposite direction from the first link, said last-named link having a lost



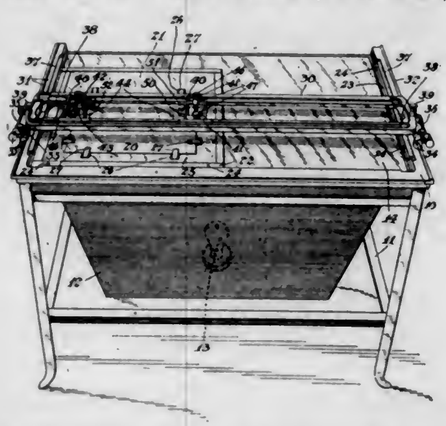
motion connection with the first-named truss link of an adjacent shoe, and means for deflecting said first-named link toward the adjacent shoe.

1,761,862. MUSIC ROLL. HENRY PRICE BALL, Brooklyn, N. Y. Original application filed Feb. 5, 1924, Serial No. 690,756, now Patent No. 1,716,811, dated June 11, 1929. Divided and this application filed Oct. 9, 1926. Serial No. 140,620. 11 Claims. (Cl. 84—161.)



1. A music-sheet having a perforation representing a tone, and a second round perforation, longitudinally in line therewith, indicating by its distance of separation therefrom the intensity of the tone.

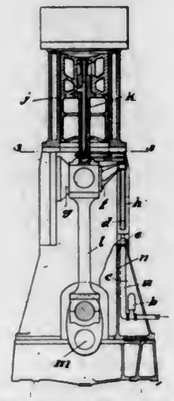
1,761,863. NEGATIVE LOCATING DEVICE FOR STEP AND REPEAT PRINTING APPARATUS. ELLIS BASSIST, Milwaukee, Wis., assignor to F. Wesel Manufacturing Company, Brooklyn, N. Y., a Corporation of New York. Filed Sept. 24, 1926, Serial No. 137,531. Renewed Nov. 29, 1929. 6 Claims. (Cl. 32—184.5.)



1. The combination with a supporting table provided with a translucent top having scales along its sides and adapted to support in predetermined position a carrier bearing a negative provided with register marks, and a source of illumination beneath said top for projecting

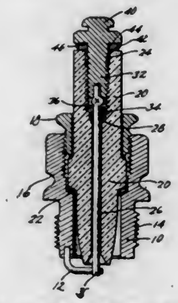
light therethru to the negative; of a bridge member slidable over the said top along its sides and cooperating with the scales thereof for setting the bridge in predetermined positions, means to secure the bridge in selected position, slides movable along the bridge, and scales on said bridge for cooperation with the slides in setting the same in selected position, said slides bearing indicator marks for registry with corresponding marks on the negative.

1,761,864. PISTON-COOLING DEVICE FOR INTERNAL-COMBUSTION ENGINES. HEINRICH BECKER, Augsburg, Germany, assignor to the Firm Maschinenfabrik Augsburg-Nuernberg Aktiengesellschaft, Augsburg, Germany, a Corporation of Germany. Filed Sept. 30, 1927, Serial No. 223,167, and in Germany Oct. 12, 1926. 4 Claims. (Cl. 123—176.)



1. In an engine, an engine frame, a piston, a cylinder for said piston supported by said engine frame, a connecting rod operably connected to said piston and operating in a transverse plane in said engine frame, liquid circulating tubes for said piston, means supporting said tubes for reciprocating movement with said piston, said engine frame having a slot through which said means extends, the slot being arranged in a portion of the engine frame which is substantially parallel with said transverse plane so that the passage through the slot is out of line with the splashing of the connecting rod, and stationary liquid conducting means telescopically engaging said tubes.

1,761,865. SPARK PLUG. GEORGE H. E. BERTHOLD, East Orange, N. J., assignor to The Rajah Company, Bloomfield, N. J., a Corporation of New Jersey. Filed Feb. 26, 1927. Serial No. 171,183. 4 Claims. (Cl. 123—169.)

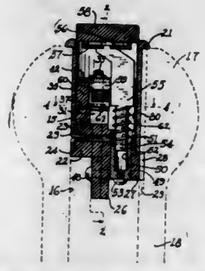


1. A spark plug comprising an insulating core having a longitudinal bore therethrough, a central electrode mounted in said bore being of a size and shape relative to the bore such that that portion of the electrode which is within the part of the insulating core exposed in use to the heat of burning gases will be free to expand and contract radially and longitudinally without interference from said core, said core being formed with a recess into which the bore opens substantially above that part of the core which is exposed to the extreme temperature changes, a washer in the bottom of said recess fitting tightly about the electrode and into the bottom of the recess and a narrow band of a sealing material within said recess compressed into intimate sealing contact with the electrode and with the insulating core and which serves to press said washer into a closer sealing contact with the electrode and the core.

1,761,866. ALLOY STEEL AND METHOD OF MAKING THE SAME. RICHARD E. BISSELL, Cleveland Heights, Ohio, assignor to Thompson Products, Inc., a Corporation of Ohio. Filed Feb. 8, 1928. Serial No. 252,913. 11 Claims. (Cl. 148—31.)

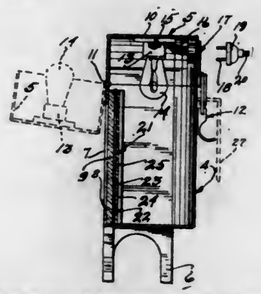
9. The method of heat treating normally austenitic alloy consisting principally of chromium, nickel, silicon, carbon and iron, in which the combined chromium, nickel content is between about 15.0 and 21.5% and the chromium is not substantially less than 5% or substantially greater than 20%, including heating the alloys to from about 1250° to 1700° F. for a period of about 2 to 11 hours and slowly cooling the alloys to render the same martensitic.

1,761,867. PUSH BUTTON. BORNETT L. BOBBOFF, Milwaukee, Wis. Filed Apr. 4, 1928. Serial No. 267,454. 12 Claims. (Cl. 200—16.)



1. In a push-button, the combination of a casing, an insulating member mounted within the casing, a pair of contacts disposed on opposite sides of said insulating member and spaced axially within the casing, a contactor movable between said contacts into selective engagement therewith and normally spring-urged into engagement with one of said contacts, said contactor having an actuating part at one end of said casing, and a second insulating member carried at the other end of the casing and having a recess in which said contactor is slidably guided.

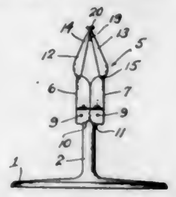
1,761,868. ELECTRIC HOUSE NUMBER AND AUTO NUMBER. WILLIAM E. BURKE, Minneapolis, Minn. Filed Aug. 19, 1929. Serial No. 387,069. 1 Claim. (Cl. 40—132.)



A portable electric sign comprising a casing main body, an elongated opening in the front of said casing main body,

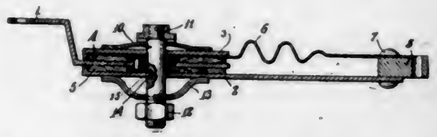
a cover over the main body of said casing and being hingedly connected thereto at the front thereof above said opening and detachably connected to the casing body at its upper rear portion by means of clamping devices, the reflecting surfaces substantially covering the exposed inner surfaces of the casing, said casing being rounded outward between its ends to form a rounder reflector surface back of the opening in the front of the casing, said cover being inclined toward its central portion, an electric bulb carried by the central portion of said cover and depending therefrom but being above the opening in the front of the casing, a carrying handle on the top of said casing cover, and a vertical, removable, translucent sign in the casing and covering the opening in the front portion thereof.

1,761,869. CUFF BUTTON. HJALMAR CARLSON, Duluth, Minn. Filed Apr. 24, 1929. Serial No. 357,774. 5 Claims. (Cl. 24—99.)



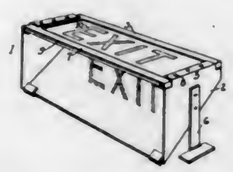
1. In a button of the class described, a base, a shank extending upwardly therefrom, a sectional head pivotally associated with the upper end of the shank and forming a continuation of said shank when disposed in a raised position, said head being disposed parallel with the base when in a lowered horizontal position, coacting means between the sectional head and the shank for securing the head in its last mentioned position, said last mentioned means including a resilient head forming element carried by the central portion of the sectional head, the upper end of the shank being formed with a socket for receiving said resilient head forming element.

1,761,870. SHOCK ABSORBER. NÉMORIN LAURENT CAUSAN, Suresnes, France. Filed May 3, 1927, Serial No. 188,575, and in France May 4, 1926. 3 Claims. (Cl. 188—130.)



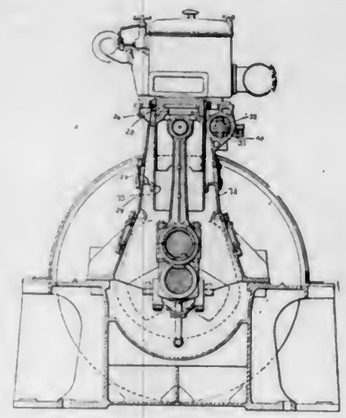
1. In a suspension system for vehicles, the combination of two friction shock absorbers substantially parallel to each other, one absorber having at least one rigid arm and the other absorber having at least one elastic arm.

1,761,871. SIGN. PHILIP P. CHAPIN and WILLIAM J. KUPEC, New York, N. Y. Filed Aug. 4, 1928. Serial No. 297,423. 2 Claims. (Cl. 40—130.)



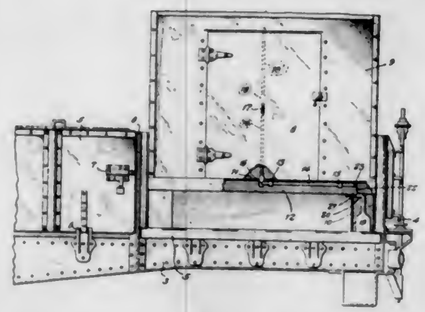
1. The combination of a member disposed as a skylight, said member having thereon designations made up of translucent self-luminous material, and a mirror reflecting the translucent quality of said designations to the observer during daylight and reflecting the luminous quality of said designations to the observer during darkness.

1,761,872. INTEGRAL CAM-SHAFT BEARING. ALAN ERNEST LEOFRIC CHORLTON, London, England. Filed Mar. 21, 1928. Serial No. 263,420. 6 Claims. (Cl. 121—104.)



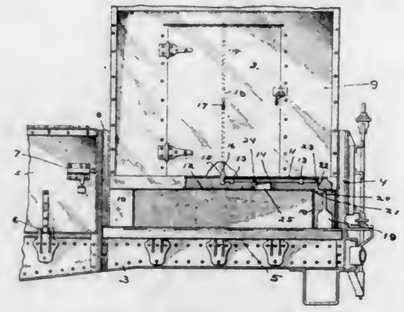
6. In an internal combustion engine, the combination of a cast frame having integral side and top plates, cylinder liners having their upper ends extending through the top plate, valve carrying heads for the cylinder liners carried by the top plate and each being provided with a plurality of push rods, said side plate having integral walls providing a cam shaft housing disposed adjacent to the top plate and parallel therewith, said housing having a plurality of upper openings through which project the push rods, and a cam shaft in the housing for actuating the push rods.

1,761,873. FREIGHT-CONTAINER CAR. EDWIN S. CLARKSON, Washington, D. C., assignor to The L. C. L. Corporation, a Corporation of Delaware. Filed Mar. 5, 1929. Serial No. 344,516. 9 Claims. (Cl. 105—366.)



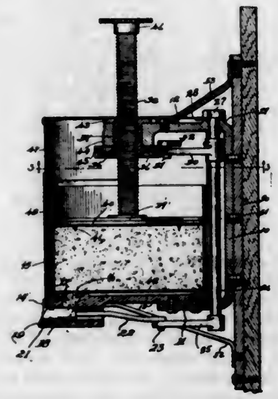
1. In combination, a support, a plurality of freight containers having legs removably mounted on said support, a door in each container, a locking bolt for each door, and means carried by the container holding the door bolts against operation so long as the legs of the container rest on the support.

1,761,874. FREIGHT-CONTAINER CAR. EDWIN S. CLARKSON, Washington, D. C., assignor to The L. C. L. Corporation, a Corporation of Delaware. Filed Mar. 19, 1929. Serial No. 348,309. 4 Claims. (Cl. 105—366.)



1. In combination, a support, a freight container having legs and removably mounted on said support, a door for the container, a locking bolt for the door, and means carried by the container holding the door bolts against operation so long as the legs or the body of the container rest on a support.

1,761,875. SOAP-DISPENSING APPARATUS. HENRY CORDELL, Wilmette, and EARL PEARL SHULTIS, Waukegan, Ill., assignors to U. S. Sanitary Specialties Corporation, Chicago, Ill., a Corporation of Illinois. Filed Sept. 23, 1926. Serial No. 137,185. 7 Claims. (Cl. 221—102.)



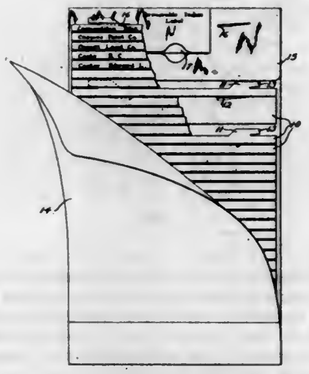
1. In a dispensing apparatus of the character described, the combination of a shouldered platform having a discharge duct, a container adapted to contain a semi-solid substance and having one end arranged to be secured on the shoulder of said platform, a plunger operable within said container to apply pressure to the material therein contained, a handle and connections for imparting a predetermined down feeding movement to the plunger with each operation of the handle, the container at its bottom communicating with said discharge duct, a valve chamber extending transversely of the discharge duct, a plunger valve operable within said chamber and across the mouth of said duct and adapted when retracted to permit down flow of material into said chamber in advance of the plunger and adapted when thrust forwardly to eject the previously deposited charge of material and cut off the further flow of material through the duct, and means connected with the handle for retracting the plunger valve during the initiatory movement of the handle and adapted to advance the plunger valve during the final movement of the handle, substantially as described.

1,761,876. OIL-WELL PUMP. HAROLD L. CRULL, Tulsa, Okla. Filed Apr. 16, 1928. Serial No. 270,227. 19 Claims. (Cl. 103—225.)



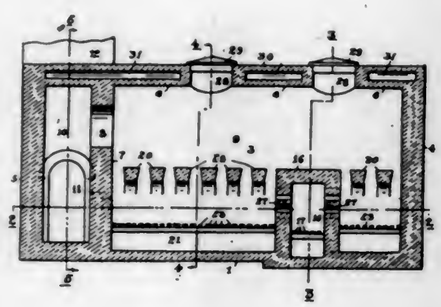
1. In combination with a working barrel, a plunger operable in the barrel, a valve subject to hydrostatic pressure of superimposed fluid and controlling admission of fluid to the plunger, means for actuating the plunger, and hydraulic means responsive to initial charging movement of the plunger actuating means for unseating the valve.

1,761,877. VISIBLE STRIP INDEX. GEORGE H. DAWSON, Boston, Mass., assignor to Service Bureau, Inc., Cambridge, Mass., a Corporation of Massachusetts. Filed June 25, 1928. Serial No. 287,993. 6 Claims. (Cl. 120—16.)



1. A visible index comprising a series of overlapping strips, each having a tongue and a slot adapted to receive and retain the tongue of the next adjacent strip, whereby the strips are detachably interconnected and are spaced by said tongues and slots relatively to one another with their margins projecting one beyond another, the tongue and slot connection constituting a hinge-joint upon which one of two adjacent strips may be swung outwardly.

1,761,878. FURNACE FOR BURNING GARBAGE AND OTHER REFUSE. HERSCHEL M. DAY, Cannonsburg, Pa. Filed May 15, 1928. Serial No. 277,844. 6 Claims. (Cl. 110—17.)



1. In a furnace of the character described, the combination with a main furnace chamber, a combustion chamber and a chimney connected to the latter, of transversely disposed and spaced supports in said main chamber upon which the material to be consumed is placed, the communication between said chambers being above said supports, and a roofed over fire box located in said main chamber between the ends thereof and having communication with the latter below said supports, said fire box roof having its upper surface level with the tops of said supports to permit material to be moved from one end of the main chamber to the other over the fire box.

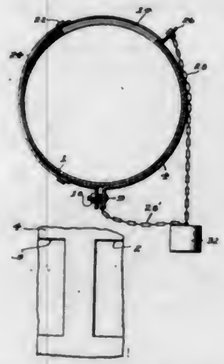
1,761,879. ORNAMENTAL FIGURE. ISADOR DICHTER, Chicago, Ill. Filed Jan. 7, 1928. Serial No. 245,202. 1 Claim. (Cl. 46—40.)



A construction of the class described comprising a hollow cast metal elephant figure having a core opening in the top of the back thereof; a closure for said opening in the form of a blanket for said elephant figure, substantially inverted U-shaped in cross section and formed and shaped to embrace and clamp said figure to automatically hold the same in place; and bosses at the four corners of said closure, there being corresponding depressions in said figure to receive said bosses.

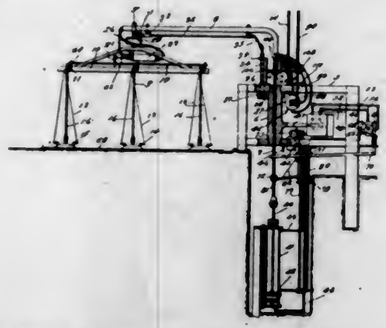
1,761,880. SAFETY CONTROL DEVICE FOR FURNACES. THOMAS A. E. DICKINSON, Poland, Ohio. Filed Mar. 26, 1929. Serial No. 350,110. 12 Claims. (Cl. 126—287.5.)

4. A device of the character described comprising a smoke pipe having an opening in the wall thereof, a damper closing said opening, a fusible element carried by the smoke pipe in contact therewith, means connecting the fusible



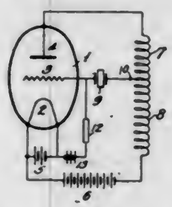
element and damper, and a weight associated with said fusible element and operable to open the damper upon fusion of the fusible element.

1,761,881. AUTOMATIC SHEET STACKER. ENOS L. DONNELLY, Huntington, W. Va. Filed Oct. 31, 1928. Serial No. 316,247. 14 Claims. (Cl. 214—6.)



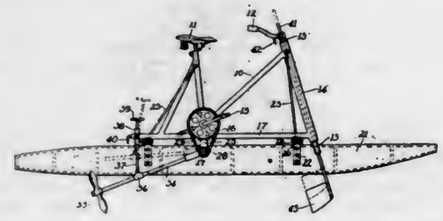
1. A stacker comprising a rotatable standard mounted for vertical sliding movement, a horizontal stacker arm at the upper end of the standard, independent fluid pressure operating means for the standard and the arm arranged to reversibly actuate the same in their respective movements and automatic control means for said operating means providing for the movement of the standard and the arm in predetermined timed relation, and operable through the movement of said standards.

1,761,882. PIEZO-ELECTRIC CRYSTAL-CONTROLLED OSCILLATION GENERATOR. HEINRICH EBERHARD, Berlin, Germany. Filed Oct. 27, 1927, Serial No. 229,102, and in Germany Oct. 26, 1926. 5 Claims. (Cl. 250—36.)



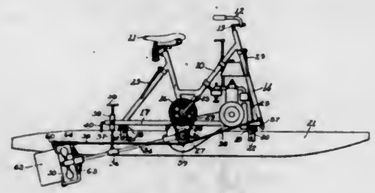
1. In an arrangement for producing electrical oscillations an amplifying valve, an oscillating device connected to the anode of the amplifying valve on one side and a piezo electrical crystal on the other side, said crystal being arranged between said oscillating device, and the grid of the amplifying tube, and an inductance connected to said oscillating device and the piezo electrical crystal on one side and to the filament of such an amplifying device on the other hand.

1,761,883. WATER VEHICLE. KURTIS R. FROEDTERT, Milwaukee, Wis., assignor to Brinsmere Boat and Cycle Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Aug. 29, 1928. Serial No. 302,823. 8 Claims. (Cl. 115—26.)



1. A water vehicle comprising a frame, swinging arms mounted on the frame, pontoons pivotally mounted on the swinging arms, brace rods detachably connecting the frame with the pontoons, and steering and propelling means mounted on the frame, said detachable brace rods and swinging arms permitting the pontoons to fold with respect to the frame.

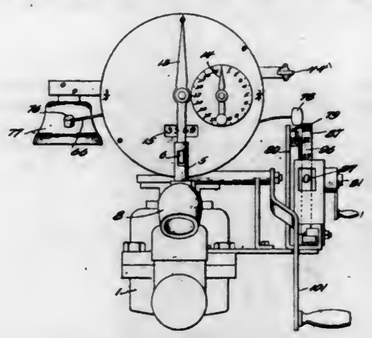
1,761,884. WATER VEHICLE. MICHAEL GORSKI, Milwaukee, Wis., assignor to Brinsmere Boat & Cycle Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Apr. 16, 1929. Serial No. 355,636. 7 Claims. (Cl. 115—26.)



1. A water vehicle comprising a frame, arms mounted on the frame, pontoons pivotally mounted on the arms, brace rods detachably connecting the frame with the pontoons, and means for locking the arms and the brace rods to the pontoons comprising a bracket on said pontoons, slotted ears thereon having openings of larger diameter than the slots, screw studs on the arms and the brace rods capable of entering the openings by way of the slots, and thumb nuts on the screw studs having projections to enter said openings, said projections being too large to pass through the slots.

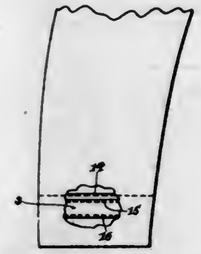
1,761,885. LIQUID-DISPENSING APPARATUS. JOSEPH J. GROETKEN, Aurora, Ill. Filed Apr. 24, 1926. Serial No. 104,463. 16 Claims. (Cl. 221—101.)

1. In a liquid dispensing apparatus, quantity measuring means, a shaft normally clutched therewith, an indicating pointer secured on the shaft, gravity actuated means secured to the shaft opposite the point of the indicating pointer, a cam secured to the shaft and having a V-shaped portion pointing oppositely to the point of the indicating



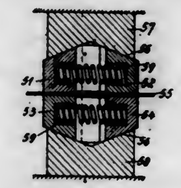
pointer, and pressing means pressing on the V-shaped portion transversely of the shaft to aid in swinging the pointer from a certain range of position to zero.

1,761,886. GARMENT SLEEVE. JOSEPH HASPEL, New Orleans, La., assignor of one-third to Harry S. Haspel and one-third to William Haspel, New Orleans, La. Filed Nov. 6, 1929. Serial No. 405,171. 2 Claims. (Cl. 2—269.)



1. The combination with a coat sleeve having an inwardly extending fold at its inner end free of connection with the inner face thereof, of an outlet member formed of a pair of end folds, an inner fold arranged over one of the end folds of said pair, a coupling part connecting one of the end folds of said pair to the inner fold, a coupling part connecting said inner fold to the other end fold of the pair, means for permanently securing one of the end folds of the pair to the inner face of the coat sleeve at a point removed from the free end of said inwardly extending fold, means for permanently securing the other end fold of said pair to said inwardly extending fold in proximity to the free end thereof, and means for releasably securing said coupling parts and inner fold together whereby when released the length of the sleeve will be extended.

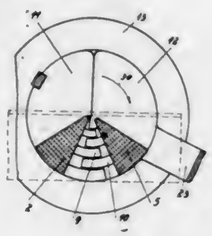
1,761,887. METHOD AND MEANS FOR UPSETTING SHEET METAL. HUGO JUNKERS, Dessau, Germany. Filed Aug. 3, 1925, Serial No. 47,816, and in Germany Aug. 15, 1924. 6 Claims. (Cl. 78—60.)



1. Device for producing a change of form in a piece of sheet metal comprising two pairs of gripping jaws mov-

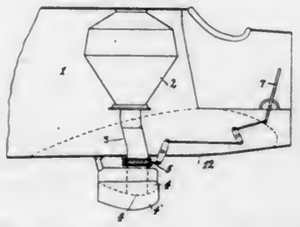
able towards and away from each other and extensions on opposite edges of said pairs of jaws, extensions of one pair of jaws projecting into the gap separating the extensions of the other pair.

1,761,888. METHOD AND MEANS FOR UPSETTING SHEET METAL. HUGO JUNKERS, Dessau, Germany. Original application filed Aug. 3, 1925, Serial No. 47,816, and in Germany Aug. 15, 1924. Divided and this application filed Nov. 27, 1926. Serial No. 151,232. 13 Claims. (Cl. 78—60.)



1. The method of producing a change of form in a piece of sheet metal, comprising gripping by their opposite surfaces two portions of such piece and forcibly moving said two portions in opposite directions around a common centre in the plane extending between said surfaces while preventing the intermediate portion from bending or folding.

1,761,889. DISCHARGING INSECTICIDES FROM AIRCRAFT. HUGO JUNKERS, Dessau, Germany. Filed June 17, 1929, Serial No. 371,690, and in Germany June 25, 1928. 5 Claims. (Cl. 244—1.)



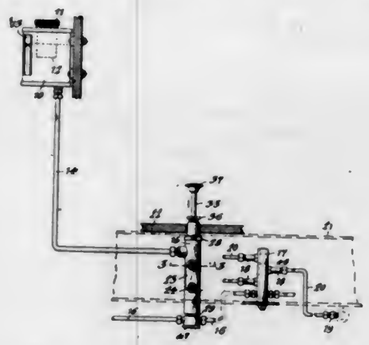
1. In means for discharging insecticides from aircraft having a pipe projecting beyond the outline of said aircraft, the combination with said pipe of a stream-line cowl surrounding the opening of said pipe.

1,761,890. POLISHING DISK. GUSTAV LÜDORF, Barmen, Germany, assignor to Artur Schulte, Velbert, Germany, Karl Küch, Barmen, Germany, and Wilhelm Hof, Elberfeld, Germany. Filed Mar. 16, 1928, Serial No. 262,306, and in Germany Dec. 28, 1926. 6 Claim. (Cl. 51—193.)



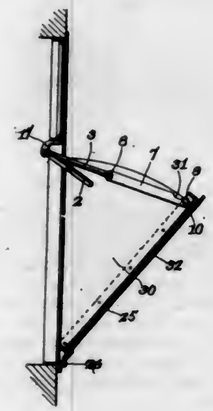
1. A polishing device comprising a plurality of layers of a fabric originally manufactured as a spiral band, each layer consisting of a section corresponding to a single spiral convolution converted into a plane disk.

1,761,891. LUBRICATING SYSTEM. CHARLES W. MANZEL, Buffalo, N. Y. Filed Apr. 14, 1925. Serial No. 22,999. 1 Claim. (Cl. 184—7.)



A lubricating system for automobile bearings and the like, comprising a reservoir for the lubricant, a plunger-pump including an inlet and an outlet, said inlet being connected to the reservoir, a fitting applied to the bearing to be lubricated and containing a check-valve, a conduit connecting the pump-outlet with said valve-fitting, and a measuring device interposed in said conduit for delivering a predetermined quantity of lubricant to the bearing, said device including a measuring chamber having a valve-controlled outlet port at its discharge end, and a piston-valve operable in the inlet end of said chamber and exposed at its rear end to the lubricant-pressure in the conduit, said piston-valve having a spiral oil-conducting groove in its exterior face for controlling the expulsion and admission of lubricant to and from the chamber in response to the forward and return movements of the piston valve effected by the corresponding movements of the pump-plunger.

1,761,892. WINDOW CONSTRUCTION. GEORGE A. McCUEAN, Sharpsburg, Pa. Filed Aug. 30, 1929. Serial No. 389,500. 4 Claims. (Cl. 268—104.)



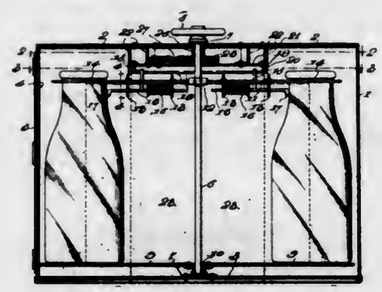
1. In combination, a window frame including a sill portion and a sash hinged to said frame remote from said portion, a rock shaft supported from said sill portion and arranged rearwardly of said frame, crank arms projecting from the ends of the shaft, links pivotally connected to the non-hinged end of said sash and pivotally connectd to said crank arms, and a handle carried by the sash and providing for the rocking of the same to project

the crank arms forwardly with respect to the frame to shift the sash to open position and whereby the crank arms will extend over said sill portion so that when lowering the crank arms the sill portion will arrest the closing movement of the sash, said links provided with clearances for the sash when the latter is in closed position.

1,761,893. MANUFACTURE OF UREA. WILHELM MEISER, Ludwigshafen-on-the-Rhine, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Feb. 17, 1927, Serial No. 169,134, and in Germany Feb. 19, 1926. 5 Claims. (Cl. 260—125.)

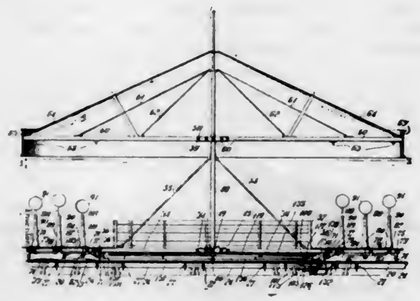
1. The process of manufacturing urea in the shape of crystalline needles which comprises breaking up warm solutions of urea containing more than 50, but less than 90 per cent, by weight, thereof into drops and allowing them to cool slowly in a gaseous drying medium.

1,761,894. MILK-BOTTLE RETRIEVER. CHESTER A. POOL, Twin Falls, Idaho. Filed Mar. 26, 1929. Serial No. 350,008. 15 Claims. (Cl. 237—41.)



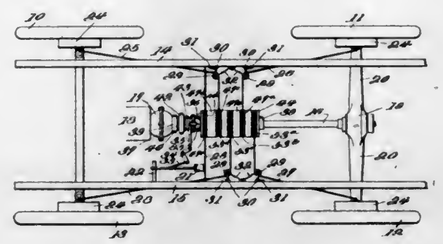
1. A device of the character described comprising a movable bottle carrier, means to lock the carrier against movement, and means operable upon the positioning of a bottle upon the carrier to release the said locking means.

1,761,895. MERRY-GO-ROUND. WILTON POWELL, Prescott, Ariz. Filed Nov. 14, 1927. Serial No. 233,199. 13 Claims. (Cl. 272—37.)



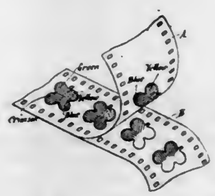
1. In an amusement device, the combination with a floor, of a merry-go-round having a relatively fixed central portion and hinged outer sections movable over the floor, means for simultaneously rotating said merry-go-round on its vertical axis and translating it bodily over the floor and humps on the floor to tilt the hinged sections at different times in different rotations.

1,761,896. POWER BRAKE. HERBERT L. SHALLCROSS, Philadelphia, Pa. Filed Sept. 3, 1925. Serial No. 54,194. 17 Claims. (Cl. 188—140.)



3. In a power brake, a rotating shaft, a plurality of collars, and a plurality of drums mounted upon the shaft, means to cause said collars to rotate with the shaft, a device to bring said collars and drums together whereby the latter are rotated frictionally by the former, a flexible means connecting each of said drums with a brake, and means to take up the slack in each of said flexible means, whereby said cables are tensed equally by movement of said drums in either direction.

1,761,897. MULTICOLOR CINEMATOGRAPHIC AND OTHER FILM AND PROCESS OF MAKING SAME. JOHN EDWARD THORNTON, London, England, assignor to John Owden O'Brien, Manchester, England. Filed May 5, 1924, Serial No. 711,251, and in Great Britain May 18, 1923. 2 Claims. (Cl. 95—2.)



1. A method of producing multi-colored cinematograph film positives upon double width transparent material of half standard thickness consisting in simultaneously coating one half width of the double width material with a sensitized colloid containing dye of one color and the other half width with a sensitized colloid containing dye of a different color, photographically printing on each half width a partial image, washing off the surplus colored colloid, recoating each half width of the support with a differently colored sensitized colloid, which also differs in color from the colors in the first coating, printing on each half width a second partial image in the same picture space as the first partial image, washing off the surplus colloid, dividing the strips longitudinally, superimposing the two divided strips with their partial images in register and cementing them together to produce a complete picture in four colors in a single picture area.

1,761,898. BALL OR HANDLE FOR GEAR-SHIFT LEVERS. KARL TURK, Baltimore, Md., assignor to The Porcelain Enamel & Manufacturing Company of Baltimore, Baltimore, Md. Filed Apr. 2, 1928. Serial No. 266,690. 1 Claim. (Cl. 74—33.)

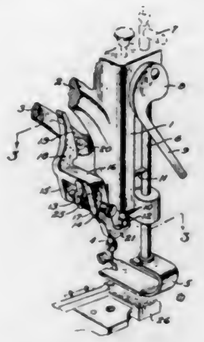
A lever-weighting ball handle for automobile gear shift levers, consisting of cast iron having an aperture provided with a screw thread formed in the metal of the ball for attachment of the ball to the end of the lever, and

having a coating of vitreous enamel fused to the surface of the ball and intimately united with the metal of the



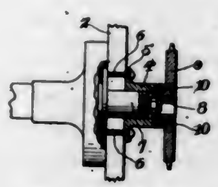
ball to result in a lever handle substantially indestructible by shocks, and also providing a durable smooth even and ornamental finish.

1,761,899. AUTOMATIC PRESSER-FOOT-LIFTING MECHANISM. ANNA M. WENZEL, Brooklyn, N. Y. Filed May 22, 1929. Serial No. 365,140. 6 Claims. (Cl. 112—239.)



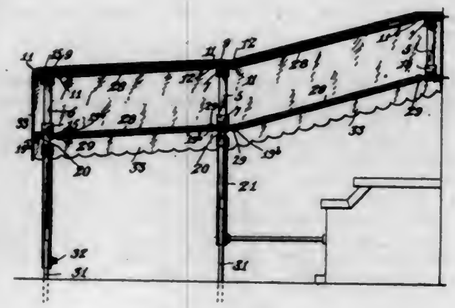
1. In a tripper mechanism for raising the presser foot of a sewing machine the combination of a support including a pin; a frame slidably mounted on said pin; a bar and connections for slidably supporting said presser foot; an extension of said frame adapted to engage one of said connections when said frame is at one limit of movement on said pin but be disengaged therefrom when said frame is slid to the other limit thereon; and a second extension of said frame adapted to be engaged by an oscillating member of said machine when said first named extension is engaged with said connections whereby said frame is oscillated about said pin and said presser foot raised.

1,761,900. POWER TAKE-OFF. ARTHUR C. WHATLEY, Opelika, Ala. Filed Oct. 3, 1929. Serial No. 397,114. 2 Claims. (Cl. 74—106.)



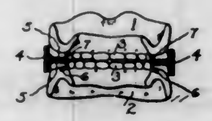
1. A power take-off comprising a tubular member adapted to replace the hub and hub flange of a vehicle wheel, a sprocket having an annular flange extending into said tubular member, and holdfast devices extending through the sprocket and into the tubular member.

1,761,901. SIDEWALK CANOPY. CECIL M. WICKSTRUM, Omaha, Nebr. Filed Sept. 17, 1929. Serial No. 393,199. 4 Claims. (Cl. 135—5.)



1. In a sidewalk canopy, a frame, said frame embodying sections, each section comprising parallel side members and a central member, means at the ends of the sections for pivotally connecting the sections, uprights for supporting the sections, and a cover for the frame.

1,761,902. DENTURE. KARL G. ANDERSON, Seattle, Wash. Filed Nov. 22, 1928. Serial No. 321,246. 1 Claim. (Cl. 32—4.)



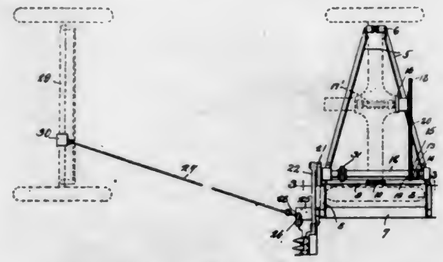
A pair of dentures comprising an upper plate fitting and covering the gums, a lower plate fitting the gums, coil springs arranged one at each side of the plates and at the rear thereof, the straight ends of each spring extending forward outwardly of the teeth, the end being turned in across the teeth, the lower end being secured to the lower plate and the upper end being bent upward around the teeth.

1,761,903. PENHOLDER. IRWIN C. BRADLEY, Brattleboro, Vt. Filed Oct. 7, 1929. Serial No. 398,041. 5 Claims. (Cl. 120—101.)



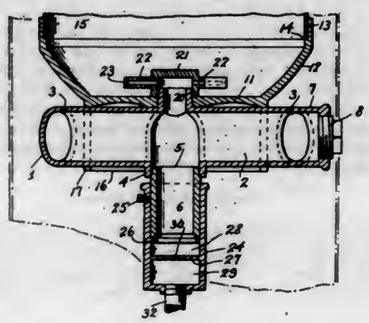
1. A penholder comprising a handle having a recess, and a nib holding and ejecting member slidable in the recess and having a yoke portion and opposite arms extending outwardly therefrom, one arm having an outstruck nib abutment, and the other arm having a finger piece at its extremity, and means engaging with the handle and slidably with the yoke portion for guiding the member in its sliding movement in said recess.

1,761,904. MOWING ATTACHMENT. WILLIAM L. CHAMPION, Muskogee, Okla. Filed Sept. 22, 1928. Serial No. 307,724. 3 Claims. (Cl. 56—25.)



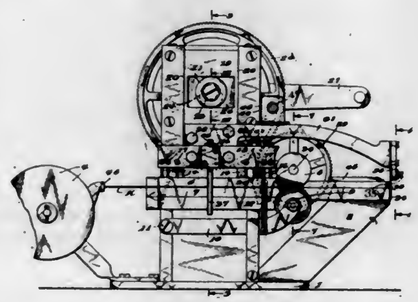
1. A mower attachment for motor vehicles, comprising a frame formed of a pair of bars, means for clamping one end of the frame to the rear axle of a motor vehicle, the opposite ends of the bars diverging and extending beyond the side of the truck, straddling one of the wheels of the truck, a power shaft mounted on the frame, means for transmitting power of the motor of the vehicle to the power shaft, and a cutter bar supported by the frame, and means for transmitting power from the power shaft to the cutter bar.

1,761,905. DUPLEX BURNER. EUGENE ORA DANIELS, Toledo, Ohio. Filed July 18, 1928. Serial No. 293,773. 4 Claims. (Cl. 158—99.)



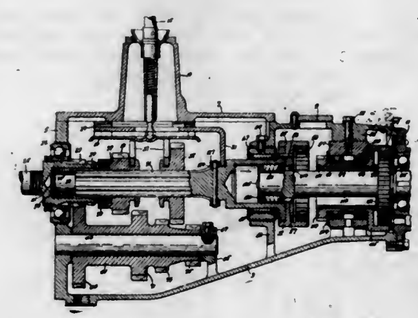
4. In a burner of the class described, the combination of an annular hollow burner head formed with a fuel outlet, a circumferentially extending passage in the top thereof, a hollow cross arm extending across the annular burner head and arranged within the confines thereof, the ends of the cross arm having communication with the respective sides of the burner head, a flame deflector unit including a saucer like rim for disposition about the annular head and against which the flames are to be directed, and a skirt portion depending from the lower edge of the rim for disposition within the confines of the annular burner head, said skirt portion being notched to rest on the cross arm, and said cross arm having an inlet opening, a shell associated with the arm and having an open end communicating with the said inlet opening in said arm, a partition arranged within the lower portion of the shell and dividing the same into a lower gas chamber and an upper mixing chamber, one side of the mixing chamber being provided with an air inlet opening, a gas supply pipe receiving opening formed in the gas chamber, and said partition being formed with an orifice to admit the gas from the chamber to mix with the air in the shell.

1,761,906. PUNCHING AND CUTTING MACHINE. MARY J. A. DAVY, New York, and ALBERT P. KOMOW, Brooklyn, N. Y.; said Komow assignor to said Davy. Filed Dec. 5, 1925. Serial No. 73,491. 4 Claims. (Cl. 164—12.)



1. A machine of the character described including stationary guides, a reciprocating plunger mounted for longitudinal movement in said guides, and having an opening therein, a rotary shaft having an eccentric hub formed thereon and extending into the opening for moving the plunger, a cam roller carried by the hub, anti-friction bearings interposed between the hub and cam roller, and means for removably holding said bearings and cam-roller in position on the hub.

1,761,907. OVERGEAR TRANSMISSION. HAROLD DREW, Lansing, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed July 13, 1927. Serial No. 205,513. 12 Claims. (Cl. 74—58.)

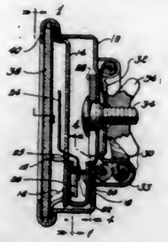


1. In change speed transmission, three aligned shafts, means to drive the intermediate shaft from a first end shaft at a plurality of speed ratios, means to drive the second end shaft from the intermediate shaft at the same speed or at a predetermined ratio, means associated with said intermediate shaft and said second end shaft to affect said last named speed change by an axial movement of said intermediate shaft.

1,761,908. AMMETER. JESSE E. ESHBAUGH, Flint, Mich., assignor to A C Spark Plug Company, Flint, Mich., a Company of Michigan. Filed Aug. 19, 1927. Serial No. 214,159. 4 Claims. (Cl. 171—95.)

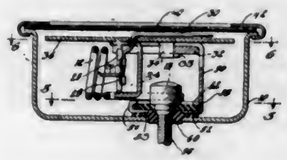
4. In an ammeter, a case having movably supported therein an armature, a permanent magnet tending to hold

said armature against movement, a clamp on the back side of said case having a plurality of spaced arms for receiving a coil of a condenser, one of said arms being disposed



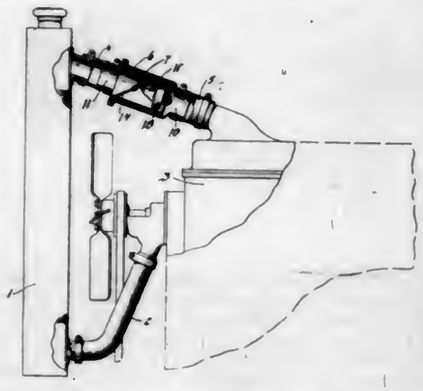
adjacent the armature for concentrating the field of force adjacent thereto, and means for connecting said clamp to said case.

1,761,909. AMMETER. JESSE E. ESHBAUGH, Flint, Mich., assignor to A C Spark Plug Company, Flint, Mich., a Company of Michigan. Filed Oct. 7, 1927. Serial No. 224,641. 13 Claims. (Cl. 171—95.)



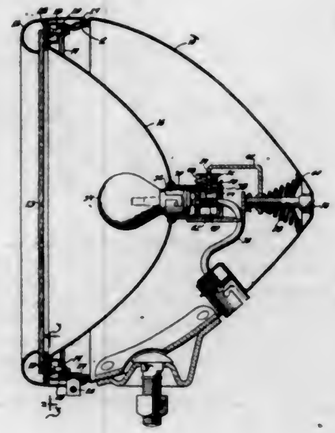
13. In an ammeter, a U-shaped supporting frame, an integral tongue pressed inwardly of the U from one leg thereof and undersiapping said leg, and a pointer-swinging mechanism mounted between said tongue and said leg.

1,761,910. THERMOSTAT. JESSE E. ESHBAUGH, Flint, Mich., assignor to A C Spark Plug Company, Flint, Mich., a Company of Michigan. Filed May 19, 1928. Serial No. 279,148. 6 Claims. (Cl. 236—34.)



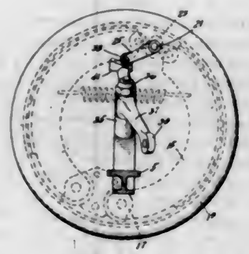
1. In a device of the character described, a tubular member having opposite notches in one end, a swinging plate valve pivoted at an intermediate point in said member, a U shaped strap extending across the end of said member and positioned within the notches with its legs in frictional contact with the outer surface of the member, and a coiled thermo-sensitive element mounted on said strap axially of the member and having an operative connection with said swinging plate valve.

1,761,911. LAMP-FOCUSING MECHANISM. ROBERT N. FALGE, Detroit, Mich., assignor to General Motors Research Corporation, Detroit, Mich, a Corporation of Delaware. Filed Apr. 30, 1928. Serial No. 274,077. 4 Claims. (Cl. 240—44.)



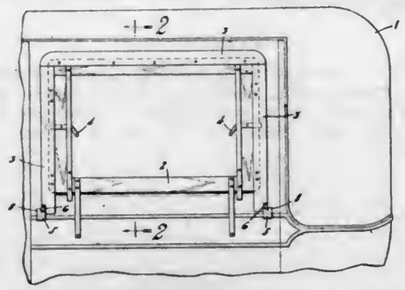
1. A lamp including a housing, a reflector mounted in the housing for axial sliding movement, means for limiting the forward movement of the reflector, a lamp socket slidably mounted in the reflector, adjusting means for the socket comprising a screw slidably mounted in the housing, means secured to the reflector for positively preventing bodily movement of the screw in one direction, means having threaded engagement with the screw and universally connected to the socket for adjustign the latter back and forth upon rotation of the screw, and spring means engaging said last named means and the housing for urging the reflector outwardly and maintaining said adjusting means in adjusted position.

1,761,912. FRONT-WHEEL BRAKE. ALBERT W. FREHSE, Detroit, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Nov. 7, 1927. Serial No. 231,634. 12 Claims. (Cl. 188—194.)



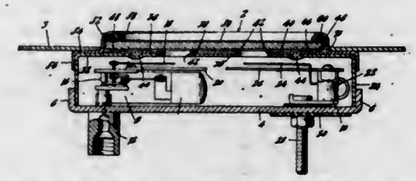
1. In a brake, a rotatable drum, brake mechanism within the drum, expanding means therefor, a rock shaft carrying said expanding means and having an arm, an actuating lever, a wedge on said lever engaging said arm to rock the shaft and apply the brake.

1,761,913. STRIPING FIXTURE. JOHN THOMAS GREEN, Detroit, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Oct. 6, 1928. Serial No. 310,870. 7 Claims. (Cl. 91—65.)



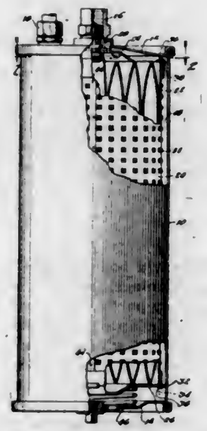
1. In a striping fixture adapted to guide a striping tool over the work, a protective shield offset with respect to the guiding portion of the fixture to overlie the work at a predetermined point and over which the stripe applying portion of the tool may be passed prior to its passage over the work.

1,761,914. INSTRUMENT PANEL. EDMUND E. HANS, Detroit, Mich., assignor to A C Spark Plug Company, Flint, Mich., a Company of Michigan. Filed Jan. 24, 1929. Serial No. 334,780. 12 Claims. (Cl. 180—90.)



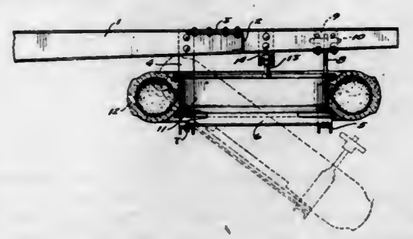
1. In a housing for recording devices, a back plate, a casing interfitting with but not secured to said plate, dial openings in said casing, a facing plate over said casing, means for resiliently supporting said plate on said casing, a transparent member over said plate, and a bezel on said casing to hold said transparent member in place.

1,761,915. OIL FILTER. MARK P. HARWOOD and CHARLES W. MCKINLEY, Flint, Mich., assignors to A C Spark Plug Company, Flint, Mich., a Company of Michigan. Filed Oct. 5, 1927. Serial No. 224,124. 2 Claims. (Cl. 210—178.)



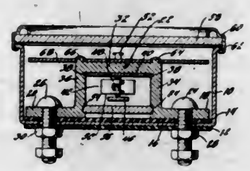
1. In a filter, a filtering medium therein, and a retainer for the medium comprising a sheet of metal provided with a plurality of openings and having the metal at the openings projecting from the plane of the sheet, said sheet formed to surround the filtering meduim with its projecting metal portions on the outside.

1,761,916. TIRE CARRIER. ARTHUR HEBNER, Pontiac, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Sept. 15, 1928. Serial No. 306,118. 4 Claims. (Cl. 224—29.)



1. An underslung tire carrier, including in combination with a chassis frame, of a pair of U-shaped bars extending transversely across and beneath the frame in longitudinally spaced relation, one of the bars having its opposite legs rigidly fastened to the side members of the frame, and the other bar having its opposite legs adjustably secured to the side frame members, and tire engaging means extending across the space between the bars and rigidly connected at one end to said adjustable bar and loosely connected at the opposite end to the rigid bar.

1,761,917. AMMETER. RALPH O. HELGEBY, Flint, Mich., assignor to A C Spark Plug Company, Flint, Mich., a Company of Michigan. Filed May 28, 1928. Serial No. 281,098. 11 Claims. (Cl. 171—95.)



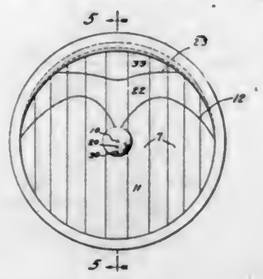
6. In an ammeter, a U-shaped supporting frame for mounting the ammeter parts, a pointer swinging mechanism mounted as a unit at the base of the U, and a magnet mounted on said frame at the ends of the legs of the U.

1,761,918. LOCATION AND DESIGN OF A MAGNET FOR SPEEDOMETERS. RALPH O. HELGEBY, Flint, Mich., assignor to A C Spark Plug Company, Flint, Mich., a Company of Michigan. Filed June 18, 1928. Serial No. 286,451. 6 Claims. (Cl. 264—13.)



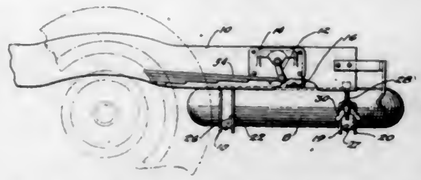
1. In a magnetic measuring instrument, a rotatable speed indicating member, a U-shaped stationary magnet, the arc-shaped portion of the magnet surrounding and being concentric with said speed indicating member the speed indicating member being in the form of a cup extending beyond the legs of said magnet.

1,761,919. REFLECTOR. JOHN H. HUNT, Detroit, Mich., assignor to General Motors Research Corporation, Detroit, Mich., a Corporation of Delaware. Filed Sept. 1, 1927. Serial No. 216,901. 2 Claims. (Cl. 240—41.)



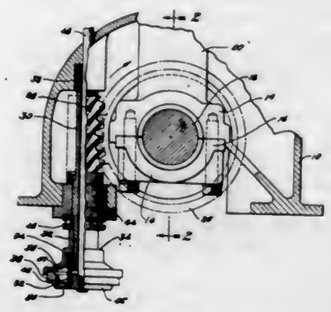
1. A reflector comprising a substantially paraboloidal lower portion, an intermediate portion joining the lower portion without abrupt break in curvature, said intermediate portion being formed by the rotation of an ellipse about an axis displaced below the axis of the lower portion, and an upper portion bent downwardly with respect to said lower and immediate portions.

1,761,920. TRUCK-TIRE CARRIER. ORMOND E. HUNT and ALBERT G. GEISTERT, Detroit, Mich., assignors to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Dec. 15, 1927. Serial No. 240,178. 7 Claims. (Cl. 224—29.)



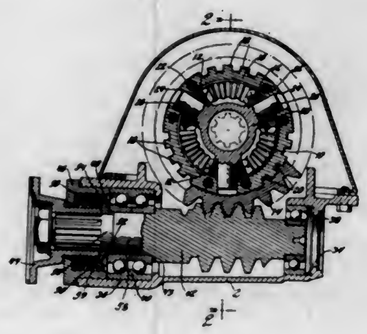
1. In a chassis including side frame members, a carrier supported thereon comprising longitudinally spaced supports, one of which is vertically adjustable, and the other of which is fixed, and a rigid abutment between said supports and spaced from the plane thereof for holding a tire fixed between the abutment and said supports.

1,761,921. SUPERCHARGER DRIVE. ROLAND V. HUTCHINSON, Lansing, Mich., assignor to General Motors Research Corporation, Detroit, Mich., a Corporation of Delaware. Filed Aug. 19, 1927. Serial No. 214,096. 4 Claims. (Cl. 74—36.)



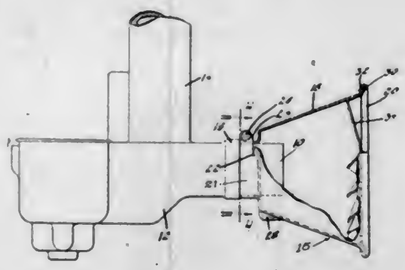
1. In combination with an internal combustion engine having a crank shaft having end and intermediate bearings, one of said intermediate bearings formed of two bearing portions, a worm wheel rigid with said shaft between said bearing portions, a worm meshing with said wheel, a hollow shaft rigid with said worm, a shaft in said hollow shaft and driven thereby, and a supercharger driven from said last named shaft.

1,761,922. WORM-GEAR AXLE. ROLAND V. HUTCHINSON, Lansing, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Apr. 27, 1929. Serial No. 358,585. 3 Claims. (Cl. 74—99.)



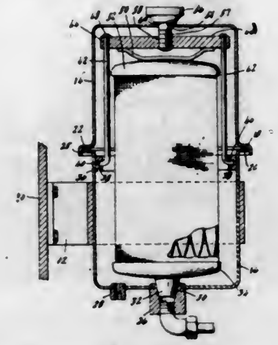
1. In a differential, a ring gear surrounding said differential, a pinion case inside said gear, meshing splines on said gear and case, conforming interrupted portions on said splined portions, a differential pinion spider having a plurality of arms, said arms mounted in openings formed at said interrupted portions of said case, and pinions mounted on said arms.

1,761,923. AIR CLEANER. HERBERT G. KAMBATH, Flint, Mich., assignor to A C Spark Plug Company, Flint, Mich., a Company of Michigan. Filed Aug. 8, 1927. Serial No. 210,425. 9 Claims. (Cl. 183—90.)



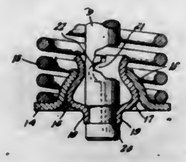
2. In an air cleaner, a body portion having therein air inlet and discharge openings, means to cause the air within the interior of the body portion to travel in a helical path, said air cleaner being adapted to be detachably connected to an air intake conduit, which, when it is connected to the air cleaner, extends into the interior of the body portion through the air discharge opening therein and is spaced within the interior of the body portion from the side walls thereof so as to provide within the interior of the body portion a dust trap, and a dirt discharge opening in the body portion adjacent the conduit.

1,761,924. OIL FILTER. HERBERT G. KAMRATH, Flint, Mich., assignor to A C Spark Plug Company, Flint, Mich., a Company of Michigan. Filed Nov. 2, 1927. Serial No. 230,563. 12 Claims. (Cl. 210—183.)



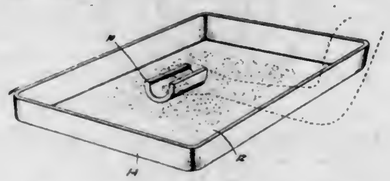
2. In a container comprising a plurality of sections, a bail pivoted to one section and extending into a second section, and means on said second section adapted to engage said bail to hold said plurality of sections together.

1,761,925. VALVE-SPRING RETAINER. GEORGE W. LAMPMAN, Pontiac, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Mar. 26, 1928. Serial No. 264,868. 8 Claims. (Cl. 251—144.)



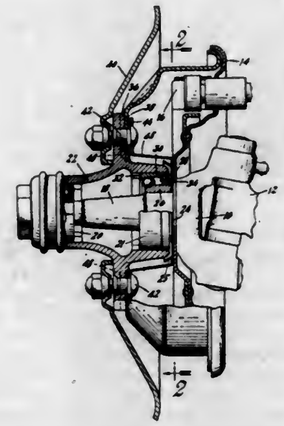
8. The combination with a poppet valve having a stem provided with an annular groove, and a spring adapted to yieldingly hold the valve on its seat, of a spring retainer detachably engageable with the stem and comprising a plurality of pawl elements having interlocking engagement with each other and provided with substantially inclined surfaces and with portions for engagement within the annular groove on the valve stem, and a collar surrounding said elements on which the spring bears, said collar being movable axially of the elements for sliding contact on said inclined surfaces thereof to swing said elements into or out of engagement with said groove.

1,761,926. PROCESS OF MAKING BEARINGS. CHARLES H. LANDERS, Lansing, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Jan. 23, 1928. Serial No. 248,842. 19 Claims. (Cl. 29—149.5.)



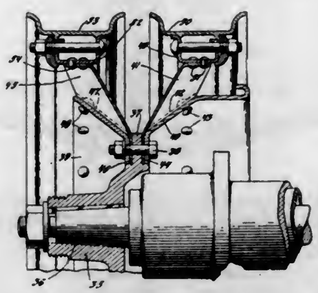
1. The method of making lined bearings, which consists in providing a back having the shape of a finished bearing segment, coating the interior only of said back with tin, applying a lining of babbitt to the tinned interior of the back, trimming the back to substantially finished dimensions at the parting line, assembling two blanks to form a cylinder and boring the interior of the cylinder to finished dimensions.

1,761,927. DISK WHEEL. FRANK L. MAIN, Jackson, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Apr. 9, 1928. Serial No. 268,752. 2 Claims. (Cl. 184—106.)



1. The combination with a non-rotatable spindle, of a hollow wheel hub rotatably mounted thereon and adapted to contain lubricant, a brake drum carried by the hub, a deflector associated with the drum on the interior thereof, an outlet passageway communicating with the deflector and a second deflector associated with the spindle at the end of the hub to direct lubricant thrown from the hub into the first mentioned deflector.

1,761,928. WHEEL CONSTRUCTION. FRANK L. MAIN, Jackson, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Jan. 28, 1929. Serial No. 335,558. 8 Claims. (Cl. 301—6.)

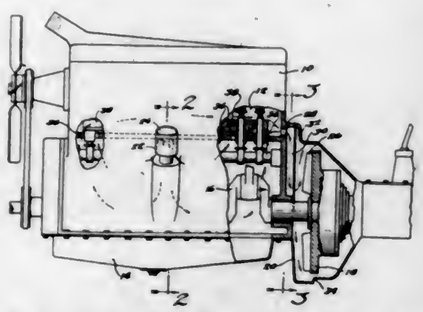


1. A vehicle wheel including a hub having an annular flange, a brake drum secured to the flange, a series of radially extending pressed metal spokes of channel shape in section, fastened on said drum adjacent their inner end and having flattened extensions on their inner ends which are adapted to lie between the hub flange and the brake drum, and means on the outer ends of the spokes for carrying a tire rim.

3. A vehicle wheel including a hub having an annular flange, a pair of conical members secured to said hub flange on opposite sides thereof, a series of channelled

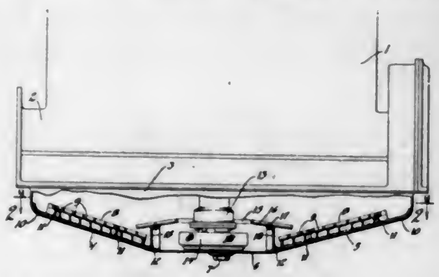
spokes having flattened portions on their inner ends secured between the hub flange and one of said conical members, a second series of channelled spokes having flattened inner end portions secured between the hub flange and the other of said conical members, and two felloes carried on the outer ends of the two series of spokes.

1,761,929. CRANK-CASE VENTILATION. CHARLES L. MCCUEN, Lansing, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed May 2, 1928. Serial No. 274,521. 3 Claims. (Cl. 123—171.)



1. In an automobile, the combination of an engine having a crankshaft and a crankcase serving as a lubricant reservoir, a centrifugal fan on the crankshaft, a casing for the fan communicating with the crankcase through a passage extending to a point adjacent the axis of the shaft, said fan casing being provided with a peripheral discharge port, said discharge port facing rearwardly so as to be subject to the aspirating action of passing air currents.

1,761,930. OIL PAN. CHARLES L. MCCUEN, Lansing, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed June 8, 1928. Serial No. 283,900. 12 Claims. (Cl. 210—57.)



1. A liquid reservoir, a succession of spaced baffle walls in said reservoir forming a plurality of sedment traps, and a cushioning strip in the bottom of each trap.

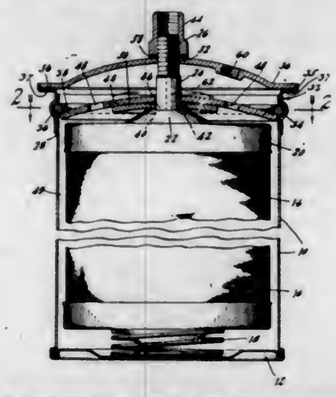
1,761,931. CARBON-REMOVING-LIQUID INJECTOR. CHARLES W. MCKINLEY, Flint, Mich., assignor to A C Spark Plug Company, Flint, Mich., a Company of Michigan. Filed July 9, 1928. Serial No. 291,371. 2 Claims. (Cl. 123—198.)

1. A decarbonizer of the character described, including a fluid container adapted for attachment with an engine intake passage, a closure cap for the top of the container, having a filler opening therein, a plate movable relative to said cap to cover or uncover said filler opening, a valve manually movable in one direction to open position to allow the flow of decarbonizing fluid from the container into the intake passage under influence of suction in the passage, and having a stem projecting thru the closure cap,



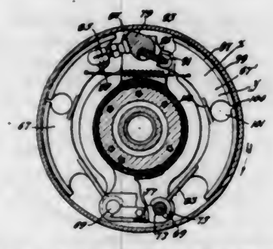
and a tension spring between the end of the valve stem and said plate holding the valve normally on its seat against engine suction and resisting movement of said plate.

1,761,932. OIL FILTER. FRANK N. NUTT, Flint, Mich., assignor to A C Spark Plug Company, Flint, Mich., a Company of Michigan. Filed May 7, 1928. Serial No. 275,753. 11 Claims. (Cl. 220—61.)



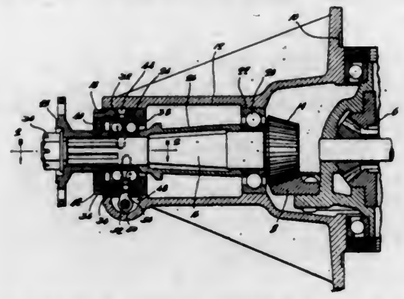
1. In a container, a groove in the container, a ring mounted in said groove, a plate in the container and retained at its edge by the ring, a closure, means passing through said plate and closure, and means attached to said means to hold the closure on the container.

1,761,933. INTERNAL BRAKE. HERMAN C. OLIVIER, Detroit, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Jan. 6, 1928. Serial No. 244,886. 10 Claims. (Cl. 188—78.)



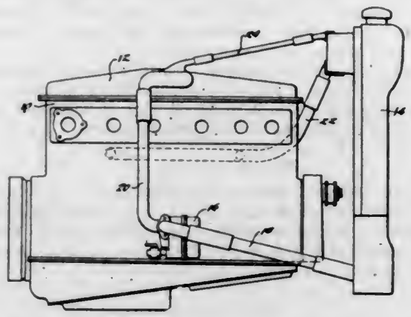
1. A shoe for brakes comprising a lining carrying flange, an arc shaped web supporting said flange, said lining carrying flange formed at an intermediate point with a radial slot and the said web having an opening into which the slot gives access, there being a bridge portion relatively thin radially and wide axially inwardly of the opening in the web.

1,761,934. ADJUSTING DEVICE. DONALD DAMON ORMSBY and JOHN SWINSCOE, Syracuse, N. Y., assignors to General Motors Research Corporation, Detroit, Mich., a Corporation of Delaware. Filed Nov. 7, 1927. Serial No. 231,618. 13 Claims. (Cl. 74—7.)



1. A differential assembly comprising a housing member having a tubular extension, a shaft carrying member in the form of a cylinder slidably received in said tubular member, means including an inclined surface on said cylinder and a removable relatively stationary part engaging said inclined surface for effecting axial adjustment of the cylinder upon rotation thereof.

1,761,935. REVERSED-FLOW WATER-COOLED ENGINE. ERIC OLLE SCHJOLIN, Birmingham, Mich., assignor to Yellow Truck & Coach Manufacturing Company, Pontiac, Mich., a Corporation of Maine. Filed Feb. 18, 1928. Serial No. 255,409. 5 Claims. (Cl. 123—170.)

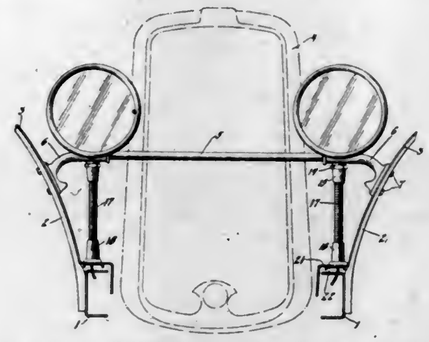


1. In a circulatory cooling system for internal combustion engines for motor vehicles and the like, a main circuit including a heat radiating unit having an inlet and an outlet, a jacketed engine cylinder head connected with the outlet of the heat radiating unit, a jacketed engine cylinder block connected with the inlet of the heat radiating unit, and an auxiliary circuit comprising a by-pass around the jacketed head and block and connecting the jacketed head and the inlet of the heat radiating unit.

1,761,936. METHOD OF RUST-PROOFING IRON OR STEEL. ALFRED W. SCHLUCHTER, Dearborn, Mich., assignor to General Motors Research Corporation, Detroit, Mich., a Corporation of Delaware. Filed Dec. 24, 1928. Serial No. 328,315. 14 Claims. (Cl. 148—16.)

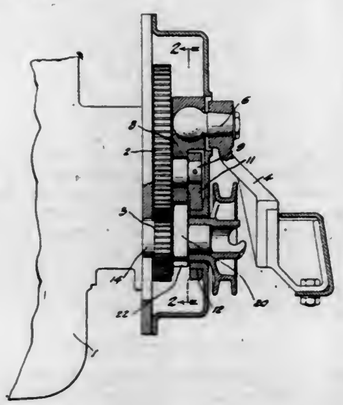
1. The process of treating iron or steel so as to produce on the surface thereof a corrosion resisting coating which includes heating the metal in an atmosphere of a gas capable of reacting with the metal so as to form thereon a surface coating and containing a substance selected from the group which consists of the elements of Group V (B) and Group VI (B) of the periodic system and the compounds of said elements from which the elements will be freed at the temperature of the heating.

1,761,937. HEADLAMP MOUNTING. HERMAN SCHWARZE, Birmingham, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Feb. 8, 1929. Serial No. 338,410. 9 Claims. (Cl. 240—57.)



1. In a headlamp mounting for vehicles, wherein a tie bar connecting the fenders supports the lamps, a dependent tube on a lamp extending through a portion of the tie bar, a quick detachable coupling for the conductors of energy to the light element, carried by said dependent tube, a protective casing for the conductors, having means for attachment with the tube to hold the lamp in place and prevent access to the coupling.

1,761,938. ENGINE MOUNTING. CHARLES R. SHORT, Dayton, Ohio, assignor to General Motors Research Corporation, Detroit, Mich., a Corporation of Delaware. Filed Mar. 1, 1926. Serial No. 91,506. 8 Claims. (Cl. 123—192.)

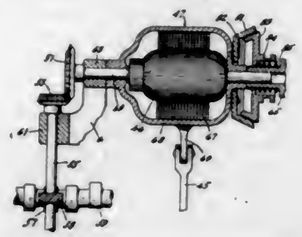


1. The combination of a machine subject to vibrations of substantially fixed amplitude and direction, a support, suspension means connecting the machine and the support, and means for positively moving said connecting means in synchronism with said vibrations so as to cause the point of support to follow the machine in its vibratory movement to prevent transmission of vibrations to the support.

1,761,939. ELECTRIC BOOSTER BRAKE. CHARLES R. SHORT, Detroit, Mich., assignor to General Motors Research Corporation, Detroit, Mich., a Corporation of Delaware. Filed Jan. 30, 1928. Serial No. 250,476. 10 Claims. (Cl. 188—158.)

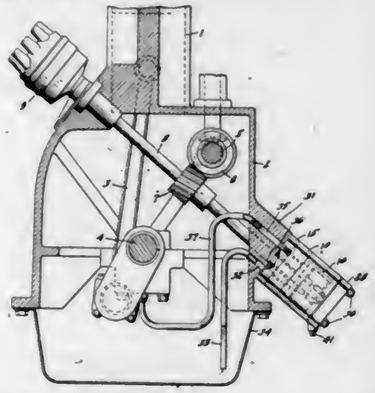
1. In a vehicle, brake means, a generator comprising an armature and a field, both rotatably mounted, means asso-

ciated with one of said generator parts and connected to said brakes to apply the same as the result of the magnetic



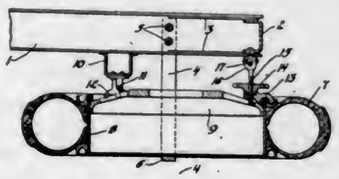
drag of one of said parts upon the other, means to hold said brake applying part from rotation and manually operable means to release said holding means.

1,761,940. OIL-FILTERING MEANS. LEROY W. SHUTTS, Detroit, Mich., assignor to General Motors Research Corporation, Detroit, Mich., a Corporation of Delaware. Filed May 7, 1928. Serial No. 275,816. 9 Claims. (Cl. 210—199.)



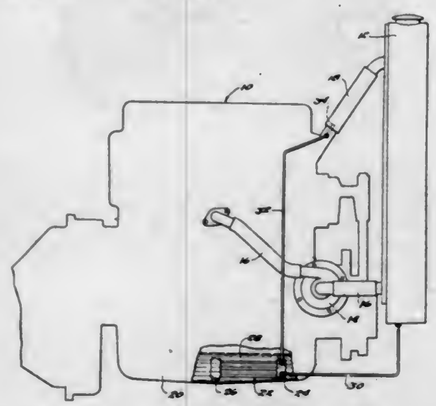
1. In a fluid pressure system, a stationary closed filter chamber, a pump for delivering fluid into said chamber under pressure, an operating pump element having a hollow shaft extension projected into said chamber, a hollow rotary element mounted on the shaft extension for rotation therewith and provided with a perforated wall through which the fluid passes under the pressure of said pump from the chamber to the interior of said hollow element, and then out the hollow shaft extension.

1,761,941. UNDERSLUNG TIRE CARRIER. LOUIS M. SPENCER, Detroit, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Oct. 26, 1927. Serial No. 228,829. 9 Claims. (Cl. 224—29.)



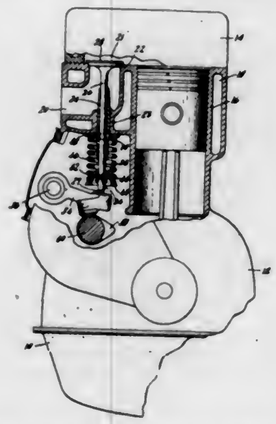
1. The combination with a chassis frame, of means to carry a spare tire in substantially horizontal position beneath the frame, including a tire supporting strap suspended from the frame and engageable with the underside of the tire, and tire engaging members associated with the underside of the frame on either side of said strap for engagement with the upper side of the tire, one of said members being adjustable to effect a clamping action on the tire for firmly maintaining it in position.

1,761,942. TEMPERATURE CONTROL FOR OIL. WILLIAM R. STRICKLAND, Detroit, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Deleware. Filed May 7, 1928. Serial No. 275,739. 2 Claims. (Cl. 123—196.)



1. The combination of an internal combustion engine provided with a lubricating system including a lubricant reservoir, a cooler in the reservoir containing a cooling fluid, a condenser, connections between the cooler and the condenser, the cooler being so arranged as to maintain the fluid in static state until circulation is produced by boiling of the fluid, thereby making use of the latent heat of the fluid as the means of heat transfer.

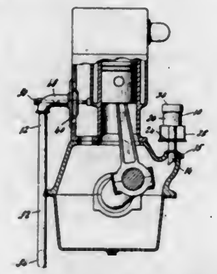
1,761,943. VALVE-SPRING RETAINER. CALEB E. SUMMERS and GEORGE W. LAMPMAN, Pontiac, Mich., assignors to General Motors Research Corporation, Detroit, Mich., a Corporation of Delaware. Filed Jan. 13, 1928. Serial No. 246,508. 8 Claims. (Cl. 251—144.)



1. A spring retainer comprising a hollow sleeve provided with an aperture and flanged outward adjacent one end, a retaining element fitting closely about said sleeve between said aperture and flange and slidable therebetween,

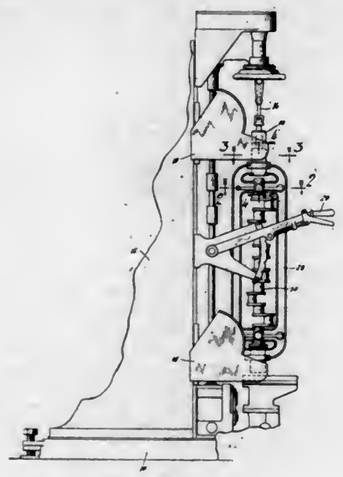
said retaining element being extended radially and axially over said aperture, and a locking dog in said aperture contacting the inner side of said retaining element and held in a position extending within the inner surface of said sleeve when said retaining element is nearest said aperture, and movable to clear said inner surface when said retaining element is distance from said aperture.

1,761,944. CRANK-CASE VENTILATOR. PAUL B. TAYLOR, Pontiac, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Sept. 26, 1927. Serial No. 222,124. 13 Claims. (Cl. 123—171.)



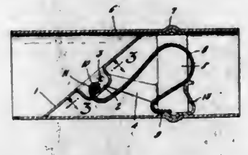
1. For use upon an internal combustion engine including a crankcase: a pipe fixed therein and provided with a perforated widened upper portion, a casing fitting about said widened portion spaced from a lower portion of said pipe, said lower portion being provided with an opening, filtering means between said casing and pipe, and a removable cap fixed over the upper end thereof.

1,761,945. METHOD OF BALANCING AND APPARATUS THEREFOR. THOMAS C. VAN DEGRIFT, Detroit, Mich., assignor to General Motors Research Corporation, Detroit, Mich., a Corporation of Delaware. Filed Aug. 13, 1927. Serial No. 212,818. 12 Claims. (Cl. 73—51.)



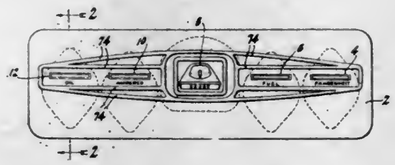
1. The method of locating the axis of rotating balance of a shaft which consists in mounting the shaft in a frame, rotating the shaft and frame, observing the condition of balance of the shaft and, if found out of balance, shifting the shaft in the frame with respect to the axis of rotation until the shaft indicates balance, and marking the ends of the shaft at the points thereof which register with the axis of rotation.

1,761,946. THERMOSTAT. IVAR T. WEDIN, Flint, Mich., assignor to A C Spark Plug Company, Flint, Mich., a Company of Michigan. Filed Dec. 31, 1928. Serial No. 329,330. 10 Claims. (Cl. 236—93.)



1. A device of the character described, including a tubular housing adapted for insertion within a fluid passageway, a frame in said housing, interlocking portions on the frame and housing pressed one into the other to hold the parts in assembled relation, a pair of forwardly projecting arms integral with said frame and having apertures adjacent their ends, a butterfly valve having a depressed portion located between said arms and whose side walls are provided with outstanding teats that extend into said apertures to afford a pivotal mounting for the valve, a pivot pin having its opposite ends extending into depressions in the side walls of said depressed portion of the valve, a bi-metallic thermo-sensitive spring strap of U-shape having one end curled around said pivot pin and its opposite end secured to said frame, adapted to swing said valve about its pivot to control fluid flow through the passageway by its expansion and contraction under temperature changes of the fluid, and a stop finger for the spring strap carried by said frame and adustable for varying the tension of said strap to control the opening of the valve in accordance with predetermined temperatures.

1,761,947. PRESSURE GAUGE. IVAR T. WEDIN, Flint, Mich., assignor to A C Spark Plug Company, Flint, Mich., a Company of Michigan. Filed Jan. 30, 1930. Serial No. 424,611. 8 Claims. (Cl. 116—129.)



1. In a gauge, a pointer, means for moving said pointer, and a rounded transparent column mounted on the gauge over the pointer.

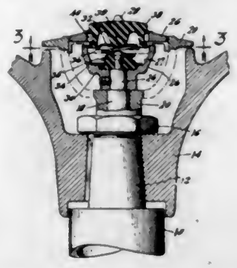
1,761,948. ELECTROPLATING PROCESS. RALPH J. WIRSHING and HENRY R. FAAS, Detroit, Mich., assignors to General Motors Research Corporation, Detroit, Mich., a Corporation of Delaware. Filed Jan. 10, 1927. Serial No. 160,310. 3 Claims. (Cl. 204—14.)

1. The process of electrolytically depositing nickel comprising passing an electric current through a bath containing as its principal solute nickel acetate and including the maintenance of the bath during electrodeposition at a temperature between the approximate limits of 100° to 160° F.

1,761,949. HORN BUTTON SWITCH. JOHN G. WOOD and JOHN H. ALFES, Lansing, Mich., assignors to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Apr. 9, 1928. Serial No. 268,612. 8 Claims. (Cl. 200—159.)

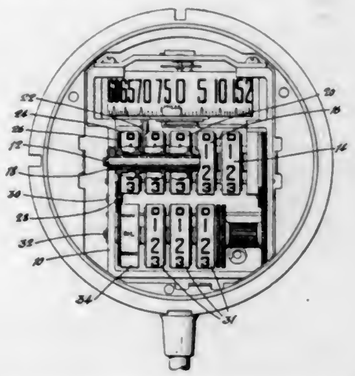
1. In a switch mechanism comprising a control member provided with a recess, a tubular member connected with

said control member, an insulated conductor within said tubular member and having a terminal within said recess, a switch button extending within said recess and movable to and from a position grounding said terminal, means



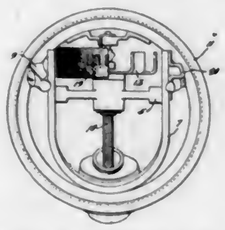
resiliently urging said switch button away from grounded position, and a retaining element on said control member and having a portion resiliently held within said recess for limiting the movement of said switch button.

1,761,950. SERVICE INDICATOR. JOSEPH ZUBATY, Flint, Mich., assignor to A C Spark Plug Company, Flint, Mich., a Company of Michigan. Filed Feb. 14, 1927. Serial No. 168,068. 6 Claims. (Cl. 40—44.)



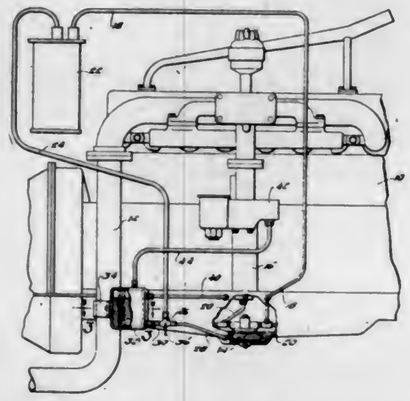
1. An odometer comprising, in combination, a frame, a shaft carried by the frame, a sleeve rotatably mounted on the shaft, figure wheels carried on said shaft and other figure wheels carried on said sleeve, one of said figure wheels being secured to the sleeve, a gear secured to the sleeve, and a service indicating wheel carried by the frame and driven by said gear.

1,761,951. TEMPERATURE COMPENSATOR. JOSEPH ZUBATY, Flint, Mich., assignor to A C Spark Plug Company, Flint, Mich., a Company of Michigan. Filed Apr. 8, 1927. Serial No. 182,077. 2 Claims. (Cl. 264—13.)



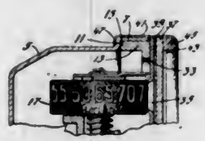
1. In combination, a magnet, an indicating member in the active field between the poles of the magnet, said indicating member having electrical conductivity variable with temperature, a magnetic shunt distinct from the active field, there being an air gap in said shunt, and a compensating member having magnetic permeability variable with temperature changes positioned in said gap of the shunt.

1,761,952. OIL RECTIFIER. JOSEPH ZUBATY, Flint, Mich., assignor to A C Spark Plug Company, Flint, Mich., a Company of Michigan. Filed Sept. 16, 1927. Serial No. 219,974. 20 Claims. (Cl. 123—196.)



1. In combination with an internal combustion engine including an oil pump, an oil receptacle heated from said engine and provided with a connection with the engine crankcase, a conduit connected with said oil pump and provided with two branches, one leading to the receptacle and one to the crankcase, and means for inversely varying the sizes of the openings in said branches.

1,761,953. INSTRUMENT CASING. JOSEPH ZUBATY, Flint, Mich., assignor to A C Spark Plug Company, Flint, Mich., a Company of Michigan. Filed Feb. 15, 1928. Serial No. 254,524. 4 Claims. (Cl. 264—1.)

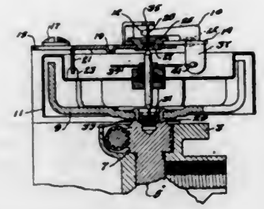


1. In a measuring instrument, a casing, said casing having a flared open end of enlarged diameter forming a shoulder between the parts of said casing, an instrument frame having a projecting portion of greater axial extend than the depth of the enlarged diameter part of said casing, a cover glass, a bezel surrounding the enlarged part of said casing and secured externally over said shoulder, said bezel holding the glass and frame in assembled relation with the projection of the frame engaging the shoulder externally.

1,761,954. SPEED-CUP DAMPENER. JOSEPH ZUBATY, Flint, Mich., assignor to A C Spark Plug Company, Flint, Mich., a Company of Michigan. Filed May 12, 1928. Serial No. 277,339. 1 Claim. (Cl. 264—13.)

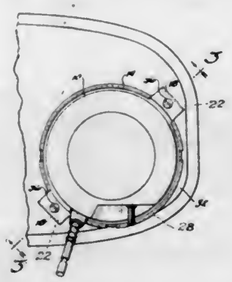
In a measuring instrument, a frame, a rotor shaft journaled therein, an indicating member having a spindle, said spindle having a plurality of bearings, one of said bearings being positioned in said frame and the other located in

and rotatable with said rotor shaft, a spring to bias said indicating member to a predetermined position, a rotatable member to adjust the tension of said spring, and means



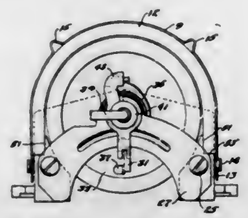
rotatably carried by said adjusting member and frictionally engaging said spindle to steady the action of said indicating member.

1,761,955. MOUNTING MEANS FOR SPEEDOMETERS. JOSEPH ZUBATY, Flint, Mich., assignor to A C Spark Plug Company, Flint, Mich., a Company of Michigan. Filed June 2, 1928. Serial No. 282,378. 4 Claims. (Cl. 180—90.)



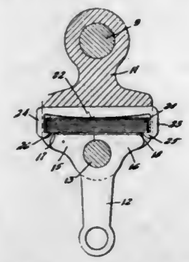
1. An instrument comprising a housing, indicating mechanism, and means for supporting the mechanism within the housing comprising a plate on which the mechanism is mounted, said plate having a portion projecting outside of the housing, said portion being adapted for engagement by clamping means to secure the instrument upon a panel.

1,761,956. SPEEDOMETER-MAGNET MOUNTING. JOSEPH ZUBATY, Flint, Mich., assignor to A C Spark Plug Company, Flint, Mich., a Company of Michigan. Filed June 8, 1928. Serial No. 283,995. 4 Claims. (Cl. 264—13.)



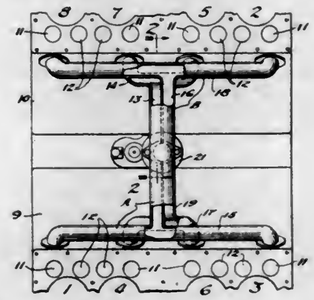
1. In combination with a measuring instrument including a frame and a fixed magnet, a strip terminally secured to said frame lying in the plane of and embracing said magnet, said frame having parts engaging said magnet, said strap having crimps to be pinched to firmly secure said magnet in engagement with said frame parts.

1,761,957. STEERING ARM. JOHN O. ALMEN, Royal Oak, and OLAF RASMUSSEN, Detroit, Mich., assignors to General Motors Research Corporation, Detroit, Mich., a Corporation of Delaware. Filed Oct. 2, 1929. Serial No. 396,734. 12 Claims. (Cl. 74—38.)



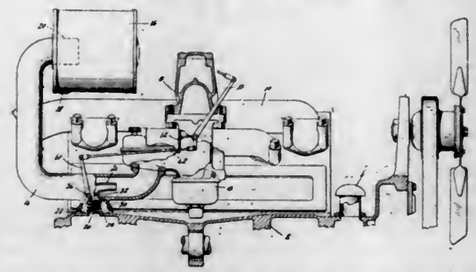
4. In a device of the character described, two members movable relative to each other, a spring element interposed between cooperating portions of the members, and engaging with one of the members at opposite ends and at an intermediate point, and adapted for engagement by the other member adjacent the opposite ends and to be sprung between two of its points of engagement with the first mentioned member to yieldingly resist relative movement of the members.

1,761,958. DUAL INTAKE MANIFOLD. DAVID E. ANDERSON, Detroit, Mich. Filed Oct. 8, 1927. Serial No. 224,962. 6 Claims. (Cl. 123—52.)



1. The combination with an eight-cylinder V-type engine in which two adjacent cylinders in one block fire in immediate succession and carbureting means therefor of an intake manifolding system including a passage leading from the carbureting means to the end cylinders of a block and another passage leading from the carbureting means to the intermediate cylinders of the block.

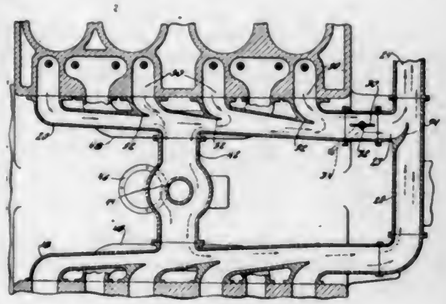
1,761,959. CRANK-CASE VENTILATING SYSTEM. DAVID E. ANDERSON, Detroit, Mich. Filed Dec. 27, 1927. Serial No. 242,564. 3 Claims. (Cl. 123—119.)



1. In an engine including a crankcase having a breather opening, a carburetor provided with an air intake passage,

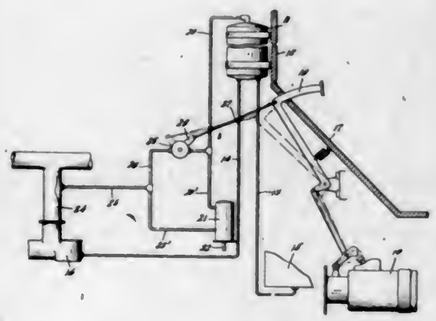
an intake conduit conducting the fuel mixture to the cylinders, a throttle valve in said conduit, a connection between said air intake passage and said crankcase, a valve controlling the flow of vapors thru said connection, a spring urging the valve upon its seat, and means controlled by the position of said throttle valve for varying the tension of the spring so that as the throttle valve is opened, the second named valve is urged more strongly toward its seat.

1,761,960. BUTTERFLY-VALVE EXHAUST PIPE. SYLVESTER ARMITAGE, Highland Park, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Dec. 19, 1927. Serial No. 241,098. 14 Claims. (Cl. 123—122.)



1. In combination with an internal combustion engine, a plurality of exhaust manifolds, means interconnecting with said manifolds, and means in one manifold to divert the exhaust gases into a second manifold.

1,761,961. VACUUM GASOLINE-SUPPLY SYSTEM. CHARLES F. ARNOLD, Detroit, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed June 20, 1929. Serial No. 372,421. 5 Claims. (Cl. 123—138.)



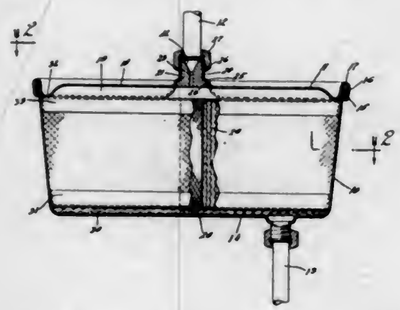
1. In an automotive vehicle organization including a tank for engine fuel; a plurality of means, differing in promptitude of response, for advancing fuel thereto by suction; a conveniently manipulatable element; and means rendering manipulation of said element effective to operate the more promptly responsive of said fuel advancing means,—said conveniently manipulable element being a starter pedal.

1,761,962. LAMINATED WORM GEAR. ABRAHAM M. BABITCH, Flint, Mich., assignor to A C Spark Plug Company, Flint, Mich., a Company of Michigan. Filed Mar. 28, 1927. Serial No. 179,017. 2 Claims. (Cl. 74—28.)



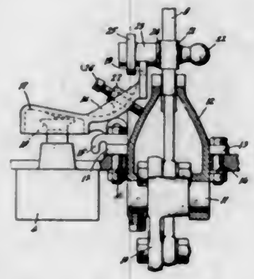
1. A gear comprising a series of stamped ring sector tooth members of spiral shape and a second series of similarly shaped spacing members of less radial extent, the members of the two series being assembled in concentric and alternating relation to form a spiral gear.

1,761,963. OIL FILTER. ABRAHAM M. BABITCH, Flint, Mich., assignor to A C Spark Plug Company, Flint, Mich., a Company of Michigan. Filed May 9, 1927. Serial No. 189,991. 17 Claims. (Cl. 210—164.)



1. In an oil filter, a container for a filtering material, a cover secured to said container, and a plurality of integral ribs pressed in said cover forming oil channels.

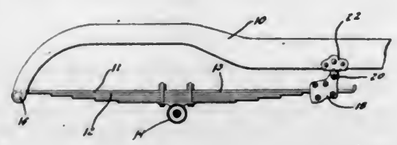
1,761,964. INTERLOCK MECHANISM. CHARLES O. BALL, Birmingham, Mich., assignor to Yellow Truck and Coach Manufacturing Company, Pontiac, Mich., a Corporation of Maine. Filed Oct. 21, 1927. Serial No. 227,747. 7 Claims. (Cl. 74—83.)



1. Interlock mechanism of the character described, including in combination with a pair of pivoted control

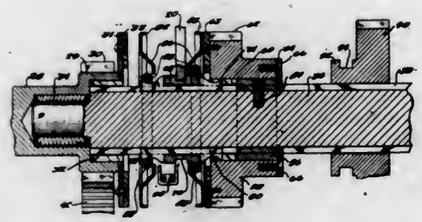
elements having axes arranged in angular relation, of a lateral projection on one of the elements extending in proximity to a portion of the other element, said portion having a curved surface conforming to and lying in the arc of movement of the projection and having an opening therein corresponding to the location of said projection when the first mentioned element is in a predetermined position of control, the curved surface of said portion being adapted to abut the projection to lock the second mentioned element against movement when the first mentioned element is out of said predetermined control position and said projection extending within said opening during movement of the second mentioned element to hold the first mentioned element against movement out of said predetermined control position.

1,761,965. SNUBBER. LLOYD BLACKMORE, Highland Park, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed July 29, 1927. Serial No. 209,313. 16 Claims. (Cl. 267—56.)



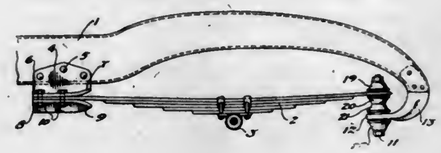
1. In a shock absorber for vehicles, a normally substantially straight spring pivoted at one end to the vehicle frame and adapted to be flexed to arched or bowed positions at both sides of its normal position, a bracket pivoted to the frame and directly connected to the other end of the spring, and a plurality of friction surfaces in said bracket for retarding return movement of said spring from bowed position on either side of its normal position.

1,761,966. TRANSMISSION. LLOYD BLACKMORE, Detroit, Mich., assignor to General Motors Research Corporation, Detroit, Mich., a Corporation of Delaware. Filed Jan. 27, 1928. Serial No. 250,008. 5 Claims. (Cl. 192—53.)



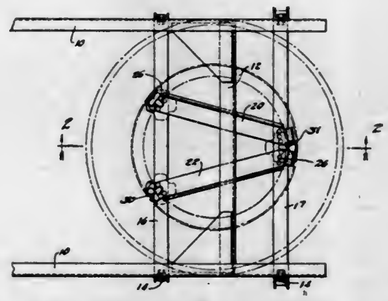
4. In combination, a shaft, a clutch member slidable but non-rotatable thereon, a co-axial member mounted for rotation relative to said shaft, said coaxial member and clutch member having parts to be engaged to positively prevent relative rotation therebetween, said coaxial member having a friction face axially beyond its clutch element and adjacent the clutch member, a friction disc nonrotatable but axially slidable on said clutch member, said clutch member having a circumferential groove adjacent the coaxial member, a spring member in said groove, said friction disc having inwardly directed radial fingers, said spring being positioned between the plane of said friction disc and said fingers, and means to slide said clutch member to effect frictional engagement of said friction disc and friction face, and thereafter a positive engagement of said coaxial member and clutch member.

1,761,967. RUBBER SPRING SHACKLE. LLOYD BLACKMORE, Highland Park, Mich., assignor to General Motors Research Corporation, Detroit, Mich., a Corporation of Delaware. Filed Feb. 20, 1928. Serial No. 255,677. 6 Claims. (Cl. 267—30.)



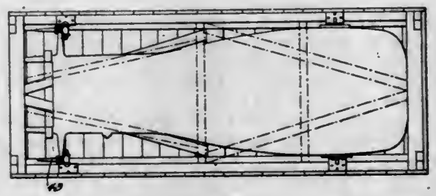
1. Means for hanging a vehicle frame on the spring, including a block of elastic material carried on the spring, and a suspension element extending between and connecting the spring and frame, said suspension element carrying the weight of the frame and bearing on and placing said elastic block under compression.

1,761,968. TIRE CARRIER. CARL J. BOCK, Pontiac, Mich., assignor to Yellow Truck and Coach Manufacturing Company, Pontiac, Mich., a Company of Maine. Filed Sept. 14, 1927. Serial No. 219,486. 1 Claim. (Cl. 224—29.)



An undersiung tire carrier for supporting a tire and rim in a substantially horizontal position beneath a vehicle frame, comprising supporting bars connected with and extending below the frame, diverging positioning bars of angular shape secured to said supporting bars and having their upper edge extending horizontally to form a ledge on which the tire may be slid when being placed in the carrier, the ends of said positioning bars being bent upwardly and horizontally to form supporting portions for the rim slightly below said ledge.

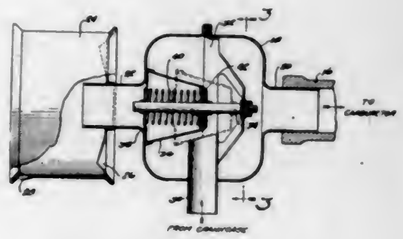
1,761,969. EXPORT SHIPPING DEVICE. RAYMOND W. CHALMERS, Highland Park, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Sept. 4, 1926. Serial No. 133,714. 1 Claim. (Cl. 206—46.)



In combination, a shipping box, a vehicle having a rear axle housing with terminal flanges and with pivoted steer-

ing knuckles provided with apertures for the reception of steering arms, a plurality of brackets secured to the opposite side walls of said box, said vehicle having its wheels and rear axles removed and its steering knuckles turned through substantially 90°, means to secure said rear axle housing flanges to certain of said brackets and other means to secure said steering knuckles to other brackets, said other means extending through the apertures of said steering knuckles.

1,761,970. VENTILATOR-CONTROL VALVE. RAGNAR CLASON, Flint, Mich., assignor to A C Spark Plug Company, Flint, Mich., a Company of Michigan. Filed May 25, 1928. Serial No. 280,501. 8 Claims. (Cl. 123—119.)



1. An engine having a suction operated air intake, and a crankcase provided with an air inlet and an air outlet, a chamber communicating with the engine intake and with the crankcase outlet and provided with an air admission port, and a valve in said chamber normally spring pressed to close said port, but adapted upon increase in engine suction to open said port and effect a shutting off of the crankcase outlet.

1,761,971. MUFFLER. LEROY V. CRAM, Flint, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed June 25, 1928. Serial No. 288,115. 4 Claims. (Cl. 137—100.)



1. A muffler, including a casing, a plurality of partition walls in said casing, each of said walls having a series of gas whirling louvers therein that impart a swirling movement to the gases, the louvers in certain of the walls being in the outer portion thereof and the louvers in other walls being in the central portion thereof.

1,761,972. CLUTCH PRESSURE LEVER PLATE. JAMES M. CRAWFORD, Detroit, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Dec. 12, 1928. Serial No. 325,470. 3 Claims. (Cl. 192—68.)

1. In a clutch, a flywheel, a coaxial driven member, a coaxial pressure plate movable to frictionally engage said driven member between itself and said flywheel, means including co-operating parts on said flywheel and pressure plate whereby the latter is driven by the former, and manually operated means to move said pressure plate axially to release said clutch, said manually operated means engaging the pressure plate part of the said co-operating parts, the flywheel part of said co-operating parts being an inwardly directed stud, and the pressure

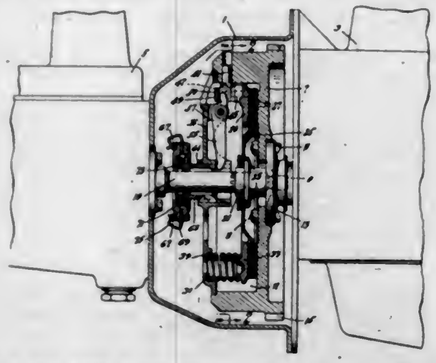
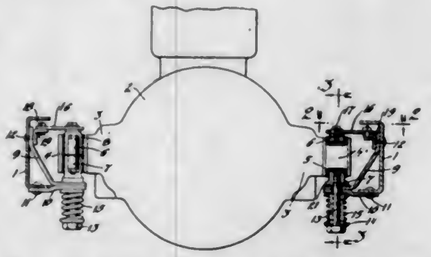


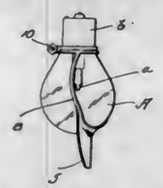
plate part being a detachable U-shaped member, the stud projecting into the space between the sides of the U-shaped member.

1,761,973. ENGINE SUPPORT. GEORGE H. DAUBNER, Pontiac, Mich., assignor to Yellow Truck & Coach Manufacturing Company, Pontiac, Mich., a Corporation of Maine. Filed Feb. 1, 1928. Serial No. 251,186. 13 Claims. (Cl. 180—64.)



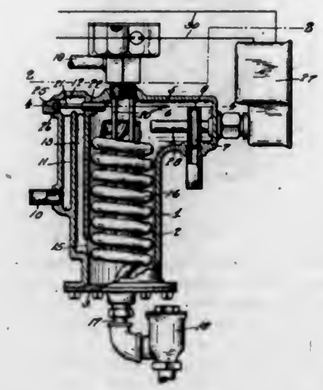
1. In combination, an engine, a supporting member therefor, arranged to permit relative movement of the engine therewith, and means associated with one of said members to normally maintain the parts in definite relation with each other, but adapted for restruction to relieve said members of strains.

1,761,974. GLARE SHIELD FOR AUTOMOBILE HEADLIGHT BULBS. FREDERICK H. ARNOLD, Reading, Pa. Filed Nov. 19, 1928. Serial No. 320,414. 3 Claims. (Cl. 240—48.6.)



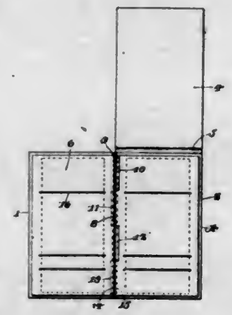
1. A glare shield for lamp bulbs, said shield comprising a vertical tongue merging at its inner vertical edge in to a skirt portion disposed at an angle thereto, said skirt portion at approximately the center line of said tongue merging into a relatively short secondary tongue, and said skirt at opposite ends thereof being provided with rearwardly extending thin metal strips of a shape conforming to the curvature of the lamp bulb and adapted to engage the bulb at opposite sides thereof, said first mentioned tongue adapted to be positioned forwardly of the bulb and to one side thereof.

1,761,975. PREHEATER APPARATUS FOR OIL BURNERS. ARTHUR J. BAIRD, Portland, Oreg. Filed Dec. 10, 1928. Serial No. 324,902. 4 Claims. (Cl. 126—371.)



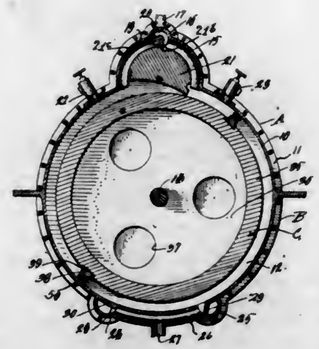
1. A preheater for fuel-oil, comprising a casing having a heating chamber communicatively connected with a source of oil supply under pressure and a discharge chamber in said casing communicating with the upper end of said heating chamber, a steam-coil in said heating chamber, an electric circuit including a heating element extending into said heating chamber, a discharge pipe arranged to withdraw oil from near the top of said discharge chamber, and a thermostatically controlled switch having a thermostatic element extending into said discharge chamber at an elevation below the opening into said discharge pipe and adapted to make or break said circuit in response to changes in temperature of the oil.

1,761,976. WALLET OR BILL HOLDER. HELEN BARNES, Butte, Mont. Filed Apr. 23, 1928. Serial No. 272,119. 2 Claims. (Cl. 150—38.)



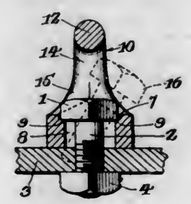
1. A bill holder comprising a foldable body portion including a pair of rectangular folds and a rectangular flap extended from one fold and overlapping the other to retain the bdoy portion in folded condition, said body portion when folded formed with an open end and an open side, and a plurality of rectangular carriers within and hinged to the body portion and each provided with a plurality of spaced, transversely extending slots adjacent the ends thereof for interlacing therewith non-folded bills lengthwise thereof whereby the bills are detachably secured to the carriers in extended position with the ends of the bills free, said open end of the body portion providing for the selective withdrawing of the bills and said open side permitting of opening of the body portion when the flap is shifted from retaining position.

1,761,977. ROTARY ENGINE. WILLIAM H. BENDAY, Hancock, Mich. Filed Oct. 6, 1924. Serial No. 742,055. 2 Claims. (Cl. 121—80.)



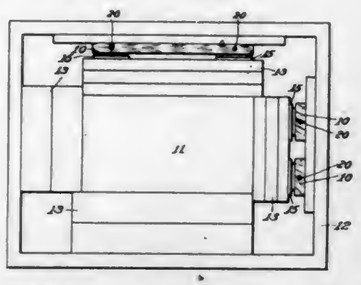
1. A rotary engine comprising a cylindrical stator, a semi-cylindrical housing extending outwardly from and transversely of the annular wall of the stator, the inner side of the housing being fully open and in full communication with the stator, a semi-cylindrical steam chest extending outwardly from and longitudinally of the housing and having an inlet, the inner side of the steam chest being fully open and in full communication with the housing, a rotor arranged within the stator and provided with vanes, a solid semi-cylindrical abutment rotatably supported within the housing with its curved wall in spaced relation to the corresponding wall of the housing to provide a passage from the steam chest to the stator, the abutment contacting at one end with the rotor, a cylindrical valve rockably supported within the steam chest in contact with the curved wall of the abutment and the corresponding wall of the steam chest, the valve extending across the passage between the abutment and housing and provided with a semi-circular steam passage communicating with the inlet of the steam chest, means for adjusting the abutment and yieldingly holding it in adjusted position, and means for adjusting the valve.

1,761,978. SEPARABLE OR DETACHABLE BOLT EYE. ARTHUR L. BLACK, Coffeyville, Kans. Filed Jan. 5, 1929. Serial No. 330,648. 2 Claims. (Cl. 85—1.)



2. A separable or detachable bolt eye comprising a base and a coupling member integral therewith, said base having a polygonal shaped bolt head receiving pocket in its top and a slot opening into the pocket for the passage of the bolt shank and elongated in a plane transverse to the plane of said coupling member.

1,761,979. PRINTER'S QUOIN. AUGUSTUS MURRAY BOWZER, Lynn, Mass. Filed Nov. 21, 1927. Serial No. 234,727. 8 Claims. (Cl. 254—41.)



1. A printer's quoin having a main body, a sliding clamping member, an inclined slot in the body, an inclined support integral with the clamping member for moving the said clamping member outwardly and downwardly.

1,761,980. METHOD OF MAKING FINNED TUBING. HARRY W. BUNDY, Detroit, Mich., assignor, by mesne assignments, to Bundy Tubing Company, Detroit, Mich., a Corporation of Michigan. Filed July 5, 1927, Serial No. 203,381. Renewed Apr. 21, 1930. 9 Claims. (Cl. 113—35.)



1. The method of making fluid conducting finned tubing, which consists in moving a substantially continuous length of tinned strip stock with continuous longitudinal movement, forming one or more longitudinal substantially closed pleats in the stock, rolling the stock after the pleats are formed into tube form with the pleats outside the tube so as to form longitudinal fins on the tube with the interior of the tube clear of obstructions, and then heating the tube to melt the tin and secure the facing portions of the thus formed strip stock and the pleats together.

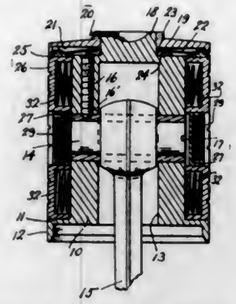
1,761,981. FINNED TUBE. HARRY W. BUNDY, Detroit, Mich., assignor, by mesne assignments, to Bundy Tubing Company, Detroit, Mich., a Corporation of Michigan. Filed July 5, 1927. Serial No. 203,383. 6 Claims. (Cl. 257—262.)



1. A finned tube comprising a relatively long and narrow strip of metal fashioned into hollow cross sectional form with the lengthwise dimension of the strip extending lengthwise of the hollow form, a plurality of folds in the strip extending lengthwise of the same, said folds being entirely on the outside of the hollow cross sectional form to form exterior fins with the interior of the hollow form substantially unobstructed, said strip with its folds thereon being twisted substantially on the axis of the hollow cross sectional form whereby the said exterior fins are spiral.

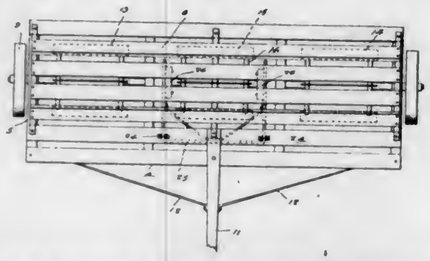
1,761,982. PISTON. JAMES A. DUNNING, Suffolk, Va., assignor of one-third to Vernon S. Mayberry, Portsmouth, Va., and one-third to Carson S. Dunning, Rocky Mount, N. C. Filed Sept. 23, 1929. Serial No. 394,513. 3 Claims. (Cl. 74—108.)

1. A piston of the character described comprising a core, a circumferentially extending head on the lower end of the core, substantially semi-circular separable segments encircling the core and mounted on the head, expansible



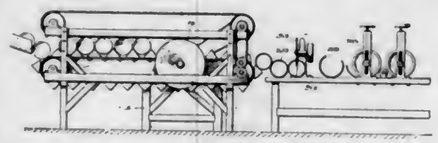
springs positioned between the segments and the core and resilient means mounted on said core for yieldingly urging the segments against the head.

1,761,983. CORNSTALK CUTTER. SIMPSON FINNELL, Hamburg, Iowa. Filed Apr. 18, 1929. Serial No. 356,133. 2 Claims. (Cl. 55—61.)



1. In a structure of the class described, in combination, a wheel supported frame, a pair of rigidly mounted end cutters and a central cutter arranged between and in alinement with said end cutters, said central cutter comprising a frame, and means pivotally connecting said frame with said wheel supported frame.

1,761,984. MECHANISM FOR SALVAGING TIN CANS. WILLIAM COLT FRICK, Danville, Pa.; Mary E. Frick administratrix of said William Colt Frick, deceased. Filed Apr. 4, 1927. Serial No. 180,983. 5 Claims. (Cl. 164—10.6.)

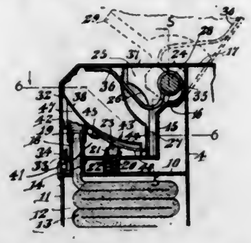


1. A can cutting machine of the character described including a frame, a main drive-shaft carried thereby, saws mounted on said drive-shaft in spaced-apart relation, an endless conveyer carried by the frame and driven from said drive-shaft, said conveyer being arranged between the saws for delivering cans thereto to saw off the ends thereof, and means for feeding the cans to said conveyer.

1,761,985. COMBINED CIGARETTE CASE AND LIGHTER. HARRY L. GOODNOW, Chicago, Ill. Filed June 18, 1928. Serial No. 286,423. 4 Claims. (Cl. 67—7.1.)

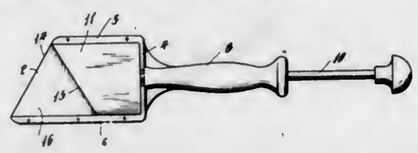
4. A cigarette lighter comprising, a rigid guide formed with a continuous flange, a sparker disposed below the

plane of the flange, a wick adjacent the sparker, a pivoted cover having a resilient member secured thereto for normally contacting the sparker when the cover is swung on its pivot to open and close the same, an ear projecting laterally from said member and normally extending beneath the flange, and means for swinging said member



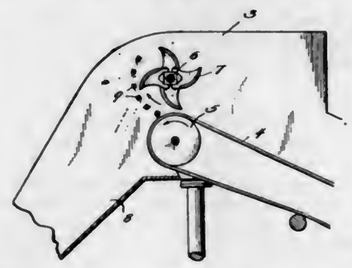
laterally during the opening movement of the cover to position the ear above the flange when the cover is in open position, said ear riding over said flange during the closing movement of the cover and slipping over one end of the flange to normal position when the cover is brought to closed position.

1,761,986. ICE-CREAM DIPPER. JOSEPH H. GRUMMER, Cleveland, Ohio, assignor of one-half to Roderick W. McPherson, Cleveland, Ohio. Filed Dec. 19, 1929. Serial No. 415,315. 3 Claims. (Cl. 107—48.)



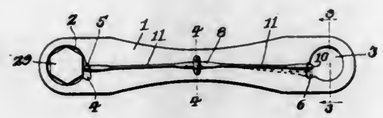
2. An ice cream dipper, comprising a hollow member having its space narrow in one dimension and relatively wider transversely of the member, a tubular handle on said member and communicating with said space, the edge of said member opposite to said handle being inclined from one narrow wall to the other, a plunger slidably mounted and snugly fitting in said member, a rod secured to said plunger and extending through said tubular handle, and the edge of said plunger opposite to said rod inclined inwardly of the hollow member and opposite to the inclination of the edge of the member, the space formed within the member by said oppositely inclined edges providing a mold for containing ice cream for discharge by the action of the plunger.

1,761,987. CANE CUTTING AND DELIVERING MECHANISM. HORACE JOHNSON and WILLIAM A. RAMSAY, Honolulu, Territory of Hawaii. Filed Apr. 24, 1929. Serial No. 357,828. 4 Claims. (Cl. 146—119.)



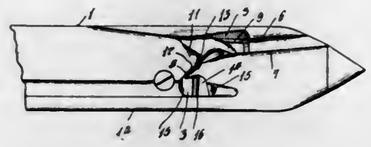
1. The combination with a rotary cane cutter and a cane delivery mechanism, of means for cooperating with the cutter to prevent the cutter from throwing the cane, before properly cutting up the same into the delivery mechanism and for assisting in cutting up the cane, the latter means including a plurality of spaced bars arranged upon an arc of a circle, the center of which is substantially the axis of the cutter.

1,761,988. WRENCH. ARTHUR J. LAYHON, Lowell, Mass., assignor of one-half to Reuben Dunsford, Chelmsford, Mass. Filed June 3, 1929. Serial No. 368,120. 1 Claim. (Cl. 81—53.)



A wrench comprising, a body portion formed adjacent one end with a circular opening, the wall of said opening being formed with an elongated recess decreasing in width from one end to the other, and an elongated, resilient element fixedly secured at one end to the body portion and having its other end formed with a nose extending through said recess and projecting into said opening, said element being under a lateral tension to normally maintain the nose at the narrower end of the recess and further being circular in cross section and having a portion of its length flattened to provide such portion with relatively wide and narrow dimensions extending at right angles to each other, said relatively narrow dimension extending in the direction of travel of the nose to increase the operative resiliency of the element.

1,761,989. SELF-THREADING LOOM SHUTTLE. PHINEAS A. MILLIS and MARVIN JOHNSON, Uxbridge, Mass. Filed Feb. 9, 1928. Serial No. 253,092. 2 Claims. (Cl. 139—223.)

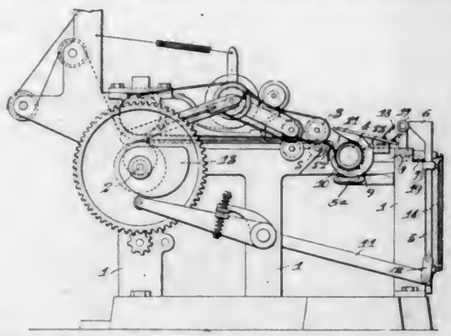


1. In a self-threading shuttle for looms, the combination with a shuttle body, a threading device having a longitudinal thread passage, and the shuttle body provided with a transversely extending thread passage communicating with said longitudinal thread passage, the body of the shuttle having an unobstructed threading slot communicating with said transversely extending relatively narrow and straight thread passage tangential with respect thereto and at the rear thereof arranged at an acute angle to the base of the shuttle from one end of said passage to prevent casual unthreading of the shuttle.

1,761,990. CRIMPING MECHANISM FOR CYLINDER-FORMING MACHINES. WILSON R. MYERS, New York, N. Y., assignor to Ice Cream Smack Corporation, New York, N. Y., a Corporation of Delaware. Filed May 22, 1928. Serial No. 279,753. 25 Claims. (Cl. 93—36.)

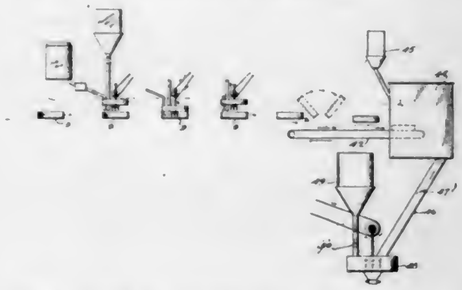
1. In a machine of the character described, a rotatable mandrel, a pivoted crimper and a reciprocating crimper-

operation controlling bar having a cam, said crimper having a portion engaging said cam, and a spring continuously



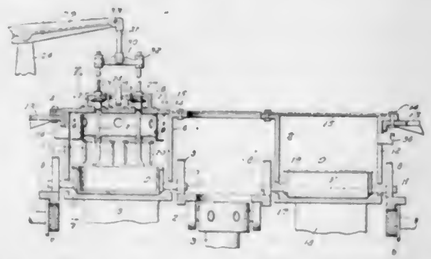
tending to move said crimper in opposition to said bar, said crimper including an arm having a forked end provided with an opening aligning normally with said mandrel.

1,761,991. METHOD FOR MANUFACTURING ACID PHOSPHATE. BEVERLY OBER, Baltimore, Md., assignor to G. Ober & Sons Company, Baltimore, Md. Filed June 5, 1925. Serial No. 35,110. 20 Claims. (Cl. 71—7.)



18. A process for manufacturing acid phosphate comprising mixing phosphate material and an acid in relatively small batches to form a porous mass and drying the mass without substantially disturbing its porosity.

1,761,992. APPARATUS FOR MANUFACTURING ACID PHOSPHATE. BEVERLY OBER, Baltimore, Md., assignor to G. Ober & Sons Company, Baltimore, Md. Original application filed June 5, 1925, Serial No. 35,110. Divided and this application filed Aug. 18, 1925. Serial No. 51,049. 29 Claims. (Cl. 71—1.)



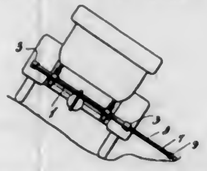
3. An apparatus for manufacturing acid phosphate comprising a revoluble frame, a plurality of containers mounted thereon adapted to receive a mixture of ground phosphate rock and an acid, means to stir the mixture, and means to discharge the containers at a predetermined time.

1,761,993. AIR PISTOL. HUGO SCHMEISSER, Suhl, Germany. Filed Feb. 13, 1928, Serial No. 254,135, and in Germany Jan. 25, 1927. 3 Claims. (Cl. 124—10.)



1. An air pistol comprising a butt; an air cylinder pivotally mounted on said butt at approximately intermediate the ends of the cylinder so that it projects rearwardly of the rear part of the butt; and a spring-actuated piston in said cylinder which is placed in cocked position in the cylinder by forcing the rear end of the cylinder toward the butt around the pivotal mounting.

1,761,994. SAFETY BUMPER FOR AUTOMOBILES. EDWARD C. SHILLING, Columbus, Ohio, assignor of one-half to Jacob Dagger, Urbana, Ohio. Filed Aug. 21, 1929. Serial No. 387,460. 3 Claims. (Cl. 293—55.)



1. A safety bumper for automobiles, comprising a tubular housing, a bar slidably mounted in said housing and having longitudinal grooves therein, anti-friction bearing members engaging in said grooves and bearing in said housing, and means to hold the bar at adjusted positions when extended from either end of the housing.

1,761,995. PRICE-TAG HOLDER. JOHN P. SIEBE, Sacramento, Calif. Filed Mar. 14, 1929. Serial No. 347,021. 3 Claims. (Cl. 40—21.)

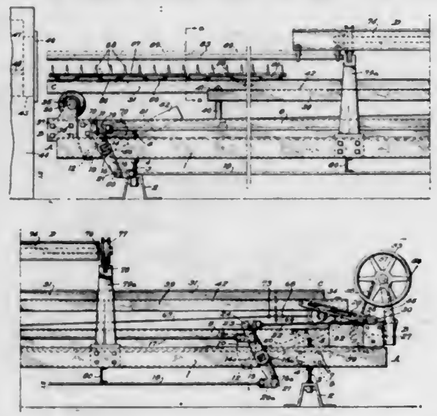


1. A price tag holder, comprising a plate having means to hold a price card, tongues formed on the plate by incisions made therein, said tongues being folded on the plate, the folds of said tongues being in staggered relation, and a holding means adapted to engage an article of merchandise and secured to said plate under said folded tongues.

1,761,996. APPARATUS FOR LOADING AND UNLOADING ENAMELING FURNACES. LAWRENCE J. STEVENSON, Baltimore, Md., assignor to The Porcelain Enamel & Manufacturing Co., Baltimore, Md., a Corporation of Maryland. Filed Oct. 18, 1926. Serial No. 142,350. 4 Claims. (Cl. 214—26.)

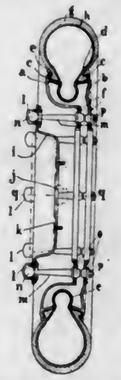
3. In an apparatus for charging and unloading enameling furnaces, the combination of a vertically movable track

support and a longitudinally reciprocable fork member carried thereby, said fork member comprising aligned beams parallel with said track and having flanged wheels contacting with the latter, guide members projecting upwardly from said track and having a rolling contact with the upper periphery of said wheels, rollers mounted on said track and contacting with said fork member, said rollers cooperating with said guide members for maintaining said fork in a horizontal plane during the longitudinal recip-



rocation of the latter, a plurality of spaced loop members having their ends loosely resting on the aligned beams of said fork, and a plurality of spaced bars disposed in parallel relation to the beams of said fork and loosely resting on said loop members, said bars having spaced upwardly projecting article supporting points adated to receive articles to be deposited in and removed from said furnace, whereby provision for handling articles of varying sizes and shapes is assured.

1,761,997. PNEUMATIC SUSPENSION WHEEL. FÉLIX TESSÉ, La Courneuve, France. Filed Mar. 18, 1929, Serial No. 348,044, and in Luxemburg Mar. 31, 1928. 4 Claims. (Cl. 152—28.)



2. In a vehicle wheel, a pair of disks, means for mounting a pneumatic tire on said disks, and means for flexibly mounting said disks on the vehicle hub, said last named means including tilting rods.

1,761,998. TOOL. DELMONT MARR THORNE, Galesburg, Ill. Filed Dec. 7, 1928. Serial No. 324,390. 1 Claim. (Cl. 140—117.)

A tool for splicing wires, comprising an elongated body portion, wide flanges formed along the longitudinal edges of the body portion and disposed in parallel spaced relation with each other, said flanges having openings disposed adjacent to one end of the body portion, said flanges



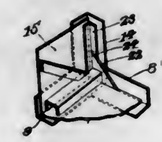
having cut out portions extending from one of the respective ends thereof and terminating at the openings, and one wall of the respective cut out portions being curved to guide the tool over a wire.

1,761,999. SIGNBOARD STRUCTURE FOR TRUCK BODIES. SIMEON E. TRAVIS, Jr., Hattiesburg, Miss. Original application filed Jan. 26, 1928, Serial No. 249,693. Divided and this application filed Mar. 5, 1929. Serial No. 344,530. 7 Claims. (Cl. 40—129.)



1. A sign board structure for truck bodies comprising a pair of arch-shaped, upstanding, spaced supporting elements adapted to be connected with the truck body at the ends thereof and each formed of a single length of material, a display panel for disposition lengthwise of the truck body and having its ends seated directly upon said elements centrally of the top of the latter, and means for anchoring said panel to said elements, said means abutting against the marginal portions of both faces and seated on the top of said panel and further seated on and secured to said elements.

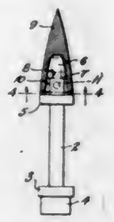
1,762,000. FLOOR AND CORNER STRUCTURE FOR TRUCK BODIES. SIMEON E. TRAVIS, Jr., Hattiesburg, Miss. Original application filed Jan. 26, 1928, Serial No. 249,693. Divided and this application filed Mar. 5, 1929. Serial No. 344,533. 8 Claims. (Cl. 296—30.)



1. A truck body of that type having one or more spaced superposed decks, each deck including side and end rails of angle-shaped cross section to provide vertical and hori-

zontal legs and with the latter extending inwardly from the lower end of the former, each deck further including a flooring secured upon said horizontal legs, upstanding corner rails of angle-shaped cross section, abutting said flooring, the end rails of said lowermost deck having the vertical and the horizontal legs thereof abutting against the corner rails, the ends of the side rails of the lowermost deck abutting against the free edges of the horizontal legs of the end rails of such deck and further abutting against one edge of said corner rails, said end rails being secured to one edge of each of said side and corner rails.

1,762,001. GRATE OR BURNING BAR FOR ENAMELING FURNACES. KARL TÜRK, Baltimore, Md., assignor to The Porcelain Enamel and Manufacturing Company of Baltimore, Baltimore, Md., a Corporation of Maryland. Filed Mar. 6, 1928. Serial No. 259,475. 4 Claims. (Cl. 25—153.)



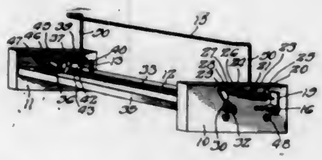
1. In a grate bar for enameling furnaces the combination of a pointed cap having a recess in its bottom, means on said grate bar engaging said socket and interlocking means on said cap for preventing upward movement of said cap away from said grate bar.

1,762,002. VARIABLE-SURFACE WING FOR AEROPLANES. JOHN VAN DE PUTTE, San Antonio, Tex. Filed Feb. 21, 1929. Serial No. 341,726. 2 Claims. (Cl. 244—12.)



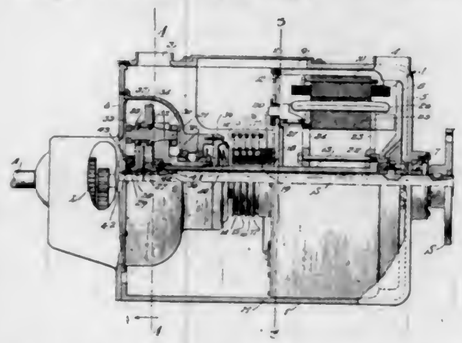
1. A wing of the class described comprising a plurality of hollow sections in telescopic relation, one of said sections on its inner surface having spaced ribs, the other section on its outer surface having a bar disposed between the ribs, said bar having rack teeth, the other section having an opening, pinions disposed in said opening and in mesh with said rack teeth, and means on the exterior of the wings to operate said pinions.

1,762,003. WHIPPING DEVICE. JOHN WEGNER, Thorp, Wis. Filed Mar. 10, 1930. Serial No. 434,831. 6 Claims. (Cl. 256—1.)



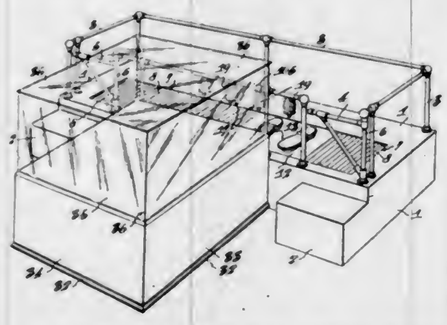
1. A device of the character described including two rotatable members arranged in parallel spaced relation with respect to each other, block members supporting said rotatable members for rotation, resilient means for urging rotation of one of said members in one direction and having connecting with the other of said rotatable members, a step carried by said other of the rotatable members for rotating said other of the rotatable members to place said resilient means under tension to rotate said one of the rotatable members at a predetermined time, latch means operable by rotation of said other of the rotatable members for holding said one of rotatable members against rotation by action of said resilient means, and a whipper bar carried by said one of the rotatable members.

1,762,004. INFINITELY-VARIABLE SPEED-RATIO POWER-TRANSMITTING DEVICE. CHARLES O. WELLMAN, Binghamton, N. Y. Filed Mar. 17, 1923. Serial No. 625,880. 7 Claims. (Cl. 290—29.)



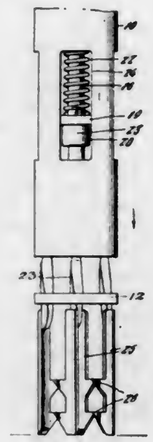
7. A speed and torque varying power transmission system including a driving shaft, a driven shaft, sun gears connected respectively with said driving and driven shafts, planet gears connecting the sun gears together, a planet carrier for the planet gears and an electric motor having relatively movable field and armature, one of which is connected with the driving shaft, and the other with the planet carrier, for producing an increase in torque.

1,762,005. SHOE-SHINING MACHINE. JAMES B. WOOLFORK, Philadelphia, Pa. Filed Dec. 20, 1928. Serial No. 327,256. 16 Claims. (Cl. 15—34.)



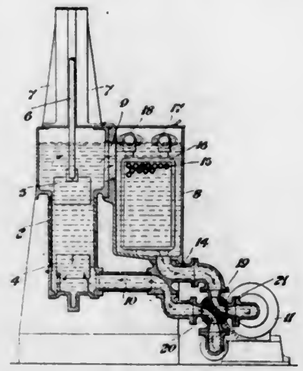
8. In a machine of the character described wherein is provided an entrance and an exit, a platform movable back and forth in a horizontal plane between extreme positions, means to move the platform including a reversible motor and power circuit, means automatically operable upon entrance of a patron through the entrance to set the motor for operation in a given direction, means operable by a patron on the platform to complete the circuit and start operation of the motor; means to automatically break the circuit and stop operation of the motor at each extreme position of the platform, and means automatically operable upon passage of the patron through the exit to reverse motor and reclose the circuit to cause the platform to return to its initial position, shoe brush sets, and means to operate said shoe brush sets in timed relation to the movements of the platform for the purpose specified.

1,762,006. FISHING TOOL. HARRY A. YOUNG, Cross Plains, Tex. Filed Feb. 13, 1928. Serial No. 254,066. 5 Claims. (Cl. 294—100.)



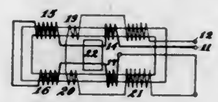
1. A fishing tool comprising a housing provided with a sucker rod attachment upon one end, a shaft having connection with the sucker rod attachment being extended from the opposite end of the housing, disks slidably mounted upon the shaft member, a compression spring encircling the shaft and interposed between the sucker rod attachment and the adjacent disk member, rods twisted upon themselves being extended through openings in the remaining disk corresponding in shape to the cross sections thereof, the innermost ends of said rods having swivel connection with the first mentioned disk, and gripping elements carried upon the outermost ends of the rods.

1,762,007. ELECTRIC CONTROLLER OF THE LIQUID TYPE. VICTOR BREEZE, Kingstonville, near Lewes, England. Filed Feb. 26, 1925. Serial No. 11,898, and in Great Britain Mar. 18, 1924. 3 Claims. (Cl. 201—57.)



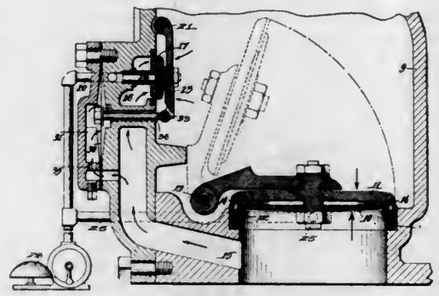
1. A liquid electric controller comprising a tubular liquid containing electrode chamber, two electrodes, a liquid cooling vessel, means for varying the axial distance between the electrodes independently of the level of the liquid, a circulating pump having a bye pass valve, the electrodes being mounted in each end of the tubular chamber respectively and the cooling vessel being connected at one end to one end of the tubular chamber and at the other end through the pump or the bye pass valve to the other end of the tubular chamber so as to form a closed liquid circulating passage through which the whole of the liquid will be pumped from the cooling vessel first over one electrode then axially across the space in the electrode chamber between the electrodes then over the other electrode and then back to the cooling vessel and therethrough to the pump or bye pass valve.

1,762,008. REGULATING TRANSFORMER. GIUSEPPE BURNENGO, Genoa, Italy. Filed May 3, 1926. Serial No. 106,526, and in Italy May 5, 1925. 1 Claim. (Cl. 171—119.)



A variable static transformer comprising a core having a pair of parallel legs, a movable magnetic member disposed between said parallel legs, a primary winding and a secondary winding on each leg, each winding on each leg comprising a major section and a minor section, the major and minor sections of each winding being arranged in close inductive relation to the minor and major sections, respectively, of the other winding.

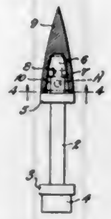
1,762,009. CONSTANT-ALARM DEVICE. HJALMAR G. CARLSON, Worcester, Mass., assignor to Rockwood Sprinkler Company of Massachusetts, Worcester, Mass., a Corporation of Massachusetts. Filed Mar. 14, 1927. Serial No. 175,263. 6 Claims. (Cl. 169—23.)



1. The combination with an alarm valve casing and valve, of a by-pass having one end opening on the main water pressure side of the valve, a chamber connected with the by-pass and having an opening into the interior of said valve casing on the other side of the valve, a tube in said chamber connected to conduct water to an alarm device, a valve for closing said opening, said tube being in position for its end to be closed by the valve when in closed position, a second chamber in open communication with the interior of the valve casing, a diaphragm across the second chamber, a rod connected with said diaphragm and connected with said second valve, and a restricted passage to admit water into the second chamber behind the diaphragm from the main water pressure side of the valve casing, the pressure of water from the chamber behind the diaphragm toward the valve acting to slow down the closing of the second valve.

zontal legs and with the latter extending inwardly from the lower end of the former, each deck further including a flooring secured upon said horizontal legs, upstanding corner rails of angle-shaped cross section, abutting said flooring, the end rails of said lowermost deck having the vertical and the horizontal legs thereof abutting against the corner rails, the ends of the side rails of the lowermost deck abutting against the free edges of the horizontal legs of the end rails of such deck and further abutting against one edge of said corner rails, said end rails being secured to one edge of each of said side and corner rails.

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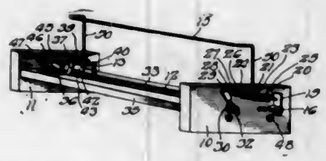
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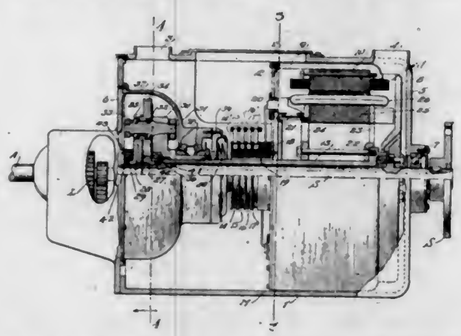
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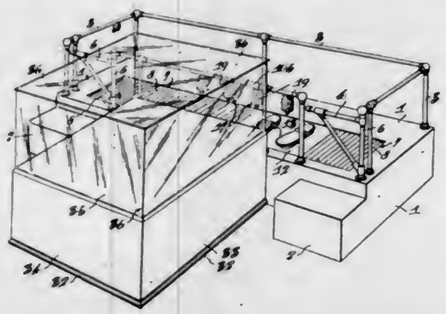
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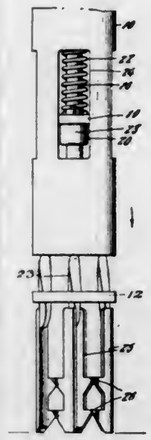
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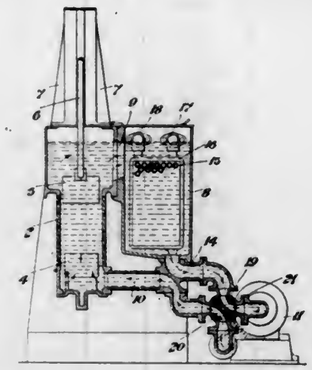
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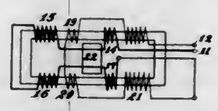
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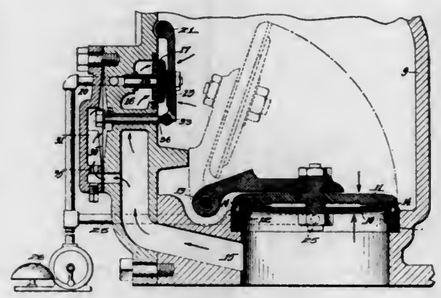
1. A liquid electric controller comprising a tubular liquid containing electrode chamber, two electrodes, a liquid cooling vessel, means for varying the axial distance between the electrodes independently of the level of the liquid, a circulating pump having a bye pass valve, the electrodes being mounted in each end of the tubular chamber respectively and the cooling vessel being connected at one end to one end of the tubular chamber and at the other end through the pump or the bye pass valve to the other end of the tubular chamber so as to form a closed liquid circulating passage through which the whole of the liquid will be pumped from the cooling vessel first over one electrode then axially across the space in the electrode chamber between the electrodes then over the other electrode and then back to the cooling vessel and therethrough to the pump or bye pass valve.

1,762,008. REGULATING TRANSFORMER. GIUSEPPE BURNENGO, Genoa, Italy. Filed May 3, 1926, Serial No. 106,526, and in Italy May 5, 1925. 1 Claim. (Cl. 171—119.)



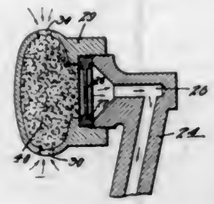
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1. The combination with an alarm valve casing and valve, of a by-pass having one end opening on the main water pressure side of the valve, a chamber connected with the by-pass and having an opening into the interior of said valve casing on the other side of the valve, a tube in said chamber connected to conduct water to an alarm device, a valve for closing said opening, said tube being in position for its end to be closed by the valve when in closed position, a second chamber in open communication with the interior of the valve casing, a diaphragm across the second chamber, a rod connected with said diaphragm and connected with said second valve, and a restricted passage to admit water into the second chamber behind the diaphragm from the main water pressure side of the valve casing, the pressure of water from the chamber behind the diaphragm toward the valve acting to slow down the closing of the second valve.

1,762,010. PROTECTING DEVICE FOR BLEED PASSAGES. HJALMAR G. CARLSON, Worcester, Mass., assignor to Rockwood Sprinkler Company of Massachusetts, Worcester, Mass., a Corporation of Massachusetts. Filed Oct. 31, 1927. Serial No. 229,988. 2 Claims. (Cl. 210—27.)

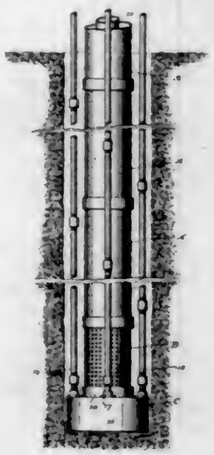


1. The combination of a member having a passage through it for air and provided with an externally threaded head, of a filter located on the outside of the head for protecting a fine bleed passage, and a perforated casing screwed onto the head to hold the filter in place and filled with porous compressible material to protect the bleed passage from impurities of air and water.

1,762,011. TREATMENT OF ANIMAL FIBERS AND PRODUCT THEREOF. ARNOLD DOSER, Cologne-Mulheim, GUSTAV MAUTHE, Cologne-Holweide, and ALFRED THAUSS, Cologne-Deutz, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Jan. 19, 1929, Serial No. 333,742, and in Germany Jan. 25, 1928. 4 Claims. (Cl. 8—5.)

1. The process which comprises incorporating with animal fibers a product being obtainable by reacting with an aralkyl halogenide upon a compound of the group comprising recent resins and condensation products of recent resins with phenols, in the presence of zinc chloride at a temperature between about 100–200° C., and sulfonating the product thus obtainable.

1,762,012. WELL-CASING SHOE. ELMER D. EVERY, Rochelle Park, N. J., assignor to Artesian Well & Equipment Co., Inc., New York, N. Y., a Corporation of New Jersey. Filed May 1, 1928. Serial No. 274,265. 10 Claims. (Cl. 166—9.)



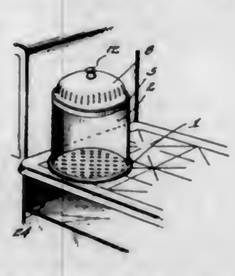
1. A well casing shoe including a body defining an upper closed chamber adapted to receive a fluid and having a portion thereof extending radially beyond the casing periphery and provided with an upwardly directed restricted outlet for discharging the fluid therethrough.

1,762,013. HAND-BAG FRAME. WILLIAM FINKELSTEIN, Philadelphia, Pa. Filed June 22, 1925. Serial No. 38,864. 1 Claim. (Cl. 190—54.)



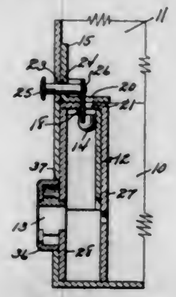
In a bag structure, the combination with a mouth surrounding an L shaped frame, of a bag body comprising an outer leather covering, an intermediate backing layer and inner cloth lining therefor, a strip of sole leather bent upon itself with a spacing strip therebetween to form an inverted U shaped stitching strip adapted to abut against the inner side of the depending frame portion, a binder strip secured to said depending frame portion with said stitching strip secured therebetween, said bag body having its marginal edge stitched to the creased edge of said stitching strip flush with the outer surface of said frame.

1,762,014. HOUSEHOLD HEATING UTENSIL. FRIEDRICH G. FISCHER, Detroit, Mich. Filed June 7, 1928. Serial No. 283,555. 11 Claims. (Cl. 219—37.)



1. A portable household heating utensil, comprising a base for holding a heating element adapted to be heated by an outside heating source, a reflector extending partially around the heating element and disposed vertically, and a cover member at the top of the reflector.

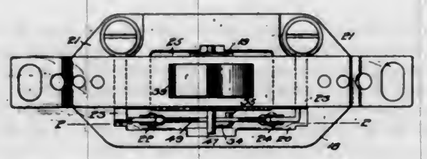
1,762,015. CASH-BOX LATCH. GEORGE J. FRANCIS, Durham, Conn. Filed July 17, 1925. Serial No. 44,266. 1 Claim. (Cl. 70—29.)



In a cash box having a hinged flanged closure and having a key operated lock whose casing is fixed to one wall thereof and which casing has its top provided with openings, one of which is of rectangular formation, a right angular plate having one of its flanges fixed to the inner face of the closure and its second flange designed to overlie and rest on the top of the lock casing and the said last mentioned

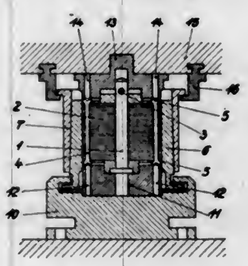
flange having depending notched keepers to be received through the first mentioned openings in the lock casing and which notched keepers are designed to be engaged by the bolt of the lock, the said last mentioned flange having a rectangular opening therein to register with that of the lock casing, the fixed flange of the angle plate having secured thereto one end of an offset spring whose other end is formed with a depending portion designed to pass through the rectangular opening in the second flange of the angle plate and through the rectangular opening in the top of the casing and to be urged against one of the longitudinal walls provided by these openings by the tension of the spring, said depending portion being formed with an angle lip to overlie and to contact with the inner face of the top wall of the lock casing and a push element passing through the fixed flange of the plate and through the cover and fixed to the spring at the end thereof provided with the depending portion.

1,762,016. SNAP SWITCH. ARTHUR C. GAYNOR, Stratford, Conn. Filed Oct. 22, 1926. Serial No. 143,454. 3 Claims. (Cl. 200—67.)



3. In a snap switch, the combination of a bracket having a pair of arms each formed with a bearing, a crank shaft journaled in said bearings, and a contact blade carried by said shaft, the bearing in one of said arms having an entrance slot extending to the edge of said arm and the other bearing being closed but formed with an offset elongation to facilitate assembly of the crank in the bracket, said slot and said elongation merging in the respective bearings at least as high as the vertical center of the latter and the elongated portion of the closed bearing being substantially of the same length as the end portion of the shaft adapted to be supported in said closed bearing.

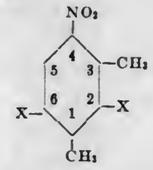
1,762,017. METHOD OF MANUFACTURE OF SQUIRREL-CAGE ROTORS FOR ELECTRIC MACHINES. FERDINAND GRENZER, Cannstatt-Stuttgart, Germany, assignor to Maschinenfabrik Esslingen, Esslingen, Germany. Filed Oct. 18, 1927, Serial No. 227,010, and in Germany Nov. 1, 1926. 7 Claims. (Cl. 29—84.)



1. The method of manufacture of squirrel cage rotors for electric machines, which consists in compressing a stack of laminations to a predetermined pressure, mounting the short-circuiting rings and squirrel cage rods and riveting said rods over said rings.

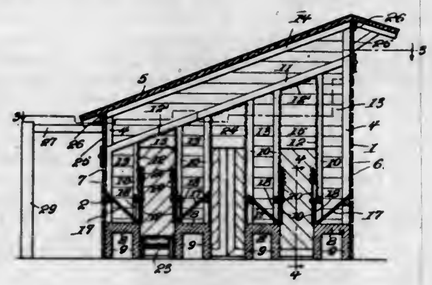
1,762,018. CHLORINE-SUBSTITUTION PRODUCTS OF 4-NITRO-1.3-DIMETHYLBENZENE AND PROCESS FOR PREPARING THEM. ERWIN HOFFA and ERWIN THOMA, Hochst-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Sept. 21, 1927, Serial No. 221,134, and in Germany Oct. 11, 1926. 14 Claims. (Cl. 260—142.)

1. The process for preparing chlorine compounds of the following constitution:



wherein X stands for chlorine or hydrogen, but at least one X represents chlorine, which consists in treating 4-nitro-1.3-dimethylbenzene with the quantity of chlorinating agent required for obtaining the desired final product.

1,762,019. CORNCRIB. MARY K. JANDL, Marble Rock, Iowa. Filed Jan. 20, 1928. Serial No. 248,199. 1 Claim. (Cl. 20—1.2.)



A corn storage house comprising a pitched roof, spaced slats included in the front and rear walls of said house, the sides being closed and provided with vertically arranged openings, parallel base members of U-shaped cross section disposed between and at the opposite sides of said openings, angle beams arranged in spaced parallelism with respect to the roof and below the same, uprights connected at the angle beams and rising from the base members, reticulated sheets secured to the confronting faces of pairs of the uprights and to the lower portions of the angle beams between the uprights to provide independent bins, each of said bins having an angle wall directed toward passages provided between the bins, the portions of the sheets secured to the angle beams providing guides for corn, slidably mounted gravity closed doors for openings aligned with the angle walls and disposed in the bins, remote means to operate said doors, the front and rear of the house above the bins being provided with openings, the opening of the front being adapted to receive corn to be passed by gravity to the bins through openings in the tops of the latter, doors for the first mentioned openings, doors for the openings in the front and rear of the house and said first mentioned openings being aligned with the passages between the bins.

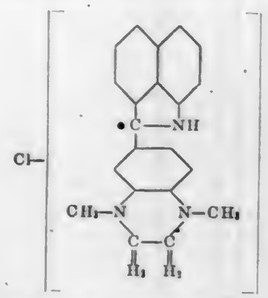
1,762,020. NEW AZO DYESTUFFS. MYRTIL KAHN, Cologne, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Sept. 10, 1927, Serial No. 218,860, and in Germany Oct. 22, 1926. 3 Claims. (Cl. 260—72.)

1. The process for the production of new azo dyestuffs comprising coupling the tetrazo compound of the intermediate bodies from a p-diamine and an amino naphthol

sulfonic acid with two molecules of components at least one of them being a 1-hydroxy-alkyl-amino-3-aminobenzene, the sequence of the combinatfon being immaterial.

1,762,021. CONDENSATION PRODUCTS OF THE NAPHTHOSTYRIL SERIES AND PROCESS OF PREPARING THE SAME. GEORG KRÄNZLEIN, MAX HEYNE, and PAUL OCHWAT, Hochst-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Nov. 21, 1927, Serial No. 234,903, and in Germany Nov. 30, 1926. 13 Claims. (Cl. 260—29.)

13. As a new product, the compound of the following formula:



said product being a dyestuff forming in a dry state a black powder, readily dissolving in water to a dark-blue solution and dyeing cotton mordanted with tannin, paper or the like, blue-black tints.

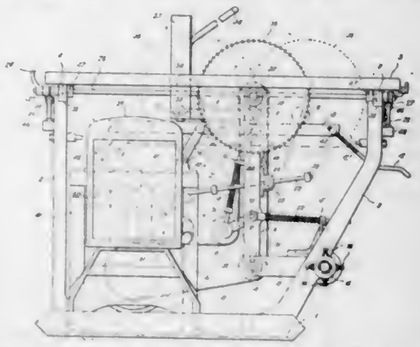
1,762,022. AZODYESTUFFS INSOLUBLE IN WATER AND PROCESS OF MAKING SAME. LEOPOLD LASKA and ARTHUR ZITSCHER, Offenbach-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Jan. 29, 1929, Serial No. 336,003, and in Germany Feb. 1, 1928. 6 Claims. (Cl. 260—77.)

1. A process which comprises combining the diazo compound of 2.3.4-trichloro-aniline with a di-acetoacetyl-diamino-diaryl compound of the general formula:

$$CH_3.CO.CH_2.CO.NH—X—NH.CO.CH_2.CO.CH_3$$

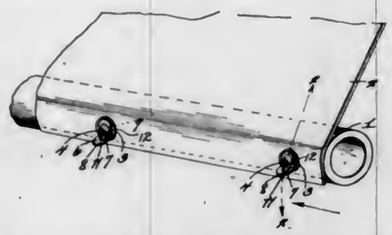
wherein X means a diphenyl residue which may contain further substituents.

1,762,023. SAWING MACHINE. CHARLES I. LONGENECKER, Milwaukee, Wis., assignor to Chain Belt Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Sept. 16, 1927. Serial No. 219,986. 7 Claims. (Cl. 143—43.)



1. In a sawing machine the combination of a circular saw, a saw table, an arm in which the saw is supported movable lengthwise of the table, a roller carried by the saw arm, a supporting bar upon which the roller rests and by which the movements of the saw on lines parallel with the working surface of the table are directed, parallel links by which the supporting bar is held, and means for adjusting the bar and links to vary the extent to which the cutting portion of the saw extends beyond the face of the table.

1,762,024. AWNING CLIP. JOSEPH D. MAJOR, Philadelphia, Pa. Filed July 8, 1929. Serial No. 376,776. 4 Claims. (Cl. 156—15.)



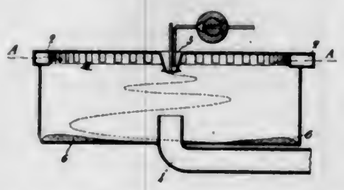
3. In an awning clip, the combination with an awning rod having an added projection, of an awning having an eyelet adjacent its margin, and through which the headed projection may engage, a clip comprising right angle parts, one constituting a projection engaging member, the other constituting a finger piece, said clip having an elongated slot, said slot having a restricted portion formed in the projection engaging part and an enlarged portion formed in the finger piece part, the latter portion permitting of the passage of the head of the projection, whereby the shank of the projection may engage in the restricted portion of the slot.

1,762,025. FOOT SUPPORT. JAMES NELSON MARKS, London, England. Filed Aug. 6, 1928, Serial No. 297,675, and in Great Britain Aug. 11, 1927. 2 Claims. (Cl. 36—71.)



1. A foot arch support comprising a supporting plate, a pad thereon, and an initially flexible covering united to the plate by a tacky adhesive and hence also securing the pad in place.

1,762,026. METHOD FOR ATOMIZING AND DRYING LIQUIDS. AAGE NYROP, Copenhagen, Denmark. Filed Aug. 3, 1926, Serial No. 126,919, and in Denmark May 10, 1926. 1 Claim. (Cl. 159—48.)



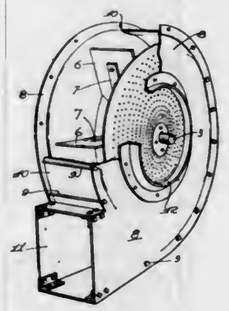
Method for atomizing and drying liquids consisting in hurling out particles of liquid from an atomizer at the top of a vessel in a layer and pressing the particles in a downwardly extending spire with increasing radius of curvature, and simultaneously introducing drying air at the top of the vessel and adjacent the side of outcoming particles of liquid so that the air will pass through the particles of the liquid in a spire with decreasing radius of curvature but with the same direction of movement as the particles of liquid.

1,762,027. RUBBER TIME STAMP AND DATER. GEORGE A. PICKUP, East Nashville, Tenn. Filed June 27, 1927. Serial No. 201,843. 1 Claim. (Cl. 101—373.)



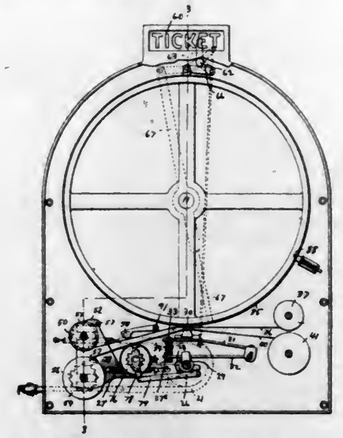
A time and dating stamp of the character described comprising a hollow rubber body, a flange formed on said body at its lower end, a substantially rigid handle secured to said body at its upper end, rubber rings, one having indicia representing the days of the month, and the other having indicia representing the time of the day, said rings being removably mounted on the flange for rotation and interchangeable with each other, a ribbed flange formed about the periphery of each ring, a rubber disk secured to the lower end of said body through the medium of either of the rings, a pointer carried by said disk and being associated with said numerals, and an indicator formed on said body and cooperating with said pointer.

1,762,028. EXHAUST FAN. MORTON F. PHELPS, Little Rock, Ark., assignor to Phelps Manufacturing Company, a Copartnership consisting of Frank Phelps and Morton F. Phelps, Little Rock, Ark. Filed Mar. 10, 1926. Serial No. 93,630. 2 Claims. (Cl. 230—132.)



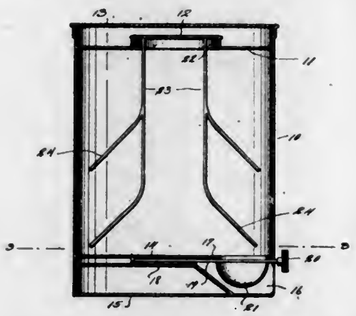
1. In a power driven blast wheel including a casing formed with a discharge opening and in one side with an inlet, the combination of a shaft and means for applying power thereto, a fan wheel fixed to the shaft and a screen comprising a disk and a central hub to which it is secured and by which it is fixed to the shaft independently of the fan wheel, said screen disk being prebalanced for rotation about the axis of its hub and disposed between the blast wheel and inlet opening in the side of the casing to separate solid matter from air drawn through the inlet opening and screen and prevent such solid matter from contact with the blast wheel blades, and said casing having a removable side whereby said screen is removable and replaceable by another prebalanced screen without disturbing the balance of the blast wheel.

1,762,029. FARE REGISTER. OSCAR L. POTTS, Hendersonville, Tenn., assignor of one-half to Asbery Joney Anderson, Nashville, Tenn. Filed Sept. 11, 1925. Serial No. 55,777. 2 Claims. (Cl. 235—29.)



1. In a fare register, a plurality of concentric shafts, devices for rotating the shafts independently, counting mechanism including independent sets of wheels, devices operatively connected with each shaft for actuating the independent sets of wheels of the counting mechanism, mechanism for printing a record of fares, and means including interengaging devices extending radially from the concentric shafts for actuating the printing mechanism simultaneously with the operation of either of the concentric shafts.

1,762,030. COFFEE OR TOBACCO HUMIDOR. JOHN J. RATTY, New York, N. Y. Filed Jan. 5, 1929. Serial No. 330,686. 2 Claims. (Cl. 221—106.)

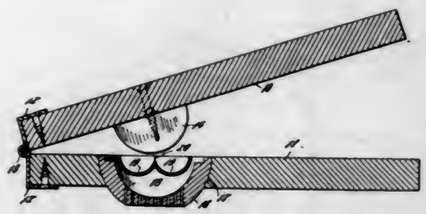


1. A container of the character described comprising a body having a false top provided with an opening and a closure therefor and a top extending over the false top, the container having a false bottom above the lower end of the container and the side of the container below this false bottom having a discharge opening, the false bottom of the container also having a discharge opening, a spindle mounted upon the false bottom and extending across the discharge opening and carrying a measuring cup which fits the opening in the false bottom, the spindle having means whereby it may be oscillated to carry the cup from a receiving to a discharge position and vice versa.

1,762,031. FRUIT CUTTER AND SQUEEZER. JAMES H. ROBERTS, Atlanta, Ga. Filed Feb. 12, 1926. Serial No. 87,891. 1 Claim. (Cl. 146—72.)

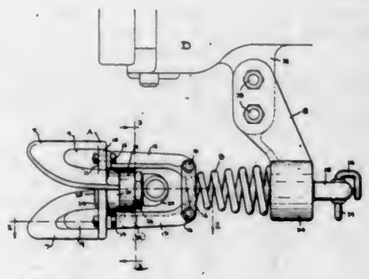
A fruit cutter comprising a handle having a cup-shaped fruit receiving receptacle, a cutting blade centrally and

vertically disposed within the receptacle, said blade having semi-circular sharpened edges arranged in end to end



relation, and a pointed projection upstanding from the blade at the meeting of said edges for an appreciable distance above the latter to impale the fruit.

1,762,032. AUTOMATIC TRAIN-PIPE COUPLING. JOSEPH ROBINSON, New York, N. Y. Filed July 1, 1921, Serial No. 481,964. Renewed Oct. 2, 1928. 14 Claims. (Cl. 285—58.)

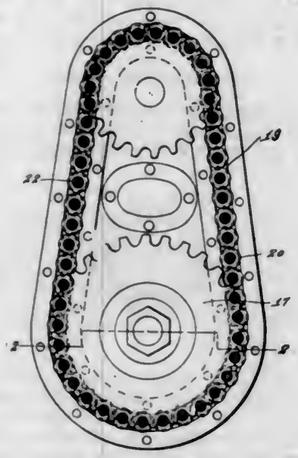


1. In an automatic train pipe coupling, the combination of a coupling head having an opening therein and having also a pair of perforated guides, a spring for supporting said head, a yoke comprising separate members which straddle the opening in said head and which are connected to the head in alignment with the perforations in said guides, said yoke being suitably connected to one end of said spring, and a bracket connected to the other end of said spring and serving to support said coupling head from the car.

1,762,033. PROCESS OF PREPARING PICTURES TO BE PRODUCED BY TANNING ACTION. MAXIMILIAN PAUL SCHMIDT, RUDOLF ZAHN, and WILHELM KRIEGER, Wiesbaden-B'ebrich, Germany, assignors to Halle & Co. Aktiengesellschaft, a Corporation of Germany. Filed Aug. 7, 1928, Serial No. 298,126, and in Germany Aug. 22, 1927. 18 Claims. (Cl. 95—6.)

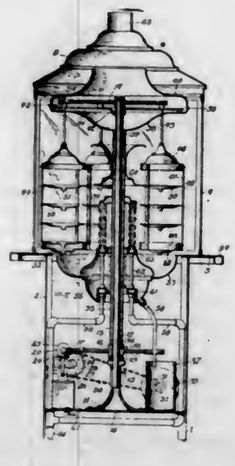
1. The process of preparing pictures to be produced by tanning action consisting in applying a mixture of a diazo compound and an organic colloid on a base placing the object to be copied on the layer sensitive to light, exposing it to light, treating it with a tanning agent and developing it with water.

1,762,034. ROLLER DRIVE. CECIL MERWIN SILBERBERGER, Frederick, S. Dak. Filed July 11, 1928. Serial No. 291,822. 1 Claim. (Cl. 74—31.)



A drive connection comprising a housing provided with oppositely located racewnys, shaft members having the ends therefor disposed within the raceways, roller members loosely mounted upon the ends of the shafts disposed within and engageable tangentially thereof with said raceways, roller members included upon the intermediate portions of the shafts, and spacing elements carried by the shafts at the ends of the roller members to insulate and prevent displacement of both the intermediate and end rollers.

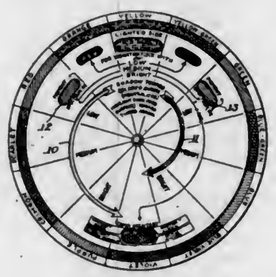
1,762,035. REVOLVING BROILER. GEORGE SOYLIAN, New York, N. Y. Filed May 28, 1928. Serial No. 281,150. 4 Claims. (Cl. 126—41.)



1. A revolving broiler, including a stationary standard, a gear wheel rigidly secured to said standard, a plurality of article supporting frames, a gear wheel connected with each of said frames, said gear wheels meshing with the first mentioned gear, means for supporting and moving said second mentioned gear in a circle while in mesh with the first mentioned gear, whereby said frames will be individually rotated as they move in a circle, said means

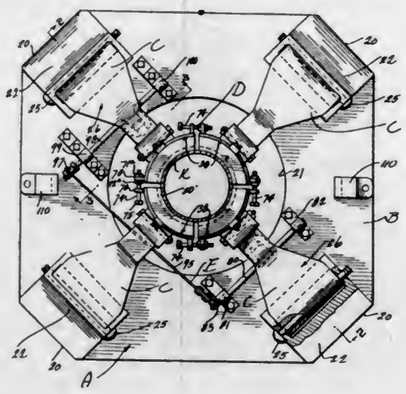
extending to a point near the bottom of said standard, a driving structure connected with said means near the bottom of said standard, said driving structure including an electric motor and a heater arranged at the center of said circle for heating articles carried by said frames said heater surrounding said standard.

1,762,036. DISK CHART TO DETERMINE COLOR RELATIONS. JOSEPH J. STEEDLE, Scranton, Pa. Filed Nov. 18, 1926. Serial No. 149,200. 3 Claims. (Cl. 88—14.)



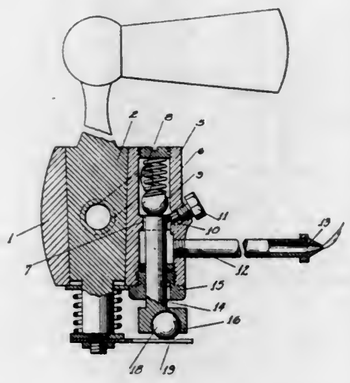
1. A color chart comprising a base, a circular field divided into color sections, overlapping color extensions arranged upon alternate color sections, proportional indicia upon said extensions, eccentrically arranged tinted bands intersecting the color sections, a mask rotatable upon the base over the field and having openings therein, said openings being arranged to render visible any selected color section and its complement to indicate a neutralizing color for the color of the section selected; to render visible any selected color section and the comparative brilliancy of light for the color of the section to determine its color in shadow; the comparative brilliancy of high light and shadows, and indicia to indicate the same.

1,762,037. PIPE HOLDER AND ELEVATOR. JAMES S. TAYLOR, Wynona, Okla., assignor, by direct and mesne assignments, of three-eighths to Lory J. Mildren, Ponca City, Okla., and two-eighths to C. E. Reed, Wichita, Kans. Filed Oct. 23, 1926. Serial No. 143,689. 13 Claims. (Cl. 24—249.)



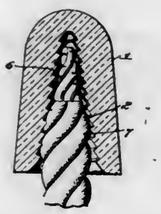
1. As an article of manufacture a jaw construction for well casing holders comprising a concavo-convex jaw, a concavo-convex metal liner for the concave side of said jaw, said concavo-convex liner having a flange at one end thereof adapted to overlie one end edge of said jaw, said jaw being recessed in the top of the edge over which said flange lies, and said flange having a depending lug adapted to fit into said recess to prevent circumferential movement of the liner with respect to the jaw.

1,762,038. COMBINATION GAS COCK AND AUTOMATIC LIGHTER. CHARLES A. THEKAN, Milwaukee, Wis. Filed Jan. 18, 1929. Serial No. 333,371. 2 Claims. (Cl. 158—115.)



2. A combined gas cock and lighter comprising a casing, a main cock therein, a chamber formed in the casing, a valve seat in the casing dividing the chamber into upper and lower parts, a pilot burner connected with the lower part, a spring pressed valve in the upper part for engaging the seat, means for connecting the upper part with the gas supply, a by-pass for connecting the lower part with the upper part, a rod extending through the bottom of the lower part and having its upper end engaging the valve, the lower part of the rod having an enlargement thereon provided with an inclined slot, a ball in the slot, an arm on the lower end of the cock which will engage the ball on the opening movement of the cock and thus raise the rod to push the valve off its seat, after which the arm passes from under the ball, said ball riding up the slot when engaged by the arm on the closing movement of the cock and means for adjusting the size of the by-pass.

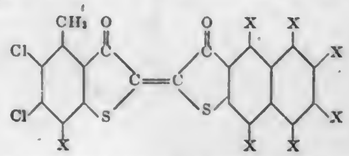
1,762,039. INSULATING CAP FOR THE JOINTS OF ELECTRICAL CONDUCTORS AND CONDUCTIVE COATING FOR USE THEREIN. FREDERIK MARINUS VAN GELDEREN, Enschede, Netherlands. Filed Oct. 3, 1927. Serial No. 223,789. 4 Claims. (Cl. 173—263.)



1. An insulating cap for the bare ends of electrical conductors having a cavity therein for the reception of the conductors and provided with an internal thread for binding engagement with said bare ends when the cap is applied thereto and rotated, and a conductive coating of metal glaze on said thread.

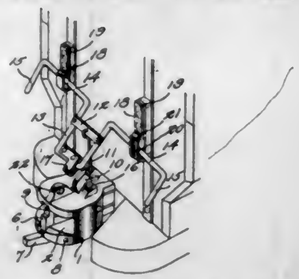
1,762,040. VAT DYESTUFF. HERMANN WAGNER, Bad-Soden-on-the-Taunus, RUDOLF BRUNE, Hochst-on-the-Main, MAX HESSENLAND, Konigsberg, and EAWIN HOFFA, FRITZ MÜLLER, and HANS HEYNA, Hochst-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Original application filed May 3, 1926, Serial No. 106,492, and in Germany May 6, 1925. Divided and this application filed Aug. 30, 1928. Serial No. 303,102. 3 Claims. (Cl. 260—53.)

1. As new products the vat dyestuffs of the general formula:



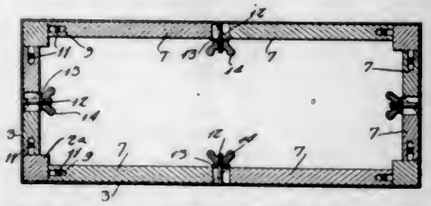
wherein X represents hydrogen which may be replaced by halogen.

1,762,041. CAR COUPLER. ADAM WAKENSHAW, Bearcreek, Mont. Filed Apr. 3, 1928, Serial No. 267,039. Renewed Oct. 30, 1929. 1 Claim. (Cl. 213—191.)



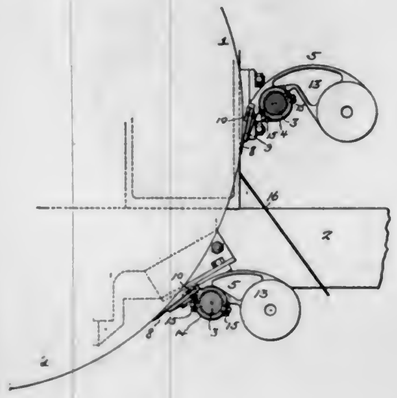
A car-coupling of the character described comprising a draw-head, a coupling link operated member pivotally secured in a groove longitudinally formed in said draw-head, substantially right angle disposed arms included in said coupling link operated member, one of said arms having a recessed free end, a latch arm pivotally mounted in a recess formed in said draw-head and being engageable in the recess of the arm to prevent movement of said coupling link operated member, operating means for said latch arm, a U-shaped intermediate portion included in said operating member, shanks formed with the arms of said U-shaped portion, strap hangers receiving the shanks, means formed with said shanks for moving said operating member in the strap hangers, a cross strip having its ends secured to the arms of the U-shaped portion, a link connection between the cross strip and latch arm, and latching means carried by said U-shaped member and draw-head respectively to prevent movement of the operating member in one direction.

1,762,042. TABLE-LEG FASTENING. STANLEY WOJTAN, Chicago, Ill. Filed Feb. 14, 1929. Serial No. 339,975. 5 Claims. (Cl. 45—48.)



1. In a table, a table top, side and end rails depending from the top, legs detachably engaged with the table, means carried by the side and end rails for anchoring the legs to the table, said means including a pair of slidable strips on each side and end rail having beveled overlapping ends, and means engaged with the beveled ends for moving the strips away from each other into abutting and binding engagement with the legs.

1,762,043. MACHINE FOR CHILLING AND FLAKING SOAP. ELWOOD B. AYRES, Melrose Park, Pa., assignor to Proctor & Schwartz, Incorporated, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Aug. 25, 1926. Serial No. 131,433. 3 Claims. (Cl. 83—91.)



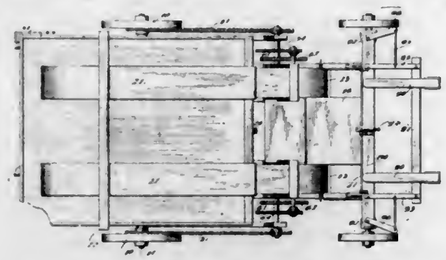
1. The combination in a soap chilling and flaking apparatus; of a cylinder on which the film of the soap is formed, a bar extending across the cylinder, and a series of independent blades resting on the top of the bar and arranged to bear against the cylinder and remove the soap therefrom.

1,762,044. BLASTING UNIT. CLARENCE E. BEDIENT, Cincinnati, Ohio. Filed Oct. 25, 1928. Serial No. 315,086. 4 Claims. (Cl. 102—6.)



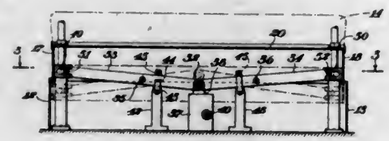
1. A blasting unit comprising a combustible casing having relatively thick and rigid side walls, explosive in said casing, detonating means to explode said unit, said casing comprising a chemical part of the ingredients of the explosives of said unit.

1,762,045. COTTON HARVESTER. ARTHUR E. BENSON, Clarendon, Tex. Filed May 31, 1928. Serial No. 281,794. 3 Claims. (Cl. 56—35.)



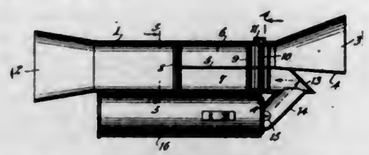
1. A device of the character described comprising a frame, a body on the frame, a hood having one portion in open communication with the body, an inverted U-shaped channel section inclined at an angle to the body and having the inner end in open communication with the hood, the bottom of the channel section being open to the body, a drum provided with fingers and rotatably mounted in the hood, a second drum provided with curved fingers disposed in cooperative association with the first mentioned fingers for supplying cotton to said fingers, the first mentioned fingers being adapted to throw the cotton into the channel sections whence said cotton is directed into the body and means for revolving the drums.

1,762,046. MOTOR-VEHICLE SEAT. ALBERT B. BLUMENBERG, New York, N. Y. Filed Jan. 7, 1929. Serial No. 330,721. 5 Claims. (Cl. 155—91.)



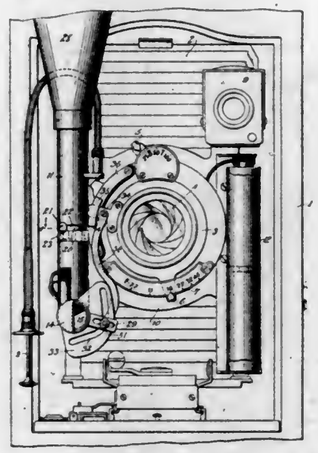
1. In a motor vehicle, a floor board, a hollow base thereon, a seat mounted in association with said base and provided with depending side walls telescoped within said base, and means for altering said telescoped relationship to adjust the seat to desired heights above the floor board; said means comprising a set of opposed channel elements carried by said walls and beneath said seat, and means engaging within said elements for raising and lowering the same.

1,762,047. PHOTOMETER. KINGSLAND CAMP, Newark, N. J. Filed Mar. 17, 1928. Serial No. 262,348. 6 Claims. (Cl. 88—23.)



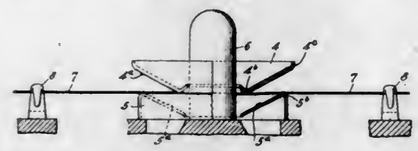
3. As a new article of manufacture, a direct vision comparison photometer, including an artificial light, a disk of ground glass or analogous material through portions of which both the artificial and natural lights are directed; a deflecting surface illuminated by said light and a disk having partially rotary mounting and having a clear part and an opaque part, said disk located in the path of both the natural and artificial light rays, said disk adapted to be turned to cut off the direct vision and the natural light whereby uniformity of natural and artificial light can be had.

1,762,048. EXPOSURE CONTROL. KINGSLAND CAMP, Newark, N. J. Filed May 26, 1928. Serial No. 280,892. 6 Claims. (Cl. 95—10.)



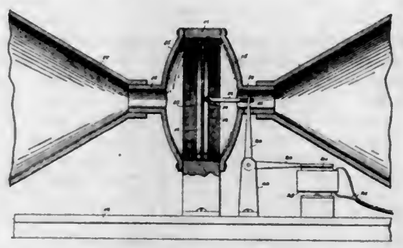
1. An exposure control for a camera, including a photometer, an electric lamp in the photometer, a battery, and shutter operating means operatively connected to the photometer and constituting a circuit closer for the lamp.

1,762,049. TENSION DEVICE. HARRY D. CLINTON, Johnson City, N. Y. Filed June 6, 1929. Serial No. 368,948. 6 Claims. (Cl. 242—150.)



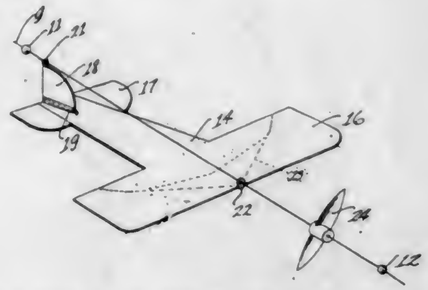
3. In a yarn tensioning device, a pair of disc members of dish-like form fitting one within the other and having annular rounded ridges disposed toward each other on which a strand of feeding yarn passed between the discs will bear under tension, and means coaxially guiding the disc members in independent free-play movement.

1,762,050. LOUD-SPEAKER. CHARLES G. COOK, Portsmouth, N. H. Filed Aug. 24, 1928. Serial No. 301,901. 3 Claims. (Cl. 274—25.)



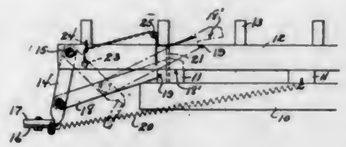
1. In a device of the character described, a central cylindrical casing, a diaphragm mounted within said casing, tone chamber forming members mounted on the opposite ends of said casing, including tubular members, sound propagating horns associated with said members, and actuating means for said diaphragm extending through one of said members.

1,762,051. TOY. JOHN T. COONEY, Reseda, Calif. Filed May 17, 1929. Serial No. 363,798. 1 Claim. (Cl. 46—14.)



In a device of the character described adapted to be attached to a moving vehicle, a cord angularly disposed with respect to a horizontal, a plane movable on said cord and suspended therefrom, a freely rotatable propeller movable on said cord and independently of said plane whereby said propeller may move toward or away from said plane or along said cord therewith.

1,762,052. ADJUSTABLE STEP FOR VEHICLES. CHARLES DODDS, Tipton, Iowa. Filed July 24, 1929. Serial No. 380,609. 1 Claim. (Cl. 280—166.)



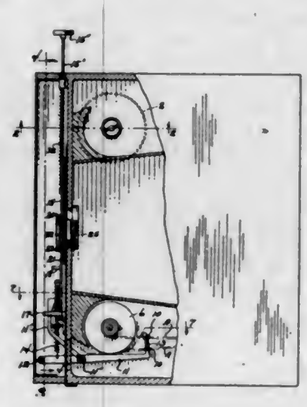
An auxiliary vehicle step construction comprising spaced pivotally suspended leg members, shelf portions twisted and angularly disposed adjacent the depending ends of the leg members, a step tread carried upon the shelf portions, locking plates having pivotal eccentric connection with the leg members adjacent their outermost ends and portions removed adjacent their innermost ends for detachable connection with appropriate portions of the vehicle body, a retractile spring establishing connection at its ends between the vehicle body and step tread to yieldingly induce the step to occupy a retracted position, and means carried by the body having connection with the locking plates to facilitate releasing of the portions removed of the locking plates from the abutting portions of the body to shift said step tread to occupy an out of the way position.

1,762,053. TREATMENT OF FISH SKINS. ALFRED EHRENREICH, London, England. Filed Jan. 24, 1928, Serial No. 249,204, and in Belgium Jan. 26, 1927. 4 Claims. (Cl. 149—4.)

4. A process for the treatment of skins of sharks and the like, comprising the introduction of said skins after liming and other preparatory treatment into a viscous liquid containing about 5% of gum tragacanth or water extract of algæ or of fenugreek for approximately 6 hours at a temperature of about 30° C., sprinkling said skins, and drying said skins to prepare them for final treatment.

1,762,054. CAMERA. DAVE FOREMAN, Lenorah, Tex., assignor of one-fourth to Joe L. Hall and one-fourth to John R. Vance, Stanton, Tex. Filed Sept. 10, 1928. Serial No. 305,034. 1 Claim. (Cl. 95—31.)

In combination with a camera including its film spools, a plunger member for engaging one end of one of the film spools, a barrel carrying the plunger member, a spring for rotating the barrel, a film carried by the spools and having holes therein, a latch lever engaging the holes for preventing movement of the film under the action of the spring, a reciprocatory shutter actuating member having a hole therein, a circular shutter having an exposure opening therein, a pin connected with the shutter and passing



through the hole in the shutter actuating member, a spring for actuating the shutter, a cover blind, a dog on the shutter operating member for operating the cover blind on the upward movement of the shutter operating member, a projection on the shutter operating member and an arm connected with the latch lever and engaged by the projection on the downward movement of the shutter operating member for moving the latch lever to releasing position.

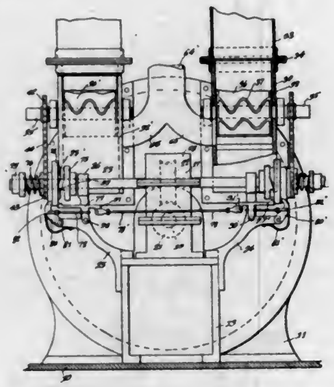
1,762,055. CHECK NOZZLE. CHARLES W. FRANK, Elizabeth, N. J. Filed Sept. 15, 1928. Serial No. 306,145. 2 Claims. (Cl. 137—111.)



1. In a dispensing nozzle of the character described having a discharge end provided with an interior valve seat, a valve head formed with an undercut portion to position upon said seat, a split skirt carried by the valve head and extending into the nozzle, means carried by the nozzle for engaging and limiting the outward movement of the valve therefrom, said valve head when seated completely covering the discharge end of the nozzle.

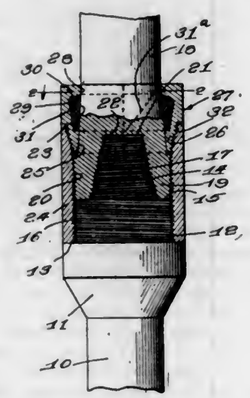
1,762,056. PULVERIZING MILL. GEORGE GALAN, Pittsburgh, Pa. Filed Aug. 27, 1927. Serial No. 215,853. 3 Claims. (Cl. 83—11.)

1. In a delivery device, a pair of rotatable elements having openings of a predetermined size formed in the periphery thereof and adapted to extend axially thereof, means for independently directing fuel to said rotatable elements, a drive shaft, clutch members associated with said drive shaft, operating means for said clutch members, means for connecting said clutch operating means whereby when one of said clutches is disengaged the other of said clutches



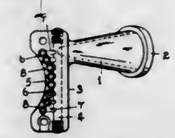
will be engaged whereby to independently connect said rotatable elements to said drive shaft for rotation therewith.

1,762,057. COUPLING FOR DRILL RODS. GEORGE C. GATES, REX W. CLARK, and PRESLAY C. WILLS, Montrose, Colo. Filed June 29, 1929. Serial No. 374,698. 2 Claims. (Cl. 287—125.)



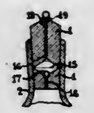
1. In a coupling of the class described, the combination with a drill shaft provided upon the lower end thereof with a circular head having formed in the lower face thereof a threaded conical socket, of a bit shaft having an enlarged portion provided with an extension of the same size as the circular head, an annular shoulder formed upon the enlarged portion adjacent the extension, a conical extension formed upon the upper end of said extension and having screw-threads adapted to coact with the screw-threads of said bore, the exterior of said extension and said head being oppositely screw-threaded to the screw-threads of said conical extension and bore, a sleeve having its lower end provided with screw-threads adapted to engage the circular head and extension and having its lower extremity adapted for engagement with said flange, the upper end of said sleeve being oppositely screw-threaded to the lower end thereof, a cap having a central aperture adapted to receive the drill shaft, said cap being exteriorly screw-threaded for engagement with the threads of the upper end of the sleeve, the aperture of the cap being enlarged to form about the shaft when the cap is in position thereon an annular recess, a packing element located in said recess and formed of compressible material, the packing element being normally of a size greater than the space between the walls of the recess and the bit stem and being compressed by the engagement of the cap with said sleeve, the lower end of said cap abutting the upper end of said circular head.

1,762,058. LINING GUN NOZZLE. HERBERT HENRY HARRIS, Woodville, WILLIAM THOMAS WHITTINGSLOWE, New Mile End, and SAMUEL JAMES JOLLY, Woodville West, South Australia, Australia. Filed Dec. 14, 1928, Serial No. 326,145, and in Australia Nov. 9, 1928. 4 Claims. (Cl. 15—140.)



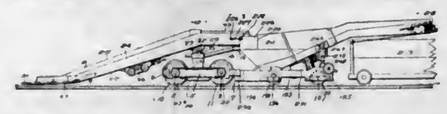
1. A lining gun nozzle comprising an elongated flattened body upon the smaller end of a tapered tubular intake stem the larger end of which is adapted to be secured by means of a suitable device to the gun, a bore within the body and communicating with the intake stem, a series of countersunk openings along a face of the body and adjacent to an edge of same each of which communicates with the said channel and each of which is extended to the edge of the face, and a covering of fine hair held over such openings by a suitable clamping device.

1,762,059. MEANS FOR CONTROLLING THE DISCHARGE OF LIQUIDS FROM CONTAINERS. GEORGE SEVICKE JONES, Christchurch, New Zealand. Filed Mar. 25, 1927, Serial No. 178,446, and in New Zealand Jan. 28, 1927. 1 Claim. (Cl. 215—58.)



In a liquid dispensing container, means for controlling the supply of liquid from said container, comprising upper and lower stopper members within the neck of the container having alined, concentric bores for the passage of the liquid, the relatively adjacent ends of the said members being of conical form, and each concave, the said ends of the members being relatively spaced and the adjacent ends of the bores in the members opening into the space between the members at the apexes of the said ends of the conical recesses of the members, and a ball valve confined in the said space between the members, and freely movable over the conical surfaces of the ends of the members, whereby to assume a position closing the end of either bore in different positions of the container, the conical recesses extending to the wall of the neck of the container at their basal ends and the upper stopper member being frictionally held within the neck of the container, and adjustable with respect to the lower stopper member to vary the capacity of the space between the relatively adjacent ends of the members.

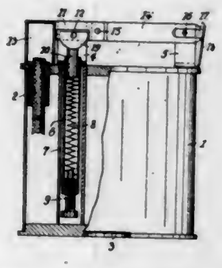
1,762,060. LOADING MACHINE. JAMES ELLWOOD JONES, NORTON A. NEWDICK, and WILLIAM E. MOODY, Columbus, Ohio; said Newdick and said Moody assignors to said Jones. Filed June 9, 1919. Serial No. 302,914. 10 Claims. (Cl. 198—11.)



1. In a loading machine of the character described, the combination with a front truck and a rear truck, the said

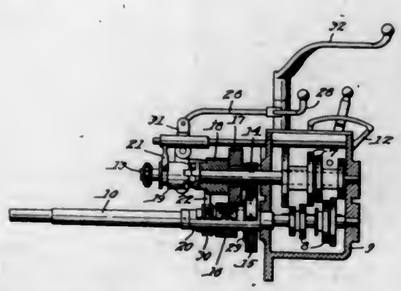
trucks being arranged in tandem relationship, of a gathering conveyor mounted to have a swinging movement in a substantially horizontal plane about a vertical axis provided upon said front truck and located substantially over the rear end thereof, a hopper within which the rear portion of the conveyor lies, the sides of which hopper project above the level of the rear or discharge portion of said conveyor to confine the material discharged from said conveyor within the limits of the hopper, said hopper being mounted adjacent to the front end of the rear truck, said gathering conveyor comprising travelling flights which travel in a substantially horizontal semi-circular path within the hopper, and a loading conveyor carried by the rear truck and to which the material is conducted by said hopper.

1,762,061. PYROPHORIC LIGHTER. VINCENT KASSAPIAN, Berlin, Germany, assignor to the Firm Müller & Grünstein, Elgersbürger Feuerzeugfabrik, Elgersburg, Germany. Filed Sept. 28, 1927, Serial No. 222,604, and in Germany Aug. 2, 1927. 9 Claims. (Cl. 67—7.1.)



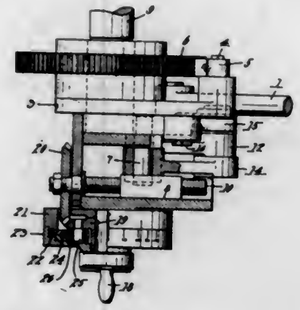
5. In a pyrophoric lighter, the combination of a fuel receptacle having a top plate provided with a wick guide, a tubular extension providing a container and support for a pyrophoric body, said casing being adapted to be inserted in said receptacle, a bearing block at the outer end of said extension, a closing cap and a friction member, means associated with said cap and member to support the same for coaxial rotary movement on said bearing block, an actuating arm, means pivotally connecting said arm to said cap, a second bearing block mounted on said plate, and means providing a pin and slot connection between the free end of said arm and said second bearing block.

1,762,062. UNIT CONSTRUCTION AND TWO-SPEED DRIVING-GEAR ARRANGEMENT FOR CRANK-SHAPING MACHINES. GEORGE H. KNIGHT, Torrington, Conn., assignor to The Hendey Machine Company, Torrington, Conn., a Corporation of Connecticut. Filed July 14, 1926. Serial No. 122,456. 6 Claims. (Cl. 74—57.)



3. In a driving unit for speed change gearing, the combination with two shafts on which the speed change gearing is all mounted, of a machine driving pinion loosely mounted on the driven shaft, means for clutching the said pinion to its shaft to be driven thereby, a gear fixed with respect to the driving pinion, a pinion on the driving shaft slidable into and out of mesh with said gear fixed to the driving pinion, change speed gearing between the driven shaft and the gear fixed to the driving pinion adapted to be connected with said pinion on the driving shaft, and means for simultaneously closing the clutch and shifting the pinion on the driving shaft to disengage it.

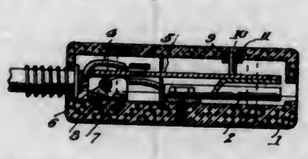
1,762,063. MECHANICAL MOVEMENT. GEORGE H. KNIGHT, Torrington, Conn., assignor to The Hendey Machine Company, Torrington, Conn., a Corporation of Connecticut. Filed June 13, 1927. Serial No. 198,369. 11 Claims. (Cl. 74—54.)



2. In a mechanical movement, the combination with a driving element having a to and fro motion and a driven rotary element, of a pivoted lever connected with the driving element to be oscillated thereby, a rock arm pivoted to swing on the axis of the driven element, means on said rock arm for imparting an intermittent rotary motion to the driven element as the rock arm oscillates, an adjustable stud, means for connecting the stud with the lever, means movable to varying angles therewith for connecting the stud with the rock arm and means for adjusting the position of the stud to vary the intermittent motion of the driven element.

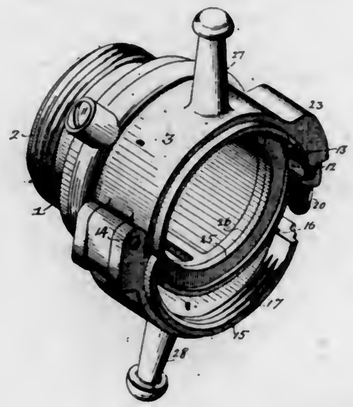
10. In a mechanical movement, the combination with an operating lever and a rock arm, an adjustable stud, means for connecting the operating lever, rock arm and stud, a driven toothed wheel, a ratchet pawl carried by the rock arm and acting on the teeth of said gear to give the gear an intermittent rotary motion, gearing for adjusting the stud, a shaft connected with said gearing having a handle for rotating the shaft, a movable dial graduated to show the various positions of the adjustable stud, a stationary zero mark, and differential means to rotate the dial a fraction of a revolution while the handle makes a number of complete revolutions, said means comprising a stud mounted rotatably with respect to the handle, an internal gear mounted on the movable dial, a concentric stationary internal gear of a slightly different number of teeth, and a pinion meshing with both concentric gears and revolvable with said handle.

1,762,064. SAFETY PLUG. ROBERT H. KYLE, Grandview, Calif. Filed Mar. 25, 1929. Serial No. 349,863. 1 Claim. (Cl. 200—142.)



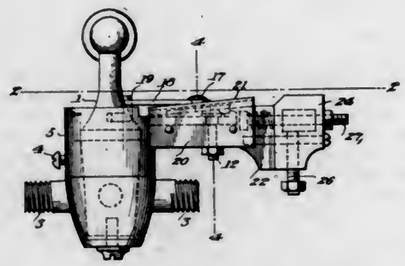
A safety plug of the class described comprising a casing, a pair of terminals therein, a lever pivoted in the casing and arranged to contact one of the terminals, a spring for normally holding the lever out of contact with the terminal, fusible means for holding lever in contact with the terminal, a conductor connected with one terminal, a conductor connected with the lever, said fusible means comprising a sleeve threaded in the casing, a button passing through the sleeve and engaging the lever to hold the same against the terminal, fusible material between the button and sleeve for holding the button against movement, said sleeve and button being reversible whereby they can be reversed, after the material has been fused and cooled to enable the parts to be again used for holding the lever against the terminal.

1,762,065. COUPLING FOR SUCTION HOSE. JOHN T. LALLY, Wilmington, Del. Filed May 18, 1928. Serial No. 278,847. 1 Claim. (Cl. 285—147.)



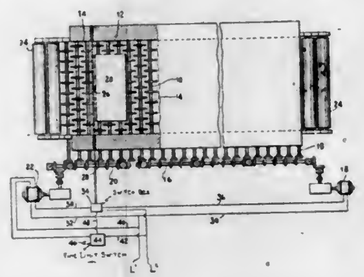
The combination in hose coupling, of a body portion; a head swiveled thereon and having a projecting threaded segmental portion; a movable threaded segmental portion pivoted to the head at one side thereof and arranged to close against the projecting segmental portion of the head; a spring-latch pivoted to the opposite side of the head and having a hook; and a projection at the end of the movable segmental portion with which the hook of the latch engages, the head having a box-like structure enclosing the body of the latch, and the movable segmental section having a lug which protects the outer end of the latch.

1,762,066. VALVE-ACTUATED SWITCH. WALTER J. MACKEY, Detroit, Mich. Filed Sept. 24, 1928. Serial No. 308,109. 6 Claims. (Cl. 200—53.)



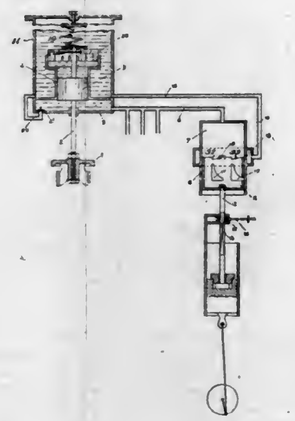
6. In a valve-actuated switch, a pair of sliding plates, one of said plates being inclined, lugs formed with said plates and being arranged whereby the lug of one plate engages the lug of the other plate for moving said last mentioned plate, spring means for urging said last mentioned plate in a direction opposite from that in which it is moved by the lugs, a spring pressed plunger bolt arranged in the path of the lug of the last mentioned plate, and the lugs being formed to coopernate for carrying the last mentioned plate to a position to cause the lug thereof to momentarily contact the plunger bolt.

1,762,067. CONVEYER SYSTEM FOR HEAT-TREATING FURNACES. FORREST W. MANKER, Toledo, Ohio, assignor to The Surface Combustion Company, Inc., Toledo, Ohio, a Corporation of New York. Filed Jan. 24, 1929. Serial No. 334,748. 4 Claims. (Cl. 198—37.)



1. In a heat-treating furnace, the combination of a bed of revoluble members adapted to support the work to be heated, means for rotating said members to move the work from one end of the furnace toward the other, means actuated by the moving work when it reaches a predetermined position adjacent the exit end of the furnace for stopping the rotation of said members, and means for driving a segregated group of said members adjacent the furnace exit at a relatively high speed to eject the work from the furnace.

1,762,068. HYDRAULIC ACTUATING MECHANISM. HEINRICH MAURITS MEIER MATTERN, Jr., Hilversum, Netherlands. Filed Nov. 8, 1924, Serial No. 748,796, and in the Netherlands Nov. 13, 1923. 3 Claims. (Cl. 121—149.)



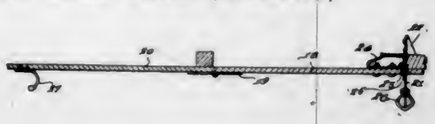
1. Hydraulic means for actuating valves comprising a cylinder having a port in its side intermediate of its ends, a hollow piston in the cylinder, said piston being open on

the pressure side and provided with a port adapted to register with the port of the cylinder, means for reciprocating the piston, a second cylinder, a piston in said second cylinder, a valve carried by the piston, a compensating vessel, a valved connection between the compensating vessel and the said second cylinder, means in the first cylinder for establishing communication between the second cylinder and the first cylinder, means for establishing communication between the compensating vessel and the port of the first cylinder, and means for returning the second piston to normal position.

1,762,069. BITUMINOUS PAINT. ROBERT MEZGER, Stuttgart, Germany, assignor to the Firm Paul Lechler, Stuttgart, Germany. Filed Mar. 6, 1925, Serial No. 13,653, and in Germany Apr. 26, 1924. 6 Claims. (Cl. 134—51.)

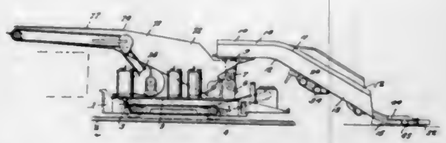
1. The method of producing bituminous paints, containing metal soaps comprising forming an emulsion from a bituminous paint, and a wattery solution of an alkali metal soap, admixing with the emulsion thus formed a watery solution of substantially molecular quantity of a salt of a metal other than an alkali metal and separating the watery alkali metal salt solution formed from the bituminous suspension of the metal soap.

1,762,070. DOOR FASTENER. RALPH MOODT, Rome, Ohio. Filed Apr. 11, 1928, Serial No. 269,233. Renewed Apr. 18, 1930. 1 Claim. (Cl. 292—228.)



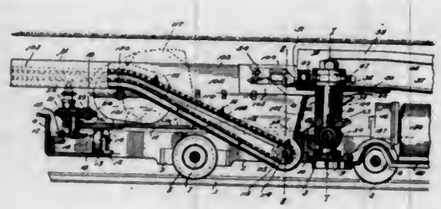
The combination with a structure having a hinged door closing an opening therein, and an abutment strip for the door, of an angle bracket fixedly secured to the door, a plate hingedly secured to one end of the angle bracket, spring means between the plate and the second end of the angle bracket for holding the latter at a right angle with respect to the door, a cam element adjustably secured on the plate to engage with the strip when the door is closed and means for swinging the plate to bring the cam out of such engagement when the door is to be opened, and a spring clip fixed on the structure and engageable with one end of the plate for holding the door in open position.

1,762,071. LOADING MACHINE. NORTON A. NEWDICK, Columbus, Ohio, assignor to The Cloader Company, Columbus, Ohio, a Corporation of Delaware. Refiled for abandoned application Serial No. 619,582, filed Feb. 17, 1923. This application filed Feb. 5, 1929. Serial No. 337,717. 3 Claims. (Cl. 198—11.)



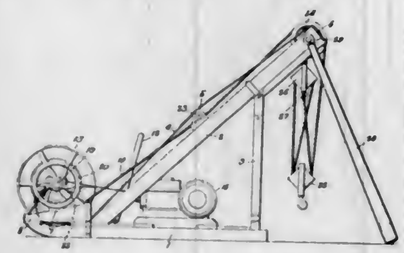
1. In a loading machine, a gathering conveyor comprising a downwardly inclined frame terminating at its lower end in a depressed nose extension, a conveyor belt mounted upon said frame, a sprocket arranged upon said extension and around which said belt is trained, a carrier for said sprocket, means for adjusting said carrier longitudinally of said extension, and stripping means formed with said carrier and co-operative with said sprocket for freeing the teeth of the latter from engagement with said belt.

1,762,072. LOADING MACHINE. NORTON A. NEWDICK, Columbus, Ohio. Filed Feb. 5, 1929. Serial No. 337,718. 13 Claims. (Cl. 198—11.)



1. In a loading machine, a wheeled truck, a bed pivotally bearing at its forward end upon said truck and at its rear end supported for motion in an arc cross-wise of said truck, an inclined conveyor, means for pivotally suspending the forward lower end of said conveyor beneath said bed whereby the lower end of said conveyor is within the plane of said truck, and a support between an elevated portion of said conveyor and said bed.

1,762,073. STUMP PULLER. WILLIAM OVESON, Roseau, Minn. Filed Feb. 15, 1929. Serial No. 340,119½. 1 Claim. (Cl. 254—146.)



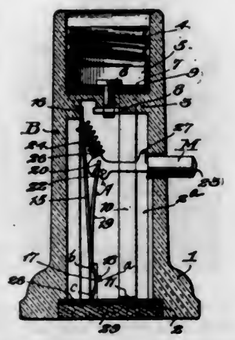
Stump pulling apparatus comprising a base, a beam mounted at its forward end upon the base, the beam being upwardly and rearwardly inclined and extending a considerable distance beyond the rear end of the base, braces at the rear end of the base for supporting the beam inwardly of its rear end, bracing members pivotally connected at their upper end to the beam at opposite sides of the rear end thereof and extending downwardly and rearwardly therefrom and diverging outwardly with relation to each other, a pulley mounted at the upper rear end of the beam, a block at the upper rear end of the beam, a block below the first mentioned block, a pulley mounted in the first mentioned block, a shaft mounted upon the base at the forward end thereof, a drum upon the shaft, a cable connected to the drum to be wound thereon and unwound therefrom, and means for rotating the shaft comprising a motor mounted upon the base and between the drum and the rear end of the base, an idle pulley mounted upon the upper side of the beam between the ends thereof, the cable being passed beneath said idle pulley and over the pulley first mentioned, pulleys rotatably mounted in the second mentioned block, the cable being led downwardly from the first mentioned pulley and beneath one of the pulleys of the last mentioned block, thence upwardly and over the pulley of the first mentioned block, and thence downwardly and beneath the other pulley of the second mentioned block and upwardly therefrom and anchored to the first mentioned block, the blocks being in vertical alinement with each other between the first mentioned braces, and the downwardly and rearwardly inclined relatively diverging braces, and means upon the last mentioned block for connection of the block with means to be anchored to the stump to be pulled.

1,762,074. APPARATUS FOR LOADING MINE CARS. JAMES A. PAISLEY, Cleveland, Ohio. Filed Feb. 2, 1929. Serial No. 336,961. 9 Claims. (Cl. 198—188.)



1. In an apparatus of the class described, the combination with a conveyor for granular material, of a plow movable over said conveyor, said plow having at its leading end an apron movably connected therewith and adapted to extend to the surface of and rest upon said conveyor.

1,762,075. ELECTRICAL SWITCH DEVICE. CARL M. PETERSEN, Trenton, N. J., assignor to Circle F Mfg. Co., Trenton, N. J., a Corporation of New Jersey. Filed Mar. 27, 1928. Serial No. 265,151. 13 Claims. (Cl. 200—67.)



12. A snap switch comprising a fixed contact, a blade constituting a contact movable into and from engagement with said fixed contact, a flexible arm rigidly connected with said blade, a blade actuator supported by said arm for movement between two positions, and spring means between said actuator and said blade operable by movement of said actuator to one of its positions to move said blade into engagement with said contact, and by movement of said actuator to the other of its positions to move said blade away from said contact, said arm having a normal flexure maintaining said actuator normally in one of its aforesaid two positions.

1,762,076. DEVICE FOR OPENING CONTAINERS SUCH AS BOXES, TINS, OR THE LIKE. BOHUMIL POLÁK, Prague, Czechoslovakia. Filed Jan. 17, 1928, Serial No. 247,392, and in Germany Dec. 12, 1927. 2 Claims. (Cl. 220—43.)

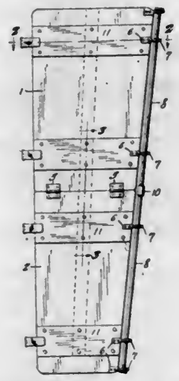


1. A lid raising cam for opening a receptacle of that type in which the lid has a side wall telescoping frictionally over the side wall of the body of the receptacle, comprising, a stamped sheet metal member formed with the following structural elements, a center portion having a pivot opening, an oblong rib surrounding the center portion elevated above said center portion and convex considered from that side which is adapted to lie away from the receptacle, a flange extending from said rib at least from those portions thereof at the end of the diagonals or the oblong shape defined by said ribs said flange lying substantially in the plane of the center portion, and a handle extending in a longitudinal direction outwardly from said rib.

1,762,077. PRODUCTION OF EGG-YOLK SUBSTITUTES. BRUNO REWALD, Hamburg, Germany. Filed Mar. 12, 1929. Serial No. 346,488, and in Germany Sept. 7, 1927. 1 Claim. (Cl. 99—11.)

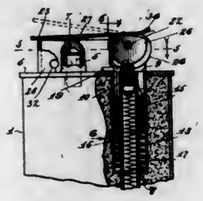
Egg yolk substitute from fat and phosphatides consisting of a stable emulsion of food fats with about 5–20% of lecithin.

1,762,078. FOLDING PANTS PRESS. FRANK E. RICHARDS, Jackson, Miss. Filed Apr. 1, 1929. Serial No. 351,784. 3 Claims. (Cl. 100—57.)



3. A trousers presser comprising two side members, each comprising two sections, each pair of sections being hingedly connected, transversely arranged reinforcing plates for the sides, outstanding ears arranged in lapping pairs having inner portions fixed to the sides and having their outer eye portions projecting beyond one edge of the sides, a pivot rod having its ends held passed through the eyes, said rod comprising two sections whose ends are arranged in a line with the confronting ends of the sides and the said ends of the pivots being provided with opposite pitched threads, a turn buckle engaging with the threads, clamps on the free edges of the side members, each including a fixed leaf section and a swingable leaf section and removable and adjusting binding elements for the leaf sections.

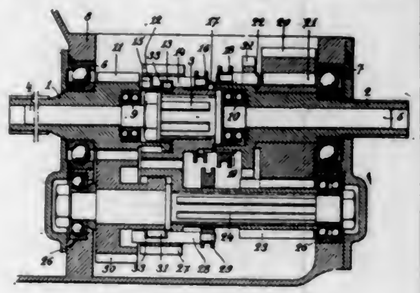
1,762,079. CIGAR LIGHTER. CHARLES RUBSAMEN, Richmond Hill, N. Y., assignor to William Demuth & Company, a Corporation of New York. Filed Aug. 18, 1928. Serial No. 300,533. 2 Claims. (Cl. 67—7.1.)



2. A lighter including a casing, a wick mounted on the casing, a spring housing extending into the casing, an

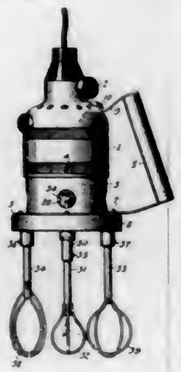
arm having one end pivotally mounted on the casing adjacent the housing, a sparking means carried by the arm, a sleeve in the housing and having its outer end bifurcated, studs on the arm and spaced outwardly of the axis of the pivotal mounting of the arm and engaged by the bifurcated outer end of the sleeve, the bifurcated portion of the sleeve being offset from the body of the sleeve, a resilient means urging the bifurcated end of said sleeve against the studs for causing oscillation of the arm, to actuate the sparking means, the bifurcated end of the sleeve having a cut-out portion, the arm adjacent the pivot having a lip engageable with the cut out portion for limiting the movement of the arm when oscillated by the sleeve.

1,762,080. SPEED-CHANGING MECHANISM. CHARLES SCHAEFFER, Paris, France, assignor to Société Anonyme Des Anciens Etablissements Panhard & Levassor, Paris, France. Filed Apr. 16, 1929, Serial No. 355,589, and in France Apr. 21, 1928. 1 Claim. (Cl. 74—59.)



A speed changing mechanism comprising on one and the same line a power gear, an intermediate gear and a driven gear, a driven shaft alined therewith, a second-motion shaft parallel with said line, two pinions secured upon said second-motion shaft and intermeshed with the intermediate and driven gears respectively, a loose second-motion pinion on said second-motion shaft, and coupling means adapted to couple firstly the power pinion with the intermediate gear, secondly the intermediate gear with the driven shaft, thirdly the driven pinion with said driven shaft and fourthly said second-motion pinion with said second-motion shaft, said means being operatable independently from one another.

1,762,081. BEATER. GEORGE SCHLEICHER, New York, N. Y. Filed Feb. 24, 1930. Serial No. 430,827. 4 Claims. (Cl. 259—102.)



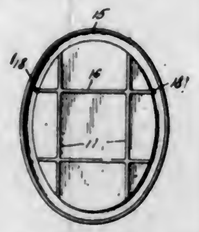
1. A beater of the character described, comprising an electric motor, a sleeve extending from said motor, a cup-shaped casing connected with said sleeve, a plate having an annular upstanding flange coacting with said casing to produce an enclosure, a shaft extending through said casing and said plate, means for coupling said shaft with the driving part of said motor, a gear wheel rigidly secured to said shaft, a plurality of pinions continually meshing with said gear wheel, a stub shaft for each of said pinions, said stub shafts being rigidly connected with said casing, an internally-geared ring rigidly connected with said plate and continually meshing with said pinons, whereby when said motor is rotating the shaft coupled therewith will rotate in one direction, while said plate will rotate in the opposite direction, means for connecting a member to said shaft and a plurality of means for connecting other members rigidly to said plate.

1,762,082. VASE. PAUL MASATO SHIRAISHI, Paauilo, Territory of Hawaii. Filed Oct. 17, 1928. Serial No. 313,167. 1 Claim. (Cl. 41—34.)



A vase of the character described comprising a bottle, a wire coiled about said bottle, cement holding said wire in coil formation, pieces of hardened volcanic lava secured about said bottle by the cement and arranged in a manner to give the appearance that the lava has formed itself in vase formation, a base for said vase, and said base being varnished.

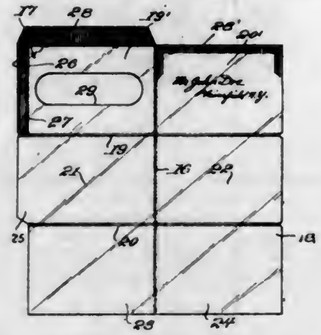
1,762,083. ART SHIELD. GEORGE G. SINGER, Jr., Bismarck, N. Dak. Filed June 21, 1929. Serial No. 372,732. 1 Claim. (Cl. 40—154.)



As a new and improved article of manufacture, a combined picture frame and plate upon which a picture is adapted to be painted, said article being formed from a single piece of material and including a substantially flat body portion and offset marginal edges of artistic cross sectional contour, vertical and transverse intersecting ribs formed on one side of the body portion, and eyes formed on the terminals of one of said transverse ribs for the purpose specified.

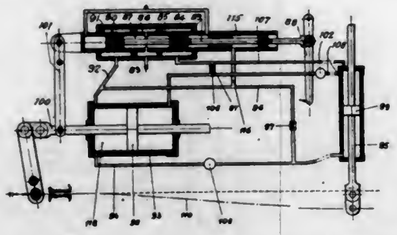
1,762,084. MAILING SHEET AND ENVELOPE. CARRIE M. SNYDER, Plainfield, N. J. Filed July 20, 1928. Serial No. 294,170. 1 Claim. (Cl. 229—92.7.)

A letter sheet divided by a central line of perforations into two main bodies, and the said bodies being divided by fold lines into central and end sheets, and one of each of the end sheets providing a front, one of said fronts having on its opposite faces the names of the sender and the addressee and the second front having a window through which the name of the addressee is visible when the bodies are folded against each other, said front sheet and the central sheet attached thereto having lateral extensions, and that on the front having its inner face treated with an adhesive, said window carrying front having its end



formed with a flap extension which is also treated with an adhesive and the other front sheet having its face, adjacent its outer end and along a portion of its edges likewise treated with an adhesive, the main bodies when folded along the perforated line and folded upon the score lines designed to have the extensions thereon adhesively connected and the said flap extension on the window carrying sheet designed when folded over the adjacent sheet to be adhesively connected thereto.

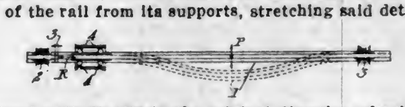
1,762,085. APPARATUS FOR JOINTLESSLY WELDING RAILS. CURT STEDEFELD, Heidelberg, Germany. Filed Feb. 8, 1928, Serial No. 252,932, and in Germany Dec. 27, 1926. 24 Claims. (Cl. 219—4.)



1. In apparatus for jointlessly welding the rails of a railway track by electrical melting off, the combination with an auxiliary motor connected to a detached portion of said rails for longitudinally reciprocating the same, of a manually actuated controller, means connecting said controller to said motor for controlling said motor in accordance with the manual actuation of said controller, and means, connecting said rails and said controller, and comprising a member connected to said rail and active upon a continued movement of said rail to actuate said controller to thereby limit the movement of said rail by said motor.

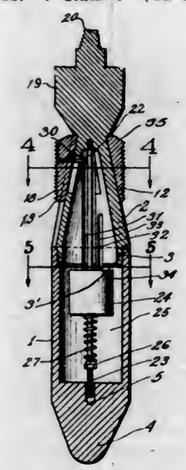
1,762,086. METHOD OF JOINTLESSLY WELDING RAILS. CURT STEDEFELD, Heidelberg, Germany. Original application filed Feb. 8, 1928, Serial No. 252,932, and in Germany Dec. 27, 1926. Divided and this application filed Feb. 27, 1930. Serial No. 431,854. 6 Claims. (Cl. 219—10.)

1. The method of jointlessly welding the rails of railway tracks and repairing the same on the lines without removal thereof, which comprises detaching a long section of the rail from its supports, stretching said detached



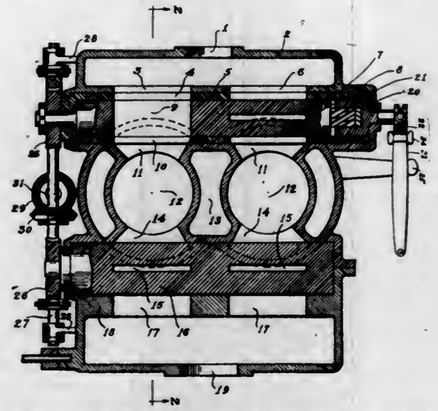
section longitudinally in the original direction of said rail into abutting engagement with the adjacent section, and welding said abutting ends.

1,762,087. WELL-CASING PULLER. FRED F. WELLMAN, Wichita, Kans., assignor to The Wellman Casing Spear Company, a Corporation of Kansas. Filed Aug. 13, 1928. Serial No. 299,218. 7 Claims. (Cl. 294—96.)



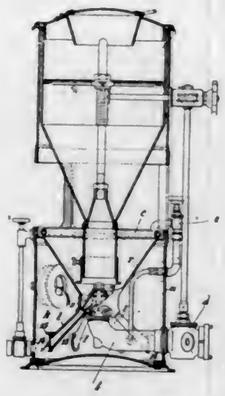
1. A well casing pulling device comprising an elongated hollow member having tapered guide faces, casing engaging slips slidable on said faces, a weight within the hollow member connected to said slips and a spring supporting said weight, the spring being collapsible when inertia of the weight is overcome to slide the slips into casing engaging position.

1,762,088. FUSED-QUARTZ VALVE. THOMAS E. BURKHARDT, Detroit, Mich. Substitution for application Serial No. 109,571, filed May 17, 1926. This application filed Nov. 30, 1929. Serial No. 410,891. 3 Claims. (Cl. 123—80.)



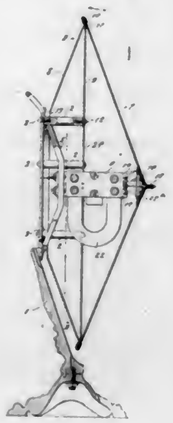
1. In combination, an internal combustion engine of metallic structure, metallic manifolds therefor and fused quartz rotary valves supported thereby and rotating therein.

1,762,089. FIRE-FIGHTING APPARATUS. HANS BURMEISTER, Berlin, Germany, assignor to Pyrene-Minimax Corporation, a Corporation of Delaware. Filed Feb. 10, 1928, Serial No. 253,304, and in Germany Feb. 11, 1927. 3 Claims. (Cl. 169—15.)



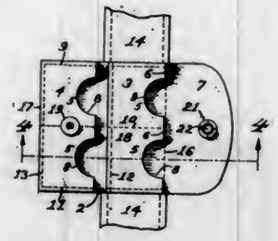
1. In apparatus for producing fire foam, in combination, a hopper for foam forming powder, a mixing chamber, a plurality of ejectors arranged to draw powder from the bottom of said hopper, mix it with water and convey it to said mixing chamber and a valve normally closing the outlet of each ejector and preventing back-flow from the mixing chamber to the ejector but arranged to open automatically to permit discharge from the ejector to the mixing chamber substantially as described.

1,762,090. SOUND-REPRODUCING DEVICE. LEWIS M. CLEMENT, Mountain Lakes, N. J., assignor to F. A. D. Andrea, Inc., New York, N. Y., a Corporation of New York. Filed June 13, 1927. Serial No. 198,371. 4 Claims. (Cl. 181—31.)



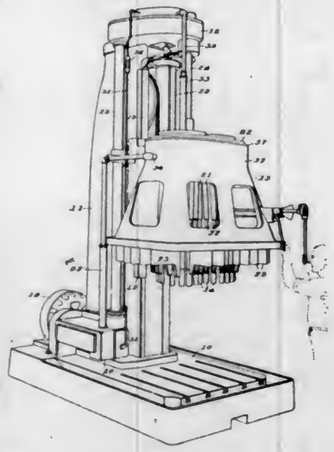
1. A sound reproducing device comprising a flexibly supported sounding board, a motor for actuating said sounding board and a flexible baffle for regulating the movement of air produced by the actuation of said sounding board and acting as the support for the sounding board.

1,762,091. PURSE. JOHN RUDOLPH FISLER, St. Louis, Mo. Filed Feb. 6, 1928. Serial No. 252,159. 4 Claims. (Cl. 150—33.)



1. A purse comprising a pair of superposed layers of material attached together along lines to provide a row of pockets arranged edge to edge in the same plane between adjacent layers, one of the layers being extended in the form of a flap adapted to be folded over the pockets to provide a common closure for all of them.

1,762,092. OIL HOUSING FOR DRILL HEADS. ROBERT M. GALLOWAY, Richmond, Ind., assignor to The National Automatic Tool Company, Richmond, Ind., a Corporation of Indiana. Filed June 15, 1927. Serial No. 198,965. 3 Claims. (Cl. 77—22.)

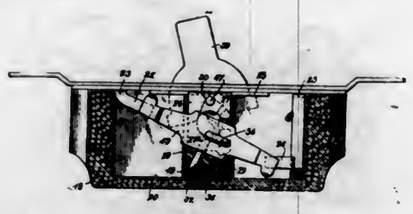


1. A machine tool head combining a housing having lower and upper web members, the upper web member having an upper substantially horizontal surface; a plurality of spindle drive shafts journaled in said web members and having ends extending above said surface; thrust bearings engaging said surface and supporting said shafts; an inverted pan-like member removably attached to the upper surface of the upper web member and enclosing the ends of said shafts and thrust bearings to form a protective covering therefor and to cooperate with said surface to form an oil chamber.

1,762,093. SNAP SWITCH. ARTHUR C. GAYNOR, Stratford, Conn. Filed Mar. 23, 1927. Serial No. 177,679. 1 Claim. (Cl. 200—67.)

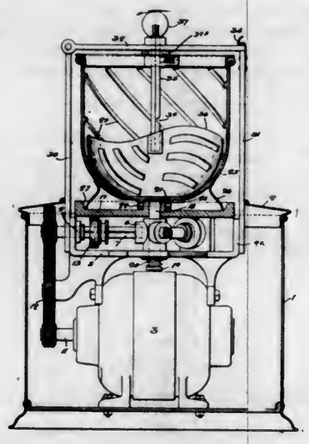
In a snap switch the combination of a contact blade, a rocking crank shaft circular in cross-section connected

to said blade and a bracket having spaced arms each formed with an aperture constituting a bearing for said shaft, the wall of said aperture formed with an arc shaped shallow recess in the lower portion in which the



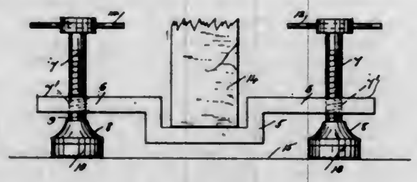
said shaft is journaled, the wall of the recess terminating below the medial line of the shaft, the walls of the aperture extending upwardly and outwardly away from the recess.

1,762,094. MIXING APPARATUS. JOSEPH F. GOETZ, Dayton, Ohio, assignor to The Columbia Mixers Corporation, Hamilton, Ohio, a Corporation of Ohio. Filed June 15, 1928. Serial No. 285,516. 17 Claims. (Cl. 259—88.)



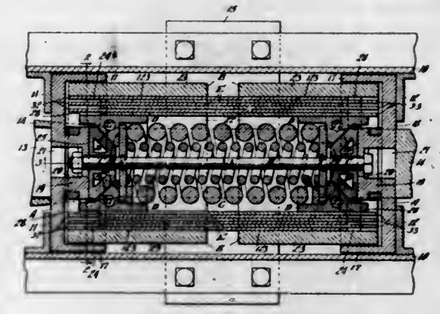
1. In a mixing apparatus, a rotary vessel, actuating means for rotating the vessel, an agitator within the vessel, variable speed means operatively connecting the vessel and actuating means, and a support for said agitator in which the agitator is held against rotation, and a lid for the vessel carried by the support.

1,762,095. DOOR HOLDER. SALEM W. HOUSTON, Pittsburgh, Pa. Filed May 18, 1929. Serial No. 364,187. 1 Claim. (Cl. 254—39.)



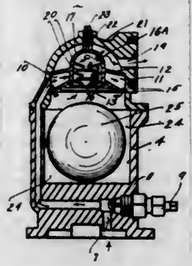
A device for securely clamping a door to a floor, comprising a crank-shaped bar having a middle portion adapted to be slid in the space between the bottom of the door and the floor, vertical portions adapted to project upwardly at the sides of the door, and horizontal end portions having their lower sides adapted to project above the level of the bottom of the door, clamping screws screwed into the end portions of the bar, and blocks swivelled on the end portions of the screws and provided with facings of relatively soft material for bearing on the floor, said blocks being arranged one on each side of the vertical portions of the bar.

1,762,096. FRICTION SHOCK-ABSORBING MECHANISM. JOHN F. O'CONNOR, Chicago, Ill., assignor, by mesne assignments, to W. H. Miner, Inc., a Corporation of Delaware. Filed June 25, 1923. Serial No. 647,434. 7 Claims. (Cl. 213—33.)



1. In a friction shock absorbing mechanism, the combination with front and rear followers, relatively movable toward each other; of front and rear friction casings relatively movable toward each other upon movement of said followers; lateral wedge-pressure-creating means including friction shoes having means thereon adapted to coact with said casings to restore the same to normal position, said shoes being relatively movable with reference to the casings during compression of the mechanism; longitudinally arranged friction plates within the said casings adapted for relative movement upon relative movement of said casings, said plates being divided into two groups on opposite sides of said wedge pressure creating means, certain of said plates of each group being anchored to the front casing and the remaining plates of each group being anchored to the rear casing; and a spring resistance coacting with said shoes.

1,762,097. OIL AND GAS SEPARATOR. JACOB G. PECK, Portland, Oreg. Filed Mar. 2 1927. Serial No. 172,164. 5 Claims. (Cl. 183—111.)



1. In an oil and gas separator, a casing, a diaphragm dividing the interior of said casing into an upper and a lower compartment, a bell shaped member penetrating said diaphragm and affording communication between the two compartments, the lower portion of said bell-shaped member flaring outwardly and downwardly thereby defining an annular passageway communicating with the lower compartment, an inlet passageway communicating with the aforesaid annular passageway and an outlet passageway leading from the upper compartment.

1,762,098. INGOT MOLD. EDMUND JAMISON KAUFFMAN, Girard, Ohio, assignor to Valley Mould & Iron Corporation, Hubbard, Ohio, a Corporation of New York. Filed July 19, 1929. Serial No. 379,580. 9 Claims. (Cl. 22—139.)

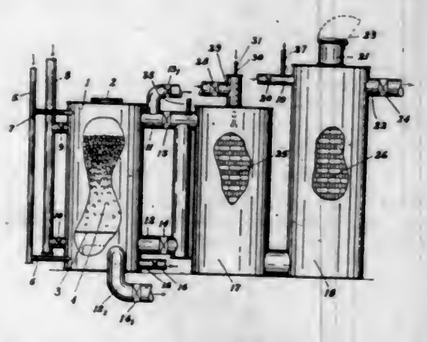
3. An ingot mold with the walls thereof comprising an alloy of cast iron containing not less than three per centum of carbon and steel containing not more than four tenths of a per centum of carbon.

1,762,099. WALL CONSTRUCTION. ROY PHILLIPS, Dallas, Tex., assignor of one-fifth to T. R. Pennington, Dallas, Tex. Filed Jan. 4, 1929. Serial No. 330,268. 4 Claims. (Cl. 72—103.)



4. In a wall, spaced wall members, vertical rods engaged with the inner and outer faces of each of the members, ties having horizontal eyes, horizontal rods in said eyes engaging the outer faces of each of the wall members, said ties having vertical eyes to receive the vertical rods that engage the inner faces of the wall members, and means to hold the vertical rods that engage the outer faces of the wall members thereagainst.

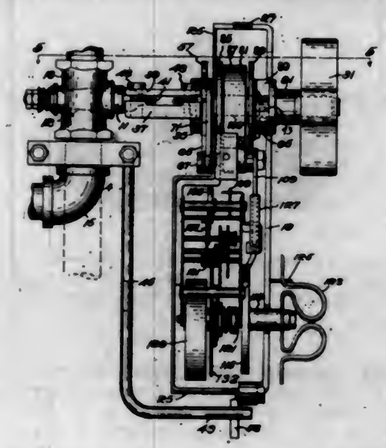
1,762,100. PROCESS FOR MAKING COMBUSTIBLE GAS. WILLIAM W. ODELL, Minneapolis, Minn., assignor to Columbia Engineering and Management Corporation, Cincinnati, Ohio, a Corporation of Ohio. Filed Mar. 4, 1927. Serial No. 172,736. 8 Claims. (Cl. 48—196.)



1. A process of generating gas which gas is substantially free from suspended carbon resulting from hydrocarbon decomposition which consists in, introducing hydrocarbon gas into a mass of solid fuel heated to a degree sufficient to decompose the hydrocarbon gas, simultaneously introducing steam therewith in amount sufficient to effect substantially complete reaction with the hydrocarbon gas, thereby producing a gas comprising essentially hydrogen and carbon monoxide and in which the ratio of hydrogen to carbon monoxide is substantially from two to one to three to one.

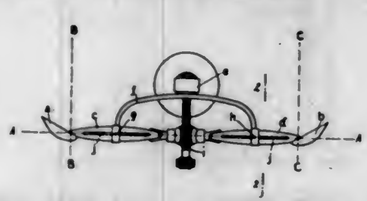
1,762,101. TIMER MECHANISM. RAYMOND D. SMITH, Pleasantville, N. Y., assignor, by mesne assignments, to Tremont Products Corporation, Boston, Mass., a Corporation of Massachusetts. Filed Feb. 15, 1922. Serial No. 536,691. 8 Claims. (Cl. 161—9.)

1. A time control and actuating mechanism carrying at one side thereof rotatable engaging means for attachment to the device to be actuated by said mechanism and carrying at another side a timing handle, said mechanism including a shaft connecting with said engaging means, a



spring impelled actuator having lost motion operating engagement with said shaft, a timer governed by said timing handle, and a detent conditionable by said timer to lock and release said actuator in tensioned position.

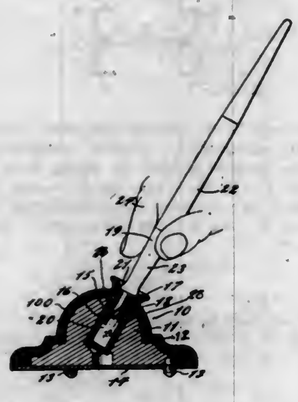
1,762,102. SOUND-DIRECTION-DETERMINING APPARATUS. CHRISTIAN VON HOFE, Vienna, Austia, assignor to C. P. Goerz Optische Anstalt Aktiengesellschaft, Akciova Spolecnost K. P. Goerz Opticky Ustav, Bratislava, Czechoslovakia, a Czechoslovak Company. Filed Apr. 18, 1928, Serial No. 271,006, and in Germany May 7, 1927. 3 Claims. (Cl. 181—26.)



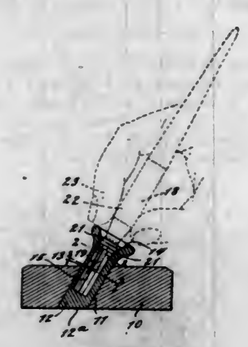
2. A sound direction determining apparatus comprising at least one sound receiving reflector formed of a paraboloid of revolution and at last one sound leading reflector in the form of an elongated ellipsoid of revolution, the said paraboloid and ellipsoid of revolution being confocal, and the sound leading reflector being provided with at least one slot extending in a meridian plane perpendicular to the acoustic axis of the preceding reflector.

1,762,103. FOUNTAIN PEN AND STAND THEREFOR. WILLIAM IRVING FERRIS, Westfield, N. J., assignor to L. E. Waterman Company, New York, N. Y., a Corporation of New York. Filed Oct. 9, 1926. Serial No. 140,462. 1 Claim. (Cl. 120—108.)

A stand for holding a fountain pen of the type having a pen nib and a barrel whose end adjacent to the pen nib is wider than the pen nib, which stand is provided with a base having an elongated recess with its axis inclined to the vertical and open at the top, the opening in the wall surrounding the top of the recess being narrower than the nib end of the pen barrel and wider than the pen nib, whereby the pen nib may be passed into said recess through the open end thereof, the wall of the base surrounding said opening being fixed with respect to the body of the stand and contacting with the extreme lower portion of the pen barrel, whereby the pen barrel is held against entrance into said recess to prevent contact between the walls of the recess and the finger engaging portion of the pen barrel, said finger engaging portion of the pen barrel being unconfined and freely accessible to the fingers when in supported engagement with the stand, the wall surrounding said recess being provided with spaced inwardly extending projections against two of which the nib of the pen contacts in order to maintain the pen point out of engagement with the walls of said recess and prevent the pen barrel from tipping over and falling out of the holder.



1,762,104. STAND FOR FOUNTAIN PENS. ROBERT C. LIDDELL, Little Falls, N. J., assignor to L. E. Waterman Company, New York, N. Y., a Corporation of New York. Filed Feb. 2, 1928. Serial No. 251,244. 2 Claims. (Cl. 120—108.)

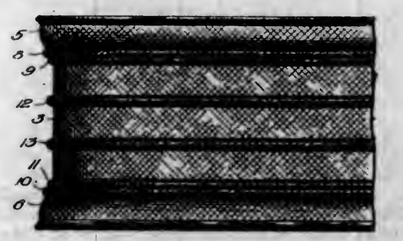


1. In a stand for a fountain pen, a receptacle provided with an opening adapted to receive the nib of the pen, the wall surrounding the upper portion of said opening being adapted to engage the lower end of the pen barrel and support the same, the wall surrounding said opening being provided on opposite sides with grooves adapted to receive the edges of the pen nib and accommodate nibs of different sizes, the wall surrounding said opening also being provided with a groove at substantially right angles to the plane of the first mentioned grooves and narrower than said nib and adapted to register with the point thereof, the distance between the outer walls of said opposite grooves being substantially greater than that between the outer wall of said groove which is at right angles to the others and the opposite wall of said opening whereby the nib of a pen having substantially the width of said opposite grooves can be inserted in the receptacle in said first mentioned grooves only, the walls surrounding said opening on opposite sides of the last mentioned groove engaging the nib on opposite sides of the center thereof and thereby maintaining the point of the nib out of contact with the walls surrounding said opening.

1,762,105. METHOD OF SYNTHESIZING VITAMINS. AUGUST J. PACINI, Chicago, Ill., assignor to Charles M. Richter, Chicago, Ill. Filed Aug. 20, 1928. Serial No. 300,955. 4 Claims. (Cl. 99—11.)

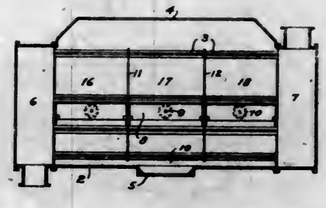
1. The method of synthesizing vitamin A comprising treating a suitable substance by suitable radiation to effect synthesis of said vitamin A, the substance being positioned in a region of ambient, inert gas, said radiation being continued only long enough to produce said vitamin A and being discontinued before vitamin D is substantially produced.

1,762,106. MATTRESS AND MATTRESS BOXING. LOUIS E. PITTONI, Jamaica, N. Y., assignor to The Rome Company, Inc., a Corporation of New York. Filed May 19, 1928. Serial No. 279,188. 8 Claims. (Cl. 5—360.)



8. A mattress comprising a core and a boxing therefor, narrow heavy cords extending around the sides of the boxing a short distance from the top and bottom of the mattress, and stitching passing through said sides close to said cords and diagonally through the corners of the mattress and the top and bottom of the boxing to produce edge rolls.

1,762,107. CONDENSER. IRVING H. REYNOLDS, Milwaukee, Wis., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis., a Corporation of Delaware. Filed Sept. 21, 1929. Serial No. 394,170. 5 Claims. (Cl. 257—43.)



1. In combination, a casing, means dividing said casing into compartments, groups of tubes within each of said compartments separated by lanes, and means for independently controlling the flow of fluid through said lanes in each of said compartments.

1,762,108. EPHEDRINE OIL SOLUTION. ELMER H. STUART, Indianapolis, Ind., assignor to Eli Lilly and Company, Indianapolis, Ind., a Corporation of Indiana. Original application filed Feb. 13, 1929, Serial No. 339,752. Divided and this application filed May 10, 1929. Serial No. 362,119. 3 Claims. (Cl. 167—58.)

1. A solution of ephedrine in oil, comprising mineral oil, ephedrine as one substance dissolved therein, and an acetal also dissolved therein.

1,762,098. INGOT MOLD. EDMUND JAMISON KAUFFMAN, Girard, Ohio, assignor to Valley Mould & Iron Corporation, Hubbard, Ohio, a Corporation of New York. Filed July 19, 1929. Serial No. 379,580. 9 Claims. (Cl. 22—139.)

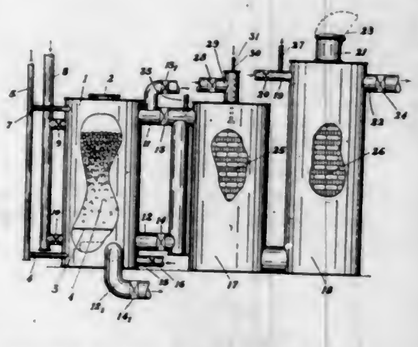
3. An ingot mold with the walls thereof comprising an alloy of cast iron containing not less than three per centum of carbon and steel containing not more than four tenths of a per centum of carbon.

1,762,099. WALL CONSTRUCTION. ROY PHILLIPS, Dallas, Tex., assignor of one-fifth to T. R. Pennington, Dallas, Tex. Filed Jan. 4, 1929. Serial No. 330,268. 4 Claims. (Cl. 72—103.)



4. In a wall, spaced wall members, vertical rods engaged with the inner and outer faces of each of the members, ties having horizontal eyes, horizontal rods in said eyes engaging the outer faces of each of the wall members, said ties having vertical eyes to receive the vertical rods that engage the inner faces of the wall members, and means to hold the vertical rods that engage the outer faces of the wall members thereagainst.

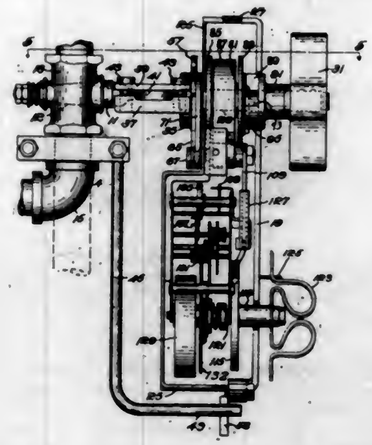
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1. A process of generating gas which gas is substantially free from suspended carbon resulting from hydrocarbon decomposition which consists in, introducing hydrocarbon gas into a mass of solid fuel heated to a degree sufficient to decompose the hydrocarbon gas, simultaneously introducing steam therewith in amount sufficient to effect substantially complete reaction with the hydrocarbon gas, thereby producing a gas comprising essentially hydrogen and carbon monoxide and in which the ratio of hydrogen to carbon monoxide is substantially from two to one to three to one.

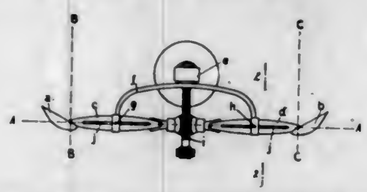
1,762,101. TIMER MECHANISM. RAYMOND D. SMITH, Pleasantville, N. Y., assignor, by mesne assignments, to Tremont Products Corporation, Boston, Mass., a Corporation of Massachusetts. Filed Feb. 15, 1922. Serial No. 536,691. 8 Claims. (Cl. 161—9.)

1. A time control and actuating mechanism carrying at one side thereof rotatable engaging means for attachment to the device to be actuated by said mechanism and carrying at another side a timing handle, said mechanism including a shaft connecting with said engaging means, a



spring impelled actuator having lost motion operating engagement with said shaft, a timer governed by said timing handle, and a detent conditionable by said timer to lock and release said actuator in tensioned position.

1,762,102. SOUND-DIRECTION-DETERMINING APPARATUS. CHRISTIAN VON HOFE, Vienna, Austia, assignor to C. P. Goerz Optische Anstalt Aktiengesellschaft, Akciova Spolecnost K. P. Goerz Opticky Ustav, Bratislava, Czechoslovakia, a Czechoslovak Company. Filed Apr. 18, 1928, Serial No. 271,006, and in Germany May 7, 1927. 3 Claims. (Cl. 181—26.)

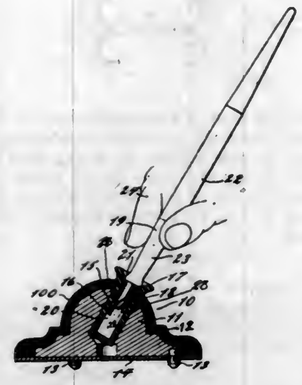


2. A sound direction determining apparatus comprising at least one sound receiving reflector formed of a paraboloid of revolution and at last one sound leading reflector in the form of an elongated ellipsoid of revolution, the said paraboloid and ellipsoid of revolution being confocal, and the sound leading reflector being provided with at least one slot extending in a meridian plane perpendicular to the acoustic axis of the preceding reflector.

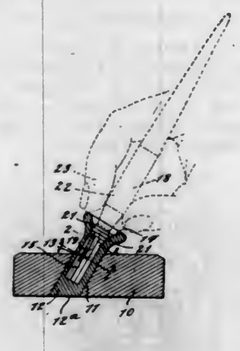
1,762,103. FOUNTAIN PEN AND STAND THEREFOR. WILLIAM IRVING FERRIS, Westfield, N. J., assignor to L. E. Waterman Company, New York, N. Y., a Corporation of New York. Filed Oct. 9, 1926. Serial No. 140,462. 1 Claim. (Cl. 120—108.)

A stand for holding a fountain pen of the type having a pen nib and a barrel whose end adjacent to the pen nib is wider than the pen nib, which stand is provided with a base having an elongated recess with its axis inclined to the vertical and open at the top, the opening in the wall surrounding the top of the recess being narrower than the nib end of the pen barrel and wider than the pen nib, whereby the pen nib may be passed into said recess through the open end thereof, the wall of the base surrounding said opening being fixed with respect to the body of the stand and contacting with the extreme lower portion of the pen

barrel, whereby the pen barrel is held against entrance into said recess to prevent contact between the walls of the recess and the finger engaging portion of the pen barrel, said finger engaging portion of the pen barrel being unconfined and freely accessible to the fingers when in supported engagement with the stand, the wall surrounding said recess being provided with spaced inwardly extending projections against two of which the nib of the pen contacts in order to maintain the pen point out of engagement with the walls of said recess and prevent the pen barrel from tipping over and falling out of the holder.



1,762,104. STAND FOR FOUNTAIN PENS. ROBERT C. LIDDELL, Little Falls, N. J., assignor to L. E. Waterman Company, New York, N. Y., a Corporation of New York. Filed Feb. 2, 1928. Serial No. 251,244. 2 Claims. (Cl. 120—108.)

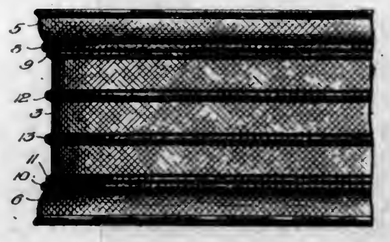


1. In a stand for a fountain pen, a receptacle provided with an opening adapted to receive the nib of the pen, the wall surrounding the upper portion of said opening being adapted to engage the lower end of the pen barrel and support the same, the wall surrounding said opening being provided on opposite sides with grooves adapted to receive the edges of the pen nib and accommodate nibs of different sizes, the wall surrounding said opening also being provided with a groove at substantially right angles to the plane of the first mentioned grooves and narrower than said nib and adapted to register with the point thereof, the distance between the outer walls of said opposite grooves being substantially greater than that between the outer wall of said groove which is at right angles to the others and the opposite wall of said opening whereby the nib of a pen having substantially the width of said opposite grooves can be inserted in the receptacle in said first mentioned grooves only, the walls surrounding said opening on opposite sides of the last mentioned groove engaging the nib on opposite sides of the center thereof and thereby maintaining the point of the nib out of contact with the walls surrounding said opening.

1,762,105. METHOD OF SYNTHESIZING VITAMINS. AUGUST J. PACINI, Chicago, Ill., assignor to Charles M. Richter, Chicago, Ill. Filed Aug. 20, 1928. Serial No. 300,955. 4 Claims. (Cl. 99—11.)

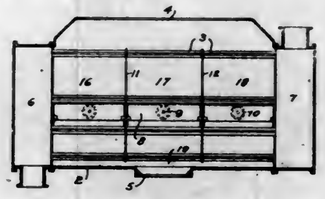
1. The method of synthesizing vitamin A comprising treating a suitable substance by suitable radiation to effect synthesis of said vitamin A, the substance being positioned in a region of ambient, inert gas, said radiation being continued only long enough to produce said vitamin A and being discontinued before vitamin D is substantially produced.

1,762,106. MATTRESS AND MATTRESS BOXING. LOUIS E. PITTONI, Jamaica, N. Y., assignor to The Rome Company, Inc., a Corporation of New York. Filed May 19, 1928. Serial No. 279,188. 8 Claims. (Cl. 5—360.)



8. A mattress comprising a core and a boxing therefor, narrow heavy cords extending around the sides of the boxing a short distance from the top and bottom of the mattress, and stitching passing through said sides close to said cords and diagonally through the corners of the mattress and the top and bottom of the boxing to produce edge rolls.

1,762,107. CONDENSER. IRVING H. REYNOLDS, Milwaukee, Wis., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis., a Corporation of Delaware. Filed Sept. 21, 1929. Serial No. 394,170. 5 Claims. (Cl. 257—43.)



1. In combination, a casing, means dividing said casing into compartments, groups of tubes within each of said compartments separated by lanes, and means for independently controlling the flow of fluid through said lanes in each of said compartments.

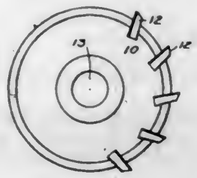
1,762,108. EPHEDRINE OIL SOLUTION. ELMER H. STUART, Indianapolis, Ind., assignor to Eli Lilly and Company, Indianapolis, Ind., a Corporation of Indiana. Original application filed Feb. 13, 1929, Serial No. 339,752. Divided and this application filed May 10, 1929. Serial No. 362,119. 3 Claims. (Cl. 167—58.)

1. A solution of ephedrine in oil, comprising mineral oil, ephedrine as one substance dissolved therein, and an acetal also dissolved therein.

1,762,109. CAST-IRON ALLOY. CLIFTON TAYLOR, Pittsburgh, Pa., and HERMAN L. GREENE, Toledo, Ohio, assignors to Molybdenum Corporation of America, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Apr. 21, 1927. Serial No. 185,649. 3 Claims. (Cl. 75—1.)

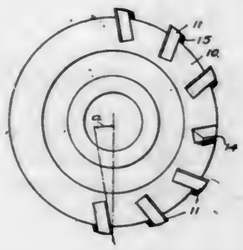
1. A cast iron alloy consisting of about 1.5% nickel, about .25% molybdenum, silicon from about .70 to about 2.5%, and carbon from about 1.5 to about 4.0%, the remainder of the alloy being iron except for constituents present as impurities and as incidental to the manufacture of the alloy.

1,762,110. COMPOUND-TAPER INSERTABLE-BLADE LOCK. RALPH R. WEDDELL, Shelton, Conn., assignor to The O. K. Tool Company, Inc., New York, N. Y., a Corporation of New York. Filed Jan. 6, 1928. Serial No. 244,834. 12 Claims. (Cl. 29—105.)



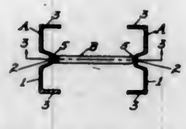
1. A cutter tool combining a body member; an opening therein adapted to receive a cutter bit said opening being tapered in two general directions one of which is axial of the body member and the other of which is substantially at right angles to the first direction; and a series of means extending in one of said directions adapted to co-act with complemental means on the cutter bit for selective positioning of the cutter bit in said member.

1,762,111. ANGULAR SERRATED ADJUSTABLE CUTTER. RALPH R. WEDDELL, Shelton, Conn., assignor to The O. K. Tool Company, Inc., New York, N. Y., a Corporation of New York. Filed Jan. 14, 1928. Serial No. 246,773. 9 Claims. (Cl. 29—105.)



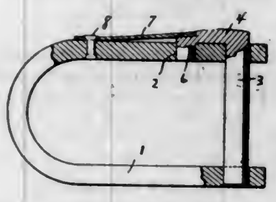
1. A cutter tool combining a body member having a tapered cutter bit opening therein with the direction of the taper extending at an angle to both the axis of said member and to a plane perpendicular to said axis and with the side walls diverging outward; a cutter bit having a portion shaped to receive a wedging fit in said opening said cutter bit having a pair of cutting edges arranged at an angle to each other; and means for securing said cutter bit in selectively adjusted positions whereby said cutting edges are simultaneously advanced in the direction of their respective cutting action comprising serrations on a surface of said portion and the adjacent wall of the opening extending in the direction of said taper and at an angle to both said directions of cutting action.

1,762,112. METAL SECTION. HERBERT E. WHITE, Youngstown, Ohio, assignor to Truscon Steel Company, Youngstown, Ohio, a Corporation of Michigan. Filed May 2, 1928. Serial No. 274,605. 5 Claims. (Cl. 189—37.)



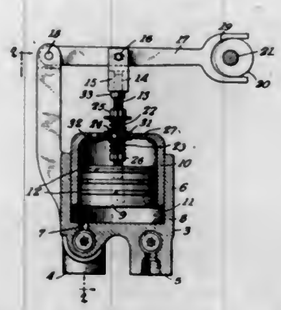
1. A structural unit comprising a sheet metal member longitudinally channeled to provide a reinforcing flange, and a lattice or web member of zigzag form welded at spaced points to the inner face of the flange, said flange being unbroken by the welds and constituting a stiffening reinforcement for the member both behind and between the said welds.

1,762,113. CLEVIS. JOHN ACHATZ, Hooper, Colo., assignor of one-half to Rudolph B. Spruill, Hooper, Colo. Filed Aug. 15, 1928, Serial No. 299,745. Renewed Feb. 26, 1930. 1 Claim. (Cl. 278—96.)



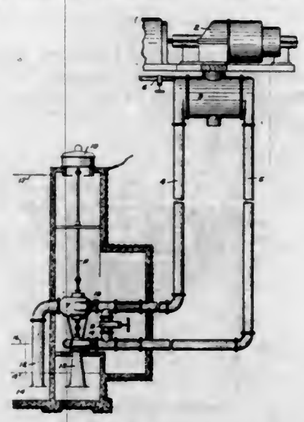
In a clevis formed with an opening in one end, an L-shaped member having one leg arranged through said opening, the other leg being formed with a recess extending inwardly from its free end, and a flat spring on said clevis snugly engageable within said recess for tensionally retaining the pin.

1,762,114. LIQUID-FUEL PUMP. ALBERT E. BERDON, Detroit, Mich., assignor to A C Spark Plug Company, Flint, Mich., a Company of Michigan. Original application filed Apr. 12, 1927, Serial No. 183,103. Divided and this application filed Feb. 4, 1928. Serial No. 251,802. 8 Claims. (Cl. 103—38.)



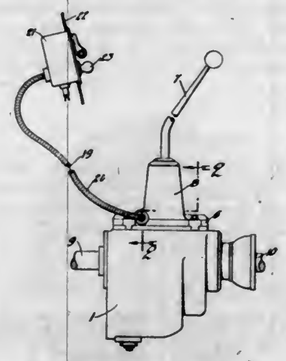
1. In a pump of the character disclosed, a pump cylinder having valved inlet and outlet ports, a sleeve piston operating in the cylinder and a piston operable in said sleeve piston, said pistons having piston faces exposed in the chamber of the cylinder and jointly cooperative to provide a maximum pumping effect and actuating means for said pistons operable to enable movement of said pistons relative to each other in opposite directions to reduce the resultant pumping effects of said pistons in both directions of the pumping strokes.

1,762,115. POWER SYSTEM. HOMER P. BINDER, Wauwatosa, and JESSE D. SUTER, Waukesha, Wis., assignors to Allis-Chalmers Manufacturing Company, Milwaukee, Wis., a Corporation of Delaware. Filed June 7, 1929. Serial No. 369,051. 3 Claims. (Cl. 60—95.)



1. In combination with a steam actuated prime mover having a heat transfer device, of means providing a closed circuit for cooling water, a pump in said circuit for urging water toward said device, a hydraulic motor in said circuit operable by water leaving said device, operating means for said pump adapted to receive power from said motor, and means forming a conduit connecting said pump and said motor independently of said circuit.

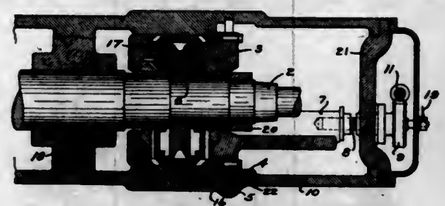
1,762,116. TRANSMISSION LOCK. JULIUS H. BOLLES, Detroit, and FRANK C. PEARSON, Lansing, Mich., assignors to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Apr. 2, 1928. Serial No. 266,650. 4 Claims. (Cl. 70—126.)



2. In combination, a plurality of shifter rods arranged in parallel relation in the same horizontal plane and a series of plungers, one for each rod, grouped and fixed with one another in successive alined relation for unison movement transversely of said rods in a horizontal plane spaced from that of the rods, to lock all the rods against movement.

1,762,117. ADJUSTING MECHANISM. HANS P. DAHLSTRAND, Wauwatosa, Wis., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis., a Corporation of Delaware. Filed May 31, 1928. Serial No. 281,993. 10 Claims. (Cl. 308—59.)

1. In combination, a stationary member, a movable member supported by said stationary member, a shaft extending in proximity to said movable member, a thrust bearing between said shaft and said movable member, means for axially moving said shaft, and a single curved



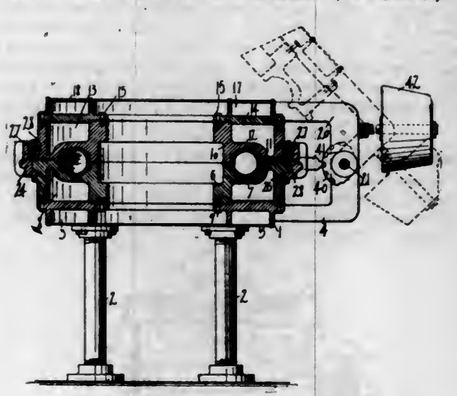
wedge for simultaneously limiting the movement of said shaft and of said bearing and of said movable member along said stationary member in either of two directions.

1,762,118. PIN FASTENER. PAUL E. FENTON, Thomaston, Conn., assignor to Scovill Manufacturing Company, Waterbury, Conn., a Corporation of Connecticut. Filed May 28, 1929. Serial No. 366,617. 7 Claims. (Cl. 24—152.)



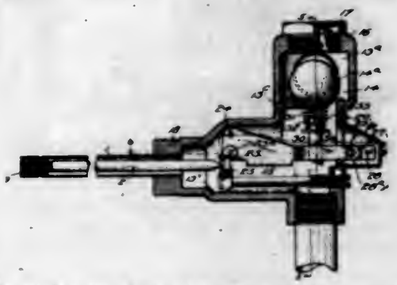
1. A pin fastener, having a sticking member and a head, the head provided with a laterally crooked portion which serves to throw the sticking member off center, said head terminating in a spur.

1,762,119. VULCANIZER. ANDREW J. FLEITER, Akron, Ohio, assignor to The Akron Standard Mold Company, Akron, Ohio, a Corporation of Ohio. Filed Aug. 12, 1927. Serial No. 212,533. 2 Claims. (Cl. 18—17.)



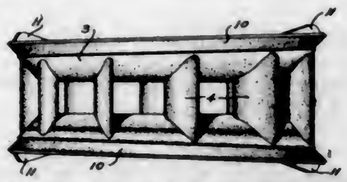
2. In a vulcanizer, the combination of two plates hinged together, molds consisting of mold members removably secured to the faces of the plates, and a rotating clamping ring to secure the mold members together while secured on said plates, the outer surfaces of the mold members lying in common planes, so that when molds are detached from the plates they may be stacked by lateral movement of one mold over the face of a second mold.

1,762,120. OPERATING MECHANISM. HOWARD E. GINTHER, La Porte, Ind., assignor to Bastian-Morley Co., La Porte, Ind., a Corporation of Indiana. Filed Jan. 24, 1928. Serial No. 249,092. 17 Claims. (Cl. 236—102.)



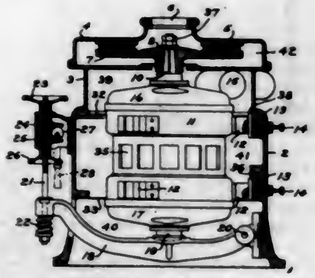
1. In mechanism of the class described, the combination with a casing having inlet and outlet connections for fuel and a valve in said casing, of a pair of levers normally disposed in the same plane and pivotally mounted at their outer ends in said casing and pivotally connected together at their inner portions, means carried by one of said levers for actuating the valve element of said valve, a second lever operatively connected to the other lever and said casing, and means engaging said second lever and operating through it and said pair of levers to operate said valve element actuating means.

1,762,121. HYDRAULIC MACHINE. EMIL GROSS, Wauwatosa, Wis., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis., a Corporation of Delaware. Filed Feb. 29, 1928. Serial No. 257,806. 8 Claims. (Cl. 253—120.)



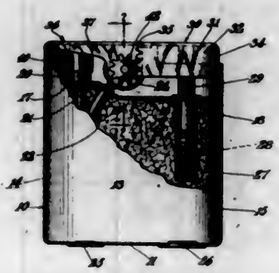
1. In a hydraulic machine, a speed ring comprising side walls having fluid guiding surfaces of gradually diminishing width forming an annular delivery opening directed toward the axis of the ring, and a spiral casing surrounding said ring and having inner edge portions connected to said walls adjoining said surfaces, said edge portions being disposed progressively nearer to said opening advancing in the direction of flow of the fluid through said casing.

1,762,122. DISINTEGRATING MILL. ALBERT M. MARSH, Wauwatosa, Wis., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis., a Corporation of Delaware. Filed Mar. 12, 1928. Serial No. 261,020. 8 Claims. (Cl. 83—7.)



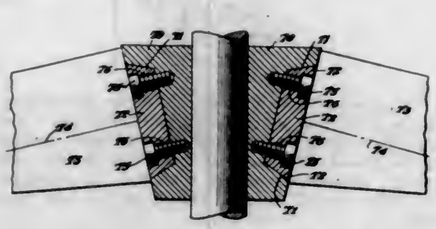
1. In combination, a fixed attrition plate, a movable attrition plate cooperating with the underside of said fixed plate, means for feeding material between said plates, a motor having a rotor direct connected to said movable plate for rotating the same about a vertical axis, and means for simultaneously moving said movable plate and the entire motor structure relative to said fixed plate.

1,762,123. POCKET LIGHTER AND THE LIKE. LOUIS V. ARONSON, Newark, N. J., assignor to Art Metal Works, Inc., a Corporation of New Jersey. Filed Dec. 13, 1928. Serial No. 325,679. 4 Claims. (Cl. 62—7.1.)



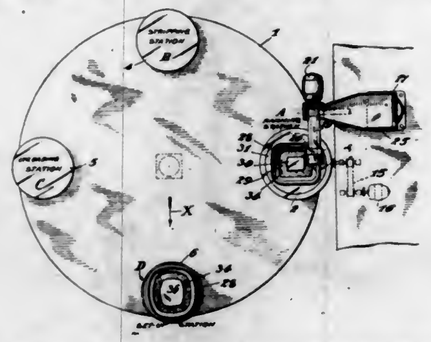
1. A lighter comprising a casing having a dividing wall below its top, a wick holder on said dividing wall, a wick in said holder and extending down into said casing, a sleeve depending from said dividing wall, a coil spring in said sleeve, a plunger above said spring, a thumb-piece over said plunger, said thumb-piece having a flat top wall and depending side walls and an end wall telescoping in close-fitting relation within corresponding side and end walls of said casing, gear teeth on the inner edges of the side walls of said thumb-piece, a carrying member having a top wall and depending side walls, a snuffer member carried by said carrying member to engage over said wick, gears secured to the side walls respectively of said carrying member and meshing with said teeth, a sparking wheel between the side walls of said carrying member, sparking metal coacting with said sparking wheel, and a pivot means passing through the side walls of said casing and operatively connecting said carrying member, said gears and said wheel, said top walls being substantially flush when the lighter is closed.

1,762,124. RUNNER FOR TURBINES. LEWIS FERRY MOODY, Philadelphia, Pa. Original application filed Apr. 15, 1922, Serial No. 553,294. Divided and this application filed June 14, 1926. Serial No. 115,751. 17 Claims. (Cl. 253—148.)



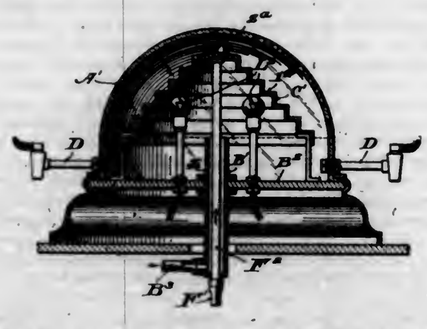
1. The combination in a hydraulic turbine comprising a flow conduit and a runner disposed therein having a central hub portion of generally conical form, a plurality of separable vane sections detachably fitted in said hub portion and rotatably adjustable with relation thereto around axes perpendicular to the elements of the conical surface of the hub.

1,762,125. MOLDING APPARATUS FOR INGOT MOLDS. JOHN E. PERRY and JAMES A. LANIGAN, Youngstown, Ohio, assignors to Valley Mould and Iron Corporation, Hubbard, Ohio, a Corporation of New York. Filed Apr. 6, 1928. Serial No. 267,822. 10 Claims. (Cl. 22—36.)



1. Apparatus for sand ramming equipment for the manufacture of ingot molds, said apparatus comprising a large turn table, a plurality of small turn tables carried by said large turn table and mounted to rotate thereon, molding devices provided with sand spaces, said devices being mounted upon certain of said small turn tables with the axes of said devices being coincident with the axes of rotation of said small turn tables, a ramming station to which said small turn tables are adapted to be moved by the rotation of the large turn table, driving mechanism at said ramming station adapted to rapidly rotate the small turn table positioned at said ramming station, sand slinger mechanism adjacent said ramming station with the nozzle of said sand slinger mounted over the sand space of the molding devices, and means to maintain said nozzle over said sand space during the rotation of the said small turn table at the ramming station.

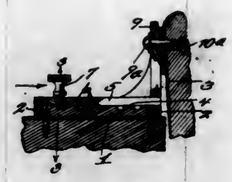
1,762,126. BEVERAGE-DISPENSING DEVICE. HARRY CLEVELAND SMITH, New York, N. Y., assignor, by mesne assignments, to Autodrink Corporation, Dover, Del., a Corporation of Delaware. Filed Aug. 25, 1927. Serial No. 215,465. 21 Claims. (Cl. 225—28.)



17. A device of the character described including a dome-like body, a transparent hood spaced over the body, and means operating to circulate liquid between the dome and body.

1,762,127. SEAT-BACK SUPPORT AND ADJUSTER. MALCOLM ALEXANDER CAMPBELL, Chicago, Ill., assignor of one-third to Bernard Heerey and one-third to Frank M. Utt, Chicago, Ill. Filed Jan. 3, 1928. Serial No. 244,203. 3 Claims. (Cl. 155—162.)

2. In an automobile seat back support and adjuster the combination with a base to be fastened on the ledge to the rear of the seat back, of a slide operatively guided upon the base with means for holding it in different adjusted positions, the forward end of the slide having an upstanding arm and being curved to accommodate itself

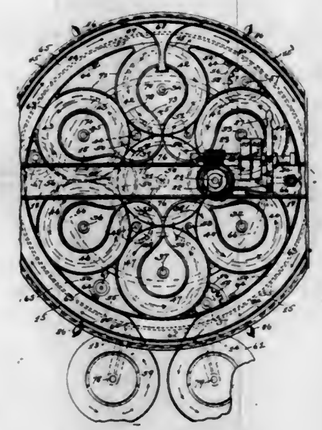


to the seat back, said arm having a slot, and a thumb screw passing through the slot and penetrating the seat back for the purpose of loosening or tightening the connections with the seat back.

1,762,128. EPHEDRINE INHALANT AND PROCESS OF PRODUCING SAME. EDGAR B. CARTER, Indianapolis, Ind., assignor, by mesne assignments, to Eli Lilly and Company, Indianapolis, Ind., a Corporation of Indiana. Filed July 23, 1928. Serial No. 294,943. 3 Claims. (Cl. 167—58.)

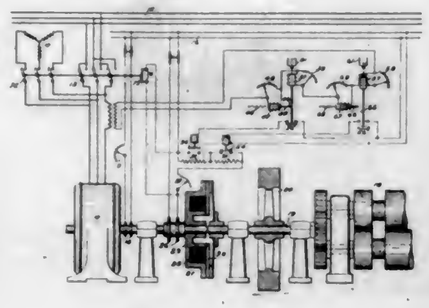
1. A solution of ephedrine in oil; comprising a mineral oil, ephedrine as one substance dissolved therein, and oil of rose as another substance dissolved therein.

1,762,129. EXHAUSTER FOR CANNED GOODS. CLARENCE F. COLBERT, Baltimore, Md., assignor to Zastrow Machine Company, Inc., Baltimore, Md., a Corporation of Maryland. Filed Sept. 13, 1928. Serial No. 305,696. 13 Claims. (Cl. 126—272.)



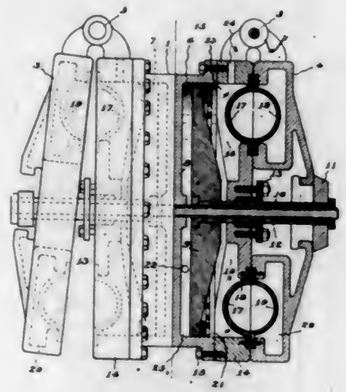
1. In an exhauster for canned goods the combination with a heating chamber having an inlet and an outlet for cans, of a series of carrier disks to receive and advance the cans through the chamber and rotary means for transferring the cans from one disk of the series of disks to the next adjacent disk of said series of disks.

1,762,130. MOTOR DRIVE. RAE W. DAVIS, West Allis, Wis., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis., a Corporation of Delaware. Filed Mar. 24, 1923. Serial No. 627,295. 20 Claims. (Cl. 172—239.)



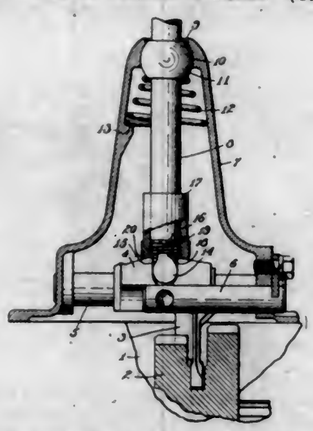
1. In combination, a synchronous motor, a variable load driven thereby, an electromagnetically actuated clutch between said motor and said load, and means responsive resilient means for biasing said sleeve into engagement of said clutch until said load drops to a predetermined value while permitting said motor to operate at synchronous speed.

1,762,131. WATCHCASE HEATER. HAROLD A. DENMIRE, Akron, Ohio, assignor to the General Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Apr. 21, 1927. Serial No. 185,468. 5 Claims. (Cl. 18—17.)



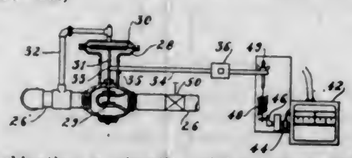
1. A watch case heater comprising a body having a cylinder therein, a reciprocating piston mounted in the cylinder, a cylinder head having a molding cavity formed therein in heat interchanging relation with respect to said cylinder, a door hinged to said body and adapted to close said molding cavity, and means extending through said head and releasably connecting said piston with said door for subjecting material within the cavity to molding pressure.

1,762,132. GEAR-SHIFTER LEVER. OTTO E. FISHBURN, Muncie, Ind., assignor to Warner Gear Company, Muncie, Ind., a Corporation of Indiana. Filed July 20, 1929. Serial No. 382,020. 6 Claims. (Cl. 74—39.)



1. The combination with a shifter lever, of a shifter fork having a slot therein to receive the end of said lever, a sleeve slidably mounted on the end of said lever and resilient means for biasing said sleeve into engagement with the top of said fork.

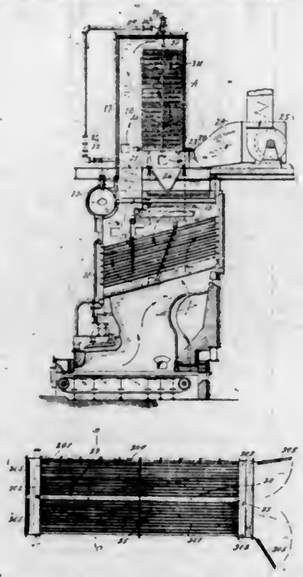
1,762,133. REGULATING APPARATUS FOR GAS-BURNING EQUIPMENT. WILLIAM J. HARRIS, Jr., Toledo, Ohio, assignor to The Surface Combustion Company, Inc., Toledo, Ohio, a Corporation of New York. Filed Jan. 20, 1928. Serial No. 248,143. 1 Claim. (Cl. 236—15.)



In combination, a plurality of inspirators adapted to form a mixture of air and gas in proper proportions for substantially complete combustion, a supply line common to all of said inspirators, a burner individual to each inspirator, said burners requiring a minimum pressure of combustible mixture for functioning, without back firing, a diaphragm control valve located in said line, means for continuously making the pressure head on the delivery side of said valve effective on one side of the diaphragm to regulate the opening of said valve, a counterbalance normally tending to open said valve against the pressure head effective on said diaphragm, the load on said counterbalance including a normally non-tensioned spring, a motor, heat responsive means for effecting the operation of said motor through a definite cycle upon the occurrence of a predetermined minimum temperature, and mechanism actuated by the operation of the motor through said cycle to put said spring under tension and thereby effect a predetermined step-up in the pressure head at the delivery side of the valve, said heat responsive means being operable to restore said motor and mechanism to their original positions upon the occurrence of a predetermined maximum temperature.

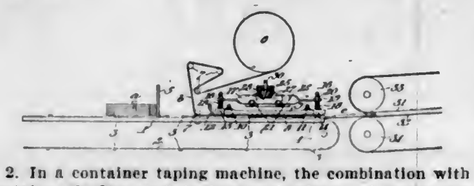
1,762,134. ECONOMIZER. WILLIAM A. JONES, West New Brighton, N. Y., assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed July 15, 1924. Serial No. 726,096. 7 Claims. (Cl. 122—421.)

1. In combination, a boiler, an economizer placed above the boiler, an unobstructed flue admitting gases from the boiler directly to the top of the economizer, and an exit for the gases at the bottom of the economizer.



5. In an economizer, oppositely located headers arranged in rows, substantially horizontal tubes connecting said headers and arranged in rows with spaces between the rows sufficiently large to permit removal therethrough of a tube in one of the rows, and a supporting member beneath at least one of said rows, the vertical dimension of said member being relatively small, whereby said member will not interfere with said removal of a tube between said rows.

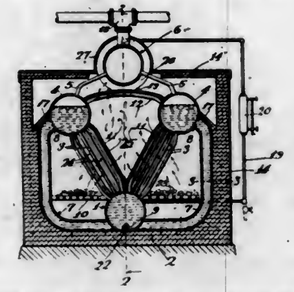
1,762,135. CONTAINER-TAPING MACHINE. GUY E. LINN, Rittman, Ohio, and WILLIAM H. FINCKEL, Jr., Washington, D. C., assignors to The Ohio Boxboard Company, Cleveland, Ohio, a Corporation of Ohio. Filed Sept. 18, 1928. Serial No. 306,737. 7 Claims. (Cl. 93—56.)



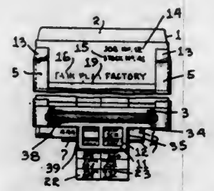
2. In a container taping machine, the combination with container feeding and taping mechanisms, of means for applying pressure and heat to the applied tape, said means including a pressure-applying member provided with means for supplying heat thereto, a support for said member, resilient means interposed between said member and said support, and means for raising and lowering said support and said member as a unit.

1,762,136. WATER-TUBE STEAM BOILER. JOHN C. HANRAHAN, Los Angeles, Calif. Filed Nov. 1, 1926. Serial No. 145,553. 10 Claims. (Cl. 122—240.)

1. A water tube steam boiler comprising a mud drum, two banks of tubes connected to the mud drum and divergently extending upward therefrom, two steam and water drums arranged above the mud drum, one steam and water drum being connected to one bank of tubes and the other steam and water drum being connected to the other bank, means providing walls connecting each steam and water drum to the mud drum, said banks of tubes serving to divide the space between the drums and walls into three chambers, the chambers between the banks of tubes and the adjacent walls constituting initial combustion chambers and the chambers between the banks of tubes constituting a secondary combustion chamber, there being passages between the tubes of each bank permitting fuel and the products of combustion to pass therethrough from the initial combustion chambers into the secondary combustion chamber and to meet therein in opposition and revive or complete the combustion before passing upwardly between the steam and water drums, and a steam or superheating drum arranged above the secondary combustion chamber in the path of the products of combustion issuing therefrom and connected to the steam and water drums.

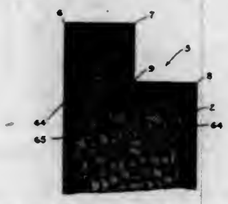


1,762,137. RECORD AND RECORD HOLDER. ARTHUR A. DIONNE, Chicago, Ill., assignor to The Alvey-Ferguson Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Feb. 20, 1925. Serial No. 10,584. 13 Claims. (Cl. 281—44.)



5. A record-keeping means comprising a holder having means for slidably supporting a card, and having a ledge at one end of the holder for limiting the sliding movement of the card, said holder also having edges one of which is in spaced relation to the ledge to expose a section of the card to be detached, said edges facilitating detachment of said section from the card.

1,762,138. COMPOSITE CORK BODY, SHEET, BLOCK, ETC., AND METHOD OF PRODUCING SAME. WILLIAM F. GRUPE, Rutherford, N. J., assignor to Armstrong Cork Company, Lancaster, Pa., a Corporation of Pennsylvania. Filed Oct. 1, 1927. Serial No. 223,300. 15 Claims. (Cl. 18—48.)



1. A composite cork body consisting of cork fragments and a binder, a surface layer of the body being wholly substantially compressed and the interior portion being wholly relatively expanded.

CARNEGIE LIBRARY OF ATLANTA

Patents Nos. 1,762,139 to 1,763,635

THE OFFICIAL GAZETTE

OF THE

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Issue of June 10, 1930

Trade-Marks	136	No. 271,482 to No.	271,617,	inclusive.
T. M. Renewals	41			
Labels	16	No. 37,553 to No.	37,568,	inclusive.
Prints	13	No. 12,583 to No.	12,595,	inclusive.
Reissues	4	No. 17,696 to No.	17,699,	inclusive.
Designs	51	No. 81,316 to No.	81,366,	inclusive.
Patents	1,497	No. 1,762,139 to No.	1,763,635,	inclusive.
Total	1,758			

Adjudicated Patents

(D. C. Pa.) Collins patent No. 1,310,060, for electric-resistance furnace, claims 7 to 11, *held* valid and infringed. *General Electric Co.* v. *George F. Hagan Co.*, 38 F. (2d) 995.

Adverse Decisions in Interference

In interferences involving the indicated claims of the following patents final decisions have been rendered that the respective patentees were not the first inventors with respect to the claims listed:

Pat. 1,553,768, F. H. Gleason, Means for measuring and delivering volumes of fluid, decided April 14, 1930, claims 1, 3, and 7.

Pat. 1,567,062, F. B. Koontz, Process of and apparatus for cracking hydrocarbons, decided April 2, 1930, claims 10, 26, and 27.

Pat. 1,581,851, M. L. Martus and E. H. Becker, Battery cell, decided April 14, 1930, claims 1, 2, 3, 4, and 5.

Pat. 1,606,045, R. S. Sanford, Brake mechanism, decided April 29, 1930, claim 22.

Pat. 1,627,567, M. H. Loughridge, Railway-traffic-controlling system and apparatus, decided May 3, 1930, claim 49.

Pat. 1,657,101, Herbert Zeitlin, Battery-cup machine, decided April 30, 1930, claim 4.

Pat. 1,728,405, C. J. Fitch, Speaker, decided May 17, 1930, claims 1, 2, 3, and 4.

Pat. 1,743,011, A. G. Zimmerman, Speech-current apparatus, decided May 2, 1930, claims 1, 2, 3, and 4.

Drawings

RULE 38.

38. When there are drawings, the description will refer to the different views by figures and to the different parts by letters or numerals, (preferably the latter.)

RULE 52—EXTRACT.

(*f*) The different views should be consecutively numbered. Letters and figures of reference must be carefully formed. They should, if possible, measure at least one-eighth of an inch in height, so that they may bear reduction to one twenty-fourth of an inch; and they may be much larger when there is sufficient room. They must be so placed in the close and complex parts of drawings as not to interfere with a thorough comprehension of the same, and therefore should rarely cross or mingle with the lines. When necessarily grouped around a certain part, they should be placed at a little distance, where there is available space, and connected by short lines with the parts to which they refer and by short broken lines when the number or letters refers to parts shown in dotted lines. They should not be placed upon shaded surfaces, and when it is difficult to avoid this, a blank space must be left in the shading where the letter occurs, so that it shall appear perfectly distinct and separate from the work. If the same part of an invention appear in more than one view of the drawing it must always be represented by the same character, and the same character must never be used to designate different parts.

It is suggested that numerals or letters be used without exponents.

NOTICE—PHOTOSTATS AND PHOTOPRINTS—CHANGE IN FEES—EFFECTIVE JULY 1, 1930

Under the amendment to Rule 191, effective July 1, 1930, the price of photostat copies of records and photoprints of drawings will be 20 cents per copy regardless of size.

THOMAS E. ROBERTSON,
Commissioner of Patents.

Condition of Applications Under Examination at Close of Business May 29, 1930

(Total number of applications awaiting action, excluding Trade-Mark Division, 118,128; Trade-Mark Division, 1,984. Oldest new case, July 29, 1929; oldest amended, July 31, 1929. The dates given are 1929 except where † indicates 1930.)

Room No.	Divisions, Examiners, and Subjects of Inventions	Oldest new application awaiting office action	Oldest amended application awaiting office action	No. of applications awaiting action
112	1. LOEFFLER, F. A., Closure Operators; Fences; Gates; Tillage; Scattering Unloaders; Handling and Hoist Line Implements.	Oct. 1	Oct. 8	1,314
126	2. HADEN, C. F., Bee Culture; Dairy; Presses; Tobacco	Aug. 29	Aug. 30	2,246
331	3. LINDSEY, A., Heating; Metal Founding; Metallurgy; Metal Treatment	Aug. 27	Dec. 30	1,572
234	4. MERRITT, A. D., Conveyers; Hoists; Handling Apparatus; Excavating	Oct. 24	Nov. 5	1,276
108*	5. MACNAB, J. F., Harvesters; Music; Acoustics; Sound Recording; Knotters	Aug. 27	Sept. 19	1,473
318	6. LEWERS, A. M., Carbon Chemistry	Aug. 1	Aug. 1	2,476
106	7. JARBOE, C. G., Optics; Photography	Aug. 15	Aug. 16	2,625
133	8. HENRY, C. C., Beds; Chairs; Kitchen and Table Articles; Racks and Cabinets	Aug. 31	Oct. 29	1,842
221	9. ADAMS, R. E., Pumps; Fluid and Fluid-Current Motors	Nov. 7	Nov. 2	1,464
118	10. HUNTER, O. F., Land Vehicles—Animal Draft Appliances, Bodies and Tops	Aug. 12	Aug. 28	1,779
148*	11. ARMSTRONG, H. C., Boots, Shoes, and Leggings; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Whip Apparatus.	Nov. 18	Nov. 30	1,038
380	12. PIERCE, P. P., Machine Elements	Oct. 2	Oct. 2	1,666
154*	13. CLIFT, J. W., Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Working; Needle and Pin Making; Turning; Boring and Drilling.	Aug. 20	Aug. 1	1,641
102*	14. BRUMBAUGH, N. J., Farriery; Metal Bending; Metal Tools and Implements, Making; Sheet-Metal Ware, Making; Wire Fabrics; Wire Working; Metal Working, Assembling, and Blanks and Processes.	Aug. 9	Aug. 19	1,465
329	15. WORRELL, L. W., Glass; Plastic Block and Earthenware Apparatus; Plastics	Aug. 9	Aug. 14	3,052
242*	16. SPENCER, C. J., Telegraphy; Telephony	Aug. 19	Oct. 1	1,272
307	17. RAFTER, G. S., Label Pasting and Paper Hanging; Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet-Material Associating or Folding; Sheet or Web Feeding; Type Setting.	Aug. 5	Sept. 19	1,682
229	18. PORTER, M. E., Motors, Expansible-Chamber Type; Power Plants; Speed-Responsive Devices	Oct. 4	Sept. 30	1,529
236	19. GLASCOCK, F. S., Furnaces; Heating Systems; Liquid and Gaseous Fuel Burners; Stoves and Furnaces.	Aug. 20	Aug. 12	2,240
179	20. GROVE, S. D., Miscellaneous Hardware; Closure Fasteners; Locks and Latches; Safes; Undertaking.	Sept. 21	Oct. 1	1,668
244*	21. THOMPSON, T. J., Textiles; Cloth Finishing	Sept. 9	Dec. 14	920
217	22. COLWELL, J. H., Aeronautics; Firearms, Ordnance, and Explosive Devices; Air Guns, Catapults, and Targets; Boats and Buoys; Ships; Marine Propulsion.	Oct. 14	Sept. 24	1,644
147*	23. GROESBECK, W. D., Coin Handling; Recorders; Registers	Aug. 15	Aug. 19	1,185
202*	24. DURAS, C. O., Apparel; Apparel Apparatus; Garment Supporters; Sewing Machines	Aug. 2	Aug. 15	1,312
	25. LIGHTFOOT, J. H., Agitating; Butchering; Classifying Solids; Centrifugal-Bowl Separators; Mills; Threshing; Vegetable and Meat Cutters and Comminutors.	Sept. 18	Sept. 25	1,637
228*	26. HODGES, J. S., Electricity, Generation; Motive Power	Sept. 7	Sept. 3	1,271
214	27. ANDERSON, L. S., Brush, Broom, and Mop Making; Brushing, Scrubbing, and General Cleaning; Laundry; Washing Apparatus.	Aug. 19	Aug. 20	1,640
225	28. BENSON, A. R., Internal-Combustion Engines	Sept. 9	Sept. 14	2,215
160*	29. MORRIS, B. N., Woodworking; Tools; Compound Tools	Dec. 18	†Jan. 3	728
248	30. SHIPMAN, J. L., Automatic Temperature and Humidity Regulation; Illuminating Burners; Illumination; Thermostats and Humidostats.	Aug. 27	†Mar. 14	1,203
312	31. HOLMES, W. N., Distillation; Gas, Heating and Illuminating; Mineral Oils	Aug. 17	Aug. 15	2,718
249	32. BARTHOLOMEW, J. A., Gas and Liquid Contact Apparatus; Heat Exchange; Gas Separation	Oct. 19	Nov. 1	1,704
152	33. WYMAN, W. I., Bridges; Masonry and Concrete Structures; Metallic Building Structures; Roads and Pavements; Roofs; Wooden Buildings.	Aug. 17	Sept. 5	2,591
304	34. SIMPSON, G. R., Electricity, Transmission to Vehicles; Pneumatic Dispatch; Railways, Rolling Stock, Switches, and Signals; Store Service; Vehicle Fenders.	Sept. 19	Oct. 14	1,193
116*	35. REYNOLDS, E. C., Buckles, Buttons, Clasps, Etc.; Card and Sign Exhibiting; Signals; Toilet	Oct. 2	Nov. 25	1,749
105	36. MORTON, G. L., Automatic Weighers; Geometrical and Measuring Instruments; Force Measuring.	Sept. 23	Oct. 2	2,347
234*	37. WEAVER, M. E., Electricity, Circuit Makers and Breakers	Sept. 12	Sept. 12	2,089
145	38. KRAFFT, C. F., Animal Husbandry; Earth Boring; Hydraulic and Earth Engineering; Mining, Quarrying, and Ice Harvesting; Stoneworking; Wells.	Aug. 13	Aug. 13	1,460
220	39. COWLES, A. W., Fluid-Pressure Regulators; Multiple Valves; Valves; Water Distribution	Aug. 7	Aug. 15	1,973
262*	40. OBERLIN, J. J., Bottles and Jars; Receptacles	July 31	Oct. 23	3,343
125	41. BROWN, J. 1., Land Vehicles, Wheels, and Axles; Resilient Tires and Wheels; Wheel Substitutes; Railway Draft Appliances.	Oct. 7	Oct. 24	1,403
223*	42. CUTTING, H. O., Electric Signaling	Oct. 9	Nov. 2	1,568
124*	43. HOPKINS, F. M., Baths, Closets, Sinks, and Spittoons; Sewerage; Electricity, Medical and Surgical; Medicines; Surgery; Dentistry; Artificial Body Members.	Aug. 1	Aug. 1	2,208
253	44. SHAFFER, C. H., Dispensing; Filling and Closing Portable Receptacles; Refrigeration	July 29	July 31	2,385
379	45. GILES, A. H., Pulleys and Shafting; Lubrication; Bearings and Guides; Spring Devices	Aug. 27	Sept. 1	2,537
233	46. WOLCOTT, C. L., Concentrating Evaporators; Fluid Sprinkling, Spraying, and Diffusing; Fire Extinguishers; Liquid Heaters and Vaporizers.	Sept. 12	Sept. 19	1,662
264	47. BARKER, H., Clutches and Power Stops; Brakes and Motors	Aug. 5	Sept. 11	2,601
212*	48. ROEPKE, O. B., Electricity, General Applications	Sept. 7	Sept. 7	1,384
239	49. EDINBURG, F. P., Check-Controlled Apparatus; Domestic Cooking Vessels; Ventilation; Driers; Liquid Separation or Purification.	Nov. 19	Dec. 2	1,295
322	50. BLAKE, C. L., Plastic and Liquid Coating Compositions; Coating	Aug. 17	Sept. 6	2,929
240*	51. BACKUS, C. D., Radiant Energy, Wave Transmission	Sept. 3	Sept. 4	2,448
144	52. MORGAN, E. T., Supports; Chucks; Joint Packing; Pipe and Rod Joints or Couplings; Tool-Handle Fastenings.	Oct. 5	Oct. 10	2,715
201*	53. PECK, M. K., Books; Manifolding; Printed Matter; Stationery, Educational Appliances; Paper Files and Binders; Tents, Canopies, Umbrellas, and Canes; Curtains, Shades, and Screens.	Dec. 7	Nov. 20	1,319
241	54. LANE, C. H., Electric Lamps; Conductors; Vapor Electric Devices; Space Discharge Tubes	Aug. 7	Aug. 7	3,028
102	55. BOWEN, S. T.—{Bread, Pastry, and Confection Making; Cutlery / Designs	†Mar. 6	†Mar. 6	379
309	56. PORTER, F. J., Electrochemistry; Laminated Fabrics; Paper Making; Substance Preparation	†May 7	†May 9	447
257*	57. NICOLSON, G. D. G., Cutting and Punching; Bolt, Nut, Rivet, Nail, Screw, Chain, and Horseshoe Making; Driven and Screw Fastenings; Jewelry; Nut and Bolt Locks.	Aug. 15	Aug. 24	2,550
		Aug. 1	Aug. 24	1,200
270*	58. DOWELL, E. F., Abrading; Typewriting	July 31	July 31	1,516
315	59. RICHARD, V. I., Chemistry; Alcohol; Fertilizers; Cement and Lime; Hides, Skins, and Leather; Fuel.	Aug. 8	Aug. 9	2,238
213*	60. GLASS, R. L., Electricity, Heating, and Welding; Batteries; Resistances and Rheostats; Prime Mover Dynamo Plants; Conduits and Housings.	Aug. 19	Aug. 30	2,459
269	61. PARKS, G. E., Elevators; Winding and Reeling; Pushing and Pulling; Fire Escapes; Ladders; Scaffolds; Velocipedes; Horology; Time-Controlling Apparatus.	Aug. 1	Aug. 2	2,679
245*	62. COCHRAN, W. W., Toys; Amusement Devices; Furniture; Fishing and Trapping; Baggage; Package and Article Carriers.	Aug. 17	Aug. 17	2,405
300	63. WINKELSTEIN, A. H., Bleaching and Dyeing; Explosive, Pyrotechnic, and Match Compositions; Oils, Fats, and Glue; Preserving; Sugar, Starch, and Carbohydrates.	Aug. 21	Aug. 21	2,531
163	Trade-Marks, Labels, and Prints: F. A. RICHMOND.—{Trade-Marks / Labels and Prints	†May 3	†May 17	1,800
		†May 1	†May 19	184

* Refers to room numbers in the annex.

DECISIONS IN PATENT AND TRADE-MARK CASES

U. S. Court of Customs and Patent Appeals

IN RE COFFEY

No. 2,201. Decided February 21, 1930

[37 F. (2d) 627]

PATENTABILITY—GEAR-SHIFTING DEVICE.

Claims for a gear-shifting device *Held* unpatentable over the prior art.

APPEAL from the Patent Office. Affirmed.

Mr. Wesley G. Carr and *Mr. Ezra W. Savage* for Coffey.

Mr. T. A. Hostetler for the Commissioner of Patents.

GRAHAM, *P. J.*:

The appellant filed his application in the Patent Office for a patent on improvements in gear-shifting mechanisms. Both the Examiner and Board of Appeals rejected the claims here in issue, the Board differing with the Examiner in its reasons therefor as to claims 1 to 4 inclusive, 6 and 7, 5 and 18, but arriving at the same conclusion as to their allowance.

On the hearing in this court the appellant abandoned his appeal as to all claims except Numbers 1, 4, 5, 8, 9, and 18. The Board of Appeals rejected claims 1 and 4 on reference to Vau Lier et al., 1,148,264, July 27, 1915, and Stubbs, 1,188,022, June 20, 1916, 5 on said Van Lier et al., 8 and 9 on Rice, 1,087,552, Feb. 17, 1914, and 18 on Van Valkenburg, 1,316,123, Sept. 16, 1919.

The Board of Appeals has described the mechanism involved in the following apt language:

> The structure involved is a gear shifting device of the preselector type wherein a selection is made by the operator on a sector mounted on the steering column and a subsequent operation of the clutch pedal will cause the apparatus to function to shift the slidable gears of an ordinary transmission to the preselected ratio indicated by the sector on the steering column. Applicant provides a separate device mounted on top of an ordinary slidable gear transmission giving three speeds forward, neutral, and reverse. Said device consists of an outer cylinder in fixed relation to the gear box and having an inner cylindrical member which is rotatable with respect to the outer member. The inner cylindrical member has rotatably connected to it a shaft extension which in turn is connected to the clutch pedal through a lost-motion connection of the slot-and-pin type. The inner cylindrical member also has another shaft extension on the opposite side which is permanently affixed thereto and by means of gear connections is capable of being rotated by the selector lever on the steering column. Said last mentioned shaft extension is hollow and contains an inner pin which pivotally supports a member at right angles to its axis and which member extends through the lower part of the outer cylindrical member and into the recesses of the sliding bars of the ordinary gear transmission positioned underneath the same. The hollow shaft and the pin have a spiral spring interconnecting them so as to provide a somewhat flexible connection but at the same time causing the pin to follow the movements of the shaft when free to rotate. The outer cylindrical member has slots of H formation cut in its under surface so as to guide the pivoted member in its translation. The cylindrical portion of the inner member has notches cut in its periphery so as to accommodate the pivoted member to allow it to swing clockwise or counterclockwise about its pivot to shift the gears in either direction.

We now recur to the claims. Claim 1 is typical of claims 1 and 4, and is as follows:

> 1. The combination with a transmission mechanism comprising a plurality of shiftable elements for securing a plurality of speed ratios in the forward direction and one speed ratio in reverse direction, of a gear-shifting mechanism having a single member for connecting said gear-shifting mechanism to said shiftable elements and means for actuating said gear-shifting mechanism to select any of said ratios when the shiftable elements are in position for any other speed ratio.

The gist of this claim seems to be the single member for connecting the gear-shifting mechanism to the shiftable elements. This the Board says is anticipated by the references cited. A single actuating member, 12, is shown by the reference Van Lier et al., and, while it operates in a different manner, it is a single member. In the Stubbs reference there is also such a single actuating member in the plunger, 38, which, when properly aligned, operates slides and shifts the gears as preselected.

Claim 5 rests upon a single actuating member which will return the transmission elements to a neutral position while the operator has the selector in position to shift gears. This is plainly accomplished by the Van Lier reference and is set out in claim 6 of said patent.

Claims 8 and 9 rest principally upon the means for preselecting the position of the single shifting member, irrespective of the operative position it occupies. The board properly held that this was shown by the Rice reference. The Rice mechanism plainly discloses mechanism for neutralizing the gear shift when it is desired to shift from one speed to another, without moving the wheel control lever into a neutral position.

The eighteenth claim is as follows:

> 18. In a gear-shifting mechanism, the combination with a variable-speed transmission mechanism for providing reverse operation and a plurality of speed ratios for forward operation, of a single member for controlling said transmission mechanism, and means comprising an actuating member, selecting and actuating mechanism and a guide having positions corresponding to the several speed ratios whereby the controlling member is actuated from any of such positions to any other of such positions by continuous movement of said actuating member.

An inspection of the reference Van Valkenburg discloses that mechanism is there provided that, when the control lever is shifted continuously from one position to another requiring a passage of the actuating element through the H of the gear case from one side to the other, will perform that function. While the method of operation is entirely different, the result is the same. The reference is, therefore, properly cited as to the claim.

The difficulty with appellant's said rejected claims is their generality and indefiniteness. It may well be that some of the features of this mechanism, as to form and structure, are novel and patentable. As he has chosen, however, to rest upon these generalities, his claims must be rejected on the references, which clearly anticipate his claims.

The decision of the Board of Appeals is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE NILS D. LEVIN

No. 2,220. Decided February 21, 1930

[37 F. (2d) 754]

PATENTABILITY—ROTARY ENGINE.

Claims for a rotary engine *Held* unpatentable over the prior art.

APPEAL from the Patent Office. Affirmed.

Messrs. Cushman, Bryant & Darby and *Mr. Arlon V. Cushman* for Levin.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

GRAHAM, *P. J.:*

This is an appeal from the decision of the Board of Appeals of the Patent Office, rejecting claims 13 and 17 of appellant's application for patent on improvements in rotary engines. Said claims 13 and 17 are as follows:

13. In a machine of the class described, the combination of a pair of rotors having intermeshing teeth, a casing having a curved wall fitted substantially air tight to the teeth of the rotors on the inlet side and an open exhaust chamber on the outlet side of said rotors, and means for delivering fluid pressure through said curved wall to the interspaces between the wall and rotor teeth.

17. In a machine of the class described, the combination of an open casing divided by a curved partition wall having a pressure inlet port into a rotor chamber and a fluid pressure chamber, a pair of rotors mounted in said open chamber with their teeth in substantially air-tight contact on the inlet side with said curved wall, and means for delivering fluid pressure to said fluid pressure chamber and through said pressure inlet port in said curved wall to the interspaces between the teeth of said rotors and said curved wall.

The claims were rejected by the Board on reference to Backstrom, No. 572,946, dated December 15, 1896. The Examiner also cited Keats, No. 981,862, dated January 17, 1911, and Taylor, No. 1,152,862, dated September 7, 1915, as references.

The appellant insists as to claim 13 that the feature therein specified "an open exhaust chamber on the outlet side of said rotors," is new to the art and patentable. As to claim 17, he insists that the language "a fluid pressure chamber" is sufficient, together with the further language "an open casing," to differentiate his invention from the references.

The cited patent to Backstrom is a steam engine, consisting of two cylindrical rotating drums with teeth which intermesh and which receive a jet of steam directed against them, and the force of which causes the drums to revolve in opposite directions. The steam, after having performed its function, passes through between these drums and exhausts through portholes into an open chamber above the drums, and separated from said drums by a solid metal wall except where said portholes are located. The only openings in the walls surrounding said drums are the ports above mentioned.

The device of applicant here has similar metallic walls surrounding the bottom portion of the rotors, and with an opening through which the actuating fluid enters and strikes the intermeshing tooth blades of the rotors. After the actuating fluid has passed through the rotors it exhausts into the upper portion of the casing. No walls surround the upper portion of the rotors as are found below them. The appellant claims that his device thus differs from Backstrom, and that the chamber into which the actuating fluid exhausts is open, as contradistinguished from Backstrom, which he claims is not open.

The Board of Appeals held against his contention in this respect, holding that the language used was sufficient to cover either the Backstrom device or that of appellant.

We agree with the Board of Appeals in this respect. An open chamber means a chamber having openings into it. Certainly, in the common language of the people, in speaking of an open chamber, one would not have in mind a chamber without any walls at all. So, in this case, the open chamber described in appellant's application is satisfied by an exhaust chamber which has an opening into it. It is probably the applicant has novelty in his mechanism. However, claims 13 and 17 are too general to give him the benefit and advantage of the same, in view of the cited references.

The decision of the Board of Appeals is, therefore, affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

MACLAREN *v.* STOETZEL

No. 2,204. Decided February 21, 1930

[38 F. (2d) 125]

INTERFERENCE — PRIORITY — CONCEALMENT AND SUPPRESSION.

Evidence reviewed and *Held* not to establish that the invention of S. was suppressed or concealed at the time that M. entered the field and that priority was properly awarded to S., who was the first to conceive the invention and the first to reduce it to practice.

APPEAL from the Patent Office. Affirmed.

Messrs. Roberts, Cushman & Woodberry, Mr. Robert Cushman, and *Mr. Arlan V. Cushman* for Maclaren.

Mr. Merrell E. Clark, Mr. Parker Dodge and *Mr. Horace A. Dodge* for Stoetzel.

LENROOT, *J.:*

This is an appeal from the decision of the Commissioner of Patents in an interference proceeding. The invention in issue relates to automatic air-control valves for use in pneumatic-tube-dispatch systems, such as are employed in department stores for dispatching cash slips, change, etc.

There are 11 counts comprising the issue. Count 1 is representative and reads as follows:

Pneumatic dispatch apparatus comprising a conduit and an exhauster connected therewith, a controlling valve located in the conduit, a minimum flow of air through the conduit being permitted when the valve is in closed position, a pneumatic exposed at one side to the pressure obtaining in the conduit and permanently exposed at the opposite side to atmospheric pressure, said pneumatic being adapted to open the air controlling valve when the pressure within the conduit is reduced due to the checking of said minimum flow by introducing a carrier into the conduit, and means responsive to increased flow of air through the conduit such as occurs when the carrier is discharged for equalizing the pressure upon opposite sides of the pneumatic to permit the valve to close.

All of the tribunals of the Patent Office, the Examiner of Interferences, the Examiners in Chief and the Commissioner of Patents, united in awarding priority to Stoetzel, the appellee herein.

The facts in the case relevant to the question before us are as follows:

Appellant is an employee of the Lamson Company, his assignee, and appellee is an employee of the G. & G. Atlas Systems, Inc., his assignee. Both assignees are manufacturers of pneumatic-dispatch-tube apparatus and are actively in competition with each other.

The interference is between the issued patent of James G. Maclaren, the appellant, granted May 19, 1925, on an application filed January 28, 1925, and a pending application of Joseph J. Stoetzel, the appellee, filed October 17, 1925.

The interference was originally declared September 4, 1925, between appellant's patent and an application of one Edmund Weigele, an officer of the Atlas Company, filed December 9, 1924, who had assigned his rights to said company. The Weigele application, it is conceded, covered the subject matter of the invention here involved. A patent having issued to appellant while the Weigele application was pending, such issue was inadvertent. Appellant, being the first to file, is the senior party. Appellee, having filed after the declaration of the interference between appellant and Weigele, he was on November 20, 1925, added to the interference. Weigele conceded priority to appellee, whereupon said Weigele was eliminated, and the interference proceeded between appellant and appellee.

All of the tribunals of the Patent Office have found that appellee conceived the invention and reduced the same to practice in 1921. We concur in that finding, and, he being the first to conceive and the first to reduce to practice, is entitled to an award of priority, unless an equitable estoppel exists against him to assert such priority, arising from the following facts, as shown by the record:

In May or June, 1921, appellee in Brooklyn, N. Y., constructed and tested a device embracing the invention here involved. This particular form of device was never commercialized by appellee or his assignee, the Atlas Company. In July, 1922, appellee in Chicago completed a second embodiment of the invention and gave it to Weigele, who took it to his home in New Jersey and kept it there until some time in 1924. On July 17, 1922, appellee filed an application for which Patent No. 1,589,998 was issued on June 22, 1926, which embraced the invention here involved except that it omitted a vane mechanism which is embraced in the counts here in issue, and because of such omission said counts do not read on the application upon which said patent was issued. Appellee gives as the reason for such omission that such mechanism was old in the prior art, a patent upon the same being owned by his assignee, the Atlas Company.

In August, 1923, appellant independently conceived the invention and in November of the same year reduced it to practice. At that time he was vice president and general manager of the Standard Carrier Company, Inc., which manufactured and installed pneumatic tubes and carriers, being the same business as that of both assignees of the parties herein. In January, 1924, said Standard Carrier Company manufactured 75 valves embodying appellant's invention, 53 of which were installed in the store of Goddard Brothers of Lynn, Mass., 16 in the store of A. E. Trautman Company, Greensburg, Pa., and three in the Bridgeport Gas Light Company building, Bridgeport, Conn.

In June or July, 1924, the Standard Carrier Company went out of business and its patents, tools and fixtures were acquired by the Lamson Company, appellant's assignee. Said Standard Carrier Company manufactured no more than the 75 devices above referred to, and the Lamson Company, assignee of appellant, has never manufactured or placed in commercial use any of the devices embodying the invention here involved.

In June, 1924, the Atlas Company, appellee's assignee, installed the device embodying his invention in the Slattery store in Boston in place of devices which had been held in preceding litigation to infringe the Libby patent owned by the Lamson Company, appellant's assignee. By January, 1926, more than 1,500 devices embodying appellee's invention had been placed in commercial use by the said Atlas Company. In July, 1924, said Atlas Company sent to the attorneys of said Lamson Company, at their request, a sample of appellee's device which had been placed in the Slattery store.

In the fall of 1924 the Lamson Company brought contempt proceedings against the Atlas Company, contending that the device here involved was also an infringement of the Libby patent owned by it, but the court held that there was no infringement. *Lamson Company* v. *Slattery Company* et al., 2 F. (2d) 1017.

In August, 1924, appellant entered the employ of his assignee, the Lamson Company, and soon thereafter called to the attention of its management his device, for which application for patent was filed on January 28, 1925. On December 9, 1924, the Atlas Company filed the application of Weigele, as hereinbefore stated. On May 19, 1925, patent to appellant was issued, but as Weigele's application was then pending, such issue was inadvertent. On September 4, 1925, an interference was declared between appellant on his patent and Weigele. On October 27, 1925, appellee filed his application, copying claims of appellant's patent, and asked that he be made a party to the interference between appellant and Weigele, which was granted on November 20, 1925. Thereafter, Weigele conceded priority to appellee and the interference proceeded between appellant and appellee.

It appears from the testimony that after appellee had conceived and tested his invention, his assignee, the Atlas Company, being charged by the Lamson Company with infringement of its Libby patent, considered the placing into commercial use of appellee's device as a means of avoiding infringement of said Libby patent, but concluded that a device covered by another patent owned by it was preferable, and therefore appellee's device was not utilized at that time. Upon marketing the device

so chosen, the Lamson Company served notice upon the Atlas Company of infringement of its Libby patent, and on March 17, 1924, the United States District Court for Massachusetts held in favor of the Lamson Company. *Lamson Company* v. *Slattery Co.*, 296 F. 724.

Thereupon, appellee's device with certain improvements was adopted by the Atlas Company and placed in commercial use in June, 1924.

Appellant contends that the facts above stated establish concealment and suppression by appellee and his assignee of the invention until June, 1924, five months after appellant, as an independent inventor, had given it to the public by commercial sales and use in January, 1924, and that therefore, under the doctrine declared in the case of *Mason* v. *Hepburn*, 13 App. D. C. 86, 84 O. G. 147, appellee is estopped from asserting priority of invention as against appellant.

The *Mason* v. *Hepburn* case, supra, holds that:

> • • • a subsequent inventor of a new and useful manufacture or improvement who has diligently pursued his labors to the procurement of a patent in good faith and without any knowledge of the preceding discoveries of another, shall, as against that other, who has deliberately concealed the knowledge of his invention from the public, be regarded as the real inventor and as such entitled to his reward.

Later in the opinion the doctrine is stated in somewhat broader terms, as follows:

> The true ground of the doctrine, we apprehend, lies in the policy and spirit of the patent laws and in the nature of the equity that arises in favor of him who gives the public the benefit of the knowledge of his invention, who expends his time, labor, and money in discovering, perfecting, and patenting, in good faith, that which he and all others have been led to believe has never been discovered, by reason of the indifference, supineness, or wilful act of one who may, in fact, have discovered it long before.

The doctrine in the two statements quoted is derived from the case of *Kendall* v. *Winsor*, 21 How. 322, and the court in the *Hepburn* case quotes from said case of *Kendall* v. *Winsor*, supra, as follows:

> The true policy and ends of the patent laws enacted under this Government are disclosed in that article of the Constitution, the source of all these laws, viz, "to promote the progress of science and the useful arts," contemplating and necessarily implying their extension and increasing adaptation to the uses of society. Vide Constitution of the United States, art. 1, sec. 8, clause 8. By correct induction from these truths it follows that the inventor, who, designedly, and with a view of applying it indefinitely and exclusively for his own profit, withholds his invention from the public, comes not within the policy or objects of the Constitution or acts of Congress. He does not promote and, if aided in his design, would impede the progress of science and the useful arts; and with a very bad grace could he appeal for favor or protection to that society which, if he had not injured, he certainly had neither benefited nor intended to benefit. Hence, if, during such a concealment, an invention similar to or identical with his own should be made and patented or brought into use without a patent, the latter could not be inhibited nor restricted upon proof of its identity with a machine previously invented and withheld and concealed by the inventor from the public. The rights and interests, whether of the public or individuals, can never be made to yield to schemes of selfishness or cupidity; moreover, that which is once given to or is invested in the public can not be recalled nor taken from them.

The Supreme Court in *Kendall* v. *Winsor*, supra, further said that an inventor—

> may forfeit his rights as an inventor by a wilful or negligent postponement of his claims, or by an attempt to withhold the benefit of his improvement from the public until a similar or the same improvement should have been made and introduced by others.

Appellant contends that the evidence shows that appellee concealed and suppressed his invention from 1921 until June, 1924, and that, appellant having conceived, reduced to practice, and put into commercial use, the device, without any knowledge of appellee's invention, and at a time when appellee was concealing and suppressing it from the public, he is estopped under the cases last cited from asserting priority against appellant.

Appellee, on the other hand, contends that the case of *Mason* v. *Hepburn*, supra, does not apply to the facts in the case at bar, but that it is governed by the recent case of *McGrath* v. *Burke*, 12 F. (2d) 161, 56 App. D. C. 220, 352 O. G. 585, in which the court said:

> It is sought by counsel for appellant to bring Burke's case within the rule announced in *Mason* v. *Hepburn*, 13 App. D. C. 86, 84 O. G. 147. In that case, however, seven years elapsed between the reduction of the invention to practice by Mason and the filing of his application. During that period there had been a complete suppression of the invention. Mason in the meantime had applied for, and received, a patent upon a similar invention, and until the Hepburn patent came to his attention, his earlier invention seems to have passed from his mind. This court has refused to extend the rule of the Hepburn case, which is a strict one, to any case not coming clearly within it. *McBerty* v. *Cook*, 16 App. D. C. 133, 90 O. G. 2205.
>
> The case before us, we think is clearly distinguishable from the Hepburn case. In this case less than two years elapsed between the date of Burke's reduction to practice and the filing of his application in the Patent Office. This is not a case where an inventor, who has merely conceived an invention, is spurred into activity by the entry of a rival inventor into the field. He had reduced to practice, and before abandonment of the invention can be presumed there must appear a deliberate intention on the part of the inventor to surrender all claim to the invention.
>
> The present case sems to come clearly within the holding of this court in *Esty* v. *Newton*, 14 App. D. C. 50, 86 O. G. 799, and it was so held by the Board of Examiners in Chief and the Commissioner of Patents. There, as here, Newton delayed his application for two years, while he was engaged in efforts to make improvements in the subject-matter of the invention. During the period of delay, two patents were issued to him on the same subject-matter. On this point the court said:
>
> "Newton was engaged in constant efforts in improvements in fire extinguishers. He had an application for a patent for one that was issued March 31, 1891, and experimented with another that was patented July 12, 1892. This last he then, and also when he testified, considered better and more efficient than the one in controversy, and he would probably not have applied for a patent for the latter had he not seen Esty's device. Being advised that his last patent did not cover this one, he made his application in order to prevent the competition of Esty. This is no more than seems to have been often done by inventors under similar circumstances. By actual reduction to practice the right to the invention becomes perfect, and can only become subordinate to the claim of a subsequent bona fide inventor by some such course of conduct as that shown in *Mason* v. *Hepburn*, supra, and the cases therein cited."
>
> Here the assignee of Burke was relying upon the Cather application as a complete domination of the Burke invention, and when its attention was called to the McGrath device, and it became apparent that the Cather application did not furnish full protection, the Burke application was made in order to prevent the competition of McGrath.

Appellee contends that he was justified in thinking that the claims of his 1922 application, upon which patent was later issued, fully covered the invention here involved, and that he was excusable for not appreciating until he saw appellant's claim, that claims might be drawn for the combination of his contribution with that of a prior art, patent for which prior art was owned by his assignee, and that upon that theory the McGrath case is exactly in point and should dispose of this case. Appellant responds that the McGrath case does not apply to the case at bar, and asserts as follows:

> The *McGrath* v. *Burke* decision rests on the facts (1) that during the period of delay in filing the Burke application, the owner of the invention filed an intervening application for substantially the same invention with claims which dominated the invention of Burke, and (2) believed and was justified in believing that such claims covered the original invention of Burke.
>
> In the case at bar, the intervening application of Stoetzel filed in 1922, relied on by the Examiners-in-Chief to bring the case within *McGrath* v. *Burke*, not only did not claim or dominate the invention in issue, but did not even disclose it.

With regard to this contention of appellant, we do not construe the opinion in the McGrath case to be based upon facts as stated by appellant. The court made no finding as to whether the application of the owner of the invention in fact dominated the invention of Burke, but merely that such was Burke's contention and belief. The only purpose the court had in referring to the intervening application in that case and the belief of Burke that it covered his invention was to negative an intention upon his part to surrender all claim to the invention. So in the case at bar, if appellee's application of 1922 was believed by him to cover his particular invention, and that certain prior art used in combination with it was covered by a patent owned by his assignee, and appellee did not know that he would be entitled as well to a patent upon the combination, which he in fact had invented, this if true, like in the McGrath case, negatives any intention to conceal or suppress his invention.

Whether appellee did conceal or suppress his invention is a question of fact.

In *Kendall* v. *Winsor*, supra, the court said, upon this subject:

> The real interest of an inventor with respect to an assertion or surrender of his rights under the Constitution and laws of the United States, whether it be sought in his declarations or acts, or in forbearance or neglect to speak or act, is an inquiry or conclusion of *fact*, and peculiarly within the province of the jury, guided by legal evidence submitted to them at the trial.

It is therefore pertinent to inquire as to what the tribunals of the Patent Office have held upon this question. All of them agreed that the appellant had failed to sustain his burden of proving such concealment or suppression. The Examiner of Interferences recites the 1922 application of appellee, together with other facts, and concludes that abandonment had not been established. The Examiners in Chief, in arriving at the same conclusion, hold that the McGrath case is applicable to the case at bar, and that appellee's 1922 application negatives suppression and concealment of the invention by appellee. The Commissioner's decision inferentially approves the views of the Examiners in Chief regarding the applicability of the McGrath case to the 1922 application of appellee, but specifically places his award of priority upon other grounds. In view of our conclusion, it is unnecessary for us to decide whether the Commissioner erred as to the specific ground upon which he awarded priority to appellee, for our decision does not rest upon unanimity of the Patent Office tribunals upon this question of fact.

We are of the opinion that the McGrath case is applicable to the case at bar, rather than *Mason* v. *Hepburn*, and that appellee, as found by the Examiners in Chief, was not negligent in thinking that the claims of his 1922 application fully covered the invention for which he was entitled to patent, and that there was no intention upon his part or upon the part of his assignee to suppress or conceal his invention. The fact that he was entitled to a broader patent than he acquired, or than his specifications disclosed, has no bearing necessarily upon the question of suppression or concealment. That would be material if there was proof that he omitted some part of his invention from his disclosure for the purpose of concealing his entire invention, but there is no such evidence in this case.

There is another established fact that very strongly corroborates the conclusion that there was no suppression or concealment of appellee's invention. In July, 1924, appellee's assignee, the Atlas Company, freely gave to appellant's assignee, the Lamson Co., a sample of appellee's device. Not only was the Lamson Company a strong competitor of the Atlas Company, but they were in litigation with each other over the question of infringement of patents. It is hardly conceivable that this sample would have been furnished the Lamson Company without immediate application for a patent, had not the officers of the Atlas Company as well as appellee believed that appellee's 1922 application, together with prior patents owned by the Atlas Company, gave them full protection. Furthermore, it may be observed that when such sample device was given to the Lamson Company, neither appellee nor the Atlas Company, so far as the record discloses, knew anything about appellant or his invention, or of it being placed in commercial use in January, 1924, or at any other time.

The appellant having failed to prove suppression or concealment of appellee's invention at the time that appellant conceived, reduced to practice, and placed his invention in commercial use, or at any other time, and appellee being the first to conceive and reduce to practice the invention, priority must be awarded to him. The decision of the Commissioner is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

MEIGS *v.* MCINTOSH

Nos. 2,194 and 2,195. Decided February 21, 1930

[37 F. (2d) 984]

INTERFERENCE—PRIORITY—RIGHT TO MAKE CLAIMS.

The party McIntosh *Held* entitled to make the claims in issue and, no testimony having been taken, entitled to the award of priority as the first to file his application.

APPEAL from the Patent Office. Affirmed.

Mr. Percival H. Truman and *Mr. Otto R. Barnett* for Meigs.

Mr. Charles H. Howson and *Mr. Dexter N. Shaw* for McIntosh.

LENROOT, *J.:*

These are appeals in interference proceedings by the appellant, the junior party, from the decision of the Board of Appeals of the Patent Office awarding priority of invention to the senior party, the appellee. There are two appeals, one in interference, No. 51,620, and the other in interference No. 53,883. Inasmuch as some of the questions involved are common to both cases, we shall dispose of both of the appeals in one opinion.

Interference No. 51,620. Docket No. 2,194

In this interference, the issue is stated in eight counts, of which the following are illustrative:

1. The process of producing a product adapted for use as artificial resinous material which comprises reacting a sugar with a monohydroxy phenol whereby substantially water insoluble material is formed and heating the latter whereby it is hardened.

2. The process of producing reactive resinous material which comprises reacting a water soluble carbohydrate with a phenol whereby reactive resinous material is formed.

5. The process of producing a synthetic gum which comprises heating together a phenolic body and a water-soluble carbohydrate in the presence of a catalyst until there is produced an initial condensation product; and further heating the same until there results a hard, infusible insoluble resin.

Counts 3, 7, and 8 are to a product, or a composition of matter, formed by practicing the method recited in the other counts.

No testimony was taken by either party, and decision was entered by the Examiner of Interferences, awarding priority of invention to appellee, the senior party, following an order on the junior party to show cause in view of his failure to take testimony. Appellant took an appeal to the Board of Appeals, which affirmed the decision of the Examiner of Interferences.

An appeal was taken by the appellant from such decision to this court, and in such appeal two questions are presented to us for determination, both involving the right of appellee to make the claims of the counts.

The first contention is that appellee's specification is insufficient and ambiguous and does not comply with section 4888, Revised Statutes, 35 U. S. C. A. sec 33, and the second that appellee's disclosure does not warrant the grant to him of a patent on a synthetic resin made, specifically, from a sugar or a soluble carbohydrate, in distinction to carbohydrates as a class.

As stated in the decision of the Board of Appeals, the invention relates to the formation of synthetic resins. It involves the reaction of a phenolic body with a sugar, or with a water soluble carbohydrate. The process is generally the same as the prior art process with the substitution of the sugar, or water soluble carbohydrate, for the formaldehyde previously used.

The alleged insufficiency and ambiguity of appellee's specification lies in the following paragraph:

> In carrying out my invention I employ the ingredients in the proportion of 1 molecule of a phenolic body to one molecule of a carbo-hydrate such as dextrose, and in a typical case I dissolve one hundred grams of phenol and one hundred grams of dextrose in a suitable solvent such as one hundred grams water, together with a suitable catalytic agent, such as from ten to twenty drops of sulphuric acid in the case specified.

With regard to appellant's contention of insufficiency and ambiguity, the decision of the Board of Appeals says:

> Appellant urges that since the molecular weight of phenol is 94 and the molecular weight of dextrose anhydride is 180, and of dextrose hydrate is 198, the statement that the ingredients are employed in the proportion of one molecule of a phenolic body to one molecule of dextrose is inconsistent with the further statement of the use of 100 grams of each and that this inconsistency renders the description so ambiguous as not to comply with section 4888 R. S. We do not agree with this contention. It is believed that taking the statement as a whole, one skilled in the art would at once appreciate that 100 grams of phenol may be employed with 100 grams of dextrose, but that this proportion of parts involves an excess of phenol which is permissible in practicing the process. It is not urged that the process is inoperative when equal parts by weight are used. It can be performed by following the specific directions given in the McIntosh application, and, therefore, it is not necessary to resort to experimentation. We deem McIntosh has presented an operative disclosure which complies with the requirements of section 4888 R. S.

We find no error in this conclusion of the Board of Appeals. There is nothing to indicate that either proportion of ingredients would not secure a successful result.

In a motion by appellant to dissolve the interference, he made the same contention as here. and the Law Examiner, in denying the motion to dissolve the interference upon this ground, said:

> The objection of inoperativeness is one that should not be insisted upon except in a clear case, particularly where the application is involved in an interference in which the matter may be fully investigated, and in which testimony may be produced throwing light upon the subject (*Bowditch* v. *Todd*, 1902 C. D. 27). The McIntosh invention is certainly not so clearly inoperative as to justify a dissolution of the interferences at this stage of the proceeding. And the same is true with respect to the sufficiency of disclosure of the McIntosh invention. This question can be decided best in the light of the testimony of the skilled workers in this art.

Appellee states specifically that he employs the ingredients in the proportion of one molecule of a phenolic body to one molecule of a carbohydrate, such as dextrose, and then states that in a typical case he dissolves one hundred grams of phenol and one hundred grams of water, together with a suitable catalytic agent, such as from ten to twenty drops of sulphuric acid in the case specified. If the additional quantity of phenol named in the illustration of a typical case would have produced a different result than the proportions of one molecule of phenol to one molecule of dextrose, appellant had an opportunity to so demonstrate by the introduction of testimony. This he failed to do, and, it being a question of fact that is involved, and appellant being the junior party with the burden of establishing his own priority of invention by a preponderance of evidence, we concur with the conclusion of the Board of Appeals that appellee's disclosure complied with the requirement of section 4888 Revised Statutes.

With regard to the second contention of appellant, the Board of Appeals stated as follows:

> As to Meigs' second contention, he urges that McIntosh did not appreciate any distinction between the use of water soluble carbohydrate and the use of water insoluble carbohydrates, but that his specification is directed to the use of all carbohydrates. Since the counts are limited to the use of a water soluble carbohydrate, or of a sugar, he urges they are narrower than McIntosh's disclosure and that the limitation involves new matter. While in his specific example McIntosh specified dextrose, which is both a water soluble carbohydrate and a sugar, and his specification also states (page 2, lines 27–29) that the invention especially contemplates the use of hexoses, pentoses, tetroses and trioses, Meigs urges these specific references do not entitle McIntosh to make claims including the broader designation—a water soluble carbohydrate—, or—a sugar—, and that when the case is viewed in this aspect the counts are broader than McIntosh's invention. He calls attention to the fact that the Law Examiner held certain claims, which were not limited to the use of a water soluble carbohydrate, unpatentable in view of the German patent to Mauthner, No. 247,181, and states that the Law Examiner should either have allowed such claims or held the claims of the instant counts unpatentable to McIntosh since there is no patentable distinction.
>
> McIntosh disclosed the use of carbohydrates in general and stated that he especially contemplated the use of several which are as a matter of fact water soluble. He selected such a carbohydrate in giving his specific example. We believe he had a right to limit his claims to the latter class of carbohydrates, if forced so to do by the state of the prior art. The Law Examiner has held the distinction to be a patentable one and this ruling of his is not before us for review. Appellant may not under rule 130 urge that the claims are not patentable. This question should not be confused with the question of McIntosh's right to make the claims. We deem McIntosh entitled to make the claims of the counts.

Here again we find no error in the holding of the Board of Appeals, and therefore the decision of the Board awarding priority of invention to appellee, the senior party in this interference, is affirmed.

Interference No. 53,883. Docket No. 2,195

In this interference the Examiner of Interferences awarded priority of invention to appellee, which decision was upon appeal affirmed by the Board of Appeals. and from its decision this appeal is taken. The issue is stated in two counts, which read as follows:

1. The process of comprising heating together a water-soluble carbohydrate, a phenolic body and a catalyst until there is formed an initial condensation product; adding a hardening agent to said product; and heating the mixture to cause the condensation product to assume its insoluble, infusible form.

2. As a new composition of matter, a hard, infusible, insoluble synthetic gum comprising the final reaction product of a phenolic body, a water-soluble carbohydrate and a hardening agent.

As in the interference just discussed, neither party has taken testimony. Appellant urges here, as he did before the Board of Appeals in the Patent Office, that appellee has no right to make the claims of the counts. There is only one question involved in this appeal that is not common to the questions decided in the appeal upon inteference No. 51,620, and that is the additional limitation of the use of a hardening agent. Appellant contends that appellee's specification does not state the proportions of hardening agent with sufficient definiteness to meet the requirements of section 4888 Revised Statutes, 35 U. S. C. A. 33. With reference to this subject, appellee's specification reads as follows:

> If it be desired to accelerate the reaction above described, suitable proportions of hardening agents may be added prior to the subjection of the initial condensation product to heat and pressure or with the other ingredients at the beginning of the process, and as typical of these I may use hexamethyl-enetetramine, benzidene-acetone, sodium-acetone-bisulphite, etc.

Upon this point, the Board of Appeals held as follows:

> It is quite apparent from this statement that the use of a hardening agent is optional. If such agent be introduced the reaction will be accelerated. The amount used would depend upon the degree of acceleration desired. While McIntosh does not give the percentage of hardening agent used, he does state that suitable proportions may be added. It is deemed those skilled in the phenolic condensation art and familiar with the use in this art of the hardening agents specified by McIntosh would readily understand what amounts should be used. The decisions cited on pages 15 to 18 of McIntosh's brief, and especially *Seabury & Johnson* v. *Am Ende*, 152 U. S. 561; *Chadeloid Chemical Company* v. *Wilson Co.*, 220 F. R., 681, and *International Cork Co.* v. *New Process Cork Co.*, 6 F. R. (2d) 420, rather than the decisions relied upon by appellant, are deemed pertinent to the facts of the instant case. We accordingly hold the McIntosh specification an operative disclosure and that McIntosh is entitled to make the claims of the counts.

We concur in the views of the Board of Appeals thus expressed.

All other questions in this case are identical with those raised and decided in interference No. 51,620, and therefore the decision of the Board of Appeals is affirmed.

The decisions of the Board of Appeals in both appeals are affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

INTERNATIONAL SILVER COMPANY *v.* THE AMERICAN SILVER COMPANY

Nos. 2,227 and 2,228. Decided February 21, 1930

[37 F. (2d) 622]

1. TRADE-MARKS—SIMILARITY—"1857" AND "1847 ROGERS BROS."

The notations "1857" and "1847 Rogers Bros." *Held* confusingly similar as applied to silverware.

2. SAME—SAME—"A. S. Co. 1857" AND "1847 ROGERS BROS."

The notations "A. S. Co. 1857" and "1847 Rogers Bros." *Held* not confusingly similar as applied to silverware.

3. SAME—SAME—CHARACTER OF THE GOODS IS TO BE CONSIDERED.

"We may take judicial notice of the fact that the purchase of silverware, sterling or plated, involves a considerable degree of care and discrimination upon the part of the purchaser. The goods are valuable. They are not a matter of every day purchase upon the part of an individual, like food products or other products that require frequent replacement."

APPEAL from the Patent Office. Affirmed.

Messrs. Bartlett & Brownell, Mr. John P. Bartlett and *Mr. Chas. L. Sturtevant* for International Silver Co.

Messrs. Mitchell & Bechert, Mr. Robert C. Mitchell and *Mr. G. H. Mitchell* for The American Silver Co.

LENROOT, *J.:*

These cases come before us for review on appeals of both parties from a decision of the Commissioner of Patents in a trade-mark case.

The applicant, The American Silver Company, on July 13, 1925, filed an application for the registration of the mark "1857," and on January 9, 1926, filed a second application for the registration of the mark "A. S. Co. 1857," both marks being used upon silverware. International Silver Company filed oppositions to both applications, claiming use of the trade-mark "1847 Rogers Bros." upon the same kind of goods, and alleging damage if said applications were allowed. The two oppositions were consolidated by the Patent Office.

The Commissioner of Patents affirmed the decision of the Examiner of Trade-Mark Interferences, sustaining the opposition to the registration of applicant's mark "1857," adjudging the applicant not entitled to such registration, and dismissing the opposition to the registration of applicant's mark "A. S. Co 1857," and adjudging the applicant entitled to such registration.

The opposer appeals from that part of the decision relating to the mark "A. S. Co. 1857," and applicant appeals from that part of the decision relating to the mark "1857."

Both parties took testimony.

The Commissioner found that opposer, through its predecessor, has used its mark upon silverware continuously since as early as 1862, and has built up a very large business, with expenditures in advertising sometimes reaching half a million dollars per year; that its business has been very largely conducted on the advertising set forth in connection with its trade-mark "1847 Rogers Bros."; that op-

poser has never used the date "1847" alone or dissociated with the words "Rogers Bros." He further found that applicant has used its mark "A. S. Co. 1857," enclosed in lozenge shaped panels, since about June 1, 1925, but has used the date "1857" since about November 1, 1894; that the applicant took over the silver plating business of another company which began making and selling silver plated tableware in 1857, when such firm took over the business of still another company that had succumbed to the effects of the panic of 1857; that the date "1857" had long been used by applicant to indicate when the business to which it had succeeded had begun; that the date "1857" alone does not appear ever to have been used by the applicant, but it was used in connection with the words "Welch-Atkins XXX" as early as November 1, 1894, and such trade-mark was registered in 1895.

The Commissioner, after finding in substance the foregoing, said:

From the foregoing, it is clear that neither party has ever used the date alone but only in connection with other distinguishing words or letters. These dates are important dates in connection with the respective histories of the establishment of the opposer and applicant companies. Their similarity as to three figures seems accidental. It is believed, even if the applicant company were otherwise entitled to registration of the numbers comprising the date, which alone it has never used as a trade-mark, yet it should not be permitted registration in view of these numbers being so deceptively similar to the numbers indicating the date in opposer's trade-mark. It is believed the conclusion of the Examiner of Interferences sustaining the opposition as to this application of the applicant company is sound.

Regarding the application No. 225,691, wherein registration of the combination mark "A. S. Co. 1857" arranged in two lozenge shaped panels is sought, it appears this mark is not similar to that of the opposer. While there is some similarity in connection with the respective dates included in the two marks, yet the distinguishing features are believed to be sufficient to prevent confusion or mistake in the mind of the public. It is evident that the applicant has not sought to adopt a mark similar to that of the opposer but in adopting the combination mark including the date when its business may be said to have been started, it has merely adopted a date having some numbers similar to those appearing in the date included in the opposer's mark.

We are of the opinion that the testimony and record support the conclusions of the Commissioner.

[1] The testimony shows that purchasers of the silverware bearing the trade-mark "1847 Rogers Bros." very frequently order it by reference to the numerals "1847" alone. If the numerals "1857" alone were used by applicant, purchasers might be misled, believing that they were purchasing goods manufactured by the owner of the trade-mark "1847 Rogers Bros." While it is not entirely clear to us that confusion would be likely to result from the use by applicant of the numerals "1857" as a trade-mark, we think the doubt should be resolved in favor of the opposer who is the prior user in good faith. *Wayne Co. Preserving Company* v. *Burt Olney Canning Company*, 32 App. D. C. 279; 140 O. G. 1003.

[2] As to the application for the registration of the combination mark "A. S. Co. 1857," we believe that the use of the letters "A. S. Co." in combination with the numerals "1857" sufficiently distinguishes the goods bearing said combination from goods bearing the trade-mark "1847 Rogers Bros.," so that confusion or mistake in the mind of the public is not likely to result therefrom.

We may take judicial notice of the fact that the purchase of silverware, sterling or plated, involves a considerable degree of care and discrimination upon the part of the purchaser. The goods are valuable. They are not a matter of every-day purchase upon the part of an individual, like food products or other products that require frequent replacement. A person might purchase silverware bearing the mark "1857" alone in the belief that he was buying goods manufactured by the owner of the mark "1847 Rogers Bros.," but we do not think this confusion is likely to occur with the mark "A. S. Co. 1857."

Were the goods upon which the marks are used of a character involving less discrimination and care in their purchase, we might come to a different conclusion.

The decision of the Commissioner is affirmed.

Affirmed.

Patent Suits

[Notices under sec. 4921, R. S., as amended Feb. 18, 1922]

1,115,950, R. H. Marchant, Calculating machine; 1,643,710, C. M. Friden, Calculating machine, D. C., N. D. Calif. (San Francisco), Doc. E 2002–S, *Marchant Calculating Machine Co. et al.* v. *Monroe Calculating Machine Co., Inc.* Claims 1, 2, and 3 of 1,115,950 and claims 1 to 6, inclusive, 9, 10, 11, 13, 19, 23 to 28, inclusive, 48 to 52, inclusive, 54, 55, 59, 62, 63, 64, 65, 67, 68, 69, 71, 73, 74, 75, 77, and 78 of 1,643,710 held valid and infringed Feb. 15, 1930.

1,131,161, C. F. Root, Safety device for punching machines; 1,196,721, same, Safety device, D. C., S. D. N. Y., Doc. E 42/94, *C. F. Root et al.* v. *S. Cupples Envelope Co. et al.* Consent decree for plaintiff Mar. 7, 1930.

1,193,093, B. Weinberger, Garment-pressing machine; 1,326,982, J. B. Spencer, Machine for pressing garments, appeal filed Feb. 27, 1930, C. C. A., 3d Cir., Doc. 4375, *U. S. Hoffman Machinery Corp.* v. *Pantex Pressing Machine, Inc.*

1,196,721. (See 1,131,161.)

1,277,431, R. Kuehnrich, Steel, filed Mar. 21, 1930, D. C., E. D. Wis. (Milwaukee), Doc. 2889, *Darwin & Milner, Inc.*, v. *Kinite Corp. et al.*

1,304,979, J. Hirshstein, Coupling; 1,348,945, same, Double-drainage roof drain and sediment cup, filed Mar. 3, 1930, D. C. Oreg. (Portland), Doc. E 9093, *Josam Mfg. Co.* v. *Portland Iron Works et al.*

1,320,900, E. I. McKesson, Respirator; Re. 15,873, J. A. Heidbrink, Anæsthetic apparatus, D. C., N. D. Ohio, (W. Div.), Doc. E 1008, *J. A. Heidbrink* v. *E. I. McKesson.* Dismissed for lack of jurisdiction (notice Mar. 15, 1930).

1,326,982. (See 1,193,093.) 1,348,945. (See 1,304,979.)

1,388,434, G. V. Johnston, Method and apparatus for butt-welding thin-gage tubing; 1,435,306, same, Butt-welded thin-walled tubing; 1,435,751, F. S. Stearns, Electric welding apparatus; 1,722,711, F. L. Sessions, Tube-welding machine, filed Mar. 11, 1930, D. C., E. D. Mich., (S. Div.), Doc. 4018, *Steel & Tubes, Inc.*, v. *General Motors Corp. et al.*

1,420,072. (See 1,422,075.)

1,422,075, L. V. Aronson, Sparking toy; 1,420,072, same, Mechanical toy; 1,462,317, same, Whirligig; 1,558,450, same, Sparkler, filed Mar. 7, 1930, D. C., S. D. N. Y., Doc. E 52/154, *Art Metal Works, Inc.*, v. *S. H. Kress & Co., Inc.*

1,435,306. (See 1,388,434.) 1,435,751. (See 1,388,434.)

1,456,528, H. D. Arnold, Electric discharge device; 1,459,412, A. M. Nicolson, Thermionic translating device, D. C., E. D. N. Y., Doc. 4709, *Radio Corp. of America et al.* v. *G. J. Seedman Co., Inc.* Consent decree for defendant Mar. 4, 1930.

1,459,412. (See 1,456,528.) 1,462,317. (See 1,422,075.)

1,468,595, 1,532,107, W. Ferris, Broaching machine, filed Feb. 27, 1930, D. C., E. D. Mich., (S. Div.), Doc. 4009, *The Oilgear Co.* v. *American Broach & Machine Co.*

1,493,283, T. G. Robinson, Process and apparatus for making button blanks from pearl stock, filed Mar. 21, 1930, D. C., S. D. N. Y., Doc. E 52/279, *T. G. Robinson* v. *L. H. Hirsch et al.*

1,532,107. (See 1,468,595.) 1,552,070. (See Re. 17,434.)

1,558,450. (See 1,422,075.)

1,564,909, T. C. Steiner, Glass-feeding mechanism; 1,573,742, K. E. Peiler, Feeding molten glass, C. C. A., 8th Cir. (St. Louis), Doc. 8658, *Hartford Empire Co.* v. *Obear-Nester Glass Co.* Decree affirmed Feb. 27, 1930. Doc. 8659, *Obear-Nester Glass Co.* v. *Hartford-Empire Co.* Decree as above.

1,573,742. (See 1,564,909.)

1,643,710. (See 1,115,950.) 1,654,504. (See Re. 17,434.)

1,656,128, F. F. Taylor, Toy vehicle; Des. 76,829, same, Child's vehicle; 1,661,411, P. Crosley, jr., Baby walker, filed Jan. 22, 1930, D. C., E. D. N. Y., Doc. 4738, *The F. F. Taylor Co.* v. *Man-A-Car Corp.*

1,661,411. (See 1,656,128.)

1,668,490, O. S. Caesar, Heating apparatus for automotive vehicles, D. C. Minn., 4th Div., Doc. E 1037, *Tropic-Aire, Inc.*, v. *P. H. Jumper et al.* Dismissed Mar. 4, 1930.

1,722,711. (See 1,388,434.) 1,732,090. (See Re. 17,434.)

1,732,091. (See Re. 17,434.) 1,732,092. (See Re. 17,434.)

1,732,093. (See Re. 17,434.) 1,732,094. (See Re. 17,434.)

Re. 15,873. (See 1,320,900.)

Re. 16,665, E. A. Arndt, Tire and luggage carrier, filed Mar. 3, 1930, D. C., S. D. Iowa (Des Moines), Doc. E 4441, *Kart-Keen Mfg. Co., Inc., et al.* v. *Herring Wissler Co.*

Re. 16,755, L. Showers, Process of making sheet glass, filed Feb. 26, 1930, D. C. Md., Doc. E 1655, *Pittsburgh Plate Glass Co.* v. *National Plate Glass Co.*

Re. 17,131, O. S. Caesar, Heating apparatus for automotive vehicles, appeal filed Mar. 1, 1930, C. C. A., 8th Cir. (St. Louis), Doc. 8849, *Tropic-Aire, Inc.*, v. *Sears, Roebuck & Co.*

Re. 17,434, 1,654,504, 1,732,090, 1,732,092, 1,732,093, 1,732,094, J. G. King, Refrigerating apparatus; 1,732,091, same, Cooling unit for mechanical refrigerator; 1,552,070, C. L. McCuen, Refrigerating apparatus, filed Mar. 11, 1930, D. C., W. D. N. Y., Doc. 198, *Frigidaire Corp.* v. *Fedders Mfg. Co.*

Disclaimers

Reissue No. 16,422.—*Otis Johnson*, San Diego, Calif. ADHESIVE. Patent reissued September 14, 1926. Disclaimer filed May 23, 1930, by the assignee, *I. F. Laucks, Inc.*

Hereby enters this disclaimer to such interpretation or construction of said specification or claims as follows:

Your petitioner disclaims any interpretation or construction of the specification or claims of the said Johnson reissue patent which brings within the scope or import of the said specification or claims *chemically isolated or chemically extracted soya bean protein.*

1,281,262.—*Felix O. Andres*, San Francisco, Calif. PROCESS OF COATING WITH PRECIOUS METAL. Patent dated October 15, 1918. Disclaimer filed May 23, 1930, by the patentee.

Hereby enters this disclaimer of so much of claims 1 and 2 of said specification as is in excess of the following:

1. The method of gold plating a transparent article, the steps of which comprise in applying to the surface to be treated a body to which gold will adhere, then applying by flowing thereover and without the application of heat, a solution containing chlorid of gold, potassium carbonate and sugar diluted as a substance effective to control or regulate the chemical reactions, permitting the gold to settle in a film coating on the treated surface, removing the excess of the solution by permitting the same to flow therefrom on the tipping of the article and then applying to the film of gold a protective toning backing of silver solution having nitrate of copper intermixed therewith.

2. The method of gold plating the surface of a transparent article, the steps of which comprise in treating the surface thereof to free the same of foreign substance, then applying to the surface a metallic deposit to which gold will adhere, applying to said base by pouring thereover and without the application of heat either to the article or to the solution an alkaline solution sufficiently diluted to control or regulate the chemical reaction with chlorid of gold, permitting the gold to deposit thereover as a film coating, removing the excess of the solution by tipping the article to permit the same to flow therefrom, then toning the color of said film coating by applying thereto a solution containing nitrate of copper.

1,327,946.—*Joseph Leopold Coyle*, Vancouver, British Columbia, Canada. EGG-BOX. Patent dated January 13, 1920. Disclaimer filed May 29, 1930, by the assignee by mesne assignments, *Coyle Safety Carton Company.*

Therefore, disclaims from the scope of claim 5 of said patent, all egg boxes, except those in which the body is collapsible, and in which the body member extensions extend upon opposite sides of the longitudinal center of the box in the form of adjacent troughs having converging side walls so spaced that eggs contact therewith, and are by such contact suspended above the bottom plane of the box, and in which the foldable partitions lie in part within and opposite unslotted parts of the side walls of the troughs whereby to prevent collapse by lateral pressure, and in which the rests formed by the bases of the partitions lie in part outside of unslotted parts of the side walls of the trough to support the same.

1,480,449.—*William G. Kendall*, Newark, N. J. LIP-STICK HOLDER. Patent dated January 8, 1924. Disclaimer filed May 23, 1930, by the assignee by mesne assignments, *Parfumerie Rigaud, Inc.*, and ratified by the patentee.

Hereby enters a disclaimer in and to said claim 1 as follows:

It herewith disclaims from the scope of claim 1 of said patent any device of the character described in which the tubular member having the straight slot does not project beyond the end of the outer member which has the spiral slot, and in which said tubular member (having the straight slot) does not have a lateral enlarged portion adjacent the inner end of said outer member (having the spiral slot), said enlargement operating to limit the longitudinal movement of said outer member (having the spiral slot) with respect to said tubular member (having the straight slot), when the outer member and the tubular member are assembled.

1,689,732.—*Irving F. Laucks* and *Glenn Davidson*, Seattle, Wash. VEGETABLE GLUE AND METHOD OF MAKING SAME. Patent dated October 30, 1928. Disclaimer filed May 23, 1930, by the assignee, *I. F. Laucks, Inc.*

Hereby enters this disclaimer to that part of the said specification as is herein below specifically set forth and to any interpretation of the claims which possibly might

be interpreted to include any of such disclaimed matter:

Page 1, line 36, cancel "vegetable proteins or."

Page 1, line 72, cancel "or to vegetable protein derived from this source."

Page 2, line 13, cancel "and ammonia." Ammonia is not an equivalent of caustic soda as such and since caustic soda as such is retained as the specific invention of the application Serial Number 671,381, the reference to ammonia was incorrectly allowed to remain in the said application.

Page 2, lines 14–17, cancel "other equivalents of caustic soda are salts of soda (or potash) with weak acids—e. g., sodium phosphate, sodium borate, and the like."

Page 2, line 18, cancel "magnesia."

Page 2, line 51, cancel "in the same way as the caustic soda and also."

The above explanation as set forth relative to ammonia is likewise applicable to the other parts deleted beginning with page 2, lines 14–17 and ending line 51. It was an error to allow the above deleted agents to remain in the specification from which the divisional applications were made, as equivalents of caustic soda as such.

Your petitioner disclaims any interpretation or construction of the specification or claims of the said patent which brings within the scope or import of the specification or claims of said patent *chemically isolated or chemically extracted vegetable protein.*

1,757,132.—*William J. Miller*, Swissvale, Pa. MACHINE FOR USE IN THE MANUFACTURE OF POTTERY WARE. Patent dated May 6, 1930. Disclaimer filed May 20, 1930, by the patentee.

Hereby enters this disclaimer to the paragraph set forth on page 4 of the patent as issued, between lines 84 and 89, and which read as follows:

"My machine may also be employed in analogous arts other than those appertaining to the manufacture of articles from plastic materials."

Interference Notice

U. S. PATENT OFFICE, *Washington, May 13, 1930.*

Lewis Newman, his assigns or legal representatives, take notice:

An interference having been declared by this Office between the application for patent of Charles Berg, 501 Fifth Ave., New York, N. Y., and Patent No. 1,679,050, granted July 31, 1928, to Lewis Newman, 10118 Adams Ave., and 1064 East 97th St. *or* 1748 East 22nd St., Cleveland, Ohio, and a notice of such declaration sent by registered mail to said Newman at said addresses having been returned by the post office undeliverable, notice is hereby given that unless said Newman, his assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the interference will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

Notices of Cancellation

U. S. PATENT OFFICE, *Washington, May 9, 1930.*

The San Aprove Company, its assigns or legal representatives, take notice:

A cancellation proceeding having been instituted by this Office upon the application of The American Products Company, of 3265 Colerain Avenue, Cincinnati, Ohio, to effect the cancellation of the trade-mark registration of The San Aprove Company, of 831 Lafayette Boulevard, Detroit, Mich. No. 156,411, dated June 20, 1922, and the notice of such proceeding sent by registered mail to The San Aprove Company at the said address having been returned by the post office as undeliverable, notice is hereby given that unless The San Aprove Company, its assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the cancellation will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

U. S. PATENT OFFICE, *Washington, May 22, 1930.*

Charles Green, his assigns or legal representatives, take notice:

A cancellation proceeding having been instituted by this Office upon the application of The American Products Company, of 3265 Colerain Avenue, Cincinnati, Ohio, to effect the cancellation of the trade-mark registration of Charles Green, of 78 Walker Street, New York, N. Y., No. 115,447, dated February 13, 1917, and the notice of such proceeding sent by registered mail to the said Green at the said address having been returned by the post-office as undeliverable, notice is hereby given that unless said Green, his assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the cancellation will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

U. S. PATENT OFFICE, *Washington, May 26, 1930.*

Rolland Ellis Thompson, his assigns or legal representatives, take notice:

A cancellation proceeding having been instituted by this Office upon the application of the Clicquot Club Company, of Millis, Mass., to effect the cancellation of the trade-mark registration of Rolland Ellis Thompson, of 505 D Street, N. W., Washington, D. C., No. 108,315, dated January 25, 1916, and the notice of such proceeding sent by registered mail to the said Thompson at the said address having been returned by the post office as undeliverable, notice is hereby given that unless said Thompson, his assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the cancellation will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

U. S. PATENT OFFICE, *Washington, May 26, 1930.*

Robert B. Karoff, his assigns or legal representatives, take notice:

A cancellation proceeding having been instituted by this Office upon the application of The American Products Company, of 3265 Colerain Avenue, Cincinnati, Ohio, to effect the cancellation of the trade-mark registration of Robert B. Karoff, of 45 East 17th Street, New York, N. Y., No. 222,205, dated December 28, 1926, and the notice of such proceeding sent by registered mail to the said Karoff at the said address having been returned by the post office as undeliverable, notice is hereby given that unless said Karoff, his assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the cancellation will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

TRADE-MARKS

OFFICIAL GAZETTE, JUNE 10, 1930

[VOL. 395. No. 2]

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this publication.

Marks applied for "under the ten-year proviso" are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 1 of said act, a fee of ten dollars must accompany each notice of opposition.

CLASS 1

Raw or Partly-Prepared Materials

Ser. No. 291,143. RELIABLE COAL & MINING CO., Chicago, Peoria, and Springfield, Ill., Moberly and Kansas City, Mo., and Omaha, Nebr. Filed Oct. 16, 1929.



The drawing is lined to indicate the color yellow.
For Coal.
Claim use since June 20, 1929.

Ser. No. 291,145. RELIABLE COAL & MINING CO., Chicago, Peoria, and Springfield, Ill., Moberly and Kansas City, Mo., and Omaha, Nebr. Filed Oct. 16, 1929.



The drawing is lined to indicate the color light yellow or ivory.
For Coal.
Claims use since June 1, 1929.

Ser. No. 291,146. RELIABLE COAL & MINING CO., Chicago, Peoria, and Springfield, Ill., Moberly and Kansas City, Mo., and Omaha, Nebr. Filed Oct. 16, 1929.



The words "Reliable High Splint" are disclaimed apart from the mark shown. The drawing is lined to indicate the color red.
For Coal.
Claims use since June 15, 1929.

Ser. No. 295,993. WILLIAM BARTELS COMPANY, New York, N. Y. Filed Feb. 14, 1930.

BLUE RIBBON

For Live Canary Birds.
Claims use since Oct. 25, 1928.

Ser. No. 296,269. ROBERT W. FAIR, doing business as Fair's Beauty Sales Agency, Tyler, Tex. Filed Feb. 20, 1930.

GOLDEN BEAUTY

For Trees—Namely, Peach Trees.
Claims use since Jan. 1, 1923.

Ser. No. 296,270. ROBERT W. FAIR, doing business as Fair's Beauty Sales Agency, Tyler, Tex. Filed Feb. 20, 1930.

FAIR'S BEAUTY

For Trees—Namely, Peach Trees.
Claims use since Jan. 1, 1924.

Ser. No. 297,024. MEADOR AND YOUNG, INCORPORATED, Nashville, Tenn. Filed Mar. 8, 1930.

Supreme Ashless

The exclusive use of the word "Ashless" is disclaimed except in use with the mark as shown.
For Coal.
Claims use since April, 1926.

Ser. No. 297,260. THE MERCHANT TRADING COMPANY, LIMITED, London, England. Filed Mar. 13, 1930.

BAGASITE

For Compositions Made from Vegetable Fibres and Pulps and Sold in Sheets, Slabs, Rods, Tubes, for Industrial Purposes.
Claims use since Apr. 17, 1929.

Ser. No. 297,261. THE MERCHANT TRADING COMPANY LIMITED, London, England. Filed Mar. 13, 1930.

METCOSITE

For Compositions Made from Vegetable Fibres and Pulps and Sold in Sheets, Slabs, Rods, Tubes, for Industrial Purposes.
Claims use since Aug. 15, 1929.

Ser. No. 298,594. WALTER C. SMITH MINERAL PRODUCTS, INC., New York, N. Y. Filed Apr. 9, 1930.

PLAYLAND HEALTH SAND

The words "Health" and "Sand" are disclaimed apart from the mark shown on the drawing.
For Prepared and Sterilized Sand.
Claims use since Mar. 3, 1930.

Ser. No. 299,547. BROWN COMPANY, Portland, Me., and Berlin, N. H. Filed Apr. 28, 1930.

CELLATE

For Cellulose Pulps.
Claims use since on or about May 21, 1929.

Ser. No. 299,766. COMMONWEALTHS COLLIERIES, INCORPORATED, Cincinnati, Ohio. Filed May 1, 1930.

DEFENDER

For Coal.
Claims use since Mar. 6, 1930.

CLASS 3

Baggage, Animal Equipments, Portfolios, and Pocketbooks

Ser. No. 295,864. PHOENIX MANUFACTURING COMPANY, Joliet, Ill. Filed Feb. 10, 1930.

BULL DOG

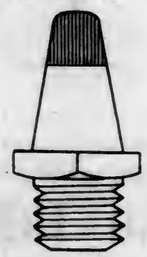
For Calks for Horse and Mule Shoes.
Claims use since May 1, 1908.

Ser. No. 296,145. PHOENIX MANUFACTURING COMPANY, Joliet, Ill. Filed Feb. 17, 1930.

PHOENIX

For Metal Horse and Mule Shoes, Rubber Pads for Horse and Mule Shoes, Rubber Horse and Mule Shoes, and Calks for Horse and Mule Shoes.
Claims use since 1884.

Ser. No. 296,196. PHOENIX MANUFACTURING COMPANY, Joliet, Ill. Filed Feb. 18, 1930.



The trade-mark consists of a contrasting zone of red color applied to the tip portions only of the calks. The representation of a calk in the drawing is disclaimed.
For Calks for Horse and Mule Shoes.
Claims use since 1904.

Ser. No. 297,170. E. BEHRMAN INC., New York, N. Y. Filed Mar. 12, 1930.

STARFISH
MOROCCO

The word "Morocco" is disclaimed apart from the mark as shown in the drawing.
For Hand Bags, Pocketbooks, Purses, Suitcases, Portfolios, Pocket Cardcases, Wallets, Satchels, Valises.
Claims use since Jan. 15, 1930.

CLASS 4

Abrasive, Detergent, and Polishing Materials

Ser. No. 297,290. THE AMERICAN FLOOR SURFACING MACHINE COMPANY, Toledo, Ohio. Filed Mar. 14, 1930.

AMERICAN FLOOR PAPER

The expression "American Floor Paper" is disclaimed apart from the other features of the mark shown in the drawing.
For Abrasives Coated on Cloth and Paper or Both.
Claims use since Feb. 19, 1930.

Ser. No. 298,152. F. L. & J. C. CODMAN COMPANY, South Boston, Mass. Filed Mar. 31, 1930.

CHAMPION

For Buffing Wheels.
Claims use since February, 1894.

Ser. No. 298,291. STEEL SHOT & GRIT CO., Amesbury, Mass., and Pittsburgh, Pa. Filed Apr. 2, 1930.

STEEL SHOT & GRIT COMPANY
SAMSON STEEL SHOT

Applicant disclaims any attempt to cover by this registration the words "Steel Shot" except in the precise relation and association in which the same appear herein.
For Abrasive Steel Shot.
Claims use since 1921.

Ser. No. 298,354. PARK & TILFORD, New York, N. Y. Filed Apr. 3, 1930.

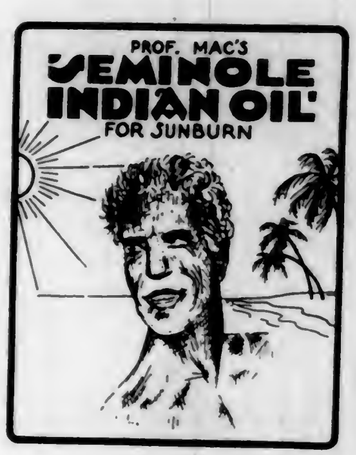
Tintex

For Dry Cleaner.
Claims use since Jan. 27, 1930.

CLASS 6

Chemicals, Medicines, and Pharmaceutical Preparations

Ser. No. 284,150. CHARLES M. MCCARTHY, Miami Beach, Fla. Filed May 16, 1929.



The portrait appearing on the drawing is that of the applicant. No claim is made herein to the words "Oil for Sunburn" apart from the mark shown in the drawing.

For Oil Especially Used for Sunburn.

Claims use since 1922.

Ser. No. 285,229. SOCIÉTÉ DES USINES CHIMIQUES RHONE-POULENC, Paris, France. Filed June 7, 1929.



For Anesthetic Products, Antipyretic Products, Salicylates, and Gualacols.

Claims use since Aug. 10, 1928.

Ser. No. 285,231. SOCIÉTÉ DES USINES CHIMIQUES RHONE-POULENC, Paris, France. Filed June 7, 1929.



For Perfumes, Disinfectant Materials, Antipyretic Products, Salicylic Derivatives, Anesthetics, and Antiseptics.

Claims use since June 1, 1928.

Ser. No. 285,233. SOCIÉTÉ DES USINES CHIMIQUES RHONE-POULENC, Paris, France. Filed June 7, 1929.

FLYING HORSES

For Anesthetic Products, Antipyretic Products, Salicylates, and Gualacols.

Claims use since Aug. 10, 1928.

Ser. No. 286,598. CLARENCE A. SCHNEIDER, doing business as Schneider's Laboratories, Detroit, Mich. Filed July 3, 1929.

MEDNOL

For Mouth Wash.

Claims use since May 14, 1929.

Ser. No. 287,307. MCKESSON & ROBBINS, INCORPORATED, Bridgeport, Conn. Filed July 18, 1929.

OCTOL

For Mouth Wash.

Claims use since Mar. 2, 1929.

Ser. No. 287,932. MONTICELLO DRUG COMPANY, Jacksonville, Fla. Filed July 31, 1929.



For Medicines for Chills and Fever, La Grippe, Malaria, Diabetes, Liver, Kidney and Bladder Troubles, Bright's Disease, Dropsy, and Blood Purifier.

Claims use since Sept. 1, 1901.

Ser. No. 291,026. JEANETTE SAMILJAN, Brooklyn, N. Y. Filed Oct. 12, 1929.



Applicant herewith disclaims the descriptive word "Certified" and the geographical names or terms "New York" and "Paris."

For Face Powders, Perfumes, Shampoos, Lip Sticks, Hand Lotions, Face Creams, Nail Polish, Hair Tonics.

Claims use since Aug. 15, 1928.

Ser. No. 294,457. WARWICK CHEMICAL COMPANY, West Warwick, R. I. Filed Jan. 4, 1930.

KIEROLE

For Assistant in the Boiling-Off of Cotton and Cotton Goods—a Compound of Vegetable Oils of Pasty Consistency for the Finishing of Textile Goods.

Claims use since November, 1928.

Ser. No. 294,458. WARWICK CHEMICAL COMPANY, West Warwick, R. I. Filed Jan. 4, 1930.

LANOLE

For Scouring Assistant Used in the Scouring of Wool and Wool Fabrics—a Compound of Vegetable Oils of Pasty Consistency for the Finishing of Textile Goods.

Claims use since November, 1928.

Ser. No. 294,459. WARWICK CHEMICAL COMPANY, West Warwick, R. I. Filed Jan. 4, 1930.

DYEROLE

For Dyeing Assistant Used in the Dyeing of Textile Fibres and Fabrics—a Liquid Solvent Compound for the Finishing of Textile Goods.

Claims use since November, 1928.

Ser. No. 294,460. WARWICK CHEMICAL COMPANY, West Warwick, R. I. Filed Jan. 4, 1930.

APPRETOLE

For Water-Softening Product Used in the Washing, Dyeing, and Printing of Textile Fibres and Fabrics—a Compound of Vegetable Oils of Pasty Consistency for the Finishing of Textile Goods.

Claims use since November, 1928.

Ser. No. 295,014. BYK-GULDENWERKE CHEMISCHE FABRIK AKTIENGESELLSCHAFT, Berlin, Germany. Filed Jan. 21, 1930.

Euphyllin

For Diureticum, Cardiacum, and Asthmaticum—Namely, Medicinal Preparations for Indication of Angina Pectoris, Suppression of Urine, Bronchial Asthma, Cardiac Asthma, Hemorrhage, Coronary Sclerosis, Eclampsia, Degeneration of the Heart Muscle, Cardiac Œdema and Renal Œdema; and Preparation for Preventing the Coagulation of Blood.

Claims use since October, 1907.

Ser. No. 295,137. EDWARD H. SCHWERTFEGER, doing business as Badger State Sales Co., Milwaukee, Wis. Filed Jan. 23, 1930.

BADGER

For Preparation for Use as a Water Softener and Cleanser.

Claims use since Dec. 18, 1929.

Ser. No. 296,191. SUMPTER WESLEY HUDSON, East Jamestown, Kannapolis, N. C. Filed Feb. 18, 1930.



For Compounds for Treating Rheumatism and Ailments of the Stomach and Kidneys; a Salve for Treating Rheumatism, Swollen Joints, and Soreness; a Salve for Eczema; a Salve for Treating Cuts, Bruises, and Running Sores, and a Cough Syrup.

Claims use since Dec. 7, 1929.

Ser. No. 296,825. RAFFAELE RUFRANO, Brooklyn, N. Y. Filed Mar. 4, 1930.



The words "The Hair Tonic without Alcohol" are disclaimed apart from the other features of the mark shown in the drawing.

For Hair Tonic.

Claims use since Feb. 14, 1930.

Ser. No. 296,924. G. S. ROBINS & COMPANY, St. Louis, Mo. Filed Mar. 6, 1930.

SUPER-CHLOR

No claim is made to the exclusive right to the use of the word "Chlor" except in the relation shown.

For Deodorizing and Disinfecting Preparation.

Claims use since May 19, 1928.

Ser. No. 297,236. CERTIFIED PERSONAL NEEDS, INC., New York, N. Y. Filed Mar. 13, 1930.

C.—P.

For Toilet Preparations, Cosmetics, and Dentifrices—Namely, Lotions, Disinfectants, Bicarbonate of Soda, Perfumery, Cleansing Cream, Rubbing Alcohol, Rouge, Antiseptic, Bay Rum, Deodorizers, Toilet Powder, Mouth Wash, Pomades, Cold Cream, Face Powders, Massage Cream, Shampoo Preparations.

Claims use since Feb. 27, 1930.

Ser. No. 297,833. LEONARD JAMES CO., San Saba, Tex. Filed Mar. 18, 1930.

LEONARD JAMES.

POULTRA-LAX

LAXATIVE MEDICINE

FOR POULTRY.

Applicant hereby disclaims the words "Laxative Medicine for Poultry" apart from the mark shown.

For Laxative Medicine for Poultry.

Claims use since Mar. 1, 1929.

Ser. No. 297,941. STANCO INCORPORATED, Wilmington, Del., and New York, N. Y. Filed Mar. 26, 1930.



No claim is made to the representation of a carton or bottle per se, and no claim is made to the printed language other than the words "Nujol" and "Stanco Incorporated." The drawing is lined for shading purposes. Applicant is the owner of registered Trade-Mark No. 236,888.

For White Mineral Oil, for Chemical, Medicinal, and Pharmaceutical Purposes.

Claims use since Jan. 18, 1930.

Ser. No. 298,258. E. R. SQUIBB & SONS, New York, N. Y. Filed Apr. 1, 1930.

NEO-BISMUTH

No claim is made to the word "Bismuth" apart from the mark shown on the drawing.

For Colloidal Bismuth Solution for Hypodermic Use.

Claims use since Feb. 21, 1930.

Ser. No. 298,301. ALEXANDER ALBERT, Brooklyn, N. Y. Filed Apr. 3, 1930.

Muriel Ann

For Lip Stick, Liquid, Cake, and Paste Rouges; Face Powder, Dusting Powder, Talcum Powder, Toilet Powder, Cleansing Cream, Face Cream, Vanishing Cream, Almond and Benzoin Cream, Pore-Cleansing Cream, Liquid Skin Cleanser, Astringent Lotions, Skin Lotion, Eyebrow Pencil, Eye Shadow Paste, Bath Salts, Acne Cream, Brilliantine, Hair Tonic, Bay Rum, Shampoos, a Preparation for Treating Dandruff, Mascara; Liquid, Powder, and Paste Nail Polish; Liquid Nail Polish, Liquid Cuticle Remover, and Sachet.

Claims use since August, 1924.

Ser. No. 298,318. MORRIS I. FRANKLIN, Turnerville, La. Filed Apr. 3, 1930.

Dr. M. I. Franklin.

The trade-mark consists of the facsimile of applicant's signature.

For an Especially-Prepared Olive Oil for Bowel Lubrication and Massage Emollient.

Claims use since Nov. 25, 1929.

Ser. No. 298,411. PARFUMERIE ROGER ET GALLET, SOCIÉTÉ ANONYME, Paris, France. Filed Apr. 4, 1930.

POURPRE D'ORIENT

For Perfumery—Namely, Extracts, Toilet Waters, and Toilet Preparations for Scenting, Beautifying, and Preserving the Skin and Hair.

Claims use since Oct. 3, 1929.

CARNEGIE LIBRARY OF ATLANTA

Ser. No. 298,496. MRS. HENRY HAMMEL, Reading, Pa. Filed Apr. 7, 1930.

Mrs Hammel's

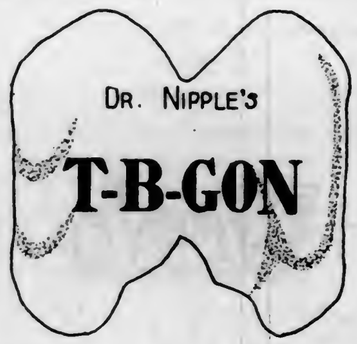


Applicant disclaims the name "Mrs. Hammel's" apart from the mark shown in the drawing.

For Douche Powder.

Claims use since about Jan. 1, 1930.

Ser. No. 298,595. W. E. & J. P. SNYDER, Port Trevorton, Pa. Filed Apr. 9, 1930.



No claim being made to the letters "T-B" apart from the mark shown.

For Medicine for Lung Ailments, Coughs, Chest Colds, and Asthma.

Claims use since Feb. 15, 1930.

Ser. No. 298,905. THOMAS A. PATTERSON, doing business as T. A. Patterson Laboratories, Cleveland, Ohio. Filed Apr. 15, 1930.

SUPERCHLOR

For Liquid Bleach.

Claims use since on or about Oct. 18, 1926.

Ser. No. 299,337. CLIFFORD G. PRIMEAU, Cranston, R. I. Filed Apr. 23, 1930.

Gastralka

For Antacid for Correction of Digestion.

Claims use since Apr. 10, 1930.

Ser. No. 299,866. BOURJOIS, INC., New York, N. Y. Filed Apr. 24, 1930.

MANDARINE

For Perfume, Toilet Water, Face Powder, Rouge, Cold Cream, and Lip Sticks.

Claims use since about 1911.

Ser. No. 299,415. SAMUEL R. STRAUSS, doing business as Strauss Laboratories, New York, N. Y. Filed Apr. 24, 1930.

ANEMOTONE

The drawing is lined to indicate the color red.

For Blood and Nerve Tonic.

Claims use since February, 1929.

Ser. No. 299,424. PAUL EUGENE PIERRE BAUDE, Paris, France. Filed Apr. 25, 1930.

Nestosyl

For Anæsthetics, and Particularly Local Anæsthetics in the Form of Pomades, Suppositories, Eye Salves, and Dressing Solutions.

Claims use since February, 1927.

Ser. No. 299,437. ANNA L. GARCIA, Los Angeles, Calif. Filed Apr. 25, 1930.

REUMATINA

For Medicinal Salve for Treatment of Rheumatism.

Claims use since Mar. 1, 1930.

Ser. No. 299,521. SEACOAST LABORATORIES, INC., New York, N. Y. Filed Apr. 26, 1930.

SEAZONE

For Disinfectants, Germicides, and Sterilizers in Powder, Capsule, or Liquid Form.

Claims use since May 1, 1925.

Ser. No. 299,535. THE VISOL LABORATORIES, Boston, Mass. Filed Apr. 26, 1930.

VISOL

For Ointments and Lotions for Treating Itch and Similar Skin Affections.
Claims use since Dec. 5, 1929.

Ser. No. 299,568. GENERAL COSMETICS CORPORATION, New York, N. Y. Filed Apr. 28, 1930.

PINEPORE

For Cleansing Creams.
Claims use since Apr. 1, 1930.

Ser. No. 299,570. GINGASOL LABORATORIES, INC., Winner, S. Dak. Filed Apr. 28, 1930.

O
E G M

For Medicinal Preparation for Treatment of the Teeth and Gums.
Claims use since about Dec. 1, 1928.

Ser. No. 299,582. JOHN A. KORHONEN, Brooklyn, N. Y. Filed Apr. 28, 1930.

Ruzakor

For Chemical Preparations in Salve and Liquid Forms for the Treatment of Eczema and Other Skin Ailments.
Claims use since Apr. 11, 1930.

Ser. No. 299,610. FRANK V. WEBB, doing business as The Malva Medicine Co., Cincinnati, Ohio. Filed Apr. 28, 1930.

MALVA

No claim is made to the word "Malva" apart from the other features of the mark shown in the drawing.
For Laxative and Tonic for the Stomach, Liver, and Kidneys.
Claims use since Apr. 9, 1930.

Ser. No. 299,611. BARNEY H. WENNER, doing business as Wenvo Medicine Co., Sedalia and Kansas City, Mo. Filed Apr. 28, 1930.

Wenvo

For Liquid Medicine for Use as a General Tonic for the Human System.
Claims use since Mar. 8, 1930.

Ser. No. 299,643. YBRY, INC., New York, N. Y. Filed Apr. 29, 1930.

amour Sauvage

For Perfumes and Toilet Water, Face Powders, Talcum Powders, Face Creams, Rouge, Lip Sticks, Brilliantine, Bath Salts, Sachets.
Claims use since September, 1929.

Ser. No. 299,709. THOMAS G. HITT, doing business as Northwest Flower Extractions Co., Seattle, Wash. Filed Apr. 30, 1930.

De Glaceme

For Perfume.
Claims use since Feb. 15, 1930.

Ser. No. 299,815. JOSEPH SUDBEAZ, Mount Vernon, N. Y. Filed May 1, 1930.

VIRILUS

For Ferment for the Treatment of Intestinal Disorders.
Claims use since Aug. 12, 1929.

CLASS 7

Cordage

Ser. No. 297,993. A. JAQUELIN TODD, Washington, D. C. Filed Mar. 27, 1930.

SPARE HER

For Clotheslines.
Claims use since Mar. 26, 1930.

CLASS 8

Smokers' Articles, Not Including Tobacco Products

Ser. No. 299,377. THE DALTON THIBAULT CORP., Stamford, Conn. Filed Apr. 24, 1930.

HYDROASH

For Ash Receivers and Trays.
Claims use since Mar. 31, 1930.

CLASS 10

Fertilizers

Ser. No. 298,442. THE GRASSELLI CHEMICAL COMPANY, Cleveland, Ohio. Filed Apr. 5, 1930.

DUGRO

For Fertilizers.
Claims use since Mar. 10, 1930.

Ser. No. 299,229. E. RAUH & SONS FERTILIZER COMPANY, Indianapolis, Ind. Filed Apr. 21, 1930.

KWIKGRO

For Fertilizers.
Claims use since Mar. 1, 1930.

CLASS 11

Inks and Inking Materials

Ser. No. 299,295. WRITE-DRI, INC., New York, N. Y. Filed Apr. 22, 1930.

Write-Dri

For Writing Fluids.
Claims use since Apr. 1, 1930.

CLASS 13

Hardware and Plumbing and Steam-Fitting Supplies

Ser. No. 282,422. NATIONAL BRAKE SERVICE, INC., Chicago, Ill. Filed Apr. 15, 1929.

NB

For Brakes and Parts Thereof and Rivets.
Claims use since Feb. 19, 1929.

Ser. No. 292,861. AEROMETRIC VALVE CORPORATION, Portland, Oreg. Filed Nov. 25, 1929.

FILTAIRE

For Tire-Inflating Devices—Namely, Pressure-Regulating Valves, Air-Hose Connections, and Air-Filtering Devices.
Claims use since June 1, 1929.

Ser. No. 295,971. THE MURDOCK MFG. & SUPPLY COMPANY, Cincinnati, Ohio. Filed Feb. 12, 1930.

Q.O.C.

For Hand-Actuated Fluid-Control Valves.
Claims use since Jan. 6, 1929.

Ser. No. 295,976. WILLIAM H. HASKELL MANUFACTURING COMPANY, Pawtucket, R. I. Filed Feb. 13, 1930.

H

For Machine and Other Bolts.
Claims use since 1871.

Ser. No. 295,980. JAMES M. NAHON, Madrid, Spain. Filed Feb. 13, 1930.



For Antislipping Devices or Metal Creepers for Boots and Shoes of Metallic Chains and Metallic Cords or Strips.
Claims use since April, 1928.

Ser. No. 296,166. WICKWIRE SPENCER STEEL COMPANY, New York, N. Y. Filed Feb. 17, 1930.

WISSCO
SHUKLIPS

The drawing is lined for shading only. No claim is made herein to exclusive use of the word "Shuklips" except as associated with the mark as shown in the drawing.
For Metallic Shoe Fasteners or Lacings.
Claims use since Feb. 1, 1930.

Ser. No. 296,711. MUELLER BRASS CO., Port Huron, Mich. Filed Mar. 1, 1930.

STREAMLINE

For Metal Fluid Conduits and Fittings Therefor.
Claims use since Feb. 14, 1930.

Ser. No. 298,356. THE POPSICLE CORPORATION OF THE UNITED STATES, New York, N. Y. Filed Apr. 3, 1930.

POPSICLE MOLD

The word "Mold" is disclaimed apart from the mark shown on the drawing.
For Molds for the Manufacture of Frozen Confectionery and the Like.
Claims use since May, 1926.

Ser. No. 290,490. CHEMICAL LABORATORY CO., INC., Boston, Mass. Filed Apr. 26, 1930.



For Toilet Seats.
Claims use since July 25, 1929.

CLASS 14

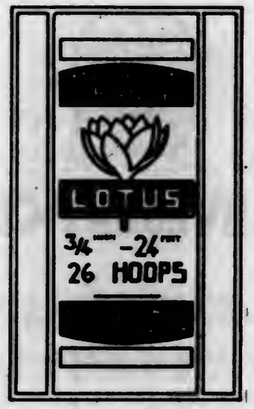
Metals and Metal Castings and Forgings

Ser. No. 289,503. CANADA FOUNDRIES & FORGINGS, LIMITED, Brockville, Ontario, Canada. Filed Sept. 9, 1929.

WEIR

For Rail Anchors.
Claims use since Apr. 9, 1928.

Ser. No. 298,717. SOCIÉTÉ ANONYME DES HAUTS FOURNEAUX DE LA CHIERS, Longwy (Meurthe-et-Moselle), France. Filed Apr. 11, 1930.



The wording upon the mark "Made in France, ¾ Inch,—24 Feet, 26 Hoops" and "Registered Trade-Mark" are disclaimed apart from the mark as shown.
For Hoop Irons.
Claims use since Jan. 31, 1930.

CLASS 15

Oils and Greases

Ser. No. 297,950. AUSTIN OIL CORPORATION, Detroit, Mich. Filed Mar. 27, 1930.

PENN POWER



For Motor-Lubricating Oil.
Claims use since Mar. 3, 1930.

Ser. No. 298,265. ASSOCIATED OIL COMPANY, San Francisco, Calif. Filed Apr. 2, 1930.

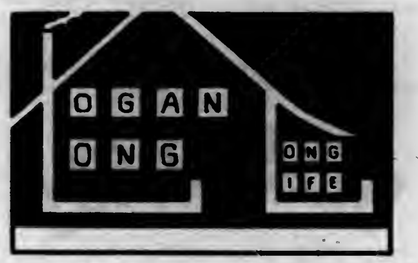


Applicant disclaims exclusive right to the words "Automatic Burner Oil" apart from the mark shown in the drawing.
For Furnace Fuel Oils.
Claims use since Jan. 1, 1925.

CLASS 16

Paints and Painters' Materials

Ser. No. 288,957. THE LOGAN-LONG COMPANY, Franklin, Ohio, Atlanta, Ga., Fulton, N. Y., and Chicago, Ill. Filed May 13, 1929.



The words "Long Life" are disclaimed apart from the mark as shown on the drawing.
For Asphalt Paint and Asbestos Fibre Roof Coating—a Thick Heavy Liquid Cement in the Nature of a Paint.
Claims use since Mar. 15, 1929.

Ser. No. 297,029. NORTH BERGEN VARNISH CORPORATION, North Bergen, N. J. Filed Mar. 8, 1930.

BERCO

For Varnishes, Paint Enamels, Lacquers, and Paints in Ready-Mixed Form.
Claims use since on or about Dec. 1, 1929.

Ser. No. 297,057. CLEVELAND SALES & SERVICE CO., Minneapolis, Minn. Filed Mar. 10, 1930.

CLE-BEST

No claim is made however, to the word "Best" apart from the mark as shown on the drawing.
For Ready-Mixed Paint, Varnishes, Lacquers, Furniture and Automobile Polishes.
Claims use since Feb. 5, 1930.

Ser. No. 297,497. THE ROESSLER & HASSLACHER CHEMICAL COMPANY, New York, N. Y. Filed Mar. 18, 1930.

PALLADOL

For Liquid Material in the Nature of a Paint for Decorating and Coloring Earthenware, Porcelain, Glass, and Other Ceramic Ware, Metals, and the Like to be Applied and Burned into the Surface to be Decorated and Colored.
Claims use since Jan. 8, 1930.

Ser. No. 298,179. JOHN S. HIBBARD, Chicago, Ill. Filed Mar. 31, 1930.

"LUCKY STRIKE"

For Furniture Polish and Auto Polish.
Claims use since Feb. 21, 1930.

Ser. No. 299,069. ABNER LUBEL, doing business as Dessiedess Paint Co., New York, N. Y. Filed Apr. 18, 1930.

DESSIEDESS

For Varnishes, Ready-Mixed Paints, and Prepared Shellac.
Claims use since Mar. 1, 1900.

Ser. No. 299,070. ABNER LUBEL, doing business as Dessiedess Paint Co., New York, N. Y. Filed Apr. 18, 1930.

D.P.C.

For Varnishes, Ready-Mixed Paints, and Prepared Shellac.
Claims use since Mar. 1, 1900.

Ser. No. 299,071. ABNER LUBEL, doing business as Dessiedess Paint Co., New York, N. Y. Filed Apr. 18, 1930.

LUBELAC

For Varnishes, Ready-Mixed Paints, and Prepared Shellac.
Claims use since Mar. 1, 1925.

Ser. No. 299,183. THE CHEMICAL & PIGMENT COMPANY, Baltimore, Md., Collinsville, Ill., and Oakland, Calif. Filed Apr. 21, 1930.

OPACITONE

For Paint Pigments.
Claims use since Apr. 11, 1930.

CLASS 17

Tobacco Products

Ser. No. 297,815. AURELIO MASCUNANA, Tampa, Fla. Filed Mar. 24, 1930.

TAMPA 7

For Cigars.
Claims use since Nov. 1, 1926.

Ser. No. 298,355. E. POPPER & COMPANY, INC., New York, N. Y. Filed Apr. 3, 1930.



STUYVESANT CLUB

The portrait shown being a fanciful representation of the late Peter Stuyvesant, one time governor of the Province of New York.
For Cigars, Little Cigars, Cigarettes, and Smoking Tobacco.
Claims use since July 21, 1921.

Ser. No. 298,396. GEORGE W. HELME COMPANY, Jersey City, N. J., and New York, N. Y. Filed Apr. 4, 1930.

LIFE MATE

For Ground Tobacco for Chewing Purposes in the Nature of Snuff.
Claims use since Oct. 30, 1929.

Ser. No. 299,473. HENRY SUTLIFF, doing business as H. Sutliff Pipe Shop, San Francisco, Calif. Filed Apr. 25, 1930.



The word "Mixture" is disclaimed except as used in connection with the balance of the mark as shown.
For Smoking Tobacco.
Claims use since Jan. 1, 1920.

CLASS 19

Vehicles, Not Including Engines

Ser. No. 295,699. STERN BROS. MOTORCYCLES, INC., New York, N. Y. Filed Feb. 6, 1930.

STERN BROS

TRAFFIC CAR

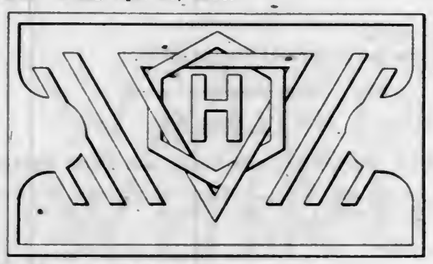
The word "Car" is disclaimed apart from the mark shown in the drawing.
For Motorcycle Equipped With Delivery Bodies.
Claims use since July, 1928.

Ser. No. 297,598. THE HUG COMPANY, Highland, Ill. Filed Mar. 20, 1930.

ROADBUILDER

For Motor Trucks and Motor-Truck Bodies.
Claims use since Aug. 20, 1926.

Ser. No. 299,504. HUDSON MOTOR CAR COMPANY, Detroit, Mich. Filed Apr. 26, 1930.



For Gasoline Passenger Automobiles.
Claims use since Nov. 8, 1929.

CLASS 21

Electrical Apparatus, Machines, and Supplies

Ser. No. 279,944. LIMIT ENGINEERING CO. LTD., London, England. Filed Feb. 26, 1929.

LIMIT

For Wireless Apparatus—Namely, Wireless Receiving Sets, Thermionic Amplifiers, Thermionic Valves, Thermionic-Valve Holders, Condensers, Both Variable and Fixed, Grid Leaks, Resistances, Switches, Connectors, Loud-Speakers and Head Sets, Batteries, Insulators, Aerials or Antennæ, Wave Traps, Volume Controls, Crystals and Crystal Detectors, Inductance Coils, Choke Coils, Coil Holders, Variometers, Loose Couplers, Wire Terminal-Plug Connectors and B-Battery Eliminators.
Claims use since Aug. 24, 1920.

Ser. No. 296,249. AMERICAN HARD RUBBER COMPANY, Hempstead and New York, N. Y. Filed Feb. 20, 1930.

ENDURANCE

For Jars, Cells, Covers, Vents, and Separators Made of Hard Rubber or Other Plastic Materials, Not Including Glass, for Storage Batteries.
Claims use since Feb. 1, 1930.

Ser. No. 297,220. WONDERLITE COMPANY OF AMERICA, San Francisco, Calif. Filed Mar. 12, 1930.

Wonderlite

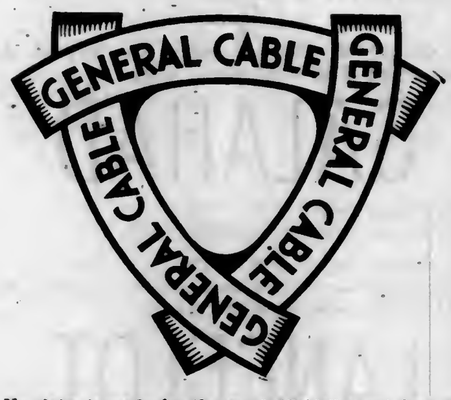
For Electric Luminescent Signs and Tubes.
Claims use since October, 1928.

Ser. No. 297,448. MONARCH INSULATED WIRE CORP., New York, N. Y. Filed Mar. 17, 1930.

MONARCH

For Electric Wire, Electric Cable, Battery Cables, Starting Cables, Battery Terminals, Ignition Cable Sets, and Radio Aërial Kits and Terminals.
Claims use since about Nov. 1, 1928.

Ser. No. 298,096. GENERAL CABLE CORPORATION, New York, N. Y. Filed Mar. 29, 1930.



No claim is made for the word "Cable" apart from the mark shown in the drawing.
For Bare and Insulated Electrical Wires and Cables.
Claims use since about Mar. 11, 1930.

Ser. No. 298,408. NATIONAL UNION RADIO CORPORATION, Newark, N. J. Filed Apr. 4, 1930.

NATIONAL UNION

For Radio Electron Tubes.
Claims use since Feb. 10, 1930.

Ser. No. 298,747. GUTH, STERN & CO., INC., New York, N. Y. Filed Apr. 12, 1930.

TRIOLA

For Portable Electric Lamps and Dry-Cell Electric Batteries.
Claims use since Mar. 5, 1930.

Ser. No. 299,035. AMERICAN HARD RUBBER COMPANY, Hempstead and New York, N. Y. Filed Apr. 18, 1930.

ACE

For Hard or Soft Rubber Solid, Lined, or Covered Equipment for Chemical-Process Industrial Uses—Namely, Plating Racks and Plating Tanks for Electroplating.
Claims use since December, 1920.

CLASS 22

Games, Toys, and Sporting Goods

Ser. No. 283,616. LINDFELT MFG. Co., doing business as Champion Mfg. Co., Des Moines, Iowa. Filed May 7, 1929.

CHAMPION

For Handball-Players' Gloves.
Claims use since March, 1928.

Ser. No. 299,793. PARKER BROTHERS INC., Portland, Me., and Salem, Mass. Filed May 1, 1930.

GALAHAD

For Board Game.
Claims use since Apr. 14, 1930.

Ser. No. 299,794. PARKER BROTHERS INC., Portland, Me., and Salem, Mass. Filed May 1, 1930.

LANCELOT

For Board Game.
Claims use since Apr. 14, 1930.

Ser. No. 299,802. THE SHALER COMPANY, Waupun, Wis. Filed May 1, 1930.



For Iron and Wood Head Golf Clubs.
Claims use since Nov. 1, 1929.

Ser. No. 299,842. RALPH A. FREUNDLICH, INC., New York, N. Y. Filed May 2, 1930.

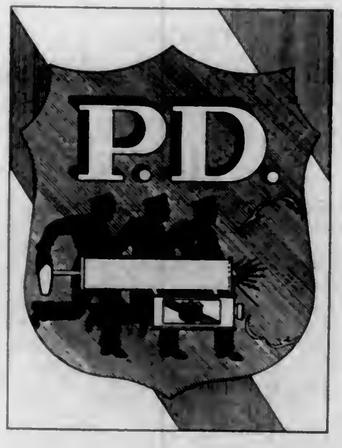


For Dolls.
Claims use since about Feb. 15, 1930.

CLASS 23

Cutlery, Machinery, and Tools, and Parts Thereof

Ser. No. 299,466. SINCLAIR REFINING COMPANY, New York, N. Y. Filed Apr. 25, 1930.



The lining on the shield design indicates the color green, and the lining on the bands indicates the color red. No claim is made to the representation of a spray gun.
For Spray Guns.
Claims use since Feb. 6, 1930.

Ser. No. 299,467. SINCLAIR REFINING COMPANY, New York, N. Y. Filed Apr. 25, 1930.

P.D.

For Spray Guns.
Claims use since Feb. 6, 1930.

CLASS 24

Laundry Appliances and Machines

Ser. No. 298,136. THE BARTON CORPORATION, West Bend, Wis. Filed Mar. 31, 1930.

WATER WHIRL

For Laundry Washing Machines.
Claims use since Mar. 28, 1930.

CLASS 27

Horological Instruments

Ser. No. 299,477. THE WILCOX NOVELTY COMPANY, Athol, Mass. Filed Apr. 25, 1930.



The trade-mark is a facsimile of the signature of Mr. J. S. Wilcox, the treasurer of said corporation.
For Clock and Watch Casings Formed of Material Other Than Precious Metals.
Claims use since July 15, 1926.

CLASS 28

Jewelry and Precious-Metal Ware

Ser. No. 295,549. LEE M. MOSS, New York, N. Y. Filed Feb. 3, 1930.

Platinumcraft

For Finger Rings, Bracelets, Chains for Personal Wear, Brooches, Pendants, and Watch Charms.
Claims use since Dec. 18, 1926.

Ser. No. 298,185. KAPPA SIGMA TAU, Chicago, Ill. Filed Mar. 31, 1930.



For Official Badges, Pledge Pins, Recognition Buttons, Finger Rings, and Brooches, All made or Plated with Precious Metal.
Claims use since Apr. 11, 1922.

Ser. No. 298,226. ARTISTIC NOVELTY CO., INC., New York, N. Y. Filed Apr. 1, 1930.



No registration rights are claimed herein to the initials "N. Y." apart from the mark as shown.
For Necklaces, Bracelets, Finger Rings, Brooches, Pendants, Rhinestones, Pearls; Precious, Semiprecious, and Imitation Stones and Jewelry; Slides, Buckles, and Clasps Made of or Plated with Precious Metal.
Claims use since 1920.

Ser. No. 298,398. IOTA TAU SIGMA, Kirksville, Mo. Filed Apr. 4, 1930.

ITΣ

For Fraternity Badges, Lapel Buttons; Scarf, Lapel, and Breast Pins; Cuff Links, Tie Clasps, Charms, Finger Rings, Belt Buckles, and Ornamental Shields, All of Precious Metal.
Claims use since 1916.

Ser. No. 298,635. MAX KRONSTADT, doing business as Bristol Seamless Ring Co., New York, N. Y. Filed Apr. 10, 1930.

ADORABLE

For Finger Rings.
Claims use since about Mar. 1, 1930.

Ser. No. 298,636. MAX KRONSTADT, doing business as Bristol Seamless Ring Co., New York, N. Y. Filed Apr. 10, 1930.

CHARMING

For Finger Rings.
Claims use since Mar. 1, 1930.

Ser. No. 298,638. MAX KRONSTADT, doing business as Bristol Seamless Ring Co., New York, N. Y. Filed Apr. 10, 1930.

TRUE-LOVE

For Finger Rings.
Claims use since Mar. 1, 1930.

Ser. No. 299,296. ALPHA DELTA ALPHA FRATERNITY, Cedar Falls, Iowa. Filed Apr. 23, 1930.

ΑΔΑ

For Fraternity Badges, Lapel Buttons; Scarf, Lapel, and Breast Pins; Cuff Links, Tie Clasps, Charms, Finger Rings, Belt Buckles, and Ornamental Shields, All of Precious Metal.
Claims use since 1921.

Ser. No. 299,316. BENJAMIN & EDWARD J. GROSS CO. INC., New York, N. Y. Filed Apr. 23, 1930.

"BAND O'LUCK"

For Finger Rings and Mountings Therefor.
Claims use since March, 1930.

Ser. No. 299,318. BENJAMIN & EDWARD J. GROSS CO. INC., New York, N. Y. Filed Apr. 23, 1930.

"LOVE MATE"

For Finger Rings and Mountings Therefor.
Claims use since March, 1930.

CLASS 29

Brooms, Brushes, and Dusters

Ser. No. 299,557. COLUMBIA PLUSH & PUFF CO., INC., Brooklyn, N. Y. Filed Apr. 28, 1930.

Betty Lou

For Powder Puffs.
Claims use since January, 1921.

CLASS 31

Filters and Refrigerators

Ser. No. 285,613. AKTIEBOLAGET ELEKTROLUX, Stockholm, Sweden. Filed June 15, 1929.



The lining of the drawing is for shading only.
For Filters and Parts Therefor and Water-Filtering Masses.
Claims use since January, 1927.

CLASS 32

Furniture and Upholstery

Ser. No. 299,801. SIMON BACHE & COMPANY, New York, N. Y. Filed May 1, 1930.

"WATERWITE"

For Mirrors.
Claims use since Feb. 10, 1930.

Ser. No. 299,834. DU PONT VISCOLOID COMPANY, New York, N. Y. Filed May 2, 1930.

Arlton

For Hand Mirrors and Picture Frames.
Claims use since Feb. 7, 1930.

CLASS 34

Heating, Lighting, and Ventilating Apparatus, Not Including Electrical Apparatus

Ser. No. 295,524. HENRY R. LUTZ, Rogersville, Tenn. Filed Feb. 3, 1930.

L & Co.

STEADFAST

For Cooking Ranges.
Claims use since Sept. 1, 1928.

Ser. No. 296,021. NATIONAL ENAMELING & STAMPING CO. INC., Milwaukee, Wis. Filed Feb. 14, 1930.

DE LUXE

For Stoves, Particularly Adapted for Burning Liquid Fuel.
Claims use since Oct. 21, 1929.

Ser. No. 297,906. THE FOREST CITY WALWORTH RUN FOUNDRIES CO., Cleveland, Ohio. Filed Mar. 26, 1930.

MONARCH

For Hot-Air Furnaces.
Claims use since Jan. 1, 1895.

Ser. No. 299,006. MIDLAND UTILITIES COMPANY OF INDIANA, Chicago, Ill. Filed Apr. 17, 1930.

HOTWELL

For Gas Water Heaters.
Claims use since Mar. 25, 1930.

Ser. No. 299,433. EASTERN OIL EQUIPMENT, INC., Portland, Me. Filed Apr. 25, 1930.

EASTERNOIL

For Oil Burners.
Claims use since Feb. 18, 1929.

CLASS 35

Belting, Hose, Machinery Packing, and Non-metallic Tires

Ser. No. 296,043. AUTOMOTIVE JOBBERS ASSOCIATION, Chicago, Ill. Filed Feb. 15, 1930.

AJAX

For Woven and Molded Brake Band Linings.
Claims use since Jan. 3, 1930.

CLASS 36

Musical Instruments and Supplies

Ser. No. 298,571. M. HOHNER, INC., New York, N. Y. Filed Apr. 9, 1930.

Carmen

For Piano Accordions.
Claims use since Sept. 28, 1929.

CLASS 37

Paper and Stationery

Ser. No. 280,287. SEAMAN PAPER COMPANY, Chicago, Ill. Filed Mar. 5, 1929.

AQUATINT

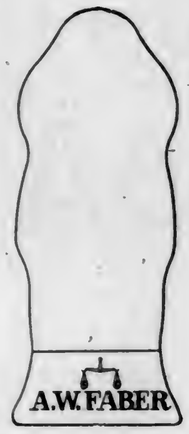
For Book Papers, Cover Papers, Bristols and Document Manila; Postcard, Tagboard, and Cardboard Blanks; Ledger Paper, Bond and Writing Papers, Mimeograph Papers, Thin Papers, Blotting Papers, Cut Cards, Announcement Paper, Fine Wedding Papers, Envelopes, and Gummed Papers.
Claims use since October, 1928.

Ser. No. 295,256. DICTATYPE INCORPORATED, Wilmington, Del. Filed Jan. 27, 1930.

TYP-O-GRAMS

For Typewriter Paper and Paper Rolls for Use on Typewriting Machines.
Claims use since Dec. 7, 1929.

Ser. No. 297,899. A. W. FABER, INC., Newark, N. J. Filed Mar. 26, 1930.



No claim is made to the illustration of the carton apart from the showing in the drawing.
For Pencils and Crayons.
Claims use since October, 1928.

Ser. No. 297,900. A. W. FABER, INC., Newark, N. J. Filed Mar. 26, 1930.



No claim is made to the illustration of the carton apart from the showing in the drawing.
For Pencils and Crayons.
Claims use since October, 1928.

Ser. No. 297,938. SOLOMON M. SAGER, Evanston, Ill. Filed Mar. 26, 1930.

"Combinette"

For a Combined Pen and Pencil.
Claims use since Jan. 7, 1930.

Ser. No. 298,387. J. W. GUTTKNECHT, Stein, near Nuremberg, Germany. Filed Apr. 4, 1930.

Waage

For Lead Pencils, Pencil Holders, Coloured Pencils, Pastel Crayons, Mechanical Pencils, Artists' Pencils and Refills for Same, Copying Pencils, Copying Ink Pencils; Writing, Drawing, Painting, Billiard, and Marking Chalks; Chalk Pencils, Chalk Holders, Slate Pencils, Rubber Pencils, Slates, Blotters, Penholders, Fountain Pens, Erasive Rubber, Rubber Tablets, Pen Boxes, Stumps, Letter Stands, Pen Cups, Letter Folders, Pencil Sharpeners, Pencil Files, Rubber Bands (Rubber in Shape of Bands), Tracing Cloth.
Claims use since 1907.

Ser. No. 298,974. BRADNER SMITH & COMPANY, Chicago, Ill. Filed Apr. 17, 1930.

FUTURA TEXT

No claim is made to the word "Text" apart from the mark shown in the drawing.
For Paper—Namely, Cover Paper, Bond Paper, Enameled Book Paper, Ledger Paper, Writing Paper, Drawing Paper, Lithograph Paper, Announcement and Greeting Paper, Billheads, Paper for Box Covering, and Uncoated Book Paper.
Claims use since Oct. 15, 1929.

Ser. No. 298,975. BRADNER SMITH & COMPANY, Chicago, Ill. Filed Apr. 17, 1930.

LACOTE

For Paper—Namely, Cover Paper, Bond Paper, Enameled Book Paper, Ledger Paper, Writing Paper, Drawing Paper, Lithograph Paper, Announcement and Greeting Paper, Billheads, Paper for Box Covering, and Uncoated Book Paper.
Claims use since Dec. 1, 1929.

Ser. No. 299,168. THE TUTTLE PRESS COMPANY, Appleton, Wis. Filed Apr. 19, 1930.

GAIETEE

For Wrapping Paper and Napkins.
Claims use since September, 1929.

Ser. No. 299,479. ALBANY PERFORATED WRAPPING PAPER COMPANY, Albany, N. Y. Filed Apr. 26, 1930.



The hatching is for shading only. No exclusive right to the words and numerals "1000 Sheets—4½×5—Albany, N. Y., U. S. A." is claimed.
For Toilet Paper.
Claims use since Mar. 31, 1930.

Ser. No. 299,524. SOUTHERN TABLET & MANUFACTURING COMPANY, Atlanta, Ga. Filed Apr. 26, 1930.

"HELLO WORLD"

For Tablets, Composition Books, and Filler Paper.
Claims use since Mar. 17, 1930.

Ser. No. 299,552. CAREW MANUFACTURING COMPANY, South Hadley Falls, Mass. Filed Apr. 28, 1930.

CHRONICLE

For Writing and Printing Paper.
Claims use since Apr. 19, 1930.

Ser. No. 299,590. PAPER SPECIALTY COMPANY, Wausau, Wis. Filed Apr. 28, 1930.

MOTHER HUBBARD'S

For Waxed Paper, Parchment Paper, Paper Table Covers, and Paper Napkins.
Claims use since Mar. 1, 1930.

Ser. No. 299,651. JOSEPH DIXON CRUCIBLE COMPANY, Jersey City, N. J. Filed Apr. 29, 1930.

BEAR

For Pencils, Crayons, and Rubber Erasers.
Claims use since February, 1930.

Ser. No. 299,896. CAREW MANUFACTURING COMPANY, South Hadley Falls, Mass. Filed May 8, 1930.

APPELLATE

For Writing and Printing Paper.
Claims use since Apr. 26, 1930.

CLASS 38

Prints and Publications

Ser. No. 291,087. FATHER'S DAY CLUB, INC., New York, N. Y. Filed Oct. 15, 1929.



The words "First Sunday in June" are disclaimed apart from the mark as shown.
For Circulars, Pamphlets, and Other Printed Matter Issued at Irregular Intervals.
Claims use since Oct. 2, 1929.

Ser. No. 294,951. AERONAUTICAL CHAMBER OF COMMERCE OF AMERICA, INC., New York, N. Y. Filed Jan. 20, 1930.

AIRCRAFT YEAR BOOK

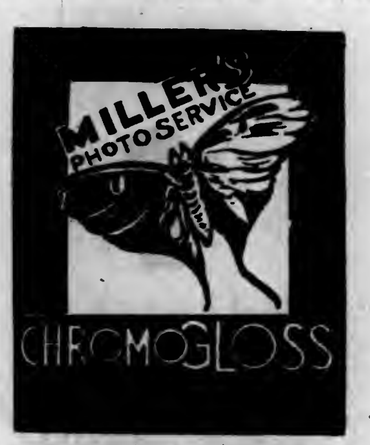
For Annual Publication.
Claims use since March, 1919.

Ser. No. 296,383. HOTEL AND RESTAURANT EMPLOYEES' AND BEVERAGE DISPENSERS' INTERNATIONAL ALLIANCE, Cincinnati, Ohio. Filed Feb. 21, 1930.



For Printed Books, Periodicals Published Monthly, and Circulars Used Between the Different Units of the Association for the Furtherance of Its Business.
Claims use since August, 1929.

Ser. No. 298,034. HENRY MILLER, doing business as Miller's Photo Service, Los Angeles, Calif. Filed Mar. 28, 1930.



No claim is made to the words "Photo Service" or the word "Gloss" apart from the mark shown.
For Photographic Prints.
Claims use since Feb. 15, 1930.

Ser. No. 298,306. IRVING J. BIRNBAUM, doing business as Whip Publishing Co., New York, N. Y. Filed Apr. 3, 1930.

The WHIP

For Magazine.
Claims use since Mar. 15, 1929.

Ser. No. 299,522. SILVEY-PEARLE TINSLER, New York, N. Y. Filed Apr. 26, 1930.

Thinking Thru

For Printed Publication.
Claims use since Dec. 1, 1926.

CLASS 39

Clothing

Ser. No. 262,539. WALL-STREETER SHOE CO., North Adams, Mass. Filed Mar. 2, 1928.



The trade-mark consists of the peculiar design arranged on the bottom of the sole of the shoe and the depression between points engaged by the metatarsal heads and extending rearwardly along the inside shank to the heel.
For Men's Leather Shoes.
Claims use since Feb. 20, 1928.

Ser. No. 282,072. THANHOUSER & WEILLER, Baltimore, Md. Filed Apr. 8, 1929.

Sally Sue

For Girls' Dresses Made of Woolen and Cotton Fabrics.
Claims use since Mar. 29, 1929.

Ser. No. 286,254. MAY DEPARTMENT STORES COMPANY, New York, N. Y. Filed June 27, 1929.

ARCH-Ped Estrian

For Shoes of Leather, Rubber, or Fabric or a Combination of Those Materials.
Claims use since about Oct. 25, 1928.

Ser. No. 288,917. LEBANON SHIRT COMPANY, Lebanon, Lititz, Lexington, and Hebron, Pa., and New York, N. Y. Filed Aug. 23, 1929.

Charing Cross

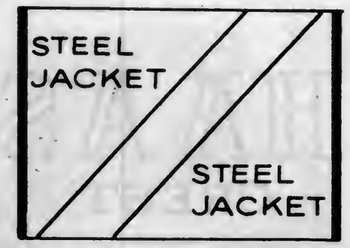
No claim is made to the words "Charing Cross" apart from the mark shown in the drawing.
For Men's and Boys' Hats, Caps, Neckties, Collars, Sweaters, Garters, Underwear of Knitted and Textile Fabrics, Raincoats, Bath Robes, Suspenders, Belts for Outerwear, Pajamas, Shoes Made of Leather, rubber, and/or Cloth or Any Combination Thereof, Socks, Nightshirts.
Claims use since Apr. 12, 1928.

Ser. No. 289,470. THE MALLORY HAT COMPANY, Danbury, Conn. Filed Sept. 7, 1929.



No claim is made to the exclusive use of the words "Hats, Elegance, Durability," and "New York" apart from the mark as shown.
For Men's, Women's and Children's Hats of Felt, Straw, and Velour and Men's and Boys' Caps of Fabric.
Claims use since June 18, 1929.

Ser. No. 293,266. C. E. EARLE, JR., Highpoint, N. C. Filed Dec. 5, 1929.



For Hosiery, Coverall Work Suits, Overalls, Dress Shirts, Work Shirts, Working Men's Jackets and Sweaters, Men's Suits and Overcoats, Separate Trousers, Fancy and Dress Vests, Men's Hats and Caps; and Boys' Suits, Play Suits, Overcoats, Caps and Hats, and Shoes Constructed of Leather, Fabric, and Combinations of These Materials.
Claims use since Nov. 18, 1929.

Ser. No. 294,254. HOOKLESS FASTENER COMPANY, Meadville, Pa. Filed Dec. 31, 1929.

HOOKLESS

Applicant is owner of registration Nos. 198,412, 263,869, and 270,509.
For Trunks for Gym Suits or Swimming Suits; Boots and Shoes of Leather, Rubber, and of a Combination of Rubber and Fabric; Children's Blouses and Drawer-Legging Suits, One-piece Full-Lengths Suits, and One and Two-Piece Wash Suits; Children's Sleepers, Women's and Children's Blouses, Lumberjacks, Men's Overall Suits and Overalls, Men's Dress and Work Shirts, Boys' Shirts for Outer Wear, Children's Snow Suits, Riding Breeches and Golf Jackets for Men and Women, Baby Robes in the Nature of a Sleeping Bag, Bag-Type Garments for Adults, Men's and Children's Knitted Underwear, Nurses' Uniforms, Leggings and Leather Gloves.
Claims use since Sept. 28, 1929.

Ser. No.295,498. SMITH AND GOLDBERG CLOAK AND SUIT COMPANY INC., New York, N. Y. Filed Feb. 1, 1930.



For Ladies' Coats and Suits.
Claims use since Jan. 1, 1929.

Ser. No. 296,513. BUTLER BROTHERS, doing business as L. C. Burr & Co., Inc., Chicago, Ill. Filed Feb. 26, 1930.

BURLY

For Overalls.
Claims use since Jan. 2, 1930.

Ser. No. 296,526. S. H. KRESS & Co., New York, N. Y. Filed Feb. 26, 1930.

Hercules

For Men's Garters.
Claims use since Jan. 2, 1930.

Ser. No. 296,527. S. H. KRESS & Co., New York, N. Y. Filed Feb. 26, 1930.

Beau Brummel

For Men's Garters.
Claims use since Jan. 2, 1930.

Ser. No. 296,610. POSNER-FOX INC., New York, N. Y. Filed Feb. 27, 1930.

POSNER-FOX, Inc.
PARAMOUNT IN FASHION

The word "Fashion" appearing on the drawing is disclaimed apart from the other features of the mark as shown.
For Ladies' and Misses' and Juniors' Dresses.
Claims use since Dec. 10, 1929.

Ser. No. 297,106. MORRIS WABER, New York, N. Y. Filed Mar. 10, 1930.

AVIO

For Men's and Boys' Clothing—Namely, Coats, Vests, and Trousers, Work, Negligee, and Dress Shirts; Men's, Boys', Women's, and Children's Shoes Made of Leather, Rubber, Fabric, and/or Any Combination Thereof; Collars, and Women's Dresses, Suits, and Cloaks.
Claims use since Apr. 30, 1929.

Ser. No. 297,604. S. H. KRESS & Co., New York, N. Y. Filed Mar. 20, 1930.

Noble Lady

For Ladies' Garters.
Claims use since Mar. 1, 1930.

Ser. No. 297,644. THE AMERICAN HAT CO. INC., Norwalk, Conn. Filed Mar. 21, 1930.

HAAS
fur felt



No claim is made to the exclusive use of the words "Haas" and "Fur Felt," apart from the mark shown in the drawing.
For Men's Hats.
Claims use since Feb. 26, 1930.

Ser. No. 297,646. THE AMERICAN HAT CO. INC., Norwalk, Conn. Filed Mar. 21, 1930.

For Men's Hats.
Claims use since Feb. 26, 1930.

Ser. No. 297,648. THE AMERICAN HAT CO. INC., Norwalk, Conn. Filed Mar. 21, 1930.



For Men's Hats.
Claims use since Feb. 26, 1930.

Ser. No. 297,650. THE AMERICAN HAT CO. INC., Norwalk, Conn. Filed Mar. 21, 1930.

HAAS
CREST

For Men's Hats.
Claims use since December, 1929.

Ser. No. 297,674. CHARLES F. HUBBS & COMPANY, New York, N. Y. Filed Mar. 21, 1930.

TREKS

For Paper Slippers and Shoes.
Claims use since Feb. 10, 1930.

Ser. No. 297,701. STONE SHOE CO. INC., New York, N. Y. Filed Mar. 21, 1930.

Mulette

For Women's and Children's Slippers of Leather and of Fabric.
Claims use since December, 1928.

Ser. No. 297,722. C. C. BALKCOM, Jacksonville, Fla. Filed Mar. 22, 1930.



For Sweaters, Knitted Jackets, Knitted Bathing Suits for Men, Women, and Children.
Claims use since Feb. 15, 1930.

Ser. No. 297,789. THE AMERICAN HAT CO. INC., Norwalk, Conn. Filed Mar. 24, 1930.



No claim is made to the exclusive use of the wording appearing on the drawing except "The American Hat Co."
For Men's Hats.
Claims use since December, 1929.

Ser. No. 297,806. EDMUND LE ROY JAMES, New York, N. Y. Filed Mar. 24, 1930.



No claim is made to the words "Slide Set" and "Snap On" apart from the mark shown in the drawing.
For Men's and Boys' Belts for Outer Wear, Men's and Boys' Suspender Braces, Men's and Boys' Garters in the Nature of Garment Supporters, Women's and Girls' Belts for Outer Wear, and Women's and Girls' Garters in the Nature of Garment Supporters.
Claims use since Jan. 31, 1927.

Ser. No. 297,823. THE STERLING COMPANY, Chicago, Ill. Filed Mar. 24, 1930.



The drawing is lined for green and red. Applicant disclaims the right to exclusive use of the words "Dainty Distinctive Dresses" apart from the mark as shown.
For Ladies' Washable House Frocks.
Claims use since Dec. 13, 1927.

Ser. No. 297,845. THE BURKHARDT BROS. CO., Cincinnati, Ohio. Filed Mar. 25, 1930.

Burkhardt's
BURKLEE

For Men's Hats, Suits, Topcoats, Overcoats, and Men's and Boys' Knickers.
Claims use since Sept. 15, 1929.

Ser. No. 297,846. THE BURKHARDT BROS. CO., Cincinnati, Ohio. Filed Mar. 25, 1930.

Burkhardt's
HARTLEE

For Men's Straw Hats, Felt Hats, Men's Dress and Negligee Shirts and Undershirts, Pajamas, Men's Suits, Topcoats, and Overcoats.
Claims use since Sept. 15, 1929.

Ser. No. 297,911. W. P. HERBERT & COMPANY, Troy, N. Y. Filed Mar. 26, 1930.

Argyle

For Women's Cloaks, Coats, Suits, and Overcoats.
Claims use since Dec. 15, 1929.

Ser. No. 298,000. ASSOCIATED APPAREL INDUSTRIES, INC., Chicago, Ill. Filed Mar. 28, 1930.

INCHES OFF

For Abdominal Belts.
Claims use since Jan. 24, 1930.

Ser. No. 298,110. I. MITTELMAN & CO. INC., New York, N. Y. Filed Mar. 29, 1930.

Tru-Junior

Applicant disclaims the right to the exclusive use of the word "Junior" apart from the trade-mark as shown in the drawing.
For Ladies' Dresses.
Claims use since Sept. 9, 1929.

Ser. No. 298,224. THE AMERICAN HAT CO. INC., Norwalk, Conn. Filed Apr. 1, 1930.

LUSTRA

For Men's Hats.
Claims use since December, 1929.

Ser. No. 298,230. ENDICOTT JOHNSON CORPORATION, Endicott, N. Y. Filed Apr. 1, 1930.

ENDICOTT
GIRLS FRIEND
JOHNSON
AMERICA'S STANDARD

No claim is herein made to the words "America's Standard" apart from the mark as shown.

For Boots, Shoes, or Slippers Constructed of Leather, Rubber Fabric, or Any Combinations Thereof and Having Leather Soles.

Claims use since about Mar. 21, 1930.

Ser. No. 298,726. THE STESLING COMPANY, Chicago, Ill. Filed Apr. 11, 1930.

Mode Etta

Applicant disclaims the exclusive right to the use of the word "Mode" apart from the mark as shown in the drawing.

For Ladies' House Dresses.

Claims use since Feb. 22, 1930.

Ser. No. 298,742. BUCKLEY BROTHERS COMPANY, New York, N. Y. Filed Apr. 12, 1930.

Buckley

For Hosiery and Underwear for Men, Women, and Children.

Claims use since March, 1923, on hosiery and since October, 1926, on underwear.

Ser. No. 298,946. JOHNSON MANUFACTURING COMPANY, Marshfield, Wis. Filed Apr. 16, 1930.

a Pair of Aces!

For Canton-Flannel Gloves and Mittens for Men, Women, and Children, and Ladies' House Dresses.

Claims use since Dec. 1, 1929.

Ser. No. 298,984. L. B. EVANS' SONS COMPANY, Wakefield, Mass. Filed Apr. 17, 1930.

RADIO TYME

For Leather House Slippers for Men and Women.

Claims use since Dec. 1, 1929.

Ser. No. 298,987. GAY DRESS CORP., New York, N. Y. Filed Apr. 17, 1930.

Gay

For Ladies' Dresses.

Claims use since December, 1928.

Ser. No. 299,055. THE FEDERAL KNITTING MILLS COMPANY, Cleveland, Ohio. Filed Apr. 18, 1930.

CAMEL-PYLE

For Men's, Women's, Boys', and Misses' Knitted Apparel, Comprising Bathing Suits, Coats, Sweaters, Jersey Shirts, Hats, Berets, Turbans, and Ladies' Dresses.

Claims use since Mar. 1, 1930.

Ser. No. 299,060. LEON E. JACOBS & BRO., New York, N. Y. Filed Apr. 18, 1930.

SPUR

For Work, Dress, and Negligee Shirts; Hosiery, and Pajamas.

Claims use since Feb. 1, 1928.

Ser. No. 299,111. CLAUDE H. DANIELS, Newton and Boston, Mass. Filed Apr. 19, 1930.

THREE BUCKS

For Men's, Women's, and Children's Boots, Shoes, and Slippers Made Wholly or in Part of Leather, Canvas, Rubber, or Textile Material.

Claims use since Mar. 31, 1930.

Ser. No. 299,119. W. T. GRANT COMPANY, New York, N. Y. Filed Apr. 19, 1930.

THE Century

For Men's Negligee and Work Shirts.

Claims use since Apr. 11, 1930.

Ser. No. 299,144. PAUL F. MEYERHOFF, New York, N. Y. Filed Apr. 19, 1930.

Drake

For Men's, Women's, and Boys' Hosiery.

Claims use since Mar. 12, 1930.

Ser. No. 299,174. ED ASH, doing business as The Maidwell Garment Company, Forest City, Ark. Filed Apr. 21, 1930.

Servicettes

For House Dresses and Aprons.

Claims use since March, 1929.

Ser. No. 299,278. QUAKER HOSIERY COMPANY, INC., Philadelphia, Pa. Filed Apr. 22, 1930.

Dultex

For Hosiery.

Claims use since Nov. 12, 1929.

Ser. No. 299,315. GIMBEL BROTHERS, INC., New York, N. Y. Filed Apr. 23, 1930.

Gabrielle

For Hosiery of All Kinds for Men, Women, and Children.

Claims use since Feb. 1, 1930.

CLASS 40

Fancy Goods, Furnishings, and Notions

Ser. No. 297,138. EDWARD M. KAPSTEIN, doing business as Pincho Hair Pin Co., Boston, Mass. Filed Mar. 11, 1930.

Lido

For Hairpins Not Made of Precious Metal.

Claims use since Feb. 25, 1930.

CLASS 42

Knitted, Netted, and Textile Fabrics

Ser. No. 278,731. THE GOVERNOR AND COMPANY OF ADVENTURERS OF ENGLAND TRADING INTO HUDSON'S BAY, London, England. Filed Jan. 31, 1929.

POINT

For Blankets Made of Wool Both in the Piece and Not in the Piece.

Claims use since 1780.

Ser. No. 286,180. LEONHARD KOCH, doing business as Koch & Te Kock, Oelsnitz, Vogtland, Germany. Filed June 26, 1929.

Halbmond-Teppich

The word "Teppich" is disclaimed apart from the mark shown in the drawing.

For Carpets and Stair-Carpets of Textiles.

Claims use since May 21, 1927.

Ser. No. 294,826. GEORGES ROMANE, St.-Mande, France. Filed Jan. 15, 1930.

ASTRANIA.

For Fabrics—Namely, Imitation Furs and Imitation Astrakhan Furs.

Claims use since Jan. 13, 1928.

Ser. No. 296,538. MERCHANDISE & RESEARCH BUREAU, New York, N. Y. Filed Feb. 26, 1930.

OLD LOOM

For Sheets and Pillowcases.

Claims use since Aug. 1, 1929.

Ser. No. 298,520. TINGUE, BROWN & CO., New York, N. Y. Filed Apr. 7, 1930.

THREAD OF GOLD

For Piece Goods, Napped Cotton Flannel, Knitted Cotton, Cotton Cover Cloth, Cotton Netting, and Cotton Duck.
Claims use since on or about Dec. 1, 1928.

Ser. No. 298,615. CELANESE CORPORATION OF AMERICA, New York, N. Y. Filed Apr. 10, 1930.

AQUATINT PRINTS

No claim is made to the word "Prints" apart from the mark as shown.
For Fabrics Made Wholly or Partially of Cellulose Derivatives.
Claims use since about Apr. 7, 1930.

Ser. No. 298,689. THOMAS DEVELON, Jr., Philadelphia, Pa. Filed Apr. 11, 1930.

ROYAL-AKOLA
WILTON RUG

No claim is made to the words "Wilton Rug" or "Akola" apart from the mark shown. The drawing is lined to indicate shading.
For Textile Rugs and Textile Floor Coverings.
Claims use since Nov. 1, 1929.

Ser. No. 299,425. THE BELL COMPANY, Worcester, Mass. Filed Apr. 25, 1930.

BELLROSE

For Woolen, Worsted, and Mixed Worsted and Cotton Piece Goods.
Claims use since Mar. 24, 1930.

Ser. No. 299,489. CELANESE CORPORATION OF AMERICA, New York, N. Y. Filed Apr. 26, 1930.

DURACEL

For Fabrics Made Wholly or Partially of Cellulose Derivatives.
Claims use since about Apr. 25, 1930.

Ser. No. 299,647. CLARENCE S. BROWN & COMPANY, INC., New York, N. Y. Filed Apr. 29, 1930.

PLYETTE

For Cotton Piece Goods for Men's Shirts.
Claims use since Jan. 1, 1929.

CLASS 43

Thread and Yarn

Ser. No. 299,371. THE CLARK THREAD COMPANY, Newark, N. J. Filed Apr. 24, 1930.

BLOSSOM



For Thread.
Claims use since Apr. 4, 1930.

CLASS 44

Dental, Medical, and Surgical Appliances

Ser. No. 295,820. BENJAMIN KRELITZ, doing business as Twin City Drug Company, Minneapolis, Minn. Filed Feb. 8, 1930.



The word "Brand" and the word "Minneapolis" are disclaimed apart from the mark shown on the drawing.
For Drug Sundries and Prophylactic Rubber Goods—Namely, Hot-Water Bottles, Ice Bags, Nipples, Rubber Cots, Hard-Rubber Whirling-Spray Syringes, Rubber Gravity Syringe Bags, Hard and Soft Rubber Pessaries, Soft-Rubber Tubes, Soft Rubber Bags Commonly Used to Retain and Receive Discharges in Medical and Surgical Work, and Surgical Gloves.
Claims use since Jan. 1, 1930.

Ser. No. 298,547. THE PREMIER CO., INC., New York, N. Y. Filed Apr. 8, 1930.



The drawing consisting of the representation of a diamond cut through the handle of the file, and no claim being made to the representation of the file per se.
For Nail Files.
Claims use since July 1, 1929.

CLASS 45

Beverages, Nonalcoholic

Ser. No. 285,702. BAKER EXTRACT COMPANY, Springfield, Mass. Filed June 17, 1929.



INDIAN

For Root-Beer Extract.
Claims use since 1899.

Ser. No. 295,434. MAVIS BOTTLING COMPANY OF AMERICA, New York, N. Y. Filed Jan. 31, 1930.

MAVIS

For Ginger Ale.
Claims use since May 1, 1929.

Ser. No. 299,147. JOS. MIDDLEBY, JR., INC., Boston, Mass. Filed Apr. 19, 1930.

CENTENNIAL

For Nonalcoholic, Maltless Beverages and Flavoring Syrups for Making the Same.
Claims use since Mar. 19, 1930.

Ser. No. 299,973. WALTER E. HUGO, Hammond, Ind. Filed May 5, 1930.

SWEET LADY

For Nonalcoholic, Noncereal, Maltless Beverages and Compounds for Making the Same.
Claims use since Jan. 2, 1930.

CLASS 46

Foods and Ingredients of Foods

Ser. No. 273,786. NELIA, SOCIEDAD ANONIMA, Barcelona, Spain. Filed Oct. 13, 1928.



For Chocolates, Cocoas, Bonbons, and Chocolate and Cocoa Confections.
Claims use since August, 1922.

Ser. No. 288,554. FABRICA DE MANTECA INDUSTRIAL DE CUETO Y CO., S. A., Habana, Cuba. Filed Aug. 15, 1929.



For Margarine.
Claims use since Feb. 1, 1928.

Ser. No. 290,474. NORTHERN CALIFORNIA FRUIT COMPANY, Victor, Calif. Filed Oct. 1, 1929.

BLACK KING

For Fresh Grapes.
Claims use since May 6, 1929.

Ser. No. 291,504. FOREMOST DAIRY PRODUCTS, INC., Jacksonville, Fla. Filed Oct. 24, 1929.



For Fresh Milk, Buttermilk, and Sour Milk.
Claims use since April, 1929.

Ser. No. 294,289. BOWRON BROS., LIMITED, Hamilton, Ontario, Canada. Filed Jan. 2, 1930.



The drawing of the trade-mark is lined for the colors purple, black, and orange (or salmon).
For Salad Dressing or Mayonnaise.
Claims use since 1916.

Ser. No. 296,207. YOSHKYS DAIRIES, INC., New York, N. Y. Filed Feb. 18, 1930.

YOSHKYS

For Milk, Butter, Cheese, Cream, and Eggs.
Claims use since about 1922.

Ser. No. 296,764. JOHN MORRELL & CO., Ottumwa, Iowa. Filed Mar. 3, 1930.

HASTY

For Canned Ham.
Claims use since Feb. 15, 1930.

Ser. No. 297,439. KIRGAN'S ARCADIA FARMS, INC., doing business as The Sohomey Company, Cincinnati, Ohio. Filed Mar. 17, 1930.

SOHOMEY

For Sweet Vegetable Relish, Garnishing Cherries, Peach Preserves, Currant Jelly, Ketchup, Chili Sauce, Mint Sauce, Oyster-Cocktail Sauce, Apple Butter, Tomato Juice, and Honey.
Claims use since Feb. 14, 1930.

Ser. No. 297,034. UNITED BAKING COMPANY, Schenectady, N. Y. Filed Mar. 20, 1930.

Lady Lou

For Doughnuts and Cup Cakes.
Claims use since Mar. 3, 1930.

Ser. No. 298,234. FISCHER BAKING CO., Newark, N. J. Filed Apr. 1, 1930.

Fischer's SLICED BRIDGE BREAD

No claim is made to the words "Sliced Bread" apart from the mark shown in the drawing.
For Bread.
Claims use since Feb. 3, 1930.

Ser. No. 298,464. SIBLEY-ALMY COMPANY, INC., Olean, N. Y. Filed Apr. 5, 1930.



The drawing is lined to denote the color red. The exclusive right to the words "Coffee" and "Brazil" are disclaimed apart from the other features shown on the mark.
For Coffee.
Claims use since October, 1929.

Ser. No. 298,548. A. ROMARY & COMPANY LIMITED, Tunbridge Wells, England. Filed Apr. 8, 1930. Under 10-year proviso.

ROMARY'S

For Biscuits and Wafers.
Claims use since 1866.

Ser. No. 298,608. YOUNG'S CANDY PRODUCTS CO., INC., Philadelphia, Pa. Filed Apr. 9, 1930.



BUSTER MINTS

For the purposes of this registration no claim is made to the word "Mints" appearing on the drawing.
For Candy.
Claims use since March, 1924.

Ser. No. 298,613. ALFRED BONIN, doing business as Pawtucket Pure Food Store, Central Falls, R. I. Filed Apr. 10, 1930.



For Malt Syrup and Malt Extract.
Claims use since Jan. 15, 1930.

Ser. No. 298,853. SCHULZE BAKING COMPANY, Kansas City, Mo., and Chicago, Ill. Filed Apr. 14, 1930.



For Cakes and Cookies.
Claims use since September, 1928.

Ser. No. 299,114. EOLA COFFEE CO., INC., Orlando, Fla. Filed Apr. 19, 1930.

EOLA'S
6 Till 6

"Good Any Hour"

No claim is made to the term "Good Any Hour" apart from the mark as shown.
For Coffee.
Claims use since Apr. 1, 1930.

Ser. No. 299,169. WALLACE & CO., Brooklyn, N. Y. Filed Apr. 19, 1930.

MIGNONS

For Chocolates and Candies.
Claims use since Oct. 16, 1908.

Ser. No. 299,215. NATIONAL LICORICE COMPANY, Brooklyn, N. Y. Filed Apr. 21, 1930.



For Candy.
Claims use since about 1904.

Ser. No. 291,504. FOREMOST DAIRY PRODUCTS, INC., Jacksonville, Fla. Filed Oct. 24, 1929.



For Fresh Milk, Buttermilk, and Sour Milk.
Claims use since April, 1929.

Ser. No. 294,289. BOWRON BROS., LIMITED, Hamilton, Ontario, Canada. Filed Jan. 2, 1930.



The drawing of the trade-mark is lined for the colors purple, black, and orange (or salmon).
For Salad Dressing or Mayonnaise.
Claims use since 1916.

Ser. No. 296,207. YOSHKYS DAIRIES, INC., New York, N. Y. Filed Feb. 18, 1930.

YOSHKYS

For Milk, Butter, Cheese, Cream, and Eggs.
Claims use since about 1922.

Ser. No. 296,764. JOHN MORRELL & CO., Ottumwa, Iowa. Filed Mar. 3, 1930.

HASTY

For Canned Ham.
Claims use since Feb. 15, 1930.

Ser. No. 297,439. KIRGAN'S ARCADIA FARMS, INC., doing business as The Sohomey Company, Cincinnati, Ohio. Filed Mar. 17, 1930.

SOHOMEY

For Sweet Vegetable Relish, Garnishing Cherries, Peach Preserves, Currant Jelly, Ketchup, Chili Sauce, Mint Sauce, Oyster-Cocktail Sauce, Apple Butter, Tomato Juice, and Honey.
Claims use since Feb. 14, 1930.

Ser. No. 297,634. UNITED BAKING COMPANY, Schenectady, N. Y. Filed Mar. 20, 1930.

Lady Lou

For Doughnuts and Cup Cakes.
Claims use since Mar. 3, 1930.

Ser. No. 298,234. FISCHER BAKING CO., Newark, N. J. Filed Apr. 1, 1930.



No claim is made to the words "Sliced Bread" apart from the mark shown in the drawing.
For Bread.
Claims use since Feb. 3, 1930.

Ser. No. 298,464. SIBLEY-ALMY COMPANY, INC., Olean, N. Y. Filed Apr. 5, 1930.



The drawing is lined to denote the color red. The exclusive right to the words "Coffee" and "Brazil" are disclaimed apart from the other features shown on the mark.
For Coffee.
Claims use since October, 1929.

Ser. No. 298,548. A. ROMARY & COMPANY LIMITED, Tunbridge Wells, England. Filed Apr. 8, 1930. Under 10-year proviso.

ROMARY'S

For Biscuits and Wafers.
Claims use since 1866.

Ser. No. 298,608. YOUNG'S CANDY PRODUCTS CO., INC., Philadelphia, Pa. Filed Apr. 9, 1930.



BUSTER MINTS

For the purposes of this registration no claim is made to the word "Mints" appearing on the drawing.
For Candy.
Claims use since March, 1924.

Ser. No. 298,613. ALFRED BONIN, doing business as Pawtucket Pure Food Store, Central Falls, R. I. Filed Apr. 10, 1930.



For Malt Syrup and Malt Extract.
Claims use since Jan. 15, 1930.

Ser. No. 298,853. SCHULZE BAKING COMPANY, Kansas City, Mo., and Chicago, Ill. Filed Apr. 14, 1930.



For Cakes and Cookies.
Claims use since September, 1928.

Ser. No. 299,114. EOLA COFFEE CO., INC., Orlando, Fla. Filed Apr. 19, 1930.

EOLA'S

6 Till 6

"Good Any Hour"

No claim is made to the term "Good Any Hour" apart from the mark as shown.
For Coffee.
Claims use since Apr. 1, 1930.

Ser. No. 299,169. WALLACE & CO., Brooklyn, N. Y. Filed Apr. 19, 1930.

MIGNONS

For Chocolates and Candies.
Claims use since Oct. 16, 1908.

Ser. No. 299,215. NATIONAL LICORICE COMPANY, Brooklyn, N. Y. Filed Apr. 21, 1930.



For Candy.
Claims use since about 1904.

Ser. No. 299,293. JAMES VAN DYK COMPANY, New York, N. Y. Filed Apr. 22, 1930.

Jay-Vee

For Coffee.
Claims use since Feb. 10, 1930.

Ser. No. 299,436. JAMES J. GALLAGHER, Baltimore, Md. Filed Apr. 25, 1930.

GENERAL PULASKI

For Coffee and Tea.
Claims use since Feb. 25, 1930.

Ser. No. 299,461. THE QUAKER OATS COMPANY, Chicago, Ill. Filed Apr. 25, 1930.

FUL-O-PEP



For Feed for Turkeys.
Claims use since Mar. 15, 1930.

Ser. No. 299,465. ARTHUR SERRA & Co., Chicago, Ill. Filed Apr. 25, 1930.

PRIDE of CUBA

For Fresh Pineapples.
Claims use since Nov. 15, 1929.

Ser. No. 299,612. WOODHOUSE BROS., Indio, Calif. Filed Apr. 28, 1930.

SAGE BRUSH

For Fresh Citrus Fruits, Fresh Vegetables, Fresh Figs, Fresh Dates.
Claims use since Jan. 3, 1930.

Ser. No. 299,624. CLIFFORD P. ROBERTS, doing business as Roberts Feed & Produce Co., Brookville, Ind. Filed Apr. 29, 1930.

YUM-YUM FEEDS

The word "Feeds" not being claimed apart from the other features of the mark.
For Poultry, Hog, and Cattle Feeds.
Claims use since Mar. 1, 1930.

Ser. No. 299,646. BARRON COUNTY CANNING & PICKLE COMPANY, Chetek, Wis. Filed Apr. 29, 1930.

SUNNY JANE

For Canned Vegetables.
Claims use since Mar. 26, 1930.

Ser. No. 299,672. BETTERTON COFFEE COMPANY, Ashland Ky. Filed Apr. 30, 1930.

OUR-TOWN

For Coffee.
Claims use since Jan. 1, 1930.

Ser. No. 299,673. BETTERTON COFFEE COMPANY, Ashland, Ky. Filed Apr. 30, 1930.

BIG-BOY

For Coffee.
Claims use since Jan. 1, 1930.

Ser. No. 299,750. MODEL MILL COMPANY, Johnson City, Tenn. Filed Apr. 30, 1930.

Sensation

For Chicken Feed, Dairy Feed, Horse Feed, Cattle Feed.
Claims use since Apr. 4, 1930.

CLASS 50

Merchandise Not Otherwise Classified

Ser. No. 298,242. A. C. HORN COMPANY, New York and Long Island City, N. Y. Filed Apr. 1, 1930.



No claim being made to the exclusive use of the word "Mat" nor to the representation of the goods apart from the mark as shown in the drawing.
For a Matting Made of a Paper and Fabric Composition.
Claims use since Feb. 18, 1930.

Ser. No. 298,640. MACKLANBURG-DUNCAN COMPANY, Oklahoma City, Okla. Filed Apr. 10, 1930.

Nu-ART

For Metal Letters and Numbers.
Claims use since Jan. 1, 1930.

Ser. No. 299,015. PHILADELPHIA WATERPROOFING CORP., Philadelphia, Pa. Filed Apr. 17, 1930.

PYROTEX

For Fabrics Treated to Render Them Waterproof and/or Fireproof.
Claims use since October, 1928.

Ser. No. 299,534. VACUUMIZER MFG. CORPORATION, Rochester, N. Y. Filed Apr. 26, 1930.

FLEXO

For Waterproof and Heatproof Pads, Mats, and Rugs for Tables, Floors, Baby Cribs, and the Like and for the Waterproof and Heatproof Material from Which They Are Made.
Claims use since Jan. 10, 1928.

TRADE-MARK REGISTRATIONS GRANTED

[ACT OF FEBRUARY 20, 1905]

JUNE 10, 1930

271,482. TIME RECORDERS, CLOCKS, AND WATCHES. HARRIS WATCH IMPORTING COMPANY, INC., New York, N. Y.
Filed February 7, 1930. Serial No. 295,735. PUBLISHED MARCH 25, 1930. Class 27.

271,488. MEDICAL PREPARATION FOR HEADACHE, NERVOUSNESS, NEURALGIA, TOOTHACHE, COLDS, RHEUMATIC AND FEMALE PAINS. ROBERT M. BRAME, Jr., doing business as The Jake Co., North Wilkesboro, N. C.
Filed February 8, 1930. Serial No. 295,824. PUBLISHED MARCH 25, 1930. Class 46.

271,484. FUNGICIDE, SEED DISINFECTANT. E. I. DU PONT DE NEMOURS AND COMPANY, Wilmington, Del.
Filed February 10, 1930. Serial No. 295,838. PUBLISHED MARCH 25, 1930. Class 6.

271,485. DRY MATS FOR USE IN THE STEREOTYPING PROCESS OF PRINTING. MORLEY BUTTON MANUFACTURING COMPANY, Portland, Me., and Portsmouth, N. H.
Filed January 21, 1930. Serial No. 295,039. PUBLISHED MARCH 25, 1930. Class 50.

271,486. CAULKING COMPOUNDS (GUM AND KNIFING GRADES). CLIFFORD A. PAYTON, doing business as Pleco Products Company, Philadelphia, Pa.
Filed December 12, 1929. Serial No. 293,591. PUBLISHED MARCH 25, 1930. Class 12.

271,487. ADHESIVE TAPE. EASTMAN KODAK COMPANY, Rochester, N. Y.
Filed January 30, 1930. Serial No. 295,366. PUBLISHED MARCH 25, 1930. Class 5.

271,488. CARBON PAPER. MITTAG & VOLGER, INCORPORATED, Park Ridge, N. J.
Filed January 30, 1930. Serial No. 295,381. PUBLISHED MARCH 25, 1930. Class 11.

271,489. CUT-OUT PAPER, BEING STIFF PAPER LAID OVER A PLURALITY OF THICKNESSES OF FABRIC OR LEATHER IN THE OPERATION OF CUTTING SUCH MATERIAL INTO PREDETERMINED SHAPES. S. M. SUPPLIES CO., Boston, Mass.
Filed January 30, 1930. Serial No. 295,395. PUBLISHED MARCH 25, 1930. Class 37.

271,490. PHOSPHATE AND LACTATE MIXTURE SUITABLE FOR USE WITH SODIUM BICARBONATE FOR THE SAME PURPOSE AS BAKING POWDER. STANDARD BRANDS INCORPORATED, Dover, Del.; Cincinnati, Ohio; and New York, N. Y.
Filed January 30, 1930. Serial No. 295,398. PUBLISHED MARCH 25, 1930. Class 6.

271,491. BAKING POWDER. LE-ROY W. EARL, doing business as Hi-Rise Baking Powder Company, Chicago, Ill.
Filed January 31, 1930. Serial No. 295,425. PUBLISHED MARCH 25, 1930. Class 6.

271,492. MINERAL-COATED PAPER SUITABLE FOR PRINTING. THE CHAMPION COATED PAPER COMPANY, Hamilton, Ohio.
Filed February 1, 1930. Serial No. 295,461. PUBLISHED MARCH 25, 1930. Class 37.

271,493. MINERAL-COATED PAPER SUITABLE FOR PRINTING. THE CHAMPION COATED PAPER COMPANY, Hamilton, Ohio.
Filed February 1, 1930. Serial No. 295,462. PUBLISHED MARCH 25, 1930. Class 37.

271,494. DESK REMINDERS CONSISTING OF A CALENDAR AND MEMORANDA SHEETS IN A BINDER. CALVIN B. GRAY, Wilmington, Del.
Filed February 4, 1930. Serial No. 295,560. PUBLISHED MARCH 25, 1930. Class 37.

271,495. GENERAL TONIC. MAXIMO TABOAS, New York, N. Y.
Filed February 4, 1930. Serial No. 295,583. PUBLISHED MARCH 25, 1930. Class 6.

271,496. LIQUID INSECTICIDE. KILSEM MANUFACTURING COMPANY, Baltimore, Md.
Filed February 5, 1930. Serial No. 295,623. PUBLISHED MARCH 25, 1930. Class 6.

271,497. CLOCKS, WATCHES, AND PARTS THEREOF. TAVANNES WATCH CO., S. A., Tavannes, Switzerland.
Filed February 5, 1930. Serial No. 295,646. PUBLISHED MARCH 25, 1930. Class 27.

271,498. FUNGICIDE, SEED DISINFECTANT. E. I. DU PONT DE NEMOURS AND COMPANY, Wilmington, Del.
Filed February 10, 1930. Serial No. 295,839. PUBLISHED MARCH 25, 1930. Class 6.

271,499. SULPHONATED OIL. GENERAL DYESTUFF CORPORATION, New York, N. Y.
Filed February 10, 1930. Serial No. 295,842. PUBLISHED MARCH 25, 1930. Class 6.

271,500. CANDY. H. D. FOSS & CO., INC., Cambridge, Mass.
Filed February 11, 1930. Serial No. 295,896. PUBLISHED MARCH 25, 1930. Class 46.

271,501. PIECE GOODS OF WOOL, COTTON, AND SILK AND MIXTURES OF THE SAME. SOCIETE A RESPONSABILITE LIMITEE RODIER, Paris, France.
Filed February 12, 1930. Serial No. 295,957. PUBLISHED MARCH 25, 1930. Class 42.

271,502. PIECE GOODS OF SILK AND RAYON AND MIXTURES THEREOF. DUPLAN SILK CORPORATION, New York, N. Y.
Filed February 15, 1930. Serial No. 296,051. PUBLISHED MARCH 25, 1930. Class 42.

271,503. STATUES AND MEDALS, BADGES, TOKENS, AND WALL ORNAMENTS MADE WHOLLY OR PARTLY OF PLASTER, LEATHER, PAPER COMPOSITIONS, CLOTH, AND METALS WHICH ARE NOT PRECIOUS. AMERICAN CENTRAL OFFICE OF SAINT THERESE, Manchester, N. H.
Filed June 18, 1929. Serial No. 285,766. PUBLISHED MARCH 25, 1930. Class 50.

271,504. TOILET TISSUES. THE CELLULO COMPANY, Sandusky, Ohio.
Filed July 16, 1929. Serial No. 287,174. PUBLISHED FEBRUARY 4, 1930. Class 37.

271,505. WRITING PAPER, MAILING AND CORRESPONDENCE ENVELOPES, WRAPPING PAPER, TISSUE PAPER, BLOTTING PAPER, AND PASTEBOARD DYED WITH FAST COLORS. I. G. FARBENINDUSTRIE AKTIENGESELLSCHAFT, Frankfort-on-the-Main, Germany.
Filed July 16, 1929. Serial No. 287,183. PUBLISHED MARCH 25, 1930. Class 37.

271,506. AUTOMOBILES AND THEIR STRUCTURAL PARTS. CHRYSLER CORPORATION, Detroit, Mich.
Filed July 19, 1929. Serial No. 287,330. PUBLISHED MARCH 25, 1930. Class 19.

271,507. AUTOMOBILES AND THEIR STRUCTURAL PARTS. CHRYSLER CORPORATION, Detroit, Mich.
Filed July 19, 1929. Serial No. 287,331. PUBLISHED MARCH 25, 1930. Class 19.

271,508. TOBACCONISTS' SUPPLIES—NAMELY, ASH TRAYS, CIGARETTE HOLDERS, AND PIPES. PERCIVAL TASKER SANDS, Vancouver, British Columbia, Canada.
Filed July 20, 1929. Serial No. 287,429. PUBLISHED MARCH 25, 1930. Class 8.

271,509. VAGINAL ANTISEPTIC JELLY. MAX LEWIS, doing business as Lewis Laboratories, Los Angeles, Calif.
Filed July 30, 1929. Serial No. 287,879. PUBLISHED MARCH 25, 1930. Class 6.

271,510. INSECTICIDES. WILLIAM KRUMMENACHER, doing business as The Millwood Company, Overland, Mo.
Filed August 10, 1929. Serial No. 288,382. PUBLISHED OCTOBER 8, 1929. Class 6.

271,511. FERROUS CASTINGS. THE INTERNATIONAL NICKEL COMPANY, INC., New York, N. Y.
Filed August 15, 1929. Serial No. 288,558. PUBLISHED MARCH 25, 1930. Class 14.

271,512. BOND, LEDGER, AND WRITING PAPER. MACK-ELLIOTT PAPER COMPANY, St. Louis, Mo.
Filed August 24, 1929. Serial No. 288,968. PUBLISHED MARCH 25, 1930. Class 37.

271,513. DIATOMACEOUS SILICA USED AS AN ADMIXTURE FOR CONCRETE. BACATOME COMPANY, San Francisco, Calif.
Filed August 24, 1929. Serial No. 288,978. PUBLISHED MARCH 25, 1930. Class 1.

271,514. ARTIFICIAL WOOL—NAMELY, THREAD AND YARN. AMERICAN MANUFACTURING COMPANY, Brooklyn, N. Y.
Filed August 30, 1929. Serial No. 289,170. PUBLISHED MARCH 25, 1930. Class 43.

271,515. ARTICLES MADE FROM NONPRECIOUS METAL. AMERICAN METAL CRAFTS COMPANY, INC., Attleboro, Mass.
Filed November 18, 1929. Serial No. 292,516. PUBLISHED MARCH 25, 1930. Class 50.

271,516. ARTICLES MADE FROM NONPRECIOUS METAL. AMERICAN METAL CRAFTS COMPANY, INC., Attleboro, Mass.
Filed November 18, 1929. Serial No. 292,517. PUBLISHED MARCH 25, 1930. Class 50.

271,517. COLOGNE, TOILET WATERS, BATH SALTS, ETC. ANCIENS ETABLISSEMENTS BAIGNOL ET FARJON, Boulogne-sur-Mer, France.
Filed November 26, 1929. Serial No. 292,919. PUBLISHED MARCH 18, 1930. Class 6.

271,518. TOOTHBRUSHES. THE AGOL CHEMICAL CO., INC., Washington, D. C.
Filed February 7, 1930. Serial No. 295,720. PUBLISHED MARCH 25, 1930. Class 29.

271,519. SALVE USED IN THE TREATMENT OF BOILS, BONE FELONS, CARBUNCLES, SORES, ULCERS, AND SKIN DISEASES. DUDLEY A. BURROWS, doing business as M. B. S. Prod. Co., Baltimore, Md.
Filed December 27, 1929. Serial No. 294,108. PUBLISHED MARCH 25, 1930. Class 6.

271,520. WASHABLE LEATHER. F. A. RUPERT COMPANY, INC., Gloversville, N. Y.
Filed December 27, 1929. Serial No. 294,122. PUBLISHED MARCH 25, 1930. Class 1.

271,521. ARTIFICIAL-SILK THREAD AND ARTIFICIAL SPINNING FIBERS. I. G. FARBENINDUSTRIE AKTIENGESELLSCHAFT, Frankfort-on-the-Main, Germany.
Filed December 28, 1929. Serial No. 294,156. PUBLISHED MARCH 18, 1930. Class 48.

271,522. BRIDGE-GAME LESSONS, PROBLEMS, AND SOLUTIONS. MAURICE M. GOLDBERG, New York, N. Y.
Filed November 30, 1929. Serial No. 293,096. PUBLISHED MARCH 25, 1930. Class 22.

271,523. CERTAIN NAMED GLASSWARE. PACIFIC COAST GLASS COMPANY, San Francisco, Calif.
Filed December 9, 1929. Serial No. 293,444. PUBLISHED MARCH 25, 1930. Class 33.

271,524. MEDICAMENTS IN SOLID AND LIQUID FORM FOR TREATING VOMITING. CHEMOSAN-UNION UND FRITZ-PEZOLDT A. G., Vienna, Austria.
Filed December 10, 1929. Serial No. 293,465. PUBLISHED MARCH 25, 1930. Class 6.

271,525. MEDICAMENTS IN SOLID AND LIQUID FORM FOR TREATING ALL VASOMOTORIC DISEASES OF THE MUSOUS MEMBRANES OF THE NOSE AND OF THE EARS. CHEMOSAN-UNION UND FRITZ-PEZOLDT A. G., Vienna, Austria.
Filed December 10, 1929. Serial No. 293,466. PUBLISHED MARCH 25, 1930. Class 6.

271,526. MEDICINAL PREPARATION IN SOLID AND LIQUID FORM FOR THE UNBLOODY TREATMENT OF VARIXES. PHARMAZEUTISCHE INDUSTRIE A. G., Vienna, Austria.
Filed December 10, 1929. Serial No. 293,484. PUBLISHED MARCH 25, 1930. Class 6.

271,527. LUBRICATING OILS. WEBER OIL COMPANY, INC., New York, N. Y.
Filed December 4, 1929. Serial No. 293,504. PUBLISHED MARCH 18, 1930. Class 15.

271,528. FINISHING LOTION, FOUNDATION CREAM, ROUGES, ETC. MARJORIE JOHNSON, INC., New York, N. Y.
Filed December 16, 1929. Serial No. 293,738. PUBLISHED MARCH 18, 1930. Class 6.

271,529. AUTOMATIC GOLF TEEING DEVICE. MINIATURE GOLF COURSES OF AMERICA, INC., New York, N. Y., assignor to Tee-O-Matic Golf Company, Inc., a Corporation of New York.
Filed December 16, 1929. Serial No. 293,742. PUBLISHED MARCH 25, 1930. Class 22.

271,530. SOLUTION OF IODINE AND CAFFEINE. LABORATOIRES DARRASSE, SOCIETE A RESPONSABILITE LIMITEE, Nanterre, France.
Filed December 19, 1929. Serial No. 293,881. PUBLISHED MARCH 25, 1930. Class 6.

271,531. MEDICINAL PREPARATION FOR GALLSTONES. DR. PAUL WANGEMANN, Berlin-Wilmersdorf, Germany.
Filed December 20, 1929. Serial No. 293,945. PUBLISHED MARCH 25, 1930. Class 6.

271,532. PREPARATION FOR THE TREATMENT OF COUGHS AND COLDS. BUNYAN B. BRANNAN, Roanoke, Ala.
Filed December 21, 1929. Serial No. 293,951. PUBLISHED MARCH 25, 1930. Class 6.

271,533. BABBITT METAL AND CEMENTED TUNGSTEN CARBIDE. GENERAL ELECTRIC COMPANY, Schenectady, N. Y.
Filed December 21, 1929. Serial No. 293,997. PUBLISHED MARCH 25, 1930. Class 14.

271,534. NONMETALLIC SHEET MATERIAL FORMED FROM TEXTILE MATERIAL AND A BINDER. GENERAL ELECTRIC COMPANY, Schenectady, N. Y.
Filed December 21, 1929. Serial No. 294,003. PUBLISHED MARCH 25, 1930. Class 50.

271,535. TONIC FOR THE RELIEF OF ANEMIA, GENERAL DEBILITY, AND MENTAL AND NERVOUS DEPRESSION. WILLIAM SIEGEL, doing business as Williams Specialty Co., New York, N. Y.
Filed December 26, 1929. Serial No. 294,089. PUBLISHED MARCH 18, 1930. Class 6.

271,536. OINTMENT. W. A. SMITH AND SON, Detroit, Mich.
Filed January 20, 1930. Serial No. 294,996. PUBLISHED MARCH 25, 1930. Class 6.

271,537. SMALL ALBUMS FOR USE IN MOUNTING AMATEUR PHOTOGRAPHS. NATIONAL PUBLISHING CO., Philadelphia, Pa.
Filed January 20, 1930. Serial No. 294,988. PUBLISHED MARCH 25, 1930. Class 37.

271,538. DEVELOPING POWDERS FOR PHOTOGRAPHIC PURPOSES. EASTMAN KODAK COMPANY, Rochester, N. Y.
Filed January 20, 1930. Serial No. 294,961. PUBLISHED MARCH 18, 1930. Class 6.

271,539. CERAMIC MATERIALS USED IN THE MANUFACTURE OF ENAMELS AND GLAZES. THE TITANIUM ALLOY MANUFACTURING COMPANY, Niagara Falls, N. Y.
Filed January 18, 1930. Serial No. 294,934. PUBLISHED MARCH 18, 1930. Class 6.

271,540. SALVE FOR CUTS, BURNS, BRUISES, BOILS, PIMPLES, BONE FELON, CORNS, BUNIONS, CALLOUSES, ITCHING SKIN, AND CHILBLAIN. ELMER SMITH, Wichita, Kans.
Filed January 18, 1930. Serial No. 294,930. PUBLISHED MARCH 18, 1930. Class 6.

271,541. BANJO. THE BACON BANJO CO., INC., Groton, Conn.
Filed January 18, 1930. Serial No. 294,910. PUBLISHED MARCH 18, 1930. Class 36.

271,542. TONIC MEDICINE FOR ALL CONDITIONS WHERE LOWERED HEMOGLOBIN CONTENT OR MALNUTRITION IS A FACTOR, PARTICULARLY IN SIMPLE ANEMIA, SECONDARY ANEMIAS (POST-OPERATIVE OR POST-INFECTIONS), DURING CONVALESCENCE, AND IN MALNUTRITION OR CACHEXIA. ELSIE GRAY, doing business as Ferris & Wright of New York City, Flushing, N. Y., assignor to Ferris & Wright, Inc., New York, N. Y.
Filed January 14, 1930. Serial No. 294,772. PUBLISHED MARCH 18, 1930. Class 6.

271,543. SILK CREPES IN THE PIECE. WILLIAM SKINNER & SONS, Holyoke, Mass., and New York, N. Y.
Filed January 13, 1930. Serial No. 294,745. PUBLISHED MARCH 25, 1930. Class 42.

271,544. EDUCATIONAL AMUSEMENT DEVICE FOR CHILDREN. EMMA LEORA KNIGHT, Baltimore, Md.
Filed January 8, 1930. Serial No. 294,536. PUBLISHED MARCH 25, 1930. Class 22.

271,545. WATCH BRACELETS, STRAPS, AND ATTACHMENTS, NECK CHAINS, ETC. GEMEX COMPANY, Newark, N. J.
Filed January 8, 1930. Serial No. 294,520. PUBLISHED MARCH 18, 1930. Class 28.

271,546. WATCH BRACELETS, STRAPS, AND ATTACHMENTS, NECK CHAINS, ETC. GEMEX COMPANY, Newark, N. J.
Filed January 8, 1930. Serial No. 294,519. PUBLISHED MARCH 18, 1930. Class 28.

271,547. WATCH BRACELETS, STRAPS, AND ATTACHMENTS, NECK CHAINS, ETC. GEMEX COMPANY, Newark, N. J.
Filed January 8, 1930. Serial No. 294,518. PUBLISHED MARCH 18, 1930. Class 28.

271,548. WATCH BRACELETS, STRAPS, AND ATTACHMENTS, NECK CHAINS, ETC. GEMEX COMPANY, Newark, N. J.
Filed January 8, 1930. Serial No. 294,517. PUBLISHED MARCH 18, 1930. Class 28.

271,549. WATCH BRACELETS, STRAPS, AND ATTACHMENTS, NECK CHAINS, ETC. GEMEX COMPANY, Newark, N. J.
Filed January 8, 1930. Serial No. 294,516. PUBLISHED MARCH 18, 1930. Class 28.

271,550. WATCH BRACELETS, STRAPS, AND ATTACHMENTS, NECK CHAINS, ETC. GEMEX COMPANY, Newark, N. J.
Filed January 8, 1930. Serial No. 294,515. PUBLISHED MARCH 18, 1930. Class 28.

271,551. WATCH BRACELETS, STRAPS, AND ATTACHMENTS, NECK CHAINS, ETC. GEMEX COMPANY, Newark, N. J.
Filed January 8, 1930. Serial No. 294,513. PUBLISHED MARCH 18, 1930. Class 28.

271,552. WATCH BRACELETS, STRAPS, AND ATTACHMENTS, NECK CHAINS, ETC. GEMEX COMPANY, Newark, N. J.
Filed January 8, 1930. Serial No. 294,512. PUBLISHED MARCH 18, 1930. Class 28.

271,553. ELECTRIC PERCOLATORS, ELECTRIC BABY-BOTTLE WARMERS, AND ELECTRIC LAMPS. ALUMINUM GOODS MANUFACTURING CO., Manitowoc, Wis.
Filed January 3, 1930. Serial No. 294,333. PUBLISHED MARCH 18, 1930. Class 21.

271,554. ARTIFICIAL LEATHER. BROWN COMPANY, Portland, Me., and Berlin, N. H.
Filed December 30, 1929. Serial No. 294,205. PUBLISHED MARCH 25, 1930. Class 50.

271,555. MEDICINAL PREPARATION FOR THE RELIEF OF INDIGESTION. THE WM. S. MERRELL COMPANY, Cincinnati, Ohio.
Filed December 28, 1929. Serial No. 294,164. PUBLISHED MARCH 18, 1930. Class 6.

271,556. BOOKS, BOOKPLATES, PAMPHLETS, BROADSIDES, PERIODICALS, BOOKLETS, DODGERS, CIRCULARS, CARDS, TICKETS, ANNOUNCEMENTS, PROGRAMS, AND POSTERS, SOLD TO THE TRADE AS SUCH, MADE BY PRINTING, ENGRAVING, ETC. EDWARD M. MOORE, Warrenville, Ill.
Filed November 18, 1929. Serial No. 292,543. PUBLISHED MARCH 25, 1930. Class 38.

271,557. MACHINES FOR MAKING PINLESS CLOTHESLINES. WILLIOM W. PEAVYHOUSE, doing business as Blue Grass Pinless Clothesline Machine, Lexington, Ky.
Filed January 4, 1930. Serial No. 294,398. PUBLISHED APRIL 8, 1930. Class 23.

271,558. DRY PAINT. AMERICAN CEMENT PAINT CO., Rossville, Ga.
Filed August 16, 1928. Serial No. 271,107. PUBLISHED OCTOBER 9, 1928. Class 16.

271,559. CIGARETTES. BROWN & WILLIAMSON TOBACCO CORPORATION, Winston-Salem, N. C.
Filed November 22, 1928. Serial No. 275,658. PUBLISHED MARCH 25, 1930. Class 17.

271,560. SKIN PREPARATION ESPECIALLY DESIGNED FOR THE PURPOSE OF PEELING SKIN IN BEAUTY-CULTURE WORK. ELSIE I. COWAN, doing business as Helene Crystal Laboratory, Venice, Los Angeles, Calif.
Filed December 8, 1928. Serial No. 276,460. PUBLISHED MARCH 25, 1930. Class 6.

271,561. MEDICINE FOR THE TREATMENT OF COLDS AND CATARRH. THE LOTAN PRODUCTS COMPANY, Cleveland, Ohio.
Filed January 20, 1929. Serial No. 278,473. PUBLISHED MARCH 18, 1930. Class 6.

271,562. PREPARATION FOR TREATING SORE THROAT, TONSILITIS, PNEUMONIA, APPENDICITIS, MASHED FINGERS, BURNS, SCALDS, HEADACHES, COLDS, NEURALGIA, LUMBAGO, INFLAMMATION OF THE BOWELS, ASTHMA, AND BRONCHITIS. LEYDE & KIESWETTER, Milwaukee, Wis.
Filed February 8, 1929. Serial No. 279,053. PUBLISHED MARCH 25, 1930. Class 6.

CARNEGIE LIBRARY OF ATLANTA

271,563. SHEET STEEL AND ANVILS. KLAUER MANUFACTURING COMPANY, Dubuque, Iowa.
Filed March 14, 1929. Serial No. 280,712. PUBLISHED MARCH 25, 1930. Class 14.

271,564. COTTON AND WOOLEN PIECE GOODS TO BE USED IN MANUFACTURING LADIES', MEN'S, AND CHILDREN'S COATS. WILKIN & ADLER, INC., doing business as Goldex, New York, N. Y.
Filed May 15, 1929. Serial No. 284,105. PUBLISHED JULY 30, 1929. Class 42.

271,565. ELECTRICAL FLOOR POLISHERS AND VACUUM CLEANERS AND PARTS THEREFOR. ELECTROLUX, INC., New York, N. Y.
Filed June 3, 1929. Serial No. 284,978. PUBLISHED MARCH 18, 1930. Class 21.

271,566. THERMALLY-OPERATED ELECTRIC CUT-OUT SWITCHES USED AS SAFETY CONTROL FOR HEATING PLANTS. MINNEAPOLIS-HONEYWELL REGULATOR COMPANY, Minneapolis, Minn.
Filed June 25, 1928. Serial No. 268,621. PUBLISHED SEPTEMBER 24, 1929. Class 21.

271,567. SOFT-FINISHED KNITTED AND WOVEN FABRICS OF SILK AND RAYON, COTTON, OR OTHER YARNS. BETHLEHEM TEXTILES COMPANY, Bethlehem, Pa.
Filed August 30, 1929. Serial No. 289,178. PUBLISHED MARCH 25, 1930. Class 42.

271,568. BROODERS. AMERICAN STEEL PRODUCTS CO., Macomb, Ill.
Filed September 19, 1929. Serial No. 289,955. PUBLISHED MARCH 25, 1930. Class 50.

271,569. SEALING SOLUTION USED IN REPAIRING LEAKS IN RADIATORS. ROSCOE C. MENERAY, doing business as Radiator Seal Company, Council Bluffs, Iowa.
Filed September 14, 1929. Serial No. 289,792. PUBLISHED MARCH 25, 1930. Class 6.

271,570. INSECTICIDES, DEODORANTS, DISINFECTANTS, NOSE AND THROAT SPRAYS, MEDICINAL MINERAL OILS, ISOPROPYL ALCOHOLS, AND PETROLATUMS. STANCO INCORPORATED, Wilmington, Del., and New York, N. Y.
Filed October 3, 1929. Serial No. 290,623. PUBLISHED MARCH 18, 1930. Class 6.

271,571. WAXED WRAPPING PAPER. AMERICAN TISSUE MILLS, Holyoke, Mass.
Filed October 7, 1929. Serial No. 290,736. PUBLISHED MARCH 25, 1930. Class 37.

271,572. LUBRICATING OILS AND GREASES. QUAKER STATE OIL REFINING CO., Oil City, Pa.
Filed September 21, 1929. Serial No. 290,086. PUBLISHED FEBRUARY 25, 1930. Class 15.

271,573. PREPARATION FOR TREATING PAIN, BURNS, AND SORENESS. EDWARD J. KELLY, doing business as Hu-Kel Chemical Co., Washington, Pa.
Filed October 14, 1929. Serial No. 291,058. PUBLISHED MARCH 25, 1930. Class 6.

271,574. PREPARATION USED AS A MOUTH WASH, A SPRAY, GARGLE, AND DOUCHE. STEVENS LUKE, doing business as Rose City Chemical Company and Stevens Luke Company, Thomasville, Ga.
Filed October 15, 1929. Serial No. 291,093. PUBLISHED MARCH 25, 1930. Class 6.

271,575. SALVE FOR USE IN THE TREATMENT OF BLOOD POISONING, BURNS, BRUISES, CUTS, PILES, FELONS, BOILS, CARBUNCLES, CHILBLAINS, AND ALL INFECTIONS OF THE SKIN. VIOLA JACKSON, doing business as W. V. L. Jackson, Catskill, N. Y.
Filed October 24, 1929. Serial No. 291,510. PUBLISHED MARCH 18, 1930. Class 6.

271,576. APPARATUS FOR RECORDING SOUND EFFECTS UPON AND PROJECTING SOUND EFFECTS FROM RECORDS OF THE PHONOGRAPH TYPE AND PARTS THEREOF. WESTERN ELECTRIC COMPANY, INCORPORATED, New York, N. Y.
Filed October 26, 1929. Serial No. 291,648. PUBLISHED MAY 18, 1930. Class 36.

271,577. FRATERNITY BADGES, LAPEL BUTTONS, CUFF LINKS, ETC. PHI ALPHA DELTA LAW FRATERNITY, Los Angeles, Calif.
Filed November 13, 1929. Serial No. 292,368. PUBLISHED MARCH 18, 1930. Class 28.

271,578. TRUE-FRUIT AND IMITATION FOOD-FLAVORING EXTRACTS. MILTON PAUL, doing business as International Extract Co., New York, N. Y.
Filed February 7, 1930. Serial No. 295,756. PUBLISHED MARCH 25, 1930. Class 46.

271,579. CHOCOLATE COVERING PREPARED ESSENTIALLY FOR ICE CREAM. WHITE-STOKES CO. INC., Chicago, Ill.
Filed February 6, 1930. Serial No. 295,706. PUBLISHED MARCH 25, 1930. Class 46.

271,580. COCOA PREPARATION COMBINED WITH MILK, SKIMMED MILK, AND SUGAR. CAUCHOIS COFFEE COMPANY, New York, N. Y.
Filed February 8, 1930. Serial No. 295,780. PUBLISHED MARCH 25, 1930. Class 46.

[ACT OF MARCH 19, 1920, SEC. 1 (b)]

THESE REGISTRATIONS ARE NOT SUBJECT TO OPPOSITION.

271,581. (CLASS 28. JEWELRY AND PRECIOUS-METAL WARE.) S. LAZARUS & SONS, Chicago, Ill.
Filed June 15, 1929. Serial No. 285,632.

GOLD MEDAL

For Finger Rings.
Claims use since Apr. 15, 1929.

271,582. (CLASS 39. CLOTHING.) LOUIS SOLOMON, Paterson, N. J. Filed June 10, 1929. Serial No. 285,389.

Glendale

For Hosiery and Knit Underwear for Men, Women, and Children.
Claims use since Apr. 1, 1920.

271,583. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) PUGSLEY & MORRISON, Yuba City, Calif. Filed May 28, 1929. Serial No. 284,745.

TREE SEAL

For Neutral Noncaustic Emulsion for Covering Fruit Trees and Plants.
Claims use since Sept. 1, 1925.

271,584. (CLASS 15. OILS AND GREASES.) GALENA MANUFACTURING COMPANY OF ILLINOIS, Galena, Ill. Filed May 20, 1929. Serial No. 284,297.

STA-PURE

For Lubricating Oil.
Claims use since Apr. 25, 1929.

271,585. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) CHARLES FRESHMAN COMPANY, INC., Brooklyn, N. Y., by change of name Earl Radio Corporation. Filed May 8, 1929. Serial No. 283,663.

C.A. Earl RADIO

For Radio Broadcast Receiving Sets.
Claims use since Apr. 1, 1929.

271,586. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) FLORIAN, INC., Detroit, Mich. Filed Apr. 30, 1929. Serial No. 283,270.

Smooth

For Face Powder.
Claims use since Mar. 25, 1929.

271,587. (CLASS 39. CLOTHING.) SIEGEL & ALENIKOFF, New York, N. Y. Filed Apr. 27, 1929. Serial No. 283,145.

Badgerette

For Women's Cloaks and Suits Made of Fabric.
Claims use since Apr. 16, 1929.

271,588. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) KELLEY NEWTON SHARP, Commerce, Ga. Filed Apr. 16, 1929. Serial No. 282,493.

Itch Bug Death

For a Preparation for Treating Skin Irritations.
Claims use since Mar. 25, 1929.

271,589. (CLASS 15. OILS AND GREASES.) PETROLEUM PRODUCTS CORPORATION, Milwaukee, Wis. Filed Apr. 15, 1929. Serial No. 282,429.

CASTOR-IN OIL

For Lubricating Oils.
Claims use since Dec. 23, 1928.

271,590. (CLASS 39. CLOTHING.) SCHIFF BROS., New York, N. Y. Filed Apr. 9, 1929. Serial No. 282,137.

TomSwift

For Boys' Blouses and Boys' and Men's Dress and Work Shirts.
Claims use since Mar. 22, 1929.

271,591. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) SCHREIBER PRODUCTS CORPORATION, Buffalo, N. Y. Filed Apr. 3, 1929. Serial No. 281,795.

SNOWYTE

For Maltose Powder for Food Purposes.
Claims use since Mar. 20, 1929.

271,592. (CLASS 39. CLOTHING.) FLEETWOOD HOSIERY CORPORATION, Fleetwood, Pa. Filed Mar. 29, 1929. Serial No. 281,552.

FLEETWOOD

For Hosiery.
Claims use since Mar. 6, 1929.

271,593. (CLASS 14. METALS AND METAL CASTINGS AND FORGINGS.) PITTSBURGH METALLURGICAL CO., INC., Niagara Falls, N. Y. Filed Mar. 19, 1929. Serial No. 281,016.

NIAGARA

For Ferrosilicon, Ferromanganese, Ferrochromium, Ferrotungsten, Ferrovanadium, Silicon-Manganese, Manganese-Silicon, and Aluminum-Silicon Alloys.
Claims use since Feb. 1, 1929.

271,594. (CLASS 28. JEWELRY AND PRECIOUS-METAL WARE.) WEIDLICH STERLING SPOON CO., Bridgeport, Conn. Filed Mar. 15, 1929. Serial No. 280,814.

Virginia Sterling

For Silverware—Namely, Hollow Ware and Flatware.
Claims use since Mar. 6, 1929.

271,595. (CLASS 36. MUSICAL INSTRUMENTS AND SUPPLIES.) EDWARD N. BURNS, New York, N. Y. Filed Feb. 27, 1929. Serial No. 279,984.

CINEMA

For Phonograph Records.
Claims use since Feb. 9, 1929.

271,596. (CLASS 4. ABRASIVE DETERGENT, AND POLISHING MATERIALS.) DIVERSEY MANUFACTURING COMPANY, Chicago, Ill. Filed Feb. 18, 1929. Serial No. 279,534.

DIVERSEY WHITE-FLAKES

For Cleanser for Cleaning Receptacles and Containers Having Incidental Water-Softening Properties.
Claims use since Jan. 25, 1929.

271,597. (CLASS 37. PAPER AND STATIONERY.) THE BUZZA COMPANY, Minneapolis, Minn. Filed Jan. 23, 1929. Serial No. 278,338.

The Bridge Ensemble

For Score Pads and Tallies for Use in Connection with Playing Cards.
Claims use since July 1, 1928.

271,598. (CLASS 27. HOROLOGICAL INSTRUMENTS.) ENGGASS JEWELRY COMPANY, doing business as Webster Watch Company, Detroit, Mich. Filed Apr. 15, 1930. Serial No. 298,890.

WEBSTER WATCH COMPANY

For Watches.
Claims use since January, 1929.

271,599. (CLASS 27. HOROLOGICAL INSTRUMENTS.) ENGGASS JEWELRY COMPANY, doing business as Claremore Watch Company, Detroit, Mich. Filed Apr. 15, 1930. Serial No. 298,889.

CLAREMORE WATCH COMPANY

For Watches.
Claims use since January, 1929.

271,600. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) THE PACKARD ELECTRIC COMPANY, Warren, Ohio. Filed Apr. 11, 1930. Serial No. 298,711.

LAC-KARD

For Electric Insulated Wire.
Claims use since Dec. 1, 1928.

271,601. (CLASS 39. CLOTHING.) EDWARD KANTOR, Brooklyn, N. Y. Filed Mar. 15, 1930. Serial No. 297,370.

Croydon

For Men's and Boys' Sweaters, Slip-Over Sweaters, Lounging Robes, Bathing Suits.
Claims use since February, 1929.

271,602. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) MRS. C. H. SMITH NOODLE CO., Ellwood City, Pa. Filed Mar. 4, 1930. Serial No. 296,827.

Mrs. Smith's

For Egg Noodles, Elbow Macaroni, Spaghetti, and Long Macaroni.
Claims use since September, 1921.

271,603. (CLASS 37. PAPER AND STATIONERY.) THE GRAY ENVELOPE MANUFACTURING COMPANY, INC., Brooklyn, N. Y. Filed Feb. 21, 1930. Serial No. 296,339.

GRAY GOOD

In the drawing the shading repres..t.. ..lor black.
For Correspondence and Mailing E..
Claims use since January, 1923.

271,604. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) LUST'S HEALTH FOOD BAKERY, INC., New York, N. Y. Filed Feb. 17, 1930. Serial No. 296,127.

HEALTHRYE

For Pumpernickel.
Claims use since Aug. 1, 1928.

271,605. (CLASS 39. CLOTHING.) JAMES A. HEARN & SON, INC., New York, N. Y. Filed Feb. 8, 1930. Serial No. 295,790.

DERBYSHIRE

For Men's Dress and Negligee Shirts, Union Suits, Pajamas, and Collars.
Claims use since Jan. 28, 1928.

271,606. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) THE AUTO SUPPLIES MANUFACTURING CO., Pueblo, Colo. Filed Feb. 8, 1930. Serial No. 295,779.

"IT LIFTS THE DUST"

For Chemically-Treated Cleaning Cloths for Furniture, Automobiles, and Similar Articles Embodying Material Which Will Collect Dust.
Claims use since June 15, 1928.

271,607. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) SIMS MALT-O-WHEAT COMPANY, St. Paul, Minn. Filed Jan. 17, 1930. Serial No. 294,896.

Sims

For Breakfast Cereal.
Claims use since Sept. 15, 1914.

271,608. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) ARTHUR J. SCHMITT, doing business as The Tassel Liter Co., Chicago, Ill. Filed Jan. 13, 1930. Serial No. 294,743.

TASSEL-LITER

For Electric Cigar Lighters.
Claims use since Feb. 1, 1929.

271,609. (CLASS 39. CLOTHING.) THE OHIO TEXTILE PRODUCTS COMPANY, Mansfield, Ohio. Filed Dec. 10, 1929. Serial No. 293,480.

ZIG ZAG

For Necktles or Cravats.
Claims use since March, 1929.

271,610. (CLASS 37. PAPER AND STATIONERY.) CHARLES R. KEERAN, doing business as Keen-Point Products Company, Evanston, Ill. Filed Nov. 24, 1928. Serial No. 275,783.

KEEN-POINT

For Pens, Pencils, and Leads.
Claims use since Nov. 21, 1928.

271,611. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) AUBRE AIRES, LTD., Chicago, Ill. Filed June 29, 1928. Serial No. 268,838.

Aubre Aires

For Cleansing Cream, Complexion Cream, Lemon Cream, Wrinkle and Tissue Cream, Face Powder, Rouge, Lip Paste, Lip Stick, Skin Tonic and Astringent, Brilliantine, Rouge and Powder Compacts or a Combination of Both, Eyebrow Pencils, Lemon Hand Lotions, Astringent Clear, Manicure Varnish, Nail Polish, Complexion Powder, Perfumes, and Toilet Water.
Claims use since Dec. 15, 1927.

271,612. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) THE FAY METAL PATCH COMPANY, Cleveland, Ohio. Filed Jan. 30, 1928. Serial No. 260,883.

FAY METAL PATCH

For Semidrying Oil Compound Used for the Preservation of Metal.
Claims use since September, 1923.

271,613. (CLASS 1. RAW OR PARTLY-PREPARED MATERIALS.) O. M. SCOTT & SONS COMPANY, Marysville, Ohio. Filed Sept. 12, 1929. Serial No. 289,695.

SCOTT'S SEEDS

For Field and Grass Seeds.
Claims use since 1919.

271,614. (CLASS 16. PAINTS AND PAINTERS' MATERIALS.) THE SHEFFIELD BRONZE POWDER & STENCIL CO., Cleveland, Ohio. Filed Aug. 27, 1929. Serial No. 289,088.

Patching WOOD

For Wood Composition Held Soft by Chemicals Which Dry Out After Application, Leaving a Hardwood Surface Easy to Tool, to Paint, Lacquer, or Stain and Holding Nails or Screws Permanently.
Claims use since Apr. 1, 1929.

271,615. (CLASS 37. PAPER AND STATIONERY.) CROWN WILLIAMETTE PAPER COMPANY, San Francisco, Calif. Filed June 19, 1929. Serial No. 285,771.

ALFIBRE

For Paper Towels.
Claims use since Mar. 18, 1929.

271,616. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) THE WM. S. MERRELL COMPANY, Cincinnati, Ohio. Filed Sept. 9, 1927. Serial No. 254,553.

RUB WITH THE BEST

For Medicated Alcohol.
Claims use since June 15, 1927.

271,617. (CLASS 37. PAPER AND STATIONERY.) RALPH S. CANNON, doing business as Bankers' Service Advertising, York, Pa. Filed Nov. 18, 1929. Serial No. 292,519.

BUK-BAK

For Paper Book Covers.
Claims use since Apr. 15, 1929.

TRADE-MARK REGISTRATIONS RENEWED

76,964. PLACARDS ADVERTISING KINEMATOGRAPH SHOWS. Registered March 1, 1910. COMPAGNIE GENERALE DE PHONOGRAPHES, CINEMATOGRAPHES ET APPAREILS DE PRECISION. Renewed March 1, 1930, to Pathe-Cinema Anciens Etablissements Pathe Freres, Paris, France, a Corporation of France, by changes of name.

77,129. DEVICES FOR HOLDING AND DELIVERING SOAP. Registered March 15, 1910. GRANULATOR SOAP COMPANY. Renewed March 15, 1930, to Soapitor Co. Inc., New York, N. Y., a Corporation of New York, successor.

77,351. A VETERINARY REMEDY. Registered March 29, 1910. AHRENS BROTHERS, Wilmington, N. C. Renewed March 29, 1930.

77,381. SILK PIECE GOODS. Registered April 5, 1910. ROGERS & THOMPSON, West New York, N. J., and New York, N. Y. Renewed April 5, 1930, to Loren O. Thompson, New York, N. Y., successor.

77,689. AN ALKALINE ANTISEPTIC. Registered April 26, 1910. ARTHUR E. FELCH, Camp Megono, Natick, Mass. Renewed April 26, 1930.

77,779. ELECTRIC LAMPS. Registered May 3, 1910. GENERAL ELECTRIC COMPANY, Schenectady, N. Y., a Corporation of New York. Renewed May 3, 1930.

77,806. SOAP. Registered May 10, 1910. GRANULATOR SOAP COMPANY. Renewed May 10, 1930, to Soapitor Co. Inc., New York, N. Y., a Corporation of New York, successor.

77,840. LADIES' OUTER WAISTS AND LADIES' SHIRT WAISTS. Registered May 10, 1910. ABRAHAM SOLOMON. Renewed May 10, 1930, to Pansy Dress Company, New York, N. Y., a Corporation of New York, successors.

77,887. ELECTRIC OUTLET BOXES. Registered May 10, 1910. SPRAGUE ELECTRIC COMPANY, New York, N. Y. Renewed May 10, 1930, to General Electric Company, Schenectady, N. Y., a Corporation of New York, assignee.

77,901. CARBON PAPER AND TYPEWRITER RIBBONS. Registered May 17, 1910. O. R. BROWN COMPANY. Renewed May 17, 1930, to Fred Lutz, doing business as O. R. Brown Paper Company, Indianapolis, Ind., successor.

77,982. WIND MUSICAL INSTRUMENTS. Registered May 24, 1910. BESSON AND COMPANY LIMITED, London, England, a Corporation of England. Renewed May 24, 1930.

77,991. TOOTHPICKS. Registered May 24, 1910. FORSTER MANUFACTURING COMPANY, Dixfield, Me. Renewed May 24, 1930, to Berst-Forster-Dixfield Company, New York, N. Y., and Dixfield, Me., a Corporation of Maine, assignee, by mesne assignments.

78,397. A REMEDY FOR BLOOD POISONING IN COLTS. Registered June 14, 1910. THOMAS B. BOWMAN, Boone, Nebr. Renewed June 14, 1930.

78,433. BROWN COTTON SHEETING WITHOUT FINISHING OR COLORING. Registered June 14, 1910. GRENDEL MILLS, Greenwood, S. C., a Corporation of South Carolina. Renewed June 14, 1930.

78,480. BARBED WIRE. Registered June 21, 1910. THE AMERICAN STEEL & WIRE COMPANY OF NEW JERSEY, Cleveland, Ohio; Chicago, Ill.; Pittsburg, Pa.; New York, N. Y.; and Worcester, Mass. Renewed June 21, 1930, to The American Steel and Wire Company of New Jersey, Cleveland, Ohio, a Corporation of New Jersey.

78,551. BAR STEEL. Registered June 21, 1910. SWEDISH IRON & STEEL CORPORATION, New York, N. Y., a Corporation of New York. Renewed June 21, 1930.

78,553. WOVEN-WIRE FABRICS FOR SCREENS. Registered June 21, 1910. THE W. S. TYLER COMPANY, Cleveland, Ohio, a Corporation of Ohio. Renewed June 21, 1930.

78,605. STEEL BALLS. Registered June 28, 1910. ERNST GUSTAV HOFFMANN, New Rochelle, N. Y. Renewed June 28, 1930, to The Hoffmann Manufacturing Company Limited, Chelmsford, England, a Corporation of Great Britain, assignee.

78,758. MEDICINES AND PHARMACEUTICAL PREPARATIONS. Registered July 12, 1910. ACTIEN-GESELLSCHAFT FÜR ANILIN-FABRIKATION, Berlin, Germany. Renewed July 12, 1930, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

78,860. MACHINERY PACKINGS. Registered July 19, 1910. RANDOLPH BRANDT. Renewed July 19, 1930. to Frank Adams, New York, N. Y., successor.

78,872. CHEMICALS USED IN TREATING PHOTOGRAPHIC PRINTS AND NEGATIVES. Registered July 19, 1910, to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Renewed July 19, 1930.

78,933. PLASTIC COMPOSITIONS FOR MAKING GUMS FOR ARTIFICIAL TEETH. Registered July 26, 1910. ARNOLD BIBER, Pforzheim, Germany. Renewed July 26, 1930, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

79,036. A SUBSTITUTE FOR CAMPHOR IN CELLULOID MANUFACTURE. Registered August 2, 1910. CHEMISCHE FABRIKEN VORM. WEILER-TER MEER, Uerdingen, Germany. Renewed August 2, 1930, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

79,071. COFFEE. Registered August 2, 1910. E. B. MILLAR & COMPANY, Chicago, Ill., a Corporation of Illinois. Renewed August 2, 1930.

79,089. CLOCKS. Registered August 2, 1910. THE WESTERN CLOCK MFG. CO. Renewed August 2, 1930. to Western Clock Company, Peru, Ill., a Corporation of Illinois, assignee.

79,118. GARTERS. Registered August 9, 1910. GEORGE FROST COMPANY, Boston, Mass., a Corporation of Massachusetts. Renewed August 9, 1930.

79,120. INSULATING OIL. Registered August 9, 1910. GENERAL ELECTRIC COMPANY, Schenectady, N. Y., a Corporation of New York. Renewed August 9, 1930.

79,186. A MINERAL POWDER FOR DECOLORIZING OIL. Registered August 16, 1910. HERMANN BENSMANN, Bremen, Germany. Renewed August 16, 1930, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y., a Corporation of Delaware assignee by mesne assignments.

79,376. ANVILS. Registered August 30, 1910. SWEDISH IRON & STEEL CORPORATION, New York, N. Y., a Corporation of New York. Renewed August 30, 1930.

79,402. COTTON PIECE GOODS. Registered September 6, 1910. BOOTT MILLS, Lowell, Mass., a Corporation of Massachusetts. Renewed September 6, 1930.

79,487. BRAKE BLOCKS. Registered September 13, 1910. THE HERBERT FROOD COMPANY LIMITED, Chapel-en-le-Frith, England. Renewed September 13, 1930, to Ferodo and Asbestos Incorporated, New Brunswick, N. J., a Corporation of New York, assignee by mesne assignments.

79,494. WATCHCASES AND WATCH MOVEMENTS. Registered September 13, 1910. ILLINOIS WATCH CASE COMPANY, Elgin, Ill., a Corporation of Illinois. Renewed September 13, 1930.

79,590. BLENDED COFFEE. Registered September 20, 1910. THE H. D. LEE MERCANTILE COMPANY, Salina, Kans. Renewed September 20, 1930, to The H. D. Lee Mercantile Company, Kansas City, Mo., a Corporation of Kansas.

79,612. BAR STEEL. Registered September 20, 1910. SWEDISH IRON & STEEL CORPORATION, New York, N. Y., and New Orleans, La. Renewed September 20, 1930, to Swedish Iron & Steel Corporation, New York, N. Y., a Corporation of New York.

79,615. WOVEN-WIRE FABRICS FOR SCREENS. Registered September 20, 1910. THE W. S. TYLER COMPANY, Cleveland, Ohio, a Corporation of Ohio. Renewed September 20, 1930.

79,616. WRITING AND PRINTING PAPER. Registered September 20, 1910. UNION CARD & PAPER COMPANY, New York, N. Y., a Corporation of New York. Renewed September 20, 1930.

79,637. COLORS IN OIL. Registered September 27, 1910. ACME WHITE LEAD & COLOR WORKS, Detroit, Mich., a Corporation of Michigan. Renewed September 27, 1930.

79,652. A VEGETABLE REMEDY FOR MALARIA. Registered September 27, 1910. DAVIS & LAWRENCE CO., New York, N. Y., a Corporation of New York. Renewed September 27, 1930.

79,676. WATCHCASES AND WATCH MOVEMENTS. Registered September 27, 1910. ILLINOIS WATCH CASE COMPANY, Elgin, Ill., a Corporation of Illinois. Renewed September 27, 1930.

79,972. HOSE SUPPORTERS AND GARTERS. Registered October 25, 1910. GEORGE FROST COMPANY, Boston, Mass., a Corporation of Massachusetts. Renewed October 25, 1930.

80,111. SALVES. Registered November 8, 1910. DERMATO SALVE COMPANY, Columbus, Ohio. Renewed November 8, 1930.

LABELS

REGISTERED JUNE 10, 1930

37,553.—*Title:* GIT UM DUST CLOTH. For Dust Cloths. THE AUTO SUPPLIES MANUFACTURING CO., Pueblo, Colo. Published January 1, 1924.

37,554.—*Title:* PER-OD-EX. For Ointment Deodorant. THE BARBASOL COMPANY, Indianapolis, Ind. Published April 18, 1930.

37,555.—*Title:* BARBASOL. For Shaving Cream. THE BARBASOL COMPANY, Indianapolis, Ind. Published March 17, 1930.

37,556.—*Title:* THE ORIGINAL BLACK CAT TOP DRESSING. For Top Dressing. H. S. ELLIS, Hollywood, Calif. Published October 21, 1929.

37,557.—*Title:* SOMMER AND KAUFMANN. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published January 6, 1930.

37,558.—*Title:* PROSPERITY. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published December 30, 1930.

37,559.—*Title:* GINGHAM. For Raspberry Preserves. PETER J. KASPER COMPANY, Chicago, Ill. Published May 1, 1930.

37,560.—*Title:* YOUNG'S ESSENCE. For Flavoring Extract. J. C. MILLETT COMPANY, doing business as H. C. Schwartz Company, San Francisco, Calif., and Milwaukee, Wis. Published March 15, 1930.

37,561.—*Title:* BLUE DIAMOND. For Honey. PACKING AND MARKETING, INCORPORATED, San Francisco, Calif. Published April 12, 1930.

37,562.—*Title:* JUCY-BITE. For Prunes. PRUNE GROWERS CO-OPERATIVE ASSOCIATION, Freewater, Oreg. Published June 15, 1929.

37,563.—*Title:* GIGLIO BRAND. For Macaroni. SAVOIA MACARONI MFG. CO. INC., Brooklyn, N. Y. Published August 1, 1929.

37,564.—*Title:* ROYAL. For Sandwich Spread. STANDARD BRANDS INCORPORATED, New York, N. Y. Published April 7, 1930.

37,565.—*Title:* THOROBREAD. For Canned Dog Food. THE THOROBREAD COMPANY, Cincinnati, Ohio. Published April 1, 1930.

37,566.—*Title:* FLAVOR FED POULTRY PRODUCTS. For Poultry Products. MILTON W. UECKER, Elkader, Iowa. Published February 12, 1930.

37,567.—*Title:* UZIT. For Chemicals. MICHAEL L. UZIT, Chicago, Ill. Published March 18, 1930.

37,568.—*Title:* SEEDTOWN LAWN GRASS MIXTURE. For Lawn Grass Seed. WARREN-TEED SEED COMPANY, Chicago, Ill. Published April 20, 1930.

PRINTS

REGISTERED JUNE 10, 1930

12,583.—*Title:* ELIZABETH ARDEN OPENS HER NEW DOORWAY TO LOVELINESS AT 691 FIFTH AVENUE. For Toilet Preparations. ELIZABETH ARDEN INC., doing business as Elizabeth Arden, New York, N. Y. Published January 25, 1930.

12,584.—*Title:* LOVE MAY BE THE PURPOSE OF LIFE BUT BEAUTY IS ITS SONG. For Vienna Youth Mask, a Face Treatment. ELIZABETH ARDEN INC., doing business as Elizabeth Arden, New York, N. Y. Published February 8, 1930.

12,585.—*Title:* JOY. For Perfume. ELIZABETH ARDEN INC., doing business as Elizabeth Arden, New York, N. Y. Published April 7, 1930.

12,586.—*Title:* MORNING, NOON & NIGHT. For Toilet Powder. HARRY BOCK, doing business as Cureodor Drug and Chemical Company, New York, N. Y. Published March 14, 1930.

12,587.—*Title:* AND NOW . . PALM BEACH COLORS IN GORDON INDIVIDUALLY-PROPORTIONED STOCKINGS. For Hosiery. BROWN DURRELL COMPANY, Boston, Mass. Published January 1, 1930.

12,588.—*Title:* IF A LOOM ACTUALLY WOVE STOCKINGS ON YOUR LEGS. For Hosiery. BROWN DURRELL COMPANY, Boston, Mass. Published February 1, 1930.

12,589.—*Title:* THERE IS A MOVEMENT AMONG MEN. For Athletic Underwear. THE B. V. D. COMPANY, INC., New York, N. Y. Published May 8, 1930.

12,590.—*Title:* EVERY HOUSE WIFE KNOWS THAT THERE'S NOTHING LIKE OVEN-BAKING TO MAKE BEANS TENDER. For Oven-Baked Beans. H. J. HEINZ COMPANY, Pittsburgh, Pa. Published March 1, 1930.

12,591.—*Title:* IN KEEPING. For Olives, Mayonnaise Salad Dressing, Sandwich Relish, Sweet Mustard Pickles and Sweet Pickles. H. J. HEINZ COMPANY, Pittsburgh, Pa. Published March 1, 1930.

12,592.—*Title:* THE SUN-KISSED FLAVOR OF OLD GARDENS. For Vinegar, Ketchup, and Oven-Baked Beans. H. J. HEINZ COMPANY, Pittsburgh, Pa. Published March 1, 1930.

12,593.—*Title:* HILLS BROS. COFFEE—BUY IT HERE! For Coffee. HILLS BROS., San Francisco, Calif. Published May 2, 1930.

12,594.—*Title:* MAMMY. For Chocolates. F. H. ROBERTS COMPANY, Boston, Mass. Published March 22, 1930.

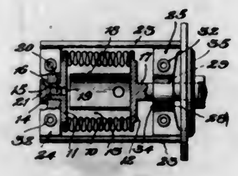
12,595.—*Title:* HERCULES TEAR GAS FOUNTAIN PEN GUN. For Tear-Gas Pistols or Guns. PETER VON FRANTZIUS, doing busines as Hercules Gas Munitions Co., Chicago, Ill. Published September 15, 1929.

REISSUES

JUNE 10, 1930

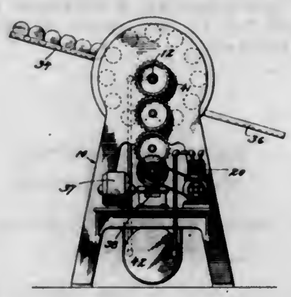
17,695. [WITHDRAWN.]

17,696. THERMOSTATICALLY-CONTROLLED VALVE UNIT. JEAN V. GIESLER, Knoxville, Tenn., assignor, by mesne assignments, to The Fulton Sylphon Company, Knoxville, Tenn., a Corporation of Delaware. Filed Feb. 21, 1930. Serial No. 430,430. Original No. 1,675,341, dated July 3, 1928, Serial No. 159,499, filed Jan. 6, 1927. 42 Claims. (Cl. 236—34.)



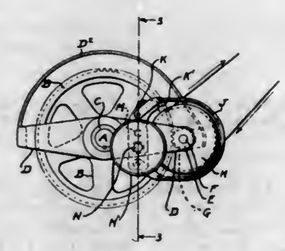
33. In a device of the character described, in combination with a thermostat, a valve stem and a valve disk operatively connected thereto, a cage for said thermostat composed of a head portion and a base portion connected by longitudinally extending ribs, said head portion having an integral valve stem guide and an integral flange constituting a valve seat for said valve disk.

17,697. METHOD OF AND APPARATUS FOR TESTING CANS. LOUIS H. PETERS, Oakland, Calif. Filed Apr. 27, 1927. Serial No. 187,084. Original No. 1,575,384, dated Mar. 2, 1926, Serial No. 693,556, filed Feb. 18, 1924. 5 Claims. (Cl. 73—51.)



1. A method of testing filled cans consisting in forming a seal around the edge of a closed can end, thereafter creating suction upon a portion of the can end embraced by the seal, whereby the end of the can will be distended, after which the distension of the end will remain permanent if the can is faulty.

17,698. BELT-DRIVEN POWER-TRANSMISSION APPLIANCE. JAMES STUART WEARN, Christchurch, New Zealand, assignor to Wearns Automatic Drive Company, Limited, Christchurch, New Zealand, a Corporation of New Zealand. Filed Dec. 31, 1926. Serial No. 158,351. Original No. 1,526,650, dated Feb. 17, 1925, Serial No. 496,517, filed Aug. 29, 1921. 8 Claims. (Cl. 74—21.)

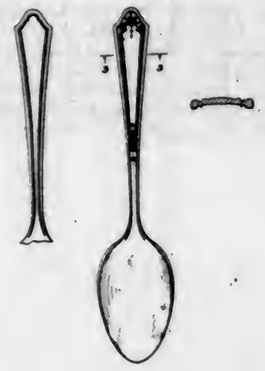


8. A power transmission device comprising a driven shaft, having a gear wheel affixed thereto, a driving shaft disposed parallel to said driven shaft and having a pinion meshing with said gear wheel, an arm carrying said driving shaft, a pulley on said driving shaft, a belt driving said pulley, such elements being so related that an increased load tends to automatically tighten the belt, and a brake carried by said arm, said brake being adapted to contact with a portion of said driving mechanism when said arm has been rotated to a given position and to prevent further rotation thereof.

DESIGNS

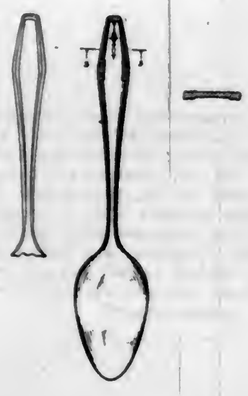
JUNE 10, 1930

81,316. SPOON OR SIMILAR ARTICLE. GROSVENOR N. ALLEN, Oneida, and LILLIAN V. M. HELANDER, Niagara Falls, N. Y., assignors to Oneida Community, Limited, Oneida, N. Y., a Corporation of New York. Filed Jan. 31, 1930. Serial No. 34,368. Term of patent 14 years.



The ornamental design for a spoon or similar article as shown and described.

81,317. SPOON OR SIMILAR ARTICLE. GROSVENOR N. ALLEN and CHARLES A. BENNETT, Oneida, N. Y., assignors to Oneida Community, Limited, Oneida, N. Y., a Corporation of New York. Filed Jan. 31, 1930. Serial No. 34,369. Term of patent 14 years.



The ornamental design for a spoon or similar article as shown and described.

81,318. LAMP STAND OR SIMILAR ARTICLE. LOUIS V. ARONSON, Newark, N. J. Filed Apr. 10, 1930. Serial No. 35,203. Term of patent 14 years.



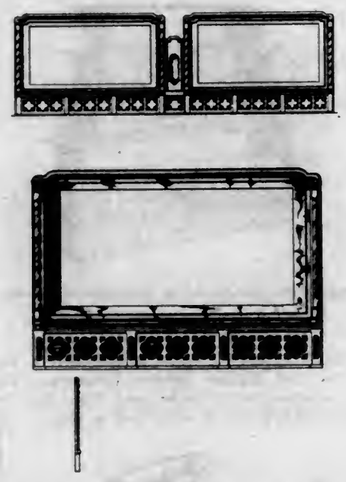
The ornamental design for a lamp stand or similar article substantially as shown.

81,319. ELASTIC WEBBING. HARRY AULL, Philadelphia, Pa., assignor to Friedberger-Aaron Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Nov. 16, 1927. Serial No. 24,144. Term of patent 14 years.



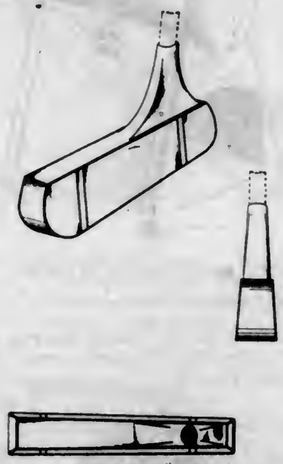
The ornamental design for elastic webbing, as shown and described.

81,320. BILLBOARD. JOSEPH T. AULTMAN, Milwaukee, Wis. Filed Jan. 24, 1930. Serial No. 34,272. Term of patent 14 years.



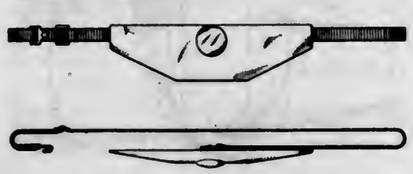
The ornamental design for a billboard, as shown.

81,321. GOLF-CLUB HEAD. ROBERT J. CASH, Los Angeles, Calif. Filed Oct. 4, 1929. Serial No. 32,939. Term of patent 14 years.



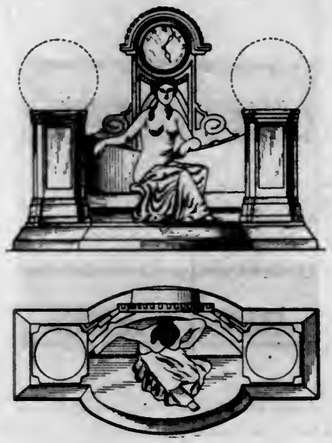
The ornamental design for a golf club head, substantially as shown.

81,322. NECKTIE. JOHN A. COFFMAN, Sedgwick, Kans. Filed Sept. 14, 1929. Serial No. 32,751. Term of patent 3½ years.



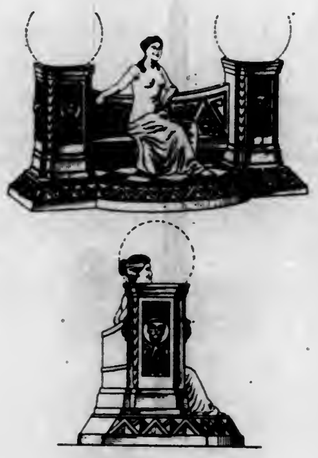
The ornamental design for necktie as shown.

81,323. COMBINED CLOCK CASE AND LAMP. PAUL CRICCHIO, New York, N. Y., assignor to Majestic Lamp Works, New York, N. Y., a Partnership consisting of Philip Silberhartz, Jacob Silberhartz, and Harry Scheiner, Brooklyn, N. Y. Filed Apr. 11, 1930. Serial No. 35,211. Term of patent 3½ years.



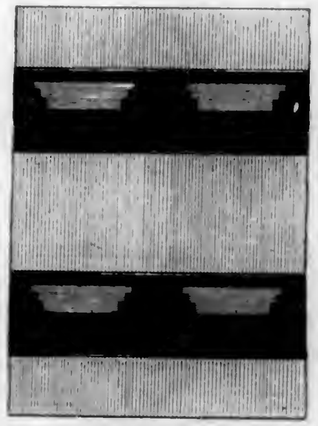
The ornamental design for a combined clock case and lamp substantially as shown.

81,324. LAMP OR ARTICLE OF ANALOGOUS NATURE. PAUL CRICCHIO, New York, N. Y., assignor to Majestic Lamp Works, New York, N. Y., a Partnership consisting of Philip Silberhartz, Jacob Silberhartz, and Harry Scheiner, Brooklyn, N. Y. Filed Apr. 11, 1930. Serial No. 35,212. Term of patent 3½ years.



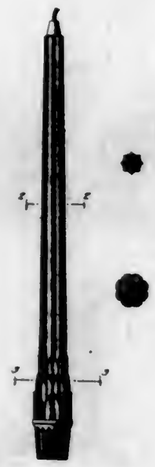
The ornamental design for a lamp or article of analogous nature substantially as shown.

81,325. TEXTILE FABRIC. IMOGENE DE LANCY, New York, N. Y., assignor to Otis Company, Inc., Boston, Mass., a Corporation of Massachusetts. Filed Oct. 16, 1929. Serial No. 33,047. Term of patent 3½ years.



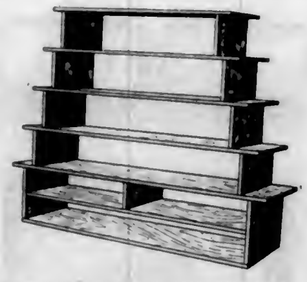
The ornamental design for a textile fabric substantially as shown.

81,326. CANDLE. JAMES W. FARRELL, Cincinnati, Ohio, assignor to Standard Oil Company, Chicago, Ill., a Corporation of Indiana. Filed Nov. 25, 1929. Serial No. 33,543. Term of patent 14 years.



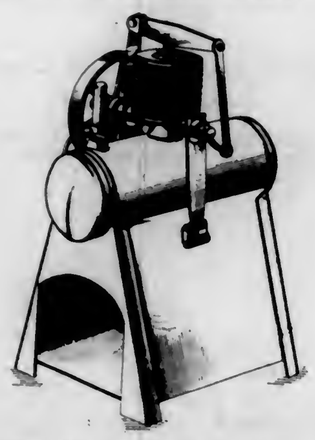
The ornamental design for a candle, as shown.

81,327. BOOKCASE. JOE S. FELSHIN, New York, N. Y. Filed May 29, 1928. Serial No. 26,904. Term of patent 3½ years.



The ornamental design for a bookcase, as shown.

81,328. TOY. JEAN V. GIESLER, Knoxville, Tenn., assignor to The Fulton Syphon Company, Knoxville, Tenn., a Corporation of Delaware. Filed Mar. 19, 1930. Serial No. 34,962. Term of patent 14 years.



The ornamental design for a toy as shown.

81,329. WEDDING RING. JOSEPH GRANAT, San Francisco, Calif. Filed Mar. 17, 1930. Serial No. 34,932. Term of patent 3½ years.



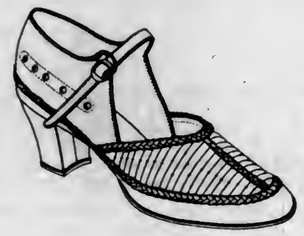
The ornamental design for a wedding ring substantially as shown.

81,330. THERMOMETER CARD. SAMUEL J. GREENBERG, Brooklyn, N. Y. Filed Mar. 18, 1930. Serial No. 34,952. Term of patent 3½ years.



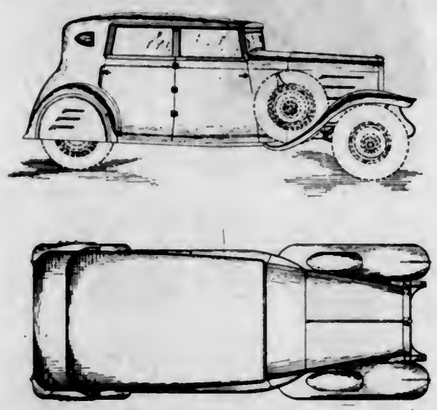
The ornamental design for a thermometer card, as shown and described.

81,331. SHOE. DAVID I. HASKELL, Brookline, Mass. Filed Nov. 9, 1929. Serial No. 33,387. Term of patent 14 years.



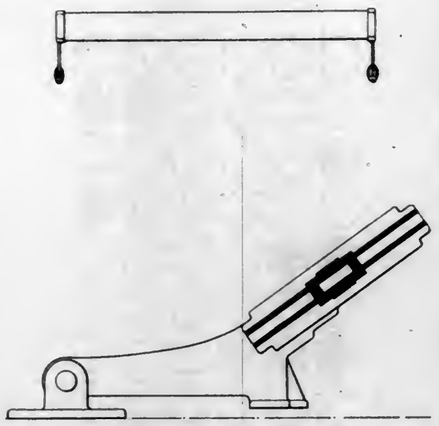
The ornamental design for a shoe, as shown.

81,332. MOTOR-VEHICLE BODY. KENT C. HAVEN, Syracuse, N. Y., assignor to H. H. Franklin Manufacturing Company, Syracuse, N. Y., a Corporation of New York. Filed Aug. 28, 1929. Serial No. 32,582. Term of patent 14 years.



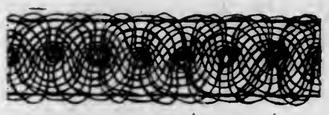
The ornamental design for a motor vehicle body substantially as shown.

81,333. FOOT REST. HERBERT V. HENDERSON, Detroit, Mich., assignor to Chrysler Corporation, Detroit, Mich., a Corporation of Delaware. Filed June 15, 1929. Serial No. 31,711. Term of patent 3½ years.



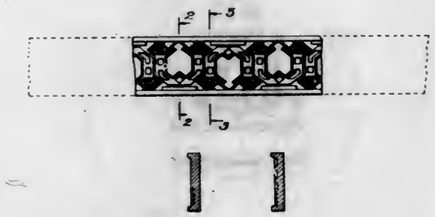
The ornamental design for a foot rest substantially as shown and described.

81,334. LACE BRAID. OTTO EUGENE HUBER, Reading, Pa., assignor to The Narrow Fabric Co., West Reading, Pa., a Corporation of Pennsylvania. Filed Mar. 10, 1930. Serial No. 34,805. Term of patent 14 years.



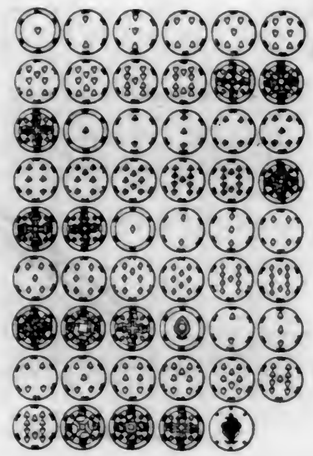
The ornamental design for a lace braid, as shown.

81,335. METAL BORDER STRIP. GEORGE P. ITTIG, Bridgeport, Conn., assignor to Blackstone Silver Company, Incorporated, Br dgeport, Conn., a Corporation of Connecticut. Filed Dec. 14, 1929. Serial No. 33,790. Term of patent 3½ years.



The ornamental design for a metal border strip substantially as shown.

81,336. PACK OF PLAYING CARDS. FELIX ALEXANDER JOSEPH, Hampstead, London, England. Filed Dec. 19, 1929. Serial No. 33,839. Term of patent 14 years.



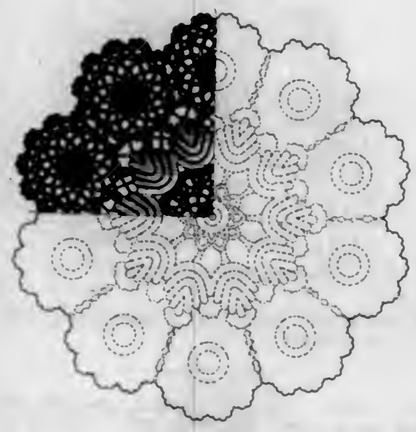
The ornamental design for a pack of playing cards substantially as shown.

81,337. ARTICLE DISPENSING STAND. EDWARD KANTER and EMIL FELDMAN, Cleveland Heights, Ohio. Filed Feb. 14, 1930. Serial No. 34,557. Term of patent 14 years.



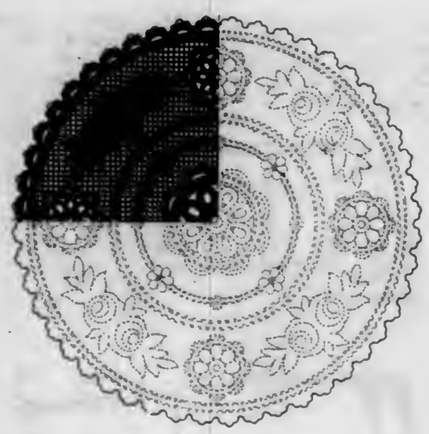
The ornamental design for an article dispensing stand, as shown.

81,338. DOILY. EDWARD KARFIOL, Brooklyn, N. Y. Filed Mar. 15, 1930. Serial No. 34,900. Term of patent 14 years.



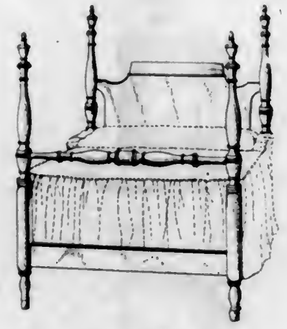
The ornamental design for a doily as shown and described.

81,339. DOILY. EDWARD KARFIOL, Brooklyn, N. Y. Filed Mar. 15, 1930. Serial No. 34,901. Term of patent 14 years.



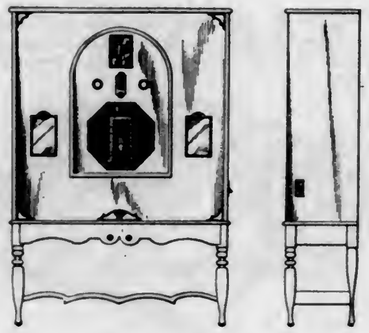
The ornamental design for a doily as shown and described.

81,340. BED OR SIMILAR ARTICLE. THOMAS G. KINDEL, Grand Rapids, Mich., assignor to Kindel Furniture Company, a Corporation of Michigan. Filed Apr. 4, 1930. Serial No. 35,156. Term of patent 3½ years.



The ornamental design for a bed or similar article, as shown.

81,341. RADIOCABINET. LOUIS FOLOFSON KIRSCH, Cleveland, Ohio. Filed Apr. 4, 1930. Serial No. 35,157. Term of patent 14 years.



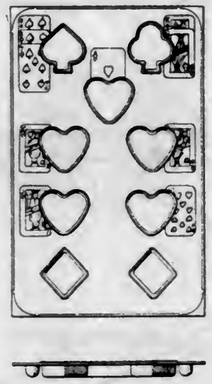
The ornamental design for a radio cabinet as shown.

81,342. FINGER RING. OSCAR F. KLINKE, Attleboro, Mass., assignor to Bates & Klinke, Inc., Attleboro, Mass., a Corporation of Rhode Island. Filed Mar. 13, 1930. Serial No. 34,844. Term of patent 7 years.



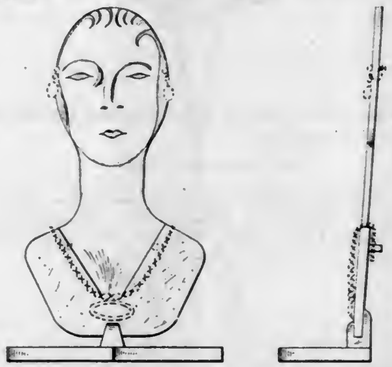
The ornamental design for a finger ring, substantially as shown.

81,343. GAME BOARD. M HELEN LANE, Chicago, Ill. Filed Jan. 28, 1929. Serial No. 29,797. Term of patent 14 years.



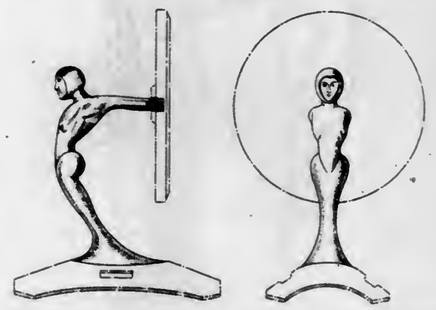
The ornamental design for a game board as shown.

81,344. EMBOSSED DISPLAY FIGURE. MAURICE M. LEVY and WILLIAM I. SMITH, Brooklyn, N. Y. Filed July 17, 1929. Serial No. 32,102. Term of patent 3½ years.



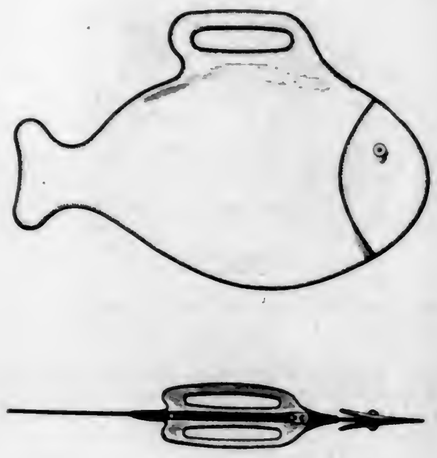
The ornamental design for an embossed display figure, as shown.

81,345. MIRROR STAND. FRANK N. MARIANI, New York, N. Y., assignor to Best Die Casting & Stamping Co., New York, N. Y., a Corporation of New York. Filed Mar. 26, 1930. Serial No. 35,028. Term of patent 7 years.



The ornamental design for a mirror stand substantially as shown and described.

81,346. CARRYING BAG. MARCUS ASH MYERS, Gloversville, N. Y., assignor to Myers' Woolly Animals, Inc., a Corporation of New York. Filed Feb. 15, 1928. Serial No. 25,451. Term of patent 3½ years.



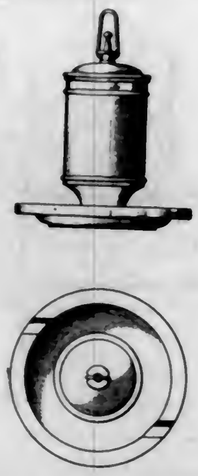
The ornamental design for a carrying bag, substantially as shown and described.

81,347. CARRYING BAG. MARCUS ASH MYERS, Gloversville, N. Y., assignor to Myers' Woolly Animals, Inc., a Corporation of New York. Filed Feb. 15, 1928. Serial No. 25,452. Term of patent 3½ years.



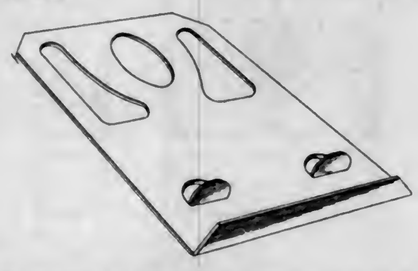
The ornamental design for a carrying bag, substantially as shown and described.

81,348. CIGARETTE HOLDER. LOUIS OFFERMAN, New York, N. Y. Filed Mar. 21, 1930. Serial No. 34,995. Term of patent 3½ years.



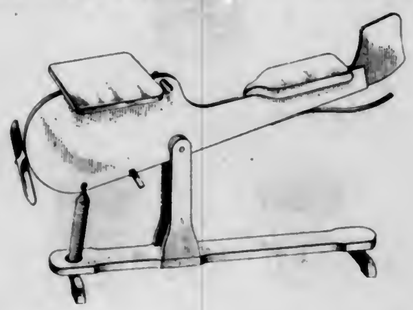
The ornamental design for a cigarette holder, substantially as shown.

81,349. SUPPORT FOR READING AND WRITING MATTER. GEORGE E. RITCHIE, Halifax, Nova Scotia, Canada. Filed Apr. 14, 1930. Serial No. 35,251. Term of patent 14 years.



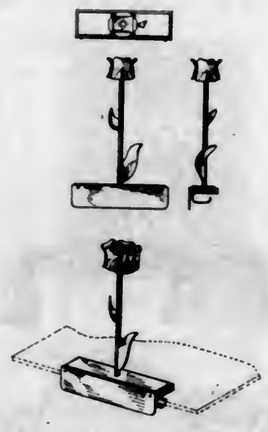
The ornamental design for a support for reading and writing matter, as shown.

81,350. TOY SEESAW. LEO J. ROUSSEAU, Detroit, Mich., assignor of one-third to Leo J. Rousseau, one-third to Ernest J. Rousseau, and one-third to Ranol J. Rousseau, Detroit, Mich. Filed Sept. 13, 1929. Serial No. 32,832. Term of patent 3½ years.



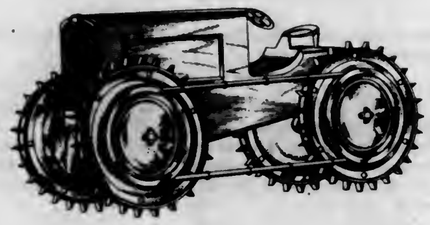
The ornamental design for a toy see-saw, as shown.

81,351. HAT SUPPORT. FRANCES SAMUELS, Flushing, N. Y., assignor to Siegfried Behr, New York, N. Y. Filed Feb. 21, 1930. Serial No. 34,603. Term of patent 3½ years.



The ornamental design for a hat support substantially as shown.

81,352. TOY CLIMBING TRACTOR. LINNAEUS T. SAVAGE, East Orange, N. J. Filed Mar. 11, 1929. Serial No. 30,424. Term of patent 14 years.



The ornamental design for a toy climbing tractor, as shown.

81,353. CENTER ORNAMENT FOR DRAPERY RODS OR THE LIKE. WALTER EDWARD SMITH, Providence, R. I., assignor to Kenney Manufacturing Company, Cranston, R. I., a Corporation of Rhode Island. Filed Mar. 5, 1930. Serial No. 34,736. Term of patent 7 years.



The ornamental design for a center ornament for drapery rods or the like, as shown.

81,354. END ORNAMENT FOR DRAPERY RODS OR THE LIKE. WALTER EDWARD SMITH, Providence, R. I., assignor to Kenney Manufacturing Company, Cranston, R. I., a Corporation of Rhode Island. Filed Mar. 5, 1930. Serial No. 34,737. Term of patent 7 years.



The ornamental design for an end ornament for drapery rods or the like, as shown.

81,355. FLOWER STAND. CHARLES TUTEUR, Chicago, Ill. Filed Mar. 10, 1930. Serial No. 34,813. Term of patent 7 years.



The ornamental design for a flower stand substantially as shown.

81,356. LADY'S HAND BAG. ROBERT L. VAUGHN, Crestview, Fla. Filed June 27, 1929, Serial No. 31,852, and in Canada Apr. 4, 1930. Term of patent 7 years.



The ornamental design for a lady's hand bag, substantially as shown.

81,357. VASE. HENDERIKUS JACOBUS VERWAYEN, Astoria, N. Y. Filed Jan. 13, 1930. Serial No. 34,116. Term of patent 3½ years.





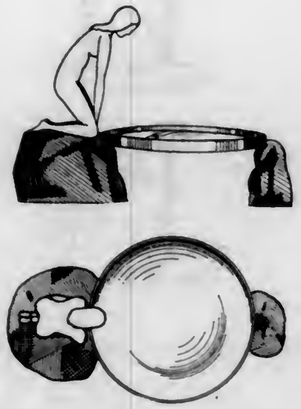
The ornamental design for a base as shown.

81,358. VENDING-MACHINE CASING. FRANK H. VOGEL, Columbus, Ohio, assignor to The Columbus Vending Company, Columbus, Ohio, a Corporation of Ohio. Filed Mar. 3, 1930. Serial No. 34,717. Term of patent 14 years.



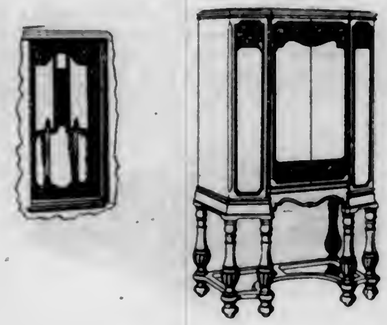
The ornamental design for a vending machine casing as shown.

81,359. READING GLASS. MILTON C. WILLIAMSON, Rochester, N. Y., assignor to Bausch & Lomb Optical Company, Rochester, N. Y., a Corporation of New York. Filed Jan. 7, 1930. Serial No. 34,043. Term of patent 7 years.



The ornamental design for a reading glass substantially as shown.

81,360. RADIOCABINET OR SIMILAR ARTICLE. EVERETT WORTHINGTON, Chicago, Ill., assignor to The Stromberg-Carlson Telephone Manufacturing Company, Rochester, N. Y., a Corporation of New York. Filed Apr. 7, 1930. Serial No. 35,178. Term of patent 3½ years.



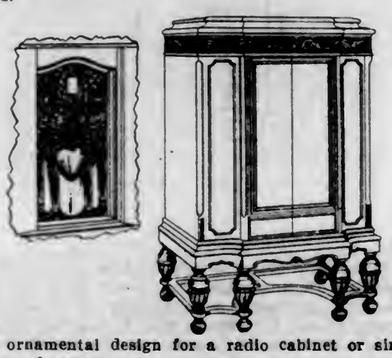
The ornamental design for a radio cabinet or similar article as shown.

81,361. RADIOCABINET OR SIMILAR ARTICLE. EVERETT WORTHINGTON, Chicago, Ill., assignor to The Stromberg-Carlson Telephone Manufacturing Company, Rochester, N. Y., a Corporation of New York. Filed Apr. 7, 1930. Serial No. 35,179. Term of patent 3½ years.



The ornamental design for a radio cabinet or similar article as shown.

81,362. RADIOCABINET OR SIMILAR ARTICLE. EVERETT WORTHINGTON, Chicago, Ill., assignor to The Stromberg-Carlson Telephone Manufacturing Company, Rochester, N. Y., a Corporation of New York. Filed Apr. 15, 1930. Serial No. 35,256. Term of patent 3½ years.



The ornamental design for a radio cabinet or similar article as shown.

81,363. RADIOCABINET OR SIMILAR ARTICLE. EVERETT WORTHINGTON, Chicago, Ill., assignor to The Stromberg-Carlson Telephone Manufacturing Company, Rochester, N. Y., a Corporation of New York. Filed Apr. 15, 1930. Serial No. 35,257. Term of patent 3½ years.



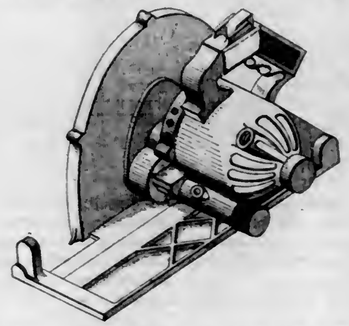
The ornamental design for a radio cabinet or similar article as shown.

81,364. DESK OR THE LIKE. ERWIN J. PAULI, Brooklyn, N. Y., assignor to Doehler Furniture Co. Inc., a Corporation of New York. Filed Apr. 16, 1930. Serial No. 85,272. Term of patent 7 years.



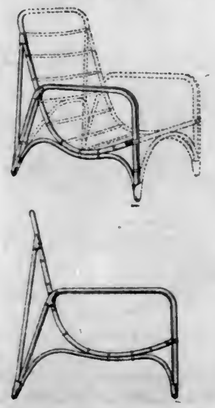
The ornamental design for a desk or the like, as shown.

81,365. PORTABLE POWER-DRIVEN SAW FRAME. THOMAS J. FEGLEY and GEORGE O. LEOPOLD, Philadelphia, Pa., assignors to North Bro's Mfg. Co., Philadelphia, Pa., a Corporation of Pennsylvania. Filed Dec. 13, 1929. Serial No. 33,785. Term of patent 14 years.



The ornamental design for a portable power-driven saw frame, substantially as shown.

81,366. FRAME OF A CHAIR OR SETTEE. CHARLES WESLEY JONES, Glen Ridge, N. J., assignor to Sons-Cunningham Reed & Rattan Co., Inc., New York, N. Y., a Corporation of New York. Filed Apr. 8, 1930. Serial No. 35,191. Term of patent 7 years.

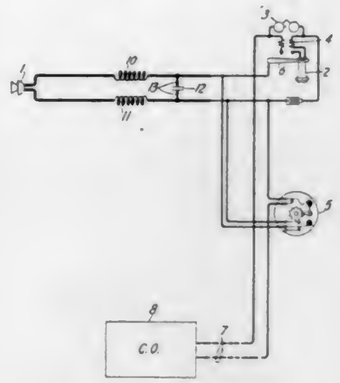


The ornamental design for a frame of a chair or settee, as shown and described.

PATENTS

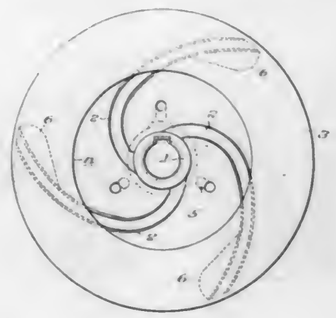
GRANTED JUNE 10, 1930

1,762,139. SIGNALING SYSTEM. ARTHUR F. BENNETT, Richmond Hill, and CLIFFORD E. MITCHELL, New York, N. Y., assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Nov. 19, 1926. Serial No. 149,301. 5 Claims. (Cl. 179—81.)



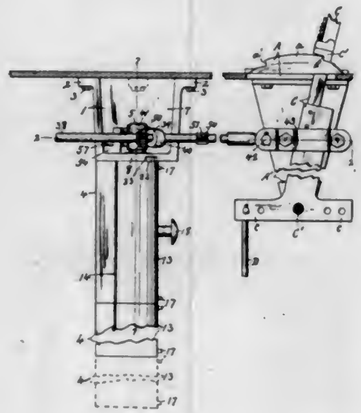
1. In a telephone substation circuit, a carbon button transmitter, and means for preventing switching operations from causing electrical packing in the transmitter, said means comprising an inductance element in series with the transmitter and a capacity element in shunt to the transmitter and inductance element.

1,762,140. METHOD OF AND MEANS FOR BALANCING ROTARY BODIES HAVING RADIATING BLADES. ARTHUR L. BLAKEMORE, Chicago Heights, Ill., assignor to American Manganese Steel Company, Chicago, Ill., a Corporation of Maine. Filed June 8, 1928. Serial No. 283,787. 2 Claims. (Cl. 103—115.)



1. A pump rotor embodying in its construction blades arranged around an axis of rotation, and having upon said blades, fins adapted to be individually reduced in mass for balancing the mass of the rotor upon its axis of rotation; the fin upon each blade being in a plane perpendicular to the axis of rotation and of reduced dimension in the direction of the width of the blade, and leaving on the sides of the fin free and unobstructed space for the flow of material impelled by the pump.

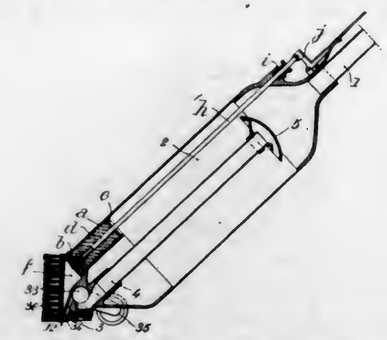
1,762,141. CIRCUIT CONTROLLER FOR MECHANICAL INTERLOCKING MACHINES. WILLIAM F. BOSSERT and WILLIAM R. BURKE, Utica, N. Y., assignors to Signal Accessories Corporation, Utica, N. Y., a Corporation of New York. Filed Mar. 26, 1928. Serial No. 264,792. 9 Claims. (Cl. 200—9.)



1. In a circuit controller of the character described, an upright support, an upright shaft mounted on the support for angular movement, a multiplicity of electric switch terminals mounted on the support in sequence along the shaft, a multiplicity of commutator rings loosely mounted end to end upon the shaft for axial displacement therefrom and provided with contact segments movable into and out of contact with the terminals as the shaft is moved angularly, the meeting ends of the commutator rings being provided with clutch-engaging members for transmitting angular motion from one to the other, said commutator rings being adjusted axially to disengage the clutch members and to permit angular movement of each of the rings independently of and relatively to the others, a collar secured to the shaft and having clutch engagement with the uppermost commutator rings, an abutment movable into and out of engagement with the lower face of the lowermost commutator ring to hold said rings in clutch engagement with each other and the uppermost ring in clutch engagement with the collar and to permit axial adjustment of said rings independently of the collar and means for effecting angular movement of the shaft.

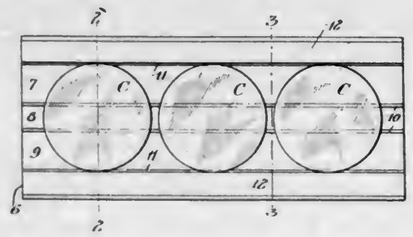
1,762,142. VACUUM CLEANING MACHINE. PAUL BARTON, Bellevue, France. Filed Jan. 14, 1927, Serial No. 161,097, and in Belgium Feb. 5, 1926. 2 Claims. (Cl. 15—10.)

1. An apparatus of the class described comprising in combination a suction nozzle, a receiving chamber communicating with said nozzle, a source of suction connected to the receiving chamber, means for filtering a fluid connected to said receiving chamber, valve means for controlling the rate of flow of fluid from the receiving chamber



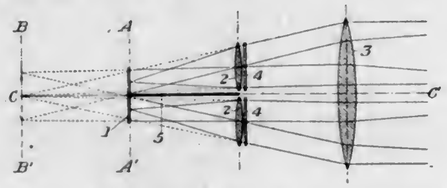
through the filtering means, and a discharge extending from the discharge side of the filtering means to a point outside of the receiving chamber.

1,762,143. FILTER AND METHOD OF PREPARING SAME. JOHN G. CAPSTAFF, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Dec. 29, 1928. Serial No. 329,124. 11 Claims. (Cl. 95—81.5.)



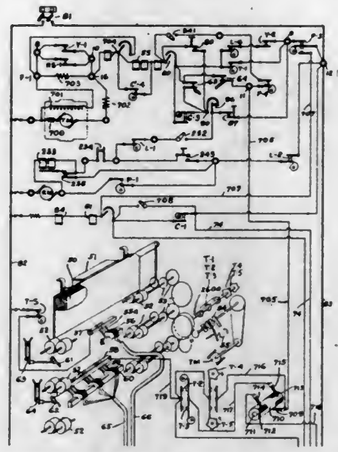
1. The method of manufacturing color filters which comprises applying by capillary attraction a layer of uniform thickness of a colored solution to the surface of a transparent plate, allowing the layer of solution to dry, and cementing a transparent cover plate to said layer.

1,762,144. LENS SYSTEM FOR COLOR PHOTOGRAPHY. HAROLD N. COX, Glen Ridge, N. J., assignor to Cox Multi-Color Photo Company, Pittsburgh, Pa., a Corporation of Delaware. Filed June 11, 1927. Serial No. 198,200. 3 Claims. (Cl. 88—1.)



2. In color photography a film extending in a plane, a plurality of optically identical objectives equidistantly arranged about an axis perpendicular to the plane of the film and at uniform distance from the plane of the film and a distance less than the focal length of the said objectives, and another objective coordinated with all of the plurality of objectives first named and arranged in the said axis and on the side of the objectives first named opposite the film.

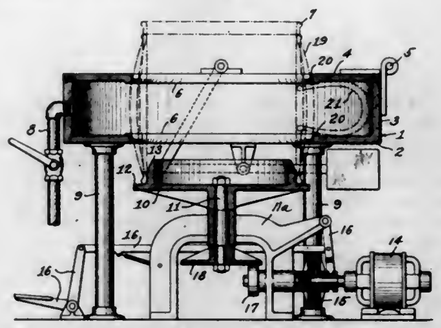
1,762,145. TABULATING MACHINE. GEORGE F. DALY and RALPH E. PAGE, Binghamton, N. Y., assignors to The Tabulating Machine Company, Endicott, N. Y., a Corporation of New Jersey. Filed Feb. 5, 1925. Serial No. 6,980. 29 Claims. (Cl. 235—58.)



1. A tabulating device, a printing device, means for operating said devices conjointly, or operating the tabulating device alone, in combination with a 2-speed driving motor therefor, a resistance for controlling the speed and torque characteristics of said motor, a plurality of contact devices for controlling the coaction of said resistance and said motor, and means governed by the printing device for automatically changing the speed of said motor.

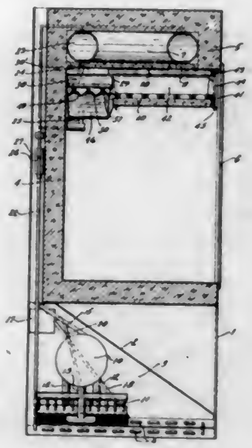
4. In a tabulating machine having a driving motor therefor and in which the motor and said tabulator have a plurality of operating speeds, means for automatically interrupting the motor circuit at one time in the tabulating cycle when the tabulator and motor are operating at one speed, and means for automatically interrupting the motor circuit at a different time in the tabulating cycle when tabulator and motor are operating at a different speed.

1,762,146. APPARATUS AND METHOD FOR MAKING TIRE CASINGS. ADRIAN O. ABBOTT, Jr., Detroit, Mich., assignor to Morgan & Wright, Detroit, Mich., a Corporation of Michigan. Filed Feb. 23, 1929. Serial No. 341,969. 5 Claims. (Cl. 154—10.)



2. In a machine for shaping pulley bands into tire casings, in combination, a vacuum box adapted to form tire casings, the top and the bottom of said vacuum box having apertures bounded by rigid edges adapted to receive the pulley band, and means for rotating the pulley band so as to centrifugally extend the pulley band into contact with said edges to effect a seal therebetween.

1,762,147. ABSORPTION REFRIGERATING APPARATUS. EDMUND E. ALLYNE, Cleveland Heights, Ohio. Filed Feb. 7, 1929. Serial No. 338,177. 6 Claims. (Cl. 62—118.)



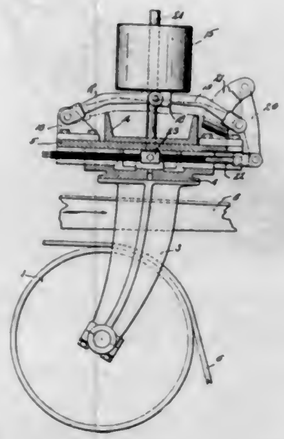
1. In a refrigerating apparatus of the absorption type, a cabinet comprising a casing having a refrigerating chamber and an upper refrigerant storage chamber heat insulated from the refrigerating chamber, a refrigerant storage in said storage chamber, a heat absorber adjacent to and below the storage compartment and comprising a forward portion extending substantially from one side of the box to the other and a rear portion communicating therewith, an ice cube insulating housing extending downward from said heat absorber, and a refrigerating element having a portion in heat transfer relation with the rear portion of said heat absorber and another portion in the bottom of said ice cube compartment, and ice cube containers arranged in said ice cube compartment between the refrigerating element therein and said heat absorber.

1,762,148. AIR VALVE. OTTO ADAM AMOS, Chicago, Ill. Filed Feb. 23, 1926. Serial No. 89,943. 4 Claims. (Cl. 137—122.)



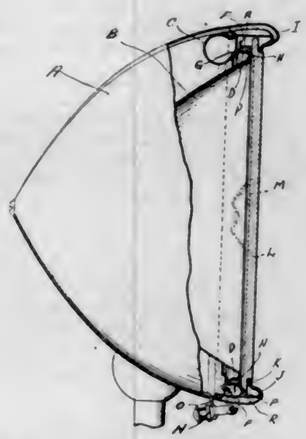
1. A valve attachment of the type described, comprising a body member having a stem and a head portion above said stem, said stem being adapted for attachment to a radiator valve and having a chamber below said head portion communicable with the air-vent of the radiator valve, said body having an axial airway, relatively smaller than said chamber, extending through the top of said head, a raised, flat-surfaced, circular seat formed on said head and surrounding said airway, a valve element comprising a disc of the character of sheet mica, normally supported loosely on said seat and covering said airway, an outlet airway through said head exteriorly of said raised seat, a cap member shaped to form a relatively low-topped chamber above and around said seat, said cap member having a flat rim adapted to rest on the upper surface of said head in spaced relation to the peripheral face of said raised seat, and its central portion being concaved above said seat, and means for detachably securing said head portion and cap member together, substantially as described.

1,762,149. IDLER PULLEY. HENRY F. ARNOLD, Hyde Park, Mass., assignor to American Tool & Machine Company, Boston, Mass., a Corporation of Massachusetts. Filed Aug. 21, 1926. Serial No. 130,564. 5 Claims. (Cl. 64—5.)



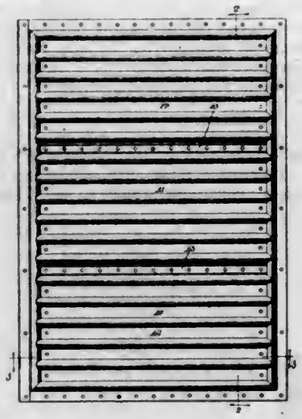
1. In a device of the kind described, a bodily movable pulley, a toggle lever including two links connected in a central joint and operatively connected to said pulley to provide movement thereof, and means for applying a force to said joint of the toggle lever whereby the said pulley will be moved with a force in accordance with the leverage in the position assumed by the toggle.

1,762,150. REFLECTOR-GASKET RETAINER. FRANK L. BAMFORD, Detroit, Mich., assignor to C. M. Hall Lamp Company, Detroit, Mich., a Corporation of Michigan. Filed July 30, 1928. Serial No. 296,314. 5 Claims. (Cl. 240—41.)



1. In a lamp, the combination of a reflector having a return bent outer flange forming an annular wall and an outwardly extending transverse flange, an annular gasket surrounding said annular wall and projecting beyond the same and a separate retaining ring surrounding said gasket and resiliently bearing against said gasket.

1,762,151. METALLIC CAR DOOR. ALLAN S. BARROWS, Los Angeles, Calif., assignor to The Youngstown Steel Door Company, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 20, 1926. Serial No. 96,166. 5 Claims. (Cl. 189—46.)



1. A fabricated car door of metal comprising a sheet metal body portion having a strengthening corrugation or indentation extending to one side of the main plane of said door; a reinforcing element rigidly associated with said door and provided with a bracing portion disposed in said corrugation and extending at an angle to the main plane of the door toward the inner bottom wall of the trough of said corrugation, and terminating in said corrugation, the metal forming the inner extremity of said terminal portion being thickened.

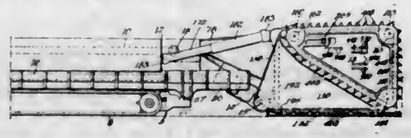
1,762,152. COMPOSITION OF MATTER COMPRISING RESINS AND RUBBER IN AQUEOUS DISPERSION AND METHOD OF MAKING THE SAME. ARTHUR BIDDLE, Trenton, N. J., assignor to United Products Corporation of America, a Corporation of Delaware. Filed June 30, 1926. Serial No. 119,758. 4 Claims. (Cl. 134—17.)

1. A composition comprising a water soluble resin soap, an alkali, rubber latex in aqueous dispersion and casein in solution.

1,762,153. METHOD OF TREATING AQUEOUSLY-DISPERSED COLLOIDAL SUBSTANCES. ARTHUR BIDDLE, Trenton, N. J., assignor to United Products Corporation of America, a Corporation of Delaware. Filed Nov. 4, 1926. Serial No. 146,288. 1 Claim. (Cl 134—17.)

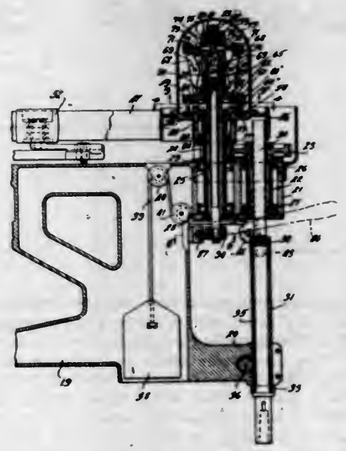
The method of treating rubber latex which comprises the addition thereto of starch which has been subjected to the action of lime and sodium fluoride and then adding an insolubilizing agent to insolubilize the starch after the water has been removed therefrom.

1,762,154. MINING MACHINE. JOHN H. BLAIR, Chicago, Ill. Filed Apr. 26, 1926. Serial No. 104,528. 26 Claims. (Cl. 262—28.)



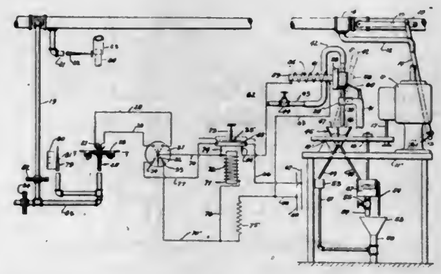
1. In a machine of the class described, the combination of a first vertically swingable arm, a push and pull arm having articulated connection with said first arm for swinging same vertically, a breaker and cutter head pivoted at the outer end of said first arm, and having breaker and cutter means thereon and a push and pull arm having articulated connection with said breaker and cutter head for swinging same about its pivot on said first arm, for setting the breaker for operating with the seams in the material.

1,762,155. CLUTCH MECHANISM FOR SETTING THREADED ARTICLES. WILLIAM D. BUSS, Cleveland, Ohio, assignor to The Hammond Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed Oct. 10, 1925. Serial No. 61,844. 6 Claims. (Cl. 192—53.)



1. In a machine of the class described, a work spindle, and driving means therefor, including a friction clutch and a semi-positive clutch, said semi-positive clutch being adapted for self-release upon predetermined load on said spindle, and said friction clutch being associated with said semi-positive clutch to be released upon release thereof.

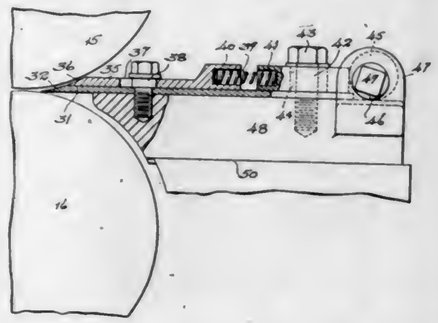
1,762,156. APPARATUS FOR CONTROLLING A FLUID FLOW. LANDON R. CALVERT, Newark, N. J., assignor to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed July 30, 1926. Serial No. 125,903. 23 Claims. (Cl. 236—1.)



1. An apparatus for maintaining gas flames at constant lengths and temperatures comprising a main gas supply line, a pressure regulator for said line, liquid actuated means for controlling said pressure regulator, means for producing a master flame, a baffle disposed transversely to said flame to intersect the inner cone thereof and produce a relatively cool portion surrounded by a relatively hot portion, means associated with said baffle for dissipating

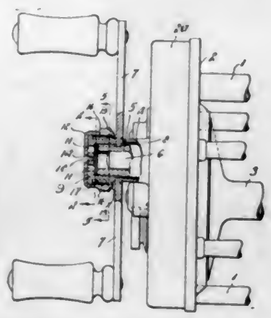
heat from the said hot portion to avoid transfer of heat to said cool spot and means responsive to the change in temperature in said cone for controlling said fluid actuated means.

1,762,157. PAPER-CREPING MACHINE. SAMUEL J. CAMPBELL, Green Bay, Wis., assignor of one-half to Hudson-Sharp Machine Company, Green Bay, Wis., a Corporation of Wisconsin. Filed May 9, 1929. Serial No. 361,661. 11 Claims. (Cl. 92—69.)



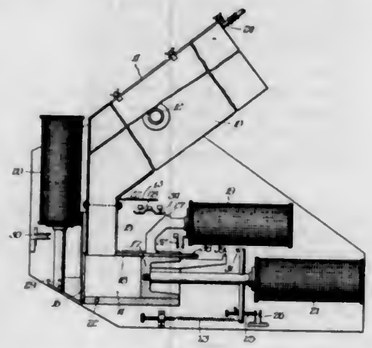
2. In a paper creping machine, the combination of feeding means for a paper web, a doctor plate associated with said feeding means, creping plates slidably and individually mounted upon the doctor plate and adapted to be individually retracted under pressure to accommodate localized variations in the thickness of the paper web, a spring for each of said creping plates for resisting such retraction, and a member standing in opposed relation to the doctor plate and creping plates, and adapted in conjunction therewith to furnish a channel for the restricted feeding of the paper web.

1,762,158. LUBRICATING CAP NUT FOR FISHING REELS. FRANCIS M. CASE, Cleveland Heights, Ohio, assignor to The Enterprise Manufacturing Company, Akron, Ohio, a Corporation of Ohio. Continuation of original application filed June 2, 1922, Serial No. 565,377, now Patent No. 1,637,437. This application filed June 26, 1924. Serial No. 722,525. 1 Claim. (Cl. 184—92.)



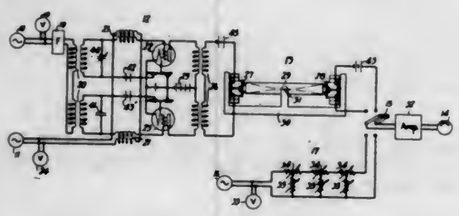
In a fishing reel, an externally threaded tubular element, an internally threaded tubular body member mounted upon said element and having a closed outer end provided with a diametrically disposed screw driver slot and with a through lubricating opening at one side of said slot, a rotatably adjustable cover for the closed end portion of said body member and having a tubular side portion and a closed outer end, said cover side portion having an interlocking connection with said tubular body member which permits relative rotary movement therebetween but prevents relative endwise or longitudinal movement therebetween, said cover closed end having a diametrically disposed slotted opening therethrough adapted when said cover is in one position of adjustment to expose said screw driver slot and when said cover is in another position of adjustment to expose said lubricating opening, and means located between the side portion of said cover and said tubular body member and engaging both thereof for maintaining said cover in any adjusted position.

1,762,159. METHOD AND APPARATUS FOR FORMING LOAVES. STEPHEN CHASE, 4th, Chicago, Ill. Filed Apr. 21, 1927. Serial No. 185,641. 15 Claims. (Cl. 107—15.)



12. Apparatus for dividing dough comprising, in combination, a container for a mass of dough, a measuring receptacle having communication with said container and having also a discharge opening, a separating device for dividing dough in said receptacle from that in the container, a closure device for opening and closing said discharge opening, a plunger operable to expel dough from the measuring receptacle through the discharge opening, means operable by the severing device to effect operation of the closure to open the receptacle, and means operable by the closure device to effect operation of the plunger to expel dough from the receptacle.

1,762,160. MEANS FOR AND METHOD OF WAVE ANALYSIS. ALFRED S. CURTIS, East Orange, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Dec. 7, 1925. Serial No. 73,951. 9 Claims. (Cl. 175—183.)



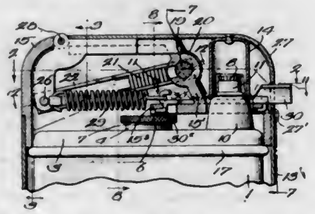
1. In a wave analyzing system, a source of waves to be analyzed lying within a definite portion of the frequency spectrum, a source of known frequency waves, a modulator supplied with waves from said sources, a fixed resonant element supplied with waves from said modulator, said element responding to a frequency higher than any within said portion of the frequency spectrum and an indicating device connected to said resonant element.

1,762,161. FOOT ARCH AND METATARSAL SUPPORT. HARRY J. CROCKER, Binghamton, N. Y. Filed Feb. 18, 1927. Serial No. 169,212. 2 Claims. (Cl. 36—76.)



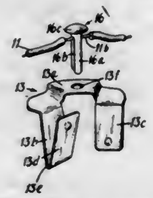
1. In an arch support for shoes, an insole to be removably inserted within a shoe and having mounted on the underside thereof an elongated flat spring member, the rear end of the spring member being fastened to the underside of the heel portion of the shoe insole, the opposite end of the spring member being free, and a hood for enclosing the free end of the shank member, said hood having its rear end entirely open and being of segmental shape and extending across the insole intermediate its ends, thereby providing a wide latitude of movement of the free end of the spring member, said free end of the spring member having a sliding engagement with the inner surface of the hood member.

1,762,162. IGNITER. HARRY A. DOUGLAS, Bronson, Mich. Filed May 9, 1929. Serial No. 361,672. 4 Claims. (Cl. 67—7.1.)



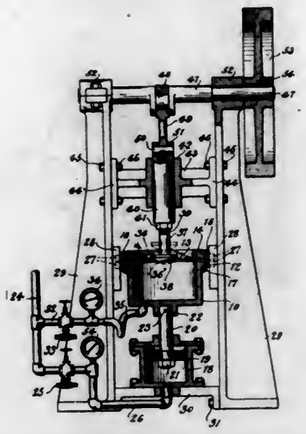
2. An igniter including a casing; an intermediately pivoted lever upon the casing; a spring for operating the lever and attached thereto at one side of the lever pivot; a latch upon the casing for positioning the lever against the force of the spring, said spring being connected with the lever at one end and with the latch at its other end and normally operating upon the latch to position the latch in a lever retaining position; a striker coupled with the lever to be operable by the lever when the lever is released by the latch; a body of spark producing material engageable by the striker, when thus operated, to produce sparks; and an inflammable element in the region of said body of spark producing material to receive igniting sparks therefrom.

1,762,163. ELECTRICAL CONNECTING DEVICE. REUBEN ECKSTEIN, Bronx, N. Y., and MAX POLIS, Brooklyn, N. Y. Filed Oct. 26, 1927. Serial No. 228,808. 3 Claims. (Cl. 173—334.)



1. An electric fitting of the character described comprising an insulating body, spaced current carrying members housed in said body, terminal posts having split shanks extending through said members, lead wires received in said body and extending thru the split portion of said shanks, said body having openings for receiving said shanks, and an insulating member secured to said body and adapted to coact with said posts for retaining said shanks in said openings.

1,762,164. TESTING MACHINE. ERNST EGER, Detroit, Mich., assignor to Morgan and Wright, Detroit, Mich., a Corporation of Michigan. Filed July 9, 1927. Serial No. 204,458. 11 Claims. (Cl. 73—51.)

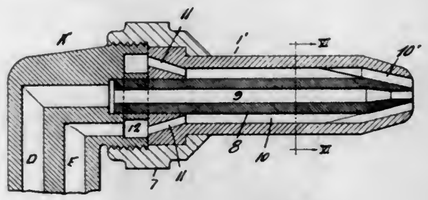


1. A machine for testing material, comprising mechanism for flexing said test material alternately in opposite directions, said mechanism being arranged to apply fluid under pressure against said material as a means for flexing the same.

1,762,165. SURFACE-FINISHED RUBBER GOODS AND PROCESS OF MAKING THE SAME. HERBERT W. EMERY, Holliston, Mass., assignor to Archer Rubber Company, Milford, Mass., a Corporation of Massachusetts. Filed Nov. 3, 1926. Serial No. 146,064. 3 Claims. (Cl. 91—70.)

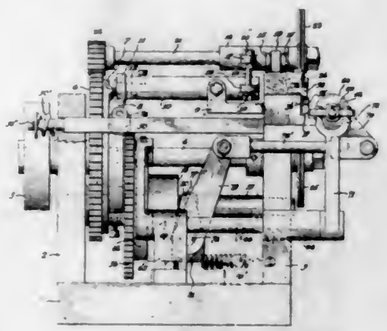
1. A process of imparting a permanent lusterless appearance to rubber-coated sheeting the rubber of which is compounded with sulphur, which comprises applying a finely divided luster-removing material to the rubber surface of the sheeting, washing the rubber surface to remove excess material therefrom, heat vulcanizing the sheeting completely, and then superficially hardening the rubber.

1,762,166. TIP FOR GAS-BURNING APPARATUS. ARTHUR J. FAUSEK and IRWING F. FAUSEK, St. Louis, Mo. Filed July 28, 1924. Serial No. 728,571. 3 Claims. (Cl. 158—27.4.)



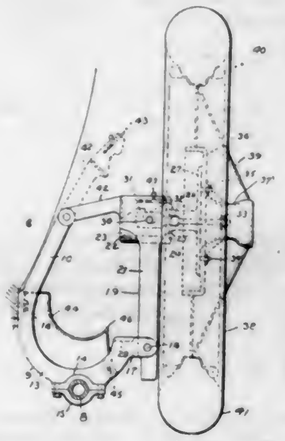
1. A welding tip for a gas-burning apparatus comprising a tubular member provided with a passageway formed therethrough from end to end thereof, said passageway at the discharge end of said member being provided with inwardly extended, circumferentially spaced radial extensions formed in the wall of said member and extended approximately parallel with the major axis thereof, which give to said passageway at said discharge end of said member a shape non-circular in cross-section each portion of which communicates with all other portions thereof.

1,762,167. HELICAL COILER AND ASSEMBLER. FERRY M. FORBES, Detroit, Mich., assignor to Premier Cushion Spring Company, Detroit, Mich., a Corporation of Michigan. Filed Aug. 15, 1927. Serial No. 213,051. 10 Claims. (Cl. 140—3.)



1. A spring forming machine comprising a helical spring forming and ejecting element and means for feeding wire thereto, the combination of a holder adapted to receive the spring issued from said element, means for tilting said holder to retain the spring in a line intersected by the line of ejection from said element, means for maintaining said holder in tilted position during the formation of another spring and an ejector operable in said holder and adapted to eject said spring into the first spring while held in said position.

1,762,168. TIRE REMOVER AND CARRIER. ERNEST FREIVOGEL, Ridgefield, Conn., assignor of one-half to Richard A. Jackson, Ridgefield, Conn. Filed July 13, 1928. Serial No. 292,513. 5 Claims. (Cl. 224—29.)



5. In combination, a support adapted for attachment to a car, an arm adapted to support a wheel rim, said arm being pivotally connected to the first-mentioned support, and tire engaging means mounted on said support in position to receive a tire for loosening the same with respect to the wheel rim in response to movement of said arm.

1,762,169. METHOD OF PRODUCING CASEINATES. WILLIAM O. FROHRING, Shaker Heights, Ohio, and WILLIAM F. RICHARDS, Mason, Mich., assignors, by mesne assignments, to The Laboratory Products Company, Cleveland, Ohio, a Corporation of Ohio. Filed Apr. 20, 1927. Serial No. 185,302. 2 Claims. (Cl. 29—11.)

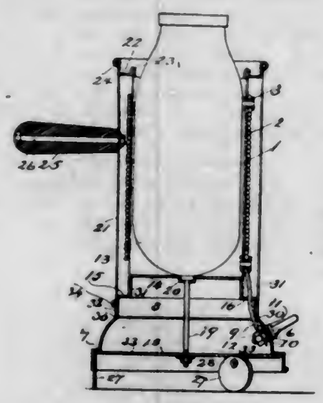
2. A method of producing alkaline caseinates, which consists in separating and drying the curd as casein, grinding to finely divided form, peptizing fresh wet curd with an alkali, mixing the wet peptized curd with the finely divided dry curd and with additional alkali, all in the presence of minimum water, and spray drying the mixture.

1,762,170. REMOVABLE TOP LIFT FOR SHOES. FRANK GENTILE and FRED MACCARONE, Brooklyn, N. Y. Filed June 6, 1929. Serial No. 368,746. 1 Claim. (Cl. 36—36.)



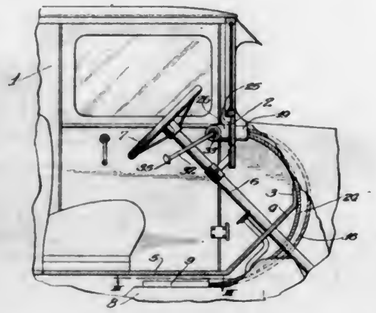
A shoe heel of the character described having a bore of irregular cross section extending over half the length thereof, a sleeve fitted in said bore and extending substantially the length thereof and having a projecting portion extending toward the centre thereof to serve as a wedge, and a shank portion fitted in said sleeve and having its upper end slotted to engage said projecting portion of the sleeve and expand the shank, and means carried by said shank portion adapted to hold a left to the bottom end of the heel.

1,762,171. ELECTRIC BABY-BOTTLE WARMER. AARON H. GOLDSMITH, Cleveland, Ohio. Filed Nov. 14, 1927. Serial No. 233,183. 2 Claims. (Cl. 219—44.)



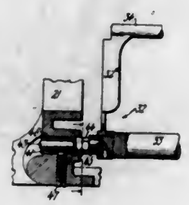
1. In an electric heater for infants' bottles and analogous uses, a hollow base member having two horizontal shoulders in its vertical edge, an inner shell resting on the inner shoulder, an outer shell resting on the outer shoulder and an annular cap ring having its inner and outer edges interlocked respectively with the upper edges of said inner and outer shells, an insulated wire heating coil enclosing said inner shell, a hollow lower base member and a bolt connecting said base members, terminal contacts in the space between said bases, said lower base being provided with ventilating passages.

1,762,172. GEAR-SHIFT CONTROL. BERT GYLLIN, Chicago, Ill. Filed Mar. 28, 1929. Serial No. 350,481. 1 Claim. (Cl. 74—39.)



A gear shifting mechanism for an automobile having a dashboard and a transmission housing, comprising in combination with the gear shifting rods of the transmission, a housing arranged to be mounted extending through an aperture in the dashboard and having a flange for securement to the dashboard, a pair of rods, each having a notch in one end thereof, slidable in the said housing, a bent rod shifting lever mounted pivoted on the housing extending normally therefrom, the said lever having a flattened end portion for engagement in the notches in the rods, a plate on the housing, the said plate having a pair of spaced outstanding members positioned between the said rods in the housing, flexible cable means secured to the rods for movement therewith, cable guiding means on the housing of the transmission, the said flexible cables being arranged slidable in the said guiding means, curved members on the gear shifting rods, and links connecting the cables to the said curved members.

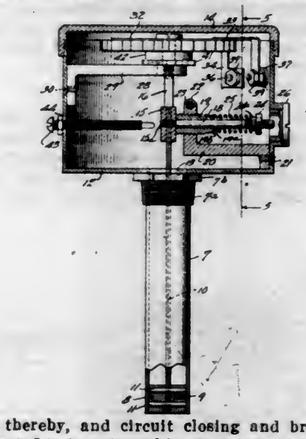
1,762,173. TYPEWRITING MACHINE. WILLIAM F. HELMOND, West Hartford, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Filed Apr. 23, 1928. Serial No. 272,652. 8 Claims. (Cl. 197—73.)



1. An adjustable supporting unit including a bushing having a circular opening and an off-center pin having a normally flexed stem, press fitted in said opening so that the bushing is effective to straighten the stem and thereby tension the same to frictionally bind upon the wall of the opening.

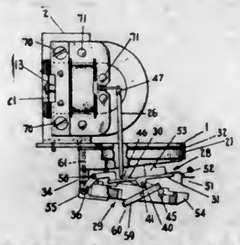
1,762,174. APPARATUS FOR THERMOSTATIC CONTROL OF ELECTRIC CIRCUITS. EMIL F. HOLINGER, New York, N. Y., assignor to Hudson Electrical Heating Corporation, New York, N. Y., a Corporation of New York. Filed Apr. 13, 1928. Serial No. 269,730. 18 Claims. (Cl. 200—139.)

1. In a thermostat for controlling electric circuits the combination of a member adapted to be reciprocated by changes in temperature, a pair of oppositely disposed pawls adapted to be moved simultaneously by said member, a ratchet wheel which is located between said pawls and



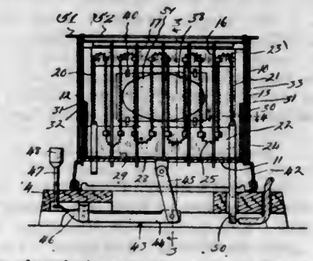
engaged thereby, and circuit closing and breaking apparatus adapted to be actuated by the rotation of said ratchet wheel.

1,762,175. ELECTRICAL SOUND RECORDING AND REPRODUCING APPARATUS. CHARLES HUENLICH, Bloomfield, N. J., assignor to Thomas A. Edison, Incorporated, West Orange, N. J., a Corporation of New Jersey. Filed Oct. 13, 1928. Serial No. 312,228. 11 Claims. (Cl. 179—100.41.)



11. An electrical sound recorder and reproducer, comprising, in combination, a frame, a pair of floating supports carried by said frame, recording and reproducing levers carried by said supports respectively, a magnet, an armature mounted for vibration in the field of said magnet, and with which each of said levers is arranged to have vibration-transmitting connection, and means for establishing and for rendering inoperative at will vibration-transmitting connection between said armature and one of said levers.

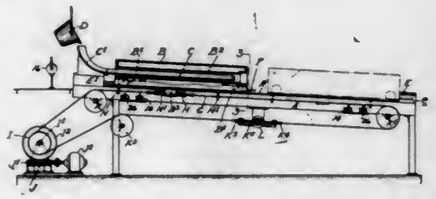
1,762,176. ELECTRIC TOASTER. FRANK KUHN and LAURENCE H. THOMAS, Detroit, Mich., assignors to American Electrical Heater Company, Detroit, Mich., a Corporation of Michigan. Filed Mar. 19, 1928. Serial No. 262,915. 2 Claims. (Cl. 53—5.)



1. In an electric toaster, a cage for a bread slice, heating elements arranged adjacent said cage, guide rods ar-

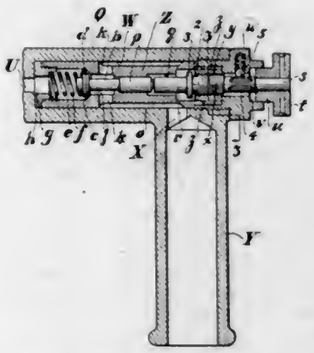
ranged adjacent the ends of said cage, and a vertically movable member arranged within said cage and adapted to support a bread slice on one edge thereof, said vertically movable member being apertured to receive the said guide rods whereby the same is accurately guided during its vertical movement.

1,762,177. CENTRIFUGAL CASTING MACHINE. JAMES B. LADD, Ardmore, Pa., assignor to United States Cast Iron Pipe & Foundry Company, Burlington, N. J., a Corporation of New Jersey. Filed Jan. 19, 1928. Serial No. 247,783. 5 Claims. (Cl. 22—65.)



1. In a machine for the centrifugal casting of pipes having a reciprocating mold carrying carriage, means for reciprocating the carriage comprising a rope connected to move the carriage in opposite directions and means for actuating the rope including an electric motor.

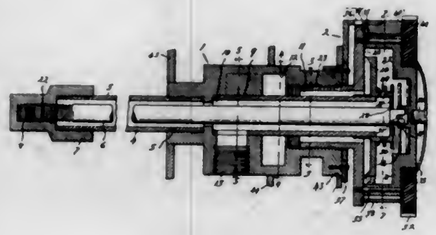
1,762,178. AIR-FEED-CONTROLLING DEVICE. EARL B. LEAR, Phillipsburg, N. J., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed Sept. 27, 1927. Serial No. 222,311. 2 Claims. (Cl. 121—9.)



1. In a feed controlling device for fluid actuated rock drills, the combination of an element to be controlled and a source of pressure fluid supply communicable with the element to be controlled, a rotation handle having a relief passage communicating with the element to be controlled, a bushing, in the rotation handle, a relief valve in the bushing controlling the passage, a nut slidable in the rotation handle, means formed separately from the valve and threaded in the nut for unseating the relief valve and maintaining said relief valve in its open position unaffected by the vibration incident to drilling and a spring to close said valve.

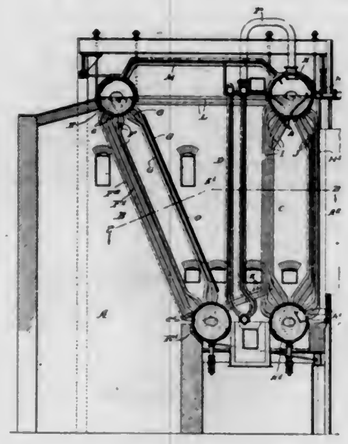
1,762,179. OVEN THERMOSTAT. ELMER E. LEDBETTER, Detroit, Mich., assignor to Ever Hot Heater Company, Detroit, Mich., a Corporation of Michigan. Filed May 9, 1927. Serial No. 190,023. 18 Claims. (Cl. 236—15.)

1. An oven regulator comprising a valve seat, a valve cooperating therewith, an expansible tube having one end connected to said valve seat, a less expansible rod connected to the other end of said tube, said rod being operably connected to said valve to directly actuate the latter by differential longitudinal movement of said tube and



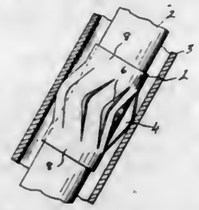
rod, and rotatably adjustable means operable through substantially a full revolution for setting said valve relative to said seat to correspond to the normal range of oven temperatures, said means including two sets of threads of different pitch adapted for simultaneous adjustment.

1,762,180. BOILER CONSTRUCTION. PHILIP MARQUAND, Newburyport, Mass., assignor to Edge Moor Iron Company, Edge Moor, Del., a Corporation of Delaware. Filed July 9, 1928. Serial No. 291,461. 4 Claims. (Cl. 122—265.)



1. A water tube boiler element adapted for use with a one direction transverse flow of fire gases through its tube banks comprising in combination two drums provided with tube holes spaced to leave substantial ligaments of sheet metal between them and one or more banks of tubes the intermediate and greater part of the length of which are in each bank disposed parallel to each other in spaced relation which leaves between them narrow gas passes substantially narrower than the spaces between the tube holes, said tubes having their ends spread apart and secured in the tube holes of the drums all of the tubes in each boiler element in the rear of the tube rows between which contracted gas passages are first formed being disposed as described to form contracted gas passages throughout the entire depth of the tube banks.

1,762,181. BUSHING. HENRY MARLES, Detroit, Mich., assignor to Gemmer Manufacturing Company, Detroit, Mich., a Corporation of Michigan. Filed Oct. 18, 1926. Serial No. 142,434. 5 Claims. (Cl. 308—237.)



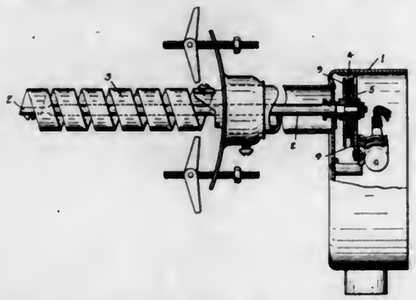
1. A bushing having a tubular body and a series of outwardly projecting substantially V-shaped fingers curved longitudinally of said bushing and arranged in tandem about the body and extending substantially tangential thereto.

1,762,182. SCOURING IMPLEMENT. DANIEL J. MAYER, Belleville, N. J., assignor to Metal Textile Corporation, West Orange, N. J., a Corporation of Rhode Island. Filed July 24, 1928. Serial No. 295,105. 5 Claims. (Cl. 15—209.)



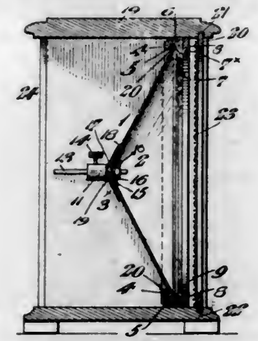
1. A device of the kind described comprising, a supporting member, pliable metallic material spirally looped upon said supporting member, the loops of said metallic material so formed having their inner bights engaging substantially one-half the perimeter of said supporting member, said supporting member being bent upon itself and tightly twisted to thereby rigidly retain the loops of said metallic material between consecutive convolutions of said twisted supporting member.

1,762,183. THERMOSTATICALLY-ACTUATED ELECTRIC SWITCH. IRA E. MCCABE, Chicago, Ill. Filed Oct. 10, 1928. Serial No. 311,436. 6 Claims. (Cl. 200—138.)



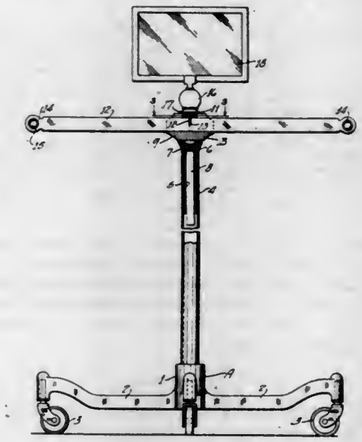
1. A temperature responsive electric switch having a temperature responsive element the movement of which is adapted to actuate a switch operating mechanism including a rotatable member actuated by said element, a rotatable switch carrier mounted thereon, a mercury tube switch mounted upon said carrier, said rotatable member provided with a toothed track, said switch carrier pivotally connected to a gravity actuated member, said member mounting a roller adapted to travel over said track, and said gravity actuated member acting upon said roller to hold it in contact with said track, whereby upon rotation of the rotatable member in either direction imparts a rotation movement to the carrier plate.

1,762,184. ACOUSTIC DEVICE. SPENCER W. MCKELLIP, Philadelphia, Pa., assignor to Wirt Company, Germantown, Pa., a Corporation of Maine. Filed Apr. 1, 1926. Serial No. 98,987. 4 Claims. (Cl. 181—31.)



1. An acoustic device comprising a support having an opening and a ring of yielding material surrounding it and forming a cushion, of a cone of vibratile material having an edging of similar material resting against the cushion and means for vibrating the cone.

1,762,185. DISPLAY STAND. MILTON D. MENDLE, Clayton, Mo., assignor to American Fixture & Showcase Manufacturing Company, St. Louis, Mo., a Corporation of Missouri. Filed June 24, 1929. Serial No. 373,313. 8 Claims. (Cl. 211—163.)

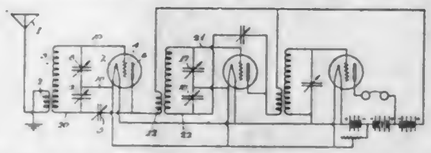


1. In a display-stand, a head comprising a block having intersecting surface grooves, a display-member including a pair of crosswise connected strips seated at their intersection in the grooves of the block, and means for securing the block and display-member together.

1,762,186. RADIO RECEIVING APPARATUS. BYRON B. MINNIUM, Chicago, Ill., assignor, by mesne assignments, to Story & Clark Radio Corp., Chicago, Ill., a Corporation of Delaware. Filed Apr. 20, 1925. Serial No. 24,399. 9 Claims. (Cl. 179—171.)

2. A radio receiving apparatus comprising a vacuum tube or lamp having a filament and a grid and a plate and elements forming in effect a Wheatstone bridge arrangement, with capacity in each arm of the bridge, one such capacity being formed by the grid-to-plate capacity

of said lamp or tube, having instrumentalities for unbalancing said bridge for the lower frequencies or longer wave lengths, thereby to produce some feed back and a consequent better action of the vacuum tube for the longer wave lengths, said instrumentalities comprising two condensers mounted on the same shaft, one condenser forming the capacity of one arm and the other condenser forming the capacity of another arm of said Wheatstone bridge arrangement, with one of the movable plates of one condenser of less area than the others and formed to progressively unbalance the two condensers as the shaft is turned in a direction to tune the apparatus for the longer wave lengths.

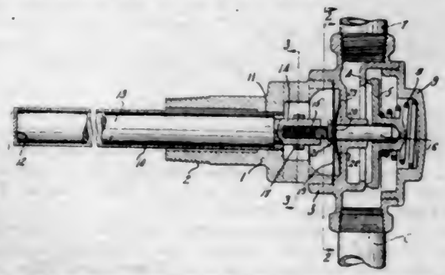


1,762,187. THERMOSTATIC VALVE CONTROL. CLARENCE H. MORROW, Cleveland, Ohio, assignor to The Hotstream Heater Company, Cleveland, Ohio, a Corporation of Ohio. Filed May 12, 1927. Serial No. 190,839. 5 Claims. (Cl. 236—102.)



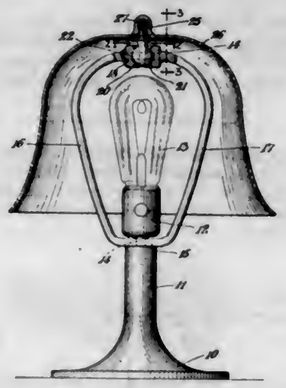
1. Thermostatic controlling apparatus of the character described, comprising a valve body having a guiding opening, a gas chamber and an opening for gas to said chamber, a controlling valve in said body for said gas opening, a tubular heat responsive element having an open end mounted in said valve body and a closed end, valve operating means including a slidably mounted relatively heat responsive element and its other end portion lying within said non-expansible member having one end portion lying within said valve body guiding opening, a bell-crank lever pivoted to and movable with said non-expansible member and having a short arm for operative engagement with the closed end of said heat responsive element and a long arm extending thru said element into operative engagement with said valve, and an adjustable abutment for that end of the non-expansible member which lies within the valve body guiding opening.

1,762,188. THERMOSTAT. CLARENCE H. MORROW, Cleveland, Ohio, assignor to Hotstream Heater Company, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 30, 1929. Serial No. 351,267. 4 Claims. (Cl. 236—102.)



1. Thermostatic valve mechanism, comprising a valve casing containing an adjustable valve member, an operating train including thermostatic elements extending from the casing to the valve member and including an adjustable device for varying the valve setting, the train of thermostatic elements including endwise abutting members, and means for maintaining pressure upon said adjustable member to prevent accidental change of adjustment thereof.

1,762,189. ADJUSTABLE LAMP-SHADE SUPPORT. HAROLD C. NOE, East Orange, N. J., assignor to William R. Noe & Sons, New York, N. Y., a Copartnership comprising William R. Noe, Charles E. Noe, and Harold C. Noe. Filed June 7, 1928. Serial No. 283,504. 4 Claims. (Cl. 240—148.)



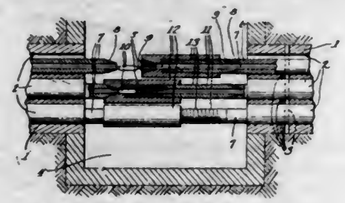
1. A bracket for supporting a table lamp shade, having arms joined at one end to embrace part of a pedestal and at the other end providing a socket, a ball in the socket forming a joint therewith, said ball having a member to support a lamp shade depending about the arms and about a source of light to be held by the pedestal.

1,762,190. VALVE FOR CELLAR DRAINS. CHARLES NOE and HENRY KREISS, Elizabeth, N. J. Filed Sept. 24, 1928. Serial No. 307,814. 17 Claims. (Cl. 137—21.)



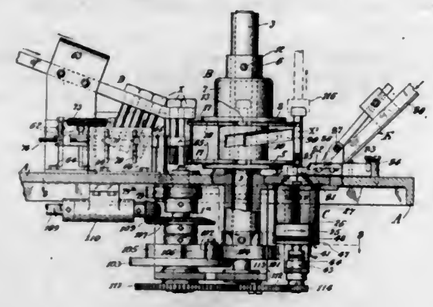
7. A valve-device for closing a floor drain, including a hollow post for insertion into a drain to be supported thereby, said post provided with cellar-draining means effective when the valve is open, a valve having a washer surrounding said post to seal the drain, and means for raising and lowering said valve, said raising and lowering means including a rotary threaded member rising to the ceiling and provided with a handle and a co-operative threaded member for affixing to the ceiling, said valve including a hollow body telescoping over said post and having said washer fixed to the bottom thereof, said rotary threaded member connected to said hollow body.

1,762,191. HIGH-VOLTAGE UNDERGROUND CABLE SYSTEM. DEAN C. OBER, Cleveland, Ohio. Filed July 7, 1922. Serial No. 573,834. 1 Claim. (Cl. 247—27.)



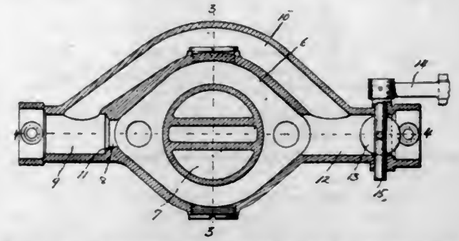
The method of assembling high voltage underground cables in preformed, buried ducts, consisting in first forming and inserting an insulating tube endwise in said duct by attaching end to end a series of tubular insulating sections, and then threading a wire through the tubular insulating tube thus formed.

1,762,192. MAGNETIC MACHINE FOR OPERATING ON BOLTS, NUTS, AND THE LIKE. WILLIAM B. PEIRCE, Coraopolis, Pa., assignor to Pittsburgh Screw & Bolt Corporation, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Dec. 31, 1925. Serial No. 78,508. 32 Claims. (Cl. 10—155.)



13. A nutter for bolts, including a turret, a Geneva stop for indexing the turret, the turret being provided with a plurality of bolt holders spaced so that each corresponds to an indexed position of the turret, each bolt holder comprising spaced apart magnetic pole pieces of unlike polarity, with notches arranged to have their magnetic lines short-circuited through said shank, and concentric guard segments of non-magnetic material for holding back the bolts at points intermediate the pole pieces, in combination with a magnetic nut chuck having its vertical axis registering with one of the indexed positions of the magnetic bolt holders, and formed with a surface comprising segments which are unlike poles of an electromagnet, the legs and coils of the magnet being approximately symmetrical with the axis of the chuck, means for rotating said magnet chuck at relatively high speed, and means for presenting to said surface, free, non-rotating nuts to be automatically centered and held thereby.

1,762,193. FLUID-CONTROL DEVICE. ANTOINE P. PLAUT, Detroit, Mich., assignor of one-half to Roberts Brass Manufacturing Company, Detroit, Mich., a Corporation of Michigan. Filed Dec. 19, 1921. Serial No. 523,288. 4 Claims. (Cl. 257—241.)



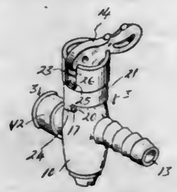
2. A fuel vaporizer comprising a body having a fuel passageway therethrough and an exhaust passageway surrounding said fuel passageway, a conduit communicating with said exhaust passageway provided with a restriction at the entrance thereto, a second conduit communicating with the opposite side of said exhaust passageway, and a by-pass connecting said first mentioned conduit in advance of said restriction to said second mentioned conduit.

1,762,194. COMPOSITION OF MATTER. WILLIAM BEACH PRATT, Wellesley, Mass., assignor, by mesne assignments, to Dispersions Process, Inc., Dover, Del., a Corporation of Delaware. Filed May 18, 1925. Serial No. 31,228. 16 Claims. (Cl. 106—23.)

1. A process of dispersing rubber in non-aqueous substances which are non-solvents of rubber, which comprises first incorporating a colloid in a rubber mass and then mixing the rubber-colloid mixture with and dispersing it as the disperse phase in the said non-solvent substance at a temperature ranging from about 120° C. to about 160° C. but insufficient to "depolymerize" the rubber.

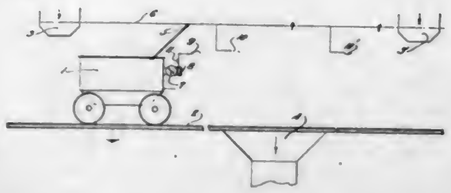
13. A composition of matter comprising a non-aqueous substance, which is a non-solvent of rubber, having dispersed therein crude rubber globules, additionally coated with a colloid, and sulphur, said non-aqueous substance constituting the continuous phase of the composition and amounting to greater than 20% by weight of the composition.

1,762,195. GAS COCK. EARL W. ROBERTS, Detroit, Mich., assignor to Roberts Brass Manufacturing Company, Detroit, Mich., a Corporation of Michigan. Filed Mar. 12, 1928. Serial No. 261,162. 4 Claims. (Cl. 251—164.)



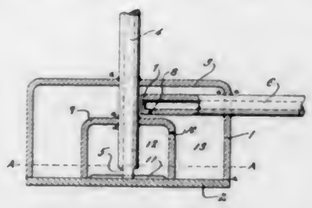
1. In a valve, a casing, a plug rotatable in said casing, a handle carried by said plug and having portions projecting beyond opposite sides thereof, a tubular member loosely and slidably mounted upon said plug between said handle and casing, said tubular member being provided with a pair of aligned slots receiving the projecting portions of said handle whereby the plug and tubular member are rotated as a unit, a disk-like element mounted upon said plug and positioned within and engaging the inner wall of said tubular member, and a yieldable member having one end engaging said element and the opposite end engaging a portion of said tubular member for automatically moving said tubular member into locking engagement with the casing when the plug is in closed position.

1,762,196. AUTOMATIC RECORDING MEANS FOR DUMP CARS. EUGENE W. SCHELLENTRAGER, Cleveland Heights, Ohio, assignor to The Atlas Bolt & Screw Company, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 7, 1927. Serial No. 173,554. 4 Claims. (Cl. 265—9.)



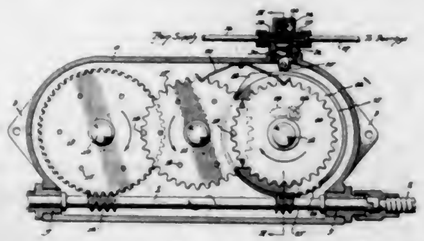
1. In combination with a dump scale car arranged for movement along a way between loading and dumping positions and provided with means for weighing the load therein and for recording said weight, and parts arranged on said car and said way respectively for cooperating during car movement past a predetermined point to cause said recording means to record the instant load in said car at said point.

1,762,197. LIQUID TRAP FOR REFRIGERATING SYSTEMS. ALBERT C. SCHICKLER, Cleveland, Ohio, assignor to Edmund E. Allyne, Cleveland, Ohio. Original application filed June 30, 1927, Serial No. 202,724. Divided and this application filed June 30, 1927. Serial No. 202,725. 4 Claims. (Cl. 251—114.)



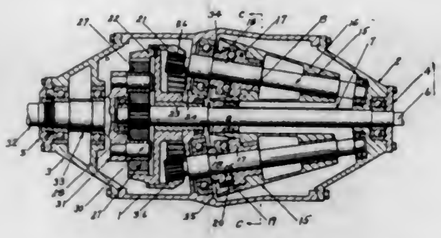
2. A liquid trap of the kind described, comprising a hollow shell provided with two chambers communicating near their bottoms, an entrance pipe communicating with one chamber, an exit pipe communicating with the other chamber, and means for equalizing the pressures in said two chambers.

1,762,198. AUTOMATIC LUBRICATOR FOR VEHICLES. LOUIS E. SHONE, Highland Park, Mich. Filed Nov. 15, 1926. Serial No. 148,374. 11 Claims. (Cl. 137—145.)



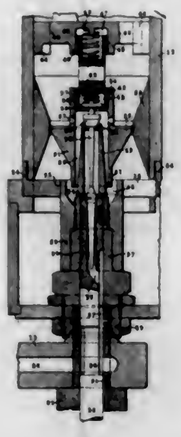
1. In an automatic valve adapted to control the flow of oil, a driven shaft, a valve operating wheel, means operated by said shaft and adapted to intermittently actuate said wheel and place said wheel in operative engagement with said shaft for a quick partial rotation for valve operating purposes independent of the first mentioned means.

1,762,199. VARIABLE-SPEED TRANSMISSION. EDWARD K. STANDISH, Hartford, Conn., assignor to Hartford Special Machinery Company, Hartford, Conn., a Corporation of Connecticut. Filed July 3, 1929. Serial No. 375,639. 4 Claims. (Cl. 74—34.)



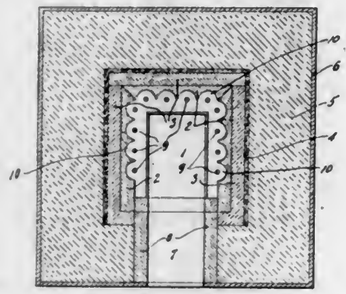
1. A variable speed mechanism comprising a frame, two shafts supported by the frame in axial alignment, one shaft having a fixed pinion and a cylindrical roll rotatable with an longitudinally adjustable along the shaft, and the other shaft having pinions in mesh with the first mentioned pinion, two axles rotatably supported by the frame oblique to, and on diametrically opposite sides of the former shaft, said axles having pinions at their separated ends, an internal gear in mesh with the axle pinions and the pinions carried by the latter shaft, conical rolls rotatably mounted on and movable axially along said axles with their adjacent surfaces parallel and in frictional engagement with the cylindrical roll, and camming connections between the conical rolls and their axles adapted to cause the conical rolls to move longitudinally and increase their frictional engagement with the cylindrical roll as power is applied.

1,762,200. CARBURETOR. MAX STEINHARDT, Munich, Germany, and EMIL BAUER, Yonkers, N. Y. Filed Mar. 16, 1925. Serial No. 15,723. 8 Claims. (Cl. 261—44.)



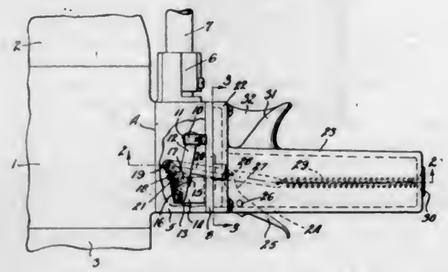
1. In a carburetor, the combination comprising a casing having an air inlet chamber and a communicating mixing chamber, a nozzle having a connection adapted for communication with a fuel supply, said nozzle being provided with two valve seats, one being disposed at its outlet orifice and a second on the interior thereof, a valve member having portions adapted to seat simultaneously on each of said seats respectively the portion adapted to seat on said second seat being arranged to restrict said orifice when the valve member is moved to extreme unseated position, and a second valve member disposed to control directly the communication between said chambers and adapted to be operated by suction, said second valve member being operatively connected to said first named valve member and arranged to operate the same for supplying fuel proportionately to opening communication between said chambers at low suction rates.

1,761,201. ELECTRIC FURNACE. HERBERT W. STRONG, Cleveland Heights, Ohio, assignor to The Strong, Carlisle and Hammond Company, Cleveland, Ohio, a Corporation of Ohio. Filed Apr. 6, 1928. Serial No. 268,046. 1 Claim. (Cl. 266—1.5.)



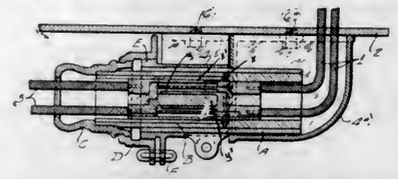
In an electric furnace, a refractory lining for a wall thereof having a plurality of major depressions, a heating element arranged before each mapor depression, each of said major depressions having a curved contour made up of a plurality of minor depressions separated by projections having sharp extremities generally corresponding in location with the curved contour of said major depression.

1,762,202. SELF-OPENING-SWITCH LOCK. BURTON W. SWEET, Cleveland, Ohio, assignor to The Van Dorn Electric Tool Company, Cleveland, Ohio. Filed July 3, 1925. Serial No. 41,452. 1 Claim. (Cl. 200—157.)



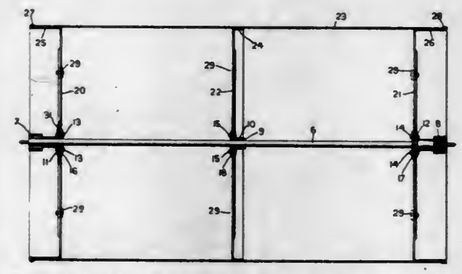
In a tool of the class described, a tool-suppporting handle, a self-opening switch and operating mechanism adapted for switch-closing operation by a finger of a hand having a tool-supporting grasp on said handle, a latch associated with said mechanism and adapted for operator actuation to maintain the switch closed, said latch and said operating mechanism having for the purpose cooperating engaging parts, said parts being adapted when engaged to maintain the latch in latching position, and means yieldably urging said latch from latching position whereby release of said mechanism from said latch will follow operation of said mechanism.

1,762,203. CONNECTING DEVICE FOR STORAGE BATTERIES. JOSEPH TEIPEL, St. Louis, Mo., assignor to Mancha Storage Battery Locomotive Company, St. Louis, Mo., a Corporation of Delaware. Filed Oct. 11, 1922. Serial No. 593,766. 2 Claims. (Cl. 173—329.)



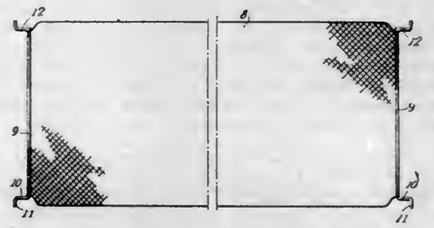
1. In an electric storage battery, the combination of an electric receptacle element provided with contacts that are electrically connected with the battery, a removable plug element provided with co-operating contacts and adapted to be slid endwise into said receptacle, a holder stationarily mounted on the exterior of the box of said battery for supporting said receptacle element, a rotatable part swiveled on the plug element and permanently connecting the same, co-operating screw threads on said rotatable part and holder for maintaining the plug in operative position in the receptacle, and means for enabling said rotatable part to be locked to said holder.

1,762,204. WEIGHING SCALE. THOMAS H. STRACHAN, Lynbrook, N. Y., assignor to Dayton Scale Company, Dayton, Ohio, a Corporation of New Jersey. Filed Mar. 29, 1929. Serial No. 350,943. 5 Claims. (Cl. 116—129.)



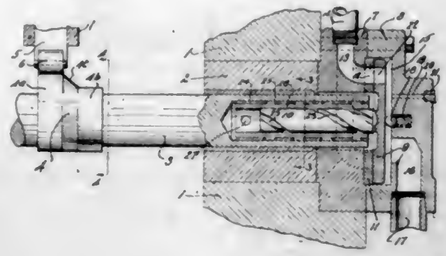
1. In a weighing scale, an indicator drum comprising a shaft, a pinion rigidly fixed to an end of the shaft, a spider having a hub provided with an opening permitting the spider to be freely moved axially over and past the pinion, means for rigidly fastening the spider to the pinion, and a chart supported on the periphery of the spider.

1,762,205. DEVICE FOR STRETCHING NETS AND THE LIKE. HENRY E. VERPILLIER, Newark, N. J. Filed Apr. 19, 1928. Serial No. 271,239. 2 Claims. (Cl. 273—35.)



1. In combination with a net and a frame having recesses, a device for stretching the net over the frame, comprising a rod connected to an end of the net, said rod having offset portions at its ends rotatably positioned in the recesses in the frame.

1,762,206. AIR STARTER TIMING MEANS. JAMES M. WINTON, Cleveland, Ohio, assignor to The Winton Engine Company, Cleveland, Ohio, a Corporation of Ohio. Filed Feb. 10, 1928. Serial No. 253,395. 2 Claims. (Cl. 60—16.)



1. In combination with a distributing valve of the class described, driving and driven members for said valve and having concentrically arranged parts with helical interengaging elements whereby sliding movement of one of said members will change the timing of said valve, said parts being of unsymmertical section whereby their interengagement may be effected only in one angular relation at the section.

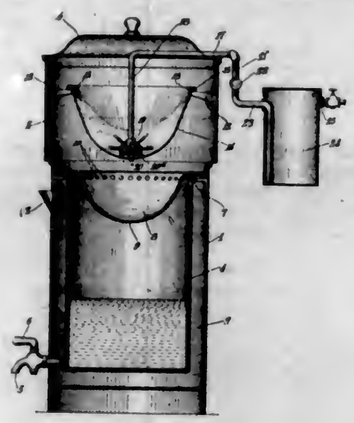
1,762,207. COFFEEPOT CONSTRUCTION. EDWARD ABORN, East Orange, N. J. Filed Mar. 22, 1928. Serial No. 263,814. 4 Claims. (Cl. 53—3.)



1. In combination, a coffeepot, a cover for the same, and a framework having downwardly directed members for supporting a coffee-filter-cloth in contact with said members, said members being bent or bowed outwardly along the framework and being out of contact with the cloth for supporting the same in the coffeepot, said coffeepot having a flange for receiving said bent portions thereon, and an upper flange for positioning said members above the first-mentioned flange, said flanges having a cover-receiving recess between them of smaller height than the extremities of the laterally bent portions of said members.

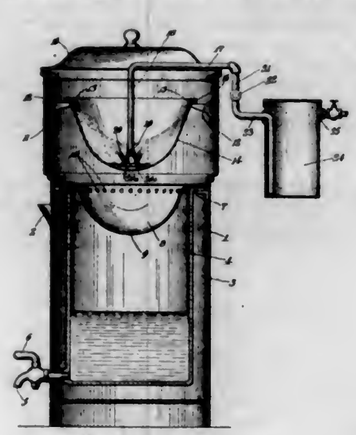
1,762,208. COFFEE-BREWING APPARATUS. EDWARD ABORN, East Orange, N. J. Filed Mar. 22, 1928. Serial No. 263,815. 21 Claims. (Cl. 53—3.)

5. An apparatus for brewing coffee having means for supporting a body of coffee while being subjected to the action of water near the top of said apparatus, and an equalizer pan located above the level of the liquid coffee in the apparatus, having a plurality of distributing openings, with a small opening in the bottom from which the brewed coffee may drip slowly and adapted to catch



the drippings from the body of coffee for mixing the brewed coffee so that when it reaches the level of the liquid in the apparatus it is ready to be dispensed.

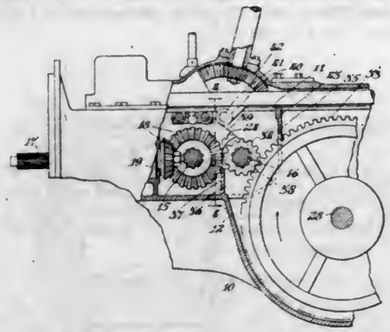
1,762,209. PROCESS OF COFFEE EXTRACTION. EDWARD ABORN, East Orange, N. J. Filed Dec. 11, 1928. Serial No. 325,296. 11 Claims. (Cl. 53—3.)



1. The process which comprises brewing coffee by simultaneously applying upwardly and laterally directed jets of hot water to a body of ground coffee at a point near the bottom of the body of ground coffee and on the interior thereof.

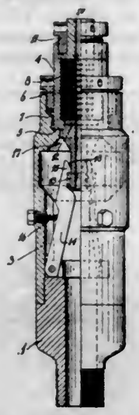
1,762,210. GEAR-TRANSMISSION LUBRICATION. HERMAN E. ALTOELT, South Bend, Ind., assignor, by mesne assignments, to Oliver Farm Equipment Company, a Corporation of Delaware. Filed Mar. 14, 1928. Serial No. 261,573. 10 Claims. (Cl. 184—13.)

9. In a lubricating device, the combination with a transmission and differential housing, said housing being divided into substantially two compartments, a transmission mechanism including a primary and supplemental transmssion shaft, a plurality of gears mounted on each of said shafts, a differential mechanism mounted in the other of said compartments, and geared to one of the gears of said supplemental shaft, and a dam between the said two compartments and surrounding the said last named gear, whereby the lubricant in said differential compartment is elevated by the ring gear of said differential



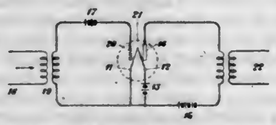
mechanism through the gear on said supplemental shaft from where it is discharged over said dam into said transmission compartment.

1,762,211. OIL SAVER AND PACKING HEAD. WILLIAM G. BRADFORD, Long Beach, Calif., assignor of one-fourth to Harold P. Shoebridge and one-fourth to Jerry L. Foutz. Filed Dec. 19, 1928. Serial No. 327,043. 5 Claims. (Cl. 166—14.)



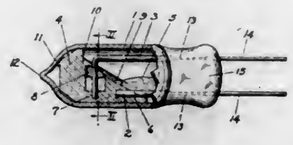
1. An oil saver and packing head adapted to be secured to well tubing, comprising a nipple, a sleeve secured to the nipple, a stripper head seated in the sleeve, packing means in the sleeve around the stripper head, a plurality of latches engaging said stripper head, said latches being adapted to be engaged by the tools during their removal, thus releasing the stripper head, said latches being pivoted adjacent the bottom thereof, and rising above said pivots, a collar at the lower end of the stripper head, and hooks on the latches at the top thereof adapted to engage the collar.

1,762,212. THERMIONIC VACUUM TUBE. CHARLES W. CARTER, Jr., Brooklyn, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Dec. 20, 1924. Serial No. 757,268. 1 Claim. (Cl. 250—27.5.)



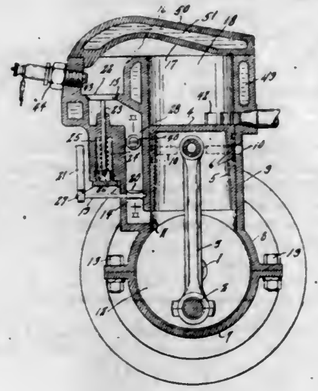
A thermionic high vacuum electron-discharge tube having its cathode in the form of an elongated filament coated with materials of emissivity value varying from zone to zone along its length whereby the current-voltage characteristic is given a desired shape.

1,762,213. MERCURY SWITCH. GEORGE FRANCIS CALLAHAN, Bloomfield, N. J., assignor to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed Aug. 31, 1929. Serial No. 389,735. 13 Claims. (Cl. 200—152.)



1. A mercury switch device comprising an enclosing glass envelope, electrodes sealed therethrough, a refractory element supported on both of said eelctrodes and a movable pool of mercury to bridge said electrodes upon a tilting of said device in one direction, along the surface of said refractory element.

1,762,214. INTERNAL-COMBUSTION MOTOR. HORACE A. CARTWRIGHT, Toledo, Ohio. Filed Sept. 24, 1927. Serial No. 221,687. 5 Claims. (Cl. 123—67.)

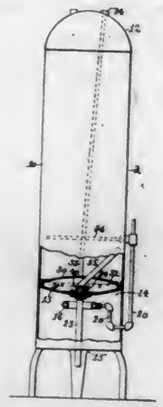


1. A motor comprising a piston, a cylinder on one side thereof, a compression chamber on the other side thereof, there being a way between the chamber and cylinder, a throttle in said way, an additional valve toward the cylinder from said throttle, and a fuel supply in said way between the throttle and the additional valve, and means normally holding said additional valve closed.

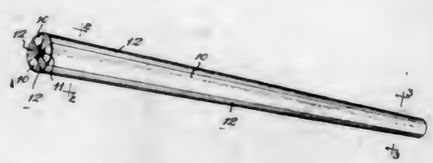
1,762,215. HOT-WATER BOILER. THEODORE W. DAHLQUIST, Dedham, Mass. Filed Apr. 8, 1928. Serial No. 267,000. 2 Claims. (Cl. 122—14.)

1. The combination with a hot water boiler provided with a head having a hot water outlet, and with a partition near the bottom of the boiler forming a hot water chamber, and with a hot water outlet pipe connecting said hot water chamber with said hot water outlet, of a

cold water inlet pipe for said boiler extended through the bottom thereof and through said partition and provided with a port communicating with said hot water chamber for the passage of water from said chamber into said inlet pipe.

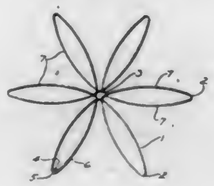


1,762,216. GOLF-CLUB SHAFT. HENRY K. B. DAVIS, New York, N. Y., assignor to Swingrite Co., Inc., Providence, R. I. Filed May 26, 1926. Serial No. 111,680. 4 Claims. (Cl. 273—77.)



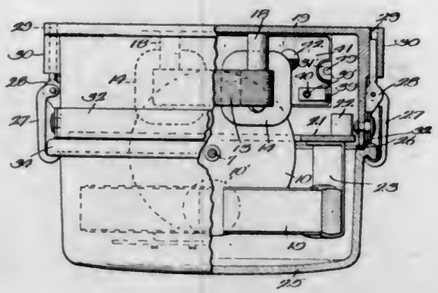
1. A shaft for golf clubs having a plurality of sections secured together, two of the adjacent sections being of different material and having adjacent surfaces in planes passing substantially through the axis of the shaft, some of the sections having portions ending short of the axis of the shaft and other sections extending substantially to the axis of the shaft.

1,762,217. COLLAPSIBLE REST. BENJAMIN R. DEXTER, Oakland, Calif. Filed July 26, 1926. Serial No. 124,918. 2 Claims. (Cl. 68—27.)



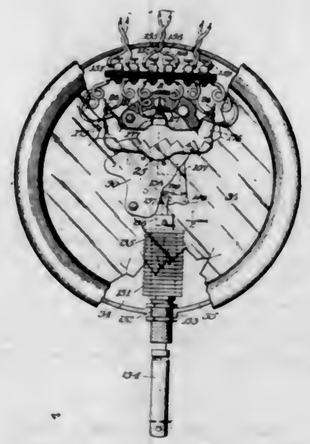
1. A collapsible rest comprising in combination a flexible strip of material, said strip being provided with alternate reversed bends at equidistant points along its length, legs formed between the consecutive bends, one end of said strip terminating in a roll, the other end of said strip terminating in a reversed bend providing a hook, said hook being capable of engaging said roll to hold said legs in converging positions.

1,762,218. ELECTRICITY METER. ALBERT L. EMENS, La Fayette, Ind., assignor to Duncan Electric Manufacturing Company, La Fayette, Ind., a Corporation of Illinois. Filed Jan. 11, 1929. Serial No. 331,731. 7 Claims. (Cl. 171—34.)



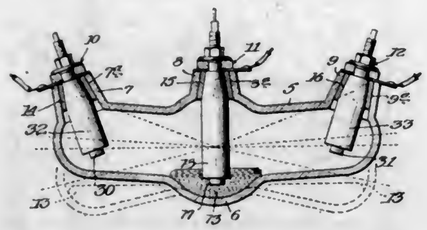
1. The combination with a casing for an electricity meter having body and cover portions; of a latching hook swingingly mounted upon one of these casing portions and bodily movable with respect to this casing portion where thus mounted; and means provided upon the latter aforesaid casing portion for effecting bodily movement of the latching hook and the holding engagement of this latching hook with the other casing portion.

1,762,219. ELECTRICAL CONTACT MECHANISM. GUY S. FABER, Chicago, Ill., assignor to Jas. P. Marsh & Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 29, 1926. Serial No. 84,619. 21 Claims. (Cl. 74—14.)



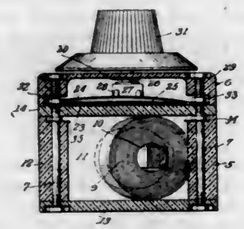
1 In electrical mechanism, the combination of a member mounted to rock, a second member mounted to rotate and be moved in the direction of its length relative to said first-named member, and mechanism operating when said second member is rotated to rock said first-named member comprising camming means formed of circumferentially arranged relatively movable cooperating projections on said members, said projections being circumferentially separable and said means yieldingly forcing said second member into engagement with said first-named member.

1,762,220. ELECTRICAL TUBULAR DEVICE. GUY S. FABER, Chicago, Ill., assignor to Jas. P. Marsh & Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 6, 1926. Serial No. 86,535. 12 Claims. (Cl. 200—152.)



1. An electrical tubular device having a hollow boss open at its opposite ends, nested electrodes insulated from each other and located in said boss, and means forming a tight joint between said nested electrodes and between said nested electrodes and said boss.

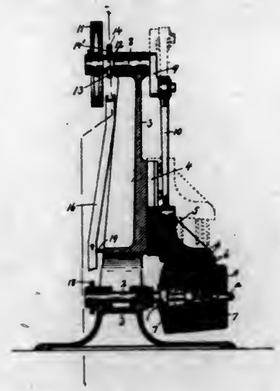
1,762,221. TUNED TRANSFORMER. CLYDE J. FITCH, Brooklyn, N. Y., assignor, by mesne assignments, to Radio Corporation of America, New York, N. Y., a Corporation of Delaware. Filed Nov. 28, 1924. Serial No. 752,623. 4 Claims. (Cl. 250—40.)



1. In a device of the character disclosed, a case, a transformer mounted in said case, an insulating base mounted on said case, a hollow cover engaged over said base, condenser elements on said base within said hollow cover, condenser adjusting means projecting up through the hollow cover, through fastenings for securing the cover, base and case together, condenser terminals associated with certain of said through fastenings and transformer terminals on the case connected with said condenser terminals.

1,762,222. METHOD AND APPARATUS FOR PERFORATING THE CORES OF YARN PACKAGES. WARD N. GERE, Syracuse, N. Y., assignor, by mesne assignments, to Eclipse Textile Devices Incorporated, Elmira Heights, N. Y., a Corporation of New York. Filed Sept. 21, 1926. Serial No. 136,808. 4 Claims. (Cl. 164—108.)

1. The method of perforating the core of a wound mass of yarn without unwinding the yarn from the core, which comprises displacing the threads of the mass to provide a passage from the outer surface of the mass to its inner surface, breaking in the portion of the core at the end of said passage by an instrument introduced through the passage, and withdrawing the instrument to permit the passage to close over the perforation which has been formed in the core.

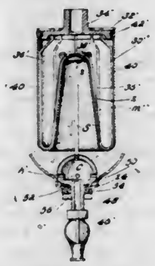


1,762,223. LOUVER. WILLIAM J. GROSS, St. Paul, Minn., assignor, by mesne assignments, to Trussbilt Steel Doors, Inc., St. Paul, Minn., a Corporation of Delaware. Filed Sept. 7, 1928. Serial No. 304,469. 9 Claims. (Cl. 189—59.)



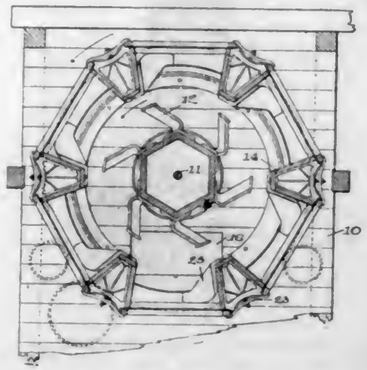
9. A louver comprising a frame, a pair of face plates one on each side of the frame and having openings and intervening cross bars, a baffle plate and a damper plate mounted in the frame and each having openings and intervening cross bars, guides on the frame which hold the baffle plate with its bars covering the openings in one of the face plates and spaced therefrom, and other guides on the frame which hold the damper plate for sliding movement to and from an operative position in which its bars close the openings in the other face plate.

1,762,224. GRAVITY-FLOW VISIBLE FILTER. EDWARD B. GUTHMANN, Warren, and DANIEL CHARLES CORBETT, Bisbee, Ariz. Filed Nov. 5, 1928. Serial No. 317,370. 1 Claim. (Cl. 210—165.)



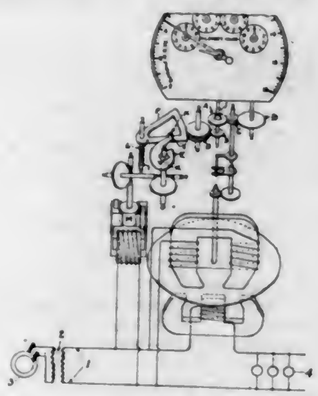
In a device of the class described, in combination, a transparent container, a cap for said container, said cap being provided with fluid inlet and outlet means, a filter suspended from said cap, said filter having a re-entrant portion and sets of means for distending said filter into cylindrical form and for distending said re-entrant portion into conical form.

1,762,225. SCREEN DRUM FOR GREEN-PEA-VINE HULLERS. FRANK HAMACHEK, Kewaunee, Wis., assignor to Frank Hamachek Machine Company, Kewaunee, Wis., a Corporation of Wisconsin. Filed Jan. 18, 1924. Serial No. 687,097. 13 Claims. (Cl. 130—30.)



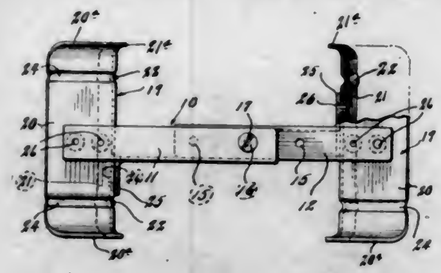
1. In a green pea vine huller, a screen drum, beaters rotatable therein, and lifting ribs within the drum with their lifting surfaces inclined rearwardly from their outer edges in order that loose peas may roll off therefrom before reaching a position above the beaters.

1,762,226. MAXIMUM-DEMAND METER. JESSE HARRIS, La Fayette, Ind. Filed Nov. 23, 1928. Serial No. 321,304. 1 Claim. (Cl. 171—84.)



A maximum demand electricity meter including a rotating electric motor having current and pressure windings to cause it to turn proportionately to the wattage; a constant speed motor; an arm driven by the second motor at a constant speed; a cam driven by the arm, said cam and arm having engaging formations permitting limited relative movement of the cam and arm, a gear sector engageable by said cam to be thereby turned in one direction and in escaping relation with the cam when turned; means for turning the gear sector in the reverse direction while it is escaping the cam, the cam being movable with relation to the aforesaid arm while the sector is escaping the cam; a pointer driving member driven by the first motor; a clutch through which the first motor drives said driving member and permitting reverse or restoring movement of this member; and gearing operable by said gear sector and operated by said sector, when this sector is reversed by the aforesaid sector turning means, this gearing then serving to restore the pointer driving member.

1,762,227. TIRE-CASING EXPANDER. GEORGE W. HEBBELER, St. Louis, Mo. Filed June 21, 1928. Serial No. 287,080. 1 Claim. (Cl. 152—27.)

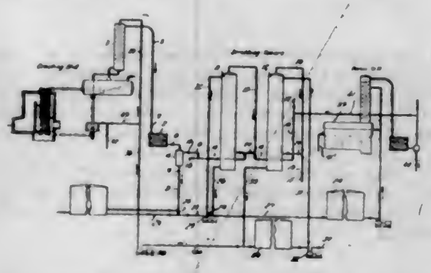


A tire expander comprising in combination a pair of sections channel shaped in cross section and arranged in opposed relation with the flanges disposed in juxtaposed relation and provided with a series of equidistant spaced apertures, a pin insertable through the aligned apertures for securing said sections in adjusted positions, a transversely disposed angle member secured to the outer end of each section with a vertically disposed flange arranged against the deflected ends of the flange and web portion of the corresponding section, and with a horizontally disposed flange of said angle member arranged against the underside of the end of the upper flange of said section, and means for attaching the flanges of the angle member to the ends of the corresponding section, the end edges of each angle member being curved outwardly to present rounded surfaces to the annular edges of the tire.

1,762,228. PREPARATION OF ADSORPTIVE GELS. HARRY N. HOLMES, Oberlin, Ohio. Filed Sept. 12, 1925. Serial No. 56,077. 9 Claims. (Cl. 23—182.)

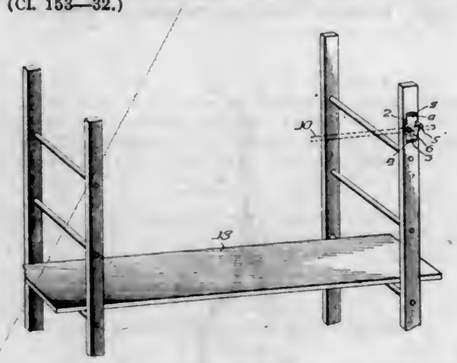
1. The process of preparing silica gels with high adsorptive capacity, comprising treating a soluble silicate in solution with an acid and collecting the gel thus formed, heating the gel at a temperature above 80° C. in the presence of water for a sufficient period to set the structure without undue shrinkage, and washing and drying the product.

1,762,229. ART OF CRACKING HYDROCARBON OILS. EDWARD W. ISOM, Scarsdale, N. Y., assignor to Sinclair Refining Company, New York, N. Y., a Corporation of Maine. Filed Apr. 20, 1927. Serial No. 185,117. 2 Claims. (Cl. 196—8.)



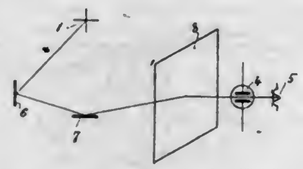
1. In cracking operations for the production of lighter and lower boiling hydrocarbon oils from heavier and higher boiling hydrocarbon oils in which vapors and gases are taken off and subjected to a condensing operation to form a condensate containing the desired product, the improvement which comprises subjecting the mixture of gas and vapor remaining uncondensed from the condensing operation first to a scrubbing treatment with condensate from the said condensing operation, then subjecting the mixture of gas and vapor escaping from the first scrubbing treatment to a scrubbing treatment with raw oil to be supplied to the cracking operation, and supplying raw oil with absorbed constituents from the second scrubbing operation to the cracking operation.

1,762,230. PIPE BENDER. MARTIN E. JOHNSON, Chicago, Ill., assignor of one-half to Ira J. Wilson, Winnetka, Ill. Filed July 26, 1928. Serial No. 295,446. 7 Claims. (Cl. 153—32.)



7. A pipe bender comprising a plate adapted to be secured to a supporting element and a pair of forming elements projecting from said plate in spaced relation to one another, one of said elements having a transverse groove therein, said groove having its terminating edges rounded and the other of said elements having two spaced transverse grooves therein, one of the last said two grooves being so disposed relatively to said plate that an extension of the axis thereof in one direction will intersect an extension of the plane of said plate.

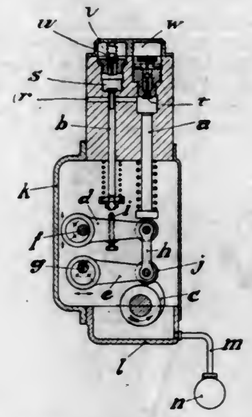
1,762,231. RECEIVER ARRANGEMENT FOR ELECTRIC TELEVISION APPARATUS. AUGUST KAROLUS, Leipzig, Germany, assignor to Radio Corporation of America, a Corporation of Delaware. Filed Aug. 31, 1926, Serial No. 132,702, and in Germany Sept. 5, 1925. 3 Claims. (Cl. 178—6.)



1. A receiver for electric television apparatus including a light relay of the Kerr type, comprising, a light screen, a source of illuminous rays, means for projecting said luminous rays as a position controlled point source of light upon said screen, and a light relay interposed between an observer and said screen whereby said observer when looking through said light relay toward said screen may view a series of position controlled light spots and visually construct a moving image upon said screen.

1,762,232. FUEL PUMP OF INTERNAL-COMBUSTION ENGINES. JOHANN MAHLER, Augsburg, Germany, assignor to the Firm: Maschinen-Fabrik Augsburg-Nuernberg, Aktiengesellschaft, Augsburg, Germany, a Corporation of Germany. Filed Apr. 11, 1925, Serial No. 22,373, and in Germany May 9, 1924. 4 Claims. (Cl. 123—140.)

1. A fuel pump for solid injection of fuel to an internal combustion engine, comprising means for controlling the beginning of fuel injection, and means for controlling the degree of fuel admission, said means including a plurality of adjustable members, a pump plunger actuated from one of said members, eccentric means for readily adjusting said member to vary the timing of the operation of said plunger,

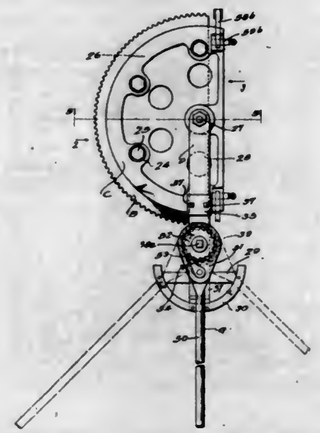


a cut-off valve actuated by another of said members, and means for actuating said members, both of said members being interposed between said actuating means and said pump plunger to transmit actuating movement to said pump plunger.

1,762,233. PREPARATION OF FUR FOR SHRINKING AND FELTING. JOHN H. MARTIN, Baldwin, N. Y. Filed July 14, 1928. Serial No. 292,911. 2 Claims. (Cl. 8—21.)

1. The improvement in the art of preparing fur for shrinking and felting, which consists in subjecting the fur to the action of a solution of disodium hydrogen phosphate and an oxidizing agent.

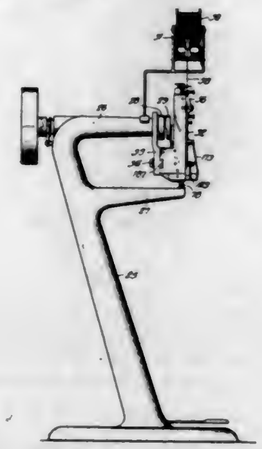
1,762,234. TUBE BENDER. CHARLES N. MATTHEWS, Los Angeles, Calif. Filed Dec. 27, 1928. Serial No. 328,750. 3 Claims. (Cl. 153—46.)



1. A bending machine comprising a peripherally curved rack, said rack having an undercut way, a former detachably secured to said rack including a peripherally arcuate tube seat concentric with said rack, a bending lever pivotally and detachably secured to said rack and former at the center of their arcs, said lever including a yoke arm

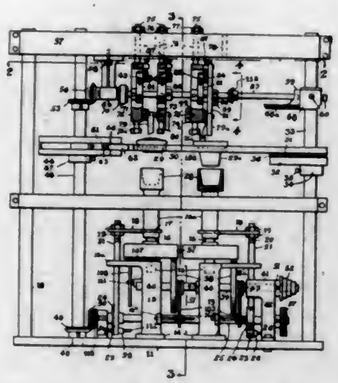
having rollers journalled thereon and riding in said way, a pinion journalled on said lever and meshing with said rack, means to rotate said pinion to cause said lever to turn, and a bending roller journalled on said lever to coact with said seat.

1,762,235. WIRE-STITCHER HEAD. IRVING R. METCALF, GEORGE L. RICHARDSON, and JOHN WOLF, Chicago, Ill., assignors to Latham Machinery Company, a Corporation of Illinois. Filed Oct. 24, 1928. Serial No. 314,618. 22 Claims. (Cl. 1—2.)



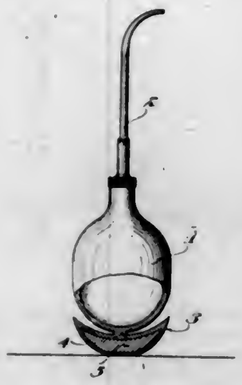
1. A wire stitcher comprising a mechanism for feeding wire in the direction of drive, a wire severing means, a staple forming and driving means operatively related to said wire feeding and severing means, and means whereby said wire feeding mechanism is actuated to feed the wire on the return stroke of said staple forming and driving mechanism.

1,762,236. POTTERY-FORMING MACHINE. WILLIAM J. MILLER, Swissvale, Pa. Filed Feb. 17, 1927. Serial No. 168,994. 17 Claims. (Cl. 25—24.)



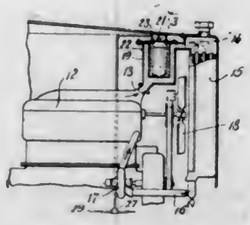
1. In a pottery forming machine a carrier for supporting molds with material therein, one or more jiggers, situated thereunder, a means for actuating the same, one or more verticaly slidable supports for profiles, a horizontally slidable member on each of said supports, one or more profiles, secured to said members, one or more revolvable spindles, one or more cams on said spindles for moving said supports with said members and said profiles thereon vertically into operative position in molds of undercut ware, a means, for sliding said members with said profiles thereon horizontally into operative position in molds of undercut ware, and a means for returning said members with the profiles thereon to their original position.

1,762,237. SELF-ARIGHTING DENTAL SYRINGE. KENNETH G. MOORE, Cannon Falls, Minn. Filed June 24, 1929. Serial No. 373,312. 3 Claims. (Cl. 128—231.)



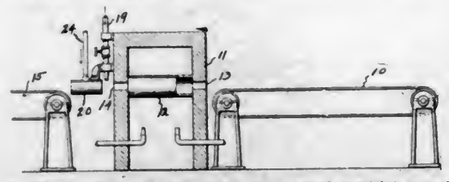
1. A syringe comprising a collapsible bulb and a discharge spout, and a weighted self-arighting base attached to the base of said bulb by a small axially located neck portion.

1,762,238. LUBRICATING SYSTEM. JOHN J. O'BRIEN, Rosemont, Pa., assignor, by mesne assignments, to Motor and Plane Accessories, Inc., Detroit, Mich, a Corporation of Delaware. Filed Apr. 8, 1927. Serial No. 181,907. 4 Claims. (Cl. 184—7.)



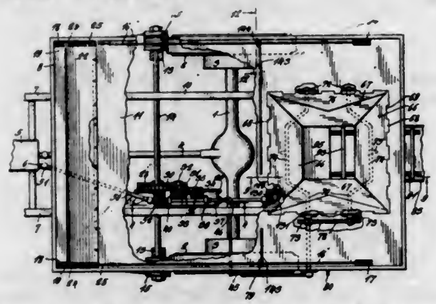
1. In a motor car, the combination with the water-jacketed engine, of a radiator, connections between the top of the radiator and the engine jacket, a sealed tank for oil mounted between the engine and the radiator and having a jacket forming a part of said connections for the flow of water between the engine jacket and radiator in heat exchange relationship to the contents of the tank, and a conduit for oil leading from the tank to the parts of the car requiring lubrication, the flow of water through the tank jacket delivering heat to the contents of the tank when the car is in operation which develops pressure in the tank initiating the flow of oil, the oil flow being stopped when the pressure is released due to the cooling of the contents of the tank when the engine is shut down.

1,762,239. METHOD OF COATING ARTICLES WITH ENAMEL. NATHANIEL B. OANITZ, Pittsburgh, Pa., assignor to The Babcock & Wilcox Tube Company, Beaver Falls, Pa., a Corporation of Pennsylvania. Filed Sept. 17,1926, Serial No. 136,041. Renewed Oct. 12, 1929. 11 Claims. (Cl. 91—73.)



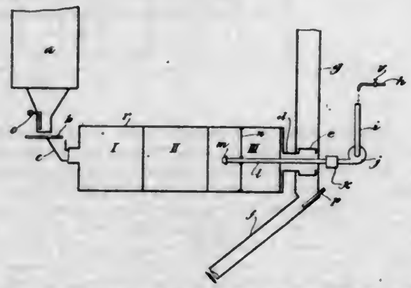
1. The method of enameling long articles which consists in coating the articles with fluid enamel and then moving the articles endwise slowly into and out of a furnace while supporting the article outside the furnace only.

1,762,240. AUTOMATIC UNLOADING DEVICE FOR VEHICLES. NATHAN C. PICKARD, Colorado Springs, Colo. Filed Feb. 23, 1929. Serial No. 341,896. 6 Claims. (Cl. 214—83.)



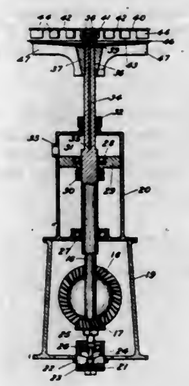
3. In a truck having a box provided with a rectangular opening in the floor near the rear end thereof, means for moving material from the front end of the box towards the opening, a door attached to each of the four sides of the openings, each door having the shape of a truncated isosceles triangle and having its base hinged to the floor so that it can be moved to and from opening closing position, said doors when in open position forming a chute having the form of a truncated pyramid and means for holding the doors in a predetermined position when open and for moving the doors to closed position and latching them in closed position.

1,762,241. GRINDING CEMENT MATERIALS, ETC. CARL PONTOPPIDAN, Copenhagen, Denmark, assignor to F. L. Smidth & Co., New York, N. Y., a Corporation of New Jersey. Filed Dec. 30, 1927, Serial No. 243,530, and in Great Britain Oct. 8, 1927. 2 Claims. (Cl. 83—94.)



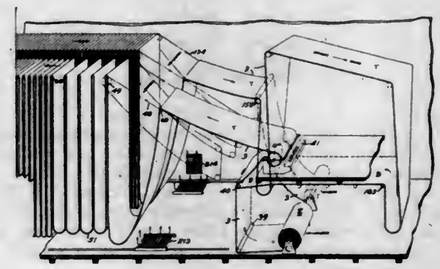
1. The improvement in the grinding of cement material, which consists in adding to the material while it is being ground a substance evaporable by the heat developed in grinding whereby, through the absorption of heat in the evaporation of such substance, the temperature of the material being ground is reduced, the substance being added in such quantities and when the temperature of the material is such that the substance is evaporated without absorption by the material.

1,762,242. LIQUID-FUEL HEATING APPARATUS. HILMER F. RODLER, Davenport, Iowa, assignor to Calvin J. Mummert, West New York, N. J. Filed Apr. 23, 1925. Serial No. 25,348. 5 Claims. (Cl. 158—77.)



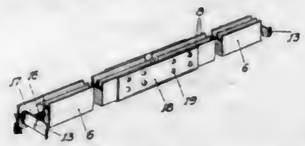
2. In an apparatus of the character described, a slightly dished plate having vanes upon the bottom thereof and projecting downwardly therefrom, a flat cover plate supported adjacent the dished plate but spaced therefrom, said flat plate carrying substantially radial vanes near its outer periphery and between said two plates, said flat plate having perforations therein located inwardly with respect to the last mentioned vanes, and means for supporting and rotating said plates in unison.

1,762,243. FESTOONING APPARATUS. LELAND S. ROSENER, San Francisco, Calif., assignor to The Paraffine Companies, Inc., San Francisco, Calif., a Corporation of Delaware. Filed Mar. 16, 1926. Serial No. 95,057. 32 Claims. (Cl. 91—55.)



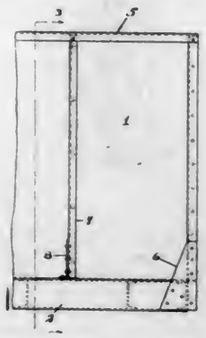
2. In a machine for treating a web, a treating mechanism, means for feeding the web to the treating mechanism, translationally movable means for carrying the web away from said treating mechanism, and means for inverting the web and returning the inverted web to the treating mechanism.

1,762,244. AUTO SCREEN ATTACHMENT. GEORGE W. RUSSELL, Stockton, Calif. Filed Mar. 13, 1928. Serial No. 261,394. 5 Claims. (Cl. 156—38.)



3. In a screen attachment for a closed car window, a bar grooved along one edge to receive and support one edge of a screen frame, and yieldable means projecting from the ends of the bar to frictionally engage the side edges of the window frame to hold the bar in place and prevent lateral movement thereof relative to the frame.

1,762,245. CAR CONSTRUCTION. ALFRED C. SCHMOHL, Beaver Falls, Pa., assignor to Pressed Steel Car Company, Pittsburgh, Pa., a Corporation of New Jersey. Filed Aug. 14, 1929. Serial No. 385,872. 5 Claims. (Cl. 105—380.)



1. In a car construction an end sill, a side sill, and a corner post, said corner post being flush with said end sill and attached to said side sill, a gusset member secured to said end sill and corner post, said corner post sloping upwardly and outwardly towards the end of the car from the side sill.

1,762,246. STEAM BOILER. DON HAROLD SHANNON, Detroit, Mich., assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed Aug. 16, 1923. Serial No. 657,669. 7 Claims. (Cl. 110—98.)



1. A baffle for a water tube boiler comprising blocks of refractory material, means for securing said blocks to the boiler tubes comprising strap members each adapted to extend around a boiler tube, means securing said strap members to said blocks, the arrangement of straps and blocks being such that the sides of said blocks are contiguous along the boiler tubes and a strap is secured to contiguous blocks.

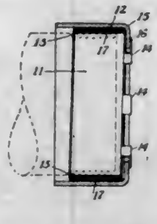
1,762,247. SOUND-REPRODUCING MACHINE. LAZARUS SHAPIRO, Bronx, N. Y., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Apr. 13, 1923. Serial No. 631,764. 4 Claims. (Cl. 179—100.12.)

1. A sound-reproducing apparatus comprising a pivoted, tubular arm, a sound box mounted to swing about an axis other than its own forwardly and rearwardly on the arm, and having acoustic connection with the interior of the arm in both the forwardly and rearwardly swung positions, a diaphragm mounted on the sound box, a stylus



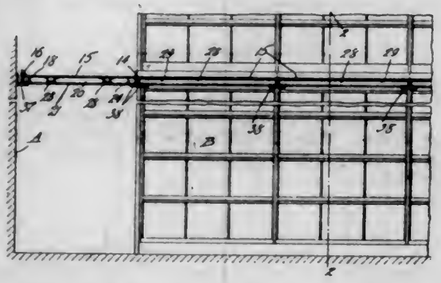
for operating the diaphragm in the forward position of the sound box relatively to the arm, and electromagnetic means carried by the sound box for operating the diaphragm of the sound box in its rearward position relative to the arm.

1,762,248. THREAD PROTECTOR. PETER J. SHRUM, Monaca Heights, Pa., assignor to Pittsburgh Screw and Bolt Corporation, a Corporation of Pennsylvania. Filed Nov. 8, 1927. Serial No. 231,842. 7 Claims. (Cl. 137—91.)



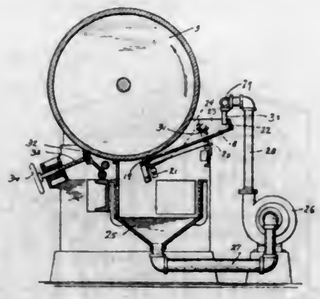
1. The combination of a thread protector comprising a plurality of concentric rings having a thread engaging flange on the inner ring thereof, of a lubricating pad disposed on the inner surface of the protector adjacent the said thread engaging flange.

1,762,249. FLOORING. CHARLES B. ULRICH, Jamestown, N. Y., assignor to Art Metal Construction Company, Jamestown, N. Y. Filed June 1, 1929. Serial No. 367,647. 7 Claims. (Cl. 189—34.)



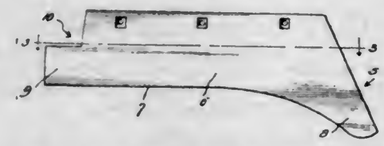
1. Flooring formed of sections each of which includes a tread portion having an edge thereof bent upwardly to form an integral dust guard and a reinforcing flange extending downwardly from the upper edge of said dust guard, said flange having its lower edge portions bent in a direction substantially parallel with said tread, other sides of said tread having their edges bent to form downwardly extending flanges for attachment to corresponding flanges of adjacent sections and said flanges having their lower edge portions bent substantially parallel with said tread portions to reinforce the flanges.

1,762,250. PROCESS FOR DRYING LIQUID MATERIALS. DIRK JACOBUS VAN MARLE, Buffalo, N. Y., assignor to Buffalo Foundry & Machine Company, Inc., Buffalo, N. Y., a Corporation of New York. Filed Apr. 7, 1925. Serial No. 21,390. 8 Claims. (Cl. 159—11.)



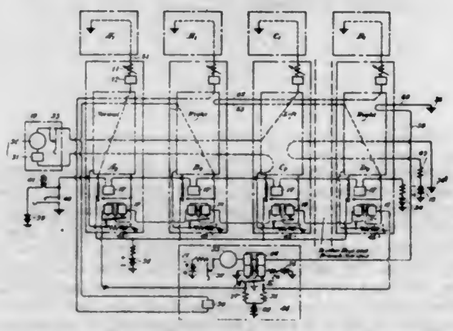
1. A process for drying liquid materials on a heated cylindrical surface, consisting of forming the liquid in a relatively thin sheet, and uninterruptedly flowing the liquid sheet in an inclined path and tangentially to the cylindrical surface.

1,762,251. PLOWSHARE. ALBERT L. VEGORS, Webster City, Iowa. Filed Dec. 21, 1928. Serial No. 327,568. 1 Claim. (Cl. 97—125.)



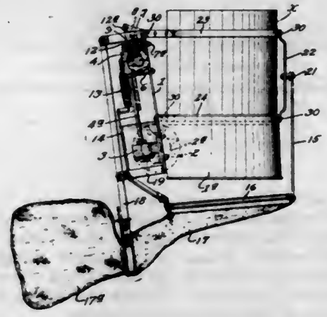
A plow-share for cutting deep matted roots in sweet clover sod comprising a single casting including a body portion having a cutting edge and a downwardly and upwardly curved portion at one end of the cutting edge, and a relatively narrow extension at the heel end of the body also having a cutting edge coincident with said first named cutting edge, said extension being of a width approximately equal to one-half the width of said body portion for providing a space between the share and the mold board when in operative position.

1,762,252. PRINTING-TELEGRAPH EXCHANGE SYSTEM. GILBERT S. VERNAM, River Edge, N. J., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Nov. 16, 1928. Serial No. 319,864. 12 Claims. (Cl. 178—4.)



1. In a telegraph exchange system, in combination, a plurality of branch stations and a central station each equipped with a printing telegraph transmitter and receiver, a single line connecting each branch station to the central station, means at the central station to simultaneously transmit or broadcast from a central station printer to any or all branch station printers, means whereby any branch station may signal the central station during broadcasting thereto, and means whereby the central station may communicate individually with such branch station over a second central station printer during such broadcasting to the other branch stations and without interfering therewith.

1,762,253. SPOUT SAMPLER. WALTER C. WHEELER, St. Louis, Mo. Filed Sept. 4, 1929. Serial No. 390,365. 1 Claim. (Cl. 73—21.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928, 370 O. G., 757.)



A spout sampler for obtaining representative samples of grain from an elevator spout, comprising a base, a body conforming to the shape of the elevator spout and supported by said base, means for attaching said base and body to an elevator spout, a pocket adapted to receive grain passing through said body, a pocket arm swingably attached to said base for supporting said pocket, and means for alternately swinging said pocket to positions beneath said body and at the side thereof.

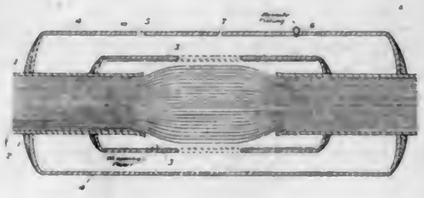
1,762,254. STRAIGHTEDGE AND REENFORCING DEVICE. JOSEPH ZAREA, East Boston, Mass. Filed Mar. 18, 1929. Serial No. 348,002. 2 Claims. (Cl. 72—121.)



1. A reenforcing element for plastered walls formed from a single strip of metal that is bent back upon itself longitudinally to form opposed walls, and laterally extending flanges at the inner edges of the walls for securing the reenforcing element across the front faces of the laths to which the plaster is applied, the flanges being formed along the inner edge of one wall, and alternate flanges

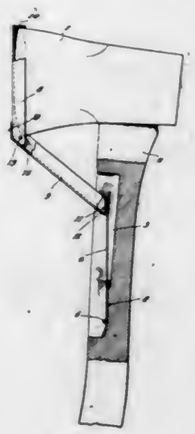
bent laterally and firmly over the free edge of the opposite wall, the joined forward edges of the opposed walls constituting a straight edge and gage for obtaining a plastered wall of uniform thickness.

1,762,255. METHOD OF PLUGGING CABLES. CHARLES E. BALDWIN, Stanhope, N. J., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Sept. 1, 1928. Serial No. 303,524. 2 Claims. (Cl. 173—266.)



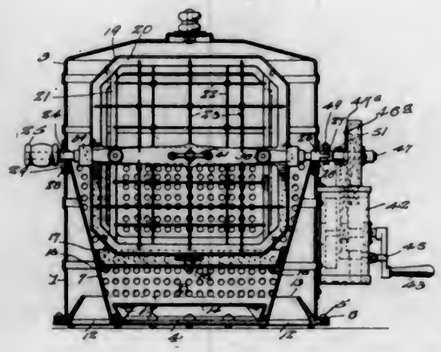
1. The method of plugging a cable against the flow of gas therethrough which consists in removing a short section of the cable sheath, wiping a sleeve over the open section of the cable, filling the sleeve with a sealing compound, removing the middle section of the sleeve, wiping an outer sleeve on the cable over the first sleeve and filling the outer sleeve with a sealing compound.

1,762,256. AX GUARD. ROBERT E. BROWN, Olean, N. Y. Filed Oct. 17, 1929. Serial No. 400,373. 6 Claims. (Cl. 145—2.)



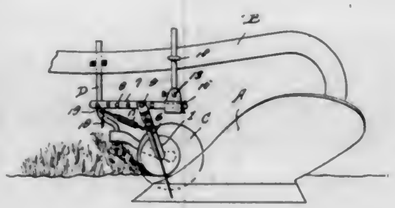
1. An ax comprising a head, a handle extending from said head and formed along its front with a longitudinally extending pocket, and a guard for the cutting edge of the ax head movable from a folded position within the pocket to an extended position and consisting of an inner strip, and an outer strip pivoted to the inner strip and adapted to cover the cutting edge of the ax head when extended.

1,762,257. CULINARY UTENSIL. CHARLES F. BURKHARDT, Washington, D. C. Filed June 17, 1929. Serial No. 371,573. 12 Claims. (Cl. 126—41.)



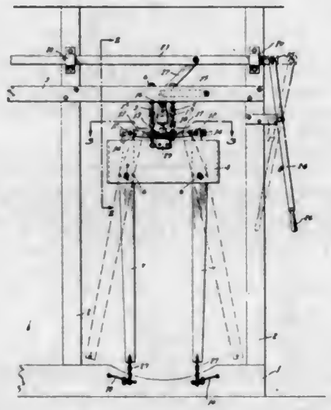
1. In a culinary utensil, the combination with a slotted base plate and an outer wall secured thereon and a container secured to the base plate within the slotted portion, said container having outwardly flaring walls and perforations therein, and an inwardly converging deflector wall above a portion of the base-plate-slot.

1,762,258. ROLLER ATTACHMENT FOR PLOWS. OLIVER G. CHENOWETH and CHARLES A. CHENOWETH, Lynn, Ind. Filed Dec. 30, 1927. Serial No. 243,617. 1 Claim. (Cl. 97—193.)



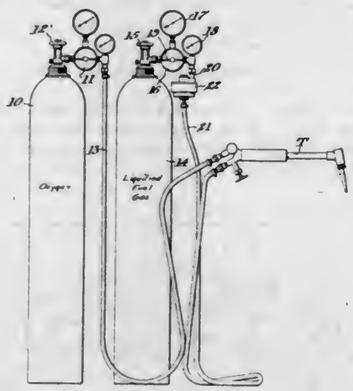
A roller attachment for plows comprising a depending L-shaped arm secured at its upper portion to the usual plow beam, the horizontal portion of the arm being disposed at right angles with respect to said beam, a block adjustable longitudinally on said horizontal portion of the arm, a bar projecting horizontally from said block in a direction parallel to the plow beam, an inverted U-shaped frame pivotally depending from the bar, a roller rotatably mounted between the end portions of the frame, and spring means interposed between the frame and the bar to tensionally maintain the roller against the ground.

1,762,259. CATTLE STANCHION. WILLIAM E. CURRIE and PETER DE VRIES, Detroit, Mich.; said de Vries assignor to said Currie. Filed Dec. 21, 1927. Serial No. 241,504. 2 Claims. (Cl. 119—148.)



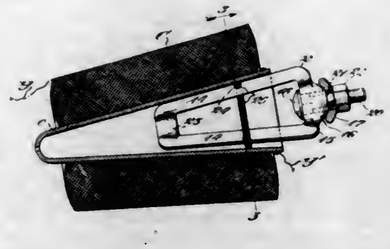
1. A stanchion comprising a frame, a fixed rail included in said frame, a swingable head suspended from said rail, a pair of neck bars pivoted to said head, arms pivoted to said bars and pivotally connected together, and means for displacing the common pivot point of said bars, whereby to swing said bars relatively to said head.

1,762,260. CUTTING AND WELDING APPARATUS. MAURICE P. DE MOTTE, Buffalo, and RAYMOND C. PIERCE, New York, N. Y., assignors to The Linde Air Products Company, a Corporation of Ohio. Filed Nov. 4, 1921. Serial No. 512,885. 4 Claims. (Cl. 158—27.4.)



3. Gas welding or cutting apparatus, comprising the combination with a container for liquefied fuel gas, a blowpipe for utilizing fuel gas, and a conduit between said container and said blowpipe, of pressure regulating means in said conduit comprising a pressure reducing and regulating valve adapted to receive gas from said container and to reduce the pressure thereof to a predetermined value and means for dampening the variations of pressure of the gas delivered by said valve, comprising a second pressure reducing valve connected directly to the low pressure side of the first valve and constructed to maintain a substantially constant ratio between the pressures of the gas entering and leaving it.

1,762,261. COP HOLDER. ERNEST A. DE WOLF, Cranston, R. I., assignor to Universal Winding Company, Boston, Mass., a Corporation of Massachusetts. Filed Apr. 11, 1928. Serial No. 269,166. 8 Claims. (Cl. 242—130.)



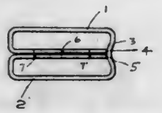
3. A holder for cops, cones and packages of strand material comprising a member provided with longitudinal ribs adapted for insertion into the interior of the cop-tube, and an annulus encircling the ribs to adapt it to engage frictionally with the interior of the cop-tube and mounted free to rotate about the member to permit the cop-tube to be turned on its axis.

1,762,262. BUTTON LOOP. JOHN H. DOMKEE, West Haven, Conn., assignor to The Wire Novelty Manufacturing Co., West Haven, Conn., a Corporation of Connecticut. Filed Feb. 15, 1929. Serial No. 340,246. 3 Claims. (Cl. 24—224.)



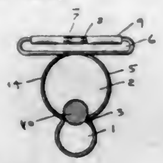
1. A button loop comprising a pair of spring arms forming a contracted portion near one end of the loop, the arms being divergent beyond the contracted portion and then being inwardly bent to form a button retaining loop, one of the arms being provided with a curved elongated slot formation at its extremity and within the plane of the loop to accommodate therein throughout its length the curved extremity of the other arm for relative movement upon the expansion of the contracted portion.

1,762,263. SLIDE BUCKLE. JOHN H. DOMKEE, West Haven, Conn., assignor to The Wire Novelty Manufacturing Co., West Haven, Conn., a Corporation of Connecticut. Filed Feb. 15, 1929. Serial No. 340,247. 6 Claims. (Cl. 24—200.)



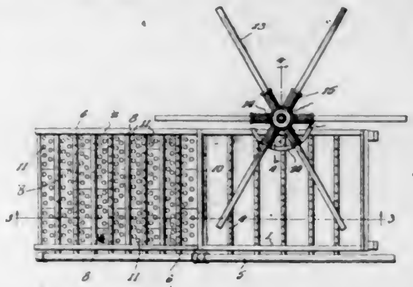
1. A slide buckle having a pair of loops connected at one side and free at the opposite side, and intermediate bars extending integrally from the free side of the loops and being provided with spaced single peaked humps projecting out of the plane of the buckle, the free ends of the bars engaging the side connection.

1,762,264. BUTTON LOOP. JOHN H. DOMKER, West Haven, Conn., assignor to The Wire Novelty Manufacturing Company, West Haven, Conn., a Corporation of Connecticut. Filed May 1, 1929. Serial No. 359,545. 3 Claims. (Cl. 24—224.)



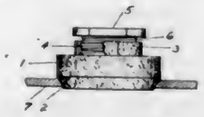
1. A button loop comprising a single piece of wire of which a middle portion is bent to form an end and side portions of associated loops intercommunicable by means of an expansible normally contracted throat portion, the remaining portions of the wire being crossed and then extended to each form a half section of a contractible suspension loop, the section of either side of the suspension loop being carried by an opposite side portion of the associated loops.

1,762,265. ORE CONCENTRATOR. RALPH C. FEHELY and RAYMOND F. STEVENSON, Keno, Oreg.; said Stevenson assignor to said Fehely. Original application filed Apr. 20, 1927, Serial No. 185,313. Divided and this application filed Aug. 28, 1928. Serial No. 302,604. 2 Claims. (Cl. 209—225.)



1. The combination with an approximately horizontal separating tank open at its top, of a rotary magnetic separator comprising a hub rotatably mounted at one side of said tank, soft iron bars radiating from the hub to sweep across the open upper end of said tank as the hub rotates, coils about the inner end portions of the bars, means for energizing the coils during movement of the bars over the separating tank, and means at the bottom of the tank for directing jets upwardly therein to agitate contents of the tank and project particles of metal upwardly into position to be attached by the magnetized bars and adhere to all surfaces of the bars.

1,762,266. VALVE. JOHN J. FRANK, Pittsfield, Mass. Filed Mar. 15, 1929. Serial No. 347,378. 5 Claims. (Cl. 251—159.)

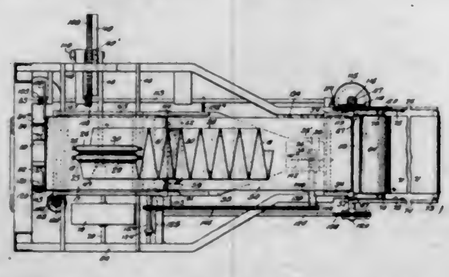


3. A valve construction of the character described comprising a moulded non-metallic and non-porous valve disc or clapper, a moulded threaded hollow stem extending therefrom, said hollow stem of a different degree of hardness than the valve disc, and the hole moulded together forming one integral part.

1,762,267. FILLER FOR BUILDING UNITS AND PROCESS OF PREPARATION. WILLIAM A. FREBET, Washington, D. C., assignor to National Lime Association, Washington, D. C., a Corporation of the District of Columbia. Filed Aug. 22, 1923. Serial No. 658,842. 12 Claims. (Cl. 106—34.)

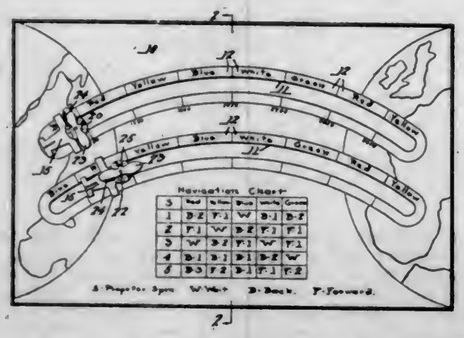
1. A process of preparing building units which includes the steps of wetting a fibrous filler, mixing said wet filler with a dry cementitious material to form a coating thereon, allowing said coating to dry, incorporating said coated filler with a preponderance of lime and some water, forming this mass into a building unit and allowing said unit to dry.

1,762,268. DOUGH-SHEETING MACHINE. THOMAS L. GREEN, Indianapolis, Ind. Filed Feb. 24, 1920. Serial No. 361,031. 28 Claims. (Cl. 107—12.)



2. A machine of the class described comprising, in combination, sets of dough sheeting rollers disposed transversely of each other for operation upon traveling dough at successive points in its line of travel; an intermediate carrier upon which the sheet is deposited, said carrier traveling in a direction to deliver the dough thereon to the second rollers while oscillating laterally to fold the sheet depositing thereon in alternate directions across the carrier; and a swinging transfer carrier, the receiving end of which moves laterally with the first mentioned carrier, for transferring the folded material from said first mentioned carrier to the second rollers.

1,762,269. GAME AND GAME PIECE. CARL C. HARRIS, Orange, Mass. Refile of application Serial No. 225,801, filed Oct. 12, 1927. This application filed Apr. 12, 1929. Serial No. 354,076. 9 Claims. (Cl. 273—134.)

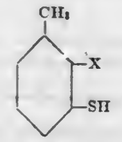


1. In a game, the combination of a game board having a slot therethrough and a series of areas along the slot colored different colors, of a game piece provided with means for holding it in the slot and allowing it to move along therein from a position opposite one area to another, a spinner on the game piece having a pointer, the game

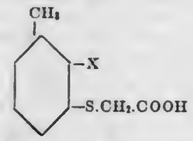
piece being provided with a circular scale having spaces in each of which is a numeral so that the pointer will point to one of these numerals after being spun, a chart comprising a series of vertical columns, each headed with the name of one of said colors and horizontal columns each having at one end of the series the numerals on the game piece scale arranged in order, the columns dividing the chart up into rectangles in each one of which is a designation indicating whether the game piece is to go forward or back and how far, and a key to the chart showing what the characters thereon indicate.

1,762,270. 2-SUBSTITUTED-1-METHYL-PHENYL-3 MERCAPTANS. ERWIN HOFFA and HANS HEYNA, Frankfort-on-the-Main-Hochst, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Nov. 24, 1928, Serial No. 321,757, and in Germany Oct. 23, 1926. 2 Claims. (Cl. 260—108.)

1. As new products, the compounds of the general formula:

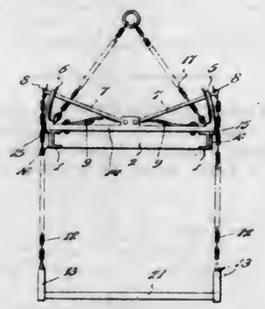


wherein X stands for the CN- or COOH-group, being crystalline bodies and capable of being converted in the presence of an alkali by means of mono-chloroacetic acid into compounds of the general formula:



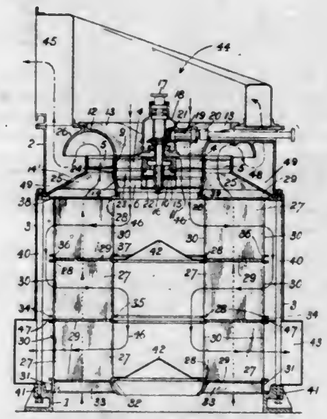
wherein X stands for the CN- or COOH-group.

1,762,271. LUMBER CRADLE. EDWARD W. HOTCHINOS, Perry, Fla. Filed Feb. 6, 1929. Serial No. 337,966. 6 Claims. (Cl. 294—67.)



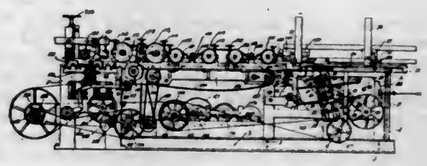
1. A lumber cradle comprising a frame, hoisting means connected with the frame, a plurality of pairs of suspending levers yieldably mounted transversely upon the frame and projecting beyond the sides thereof, and suspension elements engaged with and depending from the free ends of said levers, the lower ends of said suspension members being provided with means to support a load and the outer pairs of levers being adjustable toward or from the ends of the frame.

1,762,272. ROTARY FAN AND HEAT EXCHANGER. GEORGE FREDERICK JONES, London, England. Filed Aug. 20, 1928, Serial No. 300,820, and in Great Britain June 22, 1928. 11 Claims. (Cl. 257—244.)



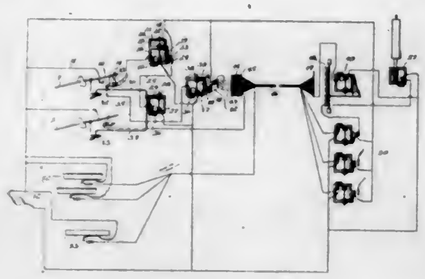
1. Rotary fans for furnaces in which two sets of blades are provided, one set, the inner set, being mounted on the boss of the fan to force air in one direction in a central duct and the second set, the outer set, arranged in annular space around the central duct to force gas in the opposite direction through an annular outlet with a heat exchanger below the annular outlet through which gas to that outlet passes in one direction and air from the central duct passes in another direction.

1,762,273. AUTOMATIC SASH MACHINE. DAVID B. MACKENZIE, Muscatine, Iowa. Filed Mar. 12, 1928. Serial No. 261,035. 7 Claims. (Cl. 144—5.)



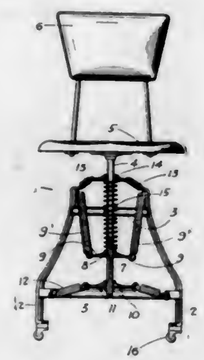
1. An automatic sash machine comprising a hopper, boring means disposed upon each side of the machine and arranged for boring a hole in the lowermost pieces of stock in the hopper, ejecting means disposed upon each side of the machine for moving the pieces of stock from the hopper, means for dressing the stock, means for conveying the stock from the hopper to said dressing means, a shaft, a pair of cams mounted upon said shaft, said cams being disposed in alternate relation, means connecting said cams with said boring means, means connecting said cams with said ejecting means, a main drive shaft, and means for operatively connecting said shaft with said main drive shaft.

1,762,274. ORGAN. DAVID MARR, Warsaw, N. Y. Filed Oct. 20, 1926. Serial No. 142,792. 5 Claims. (Cl. 84—343.)



3. The combination with an organ mechanism comprising a series of stop keys each controlling a predetermined selection of stops, of means for visually indicating the tone color obtained by such selections.

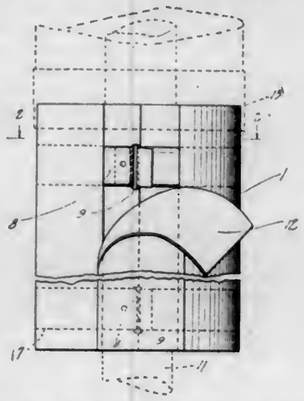
1,762,275. STOOL. CHARLES F. MILLER, Columbus, Ohio. Filed Apr. 30, 1929. Serial No. 359,243. 2 Claims. (Cl. 155—52.)



1. A stool of the character described, comprising a supporting frame, a seat, a stem depending from said seat and arranged vertically and centrally of said frame, a collar loosely carried by the upper end of said stem, a second collar threadedly received by the lower end of said stem, a third collar threadedly carried by said stem intermediate of said first named collars, vertically extending shock absorbing springs connecting the intermediate collar to the upper end of said frame, radially disposed springs connecting the upper and lower collars and said frame, the lower of said last mentioned springs being anchored to the frame at a position intermediate to that of said upper radial springs.

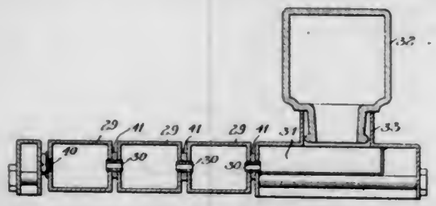
1,762,276. PIPE INSULATION. GEORGE J. SCHREIER, Chicago, Ill. Filed Apr. 2, 1928. Serial No. 266,847. 1 Claim. (Cl. 154—44.)

A pipe insulation of the character described comprising semi-cylindrical body portions, a circular casing secured to said body portions for hingedly connecting said body portions together, retaining bands disposed upon said casing for securing said body portions in closed positions, a cover for said casing having its ends terminating a short distance from the free edges of said body portions, whereby said securing bands may be covered for their entire length with the exception of the ends adjacent the free ends of said body portions, and a sealing strip disposed over the



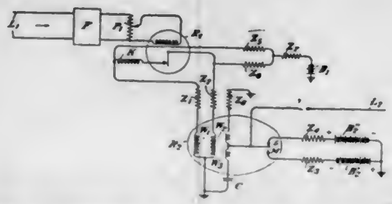
free ends of said body portions over the ends of said securing bands and over the ends of said cover and firmly secured in place.

1,762,277. STAMP-DISPENSING MACHINE. WILLIAM F. SCHWEIGER, Rochester, N. Y., assignor to Multipost Company, Incorporated, Rochester, N. Y., a Corporation of New York. Original application filed Nov. 19, 1924, Serial No. 750,952, now Patent No. 1,625,827, dated Apr. 26, 1927. Divided and this application filed Mar. 19, 1927. Serial No. 176,782. 6 Claims. (Cl. 91—51.)



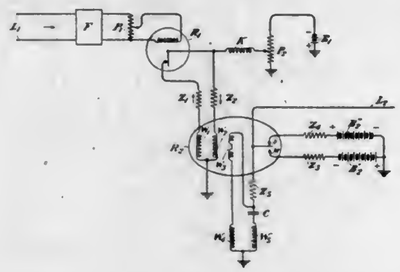
4. A stamp moistening device comprising a plurality of moistening reservoirs, each reservoir having an opening in each end thereof, a liquid supply unit having an opening in one side thereof, a nipple connecting the opening in said supply unit with one of the openings in one of said moistening reservoirs, nipples connecting adjacent moistening reservoirs to each other, and a plug secured in one of the openings of the last moistening reservoir.

1,762,278. TRANSMISSION SYSTEM. FRED J. SINGER, Rockville Center, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed May 4, 1928. Serial No. 275,165. 8 Claims. (Cl. 178—70.)



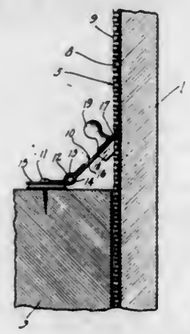
1. The combination of an alternating current relay, a direct current relay, means for causing the armature of the direct current relay to close one of its contacts when energy is being supplied to the alternating current relay, means for causing the armature of the direct current relay to close the other of its contacts when no energy is being supplied to the alternating current relay, and means for maintaining the potential difference between the armature of the alternating current relay and its contact below a predetermined value.

1,762,279. TRANSMISSION SYSTEM. FRED J. SINGER, Rockville Center, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Original application filed May 4, 1928, Serial No. 275,165. Divided and this application filed Aug. 15, 1929. Serial No. 385,991. 2 Claims. (Cl. 178—70.)



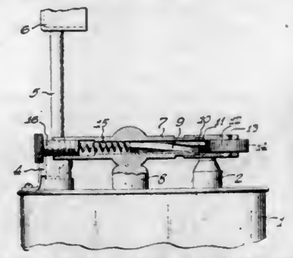
1. The combination of an alternating current relay, a direct current relay having two operating windings, two resistance elements, the two operating windings of the direct current relay and the two resistance elements forming the four arms of a Wheatstone bridge, a choke coil, the armature of the alternating current relay and the choke coil forming one diagonal of the Wheatstone bridge, and a source of direct current potential forming the other diagonal of the Wheatstone bridge.

1,762,280. WINDOW FASTENER. ARTHUR J. SLINGERLAND, Chicago, Ill. Filed Feb. 3, 1928. Serial No. 251,619. 2 Claims. (Cl. 292—228.)



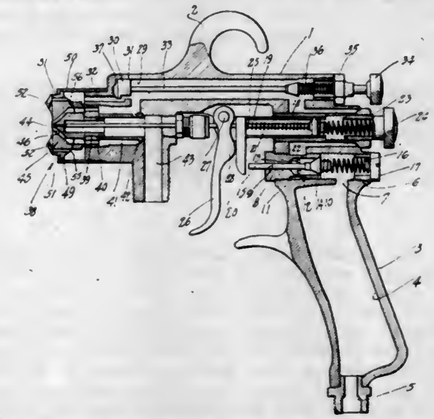
1. A device of the type described comprising a fastening strip having transversely extending side portions, a fastener, means for holding said fastener in engagement with said fastening strip, and ears integral with said fastener and extending substantially at right angles with respect thereto, said ears being adapted to be disposed upon each side of said fastening strip and to engage with said side portions irrespective of the movement of said fastener with respect to said fastening strip.

1,762,281. TOBACCO LIGHTER. ALFRED J. STECKER, St. Petersburg, Fla. Filed May 27, 1929. Serial No. 366,256. 4 Claims. (Cl. 67—7.1.)



4. In a lighter, a friction wheel, a delivery tube, a flint within said tube, said flint being of polygonal cross section and twisted, a nut associated with said tube and having an aperture of the dimensions of said cross section, said flint passing through said aperture, and means for advancing said flint towards said wheel, whereby said flint is imparted a longitudinal and rotary motion.

1,762,282. SPRAY GUN. EMIL H. STEPHAN, Bridgman, Mich., assignor to William H. Gast, Bridgman, Mich. Filed Apr. 20, 1928. Serial No. 271,554. 2 Claims. (Cl. 91—45.)

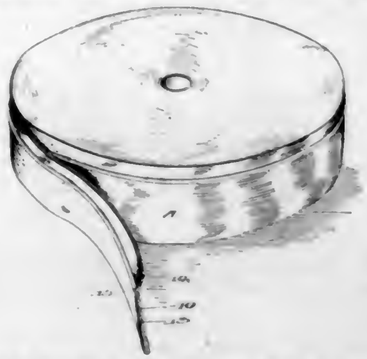


1. A device of the type described comprising a body portion, a main air passageway therethrough, an air valve, a housing for said air valve having openings therethrough, a valve stem extending through said housing, an arm disposed adjacent said valve stem, a sleeve for supporting said arm, a cylinder for movably receiving said sleeve, a trigger pivotally mounted upon said body portion adjacent said arm for actuating said arm for imparting a direct and even movement to said air valve for opening said air valve for allowing air to pass through said housing, the openings in said housing and through said main air passageway, a mouth piece, said mouth piece comprising a unit having a plurality of circumferentially-disposed openings, and a guide portion having a conical-shaped recess for directing the air passing through said circumferentially-disposed openings to and through a relatively small outlet.

1,762,283. WAISTBAND CURTAIN. OLIVE K. THOMAS and JOSEPH D. MALKIN, Philadelphia, Pa., assignors of one-half to Freydberg Bros. Inc., New York, N. Y., a Corporation of New York. Filed Nov. 5, 1927. Serial No. 231,370. 8 Claims. (Cl. 2—236.)

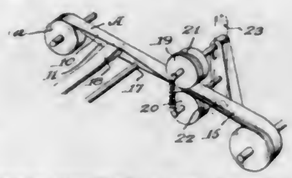
3. As a new article of manufacture, a waist band curtain consisting of a strip of stiffening material and a strip of facing material arranged opposite to and approximately

coextensive with the area of the stiffening material, said stiffening material being formed with a scoring adjacent to and spaced from one longitudinal edge thereof so that,



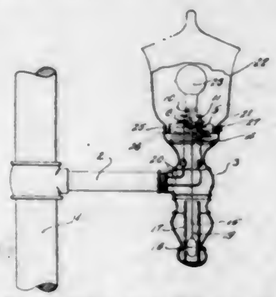
when being applied to a garment, the scoring provides a visible follow line at which attaching stitching is made and also provides a readily bendable fold line.

1,762,284. METHOD OF PRODUCING WAISTBAND CURTAINS. OLIVE K. THOMAS and JOSEPH D. MALKIN, Philadelphia, Pa., assignors of one-half to Freydberg Bros. Inc., New York, N. Y., a Corporation of New York. Filed June 24, 1929. Serial No. 373,397. 3 Claims. (Cl. 2—236.)



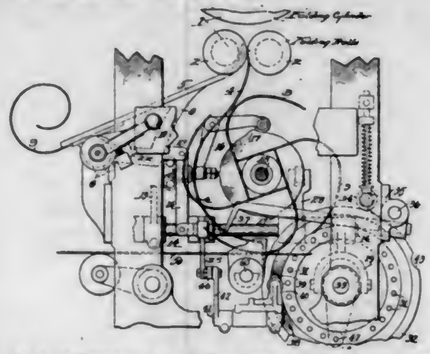
2. The herein described method of producing trouser waist bands which includes advancing in superposed relation a sized stiffening fabric and a lining fabric, moistening the stiffening fabric to render the sizing "tacky"; then subjecting the advancing strips to pressure while moistened to cause them to adhere throughout their contacting areas and offsetting, while moist, a portion of the stiffener strip to provide a groove in one face thereof and an opposed rib on its other face extending along one longitudinal edge thereof, said groove constituting a visible follow line for the operator when stitching the waist band to the trouser material and an easy bending line of fold.

1,762,285. SHOCK ABSORBER FOR INVERTED LAMPS. ALLISON J. THOMPSON, Cleveland, Ohio. Filed Jan. 16, 1928. Serial No. 247,066. 3 Claims. (Cl. 240—90.)



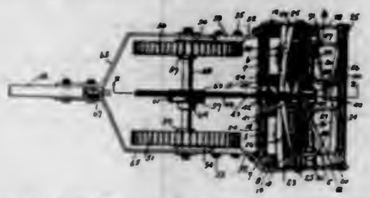
1. In a lamp fixture, a fixed casing having an upper opening, a saddle adapted to carry a lamp and having a portion extending over and about said opening to protect the same from the elements, said saddle being adapted to carry a lamp and a globe therefor, means for resiliently supporting said saddle on said casing, and counterbalance means extending within said casing below said supporting means, and associated with said saddle to maintain said lamp and globe in upright position above said opening.

1,762,286. PAPER THROW-OUT AND COUNT-RECTIFYING DEVICE. HENRY A. WISE WOOD, New York, N. Y., assignor to Wood Newspaper Machinery Corporation, New York, N. Y., a Corporation of Virginia. Filed Jan. 31, 1927, Serial No. 164,979. Renewed Nov. 5, 1929. 28 Claims. (Cl. 93—93.)



1. In a delivery for a folding machine, the combination with means for intercepting a folded product and diverting it from the normal line of delivery, with means for automatically preventing the intercepting and diversion of more than one product at a time.

1,762,287. LAWN MOWER. JOHN HENRY BLAIR, San Francisco, Calif., assignor to William F. Hollingsworth, San Francisco, Calif. Filed June 21, 1926. Serial No. 117,456. 4 Claims. (Cl. 56—252.)



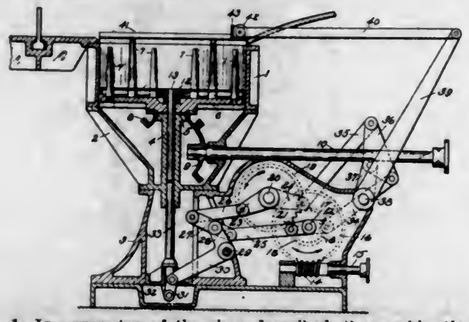
1. In a lawn mower, a pair of cutting reels extending at an inclination with respect to each other and having overlapping portions so as to present a continuous cutting surface throughout the length of the two reels, and cutting blades positioned beneath the two reels and cooperating therewith.

1,762,288. AUTOMOBILE SIGNAL. HUGH ALEXANDER COULTER, Winnipeg, Manitoba, Canada. Filed Dec. 1, 1928, Serial No. 323,027, and in Canada Nov. 13, 1928. 3 Claims. (Cl. 116—30.)



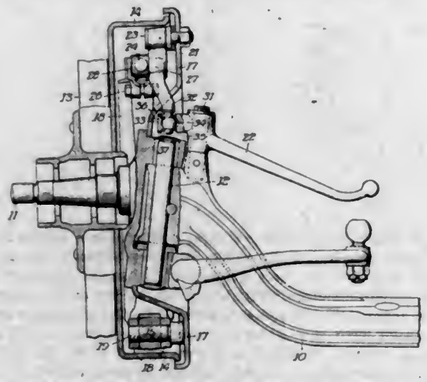
4. In an automobile signalling device, a stationary casing having a rear window therein, a cylindrical drum rotatably mounted within the casing and having a plurality of signalling symbols thereon selectively visible in the rotation of the drum through the window, a plurality of air cylinders and pistons operating therein, an operating connection between each piston and the drum designed to effect a rotary movement of the drum upon any piston being actuated, means limiting the length of stroke of the pistons, each piston having a different length of stroke and gauged such that the symbols will be separately exposed through the rear window by selectively actuating the pistons and valve controlled means for selectively exhausting the air from any cylinder.

1,762,289. COIL-HANDLING APPARATUS. FRANK P. DAHLSTROM, Worcester, Mass., assignor to Morgan Construction Company, Worcester, Mass., a Corporation of Massachusetts. Filed Dec. 27, 1927. Serial No. 242,915. 10 Claims. (Cl. 242—81.)



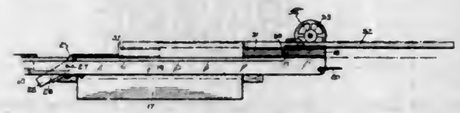
1. In apparatus of the class described, the combination with the coil-freeing member and coil-discharging pusher of a coiling reel, of an actuating mechanism, common to said member and pusher, for coordinating their movements in the handling of each coil formed on said reel, to secure first the coil-freeing movement of said member, then the operative movement of said pusher, and finally the simultaneous return of both parts to their normal positions, said actuating mechanism comprising two shafts rotating in opposite directions and at different speeds, means connecting each shaft to said member for the operation of the latter by the combined initial angular movements of the two shafts, and other means connecting each shaft with said pusher for the operation of the same, after the coil-freeing movement of said member, by the combined subsequent angular movements of both shafts.

1,762,290. BRAKE CONTROL. ADIEL Y. DODGE, South Bend, Ind., assignor to Bendix Brake Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 11, 1924. Serial No. 742,997. 5 Claims. (Cl. 188—194.)



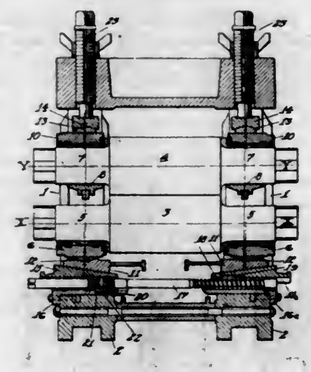
1. A front wheel brake assembly, comprising a drum secured to the wheel, a mounting plate secured to the wheel spindle, two articulated brake shoes pivoted at the unarticulated end of one shoe to the mounting plate, a lever pivoted to the mounting plate and cooperating with the unarticulated end of the other shoe for moving the same, and means for oscillating the lever.

1,762,291. DEVICE FOR SELECTIVE HANDLING OF METAL BARS OR BILLETS. ERIC H. FORS, Sheffield, England, assignor to Morgan Construction Company, Worcester, Mass., a Corporation of Massachusetts. Filed Sept. 27, 1928. Serial No. 308,816. 14 Claims. (Cl. 80—42.)



1. The combination with a cooling bed for the support of a plurality of billets, of a billet-discharge mechanism, comprising a member movable broadside on said bed between said billets and the delivery end of said bed and adapted to contact sidewise with the farthest-advanced billet on said bed, billet-engaging pawls spaced from said member and adapted to move in unison therewith, and means for adjusting the spacing between said pawls and said member to vary the number of billets picked off by said pawls at each reciprocation of said member.

1,762,292. ROLLING-MILL HOUSING AND BEARING CONSTRUCTION. JEROME R. GEORGE, Worcester, Mass., assignor to Morgan Construction Company, Worcester, Mass., a Corporation of Massachusetts. Filed May 6, 1925. Serial No. 28,383. 1 Claim. (Cl. 80—56.)

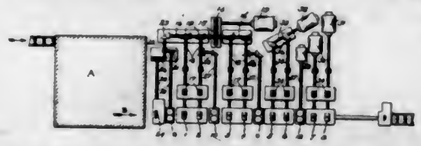


In a rolling mill housing, a supporting bearing for the lower roll neck, a holding-down bearing for the upper roll neck, a holding-down screw for said last named bearing, and means permitting shifting of both of said bearings about axes at right angles to the axes of their respective necks, said pivotal axes of said bearings being offset, when the bearings are new, from the center line of said holding-down screw, whereby longitudinal adjustment to take up endwise play in said bearings brings said axes substantially in line with the pressure exerted by said screw.

1,762,293. ROLLING MILL. JEROME R. GEORGE and JOHN W. SHEPERDSON, Worcester, Mass., assignors to Morgan Construction Company, Worcester, Mass., a Corporation of Massachusetts. Filed July 9, 1928. Serial No. 291,403. 3 Claims. (Cl. 80—36.)

3. A rolling mill, providing a plurality of roughing roll stands comprising individual edging roll stands in alter-

nating relation to pairs of stands of flatting rolls, a common driving means for all of said stands of roughing rolls, comprising a countershaft running lengthwise of said mill and having bevel gear connections to the spindles of the initial edging stand and to all of said flatting stands, the spindles of the subsequent edging stands being driven by gearing from the adjacent flatting stand spindles, in combination with additional roll stands comprising two pairs of flatting roll stands with an interposed individual edging roll stand, the first pair of said last-mentioned flatting roll

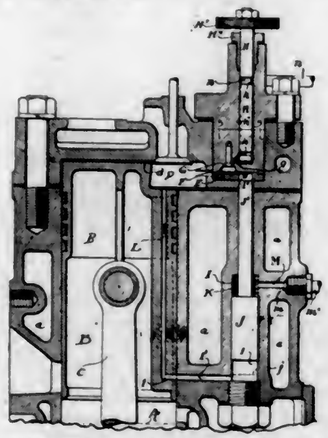


stands having a driving means separate from the driving means of said roughing stands, and the last three stands of rolls of said mill having separate individual driving means, all of said driving means being grouped together compactly, with the second-named driving means for the intermediate pair of flatting stands occupying an oblique position between the driving means for the roughing stands and the individual drives for the last three roll stands, the latter comprising an edging stand followed by two flatting stands.

1,762,294. FERTILIZING SOLUTION FOR SEED TREATMENT. WILLIAM F. GERICKE, Berkeley, Calif. Filed Aug. 11, 1925. Serial No. 49,646. 4 Claims. (Cl. 47—1.)

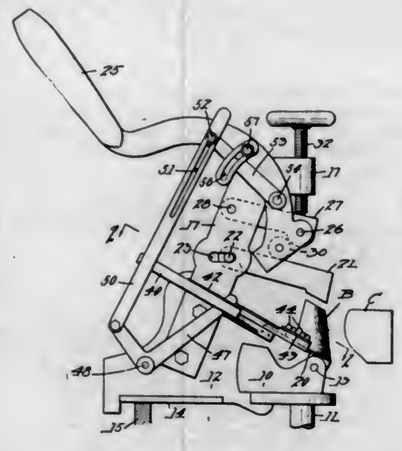
3. A fertilizing solution for treating a barley seed or seeds of similar specific gravity comprising a compound of phosphorous of four molal concentration.

1,762,295. HIGH-COMPRESSION INTERNAL-COMBUSTION ENGINE. WALDO G. GERNANDT, South Bend, Ind., assignor to Gernandt Motor Corporation, South Bend, Ind. Filed June 20, 1921. Serial No. 478,805. 10 Claims. (Cl. 123—33.)



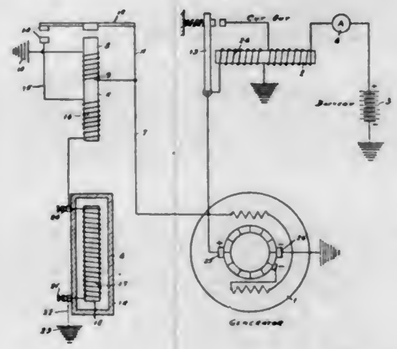
1. In combination with an engine of the class described having a combustion cylinder and a piston therein, means for feeding fuel to said cylinder comprising a fuel tank, a compression chamber of two diameters, the smaller of which communicates with the engine cylinder and the larger having a conduit leading to said fuel tank, and a plunger of two diameters in said compression chamber actuated in timed relationship to the engine piston to compress fluid and force the same together with fuel into the combustion cylinder and to apply pressure to said fuel tank.

1,762,296. WORK-POSITIONING DEVICE FOR WOOD-HEEL JACKS. WALTER H. HALL, Winchendon, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Jan. 4, 1928. Serial No. 244,530. 4 Claims. (Cl. 12—87.)



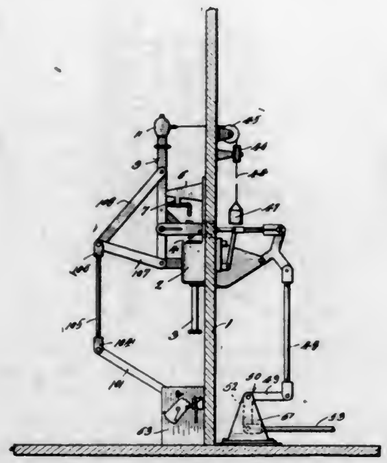
1. In a wood heel jack, a heel blank support, means to open and close said jack relative to said support, and a side gauge for a heel blank on said support, said gauge being slidable forward to operative position adjacent said support and being slidable rearward to a position permitting unobstructed cutting operations on the sides of the heel blank.

1,762,297. GENERATOR CIRCUIT PROTECTOR. ELTON R. HOPKINS, San Francisco, Calif. Filed July 18, 1927. Serial No. 206,712. 2 Claims. (Cl. 175—294.)



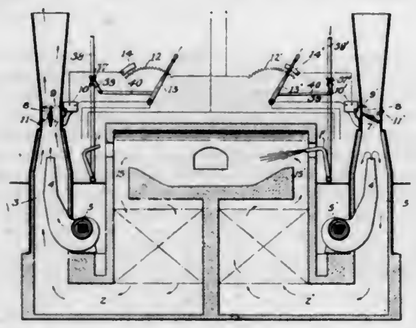
1. A generator circuit protector comprising a generator; a battery and a cut-out relay disposed between the generator and battery and connected in series therewith; and a resistance circuit capable of taking the entire output of the generator and being connected to the generator and in parallel with the battery cut-out relay circuit; said resistance circuit including a double-wound relay for automatically throwing the entire output of the generator into the resistance circuit when the generator accidentally becomes disconnected from said battery circuit.

1,762,298. RECLOSING MECHANISM FOR CIRCUIT BREAKERS. AVERY L. HOSNER, Telluride, Colo. Filed Dec. 27, 1926. Serial No. 157,887. 6 Claims. (Cl. 200—89.)



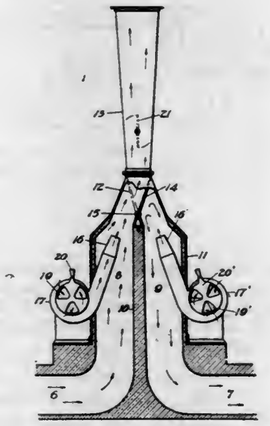
1. A re-establisher of the character described adapted for use with an electrical circuit, comprising a reciprocating bar, connecting means attached to one end of said bar for opening and closing a circuit, a trip member designed to maintain said bar in set position, means for moving said bar under a predetermined condition, a motor adapted to be energized upon the forward movement of said bar, a cam operated by said motor, means operated by said cam for resetting said trip, and means operating after the resetting of said trip to reverse the movement of said bar and connecting means to reclose said mentioned means.

1,762,299. CONTROL AND REVERSAL OF REGENERATIVE FURNACES. GEORGE H. ISLEY, Worcester, Mass., assignor to Morgan Construction Company, Worcester, Mass., a Corporation of Massachusetts. Filed Nov. 19, 1926. Serial No. 149,436. 15 Claims. (Cl. 158—7.5.)



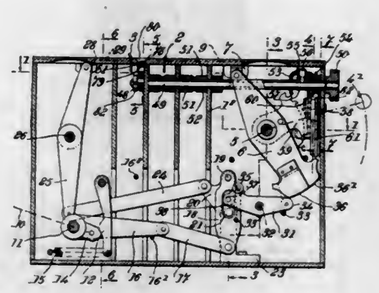
1. In a regenerative furnace, a plurality of air regenerator passages, an open-ended Venturi duct leading from each of said passages, means for supplying air in an outwardly-directed jet to each of said ducts, and a damper in each duct, adapted in closed position to direct said air to the furnace, for the support of combustion therein, and adapted in open position, to allow entrainment by said air of the waste gases from the furnace, and the discharge of said gases through the open end of the duct.

1,762,300. REVERSING AND CONTROLLING APPARATUS FOR REGENERATIVE HEATING FURNACES. GEORGE H. ISLEY, Worcester, Mass., assignor to Morgan Construction Company, Worcester, Mass., a Corporation of Massachusetts. Filed Aug. 1, 1928. Serial No. 296,824. 6 Claims. (Cl. 158—7.5.)



1. In combination, with a pair of contiguous furnace flues, communicating respectively with the opposite air regenerator passages of a regenerative furnace, of a discharge duct common to the outlets of said flues, and means for supplying air to each flue in jets discharging longitudinally of said flue and directed toward said common discharge duct, for the entrainment and discharge of the combustion products of the furnace through said discharge duct.

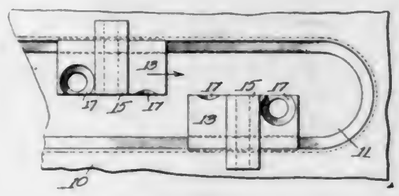
1,762,301. TICKET-CANCELING MACHINE. GEORGES KLEIN and PIERRE MASSOT, Paris, France. Filed Apr. 21, 1928, Serial No. 271,903, and in Belgium Apr. 26, 1927. 8 Claims. (Cl. 101—66.)



1. In a ticket canceling machine, a casing having an elongated slot formed therein, a pair of movable walls

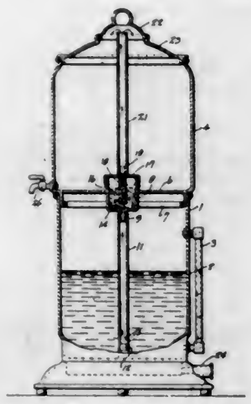
associated with said slot and adapted to vary the effective position and length of the slot opening, means for displacing each of said walls relatively to one another and means operative to prevent certain displacements of said walls relatively to one another.

1,762,302. CENTER CLIP. JOHN LITTLE, Plainfield, N. J., assignor to Wood Newspaper Machinery Corporation, New York, N. Y., a Corporation of Virginia. Filed Nov. 17, 1927. Serial No. 233,838. 7 Claims. (Cl. 101—385.)



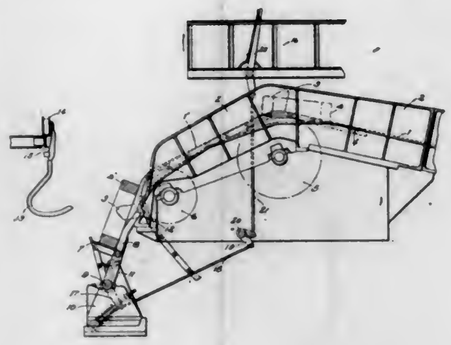
1. An intermediate plate clip for a printing cylinder consisting of a plurality of parts, each having means for holding it in an undercut groove when the parts are assembled, said parts being separately movable to release the parts from each other.

1,762,303. ELECTRIC TEA URN OR PERCOLATOR. JOHN A. MCBAIDE, Elko, Nev. Filed June 25, 1928. Serial No. 288,051. 2 Claims. (Cl. 53—3.)



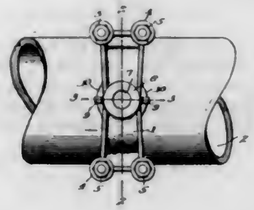
1. A tea urn comprising an open top vessel, a second vessel having a bottom flange fitting into the upper section of the first vessel and having a cup formed integrally in the bottom thereof, a pipe extending downwardly from the cup into the first vessel, a lid for the cup having a perforated pipe extending downwardly into the cup and a pipe communicating with the perforated pipe and extending upwardly into the second vessel.

1,762,304. HANDLING OF COILS OF WIRE OR THE LIKE. MYLES MORGAN, Worcester, Mass., assignor to Morgan Construction Company, Worcester, Mass., a Corporation of Massachusetts. Filed Oct. 9, 1928. Serial No. 311,392. 9 Claims. (Cl. 198—20.)



1. Apparatus for the transfer of coils or other annuli from a conveyor to a hook carrier, comprising a movable member for the support of each coil by its bottom edge in substantially vertical position, and means responsive to the movement of said member in the act of hooking said coil over one of the hooks of said carrier, for collapsing said member's support of said coil, thereby to leave said coil suspended from said hook.

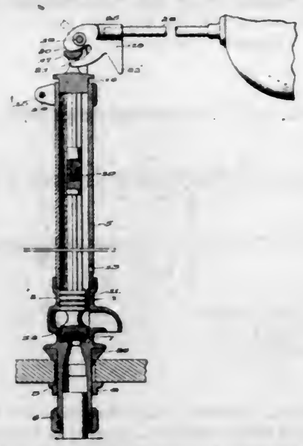
1,762,305. SERVICE CLAMP. PHILIP MUELLER, Decatur, Ill., assignor, by mesne assignments, to Mueller Co., Decatur, Ill., a Corporation of Illinois. Filed Nov. 20, 1926. Serial No. 149,738. 1 Claim. (Cl. 285—108.)



In a service clamp, the combination of a saddle comprising a tubular hub and arms projecting in opposite directions from the hub and adapted to be engaged with a securing strap, an annular groove, concentric with the bore of the hub and provided with recesses extending radially outward therefrom being formed in the inner surface of the saddle, and a soft metal gasket having its body seated in said groove and provided with lugs extending into said recesses, said lugs being of a thickness not exceeding the depth of the recesses, whereby when the clamp is secured to a main the saddle will contact with the main without effecting compression of said lugs.

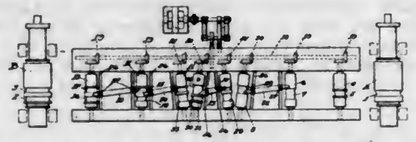
1,762,306. BALL COCK. ROBERT H. MUELLER, Decatur, Ill., assignor to Mueller Co., Decatur, Ill., a Corporation of Illinois. Filed Nov. 26, 1927. Serial No. 235,871. 7 Claims. (Cl. 137—104.)

2. A valve of the ball cock type having a casing, said casing having a relatively large valve chamber, a valve receiving recess and a restricted spout, a float operated cam, a bracket to hold said cam, a valve stem having a guide



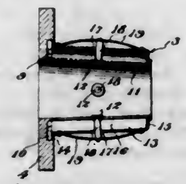
portion and a cam abutment thereon at its upper extremity, and a valve head at its lower extremity to fit loosely in the valve receiving recess.

1,762,307. CONVEYING MECHANISM. EDWARD J. QUINN, Worcester, Mass., assignor to Morgan Construction Company, Worcester, Mass., a Corporation of Massachusetts. Filed Apr. 9, 1927. Serial No. 182,448. 7 Claims. (Cl. 80—48.)



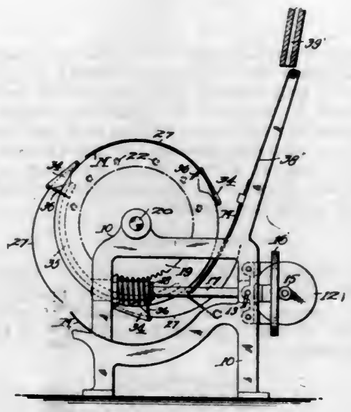
4. Conveying mechanism, comprising a series of conveyor rolls, for continuously forwarding to one stand of rolls of a rolling mill the stock received from a preceding stand of rolls of said mill, certain of said conveyor rolls having their axes skewed to make an acute angle with the direction of forward movement of said stock, and guiding means cooperating with said skewed rolls to procure axial turning movement of said stock in a predetermined direction without interruption of its forward movement on said series of rolls.

1,762,308. FUEL-SAVING VALVE. VIRGIL PARKINS, Tiffin, Ohio. Filed Aug. 1, 1928. Serial No. 296,733. 3 Claims. (Cl. 123—124.)



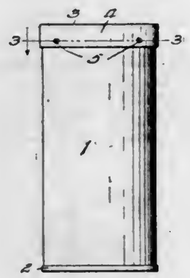
1. A device of the class described, comprising a shell adapted to be extended into the intake manifold of an internal combustion engine, valve seats carried by the shell, a casing confining the shell and spaced therefrom to provide an annular air receiving chamber, means for admitting air into the chamber, valves slidable in the casing and cooperating with said seats, and thermostatic means for controlling the valves to permit passage of air from the chamber into the shell.

1,762,309. MAT ROASTER. OSCAR CHARLES ROESEN, Brooklyn, N. Y., assignor to Wood Newspaper Machinery Corporation, New York, N. Y., a Corporation of Virginia. Filed Aug. 11, 1926. Serial No. 128,687. 8 Claims. (Cl. 34—4.)



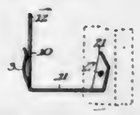
1. In a machine for roasting curved stereotype printing plate matrices, the combination with a receptacle having curved walls carried by the receptacle between which a moist matrix can be clamped to cause it to conform to their shape, means for heating the matrices while held thereby, means for moving said holding walls to carry the matrices from a receiving point to a discharge point, and means for automatically discharging the matrices at said discharge point.

1,762,310. CLOSURE FOR RECEPTACLES. WALTER L. RUTKOWSKI, St. Louis, Mo., assignor to R. C. Can Company, St. Louis, Mo., a Corporation of Missouri. Filed Mar. 28, 1927. Serial No. 178,983. 8 Claims. (Cl. 229—48.)



1. In combination with a receptacle made of paper or other fiborus material which naturally varies in gauge, a metallic closure having a side wall for the open end of said receptacle and a plurality of cone shaped indentations formed in the wall of said closure before applying the closure to the receptacle to provide inwardly directed protuberances adapted for self embedded engagement with the outer face of the wall of the receptacle when positioning the closure thereon.

1,762,311. BRACKET. EDWARD L. SCHWAB, Chicago, Ill. Filed Nov. 21, 1927. Serial No. 234,641. 2 Claims. (Cl. 40—149.)



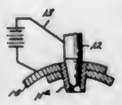
1. A card supporting display device having a body portion having means for engaging and holding a card relatively to said body portion, said body portion having a pliant member in the form of a relatively narrow strip extending from an edge thereof adapted to be bent relatively to the body portion to arrange and maintain the body portion and strip at various angles relatively to each other, and said strip having means providing for attachment of said device to a support.

1,762,312. BOILER CLEANER. NORMAN L. SNOW, Detroit, Mich., assignor to Diamond Power Specialty Corporation, Detroit, Mich., a Corporation of Michigan. Filed Jan. 15, 1923. Serial No. 612,864. 16 Claims. (Cl. 122—392.)



1. In a boiler cleaner, the combination with a steam supply pipe for a blower unit, and a valve controlling said pipe, of a positive lock for said valve and release means for said lock controlled by a building up of pressure in said pipe beyond said valve.

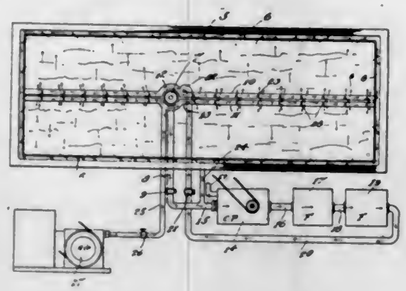
1,762,313. BOILER CLEANER. NORMAN L. SNOW and WILLIS P. THOMAS, Detroit, Mich., assignors to Diamond Power Specialty Corporation, Detroit, Mich., a Corporation of Michigan. Filed June 14, 1926. Serial No. 115,971. 9 Claims. (Cl. 122—392.)



1. A boiler cleaner blower element comprising a tubular member having overlapping edges and a nozzle securing said edges in overlapping relation and providing discharge for a jet of cleaning fluid.

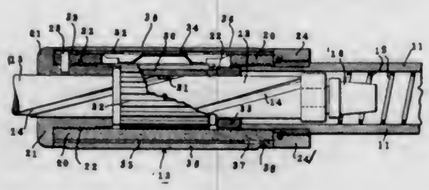
2. The method of fastening a Venturi nozzle and assembling the same with a tubular soot blower cleaner member consisting in forming an opening in the wall of said member, inserting the nozzle in said opening, and expanding the nozzle in said opening to firmly seat the nozzle therein and simultaneously fashioning an expanding Venturi jet discharge portion in said nozzle.

1,762,314. METHOD FOR MAINTAINING SWIMMING POOLS IN A SANITARY CONDITION. ROBERT M. SUTPHEN, Newark, N. J., and JOHN FRANCIS BOORAEM, Greenwich, Conn. Filed Dec. 15, 1927. Serial No. 240,121. 4 Claims. (Cl. 210—11.)



1. A method of removing impurities from the water of a swimming pool which consists in injecting upwardly from the floor of the pool a plurality of spaced jets of air to thereby produce a multiplicity of ascending groups of air bubbles of gradually increasing diameter, said air jets being so spaced relative to the depth of the pool as to cause the larger air bubbles at the surface of the water to intersect and upon collapse to produce waves or undulations of the water progressing towards the opposite sides of the pool to direct the collected impurities into the overflow gutters of the pool.

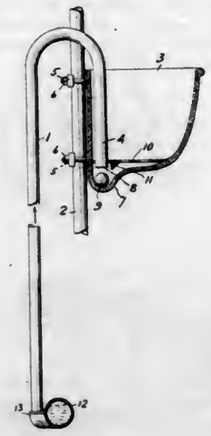
1,762,315. RATCHET SCREW DRIVER. DONALD B. SWAIN and HENRY A. RYTHER, Millers Falls, Mass., assignors to Millers Falls Company, Millers Falls, Mass., a Corporation of Massachusetts. Filed June 23, 1925. Serial No. 38,951. 7 Claims. (Cl. 145—54.)



1. A ratchet tool, including, in combination, a spindle formed with a spiral groove, a ratchet nut encircling said spindle and formed with a projection entering said groove, a housing enclosing said nut and formed with a H-shaped slot and recesses in its outer face extending away from the arms of said slot, a pair of pawls having their bodies disposed one in line with each of said slots, arms forming a part of said pawls and arranged within said recesses, the arms of one of said pawls being longer than the arms of the second of the same, a sleeve rotatably encircling said housing and formed with slots for the accomodation of the longer pawl arms, and a spring bearing against said pawls and tending to force the same into contact with the ratchet portion of said nut.

1,762,316. SIPHON DEVICE FOR WATERING LIVE-STOCK. LEWIS K. WILSON, Philadelphia, Pa. Filed Mar. 9, 1926. Serial No. 93,359. 11 Claims. (Cl. 119—74.)

1. A siphon device for watering live stock comprising a siphon supply pipe, a support, a cup carried and movable on the support and into which one leg of the pipe dips, a guide cavity provided at the bottom of the cup and aligned with the open end of said pipe, a float confined by said cavity for cooperation with the open end of the pipe, a plate providing fluid ways and arranged in the cup above



the open end of the pipe, and a lug provided on the plate and depending into position for additionally confining the movements of the float.

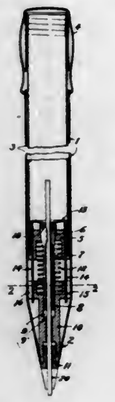
1,762,317. MAGAZINE PENCIL. ALFRED WOELM, Berlin, Germany, assignor, by mesne assignments, to Pencil Mechanism Corporation, a Corporation of New York. Filed Mar. 12, 1926, Serial No. 94,262, and in Germany Aug. 7, 1925. 40 Claims. (Cl. 120—17.)



19. In a step-by-step pencil, the combination of a member movable longitudinally of the pencil, a pair of grippers, means normally to maintain said grippers in lead-gripping position, means connecting said grippers and adapted to move the same out of engagement with a lead, and means to impart operation to said connecting means in response to a predetermined portion of the movement of said longitudinally movable member.

32. In a magazine lead pencil, an outer shell, means slidable within the upper portion of said shell and providing the side and bottom walls of a magazine adapted to feed leads successively downwardly, a lead guide tube secured in the lower portion of said shell, and a plurality of reciprocable lead-gripping and -feeding jaws positioned above said guide tube and beneath said magazine and adapted to receive a lead directly from said magazine.

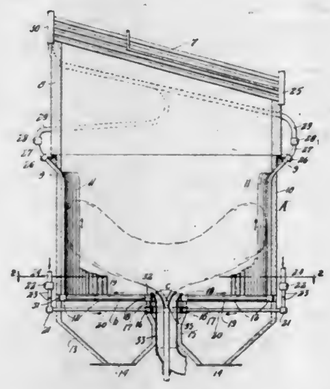
1,762,318. MAGAZINE PENCIL. ALFRED WOELM, Berlin, Germany, assignor, by mesne assignments, to Pencil Mechanism Corporation, a Corporation of New York. Filed Mar. 20, 1926, Serial No. 96,302, and in Germany June 26, 1925. 42 Claims. (Cl. 120—17.)



13. In a pencil mechanism, the combination of a longitudinally movable carrier cam ring and a lead-guiding and gripping unit freely supported thereon and formed with lead-gripping means at its upper end.

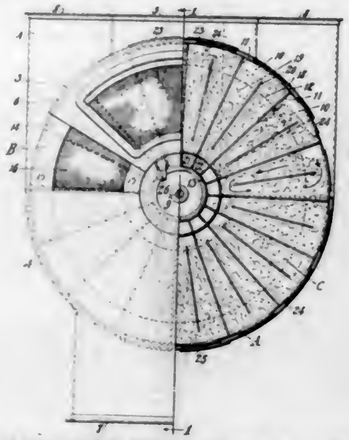
38. In a magazine pencil comprising a casing, the combination of means providing a lead magazine, said means including a bottom plate formed with an opening therein, an anchor piece detachably secured at the bottom of said casing, a pair of arms extending downwardly from the sides of said plate, and means detachably to secure said arms to said anchor piece.

1,762,319. ART OF GENERATING STEAM BY THE BURNING OF FUEL IN SUSPENSION. WILFRED R. WOOD, London, England, assignor to International Combustion Engineering Corporation, New York, N. Y., a Corporation of Delaware. Filed Jan. 8, 1927. Serial No. 159,968. 8 Claims. (Cl. 122—235.)



1. In combination, a boiler, a substantially circular combustion chamber therebeneath having side portions thereof lined with exposed tubes in the circulation of the boiler, and burner means at the lower part of the chamber for providing a mushroom shaped flame the axis of which is substantially coaxial with the axis of said chamber, said chamber being also provided with cooling tubes in the circulation of the boiler and extending in proximity to the burner means.

1,762,320. ROTARY AIR HEATER. WILFRED R. WOOD, London, England, assignor to International Combustion Engineering Corporation, New York, N. Y., a Corporation of Delaware. Filed Sept. 17, 1927. Serial No. 220,279. 6 Claims. (Cl. 257—6.)



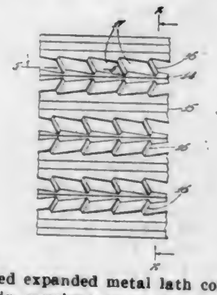
6. In a heater of the regenerative type, the combination with a casing structure having air and gas inlets and outlets, of a member provided with a plurality of compartments, said member being movable to bring such compartments successively into communication with the air and gas passages of the casing structure, and relatively small loose regenerative elemepts in said compartments, each compartment containing insufficient elements to fill it so that the elements will have bodily movement of translation in said compartments imparted thereto when said member is moved.

1,762,321. ADVERTISING-CARD HOLDER. WILLIAM AUBERLIN, Northfield, Ohio. Filed May 10, 1929. Serial No. 361,915. 3 Claims. (Cl. 40—10.)



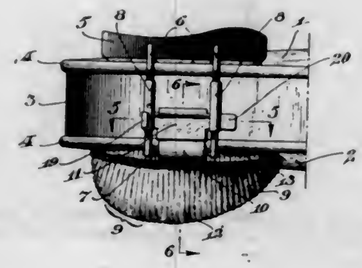
1. In an advertising card holder the combination of an elongated strip having recesses near each end and a longitudinal depression in the strip, a rod extending along the strip in said depression, and spring clamps fixed to said rod in said recesses, the rod being frictionally held in said depression whereby it may be turned to various positions.

1,762,322. METAL LATH. HERBERT K. BAKER, Detroit, Mich., assignor to Penn Metal Company, Cambridge, Mass., a Corporation of Massachusetts. Filed Oct. 16, 1925. Serial No. 62,706. 5 Claims. (Cl. 72—117.)



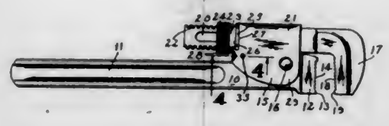
1. An improved expanded metal lath comprising spaced longitudinal main members grooved to provide relatively shallow ribs, a narrow longitudinal intermediate member disposed between each pair of main members, a single series of substantially parallel expanded strands connecting said intermediate member at each side with a main member and inclining relatively to the intermediate member in opposite directions, said intermediate member and strands forming between the main members an arch higher than said shallow ribs.

1,762,323. CLAMPING DEVICE. EMORY LOUIS BAUER, Fort Wayne, Ind. Filed June 18, 1926. Serial No. 116,772. 15 Claims. (Cl. 84—280.)



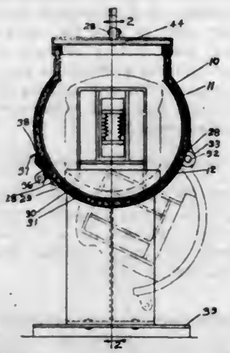
1. A shoulder rest for a violin comprising a bag having a bottom piece and a top piece, a plate on the bottom piece and secured adjacent the top piece, a protruding means integral with the plate and extending without the bag, a holding socket member adapted to be attached to the violin having two sides in holding relation to each other, said protruding means being curved and inclined with respect to said plate, and of curved cross-section to exert a tension when sprung between two sides of the holding socket member.

1,762,324. WRENCH. WILLIAM A. BERNARD, New Haven, Conn., assignor to The William Schollhorn Company, New Haven, Conn. Filed July 29, 1925. Serial No. 46,912. 10 Claims. (Cl. 81—102.)



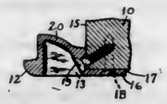
1. In a pipe wrench a stationary jaw having a handle bar extending therefrom, a movable jaw having a threaded shank extending therefrom, a sheet metal yoke generally U-shaped in cross-section straddling said shank and said bar, said yoke being pivotally secured to said bar, portions of the arms of said U-shaped yoke being extended at a portion of one end thereof and bent toward each other into abutment, said abutting portions forming an upwardly directed abutment, said abutment being spaced from the end of said yoke, and a nut adapted to screw upon the threads of said shank having a flange about its periphery, said flange being disposed between said abutment and the end face of said yoke as and for the purpose described.

1,762,325. HEATING APPARATUS. ROBERT S. BLAIR, Sound Beach, and BURLING D. WELLS, Danbury, Conn.; said Wells assignor to said Blair. Filed June 8, 1921. Serial No. 475,946. 8 Claims. (Cl. 219—19.)



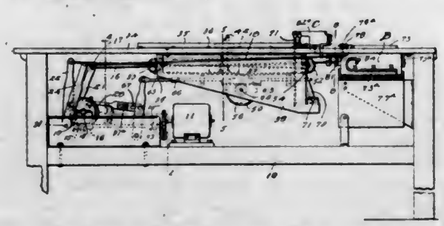
1. The herein described art which consists in generating radiant heat, enclosing the generating agency to confine by its buoyancy the air thereby heated and introducing an article to be heated upwardly into said confined space into the path of heat radiation.

1,762,326. LOCK STRIKE. ELISHA F. BRITTINGHAM, Los Angeles, Calif., assignor to Sargent & Company, New Haven, Conn. Filed Feb. 24, 1928. Serial No. 256,620. 3 Claims. (Cl. 70—15.)



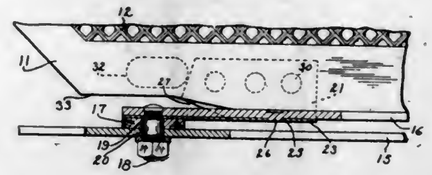
1. In a lock strike adapted to be secured to a jamb of a door or the like, a pair of opposed walls between which the bolt of a lock or the like may be received, one of said walls being substantially parallel to the face of the jamb and the other of said walls extended at an acute angle thereto, said last named wall being provided with an outer face of less width than the width of the wall parallel to the face of the jamb, said face being adapted to abut against the jamb of the door, and fastening means passing through said last named wall and into the jamb of the door.

1,762,327. SHAPING MACHINE FOR CANDY CANES AND THE LIKE. JOHN B. COFFEY, Nashville, Tenn., assignor to Bunte Brothers, Chicago, Ill., a Corporation of Illinois. Filed Sept. 22, 1925. Serial No. 57,897. 13 Claims. (Cl. 107—4.)



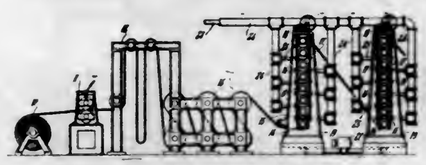
13. In a candy forming machine, a strip receiving mechanism comprising a plurality of tiltable strip receiving surfaces successively movable into position for receiving a strip of candy, means for forming a crook adjacent one end of the strip received by one of said surfaces, and means for moving said surfaces to their tilted position to effect the discharge of the strip therefrom.

1,762,328. RADIATOR SUPPORT. JOHN J. CURELLO, New Haven, Conn., assignor to The G. & O Manufacturing Company, New Haven, Conn. Filed Dec. 23, 1924. Serial No. 757,679. 10 Claims. (Cl. 180—68.)



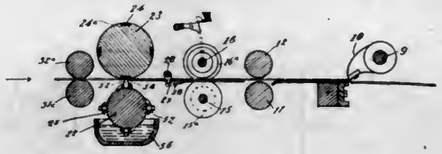
1. Means for supporting a radiator on a vehicle frame, comprising a resilient member secured adjacent its ends to the frame and extending transversely thereof, means for securing said radiator to said member at points spaced apart and spaced from the ends of said resilient member, and means for permitting flexing of said resilient member under strain, the lower surface of the radiator resting on said resilient member for a portion of its length, but spaced thereabove at the end portions thereof.

1,762,329. METHOD OF AND APPARATUS FOR SATURATING SHEET MATERIAL BY CALENDERS. WILLIAM G. DUDLESTON, Chicago Heights, Ill., assignor, by mesne assignments, to The Patent and Licensing Corporation, Boston, Mass., a Corporation of Massachusetts. Filed June 11, 1926. Serial No. 115,289. 5 Claims. (Cl. 91—68.)



1. The method of saturating a web of fibrous material, which comprises applying liquid saturant to the faces of the web, squeezing the web and saturant together, flowing a film of saturant on each face of the web, and successively pressing said films into the web without squeezing the web.

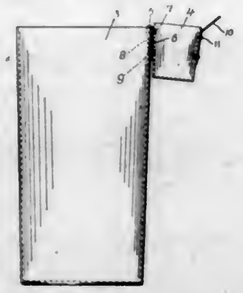
1,762,330. STRIP-SHINGLE-CUTTING MACHINE. HERMAN R. FIEDLER, Lockland, and AMANDUS GRAU, Sharon, Ohio, assignors, by mesne assignments, to The Patent and Licensing Corporation, Boston, Mass., a Corporation of Massachusetts. Filed May 19, 1924. Serial No. 714,268. 6 Claims. (Cl. 164—68.)



1. In a roofing machine the combination with means for feeding a strip of roofing material, of dies entering the material from below for liberating a series of tongues from said strip as it is fed, means for deflecting said tongues and a slitter for severing the strip lengthwise along a line which will sever said tongues, for the purpose described.

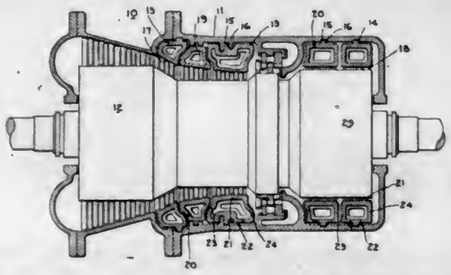
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1,762,331. AUXILIARY CONTAINER. HUBERT M. GREIST, Scarsdale, N. Y. Filed Jan 22, 1929. Serial No. 334,220. 6 Claims. (Cl. 65—13.)



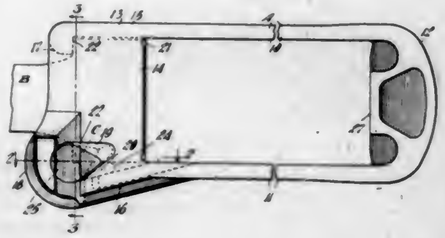
1. In an auxiliary container, a hollow body portion, means on the exterior of said body portion to detachably engage a receptacle, and a handle on the opposite side of said body portion from said engaging means, the end of said handle being relatively sharp.

1,762,332. TURBINE. HENRY J. HANZLIK, Swarthmore, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Nov. 27, 1926. Serial No. 151,105 9 Claims. (Cl. 253—78.)



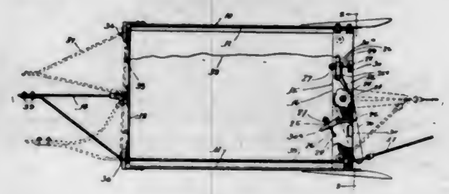
1. In a turbine, the combination with a casing and a rotor spaced interiorly thereof, of annuli of members encircling the rotor and hollow filler rings each supporting a plurality of said annuli and substantially filling the space between the annuli and the casing, whereby accumulations of motive fluid in the casing are avoided.

1,762,333. DRAWBAR AND YOKE CONNECTION. STACY B. HASELTINE, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed Apr. 18, 1927. Serial No. 184,501. 6 Claims. (Cl. 213—70.)



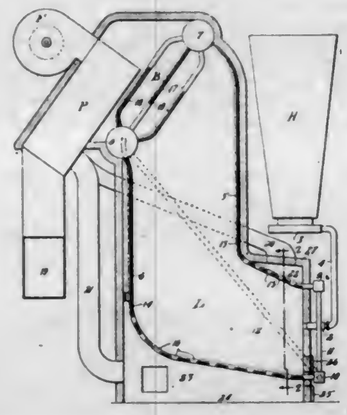
1. In a device of the character described, the combination with a drawbar having a shouldered butt; of a yoke having a hood section at one end adapted to receive the shouldered drawbar butt, the side walls of said hooded section being provided with openings adapted to receive a locking block; a removable shouldered locking block disposed transversely of the hood and extending through said openings, said shoulder being adapted to engage the shoulder of the drawbar butt to hold the drawbar assembled with the yoke, said block having portions adapted to cooperate with inter-engaging portions of said yoke to prevent lateral dislodgment of said locking block with respect to said yoke and said butt, when the parts are in operatively assembled relation.

1,762,334. DRAFT-OPERATED SCRAPER. FRANK V. HICKS, Rock Springs, Wyo., assignor to Goodman Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed July 15, 1925. Serial No. 43,694. 5 Claims. (Cl. 37—147.)



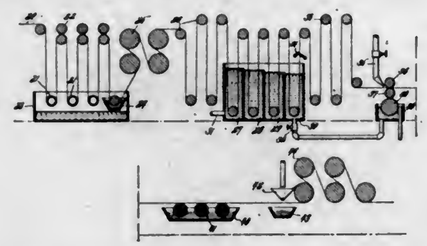
1. A draft operated scraper having head and tail ropes, a head rope connected therefor including a pivotally movable member mounted on said scraper, and a flexible connection between said member and said tail rope for positioning said member in a predetermined position relative to said scraper.

1,762,335. BOILER FURNACE. GEORGE P. JACKSON, Flushing, N. Y., assignor to International Combustion Engineering Corporation, New York, N. Y., a Corporation of Delaware. Filed Nov. 6, 1925. Serial No. 67,384. 9 Claims. (Cl. 122—235.)



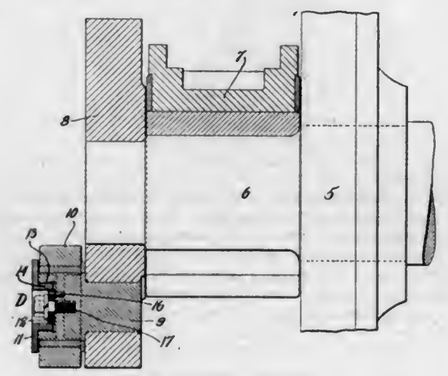
1. A boiler-furnace for burning pulverized fuel comprising, in combination, an L-shaped combustion chamber having a relatively horizontally shallow upright leg and evaporating tubes marginal of the combustion space comprehended by the legs, an offtake at the upper portion of the combustion chamber for the products of combustion, a relatively short single bank of boiler tubes extending across said offtake, and means for admitting fuel horizontally into the lower portion of the combustion space to be burned in space therein.

1,762,336. METHOD OF AND APPARATUS FOR SATURATING SHEET MATERIAL. LESTER KIRSCHBRAUN, Leonia, N. J., assignor, by mesne assignments, to The Patent and Licensing Corporation, Boston, Mass., a Corporation of Massachusetts. Filed Sept. 16, 1926. Serial No. 135,961. 9 Claims. (Cl. 91—70.)



1. The method of impregnating a fibrous sheet with waterproofing material, which comprises forcing hot waterproofing liquid through the sheet from one side thereof, coating the hot sheet with excess waterproofing liquid, cooling the sheet, applying to the sheet hot waterproofing liquid at progressively diminishing temperatures, and cooling the sheet a second time.

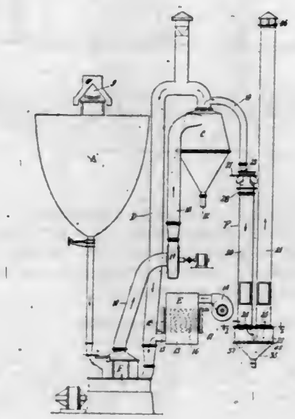
1,762,337. RAILWAY-DRIVING-WHEEL CRANK-PIN DEVICE. RONALD F. KNIGHT, Ramsey, N. J., assignor to Franklin Railway Supply Company, New York, N. Y., a Corporation of Delaware. Filed Oct. 30, 1926. Serial No. 145,300. 7 Claims. (Cl. 74—38.)



2. The combination with a railway driving wheel, of a crank pin associated with the driving wheel having an internally threaded recess, a rod carried on said pin, a collar for retaining said rod having an externally threaded hub and a polygonal shaped bore, and locking means for said collar comprising a member extending into the aforesaid recess and a polygonal shaped plate fitting said bore, said plate having a plurality of unequally spaced openings to receive said member, together with means for preventing displacement of said plate.

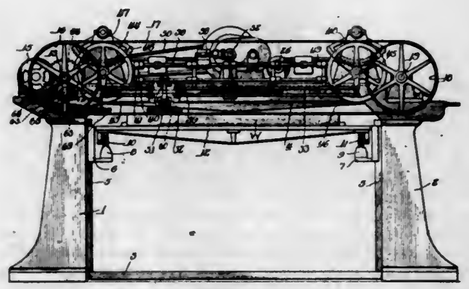
1,762,338. GAS WASHER. HENRY KREISINGER, Piermont, N. Y., assignor to International Combustion Engineering Corporation, New York, N. Y., a Corporation of Delaware. Filed Oct. 10, 1927. Serial No. 225,054. 1 Claim. (Cl. 183—25.)

A gas washer including an upright casing having a gas inlet at the top and a gas outlet at the bottom, a plurality of upright spaced vanes circularly disposed around said gas outlet, means for spraying water and steam into said casing, a second casing into which the gas is discharged



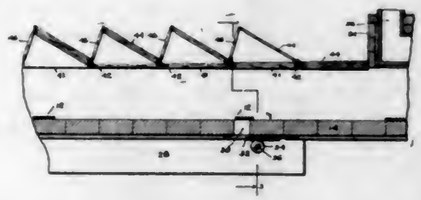
from said upright casing, said second casing having a portion constituting a water receptacle, and means for maintaining a level of water in said receptacle above the lower ends of the aforesaid vanes.

1,762,339. ABRADING MACHINE. CARL LAWRENCE MATTISON, Rockford, Ill., assignor to Mattison Machine Works, Rockford, Ill., a Corporation of Illinois. Filed Apr. 8, 1926. Serial No. 100,506. 16 Claims. (Cl. 51—141.)



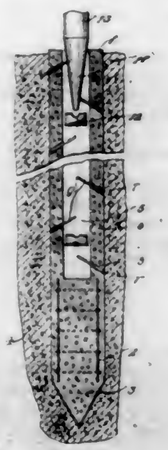
1. An abrading machine comprising, in combination, an abrading element, a recoprocatory shoe adapted to apply said abrading element to a piece of work, a tape to move the shoe, synchronously oscillatory drums upon which the tape is wound and unwound to move the shoe, a shaft for one of said drums, a pinion on said shaft, a toothed element meshing with said pinion, said element being movable in a manner to oscillate the drums, a normally stationary head, means carried by said head to effect a motion of said toothed element for oscillating the drums and reciprocating the tape, and means to move the head to shift the paths of oscillation and reciprocation.

1,762,340. LEER. JOHN MAYO, Fairmont, W. Va., assignor to Thermal Engineering Corporation, Long Island City, N. Y., a Corporation of New York. Filed Oct. 1, 1927. Serial No. 223,449. 3 Claims. (Cl. 49—46.)



3. A roof for a leer, comprising a plurality of leaves of heat insulating material resting one above the other on said leer, and means for supporting one or more of said leaves in ineffective insulating position whereby the radiation of heat from said leer may be controlled.

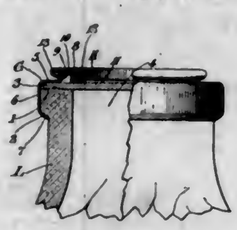
1,762,341. PILE SUPPORT. ARTHUR D. MCPHERSON, Elmhurst, Ill., assignor of one-half to Perry F. MacAllister. Filed Jan. 17, 1927. Serial No. 161,494. 1 Claim. (Cl. 61—56.)



A device of the character described, including a pile having a longtiudinal recess in the center thereof, and having slots formed in the wall of the pile and extending therethrough to serve as guides for anchoring plates, anchoring plates, the said plates being insertible in the slots from the outside of the pile before the pile is driven, and means on the plates to prevent inward travel of the plates in the slots while the pile is being driven.

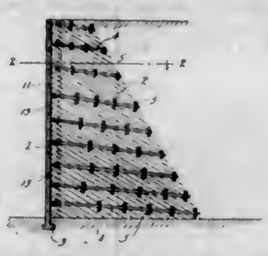
1,762,342. CLOSURE FOR GLASS RECEPTACLES. AUGUSTUS L. MEROLLE and FREDERICK BOEHLE, Brooklyn, N. Y., assignors, by direct and mesne assignments, of one-half to said Augustus L. Merolle and one-half to Empire Metal Cap Co., Inc., Brooklyn, N. Y., a Corporation of New York. Filed Sept. 22, 1928. Serial No. 307,591. 2 Claims. (Cl. 215—38.)

1. The combination with a receptacle having an annular open mouth portion formed of fragile moulded material and shaped to provide an upwardly facing annular surface lying substantially in a single horizontal plane, of a substantially flat annular disc of paper lying flat over said mouth as a closure therefor said flat disc having its annular marginal portion resting flat upon said upwardly facing annular surface, a sheet metal ring-shaped member also overlying said upwardly facing annular surface resting flat against the upper annular marginal portion of said flat disc and having a portion of itself bent to provide an annular metallic closure seat, said ring-shaped member having an integral portion depending about the outer surface of the receptacle and engaging therewith operable



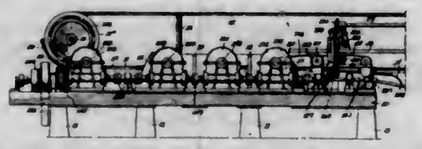
to clamp the annular portion of the disc as a gasket between the ring-shaped member and the upwardly facing surface of the receptacle to thereby seal the mouth of the receptacle, a metallic closure removably engaging within the seat of said ring-shaped member constituting a second closure for said mouth, and said second closure and said closure seat being disposed wholly above the plane of said upwardly facing annular surface of the receptacle.

1,762,343. RETAINING WALL. ANDREAS MUNSTER, Seattle, Wash. Filed Dec. 14, 1925. Serial No. 75,235. 4 Claims. (Cl. 61—39.)



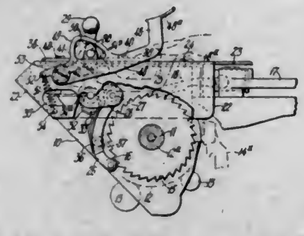
1. A retaining wall comprising a face plate, an earth fill supported against the face plate, tension members having ends slidably attached to the face plate to permit relative movement vertically without disconnection and extended substantially horizontally into the fill and anchor members fixed at intervals to the tension members; said tension and anchor members being provided in sufficient number and at such relation that they act to unify the earth of the fill to function as a substantially solid mass.

1,762,344. STRIP MACHINE. CONSTANTINE N. NEKLUTIN, Ferguson, Mo., assignor to The Universal Match Corporation, St. Louis, Mo., a Corporation of Delaware. Filed Aug. 31, 1927. Serial No. 216,587. 37 Claims. (Cl. 144—51.)



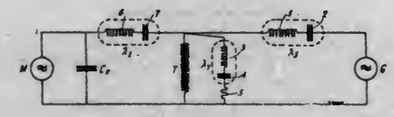
1. In a machine for making match splint cards, the combination of a conveyor and cutting means for forming individual cards of match splints and means for feeding a continuous strip of material, and means for fixing said strip to said conveyor at spaced intervals, said conveyor and strip material passing through said cutting means.

1,762,345. TYPEWRITING MACHINE. CARL E. NORIN, Jersey City, N. J., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Filed Jan. 4, 1928. Serial No. 244,398. 19 Claims. (Cl. 197—121.)



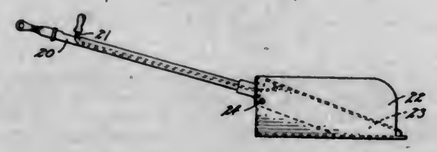
1. In a typewriting machine, the combination with a rotatable platen and mechanism engaged therewith for line-spacing, of fractional spacing means for rotating said platen less than a full-line distance in either direction, and a manually-operated device separate from said means to directly engage said means and restore the same to its normal position.

1,762,346. ARRANGEMENT FOR FREQUENCY CHANGING. MENDEL OSNOS, Berlin, Germany, assignor to Gesellschaft für Drahtlose Telegraphie m. b. H., Berlin, Germany. Filed Feb. 20, 1925, Serial No. 10,535, and in Germany Feb. 23, 1924. 4 Claims. (Cl. 172—281.)



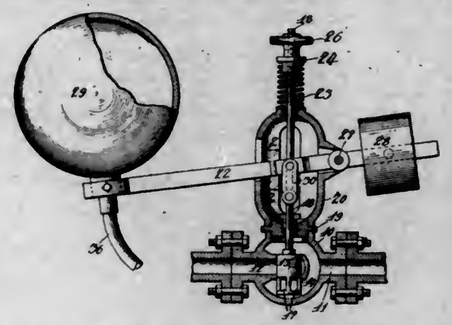
3. In stationary frequency changing apparatus for obtaining from currents of one frequency currents of another frequency related to the first by a ratio which is not a simple whole number, a harmonic generator for changing the initial frequency currents to currents of a second, sub-harmonic frequency which is a common divisor of both the initial and the desired frequencies; and means for accentuating the flow of currents of sub-harmonic frequency through said harmonic generator whereby said generator utilizes the accentuated currents of sub-harmonic frequency to generate currents of the desired frequency.

1,762,347. DUSTLESS ASH SHOVEL. HERBERT L. PEEBLES, Denver, Colo. Filed Sept. 24, 1928. Serial No. 307,843. 1 Claim. (Cl. 294—55.)



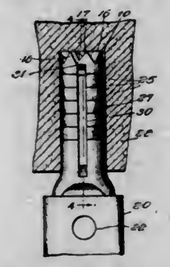
A dustless ash shovel comprising: a shovel bottom; sides on said shovel bottom closed about one end thereof; a hollow handle extending from said closed end; a lid positioned between said sides; downwardly turned edges on said lid; pivots in said downwardly turned edges pivotally securing them to said sides; an operating rod extending from a point on said lid above said pivots through said end and through said hollow handle; and an operating extremity formed on said operating rod, said extremity extending through a slot in said hollow handle.

1,762,348. LIQUID-PUMP GOVERNOR. HEINRICH A. W. PETERSEN, Gary, Ind. Filed Oct. 27, 1928. Serial No. 671,270. 6 Claims. (Cl. 137—68.)



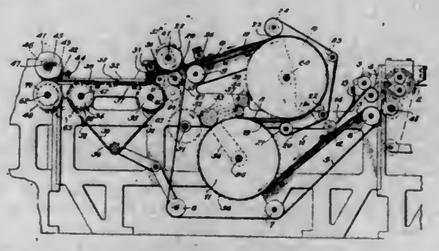
1. In a regulator, the combination of a valve casing, a valve having a stem, said valve being arranged in the casing and said stem being projected beyond the casing, a bracket secured to the casing, said stem being slidably held by said bracket, a lever pivoted to the bracket, a link connecting said lever with the valve stem, and gravity actuated pressure controlled means for controlling the operation of said valve, and means for varying the pressure at which said valve is operable.

1,762,349. ANCHORING APPARATUS. JOHN H. PHILLIPS, Chicago, Ill. Filed May 29, 1925. Serial No. 33,776. 6 Claims. (Cl. 85—2.4.)



5. A cylindrical anchoring device having a central bore therethrough and comprising drill teeth at one end thereof, frangible members adjacent said end and permitting expansion of said device when broken, said drill teeth having faces converging toward the longitudinal axis of the device to crowd drilled material into said bore.

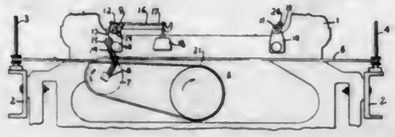
1,762,350. BAG MACHINE. ADOLPH POTDEVIN, Garden City, N. Y., assignor to Potdevin Machine Company, Brooklyn, N. Y., a Corporation of New York. Filed Mar. 3, 1928. Serial No. 258,876. 31 Claims. (Cl. 93—18.)



1. In a bag forming machine comprising tube-forming mechanism and bottoming mechanism, intermediate means

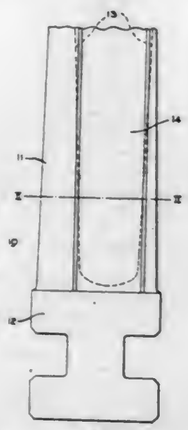
for transferring tubes from the tube-forming mechanism to the bottoming mechanism, the speed of said transferring means being adjustable relatively to said mechanisms.

1,762,351. SPINDLE DRIVE FOR SPINNING FRAMES. JOSEPH W. RANDALL, North Andover, Mass., assignor to Davis & Furber Machine Company, North Andover, Mass., a Corporation of Massachusetts. Filed Nov. 8, 1928. Serial No. 318,093. 4 Claims. (Cl. 118—48.)



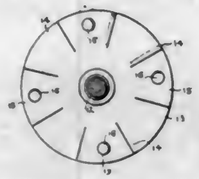
1. A spindle drive comprising a driving drum rotatable in either direction according to the twist desired, a row of spindles at each side of the drum all arranged in groups each of which comprises oppositely disposed spindles, a support for each group having an idler journalled thereon, an endless band for each group passing from the drum in a direction opposite to the pull given it by the drum directly to and around the spindles of the group successively, thence forming a loop between the drum and the spindle to which it first passed, thence passing from said loop around the drum to the point of beginning and means for mounting each support with its idler in and engaging the loop of its corresponding band whereby, irrespective of the direction of rotation of the drum, each band will always drive with a pull directly from the drum to the spindles of its group in succession.

1,762,352. TURBINE BLADE. JAMES L. RAY, Swarthmore, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Oct. 9, 1928. Serial No. 311,324. 5 Claims. (Cl. 253—77.)



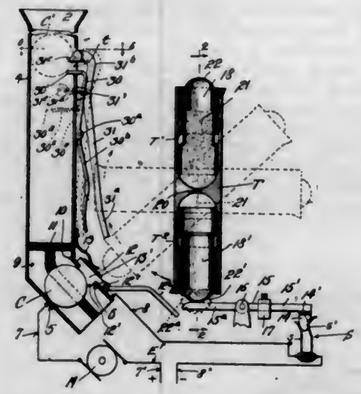
1. A turbine blade having concave and convex faces and comprising a section including one face and the inlet and outlet edge portions of the other face, said section having a cavity extending from the tip towards the base thereof and opening into said other face along lines which are the loci of the points of intersection of said other face and a plane which includes the neutral axes of two or more transverse sections of the blade, and a closure strip fitted into the opening to close the cavity, said closure strip being arranged to complete said other face across said opening.

1,762,353. DRINK MIXER. PATRICK H. ROBINSON, Racine, Wis., assignor to Hamilton Beach Mfg. Co., Racine, Wis., a Corporation of Wisconsin. Filed Nov. 16, 1925. Serial No. 69,450. 5 Claims. (Cl. 259—113.)



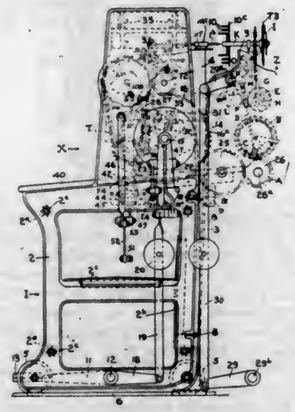
1. In a mixing device of the character described, the combination of a receptacle having an open top and comprising a side wall adapted to be held in one hand and shaped to form an elongated liquid retaining chamber of uniform cross sectional area throughout substantially its entire length, a cover removably connected to the top portion of the receptacle and having an opening formed in the central portion thereof, and an agitator-element consisting of a stem extending loosely through the cover-opening and into the chamber, a handle fixedly secured to the upper end of the stem and adapted to be gripped by the other hand and moved up and down to impart reciprocatory movement to the agitator-element, and a member fixedly secured to the lower end of the stem and provided with blades for swirling the liquid during the aforesaid reciprocatory movement, said blades bearing against the side wall of the receptacle to cause the lower end of the agitator-element to be guided in substantially a rectilinear path.

1,762,354. COIN-CONTROLLED TIMING DEVICE FOR ELECTRICALLY-ACTUATED REFRIGERATORS AND LIKE MACHINES. RICHARD SAUSE, New York, N. Y. Filed Dec. 19, 1928. Serial No. 326,916. 1 Claim. (Cl. 194—6.)



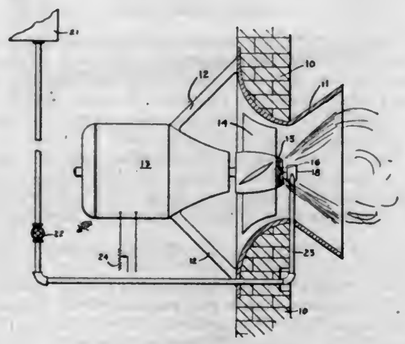
In a coin-controlled timing device for electrically-actuated refrigerators and like machines, an electric switch, means for operating said switch embodying a sand-actuated timing element having a plurality of compartments communicating through a drip aperture and mounted for rotation to cause alternate dripping of the sand from one compartment into the other, means for operating said switch at the end of the movement of a predetermined quantity of sand through said aperture, a weighted lever normally operative to close said switch and operable by the weight of sand in one of said compartments to overbalance said weight and open the circuit, means for manually rotating said timing element in one direction and preventing rotation in the opposite direction, and coin-controlled means releasable by the movement of said timing element for closing said circuit at a different point.

1,762,355. LEATHER MEASURING AND MARKING MACHINE. GUSTAV ADOLF SCHETTLER, Leeds, England, assignor to The Turner Tanning Machinery Company, Portland, Me., a Corporation of Maine. Filed Sept. 22, 1926, Serial No. 137,136, and in Great Britain Sept. 29, 1925. 18 Claims. (Cl. 101—42.)



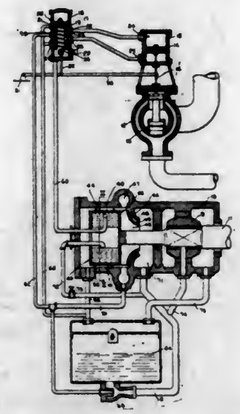
1. In a leather measuring and marking apparatus, mechanism for measuring a dimension of a piece of leather and driving means therefor, mechanism for marking on the piece of leather characters recording the measurement, means for properly aligning the measuring and marking mechanisms for relative approaching movement, a train of gears serving as a driving connection between the marking mechanism and the driving means of the measuring mechanism and adapted to intermesh at a point in the relative approaching movement of the marking and measuring mechanisms whereby both mechanisms may be driven from the same source of power, and a stop for limiting the relative approaching movement of the two mechanisms to protect the intermeshing gears.

1,762,356. LIQUID-FUEL BURNER. HENRY F. SCHMIDT, Lansdowne, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Nov. 19, 1924. Serial No. 750,799. 11 Claims. (Cl. 158—77.)



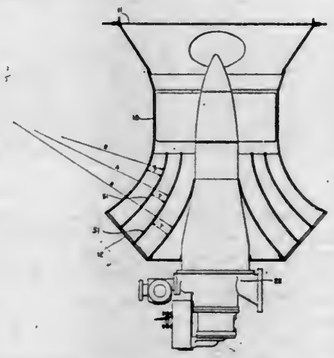
1. In a liquid fuel burner, the combination with means for setting up an air blast, of means disposed within said air blast and providing an annular chamber having an axial discharge orifice facing toward the source of said blast, and means for supplying fuel tangentially to said chamber, whereby a rotary motion is imparted to said fuel prior to its ejection from said orifice into said blast.

1,762,357. FLUID-PRESSURE GOVERNOR. HENRY F. SCHMIDT, Lansdowne, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 25, 1927. Serial No. 186,383. 4 Claims. (Cl. 264—19.)



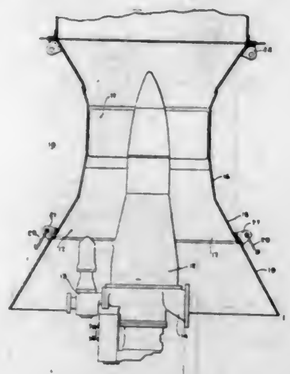
4. The combination with a prime mover having a rotor shaft and an admission valve, of a governing system therefor comprising means carried by the rotor shaft and providing an annular chamber for liquid, a Pitot tube projecting into said body of liquid and providing a liquid pressure varying as a function of the speed of rotation of the shaft, a motor device for actuating the admission valve, an impeller mounted on said shaft for supplying liquid pressure for actuating the motor device, means responsive to the variable fluid pressure in the Pitot tube for controlling the admission and exhaust of motive fluid to the motor device, and means including said impeller for supplying liquid to said chamber.

1,762,358. PROPELLER-TYPE BLOWER. HENRY F. SCHMIDT, Lansdowne, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed May 20, 1927. Serial No. 192,951. 2 Claims. (Cl. 230—117.)



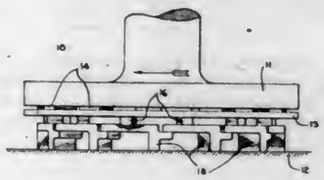
1. In a blower of the propeller type, the combination of a converging-diverging housing having an intermediate throat portion, a propeller at or in the throat portion, and a supporting structure for the propeller including a central core member which diverges from the propeller end and which defines with the housing a divergent annular passageway having a substantial component of axial direction at the discharge end, and the average thickness of said passage being not greater than .4 of the maximum radius of curvature thereof in axial planes.

1,762,359. BLOWER. HENRY F. SCHMIDT, Lansdowne, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Sept. 10, 1927. Serial No. 218,658. 4 Claims. (Cl. 230—116.)



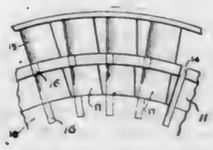
1. The combination with a propeller and a motor for driving the propeller, of a casing comprising a plurality of relatively movable telescopic sections, guide vanes in one of said sections and adjacent said propeller, and means for securing an adjacent section to said one of said sections either in extended or in retracted position.

1,762,360. THRUST BEARING. HENRY F. SCHMIDT, Lansdowne, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Sept. 10, 1927. Serial No. 218,819. 6 Claims. (Cl. 308—160.)



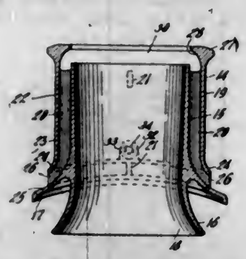
1. In a thrust bearing, the combination of a thrust collar, supporting means, a plurality of bearing pads cooperating with said collar, a flexible ring for supporting said pads, a closed chain of articulated equalizer members carried by said supporting means, and fulcrum connections between the equalizer members and the flexible ring.

1,762,361. TURBINE BLADE. HENRY F. SCHMIDT, Lansdowne, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Feb. 28, 1928. Serial No. 257,727. 13 Claims. (Cl. 253—77.)



1. A turbine blade formed from sheet metal and having a deformable holding part carried by the root portion and bent relative thereto about a radial axis.

1,762,362. LOCOMOTIVE APPLIANCE. IRWIN A. SNIDERS, Reading, Pa. Filed Jan. 12, 1928. Serial No. 246,370. 7 Claims. (Cl. 110—161.)



1. In a smoke-stack construction for locomotives, the combination with a tubular pipe member attached to the smoke-box of the locomotive and communicating with the interior thereof; of an auxiliary pipe member of larger diameter than said first named pipe, surrounding the same and spaced therefrom to form an upwardly directed flue passage, said flue passage communicating with the top of the inner pipe and having an inlet passage at the bottom open to the atmosphere, said inlet passage having downwardly and outwardly inclined inner and outer walls and terminating in a laterally directed inlet opening proper.

1,762,363. ROOF RAFTER. FLAY T. SERGENT, Belvidere, Ill. Filed Oct. 17, 1928. Serial No. 313,079. 1 Claim. (Cl. 108—23.)

A rafter for building construction comprising a series of superimposed strips, bent to a predetermined shape and secured to each other, the inner and outermost strips projecting beyond the ends of the intermediate strips, whereby to provide an attaching means for the ends of the rafter.

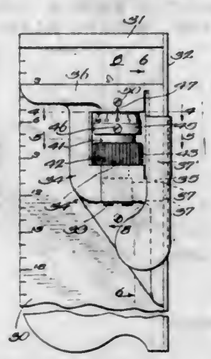
1,762,364. CONCENTRATION OF OXIDIZED ORES OF LEAD, SILVER, AND COPPER. EDWARD H. SNYDER and WILLIAM D. GREEN, Bauer, Utah, assignors to Combined Metals Reduction Company, Stockton, Utah, a Corporation of Utah. Filed Jan. 25, 1928. Serial No. 249,494. 11 Claims. (Cl. 209—166.)

1. The improvement in the flotation concentration of ores containing oxidized minerals of lead, silver or copper which consists in conditioning the ore with sodium chloride and a sulfidizing agent preparatory to froth flotation thereof.

1,762,365. PRINTER'S COMPOSING STICK. WILLIAM F. STUCKEMAN, Chicago, Ill., assignor to H. B. Rouse & Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 2, 1929. Serial No. 329,685. 2 Claims. (Cl. 276—39.)

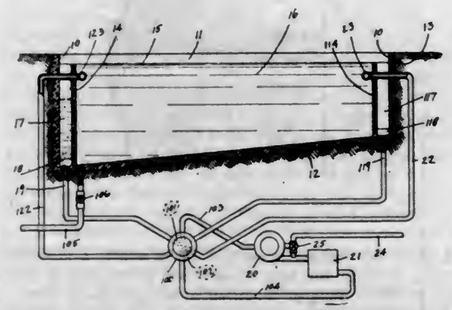
1. A printer's composing stick including the type receiving body portion thereof; a knee having a branch extending transversely of the stick and a branch extending along the stick, the branch that extends along the stick being formed in two sections, one of these sections and said stick body portion having cooperating formations enabling this section to be held in different fixed positions

along the stick, the other of said sections being adjustable along the stick, with reference to the first; intermeshing threaded members one in fixed connection with one of the aforesaid knee branch sections and the other assembled with the other knee branch section and rotatably mounted to turn in a substantially fixed plane with respect thereto, said members being arranged to effect movement of the transversely arranged knee branch longitudinally of the stick body upon rotation of the member that is mounted to turn, wherein the member that is in fixed connection with



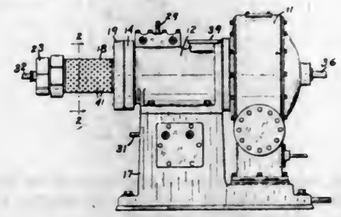
one of the knee branch sections is in the form of a threaded shaft and the other member is in the form of a nut threaded upon said shaft; an indexing collar assembled with and fixed with respect to said nut and having indices thereon that are complemental to an index that is fixed with respect to the transverse knee branch section; and an abutment assembled with the knee branch section with respect to which the plane of rotation is fixed, this abutment being adjustable longitudinally of the stick and engaged by the nut, said abutment being in sliding guiding engagement with said shaft.

1,762,366. PROCESS OF AND APPARATUS FOR WARMING AND CLEANING POOLS. SKILES E. TEST, Indianapolis, Ind. Filed Aug. 24, 1928. Serial No. 301,891. 5 Claims. (Cl. 210—11.)



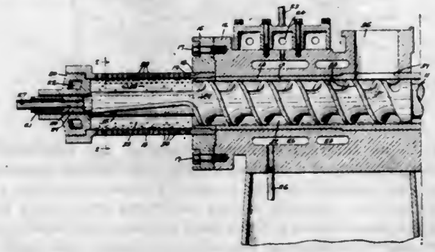
1. A swimming pool including a wall at one end at substantially the level of the pool contents and having a substantially level top and over which the surface contents of the pool drains as a surface sheet for cleaning the top of the pool, a collection chamber adjacent the pool and into which the sheet drainage is discharged, a discharge into the pool near the opposite end of the pool and arranged to discharge longitudinally of the pool and substantially across the full width thereof, a filter connected to the collection chamber, and a pump interposed between the chamber and the pool and connected to the filter whereby circulation of only the pool surface contents through the filter is obtained.

1,762,367. EXTRUSION APPARATUS. FRANK C. VANDERGRIFT, Akron, Ohio, assignor, by mesne assignments, to National-Erie Company, Erie, Pa., a Corporation of Pennsylvania. Filed Dec. 27, 1927. Serial No. 242,646. 11 Claims. (Cl. 146—174.)



1. Extrusion mechanism, as for extruding rubber, comprising: a screw-chamber casing supported adjacent its rear portion and extending forwardly in outboard relation with respect to the support, said casing being provided at its rear portion with an inlet opening for the introduction of material into said chamber and at its forward portion with an outlet for the egress of such material from said chamber; a screw, mounted within said chamber rotatable to force such material out through said outlet; and a forward bearing for said screw supported in the forward outboard portion of said casing.

1,762,368. EXTRUSION APPARATUS. FRANK C. VANDERGRIFT, Akron, Ohio, assignor, by mesne assignments, to National-Erie Company, Erie, Pa., a Corporation of Pennsylvania. Filed Sept. 8, 1928. Serial No. 304,730. 6 Claims. (Cl. 146—174.)

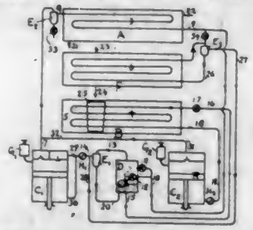


1. Extrusion mechanism, as for straining rubber, comprising: a screw chamber casing provided at its rear portion with an inlet opening for the introduction of material into said chamber, and at its forward portion with a lateral outlet for the egress of such material from said chamber, and with closure means closing the forward end of said chamber; and a screw unit, mounted within said chamber, provided with a screw at said inlet end of said chamber to force said material toward said closure means upon rotation of said screw unit, and provided at said forward end with means tending to hold said material away from said closure means and to force said material through said lateral outlet.

1,762,369. REFRIGERATING PROCESS AND APPARATUS. GARDNER TUFTS VOORHEES, Boston, Mass. Filed Mar. 10, 1923. Serial No. 624,143. 3 Claims. (Cl. 62—115.)

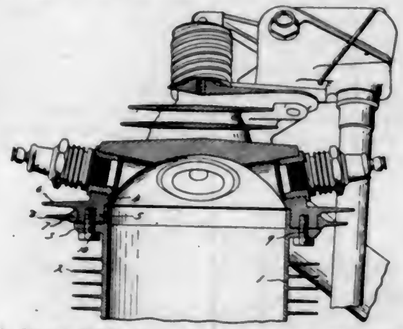
1. In a refrigerating system the combination with two cooperating compressors of a condenser, a refrigerator and a refrigerator-condenser, a discharge conduit leading from the high pressure compressor to the condenser, a liquid conduit having an expansion valve therein leading from the condenser to the refrigerator-condenser, a suction conduit leading from the refrigerator-condenser to the high pressure compressor, a discharge conduit leading from the low pressure compressor to the refrigerator-condenser, a

liquid conduit with an expansion valve therein leading from the refrigerator-condenser to the refrigerator, a suc-



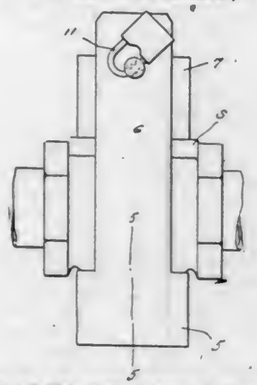
tion conduit leading from the refrigerator to the low pressure compressor, means to regulate the relative effective displacement of the compressors.

1,762,370. CYLINDER AND HEAD CONNECTION FOR INTERNAL-COMBUSTION ENGINES. WILLIAM O. WARNER, Detroit, Mich., assignor to The Warner Aircraft Corporation, Detroit, Mich., a Corporation of Michigan. Filed Nov. 14, 1927. Serial No. 233,249. 4 Claims. (Cl. 123—193.)



1. In an internal combustion engine, the combination with a cylinder, of a head of higher coefficient of expansion than said cylinder having a sleeve portion encircling and engaging said cylinder, a ring encircling said sleeve portion for maintaining a tight joint between said sleeve portion and cylinder, and means for securing said head to said cylinder including threaded members extending transversely into said sleeve portion and secured to said cylinder.

1,762,371. SAFETY-LOCK STOP. JOHN CHRISTEN WILHELM, Bartlesville, Okla. Filed July 20, 1929. Serial No. 379,800. 2 Claims. (Cl. 70—123.)



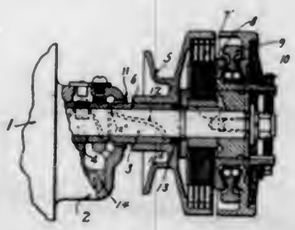
1. A device of the class described comprising a cup shaped member with a pair of spaced parallel coextensive plates rising therefrom on opposite sides and having apertures at their upper ends, a pin projecting through the apertures and an inverted cup shaped cap having a channel across the top thereof for receiving the pin, said pin having a head at one end and an opening at the other end, the opening being adapted to receive a locking means.

1,762,372. COMBINED COUNTER STIFFENER AND ARCH SUPPORT. FRANK E. WILLIS, Chicago, Ill., assignor of one-half to Walter L. Cohrs, Chicago, Ill. Filed Feb. 4, 1928. Serial No. 251,810. 1 Claim. (Cl. 36—68.)



A counter stiffener for shoes comprising a piece of leather having a grain side and a flesh side and being formed to fit the foot of the wearer, and having the grain side disposed inwardly so as to face the foot of the wearer.

1,762,373. LUBRICATING DEVICE. EDWIN M. WRIGHT, Springfield, Ohio, assignor, by mesne assignments, to Robbins & Myers, Inc., Springfield, Ohio, a Corporation of Ohio. Filed Sept. 2, 1927. Serial No. 217,270. 4 Claims. (Cl. 308—98.)



1. In a lubricating system, a drive shaft, a stationary bearing housing for said drive shaft having an oil reservoir, a driven member mounted upon said shaft with one end thereof projecting into said housing, there being an oil space at the extreme end of said member, means for carrying lubricant to said space from said reservoir, said driven member having an oil groove in its inner wall extending in the general direction of its length with both ends of the groove opening into said oil space.

1,762,374. FIGURE DOLL. WILLIAM O. YANCEY, Chicago, Ill. Filed Jan. 27, 1930. Serial No. 423,633. 4 Claims. (Cl. 46—40.)

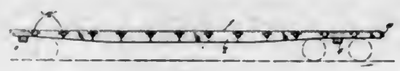
1. A doll's head comprising a relatively stationary shell, a spherical member rotative in said shell and having a portion of its surface forming the facial area of said head,

said spherical body being divided symmetrically into a plurality of segments each being groups of facial features



at intervals about its circumference and adapted to be brought into register with one another within the facial area.

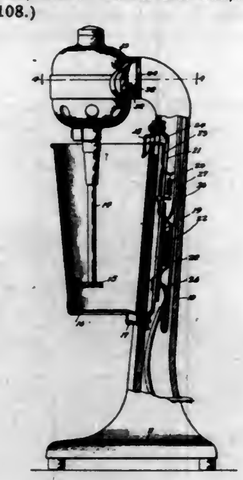
1,762,375. CAST-METAL CAR BODY. ALBERT W. ALBRECHT, University City, Mo. Filed May 3, 1929. Serial No. 360,081. 6 Claims. (Cl. 105—415.)



1. A unitary cast-metal car body comprising a single casting including a floor having upper surface that is unobstructed throughout the width, two depending side flanges extending longitudinally along the side edges of said floor, flanges integral with the under side of said floor at the ends thereof for receiving couplings, a series of stake sockets along each of said side flanges terminating near the plane of the upper surface of the floor and leaving the lateral edges of the floor unobstructed, bosses depending from the underside of said floor and having holes for receiving pins, flanges depending from said floor and having their ends integrally united with said bosses, and a series of transverse flanges depending from said floor and intersecting said first named flanges and having their ends opposite said stake sockets.

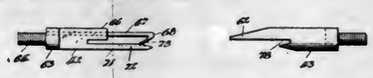
2. A unitary cast-metal car body comprising a single casting including a floor having a smooth upper surface, two depending side flanges extending longitudinally along the side edges of said floor, flanges integral with the under side of said floor at the ends thereof for receiving couplings, a series of stake sockets along each of said side flanges, bosses depending from the under side of said floor and having holes for receiving pins, flanges depending from said floor and having their ends integrally united and having holes for receiving pins, flanges depending from said floor and intersecting said first named flanges and having their ends opposite said stake sockets and flanges having their inner ends integral with said bosses and extending therefrom to integral union with said side flanges at the corners of said floor.

1,762,376. DRINK MIXER. HARRY A. ANDERSEN, Racine, Wis., assignor to Hamilton Beach Manufacturing Company, Racine, Wis., a Corporation of Wisconsin. Filed Jan. 28, 1929. Serial No. 335,536. 15 Claims. (Cl. 259—108.)



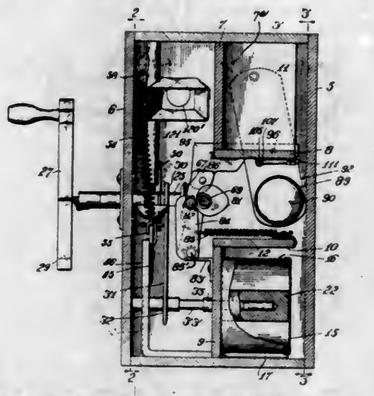
1. In a drink mixer, the combination of a rigid support, an electric motor, an agitator driven by the motor, and means for connecting the motor to said support comprising a single resilient diaphragm having a portion thereof fixedly secured to the motor and another portion fixedly secured to the support.

1,762,377. WEFT-INSERTING MECHANISM. FRANCIS E. ASHTON, Chester, Pa., assignor to Aberfoyle Manufacturing Company, Chester, Pa., a Corporation of Pennsylvania. Filed Dec. 24, 1927. Serial No. 242,341. 8 Claims. (Cl. 139—122.)



1. A weft inserting needle comprising in combination a body, a hook, and a projecting lip providing fixed means for admitting a thread to the hook and preventing its removal therefrom.

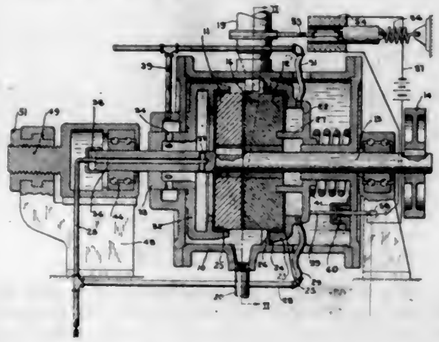
1,762,378. MOTION-PICTURE MACHINE. FRANKLIN H. AVERS, Portage, Wis. Filed Feb. 26, 1923. Serial No. 621,339. 14 Claims. (Cl. 88—16.)



2. In a camera having an exposure opening, a plurality of fixed lenses in alignment with and spaced trans-

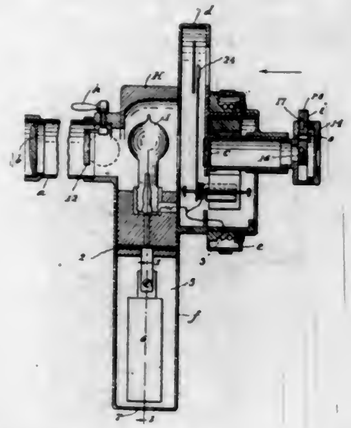
versely in said opening, a mechanism for intermittently advancing a film past said opening, a source of light, a rotary shutter shaft, a cam mounted on said shaft, and means operable by said cam for intermittently moving said source of light in predetermined timed relation with respect to the film feeding mechanism relatively of the film.

1,762,379. COAL PULVERIZER. HARRY H. BATES, Ridley Park, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 25, 1927. Serial No. 186,457. 5 Claims. (Cl. 83—8.)



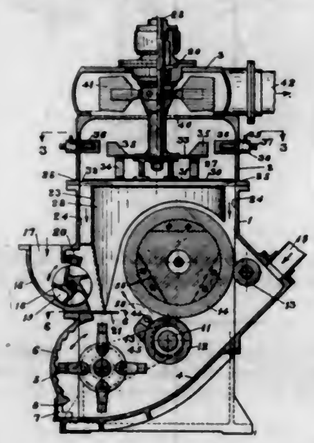
1. In a grinding machine, a rotary grinding stone, a hollow retaining member having a ring portion embracing and retaining the stone and a hollow hub-like portion with openings in said hub-like portion, a hollow rotary shaft secured to the rotary member and having passages from the hollow thereof opening into the hollow of the retaining member, and means for introducing a cooling fluid into the hollow shaft whereby it is pumped into the hollow retaining member by rotation of the shaft and outwardly thereof by the rotation of the hub portion of the retaining member.

1,762,380. OPTICAL PYROMETER. ADOLF BESTELMEYER, Frankfort-on-the-Main, Germany, assignor to Hartmann & Braun Aktiengesellschaft, Frankfort (Main) West, Germany. Filed July 16, 1926. Serial No. 122,906. 14 Claims. (Cl. 88—14.)



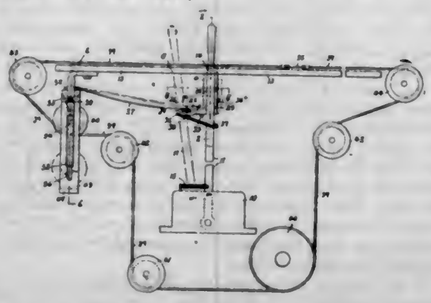
1. In an optical pyrometer, in combination, a galvanometer, a telescope passing through the galvanometer and having an objective and an eye-piece, a lamp disposed between said objective and eye-piece in the path of the rays passing through the telescope, a screen disposed forwardly of said lamp and movable into and out of the optical axis of the telescope, a screen disposed rearwardly of said lamp and movable into and out of the optical axis of the telescope, resistance regulating means cooperating between said lamp and the galvanometer, and means for supplying electric current to said lamp and to said resistance regulating means.

1,762,381. APPARATUS FOR COMMINUTING MATERIALS. CHARLES H. BIRCH, Joliet, Ill. Filed Oct. 17, 1927. Serial No. 226,724. 9 Claims. (Cl. 83—11.)



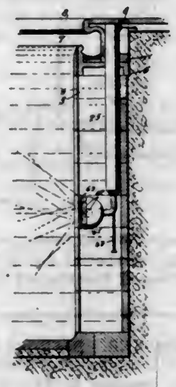
1. In a device of the kind described, a crushing roller therefor, said crushing roller having end sections and a plurality of intermediate sections, and means for resiliently urging said sections together.

1,762,382. AUTOMATIC STOP FOR DOUBLE-PILE-FABRIC LOOMS. CHARLES A. BONDZIULIS, Waterbury, Conn. Filed Sept. 30, 1929. Serial No. 396,089. 2 Claims. (Cl. 139—336.)



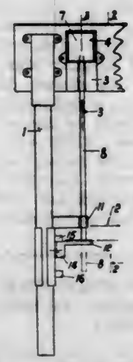
1. In a double-pile-fabric loom, the combination with a power-control mechanism, pile-cutting knife-cord, and reed-beam thereof; of a stationary guide-member; a trip-plunger mounted for both oscillating and reciprocating movement in said guide-member in position to co-act with a part of the said control-mechanism to cause the same to move into its "off" position; an arm secured to and laterally-offsetting from said plunger and normally lying out of the path of movement of the said reed-beam; and means brought into play by the slackness in the said knife-cord for turning the said plunger to swing its offsetting arm into the path of the said reed-beam for actuation thereby.

1,762,383. SUBAQUEOUS ILLUMINATION OF SWIMMING POOLS. JOHN FRANCIS BOORAEM, Greenwich, Conn. Filed Nov. 19, 1928. Serial No. 320,237. 14 Claims. (Cl. 240—2.)



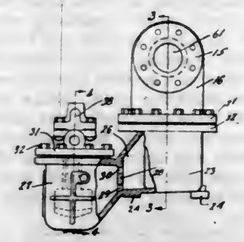
7. A swimming pool structure having its walls backed by water proofing material and provided with a chamber in one of its vertical walls opening into the pool and a transparent cover plate for the open side of said chamber, subsurface illuminating means for the pool including an artificial light source located externally of said chamber, a plurality of light refracting prisms arranged within said chamber, means positioned inwardly of the water proof backing for the pool walls and extending into said chamber to conduct light from the light source to said prisms, an opaque disc rotatably mounted between the prisms and said transparent cover plate and provided with opposed eccentric slots progressively moving across the prisms lengthwise thereof in the rotation of the disc to cause a movement of the light beams projected from the respective prisms through said slots into the pool, and means for rotating said disc.

1,762,384. SEAT INDICATOR. CHARLES ROBERT BOW, Thornliebank, Scotland. Filed May 3, 1929, Serial No. 360,059, and in Great Britain Aug. 14, 1928. 1 Claim. (Cl. 116—124.)



The combination with a seat having a seat back and a tip-up bottom, of a box mounted on the back and having a glazed aperture, a luminiscent sheet located within the box and normally visible through said aperture, a shutter mounted on said box and movable into a position clear of the aperture or into a position to close said aperture, and means operatively connecting said shutter with said bottom so that said shutter participates in the tipping movements of said bottom.

1,762,385. COMBINED SEPARATOR AND TRAP ASSEMBLY. RICHARD L. CLARK, Cleveland, Ohio, and CHARLES T. CRAKER, Corry, Pa., assignors to Strong-Carlisle & Hammond Company, Cleveland, Ohio, a Corporation of Ohio. Filed Dec. 22, 1928. Serial No. 328,040. 4 Claims. (Cl. 183—43.)



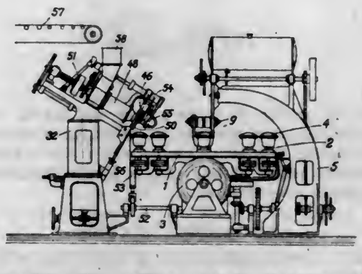
1. An assembly of the class described comprising an engine manifold, a separator and structure carried thereby, said strap having a bowl and a closely coupled steam line including a throttle valve connecting the separator of said structure with the manifold, said separator comprising an upper unit and a lower unit having a hollow extension forming a part of the bowl of the trap for quickly and directly discharging the water of condensation from the separator to the trap.

1,762,386. PACKAGE OF YARN OR THE LIKE. ALBERT B. COLLINGBOURNE, Elgin, Ill., assignor to Collingbourne Mills, Inc., Elgin, Ill., a Corporation of Illinois. Filed Jan. 16, 1928. Serial No. 247,204. 4 Claims. (Cl. 242—159.)



1. A spool for holding wound yarn or thread, comprising a plurality of relatively stiff blanks each having a slit extending inwardly from one margin, the marginal walls of the slit portion of each blank being in frictional engagement with the other blank.

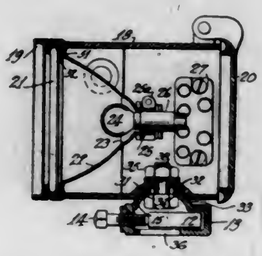
1,762,387. MACHINE AND PROCESS OF MANUFACTURE OF POTTERY OR CERAMIC ARTICLES. JOSEF DENGLER, Podersam, Czechoslovakia. Filed Dec. 21, 1928, Serial No. 327,657, and in France May 15, 1928. 8 Claims. (Cl. 25—26.)



1. A machine for making ceramic ware comprising a revoluble table, means for intermittently revolving the table, moulds carried by the table, means for axially revolving the moulds, a standard situated adjacent the table,

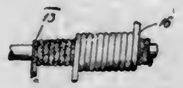
a bracket connecting the standard with the table, levers rockably supported by the bracket, means for rocking the levers, a device for wiping plastic substance at the end of one of said levers, a shaping template at the end of the other of said levers, a spraying device adjacent the template, a pneumatic shock-absorbing and movement regulating device co-operating with the wiper carrying lever, a two armed rockable pawl co-operating with the wiper carrying lever, a stationary trip-pin also co-operating with the pawl, an edge trimming cutter cooperating with the wiper carrying lever and moulds, a water-supply pump, a plastic substance supplying press, means situated about the orifice of said press for forming the plastic substance into sheet formation, means for smoothing the sheet of plastic substance and means for cutting off said sheets, and mechanism, operated by the mould supporting table, for intermittently operating said rotary sheet forming tool.

1,762,388. LIGHT-SIGNAL SUPPORT. EDWARD A. EVERETT, Long Island City, N. Y. Filed Aug. 24, 1928. Serial No. 301,881. 1 Claim. (Cl. 240—52.)



In a light signal support, the combination, a lamp bracket comprising a solid rectangular vertical member, a cleat with a rectangular opening sliding on said vertical member and clamped thereto and having on one side a spherical projection with an aperture for a bolt on the axis of the sphere and having an aperture for a bolt head in the outer wall of the cleat opposite said spherical projection, a housing having a spherical depression on its side matching the spherical projection of said cleat, said cleat being secured to said housing by a bolt passing through said apertures with the head located in the depression formed within the spherical projection of the cleat and prevented from falling out of said cleat by said vertical member.

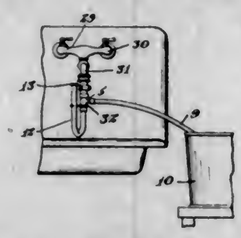
1,762,389. RESILIENT FABRIC. RICHARD C. FAGAN, Middletown, Conn., assignor to Russell Manufacturing Company, Middletown, Conn., a Corporation of Connecticut. Filed Dec. 20, 1928. Serial No. 327,212. 4 Claims. (Cl. 139—421.)



1. As an article of manufacture, an elastic webbing which includes warp strands of rubber, each strand having a wrapping colored to protect the rubber against the deteriorating action of light and a second wrapping of a neutral color over the first.

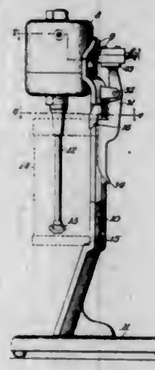
1,762,390. COMBINED FILLING AND DRAINING DEVICE. GEORGE V. GAVAZA, Quincy, Mass. Filed Jan. 24, 1929. Serial No. 334,701. 2 Claims. (Cl. 137—111.)

1. In a combined filler and drainer, a T having three outlets, two flexible conduits connected, respectively, to two of said outlets, a tube connected to the third outlet, a coupling for connecting the tube to a threaded faucet, the shorter one of said conduits having means thereon for



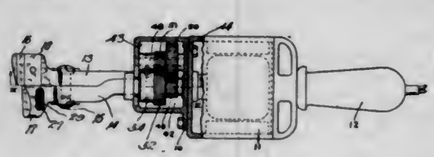
attaching it to a smooth-faced faucet, and means carried by the T for holding the shorter one of the conduits in a bent condition shutting off flow therethrough.

1,762,391. DRINK MIXER. RAYMOND B. GILCHRIST, deceased, Newark, N. J.; by Agnes C. Gilchrist, executrix, New York, N. Y., assignor to The Gilchrist Company, Newark, N. J., a Corporation of New Jersey. Original application filed Feb. 8, 1928, Serial No. 617,661, and in Canada Feb. 16, 1926. Divided and this application filed Jan. 28, 1929. Serial No. 335,639. 4 Claims. (Cl. 259—135.)



1. A replacement unit for drink-mixers comprising an electric motor provided with a casing adapted to be removably secured to a drink-mixer support and to drive a downwardly extending agitator shaft, and terminal contacts fixedly held in the casing, directly connected by electric conductors to the windings of the motor and adapted for direct engagement by motor controlling switch-members on the support, which are readily operable to control the operation of the motor, the motor being adapted to be rendered completely operable by current received from the switch and through said contacts and controlled by the operation of said switch-members.

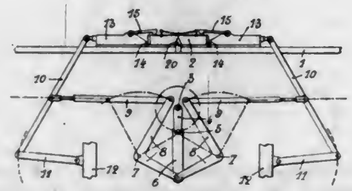
1,762,392. SHEARING MECHANISM. CHARLES B. GRAY, Millbourne, Pa. Filed Nov. 24, 1928. Serial No. 321,683. 7 Claims. (Cl. 30—13.)



1. In a shear, the combination of relatively movable members having terminal portions provided with inner

and opposed seats disposed crosswise of the shearing plane, blades having front and back faces arranged crosswise of the shearing plane and having at adjacent ends bevelled surfaces intersecting the front faces to provide cutting edges in said shearing plane, and fastening devices for holding the blades in place with respect to said terminal portions with the back faces thereof engaging said seats.

1,762,393. WEAVING LOOM, ESPECIALLY FOR HEAVY WEBS SUCH AS METALLIC WIRE WEBBING. BERNHARD HEIN, Cologne, Germany, assignor to Le Treillage Ceramique Francais, Paris, France. Filed Feb. 9, 1929, Serial No. 338,757, and in Germany Feb. 17, 1928. 3 Claims. (Cl. 139—141.)



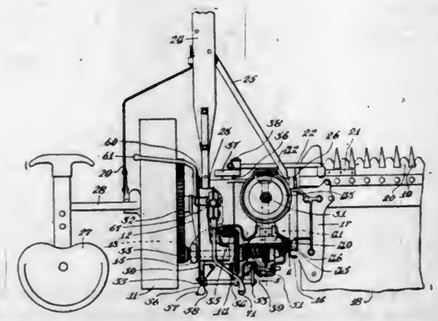
1. In a loom particularly adapted for weaving heavy metallic fabrics, a slay, a shuttle guided on said slay, two pickers adapted to be imparted a reciprocating motion along said slay, locking means having cooperative parts on said pickers and said shuttle, respectively, and adapted to couple said shuttle with said pickers, a pivotal member on said shuttle adapted to release one of said locking means or the other according to its operative angular positions and stop means on said slay, in the path of said member, for pivoting said member from one operative position to the other.

1,762,394. BOLT LOCK. RICHARD T. HOSKING, Wilmette, Ill., assignor, by mesne assignments, to Shakeproof Lock Washer Company, Incorporated, Chicago, Ill., a Corporation of Delaware. Filed Sept. 20, 1928. Serial No. 307,164. 1 Claim. (Cl. 151—14.)



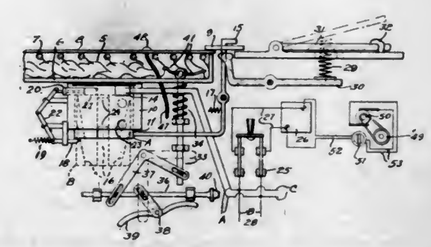
A threaded screw formed with a longitudinally extending slit that divides a portion of the length of the screw body into two complemental resilient members, said members bent away from each other in a direction perpendicular to the plane of the slit to provide outwardly bulging threaded areas having oppositely disposed notches extending inwardly to the bottom of the thread and extending lengthwise the bolt, said threaded and longitudinally notched areas adapted to be received in the threaded hole in a piece of work and to normally engage the walls thereof by yielding frictional contact therewith.

1,762,395. CLUTCH-CONTROL LEVER FOR REAPERS. PAUL KANE, Neuss, Germany, assignor to International Harvester Company, a Corporation of New Jersey. Filed Oct. 25, 1928, Serial No. 314,953, and in Germany Jan. 6, 1928. 5 Claims. (Cl. 56—167.)



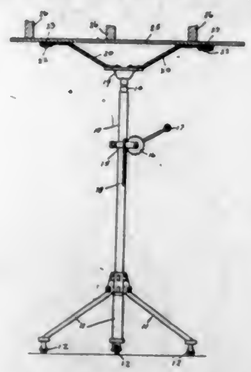
1. A reaper having an axle, a yoke pivoted thereto, a main frame pivotally connected to the yoke, a sickle carried by the main frame, driving connections for the sickle, a clutch included in said driving connections, and a lever fulcrumed on said yoke for controlling the clutch.

1,762,396. PARACHUTE FOR AEROPLANES. CHARLES KESSES, New York, N. Y. Filed Oct. 24, 1928. Serial No. 314,651. 8 Claims. (Cl. 244—21.)



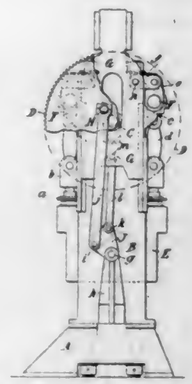
3. In parachutes for aeroplanes having in combination an open box inserted in the upper part of said aeroplane, a closed parachute positioned in said box, rings for holding the cord of said parachute secured to the rim of said box, a cover for said box secured to the upper part of said parachute to provide means to cover said parachute in said box, steel plates secured to said cover arranged to lock said cover to said plane, a round plate below said box arranged for turning around its center, levers provided to hold with their upper parts said steel plates and long open slots in said turning plate to hold the lower parts of said levers in fixed positions to hold said steel plates and by turning said plate to move said lower parts in said slots in such a position to release with said upper parts said steel plates and to force with said springs said plates with said cover and said parachute in the air by the turning of said plate with said levers.

1,762,397. WALL-BOARD HOIST. JAMES W. KINSER, Terre Haute, Ind. Filed Mar. 16, 1929. Serial No. 347,523. 5 Claims. (Cl. 304—9.)



1. A wall board hoist including yielding means for supporting a section of wall board, and mechanism for elevating said yielding means to bring the wall board into contact with the surface to which it is to be fastened.

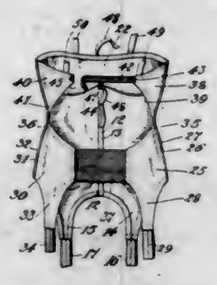
1,762,398. TOGGLE DRAWING PRESS. WILLIAM KLOCKE, Woodhaven, N. Y., assignor to E. W. Bliss Company, Brooklyn, N. Y., a Corporation of Delaware. Filed June 14, 1928. Serial No. 285,488. 4 Claims. (Cl. 113—38.)



1. In a press having a main shaft, an actuating crank thereon, a blank-holder, toggles for operating the blank-holder, rock-shafts operating said toggles, and an arm on each said rock-shaft, extending in line with the toggles when the latter are straightened, an operating part and links therefrom to said arms, said links being at right angles to said arms in the straightened position of the toggles, the combination therewith of a rocker part having a link connection with said crank, and a link connection with said operating part, the rocker having its pivot for said latter connection arranged on a radius which in the straightened position of said toggles is aligned with its connecting link to impart a minimum movement to said toggles in their approximately straightened position.

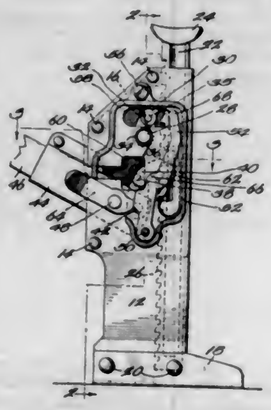
1,762,399. APPAREL GARMENT. WALDEMAR KOPS, New York, N. Y., assignor to Kops Bros. Inc., New York, N. Y., a Corporation of New York. Filed July 5, 1928. Serial No. 290,403. 5 Claims. (Cl. 2—30.)

1. In a garment of the type described, a front member adapted to overlie the diaphragm and abdomen of the wearer and extending between the axillar lines of the garment, a bandeau member extending from the upper edge of the front member and coextensive circumferentially therewith, a lower back member comprising inelastic sections connected to and extending from the front member and an elastic strap permanently connecting the said sections of the lower back member, and an upper back member also comprising inelastic sections and an elastic strap, the inelastic sections of the upper back member extending from the edges of the bandeau member and the adjacent portions of the edges of the front member and the elastic strap of the upper back member detachably



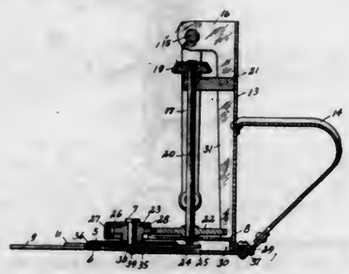
connecting the inelastic sections thereof to each other, the lower edges of the inelastic sections of the upper back member tapering upwardly from the sides of the front member while the upper edges of the inelastic sections of the lower back member taper downwardly from the edges of the front member whereby the upper back member exerts a circumferential and an upward tension in the bandeau member and the front member, while the lower back member creates a circumferential and downward tension in the said front member causing the said bandeau member and front member to control the bust and diaphragm of the wearer.

1,762,400. LIFTING JACK. MILLARD B. LUCKER, Benton Harbor, Mich., assignor to Auto Specialties Mfg. Co., San Francisco, Calif., a Corporation of California. Filed Mar. 16, 1926. Serial No. 95,035. 6 Claims. (Cl. 254—111.)



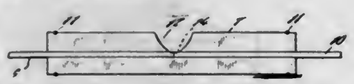
1. In a lifting jack, a casing, a toothed lifting bar, a holding pawl, a holding pawl pivot pin carried by said casing and projecting at one end beyond one side of the casing, a hand lever, a pivot pin for said hand lever carried by the casing and projecting at one end beyond one side of the casing, a lifting pawl carried by said hand lever, a spring mounted upon the projecting end of said holding pawl pivot pin and engaged at its ends, respectively, with said holding and lifting pawls for urging the latter into engagement with the teeth of said lifting bar, a relatively long integral pivoted cam member having an end extending adjacent the uppermost of said pawls and pivoted to swing to a position to effect release of said pawls from said lifting bar upon predetermined movement of said hand lever, a spring for so swinging said cam member, and a positioning lever mounted upon the projecting end of said hand lever pivot pin for movement to a position in which it engages with and holds said cam member out of a releasing position with respect to said pawls.

1,762,401. HEDGE TRIMMER. NELLIE MCCLOSKEY, Philadelphia, Pa. Filed Apr. 10, 1928. Serial No. 268,821. 1 Claim. (Cl. 80—11.)



A trimmer of the class described, including a flat base having a raised portion and radially extending shearing members, a cutter rotatably connected to said raised portion and resting thereupon, said cutter having a flange extending downwardly into substantial contact with said base and in spaced relation to said raised portion, and shearing members extending radially from said flange in coacting relation to the first named shearing members.

1,762,402. WELDING DEVICE. WILLIAM F. MECUM, Douglas, Wyo. Filed Mar. 27, 1929. Serial No. 350,247. 5 Claims. (Cl. 113—99.)



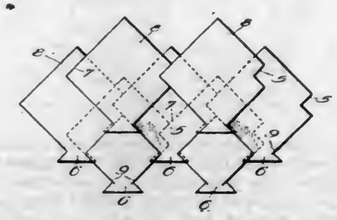
1. A wire welding device of the character described comprising a pair of complementary sections adapted to be disposed in opposed relation to each other and having grooves in their opposed sides for the reception of the wires and further a pocket formed in their intermediate portions communicating with the grooves in a manner to expose the adjacent ends of the wires, said pocket constituting means for concentrating heat on the exposed portions of the wires.

1,762,403. TEMPORARY BINDER. MAX MEYERSON, New York, N. Y. Filed Apr. 25, 1928. Serial No. 272,578. 7 Claims. (Cl. 129—40.)



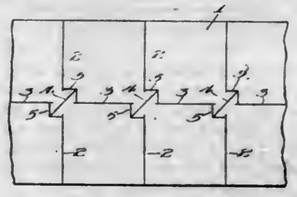
1. A temporary binder comprising a back, a sheet retainer comprising a sheet-engaging part and an attaching part, means for mounting said attachment part upon the back for adjustment of the sheet retainer toward and from the back, and means whereby said two parts are adjustable with respect to each other for thereby increasing the range of effective adjustability of the sheet-retainer toward and away from the back.

1,762,404. PREPARED ROOFING. ALFRED O. MICKELSON and DONALD A. CUMFER, Chicago, Ill., assignors by mesne assignments, to The Patent and Licensing Corporation, Boston, Mass., a Corporation of Massachusetts. Filed July 21, 1923. Serial No. 652,886. 6 Claims. (Cl. 108—7.)



4. A flexible shingle having its opposite sides parallel and lugs extending outwardly from the sides and adjacent one corner of the shingle and adapted to engage under the adjacent shingles, another corner of the shingle having a registering recess formed therein.

1,762,405. PROCESS OF PRODUCING SHINGLE ELEMENTS. ALFRED O. MICKELSON and DONALD A. CUMFER, Chicago, Ill., assignors, by mesne assignments, to The Patent and Licensing Corporation, Boston, Mass., a Corporation of Massachusetts. Original application filed July 21, 1923, Serial No. 652,886. Divided and this application filed Mar. 16, 1925, Serial No. 15,906. Renewed Aug. 6, 1926. 5 Claims. (Cl. 164—17.)

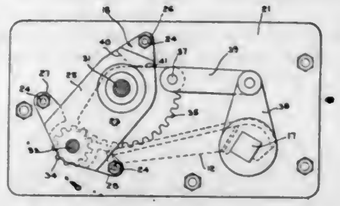


1. A process of making individual self-spacing flexible roofing units comprising severing a sheet on lines of severance extending inwardly from lateral edges and terminating short of meeting, severing the sheet intermediate the lateral edges on broken longitudinal lines of severance parallel to said lateral edges also terminating short of meeting, cutting the sheet intermediate its lateral edges on spaced diagonal lines to form butts for individual shingle units to be subsequently cut from the sheet, said diagonal cuts passing through the points determined by the intersections of projections of said lines of severance, connecting said lines of severance by short broken lines of severance angularly disposed thereto, the connecting points of these short broken lines of severance forming the apexes of the diagonal lines.

1,762,406. DUMP-GRATE-OPERATING MECHANISM. CHARLES F. MILLER, Moores, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Oct. 17, 1928. Serial No. 313,135. 4 Claims. (Cl. 126—169.)

1. In a stoker, the combination with a dump grate and means for supporting the dump grate for movement about an axis; of mechanism for effecting the rotation of the grate so as to raise and lower the same; the mechanism

comprising an operating lever connected to the dump grate, a crank mounted to move about a fixed axis, a link pivotally connected at one end to the lever and pivotally connected at its other end to the crank, a hand-operated speed-reducing mechanism for effecting the movement of the crank about its axis, and an abutment for limiting the movement of said crank; the dump grate, lever, crank, connecting



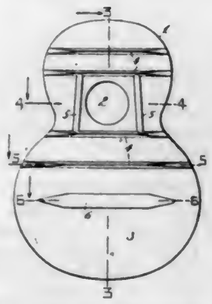
link and abutment being so constructed and arranged with respect to each other that when the dump grate is in its raised position, the axis of pivotal connection between the link and crank will be spaced a slight distance from a line extending through both the axis of rotation of the crank and the axis of pivotal connection of the link and lever, and the weight of the dump grate will act to urge the crank against the abutment.

1,762,407. METHOD OF MAKING AXLES. EDMUND C. MOGFORD and GEORGE SPATTA, Buchanan, Mich., assignors to Clark Equipment Company, Buchanan, Mich., a Corporation of Michigan. Original application filed May 15, 1929, Serial No. 363,362. Divided and this application filed Nov. 22, 1929. Serial No. 409,094. 13 Claims. (Cl. 29—153.)



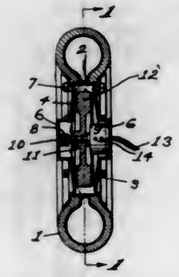
1. The method of forming a tubular axle which comprises tapering the end portions of the tubular blank, upsetting said end portions to increase the wall thickness and to form a tapered socket in the outer end, forging a knuckle piece with a tapered shank, driving said shank into the socket, and forming a peripheral weld about the margins of the socket and shank.

1,762,408. TOP FOR GUITARS AND SIMILAR STRINGED INSTRUMENTS. WILLIAM W. NELSON, Brookline, Mass. Filed Aug. 12, 1927. Serial No. 212,557. 1 Claim. (Cl. 84—291.)



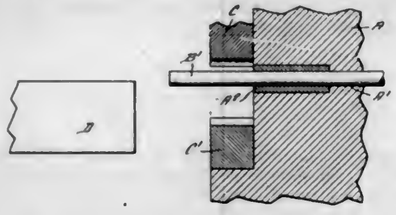
A top for stringed musical instruments in which a relatively thin and substantially flat top is subjected to string tension through an interposed bridge, comprising spaced cross pieces extending beneath the under side of the top and borne by it and to which pieces the top is glued, the glued surfaces of said pieces in the part thereof extending across the longitudinal central portion of the top being arched and the top being bent to conform to said arched surfaces whereby the top, when glued to said pieces as aforesaid, will be arched transversely along its central portion.

1,762,409. ADVERTISING DEVICE. LELAND B. NEWELL, Springfield, Ill. Filed Sept. 19, 1927. Serial No. 220,501. 3 Claims. (Cl. 74—78.)



1. A gyroscopic device comprising a shaft, a fly wheel mounted upon the shaft, means for rotating the shaft, a support for the shaft, a casing inclosing the shaft, fly wheel and shaft rotating means, and said casing having at its periphery means for supporting an article to be displayed.

1,762,410. PROCESS OF MAKING BOLTS. CHARLES F. NEWPHER, Shaker Heights, Ohio, assignor to Republic Steel Corporation, Youngstown, Ohio, a Corporation of New Jersey. Filed Sept. 19, 1927. Serial No. 220,345. 2 Claims. (Cl. 10—27.)

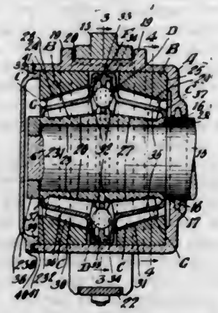


1. The method of making bolts comprising forming a button head on the stock, with a collar at the base thereof, then shaping the head and simultaneously forming a flash at its base with a portion of which the collar is merged, and then trimming the portion of the flash which projects beyond the confines of the collar, thereby to restore the collar.

1,762,411. JOURNAL BEARING. JOHN F. O'CONNOR, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed Sept. 28, 1927. Serial No. 222,415. 4 Claims. (Cl. 308—180.)

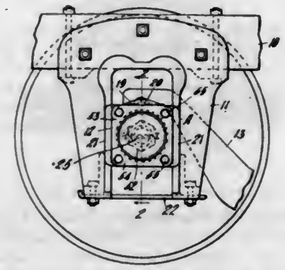
1. In a structure of the character described, the combination with a journal box member and a journal member; of race members associated with said journal member and said journal box member, said members being formed to provide conical spaced raceways, the defining surfaces of which converge from a central point outwardly; spaced circular series of conical rollers, the inner end of each of the rollers of each series being conically tapered; anti-

friction balls interposed between the circular series of rollers, each of said balls bearing upon the adjacent conical tapered ends of four rollers, two rollers of each series,



and operating to axially and circumferentially space and align the same; and means for maintaining said balls in operative position.

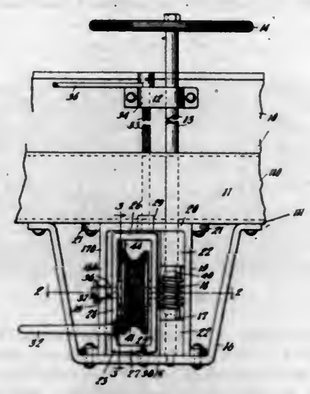
1,762,412. JOURNAL BEARING. JOHN F. O'CONNOR, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed Sept. 28, 1927. Serial No. 222,416. 6 Claims. (Cl. 308—180.)



1. In a structure of the character described, the combination with relatively movable race members, providing oppositely disposed conical bearing surfaces; of an annular series of conical rollers co-operating with each of the oppositely disposed bearing surfaces of said race members, said annular series of rollers being spaced apart, the adjacent inner ends of said rollers being provided with oppositely disposed convex spherical surfaces, and the outer ends of each of said rollers being provided with a concave spherical surface; retaining means interposed between the inner ends of the annular series of rollers, said retaining means having concave bearing surfaces engageable with the convex bearing surfaces of the adjacent ends of said rollers; and additional retaining means associated with the outer ends of each annular series of rollers and being provided with convex spherical bearing surfaces engageable with the concave spherical bearing surfaces of said rollers; and anti-friction means for supporting said additional retaining means in operative condition with reference to said rollers.

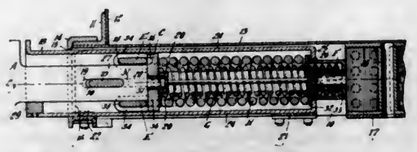
1,762,413. HAND BRAKE. JOHN F. O'CONNOR, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed Oct. 1, 1927. Serial No. 223,272. 7 Claims. (Cl. 74—112.)

1. In a hand brake structure of the character described, the combination with a rotatable driving worm member; of a winding drum to which the brake chain is connected, said drum having a worm member connected thereto and adapted to mesh with the driving worm member; and a movable carrier for said drum, said carrier being pivotally supported for swinging movement about an axis parallel to the axis of rotation of said driving worm, whereby the worm member connected to the drum is movable toward and



away from said driving worm, the pull of the brake chain on said drum serving to hold said carrier in position to maintain meshing engagement between said driving worm and the worm associated with said drum.

1,762,414. RAILWAY DRAFT RIGGING. JOHN F. O'CONNOR, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed Dec. 22, 1927. Serial No. 241,744. 8 Claims. (Cl. 213—7.)

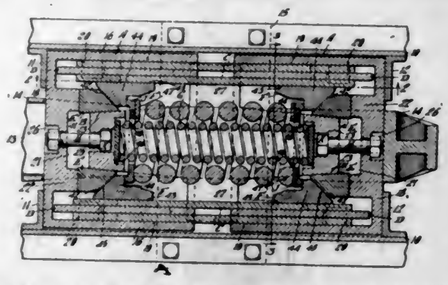


1. In a railway draft rigging for cars provided with center sills, the combination with shock absorbing means disposed between said sills; of a coupler; means for connecting said coupler with the shock absorbing mechanism and supporting the same, said means including a yoke member and an anchoring element extending through the yoke and also through the coupler shank between the ends thereof, and held against vertical displacement by engagement with the sills, said element being movable with the coupler shank and effecting movement of the yoke in unison with the coupler in draft, said yoke having means at the front end thereof for supporting the coupler shank closely adjacent the coupler head; and additional means extending through the sills and held against vertical displacement, said last named means embracing the inner end of the coupler shank and holding the same against vertical displacement in all operative positions thereof.

1,762,415. FRICTION SHOCK-ABSORBING MECHANISM. JOHN F. O'CONNOR, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed Dec. 31, 1927. Serial No. 243,915. 7 Claims. (Cl. 213—33.)

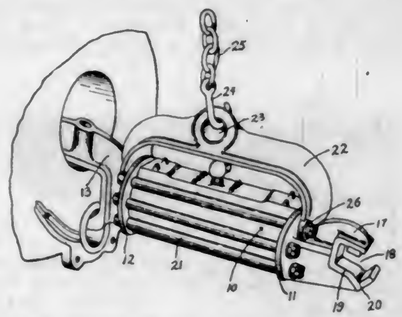
1. In a friction shock absorbing mechanism, the combination with front and rear followers relatively movable toward each other; of a central column element relatively to which said followers are movable; means carried by said followers for centering the column between the followers upon separation thereof; friction plates disposed at opposite sides of the mechanism, said plates being anchored to the column element against longitudinal move-

ment relative to said column; additional friction plates co-operating with said first named friction plates, said additional friction plates comprising two sets, movable respectively with said front and rear followers; means for opposing lateral outward movement of said plates; wedge



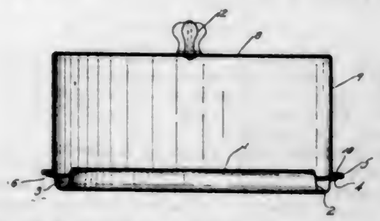
means co-operating with each of said followers and movable inwardly therewith; friction shoes co-operating with the plates and engaged by said wedge members and moved lengthwise of the mechanism thereby; and spring resistance means opposing movement of said friction shoes.

1,762,416. VIBRATOR. GEORGE B. PICKOP, New Haven, Conn., assignor to Malleable Iron Fittings Company, Branford, Conn. Filed Oct. 4, 1927. Serial No. 223,979. 7 Claims. (Cl. 259—144.)



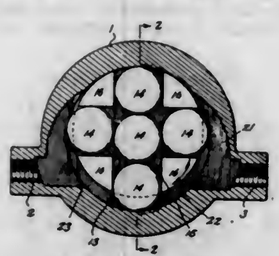
1. In a rapping device, a pair of spaced heads, a vibrator body mounted between said heads, and means for supporting the device comprising a member spanning said heads and having its ends secured thereto and attaching means at an intermediate portion of said member.

1,762,417. PORTABLE FOOD SAFE. FREDERICK F. PFEFFERKORN, Lakewood, Ohio, assignor to The Geo. H. Bowman Company, Cleveland, Ohio, a Corporation of Ohio. Filed Apr. 28, 1928. Serial No. 273,738. 1 Claim. (Cl. 45—71.)



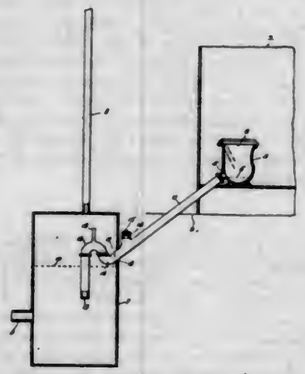
A portable food safe of the character described, including, in combination, a base and a removable cover therefor, said cover comprising a top portion and a skirt portion depending from the outer edge thereof, said base comprising an inner article-supporting portion having a substantially flat article-supporting top surface; an outer cover-supporting portion curved outwardly and upwardly to provide a seating groove to receive the lower end of the skirt portion of said cover; and an intermediate crumb-receiving portion of generally U-shape in cross section so that it has a vertically disposed inner wall, a vertically disposed outer wall and a generally horizontally disposed bottom wall, said inner article-supporting portion being mounted upon the upper end of the inner wall of said crumb-receiving portion and said outer cover-supporting portion being mounted upon the upper end of the outer wall of said crumb-receiving portion, said inner article-supporting portion being thereby surrounded by said crumb-receiving portion and said crumb-receiving portion being thereby surrounded by said outer cover-supporting portion, the upper end of said cover-supporting portion terminating, however, below the general plane of the top surface of said article-supporting portion, whereby a knife or the like may be passed horizontally inwardly along said surface without engaging said outer cover-supporting portion.

1,762,418. ROTARY FORCE PUMP. HENRY PETERSEN, Mount Auburn, Iowa. Filed Dec. 5, 1928. Serial No. 323,936. 8 Claims. (Cl. 103—136.)



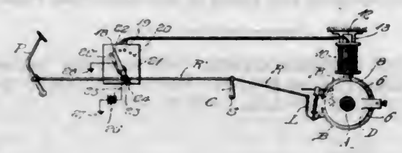
6. A rotary pump comprising a casing having a concentric chamber therein and an eccentric chamber, a piston rotatable in said chambers and having intersecting passages extending transversely unobstructedly therethrough, outer members and an intermediary member carried in said intersecting passages, the outer members having shifting rolling contact with said intermediary member and with the wall of the eccentric chamber.

1,762,419. SEWAGE-DISPOSAL FIXTURE. WALTER D. PETTIS, Oxford, Miss. Filed May 1, 1929. Serial No. 359,615. 3 Claims. (Cl. 210—6.)



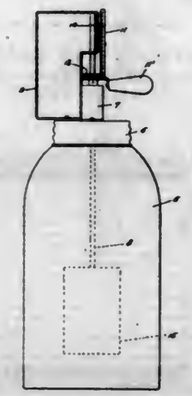
1. In combination, an inlet pipe adapted for conducting sewage from a toilet bowl, a settling tank supported below said inlet pipe and provided with a vent pipe and an outlet pipe, a conductor pipe connected with the inlet pipe and tank, said conductor pipe having an angular contour intermediate the outlet pipe and point of discharge into said tank to provide a liquid seal for preventing backflow of gases from the settling tank and said conductor pipe further provided with an opening between the liquid seal and the point of discharge into said tank to prevent the liquid seal from diminishing its level.

1,762,420. COMBINED MANUALLY AND MAGNETICALLY OPERATED VEHICLE BRAKE. EDWARD J. PRIME, Groveland, Mass. Filed June 7, 1926. Serial No. 114,248. 3 Claims. (Cl. 188—156.)



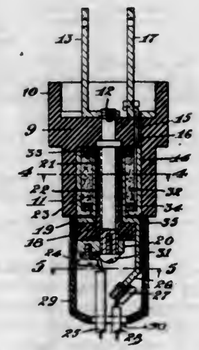
1. In combination, vehicle wheels having brake drums of magnetic metal, brake bands of magnetic metal extending around said drums, manually operated contracting means for said brake bands including a main manually operated actuator, and magnetizing means for said bands controlled by said actuator.

1,762,421. AGITATOR. VIRGIL MATTHEW PYLE, Stockton, Mo. Filed Nov. 16, 1929. Serial No. 407,684. 1 Claim. (Cl. 259—122.)



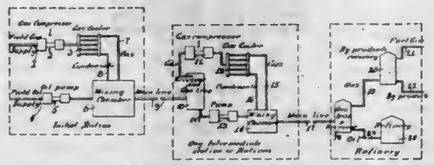
In an agitator of the character specified, an attaching member, an inverted U-shaped bracket secured to the attaching member and having a horizontally disposed bight portion spaced above the support, an agitator having a shaft extending through said support and the bight portion of said bracket and provided with a gear, a frame mounted rigidly on said support in a plane at right angles to the plane of said bracket and having a lateral extension overhanging said gear and the bight portion of said bracket and rotatably receiving the upper portion of said shaft, and a gear rotatably carried by the lateral extension of the frame and having means whereby the frame may be rotated.

1,762,422. SWIVEL ELECTRICAL CONNECTER. HAROLD ROHRDANZ, Inglewood, Calif. Filed May 1, 1928. Serial No. 274,178. 6 Claims. (Cl. 173—343.)



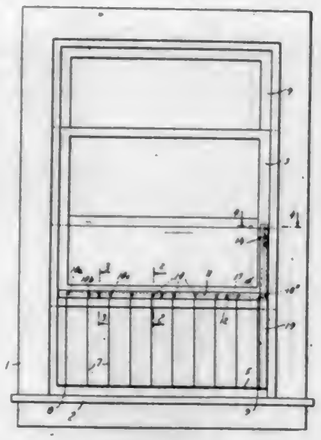
1. In a swivel electrical connecter, a pair of spaced telescoping relatively revolnble electrically conductive members, and a fragmentary electrically conductive material occupying the space between said members whereby an electric current may be directed from one of said members to the other through said fragmentary material.

1,762,423. METHOD OF TRANSPORTING PETROLEUM PRODUCTS. HENRY A. SCHARPENBERG, Bakersfield, Calif. Filed Jan. 24, 1927. Serial No. 163,306. 3 Claims. (Cl. 196—7.)



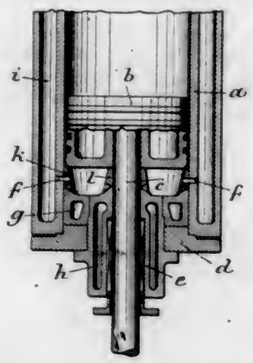
1. The method of transporting petroleum products which consists in separately receiving gas and oil taken from oil bearing earth structures, subjecting the gas, outside the presence of the oil, to compression and cooling to liquefy such portion as may be condensable, mixing, under pressure, the oil, the gas condensate and the uncondensable gas, and transporting the mixture through a pipe line.

1,762,424. WINDOW GUARD. KARL OSTEN SCHAUMAN and LUCY MARION SCHAUMAN, New York, N. Y.; said Karl Osten Schauman assignor to said Lucy Marion Schauman. Filed Dec. 15, 1928. Serial No. 326,268. 8 Claims. (Cl. 20—71.)



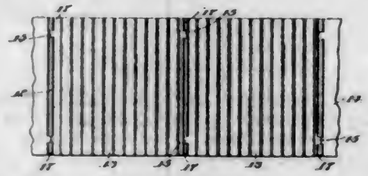
1. The combination of a window frame having a sill, a window sash fitting in said frame and movable away from said sill, and an extensible guard connected to said sill and to said sash, said guard comprising a flexible member connected to one side of the window frame.

1,762,425. CYLINDER FOR INTERNAL-COMBUSTION ENGINES. WALTER SCHENKER, Winterthur, Switzerland, assignor to the Firm: Sulzer Frères Société Anonyme, Winterthur, Switzerland. Filed Apr. 16, 1928, Serial No. 270,237, and in Switzerland May 7, 1927. 3 Claims. (Cl. 123—191.)



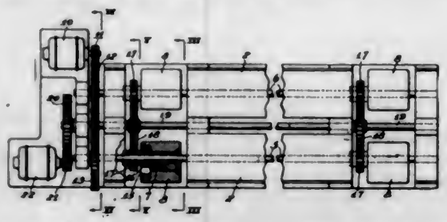
1. In a cylinder for double-acting internal combustion engines, a clearance space at the end of the cylinder facing the crankshaft, a circumferential ring of refractory metal disposed in said clearance space and welded to a member carried by the adjacent cylinder head and making a heat conducting-joint therewith and a second ring of refractory metal disposed within said clearance space and welded to another member forming a part of the cylinder head group so as to make a heat-conducting joint therewith, said second ring surrounding the piston rod and protecting it from heat.

1,762,426. HEAT EXCHANGER. EDVIN SÖHR, Lidingo, and BERTIL ALFRED LJUNGSTRÖM, Stockholm, Sweden, assignors to Aktiebolaget Ljungströms Ångturbin, Stockholm, Sweden, a Corporation. Filed Feb. 4, 1927, Serial No. 165,884, and in Sweden Jan. 20, 1926. 7 Claims. (Cl. 257—6.)



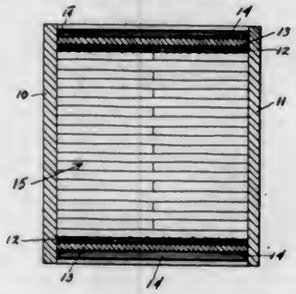
1. In a heat exchange apparatus, a supporting frame, heat exchange plates having end projections, and detachable means co-operating with said end projections for removably securing said plates in said supporting frame.

1,762,427. TUBE-ROTATING APPARATUS. RALPH C. STIEFEL, Ellwood City, Pa. Filed July 12, 1928. Serial No. 292,251. 3 Claims. (Cl. 80—11.)



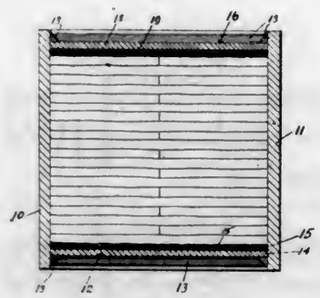
1. A tube rotating apparatus, comprising a table for receiving and supporting a tube at longitudinal intervals thereof, a pair of shafts extending longitudinally of the table below its top, cylindrical bearing sleeves eccentrically attached to and for rotation with said shafts between the tube-supporting points of the table, tube-supporting rollers mounted upon said sleeves, means for rotating said shafts to elevate said sleeves and rollers to raise a tube above the table, and means for rotating said rollers to revolve a tube supported by them.

1,762,428. CONTAINER FOR MANUFACTURED TOBACCO. HENRY P. TAYLOR, Winston-Salem, N. C. Filed Aug. 2, 1927. Serial No. 210,025. 3 Claims. (Cl. 131—11.)



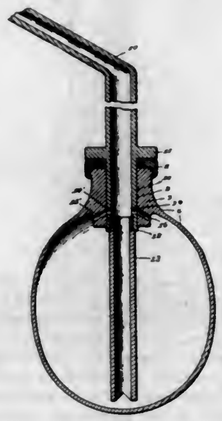
1. A head member for tobacco boxes composed of two layers of composition material, the outer layer being rigid and the inner layer being resilient, the surface of the inner layer being adapted to be placed next to the tobacco and being moulded with a reproduction of the surface of a plug of pressed tobacco taken from the interior of a batch of pressed plugs of tobacco.

1,762,429. CONTAINER FOR PACKING TOBACCO. HENRY P. TAYLOR, Winston-Salem, N. C. Filed Aug. 2, 1927. Serial No. 210,120. 1 Claim. (Cl. 131—11.)



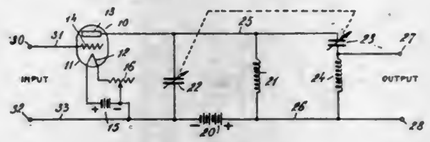
A head member for tobacco boxes comprising two layers of material secured to each other, one layer being rigid and the other layer being resilient, the resilient layer being adapted to be placed next to the mass of tobacco, said resilient layer having portions thereof of unequal density, said resilient layer being of a composition to cause the same to act in the same manner as a plug of tobacco to impart its surface to a certain degree upon the outer layers of tobacco in the box, and to have impressed on its surface, to a certain degree the contour of the outer plugs of tobacco.

1,762,430. SYRINGE. KAMEKICHI TOKITA, Seattle, Wash. Filed Aug. 31, 1929. Serial No. 389,650. 2 Claims. (Cl. 128—232.)



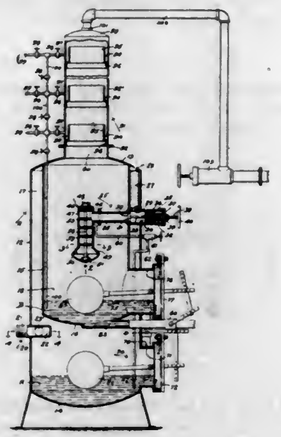
1. A syringe with a collapsible pressure chamber for drawing liquids therein, and for forcing liquids therefrom, a noncollapsible neck piece for a part of the chamber casing and provided with an opening therethrough, a tube rotatably held in the opening through the neck, with the inner end of the tube terminating inside of and near the opposite wall of the chamber and the outer end of the tube terminating outside the chamber holes in opposite sides of the tube and ducts extending through opposite sides of the neck from the interior of the chamber to the opening in the neck in line with the holes in the tube, and means for determining when the ducts and holes are in alignment to register.

1,762,431. ELECTRIC COUPLING SYSTEM. CARL E. TRUBE, Maplewood, N. J., assignor to Hazeltine Corporation, Jersey City, N. J., a Corporation of Delaware. Filed Jan. 9, 1924, Serial No. 685,148, and in Mexico Jan. 22, 1925. 9 Claims. (Cl. 179—171.)



8. In a radio receiving amplifier stage, the combination of a vacuum tube having a filament, a grid, and a plate, an electric coupling system including self-inductance and a plurality of capacities forming at least one closed oscillatory circuit, output terminals in said coupling system between which a resonant voltage is built up, connections from said filament and said plate to points in said oscillatory circuit between which the alternating voltage accompanying said resonant voltage is maintained so low by means of a ratio between the values of said capacities that highly selective amplification and stable operation are secured.

1,762,432. ABSORPTION TRAP. MILON J. TRUMBLE, Alhambra, Calif. Filed Jan. 3, 1928. Serial No. 244,247. 10 Claims. (Cl. 183—2.7.)

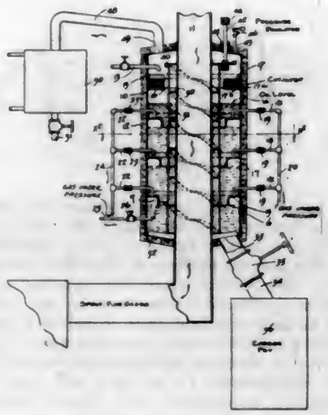


2. An absorption trap comprising: a high pressure chamber; a low pressure chamber; means for admitting a mixture of oil and gas to said high pressure chamber; means for conducting gas from said high pressure chamber to said low pressure chamber; means for conducting oil from said high pressure chamber to said low pressure chamber; means for mechanically atomizing a part of said oil in contact with said gas in said low pressure chamber; and means for separately conducting said gas and said oil from said low pressure chamber.

1,762,433. CRACKING STILL AND PROCESS. MILON J. TRUMBLE, Los Angeles, Calif. Filed July 24, 1924. Serial No. 727,910. 6 Claims. (Cl. 196—53.)

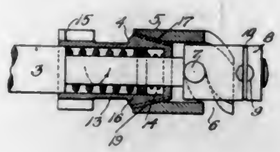
1. A two-phase oil treating apparatus comprising: an upwardly extending still body; a series of inverted gas or vapor cups secured therein; and means for heating said body by flue gases advancing through a passage separated therefrom by a heat-conductive wall, said passage being

tapered and being provided with a correspondingly tapered rotary helical scraper for removing deposits from the oil-contacting surface.



4. A two-phase oil treating apparatus embodying: a still body, traps comprising inverted cups arranged to confine a gaseous reagent at different levels in contact with and throughout the oil treated in said still body; and means for separately controlling the admission of such gaseous reagent to each of said traps.

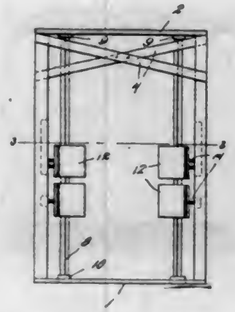
1,762,434. STARTER MECHANISM. EDWARD R. WHARTON, Medford, Mass. Filed July 1, 1929. Serial No. 375,218. 3 Claims. (Cl. 74—7.)



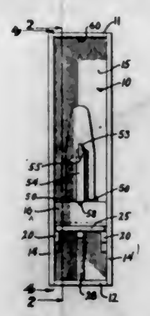
1. In a starter mechanism of the glass described, the combination with a driven gear, of a driving shaft provided with a radially projecting stud; a clutch member consisting of a sleeve loosely mounted on said shaft made at one end with opposed cam surfaces co-operating with said stud and adjacent its opposite end with eccentrically positioned recesses; a second clutch member loosely mounted on said shaft made at one end with eccentrically positioned beveled lugs to mesh with the recesses of said first member and at its opposite end with a pinion to co-operate with said gear, and spring means on said shaft engaging said second clutch member to yieldingly hold both members at the limit of their movement away from said gear.

1,762,435. BUCKING MACHINE FOR FOOTBALL PLAYERS. ERNEST E. BARTT, Coral Gables, Fla. Refile of abandoned application Serial No. 695,273, filed Feb. 26, 1924. This application filed Sept. 12, 1929. Serial No. 392,277. 2 Claims. (Cl. 273—55.)

1. A bucking machine including a frame having a top and a base secured in spaced relation by a corner post, diagonal bracing members at the sides of the frame, a pair of bucking frames mounted in the first mentioned frame between the top and the base thereof, and in relative spaced relation, said frames being adjustable toward or away from each other, and a plurality of bucking plates movably mounted on one of said bucking frames, and resisting means connected to said bucking plates and the first mentioned frame adapted for resisting the movement of the plates in the frame, whereby a foot ball player charging through the frame is engaged by said bucking plate and resisted in his passage therethrough.



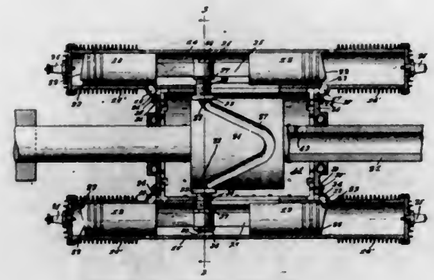
1,762,436. IRONING-BOARD CONSTRUCTION. JOHN P. DOMAN, Los Angeles, Calif. Filed Feb. 4, 1928. Serial No. 251,774. 2 Claims. (Cl. 68—10.)



1. In an ironing board, a cabinet including side stiles and a back, a transverse member secured adjacent the rear and intermediate the ends of said cabinet, said transverse member having a notch in the lower rear surface thereof, a brace adapted to engage the back of said cabinet, an ironing board pivotally connected to said brace, a cleat on said ironing board adapted to fit within said notch when the ironing board is in horizontal operative position, a block secured to each stile below and spaced from said transverse member, each of said blocks having an upwardly directed stop portion adjacent the front thereof, said stop portion engaging the lower surface of the ironing board, each of said blocks having a recess disposed rearwardly of said stop portion, the bottom of said recesses being shaped to guide the inner end of the ironing board.

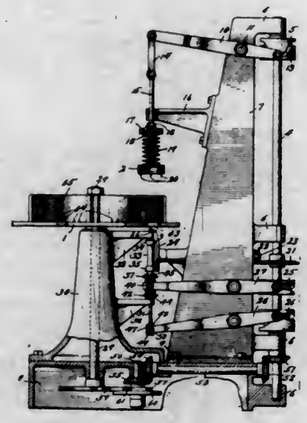
1,762,437. ENGINE. GEORGE E. FRANKLIN, Miles City, Mont. Filed Nov. 30, 1927. Serial No. 236,762. 4 Claims. (Cl. 123—58.)

2. In an engine, a housing, a plurality of cylinders having inlet and exhaust connections and mounted on the outer side of the housing, a plurality of pistons in each cylinder, a connecting rod between the pistons of each cylinder, a driven element having a cam groove and positioned within the housing, a shaft parallel with the cylinders and mounting the driven element, the shaft and



housing admitting fuel to all of the cylinders, serving as a manifold, and devices extending laterally from the connecting rods, positioned radially of the driven element, and engaging the cam groove thereof.

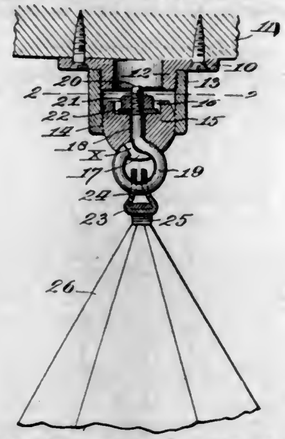
1,762,438. CORING MACHINE. HENRY E. HAMILTON, FREDERICK C. KRUEGER, and ADOLPH HAMILTON, New London, Wis., assignors, by mesne assignments, to said Henry E. Hamilton. Filed Sept. 20, 1924. Serial No. 738,873. 33 Claims. (Cl. 146—52.)



1. A coring machine comprising a helical knife supported for rotation, means to support a vegetable in position adjacent to said knife, comprising a rotatable table provided with openings to receive said knife, means for moving said knife rectilinearly through an opening in said table and a member supported in line with said tool to hold the vegetable in position on said table.

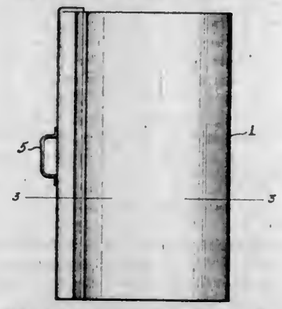
1,762,439. PUNCHING-BAG HOOK AND SWIVEL. REGINALD R. HODGKINS, Los Angeles, Calif. Filed Aug. 29, 1928. Serial No. 302,704. 3 Claims. (Cl. 272—78.)

1. In a punching bag hook and swivel, a member mounted to move freely in all directions, said member being provided in its underside with a slot, there being an opening formed through the body of said member and extending upwardly from said slot, a shank extending through



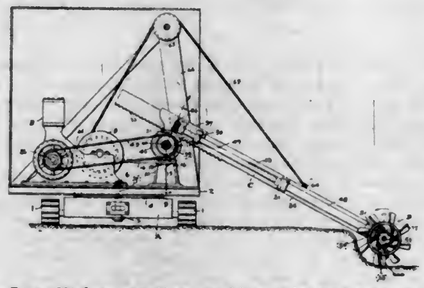
said opening, and an open ring carried by the lower end of said shank and arranged with the opening in the said ring within the slot in said member.

1,762,440. DEVICE FOR MAKING CONCRETE TEST SAMPLES. CHARLES S. HOWE. Los Angeles, Calif., assignor to Los Angeles Testing Laboratory, Los Angeles, Calif., a Corporation of California. Filed July 29, 1927. Serial No. 209,280. 2 Claims. (Cl. 25—118.)



1. A form for making concrete test samples, comprising a cylindrical tube cut longitudinally, slide plates on the edges of the longitudinal cut, a slidable locking means adapted to engage the slide plates and hold the edges of the form together, said locking means closed at one end.

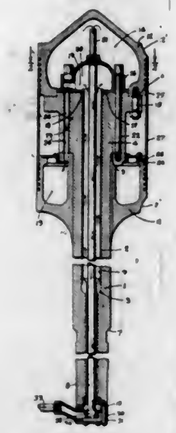
1,762,441. MACHINE FOR CLEANING AND DIGGING DITCHES. HJALMAR EMANUEL JOHNSON, San Francisco, Calif. Filed Oct. 14, 1927. Serial No. 226,097. 5 Claims. (Cl. 37—92.)



5. In a ditch excavating machine, a laterally projecting boom, a cutter wheel at the outer end thereof, power

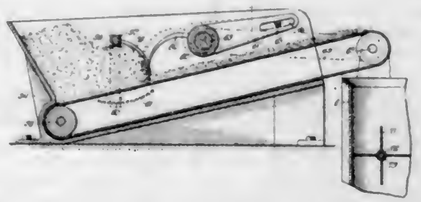
means extending along the boom for driving the cutter, and trailer means arranged to bear on the ground adjacent the cutter to support the boom and limit the depth of the cut.

1,762,442. PISTON FOR INTERNAL-COMBUSTION ENGINES. OLAV E. JORGENSEN, Forest Hills, N. Y. Filed Dec. 7, 1927. Serial No. 238,383. 20 Claims. (Cl. 123—176.)



1. In a double acting internal combustion engine, the combination of a piston rod having an enlarged end portion providing upper and lower shoulders, a combined upper head and skirt member digidly attached to said upper shoulder, a combined lower head and skirt member rigidly attached to said lower shoulder, said upper and lower members being attached to said respective shoulders near their adjacent skirt ends, and a sleeve in engagement with adjacent ends of said members and serving to close the intervening space.

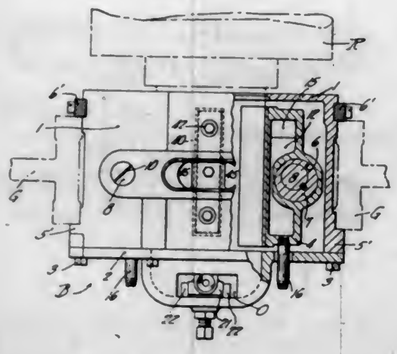
1,762,443. CANNING MACHINE. FREDERICK C. KRUEGER, New London, Wis., assignor, by mesne assignments, to Henry E. Hamilton. Filed Sept. 20, 1924. Serial No. 738,849. 19 Claims. (Cl. 226—69.)



3. In a device of the character described, the combination with a hopper for material to be conveyed, and a conveyor moving across an open portion of said hopper, of means restricting material in said hopper from moving with the conveyor, said means comprising a set of elongated teeth spaced from said conveyor.

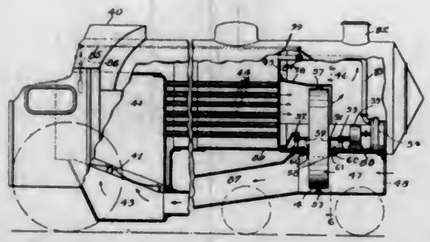
11. In a canning machine, the combination with adjustable means for feeding stringy material at a substantially constant rate, of a device adapted normally for measurement of such material by weight, and means for compacting and delivering to a can the material so measured, said device including a means for mechanically actuating the measuring device in the event that the weight operation thereof is ineffective.

1,762,444. JOURNAL BEARING. ARCHIBALD LADE, Northampton, Mass., assignor to B. F. Perkins & Son, Inc., Holyoke, Mass., a Corporation of Massachusetts. Filed Aug. 17, 1927. Serial No. 213,679. 5 Claims. (Cl. 308—62.)



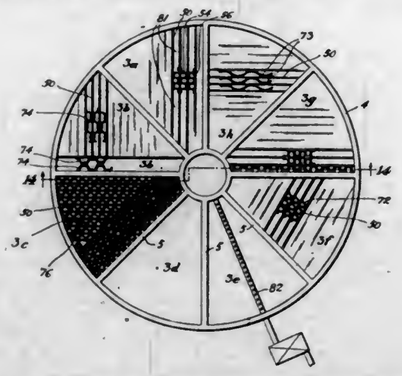
1. A journal bearing for calender rolls and the like comprising in combination, a hollow block having horizontal upper and lower walls, steps guided between said walls for sliding movements in a horizontal plane, the said steps having adjacent inner surfaces to provide a horizontally disposed bearing for a roll shaft and provided with openings therethrough which are disposed on vertical axes, the upper and lower walls being provided with openings disposed on vertical axes and members rotatable in said openings of the walls which are provided with cam portions acting on the openings in said steps whereby as the members are rotated the steps may be moved towards a shaft to align the inner surfaces thereof with a shaft between said steps.

1,762,445. AIR PREHEATER FOR LOCOMOTIVES. FREDRIK LJUNGSTRÖM, Lidingo-Brevik, Sweden. Filed Mar. 19, 1926. Serial No. 95,984. 6 Claims. (Cl. 110—56.)



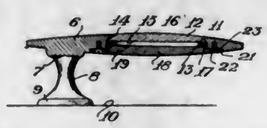
1. A locomotive comprising a furnace, an ash pit, a smoke-box, a chamber beneath said smoke-box, a floor-separating said chamber and said smoke-box, said floor having an opening in the same, a frame-work posited partly in said smoke-box and partly in said chamber and extending through said opening, means to rotate said frame-work, said frame-work containing a plurality of axially placed metal members arranged to form a plurality of passages through the frame-work, separating members between the edges of said opening and said frame-work, means to supply air to said chamber and a channel connecting said chamber with said ash pit.

1,762,446. REGENERATIVE AIR PREHEATER. FREDRIK LJUNGSTRÖM, Brevik, Lidingon, Sweden, assignor to Aktiebolaget Ljungströms Angturbin, Stockholm, Sweden, a Corporation. Filed Aug. 17, 1923, Serial No. 657,991, and in Sweden Aug. 23, 1922. 12 Claims. (Cl. 257—6.)



10. A rotor for use in regenerative heaters comprising a cylindrical frame work having an axis of rotation, a plurality of chambers in said frame work each comprising a plurality of plates arranged axially and contacting at spaced intervals to form a multiplicity of separated channels for flow of fluid axially through said frame work.

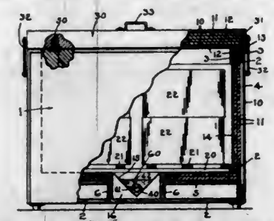
1,762,447. DOORKNOB. ERNEST W. LOWES, Harley, Ontario, Canada. Filed June 11, 1928, Serial No. 284,449, and in Canada June 8, 1928. 1 Claim. (Cl. 240—1.)



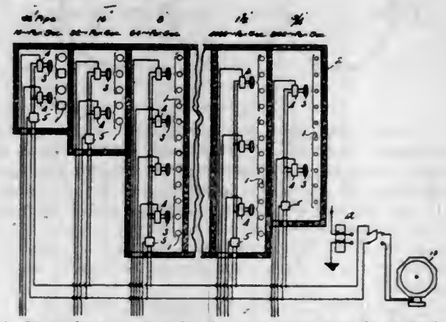
A door knob including a transversely elongated body with the main portion thereof offset laterally from the supporting shank for said body and provided with an opening extending through said main portion and opening on the opposite faces thereof with the wall of said opening bevelled toward one of said faces; a member within said opening for disclosing in the dark the location of said handle; a closure plate within said opening and opposed to said member; said member and said closure plate having their outer faces flush with the opposite faces of said body on which the opening opens and the outer faces of said member and said closure plate conforming respectively to the configuration of the faces of said body with which they register; said closure plate having reduced extended edges extending past the edge of the opening in said body for attachment to the face of the body with which the outer face of said closure plate registers; said last mentioned face of the body having a shallow countersunk recess to receive the extended portions of said closure plate; and means for spacing apart the opposed faces of said member and said closure plate within the opening in which they are removably positioned.

1,762,448. HEATER AND STERILIZER. ROBERT J. MACDUFFEE and GEORGE W. YOUNG, Seattle, Wash. Filed June 11, 1929. Serial No. 370,110. 3 Claims. (Cl. 219—40.)

1. A device of the class described, comprising an insulated supporting structure for a tank, a tank provided in its lower portion with a trough and detachably mounted in said structure, an electric heater of the immersion and open circuit type disposed in the trough, a cover for the supporting structure insulated electrically from the tank, an electric switch located in the cover and said structure, said switch being adapted to be opened by raising the cover and closed by lowering the cover, and means for establishing an electric circuit through the switch and said heater.

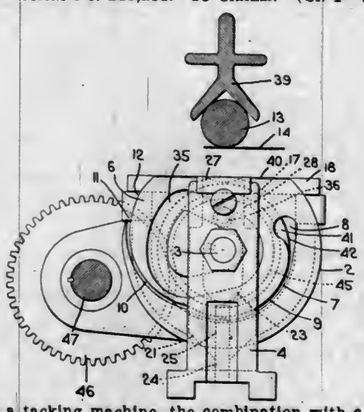


1,762,449. APPARATUS FOR THE PROPAGATION OF MUSIC AND OTHER CORRELATED SOUNDS. ARTHUR H. MARKS, New York, N. Y., assignor to Skinner Organ Company, Boston, Mass., a Corporation of Massachusetts. Filed Jan. 13, 1927. Serial No. 160,899. 10 Claims. (Cl. 179—1.)



1. In an instrumentality for producing sounds of various frequencies and complex characters, a plurality of soundproof compartments, each containing a group of speakers sounding at approximately the same fundamental frequency, each group being arranged in a gradation representing variations of tone or timbre.

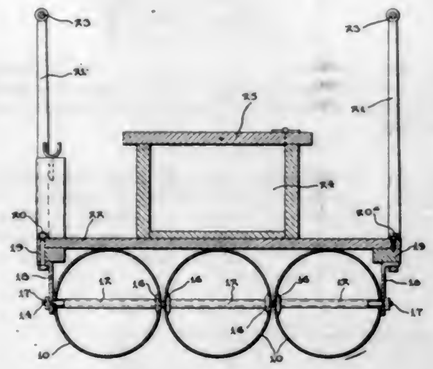
1,762,450. TACK FORMING AND DRIVING MACHINE. WILFRED B. MATHEWSON, Weymouth, Mass., assignor to American Window Shade Machine Co. Inc., Boston, Mass., a Corporation of Massachusetts. Filed Jan. 25, 1928. Serial No. 249,281. 18 Claims. (Cl. 1—2.)



1. In a tacking machine, the combination with a rotary combined templet and driver having a wire-receiving

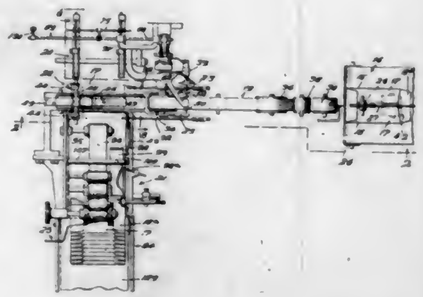
opening, of means co-operating therewith to form a tack from a length of wire placed in said opening, said combined templet and driver operating during its rotation to drive the tack thus formed.

1,762,451. BOAT. DANIEL F. MURPHY, Galveston, Tex. Filed Aug. 2, 1929. Serial No. 382,969. 2 Claims. (Cl. 114—61.)



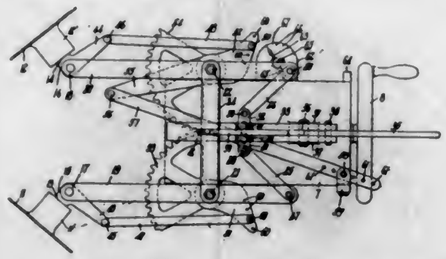
1. A boat comprising parallel tubular members, transverse assembling rods extending diametrically through the tubular members, a platform, and means carried by the assembling rods at their extremities and supporting said platform, the buoyant members being provided with diametrical tubular braces through which the assembling rods extend, the tubular brace members carrying terminal nuts exterior to the buoyant members and serving as spacers therebetween.

1,762,452. ENVELOPE MACHINE. ABRAHAM NOVICK, Flushing, N. Y., assignor to F. L. Smithe Machine Co., Inc., New York, N. Y., a Corporation of New York. Filed July 3, 1924. Serial No. 723,907. 32 Claims. (Cl. 93—62.)



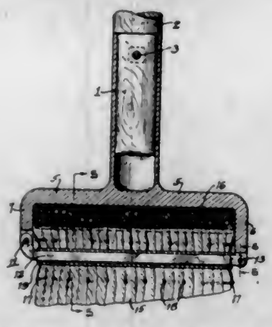
1. The machine herein described which comprises means for conveying a series of articles, means for arresting and aligning each of the articles at a predetermined point, a normally idle transfer mechanism to engage the article after it has been arrested and aligned and to transfer it, means for causing the transfer mechanism to immediately transfer the article when tripped, and means for causing each individual article to trip the transfer mechanism to initiate the operation of the transfer mechanism upon itself.

1,762,453. MACHINE FOR MANUFACTURING CASINGS FOR PNEUMATIC TIRES. JOSEPH E. PERRAULT, Watertown, and HERBERT L. DAVIS, Walpole, Mass., assignors, by mesne assignments, to Hood Rubber Company, Inc., Wilmington, Del., a Corporation of Delaware. Filed Aug. 19, 1927. Serial No. 214,148. 16 Claims. (Cl. 154—10.)



1. A machine for manufacturing casings for pneumatic tires having, in combination, a rotary core constituting a form for a casing, means for rotating the core, a pair of oppositely disposed forming discs, the faces of said discs being positioned in planes approximately radial to that portion of the periphery of the core adjacent thereto, mechanism to move said discs simultaneously and radially with relation to said core as a whole, and mechanism operated by said radial disc moving mechanism independently of the core to automatically change the angular relation of said discs to said core whereby the faces of said discs are caused to retain their positions in planes approximately radial to that portion of the periphery of the core adjacent thereto.

1,762,454. MOP. STIVIN POULOS, Boston, Mass. Filed Nov. 9, 1928. Serial No. 318,259. 2 Claims. (Cl. 15—150.)

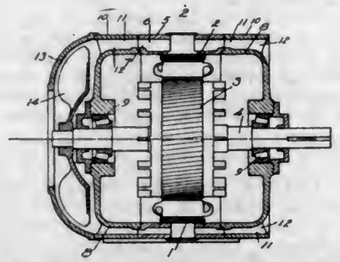


1. A T-shaped holder having an inverted trough-shaped head and a handle receiving member rigidly connected thereto, reinforcing ribs extending lengthwise of said head from opposite sides of said member and having their opposite ends bent over the ends of the head, a straight bar of rectangular cross section having one end pivoted to the end of one of said ribs, means for detachably securing the free end of said bar to the end of the other of said ribs, and a mop having a rectangular sleeve slidably mounted on said bar in the trough of said head.

1,762,455. ELECTRIC MACHINE. ANTON PREEDIT, Erie, Pa., assignor to Armor Electric Manufacturing Company, Erie, Pa., a Corporation of Pennsylvania. Filed Jan. 2, 1929. Serial No. 329,810. 5 Claims. (Cl. 172—120.)

1. In an electric machine, the combination of a stator; a stator housing; a rotor within the stator; an air circulating case over the housing forming air passages through

the housing; and an end bracket on the housing, said bracket having an inner wall and an outer wall extending radially outside and axially along the inner wall with an inter-

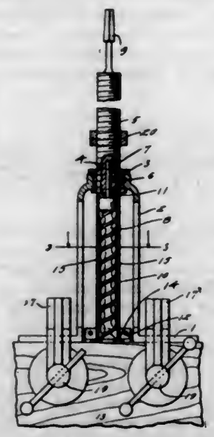


vening space forming an air circulating passage connecting with the passage in the housing, said bracket walls being connected by radially extending heat conducting posts.

1,762,456. MAKING CONDENSATION PRODUCTS OF UREA AND ALDEHYDE. KURT RIPPER, Vienna, Austria, assignor to Fritz Poliak, Vienna, Austria. Filed Sept. 27, 1924, Serial No. 740,406, and in Austria Aug. 25, 1924. 9 Claims. (Cl. 260—3.)

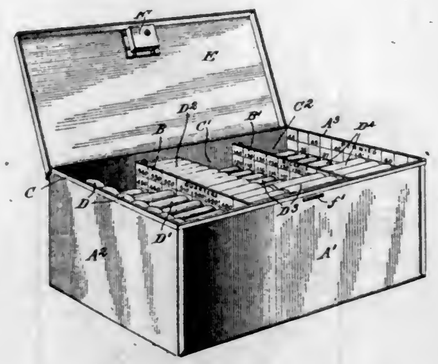
1. In the process for manufacturing condensation products from a urea and formaldehyde, the step which comprises adding to the initial condensation products, prior to the sol being transformed into the gel, organic solvents possessing the property of forming with water vapors volatile vapor mixtures and removing water from the reaction mixture by distillation.

1,762,457. MORTISING TOOL. LOUIS UHRIN, Westminster, Md. Filed Sept. 12, 1928. Serial No. 305,515. 1 Claim. (Cl. 144—70.)



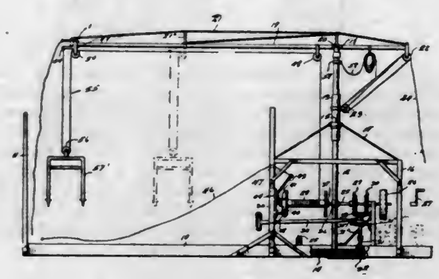
A portable mortising machine, comprising a frame formed of a U-shaped member having terminal out-turned lugs presenting a flat base to engage the work, the bent of the U being perforated to form a seat for a nut having a flange on its lower end to seat against the U-frame, a threaded rod engaging the nut and having one end adapted to engage a bit socket, the other end having a socket to receive the shouldered shank of an auger and a hollow square chisel surrounding the auger and having an inward annular flange engaged between the shoulder on the auger shank and the end of the threaded rod.

1,762,458. COIN BOX. GUSTAV A. WICKERT, Jr., Elsmere, N. Y. Filed Apr. 20, 1928, Serial No. 271,517. Renewed Apr. 19, 1930. 5 Claims. (Cl. 206—1.)



1. A coin box divided into compartments or coin spaces for holding coin rolls of several denominations, each coin space having an indicator comprising a series of numbers arranged progressively and in spaced relation, each number of the series being hidden from view by one of said rolls when the coin space is occupied.

1,762,459. HAY STACKER AND LOADER. JOHN M. WOLF, Devils Lake, N. Dak. Filed Jan. 19, 1929. Serial No. 333,645. 3 Claims. (Cl. 212—60.)

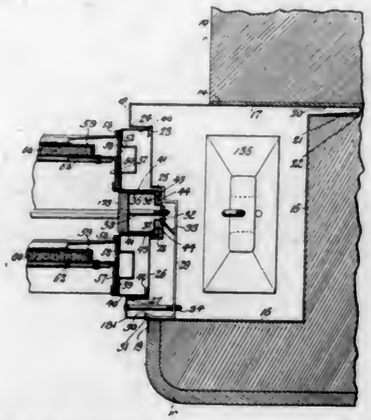


1. A hay loader of the character described comprising a base, a frame mounted on the base, a mast vertically mounted on the base and rotatable therein, a drive shaft rotatably mounted on the frame, a pair of opposed beveled gears spacedly mounted on said drive shaft, a drum loosely mounted on said shaft, clutch means for said drum, brake means carried by the frame and adapted to engage said drum, yieldable means for holding said drum into engagement with said brake means, and out of engagement with said clutch, and means engaging said gears for rotating said mast on said base.

1,762,460. WINDOW. EDWIN WILLIAM ABRAHAMSON, Buffalo, N. Y., assignor to Twin-Plex Metal Manufacturing Corporation, Buffalo, N. Y., a Corporation of New York. Filed Dec. 5, 1927. Serial No. 237,738. 8 Claims. (Cl. 189—66.)

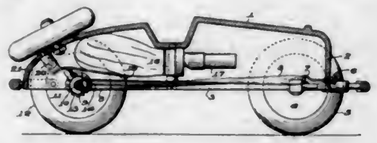
1. A window comprising a frame having a jamb, stops arranged on the jamb, a parting strip arranged on the

jamb and forming with the same and said stops vertical runways, and means for mounting sashes on the jamb including hanging strips carrying the sashes and sliding ver-



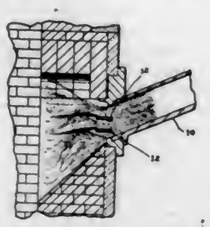
tically in said runways and provided with parts extending across the joint between said parting strip and the jam.

1,762,461. ELASTIC-PROPELLED SOUND-EMITTING TOY VEHICLE. MAURICE ALLAND, Atlantic City, N. J. Filed Apr. 5, 1929. Serial No. 352,722. 3 Claims. (Cl. 46—47.)



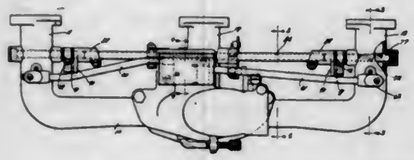
1. A toy vehicle, comprising a body having a lug and providing spaced journals, a driving axle extending through said journals and cut to provide a longitudinally extending hook, which does not increase the effective diameter of the axle, an elastic detachably connected to and extending between said lug and said hook, a toothed collar carried by said axle, and a resilient member at one end engaging said collar and secured at its other end to said body to produce a typical automobile sound as the vehicle is driven by the unwinding of said elastic.

1,762,462. METHOD OF BURNING POWDERED FUEL. L. V. ANDREWS, Worcester, Mass., assignor to Riley Stoker Corporation, Worcester, Mass., a Corporation of Massachusetts. Filed Mar. 6, 1925. Serial No. 13,467. 2 Claims. (Cl. 110—104.)



1. The method of burning pulverized fuel comprising the steps of feeding through a burner to a combustion chamber a supply of pulverized fuel and air which are intimately mixed and proportioned for complete combustion of the fuel, while maintaining a rate of fuel movement through the burner sufficiently greater than the rate of flame propagation to prevent the flame from striking back into the burner and such as would normally cause the flame to burn only at a distance from the burner, causing the fuel mixture to issue rapidly into and expand in a large combustion space, and maintaining a localized fuel zone in the fuel stream in said combustion space but adjacent to the burner which has a more rapid rate of flame propagation than the major portion of the fuel stream and sufficient to cause said major portion to start burning close to the burner.

1,762,463. CHARGE-FORMING DEVICE. FRED E. ASELTINE and WILFORD H. TEETER, Dayton, Ohio, assignors, by mesne assignments, to Delco Products Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Sept. 22, 1927. Serial No. 221,370. 24 Claims. (Cl. 123—52.)



1. A charge forming device for an internal combustion engine having a plurality of intake ports, comprising a main air manifold having branches communicating with said intake ports, a primary carburetor having fuel and air inlets to form a primary fuel mixture, means for conveying such mixture to the branches of said air manifold, means for controlling the flow of fluid from the branches of said manifold and a single means for operating said controlling means and equalizing the pressure in branches of the manifold.

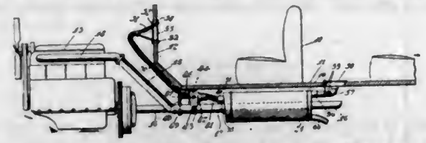
1,762,464. APPARATUS FOR REGULATING THE TEMPERATURE OF THE OIL CONTAINED IN THE SUMPS OF INTERNAL-COMBUSTION ENGINES. STAFFORD CONWAY BELFIELD, Twickenham, England. Filed July 6, 1929, Serial No. 376,442, and in Great Britain June 29, 1928. 3 Claims. (Cl. 184—104.)



1. An apparatus for regulating the temperature of the lubricating oil contained in the sump of an internal combustion engine comprising a heat transfer conduit located in said sump and immersed in the oil, air inlet means arranged to communicate with the outer air and adapted to be connected to said conduit for admitting air thereto, exhaust gas inlet means arranged to communicate with the engine exhaust and adapted to be connected to said conduit for admitting hot exhaust gases thereto, and a valve interposed between the respective inlet means and said conduit and adapted to place said conduit in communication with either of said inlet means and also adapted to close communication between said conduit and both of said inlet means simultaneously.

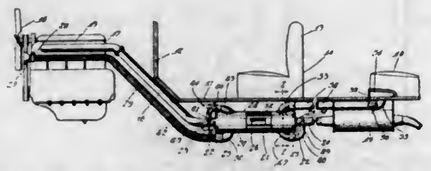
1,762,465. COMBINED MUFFLER AND HEATER FOR VEHICLES. SIDNEY J. V. BOVEY, Chicago, Ill., assignor, by mesne assignments, to Metalcraft Heater Corporation, Grand Rapids, Mich., a Corporation of Michigan. Filed Jan. 25, 1926. Serial No. 83,507. 9 Claims. (Cl. 257—241.)

1. A combined muffler and heater for vehicles comprising a casing, a fresh air receiving chamber located at one end of said casing, a heated air receiving and discharging chamber loacted at the other end of said casing, means for forming a communication between said chambers, and means for circulating the exhaust gases in



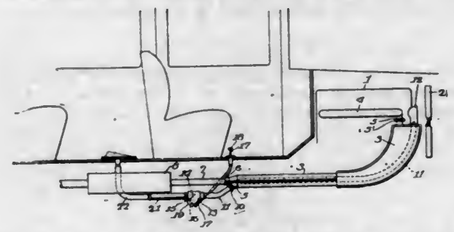
tubular columns around said communicating means, said columns communicating with each other at the opposite ends whereby the air passing through said communicating means is heated.

1,762,466. HEATER FOR VEHICLES AND THE LIKE. SIDNEY J. V. BOVEY, Chicago, Ill., assignor, by mesne assignments, to Metalcraft Heater Corporation, Grand Rapids, Mich., a Corporation of Michigan. Filed Jan. 25, 1926. Serial No. 83,508. 9 Claims. (Cl. 257—241.)



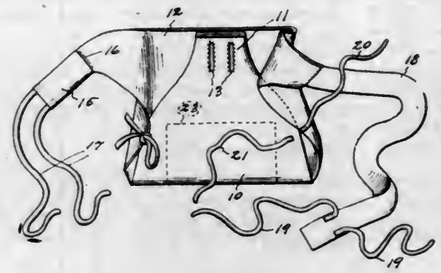
1. In an internal combustion engine, having a continuous exhaust gas conduit extending rearwardly from said engine, means for confining air to be heated in a tubular column about a portion of said exhaust gas conduit, means for conveying a portion of the exhaust gases in a tubular column around said tubular column of air, and means for conveying the tubular column of exhaust gas into said gas exhaust conduit.

1,762,467. AUTOMOBILE HEATER AND THE SILENCING OF AUTOMOBILE HEATERS. SIDNEY J. V. BOVEY, Chicago, Ill., assignor, by mesne assignments, to Metalcraft Heater Corporation, Grand Rapids, Mich., a Corporation of Michigan. Filed Jan. 13, 1928. Serial No. 246,436. 4 Claims. (Cl. 257—241.)



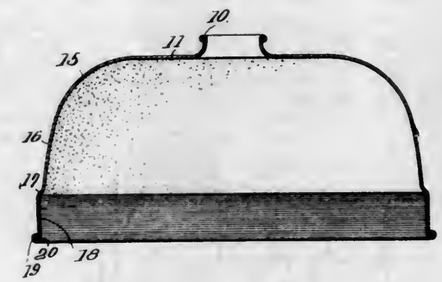
1. In a heating system for heating the interior of an automobile body, the combination with an air blower device, of a heating unit comprising means for collecting air from said blower, an outer casing member adapted to receive a fluid heating medium, said casing having a heat-insulating medium along and substantially throughout its inner wall, a metal covering over said heat-insulating medium of such a character to offer as a minimum of flow-resistance to said heating medium, a conduit leading from said air-collecting means through said casing in spaced relation to said metal covering and leading to the exterior of said casing, a hot air register adapted to be located within the automobile body space to be heated, and another conduit including a fabric section through which the heated air must pass and leading from said first-named conduit to said register for discharging heated air into the automobile body.

1,762,468. DIAPER. EVA G. BREWER, Dallas, Tex. Filed Dec. 3, 1927. Serial No. 237,430. 8 Claims. (Cl. 128—284.)



1. A diaper comprising an envelope and having attaching eyes at opposite ends, a strap attached to the envelope for securing it on the body of an infant, and a waterproofing sheet removably disposed within the envelope, the strap being threaded through the eyes at each end of said sheet for holding the said ends at the waist band when the strap is utilized for fastening the diaper.

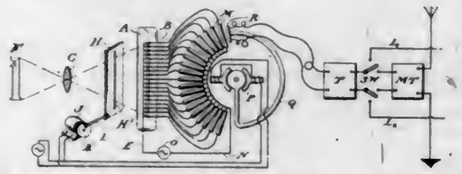
1,762,469. TABLE REFLECTOR. HARRY P. CLINE, Philadelphia, Pa., and ISIDORE SCHEINBERG and JOHN G. WATSON, Baltimore, Md., assignors to Silvergio Lamps, Inc., Baltimore, Md., a Corporation of Maryland. Filed Sept. 8, 1927. Serial No. 218,253. 4 Claims. (Cl. 240—104.)



1. In an illuminating unit to provide a uniform intensity of light for a billiard or like table for the area thereof comprising in combination, an incandescent electric lamp, an inverted cuplike reflecting shade whose diameter is substantially twice its depth and surrounding said lamp, and means to support the said lamp and shade so that the lower edge of the shade extends downward to below the normal plane of vision of a person while standing whereby to prevent light from the lamp or reflector from encountering the eyes of such standing person, said shade having a diameter approximately one-half its height above the table and having its reflecting surface of the form of a figure of revolution generated by the movement about the lamp axis of a line starting at a point at substantially one-half the depth of the shade above the predetermined location of the light source of the same, said line extending horizontally outwardly from such axis whereby to provide a first primary reflecting surface above the light source to reflect and distribute light rays away from the axis, said line then curving downward toward parallelism with said axis in an arc approximately equal in radius to substantially one-half the depth of the shade whereby to form a second primary reflecting surface above the light source to reflect and distribute rays away from and across the axis, said line then extending downwardly with a slight out-

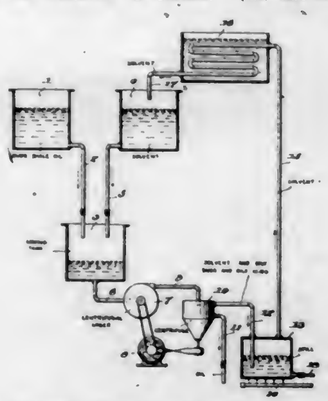
ward slope and terminating in substantial parallelism with the axis whereby to form a third primary reflecting surface below the light source to reflect and distribute light rays across the axis, said third surface cooperating also with first surface to reflect and distribute rays therefrom across the axis of the lamp at different angles than those of the primary reflected rays from said third surface, all of said surfaces cooperating to produce a uniform illumination by said lamp of a plane perpendicular to said axis and located a predetermined distance from said light source.

1,762,470. PICTURE-TRANSMISSION SYSTEM. FREDERIC C. CROWE, Erie, Pa., assignor of two-thirds to S. H. Cauley and C. L. Cauley, Erie, Pa. Filed Mar. 25, 1929. Serial No. 349,754. 12 Claims. (Cl. 178—6.)



1. In a picture transmission system, a plurality of light responsive elements arranged to form a light-sensitive area, means for projecting an image of a picture upon said light sensitive surface, movable means interposed between said image projecting means and said sensitive area for admitting only a line of said image to said sensitive area, and means for successively associating each of the elements influenced by said image line with an output circuit.

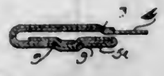
1,762,471. PROCESS FOR OBTAINING NICOTINE CARBOLATES FROM CRUDE SHALE OIL. DAVID T. DAY, Washington, D. C.; Fred J. Goble administrator of said David T. Day, deceased. Filed Nov. 12, 1924. Serial No. 749,570. 3 Claims. (Cl. 260—25.)



1. The process of extracting the compounds of oily bases and oily acids from crude shale oil, which process consists in commingling crude shale oil with a solvent comprised of liquid monohydric alcohol in which the oil is insoluble but in which said compounds of oily bases and oily acids are soluble and thus effecting the solution of said compounds in said solvent, and recovering the oily bases and oily acids from said oil.

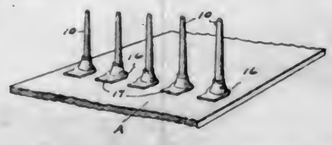
1,762,472. GARTER. OSCAR DOLEJAL, Kansas City, Kans. Filed Apr. 8, 1929. Serial No. 353,610. 1 Claim. (Cl. 241—6.)

A garter comprising an elastic strip, a U-shaped metallic clip at one end thereof, the legs of the clip being of the same length and one of said legs having a transverse slot therein adjacent the open end of the clip, the elastic strip having one end insertible through the slot from between the sides of the clip and extended to enclose the outer sides of the clip legs with the terminal end of the elastic strip



folded inwardly between the clip legs, the other clip leg having a pair of spaced transverse slots between the ends thereof, said terminal end of the elastic strip being threaded through the spaced slots and a hose attaching clasp at the other end of the elastic strip.

1,762,473. PIN AND MOUNTING THEREFOR. WILLIAM L. HANCOCK, Dallas, Tex., assignor to The Murray Company, Dallas, Tex., a Corporation of Texas. Filed Mar. 25, 1929. Serial No. 349,535. 10 Claims. (Cl. 19—78.)

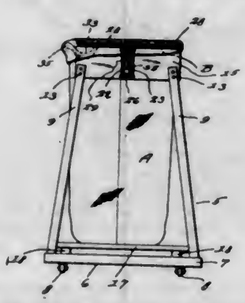


1. The combination with a distributor belt, of a non-metallic material-engaging pin, a separate metallic mounting by which the pin is secured, and means upon the mounting and extending through the belt for fastening the mounting thereto.

1,762,474. PROCESS FOR THE PREPARATION OF ARYLIDES OF 2-HYDROXY-3-NAPHTHOIC ACID. ERIC BERKELEY HIGGINS, Brentford, England, assignor of one-half to British Synthetics Limited, Brentford, England, a Company of Great Britain. Filed Nov. 26, 1926, Serial No. 151,021, and in Great Britain Dec. 28, 1925. 7 Claims. (Cl. 260—124.)

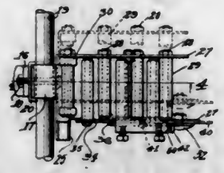
1. The process for making an arylide of 2 hydroxy 3 naphthoic acid which consists in mixing under substantially non-aqueous conditions a primary aromatic amine and a weak alkali with 2 hydroxy 3 naphthoyl chloride and subsequently adding water to the mixture.

1,762,475. PORTABLE LAUNDRY RECEPTACLE. HENRY HIRSCH, Jersey City, N. J. Filed Nov. 27, 1928. Serial No. 322,237. 5 Claims. (Cl. 83—26.)



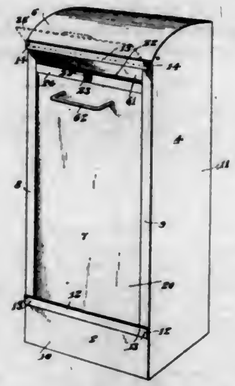
1. Stretching means of the class described and adapted to be pivotally borne by the frame member of a carrier, said means including pivoted levers having a nose portion and a spring connecting said nose portion to a wall of said frame member, said levers being operable to stretch the mouth of a bag placed in said frame member.

1,762,476. TENSION DEVICE. LEWIS T. HOUGHTON, Worcester, Mass.; John M. Houghton and Olive M. Lambert, executors of said Lewis T. Houghton, deceased, assignors to John M. Houghton and Olive M. Lambert. Filed Dec. 29, 1925. Serial No. 78,205. 9 Claims. (Cl. 242—153.)



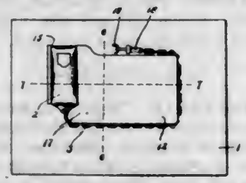
1. In a yarn guide and tension device, the combination of a guide pivoted on an axis parallel to the length of the guide, carried on a fixed frame, movable on its pivot by the action of the yarn, a fixed guide and means whereby both the pivoted and fixed guides may be adjusted together at will transversely to the yarn path to present new surfaces to the action of the yarn.

1,762,477. MAIL BOX. MYRON E. HUGHES, Iron Mountain, Mich. Filed June 13, 1928. Serial No. 285,150. 11 Claims. (Cl. 232—45.)



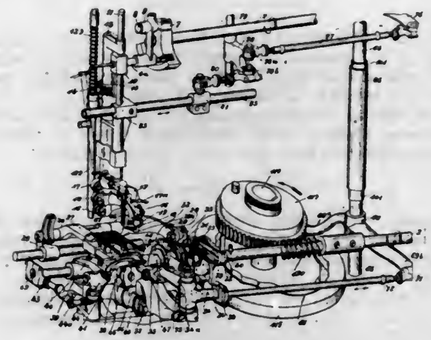
1. A mail box comprising a casing having an open front, a vertically movable door for closing said open front, means on the rear of the door and engaging with the casing to lock the door in position to partly close said open front to provide an entrance opening at the top of the front of the casing for the passage of mail into the latter, said means including a releasing member therefor provided with a pair of different shaped openings, one to receive a box owner's key and the other to receive a mail carrier's key for shifting said member to operate it to unlock the door.

1,762,478. DISPLAY DEVICE FOR JEWELRY. CHARLES E. KOETH, Rochester, N. Y., assignor to Hickok Manufacturing Company, Inc., Rochester, N. Y. Filed Apr. 24, 1926. Serial No. 104,303. 10 Claims. (Cl. 206—80.)



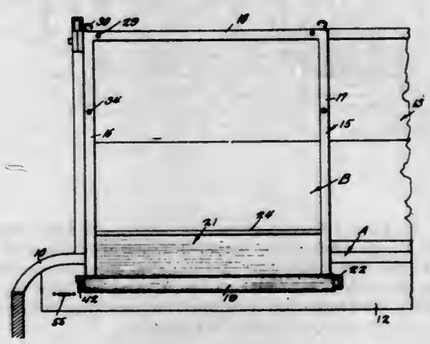
2. A display device comprising a base member, a projection formed with a groove about the same and having an extension at one side overhanging the base member in spaced relation thereto and over which an article of jewelry may be fitted, and an anchoring device for engagement by a flexible connection which extends from the article of jewelry in the groove about the projection.

1,762,479. FESTOON-SEWING MACHINE. KARL MAIER, Stuttgart, Germany, assignor to Union Special Maschinenfabrik, Gesellschaft mit beschränkter Haftung, Stuttgart, Germany. Filed Sept. 22, 1926, Serial No. 137,046, and in Germany Oct. 21, 1925. 20 Claims. (Cl. 112—100.)



1. The combination of a stitch forming mechanism including cooperating elements forming edge covering stitches by enchaining thread loops, a cutting mechanism in advance of the stitching elements, means for feeding the fabric in substantially a straight line, and means for imparting a lateral movement to the stitching and cutting mechanisms relative to the feed of the fabric and while the fabric is being fed for festooning the edge of the fabric, said cutting mechanism including means for shifting the position of the cutting devices angularly so as to follow the curved edge of the fabric as it is cut.

1,762,480. ANTIGLARE ATTACHMENT. GUS MARENTI, Washington, D. C. Filed Feb. 23, 1927. Serial No. 170,382. 5 Claims. (Cl. 296—97.)



1. An anti-glare shield for automobiles comprising a frame, means for connecting the frame with the windshield of an automobile, a roller rotatably carried by the frame, a flexible transparent colored shield wound upon the roller, lifting cables disposed on the opposite sides of the frame having their intermediate portions trained about guide rollers, the opposite ends of the cords being wound upon the roller in opposite directions, means for rotating the roller in opposite directions, and means for securing the free end of the shade to the cords.

1,762,481. CEMENTITIOUS PRODUCT AND PROCESS OF OBTAINING SAME. ROBERT A. MARR, Norfolk, Va., assignor to Ramar Syndicate Incorporated, Norfolk, Va., a Corporation of Virginia. Filed Jan. 12, 1924, Serial No. 685,895. Renewed July 31, 1926. 7 Claims. (Cl. 92—3.)

1. A process which comprises digestively cooking cellulosic material in a solution containing a sulfate, such solution being of a concentration substantially below 5%, thereafter pulping the cellulosic material and separating a substantial part at least of the disintegrated cementitious connective matter from the pulp, and thereafter isolating such separated cementitious connective matter, and molding the same.

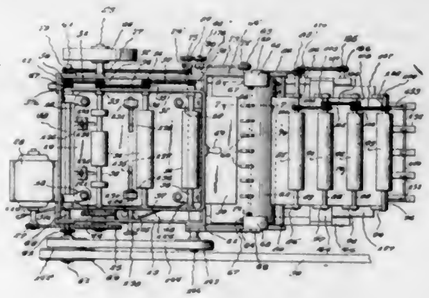
1,762,482. WELDING ROD. WILBER B. MILLER, Flushing, N. Y., assignor to Electro Metallurgical Company, a Corporation of West Virginia. Filed May 3, 1927. Serial No. 188,610. 2 Claims. (Cl. 219—8.)

1. A welding rod consisting of an iron alloy containing manganese 1.5% to 4.0%, molybdenum 0.20% to 0.60%, silicon 0.10% to 0.40%, and carbon 0.05% to 0.50%.

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1. A welding rod consisting of an iron alloy containing: carbon 0.1% to 1.0%, chormium 10% to 35%, manganese 0.1% to 3.0%, and silicon 0.75% to 3.0%.

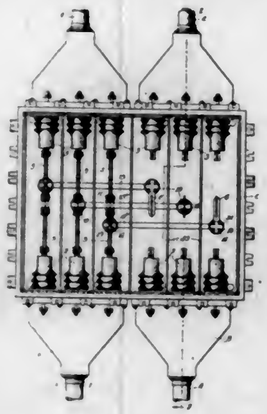
1,762,484. PRESS FEEDER AND RECEIVER. RAYMOND NOVIDOFF, New York, N. Y. Filed Feb. 12, 1929. Serial No. 339,424. 11 Claims. (Cl. 271—3.)



1. In a press feeder, means for removing a single sheet from an elevated stack, gripping mechanism adapted to clamp the edge portion of said removed sheet, a rotatable element cooperating with said gripping mechanism to advance said sheet and a runway for receiving said sheet and for delivering the same to a press.

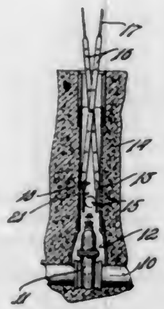
1,762,485. DISTRIBUTION BOX. JOSEPH RAH, Chicago, Ill., assignor to G. & W. Electric Specialty Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 7, 1927. Serial No. 181,666. 2 Claims. (Cl. 247—7.)

1. In a distribution box, the combination of leads entering said box, insulating partitions segregating a plurality of said leads, electrical conections between said leads, electrical connections between spaced segregated leads, and mountings for said last named connections, said mountings being disposed between partitions and to provide insulating means for said connections, said mountings



being provided with securing means for said connections and separate securing means for said mountings removed and insulated from said first named securing means.

1,762,486. GATE-VALVE-BOX CLEANER. LOUIS RODEN, Berwyn, Ill. Filed Feb. 16, 1927. Serial No. 168,803. 1 Claim. (Cl. 81—51.3.)

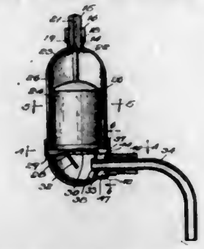


A cleaner for use in relatively deep and narrow valve boxes comprising a pair of flat elongated straight members, each member having a handle at one end and a tined jaw removably secured at the other end and having spaced apertures along substantially the whole of the portion intermediate the handle and the jaw, a pivot bolt engaging the said elongated members, said jaws being in deflected relation to said elongated members, whereby the jaws project in parallel relation to each other when opened for passage downwardly into a valve box as the cleaner is entered therein, a tine on one jaw being arranged to intermesh with the tines on the other jaw.

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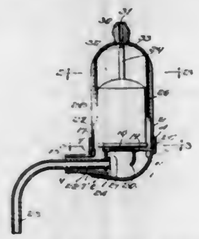
7. In a device of the class described, the combination of a bushing, a cap closing one end of said housing, said cap having a fluid opening, a float located in said housing,

a float support arranged for support between the cap and housing above the fluid opening, said support having means



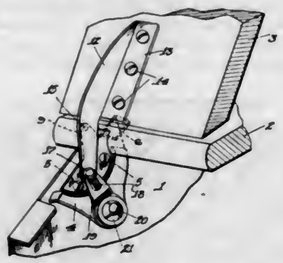
for limiting movement of a tube associated with the cap and having openings whereby fluid may pass from one to the other of said cap and housing.

1,762,488. AIR VALVE. JOHN F. SCHYLANDER, Chicago, Ill., assignor to Jas. P. Marsh & Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 9, 1927. Serial No. 182,411. 10 Claims. (Cl. 137—122.)



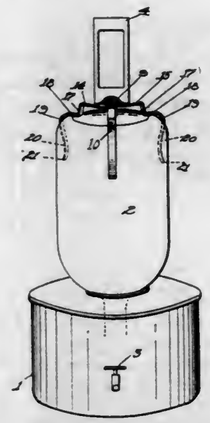
1. In a device of the character described, a housing, a cup shaped base receiving one end of the housing, a face on one side of the base having an opening therethrough, a nipple in said opening, and a curved flange having a center of curvature spaced from the center of said nipple on the inner end of the nipple of a shape conforming to the inner wall of the base around said opening.

1,762,489. HINGE FOR DESK LIDS AND THE LIKE. GEORGE STINSON and SELIM FRED, Gardner, Mass., assignors to Heywood-Wakefield Company, Boston, Mass., a Corporation of Massachusetts. Filed Mar. 7, 1928. Serial No. 259,724. 1 Claim. (Cl. 16—138.)



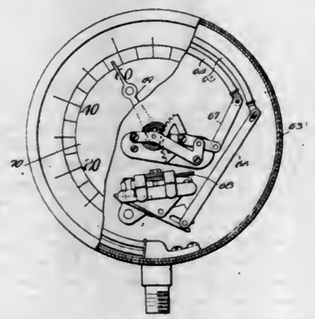
A hinge for a desk lid, to permit said lid to be raised into open position or lowered into a closed position in substantially the same plane as the stationary topboard of the desk, said hinge comprising a stationary element and a movable element, the two elements having adjacent portions pivotally connected on an axis contiguous to the edge of said topboard, and on which axis said lid is swung between its open and its closed positions, and a member pivotally attached at one end to said stationary element below said hinge axis and having at its other end an elongated slot to receive a pin carried by said movable element, said member adapted to swing on its pivot as said lid is raised and to serve as a limit stop for said opening movement by engagement of said pin with the end of said slot, the swinging movement of said member being frictionally retarded to prevent slamming of said lid on closure thereof.

1,762,490. HOLDER FOR DRINKING CUPS. FRANCIS P. SWALLOW, Worcester, Mass., assignor to United States Envelope Company, Springfield, Mass., a Corporation of Maine. Filed Apr. 6, 1927. Serial No. 181,441. 2 Claims. (Cl. 248—20.)



1. A device for supporting a drinking cup container on an inverted water bottle, comprising an arm to which said container is adapted to be secured, two other arms pivotally connected to said container arm and adapted to radiate laterally therewith from a common center, all three of said arms at their free ends providing downward extensions to engage the sides of the bottle, and inwardly of said downward extensions providing shoulders to rest against the bottle bottom, with spacers rising from said shoulders to offset the laterally radiating arm portions from the bottle bottom, whereby the cup container is spaced above said bottle bottom.

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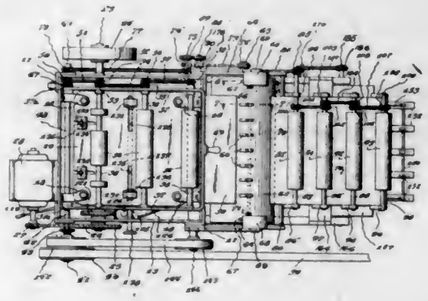
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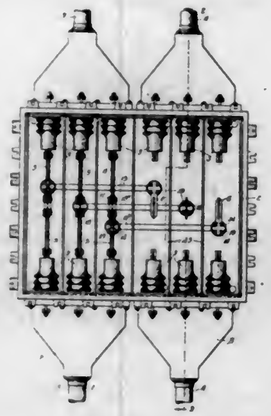
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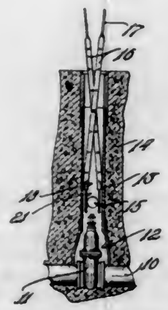
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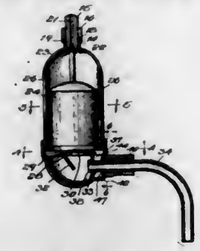


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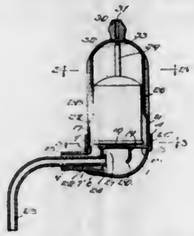
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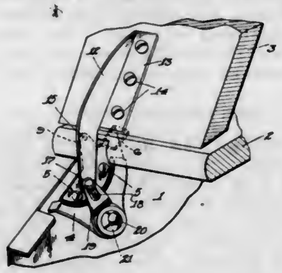
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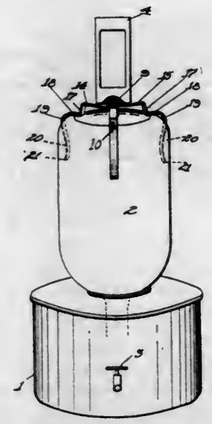
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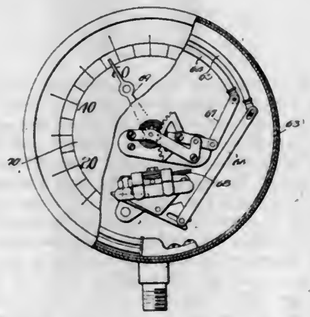
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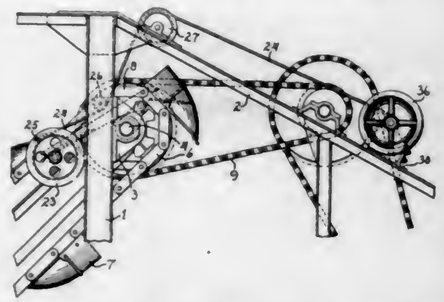
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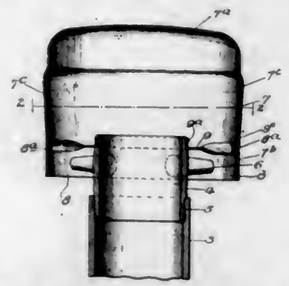
breaker and indicating mechanism connected for operation by said element, links forming a connection between said circuit breaker, indicating means and element, one end of each of said links being respectively connected with the indicator and circuit breaker and one of said links having means affording movement of said indicating means with respect to said circuit breaker.

1,762,492. MANUAL CONTROL MEANS FOR BUCKET CLEANERS. HARRY B. VAN SCOIT, Findlay, Ohio, assignor to The Buckeye Traction Ditcher Company, Findlay, Ohio, a Corporation of Ohio. Filed Jan. 27, 1928. Serial No. 249,934. 15 Claims. (Cl. 198—144.)



1. In a bucket cleaner, a support, a cleaning member pivotally connected to said support, means normally engaging one end of said cleaning member to hold it in fixed position with the other end in position to clean the bottom of buckets during their travel, but adapted to yield for permitting swinging of said member about its pivot when struck by an unyielding object, and manually operated means remote from said cleaning member but normally conected thereto for returning said cleaning member to normal position.

1,762,493. AIR CLEANER. ROY E. WATROUS, Evanston, Ill. Filed Apr. 28, 1926, Serial No. 105,099. Renewed Aug. 1, 1927. 3 Claims. (Cl. 183—91.)

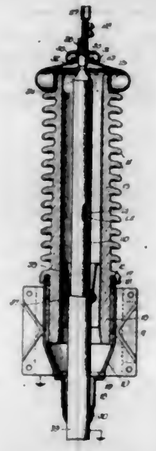


1. In an air cleaner, the combination of an upwardly extending tubular element connected to an intake subjected to suction, and having its upper end open, a hood having a closed top above the element and an annular depending wall spaced outwardly from said element and extended below the upper end of said element to form between the element and the hood, an upwardly extending inlet having its lower end open and through which air will be drawn upwardly into the hood and around said element, and fixed deflectors in said inlet to cause the air drawn into the lower end of the hood to swirl in the hood in transit to the upper open end of the element and to cause the particles in the air to be thrown outwardly to the annular wall, the deflectors terminating inwardly of said wall to leave an annular space through which the trapped particles may fall out of the hood.

1,762,494. PROCESS OF TREATING RUBBER LATEX AND PRODUCT THEREOF. WILLIAM B. WESCOTT, Boston, Mass., assignor to Rubber Latex Research Corporation, Boston, Mass., a Corporation of Massachusetts. Filed July 8, 1927. Serial No. 204,410. 6 Claims. (Cl. 18—50.)

1. A method of preparing dispersible rubber concentrates from rubber latex which comprises adding hemoglobin to the latex and spray drying the resulting mixture of latex and protective colloid in contact with air containing a known moisture content.

1,762,495. POTHEAD. PAUL F. WILLIAMS, Chicago, Ill., assignor to G & W Electric Specialty Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 19, 1925. Serial No. 10,210. 4 Claims. (Cl. 247—6.)

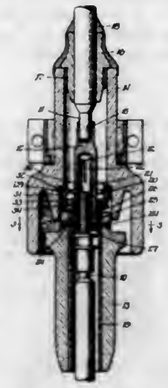


1. In a device of the class described, the combination of a pothead attaching bracket having a cup, an insulating tube mounted upon and sealed with respect to said cup and being of a smaller internal diameter than said cup, an insulated cable conductor extending through said cup and tube, and a metal sheath covering said cable and entering the bottom of said cup, passing therethrough and extending to a point below the upper edge of said cup and within said tube to decrease the possibility of rupture of the insulation of said cable, said end of the sheath being provided with conducting means supported by the sheath and tapered away from the cable to present the greatest resistance to the dielectric lines of force which tend to rupture the insulation.

1,762,496. CONNECTING MEANS FOR ELECTRICAL CONDUCTORS. PAUL F. WILLIAMS, Chicago, Ill., assignor to G. & W. Electric Specialty Company, Chicago, Ill., a Corporation of Illinois. Filed July 10, 1925. Serial No. 42,652. 1 Claim. (Cl. 173—353.)

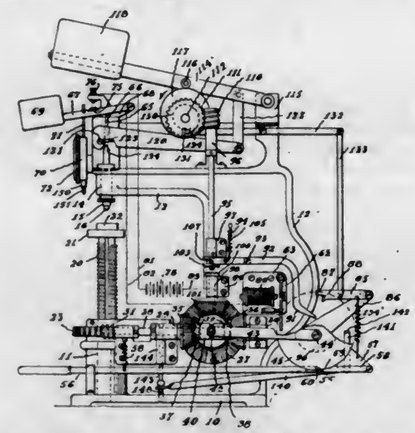
In a connecting device, the combination of a fixed insulating bushing including a body portion having a bore therethrough, said body portion having an inner and outer skirt, said outer skirt etxending below said inner skirt, said inner skirt being of larger inside diameter than said bore to provide a shoulder in said bushing, a conductor extending into said bushing, a connector secured to said conductor and terminating within said bushing, means disposed between said bushing and connector and cooperating with said shoulder for positioning said connector, an insulating handle having a bore therethrough, a conductor extending into said bore, a connector secured to said conductor, and a member movable with said handle and co-

operable with a portion of said first named connector to lock said connectors in electrical connection, said handle being insertable up into said bushing to effect connection



between said connectors and having portions guidable by said skirts and so disposed that no access can be had to the parts of said device when said connectors are in connection.

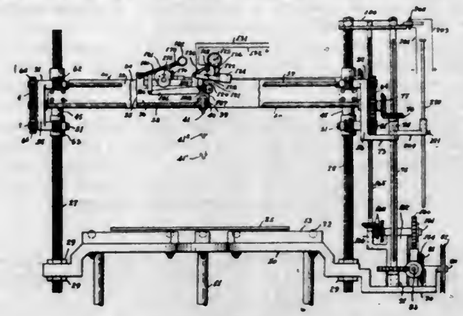
1,762,497. AUTOMATIC HARDNESS TESTER. CHARLES H. WILSON, Pelham, N. Y., assignor to Wilson-Maeulen Company, Inc., New York, N. Y., a Corporation of New York. Filed Aug. 12, 1926. Serial No. 128,853. 44 Claims. (Cl. 265—12.)



1. In combination, an engagement device; a test piece support; mechanism for moving said support toward or from said device; an indicator connected to said device; a control means for causing said mechanism to move the support toward the device; means actuated by the movement of said device to cause said control means to stop said mechanism; a major load; and means set in operation by said control means when said mechanism is thus stopped to cause said major load to press upon said device and then to cause said mechanism to move the support away from said device.

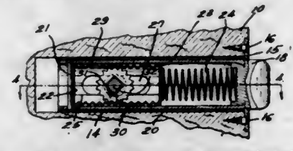
1,762,498. HARDNESS-TESTING METHOD AND APPARATUS. CHARLES H. WILSON, Pelham, N. Y., assignor to Wilson-Maeulen Company, Inc., New York, N. Y., a Corporation of New York. Filed Jan. 14, 1927. Serial No. 161,161. 24 Claims. (Cl. 265—12.)

1. In combination, a test head; an engagement device carried thereon; a test piece support; mechanism for automatically moving said test head toward said support causing it to pause, then moving it from the support; a minor load carried on said head and adapted to press on said device; an indicator connected to said device; a



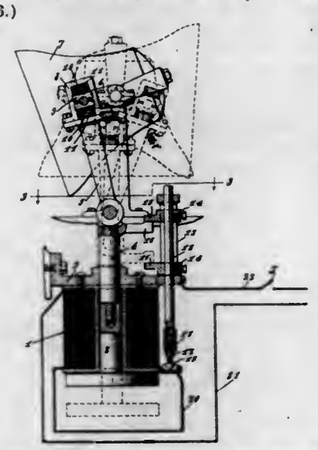
major load carried on the test head; means for automatically pressing said major load on said device during the pause and then removing it; and means actuated by the moving of said test head away from the support to cause said mechanism to be disabled.

1,762,499. LATCH-BOLT STRUCTURE. EDWALL JAMES BAUMÉ, Santa Monica, Calif. Filed Dec. 14, 1927. Serial No. 239,853. 5 Claims. (Cl. 292—172.)



1. In a door latch structure, the combination of a casing, a protractable latch bolt having a carrying frame at its inner end, oppositely disposed abutment members, one being fixed to said frame and the other slidable therein, a spring intermediate the slidable abutment and the head of said bolt tending to separate them; a roll-back actuator expansible axially to press against said abutments and move the latter to and from each other, and means to operate said actuator.

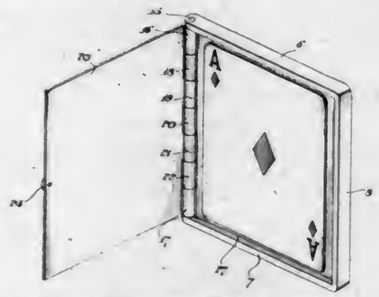
1,762,500. ELECTROMAGNETIC LOCOMOTIVE BELL RINGER. GEORGE M. BESSANT, San Bernardino, Calif. Filed Apr. 4, 1928. Serial No. 267,382. 1 Claim. (Cl. 172—126.)



A reciprocating motor comprising a magnet, a supporting bracket therefor, an armature having a threaded bore,

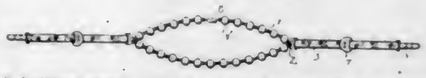
a rod having a reduced extension threaded in said bore and providing a connection between the armature and a member to be operated, a circuit for the magnet, a stationary contact arranged in the circuit, a second rod arranged at one side of the magnet, a substantially U-shaped guide for the second mentioned rod supported by the bracket for the magnet, the parallel portions of said bracket having aligned openings to slidably receive said rod, a plunger-like contact carried by the lower end of the rod and engaging the first contact when the rod is in lowered position, a pair of spaced adjustable collars carried by said rod, and characterized by projections extending in the direction of the magnet, and an arm carried by the first mentioned rod and operating between said collars to alternately contact the projections thereof for the purpose specified.

1,762,501. MAGIC CARD BOX. CARL F. BREHMER, Philadelphia, Pa. Filed Apr. 12, 1928. Serial No. 269,842. 8 Claims. (Cl. 272—8.)



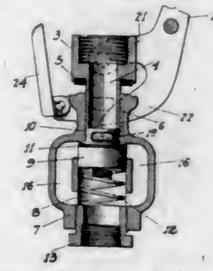
1. A magic card box comprising a frame, a partition mounted in said frame subdividing said box into two compartments, two doors for closing said compartments, one of said doors being free to open, the other of said doors being normally secured in the closed position and which when so secured seemingly constitutes a fixed bottom for the box.

1,762,502. GARMENT ACCESSORY. RALPH ORDWAY BROOKS, New York, N. Y. Filed Feb. 20, 1929. Serial No. 342,816. 1 Claim. (Cl. 63—1.)



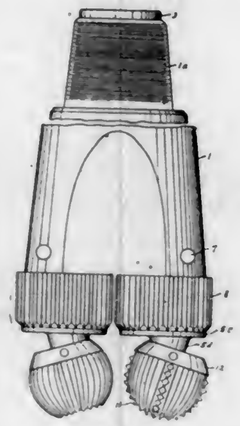
A holding device for the shoulder straps of a garment comprising a necklace having ornamental beads thereon, adjustable ribbons having holding devices connected to said necklace intermediate said beads, said ribbons having lingerie clasps at their outer ends.

1,762,503. SELF-CLOSING VALVE. WILLIAM A. BUCKNER, Fresno, Calif. Filed May 3, 1928. Serial No. 274,805. 4 Claims. (Cl. 251—115.)



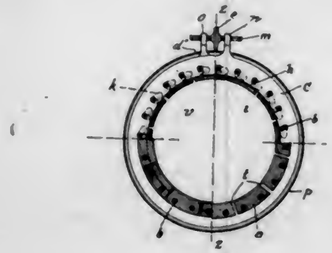
1. A valve comprising a body having a main bore and a reduced neck bore beyond the main bore, a plunger closely slidable in the main bore and normally seating against the base of the neckbore to close the same at said base, and a longitudinal bypass formed in the body and communicating with the main bore at both ends thereof whereby when the plunger is depressed from its seating position, water may pass from the main bore beyond one end of the plunger to the neck beyond the other end of the same.

1,762,504. ROLLER BIT. CLINTON H. M. BULL, Houston, Tex., assignor to Reed Roller Bit Company, Houston, Tex., a Corporation of Texas. Filed Aug. 15, 1927. Serial No. 212,994. 16 Claims. (Cl. 255—71.)



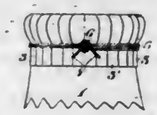
1. In a rotary boring drill, a head having a pipe bore and shaft bores, a pipe fitting in said pipe bore, an idler gear on said pipe, and shafts fitting in said shaft bores, and having gear teeth thereon meshing with the teeth of said idler gear, and cutters on said shafts.

1,762,505. FIREPLACE. EUGEN BURG, Essen, Germany. Filed Oct. 25, 1927, Serial No. 228,545, and in Germany Nov. 4, 1926. 14 Claims. (Cl. 110—75.)



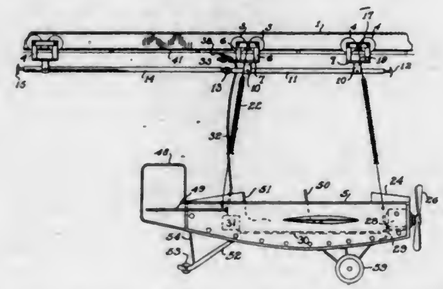
1. A fire place, comprising a combustion chamber having its wall composed of blocks in longitudinal rows spaced from one another for providing passages for the admission of secondary air, means for supplying secondary air through said pssages, means for displacing the rows of said blocks relatively to one another so as to vary the cross-sectional area of the passages provided between the same, and means for supplying fuel into said combustion chamber.

1,762,506. MILK-CAP-SECURING MEANS. BENJAMIN G. CAMPBELL, Oakland, Calif., assignor of one-half to C. C. Wing, Oakland, Calif. Filed Apr. 18, 1927. Serial No. 184,590. 1 Claim. (Cl. 215—38.).



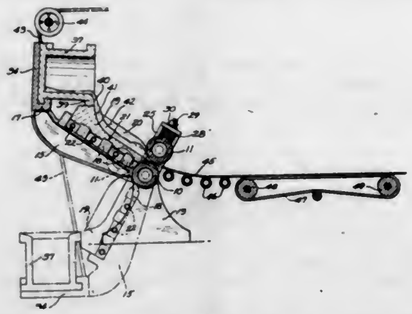
A bottle closure having a depending skirt portion adapted to enclose the mouth of a bottle, a continuous flexible cord wrapped a plurality of times around said skirt portion and having its ends releasably positioned and a sticky sealing medium applied in a substantially sticky state to the releasably positioned end portions of said cord.

1,762,507. AERIAL AMUSEMENT DEVICE. LEVITT LUZERN CUSTER, Dayton, Ohio. Filed Aug. 28, 1926. Serial No. 132,192. 5 Claims. (Cl. 104—23.)



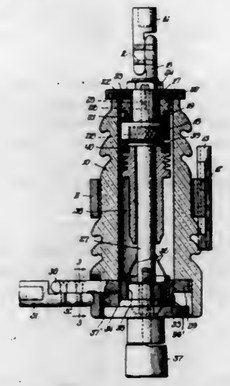
1. An apparatus of the type described, comprising an aerial track line, a carrier free to roll over the latter, a body depending from said carrier, a stop rod carried by said carrier, a bumper rod coupled to the rear portion of the stop rod, and a separate carrier on the track for the bumper rod.

1,762,508. APPARATUS FOR PRODUCING SHEET GLASS. JOHN L. DRAKE, Toledo, Ohio, assignor to Libbey-Owens Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Oct. 24, 1928. Serial No. 314,562. 15 Claims. (Cl. 49—33.)



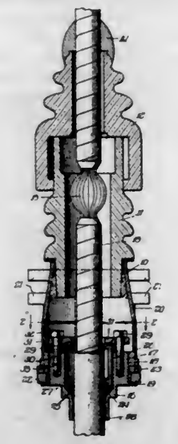
1. In apparatus for producing sheet glass, sheet rolling mechanism, means for supplying molten glass thereto including a receptacle adapted to contain the molten glass and a member for receiving the glass from the receptacle and guiding it to the rolling mechanism, and means for simultaneously moving the receptacle and member so that the glass will flow from said receptacle to said rolling mechanism without any fall or drop.

1,762,509. SINGLE-CONDUCTOR DISCONNECTER. GEORGE P. EDMONDS, Chicago, Ill., assignor to G. & W. Electric Specialty Co., Chicago, Ill., a Corporation of Illinois. Filed May 20, 1925. Serial No. 31,521. 10 Claims. (Cl. 200—163.)



1. In a device of the class described, the combination of an insulating tube, a plurality of spaced contact members carried thereby, a contact rod for forming an electrical connection between said contact members, said rod and one of said contact members having cooperating interfitting locking portions for positively locking said contact rod in operative position, and an insulating bushing surrounding said contact rod for protection purposes and adapted to rest upon one of said contact members when said rod is in an inoperative position.

1,762,510. POTHEAD. GEORGE P. EDMONDS, Chicago, Ill., assignor to G. & W. Electric Specialty Co., Chicago, Ill., a Corporation of Illinois. Filed July 10, 1925. Serial No. 42,674. 5 Claims. (Cl. 247—6.)



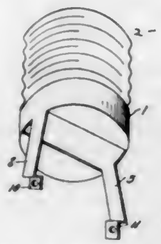
1. In a pothead arangement, the combination of a pothead member into which a cable extends, a cable entrance secured in position with respect to said member and having a packing receiving portion, a clamping member to which the cable may be secured, said clamping member being yieldably and loosely mounted to engage the packing and compensate for any irregularities of the packing, and a clamping ring cooperating with said clamping member for securing the cable in position and being secured directly to said cable entrance, by securing means passing through said ring into said cable entrance.

1,762,511. ELECTRIC-LAMP SOCKET. GEORGE HENRY ELWELL, New Haven, Conn., assignor to the Greist Manufacturing Company, a Corporation of Connecticut. Filed Aug. 17, 1927. Serial No. 213,670. 3 Claims. (Cl. 173—362.)



1. A cap having an aperture and an integral flange surrounding the aperture and projecting within the cap; a circular washer having a bur encircling the flange, the bur projecting in the same direction as the flange; and a flanged nipple inserted into the aperture, the three being united by laterally disposed displacements of their annular walls within the cap.

1,762,512. ELECTRIC-LAMP SOCKET. GEORGE HENRY ELWELL, New Haven, Conn., assignor to the Greist Manufacturing Company, a Corporation of Connecticut. Filed Oct. 10, 1927. Serial No. 225,191. 4 Claims. (Cl. 173—358.)

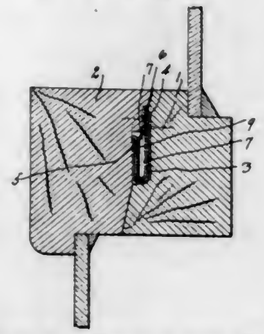


1. An electric lamp socket comprising, in part, a body of insulation having indentations in its peripheral surface, each indentation providing a shoulder, and a screw-shell having integral arms, each arm having an off-set terminal for locking engagement with a body shoulder.

1,762,513. LAMINATED GLASS. HENRY A. GARDNER, Washington, D. C. Filed May 23, 1927. Serial No. 193,736. 5 Claims. (Cl. 49—81.)

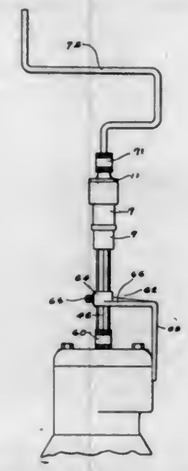
1. As an article of manufacture, a composite body comprising a plurality of glass sheets firmly united together by means of a non-brittle binder containing a toluol sulfonamide-aldehyde resin, said binder being resistant to discoloration by ultra-violet light.

1,762,514. WEATHER STRIP. JOSEPH P. GLASER and LOUIS F. JULIEN, Detroit, Mich., assignors to Chamberlain Metal Weatherstrip Co., Detroit, Mich., a Corporation of Michigan. Filed Aug. 11, 1928. Serial No. 298,994. 5 Claims. (Cl. 20—69.)



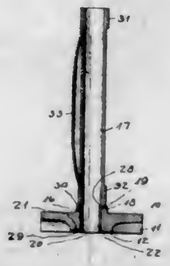
1. In a weather strip, a strip of metal bent upon itself to provide a double thickness throughout its length, the strip being formed to provide a space between the thicknesses of metal at the bent edge, the bent edge of the said strip being upturned to provide a U shaped channel between the upturned portion and the body portion, and a companion strip formed from a single thickness of metal return bent to provide a chamber, the metal enclosing the chamber being adapted to engage in the channel of the first named strip and the metal at the top of the chamber extending into engagement with the body of the strip to support and stiffen the chamber wall formed by the return bent portion.

1,762,515. SPEED WRENCH. FREDRICK A. HIERSCH, Seattle, Wash. Filed Sept. 11, 1929. Serial No. 391,769. 3 Claims. (Cl. 81—57.)



1. A speed wrench of the class described comprising a nut or bolt engaging member, an operating shaft engaging said member, change speed gearing capable of imparting different speeds to said shaft, a tube encircling said shaft having stop means adjustably secured thereto, a gear secured to the upper end of said tube, another gear secured to the upper end of the operating shaft, two internal gears adapted to engage said gears, a relieved chamber which is longer than either of said gears separating said internal gears, a driven shaft slidably connecting the operating shaft and the speed change gearing, and means for driving the said speed change gearing.

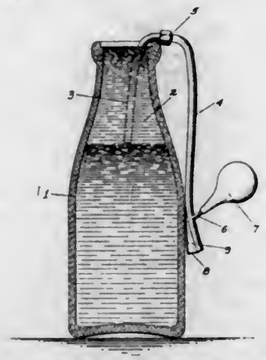
1,762,516. COP HOLDER. ANTHONY HLAVAC, Chicago, Ill., assignor to Eber J. Hubbard, Berwyn, Ill. Filed Apr. 24, 1929. Serial No. 357,756. 4 Claims. (Cl. 242—46.6.)



1. A cop holder comprising a base having a long continuous axial opening, a metallic spindle tube snugly fitting at its lower end in said opening, and a spline on said base extending full length of said opening and being of a radial

depth equal to the thickness of the spindle tube metal, said tube having a slot receiving said spline whereby it is locked to the base against rotational displacement, the tube at the upper end of its slot resting against the top of the spline and the lower end of said tube being deflected radially and against the base bottom whereby said tube is locked against longitudinal displacement.

1,762,517. CREAM SIPHON. ERNEST LARSON, Turlock, Calif. Filed Apr. 4, 1928. Serial No. 267,267. 1 Claim. (Cl. 137—20.)



In a siphon having legs, a flap to cover the end of one leg, and a flat spring member extending alongside the leg and secured to the leg and to the flap to normally draw the flap laterally away from the end of the leg and also serving as a finger-pressure piece to move the flap to an end-closing position.

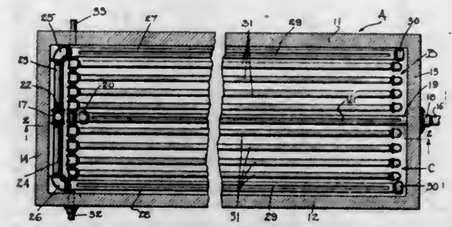
1,762,518. SPRINKLER WITH SOAP-HOLDING ATTACHMENT. DANIEL P. MACKENZIE, Roslindale, Mass., assignor of one-half to Ralph L. Odiorne, Roslindale, Mass. Filed Feb. 1, 1928. Serial No. 251,079. 3 Claims. (Cl. 299—83.)



3. A water conduit and a sprinkler head secured to the end thereof, combined with a hollow foraminous soap container having a rim shaped and proportioned to slip over the end of the head and make detachable connection therewith.

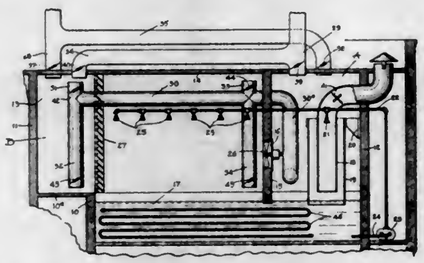
1,762,519. BRINE COOLER. CHARLES A. MOORE, Edina, Minn. Filed Apr. 22, 1926. Serial No. 103,778. 2 Claims. (Cl. 257—206.)

1. In combination with the feed and return mains of a fluid circulating system, an elongated tank, a terminal feed pipe opening into the feed main and extending along the floor of the tank medially thereof from one end to the other, said terminal pipe having a slot formed longitudinally thereof in its upper side, terminal return pipes connected with said return main, said pipes also extending along the bottom of said tank, one adjacent to one sidewall of the tank and the other adjacent to the opposite sidewall, each of said terminal return pipes



having a slot formed longitudinally thereof in its upper side, and two groups of elongated refrigerant coils lengthwise disposed longitudinally of said tank within the same, said groups of coils being spread apart medially of the tank to provide a clear vertical space above the slot in the terminal feed pipe and each of said groups of coils being spaced from the sidewall of the tank nearest thereto to provide a clear vertical space above the slot in the terminal return pipe adjacent to said sidewall.

1,762,520. AIR CONDITIONING AND CIRCULATING APPARATUS. CHARLES A. MOORE, Edina, Minn. Filed Jan. 3, 1927. Serial No. 158,763. 8 Claims. (Cl. 261—29.)

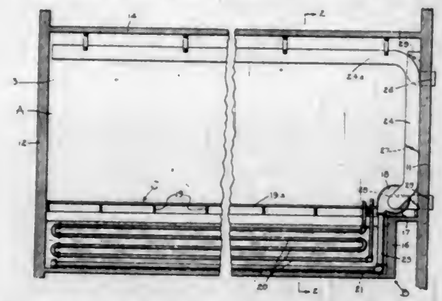


4. In combination, a structure forming a chamber, a conduit leading into said chamber, a fan associated with said conduit for impelling air into said chamber, means within the chamber for affecting the air entering the same, a feed duct leading from said chamber for conducting air to a remote point of use, a return duct leading from said point of use to said conduit, and two cross ducts, one leading from said chamber to the return duct and the other from the feed duct to said conduit to shunt air back to said chamber before using the same.

1,762,521. AIR-CONDITIONING APPLIANCE FOR PRE-COOLING ROOMS. CHARLES A. MOORE, Edina, Minn. Filed Apr. 2, 1927. Serial No. 180,389. 12 Claims. (Cl. 261—11.)

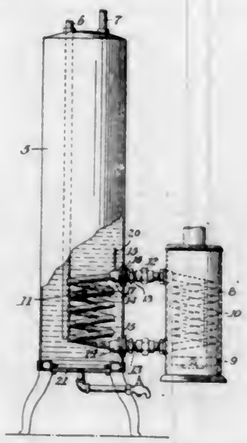
1. In combination, a structure forming a chamber, an elongated tank located in the floor of the structure centrally thereof, said tank being adapted to contain a non-freezing fluid, tiers of coiled pipe within the tank for a circulating refrigerant, air pipes in the tank, one air pipe for each tier of refrigerant pipe, each air pipe being open along the length thereof for the egress of air therefrom and located directly beneath its respective tier, a blower discharging into said air pipes, a re-circulating conduit for

feeding air to said blower, said conduit having an intake branch near the ceiling of the chamber disposed in parallelism with said tank directly over the same, said branch having a longitudinal slot in its upper side, a damper in



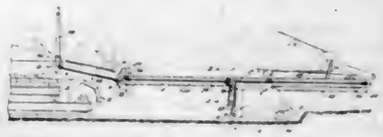
said conduit, an air ingress conduit leading from the outer atmosphere to said blower, a damper in said ingress conduit, an air egress conduit leading from the upper portion of the chamber to the outer atmosphere, and a damper in said conduit.

1,762,522. WATER HEATER. ROBERT E. NEWELL, Irwin, Pa. Filed Nov. 6, 1926. Serial No. 146,661. 1 Claim. (Cl. 122—32.)



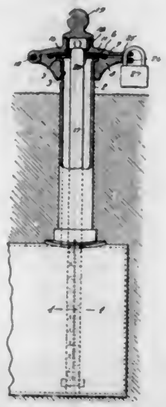
In water heater structure, the combination with a storage tank and a combustion chamber, of a circulating system comprising a conduit including heat-transfer and heat-receiving sections disposed within said tank and combustion chamber, respectively, the said sections being detachably connected together, and of such form as to permit the interchange thereof.

1,762,523. EXCAVATOR TRIP. ARTHUR ORLOFF, Green Bay, Wis., assignor to Northwest Engineering Corporation, Green Bay, Wis., a Corporation of Wisconsin. Filed Mar. 30, 1928. Serial No. 265,969. 6 Claims. (Cl. 214—102.)



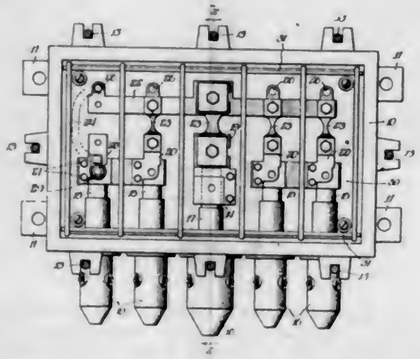
1. In an excavator, the combination with a boom, a dipper mounted to traverse said boom and provided with a dumping door, of locking mechanism for said door, a trip cable extending lengthwise of the boom, means connecting said cable with said locking mechanism, permitting free translation of said dipper along the boom with a free movement of said dipper along said cable, and means under the control of the operator to tension said trip cable to release said locking mechanism.

1,762,524. FILLING ATTACHMENT FOR TANKS. DANIEL S. PFAHL, Cleveland, Ohio. Filed July 24, 1926. Serial No. 124,700. 9 Claims. (Cl. 220—86.)



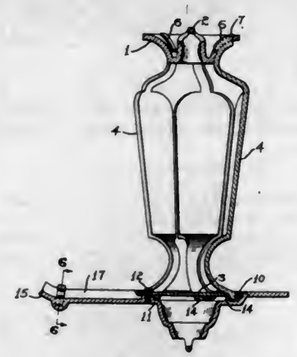
1. A filling attachment for tanks comprising a base member adapted to be secured about the filling opening of a tank, a cover plate pivotally secured to said base member and having an opening therein, an ullage rod slidable in said opening, a removable cap normally closing said opening and means for holding said ullage rod in alignment with said opening.

1,762,525. DISTRIBUTION BOX FOR CABLES OF SAME POLARITY. JOSEPH RAH, Chicago, Ill., assignor to G. & W. Electric Specialty Co., Chicago, Ill., a Corporation of Illinois. Filed July 10, 1925. Serial No. 42,638. 1 Claim. (Cl. 247—14.)



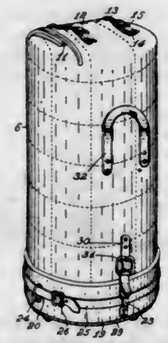
In a device of the class described, the combination of a distribution box, a plurality of contact blocks mounted therein, a main feeder electrically connected to one of said contact blocks, branch feeders electrically connected to others of said contact blocks, a bus bar mounted in said box and having a plurality of slip ping sockets, fuses normally connecting said contact blocks and bus bar, and current conducting means having an attaching ear at one end for connection to a contact block and at the other end having a slip plug adapted to be received by said sockets to form a readily removable shunt connection around a fuse as the latter is placed in circuit.

1,762,526. LIGHTING FIXTURE. JOHN K. RIDDLE, Toledo, Ohio, assignor to The Edward N. Riddle Company, Toledo, Ohio, a Corporation of Ohio. Filed Apr. 18, 1928. Serial No. 270,816. 16 Claims. (Cl. 240—78.)



1. In a lighting fixture, an upper member and a lower member, detachable means connecting said members and supporting one member from the other, a spider, means for attaching the spider to one of said members, and means rendered operative by bringing the spider into assembled position, to lock the connecting means to said members.

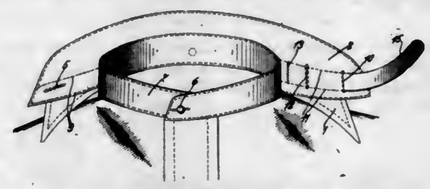
1,762,527. ICE-CREAM-SHIPPING CASE. EARL M. ROBINSON, Waterloo, Iowa, assignor to Richard L. Hall, Waterloo, Iowa. Filed Jan. 12, 1928. Serial No. 246,362. 5 Claims. (Cl. 150—52.)



1. A housing for an ice cream can, comprising an open top case having cushioning and heat insulating walls and bottom, means for closing the open top of said case and a reinforcing cap with padded bottom removably fastened upon the outside of the bottom part of said case.

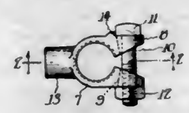
1,762,528. COLLAR FASTENER. WILTON RUBINSTEIN, St. Louis, Mo. Filed May 6, 1920. Serial No. 360,882. 13 Claims. (Cl. 2—140.)

1. In a collar, means forming a pocket near one end of the collar, said pocket having spaced slits therein opening to the inside of the collar, a tab insertable in and withdrawable from said pocket and arranged to have one end projecting beyond the end of the collar, and means forming



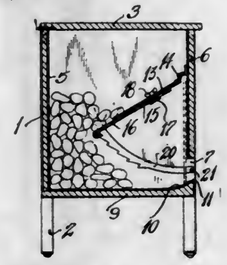
a pocket in the opposite end of the collar with a slit opening outwardly for receiving the projecting end of said tab.

1,762,529. BATTERY-TERMINAL CLAMP AND METHOD OF MAKING THE SAME. JOHN A. SALL, Rockford, Ill., assignor to Sall Brothers Company, Rockford, Ill., a Corporation of Illinois. Filed May 13, 1926. Serial No. 108,712. 4 Claims. (Cl. 173—259.)



1. A blank for terminal clamps of the character described, comprising an elongated body including an intermediate portion adapted to be bent to form a split clamping collar, the opposite ends of said intermediate portion having lugs with apertures therein adapted to register with each other when the intermediate portion is bent into circular form, and a socket member formed integral with the intermediate portion and having side portions extending in a direction parallel to the axes of the apertures in the lugs.

1,762,530. FUEL CHEST. CARL A. SANDELL, Wilkeson, Wash. Filed Nov. 5, 1928. Serial No. 317,130. 1 Claim. (Cl. 312—158.)



A fuel chest comprising a cabinet having a hinged top and supporting legs; a fixed metal lining in said cabinet; a fuel discharge opening near the bottom of said cabinet; a fuel retaining ledge in the bottom of said fuel discharge opening; a gate hinged above said opening adapted to form a feed hopper; an adjustable extension on said gate; a pair of braces extending through slots in the adjustable extension and spaced notches on said braces co-acting with the walls of the slots in the extension to hold the gate in the desired position.

1,762,531. PROCESS FOR VULCANIZING RUBBER AND PRODUCTS OBTAINED THEREBY. WINFIELD SCOTT, Nitro, W. Va., assignor to The Rubber Service Laboratories Company, Akron, Ohio, a Corporation of Ohio. Filed Jan. 5, 1928. Serial No. 244,778. 6 Claims. (Cl. 18—53.)

1. The process of vulcanizing rubber or similar material, which comprises combining with the rubber a vulcan-

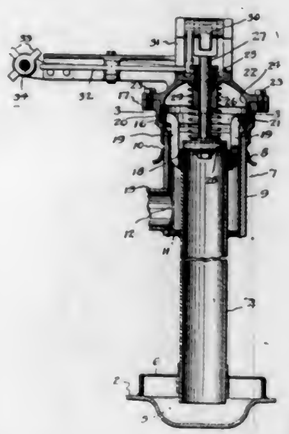
izing agent and the reaction product of butylaldehyde and a dialkylene substitution derivative of thiuram disulfide as an accelerator and subjecting the mixture to a vulcanizing temperature.

1,762,532. METHOD OF MAKING CANS. HARRY SEDELL, Boston, Mass., assignor of one-half to Arthur H. Parker, Lexington, Mass. Filed Mar. 12, 1929. Serial No. 346,321. 2 Claims. (Cl. 113—120.)



1. The process of making a can which consists in forming a can body open at both ends, introducing into the can body a plunger which fits the interior of the can body and is provided at one end with a can-end positioning face, applying to said face a can end which is smaller than the can body, locating the plunger relative to the can body so as to place the can end in sealing position, in which position there will be a gap existing between the periphery of the can end and can body, which gap is closed by said plunger, and then filling said gap with sealing material.

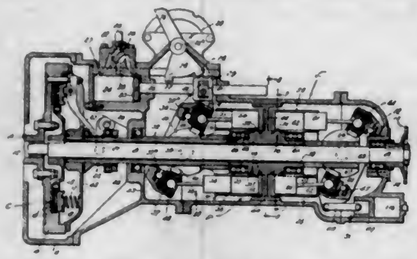
1,762,533. TANK DELIVERY STRUCTURE. PAUL S. SHIELD, Cincinnati, Ohio, assignor to Augustine Davis, Jr., Cincinnati, Ohio. Filed Mar. 20, 1926. Serial No. 96,236. 5 Claims. (Cl. 137—21.)



1. In a tank, siphon means for emptying the tank comprising a box secured in the top of the tank, and an uptake pipe and an outlet pipe communicating with the interior of said box, one of said pipes being united to said box and projecting upward in the interior thereof, a valve-seat applied to the upper end of this pipe, and a single spider positioning said valve seat in the box and bracing the upper end of said pipe.

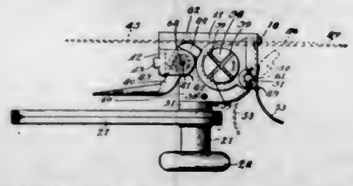
1,762,534. POWER TRANSMISSION. CLARENCE S. SORENSEN, Los Angeles, Calif. Filed May 17, 1927. Serial No. 191,975. 15 Claims. (Cl. 60—53.)

1. A power transmission including a drive element, a driven element, a variable speed hydraulic drive means between said elements and including a tilting member, a mechanical clutch between the elements, and a mechanical control connecting the hydraulic drive and clutch so that the clutch is engaged upon a predetermined drive



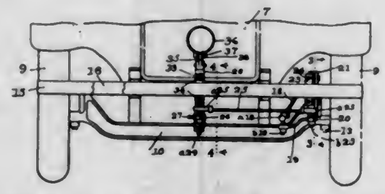
relation being obtained between said elements through the hydraulic drive, the control being actuated from the tilting element.

1,762,535. STRETCHER. SIDNEY W. TREAT, Chicago, Ill., assignor, by mesne assignments, to Signode Steel Strapping Company, a Corporation of Delaware. Filed Sept. 23, 1926. Serial No. 137,370. 3 Claims. (Cl. 254—79.)



1. In a stretching tool, supporting means, stretching means to apply stretching force at one end of a tension member, clamping means for another part of said tension member to clamp same with a free end lying against a tensioned portion of said tension member outside the said tool and means to support said tool on said tension member comprising a pivoted lever having a U stirrup about said tension member, said frame having slots to receive the ends of said stirrup.

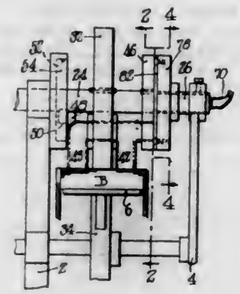
1,762,536. DIRIGIBLE HEADLIGHT. WILLIAM V. VAN ETTEN, Bellingham, Wash. Filed Aug. 6, 1928. Serial No. 297,857. 1 Claim. (Cl. 240—62.)



A dirigible steering light mounting and operating mechanism consisting of, a clamp bar attachable to the drag link of the steering mechanism of an automobile, an adjustable connecting rod one end of which is connected to said drag-link-clamp bar by a universal joint and the other end of which is engaged with one arm of a bell crank by a universal joint, said bell crank pivotally engaged with a clamp, said bell-crank clamp fastenable to bar of the front bumper of said automobile, another adjustable connecting rod one end of which is engaged with the other arm of said bell crank by a universal joint and the other end of which is engaged with a crank by a universal joint, said crank adjustably fastened to one end of a short vertical shaft to oscillate therewith, said vertical shaft mounted for oscillation in a vertical bearing, a clamp fastened to said bearing for attachment

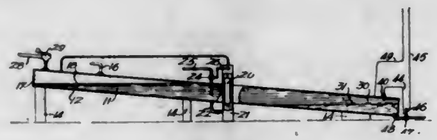
to a bar of said front bumper, an arm fastened to the other end of said vertical shaft to oscillate therewith having an opening through the outer end thereof, the lantern of an electric headlight, ears fastened to the walls of said lantern having registering openings therethrough, a clamping bolt extended through said ears and through said arm to retain said lantern in a desired angular relation with said arm, and a coil spring mounted on said vertical shaft to react between said crank and said bearing.

1,762,537. SHEET-FEEDING APPARATUS. JOSEPH N. FOUNTAIN, Westfield, Mass., assignor to Old Colony Envelope Company, Westfield, Mass., a Corporation of Massachusetts. Original application filed Feb. 6, 1928, Serial No. 252,276. Divided and this application filed Feb. 9, 1929. Serial No. 338,852. 10 Claims. (Cl. 271—28.)



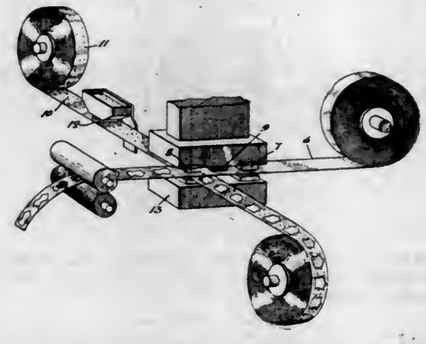
1. Blank feeding apparatus comprising in combination, a support for a stack of blanks, a pair of rolls for receiving blanks, a suction lifter oscillatable on one of said rolls for suctionally engaging a blank and means for swinging said lifter rearwardly with respect to said roll after it has engaged said blank so as to lift the same and deliver it between said rolls as it is rotated thereby.

1,762,538. WATER-LEVEL-CONTROLLING DEVICE. JOHN T. WORTHINGTON, Whittier, Calif., assignor to Petroleum Rectifying Company of California, San Francisco, Calif., a Corporation of California. Filed Apr. 16, 1923. Serial No. 632,586. 4 Claims. (Cl. 210—54.)



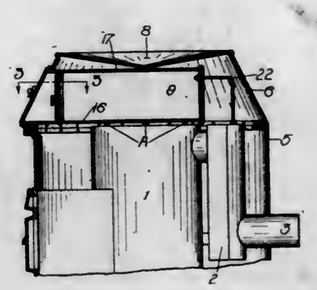
1. In a device for maintaining a substantially constant level of a surface of contact between two bodies of liquid having dissimilar electrical conductivities, the combination of: a shell containing said bodies of liquids; a pair of electrodes extending into an intermediate section of said shell, said intermediate section being at the desired level of said surface of contact; means for impressing a potential difference across said electrodes; a valve controlling the position of said surface of contact; and valve-control means in circuit with said means and with said electrodes for operating said valve to move said surface of contact away from said electrodes, said valve-control means operating said valve in response to the differences in current flowing between said electrodes at different positions of said surface of contact relative to said electrodes.

1,762,539. METHOD OF PRODUCING EMBOSSED ESCUTCHEONS, NAME PLATES, LABELS, AND THE LIKE. EDGAR L. ADAMS, Dayton, Ohio, assignor to Robert H. Angell, Dayton, Ohio. Filed May 23, 1927. Serial No. 193,751. 15 Claims. (Cl. 154—2.)



1. The herein described method of producing escutcheons, and the like, including embossing a succession of imprints in a section of stock material, applying a section of backing material to the embossed stock subsequent to the embossing operation and before severance of the embossed areas from the stock material, and subsequently simultaneously cutting the embossed area and a corresponding registering area of backing materials from the respective stock materials.

1,762,540. DOMESTIC BAKING OVEN. VERA ALLEN, Seattle, Wash. Filed May 7, 1929. Serial No. 361,145. 3 Claims. (Cl. 126—100.)

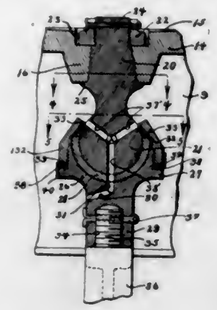


1. The combination with a hot air furnace comprising a heating jacket and its dome, and a heating drum, of an oven in the dome and resting on the drum, a door frame in the front of the dome and means joining the walls of the oven and said frame, an outer door in said frame, an inner door frame disposed transversely of the oven walls, and a second door in said inner frame.

1,762,541. PISTON. WILLIAM R. BLOWERS, Detroit, Mich. Filed Nov. 11, 1927. Serial No. 232,528. 1 Claim. (Cl. 74—108.)

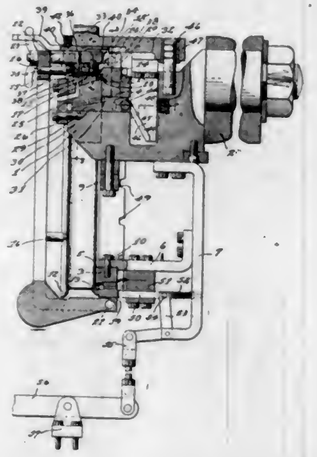
A device of the class described adapted for use with a piston having a bore formed therein, comprising: a piston connecting member insertable into said bore; a head carried by said connecting member; a socket comprising a pair of sections, one of said sections being threaded on

the other; a washer positioned between said sections; a plurality of tongues projecting outwardly from the



periphery of said washer and adapted for being bent into engagement with said sections and preventing relative rotation thereof.

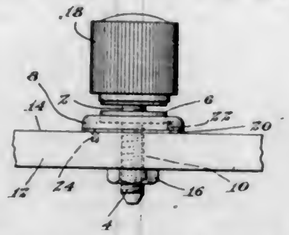
1,762,542. APPARATUS FOR FORMING SPOKE HOLES IN WIRE-WHEEL RIMS. WILLIAM N. BOOTH, Detroit, Mich., assignor to Kelsey-Hayes Wheel Corporation, Detroit, Mich., a Corporation of New York. Filed Apr. 25, 1927. Serial No. 186,458. 11 Claims. (Cl. 164—92.)



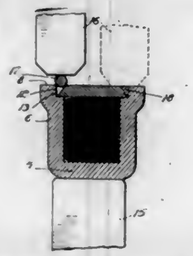
1. In an apparatus for forming spoke holes in a wire wheel rim, the combination with a support, of means adjustably mounted upon said support for holding the rim upon the latter in a plurality of positions of adjustment, a die upon said support movable outwardly into engagement with the inner face of the base of the rim, a punch movable inwardly into engagement with the base of the rim and adapted to cooperate with said die to pierce the base, and common reciprocatory means for actuating said die and punch.

1,762,543. BINDING POST. EDWARD L. BOWLES, Watertown, Mass. Filed Aug. 16, 1926. Serial No. 129,497. 2 Claims. (Cl. 173—259.)

1. In a binding-post assembly comprising a panel having an opening and a clamping element resting upon the panel and having a stem extending into the opening for assembly purposes and having also a post upon which a clamping cap is rotatably mounted to cooperate with the clamping element, a washer disposed between the clamping element and the panel and having tongues located within the outer periphery of the washer, one of the tongues entering the element and another tongue entering the panel to lock the clamping element against rotation relative to the panel.



1,762,544. MAGNET CONSTRUCTION. ADDI BENJAMIN CADMAN, Beloit, Wis., assignor to Warner Electric Brake Corporation, South Beloit, Ill., a Corporation of Illinois. Filed July 16, 1928. Serial No. 293,206. 14 Claims. (Cl. 175—367.)



1. A magnet comprising, in combination, an annular core having concentric inner and outer poles enclosing an annular winding, shoulders formed at the outer edge of the inner pole and at the inner edge of the outer pole, a wear plate of high manganese steel having its opposite side edges seated on said shoulders, there being a notch formed in one side edge of said plate, and a key of a separate piece of metal projecting into said notch and welded to the adjacent portion of one of said poles.

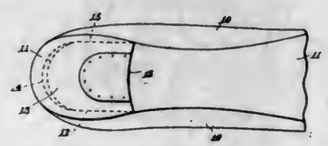
1,762,545. COSTUMER. ROBERT F. CARPENTER and THOMAS F. ANDERSON, Cleveland, Ohio, assignors to Sanymetal Products Company, Cleveland, Ohio, a Corporation of Ohio. Filed Sept. 5, 1925. Serial No. 54,694. 2 Claims. (Cl. 211—159.)



1. In a costumer, a one-piece sheet metal post having at least two of its sides each provided with a longitudinally

extending channel of generally rectangular cross dimension, a one-piece sheet metal reenforcing member arranged within the upper end portion of said post and having at least two sides engaging the bases of at least two post channels, clothes supporting hooks having their bases arranged within and fitting the channels of said posts, and securing means for said hooks, said securing means passing through the bases of said hooks, said post, and said reenforcing member, thereby securing in assembly the post, the reenforcing member and said hooks.

1,762,546. SHOE AND HEEL THEREFOR. MELBURN A. COMEAU, Haverhill, Mass. Filed Jan. 31, 1929. Serial No. 336,600. 2 Claims. (Cl. 36—24.5.)

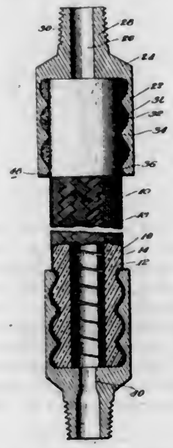


1. In a shoe, a wooden heel provided at its upper end with a depression having straight parallel side walls the front ends of which meet at acute angles the outer side surfaces of the upper end of said heel.

1,762,547. HEAT-CONDUCTING SYSTEM. RALPH H. CHURCHILL, Chicago, Ill. Filed Nov. 15, 1926. Serial No. 148,612. 8 Claims. (Cl. 252—5.)

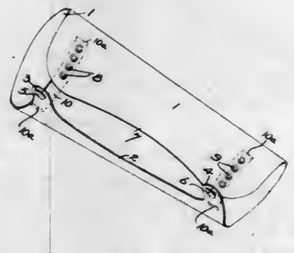
1. A heat-conducting medium comprising a quantity of aluminum in finely divided form and a relatively thin oil serving as a vehicle for said aluminum, together with a quantity of glycerine intermingled therewith and adapted to settle when the mixture is at rest.

1,762,548. JOINT. ERNEST W. DAVIS, Oak Park, Ill., assignor to Alemite Corporation, Chicago, Ill., a Corporation of Illinois. Filed Nov. 27, 1925. Serial No. 71,521. 3 Claims. (Cl. 285—74.)



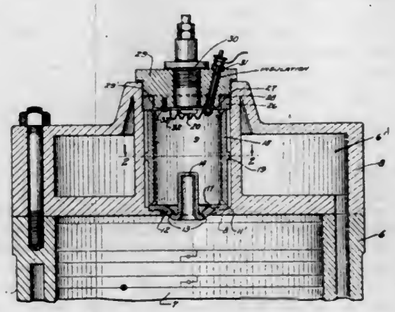
1. A permanent tubular joint comprising a tube and a terminal, said tube comprising an inner flexible tube formed of a spiral strip of metal with a packing sealing the spiral joint, a sheath of rubber composition, and an outer sheath of woven wire, said tube as a whole being flexible but substantially non-extensible and capable of withstanding high internal pressures, said terminal comprising a corrugated sleeve receiving the tube end, said corrugations indenting said tube sheaths, said sheaths inside the sleeve having annular protuberances of greater diameter than the original diameter of the undeformed tube, the woven wire sheath inside the sleeve being impregnated with rubber, the opposing surfaces of sleeve and tube being cemented together by a thin smear of asphaltum, the end of said sleeve on the tube terminating in an outward flare merging into said corrugations, and the other end carrying a threaded extension having an axial bore in alignment with the tube axis.

1,762,549. SLEEVE PROTECTOR. HENRY H. FISHER, Detroit, Mich., Filed Nov. 28, 1928. Serial No. 322,356. 2 Claims. (Cl. 2—59.)



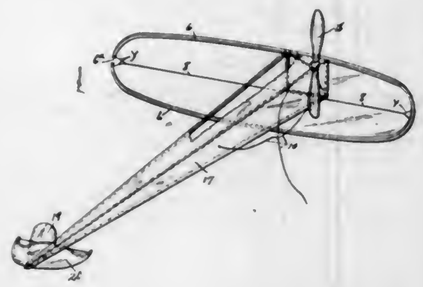
1. A sleeve protector comprising a flexible member adapted to be arranged around a coat sleeve, means attached to the inner sides of said member adjacent both its ends for holding it permanently in a large and substantially tubular form, and cooperating fastener portions adjacent the opposed margins of said member adjacent both its ends so arranged that the tubular form of the latter may be reduced as desired and made to fit snugly around sleeves of varying sizes.

1,762,550. INTERNAL-COMBUSTION ENGINE. LOUIS O. FRENCH, Milwaukee, Wis. Filed Dec. 10, 1925. Serial No. 74,532. 1 Claim. (Cl. 123—33.)



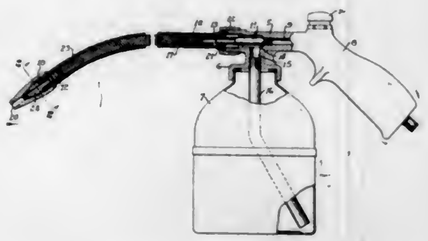
In an internal combustion engine, the combination with the main combustion chamber, of a cooled cylinder head having a precombustion chamber, a removable, apertured partition between said chambers contacting at its peripheral portion with said head, a removable liner of said precombustion chamber out of contact with said head and contacting at its inner end with said partition, a clamping member in contact with said head engaging the upper end of said liner, the contact area of the ends of said liner with said partition and clamping member being less than the average cross-sectional area of said liner so that said ends are in relatively poor thermal conductive relation with the cooled head to maintain said liner in a hot condition while the engine is running.

1,762,551. KITE. NEMESIO GAMBITO and DOROTEO SUMABAT, Pasadena, Calif., assignors to Warren F. Lemon and José S. Tolentino, Los Angeles, Calif. Filed June 7, 1928. Serial No. 283,538. 6 Claims. (Cl. 244—22.)



3. In a kite, a body comprising a light frame member of oval form horizontally, a back bone member across the middle portion thereof at right angles to the length thereof, the outer opposite ends of said oval form being jointed to permit flexing on a line lengthwise of said oval form, and a cross cord from one end of said frame member to the other.

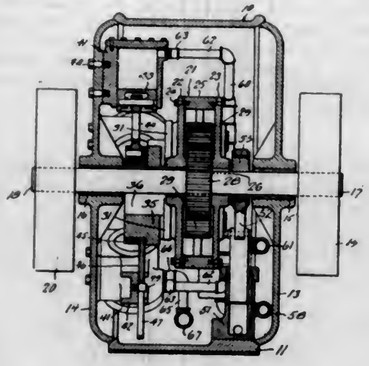
1,762,552. SPRAY GUN. WILLIAM F. GRADOLPH, Toledo, Ohio, assignor to The De Vilbiss Company, Toledo, Ohio, a Corporation of Ohio. Filed Feb. 28, 1929. Serial No. 343,396. 7 Claims. (Cl. 299—88.)



1. In a spraying device, a body with inner and outer conduits connected thereto, the inner conduit being flexible, the outer conduit being stiff, with the end remote from the body curved laterally, said outer conduit enclosing the inner conduit and being rotatably adjustable about the longitudinal axis of its connection with said body, a spray head connected to the discharge end of said conduits, and a protective casing between the outer and inner conduits and having a portion secured to the inner conduit to prevent torsional displacement of the latter when the outer conduit is adjusted.

1,762,553. POWER-TRANSMISSION MECHANISM. CHARLES C. HOWER, Cleveland, Ohio. Filed Apr. 4, 1929. Serial No. 352,382. 24 Claims. (Cl. 74—34.)

1. In a power transmission mechanism, the combination of a driving member and a driven member, a gear frame secured to rotate with one of said members, pinion gears journaled in said frame, a gear secured to the other of said members meshing with said pinions, means for preventing the pinions from rotating about the gear and in said frame, said means including eccentric means on



said pinions, a spider connecting said eccentric means, and means engaging said spider to prevent eccentric movement of the same relative to said frame.

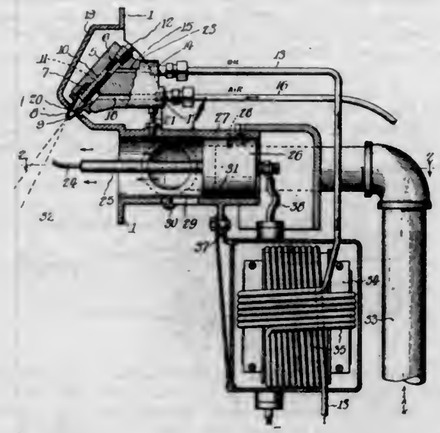
1,762,554. FOUNTAIN PEN. JOHN R. HUME, Chicago, Ill. Filed May 23, 1924. Serial No. 715,275. 1 Claim. (Cl. 120—42.)



In a device of the class described, comprising a shell having a pen chamber, a screw cap bearing a pen point and provided with an ink channel removably mounted on the open end of said pen chamber, the combination therewith of a rigid removable ink tube, open at one end and adapted to be contained in said pen chamber, said ink tube provided with an out turned flange around its open end overlaying the open end of said pen chamber and held in place by said cap, and a beveled finger lug integral with said flange, substantially as described.

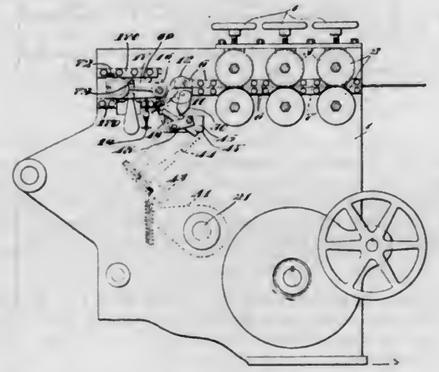
1,762,555. OIL BURNER. WILLIAM RAY KIEFER, Rockford, Ill., assignor to The Sundstrand Engineering Co., Rockford, Ill., a Corporation of Illinois. Filed Nov. 18, 1926. Serial No. 149,042. 5 Claims. (Cl. 158—2.)

1. In an oil burner, a plate adapted to close the fuel opening of a furnace, a fuel nozzle supported by said plate in position to direct a spray of combustible mixture downwardly, an igniter supported by said plate below said nozzle in position to ignite the spray, a transformer supported by said plate adjacent to said igniter, and a fuel supply



tube arranged adjacent to said transformer to utilize the heat generated in the transformer for preheating the oil, said tube being connected to said nozzle.

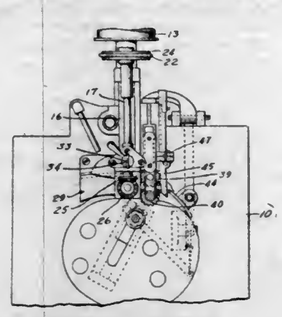
1,762,556. PROCESS AND APPARATUS FOR MAKING PISTON RINGS. LEWIS C. MARSHALL, Walpole, Mass. Filed June 1, 1927. Serial No. 195,719. 30 Claims. (Cl. 140—88.)



1. That method of making tough and durable piston rings capable of making a good bearing surface with a cylinder wall which comprises as steps selecting steel wire of at least 0.5 per cent carbon content, advancing said wire endwise while bending its end portion to form a turn, and cutting off each said turn at such a point as to provide a substantially plane ring having a gap therein.

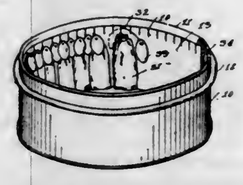
1,762,557. HAT-BRIM-CURLING MACHINE. STEPHEN J. MILLER, Danbury, Conn. Filed Dec. 29, 1927. Serial No. 243,324. 14 Claims. (Cl. 223—22.)

I. In a hat curling machine, in combination, means for producing a curl in a hat brim, a wall against which a portion of said brim bears for guiding said hat brim to said curling means, an adjustable gaging means for predetermining the size of the curl produced in said brim comprising a member movable in a slot in said wall in a direction transversely of the brim portion engaging said wall and having a part adapted to be engaged by the brim edge,



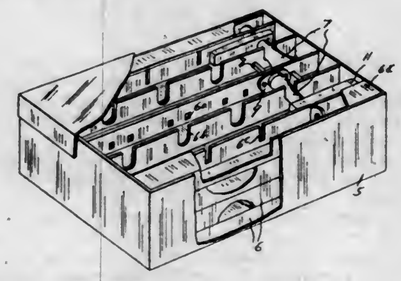
and means for closing the portion of said slot in that part of said wall against which said brim bears as it moves toward said curling means.

1,762,558. TEA BALL BOX AND METHOD OF MOUNTING TEA BALLS THEREIN. WILLIAM K. MITCHELL, Yonkers, N. Y., assignor to Millie Patent Holding Co., Inc., New York, N. Y., a Corporation of New York. Filed Mar. 8, 1928. Serial No. 260,194. 1 Claim. (Cl. 206—16.)



A box for stringed balls comprising floor and walled portions, a cardboard insert mounted adjacent said wall portion, said insert provided with spaced apart slits at its upper edge, each of said slits adapted to hold a string in looped formation, a member formed integrally with the upper edge of said wall portion and adapted to overlie the upper edge of said cardboard insert, and tongue members formed on the upper edge of said cardboard insert and positioned between said overlying member and wall portion to retain said insert in position.

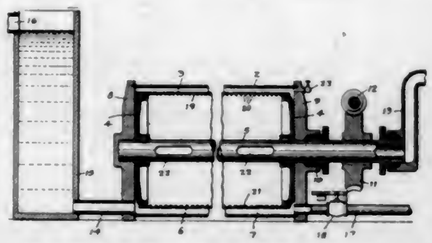
1,762,559. MEANS FOR FACILITATING SHIPMENT OF DOOR HANDLES AND THE LIKE. BENJAMIN S. MOORE, Detroit, Mich., assignor to Ferro Stamping Mfg. Co., Detroit, Mich. Filed July 9, 1928. Serial No. 291,186. 5 Claims. (Cl. 206—65.)



1. Means for facilitating shipment of articles having aligned portions of circular and polygonal cross-sections,

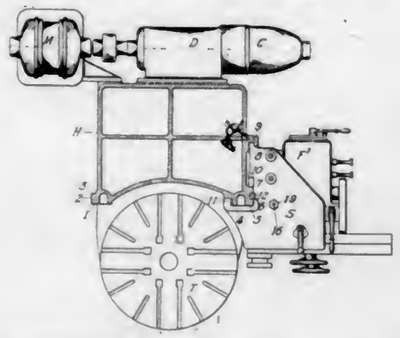
comprising a foldable mount having a plurality of apertures therein corresponding in cross-sectional shape to and of slightly greater area than the polygonal portions of the articles and also being formed with slots in aligned relation to said apertures for supporting the portions of the articles of circular cross-section as long as the mount remains in folded position.

1,762,560. METHOD OF FILTERING. CHARLES D. MORTON, New York, N. Y., assignor to Morton System, Inc., New York, N. Y., a Corporation of New York. Filed July 15, 1927. Serial No. 205,906. 3 Claims. (Cl. 210—199.)



1. The method of filtering liquids containing solids in continuous operation, which comprises circulating under pressure a stream of the liquid to be filtered lengthwise of a narrow annular space surrounding a hollow cylindrical filtering medium, continuously conducting off filtrate from the interior of the cylindrical filtering medium, continuously conducting off unfiltered liquid and the solids from said space, continuously rotating said filtering medium, and so coordinating the pressure, the rotative speed and the rate at which the liquid circulates through said space as to cause the medium to remain free of solids indefinitely.

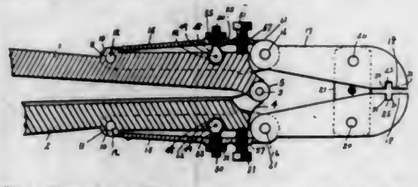
1,762,561. TURNING AND BORING MILL. EDWARD A. MULLER, Cincinnati, Ohio. Filed Sept. 29, 1927. Serial No. 222,797. 5 Claims. (Cl. 29—29.)



1. In combination with a turning and boring mill having a housing and a side-head; ways facing in four directions formed directly on the front portion of said housing and another way toward the rear of said housing and formed directly thereon, a clamping strip maintaining said side-head in contact with said last named way, and bearing surfaces on said side-head making sliding contact with said ways.

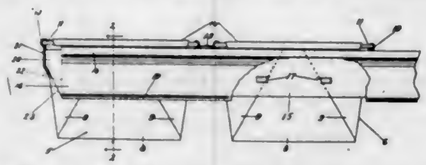
5. A turning and boring mill having in combination a housing, ways formed on a front portion of said housing, a cross-rail slidably mounted on said ways, another way formed on a rearward portion of said housing, a side-head slidably mounted on the ways formed on the front and rearward portions of the housing, said side-head so formed and positioned as to have its center of weight lie behind the cross-rail, a counter-weight for said side-head and flexible member by which said cross-head and counter-weight are suspended, said flexible member secured at one of its ends to the top of the side-head substantially at the center of weight thereof, and at its other end to said counterweight, and sheave means upon which said flexible member is supported.

1,762,562. THREAD-SWELLING MACHINE. CHARLES F. ROBERTS, Utica, N. Y., assignor to Herbert S. Powell, Utica, N. Y. Filed Aug. 30, 1928. Serial No. 303,089. 4 Claims. (Cl. 81—10.)



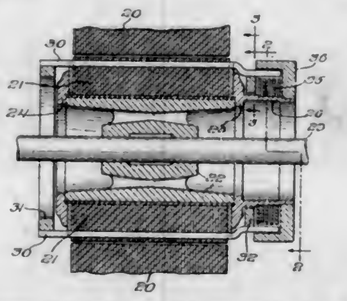
1. In a thread swelling machine, movable jaws having work engaging faces adapted to hold a bolt therebetween and rectangular recesses made in said jaws, and having two walls forming an angle not greater than a right angle with said work engaging faces, whereby to upset the threads of a bolt.

1,762,563. PAN CONNECTING AND REENFORCING STRIP. FRED SCHULTZ, Cincinnati, Ohio, assignor to The Lockwood Manufacturing Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Nov. 20, 1928. Serial No. 320,704. 6 Claims. (Cl. 53—6.)



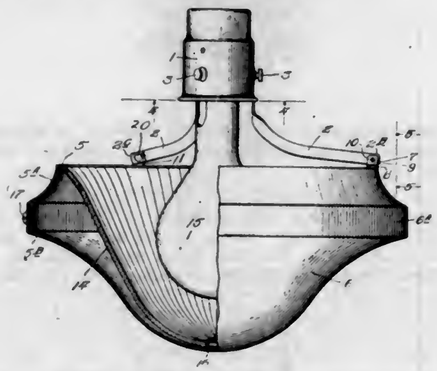
1. A connecting and re-enforcing strip for multiple baking pans comprising an inner and an outer member joined along their upper longitudinal edges by a bead, the inner member being adapted for connection with the pans of the unit, and the lower edge of the outer member overlapping the lower edge of the inner member.

1,762,564. SQUIRREL-CAGE ROTOR FOR INDUCTION MOTORS. GEORGE T. SMITH, Indianapolis, Ind. Filed Apr. 6, 1929. Serial No. 352,971. 1 Claim. (Cl. 172—120.)



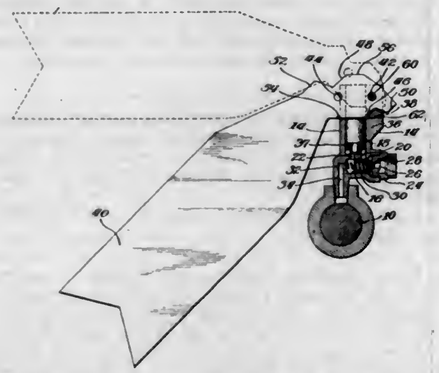
In a motor, a rotor having a plurality of separated parallel bars attached thereto and having flexible extensions thereon, a resilient centrifugally expanding low resistance ring attached to said rotor and underlying said extensions, a high resistance ring surrounded by said extensions, and a low resistance ring surrounding said extensions, the high resistance ring electrically interconnecting said bars when the rotor is at rest or revolving at a low speed, the low resistance resilient ring expanding when the rotor revolves at a high speed to first cause said bars to move away from said high resistance ring, and to connect the bars to each other thru the resilient ring, and then upon rotation at a still higher speed, to cause said bars to be connected to each other thru said low resistance ring.

1,762,565. INDIRECT-LIGHTING FIXTURE. EDWIN D. TILLSON, Evanston, Ill., assignor to Somerville W. Thompson, trustee, Chicago, Ill. Filed Apr. 22, 1929. Serial No. 357,001. 8 Claims. (Cl. 240—78.)



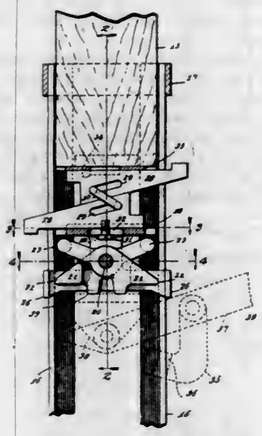
2. An indirect lighting fixture comprising an upwardly open reflector having a downwardly convexed lower end, and a bowl housing the same; the bowl comprising a main bowl part having a central bottom portion supporting the reflector and having a tubular upper end, and a bowl ring having a lower portion telescopically fitting and secured to the said tubular end of the main bowl part, the bowl ring having at its upper end an inturned flange overhanging the mouth end of the reflector.

1,762,566. SIGNAL FOR LUBRICATING SYSTEMS. REUBEN WEDEBERG, Chicago, Ill., assignor to Alemite Corporation, Chicago, Ill., a Corporation of Delaware. Filed Mar. 1, 1929. Serial No. 343,822. 9 Claims. (Cl. 116—117.)



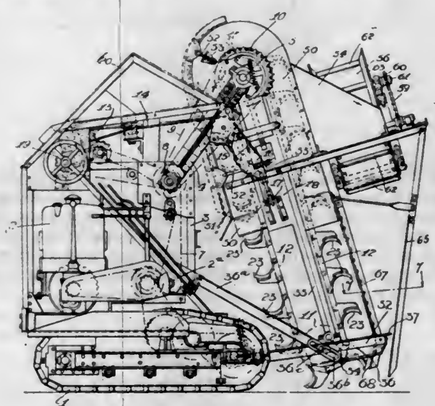
1. A combination lubricant measuring and signal device comprising a pair of cylinders, an inlet and a discharge port connecting said cylinders, an automatically operable valve to control the admission and discharge of lubricant to and from one of said cylinders, a plunger in one of said cylinders, a semaphore arm pivoted adjacent the outer end of said plunger, and interengaging cam surfaces on said semaphore arm and plunger whereby reciprocation of the latter will swing said semaphore arm about its pivotal axis.

1,762,567. ADJUSTABLE SHORE. HUGH J. BAKER, Indianapolis, Ind. Filed Sept. 8, 1927. Serial No. 218,836. 11 Claims. (Cl. 248—2.)



11. An adjustable shore, comprising two parts movable longitudinally relative to each other, one of said parts being provided with a longitudinally extending flange, a member movable with the other of said parts and having a portion bearing against one side of said flange, and a movable member acting against the opposite side of said flange and exerting a clamping action thereon to hold the two telescoping parts in extended relation.

1,762,568. DITCH-DIGGING MACHINE. HARRY H. BARBER, Aurora, Ill., assignor to Barber-Greene Company, Aurora, Ill., a Corporation of Illinois. Filed Aug. 8, 1924, Serial No. 730,813. Renewed Jan. 9, 1928. 19 Claims. (Cl. 37—90.)



3. In a ditching machine comprising a vehicle and an endless digging belt carried thereby on a boom at the rear of the vehicle, a member carried by the boom rearwardly of the digging belt to extend down into the trench made by said belt and substantially across said trench, the lat-

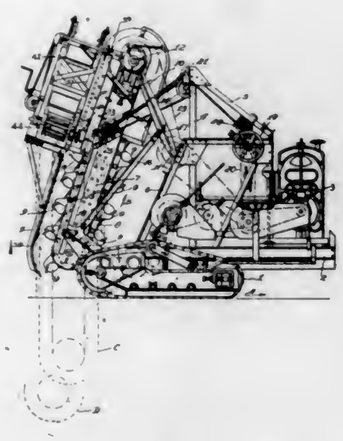
eral margins of said member being adapted to yield for passing stubborn protuberances in the walls of the trench.

8. In a ditching machine embodying a boom, an endless digger upon said boom and driving mechanism for said digger embodying a slip connection having relatively yieldable coacting parts intermittently brought into coacting relation for exercising a hammering action between said endless digger and an obstruction.

11. In a ditching machine embodying a boom, an endless digging conveyor upon said boom, a cross conveyor for receiving the material from the first conveyor and a sloping member extending downwardly from said cross conveyor for intercepting spillage and conveying the same adjacent the endless digging conveyor.

13. In a ditching machine including a vehicle, a boom, a radius rod pivotally connecting the upper part of said boom with said vehicle, a draft member pivoted to said vehicle and slidably connected to the lower part of said boom, and means for elevating said boom, said draft member and boom having coacting parts adapted to be brought into coacting relation during the elevating movements of said boom for elevating said draft member.

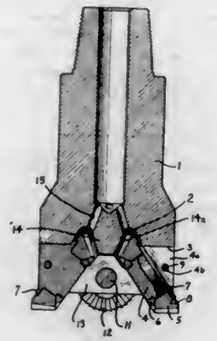
1,762,569. DITCHING MACHINE. HARRY H. BARBER, Aurora, Ill., assignor to Barber-Greene Company, Aurora, Ill., a Corporation of Illinois. Filed Apr. 13, 1925. Serial No. 22,535. 23 Claims. (Cl. 37—90.)



21. In a ditching machine, a frame, a radius rod pivoted to said frame and extending rearwardly, a boom pivoted at its upper end to said radius rod, hoisting mechanism for said boom including a cable extending from said frame in a downwardly inclined direction and attached intermediate the ends of the boom and means for spacing the lower portion of said boom from said frame.

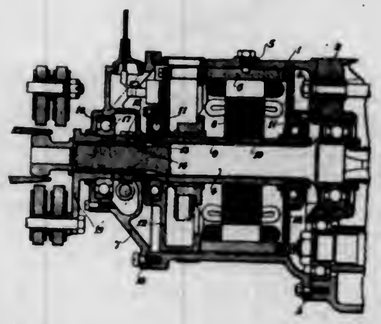
1,762,570. ROLLER-CUTTER MOUNTING. GUY E. BEHNKE, Houston, Tex., assignor to Reed Roller Bit Company, Houston, Tex., a Corporation of Texas. Filed Mar. 28, 1927. Serial No. 179,022. 4 Claims. (Cl. 255—71.)

1. A bit comprising a head having a recess therein, side roller cutters mounted in said recess, a pin extending transversely of said head between said side roller cutters and having cross roller cutters and a bridge mounted thereon, said side roller cutters being mounted on spindles slidable between and supported by the wall of said recess and the bridge, and being slidable laterally into and out



of said recess while the cross roller elements are mounted in said recess, and means to secure said spindles in said head.

1,762,571. MEANS FOR MOUNTING DYNAMOS ON MOTOR VEHICLES. OLIVER BODEN, Birmingham, England. Filed Oct. 24, 1928, Serial No. 314,623, and in Great Britain Mar. 3, 1928. 5 Claims. (Cl. 172—286.)

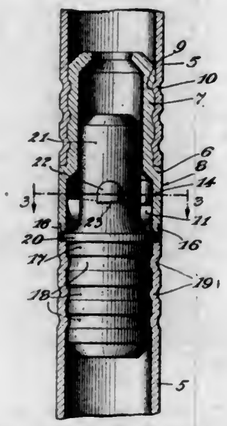


1. In a motor vehicle, the combination of a transmission shaft for driving the road wheels, a variable speed gear for operating the transmission shaft, a gear-box containing the variable-speed mechanism, a dynamo having a rotor surrounding the transmission shaft and operated thereby, and a support for the dynamo carried by the gear-box.

1,762,572. COUPLING DEVICE. FREDERIC A. DAVIDSON, Chicago, Ill., assignor to American Safety Device Co., New York, N. Y., a Corporation of New York. Filed Aug. 28, 1928. Serial No. 302,472. 1 Claim. (Cl. 287—103.)

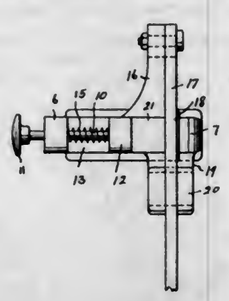
In combination with tubular members to be coupled together, male and female coupling members respectively secured permanently in the opposite end of each member, said female coupling member being of hollow construction and having internal opposed circumferentially extending shoulders, the opposed ends of said shoulders being spaced apart and the outer edges of the shoulders being convex and merging into the end face of the wall of said coupling member, said shoulders at their inner edges having circumferentially inclined cam surfaces, and the male coupling member consisting of a solid shank having a part of large diameter fixed in the end of the tubular member and a part of relatively small diameter projecting axially therefrom with an intermediate flange of the same diameter

as said tubular member and abutting against the end edge thereof, said reduced portion of the male coupling member being provided at its opposite sides and intermediate of its ends with lugs adapted to engage said convex surfaces of the shoulders on the female coupling member and be directed thereby inwardly between the opposed ends of said



shoulders, said lugs having reversely inclined faces to ride upon the cam surfaces of the said shoulders upon relative turning movement of the coupling members to thereby draw the coupling members axially in relatively opposite directions and frictionally lock the same in coupled relation.

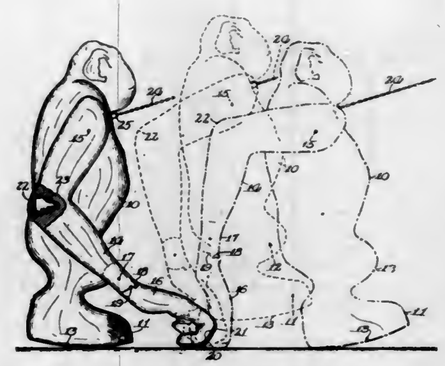
1,762,573. NUTCRACKER. ROY E. DE GOLYER, Houston, Tex. Filed June 11, 1929. Serial No. 370,009. 8 Claims. (Cl. 146—12.)



1. A nut cracker including a U-shaped bracket adapted to be fastened to a stationary object, a fixed and a movable chuck thereon arranged to receive a nut between them, a handle, a blade carried by the handle and disposed in a plane at substantially right angles to the axis of said chucks and means normally holding the movable chuck against the nut to be cut.

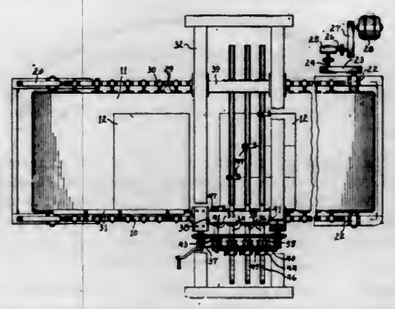
1,762,574. MECHANICAL TOY. EARLE D. FOX, Winnetka, Ill., assignor of forty-nine per cent to Benjamin A. Schiff, Chicago, Ill. Filed Nov. 14, 1928. Serial No. 319,216. 5 Claims. (Cl. 46—40.)

1. A mechanical toy embodying a body, feet and leg portions constituting a body unit and arms and hands constituting a lever unit, means connecting the lever unit with the body unit for free swinging movement with respect thereto on a pivot fixed against bodily movement with respect to said body, the said toy adapted to be supported on the ground by the body unit, one of said units being longer than the other unit whereby when the body unit is tilted upon the ground the lever unit will engage the ground and the body unit will swing past the lever unit



and engage the ground in advance of the point of contact of the lever unit with the ground, and a joint in one of said units for causing the distance between said pivot and the free extremity of the jointed unit to be increased and decreased during the operation of the toy.

1,762,575. GLASS-CUTTING DEVICE. IVAL G. FOWLER, Toledo, Ohio, assignor to The Edward Ford Plate Glass Company, Rossford, Ohio, a Corporation of Ohio. Filed July 20, 1927. Serial No. 207,159. 9 Claims. (Cl. 33—32.)

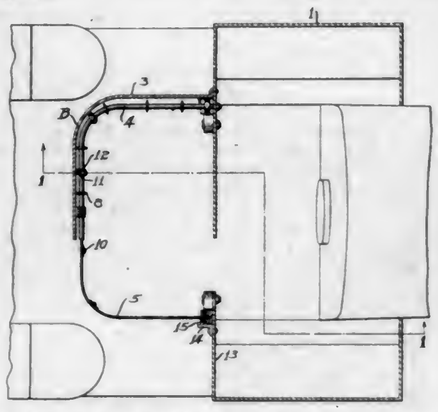


1. In a sheet glass cutting device, the combination of a carrier frame beneath which the glass travels, shafts mounted in said frame and extending across the glass, cutting elements secured to the shaft respectively, individual means provided with a measuring scale for adjusting said shafts individually in the direction of their length to bring the cutting elements the required distance apart, and additional means for effecting a simultaneous and equal adjustment of all the shafts in the direction of their length.

1,762,576. LOCOMOTIVE-CAB CURTAIN. HUBERT M. GRAY, Toledo, Ohio, assignor of one-half to Charles I. Hyland, Toledo, Ohio. Filed May 13, 1929. Serial No. 362,599. 16 Claims. (Cl. 105—456.)

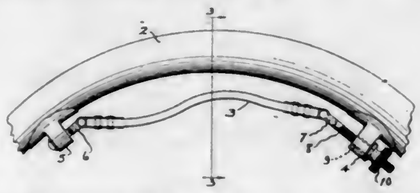
1. The combination with a locomotive cab or the like, of a curtain, means for slidingly supporting the top of the curtain, strips attached to opposite sides of the curtain, seats in the locomotive cab structure to receive said strips,

spring means normally urging said strips out of said seats, and retaining members holding said strips in seated relation.



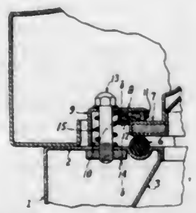
2. The combination with a locomotive cab or the like, of a curtain, a support for the top of the curtain, means for slidably attaching said curtain to said support, and means for releasably retaining one side of said curtain in place, said means including a holder member and spring means tending to urge said curtain from engagement.

1,762,577. HORN. EDWARD J. GULICK, Elkhart, Ind., assignor to C. G. Conn, Ltd., Elkhart, Ind., a Corporation of Indiana. Filed Feb. 15, 1929. Serial No. 340,033. 7 Claims. (Cl. 84—387.)



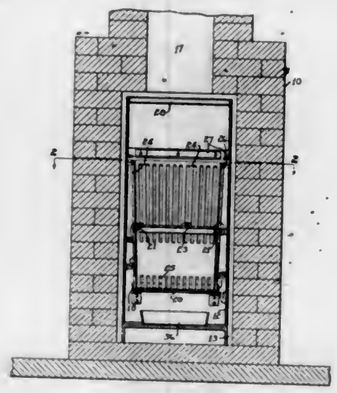
3. The combination with a horn of the character described, of a flexible non-metallic saddle or cushion element swivelly connected with the instrument body and engaging the player's shoulder when the instrument is in use.

1,762,578. CLAMPING DEVICE. CHARLES H. HISER, Springfield, Ohio, assignor to The Springfield Metallic Casket Company, Springfield, Ohio, a Corporation of Ohio. Filed Nov. 14, 1927. Serial No. 233,123. 3 Claims. (Cl. 27—17.)



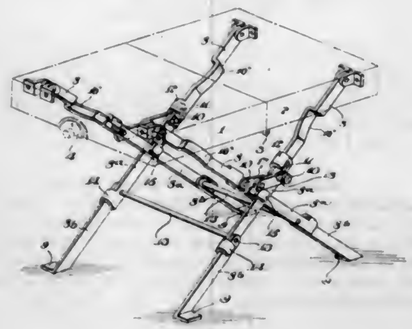
1. In a clamping device of the character described, the combination, with a surface to be clamped, of a clamping arm having a pocket, and a compressible packing in said pocket arranged to partly overhang said surface when clamped thereto to form a shoulder at the edge of said surface.

1,762,579. INCINERATOR. REINHOLD W. KRENZ, Toledo, Ohio. Filed Sept. 17, 1928. Serial No. 306,452. 4 Claims. (Cl. 110—18.)



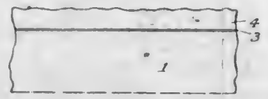
1. In an incinerator, the combination with the outer walls, of a fire chamber having walls within said outer walls and spaced therefrom, a garbage chamber above the fire chamber and having walls constituting a continuation of the walls of the fire chamber, the walls of said fire chamber being imperforate except at the top and bottom, where they have openings to permit air to flow therethrough, the walls of the garbage chamber consisting of gratings extending from top to bottom thereof, and means for preventing garbage from falling into the space between said chamber walls and the outer walls, said means being spaced from the upper edges of the chamber walls to permit a free flow of air therebetween.

1,762,580. COMBINED PORTABLE CASE AND COLLAPSIBLE SEAT. WILLIAM MENK, Philadelphia, Pa. Filed Sept. 20, 1928. Serial No. 307,296. 7 Claims. (Cl. 190—8.)



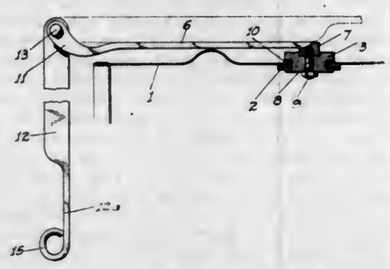
1. A portable folding case comprising a plurality of sections hinged together and movable into substantial parallelism to form a top, each of said sections forming a compartment, a pair of legs hinged to each of said sections, each of said legs being collapsible upon itself and adapted to be folded within the compartment of the section to which it is atached, and means for securing the expanded leg of one pair in intersecting relation with an expanded leg of the other pair.

1,762,581. CATHODE FOR THERMIONIC DEVICES AND METHOD OF PRODUCING SAME. ALEXANDER MCLEAN NICOLSON, New York, N. Y., assignor to Communication Patents, Inc., New York, N. Y., a Corporation of Delaware. Filed Feb. 14, 1927. Serial No. 168,243. 6 Claims. (Cl. 250—27.5.)



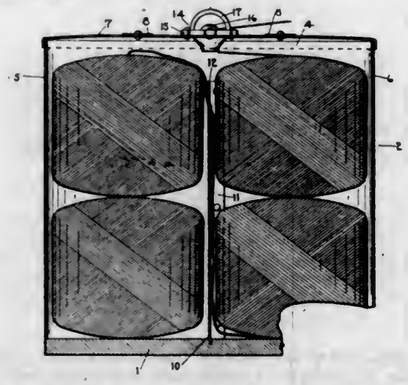
1. The method of producing an electron emitting electrode which comprises coating a conducting core with an electron emissive material, baking the coated core, and removing the uncombined coating material.

1,762,582. DRUM PLUG AND FAUCET LOCK. TONY C. NUNES, Hughson, Calif. Filed Mar. 28, 1928. Serial No. 265,401. 1 Claim. (Cl. 70—125.)



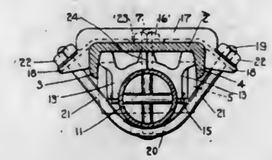
A locking device for the plug of a drum, said plug having a non-circular socket in its head, comprising a rigid bar, a head depending from one end of the bar and non-turnably fitting into the socket, a bolt projecting into the head from the under side of the plug to rigidly connect them together, and a locking bar hinged onto the outer end of said first named bar.

1,762,583. TWINE HOLDER FOR GRAIN BINDERS. LOUIS A. PARADISE, Moline, Ill., assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed Oct. 31, 1928. Serial No. 316,296. 5 Claims. (Cl. 242—146.)



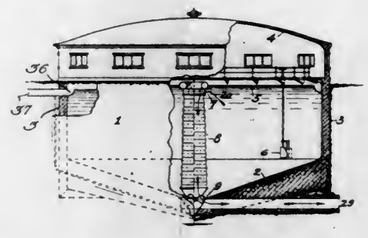
1. A twine holder having a movable cover; a central partition dividing said holder into two compartments; each compartment adapted to hold a plurality of balls of twine connected together; the balls in one compartment connected to the balls in the next compartment; and an opening in said cover through which the twine is withdrawn from the holder.

1,762,584. TONGUE SUPPORT FOR MOWERS. LOUIS A. PARADISE and WILBUR J. COULTAS, Moline, Ill., assignors to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed Jan. 26, 1929. Serial No. 335,175. 3 Claims. (Cl. 278—37.)



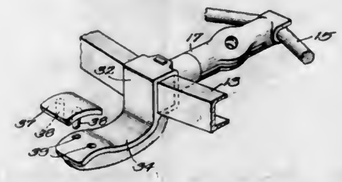
1. The combination of a mower frame including a support for a tongue, a tubular stub tongue adapted to be secured in said support, a plurality of blocks insertable between the support and stub tongue and astride the stub tongue, pins extending transversely of and through said stub tongue, notches in the blocks with which said pins engage, and means to secure the stub tongue and blocks rigidly to the support.

1,762,585. ANALYZER. JAMES W. PEARL, Chicago, Ill. Filed Jan. 17, 1927. Serial No. 161,691. 6 Claims. (Cl. 209—211.)



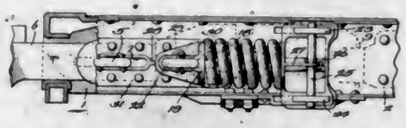
1. An analyzer for fluids or fluids and solids in which is combined a basin adapted to have a free surface at the top of the lightest fluid contents, a plurality of adjustable inlet gates adapted to rotate about a vertical axis near the periphery of the basin to control the direction and velocity of the incoming materials and the direction and velocity of rotation of the contents of the basin, an outlet near the free surface at the center of the basin for the removal of the lightest fluid product, a sump and outlet at the center of the basin for the collection and removal of heavy fluid and solid products, and a gutter and outlet at the free surface and periphery of the basin for the removal of scum and floating solids.

1,762,586. BRAKE GEARING FOR RAILWAY CARS. HERMAN C. PRIEBE, Blue Island, Ill. Filed Oct. 16, 1926. Serial No. 142,009. 5 Claims. (Cl. 188—52.)



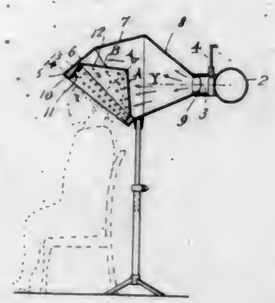
1. In a brake mechanism for railway cars, a spring plank, a truss structure comprising a compression member, a tension member and a strut between said members, and an extension carried by said strut co-operating with said spring plank to guide the movement of said truss structure.

1,762,587. DRAFT GEAR. HERMAN C. PRIEBE, Blue Island, Ill. Filed Jan. 21, 1929. Serial No. 333,834. 7 Claims. (Cl. 213—36.)



1. A draft gear including inner and outer followers; main motion resisting means interposed between and cooperating with said followers; draft sills between which the aforesaid elements are disposed; supplemental motion resisting means upon the exterior of the space between said sills and extending along the sills laterally thereof; a single member substantially at the level of the axis of the gear which effects assembly between one of said followers and the aforesaid supplemental motion resisting means; and members connected with top and bottom portions of the other follower and effecting assembly of this follower with said supplemental motion resisting means.

1,762,588. HAIR DRIER. JAMES W. RAINEY, St. Louis, Mo. Filed Apr. 30, 1929. Serial No. 359,359. 1 Claim. (Cl. 34—26.)



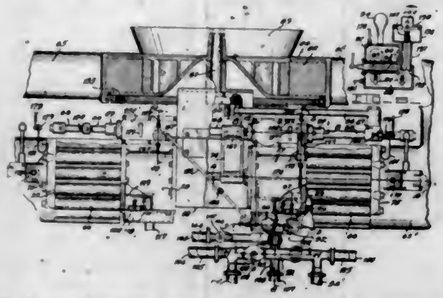
A hair drier comprising outer walls in cylindrical sections and a reducing conical section joined together to form a curved covering for the head and a relatively large expanding chamber adapted to receive heated air under pressure, an inner perforated section and a perforated conical drum therefor, and an eccentric rim wider in font than the rear and connecting said outer section and inner section and forming an annular chamber of varying width, substantially as described.

1,762,589. SALT CUP. BERNARD C. RIVERS, Rudolph, Wis. Filed June 6, 1927. Serial No. 196,820. 1 Claim. (Cl. 248—20.)



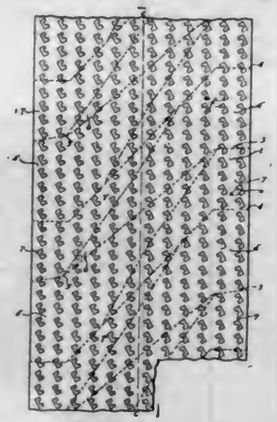
A device for the purpose indicated comprising a holder having mounting bracket at one side, the bracket being of hollow form and open on the under side and provided on the back face with a cross-sectionally circular recess, the back wall of the bracket having openings on opposite sides of the recess for the reception of fasteners which are concealed by the bracket when attached.

1,762,590. HYDRAULIC TRANSMISSION SYSTEM. ANDREAN G. RONNING, Minneapolis, Minn.; Jacob A. Ronning and Adolph Ronning, executors of the estate of said Andrean G. Ronning, deceased. Filed July 7, 1923. Serial No. 650,049. 8 Claims. (Cl. 123—33.)



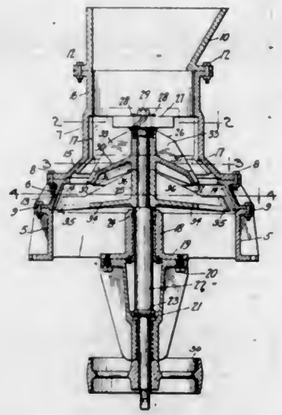
8. In combination, axially spaced internal combustion power units of the cylinder and piston type, a hydraulic pump and an air pump axially aligned with said internal combustion power units, a common piston rod to which the pistons of said pumps and power units are directly connected for synchronous movements, a crosshead rod parallel to and connected with said common piston rod, fuel injectors applied to the cylinders of said power units, a fuel pump and a high compression air pump both of the cylinder and piston type having their pistons secured to and driven by said crosshead rod, and fuel and air delivery conduits respectively connecting said two latter noted pumps to said fuel injectors; a fuel tank from which said fuel pump receives its supply, and a connection whereby said high compression air pump receives air from the first noted air pump; and an air storage chamber in the connection between said two air pumps.

1,762,591. FOUR-IN-HAND TIE, METHOD OF MAKING THE SAME, AND MATERIAL USED IN THE MANUFACTURE THEREOF. SAMUEL L. SAMTER, San Francisco, Calif., assignor to L. Samter & Sons, San Francisco, Calif., a Corporation of California. Filed Mar. 26, 1927. Serial No. 178,518. 3 Claims. (Cl. 2—146.)



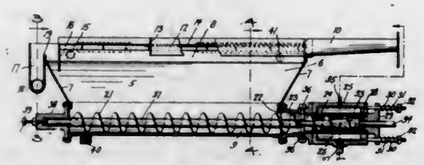
1. The method of making a four-in-hand cravat, which consists in providing a fabric body ornamented with designs or characters having a defined top and bottom arranged in a defined pattern with the tops of the characters at opposite sides of a dividing line extending longitudinally through the material disposed toward said line, cutting the material on converging lines from one edge inwardly on the bias across said dividing line and falling short of intersection the opposite edge of the material providing a tie forming piece tapering from its outer end inwardly, cutting the material on converging lines from the other edge inwardly on the bias across the said dividing line to provide a second tie forming piece tapering from its outer end inwardly, positioning the two tie forming pieces in end to end relation with certain edges in cooperative relation and with the tops of the major portions of the characters of the respective tie forming pieces disposed toward each other, and uniting the cooperating edges of the forming pieces.

1,762,592. SHREDDING MACHINE. HENRY G. SCHWARZ, Denver, Colo. Filed Mar. 26, 1927. Serial No. 178,651. 9 Claims. (Cl. 146—126.)



1. A shredding machine comprising an internally toothed housing, and a rotary element including a downwardly flaring apron and at the periphery thereof a toothed rim in cooperative relation to the teeth of the housing, the apron having radial webs providing pockets and the rim and the apron being recessed at the ends of the pockets for the discharge of objects passing downwardly upon the apron.

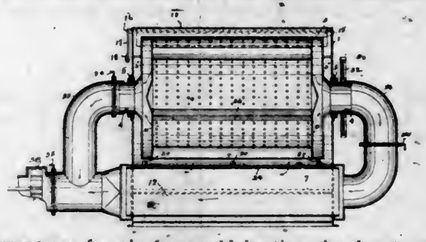
1,762,593. SEPARATOR. HENRY G. SCHWARZ, Denver, Colo. Filed Nov. 15, 1927. Serial No. 233,399. 3 Claims. (Cl. 210—55.)



1. A separator of the character described comprising a settling tank and in the upper portion thereof, a baffle structure adapted to bring material fed into the tank, to a state of comparative quiet, the tank having beyond the structure, an overflow for oil and an overflow for water.

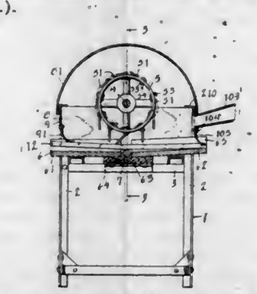
1,762,594. DRYING TUMBLER. JOHN W. SEIFERT, Houston, Tex., assignor to National Laundry Machine Company, Houston, Tex., a Corporation of Texas. Filed Apr. 28, 1928. Serial No. 273,537. 2 Claims. (Cl. 34—5.)

1. A drying tumbler including a casing having a cold air inlet opening, hollow trunnions rotatable in bearings in the casing, a foraminated drum whose ends are attached to said trunnions, a flue extending through the casing beneath the drum, said flue having an inlet opening within the casing, means for opening and closing the flue opening, a partition in the casing forming a heating chamber behind the drum having a cold air inlet, there being



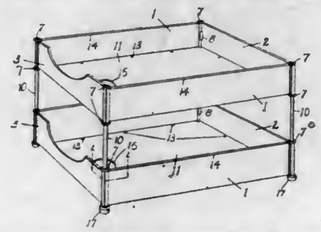
a passageway for air from said heating chamber to the drum, means for controlling said air inlet opening and said passageway to admit hot and cold air alternately or simultaneously to said drum, and an outlet pipe leading from each trunnion to the corresponding end of said flue.

1,762,595. ROSIN-RECLAIMING MACHINE. GUY W. SMITH, Kalamazoo Township, Kalamazoo County, Mich. Filed Mar. 16, 1928. Serial No. 262,258. 2 Claims. (Cl. 83—11.).



1. A machine for recovering rosin from used barrel staves comprising a suitable table, a suction housing above the said table with curtained apertures at front and rear for the passage of staves, a beater drum disposed in the said housing with single link beaters pivotally connected to the exterior of said drum and adapted to swing downwardly to beat the rosin coated surfaces of a barrel stave passing therethrough, a feed roll comprising a shaft disposed in a recess in the top of a table to slowly advance the staves fed therethrough, a friction drive therefor from the beater drum shaft, a suction fan, the intake of which is connected to the said suction chamber to induce a strong inward current of air entering the said chamber to retain and withdraw the powdered rosin, and a collector to which said fan delivers covered with porous fabric to receive the discharged rosin, as specified.

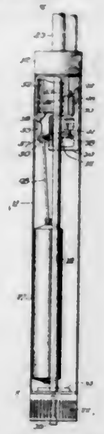
1,762,596. CORRESPONDENCE RACK OR TRAY. RAYMOND H. SOPER, Muskegon, Mich., assignor to Browne-Morse Company, Muskegon, Mich. Filed Oct. 12, 1928. Serial No. 311,987. 9 Claims. (Cl. 220—97.)



1. A tray comprising walls conformed at their ends to provide outwardly offset channel-shaped joint members

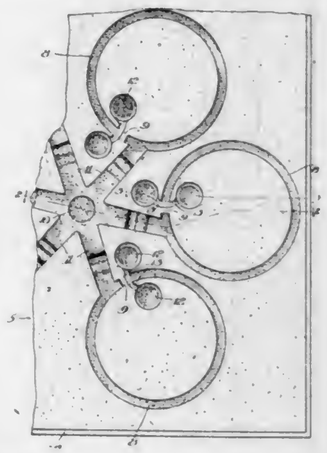
having telescoping engagement, and headed pins inserted in said joint members from the ends thereof with their heads in overlapping engagement therewith, said pins closely fitting within the joint members to close the same and having longitudinal bores extending from their outer ends adapted to receive corner posts.

1,762,597. PNEUMATIC PUMP. MARTIN S. SWANSTROM, Chicago, Ill. Filed Nov. 11, 1927. Serial No. 232,516. 8 Claims. (Cl. 103—248.)



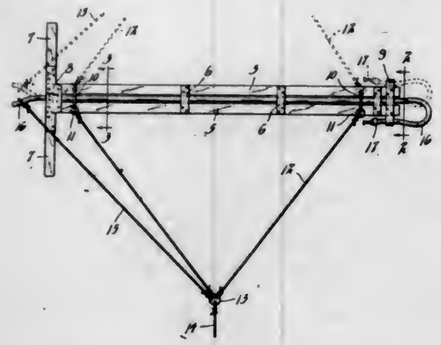
1. A pump chamber provided with inlet and outlet openings for air and for water, valves controlling the admission and discharge of air, a float located in the lower part of the pump chamber and controlling said valves, and a weight located in the upper part of the chamber and serving to restrain the operation of said float until the maximum and minimum water levels in the chamber are different from those which normally serve to actuate said float.

1,762,598. ART OF AND MOLD FOR CASTING PISTON RINGS. MACY O. TEETOR, Hagerstown, Ind., assignor to The Perfect Circle Company, Hagerstown, Ind., a Corporation of Indiana. Filed Aug. 12, 1927. Serial No. 212,387. 9 Claims. (Cl. 22—200.)



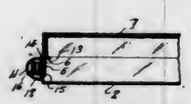
1. The method of forming piston ring castings in a mold, which consists in forming a circular ring cavity with a break forming the gap in the ring casting, a recess at one end of the ring cavity, and a runner adjacent the other end of the ring cavity, and pouring the molten metal which flows from the runner around the ring cavity into the recess.

1,762,599. COMBINED SPRINKLER AND SURFACER FOR ICE RINKS. ARTHUR THORUD, Minneapolis, Minn. Filed Mar. 16, 1929. Serial No. 347,544. 8 Claims. (Cl. 62—12.)



1. A combined sprinkler and surfacer for ice rinks, comprising a pair of spaced bars between which a hose is adapted to be run, said bars being adapted to rest on and be moved over the ice to surface the same, and means adapted to hold the discharge end of a hose directed inwardly from the outer end of one of said bars ahead of the same.

1,762,600. FASTENER CATCH FOR CONTAINERS. WILLIAM E. WACKER, Maplewood, N. J., assignor to August Goertz & Co., Inc., a Corporation of New Jersey. Filed Apr. 8, 1929. Serial No. 353,523. 3 Claims. (Cl. 292—175.)

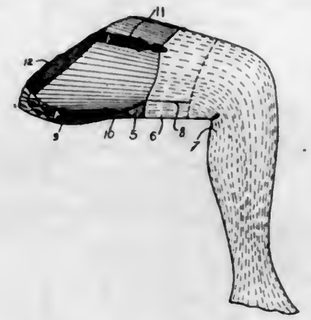


1. In a container having sections movable into closed relation one upon the other, a catch tongue depending from the margin of the free end wall of one section, a catch nosing carried by said catch tongue, a slotted latch plate for connecting said finger piece to the exterior of the other section to lie in the path of movement of said catch tongue, a finger-piece carried by said latch plate, means for connecting said finger piece to the exterior face of the free end wall of said other section subject to a limited movement toward and away from the same, and spring means intermediate said finger-piece and said latter end wall for yieldably holding said finger-piece in position to dispose said latch plate in holding relation to said catch-tongue nosing.

1,762,601. STOCKING. ETHEL M. WALL, Omaha, Nebr. Filed May 5, 1927. Serial No. 189,145. 2 Claims. (Cl. 2—240.)

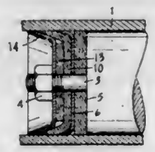
1. In a stocking, a strip of elastic knitted fabric disposed within the top portion of the stocking at the rear side thereof and extending parallel with the upper edge, and means securing the ends of said strip to the stocking body, the portions intermediate the ends of said strip being free and unattached to the body of the stocking, whereby

longitudinal tension upon a supporter attached to the intermediate portion of said strip may be transmitted to the



stocking-top principally in a circumferential direction, and excessive longitudinal tension upon the rear portion of the stocking-body avoided.

1,762,602. PISTON OR PLUNGER. HAROLD B. WIDEMAN, Niles, Mich., assignor to National Standard Company, Niles, Mich., a Corporation of Michigan. Filed Nov. 25, 1929. Serial No. 409,544. 8 Claims. (Cl. 74—109.)



8. A plunger comprising a cup-shaped outer member of resilient metal, the side wall of which is tapered to a feather edge, a cup-shaped intermediate member of fibrous material arranged within and supported by said outer member and projecting substantially therefrom, a cushioning disk arranged within said intermediate member, and a cup-shaped flaring inner member of resilient metal arranged on said cushioning disk to project from said intermediate member and normally out of contact with the side wall thereof.

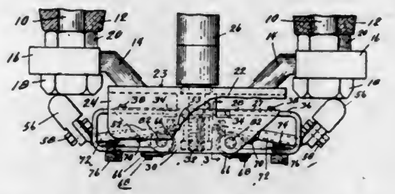
1,762,603. TOY BALLOON. ARTHUR P. WITTEN, Akron, Ohio, assignor to George E. Hall and himself, Akron, Ohio. Filed Mar. 14, 1929. Serial No. 346,835. 7 Claims. (Cl. 8—5.)



1. That method of ornamenting thin rubber articles which comprises, confining a plurality of the articles within an enclosed space and dipping the articles while so confined in a colored solution.

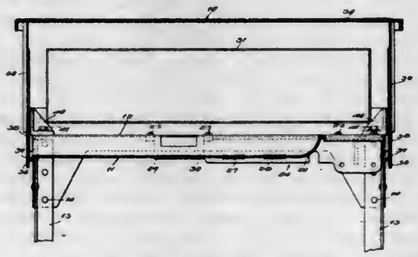
1,762,604. ELECTRIC SWITCH AND CONTACT STRUCTURE THEREFOR. CHESTER D. AINSWORTH, Wollaston, Mass., assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass., a Corporation of Massachusetts. Filed Dec. 27, 1927. Serial No. 242,666. 25 Claims. (Cl. 200—87.)

1. In an electric switch, the combination of fixed switch terminals having contact members at their ends, movable contact members cooperating with said fixed contact members so arranged that the current traversing the general switch circuit tends to separate said contact members, and relatively movable conducting elements included in said



switch circuit which react independently and in opposition to the general switch circuit to hold said contact members together.

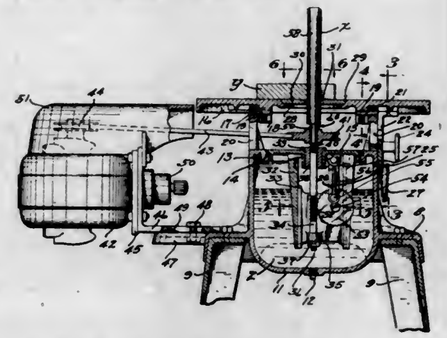
1,762,605. TABLE STRUCTURE. CARL F. ANDERSON, Brookfield, and RUDOLPH W. JANDA, Berwyn, Ill., assignors to Conlon Corporation, Cicero, Ill., a Corporation of Illinois. Original application filed June 14, 1926, Serial No. 115,820. Divided and this application filed Nov. 4, 1926. Serial No. 146,107. 12 Claims. (Cl. 312—141.)



4. In combination, a bed structure, a cover therefor having end members pivoted to the ends of the bed structure, stop members secured to the bed structure, and reinforcing panels secured to the end members and having angularly disposed elements disposed to contact with said stop members to limit opening movement of the cover.

11. In combination, a bed structure for ironing machines and the like and comprising a substantially rectangular plate having its central portion of concavo-convex cross section forming a concavity in the upper face of the plate and extending to one end thereof, and supporting means secured to said plate.

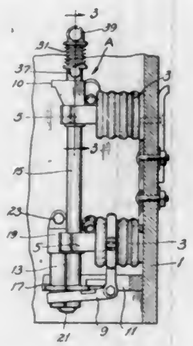
1,762,606. ABRADING MACHINE. ARVID BJORKLUND, Minneapolis, Minn. Filed July 16, 1927. Serial No. 206,317. 6 Claims. (Cl. 51—34.)



1. In a machine of the kind described, the combination with a case, a removable cover for the case, an upright

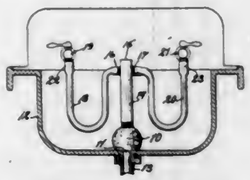
shaft journaled in the cover, means for driving the shaft, means carried by the cover within the case for reciprocating the shaft, a table overlying the case, and a tool holder applied to the shaft to partake of its rotary and reciprocatory movements and extending through an aperture in the table.

1,762,607. CARTRIDGE. LESTER P. BOLL, Maplewood, Mo., assignor to W. N. Matthews Corporation, St. Louis, Mo., a Corporation of Missouri. Filed Apr. 14, 1927. Serial No. 183,658. 7 Claims. (Cl. 200—121.)



1. A fuse cartridge comprising spaced terminal engaging elements, a fuse held in electrical connection with said engaging elements, a compression spring tending to increase the distance between points of connection of said fuse with the terminal engaging elements, and means for resisting said tendency, the explosive pressure occasioned by the rupture of said fuse being adapted to prevent the resisting operation of said resisting means.

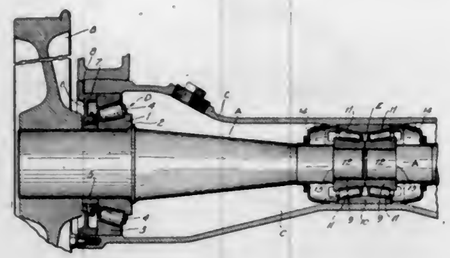
1,762,608. DRAINPIPE CLEANER. BERT L. BROWN, Long Beach, Calif. Filed June 10, 1929. Serial No. 369,885. 2 Claims. (Cl. 4—256.)



1. In a drain pipe cleaner the combination of a sponge rubber ball base adapted to be seated so that a center opening therethrough is in register with the inlet ends of a drain pipe, a stand-pipe having its lower end secured in the opening through said base that serves as a handle for applying pressure to prevent leakage between said base and drain pipe, nipples arranged at right angles to one another and adjacent the upper end of said stand pipe, water faucets, and flexible detachable pipe connections between said faucets and nipples.

1,762,609. ROLLER-BEARING-AXLE CONSTRUCTION. TRACY V. BUCKWALTER, Canton, Ohio, assignor to The Timken Roller Bearing Company, Canton, Ohio, a Corporation of Ohio. Filed Aug. 17, 1929. Serial No. 386,601. 5 Claims. (Cl. 295—38.)

1. A differential railway car axle construction comprising an axle housing, axle sections disposed in said housing with their inner ends spaced apart, conical roller bearings interposed between the outer ends of said axle sections and the outer ends of said housing, and conical roller bearings interposed between the inner ends of said axle sections

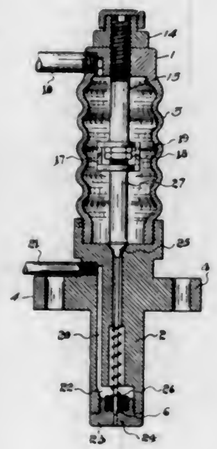


and said housing, said last mentioned conical roller bearings comprising conical inner bearing members mounted on said axle sections in abutting relation.

1,762,610. INSECTICIDE BARRIER. KENNETH F. COOPER, Great Neck, N. Y., and WILLIAM MOORE, Rutherford, N. J., assignors to American Cyanamid Company, New York, N. Y., a Corporation of Maine. Filed Sept. 21, 1923. Serial No. 664,090. 6 Claims. (Cl. 167—35.)

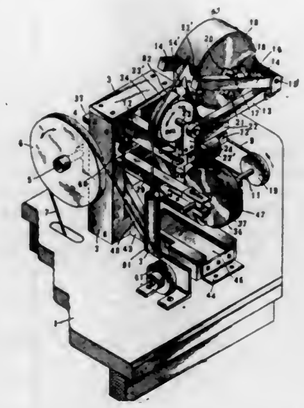
6. A surface carrying an insect barrier made up of a continuous section of an insect repellent material and one or more sections of an insecticidal material at an angle to said repellent material and substantially contiguous therewith, said insecticidal material being capable of liberating a toxic gas.

1,762,611. FUEL-INJECTION VALVE. ADAM CRAIGON, Toronto, Ontario, Canada, assignor to Craigon Engines Limited, Hamilton, Canada. Filed Nov. 21, 1927. Serial No. 234,857. 1 Claim. (Cl. 299—133.)



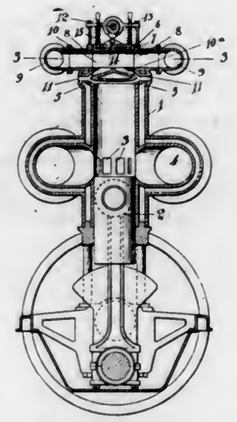
A fuel injection valve comprising a casing having a fuel outlet, an inlet for liquid fuel, an inlet for compressed air and separate passages leading from the inlets to the outlet, a part of the casing being adapted to elongate when the air pressure in the casing is sufficiently high; a valve plug controlling the outlet; a valve plug controlling the compressed air passage; and connections whereby the movement of elongation effects the opening of both valves.

1,762,612. CLOTH FOLDER. SIMON COOPER, Brooklyn, N. Y., assignor to Cooper Tea Packet Company, Brooklyn, N. Y. Filed Aug. 11, 1925, Serial No. 49,664. Renewed Jan. 24, 1928. 21 Claims. (Cl. 270—86.)



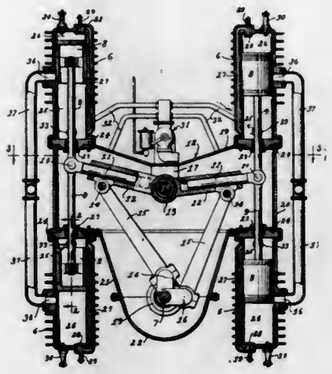
1. That method of folding sheet material which consists in unwinding the material from a roll while the roll of material is in peripheral contact with the edge of a fold-initiating rotatable disk whereby a fold is initiated without creasing the material.

1,762,613. INTERNAL-COMBUSTION ENGINE. ADAM CRAIGON, Toronto, Ontario, Canada, assignor to Craigon Engines Limited, Hamilton, Canada. Filed Aug. 9 1928. Serial No. 298,523. 1 Claim. (Cl. 123—75.)



In an internal combustion engine, the combination of a cylinder; a piston movable in the cylinder; a combustion chamber communicating with one end of the cylinder but of greater diameter; a piston valve forming one wall of the combustion chamber; a cylinder in alinement with the aforesaid cylinder forming a guide for said piston valve and having a port in its wall; a port in the main cylinder wall remote from the combustion chamber and controllable by the piston; and a port through the piston valve, whereby, when the valve is reciprocated, the port in the piston valve guide cylinder may be brought into and out of communication with the combustion chamber.

1,762,614. INTERNAL-COMBUSTION MOTOR. WILLIE DELFINO, Bakersfield, Calif. Filed Sept. 24, 1928. Serial No. 307,932. 1 Claim. (Cl. 123—54.)



An internal combustion motor comprising opposite pairs of cylinders, pistons dividing the cylinders into combustion and pre-compression chambers, conduits connecting the combustion chambers with the pre-compression chambers, check valves for said conduits, igniters for the combustion chambers, combustion chambers being provided with exhaust ports controlled by the pistons, the pre-compression chambers being provided with inlet ports, valves for the inlet ports, a rod connecting the pistons of each pair, a shaft, guides mounted to oscillate on said shaft and projecting in opposite directions, slide members working in the respective guides and pivoted to the respective rods between the cylinders of the respective pairs, a second rotatably mounted shaft provided with cranks, and pitmen pivotally connected with the guides and engaging the cranks.

1,762,615. SHOE CLOSURE. CHARLES F. DIETHER, St. Paul, Minn. Filed Sept. 4, 1928. Serial No. 303,863. 1 Claim. (Cl. 36—51.)

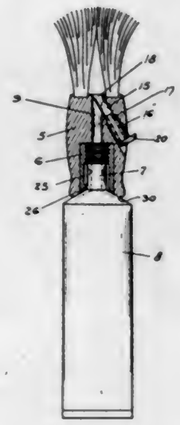


A shoe having an opening at its front portion for the insertion of the foot, a resilient member having portions extending along the sides of the shoe adjacent the edges of said opening and secured thereto for holding said opening in normally closed position, having a portion connecting said portions extending transversely therebetween at the lower end of said opening, means for securing the latter portion to the shoe at the vamp, and a flap secured at one side of said opening and extending over the same and said member.

1,762,616. SHAVING BRUSH. WILLIAM A. DILLON and CLAUDE O. WEINGAND, Los Angeles, Calif. Filed Mar 1, 1929. Serial No. 343,700. 3 Claims. (Cl. 15—135.)

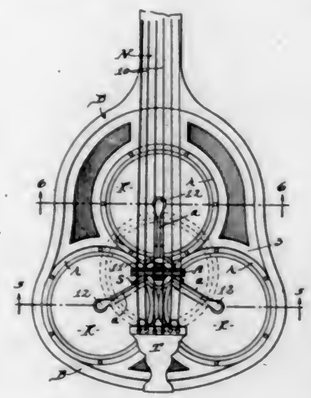
1. In a device of the class described, a brush head comprising a shank, a soap feeding passage being provided through said shank longitudinally thereof, the intake end portion of said passage being enlarged, a sleeve fixed within the enlarged portion of said passage, the inner part of said sleeve having internal threads and the

outer part of said sleeve having an unthreaded interior surface the diameter of which is equal to that of the threaded part plus the depth of its threads, a container having a neck portion projecting from one end thereof, said neck having its outer portion externally threaded



to screw into the aforementioned threads and its inner portion unthreaded, there being a key-way cut through the threaded portion of said neck, and a key within the lower portion of said sleeve, said key being adapted to cooperate with said key-way.

1,762,617. STRINGED MUSICAL INSTRUMENT. JOHN DOPYERA, Los Angeles, Calif., assignor to George D. Beauchamp, T. E. Kleinmeyer, and Paul Barth, Los Angeles, Calif. Filed Oct. 12, 1926, Serial No. 141,115. Renewed Oct. 22, 1929. 6 Claims. (Cl. 84—296.)



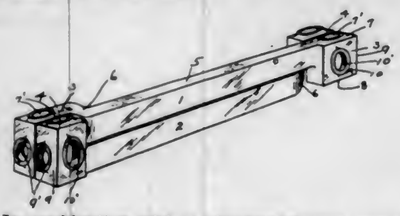
1. A stringed musical instrument including a hollow body, a top having an opening therein, a plurality of strings held in tension over said body, a metallic tensioning member positioned centrally within the body, a bridge supported by said tensioning member, and positioned adjacent said opening, a plurality of metallic resonators positioned within the body and concentrically arranged with respect to said tension member, and a member having arms engaging central portions of said resonators and a central portion engaging said bridge, for the purpose described.

1,762,618. STAKE LOCK. RAYMOND DYMOCK, Hamburg, N. J. Filed Nov. 12, 1928. Serial No. 318,657. 3 Claims. (Cl. 296—43.)



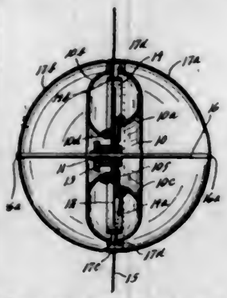
1. In a device of the class described, the combination of a pocket with a stake, the latter being at its lower end provided with a metal ferrule and at the center of its bottom with an aperture, a casing mounted in the said aperture, an expansion spring arranged in the said casing and secured at its lower end by the inwardly bent flanges of the latter, the said spring engaging a vertical rod projecting from the bottom of the said stake, the said rod terminating in a horizontal cross-bar and a lock-handle, the said cross-bar being adapted to secure the engagement of the stake with the pocket when in a transverse position and disengagement thereof when in a longitudinal position, substantially as shown and described.

1,762,619. CROSS-OVER CONNECTION FOR BACK-TO-BACK PLUMBING FIXTURES. WELLS S. FLEMING, Portland, Oreg. Filed Dec. 6, 1928. Serial No. 324,273. 6 Claims. (Cl. 137—75.)



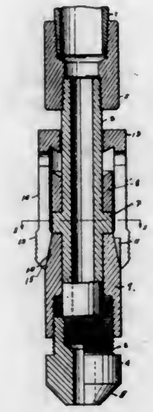
1. In combination with a plumbing fixture comprising water-receiving receptacles arranged back-to-back, and hot and cold water faucets located to discharge into said receptacles, respectively, a cross-over connection between said faucets and hot and cold water service pipes thereof, said connections consisting of tubular sections, the opposite ends of each section being provided with heads adapted to be arranged with the head at one end of one section located on the far side of the head at the same end of the other section, said heads provided with outlets, whereby the hot and cold water faucets will have the same relative positions with respect to each receptacle.

1,762,620. TOY. MARTIN O. FIXEN, Minneapolis, Minn. Filed Sept. 28, 1928. Serial No. 309,074. 6 Claims. (Cl. 46—37.)



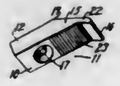
6. The structure set forth in claim 2, and a ring in said casing surrounding said drums and disk and having openings at substantially opposite sides thereof through which said cord passes.

1,762,621. SPEAR. ELLSWORTH GRAY, Houston, Tex. Filed Mar. 5, 1929. Serial No. 344,231. 6 Claims. (Cl. 294—96.)



1. A spear including a mandrel, a guide attached to the lower end thereof, an expander slidable on the mandrel having a threaded connection with the guide and having a tapered portion, expansible pipe engaging means on the mandrel and movable longitudinally thereon independently of the expander, said tapering portion of the expander being arranged to be wedged into the expansible engaging means to expand the same, opposing abutments carried by the mandrel and pipe engaging means, respectively, which cooperate, through the mandrel, with said threaded connection to move said expander, relative to said pipe engaging means, upon an appropriate rotation of the mandrel.

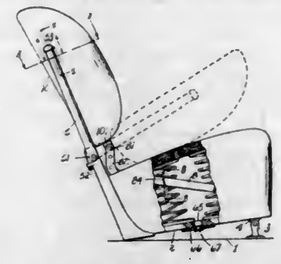
1,762,622. WEDGE. GEORGE GRAY, Kansas City, Mo., assignor to Garnett Church Furniture Co., Kansas City, Mo., a Copartnership of L. R. Gowdie, C. R. Gowdie, and G. A. Gowdie. Filed Aug. 16, 1928. Serial No. 299,913. 4 Claims. (Cl. 155—196.)



1. In combination with a pew joint comprising a pew end having a dovetail routed groove forming spaced aligned edges, and a pew body having an edge mounted in the groove and one face engaging one of said aligned edges, means for securing the body to the pew end comprising a wedge having an inner beveled end portion movable between the pew body and the other of said aligned edges into the groove and provided with a hook at the end of said portion for engaging a wall of the groove, and an outer end portion engageable with the body and the last named groove edge and means for fastening the outer end portion to the body.

1,762,623. AUTOMOBILE SEAT CONSTRUCTION. CARL F. HESS, Comstock Park, Mich. Filed Oct. 22, 1928. Serial No. 313,980. 9 Claims. (Cl. 155—53.)

9. In an automobile seat structure, the combination of a seat bottom with deep spring cushions with flexible sides, an upright post at each front corner within the cushion casing, an oblique member pivoted to the upper end of each post and extending rearwardly to the upward rear edge of

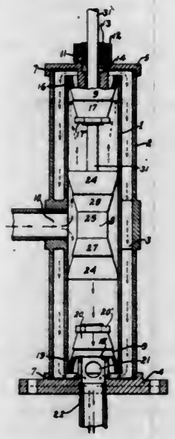


said cushion and outwardly to form hinge members at each side, and loop connections from intermediate coils of the side springs to said oblique bars, as specified.

1,762,624. FRICTION CLUTCH. EUGENE HIGGINS, Jackson, Mich. Filed Apr. 25, 1928. Serial No. 272,576. 5 Claims. (Cl. 192—77.)

5. In a friction clutch, the combination of concentrically disposed inner and outer clutch members, said inner clutch member having parallel longitudinal bores therein cutting through a portion of its periphery, a split clutch ring disposed between said members, cylindrical abutment members rotatably mounted in the inner member and having radial shoulders coacting with the ends of said clutch ring, one of said abutment members being provided with an actuating arm, and a screw means for rotatably adjusting and supporting the other abutment member in its adjusted position.

1,762,625. PUMP. CLAUDE G. HOLT, St. Johns Station, Mo. Filed Oct. 2, 1926. Serial No. 139,087. 1 Claim. (Cl. 103—185.)



In a double-acting pump, a cylinder having an inlet port, a double piston in said cylinder, said cylinder being pro-

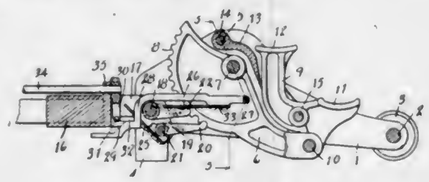
vided with oppositely disposed flexible conical check valves located at its ends and contacting with the inner face of the cylinder, said piston being provided with oppositely disposed flexible conical check valves contacting with the inner face of said cylinder at opposite sides of said inlet port and cooperating with the first mentioned conical check valves to permit a continuous flow of fluid through the cylinder, the conical valves at the ends of the cylinder having their relatively small ends extended toward the piston valves, and the relatively large end of each piston valve being extended toward and adapted to overlap the relatively small end of one of the first mentioned valves.

1,762,626. HYDROPLANE. GORDON B. HOOTON, Grand Rapids, Mich. Filed Jan. 23, 1928. Serial No. 248,814. 13 Claims. (Cl. 114—66.5.)



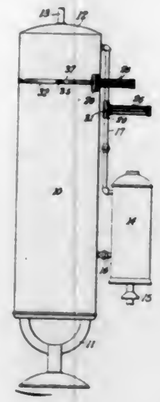
13. In a boat of the step hydroplane type, a bottom with contacting surface which is convexly curved in cross section with smooth broadly curved surface, the edge of the bottom meeting the sides and forming there a non-rounded corner, and a flexibly mounted skid-resisting hydro-fin mounted and disposed forward of the center of gravity.

1,762,627. LIFTING JACK. ARTHUR C. HOPKINS, Niles, Mich., assignor to National Standard Company, Niles, Mich. Filed Apr. 24, 1926. Serial No. 104,361. 13 Claims. (Cl. 254—6.)



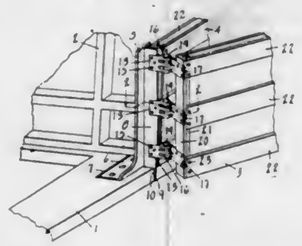
1. In a lifting jack, the combination of a frame comprising spaced side members, a lifting lever pivotally mounted between said side members and provided with a ratchet segment, a head member pivotally mounted on said lifting lever, a head supporting link pivotally connected to said frame and to said head member in parallel relation to said lifting lever for maintaining said head member in upright position, a bifurcated actuating lever having longitudinal slots in the arms thereof, a pivot therefor extending between said side members, a lifting pawl disposed between said lever arms and pivotally mounted thereon to coact with said ratchet segment, a holding pawl pivotally mounted on the actuating lever pivot between its arms to coact with said segment, springs acting to urge said pawls to engaging position, a tripping lever pivotally mounted on one of said frame side members at the side of said segment to project rearwardly and having a downwardly offset rear end provided with a cam shoulder, said tripping lever being provided with a spring finger engaging said holding pawl, a spring tripping member mounted on said lifting pawl to project rearwardly and upwardly from its pivot, and a reversing member slidably mounted in said slots in said actuating lever arms to be shifted forwardly into position to coact alternately with said holding pawl tripping lever and said actuating pawl tripping member when the actuating lever is oscillated.

1,762,628. CLOTHES-DRYING RACK. GEORGE T. HOYNS, Brooklyn, N. Y. Filed May 27, 1929. Serial No. 366,197. 2 Claims. (Cl. 211—110.)



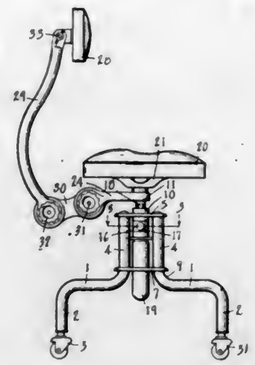
1. In a clothes drying rack, a plate member of "C" shape in cross section presenting a pair of incurved spaced wing elements having outer parallel edges, and provided with slots slightly to the rear of said edges, lugs projecting from said plate member for supporting rack arms, and a strap for encircling a boiler of circular cross section, said strap passing through the slots for urging said parallel edges against the boiler irrespective of the diameter of the later element.

1,762,629. VEHICLE BODY STRUCTURE. BURTON L. HUESMAN, Kalamazoo, Mich., assignor to Limousine Body Company, Kalamazoo, Mich. Filed June 25, 1928. Serial No. 288,000. 1 Claim. (Cl. 296—28.)



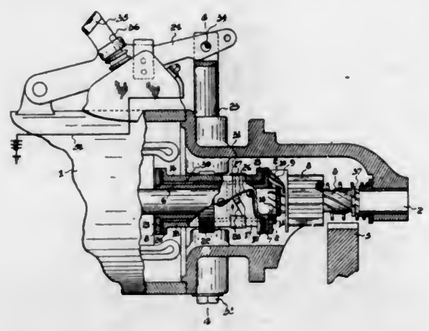
The combination with a vehicle body including a longitudinal sill member and a pair of doors, of a door post of T cross section provided with an attaching plate at its lower end secured to the upper side of said longitudinal sill, the intermediate arm of said post being extended below said plate and being disposed to project outwardly, said sill being slotted to receive the projecting end of said intermediate arm, a plurality of fixed hinge members longitudinally slotted to embrace said intermediate arm of said post and secured thereto, said fixed hinge members each having a plurality of spaced pintle ears, a pair of swinging hinge members coacting with each fixed hinge member, said swinging hinge members having oppositely offset knuckles arranged between adjacent pairs of pivot ears of said fixed members and being disposed transversely of and secured to the rear edges of the doors, and a pintle for each hinge unit, and said pairs of swinging hinge members being adapted to close against opposite sides of the fixed hinge members when the doors are closed.

1,762,630. ADJUSTABLE CHAIR. REGINALD C. HUNTLEY, Sturgis, Mich. Filed Feb. 27, 1929. Serial No. 343,035. 5 Claims. (Cl. 155—134.)



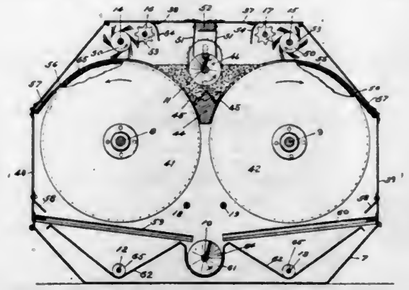
1. In a chair, the combination of tubular angled legs having upright portions at their upper ends, a head member having a central opening therein and downwardly projecting lugs engaged in the upper ends of said legs, a tie plate disposed below said head member and provided with openings through which said legs are arranged, said tie plate engaging the legs adjacent the upper angles thereof and having an opening alined with the central opening in said head, said legs being provided with alined transverse slots intermediate said head member and tie plate, a seat provided with a threaded spindle arranged through said opening in said head member, a spindle support engaging in said slots in said legs whereby it is supported intermediate said head member and tie plate, a nut on said spindle resting upon said support, and a housing for the lower end of said spindle disposed through said opening in said tie plate and engaged with said support.

1,762,631. ENGINE STARTER. MAUNSELL B. JACKSON, Toronto Ontario, Canada. Filed Mar. 13, 1928. Serial No. 261,359. 27 Claims. (Cl. 74—7.)



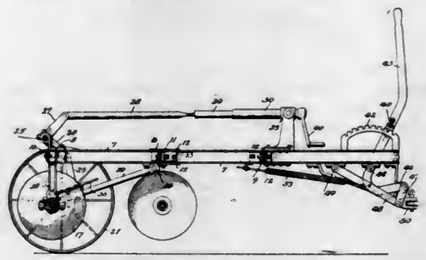
1. An engine starter comprising a rotatable shaft; a starter pinion having a drive connection with the shaft and adapted to be moved axially to mesh with a gear of an engine to be started; a rotatable member on the shaft; manually operable means for rotating said member; and means whereby the said member is adapted, when rotated not more than a predetermined distance, to move the pinion axially and if the pinion teeth meet end to end with the gear teeth to resiliently hold them in engagement therewith and thereafter positively rotate said pinion to clear the teeth of the gear to permit a further axial movement.

1,762,632. GRAIN SEPARATOR. HARRY L. JOHNSON, Minneapolis, Minn. Filed Dec. 3, 1926. Serial No. 152,430. 6 Claims. (Cl. 209—94.)



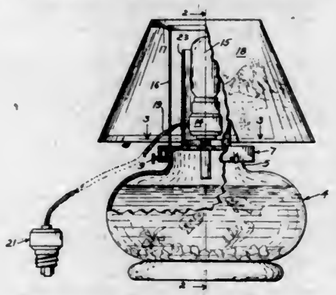
6. In a grain separator, the combination including a pair of horizontal, rotatable cylinders, forming a trough for unseparated grain, and having profusely distributed pockets in their peripheries for removing grain of a predetermined size away from the trough, and adjustable means, having moving parts, for acting upon the grain to feed in through the trough.

1,762,633. WHEELED HARROW. RUSSELL H. JOHNSON and OTTO E. SZEKELY, Moline, Ill., assignors to Brown Lynch Scott Co., Monmouth, Ill., a Corporation of Illinois. Filed Aug. 30, 1926. Serial No. 132,396. 4 Claims. (Cl. 97—233.)



1. In a wheeled harrow, the combination of a rigid unit comprising a frame, a pair of wheels, means pivotally connecting the wheels to the frame, a rocking device on the frame for moving the wheels and frame relatively, and means for actuating said rocking device comprising two tubular members adapted to telescope one within the other, and a screw device operating to move one of said members in opposite directions in the other member.

1,762,634. FISH BOWL AND LAMP COMBINATION. MOTOGO JYUMI, Oakland, Calif. Filed Jan. 3, 1929. Serial No. 330,057. 5 Claims. (Cl. 119—5.)



1. In combination with an aquarium, a lamp base disposable as a closure for the aquarium, a lamp mounted on

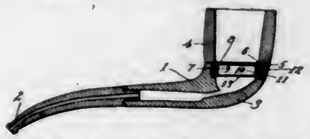
said base, means providing open air passages for the aquarium, and means utilizing said lamp for effecting a convection circulation of air through said passages and aquarium.

1,762,635. STEAM-TABLE PAN. FRANK P. LAMBERT, Oakland, Calif. Filed Oct. 14, 1929. Serial No. 399,420. 4 Claims. (Cl. 53—1.)



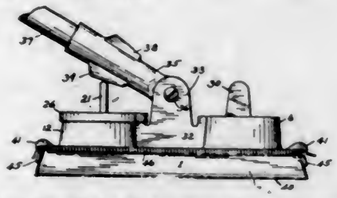
1. A steam-table pan of one-piece structure having a continuous supporting rim thereabout provided at its outer edge with a plurality of upwardly directed handle extensions, said pan having sloping sides and said extensions being parallel to the adjacent pan sides whereby the pan is arranged for nested engagement with like pans.

1,762,636. TOBACCO PIPE. BERNARD M. MARKSTEIN, Cincinnati, Ohio. Filed Dec. 31, 1924. Serial No. 759,202. 1 Claim. (Cl. 131—12.)



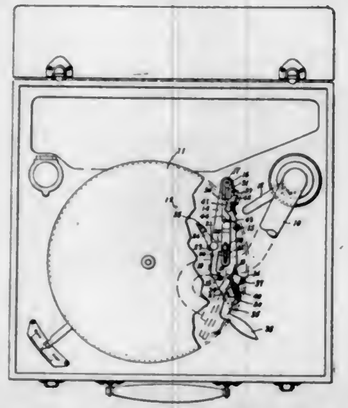
In a smoker's pipe in combination, a pipe body, a detachable bowl, said detachable bowl secured to the body of said pipe, said bowl having a threaded portion of lesser circumference than said bowl, and said body having a shoulder spaced from the end of said threaded portion, a filtering disc, a foraminated plate having an annular flange for spacing tobacco from said disc, and the flange of said plate and the outer periphery of said disc retained between said body shoulder and the end of said threaded portion.

1,762,637. FLOOR CLEANING, WAXING, AND POLISHING DEVICE. FRANCIS J. MCCARTHY, Portland, Oreg., assignor of one-half to Henry F. Wagner, Multnomah County, Oreg. Filed Feb. 25, 1929. Serial No. 342,376. 3 Claims. (Cl. 91—39.)



1. A floor cleaning and polishing device, comprising a body having a flat under surface and formed with a pair of recesses in its longitudinal axis, a cylindrical wall extending upwardly about each said recess to provide a fluid-chamber and a wax-chamber, respectively, said wax-chamber having a plunger therein provided with an upwardly extending post and transversely disposed aperture in its bottom wall, said fluid-chamber having an axially disposed opening in its bottom wall providing a valve-seat, a valve for said opening having an upwardly extending stem, a handle pivotally mounted between said chambers to swing in the plane of said longitudinal axis and adapted to operatively engage said post and said valve-stem, and means to detachably secure a pad to the underside of said body.

1,762,638. AUTOMATIC STOP DEVICE. FRANK OBERST, Fosterdale, N. Y., assignor to Wilbur Products Company, a Corporation of New York. Filed June 14, 1929. Serial No. 370,798. 9 Claims. (Cl. 192—118.)



1. An automatic phonograph stop including a brake, a projection on the turntable, a projection movable with the tone arm, an inter-engaging means actuated jointly by said projections to move said brake, said means including a controller engageable at predetermined positions of the tone arm by the projection movable therewith, and means carried by said controller to prevent accidental movement thereof.

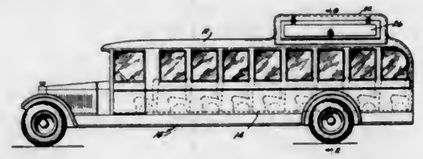
1,762,639. IMPLEMENT FOR MEASURING THE HARDNESS OF METALS. PIERRE PAUL ROUDIE, Paris, France. Filed Oct. 21, 1927, Serial No. 227,796, and in France Nov. 2, 1926. 5 Claims. (Cl. 265—13.)



3. A scleroscope, comprising a guide tube; an impact rod movable therein and adapted to be dropped upon the surface of a test piece; and freely-adjustable means for regulating the height of the drop, said means embodying a ring encircling the tube and adjustable vertically thereon, and a spring-pressed catch carried by the ring and engageable with a part provided on the rod.

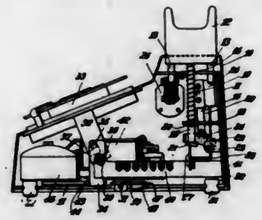
1,762,640. MOTOR-VEHICLE BODY. ROY S. SANFORD, South Bend, Ind., assignor to Bendix Brake Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 28, 1927. Serial No. 171,506. 3 Claims. (Cl. 296—1.)

1. In a bus, a chassis, a closed body upon the chassis, said body having a floor provided with an aisle along one side wall and in line with the wheels on said side of the chassis, said aisle disposed below the remaining portion of



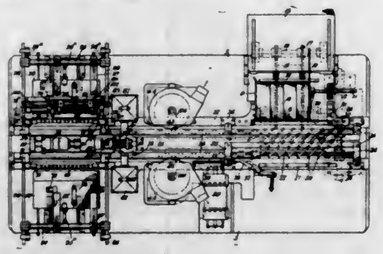
the floor and provided with a transversely offset portion at the same level extending to one side of the rear wheel on the same side of the chassis.

1,762,641. TELEPHONE INSTRUMENT. JOHANN SCHNEIDER and GEORG HECKMANN, Frankfort-on-the-Main, Germany, assignors to the Firm H. Fuld & Co., Telephon- und Telegraphenwerke, Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed July 10, 1929, Serial No. 377,279, and in Germany July 11, 1928. 7 Claims. (Cl. 179—100.)



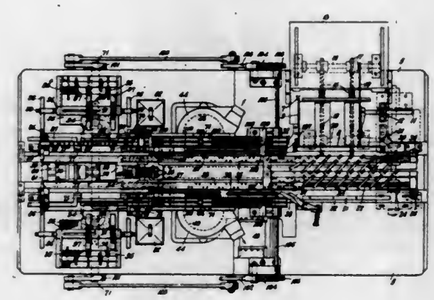
1. In a telephone subscriber's station the arrangement of a supporting framework comprising means for attaching and supporting the acting parts of the station such as coils, contacts, ringing device and microtelephone supporting parts, and a casing surrounding the said framework and being provided with holes for passing such parts which are to be acted upon from outside of the instrument such as microtelephone support, the parts passing the casing through these openings being of such cross section that they may be passed freely through the openings, and means for detachably connecting the said casing with the said framework.

1,762,642. BOX-END-MAKING MACHINE. HAROLD PITMAN SCHUCK, San Francisco, Calif., assignor to Daniels & Schuck, Inc., East Orange, N. J., a Corporation of Delaware. Filed Feb. 4, 1929. Serial No. 337,441. 11 Claims. (Cl. 244—7.)



1. A machine for making composite sections or panels from scrap lumber, comprising in combination, a table; a hopper on said table within which wooden slats or pieces are arranged side-by-side in tiers; an endless conveyor working below said hopper and adapted to successively remove and convey loose tiers of slats therefrom; a second endless conveyor working at substantially right angles to the first conveyor and onto which the former delivers; means for trimming the slats to equal lengths and means for cutting grooves therein while carried by the second conveyor; a platform-portion onto which the conveyor delivers the slats; a push-element engaging behind the delivered slats to move them forwardly on said platform-portion; a shifting stop-bar between which and said push-element the delivered slats are temporarily held under lateral compression during a cleating operation; cleat-feeding hoppers arranged on opposite sides of said platform-portion where the slats are held between the push and stop elements, means for driving wooden cleats from said hoppers and into the grooves of the slats held therebetween; and means operating said push and stop elements and holding the latter with the slats stationary during the cleating operation.

1,762,643. BOX-END-MAKING MACHINE. HAROLD PITMAN SCHUCK, San Francisco, Calif. Filed Mar. 7, 1930. Serial No. 434,066. 12 Claims. (Cl. 144—7.)



1. A machine for making composite panels from odd lengths of lumber, comprising in combination, a table; a hopper on the table in which lumber pieces are arranged side-by-side in loose tiers; an endless conveyor working below said hopper to successively remove and convey the tiers of pieces therefrom; a second endless conveyor working at substantially right angles to the first conveyor and onto which the former delivers; means for trimming the pieces to equal lengths and means for cutting a plurality of grooves therein at both ends while carried by the second conveyor; a platform-portion onto which the last named conveyor delivers the pieces still in loose tiers; a push-element engaging behind the delivered pieces to move them forwardly on said platform-portion; a shifting stop-bar between which and said push-element the delivered pieces are temporarily held under lateral compression during a cleating operation; means cooperatively actuating said push and stop elements and holding the same with the pieces stationary during the cleating operation; cleat-feeding hoppers arranged on opposite sides of said platform-portion where the pieces are held between the push and stop elements; means for driving a plurality of cleats from said hoppers and into the grooves at both ends of the pieces simultaneously as they are held under compression between the hoppers; and means feeding cleats into said hoppers coordinately with the discharge therefrom.

1,762,644. REFRIGERATING APPARATUS. JOHN SCHURMAN, Cleveland, Ohio, assignor to York Ice Machinery Corporation, York, Pa., a Corporation of Delaware. Filed Sept. 25, 1928. Serial No. 308,287. 6 Claims. (Cl. 261—116.)

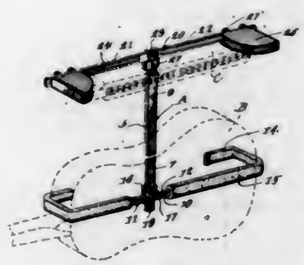
1. A refrigerating apparatus comprising a vertically disposed tube having an elbow portion arranged to form a substantially horizontal air inlet; means for supplying

a downward current of liquid spray to the inside of said tube to draw air through said inlet; a horizontally disposed air outlet box connected into the wall of said tube



near the bottom end thereof; moisture removing means in said box; and means for discharging liquid from said tube.

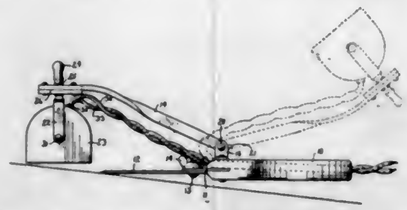
1,762,645. MOUTH-ORGAN STAND. JOHN SPALLENO, Streator, Ill. Filed June 1, 1929. Serial No. 367,649. 2 Claims. (Cl. 84—170.)



1. A device for supporting a mouth organ from a stringed instrument comprising an adjustable standard, means for detachably clamping the standard to a stringed instrument comprising arms pivotally connected to the front face of the standard adjacent to the lower end thereof, jaws carried by the outer ends of the arms for engaging the instrument, means for holding the arms against accidental swinging movement, a holder for a mouth organ carried by the upper end of the standard including arms pivotally connected to the rear face of the standard adjacent to the upper end thereof, clips slidably mounted on the arms and movable toward and away from one another for receiving the terminals of the mouth organ, and means carried by the standard for holding the arms against accidental swinging movement.

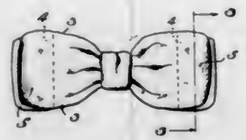
1,762,646. ELECTRICAL PAINT AND VARNISH REMOVER. HAMPTON I. SEALS and JOHN LEWIS DANIELS, Iowa Falls, Iowa. Filed July 16, 1928. Serial No. 293,242. 1 Claim. (Cl. 219—29.)

A device of the class described, comprising a handle, a scraping blade thereon, an arm pivoted on said handle, a socket member at the forward end of said arm, a yoke having a stem rising from its central portion, a ball on said stem swivelly engaging said socket member, a casing mounted between the arms of said yoke and adapted to be



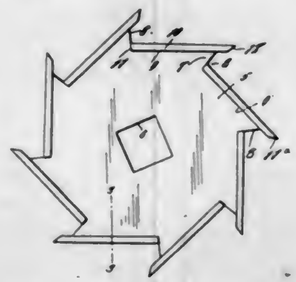
positioned immediately in front of the edge of said blade, a heating unit in said casing, and conductor wires connected to said unit.

1,762,647. BOW NECKTIE. OTTO WEINSTEIN, Boston, Mass., assignor to Standard Neckwear Company, a Corporation of Massachusetts. Filed Sept. 21, 1927. Serial No. 220,955. 2 Claims. (Cl. 2—151.)



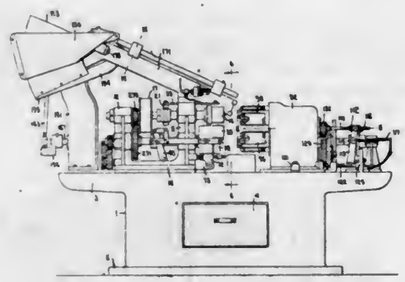
1. A preformed bow tie comprising a front portion formed from a tubular casing consisting of a main piece of cloth having two opposite edges folded inwardly and toward each other, a strip of sheet rubber extending the full width of said casing and located only at spaces where the turned end portions of the finished tie are formed, and a combined securing and reinforcing element consisting of a gummed tape mounted on the exterior and on each adjacent edge portion and in contact with said strips of sheet rubber to hold the same in position, and extending lengthwise of the edges of said cloth.

1,762,648. ROTARY CUTTER. ERNEST ALBERT WILLIAMS, Elyria, Ohio. Filed Nov. 6, 1929. Serial No. 405,140. 1 Claim. (Cl. 144—218.)



A rotary cutter for wood working purposes comprising a flat substantially disk like plate of relatively thin metal having a central arbor opening and having its peripheral portion formed with a series of circumferentially disposed pointed projections each of which has a forwardly disposed straight edge extending radially of the plate and an upper substantially straight edge disposed tangentially of the plate, said projections being arranged so that the radial edge of each projection provides an abutment at the lower end of the tangentially disposed upper edge of the preceding projection, a flat substantially elongated rectangular plate mounted on the tangentially disposed upper edge of each projection with one or both side longitudinal edges thereof disposed outwardly of the side faces of the disk like plate and having its inner end engaged with an abutment and its outer end projecting beyond the radial edge of the supporting projection and beveled on its inner face to provide an outwardly disposed cutting edge.

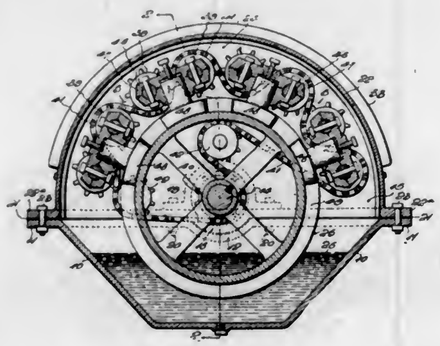
1,762,649. COMBINED AUTOMATIC BOLT-POINTING AND THREADING MACHINE. FRANKLIN O. ANDREWS, Willoughby, and LOUIS STEINFURTH, Cleveland, Ohio, assignors to The Economy Engineering Company, Willoughby, Ohio, a Corporation of Ohio. Filed Oct. 10, 1924. Serial No. 742,771. 17 Claims. (Cl. 10—4.)



1. In a machine of the character described, the combination of a housing; a revoluble turret mounted therein; means for intermittently indexing said turret; a plurality of work gripping chucks mounted on one end of said turret, each of said chucks comprising a pair of pivoted gripping jaws; a toggle connecting said jaws and a spring pressed rod acting on said toggle to keep the jaws normally closed; and an intermittently actuated push-rod adapted to successively engage said rods to open said jaws, said rod having a bearing in said housing.

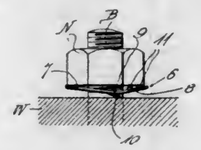
3. In a machine of the character described, the combination of a work holder and a cooperating forming tool, including a spindle; means for reciprocating said spindle; resilient means acting on said reciprocating means for advancing said spindle; other resilient means adapted to apply additional force to said reciprocating means during a portion of said advance movement; and adjusting means for limiting the action of said second resilient means.

1,762,650. INTERNAL-COMBUSTION ENGINE. JOHN A. BOUGHTON, Everett, Ohio. Filed Oct. 11, 1928. Serial No. 311,812. 6 Claims. (Cl. 123—58.)



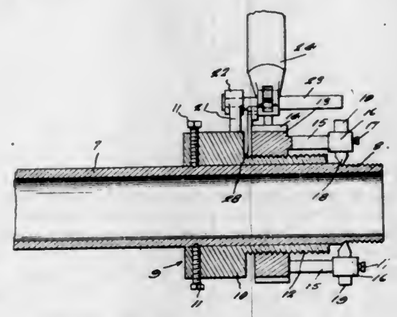
4. In an internal combustion engine, a horizontally elongated oil pan extending substantially throughout the length of the engine, two substantially semi-cylindrical cylinder blocks secured upon the upper edges of the end portions of said pan, said blocks having longitudinal opposed piston-containing cylinders which are open at the inner ends of said blocks, an arched plate across the space between the peripheral portions of the cylinder blocks and secured to said blocks and to longitudinal edges of said oil pan, providing an oil splash chamber, a cam drum in said chamber extending into said pan to splash oil from the latter, a shaft carrying said drum, bearings for said shaft supported by the ends of said oil pan and disposed under said cylinder blocks, rotary valves for said cylinders, rods rigidly connecting opposed pistons and having shoes coacting with said cam drum, sprockets on the inner ends of said valves disposed in two common planes, additional sprockets on said shaft betwene said drum and the inner ends of said cylinder blocks, and endless chains engaged with the shaft-carried sprockets and passing also around the valve-carried sprockets.

1,762,651. NUT-LOCKING WASHER. WILLIAM J. CHISM, Rock Haven, Ky. Filed Aug. 14, 1929. Serial No. 385,731. 4 Claims. (Cl. 151—35.)



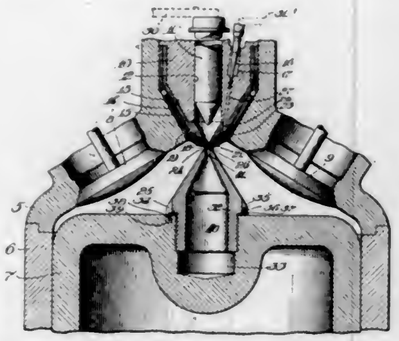
2. A nut locking washer having a major portion occupying more than half its circumference and a minor portion occupying the remainder of said circumference, the nut-facing sides of said major and minor portions being disposed at a widely obtuse angle to each other, the work-facing sides of said major and minor portions being also disposed at a widely obtuse angle to each other, whereby to obtain unequal pressure upon the nut at opposite sides of its center to frictionally bind the threads of said nut against those of the bolt.

1,762,652. PIPE DIE. LUTHER COX, Smackover, Ark. Filed May 29, 1929. Serial No. 367,033. 1 Claim. (Cl. 10—121.)



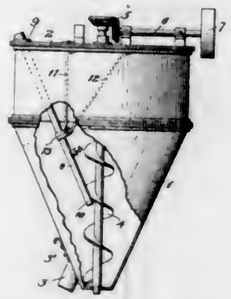
In a thread cutting die of the class described, a mounting including a collar having anchoring screws and a screw threaded feed sleeve, a nut threaded for operation on said sleeve provided with outstanding circumferentially spaced arms, cutting teeth adjustably mounted on the outer ends of said arms, a guide stem carried by the collar and projecting in spaced parallelism with said arms, an operating lever fulcrumed and slidably mounted on said stem, said nut being provided with ratchet teeth, and spring pressed alternatively operable pawls carried by said lever and cooperable with said ratchet teeth.

1,762,653. OIL-BURNING ENGINE. CLESSIE LYLE CUMMINS, Columbus, Ind., assignor to Oil Engine Development Company, Columbus, Ind., a Corporation of Indiana. Filed Oct. 28, 1927. Serial No. 229,400. 18 Claims. (Cl. 123—33.)



1. In an oil burning engine, the combination of cylinder having a combustion space and a piston operable in the cylinder, of a fuel injecting device adapted to inject the fuel into the combustion space through communicating means, a recess in the head of the piston and extending below the upper substantially flat portion thereof and a projecting casing on said head and forming a chamber with said recess, an opening being formed in the end of said casing which extends into the combustion space so that at the end of the compression stroke of the piston said opening is in close proximity to said restricted communicating means.

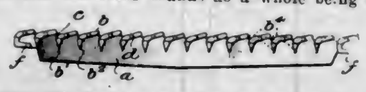
1,762,654. FEED MIXER. INGVAL EDLAND, Monitor, Oreg. Filed Dec. 5, 1929. Serial No. 411,836. 2 Claims. (Cl. 259—97.)



1. An improvement in a dry feed mixer of the type embodying a conical mixing chamber and a central vertical screw conveyor in said chamber for agitating, elevating and dropping the feed; said improvement comprising an inclined liquid-introduction pipe within said chamber, the upper end of said pipe passing through the top of said chamber at a point near the peripheral edge thereof, the lower end of said pipe being disposed within the small lower end portion of the chamber intermediate the ends of and near the periphery of said screw conveyor, and means fixedly mounting said pipe in said chamber.

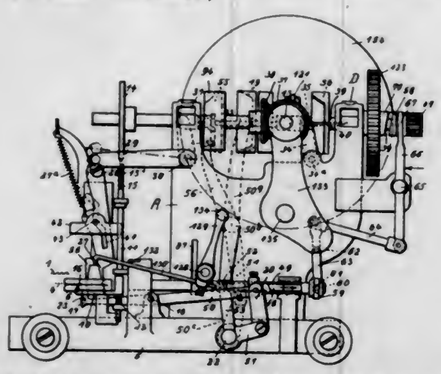
1,762,655. FIRE BAR FOR FURNACES. WILLIAM JOSEPH ERDÖS, Budapest, Hungary. Filed July 12, 1924, Serial No. 725,710, and in Hungary July 24, 1923. 1 Claim. (Cl. 126—167.)

In a fire bar the combination with a series of wings each having an upper shank at one end thereof and in angular relation thereto a lower shank the lower portion of which is tapered and the upper portion of which is partly overlapped by the upper shank of the adjacent wing, the top surface of each upper shank being slightly inclined and the lower shanks as a whole being substan-



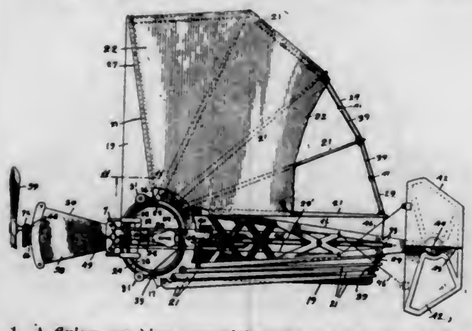
tially perpendicularly arranged relative to the longitudinal direction of the fire bar; of a stem the height of which exceeds the length of the said lower shanks, the upper shanks of the wings forming a top substantially parallel with the said longitudinal direction of the fire bar and extending laterally beyond the sides of said stem.

1,762,656. WARP-KNOTTING MACHINE. OSKAR FISCHER, Plauen/Vogtland, Germany. Filed Jan. 21, 1928, Serial No. 248,366, and in Germany June 14, 1926. 9 Claims. (Cl. 28—43.)



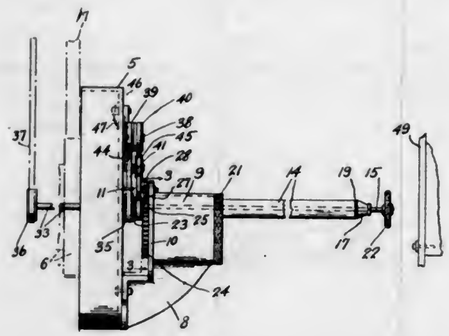
1. Apparatus for dividing the warp threads in warp-knotting machines comprising a movable carriage, a pair of horizontal clasp rods arranged in staggered relation so that the upper edge of the lower rod projects beyond the lower edge of the upper rod, and a gap is formed between said rods adapted to be entered by the threads of the new warp so as to bend and stretch them, an auxiliary separator adapted to engage some threads of the new warp so as to pitch the threads in closely spaced juxtaposition, a main separator for separating the first thread, and drivers adapted to engage said first thread and to move it to the knotting machine.

1,762,657. FLYING MACHINE. EZZIO FRANCESCONI, San Francisco, and VALENTINO L. BIANCHI, Oakland, Calif. Filed Apr. 17, 1928. Serial No. 270,769. 20 Claims. (Cl. 244—14.)



1. A flying machine comprising the combination with a motor-cycle consisting of a wheel supported frame having steering means and means for driving the cycle upon the ground, of a wing frame mounted upon the frame of the cycle; a pair of collapsible wings mounted upon the sides of the wing frame and consisting of a plurality of ribs pivotally mounted upon the wing frame and a covering mounted over the ribs, said ribs being movable from a closed position substantially parallel to the sides of the frame to an open position extending the covering to form fan shaped wings extending outwardly from the sides of the frame; means connected between the outer ends of adjacent ribs for moving the covering into folds when the wings are collapsed and for bracing the ends of said ribs when the wings are extended; a propeller; and means for actuating the propeller to propel the machine in air.

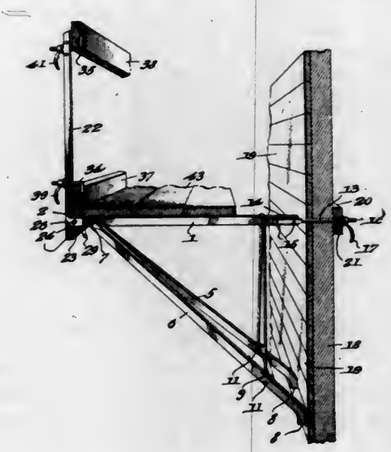
1,762,658. CYLINDER-GRINDING ATTACHMENT FOR LATHES. FREDERICK H. GJESDAHL, Crookston, Minn. Filed May 28, 1928. Serial No. 281,118. 3 Claims. (Cl. 51—261.)



1. In combination, a rotatably mounted lathe face plate, shaft supporting means secured at one side thereof, a shaft rotatably mounted in said supporting means, means for eccentrically adjusting said shaft with respect to the face plate, a shaft extending outwardly from the opposite side of the face plate operable independent of the operating means for the face plate, and means operatively connecting said shafts comprising a plurality of pulleys arranged in triangular formation on one face of said face plate, one of said pulleys being mounted on said last named shaft, a pulley mounted on the inner end of said first named shaft, and belt drive means trained over said pulleys for operatively connecting said shafts, and automatic belt tightening means carried by the face plate operable to maintain the belt under operative tension in accordance with the adjustment of said first named shaft.

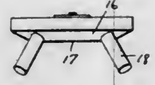
1,762,659. SCAFFOLD BRACKET. PERCY E. GOODWIN, Evansville, Ind., assignor to The Steel Scaffolding Company, Evansville, Ind., a Corporation of Indiana. Original application filed June 4, 1927, Serial No. 196,547. Divided and this application filed Oct. 25, 1927. Serial No. 228,665. 2 Claims. (Cl. 304—33.)

1. The combination with a scaffold bracket comprising a horizontal supporting bar having means at one end to effect locking engagement with the wall of a building, and at its other end being provided with a pair of holes, of an upright bar having two fasteners, respectively detachably received in the said holes and locking the upright bar to the horizontal bar at the outer end of the latter, legs attached to the outer part of the horizontal bar inwardly of the two holes aforesaid, and extending in downwardly inclined diverging relationship below the horizontal bar



and having their free ends adapted to bear against the wall of a building, and a hanger suspending the legs from the horizontal bar and freely slidable therealong when the scaffold bracket is being folded.

1,762,660. AGITATOR FOR WASHING MACHINES. HENRY KOLAR, Exeter, Nebr. Filed Dec. 12, 1929. Serial No. 413,514. 3 Claims. (Cl. 259—101.)

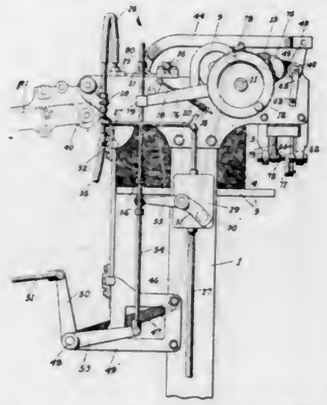


1. An agitator of the class described comprising a shaft, means at the upper end of said shaft to facilitate the keying of the shaft to the drive shaft of a washing machine, a disk formed integrally on said first mentioned shaft at the lower end of said first mentioned shaft, agitator ribs formed integrally on said disk and radiating from the adjacent end portion of said first named shaft, said rib having upwardly and rearwardly inclined forward edges merging into substantially flat straight upper edges, which upper edges in turn merge into downwardly and rearwardly inclined edges, the latter edges merging at their lower end into the lowermost edge of said shaft, a second disk slidable on said first mentioned shaft, means for keying said second disk to said first mentioned shaft, and a plurality of circumferentially spaced downwardly and outwardly extending pegs carried by the last mentioned disk.

1,762,661. PAPER FEEDING AND ELEVATING MECHANISM FOR PRINTING PRESSES. CHARLES L. LOW, Fresno, Calif., assignor to Lisenby Manufacturing Company, Fresno, Calif., a Corporation. Filed Mar. 25, 1929. Serial No. 349,637. 8 Claims. (Cl. 271—31.)

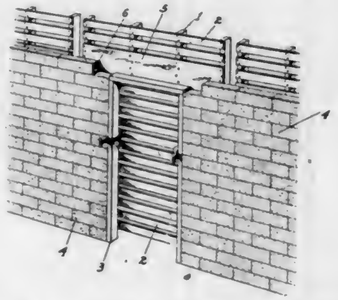
1. A paper feeding mechanism including supporting means for a stack of paper, a suction nozzle for engagement with the topmost sheet of paper, suction passage means connected to the nozzle, means for moving the nozzle horizontally and above the level of the paper for a certain distance in one direction and for then causing the nozzle

to be depressed to engage the paper, and means operated in conjunction with the nozzle moving means for causing



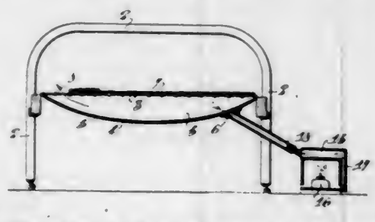
the suction passage to be opened intermediate its ends to the atmosphere for the full duration of the horizontal movement of the nozzle in said one direction.

1,762,662. LINTEL CONSTRUCTION. JOHN F. MAKOWSKI, Stockton, Calif., assignor to Fire Proof Wall Company, Reno, Nev., a Corporation. Filed Apr. 11, 1928. Serial No. 269,082. 2 Claims. 72—98.)



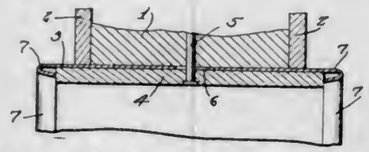
1. A method of forming a lintel comprising erecting a buck in place, building up a wall against the opposite sides of the buck, terminating the building of the wall a distance above and to each side of the buck, and then filling in plastic cementitious material above the buck and between the wall terminals to form the lintel.

1,762,663. BED-WARMING DEVICE. DONALD B. MCLEOD, Vancouver, British Columbia, Canada. Filed Nov. 15, 1926, Serial No. 148,579, and in Canada Feb. 22, 1926. 2 Claims. (Cl. 126—205.)



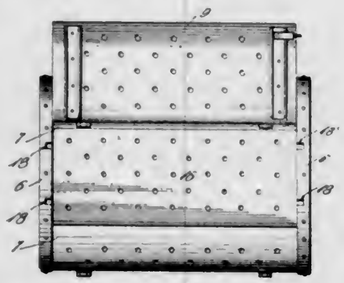
1. In combination with a bed having a wire bottom, a base blanket laid over the bottom, a fabric secured at its edges to the edges of the bottom and sagging beneath the same to constitute an air space beneath the bottom, and means to deliver heated air into said space, said blanket adapted to be folded back upon itself along an edge to provide an air outlet, the area of which outlet is proportional to the area of the blanket folded back, substantially as shown and described.

1,762,664. PLASTERING GAUGE FOR DOOR OR WINDOW OPENINGS. WILLIAM T. MOTT, Washington, D. C. Filed May 1, 1926. Serial No. 106,126. 6 Claims. (Cl. 33—85.)



5. A ground of the character described comprising a a strip of material having a plurality of openings therein for receiving fastening means, and backing strips secured over the strip of material and extending approximately to the outer edges thereof for reinforcing said edges.

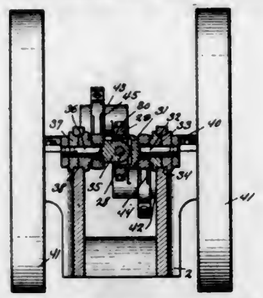
1,762,665. WASHING-MACHINE CYLINDER. AUGUST F. PARIS, Brockway, Pa. Filed Jan. 16, 1928. Serial No. 247,092. 3 Claims. (Cl. 68—18.)



1. A washing machine cylinder comprising two end members, a cylindrical side wall extending between said end members and having a plurality of circumferentially spaced doors, elongated auxiliary compartments within said cylinder and each comprising a bottom extending between said end members and spaced outwardly from the cylinder axis, and two side walls extending from the longitudinal edges of said bottom to said cylindrical side wall; the bottoms of said auxiliary compartments being spaced apart circumferentially of the cylinder, the side walls of each of said auxiliary compartments being independent of the side walls of the adjacent auxiliary compartments; all of said doors but one opening into said auxiliary compartments, said one door opening into the portion of the cylinder unoccupied by said auxiliary compartments, which portion constitutes a main washing chamber in which the water will be agitated by the bottoms and sidewalls of said auxiliary compartments.

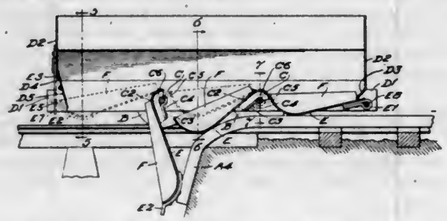
1,762,666. INTERNAL-COMBUSTION ENGINE. ALFRED O. A. RUNOE, Windsor, Ontario, Canada. Filed Mar. 26, 1928. Serial No. 264,833. 1 Claim. (Cl. 123—66.)

An internal combustion engine comprising a cylinder having one end open, a crank shaft at the open end of the cylinder having oppositely extending cranks, a pair of opposed power pistons reciprocably mounted in said cylinder, a piston rod rigidly secured to the axial center of the inner piston and extending slidably through the axial center of the outer piston, a piston rod secured to the outer piston and extending in the same direction as the first piston rod, a cross-head guide interposed between the cylinder and the crank shaft, a pair of cross-heads to form a complete operative unit, with a separate wrist pin



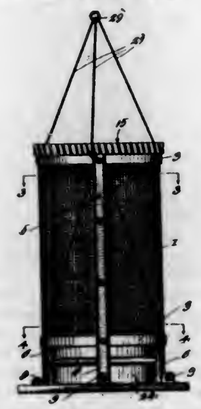
in each cross head, means connecting the first piston rod to one wrist pin, means connecting the other piston rod to the other wrist pin, and pitman rods operatively connected to the wrist pins and to the arms of the crank shaft.

1,762,667. MINE CAR. HUGH W. SANFORD and PERRY S. MCCALLEN, Knoxville, Tenn., assignors to Sanford Investment Company, Wilmington, Del., a Corporation of Delaware. Filed July 22, 1927. Serial No. 207,763. 14 Claims. (Cl. 105—364.)



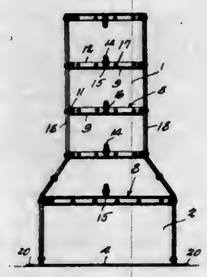
1. In a railway car of the kind described, the combination of axles, wheels supporting the axles, side sills supported by the axles, bottom doors supported on hinge lines which are transverse to the side sills, latch mechanism at the rear end of the rear door, and sealing means at the meeting of the doors and the side sills.

1,762,668. BLOWFLY TRAP. EMIL J. SCHANDUA and HARRY REICHENAU, Fredericksburg, Tex. Filed Sept. 22, 1927. Serial No. 221,290. 1 Claim. (Cl. 43—118.)



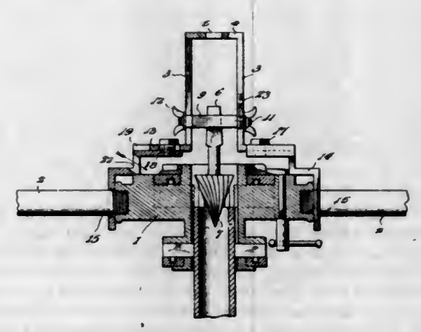
An insect trap of the character described, comprising a base, a vertical screen cylinder, a band fitted about the upper end of said cylinder and having the edge thereof turned downwardly over the adjacent cylinder edge, an elongated foraminous cone arranged vertically within said cylinder and having the base edge abutting the cylinder at the lower end thereof and an outlet opening at the apex thereof, a reinforcing band arranged about the lower end of said cylinder and having the lower edge turned upwardly to overlie the cylinder edge and adjacent base edge of said cone, vertically arranged supporting bars connecting and secured to said bands, said bars having the lower ends extended beyond the lower edge of the cylinder and bent outwardly to provide supporting feet resting upon and secured to the base, a bait receptacle of smaller diameter than the cylinder and cone and arranged upon the base beneath and extending into the lower end of the cylinder and cone, and reinforcing bars extending longitudinally of the inner face of the cylinder each in opposition to and secured to an exterior longitudinally extending bar.

1,762,669. SHELF. GEORGE ALBERT SHIELDS, San Rafael, Calif. Filed Nov. 23, 1928. Serial No. 321,482. 2 Claims. (Cl. 211—135.)



1. In a device of the class described, end plates having upright longitudinally arranged flanges, a shelf extended from one end plate to the other and having its ends disposed between the flanges of each end plate, the shelf having an upstanding rim, means for securing the end portions of the rim to the end plates, reinforcing strips extended along the outside of the flanges of the end plates, securing devices connecting the reinforcing strips with the flanges of the end plates and with the side portions of the rim of the shelf, and a support spaced from the end plates and secured to the side portions of the rim of the shelf.

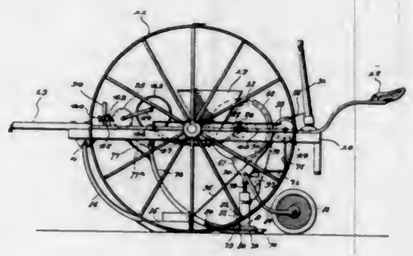
1,762,670. REAMER FOR PIPE THREADERS. EMIL T. SIESKO, Nanticoke, Pa. Filed Mar. 16, 1927. Serial No. 175,789. 3 Claims. (Cl. 77—73.)



1. A reamer attachment for pipe threading tools, the same comprising a frame including a yoke having outward-

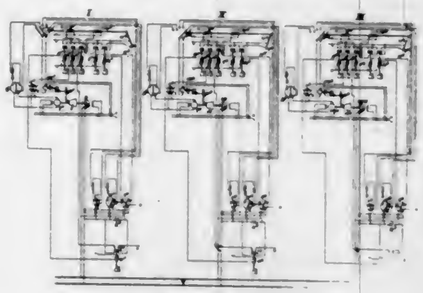
ly disposed lugs providing means of attachment to the threading tool, the side pieces of the yoke being formed with longitudinal slots, a cross head adapted to receive and carry the reamer and formed with reduced end portions disposed to operate in the longitudinal slots of the side pieces, and having threaded stems projecting outwardly from the reduced ends, and clamp nuts mounted upon said threaded stems to secure the cross head to the yoke in the required adjusted position, there being an indicating mark on the cross head and coacting scale graduations on a side piece of the yoke, to admit of proper adjustment of the reamer.

1,762,671. SEED PLANTER. FRITZ SLATHAR, deceased, Minneapolis, Minn.; by Marie Slathar, executrix, Minneapolis, Minn. Continuation of application Serial No. 473,049, filed May 5, 1920. This application filed May 3, 1929. Serial No. 360,258. 33 Claims. (Cl. 221—124.)



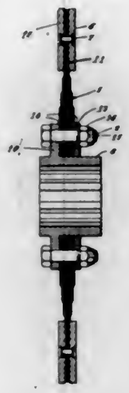
1. In a planter, a seed dispensing device having suction means for receiving and holding the seeds, and movable to seed-discharging position, means for breaking the suction when the seeds arrive at discharging position, and a seed engaging pusher device operating when the suction is broken.

1,762,672. ELECTRIC POWER DISTRIBUTION. WALTER SPENNEMANN, Cassel, Germany. Filed May 16, 1927, Serial No. 191,773, and in Germany May 22, 1926. 7 Claims. (Cl. 290—4.)



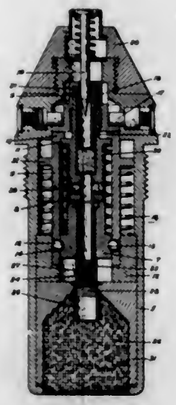
1. Means for the distribution of electrical energy comprising a system, two generators of electrical energy arranged to feed into said system, a motor for driving each generator and forming a unit therewith, each motor being independent from the other, two regulators for each unit, one being capable of keeping constant the load independently of the frequency, the other being capable of keeping constant the frequency independently of the load, and means for operatively connecting with each unit one or the other regulator.

1,762,673. CLUTCH DISK. CARL E. SWENSON, Rockford, Ill., assignor, by direct and mesne assignments, to Mechanics Universal Joint Company, Rockford, Ill., a Corporation of Illinois. Filed Apr. 22, 1926. Serial No. 103,670. 6 Claims. (Cl. 192—68.)



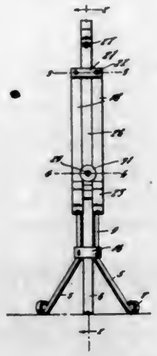
4. A clutch disk composed of fabric material from its conection with the hub to the periphery thereof and having pads of clutch facing material mounted directly on the rim portion thereof, the fabric affording torsional flexibility for smoothness in operation and the pads affording the desired friction and wearing qualities for the transmission of the power.

1,762,674. FUSE FOR PROJECTILES. ALFRED F. TEITSCHEID, Wharton, N. J. Filed Sept. 19, 1928. Serial No. 306,984. 7 Claims. (Cl. 102—39.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928, 370 O. G., 757.)



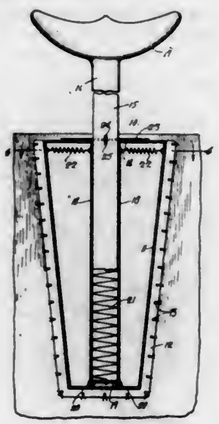
1. In a fuse, a detonator carrier, a primer carrier telescoped in the detonator carrier, a spring normally tending to extend the carriers, a sleeve fixed to the primer carrier, a spring for actuating the sleeve, a centrifugally releasable lock for holding the sleeve against the action of its spring, a centrifugally releasable connection between the sleeve and the detonator carrier brought into position for release on movement of the sleeve, pins in the primer carrier engageable with the detonator carrier to hold the carriers extended, a booster charge and a plug on the detonator carrier positioned in the entrance to the booster charge when the detonator carrier is locked to the sleeve.

1,762,675. DISPLAY EASEL. SIMON W. WIENER, Sauk Center, Minn. Filed Apr. 25, 1929. Serial No. 358,004. 2 Claims. (Cl. 40—146.)



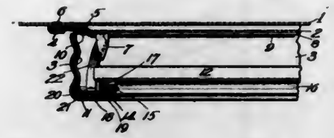
1. An easel of the class described comprising a pair of front legs, a rear leg, said legs merging at their upper ends in spaced vertical extensions, the extensions of the front legs terminating in downwardly curved and forwardly extending extensions, the extension of the rear leg merging into an upwardly and rearwardly inclined arm merging at its upper end into a forwardly directed extension terminating in an upwardly disposed ear, a pair of spaced parallel co-extensive bars fixed to the terminals and terminating at their lower ends in forwardly directed hook extensions, a pair of plates connecting the upper ends of the bars, one of said plates being fixed to said ear, and an adjustable bar slidable between the two plates and between the first two mentioned bars and having clamp means on its lower end to engage said first two mentioned bars.

1,762,676. BREAST SUPPORT. RALPH R. WOLTSTEM, Ozone Park, Long Island, N. Y. Filed July 23, 1929. Serial No. 380,382. 3 Claims. (Cl. 2—30.)



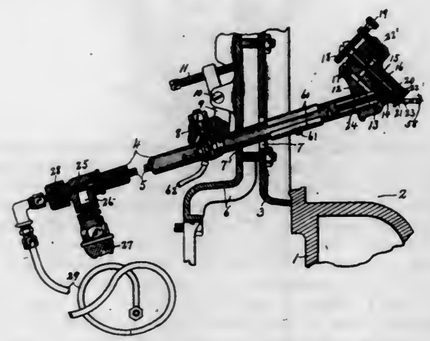
2. In combination with a waist form encircling garment, a pair of housings fixed to said garment, spaced hinged bars mounted within each housing and coacting therewith to provide sockets, breast supports provided with flat stems which extend into said sockets, springs within said sockets tending to extend said breast supports in an upward direction, spring means tending to urge the free ends of said bars into engagement with the sides of said stems to normally support the same in vertical position and for returning the same to such position after swinging movement in either direction.

1,762,677. CAR-IDENTIFYING APPLIANCE. STRAUD K. WOOD, Hutchinson, Kans. Filed Feb. 27, 1928. Serial No. 257,235. 11 Claims. (Cl. 40—2.2.)



1. In a device of the character described, the combination of a cup member, a removable cap on the cup member, provided with a transparent window, means within the cup member for securing a license certificate of relatively soft material within and against the bottom of the cup member, and means projecting angularly from the cap for pressing the certificate against the bottom of the cup member and adapted to move with the cap as the latter is applied to the cup member and ride harmlessly over the certificate, and mutilate the latter as the cap is removed.

1,762,678. OIL BURNER. ARTIS CHESTER BRYAN, Syracuse, N. Y. Filed Sept. 2, 1927. Serial No. 217,123. 4 Claims. (Cl. 158—76.)



1. In an oil burner, a head having an inlet for the liquid fuel and an outlet for the combustible mixture communicating with the fuel inlet, an air tube extending into the head across the fuel inlet and discharging into the outlet and having a different co-efficient of expansion than the head adapted when heated to expand toward the outlet to reduce the amount of mixture passing through said outlet, and means for igniting the mixture.

1,762,679. HANDLE FOR TOOLS. GEORGE JOHN CROSMAN, Jr., Newark, N. J. Filed Jan. 19, 1929. Serial No. 333,583. 1 Claim. (Cl. 306—41.)

An implement whose handle is formed of a metallic shank which is an extension of the implement proper and

metallic strips whose ends are united to opposite sides of the extension, the strips being pressed oppositely outward



to form a plurality of outwardly convex bows, and material molded around said shank to a union between opposite bows.

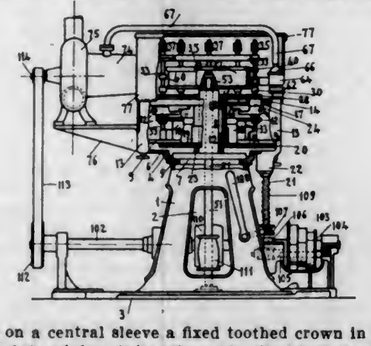
1,762,680. BABY CONVEYANCE. ALEXANDER F. DEBELACK, Sheboygan, Wis., assignor to Marie Mannis, Sheboygan, Wis. Filed July 2, 1928. Serial No. 289,991. 1 Claim. (Cl. 280—31.)



A baby conveyance comprising a baby basket, a wheeled frame upon which said basket rests removably, all portions of said frame being sufficiently low to be unsuited for use as a handle for pushing or pulling the same, said frame having means for preventing horizontal movement of the basket with respect thereto, and two bail-handles pivoted to said basket, each of said bail-handles being swingable toward an end of the basket to an outwardly inclined position at which it projects longitudinally from the basket and frame and may be conveniently held by a standing person to serve as a handle for pushing or pulling the entire conveyance.

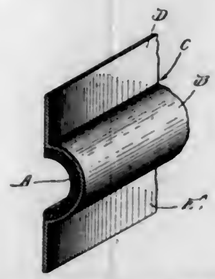
1,762,681. CORK-GRINDING MACHINE. SAVERIO DI BONO, Genoa, Italy. Filed Jan. 26, 1928. Serial No. 249,708. 2 Claims. (Cl. 51—108.)

1. A cork grinding machine comprising: a base of a frustoconical shape; a plane disc fastened to the said base and centrally bearing an upwardly projecting cylindrical sleeve; a cylindrical sleeve on to the said external fixed sleeve and rotatable around same, suitably supported by the fixed disc; an annular horizontal disc on the said rotatable sleeve and a horizontal gear below same; a pinion meshing with said gear and driven by the governing shaft of the machine; a number of spaced vertical sleeves concentrically of the machine; a horizontal casing of elongated shape fitted with a suitable cover mounted on the said vertical sleeve and excentrically thereof; a second sleeve rotatably mounted within said rotatable sleeves and carrying downwardly, under the rotatable supporting sleeve a pinion and above, within the elongated casing another pinion meshing with another like pinion contained and pivoted within the said casing, the pivot axis being excentrical with regards to the sleeve axis; said pivot projecting above the said casing in form of a supporting jaw, a vertical rod internally of each rotatable sleeve, the said rod being axially slidable, but solidary in its rotation to the rotatable sleeve, the said rods projecting from both sides, say below the sleeve and above the casing; a spring pushing said rod downwardly; a horizontal arm transversally of each of the vertical rods and carrying to its free end a cylindrical boss rotatable about its vertical axis, that is co-axial with the axis of the supporting jaw, and having a head adapted to coact to hold the cork; a plane annular disc to the upper part of the supporting shell and



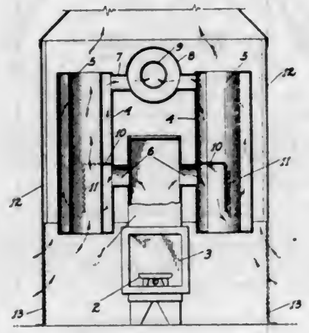
carrying on a central sleeve a fixed toothed crown in mesh with all of the pinions below the said cylindrical sleeves; a vertical shaft centrally of the machine and supporting upwardly, in correspondence of the spaced jaws a drum like tool with its rim lined with emery fabric; each rotatable sleeve within the annular disc being downwardly provided with a collar, two arms radially attached to said collar and outwardly projecting thereof; one of the said arms being pulled centrally of the machine by a suitable spring, while the opposite arm bears with its end roller against the internal surface formed as cylindrical cams concentrically of the machine; and controlling the oscillation of the arms; and means for the timely feeding of the raw corks and for the ejecting of the finished one; means being also provided for the suitable driving of the various parts, for the inspecting and cleaning and for registering the machine according to the type of corks to be obtained.

1,762,682. COMBINED CONTRACTION AND EXPANSION JOINT. ALBERT C. FISCHER, Chicago, Ill., assignor to The Philip Carey Manufacturing Company, a Corporation of Ohio. Original application filed Jan. 3, 1922, Serial No. 526,742. Divided and this application filed May 9, 1927. Serial No. 190,084. 13 Claims. (Cl. 94—18.)



4. A metallic contraction joint of sheet metal carrying a relatively thick coating of bitumen containing material mounted on the face of the sheet and adapted to flow along the metallic portion.

1,762,683. GAS FURNACE. RICHARD E. FRASER, Stockton, Calif., assignor to Fraser Furnace Company, Stockton, Calif., a Corporation. Filed Nov. 19, 1928. Serial No. 320,332. 1 Claim. (Cl. 126—116.)



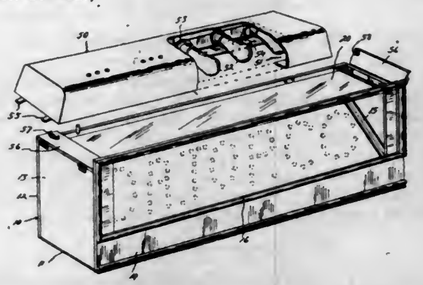
A gas furnace including a fire chamber, a combustion chamber immediately above the fire chamber, a vertical air flue at one side of the combustion chamber and extending from a point approximately in the plane of the top of the fire chamber to a point above the combustion chamber, an enclosed combustion drum formed around the air flue, combustion inlet and outlet flues communicating with the drum at spaced points and on the same side thereof, the inlet flue leading from the combustion chamber into the drum at a point a considerable distance above the bottom of the latter, a baffle plate between the drum and air flue just above the combustion inlet flue and extending part way around the air flue, and downward extensions on the ends of the baffle plate extending to points short of the bottom of the drum.

1,762,684. RAISIN-CLEANING APPARATUS. CEPHAS U. FRAZIER, Orosi, Calif. Filed Apr. 29, 1927. Serial No. 187,509. 5 Claims. (Cl. 146—55.)



1. A raisin cleaning apparatus including, in combination, a plurality of cylindrical screens eccentrically one within the other, means for feeding raisins between said screens whereby their stems can protrude through said screens in opposite directions, and a revolving fan-like member adjacent each screen and adapted to knock said protruding raisin stems therefrom.

1,762,685. DISPLAY APPARATUS. MILTON HARTMAN, GRAYSTON L. OHMART, and THEODORE H. HAWKINSON, Detroit, Mich., assignors to Localized Advertising Corporation, Detroit, Mich., a Corporation of Michigan. Filed Nov. 26, 1928. Serial No. 321,952. 1 Claim. (Cl. 40—32.)



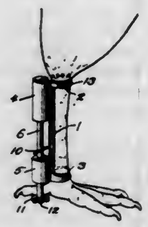
In a display apparatus of the character described, a casing, said casing having a removable side wall and a removable top panel, a shadow box adapted to be associated with the top of said casing and means for jointly securing said wall, panel and shadow box in position.

1,762,686. LEAF HOLDER FOR BOOKS. KEN HAYASHI, Evansburgh, Alberta, Canada. Filed July 15, 1929. Serial No. 378,531. 3 Claims. (Cl. 24—66.)



2. In a structure of the class described, a substantially U-shaped attaching frame provided with pairs of longitudinally spaced bearings, pairs of individual leaf clamping devices each including a shaft mounted for oscillation in one pair of the bearings, each of said shafts being formed on its inner end with an operating handle and on its outer end with a curvate leaf engaging finger.

1,762,687. RECORDING DEVICE FOR POULTRY. JAMES M. HODGES, Louisville, Ky. Filed Jan. 9, 1928. Serial No. 245,606. 2 Claims. (Cl. 119—45.)



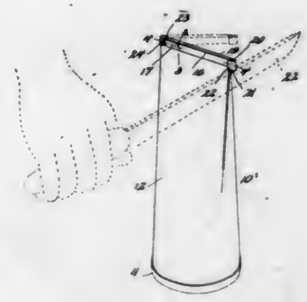
1. A device of the class described comprising a body member, leg embracing means carried thereby, upper and

lower sleeves upon the body member, a stem slidably mounted in said sleeves, a spring within the upper sleeve bearing against the upper end of the stem and yieldably holding the same in a downward position, and an impressing member at the lower end of the stem.

1,762,688. OXIDIZING PARAFFINS, WAXES, AND THE LIKE. FRITZ HOFMANN, Breslau, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Mar. 14, 1928, Serial No. 261,706, and in Germany Mar. 18, 1927. 3 Claims. (Cl. 196—142.)

1. A process for the oxidation of paraffin hydrocarbons, which comprises oxidizing the said hydrocarbons by means of a gas containing oxygen in the presence of an inorganic catalyst associated with organic nitrogenous bases.

1,762,689. REMOVABLE RECEPTACLE CLOSURE. KOBY KOHN, New York, N. Y. Filed Aug. 2, 1926. Serial No. 126,553. 7 Claims. (Cl. 229—1.5.)



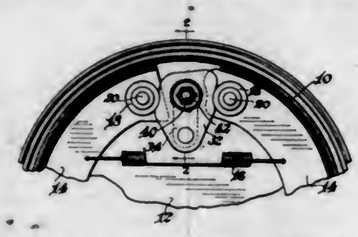
1. In a receptacle having a filling opening, the walls of which can be brought into confronting engagement, the combination of a metal strip folded over the free edges of the walls and pressing the walls tightly into engagement, means extending from said strip and away from the receptacle to afford a striking surface for use in removing said strip and a portion of said strip near one end engaging the receptacle more tightly than the remainder of the strip.

1,762,690. COFFEE PRODUCT AND METHOD OF MAKING SAME. JOSEPH L. KOPF, East Orange, N. J., assignor to Jabez Burns & Sons, Inc., New York, N. Y., a Corporation of New York. Filed Dec. 30, 1926. Serial No. 158,131. 5 Claims. (Cl. 99—11.)

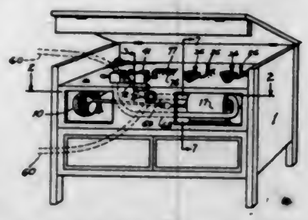
1. A coffee product comprising a plurality of coffee granules of uniform size, certain of which granules are formed of fine coffee held together by an edible non deliquescent binder, the amount of fine coffee thus formed into granules being proportionate to the amount of fine coffee produced in the normal granulation of the coffee beans.

1,762,691. BRAKE. LUDGER E. LA BRIE, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Sept. 1, 1928. Serial No. 303,451. 5 Claims. (Cl. 188—78.)

1. Operating mechanism comprising a shaft having a laterally extending operating lever with an applying lever pivotally connected thereto at one side of the shaft and extending across the axis of the shaft and which is frictionally held for movement with the operating lever in a manner permitting it to shift slightly with respect to the operating lever to center itself.

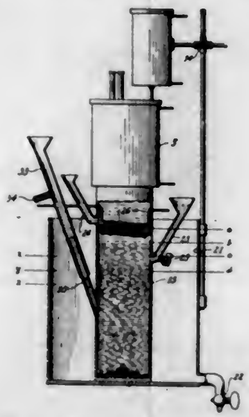


1,762,692. MASSAGE MACHINE. ABRAHAM W. LAIR, Los Angeles, Calif. Filed Jan. 28, 1927. Serial No. 164,288. 7 Claims. (Cl. 128—38.)



1. In a massage machine, a double acting pneumatic pump adapted to give puff or suction strokes, an operating means for said pump, a double acting adapter comprising a reciprocatory sleeve and having passages connected to respective chambers in said pump and controlled by said sleeve, a regulating means connected to said pump to control the puff or suction strokes therefrom, a regulating means connected to said adapter to control the delivery of puff or suction strokes therefrom, and a delivery means connected to said adapter to be applied to the surface of the human body.

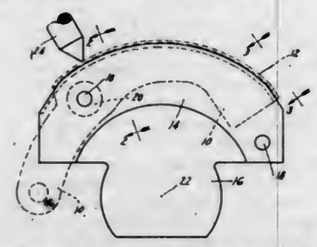
1,762,693. METHOD AND APPARATUS FOR MAKING PELLETS. CHARLES E. LINEBARGER, Chicago, Ill. Filed Jan. 5, 1927. Serial No. 159,227. 13 Claims. (Cl. 83—91.)



1. A method for making pellets or the like consisting in passing streams of the substance from which the pellets are to be made into a zone of liquid, the temperature of which is maintained constantly higher than the melting point of the substance, thus forming drops of the substance, in then passing the drops into a zone of liquid constantly kept at a lower temperature, and in finally passing the drops into a third zone of liquid, the temperature of which is maintained all the time still lower and is also lower than the melting point of the substance.

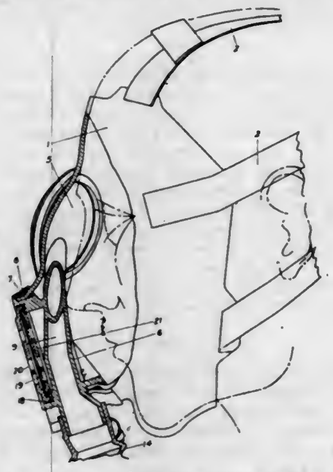
5. Apparatus for forming pellets comprising a vessel adapted to contain a liquid, means for maintaining constantly the temperatures of an upper, an intermediate, and a lower layer of said liquid, respectively, higher than, nearly the same as, and lower than the melting point of the substance from which the pellets are to be made, and means for passing drops of said substance into said upper layer of liquid, the density of the liquid being such as to allow the drops to pass downward through said layers.

1,762,694. MANUFACTURE OF BRAKE SHOES. LELAND E. LONG and STANLEY WHITWORTH, South Bend, Ind., assignors to Bendix Brake Company, Chicago, Ill., a Corporation of Illinois. Filed June 20, 1927. Serial No. 199,989. 9 Claims. (Cl. 219—10.)



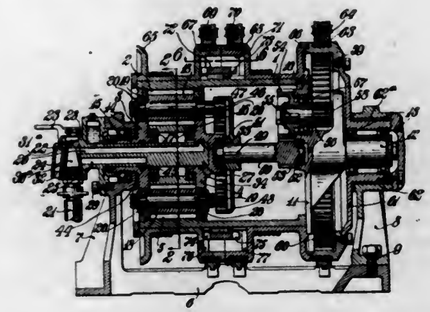
1. That method of making articles such as brake shoes composed of a rim and a web which comprises assembling the rim and the web with the outer edge of the web seated against the inner face of the rim, engaging the web with an electrode at a position spaced from its outer edge a distance approximately equal to the thickness of the rim, engaging the outer face of the rim with another electrode, and passing a current between the electrodes.

1,762,695. GAS MASK. RANDOLPH MONRO, Edgewood Arsenal, Md. Filed May 14, 1924. Serial No. 713,267. 10 Claims. (Cl. 128—141.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928, 370 O. G., 757.)



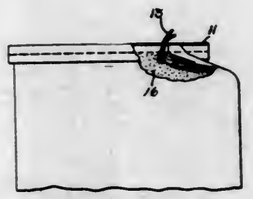
10. In a gas mask an air admitting structure comprising a cylindrical wall, a tubular stem extending through the wall into the annular space within the same, the stem being disposed on one side thereof means forming an extension of the stem for delivering air drawn into the mask over the lenses thereof, the tubular stem, cylindrical wall and air delivery means being integrally constructed and means associated with the cylindrical wall for transmitting the wearer's voice.

1,762,696. HOIST. CHARLES F. OSGOOD, Claremont, N. H., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed Mar. 23, 1926. Serial No. 96,097. 6 Claims. (Cl. 254—185.)



1. In a hoist, a casing rotatable in opposite directions and having a motor chamber, a reversible motor disposed in said chamber and rotatable at the same rate as and with said casing, said motor having a relatively movable reversible motor rotor element rotatable by the power of said motor selectively in either direction upon its axis, power transmission means between said motor rotor element and said casing whereby the latter may be rotated in either of opposite directions, a winding drum surrounding said casing and rotatable relative thereto, and clutch means for automatically connecting said drum to said casing on rotation of said casing in one direction.

1,762,697. MEANS FOR CLOSING THE VALVES OF VALVE BAGS. JOHN C. REDINGTON, Geneva, Ill., assignor, by mesne assignments, to St. Regis Paper Company, New York, N. Y., a Corporation of New York. Filed Mar. 9, 1928. Serial No. 260,440. 5 Claims. (Cl. 150—9.)

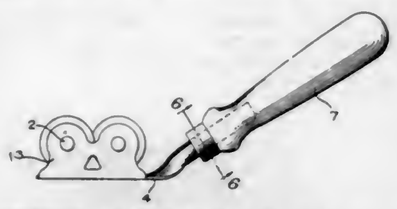


1. A valve bag comprising a flap directed into the interior of the bag and a string connected to said flap and extending outward through the wall of the bag and adapted to pull the flap into valve closing position after the bag has been filled.

1,762,698. KNIFE SHARPENER. ABE O. SAMUELS, Rochester, N. Y., assignor to Samson-United Corporation, Rochester, N. Y., a Corporation of Delaware. Filed Apr. 23, 1928. Serial No. 272,135. 1 Claim. (Cl. 76—87.)

A knife sharpener consisting of a flat base portion adapted to rest on a plane support, upstanding side walls

integral with the base, a series of sharpening disks mounted between said side walls, said base having an extension projecting from one end thereof beyond the side walls and having a central longitudinal upwardly dished portion and side edges that gradually converge and terminate in an integral handle portion that is inclined upwardly from the base portion, said upwardly inclined portion forming a handle portion that is generally of inverted U-shape



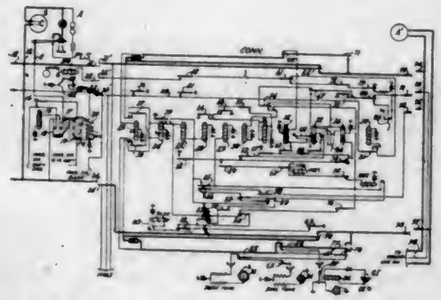
in cross-section, the walls forming the handle portion extending downwardly in a direction opposite to said side walls of the base portion, and a handle surrounding and secured to said handle portion, the handle portion being sharply inclined upwardly to such a degree as to permit conveniently holding the handle of the sharpener when the base is resting on and against a support, a portion of said extension being adapted to rest on the support with the base.

1,762,699. BRAKE-OPERATING MEANS. ROY S. SANFORD, South Bend, Ind., assignor to Bendix Brake Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 12, 1926. Serial No. 147,855. 5 Claims. (Cl. 188—3.)



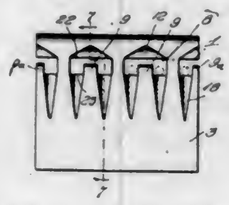
2. In combination with a tractor and a trailer having brakes and having a draft connection with the tractor, a brake-applying device on the trailer, a brake connection from the tractor to said device which is inoperative as long as the trailer is connected to the tractor by the draft connection and which is tensioned to operate said brake-applying device by separation of the trailer and the tractor greater than permitted by the draft connection, and means for holding the brakes applied through said device when the brake connection is broken after being so tensioned, the brake connection including as its weakest element a shear pin between said means and the tractor.

1,762,700. CONNECTER SWITCH. NORMAN H. SAUNDERS, Homewood, Ill., assignor to Reserve Holding Company, Kansas City, Mo., a Corporation of Delaware. Filed Apr. 18, 1928. Serial No. 270,879. 22 Claims. (Cl. 179—18.)



1. In a telephone system, a release relay for controlling the release of an established connection, an impulse repeating relay for repeating impulses to cause the establishment of a desired connection, means for short-circuiting said release relay in order to send impulses to said repeating relay, and a change-over relay connected in parallel with said repeating relay to assist in the establishment of the desired connection.

1,762,701. HEATING-ELEMENT-MOUNTING MEANS. EDWIN L. SMALLEY, Whitefish Bay, Wis., assignor to Hevi Duty Electric Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed June 22, 1929. Serial No. 373,013. 16 Claims. (Cl. 266—1.5.)



16. In an electric furnace, a heating element, a ceramic refractory member arranged to support the turns of said heating element, said member being apertured adjacent the upper extremity thereof for the passage of the turns of the heating element therethrough, the apertured portions thereof having walls extending substantially normal with respect to one face of said member throughout one portion of their length and tapered to the opposite face of said member throughout the remainder of their length, the lower walls providing supports for the turns of said heating element, and a lug projecting upwardly into the apertured portion of said member from the last mentioned face thereof and providing spacing means for positively aligning said heating element with respect to said member.

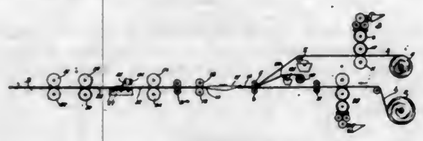
1,762,702. METHOD OF MAKING BOXES AND BOX-BLANK ASSEMBLIES. HARRY BRIDGMAN SMITH, Brooklyn, N. Y., assignor, by mesne assignments, to Hoague-Sprague Corporation, Lynn, Mass., a Corporation of Massachusetts. Filed Jan. 12, 1923, Serial No. 612,169. Renewed Sept. 24, 1926. 20 Claims. (Cl. 93—36.)



1. A method of producing boxes comprising advancing a continuous web of shell material and a continuous web of cover material and securing them in facial contact, cutting the materials longitudinally to separate corner lap and end wing members, severing the combined materials transversely at regular intervals and folding an individual blank so produced into box form with side and end wing portions turned at right angles to the central or body portion, with corner laps inturned, with end wings turned up outside the corner laps and with marginal portions of certain of the wings including combined shell and cover material turned in and secured against adjacent inner faces of the box walls.

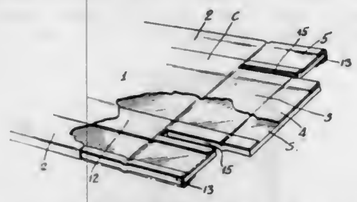
1,762,703. BOX AND METHOD OF MAKING SAME. HARRY BRIDGMAN SMITH, Brooklyn, N. Y., assignor, by mesne assignments, to Hoague-Sprague Corporation, Lynn, Mass., a Corporation of Massachusetts. Filed Jan. 12, 1923, Serial No. 612,168. Renewed Sept. 24, 1926. 6 Claims. (Cl. 93—36.)

1. A method of producing boxes comprising advancing a continuous web of shell material, advancing a continuous web of cover material and adhesively securing it to a surface of the shell web, routing out the shell material to a substantial depth to produce continuous longitudinal fold lines, producing parallel gathered transverse fold creases, cutting the combined materials between certain of the



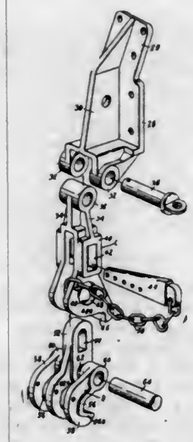
transverse creases on lines substantially co-incident with the longitudinal fold lines, severing the continuous assembly transversely at regular intervals to produce individual covered box blanks, all of said operations occurring in sequence during the advancement of the webs and folding the blanks into box form.

1,762,704. BOX BLANK AND BOX. HARRY BRIDGMAN SMITH, New York, N. Y., assignor to Hoague-Sprague Corporation, Lynn, Mass., a Corporation of Massachusetts. Filed Jan. 22, 1927. Serial No. 162,737. 18 Claims. (Cl. 229—32.)



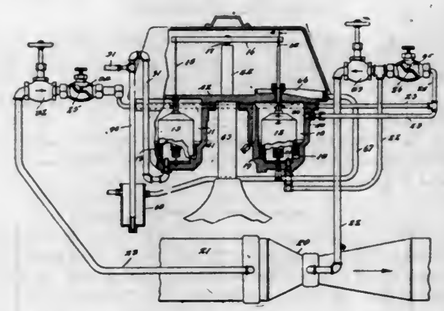
6. A box blank assembly comprising a body section with integral side wings, end wings, and corner laps, and creased on folding lines, and having reinforcing strips along the folding lines on the outer face of the blank, and having other reinforcing strips at the edges of the laps and the wings with which they are connected which will be at the top of the box part when it is folded.

1,762,705. OUTRIGGER FOR CRANES OR THE LIKE. GEORGE A. VAUGHN, Newton, Iowa, assignor to The Parsons Company, Newton, Iowa. Filed July 5, 1927. Serial No. 203,311. 6 Claims. (Cl. 188—43.)



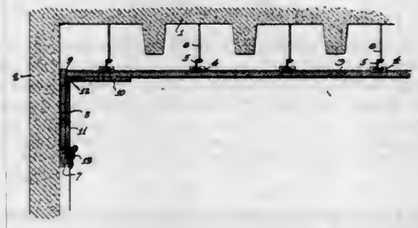
1. In a structure of the class described, the combination of a main frame mounted on wheels adapted to travel on rails, an upright member supported on said main frame, and an outrigger comprising a bracket rigidly connected with said upright member, a clamp member pivoted to said bracket, a second clamp member having a loose pivotal connection with the first clamp member, and means for rigidly connecting the clamp members.

1,762,706. APPARATUS FOR PRODUCING A PROPORTIONATELY VARYING NEGATIVE PRESSURE. CHARLES F. WALLACE, Westfield, N. J., assignor to Wallace & Tiernan Company, Inc., Belleville, N. J., a Corporation of New York. Filed Nov. 30, 1927. Serial No. 236,852. 16 Claims. (Cl. 137—78.)



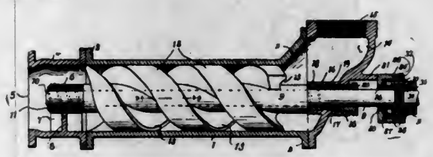
1. Fluid pressure transmission apparatus for transmitting and proportionately reducing a varying differential pressure, comprising a high pressure pipe, a low pressure pipe, a friction-reducing flow-restricting orifice in one of said pipes, a by-pass connecting said pipes located beyond said flow-restricting orifice, and a differential-controlling flow-restricting orifice in said by-pass.

1,762,707. PLASTERING CONSTRUCTION. GORDON R. WALPER, Royal Oak, Mich. Filed Dec. 10, 1928. Serial No. 324,833. 6 Claims. (Cl. 72—123.)



1. In a plastering construction wherein two walls at an angle to each other are plastered, an intermediate member disposed adjacent the vertex of the angle of said walls and in non-adhering relation thereto, and plaster applied to the remaining wall and continued over said intermediate member.

1,762,708. PUMP. BYRON HARVEY ALLRED, Boise, Idaho. Filed July 5, 1927. Serial No. 203,507. 3 Claims. (Cl. 103—89.)



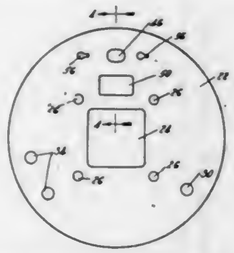
1. In a pump of the type described, an outlet head having a bearing sleeve formed in its lower portion, an arcuate

web formed on the outer side of the outlet head and projecting outwardly therefrom, an impeller shaft rotatably fitted through the bearing sleeve in the outlet head and extending through the pump body, the arcuate web being located above the shaft, a packing box within the said bearing sleeve and around the shaft, a case secured to and abutting the web on the outlet head, there being a clear space below the web between the head and the case to permit escape of fluid creeping along the shaft, a chambered cap secured over the outer side of said case, the impeller shaft extending through said case and said cap, packing within the case around the shaft, a box on the outer side of the cap, packing in said box around the shaft, and bearings within the case around the shaft to receive end thrust.

1,762,709. FUNGICIDE. EARL BURNARD ALVORD, Cleveland, Ohio, assignor, by mesne assignments, to The Grasselli Chemical Company, Cleveland, Ohio, a Corporation of Delaware. Filed Sept. 7, 1926. Serial No. 134,145. 2 Claims. (Cl. 167—16.)

2. As a fungicide a liquid composition containing colloidal copper sulphide in a liquid vehicle containing a colloidal dispersion agent.

1,762,710. BRAKE-BACKING PLATE. VINCENT BENDIX, Chicago, Ill., assignor to Bendix Brake Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 23, 1927. Serial No. 177,546. 4 Claims. (Cl. 188—2.)



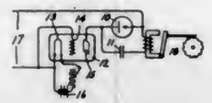
1. A backing plate for a brake having openings which are relatively large at one side and narrow at the other, to form in effect keyhole-shaped slots, in combination with brake means having a part including fastenings fitting the narrow ends of the openings and securing means on the fastenings which can be passed through the large ends of the openings but not through the narrow ends.

1,762,711. PROCESS OF REPRODUCING SURFACE APPEARANCE OF NATURAL OBJECTS. LLOYD V. CASTO, Detroit, Mich., assignor to Oxford Varnish Corporation, Detroit, Mich., a Corporation of Michigan. Filed Mar. 21, 1928. Serial No. 263,439. 6 Claims. (Cl. 101—211.)



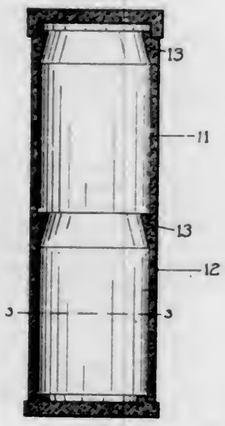
6. A process for simulating marble surfaces on the surfaces of materials other than marble, which includes the steps of making alternate transfers from positive and negative graining plates or rolls to the surface being finished, in the sequence of colored transfer or impression desired but with subsequent transfers out of register with the previous transfers.

1,762,712. GLOW-TUBE MEASURING DEVICE. ERNEST E. CHARLTON, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Aug. 10, 1925. Serial No. 49,359. 10 Claims. (Cl. 250—27.)



1. A system for measuring electrical phenomena comprising an electron discharge device having a plate circuit, a glow tube connected in series relation with said circuit, and a source of supply for said circuit having a voltage above that of the sparking voltage of the glow tube.

1,762,713. JOINT CONSTRUCTION. RICHARD E. DILL, Alexandria, Nebr. Filed Aug. 20, 1925. Serial No. 51,346. 2 Claims. (Cl. 72—106.)

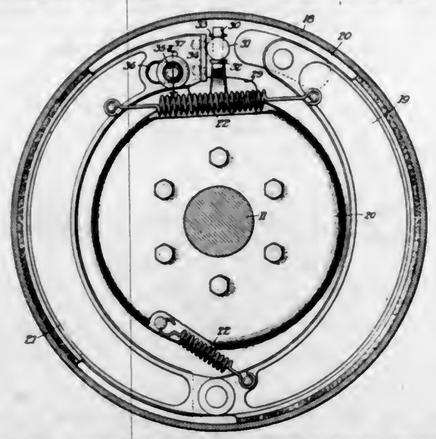


2. A joint for superposed tile comprising a horizontal annular seat on the upper end of the lower tile adapted to receive and support the lower end of the upper tile to hold said tiles in vertical alinement, a layer of cement between the abutting faces of said tiles, an upwardly and inwardly extending annular wall carried by the lower tile and rising above said horizontal seat and providing with the inner face of the upper tile an upwardly flaring pocket leading from said layer of cement, and a moisture and air repellant material in said pocket for sealing the joint between said tiles.

1,762,714. BRAKE CONTROL. ADIEL Y. DODGE, South Bend, Ind., assignor to Perrot Brake Corporation, South Bend, Ind., a Corporation of Illinois. Filed Dec. 31, 1924. Serial No. 758,980. 2 Claims. (Cl. 188—194.)

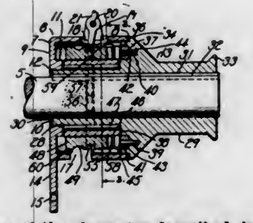
1. A vehicle having a wheel with a brake, an axle, a wheel-carrying spindle supporting part of the brake, and a pivot pin swivelling the spindle to one end of the axle, and comprising, in combination with said parts, a lever generally paralleling the axis and fulcrumed on the opposite side of the pivot pin from the wheel and having its wheel end turned vertically upward and substantially

coaxial with respect to the pivot pin when the brake is applied, and an elongated thrust member having a cylin-



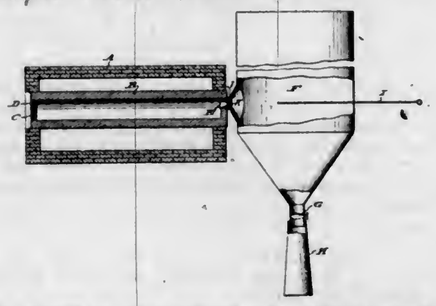
drical face with horizontally extending elements engaging the brake and having a vertical bore embracing the vertically-turned end of the lever.

1,762,715. CATHEAD. ORREN M. GAHAGAN, Wewoka, Okla. Filed Jan. 14, 1929. Serial No. 332,465. 8 Claims. (Cl. 254—173.)



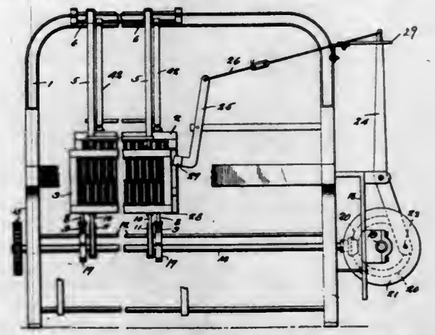
1. In a device of the character described, in combination with a shaft and a shaft support, a housing mounted on the support and having an opening to receive the shaft, a spool member fixed on said shaft and having a sleeve and clutch portion in the housing, a sheave member slidable on said sleeve and having a clutch portion, means for manually shifting said sheave to effect engagement of said clutch portions, and means for automatically shifting said sheave to effect disengagement thereof.

1,762,716. PROCESS OF PREPARING ZINC DUST AND APPARATUS THEREFOR. HARRY A. GRINE, Clarksburg, W. Va., assignor, by mesne assignments, to The Grasselli Chemical Company, Cleveland, Ohio, a Corporation of Delaware. Filed Nov. 29, 1927. Serial No. 236,563. 2 Claims. (Cl. 75—28.)



1. Process for the production of zinc dust by distillation of metallic zinc bearing material which consists in volatilizing zinc in a closed chamber, passing the zinc vapors to an expansion device consisting of a restricted opening while maintaining the temperature of the vapors in said expansion device above the condensing temperature of zinc and quickly expanding and cooling the vapors in a condenser at a pressure below that obtaining in said closed chamber and in the absence of air to form zinc dust, said restricted opening being sufficiently small to produce a jet action projecting the zinc vapors with considerable velocity well out in the body of the condenser.

1,762,717. LOOM. EUGENE HERRING, New Orleans, La., assignor to Elm City Cotton Mills, Lagrange, Ga., a Corporation of Georgia. Filed Sept. 12, 1927. Serial No. 219,065. 2 Claims. (Cl. 139—53.)



1. In a loom of the class described, a frame, a harness, means for mounting the harness on the frame for up and down movement and for sidewise movement, a shaft journaled on the frame, means operated by the shaft and connected to the harness for moving the harness up and down, third and fourth levers mounted on the frame to swing sidewise in approximate parallelism to the shaft, the harness being slidable on the third lever, a link connecting the third and fourth levers, a cam wheel operatively connected with the fourth lever and disposed in approximate parallelism to the shaft, and means for connecting the cam wheel operatively with the shaft.

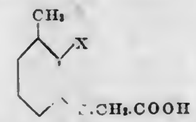
1,762,718. HANDLE FOR IMPLEMENTS. DAVID F. HERVEY, Logansport, Ind. Filed May 25, 1929. Serial No. 365,976. 10 Claims. (Cl. 294—57.)



1. In an implement, a blade having a front edge, a handle carried by the blade and a plurality of hand grips carried by the handle, said grips being disposed in angular relation to each other and in angular relation to the edge of the blade.

1,762,719. 2-SUBSTITUTED-1-METHYL-PHENYL-3-THIOGLYCOLIC ACID. ERWIN HOFFA and HANS HEYNA, Frankfort-on-the-Main-Hochst, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Nov. 24, 1928, Serial No. 321,756, and in Germany Oct. 23, 1926. 2 Claims. (Cl. 260—108.)

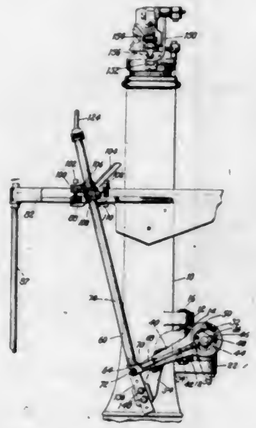
1. As new products, the compounds of the general formula:



wherein X stands for the CN- OR COOH, being colorless crystalline bodies, which by a treatment with an alkali are

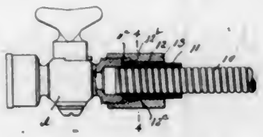
transformed into derivatives of 4-methylthionaphthene which on their part can be converted to known methods into 4.4'-dimethylthioindigo.

1,762,720. SHOE SUPPORT. KARL KILBURN, Boston, and THOMAS H. SEELY, Melrose, Mass., assignors to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Aug. 9, 1928. Serial No. 298,606. 18 Claims. (Cl. 1—41.)



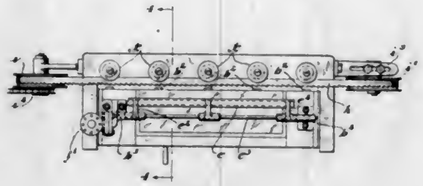
1. In a shoe support, a last spindle constructed and arranged to move freely with a shoe and last when the shoe is presented for operation of a machine thereon and to permit movement of the shoe in any direction for such presentation, and means acting when the shoe and last are placed in a position convenient for hand operation on a shoe for rendering the spindle immovable in directions in which it tends to move during the operation.

1,762,721. GAS CONNECTION. HERMANN RICHARD KLINGNER, Dresden, Germany, assignor to Alfred Wagner, New York, N. Y. Filed Feb. 17, 1928. Serial No. 255,098. 1 Claim. (Cl. 285—87.)



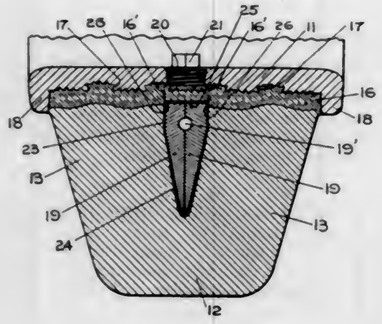
Coupling means for joining together two gas conducting tubes, one of which tubes is provided with a threaded end, and the end of the second of which is adapted to fit into said first named tube, an elastic sleeve, formed at one end with a flange and having a tapered portion, said sleeve being tightly mounted near the said end of said second tube, a split tubular member, provided with a tapered flare at its split end to conform with the tapered portion of said sleeve and adapted to lie thereon, a muff slidably mounted on said second tube provided with threaded means for engaging said threaded end on said first named tube and also provided with an internal tapered portion adapted to bear tightly on said tapered flare, when said muff engages said first named tube, and distort said elastic member longitudinally and transversely to form a leak proof connection between said two tubes.

1,762,722. APPARATUS FOR USE IN THE MANUFACTURE OF LAMINATED GLASS. GEORGE W. KRETZSCHMAR, Garfield, N. J., assignor to Triplex Safety Glass Company of North America, New York, N. Y., a Corporation of Delaware. Filed Aug. 28, 1928. Serial No. 302,476. 1 Claim. (Cl. 49—81.)



An apparatus for use in preparing the edges of laminated glass for sealing comprising an endless, traveling band cleaner, means to support the band cleaner, a movable supporting table to receive the sheet of laminated glass, a presser mounted on the table to press the glass down on the table, means to actuate the same mounted on the table, and means to move the table and the presser toward the band cleaner.

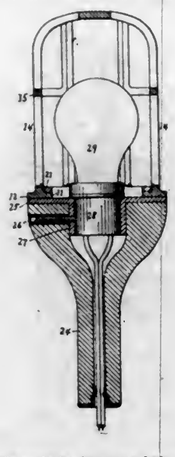
1,762,723. PROCESS AND MEANS FOR MAKING TIRES. CHARLES M. MANLY, Richmond Hill, N. Y.; John M. Manly, William G. Manly, and Basil M. Manly, executors of said Charles M. Manly, deceased, assignors to Overman Cushion Tire Company, Inc., New York, N. Y., a Corporation of New York. Filed Aug. 30, 1923. Serial No. 660,192. 11 Claims. (Cl. 18—55.)



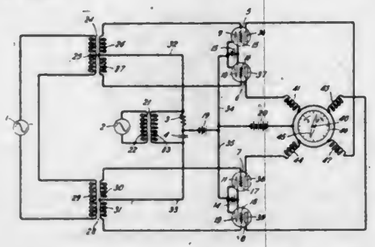
1. In a process for making cored articles of vulcanized rubber compound, the use of a hollow annular core formed out of fragile granular material into substantially rigid arcuate sectors flexibly joined by means covering the joints in the core assembled from such sectors to prevent rubber compound from being squeezed into the joints and hollows of the core.

1,762,724. LAMP GUARD. JACOB MANNESCHMIDT, Brooklyn, N. Y. Filed June 21, 1928. Serial No. 287,182. 3 Claims. (Cl. 240—54.)

1. In a lamp guard the combination with a socket, of a plate with a depending sleeve, means for fastening the sleeve to the socket, a handle secured by said means to the sleeve, a cage arranged on the plate, means for hooking the cage to the plate by revolving it in an arc of a circle, and a spring bolt brought into action when the cage is hooked to the plate for locking it to the plate.



1,762,725. METHOD OF AND MEANS FOR INDICATING SYNCHRONISM. WARREN A. MARRISON, Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Mar. 24, 1928. Serial No. 264,431. 7 Claims. (Cl. 172—245.)



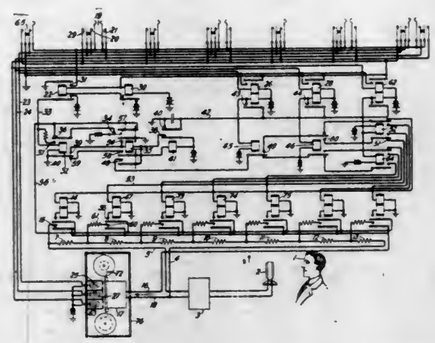
1. A system comprising a plurality of sources of single phase alternating currents, means jointly controlled by said single phase currents to produce polyphase currents, and means actuated by said polyphase currents for indicating the phase relationship between said single phase currents.

1,762,726. TELEPHONE-DIAL PROTECTOR. IDA M. MARTIN, Hillside Township, Union County, N. J. Filed Aug. 24, 1928. Serial No. 301,732. 6 Claims. (Cl. 179—189.)



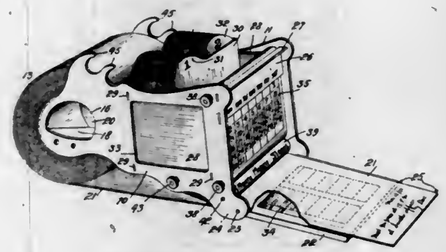
1. A device for preventing unauthorized use of a dial telephone, comprising a casing having a lip adapted to engage the base of the telephone and a top plate to cover a dial on the telephone, down-extending flanges integral with the top plate and adapted to embrace the sides of the dial, and forks integral with the top plate adapted to embrace the handle portion of the telephone, said forks being provided with means to receive a lock to prevent removal of the device.

1,762,727. VOLUME-CONTROL SYSTEM. ROBERT C. MATHES, Wyoming, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Dec. 15, 1927. Serial No. 240,105. 3 Claims. (Cl. 179—100.3.)



1. A method of recording and reproducing a wider range of sounds than recording material will ordinarily permit which consists of varying the loss in the recording circuit according to the limitations of the recording material, making a single record of the sounds, marking the record at intervals only with code markings in accordance with the loss inserted, reproducing the record and varying the gain in the reproducing circuit according to the markings.

1,762,728. COMBINED MEMORANDUM DEVICE AND MEMORY TICKLER. CHARLES J. MCARTHUR, Glen Ridge, N. J. Filed Feb. 26, 1926. Serial No. 90,744. 8 Claims. (Cl. 281—6.)

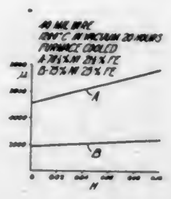


1. In a device of the character described, the combination of a frame, a roll of paper supporting the rear portion of the frame, and a writing tablet at the front portion of the frame onto which the free portion of the web of paper may be led, whereby the rolling bearing of the roll of paper on the surface supporting the device, due to a forward or backward movement of the frame, will move the said free portion in a corresponding direction.

1,762,729. METHOD OF TREATING LATEX AND PRODUCT OBTAINED THEREBY. JOHN MCGAVACK, Jackson Heights, N. Y., assignor to the Naugatuck Chemical Company, Naugatuck, Conn., a Corporation of Connecticut. Filed Oct. 14, 1927. Serial No. 226,256. 6 Claims. (Cl. 18—50.)

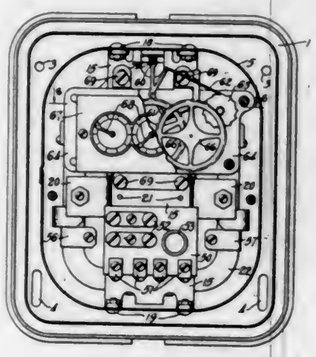
5. The method of treating latex which comprises adding to latex a small amount of sodium silicate in solution and sufficient dilute boric acid to convert the silicate into a hydrosol of silicic acid, allowing to stand until gel formation occurs, and recovering an uncoagulated latex gel.

1,762,730. HEAT TREATMENT OF MAGNETIC MATERIALS. LOUIS W. MCKEEHAN, Maplewood, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Oct. 30, 1926. Serial No. 145,124. 8 Claims. (Cl. 175—21.)



1. The method of treating a magnetic material containing from 60% to 80% nickel and the balance chiefly iron to give it substantially constant permeability for all field strengths up to at least .1 gauss which comprises heating it to a maximum temperature between about 600° C. and about 900° C. for at least two hours and cooling to approach room temperature at an average rate of about 10° C. per minute.

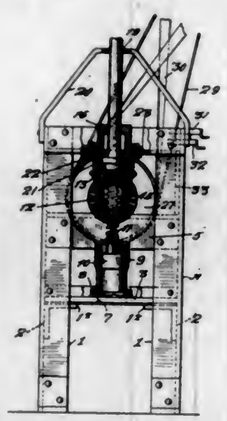
1,762,731. MAGNETIC DEVICE. EDWARD D. MEAD, Caldwell, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Aug. 15, 1929. Serial No. 386,207. 13 Claims. (Cl. 175—339.)



1. In combination, a U-shaped permanent magnet suspended to oscillate freely from one position to another, a stationary electromagnet located between the pole-pieces of said permanent magnet having opposite pole-pieces presented respectively to the opposite pole-pieces of said permanent magnet such that the air gaps between the electromagnet and said permanent magnet are constant for different positions of the permanent magnet, an energizing coil for said electromagnet, and means actuated in response to the oscillation of said permanent magnet.

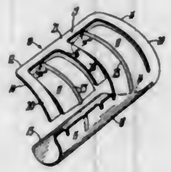
1,762,732. DEVICE FOR EXPANDING SHORT PIPES. JOHN K. MORAIS, Richmond Hill, N. Y. Filed Mar. 14, 1929. Serial No. 346,837. 2 Claims. (Cl. 153—80.5.)

1. A device for expanding short lengths of tubes, comprising a supporting frame, a seat adapted to receive the pipe, said seat having a passageway for an expander, a screw having an expander head below it, a lower housing through which the screw passes, means carried by an upper housing for holding the screw against rotation but permitting its endwise movement, a worm for the screw, gear



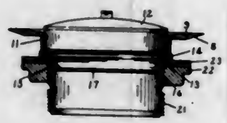
devices for rotating the worm, and power-driven means for imparting reversely directed movements to the gear devices.

1,762,733. TYPEWRITING MACHINE. CARL E. NORIN, Jersey City, N. J., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Filed Aug. 15, 1927. Serial No. 213,131. 1 Claim. (Cl. 197—136.)



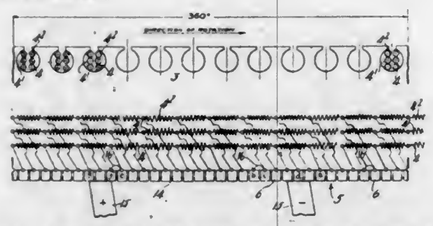
A work sheet holder comprising a body portion and a resilient E shaped frame extending therefrom, a plurality of less resilient tongues extending between the branches of the E shaped frame and adapted to clasp a typewriter platen, the outer ends of said tongues forming abutments for a work sheet while the longitudinal outer edge of the E shaped frame extends in front of and around said tongues and is adapted to clasp said work sheet.

1,762,734. WASTE FITTING FOR SINKS OR THE LIKE. ERASTUS G. OAKLEY, Southport, Conn., assignor to Bridgeport Brass Company, Bridgeport, Conn. Original application filed Nov. 8, 1926, Serial No. 147,045. Divided and this application filed Apr. 11, 1927. Serial No. 182,932. 3 Claims. (Cl. 4—292.)



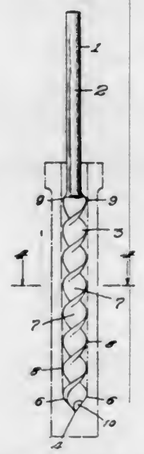
1. In a sink drain and the like, a bushing having a shoulder adapted to provide a seat, and a strainer member having the peripheral portion thereof so constructed that the edge is contractible in diameter for ready insertion in the shoulder, and to be easily removable therefrom.

1,762,735. ELECTRIC MOTOR. ALFRED E. OSWALD, Hackensack, N. J., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Filed Feb. 20, 1925. Serial No. 10,462. 13 Claims. (Cl. 171—228.)



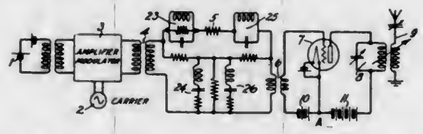
1. An armature, having slots, including a winding having a plurality of at least three parallel reentrant sections, each section having a plurality of series connected coils wound in the armature-slots, one coil from each section being placed in a slot, and a plurality of means to connect all of the sections in pairs, the coils in each pair being in the same slot and of different sections, said means being in number equal to the number of sections and spaced as far apart as possible around the armature.

1,762,736. TWIST DRILL. GILBERT L. PEAKES, Bloomfield, N. J., assignor to Bakelite Corporation, New York, N. Y., a Corporation of Delaware. Filed Oct. 23, 1926. Serial No. 143,557. 3 Claims. (Cl. 77—70.)



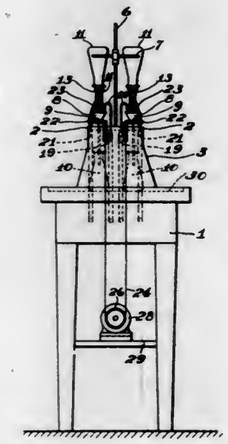
1. As an article of manufacture, a twist drill sharpened with substantially zero rake and having no lands adapted especially to produce a hole with unclouded walls in a piece of bakelite or other transparent organic material.

1,762,737. SYSTEM EMPLOYING SPACE-DISCHARGE DEVICE. EUGENE PETERSON, New York, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Mar. 29, 1929. Serial No. 350,952. 4 Claims. (Cl. 179—171.)



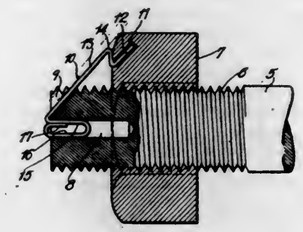
1. The method of operating a three-element space discharge tube in which the space current flows in impulses the envelope of which varies in accordance with a signal wave, comprising operating the grid about a normal negative potential less than the static cut-off potential, proportioning the load impedance to a low value within the limit of safe power dissipation in the tube, and proportioning the maximum grid voltage swing to correspond substantially to the maximum instantaneous space current for the given anode voltage.

1,762,738. FILTRATION APPARATUS. ARTHUR W. PETREY, Parnassus, Pa., assignor to Aluminum Company of America, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed June 7, 1929. Serial No. 369,140. 8 Claims. (Cl. 23—259.)



1. A filtration apparatus comprising a funnel support, a funnel rotatably carried by said support, means for rotating the funnel, and filter-washing means disposed in fixed relation to the funnel and adapted to be connected to a source of wash liquid.

1,762,739. NUT LOCK. JOHN E. PHILLIPS, New York, N. Y. Filed Dec. 3, 1928. Serial No. 323,497. 2 Claims. (Cl. 151—28.)



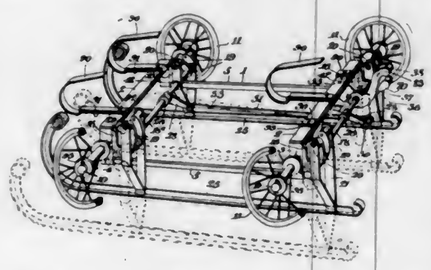
1. In combination, a bolt having a central opening therein, a nut having an angularly disposed pocket therein, a resilient locking member arranged to engage the opening and the pocket, an expandible end on the locking member for retaining the same in position and a shoulder on the nut engaging end of the lock member and at an angle thereto overlying the nut.

1,762,740. DRAW-WORKS BRACE. JOSHUA C. RAINS, Houston, Tex., assignor of one-third to Joseph F. Bashara, Harris County, Tex., and one-third to Aubrey Fariss. Filed May 14, 1928. Serial No. 277,577. 9 Claims. (Cl. 189—31.4.)



1. A connecting brace formed of tubular sections, one of which is rotatable relative to the others, tension rods operatively connected to said rotatable section and extending through the other sections anchoring means at the respective ends of said brace and anchoring means at the outer ends of said rods.

1,762,741. CONVERTIBLE GEAR FOR VEHICLES. JOHN G. RAITHEL, Little Falls, N. Y. Filed Mar. 31, 1927. Serial No. 179,821. 3 Claims. (Cl. 280—9.)

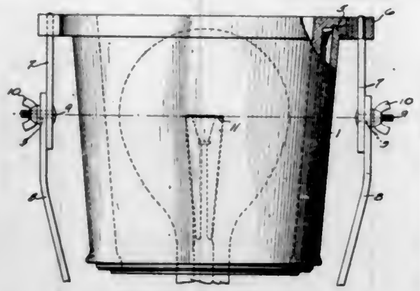


1. In a convertible gear for vehicles, a frame having wheels connected therewith, runners connected to said frame, V-shaped members connected to said runners, arms connected to said V-shaped members, shafts for rocking said arms, a lever for rocking said shafts, a spring pressed member for locking said lever in a given position, a second lever for releasing said first named lever when in locked position and members attached to one of said levers to cause said levers to move together.

1,762,742. PROCESS OF PRODUCING PRIMARY AMINES. WALTER REPPE, Ludwigshafen-on-the-Rhine, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Feb. 11, 1927, Serial No. 167,582, and in Germany Feb. 9, 1926. 4 Claims. (Cl. 260—127.)

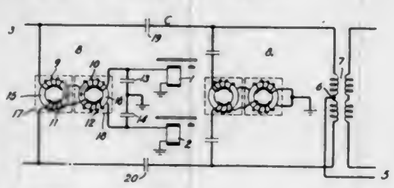
1. The process of producing primary amines which comprises passing a vaporized carbonyl compound mixed with hydrogen and gaseous ammonia at an elevated temperature over a hydrogenation catalyst.

1,762,743. LUMINAIR. GEORGE RUCKER, San Francisco, Calif., assignor to Holophane Company, Inc., New York, N. Y., a Corporation of New York. Filed July 27, 1926. Serial No. 125,152. 5 Claims. (Cl. 240—25.)



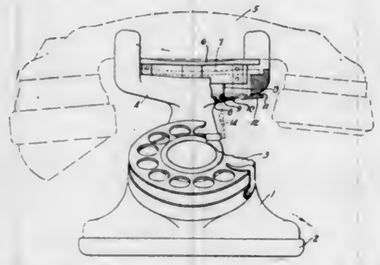
1. A luminair comprising a stationary light source, a light transmitting envelope containing a refractor on opposite sides of the light source, a support and means for tipping the refractor in the envelope with relation to the support and about an axis passing through the center of the light source to shift the entire emitted beam correspondingly.

1,762,744. RETARDATION COIL FOR COMPOSITE SETS. ERNEST L. SCHWARTZ, East Orange, N. J., and ALBERT J. WILLIAMS, Jr., Media, Pa., assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Nov. 1, 1927. Serial No. 230,219. 3 Claims. (Cl. 179—3.)



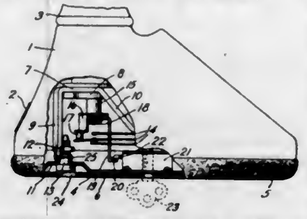
1. In a transmission circuit, a line circuit, means for simultaneously superposing voice signals and telegraph signals on said circuit, and means comprising a retardation coil system for separating said signals, said retardation coil system comprising two coils having common flux linkage and portions of their windings poled so as to practically eliminate mutual coupling between the coils.

1,762,745. SUBSTATION APPARATUS. OSCAR A. SHANN, Brooklyn, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Feb. 6, 1929. Serial No. 337,777. 6 Claims. (Cl. 179—90.)



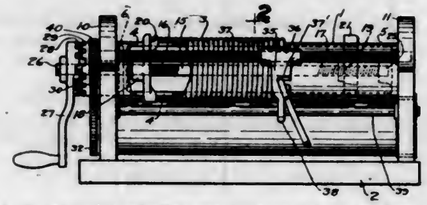
1. In a telephone substation instrument of the handset type a handset, a handset supporting member, a movable switch member normally depressed by the handset and a manually operated automatically restored member attached to the handset supporting member for raising and sustaining in raised position the handset and the movable switch member normally depressed thereby.

1,762,746. SUBSTATION LOCKING APPARATUS. OSCAR A. SHANN, Brooklyn, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Feb. 8, 1929. Serial No. 338,406. 8 Claims. (Cl. 179—189.)



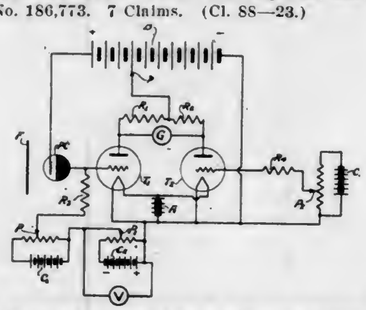
1. In a telephone instrument, in combination an attached transmitter and receiver, a mounting therefor having a switch by which telephonic connection may be had to a telephone line, an enlarged base portion in the mounting, and a lock contained within the enlarged base portion by which the switch may be locked against operation.

1,762,747. COMPRESSED-SPRING MACHINE. ANDREW F. SMITH, Seattle, Wash. Filed Oct. 23, 1928. Serial No. 314,526. 4 Claims. (Cl. 153—67.)



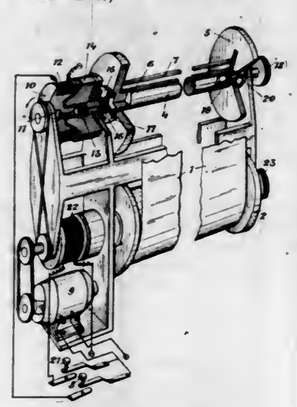
1. In a spring-winding machine of the class described, a frame, a removable mandrel in the said frame, means in the said mandrel for gripping and holding the ends of a spring that may be wound thereon, means for releasing the said spring-holding means, rollers cooperating with the said mandrel to form the spring, a suitable feeding device for feeding the spring material to the mandrel, and suitable means for rotating the said mandrel, rollers and feeding device.

1,762,748. PHOTO-ELECTRIC PHOTOMETER. HARDICK ALLEN SMITH, New Rochelle, N. Y., assignor to Electrical Testing Laboratories, Inc., New York, N. Y., a Corporation of New York. Filed Apr. 26, 1927. Serial No. 186,773. 7 Claims. (Cl. 88—23.)



7. In a photometric apparatus, the combination of a Wheatstone bridge having a three electrode audion in one arm and a resistance in another, so arranged that they are normally balanced, means for impressing a desired potential upon the grid of the audion, a photoelectric cell connected to the grid of the audion, means for impressing a voltage upon the grid to counter balance that impressed upon the grid by the photoelectric cell and means for measuring the value of the counter balancing voltage, substantially as set forth.

1,762,749. PAPER-FEEDING MECHANISM. GUSTAV TAUSCHEK, Vienna, Austria. Filed May 21, 1928, Serial No. 279,543, and in Austria May 27, 1927. 3 Claims. (Cl. 197—133.)



1. In a device as set forth, the combination of a writing machine, platen printing mechanism, means for feeding said platen in successive steps, two rollers carrying a strip of paper which passes from one roller to the platen and from thence to the other roller to be written upon power driven means for rotating the two rollers selectively and independently of the feeding mechanism of the machine, and means for manually operating said rollers independently of the feeding mechanism and power driven means.

1,762,750. TIRE-CHAIN CONNECTION. JOSEPH I. WEISSMAN, Brooklyn, and MORRIS GOLDSTEIN, Ozone Park, N. Y.; said Goldstein assignor to Joseph Goldstein, Brooklyn, N. Y. Filed June 20, 1927. Serial No. 200,089. 3 Claims. (Cl. 24.230—5.)

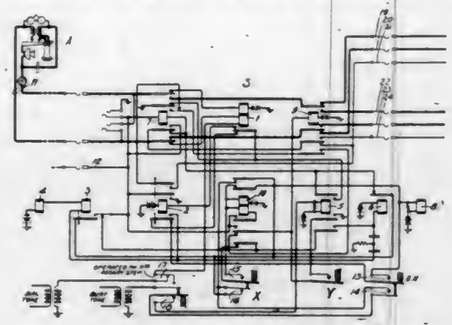


1. In antiskid chain connections for a wheel tire, a clamp lug arranged for connection to the felly of the wheel, and a hook member integral with said lug and projecting therefrom and forming a circumferentially extending looped connection disposed to admit a link of the chain and permit a movement thereof lengthwise of said loop.

1,762,751. TELEPHONE SYSTEM. ESMOND P. G. WRIGHT, Burwood, England, assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Oct. 26, 1928, Serial No. 315,141, and in Great Britain Dec. 17, 1927. 12 Claims. (Cl. 179—18.)

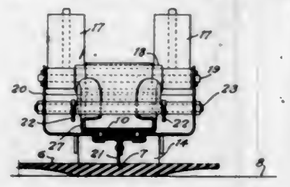
1. The combination in an automatic switch of a plurality of terminal banks, a plurality of sets of brushes

for cooperating with said terminal banks, means for operatively associating any one of said sets of brushes with the



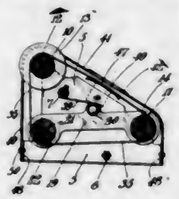
terminals in its corresponding bank, and means for operatively associating all of said sets simultaneously with their corresponding banks.

1,762,752. METHOD OF AND APPARATUS FOR MANUFACTURING PNEUMATIC TIRES. ADRIAN O. ABBOTT, Jr., Detroit, Mich., assignor to Morgan and Wright, Detroit, Mich., a Corporation of Michigan. Filed Mar. 15, 1928. Serial No. 261,830. 15 Claims. (Cl. 154—9.)



1. The method of assembling elements of a pneumatic tire which comprises forming a guide on one of said elements and applying another of said elements to the first element with the relative position of the elements during the application determined by said guide.

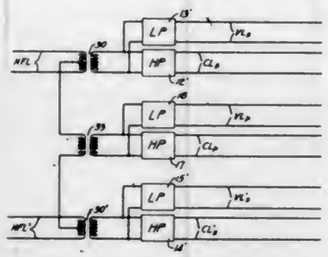
1,762,753. INDICATING DEVICE. LOUIS V. ARONSON, Newark, N. J., assignor to Art Metal Works, Inc., a Corporation of New Jersey. Filed May 3, 1928. Serial No. 274,689. 7 Claims. (Cl. 40—118.)



1. The combination with a casing, of a frame, sets of rollers on said frame, each set of rollers defining the apex of a triangle, an indicia-bearing belt on one roller of each set, the belts defining sides of said triangle, means for holding said belts under tension, said frame with the thereby-carried rollers and belts being received by said casing as a unit, and means for actuating each of said belts.

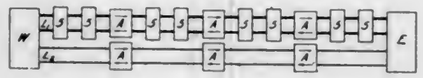
1,762,754. PHANTOM CARRIER CIRCUIT. HAROLD S. BLACK, East Orange, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed May 11, 1928. Serial No. 276,895. 9 Claims. (Cl. 179—15.)

1. A multiplex wave transmission system comprising side circuits, side circuit low frequency grouping filters and side circuit high frequency grouping filters in the side circuits, and a phantom circuit derived from the side circuits at such points thereof with relation to said side



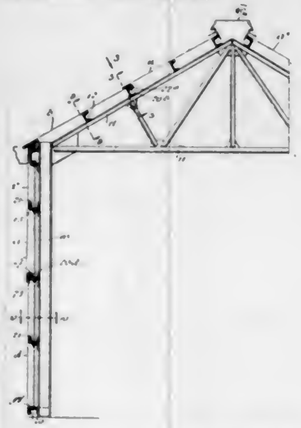
circuit filters that waves transmitted over said side circuits pass through the phantom circuit without passing through either side circuit filter.

1,762,755. METHOD AND MEANS FOR REDUCING CROSS TALK IN CARRIER-CURRENT SIGNALING SYSTEMS. HAROLD S. BLACK, Montclair, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed May 31, 1928. Serial No. 281,698. 14 Claims. (Cl. 179—78.)



1. A signal transmission system comprising adjacent lines paralleling each other and having different transmission characteristics, terminal stations therefor, and means intermediate said terminal stations for providing two transmission paths over said lines of substantially the same transmission equivalent between the extreme limits within which said lines parallel each other, said means comprising a plurality of frequency discriminating attenuating elements inserted in the line having the higher transmission level.

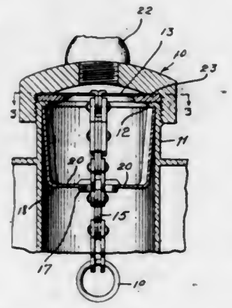
1,762,756. BUILDING CONSTRUCTION. ACHILLE BRAUNSTEIN, Brooklyn, N. Y., assignor to Anchor Corrugating Construction Co., New York, N. Y., a Corporation of New York. Filed Feb. 25, 1926. Serial No. 90,447. 12 Claims. (Cl. 189—1.)



1. In building construction, the combination with a frame having spaced horizontal beams, of a sheathing consisting of sheets with their side edges spaced apart

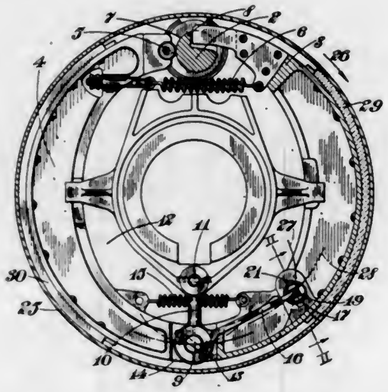
having on their inner surfaces hook flanges engaging the beams, fastening means insertable from the outside for securing the side edges of adjacent sheets to the beams, and cover pieces engaging the side edge portions of the sheets and covering the spaces between the side edges of adjacent sheets.

1,762,757. RETAINING DEVICE. CORD H. BEHNKE, Flushing, N. Y., assignor, by mesne assignments, to Moto Meter Gauge & Equipment Corporation, Long Island City, N. Y., a Corporation of Delaware. Filed July 6, 1927. Serial No. 203,743. 8 Claims. (Cl. 220—24.)



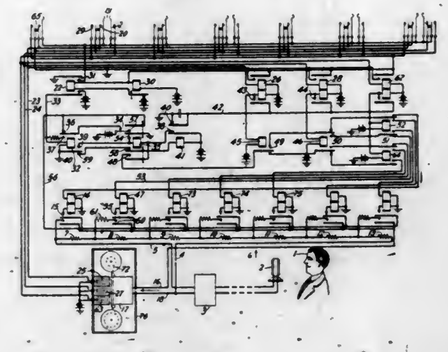
1. The combination with a radiator cap grooved circumferentially in the interior thereof, of radiator-cap-retaining means including an arched member adapted to extend across the cap constructed to yield in one direction at its edge to permit insertion into said cap and to engage the grooved interior surface of said cap and be locked permanently and positively against removal.

1,762,758. BRAKE FOR VEHICLES. FREDERICK TASKER BURGESS and CHARLES WILLIAM SEWELL, Cricklewood, England, assignors of one-third to Bentley Motors Limited, Cricklewood, England, a British Company. Filed Aug. 29, 1928, Serial No. 302,816, and in Great Britain Feb. 21, 1928. 5 Claims. (Cl. 188—78.)



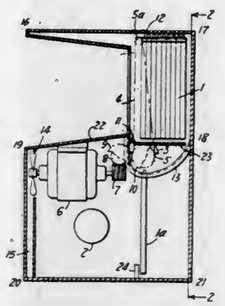
1. In an internal expanding brake, the combination of a forward shoe, a rearward shoe, a floating pivot connecting the two shoes, means for applying said forward shoe, a swinging link supporting said floating pivot, an arm on the swinging link which has a sliding engagement with the forward shoe so arranged that there is no interference with the servo action of the brake, substantially as set forth.

1,762,759. VOLUME-CONTROL SYSTEM. JOHN C. BURKHOLDER, Jr., East Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Dec. 15, 1927. Serial No. 240,118. 5 Claims. (Cl. 179—100.3.)



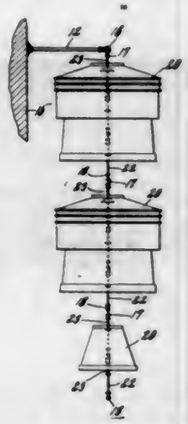
1. In a sound film recording and reproducing system, a source of sound, a film, recording and reproducing means including a recording and a reproducing volume control device each comprising a potentiometer and a plurality of relays, selectively operable means for operating said recording control device and for marking said film to correspond to each operation, and means selectively operated by said markings for operating said reproducing control device to compensate for changes in volume level introduced by said recording control device.

1,762,760. MACHINE FOR EXHIBITING PHOTOLUMINESCENT IMAGES. LYMAN CHALKLEY, Jr., State College, Pa. Filed Oct. 5, 1927. Serial No. 224,065. 1 Claim. (Cl. 40—36.)



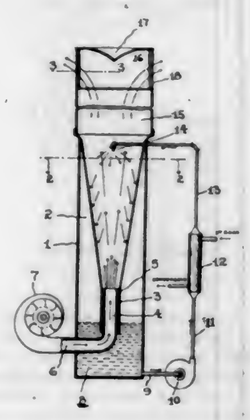
A machine comprising: a box divided into two compartments, one above the other, the lower compartment containing a light source screened from outside view, and the upper compartment having an opening such that its interior may be seen from the outside; a plurality of movable frames bearing photoluminescent images, and continuous tracks for the frames to move on; an electric motor, two sprocket gears rotated by the motor, two continuous chains carrying pushers and actuated by the sprockets; the whole operating in such a way that a frame bearing a photoluminescent image after exposure of the image to the light source in the lower compartment is picked up by the pushers and is carried by the chains into the upper compartment and before the opening thereof so as to exhibit the photoluminescent image, the introduction of the frame into the upper compartment causing the release of a second frame so that it falls by force of gravity into the lower compartment and into the position originally occupied by the first frame.

1,762,761. DISPLAY HOLDER FOR LAMP SHADES. THOMAS B. CHAMBERLAIN, Boston, and CHARLES H. BAILEY, Hingham, Mass. Filed Nov. 12, 1928. Serial No. 318,812. 3 Claims. (Cl. 211—113.)



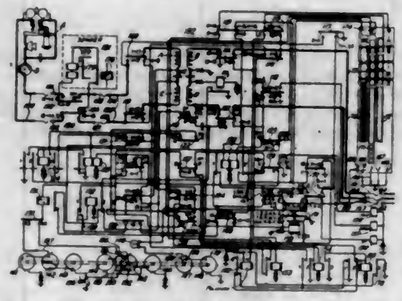
1. A lamp-shade holder constituting a pendant section and comprising two alined arms, a hook at the outer end of one arm, and an eye at the outer end of the other arm, and a shade rest secured to and projecting laterally from the arms and spaced from the ends thereof so that either arm may be grasped to manipulate the holder while a shade is supported by the rest.

1,762,762. DEVICE FOR COOLING WATER. BARTON H. COFFEY, Elizabeth, N. J., assignor to The Cooling Tower Co. Inc., New York, N. Y., a Corporation of New York. Filed Dec. 5, 1925. Serial No. 73,458. 2 Claims. (Cl. 261—117.)



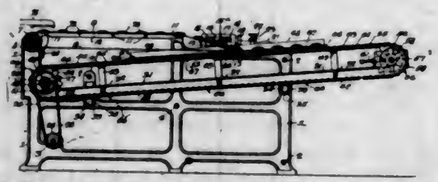
1. In a device of the character described, the combination of a Venturi expanding tube provided with a mouth having vertical sides, an air nozzle in the said mouth, an annular passage exterior of the nozzle and within the mouth, means for delivering a spray of water within the upper part of said Venturi tube, means for discharging air from the air nozzle at a velocity sufficient to prevent the water from entering the air nozzle whereby the water is caused to run down the sides of the tube between the mouth of the tube and the air duct, means for collecting the water and means to convey water from said collecting means to said delivering means.

1,762,763. TELEPHONE SYSTEM. RAYMOND E. COLLIS, East Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Aug. 8, 1928. Serial No. 298,143. 18 Claims. (Cl. 179—18.)



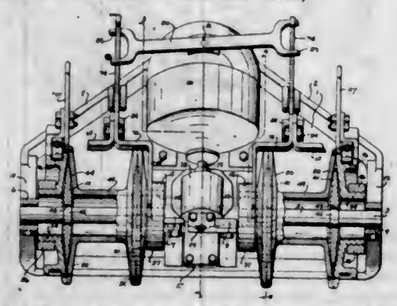
1. In a switch controlling system, an impulse controlled switch, means for absorbing the first controlling impulse, and means for adding the effect of said impulse after the following impulses have ceased.

1,762,764. FEEDING MECHANISM. WILLIAM COSTELLO, Jr., Philadelphia, Pa.; Elizabeth R. Costello and John L. Costello, administrators of said William Costello, jr., deceased, assignors to National Biscuit Company, New York, N. Y., a Corporation of New Jersey. Filed Nov. 10, 1923. Serial No. 673,939. 8 Claims. Cl. 107—7.)



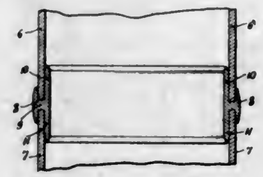
3. The combination with a main frame, of a conveyer mounted in said main frame, a sub-frame movably supported on the main frame, a conveyer carried by the sub-frame and adapted to receive articles from the said first conveyer, mechanism for operating on their respective frames the said conveyers, and mechanism for reciprocating the sub-frame on the main frame in directions substantially paralleling the normal advance movement of said second conveyer, each movement of said reciprocation being effected at a speed relatively different from the other movement thereof.

1,762,765. CABLE-ACTUATING MECHANISM. KENNETH DAVIS, St. Benedict, Pa., assignor, by mesne assignments, to Rembrandt Peale, W. Sanders Davies, and William S. Wallace, trustees. Filed Aug. 21, 1924. Serial No. 733,327. 2 Claims. (Cl. 254—185.)



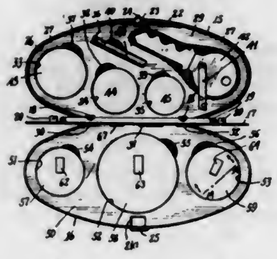
1. A cable actuating mechanism including in combination a hollow winding drum, a driven shaft, a driving member within the hollow drum and substantially coaxial therewith and fixed to the shaft, means for changing transversely the axial relation between the drum and driving member to drive the drum, a similar drum and driving means therefor, and means mechanically interconnecting the shifting members on each drum for preventing the simultaneous driving of the two drums.

1,762,766. PIPE SLEEVE. FRANCIS DE GARAY, Brooklyn, N. Y., assignor to Altmar Steel Products Company, Inc., New York, N. Y., a Corporation of New York. Filed Mar. 24, 1928. Serial No. 264,554. 1 Claim. (Cl. 285—192.)



The combination of a pipe sleeve made of metal and provided with an outer band, an inner band concentric thereto and a connecting portion integral with said outer band and with said inner band and extending therebetween, and a pair of pipe sections made of metal and disposed upon opposite sides of said connecting portion and fitting tightly thereagainst, and against said inner and outer bands, the ends of said pipe sections, where they abut against said connecting portion, being swaged to make a tight fit as against said outer band and said inner band.

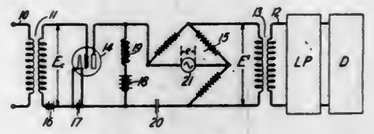
1,762,767. VANITY CASE. PAULINE DWAN, New York, N. Y. Filed Mar. 30, 1929. Serial No. 351,174. 7 Claims. (Cl. 132—79.)



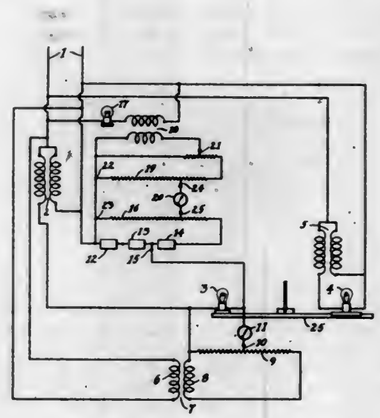
7. In a vanity case the combination of a hollow body portion, a hollow lid and a tray plate, an inset plate fitted into said hollow lid and provided with pockets, a strip of sheet material closed upon itself and fitted into said hollow lid so as to form a neck therefor and to engage said inset plate and hold the same in place, means for connecting together said hollow body portion, said lid and said tray plate, so as to permit said tray plate to swing against said neck, and mechanism carried by said tray plate for securing thereto an article to be detachably carried by said tray plate.

1,762,768. TRANSMISSION SYSTEM. ALTON C. DICKIESON, Brooklyn, N. Y., assignor to Bell Telephone Laboratories Incorporated, New York, N. Y., a Corporation of New York. Filed Oct. 30, 1926. Serial No. 145,170. 14 Claims. (Cl. 178—44.)

3. A transmission system comprising a circuit over which waves are transmitted, a space discharge amplifier including a grid for repeating said waves, means for impressing a large biasing potential upon said grid to block said amplifier, and means responsive to waves above a certain amplitude to reduce said biasing potential to render said amplifier operative.



1,762,769. CIRCUIT ARRANGEMENT FOR THE MEASUREMENT OF THE LIGHT EMITTED BY AND THE WATTS OR CURRENT CONSUMED BY INCANDESCENT LAMPS. EDGAR D. DOYLE, Philadelphia, Pa., assignor to Electrical Testing Laboratories, Inc., New York, N. Y., a Corporation of New York. Filed Aug. 2, 1927. Serial No. 210,091. 18 Claims. (Cl. 175—183.)

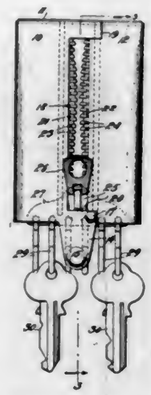


1. The method of determining the luminous output of an incandescent lamp by means of alternating current by impressing a definite percentage of the alternating current upon a standard lamp of known luminous output at a known voltage, adjusting a comparison lamp also energized by the same alternating current so that its illumination is equivalent to that of the standard lamp, replacing the standard lamp by the lamp to be tested, impressing upon the lamp to be tested a percentage of the alternating current voltage bearing the same ratio to the voltage impressed upon the standard lamp as that which the voltage of the lamp to be tested bears to the known voltage of the standard lamp, and without readjusting the comparison lamp, varying the illumination which it produces until it is equivalent to that of the lamp to be tested, substantially as set forth.

1,762,770. HOLDER FOR KEYS OR THE LIKE. ABRAHAM DROUTMAN, Brooklyn, N. Y., assignor of one-half to Joseph N. Lowe, New York, N. Y. Filed Aug. 3, 1928. Serial No. 297,269. 7 Claims. (Cl. 150—40.)

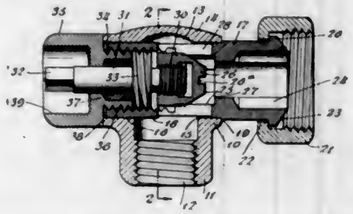
7. A key holder or the like, comprising a pouch of flexible material having an opening, the pouch also having a slot extending toward the opening, flexible means for closing

the slot and bendable by the pouch without being rendered inoperative, a slide for opening or closing the flexible



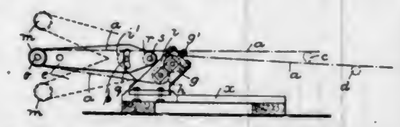
means at will, and movable to or from the opening, and means carried within the pouch by the slide for supporting keys or the like.

1,762,771. PIPE FITTING. GROVER S. EBLE, Belle Harbor, N. Y. Filed Sept. 3, 1926. Serial No. 133,312. 10 Claims. (Cl. 251—156.)



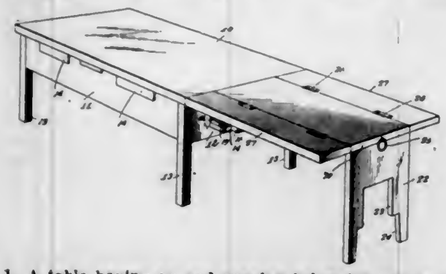
4. A combination pipe fitting comprising a substantially cylindrical casing having a laterally extending branch to which a pipe line is adapted to be connected, a sleeve mounted within said casing and having a plurality of elongated slots therein, through which communication between said branch and enlargement is established, a valve plug mounted within said sleeve and having portions thereof projecting into said slots to hold said plug against rotation, and a valve rod having threaded engagement with said plug and with said sleeve, the threaded engagement of said rod with said plug being of opposite hand to the threaded engagement of said rod with said sleeve whereby a longitudinal movement of said plug due to the rotation of said rod is effected by the action of both of said threads.

1,762,772. BELT CONVEYER. GATHORNE JOHN FISHER, Briarlea, Penygarn, Pontypool, Wales. Filed Oct. 25, 1927, Serial No. 228,542, and in Great Britain Nov. 2, 1926. 6 Claims. (Cl. 198—203.)



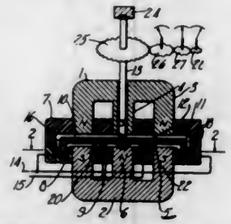
1. In a belt conveyer, a frame comprising cheek plates with projecting portions, a pair of driving rolls supported in said frame, a conveyor belt led and pinched between said rolls, a jib frame pivoted on said projecting portions of said cheek plates closely adjacent to said rolls, and a return roller for said conveyer belt on said jib frame.

1,762,773. CONVERTIBLE TABLE. ANTONIO FRAZZANO, Orange, N. J. Filed Apr. 30, 1928. Serial No. 273,818. 2 Claims. (Cl. 45—113.)



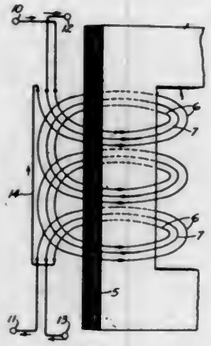
1. A table having an end opening below its top, an extension one-half the width of the table top, leaves hingedly engaged at the edges of said extension to cover its surface when folded thereover, a hinged support at the end of the extension foldable thereagainst, toggle joint means to support said extension level with the table top, said means enabling the extension to be lowered to pass into the opening, and means to limit the extraction of said extension.

1,762,774. ELECTROMAGNETIC DEVICE. JACOB R. FRY, Montclair, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed June 15, 1928. Serial No. 285,519. 6 Claims. (Cl. 171—265.)



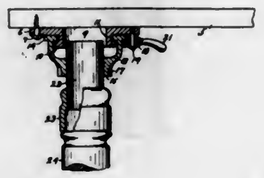
1. In combination, a magnet having an annular pole piece, a rotatable disc arranged in continuous magnetic relation with said pole piece, and means for directing a flow of current across said disc at different points about its circumference.

1,762,775. INDUCTANCE DEVICE. ALBERT G. GANZ, Union City, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Sept. 19, 1928. Serial No. 306,877. 6 Claims. (Cl. 175—356.)



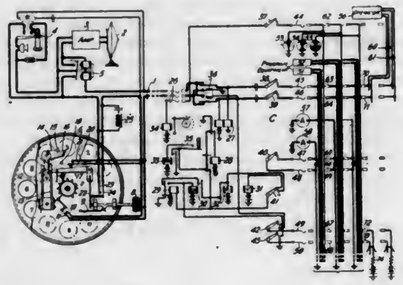
1. An inductance device for connecting two lines, comprising a core with a plurality of inductively coupled windings, each of said windings having its individual turns carrying current in one direction at a certain instant interleaved with the individual turns of another winding carrying current in the opposite direction at said instant and substantially preventing the flux within either of said windings from producing eddy currents in any of said turns.

1,762,776. FURNITURE LEG. CHARLES W. GARDNER, New York, N. Y. Filed Dec. 22, 1927. Serial No. 241,900. 3 Claims. (Cl. 287—20.)



1. In a furniture leg, an attachment base provided with locking ledges, a socket member having locking ledges cooperating with the ledges of said base, a stop provided for one of said ledges to limit the locking movement of said socket member, a clamp device carried by said base and engaging said socket member, and a leg secured to said socket member.

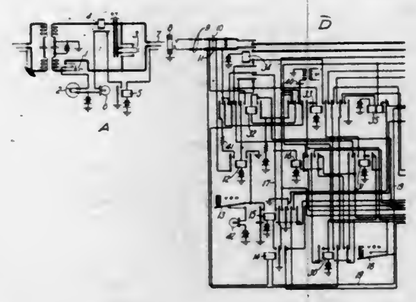
1,762,777. TRANSMISSION SYSTEM. CHARLES L. GOODRUM, New York, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Aug. 22, 1927. Serial No. 214,566. 10 Claims. (Cl. 179—2.)



1. In combination, a central office, a subscriber's line terminating therein, means at the central office for sending programs over said line, a program receiving set and a telephone set at the substation, an operator's position, automatic switches, means controlled by the subscriber for setting said switches to select any one of said programs or the operator's position, and means responsive to the selection of the operator's position for rendering said program receiving set ineffective and for rendering effective said telephone set.

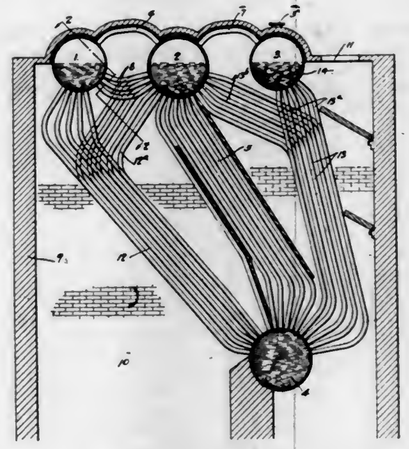
1,762,778. TELEPHONE SYSTEM. JOHN R. GOULD, Aldwych, London, England, assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Mar. 14, 1929, Serial No. 346,825, and in Great Britain Mar. 28, 1928. 18 Claims. (Cl. 179—27.)

1. In a telephone system, lines having numbers which are composed of a given number of digits, lines having numbers which are composed of a different number of digits, an automatic switch, final selectors directly accessible to said switch, and means in said switch responsive to pulses



originated by the dialing of two or more successive digits of the number of a line to select a final selector having access to said line.

1,762,779. BOILER. LOUIS G. HALLER, Chattanooga, Tenn. Filed Jan. 12, 1927. Serial No. 160,678. 10 Claims. (Cl. 122—302.)

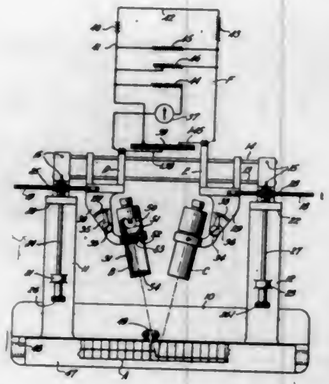


1. In a boiler, the combination of a front, a middle, and a rear upper drum, a lower drum, all of said drums being parallel, a bank of tubes connecting the rear upper drum to the lower drum, a bank of tubes connecting the middle upper drum to the lower drum, and a bank of tubes arranged in rows lying in parallel planes at right angles to the drums, the tubes of all of said rows having their lower ends connected to the lower drum, the upper ends of all of the tubes of a number of rows distributed through the bank from one end to the other being connected to the front upper drum, and the upper ends of all of the tubes of the remaining rows being connected to the middle upper drum.

1,762,780. ELECTRICAL MEASURING INSTRUMENT. FRANK H. HIBBARD, Arlington, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Dec. 24, 1924. Serial No. 757,821. 6 Claims. (Cl. 177—351.)

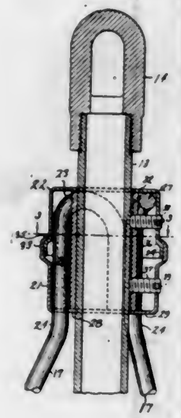
1. In a distance measuring device, a frame, a plurality of means for locating the boundaries defining a distance to be measured, means slidably mounted on said frame for moving the first mentioned means to coincide with said

boundaries, a circuit, a galvanometer connected in said circuit, and electrical means controlled by the movement



of said slidable means for controlling the operation of said galvanometer for indicating the distance in a number of predetermined units.

1,762,781. SHADE SUPPORT. HOWARD LE ROY JENKINS, Newark, Ohio, assignor to Holophane Company, Inc., New York, N. Y., a Corporation of New York. Filed Oct. 11, 1928. Serial No. 311,739. 16 Claims. (Cl. 240—128.)



1. A shade holder comprising a sleeve assemblage and a plurality of shade supporting arms extending outwardly from the assemblage, the assemblage comprising an inner tube, an outer casing spaced from the tube, the casing having end flanges overlying the ends of the tube, the arms passing through one end flange and being bent to be of generally hook-shaped configuration and having portions which engage the inner surface of the casing, the opposite end wall, and the outer surface of the tube.

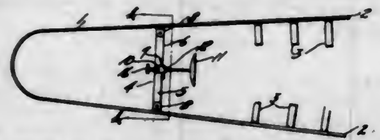
1,762,782. PACKAGING CEMENTING COMPOUNDS. HENRY JEPSEN, Collinsville, Conn. Filed Dec. 6, 1928. Serial No. 324,220. 2 Claims. (Cl. 206—56.)

1. A package comprising an interior cylindrical body of glutinous adhesive and an exterior cylindrical casing of thin, soft, easily severed metal, which casing is spirally corrugated for substantially its entire length and



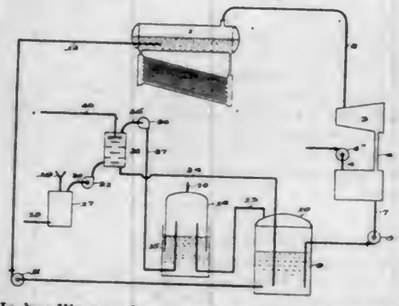
is provided with a cap which is also spirally corrugated and is capable of being screwed upon the end of the casing wherever the casing and the body are cut off.

1,762,783. ANIMAL TRAP. STEPHEN OSCAR KASCAK, Hugoton, Kans. Filed Apr. 18, 1929. Serial No. 355,999. 1 Claim. (Cl. 43—94.)



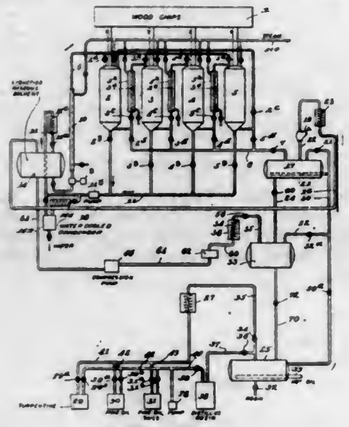
In a device of the kind described, a U-shaped spring with normally convergent legs, jaws carried by the said legs, a trigger mechanism comprising a pair of pivotally connected trigger members pivotally mounted between the spring legs, one of the said members having a recess, an extended finger upon the other member to engage this recess, a screw threaded through the said finger and engaging the member having the said recess to adjust the action of the trigger mechanism, a stem pivotally connected to one of the said trigger members, a trip plate upon the outer end thereof and a spring upon the said trigger member engaging the inner end of the stem to hold the same in an adjusted position.

1,762,784. TREATMENT OF BOILER WATER. HEINRICH KRIEGSHEIM, New York, N. Y., assignor to The Permutit Company, New York, N. Y., a Corporation of Delaware. Filed Apr. 25, 1927. Serial No. 186,445. 5 Claims. (Cl. 210—16.)



1. In handling condensation water of a condensing steam plant en route to the boiler the process which comprises maintaining the blanketing layer of nitrogen over exposed water surfaces.

1,762,785. PROCESS FOR THE SOLVENT EXTRACTION OF WOODS. ARTHUR D. LITTLE, Brookline, Mass., assignor to Arthur D. Little, Incorporated, Cambridge, Mass., a Corporation of Massachusetts. Filed Oct. 8, 1927. Serial No. 224,865. 14 Claims. (Cl. 202—54.)



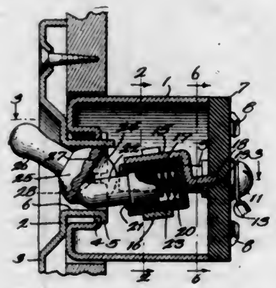
8. A process for the treatment of coniferous woods to recover therefrom hydrocarbon soluble extractives which comprises treating such woods for a time of the order of from one to four hours with a hydrocarbon solvent comprising chiefly butane at temperatures between 50° and 100° C. under pressure.

1,762,786. TRUSS. JOHN L. MCKEOWN, Chicago, Ill. Filed Feb. 27, 1928. Serial No. 257,459. 15 Claims. (Cl. 108—23.)



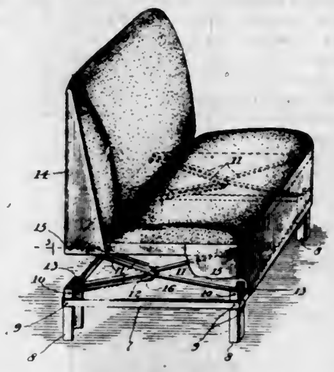
1. A truss of the general type specified, comprising a bowed top chord consisting of pieces of lumber secured together flatwise to form a plurality of superposed layers, the pieces of lumber forming said layers, respectively, being arranged end to end in abutting relation and having interlocking engagement with one another.

1,762,787. ELECTRIC SNAP SWITCH. JOHN H. NELSON, Chicago, Ill., assignor to Harry A. Douglas, Bronson, Mich. Filed May 5, 1928. Serial No. 275,352. 1 Claim. (Cl. 200—68.)



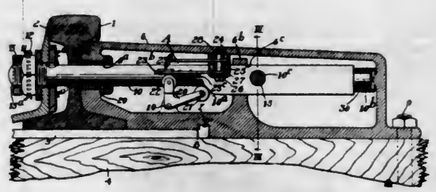
Operating mechanism for an electric snap switch including an expansible and contractible resilient member and two abutments between which said member is disposed, one of said abutments having an extended abutment surface along which the engaging end of said contractible member may slide, this abutment being adjustable to cause its said surface to be obtuse to the line of pressure of said resilient member and in two directions alternately upon opposite sides of said line of pressure. the expansible and contractible member being fulcrumed on the other abutment, said extended abutment surface being shaped to escape turning engagement with said contractible resilient member when the adjustable abutment is being moved to remove the extended abutment surface from one obtuse direction and partially toward the other obtuse direction whereupon the resilient contractible member expands and turns to snap the adjustable abutment throughout the balance of its movement.

1,762,788. SEAT CONSTRUCTION. WILLIAM NOELLE, Chicago, Ill., assignor of one-half to Herman Wernicke, Chicago, Ill. Filed June 4, 1928. Serial No. 282,724. 5 Claims. (Cl. 155—50.)



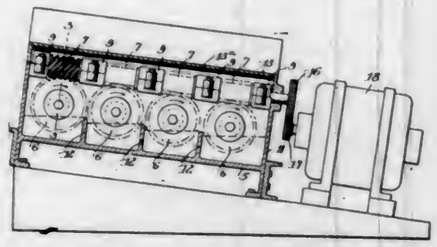
1. A seat construction comprising a base; a seat member arranged above said base; and a spring mounting for said seat member consisting of spaced sets of springs, each set consisting of a plurality of springs doubled between their ends to form divergent arms and comprising springs, opposite ends of which, respectively, are connected to opposite sides of said base and seat member, and the looped portions of which project inwardly toward each other and are sa proportioned that the loops therein, respectively, will overlap, and a pin which engages the loops of the springs of each set of springs and flexibly connects the same.

1,762,789. CIRCUIT CONTROLLER. LEON E. NORDHOLM, Des Moines, Iowa. Filed Aug. 1, 1929. Serial No. 382,808. 9 Claims. (Cl. 246—253.)



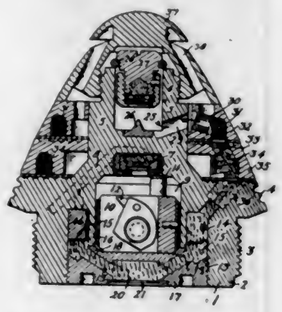
1. In combination with a railway switch comprising a fixed rail and a movable switch point, a housing fastened to the fixed rail, a movable lock rod in said housing operated by said movable switch point, and manually operable means for at times preventing relative movement of said lock rod and said housing.

1,762,790. ROTARY GRIZZLY. JOHN H. ODENBACH, HERMAN GOLDMAN, and WILLIAM C. HENRY, Rochester, N. Y., assignors to Dolomite Products Company, Inc., Rochester, N. Y., a Corporation of New York. Filed Apr. 8, 1927. Serial No. 182,117. 6 Claims. (Cl. 74—36.)



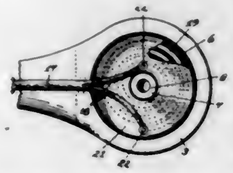
1. In a rotary grizzly, the combination with a series of shafts, of a worm gear on each of said shafts, a driving shaft having a series of worms thereon engaging said worm gear, an oil chamber within which the worm gears rotate, transverse overflow walls in the oil chamber forming pockets, one for each worm gear, and acting to effect continuous circulation of oil to the various gears, bearings for the driving shaft intermediate the worms, said bearings having lubricating openings in their upper sides, and a cover for said chamber forming an enclosure for the gearing and acting to direct lubricant to the openings in said bearings.

1,762,791. CHRONOGRAPHIC SYSTEM. HENRY W. O'NEILL, Elmhurst, N. Y. Filed Sept. 26, 1918. Serial No. 255,824. 23 Claims. (Cl. 234—36.5.)



12. In a chronographic system, record roll, explosive means positioned to mark said record roll, circuit means including a fusible section, and means for melting said fusible section to control the operation of said explosive means.

1,762,792. ELECTRIC HAIR CURLER. BENJAMIN F. OSTROWSKI, San Francisco, Calif. Filed June 8, 1929. Serial No. 369,381. 2 Claims. (Cl. 219—24.)



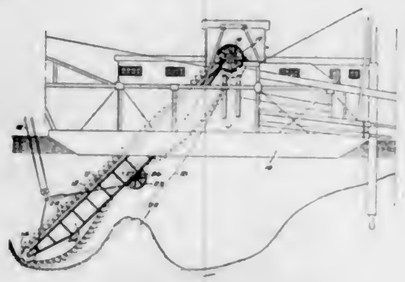
1. An electric hair curler comprising a pair of tongs provided with jaw portions having adjacent faces movable into proximate matching relation and having annular recesses formed in the backs of the jaw portions and forming central posts within the recesses; handle portions connected to the jaw portions; heating units mounted within the recesses; a cover plate mounted upon the back of each jaw portion, said plates having notches formed therein adjacent the handle portions of the tongs; a screw applied through each plate and threaded into the central posts of the jaw to detachably secure the plates; and flexible electrical conductors connected to the heating units through the handles and extending into the recesses through the notches in the cover plates to connect said units to a source of electrical energy for heating the jaws.

1,762,793. CLIP FOR TUBULAR SHELLS. HENRY G. OXX, Providence, R. I., assignor to A. T. Wall Co., Providence, R. I., a Corporation of Rhode Island. Filed Oct. 16, 1929. Serial No. 400,113. 7 Claims. (Cl. 24—11.)



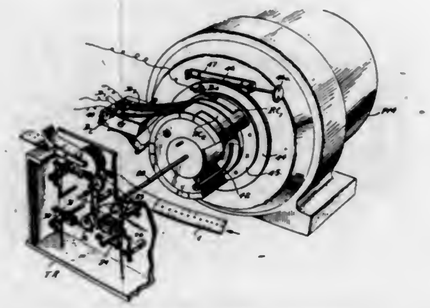
1. In combination, a tubular shell having spaced slots in the wall thereof, and a clip member having a pocket engaging finger at the lower end thereof, an upper end of a greater width than the spacing between said slots having a lug projecting within said shell from each side wall bent first towards the other lug to the amount of the spacing between said slots forming shoulders exterior of said shell to conceal said slots, then inwardly through said slots and then against the inner wall of said shell to secure said clip thereto.

1,762,794. DREDGING MACHINE. OSCAR B. PERRY, San Francisco, Calif. Filed Nov. 7, 1928. Serial No. 317,758. 5 Claims. (Cl. 37—69.)



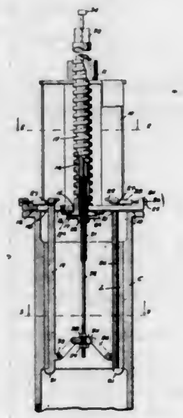
4. In a dredging machine, a ladder adapted to extend outwardly and downwardly from a supporting structure, an endless bucket line supported by and entrained about said ladder, the upper portion of said line being normally tensioned during operation, and the lower portion being normally slack, means on said ladder intermediate the ends thereof for supporting said line, and means cooperating with said supporting means for guiding the line passing over said support means.

1,762,795. COMBINATION TELEGRAPH TRANSMITTER AND REGENERATOR. WILLIAM CHRISSIE PERRY, London, England, assignor to The Western Union Telegraph Company, New York, N. Y., a Corporation of New York. Filed July 15, 1929. Serial No. 378,441. 6 Claims. (Cl. 178—70.)



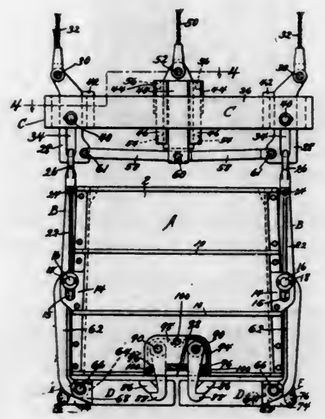
1. In a telegraph system, an incoming line, an outgoing line, means for repeating signals from the incoming line to the outgoing line including a rotary distributor and pick-up relays controlled by said distributor, a tape transmitter driven by said rotary distributor, and contacts controlled by said tape transmitter for controlling a regenerative circuit on said pick-up relays.

1,762,796. LINER PULLER. ARCH P. RIDENOUR, Los Angeles, Calif. Filed Apr. 22, 1929. Serial No. 357,173. 3 Claims. (Cl. 29—88.2.)



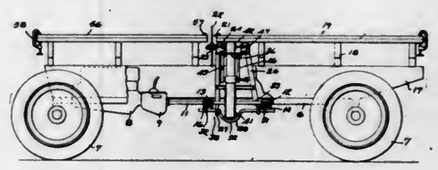
1. A liner puller comprising a plurality of jaws, means for causing one end of each of the jaws to be expanded against the interior of a liner, independently operable means for causing the other end of each of the jaws to be expanded against the interior of the liner, and means for causing the jaws to move the liner longitudinally.

1,762,797. CUPOLA-CHARGING BUCKET. JOHN M. ROHLFING, Plainfield, N. J., assignor to American Car and Foundry Company, New York, N. Y., a Corporation of New Jersey. Filed June 17, 1929. Serial No. 371,429. 31 Claims. (Cl. 294—69.)



1. In a cupola charging bucket having a discharge opening, doors normally closing said opening and adapted to open by gravity and to be automatically partially closed by the weight of the bucket.

1,762,798. SAW RIG. GEORGE F. SCHAPER and JOHN A. SCHMITZ, Burbank, Calif. Filed Aug. 21, 1928. Serial No. 301,148. 10 Claims. (Cl. 143—43.)

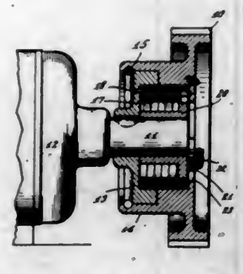


1. A portable saw rig comprising an automobile frame, supporting wheels journalled thereon, a motor carried by the frame, a power shaft operatively connected to the motor and journalled upon the frame to extend longitudinally thereof, a drive pulley rigid with said shaft, a yoke mounted upon said frame for pivotal movement about an axis lower than and slightly offset from said shaft, a saw table mounted upon said frame, a mandrel journalled upon said yoke adjacent the under side of the table, a saw carried by said mandrel and extending through a slot in said table, said slot being extended to permit swinging said yoke to advance the saw across the table, a driven pulley rigid with the mandrel, and a belt engaging both pulleys.

1,762,799. SPRING CLUTCH. WILLIAM CARLETON STARKEY, Allisonville, Ind., assignor to L. G. S. Devices Corporation, Indianapolis, Ind., a Corporation of Indiana. Filed Feb. 7, 1927. Serial No. 166,280. 18 Claims. (Cl. 192—41.)

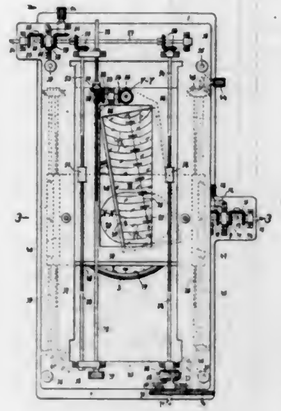
14. In combination, two relatively rotatable members having alined axial recesses, a coil spring located in said recesses, said spring being normally free from engagement with the wall of the recess in one of said members and

being operatively connected to the other of said members, and means operative when said spring reaches a predetermined rotational velocity for causing said spring to expand



into gripping engagement with the wall of the recess in that member with which it is normally free from engagement.

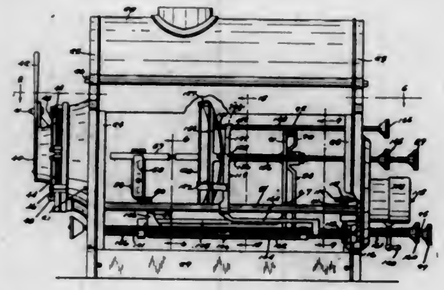
1,762,800. FIRE-CONTROL APPARATUS FOR FIRING AT MOVABLE TARGETS. ADOLF STEINLE, Jena, Germany, assignor to the Firm N. V. Nederlandsche Instrumenten Compagnie, Haag, Netherlands. Filed Nov. 10, 1927, Serial No. 232,446, and in Germany Nov. 15, 1926. 4 Claims. (Cl. 33—75.)



1. In a fire control apparatus for firing at movable targets a plane translucent plate provided with concentric circles and a linear mark containing the centre of these circles, means for rotating the said plate about an axis perpendicular to the plate and containing the said centre, a member provided with a single mark, means for rotating this member about an axis parallel to the said axis and for displacing it in a direction that perpendicularly intersects the axis of rotation of the said member, other means for displacing this member and the said plate relatively to each other in the direction of the intersecting line of the plate with the plane containing the said two axes, another member provided with another single mark, and means for displacing this other member in the said direction, the said plate and the said two members being disposed one above the other.

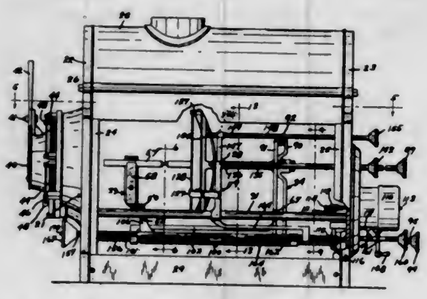
1,762,801. PROJECTION APPARATUS. HARRY H. STRONG, Toledo, Ohio, assignor to The Strong Electric Corporation, Wilmington, Del., a Corporation of Delaware. Filed May 14, 1927. Serial No. 191,363. 20 Claims. (Cl. 88—24.)

1. Projection apparatus comprising: a housing; movable light-beam-producing mechanism disposed within said housing, comprising light-producing means, comprising also movable reflector means cooperating with said light-producing means to produce a light beam, and variable by approach and recession of said reflector means toward and from said light-producing means to vary the focus of said light beam; movable nose mechanism connected to said housing, provided wtih a pair of openings for the passage



of light therethrough, and movable between a position in which one of said openings is in operative relation to said light beam and a position in which the other of said openings is in operative relation to said light beam; and means whereby such movement of said nose mechanism automatically effects such movement of said light-beam-producing mechanism.

1,762,802. PROJECTION APPARATUS. HARRY H. STRONG, Toledo, Ohio, assignor to The Strong Electric Corporation, Wilmington, Del., a Corporation of Delaware. Filed June 27, 1927. Serial No. 201,908. 7 Claims. (Cl. 88—24.)

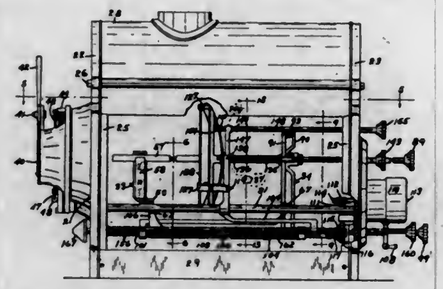


3. Projection apparatus comprising: a housing; movable light-beam-producing mechanism disposed within said housing movable to vary a characteristics of the utilized light beam produced thereby; movable nose mechanism connected to said housing, provided with a pair of openings for the passage of light therethrough, and movable between a position in which one of said openings is in operative relation to said light beam and position in which the other of said openings is in operative relation to said light beam; and means whereby such movement of said light-beam-producing mechanism automatically effects such movement of said nose mechanism.

1,762,803. PROJECTION APPARATUS. HARRY H. STRONG, Toledo, Ohio, assignor to The Strong Electric Corporation, Wilmington, Del., a Corporation of Delaware. Filed June 27, 1927. Serial No. 201,910. 14 Claims. (Cl. 88—24.)

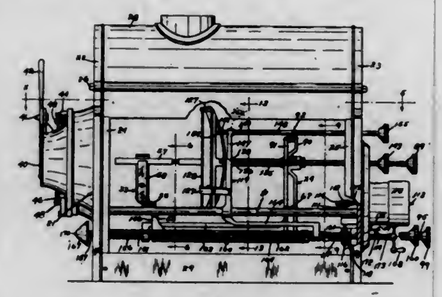
1. Projection apparatus comprising: a housing; and movable light-beam-producing mechanism disposed within said housing, comprising movable light-producing means,

comprising also reflector means cooperating with said light-producing means to produce a light beam, and variable by movement of said light-producing means to vary



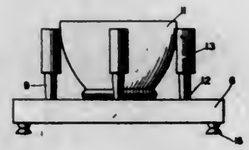
the focus of said light beam between a beam suitable for cinematographic projection and a beam suitable for stereopticon projection.

1,762,804. PROJECTION APPARATUS. HARRY H. STRONG, Toledo, Ohio, assignor to The Strong Electric Corporation, Wilmington, Del., a Corporation of Delaware. Filed June 27, 1927. Serial No. 201,909. 2 Claims. (Cl. 88—24.)



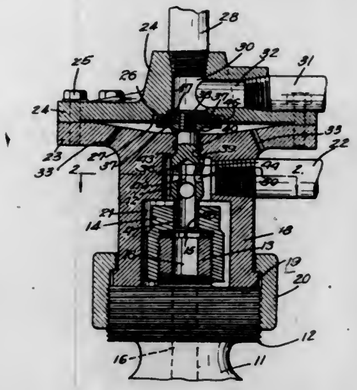
1. Projection apparatus comprising: a housing; movable light-beam-producing mechanism disposed within said housing, comprising movable light-producing means, comprising also reflector means cooperating with said light-producing means to produce a light beam, and variable by movement of said light producing means to vary th focus of said light beam; movable nose mechanism connected to said housing, provided with a pair of openings for the passage of light therethrough, and movable between a position in which one of said openings is in operative relation to said light beam and a position in which the other of said openings is in operative relation to said light beam; and means whereby such movement of said light-producing means automatically effects such movement of said nose mechanism.

1,762,805. MIXING-BOWL HOLDER. JAMES D. TUCKER, Sierra Madre, Calif. Filed May 21, 1928. Serial No. 279,239. 4 Claims. (Cl. 65—54.)



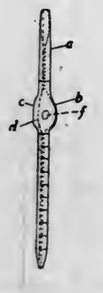
1. A holder for receptacles, comprising a base having a plurality of radiating groups of holes of equal size therein, holes of each group being staggered and closely spaced to reduce the difference in the radial distances of adjacent holes from a common center, pegs receivable within selected holes to determine an intervening space corresponding to the size of the receptacle to be held, a length of rubber tube disposed upon each of said pegs to frictionally engage the sides of said receptacle, and vacuum cups on the bottom of said base to removably secure the holder to a supporting structure.

1,762,806. DIAPHRAGM HEAD FOR PUNCTURING CLOSURE DISKS. SCOTT E. ALLEN and OZRO N. WISWELL, Los Angeles, Calif., assignors, by mesne assignments, to C-O-Two Fire Equipment Company, Los Angeles, Calif., a Corporation of California. Filed Jan. 30, 1929. Serial No. 336,155. 12 Claims. (Cl. 221—73.5.)



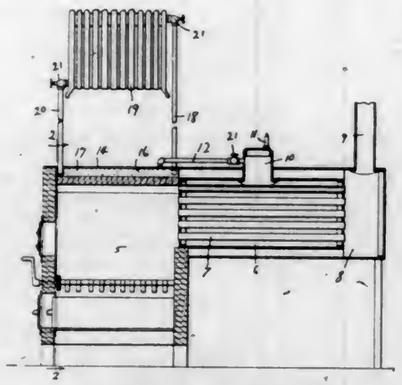
1. In a device for use in connection with a fluid container having an opening and a closure for said opening; a body having a chamber communicating with said opening; a puncturing member extending into said chamber and operable to open said closure; a diaphragm for operating said puncturing member; and means for applying a pressure against said diaphragm so as to operate said puncturing member.

1,762,807. BLOOD PIPETTE. OTTO ARNOLD, Schmiedefeld, Germany. Filed Oct. 19, 1928, Serial No. 313,594, and in Germany Sept. 25, 1928. 2 Claims. (Cl. 23—292.)



1. A pipette having a spherical bulb and at least one flat portion on the surface thereof, substantially as set forth.

1,762,808. RADIATOR HEATING CONNECTION FOR BOILERS. STEPHEN BALDYZAR, Racine, Wis. Filed Nov. 17, 1927. Serial No. 233,933. 1 Claim. (Cl. 237—67.)



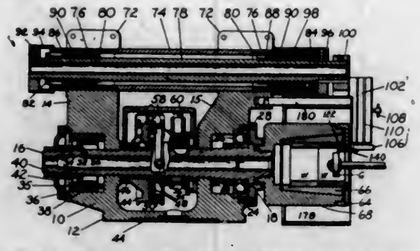
In combination, a steam boiler provided with a steam dome, a relatively shallow container horizontally disposed above the fire-box of the boiler, a partition arranged transversely of the container dividing the same into a pair of compartments, a feed pipe affording communication between one of said compartments and said steam dome, a radiator remotely disposed with respect to and above the plane of the container, a feed pipe connecting the upper portion of the radiator at one end with said first named compartment and a pipe communicating with the opposite end of the radiator and connected with said other compartment.

1,762,809. DIAL-TELEPHONE ATTACHMENT. ADA G. BRADFORD, Oakland, Calif. Filed Jan. 13, 1930. Serial No. 420,457. 1 Claim. (Cl. 248—20.)



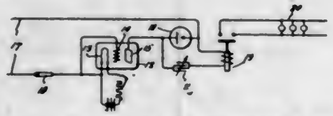
A dial telephone attachment composed of a bracket having a resilient substantially circular telephone column engaging jaw and a flash light engaging jaw connected thereto and located substantially diametrically thereof, the flash light engaging jaw having a part located opposite to a part of the telephone column engaging jaw and having a free end which extends toward and substantially confronts the adjacent side of the curved jaw, there being free space between said parts of the jaws, so as to hold the flash light directly against said part of the telephone column engaging jaw and vertically in close relation to the telephone column and to brace said part of the telephone column engaging jaw.

1,762,810. HEADSTOCK AND GAUGE SUPPORT. RICHARD J. BRITTAIN, Jr., Newark, and WILLIAM H. CHAPMAN, Montclair, N. J., assignors to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed May 26, 1924. Serial No. 715,906. 12 Claims. (Cl. 51—165.)



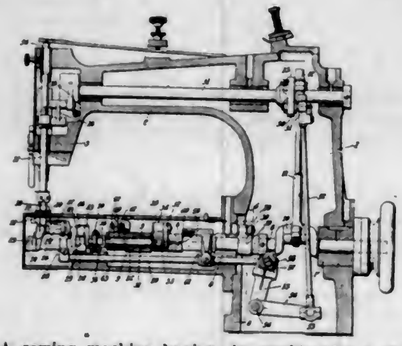
12. In an internal cutting machine, a work holder, a head, means for rotatably supporting the work holder on the head, the head being extended above the work holder, a shaft, means or supporting the shaft in the extended portion of the head to slide and swing on an axis parallel to the axis of the work holder, an arm depending from the shaft and having a slideway, a gauge housing slidably mounted on the slideway, a work engaging member projecting from the housing to enter the bore of a hollow work-piece on the work holder, means for moving the gauge housing along its slideway, and means for causing the work engaging member to move on a line radial to the axis of the rocking shaft; substantially as described.

1,762,811. ELECTRIC TIMING DEVICE. ERNEST E. CHARLTON, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Aug. 10, 1925. Serial No. 49,360. Renewed Jan. 8, 1930. 6 Claims. (Cl. 175—320.)



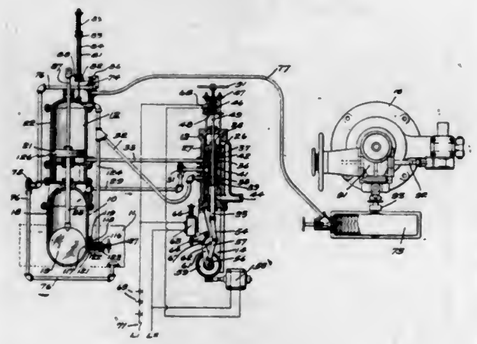
1. An electric timing device comprising a glow tube and a condenser connected in parallel, a source of supply having a voltage in excess of the sparking voltage of said glow tube, and means for charging said condenser from said source at a substantially constant rate.

1,762,812. SEWING MACHINE. ANDREW B. CLAYTON, Union, N. J., assignor to the Singer Manufacturing Company, Elizabeth, N. J., a Corporation of New Jersey. Filed Jan. 28, 1928. Serial No. 250,111. 7 Claims. (Cl. 112—215.)



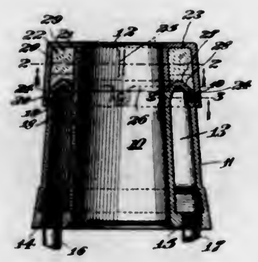
6. A sewing machine having, in combination a frame including a standard, a bracket-arm and a cylinder-bed, a main-shaft journaled in said frame in line with and extending into said cylinder-bed, a throat-plate formed with feed-dog slots, a feed-dog, an inverted U-shaped feed-bar, a feed-lift rock-shaft, spaced crank-arms on said rock-shaft pivotally connected to the lower ends of the legs of said feed-bar, a bell-crank lever fulcrumed on said feed-lift rock-shaft, one arm of said bell-crank lever being connected to said feed-bar and the other arm extending across the cylinder-bed, a feed-advancing rock-shaft having a crank-arm extending alongside said other arm of the bell-crank lever and means for relatively adjusting the arms of said bell-crank lever angularly to center the feed-dog in the feed-dog slots in the throat-plate.

1,762,813. HYDRAULIC CONTROL SYSTEM. CHARLES V. FOULDS, Berkeley, Calif., assignor to the Pelton Water Wheel Company, San Francisco, Calif, a Corporation of California. Filed Aug. 22, 1927. Serial No. 214,548. 7 Claims. (Cl. 137—158.)



1. In a hydraulic turbine control system, a hydraulic turbine, means for governing said turbine, a main valve for admitting or interrupting flow of water to the turbine, and means correlated with movements of the main valve for automatically conditioning the governing means to start the turbine.

1,762,814. TUYÈRE. ALEXANDER H. FOSDICK, Bethlehem, Pa., assignor to Bethlehem Steel Company. Filed May 21, 1928. Serial No. 279,344. 4 Claims. (Cl. 122—6.6.)



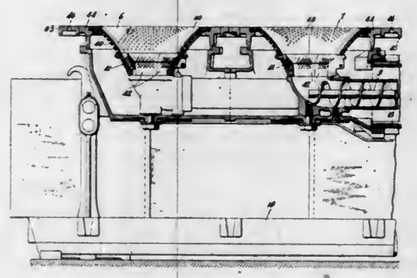
1. A tuyère comprising a copper body portion, a detachable ferrous metal nose portion, said body portion having an annular water chamber therein, said nose portion comprising spaced inner and outer walls, means integral with said walls forming a closure for the outer end of said nose portion, and means comprising the extremity of the body portion adapted to provide a closure for the inner end of said nose portion.

1,762,815. MANUFACTURE OF REENFORCED CONCRETE. OTTO GLOESER, Niklasdorf, near Friewaldau, Czechoslovakia. Filed Apr. 26, 1928, Serial No. 273,020, and in Germany Apr. 28, 1927. 1 Claim. (Cl. 25—154.)



The process of reenforcing concrete consisting in forming a body of concrete with the reenforcement embedded therein, in tensioning the reenforcement up to its elastic limit before the concrete is rammed, in compressing the still liquid concrete by suitable apertured means guided by the reenforcement, and finally in releasing the tensioning means after the concrete has set.

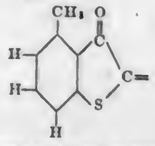
1,762,816. FURNACE. CORTICE H. HALL, Glen Rock, N. J., assignor to Domestic Stoker Company, New York, N. Y., a Corporation of Delaware. Filed Feb. 2, 1928. Serial No. 251,246. 2 Claims. (Cl. 110—44.)



2. A duplex furnace comprising a fuel hopper, a pair of underfeed firepots at different distances from said hopper and closely adjacent each other, a pair of parallel screw conveyors of different lengths arranged to feed fuel from said hopper to said firepots, said firepots being arranged on the same level, one diagonally behind the other and the conveyors being arranged on the same level and closely adjacent side by side to feed equally from said hopper, a conveyor mechanism for removing ashes from beneath both firepots comprising a screw conveyor etxending parallel to said first mentioned screw conveyors and an actuating mechanism for the three screw conveyors comprising sprocket wheels secured to the respective conveyors, a sprocket chain engaging the three sprocket wheels and means for actuating said sprocket chain.

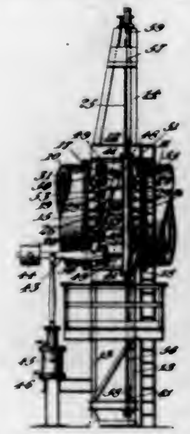
1,762,817. NEW VAT DYESTUFFS AND A PROCESS OF PREPARING THEM. ERWIN HOFFA and HANS HEYNA, Hochst-on-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 13, 1927, Serial No. 226,039, and in Germany Oct. 23, 1926. 3 Claims. (Cl. 260—53.)

1. As new products, indigoid vat-dyestuffs containing the following atomic group:



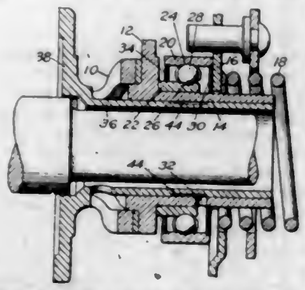
which dyestuffs possess excellent properties regarding fastness.

1,762,818. VALVE. PHILIP J. HOFFMAN, Johnstown, Pa., assignor to Bethlehem Steel Company. Filed Apr. 11, 1925. Serial No. 22,350. 19 Claims. (Cl. 251—51.)



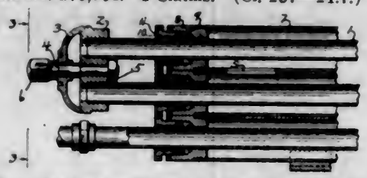
1. In a valve, the combination of a housing structure including opposed conduit members defining a slot, a plate valve movable in the slot, means bodily movable externally of one of the conduit members for effecting a gas tight seal of the plate valve with respect to said members, means for normally moving said movable member to sealing position, and means for retracting the movable member to permit the valve to be easily moved.

1,762,819. ANTIFRICTION BEARING AND MOUNTING. FREDERICK G. HUGHES, Bristol, Conn., assignor to the New Departure Manufacturing Company, Bristol, Conn., a Corporation of Connecticut. Filed May 6, 1925. Serial No. 28,313. 11 Claims. (Cl. 308—187.)



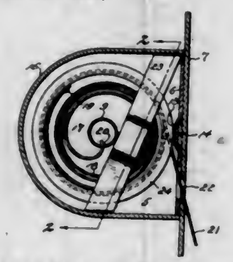
1. In a unit handling antifriction bearing, in combination, an outer race ring having a ball groove, an inner race ring having a ball groove, the grooves confronting one another radially, balls engaging said grooves and retaining the race rings in assembled relation against relative axial movement in either direction, said outer race ring having one end projecting beyond the corresponding end of the inner race ring to serve as an abutment, the outer race ring being supported solely by rolling contact with the balls; substantially as described.

1,762,820. CONNECTED PIPE SYSTEM AND METHOD OF MAKING THE SAME. IRA H. KENDALL, Potsdam, N. Y., assignor to The Kendall Patents, Inc., Potsdam, N. Y., a Corporation of New York. Filed Apr. 16, 1928. Serial No. 270,504. 4 Claims. (Cl. 257—24.7.)



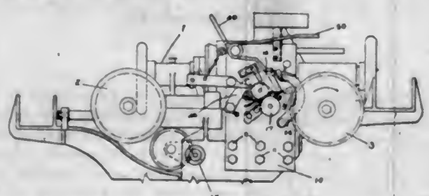
1. A method of connecting a pair of pipes having slits therein, which consists in placing said slits in alignment and causing said tubes to abut each other, and forming a liquid tight joint at the edges of the said slits by melting a layer of liquid tight material directly at the peripheries of the said slits, and causing said material to solidify.

1,762,821. SASH BALANCE. ALBERT H. KERSTING, Los Angeles, Calif. Filed July 31, 1928. Serial No. 296,575. 2 Claims. (Cl. 16—198.)



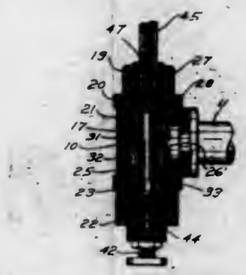
1. A device of the character described, comprising; a casing; a rotatable drum within the casing; a sash-tape wound upon the drum and extending outwardly through the casing; and a spring resiliently pressing against the drum and reacting against a wall of the casing, adapted to frictionally oppose the rotation of the drum; the casing being adapted for permitting said wall to be inwardly indented by a hammer blow at the spring reaction point, to increase the pressure of the spring without otherwise affecting the positioning or functioning of the several parts of the device.

1,762,822. FEEDING AND CUTTING DEVICE. HAROLD J. KROLL, Wauwatosa, Wis., assignor to The Fisk Rubber Company, Chicopee Falls, Mass., a Corporation of Massachusetts. Filed Nov. 27, 1925. Serial No. 71,812. 7 Claims. (Cl. 164—49.)



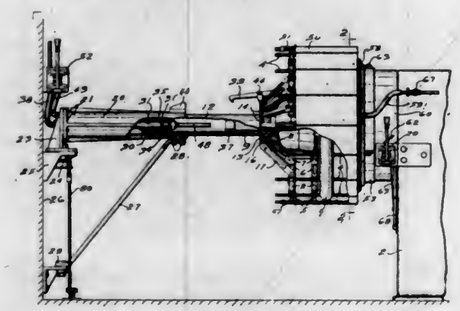
1. A device of the character described comprising normally closed cutting elements, means adapted to releasably hold said cutting elements in open relation and means automatically operable through contact with the advancing end of a web to release said holding means.

1,762,823. TUBE-DEFLATING VALVE. LARS G. KRUSELL, Chicopee Falls, Mass., assignor to The Fisk Rubber Company, Chicopee Falls, Mass., a Corporation of Massachusetts. Filed May 16, 1927. Serial No. 191,690. 4 Claims. (Cl. 284—18.)



4. A tire tube deflating device comprising a barrel having a suction chamber into which a tube valve may be inserted, a shut off valve adapted to shut off the chamber from a suction source, said valve being exposed on one side to the reduced pressure of said chamber, a removable cap separating the other side of the valve from the atmosphere, and a vented needle valve attached to and removable with the cap whereby the access of air from the atmosphere to the valve may be regulated.

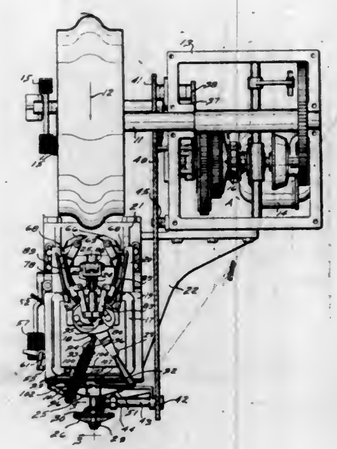
1,762,824. TIRE-BUILDING MACHINE. PAUL W. LEHMAN, Milwaukee, Wis., assignor to The Fisk Rubber Company, Chicopee Falls, Mass., a Corporation of Massachusetts. Filed Mar. 1, 1928. Serial No. 258,203. 7 Claims. (Cl. 154—10.)



1. A device of the character described comprising a plurality of substantially parallel band supporting fingers arranged in an annular formation and means to move said fingers radially and in parallel relation to increase the diameter of the annular formation.

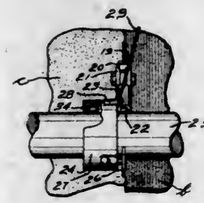
1,762,825. TIRE-BUILDING MACHINE. PAUL W. LEHMAN, Milwaukee, Wis., assignor to The Fisk Rubber Company, Chicopee Falls, Mass., a Corporation of Massachusetts. Filed Mar. 28, 1928. Serial No. 265,480. 4 Claims. (Cl. 154—10.)

1. A tire building machine comprising a rotatable core, a stitcher carriage, stitching mechanism mounted thereon including pivoted arms provided at their free ends with pivoted bearings, stitching discs mounted in said bearings, a yielding member mounted on the carriage and positioned to engage the crown of the core only after the stitching discs have advanced a predetermined distance down the sides of the core and links connecting the pivoted bearings of the stitching discs and the yielding member to cause



a change in the angle of the discs with respect to the core during the travel of the discs over the bead portion of the core.

1,762,826. STOCK TRIMMING DEVICE. PAUL W. LEHMAN, Milwaukee, Wis., assignor to The Fisk Rubber Company, Chicopee Falls, Mass., a Corporation of Massachusetts. Filed Nov. 5, 1928. Serial No. 317,302. 3 Claims. (Cl. 164—39.)

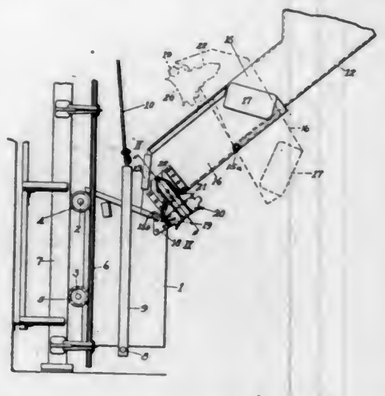


1. In a calender, a trimming device for removing surplus stock from the edge of a composite sheet of material comprising a knife adjustably held against a calender roll, a guide mounted in line and fixed to the knife, a weight, a cable fixed to the guide and weight, and pulleys over which the cable passes, so positioned that the weight will cause the guide to be held in yielding contact with the trimmed edge of the composite sheet of material.

1,762,827. LOADING DEVICE. WILLIAM K. LIGGETT, Columbus, Ohio, assignor to The Jeffrey Manufacturing Company, Columbus, Ohio, a Corporation of Ohio. Filed Jan. 18, 1926, Serial No. 82,047. Renewed May 17, 1929. 7 Claims. (Cl. 214—125.)

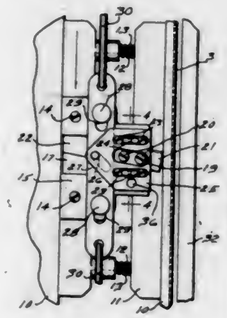
1. In a machine of the class described, the combination with a receptacle reciprocable in a fixed path, of a spout pivotally supported adjacent said path adapted when in one

position to conduct material to said receptacle, means actuated by movement of said receptacle to turn said spout about its pivotal support to a material conducting



position or to a material obstructing position, and a downwardly turned lip formed on said spout as and for the purpose set forth.

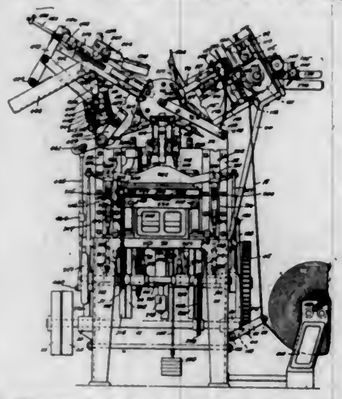
1,762,828. CUTTING MACHINE. THOMAS P. LITTLE, Chicopee Falls, Mass., assignor to The Fisk Rubber Company, Chicopee Falls, Mass., a Corporation of Massachusetts. Filed Apr. 16, 1928. Serial No. 270,202. 2 Claims. (Cl. 164—73.)



1. In a device of the character described, means for adjusting the extent of projection of a reciprocating knife which comprises a knife support, a rack formed on the knife support, a reciprocable cam actuated member adjustably secured to the support and operable under the influence of its cam to move the support transversely of the general path of its reciprocation to project the knife into and out of cutting position, said cam actuated member being formed to receive a geared key engaging with said rack to advance or retract the knife support in relation to the cam actuated member to thereby vary the extent of the projection of the knife in its cutting position.

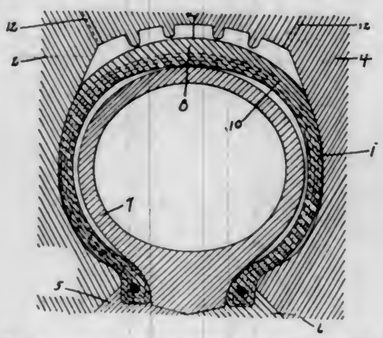
1,762,829. MACHINE FOR PRODUCING LINED POUCHES. FRANK E. LUDINGTON, Waterbury, Conn. Filed Oct. 20, 1927. Serial No. 227,398. 13 Claims. (Cl. 93—44.)

1. In a pouch forming machine, a mandrel form, means for feeding a strip of material into relation with said form, folding means for folding said material about said form and including a rocker shaft, a holding arm mounted upon said shaft and having rotary movement thereon, side folding arms mounted on said shaft, a yieldable connection between said side folding arms and said holding arm comprising a pressure arm fixed to said shaft, a plunger carried by said holding arm engaged through said pressure arm, a limit stop on said plunger, and a spring disposed



on said plunger between said arms, said rocker shaft being adapted to move said holding and folding arms into relation with said form whereby said material is held upon said form and folded at the sides, and other folding means adapted to complete the folding of the material about the form.

1,762,830. MANUFACTURE OF PNEUMATIC TIRE CASINGS. GEORGE L. MATHER, Milwaukee, Wis., assignor to The Fisk Rubber Company, Chicopee Falls, Mass., a Corporation of Massachusetts. Filed Mar. 4, 1927. Serial No. 172,680. 2 Claims. (Cl. 18—55.)

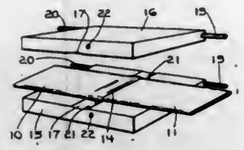


2. The method of molding semi-flat tire casings during cure which comprises inserting a fluid pressure core within the casing, applying fluid pressure to the interior of the core and retarding the expansion of the crown portion of the core to an extent sufficient to cause the expanding core to force the side-walls and crown of the casing respectively against the side portions and crown of the mold cavity substantially simultaneously and with uniform pressure whereby excessive flow of rubber to the casing shoulders is prevented and the interior of the casing is molded in semi-flat cross-sectional contour.

1,762,831. METHOD OF AND MOLD FOR SPLICING RUBBER TUBES. CHARLES EDGAR MAYNARD, Northampton, Mass., assignor to The Fisk Rubber Company, Chicopee Falls, Mass., a Corporation of Massachusetts. Filed Apr. 16, 1927. Serial No. 184,393. 8 Claims. (Cl. 18—18.)

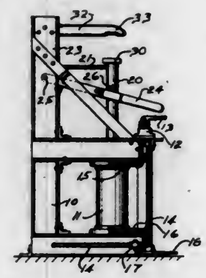
4. A method of vulcanizing the spliced ends of a rubber tube which comprises flattening the splice upon itself

under heat and pressure, removing the pressure, and flattening the splice again upon itself in a direction at right



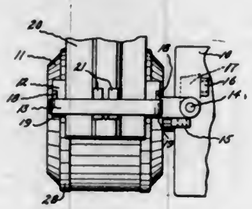
angles to the first, the pressure in at least its second application extending only partially across the width of the splice.

1,762,832. VALVE-PAD PRESS. CHARLES EDGAR MAYNARD, Northampton, Mass., assignor to The Fisk Rubber Company, Chicopee Falls, Mass., a Corporation of Massachusetts. Filed Nov. 15, 1928. Serial No. 319,508. 2 Claims. (Cl. 154—9.)



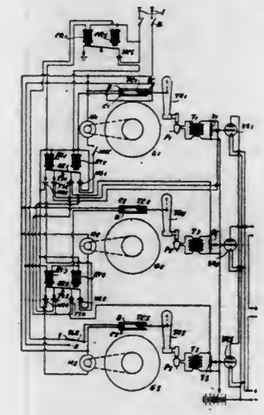
1. A device of the character described comprising a support, a platen formed to fit a valve pad, said platen fixed to the support, a rod, means carried by the support to move the rod toward and from the platen, a sleeve slidably mounted on the rod within predetermined limits, means carried by the sleeve to hold the latter against rotation on the rod, a platen formed to fit the outside of a rubber tube fixed to the sleeve, means carried by the support to move the platen carried by the sleeve toward the platen fixed to the support, and means operable to move the rod in the sleeve to press the platens together.

1,762,833. GUIDE FOR PNEUMATIC TIRE TREADS. CHARLES EDGAR MAYNARD, Northampton, Mass., assignor to The Fisk Rubber Company, Chicopee Falls, Mass., a Corporation of Massachusetts. Filed Oct. 24, 1927. Serial No. 228,153. 6 Claims. (Cl. 154—9.)



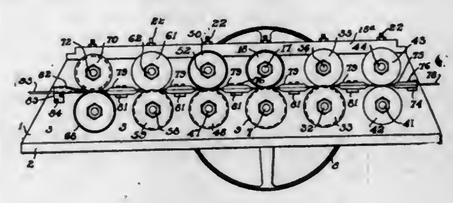
1. In a tire building machine, a device for centralizing a tire tread on a tire carcass comprising in combination a shelf projecting over the tire carcass and an adjustable guide pressing a tire tread on the shelf as the said tread slides over it.

1,762,834. APPARATUS FOR THE ELECTRICAL TRANSMISSION OF SOUND FROM GRAMOPHONE RECORDS. LAURENCE HERBERT PEARSON, Nottingham, England. Filed Nov. 3, 1928, Serial No. 316,919, and in Great Britain Oct. 5, 1928. 3 Claims. (Cl. 179—100.4.)



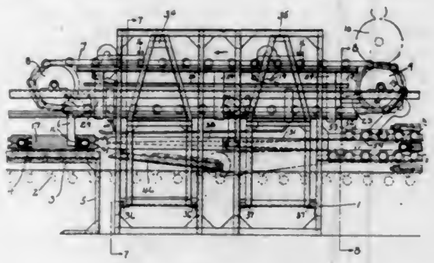
1. Apparatus for the electrical reproduction of sound from gramophone records comprising a plurality of turntables and driving motors therefor, an electric pick up for each turntable for coacting with each record, sound amplifying means, a pair of relays associated with each turntable other than the last of the series of turntables, balanced armatures adapted for operation by said relays, said relays controlling the motor circuits and output circuits of the pick ups associated with the several turntables, a pair of contacts associated with each turntable, a member moving in unison with the tone arm of each turntable and said member closing the respective contacts to operate the respective relays.

1,762,835. MEANS FOR FORMING METAL TUBES. FRANK H. POEPPELMEIER, Dayton, Ohio, assignor, by direct and mesne assignments, to The Typographic Machines Company, Dayton, Ohio, a Corporation of Ohio. Filed May 13, 1927. Serial No. 191,099. 5 Claims. (Cl. 153—2.)



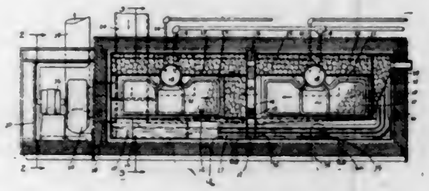
1. In a machine of the type described, the combination with a supporting frame, of a plurality of pairs of superimposed rolls mounted in said frame adapted to receive between them a strip of metal, means carried by two of said rolls to shear said strip to proper length, a pair of subsequent rolls being formed to bend said strip to channel shape, with a flat bottom, a next succeeding pair of rolls being formed to further bend the walls of said channel, and the last pair of rolls being formed to crimp said walls closer together, and means for rotating said rolls.

1,762,836. MOLD BREAKER. JOHN SCHERNER, Milwaukee, Wis., assignor to The Fisk Rubber Company, Chicopee Falls, Mass., a Corporation of Massachusetts. Filed Nov. 17, 1926. Serial No. 148,938. 11 Claims. (Cl. 18—2.)



1. A device of the character described comprising means for advancing a loaded tire mold and relatively stationary means located in the path of the advancing mold to separate the mold halves from the tire, said mold separating means being adjustable to receive varying sizes of molds.

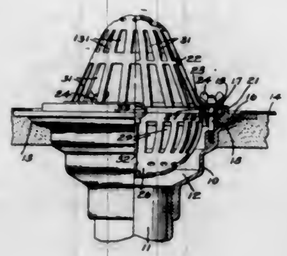
1,762,837. AIR CONDITIONER FOR COMPARTMENTS AND RAILWAY CARS. CLINTON F. SHADLE, Indianapolis, Ind., assignor, by direct and mesne assignments, to Air Development Company, Inc., a Corporation of New York. Filed July 18, 1927. Serial No. 206,719. 4 Claims. (Cl. 257—18.)



2. An apparatus for conditioning air in a compartment comprising a box associated therewith, means for causing air to pass therethrough into said compartment, said box comprising a plurality of compartments in communication with each other, a refrigerating unit in each of said compartments, for providing a plurality of different cooling stages, one of said refrigerating units being maintained at a lower temperature than the other, said units being so positioned with respect to the passage of air therethrough that the first cooling stage of said air will cause a maximum precipitation of moisture substantially without freezing the same while the second cooling stage will cause a further reduction of temperature of the air after the greater portion of the moisture has been removed, and a passageway through which said air is caused to pass before reaching said refrigerating units for receiving and maintaining to a given level the moisture precipitated by said refrigerating units, whereby the air will be cooled during its passage and cleansed by reason of its contact with the water contained therein.

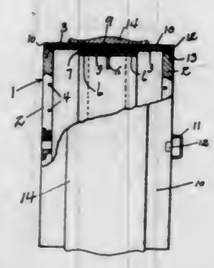
1,762,838. ROOF DRAIN. REGINALD C. SHAND, Piedmont, Calif., assignor to Shand & Jurs Company, Berkeley, Calif., a Copartnership consisting of Reginald C. Shand and Albert E. Jurs. Filed Jan. 23, 1929. Serial No. 334,558. 7 Claims. (Cl. 182—31.)

1. A roof drain comprising a body member having an opening extending downwardly thru the same and adapted to be installed in connection with a roof, the upper face of said body being substantially at the level of the drainage level of the roof, a perforated sediment cup disposed within said body, lugs projecting from the upper edge of said cup, said lugs being supported by said body and serving to retain the cup with its upper edge near said level, and a dome



like strainer removably positioned over said opening, said strainer extending above said level and being removably disposed on said body.

1,762,839. BUILDING TIRE CASINGS. HARRY L. SMITH, Cudahy, Wis., assignor to The Fisk Rubber Company, Chicopee Falls, Mass., a Corporation of Massachusetts. Filed Nov. 22, 1926. Serial No. 150,054. 7 Claims. (Cl. 154—10.)



1. A device of the character described comprising a drum adapted to support an expanding device and removable means adapted to be positioned over said drum and expanding device to form a tire building surface.

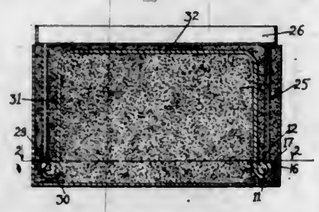
1,762,840. GRID FOR GAS PURIFIERS. SAM EDWARD SPENCER, Elland, England. Filed Sept. 21, 1925, Serial No. 57,785, and in Great Britain Oct. 22, 1924. 5 Claims. (Cl. 183—50.)



1. A grid for gas purifiers comprising carrying means, support members rhomboidal in cross-section arranged in rows above and below said means and engaged therewith, the members of each row being arranged in pairs with the spaces between the members of each pair differing in width from the spaces between adjacent pairs, the pairs of support members in one row positioned to break joint with the pairs of members in the other row, the said support members forming alternate pockets for the reception of purifying material and the passage of gas.

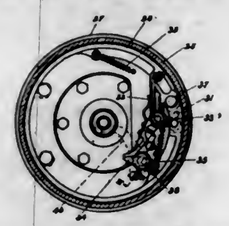
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1,762,841. CORE GATE FOR BATH-TUB MOLDS AND THE LIKE. CARMI J. STEELE, Los Angeles, Calif., assignor of one-third to Wallace R. Coates and one-third to Roy C. Troeger, Los Angeles, Calif. Filed Apr. 5, 1928. Serial No. 267,535. 12 Claims. (Cl. 22—129.)



1. In the art described the combination of a mold for a tub-like article having a rim forming portion arranged lowermost, a side wall forming portion extending upwardly therefrom and a bottom forming portion of the article at the top of the mold, a core gate connected to the rim portion, and a sprue connected to the core gate.

1,762,842. VEHICLE BRAKE. WILLIAM S. STOCKTON, Toledo, Ohio, assignor to The Willys-Overland Company, Toledo, Ohio, a Corporation of Ohio. Filed May 24, 1928. Serial No. 280,172. 4 Claims. (Cl. 188—194.)



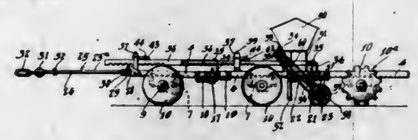
1. The combination with a dirigible wheel having a substantially vertical axis of a brake drum, an expandible brake band disposed within the drum, a supporting plate disposed adjacent the drum in spaced relation to the axis, adapted to oscillate about said axis and forming an enclosed chamber with the drum, a band expanding lever pivotally secured to one end of the brake band and engageable with the other end of the brake band, a cam pivotally mounted in the plate, adapted to engage the lever an arm operatively connected to the cam and adapted to actuate said cam, said arm having a portion thereof projecting toward said axis, and a cable in alignment with the axis operatively connected to the arm portion.

1,762,843. HOLDER FOR CUT FLOWERS. CHARLES J. STRAUB, Gowanda, N. Y. Filed Aug. 18, 1927. Serial No. 213,769. 7 Claims. (Cl. 47—41.)



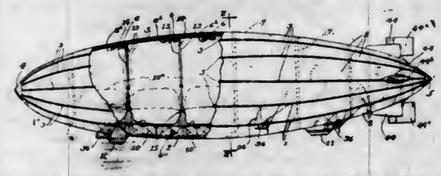
1. A holder for cut flowers, comprising a support and a retainer-ring at the upper end of said support, said support being constructed of pliant material so that any part along the length thereof may be diminished in width.

1,762,844. DISK CULTIVATOR. HEBER F. TOWNER, Santa Ana, Calif.; P. G. Beissel, executor of said Heber F. Towner, deceased, assignor to B. V. Curry, trustee. Filed June 1, 1927. Serial No. 195,646. 9 Claims. (Cl. 55—83.)



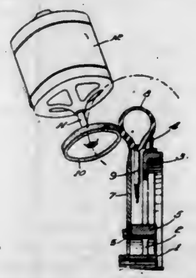
1. In a disk cultivator, the combination of a forward gang of disks, an intermediate gang of disks, means pivotally connecting the gangs of disks at one end, a rear gang of disks, and means connecting the rear gang of disks to the intermediate gang of disks.

1,762,845. DIRIGIBLE. RALPH H. UPSON, Brooklyn, N. Y., assignor to Aircraft Development Corporation, Detroit, Mich., a Corporation of Michigan. Filed May 4, 1922. Serial No. 558,541. 24 Claims. (Cl. 244—3.)



5. In a dirigible a transverse partition flexible and sealed at its periphery to the hull skin, a circumferential stiff structure, a set of interior transverse reenforcements in close proximity to said partition and means whereby limited flexibility of said partition is permitted without yield in the circumferential stiff structure.

1,762,846. APPARATUS FOR TREATING RUBBER ARTICLES. JACOB WASELUK, Detroit, Mich., assignor to Morgan and Wright, Detroit, Mich., a Corporation of Michigan. Filed Apr. 2, 1927. Serial No. 180,507. 4 Claims. (Cl. 51—237.)

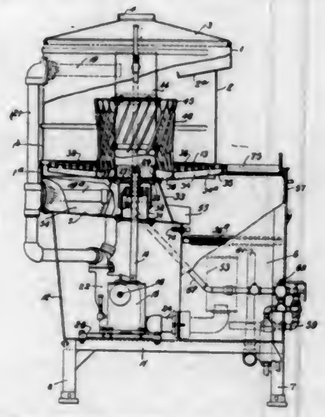


3. A device for supporting a curing bag comprising a frame substantially annular in form, and means cooperating with the frame to support a curing bag provided with a valve stem, said frame being arranged to clear the valve stem, whereby said curing bag is permitted to creep circumferentially of said frame.

1,762,847. DISHWASHING MACHINE. GEORGE WEBB, West Hartford, Conn., assignor to Colt's Patent Fire Arms Manufacturing Company, Hartford, Conn., a Corporation of Connecticut. Filed Nov. 19, 1926. Serial No. 149,379. 12 Claims. (Cl. 141—9.)

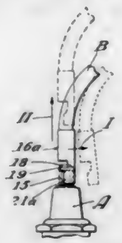
8. In a dish washing machine, the combination of an elevated casing having a bottom wall and having an opening in its peripheral wall through which soiled dishes can be supplied and washed dishes removed, a vertical shaft

extending through the bottom wall of the casing, a flange rigidly connected to the shaft within the casing and having an upward facing annular friction surface thereon, a substantially horizontal rotatable table in the casing adapted to carry the said dishes during the washing operation and having a hub with a downward facing annular



friction surface thereon engaging the said friction surface of the said flange and serving as the sole means for supporting and rotating the table, spray devices inside of the casing for directing liquids against dishes carried by the table, a pump, pipe connections from the pump to the spray devices, and mechanism for operating the said pump and vertical shaft at relatively high and low speeds respectively.

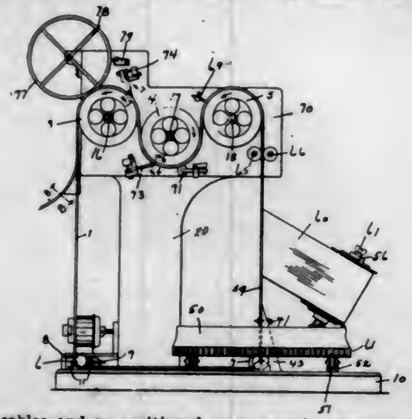
1,762,848. ELECTRICAL CONNECTER. RALPH H. WHISLER, Halfway, Mich., assignor to Hudson Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Sept. 13, 1926. Serial No. 135,010. 1 Claim. (Cl. 173—269.)



An electrical connecter comprising a terminal having a relatively enlarged portion adjacent its end and a relatively reduced portion in the rear of said enlarged portion, and a cooperating terminal having a body adapted for attachment to the end of a wire, a reduced unitary neck portion extending in a longitudinal direction from said body portion, and a pair of spring arms extending in opposite directions circumferentially from said neck portion, spaced from said body portion, and adapted to embrace the reduced portion of said first named terminal and to abut the enlarged portion thereof.

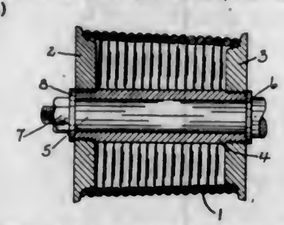
1,762,849. MANUFACTURE OF PNEUMATIC TIRE CASINGS. GEORGE F. WIKLE, Milwaukee, Wis., assignor to The Fisk Rubber Company, Chicopee Falls, Mass., a Corporation of Massachusetts. Filed Nov. 22, 1926. Serial No. 149,962. 8 Claims. (Cl. 154—1.)

1. A device of the character described comprising spaced parallel cables, means to advance the cables in unison, means adapted to wind a strip of fabric about the cables, as the latter are advanced, to form a two-ply web of fabric with cables enclosed at the edges thereof and means adapted to cut one ply of the fabric longitudinally adjacent



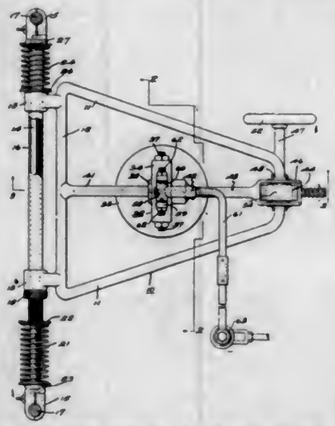
the cables and so positioned as to permit removal of the fabric from the cables as two-ply carcass material having stepped-off edges.

1,762,850. TIRE-BUILDING MACHINE. JOHN VRBANAC, Milwaukee, Wis., assignor to The Fisk Rubber Company, Chicopee Falls, Mass., a Corporation of Massachusetts. Filed Apr. 4, 1927. Serial No. 180,852. 6 Claims. (Cl. 154—9.)



1. A roll for applying material to the curved surface of a tire casing comprising, a coiled spring confined between end plates, the end plates and spring being mounted for free rotation.

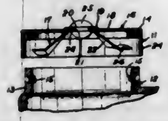
1,762,851. AEROPLANE-CONTROL APPARATUS. ALBERT BERTRAM WILLETT, Sacramento, Calif. Filed July 22, 1929. Serial No. 379,891. 6 Claims. (Cl. 244—29.)



1. In an aeroplane control, a frame adapted to be secured to a relatively fixed support, a lever arm adapted to

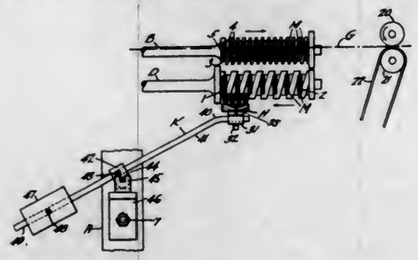
be moved laterally in any direction, a universal joint connected to said arm, said joint including a collar, a member carried by the frame slidably extended thru said collar, and means for shifting the position of said collar on said member.

1,762,852. CLOSURE. CHARLES A. ZAROBSKY, Cleveland, Ohio, assignor to The Simplex Cap Company, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 2, 1928. Serial No. 258,546. 4 Claims. (Cl. 220—40.)



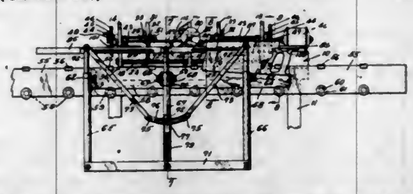
1. For use with a tube provided with a plurality of partial bayonet joints, a closure comprising: a cap member having a top section; locking means having a plurality of fingers provided with partial bayonet joints complementary to and cooperating with said partial bayonet joints of said tube; cooperating irregularities on said top section and said locking means preventing relative rotation between said cap member and said locking means when said cap member and said locking means are assembled; and securing means securing said locking means assembled with said cap member.

1,762,853. DEVICE FOR CLEANING GILL-BOX FALLERS. THOMAS BREDBURY, Andover, Mass., assignor to Patent Protection Corporation, trustee, Lowell, Mass., a Corporation of Massachusetts. Filed Nov. 18, 1926. Serial No. 149,036. 3 Claims. (Cl. 19—129.)



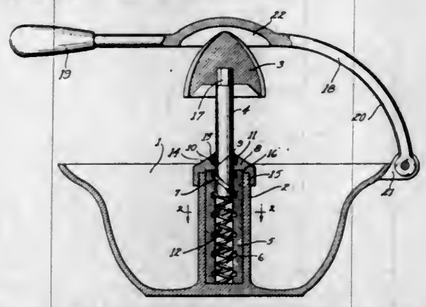
1. The combination in a gill box having means to cause the stock to move horizontally in a given direction and having top screws and bottom screws together with fallers each of substantially rectangular cross section and each having pins projecting from its top face and having a flat bottom face, said fallers being caused to move along and between the top screws whereby the pins penetrate the stock and to move in the same direction therewith but at a slower speed and which fallers then descend and move each in an upright position in the opposite direction between the bottom screws; of a flat faced brush positioned under the bottom screws of such size as to span the space between two fallers with the bottom faces of which it engages while said fallers are supported by said bottom screws; a brush socket medially fastened to the bottom of said brush and having a cylindrical hole and a guide screw which enters said hole; a bracket fixed to the frame of the gill box having at the top an open bearing; a yoke having a pivot which rests in said open bearing; a brush support which passes adjustably through said yoke and which at one end enters the socket hole and has a transverse slot into which said guide screw enters and at the other end has an adjustable weight whereby the brush is held yieldingly in contact with the bottom faces of said fallers as they move along the bottom screws.

1,762,854. SAW-SHARPENING MACHINE. WILLIAM COOPER and SAMUEL H. MULLIKIN, Van Nuys, Calif. Filed Mar. 28, 1928. Serial No. 265,306. 10 Claims. (Cl. 76—37.)



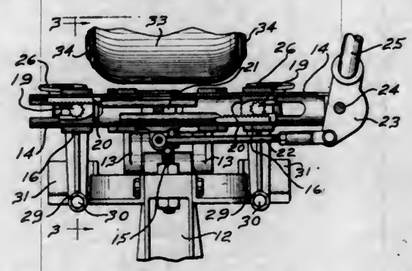
1. In a saw sharpening machine, the combination of: a supporting structure; an abrasive wheel adjustably mounted on said supporting structure; means for driving said abrasive wheel; a track carried by said supporting structure; saw-clamping means slidable along said track; a lowering mechanism for moving said saw-clamping means to withdraw a saw clamped therein from engagement with said abrasive wheel; means for varying the direction of withdrawal of said saw-clamping means; and advancing means for advancing said saw-clamping means when said wheel and said saw are not in contact.

1,762,855. JUICE EXTRACTOR. BERT R. DELERAY, Los Angeles, Calif. Filed Apr. 7, 1928. Serial No. 268,127. 7 Claims. (Cl. 146—3.)



1. In a juice extractor, the combination of a bowl having a sleeve extending upwardly within the same, a burr having a plain cylindrical guide stem extending downwardly therefrom with its lower end housed within the sleeve, means on the sleeve and cooperating means on the lower end of the stem to cause a rotation of the stem when the burr and stem are forced downwardly, and means for returning the stem and burr to an elevated position after the same have been depressed.

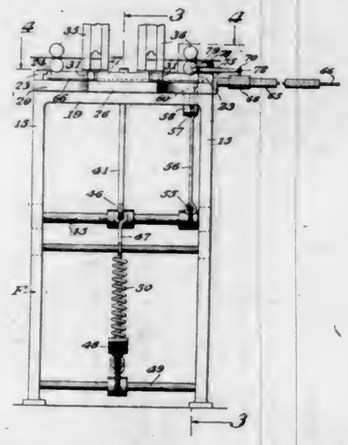
1,762,856. TURN-UNDER STITCHING DEVICE. CHARLES H. DESAUTELS, Springfield, Mass., assignor to The Fisk Rubber Company, Chicopee Falls, Mass., a Corporation of Massachusetts. Filed May 11, 1929. Serial No. 362,275. 4 Claims. (Cl. 154—10.)



1. A device for forming material around and under the bead portion of a tire supported and rotated by a tire

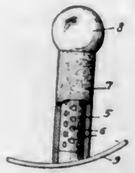
building drum arched adjacent the bead, which comprises a flanged stitching roll mounted for movement so that the contacting point of the flange of the roll describes an arc around the bead portion, the center of which lies outside the bead portion and the plane of the flange being substantially tangent to the said arc and means operable to move the roll bodily in an axial plane of the drum, said bodily movement being variable with respect to the arcuate movement.

1,762,857. DEVICE FOR POSITIONING STRING HANDLES ON PAPER BAGS. CARLETON G. EATON, Waltham, Mass., assignor to A. M. Eaton Paper Company, Boston, Mass., a Corporation of Massachusetts. Filed Mar. 9, 1929. Serial No. 345,748. 9 Claims. (Cl. 93—8.)



1. The combination with means for securing a string handle to a bag, of a frame, a template on said frame for positioning said handle, a member for positioning a bag in a predetermined relation to said template, and means for moving one of said members relative to another to permit the removal of said handle from said template after the former has been secured to the bag.

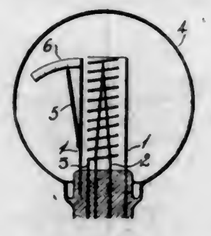
1,762,858. RECTAL SUPPOSITORY AND HOLDER THEREFOR. CHARLES S. FREEDMAN, Los Angeles, Calif. Filed Aug. 25, 1927. Serial No. 215,433. 10 Claims. (Cl. 128—271.)



1. A rectal suppository holder comprising a hollow shaft member having a fluid reservoir at its upper end, and a base member secured to the lower end of said shaft.

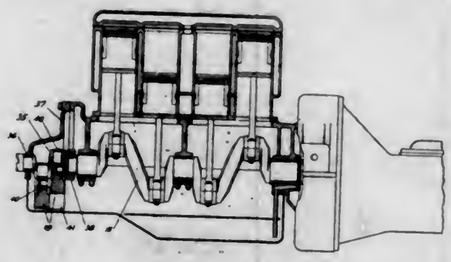
1,762,859. TUBE-TEMPERATURE AND LOSS-INDICATING DEVICE. LOUIS A. GERHARD, Washington, D. C., assignor by mesne assignments, to Federal Telegraph Company, a Corporation of California. Filed Nov. 24, 1928. Serial No. 321,718. 1 Claim. (Cl. 250—27.5.)

A thermionic tube comprising in combination electrodes enclosed by a transparent envelope, a thermo-expansive member contained within said envelope and thermally connected with one of said electrodes, said member comprising a plurality of dissimilar metals thermally responsive to



the temperature of said electrode and a graduated member adjacent said thermo-expansive member whereby the temperature of said electrode may be determined.

1,762,860. BALANCER FOR RECIPROCATING ENGINES. ALVA B. GILBERT, Toledo, Ohio, assignor to The Willys-Overland Company, Toledo, Ohio, a Corporation of Ohio. Filed Apr. 12, 1924. Serial No. 706,099. 5 Claims. (Cl. 74—38.)



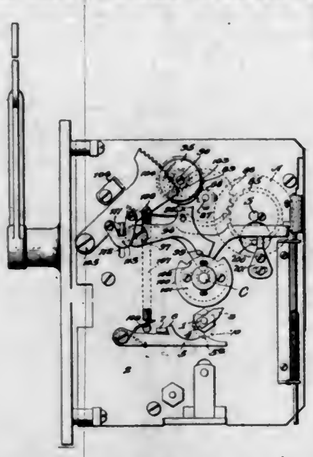
5. A multi-cylinder engine including a main crankshaft having pistons connected thereto by connecting rods inherently balanced as to primary forces, an auxiliary crankshaft having weights of predetermined mass connected to the individual cranks by connecting rods rotated in synchronized relation with respect to the main crankshaft and likewise inherently balanced as to primary forces the ratio of the length of the main crank to the length of the main connecting rod being less than that of the auxiliary crank to its connecting rod.

1,762,861. METHOD OF PRODUCING MERCURY. WALTER GLAESER, Brooklyn, N. Y., assignor to Glaeser Research Corporation, New York, N. Y., a Corporation of New York. Filed Nov. 14, 1924. Serial No. 749,999. 7 Claims. (Cl. 75—22.)

2. A method of extracting mercury from cinnabar ore, which comprises subjecting the finely divided ore to a reducing agent in the presence of water and a metal capable of forming an amalgam with the mercury.

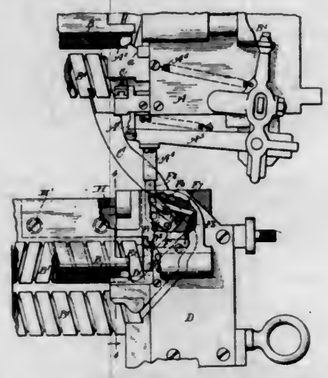
1,762,862. TAXIMETER. JULIUS GLUCK, New York, N. Y., assignor, by mesne assignments, to Ohmer Fare Register Company, Dayton, Ohio, a Corporation of New York. Filed Nov. 17, 1921. Serial No. 515,920. 28 Claims. (Cl. 235—30.)

1. A taximeter including a fare register unit consisting of a plurality of fare drums, means for actuating one of the fare drums, a star wheel unit for transferring motion from one fare drum to the other and means consisting of a spring tensioned pivoted frame having a shaft for carrying the star wheels, and the said star wheels having hub portions provided with a flat face, and keeper means supported by the meter frame at one side of the star wheels and



adapted to be engaged by the flat face of the hub portion thereof when the star wheel is disengaged from the fare drums.

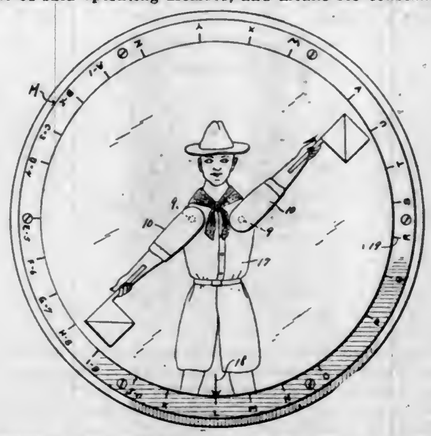
1,762,863. TYPOGRAPHICAL DISTRIBUTING MACHINE. RALPH M. GROVE, Brooklyn, N. Y., assignor to Mergenthaler Linotype Company, a Corporation of New York. Filed Nov. 27, 1928. Serial No. 322,120. 18 Claims. (Cl. 199—41.)



1. In a typographical distributing mechanism for handling matrices formed on their opposite edges with upper and lower projecting ears, and comprising a distributor bar and a set of matrix conveying screws, the combination of inclined guide rails along which the matrices gravitate toward the screws, and an escapement device presenting upper and lower pairs of reciprocating dogs for controlling the passage of the gravitating matrices one at a time into position to be picked up by the screws, the upper dogs being arranged to engage the upper ends of the upper projecting ears of the matrices and the lower dogs arranged to engage the lower ends of said matrix projecting ears.

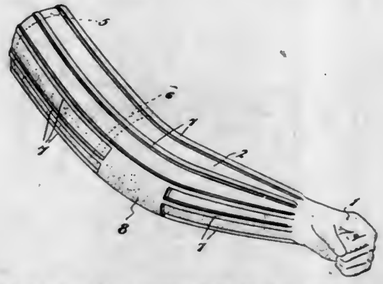
1,762,864. EDUCATIONAL DEVICE. JOHN H. GUY, Richmond, Va. Filed Nov. 16, 1929. Serial No. 407,695. 4 Claims. (Cl. 116—18.)

1. An appliance of the class described comprising two members supported for relative rotation, rockable semaphores carried by one of the members, the second member having trackways, said trackways having depressions therealong, a longitudinally movable operating member operatively connected with each of the semaphores for independently rocking each semaphore upon longitudinal movement of said operating member, and means for constantly



maintaining said operating member in operative contact with a trackway, the depressions in the trackways upon relative rotation of the first two members adjusting the positions of the semaphores.

1,762,865. TRAPPER'S GLOVE. PAUL G. HEINRICH, Eden, N. Y. Filed July 2, 1929. Serial No. 375,434. 3 Claims. (Cl. 2—168.)

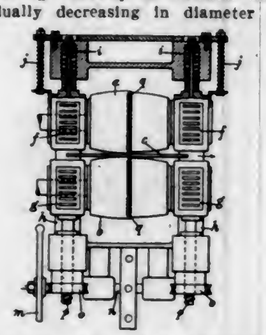


3. A water-proof glove comprising a hand covering portion and an arm covering portion extending therefrom, the said hand covering portion being formed of rubber and the arm covering portion consisting of a rubber body merging into the hand covering portion, ribs extending longitudinally upon the outer face of said body and spaced from each other circumferentially thereof, the elbow covering portion of the body being thickened to form a reinforcement of a thickness corresponding to the thickness of the ribs, a fabric reinforcing lining adhering to the inner surface of said body, and elastic bands spaced from each other between the elbow reinforcement and upper end of the body and adapted to draw the arm covering portion tightly about a person's arm and retain the glove in place.

1,762,866. REELING MACHINE. JACK HOLLINS, Middlewich, and DOUGLAS JEPSON, Glossop, England, assignors to Imperial Chemical Industries Limited, London, England, a British Company. Filed Jan. 16, 1929, Serial No. 332,934, and in Great Britain Feb. 8, 1928. 5 Claims. (Cl. 80—13.)

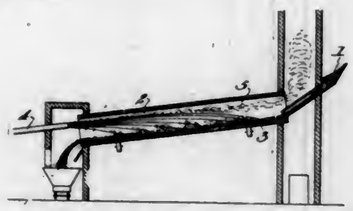
1. In a reeling machine for freeing a metal tube from the mandrel on which it has been produced, in combination, a pair of positively driven co-operating rolls by which the tube and mandrel have rotary and longitudinal movements imparted thereto, each roll having a curved contour

at the work entering side which gradually increases in diameter until it reaches a maximum where there is a short parallel portion, the work leaving side of the parallel portion decreasing suddenly in diameter and thereafter further gradually decreasing in diameter towards the



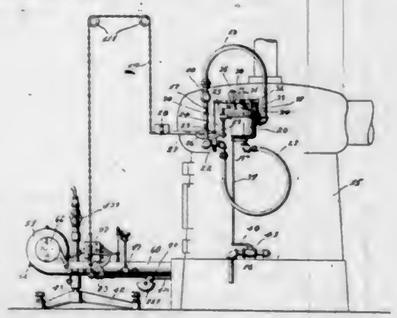
work leaving side of the roll, a work support beneath the rolls which is stepped downwards beneath the parts of the roll contours which decrease suddenly in diameter, and means applying a yielding pressure through the rolls to the tube upon the mandrel.

1,762,867. PROCESS FOR WORKING UP COMPLEX ORES AND METALLURGICAL PRODUCTS. FRIEDRICH JOHANNSEN, Magdeburg, Germany, assignor to the Firm Fried. Krupp Grusonwerk Aktiengesellschaft, Magdeburg-Buckau, Germany. Filed Jan. 21, 1927, Serial No. 162,679, and in Germany Jan. 26, 1926. 5 Claims. (Cl. 75—17.)



1. Process for working up complex ores or metallurgical products containing metallic sulfides, which consists in heating the charge to a temperature sufficient to volatilize the sulfides of metals whose sulfides are readily volatilizable without volatilizing sulfides of metals whose sulfides are more difficultly volatilizable, while maintaining a reducing atmosphere within the charge and in its immediate vicinity and an oxidizing atmosphere above the charge.

1,762,868. OIL BURNER. ACHILLE KAIS, Detroit, Mich. Filed Oct. 3, 1927. Serial No. 223,742. 12 Claims. (Cl. 122—448.)



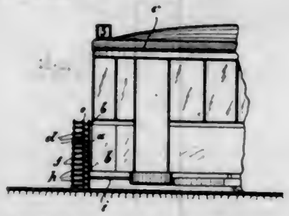
7. In combination, a boiler, an oil burner, control mechanism therefor, a chamber member, means for slidably mounting said chamber member, a pressure actuated diaphragm in said chamber member, a counter-balancing lever, means connecting said lever to said chamber member and diaphragm, means connecting said control mechanism to said counter-balancing lever and means connecting said chamber member to the steam and water chambers whereby said diaphragm is actuated in accordance with changes in steam pressure and said chamber member moved in accordance with said water level to move said counter-balancing lever in accordance therewith.

1,762,869. UMBRELLA HANDLE. RUDOLPH A. KRATOCHWILL, Greenville, Tenn. Filed Aug. 25, 1928. Serial No. 302,097. 2 Claims. (Cl. 135—47.)



2. A device of the character described comprising a body formed with pockets in its sides, a head for said body, a neck extending downwardly from said head and fitting about the upper end of said body, strips extending from said neck against said body in covering relation to said pockets and formed with openings registering with the pockets, and closures for said openings hinged to said strips.

1,762,870. BUFFER-LIKE GUARD FOR VEHICLES. WILHELM LANGE, Berlin-Spandau, Germany. Filed July 8, 1929, Serial No. 376,721, and in Germany July 6, 1928. 2 Claims. (Cl. 293—54.)

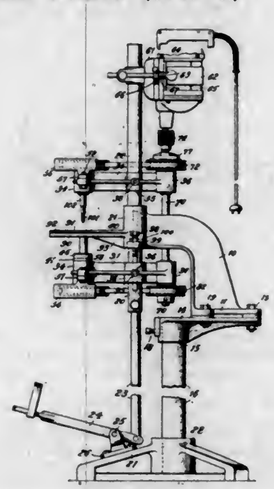


1. A buffer-like guard for vehicles, comprising in combination a base plate fixed on the vehicle, horizontal spiral springs on this base plate, a movable plate in front of these spiral springs, and conical steel springs fixed with their inner wide ends on said movable plate.

1,762,871. WELDING ALLOY. ARTHUR R. LYTLE, Elmhurst, N. Y., assignor to Union Carbide & Carbon Research Laboratories, Inc., a Corporation of New York. Filed Dec. 20, 1929. Serial No. 241,453. 2 Claims. (Cl. 29—181.)

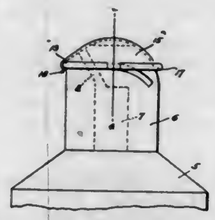
1. A composite article comprising a ferrous portion and a body of readily fusible copper-zinc-nickel alloy firmly welded thereto, said alloy containing 25% to 60% of nickel; not more than 25% of zinc; and 0.05% to 4% of silicon; with the remainder principally copper.

1,762,872. BRAKE-BAND DRILLING AND COUNTERSINKING MACHINE. ROBERT E. MANLEY, York, Pa., assignor to Manley Manufacturing Company, York, Pa., a Corporation of Delaware. Filed July 1, 1924. Serial No. 723,585. 9 Claims. (Cl. 77—5.)



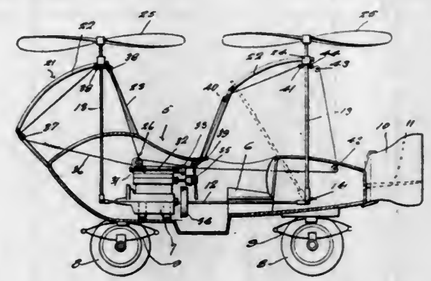
1. In a brake band drill, a narrow horn for supporting a brake band held against the upper surface of the horn by the operator, a vertical shaft passing thru said support adjacent said horn, means on said shaft working from above said horn for making a hole in the brake band lining, and means on said shaft working from below said supporting means for making a hole in the lining, one of said holes passing entirely through the lining and the other hole being of larger diameter and not passing through the lining, both holes being concentric and made without removal of the brake band from the horn, and means for shifting said shaft for operating said working means as a unit.

1,762,873. CAP FOR CANS, TUBES, AND THE LIKE. RAYMOND A. MCCLURE, Ottumwa, Iowa. Filed Aug. 14, 1928. Serial No. 299,619. 1 Claim. (Cl. 221—60.)



In combination, a container having a closed neck with one side of its top beveled and with its opposite side curved along its vertical plane, said beveled surface being provided with a discharge opening communicating with the interior of the container, said neck also having grooves formed at its remaining sides and inclined downwardly at their ends adjacent the curved side of the neck, a flange extending partly about the sides of the neck and terminating at the inner ends of said grooves, a cap seated upon the neck shaped complementary with the top thereof and having a pair of inturned flanged sections formed at its opposite sides and slidably disposed throughout the length of said grooves and cooperating to provide limited movement of the cap upon said neck and means carried by said can engageable with the flange portion of the neck for releasably securing the cap in position thereon.

1,762,874. AEROPLANE. HERMAN MCLIND, Los Angeles, Calif. Filed July 1, 1929. Serial No. 375,123. 2 Claims. (Cl. 244—15.)



1. An aircraft of the character described comprising a body, a motor mounted in the body, said motor being provided with a drive shaft, a propeller shaft, means for pivotally connecting the propeller shaft to the drive shaft, collapsible wings on the body, means for adjusting the propeller shaft from a straight-forward propelling position to a vertical lifting position, and connections between the propeller shaft and the wings for adjusting the wings in accordance with the position of the propeller shaft.

1,762,875. MILLING CUTTER. CLAUDE W. METZGER, Los Angeles, Calif., assignor, by mesne assignments, to Consolidated Machine Tool Corporation of America, a Corporation of Delaware. Filed Oct. 10, 1923. Serial No. 667,749. 7 Claims. (Cl. 29—105.)

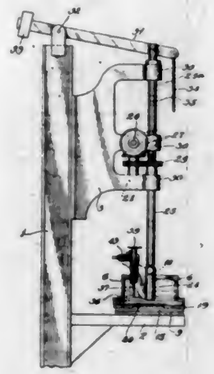


1. A rotary cutter comprising a supporting body having transverse slots in its outer periphery, each slot including opposed walls and seats adjacent said walls, cutter blades positioned on said seats and abutting against said walls, and means secured to said body and engaging the outer edges of said blades to hold them inwardly against their seats and exerting lateral pressure against such blades to clamp them against said walls.

1,762,876. MOLD FOR HEAD CORES. WILLIAM D. MOORE, JOSEPH B. LORING, and WILLIAM J. BOWERS, Birmingham, Ala., assignors to Sand Spun Patents Corporation, New York, N. Y., a Corporation of Delaware. Filed Mar. 6, 1928. Serial No. 259,517. 10 Claims. (Cl. 22—24.)

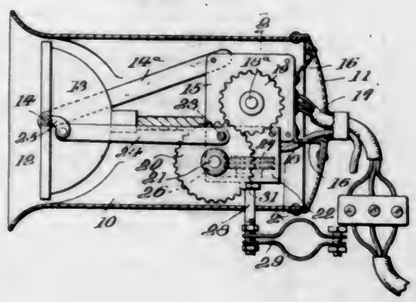
1. Mechanism to form a head core having in one end an axial scruff receiving pocket, and at the other an external annular rib, including a mold having an opening in its top of an area corresponding to that of the cross

section of the pocket, and a coaxial annular recess at the opposite end to form a rib, means movable through the opening to shape the pocket and to displace molding sand radially and compress it in the recess when said means is rotated with respect to the mold, said means including



a strike head contoured to form the pocket, and a compressing finger normally spring pressed to inoperative position, and set mechanism for holding the finger in operative position and adapted to be released by the pressure of the sand when the selected point of compression is attained.

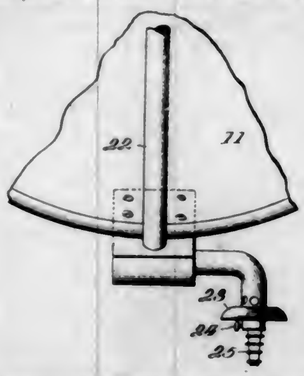
1,762,877. LAMP FOR MOTOR VEHICLES. HENRY H. MORETON, Santa Monica, Calif. Filed Feb. 2, 1928. Serial No. 251,418. 16 Claims. (Cl. 240—61.)



2. A lamp of the character described comprising a supporting casing, a lamp pivotally mounted therein, a motor mounted in said casing, means operated by said motor for rocking said lamp on its pivotal axis, and means also operated by said motor for moving said casing on an axis at right angles to the axis of movement of said lamp.

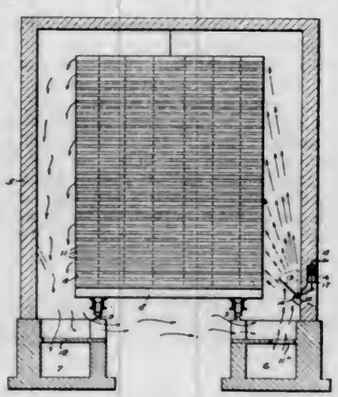
1,762,878. GAS HEATER. HENRY H. MORETON, Santa Monica, Calif. Filed June 14, 1928. Serial No. 285,478. 7 Claims. (Cl. 126—92.)

1. A heater of the character described comprising a reflector, a support member secured to said reflector, a burner carried by said support member, a heat-intensifying member also carried by said support member and enclosing said burner ,and means independent of said support



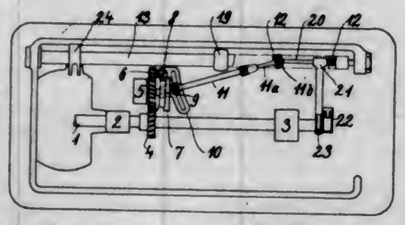
member for supplying combustible mixture to said burner, said heat-intensifying member being located in a predetermined focal position with respect to said reflector.

1,762,879. METHOD OF AND MEANS FOR DRYING LUMBER. MORITZ L. MUELLER, Seattle, Wash. Filed Apr. 12, 1929. Serial No. 354,570. 7 Claims. (Cl. 34—46.)



1. The herein described method of drying lumber, which consists of setting up a current of air transversely through a pile of lumber, piled in spaced courses, and continuously changing the direction of the air current to cause it to sweep up and down the side of the pile of lumber.

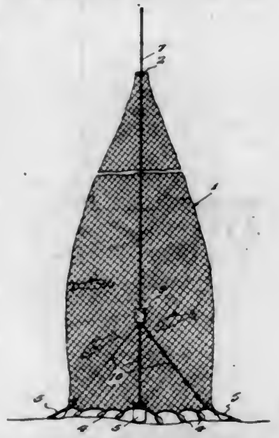
1,762,880. DRIVING GEAR FOR MATERIAL FEEDERS FOR SEWING MACHINES. RUDOLF MUNDLOS, Magdeburg, Germany. Filed Jan. 10, 1928, Serial No. 245,759, and in Germany Nov. 18, 1926. 1 Claim. (Cl. 112—205.)



In a driving gear for the material-feeder in sewing machines, the combination in mechanism for imparting to

the material-feeder a movement in longitudinal direction, consisting of an oscillatable link, a rocking shaft, composed of one part which is not shiftable and of another part which is shiftable, two arms on said shiftable part of said shaft, a connecting rod connecting one of said arms with said link and composed of two parts one part mounted in the other so that it can rotate with regard to the same but not carry out a shifting movement, a cross bar carried by the said arms of said rocking shaft, and a material feed bar associated with the cross bar.

1,762,881. FISH TRAP. JENS K. NICOLAYSON, Oakland, Calif., assignor of one-fourth to Angelo Archini, San Francisco, Calif. Filed May 15, 1929. Serial No. 363,196. 3 Claims. (Cl. 43—7.)



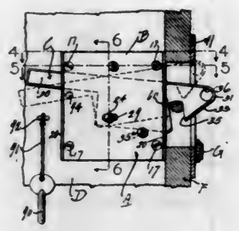
1. A fish trap comprising a net of bag-like formation, said net having a ring in its upper end, a cord binding the lower end of the net to provide an entrance opening, weighted plates secured to the cord, a main cord slidable in the ring and having a stop carried by its lower end, draw-strings connecting the plates and stop, said stop being adapted to engage the ring to lift the net and simultaneously contract the cord forming the entrance opening, as and for the purpose set forth.

1,762,882. SNAP OR CLASP. RICHARD R. O. NINNERMUN, Fero, N. Dak. Filed Dec. 21, 1929. Serial No. 415,755. 2 Claims. (Cl. 24—232.)



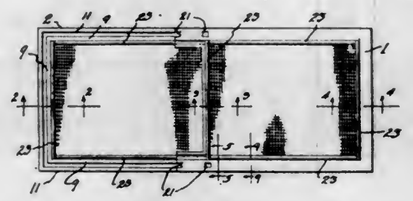
1. As a new article of manufacture, a clasp comprising complemental members, one of which is formed intermediate of its ends with a lateral bifurcated projection to which the other member is pivotally connected at one end, means for pivotally connecting said second member to said first member, said members being each formed at their adjoining ends with laterally projecting shoulders whose paths intersect in the movement of one member relative to the other whereby one shoulder may be forced past and into locking engagement with the other shoulder to hold the clasp in closed position.

1,762,883. DOOR CATCH. WILLIAM NORMAN, Grand Island, Nebr. Filed Dec. 3, 1928. Serial No. 323,482. 5 Claims. (Cl. 292—254.)



1. In a latch the combination of a casing providing a pair of walls, one of the walls having upper and lower right angled flanges, transverse detachable means connecting the walls together with the flanges in engagement between the walls to hold them spaced, the front and rear of the case between the walls being open, a pivot pin transversely carried by the walls, a latch bolt pivoted on said pin and extending through the rear and front openings between the walls, the bolt beyond the front of the case having a keeper receiving slot therein, the pivot pin being adjustable longitudinally of the case between the front and rear open ends.

1,762,884. ADJUSTABLE WINDOW SCREEN. MAYHEW E. NOYES, Canton, Ohio. Filed Nov. 9, 1928. Serial No. 318,127. 4 Claims. (Cl. 156—38.)

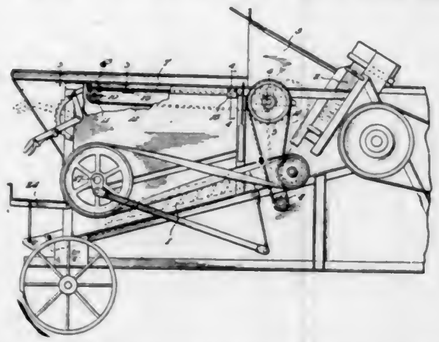


2. In an adjustable window screen, a pair of frame members, a pair of guides carried by each frame member and engaging the other frame member to allow one frame to slide upon the other, a U shaped channel formed in the inner edge of each frame member having a free inner edge bent downwardly at an angle into the channel providing a yieldable strip, a rod of greater diameter than the space between the downwardly bent edge and the opposite side of the U shaped channel, a screen fabric extending over the edge of the channel and the rod being inserted in the channel below the said downwardly bent edge to engage the screen fabric between the rod and the said edge.

1,762,885. FEED TABLE. THEODORE H. OPPENHEIM and BERNARD SELHORST, Coldwater, Ohio, assignors to The New Idea Spreader Co., Coldwater, Ohio, a Corporation of Ohio. Filed Aug. 3, 1927. Serial No. 210,362. 1 Claim. (Cl. 198—126.)

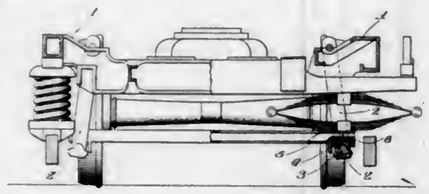
The combination of a support including parallel side members, a hopper on the support, brackets secured to and projecting inwardly from said side members, rails slidably resting on said brackets at the inner sides of the side members, drums mounted at and extending between the cor-

responding ends of the rails, an endless feed belt having its bights disposed around the respective drums, means



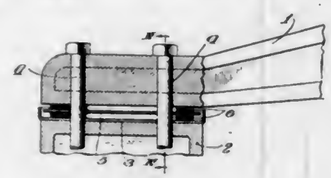
for actuating the belt, and means connected to one of the rails for shifting the same endwise upon the brackets and adjusting the feed belt to and from the hopper.

1,762,886. SPRING-PLANK CUSHION. RICHARD J. O'BRIEN, Depew, N. Y., assignor to Waugh Equipment Company, Depew, N. Y., a Corporation of Maine. Filed July 25, 1929. Serial No. 380,824. 4 Claims. (Cl. 105—190.)



3. In a device of the character described, the combination with a spring plank, of supporting means therefor, resilient cushioning means between said plank and supporting means, and means for limiting the expansible movement of said resilient means.

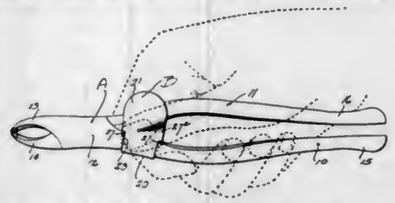
1,762,887. CUSHION FOR SIDE BEARINGS. RICHARD J. O'BRIEN, Depew, N. Y., assignor to Waugh Equipment Company, Depew, N. Y., a Corporation of Maine. Filed July 25, 1929. Serial No. 380,825. 4 Claims. (Cl. 105—195.)



1. In a railway car, a longitudinally extending side bar, cross members attached to the ends thereof, resilient means between said cross members and the ends of said side bar, and means for confining and limiting the action of said resilient means.

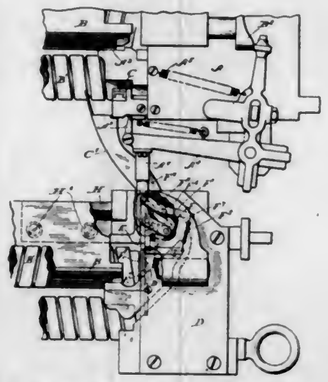
1,762,888. DENTAL FORCEPS. GEORGE P. ROBERTS, Tarpon Springs, Fla. Filed May 17, 1928. Serial No. 278,536. 5 Claims. (Cl. 32—34.)

1. In dental forceps a pair of pivoted members, each member including a jaw portion and a handle portion, and a thumb engaging guard member rigidly connected with one of the handle portions and constituting a laterally extending thumb support free of the other handle but in



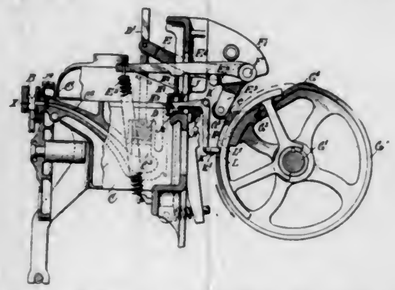
position to substantially overlie the adjacent portion of the said other handle portion in position where the operator naturally grasps the same when the members are in an operating position.

1,762,889. TYPOGRAPHICAL DISTRIBUTING MACHINE. JOHN R. ROGERS, Brooklyn, N. Y., assignor to Mergenthaler Linotype Company, a Corporation of New York. Filed Nov. 27, 1928. Serial No. 322,115. 17 Claims. (Cl. 199—41.)



1. In a typographical distributing mechanism comprising a distributor bar and a set of matrix conveying screws, the combination of inclined guide rails along which the matrices gravitate toward the screws, and an escapement device presenting upper and lower matrix arresting and releasing dogs movable rectilinearly and arranged to operate in offset vertical parallel planes in controlling the passage of the gravitating matrices one at a time into position to be picked up by the screws.

1,762,890. TYPOGRAPHICAL CASTING MACHINE. JOHN R. ROGERS, Brooklyn, N. Y., assignor to Mergenthaler Linotype Company, a Corporation of New York. Filed Feb. 4, 1929. Serial No. 337,207. 12 Claims. (Cl. 199—47.)



1. In a typographical casting machine, the combination of a metal pot, a plunger arranged to reciprocate therein, a

spring or equivalent means for actuating the plunger, and automatic means for locking the spring normally out of action and for releasing it momentarily during each rotation of the cam, for the purpose described.

1,762,891. METHOD OF MOUNTING SINGLE AND DOUBLE ROW BALL BEARINGS. LOUIS ROUANET, Ivry-Port, France, assignor to Compagnie d'Applications Mecaniques, Ivry-Port, France. Filed Jan. 16, 1928, Serial No. 247,206, and in France Jan. 20, 1927. 6 Claims. (Cl. 29—84.)



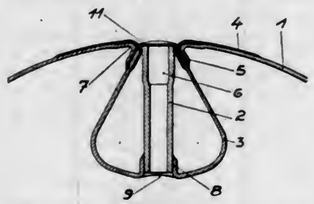
1. A process of assembling ball bearings which consists in inserting between concentric races a suitable number of balls, shaping strips of deformable material, to include loops adapted to surround a part of a ball and corrugated loops adapted to extend between each pair of adjacent balls, placing the shaped strips on the rows of balls so that the corrugated loops project between the balls, and flattening the corrugated loops so as to more completely surround the balls and retain the latter in the bearing.

1,762,892. ELECTRIC COIN-OPERATED SWITCH. WALTER H. RUTHER, St. Louis, Mo. Filed Sept. 10, 1928. Serial No. 305,051. 6 Claims. (Cl. 194—9.)



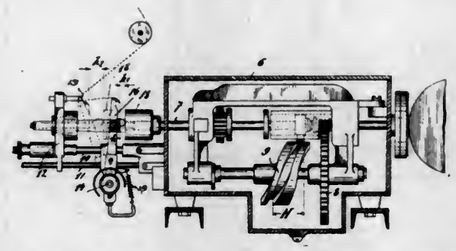
1. A circuit closing switch for motors controllable by the number of revolutions of the mechanism to be driven and including two rotatable circuit closing mechanisms connected to be concurrently rotated, one of said circuit closing mechanisms being initially operated to momentarily close the circuit, and the other circuit closing mechanism subsequently coming into play to maintain the circuit after the initial circuit closing mechanism has assumed normal open position.

1,762,893. FILLING TUBE FOR INFLATABLE BODIES. SIEGFRIED SAUL, Aachen, Germany. Filed Oct. 3, 1928, Serial No. 310,124, and in Germany Oct. 31, 1927. 1 Claim. (Cl. 273—65.)



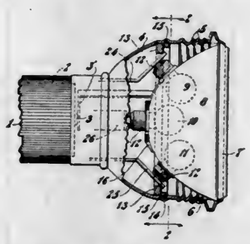
In a device of the kind described, an elastic bladder having an aperture, an elastic bag within said bladder having a bulging shape which it tends to retain, said inner bag having an aperture and being attached to said bladder so that said apertures coincide, a filling tube normally within said bag, said bag having a second aperture at which said filling tube is attached to it, said bag being distorted when said filling tube is withdrawn therefrom and being capable of drawing said filling tube back into it by assuming its normal shape when said filling tube is released.

1,762,894. PIRN-WINDING MACHINE. HANS SCHWEITER, Horgen, near Zurich, Switzerland. Filed Oct. 11, 1928, Serial No. 311,876, and in Germany Jan. 9, 1928. 14 Claims. (Cl. 242—43.3.)



5. In a pirn winding machine an axially reciprocating pirn spindle, a stationary main yarn guide normally adapted to guide a yarn thread, a journal fixed on a stationary machine part, an auxiliary yarn guide mounted for reciprocating swing motion and for shifting motion on said journal, a hub on said latter guide freely rotatable and shiftable on said journal, a spring adapted to be compressed by said hub upon said latter guide being shifted into operative position and to shift the latter into inoperative position when relaxing, said auxiliary guide being adapted to assume the guiding control of said yarn in the operative position, means for imparting reciprocating swing motion from said spindle to said latter guide when in operative position, and means for automatically shifting it into inoperative position after a certain number of swing motions.

1,762,895. ELECTRIC HAND FLASH LIGHT. JAMES L. SHANNON, Springfield, Mass., assignor to Blake Manufacturing Company, a Corporation of Massachusetts. Original application filed Apr. 11, 1928, Serial No. 269,188. Divided and this application filed Feb. 4, 1930. Serial No. 425,856. 2 Claims. (Cl. 240—10.5.)

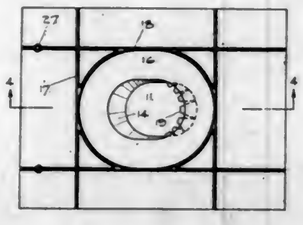


1. As an article of manufacture for the purpose described, a flat ring of insulating material formed with a central opening and with oppositely disposed recesses extending from the opening, a bar secured to the ring and formed with an opening which is located in the line which passes through the oppositely located recesses, whereby a reflector with a centrally disposed socket may be accurately positioned in relation to the ring.

1,762,896. PIPE ROOF FLASHING. ROBERT SHERLOCK, Toronto, Ontario, Canada. Filed Jan. 19, 1929. Serial No. 333,577. 1 Claim. (Cl. 285—31.)

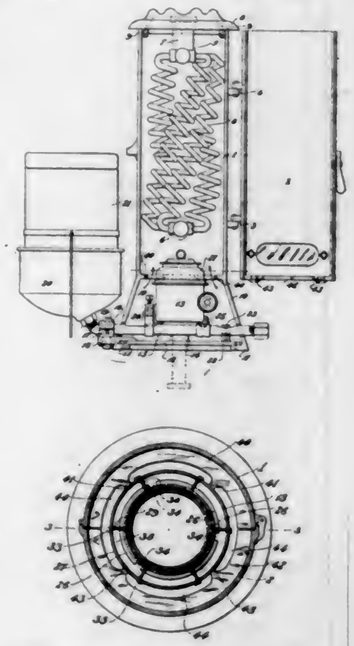
In a pipe roof flashing construction, a hub portion adapted to encircle a pipe and having a converging wall at one

side and a receding wall at the other and inwardly extending teeth from said receding wall adapted to be broken off to allow said flashing to be set at different angles in regard to said pipe and at the same time form a tight fit therewith about its lower edge in order to properly retain the caulking between said pipe and said thimble, an



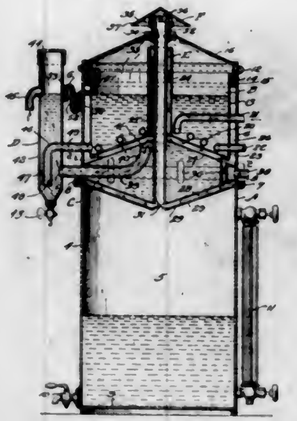
outwardly extending flange formed at the upper end of said thimble or hub portion, score lines in said flange to allow sections thereof to be readily broken therefrom to reduce the area of said flange, and means in said flange for co-acting with a roofing material to form a waterproof joint without the aid of an extra metal plate or lead sheet.

1,762,897. AIR INLET DEVICE FOR OIL BURNERS. PETER S. SINCLAIR, Holyoke, Mass., assignor to Holyoke Heater Company, Holyoke, Mass., a Corporation of Massachusetts. Filed Nov. 27, 1926. Serial No. 151,076. 17 Claims. (Cl. 122—250.)



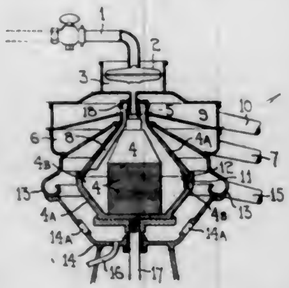
1. An oil water heater comprising in combination, an inclosing casing, water heating coils therein, an oil burner located within the casing, a removable collar or ring like member on the burner, spacing and centering means on the casing which engage the collar or ring on the burner to provide a concentric and annular air space for causing a predetermined and substantially an unbroken flow of air around the outside of the collar or ring and upward into the casing.

1,762,898. WATER STILL. ALBERT SORENSEN, Washington, D. C. Filed May 20, 1927. Serial No. 192,983. 10 Claims. (Cl. 202—196.)



1. In a still, a main body providing a chamber in its lower portion for storage of distilled water, a boiler in said body above said chamber including a removable lid, and a pipe extending thru said boiler providing a way for air and vapor from said chamber to the atmosphere at the top of the still, said lid carried by said pipe.

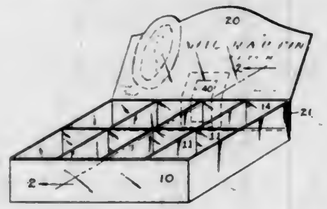
1,762,899. MACHINE FOR SEPARATING SOLIDS FROM LIQUIDS. JAMES THOMSON and CATHERINE ELIZABETH THOMSON, Dunedin, New Zealand, assignors of three-fifths to John Winsloe, Dunedin, Otago, New Zealand. Filed May 17, 1928, Serial No. 278,598, and in New Zealand July 4, 1927. 2 Claims. (Cl. 233—47.)



1. A centrifugal separator including a frame formed to provide a lower compartment, an intermediate compartment and an upper compartment, the lower compartment being formed to provide an annular trough at a point intermediate its upper and lower ends, a bowl mounted for rotation within and spaced from the wall of the lower compartment, the wall of the bowl being formed intermediate its ends with a series of radially disposed jets in line with the annular trough of the frame, the wall of the bowl including inwardly above and below the jets to provide the maximum bowl area in line with the jets, a series of superimposed disks carried by the bottom of the bowl and spaced apart to permit the passage of material from between them, means for delivering material axially of the disks, a series of closed upwardly converging ducts arranged in spaced relation on the inner surface of the bowl with their lower open ends terminating above the

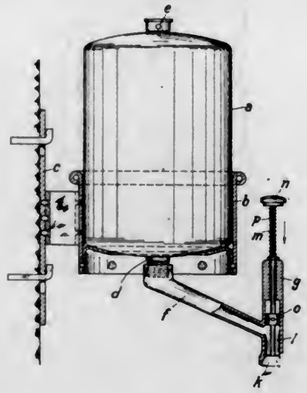
radial jets and their open upper ends leading through the wall of the bowl into the upper compartment of the frame, the upwardly diverging wall of the bowl below the jets directing the heavier material separated by centrifugal force to said jets, the lighter material separated by the disks rising in the bowl and through the ducts for delivery in the upper compartment of the frame, and baffles for the jets to prevent direct outward flow therethrough.

1,762,900. DISPLAY BOX. CHARLES O. TODD, Cleveland, Ohio, assignor to The Wilson Fastener Company, Cleveland, Ohio, a Corporation of Ohio. Filed June 9, 1927. Serial No. 197,630. 5 Claims. (Cl. 206—44.)



3. As a new article of manufacture, a box having walls and a flap so connected to one of the walls that it may fold on an axis adjacent the top of such wall into a horizontal position on top of the box or an inclined position upwardly and outwardly from such wall, and a stiffening device secured to the foldable portion of the flap above and substantially down to the hinge axis and held rigid with the box wall below and substantially up to the hinge axis, whereby the stiffening device will not bow away from the flap when the latter extends backwardly at an obtuse angle to the box wall.

1,762,901. DELIVERING APPARATUS FOR LIQUID SOAP. WERNER WEINBERG, Ludenscheid, Germany. Filed Apr. 21, 1928, Serial No. 271,940, and in Germany May 3, 1927. 1 Claim. (Cl. 221—94.)

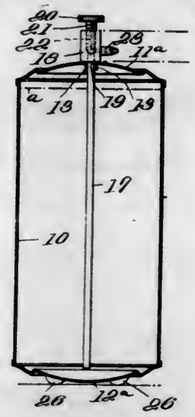


A delivering apparatus for liquid soap comprising in combination with a wall bracket as carrier, a transport vessel adapted to be removably inserted in said bracket, a charging and air tub at the top end of said vessel, a discharge in the bottom of said vessel, an inclined discharge tube screwed on said discharge, a vertical tubular valve case integral with said discharge tube, a valve cone in the lower end of said valve case, a valve rod extending upwardly from said valve cone through the top of said valve case, a spring on said valve rod outside said case maintaining said valve in the closing position, and a piston keyed on said valve rod above the discharge opening of said inclined tube adapted to shut-off said tubular valve case from said discharge tube when the valve is being depressed so that only the quantity of liquid soap between said piston and the lower end of said valve casing is delivered.

1,762,902. SYSTEM OF LUBRICATION. JOHN F. WERDER, Cleveland, Ohio, assignor of one-half to Edmund Rogers. Filed Apr. 20, 1926. Serial No. 103,352. 7 Claims. (Cl. 87—9.)

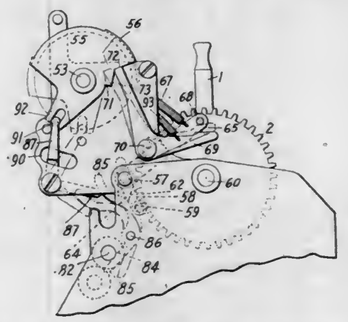
1. A lubricating composition consisting of liquid hydrocarbon lubricating oils charged with an inert gas under pressure.

1,762,903. SELF-DISPENSING LIQUID PACKAGE. JOHN F. WERDER, Cleveland, Ohio, assignor of one-half to Edmund Rogers. Filed May 29, 1926. Serial No. 112,584. 14 Claims. (Cl. 221—1.)



1. A pressure-liquid storage and dispensing receptacle including inwardly biased, resilient, flexible top and bottom walls and a pipe fastened to said top wall and extending within said receptacle and presenting its open lower end substantially at said bottom wall, the lower end of said pipe being supported by said top wall at varying distances from said bottom wall by the action of the pressure within the receptacle upon said flexible walls.

1,762,904. REGISTER FLASH MECHANISM. ALBERT S. WHEELBARGER, Dayton, Ohio, assignor to Ohmer Fare Register Company, Dayton, Ohio. Filed Nov. 28, 1927. Serial No. 236,094. 2 Claims. (Cl. 235—24.)



1. In a machine, a duplicate set of indicator drums, means whereby said sets of drums are simultaneously actu-

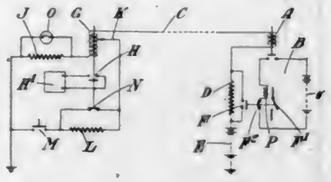
ated, said means including a gear, a lever actuated by the movement of said gear, a flash provided with a plurality of seats adapted to be engaged by said lever, means to cause said lever to engage one of said seats when said gear has been moved, and means to cause said lever to engage the other of said seats when the machine has been actuated.

1,762,905. PNEUMATIC TIRE. HENRY BENSON WHITLARK, Tarboro, N. C., assignor, by mesne assignments, to Lambert Tire & Rubber Company, Barberton, Ohio, a Corporation. Continuation of application Serial No. 695,013, filed Feb. 25, 1924, refiled for abandoned application No. 330,205, filed Oct. 13, 1919. This application filed July 10, 1926. Serial No. 121,680. 5 Claims. (Cl. 152—10.)



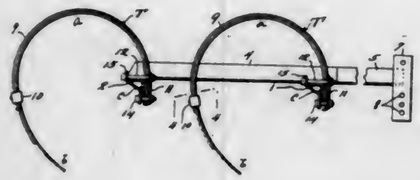
4. In a pneumatic tire casing in which all parts are vulcanized together; a carcass adapted to receive an inner tube and expansible to a predetermined extent when the tube is inflated, a rubber tread surrounding said carcess and having transverse circumferentially spaced openings entering from the sides of the tread thereby leaving transverse circumferentially spaced rubber lugs or pillars between adjacent openings, and a substantially non-elongatable band of flexible material embedded in said tread between said openings and the road-contacting face of the tread for restricting radial expansion of that portion of the tread which lies between the openings and pillars and the road-contacting face, whereby inflation of the tube and consequent expansion of the carcass will effect radial compression of the rubber lugs to a greater degree than their normal state of compression after vulcanizing.

1,762,906. ELECTRIC SIGNALING OR CONTROL SYSTEM. RALPH WILLOUGHBY, Stocksfield, England, assignor to A. Reyrolle & Company Limited, Hebburn-on-Tyne, England, a Company of Great Britain. Filed Oct. 24, 1927, Serial No. 228,453, and in Great Britain Nov. 29, 1926. 5 Claims. (Cl. 175—320.)



3. In an electric signaling or control system arranged for duplex working, the combination with the circuit over which the signaling or control currents are passed, of two electro-magnetic devices disposed one at each end of the circuit, one of the devices having its operating coil divided into two parts such that the current required to operate the undivided-coil device is less than that required to operate the divided-coil device when flowing through one part only of the divided coil and is greater than that required to operate the divided-coil device when flowing through the whole of its coil, a source of power connected in series with the operating coils of the two electro-magnetic devices, two contact-making devices disposed one at each end of the circuit, and resistances which are selectively brought into or cut out from the circuit by the operation of the contact-making devices and are so dimensioned that either electro-magnetic device will respond to the operation of the contact-making device at the remote end irrespective of the condition of the other electromagnetic device and of the other contact-making device.

1,762,907. HARROW. BENJAMIN CHRISTIAN WOLF, Cheboygan, Mich. Filed Oct. 27, 1928. Serial No. 315,495. 2 Claims. (Cl. 55—97.)



1. A harrow comprising in combination, a frame and a plurality of resilient teeth carried thereby, each of said teeth having a substantially semi-cylindrical portion extending upwardly from the top of the frame and continued by a downwardly and forwardly curved portion for engagement with the soil, members disposed longitudinally across the central portion of the frame and continued by forwardly converging members, and a vertically disposed hitch plate carried by the outer extremities of the last members.

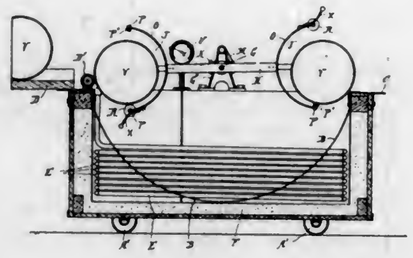
1,762,908. FLORIST'S PICK. EDSON L. BENNETT, Hudson, N. Y. Filed May 15, 1929. Serial No. 363,331. 2 Claims. (Cl. 47—55.)



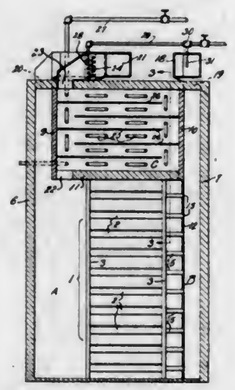
1. A florist's pick including a body portion formed of a length of thin sheet metal adapted to be bent around the stem of a leaf to secure the stem to the pick, a head at one end of the body portion, said head defining lateral spurs, and said body portion adapted to be forced into a supporting surface.

1,762,909. APPARATUS FOR USE IN COATING CHEESES WITH PARAFFIN WAX OR THE LIKE AND IN OTHER ANALOGOUS OPERATIONS. EDWIN DANIEL BERRY, Palmerston North, New Zealand. Filed Feb. 21, 1929, Serial No. 341,702, and in New Zealand Mar. 30, 1928. 4 Claims. (Cl. 91—46.)

1. An apparatus of the character described, comprising a tank adapted to hold a coating liquid and constructed with an approximately semi-circular rolling plate or false bottom arranged lengthwise within it; a feeding table at one end of the tank top; a delivery table at the other end of the tank top, and a rotating frame including a shaft journaled on the tank sides; said frame being provided with a number of holding cages disposed upon the ends of radiating arms and adapted in the rotation of the frame to pass round above the surface of the said rolling plate; and stop means on the shaft to retain said cages in arrested position, relative to the feed and delivery tables.



1,762,910. DRYING APPARATUS FOR GELATIN CARBON TISSUE. THOMAS CHESTER, Pittsburgh, Pa. Filed Aug. 1, 1928. Serial No. 296,817. 5 Claims. (Cl. 34—39.)



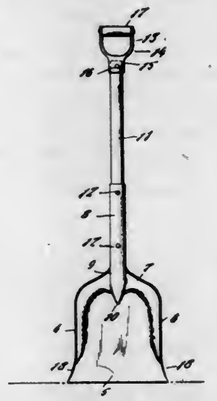
1. Apparatus of the character described and comprising means for supporting plates to be dried, means for directing a drying medium upon said plates, means arranged about said parts to form a drying chamber within which the parts are located, means providing a second chamber, said directing means having supply connection with said second chamber, means providing a third chamber communicating with said first chamber, refrigerant means having a cooling surface in said third chamber, means effecting circulation from said first and third chambers to said second chamber and hence from the second to the first chamber through said directing means, and heating means arranged in the flow of circulation from the third to the second chamber.

1,762,911. SEALING COMPOUND FOR PYROTECHNIC DEVICES. HERBERT CLAUSER, Elkton, Md., assignor to Victory Sparkler & Specialty Company, Elkton, Md., a Corporation of Delaware. Filed Feb. 2, 1926. Serial No. 85,592. 2 Claims. (Cl. 106—8.)



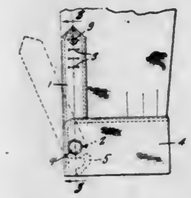
1. A material for sealing fireworks comprising a mixture of substantially 50% of silicate of soda, substantially 10% of a metallic oxide and substantially 40% of silicate of alumina.

1,762,912. FIRE SHOVEL. SIM CLEVELAND, Jr., Macon, Ga. Filed May 27, 1929. Serial No. 366,301. 1 Claim. (Cl. 294—55.)



A shovel blade formed from a single sheet of metal to provide a relatively flat bottom, a rear wall rising from said bottom, and spaced side walls merging at their rear ends into said rear wall, the bottom of said blade at the forward end thereof being of greater width than that portion of the bottom between the rearmost portions of said side walls, and said side walls from a point inwardly from the forward edge of the shovel slightly curving outwardly to conform with the width of the shovel at the forward edge portion of said shovel.

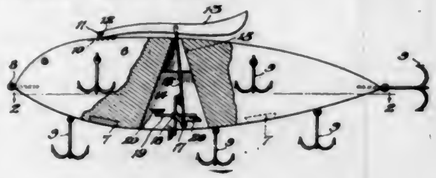
1,762,913. SHIRT. JOSEPH L. CORBI, Washington, D. C., assignor of one-third to Victor Galotta, Washington, D. C., and one-third to Henry Pizzutiello, Bronx, N. Y. Filed Mar. 5, 1929. Serial No. 344,509. 1 Claim. (Cl. 2—270.)



Means for holding a shirt sleeve in folded and raised position on the arm of a wearer, comprising a strap, means for connecting one end of the strap to one end of the cuff of the sleeve, said strap having buttonholes in each end thereof for receiving portions of the cuff button, whereby the ends of the cuff are connected together by the strap

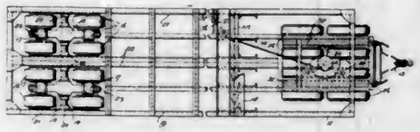
and the cuff held on the upper part of the forearm of the wearer and a button on the sleeve above the cuff and adjacent one edge of the slit in the sleeve for passing through the buttonhole at the free end of the strap to hold the strap in inoperative position.

1,762,914. ARTIFICIAL BAIT. LEE ROY CORNELIUS, near Danville, Ill., assignor of one-half to William P. Winther, Danville, Ill. Filed May 7, 1929. Serial No. 361,018. 7 Claims. (Cl. 43—46.)



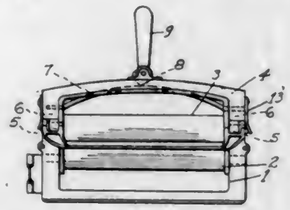
1. Artificial bait comprising a body, a member movably mounted thereon, a transverse crank-shaft in said body, means operatively connecting said member and the crank of said shaft, and a water-actuatable wheel fast on said shaft and extending outside of said body.

1,762,915. HEAVY-DUTY TRAILER. DURREL H. DAVIS, Edgerton, Wis., assignor to Highway Trailer Company, Edgerton, Wis., a Corporation of Wisconsin. Filed June 13, 1928. Serial No. 284,894. 1 Claim. (Cl. 280—81.)



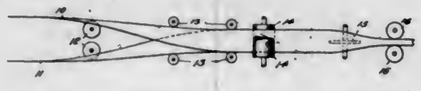
In combination, a heavy duty vehicle frame and supporting means therefor including a main axle extending transversely of the frame, a pair of transversely spaced beams each journaled at its mid-point on said axle, a short axle extending transversely at each end of each beam and pivotally mounted thereon with a wheel on said axle at each side of the pivot axis, whereby each pair of such wheels may swing vertically about the pivotal connection of their axle to the beam, and each beam may rock in a vertical plane about said main axle; said frame comprising a longitudinal member extending between the vertical planes in which the two beams rock and side members outside said planes, the main axle being rigidly secured to said side members and said longitudinal member, whereby the load on the frame is transmitted to the main axle at the middle portion thereof and at both its ends, and said axle serves to reinforce the frame transversely.

1,762,916. SAFETY DISENGAGING MECHANISM FOR WRINGERS. WILLIAM C. F. DIETZ, Cincinnati, Ohio. Filed Mar. 11, 1926. Serial No. 94,023. 7 Claims. (Cl. 68—32.)



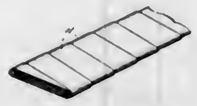
1. A clothes wringer comprising a stationary frame carrying a driven roller, a complementary frame mounted on the stationary frame and carrying an engaging roller, a spring carried in the complementary frame for forcing the engaging roller toward the driven roller, locking means at each end of said spring for holding the complementary frame to the stationary frame against the tension of the spring, said locking means also serving as a pivotal connection between the two frames and permitting swinging action of the complementary frame to either side of the stationary frame.

1,762,917. TAPE AND METHOD OF MAKING THE SAME. MILO C. DODGE, Auburn, N. Y., assignor to Columbian Rope Company, Auburn, N. Y., a Corporation of New York. Filed Aug. 1, 1927. Serial No. 209,886. 4 Claims. (Cl. 270—41.)



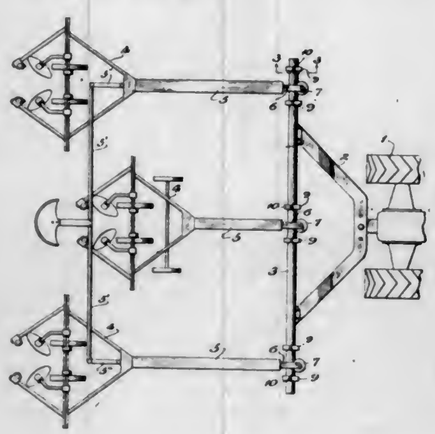
1. A paper tape formed of a pair of ribbons of paper, each folded centrally of its side edges with the folds of one ribbon laid between the folds of the other, the edges of one ribbon extending toward the crease in the other, and the interlaid folded ribbons folded a second time along their longitudinal centers.

1,762,918. FLAT PAPER-TAPE MARKER FOR ROPE. MILO C. DODGE, Auburn, N. Y., assignor to Columbian Rope Company, Auburn, N. Y., a Corporation of New York. Filed Aug. 1, 1927. Serial No. 209,889. 1 Claim. (Cl. 40—2.2.)



A rope marker consisting of a flat paper tape comprising a single ribbon of paper, said ribbon being wound in overlapped spiral convolutions and said overlapped convolutions permanently pressed into a substantially flat tape.

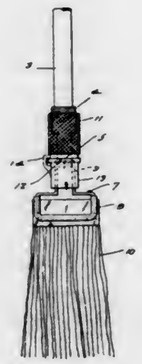
1,762,919. TRACTOR HITCH. THOMAS DRABEK, Winner, S. Dak. Filed Dec. 19, 1927. Serial No. 241,189. 2 Claims. (Cl. 280—33.10.)



1. A tractor hitch including a bar mounted transversely of the rear end of a tractor, a plurality of cultivator tongues

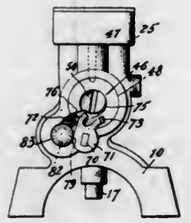
each provided with vertically spaced arms extending above and below said bar, rollers provided with concaved surfaces mounted between the ends of the arms of respective tongues and adapted to roll upon said bar, collars slidably mounted on said bar on opposite sides of each of said tongues, and set screws for adjustably securing said collars in place.

1,762,920. MOP HOLDER. BERT J. DUCE and SOLOMON JOHN ORENT, Buena Park, Calif. Filed May 9, 1929. Serial No. 361,730. 1 Claim. (Cl. 15—154.)



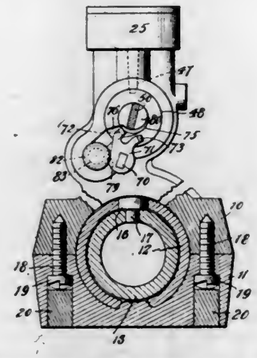
In a structure of the class described, a handle, an externally screw threaded ferrule mounted on said handle and having an extension, a pair of oppositely disposed swingably mounted jaws carried by said extension and having arm portions, a sleeve threaded on said ferrule, a collar embracing the arm portions for actuating the jaws, and an operating connection between the collar and sleeve.

1,762,921. KEY-IMPRISONING LOCK. CHARLES N. FAIRCHILD, New Haven, Conn., assignor to Fairchild Lock Corporation, New York, N. Y., a Corporation of Delaware. Filed Mar. 2, 1927. Serial No. 172,113. 13 Claims. (Cl. 70—127.)



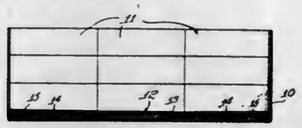
3. In combination, a locking bolt, means for moving said bolt in one direction, a key operated lock for moving the bolt in the opposite direction, a manually releasable member, and means for locking the key in its lock after the key has been turned past bolt unlocking position, until after operation of said member.

1,762,922. CAM-OPERATED IGNITION LOCK. CHARLES N. FAIRCHILD, New Haven, Conn., assignor to Fairchild Lock Corporation, New York, N. Y. a Corporation of Delaware. Filed May 25, 1927. Serial No. 194,195. 14 Claims. (Cl. 70—127.)



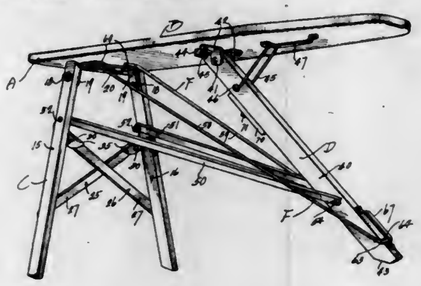
6. In an ignition switch, a plurality of contacts, means for resiliently separating said contacts, a lock cylinder, a cam secured to said cylinder, and means engaging one of said contacts and lying in the path of the cam whereby rotation of the cam will bring the two contacts into engagement thereby closing the ignition circuit.

1,762,923. DISPLAY BOX. JOHN P. FEGELY, Allentown, Pa., assignor of one-half to Granville B. Peters, Allentown, Pa. Filed Feb. 5, 1929. Serial No. 337,652. 4 Claims. (Cl. 306—44.)



1. A false-bottom for display boxes embodying a false-bottom proper having an under-folding, supporting end-flange at each end, an under-folding, supporting side-flange at each of its longitudinal edges, and a folding tab attached to the free edge of each one of said end-flanges and adapted to extend to a point above the false-bottom proper, for the purpose set forth.

1,762,924. FOLDING IRONING TABLE. CAL A. FORNEY, Goshen, Ind. Filed May 6, 1927. Serial No. 189,365. 3 Claims. (Cl. 68—10.)



1. In an ironing table construction an ironing board, and means for operatively supporting the board including a pair of legs, means loosely pivoting the legs to the ironing board in such manner that they are movable towards or away from each other transversely of the ironing board,

and cross braces connecting said legs together, each of said braces including a pair of pivoted together portions, one of which portions of each brace is connected to one leg in a pivoted relation and the other portion of each brace being pivotally connected to the other leg.

1,762,925. SOUND FILM WITH SENSITOMETRIC SCALE. LOYD A. JONES and CLIFTON M. TUTTLE, Rochester, N. Y., assignors to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed May 1, 1929. Serial No. 359,634. 5 Claims. (Cl. 95—9.)

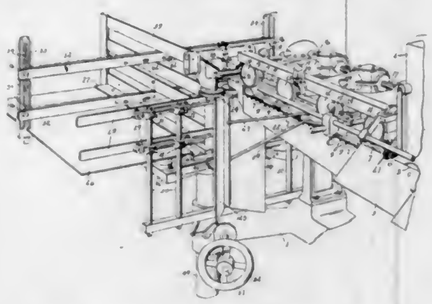


1. A band of sensitized film having thereon at intervals throughout its length latent images of sensitometric strips, and having a longitudinal series of exactly spaced perforations, each sensitometric strip image varying in exposure longitudinally of the band in an accurate dimensional relation to the perforations.

1,762,926. SAFETY DEVICE FOR AUTOMOBILE STARTERS. ROBERT LITTLER, Sr., Philadelphia, Pa., assignor to Martha E. Littler, Philadelphia, Pa. Original application filed Mar. 7, 1927, Serial No. 173,405. Divided and this application filed Oct. 27, 1927. Serial No. 229,152. 6 Claims. (Cl. 123—179.)

1. A safety device for automobiles, comprising a shield adapted to be applied to and removed from the cranking end of the engine shaft of the automobile, and means for locking said shield against withdrawal while the transmission mechanism of the automobile is out of neutral.

1,762,927. STITCHING MACHINE. FRED L. MANNY, Benton Harbor, Mich., assignor to F. P. Rosback Company, Benton Harbor, Mich. Filed June 20, 1929. Serial No. 372,330. 31 Claims. (Cl. 271—89.)



1. In a structure of the class described, a conveyor comprising a plurality of work supporting rollers adjustable longitudinally of the conveyor and relative to each other, a plurality of driving rollers cooperating with said supporting rollers and independently adjustable relative to each other, means for adjustably supporting said driven rollers in operative relation to said supporting rollers, and means for automatically moving one of said driving rollers to and from work engaging position.

1,762,928. WATER-RESISTANT PAPER. GEORGE JAMES MANSON, Hawkesbury, Ontario, Canada. Filed Mar. 14, 1927. Serial No. 175,440. 11 Claims. (Cl. 92—21.)

5. A water resistant paper made from pulp containing a non-fouling wax composition whereby said paper is substantially free from wax spots.

1,762,929. METHOD OF TREATING PAPER PULP TO OBTAIN PAPER OF IMPROVED WATER RESISTANCE. GEORGE JAMES MANSON, Hawkesbury, Ontario, Canada. Filed Mar. 14, 1927. Serial No. 175,427. 20 Claims. (Cl. 92—21.)

2. In the process of making paper manufactures, the step which comprises adding to paper pulp a wax dispersion composition which is at least partially pre-set.

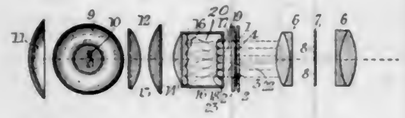
1,762,930. ART OF PAPER MAKING. GEORGE J. MANSON, Hawkesbury, Ontario, Canada. Filed Oct. 24, 1927. Serial No. 228,494. 30 Claims. (Cl. 92—21.)

1. In the art of paper making, the step which comprises incorporating rosin and an encysted water-proofing agent with wet paper pulp and sheeting the pulp on a filter-web without clogging the web with said agent.

1,762,931. GREASEPROOF PAPER OR PAPER WHICH RETAINS ITS STRENGTH IN CONTACT WITH GREASE. GEORGE JAMES MANSON, Hawkesbury, Ontario, Canada. Filed Mar. 14, 1927. Serial No. 175,428. 8 Claims. (Cl. 92—21.)

1. A rosin-sized water-resistant paper, stable toward grease, containing pre-set paraffin wax.

1,762,932. PROJECTION SYSTEM FOR COLOR PICTURES. JOSEPH MIHALYI, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed May 11, 1927. Serial No. 190,509. 6 Claims. (Cl. 88—16.4.)

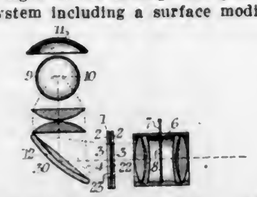


1. In a projector, a projection gate, a projection objective in front of said gate, a filter comprising color sections also in front of the gate and associated with said objective, a light source behind the gate and positioned to throw a beam of light in a path through said gate, objective and filter, a condensing system in said path between the lamp and the gate and including a series of lens elements transversely of the beam and constituting a multiple projection system projecting a plurality of images of the light source over the area of the filter.

1,762,933. PROJECTION SYSTEM FOR COLOR PICTURES. JOSEPH MIHALYI, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed May 11, 1927. Serial No. 190,510. 5 Claims. (Cl. 88—16.4.)

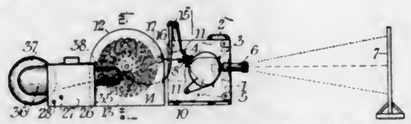
1. In a projector, a projection gate, a projection objective in front of said gate, a filter comprising color sections also in front of the gate and associated with said objective, a light source behind the gate, and a condenser system between the light source and the gate and projecting an

image of the light source through the gate and upon the filter, said system including a surface modified to diffuse



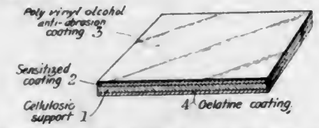
light projected therethrough, the extent of diffusion being such that an otherwise sharp image is rendered blurred but still visible as an image.

1,762,934. COMBINED HUMIDIFIER AND PROJECTOR. PAUL C. SEEL, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Feb. 10, 1927. Serial No. 167,310. 5 Claims. (Cl. 88—17.)



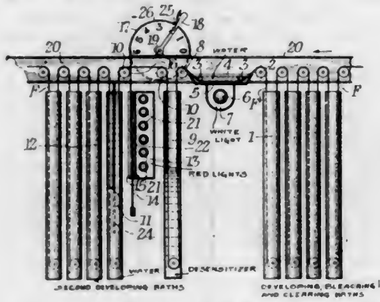
1. Motion picture apparatus comprising a projection gate, a film magazine, mechanism for feeding and directing an endless band of film from said magazine to said gate and from said gate to the magazine, means for circulating and humidifying the air in said magazine for maintaining the atmosphere in said magazine in a condition of high humidity.

1,762,935. ANTIABRASION PHOTOGRAPHIC COATING. SAMUEL E. SHEPPARD and JAMES G. MCNALLY, Rochester, N. Y., assignors to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Feb. 19, 1929. Serial No. 341,195. 2 Claims. (Cl. 95—9.)



1. An article of manufacture comprising a transparent support, a layer of sensitized photographic material mounted thereon, and a covering of protective material for said layer containing poly vinyl alcohol.

1,762,936. PHOTOGRAPHIC REVERSAL PROCESS. MERRILL W. SEYMOUR, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Aug. 21, 1928. Serial No. 301,068. 14 Claims. (Cl. 95—5.)

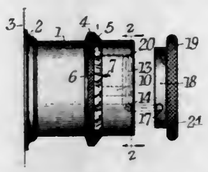


1. In a process of making photographic images by reversal from a photographic element containing an image and containing light sensitive salts, the steps of giving said element an exposure to an actinic light and an exposure to a non-actinic light capable of lessening the effect of the exposure to actinic light, the last named exposure being controlled in accordance with the printing characteristics of the element.

1,762,937. PROCESS OF SPRAY-DRYING CELLULOSE ACETATE SOLUTIONS. CYRIL J. STAUB, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Mar. 2, 1928. Serial No. 258,689. 3 Claims. (Cl. 260—102.)

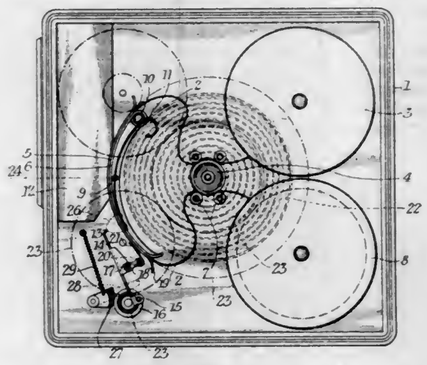
1. In the process of preparing cellulose acetate, spraying in fine droplets a flowable reaction mixture comprising cellulose acetate, acetic acid and an organic liquid which is miscible therewith and highly volatile, into a desiccating gaseous vehicle which takes up vapors of acetic acid and of said liquid with great rapidity thereby disrupting the particles and converting the spray into a fine power the particles of which are rough surfaced and highly permeable to liquids.

1,762,938. OPTICAL EQUIPMENT FOR PHOTOGRAPHIC CAMERAS. DONALD H. STEWART, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Oct. 24, 1928. Serial No. 314,781. 16 Claims. (Cl. 95—8.5.)



1. In an optical equipment for cameras, the combination with an objective and a mount therefor, of a diaphragm therefor including a movable member for adjusting the diaphragm opening, a filter holder adapted to slide upon the objective mount, and cooperating means on the diaphragm adjusting mechanism and the filter holder operative to move the mechanism and adjust the diaphragm when the holder is slid upon the objective mount.

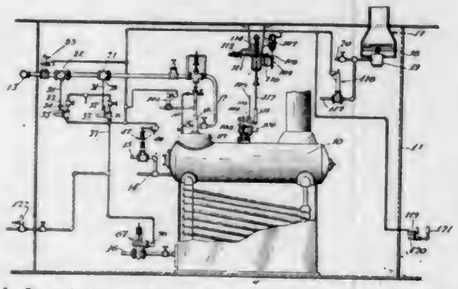
1,762,939. FILM-MOVING MECHANISM. OTTO WITTEL, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed June 10, 1925. Serial No. 36,291. 1 Claim. (Cl. 88—18.4.)



In a motion picture apparatus having a frame and a motor carried thereby, mechanism driven by said motor and including an arm with a claw, a link pivoted to said arm and to said frame, and means to reciprocate said arm, whereby the claw is moved through a closed path, members

forming a guideway for a film strip, a portion of said path intersecting said guideway whereby the claw may engage and move a film, and a spring between the frame and the link and adapted to oppose and be tensioned by the movement of the link when the claw is being moved along its path outside of said guideway, and adapted to assist in the movement of the link and the mechanism connected thereto, when the claw is in the film engaging portion of its path, the force exerted by the spring alone being insufficient to move the film.

1,762,940. SAFETY DEVICE FOR BOILERS. PHILIP C. WOOD, Johnstonville, Calif. Filed Sept. 22, 1926. Serial No. 137,079. 10 Claims. (Cl. 122—504.)



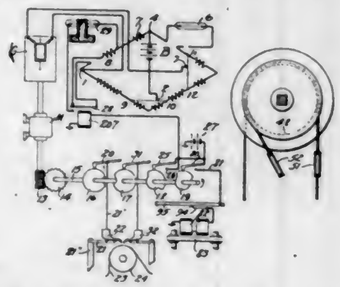
1. In a boiler system wherein there are a plurality of boilers supplying a main steam pipe through outlet pipes, means disposed in each outlet pipe automatically preventing the reversal of steam flow therethrough, and means operable by said means for increasing the supply of feed water to the boiler with which the outlet pipe is associated.

1,762,941. PAPER-INSULATED CONDUCTOR. ERNEST B. WOOD, Chatham, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed May 29, 1926. Serial No. 112,532. 7 Claims. (Cl. 173—264.)



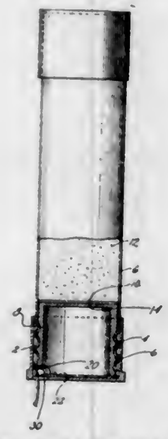
1. An electrical conductor comprising a metallic core, a coating of loose fibrous material thereon and a layer of textile material enclosing said fibrous material coating, said coating and said layer of textile material being impregnated with cellulose-acetate.

1,762,942. MEASURING AND RECORDING DEVICE. JAMES C. WRIGHT, Maplewood, N. J., EDMUND B. WHEELER, New York, N. Y., and ERNEST B. WOOD, Chatham, N. J., assignors to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 9, 1923. Serial No. 630,811. 4 Claims. (Cl. 234—1.5.)



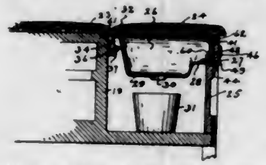
1. In combination, means including a Wheatstone bridge for measuring the values of two quantities, and a translating mechanism positioned under control of said bridge for determining a third value which is a function of the two measured values.

1,762,943. CONTAINER. AARON ZAUDER, Brooklyn, N. Y. Filed July 14, 1928. Serial No. 292,855. 11 Claims. (Cl. 221—79.)



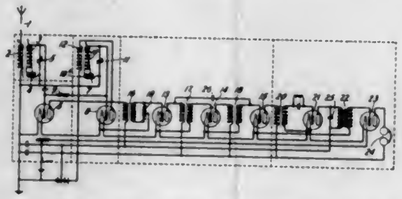
1. A container comprising a tube of material adapted to be readily deformed, a closure located in one end of the tube, provided with a tube-wall-engaging thread, and into threaded engagement with which the adjacent portion of the wall of the tube is deformed, and means carried by said closure and engaging the opposite face of the tube wall for depressing a portion of the tube wall into the thread groove of said closure.

1,762,944. EXAMINING AND IRRIGATING TABLE. HARRY S. ALLISON, Indianapolis, Ind., assignor to William D. Allison, Indianapolis, Ind. Filed Apr. 20, 1927. Serial No. 185,131. 14 Claims. (Cl. 45—50.)



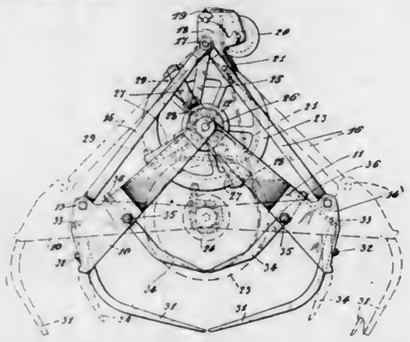
1. In an examining table, a top divided into two sections, one of said sections being removable, and a basin under the removable section, and means for rocking one edge said basin above the level of the removable section.

1,762,945. RADIO RECEIVING SYSTEM. SIDNEY E. ANDERSON, Maplewood, N. J., assignor to Western Electric Company, Incorporated, a Corporation of New York. Filed Aug. 20, 1925. Serial No. 51,391. 4 Claims. (Cl. 179—171.)



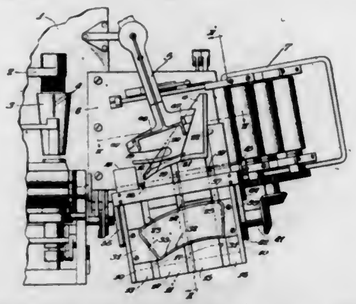
2. An amplifier comprising a plurality of tandem connected circuits, each selective of a wave to be amplified and including a three-electrode space discharge device, means for supplying to said amplifier a wave extending over a relatively wide frequency band, and means for preventing distortion of said wave, said last mentioned means comprising a capacity element connecting the plate of one discharge device to the grid of a following discharge device other than the next succeeding device.

1,762,946. BUCKET OR GRAPPLE. HERBERT S. ATKINSON, East Orange, N. J., assignor to The Hayward Company, New York, N. Y., a Corporation of New York. Filed June 4, 1926. Serial No. 113,683. 5 Claims. (Cl. 294—112.)



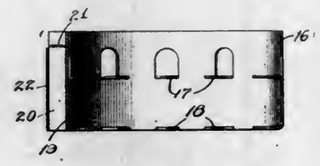
1. The combination with a grapple having pivoted scoop sections each comprising one-piece members including side, rear and top portions, of a plurality of tine-members depending from the rear portions of said sections and having their upper ends secured to said rear portions and their tips attached to said top portions, and a second set of tine-members arranged inwardly of the first-mentioned tine-members and having their upper ends secured to said side portions and their tips attached to said top portions.

1,762,947. BLANK-FEEDING MACHINE. CESARE BARBIERI, New York, N. Y., assignor, by mesne assignments, to Vortex Cup Company, Chicago, Ill., a Corporation of Delaware. Original application filed Oct. 21, 1927, Serial No. 227,657. Divided and this application filed July 30, 1928. Serial No. 296,327. 12 Claims. (Cl. 271—44.)



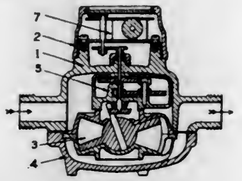
1. In a machine of the class described the combination with a slotted table having a centering recess in one end thereof, of a blank holding magazine mounted thereon, roller means for discharging a blank from said magazine, a plurality of bars slidably mounted in said slotted table and having the ends thereof shaped to complementally fit the edges of a blank, and means for simultaneously operating said bars to cause the same to engage the discharged blank and advance the same into a centered position in said recess.

1,762,948. CONICAL CUP DISPENSER. CESARE BARBIERI, New York, N. Y., assignor, by mesne assignments, to Vortex Cup Company, Chicago, Ill., a Corporation of Delaware. Filed Oct. 31, 1928. Serial No. 316,282. 16 Claims. (Cl. 312—43.)



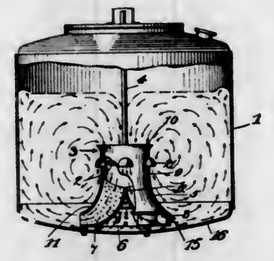
1. A cup dispenser comprising a container adapted to receive a stack of nested cups, a base ring secured to said container, a supporting housing for removably receiving said base ring, a plurality of groups of radially directed members within said supporting housing with the members of one group positioned directly below the members of another group and arranged parallel thereto, and latching means carried by said base ring adapted to lockingly engage with members of one of said groups to hold the container and said base ring latched within said supporting housing.

1,762,949. LIQUID METER. ROBERT S. BASSETT, Buffalo, N. Y. Filed Oct. 11, 1927. Serial No. 225,492. 5 Claims. (Cl. 73—98.)



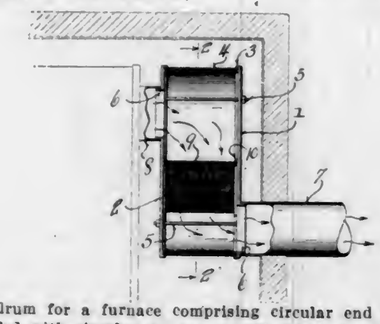
5. In a liquid meter, an indicating mechanism, a volume measuring mechanism and a connecting mechanism, including wear exposed gears having an outer shell member made of a hard wear-resisting metallic material containing chromium, and an inner core member made of material that is substantially softer than said outer shell member, substantially as and for the purpose described.

1,762,950. MIXING APPARATUS. HENRY S. BEERS, Westport, Conn., assignor to The Turbo-Mixer Corporation, New York, N. Y., a Corporation of New York. Filed Apr. 24, 1929. Serial No. 357,719. 19 Claims. (Cl. 259—96.)



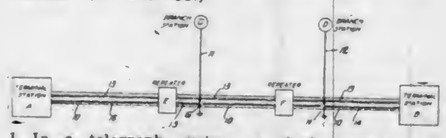
1. Mixing apparatus comprising a tubular flow director having a generally flaring form in the direction of flow, a propeller in the intake portion of the director, and discharge ports in the director adjacent the propeller, and means at the ports for deflecting material and avoiding dead circulation areas adjacent the director.

1,762,951. DRUM FOR FURNACES. HERMAN BEESE, Wausau, Wis., assignor to Ribside Furnace Company, Wausau, Wis. Filed Dec. 10, 1928. Serial No. 325,046. 1 Claim. (Cl. 126—99.)



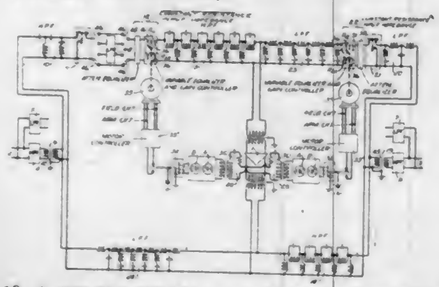
A drum for a furnace comprising circular end plates provided with circular grooves, a cylindrical sheet metal body portion having its edges seated within said grooves, bolts extending through said end plates for clamping said end plates to said body portion, one of said end plates having an inlet aperture above its transverse center, the other of said plates having an outlet apertured below its transverse center, and an inverted V-shaped baffle plate located immediately above said outlet aperture and clamped between said end plates beneath the inlet aperture with its ends arranged in slight spaced relation with the body portion to form a restricted passage upon each side of the baffle plate.

1,762,952. DUPLEX TELEGRAPH SYSTEM. JOHN H. BELL, South Orange, N. J., assignor to Western Electric Company, Inc., New York, N. Y., a Corporation of New York. Filed Feb. 28, 1928. Serial No. 257,574. 3 Claims. (Cl. 178—58.)



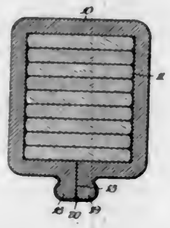
1. In a telegraph system, a single open-wire line, a duplex station for said line, a pair of conductors, additional conductors of other signaling circuits immediately adjacent to said pair, a duplex cable station for said pair, said open-wire line being directly connected to the free end of one conductor of said pair, and means associated with the free end of the other conductor of said pair to balance said open-wire line with respect to said cable station.

1,762,953. SIGNALING SYSTEM. HAROLD S. BLACK, East Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed June 26, 1928. Serial No. 288,355. 19 Claims. (Cl. 178—44.)



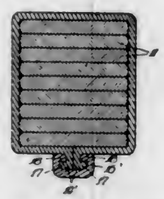
19. A two-way repeater comprising a unidirectionally transmitting amplifier common to both directions of transmission and means responsive to amplified waves from said amplifier for controlling the transmission equivalent of said repeater independently for the two directions.

1,762,954. COVER FOR VEHICLE SPRINGS. STANLEY BOLIN, Chicago, Ill., assignor of one-half to Leonard M. Bolin, Chicago, Ill. Filed Dec. 4, 1925. Serial No. 73,151. 5 Claims. (Cl. 267—37.)



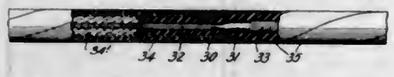
1. A spring cover which consists of a casing of soft rubber molded to fit about the spring and slitted longitudinally to permit application to or removal from the spring upon lateral expansion at the slit, said casing being so molded that the walls of the same will press resiliently against the spring to produce a sealed closure.

1,762,955. COVER FOR VEHICLE SPRINGS. STANLEY BOLIN, Chicago, Ill., assignor of one-half to Leonard M. Bolin, Chicago, Ill. Filed Nov. 29, 1926. Serial No. 151,274. 4 Claims. (Cl. 267—37.)



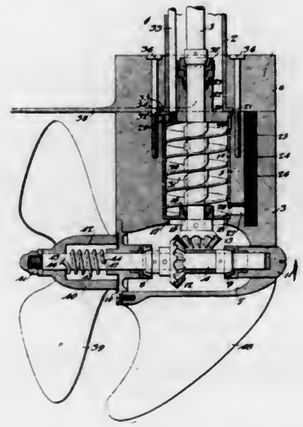
4. A spring cover, comprising a longitudinally slitted casing having ribs along the edges of the slit, and a longitudinally grooved strip adapted to fit over and embrace the ribs, the interfitting rib and strip portions being formed of readily flexible material in order to conform to the flexing of the spring and being of such cross-sectional area as to present an interlocking dove-tailed joint therebetween, and certain of such portions being resiliently yieldable whereby to permit assembling and disassembling of the same.

1,762,956. SIGNALING CONDUCTOR. OLIVER E. BUCKLEY, Maplewood, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Nov. 30, 1926. Serial No. 151,680. 11 Claims. (Cl. 178—45.)



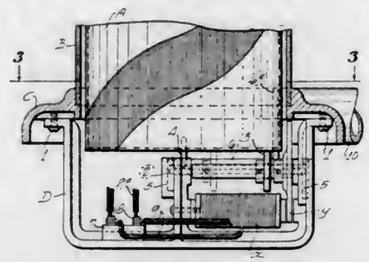
1. A loaded submarine cable having loading of different values of inductance per unit of length for some sections than for others, and having insulation for giving said cable sections different values of capacitance per unit of length, the loading and the insulation being so proportioned that the ratio of the inductance to capacitance in each section of the cable is substantially the same per unit of length for all sections.

1,762,957. OUTBOARD MOTOR. WILLIAM F. A. BUEHNER, Miami, Fla., assignor, by mesne assignments, to Outboard Motors Corporation, a Corporation of Michigan. Filed Dec. 17, 1927. Serial No. 240,868. 3 Claims. (Cl. 115—17.



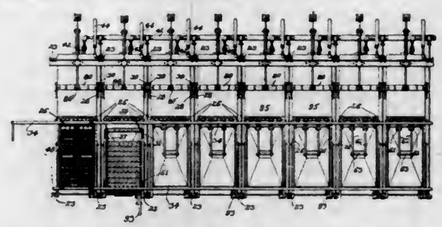
1. An outboard motor structure having a downwardly extending power shaft encased by a supporting housing, a connecting housing mounted on the supporting housing, a pump and propeller housing removably connected to the connecting housing and provided with an opening to receive a pump and an inlet passage communicating therewith, and a pump mechanism to be assembled on the power shaft and removably fitted as a unit within the pump housing when the mounting housing is detached.

1,762,958. ELECTRICALLY-OPERATED BARBER POLE. LIONEL A. CARTER, Webster Groves, and CHRISTIAN P. STEINMETZ, St. Louis, Mo., assignors to Koken Companies, St. Louis, Mo., a Corporation of Delaware. Filed Dec. 24, 1928. Serial No. 328,224. 5 Claims. (Cl. 40—126.)



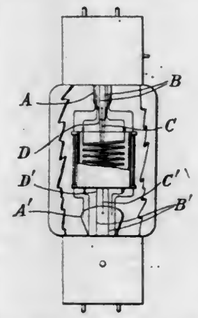
1. A barber pole provided with a vertically-disposed rotatable striped member, a housing for said member comprising a bottom supporting bracket, an electric induction motor of the disk type, a drive shaft connected to the disk of said motor, a driving means for transmitting rotary motion to said rotatable member from said drive shaft, a supporting frame for said motor, drive shaft, and driving means that is detachably connected to said supporting bracket, and a lubricating means combined with said frame and capable of being replenished from the exterior of the pole for keeping said drive shaft in a lubricated condition.

1,762,959. ICE-CREAM-CONE-MAKING MACHINE. JAMES DENARO, Cambridge, Mass. Filed Dec. 28, 1925. Serial No. 77,911. 15 Claims. (Cl. 107—66.)



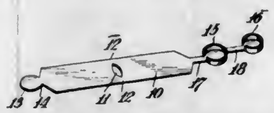
1. In a machine for making edible containers in combination, a main frame, a plurality of baking units therein, each baking unit comprising a heater, a core head having a multiplicity of cores located at the heater, and a subframe, provided with a multiplicity of molds, slidable to and from the heater, and a batter supply device successively movable to each of said plurality of baking units to register with the mold frames when the latter have been moved from the heater.

1,762,960. DUPLEX ELECTRON-DISCHARGE DEVICE. WILLIAM J. DESMOND, Harrison, N. J. Filed Aug. 1, 1924. Serial No. 729,472. 2 Claims. (Cl. 250—27.5.)



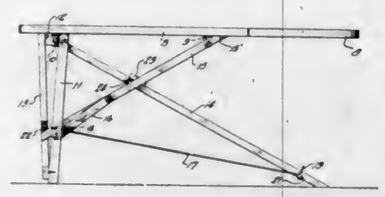
1. In an electron discharge device comprising a sealed evacuated glass envelope, having stem presses sealed into said envelope at opposite ends thereof, said stems being set at an angle to each other but coincident with the longitudinal axis of the tube and each stem having a hair pin filament mounted thereon, the said filaments interlinking without interference with each other.

1,762,961. SEAL. NORMAN DESSAUER, New York, N. Y., assignor to The International Seal and Knot Protector Co., New York, N. Y., a Corporation of New York. Filed Jan. 11, 1929. Serial No. 331,873. 2 Claims. (Cl. 292—315.)



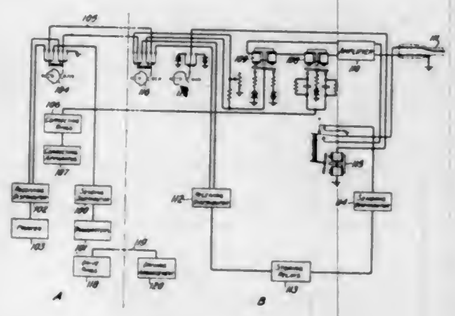
1. A seal comprising a strap of sheet metal, including a body portion, a substantially circular head at one end in the plane of the body portion and connected to the body portion by a narrow neck, a cup at the opposite end, said cup having a bottom wall in the plane of the body portion and connected thereto by a narrow neck and having an upstanding peripheral wall, the internal diameter of said cup being greater than the external diameter of said head, and the peripheral wall of said cup being bendable into position above said head when the latter is placed within said cup with said necks superposed.

1,762,962. FOLDING IRONING TABLE. JOHN P. DORAU, Horicon, Wis. Filed Aug. 22, 1927. Serial No. 214,630. 2 Claims. (Cl. 68—10.)



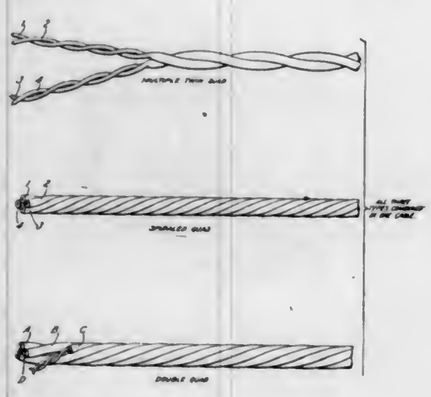
1. An ironing table, comprising a board member, a pair of legs and a third leg pivotally connected to the bottom portion of the board near one end portion thereof and movable away from the board to extended diverged positions, a pair of brace members pivotally connected at one pair of ends to the bottom portion of the board medially of its ends, the other ends of said brace members being free, said brace members and said third leg crossing each other medially of their lengths when moved away from the board, the outer end portions of said braces releasably bearing against the inner sides of said pair of legs and exerting a lateral pressure thereon, links pivotally connected with said braces and said pair of legs, means connected with the links and releasably engageable with the third leg to hold it in open position and slidable thereon, and means carried by the third leg and engageable with said brace members to hold the same in open position.

1,762,963. MEANS FOR SYNCHRONIZING ROTARY DEVICES. ANDREW D. DOWD, Hoboken, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 26, 1928. Serial No. 272,900, and in Great Britain Oct. 31, 1927. 4 Claims. (Cl. 178—53.)



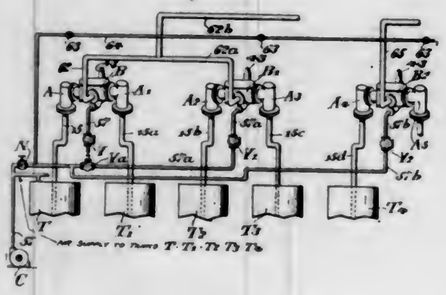
1. In a synchronous telegraph system, a transmission line, distributors and brushes therefor connected to opposite ends of said line, synchronizing means for said distributors controlled by the distributor at the sending end of said line, means for stepping the brushes around the distributor at the receiving end in both forward and backward directions with respect to the direction of rotation, automatic means for effecting the change of brush stepping from one direction to the other, and means for completing each step of said brush before the second mentioned means is permitted to again operate.

1,762,964. LOADED CABLE CIRCUIT. AUGUST EBELING, Charlottenburg, Germany, assignor to Siemens & Halske Aktiengesellschaft, Siemensstadt, near Berlin, Germany, a Company of Germany. Filed May 18, 1929, Serial No. 364,145, and in Germany May 26, 1928. 4 Claims. (Cl. 178—45.)



1. In a telephone cable, spiraled quads forming phantom and side circuits, multiple twin quads forming phantom and side circuits, and double quads forming phantom and side circuits, said side circuits and phantom circuits being loaded.

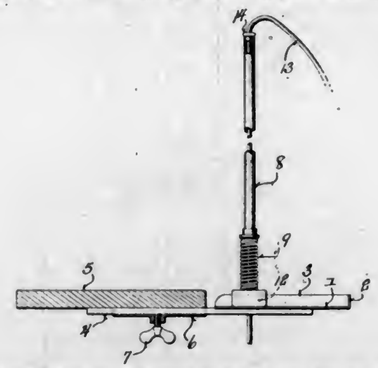
1,762,965. LIQUID-DISPENSING SYSTEM. CARL H. EHLERS, Penfield, Pa., assignor to The Atlantic Refining Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Nov. 6, 1925. Serial No. 67,288. 15 Claims. (Cl. 221—74.)



1. In a liquid dispensing system, a plurality of liquid containing tanks connected to a discharge conduit, valve structure normally preventing passage of liquid to said conduit from said tanks and operable to effect solely passage of liquid to said conduit from a selected tank, means for holding said valve structure in position to pass liquid to said conduit from said selected tank, and means controlling said last mentioned means for permitting said valve structure to resume normal position.

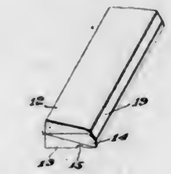
1,762,966. COMBINED IRON HOLDER AND CORD TAKE-UP. FLORA ELLINGER, Milwaukee, Wis. Filed June 21, 1928. Serial No. 287,123. 1 Claim. (Cl. 248—30.5.)

In a take-up device, a bracket, a threaded boss, disposed at an angle with respect to the bracket and formed with a central bore, a tubular upright, a removable collar at the upper end of the upright, an enlarged threaded hub



at the lower end of the upright and a coil spring having one end engaged with the threaded hub and the other end engaged with the threaded boss.

1,762,967. WELTING. WILLIAM J. FALLON, Jr., Boston, Mass. Filed Mar. 5, 1920. Serial No. 344,323. 5 Claims. (Cl. 36—78.)



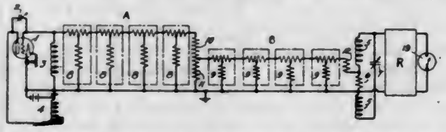
1. As an article of manufacture, a strip of welting of increased thickness formed of three strips of stock each wedge-shaped in cross-section and secured together one on top of the other with the thick portion of one wedge-shaped strip lying between the thin portions of the other two wedge-shaped strips.

1,762,968. COMPOSITE CONDUCTOR. FRANK F. FARNSWORTH, Flushing, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Nov. 27, 1926. Serial No. 151,171. 17 Claims. (Cl. 178—45.)



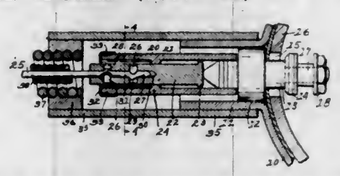
1. A signaling conductor comprising a plurality of component strands in close contact, and a thin layer of molybdate powder between the component strands.

1,762,969. HIGH-FREQUENCY ATTENUATING NETWORK. JOHN F. FARRINGTON, Flushing, N. Y., assignor, by mesne assignments, to Western Electric Company, Incorporated, a Corporation of New York. Filed Apr. 10, 1925. Serial No. 22,028. 9 Claims. (Cl. 178—44.)



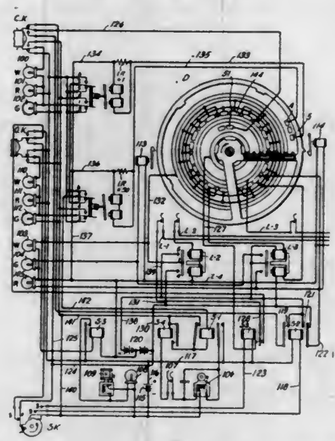
1. In a system including a source of oscillations and a load circuit, means for varying the attenuation of said oscillations comprising an attenuation network composed of a plurality of attenuation units each having a fixed attenuation characteristic which is different from that of the others, comprising groups each having a constant characteristic impedance regardless of the number of units and adapted to operate between different terminating impedances, and means for inserting each unit in the network at will while maintaining a continuity of circuit between the remaining units, said network being connected between said source of oscillations and said load.

1,762,970. IGNITION-CIRCUIT-CONTROL MECHANISM. EDWARD FIEDLER, Wauwatosa, Wis., assignor to Clum Manufacturing Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Feb. 8, 1928. Serial No. 252,752. 12 Claims. (Cl. 200—44.)



12. In a device of the character described, the combination with a cable, a cable actuator, a control actuator subject to a predetermined load, and a flexible sheath subject to relative variation in length with respect to said cable; of means for connecting said cable to said actuators, one of said connections including an extensible portion including means resisting its extensible movement with a force greater than that required to overcome the load to which said control actuator is subject, and yieldable in response to predetermined degrees of force exceeding the resistance of said means, whereby said last mentioned connection is self adjusting to compensate for such relative variation.

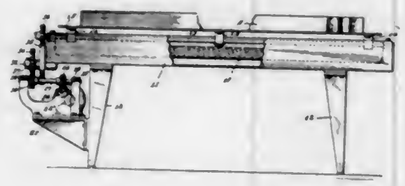
1,762,971. REMOTE-CONTROL POWER SYSTEM. JOSEPH C. FIELD, Maplewood, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Feb. 2, 1929. Serial No. 337,039. 3 Claims. (Cl. 177—353.)



1. In a remote control system, the combination with a dispatcher's station and a substation, power switches thereat, a pair of lamps at the dispatcher's station for each power switch, a polarized relay at the dispatcher's station for each pair of lamps, auxiliary signaling contacts on each power switch, battery connections thereto adapted to be reversed by the shifting of the lower switch to cause said relay to change the indications of said lamps, of a

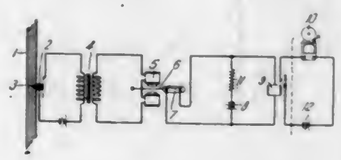
series of polarized relays at the substation for said power switches having similar battery connections adapted to be substituted for the auxiliary signaling contacts of the corresponding switches, electromagnetic means at the substation controlled from the dispatcher's station for effecting the substitution, a signal at the dispatcher's station operated thereby, means at the dispatcher's station for operating a given polarized relay at the substation, said relay in shifting the battery connections operating the corresponding polarized relay at the central office to change the indications of the pair of lamps controlled thereby, means controlled by the dispatcher for restoring said electromagnetic means, a signal at the dispatcher's station operated thereby, a circuit for applying power to the shifting magnet of the selected switch, said circuit including contacts of the polarized relay at the substation whose position has been changed, and means controlled by the dispatcher for closing said circuit.

1,762,972. PLATE GLUE SPREADER. HARRY G. FRANCIS, Rushville, Ind. Filed Mar. 31, 1926. Serial No. 98,710. 3 Claims. (Cl. 91—47.)



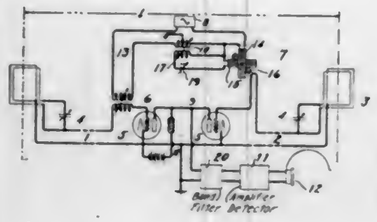
1. A device suitable for use in applying adhesive material to the faces of boards or the like, comprising an open-topped pan for containing a supply of the adhesive material, a substantially flat spreader plate pivotally mounted on a horizontal axis above the level of the adhesive in the pan and adapted to dip into and emerge from the adhesive material as it rotates, and means for moving said plate intermittently about its axis to invert and dip it periodically into the adhesive material in said pan and to come to rest thereabove in a predetermined position such that articles may be applied to and removed from its adhesive-covered surface.

1,762,973. ALARM SYSTEM. HALSEY AUGUSTUS FREDERICK, Mountain Lakes, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 28, 1926. Serial No. 105,089. 3 Claims. (Cl. 177—316.)



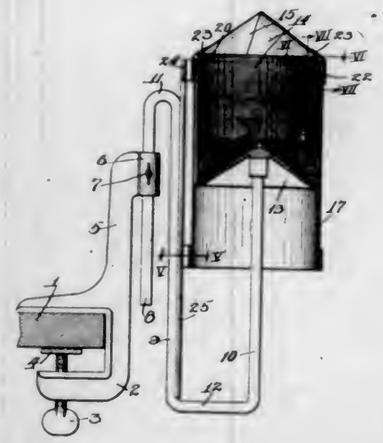
2. In a protective system for vaults, the combination with a vertical wall thereof of an electric circuit including a vibration responsive device having contacts and alarm means responsive to the operation of the contacts, the device being mounted on the wall and having its contacts adapted to be opened only by vibrations substantially perpendicular to the wall and within the frequency range to which the wall readily responds.

1,762,974. RADIO RECEIVING SYSTEM. HARALD TRAP FRIIS, Red Bank, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Oct. 30, 1924. Serial No. 746,753. 4 Claims. (Cl. 250—11.)



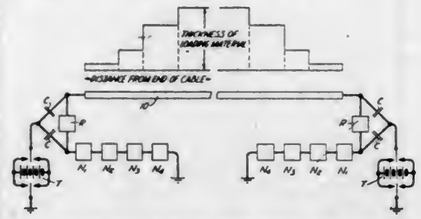
1. In a directive radio receiving system of the type in which electro-motive forces of different phases are produced in a plurality of receiving circuits from a space propagated wave and combined in a common signal circuit after separate demodulation with a common heterodyne wave, the combination with a plurality of wave receiving circuits of a source of heterodyne waves, a metallic circuit coupling said source to said circuits, and means included in said metallic circuit for independently adjusting the phase of the heterodyne waves in at least one of said wave circuits.

1,762,975. DISH DISPENSER. FRANK J. GETZ, Chicago, Ill., assignor, by mesne assignmnets, to Vortex Cup Company, Chicago, Ill., a Corporation of Delaware. Filed Nov. 2, 1928. Serial No. 316,666. 14 Claims. (Cl. 312—43.)



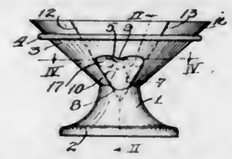
1. A dish dispenser comprising a supporting bracket, a dish support mounted thereon adapted to support a stack of nested sundae dishes in an inverted position and a magazine for enclosing the stack of dishes, said magazine having the exterior thereof slidably engaged with said bracket and adapted to drop by gravity a predetermined distance each time a dish is removed from the upper end of the magazine.

1,762,976. LOADED SIGNALING CONDUCTOR. JOHN J. GILBERT, Douglaston, N. Y., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Original application filed Mar. 5, 1924, Serial No. 696,981, and in France Jan. 6, 1924. Divided and this application filed May 31, 1928. Serial No. 281,617. 4 Claims. (Cl. 178—45.)



1. In inductively loaded signaling conductor having great overall attenuation and having continuously loaded sections in which the amount of the loading material per unit length of conductor is less on a section of said conductor adjacent an end thereof than on a section of said conductor more remote from the end.

1,762,977. SUNDAE DISH AND HOLDER AND METHOD OF ASSEMBLING THE SAME. WILLIAM ANSLEY GREEN, Toronto, Ontario, Canada, assignor, by mesne assignments, to Vortex Cup Company, Chicago, Ill., a Corporation of Delaware. Filed Nov. 8, 1928. Serial No. 318,057. 13 Claims. (Cl. 65—61.)



1. A holder for plaited sundae dishes of conical shape, said holder comprising a frusto-conical body arranged with its small end downward and open, a base rigidly secured thereon and open at its upper end to communicate with the opening in the lower end of the body, said body having a substantially key-shaped opening therein affording a guide tip and a pair of separated inwardly deflected tongues for engaging the plaited portion of a sundae dish.

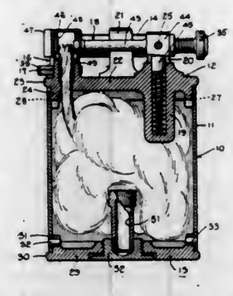
1,762,978. 3'-AMINO-4'-ALKYL ETHERS OF ORTHO BENZOYL BENZOIC ACID AND THE PROCESS OF MAKING SAME. IVAN GUBELMANN, HENRY J. WEILAND, and OTTO STALLMANN, South Milwaukee, Wis., assignors to the Newport Company, Carrollville, Wis., a Corporation of Delaware. Filed June 28, 1926. Serial No. 119,248. 3 Claims. (Cl. 260—64.)

1. The proces of preparing 3'-amino-4'-alkyl ether-ortho-benzoyl-benzoic acid, which comprises reducing 3'-nitro 4'-alkyl ether-ortho-benzoyl benzoic acid by means of a metal and an acid adapted to react with said metal to form nascent hydrogen, separating the metallic sludge and adjusting the solution to weak acidity toward methyl red and filtering off the product.

1,762,979. PROCESS OF RECOVERING RESORCINOL. IVAN GUBELMANN and CLYDE O. HENKE, South Milwaukee, Wis., assignors to The Newport Company, Carrollville, Wis., a Corporation of Delaware. Filed Dec. 24, 1927. Serial No. 242,514. 6 Claims. (Cl. 260—154.)

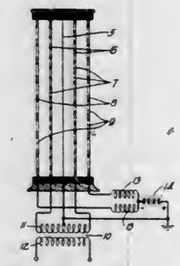
1. The process of recovering resorcinol from a resorcinol mass containing impurities extracted from rosin, which comprises dissolving the resorcinol out of the mass with water and recovering the resorcinol from the water solution of the resorcinol.

1,762,980. POCKET CIGAR LIGHTER. CHARLES HARDY, New York, N. Y., assignor to Wales Novelties Corporation, New York, N. Y., a Corporation of New York. Filed Nov. 7, 1927. Serial No. 231,569. 8 Claims. (Cl. 67—7.1.)



4. A lighter comprising a tubular casing of elongated cross section, and cast cover and bottom walls permanently fitted thereto, the said cover wall having integrally cast therewith supporting means and housing means for lighter operating elements and a depending marginal flange, the said bottom wall having integrally cast therewith an upstanding marginal flange, the said tubular casing having its top and bottom fitted over the said marginal flanges and making therewith permanent leak-proof joints, and additional interengaging means for mechanically locking the said tubular casing permanently to the said cover and bottom walls.

1,762,981. ACOUSTIC DEVICE. RALPH V. L. HARTLEY, South Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed June 6, 1928. Serial No. 283,200. 1 Claim. (Cl. 179—111.)

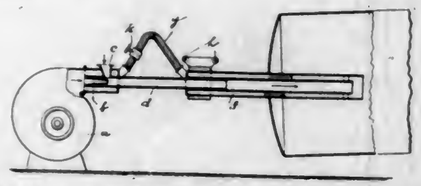


An acoustic device comprising a metallic diaphragm, a perforated plate member on each side of said diaphragm, a perforated grid member between each of said plate members and said diaphragm, a direct current source connected at its one pole to said disphragm and at its opposite pole to said plate members, and means for applying a varying electrical force to said grid members, the perforations in said grid and plate members being offset with respect to each other whereby an electrical charge of one polarity on said plate members may cause a charge of opposite polarity on said grids and through the perforations in said grid member on said diaphragm.

1,762,982. APPARATUS FOR BURNING COAL DUST. ALEXANDER HASSELBACH and FRITZ LUTHER, Dessau, Germany, assignors to G. Polysius, a Firm of Dessau, Germany. Filed Mar. 23, 1927, Serial No. 177,530, and in Germany Dec. 18, 1926. 2 Claims. (Cl. 110—104.)

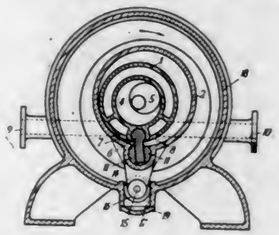
1. In combination a combustion chamber, a blower, a pair of concentric pipes having their respective inlet ends

connected to the outlet of the blower and their outlet ends projecting into said chamber, an injector nozzle in the inner pipe at the blower outlet, and means for delivering solid fuel in finely subdivided condition to the delivery end of said nozzle, whereby a mixture of air and fuel is delivered to the combustion chamber through the inner



pipe, and the air delivered through the outer pipe serves to protect said mixture from the heat of said combustion chamber while said mixture is in transit in the inner pipe, and also serves to furnish the additional air required for combustion of the fuel upon the delivery of the mixture to the chamber.

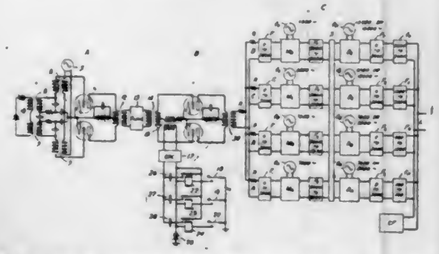
1,762,983. ENGINE, PUMP, COMPRESSOR, AND THE LIKE. HUGO HEINRICH, Zwickau, Germany. Filed May 16, 1928, Serial No. 278,277, and in Germany Aug. 16, 1927. 5 Claims. (Cl. 121—68.)



3. In a device of the kind described, in combination an inner stationary cylindrical member and an outer hollow cylindrical member of larger diameter than said stationary member and engaging therewith, means adapted to cause said outer member to eccentrically and engagingly oscillate along said interior member, an abutment rockingly mounted in said stationary member and in said outer member, a casing spacedly surrounding said two members, a projection on said outer member, guiding means on said projection engageable with portions of said casing preventing axial rotation of said outer member, and feeding and discharging means connected to the space between said two members

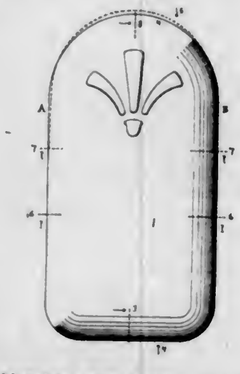
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1,762,984. SECRET-COMMUNICATING SYSTEM. RAYMOND A. HEISING, Millburn, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Oct. 8, 1928. Serial No. 310,966. 6 Claims. (Cl. 179—1.)



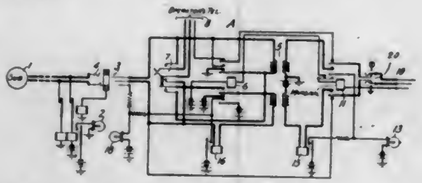
1. In secret transmission of signaling waves comprising a band of frequencies sufficiently wide to permit intelligible reception, the method comprising selecting the band from different portions of the total available signal frequency range from time to time during transmission, and purposely altering the waves in the band after its selection but prior to their transmission to render them difficult of reception.

1,762,985. COVER. HARRY HERSH, Milwaukee, Wis. Filed Feb. 4, 1926. Serial No. 85,871. 5 Claims. (Cl. 220—24.)



1. The combination with a base of substantially rectangular form having one end rounded, of a cup-shaped cover of flexible sheet material conforming substantially in shape and dimensions to the base, and fitted thereover with its ends and sides in contact with the base, portions of the sides of the cover adjacent the rounded end thereof being of less width than the portions of the sides adjacent the opposite end of the base, whereby by lateral pressure on said narrower portions of its side walls the cover may be elongated to separate the rounded end thereof from the corresponding end of the base, for the purpose described.

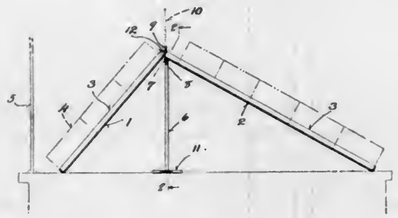
1,762,986. TELEPHONE SYSTEM. EDWARD E. HINRICHSEN, New York, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Mar. 30, 1927. Serial No. 179,438. Renewed Dec. 16, 1929. 8 Claims. (Cl. 179—41.)



1. In a telephone exchange system, incoming lines, outgoing lines, a link circuit connecting an incoming line with an outgoing line, a repeating coil associated with said link circuit, means for establishing a low resistance non-inductive path around said repeating coil through said link circuit, and means associated with certain of said outgoing lines for actuating said last mentioned means to establish said path responsive to the establishing of a connection between the link circuit and one of said last mentioned outgoing lines.

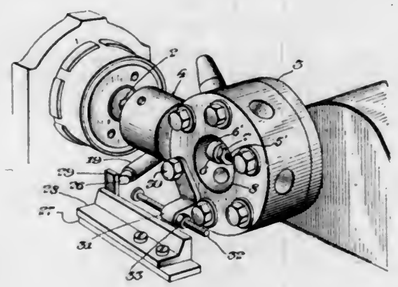
1,762,987. DISPLAY DEVICE FOR SHOW CASES, WINDOWS, AND SIMILAR PLACES. WILLIBALD HOFFMANN, Milwaukee, Wis. Filed Nov. 26, 1928. Serial No. 321,943. 4 Claims. (Cl. 211—160.)

1. A display rack for show cases, windows, and the like, said rack comprising a pair of trays having longitudinally extending marginal flanges hingedly joined adjacent the inner ends of said trays, said trays being adapted to be arranged at an angle to each other with



their outer edges resting upon a supporting surface, and a pair of supporting legs pivotally joined to one of said trays adjacent their inner ends.

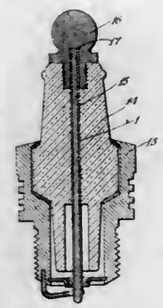
1,762,988. THREADING-DIE-OPERATING ATTACHMENT. WILLIAM J. HOGG, Cleveland, Ohio, assignor to The National Acme Company, Cleveland, Ohio, a Corporation of Ohio. Filed Feb. 15, 1928. Serial No. 254,358. 24 Claims. (Cl. 29—57.)



1. A threading die comprising a closing cap, a chaser-carrying body shiftable in said cap, means for shifting the body relatively to the cap and comprising a shiftable arm having means engaging the body to shift the body, and shiftable means located adjacent to the outer end of said arm and automatically shiftable relatively to the arm to permit said arm to pass an obstruction in the path thereof.

20. The combination of a threading die adapted to be carried by a sliding turret and comprising a closing cap and a chaser-carrying body in said cap shiftable relatively to each other, means for shifting the shiftable member and comprising shiftable means located exteriorly of the cap and in engagement with the shiftable member, and fixed means for engaging said shiftable means on the sliding movement of the turret, said shiftable means having means shiftable relatively thereto for permitting the passage of the shiftable means of said fixed means in one direction.

1,762,989. SPARK PLUG. ROY T. HURLEY, Dobbs Ferry, N. Y., assignor to The B. G. Corporation, a Corporation of New York. Filed Mar. 15, 1923. Serial No. 625,411. 5 Claims. (Cl. 123—169.)

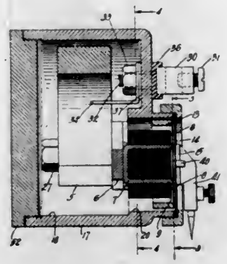


1. An electrode for spark plug comprising a composite wire composed of an outer sheath of heat-resisting metal and a core of a good heat-conducting metal, said core being co-extensive in length with the outer sheath.

1,762,990. PREPARATION OF ELECTRICAL RESISTANCE UNITS. LESTER L. JONES, Oradell, N. J., and JOSEPH A. FLANZER, Brooklyn, N. Y., assignors, by direct and mesne assignments, to Technidyne Corporation, New York, N. Y., a Corporation of New York. Filed Oct. 8, 1925. Serial No. 61,326. 2 Claims. (Cl. 201—76.)

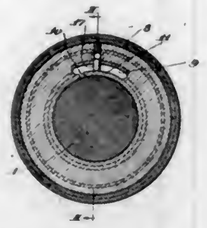
1. A free flowing electrically conductive paint adapted to be applied in a thin homogeneous layer to a surface for the manufacture of resistances comprising a mixture of one part of colloidal graphite, by volume, with about seven parts of water glass, by volume, the mixture being proportioned to obtain a consistency such that when applied a smooth even film of desired uniform thinness is produced.

1,762,991. ELECTROMAGNETIC REPRODUCER OR RECORDER. WARREN C. JONES, Flushing, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed July 14, 1927. Serial No. 205,562. 4 Claims. (Cl. 179—100.41.)



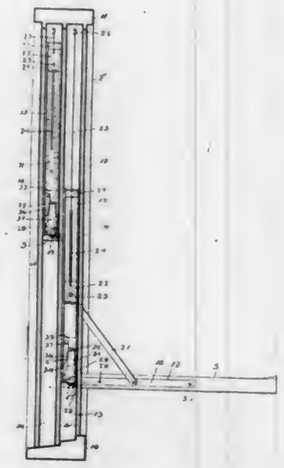
1. In a reproducer in combination a magnet system comprising a permanent magnet, an electromagnet carried by one leg of the permanent magnet and an extension carried by the other leg of the permanent magnet and constituting a return path for magnetic flux, a vibrating stylus operated armature, viscous material for damping the vibrations of the armature by lateral movement of the viscous material with respect to the armature and a housing enclosing the magnet system and containing the viscous damping material.

1,762,992. SURFACE-MARKING ROLL. ROY H. KELLY, Rothschild, Wis., assignor to Marathon Paper Mills Company, Rothschild, Wis., a Corporation of Wisconsin. Filed Mar. 28, 1928. Serial No. 265,314. 4 Claims. (Cl. 101—23.)



1. A surface marking roll, comprising a shaft, collars mounted thereon bearing a mark, design, symbol or the like, each of said collars being slotted to form a tongue adapted to frictionally engage said shaft throughout its length, to thereby prevent the collar from rotating in either direction on said shaft, and means for bringing pressure to bear against said tongue to increase the friction and maintain the collars in position on said shaft.

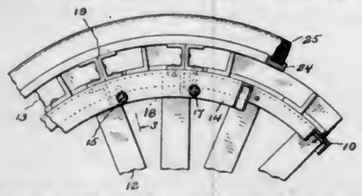
1,762,993. WINDOW STRUCTURE. WILLIAM J. KLEMM, Chicago, Ill., assignor to Ruda Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 19, 1929. Serial No. 356,498. 11 Claims. (Cl. 20—49.)



1. In window structures, the combination of a window frame having upright side channels, runners slidable in said channels, a window sash pivoted to said runners to swing relative thereto into open or closed position, window weights connected with said runners, brake shoe structures pivoted on said runners, and cam projections on said sashes rotated during swinging movement of a sash to open position to swing and force said brake shoe structures into braking engagement with the sides of said channels.

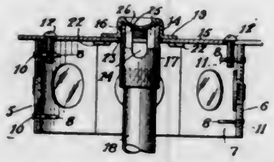
1,762,994. TIRE SUPPORT. HERBERT L. KNEEN, Hamden, Conn. Filed Sept. 1, 1927. Serial No. 216,867. 6 Claims. (Cl. 301—39.)

6. An extension rim for a tractor wheel or the like, substantially U-shape in cross section, having flanges between the parallel walls thereof which are apertured to receive fastening members, a plurality of standards secured to the rim thereof and projecting radially therefrom, and a tire rim encircling said standards and fixed thereto, said standards being composed of channel irons having their



webs secured together, with the bases thereof projecting laterally beyond one face of the rim and pointed relatively thereto.

1,762,995. FIXTURE SUPPORT. JULIAN GORDON KNIGHT, Brooklyn, N. Y. Filed Mar. 16, 1925. Serial No. 15,815. 3 Claims. (Cl. 247—20.)



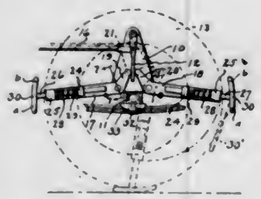
1. An outlet box having an opening in the top of the same for the passage of a fixture mounting member and a pressed metal hollow fixture support closed at its upper end and having a base secured to the top of the box in position with the closed hollow portion of the support in registry with the opening in the top, said hollow closed portion of the support projecting above the top of the box and being internally screw threaded to match the complementary screw threads on a fixture mounting member.

1,762,996. LOADING OF SIGNALING CONDUCTORS. VICTOR E. LEGG, East Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Nov. 8, 1928. Serial No. 317,931. 7 Claims. (Cl. 178—45.)



1. A conductor surrounded with magnetic material, the material on different portions of the conductor being of different effective permeability and the lower permeability material having the lower resistivity.

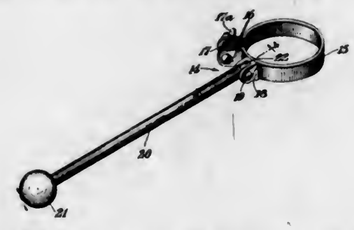
1,762,997. WHEEL CHOCK. WILLIAM L. LIGHTFORD, Indianapolis, Ind. Filed Jan. 5, 1927. Serial No. 159,081. 4 Claims. (Cl. 188—5.)



1. The combination of a wheel, an arm pivoted eccentrically of the wheel to swing to the rear of the wheel, a second arm pivoted eccentrically of the wheel to swing to the front of the wheel, a leg slidingly carried by each of said two arms, yielding means resisting the outward travel of the legs, a shoe on the outer end of each leg, means

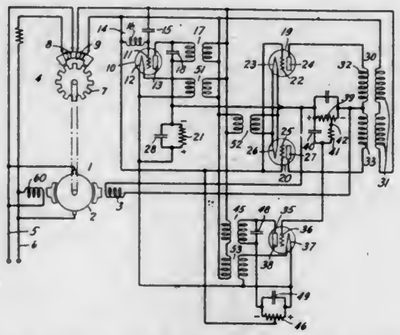
normally holding said arms upwardly to maintain said shoes in positions out of contact with said wheel, selective means for dropping either of said shoes to contact the periphery of the wheel whereby the shoe actuated may frictionally engage said wheel and be carried along by the wheel and a stop limiting the travel of the arm carrying the shoe whereby said shoe stops the rotation of the wheel when the shoe contacts the ground and carries the wheel thereon.

1,762,998. ATTACHMENT FOR TELEPHONES. DEVEREUX LORD, Brooklyn, N. Y. Filed Jan. 21, 1929. Serial No. 333,768. 5 Claims. (Cl. 179—147.)



1. An attachment for a telephone comprising a handle, means for securing the handle to the transmitting instrument, such handle being so constructed as to automatically fall into a line substantially parallel with that part of the instrument to which it is attached when not in use.

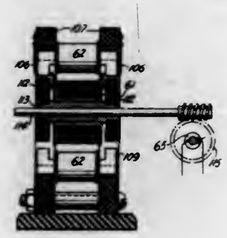
1,762,999. REGULATOR SYSTEM. EMANUEL C. MANDERFIELD, Boonton, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Feb. 28, 1929. Serial No. 343,527. 11 Claims. (Cl. 171—312.)



1. In a regulator system, a dynamo-electric machine, a thermionic tube, means for operating said tube in accordance with a characteristic of said machine, means comprising an amplifier effecting direct amplification of the output from said tube for controlling said machine to maintain the characteristic thereof constant, and means for impressing a potential on said thermionic tube which varies inversely with the output of said amplifier to compensate the regulating operation.

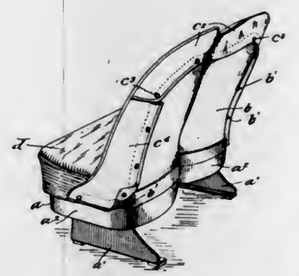
1,763,000. SYNCHRONOUS MOTOR. WARREN A. MARRISON, Bloomfield, N. J., assignor, by mesne assignments, to Western Electric Company, Incorporated, a Corporation of New York. Original application filed May 3, 1923, Serial No. 636,364. Divided and this application filed Mar. 31, 1925. Serial No. 19,580. 6 Claims. (Cl. 172—120.)

1. The combination with a source of varying electrical current comprising an unvarying component and an alternating component of a synchronous motor comprising a stator winding energized by said varying current, a rotor maintained in motion by the action of said stator, and an energizing winding for said rotor in inductive relation to the first mentioned winding.



6. The combination with a source of varying electrical current comprising an unvarying component and an alternating component of a synchronous motor comprising a stator winding energized by said varying current, a rotor maintained in motion by the action of said stator, and a stationary energizing winding for said rotor in inductive relation to the first mentioned winding.

1,763,001. SEAT UPHOLSTERY. ALFRED F. MASURY, New York, N. Y., assignor to International Motor Company, New York, N. Y., a Corporation of Delaware. Filed June 23, 1928. Serial No. 287,691. 1 Claim. (Cl. 155—182.)

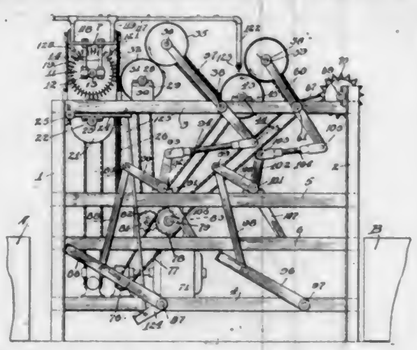


A cover for a seat having a removable seat portion and a back portion said cover comprising a back portion, a flap attached to the top of the back portion of the cover and permanently forming a pocket to receive the top of the back portion of the seat, flaps at the respective sides of the cover, snap fasteners on the flaps to secure the flaps to the back portion of the seat, upholstery secured to the cover and adapted to lie between it and the back portion of the seat, and means to secure the cover between the cushion and the back portion of the seat.

1,763,002. METHOD OF AND APPARATUS FOR CLEANING GUT. GUY L. MATTHEWS, Chicago, Ill., assignor to Harry L. Diehl, Chicago, Ill. Filed Jan. 2, 1929. Serial No. 329,914. 9 Claims. (Cl. 17—43.)

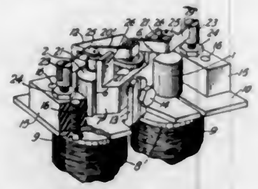
1. The method of cleaning split gut and the like which consists in tying the strings of the split gut at one end

into a head, exerting a pull on said head to initiate movement of the strings of the gut past a scraping position, sub-



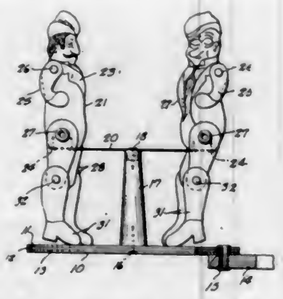
jecting the strings of the gut to a scraping action at said position and stretching and squeezing the strings of said gut after it is pulled past said scraping position.

1,763,003. ELECTROMAGNETIC DEVICE. EDWARD D. MEAD, Caldwell, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed May 6, 1929. Serial No. 360,717. 10 Claims. (Cl. 200—87.)



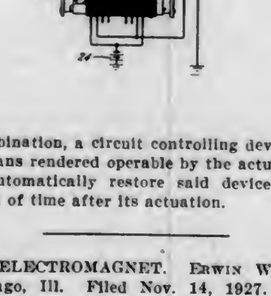
1. In an electromagnetic device a magnetic circuit comprising a core terminating in a pole-piece and a pivoted armature oscillatable toward and away from said pole-piece, a pair of contact springs one disposed on either side of the pivot of said armature, said springs extending toward each other with their free contact ends disposed opposite each other, and means operable through the oscillation of said armature to move the contact ends of both said springs toward each other into engagement.

1,763,004. DANCING TOY. BURTON P. MERWIN, Weston, Conn., assignor to The Weston Toy Company, Inc., a Corporation of Connecticut. Filed Aug. 12, 1929. Serial No. 385,377. 5 Claims. (Cl. 46—40.)



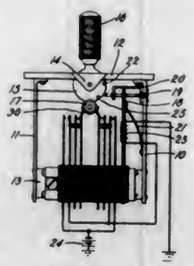
1. A dancing toy comprising a base, a pedestal supported on said base, a flexible supporting spring pivoted on said pedestal, a pair of body figures affixed to said spring, the figures being at opposite sides of the pedestal, and jointed limbs pivoted to said figures, the feet being adapted to contact with said base.

1,763,005. LOAD-REDUCING MEANS FOR CONVEYERS. GEORGE J. MEYER, Milwaukee, Wis., assignor to Geo. J. Meyer Manufacturing Company, Cudahy, Wis., a Corporation of Wisconsin. Filed Aug. 21, 1929. Serial No. 387,477. 7 Claims. (Cl. 198—129.)



1. In a machine having a conveyer including ascending and descending flights and rotary supporting means for the upper portions of said conveyer flights, the combination, with said conveyer, of a rotary member engaging at its opposite sides the ascending and descending flights and supporting the lower portions of said flights therefrom to minimize the friction load on said rotary supporting means.

1,763,006. TELEPHONE-EXCHANGE EQUIPMENT. PAUL B. MURPHY, Nyack, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Sept. 12, 1927. Serial No. 219,008. 8 Claims. (Cl. 179—176.)

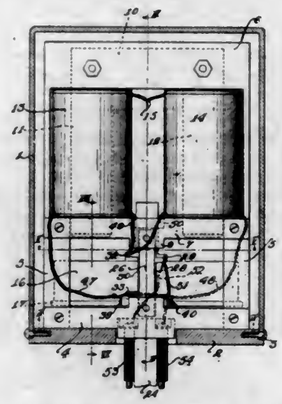


7. In combination, a circuit controlling device and thermostatic means rendered operable by the actuation of said device to automatically restore said device a predetermined period of time after its actuation.

1,763,007. ELECTROMAGNET. ERWIN WALTER PETZING, Chicago, Ill. Filed Nov. 14, 1927. Serial No. 232,973. 9 Claims. (Cl. 175—335.)

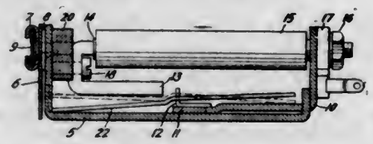
1. A device of the class described suitable for both direct and alternating currents including a core, a pair of legs integral therewith, a coil on each of said legs, a plunger for abutting the ends of said legs when said coils are ener-

gized, and means operable by said plunger to connect a small portion of each coil in a circuit until said plunger



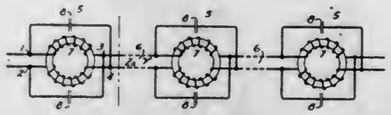
is in motion, and then to connect all of said coils in circuit to hold said plunger in abutment with the ends of said legs.

1,763,008. ELECTROMAGNETIC DEVICE. NEIL Y. PRESSMAN, Wyoming, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Jan. 19, 1929. Serial No. 333,644. 5 Claims. (Cl. 175—336.)



1. In an electromagnetic device, an armature having a plurality of fulcrum points on which it pivots during the course of a single actuation thereof.

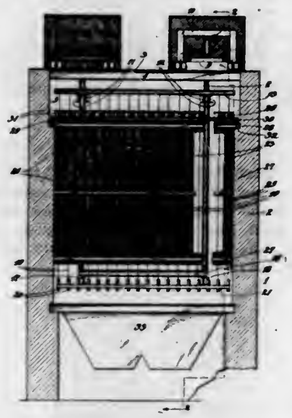
1,763,009. LOADING SYSTEM. DONALD A. QUARLES, Englewood, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Original application filed Aug. 14, 1924, Serial No. 731,909, Patent No. 1,711,653, dated May 7, 1929. Divided and this application filed Sept. 29, 1928. Serial No. 309,290. 4 Claims. (Cl. 178—45.)



1. In an inductively loaded transmission line having two line wires, a loading unit comprising an inductance coil having equal windings connected in series with said line wires, and equal capacities connected in shunt to said line between diagonally opposite corners of said line windings.

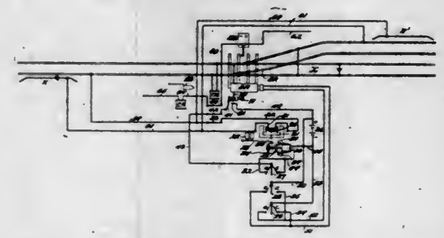
1,763,010. ELECTROSTATIC PRECIPITATOR. ROSS BUXTON RATHBUN, El Paso, Tex., assignor to American Smelting and Refining Company, New York, N. Y., a Corporation of New Jersey. Filed Aug. 12, 1926. Serial No. 128,781. 9 Claims. (Cl. 183—7.)

1. In an electrostatic precipitator, a conduit, an electrode assembly comprising a plurality of first electrodes, a second electrode assembly comprising a plurality of electrode cylinders of open mesh, one surrounding each first electrode, means for insulating one of said assemblies



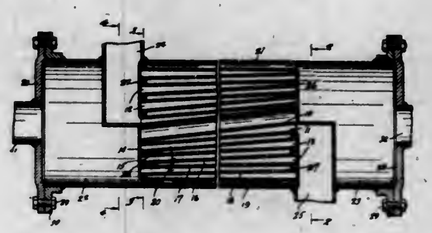
from said conduit, and means for supporting said other assembly, said cylinders having their lengths disposed transverse to the length of said conduit.

1,763,011. SWITCH-CONTROL APPARATUS. ARCHIBALD G. SHAVER, Chicago, Ill., assignor to The Regan Safety Devices Company, Inc., New York, N. Y., a Corporation of New York. Filed July 19, 1926. Serial No. 123,336. 31 Claims. (Cl. 246—221.)



1. A railroad switch operating system comprising a switch operating mechanism, a source of energy for energizing the mechanism, a device controlling the application of the source to the mechanism, and speed responsive train carried means for controlling the operation of the device.

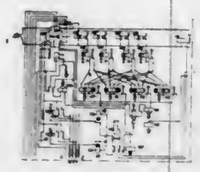
1,763,012. ECCENTRIC-CONCENTRIC HEAT EXCHANGER. ROBERT L. SHIPMAN, Bridgeport, Conn., assignor of one-half to Earl D. Sprague, Bridgeport, Conn. Filed Oct. 9, 1928. Serial No. 311,382. 5 Claims. (Cl. 257—243.)



1. In a heat exchange device an outer tubular shell, a plurality of pairs of spaced substantially concentric tubes

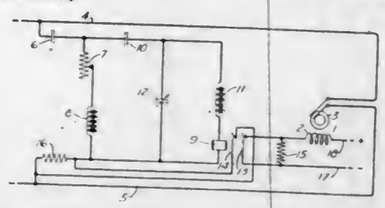
within the shell and spaced therefrom and providing chambers at the opposite ends of the tubes in communication with the spaces between the tubes of each pair, fluid inlet and outlet connections to said chambers, the adjacent pairs of tubes being inclined with respect to each other so that the spaces between adjacent pairs are wider at one end at the upper side of their longitudinal axes and wider at the other end at the lower side of their longitudinal axes, and inlet and outlet connections to these spaces at substantially the widest portions thereof.

1,763,013. TELEPHONE SYSTEM. THOMAS SAMUEL SKILLMAN, Aldwych, London, England, assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed July 3, 1929, Serial No. 375,715, and in Great Britain July 20, 1928. 12 Claims. (Cl. 179—27.)



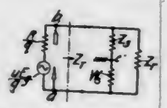
1. In a telephone system, lines, means for interconnecting said lines, a repeater, and means controlled over an established connection between two of said lines for inserting said repeater in said established connection.

1,763,014. REGULATOR SYSTEM. LELAND J. STACY, Caldwell, and MYRON E. KROM, Madison, N. J., assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Nov. 6, 1928. Serial No. 317,583. 16 Claims. (Cl. 171—119.)



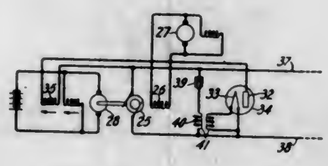
1. In a voltage regulator system for an alternating-current generator having a regulator field-magnet winding, means comprising a relay for controlling said field winding, and a control circuit connected to the generator for operating said relay to maintain the generator voltage constant, said control circuit comprising reactance elements serving to effect a sudden increase in current to operate said relay at a predetermined generator voltage.

1,763,015. OPERATION OF ELECTRIC SPACE-DISCHARGE DEVICES. GEORGE H. STEVENSON, Sound Beach, Conn., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Sept. 7, 1926. Serial No. 133,898. 8 Claims. (Cl. 179—171.)



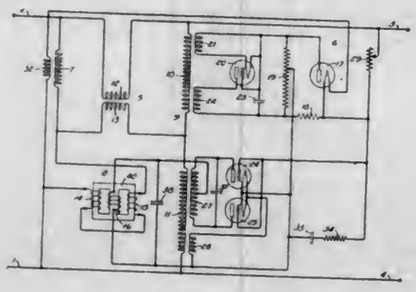
1. An electric space discharge amplifying device having at a given frequency a regeneration factor substantially different from unity, an anode and a cathode in said device, a space discharge path between said anode and said cathode, a control element included in said device for controlling said electric discharge, and an external output circuit for said device facing the discharge path and having an impedance of the order of the impedance of said space discharge path divided by said regeneration factor.

1,763,016. ELECTRIC REGULATOR. HUGH M. STOLLER, Mountain Lakes, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Original application filed July 24, 1919, Serial No. 313,039. Divided and this application filed Aug. 20, 1925, Serial No. 51,313. Renewed Dec. 27, 1929. 11 Claims. (Cl. 171—119.)



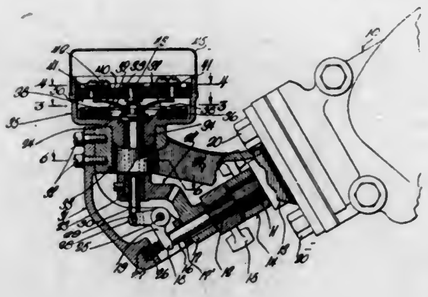
1. In combination, an alternating current generator, and means for regulating the frequency of the current generated thereby, said means comprising an electric discharge device having a plurality of electrodes, connections from said generator for supplying space current between two of said electrodes, a path comprising inductance and capacity tuned to a frequency differing from the normal frequency of said generator, means for controlling through the intermediary of said path a characteristics of one electrode of said device in response to variations in the frequency of the current generated, and means controlled by the resulting variations in the space current of said device for controlling said generator.

1,763,017. REGULATOR SYSTEM. HUGH M. STOLLER, Mountain Lakes, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed June 15, 1928. Serial No. 285,768. 13 Claims. (Cl. 171—119.)



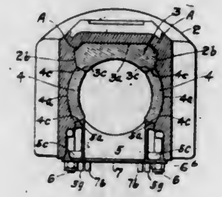
1. In a regulator system, a load circuit, a supply circuit connected to said load circuit, control circuits comprising an electric discharge device operated according to the voltage on said load circuit, and means comprising a Wheatstone bridge circuit governed by said control circuits for maintaining the voltage on said load circuit substantially constant.

1,763,018. AUTOMOBILE SWITCH. FELIX J. STUCKERT, Jr., Milwaukee, Wis., assignor to Briggs & Stratton Corporation, Milwaukee, Wis., a Corporation of Wisconsin. Filed May 13, 1927. Serial No. 191,073. 8 Claims. (Cl. 200—4.)



1. The combination with the steering gear of an automotive vehicle and its switch mechanism of means for mounting the switch mechanism in an upright position juxtapose the lower end of the steering gear, the switch mechanism including terminals and a plurality of contactors operable to engage and disengage the terminals, one of said contactors being slidable and the other rotatable into and out of engagement with their respective terminals, means for operating one contactor including a segmental gear, and means for operating the other contactor including a pivoted lever.

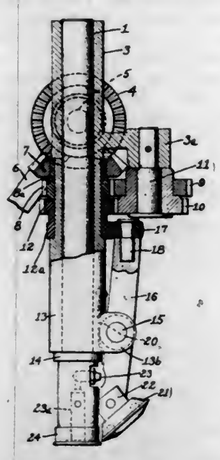
1,763,019. DRIVING BOX FOR LOCOMOTIVE ENGINES. HARRY SWOYER, Dunkirk, N. Y. Filed June 1, 1925. Serial No. 33,890. 4 Claims. (Cl. 308—83.)



1. A locomotive driving box having a journal cavity therein; a crown bearing fitting against the top of said cavity, the said bearing having oppositely inclined sides affording a supporting engagement with the box; other inclined sides out of contact with the box to permit expansion of the bearing without distortion of the box.

1,763,020. CAPPING APPARATUS. LEON D. TITUS, Port Arthur, Tex., assignor to The Texas Company, New York, N. Y., a Corporation of Delaware. Filed Jan. 24, 1928. Serial No. 249,065. 11 Claims. (Cl. 113—24.)

1. A capping apparatus, comprising a rotatable die, a crimping tool adapted to revolve about the die, means for forcibly holding the tool in working co-operation with the die and alternately permitting periodical release of the tool therefrom, and manual means for continuously revolving said crimping tool and simultaneously effecting automatic operation of said first mentioned means.

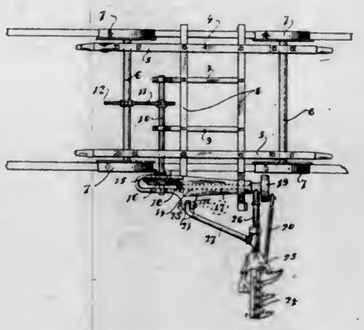


1,763,021. NUT. LEWIS L. TURNER, Meriden, Conn., assignor to The Charles Parker Co., Meriden, Conn. Filed Oct. 19, 1928. Serial No. 313,462. 1 Claim. (Cl. 85—32.)



A clamping-nut comprising a polygonal or faceted wrench-engaging portion, a shank rising above the upper face thereof and shaped to permit the wrench to turn freely upon it, and an annular guard located at the upper end of the said shank, made integral therewith, and overhanging the same in the horizontal plane to prevent the wrench from being bodily lifted off from the nut, the said overhanging annular guard being greater in diameter than the diameter of the polygonal wrench-engaging portion of the nut.

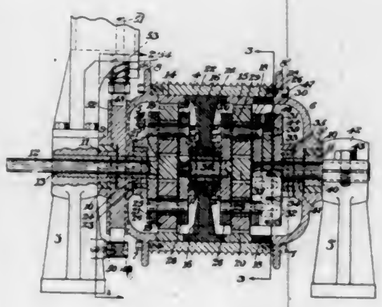
1,763,022. MOWING MACHINE. WILLIAM TYCHIE, Grosse Isle, Manitoba, Canada. Filed Jan. 18, 1927. Serial No. 161,820. 2 Claims. (Cl. 56—232.)



1. A railway mowing machine including the combination of a wheeled truck; a cradle projecting laterally from

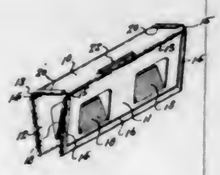
one side of said truck; a transversely rotatable shaft driven by one of the axles of the wheeled truck; a casing supported at the outer end of said cradle; a supporting arm hingedly mounted on said casing; a cutter bar head carried by said supporting arm; a cutter bar pivoted for vertically swinging adjustment in said cutter bar head; transmission mechanism within said casing and driven by said transverse shaft; and driving mechanism connecting said transmission mechanism with said cutter bar to operate the latter.

1,763,023. HOISTING MECHANISM. WARREN C. TYLER, East Orange, N. J., assignor, by mesne assignments, to W. C. Lipe, Inc., Syracuse, N. Y., a Corporation of New York. Filed Mar. 15, 1923. Serial No. 625,206. 12 Claims. (Cl. 254—186.)



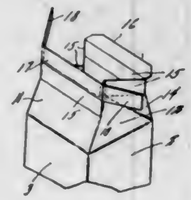
1. The combination of a drum having heads arranged with hollow trunnions to rotatably support the same, a drive shaft extending into the drum through and rotatable in one of the trunnions, a gear fixed to and rotatable with said shaft within the drum, an annular gear disposed about the inner circumference of the drum concentric with the shaft gear on the drive shaft, intermediate gears to mesh with said annular gear and gear on the drive shaft, a carrier for said intermediate gears loosely mounted within the drum concentric of the drive shaft to permit of movement of the carrier and drum relative to each other, means within the drum having a part to extend through the drum trunnion opposite the drive shaft, means to hold said latter means against rotation, and flexible means carried by said gear carrier for the engagement of said fixed means to hold the carrier against rotation with the shaft and drum.

1,763,024. CARD-HOLDING CLIP. JOSEPH A. UNDERHILL and GEORGE C. HEMENWAY, New York, N. Y., assignors to Hampden Manufacturing Co., New York, N. Y., a Corporation of New York. Filed Aug. 27, 1929. Serial No. 388,694. 7 Claims. (Cl. 40—23.)



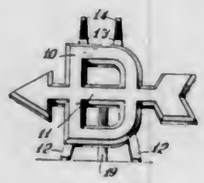
1. A card holding clip made of sheet metal comprising a body having a medial portion and side plates respectively extending angularly in spaced apart relation from the longitudinal margins of said medial portion, at least one of said side plates having integral with its end and free longitudinal edges inwardly turned flanges spaced outwardly from the face thereof to form card receiving and retaining channels, and at least one of said side plates having inwardly and upwardly inclined resilient gripping tongue means projecting from its inner face for the purposes described.

1,763,025. PAPER-BOX SEALING. JOHN R. VAN WORMER, Toledo, Ohio, assignor to The American Paper Bottle Company, Toledo, Ohio, a Corporation of Ohio. Filed May 14, 1928. Serial No. 277,415. 1 Claim. (Cl. 229—37.)



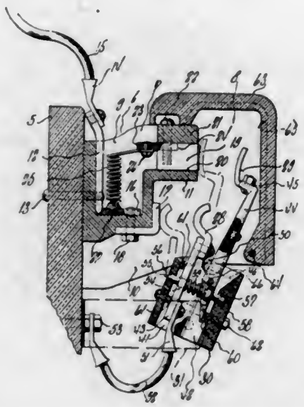
A container comprising an end closure, a pair of opposing rectangularly defined sections, connecting intermediately triangularly defined sections, said rectangular and triangular sections terminating in a continuous band extension with additional supplemental extensions beyond said band for the rectangular sections, the band portions intermediate the rectangular sections being foldable between the band portions at the rectangular sections, one of said supplemental extensions coacting as a tuck-in-tongue from its rectangular section band portion over the folded band portions from the intermediate sections in a container closure rib-forming assembly and the other extension from its band portion foldable over the tuck-in-tongue and against the band portion for said tongue coacting as a seal thereover, and additional sealing effecting holding means coacting between the opposing portions of the continuous band.

1,763,026. DESK WATCH HOLDER. DONALD E. WILLARD, Danville, Ill. Filed Nov. 19, 1927. Serial No. 234,438. 7 Claims. (Cl. 211—25.)



1. In a device of the class described, including in combination, a skeletonized body of cast metal having feet at the bottom and projections at the top for engaging a watch, a grooved pocket in the back thereof, and a leg having a portion adapted to interlockingly engage said groove for maintaining said body in substantially upright position.

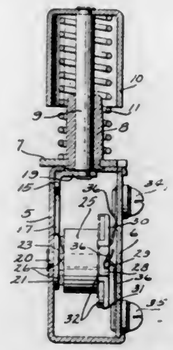
1,763,027. ELECTRIC SWITCH. GUSTAV O. WILMS, Milwaukee, Wis., assignor, by mesne assignments, to Harry L. Bradley and Lynde Bradley, Milwaukee, Wis. Filed Mar. 22, 1929. Serial No. 349,130. 14 Claims. (Cl. 200—6.)



1. In a switch of the character described, a member having a pocket, switch members, means movably mounting the switch members in the pocket, and common means yieldably urging the switch members to a predetermined position

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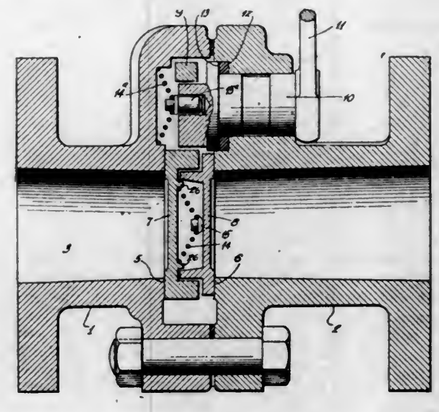
1,763,028. LIGHT-DIMMING SWITCH. ROBERT K. WINNING, Wauwatosa, Wis., assignor to Clum Manufacturing Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed June 12, 1929. Serial No. 370,249. 16 Claims. (Cl. 200—11.)



1. In a switch, the combination with fixed contacts, and a pivotally movable contact means arranged for co-action therewith, of mechanism for moving said contact means comprising a reciprocable plate provided with spaced arms, rack teeth formed marginally in one of said arms, and a contact actuator comprising a disc pivoted between said arms in the plane of said plate and provided with peripheral teeth meshing with said marginal rack teeth.

1,763,029. GATE VALVE. WYLIE G. WILSON, Jersey City, N. J., assignor to Everlasting valve Company, a Corporation of New Jersey. Filed Sept. 27, 1928. Serial No. 308,770. 4 Claims. (Cl. 251—18.)

1. In a gate valve, a casing having two ports in axial alinement and in relative proximity, said ports provided with parallel seats, sealing elements cooperating with said seats, elastic means interposed between said sealing elements, said means comprising a spring in the form of a progressive helix or hollow cone the convolution of said helix being such that when the spring is axially compressed said convolutions can pass each the other without contact, and when fully compressed said convolutions will lie in a common plane, whereby the said seats may be positioned in relatively close proximity.



1,763,030. PNEUMATIC FLOW MEANS FOR DEEP WELLS. JOHN A. WOLFE, Tulsa, Okla., assignor of one-third to Horace C. Fitzpatrick, Independence, Kans., and one-third to Guy A. Most, Tulsa, Okla. Filed Mar. 4, 1927. Serial No. 172,614. 5 Claims. (Cl. 103—260.)



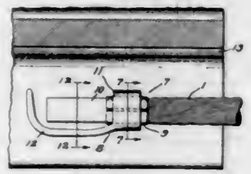
1. Means of the character set forth comprising, in combination with a well casing, a flow tube extending downwardly into the casing, the joint between the top of the casing and flow tube being closed, means for introducing fluid under pressure into the casing, and an assembly connected to the lower end of the flow tube and incorporating an injector involving a jet nozzle disposed axially of the tubing and a port leading from said nozzle to the space between the tubing and the casing, a check valve involving a tubular body applied to the lower end of the injector, and a tubular packer connected to the check valve body and engaging the well casing thereby to seal the joint between the lower end of said assembly and the well casing.

1,763,031. SPOON HOOK. JOHN C. YATES, Baltimore, Md. Filed Aug. 28, 1929. Serial No. 388,965. 3 Claims. (Cl. 43—45.)



1. In a spoon-hook, the combination of a hook including a bowed part and an eye, the latter being in the same plane with the bowed part, a spoon having means at its front end for attaching a fishing line, the rear end of the spoon having an aperture therethrough at the rear end portion and having a concave part at the rear of said aperture for conforming to the shank of the hook, the front side of this aperture forming a fulcrum which combines with said concave part to hold the hook in a predetermined position, the middle part of said spoon being provided with an opening into which said eye can be compressed against spring action of the shank while the hook rests against said fulcrum, and a securing member pivotally mounted on said spoon and provided with an element to be passed into and out of said eye, for securing and releasing the hook, substantially as shown and specified.

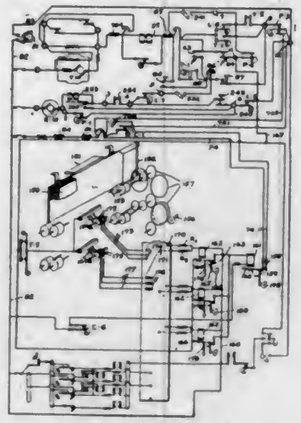
1,763,032. RAIL BOND AND METHOD OF APPLYING. JOHN B. AUSTIN, Cleveland, Ohio, assignor to The Ohio Brass Company, Mansfield, Ohio, a Corporation of New Jersey. Filed Aug. 22, 1927. Serial No. 214,578. 19 Claims. (Cl. 173—278.



1. A rail bond for autogenic welding to rail surfaces comprising a flexible body, a member composed of copper and a fluxing agent secured thereto having a part projecting away from the body member along the rail surface and a second member associated with the body and arranged to form a receptacle with the rail for molten welding metal and having the projecting part within the receptacle.

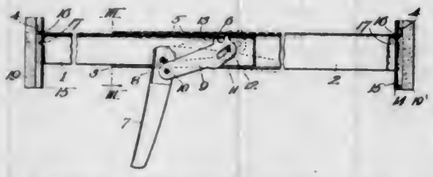
1,763,033. AUTOMATIC CONTROL SYSTEM. JAMES W. BRYCE, Bloomfield, N. J., assignor to The Tabulating Machine Company, Endicott, N. Y., a Corporation of New Jersey. Filed Jan. 21, 1928. Serial No. 248,347. 14 Claims. (Cl. 235—92.)

1. In an automatic control system for a record controlled tabulating machine comprising a relay of the type responsive only to impulses of higher values, record controlling means whereby an impulse of one value or an impulse of a higher value is transmitted to said relay



and means for controlling machine operation in accordance with the magnitude of the impulses transmitted to said relay.

1,763,034. ADJUSTABLE SUPPORT FOR CLOTHES HANGERS OR SHADE FIXTURES. CHARLES A. BUNKER, Kansas City, Mo., assignor to Bunker-Clancey Manufacturing Company, Kansas City, Mo., a Corporation of Missouri. Filed Oct. 3, 1927. Serial No. 223,638. 9 Claims. (Cl. 211—123.)



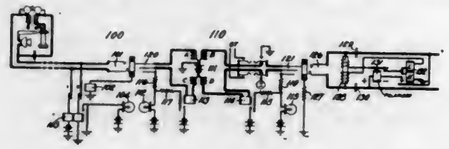
1. A member comprising telescopically related bars, gripping devices mounted on the remote ends of said bars, and means carried by one of the bars and movable pivotally and longitudinally slidable thereon for engaging the other bar and effecting relative sliding movement of the bars to increase the length of the member as a whole.

1,763,035. CELLULOSE-ETHER FILM AND COMPOSITION FOR MAKING THE SAME. STEWART J. CARROLL, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Aug. 9, 1926. Serial No. 128,338. 4 Claims. (Cl. 106—40.)

4. As an article of manufacture, a flexible, transparent, colorless film comprising colloidized water-insoluble ethyl cellulose and alpha bromnaphthalene free from uncombined bromine and hydrobromic acid, said film having uniformly destributed therein sufficient inorganic alkali to give the film an alkalinity in excess of pH 7, the amount of alkali being insufficient to impair the transparency of the film.

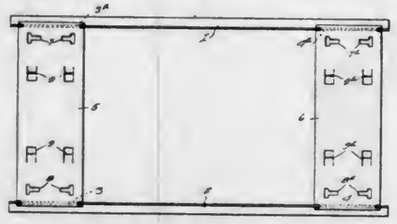
1,763,036. TRUNKING SYSTEM. FERDINAND S. ENTZ, Mount Vernon, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Aug. 31, 1928. Serial No. 303,161. 27 Claims. (Cl. 179—27.)

1. In a trunking system, a plurality of offices, a plurality of trunks of different characteristics outgoing from an office, incoming trunks to said office terminating in conductor terminals, means at said office for physically connecting said conductor terminals with said outgoing trunks, repeaters common to said trunks, and means



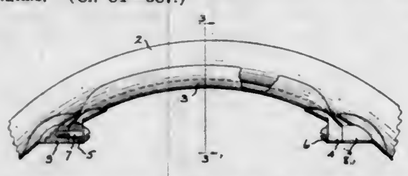
operably responsive solely to the seizure of an outgoing trunk of a certain characteristic to add a repeater in series with the talking conductors terminating in said conductor terminals.

1,763,037. RAILROAD TIE. WILLIAM P. DAY, Cleveland Heights, Ohio, assignor to The International Steel Tie Company, Cleveland, Ohio, a Corporation of Ohio. Filed May 31, 1929. Serial No. 367,257. 18 Claims. (Cl. 238—7.)



1. A railroad tie construction of the character described comprising a pair of spaced, parallel angle bars, each of said angle bars having slots in the opposite ends thereof respectively, a pair of rail plates connecting said pair of angle bars respectively and disposed within said slots, rail clamps carried by said plates and adapted for securing a rail thereto.

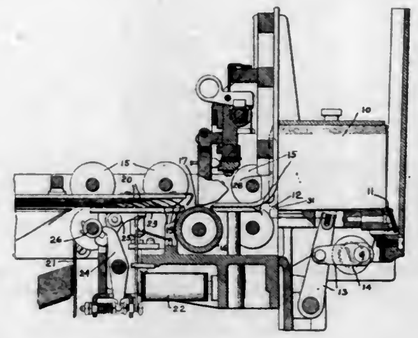
1,763,038. HORN. ORA DOTSON, Elkhart, Ind., assignor to C. G. Conn, Ltd., Elkhart, Ind., a Corporation of Indiana. Filed Feb. 15, 1929. Serial No. 340,096. 8 Claims. (Cl. 84—387.)



3. The combination with a wind musical instrument adapted to be supported upon the shoulder of the player and provided with a curved branch portion, of an inflexible saddle element having its opposite ends rockably connected with said instrument branch portion at the inner periphery thereof, said saddle element being curved to conform with the longitudinal curve of the instrument branch portion.

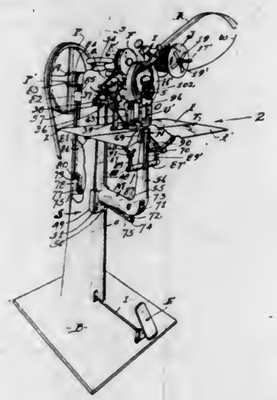
1,763,039. MAGAZINE THROAT. EUGENE A. FORD, Scarsdale, N. Y., assignor to The Tabulating Machine Company, Endicott, N. Y., a Corporation of New Jersey. Filed Dec. 3, 1927. Serial No. 237,497. 3 Claims. (Cl. 271—44.)

1. In a tabulating machine having a magazine for holding a stack of cards, the bottom one of which is engaged by a picker to positively feed it forward; an upper front wall having its lower end provided with a steeply bevelled flat surface inclined along its entire length at only a very slight angle relative to the vertical whereby it is adapted to restrain movement of the cards under the force of friction imparted to them by the upper surface of the positively fed bottom card while serving to cam said bottom card downwardly as it is fed, a second surface on the lower end of the wall intersecting the first-mentioned



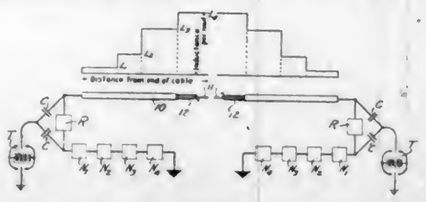
surface and inclined upwardly therefrom, and a lower front wall having a hollowed out upwardly extending portion at the entrance side to accommodate a concavely curved card, and a downwardly extending portion on said lower wall at the exit side, said bottom card as it is advanced having substantially a line contact with the ends of the upper and lower walls whereby the frictional resistance to feeding of the bottom card is lessened.

1,763,040. STAPLING MACHINE. ELMER E. FREY, Los Angeles, Calif., assignor to John P. Meehan and Edward F. Leonard, Los Angeles, Calif., doing business as Leonard Machinery Company. Filed June 23, 1927. Serial No. 201,007. 11 Claims. (Cl. 1—7.)



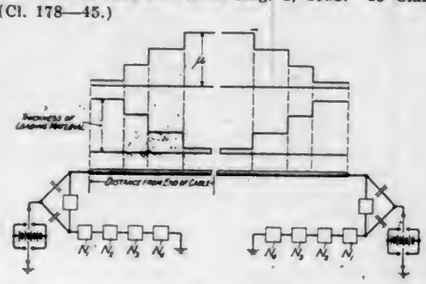
1. A stapling machine comprising a forming and driving head, a clinching head, means for successively feeding portions of wire to stapling position therebetween, a freely rotatable cutter mounted adjacent said forming and driving head for cutting uniform lengths of said wire preparatory to each operation of the machine, and means for oscillating said cutter bodily to and from operative engagement with the wire.

1,763,041. LOADED SIGNALING CONDUCTOR AND METHOD OF SIGNALING. JOHN J. GILBERT, Port Washington, N. Y., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Mar. 5, 1924. Serial No. 696,981. 38 Claims. (Cl. 178—45.)



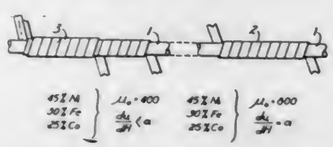
1. A submarine cable which is inductively loaded for a considerable portion of its length and unloaded in a shallow water portion or portions.

1,763,042. LOADED SIGNALING CONDUCTOR. JOHN J. GILBERT, Douglaston, N. Y., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed June 6, 1928, Serial No. 283,372, and in France Aug. 1, 1923. 15 Claims. (Cl. 178—45.)



1. A long inductively loaded signaling conductor having a great overall attenuation in which the quantity per unit and the permeability of the loading material are different on different sections but such that the transmission efficiency is approximately the same for all sections.

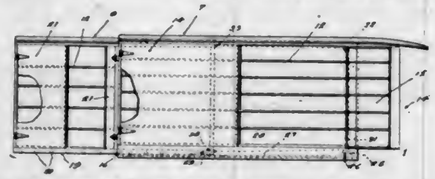
1,763,043. LOADING OF CONDUCTORS. JOHN J. GILBERT, Douglaston, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Nov. 6, 1928. Serial No. 317,504. 5 Claims. (Cl. 178—45.)



1. The method of improving the transmission characteristics of a long signaling conductor loaded with a material of substantially identical composition throughout, which method comprises heat treating the terminal sections of said conductor to have greater constancy of permeability than the center sections.

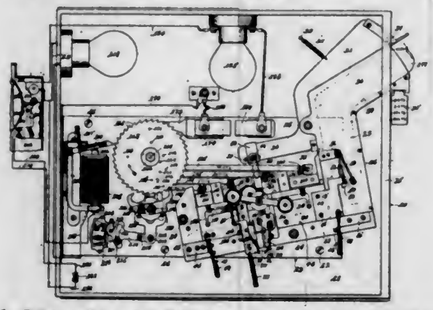
1,763,044. PORTABLE VENDING MACHINE. ROBERT ERNEST HEATH, Monroe, N. C. Filed Mar. 29, 1929. Serial No. 351,018. 2 Claims. (Cl. 296—21.)

1. In a portable carrier and display structure of the class described, a pair of spaced parallel relatively stationary shelf sections defining a central compartment, a closure for the outside of each shelf section, a pair of relatively movable sections equipped with shelves and hingedly



mounted upon said relatively stationary sections, and an extensible section telescopically confined in said compartment.

1,763,045. COIN-CONTROLED APPARATUS. LOUIS F. HEHN, Chicago, Ill. Filed May 31, 1927. Serial No. 195,294. 11 Claims. (Cl. 194—9.)



1. In a coin controlled apparatus, a plurality of coin receiving compartments each compartment adapted to receive a coin of a definite diameter, a single coin chute communicating with said compartments, means including a slidably mounted member for selectively cooperating with a single coin whereby values for money inserted into said coin controlled apparatus may be obtained in the proportion of the face value ratios of diverse coins inserted into said chute, and means including an escapement device whereby the value purchasing power of various coins inserted into the apparatus may be varied.

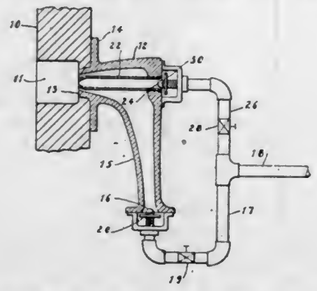
1,763,046. AUTOMOBILE WASHING APPARATUS. DOUGLAS D. HEIMBURGER, St. Louis, Mo., assignor to Marquette Manufacturing Company, St. Paul, Minn. Filed Nov. 28, 1927. Serial No. 236,171. 3 Claims. (Cl. 299—83.)



1. A car washing apparatus comprising a source of air supply, a source of water supply and a source of soap

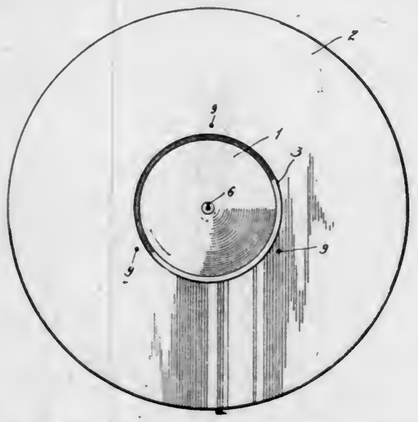
solution supply, conduits leading from said sources of supply, a common discharge nozzle in connection with each of said conduits, said nozzle including a tubular opening through which the soap solution and water may pass, the soap solution being discharged into such tubular opening at an angle relative to the axis thereof, and a single means for cutting off the supply from two of said conduits arranged in the nozzle.

1,763,047. METHOD OF BURNING EXPLOSIVE GASEOUS MIXTURES. WILLIAM M. HEPBURN, Toledo, Ohio, assignor to The Surface Combustion Company, Inc., Toledo, Ohio, a Corporation of New York. Filed Oct. 28, 1927. Serial No. 229,427. 7 Claims. (Cl. 158—117.5.)



7. A method of supplying an explosive mixture of fuel gas and combustion supporting gas in approximately constant proportion to a combustion chamber, comprising supplying one of the gases under a higher pressure than the other to serve as an inducing gas, changing some of the pressure energy of such inducing gas to velocity energy with reduction of pressure, supplying the other gas to the stream of the inducing gas at a point of relatively high velocity and low pressure, changing some of the velocity energy of the mixture back to pressure energy, the relative volumes of said gases lacking those proportions required for a substantially correct mixture, and causing said mixture to flow into said chamber by the inducing action of a stream of that gas which the mixture lacks to make a correct mixture, whereby the resultant mixture will be explosive.

1,763,048. LOUD-SPEAKER. MARCUS C. HOPKINS, Washington, D. C., assignor to Hopkins Corporation, Jersey City, N. J., a Corporation of Delaware. Filed Dec. 22, 1925. Serial No. 77,033. 19 Claims. (Cl. 181—32.)



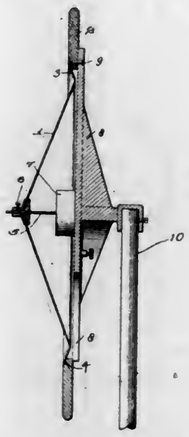
1. A loud speaker comprising a central relatively light and stiff diaphragm, an external sound board of greater mass than the diaphragm, and a flexible coupling between the two adapted to permit the central diaphragm to respond to relatively high frequencies and adapted to transmit the relatively low frequencies to the sound board, the combined area of the diaphragm and the sound board being sufficient to impart directly to the surrounding air sound waves of clear audibility.

1,763,049. LOUD-SPEAKER. MARCUS C. HOPKINS, Washington, D. C., assignor to Hopkins Corporation, Jersey City, N. J., a Corporation of Delaware. Filed Feb. 11, 1926. Serial No. 87,491. 16 Claims. (Cl. 181—31.)



1. A loud speaker tympanum having a portion which is substantially fully responsive to the higher frequencies and a portion consisting essentially of synthetic lumber which is substantially fully responsive to the lower frequencies.

1,763,050. LOUD-SPEAKER. MARCUS C. HOPKINS, Washington, D. C., assignor to Hopkins Corporation, Jersey City, N. J., a Corporation of Delaware. Filed July 24, 1926, Serial No. 124,667. Renewed Mar. 22, 1930. 15 Claims. (Cl. 181—31.)



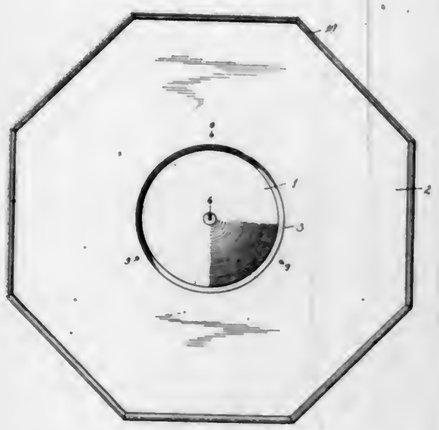
1. A loud speaker tympanum having a portion which is freely responsive to the higher frequencies and a portion formed of cork which is freely responsive to the lower frequencies.

1,763,051. LOUD-SPEAKER. MARCUS C. HOPKINS, Washington, D. C., assignor to Hopkins Corporation, Jersey City, N. J., a Corporation of Delaware. Filed Jan. 5, 1926, Serial No. 79,329. Renewed Dec. 24, 1926. 14 Claims. (Cl. 181—31.)



1. A loud speaker comprising a central relatively light and stiff tympanum, an external balsa wood sound board of greater mass than the diaphragm, and a flexible coupling between the two adapted to permit the central tympanum to respond to relatively high frequencies and adapted to transmit the relatively low frequencies to the sound board.

1,763,052. LOUD-SPEAKER. MARCUS C. HOPKINS, Washington, D. C., assignor to Hopkins Corporation, Jersey City, N. J., a Corporation of Delaware. Filed Mar. 23, 1926. Serial No. 96,743. Renewed Apr. 22, 1930. 10 Claims. (Cl. 181—32.)



1. A loud speaker having a sound board with a polygonal periphery, and a strip of protecting and reinforcing molding secured to the sound board along the peripheral edge of each side of the polygon.

1,763,053. LOUD-SPEAKER. MARCUS C. HOPKINS, Washington, D. C., assignor to Titanafram Corporation, Jersey City, N. J., a Corporation of Delaware. Filed Jan. 7, 1927, Serial No. 159,553. Renewed Sept. 28, 1929. 17 Claims. (Cl. 181—31.)



1. A loud speaker comprising a conical diaphragm and a resonator of corrugated board arranged adjacent the diaphragm and adapted to be actuated thereby.

1,763,054. LOUD-SPEAKER. MARCUS C. HOPKINS, Washington, D. C., assignor to Titanafram Corporation, Jersey City, N. J., a Corporation of Delaware. Filed Jan. 7, 1927, Serial No. 159,554. Renewed Apr. 22, 1930. 7 Claims. (Cl. 181—31.)



1. In a sound reproducer, the combination with a conical diaphragm, of a series of ring-like members of relatively thin strip material, secured edgewise against the dished face of said cone.

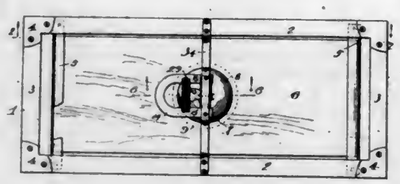
1,763,055. LOUD-SPEAKER. MARCUS C. HOPKINS, Washington, D. C., assignor to Titanafram Corporation, Jersey City, N. J., a Corporation of Delaware. Filed Jan. 7, 1927. Serial No. 159,555. 7 Claims. (Cl. 181—31.)



1. A loud speaker comprising a diaphragm, a plurality of parallel spaced resonators of corrugated board, means for transferring vibrations from the diaphragm to one of the resonators and means for transferring vibrations from one of the resonators to the other.

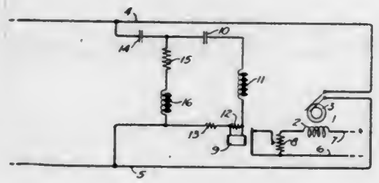
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1,763,056. SOUND-PRODUCING DEVICE. JOHN MEEKER HIGH, Jr., New York, N. Y., assignor to Hopkins Corporation, Jersey City, N. J., a Corporation of Delaware. Filed Sept. 3, 1925. Serial No. 54,204. 9 Claims. (Cl. 181—31.)



1. In a sound reproducing device, the combination of a parchment cone and a flexibly suspended balsa wood sounding board rigidly connected to the periphery of the cone.

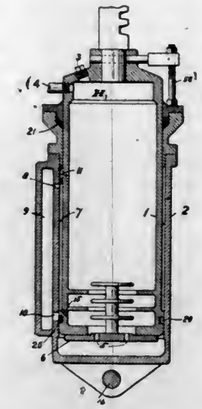
1,763,057. REGULATOR SYSTEM. MYRON E. KROM, Madison, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Nov. 6, 1928. Serial No. 317,594. 10 Claims. (Cl. 171—119.)



1. In a voltage regulator system for an alternating-current generator having a regulator field magnet winding, means comprising a relay for controlling said field winding, a control circuit connected to the generator for operating the relay to maintain the generator voltage constant, said control circuit having reactance means to effect a rapid increase in current flow at a predetermined generator voltage to operate said relay, and means comprising a resistance element in the control circuit for governing said circuit, when the generator voltage is being reduced from above normal value, to effect a rapid decrease in current flow through the relay coil to release the relay at a generator voltage close to the generator voltage for operating the relay.

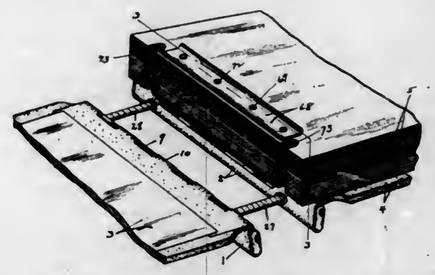
1,763,058. PISTON AND CYLINDER CONSTRUCTION FOR MOLDING MACHINES. WILFRED LEWIS, Haverford, Pa., assignor to The Tabor Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Feb. 3, 1928. Serial No. 251,728. 2 Claims. (Cl. 121—38.)

1. A rollover mechanism for molding machines comprising an oil cylinder and piston having packing at the end of the piston and at the top of the cylinder to provide a chamber between them, a by-pass having ports through the cylinder wall whereof one is located to be covered by the piston in its innermost position and whereof the other is located below the top of said chamber to provide space for trapping oil to check the outstroke of the piston, a vent opening through the piston wall arranged near the packing thereof to permit the trapped oil to escape slowly while the piston moves up to the end of its travel, a relief passage having a check valve and



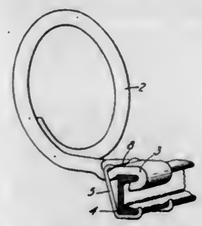
extending from near the bottom of the cylinder to the top of said chamber to permit instroke of the piston, and a spring for initiating the instroke.

1,763,059. GUIDE-PLATE FOR LOOSE-LEAF BINDERS. JOHN L. MCMILLAN, Syracuse, N. Y., assignor to McMillan Book Company, Syracuse, N. Y., a Corporation of New York. Filed June 27, 1928. Serial No. 288,550. 5 Claims. (Cl. 129—8.)



1. In a loose leaf book, a pair of opposed convex back members, covers hinged to the back members and a concave plate in contact with the inner face of each back member and removable therefrom, and having a plurality of posts adapted to extend through openings in loose leaves.

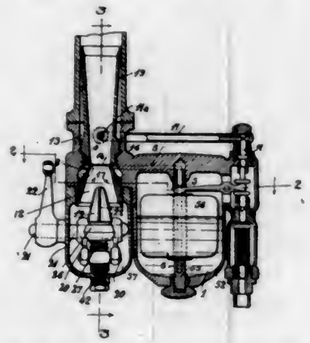
1,763,060. TELEPHONE-EXCHANGE EQUIPMENT. DELBERT C. MEYER, East Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed May 13, 1927. Serial No. 191,002. 1 Claim. (Cl. 248—36.)



In a mechanical device for mounting on a flanged member, a support having a hooked end for engagement

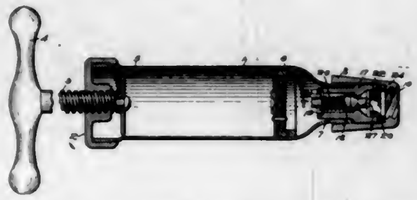
with a flange on said flanged member and provided with a depression, and a substantially U-shaped spring clamp having L-shaped extensions for engagement with another flange of said flanged member and a receding portion in the base thereof for engaging the depression in said support, said support and said spring clamp coacting to effect a resilient fastening means for securing the device to the flanged member.

1,763,061. CARBURETOR FOR INTERNAL-COMBUSTION ENGINES. FRANCIS MONIER, Neuilly-sur-Seine, France. Filed Oct. 31, 1922, Serial No. 598,084, and in France Nov. 5, 1921. 2 Claims. (Cl. 261—72.)



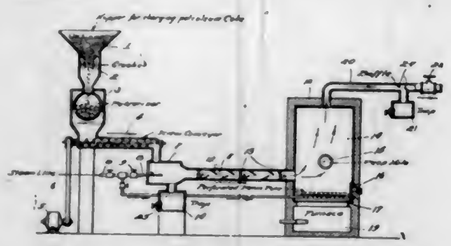
1. In a carburetor for an explosion engine, the combination of a reservoir partly filled with liquid fuel, a pipe through which fuel can be sucked into the engine and mixed with air and formed with zones of greater and less constriction, a tube opening at one end beneath the level of the liquid in the reservoir and terminating at the other end in a plurality of openings extending into the more constricted zone of said pipe and spaced longitudinally of said pipe, a second tube opening at one end into the reservoir above the level of the liquid and at the other end into the less constricted zone of said pipe and a throttle valve in the pipe operable outwardly of the opening thereinto of both said tubes, said throttle valve including portions movable gradually toward or from position to close certain of the openings of said first-named tube into said intake pipe as said throttle valve is moved toward closed or open position respectively.

1,763,062. LUBRICATING APPARATUS. HOWARD J. MURPHY, Reading, Mass., assignor, by mesne assignments, to Alemite Corporation, Chicago, Ill., a Corporation of Delaware. Filed Feb. 11, 1925. Serial No. 8,587. 6 Claims. (Cl. 221—47.4.)



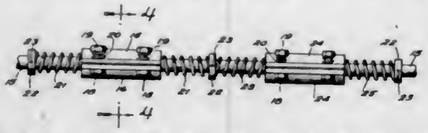
1. A lubricant-expelling device comprising, in combination, a supply barrel presenting a reduced front end portion, a nozzle sleeve secured to said reduced end portion, said nozzle sleeve having means for making a quick detachable connection with a lubricant receiving nipple and a closure valve unit enclosed by said reduced end portion and said sleeve, said valve unit removable completely assembled from said reduced end portion pursuant to the removal of said nozzle sleeve.

1,763,063. PROCESS FOR MAKING CARBONACEOUS MATERIAL. ALFRED OBERLE, Oak Park, Ill. Filed Aug. 18, 1924. Serial No. 732,671. 5 Claims. (Cl. 134—60.)



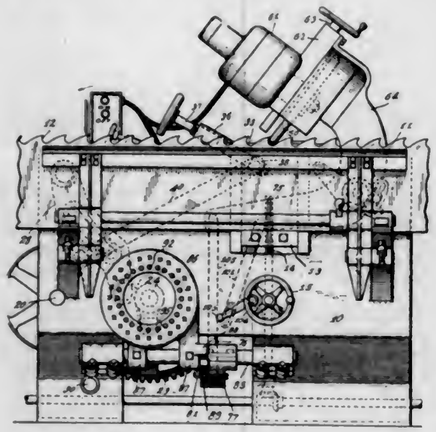
3. A process for making carbonaceous material, consisting in disintegrating petroleum carbon to a finely divided condition, thoroughly admixing superheated steam therewith, separating the carbonaceous material from the solid impurities and volatile products, oxidizing said volatile products with an insufficient amount of air to cause incomplete combustion and the production of carbon-black as a by-product.

1,763,064. AUTOMOBILE CONSTRUCTION. CLYDE R. PATON and TOM S. SLIGH, Jr., South Bend, Ind., assignors to The Studebaker Corporation, South Bend, Ind., a Corporation of New Jersey. Filed Nov. 22, 1926. Serial No. 150,062. 9 Claims. (Cl. 280—89.)



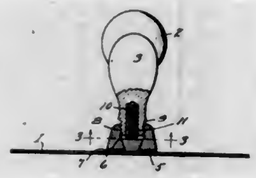
5. In an automobile, a cross tube, a two-part longitudinally divided weight slidably mounted thereon, spring means controlling the position of said longitudinally divided weight on said cross tube, and spring means for causing said weight to resiliently embrace said tube.

1,763,065. SAW-TOOTH GRINDER. JOHN F. PRIBNOW, San Diego, Calif., assignor to Pribnow Saw Sharpening Machinery Company, Los Angeles, Calif., a Corporation of California. Filed Apr. 18, 1927. Serial No. 184,522. 3 Claims. (Cl. 74—14.)



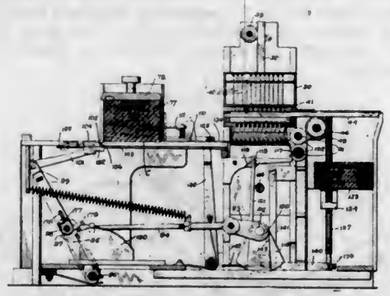
1. A camming device, comprising a rock-shaft, a supporting plate mounted thereon, a flexible cam ring carried by said supporting plate, means acting between said cam ring and said supporting plate for varying the shape of said cam ring, a rotatable shaft, and a roller carried by said rotatable shaft and arranged to travel around said cam ring as said rotatable shaft rotates, said roller being rotatably supported from said rotatable shaft on an oblique axis inclined inwardly and toward said cam ring.

1,763,066. PLASTERER'S TROWEL. JOHN ROONEY, Cleveland, Ohio, assignor of one-half to Harry J. Green, Cleveland, Ohio. Substitute for application Serial No. 724,409, filed Oct. 7, 1912. This application filed Nov. 23, 1927. Serial No. 235,160. 6 Claims. (Cl. 306—44.)



1. In a plasterer's trowel, the combination, with a metal plate, of a rail secured thereto and having its sides undercut, a handle for said trowel and having a threaded shank perpendicular thereto, and a nut having a notch receiving said rail and conforming to the shape thereof, also having a threaded socket intersecting said notch and adapted to receive said shank.

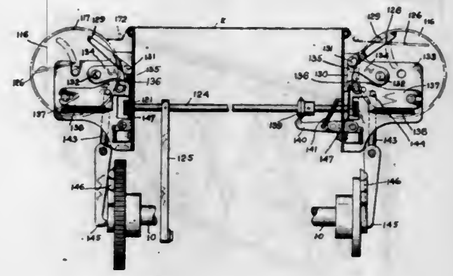
1,763,067. PUNCHING DEVICE. JOHN T. SCHAAFF, Washington, D. C., assignor to The Tabulating Machine Company, New York, N. Y., a Corporation of New Jersey. Filed Aug. 19, 1924. Serial No. 732,933. 38 Claims. (Cl. 164—114.)



37. In a card handling machine, means for perforating cards, means for feeding cards to said perforating means, mechanism for operating both aforesaid means, a device intermittently operated by said mechanism, and means controlled by said device for stopping said mechanism after a predetermined number of cards have been fed and perforated.

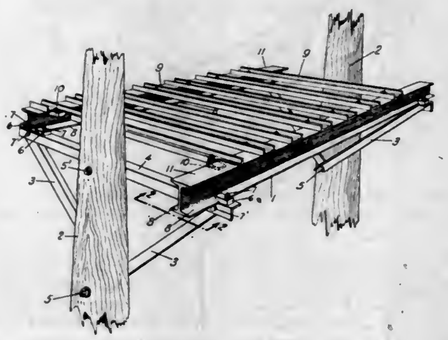
1,763,068. RIBBON MECHANISM. JOHN T. SCHAAFF, Washington, D. C., assignor to The Tabulating Machine Company, Endicott, N. Y., a Corporation of New Jersey. Original application filed July 6, 1927, Serial No. 203,765. Divided and this application filed June 26, 1928. Serial No. 288,886. 10 Claims. (Cl. 101—336.)

1. In a ribbon mechanism, a spool, a pawl for rotating the spool, driving means for moving the pawl to rotate the spool, a device for actuating said means to release the pawl from the spool whereby the pawl is ineffective to rotate the spool, a member for preventing operation of said device to actuate said means, and an element operated



directly by said driving means for releasing said member and permitting said device to actuate the driving means for releasing the pawl.

1,763,069. ADJUSTABLE PLATFORM. CHARLES E. SCHULER, Columbus, Ohio, asignor to The International Derrick & Equipment Company, Columbus, Ohio, a Corporation of Ohio. Filed Apr. 25, 1927. Serial No. 186,233. 3 Claims. (Cl. 248—30.)

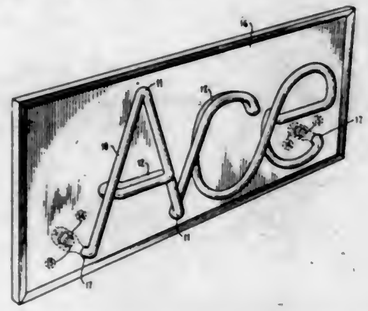


1. A platform comprising spaced longitudinal members, a plurality of supporting elements connected to said members and relatively adjustable independently of each other along said members, each supporting element including a pair of legs converging downwardly toward each other adapted to be attached to a support, and cross-pieces connected to and carried by said longitudinal members.

1,763,070. METHOD OF SEASONING WOOD. FORREST STREATOR SHINN, Aurora, Ill. Filed Oct. 15, 1927. Serial No. 226,519. 4 Claims. (Cl. 34—24.)

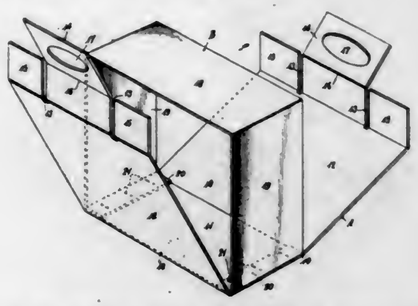
1. A method of seasoning wood characterized by the facts that the wood is first subjected to a steam treatment, is then subjected to a compressed air treatment, and is then subjected to a vacuum treatment, such seasoning treatment being without the addition of preservative liquid.

1,763,071. METHOD OF PRODUCING VACUUM-TUBE-LAMP ENVELOPES OF SPECIAL DESIGN. ROBERT C. SMALLEY, Arlington, N. J., assignor to Claude Neon Lights, Inc., New York, N. Y., a Corporation of New York. Filed June 2, 1926. Serial No. 113,306. 15 Claims. (Cl. 40—84.)



10. The method of producing a vacuum tube envelope of predetermined design which comprises laying out the design in reverse on a sheet of asbestos and working the envelope in contact therewith to fit said design.

1,763,072. BOX. SIDNEY M. SMITH, Atlanta, Ga., assignor to Empire Printing & Box Company, Atlanta, Ga., a Corporation of Georgia. Filed May 17, 1929. Serial No. 363,824. 3 Claims. (Cl. 229—52.)



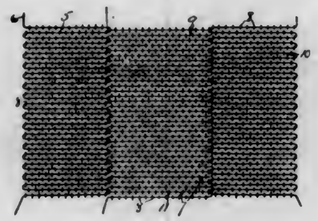
1. A box having a bottom wall, an arch section rising therefrom and open at the sides, side walls hinged to opposite edges of the box and adapted to close said sides of the arch section, said walls having handles integral therewith to extend above the arch for joint grasping, and said side walls having flaps integral with the upper edges thereof and insertible into the arch section for contact with the inner surface of such section.

1,763,073. AUTOMATIC CONVEYING SYSTEM FOR MERCHANDISE. WILLIAM J. TAYLOR, Winthrop Harbor, Ill., assignor to The Lamson Company, Syracuse, N. Y., a Corporation of Massachusetts. Filed Feb. 6, 1928. Serial No. 252,387. 5 Claims. (Cl. 198—159.)



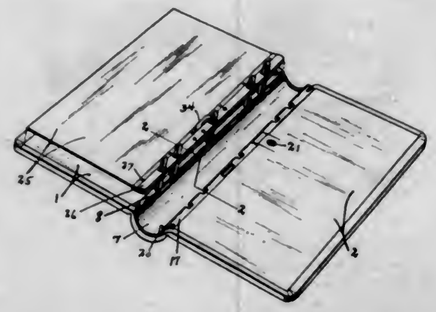
1. In a device of the class described, a plurality of conveyor supports in vertically spaced relation, rollers positioned transversely of the supports in longitudinally spaced relation, a moving belt supported on the upper surfaces of the rollers carried by certain of the supports and being supported in frictional contact with the under surfaces of the rollers carried by the other supports, and means for imparting movement to the belt.

1,763,074. FABRIC. SCHUYLER J. TAYLOR, Portland, Conn., assignor to The Russell Manufacturing Company, Middletown, Conn., a Corporation of Connecticut. Filed Aug. 30, 1928. Serial No. 303,045. 2 Claims. (Cl. 139—383.)



1. A fabric comprising a base portion composed of weft and warp threads, each set of threads being of similar material and interlaced crosswise one of the other and of substantially uniform width from end to end, and a marginal portion comprising warp threads and an inelastic weft thread extending back and forth from the edge of the fabric to form a straight line of said edge and creating with said warp threads a marginal strip of uniform width, said marginal weft threads being interlaced with the weft threads of the base portion of the fabric, said marginal weft threads being of cheaper material than the main weft threads.

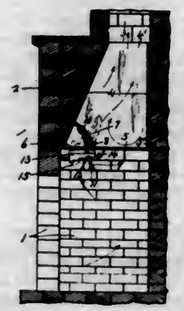
1,763,075. LOOSE-LEAF RECORD BOOK. PAUL O. UNGER, Syracuse, N. Y., assignor to McMillan Book Company, Syracuse, N. Y., a Corporation of New York. Filed Dec. 27, 1927. Serial No. 242,741. 3 Claims. (Cl. 129—24.)



3. In a device of the class described, two opposed covers, a plurality of posts secured together in a group pivotally mounted at the edge of one cover, and means for pivotally mounting the other cover to the other ends of the posts.

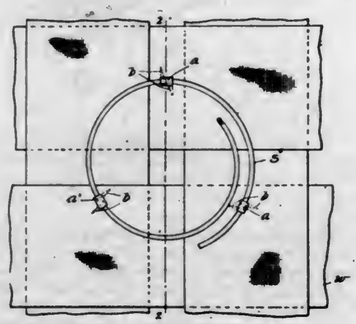
1,763,076. FIREPLACE DOME. HERBERT H. WALTERS, Syracuse, N. Y., assignor to Chemical Toilet Corporation, Syracuse, N. Y., a Corporation of New York. Filed Feb. 4. 1929. Serial No. 337,373. 2 Claims. (Cl. 126—288.)

1. A sheet metal dome adapted to be installed as a connection between the upper portion of a fire-place and smoke flue of the chimney and comprising an upwardly tapered tubular shell having a horizontal bottom wall provided with a relatively narrow opening therethrough adjacent the front wall to allow the passage of the products of combustion from the fire-place to the interior of



the shell, a V-shaped bearing member secured to the bottom wall adjacent the rear wall of the opening with its open side uppermost, and a damper loosely fulcrumed in the open side of said member for rocking movement to and from a position across said opening and adapted to be removed from said member by upward displacement.

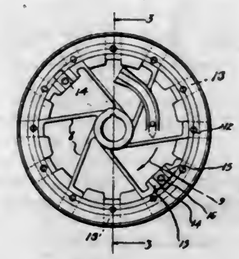
1,763,077. UPHOLSTERY-SPRING-ATTACHING DEVICE. SIMON L. WARREN, Quincy, Mass. Filed Apr. 25, 1928. Serial No. 272,707. 5 Claims. (Cl. 155—179.)



1. A metal staple, for attaching an end coil of an upholstery spring to a textile support, having an elongated U-form saddle portion adapted to be closely fitted onto and clamped to the coil, to prevent longitudinal movement thereof in said saddle portion, and having a prong of substantially less width than the length of its saddle portion extending from each side of said portion at opposite ends and constructed to permit each prong to be bent into positions in which it extends directly beneath the side of the saddle portion opposite thereto and between its end and the prong which extends therefrom.

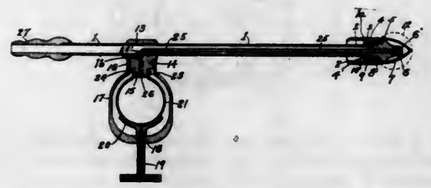
4. In an upholstery construction including a textile support and a wire coil spring having its bottom coil seated on the top side thereof, a metal staple having an elongated U-form saddle fitted onto the top side of said coil and clamped thereto and having a prong of substantially less width than the length of the saddle extending from each side thereof at its opposite ends, said prongs being extended downwardly thru said support and bent oppositely therebeneath and beneath the corresponding directly opposite side portions of the saddle, in position to clamp the coil and support together between the prongs and the saddle.

1,763,078. AIR-COOLED BRAKE RIM FOR ROTARY DRAW WORKS. BEN N. YOUNGKEN, Los Angeles, Calif., assignor to The National Supply Company of Delaware, New York, N. Y., a Corporation of Delaware. Filed Nov. 7. 1927. Serial No. 231,444. 4 Claims. (Cl. 188—264.)



1. In an air cooled brake drum, the combination of a spool, flanges at the opposed ends thereof, brake rims secured to said flanges to provide air ducts between the flanges and brake rims, and webs formed on the faces and through said air ducts of said flanges for circulating air within the brake rims.

1,763,079. URETHRAL SYRINGE. STEFAN ZACSEK, Los Angeles, Calif. Filed Nov. 14, 1928. Serial No. 319,222. 6 Claims. (Cl. 128—239.)



1. In combination with a tube having a flushing nozzle, and provided beyond the nozzle with a head having a reduced tip, and a bore therethrough, an inflatable air-tight cover for said head and tip and a pipe longitudinally disposed within the tube and open to the inside of the cover to inflate the cover, means to supply compressed air to the pipe for inflating the cover.

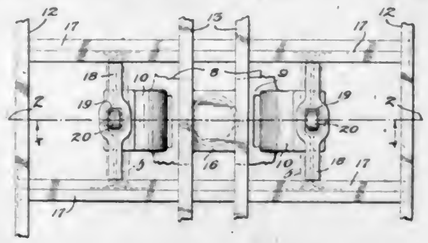
1,763,080. PRODUCTION OF DRY LEVULOSE OR CARBOHYDRATE MIXTURES. WILLIAM C. ARSEM, Schenectady, N. Y., assignor to Industrial Technics Corporation, Schenectady, N. Y., a Corporation of New York. Filed Jan. 31, 1927. Serial No. 165,042. 5 Claims. (Cl. 127—36.)

1. The method of hydrolyzing inulin to form levulose consisting essentially of mixing with a quantity of inulin the theoretical amount of water necessary to hydrolyze it, adding a soluble acid anhydride and heating in a closed container.

1,763,081. SIDE BEARING FOR CARS. LEE W. BARBER and EDWIN W. WEBB, Chicago, Ill., assignors to Standard Car Truck Company, Chicago, Ill., a Corporation of New Jersey. Filed Feb. 25, 1928. Serial No. 256,972. 1 Claim. (Cl. 105—200.)

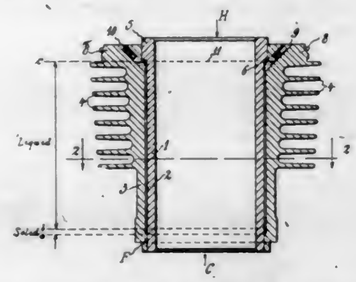
The combination with a car truck having a pair of cross-connected bolsters carrying on their cross connections side bearing roller treads overhanging the wheel

base of a car body having a pair of cross-connected body bolsters carrying on their cross connections side bearing



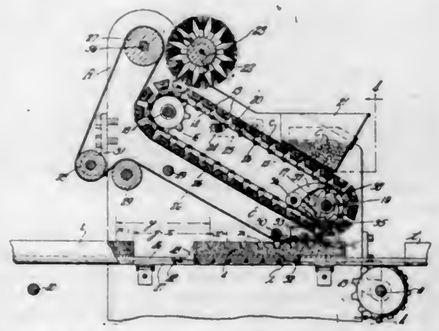
rollers, adapted to contact with and travel over said treads of the cross-connected truck bolster substantially as described.

1,763,082. AIR-COOLED CYLINDER. CHARLES A. BAUER and CARL B. GUSTAFSON, Springfield, Mass., assignors to Indian Motocycle Company, Springfield, Mass., a Corporation of Massachusetts. Filed Apr. 18, 1929. Serial No. 356,241. 8 Claims. (Cl. 123—170.)



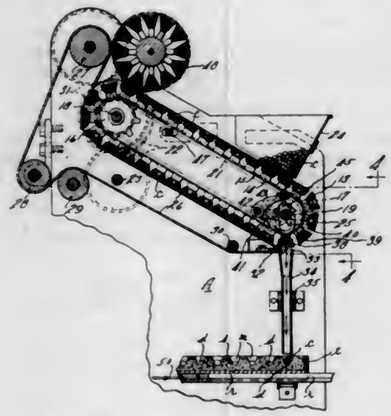
1 A heat conducting wall for internal combustion engine cylinders and the like comprising inner and outer members of different metal with an air tight space between said members containing a filler which will be liquid and not boil at the operating temperatures of said cylinder.

1,763,083. FEEDING APPARATUS FOR CONFECTIONERY MACHINES. ALONZO LINTON BAUSMAN, Springfield, Mass., assignor to National Equipment Company, Springfield, Mass., a Corporation of Massachusetts. Filed July 29, 1926, Serial No. 125,822. Renewed Mar. 13, 1929. 7 Claims. (Cl. 107—1.)



2. Feeding mechanism, comprising, a travelling carrier for molds, a conveyer mounted above said carrier so that in its upper course it moves in an upwardly sloping path away from the carrier and in its lower course moves downwardly toward the carrier and at one point in said course overlies the path of travel of said molds, said conveyer having article-receiving pockets in its outer face, an open-bottomed hopper containing the articles to be fed and under which the conveyer near the start of its upper course travels in closely adjacent relation to close the bottom thereof, whereby the pockets become filled with articles, a belt which in part of its course of travel moves at the same surface speed and in the same direction as said conveyer and in contiguous relation therewith while the conveyer is travelling in its lower course for the purpose of closing the filled pockets and holding them closed until they successively arrive at said point, and coordinated means for driving said carrier and conveyer so that as each pocket successively arrives at said point a mold underlies it to receive the article therein.

1,763,084. FEEDING APPARATUS FOR CONFECTIONERY MACHINES. ALONZO LINTON BAUSMAN, Springfield, Mass., assignor to National Equipment Company, Springfield, Mass., a Corporation of Massachusetts. Filed July 14, 1927. Serial No. 205,816. 8 Claims. (Cl. 107—1.)

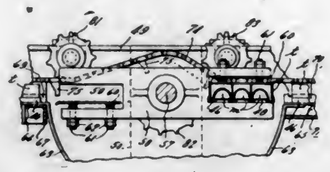


3. Article feeding mechanism, comprising, in combination with conveying means to which the articles are to be fed, a conveyer mounted to move during part of its lower course of travel in a path above that of said means, said conveyor having a series of longitudinally spaced pockets in its outer face in which pockets the articles are placed while the pockets are travelling open end up; a belt mounted to move in part of its course of travel in contiguous relation with the outer face of said conveyer for the purpose of successively closing said pockets after they have been filled and holding them closed, while the pockets are travelling open end down and until they successively arrive at a predetermined point in said path, when the belt moves away from the conveyer to successively open the pockets and allow the articles to successively fall therefrom and upon said conveying means; and means in the nature of a barrier to prevent the articles as they successively fall from said pockets from being deflected forwardly out of the desired vertical path of fall by reason of the momentum acquired by moving with said conveyer.

1,763,085. APPARATUS FOR FORMING CONFECTION SHELLS. ALONZO LINTON BAUSMAN, Springfield, Mass., assignor to National Equipment Company, Springfield, Mass., a Corporation of Massachusetts. Filed Feb. 9, 1928. Serial No. 253,176. 6 Claims. (Cl. 107—1.)

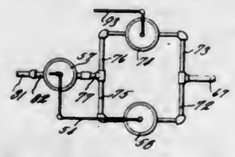
2. In an apparatus of the class described, a mold turning device comprising, a member mounted for intermittent

turning movement about an axis disposed intermediate the ends thereof and provided at each end with a mold receiving recess, a supporting shaft for said member, a flexible conveyer element mounted to travel in a plane spaced, from but parallel with the plane in which said member turns and having a series of lugs for moving the molds,



guiding means to direct said element so that one lug will move a mold into one of said recesses while another lug moves another mold out of the other recess, and so that said lugs will be deflected in a non-interfering path with respect to said shaft, and means for operating said element during intervals of rest of said member.

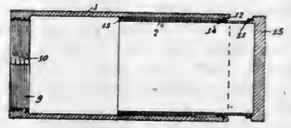
1,763,086. APPARATUS FOR TEMPERING CHOCOLATE AND THE LIKE. ALONZO LINTON BAUSMAN, Springfield, Mass., assignor to National Equipment Company, Springfield, Mass., a Corporation of Massachusetts. Filed Dec. 7, 1928. Serial No. 324,552. 6 Claims (Cl. 257—4.)



1. Apparatus for cooling chocolate or the like comprising, a kettle for the chocolate, a series of straight pipes, each of said pipes encompassed by a jacket which extends substantially from end to end thereof, cross connections between one end of each pipe of the series and the adjacent end of the next pipe of the series, a pump and connections therefrom to the kettle and the free end of the first pipe of the series, the free end of the last pipe of said series connected to discharge into said kettle, means for circulating in said jackets a cooling medium having a temperature well below the freezing point of the chocolate, means movable in each of said pipes to prevent the chocolate from freezing to the inner walls thereof, said cross connections having jackets, and means for circulating a tempering medium in the jackets of said cross connections to prevent the chocolate from clogging the same as it passes from one pipe of the series to another.

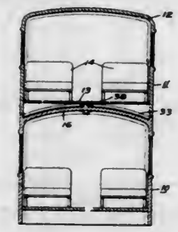
4. Apparatus for cooling chocolate or the like comprising, a kettle for the chocolate, a pump for drawing chocolate from the kettle, a conduit through which the chocolate is forced by said pump and by which it is delivered back into said kettle, said conduit having a jacket, connections by which a cooling medium is admitted to said jacket, a valve in said connections operable to throttle down the flow of cooling medium to said jacket, a second valve in said connections operable after said flow has been throttled down by the first named valve to cut off such flow altogether, means responsive to the temperature of the chocolate flowing in said conduit to operate the first named valve when such temperature is reduced approximately to the desired predetermined temperature, and separate means also responsive to the temperature of such chocolate to operate the second named valve when such temperature is reduced to the predetermined temperature desired.

1,763,087. LICENSE AND REGISTRY LOCK. LOUIS HAMILTON BEALL, Louisville, Ky. Filed Jan. 12, 1929. Serial No. 332,115. 3 Claims. (Cl. 40—2.2.)



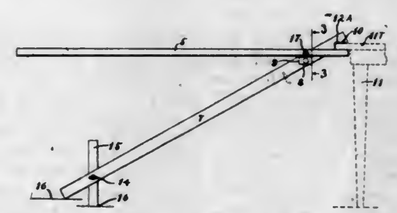
1. A device for locking an element to a support, said device comprising the combination of a closure member, a yoke having one end passing through the closure member, locking means securing said end to the closure member, a tubular member, having a closure at one end, and a means to secure the first mentioned closure member to the other end of the tubular member; the last mentioned means comprising interengaging threads on said end and the first mentioned closure member and means limiting relative movement between said closure and tubular members tending to separate them; the yoke projecting from the closure member and having its other end engaging one of said members to define a space for receiving said support and the element to be locked thereto, the tubular member and its closures being arranged to render inaccessible said locking means.

1,763,088. VEHICLE CONSTRUCTION. ALEXANDER W. BAOHMAN, San Francisco, Calif. Filed Dec. 8, 1926. Serial No. 153,288. 3 Claims. (Cl. 296—103.)



1. In a device of the class described, a vehicle body adapted to receive passengers and having a roof, an upper passenger deck adapted to be positioned upon said roof, means for maintaining said upper deck in alinement with the body comprising members interlocking said upper deck and said body roof, and latch means automatically engageable when the upper deck is positioned upon the body for locking said deck and body together.

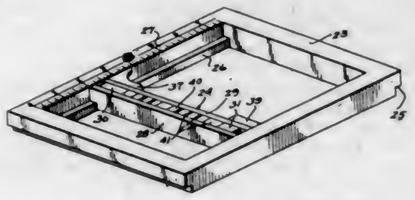
1,763,089. IRONING BOARD. GEORGE HENRY BULTMAN and JAMES C. HORGAN, St. Paul, Minn. Filed Oct. 7, 1927. Serial No. 224,719. 1 Claim. (Cl. 68—10.)



In combination with an ironing board provided with a slot extending inwardly from one end thereof and a prop pivoted to the board adjacent the terminus of said slot and movable therein, said prop having a rearwardly and downwardly opening notch at its rear end and movable

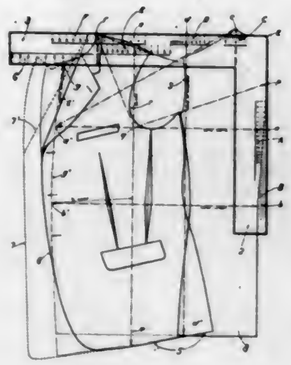
into closing position relative to the top rear edge part of the board to grip a horizontal element; said pivot means for the prop comprising a metal cross member fixed to the under side of said board and having an integral inverted U-shaped yoke part at its center with an angular face engaging one end of the slot and arranged to be engaged by the prop when the latter is in an angular position to the board, and means comprising lugs at the ends of the cross member engaging the opposite edges of the board.

1,763,090. PRINTER'S CHASE AND COMPOSING STICK. GEORGE E. BUZZA, Minneapolis, Minn. Filed Jan. 25, 1929. Serial No. 335,044. 16 Claims. (Cl. 276—38.)



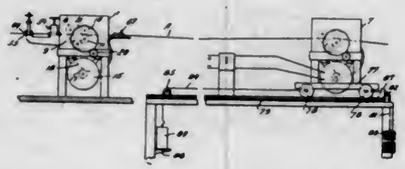
1. The combination with a chase having ways, of a composing stick removably and slidably mounted on the ways for lateral adjustment in the chase, and a catch on the composing stick for holding said stick in different adjustments in the chase and adapted to yield by lateral pressure on the stick to permit said stick to be laterally adjusted in the chase.

1,763,091. TAILOR'S SQUARE. ROSARIO CANGEMI, Boston, Mass. Filed Dec. 18, 1926. Serial No. 155,632. 6 Claims. (Cl. 33—11.)



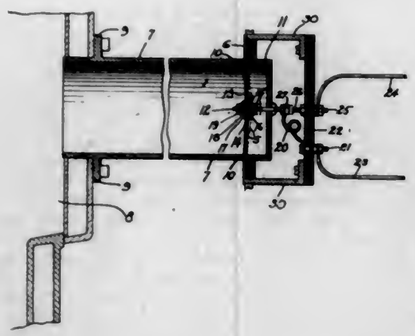
3. A tailor's square having thereon separate and independent scales for locating directly the important points to be fixed in laying out the pattern for a coat, certain of said scales being graduated in terms of height and others in terms of chest measure, said scales being so located with reference to each other on one side of the square that all of the important points for laying out the pattern for a coat can be located directly from the scales while the square remains in a single fixed position on the pattern, and sleeve and trousers scales independent of each other on the opposite sides of the square and on both arms thereof, one arm bearing a scale for the rise of the trousers and the seat line and the other having a scale for the horizonti measure to determine the fork point, all of said trouser scales being graduated in terms of girth.

1,763,092. FEEDING MECHANISM FOR METAL-TREATING MACHINES. ALEXANDER FIELDER CLARKE, Verona, Pa., assignor to Copper Plate Sheet and Tube Company, New York, N. Y., a Corporation of New Jersey. Filed Dec. 24, 1926. Serial No. 156,976. 6 Claims. (Cl. 266—3.)



5. The method of controlling the tension of metal strips in passing the strip through metal treating apparatus which comprises passing the strips through pulling rolls mounted on a movable support and maintaining a constant pull on the support in a direction opposite to the pull exerted by the tension of the strip.

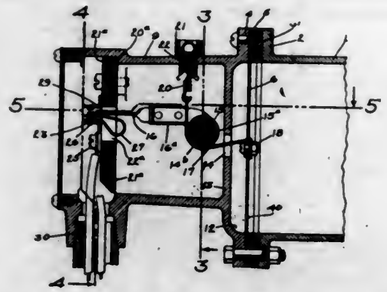
1,763,093. AUTOMATIC SAFETY DEVICE. LEWIS L. CUNNINGHAM, Minneapolis, Minn., assignor, by mesne assignments, to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a Corporation of Delaware. Filed July 24, 1925. Serial No. 45,835. 23 Claims. (Cl. 200—137.)



1. A device of the class described comprising a tubular member, an annular element encircling said tubular member and having a relatively large cross-section, a relatively thin heat-sensitive element enclosed by the tubular member and attached to said relatively thick annular element, and a cap closing the tubular member and having a sealing socket fitted within the annular element.

1,763,094. CIRCUIT-CONTROLLING DEVICE. LEWIS L. CUNNINGHAM, Minneapolis, Minn., assignor, by mesne assignments, to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a Corporation of Delaware. Original application filed Feb. 8, 1926, Serial No. 86,849. Divided and this application filed Oct. 26, 1927. Serial No. 228,855. 3 Claims. (Cl. 200—137.)

1. A device of the class described comprising a frame, a diaphragm, a pair of contacts one having the form of an expansible spring, an arm engageable between the contacts and engageable by the spring during expansion,



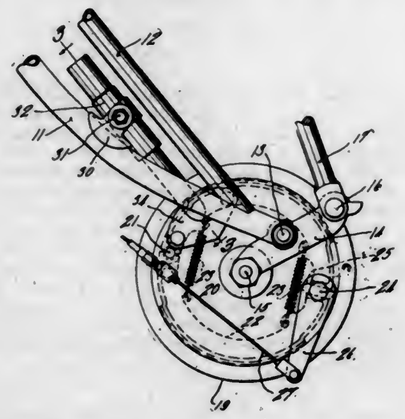
said arm having a hub and an element attached to the diaphragm and frictionally engaging the hub and having its opposite end yieldably connected to the frame.

1,763,095. CHAIN SAW. THOMAS H. DE HAVEN, Bellingham, Wash. Filed Mar. 19, 1929. Serial No. 348,185. 4 Claims. (Cl. 143—135.)



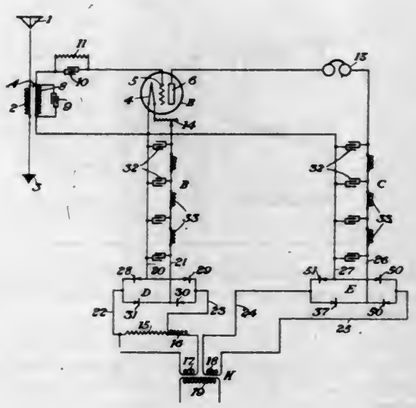
1. A chain saw consisting of links having raker teeth alternating with cutting teeth said cutting teeth disposed in staggered relation alternately on opposite sides of said raker teeth, each of said cutting teeth disposed alone on its link midway between the rivets therethrough and each of said raker teeth disposed alone on its link midway between the rivets therethrough.

1,763,096. FRONT-WHEEL-BRAKE MOUNTING FOR MOTOR CYCLES. CHARLES B. FRANKLIN, Springfield, Mass., assignor to Indian Motocycle Co., Springfield, Mass., a Corporation of Massachusetts. Filed Aug. 10, 1928. Serial No. 298,693. 7 Claims. (Cl. 188—26.)



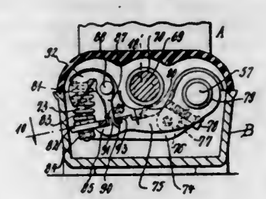
1. In a motorcycle of the type having a frame and a front wheel vertically movable with respect to the frame, a brake drum rotatable with the wheel, a brake supporting member, brake elements supported by the member and coacting with the brake drum, a casing pivoted to the frame, and a plunger fastened to the brake supporting member and reciprocable within the casing.

1,763,097. POWER-SUPPLY MEANS. LARS O. GRONDAHL, Pittsburgh, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed July 19, 1923. Serial No. 652,524. 4 Claims. (Cl. 250—27.)



1. In combination, an electron tube comprising a filament, a plate circuit for said tube including a source of alternating current, means for supplying to said filament uni-directional current having periodic points of maximum value, and means for displacing the phase of such points with respect to the maximum points of said alternating current.

1,763,098. MAGNETO. TERRENCE G. LOUIS, Springfield, Mass., assignor to Wico Electric Company, West Springfield, Mass., a Corporation of Massachusetts. Filed Nov. 14, 1928. Serial No. 319,361. 13 Claims. (Cl. 171—209.)

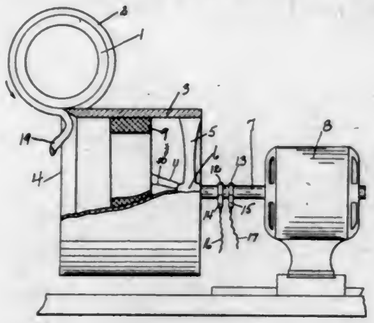


1. In a magneto, magnetic pole pieces, an armature movable back and forth with respect to said pole pieces, a drive shaft, elastic means stressed by the operation of said shaft and releasable at properly timed intervals to move the armature away from its pole pieces at a speed independent of that of said shaft, and means automatically operable when said shaft exceeds a predetermined speed to restrict the degree of stressing of said elastic means by said shaft and automatically operable whenever the speed of said shaft is less than said predetermined speed to remove the restriction imposed on the stressing of said elastic means.

1,763,099. SKIVING DEVICE. GEORGE J. MEAD, Milwaukee, Wis., assignor to The Fisk Rubber Company, Chicopee Falls, Mass., a Corporation of Massachusetts. Filed Nov. 27, 1926. Serial No. 151,095. 3 Claims. (Cl. 164—40.)

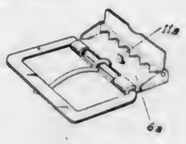
1. A device for skiving the ends of raw rubber tubes which comprises a rotary tube supporting mandrel, a

cylindrical cutting member positioned at right angles to and in tangent relation to the mandrel and having a



degree of curvature substantially equal to that of the skive desired on the tube, and means to rotate the cutter about its longitudinal axis.

1,763,100. BELT BUCKLE. JOHN A. MENDOSA, Manteca, Calif. Filed June 12, 1928. Serial No. 284,845. 2 Claims. (Cl. 24—163.)



1. A belt-buckle comprising a body, means mounted on the body and cooperating with one end of the same to adjustably engage and hold the free end of a belt, a plate mounted on the body and extending away from said one end thereof to flatly engage the belt at its opposite end, a pin projecting from the belt-engaging face of the plate to fit an orifice provided in the belt, and a clamping member pivoted on the plate for engagement with the face of the belt opposite to that engaged by the plate to hold the belt in such engagement, whereby to also prevent displacement of the pin from the belt-orifice.

1,763,101. CARBONACEOUS MATERIAL AND PROCESS OF MAKING THE SAME. ALFRED OBERLE, Oak Park, Ill. Filed Nov. 3, 1923. Serial No. 672,648. 6 Claims. (Cl. 252—3.)

1. A process for producing activated carbon from carbonaceous material, comprising heating the material in the presence of water to a temperature sufficient to vaporize the water and volatile impurities, distilling off the evolved vapors under pressure, and subsequently reducing the pressure and imposing a vacuum on the material while continuing the heat treatment, thereby effecting a further removal of volatile substances.

1,763,102. CARBONACEOUS MATERIAL AND PROCESS OF MAKING THE SAME. ALFRED OBERLE, Oak Park, Ill. Filed Jan. 31, 1925. Serial No. 6,157. 6 Claims. (Cl. 252—3.)

1. A process of making carbonaceous material including the steps of combining petroleum carbon, an acid sludge and sawdust, allowing a sufficient period of time to elapse for the acid to attack and disintegrate the cellulose or wood-like material of plant origin, treating with steam to drive off the volatile constituents and recovering the intimate mixture of the acid treated cellulose or wood-like material of plant origin and petroleum carbon.

5. An active carbonaceous material comprising an intimate bound mixture of carbon-black and skeleton of carbonized woody fibers.

1,763,103. DEVICE FOR ASSISTING HEARING. DR CLIFFORD PHIPPS, Los Angeles, Calif. Filed June 11, 1927, Serial No. 198,050. Renewed Mar. 1, 1930. 3 Claims. (Cl. 181—28.)



1. A device for promoting hearing in the deaf comprising a telephone unit having a vibratory arm, a mouthpiece carried by said arm to be engaged between the user's lips, and a microphone and a battery connected therewith for transmitting impulses to said unit.

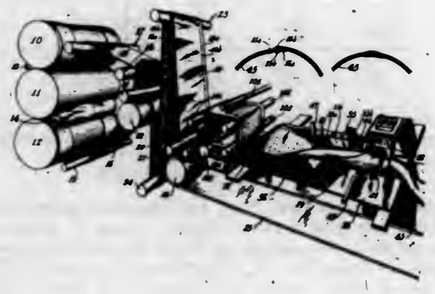
1,763,104. VARIABLE-SPEED A C MOTORS. WILFRED SHURTLEFF, Moline, Ill., assignor to the Herman Nelson Corporation, Moline, Ill., a Corporation of Illinois. Filed May 25, 1927. Serial No. 193,992. 1 Claim. (Cl. 172—120.)

In a motor of the class described, the combination of a stator, a shaft, a sleeve shiftable endwise on said shaft, said shaft and sleeve having key ways and ball keys therein forming a driving connection between the shaft and sleeve and permitting relative endwise movement of the sleeve, a rotor mounted on and endwise movable with said sleeve relatively to the stator, a choke mounted on said sleeve and spaced from one end of said rotor and comprising a group of laminations movable with said sleeve into and out of the magnetic field of said stator, a spring on said shaft normally urging said sleeve in one direction, means for adjusting the force of the spring, and a centrifugal device responsive to the speed of the rotor for shifting the sleeve, rotor and choke against the action of the spring.

1,763,105. ART CLAY. JOHN P. SLINGER, St. Louis, Mo. Filed Oct. 2, 1924. Serial No. 741,285. 6 Claims. (Cl. 134—46.)

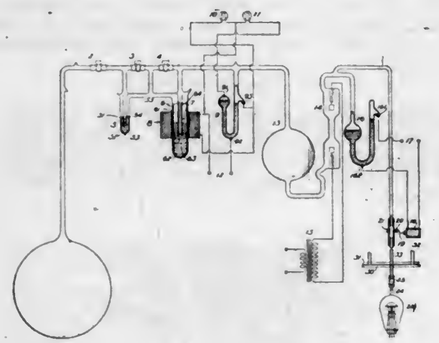
6. An art clay comprising a mixture of approximately forty parts of whiting, approximately fourteen parts of talc, approximately twenty parts of dextrine, approximately ten parts of liquid glucose, and sufficient formaldehyde and sandalwood oil to preserve and color the clay, together with enough water to form a paste.

1,763,106. METHOD OF MAKING RUBBER TUBES. CLARENCE E. SNYDER, Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed July 27, 1928. Serial No. 295,692. 7 Claims. (Cl. 154—8.)



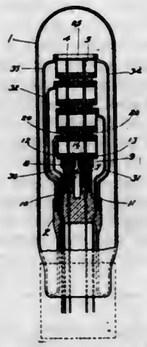
1. The method of making a rubber tube which comprises progressively forming a flat, sheeted strip of unvulcanized rubber from a supply mass of stock, feeding it from the forming position as it is formed, and progressively folding its side margins into contact with each other and thereby forming a tube of the strip as it is so fed.

1,763,107. REGULATING SYSTEM. JOHN A. SPENCER, Revere, Mass., assignor to Raytheon, Inc., Cambridge, Mass., a Corporation of Massachusetts. Filed Mar. 31, 1928. Serial No. 266,441. 5 Claims. (Cl. 176—2.)



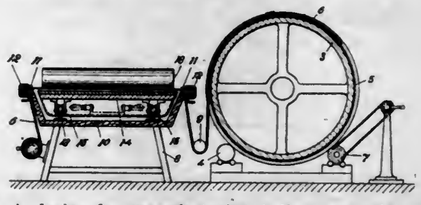
1. In a gas supply system for preexhausted electric discharge devices which have been substantially exhausted of undesirable gases and which are to be filled with gas of a predetermined quality and pressure, a gas supply, controlling means for maintaining said supply at the predetermined pressure, means for cutting off the flow of gas in either direction between the controlled supply and the device upon connection with a device containing gas at a greater pressure than that in the supply, and means interposed between said supply and said pressure responsive means for continually indicating the quality of the gas flowing between said device and said supply.

1,763,108. GLOW LAMP. PERCY L. SPENCER, Medford, Mass., assignor, by mesne assignments, to Old Colony Trust Company, a Corporation of Massachusetts. Filed Mar. 1, 1929. Serial No. 343,680. 6 Claims. (Cl. 176—122.)



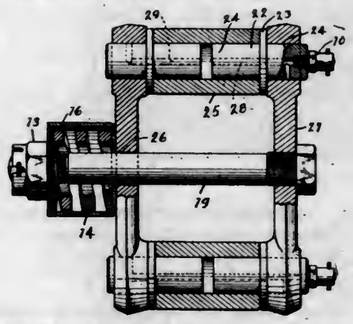
3. A glow lamp comprising a plurality of cathode chambers, each of said chambers comprising a cathode having its interior surface to promote electron emission therefrom, each of said cathodes being insulated from the others and a common anode substantially enclosed by said cathodes.

1,763,109. METHOD OF MANUFACTURING BALLOON MATERIAL. HANS STROBL, Berlin-Tempelhof, Germany, assignor, by mesne assignments, to Luftschiffbau Zeppelin G. m. b. H., Friedrichshafen, Bodensee, Germany. Filed May 22, 1926, Serial No. 110,963, and in Germany June 13, 1925. 4 Claims. (Cl. 154—1.)



3. A device for manufacturing balloon material comprising a revolvable drum-like support, a stretching frame next to it, and illuminating means underneath said frame, said illuminating means being adapted to be moved along said frame in the longitudinal axis of said drum-like support.

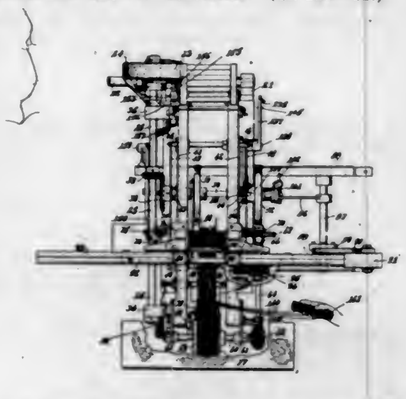
1,763,110. SPRING SHACKLE. HARRY G. TRENCH, Hartford, Conn., assignor to The Union Trust Company, Cleveland, Ohio, a Corporation of Ohio. Filed Jan. 18, 1920. Serial No. 81,947. 2 Claims. (Cl. 267—54.)



1. A shackle unit for use in connection with vehicle springs comprising a shackle plate having apertures in the

end portions thereof, a pintle element having an annular flange formed intermediate its ends and having a portion adapted to be received in the aperture of one end of said shackle plate, a second portion adapted to provide a pivot element for the vehicle spring in connection with which said shackle unit is used, a second pintle of like construction secured in the aperture formed in the other end of said shackle plate, a second shackle plate, a bolt carried by the first shackle plate and extending through an aperture formed in said second shackle plate, pintle elements carried in suitable apertures formed in the end portions of said second shackle plate, a helical spring mounted concentrically of the end portion of said bolt, a nut mounted on the end of said bolt and adapted to apply adjustable pressure to said spring, said spring being mounted between said second shackle plate and said nut and adapted to impose yielding pressure on the end portions of said shackle plates, urging the end portions of said shackle plates toward each other when said shackle unit is mounted in position.

1,763,111. COMBINED POWER AND HAND LOOM. ROBERT E. WALLISER, Chicago, Ill. Filed July 16, 1928. Serial No. 293,277. 30 Claims. (Cl. 139—11.)



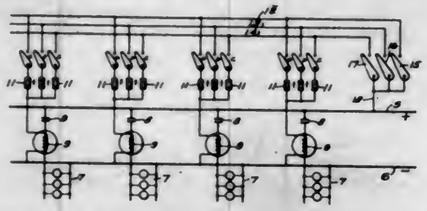
2. A machine of the class described comprising, in combination, automatic weaving means; a clutch for disengaging the shuttle mechanism; a main drive clutch; pattern controlled means for automatically disengaging said first mentioned clutch at predetermined intervals; and pattern controlled means for automatically disengaging said main drive clutch following each disengagement of said first mentioned clutch, to permit of an independent weaving operation at a predetermined point in the fabric where the warp threads are in definite pattern arrangement.

1,763,112. PROCESS FOR DEGUMMING SILK. LEO WALLERSTEIN, New York, N. Y., assignor to Wallerstein Company, Inc., New York, N. Y., a Corporation of New York. Filed Feb. 2, 1927. Serial No. 165,491. 3 Claims. (Cl. 8—2.)

1. The process of degumming silk which consists in subjecting the silk to the action of a solution of papain in the presence of an activator at a temperature sufficient to maintain the activity of the enzyme.

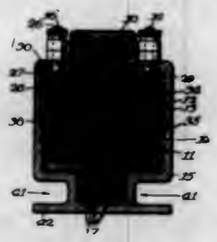
1,763,113. THEATER-LIGHT CONTROL APPARATUS. ROY J. WENSLEY, Edgewood, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 26, 1929. Serial No. 350,104. 5 Claims. (Cl. 171—97.)

1. A control system for theater lighting comprising a feed circuit, a plurality of load circuits, a current-operated control switch for each load circuit, a plurality of scene-control conductors, a plurality of uni-direction valves for each control switch commonly connected at one terminal



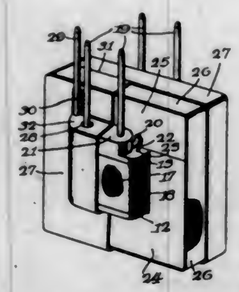
to the control switch and individually connected to a different scene-control conductor, and a presettable switch for each valve.

1,763,114. ELECTRIC COIL AND TRANSFORMER AND PROCESS FOR MAKING SAME. HUGO H. WERMINE, Villa Park, Ill., assignor to Belden Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 2, 1927. Serial No. 180,356. 9 Claims. (Cl. 175—361.)



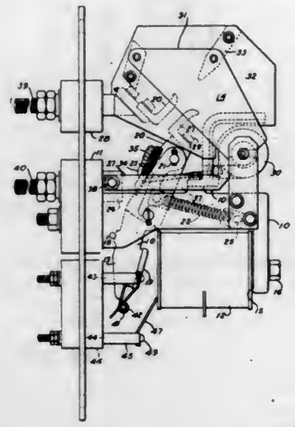
1. In a transformer of the class described, the combination of a bobbin, primary and secondary coils wound on said bobbin, a plurality of binding posts permanently mounted on said bobbin and connected respectively to the terminals of said coils, a metallic shield enclosing said bobbin and said coils, said shield being apertured to permit said binding posts to project outwardly therethrough and electrically connected to one of said posts but not to the others, and a casing of impervious material enclosing said shield.

1,763,115. WEATHERPROOF ELECTRIC WINDING. HUGO H. WERMINE, Villa Park, Ill., assignor to Belden Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed July 16, 1928. Serial No. 293,071. 3 Claims. (Cl. 175—356.)



1. The method of applying a weatherproof casing to an electric winding which consists in first molding an open-ended shell, then inserting the winding into said shell, and then molding a cover over said open end to completely enclose said winding while consolidating said cover material with the material of the premolded shell.

1,763,116. MAGNETIC CONTACTOR. HAROLD E. WHITE, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 24, 1928. Serial No. 264,357. 7 Claims. (Cl. 200—104.)



1. In a magnetically operated switching device, the combination of a pivotally mounted armature member, a contact carrying member pivotally mounted on the armature, a movable contact member mounted on the contact carrying member, a stationary contact member disposed to be engaged by the movable contact member, a tension spring attached to the contact carrying member and disposed to bias the armature to its open position and rotate the contact carrying member about its pivot point, a blow-out coil disposed to be energized by the current traversing the contact members, a contact brush mounted on the contact-carrying member, a stationary contact block disposed to be engaged by the brush in response to the rotation of the contact carrying member, said brush and contact block being disposed to short-circuit the blow-out coil subsequent to the engagement of the contact members, and a magnetizing coil disposed to actuate the armature.

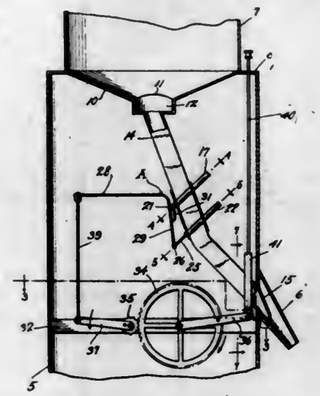
1,763,117. ELECTRIC HEATING UNIT. JAMES C. WOODSON, East Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Oct. 10, 1925. Serial No. 61,683. 6 Claims. (Cl. 201—67.)



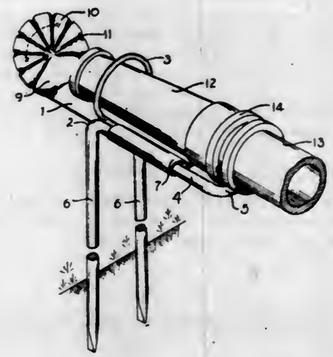
4. The method of making a tubular heating unit which comprises locating an externally longitudinally grooved cylinder of metallic magnesium in an outer metal casing, locating a resistor member in the cylinder, filling the space within the cylinder with a pulverulent electric-insulating material and subjecting said elements to the action of steam to expansively oxidize the magnesium into magnesium oxide to tightly compact the filling in the casing.

1,763,118. SUGAR-DISPENSING APPARATUS. CASIMIR YUCIUS, Chicago, Ill. Filed May 14, 1928. Serial No. 277,684. 3 Claims. (Cl. 221—112.)

1. A dispensing apparatus of the class described comprising a casing, a container rising from the casing, a chute extending downwardly from the container through the casing, a spout extending from the casing and receiving the lower end of the chute, a pair of valve plates slidable across the chute one above the other, means normally holding the lower plate closed, a push rod, and means actuatable by said push rod to first close the upper plate and then open the lower plate, said last mentioned means comprising a lever, means rockably engaging an end of the lever with the lower plate, means slidably and rockably engaging the lever with the upper plate, and means for rocking the lever when the rod is pushed.



1,763,119. NOZZLE HOLDER AND SPRINKLER. CAPELLE HATCHER ARCHER, Tampa, Fla. Filed Nov. 5, 1928. Serial No. 317,327. 5 Claims. (Cl. 299—76.)

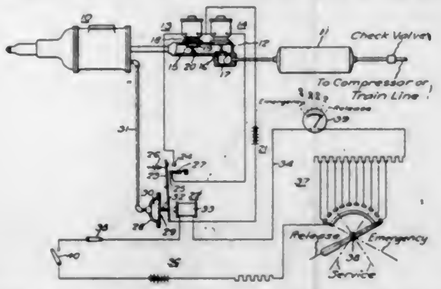


1. A nozzle holder comprising a supporting wire bent to form a transverse portion connecting two parallel portions, each of which is bent to form a leg to be thrust into the ground, a loop of wire having each of its free ends extending substantially parallel with one of the parallel portions of the supporting wire and closely adjacent thereto, and a metal plate having a portion at each side folded around one of the parallel portions of the supporting wire and one of the parallel portions of the wire loop.

1,763,120. ELECTROPNEUMATIC BRAKE. LOUIS M. ASPINWALL, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Feb. 14, 1927. Serial No. 167,906. 8 Claims. (Cl. 303—20.)

1. In an electro-pneumatic braking system, in combination, a brake cylinder, a source of supply of compressed

air for the brake cylinder, electromagnetic valves interposed between the brake cylinder and the source of supply of compressed air, for regulating the pressure in the brake



cylinder, independent circuits for actuating said valves and means dependent on the air pressure in the cylinder for controlling the energization of the circuits to maintain a predetermined pressure in the brake cylinder.

1,763,121. AGITATING CONVEYER. JOSEPH OSWELL BAILEY, Atlanta, Ga. Filed Mar. 8, 1929. Serial No. 345,538. 1 Claim. (Cl. 257—97.)



A conveyer comprising a shaft having a continuous spiral conveyer blade mounted thereon and extending substantially throughout its length formed with a plurality of pitched sections, the outer edges of the opposite end pitch sections being formed with an opening, the intermediate sections being formed with a pair of openings in substantial alignment with the end opening, a series of rod sections extending through the respective openings, lock means carried by said rods and adapted to engage opposite sides of each respective pitch section, whereby said rods constitute agitating and mixing elements and bracing means for each flight section with respect to its adjacent section.

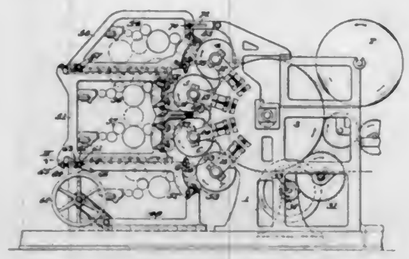
1,763,122. SPRAY CONVEYER. JOSEPH OSWELL BAILEY, Atlanta, Ga. Filed Mar. 8, 1929. Serial No. 345,539. 1 Claim. (Cl. 258—97.)



A conveyer comprising a shaft hollow throughout its length, a series of hollow jet members arranged in a spiral line about said shaft, communicating with the interior thereof and constituting lug elements, a helicoid conveyer blade mounted on said shaft in a spiral direction opposite to that of said lug elements, whereby continuous treatment of said material through said shaft and jet members and agitation and mixing thereof during its travel throughout the length of the conveyer and across its path of travel is effected.

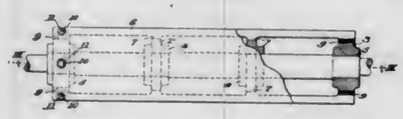
1,763,123. ROTARY WEB-PRINTING PRESS FOR BAG BLANKS. HOWARD M. BARBER, Pawcatuck, Conn., assignor to C. B. Cottrell & Sons Company, Westerly, R. I., a Corporation of Delaware. Filed May 4, 1928. Serial No. 275,017. 2 Claims. (Cl. 101—182.)

1. In a rotary press for printing on a web from which bag blanks having overlapping tab portions at their heads, are to be cut, an impression cylinder and a form cylinder, said form cylinder having a circumference equal to or a



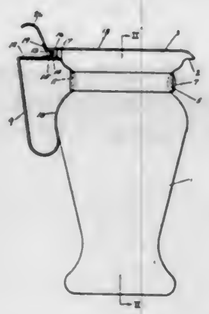
multiple of the combined length of two adjacent bag blanks plus the distance occupied by their overlapping tab portions.

1,763,124. PLATE CYLINDER FOR PRINTING PRESSES. HOWARD M. BARBER, Pawcatuck, Conn., assignor to C. B. Cottrell & Sons Company, Westerly, R. I., a Corporation of Delaware. Filed July 20, 1928. Serial No. 294,098. 4 Claims. (Cl. 101—375.)



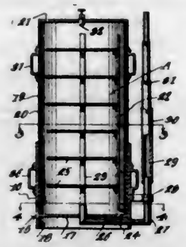
1. A plate cylinder comprising a shaft member having circumferential flanges located at intervals along the same and a shell member having internal annular ribs coinciding with said flanges and means for removably securing the shell member to the shaft member.

1,763,125. CONTAINER, HANDLE, AND TOP THEREFOR, AND MEANS OF UNION THEREOF. CHARLES S. BARON, Tiffin, Ohio. Filed Feb. 2, 1926. Serial No. 85,543. 6 Claims. (Cl. 215—100.)



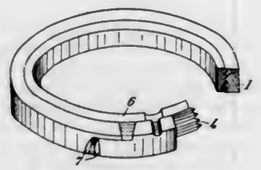
1. The combination with a container having a circumferential groove below its mouth-defining rim, of a detachable spring clip confined by the walls of said groove upon the container, and a separable detachable handle having a portion of it confined by the clip against the body of the container.

1,763,126. COOKER. JERRY BARRY, Melfort, Saskatchewan, Canada. Filed Mar. 16, 1929. Serial No. 347,625. 10 Claims. (Cl. 53—3.)



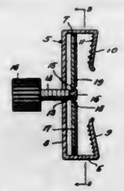
1. A cooking device comprising a closed vessel, means for controlling the outlet of moisture from said vessel including a flue communicating with the lower end of the receptacle, and means for altering the active length of said flue.

1,763,127. PISTON RING. GEORG BEER, Wiesbaden, Germany. Filed Sept. 12, 1929, Serial No. 392,160, and in Germany May 17, 1926. 3 Claims. (Cl. 74—109.)



1. A piston ring, comprising inner and outer concentric ring members, the outer periphery of the inner member and the inner periphery of the outer member having alternating circumferential annular ribs and grooves thereon, the ribs on one of said members being axially offset with respect to the grooves on the other of said members so as to increase the combined axial width of the members when the ring is assembled between a piston and a cylinder.

1,763,128. SAFETY HOLDER. ARTHUR M. BOLLAND, Lockport, N. Y. Filed July 5, 1929. Serial No. 376,227. 2 Claims. (Cl. 24—263.)



1. In a device of the character described comprising a yoke-shaped body portion, a pair of inwardly disposed extensions secured on the ends of the legs thereof, a stem threadedly mounted on the bight portion of and extending through said body portion, a plate rockably mounted on the end of said stem and slidably confined in said yoke to selectively abut said extensions, said plate formed with a compressible layer on its outer face.

1,763,129. PROCESS OF MAKING STOPPERS. JEAN BROADHURST, New York, N. Y., assignor of one-half to Stanley J. Stanley, New York, N. Y. Filed Jan. 12, 1928. Serial No. 246,285. 5 Claims. (Cl. 18—55.)



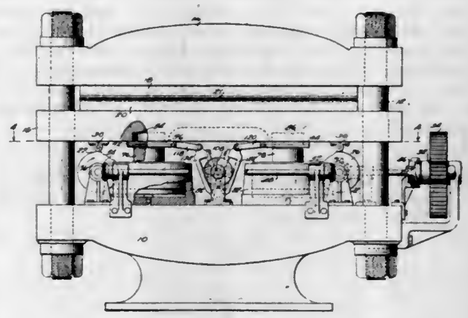
3. The process of making stoppers, consisting of subjecting an end of a porous pulp body to moisture and tapering the body toward the moistened end.

1,763,130. GRAVE MARKER AND FLOWER STAND. EDNEY B. CARTWRIGHT, Chattanooga, Tenn. Filed Dec. 23, 1927. Serial No. 242,271. 3 Claims. (Cl 47—41.)



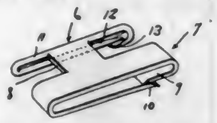
3. A device of the character described comprising, in combination, a pot frame made of a single piece of strap metal bent U-shaped; a hoop also of strap metal welded to the arms of the frame; and a sharpened stake of strap metal welded to the lower end of the frame, said stake adapted to be bent for crating or shipping purposes.

1,763,131. PRESS. JOHN J. CAVAGNARO, Ridgewood, N. J. Filed Feb. 5, 1929. Serial No. 337,631. 16 Claims. (Cl. 101—3.)



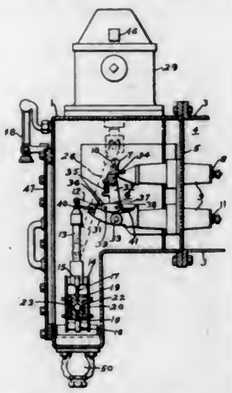
1. In a press, a movable press member, means for producing free movement of said member through a relatively considerable distance, and hydraulic means, applied to the movable member separately from the application thereto of the first named means, for producing the final pressing movement of said member, said hydraulic means being adapted to produce movement of said member through a shorter distance than the first named means.

1,763,132. APPAREL CLASP. ETHEL K. CHASE, New Bedford, Mass. Filed Dec. 12, 1929. Serial No. 413,530. 1 Claim. (Cl. 24—85.)



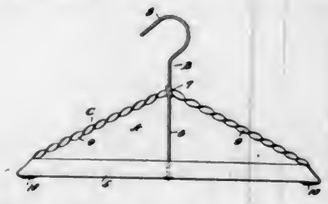
As a new product of manufacture, an apparel fastener comprising an elongated loop-like clasp formed of substantially flattened material and having overlapping ends providing an entrance, the outer end being flared outwardly to facilitate insertion of apparel straps and the like, a web formed integral with said clasp, and a safety pin carried by said web and disposed in spaced parallelism with said clasp and in a plane substantially even with the clasp.

1,763,133. TAP CHANGER FOR ELECTRIC TRANSFORMERS. WILLIAM A. COATES, Hale, and JOHN FOWLER, Leeds, England, assignors to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Nov. 30, 1928, Serial No. 322,840, and in Great Britain Dec. 1, 1927. 6 Claims. (Cl. 200—17.)



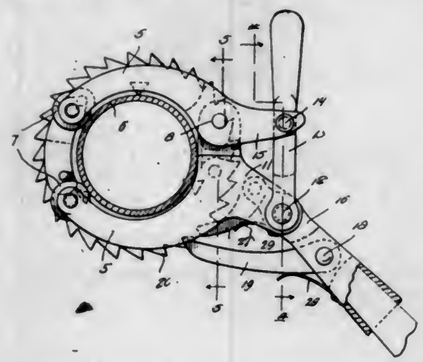
1. In a transformer having a winding provided with a plurality of tapping points, tap changing mechanism therefor comprising a plurality of switches for changing the connections to said tapping points, a switch operating member associated with each switch, and means for positively actuating the switch operating members in the one or the other direction, each switch comprising a movable switch arm and means for biasing the switch arm to a predetermined position, and a toggle mechanism between the switch operating member and the switch arm for locking the switch arm in a second predetermined position against the action of said biasing means until released by the switch operating member.

1,763,134. GARMENT HANGER. PEYTON S. COLES, Atlanta, Ga. Filed Dec. 22, 1928. Serial No. 327,958. 1 Claim. (Cl. 223—64.)



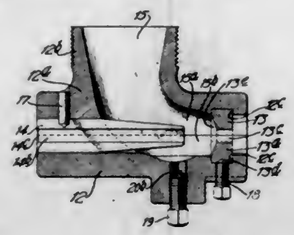
A garment hanger comprising a horizontal member, a hook member, secured to the horizontal member intermediate its length, said hook member formed with a loop at a point vertically spaced from the horizontal member, a rubber supporting element adapted to extend through said loop with its ends connected to said horizontal member, the said rubber supporting element being formed with spirals throughout its length comprising a plurality of upstanding garment contacting surfaces, whereby garments supported thereon will not slip off.

1,763,135. PIPE WRENCH. LUTHER COX, Smackover, Ark. Filed Nov. 11, 1927. Serial No. 232,626. 1 Claim. (Cl. 81—57.)



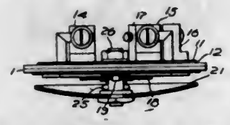
In a pipe wrench, a pair of arcuate pipe engaging segments freely mounted on the pipe and pivotally connected at one end, rearwardly diverging extensions formed on said connected ends, a link pivotally connected to one extension and adapted to be detachably connected to the other extension for releasably connecting said extensions for maintaining the segments in fixed relative position, a section annular pipe gripping member formed of a pair of arcuate sections pivotally connected at one end, latch means releasably connecting their opposite ends for retaining the same upon the pipe, gripping elements carried at the inner periphery of the sections thereof, ratchet teeth formed at the outer periphery thereof and a handle member pivotally attached to one of said extensions having pawls carried thereon and disposed at opposite sides of the pivotal connection of the handle and engaging said ratchet teeth for respectively operating the gripping member upon opposite movement of the handle.

1,763,136. INSULATING HEAD FOR EXTRUSION MACHINES. GUY F. CROWLEY, Milford, Conn., and ROBERT C. PIERCE, Niles, Mich., assignors to National Standard Company, Niles, Mich., a Corporation of Michigan. Filed June 27, 1927. Serial No. 201,792. 1 Claim. (Cl. 18—13.)



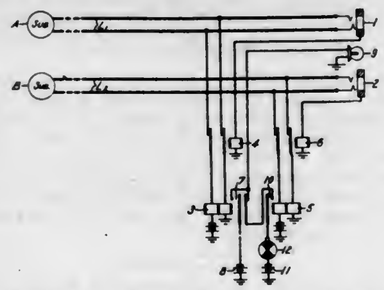
In combination with an extrusion machine; a head adapted to have a wire passed through the same substantially transversely to the extrusion machine, said head comprising, a baffle provided with an aperture, said baffle being separable throughout the length of said aperture, a die provided with an aperture, said die being separable throughout the length of said aperture, and a separable casing provided with an aperture adapted to receive coating material from the extrusion machine, said separable casing adapted to support said separable baffle and said separable die, whereby, the casing, baffle, and die, may be separated to permit removal of a wire therefrom.

1,763,137. THERMOSTATIC DEVICE. HILLER D. DORFMAN, Mansfield, Ohio, assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Nov. 10, 1927. Serial No. 232,291. 7 Claims. (Cl. 200—122.)



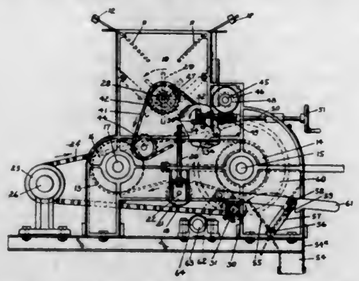
1. In a thermal relay for an electric motor in combination, a thermostatic switch for the motor, means responsive to a relatively small value of current long continued for heating the switch to its operating temperature by conducted heat, and a second means responsive to a relatively large value of current of short duration for heating the switch to its operating temperature by radiant heat.

1,763,138. SIGNALING SYSTEM. OTTO EDELMANN, Newark, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed July 24, 1929. Serial No. 380,560. 9 Claims. (Cl. 179—71.)



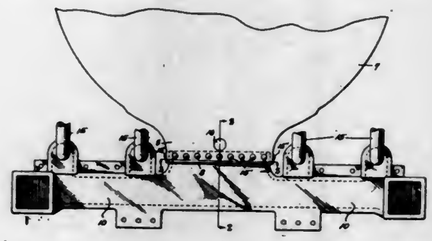
1. In a telephone system, a plurality of lines, a calling signal common to said lines, and means associated with each of said lines for operating said signal in a different characteristic manner.

1,763,139. MEASURING FEEDER. SHERMAN T. EDWARDS, Chicago, Ill. Filed Aug. 12, 1929. Serial No. 385,121. 4 Claims. (Cl. 83—44.)



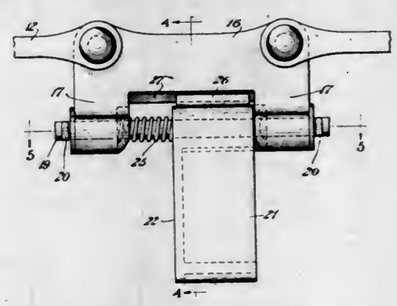
1. A device of the character described, including; a hopper; a belt conveyor across the bottom of the hopper; a vertically slidable gate above the conveyor at the side of the hopper adjacent the discharge end of said conveyor; and a rotatable material leveling member carried on the inner side of the gate near its lower edge.

1,763,140. LOCOMOTIVE WATER-TUBE BOILER. GEORGE H. EMERSON, Baltimore, Md. Filed Sept. 20, 1928. Serial No. 307,155. 7 Claims. (Cl. 122—369.)



3. In a water tube boiler, a back tube sheet having an extension, a mud ring having a tubular projection, and a throat sheet having an extension, the extensions of the tube sheet and throat sheet being arranged to embrace the tubular projection of the mud ring and secured thereto.

1,763,141. CONVEYER FLIGHT. GEORGE ERDMAN, Hudson, N. Y., assignor to Gifford-Wood Company, Hudson, N. Y., a Corporation of New York. Filed June 21, 1928. Serial No. 287,129. 3 Claims. (Cl. 198—168.)

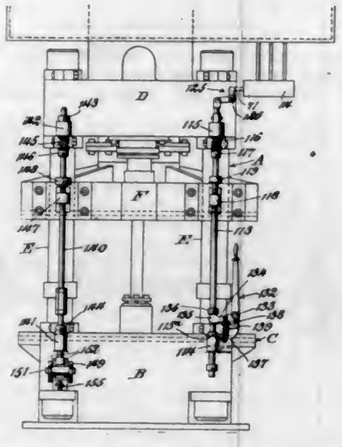


1. In combination with a conveyer chain, a link; a depending bearing portion at each end of the link; a shaft arranged longitudinally of the link and in the bearings; a pusher plate rockably mounted on the shaft and extending below the bearings; a V-shaped projection on the rear face of the plate; one inner face of the bearings having a corresponding V-shaped notch to form a seat for the projection; and a coiled spring on the shaft between the front of the plate and the adjacent bearing to hold the V-shaped projection normally in its notch.

1,763,142. HYDRAULIC PRESS. WALTER ERNST, Mount Gilead, Ohio, assignor to Hydraulic Press Manufacturing Company, Mount Gilead, Ohio. Filed Jan. 24, 1929. Serial No. 334,746. 12 Claims. (Cl. 138—10.)

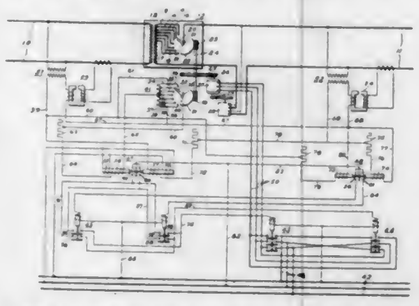
1. The combination with a hydraulic press including a reciprocatory platen; of a pump dischargeable in one direction only; means forming with the press and with the pump a high pressure hydraulic press-operating circuit; a reversing valve operatively connected in said circuit; a low pressure hydraulic pilot circuit; a pilot valve operatively connected in said low pressure circuit; pressure responsive actuating means associated with said reversing valve;

hydraulic connections between the pilot valve and said pressure responsive actuating means for admitting fluid from said low pressure circuit to said actuating means



to shift the reversing valve when the pilot valve is shifted; and means for shifting the pilot valve when the platen approaches the limit of one of its reciprocatory movements.

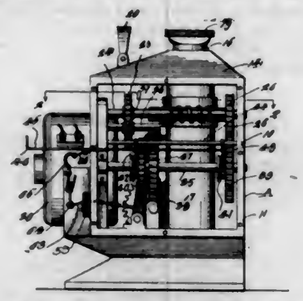
1,763,143. TAP CHANGER. WILLIAM R. FARLEY, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Jan. 5, 1929. Serial No. 330,481. 9 Claims. (Cl. 171—119.)



1. An automatic tap-changing system for transformers comprising, in combination, a plurality of power lines, a transformer connecting said power lines, said transformer being provided with motor-operated tap-changing equipment, and means for controlling the motors to operate the tap-changing equipments for maintaining the ratio of transformation equal to the ratio of the voltages of the respective power lines.

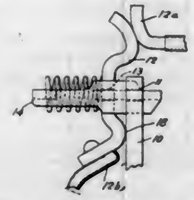
1,763,144. JACK. LEWIS J. FULLER, Cleveland, Ohio. Filed Jan. 10, 1927. Serial No. 160,258. 1 Claim. (Cl. 254—98.)

In a device of the class described, a rotatable feed nut, a screw operated by said nut, an electric motor, a control switch for the motor, a driven shaft operated from the motor, a drive shaft for the feed nut, a pair of drive gears keyed to the drive shaft, an idle gear meshing with one of said drive gears, a pair of gears feathered upon the driven shaft, a shift rod for the feathered gears, the feathered gears being arranged for movement into and out of engagement with the idle gear and the drive gear, a trip lever rockably mounted adjacent to one end defining a relatively long arm and a relatively short arm, trip fingers on the opposite ends of the arms, a trip lug on the screw for engaging one trip finger or the other at the limit of the travel of the screw for operating the



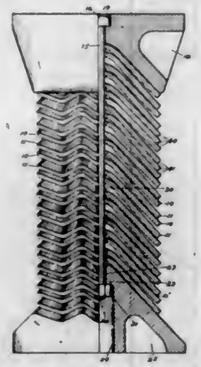
trip lever, and means operatively connecting the long arm of the trip lever to the control switch and shift rod, as and for the purpose specified.

1,763,145. CONTACT FINGER. JOHN Q. GAUBERT, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed June 18, 1927. Serial No. 199,695. 6 Claims. (Cl. 200—166.)



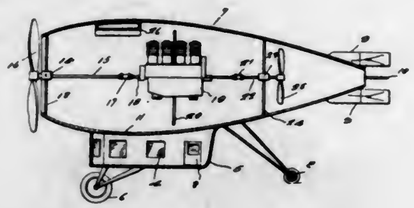
1. In a contactro, in combination, a contact-carrying member, a contact tip adapted to be mounted on the contact-carrying member, said contact tip and contact-carrying member being provided with openings, a buckle provided with oppositely disposed tongues, one of said tongues being disposed to fit loosely into the openings in said contact tip and contact-carrying member, and resilient means for retaining the contact tip in movable relation on the tongue.

1,763,146. SPRING. ERNEST G. GOODWIN, Pelham, N. Y., assignor to Standard Coupler Company, New York, N. Y., a Corporation of New Jersey. Filed May 9, 1925. Serial No. 29,194. 15 Claims. (Cl. 267—3.)



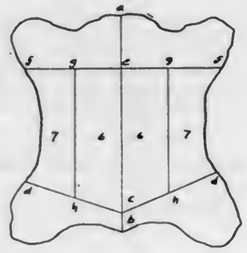
1. A spring consisting of a plurality of nested dished elements, each unconnected to but frictionally engaging the adjacent elements on each side, said elements contacting in increasing area as the load is applied.

1,763,147. AIRCRAFT CONSTRUCTION. WILLIAM K. GOEBNER, Atlantic City, N. J. Filed June 6, 1929. Serial No. 368,840. 2 Claims. (Cl. 244—18.)



2. An aeroplane comprising a body, a longitudinally tapering tube supported on said body and extending beyond the adjacent ends of said body, said tube being open at said end, a relatively large propeller mounted exteriorly of said tube at its largest end, a relatively small propeller mounted within said tube inwardly from the smallest end of said tube, said propellers having their axes in longitudinal alignment, a motor arranged in said tube between said propellers, means operatively connecting the propellers with said motor, wings projecting laterally from opposite sides of said tube, said wings tapering longitudinally toward the smallest end of said tube, said wings being substantially arcuate in cross section.

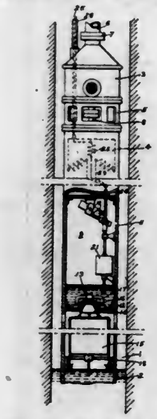
1,763,148. METHOD OF FORMING INSOLES. HAROLD M. GUSDORF, Indianapolis, Ind. Filed June 20, 1929. Serial No. 372,271. 1 Claim. (Cl. 12—146.)



The method of cutting inner soles from pig skin which consists in cutting strips from the fat backs of pigs parallel to the back bone, cutting these strips transversely to form blocks each having a length parallel to the length of the strips and greater than the strip widths, and cutting two innersoles to exact sizes from each block, whereby each insole so formed will be composed of material flexible longitudinally but which will substantially resist any transverse stretching.

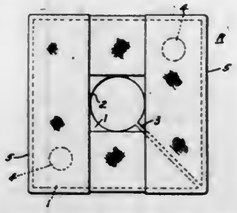
1,763,149. INCLOSED SUBMERSIBLE MACHINE. VICTOR GUTMANN, Nuremberg, and LUDWIG STEINER, Berlin, Germany, assignors to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Feb. 17, 1928, Serial No. 255,166, and in Germany Apr. 30, 1927. 9 Claims. (Cl. 103—87.)

1. In a submersible electrical machine, in combination, a pump for pumping fluids, a motor for operating the pump, a casing for inclosing the motor, said casing being provided with a reservoir for collecting leakage fluid, means for discharging leakage fluid from the reservoir when the motor



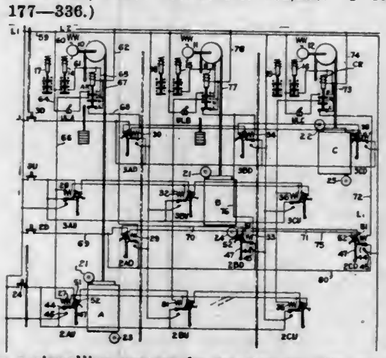
casing is raised out of the fluid, and means responsive to the level of the fluid in the reservoir for controlling the operation of the motor.

1,763,150. REACTOR SYSTEM. JOSEPH S. HEBREW, Sharon, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed July 15, 1927. Serial No. 205,883. 2 Claims. (Cl. 175—356.)



1. A reactor comprising a group of magnetizable members, a member comprising a phenol condensation product passing through said magnetizable members, a web of tape disposed about said magnetizable members for holding them in assembled relation, and water-proof gum material disposed on said tape.

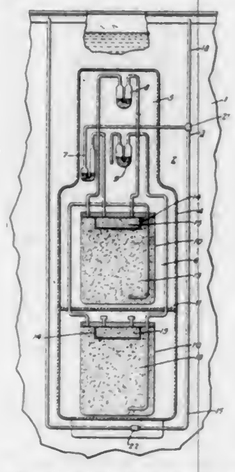
1,763,151. SIGNALING SYSTEM. RAY P. HIGBEE, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed June 24, 1927. Serial No. 201,157. 8 Claims. (Cl. 177—336.)



1. In a signalling system for an elevator, the combination with an elevator car operable in a hatchway past

a floor landing, of a bell on the car, a striker mounted in the hatchway for actuating said bell, passenger-operated means located at the landing for moving said striker from a non-operative position to an operative position to actuate the bell, means to maintain said striker in said operative position, and means for restoring the striker to its non-operative position upon the striking of said bell.

1,763,152. TRANSFORMER. LELAND H. HILL, Swissvale, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Dec. 4, 1924. Serial No. 753,836. 13 Claims. (Cl. 220—85.)



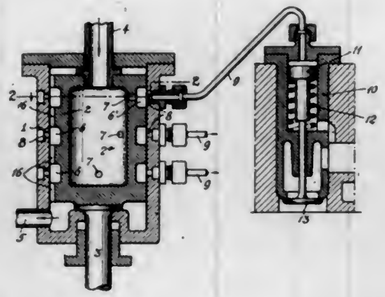
1. In a gas-treating device, a container, paths connected in parallel for conducting gas to the container, a breathing regulator for controlling the pressure within the container and connected in series relation to the parallel paths, and means constituting a portion of one of the parallel paths by which the parallel paths may constitute direct entrance and exit paths to the container independently of the breathing regulator.

1,763,153. COMBINED WINDSHIELD WIPER AND ICE REMOVER. WILLIAM J. HOBBINS, Madison, Wis. Filed Feb. 27, 1928. Serial No. 257,352. 3 Claims. (Cl. 15—255.)



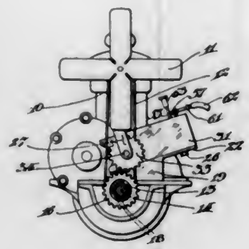
1. In combination, an oscillating wind-shield wiper, a tube carried thereby and parallel therewith means for connecting said tube with the exhaust line of an engine, said tube being perforated to discharge the exhaust against the windshield.

1,763,154. CONTROLLING DEVICE. HANS HOLZWARTH, Dusseldorf, Germany, assignor to Holzwarth Gas Turbine Co., San Francisco, Calif., a Corporation of Delaware. Filed Mar. 11, 1927. Serial No. 174,500. 1 Claim. (Cl. 25—107.)



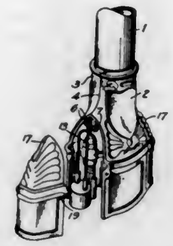
A device for controlling a fluid-pressure-operated instrumentality, comprising a casing having an outlet and an opening adapted to be connected with such instrumentality, a controlling member rotatably mounted in said casing and provided with an annular outwardly open channel in registry with said opening, partition blocks in said channel whereby the latter is divided into independent chambers, one of which is adapted to be placed in communication through the interior of said controlling member with a source of fluid under pressure, and the other of which is in communication with the outlet of the casing, each of said blocks being so constructed as to provide one or more channels communicating with the chamber to the rear of such block and adapted to come into registry with said opening and increasing in effective total cross-section toward such chamber, whereby communication between said opening and said chambers in succession is established gradually from zero to the full area of such opening.

1,763,155. AIR PUMP. GEORGE H. HUGHES, Philadelphia, Pa. Filed Sept. 7, 1927. Serial No. 217,892. 12 Claims. (Cl. 230—38.)



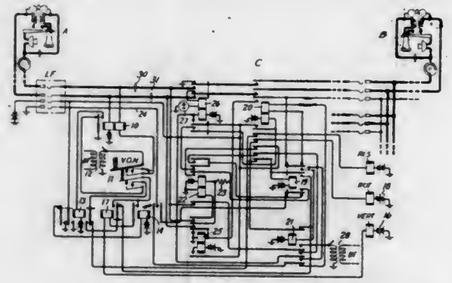
1. An air pumping attachment for vehicle motors including a pinion attachable to the crankshaft pulley of a motor, a bracket secured to the motor, a pump mounting slidable on the bracket, a cylinder on the mounting, a piston reciprocable in the cylinder, and a gear operably connected to the piston to be brought into mesh with the pinion.

1,763,156. POST STRUCTURE. HOWARD L. JOHNSTON, Forest Hills, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Jan. 16, 1925. Serial No. 2,965. 7 Claims. (Cl. 247—1.)



1. A sheath for posts comprising two sheathing members and two cover members, the upper portion of said sheathing members being shaped to conform to a cylinder for encircling a post, the lower ends of the sheathing members being spaced apart and the two cover members being disposed therebetween to form a distorted cylinder for encircling the post.

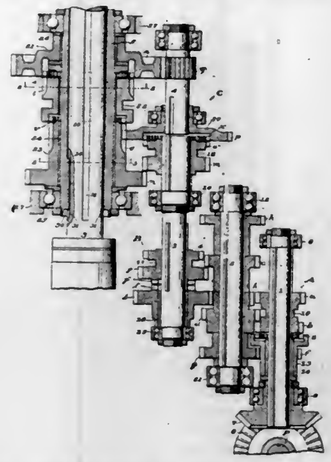
1,763,157. TELEPHONE SYSTEM. GERALD V. KING, St. Albans, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed May 4, 1929. Serial No. 360,439. 7 Claims. (Cl. 179—18.)



1. In a telephone system, subscribers' lines, means for establishing a connection between any two of said lines, means for signaling the subscriber on the line to which the connection has been made, and means responsive to a call from a certain subscriber's line for preventing the signaling of the subscriber to which the connection is made if said subscriber is already engaged in a previous connection.

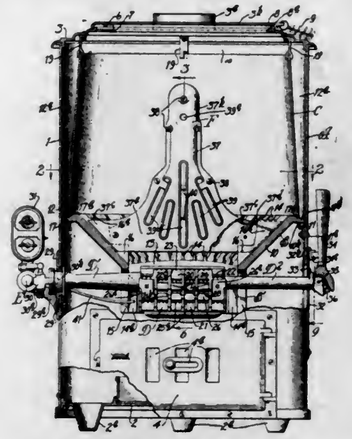
1,763,158. THIRTY-SIX-SPEED HEAD. DAVID C. KLAUSMEYER and HENRY M. NORRIS, Cincinnati, Ohio, assignors to The Cincinnati Bickford Tool Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Mar. 28, 1925. Serial No. 19,178. 5 Claims. (Cl. 74—57.)

1. In a radial drill head, a speed controlling mechanism combining a power shaft; first, second, and third driven shafts; a spindle; serially arranged primary, secondary and tertiary gear sets carried by the head and adapted to transmit to said spindle a plurality of speeds from a single speed in said power shaft, said secondary gear set comprising three rotatable and non-translatable driving gears supported by said second shaft, one rotatable and non-translatable driven gear journaled coaxial with said third shaft and two driven gears splined to said third shaft, said driven gears being complemental to said driving



gears, and being adapted to selectively to be rotated thereby; and a clutch device between said translatable and non-translatable driven gears operatively to connect said non-translatable driven gear with said third shaft.

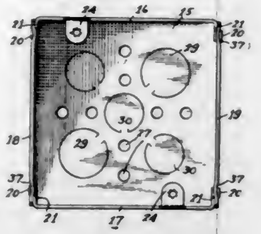
1,763,159. INCINERATOR. HERMAN KLEIN, Chicago, Ill. Filed May 31, 1928. Serial No. 281,739. 27 Claims. (Cl. 110—18.)



1. In combination, a fire-pot having at its lower end an unobstructed discharge-chute, and a gas-burning grate substantially housed in said chute and having centrally located trunnions upon which the grate may turn in either direction, said grate having wings provided with sloping top surfaces, the lateral edges of said wings being so related to the walls of said chute as to maintain closure at one side while the other side is opened in the dumping operation.

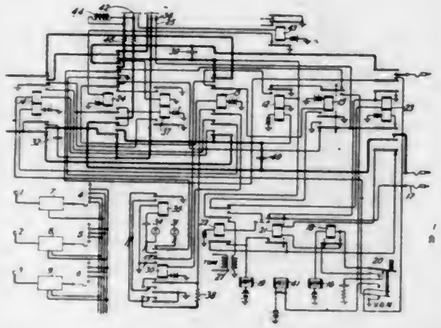
26. A gas burning grate for use with an incinerator comprising a rectangular casting of general V cross section, with a plurality of openings through each side thereof, said casting formed hollow for the passage of gas through every portion of the grate, and with gas discharge orifices around the periphery of the grate and also around said openings.

1,763,160. OUTLET OR JUNCTION BOX OR THE LIKE. JULIAN GORDON KNIGHT, Brooklyn, N. Y. Filed Mar. 16, 1925. Serial No. 15,816. 8 Claims. (Cl. 247—15.)



1. An outlet or junction box or the like comprising a back wall having angularly upstanding side walls, one of the side walls having an inturned end portion engaged inside the end portion of another side wall and provided with a locking lug, the outside wall having an opening through which said locking lug projects, the outer wall being indented beneath the overlying portion of the locking lug and said locking lug lying in said indented portion in the outside face of the outer wall to further interlock the two walls, said indented portion overstanding that part of the inturned end portion from which the locking lug extends, whereby the walls are interlocked vertically as well as horizontally.

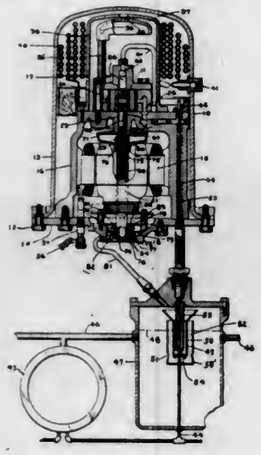
1,763,161. TELEPHONE SYSTEM. CHARLES D. KOECHLING, Brooklyn, and GERALD V. KING, Jamaica, N. Y., assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Nov. 1, 1928. Serial No. 316,433. 14 Claims. (Cl. 179—16.)



1. In a telephone system, lines, an automatic selecting switch for each line, means responsive to the actuation of the switch of any one of said lines for associating said line with all of the other lines, and means associated with the switch of each of said called lines for individually applying ringing current and talking current to the corresponding called lines.

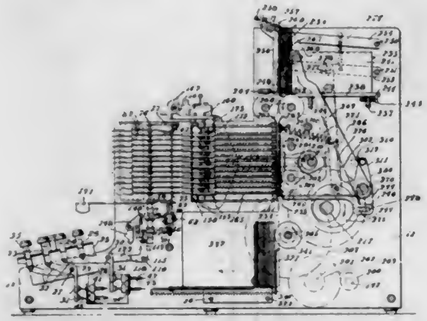
1,763,162. REFRIGERATOR - MOTOR - LUBRICATING SYSTEM. ANDREW A. KUCHER, Chester, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Oct. 13, 1925, Serial No. 62,275. Renewed Jan. 21, 1928. 13 Claims. (Cl. 230—207.)

1. In a lubricating system for an intermittently operated fluid translating apparatus, the combination of a compressor, a receptacle for containing lubricant, means for repeatedly conveying lubricant from the receptacle to the compressor and back to the receptacle during the active periods of the compressor and for removing lubricant from the receptacle during at least portions of the inactive



periods of said compressor, and a chamber for collecting the lubricant removed from the receptacle during the inactive periods of said compressor.

1,763,163. AUTOMATIC VISIBLE-CARD PERFORATOR. WILLIAM W. LASKER, Brooklyn, N. Y., assignor, by mesne assignments, to Remington Rand Inc., New York, N. Y., a Corporation of Delaware. Filed June 28, 1922. Serial No. 571,349. 81 Claims. (Cl. 164—112.)

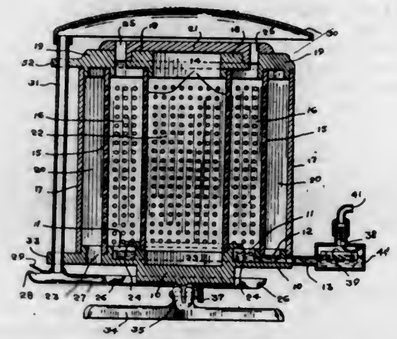


1. In a card punching machine, the combination of a keyboard, punch mechanism controllable from said keyboard, a device for holding a card to be punched and formed so as to expose the face of the card to the operator of the machine, means for moving said card from exposed position to operative position with relation to said punch mechanism, and operating mechanism correlated with said means and with said punch mechanism for first causing said means to move said exposed card from exposed position to operative relation with said punches and thereafter during the same cycle of operation causing said punch mechanism to punch said card according to the control of said keys.

1,763,164. OIL BURNER. MICHAEL A. S. LAVIGNE, Winsted, Conn., assignor of seventeen per cent to Amin M. Khoury, Burlington, Vt. Filed Apr. 11, 1928. Serial No. 269,206. 2 Claims. (Cl. 158—87.)

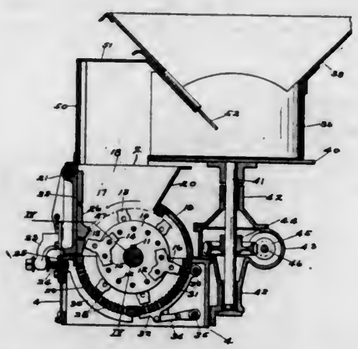
1. An oil burner, comprising a base member, a fuel trough supported by said base member, spaced perforated

partitions extending vertically from the walls of said trough, forming a combustion chamber above the trough, an outer wall disposed in spaced relation to the outer partition and supported by said base member, a cover for said partitions and wall having openings therethrough communicating with the combustion chamber, a canopy



disposed above said cover in spaced relation thereto, a priming trough disposed beneath the base member adjacent the fuel trough, a filler pipe connected with said priming trough, and a return pipe extending down from said canopy having connection with said filler pipe, said base member having air openings communicating with the space between the outer wall and outer partition.

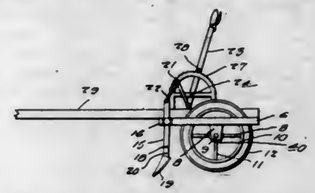
1,763,165. APPARATUS FOR BREAKING COAL. WILLIAM K. LIGGETT, Columbus, Ohio, assignor to The Jeffrey Manufacturing Company, Columbus, Ohio, a Corporation of Ohio. Filed Dec. 4, 1923. Serial No. 678,456. 5 Claims. (Cl. 83—11.)



1. In a machine of the class described, the combination of a rotor; a plurality of radially extending, rigid, reducing elements circumferentially disposed and spirally arranged longitudinally of said rotor and which, when the rotor is in motion, generate a substantially continuous revolving material-supporting surface; and a hopper for the material to be reduced arranged above and closely embracing at its lower end said rotor to retain the material in floating condition on said rotor and to prevent oversize material passing between said rotor and the lower end of said hopper.

1,763,166. ROTARY LAND CORRUGATOR. CECIL B. LINDBURG, Darlington, Idaho. Filed May 15, 1928. Serial No. 277,946. 1 Claim. (Cl. 97—55.)

An apparatus of the character described, comprising a frame, a shaft journaled across the frame, a plurality of rollers on the shaft in spaced relation to each other, each roller including a rim, a hollow rib encircling the rim comprising a pair of outwardly converging side walls

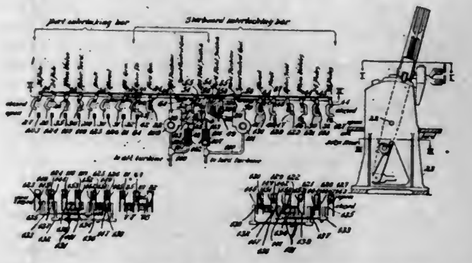


disposed inwardly of the marginal edges of the rim and a substantially V-shaped end wall bridging the side walls at their outer edges, and a plurality of digging elements supported on the frame, one in front of each roller.

1,763,167. METHOD OF REVIVIFYING FULLER'S EARTH AND OTHER FILTERING CLAYS. HUGH LOWERY, Alton, Ill., assignor to Standard Oil Company, Whiting, Ind., a Corporation of Indiana. Filed May 25, 1927. Serial No. 194,237. 4 Claims. (Cl. 252—2.)

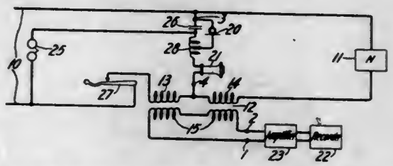
1. The method of revivifying filtering clay from mineral oil filtration which consists in washing the clay with aqueous solution of soda ash while heating to about 180 to 210° F., settling the mixture, removing oil and liquid therefrom, washing the clay with water, and drying and igniting the clay.

1,763,168. CONTROL MECHANISM. JOHN B. MACNEILL, Wilkinsburg, and ANDREW H. BAKKEN and CURTIS A. TUCKER, Edgewood Park, Pa., assignors to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Sept. 1, 1921. Serial No. 497,765. 16 Claims. (Cl. 172—8.)



1. The combination with an electric generator, an electric motor to be energized therefrom and having a secondary winding, a resistance device for said secondary winding, and means whereby operation of the resistance device is precluded prior to the energization of the field of the feeding generator.

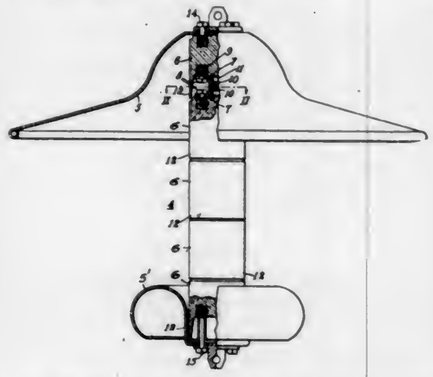
1,763,169. SOUND RECORDING. ROBERT C. MATHES, Wyoming, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Sept. 23, 1926. Serial No. 137,274. 8 Claims. (Cl. 179—6.)



1. A system comprising a telephone set including a transmitter, a line, a recorder adapted for recording elec-

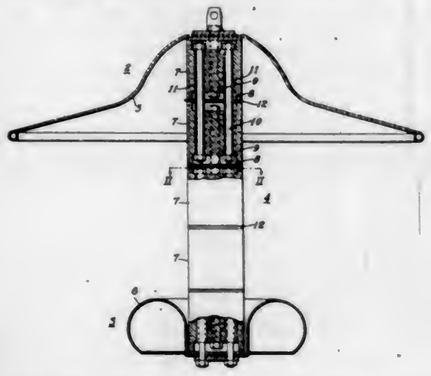
trical variations within a limited amplitude range, means coupling said telephone set and said recorder to said line and in conjugate relationship to each other, said system being so adjusted that said recorder is supplied with a portion of the eelctrical variations received over said line and from said transmitter, and means comprising a single space discharge amplifying device connected between the recorder and said coupling means, and automatically responsive to receiving electrical variations to maintain the amplitude range of the electrical variations supplied to said recorder within the recording limits thereof.

1,763,170. INSULATOR. FREDERIC H. MILLER, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Feb. 19, 1927. Serial No. 169,487. 2 Claims. (Cl. 173—318.)



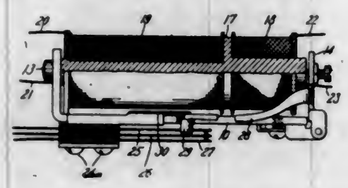
1. An insulator in the form of an elongated cylindrical rod of inorganic dielectric material having smooth side surfaces of uniform diameter and constructed of closely end-to-end related longitudinal sections, one of said sections comprising a main body portion and an annular end flange projecting therefrom to a position closely adjacent to a next adjacent section to provide a space between said one and said adjacent section, and detachable section-connecting means having portions in said space.

1,763,171. INSULATOR. FREDERIC H. MILLER, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Feb. 19, 1927. Serial No. 169,488. 4 Claims. (Cl. 173—318.)



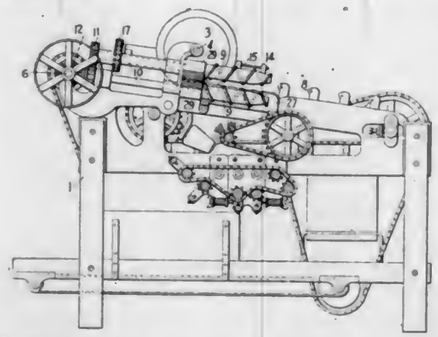
2. An insulator comprising end-to-end related insulating units having adjacent ends constructed to form a recess, a member extending through said units to hold the same together, an insulating barrier dividing said recess into compartments, and a member extending through each of the units having an enlarged head in one of said compartments.

1,763,172. ELECTRO-POLARIZED RELAY. OHMER R. MILLER, Floral Park, N. Y., and EDWARD D. MEAD, Caldwell, N. J., assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Dec. 19, 1928. Serial No. 326,925. 4 Claims. (Cl. 175—339.)



4. An electromagnetic relay comprising a magnetic heel piece having a magnetic core mounted thereon, said core having winding sections of different areas, an armature movably attached to said heel piece and having a portion adjacent the end of said core of larger area, a magnetic projection on said core at the junction of said sections extending in juxtaposition to said heel piece, a polarizing winding on the front core section and an operating winding on the rear core section, whereby the flux produced by current in the rear winding when in opposite direction to that flowing in the front winding saturates the rear core section by the leakage flux through said projection before sufficient flux is produced at the armature end to attract the armature.

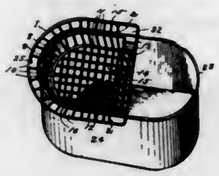
1,763,173. BUTT-REMOVING MECHANISM. SAMUEL E. MORRAL and WILLIAM W. MORRAL, Morral, Ohio. Filed June 17, 1924. Serial No. 720,683. 34 Claims. (Cl. 146—84.)



1. In a machine of the character described, a butt removing device, means for moving an ear toward said butt removing device, a stationary member to position said ear with relation to said butt removing device, means for moving said ear into engagement with said stationary member, and cooperating feeding members arranged adjacent to said stationary member to advance the butt of the ear during the butt removing operation.

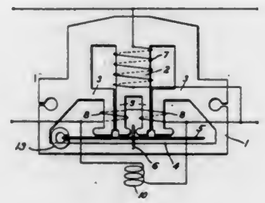
1,763,174. DRAINER. AGNES AMELIA MORRIS, Minneapolis, Minn. Filed Dec. 17, 1928. Serial No. 326,578. 2 Claims. (Cl. 68—30.)

1. A device of the kind described comprising a plurality of wires shaped to form a basket having sides, a bottom, a rounded end and a straight end, said sides and ends tapering towards the bottom, the upper portions of said wires being outwardly directed, a frame member to which



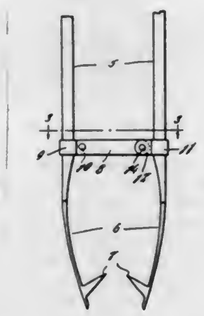
the upper ends of the wires are secured, a downwardly directed hook at the rounded end of the structure, and legs on the bottom thereof.

1,763,175. INTEGRATING METER. HANS NÜTZELBERGER, Nuremberg, Germany, assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 7, 1927, Serial No. 173,305, and in Germany Mar. 8, 1926. 8 Claims. (Cl. 171—264.)



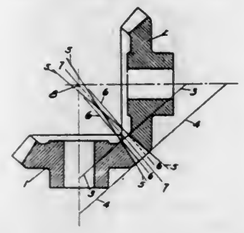
1. A motor meter comprising a torque-producing magnet system having current and pressure windings, and means comprising an auxiliary coil of manganin wire in shunt-circuit relation to the current winding for compensating the meter for errors caused by temperature variations.

1,763,176. CLAM-DIGGER FORK. JOHN O'ROURKE, South Bend, Wash. Filed May 6, 1929. Serial No. 360,832. 4 Claims. (Cl. 294—53.)



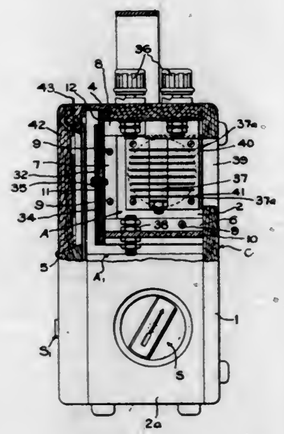
1. A device of the class described comprising a pair of handles, forks on the lower ends of the handles, and means for pivotally connecting the handles together in spaced relation.

1,763,177. METHOD OF LAYING OUT GEARS. JULIAN L. PERKINS, West Springfield, Mass., assignor to Perkins Machine & Gear Company, West Springfield, Mass., a Corporation of Massachusetts. Filed Mar. 12, 1929. Serial No. 346,325. 5 Claims. (Cl. 74—41.)



1. In a method of laying out single-cut bevel-gears, the steps of generating the outline of a developed tooth slot at the toe end and the outline thereof at the heel end as far inwardly at least as the pitch circle at that end, maintaining the total-depth circle at the toe end, finding a total-depth circle at the heel end by applying the outline of said slot at the toe end to the heel end in a manner to cause opposite sides of said outline to coincide with the points on the pitch circle at the heel end through which the developed curves pass or to which they extend, and connecting by a line the total-depth circle thus obtained at the heel end with the total-depth circle at the toe end to determine the cutting angle.

1,763,178. METER CASING. RAYMOND T. PIERCE, Millburn, N. J., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Feb. 14, 1928. Serial No. 254,244. 4 Claims. (Cl. 171—95.)



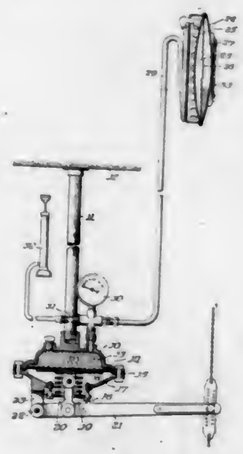
4. The combination with a meter casing, of meter-operating mechanism disposed therein and including a plurality of coils, a switch carried by the wall structure of said casing for controlling the relation to each other of said coils, and a second switch for connecting and disconnecting one of said coils to and from an electrical circuit.

1,763,179. TIRE-BEAD REENFORCEMENT. ROBERT C. PIERCE, Niles, Mich., assignor to National-Standard Company, Niles, Mich., a Corporation of Michigan. Filed May 17, 1929. Serial No. 363,949. 2 Claims. (Cl. 245—1.5.)



2. A tire bead re-enforcement comprising a tension member wound into an annulus, the turns or loops being held together by a retaining strand spirally wound about the same, said strand being given extra close turns at the ends of the tension member to keep them from sticking out tangentially from the annulus.

1,763,180. THERMOSTATIC REGULATOR. FRED W. POWERS, Chicago, Ill., assignor to Powers Regulator Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 5, 1928. Serial No. 310,577. 3 Claims. (Cl. 236—99.)



1. In combination, a diaphragm motor having an air chamber, a heat controlling element operated by said motor, a self contained thermostatic motor including means providing an expansible fluid chamber, an air chamber and a diaphragm separating said chambers, a conduit joining the air chambers of said motors, a gauge affected by the air pressure in said chambers, said gauge being calibrated to indicate variations in pressure in direct relation to variations in temperature that are effective on said thermostatic motor, and means for initially developing in said air chambers a pressure that shall cause said gauge to indicate a figure corresponding to the temperature in degrees that is then effective on said thermostatic motor.

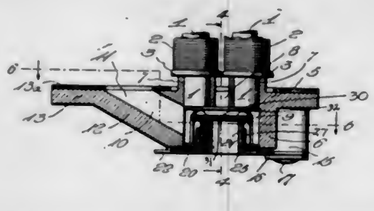
1,763,181. ANIMAL HOLDER. ODA AUGUSTA REEVES, Charleston, Mo. Filed June 6, 1928. Serial No. 283,379. 2 Claims. (Cl. 119—153.)

1. An animal holder comprising a tube the lower end of said tube provided with oppositely disposed diverging guides, a wire anchored at one end of the tube to form a loop and then to extend in said end of the tube said loop seated in said guides, a rigid rod slidable through the tube, means at the inner end of the rod to anchor the other end of the wire thereto, a lever, means for rockably mounting the lever on the tube, said tube having an opening through which one end of the lever passes,



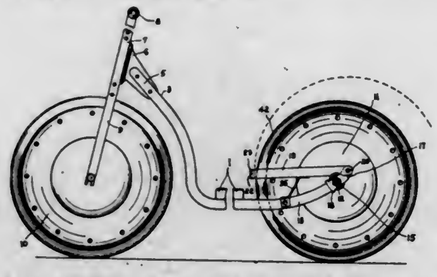
said one end of the lever having an opening through which the rod extends, spring means resting against the lever to cause the said one end of the lever to be urged inwardly of the tube, said rod having a threaded portion, a threaded member engaged in said one end of the lever to partially extend into the opening thereof for engaging the threaded portion of the rod to hold said rod in different adjusted positions.

1,763,182. ORGAN VALVE. WILLIAM H. REISNER, Hagerstown, Md., assignor to The W. H. Reisner Manufacturing Company, Hagerstown, Md., a Corporation of Maryland. Filed Aug. 9, 1929. Serial No. 384,546. 7 Claims. (Cl. 84—339.)



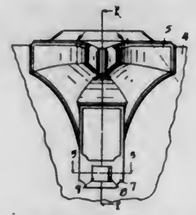
4. In an organ valve, a valve housing, an electromagnetic control device projecting into said valve housing, a valve chamber in said valve housing, said valve chamber being open in a position opposite the entrance of said electromagnetic control device to said chamber, a plate member arranged to close the opening in said valve housing, said plate member carrying an inwardly directed cylindrical sleeve forming a valve seat, a magnetic disc valve arranged to be mounted on the extremity of said valve seat, and a guide device telescopically secured over said valve seat, said device having tongues formed integral therewith and embracing opposite peripheral edges of said magnetic disc valve for guiding said disc valve in a predetermined path during the operation thereof under control of said electromagnetic control device.

1,763,183. VEHICLE. MAYO E. ROE, Elyria, Ohio, assignor to The Colson Company, Elyria, Ohio, a Corporation of Ohio. Filed Mar. 6, 1926. Serial No. 92,712. 13 Claims. (Cl. 188—24.)



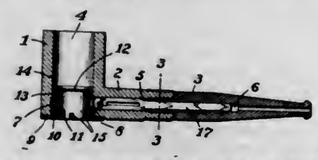
1. In a cycle, a pair of longitudinally aligned supporting wheels, a frame joining the wheels, a lever pivoted laterally of one of said wheels but eccentrically thereto, comprising a brake portion adapted to contact with the periphery of the wheel when rotated on its pivot, a stop secured to the frame adapted to limit rotation of the lever on its pivot to the opposite direction, said lever adapted to support the vehicle when rotated against said stop.

1,763,184. RADIATOR FOR MOTOR VEHICLES. FREDERICK C. RUPPEL, Grand Rapids, Mich., assignor to W. B. Jarvis Company, Grand Rapids, Mich. Filed Feb. 27, 1928. Serial No. 257,438. 4 Claims. (Cl. 220—24.)



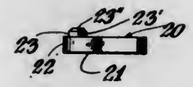
1. The combination with a radiator shell having an opening therein, a radiator disposed within the shell and having a filling opening mounted with a flat-faced valve seat, an angular closure member pivotally mounted on said shell at the rear of said opening so that its vertical arm overlaps the front of the radiator shell when closed, said front arm having an opening therein, said hinge connection for said closure member being such as to permit limited lateral movement thereof, a valve mounted on said closure member to coact with said velve seat, said valve having a flat face permitting lateral sliding movement thereof on said valve seat, and a keeper on the front of said shell positioned to project through said opening in said closure member and with which the closure member may be engaged by a lateral movement, said keeper having a cam face coacting with said closure member.

1,763,185. TOBACCO PIPE. EDWARD C. SASSER, Washington, D. C. Filed June 23, 1928. Serial No. 287,784. 9 Claims. (Cl. 131—12.)



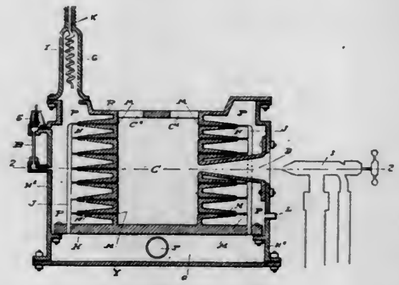
7. A tobacco pipe comprising a bowl, a plug to form the bottom wall of the bowl, said plug having a chamber leading in from its bottom, a knife edge extending above the top wall of the chamber and the side walls of the hub tapering inwardly, the lower portion of the plug being threaded and a flange at the lowermost edge of the plug.

1,763,186. SLIDE-OPERABLE FASTENING DEVICE. ABRAHAM B. SCHACHAT, New York, N. Y., assignor to Noel Statham, Irvington-on-Hudson, N. Y. Filed Apr. 26, 1928. Serial No. 272,945. 8 Claims. (Cl. 24—205.)



1. A male fastener element for automatic, flexible fasteners and the like, comprising a fastener portion provided with a substantially cylindrical projection, said substantially cylindrical projection being provided with a substantially frusto-conical reduced end portion.

1,763,187. RADIATOR HEARTH FOR BOILERS AND SIMILAR APPARATUS. EMILIO SINNO, JAIME ANGEL LLAURÓ, ALFREDO LLAURÓ, and ELISEO LLAURÓ, Buenos Aires, Argentina. Filed June 5, 1928, Serial No. 283,079, and in Argentina Oct. 31, 1927. 1 Claim. (Cl. 122—23.)

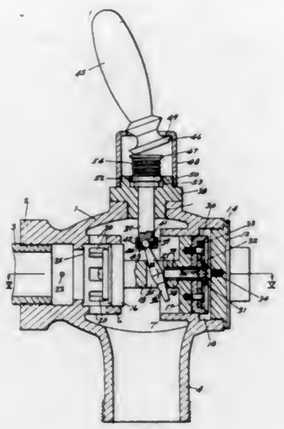


A device of the character described comprising a casing adapted to receive a liquid, a cylinder within said casing adapted to be heated by a fuel, a bottom wall formed with said cylinder, means for supporting said cylinder bottom within said casing spaced from the bottom thereof, a plurality of radiator wings grouped about said cylinder within said casing and provided with radial perforations, tubes in said perforations, a flue in the chamber formed between the cylinder and casing bottom to provide draught and means for the escape of fumes and smoke, and communications between said tubes and said flue, a water gage and a safety valve combined with said casing, a steam dome on top of said casing, a coil within said dome to compel the steam to follow a sinuous path and drying the same.

1,763,188. FLUSHING VALVE. BEN B. THOMAS and GUNNER O. FORSBERG, Portland, Oreg. Filed Sept. 7, 1927. Serial No. 218,042. 8 Claims. (Cl. 137—93.)

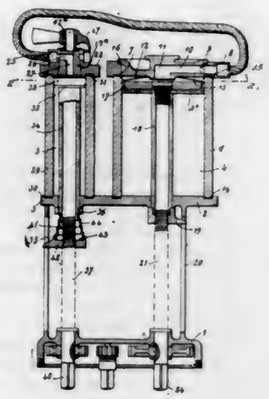
1. A self closing flushing valve, comprising the combination with a shell having an inlet connection, a piston-actuated valve therein having a valve and a piston head of different facial areas, and a stem provided with a transverse aperture uniting the valve and piston head, of means for supplying water thereto under pressure, a reciproca-

tory relief valve in the piston head having a hollow stem with ports extending into the transverse aperture aforesaid, a wedge acting member extending into said aperture



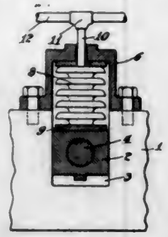
and into operative connection with the relief valve stem, a yielding plunger in the shell operatively connected with the wedge acting member, and a rocking handle carried on the shell in operative connection with the plunger.

1,763,189. DISTRIBUTING PUMP FOR LUBRICANTS AND OTHER VISCOUS SUBSTANCES IN VARIABLE AND DETERMINED QUANTITIES. JACQUES MULLER, La Garenne Colombes, France. Filed Feb. 5, 1927, Serial No. 166,190, and in France Feb. 5, 1926. 1 Claim. (Cl. 221—103.)



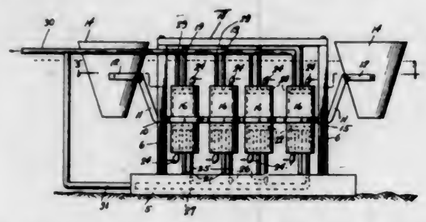
A device of the character described comprising two cylinders of different capacity, side by side, a frame forming the bottoms of said cylinders, said cylinders having each a piston therein, a hollow rod in each cylinder cooperable with the pistons, a plate having screw engagement with the rod of the smaller cylinder with an interposed spring, and a plate on the other rod, rods with guides for said plates, means for charging the larger cylinder, means for putting the contents of the larger cylinder under pressure, means for connecting the two cylinders, the piston in the smaller cylinder being depressible downward against the resistance of said spring.

1,763,190. IRONING MACHINE. LE ROY C. SCHENCK, Moline, Ill., assignor to Troy Laundry Machinery Company, Inc., New York, N. Y., a Corporation of Delaware. Filed Feb. 4, 1929. Serial No. 337,347. 3 Claims. (Cl. 308—26.)



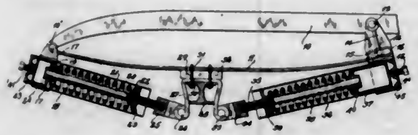
1. In a bearing device for an ironing machine, a frame, a bearing slidably positioned in said frame, an abutment connected to said frame, an expansible metal bellows positioned between the abutment and said bearing, and means for applying pressure to said bellows.

1,763,191. TIDE OR WAVE MOTOR. PAUL M. SEALY and JACK CARROLL, Rock Hill, S. C. Filed Oct. 15, 1928. Serial No. 312,522. 5 Claims. (Cl. 103—70.)



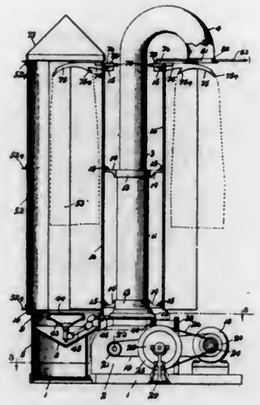
1. In combination, a base, standards, rising from the base and having slots extending longitudinally thereof, a cross member projecting through the slots to slide therein and having arm end extensions, floats arranged on the end extensions, one or more cylinders anchored on the cross member between the standards and having their extremities opened and partitioned across their intermediate portions, a cross bar on the upper ends of the standards, piston rods rigidly attached to the cross bar and the base and extending inwardly of the ends of the cylinders and terminating in pistons, outlet pipes threaded through the pistons, inlet pipes threaded through the pistons, and means for taking off water from the outlet pipes.

1,763,192. VEHICLE SPRING. SUMNER S. SHEARS, Brooklyn, N. Y. Filed June 28, 1926. Serial No. 119,126. 8 Claims. (Cl. 267—29.)



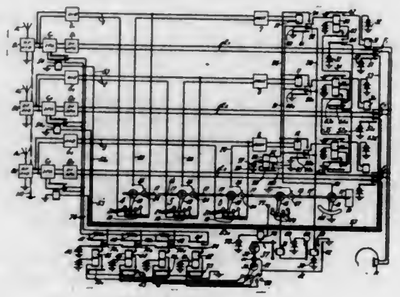
1. In combination with a vehicle frame and axle, a flexible member pivotally connected to the frame at one end, yieldingly connected to the frame at the other end and connected to the axle near its midsection; tubular levers fulcrumed at the axle and pivotally connected to the frame at their power ends, rods pivotally connected to a bracket on the axle, pistons fixed upon the ends of said rods and coil springs within the tubular levers in such manner as to be compressed by said pistons upon the downward movement of the power ends of said levers.

1,763,193. STEAMING AND DRYING MACHINE. HARRY A. SHIELDS, Grand Rapids, Mich. Filed Jan. 28, 1929. Serial No. 335,483. 19 Claims. (Cl. 34—26.)



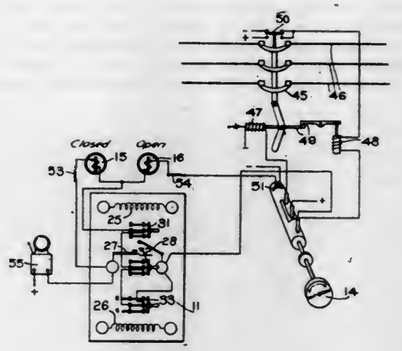
1. A machine of the class described comprising, a vertically positioned rotatably mounted support, a plurality of vertically positioned substantially U-shaped compartment members located in equally spaced relation around said support, garment holding members carried at the upper portion of each compartment member, means for periodically rotating said support about a vertical axis with step by step movement, a substantially vertical outer wall back of which each of said compartment members is successively brought, swinging doors mounted at each edge of the wall to turn about vertical axes adapted to engage with said compartment members whereby a compart member and the front wall and doors make a steaming chamber, a closure for the upper end of the chamber, and means for introducing steam into the lower end of the chamber.

1,763,194. COMMUNICATION SYSTEM. LEON J. SIVIAN, East Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Mar. 23, 1929. Serial No. 349,335. 20 Claims. (Cl. 250—20.)



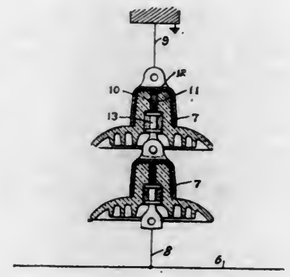
1. The method of selecting from a group of waves having variable amplitudes one wave to the exclusion of the others, which comprises varying the effectiveness of said waves over a range, and selecting the wave which first reaches a predetermined value.

1,763,195. RELAY-TESTING APPARATUS. HARVEY P. SLEEPER, Elizabeth, N. J. Filed Oct. 5, 1926. Serial No. 139,619. 8 Claims. (Cl. 177—311.)



2. In combination with an automatic circuit-interrupter and means for indicating the open and closed positions thereof, means including said indicating means for rendering evident the non-automatic condition of the circuit-interrupter resulting from a break at any point in its control circuit.

1,763,196. INSULATOR STRING. JOSEPH SLEPIAN, Swissvale, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Sept. 19, 1922. Serial No. 589,186. 6 Claims. (Cl. 173—318.)

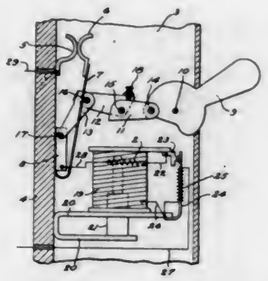


3. A device including electrical elements in series and a resistor element shunted across the entire series of electrical elements and in electrical connection, at intermediate points, with the respective intermediate terminal members of the several electrical elements, the resistance of said resistor element under normal voltage conditions being of the same order of magnitude as the resistance of said series of electrical elements, and one or more sections of said resistor element having the further property, when a predetermined critical excessive voltage is exceeded, of passing current discharges with comparative freedom and of returning to its normal high-resistance state when normal voltage conditions are restored.

5. An insulator unit having conducting terminal parts separated by an insulating member, said insulating member being provided with a perforation extending therethrough from one conductor terminal to the other, and a protective device located in said perforation and having its terminals connected to the terminals of the insulator

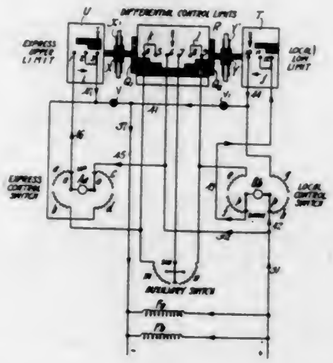
unit, said protective device comprising a stack of plates including plates having a resistivity of at least several thousand ohms per centimeter cube.

1,763,197. CIRCUIT BREAKER. GOTTLIEB SPEISER, Nuremberg, Germany, assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed July 23, 1925, Serial No. 45,522, and in Germany June 30, 1924. 3 Claims. (Cl. 175—294.)



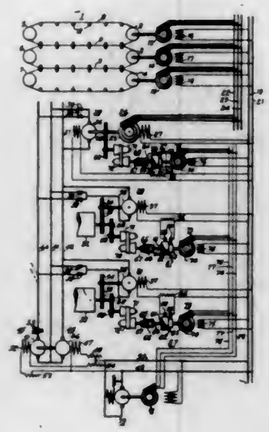
1. The combination with a circuit breaker having a current responsive trip device for releasing the circuit breaker to open position under predetermined current conditions, of a normally closed circuit connected in parallel to the trip device, a thermal responsive switch element for opening the said circuit and a heating coil for the said element connected in series with the said coil for maintaining the switch element at a temperature under normal current conditions sufficient to maintain the element in open position.

1,763,198. DUAL ELEVATOR SYSTEM AND CONTROL. FRANK J. SPRAGUE, New York, N. Y., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Dec. 31, 1926. Serial No. 158,244. 27 Claims. (Cl. 187—16.)



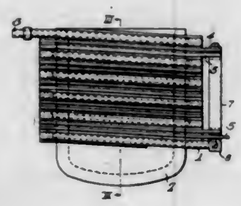
15. In a dual elevator system the combination of two cars operating on common rails in a single shaft and a supplemental controller at the head of the shaft for the down control circuit of the upper car and the up control circuit of the lower car, carried through a differentially operated member operated by two gears each of which is driven by its associated motor.

1,763,199. REGULATOR SYSTEM. STEPHEN A. STAEGE, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Aug. 6, 1925. Serial No. 48,566. 10 Claims. (Cl. 172—293.)



3. In a system of motor drives, a plurality of direct-current motors, a plurality of power sources for said motors, a plurality of alternating-current motors, and means for governing the speed of said motors to maintain a predetermined harmony between them.

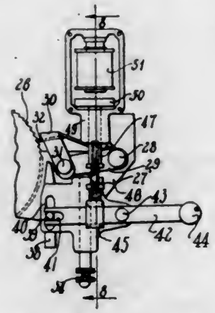
1,763,200. INDUCTION FURNACE. GERALD B. TJOFLAT, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Sept. 13, 1928. Serial No. 305,671. 3 Claims. (Cl. 266—1.5.)



1. An induction-coil winding comprising a plurality of turns of electric-conducting material having a passageway extending longitudinally therethrough and a plurality of turns of electric-conducting material of solid section interposed between the turns having the passageway therein and in thermal communication therewith.

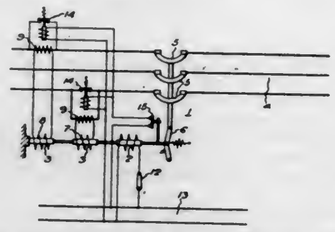
1,763,201. MAGNETIC THROW-OFF FOR GRINDING MACHINES. FREDERICK D. VAN NORMAN, Springfield, Mass., assignor to Van Norman Machine Tool Company, Springfield, Mass., a Corporation of Massachusetts. Filed May 18, 1928. Serial No. 278,892. 7 Claims. (Cl. 51—165.)

1. A machine of the class described comprising a feed ratchet, a pawl for rotating the ratchet, a striker movable through a substantial free travel to contact with the pawl to disengage it from the ratchet, a work-controlled electromagnet, an armature movable by the force of the electromagnet and normally spaced from it, and



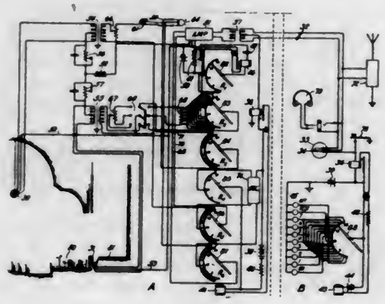
mechanism coupling the armature and striker and so proportioned that a movement of the armature causes a movement of the striker of greater amplitude.

1,763,202. CIRCUIT BREAKER. ROSWELL C. VAN SICKLE, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 2, 1927. Serial No. 180,464. 16 Claims. (Cl. 175—294.)



1. The combination, in a circuit interrupter connected in an electrical circuit, of a closing means therefor, and electro-responsive closing means that operates in conjunction with the said closing means when a condition of overload or short-circuit exists in the main electrical circuit.

1,763,203. REMOTE-CONTROL SYSTEM. WILLIAM F. VIETH, Jackson Heights, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed June 13, 1927. Serial No. 198,480. 10 Claims. (Cl. 179—1.)



1. A broadcasting system comprising a plurality of stations associated with a broadcasting transmitter, a transmission medium connecting said stations and said broadcast transmitter, means for impressing on said transmission medium for transmission to said broadcast transmitter signals from a plurality of sources, means for adjusting the relative intensity of the signals impressed by the first mentioned means upon said transmission medium from said different sources, respectively, and means remote from said adjusting means for transmitting control waves over said transmission medium to vary the setting of said adjusting means.

1,763,204. PAVING MIXTURE AND PROCESS OF PREPARING SAME. EDWIN C. WALLACE, Newton, Mass. Filed Nov. 5, 1928. Serial No. 317,496. 3 Claims. (Cl. 106—31.)

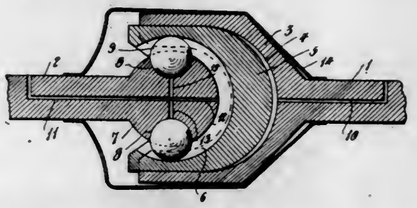
1. The method of producing improved paving mixtures from native bituminous sands and asphalt rock which comprises controlling the quantity of and the consistency of the bitumen and correcting the grading of the mineral element by preparing a suitable mixture of heated sand or fine stone particles so graded as to supply the deficiency of certain sizes of the native material and combining it with heated bituminous cement the proportion of which is less and the consistency of which is harder than the proportion and consistency of the bitumen in the native material, then thoroughly commingling the prepared mixture and the native bituminous sand or asphalt rock to produce a composition suitable for paving purposes having a well graded aggregate and a bituminous cementing medium of harder consistency than the bitumen contained in the native material.

1,763,205. PLAYING IMPLEMENT. CECIL M. WINBIGLER, Los Angeles, Calif. Original application filed Feb. 9, 1924, Serial No. 691,809. Divided and this application filed Nov. 13, 1926. Serial No. 148,212. 8 Claims. (Cl. 273—87.)



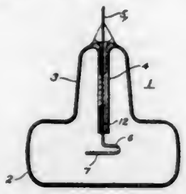
1. A playing implement for a golf game employing miniature clubs, said implement comprising means adapted to fit on the index finger of the player and swing in a vertical plane, an angular socket carried by said means, and a golf club having a shaft adapted to fit in said socket.

1,763,206. UNIVERSAL JOINT. JOSEPH F. WOVERIS, Chicago, Ill. Filed July 3, 1929. Serial No. 375,700. 2 Claims. (Cl. 64—91.)



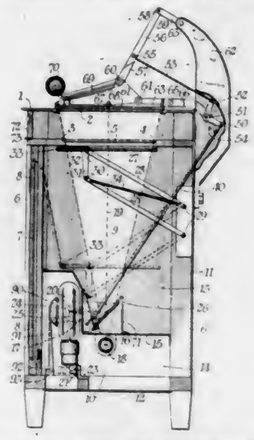
1. A universal joint, comprising two shafts, one of said shafts having a head provided with a U-shaped grooved guideway, a U-shaped bearing member slidably mounted in said grooved guideway and having an arcuate raceway therein, the other of said shafts having a head thereon, provided with spherical recesses therein, and spherical bearing members engaged in said recesses and in the raceway aforesaid.

1,763,207. PHOTO-ELECTRIC DEVICE. VLADIMIR K. ZWORYKIN, Swissvale, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Jan. 29, 1927. Serial No. 164,476. 5 Claims. (Cl. 250—27.5.)



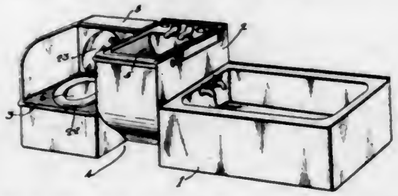
1. In a photo-electric cell, an anode comprised of a metal rod and a cathode spaced from said anode, the perpendicular distance from said cathode to said anode being not over six times the diameter of said rod.

1,763,208. LIGHT SYSTEM FOR PHOTOGRAPHIC-PRINTING MACHINES. FRED E. ALTMAN, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Dec. 17, 1926. Serial No. 155,526. 20 Claims. (Cl. 95—73.)



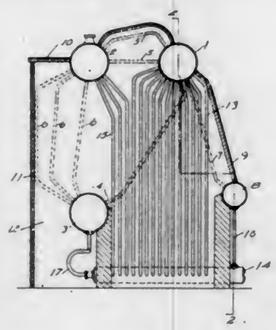
1. In a photograph'c printing machine, the combination with a printing panel, of a platen movably mounted thereover, a transparent face on said platen, a printing lamp spaced from the panel, a pilot lamp spaced from said panel, means for reflecting the light from one lamp into the path of light from the other lamp, whereby the light beams from both lamps may pass through the same path before reach'ng the printing panel, and means confining the light rays from both lamps to a beam of predetermined size.

1,763,209. BATHROOM EQUIPMENT. OWEN H. AYERS and CHARLES MORLEY, Dayton, Ohio. Filed Oct. 6, 1927. Serial No. 224,395. 5 Claims. (Cl. 4—2.)



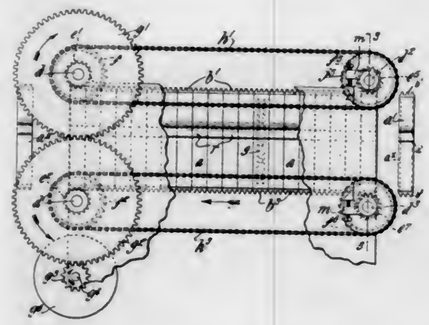
1. In a plumbing unit of the character described, a unitary structure including a tub, a lavatory and a housing for a water closet bowl, formed integrally with each other, said seat portion comprising vertical wall and top portions enclosing a compartment, an independent closet bowl within the compartment, a seat on top of said housing and independent thereof, a flush rim for said bowl formed integral with the top portion of the housing and independent of the bowl and seat, a flush tank for supplying water thereto formed integrally with the unit, and a passage within said unit connecting the flush tank with said flush rim.

1,763,210. FURNACE. GEORGE W. BACH, Erie, Pa., assignor to Union Iron Works, Erie, Pa., a Corporation of Pennsylvania. Filed Aug. 9, 1926. Serial No. 128,158. 4 Claims. (Cl. 122—302.)



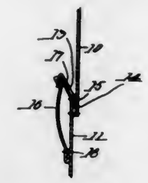
1. In a furnace, the combination of a drum; a boiler tube system connected lengthwise of and through the intermediate portions of the drum; a furnace wall through which the drum extends; cooling tubes extending radially and fan-wise from the drum, said cooling tubes being bent to distribute the tubes at intervals in parallel relation with their axes in a plane within the wall; and a manifold arranged without the wall and connected to the ends of the tube opposite their connection with the drum, said manifold having its axis in a plane extending transversely of the axis of the drum.

1,763,211. MOLD SUCH AS USED IN THE MANUFACTURE OF WAFER BISCUITS AND FOR OTHER PURPOSES. GEORGE RALPH BAKER, London, England, assignor to Baker Perkins Co. Inc., Saginaw, Mich., a Corporation of New York. Filed Sept. 17, 1927, Serial No. 220,256, and in Great Britain Sept. 21, 1926. 7 Claims. (Cl. 107—58.)



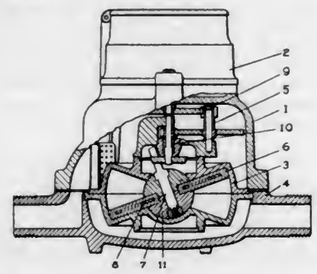
3. In molding apparatus, the combination of a straight linear two-bar track, a plurality of molding bodies, comprising molding faces adapted to coact with those of adjacent molding bodies to form mold cavities and lugs riding on said track bars, the said mold bodies being provided with rack teeth, pinions for engaging the rack teeth on a mold body at one end of a defined section of the track, pinions for engaging the rack teeth of a mold body at the other end of said section, spockets connected to the pinions at one end of the track section, sprockets at the other end of said track section, resilient means for connecting the latter sprockets with the pinions at that end of the track section, and chains connecting said sprockets so as to hold the mold bodies in said track section in close contact with one another.

1,763,212. BATHING SUIT. ARTHUR J. BARNETT, New York, N. Y., assignor to The Worcester Knitting Co., Worcester, Mass., a Corporation of Massachusetts. Filed July 22, 1929. Serial No. 380,182. 1 Claim. (Cl. 2—67.)



As an article of manufacture, a one piece bathing suit having an upper part and a nether part of two different pieces of material sewed together by a line of stitches around the waistline, the lower part having the front portion extending above the waistline a material distance and extending downwardly behind the front portion and in front of the upper part where the line of stitches secures it to said upper part forming a loop extending around the garment, and straps for a belt secured at their upper ends to the extreme upper end of the trunks near the fold of the loop thereof and secured at their lower ends to the material of the trunks below the waistline seam.

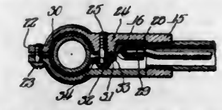
1,763,213. LIQUID METER. ROBERT S. BASSETT, Buffalo, N. Y. Filed Mar. 10, 1927. Serial No. 174,234. 2 Claims. (Cl. 73—98.)



1. In a disc liquid meter a disc piston formed by we'ght of a composition of 5 to 50% vulcanized hard rubber, 5 to 50% powdered carbon, the balance to be of a suitable finely subdivided filler, said disc piston having an internal re'nforcing member, substantially as and for the purpose described.

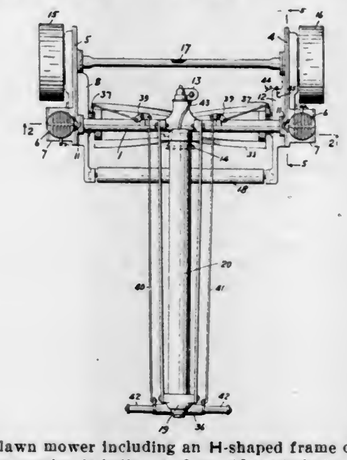
1,763,214. GROUNDING DEVICE. HENRY BRACHTL, Chicago, Ill., assignor, by mesne assignments, to Appleton Electric Company, Chicago, Ill., a Corporation of Illinois. Filed May 29, 1926. Serial No. 112,483. 7 Claims. (Cl. 247—1.)

1. A device for grounding a conductor and an enclosing conduit to a ground pipe comprising, in combination, two substantially semi-cylindrical complementary parts having semi-circular clamping jaws at one end to embrace a transversely extending ground pipe and forming a housing completely enclosing a portion of the ground pipe when in the clamping position, the clamping jaws of the parts being recessed to form an annular channel about the ground pipe,



one of said parts having a tubular portion internally threaded for connection with the conduit, means for securing said parts together clamped to the ground pipe, a metal strap within said annular channel in the housing and surrounding the ground pipe and a screw device engaging the ends of said strap and one of said parts adjustable to clamp the strap to the ground pipe and to said part.

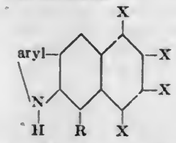
1,763,215. LAWN MOWER. WILLIAM F. H. BRAUN, Wynnewood, Pa. Filed May 29, 1928. Serial No. 281,444. 5 Claims. (Cl. 56—26.)



1. A lawn mower including an H-shaped frame of which the cross member is hollow and provides admission and exhaust passages and of which each parallel member includes a cylinder and a crank case and a blower chamber and of which one parallel member also includes a magneto receptacle and of which the other parallel member also includes a gear housing.

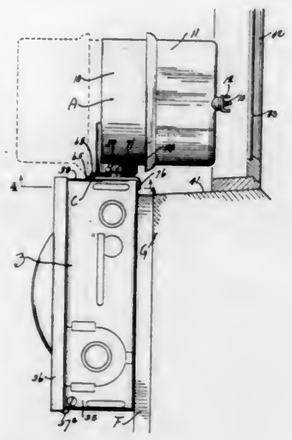
1,763,216. 2.3-BENZOCARBAZOLE-1.4-QUINONES AND PROCESS OF PREPARING THE SAME. HANS T. BUCHERER, Munich, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed June 26, 1928, Serial No. 288,527, and in Germany June 3, 1926. 10 Claims. (Cl. 260—46.)

1. In a process of preparing a 2.3-benzo-carbazole-1.4-quinone, the step which comprises heating a compound of the following general formula.



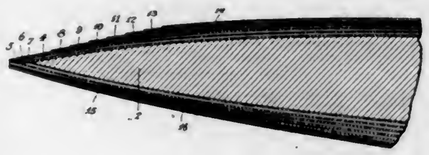
wherein X stands for any monovalent substituents and R for the group $-N{=}N-aryl$ or $-N(Y)-NH-aryl$ (Y being a sulfo group), with a dilute acid.

1,763,217. MOVABLY-SUPPORTED METER. ORVILLE BUYS, Pittsburgh, Pa. Filed Oct. 19, 1925. Serial No. 63,520. 16 Claims. (Cl. 247—2.)



16. In a meter construction the combination of a meter including a casing enclosing the meter operating parts, a vertical extension connected directly with the meter casing, and means mounting the vertical extension for rotation of the meter casing above the axis of said vertical extension for the purpose of facing the meter dial in different angular positions in a horizontal plane.

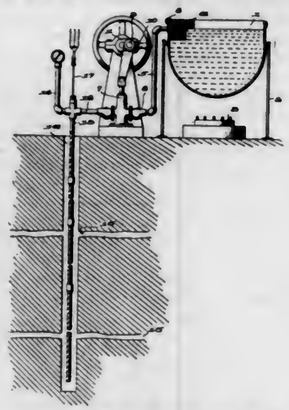
1,763,218. PROPELLER FOR AIRPLANES AND DIRIGIBLE BALLOONS. FRANK W. CALDWELL, Dayton, Ohio, assignor to The Hamilton Standard Propeller Corporation, West Homstead, Pa., a Corporation of Pennsylvania. Filed Dec. 22, 1923. Serial No. 682,189. 4 Claims. (Cl. 170—159.)



1. A propeller for airplanes or dirigible balloons, comprising a core of balsa wood and a completely enclosing coating therefor, comprising a large number of thin successive veneers, each progressively shorter lengthwise, of strong tough material, said coating being the principal source of structural strength.

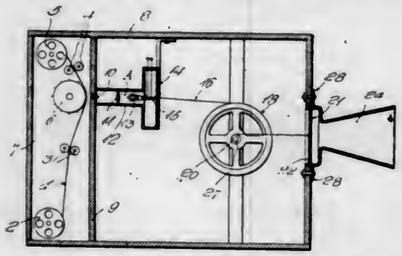
1,763,219. METHOD AND APPARATUS FOR SEALING CREVICES IN ROCK FORMATIONS OR THE LIKE. GEORGE W. CHRISTIANS, Chattanooga, Tenn. Filed Sept. 11, 1926. Serial No. 134,920. 10 Claims. (Cl. 61—36.)

1. A method for sealing crevices in rock formations and the like, including the steps of heating a mass of thermo-plastic material, feeding the heated thermo-plastic material from the upper portion of the mass by gravity, through a passage-way, heating said passage-way to permit



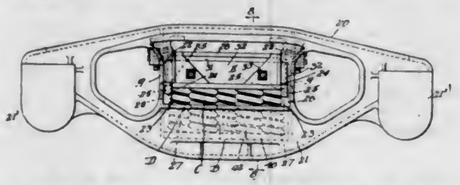
the material to readily flow through the same, and pumping such heated material through a conduit and into the crevise to be sealed.

1,763,220. SOUND-RECORDING APPARATUS. BEN J. CHROMY, Hopkins, Minn., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed Sept. 17, 1928. Serial No. 306,541. 6 Claims. (Cl. 274—5.)



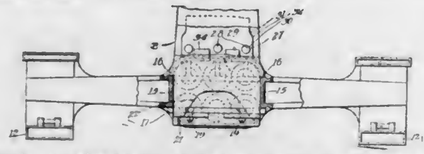
1. In a device of the class described the combination of a light sensitive film, a light source, a light absorbing medium interposed between said light source and said light sensitive film, and means for varying the intensity of light absorbed by said light absorbing medium in accordance with mechanical vibrations of sound waves for recording these vibrations on said film.

1,763,221. RAILWAY TRUCK. CLAUS J. W. CLASEN, Davenport, Iowa, assignor to The Bettendorf Company, Bettendorf, Iowa, a Corporation of Iowa. Filed Apr. 13, 1925, Serial No. 22,595. Renewed Nov. 26, 1929. 30 Claims. (Cl. 105—197.)



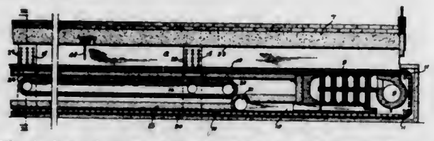
1. In a railway truck, the combination with a side frame, including a compression member, a tension member, guide columns, and a spring rest arranged to support a spring assembly thereon the lower portions of said guide columns being provided with recesses for the accommodation of additional spring elements; at the same lever as said spring assembly, and a bolster of increased width arranged to bear upon all of the units of said spring cluster.

1,763,222. RAILWAY TRUCK. CLAUS J. W. CLASEN, Davenport, Iowa, assignor to The Bettendorf Company, Bettendorf, Iowa, a Corporation of Iowa. Filed Apr. 13, 1925, Serial No. 22,594. Renewed Apr. 26, 1930. 15 Claims. (Cl. 105—197.)



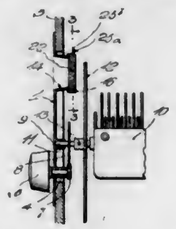
1. In a railway truck, the combination with a side frame including a compression member, a tension member, guide columns and a spring rest; of a spring assembly comprising a plurality of spring units occupying the entire available space on said spring rest; a bolster operatively mounted between said columns and of a width corresponding to the extent of said spring assembly; reinforcing means connecting said guide columns; a spring plate member bearing said spring assembly; a spring plank member; and means on one of said members engaging means on the other of said members for maintaining said spring plank in operative position.

1,763,223. GLASSWARE-ANNEALING LEER. ALBERT N. CRAMER, Toledo, Ohio, assignor to Owens-Illinois Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Apr. 2, 1927. Serial No. 180,580. 13 Claims. (Cl. 49—46.)



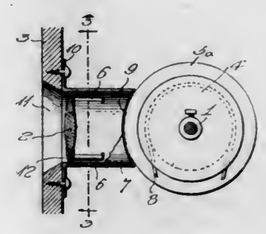
13. A leer for annealing glass articles comprising an annealing chamber extending lengthwise of the leer, a conveyor extending through said chamber lengthwise thereof, a heating device adjacent one end of said chamber, and means for causing a continuous circulation of air through said heating device for heating the air and thence through the annealing chamber in the direction of its length and back to the heating device, said circulating means including a suction box extending transversely of the annealing chamber and provided with openings extending through the floor of the chamber and distributed transversely of said chamber.

1,763,224. FREQUENCY-ADJUSTING MEANS FOR HIGH-FREQUENCY SIGNALING SYSTEMS. CHESTER L. DAVIS, Keokuk, Iowa, assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 29, 1929. Serial No. 403,317. 6 Claims. (Cl. 116—124.3.)



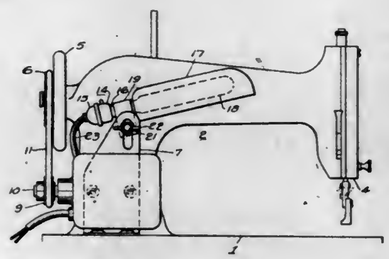
1. An indicator dial comprising a plate member adapted to be mounted adjacent the front panel of a radio broadcast receiver in front of the rotatable shaft of a tuning device, said indicator dial being carried by said rotatable shaft and movable behind said front panel, a housing projecting from said plate member, said housing having a pair of resilient arms on the extremity thereof, a lens insertable between said arms, and means connected to said arms for locking said lens in said housing for establishing a line of vision through said plate member for viewing said indicator dial in magnified proportions.

1,763,225. INDICATOR SYSTEM. CHESTER L. DAVIS, Keokuk, Iowa, assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Original application filed Mar. 7, 1929, Serial No. 345,167. Divided and this application filed Feb. 12, 1930. Serial No. 427,836. 5 Claims. (Cl. 116—124.3.)



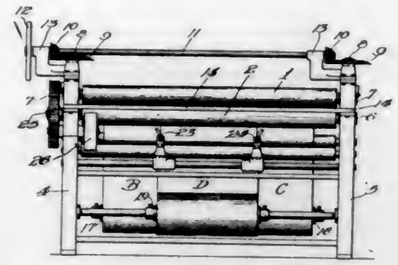
1. An indicator apparatus for frequency control systems comprising in combination with a calibrated drum, an instrument panel, a hood extending from the rear of said instrument panel and enveloping a portion of the peripheral surface of said calibrated drum, and a lens insertible through the instrument panel to a position within said hood for magnifying the calibrations on said calibrated drum.

1,763,226. LAMP SUPPORT. RALPH EHRENFELD, Springfield, Mass., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed June 23, 1928. Serial No. 287,876. 5 Claims. (Cl. 240—2.)



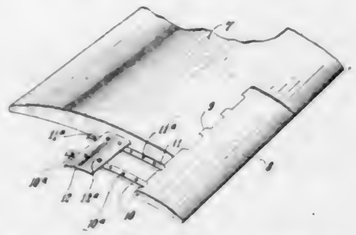
5. In a sewing machine having the usual base, a gooseneck, stitching mechanism and a driving motor, in combination, a lamp, a bracket of substantially L-shape secured to the base and having a vertically extending slot at its upper end, means for securing the motor to the bracket adjacent to the base, and a clamping means for the lamp extending through the slot to permit of vertical movement of the lamp.

1,763,227. METHOD OF AND APPARATUS FOR FACING PANELS WITH METAL. ARMIN ELMENDORF, Chicago, Ill. Filed Sept. 22, 1924. Serial No. 739,236. 8 Claims. (Cl. 154—37.)



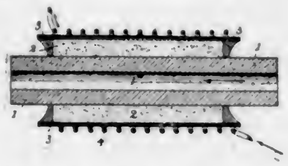
2. The method of trimming and delivering a plurality of thin metal sheets which consists in feeding said sheets longitudinally with their side marginal portions overlapping, and cutting through the overlapped portions along longitudinal lines.

1,763,228. AIRPLANE AND THE LIKE. ANTHONY H. G. FOKKER, Amsterdam, Netherlands, assignor to Fokker Aircraft Corporation of America, a Corporation of Delaware. Filed Sept. 10, 1925. Serial No. 55,445. 4 Claims. (Cl. 244—20.)



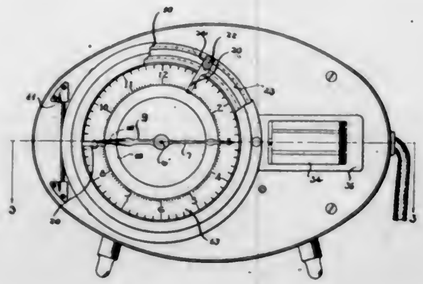
1. Means for operating the control surface of an airplane, comprising an auxiliary surface connected to said control surface and adapted to be moved by the forces developed in flight and means for rendering said auxiliary surface effective by the manual operation of the control surface, said auxiliary surface being movable fore and aft relatively to the control surface, whereby the amount of effort produced by said auxiliary surface may be increased or diminished.

1,763,229. APPARATUS FOR THE TREATMENT OF GASES AT HIGH TEMPERATURES. MARCEL FOURMENT, Paris France. Filed Oct. 28, 1925, Serial No. 65,294, and in France Dec. 22, 1924. 3 Claims. (Cl. 204—31.)



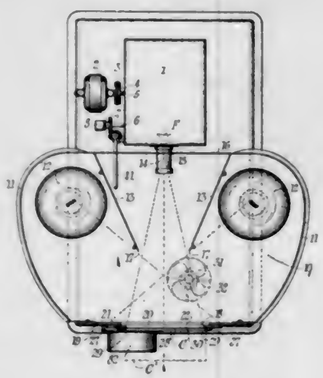
1. An apparatus for treating gases at high temperatures, comprising a conduit of graphite lined internally with a refractory substance, a heat insulating jacket surrounding said conduit, an envelope made of a dielectric substance enclosing said jacket and a high frequency inductance coil encircling said jacket.

1,763,230. TIME-CONTROL MECHANISM. WALTER P. FRISCH, Rochester, N. Y. Filed Feb. 11, 1928. Serial No. 253,733. 9 Claims. (Cl. 161—1.)



1. A time controlled mechanism comprising a clock mechanism having its hour and minute shafts coaxially arranged, a member mounted to turn about the common axis of said shafts, and two cooperating devices, one on the rotary member turning with the latter and the other making complete rotations with one of the shafts and connectible with the device on the rotary member so that the two devices turn together and stationary means engaging the part turning with the shaft for effecting connection between the rotary member and said part.

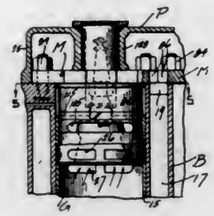
1,763,231. MOTION-PICTURE TITLE-MAKING MACHINE. EDWIN C. FRITTS, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Aug. 26, 1927. Serial No. 215,609. 17 Claims. (Cl. 88—16.)



1. In a photographing machine, the combination with an enclosed chamber having an exposure opening therein, of means for evacuating air from the chamber, whereby a card to be photographed may be held against the exterior edges of the exposure opening, and a camera on that side of the opening toward which the card is held and focused on the plane of the opening for photographing that side of the card so held that faces the chamber.

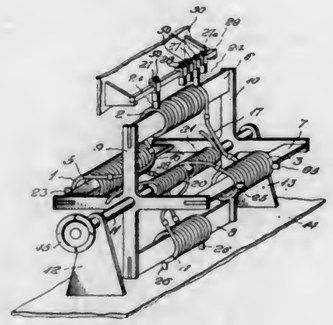
6. In combination, a support for an object to be photographed, a motion picture camera positioned to photograph a card at the support, a film footage indicator, a measuring device mounted on the support and controllable by a card positioned thereon for controlling the operation of the film footage indicator.

1,763,232. CYLINDER-HEAD CONSTRUCTION FOR INTERNAL-COMBUSTION ENGINES. LUTHER A. GAW, Charlottesville, Va., assignor to Dillon-Gaw Motor Company, Fayetteville, W. Va., a Corporation of West Virginia. Filed Jan. 24, 1927. Serial No. 163,193. 2 Claims. (Cl. 123—174.)



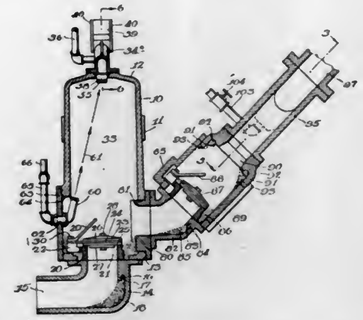
1. As an article of manufacture a detachable cylinder head for internal combustion engines comprising an outer substantially cylindrical shaped shell having a lateral attaching flange thereabout of polygonal formation, the attaching flange inwardly from the outer edges thereof being recessed to provide water passageways, the attaching flanges at the corners thereof having bolt receiving passageways therethrough, an inner shell connected at its lower end in a sealed relation with the lower end of the octer shell and extending upwardly through the outer shell in spaced relation and at its upper end projecting above the attaching flanges of the outer shell.

1,763,233. INDUCTANCE SYSTEM. LOUIS A. GEBHARD, Washington, D. C., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed Mar. 9, 1929. Serial No. 345,741. 10 Claims. (Cl. 171—242.)



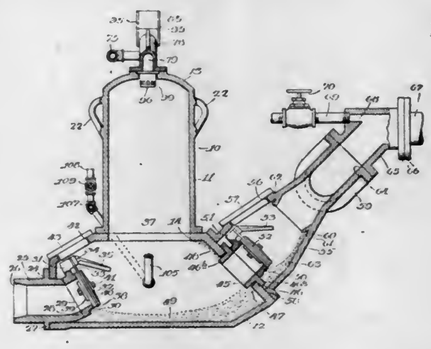
1. An inductance system comprising in combination a plurality of individual inductance coils, said inductance coils comprising lengths of metal tubing, said coils supported by a common framework, a shaft supporting and adapted to rotate said framework and individual lengths of insulating tubular members interconnecting said coils.

1,763,234. SAND PUMP. JOSEPH GYGER, Ottawa, Ill., assignor to Ottawa Silica Company, Ottawa, Ill., a Corporation of Delaware. Filed Dec. 19, 1924. Serial No. 757,018. 11 Claims. (Cl. 103—252.)



1. The combination in a pump of a pump chamber, a conduit leading into said chamber, and means in said conduit for causing the material being pumped to adhere and form a wearing surface.

1,763,235. SAND PUMP. WAYNE B. GYGER, Ottawa, Ill., assignor to Ottawa Silica Company, Ottawa, Ill., a Corporation of Delaware. Filed Dec. 19, 1924. Serial No. 757,019. 7 Claims. (Cl. 103—252.)

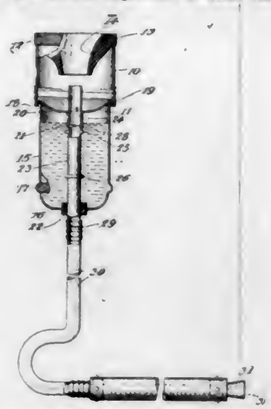


1. The combination in a pump of a casing, an inlet conduit leading into one end of said casing, a valve seat detachably mounted on the end of said conduit, a bodily movable valve carried by said valve seat, means independent of the casing and valve for limiting movement of said valve, means for permitting access to said valve and valve seat through the wall of said casing, and outlet means located substantially in a direct flow line with said inlet conduit.

1,763,236. SOAPING DEVICE. ARTHUR W. HAHN, Jr., Bronx, N. Y. Filed Dec. 31, 1927. Serial No. 243,946. 3 Claims. (Cl. 299—84.)

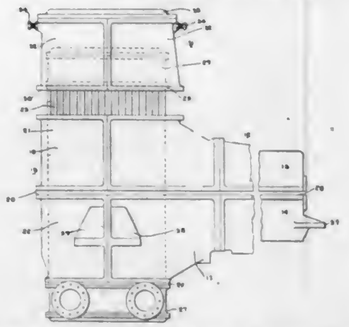
1. In a soaping device, in combination, a lower casing forming an interior soap chamber, an upper casing fixedly attached to said lower casing forming a water chamber having an opening into said soap chamber, said two casings being non-revoluble with respect to each other, a downwardly extended wall within said upper casing capable of attachment to a water supply faucet, a vertically movable delivering tube extending from the water chamber through the soap chamber and thence outwardly

through the bottom of said lower casing and means whereby a vertical movement imparted to said tube externally



of the lower casing will selectively allow the delivering of fresh water or soapy water through said delivering tube externally of said lower casing.

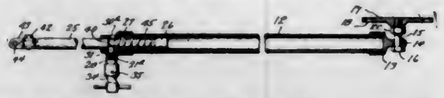
1,763,237. COMBINED TURBINE AND CONDENSER. FRANCIS HODGKINSON, Swarthmore, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed July 21, 1927. Serial No. 207,485. 11 Claims. (Cl. 60—64.)



11. In an installation of the type described, comprising an axial flow turbine and a surface condenser having its longitudinal axis disposed transversely with respect to the turbine axis, the combination of a housing for the installation comprising a unitary member constituted by a turbine cylinder portion and a condenser shell portion and another unitary member similarly constituted and complementary to said first-mentioned unitary member, both of said unitary members being joined together in a plane extending longitudinally of the turbine and transversely of the condenser to form a continuous joint extending longitudinally of the turbine cylinder and circumferentially of the condenser shell, one of said members being removable from the other member without disengaging any of the connections through which fluid flows into or out of the condenser.

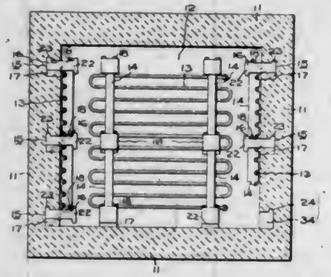
1,763,238. DOOR STOP AND HOLDER. HENRY E. HUBBS and LEVI D. MALONE, Shelby, Ohio, assignors to The Shelby Spring Hinge Company, Shelby, Ohio, a Corporation of Ohio. Filed Apr. 1, 1929. Serial No. 351,472. 5 Claims. (Cl. 292—262.)

1. A door stop and holder comprising two members one telescoping within the other and cooperating means on said members for preventing the withdrawal one from the other, bracket means pivoted to the outer ends of each member for securing the end of one member to a door frame and the other to the door hinged therein, and means on said members for locking them in their extended position, said locking means comprising a boss extending laterally from the outer member provided with a bore, a locking pin in said bore extending from the outer end thereof, a spring urging the pin toward the inner telescoping member, which member is provided with a notch near its



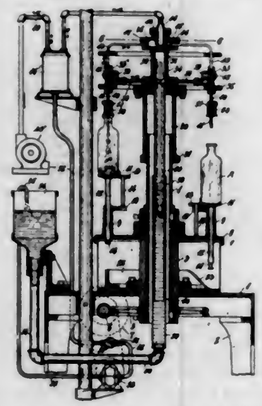
inner end into which said pin engages, the outer end of said boss having a notch radially extending from the bore therein, and means on the outer end of said locking pin adapted to engage in said notch to permit the said pin to move inwardly, said pin and means when withdrawn from said notch, adapted to be rotated so said means engages the end of said boss and inward movement of said pin is prevented.

1,763,239. ELECTRIC FURNACE. ALVIN D. KEENE, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 29, 1924. Serial No. 709,721. 9 Claims. (Cl. 266—1.5.)



2. In an electric furnace, the combination with a refractory wall for a furnace chamber and a resistor unit disposed therein, of a cleated member, a wedging member and a member for locking said cleated member to said wedging member to support the resistor unit on the wall.

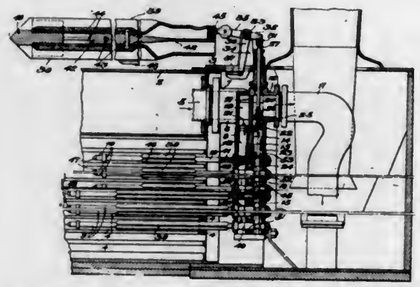
1,763,240. FILLING MACHINE. KARL KIEFER, Cincinnati, Ohio. Filed Mar. 16, 1922. Serial No. 544,236. 8 Claims. (Cl. 226—116.)



8. In a filling machine, a hollow central shaft, a rotary series of filling tubes carried by said hollow central shaft,

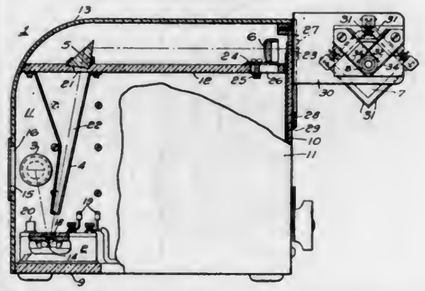
a reservoir open to the atmosphere and below said filling tubes, a liquid supply connection from said reservoir to said filling tubes partly within said hollow shaft and suction means for elevating the liquid from said reservoir to the filling tubes.

1,763,241. STEAM SUPERHEATING SYSTEM. TEODORO LARREY and LUIS GODARD, Mexico City, Mexico. Filed Nov. 26, 1928, Serial No. 322,031, and in Mexico Oct. 16, 1928. 13 Claims. (Cl. 122—462.)



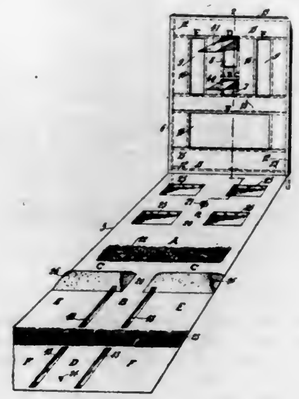
1. In a steam superheating system, a deflector; a partition within the deflector dividing the same into separate chambers for saturated and superheated steam, said partition having an internal chamber intermediate the first-named chambers; a plurality of separate groups of tubular superheating units connected to the deflector; means for supplying saturated steam to the saturated steam chamber; means establishing communication between all the units of one group and the saturated steam and intermediate chambers, to enable said units to receive saturated steam from the former and supply it to the latter after having been superheated; separate means establishing communication between all the units of a second group and said intermediate and superheated steam chambers, to enable the second group of units to receive superheated steam from the intermediate chamber and supply it to said superheated steam chamber after having been superheated a second time; means working in the superheated steam chamber to regulate the entry of steam thereinto from the second group of superheater units; and means to discharge the twice-superheated steam for use.

1,763,242. OSCILLOGRAPH GALVANOMETER. JOSEPH W. LEGG, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Original application filed Nov. 26, 1924, Serial No. 752,427. Divided and this application filed Sept. 13, 1928. Serial No. 305,857. 19 Claims. (Cl. 171—95.)



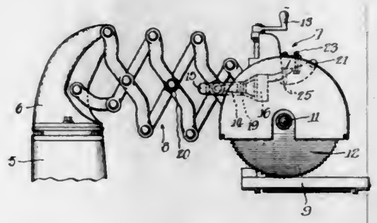
4. The combination with means for passing a beam of energy along a predetermined path, of means for vibrating said beam of energy in accordance with a varying electrical quantity, and means for making said vibrating beam of energy appear as a plurality of waves.

1,763,243. GOLF GAME APPARATUS. BERNARR MACFADDEN, New York, N. Y. Filed May 4, 1927. Serial No. 188,743. 11 Claims. (Cl. 273—35.)



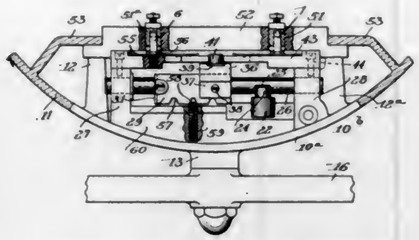
1. In a game apparatus, a green having a goal; a screen having an opening therein; a ball receiving device at the rear of said opening, comprising a forward funnel secured around said opening; an upwardly inclined tubular portion merging with the funnel portion; said device having lower openings different distances from its ends; indicia designating said lower openings; and corresponding indicia on the green, the indicia on the green corresponding to the lower openings progressively nearer the screen being located at positions progressively less difficult relative to the goal.

1,763,244. LATCH DEVICE. CARL LAWRENCE MATTISON, Rockford, Ill., assignor to Mattison Machine Works, Rockford, Ill., a Corporation of Illinois. Filed Nov. 11, 1926. Serial No. 147,713. 5 Claims. (Cl. 143—47.)



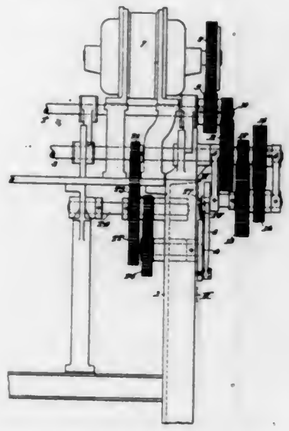
1. A wood-working machine comprising, in combination, a stationary support, an extensible frame having one end mounted on said support, a motor driven tool head mounted on the free end of the extensible frame and carried thereby for horizontal reciprocatory movement, which movement is free and uninterrupted when said frame is in any position except fully retracted, a horizontal operating handle on said tool head, a latch device for holding said tool head in its fully retracted position, and a releasing lever for said latch device positioned adjacent said operating handle and arranged automatically to release said latch device when an operator grasps said operating handle and pulls forwardly thereon.

1,763,245. ELECTRIC-CIRCUIT-CONTROL MEANS. ADAM J. MAY, Rochester, N. Y., assignor, by mesne assignments, to Ritter Dental Manufacturing Company, Inc., Rochester, N. Y., a Corporation of Delaware. Original application filed Nov. 20, 1025, Serial No. 70,241. Divided and this application filed Aug. 14, 1926. Serial No. 129,273. 19 Claims. (Cl. 200—76.)



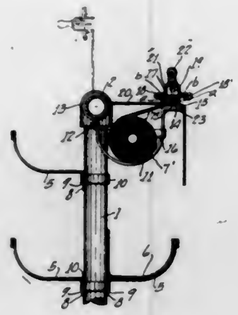
1. An electric circuit control switch comprising a support, a holder mounted for movement in opposite directions thereon and provided with spaced contacts, separate sets of fixed contacts on each side of the holder the contacts of each set being adapted upon movement of the holder to predetermined positions to be connected by one of the contacts of said holder, separate connections between certain contacts of each set on one side of the holder and certain contacts of another set on the opposite side of the holder and operating means for the holder effective to afford a relatively quick make and break between the movable and fixed contacts, and said operating means upon movement thereof being actuated independently of the circuit controlled by the switch.

1,763,246. PACKAGE-WINDING MACHINE. JOHN O. MCKEAN, Westfield, Mass., assignor to Foster Machine Company, Westfield, Mass., a Corporation of Massachusetts. Filed Dec. 29, 1927. Serial No. 243,323. 20 Claims. (Cl. 242—18.)



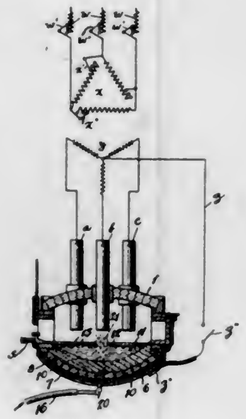
9. In a winding machine, a constant speed winding roll shaft, a traverse guide actuating cam shaft and means for driving it at varying speeds including, a member mounted to oscillate about the cam shaft, a crank shaft, a driving connection between the cam shaft and crank shaft, a driving connection between the crank shaft and said oscillating member, a winding roll shaft gear, a cam shaft gear, and idler gears on the cam shaft and on the oscillating member connecting the winding roll shaft gear with the cam shaft gear.

1,763,247. DISPLAY RACK. MILTON D. MENDLE, Clayton, Mo., assignor to American Fixture & Showcase Mfg. Co., St. Louis, Mo., a Corporation of Missouri. Filed Jan. 30, 1928. Serial No. 250,671. 1 Claim. (Cl. 164—73.)



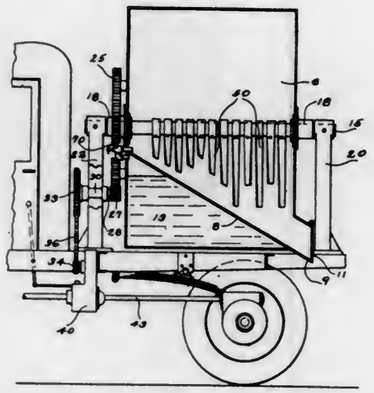
Goods cutting means including, in combination, an elongated channeled member adapted to underlie the goods along a proposed line of severance, an elongated frame adapted removably to straddle the channeled member for clamping the goods thereupon, said frame including oppositely disposed outwardly presented portions, an inverted substantially U-shaped memebr having portions flanged around said portions of the frame for movably attaching said member to the frame, said member being shiftable along the frame relatively to the channeled member, and a blade carried by said member and adapted to depend into the channeled member.

1,763,248. ELECTRIC FURNACE METHOD. WILLIAM E. MOORE, Pittsburgh, Pa., assignor to Pittsburgh Research Corporation, Pittsburgh, Pa. Original application filed June 19, 1928, Serial No. 286,594. Divided and this application filed Apr. 12, 1929. Serial No. 354,603. 4 Claims. (Cl. 75—22.5.)



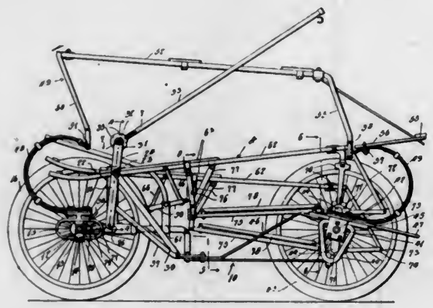
1. An electric metallurgical furnace having a bottom comprising a porous layer of carbonaceous material in direct contact with the charge, and means for forcing gas under pressure up through the pores of said layer and through the charge resting thereon whereby the charge is agitated to bring it into intimate contact with the layer of carbonaceous material.

1,763,249. TRANSIT CONCRETE MIXER. JOSEPH E. MORRIS, Seattle, Wash., assignor of one-fourth to Clarence M. Tuck, Seattle, Wash. Filed Jan. 22, 1929. Serial No. 334,189. 6 Claims. (Cl. 83—73.)



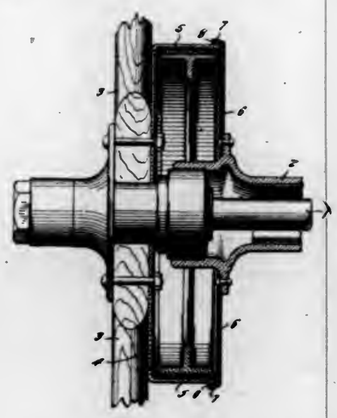
1. In a transit concrete mixer, a prismatic mixing chamber, a fixed shaft adapted to journal said mixing chamber, propelling blades secured to said fixed shaft, a discharge chute formed by extending the adjacent sides at one corner, a sloping plate secured in one corner of the mixing chamber so as to form a rearward discharging slope and drive means for the mixing chamber.

1,763,250. VELOCIPEDE. ISAAC NETTLES, Detroit, Mich. Filed Apr. 17, 1929. Serial No. 355,840. 6 Claims. (Cl. 208—113.)



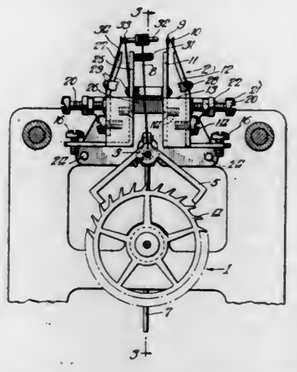
1. A vehicle of the class described comprising a frame, propelling wheels therefor, a crank shaft to drive said propelling wheels, lever devices operatively connected to the crank shaft for foot operation, means interconnecting said devices comprising a crank shaft, and pittmans connecting the latter crank shaft and said devices.

1,763,251. BRAKE-DRUM STRUCTURE. RAYMOND J. NORTON, Washington, D. C., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Dec. 7, 1928. Serial No. 324,363. 7 Claims. (Cl. 188—218.)



1. A brake apparatus comprising a drum, a backing plate, a non-metallic non-absorbent closure member between the drum and plate adhered directly to the plate.

1,763,252. CLOCK-CONTROLLED CONTACT DEVICE. ERNEST S. OSTLER, Chicago, Ill., assignor to Stromberg Electric Company, Chicago, Ill., a Corporation of Maine. Filed Aug. 10, 1925. Serial No. 49,196. 9 Claims. (Cl. 58—33.)

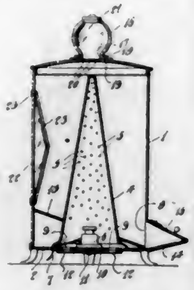


1. The combination with a periodically oscillatable member of an oscillatable leaf spring mounted thereon, two base members each carrying a pair of relatively movable cooperating contact members actuable by the direct spring action of said oscillatable leaf spring, and positioning means for said contact members comprising a single resilient means coacting between said base members and adjusting means for each of said base members opposing the action of said resilient means thereon.

1,763,253. MERCHANDISE WARMER. WILLIAM H. PALMER, Monrovia, Ind., assignor of one-half to George L. Davids, Indianapolis, Ind. Filed Feb. 7, 1929. Serial No. 338,210. 3 Claims. (Cl. 34—21.)

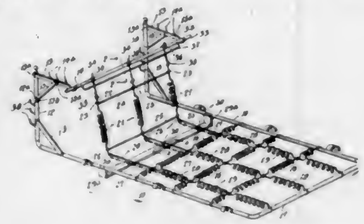
1. A merchandise warmer, comprising a receptacle, a sheet metal cone mounted on the base of the receptacle and

spaced from its side walls providing a space for merchandise therebetween, said cone extending vertically through the receptacle, a heating element supported on the bottom of the receptacle within the cone and adapted to warm



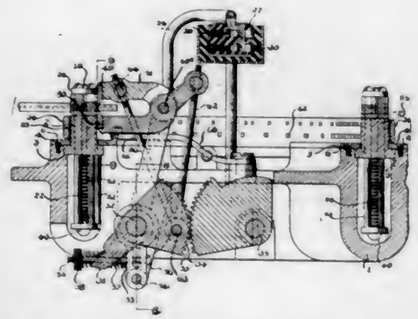
the cone and the merchandise within the receptacle, the top of the receptacle being open, a removable cover closing the open top, and a dispensing opening in the side wall of the receptacle adjacent to its bottom.

1,763,254. BEDSPRING. JOSEPH T. PROWS, Cynthiana, Ky. Filed Aug. 30, 1928. Serial No. 303,059. 3 Claims. (Cl. 5—72.)



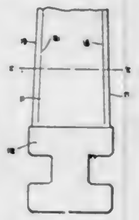
1. A device of the class described comprising a frame, spring means carried thereby, a cross bar on said frame, said spring means having rods extending over the cross bar and having upwardly inclined portions to form a head, flexible elements secured to said bar and slidable at one end on said rods, said flexible elements extending across the bar and being connected at their other ends to said spring means.

1,763,255. METHOD OF BINDING THE ENDS OF ELECTRICAL CONDUCTOR CORDS AND TO AN APPARATUS USED IN SUCH METHOD. WILLIAM A. RANKIN, Rochester, N. Y. Filed Apr. 20, 1927. Serial No. 185,326. 18 Claims. (Cl. 18—2.)



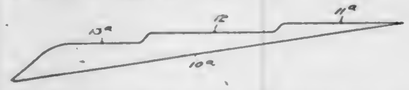
10. A machine of the class described comprising, an open ended mold having two parts, one of which is held toward the other with yielding pressure, a stripping mechanism arranged to remove the insulation from the end of a cord projecting from one of the open ends, and mold opening means having connection with the stripping means for effecting the operation of the latter while the mold is closed.

1,763,256. TURBINE BLADE. JAMES L. RAY, Swarthmore, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Jan. 16, 1929. Serial No. 332,926. 3 Claims. (Cl. 253—77.)



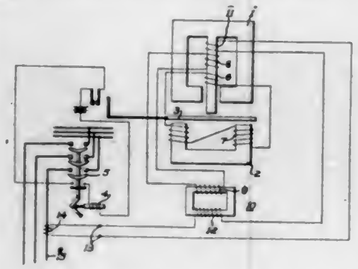
1. A turbine blade having a greater concentration of internal compressive stresses in the respective inlet and outlet edge portions thereof than elsewhere.

1,763,257. AEROFOIL. DAVID L. ROSCOE, San Diego, Calif. Filed Apr. 25, 1928. Serial No. 272,806. 9 Claims. (Cl. 244—12.)



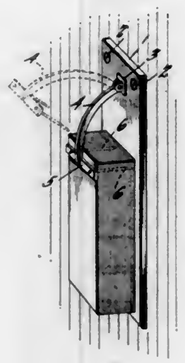
1. An aeroplane wing having the forward portions of its upper and lower surfaces converging forwardly to form a thin edge at the wing front, whereby head resistance is substantially eliminated, and said upper surface having a depression therein spaced rearwardly from said edge thereby producing a vacuum above the wing during flight of the plane the surface of said depression and the upper surface of the wing in advance of said depression being parallel to the line of flight of the plane.

1,763,258. ELECTRIC RELAY. THOMAS WYLIE ROSS, Manchester, England, assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Sept. 22, 1923, Serial No. 664,192, and in Great Britain Oct. 21, 1922. 6 Claims. (Cl. 175—294.)



1. In an electric relay, the combination with a movable member and an energizing coil to actuate the movable member, of an opposing winding and means for modifying the energization of both windings to permit the relay to operate in response to currents less than a predetermined value but to preclude its operation in response to currents exceeding such value.

1,763,259. TOILET-PAPER-DISTRIBUTING APPARATUS. HERMANN AUGUST SCHLOSSBERGER, Buenos Aires, Argentina. Filed Feb. 9, 1929, Serial No. 338,833, and in Argentina Jan. 9, 1929. 1 Claim. (Cl. 211—57.)



A holder for paper sheets comprising a base, a support secured to the base adjacent the top, a curved arm pivotally secured at one end to the support, a transverse rod carried on the free end of said arm and rigid therewith, and prongs fastened to the rod at each side of the arm and projecting toward the base, said prongs being inclined upwardly from the horizontal, the points of said prongs engaging the base.

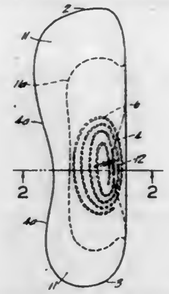
1,763,260. COIL-SPRING METATARSAL-ARCH SUPPORT. WILLIAM SEIGLE, Hinton, Okla. Filed Apr. 19, 1929. Serial No. 356,521. 5 Claims. (Cl. 36—71.)



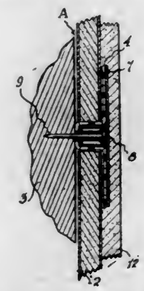
1. A metatarsal arch support, as described, embodying, a suitable base having lateral grooves across its front central portion adapted for positioning said support in one of said grooves, said grooves having oppositely positioned cavities extending laterally therefrom, a coil spring, means arranged upon said spring for adjustably positioning within said cavities, a cap for said spring, and means for adjusting the throw of said spring and the vertical movement of said cap.

1,763,261. COIL-SPRING LONGITUDINAL-ARCH SUPPORT. WILLIAM SEIGLE, Hinton, Okla. Filed Apr. 19, 1929. Serial No. 356,522. 5 Claims. (Cl. 36—71.)

1. A device, as described, embodying an arch support, comprising a fabric base member and a fibrous top member resilient in parts, joined at their heel, toe, and edge portions, a coil spring disposed between the central portions of said members, and a chain means attaching said members centrally for adjustably controlling the throw of said spring.

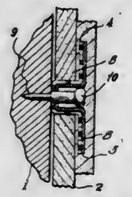


1,763,262. PLASTER CONSTRUCTION. HENRY R. SHANKS, Dallas, Tex. Filed Apr. 13, 1929. Serial No. 354,798. 5 Claims. (Cl. 72—118.)



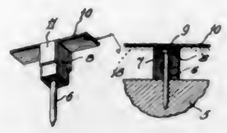
1. A support for wall boards in the construction of plaster walls, comprising a longitudinally grooved metallic element, means for attaching the elements to studding whereby the wall boards are suspended by the element, leaving a space between the back of the boards and the studding for play of the boards said means including a driven element headed at one end and pointed at the other for penetrating the studding and a spacer element covering the head and a portion of the shank of the driven element and having a shoulder adapted to engage the surface of the studding to limit the penetration of the driven element.

1,763,263. MEANS FOR HANGING WALL BOARD. HENRY R. SHANKS, Dallas, Tex. Filed Apr. 18, 1929. Serial No. 356,229. 3 Claims. (Cl. 72—118.)



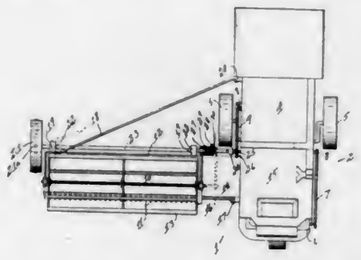
1. Means for fastening wall board to a studding or support comprising an elongated element and a hollow sheath, one end of the element being pointed to penetrate the studding and the opposite end of the element being covered with the sheath, the sheath spaced around the element, one end of the sheath providing a stop to limit the inner movement of the element in the studding.

1,763,264. MEANS FOR SUSPENDING WALL BOARD. HENRY R. SHANKS, Dallas, Tex. Filed July 1, 1929. Serial No. 375,167. 4 Claims. (Cl. 72—118.)



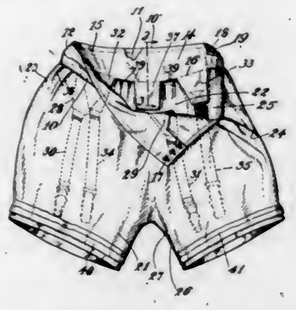
1. Means for supporting wall board in constructing plastic walls, comprising an elongated pointed element with an enlarged upper end; a rubber plug on the element, means for covering the enlarged end of the element to prevent contact with plaster, and means for attaching the covering means to the element.

1,763,265. TRACTION CONTROL FOR COMBINED HARVESTERS. FREDERICK E. SHARP, Prescott, Wash. Filed Jan. 19, 1928. Serial No. 247,929. 6 Claims. (Cl. 56—20.)



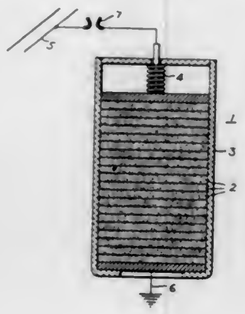
6. In a traction control for combined harvesters, the combination with the operating mechanism, the header thereof hingedly attached to said harvester, and a grain wheel, of journals rigidly attached to said header, an axle rigidly secured to and rotatable with said grain wheel, and mounted in said journals and disposed to strengthen said header, and extended for and operably connected with said operating mechanism, and means integral with said axle to provide for the independent control of said grain wheel and to provide for the maximum movement of said header in a vertical arc.

1,763,266. APPAREL GARMENT. FELIX SIMMONS, New York, N. Y. Filed July 5, 1928. Serial No. 290,291. 3 Claims. (Cl. 2—224.)



2. In a garment of the type described, a belt member adapted to fit the waist of a wearer and comprising multi-ply parts including an inner ply section having a plurality of supporter tabs depending therefrom, a liner section having a plurality of supporter tabs depending therefrom and with which the supporter tabs of the inner ply section are coincident, an outer ply section, and a drawers member having its upper edge lying between the said outer ply section and the liner section and connected to all the parts of the belt along a line extending above the said tabs depending from the inner ply section and the liner section.

1,763,267. RESISTANCE PLATE. JOSEPH SLEPIAN, Swissvale, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 29, 1922. Serial No. 557,364. 23 Claims. (Cl. 175—30.)



8. A composite resistor material containing finely divided carbon distributed throughout a substantially non-conductng mass and characterized by being impregnated with chromic acid.

20. A lightning-arrester comprising a plurality of composite resistor bodies disposed close to each other to constitute minute gaps having a breakdown voltage of the order of 300 to 500 volts, said composite resistor bodies comprising conducting particles and an oxidizng agent distributed throughout a substantially non-conducting mass, said oxidizing agent being, substantially inactive at normal operating temperatures, but being sufficiently active on said conducting particles at temperatures below the temperature of copious electron emission to cause a material increase of the resistivity of said resistor bodies at points of excessive heating.

1,763,268. RESISTOR MATERIAL AND METHOD OF MAKING SAME. JOSEPH SLEPIAN, Swissvale, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Original application filed Apr. 29, 1922, Serial No. 557,364. Divided and this application filed Oct. 15, 1923. Serial No. 668,552. 20 Claims. (Cl. 201—76.)

11. The method of increasing the resistivity of carbonaceous resistor bodies which comprises impregnating the same with a solution of chromic acid and subsequently heating said bodies to a temperature below 500° C. but sufficiently high to cause the chromic acid to oxidize the carbonaceous material and significantly increase the resistivities of the bodies.

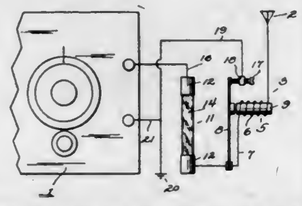
1,763,269. PREPARATORY PROCESS IN THE MANUFACTURE OF RESAWN SHAKE SHINGLES. WILLIAM S. SMITH, Port Moody, British Columbia, Canada. Filed June 14, 1929. Serial No. 370,903. 1 Claim. (Cl. 144—309.)

A preliminary process in the manufacture of re-sawn shake shingles and comprising, the method hereinbefore described in which the natural surface shape from which by a single inter-surface saw-cut two re-sawn or commercial shake shingles are produced, is subjected to a preliminary truing process by which a very acute angular



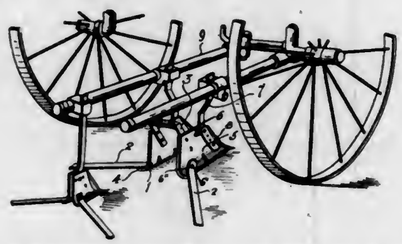
cut is taken off the side and transverse edge of that portion of the shake end which is to form the thin end of the shingle, and then by reversing the shingle to perform a similar operation on the diagonally opposite portion of the shake, for the other shingle.

1,763,270. SIGNAL CLARIFIER FOR RADIO RECEIVING APPARATUS. WILLIAM I. SPANGLER, Tarlton, Ohio. Filed June 19, 1928. Serial No. 286,508. 2 Claims. (Cl. 250—20.)



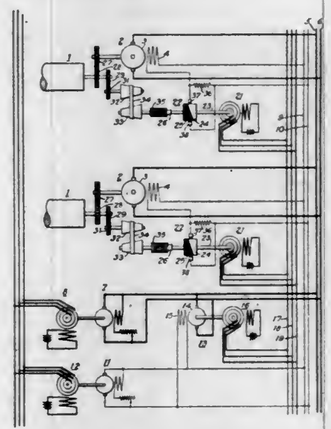
1. A signal clarifier for radio receiving apparatus comprising an electro-magnet having one terminal adapted to be connected with an aerial, the other terminal of said magnet being connected with an armature normally spaced from the pole of said magnet, a ground post normally spaced from said armature but disposed upon the presence of an abnormal electric field around said magnet to be brought into contact with said armature by the movement of the latter in response to said abnormal magnetic field, said ground post having a connection to ground, and a wire leading from said armature to the current input side of a radio receiving set, and a resistance device interposed in the circuit between said armature and the input side of the radio set.

1,763,271. CULTIVATOR ATTACHMENT. WILLIAM C. SPECK, Lamesa, Tex. Filed Oct. 10, 1927. Serial No. 225,072. 1 Claim. (Cl. 97—179.)



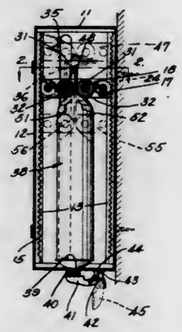
An attachment for cultivators comprising runner members connected together in spaced relation, each member having connection with a depending element of the cultivator beams; said runner members having their lower edges or soil-engaging surfaces curved outwardly; a spreader blade carried on each of said runner members at the forward edges of said members, said spreader blades having their cutting or soil-treating and engaging surfaces directed outwardly and away from the space between said runner members to permit passage of soil and weeds; slots in said outwardly curved surfaces of the runner members; cutter blades having their inner ends curved to seat in the curved surfaces of said runner members and bolts for adjustably connecting the blades to the curved surfaces of the runners.

1,763,272. REGULATOR SYSTEM. STEPHEN A. STAEGE, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Oct. 14, 1924, Serial No. 743,578. 14 Claims. (Cl. 172—293.)



9. In a system of motor control, the combination with an electric motor and a separate speed member, of means responsive to speed variations between the motor to be controlled and the speed member for gradually varying the excitation of the controlled motor, said means comprising a rotary element having symmterically disposed wedge-shaped conducting and non-conducting surface portions, a plurality of brushes cooperating therewith and means differentially responsive to the speed of said speed member and to the speed of said motor for imparting a lateral motion to said rotary member, and additional means for varying the permanent speed relationship between said motor and said speed member.

1,763,273. TOOTH-PASTE DISPENSER. ARTHUR C. STRAUSS and DANIEL W. BLAIR, Los Angeles, Calif. Filed Apr. 2, 1928. Serial No. 266,599. 5 Claims. (Cl. 221—60.)



1. In a dispensing device of the class described, the combination of: a housing having corner supports and a

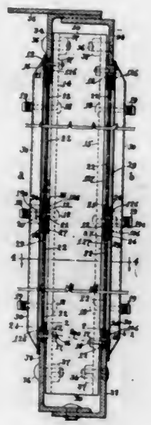
base; racks secured to said supports, said base forming the support for the feeding end of a collapsible tube; a carriage operable in said housing; shafts mounted in the opposite ends of said carriage; gears carried by said shafts and adapted to engage with said racks to move said carriage relative to said housing; a pair of shafts arranged in said carriage between said end shafts; rollers carried by said intermediate shafts and being spaced apart for the introduction therebetween of the closed end of said tube; and gears mounted on one end of said intermediate shafts adapted for synchronous operation with the gears at one end of said carriage to move said rollers relative to said tube, whereby said rollers are rotated in a direction opposite to that of the movement of said carriage.

1,763,274. NAIL FILE OR SIMILAR INSTRUMENT AND CARRIER THEREFOR. CHARLES A. TEAL, Jr., Jenkinstown, Pa. Filed Dec. 5, 1929. Serial No. 411,741. 9 Claims. (Cl. 30—23.)



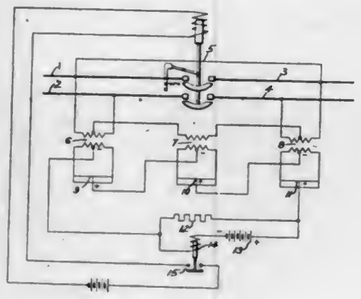
1. The combination of an elongated carrier comprising two plate-like elements secured together, one element having an outwardly bulged portion providing a pocket having an entrance opening and having one of its sides closed by the other element, an instrument comprising an elongated, plate-like body having one end portion thereof inserted into said pocket, and means spaced from said pocket for detachably connecting the other end portion of said body to said carrier.

1,763,275. GLAZING CONSTRUCTION. GEORGE W. THOMAS, Pittsburgh, Pa., assignor to H. H. Robertson Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Nov. 23, 1928. Serial No. 321,412. 14 Claims. (Cl. 189—1.)



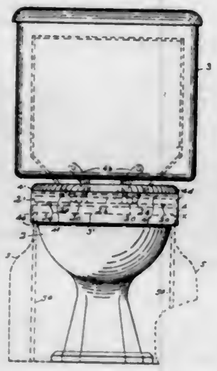
1. In a glazing construction, in combination, a series of supporting members, channeled bars spaced apart and extended across said supporting members on the outside thereof, and a glass pane supported by said channeled bars on the outer side of said supporting members in a separate plane therefrom and bodily movable into and out of the channels in adjacent bars, and a cap member associated with each supporting member and governing the side edge portion of the glass pane whereby the supporting members are protected from the weather.

1,763,276. COMPENSATED PARALLELING SYSTEM. PHILLIPS THOMAS, Edgewood, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Sept. 19, 1927. Serial No. 220,556. 7 Claims. (Cl. 171—118.)



1. A system for connecting a pair of alternating-current circuits comprising a magnetically operated circuit connector, a control relay therefor, a direct-current source for energizing said relay and means for setting up a voltage to oppose the energization of said relay in proportion to the voltages of said circuits and in proportion to the instantaneous resultant thereof, whereby said circuits will be connected whenever the voltage of one is below normal, and that of the other is normal and in phase with the voltage of the first mentioned circuit.

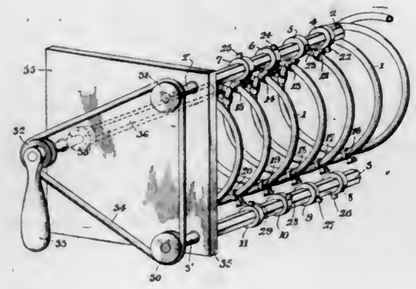
1,763,277. WATER-CLOSET COMBINATION. BERT O. TILDEN, Trenton, N. J., assignor to B. O. T. Mfg. Co., Trenton, N. J., a Corporation of New Jersey. Filed Oct. 10, 1929. Serial No. 398,749. 3 Claims. (Cl. 4—242.)



1. A cover for the hinged seat of a water closet bowl comprising a plane body of greater area than the seat,

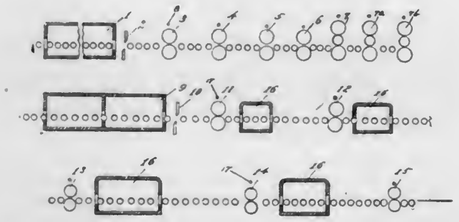
said body being formed with front and lateral valances that extend below and hide the seat and rim of the bowl, the rear end of the body being pivotally connected to the pintle of the seat hinge by loop members that are secured to the under side of the body, and the lateral valances being reduced in depth at their rear ends to avoid contact with the adjacent rim portion and also afford clearance for users of the seat.

1,763,278. INDUCTANCE SYSTEM. ARTHUR M. TROGNER, East Orange, N. J., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed Dec. 22, 1928. Serial No. 327,934. 9 Claims. (Cl. 171—242.)



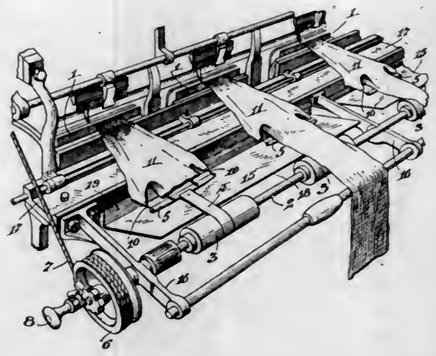
1. In apparatus of the class described the combination of, an inductance unit, clips mounted at predetermined positions upon the turns of said inductance unit, members positioned adjacent to said inductance unit, and means mounted upon said members for engaging said clips in predetermined sequence.

1,763,279. METAL ROLLING. JOHN B, TYTUS, Middletown, Ohio, assignor to The American Rolling Mill Company, Middletown, Ohio, a Corporation of Ohio. Filed June 20, 1925. Serial No. 38,436. 8 Claims. (Cl. 29—18.)



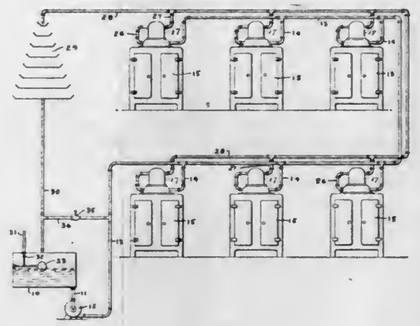
8. A process for rolling metal into sheets which consists in reducing plate to pieces from which packs are to be made by passing plate sections through a series of stands of rolls successively, said rolls being maintained cold, forming heated packs, and pasing the packs successively through a series of stands of rolls, said rolls also being maintained cold, and adjusting the temperature of the packs between the successive operations thereon.

1,763,280. TENSION-BAR MECHANISM FOR KNITTING MACHINES. RUDOLF ULLRICH, Wyomissing, Pa., assignor, by mesne assignments, to Textile Machine Works, Wyomissing, Pa., a Corporation of Pennsylvania. Filed Apr. 17, 1929. Serial No. 355,706. 5 Claims. (Cl. 66—149.)



1. In a full-fashioned knitting machine having a tension take-up mechanism comprising a fabric-engaging tension-bar, supporting means for said bar located below the operatively-tensioned position thereof and adapted to coact therewith so as to facilitate fabric-disengaging movement of the bar when the tension is released.

1,763,281. REFRIGERATING SYSTEM. HARRY R. VAN DEVENTER, New York, N. Y., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Sept. 28, 1923. Serial No. 665,438. 4 Claims. (Cl. 62—115.)

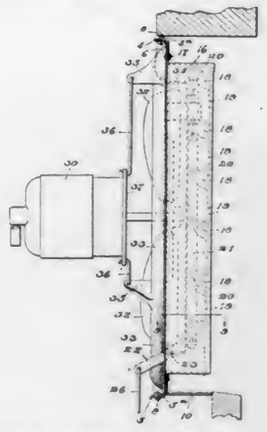


1. In a refrigerating system, the combination of a plurality of refrigerating machines provided with condensing means, a common means for circulating and recirculating a combined motive and condensing fluid to the several refrogerating machines, and means for cooling the combined motive and condensing fluid.

1,763,282. VENTILATING APPARATUS. MERRITT A. VINING, Grand Rapids, Mich. Filed Sept. 13, 1927. Serial No. 219,288. 15 Claims. (Cl. 98—116.)

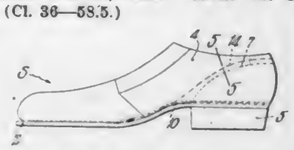
1. A ventilating apparatus of the character set forth comprising an element having an aperture therein, a shut-

ter structure controlling the degree of opening of said aperture, and a motor driven fan normally disposed in operative relation to said aperture, said fan being re-



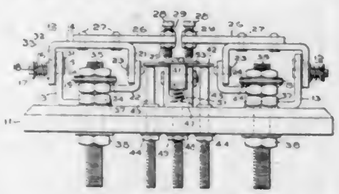
silently mounted on said element and movable into and out of operative relation to said aperture about a vertically disposed axis.

1,763,283. SHOE. EUGENE B. WARD, West Springfield, Mass. Filed Oct. 19, 1929. Serial No. 400,846. 4 Claims. (Cl. 36—58.5.)



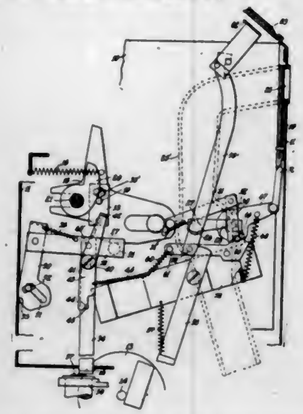
1. In combination with a shoe having a sole and an upper, means for contracting a part of said upper comprising, a member associated with said sole which is moved with respect thereto as the sole is fixed, and a member operable thereby which is associated with said upper for contracting the same about the heel of a wearer.

1,763,284. THERMAL RELAY. HAROLD E. WHITE, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Sept. 9, 1927. Serial No. 218,385. 6 Claims. (Cl. 200—88.)



1. In combination, a single magnetic-loop device comprising armature and stator members, means for biasing said armature to provide an air gap in said loop, a current-conducting member extending through said loop and normally engaging said armature for providing a shunt path for said air gap and for magnetizing said loop, said current-conducting member being normally magnetic when cool and non-magnetic when heated to a temperature of predetermined value, whereby a reduction in said air gap and consequent movement of said armature are effected when said current-conducting member has been heated to said temperature.

1,763,285. COIN-TRIPPED STARTING MECHANISM. CLIFFORD P. WICKS, Stamford, Conn., assignor to American Cuptor Corporation, New York, N. Y., a Corporation of Delaware. Filed Mar. 24, 1928. Serial No. 264,525. 15 Claims. (Cl. 194—9.)



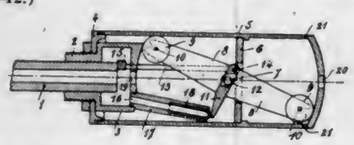
1. In a coin operated apparatus having a movable starting member and means for tensioning said member toward the starting position: a control for said starting member comprising a pair of links pivoted together to form a toggle adapted to hold said starting member in non-starting position when said links are substantially aligned, a stop for holding said links against extended movement in one direction from the aligned position, a trigger member whereby said links may be moved from aligned position in the other direction to release said starting member, and means for guiding a falling coin approximately vertically down toward said trigger member whereby the impact of the coin on said trigger member may break said toggle and cause said starting member to be released.

1,763,286. DAMPING OR ABSORBING DEVICE FOR FIREARMS FOR THE PREVENTION OF SOUNDS, FLAMES, AND RECOIL. ZYGMUNT WILMAN, Paris, France. Filed Nov. 29, 1927, Serial No. 236,413, and in France Dec. 23, 1926. 12 Claims. (Cl. 89—42.)



1. In a gun silencer, the combination of relatively fixed and moveable chambers mounted to nested and mutually pivoted relationship upon the end of the gun barrel, said chambers being provided with openings which normally register in alignment with the gun barrel to provide a projectile outlet, whereby pivoting of the movable chamber will destroy said registry to obturate said outlet.

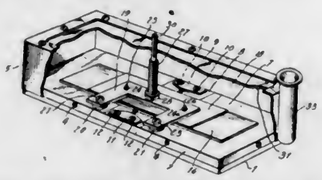
1,763,287. DAMPING APPARATUS FOR THE PREVENTION OF NOISE, FLAMES, AND RECOIL IN FIREARMS OF THE AUTOMATIC TYPE. ZYGMUNT WILMAN, Paris, France. Filed Nov. 29, 1927, Serial No. 236,414, and in France Apr. 27, 1927. 10 Claims. (Cl. 89—42.)



1. In a gun silencer, a chamber mounted on the end of the gun barrel as a prolongation of the latter, a fixed outer

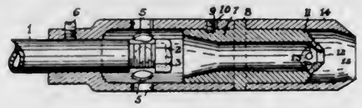
chamber of enlarged volume enclosing said first-named chamber, the forward walls of said chambers being provided with aligned openings which permit the exit of a discharged projectile, and means for automatically obturating both of said openings after the exit of the projectile.

1,763,288. PIEZO-ELECTRIC CRYSTAL APPARATUS. ROBERT H. WORRALL, Washington, D. C., assignor, by mesne assignments, to Federal Telegraph Company, a Corporation of California. Filed Feb. 25, 1928. Serial No. 257,074. 12 Claims. (Cl. 171—327.)



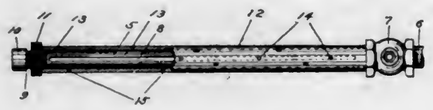
1. A piezo electric crystal holder comprising a mounting plate having a flat surface, a cover member secured to said mounting plate, a piezo electric crystal element supported by said mounting plate upon said flat surface, means positioned transversely of said mounting plate and directed toward said piezo electric crystal element for maintaining said piezo electric crystal element in position, an electrode positioned in floating contact on the upper surface of said piezo electric crystal element, and means extending from one side of said mounting plate for centering said electrode with respect to said piezo electric crystal element.

1,763,289. BURNER. JAMES B. ANDERSON and HARRY J. ANDERSON, Shaler Township, Allegheny County, Pa. Refiled for abandoned application Serial No. 265,565, filed Mar. 29, 1928. This application filed July 30, 1929. Serial No. 382,152. Renewed Nov. 23, 1929. 6 Claims. (Cl. 158—33.)



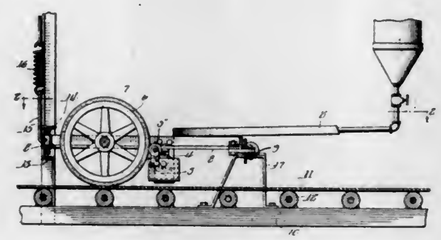
1. A burner structure of the character described and comprising an inlet passage for the gas, said passage having a jet opening at its discharge end, an air-mixing chamber surrounding said jet opening, a passage for the fuel mixture extending from the chamber and having a nozzle orifice at its outer end for the discharge of a column of burning gases, a plurality of small ports surrounding said nozzle orifice and leading from said second named passage to produce jet flames surrounding said column, said ports diverging outwardly, and a tubular flame shield extending forwardly from said nozzle orifice and acting to reverberate the jet flames into contact with said column, said flame shield having a restricted discharge opening.

1,763,290. DEVICE FOR FEEDING CUTTING COMPOUNDS AND THE LIKE. GEORGE B. ARONES, Minneapolis, Minn. Filed Nov. 12, 1928. Serial No. 318,929. 2 Claims. (Cl. 299—106.)



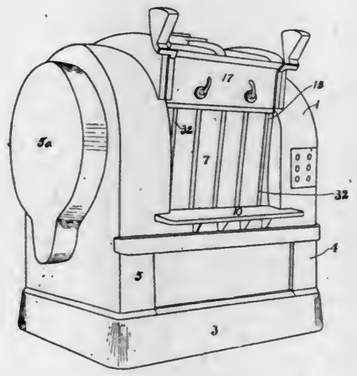
1. A feed unit of the character described, comprising a feed pipe having a longitudinally extending slot, a sleeve member rotatably disposed upon the pipe and having spaced series of perforations adapted to be selectively registered with the slot, and means at one end of the unit for releasably securing the sleeve against rotation on the pipe, said means comprising a member threaded upon the pipe for abutting engagement against the sleeve.

1,763,291. PROCESS OF CHEMICAL PRINTING. HARRY E. BROOKBY, Evanston, Ill., assignor to The United States Gypsum Co., Chicago, Ill., a Corporation of Illinois. Filed Aug. 29, 1927. Serial No. 216,004. 5 Claims. (Cl. 101—426.)



1. The process of chemically printing trade marks, etc., on plasterboards during their process of manufacture comprising the applying thereto a printing chemical during the continuous movement of said plasterboards, allowing the same to penetrate the fibrous cover sheet, and thereafter applying a developing chemical, such that the reaction by the two chemicals will produce an insoluble color substance within the surfacing cover sheets of the plasterboard.

1,763,292. MIXING AND KNEADING MACHINE. GUSTAV B. EGGERT, Saginaw, Mich., assignor to Baker Perkins Company, Inc., Saginaw, Mich., a Corporation of New York. Filed Feb. 6, 1928. Serial No. 252,084. 14 Claims. (Cl. 259—28.)

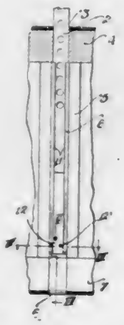


1. In a dough-working machine, a trough, a rotary beater therein, a door adapted to close one side of said trough while the machine is in operation, said door and an adjacent part of said trough constituting an eccentric pocket in said trough.

1,763,293. RUBBER COMPOSITION AND METHOD OF PRESERVING RUBBER. HAROLD WALTER ELLEY, Wilmington, Del., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Dec. 7, 1927. Serial No. 238,463. 3 Claims. (Cl. 18—50.)

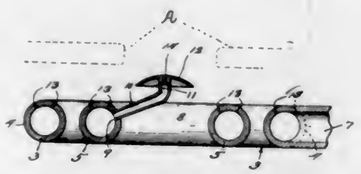
1. The method of inhibiting the oxidation of rubber which comprises incorporating therewith, in addition to a vulcanizing agent and an accelerator which is substantially a non-inhibitor of oxidation, meta-toluylene-diamine.

1,763,294. HEADREST SOCKET FOR BARBER CHAIRS. JOHN R. EMMERT, Chicago, Ill., assignor to Emil J. Paidar Company, a Corporation of Illinois. Filed July 13, 1928. Serial No. 292,529. 1 Claim. (Cl. 155—177.)



In a barber chair, a metal guide having a web with flanges, said flanges being formed at one end to provide sockets, and buffers seated in said sockets.

1,763,295. INDIVIDUAL PILOT LIGHT FOR GAS BURNERS. WOLKE ENGLUND, Chicago, Ill. Filed Mar. 22, 1928. Serial No. 263,805. 4 Claims. (Cl. 158—115.)



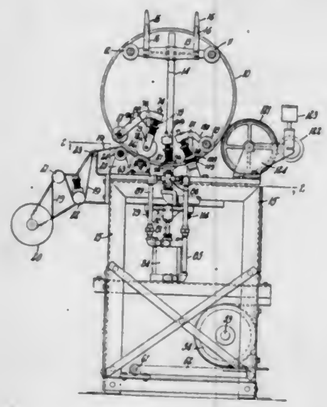
1. An attachment for gas burners which have gas supply chambers and openings communicating therewith for permitting the gas to escape from said chamber and be burned, comprising a member having a longitudinal recess therein and an opening forming a communicating means between said recess and the outer surface of said member, one end of said recessed member being adapted to be attached to said burner in such a manner that the recess therein communicates with the gas supply chamber and permits the gas to escape through said opening in said recessed member and be burned simultaneously with the gas escaping through said burner openings, said opening in the recessed member being adapted to lie in close proximity to some of the burner openings, and a cover for said opening in said recessed member for protecting the flame caused by the burning gases emerging therefrom and preventing it from being extinguished when something is spilled on said burner.

1,763,296. AWNING-FRAME STRUCTURE. THOMAS HAROLD FOSTER, Topeka, Kans., assignor to Topeka Tent & Awning Co., Topeka, Kans., a Corporation of Kansas. Filed Mar. 23, 1927. Serial No. 177,826. 10 Claims. (Cl. 156—44.)



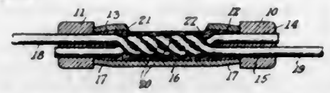
8. In an awning, a support, an awning frame for sliding on said support, a visor frame pivoted to said awning frame, means for locking the visor frame against collapse until the awning frame has reached a predetermined point in its upward travel, said means comprising a member pivoted to the awning frame and a second member pivoted to the visor frame, and stop means for limiting movement of said pair of members in one direction.

1,763,297. MACHINE FOR COVERING TIRE BEADS. FRED D. FOWLER, Newton, Mass., assignor, by mesne assignments, to Hood Rubber Company, Inc., Wilmington, Del., a Corporation of Delaware. Filed Jan. 7, 1928. Serial No. 245,105. 5 Claims. (Cl. 154—9.)



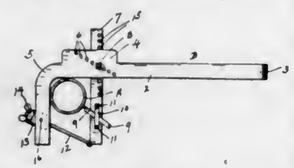
1. A machine for covering tire beads having, in combination, means for supporting and guiding a ring constituting a tire bead core, means to feed a strip of fabric to the periphery of said ring embodying a pair of rotary feed rolls, an auxiliary feed roll positioned in advance of said pair of feed rolls, means to guide sheet material to said auxiliary feed roll, and means to rotate said auxiliary feed roll at a greater surface speed than that of said pair of feed rolls.

1,763,298. WIRE-END SPLICING DEVICE AND CONNECTING GUARD. ERIC T. FRANZEN, Newark, N. J. Filed May 25, 1927. Serial No. 194,005. 4 Claims. (Cl. 173—263.)



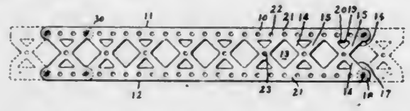
1. In a wire connector having a tubular element through which a pair of wires to be twisted may extend, a head having a pair of perforations to receive the ends of wires to be connected, and an integral frusto-conical extension on said head extending within the tubular element and swivelly connected therewith.

1,763,299. CUTTER. JOSEPH B. GALBRAITH, Kaysville, Utah. Filed Aug. 23, 1927. Serial No. 214,831. 1 Claim. (Cl. 81—189.)



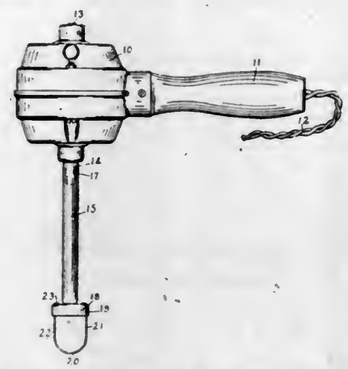
In a cutter the combination of a piece of metal bent back upon itself to form a handle; a cutting bar suspended from said handle near one end thereof; a cutting tool set in said bar at an angle thereto; an eye bolt secured to the lower end of said cutter bar to draw said cutter bar to the work; and a thumb nut on said eye bolt.

1,763,300. TOY BUILDING CONSTRUCTION. ALFRED C. GILBERT, Hamden, Conn., assignor, by mesne assignments, to The A. C. Gilbert Company, New Haven, Conn., a Corporation of Maryland. Filed May 10, 1927. Serial No. 190,231. 3 Claims. (Cl. 46—35.)



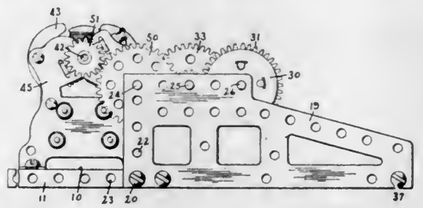
1. A square hollow girder, comprising a plurality of elongated strips of thin material, having parallel side marginal portions interconnected by a plurality of diagonal portions, said diagonal portions forming substantially square-shaped openings disposed intermediate the marginal portions and forming at the ends of said strip a V-shaped end edge, said strip having a diagonally disposed series of perforations in alignment with each of said diagonal portions, said diagonal portions also forming a series of triangular openings adjacent each marginal portion, the square-shaped openings in said strip being disposed cornerwise with respect to the marginal portions, a corner of each square-shaped opening being disposed in alignment with the inner edge of each marginal portion, said strip having a longitudinally extending series of perforations in each of said marginal portions, certain of the perforations in the diagonal series of perforations being disposed in and being one of the longitudinal series of perforations in said marginal portions, said strips being disposed at right angles to each other, with the side edges of one extending along the side edges of another, and a strip of material right angular in cross section extending along the adjacent side edges with the first mentioned strips, said second mentioned strip having a series of transversely elongated openings in each of its side portions, and means passing through the elongated openings in the angle strip and through the openings in the marginal portions of the flat strips to secure these strips together.

1,763,301. MIXING DEVICE. ALFRED C. GILBERT, Hamden, Conn., assignor, by mesne assignments, to The A. C. Gilbert Company, New Haven, Conn., a Corporation of Maryland. Filed July 1, 1927. Serial No. 202,922. 16 Claims. (Cl. 259—135.)



1. In a mixing device, a beating element adapted to be detachably secured to an end of a rotatable shaft, said beating element including an inverted cup-shaped member having a U-shaped loop member depending therefrom.

1,763,302. CONSTRUCTION TOY. ALFRED C. GILBERT, Hamden, Conn., assignor, by mesne assignments, to The A. C. Gilbert Company, New Haven, Conn., a Corporation of Maryland. Filed July 14, 1927. Serial No. 207,010. 6 Claims. (Cl. 46—35.)



4. A construction toy comprising a base plate, side plates secured to the base plate in parallel upstanding relation adjacent the side edges thereof and extending longitudinally of the base plate, a motor and means independent of the side plates for securing the motor to the base plate with its shaft extending parallel to or at substantially right angles to the planes of the side plates.

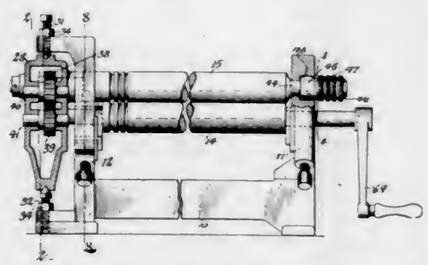
1,763,303. TROLLEY WHEEL. WALTER F. GRAHAM, Mansfield, Ohio, assignor to The Ohio Brass Company, Mansfield, Ohio, a Corporation of New Jersey. Filed Nov. 14, 1928. Serial No. 319,366. 1 Claim. (Cl. 148—11.5.)



The method of manufacturing a current collector comprising forming a body casting from a molten mixture of copper 80%, zinc 15%, nickel 4%, silicon 1%, to the shape desired in a mold, then heating the casting to

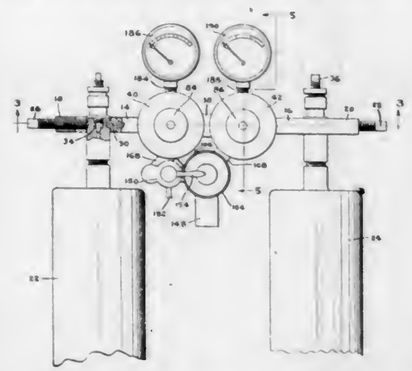
about 1500 deg. F. and quench to about room temperature to uniformly distribute the elements throughout the mass and then heat the mass to about 450 deg. F. and cool slowly to precipitate the nickel and silicon as a non-soluble, stable compound uniformly distributed throughout the mass to harden the same.

1,763,304. SLIP-ROLL-FORMING MACHINE. PAUL R. HAHNEMANN, Buffalo, N. Y., assignor to Niagara Machine and Tool Works, Buffalo, N. Y., a Corporation of New York. Filed May 9, 1928. Serial No. 276,325. 5 Claims. (Cl. 153—61.)



1. A slip roll forming machine comprising a main frame having a standard at its head end which is provided with a forwardly opening key-hole slot, a lower roll mounted on said frame, an upper roll movable with its head end into and out of said slot, a rear roll arranged in rear of said lower and upper rolls, and a sleeve movable lengthwise on the head end of said upper roll and into and out of engagement with the enlarged inner end of said key-hole slot.

1,763,305. ANÆSTHETIZING APPARATUS. JAY A. HEIDBRINK, Minneapolis, Minn. Filed Feb. 23, 1924. Serial No. 694,486. 7 Claims. (Cl. 128—203.)



1. An anæsthetizing apparatus having a mixing chamber, means for supplying thereto from independent source of supply a plurality of gases under pressure, a connection for an inhaler leading from said mixing chamber, means for shutting off the supply of gases to said mixing chamber, a valve casing, an adjustable valve in said casing, a passageway connecting said valve casing with one of said sources, a passageway connecting said valve casing with said mixing chamber, and a connection for a second inhaler leading from said valve casing, said valve having ports so arranged that for different positions thereof gas from said last mentioned source may be delivered into said second inhaler or into said last mentioned passageway as desired.

5. An anæsthetizing apparatus comprising a mixing chamber, means for supplying thereto from independent sources of supply two gases under pressure, a casing containing said mixing chamber, a diaphragm constituting one of the walls of said mixing chamber, a restricted passageway for conducting one of said gases into said mixing chamber, a second passageway for conducting the same gas to the outside surface of said diaphragm, a valve controlling a passageway for conducting the other of said gases into said mixing chamber, means normally maintaining said valve seated, connections between said diaphragm and said valve for causing the latter to be opened to an extent in proportion to the pressure of gas passing through said second passageway, and a passageway leading from said mixing chamber for supplying the mixed gases to an inhaler.

1,763,306. KITCHEN CABINET AND REFRIGERATOR. WALTER H. HENDRICKSON, Rockford, Ill., assignor to Emerson-Brantingham Corporation, Rockford, Ill., a Corporation of Illinois. Filed Dec. 8, 1927. Serial No. 238,528. 7 Claims. (Cl. 312—107.)

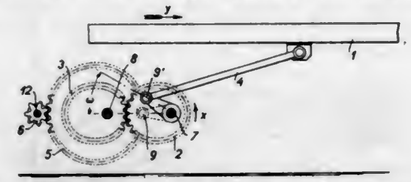


1. In a sheet metal cabinet construction, the combination with side, back, and top walls forming the shell of the cabinet, of a separate one piece sheet metal front wall in the form of a frame with one or more openings therein for drawers or doors, said separate front wall being arranged preferably to be given one finish, and the other walls preferably another finish, said front wall having rearwardly directed flanges defining at least the side edges thereof, said rearwardly directed flanges having the edges thereof bent inwardly thereof to provide fastening flanges, the side walls of said cabinet having the edges thereof likewise bent inwardly to provide fastening flanges, means for securing the fastening flanges together, and a panel for covering at least one side wall of said cabinet, said panel being of the same appearance or finish as the front to match the same and having a flange arranged to fit in between the flanges fastening the front to the side wall, whereby the panel is fastened in place therewith.

2. In a cabinet construction, the combination of a cabinet having a body portion and a front attachable to or removable from the body portion as a separate unit, another cabinet of similar construction arranged to be disposed alongside the same and in abutting relation therewith, and means for interlocking the cabinets, said means being interposed between the body portions and the fronts of the two cabinets.

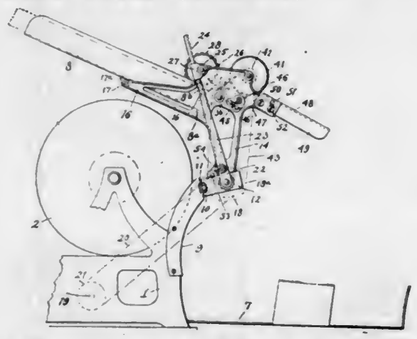
1,763,307. PROPULSION CONVEYER. ERNST HOFFMANN, Salza, near The Harz, Germany, assignor to Schmidt, Kranz & Co. Nordhäuser Maschinenfabrik Aktien-Gesellschaft, Nordhäuser near The Harz, Germany. Filed Dec. 14, 1927, Serial No. 239,847, and in Germany Dec. 15, 1926. 7 Claims. (Cl. 74—14.)

1. A propulsion conveyer, comprising an elongated conveying support mounted for being reciprocated in longitudinal direction, an operating mechanism comprising a pair of meshing elliptical gear wheels each rotatably supported at one of its foci, means to connect said conveying support with one of said gear wheels at different angular



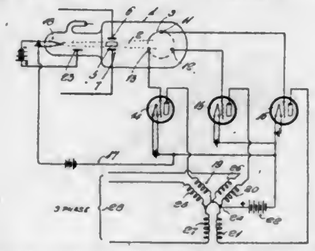
distances from the major axis of the ellipse of such gear wheel, and means to rotate the other one of said gear wheels.

1,763,308. INTERLEAVING DEVICE FOR PRINTING MACHINES. THOMAS WALTER HORN, Cleveland, Ohio, assignor to A. B. Dick Company, Chicago, Ill., a Corporation of Illinois. Filed June 18, 1928. Serial No. 286,178. 5 Claims. (Cl. 101—118.)



1. The combination with a printing machine having a printing cylinder, a magazine for the sheets to be printed upon in front of said cylinder, a receptacle for printed sheets in the rear of said cylinder, and means for feeding the sheets one at a time from the magazine and past the cylinder into the receptacle, of an interleaving mechanism adapted to interleave slip sheets with the printed sheets in the receptacle comprising a magazine adapted to receive a pile of slip sheets, means for feeding the slip sheets one at a time on edge into the receptacle for the printed sheets so that each sheet will fall downwardly about its edge upon the top of a printed sheet, said magazine being pivotally supported at a point beyond its center whereby it will always rock about its support so that the top sheet of the pile will be in engagement with the feeding means.

1,763,309. SYSTEM FOR GENERATION OF POLYPHASE CURRENT. CLINTON W. HOUGH, Boonville, N. Y., assignor, by mesne assignments, to Federal Telegraph Company, a Corporation of California. Filed Apr. 24, 1926. Serial No. 104,467. 8 Claims. (Cl. 175—363.)



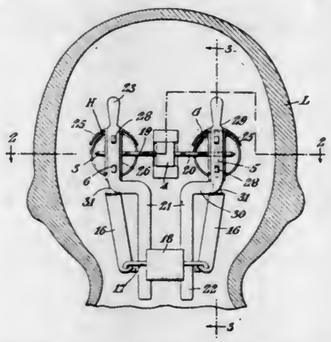
1. In a system for generating three phase high frequency current, an electron discharge device, a plurality of means associated with said electron discharge device for deflecting the electron discharge to a plurality of differing positions, a plurality of terminals projecting into said electron discharge device in the path of said electron discharge, a plurality of electron tubes each having grid, filament and plate electrodes, output circuits interconnecting said plate electrodes in polyphase manner and connections between said terminals and said grid electrodes for successively impressing electric charges on said grid electrodes for effecting the generation of polyphase current in said output circuits.

1,763,310. REFLECTOR AND SUPPORTING TONGUES THEREFOR. PHILIP KRANZ and ALBERT P. SCHMID, Philadelphia, Pa., assignors to Bernard Wilmsen, Philadelphia, Pa. Filed July 16, 1929. Serial No. 378,604. 3 Claims. (Cl. 240—103.)



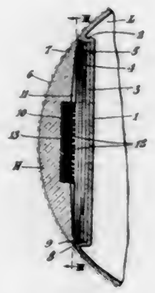
1. A reflecting Christmas tree ornament, composed of a ring, sheets of reflecting material secured thereon, inner and outer flanges at opposite ends of said ring and compressed upon said sheets for securing the latter in place and a disc adhesively secured to one of said flanges and having a star shaped opening therein, whereby resilient supporting tongues are formed.

1,763,311. ROLLING EYES WITH LASHES. SAMUEL MARCUS, Brooklyn, and ALEXANDER KONOFF, New York, N. Y., assignors to Markon Manufacturing Co., Inc., New York, N. Y., a Corporation of New York. Filed Nov. 1, 1927. Serial No. 230,231. 8 Claims. (Cl. 46—40.)



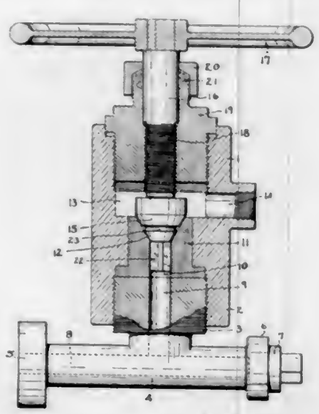
1. In an eye set, a pair of eyes, a supporting member extending between said eyes, connector members one for connecting each of the eyes with the supporting member, said connector members comprising parts providing for manual adjustment of the connector members rotatably and longitudinally of the supporting member, said connector members also having pivot parts by which the respective eyes are pivotally connected thereto to swing about vertical axes, a carrier for the supporting member permitting pivotal movement of the eyes with the supporting member upon a horizontal axis, eyelids fixedly connected directly with the connector members so as to be adjustable therewith rotatably of the supporting member and so as to swing with the eyes about the mentioned horizontal axis, and gravity control means for the eyes.

1,763,312. ARTIFICIAL EYE. SAMUEL MARCUS, Riverdale, N. Y., assignor to Markon Manufacturing Co., Inc., New York, N. Y., a Corporation of New York. Filed Feb. 10, 1928. Serial No. 253,312. 8 Claims. (Cl. 46—40.)



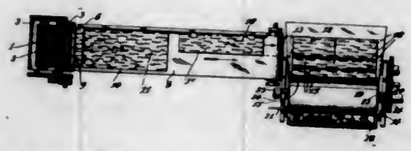
1. An artificial eye comprising a body member, a lens member, means providing a pupil visible at the centre of said lens, a plurality of separately formed circular members arranged concentrically with respect to the pupil behind said lens and each presenting a ring of different color also visible through the lens, the lines of demarkation between said rings of different colors being visible through the lens and being undesirably sharply defined, and means comprised in the lens of a character to at least partially obliterate said lines of demarkation as viewed through said lens.

1,763,313. VALVE FOR HOMOGENIZING DEVICES. JOHN M. MCCLATCHIE, New York, N. Y., assignor to The Borden Company, New York, N. Y., a Corporation of New Jersey. Filed Mar. 21, 1928. Serial No. 263,337. 3 Claims. (Cl. 99—2.)



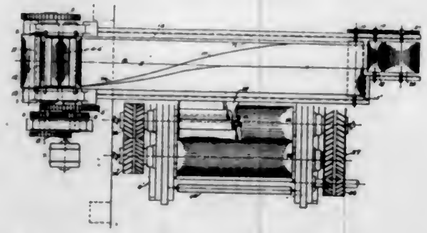
1. A valve for homogenizing devices comprising, a casing having a passageway therethrough, a tapered annular valve seat located in the passageway, and a tapered valve member adapted to seat against the valve seat to control the flow of fluid through the passageway, the fluid flowing longitudinally of and between the adjacent surfaces of the valve seat and the valve member, said valve member being provided with an annular groove interrupting the continuous flow of fluid between the adjacent valve surfaces and dividing the valve surfaces into two separate areas.

1,763,314. METHOD OF AND APPARATUS FOR SHEETING LINOLEUM OR THE LIKE. MERLE S. MCCONOUGHEY, Llanerch, Pa., assignor to Congoleum-Nairn, Inc., a Corporation of New York. Filed June 22, 1927. Serial No. 200,614. 15 Claims. (Cl. 154—24.)



13. In a machine for making inlaid linoleum or the like, in combination, a source of supply of plastic material, a pair of primary sheeting rolls supplied thereby and adapted to form a continuous sheet from said plastic material, conveyor means in receiving relation to said pair of primary sheeting rolls, means for severing said continuous sheet into individual sheets of predetermined length, a support on which the individual sheets may be piled in transversely overlapping relation and a second pair of sheeting rolls in receiving cross-rolling relation to said overlapped sheets.

1,763,315. MACHINE FOR THE MANUFACTURE OF INLAID LINOLEUM. MERLE S. MCCONOUGHEY, East Orange, N. J., assignor to Congoleum-Nairn, Inc., a Corporation of New York. Filed Dec. 1, 1927. Serial No. 236,892. 11 Claims. (Cl. 154—21.)



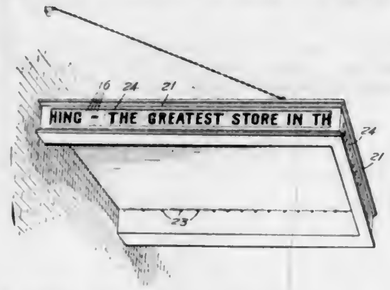
10. In a machine for making inlaid linoleum or the like, a pair of primary sheeting rolls adapted to form a continuous sheet from plastic material, a second pair of sheeting rolls disposed at right angles to said first pair, means intermediate the said pairs of rolls for severing said continuous sheet to form individual sheets therefrom, and means for feeding said individual sheets in cross-rolling overlapping relation to said second pair of sheeting rolls.

1,763,316. DISPENSING CAN. JOSEPH H. MILLER, Houston, Tex. Filed Sept. 21, 1928. Serial No. 307,404. 3 Claims. (Cl. 221—32.)



1. In a dispensing can the combination with a cylindric body having a projection at one end thereof which projection has a central stem-guide, of a tapered nozzle detachably connected at its larger end to said body-projection, said nozzle being open at its outer end and also having an opening in its side adjacent said end opening, a cap having a flange which fits over the end of the nozzle and covers both the end and side openings of the nozzle said cap-flange having an opening which when the cap is turned on the nozzle may be made to uncover the side opening of the nozzle, and a stem extending all the way through the nozzle and also through the said guide of said projection said stem extending through the cap and having its end bent back and engaging the cap to form a loop on the latter.

1,763,317. DISPLAY APPARATUS. MAURICE W. NORDLINGER and LOUIS KLEIN, Norfolk, Va. Filed June 6, 1929. Serial No. 368,851. 8 Claims. (Cl. 40—32.)



1. A display apparatus comprising upper and lower frame sections, a plurality of rods for connecting said frame sections and supporting them in their spaced relation, an outer casing arranged to slip over said frame sections and to be secured thereto, a continuously formed guide member secured to each of the upper and lower frame sections, a sprocket chain arranged to be freely slidable within each of the guide members, sprocket wheels disposed adjacent said upper and lower sprocket chains for moving them in unison, and a plurality of closely arranged prisms carried by said chains.

1,763,318. DISPLAY DEVICE. JAMES J. O'BRIEN, Chicago, Ill. Filed Apr. 13, 1928. Serial No. 269,724. 6 Claims. (Cl. 211—154.)

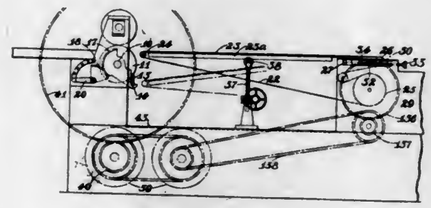


4. In combination, a support, a flexible element having one end mounted on the support, the said element having a plurality of reverse bends forming a plurality of arms, and the other end of the element being a free-ended arm disposed between a pair of arms.

1,763,319. UNHAIRING AGENT. AUGUST C. ORTHMANN, Milwaukee, Wis., assignor to Pfister & Vogel Leather Co., Milwaukee, Wis., a Corporation of Wisconsin. Filed Mar. 5, 1928. Serial No. 259,388. 1 Claim. (Cl. 149—2.)

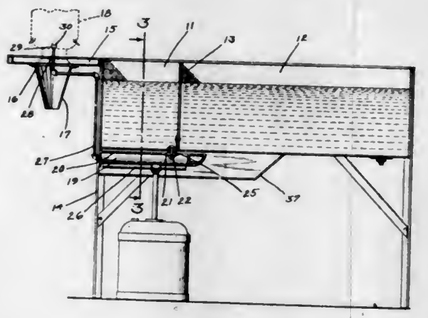
As a new unhairing agent for hides, desugarization waste from the beet sugar process in a strongly alkaline condition.

1,763,320. DOUGH-CUTTING MACHINE AND THE LIKE. JOHN CUBRIE PATERSON, Willesden, London, England, assignor to Baker Perkins Company, Inc., Saginaw, Mich., a Corporation of New York. Filed July 1, 1929, Serial No. 375,192, and in Great Britain July 26, 1928. 6 Claims. (Cl. 107—12.)



1. A dough working machine having a pair of gauge rolls, a circumferentially adjustable scraper blade operatively associated with the lower roll, and blade-positioning devices for effecting such adjustment.

1,763,321. CAN CLEANING AND STERILIZING APPARATUS. MARTIN PEARSON, Robbinsdale, Minn., assignor to Pearson Manufacturing Company, Inc., Robbinsdale, Minn., a Corporation of Minnesota. Filed Jan. 13, 1927. Serial No. 160,884. 6 Claims. (Cl. 141—7.)

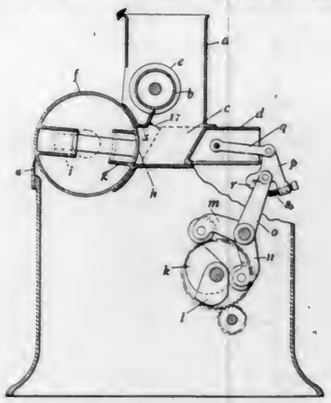


1. An apparatus of the class described comprising a water receptacle, a support for a can having an opening therein, a steam generator beneath the receptacle having a valve-controlled communication with the receptacle, said generator comprising legs connected at one end to form a U-shaped structure, and a web connecting together said legs and cooperating therewith to form a heating chamber.

1,763,322. DOUGH-DIVIDING MACHINE. JOHN EDWARD POINTON and LAURENCE SEYMOUR HARBER, Peterborough, England, assignors to Baker Perkins Company Incorporated, New York, N. Y. Filed Dec. 5, 1928, Serial No. 323,967, and in Great Britain Aug. 24, 1928. 4 Claims. (Cl. 107—15.)

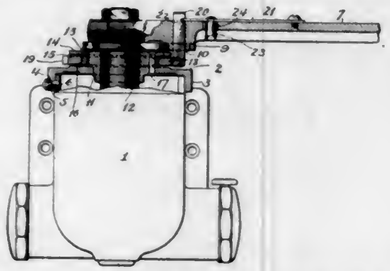
1. In a dough measuring machine the combination of a dough hopper, a variable speed feeding roller therein, a rotary cylindric member seated in a part-cylindric-shaped apertured seat formed in a side wall of the hopper, said member mounted for continuous rotation at variable speeds, and formed with a measuring chamber having a reciprocatory piston therein, power means actuating said cylindric member and piston, a cutting member located at the upper edge of the aperture in said cylindric seat and projecting inwardly and upwardly to the feeding roller, a ram having its working face inclined upwardly and rearwardly, power means actuating the ram toward and from the measuring

chamber, an adjustable stop means terminating the forward movement of the ram at selective predetermined distances from said cutting member, so as to present at all



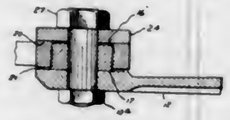
times a return passageway for dough upwardly into the hopper from the spaces between the working face of the ram and the rotary cylindric member.

1,763,323. DOOR CLOSER. ROBERT S. POTTER, Greenwich, Conn., assignor to The Yale & Towne Manufacturing Company, Stamford, Conn. Filed Nov. 12, 1924. Serial No. 749,455. 12 Claims. (Cl. 16—62.)



1. The combination with the shaft and arm of a door closer, of a stationary friction surface centered about said shaft, a movable friction surface similarly mounted cooperable with said stationary surface to hold a door open, and means actuated by said arm and having adjustable connection with said movable friction surface to move the latter into frictional engagement with said stationary surface.

1,763,324. DOOR HOLDER. ROBERT S. POTTER, Greenwich, Conn., assignor to The Yale & Towne Manufacturing Company, Stamford, Conn. Filed Dec. 15, 1927. Serial No. 240,301. 10 Claims. (Cl. 16—49.)



1. In a door holder, a pair of pivotally connected arms, one to be attached to a door casing and the other to be attached to a door, said pivotal connection comprising a pair of friction disks and an externally threaded friction sleeve carried by one of said arms, an internally threaded block mounted on the threads of said friction sleeve, said block being secured to the other of said arms.

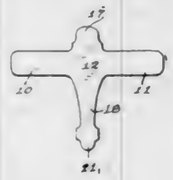
1,763,325. VULCANIZATION OF RUBBER. DONALD H. POWERS, Penns Grove, N. J., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Aug. 31, 1926. Serial No. 132,895. 4 Claims. (Cl. 18—53.)

1. The process of treating rubber, which comprises vulcanizing said rubber in the presence of di benzo thiazole mono-sulphide.

1,763,326. METHOD OF STABILIZING ALDEHYDES. MARION C. REED, Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed Dec. 19, 1928. Serial No. 327,183. 16 Claims. (Cl. 23—250.)

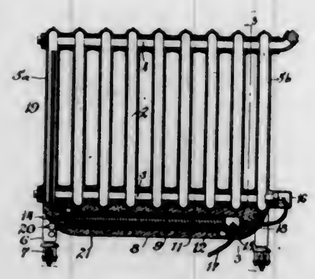
1. The method of stabilizing aldehydes which comprises adding a small proportion of a secondary aromatic amine to an aldehyde.

1,763,327. PENCIL ATTACHMENT. PETER RICHIE, Waterbury, Conn. Filed June 25, 1928. Serial No. 288,098. 2 Claims. (Cl. 120—103.)



1. In a combination pencil clip and finger rest, a pair of pencil gripping jaws, and a longitudinal finger supporting section spaced from the axis of the pencil and integrally connected to said jaws by a pair of loops, said loops being in contact with the underside of said finger supporting section to form a base therefor.

1,763,328. ELECTRIC RADIATOR. WILLIAM H. ROBINSON, Buffalo, N. Y., assignor to Thermo Electric Research Corporation, Buffalo, N. Y., a Corporation of New York. Filed July 16, 1927. Serial No. 206,292. 7 Claims. (Cl. 219—38.)



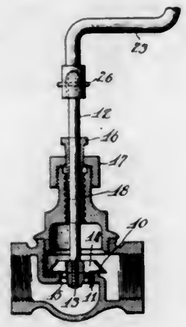
1. In an electric hot water radiator, in combination, a unitary radiator element having end sections and intermediate means of communication and radiation between said sections, an electric heating element, a water chamber located externally of said radiator element and subject to the heat of said heating element and means of communication between the ends of said water chamber and said sections such that the direction of the circulation of water is definitely prescribed and such that the heated water flowing from said chamber passes upwardly through and directly to the upper end of the adjacent end section.

1,763,329. SHEET-METAL CONTAINER. CHARLES H. ROLLASON, Wheeling, W. Va., assignor to Wheeling Steel Corporation, Wheeling, W. Va., a Corporation of Delaware. Filed Nov. 13, 1928. Serial No. 319,096. 3 Claims. (Cl. 220—39.)



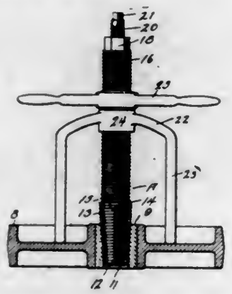
1. The combination with the sheet metal head of a container having an opening defined by a threaded neck, of a threaded cap-like closure for screwing upon said neck, and a disk rigidly carried by said closure, said disk having a circumferential upstanding bead provided with perforations adapted for the reception of securing means.

1,763,330. VALVE-RESEATING TOOL. MORTIMER B. SKINNER, Wilmette, Ill. Filed Nov. 5, 1924. Serial No. 747,898. 2 Claims. (Cl. 90—12.5.)



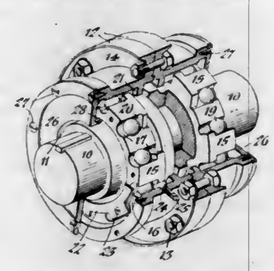
1. In a valve reseating tool of the character described for a valve having a wall defining a circular seat opening, the combination of a cutter, means for rotating the cutter, and a cylindrical pilot member having balls serving as bearings at edge portions thereof, said balls being mounted for inward and outward movement and being provided respectively with springs pressing them outward, the balls normally projecting slightly beyond the edge of the pilot member and being adapted to engage and move upon the wall defining the seat opening of the valve.

1,763,331. BUSHING-REMOVING TOOL. PRESTON C. STEPHENSON, Sioux City, Iowa, assignor of two-sixths to Harry Gurshtel and one-sixth to E. E. Baron, Sioux City, Iowa. Filed Nov. 10, 1928. Serial No. 218,420. 6 Claims. (Cl. 29—88.2.)



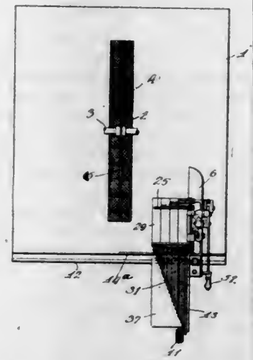
1. In a bushing remover, a pulling bolt, having an internally threaded bore, a tapered hollow nose formed on the end of said bolt, and divided radially to form three separable jaws, a wedge positioned within said hollow nose, adapted to expand the jaws, a threaded stem, threaded into the threaded bore, adapted to be rotated to transmit longitudinal pressure to the wedge, said bolt being externally threaded, a wing nut threaded thereon, and a yoke including a collar loosely receiving said bolt, said yoke being adapted to be engaged by the wing nut, and, in turn, to engage a device in which a bushing is located.

1,763,332. UNIVERSAL SHAFT COUPLING. WILLIAM E. SYKES, Buffalo, N. Y. Filed Dec. 2, 1924. Serial No. 753,458. 11 Claims. (Cl. 64—91.)



1. In a coupling for shafts or the like, a hollow casing having spaced apart internally and radially projecting lugs extending axially a portion of the length of said casing, a member adapted to be secured to a shaft and having peripheral lugs extending radially therefrom into the spaces between the lugs on said casing, said member being axially slidable within said casing, driving members between the opposed side surfaces of the lugs on said member and said casing, said driving means being freely rotatable on an axis radially disposed relatively to the axis of said casing and between the side surfaces of said lugs.

1,763,333. MULTIPLE GAUGE. WILLIAM O. VIVARTTAS, Rockford, Ill., assignor to Mattison Machine Works, Rockford, Ill., a Corporation of Illinois. Filed May 4, 1927. Serial No. 188,767. 10 Claims. (Cl. 143—168.)



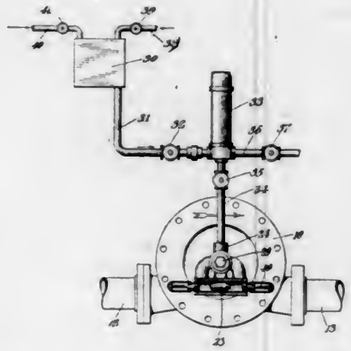
4. A device of the class described having, in combination, a support, a plurality of heads normally arranged in lateral adjacent series respectively, a plurality of groups of gauges carried by said heads, a plurality of pairs of bracket arms pivoted on a common axis on said support, each of said pairs of bracket arms independently supporting one of said heads, means for securing said bracket arms on said support to retain said heads in normal position, said means being releasable to permit the independent swinging of said heads to remove said gauges from normal guiding position.

1,763,334. STORAGE AND DISPLAY DEVICE FOR FLAT TABLEWARE ARTICLES. GEORGE H. WALDMAN, New York, N. Y., assignor to Oneida Community, Limited, Oneida, N. Y., a Corporation of New York. Filed Jan. 27, 1928. Serial No. 249,812. 4 Claims. (Cl. 206—75.)



1. A receptacle for the storage and display of flat tableware articles, comprising a body member in the form of an open rigid frame, a removable tray member of comparatively flexible material comprising a bottom and upwardly extending sides, a removable rack carried by said removable member for the articles to be displayed, a removable glazed cover for the receptacle and corner blocks on the body member and projecting inwardly from each corner thereof for engaging and supporting the removable member.

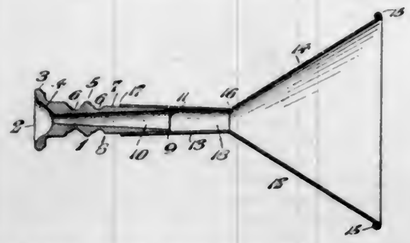
1,763,335. LIQUID-MIXING DEVICE. JOHN S. WATTS, West Chester, Pa. Filed Nov. 23, 1927. Serial No. 235,365. 1 Claim. (Cl. 137—78.)



In a device of the character described, a conduit, a substantially circular chamber above said conduit and communicating therewith, said chamber being of greater width than said conduit, a projection extending from one wall of said chamber, a shaft rotatably mounted in said projection, a rotor carried by said shaft and arranged within said chamber, vanes mounted on the periphery of said rotor to extend into said conduit, said vanes being slightly less in cross section than said conduit, a valve chamber in said projection coaxial with said shaft, a cylinder provided in said projection, a piston reciprocable in said cylinder, passages in said projection leading to said valve chamber from opposite ends of the cylinder, a discharge passage in said projection leading from said valve chamber to said conduit, an inlet passage leading to said valve chamber, a valve rotatably mounted in said valve chamber for alternately connecting the inlet and discharge passages to the passages leading to the ends of the cylinder, and a driving connection between said shaft and said valve.

1,763,336. HORN. SAMUEL M. WILDER, Gloucester City, N. J. Filed Aug. 23, 1928. Serial No. 301,646. 1 Claim. (Cl. 84—387.)

A horn of the character stated, comprising the combination with a mouth piece bell having a forwardly projecting extension the exterior surface of which extension tapers longitudinally in gradually decreasing diameter, said extension having an internal bore which extends forwardly in constantly increasing diameter, of an amplifier fixed to said extension and comprising a substantially



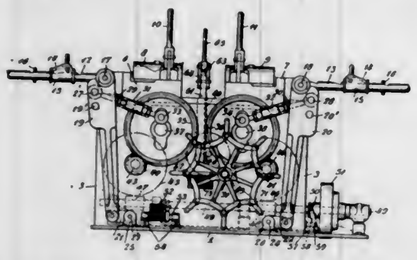
cone frustum shaped member, said member having a rearwardly projecting extension having an internal bore which extends rearwardly in constantly increasing diameter to engage the tapered surface of the mouth piece bell extension.

1,763,337. METHOD OF MAKING COVERED-JOINT HINGE MEMBERS. SETH B. ATWOOD, Rockford, Ill. Filed July 5, 1927. Serial No. 203,429. 9 Claims. (Cl. 29—11.)



1. The method of making the outer member of a covered joint hinge consisting in forming a blank to a cross-section approximately that of the hinge member in its normal operative condition, said blank comprising a strap portion, a knuckle portion offset therefrom, an extension at the outer end of the knuckle portion having a stop abutment at its inner side, and a narrow extension at the outer end of the first mentioned extension adapted to form a part of the cover for the knuckle joint, slotting the knuckle proper to provide bearing surfaces for the knuckle of the inner hinge member, and bending said narrow extension inwardly against the first mentioned extension of the knuckle proper.

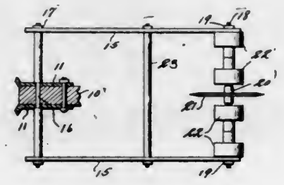
1,763,338. MACHINE FOR FORMING CRANKS. KARL AUERBACH, Saalfeld-on-the-Saale, Germany, assignor to Herman F. Hoevel, New York, N. Y. Filed June 30, 1927, Serial No. 202,535, and in Germany July 15, 1926. 17 Claims. (Cl. 29—6.)



1. A machine of the class described, comprising aligning holders for a blank which are movable toward and from each other, an intermediate member arranged to engage the blank between said holders, actuating mechanism temporarily operative for starting said intermediate member in a direction transverse to the path of said holders

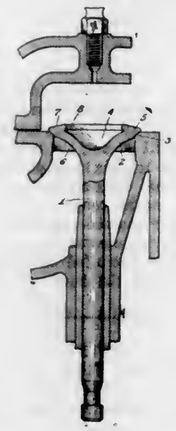
to impart an initial bend to the intermediate portion of said blank, said holders being stationary relatively to each other during the starting operation of said intermediate member, mechanism operative subsequently to the operation of said actuating mechanism for moving said holders toward each other whereby the intermediate portion of said blank is forced farther in said transverse direction to complete the bend therein, said intermediate member continuing to move in its transverse path in response to the deflection imparted to said intermediate portion of the blank by the pressure of the holders moving toward each other, and a guide for maintaining the intermediate member in its transverse path of movement.

1,763,339. EDGE-TRIMMING ATTACHMENT FOR LAWN MOWERS. ANDREW E. BECK, Sarasota, Fla. Filed Nov. 10, 1928. Serial No. 318,464. 6 Claims. (Cl. 97—227.)



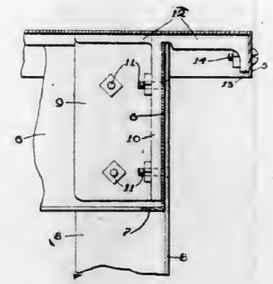
1. The combination with a lawn mower having a handle, traction wheels, and a brace rod extending transversely across the mower inward of the traction wheels, of an edge cutting attachment comprising arms disposed one on each side of the handle and pivotally mounted thereon, the arms adapted to bear against said brace rod when the machine is inverted and the arms are lowered, and a cutting disk supported between the free extremities of said arms.

1,763,340. POPPET VALVE. RICHARD E. BISSELL, Cleveland Heights, Ohio, assignor to Thompson Products Inc., Cleveland, Ohio, a Corporation of Ohio. Filed July 10, 1926. Serial No. 121,569. 4 Claims. (Cl. 123—188.)



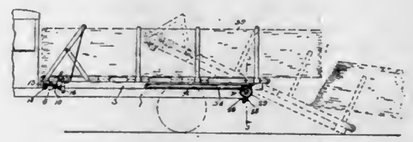
1. A tulip valve having its upper edge outwardly and downwardly inclined toward the valve seat and a reentrant curve in the wall of the central cavity near the upper edge.

1,763,341. TABLE. CHARLES ALAN BRANTINGHAM, Rockford, Ill., assignor to Emerson-Brantingham Corporation, Rockford, Ill., a Corporation of Illinois. Filed Apr. 7, 1927. Serial No. 181,735. 5 Claims. (Cl. 45—48.)



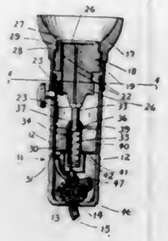
1. In a table or similar construction comprising a one-piece sheet metal side rail bent to form corners, sheet metal legs of angular cross-section fitting the outside of said corners, and a sheet metal top overhanging the side rails marginally and having a downturned marginal flange, brackets for the corners, each of said brackets being in the form of a heavy casting providing a vertical body portion of angular cross-section fitting the inside of the coners of said rails and a horizontal top portion overhanging the outside of the body portion and having downturned flanges on the outer edges thereof presented in vertical planes substantially at right angles to one another, each of said legs having the flanges thereof arranged to bolt to the flanges of the body portion of said brackets whereby in the drawing together of said angular parts the side rail therebetween has the corners thereof trued up and positively held to the desired shape as well as reinforced, the top being also arranged to have the downturned marginal flange thereof bolted at the corners to the down-turned flanges on the top portion of said brackets whereby firmly to secure the top to the side rail and legs in proper relation thereto.

1,763,342. TRUCK BODY. VANTYLE W. CODDINGTON, North Milwaukee, Wis., assignor to Lakeside Bridge & Steel Co., North Milwaukee, Wis., a Corporation of Wisconsin. Filed Sept. 15, 1924. Serial No. 737,678. 6 Claims. (Cl. 298—14.)



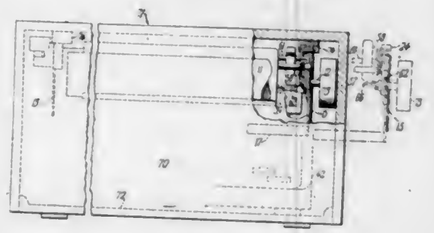
1. A truck body comprising a frame, and means carried by one end of said body frame and arranged to cooperate with the frame of a vehicle chassis to raise said body frame from the chassis and to move the same backwardly with respect thereto, said means comprising a member provided with teeth and permanently fixed to said body in all adjustments of the body frame relative to the chassis frame, gearing cooperable with the said toothed member, and a roller supported at the other end of said body frame for vertical shifting movement with respect thereto.

1,763,343. ELECTRICAL DEVICE AND THE MANUFACTURE THEREOF. JOSEPH H. COHEN, Bridgeport, Conn. Filed Oct. 30, 1924. Serial No. 746,914. 11 Claims. (Cl. 175—296.)



1. In combination, a housing for supporting translating units; means on the housing for holding therein a translating unit of one kind; and separate means on the housing for holding therein interchangeably with and in the same place adapted to be occupied by a translating unit of the said one kind, a translating unit of another kind.

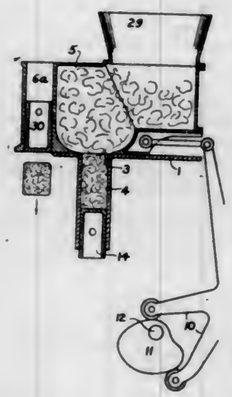
1,763,344. TYPEWRITING MACHINE. FREDERICK U. CONARD, Bridgeport, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Filed Apr. 4, 1928. Serial No. 267,226. 18 Claims. (Cl. 197—193.)



11. In a typewriting machine of the class described, in combination, a platen-carriage having strong, rigid end plates, a rearwardly-extending carriage-centering lever loosely pivoted on said carriage adjacent the right-hand end plate thereof, said lever being displaceable downwardly, and its rear end portion effective for engaging a laterally fixed member of said machine for arresting said carriage upon movement of the same leftwardly to a position wherein it is centered on said machine, and means for transmitting the blow, taken by said moving lever because of its engagement with said fixed member, to the right-hand rigid end plate.

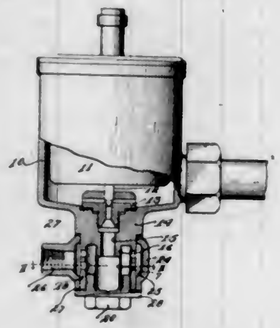
1,763,345. DOUGH DIVIDER. HENRY DEVLIN, Saginaw, Mich., assignor to Baker Perkins Company, Inc., Saginaw, Mich., a Corporation of New York. Filed Feb. 25, 1928. Serial No. 256,967. 8 Claims. (Cl. 107—15.)

7. In a dough dividing mechanism including a supply hopper and having a transfer ram and a measuring plunger mechanically connected together so as to be differentially movable and adapted to compact a dough piece between them during its passage from a transfer chamber to a measuring chamber, a yieldable backing for said ram to limit the amount of pushing force that can be exerted by the ram against the dough piece, and furthermore adapted



to expand when freed and to thereby cause the ram to expel a dough remnant from the transfer chamber into the hopper.

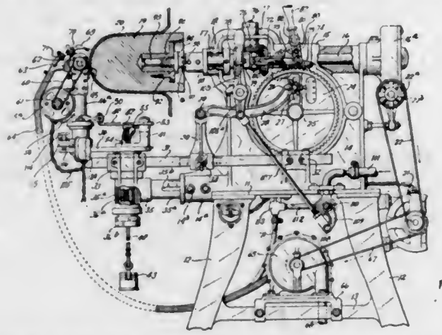
1,763,346. STRAINER AND METHOD OF ASSEMBLING SAME. RAY T. DE VOE, Flint, Mich., assignor to Marvel Carbureter Company, a Corporation of Michigan. Filed Oct. 8, 1928. Serial No. 310,980. 1 Claim. (Cl. 210—165.)



A fuel strainer for a carbureter having a float-housing body, a depending perforated shell on the body, means cooperating with the shell to define an annular fuel directing chamber and a sediment pocket, the said means comprising an enveloping member for the shell partially spaced therefrom and having a fuel entrance passage to the annular chamber so formed, means cooperating with the shell to define another annular chamber, said means comprising a sealing plug in threaded engagement with the shell, a cylindrical screen member mounted on the plug, and a passaged depending boss on the body entered in the screen member.

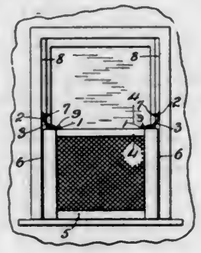
1,763,347. HAT-CLIPPING MACHINE. JAMES F. DORAN, Danbury, Conn. Filed Sept. 20, 1927. Serial No. 220,691. 19 Claims. (Cl. 223—30.)

1. In a hat clipping machine, in combination, means for supporting a hat block having a hat thereon, means for rotating said hat block and said hat, a clipping device, means for driving said clipping device rigidly mounted with respect thereto, means for supporting said driven clipping device in position to clip the surface of said hat, and means for driving said clipper supporting means to cause said clipping device to traverse the surface of the crown of said rotating hat, said clipping device being



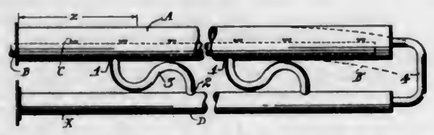
mounted upon said supporting means for tilting thereon during said traverse about an axis substantially transverse to the path of said traverse.

1,763,348. WINDOW-SCREEN HANGER. JAMES D. DYER, Kansas City, Mo. Filed Feb. 23, 1929. Serial No. 341,994. 4 Claims. (Cl. 16—171.)



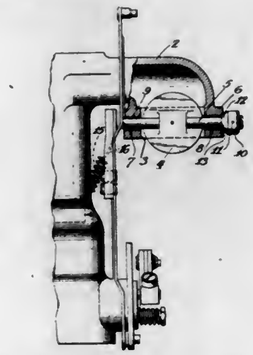
1. In window screen hangers, a hanger member having an end portion adapted to be fastened horizontally on the upper end of a screen frame vertically slidable against a window jamb and against a stop on the inner side of said jamb and below a pin inwardly extending from said jamb, said hanger member having a portion inclining upwardly toward said jamb, when the hanger member is affixed to the screen frame, said inclined portion having a longitudinal slot adapted to receive therethrough said pin, when said screen frame is in its lowermost position, said pin being adapted to pass out of said slot when said frame is lifted to a predetermined position, to release the frame, said member pivotally engaging said pin to permit said frame to swing upwardly to an upwardly and outwardly inclined reversed position, said hanger member in such reversed position of the frame being adapted to engage said stop and hold said frame from downwardly swinging.

1,763,349. TUBULAR BURNER JACKET. EUGENE OSCAR ENGELS, Saginaw, Mich., assignor to Baker Perkins Company, Inc., Saginaw, Mich., a Corporation of New York. Filed Nov. 4, 1929. Serial No. 404,693. 8 Claims. (Cl. 107—55.)



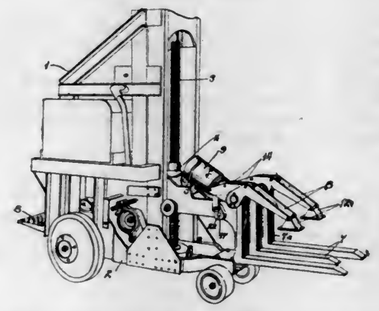
5. In combination, a tubular jacket having an intake leg and an exhaust leg, a tubular burner enclosed within the intake leg of said jacket, extending lengthwise thereof and having burner orifices, conduits connecting the legs of the jacket at spaced intervals along their length and comprising flexible pipes, a U-formed conduit connecting the ends of said legs, for the purposes set forth.

1,763,350. VALVE BEARING. JACOB RICHARD FRANCIS, Flint, Mich. Filed Dec. 17, 1928. Serial No. 326,553. 4 Claims. (Cl. 251—11.)



2. A valved conduit, a fly valve in said conduit, a valve shaft extending through said conduit, said conduit having openings for said shaft of greater diameter than said shaft, means for rotating said shaft, and resilient means engaging said shaft to retain the same against one side of the valve shaft openings.

1,763,351. CONVEYING APPARATUS. ALBERT H. GFRORER, Buffalo, N. Y., assignor to The Automatic Transportation Company, Inc., Buffalo, N. Y., a Corporation of New York. Filed Dec. 6, 1927. Serial No. 238,091. 5 Claims. (Cl. 214—65.)

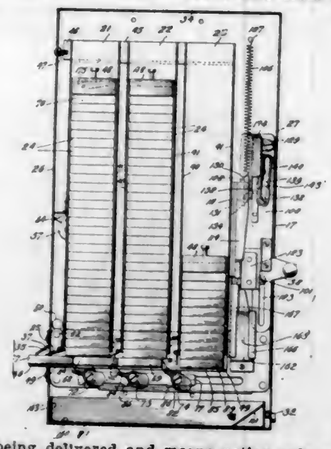


1. The combination with a conveyor of a supporting frame carried thereby and having spaced arms, a clamping lever pivotally mounted on and supported by said arms, a motor supported by said arms and a driving connection between said motor and said clamping lever.

1,763,352. COIN-CONTROLLED VENDING MACHINE. HARVEY GILES, Brooklyn, N. Y., assignor to Artemas Ward, Inc., New York, N. Y., a Corporation of New York. Filed July 14, 1925. Serial No. 43,489. 14 Claims. (Cl. 312—35.)

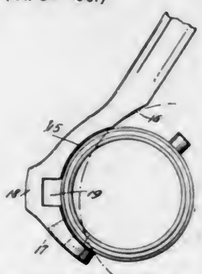
8. A machine comprising a commodity chamber containing front and rear stacks of articles and a coin controlled device for delivering said articles comprising means for

advancing an article from the rear stack to the front stack at the same time that an article from the front



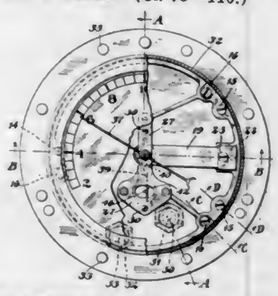
stack is being delivered and means active only after the rear stack is empty for delivering articles from the front stack.

1,763,353. WRENCH. WALTER MILLWARD HELLER, Newark, N. J. Filed June 25, 1929. Serial No. 373,655. 3 Claims. (Cl. 81—90.)



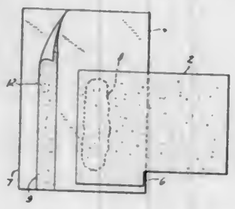
1. A wrench comprising a bar formed at one end portion of curved contour and provided with an aperture adapted for engagement with the pins of the pin type hose coupling and formed with a laterally open socket inwardly of said curved portion and adapted for engagement with the lugs of the rocker lug type hose coupling, substantially as described.

1,763,354. PRESSURE GAUGE. EMIL A. ILEMAN, New York, N. Y., assignor, by mesne assignments, to Consolidated Ashcroft Hancock Company, Inc., New York, N. Y., a Corporation of Delaware. Filed May 21, 1926. Serial No. 110,598. 9 Claims. (Cl. 73—110.)



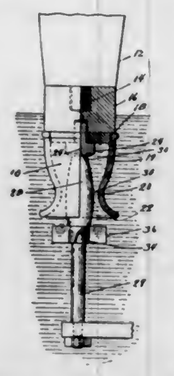
1. A pressure gauge having in combination a diaphragm, means holding the diaphragm and applying pressure to be measured to one side of the diaphragm, a frame on the other side of the diaphragm, indicating mechanism carried by said frame and operated by the diaphragm responsive to variations in the pressure applied thereto, and means for adjusting the position of said frame toward and from said holding means and diaphragm to adjust the reading of the indicating mechanism.

1,763,355. PAD AND ASSOCIATED TUBE-FORMING MEANS FOR PERMANENT HAIR WAVING. LEON INGRASSIA, Astoria, N. Y. Filed Aug. 30, 1927. Serial No. 216,366. 10 Claims. (Cl. 132—36.2.)



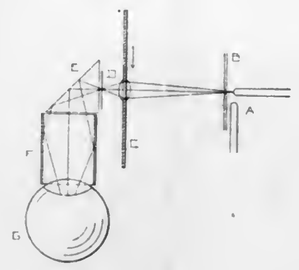
1. Combined means for applying hair-treating chemicals to hair for permanent waving and for enclosing the chemical-applying means comprising, in combination, a pad carrying hair-treating chemicals and a sheet of tube-forming material, said pad and said sheet each partially overlapping the other and being secured together, the projection of said pad beyond said sheet being substantially equal to the overlap but the tube length dimension of the overlap being greater than the corresponding dimension of the projection.

1,763,356. CONTACT MEMBER FOR ELECTRIC SWITCHES. GUSTAV JANSSON, Wollaston, Mass., assignor, by mesne assignments, to Condit Electrical Manufacturing Corporation, Boston, Mass., a Corporation of Massachusetts. Filed Dec. 11, 1924. Serial No. 755,311. 23 Claims. (Cl. 200—150.)



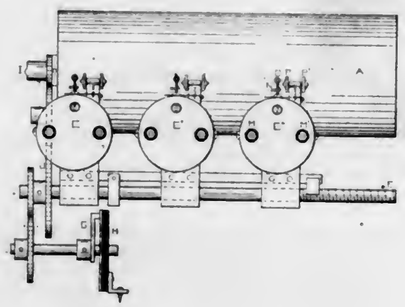
1. A contact member for an electric switch comprising a tubular electrically conducting and arc-supporting body provided internally with a primary contact member in the upper end and spaced from the side walls of and connected electrically with said tubular body, said tubular body having a reduced arcing throat disposed below said primary contact member, and a downwardly and outwardly divergent electrically conducting portion communicating with said threat and constituting an arcing face for said contact member, the inner face of said tubular body between said primary contact member and said throat also constituting an arcing face over which the circuit interrupting arc is adapted to travel.

1,763,357. ARC-LAMP LENS-DISK TRANSMITTER. CHARLES FRANCIS JENKINS, Washington, D. C., assignor to Jenkins Laboratories, Washington, D. C., a Corporation of the District of Columbia. Filed Jan. 3, 1928. Serial No. 244,323. 4 Claims. (Cl. 178—6.)



1. In a television system the combination of a light source of high intensity, a continuously moving picture film, a lens disk having the lens arranged equi-distant from the axis thereof, said disk being situated between the light source and the film, and a photo-sensitive cell situated to receive the divergent beam projected through the film by the lens disk.

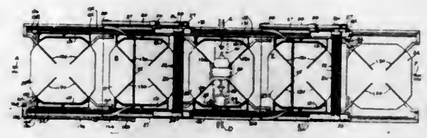
1,763,358. CODE TRANSMITTER RECEIVER. CHARLES FRANCIS JENKINS, Washington, D. C., assignor to Jenkins Laboratories, Washington, D. C., a Corporation of the District of Columbia. Filed Mar. 5, 1928. Serial No. 259,310. 9 Claims. (Cl. 178—5.)



1. The method of electrically transmitting a visual representation, which comprises dividing the representation into a plurality of sections, analysing simultaneously the successive elemental areas of each section, transmitting currents corresponding to said analysis, suspending the transmission of currents corresponding to one section, and transmitting during said suspension the currents corresponding ton another section.
responding to another section.

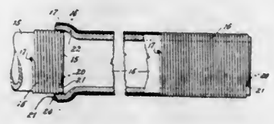
1,763,359. APPARATUS FOR SETTING OUT LEATHER. WILLIAM C. JOHNSON, Milwaukee, Wis., assignor to Machinery Development Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Sept. 26, 1928. Serial No. 308,530. 16 Claims. (Cl. 149—17.)

15. In an apparatus of the character described, the combination of a supporting frame, a supporting means for the setting-out board with the hide thereon, a reciprocating carriage, a pressing and stretching roller mounted on said carriage and movable into engagement with said hide to



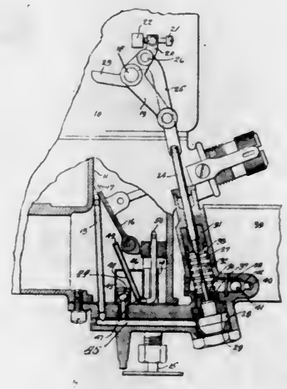
set it out on said board, and means including a belt drive between said roller and frame for continuously rotating the roller as said carriage reciprocates.

1,763,360. NONCORRODIBLE REENFORCED PIPE. OTHO V. KEAN, Providence, R. I. Filed Jan. 22, 1927. Serial No. 162,756. 5 Claims. (Cl. 137—75.)



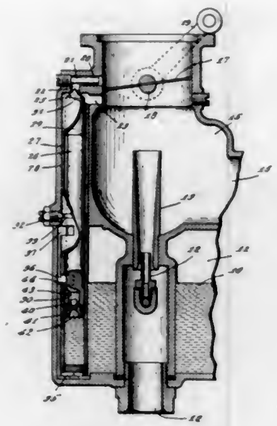
1. A cast iron pipe having a chilled outer zone and a tensioned reenforcing winding of steel band therearound.

1,763,361. CARBURETOR. CHARLES H. KIRBY, Flint, Mich., assignor to Marvel Carbureter Company, Flint, Mich., a Corporation of Illinois. Filed June 7, 1926. Serial No. 114,104. 5 Claims. (Cl. 261—34.)



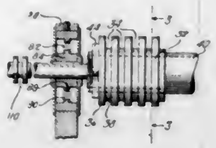
1. In combination with an accelerating pump and the discharge nozzle therefor, a passage connecting the pump to the nozzle, means associated with the pump for varying the effective area of said passage during the movement of said pump, and means for storing a part of the pump discharge adapted to maintain the delivery of the accelerating charge after the cessation of the pump stroke.

1,763,362. CARBURETOR. HOWARD W. LINKEAT, Indianapolis, Ind., assignor to The Wheeler-Schebler Carburetor Co., Indianapolis, Ind., a Corporation of Indiana. Filed Mar. 14, 1925. Serial No. 15,468. 8 Claims. (Cl. 261—63.)



1. In combination, a carburetor mixing chamber into which air and fuel are supplied and from which a mixture-discharge passage leads, a throttle controlling said mixture-discharge passage, a conduit for admitting additional air to said mixture-discharge passage on the engine side of the throttle when the throttle is closed, and means for producing a delayed closing of said additional-air conduit following an increase above a predetermined value in the suction in said mixture-discharge passage on the engine side of said throttle.

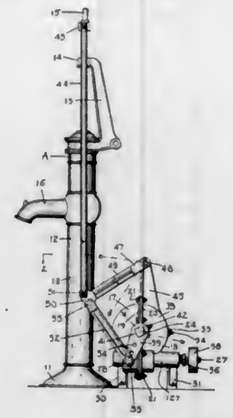
1,763,363. EQUALIZER ROD. JACOB A. L. MÖLLER, New York, N. Y. Filed Feb. 21, 1925. Serial No. 10,940. 10 Claims. (Cl. 91—53.)



1. In a coating machine an equalizer rod which comprises a rod having a series of depressions in the outer surface thereof, said depressions having a uniform depth in any given position along the length of said rod and a varying depth circumferentially of said rod, and means for mounting the said rod in a coating machine comprising flexible bearings whereby the operation of said rod will remain substantially uniform irrespective of inequalities in the paper or the dope applied thereto.

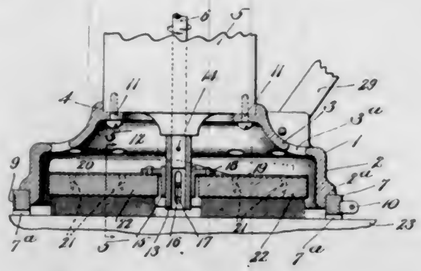
1,763,364. PUMP JACK. ERNEST A. MUMME, Minneapolis, Minn., assignor to Minneapolis Engineering Company, Minneapolis, Minn., a Corporation of Minnesota. Filed Feb. 18, 1927. Serial No. 169,246. 4 Claims. (Cl. 74—14.)

1. A pump jack comprising a case, a shaft journalled in said case, a crank attached to said shaft, a connecting rod disposed to one side of said shaft, a link pivoted to said crank, an upstanding standard formed on said case, an



arm pivoted in said standard, said connecting rod, link and arm being all connected together and transmission gearing within said case for operating said shaft.

1,763,365. SURFACING MACHINE. GEORGE H. NOBBS, Watertown, Mass. Filed Dec. 22, 1927. Serial No. 241,743. 8 Claims. (Cl. 15—49.)



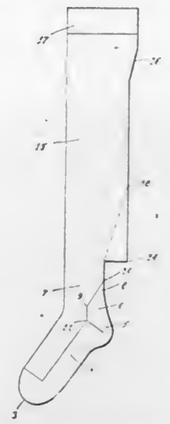
1. In a machine of the character described comprising a base frame that is supported directly by the floor or the like; a motor mounted upon said frame; a rotary propeller fan splined upon the shaft of said motor; and a tool connected with said propeller fan and yieldingly held against the floor or the like by the reaction thrust of said propeller fan.

1,763,366. CEMENTING COMPOSITION. THOMAS F. NOONAN, Chicago, Ill. Filed Nov. 16, 1925. Serial No. 69,370. 5 Claims. (Cl. 106—8.)

1. A cementing composition consisting essentially of the following ingredients in approximately the following proportions by weight: red lead 74 per cent., lamp black 4 per cent., dry shellac 7 per cent., wood alcohol 15 per cent.

1,763,367. STOCKING AND METHOD OF MAKING. WILLIAM S. PARKER, Rockford, Ill., assignor to Burson Knitting Company, Rockford, Ill., a Corporation of Illinois. Filed Dec. 21, 1927. Serial No. 241,651. 1 Claim. (Cl. 66—183.)

The method of making a fashioned stocking on an opposed flat bed knitting machine, which consists in knitting a tubular ankle portion with a certain number of needles; then simultaneously throwing into action more needles for the knitting of a wider tubular leg portion but, before knitting with these additional needles, forming a set-up

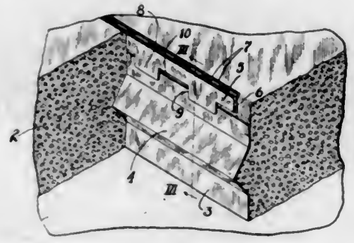


or closing with said additional needles; then knitting the leg portion and completing the stocking, and subsequently cutting off a portion of the fabric, including that with the set-up in it, on a line corresponding with the fashioning at the calf, and joining the cut edges by a seam.

1,763,368. METHOD OF ACCELERATING AND IMPROVING TANNING PROCESSES. FRIEDRICH POSPIECH, Dresden, Germany, assignor to Chemische Fabrik Pott & Co., Dresden, Germany. Filed Aug. 26, 1927, Serial No. 215,761, and in Germany Aug. 21, 1926. 2 Claims. (Cl. 149—4.)

1. A method of accelerating and improving the tanning processes when working with vegetable tanning agents, which comprises adding to the tanning liquor, condensation products of naphthalene sulfonic acids and alcohols of the aliphatic series having more than two carbon atoms in the presence of condensation mediums.

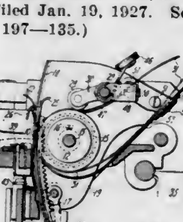
1,763,369. CONTRACTION-CENTER-STRIP MOLD CAP. ROBERT R. ROBERTSON, Chicago, Ill. Filed June 20, 1929. Serial No. 372,291. 6 Claims. (Cl. 94—17.)



4. A contraction center strip mold cap comprising a plate, spaced projections integrally formed on one longitudinal margin thereof and a deflected bead member integrally formed on the other longitudinal margin thereof.

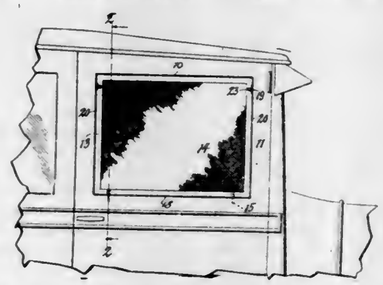
1,763,370. ROTARY CUTTER. JOSEPH E. ROUSSEAU, Haverhill, Mass., assignor of one-half to Arthur C. Murphy, Haverhill, Mass. Filed Aug. 22, 1929. Serial No. 387,741. 4 Claims. (Cl. 12—88.)

1. A rotary cutter of the character described comprising a main toothed cutter head for operating upon the edge of a sole, and a single supplemental disc member of larger outside diameter fixed concentrically in position against the outer face of said main cutter head and constructed with a thin serrated inseam-engaging peripheral



portion whereof each tooth is made with a relatively long eccentrically arcuate convex circumferentially disposed edge at one side thereof and with an abrupt relatively short edge at the opposite side thereof.

1,763,371. SCREEN MOUNTING. JOHN C. SCHEELER, Buffalo, N. Y., assignor to Buffalo Wire Works Co., Inc., Buffalo, N. Y., a Corporation of New York. Filed Dec. 31, 1928. Serial No. 329,341. 1 Claim. (Cl. 156—14.)



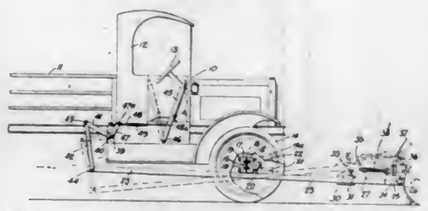
In an automobile window screen of the type having an apertured frame, a frame support comprising an L-shaped bracket having one leg adapted to be secured to the window of an automobile and the other leg adapted to engage with one side of the frame over the aperture in the frame, a screw-stem integral with and projecting from said last mentioned leg and adapted to pass outwardly through the aperture in the frame, and a screw-nut adapted to engage said screw-stem and to bear against the outer side of the frame.

1,763,372. TYPEWRITING MACHINE. JOSEF C. M. SCHNEIDER, New York, N. Y., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Filed Jan. 19, 1927. Serial No. 161,971. 8 Claims. (Cl. 197—135.)

1. A stencil-card typewriting machine including a card-holding frame arranged to reciprocate in front of a platen and means for line-spacing the frame, said means including a line-spacing mechanism operatively connected to a platen shaft, gears carried by said shaft and racks on said card-holding frame for engaging the gears, the platen being

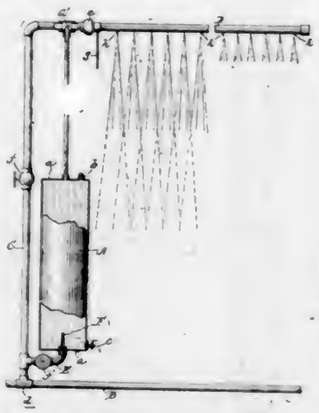
loosely mounted on the platen shaft, and a resilient pressure roll running on the platent to hold the platen and prevent rotation thereof when line-spacing the card, the platen being independently rotatable to line-space a backing sheet therearound.

1,763,373. SNOWPLOW ATTACHMENT. CONRAD SCHNELL, Woodhaven, N. Y. Filed Nov. 21, 1927. Serial No. 234,760. 2 Claims. (Cl. 37—42.)



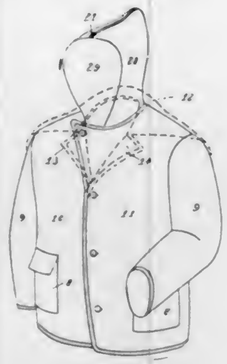
1. A snowplow attachment for motor trucks comprising a frame of substantially U-shape having its legs formed of parallel disposed straight beams tiltably fastened to the front axle of the truck, its closed end extending forward of the axle and its open end rearward thereof, a scraper at the front end and a lever at the driver's seat operably connected to the rear end of the said frame adapted to tilt the frame about its fulcrum.

1,763,374. APPARATUS FOR DISTRIBUTING FERTILIZER IN SOLUBLE CONDITION. GUSTAVE C. C. SCHRADER, Woodstock, N. Y., assignor to Harry I. Bernhard, Brooklyn, N. Y.; Annie Mertine Bernhard executrix of said Harry I. Bernhard, deceased. Original application filed Apr. 13, 1922, Serial No. 552,418. Divided and this application filed Apr. 29, 1927. Serial No. 187,666. 3 Claims. (Cl. 299—84.)



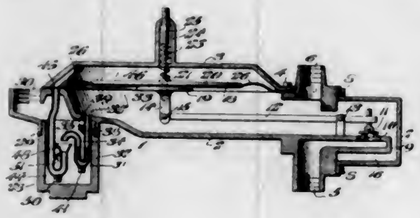
1. An apparatus for distributing fertilizer in soluble condition embodying a feed pipe, a distributing member having a direct connection with said feed pipe, a tank for containing a fertilizer solution, a fluid connection between said feed pipe and said tank, said fluid connection including a reducing nozzle at one end thereof and located inside the tank at one end thereof and operable for feeding liquid in reduced quantity to the tank as compared with the volume of fluid passing from said feed pipe to the distributing member, and a fluid conection from said tank to the distributing member whereby a fertilizer solution in diluted condition may flow from the tank to the distributing member concurrently with the flow of liquid from the feed pipe directly to the distributing member.

1,763,375. COMBINED GARMENT AND HOOD. ALFRED F. SCHRUP, Dubuque, Iowa, assignor to H. B. Glover Company, Dubuque, Iowa, a Corporation of Iowa. Filed Apr. 27, 1929. Serial No. 358,459. 1 Claim. (Cl. 2—84.)



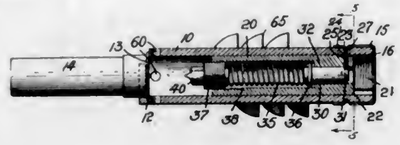
A garment of the character described having a collar of inelastic material attached thereto at the neck, and a fastener comprising stringers attached to the underside of the collar and spaced from the lower edge extending from the lower corners thereof to the center and meeting thereat in upwardly curved relation, locking members attached to said stringers, and a sliding cam actuating said locking members, to draw the lower edge of the collar together in the form of a hood having a smooth outer surface, said collar extending forward along the neck of the coat to the lapels and extending outward therefrom being of sufficient width to extend upward over the head when raised, whereby the sliding cam may be drawn along the stringers folding the lower edge of the collar together to form a hood, the outer surface of the collar becoming the inner surface of the hood.

1,763,376. ATTACHMENT FOR GAS GOVERNORS. FREDERICK P. SMITH, Glassboro, N. J., assignor of one-half to James N. Paff, Glen Lake, N. J. Filed Apr. 29, 1929. Serial No. 358,772. 11 Claims. (Cl. 50—26.)



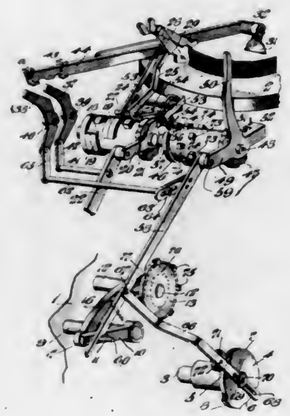
1. An attachment for a gas governor including a casing, a diaphragm therein dividing said casing into an upper compartment and a lower compartment, a valved inlet for said lower compartment, and an outlet for said lower compartment comprising, a U-shaped outlet leading from said lower compartment to the atmosphere, a liquid in said U-shaped outlet normally sealing said lower compartment from the atmosphere, and a second U-shaped outlet leading from said upper compartment to the atmosphere, the free end of said second U-shaped outlet being so positioned with reference to the free end of said first U-shaped outlet as to receive the liquid ejected from the latter due to an increase in pressure in said lower compartment to provide an outlet for said lower compartment and to seal said upper compartment from the atmosphere.

1,763,377. SOUNDING DEVICE. ELMER A. SPERRY, Brooklyn, N. Y., assignor, by mesne assignments, to Sperry Development Company, a Corporation of Delaware. Filed Jan. 9, 1924, Serial No. 685,271. Renewed Oct. 29, 1929. 11 Claims. (Cl. 102—3.)



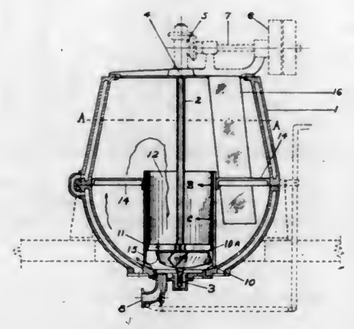
1. A sounding device, comprising a casing, a striker therein, a cartridge, means for holding said cartridge in cooperative relation to said striker, means tending to actuate said striker to discharge the cartridge, a freely slidable latch normally interposed between said casing and said striker for maintaining said striker in ineffective position, and means whereby the predetermined pressure of the water causes said latch to slide out of engagement with said casing to permit said second means to actuate said striker.

1,763,378. STRIPING ATTACHMENT FOR CIRCULAR SPRING-BEARD-NEEDLE KNITTING MACHINES. JOHN TAIT, WILLIAM TAIT, and FRANCIS TAIT, Jr., Philadelphia, Pa., assignors to Howard Hosiery Company, a Partnership composed of Francis Tait, Sr., Francis Tait, Jr., James Tait, William Tait, John Tait, Robert Tait, Samuel Tait, and Elmer A. Naigle, Philadelphia, Pa. Filed May 5, 1925. Serial No. 28,127. 7 Claims. (Cl. 66—100.)



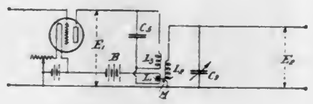
7. In a knitting machine of the character stated, a main control cam drum, an auxiliary control cam drum, auxiliary finger lifters cooperating therewith, means to actuate said auxiliary drum, including an actuating link driven by a source of power, and a timing cam adapted to render said link inoperative during the formation of certain parts of the hose, and the width control cam cooperating with said actuating means to vary the action of said auxiliary cam drum by any desired increments.

1,763,379. MACHINE FOR DISSOLVING CELLULOSE XANTHATE AND THE LIKE. RICHARD THURM and EUGENE SCHMIERER, Saginaw, Mich., assignors to Baker Perkins Company, Inc., White Plains, N. Y. Filed Nov. 29, 1926. Serial No. 151,488. 4 Claims. (Cl. 259—97.)



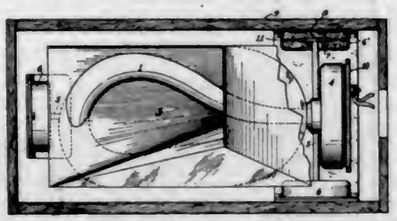
1. In combination a dissolver bowl, an open-ended cylindrical drum in said bowl and spaced above its bottom, a spindle, a rotatable bladed impeller mounted thereon with sharpened upper edges located tangential to the impeller hub, said impeller disposed at the lower end of said drum and adapted to maintain a recurrent flow of material therethrough, radially disposed stationary bars mounted within the drum and formed with shearing edges contiguous to and co-operating with the edges of the blades of said impeller to produce a shearing action upon pieces of material of the nature of cellulose xanthate while flowing in suspension.

1,763,380. ELECTRIC COUPLING SYSTEM. CARL E. TRUBE, Orange, N. J., assignor to Hazeltine Corporation, Jersey City, N. J., a Corporation of Delaware. Filed July 14, 1928, Serial No. 292,739, and in Great Britain July 2, 1926. 9 Claims. (Cl. 179—171.)



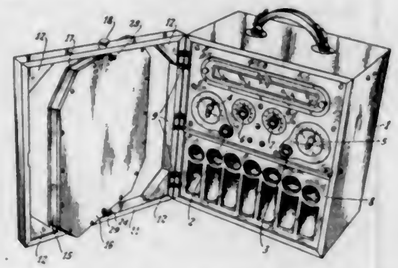
1. In a radio amplifier stage including a vacuum tube having a filament, a grid and a plate, an electric coupling system which comprises a main resonant circuit including as elements a secondary coil and a condenser, at least one of which is adjustable to tune the coupling system over a range in frequency, a second circuit coupled to said resonant circuit, including a fixed self-inductance effectively in parallel with fixed capacity external to said main resonant circuit, whereby said second circuit is resonant at a frequency lower than the lowest frequency within said range, a primary coil electromagnetically coupled to said secondary coil, and a path through said coupling system between said plate and said filament including in series said primary coil and at least a portion of said fixed capacity, whereby in the operation of the amplifier stage there is developed in said main resonant circuit a resonant voltage whose ratio to the voltage between the plate and the filament automatically rises when said adjustable element is adjusted for higher frequencies.

1,763,381. LOUD-SPEAKER HORN. ARTHUR F. VAN DYCK, Rye, N. Y., and FREDERICK H. GUBER, Roselle, N. J., assignors to Radio Corporation of America, a Corporation of Delaware. Filed Sept. 12, 1925. Serial No. 55,889. 3 Claims. (Cl. 181—27.)



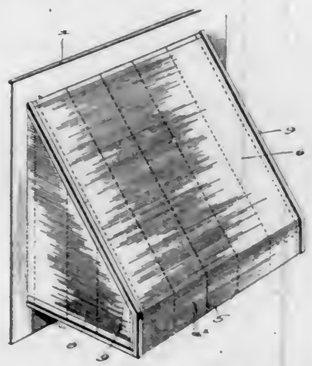
1. A horn having a length greater than its greatest overall dimension consisting of a looped tube intersecting itself, legs attached to the horn for supporting the same and resilient footings for the legs.

1,763,382. LOOP ANTENNA. ARTHUR F. VAN DYCK, Yonkers, N. Y., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Sept. 19, 1925. Serial No. 57,339. 6 Claims. (Cl. 250—14.)



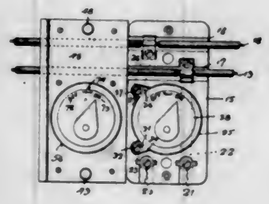
6. In apparatus of the character described a loop antenna removably and pivotally mounted at its central axis to a frame encircling said antenna, a connection from said antenna to a pivot on said frame, a second connection from said loop to a collar, on the frame, insulated from and encircling said pivot, and a cabinet hingeably supporting said frame.

1,763,383. SCREEN AWNING. RAPHAEL VIERA, Scranton, Pa. Filed Apr. 6, 1929. Serial No. 353,077. 4 Claims. (Cl. 150—15.)



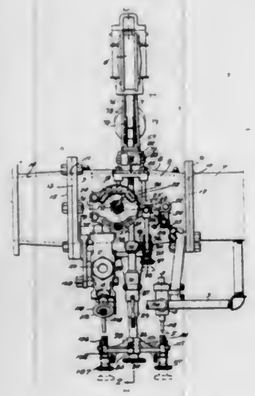
4. A screen awning for window openings or the like comprising triangularly shaped end frames, one or more strips of screen material extending continuously from the upper back edge, around the forward and bottom sides of the frames to the rear edge thereof, strips of screen material for enclosing the openings through the end frames, and metallic strips secured over the triangular frames for securing the strips of screen material thereto.

1,763,384. CIRCUIT BREAKER. CARL ERIC ANDERSON, Stratford, and WILLIAM H. KEEFE, Jr., Bridgeport, Conn., assignors to The Bryant Electric Company, Bridgeport, Conn., a Corporation of Connecticut. Filed July 24, 1925. Serial No. 45,834. 2 Claims. (Cl. 175—371.)



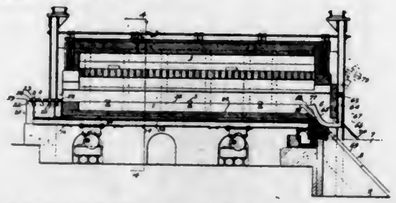
1. In a circuit breaker, a connection block having conductors thereon, a detachable cover overlying said conductors, said cover being apertured, in combination with a circuit breaker unit adapted to pass through the aperture in said cover and being detachably mountable on said block, said unit having laterally projecting terminals overlaid by the connection block cover.

1,763,385. VALVE APPARATUS. GEORGE F. BEACH, Philadelphia, Pa., assignor, by mesne assignments, to Ryan, Scully & Company, Philadelphia, Pa., a Corporation of Delaware. Filed Sept. 8, 1927. Serial No 218,284. 5 Claims. (Cl. 137—144.)



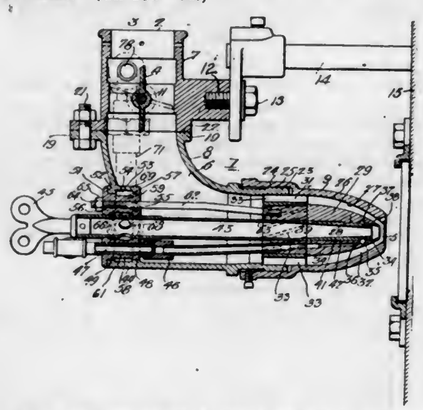
1. A triplex valve structure comprising an air valve, a fuel valve having an adjustable by-pass valve therefor, a pilot valve, electrically operated mechanism for actuating said air, fuel and pilot valves, and means whereby the extent of operation of said pilot valve may be adjusted independently of the other valves.

1,763,386. FURNACE CONVEYER. GEORGE F. BEACH, Philadelphia, Pa., assignor, by mesne assignments, to Ryan, Scully & Company, Philadelphia, Pa., a Corporation of Delaware. Original application filed Apr. 8, 1926, Serial No. 100,681. Divided and this application filed May 31, 1927. Serial No. 195,292. 11 Claims. (Cl. 214—18.)



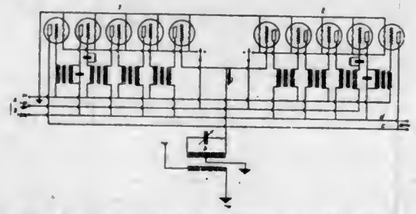
1. A furnace having an opening, means whereby articles may be passed through said furnace opening, and reciprocating means movable back and forth through said furnace opening for guiding said articles over said first-mentioned means.

1,763,387. OIL BURNER. GEORGE F. BEACH, Philadelphia, Pa., assignor, by mesne assignments, to Ryan, Scully & Company, Philadelphia, Pa, a Corporation of Delaware. Filed Apr. 6, 1926. Serial No. 100,165. 4 Claims. (Cl. 158—76.)



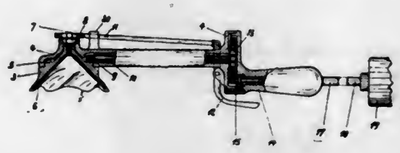
1. A burner comprising a casing having a tubular extension, a closure plug positioned in said extension comprising a pair of spaced plate sections interconnected by arms, of which one is apertured to receive a fuel pipe, said plug being apertured to permit the passage therethrough of a spray tube, and a pipe extending from the chamber formed between the plate sections of said plug to a predetermined point on said casing.

1,763,388. MULTIPLE-AMPLIFIER ARRANGEMENT. ETTORE BELLINI, Paris, France. Filed Jan. 12, 1927, Serial No. 160,555, and in France Feb. 2, 1926. 6 Claims. (Cl. 179—171.)



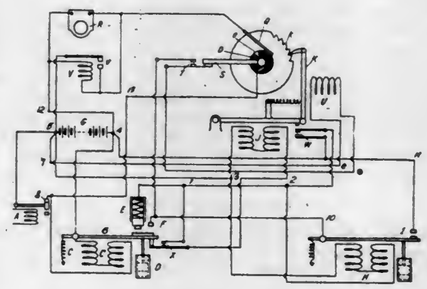
1. A radio receiving arrangement for use over a comparatively wide range of wave-lengths, comprising a common radio frequency input circuit capable of being tuned over the entire wave-length range, a common audio frequency output circuit, a plurality of independent groups of cascade-connected tube amplifiers arranged to operate within different bands of said range and connected between said common input and output circuits, and means for selectively rendering operative one of said amplifier groups by closing the filament heating-circuit of that group.

1,763,389. ICE-CREAM SPOON. PENROSE E. CHAPMAN, St. Louis, Mo. Filed Aug. 4, 1924. Serial No. 730,021. 1 Claim. (Cl. 107—48.)



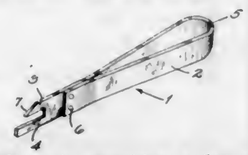
An ice-cream spoon comprising a support including a handle, a rotatable bowl at one end of said support, a shaft passing through said bowl, a rotatable scraper within said bowl attached to one end of said shaft, an arresting wheel at the other end of said shaft, means to rotate said bowl about said shaft, trigger means adjacent the handle, and means actuated by said trigger means for stopping the motion of said wheel.

1,763,390. SELECTIVE CALLING DEVICE. WILFRED JOHN DAVIS, Plymouth, England, assignor to Radio Corporation of America, a Corporation of Delaware. Filed Aug. 17, 1922, Serial No. 582,521, and in Great Britain Aug. 26, 1921. 11 Claims. (Cl. 177—353.)



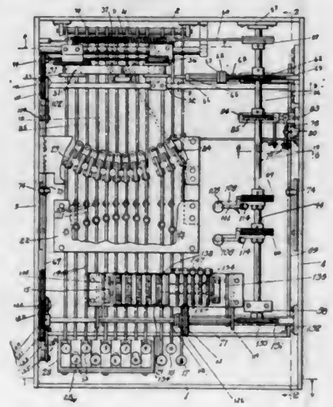
11. In a signalling device adapted to be operated by a given number of impulses of a given duration and intervals therebetween of a given duration, the combination of, a signal, means for measuring the length of the received impulses, means for measuring the length of the intervals, storing means, means whereby the first means repeatedly actuates the storing means on the receipt of each impulse of said given duration, means operated by said first and second measuring means on the reception of an impulse longer than said given duration or on the occurrence of an interval longer than said given duration for nullifying the effect of the repeated actuations on said storing means and means operated by the storing means after a given number of repeated operations to actuate said signal.

1,763,391. CAN PUNCHER. GEORGE WALTER DRUHE, Piedmont, Calif. Filed Jan. 23, 1928. Serial No. 248,623. 1 Claim. (Cl. 164—119.)



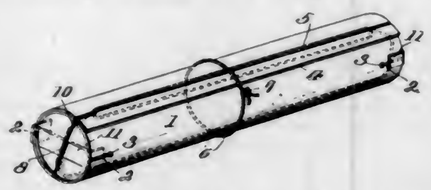
A can head punch comprising a flat strip of metal bent upon itself forming a loop-like handle at one end, spaced apart tynes formed at the other end thereof, one of the said tynes forming a punch and the other of said tynes functioning as a spacer.

1,763,392. CHECK PROTECTOR. CARL H. EPPLE, Oakland, Calif. Filed Dec. 20, 1924. Serial No. 757,272. 3 Claims. (Cl. 235—59.)



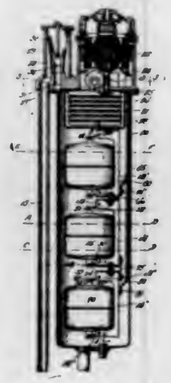
1. A check protector and register comprising in combination a printing mechanism having type bars, a stepped guide block, type operating stems slidable therein, an operative connection from the stems to the type bars, a plurality of numeral keys having stems extending through the stepped block, collars on said numeral stems to engage the type operating stems, said type operating stems having a fixed travel for all the stems, and the numeral stems having a variable travel in accordance with the indication of the numeral, and means actuated by the numeral stems to operate the register.

1,763,393. MAIL AND PARCEL TUBE. JOHN A. FLUELLEN, Plymouth, W. Va. Filed July 11, 1928. Serial No. 291,769. 4 Claims. (Cl. 229—93.)



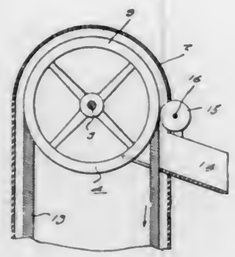
1. A mailing tube comprising a sheet having at its opposite ends a plurality of longitudinally inwardly extending openings, said sheet rolled into a tube bringing said openings in alignment, and a flexible fastening member extending longitudinal the tube and through the said openings and across its open end whereby the tube is secured and its contents held therein.

1,763,394. COMBINED SAFETY DEVICE AND RESETTING MECHANISM. GEORGE R. FOLDS and LAWRENCE M. PERSONS, Chicago, Ill., assignors to Cook Electric Company, Chicago, Ill., a Corporation of Illinois. Filed May 15, 1925. Serial No. 30,578. 40 Claims. (Cl. 103—26.)



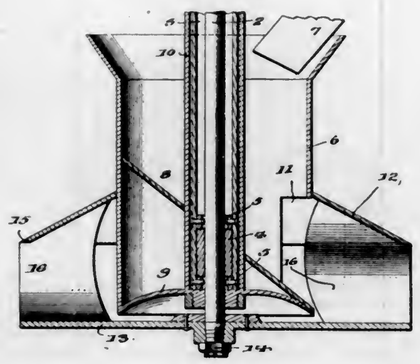
12. In a pumping apparatus comprising a receptacle, and a motor driven pumping unit for supplying liquid thereto, the combination of three float controlled switches, the first for opening the motor circuit when substantially all the liquid is withdrawn from said receptacle, the second for opening the motor circuit when a normal predetermined liquid level is attained in said receptacle, and the third for opening the motor circuit at a higher level in the event said second switch fails to break said motor circuit when said predetermined level is reached.

1,763,395. PUMP. CHARLES P. FREDERICK, Seattle, Wash. Filed Oct. 1, 1928. Serial No. 309,456. 2 Claims. (Cl. 103—72.)



1. In a pump of the class described, upper and lower pulleys, the lower pulley being adapted to be submerged in the liquid to be elevated, an endless conveyor tube formed of coiled springs trained over the pulley, means for operating the tube to lift the fluid, and a discharge chute for receiving the liquid deflected off of the upper pulley by centrifugal force, and a take off wheel mounted above the discharge chute and having binding engagement with the downwardly traveling flight of the conveyor tube for retarding the downward passage of said flight for causing the convolutions thereof to be spread apart as they pass beyond the wheel and to become crowded together as they approach in proximity to the said wheel.

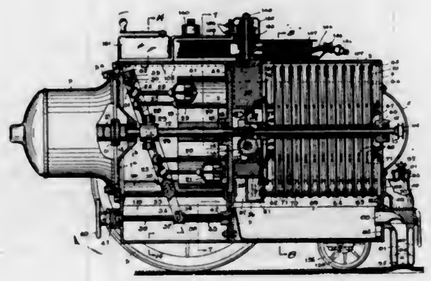
1,763,396. CENTRIFUGAL GRAIN DISTRIBUTOR. JUDSON C. HOWLAND, Galveston, Tex. Filed Dec. 30, 1926, Serial No. 158,043. Renewed Mar. 19, 1930. 7 Claims. (Cl. 198—128.)



4. A distributor of the character described including a central hopper having a discharge opening therein, and rotary distributing blades arranged exteriorly of said hopper and around the opening and in position to receive material through said opening.

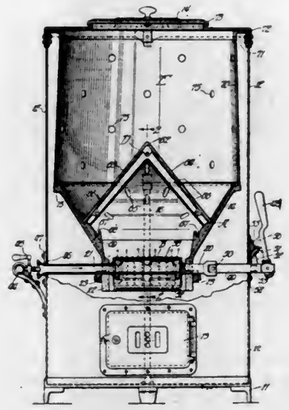
7. A distributor of the character described including a hopper, distributing blades in position to receive material from the hopper and discharge said material in all general directions from the hopper, and guides arranged approximately on opposite sides of the blades and extending in the same general direction for directing the discharge of the material.

1,763,397. VACUUM CLEANER. JOB HUTCHINSON, Saugerties, N. Y. Filed June 3, 1924. Serial No. 717,494. 3 Claims. (Cl. 15—16.)



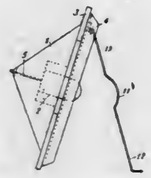
1. A vacuum cleaner comprising an elongated body, a motor at one end of said body, a suction nozzle at the other end thereof, a dust collector adjacent said nozzle, a horizontal motor-driven shaft extending longitudinally of said body, pump mechanism located adjacent the motor and driven by said shaft, supporting wheels and gearings driven by said shaft for propelling the cleaner over the floor, said gearing being located between said dust collector and pumping mechanism.

1,763,398. INCINERATOR. HERMAN KLEIN, Chicago, Ill. Filed Oct. 4, 1926. Serial No. 139,326. 2 Claims. (Cl. 110—18.)



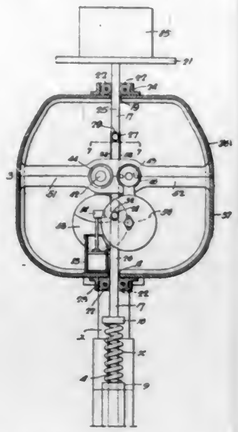
1. A gas burning grate comprising an inverted V shaped hollow grate member having suitable gas emitting openings therein along the bottom edge thereof, means for pivotally supporting the grate on its center with the opposite legs sloping downwardly from the apex so as to permit tilting either side downwardly to dump the grate, and a plurality of ribs formed upon the upper face of each leg extending from the apex to the peripheral edge with upper refuse supporting edges sloping downwardly and spaced to keep the refuse clear of the burner openings.

1,763,399. LOUD-SPEAKER. GAUTIER HERMAN THAL LARSEN, Eindhoven, Netherlands, assignor to Radio Corporation of America, a Corporation of Delaware. Filed Sept. 12, 1928, Serial No. 305,365, and in the Netherlands Oct. 8, 1927. 3 Claims. (Cl. 181—31.)



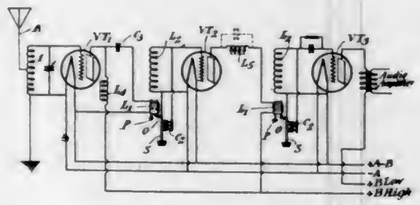
1. A loud speaker comprising a magnet system, a diaphragm operatively connected with said magnet system, a frame for supporting said diaphragm, a member fastened to said frame for supporting said magnet system and means pivoted to said member for coacting with said frame to form a stand for said loud-speaker.

1,763,400. TESTING MACHINE. ROBERT B. LEWIS, Philadelphia, Pa., assignor to Tinius Olsen Testing Machine Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Oct. 8, 1924. Serial No. 742,419. 30 Claims. (Cl. 265—17.)



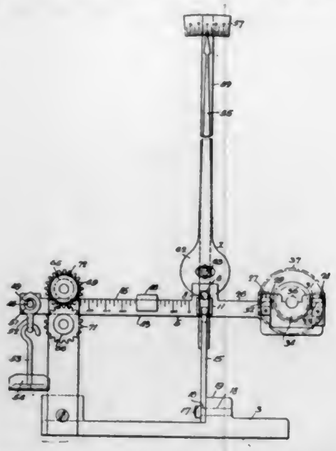
1. A testing machine comprising a pendulum, load-receiving means, and means for so operatively associating said pendulum and said first-mentioned means that said machine registers a compression load and a tension load for opposite movements of said load receiving means.

1,763,401. METHOD OF AND APPARATUS FOR OPERATING ELECTRICAL AMPLIFIERS. EDWARD H. LOFTIN, New York, N. Y., assignor, by mesne assignments, to Radio Corporation of America, New York, N. Y., a Corporation of Delaware. Filed Nov. 12, 1926. Serial No. 147,953. 7 Claims. (Cl. 179—171.)



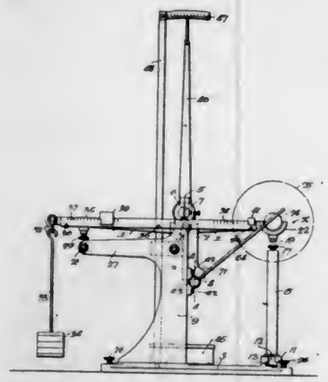
6. In a system for efficiently selectively amplifying high frequency electrical currents over a wide range of frequencies including a three electrode vacuum tube amplifier having inherent capacity between its electrodes, a variable period circuit connected to the input electrodes of said tube, an output circuit, a second vacuum tube, a second variable period circuit of like frequency range as said first variable period circuit in the input circuit of said second tube so closely coupled to said output circuit that its reactions on said output circuit as it is varied to follow the varying of the input circuit of said first tube inevitably include that reaction which unmodifiedly acting through said inherent tube capacity is of such phase and potential as to produce oscillation, means for annulling a sufficient amount of the effect of said reaction while maintaining said close coupling that oscillation is prevented, and mechanical means associated with a variable element of one of said variable circuits for varying said coupling with frequency to control said oscillation producing reaction to follow any variation with frequency of said annulling effect, whereby said oscillation prevention is effective to substantially the same degree throughout said wide range of frequencies.

1,763,402. MEANS FOR AND METHOD OF BALANCING. JACOB LUNDGREN, Philadelphia, Pa., assignor to Tinius Olsen Testing Machine Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed May 8, 1924. Serial No. 711,889. 28 Claims. (Cl. 73—51.)



1. A weighing instrument comprising a beam having a fulcrumed cradle affording a rotative support for a body to be tested, and supporting means for said beam permitting a movement thereof.

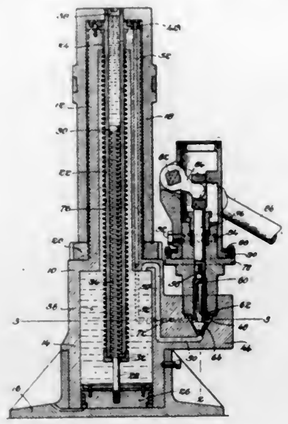
1,763,403. BALANCING DEVICE. JACOB LUNDGREN, Philadelphia, Pa., assignor to Tinius Olsen Testing Machine Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Nov. 6, 1924. Serial No. 748,168. 26 Claims. (Cl. 73—51.)



1. Apparatus comprising a pendulum, a pair of fulcrumed members movable therewith and providing specimen supports a predetermined distance from the fulcrums, the fulcrums and the specimen supports being in a common plane, and indicating means responsive to a movement of said pendulum.

1,763,404. HYDRAULIC JACK. JAMES P. MCBRIDE, New York, N. Y., assignor to Munke Jack Corporation, New York, N. Y., a Corporation of Delaware. Filed Nov. 9, 1927. Serial No. 232,028. 7 Claims. (Cl. 138—9.)

1. In a hydraulic jack, a hollow housing adapted to contain a liquid, a ram member carried by and projectible and retractible with respect to said housing, a pump arranged to take liquid from said housing and force it



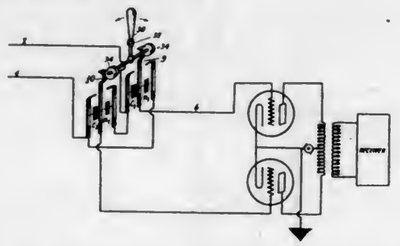
between the housing and said ram member to project the latter, and spring actuated means operable to force liquid from said housing to said pump.

1,763,405. BRAKE CONTROL SYSTEM FOR THE WHEELS OF AIRPLANES. GEORGES LOUIS RENÉ JEAN MESSIER, Montrouge, France. Filed Sept. 7, 1928, Serial No. 304,432, and in France Sept. 21, 1927. 8 Claims. (Cl. 244—2.)



1. In a brake control system for airplane wheels, a control actuated by the tail skid, a lever connected to said control and to the brake, and means controlled by the pilot for varying the effective length of said lever.

1,763,406. CAPACITY NEUTRALIZED SWITCH. ALBERT B. MOULTON, Riverhead, N. Y., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Jan. 27, 1927. Serial No. 163,887. 9 Claims. (Cl. 200—52.)



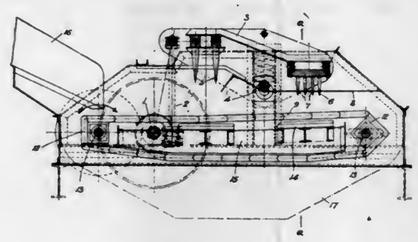
1. The method of preventing a transfer of high frequency energy thru an open mechanical switch because of its natural capacitance which consists in applying oppositely phased neutralizing energy to the dead side of the switch.

1,763,407. EXPLOSIVE CARTRIDGE AND METHOD OF LOADING HIGH EXPLOSIVES IN DRILL HOLES. OTTO B. NIESEN, Allentown, Pa., assignor to Trojan Powder Company, New York, N. Y., a Corporation of New York. Filed May 6, 1925. Serial No. 28,361. 4 Claims. (Cl. 102—4.)



1. An improved cartridge comprising a charge of explosive, an envelope surrounding same, and a plurality of rupturable tension members exterior to the cartridge envelope to which a lowering member may be attached and which are adapted to rupture as a result of a sharp upward pull on the lowering member.

1,763,408. COAL BREAKER. GEORGE NORTON, Birmingham, England. Filed Nov. 16, 1928, Serial No. 319,940, and in Great Britain Dec. 2, 1927. 4 Claims. (Cl. 83—52.)

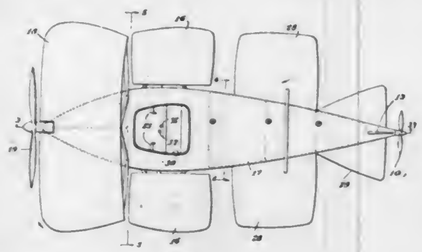


1. In a coal breaking or like machine having primary and secondary picks movable up and down, a conveyor belt formed with a series of grids or open-meshed members jointed or linked together and movable under the picks and a deflector plate or plates disposed below the forward or conveying section of the conveyor belt so as to deflect the broken coal falling through the forward or conveying section away from the return section.

1,763,409. FLYING MACHINE. COY ORSETT, Boston, Mass. Filed Feb. 25, 1929. Serial No. 342,542. 2 Claims. (Cl. 244—17.)

1. A combination aeroplane-dirigible type of aircraft, the body form of which is of a seal-like shape with a vertically projecting frontal head, body portion tapering to a point at the rear end, the lateral main body wing of which is affixed upon the aforesaid front head, lateral

side wings affixed on sides of body portion, steering means applied to the rear end of said body portion; main



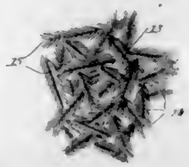
propulsive means affixed upon the projecting front head, and secondary propulsive means affixed at the tapered rear-end of said body portion.

1,763,410. PURIFICATION OF NAPHTHALENE. GEORG SCHROETER, Berlin, Germany, assignor to Newport Manufacturing Company, Carrollville, Wis., a Corporation of Delaware. Original application filed Aug. 29, 1921, Serial No. 496,639, and in Germany Feb. 24, 1915. Divided and this application filed Mar. 27, 1925. Serial No. 18,902. 19 Claims. (Cl. 260—168.) (Granted under the provisions of the act of Mar. 3, 1921, 41 Stat. L., 1313.)

14. In the process for purifying naphthalene to remove catalyzer poisons, the step of subjecting liquefied naphthalene to the action of an easily melted alkali metal.

1,763,411. ARTIFICIAL GOLF-COURSE COVERING. GRADY R. SWOPE, St. Petersburg, Fla. Substitute for application Serial No. 421,049, filed Jan. 15, 1930. This application filed May 8, 1930. Serial No. 450,798. 13 Claims. (Cl. 94—7.)





1. An artificial covering for golf courses comprising a matted surface composed of intertwined feathers, and a binder for the mixture.

7. An artificial covering for golf courses comprising a matted surface composed of feathers cut and mixed so that their barbs are intertwined, sand mixed with said feathers, and a binder securing the mixture together.

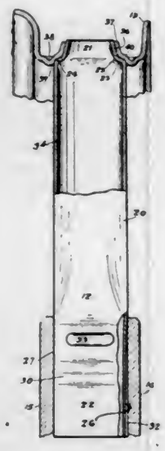
1,763,412. SEWAGE-DISPOSAL APPARATUS. MARCUS B. TARK, Philadelphia, Pa., assignor to Link-Belt Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 22, 1927. Serial No. 177,372. 2 Claims. (Cl. 210—55.)

1. The combination with a settling tank having a substantially vertical end wall and where the bottom joins the said wall a rounded corner, of sludge removing means at the opposite end of the tank, an endless conveyer having rigid transverse flights adapted to sweep the accumulated sludge in the bottom of the tank to said removing means, and means affording free movement of the flights away



from the conveyer and into engagement with the said rounded corner and the bottom of the tank to thereby effect a substantially complete removal of the said sludge from the tank.

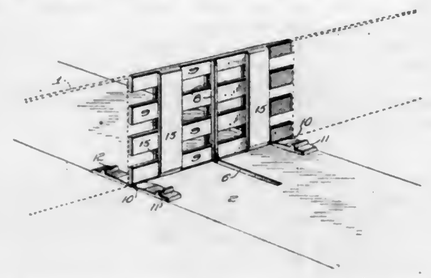
1,763,413. WHEEL. ALVA N. WILCOX, Dayton, Ohio. Filed June 21, 1927. Serial No. 200,458. 1 Claim. (Cl. 301—67.)



In a metal spoked wheel, the combination with a felloe having a plurality of flanged holes adapted to receive the outer ends of the spokes, and pockets in the inner face of the felloe surrounding the holes, of tubular spokes the walls whereof are contracted to form tenons and integral rings, the joinders of said rings and the walls of the spoke bodies forming shoulders at the outer ends of the walls which enter and bear against the inner surfaces of the pockets and the joinders of the rings and tenons being spaced from the inner face of the felloe, whereby the load strain of the wheel is transmitted by the felloe directly to the walls of the spokes at the points of contact between pockets and shoulders formed at the outer ends of the walls and is resisted longitudinally by the walls.

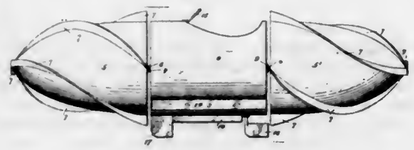
1,763,414. GATE. JOSEPH W. ADAMS, Lexington, Ky. Filed Nov. 30, 1929. Serial No. 410,772. 2 Claims. (Cl. 39—5.)

1. A gate of the character described, comprising a casing adapted to be placed below the roadway, said casing having a slot in its upper portion, a pair of plates resting on said casing and formed with a gate bearing and a pair of stops, a gate having its lower rail bearing in said bearings of said plates, with one of said stops between the space in the lower panels of the gate to prevent sliding of said gate, an arm depending from said gate through the slot of the casing, a weight on said arm to cause the



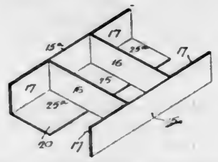
gate to assume a vertical position, and traction rails on each side of the gate for engagement with the wheels of a vehicle.

1,763,415. MARINE CRAFT. EDWIN BOYCE, Pine Bluff, Ark. Filed Jan. 9, 1930. Serial No. 419,609. 1 Claim. (Cl. 115—20.)



A motor boat comprisnig a longitudinal shaft, a front helically-webbed float and a rear helically-webbed float secured to the front and rear ends of said shaft respectively, a cylindrical pilot's car between said floats and having central bearings at its ends through which said shaft passes, a pilot's seat in the rear portion of said car directly over and close to said shaft, the upper side of said car having an opening over said seat to receive the pilot's body, a windshield rising from said car in front of said opening, a motor mounted in said car and operatively connected with said shaft, said motor being below the shaft to prevent tilting of the car about said shaft and being at the front of said car to counteract depression of the rear part of the car under the influence of the pilot's weight, keels on said car extending from end to end thereof and serving to quiet the water acted upon by the webs of the front float, one of said keels being centrally disposed, a rudder at the rear end of said central keel, a steering wheel in front of and above the pilot's seat, and operating connections between said steering wheel and said rudder.

1,763,416. SEPARATOR FOR CONTAINERS. CLIFTON BRIERLEY, Philadelphia, Pa., assignor to Tasty Baking Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Mar. 23, 1929. Serial No. 349,473. 13 Claims. (Cl. 229—15.)

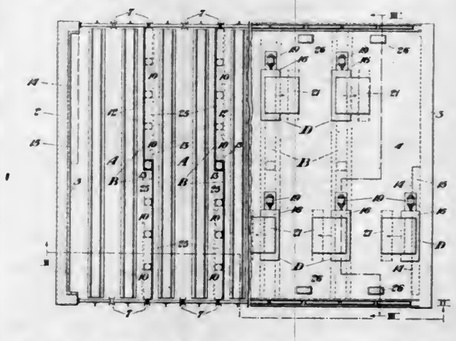


1. A separator unit, for use in a container, comprising spaced side members, transverse members connecting said spaced side members and a shelf member extending partway across the separator unit from one of said side members toward the other thereof.

1,763,417. ELECTRODE FOR ELECTRIC WELDING OR SOLDERING. EDWARD JOHN CLARKE, Charing Cross, England, assignor to Alloy Welding Processes Limited, Charing Cross, England, a British Company. Filed Feb. 15, 1928, Serial No. 254,621, and in Great Britain Mar. 29, 1927. 2 Claims. (Cl. 219—18.)

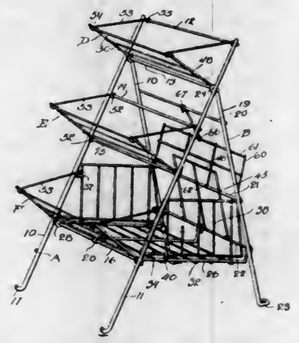
1. An electrode for the arc welding or soldering of aluminium comprising a core of aluminium on which is a coating of flux of sufficient thickness to confine the arc substantially to the crater formed, said flux coating comprising as its ingredients 30 to 60 parts potassium fluoride, 30 to 60 parts potassium chloride and 3 to 20 parts of carbonaceous material.

1,763,418. OVEN. ROBERT E. CRAMER, Pittsburgh, Pa. Filed May 18, 1929. Serial No. 364,234. 2 Claims. (Cl. 34—19.)



1. A rod baking and drying oven comprising a rectangular main oven chamber divided into a plurality of sub-chambers by partition walls, means for heating and circulating the air in each of said sub-chambers, said means withdrawing the air from each sub-chamber from a point along one side wall to the rear of the transverse center of said sub-chamber and from a point along the other side wall forward of the transverse center of said sub-chamber, and returning the air heated to the upper part of said sub-chamber from which it is withdrawn at points to the rear and forward of its transverse center.

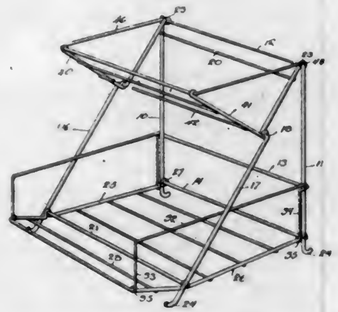
1,763,419. DISPLAY RACK AND BIN. EDWARD Y. CROSSMORE, Yonkers, ANDREW C. CHAPPORY, Jr., Brooklyn, and JOHN B. POSEY, White Plains, N. Y., assignors to National Biscuit Company, New York, N. Y., a Corporation of New Jersey. Filed Aug. 26, 1929. Serial No. 388,530. 12 Claims. (Cl. 211—158.)



1. A display rack comprising a front frame member, a rear frame flexibly connected to the upper portion

thereof, and a section constituting the bottom of a bin and flexibly secured to one of said frame members and detachably secured to the other frame member to hold said members in spaced inclined relation, and sections constituting sides for the bin flexibly secured to said bottom section.

1,763,420. DISPLAY RACK AND BIN. EDWARD Y. CROSSMORE, Yonkers, ANDREW C. CHAPPORY, Jr., Brooklyn, and JOHN B. POSEY, White Plains, N. Y., assignors to National Biscuit Company, New York, N. Y., a Corporation of New Jersey. Filed Aug. 26, 1929. Serial No. 388,531. 6 Claims. (Cl. 211—158.)

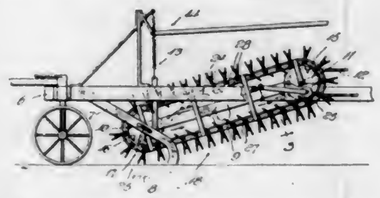


1. A rack comprising a front frame member having side legs and a lower cross brace, a rear frame member having side legs and a lower cross brace, said frame members being flexibly connected near their top, and spaced rods linked to the cross brace of one frame member and having a downwardly opening bend intermediate the ends thereof extending over the cross brace of the other frame member, said rods adapted to maintain said frames in extended position of use, said spaced rods having transverse rods welded thereto and constituting therewith the bottom frame of a bin, and sides for said bin each comprising a rod bent to provide legs and a connecting portion, the legs being each flexibly connected with a spaced rod.

1,763,421. STABLE-SURFACE ALLOY STEEL. RALPH P. DE VRIES, Newtonville, N. Y. Filed Jan. 20, 1926. Serial No. 82,611. 6 Claims. (Cl. 75—1.)

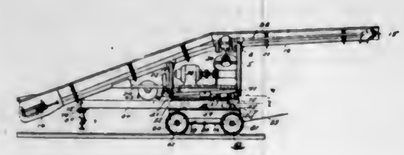
1. As a new product, an alloy steel comprising, chromium from 1.0% to 10.0%, silicon from 0.5% to 6.0%, aluminum from 0.2% to 6.0%, copper from 0.5% to 5.0%, carbon from 0.05% to 1.0%, and the balance iron.

1,763,422. BEET GRIPPING AND CONVEYING MEANS. THOMAS H. DOLLING, Huntington Park, Calif., assignor of one-half to Russell McTaggart, Huntington Park, Calif. Filed Nov. 15, 1928. Serial No. 319,599. 2 Claims. (Cl. 55—108.)



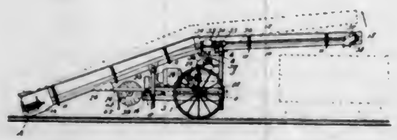
1. In a beet gripping and conveying means, a chain composed of a plurality of one-piece U-shaped links having their arms all disposed in the same direction and overlapped, pivots passing through said overlapped arms and projecting outwardly therefrom to form spindles, spring-closed beet grippers mounted on the transverse arm-connecting portions of said links, levers fulcrumed to the centers of said arm-connecting portions and operatively connected with said grippers for opening the latter upon outward swinging of the levers, and rollers on the outer ends of said spindles, and stationary tracks engaging said rollers for holding the chain against outward movement upon outward forcing of said levers.

1,763,423. PORTABLE SWIVEL-TRUCK CONVEYER. GEORGE D. DUNCAN, Jr., Alton, Ill., assignor to Duncan Foundry and Machine Works, Inc., Alton, Ill., a Corporation of Illinois. Filed Aug. 3, 1928. Serial No. 297,171. 7 Claims. (Cl. 198—11.)



1. A portable conveyer comprising a truck, a conveyer frame and operative mechanism, a turntable support therefor, vertically adjustable means for said frame mounted on said turntable, supporting wheels and shafts for said turntable, a horizontal rectangular frame pivotally mounted on and extending beyond said truck forming a swinging track for said wheels, and an adjustable brace for the outer overhanging end of said swinging track.

1,763,424. PORTABLE CONVEYER. WILLIAM M. DUNCAN, Alton, Ill., assignor to Duncan Foundry and Machine Works, Inc., Alton, Ill., a Corporation of Illinois. Filed June 18, 1928. Serial No. 286,212. 3 Claims. (Cl. 198—11.)

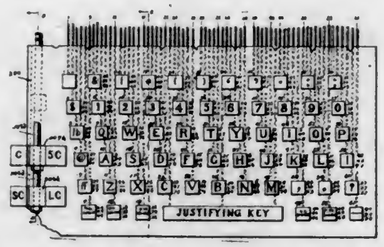


1. A portable conveyer comprising a drag conveyer frame, carrying wheels and axle, horizontally disposed beam levers hung between their ends from said axle, vertically disposed posts supporting said frame and pivoted to the rear ends of said levers, horizontally disposed beams extending over said axle and connected by their ends to said conveyer frame and said posts, and means acting on the front ends of said levers to depress the levers and raise their rear end connections above the axle, substantially as described.

1,763,425. SELECTIVE MECHANISM. ROY EMERY, Brooklyn, N. Y. Filed Dec. 22, 1925. Serial No. 77,092. 39 Claims. (Cl. 199—18.)

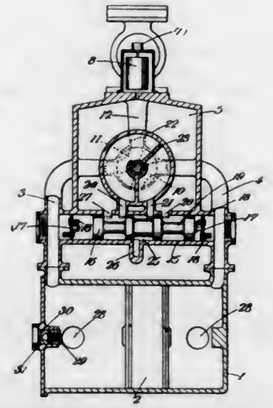
1. Selective mechanism, comprising, a keyboard, a plurality of keys in the keyboard, a plurality of slides adapted for being actuated by the keys, one for each key; extensions on each slide, a plurality of blades, adapted to be engaged by the extensions of said weights, one or more blades by each of said weight, a switch for completing an

electric circuit whenever any one of said blades is actuated; a plurality of cam rods, adapted for actuating releasing means for ejecting matrices from a magazine, said cam rods being held adjacent to said magazine; means for actuating the cam rods, in different combinations, so that



each different combination will control a release for a different matrix from the magazine, and means for transmitting movement from each of the said blades, to one of the cam-rods, singly or in unison, so that with the movement of any blade or combination of blades, the corresponding cam rod or combination of cam rods will be actuated.

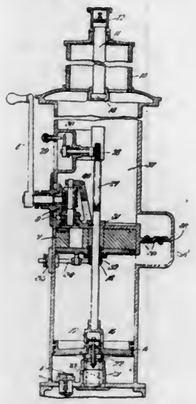
1,763,426. APPARATUS FOR THE MEASUREMENT OF LIQUIDS BY VOLUME. JOHN FRASER, Leckmelm-by-Garve, Scotland, assignor to British Petroleum Company, Limited, London, England, a British Company. Filed Dec. 17, 1925, Serial No. 76,027, and in Great Britain Dec. 20, 1924. 6 Claims. (Cl. 73—30.)



1. Liquid-measuring apparatus comprising in combination a cylinder, a piston in said cylinder, means whereby liquid may be admitted to and discharged from each end of said cylinder, a valve controlling said means, mechanism responsive to liquid pressure to actuate said valve, an auxiliary valve-means whereby liquid under pressure is admitted to and discharged from said mechanism, said auxiliary valve-means being operated by liquid pressure, and means for preventing actuation of said auxiliary valve until said piston is in contact with one end of said cylinder.

1,763,427. APPARATUS FOR THE MEASUREMENT OF LIQUIDS. JOHN FRASER, Leckmelm-by-Garve, Scotland, assignor to Brtiish Petroleum Company, Limited, London, England, a British Company. Filed Mar. 10, 1928, Serial No. 260,681, and in Great Britain Mar. 15, 1927. 19 Claims. (Cl. 221—99.)

1. Apparatus for the measurement of liquids comprising a measuring vessel, a second vessel at least part of which is transparent, means for simultaneously introducing liquid into and withdrawing it from said measuring and said

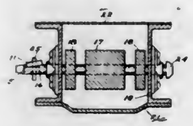


transparent vessels and means for ensuring that the quantity withdrawn from said transparent vessel corresponds to that withdrawn from said measuring vessel.

1,763,428. MANUFACTURE OF CELLULOSE DERIVATIVES. WALTER HAMIS GLOVER, Leamington, and CLAUDE DIAMOND, Coventry, England, assignors to Courtaulds, Limited, London, England. Filed Feb. 3, 1927, Serial No. 165,752, and in Great Britain Apr. 10, 1926. 2 Claims. (Cl. 260—101.)

2. The production of cellulose derivatives by treating with an acetylating agent containing acetic anhydride, an ethyl cellulose which is insoluble in water and in dilute alkali and in the common organic solvents, and which contains not more than one ethyl group for every $C_6H_{10}O_5$ present and not less than 4 per cent of ethyl.

1,763,429. COUPLER KEY. ERNEST G. GOODWIN, Pelham, N. Y., assignor to Standard Coupler Company, New York, N. Y., a Corporation of New Jersey. Filed Sept. 18, 1925. Serial No. 57,080. 7 Claims. (Cl. 85—5.)

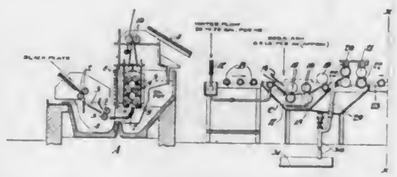


6. An elongated flat draft key having at least one headless end and having near a headless end two spaced holes and having on each of its two wide faces a notch, one wall of each notch being relatively steep with respect to the longitudinal axis and the other wall of each notch sloping gently from the longitudinal axis as it progresses from the steep wall toward the far end of the key.

1,763,430. METHOD OF REMOVING, PURIFYING, AND RECOVERING OIL FROM TIN PLATE. JAMES H. HOLDEN, Brentwood, THOMAS O'BRIEN, Sharon, and JOSHUA C. WHETZEL and RUFUS E. ZIMMERMAN, Pittsburgh, Pa., assignors to American Sheet and Tin Plate Company, Pittsburgh, Pa., a Corporation of New Jersey. Filed June 15, 1926. Serial No. 116,130. 3 Claims. (Cl. 87—6.)

1. The method of purifying and recovering palm oil from an alkaline palm oil-in-water emulsion formed by washing

palm oil from tin plate and the like with an alkaline water solution, which consists in collecting the emulsion, breaking down the emulsion by adding acid to said collected emulsion, separating the major portion of the water content of the broken down emulsion by gravity while the oil content of said emulsion rises through and floats on said water in the form of a water-in-oil mixture, then collecting said water-in-oil mixture, heating said water-in-oil



mixture, so as to vaporize the water content thereof, then discharging the oil and water vapor mixture formed by vaporizing the water content of the water-in-oil mixture, into the path of a body of upflowing gaseous fluid so as to permit the water vapors to be carried upwardly with the gaseous fluid while the oil falls through said fluid by gravity substantially free from all water, then collecting said oil, and finally separating all foreign solid matter from said collected oil.

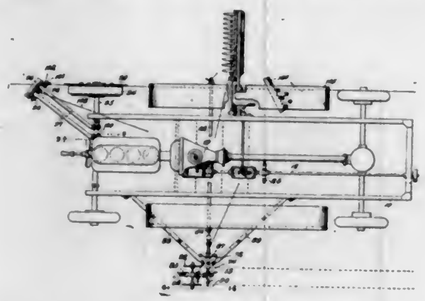
1,763,431. STREET AND HIGHWAY MARKER. CLARENCE V. JOHNSON, Wichita, Kans., assignor of one-third to Harry L. Ream and one-third to Fouze Kimball, Wichita, Kans. Filed Oct. 7, 1929. Serial No. 397,978. 4 Claims. (Cl. 40—145.)



1. A sign comprising a post, two relatively long and narrow sign plates disposed horizontally and secured in parallel vertical planes against opposite vertical sides of said post, and two additional sign plates disposed in parallel vertical planes transverse to the first named plates, said additional sign plates being secured to the ends of said first named plates and projecting vertically therefrom.

1,763,432. ROAD-MARKING MACHINE. JAMES H. KIRKMAN, Smithfield, N. C. Filed Apr. 16, 1929. Serial No. 355,459. 5 Claims. (Cl. 91—44.)

4. In combination with a vehicle, a removable paint distributor including a nozzle supported on and projecting from one side of the vehicle adjacent to the road; a disc rotatably mounted on each side of the nozzle and engageable with the road to restrict the lateral flow of paint from the nozzle, means for supplying paint under pressure to



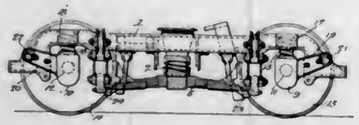
the nozzle and removable means at one side of the vehicle arranged to engage the shoulder of the road and automatically guide the vehicle parallel thereto.

1,763,433. HORSESHOE. EARL H. LANGLOIS, Baltimore, Md., assignor to The Victory Racing Plate Company, Baltimore, Md., a Corporation of Maryland. Filed Jan. 12, 1929. Serial No. 332,192. 1 Claim. (Cl. 168—29.)



A horseshoe for race horses comprising a body having a groove in the lower face of its toe portion, with holes in said toe portion communicating with the grooves, a calk having a substantially rectangular base forming projections at the sides of the calk, said base fitting in the groove, the walls of the groove being upset over the projecting parts of the base to hold the calk in place, projections on the base entering the holes, the inner wall of the calk being beveled.

1,763,434. CAR TRUCK. ELMER LATSHAW, Philadelphia, Pa., assignor to The J. G. Brill Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed May 4, 1929. Serial No. 360,440. 10 Claims. (Cl. 105—192.)

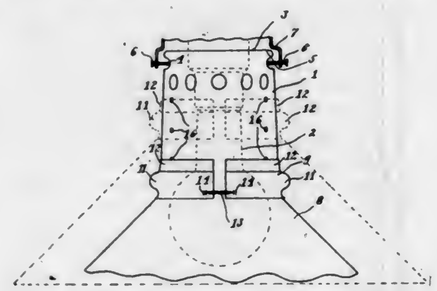


5. In a car truck, a frame, a supporting axle therefor, a brake shoe carried by the frame for engagement with a wheel carried by the axle, the brake shoe engaging the wheel below the center thereof whereby upon depression of the frame the brake shoe tends to separate from the wheel, and means for moving the axle upon depression of the frame to maintain the wheel in engagement with the brake.

1,763,435. METHOD OF TREATING ARSENIOUS ORE. AXEL RUDOLF LINDBLAD, Djursholm, Sweden. Filed Dec. 1, 1927, Serial No. 237,127, and in Sweden June 10, 1927. 5 Claims. (Cl. 75—17.)

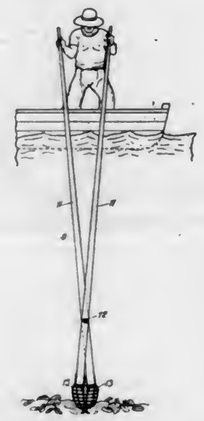
1. A method of treating arsenic containing ore, which comprises roasting the ore in the presence of air together with substances adapted to unite with the arsenic in the ore to form insoluble arseniates, smelting the resulting products in the presence of slag forming substances, and removing with the slag such arseniates as have entered thereinto.

1,763,436. HOLDER ADAPTER FOR REFLECTORS. RENWICK MCWILLIAM, Pittsburgh, Pa. Filed Aug. 15, 1929. Serial No. 386,205. 6 Claims. (Cl. 240—144.)



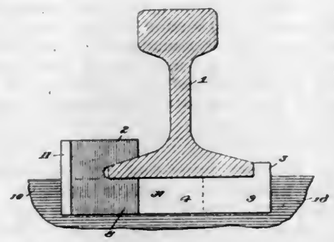
1. A reflector holder comprising a housing adapted to fit over an electric light bulb and its socket, an annular segmental reflector gripping member mounted for axial adjustment upon said housing, and means yieldably joining the segments of said member together whereby a reflector may be readily mounted and securely held therein.

1,763,437. CLAM TONGS. CARL H. MUNKELWITZ, Sayville, N. Y. Filed Aug. 17, 1929. Serial No. 386,686. 2 Claims. (Cl. 294—118.)



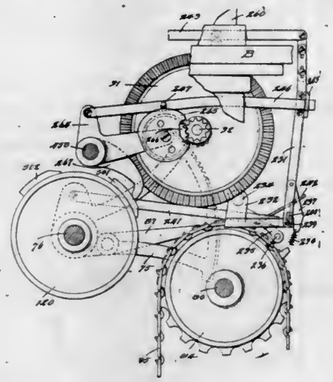
1. A clam digging instrument comprising a pair of pivotally connected handle members, a pair of coacting jaws carried by one end of said handle members, each of said jaws including a wire frame of substantially inverted U-shape, a base rail secured to the terminal ends of said frame and bridging the space therebetween, spaced longitudinal bars having their terminal ends fixedly secured to the side legs of said wire frame, spaced transverse brace bars secured to said longitudinal bars and the top rail of said frame, and spaced teeth along the bottom rail of said frame, the teeth of one jaw being staggered, relative to the teeth of the other jaw, to allow the said jaws to tightly close when moved to a closed position.

1,763,438. RAILWAY-RAIL ANCHOR. HARRY G. NORWOOD, Washington, D. C., assignor to Theodore F. von Dorn, New York, N. Y. Filed Jan. 29, 1930. Serial No. 424,297. 7 Claims. (Cl. 238—330.)



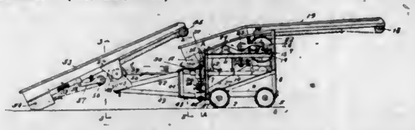
1. A one-piece track rail anchor adapted to be fixedly secured to the rail base, comprising a body portion folded upon itself intermediate its ends, with its lowermost face and its upper face inclined in opposite directions.

1,763,439. TUCKING ATTACHMENT FOR KNITTING MACHINES. ALBERT E. PAGE, Brooklyn, N. Y., assignor to Scott & Williams, Incorporated, New York, N. Y., a Corporation of Massachusetts. Filed Dec. 10, 1927. Serial No. 239,231. 5 Claims. (Cl. 66—44.)



1. A knitting machine having independent needles and a cam for the needle butts, adapted when raised to cause the latches of certain needles to clear and when depressed to cause those needles to tuck in combination with two independent automatic control means for said cam, one of said means being adapted to depress the cam for a minimum of one full revolution of the needle cylinder the second means being adapted to depress same for a partial revolution.

1,763,440. PORTABLE CONVEYER LOADER. JOHN P. POLSTER, Alton, Ill., assignor to Duncan Foundry and Machine Works, Inc., Alton, Ill., a Corporation of Illinois. Filed Nov. 14, 1928. Serial No. 319,404. 5 Claims. (Cl. 198—7.)



1. A conveyer loader comprising a main conveyer, a feeder conveyer, a supporting frame for the feeder con-

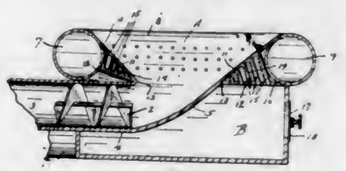
veyer having upper and lower pivot tongues in a vertical axis adapted to swing about said axis, a gear casing carried by the upper tongue so as to form a swing casing. A fixed gear casing mounted on said main conveyer in said vertical axis below the swing casing, a vertical shaft between said casings and in said vertical axis, operative connections between said vertical shaft and the feeder conveyer, a horizontal shaft mounted on the main conveyer and passing through the fixed casing and operatively connected to the vertical shaft, and driving means for the main conveyer and operatively connected to said horizontal shaft.

1,763,441. DEVICE FOR USE IN DETERMINING TURNING RADIUS OF MOTOR BUSSES. JOSEPH RICHARDSON, Ridgefield, N. J., assignor to Fifth Avenue Coach Company, a Corporation of New York. Filed Oct. 8, 1928. Serial No. 311,054. 6 Claims. (Cl. 33—1.)



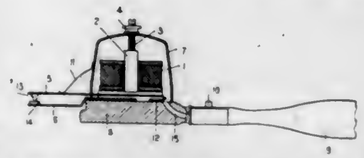
1. A testing device of the type described, comprising in combination, a frame, supporting wheels at one end, swiveling guide wheels at the other end, means for adjusting the swiveling wheels to different angular positions, means for indicating said positions, and means for locking them in their adjusted positions.

1,763,442. RETORT. WILLIAM F. RIEGER, Salt Lake City, Utah, assignor, by mesne assignments, to The Stoker Matic Corporation, Salt Lake City, Utah, a Corporation of Utah. Filed Mar. 27, 1928. Serial No. 265,026. 7 Claims. (Cl. 122—4.)



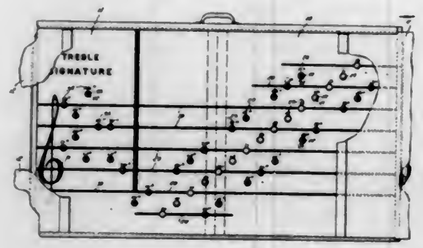
1. In a combustion device, means defining a retort, an enclosed air chamber therebeneath, tubes connecting said chamber with said retort, and means to cause water to circulate around said tubes in heat exchange relation thereto.

1,763,443. ELECTROMAGNETIC IGNITION DEVICE. RUGGERO RIGHETTO, Turin, Italy, assignor of one-half to Severino Trisoglio and one-half to Luigi Castelli, Turin, Italy. Filed Jan. 23, 1928, Serial No. 248,840, and in Italy Jan. 22, 1927. 6 Claims. (Cl. 175—91.)



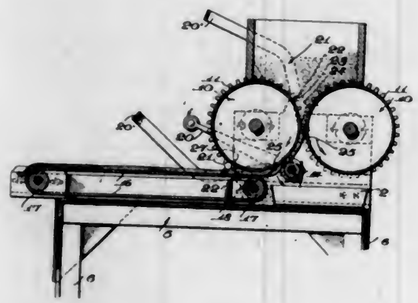
1. An electromagnetic ignition device comprising an exciting coil, a substantially fixed sparking point, an oscillating sparking point adapted to be magnetically actuated by said coil when the latter is energized, and a relatively movable core for varying the magnetic effect of said coil whereby the amplitude of movement of said oscillating sparking point will be adjusted correspondingly with any increase in length of the normal air gap between the latter and said fixed sparking point due to wear thereof during continued use.

1,763,444. MUSIC-TEACHING DEVICE. MICHAEL B. ROCK, Staten Island, N. Y. Filed Nov. 16, 1928. Serial No. 319,912. 11 Claims. (Cl. 84—472.)



8. An apparatus for teaching sight singing including a casing, a staff board and clef board displayed on the front of said casing, light bulbs associated with said boards, a keyboard in the rear of said casing for controlling said bulbs, a pilot light in circuit with said bulbs adapted to flash when any of the bulbs of said staff board are illuminated, and means for cutting the pilot light from the bulb circuits, whereby energy may be delivered to said bulbs for illuminating a plurality thereof at one time.

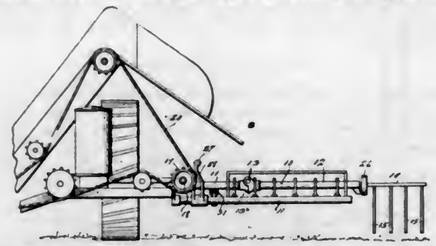
1,763,445. TORTILLA-FORMING MACHINE. LUIS ROMERO, Mexico City, Mexico. Filed Dec. 15, 1927. Serial No. 240,229. 3 Claims. (Cl. 107—28.)



1. In combination a hopper for receiving a body of plastic material, a pair of coacting pressure rollers journalled below the same adapted to advance plastic material in a longitudinal sheet, a U-shaped frame pivoted off dead center to the hopper, a flexible scraper element carried by the frame and normally held against one of the rollers to detach the plastic material therefrom.

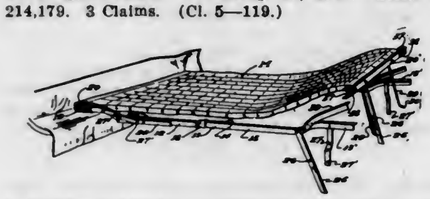
1,763,446. AUTOMATIC BUNDLE-TRIPPING MECHANISM FOR BINDERS. CARL C. SANCKEN, Saunemin, Ill. Filed Jan. 26, 1929. Serial No. 335,238. 5 Claims. (Cl. 56—476.)

1. The combination with a binder having a bundle carrier mounted for dumping movement, of a member projecting out from the machine on one side thereof and having oscillatable fingers adapted to engage with previously deposited bundles and be oscillated thereby, means operatively connecting the fingers to the bundle carrier to release the same when the fingers are oscillated upon con-



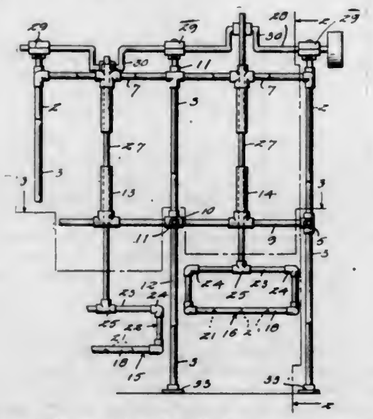
tact with a previously deposited bundle and brake means engaging said projecting member whereby to retard the rotary movement thereof.

1,763,447. FOLDING BED. LOUIS F. SCHILLING, Salem, Ohio; Ray Schilling administratrix of said Louis F. Schilling, deceased. Filed Aug. 19, 1927. Serial No. 214,179. 3 Claims. (Cl. 5—119.)



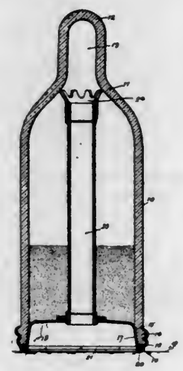
1. A folding bed or cot comprising a cross-bar, two fixed pivoting members carried one by each free end thereof, two side rails one connected to each pivoting member for swinging movement in the same plane as the cross-bar, each of said side rails being composed of two hinged sections foldable inwardly upon each other, a second cross-bar, cooperative means carried by the terminals of the two side rails and the second cross-bar whereby the second cross-bar may be locked immovably to or released from said side rails, said means including a fixed lug carried by the cross-bar and between which and the end of the cross-bar the rail seats, and the pivoted latch carried by the cross-bar and adapted to embrace the end of the rail to lock the rail to the cross-bar.

1,763,448. PUDDLER FOR TANKS OF SEWAGE-DISPOSAL PLANTS. FRED M. TIES, Brodhead, Wis. Filed Aug. 8, 1929. Serial No. 384,415. 2 Claims. (Cl. 259—123.)



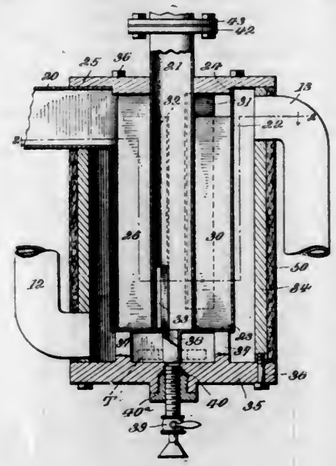
1. A puddler of the character set forth, comprising a frame, vertical guide tubes carried by the frame, elongated paddles arranged within the frame, yokes carried by the paddles at opposite sides of their transverse centers and in alinement with the guide tubes, guide rods fixed to the yokes and working in the guide tubes, yokes carried by the paddles at their transverse centers, a shaft journaled upon the frame and provided with oppositely directed cranks, and connecting rods engaged with the cranks and said last named yokes.

1,763,449. DISPENSING CONTAINER. HENRY T. TRAUTVETTER, Clifton, N. J. Filed Aug. 2, 1928. Serial No. 296,977. 3 Claims. (Cl. 221—98.)



1. A dispensing container comprising an inverted cup shaped body having a completely closed non-supporting upper end and a lower open supporting end, a removable closure for said lower end having an outlet opening and an upstanding open ended tube extending from said outlet opening to a point adjacent to and spaced from the upper end of said body.

1,763,450. CHARGE-BLENDING DEVICE. HORACE VAN DEVENTER and EDDIE H. STEPP, Knoxville, Tenn. Filed June 29, 1927. Serial No. 202,373. 7 Claims. (Cl. 48—180.)



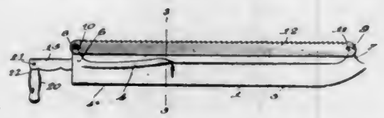
1. In a charge blending device for internal combustion engines, an inner conduit, a concentric outer jacket and end members to define an annular space between said conduit and jacket, a partition and a plurality of baffles

joining said conduit and jacket, said partition closing said annular space and said baffles alternately, extending from a respective end wall and terminating short of the other wall at top and bottom whereby to form a series of axially extending compartments each having an inlet opening at one end and an outlet opening at the other end, a conduit to connect the inlet opening of a compartment adjacent said partition to a carburetor, another of said compartments having its outlet opening in communication with the inner conduit, and means to connect said inner conduit to an internal combustion engine intake.

1,763,451. TREATING GLYCERIN. HERMANN WEBER, Reisholz, near Dusseldorf, and FERNANDO NIEMEYER, Holthausen, near Dusseldorf, Germany. Filed Jan. 12, 1927, Serial No. 160,767, and in Germany Jan. 26, 1926. 4 Claims. (Cl. 260—156.5.)

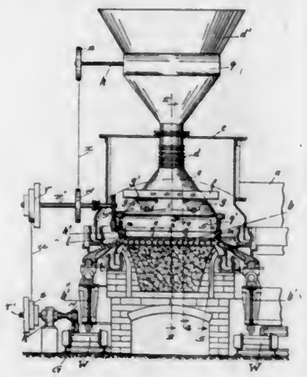
1. The process of treating glycerin, which consists in heating glycerin for from two to six hours at about 220 to 240 degrees centigrade with alkali metal silicates.

1,763,452. COMBINATION CLEAVER, KNIFE, AND SAW. BERT WILLIAMSON, McKeesport, Pa. Filed May 25, 1926. Serial No. 111,592. 2 Claims. (Cl. 146—77.)



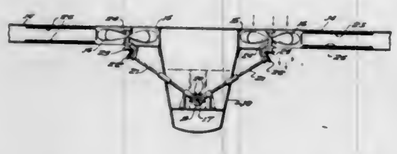
1. A tool of the class described comprising a blade, the major portion of the length of which is in the form of a knife, the remainder of the blade being thickened intermediate its width to form a cleaver-like structure at one end, said thickened portion being tapered transversely toward its opposite edges, one edge forming a cutter and the other an entering wedge, the knife portion of the blade being tapered transversely from a blunt edge at one side to a cutting edge at the other, and a handle connected with said blade.

1,763,453. CHARGING DEVICE FOR OVENS OF THE ROTARY ANNULAR SOLE-PLATE TYPE. FRIEDRICH BARTLING, Munich, Germany. Filed June 27, 1927, Serial No. 201,954, and in Germany Jan. 15, 1927. 4 Claims. (Cl. 263—28.)



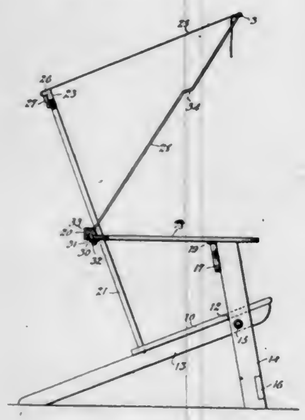
1. In a charging apparatus for an oven having a rotary annular sole plate with marginal rails, a charging hopper supported above the sole plate, a feed box having means engaging said rails to determine the radial position of said feed box with respect to the axis of the annular sole plate, a flexible conduit connecting said hopper and said box to permit such radial movement, and means independent of said sole plate to support said box in its movements.

1,763,454. AUXILIARY SUSTAINING MEANS FOR AIRPLANES. JOHN FRANKLIN BERRY, Lewis, Iowa. Filed May 21, 1929. Serial No. 364,827. 7 Claims. (Cl. 244—15.)



4. In an aerofoil having a vertically disposed opening therethrough, a propeller rotatably mounted in said opening and adapted to force the air downwardly therethrough, a closure member slidably mounted in said aerofoil, guide means for said closure member, manually operated means for moving said closure member across said opening, and means for moving said closure member outwardly whereby to position the outer faces of said closure member substantially flush with the outer faces of said aerofoil.

1,763,455. FOLDING CHAIR. EMIL DE BRUIJN, Roslyn, Pa. Filed June 19, 1929. Serial No. 372,131. 3 Claims. (Cl. 155—139.)

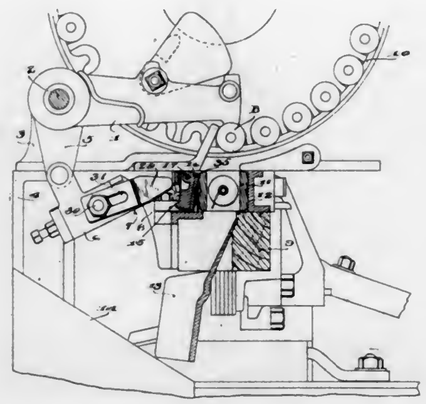


1. A folding chair comprising a seat provided with holes near the rear edge thereof and stops at the sides, legs secured to said seat, front legs pivoted to the first mentioned legs and engageable respectively with said stops, an arm hingedly connected with each front leg, a crossbar connecting the rear ends of said arms, a back hingedly connected with said crossbar, and lugs on the lower edge of said back engageable respectively in the holes in said seat.

1,763,456. DRAWING-IN-FILLING PREVENTER. THEOPHILE CAUX, Lawrence, Mass. Filed Sept. 26, 1928. Serial No. 308,549. 11 Claims. (Cl. 139—256.)

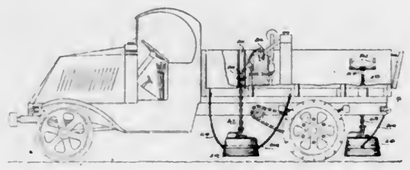
1. A filling drawing-in preventer for looms, comprising a shuttle box having a portion of the inner face of one side wall movably mounted and forming a check for the

shuttle, and means by which the said portion is moved outwardly to enlarge the shuttle box upon the transfer of a fresh bobbin from the magazine of the loom to a shuttle



in the shuttle box, thereby preventing the trailing end of a spent filling from being wedged between the shuttle and shuttle box.

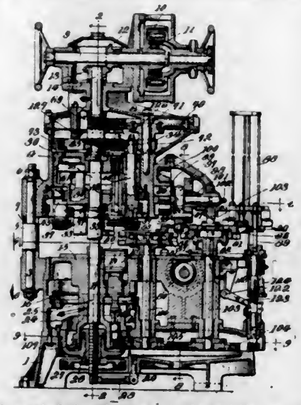
1,763,457. ROAD-WORKING APPARATUS. CHARLES ROBERT CHURCHILL and JOSEPH R. HAYNEN, New Orleans, La., assignors to Electric Appliance Company, New Orleans, La., a Firm composed of C. Robert Churchill, Willard W. Low, Jas. R. Haynen, J. Wheaton Flynn, and M. A. Barre. Filed Apr. 16, 1928. Serial No. 270,454. 3 Claims. (Cl. 209—215.)



1. The combination with a motor vehicle, of a vertically adjustable support extending transversely of the body of the vehicle and within the same, electromagnets suspended in spaced relation from said support, another electromagnet suspended below the said body in rear of said first named electromagnets and in line with the space therebetween, a vertically adjustable support carried centrally of the rear end portion of the said body for sustaining said last named electromagnet in suspended position, and means for controlling the operation of said electromagnets.

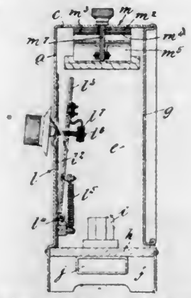
1,763,458. MACHINE FOR DOUBLE-SEAMING CAN ENDS TO CAN BODIES. JOHN COYLE, Baltimore, Md., assignor to Continental Can Company, Inc., New York, N. Y., a Corporation of New York. Filed Mar. 15, 1928. Serial No. 261,827. 17 Claims. (Cl. 113—24.)

1. The combination of a plurality of seaming units traveling in a circular path, each including a chuck, a feeding mechanism for feeding can bodies in a straight line and then in a curved path to the seaming units, means for placing a can end on the can body while it is traveling in the straight path of travel and for positively and firmly seating the end in the can body, and means for holding



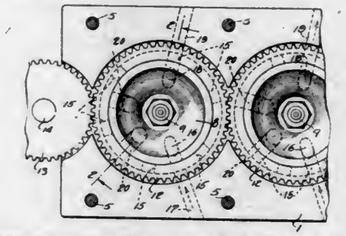
the can end seated in the can body while on its curved path of travel until engaged by the chuck of the seaming unit.

1,763,459. RECEIVING APPARATUS. ROY DEASON, Small Heath, England. Filed Nov. 23, 1928, Serial No. 321,429, and in Great Britain Nov. 29, 1927. 4 Claims. (Cl. 250—14.)



1. Apparatus for receiving, transmitting or amplifying high frequency and low frequency electrical currents, comprising a metal casing, a metal plate supported adjacent the inner face of one wall of said casing but insulated from the latter, said wall and said plate forming two elements of a condenser, means tending to move said plate away from said wall, and means operative from the exterior of said casing for moving said plate toward said wall in opposition to the last-named means.

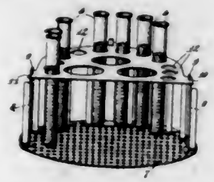
1,763,460. VALVE MECHANISM FOR INTERNAL-COMBUSTION ENGINES. JESSE FRANKLIN FISK, Chicago, Ill., assignor of one-half to Frank P. Walsh, New York, N. Y. Filed July 3, 1928, Serial No. 290,078. 1 Claim. (Cl. 123—80.)



An internal combustion engine including a cylinder provided with a combustion chamber, a head, a rotating cylin-

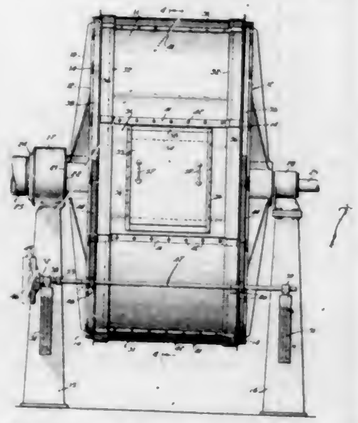
drical valve mounted in the head, said head having intake and exhaust passages opening into the combustion chamber, said valve having a plurality of equally spaced ports adapted to be alined with the intake and exhaust passages, said head having valve balancing passages leading from the combustion chamber to the inner face of the valve and located between the intake and exhaust passages, the arrangement of the ports in the valve being such with respect to the intake and valve balancing passages that certain of the ports will be alined with the valve balancing passages when one of the ports is alined with the intake passage while being out of alinement when a port is alined with the exhaust passages.

1,763,461. TEST-TUBE RACK. CHARLES FOWLER, Ardsley on Hudson, N. Y. Filed June 15, 1927. Serial No. 199,014. 1 Claim. (Cl. 23—259.)



A rack of the character described, comprising a perforated baseplate, upstanding posts on the baseplate, removable plates supported on the upper ends of the posts and having test tube receiving openings therein, and upwardly projecting pins on the baseplate adapted to receive test tubes in an inverted position.

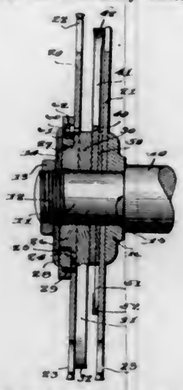
1,763,462. COMBINED DRYING, DRUMMING, CLEANING, CAGING, AND FINISHING FUR MACHINE. HERMAN GABBE, Brooklyn, N. Y. Filed Aug. 18, 1928. Serial No. 300,568. 13 Claims. (Cl. 149—24.)



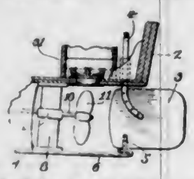
13. In a machine of the class described, the combination of a drum provided with doors, means for guiding said doors, and rotatory means on the drum connected with said doors to move said doors to opened and closed positions.

1,763,463. DADO CUTTER. JOHN GARTHE, Pontiac, Mich. Filed Apr. 22, 1929. Serial No. 357,296. 3 Claims. (Cl. 144—222.)

1. A dado-cutter comprising a shaft, having a shoulder, a pair of spaced circular saws on the shaft, a plurality of discs mounted between the saws and provided with cutters, a washer having a projecting annular flange, one of the circular saws having an opening to receive the flange, said washer having an externally threaded reduced portion, a nut threaded on to said reduced portion and connected to the saw, the flange having a plurality of notches and a pin carried by the nut and engageable with the notches for locking the nut to the washer.

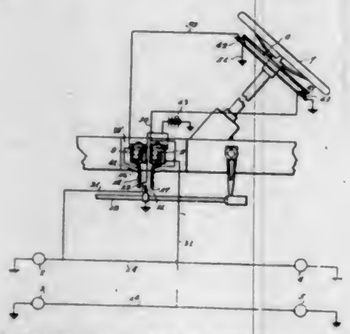


1,763,464. ATTACHMENT FOR MOTOR BOATS. GEORGE GUNDERSON, JOHN ERICKSON, and RODMAN T. BACKUS, Salerno, Fla. Filed July 29, 1929. Serial No. 381,994. 12 Claims. (Cl. 115—34.)



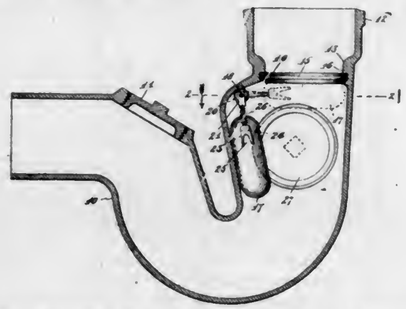
1. An attachment for motor boats comprising an annular mounting adapted to extend through the bottom of the boat and provided with upper and lower flanges adapted to be anchored against the upper and lower faces respectively of said bottom, a tubular plug element for extension into said mounting and having a transparent closure at its upper portion, said element and upper flange of the mounting having coacting means for removably connecting the upper end of said element to the mounting in a water-tight manner.

1,763,465. SIGNAL MECHANISM FOR AUTOMOBILES. WILLIAM F. HILD, East Rutherford, N. J. Filed Sept. 10, 1926. Serial No. 134,730. 4 Claims. (Cl. 177—339.)



1. In an electrical signal a magnet circuit, a signal circuit having electrical connection with a signal, a source of electrical energy connected with the two circuits, an electrical magnet in the magnet circuit, a contact electrically connected with the electro-magnet, a movable contact adjacent the first contact, cooperating means between the armature of the magnet and the movable contact for normally holding the latter against the first mentioned contact, a switch in the signal circuit and operable to energize the electromagnet to render such means inoperative to permit the movable contact to become disengaged from the first mentioned contact and establish electrical connection with one conductor of the magnet circuit, and a grounded contact operable to establish electrical connection with the other conductor of the magnet circuit whereby to establish an electrical circuit through the electro-magnet to the signal.

1,763,466. PLUMBING FIXTURE. ALBERT M. KHUN, Elizabeth, N. J. Filed Apr. 3, 1929. Serial No. 352,270. 8 Claims. (Cl. 182—15.)



1. In a plumbing fixture, a buoyant valve, and means pivotally associating the same with said fixture, said means including a pivotally mounted shaft carried by said fixture.

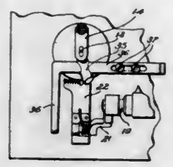
1,763,467. TOY PALPITATING HEART. HERMAN H. D. KLINKER, New York, N. Y. Filed Apr. 4, 1929. Serial No. 352,513. 2 Claims. (Cl. 46—37.)



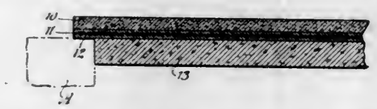
1. A novelty comprising an elastic heart shaped element having soft stuffing therein, an inflatable and deflatable elastic body embedded in said stuffing, a length of tube connected at one end with said body, and a vented elastic bulb connected with the end of said tube remote from said body, for the purpose specified.

1,763,468. PLAITED HAT LINING AND METHOD AND APPARATUS FOR MAKING THE SAME. ALFRED KURTZ, Brooklyn, N. Y. Filed Apr. 28, 1927. Serial No. 187,309. 2 Claims. (Cl. 112—132.)

2. An attachment for plaiting and sewing machines comprising a bar slotted at one end for detachable adjustable engagement with the work plate of the machine, a filler guide member carried by the bar and adapted to be disposed closely adjacent the needle of the machine, the bar being offset to hold the filler guide above the work plate to provide clearance for a plaiting blade, and a blocker carried by the free end of the bar also spaced above the work plate and adapted to prevent previously plaited fabric from working under the needle when a curved seam is being made.

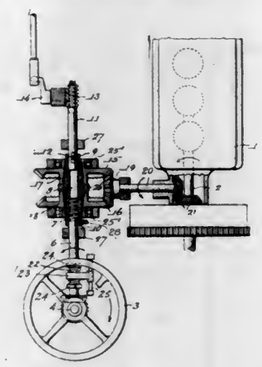


1,763,469. FLAT ASBESTOS-CEMENT ROOF AND WALL SHEET. LOUIS LANE, Habana, Cuba. Filed Feb. 9, 1928. Serial No. 253,101. 4 Claims. (Cl. 154—45.9.)



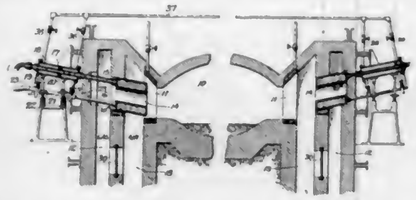
1. An improved article of manufacture comprising a flat compound shelter-sheet for the outside covering of roofs and walls consisting of a pre-formed unitary asbestos-cement shelter sheet, an inner surface sheet made of a thermal non-conducting material, the said two sheet elements being cemented together at their uniting faces by means of an intermediate layer of quick-hardening cement having greater tensile strength than the asbestos-cement sheet and having embedded in said uniting layer of cementing material a tension reinforcing element.

1,763,470. STEERING GEAR. GEORGE EDWARD LEMON, Brooklyn, N. Y. Filed Sept. 20, 1927. Serial No. 220,745. 4 Claims. (Cl. 180—79.3.)



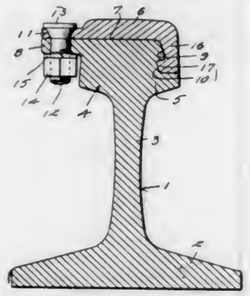
1. A steering gear, including a pair of alined shafts, a clutch sleeve having oppositely tapered ends, said sleeve having screw-threaded engagement with one shaft and secured to turn with the other shaft, a pair of gear wheels having internally tapered hubs mounted for rotation on the opposite ends of said clutch sleeve, a pinion meshing with both of said gears, motor driven means operatively connected to the pinion, and manually operated means connected to the shaft having screw-threaded engagement with the clutch sleeve.

1,763,471. REVERBERATORY FURNACE. FREDERICK F. LINES, Annapolis, Md. Filed July 11, 1921. Serial No. 483,792. 2 Claims. (Cl. 263—15.)



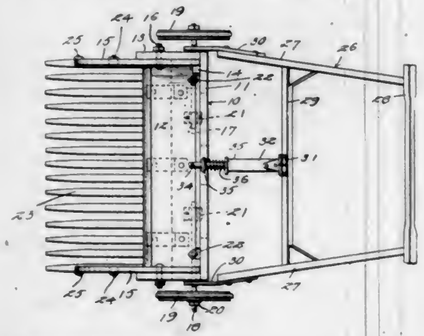
1. In a reverberatory furnace, a furnace head having an air port and a gas port, means to vary the relative areas of the mouths of said ports and simultaneously control the quantity of fluid delivered to one of said ports.

1,763,472. RAILWAY TRACK RAIL. GERALD M. MAGEE, Kansas City, Mo. Filed June 6, 1929. Serial No. 368,881. 4 Claims. (Cl. 238—143.)



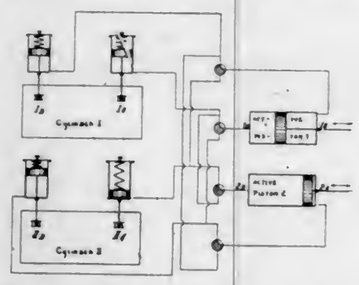
1. An improved railway rail comprising a base portion, said base portion having a longitudinal recess formed along the inner edge thereof whereby to provide an inset locking portion, and a tread section adapted to be mounted on said base portion, said tread section having a depending inwardly extending flange on the inner edge thereof adapted to engage in said longitudinal recess.

1,763,473. HAND-OPERATED WHEEL RAKE. FREDERIC M. MEHL, Fremont, Nebr. Filed Oct. 20, 1928. Serial No. 313,824. 8 Claims. (Cl. 55—10.)



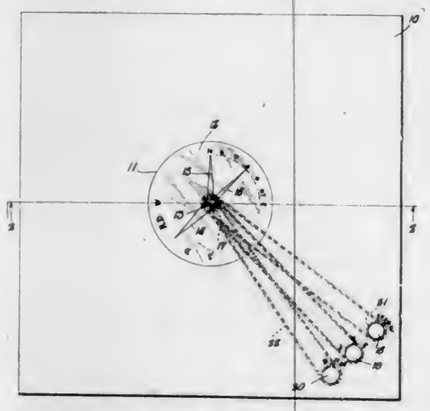
1. In a hand operated wheel rake, a main frame including bottom and rear walls, vertically adjustable wheels supporting said frame, a tooth bar secured to the frame, a handle pivoted to the frame at the lower end thereof, a guide carried by the upper end of the rear wall and a member hingedly connected to said handle and extending through said guide having a stop in spaced relation to the guide and a spring extending between said stop and the guide and constantly urging the rear wall of the frame forwardly to thereby maintain the teeth of said bar in engagement with the ground.

1,763,474. REVERSING GEAR FOR RECIPROCATING ENGINES WITH HYDRAULICALLY-OPERATED VALVES. HEINRICH MAURITS MEIER MATTERN, Jr., Hilversum, Netherlands. Filed Dec. 30, 1926, Serial No. 158,087, and in the Netherlands Dec. 31, 1925. 4 Claims. (Cl. 121—149.)



1. A reversing gear for reciprocating engines comprising a plurality of cylinders, pistons mounted for reciprocation in the cylinders and adapted to be periodically actuated, a second group of cylinders, conduits for connecting said cylinders, a valve for controlling communication between the first mentioned cylinders and the second mentioned cylinders, and adapted to be manually operated, pistons movable in the second group of cylinders, valves connected with the pistons, the first mentioned cylinders and the second mentioned cylinders and conduits being filled with the liquid whereby actuation of the pistons in one direction in the first mentioned cylinders will cause actuation of a piston in the second group of cylinders for operating the valves.

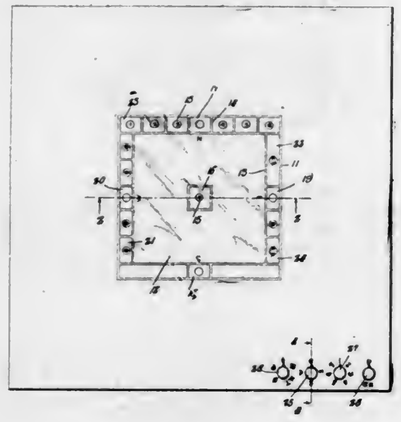
1,763,475. GAME INDICATOR FOR CARD TABLES. JOSEPH W. MORRIS, Tonkawa, Okla. Filed Aug. 27, 1929. Serial No. 388,805. 4 Claims. (Cl. 273—148.)



1. A card table having therein a circular recess, a glass cover for the recess flush with the table top, the margin of the recess having thereon indicating marks, one series of marks indicating north, south, east and west points on the table and thereby indicating the dealer and another series of marks indicating the several bids and having in connection therewith marks indicating the number of any

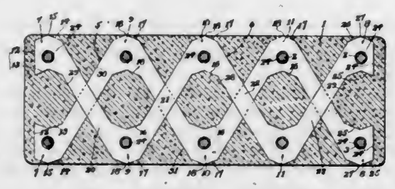
trump which is bid, and indicating marks indicating when the bid is doubled or redoubled, a plurality of pointers rotatably mounted within the recess, one of said pointers being adapted to be turned to indicate the dealer, another pointer being adapted to be turned to indicate the bid made and the number of tricks contracted to be made and the third pointer being shiftable to the indications for doubling or redoubling, and manually operable means remote from the recess and mounted upon the table whereby said pointers may be independently shifted.

1,763,476. CARD-TABLE INDICATOR. JOSEPH W. MORRIS, Tonkawa, Okla. Filed Aug. 27, 1929. Serial No. 388,806. 3 Claims. (Cl. 273—148.)



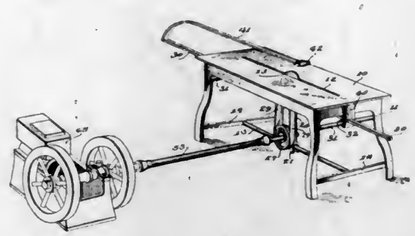
1. A card table having a recess in its face, a glass transparent cover for the recess a plurality of series of electric lamps disposed in the recess, the lamps of one series indicating who should deal, the lamps of another series indicating the several trump suits, the lamps of another series indicating the amount bid, the lamps of another series indicating additional contracts, indicia associated with each of the several lamps and indicating the event to which the lamp relates and independent controlling means for each series of lamps shiftable to energize or deenergize any particular lamp of the series, said controlling means being manually actuatable and being carried by the table but disposed remote from said recess.

1,763,477. CROSSING SLAB. GEORGE B. NAGEL, Columbus, Ohio. Filed June 26, 1928. Serial No. 288,346. 20 Claims. (Cl. 94—12.)



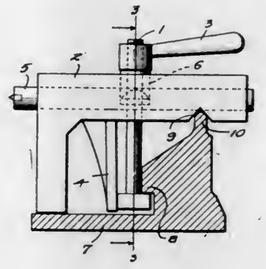
1. A truss member for concrete crossing slabs comprising a one-piece body having oppositely disposed, outwardly directed lateral end parts and oppositely and alternately disposed V portions, each having a terminal formed with an opening, and said body being further provided in each lateral end part with an opening aligning with an opening in a terminal.

1,763,478. SAW TABLE. CLARENCE E. PALMETER, Mount Sterling, Ky. Filed May 10, 1928. Serial No. 276,674. 1 Claim. (Cl. 143—47.)



A saw table comprising a supporting frame, a rod movable longitudinally of the frame, a handle connected to one end of the rod for shifting said rod, bearings for said rod carried by the table, a supporting rod depending from the movable rod and rigidly connected at its upper end to said rod, the supporting rod having a bearing, a countershaft mounted in the bearing, a saw secured to the countershaft, a guide rod located in a vertical plane which passes through the movable rod and the supporting rod and mounted longitudinally on the frame, the lower end of the supporting rod having means engageable with the guide rod aiding in maintaining the supporting rod in a vertical plane, driving means mounted on the lower end of the supporting rod and operatively connected with the countershaft, and means for actuating the driving means.

1,763,479. DIAMOND TOOL HOLDER. ERNEST S. RICHARDSON, Fort Wayne, Ind. Filed Sept. 13, 1927. Serial No. 219,290. 6 Claims. (Cl. 125—11.)

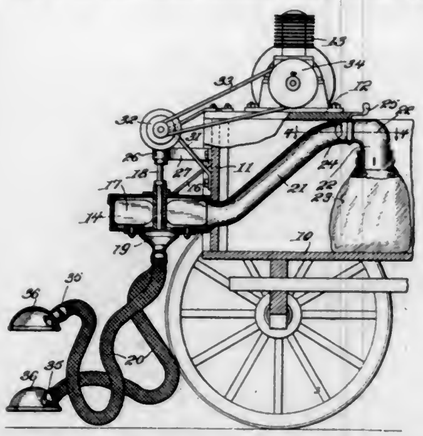


1. A tool holder comprising a block substantially L-shaped in cross section and provided at its under side with an abutment, said block having a passage, a tool bar located in said passage, a sleeve seated in the block and disposed transversely of the passage, a bolt passing through the sleeve and the block and having its head engaging the abutment and a nut screwed upon the bolt and adapted to force the sleeve toward the bar.

1,763,480. COTTON PICKER. THOMAS E. RICE, Des Moines, Iowa. Filed Mar. 3, 1928. Serial No. 258,869. 1 Claim. (Cl. 56—13.)

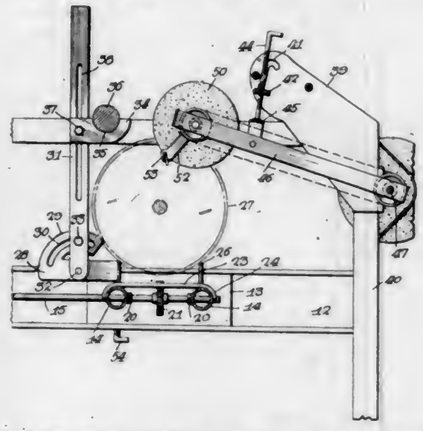
A cotton picker comprising in combination with a wagon box, a suction fan secured to the vertical end wall of the box, a platform upon top of the box, a motor mounted upon the platform, means operatively associating the motor and

fan to drive the latter, a receiving sack disposed within the box, a conveyor conduit extending from the fan casing



through the end of the wagon box to direct the cotton to the receiving sack, a suction tube extending from the fan casing, and a collector cup at the outer end of the tube.

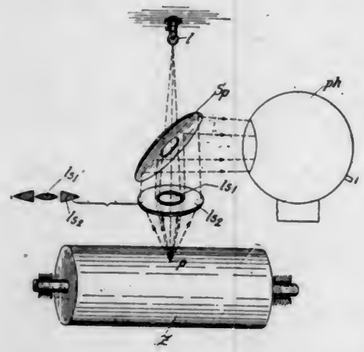
1,763,481. LAWN-MOWER SHARPENER. FRANK SCOTT ROBSON, Basalt, Idaho. Filed Sept. 19, 1928. Serial No. 306,886. 2 Claims. (Cl. 51—92.)



1. A sharpening machine comprising a frame having a line shaft, slides carried thereby, tubular members mounted upon the slides at the ends of the frame, a carriage plate having flanges slidably mounted upon the tubular members, an operating mechanism carried by the tubular members and having connection with the carriage plate to oscillate same across the frame, a sharpening element driven by the line shaft, an adjusting element adapted to regulate tension of the element with relation to the blades of the work, and an arm having a pocket within one end adapted to accommodate said blades whereby the latter may be angularly disposed with relation to said sharpening element.

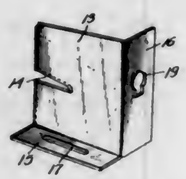
1,763,482. SCANNING DEVICE. WILHELM SCHEPPMANN, Berlin-Tempelhof, Germany, assignor to C. Lorenz Aktiengesellschaft, Berlin-Tempelhof, Germany. Filed May 31, 1929, Serial No. 367,245, and in Germany June 7, 1928. 3 Claims. (Cl. 178—7.)

1. In a picture scanning apparatus, a picture carrier drum, a source of light above the drum, a photo-sensitive cell, a primary lens disposed in the path of the light beam from the light source for condensing the light rays and projecting a spot of light upon the drum, an annular secondary lens surrounding the primary lens and acting to receive and condense the light rays reflected upwardly from the drum and to project such rays convergently



upward therefrom, and a reflector arranged between the source of light and the lenses and having an opening therein to admit passage of the light beam from the source to the primary lens, said reflector being disposed and operating to intercept the reflected light rays from the secondary lens and concentrate the same upon the photosensitive cell.

1,763,483. CONSTRUCTION CLEAT. ROY R. SEWARD and JOHN A. BOOE, Indianapolis, Ind. Filed July 16, 1928. Serial No. 293,049. 3 Claims. (Cl. 25—131.5.)

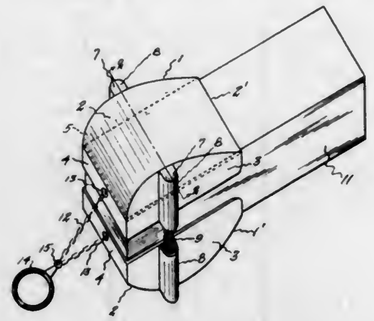


2. The combination of a supporting member having a laterally extending tapered flange, a transverse member mounted in substantially parallel relation to said flange, a second transverse member mounted substantially at right angles to the first transverse member, means for securing said transverse members to said flange comprising a plate having an elongated tapered recess for receiving the flange and for engaging opposite sides of the same to form a tight fit, said plate having oppositely disposed flanges for engagement with the transverse members, and fastening means connecting said flanges and said transverse members and securing them firmly together, substantially as set forth.

1,763,484. TICKET HOLDER. ARTHUR E. SORENSON, Aurora, Nebr. Filed Apr. 23, 1929. Serial No. 357,595. 1 Claim. (Cl. 206—40.5.)

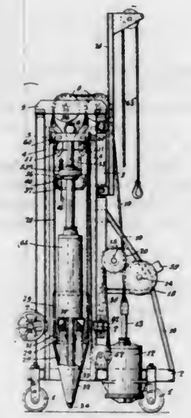
In a ticket holding device of the character described, a pair of oppositely disposed retaining members, each of said retaining members comprising a curved top, side walls and a rear wall, a base plate positioned within each of said retaining members and arranged parallel with the free edges of said walls, the front edge of said base plate coinciding with the front edge of the curved top, a tubular socket rigidly attached to each side wall

of each of said retaining members and open at the bottom, a tension coil spring on each side of said retaining



members and positioned within said tubular sockets, the ends of said coil springs being securely fastened to the top of said tubular sockets.

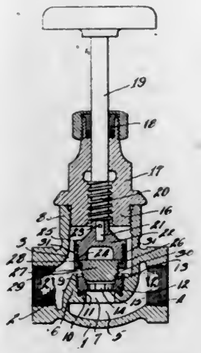
1,763,485. MACHINE FOR LAYING FOUNDATIONS OF STRUCTURES. OTTOKAR STERN, Vienna, Austria. Filed Dec. 17, 1926. Serial No. 155,525. 14 Claims. (Cl. 61—73.)



1. A machine for laying vertical or oblique foundations of buildings, structures and the like, comprising in combination a carriage, vertical posts mounted on the latter, a yoke-bracket adjustably arranged in said posts, a driving member suspended from the yoke-bracket, and a ram operable in the driving member.

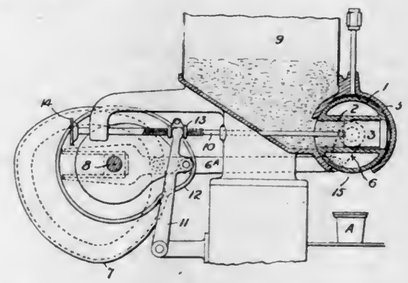
1,763,486. VALVE. LESLIE P. STRONG, Lakewood, Ohio, assignor to The Clark Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed Sept. 24, 1925. Serial No. 58,388. 1 Claim. (Cl. 251—167.)

In a valve adapted to handle steam at high pressures and temperatures, a valve body having a valve opening portion of material having a high coefficient of expansion, and a relatively hard valve seat member having a lesser coefficient of expansion screw-threaded in the opening of said valve body portion, said valve body portion and said seat member having cooperating integral conical portions, that of the valve body extending within that of the valve seat member, said seat member being screwed into the valve body to seat said conical portions one against the other, whereby when the parts are subjected to the temperature of service, the conical portion of the valve body will expand within the corresponding portion of the seat member and force the seat member longitudinally of the opening and its



threads against the valve body threads, to grip and seat the seat member between its threaded and its conical portions, and a more efficient seal will be had between the seat member and body both at the threads and at the conical portions.

1,763,487. VALVE OR CONTROL MECHANISM FOR MACHINES FOR FILLING MATERIALS INTO CONTAINERS. CYRUS TAYLOR, Hartford, Conn. Filed June 30, 1926, Serial No. 119,712, and in Great Britain, May 26, 1926. Renewed Jan. 31, 1930. 1 Claim. (Cl. 221—102.)

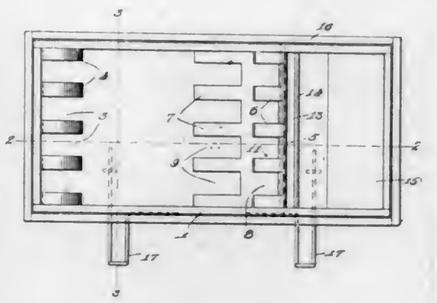


Apparatus of the class described, comprising a reservoir having a discharge opening, a cylindrical casing to which said discharge opening leads, said casing also having a discharge opening, a valve mounted for oscillation in said casing and having a bore extending transversely therethrough, a plunger in said bore, a pair of slidably mounted rods arranged respectively in line with the centers of the discharge openings of the reservoir and casing, means for operating said rods, means for oscillating said valve and a common actuating shaft for said rod operating and said valve oscillating means.

1,763,488. BARBER'S TOOL CHEST. FRED E. TITCOMB, Cleveland, Ohio. Filed Oct. 26, 1928. Serial No. 315,252. 3 Claims. (Cl. 206—16.)

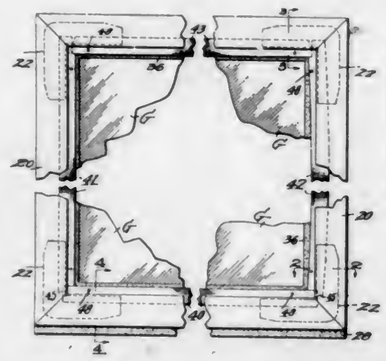
1. A barber's razor chest, comprising a box-like member, an arched plate which is slotted to provide spaced fingers between the notches secured in the box at one end thereof, an angle plate pivoted in the box adjacent to the other end thereof, said angle plate providing an upper and a lower arm, the upper arm of the said plate being

materially less in length than the lower arm and both arms being provided with longitudinal notches in alinement with the notches between the fingers in the ends of the box and the notches in the lower arm extending only



partly thereinto and a flanged cover for the box providing a receptacle for the box when the latter is opened, and slidable article holders movable laterally through one side adjacent the respective ends of the cover.

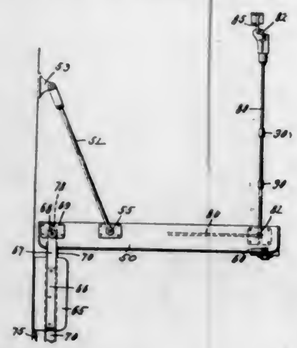
1,763,489. METAL WINDOW SASH. CHARLES H. TURNER, Worcester, Mass., assignor to Osgood Bradley Car Company, Worcester, Mass., a Corporation of Massachusetts. Filed May 11, 1927. Serial No. 190,603. 5 Claims. (Cl. 189—78.)



1. A metal window sash comprising a sash frame having grooves along its inner edges and having inwardly projecting flanges, and locking bars seated in said grooves and effective to hold a glass in position against said flanges, said bars having locking adjustment with each other by which they are mutually retained in glass-holding position, and one of said bars being resilient to permit movement thereof out of locking position.

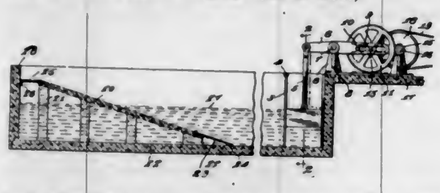
1,763,490. SLEEPING-CAR STRUCTURE. CHARLES H. TURNER, Worcester, Mass., assignor to Osgood Bradley Car Company, Worcester, Mass., a Corporation of Massachusetts. Filed Jan. 3, 1929. Serial No. 330,028. 11 Claims. (Cl. 105—315.)

1. In a sleeping car, a bed frame, a supporting structure, supporting and guiding means connected to said supporting structure and to said frame intermediate the upper and lower edges thereof, counterweighting means



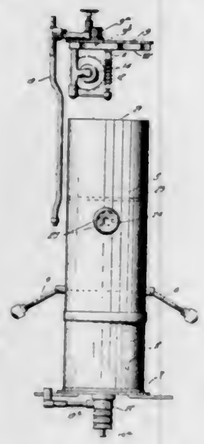
connected to the frame adjacent its lower edge, and means for supporting the outer edge of the frame when it is swung downwardly and outwardly.

1,763,491. WAVE PRODUCER FOR SWIMMING TANKS. WILLIAM VOLTZ, Ridgefield, Wash. Filed Oct. 30, 1929. Serial No. 403,623. 2 Claims. (Cl. 4—178.)



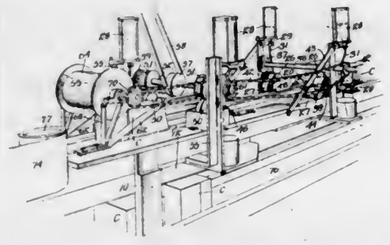
1. A swimming tank having an inclined plane therein and having gratings at the ends thereof, and a vertically movable reciprocatory plunger for agitating the water in the tank and to force the same in wave form over the inclined plane.

1,763,492. BREATHING APPARATUS. JAMES DOUGLAS VOSS, Oakleigh, near Melbourne, Victoria, Australia. Filed May 19, 1927. Serial No. 192,760. 3 Claims. (Cl. 128—142.)



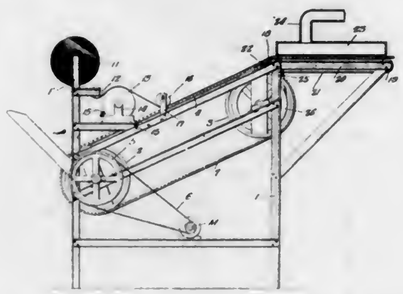
1. Apparatus for the purpose described comprising a casing having means separating it into an oxygen-receiving chamber and a chamber for receiving a purifying canister, closures for said casing, an oxygen regulating device being carried in toto by one closure, a purifying canister carried by the other closure, the latter closure being provided with a discharge nipple for said canister adapted to be connected to a mask, means connecting the discharge of said oxygen regulating device with said nipple, and an inlet intermediate the ends of said casing for admitting poison gases to said canister.

1,763,493. PACKAGE CONVEYING, CLOSING, AND SEALING MACHINE. JAMES R. WYSONG, Richmond, Va., assignor to Larus & Brother Company, Richmond, Va., a Corporation of Virginia. Filed June 15, 1928. Serial No. 285,729. 7 Claims. (Cl. 93—6.)



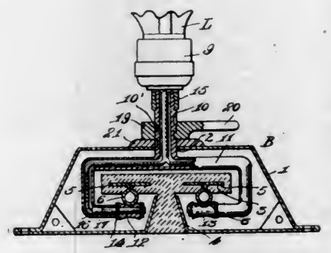
1. A device of the class described, comprising a conveyor adapted to receive cartons to be closed and sealed, a member projecting over the side of the conveyor in a position to engage and open the lower flap, a mucilage roller for applying adhesive to the inner surface of the flap, an inclined tapered strap for closing the lower flap and for guiding the upper flap to open position, a mucilage roller for applying adhesive to the inner surface of the upper flap, a co-operating roller having peripheral flanges at each side for engaging the flap and holding it in engagement with the mucilage roller, an inclined tapered strap for closing the upper flap, and means as the carton is carried along for yieldingly holding the flap closed to permit the adhesive to set, substantially as set forth.

1,763,494. CERAMIC-TILE-MOUNTING MACHINE. LAWRENCE N. YINGER, Zanesville, Ohio. Filed Jan. 14, 1929. Serial No. 332,472. 2 Claims. (Cl. 154—1.)



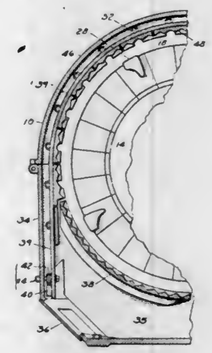
1. An apparatus of the class described comprising a supporting frame, a pair of drums rotatably arranged therein, one drum being arranged at a higher level than the other, an endless belt passing over the drums and having tile receiving recesses therein, chutes for feeding the tiles into the recesses just before the belt passes from the lower drum, means for supporting a rolled strip of paper on the frame, a reservoir containing adhesive on the frame, a roll supported on the frame and extending into the reservoir and over which the strip extends, a presser roll on the frame for pressing the strip after it leaves the adhesive roller on to the tiles, a second endless belt, rollers for the same, means for directing the strip with the tiles thereon from the first belt on to the second belt and means for heating the strip and tiles as it travels along with the second belt.

1,763,495. ADJUSTABLE MOUNTING FOR ELECTRIC BULBS. WILLIAM B. YOUNG, Pulaski, Va. Filed Jan. 21, 1929. Serial No. 333,917. 4 Claims. (Cl. 173—324.)



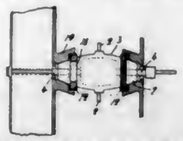
1. A device of the class described comprising a casing having a slot therein, a pair of conductor members in the casing, a tubular stem passing through the slot and having branches on its inner end with parts of the branches engaging the conductor members, a bulb socket on the outer end of the stem and conductors leading from the socket and passing through the stem and its branches and connected with the conductor engaging parts of the branches whereby current will flow to the socket from the conductor members irrespective of the position of the socket and stem in the slot of the casing.

1,763,496. PULVERIZING APPARATUS. L. V. ANDREWS, Worcester, Mass., assignor to Riley Stoker Corporation, Worcester, Mass., a Corporation of Massachusetts. Filed July 5, 1929. Serial No. 376,040. 13 Claims. (Cl. 83—11.)



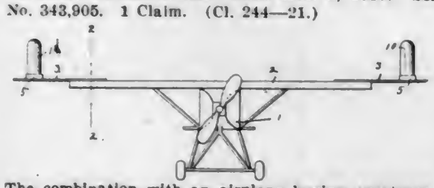
1. A pulverizing apparatus comprising a casing having an inlet for coarse material and an outlet for pulverized material, rotatable pulverizing elements mounted within the casing, a protecting resilient liner for the upper portion of the casing which is spaced therefrom, and means for supporting the liner solely on the lower portion of the casing and independently of the upper portion thereof.

1,763,497. WOODWORKING MACHINE. VILHELM THURE AUBERTIN, Valby, near Copenhagen, Denmark. Filed Dec. 8, 1927, Serial No. 238,693, and in Denmark Dec. 11, 1926. 2 Claims. (Cl. 144—3.)



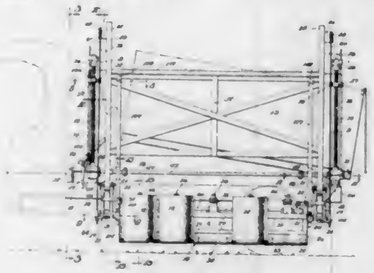
1. In a woodworking machine, a stand, a motor hung for oscillation in said stand and including a shaft which is adapted to bear tools, and a stator having centering and fixing members at the respective ends and work tables having recesses corresponding to the shape of the centering and fixing members and detachably engaged therewith.

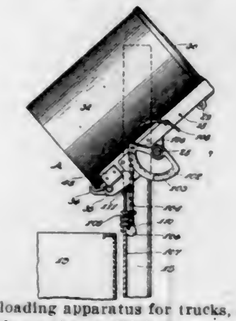
1,763,498. SAFETY DEVICE FOR AIRPLANES. TRIAN BERBECK, Baltimore, Md. Filed Mar. 2, 1929. Serial No. 343,905. 1 Claim. (Cl. 244—21.)



The combination with an airplane having apertures in the wings thereof, a flanged sleeve projecting through each of said apertures a band secured to said sleeve, metal strips having the lower ends secured between said sleeve and band, a pocket for each of said apertures, said pockets surrounding the said metal strips and having their lower ends secured between the said sleeves and band, slides arranged below said apertures and means for operating said slides to open or close the apertures to said pockets.

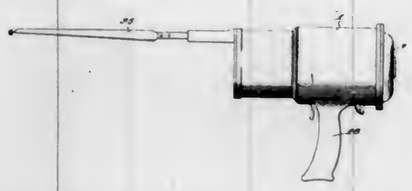
1,763,499. LOADING APPARATUS. ROBERT S. BOLGER, Jamaica, N. Y., assignor to Joseph Amendolara, New York, N. Y. Filed Oct. 27, 1928. Serial No. 315,452. 5 Claims. (Cl. 214—67.)





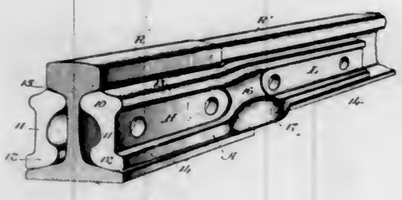
1. In a can loading apparatus for trucks, a pair of rails, vertical movable carriages slidable over said rails, a can carrier journalled for turning movement in said carriages, co-acting means between said carriages and said can-carrier for limiting outward tilting of said can-carrier, and automatic means for tilting said can carrier inwardly upon reaching the limit of its upward movement, said automatic means including segmental members fixedly carried at the ends of said can-carrier, and chains having one of their ends fixedly connected to said segmental members and their other ends provided with hook elements adapted to engage a stationary part in the path of upward movement of the same.

1,763,500. SAW. CHARLES ANTHONY BOWEN, Portsmouth, Ohio. Filed Oct. 31, 1927. Serial No. 230,043. 1 Claim. (Cl. 143—68.)



A saw of the character described comprising a casing, a motor driven plunger rod mounted in said casing for reciprocation and being formed with a bore communicating with a depression at the outer end thereof, a shank mounted in the bore, lugs formed with said shank and being received in notches formed in the depression, a threaded sleeve nut threadedly secured in the depression, a collar on the shank and engageable by the sleeve nut and a saw blade secured to said shank.

1,763,501. COMPROMISE RAIL-JOINT BAR. DANIEL LAWRENCE BRAINE, Brooklyn, N. Y., assignor to The Rail Joint Company, New York, N. Y., a Corporation of New York. Filed June 5, 1929. Serial No. 368,609. 3 Claims. (Cl. 238—167.)

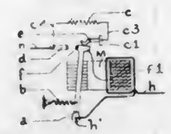


1. A compromise rail joint including the rail, and a bar having a head portion provided at its inner side with a bearing member for engaging the rail head fillet and at its outer side with a longitudinal reinforcing rib, said bar also being provided with a foot portion of toeless formation and having a narrow reinforcing flange longitudinally of the bar and an integral body of reinforcing metal at the outerside of the bar between the inside bolt holes and integrated with the rib of the bar head and with the flange of the bar foot.

1,763,502. EXTRA-RAPID CIRCUIT BREAKER. PAUL JOSEPH BRANCHU, Guerande, France. Filed Apr. 5, 1926, Serial No. 99,935, and in France Apr. 8, 1925. 4 Claims. (Cl. 200—94.)

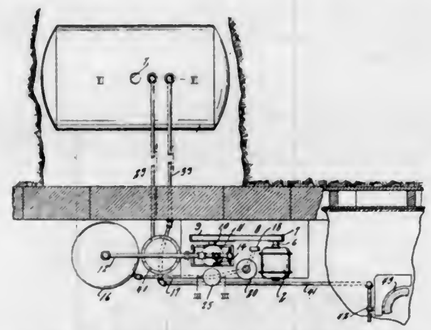
1. In an overload circuit breaker, a controlling electromagnet having a winding in series in the circuit to be controlled, a conducting lever associated with said magnet and connected in series with said winding in said circuit, a

movable contact carried by and conductively connected with said armature lever, a fixed contact engaged by said movable contact upon closing of said circuit, a second fixed



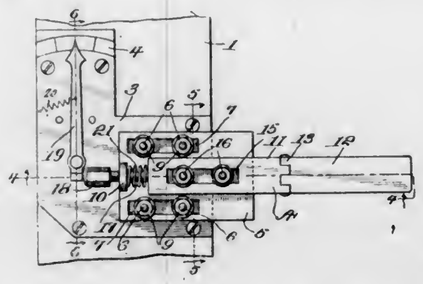
contact over which said lever slides and with which the lever is in constant engagement, and a resistance having its terminals connected respectively to said fixed contacts.

1,763,503. GAS PLANT. AUGUST H. BUERK, Curtice, and HERMAN GSCHWEND, Waterville, Ohio. Filed May 26, 1928. Serial No. 280,940. 4 Claims. (Cl. 261—26.)



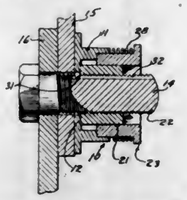
1. A gaseous fuel installation embodying a delivery line, a liquid fuel reservoir from which the line extends, a pressure responsive controller in said line, a pressure air providing reservoir, a line from the pressure air providing reservoir to below liquid fuel level in the fuel reservoir, and a valve in said latter line operable automatically by said controller.

1,763,504. STARTING GAUGE FOR LOOMS. CLEVELAND CAPRIO, Hawley, Pa. Filed Apr. 17, 1929. Serial No. 355,938. 3 Claims. (Cl. 139—1.)



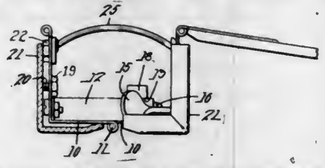
1. A starting gauge for looms comprising a supporting plate of angle shape having a dial adjacent one end of one of its arms, a plate adjustably arranged on the other arm, a slide carried by said other plate, a finger pivoted to the first plate and cooperating with the dial, an adjustable member connected with the slide and engaging the finger for causing movement of the finger by the movement of the slide and a spring on a part of the slide tending to hold the same in its outward position.

1,763,505. SELF-TIGHTENING NUT. MICHAEL J. DUFFY, Brooklyn, N. Y. Filed Sept. 4, 1929. Serial No. 390,337. 4 Claims. (Cl. 85—32.)



1. The combination with a bolt and nut, of a self tightening device comprising a hollow cylindrical body having an internal annular recess and an inwardly extending flange, said inwardly extending flange having a bolt receiving opening, said nut adapted to be threaded on said bolt and against said inwardly extending flange, a cylindrical locking member cooperative with said base, said locking member having a neck portion including an angular open portion to receive said nut in locking relation, said neck portion adapted to enter said base portion and resilient means, effective between said base and said locking member to exert force in the direction of inward rotation of said nut, whereby to maintain the nut tightly in position against unintentional dislodgement.

1,763,506. ACCOUNT BOOK. JOHN A. FARNUM, Worcester, Mass. Filed May 25, 1928. Serial No. 280,564. 4 Claims. (Cl. 129—17.)



1. In a loose leaf account book, the combination with a hinged back of metal, of a non-metallic covering for each half of the back and detachable means for holding the covering on the back, whereby the covering can be removed at will and the metallic parts exposed for adjustment and repair.

1,763,507. AIRCRAFT. CHARLES L. FORTIER, Montreal, Quebec, Canada. Filed Aug. 6, 1928. Serial No. 297,753. 4 Claims. (Cl. 244—12.)

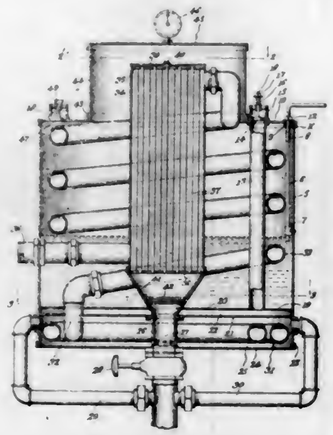


1. In a flying machine, a plurality of superposed sustaining airfoils, a plurality of airfoil sections mounted in longitudinal alignment on the longitudinal side portions of one of said airfoils adapted to deflect air currents inwardly on to the under surface thereof, and a plurality of airfoil sections mounted on the central portion of a second sustaining airfoil adapted to direct air currents downwardly through openings in said airfoil to the under side thereof.

1,763,508. VAPORIZING DEVICE. DANIEL EARL FOWLER, San Antonio, Tex., assignor of one-half to Nettie M. Hawkins, El Paso, Tex. Filed Apr. 12, 1929. Serial No. 354,613. 2 Claims. (Cl. 261—12.)

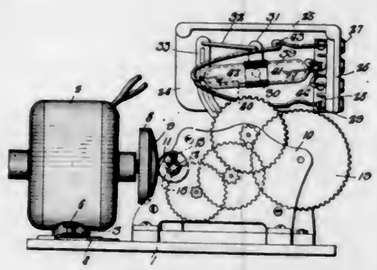
1. In an improved vaporizing device, a generator chamber in communication with sources of liquid fuel and air

supplies, a heater chamber below said generator chamber, an engine intake pipe communicating with the vapor space of the generator chamber and extending through said heater chamber, said engine intake pipe having perforations therein setting up communication between the interior of



the intake pipe and the heater chamber, a valve in the engine pipe below the heater chamber, and a pair of branch pipes connecting with upper zones of the heater chamber at opposite sides thereof, and with the engine intake pipe below said valve.

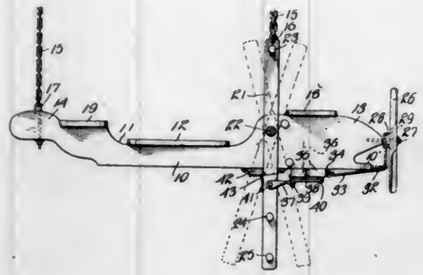
1,763,509. EXPOSURE METER. FRANK M. GATES, Rockford, Ill., assignor of one-third to Walter P. Kelley, Rockford, Ill. Filed May 4, 1929. Serial No. 360,558. 3 Claims. (Cl. 161—1.)



1. In a variable timing meter for the purpose set forth, a motor which is mounted for turning on a support, a friction wheel driven by the motor, means for latching the motor when turned to predetermined positions, a second friction wheel to be engaged by the motor friction wheel, a notched fibre disc turned by the friction wheels, a mercury switch having spaced contacts at the ends thereof which are wired respectively in a lamp circuit and in an alarm circuit, a pivoted support for the mercury switch, a pivoted arm loosely connected with the support and having an offset element to rest on the periphery of the disc and a spring for influencing the element against the disc.

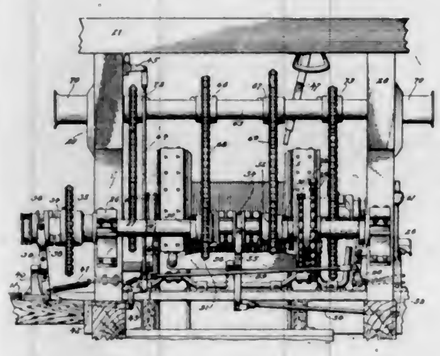
1,763,510. CHILD'S AEROPLANE SWING. HARRY GILL and ORVAL R. PLATTER, North Vernon, Ind. Filed Nov. 5, 1928. Serial No. 317,284. 5 Claims. (Cl. 155—65.)

1. An aeroplane swing comprising an elongated body, means for suspending the body from its ends, a handle, a rotary propeller, a pulley adjacent the propeller and having a ratchet therein adapted to engage the propeller, and a



cable connecting said handle and said pulley whereby operation of the handle will rotate the propeller, substantially as set forth.

1,763,511. TWO-POST THREE-SHAFT DRAW WORKS. EDWIN W. GOESER, Los Ageles, Calif. Filed June 27, 1928. Serial No. 288,714. 8 Claims. (Cl. 255—19.)

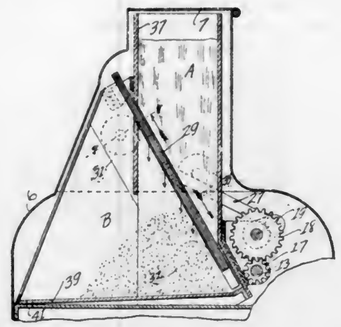


7. In a rotary draw works, a unitary supporting frame comprising uprights, a countershaft mounted in the uprights at the base thereof and adapted to be driven by a prime mover, a line shaft mounted in said uprights higher than and parallel to the countershaft, a drum shaft mounted in said uprights below and parallel to the line shaft, operative connections between the countershaft and line shaft, and between the line shaft and drum shaft, the line shaft and countershaft being on the side of the uprights opposite the drum shaft, the countershaft being extended at one end beyond the supporting frame, and having means mounted on said extension for establishing a driving connection between the countershaft and a rotary table.

1,763,512. ICE-SHAVING MACHINE. ADOLPH ODDIE GOLDSTEIN, Santa Cruz, Calif. Filed Dec. 21, 1928. Serial No. 327,580. 3 Claims. (Cl. 83—62.)

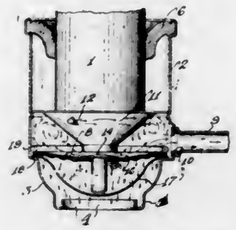
1. In a device of the character described, a base, a housing positioned on said base, an ice receptacle vertically positioned within said housing, a rectangular frame positioned within said housing and extending diagonally through said ice receptacle and forming a support for a

block of ice, means for supporting said frame so that the same may be freely reciprocated and a plurality of scrap-



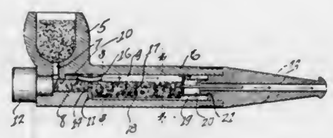
ing elements carried by said frame for the purpose of scraping small paticles of ice from a cake of ice placed in said ice receptacle.

1,763,513. FILTER. ARTHUR V. GULLBORG, Chicago, Ill. Filed Mar. 9, 1928. Serial No. 260,275. 7 Claims. (Cl. 210—82.)



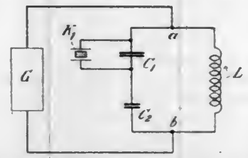
1. In a device of the character described, foraminous means, major and minor means for directing a fluid over said foraminous means, and means normally blocking the action of said major directing means but proportionally responsive to the pressure of said fluid to permit said action.

1.763,514. TOBACCO PIPE. SKÚLI GUNNLAUGSSON, Rio Vista, Calif. Filed Sept. 21, 1927. Serial No. 221,030. 1 Claim. (Cl. 131—12.)



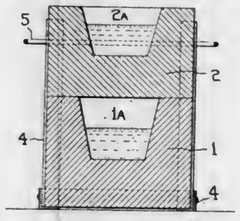
A tobacco pipe comprising a bowl, a barrel having a chamber formed therein and in communication with said bowl, a plug removably secured in one end of said barrel, a centrally bored stem detachably secured in the opposite end of said barrel, a disc mounted in said barrel and positioned in proximity to said bowl, an elongated rod connected to said disc and extending through the bore of said stem, an absorbent removably secured on said rod, a perforated cap connected to said stem and interposed between the same and the absorbent, said cap receiving therethrough the elongated rod, and a tubular member carried by said disc for establishing communication between said bowl and said absorbent and adapted to deposit moisture upon the absorbent in the barrel of said pipe.

1,763,515. PIEZO-ELECTRIC DEVICE. WALTER HAHNEMANN, Berlin-Marienfelde, Germany, assignor to C. Lorenz Aktiengesellschaft, Berlin-Tempelhof, Germany. Filed June 19, 1928, Serial No. 286,571, and in Germany June 24, 1927. 3 Claims. (Cl. 250—36.)



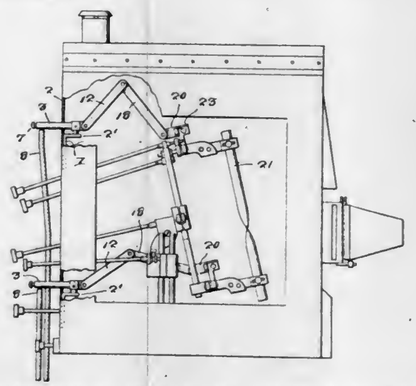
1. A high frequency electric circuit including inductance and capacity elements and carying currents having a frequency determined by said inductance and capacity elements, a piezo-electric crystal device having a natural frequency equal to a frequency to be maintained in said circuit, and placed in parallel relationship to a fractional part of one of said elements so as to be exposed to less than the full voltage of the circuit and adapted to vary its impedance presented to said currents in such a manner as to compensate for variations of said inductance and capacity elements to maintain the natural frequency of said circuit.

1,763,516. HEATING DEVICE. JOHN CHARLES HARRIS and JAMES WOOD, Otiake, New Zealand. Filed May 16, 1929, Serial No. 363,534, and in New Zealand Nov. 2, 1928. 3 Claims. (Cl. 126—59.5.)



1. A heater for the purpose specified, comprising a pair of superimposed porous noninflammable portions, each having a cup-like depression in its upper surface, the cavity or depression in the lower heater portion being closable by means of the bottom or base of the upper heater portion superimposed thereon.

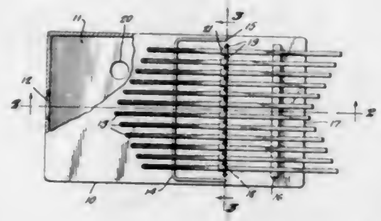
1,763,517. PROJECTOR LAMP. FREDERICK H. HARTWICK and HARRY C. ARNOLD, Columbus, Ohio. Filed Jan. 21, 1924. Serial No. 687,552. 1 Claim. (Cl. 176—103.)



In a supporting device for the carbons of an arc lamp projector, angle brackets secured to a wall of the lamp

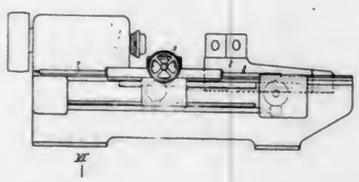
housing of the projector and including horizontal parts, a boss on each of the horizontal parts, a pin rising from each boss, a bar for each pin swiveled thereon, the bars passing through said wall and each having a horizontal bore in the outer end thereof, a screw for each bore for securing a terminal of an electric wire in a hole formed in each bar at right angles to the bores therein, the opposite ends of said bars being flattened, links, spring pressed pivot means connecting the links at one of their ends in pairs, one link of each pair having its opposite end pivoted to the flattened end of one of said bars, brackets at the opposite ends of the other links of the pairs, a boss for each of the second mentioned brackets, studs extending from the bosses and providing pivots between the links and the second mentioned brackets respectively, spring means for the last mentioned pivots, a flange for each of the second mentioned brackets disposed at the outer end thereof, carbon holders, and connecting means between the carbon holders and flanged ends of the second mentioned brackets.

1,763,518. MUSICAL INSTRUMENT. STEPHEN HAWEIS, Washington, D. C. Filed Jan. 3, 1927. Serial No. 158,724. 3 Claims. (Cl. 84—408.)



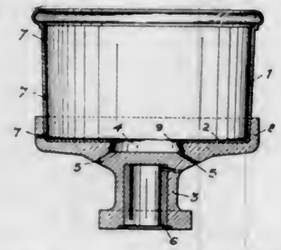
1. A musical instrument comprising a hollow member defining a sound chamber and having an opening therein and a plurality of spaced parallel sound bars mounted upon the member and arranged to produce different musical tones and sleeves mounted for free movement upon the bars.

1,763,519. LATHE WITH CAPSTAN AND CROSS-SLIDE RESTS. WILHELM HEINEMANN, Baden, Germany. Filed Nov. 15, 1927, Serial No. 233,457, and in Germany June 21, 1926. 2 Claims. (Cl. 82—32.)



1. A lathe having a cross-slide, a capstan rest and a bed, prism guides on said bed for the rest, disposed in pairs symmetrically to the lathe axis, the members of each pair being one above the other, and joined, with one common guide surface, the upper half serving for the cross slide and the lower half for the capstan rest, so that the cross slide guards the inner guide, and continuous guard strips carried side by side by said rest, the rest having also continuous guard strips side by side which guard the guides in all positions of the rest.

1,763,520. SPINNING BOWL. JOHANN CARL HENSING, Arnhem, and JAN WILLEM LUBBERHUIZEN, Ede, Netherlands, assignors to Naamlooze Vennootschap Nederlandsche Kunstzijdefabriek, Arnhem, Netherlands. Filed June 5, 1928, Serial No. 283,043, and in the Netherlands Sept. 22, 1927. 4 Claims. (Cl. 118—49.)



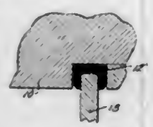
1. A spinning bowl comprising a shell a foot and a base, one of the latter parts having a concentric depression in its upper surface, the depression extending substantially below the upper surface of the said part, the depression being flared outwardly in a downward direction, and liquid discharge openings leading from the base.

1,763,521. FASTENER. GEORGE A. HOLMES, Newton, Mass., assignor, by mesne assignments, to United-Carr Fastener Corporation, Cambridge, Mass., a Corporation of Massachusetts. Filed Jan. 16, 1929. Serial No. 332,955. 5 Claims. (Cl. 24—219.)



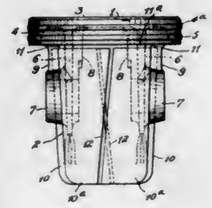
4. A separable fastener member formed from a single piece of metal and comprising a tubular socket receiving portion provided with an apertured head, a neck, a base extending directly inwardly from said neck, a cup shaped attaching portion integral with said base and being of smaller diameter than said tubular socket receiving portion and having a peripheral wall and a hump provided in the bottom of said cup shaped attaching portion prior to attachment of the fastener member to a support, said hump extending toward the aperture in said head and being adapted when pressed axially of the fastener member to laterally expand the peripheral wall of the cup shaped attaching portion for securing the fastener member to a support.

1,763,522. HEAD CONSTRUCTION FOR AUTOMOBILE WINDOWS. HARRY M. HOOD, Chicago, Ill., assignor to Featheredge Rubber Company, Inc., a Corporation of Illinois. Filed May 29, 1928. Serial No. 281,429. 4 Claims. (Cl. 296—44.5.)



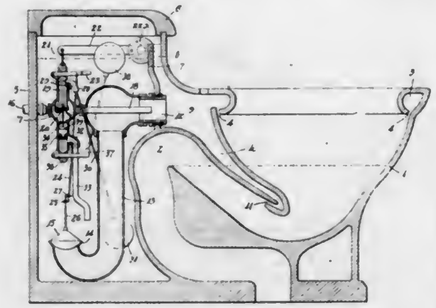
1. In a window construction for automobiles and the like, a relatively thin sash member and a lintel member comprising sponge rubber having in its lower face a channel of different contour from that of the upper edge of the sash member and a compressible portion above such channel so that when the sash member is forced up into the channel and the top thereof compressed, the side edges of the channel will be tilted in to make a seal against the face of the sash member.

1,763,523. PISTON. FRANK JARDINE, Cleveland, Ohio, assignor, by mesne assignments, to The Cleveland Trust Company as trustee, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 11, 1920, Serial No. 364,997. Renewed Mar. 9, 1921. Serial No. 450,898. 12 Claims. (Cl. 74—108.)



1. In a piston for an internal combustion engine, the combination of a head having ring grooves therein, a plurality of webs integral with said head and having diametrically opposite piston pin bosses therein, a skirt integral with said webs relieved adjacent said webs and separated from the head by circumferential slots and provided with a longitudinal slot connecting the lower end of the piston with one of the circumferential slots.

1,763,524. CLOSET. WILLIAM C. H. JOINER, Jr., Camden, N. J. Filed June 13, 1929. Serial No. 370,630. 5 Claims. (Cl. 4—13.)



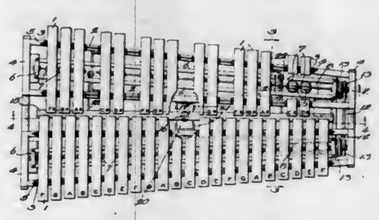
1. A closet comprising a bowl having an inlet cavity, a water tank constructed as a unit with the bowl, said bowl and tank having an upstanding partition between them adjacent to said cavity and forming an overflow passage from the tank into said cavity, and means for discharging water from within the tank into said cavity and communicating through said partition.

1,763,525. MACHINE POSTING BINDER. HARRY S. JONES, Chicago, Ill. Filed July 19, 1923. Serial No. 652,485. 1 Claim. (Cl. 129—12.)



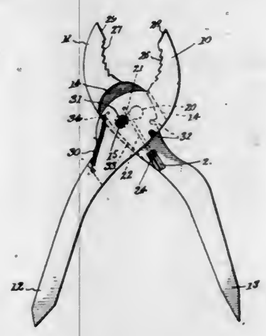
In a loose-leaf binder, a hollow clamping member, a block rotatable in said clamping member, means for limiting the rotation of said block, a flat sided sectional post secured to said block, a second clamping member having an aperture through which said post extends, and a head on said post above said second clamping member for rotating said post.

1,763,526. MUSICAL INSTRUMENT. MARVIN L. JONES, Chicago, Ill., assignor to J. C. Deagan, Inc., Chicago, Ill., a Corporation of Illinois. Filed Dec. 10, 1928. Serial No. 324,976. 2 Claims. (Cl. 84—403.)



1. A musical instrument including a horizontal row of vibrant horizontal bars each adapted, when set into vibration, to produce a tone of a musical scale differing from the tones produced by the others; a unitary sound dampener normally engaging all of said bars and in itself inclusive of a bar extending along the aforesaid row of bars; a frame carrying the aforesaid row of bars; an arm structure pivoted upon said frame and connected with and carrying the bar of the sound dampener; a spring pressing upwardly upon the bar of the sound dampener and means coupled with said bar for moving the sound dampener away from the sound producing bars against the force of the aforesaid spring.

1,763,527. PLIERS. RODNEY JONES, Kenner, La. Filed Nov. 11, 1929. Serial No. 406,468. 3 Claims. (Cl. 81—51.3.)

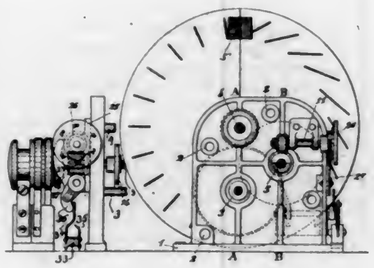


1. An improved pliers comprising a pair of jaws and handles, one of said handles having an elongated slot therein, a fulcrum pin passing through the crossed handles and adapted to engage in one or the other end of said slot, and a locking device mounted in one of the handles and movable into and through the intermediate portion of the slot to confine the pin in the one or other end of said slot.

1,763,528. APPARATUS FOR SELECTING LUMINOUS POINTS OF AN IMAGE FOR REPRODUCTION BY TELEVISION. ETIENNE (known as Stephane) JULIEN BRUN, Lyon, France. Filed Mar. 24, 1927, Serial No. 177,989, and in France Mar. 27, 1926. 8 Claims. (Cl. 178—6.)

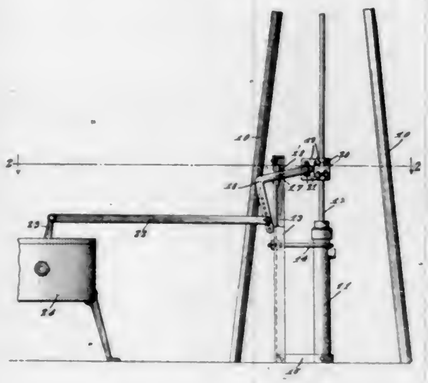
1. An apparatus of the character described comprising a driving shaft, gears carried by said shaft, a pair of discs

each rotated in the same direction by the said gears and adapted to be driven at a different speed with respect to each other, one of said discs having radial slits and the



others having slits formed at an angle substantially 45 degrees with respect to the slits of the first mentioned disc.

1,763,529. WINDMILL POWER FOR WASHING MACHINE. HENRY J. KOENEN, Clara City, Minn. Filed Oct. 29, 1928. Serial No. 315,737. 1 Claim. (Cl. 74—5.)

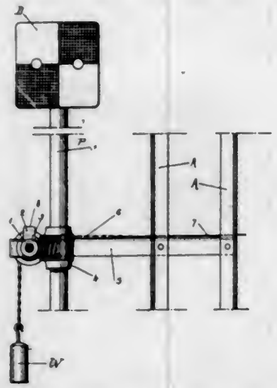


A power take off mechanism comprising in combination spaced standards, a bell crank lever eccentrically mounted for rocking movement between said standards having its ends disposed in vertical and horizontal planes with the vertically disposed end depending, of a reciprocating polishing rod located adjacent one end of a lever, plate members arranged in spaced parallelism upon the opposite sides of the rod and adapted to receive the horizontally disposed end of the lever therebetween, and bolt members passed through the plates adapted for sliding engagement with the opposite side edges of the horizontally disposed end of the lever upon the reciprocating actions of the rod

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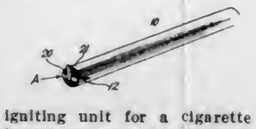
1,763,530. RAILROAD-SIGNAL LOCK. XAVIER LATTY, Paris, France. Filed Mar. 13, 1930, Serial No. 435,608, and in France Jan. 11, 1930. 3 Claims. (Cl. 246—476.)

1. In combination with a railroad signal comprising a disk carried at the top of a rotatable post supported between a pair of brackets, a worm sector on a portion of the disk post, a worm meshing with the worm sector and carried by a transverse spindle, a revoluble member fixedly carried by the spindle, and a flexible member engaging said revoluble member and carrying at one end the usual



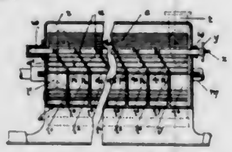
balance weight of the signal while being connected at its opposite end to the transmission member attached to the usual signal operating lever.

1,763,531. SELF-LIGHTING CIGARETTE. HERMAN LEON and JACK WOLF LEON, Atlantic City, N. J. Filed Mar. 15, 1929. Serial No. 347,364. 5 Claims. (Cl. 131—52.)



1. In an igniting unit for a cigarette comprising a combustible element projecting into the body of a cigarette, a flexible strip wound about said element, and a friction substance on said strip for frictional contact with said combustible element when pulled from a wound condition.

1,763,532. REFINING ENGINE. HERMANN MALLICKH, Duren, Rheinland, Germany. Filed May 28, 1928, Serial No. 281,316, and in Germany May 30, 1927. 5 Claims. (Cl. 92—22.)



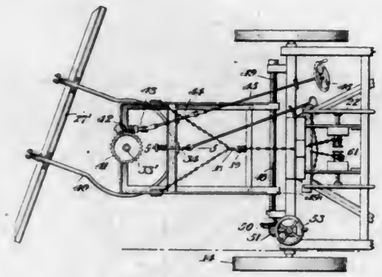
4. In a pulping machine for paper and similar substances the combination of a grinding element having a helical guiding device disposed within the enlarged casing of the apparatus with adjustable deflecting or transporting elements oscillating on bolts, the free ends of said elements being adjustable by means of abutments placed on a horizontally movable rod on the threaded outer end whereof is placed a hand wheel.

1,763,533. PROCESS FOR HARDENING COLLOIDS. ALFRED MILLER, Dessau, Germany, assignor, by mesne assignments, to Agfa Ansco Corporation, Binghamton, N. Y., a Corporation of New York. Filed Feb. 2, 1924, Serial No. 690,325, and in Germany Nov. 27, 1923. 2 Claims. (Cl. 41—41.5.)

1. The process which comprises treating with a solution of an alkali a gelatine layer containing formaldehyde bisulphite.

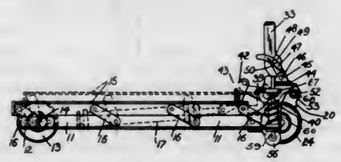
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1,763,534. ROAD PLANER. ANDREW J. MONROE and GEORGE W. MONROE, Arthur, Ill. Filed Sept. 6, 1929. Serial No. 390,774. 4 Claims. (Cl. 37—166.)



1. In a machine of the class described, a main frame, a plurality of diverging blades, a rear transversely extending blade constituting a slicer, a second frame mounting the rear blade, a bar for mounting the second frame for swinging movement at the rear of the frame first named, the swinging frame being slidable along the bar and transversely of the machine, means determining the elevation of the swinging frame, and means for retaining an adjusted position of the swinging frame on said bar.

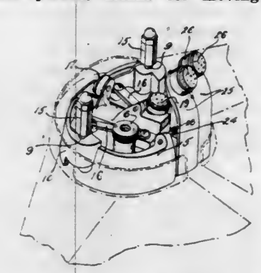
1,763,535. ELEVATING HAND TRUCK. RICHARD NUTTALL, Waverley, near Sydney, New South Wales, Australia. Filed Sept. 18, 1923, Serial No. 663,434, and in Australia Oct. 22, 1922. 6 Claims. (Cl. 254—10.)



1. An elevating hand truck comprising an elevating platform having lugs carried thereby, a fore-carriage head adapted to be connected to the truck, a vertically disposed box provided therewith, an axle revolvably mounted in the base thereof and carrying supporting wheels, a post secured to said axle and extending up through said box, a steering lever hinged to the head of said post, elevating levers medially fulcrumed to said box with their rear ends adapted to engage the lugs of the platform of the truck and their forward ends projecting within said head, a vertically slidable collar on said post and engageable with the forward ends of said elevating levers, and means engageable by said steering lever for downwardly thrusting said collar by depression of said lever, and disengageable from said lever to permit independent ascent of said means and collar.

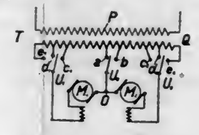
1,763,536. NECKBAND CLAMP FOR PRESSING MACHINES. ROBERT C. PAULY, Cincinnati, Ohio, assignor to The American Laundry Machinery Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Apr. 27, 1928. Serial No. 273,393. 3 Claims. (Cl. 68—9.)

1. In a device of the character described an expansible neckband-receiving form, spring means arranged to yieldably urge said form to expand, a movable member, means associating said member with said form to cause contraction thereof upon movement of said member in one direction, operator-operable means for moving said member



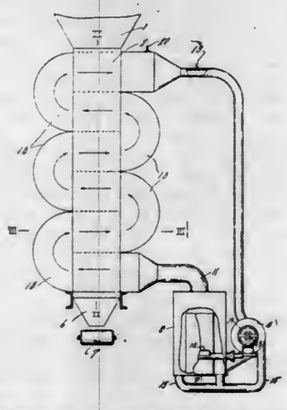
in said direction, clutch means for retaining said member in a position to which it is so moved, and operator-operable means for releasing said clutch means.

1,763,537. CONTROL OF SINGLE-PHASE MOTORS. FRANZ PRANTL, Wettingen, near Baden, Switzerland, assignor to Aktiengesellschaft Brown, Boveri and Cie, Baden, Switzerland. Filed Dec. 16, 1927, Serial No. 240,561, and in Germany Dec. 18, 1926. 3 Claims. (Cl. 172—276.)



1. Control equipment for step-by-step voltage control of two single-phase series comutator motors or groups of motors connected in series including a supply transformer having a primary and a secondary winding, means including a two-way switch connecting the junction between the two motors or groups of motors selectively to the middle point of the secondary winding or to a tapping spaced therefrom by a single voltage step, and means including a pair of multi-way switches for connecting each of the outer terminals of the motors or groups of motors selectively to the respective ends of the secondary winding or to tappings spaced therefrom by steps, each of which is equivalent to two of the said single voltage steps.

1,763,538. STERILIZER. OLIVER W. RANDOLPH, Toledo, Ohio. Filed Mar. 24, 1928. Serial No. 264,515. 3 Claims. (Cl. 34—34.)



1. A temperature controlled apparatus comprising a rectangular vertical way for granular material to be ex-

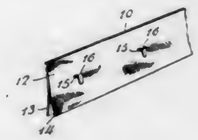
posed to temperature treatment therein, said way having transverse upwardly and downwardly pointed vertically parallel flat sided hexagonal cross section ducts vertically staggered, and return bend connections laterally of said way in two opposing vertically opposite series cooperating with said ducts as the connecting passage in a sinuous vertical course independently of communication with said way, equal pressure being maintained throughout said ducts so as to approximate equal heat transference from the separate ducts throughout the apparatus.

1,763,539. RETORT. WILLIAM F. RIEGER, Salt Lake City, Utah, assignor, by mesne assignments, to The Stoker Matic Corporation, Salt Lake City, Utah, a Corporation of Utah. Filed Aug. 27, 1928. Serial No. 302,310. 5 Claims. (Cl. 122—4.)



1. In a furnace construction of the class described, a retort having a plurality of openings in the walls thereof, an air chamber having its circumscribing wall arranged in spaced relation to the retort walls, and water cooling means projecting into the air chamber from the retort walls, said water cooling means defining water cooled air passages communicating with the openings in the retort walls and constituting cooling means for said openings and walls.

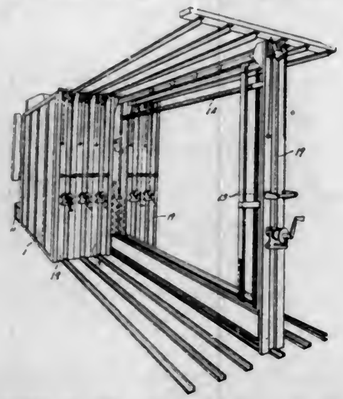
1,763,540. HOOK AND EYE TAPE. LOUIS ROCKE, Brooklyn, N. Y., assignor to Waldes-Koh-I-Noor, Inc., Long Island City, N. Y., a Corporation of New York. Filed Mar. 30, 1927. Serial No. 179,408. 2 Claims. (Cl. 2—265.)



1. A separable fastening device consisting of a tape comprising a single thickness of material having at the lower end thereof a pair of flaps separated from each other at their outer edges and integral with said single thickness at their inner edges, one of said flaps being provided adjacent to its inner edge with a plurality of apertures, said single thickness, flaps and apertures being formed in the weaving of said tape, and a plurality of separable fasteners secured in interlocking engagement with the apertures of said tape, each stamped from a single piece of sheet metal and formed to provide a solid cross bar, and an extension projecting laterally therefrom, said extension being provided with means for being detachably engaged with a co-operating fastener, and said fasteners being secured in interlocking engagement with said tape with said extension projecting through said apertures and with said solid cross bar located between and concealed by said flaps.

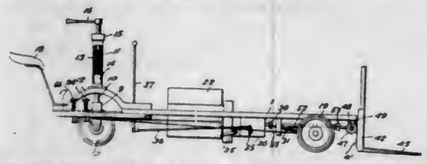
1,763,541. DRY ROOM. JOSEPH B. SANDO, Norwood, Ohio, assignor to The American Laundry Machinery Company, Cincinnati, Ohio, a Corporation of Ohio. Filed May 31, 1927. Serial No. 195,475. 44 Claims. (Cl. 34—40.)

1. Drying apparatus, comprising a drying chamber having an opening, a frame having a work supporting portion movable through said opening into and out of said chamber, and means for automatically closing said chamber opening when the work supporting portion of said



frame is moved through said opening to a position outside of said chamber, said means being provided with through openings for the passage of air when said work supporting frame portion lies within said chamber.

1,763,542. TRUCK. JAKE A. SCHOENBERG and HAZEL A. SANDHOLM, Spokane, Wash. Filed Apr. 16, 1928. Serial No. 270,539. 1 Claim. (Cl. 254—6.)



In combination with a power driven truck, including the frame and power plant thereof, a pair of uprights, a back forming member connecting the uprights together, a platform having its rear edge connected with the lower ends of the uprights, the upper face of the platform sloping forwardly and downwardly, toothed portions on the uprights, means for movably connecting the uprights with the front end of the frame, a transversely arranged shaft journaled in the front part of the frame, sprockets on the ends of said shaft meshing with the toothed portions, a worm on the shaft, a longitudinally extending shaft journaled in the frame, a worm on the front end thereof meshing with the before mentioned worm, means, including clutch means, for driving said longitudinal shaft in either direction from the power plant and manually operated means for shifting the clutch means from a neutral position to either one of two positions to drive said shaft in either one direction or the other.

1,763,543. SHOE ATTACHMENT. ALBERT L. SOTHEN, Chicago, Ill. Filed Dec. 17, 1927. Serial No. 240,893. 1 Claim. (Cl. 36—73.)



In combination with a shoe sole, a metallic stiffening member having openings therein, securing means inserted through said openings for fastening said member to the sole, said member having a formation substantially similar to the sole and having the inner transverse end thereof disposed forwardly of the flexing portion of the sole, said member having ears extending outwardly from said inner end to the flexing portions of the sole and

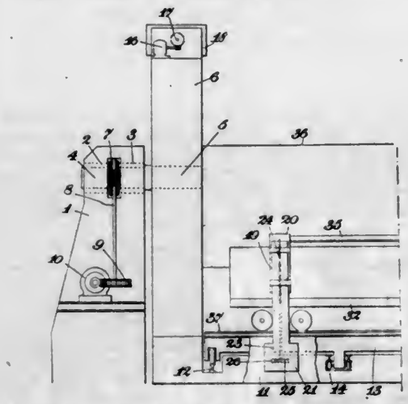
having openings in said ears through which securing elements may be inserted, said member including transversely and longitudinally extending convex formations arranged so that the peaks of said formations will tend to converge at substantially the midpoint of said member, said member having an enlarged opening at said midpoint to remove the portion of said member in which said curved formations would converge.

1,763,544. GASOLINE-DISPENSING DEVICE. JOHN J. TOKHEIM, Cedar Rapids, Iowa. Filed Aug. 10, 1927. Serial No. 212,042. 14 Claims. (Cl. 221—100.)



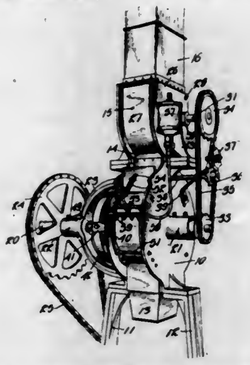
4. A gasoline dispensing device comprising, in combination, a reservoir having liquid supply means and overflow and return means, a dispensing hose, a pump for forcing liquid into the reservoir through the supply means, a pair of valved outlets in the reservoir respectively communicating with the dispensing hose and the return line, and means for operatively connecting and controlling said valved outlets whereby when the outlet connecting with the dispensing hose is closed liquid supplied by the pump to the reservoir will pass therefrom to the return line.

1,763,545. DISCHARGING MEANS FOR OPEN RAILWAY WAGONS. GUSTAW WILLIMEK and WLADYSLAW SKARBEK-KOZIETULSKI, Grudziadz, Poland. Filed May 25, 1928, Serial No. 280,598, and in Poland June 1, 1927. 1 Claim. (Cl. 214—52.)



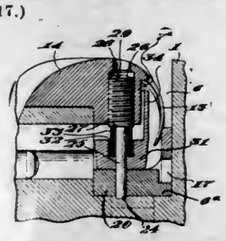
Apparatus for discharging open railway wagons, comprising Z-shaped iron tilting levers each consisting of a normally upright member rotatably supported about its centre and of two horizontal members extending in opposite directions, one from the top and one from the bottom, a bridge secured to the bottom members of the Z-shaped levers for the reception of the wagon to be emptied, counterweights displaceable along the upper horizontal members of the tilting levers to counterbalance the weight of the loaded wagon, worm gearing for displacing the counterweights, further worm gearing for rotating the tilting levers about their fulcrum to empty the wagon, and electric motors for actuating the sets of worm gearing.

1,763,546. TOBACCO MEASURING AND FEEDING DEVICE. JAMES R. WYSONG, Richmond, Va., assignor to Larus & Brother Co., Richmond, Va., a Corporation of Virginia. Filed May 9, 1928. Serial No. 276,455. 7 Claims. (Cl. 131—39.)



1. A device of the class described comprising a housing, a rotary drum in said housing, provided with pockets in its periphery, a trap door in the housing, and moistening pads on the inner side of the trap door for moistening the periphery of the rotary drum, substantially as set forth.

1,763,547. SHUTTLE TENSION. FRED E. ADAMS, Providence, R. I., assignor to U. S. Robbin & Shuttle Company, Providence, R. I., a Corporation of Rhode Island. Filed Apr. 9, 1928. Serial No. 268,508. 10 Claims. (Cl. 139—217.)

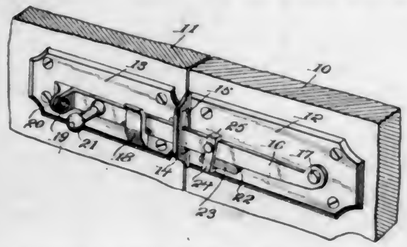


1. In combination with a shuttle eye of self-threading type, a tension device comprising a pair of hard, wear-resistant, relatively movable members adapted to receive a yarn between them, and adjustable means for urging one of said members toward the other whereby to oppose the free movement of the yarn, said members being independent of the shuttle eye and freely removable and replaceable without disturbing the setting of said adjustable means.

1,763,548. DOOR LATCH. WALTER E. ANDERSON, Pocatello, Idaho. Filed Apr. 11, 1928. Serial No. 269,281. 1 Claim. (Cl. 292—195.)

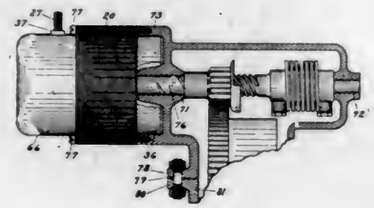
A door fastening comprising companion plates carried upon the adjacent portions of the door members, an

ear offset adjacent the innermost end of one of the plates having an elongated slot, a keeper carried by the other plate, a latch member pivotally mounted upon the first mentioned plate being extended through the elongated slot in the ear and received by said keeper, an L-shaped



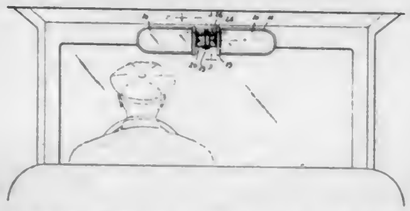
lever extended through one of the doors in the first mentioned plate to engage the lower portion of the latch member, a U-shaped retaining plate eccentrically mounted upon the latch member and engageable at one end with the under side of the L-shaped lever, and an operating handle carried upon the outermost end of the lever.

1,763,549. ELECTRIC STARTING DEVICE FOR INTERNAL-COMBUSTION ENGINES. VINCENT G. APPLE, Dayton, Ohio. Filed Jan. 5, 1928. Serial No. 244,735. 12 Claims. (Cl. 290—48.)



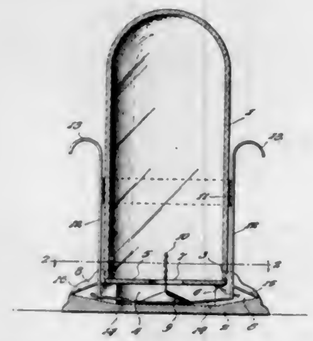
1. In a dynamo electric machine adapted for service on an internal combustion engine, a gear of relatively large diameter secured to a rotatable member of said engine, a pinion of relatively small diameter adapted to engage said gear, a shaft secured to said pinion for rotation therewith, a bracket carrying bearings for said pinion shaft, said shaft extending a short distance beyond the bearing at one end but having no further support, said bracket being so positioned on the frame of said engine as to provide suitable registry of said pinion and gear, a dynamo-electric machine field unit mounted on said bracket in concentric relation to said shaft, and a dynamo electric machine armature securely mounted in overhung fashion on the extended end of said shaft.

1,763,550. ADJUSTABLE REFLECTOR. DORA FAURE BEAUCHAMP, Forest Hills, N. Y. Filed Dec. 21, 1926. Serial No. 156,119. 3 Claims. (Cl. 45—97.)



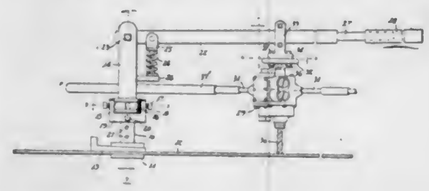
1. A device of the character described comprising two reflectors extending away from one another, supporting means, and U-shaped members having their intermediate portions abutting and pivotally connected on horizontal axes with the adjacent ends of said reflectors and having their arms extending toward one another and hingedly connected on a vertical axis with said supporting means, the opposite ends of the reflectors being free.

1,763,551. SUGAR DISPENSER. EDWIN M. BROWN, Jackson, Mich. Filed June 21, 1927. Serial No. 200,453. 8 Claims. (Cl. 221—98.)



1. A dispenser comprising a base recessed in its top side to provide a chamber having an outlet, a holder detachably mounted upon the base, a partition between the base and holder, and having an opening for the discharge of the contents of the holder into the chamber, a cut off within the chamber, a handle slidably mounted upon the holder, connecting means between the handle and cut-off, and a cover for the outlet of the chamber connected with the handle for movement therewith.

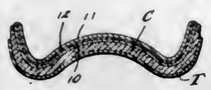
1,763,552. DRILL RIG. JOHN WILLIAM COOK, Miami, Fla. Filed May 5, 1928. Serial No. 275,469. 2 Claims. (Cl. 77—59.)



1. A drill rig comprising a post, means for attaching said post to a sheet or plate to be drilled, a lever, means connecting said lever with the post for the upward and downward and horizontal swinging movements of said lever, and a drill hanger slidable on said lever and adapted to remain in vertical position in a predetermined vertical axis when said lever is swung upwardly and downwardly, said hanger having a rounded fulcrum surface on which the lever may swing and slide when forcing the hanger downwardly by the lever.

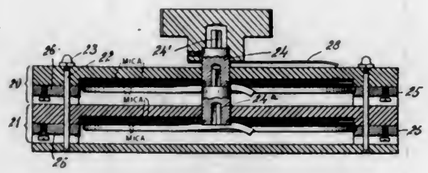
1,763,553. METHOD AND APPARATUS FOR USE IN TAKING IMPRESSIONS OF EDENTULOUS MOUTHS. CHARLES B. DENNIS, Conneaut Lake, Pa. Filed Mar. 21, 1929. Serial No. 348,900. 6 Claims. (Cl. 32—6.)

1. The method of taking impressions of edentulous mouths consisting in forming the usual composition impression, superimposing upon this impression a pair of layers of plastic material having a medium arranged therebetween to facilitate separation thereof, reforming the impression in the layers, removing the outer layer and substituting therefor a substance in a semi-liquid state which hardens as it dries and forming an impression in said substance.



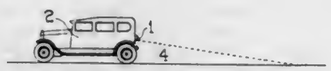
2. As an article of manufacture, a filler for a composition impression comprising upper and lower layers of plastic material and a medium between the layers to prevent them from adhering to each other so as to permit the removal of the upper layer after an impression has been made in the filler.

1,763,554. VARIABLE CONDENSER. WILLIAM DUBILIER, New York, N. Y., assignor to Dubilier Condenser Corporation, a Corporation of Delaware. Filed July 20, 1922. Serial No. 576,235. 14 Claims. (Cl. 175—41.5.)



1. In a variable condenser, a thin fixed electrode element comprising a sheet of metal foil and a sheet of thin mica, a thin rotatable electrode element in superposed relation to said sheet of mica, and means for gently pressing said elements together, said electrode elements being sufficiently flexible so that their adjacent surfaces make contact at substantially all points, the pressure between said electrode elements being insufficient to effect any excessive obstruction to the movement of said rotatable electrode element.

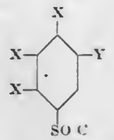
1,763,555. PASSING LIGHT. LILLIE EGLINTON, Featherston, Wellington, New Zealand. Filed June 27, 1928. Serial No. 288,775. 1 Claim. (Cl. 240—7.1.)



A lamp for connection with the rear part of a vehicle for illuminating both sides of a roadway, comprising a casing in the form of an opened bottom hood having a triangular shaped inner wall provided with recesses in the lower edge thereof, a top wall having the opposite portion arranged in divergent relation and secured to the upper edge of the inner wall, and a semi-circular shaped and bulged outer wall outwardly inclined from the top wall, the inner surfaces of the walls acting as a reflector and a bulb mounted in the inner wall, substantially as and for the purposes set forth.

1,763,556. TRI HALOGEN BENZENE SULPHOCHLORIDE AND PROCESS FOR PREPARING THE SAME. RICHARD HERZ, Frankfort-on-the-Main, ERNST RUNNE, Hochst-on-the-Main, and EDUARD ALBRECHT, Fechenheim, near Frankfort-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Mar. 15, 1928, Serial No. 262,031, and in Germany Mar. 18, 1927. 3 Claims. (Cl. 260—158.)

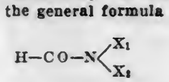
1. As new compounds products corresponding probably to the general formula:



in which formula the X's mean chlorine and Y means hydrogen or an alkyl group, being crystalline powers, which can be saponified to the corresponding sulfonic acids and reduced to the corresponding mercaptan compounds.

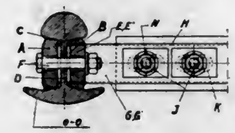
1,763,557. PROCESS FOR INTRODUCING AN ALDEHYDIC GROUP INTO HETEROCYCLIC NITROGEN COMPOUNDS. GEORG KALISCHER and HEINZ SCHEYER, Frankfort-on-the-Main, and KARL KELLER, Mainkur, near Frankfort-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Jan. 30, 1928, Serial No. 250,719, and in Germany Feb. 2, 1927. 2 Claims. (Cl. 260—46.)

1. Process for introducing an aldehydic group into hetrocyclic nitrogen compounds which process comprises acting on hetrocyclic nitrogen compounds in which no hydrogen atom is substituted by an aminogroup in presence of a condensation agent containing chlorine with a formylamino compound of the general formula



wherein X_1 and X_2 represent hydrogen or aryl, or X_1 represents aryl and X_2 represents alkyl.

1,763,558. SECURING RAILS TO HIGH-SPEED SUSPENSION MONORAILWAYS. FRANZ KRUCKENBERG, Heidelberg, Germany. Filed Mar. 5, 1927, Serial No. 173,195, and in Germany Mar. 6, 1926. 7 Claims. (Cl. 104—93.)

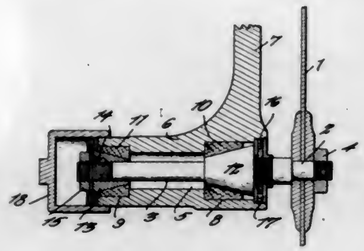


1. A securing arrangement for the rails of high speed suspension mono-railways with upper and lower rail running faces and of the type including rail supporting members and means for securing the rails to said supporting members, characterized in that the wheel loads are transmitted directly from the rail to the rail supporting members in the plane of symmetry of the rail head and foot cross section.

1,763,559. COLTER ATTACHMENT FOR PLOWS. CLARENCE MARCHAL, Plainfield, Ind. Filed June 30, 1926. Serial No. 119,691. 1 Claim. (Cl. 308—9.)

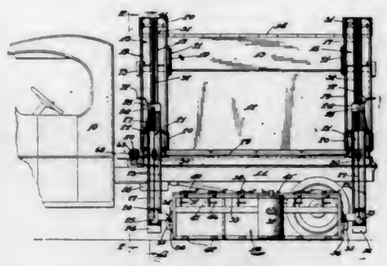
In a colter, a support having a cylindrical bore therethrough with counter bores at the ends thereof, cylindri-

cal wooden bearing member mounted within the counter bores and having frusto-conical openings therein converging toward each other, a shaft extending through the bore and beyond one side of the support, said side of the support having an internal annular shoulder, spaced disks mounted on the projecting end of the shaft, the innermost disk being loosely mounted on the shaft and bearing against said shoulder, absorbent material arranged between the disks, the outermost disk being threaded on the



shaft and acting to adjust the position of said cone, the other end of the shaft being threaded, a cone mounted on the threaded end of the shaft and received by the adjacent bearing member, said last mentioned cone having a key-way slot, a key received by said slot engaging said shaft, and a nut screwed on the threaded end of the shaft to hold the key in position and coacting with the second named cone for adjusting the latter in the bearing.

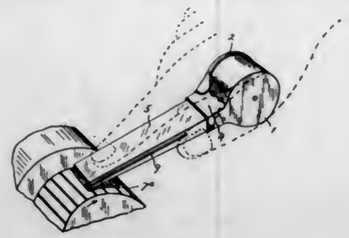
1,763,560. LOADING APPARATUS. JOSEPH A. AMENDOLARA, New York, N. Y. Filed Nov. 26, 1927. Serial No. 235,955. 4 Claims. (Cl. 214—67.)



1. In a loading apparatus, the combination with the body of a truck, stationary vertical tracks mounted on said body in spaced relation, carriages movable over the respective tracks and having pulleys thereon, vertical tracks carried by said carriages and movable therewith, second carriages movable over said last mentioned tracks, a carrier turnably mounted in said last mentioned carriages, lifting and lowering means to which said first carriages are connected, and cables passing over said pulleys on the first mentioned carriages and having their ends respectively connected to said body and to the other carriages.

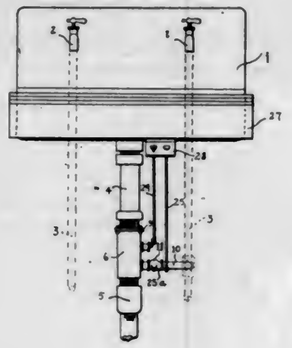
1,763,561. TOOL FOR CLEANING COMMUTATORS. JENTJE MULDER, Detroit, Mich. Filed Apr. 8, 1927. Serial No. 181,938. 5 Claims. (Cl. 51—187.)

1. A tool for pressing an abrasive strip against work, comprising a substantially cup-shaped container for receiving a rolled abrasive strip, an arm mounted at one end upon said container and slotted lengthwise to provide an exit for said strip from said container, the end por-



tion of said strip being adapted to be return bent against the end portion of said arm and to be held by said arm against the work.

1,763,562. DRAIN-PIPE FITTING. JENTJE MULDER, Detroit, Mich. Filed Feb. 15, 1929. Serial No. 340,064. 6 Claims. (Cl. 182—22.)

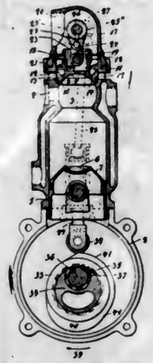


1. In a device of the character described, the combination with a hollow fitting having an inlet and outlet for connection with a drain pipe, of means for delivering a flushing liquid under pressure to said fitting, control means for such liquid delivery, a valve member in said fitting adapted to close said drainage inlet, means for manually actuating said valve member and for holding it in closed position, and means within said fitting for delivering a cleansing compound to the flushing liquid responsive to the pressure of its flow.

1,763,563. VALVE GEAR, PARTICULARLY FOR INTERNAL-COMBUSTION MOTORS. KARL GUSTAF ÖSTBERG, Stockholm, Sweden. Filed Nov. 23, 1926. Serial No. 150,346, and in Sweden Feb. 6, 1926. 12 Claims. (Cl. 123—188.)

1. A valve mechanism adapted particularly for internal combustion motors, characterized by an outwardly open-

ing valve provided with a movable valve seat which is pressed by internal excess pressure against the valve body,



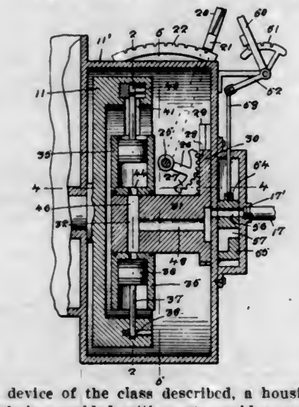
when the latter is kept in the closed position by means of a suitable locking mechanism, said valve seat, in turn, making a tight fit with the surroundings.

1,763,564. ATTACHING MEANS FOR BRAKE-TESTING DEVICES. DABNEY P. OWENS, Lake Worth, Fla. Filed Nov. 1, 1927. Serial No. 230,306. 1 Claim. (Cl. 235—96.)



Means for connecting a brake testing device to a hub cap, comprising a cap-shaped member formed of rubber and having a small open end to fit over the hub cap and frictionally engage the same, the outer end of the member having an opening, inner and outer metal parts fastened to the outer end of the member and covering the opening and means on the outer metal part for supporting a brake testing device.

1,763,565. HYDRAULIC TRANSMISSION MECHANISM. WILLIAM E. PARKER, Philadelphia, Pa. Filed Dec. 21, 1925. Serial No. 76,937. 1 Claim. (Cl. 103—11.)



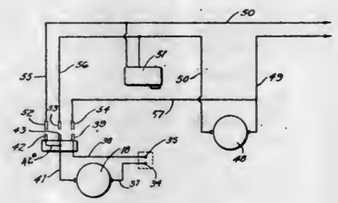
In a device of the class described, a housing one wall of which is provided with ports, guides carried by the inner surface of the wall, a body slidable in the guides and having ports for the distribution of fluid through the ports first named, a plurality of pipes for conducting fluid in opposite directions, a valve casing carried by said wall and in communication with the pipes, and a slide valve operable separately from the body and within the valve casing, this valve having a port for placing the pipes in communication simultaneously with the ports of the body, the valve having other ports for placing the pipes in communication individually with the ports of the body.

1,763,566. COMPOSITE GEAR-SHIFT HANDLE GRIP. JAMES D. PEMBLETON, Pontiac, Mich., assignor to Beck-Frost Corporation, Toledo, Ohio, a Corporation of Ohio. Filed May 2, 1928. Serial No. 274,429. 1 Claim. (Cl. 74—33.)



A gear shift lever grip embodying parallel grain wood elements anchored together to form a block and provided centrally lengthwise of the elements with an opening thereinto, with the joints of the elements distributed about said opening, and a ferrule of greater transverse dimension than said opening press-fit assembled thereinto to provide a mounting for the grip.

1,763,567. AUTOMATICALLY-CONTROLLED ICE-CREAM FREEZER. AARON T. SIMMONS and BEVERLY H. MILES, Bloomington, Ill., assignors to Williams Oil-O-Matic Heating Corporation, Bloomington, Ill., a Corporation of Illinois. Filed May 9, 1928. Serial No. 276,267. 6 Claims. (Cl. 62—114.)

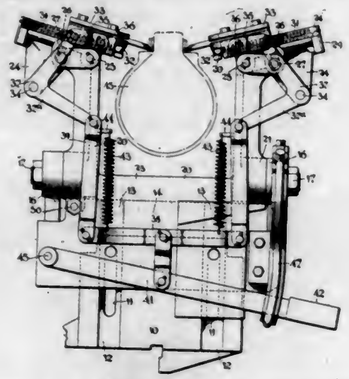


1. The combination with an electrically operated domestic refrigerating unit, including an electric circuit and a thermostat in said circuit to control the operation of the unit motor to maintain a predetermined temperature within the unit, of an electrically operated ice cream freezer ,and means adapted to connect the electric circuit of the freezer upon the insertion of the freezer within the unit.

1,763,568. TRIMMING DEVICE FOR TIRE-BUILDING MACHINES. EDWIN G. TEMPLETON, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Nov. 24, 1925. Serial No. 71,243. 3 Claims. (Cl. 154—10.)

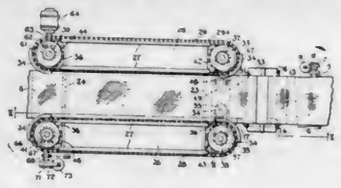
1. The combination with a tire building machine having a rotatable core, of a trimming device comprising up-

standing arms disposed on each side of the core, positively interconnected knife holders slidably disposed upon the



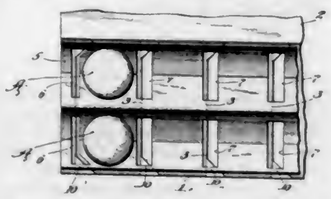
upper ends of the arms and operating means connected to the knife holders simultaneously to actuate them toward the core.

1,763,569. APPARATUS FOR AND METHOD OF TREATING FABRICS. WARD T. VAN ORMAN, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Apr. 16, 1929. Serial No. 355,527. 5 Claims. (Cl. 26—52.)



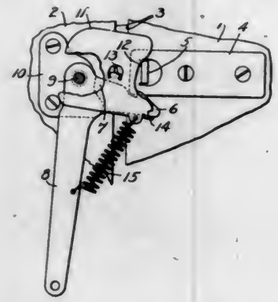
1. A machine for racking fabric comprising tentering chains for simultaneously gripping the marginal portions of the fabric, means for continuously driving one of the chains, and means for producing a continuous relative lag between the driven chain and the other chain.

1,763,570. CUSHIONING MEANS FOR EGG CARTONS. JOHN E. WALSH, Chicago, Ill., assignor to Self Locking Carton Company, a Corporation of Illinois. Filed July 28, 1927. Serial No. 208,901. 2 Claims. (Cl. 229—28.)



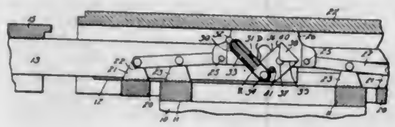
1. The combination with a container having a longitudinal partition and transverse partitions extending across the latter and cooperating therewith to divide the container into two rows of compartments, of a flexible sheet slotted between the ends to permit the portions between the slots to enter the compartments in the container while the ends are supported upon the tops of the transverse partitions, the parts being so proportioned that the portions of the sheet between slots stand clear of the bottom of the container.

1,763,571. TABLE LOCK. FREDERICK B. WALTER, Wabash, Ind., assignor to Walter & Co., Wabash, Ind., a Corporation of Indiana. Filed Feb. 13, 1928. Serial No. 253,883. 3 Claims. (Cl. 45—9.)



1. A latch for extension tables comprising a keeper and a hook relatively bodily movable, said hook being pivotally mounted to permit movement into and out of locking engagement with said keeper, an arm movable with said hook and having a limited movement independently thereof and provided with a cam surface means for urging said cam surface toward said hook and engaging said keeper to move the hook into engagement with the keeper, said cam surface when the hook is moved out of engagement with the keeper being adapted to engage the keeper and move the same relatively to the hook.

1,763,572. EXTENSION TABLE. FREDERICK B. WALTER, Wabash, Ind., assignor to B. Walter & Co., Wabash, Ind., a Corporation of Indiana. Filed Apr. 6, 1929. Serial No. 352,969. 6 Claims. (Cl. 45—113.)

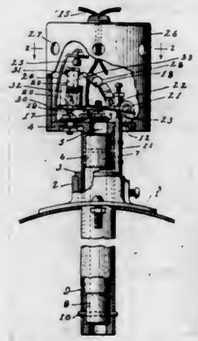


2. An extension table structure of the character specified in claim 1 comprising a cam block pivotally supported on a horizontal axis on the main leaf and provided with two cam surfaces upon opposite sides of said pivot, means connected with said cam block by which it may be shifted to bring one or the other of its cam faces into active position, and means carried by the slide structure for engaging the cam block to produce vertical movements of the leaves in one direction of lateral displacement of the extension leaf and to swing the cam block upon opposite movement of the extension leaf.

1,763,573. THERMOSTATICALLY-ACTUATED ELECTRIC CONTROL. WALTER W. WILLIAMS, Bloomington, Ill., assignor to Williams Oil-O-Matic Heating Corporation, Bloomington, Ill., a Corporation of Illinois. Filed Aug. 3, 1925. Serial No. 47,700. 2 Claims. (Cl. 200—137.)

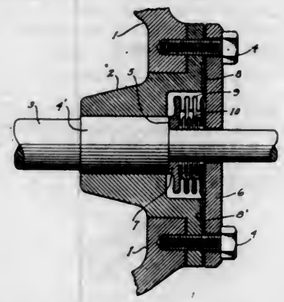
1. A stack control device for electrically operated heating furnaces comprising an electric circuit making and breaking mechanism mounted upon the exterior of the stack having thermostatic actuating members for said mechanism entering the interior of the stack and subjected to the variations of temperature therein, said mechanism comprising a fixed contact, and a moveable contact normally closing the circuit, said moveable contact carried on a

plate having adjustable means adapted to be engaged upon the expansion of a thermostatic member and at a predetermined temperature within the stack be moved to break the circuit, said moveable contact having a slideable engagement with said plate and adjustable means to limit



the movement of said contact with said plate away from said fixed contact and allowing further movement of the plate in that direction, and means causing the contact to always move with the plate in the direction of the fixed contact.

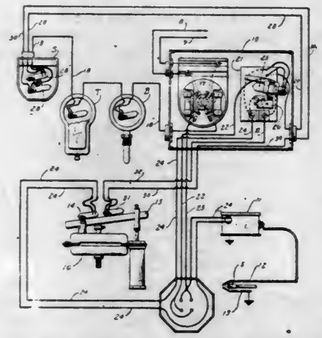
1,763,574. EXPANDING STUFFING BOX. WALTER W. WILLIAMS, Bloomington, Ill., assignor to Williams Oil-O-Matic Heating Corporation, Bloomington, Ill., a Corporation of Illinois. Filed July 27, 1927. Serial No. 208,682. 1 Claim. (Cl. 286—11.)



A stuffing box for a casing having a bearing block, a shouldered shaft mounted for rotation therein, a non-rotatable sealing ring bearing against the shoulder of the shaft, a collar plate secured to the casing, a hollow annular expansible and contractable member comprising two concentric spaced apart bellows interposed between and secured at opposite ends to the sealing ring and collar plate, respectively, and a fluid within said annular member whereby upon rotation of the shaft the heat generated by friction between the fixed ring and rotating shoulder is transmitted to said fluid causing the same to expand and force the ring against the shoulder.

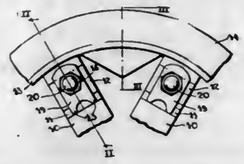
1,763,575. ELECTRIC-CIRCUIT CONTROL. WALTER W. WILLIAMS, Bloomington, Ill., assignor to Williams Oil-O-Matic Heating Corporation, Bloomington, Ill., a Corporation of Illinois. Filed Oct. 28, 1927. Serial No. 229,360. 5 Claims. (Cl. 158—28.)

1. In an electrically-operated liquid fuel burner mechanism including an electrical ignition device, an electric control therefor included in the burner circuit comprising an electrically-actuated safety switch, a room thermostat and a stack safety switch normally adapted upon closing of the room thermostat to operate the burner mechanism for a time predetermined by the electrically-actuated safety switch, an ignition switch normally closing a circuit through an ignition device from the safety switch to the return circuit from the burner mechanism, a normally open burner switch connected on one side of the burner circuit, a second switch in the stack safety normally open, connected on one side to the burner switch and on the



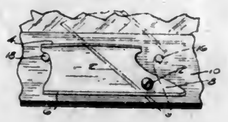
other to the burner circuit and adapted upon establishment of combustion to close the circuit through the burner switch and at the same time open the first switch to exclude the safety switch, and means actuated by operation of the burner mechanism to actuate the ignition switch to break the ignition circuit and to close the burner switch, the normal burner circuit having been broken through the first mentioned stack safety switch upon establishing of combustion.

1,763,576. WHEEL ASSEMBLY. RICHARD S. BURDETTE, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Apr. 7, 1928. Serial No. 268,172. 9 Claims. (Cl. 301—12.)



1. A wheel assembly including a spoke formed with an inclined seat, a rim formed with an inwardly extending projection providing an inclined seat, and a wedging member formed to make line contact with spaced portions of one of the inclined seats and single line contact with the other inclined seat.

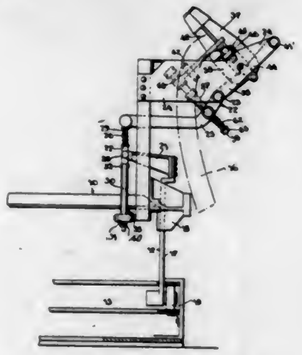
1,763,577. SASH LIFT. HARRY E. CAMPBELL, Baltimore, Md., assignor to Campbell Metal Window Corporation, Baltimore, Md., a Corporation of Maryland. Filed June 18, 1927. Serial No. 199,690. Renewed Oct. 24, 1929. 4 Claims. (Cl. 268—132.)



1. A window-frame comprising a sill, a sash, a sash lift pivoted near one of the ends of the lift on the inside

of the sash and having a cam portion projecting beyond the pivot point adapted to move downwardly to contact with the sill when the lift is pressed upwardly and stop means for limiting the angular movement of the lift so that it cannot move as much as 45° above the horizontal and cannot move substantially below the horizontal, so that the same may be used to move the window both up and down in the usual manner.

1,763,578. DEFLATING MACHINE. WALLACE H. CAMPBELL, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Dec. 15, 1927. Serial No. 240,225. 9 Claims. (Cl. 154—9.)

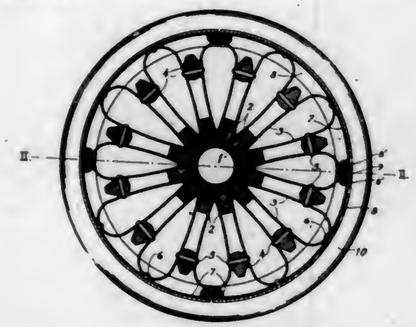


1. A tube deflating apparatus including a frame, a pair of jaws pivotally connected to the frame, said jaws in closed position meeting in a plane oblique to the horizontal.

1,763,579. ANTIOXIDANT OR AGE RETARDER. ALBERT M. CLIFFORD, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Mar. 1, 1928. Serial No. 258,442. 9 Claims. (Cl. 18—50.)

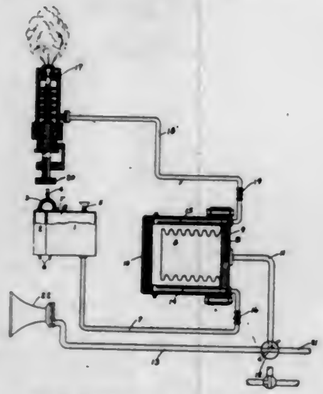
3. A method of treating rubber which comprises incorporating therein the reaction product of a phenyl naphthylamine and an aldehyde, and subjecting the resulting compound to vulcanization.

1,763,580. WHEEL FOR VEHICLES. ANDRÉ GAUTHIER, Villepauche, France. Filed July 31, 1928, Serial No. 296,466, and in France Aug. 1, 1927. 1 Claim. (Cl. 152—29.)



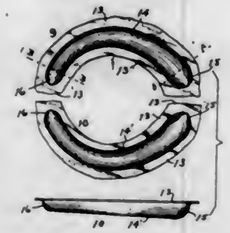
A vehicle wheel, comprising in combination a hub, a plurality of wedge shaped members secured to the hub in encircling relation thereto, a plurality of sheet metal members each bent to form a loop of ovate-acuminate form, the acuminate end of each of said loops being wedged between a pair of said wedge-shaped members, a plurality of felly-forming sections bolted to said loops at their ovate ends, and wedges secured to adjacent loops between the ovate portions of said loops.

1,763,581. SIGNALING SYSTEM. DONALD M. DALTON, Washington, D. C. Filed Nov. 2, 1929. Serial No. 404,383. 8 Claims. (Cl. 116—137.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



1. In a signaling system, a reservoir, a prime mover in communication with the reservoir, a visible medium ejector in communication with the prime mover, a sound producing device, and a source of power for operating the prime mover and sound producing device.

1,763,582. METHOD FOR THE MANUFACTURE OF METAL TUBES. EDWARD J. GULICK, Elkhart, Ind., assignor to C. G. Conn, Ltd., Elkhart, Ind., a Corporation of Indiana. Filed June 29, 1928. Serial No. 289,245. 4 Claims. (Cl. 113—116.)

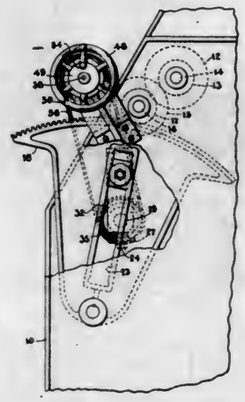


1. In the method of making a tube in halves, the steps consisting of forming a pair of rudimentary blanks of flat ductile sheet metal, then forming cooperating tube half sections of said blanks by applying fluid under pressure to said blanks, then removing the excess stock from the sides and ends of said half sections, and then welding said half sections together at their longitudinal joints.

1,763,583. CONTROL DEVICE FOR SHEET-FEEDING MECHANISMS. JORGEN I. HAASE, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Mar. 23, 1928. Serial No. 264,253. 15 Claims. (Cl. 74—14.)

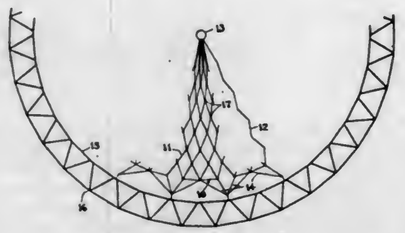
1. In combination, a driving shaft, a crank arm extending therefrom, a threaded rod mounted for rotation within

the arm, a bolt threaded on the rod and slidable with respect to the arm, a beveled gear keyed to the rod, a sprocket wheel loosely mounted on the shaft, a beveled gear secured to the sprocket wheel and meshing with the gear on the rod, an auxiliary shaft rotatably mounted a distance from the driving shaft, sprocket wheels keyed to the two shafts,



a sleeve rotatably mounted in concentric relation to the auxiliary shaft, a sprocket wheel keyed to the sleeve, a driving element trained about the sprocket wheel keyed to the respective shafts, a driving element trained about the loosely mounted sprocket and the sprocket on the sleeve, and means for selectively connecting and disconnecting the sleeve and the auxiliary shaft.

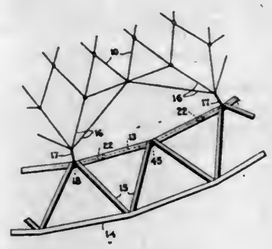
1,763,584. WIRE NETTING FOR AIRSHIPS. PAUL HELMA and KURT BAUCH, Akron, Ohio, assignors to Goodyear-Zeppelin Corporation. Akron, Ohio, a Corporation of Delaware. Filed Mar. 7, 1929. Serial No. 345,035. 4 Claims. (Cl. 244—3.)



1. A bulkhead adapted to be installed in an airship main ring, comprising wires of zig-zag configuration connected to the main ring, adjacent zig-zag wire portions being connected together in uncrossed relation to present a relatively smooth contact surface upon which gas cells are adapted to bulge.

1,763,585. BULKHEAD FOR AIRSHIPS. PAUL HELMA and WOLFGANG B. KLEMPERER, Akron, Ohio, assignors to Goodyear-Zeppelin Corporation, Akron, Ohio, a Corporation of Delaware. Filed May 6, 1929. Serial No. 360,822. 7 Claims. (Cl. 244—3.)

1. In an airship comprising a rigid main ring having circumferential girders, a bulkhead including a netting disposed substantially in the plane of the main ring, resilient means installed within the circumferential girders of the main ring, means connecting the last mentioned

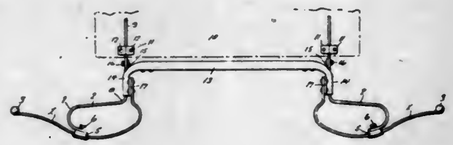


means to the netting for supporting the latter, and means for directing the supporting forces of the netting into a direction substantially circumferentially of the main ring.

1,763,586. GAS CONTAINER FOR AIRCRAFT. KARL HUERTTLE, Akron, Ohio, assignor to Goodyear-Zeppelin Corporation, Akron, Ohio, a Corporation of Delaware. Filed Jan. 27, 1928. Serial No. 250,071. 5 Claims. (Cl. 244—3.)

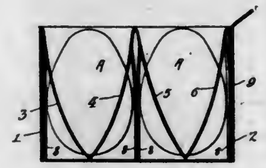
1. A gas cell for lighter-than-aircraft comprising a fabric coated with bakelite.

1,763,587. BUMPER. HERBERT S. JANDUS, Detroit, Mich., assignor to General Spring Bumper Corporation, Detroit, Mich., a Corporation of Michigan. Filed Mar. 25, 1929. Serial No. 349,545. 11 Claims. (Cl. 293—55.)



1. The combination with spaced impact sections and support members therefor, of a channel brace having its end portions curved to form seats for the said support members, and means for clamping said support members to said brace.

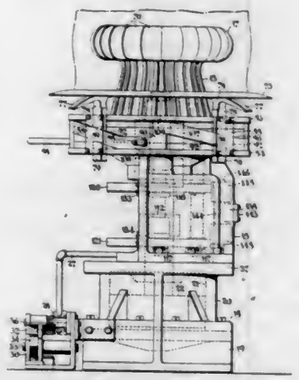
1,763,588. EGG CONTAINER. HARRY C. JOHNSON, Chicago, Ill., assignor to Self Locking Carton Company, a Corporation of Illinois. Filed Mar. 3, 1928. Serial No. 258,749. 1 Claim. (Cl. 229—28.)



An element for supporting eggs in a carton, comprising a blank folded along parallel lines to produce a plurality

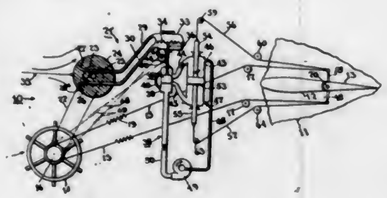
of troughs and supports at opposite sides, each trough having tongues hung at their upper ends cut from the sides of the same, each tongue being opposite a corresponding tongue in the other side of the same trough, and the tongues being of such lengths and being so disposed that they will engage the bottom of the carton when pressed laterally into vertical positions while the element is in a carton.

1,763,589. TIRE-FORMING MACHINE. RAPHAEL S. KIRK, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Nov. 18, 1927. Serial No. 234,130. 13 Claims. (Cl. 154—10.)



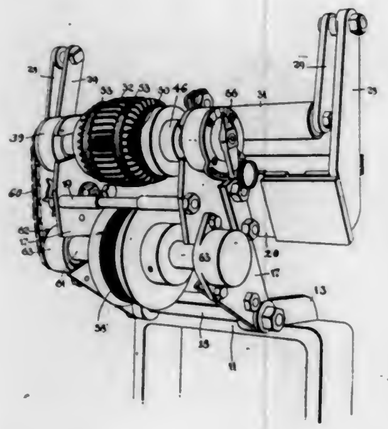
1. A tire shaping machine comprising a horizontally disposed core composed of sections, a pair of parallel links pivoted to each section, means for pivotally supporting the links and means disposed substantially entirely below the plane of the core sections for applying force to the links to cause them to move the sections radially from a common center.

1,763,590. STABILIZING APPARATUS FOR AIRSHIPS. WOLFGANG B. KLEMPERER, Akron, Ohio, assignor to Goodyear-Zeppelin Corporation, Akron, Ohio, a Corporation of Delaware. Filed Apr. 22, 1927. Serial No. 185,837. 2 Claims. (Cl. 244—29.)



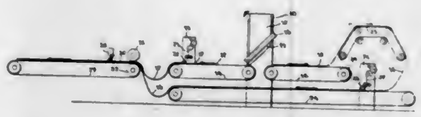
1. The combination with a dirigible airship having a substantially symmetrical stream-lined portion and rudders, of a plurality of Venturi tubes disposed symmetrically adjacent the forward extremity of the stream-lined portion, the axes of the Venturi tubes being substantially parallel to the local tangent of the longitudinal genetratrix of the stream-lined portion, manometric mechanism connected to the Venturi tubes, and a servo-motor connecting said mechanism to the rudders.

1,763,591. FABRIC-SHAPING DEVICE. ELOV F. MAAS, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Dec. 4, 1925. Serial No. 73,222. 19 Claims. (Cl. 154—10.)



1. A shaping device comprising a shaft formed with an eccentric portion and a plurality of resiliently contained means actuated by the eccentric portion and adapted for radial movement.

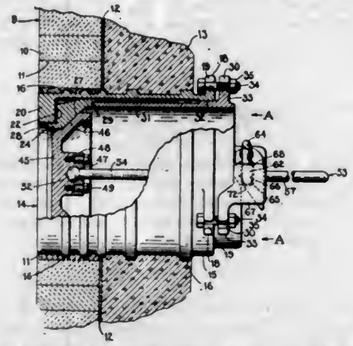
1,763,592. BAND-BUILDING MACHINE. ELOV F. MAAS, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Apr. 9, 1928. Serial No. 268,495. 6 Claims. (Cl. 154—9.)



1. A band building machine comprising an oppositely driven pair of conveyors for transporting in opposite directions from a common source of supply positioned near their adjacent end portions of continuous bands initially assembled thereupon, a conveyor for transporting the band from the delivering end of one of the pair of conveyors, adjacent the delivering end of the other, and means for stitching the two bands together.

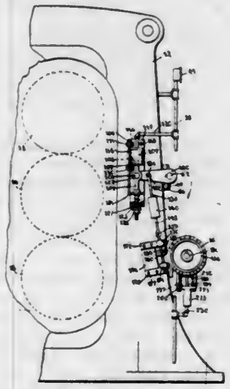
1,763,593. VALVE FOR ACID TANKS. MAX C. NELSON, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Feb. 24, 1928. Serial No. 256,569. 7 Claims. (Cl. 137—21.)

1. A valve comprising a cylindrical body having a flange adjacent one end, a valve seat resting on the flange and having a valve seating surface, a cylindrical member within the body and removably secured thereto in abutting relation with the valve seat, said member on its outer end having diametrically disposed keepers and a latch pivoted to one of the keepers, a valve disc resting against the valve seating surface, a rod connected to the disc and extending to the outer end of the cylindrical member, and a bar secured transversely of the rod and



turnable into locking engagement with the keepers, the latch being operable to prevent accidental reverse movement of the bar from its locked position.

1,763,594. TENSIONING DEVICE FOR FABRICS. MAX C. NELSON, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Sept. 29, 1928. Serial No. 309,243. 11 Claims. (Cl. 271—2.1.)



1. A fabric tensioning device comprising a floating fabric supporting roller, a fluid pressure controlled member connected to the roller, a plurality of rolls resiliently pressed together through which the fabric is conducted, and retarding means associated with one of the last mentioned rolls and operatively connected to the floating roller.

1,763,595. PUMP. FRANK H. PAATSCH, Wauwatosa, Wis., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis., a Corporation of Delaware. Filed Apr. 28, 1928. Serial No. 273,506. 3 Claims. (Cl. 103—115.)

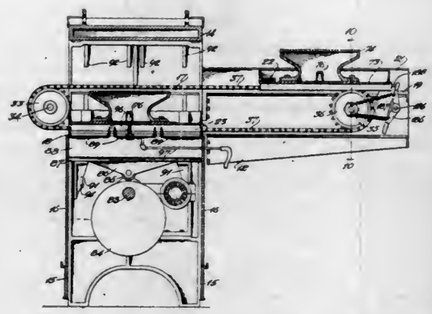


1. A pump impeller comprising, a conical hub, and vanes extending spirally along and about the axis of said hub, the inlet edges of said vanes extending spirally and outwardly away from the smaller end of said hub to provide an unobstructed axial suction opening in advance of the hub apex, and the spiral fluid impelling surfaces of said vanes being laterally inclined relative to said axis adjoining said edges and gradually approaching axial parallelism at the discharge portion thereof.

1,763,596. PROCESS FOR TANNING ANIMAL HIDES WITH SALTS OF IRON. KURT STÜRMER, Pruhlitz, Germany. Filed Feb. 12, 1929, Serial No. 339,497, and in Germany Feb. 18, 1928. 5 Claims. (Cl. 149—5.)

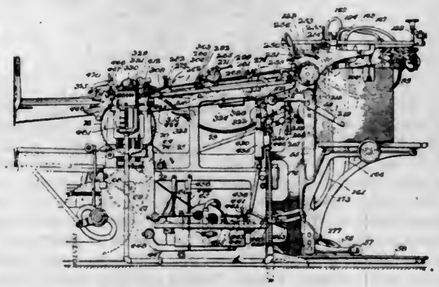
1. Process for tanning animal hides using basic salts of iron, consisting in treating the hides with a solution of divalent salts of iron, then introducing into the solution substantially pure nitric monoxide and then oxidizing the hides.

1,763,597. IRONING MACHINE. CECIL H. BOYULS, Louisville, Ky. Filed July 12, 1928. Serial No. 292,232. 33 Claims. (Cl. 68—9.)



1. In an ironing machine, a frame, a platen fixed on said frame, a plurality of bucks supported on said frame and movable successively to cooperating position relative to said platen and in spaced relation thereto, electrically driven means for moving the bucks into said cooperative position, other electrical driving means for moving the positioned buck toward and from the platen, and switch means controlled by the movements of the bucks for automatically cutting out the first electrical means and cutting in the second electrical means upon the respective buck assuming said cooperative position.

1,763,598. SHEET-FEEDING DEVICE. CARL E. CHRISTOPHEL, Pearl River, N. Y., assignor to Dexter Folder Company, New York, N. Y., a Corporation of New York. Filed Aug. 14, 1924. Serial No. 732,046. 104 Claims. (Cl. 271—31.)



1. In combination, a device to be fed, a sheet feeder connected thereto, a conveyor for progressing the sheets

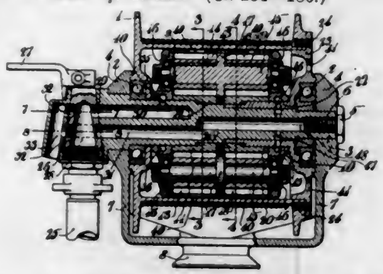
to said device, a forwarder mechanism delivering the sheets to said conveyor at substantially the linear speed of the latter, and slow-down mechanism engaging the front of the sheet as the rear of the sheet passes out of engagement with the conveyor.

1,763,599. COMBINATION WHEEL WITH PISTON-SPRINGS TIRE. CARMELO COLAGIURI, Houston, Tex. Filed Feb. 11, 1929. Serial No. 339,181. 2 Claims. (Cl. 152—31.)



1. A wheel comprising a pair of discs, having their central portions depressed inward in abutting engagement with one another and their outer portions in spaced parallel relation, said spaced parallel portions defining an annular chamber, hub plates engaging the outer faces of the depressed portions having axial hub sleeves in alignment with openings formed in the discs, fastening elements extending through the depressed portions of the discs and hub plates, pairs of inner and outer rings having registering openings arranged between the outer portions of the discs and provided with flanges engaging the inner faces of the discs, fastening elements extending through the flanges and discs, spring-pressed rods slidable in said aligning openings in the rings, and cushioning blocks carried by the outer ends of the rods.

1,763,600. HOISTING MECHANISM. GEORGE H. GILMAN, Claremont, N. H., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed Oct. 22, 1919, Serial No. 332,519. Renewed Oct. 16, 1929. 30 Claims. (Cl. 254—186.)



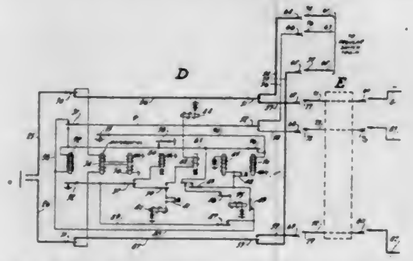
1. In a hoist, a shaft, a winding drum rotatably mounted thereon, a reversible pressure fluid motor comprising compound motor and reduction gearing carried on said shaft and housed within said drum, means for supplying pressure fluid to said motor to act on the teeth of said motor and reduction gearing means for exhausting fluid from said motor, said supply and exhaust means including passages disposed within said shaft substantially axially of said drum, means for reversing said motor and drum including a reversible controlling valve carried at one end of said shaft, means for holding one of said gears against rotation, and means connecting another of said gears in operative driving relation with said drum.

1,763,601. ROOFING AND METHOD OF MAKING SAME. LESTER KIRSCHBRAUN, Leonia, N. J., assignor, by mesne assignments, to The Patent and Licensing Corporation, Boston, Mass., a Corporation of Massachusetts. Filed Oct. 20, 1926. Serial No. 142,820. 25 Claims. (Cl. 108—7.)



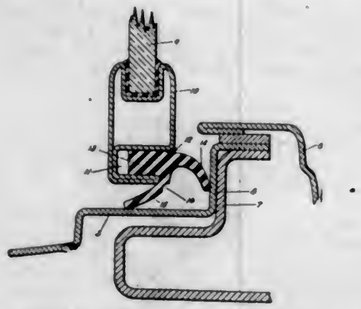
1. The method which comprises applying and adhesively uniting granular surfacing material to a face of a flexible sheet of roofing material, folding said sheet intermediate its edges so as to bring portions of said granular surfaced face into opposed relationship.

1,763,602. TELEPHONE SYSTEM. CLARENCE E. LOMAX, Chicago, Ill., assignor, by mesne assignments, to Automatic Electric Inc., Chicago, Ill., a Corporation of Delaware. Filed Aug. 3, 1925, Serial No. 47,730. Renewed Feb. 21, 1929. 24 Claims. (Cl. 179—27.)



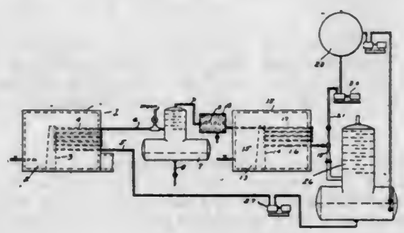
11. In a telephone system, calling stations of two classes, an automatic switch common to both classes accessible thereto, said switch having access to called stations over two different paths, one of said paths being predetermined for serving calling stations of one class and adapted to establish a talking connection between a calling and a called station only if said called station is idle, said other path being predetermined for serving calling stations of the other class and adapted to establish a talking connection regardless of the idle or busy conditions of a called station, and means in said switch for effecting the switching operations in accordance to the class of a calling station.

1,763,603. WINDSHIELD WEATHER STRIP. DENNIS A. DONAHUE, South Bend, Ind., assignor to The Studebaker Corporation, South Bend, Ind., a Corporation of New Jersey. Filed Jan. 9, 1929. Serial No. 331,221. 7 Claims. (Cl. 296—93.)



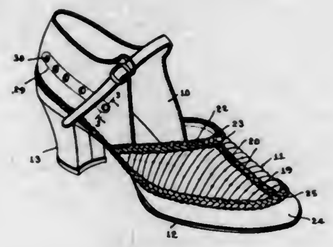
7. A weather strip comprising, a body portion, a curved member extending longitudinally of one side of said body portion, and a second member extending longitudinally of said body portion normally substantially perpendicular thereto, said second member having a recess extending longitudinally thereof to permit flexure of said member in a direction toward said body portion.

1,763,604. VACUUM SYSTEM OF OIL CONVERSION. AUDLEY E. HARNSBERGER, Chicago, Ill., assignor to The Pure Oil Company, Chicago, Ill., a Corporation of Ohio. Filed May 31, 1928. Serial No. 281,785. 5 Claims. (Cl. 196—61.)



1. The process of converting high boiling point hydrocarbons into those of lower boiling point, which comprises heating the oil initially introduced into the process to a temperature sufficiently high to convert the same from its normally liquid to a substantially dry vaporous state, then subjecting the vapors to temperatures in excess of approximately 1,000° F., maintaining the vapors at such latter temperature for a period of time sufficient to effect desired conversion reactions, and then forcing the vapors through a restricted conduit together with a liquid jet of cooler oil for the purpose of abruptly lowering the temperature of the vapors to a point not in excess of 600° F. and to produce sub-atmospheric pressures in the conversion zone.

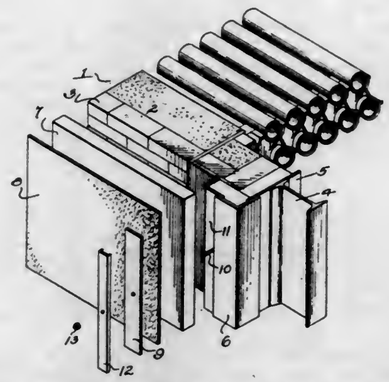
1,763,605. SHOE. DAVID I. HASKELL, Brookline, Mass. Filed Nov. 9, 1929. Serial No. 406,045. 5 Claims. (Cl. 36—3.)



1. A shoe having a vamp having a slotted zone comprising a plurality of transversely disposed parallel strips, said zone being disposed entirely within and spaced from the border line of the vamp, and tape affixed to said vamp on the periphery of said zone and surrounding said zone, said tape being spaced from the sole of the shoe.

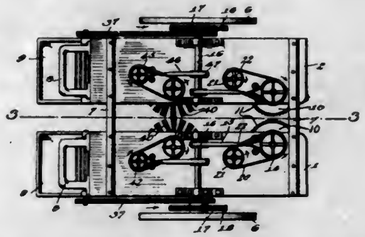
1,763,606. REPLACEABLE WALL STRUCTURE FOR FURNACES. DANIEL E. SULLIVAN, Evanston, Ill., assignor to The Pure Oil Company, Chicago, Ill., a Corporation of Ohio. Filed Feb. 16, 1928. Serial No. 254,834. 4 Claims. (Cl. 72—16.)

1. A wall structure for furnaces and the like having an inner wall formed from a heat resisting refractory material, removable and sectional pre-formed panels of heat insulating material applied directly to the outer surface of said inner refractory wall, a plurality of weather-proof sheets applied to the outer surface of said



panels, a plurality of metallic strips arranged to cover the meeting edges between said panels and sheets, and removable threaded devices connecting the said strips for drawing said strips into clamping engagement with said sheets and panels.

1,763,607. COTTON HARVESTER. JULIAN EDGAR WATKINS, Navasota, Tex. Filed Oct. 11, 1924. Serial No. 743,116. 1 Claim. (Cl. 56—48.)

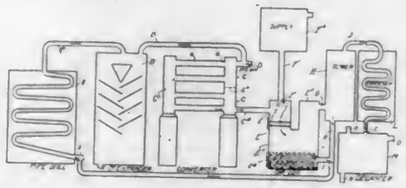


A cotton harvester comprising a pair of spaced casings providing a path for the plants, wheels supporting the casings, a shaft rotatably mounted in each casing and provided with a plurality of spaced radial fingers projecting from the shaft and into the path between the casings, said fingers at diametrically opposite points thereof being equipped with brushes, a second shaft in each casing provided with a plurality of spaced discs having brushes on the opposite faces thereof, each of said brush-equipped fingers being adapted to pick the cotton from the branches of the plants, groups of the fingers being located in spaced horizontal planes and arranged to project between pairs of the brush equipped discs, said fingers adapted to be revolved between a pair of said discs, so that the revolving brushes will remove the lint from the brush-equipped fingers, and means operatively connecting the shafts with the wheels, whereby the shafts will be revolved when the casings are forced along a row of cotton plants.

1,763,608. APPARATUS FOR TREATING HYDROCARBON OILS. JOSEPH B. WEAVER, Chicago, Ill., assignor, by mesne assignments, to Gyro Process Company, a Corporation of Michigan. Filed June 15, 1925. Serial No. 37,243. 5 Claims. (Cl. 196—61.)

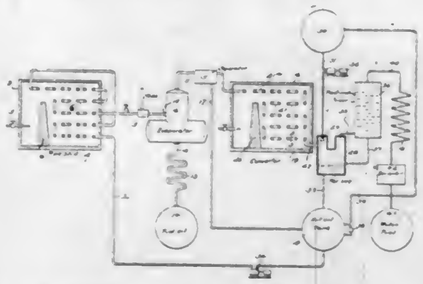
2. In an apparatus for cracking hydrocarbon oil in the vapor phase, the combination with a pipe still, means for

passing oil through said pipe still and therein subjecting the oil to temperatures sufficiently high to effect vaporization of a portion thereof without substantially cracking the same, an expander arranged to receive the entire body of the oil released from said pipe still and serving to separate the liquid and vaporous fractions of the oil discharged from said still, separate outlets for removing from said expander the liquid and vaporous fractions of the oil, a converter through which the vaporized fractions of the oil alone are passed, means for heating the oil vapor passing through said converter to a temperature in



excess of 1000° F., a cooler situated directly at the outlet of said converters, means disposed immediately adjacent to the position of entry of the vapors for introducing liquid oil into said cooler and into intimate contact with the oil vapors discharged from said converter to effect a quick reduction in the temperature of said vapors to a temperature not in excess of 600° F. precluding the liberation of free carbon, means for passing the liquid oil from said cooler to said pipe still, and means for fractionating and condensing the vapors released from said cooler.

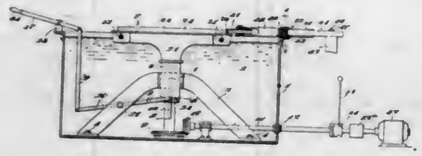
1,763,609. PROCESS OF TREATING HYDROCARBON OILS. JOSEPH B. WEAVER and RODOLPHE STAHL, Toledo, Ohio, and CARY R. WAGNER, Chicago, Ill., assignors to Gyro Process Company, Detroit, Mich., a Corporation of Michigan. Filed June 6, 1927. Serial No. 196,884. 21 Claims. (Cl. 196—61.)



1. The process of converting hydrocarbon oil which comprises heating the oil to temperatures sufficient to convert the same from its normally liquid to a dry vapor state but without cracking, then abruptly and substantially instantly raising the temperature of the oil vapors to cracking temperatures in excess of approximately 1000° F., and immediately upon completing the cracking in the vapor phase abruptly arresting the cracking reactions by instantaneously cooling the cracked products to a critical temperature less than approximately 600° F. to substantially eliminate the formation of free carbon.

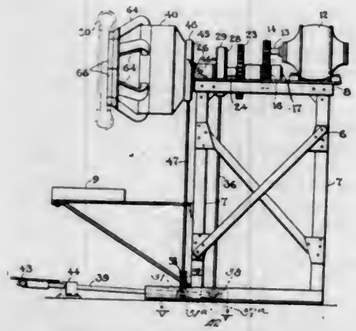
1,763,610. SPRING FORMING AND HARDENING DEVICE. ADOLPH D. BACH, Newtonville, Mass. Filed Aug. 9, 1927. Serial No. 211,738. 12 Claims. (Cl. 266—6.)

1. A spring forming and hardening machine comprising a tank for containing a hardening liquid, a relatively rotatable forming table mounted above the surface of the liquid in the tank, means to rotate the table in a plane parallel to the surface of the liquid, means to raise and lower the table, means adjacent to the periphery



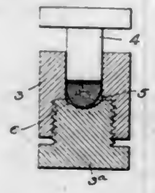
of the table for engagement with the entering end of a work strip, and automatic means cooperating with the table for bending the strip about the periphery thereof and for retaining it in position thereon while in the tank.

1,763,611. TIRE-LINING APPARATUS. HAROLD M. BROWN, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Feb. 9, 1929. Serial No. 338,836. 8 Claims. (Cl. 91—60.)



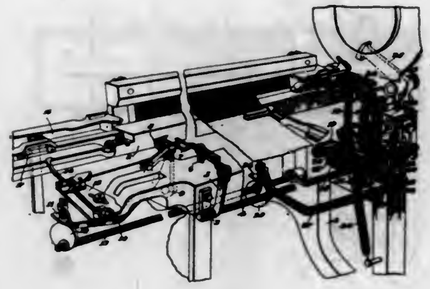
6. A tire lining machine comprising a driven shaft, a chuck rotatably mounted upon the shaft, outwardly movable racks radially arranged within the chuck, tire bead engaging jaws supported by the racks, actuating gears engaging the racks, and a worm provided upon the shaft for engaging and actuating the gear.

1,763,612. CUE TIP. JAMES B. CROOKSTON, Pittsburgh, Pa. Filed Sept. 17, 1921. Serial No. 501,494. 14 Claims. (Cl. 273—70.)



1. The method of producing cue tips, which consists in taking a blank of suitable material, having a continuously curved playing surface and a flat bottom, and by compression sufficient to produce the desired density of playing surface forming the same into a finished cue tip of less convexity of playing surface with a base portion above the flat bottom.

1,763,613. LOOM. HARRY A. DAVIS, Hopedale, Mass., assignor to Draper Corporation, Hopedale, Mass., a Corporation of Maine. Filed Aug. 6, 1929. Serial No. 383,846. 14 Claims. (Cl. 139—231.)



1. In a loom, the combination of a filling detector for indicating a fault in the filling conditions, a shuttle feeler to feel for the shuttle and determine if it is properly boxed, means connected to the shuttle feeler for moving it to feeling position, an actuator for said means normally disconnected therefrom, and devices for connecting said means to its actuator on detection of a filling fault that the shuttle feeler may be moved to its feeling position by the actuator and be prevented from engagement with the shuttle during its picking movement.

1,763,614. COP SKEWER FOR LOOM SHUTTLES. FREDRIC E. DOUGLAS, Hopedale, Mass., assignor to Draper Corporation, Hopedale, Mass., a Corporation of Maine. Filed May 14, 1928. Serial No. 277,452. 5 Claims. (Cl. 242—120.)



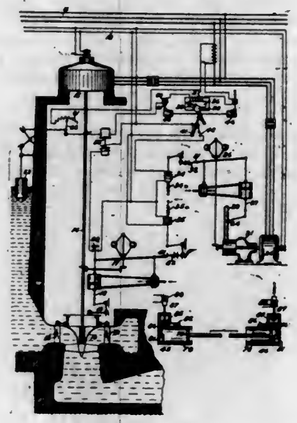
3. A metallic cop skewer spindle provided with a head for detachable engagement with a shuttle and having a cop holding barrel provided with two separate spirals arranged side by side longitudinally of the skewer so that the exposed interior windings of the previously wound cop shall not be displaced as the wound cop is forced longitudinally upon the cop skewer.

1,763,615. AGE-RESISTING RUBBER COMPOSITION AND METHOD OF PREPARING SAME. HAROLD W. ELLEY, Wilmington, Del. Filed May 29, 1929. Serial No. 367,134. 14 Claims. (Cl. 18—50.)

9. A rubber product that has been vulcanized in the presence of tolyl naphthylamine.

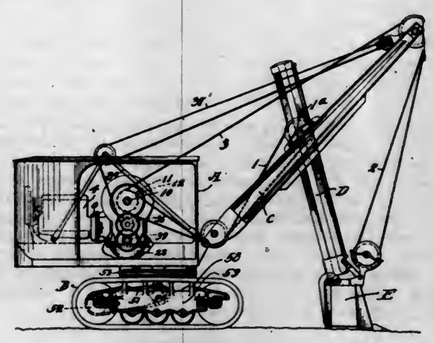
1,763,616. POWER SYSTEM. JOHN J. KANE, Milwaukee, Wis., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis., a Corporation of Delaware. Filed Apr. 23, 1923. Serial No. 633,898. 19 Claims. (Cl. 290—4.)

12. A dynamo-electric power installation, comprising a prime mover, regulating means for controlling the supply of energy to said prime mover to insure its operation at a definite controlled speed to supply a load variable between approximately zero and a maximum limiting value, automatically operative means for limiting the maximum load on said prime mover to said limiting value, and means



responsive to a condition attendant upon the operation of said installation for varying said load limiting value while permitting operation of said prime mover at said controlled speed.

1,763,617. WORM-DRIVE CRANE. ERICH H. LICHTENBERG, Milwaukee, Wis., assignor to Koehring Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed June 25, 1928. Serial No. 288,159. 21 Claims. (Cl. 214—132.)



1. In a crane, in combination, a base, a crane body thereon, excavating means carried by the crane body, and operating machinery on the crane body for the excavating means, comprising an engine on the body, a worm shaft and worm being directly connected to said engine, drum mechanism for the excavating means, and driving connections between the worm aforesaid and said drum mechanism.

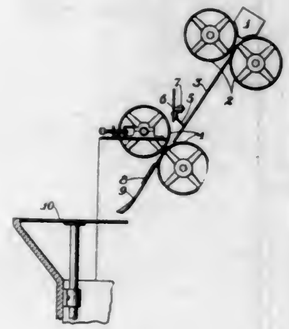
1,763,618. LINER AND METHOD OF TREATING THE SAME. LORIN B. SEBRELL, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Original application filed Apr. 6, 1927, Serial No. 181,605. Divided and this application filed Sept. 16, 1927. Serial No. 220,061. 1 Claim. (Cl. 154—50.)

A unit consisting of plies of rubberized material alternating with plies of liner material treated with nitrocellulose containing dibutyl phthalate.

1,763,619. METHOD OF VULCANIZING CAOUTCHOUC AND THE PRODUCT DERIVED THEREFROM. LORIN B. SEBRELL, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Original application filed Sept. 13, 1927, Serial No. 219,365. Divided and this application filed June 12, 1928. Serial No. 284,888. 11 Claims. (Cl. 18—53.)

2. A method of treating rubber which comprises heating a vulcanizable rubber compound containing a reaction product of mercaptobenzothiazole with ethylidene aniline.

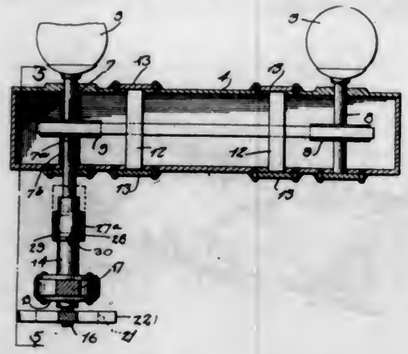
1,763,620. MACHINE FOR FORMING BUNS AND THE LIKE. FRANK J. WOLFARTH and WILLIAM W. DUANT, Saginaw, Mich.; said Duant assignor to said Wolfarth. Filed May 16, 1929. Serial No. 363,528. 3 Claims. (Cl. 107—12.)



3. In a dough forming machine including a pair of initial rolls and a pair of final rolls connected by an inclined apron, adjustable stop means interposed between said two pairs of rolls and located with relation to the apron so as to engage the edge of a piece of dough sliding down the apron from the first set of rolls to the second set, whereby to rotate the moving dough piece in its own plane and thereby cause it to present itself to the final pair of rolls for rolling in a different direction, an inclined apron whose discharge end is slightly tilted, and a traveling conveyor beneath said discharge end.

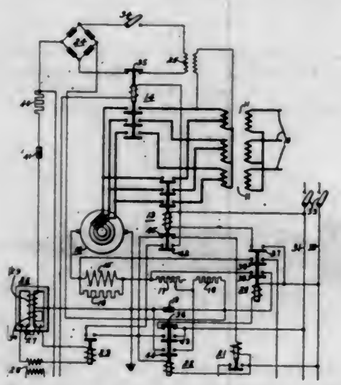
1,763,621. DIRIGIBLE HEADLIGHT FOR AUTOMOBILES. JOHN JAROSZ, Central Falls, R. I., assignor of one-third to Romuald Hull, Central Falls, R. I., and of one-third to John A. Pikor, Central Falls, R. I. Filed Dec. 31, 1928. Serial No. 329,637. 1 Claim. (Cl. 240—62.)

A dirigible headlight mechanism for automobiles comprising a casing secured to the body part of the vehicle, a pair of lamp holding posts rotatably mounted in said casing, one of said posts extending vertically through and below said casing, a tubular member mounted on the axle of the vehicle, in which said extending post has its bearing means for interlocking said extension, and said bearing, and for disconnecting the same, said tubular member being operatively connected with the steering mechanism of the vehicle, said downwardly extended post and tubular bearing being formed with transverse slots adapted to be brought into coincidence, a key insertable in said slots to interlock said post and bearing member and a slidable and rotatable sleeve embracing said bearing member and preventing dislodgement of said key, the said sleeve having



a flange at its lower end, notched for the passage of the head of the key, the said tubular member being formed with a flange to limit the movement of the sleeve vertically.

1,763,622. CONVERTER POLARIZING SYSTEM. CHARLES P. WEST, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed June 16, 1928. Serial No. 286,021. 11 Claims. (Cl. 171—118.)



1. An automatic station comprising a rotary converter, provided with a field winding, a rectifier adapted to be connected in series with said field winding and the converter commutator during the starting of the converter, means for applying reduced voltage to the converter armature, an independent source of direct current adapted to be temporarily connected to said field winding, a relay, an alternating-current source, an iron-core reactor having an alternating-current winding connected in series with said relay to said alternating-current source, a direct-current winding on said reactor connected to the converter commutator for causing the operation of said relay, and switches controlled by said relay for transferring the converter armature from low voltage to normal voltage.

1,763,623. CONNECTER FOR ELECTRICAL CONDUCTORS. PAUL F. WILLIAMS, Chicago, Ill., assignor to G & W Electric Specialty Co., Chicago, Ill., a Corporation of Illinois. Filed Jan. 8, 1921. Serial No. 435,818. 13 Claims. (Cl. 173—353.)

1. The combination with an outer casing and a conductor terminal arranged therein, of means for preventing

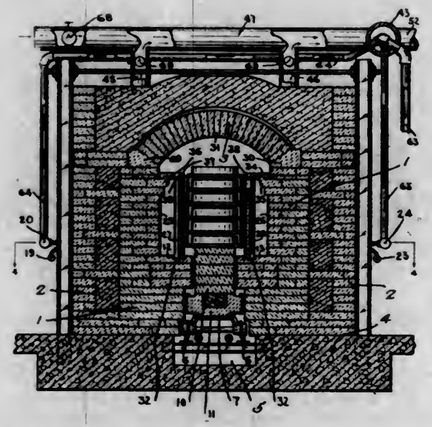
rotation on the part of the terminal relatively to the casing comprising a removable member surrounding and engaging the terminal and extending along the wall of the casing and engaging the same, said member and terminal having cooperating abutments to prevent rotation on the part of the terminal.



8. A device of the class specified, having in combination a tubular base member having an interiorly arranged downwardly facing shoulder, a terminal in said base member having outwardly extending projections provided with upwardly facing shoulders adapted to cooperate with the shoulder on the tubular casing, a ring surrounding said terminal above said shoulders, said ring having a polygonally shaped aperture and the adjacent portion of the terminal having a correspondingly formed polygonal portion to cooperate with said ring to prevent rotation of said terminal, and means for holding said ring against rotation.

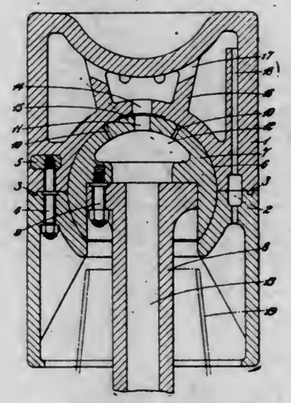
11. In a device of the class specified the combination with plug and socket terminals of an arcing member comprising an annular ring forming the outer end portion of said socket terminal.

1,763,624. TUNNEL KILN. THURE LARSSON, Worcester, Mass., assignor to Norton Company, Worcester, Mass., a Corporation of Massachusetts. Filed Mar. 26, 1928. Serial No. 264,667. 18 Claims. (Cl. 25—142.)



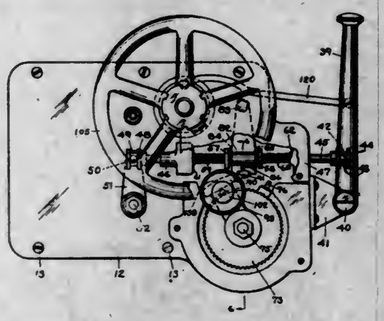
1. A tunnel kiln comprising a combustion chamber, a burner associated with the chamber, conduits for conducting fuel and air to the burner, a heat exchange device independent of the kiln for preheating the air delivered to the burner, means for withdrawing the products of combustion from the combustion chamber and delivering them to the heat exchange device, an exit flue for said products of combustion leading from said device, and means for mixing a cooler gas with the products of combustion before they enter the exit flue.

1,763,625. PISTON FOR INTERNAL COMBUSTION ENGINES. GEORGE ARTHUR MELLOR, Welling, England, assignor of one-half to The General Electric Company Limited, London, England. Filed Apr. 10, 1928, Serial No. 268,936, and in Great Britain Apr. 21, 1927. 3 Claims. (Cl. 123—176.)



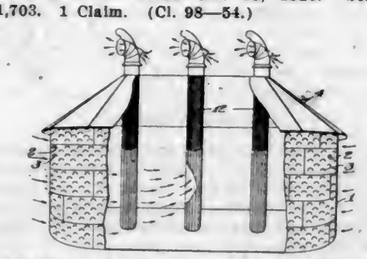
1. In an internal combustion engine, a piston adapted to be cooled by circulating oil therethrough, comprising a member provided with a spherically shaped recess, in combination with a connecting rod having a hollow spherical head engaging with said recess, an oil chamber beneath the piston head, means for supplying cooling oil to said chamber through said hollow head, and an unobstructed outlet passage for the cooling oil from said chamber to provide for free circulation of the oil.

1,763,626. FEEDING MECHANISM FOR GRINDING MACHINES. GEORGE H. SMITH, Worcester, Mass., assignor to Norton Company, Worcester, Mass., a Corporation of Massachusetts. Filed July 26, 1928. Serial No. 295,397. 15 Claims. (Cl. 51—165.)



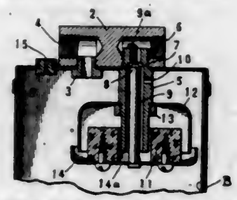
1. A feeding mechanism for a grinding machine wheel slide comprising a feed screw, a nut engaging said screw and operatively connected to the wheel slide, a power mechanism to rotate the feed screw and feed the wheel continuously towards the work and automatic means to positively disconnect the power mechanism when the slide has reached any predetermined position.

1,763,627. CORNCRIB OR THE LIKE. CARL OBERLIN, Mansfield, Ohio. Filed Oct. 15, 1926. Serial No. 141,703. 1 Claim. (Cl. 98—54.)



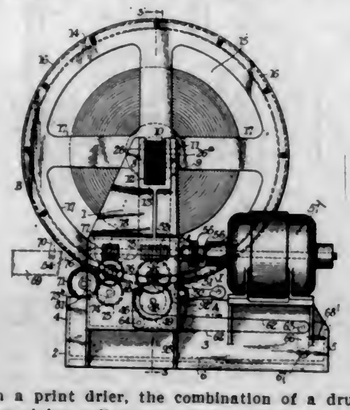
In a sheet metal crib for storage of grain or the like, a body having a series of ventilating openings formed around the body, means for partially closing the ventilating openings, ventilating means composed of wood positioned in the center of the crib and spaced apart to absorb moisture and condense same, the ventilating means permitting air to enter, means for holding the absorbent material together, said ventilating means comprising a plurality of vertical slats positioned in spaced apart relation at the bottom thereof, the spaces being closed at the top by a plurality of slats from a point substantially adjacent to the horizontal plane of the eave of the crib and extending to the apex of the roof of the crib and auxiliary ventilating means secured thereto.

1,763,628. FUEL-FEEDING APPARATUS. JOSEPH C. COULOMBE, Kokomo, Ind. Filed Mar. 5, 1925. Serial No. 13,223. 24 Claims. (Cl. 103—236.)



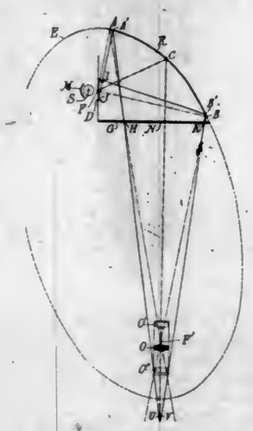
1. In a fuel feeding apparatus, an operating chamber having a liquid supply connection, a suction connection, a constantly open atmospheric port, a discharge connection, a controlled valve for the discharge connection, a controlling valve for the suction connection, a float and an hydraulic chamber co-operatively acting with the float for said valve.

1,763,629. PHOTOGRAPHIC PRINT DRIER. ROY S. HOPKINS, Rochester, N. Y. Filed May 14, 1927. Serial No. 191,486. 15 Claims. (Cl. 34—4.)



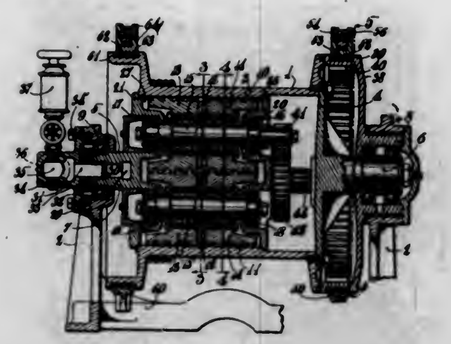
3. In a print drier, the combination of a drum, of a drum revolving roller contacting with the periphery of the drum, and means for feeding prints to the drum including a belt, said belt being free from contact with said drum and having contact with the drum revolving roller, whereby both the drum and the print-feeding belt may be moved through the drum-revolving roller.

1,763,630. PHOTOGRAPHIC PRINTER. ROY S. HOPKINS, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Apr. 3, 1928. Serial No. 267,016. 9 Claims. (Cl. 88—24.)



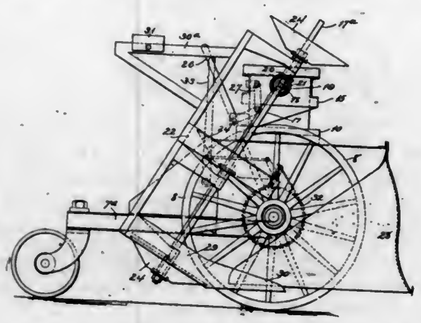
1. In a photographic printer, a frame having an exposure window, a casing comprising a reflector portion and a lamp house mounted upon said frame holder, the reflector being in the shape of a portion of an ellipsoid of revolution unsymmetrical to the axis of such ellipsoid, a translucent, light diffusing screen in said casing in the region of one focus of said ellipsoid, and an illuminating system behind said screen illuminating a definite extended area of said screen in the region of said focus.

1,763,631. HOISTING MECHANISM. MORRIS P. HOLMES, Claremont, N. H. Filed Dec. 18, 1920, Serial No. 430,211. Renewed May 14, 1930. 10 Claims. (Cl. 254—186.)



1. In a hoisting mechanism, a drum, and driving means therefor including a motor comprising a casing formed integral with said drum, and a plurality of intermeshing rotors disposed in said casing and driving said drum, there being power transmission gearing between the drum and one of said rotors.

1,763,632. CANE HARVESTER. WILLIAM HENRY MORGAN, Alliance, Ohio, assignor, by mesne assignments, to The Morgan Hurrycane Company, New York, N. Y., a Corporation of Florida. Filed Dec. 11, 1924. Serial No. 755,251. 21 Claims. (Cl. 58—160.)



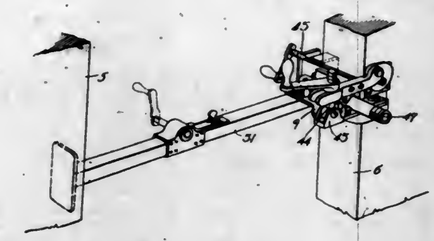
1. In a cane harvester, the combination of a main frame mounted on wheels, a cutter carrying frame located at one side of said main frame, means carried by the main frame and supporting the cutter carrying frame, the said cutter carrying frame being mounted to tilt with reference to the main frame, a cutter carrying shaft mounted in said cutter carrying frame, a plurality of cutters carried by said shaft and means for rotating said shaft.

1,763,633. PROCESS OF MAKING WHEY PRODUCTS. NICHOLAS L. SIMMONS, Wausau, Wis. Original application filed Jan. 2, 1930, Serial No. 418,175. Divided and this application filed Apr. 2, 1930. Serial No. 441,180. 16 Claims. (Cl. 99—11.)

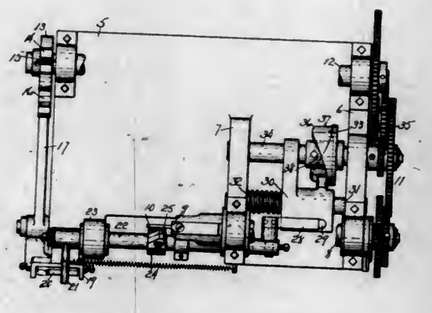
14. The process of making a whole-whey product comprising concentrating the whey to substantially seventy percent solids and thirty percent moisture in a vacuum pan at a low temperature to avoid discoloration of the product, removing the resulting concentrate to a setting reservoir, permitting said concentrate to set until the lactose crystallizes into a pasty mass, and desiccating said pasty mass at a temperature below the temperature at which the crystalline lactose caramelizes.

1,763,634. VISE. GEORGE AGOBIAN, Brooklyn, N. Y. Filed Feb. 27, 1928. Serial No. 257,470. 6 Claims. (Cl. 81—41.)

1. A pipe vise comprising clamping members, means for adjusting the clamping members relatively to each other, a clamp block operable between said members to secure the vise to a door jamb, screws for operating the clamp block, a fixed pipe holding jaw, a movable jaw cooperating therewith, a brace arranged to be positioned against said vise to retain the same solidly in a doorway, and a foot portion on each end of said brace.



1,763,635. SCREW-THREADING MACHINE. HARRY P. TOWNSEND, Hartford, Conn. Filed July 29, 1926. Serial No. 125,779. 5 Claims. (Cl. 10—101.)



1. A screw thread cutting machine including a rotatable spindle having means for holding a blank, a thread cutting tool, means for imparting movement into cutting position and traversing movement to the tool, the latter comprising a cam having lobes of different depths for imparting to the tool different lengths of paths of travel in its traversing movement, and means for engaging the tool with the blank at the end of each traversing movement thereof.

Patents Nos. 1,763,636 to 1,765,358

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PLANT PATENTS

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[S. 4015]

An Act To provide for plant patents

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That sections 4884 and 4886 of the Revised Statutes, as amended (U. S. C., title 35, secs. 40 and 31), are amended to read as follows:

"SEC. 4884. Every patent shall contain a short title or description of the invention or discovery, correctly indicating its nature and design, and a grant to the patentee, his heirs or assigns, for the term of seventeen years, of the exclusive right to make, use, and vend the invention or discovery (including in the case of a plant patent the exclusive right to asexually reproduce the plant) throughout the United States and the Territories thereof, referring to the specification for the particulars thereof. A copy of the specification and drawings shall be annexed to the patent and be a part thereof.

"SEC. 4886. Any person who has invented or discovered any new and useful art, machine, manufacture, or composition of matter, or any new and useful improvements thereof, or who has invented or discovered and asexually reproduced any distinct and new variety of plant, other than a tuber-propagated plant, not known or used by others in this country, before his invention or discovery thereof, and not patented or described in any printed publication in this or any foreign country, before his invention or discovery thereof, or more than two years prior to his application, and not in public use or on sale in this country for more than two years prior to his application, unless the same is proved to have been abandoned, may, upon payment of the fees required by law, and other due proceeding had, obtain a patent therefor."

SEC. 2. Section 4888 of the Revised Statutes, as amended (U. S. C., title 35, sec. 33), is amended by adding at the end thereof the following sentence: "No plant patent shall be declared invalid on the ground of noncompliance with this section if the description is made as complete as is reasonably possible."

SEC. 3. The first sentence of section 4892 of the Revised Statutes, as amended (U. S. C., title 35, sec. 35), is amended to read as follows:

"SEC. 4892. The applicant shall make oath that he does verily believe himself to be the original and first inventor or discoverer of the art, machine, manufacture, composition, or improvement, or of the variety of plant, for which he solicits a patent; that he does not know and does not believe that the same was ever before known or used; and shall state of what country he is a citizen."

SEC. 4. The President may by Executive order direct the Secretary of Agriculture (1) to furnish the Commissioner of Patents such available information of the Department of Agriculture, or (2) to conduct through the appropriate bureau or division of the department such research upon special problems, or (3) to detail to the Commissioner of Patents such officers and employees of the department, as the commissioner may request for the purposes of carrying this Act into effect.

SEC. 5. Notwithstanding the foregoing provisions of this Act, no variety of plant which has been introduced to the public prior to the approval of this Act shall be subject to patent.

SEC. 6. If any provision of this Act is declared unconstitutional or the application thereof to any person or circumstance is held invalid, the validity of the remainder of the Act and the application thereof to other persons or circumstances shall not be affected thereby.

Approved, May 23, 1930.

NOTICE—PHOTOSTATS AND PHOTOPRINTS—CHANGE IN FEES—EFFECTIVE JULY 1, 1930

Under the amendment to Rule 191, effective July 1, 1930, the price of photostat copies of records and photoprints of drawings will be 20 cents per sheet regardless of size.

THOMAS E. ROBERTSON,
Commissioner of Patents.

Condition of Applications Under Examination at Close of Business June 6, 1930

(Total number of applications awaiting action, excluding Trade-Mark Division, 119,016; Trade-Mark Division, 2,470. Oldest new case, Aug. 2, 1929; oldest amended, Aug. 1, 1929. The dates given are 1929 except where † indicates 1930.)

Room No.	Divisions, Examiners, and Subjects of Inventions.	Oldest new application and oldest action by applicant awaiting office action: New	Amended	No. of applications awaiting action
112	1. LOEFFLER, F. A., Closure Operators; Fences; Gates; Tillage; Scattering Unloaders; Handling and Hoist Line Implements.	Oct. 2	Oct. 14	1,313
126	2. HADEN, C. F., Bee Culture; Dairy; Presses; Tobacco	Sept. 5	Aug. 30	2,237
331	3. LINDSEY, A., Heating; Metal Founding; Metallurgy; Metal Treatment	Sept. 3	†Jan. 6	1,600
234	4. MERRITT, A. D., Conveyers; Hoists; Handling Apparatus; Excavating	Nov. 8	Nov. 9	1,318
108*	5. MACNAB, J. F., Harvesters; Music; Acoustics; Sound Recording; Knotters	Sept. 3	Sept. 19	1,477
318	6. LEWERS, A. M., Carbon Chemistry	Aug. 8	Aug. 7	2,471
106	7. JARBOE, C. G., Optics; Photography	Aug. 24	Aug. 24	2,644
133	8. HENRY, C. C., Beds; Chairs; Kitchen and Table Articles; Racks and Cabinets	Sept. 9	Oct. 29	1,873
221	9. ADAMS, R. E., Pumps; Fluid and Fluid-Current Motors	Nov. 19	Nov. 18	1,467
118	10. HUNTER, O. F., Land Vehicles—Animal Draft Appliances, Bodies and Tops	Aug. 13	Sept. 11	1,802
148*	11. ARMSTRONG, H. C., Boots, Shoes, and Leggings; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Whip Apparatus.	Nov. 25	Dec. 7	1,034
380	12. PIERCE, P. P., Machine Elements	Oct. 5	Oct. 11	1,691
154*	13. CLIFT, J. W., Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Working; Needle and Pin Making; Turning; Boring and Drilling.	Aug. 29	Sept. 11	1,649
102*	14. BRUMBAUGH, N. J., Farriery; Metal Bending; Metal Tools and Implements, Making; Sheet-Metal Ware, Making; Wire Fabrics; Wire Working; Metal Working, Assembling, and Blanks and Processes.	Aug. 19	Aug. 20	1,480
329	15. WORRELL, L. W., Glass; Plastic Block and Earthenware Apparatus; Plastics	Aug. 19	Aug. 24	3,058
242*	16. SPENCER, C. J., Telegraphy; Telephony	Aug. 26	Oct. 1	1,209
307	17. RAFTER, G. S., Label Pasting and Paper Hanging; Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet-Material Associating or Folding; Sheet or Web Feeding; Type Setting.	Aug. 8	Sept. 19	1,698
229	18. PORTER, M. E., Motors, Expansible-Chamber Type; Power Plants; Speed-Responsive Devices	Oct. 17	Oct. 7	1,530
236	19. GLASCOCK, E. S., Furnaces; Heating Systems; Liquid and Gaseous Fuel Burners; Stoves and Furnaces.	Aug. 22	Aug. 13	2,328
179	20. GROVE, S. D., Miscellaneous Hardware; Closure Fasteners; Locks and Latches; Safes; Undertaking.	Sept. 28	Oct. 2	1,664
212	21. THOMPSON, T. J., Textiles; Cloth Finishing	Oct. 9	Dec. 14	925
244*	22. COLWELL, J. H., Aeronautics; Firearms, Ordnance, and Explosive Devices; Air Guns, Catapults, and Targets; Boats and Buoys; Ships; Marine Propulsion.	Oct. 21	Nov. 21	1,667
217	23. GROESBECK, W. D., Coin Handling; Recorders; Registers	Aug. 20	Sept. 4	1,186
147*	24. DURAS, C. O., Apparel; Apparel Apparatus; Garment Supporters; Sewing Machines	Aug. 14	Sept. 3	1,323
202*	25. LIGHTFOOT, J. H., Agitating; Butchering; Classifying Solids; Centrifugal-Bowl Separators; Mills; Threshing; Vegetable and Meat Cutters and Comminutors.	Sept. 18	Sept. 27	1,629
228*	26. HODGES, J. S., Electricity, Generation; Motive Power	Sept. 12	Sept. 17	1,296
214	27. ANDERSON, L. S., Brush, Broom, and Mop Making; Brushing, Scrubbing, and General Cleaning; Laundry; Washing Apparatus.	Aug. 31	Sept. 5	1,658
225	28. BENSON, A. R., Internal-Combustion Engines	Sept. 13	Sept. 17	2,271
160*	29. MORRIS, B. N., Woodworking; Tools; Compound Tools	†Jan. 1	†Jan. 4	729
248	30. SHIPMAN, J. L., Automatic Temperature and Humidity Regulation; Illuminating Burners; Illumination; Thermostats and Humidostats.	Sept. 17	†Mar. 17	1,200
312	31. HOLMES, W. N., Distillation; Gas, Heating and Illuminating; Mineral Oils	Aug. 17	Aug. 21	2,740
249	32. BARTHOLOMEW, J. A., Gas and Liquid Contact Apparatus; Heat Exchange; Gas Separation	Nov. 2	Nov. 1	1,719
152	33. WYMAN, W. I., Bridges; Masonry and Concrete Structures; Metallic Building Structures; Roads and Pavements; Roofs; Wooden Buildings.	Aug. 20	Sept. 11	2,647
304	34. SIMPSON, G. R., Electricity, Transmission to Vehicles; Pneumatic Dispatch; Railways, Rolling Stock, Switches, and Signals; Store Service; Vehicle Fenders.	Sept. 21	Oct. 15	1,173
116*	35. REYNOLDS, E. C., Buckles, Buttons, Clasps, Etc.; Card and Sign Exhibiting; Signals; Toilet	Oct. 22	Nov. 25	1,763
105	36. MORTON, G. L., Automatic Weighers; Geometrical and Measuring Instruments; Force Measuring	Sept. 28	Oct. 10	2,362
224*	37. WEAVER, M. E., Electricity, Circuit Makers and Breakers	Sept. 16	Sept. 18	2,078
145	38. KRAFFT, C. F., Animal Husbandry; Earth Boring; Hydraulic and Earth Engineering; Mining, Quarrying, and Ice Harvesting; Stoneworking; Wells.	Sept. 3	Sept. 3	1,462
220	39. COWLES, A. W., Fluid-Pressure Regulators; Multiple Valves; Valves; Water Distribution	Aug. 19	Aug. 19	1,977
262*	40. OBERLIN, J. J., Bottles and Jars; Receptacles	Aug. 7	Oct. 24	3,364
125	41. BROWN, J. I., Land Vehicles, Wheels, and Axles; Resilient Tires and Wheels; Wheel Substitutes; Railway Draft Appliances.	Oct. 30	Oct. 28	1,397
223*	42. CUTTING, H. O., Electric Signaling	Oct. 15	Nov. 2	1,578
124*	43. HOPKINS, F. M., Baths, Closets, Sinks, and Spittoons; Sewerage; Electricity, Medical and Surgical; Medicines; Surgery; Dentistry; Artificial Body Members.	Aug. 12	Aug. 12	2,221
253	44. SHAFFER, C. H., Dispensing; Filling and Closing Portable Receptacles; Refrigeration	Aug. 2	Aug. 1	2,487
379	45. GILES, A. H., Pulleys and Shafting; Lubrication; Bearings and Guides; Spring Devices	Aug. 29	Sept. 3	2,546
233	46. WOLCOTT, C. L., Concentrating Evaporators; Fluid Sprinkling, Spraying, and Diffusing; Fire Extinguishers; Liquid Heaters and Vaporizers.	Sept. 12	Sept. 26	1,666
284	47. BARKER, H, Clutches and Power Stops; Brakes and Motors	Aug. 9	Sept. 16	2,600
212*	48. ROEPKE, O. B., Electricity, General Applications	Sept. 9	Sept. 9	1,390
239	49. EDINBURG, F. P., Check-Controlled Apparatus; Domestic Cooking Vessels; Ventilation; Driers; Liquid Separation or Purification.	Nov. 18	Dec. 7	1,301
322	50. BLAKE, C. L., Plastic and Liquid Coating Compositions; Coating	Aug. 23	Sept. 13	2,929
240*	51. BACKUS, C. D., Radiant Energy, Wave Transmission	Sept. 10	Sept. 9	2,459
144	52. MORGAN, E. T., Supports; Chucks; Joint Packing; Pipe and Rod Joints or Couplings; Tool-Handle Fastenings.	Oct. 12	Oct. 16	2,711
201*	53. PECK, M. K., Books; Manifolding; Printed Matter; Stationery, Educational Appliances; Paper Files and Binders; Tents, Canopies, Umbrellas, and Canes; Curtains, Shades, and Screens.	Dec. 7	Nov. 20	1,330
241	54. LANE, C. H., Electric Lamps; Conductors; Vapor Electric Devices; Space Discharge Tubes	Aug. 13	Aug. 15	3,021
102	55. BOWEN, S. T.—{Bread, Pastry, and Confection Making; Cutlery	†Mar. 25	†Mar. 15	383
	{Designs	†May 10	†May 24	477
309	56. PORTER, F. J., Electrochemistry; Laminated Fabrics; Paper Making; Substance Preparation	Aug. 24	Sept. 4	2,563
257*	57. NICOLSON, G. D. G., Cutting and Punching; Bolt, Nut, Rivet, Nail, Screw, Chain, and Horseshoe Making; Driven and Screw Fastenings; Jewelry; Nut and Bolt Locks.	Aug. 8	Aug. 24	1,209
270*	58. DOWELL, E. F., Abrading; Typewriting	Aug. 9	Aug. 5	1,530
315	59. RICHARD, V. I., Chemistry; Alcohol; Fertilizers; Cement and Lime; Hides, Skins, and Leather; Fuel.	Aug. 15	Aug. 15	2,243
213*	60. OLASS, R. L., Electricity, Heating, and Welding; Batteries; Resistances and Rheostats; Prime Mover Dynamo Plants; Conduits and Housings.	Aug. 29	Sept. 6	2,489
269	61. PARKS, G. E., Elevators; Winding and Reeling; Pushing and Pulling; Fire Escapes; Ladders; Scaffolds; Velocipedes; Horology; Time-Controlling Apparatus.	Aug. 8	Aug. 12	2,697
245*	62. COCHRAN, W. W., Toys; Amusement Devices; Furniture; Fishing and Trapping; Baggage; Package and Article Carriers.	Aug. 26	Aug. 27	2,438
309	63. WINKELSTEIN, A. H., Bleaching and Dyeing; Explosive, Pyrotechnic, and Match Compositions; Oils, Fats, and Glue; Preserving; Sugar, Starch, and Carbohydrates.	Aug. 28	Aug. 31	2,549
163	Trade-Marks, Labels, and Prints: F. A. RICHMOND.—{Trade-Marks	†May 8	†May 23	2,246
	{Labels and Prints	†May 6	†May 23	224

* Refers to room numbers in the annex.

DECISIONS IN PATENT AND TRADE-MARK CASES

U. S. Court of Customs and Patent Appeals

IN RE DAVENPORT

No. 2,242. Decided March 19, 1930

[38 F. (2d) 1009]

PATENTABILITY—CELLULOID LETTERS FOR SIGNBOARDS.

Claims for celluloid letters to be used on signboards *Held* unpatentable over the prior art.

APPEAL from the Patent Office. Affirmed.

Messrs. Brown, Jackson, Boettcher & Dienner, Mr. Charles A. Brown, Mr. John A. Dienner, and *Mr. Henry H. Babcock* for Davenport.

Mr. T. A. Hostetler for the Commissioner of Patents.

HATFIELD, *J.:*

This is an appeal from the decision of the Commissioner of Patents affirming the decision of the Examiner denying all of appellant's claims for an alleged invention relating to characters or letters for use in connection with signboards for advertising purposes.

Claims 1 and 2 are illustrative. They read:

1. A celluloid letter having a single continuous flange extending across each end of the letter.

2. A character for use in connection with signboards and for similar purposes, said character being formed of resilient material appreciably softer than metal used in producing metallic sign characters and being provided at each end with an angularly disposed flange.

The claims were rejected on the following references: Grant, 1,163,750, December 14, 1913; Clark, 1,207,711, December 12, 1916.

It will be observed that the claims are directed to a letter of celluloid and possibly other materials softer than metal, having an angularly-disposed flange at each end. The flanges are designed to be inserted into cloth-lined grooves in a signboard.

The patent to Clark discloses a celluloid letter for signboards, having an angular flange at one end only. The letter is so constructed that the flange tends to grip the lower surface of the groove in which it is designed to be inserted.

The patent to Grant discloses a letter formed of sheet metal with an angular flange at each end. The letters are so constructed that the flanges tend to grip the inward surfaces of the grooves in the signboard.

It is claimed by appellant, and there is some evidence in the record to establish, that the Clark and Grant letters were not commercially successful.

It appears that the Clark celluloid letter would buckle when exposed to heat and, due to the fact that it had but one angular flange, would not remain in its proper place and position on the signboard.

The letters disclosed in the Grant patent were not commercially successful because, as stated by appellant in an affidavit appearing in the record:

> * * * sheet metal letters corrode unless specially treated, tear the cloth covering of the board, readily break at the bend of the flange, and can not be enameled to give the proper depth of color since bending of the letter cracks the enamel, and sheet metal letters generally are open to these objections as well as the objection that they scratch and mar each other if kept loosely together and do not readily return to their initial shape if bent or distorted to a material extent; * * * the single flange celluloid letter has proved to be a failure, and many of the largest users of sign letters in the United States, including the Woolworth, and Kresge, five and ten cent stores, have adopted the two flange celluloid letter manufactured by appellant as being satisfactory and avoiding the above noted objection to the single flange celluloid letter.

It is claimed by appellant, and the affidavits in the record tend to support his contention, that the letters disclosed in the involved application for patent have been commercially successful; and that, although appellant and others had been engaged for several years in attempting to solve the problem presented by the failure of the letters disclosed in the prior art, nothing of value had been accomplished until appellant invented the letters disclosed in his application.

It is contended that appellant's letters are not of the gripping type, but are so constructed that, when subjected to heat and the body of the letter tends to buckle, the angular flanges are forced outwardly "into frictional contact" with the outward surfaces of the grooves in the sign-board and, as a consequence, the letters are held in position.

In holding that the claims of appellant did not involve invention, the Commissioner, among other things, said:

> Clark discloses the celluloid letters with all their advantages and Grant discloses how they may be held securely at the top and bottom upon the signboard. There was nothing inventive in adopting the two flange features of Grant in the celluloid type of letters disclosed by Clark. While the applicant has made some reference to the particular angle made by the angles of the letters of the references, yet there is nothing in the claims as here under review which indicates the angle is different from that of the letters of the references. The change in any event would not involve invention.

With this conclusion, we agree.

It is contended by counsel for appellant that the letter disclosed in the application is a commercial success and is distinguishable from the letters disclosed in the patents to Clark and Grant, by reason of the fact that, when the celluloid body of appellant's letter tends to buckle when exposed to heat, the angular flanges are forced outwardly into frictional contact with the outward surfaces of the grooves and the letter is held firmly in position. The trouble with this argument is that the claims in issue provide broadly for a letter made of celluloid, or of resilient, moldable, noncorrodible, or elastic and moldable cellulosic material, provided at each end with an *angularly disposed flange.*

The patent to Clark discloses a *celluloid* letter having an *angular flange,* while the patent to Grant discloses a letter having *two angular flanges.* There is nothing in the claims in issue to distinguish the angular flanges of appellant's letter from the angular flanges of the Grant letter.

The fact that appellant's letter is a commercial success is not sufficient, in view of the claims in issue, to warrant a holding that appellant is entitled to a patent.

The decision is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

ROSENBERG BROS. & CO. *v.* THE SIMON LEVIN & SONS CO.

No. 2,152. Decided February 21, 1930

[37 F. (2d) 962]

TRADE-MARKS—SIMILARITY—"COLLEGE PARK" AND "FASHION PARK."

A trade-mark for men's clothing consisting of the words "College Park" beneath a figure representing the entrance to a college building or college grounds *Held* not deceptively similar to a mark for the same goods, consisting of the words "Fashion Park" associated with the representation of two men on horseback.

APPEAL from the Patent Office. Affirmed.

BLAND, J., and LENROOT, J., dissenting.

Mr. Clarence G. Campbell for Rosenberg Bros. & Co.

Mr. Thomas L. Mead, jr., and *Messrs. Browne & Phelps* for The Simon Levin & Sons Co.

GARRETT, *J.*:

The question here involved is the right of appellee to have registered as a trade-mark the words "College Park" printed beneath a figure or design representing the entrance to either a college building or college grounds, having in the opening between the pillars and beneath an arch an open book with a lighted lamp or torch.

The application is opposed by appellant upon the ground that it is the owner of a mark "Fashion Park," associated or used in connection with a representation of two men on horseback, registered in the United States Patent Office in three different forms, the distinguishing feature in each of the forms being the words "Fashion Park."

The Examiner of Trade-Mark Interferences found that no confusion in trade would be likely from the use of the two marks and dismissed the opposition, holding applicant to be entitled to the registration sought. This action was affirmed by the Commissioner and appeal was taken, bringing the matter before us.

In his decision, the Commissioner said:

> Notwithstanding that both marks include the word "Park," the general appearance and signification of the marks in their entirety are too different to justify a conclusion of confusion of origin.

It is conceded that appellant adopted and applied its mark first and that the goods of the respective parties are of the same descriptive properties; viz, men's outer clothing.

The question for our determination, therefore, is whether the marks themselves are so similar as that their use in commerce would be likely to cause confusion in the minds of prospective purchasers.

Testimony was taken in the case and no instance of confusion was shown to have occurred. The brief of appellant (opposer) in summing up its contentions does say:

> Likelihood of confusion of goods of applicant with those of opponent clearly evidenced at Baltimore, Maryland, as well as elsewhere.

The only basis for this appears to be that a witness testified that opposer had a dealer at Baltimore who handles its goods. The witness was not asked about confusion at Baltimore or elsewhere. No effort was made to show confusion; no testimony was taken upon that question, and the whole matter is left to depend upon the inference which the tribunals of the Patent Office were, and this court now is, asked to draw from the designs themselves.

An inspection of these designs leads us to conclude that there is no reasonable ground upon which to base a belief that confusion is probable or likely. There is no similarity of appearance in the designs. The words, when pronounced, do not have the same sound, except the one word "Park," which can not, standing alone, be taken as the dominating characteristic of either of the marks. It is not contended that anyone can secure the exclusive right to use the word "Park," and we do not understand the law to deny registration to one combination which includes part of another combination unless the former is so similar to the latter as to create confusion.

To our minds there is no similarity of meaning between the words "College" and "Fashion," which justifies the conclusion that "College Park" is likely to be confused with "Fashion Park," although used upon goods of the same descriptive properties. This is particularly true when the other features of difference in the designs are considered.

The decision of the Commissioner of Patents is affirmed.

Affirmed.

LENROOT, *J.*, dissenting:

I regret that I find myself unable to concur in the opinion of the majority.

The goods upon which the respective marks "Fashion Park" and "College Park" are used are identical in kind.

The record shows that appellant adopted the trade-mark "Fashion Park" not later than 1915, and that it has carried on a very extensive advertising campaign, at a cost of approximately eight million dollars, with the words "Fashion Park" as the leading feature of its advertisements, and has built up a nation-wide business in clothing bearing its trade-mark.

The application of appellee recites that it has used the words "College Park" upon men's suits and overcoats since February 1, 1926.

The majority opinion states:

> To our minds there is no similarity of meaning between the words "College" and "Fashion," which justifies the conclusion that "College Park" is likely to be confused with "Fashion Park," although used upon goods of the same descriptive properties.

In my opinion, the word "College" as used as a mark upon men's clothing conveys the idea of fashion, in so far as college students are concerned. It is a matter of common knowledge that the style of clothes worn by college students is to a very substantial degree followed by the young men of the country. Therefore, the word "College" as a mark upon clothes has very much the same meaning as "Fashion," and when combined with the word "Park," forming the trade-mark "College Park," conveys the same meaning to college students, at least, as does the trade-mark "Fashion Park."

The testimony of appellant shows that it caters to college trade and develops models particularly adapted to college wear. The testimony upon this subject is as follows:

> Q. What do you consider the principal clientele of Rosenberg Bros. & Co. in their Fashion Park goods?
> A. Fashion Park caters principally to the taste of young men developing most of its models in keeping with their requirements. This means, of course, that we actually cater to the college man because his taste predominates the style in young men's clothes.
> Q. Do you emphasize in any of your advertising material the fact that you cater to the college man's taste?
> A. Publicity service and cuts are furnished to the dealers showing models particularly adapted to college wear. In our "copies of dealer ads" (Exhibit F) are two of these ads, one bearing the name of S. L. Bird & Sons, Detroit, Michigan, featuring the Royal Park models as "College men prefer." Another bearing the name of Jacob Reeds Sons, located in Philadelphia, Pa., also featuring Royal Park as "Styled for Yale and Princeton men everywhere." I have marked these two ads "A" and "B," respectively, with a blue crayon so as to identify them.
> Q. Were these advertisements as shown in this Exhibit F actually used by your dealers?
> A. They were by many of them.
> Q. Then you do cater to college trade and develop models particularly adapted for college wear?
> A. Yes; we do.
> Q. Do any of your dealers cater particularly to the college trade? I mean actually send salesmen directly to the colleges?
> A. Yes: for example Finchley, Inc., New York city.
> Q. For how long and how extensively has Finchley done this?
> A. For five or six years at least. Salesmen are sent to all of the leading colleges throughout the entire United States.
> Q. And do the goods so sold by Finchley to the college trade directly carry the trade-mark label, "Fashion Park"?
> A. They do. That has always been the practice and still is to-day.

Appellee, in its brief, in attempting to distinguish between the two marks, states:

> "Fashion Park" suggests the ultra in men's wear, and more particularly the mode set by people of wealth and leisure who can afford to take time to ride around in Fashion Park properly attired.
> "College Park" on the other hand, suggests a mode reflecting the studied carelessness and freedom from convention proverbially affected by college men.

I can not accept any such restricted meaning of either mark. "Fashion" is defined in the Standard Dictionary as "The prevailing mode in such things as are subject to change in form or style, as in ornament or etiquette, and especially, dress."

College dress is a "fashion" or "prevailing mode" adopted by college men; the words "College Park," used by appellees, indicate such fashion and appellant's mark includes it, as the testimony conclusively shows. Therefore, as applied to clothing worn by college students, at least, both marks have exactly the same significance, and it necessarily follows that the two marks are likely to cause confusion in the mind of the public, especially that part of it to which both parties cater, viz., college men.

If there be doubt upon this question, it should be resolved in favor of appellant. In *Kassman & Kessner, Inc.* v. *Rosenberg Bros. & Co.*, 10 Fed. Rep. (2d) 904, a case involving one of the marks here involved, "Fashion Park," the court said that where doubt arises on a question of this character, the courts incline to resolve the doubt against the newcomer, and gave the reason as follows:

> The reason for this rule is that the field from which a person may select a trade-mark is practically unlimited, and hence there is no excuse for impinging upon or even closely approaching the mark of a business rival.

In the case at bar, appellee had thousands of words from which to select a trade mark. There was no reason why it should select the particular combination of the words "College" and "Park," unless it was to approach as nearly as possible to the mark of appellant without infringement, and profit by purchasers thinking that the clothes made by it were those made by appellant.

It has been held that it is the duty of the Patent Office to refuse registration to one whose use of the mark has been of such deceptive character that a court of equity would deny him protection. *Coffin Redington Company* v. *Turner*, 46 App. D. C. 449. This is certainly the law where the marks are applied to identical goods, and I cannot believe that a court of equity would uphold the mark of appellee. It has been held in many cases that the law of trade-marks is but a part of the broader law of unfair competition.

In *United Drug Co.* v. *Rectanus Co.*, 248 U. S. 90, the function of a trade-mark was stated as follows:

> Its function is simply to designate the goods as the product of a particular trader and to protect his good will against the sale of another's product as his; * * *

If appellee had desired in good faith to adopt a trade-mark "to protect his good will against the sale of another's product as his," it would seem that he would have selected a mark so dissimilar to the mark of a competitor that there would be no possibility of confusion. If it desired to use the word "College" as a part of its mark it had a perfect right to do so, but why did it select the word "Park" to use in combination with the word "College" when it must have known that a strong competitor was using the word "Park" in combination with the word "Fashion"? There are hundreds, if not thousands, of words that might have been used by appellee instead of the word "Park," or a like number that might have been used in combination with the word "College." The conclusion to me is irresistible that in selecting the words "College Park," appellee hoped to secure a benefit from appellant's mark by reason of their similarity, and I am of the opinion that there was ample ground for such hope.

The majority opinion makes mention of the fact that no confusion was shown in the testimony and no effort was made to show it. Proof of actual confusion is always very difficult to secure. Search would have to be made among customers to find those who had been misled. But it is not necessary to show actual confusion by testimony, nor need there be any presumption of actual confusion. The language of the statute is: "likely to cause confusion or mistake." The law is that the mere probability of confusion as a result of the use of the marks by the respective parties is sufficient. *Rockwood Pottery Co.* v. *A. Wilhelm Co.*, 43 App. D. C. 1.

In the case of *Rosenberg Bros. & Co.* v. *Wetherby Kayser Shoe Co.*, decided at this term, the appellant there being the appellant here, the marks involved were "Fashion Lane," used by appellee on men's, women's, and children's footwear, and "Fashion Park," "Fashion Park Clothes," and "Tailored at Fashion Park," each of said last-named marks being superimposed upon a small cut or representation of two persons on horseback, and used by appellant on men's coats, vests, pants, and overcoats. The question involved was whether the said mark of appellee

so nearly resembled the mark of appellant as to be likely to cause confusion or mistake in the mind of the public, or to deceive purchasers. We there held that the words "Park" and "Lane," in combination with the word "Fashion" and the other elements of the respective marks, *as applied to the various goods upon which they were used*, were not so similar as to cause confusion. Had the marks in that case been used upon identical goods, as are the marks here involved, a very different question would have been before us. It is clear that marks may be so similar as to cause confusion if used upon goods identical in kind, but so dissimilar that no confusion would arise if used on goods not identical in kind.

This dissent is lengthy because I feel very strongly that what seems to me to be an erroneous conclusion of the court will encourage the application for registration of trade-marks, used upon goods identical in kind, with a purpose and intent by the applicant of approaching as nearly as possible the mark of a competitor to which he is entitled, with a hope of securing benefits therefrom.

In my opinion, the decision of the Commissioner should be reversed.

BLAND, *J.*, concurs in this dissent.

U. S. Court of Customs and Patent Appeals

IN RE JAMES FISCHER

No. 2219. Decided February 21, 1930

[37 F. (2d) 628]

1. PATENTABILITY—ANTICIPATION—DRAWINGS.

While the drawings of patents need not be accurate enough to be used as working drawings, it must be assumed that they show the true positions and proportions of the parts of the devices which they purport to delineate, so far as necessary to show invention.

2. SAME—ROLLER MILL.

Claims for a roller mill designed to be used in manufacturing sugar *Held* patentable over the prior art.

3. APPEAL—WHAT MAY BE CONSIDERED.

To the extent that an affidavit filed after the appeal was taken "sets forth facts material to the issue here involved, not found in the record made in the Patent Office, it can not be and has not been considered by us. The law requires that we shall hear and determine appeals 'and review the decision appealed from in a summary way, on the evidence produced before the Commissioner'."

4. SAME—REPLY BRIEFS—CAN BE FILED ONLY WITH PERMISSION OF THE COURT.

To the extent that an affidavit filed after the appeal was taken "consists of arguments, which it does to a considerable degree, it is in the nature of a reply brief and should not have been filed without first securing the express permission of this court, on motion made therefor, which was not done in this case."

APPEAL from the Patent Office. Reversed.

Mr. Ernest Wilkinson for Fischer.

Mr. T. A. Hostetler for the Commissioner of Patents.

LENROOT, *J.*:

This is an appeal from the decision of the Board of Appeals of the Patent Office, affirming that of the Examiner rejecting the claims as defining nothing patentable over the prior art. The claims are two in number and read as follows:

1. In apparatus of the character described, the combination with a three-roller mill and housing therefor, of an upper roller mounted in said housing above the upper roller of said mill, with means for simultaneously rotating all of said rollers, and means for directing the crushed solid material from the two upper rollers back between the upper roller of the mill and the two lower rollers, whereby three separate crushings are secured in a four-roller mill, substantially as and for the purposes described.

2. In apparatus of the character described, the combination with a three-roller mill and housing therefor, of an upper roller mounted in said housing above the upper roller of said mill, with means for simultaneously rotating all of said rollers, means for exerting a regulated pressure on the two upper rollers of said four-roller mill, and means for directing the crushed solid material from the two upper rollers back between the upper roller of the mill and the two lower rollers, whereby three separate crushings are secured in a four-roller mill, substantially as and for the purposes described.

Appellant's application discloses a roller mill used in manufacturing sugar, comprising four rollers mounted in a housing and all driven simultaneously by gearing in a direction indicated upon the drawings. A curved deflector provides a means for directing the crushed solid material from the two upper rollers back between one of the upper rollers and one of the two lower rollers. A turn plate then directs the crushed solid material to the space between one of the upper rollers and the other of the two lower rollers. The upper bearing block of he upper roller is pressed upon by a hydraulic, which is intended to limit the pressure on the roller axle and provide means for exerting a regulated pressure on the two upper rollers of the four-roller mill.

The object of the invention is stated by appellant in his specification as follows:

> My present invention relates to improvements in roller mills used in the manufacture of sugar, and is intended to provide a more efficient, more compact and cheaper construction than is now generally used in extracting juice from sugar cane or sorghum or the like.
>
> In the manufacture of sugar from sugar cane, the most common practice is to pass the cane stalks through a pair of rollers known as crushers, which rollers are usually provided with roughened surfaces, either of zigzag fluted or other construction, and after extracting part of the juice from the crusher, which is carried off in the usual way, the crushed cane stalks are then fed to one or more three-roller mills, and with larger factories or centrals, it is quite common to employ as many as twelve rollers, arranged in pyramidal form, one behind the other, in groups of three each, or four crushing mills, in addition to the crusher referred to.
>
> As is well known in the art, each three-roller mill subjects the crushed stalks or bagasse to two separate crushings respectively between the upper and front rollers of each mill, and then between the top and back rollers of each mill, the bagasse being directed in the proper direction by the rotation of the rollers and by the usual well known turn plate.
>
> According to my present invention, I place an upper roller above the top roller of a three-roller mill and parallel therewith, thus constituting a four-roller mill, which, as will be hereinafter explained, will give three separate crushings for each four-roller mill. For instance, for three four-roller mills, nine crushings will be secured, whereas for the usual twelve roller mills arranged in groups of three rollers, only eight crushings would be had, and not only is the advantage of increased crushings secured, but also there is a decided saving in cost of construction, simplicity of driving, compactness of arrangement and reduced floor space, and other advantages, which will be hereinafter more fully described.

There is but one reference: Guy (British), 2416, issued in 1890. The specification of this patent covers six pages, accompanied by twenty-three sheets of drawings, containing fifty-four figures. Said specification, among other things, states:

> In carrying my invention into effect, I employ a central or driving roll, with other rolls arranged around its circumference, so as to be in contact, or approximately in contact therewith, and said rolls may or may not be unequally pitched around the central or driving roll. I may employ three, four, five, six, seven, or eight such rolls, and arrange them around the central or driving roll before mentioned in such a manner that the axes of the opposite rolls may be in the same plane, or otherwise, and in such arrangements I do not confine myself to an arbitrary base line, but may assume said base line at any angle most suitable for the feed and delivery of the cane in different cases of application. I may also add guide rolls, feed or delivery rolls, or crushing rolls to any part of the systems, hereinbefore enumerated, for the purpose of diverting the feed, delivery, and course of the canes, and also to provide additional crushing pressures where expedient or desirable.

The Board of Appeals in its decision states:

> Appealed claim 1 appears to read fairly on Fig. 27 and 1A of Guy except for the phrase "means for directing the crushed solid material from the two upper rollers back between the upper roller of the mill and the two lower rollers."
>
> Figs. 27 and 1A of Guy show by arrows the course of the feed as entering between the central and lower roll at the left. We agree with the Examiner that there would be no invention in reversing the direction of rotation of the rollers thereby reversing the direction of feed of the cane in Guy's machine, when it would fully meet the structure of the claim; also that there would be no invention in a partial bodily rotation of the three rollers *a*, *b*, *c* of Fig. 27 about the central roller *d* in a clockwise direction so that *b* will take the position of *a*, the feed still starting between rollers *b* and *a*, which would fully satisfy the claim.
>
> The Examiner also rejects on Fig. 21 in which the feed starts between rollers *a* and *b* as in appellant's device and follows the same course between rollers *a*, *d*, and *a*, *i*. This requires no change in the rotation of the rollers or the beginning of the feed but merely the elimination of the additional rollers shown in Fig. 21, which we agree with the Examiner would not involve invention.

Appellant's sole contention is that the British reference is so incomplete and so inadequate a disclosure that it cannot properly be held to be anticipatory of his claims.

In support of this contention he cites a number of authorities to the point that the rule as to anticipation by a foreign patent is very strict. *Schuricht* v. *McNutt* v. *Willis*, 26 F. (2d) 388, 373 O. G. 535; *Permutit Co.* v. *Harvey Laundry Co. et al.*, 274 F. 937.

In *Carson* v. *American Smelting & Refining Co.*, 4 F. (2d) 463, the Circuit Court of Appeals for the Ninth Circuit said:

> A foreign patent is to be measured as anticipatory, not by what might have been made out of it, but by what is clearly and definitely expressed in it. An American patent is not anticipated by a prior foreign patent unless the latter exhibits the invention in such full, clear and exact terms as to enable any person skilled in the art to practice it without the necessity of making experiments.

In *Westinghouse Airbrake Company* v. *Great Northern Railway*, 88 F. 258, the court said:

> • • • The prophetical suggestions in English patents of what can be done, when no one has ever tested by actual and hard experience and under the stress of competition the truth of these suggestions, or the practical difficulties in the way of their accomplishment, or even whether the suggestions are feasible, do not carry conviction of the truth of these frequent and vague statements.

In the case of *Simplex Piston Ring Co.* v. *Hamilton*, 21 F. (2d) 196, in which an English patent was cited as a reference to avoid the charge of infringement, the court said:

> The Carr-Lockwood patent is a foreign reference and must be taken for exactly what it shows on its face and cannot be reconstructed to anticipate the patent in suit.

Having in mind the general principle declared in the cases cited, we proceed to a comparison of the disclosure of the cited reference with the disclosure in appellant's specification.

The British patent expresses two objects or purposes of the patentee, the first being essentially the same as that stated by appellant, and the second having to do with the removability of the rollers, with which we are not concerned. Appellant's basic idea is adding another roller to the type of sugar mill in general use, to secure one additional crushing of the cane within the same space occupied by the ordinary mill. The Guy patent proposes to add one or more rollers to secure additional crushings of the cane, and also to economize in space required.

We take it there is no invention in the mere idea of adding additional rollers to an ordinary sugar mill. The invention, if any there be, consists in the means used and method of operation to secure the desired result.

We have already referred to the fact that the specification of the Guy patent consists of six pages of description, and twenty-three sheets of drawings, containing fifty-four figures. These various figures show a multitude of combinations of rollers, with varying points of feeding the cane to the rollers, and many different combinations of rotary motion of the rollers. There are so many of these combinations, so many of them clearly inoperable, that we are inclined to agree with appellant that the patentee Guy had no conception at all of a combination of rollers, and method of their operation, that would produce the result claimed by him.

It is a significant circumstance that in the large number of figures set out, comprising so many combinations of rollers and methods of operation, none of them disclose completely the plan of appellant. Guy apparently covered by his drawings every combination that he could think of, but he failed to think of the combination which appellant discovered, which happens to be one which apparently cures most of the defects in the combinations shown by Guy.

Out of the fifty-four figures of the drawings of Guy, the tribunals of the Patent Office selected three which, in connection with the description in the Guy specification, are held to disclose the invention claimed by appellant. But it is admitted by the Board of Appeals that each of these three combinations would require change and adaptation to read on appellant's claims in connection with his specification and drawings. The three so selected are figures 1A, 27 and 21.

Figures 1A and 27 of Guy are identical except as to the relative position of the outer rollers to the central roller. The point of feeding and rotary motion of the rollers are the same in each figure. Both are clearly inoperable for the reason that the bagasse would not move in the direction specified without additional means being provided to give it motion between its leaving the rollers after one crushing to be taken up by the rollers to give it the next crushing. The space between the top and back roller is too great for the motions of the top center and back roller to move the bagasse upwards from the back to the top roller.

The tribunals of the Patent Office apparently concede the inoperativeness of the combinations shown in Figures 1A and 27, but hold that the same combination and result claimed by appellant would be secured by Guy if the point of feeding shown in said figures were changed from the front and central rollers to the central and top rollers, and rotary motion of the

rollers reversed. These changes, they hold, would not involve invention. We may observe that in both figures Guy adopts the point of feeding and rotation of rollers employed in the ordinary three-roller mill. While it may seem obvious now that a change in the point of feeding and reversing the motion of the rollers would produce the same combination and result claimed by appellant, it evidently was not obvious for nearly forty years, the Guy patent being issued in 1890, for the Examiner in his answer refers to the three-roller mill as the "standard mill."

[1] While drawings need not be accurate enough to be used as working drawings, we think we have the right to assume that they do show the true positions and proportions of the parts of the devices which they purport to delineate, so far as necessary to show invention. *Walker on Patents* (6th ed.) sec. 172. With this in mind, said figures 1A and 27 of the Guy patent show that the two lower rollers in each figure are spaced so far apart that even if a turn plate is provided, as in appellant's specification, it is doubtful if the bagasse would be carried from one roller to the other without additional means of propulsion.

The tribunals of the Patent Office also rejected the application upon Figure 21 of Guy. This figures shows a combination of eleven rollers, providing fourteen crushings of bagasse. The point of feeding is relatively the same, and the rotary motion of the rollers is in the same direction, as in appellant's specification. The Board of Appeals holds that the elimination of seven rollers would result in appellant's combination. It is clear that this would involve an entire reconstruction of the mill, and even when so reconstructed, the position of the two lower rollers would be so far apart as to render it inoperative without additional means of moving the bagasse from one roller to another.

It is true that the Guy specification relates that "suitable appliances are provided for feeding, grinding or leaching the cane" and "In converting an existing mill of any type, I may also add feed, delivery, crushing or guide rolls to the original rolls in order to carry out my invention." But this would involve experiments to determine the character and application of such appliances or rolls, and we do not think that these recitals are sufficient to supply the elements necessary to constitute, with the disclosure shown by the drawings, anticipation of appellant's invention.

Like the multitude of drawings employed by Guy to form a blanket covering what he deemed all possible combination, the language of the recitals quoted seems to have a purpose of drawing within their scope every improvement in a mill consisting of more than three rollers, but without any conception upon his part of any practical contribution to the art. We think the disclosure in the Guy patent is so incomplete and inadequate, having in mind that the reference is a foreign patent, that it can not be held that it anticipates appellant's invention.

With regard to whether the changes necessary to adapt Guy's disclosure to read upon appellant's specification constitute invention, it should be borne in mind that, as stated by the Supreme Court in *Diamond Rubber Company* v. *Consolidated Tire Co.*, 220 U. S. 428, 166 O. G. 25:

> Knowledge after the event is always easy, and problems once solved present no difficulties, indeed, may be represented as never having had any. * * *

The Guy patent being the only reason assigned by the Board of Appeals for the rejection of appellant's application, we assume that but for such reference the claims would have been allowed.

[2] As we are of the opinion that the Guy patent was not a valid reference, it follows that error was committed in rejecting the claims.

Claim 2 differs from claim 1 only in the addition of the words in said claim 2—

> means for exerting a regulated pressure on the two upper rollers of said four-roller mill.

Appellant in his specification concedes that the means referred to in the added language are well known in the art and do not constitute in themselves a part of his invention, but, having found that claim 1 should be allowed, claim 2 is allowable in combination with his invention covered by claim 1, for it is an element necessary for the successful operation of appellant's invention.

On September 17, 1929, after appellant's appeal from the Board of Appeals had been perfected, a stipulation was entered into between counsel for appellant and counsel for the Commissioner of Patents that the affidavit of Ernest Wilkinson, appellant's counsel, might, subject to the approval of the court, be added to the record on file in the case, and such affidavit is found in the files in the case.

[3] To the extent that this affidavit sets forth facts material to the issue here involved, not found in the record made in the Patent Office, it can not be and has not been considered by us. The law requires that we shall hear and determine appeals "and review the decision appealed from in a summary way, *on the evidence produced before the Commissioner.*" (Italics ours.)

[4] To the extent that the affidavit consists of arguments, which it does to a considerable degree, it is in the nature of a reply brief and should not have been filed without first securing the express permission of this court, on motion made therefor, which was not done in this case.

Finally, even though we were not convinced that the Guy patent does not disclose appellant's invention, the very general character of the Guy disclosure, the multiplicity of combinations set out by him, together with the lack of detail of means by which such combinations could be made operative, render it very doubtful, to say the least, whether Guy contributed anything to the art, or taught anything that was new or useful in its development. It has been held that the existence of doubt defeats anticipation. *Badische Anilin, etc., Fabrik* v. *Kalle*, 94 F. 163, affirmed 104 F. 802.

For the reasons stated, the decision of the Board of Appeals is reversed.

Reversed.

Patent Suits

(Notices under sec. 4921, R. S., as amended Feb. 18, 1922.)

1,084,080, G. H. Gillons, Oil-refining mechanism, filed Feb. 27, 1930, D. C., N. D. Calif. (San Francisco), Doc. E 2563–L, *G. H. Gillons et al.* v. *The Shell Co. of Calif.*

1,111,583, P. E. Holt, Traction belt for tractors; 1,442,567, same, Track link; 1,661,649, 1,194,269, C. L. Best, Traction engine; 1,232,482, same, Tractor; 1,258,601, E. F. Norelius, Track chain; 1,520,432, same, Traction engine; 1,304,428, H. C. White, Tractor truck mechanism; 1,304,430, E. E. Wickersham, End-thrust roller bearing; 1,329,316, same, Self-laying-track vehicle; 1,379,323, W. Turnbull, same; 1,258,602, same, Tractor; 1,314,621, same, Antivibrating means for self-laying tracks; 1,282,326, same, Endless link track, filed Mar. 14, 1930, D. C., N. D. Calif. (San Francisco), Doc. 2596–K, *Caterpillar Tractor Co. et. al.* v. *W. H. Worden Co.*

1,172,808, 1,249,129, 1,255,896, 1,336,570, Lathrop and Paulson, Milk-can-washing machine; 1,336,567, same, Can-reversing mechanism for can-washing machines; 1,247,692, same, Cover-applying mechanism for can-washing machine; 1,525,304, same, Solution process; 1,249,130, same, Feeding mechanism for can-washing machines; 1,378,245, 1,444,925, H. D. Lathrop, Can-washing machine; 1,396,516, 1,454,124, E. F. McEvan, same; 1,578,451, same, Can-delivering mechanism; 1,649,073, same, Can conveying, inverting, and discharging mechanism, filed Mar. 31, 1930, D. C., W. D. N. Y., Doc. 201, *H. D. Lathrop* v. *Oakes & Burger Co., Inc.*

1,194,269. (See 1,111,583.)

1,212,840, F. J. Straub, Building block and method of making, filed Mar. 14, 1930, D. C. Del., Doc. E 777, *Crozier-Straub, Inc., et al.* v. *N. B. Kelley et al.*

1,232,482. (See 1,111,583.) 1,247,692. (See 1,172,708.)

1,249,129. (See 1,172,808.) 1,249,130. (See 1,172,808.)

1,255,896. (See 1,172,808.) 1,258,601. (See 1,111,583.)

1,258,602. (See 1,111,583.)

1,263,355, P. Artigue, Means for producing animated shadowgraphs, D. C., S. D. Calif. (Los Angeles), Doc. 1–81–B, *P. Artigue* v. *P. Grimm et al.* (*Grimm & Cosgrove*). Doc. K–51–M, *P. Artigue* v. *Warner Bros. Pictures, Inc.* Doc. K–52–M, *P. Artigue* v. *Universal Pictures Corp.* Doc. K–56–M, *P. Artigue* v. *First National Pictures, Inc.* Doc. K–57–M, *P. Artigue* v. *Metro-Goldwyn Mayer Corp.* Doc. K–80–M, *P. Artigue* v. *W. L. Hall et al.* Doc. K–81–M, *P. Artigue* v. *Wm. Fox Vaudeville Co.* Dismissed without prejudice Mar. 11, 1930, in each of above cases.

1,271,529, M. C. Hopkins, Acoustic device, filed Mar. 11, 1930, D. C. Del., Doc. E 776, *Lektophone Corp.* v. *The F. R. Gooding Co.*

1,282,326. (See 1,111,583.) 1,304,428. (See 1,111,583.)

1,304,430. (See 1,111,583.) 1,314,621. (See 1,111,583.)

1,329,316. (See 1,111,583.) 1,336,567. (See 1,172,808.)

1,336,570. (See 1,172,808.) 1,378,245. (See 1,172,808.)

1,379,323. (See 1,111,583.) 1,396,516. (See 1,172,808.)

1,399,566, I. Lazarus, Projection screen, D. C., S. D. Calif. (Los Angeles), Doc. E Q–95–H, *R. R. Micks* v. *J. Brassington et al.* (*Universal Cine Screen Co.*) Bill and counterclaim dismissed with prejudice on stipulation of counsel Mar. 3, 1930.

1,423,500, R. Cross, Process of treating petroleum oil; 1,426,813, J. C. Black, Process for the production of low-boiling-point hydrocarbons; 1,431,772, same, Apparatus for treating hydrocarbons to produce those of lower boiling points; 1,456,419, same, Process and apparatus for the production of low-boiling-point hydrocarbons, filed Mar. 28, 1930, D. C. Me. (Portland), Doc. 924, *Gasoline Products Co., Inc.*, v. *Champlin Refining Co.*

1,426,813. (See 1,423,500.) 1,431,772. (See 1,423,500.)

1,442,567. (See 1,111,583.) 1,444,925. (See 1,172,808.)

1,454,124. (See 1,172,808.) 1,456,419. (See 1,423,500.)

1,470,524, H. B. Burt, Process of making frozen confections; 1,505,592, F. W. Epperson, Frozen confectionery, D. C., E. D. Mo., E. Div., Doc. 8756, *The Popsicle Corp. et al* v. *D. C. Madison et al.* (*Alaska Sucker Co.*). Consent decree holding 1,505,592 and claims 1 and 2 of 1,470,524 valid and infringed Mar. 29, 1930.

1,483,361, J. P. McCarthy, Method of reclaiming waste, filed Mar. 5, 1930, D. C., S. D. Ind. (Indianapolis), Doc. 1232, *The American Laundry Machinery Co.* v. *Hoosier Waste Renovating Co.*

1,486,883, E. P. Halliburton, Method of hydrating cement; 1,500,385, same, Method of and apparatus for mixing materials, filed Mar. 27, 1930, D. C., W. D. Okla. (Oklahoma City), Doc. E 1105, *E. P. Halliburton et al* v. *Owen Oil Well Cementing Process, Inc.* Doc. E 1106, *E. P. Halliburton et al* v. *Universal Oil Well Cementing Co.*

1,496,458, V. A. Friend, Method of preparing canned baked beans, filed Feb. 14, 1930, D. C. Me. (Portland), Doc. 922, *L. A. Friend et al.* (*Friend Bros.*) v. *Burnham & Morrill Co.*

1,500,385. (See 1,486,883.) 1,505,592. (See 1,470,524.)

1,520,432. (See 1,111,583.) 1,525,304. (See 1,172,808.)

1,534,092, W. H. Solle, Fruit-drying apparatus, filed Mar. 27, 1930, D. C. Oreg. (Portland), Doc. E 9102, *W. H. Solle* v. *J. M. Throne.*

1,546,708, J. S. Booth, Motor vehicle, D. C., S. D. Ind. (Indianapolis), Doc. 1004, *J. S. Booth* v. *Stutz Motor Car Co. of America et al.* Dismissed for want of equity Feb. 28, 1930.

1,562,288, P. Burke, Pull shovel, filed Apr. 1, 1930, D. C., E. D. Wis. (Milwaukee), Doc. 2894, *Northwest Engineering Corp.* v. *Harnischfeger Corp.*

1,570,382, A. S. Lyhne, Vanity box, D. C., S. D. N. Y., Doc. E 44/133, *A. S. Lyhne* v. *Sagamor Metal Goods Corp.* Dismissed Mar. 28, 1930.

1,578,451. (See 1,172,808.)

1,593,302, E. B. Hiatt, Basket liner, filed Mar. 28, 1930, D. C., M. D. Pa., Doc. 660, *Carpenter-Hiatt Sales Co.* v. *Rice, Trew & Rice Co.* Same, filed Mar. 26, 1930, D. C. Del., Doc. E 778, *Carpenter-Hiatt Sales Co.* v. *C. E. Brown.*

1,635,183, A. A. Jeannotte, Combined stool, steps, and tool box, D. C. Me. (Portland), Doc. 909, *A. A. Jeannotte* v. *Morrill-Adams Co.* Dismissed Mar. 25, 1930.

1,646,416, G. C. Monckmeier, Automatic thrust bearing, D. C., S. D. Ind. (Indianapolis), Doc. E 1157, *Eyer-Tite Bolt Co. et al.* v. *Adjustable Bearing Co.* Dismissed for want of equity Mar. 24, 1930.

1,649,073. (See 1,172,808.)

1,660,017, J. Schoenfeld, Switch plug, filed Feb. 28, 1930, D. C., N. D. Calif. (San Francisco), Doc. 2567–K, *J. Schoenfeld* v. *S. H. Kress & Co. et al.*

1,661,649. (See 1,111,583.)

1,743,439, C. DeWitt, Steel pole, filed Mar. 3, 1930, D. C., N. D. Calif. (San Francisco), Doc. 2574–S, *Taper Tube Pole Co.* v. *City of Berkeley, Calif., et al.*

Re. 15,115, E. D. Mackintosh, Method of driving electric centrifugal machines, D. C. Del., Doc. E 697, *S. S. Hepworth Co. et al.* v. *Penick & Ford, Ltd., Inc.* Patent held valid and infringed Mar. 4, 1930.

Re. 16,579, J. S. Booth, Motor vehicle, D. C. Ind. (Indianapolis), Doc. 1048, *J. S. Booth* v. *Stutz Motor Car. Co. of America, Inc.* Dismissed for want of equity Feb. 28, 1930.

Des. 70,209, J. Berlinger, Wedding ring, D. C., S. D. N. Y., Doc. E 51/111, *J. Berlinger* v. *M. Kronstadt* (*Bristol Seamless Ring Co.*). Consent decree for plaintiff Mar. 27, 1930.

Des. 76,347, A. R. Kanne, Lamp, D. C., S. D. N. Y., Doc. E 49/126, *Kanne & Bessant, Inc.*, v. *Eaglelet Metal Spinning Co., Inc., et al.* Injunction June 18, 1929.

Trade-Marks Canceled

156,533.—Rabbit skin dyed by process to be made into fur garments. Aaron Kosofsky, New York, N. Y. Registered June 27, 1922. Canceled May 17, 1930.

Adverse Decisions in Interference

In interferences involving the indicated claims of the following patents final decisions have been rendered that the respective patentees were not the first inventors with respect to the claims listed:

Pat. 1,567,312, R. Wietzel, Manufacture of formanide, decided April 10, 1930, claims 5 and 6.

Pat. 1,593,356, D. C. Prince, System of electrical distribution, decided May 7, 1930, claim 4.

Pat. 1,658,427, A. D. Cardwell, Means for variably controlling electrical instruments, decided May 9, 1930, claim 1.

Pat. 1,686,661, W. H. Himes, Pipe-threading machine, decided May 7, 1930, claim 1.

Pat. 1,723,926, S. M. Fairchild, Information recording attachment for cameras, decided May 24, 1930, claims 6, 7, and 9.

Pat. 1,743,470, E. D. Mead, Magnetic devices, decided May 8, 1930, claim 1.

Final decisions in interference have been rendered against the following trade-marks:

T. M. 190,851, Paint remover, Washoff Products Company, of Lima, Ohio. Registered October 28, 1924. Decided May 6, 1930.

T. M. 258,006, Coffee, Jewel Tea Co., of Chicago, Illinois. Registered June 25, 1929. Decided May 27, 1930.

Adjudicated Patents

(D. C. N. Y.) Fuller patent, No. 1,101,268, for stencil sheet, *Held* infringed. *Elliott Addressing Mach. Co.* v. *Addressing Typewriter Stencil Corporation*, 39 F. (2d) 232, 233.

(D. C. Md.) Straub patent, No. 1,212,840, for building block and method of making the same *Held* valid and infringed. *Crozier Straub, Inc.*, v. *Maryland Concrete Corporation*, 39 F. (2d) 126.

(D. C. Ill.) Kohn patent, No. 1,368,809, for garbage incinerator, claims 2 and 3, *Held* not infringed. *Kohn* v. *Cribben & Sexton Co.*, 39 F. (2d) 126.

(D. C. N. J.) Nelson patent, No. 1,377,023, for lubricating device, *Held* invalid. *Bassick Mfg. Co.* v. *Rogers Products Co.*, 39 F. (2d) 123.

(D. C. Ohio.) Smith patent, No. 1,379,224, for dog-racing amusement, claims 1 and 2 *Held* not infringed. *Smith* v. *Springdale Amusement Park*, 39 F. (2d) 92.

(D. C. Ohio.) Smith patent, No. 1,507,439, for starting cage for racing dogs, *Held* not infringed. Id.

(D. C. Ohio.) Smith patent, No. 1,507,440, for housing for conveyer cars and tracks, *Held* not infringed. Id.

(D. C. Pa.) Peller patent, No. 1,655,391, for method of and apparatus for feeding molten glass, *Held* not infringed. *Hartford-Empire Co.* v. *Hazel Atlas Glass Co.*, 39 F. (2d) 111.

(D. C. Del.) Greenewalt reissue patent, No. 16,825, for method of and means for associating light and music, *Held* invalid. *Greencicalt* v. *Stanley Co. of America*, 39 F. (2d) 102.

Notices of Cancellation

U. S. PATENT OFFICE, *Washington, May 22, 1930.*

Charles Green, his assigns or legal representatives, take notice:

A cancellation proceeding having been instituted by this Office upon the application of The American Products Company, of 3265 Colerain Avenue, Cincinnati, Ohio, to effect the cancellation of the trade-mark registration of Charles Green, of 78 Walker Street, New York, N. Y., No. 115,447, dated February 13, 1917, and the notice of such proceeding sent by registered mail to the said Green at the said address having been returned by the post-office as undeliverable, notice is hereby given that unless said Green, his assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the cancellation will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

U. S. PATENT OFFICE, *Washington, May 26, 1930.*

Robert B. Karoff, his assigns or legal representatives, take notice:

A cancellation proceeding having been instituted by this Office upon the application of The American Products Company, of 3265 Colerain Avenue, Cincinnati, Ohio, to effect the cancellation of the trade-mark registration of Robert B. Karoff, of 45 East 17th Street, New York, N. Y., No. 222,205, dated December 28, 1926, and the notice of such proceeding sent by registered mail to the said Karoff at the said address having been returned by the post office as undeliverable, notice is hereby given that unless said Karoff, his assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the cancellation will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

U. S. PATENT OFFICE, *Washington, May 26, 1930.*

Rolland Ellis Thompson, his assigns or legal representatives, take notice:

A cancellation proceeding having been instituted by this Office upon the application of the Clicquot Club Company, of Millis, Mass., to effect the cancellation of the trade-mark registration of Rolland Ellis Thompson, of 505 D Street, N. W., Washington, D. C., No. 108,315, dated January 25, 1916, and the notice of such proceeding sent by registered mail to the said Thompson at the said address having been returned by the post office as undeliverable, notice is hereby given that unless said Thompson, his assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the cancellation will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

TRADE-MARKS

OFFICIAL GAZETTE, JUNE 17, 1930

[VOL. 395. No. 3]

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this publication.

Marks applied for "under the ten-year proviso" are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 1 of said act, a fee of ten dollars must accompany each notice of opposition.

CLASS 1

Raw or Partly-Prepared Materials

Ser. No. 282,504. THE TILDESLEY COAL COMPANY, Cincinnati, Ohio. Filed Apr. 16, 1929.

Mephisto Coal

"Makes any furnace function"

The word "Coal" and the words "Makes Any Furnace Function" are disclaimed apart from the mark as shown in the drawings.

For Coal.

Claims use since Feb. 20, 1929.

Ser. No. 298,998. LOUIS V. KEELER, New York, N. Y. Filed April 17, 1930.

JATEX

For Liquid Latex Having 60 Per Cent Dry Rubber Content.

Claims use since Oct. 1, 1929.

Ser. No. 299,956. COMMONWEALTHS COLLIERIES, INCORPORATED, Cincinnati, Ohio. Filed May 5, 1930.



For Coal.

Claims use since Mar. 6, 1930.

CLASS 2

Receptacles

Ser. No. 297,733. GIBRALTAR CORRUGATED PAPER COMPANY, INC., North Bergen, N. J. Filed Mar. 22, 1930.

ROCKRAFT LINERS

The word "Liners" being disclaimed apart from the mark shown.

For Corrugated Paper Boxes and Cartons.

Claims use since Jan. 1, 1930.

Ser. No. 298,190. L. B. Co., Chicago, Ill. Filed Mar. 31, 1930.

MOTH SEAL

No claim is made to the words "North Seal" apart from the mark shown in the drawing.
For Cedarized Mothproof Fibre Garment Bags.
Claims use since Jan. 2, 1930.

Ser. No. 298,338. THE KROGER GROCERY & BAKING CO., Cincinnati, Ohio. Filed Apr. 3, 1930.

Country Club



For Paper Shopping Bags, Wooden Shopping Baskets and Sugar Cartons.
Claims use since July 1, 1929.

Ser. No. 298,584. H. M. NEWHALL & CO., San Francisco, Calif. Filed Apr. 9, 1930.



For Burlap Bags.
Claims use since Jan. 1, 1930.

Ser. No. 298,585. H. M. NEWHALL & CO., San Francisco, Calif. Filed Apr. 9, 1930.



For Burlap Bags.
Claims use since Jan. 1, 1930.

CLASS 4

Abrasive, Detergent, and Polishing Materials

Ser. No. 277,311. CHAS. F. L'HOMMEDIEU & SONS CO., Chicago, Ill. Filed Dec. 28, 1928.

Reliance

For Polishing, Cutting, Buffing, and Finishing Compositions, with Incidental Coloring Properties—Namely, Lime-Finish, Metal Polish, White-Finish Metal Polish, Metal Cleaner, Lime and Tripoli Compositions Used in Steel Polishing, Crocus Compositions, Emery Paste Compositions, Emery Cake Compositions, Chromium Compositions, Tallow and Stearic-Acid Compositions or Grease-Stick Compositions, Used in Metal Polishing; Rouges, Buffs, Belt Dressing, Grinding Wheels, Buffing Wheels, and Polishing Wheels.
Claims use since 1911.

Ser. No. 290,015. THE FEDERAL RUBBER COMPANY, Chicago, Ill., Cudahy, Wis., and Chicopee Falls, Mass. Filed Sept. 20, 1929.

FEDERAL

For Dressing for Auto Tops and Rubber Tires.
Claims use since July 12, 1929.

Ser. No. 292,547. ONE SWIPE COMPANY, Minneapolis, Minn. Filed Nov. 18, 1929.



For Nonsoap-Containing Substance for Cleaning Finished Surfaces.
Claims use since Apr. 30, 1928.

Ser. No. 293,890. PAUL PETER MÜLHENS, doing business as Eau de Cologne- & Parfümerie-Fabrik "Glockengasse No. 4711" gegenüber der Pferdepost von Ferd. Mülhens, Cologne-on-the-Rhine, Germany. Filed Dec. 19, 1929.



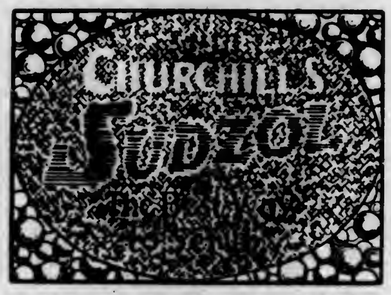
The drawing is lined for blue, no claim being made to the exclusive use of the word "Creme" apart from the mark shown.
For Soaps, Including Toilet Soaps and Shaving Sticks.
Claims use since July 30, 1928.

Ser. No. 293,892. PAUL PETER MÜLHENS, doing business as Eau de Cologne- & Parfümerie-Fabrik "Glockengasse No. 4711" gegenüber der Pferdepost von Ferd. Mülhens, Cologne-on-the-Rhine, Germany. Filed Dec. 19, 1929.



The drawing is lined for blue.
For Soaps, Including Toilet Soaps and Shaving Sticks.
Claims use since July 30, 1928.

Ser. No. 295,467. CHURCHILL MFG. CO., Sioux City, Iowa. Filed Feb. 1, 1930.



The lining on the drawing indicates shading only. No claim is made to the exclusive right to the words "The Best Way to Scrub" apart from the other features of the mark shown.
For Soap for Scrubbing Purposes.
Claims use since 1921.

Ser. No. 297,447. F. COBB MIMS, doing business as Klen-Zit Company, Philadelphia, Pa. Filed Mar. 17, 1930.

Klen-Zit
Under The Dirt The Paint Is Still Good

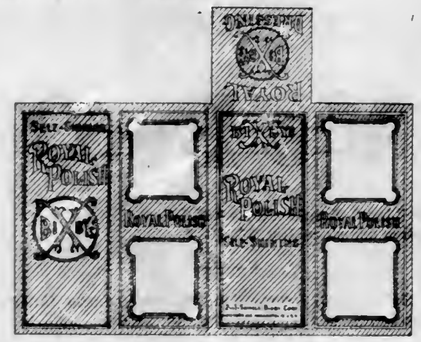
No claim being made to the words "Under The Dirt The Paint Is Still Good" apart from the mark substantially as shown in the drawing.
For Paint and Varnish Cleaners and Hard Stone Cleaner.
Claims use since on or about Apr. 1, 1928.

Ser. No. 297,689. MASTER-ALL CHEMICAL COMPANY, Sioux City, Iowa. Filed Mar. 21, 1930.

"MASTER-ALL"

For Dry-Cleaning Fluid.
Claims use since June 1, 1928.

Ser. No. 297,882. 2 IN 1-SHINOLA-BIXBY CORPORATION, New York, N. Y. Filed Mar. 25, 1930.



No claim is made to the words "Polish, Self-Shining, Dressing," and the geographical expression "New York and Indianapolis, U. S. A.," as well as the carton appearing on the drawing, apart from the rest of the features of the mark as shown. The lining in the drawing is intended to denote the color purple.
For Shoe Polish.
Claims use since about Jan. 1, 1903.

Ser. No. 298,293. 2 IN 1-SHINOLA-BIXBY CORPORATION, New York, N. Y. Filed Apr. 2, 1930.

SHINOLA

For Cleaning, Polishing, and Renovating Composition Having Incidental Waterproofing Properties, for Use on Footwear of Leather, Rubber, or Fabric, Leather Goods, Harness, Clothing, Glassware.
Claims use since Jan. 1, 1900.

Ser. No. 298,294. 2 IN 1-SHINOLA-BIXBY CORPORATION, New York, N. Y. Filed Apr. 2, 1930.



No claim is made to the geographical terms "New York" and "Indianapolis, U. S. A." and to the representation of the container apart from the other features of the mark shown in the drawing.

For Cleaning, Polishing, and Renovating Composition Having Incidental Waterproofing Properties, for Use on Footwear of Leather, Rubber, or Fabric, Leather Goods, Harness, Clothing, Glassware.

Claims use since Jan. 1, 1900.

Ser. No. 298,669. THE SELIG COMPANY, Atlanta, Ga. Filed Apr. 10, 1930.

VelvO

For Liquid Soap for Personal Use.
Claims use since Jan. 10, 1922.

Ser. No. 298,826. THE LEA MANUFACTURING COMPANY, Waterbury, Conn. Filed Apr. 14, 1930.



For Finishing Compositions for Buffing and Polishing Metallic and Other Surfaces.
Claims use since February, 1924.

Ser. No. 299,338. THE PROCTER & GAMBLE COMPANY, Cincinnati, Ohio. Filed Apr. 23, 1930.

drift

For Package Soap.
Claims use since Mar. 24, 1930.

Ser. No. 299,416. SWIFT AND COMPANY, Chicago, Ill. Filed Apr. 24, 1930.

WHITE BIRCH

For Soap.
Claims use since on or about the year 1905.

Ser. No. 299,553. CHURCHILL MFG. CO., Sioux City, Iowa. Filed Apr. 28, 1930.

Old Castle

For Neutral Soap.
Claims use since Apr. 1, 1930.

CLASS 5

Adhesives

Ser. No. 297,183. FERDINAND SICHEL KOMMANDIT-GESELLSCHAFT, Hanover-Limmer, Germany. Filed Mar. 12, 1930.



For Adhesive Glues, Gums, and Pastes—Namely, Gum Arabic, Dextrine, Glues for Painters' and Jointers' Use, Leather Glues, Cold Glues, Vegetable Glues, Paste Powders.
Claims use since 1907.

Ser. No. 297,184. FERDINAND SICHEL KOMMANDIT-GESELLSCHAFT, Hanover-Limmer, Germany. Filed Mar. 12, 1930.

SICHEL

For Adhesive Glues, Gums, and Pastes—Namely, Gum Arabic, Dextrine, Glues for Painters' and Jointers' Use, Leather Glues, Cold Glues, Vegetable Glues, Paste Powders.
Claims use since Jan. 8, 1930.

CLASS 6

Chemicals, Medicines, and Pharmaceutical Preparations

Ser. No. 275,041. INDEPENDENT GROCERS' ALLIANCE DISTRIBUTING COMPANY, Chicago, Ill. Filed Nov. 9, 1928.



For Starch, Bluing, Ammonia, Salt, and Baking Powder.
Claims use since Sept. 1, 1927.

Ser. No. 281,954. WALTER A. KRANK, St. Paul, Minn., executor of the estate of Alfred J. Krank, deceased. Filed Apr. 6, 1929.

Place-A-Wave

The word "Wave" is hereby disclaimed apart from the mark as shown.
For Hairdressing Preparation.
Claims use since Mar. 4, 1929.

Ser. No. 283,094. DARNEE, INC., New York, N. Y. Filed Apr. 27, 1929.

SUNBRONZE

For Face Powder, Face Lotion, Rouge, and Face Cream.
Claims use since Apr. 12, 1929.

Ser. No. 283,272. FRANK A. GENESER, doing business as Geneser Chemical Company, Des Moines, Iowa. Filed Apr. 30, 1929.

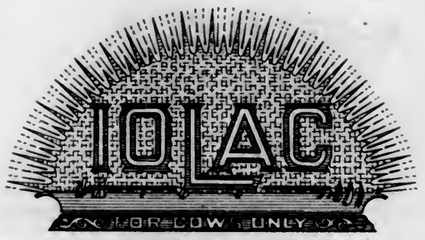


Applicant disclaims the right to the exclusive use of the words "Lice Oil" apart from the mark as shown on the drawing.

For Oily Substance for the Elimination of Poultry Lice.

Claims use since about Mar. 1, 1929.

Ser. No. 283,919. BREEDERS SERVICE INC., Troy, N. Y. Filed May 13, 1929.



The color lining appearing on the drawing is used for shading purposes only, color forming no feature of applicant's marking. Applicant disclaims the words "For Cows Only" apart from the mark as shown on the drawing.

For Cattle Tonic for the Relief of and the Prevention of Abortion in Pregnant Cows by its Tonic and Stimulating Effect.

Claims use since Jan. 1, 1928.

Ser. No. 285,182. SOCIETA ANONIMA DOCTOR LEOPOLDO ZAMBELETTI, Milan, Italy. Filed June 6, 1929.

"EMARSOL,,

For Solution of Arsenical Acid to be Used for Purpose of Injections.
Claims use since Mar. 18, 1929.

Ser. No. 289,348. TH. GOLDSCHMIDT A.-G., Essen-on-the-Ruhr, Germany. Filed Sept. 5, 1929.

Tegin

For Cosmetic Ointments and Creams.
Claims use since June 1, 1928.

Ser. No. 293,459. PAUL AGOSTA, Detroit, Mich. Filed Dec. 10, 1929.



AGOSTA'S

The portrait is that of applicant.
For Preparation for Piles.
Claims use since January, 1929.

Ser. No. 293,578. HENRIK GAHNS AKTIEBOLAG, Uppsala, Sweden. Filed Dec. 12, 1929.



For Hair Tonic, Hair Fixature, Sulphur Pomade, Sulphur Tar Pomade, and Other Pomades for Hair and Skin; Skin Creams, Face Powder, and Talcum Powder.
Claims use since 1912.

Ser. No. 294,169. NATURAL OIL PRODUCTS, INC., San Francisco, Calif. Filed Dec. 28, 1929.



For Medicinal Mineral Oil Used for the Treatment of Skin Eruption, Burns, Sunburn, Bruises, and Sprains; Dandruff and Itching Scalps, and Poison-Oak Infection.
Claims use since July 20, 1928.

Ser. No. 293,459. PAUL AGOSTA, Detroit, Mich. Filed Jan. 9, 1930.

LAXA-LIMES

The word "Limes" is disclaimed apart from the mark as shown on the drawing.
For Laxative Having a Fruity Lime Taste.
Claims use since Dec. 14, 1929.

Ser. No. 294,699. WATERBURY CHEMICAL COMPANY, INC., New York, N. Y. Filed Jan. 11, 1930.

PANOSAN

For Medicines and Pharmaceutical Preparations in the Form of Compounds Containing Cod-Liver Oil for Use as General Tonics.
Claims use since Dec. 24, 1929.

Ser. No. 295,919. DONATO ROSSI, doing business as Eros Chemical Company, Brooklyn, N. Y. Filed Feb. 11, 1930.



For Preparation for the Treatment of Whooping Cough.
Claims use since Nov. 1, 1928.

Ser. No. 296,100. ARGY PRODUCTS COMPANY, New York, N. Y. Filed Feb. 17, 1930.

IODOXYL

For Capsules of Oxo-Iodo-Cinchophen.
Claims use since Mar. 1, 1928.

Ser. No. 296,316. BENJAMIN & HERZOG, New York, N. Y. Filed Feb. 21, 1930.

FELTINA

For Size for Finishing Felt Hats and Straw Hats.
Claims use since September, 1928.

Ser. No. 296,947. BERTHE BATTENDIER, Paris, France. Filed Mar. 7, 1930.

CYTOSTYL

For Sterilized Milk Serum Used as a Surgical Dressing and for Internal Surgical Treatment of Wounds of All Kinds.
Claims use since Nov. 25, 1929.

Ser. No. 297,148. L. T. PIVER, INC., Wilmington, Del., and New York, N. Y. Filed Mar. 11, 1930.

Rêve d'or

For Perfume, Toilet Water, Face Powder, Talcum Powder, Bath Salts, Brilliantine, Bandoline, Rouge, Lip Stick, Dusting Powder, Sachet, Cold Creams, Lotion for the Skin and Hair, Powder and Rouge Compacts, and Vegetal.
Claims use since Jan. 21, 1929.

Ser. No. 297,181. JOHN GEORGE EVANKO, Pittsburgh, Pa. Filed Mar. 12, 1930.

E-VAN-KO



The signature shown on the drawing is the facsimile of the signature of the applicant and the portrait is that of the applicant.
For Preparation Used as a Hair Grower, Hair Tonic, and Scalp Irritations.
Claims use since Jan. 15, 1930.

Ser. No. 297,696. THE SELIG COMPANY, Atlanta, Ga. Filed Mar. 21, 1930.

FLO-VAPOR

No claim is made to the word "Vapor" apart from the mark as shown.
For Deodorizing Blocks.
Claims use since Mar. 20, 1925.

Ser. No. 297,723. BLANCHE A. BLESCH, doing business as Almondol Co., Chicago, Ill. Filed Mar. 22, 1930.

ALMONDOL

For Healing Salve.
Claims use since Mar. 14, 1930.

Ser. No. 297,788. ALLIED DRUG SUPPLY COMPANY, doing business as Allied Drug Stores, Chicago, Ill. Filed Mar. 24, 1930.

ADSCO

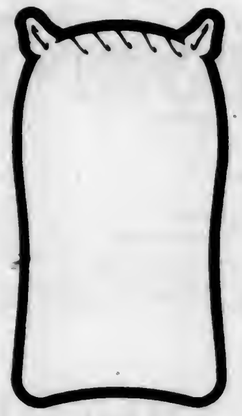
For Spirit Ammonia Aromatic, Glycerin, Aromatic Cascara, Castor Oil, Rubbing Alcohol Compound, Glycerin and Rose Water, Sweet Oil, Witch-Hazel Extract, Oil of Citronella, Spirit Camphor, Olive Oil for Medicinal Purposes, Oil of Wintergreen, Bay Rum, Spirit Turpentine, Sweet Spirit Nitre, Chloroform Liniment, Tincture of Iodine, Camphorated Oil, Fennel Seed, Comp. Licorice Powder, Bicarbonate of Soda, Henna Powder, Flaxseed, Alum, Pennyroyal Herb, Peroxide of Hydrogen, Senna Leaves, Sulphur, Epsom Salt, Linden Flowers and Leaves, Horehound Herb, Boric-Acid Crystals, German Chamomile, Tansy Herb, Catnep Herb, and Essence of Peppermint.
Claims use since December, 1928.

Ser. No. 297,842. ATOMOL MFG. COMPANY, New Haven, Conn., and New York, N. Y. Filed Mar. 25, 1930.

ATOMOL

For Liquid, Concentrated Inhalent Used in the Treatment of Head Colds and Nasal Catarrh.
Claims use since Sept. 3, 1928.

Ser. No. 298,071. THE BARKER, MOORE & MEIN CO., INC., Philadelphia, Pa. Filed Mar. 29, 1930.



No claim is made to the representation of a bag apart from the mark shown in the drawing.

For Mineral Appetizer and Condition Powders for Poultry, Cows and Hogs.

Claims use since on or about Mar. 7, 1930.

Ser. No. 298,366. WALGREEN CO., doing business as Valentine Laboratories, Chicago, Ill. Filed Apr. 3, 1930.

ANIDON

For Tablets for the Relief of Distress and Discomfort Due to Simple Headache, Head Colds, Muscular Aches and Pains, and After Tooth Extraction.

Claims use since Mar. 27, 1930.

Ser. No. 298,471. SYNTHETIC RESINS CO. INC., New York, N. Y. Filed Apr. 5, 1930.

RESINITE

For Synthetic Resin Which is Used in the Manufacture of Varnishes and Lacquers.

Claims use since Mar. 18, 1930.

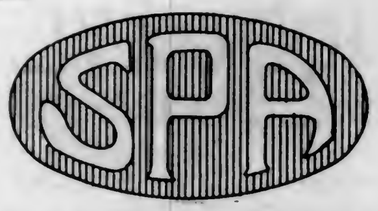
Ser. No. 298,489. JAMES T. COLE, doing business as Co-Fos Chemical Products Co., Highland Park, Mich. Filed Apr. 7, 1930.

SUL-MO-SAL

For General Tonic, Blood Purifier, and Rheumatic Medicine.

Claims use since Jan. 2, 1930.

Ser. No. 298,532. S. R. FUJII, doing business as Noxache Chemical Laboratory, San Francisco, Calif. Filed Apr. 8, 1930.



The oval in the drawing is lined to represent the color red.

For Bath Salts.

Claims use since on or about Feb. 15, 1929.

Ser. No. 298,730. UNITED DRUG COMPANY, Boston, Mass. Filed Apr. 11, 1930.

Aspiroids

For Medicinal Preparation for Relieving Colds.

Claims use since Jan. 8, 1930.

Ser. No. 298,765. R-OWN LABORATORIES, INC., Brooklyn, N. Y. Filed Apr. 12, 1930.

℞-OWN

No claim is made to the symbol "℞" apart from the mark shown.

For Antiseptic Ointment.

Claims use since Feb. 19, 1930.

Ser. No. 298,841. EDWIN A. O'DONNELL, doing business as Harris Manufacturing Co., Philadelphia, Pa. Filed Apr. 14, 1930.



The drawing is lined for the color blue.

For Adhesive Liquid Cement for Repairing Radiators and Other Liquid-Containing Vessels.

Claims use since Apr. 2, 1930.

Ser. No. 298,858. E. R. SQUIBB & SONS, New York, N. Y. Filed Apr. 14, 1930.

NOXIVE

For Preparation for the Treatment of Poison-Ivy Dermatitis.

Claims use since Apr. 2, 1930.

Ser. No. 298,911. ISIDOR SMITH, doing business as Snib Chemists, New York, N. Y. Filed Apr. 15, 1930.

SNIB BALM

The word "Balm" appearing on the drawing is disclaimed apart from the other features of the mark as shown therein.

For Preparation for the Treatment of Aches and Pains, Such as Rheumatism, Sore Muscles, Chest Colds, and Coughs.

Claims use since Mar. 1, 1930.

Ser. No. 298,940. LUZ ESTIVAN GARCIA, San Antonio, Tex. Filed Apr. 16, 1930.



For Cold Preparation.

Claims use since Mar. 10, 1930.

Ser. No. 298,956. FERDINAND POLLARI, doing business as Fratelli Pollari, Buffalo, N. Y., and Parma, Italy. Filed Apr. 16, 1930.



The lining in the drawing representing the colors red, blue, green, and orange. No claim being made to the exclusive use of the words "A Very Good Tonic" and "Parma" apart from the mark as shown in the drawing.

For Wine Tonic.

Claims use since Nov. 29, 1926.

Ser. No. 298,980. OTIS CLAPP & SON, INC., Boston, Mass. Filed Apr. 17, 1930.

AROMANT

For Nasal Inhalant Intended to Assist Restoration of Normal Breathing, to Cleanse and Soothe Nose and Air Passages by Suitable Medication.

Claims use since Apr. 9, 1930.

Ser. No. 299,160. THE SELIG COMPANY, Atlanta, Ga. Filed Apr. 19, 1930.

MOTH-IT

No claim is made to the word "Moth" apart from the mark as shown.

For Insecticide.

Claims use since Feb. 18, 1929.

Ser. No. 299,720. THE LETONE COMPANY, West Milton, Ohio. Filed Apr. 30, 1930.

LETONE

For Preparation for the Treatment of Diabetes and Purifying the Blood.

Claims use since Dec. 8, 1928.

Ser. No. 299,860. PENN BROS., Chicago, Ill. Filed May 2, 1930.



For Preparation for the Treatment of Rheumatism, Cramp, and All Kinds of Foot Irritations.

Claims use since Apr. 10, 1930.

Ser. No. 299,870. STANDARD OIL COMPANY OF CALIFORNIA, San Francisco, Calif., and Wilmington, Del. Filed May 2, 1930.

CALODORANT

For Volatile Odorant.

Claims use since Oct. 25, 1929.

Ser. No. 299,949. THE BOVININE COMPANY, Chicago, Ill. Filed May 5, 1930.

Neobovinine 20

For Tonic for Anemic Conditions, Marasmus, Dietary Deficiencies, and Malnutrition.

Claims use since Apr. 16, 1930.

Ser. No. 299,983. MIDWAY CHEMICAL CO., Chicago, Ill. Filed May 5, 1930.

"Swish"

For Stock Spray.
Claims use since Jan. 2, 1930.

Ser. No. 299,990. ELMER N. SHOCKLEY, Bassett, Va. Filed May 5, 1930.

VACAR

For Preparation for Removing Dandruff.
Claims use since June 1, 1929.

Ser. No. 300,077. MALACHI C. MCGEE, Winchester, Ark. Filed May 7, 1930.

Nature Spark

For Medical Preparation for Treating the Kidney and Bladder.
Claims use since Mar. 5, 1929.

Ser. No. 300,087. REMEDAL MANUFACTURING COMPANY, doing business as Standard Drug Co., Santa Rosa, Calif. Filed May 7, 1930.

CHIX-PIX

For Preparation for Prevention of Cannibalism Among Chickens.
Claims use since June 1, 1929.

Ser. No. 300,216. THE MENTODENE COMPANY, Atlanta, Ga. Filed May 9, 1930.

Mentodene

For Cough Medicine.
Claims use since 1882.

Ser. No. 300,250. JOHN J. WARNER, doing business as Juvena Pharmacal Co., Rochester, N. Y. Filed May 9, 1930.

Nu-Day

For Lotions for the Treatment of the Skin.
Claims use since Feb. 1, 1930.

Ser. No. 300,304. E. R. SQUIBB & SONS, New York, N. Y. Filed May 10, 1930.

IPRALIDON

For Analgeso Hypnotic.
Claims use since May 6, 1930.

Ser. No. 300,306. THE STA-PUT MANUFACTURING CO., Columbus, Nebr. Filed May 10, 1930.

STA-PUT

For Fly Repellent for Live-Stock, a Disinfectant, and a Healing Lotion for Use in Treating Sores.
Claims use since Dec. 15, 1929.

Ser. No. 300,307. BLANCH STEVENS, doing business as Helen Clark & Co., Los Angeles, Calif. Filed May 10, 1930.

GIANT

For Preparation for the Treatment of the Hair and Scalp.
Claims use since about Apr. 18, 1930.

CLASS 8

Smokers' Articles, Not Including Tobacco Products

Ser. No. 299,903. DOBBS & CO., New York, N. Y. Filed May 3, 1930.



For Cigar Holders, Cigarette Holders, Cigar Cases, Cigarette Cases, Tobacco Pouches.
Claims use since about July, 1908.

Ser. No. 299,003. FILTRET INC., Seattle, Wash. Filed May 5, 1930.

FILTRET

For Smoking Pipes and Filters for Smoking Devices.
Claims use since July 1, 1928.

CLASS 9

Explosives, Firearms, Equipments, and Projectiles

Ser. No. 291,942. VULCAN MATCH CO., INC., New York, N. Y. Filed Nov. 2, 1929.



No claim being made to the exclusive use of the outline of the label nor of the words "Safety Matches Made in Sweden" apart from the mark as shown in the drawing.
For Matches.
Claims use since Sept. 4, 1929.

Ser. No. 293,345. REMINGTON ARMS COMPANY, INC., Bridgeport, Conn., and Ilion, N. Y. Filed Dec. 6, 1929. Under section 5b of the act of 1905 as amended in 1920.

Remington

Applicant is the owner of registrations Nos. 60,248 and 90,742 effected on the ground of exclusive use for 10 years next preceding Feb. 20, 1905.
For Firearms—Namely, Military and Sporting Rifles, Shotguns, Pistols, and Parts Thereof; Metallic Cartridges, Metallic Shot Shells, Paper Shot Shells, Empty Metallic and Paper Shells, Blank Cartridges, Caps, Primers, Wads, Shot, Bullets, and Air Rifles.
Claims use on firearms, particularly military and sporting rifles, shotguns, pistols, and parts thereof, since prior to the year 1889; on metallic cartridges, metallic shot shells, paper shot shells, empty metallic and paper shells, blank cartridges, caps, primers, wads, shot, and bullets, since Ocober, 1910; and on air rifles since about Oct. 9, 1928.

CLASS 10

Fertilizers

Ser. No. 292,310. AMERICAN CYANAMID COMPANY, New York, N. Y. Filed Nov. 12, 1929.

AMMO-PHOS B

For Fertilizer Mixtures.
Claims use since Jan. 15, 1929.

Ser. No. 292,311. AMERICAN CYANAMID COMPANY, New York, N. Y. Filed Nov. 12, 1929.

AMMO-PHOS A

For Fertilizer Mixtures.
Claims use since Jan. 15, 1929.

CLASS 11

Inks and Inking Materials

Ser. No. 298,420. THE AMERICAN CRAYON COMPANY, Sandusky, Ohio. Filed Apr. 5, 1930.

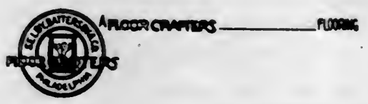
SED-ONO

For Writing Ink.
Claims use since Feb. 6, 1930.

CLASS 12

Construction Materials

Ser. No. 280,576. SELBY, BATTERSBY & CO., Philadelphia, Pa. Filed Mar. 11, 1929.



"Philadelphia" and "Flooring" are disclaimed apart from the association shown.
For Materials for Plastic and Mastic Floor Coverings Intended to be Manufactured in Place and Plastic and Mastic Floors in Condition for Laying.
Claims use since Apr. 6, 1928.

Ser. No. 280,577. SELBY, BATTERSBY & CO., Philadelphia, Pa. Filed Mar. 11, 1929.

SELBATEX

For Materials for Plastic and Mastic Floor Coverings Intended to be Manufactured in Place and for Plastic and Mastic Floors in Condition for Laying.
Claims use since Apr. 6, 1928.

Ser. No. 285,897. THE NATIONAL LIME & STONE COMPANY, Findlay, Ohio. Filed June 21, 1929.

MONARCH

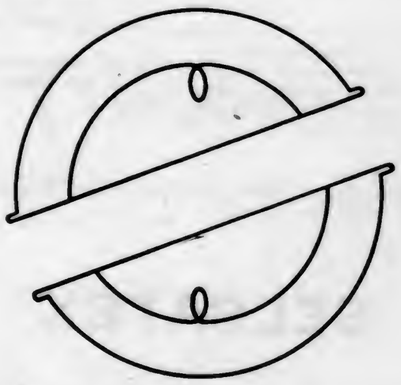
For Finishing Lime, Powdered Lime, Mason's Lime, Lump Lime, and Brick Mortar.
Claims use since about March, 1904.

Ser. No. 291,088. THE FLEISCHMANN TRANSPORTATION COMPANY, Cincinnati, Ohio, and New York, N. Y. Filed Oct. 15, 1929.

AIRSEAL

For Balsa-Wood Lumber Cut to Different Shapes and Sizes and Adapted for Various Structural and Manufacturing Purposes.
Claims use since Aug. 1, 1929.

Ser. No. 291,089. THE FLEISCHMANN TRANSPORTATION COMPANY, Cincinnati, Ohio, and New York, N. Y. Filed Oct. 15, 1929.



For Balsa-Wood Lumber Cut to Different Shapes and Sizes and Adapted for Various Structural and Manufacturing Purposes.
Claims use since Aug. 1, 1929.

Ser. No. 294,661. BENJAMIN BERMAN, doing business as Stonhard Company, Philadelphia, Pa. Filed Jan. 11, 1930.

STONHARD · CONCRETITE ·

For Liquid Mixture as a Hardener, Tightener, Waterproofing, Etc., Used in the Manufacture of Concrete for Paving and Construction Work.
Claims use since Nov. 1, 1928.

Ser. No. 294,662. BENJAMIN BERMAN, doing business as Stonhard Company, Philadelphia, Pa. Filed Jan. 11, 1930.

STONHARD · SURBOND ·

For Asphalt-Coated Stone Used for Construction, Repairing, and Resurfacing Roadways, Driveways, and Floors.
Claims use since Nov. 11, 1928.

Ser. No. 297,593. GENERAL SEATING COMPANY, Chicago, Ill. Filed Mar. 20, 1930.

FIRMASTONE

For Cement with Which to Fasten Articles to a Concrete Floor, Brick or Cement Wall, and Other Things of Such Nature.
Claims use since Dec. 2, 1929.

Ser. No. 297,804. GRIP MANUFACTURING COMPANY, Philadelphia, Pa. Filed Mar. 24, 1930.

WORLD'S BEST GRIP FIRE BRICK CEMENT

No claim is made to the words "Fire Brick Cement."
For Fire-Brick Cement.
Claims use since Oct. 8, 1929.

Ser. No. 298,461. ROCK-HILL ASPHALT & CONSTRUCTION COMPANY, St. Louis, Mo. Filed Apr. 5, 1930.

"ROC-HIL" ROC-HIL ASPHALT

The word "Asphalt" is disclaimed apart from the other features of the mark shown in the drawings.
For Asphalt Used Primarily in the Construction of Highways, Roads, and the Like, and a Surfacing and Conditioning Liquid Compound for Road Coating and Preservation Purposes.
Claims use since Aug. 1, 1929.

Ser. No. 298,616. D. STANLEY CORWIN, Greenport, Long Island, N. Y. Filed Apr. 10, 1930.

Nu-thot

For Plaster, Stucco, Wall Board, Bricks, Lath, Shingles, Tiles, Flooring, Steel Studs, Steel Partition and Roof Construction, Window Frames, Doors, Windows, Trim, Building Blocks, Cement, Roof Tiles, and Drainage Tiles.
Claims use since about Mar. 13, 1930.

CLASS 13

Hardware and Plumbing and Steam-Fitting Supplies

Ser. No. 291,054. DUKE MANUFACTURING COMPANY, St. Louis, Mo. Filed Oct. 14, 1929.

Duke

The mark is a facsimile of the signature of M. P. Duke, president of applicant.
For Cereal Cookers, Portable Hot-Water Food Warmers, Steam Tables, Portable Hot-Water Service-Plate Warmers, Portable Hot-Water Roll Warmers, Urn Stands, Coffee Urns, Compartment Steamers, Floor Pans, Bains-Marie, Sinks, Metal Proof Boxes and Insulated Pans, Water-Cooler Fountains, and Water Station Fountains.
Claims use since Sept. 9, 1925.

Ser. No. 293,816. BALMER-WESTITE CO., Weston, W. Va., now, by change of name, Westite Co., a Corporation of West Virginia. Filed Dec. 18, 1929.

WESTITE

For Glass and China Bathroom Fixtures—Namely, Roll-Paper Holders, Soap Dishes, Funnels, Shaving-Set Holders, Combination Tumbler and Toothbrush Holders, Towel Racks, Towel Bars, Trays, Hooks, Door Knobs, and Handles.
Claims use since Apr. 27, 1929.

Ser. No. 299,098. LESTER H. VAUGHAN, Taunton, Mass. Filed Apr. 18, 1930.

L.H.VAUGHAN

LHV

The exclusive use of the word "Vaughan" is disclaimed except in connection with the mark as shown.
For Pitchers, Bowls; Coffee, Tea, and Hot-Water Pots; Vases, Pepper and Salt Shakers, Porringers, Plates, Platters, and Trays, All of Pewter, Copper, Brass, and Other Base Art Metals.
Claims use since 1920.

Ser. No. 299,725. BERTRAM EDWARD MESLER, New York, N. Y. Filed Apr. 30, 1930.

TURRET

For Shade-Roller Stops.
Claims use since Apr. 21, 1930.

CLASS 14

Metals and Metal Castings and Forgings

Ser. No. 275,299. SCHOELLER-BLECKMANN STAHLWERKE, A. G., Vienna, Austria. Filed Nov. 14, 1928.



For Blocks, Bars, Rods, Plates, and Sheets Cast, Pressed, Forged, Rolled, or Drawn, of Iron and Steel and Other Ferrous Metals and Alloys; and of Nickel, Cobalt, Chromium, Tungsten, Molybdenum, Manganese, Silicon, Aluminum, Vanadium, Titanium, Tantalum, Copper, Tin, Zinc; and of Nickel-Chromium Alloys, Nickel-Manganese Alloys, Chromium-Manganese Alloys, Tungsten-Chromium Alloys, Molybdenum-Chromium Alloys, Tungsten-Cobalt Alloys, Molybdenum-Cobalt Alloys, Tungsten-Nickel Alloys, Molybdenum-Nickel Alloys, Chromium-Cobalt Alloys, Chromium-Nickel-Tungsten Alloys, Chromium-Cobalt-Tungsten Alloys, Chromium-Nickel-Molybdenum Alloys, and Anvils and Anchors.

Claims use since Aug. 30, 1928.

Ser. No. 291,513. KRONE-SEBEK DIE CASTING & MFG. CO., Chicago, Ill. Filed Oct. 24, 1929.



For Die Castings.

Claims use since January, 1921.

Ser. No. 298,349. MULLINS MANUFACTURING CORPORATION, Salem, Ohio. Filed Apr. 3, 1930.



For Sheet-Metal Stampings.

Claims use since Mar. 1, 1930.

Ser. No. 299,923. THE MIDVALE COMPANY, Nicetown, Philadelphia, Pa. Filed May 3, 1930.

MIDVALLOY

For Heat and Corrosion Resisting Alloy Steels in the Form of Ingots, Castings, Bars, and Forgings.

Claims use since Apr. 8, 1930.

CLASS 16

Paints and Painters' Materials

Ser. No. 281,946. ECONOMY PAINT MILLS, Geneva, Nebr. Filed Apr. 6, 1929.

ECONOMY PAINT

No claim is made to the word "Paint" apart from the mark shown in the drawing.

For Ready-Mixed Paints.

Claims use since February, 1920.

Ser. No. 291,460. H. J. LOTHAMER, doing business as H. J. Lothamer & Co., Los Angeles, Calif. Filed Oct. 23, 1929.

CAS SEALER

No claim is made to the word "Sealer" apart from the mark as shown on the drawing.

For Undercoat for Paints, Primer Paints, in Ready-Mixed, Paste, and Dry Forms.

Claims use since Oct. 9, 1929.

Ser. No. 292,062. V. E. P. COMPANY, Newark, N. J., St. Louis, Mo., and Pontiac, Mich. Filed Nov. 5, 1929.

VECO

For Lacquers, Lacquer Enamels, Striping Lacquers, Nitrocellulose Lacquer Finishes, Pyroxylin Undercoatings, and Pyroxylin Primers.

Claims use since about Feb. 20, 1921.

Ser. No. 296,978. THE O-P CRAFT CO., INC., Sandusky, Ohio. Filed Mar. 7, 1930.

TEMPERA-TEX

No claim is made to the exclusive use of the word "Tempera" apart from the mark shown in the drawing.

For Mediums Used in Setting Colors to Produce a Textile Paint.

Claims use since Feb. 24, 1930.

CLASS 17

Tobacco Products

Ser. No. 297,101. JOHN H. SWISHER & SON, INC., Jacksonville, Fla. Filed Mar. 10, 1930.



The portrait is a fanciful picture of a person who is dead.

For Cigars.

Claims use since Oct. 7, 1898.

Ser. No. 300,015. GALLAHER LIMITED, Belfast, Ireland. Filed May 6, 1930.



Applicant disclaims the representation of a cigarette except in the precise relation and association in which the same appears herein.

For Smoking Tobacco, Cigarettes, Cigars, Snuff, and Chewing Tobacco.

Claims use since November, 1929.

CLASS 19

Vehicles, Not Including Engines

Ser. No. 281,312. CLARENCE O. PREST, doing business as Prest Airplanes & Motors, Arlington, Calif. Filed Mar. 25, 1929.

BABY PURSUIT

The applicant disclaims the right to the exclusive use of the word "Pursuit" apart from the trade-mark as shown in the drawing.

For Airplanes.

Claims use since September, 1928.

Ser. No. 281,893. BENDIX BRAKE COMPANY, Chicago, Ill. Filed Apr. 5, 1929.

ELECTROSERVO

For Brakes and Parts Thereof and Operating Connections Therefor.

Claims use since Mar. 7, 1929.

Ser. No. 281,894. BENDIX BRAKE COMPANY, Chicago, Ill. Filed Apr. 5, 1929.

MECANOSERVO

For Brakes and Parts Thereof and Operating Connections Therefor.

Claims use since Mar. 7, 1929.

CLASS 22

Games, Toys, and Sporting Goods

Ser. No. 275,048. INDEPENDENT GROCERS' ALLIANCE DISTRIBUTING COMPANY, Chicago, Ill. Filed Nov. 9, 1928.



For Toys, Especially Small Toy Wagons Operating by Spring Mechanism.

Claims use since Sept. 1, 1927.

Ser. No. 294,971. HORACE W. HALL, doing business as Speedwood Manufacturing Company, Newton, Mass. Filed Jan. 20, 1930.

WOVEN-WOOD

For Tennis Rackets.
Claims use since Jan. 18, 1930.

Ser. No. 298,418. PETER WINSTON, doing business as Arrow Tee Company, Richmond, Va. Filed Apr. 4, 1930.



For Golf Tee.
Claims use since Aug. 1, 1929.

Ser. No. 299,008. NATIONAL SKATE CORPORATION, New York, N. Y. Filed Apr. 17, 1930.

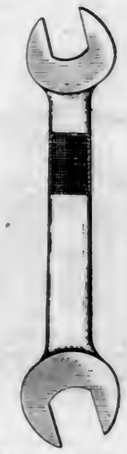


No claim is made to the term "New York" except in conjunction with the mark as shown.
For Ice Skates.
Claims use since Mar. 5, 1930.

CLASS 23

Cutlery, Machinery, and Tools, and Parts Thereof

Ser. No. 251,603. BONNEY FORGE & TOOL WORKS, Allentown, Pa. Filed July 7, 1927.



The trade-mark, which is applied or affixed to the goods in the process of manufacture, consists in a rectangular area on a side face of the shank of the wrench, which rectangular area is of black color with a border of orange color, as indicated by the lining shown in the drawing, said mark being applied to the goods by the use of a decalcomania transfer. The representation of the wrench in the drawing per se is disclaimed.
For Wrenches.
Claims use since Nov. 15, 1922.

Ser. No. 297,333. SAGINAW STAMPING & TOOL COMPANY, Saginaw, Mich. Filed Mar. 14, 1930.

RACEAWAY

For Conveyor Trolley Roller Turns, Chain Rollers, Conveyor Trolley Wheels, Conveyor Gravity Rollers, Chain-Hoist Trolleys, Belt-Conveyor Idlers, Conveyor Lubricators, Pressed Wheels for Machinery.
Claims use since March, 1926.

Ser. No. 298,458. OPCO COMPANY, INC., Buffalo, N. Y. Filed Apr. 5, 1930.

OPCO

For Lubricators—Namely, Devices for Lubricating the Valves, Pistons, and Piston Rings of Internal-Combustion Engines.
Claims use since Aug. 1, 1928.

Ser. No. 299,235. T. J. STUMP & SON, Ashland, Tenn. Filed Apr. 21, 1930.

LIVELY LAD

For Hand Tools for Cutting Weeds.
Claims use since Jan. 1, 1929.

Ser. No. 299,898. CHAIN BELT COMPANY, Milwaukee, Wis. Filed May 3, 1930.

MOTOMIXER

No claim is made to the exclusive use of the word "Mixer" apart from the other features of the mark shown.
For Transit Concrete Mixers.
Claims use since Apr. 16, 1930.

Ser. No. 299,942. WILLIAMS PATENT CRUSHER AND PULVERIZER COMPANY, St. Louis, Mo. Filed May 3, 1930.

KARMEL PRESS

No claim is made to the use of the word "Press" apart from the mark as shown.
For Presses and Parts Thereof for Manufacturing Animal and Poultry Feed in Granular Form.
Claims use since Apr. 14, 1930.

Ser. No. 300,108. COLT'S PATENT FIRE ARMS MANUFACTURING CO., Hartford, Conn. Filed May 8, 1930. Under section 5b of the act of 1905 as amended in 1920.

COLT

For Dish, Silver, and Glass Cleaning Machines.
Claims use since May, 1924.

Ser. No. 300,188. GREENFIELD TAP AND DIE CORPORATION, Greenfield, Mass. Filed May 9, 1930.

Pericles

For Screw Plates, Including Taps, Dies, Pipe Wrenches, and Stocks.
Claims use since Mar. 13, 1930.

Ser. No. 300,234. REGAL TYPEWRITER COMPANY, INC., New York, N. Y. Filed May 9, 1930.

REGAL

For Typewriting Machines and Parts Thereof.
Claims use since Apr. 15, 1922.

CLASS 26

Measuring and Scientific Appliances

Ser. No. 298,588. PHOTO MARKETING CORPORATION, New York, N. Y. Filed Apr. 9, 1930.

RHACO

For Photographic Articles—Namely, Exposure Meters, Printing Frames, Enlargers, Flashlight Devices, Sensitized Photographic Papers, Photographic Filters and Filter Holders, Cameras, Optical Magnifiers, Camera Tripod Attachments, Plate Holders, Releases for Camera Shutters, Dark-Room Lamps, Film-Pack Adapters, and Metal Adapters for Plate and Film Holders.
Claims use since Apr. 1, 1929.

Ser. No. 298,589. PHOTO MARKETING CORPORATION, New York, N. Y. Filed Apr. 9, 1930.

Bewi

For Photographic Exposure Meters and Photometers, Photographic Lenses, Lens Mountings, Photographic Shutters and Timing Devices.
Claims use since Mar. 21, 1930.

Ser. No. 298,691. EASTMAN KODAK COMPANY, Rochester, N. Y. Filed Apr. 11, 1930.

KOVITA

For Light-Sensitive Photographic Paper.
Claims use since Mar. 10, 1930.

CLASS 27

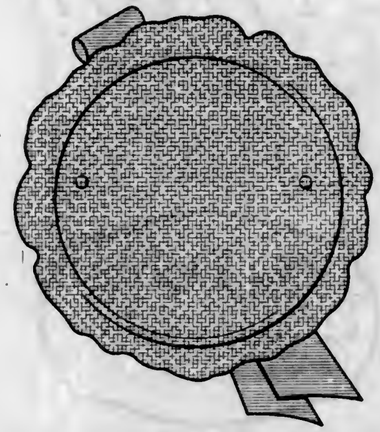
Horological Instruments

Ser. No. 299,670. A. C. BECKEN COMPANY, Chicago, Ill. Filed Apr. 30, 1930.

TREASURELAND

For Watches and Clocks.
Claims use since Apr. 11, 1930.

Ser. No. 299,747. WESTERN CLOCK COMPANY, Peru, Ill. Filed Apr. 30, 1930.



The lining on the seal design indicates the color yellow or gold and the lining on the ribbon indicates the color blue.
For Clocks and Watches.
Claims use since Nov. 29, 1929.

Ser. No. 299,838. DU PONT VISCOLOID COMPANY, New York, N. Y. Filed May 2, 1930.

Arlton

For Clocks.
Claims use since Feb. 7, 1930.

Ser. No. 299,904. DOBBS & Co., New York, N. Y. Filed May 3, 1930.

Dobbs

For Travelling Clocks.
Claims use since about July, 1908.

CLASS 29

Brooms, Brushes, and Dusters

Ser. No. 299,835. DU PONT VISCOLOID COMPANY, New York, N. Y. Filed May 2, 1930.

Arlton

For Hairbrushes and Cloth Brushes.
Claims use since Feb. 7, 1930.

Ser. No. 299,906. DOBBS & Co., New York, N. Y. Filed May 3, 1930.

Dobbs

For Hat Brushes, Derby Wipers, and Leurs for Smoothing Silk Hats.
Claims use since about July, 1908.

CLASS 31

Filters and Refrigerators

Ser. No. 299,231. SEARS ROEBUCK AND CO., Chicago, Ill. Filed Apr. 21, 1930.

COLDSPOT

For Electric Refrigerators.
Claims use since Mar. 11, 1930.

Ser. No. 300,169. JOSEPH M. CHANDLER, East Bridgewater, Mass. Filed May 9, 1930.

CHILLPAC

For Refrigerating Units and Parts Thereof.
Claims use since Mar. 11, 1930.

CLASS 32

Furniture and Upholstery

Ser. No. 293,304. F. P. WOLL & COMPANY, Philadelphia, Pa. Filed Dec. 5, 1929.

Genuine New Vitacurld HAIR

No claim is made to the use of the words "Genuine New" and "Hair" apart from the mark shown in the drawing.
For Hair for Stuffing Mattresses, Furniture, and Upholstery.
Claims use since Apr. 30, 1929.

CLASS 34

Heating, Lighting, and Ventilating Apparatus, Not Including Electrical Apparatus

Ser. No. 298,996. INTERNATIONAL RADIATOR CORP., Port Chester, N. Y. Filed Apr. 17, 1930.

INTERNATIONAL RADIATORS
"Heat the World"

No claim is made to the word "Radiators" apart from the mark as shown.
For Heating Radiators.
Claims use since Oct. 1, 1929.

Ser. No. 299,000. JOHN C. KORTH, New York, N. Y. Filed Apr. 17, 1930.

CARTER - KORTH
OIL BURNER

No claim is made to the words "Oil Burner" apart from the mark as shown in the drawing.
For Oil Burners.
Claims use since July, 1929.

Ser. No. 299,921. BENJAMIN C. MCCLURE, New York, N. Y. Filed May 3, 1930.

MAID - O - THE MIST

For Machine to Put Moisture in the Air.
Claims use since Oct. 15, 1929.

CLASS 35

Belting, Hose, Machinery Packing, and Non-metallic Tires

Ser. No. 296,144. PHOENIX MANUFACTURING COMPANY, Joliet, Ill. Filed Feb. 17, 1930.

PHOENIX

For Rubber Goods—Namely, Radiator Hose.
Claims use since about July, 1929.

Ser. No. 299,152. PETRO-FLEX TUBING COMPANY LIMITED, Watford, England. Filed Apr. 19, 1930.

PETROFLEX

For Tubular Hose Made Wholly or in Part of Rubber or Fabric.
Claims use since Mar. 14, 1921.

CLASS 36

Musical Instruments and Supplies

Ser. No. 292,132. THE VOISOPHONE COMPANY, Wausau, Wis. Filed Nov. 7, 1929.

VOISOPHONE
VOICE-SOUND-MUSIC

No claim is made to the exclusive right to the use of the words "Voice, Sound," and "Music" apart from the mark shown in the drawing.
For Unitary Phonographic Reproducing Apparatus for Use with Moving-Picture-Projection Apparatus.
Claims use since June 1, 1929.

CLASS 37

Paper and Stationery

Ser. No. 285,199. EGGERSS-O'FLYNG CO., Omaha, Nebr. Filed June 7, 1929.

TRISCO BOARD

No claim being made to the word "Board" apart from the mark shown.
For Corrugated Strawboard.
Claims use since Mar. 13, 1929.

Ser. No. 290,268. MOSINEE PAPER MILLS COMPANY, Mosinee, Wis. Filed Sept. 26, 1929.

CELLUSUEDE

For Paper Used for Menu Covers, Dance Programs, Box Covers, Novelty Pieces, and Advertising Circulars.
Claims use since May 13, 1929.

Ser. No. 291,127. JONES & KROEGER COMPANY, Winona, Minn. Filed Oct. 16, 1929.

"Princess Wenonah"
Descretary

For Combination Memorandum and Calendar Desk Pad.
Claims use since Sept. 30, 1929.

Ser. No. 294,873. EATON, CRANE & PIKE COMPANY, Pittsfield, Mass. Filed Jan. 17, 1930.



No right to the exclusive use of the word "Vellum" is claimed except as part of the mark shown.

For Papeteries, Correspondence Cards, Writing Tablets, Correspondence and Mailing Envelopes, and Writing Paper, Including Ream and Pound Goods.

Claims use since July 16, 1929, on papeteries and correspondence cards, and since July 17, 1929, on writing tablets, correspondence and mailing envelopes, and writing paper.

Ser. No. 295,588. WILLIAM A. WELSH, doing business as Paper Service Company, Philadelphia, Pa. Filed Feb. 4, 1930.

PALL MALL METALLIC

The word "Metallic" is disclaimed apart from the mark shown.

For Box-Covering Paper.

Claims use since Jan. 1, 1923.

Ser. No. 295,870. THE SUPERIOR TYPE COMPANY, Chicago, Ill. Filed Feb. 10, 1930.

STAMPERKRAFT

For Rubber Stamps; Rubber-Stamp Printing Outfits Comprising a Font of Rubber Type, a Type Holder, a Stamp Pad, and a Pair of Tweezers, All Within a Container; Rubber Type; and Sign Markers Comprising a Series of Letters or Characters, Each Individual Letter or Character Being Mounted on a Holder, a Stamp Pad, and a Gauge, All Within a Container.

Claims use since Jan. 5, 1930.

Ser. No. 296,619. WATERFALLS PAPER MILLS, New York, N. Y. Filed Feb. 27, 1930.

PROMOTION BOND

No claim being made to the exclusive use of the word "Bond."

For Bond and Writing Paper.

Claims use since Jan. 29, 1930.

Ser. No. 297,881. J. S. STAEDTLER, INC., New York, N. Y. Filed Mar. 25, 1930.



The representation of a pencil appearing on the drawing is disclaimed apart from the mark shown.

For Lead Pencils, Colored Pencils, Indelible Pencils, Copying Pencils, Pencil Leads, and Copying Leads and Sticks, Slate Pencils; Blackboard, Drawing, Sign, and Marking Pencils; Combination Pens and Pencils, Rubber Pencils, Penholders, Fountain Pens, Mechanical Pencils, and Fillers for Same.

Claims use since January, 1923.

CLASS 38

Prints and Publications

Ser. No. 292,271. CHARLES H. MCCARTHY, Minneapolis, Minn. Filed Nov. 11, 1929.

Country, Gardens and Homes

For Quarterly Publication.

Claims use since Oct. 8, 1929.

Ser. No. 296,105. ABRAHAM I. COVELL, New York, N. Y. Filed Feb. 17, 1930.

Life Lines

For Semimonthly Periodical.

Claims use since Apr. 6, 1929.

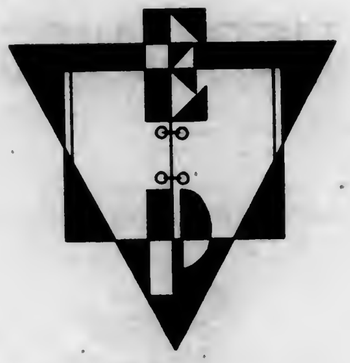
Ser. No. 296,255. THE BERGEN EVENING RECORD CORPORATION, Hackensack, N. J. Filed Feb. 20, 1930.

Bergen Evening Record

For Newspaper Printed and Published Daily Except Sundays.

Claims use since Jan. 16, 1922.

Ser. No. 296,464. WESLEY H. SHIRK, doing business as Engineers Publishing Company, Philadelphia, Pa. Filed Feb. 24, 1930.



For Loose-Leaf Forms and Binders Therefor.

Claims use since Nov. 1, 1929.

Ser. No. 298,787. THE CARILLON ASSOCIATION, Washington, D. C. Filed Apr. 14, 1930.

THE CARILLON

The lining shown on the drawing is merely for the purpose of shading.

For Quarterly Magazine.

Claims use since Sept. 25, 1929.

Ser. No. 299,003. LANMAN & KEMP, INC., New York, N. Y. Filed Apr. 17, 1930. Under 10-year proviso.



The picture on the drawing is a portrait of Dr. C. C. Bristol, deceased.

For Almanacs.

Claims use since 1863.

Ser. No. 299,599. THE SCHOLASTIC PUBLISHING COMPANY, Chicago, Ill., and Jefferson City, Mo. Filed Apr. 28, 1930.

The SCHOLASTIC EDITOR

For Magazine Published Monthly except in July, August, and September.

Claims use since Oct. 1, 1921.

Ser. No. 299,622. J. CARVER PUSEY, Wrightstown, Pa. Filed Apr. 29, 1930.

BENNY

For Comic Cartoon Strip for Newspaper and Magazine Publication.

Claims use since Nov. 25, 1928.

Ser. No. 299,768. DAILY GRAPHIC, INC., New York, N. Y. Filed May 1, 1930.

HAPPY DAYS *and* WHOOPEE DAYS

For Series of Cartoons or Comic Strips.

Claims use since Apr. 14, 1930.

Ser. No. 299,780. KING FEATURES SYNDICATE, INC., New York, N. Y. Filed May 1, 1930.

NUTTY NEWS

For Newspaper Section.

Claims use since Jan. 13, 1930.

Ser. No. 299,918. MICHAEL LEVY, doing business as The Levy Corporation, St. Louis, Mo. Filed May 3, 1930.

MARKET NEWS

For Periodicals.

Claims use since Jan. 4, 1930.

Ser. No. 299,944. AMERICAN OPTICAL COMPANY, Southbridge, Mass. Filed May 5, 1930.

AMERICAN OPTICAL VISION

For Magazines or Periodicals.

Claims use since Apr. 1, 1929.

Ser. No. 300,164. BAUSCH & LOMB OPTICAL COMPANY, Rochester, N. Y. Filed May 9, 1930.

The Educational FOCUS

For Periodical Publication.

Claims use since June, 1929.

Ser. No. 300,215. ROBERT MCNEIL, Philadelphia, Pa. Filed May 9, 1930.

PHARMEDICA

For Catalogue Issued Intermittently.
Claims use since Jan. 2, 1930.

Ser. No. 300,253. THE MELLIAND, INC., New York, N. Y. Filed May 1, 1930.

THE *Melliand*

For Periodicals Issued Monthly.
Claims use since Mar. 27, 1929.

Ser. No. 300,325. THE BRUCE PUBLISHING COMPANY, Milwaukee, Wis. Filed May 12, 1930.

The CATHOLIC SCHOOL JOURNAL

For Periodicals.
Claims use since April, 1901.

CLASS 39

Clothing

Ser. No. 277,998. RUTH COHEN, Denver, Colo. Filed Jan. 15, 1929.



The word "Frocks" is disclaimed apart from the mark as shown on the drawing.

For Children's Wash Dresses, Wool Dresses, and Dresses in All Types of Materials, Such as Silk, Cotton, and Wool, for Girls, Ages Two Years to Sixteen Years.
Claims use since Jan. 1, 1928.

Ser. No. 280,446. LINDENOID SOLE LEATHER CO., INC., Newark, N. J. Filed Mar. 8, 1929.

HERCULES

For Shoe Soles and Heels.
Claims use since Jan. 3, 1913.

Ser. No. 281,814. BROWNING, KING & CO., New York, N. Y. Filed Apr. 4, 1929.



The drawing is lined for the color red.
For Men's Suits and Overcoats.
Claims use since Feb. 21, 1929.

Ser. No. 281,815. BROWNING, KING & CO., New York, N. Y. Filed Apr. 4, 1929.

CHALLENGER

For Men's Suits and Overcoats.
Claims use since Feb. 21, 1929.

Ser. No. 292,662. G. ENGELHARDT & CO. "CHASALLA" SCHUHFABRIK AKTIENGESELLSCHAFT, Cassel, Germany. Filed Nov. 21, 1929.

'Chasalla'

For Shoes Made of Leather, Fabric, Canvas, Rubber and Combinations of These Materials; Arch-Supporting Insoles Made of Leather, Fabric, Canvas, Paper, Paperoid, Metal, Etc.; Rubber Heels, Rubber Soles, Rubber-Heel Protectors Inserted into the Heel and Held Therein by Pins, Glue, or the like, Leggings, Hosiery, and Socks.
Claims use since Oct. 24, 1903.

Ser. No. 292,663. G. ENGELHARDT & CO. "CHASALLA" SCHUHFABRIK AKTIENGESELLSCHAFT, Cassel, Germany. Filed Nov. 21, 1929.

Pedisana

For Shoes Made of Leather, Fabric, Canvas, Rubber, Etc., and Combinations of These Materials; Arch-Supporting Insoles Made of Leather, Fabric, Canvas, Paper, Paperoid, Metal; Rubber Heels, Rubber Soles, Rubber-Heel Protectors Inserted into the Heel and Held Therein by Pins, Glue, or the like, Leggings, Hosiery, and Socks.
Claims use since June 5, 1914.

Ser. No. 293,735. B. KUPPENHEIMER & CO. INC., Chicago, Ill. Filed Dec. 16, 1929.



In the drawing the word "Topper" and the letters "dT" are lined for the color blue. The words "Duffel" and "Topper" are specifically disclaimed as constituting a part of the trade-mark shown in the drawing and specimens.

For Men's and Boys' Ready-to-Wear Topcoats or Overcoats.
Claims use since Nov. 25, 1929.

Ser. No. 295,902. ROY C. LEE, Newark, N. J. Filed Feb. 11, 1930.



No claim is made to the words "Trade Mark" and "Stocking Protector." No claim is made to the pictorial illustration apart from the mark shown in the drawing.

Protecting Devices Made of Rubber Substance Applicable to a Shoe or the like to Protect Said Shoe and to Protect the Stocking of the Wearer.
Claims use since Nov. 20, 1929.

Ser. No. 296,693. CONVERSE RUBBER COMPANY, Malden, Mass. Filed Mar. 1, 1930.

Chix

For Ladies' and Misses' Gaiters and Ladies' and Misses' Rubber and/or Canvas and/or Cloth Overshoes.
Claims use since Jan. 14, 1930.

Ser. No. 296,838. WATSON AND MIDGLEY, Manchester, England. Filed Mar. 4, 1930.

FABREX

For Dress, Negligee, and Work Shirts, Collars, Cuffs, and Pyjamas.
Claims use since Jan. 23, 1929.

Ser. No. 297,228. BLOOMINGDALE BROS., INC., New York, N. Y. Filed Mar. 13, 1930.



Applicant disclaims the words "Exclusively at," "New York," and "London."

For Boys' Suits, Coats, Trousers, Overcoats, Raincoats, Hats, Caps, Negligee Shirts, Pajamas, Neckties, and Underwear.
Claims use since Feb. 26, 1930.

Ser. No. 297,229. BLOOMINGDALE BROS., INC., New York, N. Y. Filed Mar. 13, 1930.



The applicant disclaims the words "Exclusively at," "New York," and "London."

For Men's Suits, Coats, Trousers, Overcoats, Raincoats, Hats, Caps, Negligee Shirts, Pajamas, Neckties, and Underwear.
Claims use since Feb. 26, 1930.

Ser. No. 297,230. BLOOMINGDALE BROS., INC., New York, N. Y. Filed Mar. 13, 1930.



Applicant disclaims the words "Sport Wear," "New York," and "London" apart from the mark as shown on the drawing.

For Men's Suits, Coats, Trousers, Overcoats, Raincoats, Sweaters, Dressing Gowns or Robes, and Negligee Shirts.

Claims use since Feb. 26, 1930.

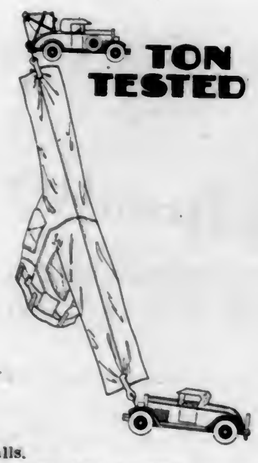
Ser. No. 297,445. THE MENIHAN COMPANY, Rochester, N. Y. Filed Mar. 17, 1930.



For Leather Shoes.

Claims use since Mar. 7, 1930.

Ser. No. 297,531. HIRSCH-WEIS MANUFACTURING COMPANY, Portland, Oreg. Filed Mar. 19, 1930.



For Overalls.

Claims use since Feb. 1, 1930.

Ser. No. 297,786. THE WINDSOR MILLS, INC., Philadelphia, Pa. Filed Mar. 22, 1930.

SUPRE - TWIST

No claim is made to the word "Twist" apart from the mark as shown.

For Hosiery.

Claims use since on or about Mar. 20, 1930.

Ser. No. 297,805. JACOB C. HECKELMAN, doing business as The Olympic Glove Company, New York, N. Y. Filed Mar. 24, 1930.



For Gloves and Mittens Made from Leather, Cloth, and Rubber; Aprons Made from Leather or Cloth for Keeping the Clothes Clean, Sleeves, Leggings.

Claims use since December, 1926.

Ser. No. 298,319. BERTRAM GOLDBERG, Johnstown, N. Y. Filed Apr. 3, 1930.

Trizé

For Men's, Women's, and Children's Underwear Made from Silk and Tubize and Silk and Any Other Synthetic Fibre, Both Warp Knit or Other Woven Fabrics.

Claims use since Feb. 15, 1930.

Ser. No. 298,565. BARNES SHOE COMPANY, Centralia, Ill. Filed Apr. 9, 1930.



No claim is made herein to the exclusive use of the words "Shoes" or "So Very Smart."

For Shoes of Leather or a Combination of Leather, Rubber, or Fabric.

Claims use since Dec. 1, 1929.

Ser. No. 298,762. OLYMPIA KNITTING MILLS, INC., Olympia, Wash. Filed Apr. 12, 1930.



For Swimming Suits.

Claims use since June, 1929.

Ser. No. 298,915. N. B. THAYER SHOE COMPANY, East Rochester, N. H. Filed Apr. 15, 1930.



The word "Shoe" is disclaimed apart from the other features of the mark shown in the drawing.

For Shoes Made of Leather, Rubber, or Fabric or Combinations of These Materials.

Claims use since about August, 1929.

Ser. No. 298,981. THE DAVIS-EDGE COMPANY, Quakertown, Pa. Filed Apr. 17, 1930.

DECO

For Men's, Boys', and Women's Leather Belts.

Claims use since Mar. 1, 1930.

Ser. No. 299,057. GROSS & HURWITZ, New York, N. Y. Filed Apr. 18, 1930.

JO-DEE TOGS

No claim being made to the exclusive use of the word "Togs" apart from the mark as shown in the drawing.

For Children's Dresses, Boys' Suits, and Creepers.

Claims use since Feb. 1, 1930.

CLASS 40

Fancy Goods, Furnishings, and Notions

Ser. No. 283,513. WILLIAM PRYM G. M. B. H., Stolberg-Rheinland, Germany. Filed May 4, 1929.



For Smallwares Not Made of Precious Metals, Including Snap Fasteners; Hooks, Eyes, and Loops; Pins, Safety Pins, Hairpins, Needles for Hand Use, Glove Fasteners, and Bobbed-Hair Pins.

Claims use since Mar. 13, 1929.

CLASS 41

Canes, Parasols, and Umbrellas

Ser. No. 299,309. THE FINK & EASTER COMPANY, Baltimore, Md. Filed Apr. 23, 1930.



No claim is made to the representation of the goods apart from the mark shown in the drawing.

For Umbrellas with Holders Therefor.

Claims use since Mar. 15, 1930.

CLASS 42

Knitted, Netted, and Textile Fabrics

Ser. No. 271,659. OVERLAND SILK CO., INC., New York, N. Y. Filed Aug. 28, 1928.



No claim is made to the words "Crepe, Trade Mark," and "New York, N. Y." apart from the mark shown on the drawing.

For Silks and Satins Sold by the Yard.
Claims use since June, 1928.

Ser. No. 277,073. MARCUS BROTHERS, New York, N. Y. Filed Dec. 21, 1928.



For Sheets and Pillowcases.
Claims use since about Apr. 13, 1923.

Ser. No. 280,108. HILDEGARD DOEDERLEIN, Woodridge, N. J. Filed Mar. 1, 1929.



For Curtain Laces in the Piece.
Claims use since Jan. 8, 1929.

Ser. No. 289,896. LIN-ERIN LIMITED, Lurgan, Northern Ireland. Filed Sept. 17, 1929.

LINERIN

For Handkerchiefs in the Piece and Not in the Piece Made of Linen or of Mixtures of Cotton, Art Silk, and Linen, in Which the Linen Predominates; Linen Piece Goods of All Kinds, and Piece Goods of All Kinds Composed of Cotton and Linen, or Cotton, Silk, and Linen, and in Which Linen Predominates; Linen and Hemp Goods Not in the Piece—Namely, Table and Bed Linen, Towels, Glass Cloths, and Piece Goods from Which Dusters are Made.

Claims use since Feb. 21, 1927.

Ser. No. 298,252. OLD TOWN WOOLEN CO., INC., Old Town, Me. Filed Apr. 1, 1930.



The words "Warranted Camel Hair and Wool" and the words "Old Town" are disclaimed, and the word "Blanket" is disclaimed except in association with the mark as shown.

For Wool Blankets and Wool and Camel-Hair Blankets.
Claims use since Mar. 1, 1928.

Ser. No. 298,384. FORSTMANN & HUFFMANN COMPANY, Passaic, N. J. Filed Apr. 4, 1930.

Londra

For Woolen Piece Goods.
Claims use since Mar. 1, 1930.

Ser. No. 299,036. THE AMERICAN MILLS COMPANY, Waterbury, Conn. Filed Apr. 18, 1930.

GARMENTLIFE

For Wide Elastic Fabric.
Claims use since Apr. 11, 1930.

Ser. No. 299,878. WORUMBO MANUFACTURING COMPANY, Bath, Me. Filed May 2, 1930.

TRAVLTOUR

For Woolen Fabrics.
Claims use since Mar. 4, 1930.

Ser. No. 300,031. RHODE ISLAND PLUSH MILLS, INC., Woonsocket, R. I. Filed May 6, 1930.

Rho-Del

For Pile Fabrics.
Claims use since Sept. 3, 1929.

Ser. No. 300,101. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y. Filed May 8, 1930.

Alpanna

For Pile Fabrics in the Piece.
Claims use since Apr. 28, 1930.

Ser. No. 300,111. C. K. EAGLE & CO. INC., New York, N. Y. Filed May 8, 1930.

EVANGELINE

For Piece Goods, Silk, or a Combination of Silk and Artificial Silk.
Claims use since Apr. 14, 1930.

Ser. No. 300,337. COHEN, GOLDMAN & CO. INC., New York, N. Y. Filed May 12, 1930.

COMFORT-TEX

For Woven Fabric Made from Worsted.
Claims use since Jan. 10, 1930.

CLASS 44

Dental, Medical, and Surgical Appliances

Ser. No. 275,055. INDEPENDENT GROCERS' ALLIANCE DISTRIBUTING COMPANY, Chicago, Ill. Filed Nov. 9, 1928.



For Toothpicks.
Claims use since Sept. 1, 1927.

Ser. No. 296,311. AKRON ACE SPECIALTY COMPANY, Akron, Ohio. Filed Feb. 21, 1930.

ASCO

For Prophylactic Rubber Articles for the Prevention of Contagious Diseases.
Claims use since on or about Feb. 1, 1930.

Ser. No. 297,292. L. BAMBERGER & CO., Newark, N. J. Filed Mar. 14, 1930.

chantrey

For Protective Pads to Wrap Over Hair After it is Wound on Rod and Before Baking Period in Process of Permanent Waving.
Claims use since Jan. 20, 1930.

Ser. No. 297,624. SINGER BOX CO., doing business as Manicu-Kit Co., New York, N. Y. Filed Mar. 20, 1930.

Manicu-Kit

No claim being made to the exclusive use of the word "Kit" apart from the mark as shown in the drawing.
For Manicure Kits.
Claims use since November, 1928.

Ser. No. 299,579. KIRBY, BLOCK AND FISCHER, INC., New York, N. Y. Filed Apr. 28, 1930.

PRIMS

For Sanitary Napkins.
Claims use since Jan. 1, 1930.

Ser. No. 299,721. JOSEPH A. LIEB, doing business as Star Dental Mfg. Co., Philadelphia, Pa. Filed Apr. 30, 1930.

TEMPRYTE

For Dental Instruments—Namely, Explorers, Double-End and Single-End; Scalers, Double-End and Single-End; Chisels, Single-End; Carvers, Double-End and Single-End; Plastic Instruments, Double-End and Single-End; Excavators, Double-End and Single-End; Spatulas, Double-End and Single-End; and Lancets, Single-End.
Claims use since April, 1920.

Ser. No. 299,993. REGELSON & ROSTOW, New Haven, Conn. Filed May 5, 1930.

SANTEX

For Prophylactic Rubber Articles for the Prevention of Contagious Diseases.
Claims use since Apr. 1, 1930.

CLASS 45

Beverages, Nonalcoholic

Ser. No. 280,543. DAIGGER CORPORATION, Chicago, Ill. Filed Mar. 11, 1929.

BROWN DERBY

For Nonalcoholic, Maltless, Chocolate Beverage Sold as a Soft Drink and Syrups and Extracts for Making the Same.
Claims use since Jan. 1, 1928.

Ser. No. 297,700. SEMINOLE FRUIT FLAVOR CO., Chattanooga, Tenn. Filed Mar. 21, 1930.

MAR-VEL

For Carbonated Nonalcoholic, Noncereal, Maltless Beverages Sold as Soft Drinks and for Syrups, Concentrates, and Extracts Used in Making the Same.
Claims use since on or about June 15, 1926.

Ser. No. 297,888. BEVERAGE INDUSTRIES, INC., West Orange, N. J. Filed Mar. 26, 1930.

WHIRL

For Nonalcoholic, Maltless Beverages Sold as Soft Drinks and Syrups for Making the Same.
Claims use since Mar. 19, 1930.

Ser. No. 298,849. RIONA PRODUCTS CO. INC., McAllen, Tex. Filed Apr. 14, 1930.

RIONA

For Nonalcoholic Grapefruit Juice for Soft-Drink Purposes.
Claims use since Dec. 4, 1929.

Ser. No. 299,311. THE FITGER COMPANY, Duluth, Minn. Filed Apr. 23, 1930.

Lorit

For Nonalcoholic, Maltless Beverages Sold as Soft Drinks.
Claims use since Apr. 14, 1930.

Ser. No. 300,141. OCHEE SPRING WATER CO., Providence, R. I. Filed May 8, 1930.

Ochee

For Nonalcoholic, Noncereal, Maltless Beverages Sold as Soft Drinks and Sirups and Extracts for Making the Same.
Claims use since June, 1875.

Ser. No. 300,200. JAMESTOWN GINGER ALE CORP., Norfolk, Va. Filed May 9, 1930.

STILMOR

For Ginger Ale.
Claims use since May 7, 1930.

Ser. No. 300,326. CAMERON BROTHERS, McDonald, Pa. Filed May 12, 1930.

High Flier

For Ginger Ale.
Claims use since Apr. 1, 1930.

CLASS 46

Foods and Ingredients of Foods

Ser. No. 267,641. DEMING & GOULD CO., Chicago, Ill., and South Bellingham, Wash. Filed June 7, 1928.

RED FEATHER

For Canned Salmon.
Claims use since July, 1908.

Ser. No. 279,875. PALELLA AND MONDELLI, Gilroy, Calif. Filed Feb. 25, 1929.

THE RED TENT

For Fresh Vegetables.
Claims use since Nov. 23, 1928.

Ser. No. 287,378. DR. EDUARD SPIEKER, Munich, Germany. Filed July 19, 1929.



For Fermented Food Products Obtained by Adding Yoghurt and Acidophilus Ferments to Camembert Cheese and Ferments of the Stated Kinds for Use in Making the Same.
Claims use since Oct. 1, 1928.

Ser. No. 287,379. DR. EDUARD SPIEKER, Munich, Germany. Filed July 19, 1929.

Cam-Yog

For Fermented Food Products Obtained by Adding Yoghurt and Acidophilus Ferments to Camembert Cheese and Ferments of the Stated Kinds for Use in Making the Same.
Claims use since Oct. 1, 1928.

Ser. No. 289,463. ELIAS G. JOSEPH, doing business as Gay Jay Candy Co., Flint, Mich. Filed Sept. 7, 1929.



For Candy and Salted Nuts.
Claims use since May 15, 1929.

Ser. No. 291,300. TEXAS CANNING COMPANY, Laredo, Tex. Filed Oct. 19, 1929.

TOLTECA

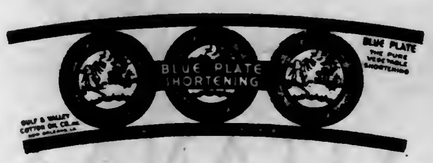
For Peppers in Vinegar and Pepper Sauce for Foods.
Claims use since July 31, 1929.

Ser. No. 291,680. F. A. MARTOCCIO COMPANY, doing business as Hollywood Candy Co., Minneapolis, Minn. Filed Oct. 28, 1929.

Choclat Sundae

Applicant disclaims for the purposes of registration the word "Chocolat" apart from the mark as shown.
For Candy Bars.
Claims use since Oct. 19, 1929.

Ser. No. 291,977. GULF & VALLEY COTTON OIL COMPANY, INC., New Orleans, La. Filed Nov. 4, 1929.



Applicant hereby disclaims all the reading-matter shown on such drawing except the words "Blue Plate."
For Shortening or Cooking Fat Composed of Fatty, Oleaginous, or Unctuous Food Substances.
Claims use since Feb. 1, 1929.

Ser. No. 293,850. FRANK S. MYERS, doing business as Old Dominion Company, Grand Rapids, Mich. Filed Dec. 18, 1929.

OLD DOMINION



The drawing is lined for red. The portrait shown in the accompanying drawing is fanciful. Applicant disclaims the right to the exclusive use of the words "Old Dominion" apart from the trade-mark as shown in the drawing.
For Salad Dressing.
Claims use since June, 1929.

Ser. No. 293,875. FLORASYNTH LABORATORIES, INC., New York, N. Y. Filed Dec. 19, 1929.

RITTER BOUQUET

Applicant disclaims the use of the word "Bouquet" apart from the mark as shown.
For Natural and Synthetic Essential Oils Suitable for Food-Flavoring Purposes.
Claims use since July 19, 1929.

Ser. No. 294,450. MATTERHORN MALT PRODUCTS COMPANY, Chicago, Ill. Filed Jan. 6, 1930.



Applicant hereby disclaims the color blue in the trade-mark "Matterhorn."
For Syrup.
Claims use since Dec. 20, 1929.

Ser. No. 294,989. NATIONAL VITAMIN CORPORATION, Wilmington, Del. and New York, N. Y. Filed Jan. 20, 1930.

VITAMAX

For Cereal Food Product of the General Character of a Breakfast Food Comprising Cereal Germs or Embryos.
Claims use since on or about Oct. 4, 1929.

Ser. No. 296,227. OSCAR MAYER & CO. INC., doing business as Oscar Mayer's, Chicago, Ill. Filed Feb. 19, 1930.



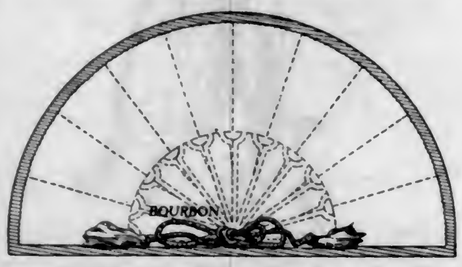
No claim is made to the term "German Wieners" or the outline of the container of the goods. The drawing is lined for yellow and red.
For Frankfurters.
Claims use since Dec. 1, 1928.

Ser. No. 296,359. E. RAUH & SONS FERTILIZER COMPANY, doing business as E. Rauh & Sons Animal Feed Co., Indianapolis, Ind. Filed Feb. 21, 1930.



For Farinaceous Feed Mixtures for Poultry, Cattle, Horses, and Hogs.
Claims use since Aug. 6, 1923.

Ser. No. 296,621. STEPHEN F. WHITMAN & SONS, INC., Philadelphia, Pa. Filed Feb. 27, 1930.



The drawing is lined for shading.
For Candy.
Claims use since June 27, 1929.

Ser. No. 297,083. KINGAN & CO., INCORPORATED, Indianapolis, Ind. Filed Mar. 10, 1930.



Applicant is the owner of certificates 115,766, 136,842, 254,147, the first and last mentioned marks being registered under the 10-year proviso.
For Canned Cooked Chicken.
Claims use since Nov. 1, 1929.

Ser. No. 297,205. THE NEW ERA MILLING COMPANY, Arkansas City, Kans. Filed Mar. 12, 1930.



For Wheat Flour.
Claims use since Feb. 12, 1910.

Ser. No. 298,307. MAXIM BOBINSKI, Riverhead, Calverton, Jamesport, Watermill, and Bridgehampton, N. Y. Filed Apr. 3, 1930.



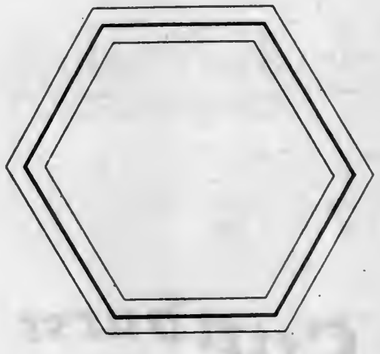
No claim is made to the pictorial representation of the potatoes apart from the mark as shown.
For Potatoes in Their Natural State.
Claims use since November, 1928.

Ser. No. 298,447. HASHEMPSH, INC., New York, N. Y. Filed Apr. 5, 1930.

SHEMEN

For Olive Oil and Sesame Oil.
Claims use since Jan. 1, 1925.

Ser. No. 298,470. WILLIAM O. SWEZEY, doing business as W. O. Swezey Company, Cleveland, Ohio. Filed Apr. 5, 1930.



For Prepared Flour for Cakes, Waffles, Doughnuts.
Claims use since Jan. 10, 1930.

Ser. No. 298,876. AMERICAN FRUIT GROWERS, INC. OF CALIFORNIA, Los Angeles, Calif. Filed Apr. 15, 1930.



LEMON MAID

The drawing is lined to indicate the color yellow. No claim is made to the word "Lemon" apart from the mark as shown on the drawing.
For Fresh Citrus Fruits.
Claims use since Nov. 20, 1929.

Ser. No. 298,893. FRANKS BIRD STORE, INC., New York, N. Y. Filed Apr. 15, 1930.



The wording appearing on the drawing is disclaimed apart from the other features of the mark as shown.

For Birdseed.

Claims use since Apr. 3, 1930.

Ser. No. 299,052. DOUTHITT ENGINEERING CO., Chicago, Ill. Filed Apr. 18, 1930.

Sunburst

For Butter, Dried Skim Milk, Fresh Milk, Buttermilk, and Cream.

Claims use since Nov. 20, 1929.

Ser. No. 299,255. PAUL CASE, doing business as Vitala Tea Co., Brockton, Mass. Filed Apr. 22, 1930.

VITALA

"A Reservoir of ENERGY and VIGOR"

Applicant hereby disclaims the right to register the following descriptive notation: "A Reservoir of Energy and Vigor."

For Boxed Tea.

Claims use since Mar. 1, 1930.

Ser. No. 299,386. HAAS, BARUCH & COMPANY, Los Angeles, Calif. Filed Apr. 24, 1930.

VIVIENNE

For Canned Fruits, Canned Vegetables, Canned Fish, Chili Sauces, Dried Fruits, Fruit Preserves, Mayonnaise, French Dressing, and Catsup.

Claims use since Sept. 26, 1929.

Ser. No. 299,409. RED SUN PRODUCTS COMPANY, Chicago, Ill. Filed Apr. 24, 1930.

DOUBLE DUTY

For Malt Syrup.

Claims use since May 10, 1929.

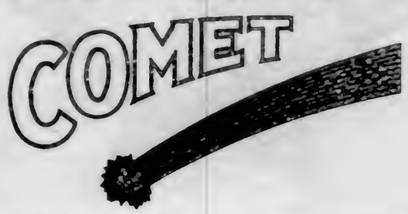
Ser. No. 299,422. ISADORE GOLDBERG, doing business as Ideal Malt & Supply Co., Cleveland, Ohio. Filed Apr. 24, 1930.

DRAFT

For Malt Syrup.

Claims use since Jan. 15, 1928.

Ser. No. 299,452. MCLAREN-CONSOLIDATED CONE CORPORATION, Dayton, Ohio. Filed Apr. 25, 1930.



The drawing is lined to indicate the color yellow, but the trade-mark is not limited to any specific color, and the color yellow is not claimed as a part of the mark.

For Ice-Cream Cones.

Claims use since on or about Sept. 1, 1929.

Ser. No. 299,453. MCLAREN-CONSOLIDATED CONE CORPORATION, Dayton, Ohio. Filed Apr. 25, 1930.

COMET

The drawing is lined to indicate the color yellow, but the trade-mark is not limited to any specific color, and the color yellow is not claimed as a part of the mark.

For Ice-Cream Cones.

Claims use since on or about Sept. 1, 1929.

CARNEGIE LIBRARY OF ATLANTA

Ser. No. 299,986. NUTRINE CANDY CO., Chicago, Ill. Filed May 5, 1930.

WAXRAD

For Candy.

Claims use since Mar. 15, 1930.

Ser. No. 300,014. FISHER FLOURING MILLS COMPANY, West Waterway, Harbor Island, Seattle, Wash. Filed May 6, 1930.

EL MARINERO



For Wheat Flour.

Claims use since Jan. 11, 1930.

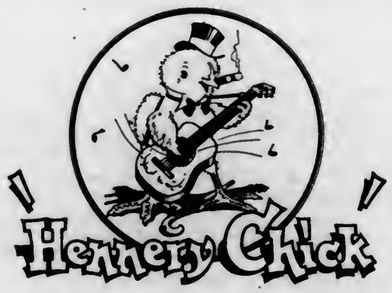
Ser. No. 300,144. SCHARF BROTHERS COMPANY, INC., New York. N. Y. Filed May 8, 1930.

OASIS

For Candy.

Claims use since winter of 1928.

Ser. No. 300,161. ENDRE ANDERSON, doing business as Dakota Breeders Hatchery, Fargo, N. Dak. Filed May 9, 1930.



No claim being made to the words "Hennery Chick" apart from the mark shown.

For Baby Chicks.

Claims use since Apr. 1, 1930.

CLASS 48

Malt Beverages and Liquors

Ser. No. 297,966. THEO. HAMM BREWING COMPANY, St. Paul, Minn. Filed Mar. 27, 1930.

Digesto

For Malt and Hop Tonic Sold for Beverage Purposes and Containing Less Than One-Half of One Per Cent Alcohol, by Volume.

Claims use since June 18, 1907.

CLASS 50

Merchandise Not Otherwise Classified

Ser. No. 295,032. THE LAIDLAW CO., INC., New York, N. Y. Filed Jan. 21, 1930.

Laidlaw Burbank

For Textile Top Covering for Covering the Tops of Motor Cars, and Motor Boats, and Motor-Car Trunk Covers, and Motor-Car Tire Covers, Said Material Being Waterproof Because of Its Construction and Subjected to a Showerproof Process After it is Woven.

Claims use since on or about Feb. 1, 1914.

Ser. No. 295,770. THE VITALITE CO., New York, N. Y. Filed Feb. 7, 1930.



No claim is made to the exclusive use of the words "Reinforced With Wire" except in association with the other features of the mark.

For Reticular Metallic Base Covered With Cellulose-Derivative Film Used as a Substitute for Glass.

Claims use since Nov. 7, 1929.

Ser. No. 298,743. E. I. DUPONT DE NEMOURS AND COMPANY, Wilmington, Del. Filed Apr. 12, 1930.

DU PONT
PONTAN

For Rubberized Fabrics—i. e., Fabrics Treated With a Rubber Coating.

Claims use since Apr. 2, 1930.

Ser. No. 299,833. E. I. DU PONT DE NEMOURS AND COMPANY, Wilmington, Del. Filed May 2, 1930.

PONTINE

For Rubberized Fabrics—i. e., Fabrics Treated With a Rubber Coating.
Claims use since Nov. 2, 1929.

Ser. No. 299,941. HARRY B. WESSON, Tampa, Fla. Filed May 3, 1930.

The Bug House

For Trap for Roaches and Water Bugs.
Claims use since Apr. 12, 1930.

TRADE-MARK REGISTRATIONS GRANTED

[ACT OF FEBRUARY 20, 1905]

JUNE 17, 1930

271,618. POROUS RUBBER SHEETS FOR USE AS FILTERING MEDIA. DEWEY & ALMY CHEMICAL COMPANY, North Cambridge, Mass.
Filed December 26, 1929. Serial No. 294,063. PUBLISHED APRIL 1, 1930. Class 31.

271,619. CAKES AND PIES. ELMER O. EMERY, doing business as Sally Lynn Kitchen, Washington, D. C.
Filed December 13, 1929. Serial No. 293,619. PUBLISHED MARCH 25, 1930. Class 46.

271,620. COOKIES AND MACAROONS. MOTHER'S FAVORITE COOKIE COMPANY, Glendale, Calif.
Filed December 6, 1929. Serial No. 293,337. PUBLISHED MARCH 25, 1930. Class 46.

271,621. LUGGAGE—NAMELY, TRUNKS, SUITCASES, TRAVELING BAGS, AND HATBOXES FOR TRAVELING PURPOSES. ELY & WALKER DRY GOODS COMPANY, St. Louis, Mo.
Filed November 29, 1929. Serial No. 293,033. PUBLISHED APRIL 1, 1930. Class 3.

271,622. TIME RECORDERS, CLOCKS, AND WATCHES. ETNA WATCH COMPANY, New York, N. Y.
Filed February 24, 1930. Serial No. 296,413. PUBLISHED APRIL 8, 1930. Class 27.

271,623. TOOL AND DIE STEEL. ZIV STEEL & WIRE Co., Chicago, Ill.
Filed February 21, 1930. Serial No. 296,379. PUBLISHED APRIL 8, 1930. Class 14.

271,624. HAIR TONIC. LEWIS BROS., INC., New York, N. Y.
Filed February 20, 1930. Serial No. 296,281. PUBLISHED APRIL 8, 1930. Class 6.

271,625. AMPOULES CONTAINING MAGNESIA IN ASSIMILABLE FORM USED AS A GENERAL BIOLOGICAL STIMULANT. LABORATOIRE DE PHARMACOLOGIE, INC., New York, N. Y.
Filed February 20, 1930. Serial No. 296,279. PUBLISHED APRIL 8, 1930. Class 6.

271,626. LAXATIVE TONIC. MUIR LABORATORIES, Grand Rapids, Mich.
Filed February 19, 1930. Serial No. 296,231. PUBLISHED APRIL 1, 1930. Class 6.

271,627. PREPARATION FOR CURLING AND WAVING HAIR. LA GERARDINE, INC., New York, N. Y.
Filed February 8, 1930. Serial No. 295,800. PUBLISHED APRIL 1, 1930. Class 6.

271,628. X-RAY APPARATUS. DORIS E. CAMPBELL, doing business as Campbell X-Ray Company of Boston, Boston, Mass.
Filed February 7, 1930. Serial No. 295,772. PUBLISHED APRIL 1, 1930. Class 44.

271,629. WRITING INK. CLYDE DEAN, doing business as Dean Ink Company, Chicago, Ill.
Filed February 3, 1930. Serial No. 295,507. PUBLISHED APRIL 8, 1930. Class 11.

271,630. CANVAS LACED STOCKINGS FOR THERAPEUTIC PURPOSES. TRIO SPECIALTY COMPANY, INC., New York, N. Y.
Filed January 30, 1930. Serial No. 295,401. PUBLISHED APRIL 1, 1930. Class 44.

271,631. FINISHED STEEL CASTINGS—NAMELY, CAST-STEEL BANDS. STANDARD BRAKE SHOE & FOUNDRY COMPANY, Pine Bluff, Ark.
Filed January 27, 1930. Serial No. 295,282. PUBLISHED APRIL 8, 1930. Class 14.

271,632. ELECTRIC HEATING PADS USED FOR THERAPEUTIC PURPOSES. THE FITZGERALD MANUFACTURING COMPANY, Torrington, Conn.
Filed January 25, 1930. Serial No. 295,214. PUBLISHED APRIL 1, 1930. Class 44.

271,633. ELECTRIC HEATING PADS USED FOR THERAPEUTIC PURPOSES. THE FITZGERALD MANUFACTURING COMPANY, Torrington, Conn.
Filed January 25, 1930. Serial No. 295,213. PUBLISHED APRIL 1, 1930. Class 44.

271,634. POLISHING WAX. THE GILBERT SPRUANCE COMPANY, Philadelphia, Pa.
Filed January 24, 1930. Serial No. 295,156. PUBLISHED APRIL 1, 1930. Class 16.

271,635. MEDICINAL PREPARATION FOR THE RELIEF OF ITCH, MANGE, SCABIES, SCRATCHES, CAMP ITCH, AND THE SEVEN-YEARS' ITCH, SORE BACK, AND COLLAR-GALLED HORSES. OWENS & MINOR DRUG CO., INC., Richmond, Va.
Filed January 21, 1930. Serial No. 295,045. PUBLISHED APRIL 1, 1930. Class 6.

271,636. LEAF TOBACCO. ROSS TOBACCO COMPANY, Louisville, Ky.
Filed January 20, 1930. Serial No. 294,995. PUBLISHED APRIL 8, 1930. Class 17.

271,637. VAGINAL SPRAYER. DAVID LEE O'SULLIVAN, New York, N. Y.
Filed January 20, 1930. Serial No. 294,991. PUBLISHED APRIL 1, 1930. Class 44.

271,638. LIQUID WAX POLISH, FURNITURE POLISH, AND WAXLESS POLISH. E. E. FULTON CO., Chicago, Ill.
Filed January 20, 1930. Serial No. 294,967. PUBLISHED APRIL 1, 1930. Class 16.

271,639. PYROXYLIN-COATED FABRICS USED AS A SUBSTITUTE FOR LEATHER AND AS WALL COVERINGS. COLUMBUS COATED FABRICS CORPORATION, Columbus, Ohio.
Filed January 18, 1930. Serial No. 294,915. PUBLISHED APRIL 8, 1930. Class 50.

271,640. LAMINATED SHEETS. LAMICEL PRODUCTS INC., New York, N. Y.
Filed January 10, 1930. Serial No. 294,639. PUBLISHED APRIL 8, 1930. Class 50.

271,641. EXERCISING DEVICES FOR THE TEETH AND GUMS. MARIAN W. JORDAN, Los Angeles, Calif.
Filed January 3, 1930. Serial No. 294,357. PUBLISHED APRIL 1, 1930. Class 44.

271,642. RUBBER DOILIES. WEBSTER RUBBER COMPANY, Sabbatus, Me.
Filed December 28, 1929. Serial No. 294,197. PUBLISHED APRIL 8, 1930. Class 50.

271,643. SKIN CREAM. HOLLYWOOD LABORATORIES, INC., Iowa City, Iowa, and Hollywood, Calif.
Filed December 21, 1929. Serial No. 293,970. PUBLISHED APRIL 8, 1930. Class 6.

271,644. STEEL BARS OF VARIOUS SHAPES AND SIZES, FORGINGS, AND BLOCKS, DISCS, AND PIECES OF STEEL. FIRTH-STERLING STEEL COMPANY, McKeesport, Pa.
Filed December 20, 1929. Serial No. 293,921. PUBLISHED APRIL 8, 1930. Class 14.

271,645. TABLETS, A MEDICINAL PREPARATION USED IN THE TREATMENT OF COMMON COLDS, SIMPLE HEADACHE, AND SIMPLE NEURALGIA. ABRAHAM N. SHAVELSON, doing business as Chex Chemical Company, Guttenberg Township, Hudson County, N. J.
Filed December 11, 1929. Serial No. 293,559. PUBLISHED APRIL 1, 1930. Class 6.

271,646. INHALENT FOR THE TREATMENT OF HEAD COLDS, HAY FEVER, NASAL CATARRH, ASTHMA, SINUS AND BRONCHIAL AFFECTIONS. HUBERT E. ROUSH, doing business as Roush Drug Company, Humeston, Iowa.
Filed December 9, 1929. Serial No. 293,448. PUBLISHED APRIL 8, 1930. Class 6.

271,647. LIQUID INK ERADICATOR. H. A. MONTGOMERY CO., INC., Detroit, Mich.
Filed November 29, 1929. Serial No. 293,061. PUBLISHED APRIL 1, 1930. Class 6.

271,648. WIRE CLOTH AND METAL SCREENING. NEWARK WIRE CLOTH COMPANY, Newark, N. J.
Filed January 14, 1930. Serial No. 294,777. PUBLISHED APRIL 1, 1930. Class 13.

271,649. RADIOTUBES—NAMELY, ELECTRON OR VACUUM TUBES. JOHNSONBURG RADIO CORPORATION, Johnsonburg, Pa.
Filed January 14, 1930. Serial No. 294,774. PUBLISHED MARCH 25, 1930. Class 21.

271,650. RADIO AND AUTOMOBILE BATTERIES AND RADIO ELECTRON TUBES. JOHN E. FORSELL, doing business as Old Trusty Co., Clay Center, Nebr.
Filed May 18, 1929. Serial No. 284,262. PUBLISHED SEPTEMBER 3, 1929. Class 21.

271,651. WHEAT FLOUR. THE BOWEN FLOUR MILLS COMPANY, Independence, Kans.
Filed May 14, 1929. Serial No. 283,979. PUBLISHED JUNE 25, 1929. Class 46.

271,652. PAINT ENAMELS. THE CHARLES MOSER COMPANY, Cincinnati, Ohio.
Filed May 11, 1929. Serial No. 283,884. PUBLISHED APRIL 1, 1930. Class 16.

271,653. RADIO RECEIVING SETS AND PARTS THEREOF—NAMELY, TUNED RADIO FREQUENCY UNITS, ASSEMBLED RADIO FREQUENCY AMPLIFYING UNITS, AND ASSEMBLED THERMIONIC DETECTING UNITS. PEOPLE'S OUTFITTING COMPANY, Detroit, Mich.
Filed January 13, 1930. Serial No. 294,737. PUBLISHED MARCH 25, 1930. Class 21.

271,654. STENCIL PAPER CONSISTING OF SHEETS ADAPTED TO CONVERSION INTO STENCILS. A. B. DICK COMPANY, Chicago, Ill.
Filed February 4, 1930. Serial No. 295,559. PUBLISHED APRIL 1, 1930. Class 37.

271,655. ELECTRICALLY-OPERATED SIGNAL HORN. TEMME MANUFACTURING CO., Chicago, Ill.
Filed January 10, 1930. Serial No. 294,649. PUBLISHED MARCH 25, 1930. Class 21.

271,656. AUTOMOBILE BODIES. HUDSON MOTOR CAR COMPANY, Detroit, Mich.
Filed January 6, 1930. Serial No. 294,427. PUBLISHED APRIL 1, 1930. Class 19.

271,657. AUTOMOBILES AND CONSTRUCTIVE PARTS THEREOF. GRAHAM-PAIGE MOTORS CORPORATION, Dearborn, Mich.
Filed January 6, 1930. Serial No. 294,420. PUBLISHED APRIL 1, 1930. Class 19.

271,658. CLOTHES-WASHING MACHINES AND CLOTHES WRINGERS. HARRY BOHN, doing business as The Coffield Washer Company, Dayton, Ohio.
Filed December 19, 1929. Serial No. 293,867. PUBLISHED APRIL 1, 1930. Class 24.

271,659. LAUNDRY TRAYS AND KITCHEN SINKS. ALBERENE STONE COMPANY, New York, N. Y.
Filed December 13, 1929. Serial No. 293,612. PUBLISHED APRIL 1, 1930. Class 13.

271,660. GRID-CONTROLLED ARC TUBES. GENERAL ELECTRIC COMPANY, Schenectady, N. Y.
Filed December 11, 1929. Serial No. 293,526. PUBLISHED APRIL 1, 1930. Class 21.

271,661. ELECTRIC SIGNAL LIGHTS FOR MOUNTING ON VEHICLES AS DIRECTION SIGNALS OR FOR FIXED PLACEMENT ALONG HIGHWAYS AS TRAFFIC SIGNALS. MANUEL S. SILVA, Decota, Calif.
Filed December 10, 1929. Serial No. 293,490. PUBLISHED MARCH 25, 1930. Class 21.

271,662. BREAKFAST CEREAL. ELAM MILLS, INC., Chicago, Ill.
Filed February 21, 1930. Serial No. 296,328. PUBLISHED APRIL 1, 1930. Class 46.

271,663. FOUNTAIN PENS AND PENCILS. ECLIPSE FOUNTAIN PEN AND PENCIL CO. INC., New York, N. Y.
Filed February 20, 1930. Serial No. 296,267. PUBLISHED APRIL 1, 1930. Class 37.

271,664. MINERAL-COATED PAPER SUITABLE FOR PRINTING. THE CHAMPION COATED PAPER COMPANY, Hamilton, Ohio.
Filed February 20, 1930. Serial No. 296,262. PUBLISHED APRIL 1, 1930. Class 37.

271,665. WAXED PAPER. PACKAGE PAPER COMPANY, Holyoke, Mass.
Filed February 6, 1930. Serial No. 295,693. PUBLISHED APRIL 1, 1930. Class 37.

271,666. TOILET PAPER AND WAX PAPER. FIRST NATIONAL STORES INC., Boston, and Somerville, Mass.
Filed February 6, 1930. Serial No. 295,666. PUBLISHED APRIL 1, 1930. Class 37.

271,667. PERIODICAL. PUBLISHERS' FISCAL CORPORATION, New York, N. Y.
Filed February 5, 1930. Serial No. 295,638. PUBLISHED MARCH 25, 1930. Class 38.

271,668. LYE. B. T. BABBITT, INC., New York, N. Y.
Filed January 9, 1930. Serial No. 294,563. PUBLISHED MARCH 25, 1930. Class 6.

271,669. LYE. B. T. BABBITT, INC., New York, N. Y.
Filed January 9, 1930. Serial No. 294,567. PUBLISHED MARCH 25, 1930. Class 6.

271,670. LYE. B. T. BABBITT, INC., New York, N. Y.
Filed January 9, 1930. Serial No. 294,571. PUBLISHED MARCH 25, 1930. Class 6.

271,671. TWO PER CENTUM (2%) SOLUTION OF THE DRUG DIBROM-OXYMERCURI FLUORESCEIN. JOHN T. WILLIAMS, Jr., doing business as Williams & Co., Brooklyn, N. Y.
Filed January 15, 1930. Serial No. 294,832. PUBLISHED MARCH 18, 1930. Class 6.

271,672. PREPARATION FOR DEHAIRING HIDES AND PREPARING THEM FOR TANNING. ROHM & HAAS COMPANY, Philadelphia, Pa.
Filed January 8, 1930. Serial No. 294,544. PUBLISHED MARCH 18, 1930. Class 6.

271,673. OINTMENT. EDWARD C. DORNBUSCH, doing business as De Cue's Laboratories, Cleveland, Ohio.
Filed January 3, 1930. Serial No. 294,343. PUBLISHED MARCH 25, 1930. Class 6.

271,674. PREPARATIONS FOR THE HAIR COMPRISING A DRY-SHAMPOO POWDER. CURELLJO G. M. B. H., Wernigerode, near the Harz, Germany.
Filed December 18, 1929. Serial No. 293,822. PUBLISHED MARCH 18, 1930. Class 6.

271,675. CANDY. GENERAL CANDY CORPORATION, Chicago, Ill.
Filed February 18, 1930. Serial No. 296,182. PUBLISHED APRIL 1, 1930. Class 46.

271,676. CANDY. GREEN BROTHERS COMPANY, doing business as Green Bros. Co., Springfield, Mass.
Filed February 15, 1930. Serial No. 296,057. PUBLISHED APRIL 1, 1930. Class 46.

271,677. CANNED MALT SYRUP. NATHAN FELDMAN, doing business as Felko Supply Co., New Brunswick, N. J.
Filed February 14, 1930. Serial No. 296,007. PUBLISHED APRIL 1, 1930. Class 46.

271,678. ARTIFICIAL BAITS. JAMES HEDDON'S SONS, Dowagiac, Mich.
Filed February 13, 1930. Serial No. 295,977. PUBLISHED APRIL 1, 1930. Class 22.

271,679. BRIDGE SETS, TENNIS-RACKET COVERS, AND GOLF BAGS. HOOKLESS FASTENER COMPANY, Meadville, Pa.
Filed February 12, 1930. Serial No. 295,947. PUBLISHED APRIL 1, 1930. Class 22.

271,680. BRIDGE SETS, TENNIS-RACKET COVERS, AND GOLF BAGS. HOOKLESS FASTENER COMPANY, Meadville, Pa.
Filed February 12, 1930. Serial No. 295,946. PUBLISHED APRIL 1, 1930. Class 22.

271,681. CANNED SAUERKRAUT. BOND PICKLE COMPANY, Oconto, Wis.
Filed February 10, 1930. Serial No. 295,830. PUBLISHED APRIL 1, 1930. Class 46.

271,682. YARNS COMPOSED OF SILK, WOOL, AND MOHAIR. MONOMAC SPINNING COMPANY, Boston, Mass.
Filed February 8, 1930. Serial No. 295,803. PUBLISHED APRIL 1, 1930. Class 48.

271,683. COOKIES. F. A. WOOD & CO., Atlantic City, N. J.
Filed February 6, 1930. Serial No. 295,707. PUBLISHED MARCH 25, 1930. Class 46.

271,684. MALT SYRUP. WILLIAM F. MULHERIN, doing business as Excelsior Supply Company, Syracuse, N. Y.
Filed February 6, 1930. Serial No. 295,684. PUBLISHED APRIL 1, 1930. Class 46.

271,685. MALT SYRUP FOR FOOD PURPOSES. MORRIS WEISS, doing business as Sheepshead Malt Products Co., Brooklyn, N. Y.
Filed February 5, 1930. Serial No. 295,649. PUBLISHED APRIL 1, 1930. Class 46.

271,686. COFFEE. MANNINGS, INC., San Francisco, Calif.
Filed February 5, 1930. Serial No. 295,626. PUBLISHED APRIL 1, 1930. Class 46.

271,687. MEDICINAL PREPARATION USED IN THE TREATMENT OF HEAD COLDS. SIMON L. RUSKIN, doing business as Pasteurol Company, Brooklyn, N. Y.
Filed February 3, 1930. Serial No. 295,537. PUBLISHED MARCH 18, 1930. Class 6.

271,688. MALT SYRUP. ZIMMERMAN BROS., Lock Haven, Pa.
Filed January 28, 1930. Serial No. 295,314. PUBLISHED APRIL 1, 1930. Class 46.

271,689. OLIVE OIL. GIUSEPPE CITTI, Chicago, Ill.
Filed January 27, 1930. Serial No. 295,254. PUBLISHED APRIL 1, 1930. Class 46.

271,690. LARD AND SMOKED PICNIC HAMS. THE RATH PACKING COMPANY, Waterloo, Iowa.
Filed January 25, 1930. Serial No. 295,237. PUBLISHED APRIL 1, 1930. Class 46.

271,691. EGGS AND DRESSED POULTRY. PACIFIC EGG PRODUCERS COOPERATIVE, INC., New York, N. Y.
Filed January 24, 1930. Serial No. 295,188. PUBLISHED APRIL 1, 1930. Class 46.

271,692. GLASS JARS OR CONTAINERS. OLEAN GLASS COMPANY, INC., Olean, N. Y.
Filed January 23, 1930. Serial No. 295,133. PUBLISHED APRIL 1, 1930. Class 33.

271,693. COMPOUNDS OF OLIVE OIL AND COTTONSEED OIL. IGNAZIO NUCCIO, doing business as Orazi & Curiazi Olive Oil Company, Cleveland, Ohio.
Filed January 18, 1930. Serial No. 294,926. PUBLISHED APRIL 1, 1930. Class 46.

271,694. LUGGAGE CARRIER IN THE NATURE OF A TRUNK. KARI-KEEN MANUFACTURING CO., INC., Sioux City, Iowa.
Filed January 15, 1930. Serial No. 294,808. PUBLISHED APRIL 1, 1930. Class 3.

271,695. PREPARATION USED IN THE TREATMENT OF POULTRY DISEASES—NAMELY, ROUP, BRONCHIAL PNEUMONIA, BRONCHITIS, INFLUENZA, POX, AND CANKER. MAXMILLIAN PFAFFINGER, doing business as Quality Poultry Ranch, Van Nuys, Calif.
Filed January 11, 1930. Serial No. 294,686. PUBLISHED MARCH 18, 1930. Class 6.

271,696. BUTTER MADE WITH COW'S MILK. SOUTHERN PROPERTIES, INC., doing business as Garland Creamery, Dallas, Tex.
Filed January 4, 1930. Serial No. 294,405. PUBLISHED MARCH 25, 1930. Class 46.

271,697. CANDY. DAVID H. MERRIAM, doing business as Ye House of John L. Bailey, Fitchburg, Mass.
Filed January 4, 1930. Serial No. 294,396. PUBLISHED APRIL 1, 1930. Class 46.

271,698. COFFEE AND TEA. R. L. GERHART, doing business as R. L. Gerhart & Co., Lancaster, Pa.
Filed January 4, 1930. Serial No. 294,384. PUBLISHED APRIL 1, 1930. Class 46.

271,699. MEDICINAL SMOKING PREPARATIONS FREE FROM TOBACCO FOR RELIEF OF PAROXYSMS OF ASTHMA. THE BLOSSER COMPANY, Atlanta, Ga.
Filed December 30, 1929. Serial No. 294,203. PUBLISHED MARCH 18, 1930. Class 6.

271,700. MUSICAL INSTRUMENTS—NAMELY, ACCORDIONS. GRETSCH & BRENNER, INC., New York, N. Y.
Filed January 28, 1930. Serial No. 295,122. PUBLISHED MARCH 25, 1930. Class 36.

271,701. FINGER RINGS AND MOUNTINGS THEREFOR. BENJAMIN & EDWARD J. GROSS CO., INC., New York, N. Y.
Filed January 30, 1930. Serial No. 295,355. PUBLISHED MARCH 25, 1930. Class 28.

271,702. FINGER RINGS AND MOUNTINGS THEREFOR. BENJAMIN & EDWARD J. GROSS CO., INC., New York, N. Y.
Filed January 30, 1930. Serial No. 295,354. PUBLISHED MARCH 25, 1930. Class 28.

271,703. BRIDGE TABLES. LUCIEN A. MARSH, doing business as L. A. Marsh Manufacturing Co., San Francisco, Calif.
Filed January 29, 1930. Serial No. 295,339. PUBLISHED APRIL 8, 1930. Class 32.

271,704. PULP AND PAPER MAKING MACHINERY. BIRD MACHINE COMPANY, South Walpole, Mass.
Filed January 28, 1930. Serial No. 295,291. PUBLISHED APRIL 8, 1930. Class 23.

271,705. DIAMONDS. C. A. KIGER CO., doing business as Virgin Diamond Syndicate, Kansas City, Mo.
Filed January 27, 1930. Serial No. 295,265. PUBLISHED MARCH 25, 1930. Class 28.

271,706. OPTICAL FRAMES. DESIGN MFG. CO., INC., Rochester, N. Y.
Filed January 27, 1930. Serial No. 295,255. PUBLISHED APRIL 8, 1930. Class 26.

271,707. OIL-DISPENSING DEVICES IN THE NATURE OF A COMBINED RACK AND SEMIMECHANICAL DISPLAY STAND FOR USE IN THE DISPLAY AND SALE OF OIL FROM SEPARATE CONTAINERS. BOE MANUFACTURING COMPANY, Minneapolis, Minn.
Filed January 27, 1930. Serial No. 295,250. PUBLISHED APRIL 8, 1930. Class 23.

271,708. OIL-DISPENSING DEVICES IN THE NATURE OF A COMBINED RACK AND SEMIMECHANICAL DISPLAY STAND FOR USE IN THE DISPLAY AND SALE OF OIL IN SEPARATE CONTAINERS. BOB MANUFACTURING COMPANY, Minneapolis, Minn.
Filed January 27, 1930. Serial No. 295,240. PUBLISHED APRIL 8, 1930. Class 23.

271,709. ROTARY ROCK-BIT CONES. GARBER TOOL CO., INC., Garber, Okla.
Filed January 13, 1930. Serial No. 294,722. PUBLISHED APRIL 8, 1930. Class 23.

271,710. DIAMONDS AND DIAMOND RINGS. J. W. FORSINGER CO., Chicago, Ill.
Filed January 11, 1930. Serial No. 294,666. PUBLISHED APRIL 1, 1930. Class 28.

271,711. BEAD-STRINGING CHAIN AND SILK CORDS. REGENT IMPORT CORPORATION, New York, N. Y.
Filed January 6, 1930. Serial No. 294,442. PUBLISHED APRIL 1, 1930. Class 28.

271,712. PINS, BADGES, WATCH CHARMS, AND BRACELETS, ALL MADE OF OR PLATED WITH PRECIOUS METAL. PSI OMEGA, Pittsburgh, Pa.
Filed January 6, 1930. Serial No. 294,441. PUBLISHED MARCH 25, 1930. Class 28.

271,713. FAN BELTS, REFRIGERATOR BELTS, RADIATOR HOSE, CAR-WASHER HOSE, AIR HOSE, WINDSHIELD-WIPER HOSE, WELDING HOSE, GENERATOR TUBING, AND HAND-PUMP TUBING. RAYBESTOS-MANHATTAN, INCORPORATED, Bridgeport, Conn.
Filed January 4, 1930. Serial No. 294,400. PUBLISHED APRIL 8, 1930. Class 35.

271,714. CARD OR TICKET PUNCH. THE HODGSON & PETTIS MANUFACTURING COMPANY, New Haven, Conn.
Filed January 2, 1930. Serial No. 294,304. PUBLISHED APRIL 8, 1930. Class 23.

271,715. PHONOGRAPH APPARATUS FOR RECORDING AND REPRODUCING SOUNDS. PLAZA MUSIC COMPANY, New York, N. Y.
Filed December 28, 1929. Serial No. 294,176. PUBLISHED MARCH 25, 1930. Class 36.

271,716. FINGER RINGS. JOSEPH GRANAT, doing business as Granat Bros., San Francisco, Calif.
Filed December 27, 1929. Serial No. 294,112. PUBLISHED MARCH 25, 1930. Class 28.

271,717. FINGER RINGS. JOSEPH GRANAT, doing business as Granat Bros., San Francisco, Calif.
Filed December 27, 1929. Serial No. 294,111. PUBLISHED MARCH 25, 1930. Class 28.

271,718. SAFETY-RAZOR BLADES. "NIEBO" STAHL- UND METALLWARENFABRIK GEBR. NIEPENBERG, Wald-Solingen, Germany.
Filed December 17, 1929. Serial No. 293,785. PUBLISHED APRIL 8, 1930. Class 23.

271,719. NECKLACES, PENDANTS, BRACELETS, CONNECTION RINGS AND FINGER RINGS, EARRINGS, AND BROOCHES. JANCKEL MFG. CO., INC., Providence, R. I.
Filed December 17, 1929. Serial No. 293,777. PUBLISHED MARCH 25, 1930. Class 28.

271,720. BEADS USED AS NECKLACES AND THE LIKE PERSONAL WEAR AND JEWELRY FOR PERSONAL WEAR (NOT INCLUDING WATCHES). SPANGLER INC., Chicago, Ill.
Filed December 6, 1929. Serial No. 293,761. PUBLISHED APRIL 1, 1930. Class 28.

271,721. MOTION-PICTURE AND SOUND-PRODUCING FILM. TEC-ART STUDIOS, INC., Los Angeles, Calif.
Filed December 26, 1929. Serial No. 294,095. PUBLISHED APRIL 8, 1930. Class 26.

271,722. OILS AND GREASES OR PETROLEUM PRODUCTS CONSISTING OF GASOLINE, MOTOR-FUEL OILS, LUBRICATING OILS, AND LUBRICATING GREASES. UNITED STATES REFINING COMPANY, Los Angeles, Calif.
Filed December 7, 1929. Serial No. 293,389. PUBLISHED MARCH 25, 1930. Class 15.

271,723. STONE-PICKING MACHINES. THE FARMERS' STONE-PICKING MACHINE COMPANY, Baltimore, Md.
Filed February 19, 1930. Serial No. 296,223. PUBLISHED APRIL 8, 1930. Class 23.

271,724. POWER-TRANSMISSION MACHINERY. WORTHINGTON PUMP AND MACHINERY CORPORATION, New York, N. Y.
Filed February 12, 1930. Serial No. 295,970. PUBLISHED APRIL 8, 1930. Class 23.

271,725. PUMPS AND PUMPING UNITS. DECATUR PUMP COMPANY, Decatur, Ill.
Filed February 12, 1930. Serial No. 295,930. PUBLISHED APRIL 8, 1930. Class 23.

271,726. PUMPS AND PUMPING UNITS. DECATUR PUMP COMPANY, Decatur, Ill.
Filed February 12, 1930. Serial No. 295,929. PUBLISHED APRIL 8, 1930. Class 23.

271,727. SHOVELS, SPADES, SCOOPS, TELEGRAPH SPOONS, HAND-OPERATED DITCHING TOOLS, SNOW PUSHERS, SIDEWALK SCRAPERS, POST-HOLE DIGGERS, TOOL HANDLES. BALDWIN TOOL WORKS, Parkersburg, W. Va.
Filed February 10, 1930. Serial No. 295,827. PUBLISHED APRIL 8, 1930. Class 23.

271,728. SHOVELS, SPADES, SCOOPS, TELEGRAPH SPOONS, HAND-OPERATED DITCHING TOOLS, SNOW PUSHERS, SIDEWALK SCRAPERS, POST-HOLE DIGGERS, TOOL HANDLES. BALDWIN TOOL WORKS, Parkersburg, W. Va.
Filed February 10, 1930. Serial No. 295,826. PUBLISHED APRIL 8, 1930. Class 23.

271,729. CUP LEATHERS FOR PUMPS. DEMPSTER MILL MANUFACTURING COMPANY, Beatrice, Nebr.
Filed February 4, 1930. Serial No. 295,562. PUBLISHED APRIL 8, 1930. Class 35.

271,730. ICE PICKS, KITCHEN FORKS, SPOONS, ETC. UTILITY MANUFACTURING CO., INC., Baltimore, Md.
Filed January 30, 1930. Serial No. 295,405. PUBLISHED APRIL 8, 1930. Class 23.

271,731. WATCH BRACELETS, WATCH STRAPS, WATCH ATTACHMENTS, ETC. GEMEX COMPANY, Newark, N. J.
Filed January 30, 1930. Serial No. 295,372. PUBLISHED MARCH 25, 1930. Class 28.

271,732. BOTTOM FINISH FOR SHOE SOLES. PENN-STANDARD SOLE CEMENTING PROCESS, INC., Philadelphia, Pa.
Filed January 17, 1930. Serial No. 294,889. PUBLISHED MARCH 18, 1930. Class 6.

271,733. ASTRINGENTS, ASTRINGENT CERATES, ALMOND MEAL, ETC. RENÉE THORNTON, New York, N. Y.
Filed January 16, 1930. Serial No. 294,862. PUBLISHED MARCH 25, 1930. Class 6.

271,734. PREPARATION FOR USE IN TREATING HEAD COLDS, CHEST COLDS, HAY FEVER, AND NASAL CATARRH, OR SINUS TROUBLE. J. EARL THAYER, doing business as O-Tas-O Products Company, Sidney, Nebr., and Denver, Colo.
Filed February 20, 1930. Serial No. 296,299. PUBLISHED APRIL 8, 1930. Class 6.

271,735. MAGAZINE PUBLISHED MONTHLY. MCGRAW-HILL PUBLISHING COMPANY, INC., New York, N. Y.
Filed January 18, 1930. Serial No. 294,925. PUBLISHED MARCH 25, 1930. Class 38.

271,736. MINERAL-COATED PAPER SUITABLE FOR PRINTING. THE CHAMPION COATED PAPER COMPANY, Hamilton, Ohio.
Filed January 13, 1930. Serial No. 294,710. PUBLISHED MARCH 25, 1930. Class 37.

271,737. CANNED FRUITS. STARR FRUIT PRODUCTS CO., Portland, Oreg.
Filed February 21, 1930. Serial No. 296,366. PUBLISHED APRIL 8, 1930. Class 46.

271,738. PREPARATION FOR DRIVING MOTHS AND OTHER INSECTS FROM CLOTHING. LYNCH-CROSS CORPORATION, Milwaukee, Wis.
Filed February 21, 1930. Serial No. 296,353. PUBLISHED APRIL 1, 1930. Class 6.

271,739. COMPOUNDS USED FOR EXTERNAL APPLICATION TO HORSES FOR RELIEF OF FISTULA AND POLE EVIL. HENRY N. WILHELM, Memphis, Nebr.
Filed February 20, 1930. Serial No. 296,304. PUBLISHED APRIL 8, 1930. Class 6.

271,740. CATTLE FEED—NAMELY, COTTONSEED MEAL. SAN JOAQUIN COTTON OIL COMPANY, Los Angeles, Calif.
Filed February 3, 1930. Serial No. 295,538. PUBLISHED APRIL 1, 1930. Class 46.

271,741. BIMONTHLY PUBLICATION. DELL PUBLISHING COMPANY, New York, N. Y.
Filed February 3, 1930. Serial No. 295,508. PUBLISHED MARCH 25, 1930. Class 38.

271,742. POULTRY FEED. JAY W. WHEELER, doing business as Los Angeles Grain and Feed Company, Los Angeles, Calif.
Filed January 28, 1930. Serial No. 295,412. PUBLISHED APRIL 1, 1930. Class 46.

271,743. WHEAT FLOUR. INLAND MILLING COMPANY, Des Moines, Iowa.
Filed January 25, 1930. Serial No. 295,223. PUBLISHED APRIL 1, 1930. Class 46.

271,744. WHEAT FLOUR. INLAND MILLING COMPANY, Des Moines, Iowa.
Filed January 25, 1930. Serial No. 295,221. PUBLISHED APRIL 1, 1930. Class 46.

271,745. STATISTICAL CHARTS. KARSTEN STATISTICAL LABORATORY, INC., New Haven, Conn.
Filed January 20, 1930. Serial No. 294,979. PUBLISHED MARCH 25, 1930. Class 38.

271,746. EGGS. GREENBERG BROS. FARM PRODUCE, INC., New York, N. Y.
Filed January 2, 1930. Serial No. 294,300. PUBLISHED APRIL 1, 1930. Class 46.

271,747. COAL. SUNSHINE COAL COMPANY, Centerville, Iowa.
Filed December 17, 1929. Serial No. 293,800. PUBLISHED MARCH 11, 1930. Class 1.

271,748. DAIRY COW FEED, SWEET FEED, BABY-CALF FEED, BEEF FATTENER, SWINE PROTEIN SUPPLEMENT, HORSE SWEET FEED, EGG-LAYING MASH, GROWING-CHICK MASH, CHICK STARTER, BABY-CHICK SCRATCH, HEN SCRATCH. CENTRAL FARM PRODUCTS COMPANY, Waco, Tex.
Filed December 0, 1929. Serial No. 293,406. PUBLISHED APRIL 1, 1930. Class 46.

271,749. CANDY. BROWN & HALEY, Tacoma, Wash.
Filed February 27, 1930. Serial No. 296,577. PUBLISHED APRIL 8, 1930. Class 46.

271,750. CARBON BLACK USED FOR VARIOUS INDUSTRIAL PURPOSES AND ESPECIALLY FOR COMPOUNDING WITH RUBBER. THERMATOMIC CARBON COMPANY, Pittsburgh, Pa.
Filed February 26, 1930. Serial No. 296,555. PUBLISHED APRIL 8, 1930. Class 6.

271,751. PYORRHEA SOLUTION. PHARMACAL MANUFACTURING CO., Cleveland, Ohio.
Filed February 24, 1930. Serial No. 296,439. PUBLISHED APRIL 8, 1930. Class 6.

271,752. LAXATIVE PREPARATION IN TABLET FORM. HARRY KESSINGER, doing business as The Harry Kessinger Company, Houston, Tex.
Filed February 24, 1930. Serial No. 296,426. PUBLISHED APRIL 8, 1930. Class 6.

271,753. TEA. GRISTEDE BROS., INC., New York, N. Y.
Filed February 24, 1930. Serial No. 296,419. PUBLISHED APRIL 8, 1930. Class 46.

271,754. MINERAL-COATED PAPER SUITABLE FOR PRINTING. THE CHAMPION COATED PAPER COMPANY, Hamilton, Ohio.
Filed January 13, 1930. Serial No. 294,790. PUBLISHED MARCH 25, 1930. Class 37.

271,755. MINERAL-COATED PAPER SUITABLE FOR PRINTING. THE CHAMPION COATED PAPER COMPANY, Hamilton, Ohio.
Filed January 13, 1930. Serial No. 294,708. PUBLISHED MARCH 25, 1930. Class 37.

271,756. MINERAL-COATING PAPER SUITABLE FOR PRINTING. THE CHAMPION COATED PAPER COMPANY, Hamilton, Ohio.
Filed January 13, 1930. Serial No. 294,706. PUBLISHED MARCH 25, 1930. Class 37.

271,757. MINERAL-COATED PAPER SUITABLE FOR PRINTING. THE CHAMPION COATED PAPER COMPANY, Hamilton, Ohio.
Filed January 13, 1930. Serial No. 294,705. PUBLISHED MARCH 25, 1930. Class 37.

271,758. WRITING PAPER AND MAILING AND CORRESPONDENCE ENVELOPES. THE PHOTOSCRIPT COMPANY, Philadelphia, Pa.
Filed January 8, 1930. Serial No. 294,540. PUBLISHED APRIL 1, 1930. Class 37.

271,759. PELTS OR UNFINISHED FURS, SUCH AS MUSKRAT, OPOSSUM, MINK, RACCOON, OTTER, AND OTHERS. LOUISIANA FURS, INC., Chicago, Ill.
Filed January 8, 1930. Serial No. 294,537. PUBLISHED APRIL 1, 1930. Class 1.

271,760. DAIRY PRODUCTS—NAMELY, BUTTER. SUCHMAN & MCROBERTS, INC., doing business as Bay View Creamery, Jersey City, N. J.
Filed January 7, 1930. Serial No. 294,493. PUBLISHED APRIL 1, 1930. Class 46.

271,761. PERIODICALS. QUALITY PUBLICATIONS, INC., New York, N. Y.
Filed January 7, 1930. Serial No. 294,485. PUBLISHED MARCH 25, 1930. Class 38.

271,762. PERIODICALS. QUALITY PUBLICATIONS, INC., New York, N. Y.
Filed January 7, 1930. Serial No. 294,484. PUBLISHED MARCH 25, 1930. Class 38.

271,763. AUDIO-FREQUENCY AMPLIFIERS. WEBSTER ELECTRIC COMPANY, Racine, Wis.
Filed January 2, 1930. Serial No. 294,327. PUBLISHED MARCH 25, 1930. Class 21.

271,764. HEADING FOR A SERIES OF ARTICLES. CHRISTY WALSH, New York, N. Y.
Filed January 23, 1930. Serial No. 295,143. PUBLISHED APRIL 1, 1930. Class 38.

271,765. CHAIRS (EXCEPT SURGICAL AND DENTAL CHAIRS), ARMCHAIRS, LOVE SEATS, COUCHES, BEDS, AND SEATS AND BACKS FOR MOTOR CARS, RAILWAYS, AND AEROPLANES. WILLY KNOLL, doing business as Wilhelm Knoll, Stuttgart, Germany.
Filed October 21, 1929. Serial No. 291,840. PUBLISHED APRIL 1, 1930. Class 32.

271,766. PHONOGRAPH RECORDS. COLUMBIA PHONOGRAPH COMPANY, INC., Bridgeport, Conn.
Filed October 18, 1929. Serial No. 291,204. PUBLISHED OCTOBER 18, 1929. Class 36.

271,767. PERIODICAL. ELIOT KEEN, doing business as Passing Show Publishing Company, New York, N. Y.
Filed October 17, 1929. Serial No. 291,166. PUBLISHED MARCH 25, 1930. Class 38.

271,768. ELECTRIC CHURNS. MALCOME L. BURTON, Inman, S. C.
Filed October 16, 1929. Serial No. 291,113. PUBLISHED MARCH 25, 1930. Class 21

271,769. SERIES OF CARTOONS OR COMIC STRIPS IN A DAILY NEWSPAPER. DAILY GRAPHIC, INC., New York, N. Y.
Filed November 27, 1929. Serial No. 292,985. PUBLISHED MARCH 25, 1930. Class 38.

271,770. LIQUID-PURIFYING DEVICE CONSISTING OF A POROUS CONTAINER HAVING A PURIFYING AGENT CONSISTING PRINCIPALLY OF CHARCOAL DISPOSED THEREIN. CHARRED BAG COMPANY, Salisbury, N. C.
Filed November 27, 1929. Serial No. 292,976. PUBLISHED APRIL 1, 1930. Class 50.

271,771. OINTMENT FOR RASH, EXZEMA, BREAKING OUT, ETC., ON GROWN PERSONS, AND PARTICULARLY ON INFANTS. WILLIAM H. RORER, INC., Philadelphia, Pa.
Filed November 22, 1929. Serial No. 292,752. PUBLISHED APRIL 1, 1930. Class 6.

271,772. INTERNAL-COMBUSTION ENGINES. MONTGOMERY WARD & Co., INCORPORATED, Chicago, Ill.
Filed November 22, 1929. Serial No. 292,743. PUBLISHED APRIL 8, 1930. Class 23.

271,773. CANNED TUNA FISH, PEAS, CORN, ITALIAN TOMATOES, AND STRING BEANS; OLIVE OIL, AND RICE. MOLINELLI GIANNUSA & RAO, INC., doing business as Mogira Products Co., Brooklyn, N. Y.
Filed November 22, 1929. Serial No. 292,741. PUBLISHED APRIL 1, 1930. Class 46.

271,774. POSTAL FRANKING MACHINES, PARCEL-POST STAMPING MACHINES, ETC. WILHELM FRIEDRICHS, Reinickendorf-Ost, near Berlin, Germany.
Filed November 20, 1929. Serial No. 292,626. PUBLISHED APRIL 8, 1930. Class 23.

271,775. MINERAL COMPOUNDS—NAMELY, PHYSICS, TONICS, AND CONDITIONERS FOR HOGS, SHEEP, AND POULTRY. OELWEIN CHEMICAL COMPANY, Oelwein, Iowa.
Filed November 19, 1929. Serial No. 292,592. PUBLISHED MARCH 18, 1930. Class 6.

271,776. PERFUMES, LOTIONS, BATH POWDERS, ETC. LES PARFUMS DE MOLYNEUX, INC., New York, N. Y.
Filed November 15, 1929. Serial No. 292,452. PUBLISHED APRIL 1, 1930. Class 6.

271,777. PRINTED CARDS, PRINTED LEAFLETS, FOLDERS, AND BOOKLETS SOLD TO THE TRADE AS SUCH. PAUL S. HERVEY, Des Moines, Iowa.
Filed November 9, 1929. Serial No. 292,208. PUBLISHED MARCH 25, 1930. Class 38.

271,778. WALL-PAPER TRIMMERS, PARTS THEREOF, PAPER-TRIMMING OUTFITS, SHEARS, ETC. HYDE MANUFACTURING COMPANY, Southbridge, Mass.
Filed November 6, 1929. Serial No. 292,071. PUBLISHED APRIL 8, 1930. Class 23.

271,779. RADIO RECEIVING SETS ALONE OR ADAPTED FOR COMBINATION WITH PHONOGRAPHS. SUPERIOR CABINET CORPORATION, New York, N. Y.
Filed October 31, 1929. Serial No. 291,845. PUBLISHED APRIL 1, 1930. Class 21.

271,780. SALVES AND OINTMENTS APPLICABLE TO TREATMENT OF DISORDERS OF SKIN, MUSCLES, AND JOINTS. MILDRED A. ARMSTRONG, Glendale, Calif.
Filed October 15, 1929. Serial No. 291,077. PUBLISHED JANUARY 7, 1930. Class 6.

271,781. PORTABLE AND CABINET PHONOGRAPHS. STERCHI BROS. STORES, INC., Knoxville, Tenn.
Filed October 25, 1929. Serial No. 291,589. PUBLISHED MARCH 25, 1930. Class 36.

271,782. HOSIERY. GOTHAM SILK HOSIERY COMPANY, INC., New York, N.Y., assignor to "Onyx" Hosiery, Inc., of New York, N. Y., a Corporation of New York.
Filed October 29, 1929. Serial No. 291,724. PUBLISHED MARCH 25, 1930. Class 39.

271,783. WOOLEN RUGS, WOOLEN BLANKETS, VEHICLE ROBES MADE OF PURE CAMEL HAIR, VICUNA, AND PURE WOOL. THE JAEGER COMPANY, INC., New York, N. Y.
Filed October 30, 1929. Serial No. 291,771. PUBLISHED APRIL 1, 1930. Class 42.

271,784. CHEMICAL CARBON REMOVER. ETHYL GASOLINE CORPORATION, New York, N. Y.
Filed February 24, 1930. Serial No. 296,410. PUBLISHED APRIL 1, 1930. Class 6.

271,785. MEDICINAL PREPARATION FOR THE TREATMENT OF HEADACHE, NEURALGIA, RHEUMATISM, GOUT, COLDS, LA GRIPPE, FEVERS, CHILLS, INFLUENZA, NEURITIS, BACKACHE, MONTHLY PAINS, AND SCIATICA. LORENZ P. ELZ, doing business as Norine Co., St. Louis, Mo.
Filed February 19, 1930. Serial No. 296,222. PUBLISHED APRIL 1, 1930. Class 6.

271,786. PERMANENT-WAVING PREPARATION. PETER JOSEPH PUETZ, doing business as Joester Company, Fort Wayne, Ind.
Filed February 17, 1930. Serial No. 296,146. PUBLISHED APRIL 1, 1930. Class 6.

271,787. PERFUMES. H. MILGRIM & BROS., INC., New York, N. Y.
Filed February 17, 1930. Serial No. 296,131. PUBLISHED APRIL 1, 1930. Class 6.

271,788. TOILET POWDER. THE HENRY B. GILPIN COMPANY, Baltimore, Md.
Filed February 17, 1930. Serial No. 296,118. PUBLISHED APRIL 1, 1930. Class 6.

271,789. MEDICINAL PREPARATION FOR USE IN THE TREATMENT OF RHEUMATISM, NEURITIS, SCIATICA, LUMBAGO, AND GOUT. DR. MILES MEDICAL COMPANY, Elkhart, Ind.
Filed February 15, 1930. Serial No. 296,074. PUBLISHED APRIL 1, 1930. Class 6.

271,790. SALTED PEANUTS. SCHINDLER'S PEANUT PRODUCTS, INC., Washington, D. C.
Filed February 18, 1930. Serial No. 296,202. PUBLISHED APRIL 8, 1930. Class 46.

271,791. INHALANT FOR THE RELIEF OF CATARRH AND COLD IN THE HEAD. E. GRIFFITHS HUGHES, LIMITED, Manchester, England.
Filed February 7, 1930. Serial No. 295,737. PUBLISHED APRIL 1, 1930. Class 6.

271,792. COMPOUND TO BE USED IN THE TREATMENT OF CHAPPED HANDS, FACE, AND LIPS; TALCUM POWDER, ETC. BALDAUF DRUG COMPANY, Milwaukee, Wis.
Filed February 7, 1930. Serial No. 295,723. PUBLISHED APRIL 8, 1930. Class 6.

271,793. BAKING SODA, STARCH, BORAX, ETC. FIRST NATIONAL STORES INC., Boston and Somerville, Mass.
Filed February 6, 1930. Serial No. 295,669. PUBLISHED APRIL 8, 1930. Class 6.

271,794. PREPARATION USED AS A PREVENTATIVE AGAINST ALL FORMS OF WOOD-DESTROYING ORGANISMS. TERMITEOL CORPORATION, INC., New Orleans, La.
Filed February 5, 1930. Serial No. 295,647. PUBLISHED APRIL 1, 1930. Class 6.

271,795. TEAS AND COFFEES. THE GOVERNOR AND COMPANY OF ADVENTURERS OF ENGLAND, TRADING INTO HUDSON'S BAY, doing business as Hudson's Bay Company, Winnipeg, Manitoba, Canada.
Filed February 5, 1930. Serial No. 295,615. PUBLISHED APRIL 8, 1930. Class 46.

271,796. TEAS AND COFFEES. THE GOVERNOR AND COMPANY OF ADVENTURERS OF ENGLAND, TRADING INTO HUDSON'S BAY, doing business as Hudson's Bay Company, Winnipeg, Manitoba, Canada.
Filed February 5, 1930. Serial No. 295,614. PUBLISHED APRIL 8, 1930. Class 46.

271,797. TEAS AND COFFEES. THE GOVERNOR AND COMPANY OF ADVENTURERS OF ENGLAND, TRADING INTO HUDSON'S BAY, doing business as Hudson's Bay Company, Winnipeg, Manitoba, Canada.
Filed February 5, 1930. Serial No. 295,613. PUBLISHED APRIL 8, 1930. Class 46.

271,798. RUBBING LINIMENT FOR EXTERNAL USE FOR TREATMENT OF SPRAINS AND BRUISES. GORHAM AND WING, Lexington, Ky.
Filed January 22, 1930. Serial No. 295,106. PUBLISHED APRIL 1, 1930. Class 6.

271,799. PREPARATION FOR THE TREATMENT OF STOMACH ILLS. NATIONAL ART SIGN CORPORATION, Minneapolis, Minn.
Filed January 11, 1930. Serial No. 294,681. PUBLISHED APRIL 1, 1930. Class 6.

271,800. PREPARATION FOR THE TREATMENT OF RHEUMATISM, NEURALGIA, NEURITIS, LUMBAGO, PLEURISY, SCIATICA, AND ALL DULL OR SHARP JOINT OR MUSCLE PAINS. NATIONAL ART SIGN CORPORATION, doing business as Nasco Company, Minneapolis, Minn.
Filed January 11, 1930. Serial No. 294,680. PUBLISHED APRIL 1, 1930. Class 6.

271,801. CANNED SHRIMP AND CANNED OYSTERS. MEXICAN GULF PACKING CO. INC., Pascagoula, Miss.
Filed January 11, 1930. Serial No. 294,676. PUBLISHED APRIL 8, 1930. Class 46.

271,802. EDIBLE NUTS SALTED OR IN THEIR NATURAL STATE (BUT SHELLED) — NAMELY, ALMONDS, PECANS, FILBERTS, PEANUTS, CASHEWS, AND LOVENUTS. AMERICAN NUT COMPANY, Indianapolis, Ind.
Filed December 26, 1929. Serial No. 294,050. PUBLISHED APRIL 8, 1930. Class 46.

271,803. CITRATE OF MAGNESIA. GENERAL DISTRIBUTORS COMPANY, Brooklyn, N. Y.
Filed December 20, 1929. Serial No. 293,923. PUBLISHED APRIL 1, 1930. Class 6.

271,804. MEN'S AND BOYS' DRESS, NEGLIGEE, AND WORK SHIRTS. LEBANON SHIRT COMPANY, Lebanon, Lititz, Lexington, and Hebron, Pa., and New York, N. Y.
Filed November 14, 1929. Serial No. 292,407. PUBLISHED APRIL 1, 1930. Class 39.

271,805. MATS TO BE USED UNDER RUGS TO PREVENT THEIR SLIPPING. J. C. HAARTZ COMPANY, New Haven, Conn.
Filed January 23, 1930. Serial No. 295,125. PUBLISHED APRIL 1, 1930. Class 50.

271,806. CONDUITS FOR ELECTRIC WIRES AND FITTINGS FOR THE SAME. ELECTROTRIM, INC., Union City, Ind.
Filed January 25, 1930. Serial No. 295,212. PUBLISHED MARCH 25, 1930. Class 21.

271,807. WATERPROOF FABRICS. WINDHAM MANUFACTURING CO., Boston, Mass.
Filed January 27, 1930. Serial No. 295,286. PUBLISHED APRIL 1, 1930. Class 50.

271,808. STORAGE BATTERIES. THE ELECTRIC STORAGE BATTERY COMPANY, Philadelphia, Pa.
Filed January 30, 1930. Serial No. 295,367. PUBLISHED APRIL 1, 1930. Class 21.

271,809. ROTARY STITCH-CLEANING BRUSHES. S. M. SUPPLIES CO., Boston, Mass.
Filed January 30, 1930. Serial No. 295,394. PUBLISHED APRIL 1, 1930. Class 29.

271,810. CONNECTORS FOR ARMORED CABLES AND WIRES. NATIONAL ELECTRIC PRODUCTS CORPORATION, Pittsburgh, Pa.
Filed February 4, 1930. Serial No. 295,569. PUBLISHED APRIL 1, 1930. Class 21.

271,811. STORAGE BATTERIES AND PARTS THEREOF. PILLE BROS., INC., Denver, Colo.
Filed February 4, 1930. Serial No. 295,572. PUBLISHED APRIL 1, 1930. Class 21.

271,812. STORAGE BATTERIES. USL BATTERY CORPORATION, Niagara Falls, N. Y.
Filed February 4, 1930. Serial No. 295,584. PUBLISHED APRIL 1, 1930. Class 21.

271,813. STORAGE BATTERIES. USL BATTERY CORPORATION, Niagara Falls, N. Y.
Filed February 4, 1930. Serial No. 295,585. PUBLISHED APRIL 1, 1930. Class 21.

271,814. WIRE FENCING, AND PARTICULARLY STRAIGHT-LINE POULTRY NETTING. THE AMERICAN STEEL AND WIRE COMPANY OF NEW JERSEY, Cleveland, Ohio; Chicago, Ill.; Pittsburgh, Pa.; New York, N. Y.; Worcester, Mass.; and Hoboken, N. J.
Filed February 5, 1930. Serial No. 295,599. PUBLISHED APRIL 1, 1930. Class 13.

271,815. STEAM AND HOT-WATER HEATING BOILERS. THE HOME HEATING CORPORATION, Baltimore, Md.
Filed February 5, 1930. Serial No. 295,620. PUBLISHED APRIL 1, 1930. Class 34.

271,816. CLOTHES AND DRYING RACKS. JESSE L. WOOD, Jackson, Mich.
Filed February 5, 1930. Serial No. 295,651. PUBLISHED APRIL 1, 1930. Class 24.

271,817. MOPS, BROOMS, AND SCRUB BRUSHES. FIRST NATIONAL STORES INC., Boston and Somerville, Mass.
Filed February 6, 1930. Serial No. 295,668. PUBLISHED APRIL 1, 1930. Class 29.

271,818. MINERAL OIL AND A COMPOUNDED OIL FOR LUBRICATING PURPOSES. E. E. FULTON CO., Chicago, Ill.
Filed January 20, 1930. Serial No. 294,968. PUBLISHED APRIL 1, 1930. Class 15.

271,819. GASOLINE PASSENGER AUTOMOBILES. HUDSON MOTOR CAR COMPANY, Detroit, Mich.
Filed January 21, 1930. Serial No. 295,030. PUBLISHED APRIL 1, 1930. Class 19.

271,820. COVERS FOR AUTOMOBILE CUSHIONS, SEATS, AND SEAT BACKS. THE S. E. HYMAN COMPANY, Fremont, Ohio.
Filed January 22, 1930. Serial No. 295,073. PUBLISHED APRIL 1, 1930. Class 19.

271,821. STORAGE-TYPE AUTOMATIC ELECTRICAL WATER-HEATERS. ELECTRODAIRE COMPANY, Detroit, Mich.
Filed January 18, 1930. Serial No. 294,916. PUBLISHED MARCH 25, 1930. Class 21.

271,822. PYROXYLIN OR OTHERWISE COATED FABRICS—NAMELY, LEATHER CLOTH. THE ZAPON COMPANY, Wilmington, Del.
Filed January 18, 1930. Serial No. 294,939. PUBLISHED APRIL 1, 1930. Class 50.

271,823. PYROXYLIN OR OTHERWISE COATED FABRICS—NAMELY, LEATHER CLOTH. THE ZAPON COMPANY, Wilmington, Del.
Filed January 18, 1930. Serial No. 294,940. PUBLISHED APRIL 1, 1930. Class 50.

271,824. PYROXYLIN OR OTHERWISE COATED FABRICS—NAMELY, LEATHER CLOTH. THE ZAPON COMPANY, Wilmington, Del.
Filed January 18, 1930. Serial No. 294,941. PUBLISHED APRIL 1, 1930. Class 50.

271,825. SWEATERS FOR CHILDREN. S. AUGSTEIN & Co., New York, N. Y.
Filed January 23, 1930. Serial No. 295,112. PUBLISHED MARCH 25, 1930. Class 39.

271,826. LADIES' UNDERWEAR OF SILK, RAYON, AND A MIXTURE OF RAYON AND SILK. JOSEPH ADELSON & SONS, New York, N. Y.
Filed January 22, 1930. Serial No. 295,064. PUBLISHED MARCH 25, 1930. Class 39.

271,827. WOMEN'S AND MISSES' DRESSES. REGENT WAIST & DRESS CO., INC., New York, N. Y.
Filed January 21, 1930. Serial No. 295,052. PUBLISHED MARCH 25, 1930. Class 39.

271,828. HANDKERCHIEFS. THE HERRMANN HANDKERCHIEF CO., INC., New York, N. Y.
Filed January 11, 1930. Serial No. 294,670. PUBLISHED APRIL 1, 1930. Class 42.

271,829. UNION SUITS, UNDERSHIRTS, AND DRAWERS FOR MEN, WOMEN, AND CHILDREN. NORWICH KNITTING COMPANY, Norwich, N. Y.
Filed January 9, 1930. Serial No. 294,589. PUBLISHED APRIL 1, 1930. Class 39.

271,830. PERIODICAL. MANAGEMENT MAGAZINES, INC., Chicago, Ill.
Filed January 4, 1930. Serial No. 294,395. PUBLISHED APRIL 1, 1930. Class 38.

271,831. PERIODICAL. MANAGEMENT MAGAZINES, INC., Chicago, Ill.
Filed January 4, 1930. Serial No. 294,394. PUBLISHED APRIL 1, 1930. Class 38.

271,832. WOMEN'S AND CHILDREN'S HOSIERY. BULLOCK'S, INC., Los Angeles, Calif.
Filed January 3, 1930. Serial No. 294,338. PUBLISHED MARCH 25, 1930. Class 39.

271,833. PART-WOOL (WOOL AND COTTON) BLANKETS. THE LEAKSVILLE WOOLEN MILLS, INC., Charlotte, N. C.
Filed December 10, 1929. Serial No. 293,475. PUBLISHED APRIL 1, 1930. Class 42.

271,834. MEN'S AND BOYS' SUITS, TROUSERS, HATS, OVERCOATS, AND TOPCOATS. THE KIBLER COMPANY, Columbus, Ohio.
Filed May 11, 1929. Serial No. 283,874. PUBLISHED AUGUST 20, 1929. Class 39.

271,835. MEN'S AND BOYS' SUITS, TROUSERS, HATS, OVERCOATS, AND TOPCOATS. THE KIBLER COMPANY, Columbus, Ohio.
Filed May 11, 1929. Serial No. 283,873. PUBLISHED AUGUST 20, 1929. Class 39.

271,836. BITTERS FOR INDIGESTION, DYSPEPSIA, AND ASTHMA; CATARRH MEDICINE, EYE MEDICINE, FEVER POWDER; GREEN SALVE FOR BURNS, BOILS, CUTS, BRUISES, AND WOUNDS; CANCER SALVE, ECZEMA OINTMENT; AND TONIC FOR CONSTIPATION, NEURALGIA, AND RHEUMATIC CONDITIONS. GOTTFRIED MILBRANDT, Croswell, Mich.
Filed May 6, 1929. Serial No. 283,577. PUBLISHED MARCH 18, 1930. Class 6.

271,837. ARMORED ELECTRIC CONDUCTORS OR CABLES. NATIONAL ELECTRIC PRODUCTS CORPORATION, Pittsburgh, Pa.
Filed May 3, 1929. Serial No. 283,464. PUBLISHED JULY 16, 1929. Class 21.

271,838. BOXES. ANCHOR BOX & LUMBER COMPANY, Millvale, Pa.
Filed April 26, 1929. Serial No. 283,024. PUBLISHED DECEMBER 3, 1929. Class 2.

271,839. MEDICINAL TEA FOR USE IN THE TREATMENT OF RHEUMATISM, LUMBAGO, BACKACHE, AND NERVOUS PAINS OF ALL KINDS. "HEILIT" CHEMISCHES LABORATORIUM, Salzwedel, Germany.
Filed April 22, 1929. Serial No. 282,820. PUBLISHED MARCH 18, 1930. Class 6.

271,840. CERTAIN NAMED PAINT PRODUCTS. MIDWEST WALL PAPER & PAINT CO., Kansas City, Mo.
Filed April 6, 1929. Serial No. 281,960. PUBLISHED JUNE 11, 1929. Class 16.

271,841. ELECTRIC WELDERS AND PORTABLE ELECTRIC-LIGHTING PLANTS FOR EMERGENCY WORK, CAMPS, AND THE LIKE, AND FARM LIGHTING AND POWER ELECTRIC-LIGHTING PLANTS. KLAUER MANUFACTURING COMPANY, Dubuque, Iowa.
Filed March 14, 1929. Serial No. 280,715. PUBLISHED MARCH 25, 1930. Class 21.

271,842. FLOOR RUGS AND MATS IN THE NATURE OF TEXTILE PILE FABRICS COMPRISED OF MOHAIR, JUTE, AND COTTON. EDWIN FIELD & SONS, LIMITED, Skelmanthorpe, near Huddersfield, England.
Filed March 6, 1929. Serial No. 280,329. PUBLISHED APRIL 1, 1930. Class 42.

271,843. COTTON, WOOL, RAYON, AND SILK HOSIERY; KNITTED AND TEXTILE FABRIC UNDERWEAR FOR THE USE OF MEN, WOMEN, AND CHILDREN; AND DRESSES FOR WOMEN, MISSES, AND CHILDREN. LOCKWOVEN HOSIERY COMPANY, St. Louis, Mo.
Filed March 1, 1929. Serial No. 280,128. PUBLISHED DECEMBER 24, 1929. Class 39.

271,844. A MEDICINAL PREPARATION FOR REMOVING VERRUCA AND PAPILLOMA, CALLOUS, NAIL GROOVE, AND FOR TREATING SOFT CORNS, NERVOVASCULAR AND VASCULAR CORNS. FRANK X. SCHRAM, doing business as F. X. Schram Laboratories, Chicago, Ill.
Filed February 25, 1929. Serial No. 279,887. PUBLISHED APRIL 1, 1930. Class 6.

271,845. PREPARATION FOR PILES IN LIQUID AND CAPSULE FORM. PETER WENNER, Bozeman, Mont.
Filed February 16, 1929. Serial No. 279,512. PUBLISHED APRIL 8, 1930. Class 6.

271,846. RADIO RECEIVING SETS AND LOUD-SPEAKERS, TRANSFORMERS, TUBE SOCKETS, ETC. THE BALDWIN COMPANY, Cincinnati, Ohio.
Filed February 6, 1929. Serial No. 278,923. PUBLISHED APRIL 1, 1930. Class 21.

271,847. LINIMENTS IN LIQUID FORM APPLIED EXTERNALLY FOR RELIEF OF PAIN AND INFLAMMATION, CASTOR OIL, COUGH AND COLD MEDICINES, EPSOM SALTS. ANDREW A. OSETKOWSKI, doing business as Union Products Company, Detroit, Mich.
Filed February 2, 1929. Serial No. 278,803. PUBLISHED APRIL 1, 1930. Class 6.

271,848. BRIDGE LAMPS, JUNIOR LAMPS, TABLE LAMPS. HAMILTON ROSS FACTORIES, INC., Chicago, Ill.
Filed January 28, 1929. Serial No. 278,539. PUBLISHED APRIL 1, 1930. Class 21.

271,849. SELF-CONTAINED ACCESSORY UNIT FOR ELECTRICAL APPARATUS COMPRISING A COMBINATION OF HIGH-CAPACITY CONDENSER AND CHOKES OR INDUCTANCES ARRANGED IN A SINGLE CONTAINER OR HOUSING. TOBE C. DEUTSCHMANN, doing business as Tobe Deutschmann Company, Cambridge, Mass.
Filed January 5, 1929. Serial No. 277,617. PUBLISHED APRIL 1, 1930. Class 21.

271,850. SWEETENED AND COFFEE-FLAVORED FOOD TABLETS. ULTRA-VIOLET GENERATOR CORPORATION, Chicago, Ill.
Filed December 28, 1928. Serial No. 277,327. PUBLISHED APRIL 1, 1930. Class 46.

271,851. LAUNDRY SOURS. CRESCENT CHEMICAL CORPORATION, Philadelphia, Pa.
Filed December 22, 1928. Serial No. 277,104. PUBLISHED MARCH 5, 1929. Class 6.

271,852. LAUNDRY SOURS. CRESCENT CHEMICAL CORPORATION, Philadelphia, Pa.
Filed December 22, 1928. Serial No. 277,103. PUBLISHED FEBRUARY 19, 1929. Class 6.

271,853. BAKING POWDER. ROYAL BAKING POWDER COMPANY, Jersey City, N. J., and New York, N. Y.
Filed December 21, 1928. Serial No. 277,086. PUBLISHED APRIL 1, 1930. Class 6.

271,854. BAKING POWDER. ROYAL BAKING POWDER COMPANY, Jersey City, N. J., and New York, N. Y.
Filed December 21, 1928. Serial No. 277,085. PUBLISHED APRIL 1, 1930. Class 6.

271,855. COFFEE AND TEA. HIGGINS AND BURKE, LIMITED, Toronto, Ontario, Canada.
Filed October 11, 1929. Serial No. 290,951. PUBLISHED APRIL 1, 1930. Class 46.

271,856. TONIC FOR EARACHE, DEAFNESS, NERVOUSNESS, BLOOD PURIFYING, SYSTEM BUILDING, WEAK KIDNEYS, INDIGESTION, AND LUMBAGO. CALEB THOMPSON, St. Louis, Mo.
Filed October 2, 1929. Serial No. 290,531. PUBLISHED APRIL 1, 1930. Class 6.

271,857. CARTOONS. DELL PUBLISHING COMPANY, New York, N. Y.
Filed October 2, 1929. Serial No. 290,497. PUBLISHED NOVEMBER 12, 1929. Class 38.

271,858. MEDICINAL PREPARATION FOR TREATING PILES. CHAS. C. CARROLL, Jacksonville, Fla.
Filed October 1, 1929. Serial No. 290,451. PUBLISHED MARCH 18, 1930. Class 6.

271,859. OVERALLS, JUMPERS, PANTS, SHOP COATS, AND APRONS. TULSA OVERALL & MANUFACTURING COMPANY, Tulsa, Okla.
Filed September 16, 1929. Serial No. 289,854. PUBLISHED APRIL 1, 1930. Class 39.

271,860. CIGAR HOLDERS AND CIGARETTE HOLDERS. KAUFMANN BROS. & BONDY, INC., West New York, N. J., assignor to Reiss-Premier Pipe Co., New York, N. Y., a Corporation of New Jersey.
Filed September 13, 1929. Serial No. 289,747. PUBLISHED NOVEMBER 28, 1929. Class 8.

271,861. FIELD, GARDEN, AND VEGETABLE SEED. GOLDBERG SEED & FEED COMPANY, Fargo, N. Dak.
Filed September 9, 1929. Serial No. 289,513. PUBLISHED APRIL 1, 1930. Class 1.

271,862. DENTIFRICE. THE CUTINO COMPANY, Kansas City, Mo.
Filed September 6, 1929. Serial No. 289,391. PUBLISHED DECEMBER 17, 1929. Class 6.

271,863. ANTACID AND DIGESTANT. H. L. LADD CHEMIST, INC., San Francisco, Calif.
Filed September 5, 1929. Serial No. 289,356. PUBLISHED MARCH 18, 1930. Class 6.

271,864. BOTTOM FINISH FOR SHOE SOLES. PENN-STANDARD SOLE CEMENTING PROCESS, INC., Philadelphia, Pa.
Filed January 17, 1930. Serial No. 294,890. PUBLISHED MARCH 18, 1930. Class 6.

271,865. PERFUMES, FACE POWDERS AND CREAMS, ROUGE, ETC. DE MUSSET, INC., New York, N. Y.
Filed January 23, 1930. Serial No. 295,118. PUBLISHED MARCH 18, 1930. Class 6.

271,866. PERFUMES, FACE POWDERS, TOILET WATER, ETC. DE MUSSET, INC., New York, N. Y.
Filed January 23, 1930. Serial No. 295,119. PUBLISHED MARCH 25, 1930. Class 6.

271,867. HORSE-RADISH SYRUP USED AS A VEHICLE FOR IODINE ADMINISTERED INTERNALLY. LABORATOIRE DE PHARMACOLOGIE, INC., New York, N. Y.
Filed January 24, 1930. Serial No. 295,182. PUBLISHED MARCH 18, 1930. Class 6.

271,868. CHEMICAL PREPARATIONS FOR THE PROTECTION OF TREES AND THEIR CULTURE, PARTICULARLY FRUIT TREES AND OTHER PLANTS, AGAINST PARASITES OF AN ANIMAL OR PLANT NATURE. R. AVENARIUS & CO., Stuttgart, Germany.
Filed January 25, 1930. Serial No. 295,203. PUBLISHED MARCH 18, 1930. Class 6.

271,869. POULTRY MEDICINE FOR ROUP, BOWEL COMPLAINT, CHOLERA, WHITE DIARRHŒA, CHICKEN POX, LIMBER NECK, AND COCCIDOSIS. KO-TAR PRODUCTS CO., Cedar Rapids, Iowa.
Filed January 25, 1930. Serial No. 295,227. PUBLISHED APRIL 1, 1930. Class 6.

271,870. MEDICINAL PREPARATION FOR THE RELIEF OF STOMACH DISORDERS SUCH AS INDIGESTION AND DYSPEPSIA. VICLAIRE, INC., New York, N. Y.
Filed January 28, 1930. Serial No. 295,310. PUBLISHED APRIL 1, 1930. Class 6.

271,871. MEDICINAL PREPARATION FOR TREATING DIABETES. ANGELES CAUSA Y RAMIREZ, Habana, Cuba.
Filed January 29, 1930. Serial No. 295,328. PUBLISHED MARCH 18, 1930. Class 6.

271,872. LINIMENT. ALLAN C. DAY, doing business as A. C. Day Laboratories, South Orange, N. J.
Filed January 29, 1930. Serial No. 295,332. PUBLISHED APRIL 1, 1930. Class 6.

271,873. MEDICINAL PREPARATIONS FOR USE IN DISORDERS OF THE BLOOD AND CIRCULATORY SYSTEM. THE NEW ERA TREATMENT COMPANY, London, England.
Filed January 30, 1930. Serial No. 295,384. PUBLISHED APRIL 1, 1930. Class 6.

271,874. CLEANSING CREAM, SACHET POWDER, PASTE ROUGE, ETC. LOUIS SINGER, doing business as Jubilee Perfumer, New York, N. Y.
Filed January 30, 1930. Serial No. 295,392. PUBLISHED APRIL 1, 1930. Class 6.

271,875. CARBON BLACK TO BE USED FOR GENERAL PURPOSES. INTERNATIONAL GAS PRODUCTS, INC., Monroe, La.
Filed February 10, 1930. Serial No. 295,849. PUBLISHED MARCH 25, 1930. Class 6.

271,876. CARBON BLACK TO BE USED FOR GENERAL PURPOSES. INTERNATIONAL GAS PRODUCTS, INC., Monroe, La.
Filed February 10, 1930. Serial No. 295,850. PUBLISHED MARCH 25, 1930. Class 6.

271,877. BILIARY STIMULANT FOR INTESTINAL TOXEMIA AND AS A GALL-BLADDER STIMULANT. THE DRUG PRODUCTS CO., INC., Long Island City, N. Y.
Filed February 12, 1930. Serial No. 295,936. PUBLISHED MARCH 25, 1930. Class 6.

271,878. CHEMICAL PREPARATION FOR ELIMINATING CARBON IN MOTORS OR ENGINES. CHAS. L. EVERWINE, Newark, N. J.
Filed February 12, 1930. Serial No. 295,941. PUBLISHED MARCH 25, 1930. Class 6.

271,879. BABY POWDER. GOLD BOND STERILIZING POWDER CO., INC., Fairhaven, Mass.
Filed February 12, 1930. Serial No. 295,945. PUBLISHED MARCH 25, 1930. Class 6.

271,880. FACE POWDER. LUCIEN LELONG, INC., Chicago, Ill.
Filed February 12, 1930. Serial No. 295,949. PUBLISHED MARCH 25, 1930. Class 6.

271,881. CHEMICAL SUBSTANCES FOR REGENERATING AND REFINING IRON AND STEEL. ALOIS ROB, Weil-Friedlingen, Germany.
Filed February 14, 1930. Serial No. 296,027. PUBLISHED MARCH 25, 1930. Class 6.

271,882. MEDICINAL PREPARATION FOR THE TREATMENT OF THROAT AND STOMACH AND FOR PURIFYING THE BREATH. MACANDREWS & FORBES COMPANY, Camden, N. J.
Filed February 15, 1930. Serial No. 296,068. PUBLISHED APRIL 1, 1930. Class 6.

271,883. ELECTRICAL CRANK-CASE HEATERS. PERMATITE MANUFACTURING CO. INC., Minneapolis, Minn.
Filed December 13, 1929. Serial No. 293,639. PUBLISHED APRIL 1, 1930. Class 21.

271,884. BOYS' AND YOUNG MEN'S COATS, VESTS, TROUSERS, AND OVERCOATS. SONNEBORN BROTHERS, INC., New York, N. Y.
Filed February 15, 1930. Serial No. 296,083. PUBLISHED APRIL 1, 1930. Class 39.

271,885. MEN'S, BOYS', WOMEN'S, AND CHILDREN'S SUITS AND OVERCOATS. THE LEON GODCHAUX CLOTHING CO. LTD., New Orleans, La.
Filed February 17, 1930. Serial No. 296,117. PUBLISHED APRIL 1, 1930. Class 39.

271,886. BOYS' AND YOUNG MEN'S COATS, VESTS, TROUSERS, AND OVERCOATS. SONNEBORN BROTHERS, INC., New York, N. Y.
Filed February 15, 1930. Serial No. 296,084. PUBLISHED APRIL 1, 1930. Class 39.

271,887. RIBBONS IN THE PIECE MADE OF SILK, RAYON, COTTON, AND/OR ANY COMBINATION THEREOF. WM. E. WRIGHT & SONS CO., Orange, N. J.
Filed February 14, 1930. Serial No. 296,041. PUBLISHED APRIL 1, 1930. Class 42.

271,888. NEGLIGEE AND DRESS SHIRTS. KAYLON INCORPORATED, Troy and New York, N. Y.
Filed February 14, 1930. Serial No. 296,015. PUBLISHED APRIL 1, 1930. Class 39.

271,889. NEGLIGEE AND DRESS SHIRTS. KAYLON INCORPORATED, Troy and New York, N. Y.
Filed February 14, 1930. Serial No. 296,014. PUBLISHED APRIL 1, 1930. Class 39.

271,890. PIECE GOODS OF WOOL, COTTON, AND SILK AND MIXTURES OF THE SAME. SOCIETE A RESPONSABILITE LIMITEE RODIER, Paris, France.
Filed February 12, 1930. Serial No. 295,958. PUBLISHED APRIL 1, 1930. Class 42.

271,891. WOOLEN AND WORSTED FABRICS IN THE PIECE. DETMER, BRUNER & MASON, INC., New York, N. Y.
Filed February 12, 1930. Serial No. 295,932. PUBLISHED APRIL 1, 1930. Class 42.

271,892. BABY BOYS' SUITS. DAINTY TINY TOGS, INC., New York, N. Y.
Filed February 12, 1930. Serial No. 295,926. PUBLISHED APRIL 1, 1930. Class 39.

271,893. HOSIERY. THE FULWEAR HOSIERY MILLS, Columbus, Ga.
Filed February 10, 1930. Serial No. 295,841. PUBLISHED APRIL 1, 1930. Class 39.

271,894. COTTON-WARP WORSTED WITH SPECIALLY-PREPARED WRAPPED HAIR-YARN FILLING. PENN WORSTED COMPANY, Philadelphia, Pa.
Filed February 8, 1930. Serial No. 295,808. PUBLISHED APRIL 1, 1930. Class 42.

271,895. UMBRELLAS AND PARASOLS. THE FINK & EASTER COMPANY, Baltimore, Md.
Filed February 8, 1930. Serial No. 295,789. PUBLISHED APRIL 1, 1930. Class 41.

271,896. INFANTS', CHILDREN'S, JUNIORS', AND MISSES' DRESSES. DOLLY DRESS CO., INC., Derby, Conn.
Filed February 8, 1930. Serial No. 295,786. PUBLISHED APRIL 1, 1930. Class 39.

271,897. TRADE PUBLICATION OR MAGAZINE. E. I. DU PONT DE NEMOURS AND COMPANY, Wilmington, Del.
Filed February 7, 1930. Serial No. 295,777. PUBLISHED APRIL 1, 1930. Class 38.

271,898. HOSIERY. NU-CRAFT HOSIERY MILLS, INC., Mohnton, Pa.
Filed February 5, 1930. Serial No. 295,634. PUBLISHED MARCH 25, 1930. Class 39.

271,899. LADIES' SLIPS AND SUSPENDERS THEREFOR. VIOLA F. KONCEN, St. Louis, Mo.
Filed February 1, 1930. Serial No. 295,481. PUBLISHED MARCH 25, 1930. Class 39.

271,900. WORK SHIRTS. WASHINGTON MANUFACTURING COMPANY, Nashville, Tenn.
Filed January 30, 1930. Serial No. 295,409. PUBLISHED APRIL 1, 1930. Class 39.

271,901. COTTON PIECE GOODS FOR MAKING SHIRTS. WASHINGTON MANUFACTURING COMPANY, Nashville, Tenn.
Filed January 30, 1930. Serial No. 295,408. PUBLISHED APRIL 1, 1930. Class 42.

271,902. WOOLEN PIECE GOODS AND WOOLEN PIECE GOODS ESPECIALLY ADAPTED FOR LADIES' COATS. MADISON WOOLEN COMPANY, Madison, Me.
Filed January 29, 1930. Serial No. 295,338. PUBLISHED APRIL 1, 1930. Class 42.

271,903. WOOL BED BLANKETS IN PLAID, PLAIN COLORS, AND FANCIES. MUNCY TEXTILE COMPANY, Muncy, Pa.
Filed January 28, 1930. Serial No. 295,304. PUBLISHED APRIL 1, 1930. Class 42.

271,904. SUGAR. DOMINICAN SUGAR REFINING COMPANY, C. POR A., Ingenio Boca Chica, Dominican Republic.
Filed November 14, 1927. Serial No. 257,535. PUBLISHED APRIL 1, 1930. Class 46.

271,905. CEREAL MALT BEVERAGES CONTAINING LESS THAN ONE-HALF OF ONE PER CENT ALCOHOL BY VOLUME. TACOMA BREWING CO., San Francisco, Calif.
Filed November 21, 1927. Serial No. 257,904. PUBLISHED APRIL 1, 1930. Class 48.

271,906. LADIES', MISSES', AND CHILDREN'S KNIT UNDERWEAR. A. J. ARMSTRONG CO. INC., New York, N. Y.
Filed June 28, 1928. Serial No. 268,766. PUBLISHED NOVEMBER 26, 1929. Class 39.

271,907. CANNED SALMON. DEMING & GOULD CO., Chicago, Ill., and South Bellingham, Wash.
Filed June 7, 1928. Serial No. 267,045. PUBLISHED APRIL 1, 1930. Class 46.

271,908. CANDY. SOPHIA MAIER, Chicago, Ill.
Filed May 23, 1928. Serial No. 266,867. PUBLISHED APRIL 8, 1930. Class 46.

271,909. FRESH GRAPES. E. A. COUTURE, Modesto, Calif.
Filed May 22, 1928. Serial No. 266,790. PUBLISHED APRIL 8, 1930. Class 46.

271,910. FRESH APPLES. W. A. PATTON, Catlettsburg, Ky.
Filed April 16, 1928. Serial No. 264,902. PUBLISHED APRIL 8, 1930. Class 46.

271,911. ARMORED ELECTRIC CONDUCTORS OR CABLES. NATIONAL ELECTRIC PRODUCTS CORPORATION, Pittsburgh, Pa.
Filed December 8, 1928. Serial No. 276,495. PUBLISHED SEPTEMBER 3, 1929. Class 21.

271,912. ELECTRIC-CURRENT-CONDUCTING CORDS AND CONNECTORS THEREFOR. AMERICAN BRAIDING COMPANY, Holyoke, Mass.
Filed December 8, 1928. Serial No. 276,444. PUBLISHED MARCH 12, 1929. Class 21.

271,913. THERAPEUTIC LAMPS AND ATTACHMENTS. CONTINENTAL SCALE WORKS, Chicago, Ill.
Filed December 7, 1928. Serial No. 276,408. PUBLISHED APRIL 23, 1929. Class 44.

271,914. SOAPS. PARFUMERIE ROGER ET GALLET, SOCIETE ANONYME, Paris, France.
Filed November 14, 1928. Serial No. 275,293. PUBLISHED MARCH 18, 1930. Class 4.

271,915. VACUUM TUBES. MATCHLESS ELECTRIC COMPANY, Chicago, Ill.
Filed November 5, 1928. Serial No. 274,840. PUBLISHED MAY 7, 1929. Class 21.

271,916. LIQUID MOTOR FUEL OR GASOLINE. PHILLIPS PETROLEUM COMPANY, Bartlesville, Okla.
Filed October 29, 1928. Serial No. 274,494. PUBLISHED JANUARY 8, 1929. Class 15.

271,917. COAL. BOKOSHE SMOKELESS COAL CO., Bokoshe, Okla.
Filed September 10, 1928. Serial No. 272,126. PUBLISHED APRIL 1, 1930. Class 1.

271,918. FRESH BROCCOLI, FRESH PRICKLY PEARS, AND FRESH TOMATOES. D'ARRIGO BROS. CO., Boston, Mass., and San Jose, Calif.
Filed August 25, 1928. Serial No. 271,535. PUBLISHED APRIL 8, 1930. Class 46.

271,919. PICTURE POST CARDS, PICTURE CARDS FOR VENDING MACHINES, AND CARDS FOR VENDING MACHINES. J. FRANK MEYER, doing business as Exhibit Supply Co., Chicago, Ill.
Filed August 1, 1928. Serial No. 270,433. PUBLISHED MARCH 25, 1930. Class 38.

271,920. COMBINATION OF CONDENSERS AND INDUCTANCES FORMING FILTER UNITS. TOBE DEUTSCHMANN COMPANY, Canton, Mass., assignor to Tobe Deutschmann Company, a Corporation of Delaware.
Filed July 10, 1928. Serial No. 269,374. PUBLISHED APRIL 1, 1930. Class 21.

271,921. CANNED VEGETABLES, FRUITS, JAMS, ETC. JACOB D. GROSSMAN, doing business as Narragansett Wholesale Grocery Co., Providence, R. I.
Filed May 25, 1929. Serial No. 284,611. PUBLISHED APRIL 1, 1930. Class 46.

271,922. UNITARY ARTICLES AND A MOTOR FOR OPERATING THE SAME. THE UNITED STATES AIR COMPRESSOR COMPANY, Cleveland, Ohio.
Filed May 24, 1929. Serial No. 284,593. PUBLISHED APRIL 8, 1930. Class 23.

271,923. MEDICINAL PREPARATION FOR TREATING TONSILLITIS. LOUIS PHILIPPE, doing business as Iodo Chemical Co., New York, N. Y.
Filed June 12, 1929. Serial No. 285,468. PUBLISHED SEPTEMBER 24, 1929. Class 6.

271,924. FILTERS AND PARTS THEREFOR. AKTIEBOLAGET ELEKTROLUX, Stockholm, Sweden.
Filed June 13, 1929. Serial No. 285,489. PUBLISHED APRIL 1, 1930. Class 31.

271,925. TALCUM POWDER FOR BABIES. BABY HEALTH PRODUCTS, INC., Brooklyn, N. Y.
Filed June 15, 1929. Serial No. 285,617. PUBLISHED APRIL 1, 1930. Class 6.

271,926. ELECTRIC OZONE-GENERATING MACHINES. MONTGOMERY BROTHERS, Chicago, Ill.
Filed June 17, 1929. Serial No. 285,685. PUBLISHED FEBRUARY 25, 1930. Class 21.

271,927. FINGER RINGS, EARRINGS, BRACELETS, BROOCHES, NECKLACES, SHOULDER PINS, CLASPS, BELT BUCKLES, SHOE BUCKLES, DRESS BUCKLES, AND HAT ORNAMENTS, ALL CONSTRUCTED OF OR PARTIALLY OF PRECIOUS METAL. ARNO WRAZLOWSKY, doing business as Fashionlane Jewelry Co., Providence, R. I.
Filed June 24, 1929. Serial No. 286,060. PUBLISHED MARCH 25, 1930. Class 28.

271,928. STORAGE BATTERIES. THE PEP BOYS—MANNY, MOE & JACK, doing business as Sturdee Storage Battery Co., Philadelphia, Pa.
Filed July 6, 1929. Serial No. 286,710. PUBLISHED APRIL 1, 1930. Class 21.

271,929. CARDS AND BOOKS FOR BUDGET OR LIKE ACCOUNTING. LOUIS A. SAVIDGE, Kansas City, Mo.
Filed July 12, 1929. Serial No. 287,017. PUBLISHED SEPTEMBER 3, 1929. Class 37.

271,930. GREENHOUSE BENCHES FOR SOIL AND POTTED PLANTS, PLANT SUPPORTS, ETC. WILLIAM H. LUTTON COMPANY, Jersey City, N. J.
Filed July 15, 1929. Serial No. 287,146. PUBLISHED APRIL 1, 1930. Class 50.

271,931. PREPARATION FOR THE TREATMENT OF THE SCALP. REBECCA HALIF, doing business as Madame Halif, Lynbrook, N. Y.
Filed July 18, 1929. Serial No. 287,297. PUBLISHED APRIL 1, 1930. Class 6.

271,932. FRESH FISH AND FILLETS. BEACON FISHERIES COMPANY, Boston, Mass.
Filed July 23, 1929. Serial No. 287,520. PUBLISHED APRIL 8, 1930. Class 46.

271,933. PERFUMES. LES GRANDS PARFUMS DE FRANCE, INC., New York, N. Y.
Filed July 23, 1929. Serial No. 287,536. PUBLISHED APRIL 1, 1930. Class 6.

271,934. COFFEE. GARNERS INC., Memphis, Tenn.
Filed July 25, 1929. Serial No. 287,658. PUBLISHED APRIL 1, 1930. Class 46.

271,935. EFFERVESCENT POWDERED SALT FOR THE RELIEF OF HEADACHE, NEURALGIA, AND SOUR STOMACH AND AS AN AID TO DIGESTION. EUGENE VON SCHALLERN, doing business as Schallern's Drug Store and Von Schallern Drug Co., Ripon, Wis.
Filed July 25, 1929. Serial No. 287,683. PUBLISHED APRIL 8, 1930. Class 6.

271,936. ODORIFEROUS AND AROMATIC CHEMICALS USED IN THE PREPARATION OF PERFUMES AND FLAVORING EXTRACTS. I. G. FARBENINDUSTRIE AKTIENGESELLSCHAFT, Frankfort-on-the-Main, Germany.
Filed July 27, 1929. Serial No. 287,744. PUBLISHED APRIL 8, 1930. Class 6.

271,937. BOUILLON CUBES AND BOUILLON IN POWDERED FORM. INTERNATIONAL PRODUCTS CORPORATION, New York, N. Y.
Filed July 31, 1929. Serial No. 287,927. PUBLISHED APRIL 8, 1930. Class 46.

271,938. CLOCKS AND WATCHES. WESTERN CLOCK COMPANY, Peru, Ill.
Filed August 1, 1929. Serial No. 287,985. PUBLISHED APRIL 8, 1930. Class 27.

271,939. CORN AND BUNION PLASTERS. THE KENDALL COMPANY, Boston, Mass., and Chicago, Ill.
Filed August 3, 1929. Serial No. 288,076. PUBLISHED APRIL 1, 1930. Class 6.

271,940. OTTOMANS, HASSOCKS, CUSHIONS, AND FOOTSTOOLS. VICTOR L. NEWMAN, doing business as Trisales Company, New York, N. Y.
Filed August 12, 1929. Serial No. 288,443. PUBLISHED APRIL 1, 1930. Class 32.

271,941. NONALCOHOLIC, MALTLESS BEVERAGES SOLD AS SOFT DRINKS. GEORGE WALLACE, Jacksonville, Fla.
Filed August 12, 1929. Serial No. 288,445. PUBLISHED APRIL 1, 1930. Class 45.

271,942. SAFETY-RAZOR BLADES. MARTIN E. GREENHOUSE, Philadelphia, Pa.
Filed August 13, 1929. Serial No. 288,453. PUBLISHED APRIL 8, 1930. Class 23.

271,943. TOPS. THE EDWARDS MANUFACTURING COMPANY, Cincinnati, Ohio.
Filed August 13, 1929. Serial No. 288,469. PUBLISHED APRIL 1, 1930. Class 22.

271,944. WET STORAGE BATTERIES. GLOBE-UNION MFG. CO., Milwaukee, Wis.
Filed August 15, 1929. Serial No. 288,555. PUBLISHED APRIL 1, 1930. Class 21.

271,945. LINIMENT USED INTERNALLY FOR GENERAL RELIEF OF CANCER. ADJUTOR J. LAMBERT, doing business as A. J. Lambert, Auburn, Me.
Filed August 20, 1929. Serial No. 288,750. PUBLISHED APRIL 1, 1930. Class 6.

271,946. CEDAR WARDROBES, CEDAR CHIFFOROBES, CEDAR CLOSETS, CEDAR CHESTS, DESIGNED FOR THE DESTROYING OF MOTHS AND EGGS AND WORMS FOUND IN CLOTHING, ETC., STORED IN SUCH CLOSURES. THE LANE COMPANY, INC., Altavista, Va.
Filed August 24, 1929. Serial No. 288,967. PUBLISHED APRIL 1, 1930. Class 32.

271,947. CHLORINATED AROMATIC HYDROCARBONS AND THEIR DERIVATIVES, INCLUDING CHLORINATED DIPHENYL. FEDERAL PHOSPHORUS COMPANY, Birmingham, Ala.
Filed August 26, 1929. Serial No. 289,015. PUBLISHED MARCH 25, 1930. Class 6.

271,948. DIGESTIVE TONIC. LOUIS FEINSTEIN, doing business as Scientific Research Laboratories, Los Angeles, Calif.
Filed August 27, 1929. Serial No. 289,068. PUBLISHED APRIL 8, 1930. Class 6.

271,949. SKINS OF DOMESTIC AND WILD ANIMALS, REPTILES, AND FISHES IN A RAW OR PARTLY-PREPARED CONDITION. JOHN PRYCE & Co., Batavia, Java, Dutch East Indies.
Filed August 28, 1929. Serial No. 289,128. PUBLISHED APRIL 1, 1930. Class 1.

271,950. BUTTERED POP CORN, DRIED POP CORN, ROASTED PEANUTS, SALTED PEANUTS. E. WALTER KLEINSCHMIDT, doing business as Lido Sweet Shop, Maywood, Ill.
Filed September 3, 1929. Serial No. 289,280. PUBLISHED APRIL 8, 1930. Class 46.

TRADE-MARK REGISTRATIONS RENEWED

77,229. CERTAIN MACHINERY. Registered March 22, 1910. FRIED. KRUPP, AKTIENGESELLSCHAFT, GRUSONWERK. Renewed March 22, 1930, to Fried. Krupp Grusonwerk Aktiengesellschaft, Magdeburg-Buckau, Germany, a Corporation of Germany, successor.

77,479. CERTAIN CLOTHING. Registered April 12, 1910. NEUSTADTER BROTHERS, San Francisco, Calif., a Corporation of California. Renewed April 12, 1930.

77,683. CERTAIN FOODS. Registered April 26, 1910. WESTERN GROCER Co., Marshalltown, Iowa, a Corporation of Iowa. Renewed April 26, 1930.

77,878. HARNESS HARDWARE. Registered May 10, 1910. NORTH AND JUDD MANUFACTURING COMPANY, New Britain, Conn., a Corporation of Connecticut. Renewed May 10, 1930.

77,879. TROLLEY CLAMPS AND SUSPENSION DEVICES. Registered May 10, 1910. THE OHIO BRASS COMPANY, Mansfield, Ohio, a Corporation of New Jersey. Renewed May 10, 1930.

77,967. CANNED SALMON. Registered May 17, 1910. UNION FISHERMEN'S CO-OPERATIVE PACKING Co., Astoria, Oreg., a Corporation of Oregon. Renewed May 17, 1930.

78,094. A REMEDY FOR CERTAIN DISEASES. Registered May 31, 1910. NATHAN A. HARRIS, Conway, Mo. Renewed May 31, 1930.

78,301. RUGS. Registered June 7, 1910. BIGELOW CARPET COMPANY, Clinton, Lowell, and Boston, Mass. Renewed June 7, 1930, to Bigelow-Sanford Carpet Co., Inc., New York, N. Y., a Corporation of Massachusetts, assignee.

78,302. RUGS. Registered June 7, 1910. BIGELOW CARPET COMPANY, Clinton, Lowell, and Boston, Mass. Renewed June 7, 1930, to Bigelow-Sanford Carpet Co., Inc., New York, N. Y., a Corporation of Massachusetts, assignee.

78,303. CARPETS. Registered June 7, 1910. BIGELOW CARPET COMPANY, Clinton, Lowell, and Boston, Mass. Renewed June 7, 1930, to Bigelow-Sanford Carpet Co., Inc., New York, N. Y., a Corporation of Massachusetts, assignee.

78,388. CANNED SALMON. Registered June 7, 1910. UNION FISHERMEN'S CO-OPERATIVE PACKING Co., Astoria, Oreg., a Corporation of Oregon. Renewed June 7, 1930.

78,481. WHITE WINE. Registered June 21, 1910. GIOVANNI AQUINO. Renewed June 21, 1930, to John Aquino, Inc., New York, N. Y., a Corporation of New York, successor.

78,488. RUGS. Registered June 21, 1910. BIGELOW CARPET COMPANY, Clinton, Lowell, and Boston, Mass. Renewed June 21, 1930, to Bigelow-Sanford Carpet Co., Inc., New York, N. Y., a Corporation of Massachusetts, assignee.

78,519. LUBRICANTS CONTAINING GRAPHITE AND GREASE. Registered June 21, 1910. INTERNATIONAL ACHESON GRAPHITE COMPANY. Renewed June 21, 1930, to Acheson Graphite Corporation, Niagara Falls, N. Y., a Corporation of New York, assignee.

78,628. METAL PIPES AND TUBES. Registered June 28, 1910. NATIONAL TUBE COMPANY, Pittsburgh, Pa., a Corporation of New Jersey. Renewed June 28, 1930.

78,634. VISE. Registered June 28, 1910. PRENTISS VISE COMPANY, New York, N. Y., a Corporation of New York. Renewed June 28, 1930.

78,635. VISE. Registered June 28, 1910. PRENTISS VISE COMPANY, New York, N. Y., a Corporation of New York. Renewed June 28, 1930.

78,637. VISE. Registered June 28, 1910. PRENTISS VISE COMPANY, New York, N. Y., a Corporation of New York. Renewed June 28, 1930.

78,944. COMPOUND IN THE NATURE OF A PAINT. Registered July 26, 1910. J. DAMPNEY & Co. LD., Cardiff, England. Renewed July 26, 1930, to J. Dampney & Co. Limited, Newcastle-on-Tyne, England, a Corporation of Great Britain.

78,970. LEAD PENCILS. Registered July 26, 1910. L. & C. Hardtmuth, London, England, and Budweis, Austria-Hungary. Renewed July 26, 1930, to Koh-I-Noor Bleistiftfabrik L. & C. Hardtmuth, Budweis, Czechoslovakia, assignee.

79,054. CERTAIN PRECIOUS-METAL WARE. Registered August 2, 1910. JOSEPH L. HERZOG & COMPANY, New York, N. Y. Renewed August 2, 1930.

79,097. ROOFING, SARKING, SHEATHING, AND LINING FELTS. Registered August 9, 1910. D. ANDERSON & SON, LIMITED, Belfast, Ireland, and Manchester, England, a Corporation of Great Britain. Renewed August 9, 1930.

79,220. AN EXTRACT OF YEAST FOR HUMAN FOOD. Registered August 16, 1910. THE MARMITE FOOD EXTRACT Co., LIMITED, London, England, a Corporation of Great Britain. Renewed August 16, 1930.

79,231. PORCELAIN BUTTONS AND BEADS. Registered August 16, 1910. RISLER & CIE, Freiburg, Germany. Renewed August 16, 1930, to Risler & Cie, Aachen, Germany.

79,343. STRAIGHT IRISH WHISKY. Registered August 30, 1910. JOHN JAMESON & SON LIMITED, Dublin, Ireland, a Corporation of England. Renewed August 30, 1930.

79,441. CERTAIN HORSE EQUIPMENTS. Registered September 6, 1910. NORTH AND JUDD MANUFACTURING COMPANY, New Britain, Conn., a Corporation of Connecticut. Renewed September 6, 1930.

79,513. ANIMAL TRAPS. Registered September 13, 1910. ONEIDA COMMUNITY LIMITED, Oneida, N. Y. Renewed September 13, 1930, to Animal Trap Company of America, Lititz, Pa., a Corporation of Pennsylvania, assignee.

79,533. REMEDIES FOR COUGHS, COLDS, GRIPPE, AND CERTAIN OTHER AFFECTIONS. Registered September 13, 1910. THE SYNVITA MEDICINE CO. Renewed September 13, 1930, to The Every Day Products Supply Co., Lima, Ohio, a Corporation of Ohio, successor.

79,544. WHEAT FLOUR. Registered September 20, 1910. THE ALLEN & WHEELER Co., Troy, Ohio, a Corporation of Ohio. Renewed September 20, 1930.

79,547. ALL KINDS OF CANDY. Registered September 20, 1910. PAUL F. BEICH COMPANY, Bloomington and Chicago, Ill., a Corporation of Illinois. Renewed September 20, 1930.

79,553. BOOKS OF A LITERARY NATURE. Registered September 20, 1910. BRENTANO'S, INC., New York, N. Y., a Corporation of New York. Renewed September 20, 1930.

79,714. FRESH OYSTERS. Registered October 4, 1910. AUBREY G. BAILEY, Norfolk, Va. Renewed October 4, 1930.

79,719. ALL KINDS OF CANDIES. Registered October 4, 1910. CENTRAL CANDY COMPANY. Renewed October 4, 1930, to Walter Birk Candy Company, Chicago, Ill., a Corporation of Illinois, successor.

79,766. CANDIES. Registered October 4, 1910. FREDERICK W. LIPPS COMPANY OF BALTIMORE CITY, as assignee of Charles D. Lane, Bridgeport, Conn. Renewed October 4, 1930, to The Frederick W. Lipps Co., Baltimore, Md., a Corporation of Maryland, assignee by mesne assignments.

79,780. HOSIERY. Registered October 4, 1910. ONEIDA HOSIERY COMPANY. Renewed October 4, 1930, to Cadet Hosiery Company, Inc., Philadelphia, Pa., a Corporation of Delaware, assignee by mesne assignments.

79,787. HAMS, BACON, AND LARD. Registered October 4, 1910. W. C. ROUTH & Co., Logansport, Ind., a Corporation of Indiana. Renewed October 4, 1930.

79,806. COFFEE. Registered October 11, 1910. C. W. ANTRIM & SONS, Richmond, Va. Renewed October 11, 1930.

79,813. OLIVE OIL. Registered October 11, 1910. BRAGNO AND MUSTARI, Chicago, Ill. Renewed October 11, 1930.

79,840. LIME, HYDRATED LIME, AND PLASTER. Registered October 11, 1910. THE KELLEY ISLAND LIME & TRANSPORT COMPANY, Cleveland, Ohio, a Corporation of Ohio. Renewed October 11, 1930.

79,850. COVERS FOR MANHOLES AND HANDHOLES. Registered October 11, 1910. R. MUNROE & SONS MFG. CORP., Pittsburgh, Pa., a Corporation of Pennsylvania. Renewed October 11, 1930.

79,858. WHEAT FLOUR. Registered October 11, 1910. RED WING MILLING COMPANY, Red Wing, Minn., a Corporation of Minnesota. Renewed October 11, 1930.

79,874. CLOCKS AND WATCHES. Registered October 11, 1910. THE WESTERN CLOCK MFG. Co. Renewed October 11, 1930, to Western Clock Company, Peru, Ill., a Corporation of Illinois, assignee.

79,875. CLOCKS AND WATCHES. Registered October 11, 1910. THE WESTERN CLOCK MFG. Co. Renewed October 11, 1930, to Western Clock Company, Peru, Ill., a Corporation of Illinois, assignee.

79,902. CANNED VEGETABLES. Registered October 18, 1910. DICKINSON & Co., Eureka, Ill. Renewed October 18, 1930, to Dickinson & Co., Chicago, Ill., a Corporation of Illinois, assignee by mesne assignments.

79,903. CANNED VEGETABLES. Registered October 18, 1910. DICKINSON & Co., Eureka, Ill. Renewed October 18, 1930, to Dickinson & Co., Chicago, Ill., a Corporation of Illinois, assignee by mesne assignments.

79,996. COFFEE. Registered October 25, 1910. E. B. MILLAR & COMPANY, Chicago, Ill., a Corporation of Illinois. Renewed October 25, 1930.

LABELS

REGISTERED JUNE 17, 1930

37,569.—*Title:* ZEV. For Floor Cleaner. THE ABSORENE MANUFACTURING COMPANY, St. Louis, Mo. Published April 19, 1930.

37,570.—*Title:* BETSY ROSS OLD FASHIONED PEPPERMINTS. For Peppermints. BETSY ROSS MINT Co., Philadelphia, Pa. Published April 10, 1930.

37,571.—*Title:* CANNON CAROLEEN SHEETING. For Sheeting. CANNON MILLS, INC., New York, N. Y. Published March 27, 1930.

37,572.—*Title:* CANNON CAROLEEN PILLOW CASES. For Pillowcases. CANNON MILLS, INC., New York, N. Y. Published March 27, 1930.

37,573.—*Title:* CANNON CAROLEEN SHEETS. For Sheets. CANNON MILLS, INC., New York, N. Y. Published March 27, 1930.

37,574.—*Title:* CANNON CAROLEEN SHEETS. For Sheets. CANNON MILLS, INC., New York, N. Y. Published March 27, 1930.

37,575.—*Title:* CANNON CAROLEEN PILLOW CASES. For Pillowcases. CANNON MILLS, INC., New York N. Y. Published March 27, 1930.

37,576.—*Title:* SOUTHERN GIRL COFFEE. For Coffee. DIAMOND COFFEE MILLS, INC., Shreveport, La. Published January 15, 1929.

37,577.—*Title:* BROWN MUG COFFEE. For Coffee. DIAMOND COFFEE MILLS, INC., Shreveport, La. Published January 15, 1929.

37,578.—*Title:* LIQUID GOLD COFFEE. For Coffee. DIAMOND COFFEE MILLS, INC., Shreveport, La. Published January 15, 1929.

37,579.—*Title:* SALAD BOWL SALAD DRESSING. For Salad Dressing. THE GELFAND MFG. COMPANY OF CALIFORNIA INC., Los Angeles, Calif. Published April 15, 1929.

37,580.—*Title:* GRAU-STARK. For Golf Hose. F. M. GRAUER & COMPANY, Philadelphia, Pa. Published March 13, 1930.

37,581.—*Title:* HAPPY HOME. For Bread. HALL BAKING Co., Buffalo, N. Y. Published October 22, 1929.

37,582.—*Title:* HYDROSAL. For Ointment. THE HYDROSAL COMPANY, Cincinnati, Ohio. Published April 25, 1930.

37,583.—*Title:* HYDROSAL. For Antiseptic. THE HYDROSAL COMPANY, Cincinnati, Ohio. Published April 25, 1930.

37,584.—*Title:* JEWEL DESSERT. For Lemon Dessert. JEWEL TEA Co., INC., Barrington, Ill. Published March 15, 1930.

37,585.—*Title:* LATHERKREEM. For Shaving Cream. A. J. KRANK COMPANY, St. Paul, Minn. Published April 21, 1930.

37,586.—*Title:* ABBOTTS GRADE A. For Butter. THE MENASHA PRODUCTS COMPANY, Chicago, Ill. Published April 5, 1930.

37,587.—*Title:* APPLE-CANDY. For Candy. RIDGEWOOD FRUIT GROWERS, INC., Winchester, Va. Published May 1, 1930.

37,588.—*Title:* SEAL BRAND. For Tea. STANDARD BRANDS INCORPORATED, New York, N. Y. Published May 12, 1930.

37,589.—*Title:* OROCIDE. For Mouth Wash. BROIS J. STEARN, doing business as Orocide Chemical Company, Chicago, Ill. Published February 15, 1930.

37,590.—*Title:* WHITE LILY. For Sweet Corn. SYCAMORE PRESERVE WORKS, Sycamore, Ill. Published May 1, 1930.

37,591.—*Title:* GOLDEN GLOW. For Egg Noodles. TRAFICANTI BROS., doing business as Gold Rolled Food Products Co., Chicago, Ill. Published April 15, 1930.

37,592.—*Title:* LITTLE PAL. For Cinnamon Rolls. WAX PAPER PRODUCTS COMPANY, Omaha, Nebr. Published December 24, 1929.

37,593.—*Title:* FRESH AIR TAXI. For Candy Figures. WIGLY CANDY CO., INC., Brooklyn, N. Y. Published April 26, 1930.

37,594.—*Title:* UNCLE SAM'S KWIK-DETH. For Insecticide. GEORGE E. WILLIAMS, Houston, Tex. Published October 29, 1929.

PRINTS

REGISTERED JUNE 17, 1930

12,596.—*Title:* RED HEART FEEDS. For Pig Meal and Poultry Mash. AJAY MILLING COMPANY, Marshalltown, Iowa. Published April 19, 1930.

12,597.—*Title:* THE THREE LETTERS B. V. D. For Athletic Underwear. THE B. V. D. COMPANY, INC., New York, N. Y. Published May 1, 1930.

12,598.—*Title:* THE B. V. D. UNION SUIT. For Athletic Underwear. THE B. V. D. COMPANY, INC., New York, N. Y. Published May 1, 1930.

12,599.—*Title:* THE UNDERWEAR OF QUALITY. For Athletic Underwear. THE B. V. D. COMPANY, INC., New York, N. Y. Published May 1, 1930.

12,600.—*Title:* NO SUMMER FEARS FOR YOUNG EDWARD EVERETT HALE IV. HE HAS THIS PROTECTION MANY MOTHERS GIVE. For Wheat Breakfast Food. THE CREAM OF WHEAT CORPORATION, Minneapolis, Minn. Published May 10, 1930.

12,601.—*Title:* BEACON COAL. For Coal. ALFRED F. GAMBLE, doing business as Driscoll Coal Company, Lansing, Mich. Published April 16, 1930.

12,602.—*Title:* THE OTKOFFE BOTTLE SECURITAS. For Bottle Treated to Hold Hot Coffee. O. J. LAFAYETTE & Co., Los Angeles, Calif. Published November 14, 1929.

12,603.—*Title:* THE NEW IMPROVED KANFELS KEY CONTAINER. For Key Containers. LEATHER GOODS NOVELTY CO., INC., Los Angeles, Calif. Published February 28, 1930.

12,604.—*Title:* THE WATCH YOU CAN FORGET TO WIND. For Self-Winding Watches. PERPETUAL SELF WINDING WATCH COMPANY OF AMERICA, INC., New York, N. Y. Published May 13, 1930.

12,605.—*Title:* 'TAKE A TIP' USE 'RAZIP' ON YOUR STROPPER. 'FIRST AID FOR A DULL BLADE.' For Razor Strops. HARRY BRADLEE PRUDEN, Deland, Fla. Published March 1, 1930.

12,606.—*Title:* SAVOY PARK SHOP COMBINATION BASKET. For Corsage Baskets Containing Six Corsages of Flowers. SAVOY PARK SHOP, INC., New York, N. Y. Published May 13, 1930.

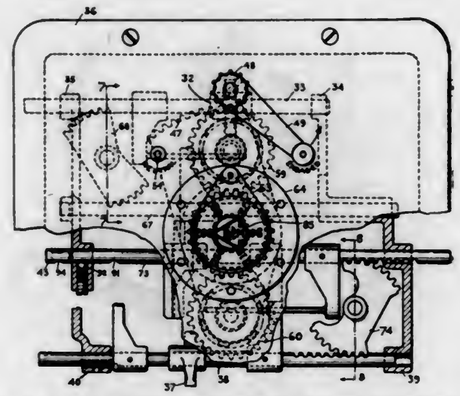
12,607.—*Title:* 1930 SPORTS SILK WEEK. For Silk. SPUN SILK RESEARCH COMMITTEE (SPUN SILK DIVISION OF THE SILK ASSOCIATION OF AMERICA, INC.), New York, N. Y. Published April 1, 1930.

12,608.—*Title:* NO MILK TO-DAY. For Milk. EDWIN R. SWABACK, doing business as E. R. Swaback, New York, N. Y. Published January 2, 1930.

REISSUES

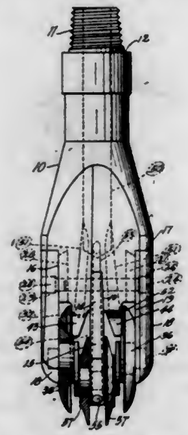
JUNE 17, 1930

17,699. TRANSMISSION AND CONTROL MECHANISM FOR MACHINE TOOLS. JOSEPH B. ARMITAGE, Wauwatosa, Wis., assignor to Kearney & Trecker Corporation, West Allis, Wis. Filed Feb. 12, 1930. Serial No. 431,037. Original No. 1,715,488, dated June 4, 1929, Serial No. 52,189, filed Aug. 24, 1925. 48 Claims. (Cl. 74—58.)



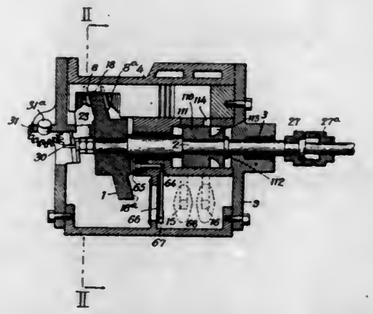
1. In a transmission and control mechanism for machine tools, the combination with rate changing mechanism including a plurality of shiftable rate change elements, of a plurality of shifters respectively connected for movement with the respective elements, and a selector mounted for oscillatory movement in a position to contact and move said shifters, said selector being mounted for rotation about an axis transverse to the direction of its oscillatory movement and being formed to engage different of said shifters when oscillated in different positions of rotative adjustment.

17,700. MULTIPLE-DISK DRILL BIT. CHARLES S. CRICKMER and IVAN C. BELL, Dallas, Tex., assignors to The Guiberson Corporation, Dallas, Tex., a Corporation of Delaware. Filed Oct. 23, 1929. Serial No. 401,915. Original No. 1,657,610, dated Jan. 31, 1928, Serial No. 64,019, filed Oct. 21, 1925. 22 Claims. (Cl. 255—71.)



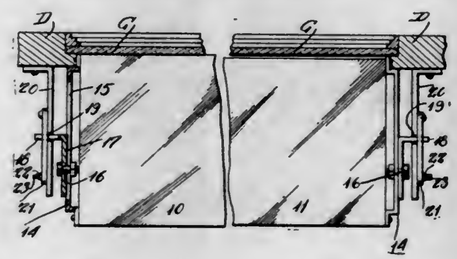
1. In a multiple separate cutter disk bit, a bit stock, cutter disks revolubly and independently mounted upon the stock, adjacent disks being spaced apart at their hubs, and projections on the stock extending relatively into the spaces between the disks, two of said disks being mounted at the center of the bit below the other disks.

17,701. MECHANISM FOR THE INTERCONVERSION OF RECIPROCATING AND ROTARY MOTIONS. ANTHONY GEORGE MALDON MICHELL, Melbourne, Australia, assignor, by mesne assignments, to Michell-Crankless Engines Corporation, New York, N. Y., a Corporation of New York. Filed Nov. 7, 1929. Serial No. 405,529. Original No. 1,666,539, dated Apr. 17, 1928, Serial No. 715,491, filed May 23, 1924, and in Australia July 4, 1923. 36 Claims. (Cl. 74—14.)



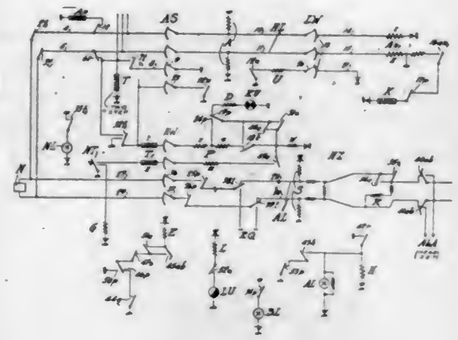
19. In mechanism for the inter-conversion of reciprocating and rotary motions, a slant having rotary and axial movements, reciprocable elements coacting therewith, and means automatically operable during the rotation of the slant to shift the slant axially.

17,702. SHOW CASE FOR STORE DOORS. ALFRED J. STRAUSS, Louisville, Ky., assignor, by mesne assignments, to E. W. Elithorpe, Minneapolis, Minn. Filed Aug. 1, 1928. Serial No. 296,820. Original No. 1,594,385, dated Aug. 3, 1926, Serial No. 80,612, filed Jan. 11, 1920. 3 Claims. (Cl. 312—112.)



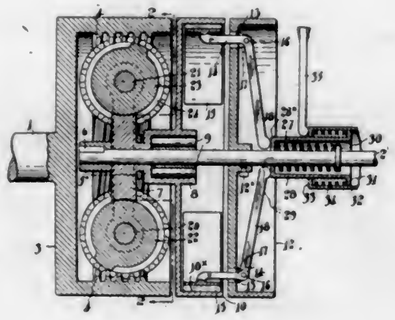
1. A display device for store doors comprising a casing having an open side adapted to fit against the glass of a store door, members extending transversely of said casing at the ends thereof, body brackets slidably mounted on said members and having a portion extending outwardly from the respective ends, and supporting brackets of L-shape each having one arm adapted to be secured to the side style of a door and a second arm slotted to receive the body bracket.

17,703. TELEPHONE SYSTEM. ADOLF WASCHNACK, Neu Finkenkrug, near Berlin, Germany, assignor to Siemens & Halske Aktiengesellschaft, Wernerwerk, Siemensstadt, near Berlin, Germany. Filed May 11, 1929. Serial No. 362,445. Original No. 1,639,445, dated Aug. 16, 1927, Serial No. 714,998, filed May 22, 1924, and in Germany Sept. 20, 1923. 16 Claims. (Cl. 179—27.)



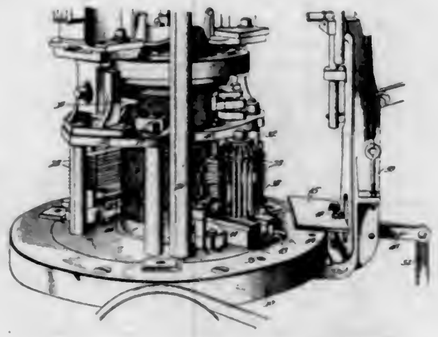
14. In a telephone system, subscribers' lines, a finder switch in which said lines terminate, a trunk, means responsive to a call on one of said lines for operating said finder to extend such line to said trunk, an individual key for each line, a key for said trunk, and means responsive to the actuation of one of said line keys and said trunk key for causing the operation of the finder to extend said trunk to the corresponding line as a called line.

17,704. VARIABLE-SPEED TRANSMISSION. CLIFFORD SIFTON, Toronto, Ontario, Canada. Filed Nov. 18, 1929. Serial No. 408,127. Original No. 1,703,178, dated Feb. 26, 1929, Serial No. 232,133, filed Nov. 9, 1927. 5 Claims. (Cl. 74—34.)



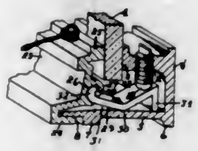
1. In a variable speed transmission mechanism the combination of alined driving and driven shafts; an internal worm secured to the driving shaft; an external worm gear mounted freely on the driven shaft; a frame secured to the driven shaft; a planetary gear mounted on said frame to mesh with the worm gears of the shafts, said planetary gear comprising a central worm meshing with the external worm gear, the end worm gears meshing with the internal worm; a friction clutch member connected to the external worm gear; a shoe co-acting with the said clutch member; and means for varying the pressure of the shoe.

17,705. KNITTING MACHINE. ELMER U. AMES, deceased, Collingswood, N. J., by Caroline F. Ames, administratrix, Haddonfield, N. J. Filed Apr. 29, 1930. Serial No. 448,390. Original No. 1,722,989, dated Aug. 6, 1929, Serial No. 96,049, filed Mar. 19, 1926. 70 Claims. (Cl. 66—50.)



66. A circular knitting machine comprising a slotted needle bed, a needle slidable in a slot in said bed, a similarly slidable jack with operating means projecting therefrom, said jack being movable with the needle and independently thereof, means on the jack for engaging the needle to select the same, a cam directly engaging said operating means to actuate the needle, and selective means acting on the outer face of the jack to prevent engagement of said operating means and the jack-cam, substantially as set forth.

17,706. SASH CONSTRUCTION. CHARLES G. NELSON, Chicago Heights, Ill., assignor to Zouri Drawn Metals Company, Chicago Heights, Ill., a Corporation of Illinois. Filed Apr. 21, 1930. Serial No. 446,112. Original No. 1,687,305, dated Oct. 9, 1928, Serial No. 212,936, filed Aug. 15, 1927. 12 Claims. (Cl. 20—56.4.)

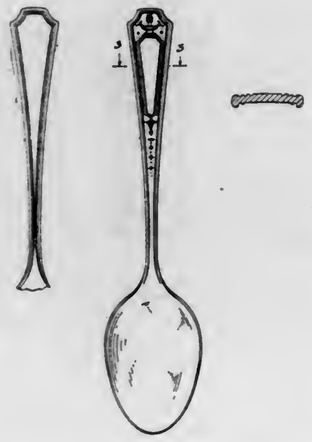


1. In a sash construction, a glass clamping member having a base flange extending in a plane perpendicular to the plane of the glass, a second clamping member having a base flange engaging the underside of the first mentioned flange, one of said clamping members having on its inner face a channel with an overhanging shoulder, a draw plate having a head engageable with said shoulder, and means connected with the other clamping member and cooperating with the draw plate to cause its head to bear against said shoulder and draw the clamping members into clamping relation to the glass.

DESIGNS

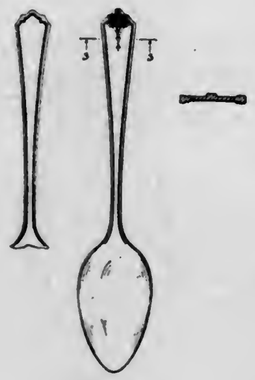
JUNE 17, 1930

81,367. SPOON OR SIMILAR ARTICLE. GROSVENOR N. ALLEN and CHARLES A. BENNETT, Oneida, N. Y., assignors to Oneida Community, Limited, Oneida, N. Y., a Corporation of New York. Filed Jan. 7, 1930. Serial No. 34,046. Term of patent 14 years.



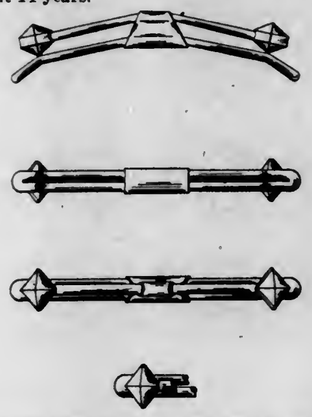
The ornamental design for a spoon or similar article as shown and described.

81,368. SPOON OR SIMILAR ARTICLE. GROSVENOR N. ALLEN, Oneida, and LILLIAN V. M. HELANDER, Niagara Falls, N. Y., assignors to Oneida Community, Limited, Oneida, N. Y., a Corporation of New York. Filed Jan. 31, 1930. Serial No. 34,371. Term of patent 14 years.



The ornamental design for a spoon or similar article as shown and described.

81,369. COLLAR HOLDER. LAWRENCE E. BAER, Attleboro, Mass., assignor to Baer & Wilde Co., Attleboro, Mass. Filed Mar. 8, 1930. Serial No. 34,782. Term of patent 14 years.



The ornamental design for a collar holder as shown.

81,370. CURTAIN ROD OR SIMILAR ARTICLE. JAMES H. BOYE, Chicago, Ill. Filed Mar. 31, 1930. Serial No. 35,074. Term of patent 7 years.



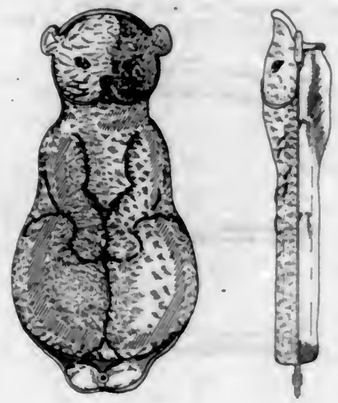
The ornamental design for a curtain rod or similar article, as shown.

81,371. HOT-WATER BOTTLE OR ARTICLE OF SIMILAR NATURE. FRANCES R. BROWN, New York, N. Y., assignor to I. B. Kleinert Rubber Company, New York, N. Y. Filed Apr. 23, 1930. Serial No. 35,362. Term of patent 7 years.



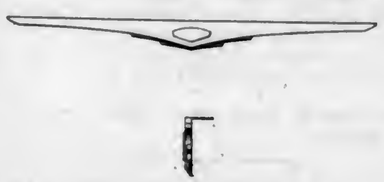
The ornamental design for a hot-water bottle, or article of similar nature, as shown.

81,372. HOT-WATER BOTTLE OR ARTICLE OF SIMILAR NATURE. FRANCES R. BROWN, New York, N. Y., assignor to I. B. Kleinert Rubber Company, New York, N. Y. Filed Apr. 23, 1930. Serial No. 35,363. Term of patent 7 years.



The ornamental design for a hot water bottle, or article of similar nature, as shown.

81,373. AUTOMOBILE INSTRUMENT PANEL. RUDOLPH DE BOER, Grand Rapids, Mich., assignor to Grand Rapids Metalcraft Corporation, Grand Rapids, Mich., a Corporation of Michigan. Filed Mar. 17, 1930. Serial No. 34,913. Term of patent 3½ years.



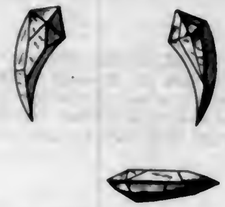
The ornamental design for an automobile instrument panel, substantially as shown.

81,374. PIN. LESTER DEUTSCH, Bronx, N. Y. Filed Apr. 3, 1930. Serial No. 35,142. Term of patent 3½ years.



The ornamental design for a pin as shown.

81,375. PRECIOUS, SEMIPRECIOUS, OR SYNTHETIC CUT STONE. JULIUS DINHOFER, New York, N. Y. Filed Oct. 29, 1929. Serial No. 33,192. Term of patent 7 years.



The ornamental design for precious, semiprecious or synthetic cut stone, as shown.

81,376. PRECIOUS, SEMIPRECIOUS, OR SYNTHETIC CUT STONE. JULIUS DINHOFER, New York, N. Y. Filed Oct. 29, 1929. Serial No. 33,193. Term of patent 7 years.



The ornamental design for precious, semiprecious or synthetic cut stone, as shown.

81,377. PRECIOUS, SEMIPRECIOUS, OR SYNTHETIC CUT STONE. JULIUS DINHOFER, New York, N. Y. Filed Oct. 29, 1929. Serial No. 33,194. Term of patent 7 years.



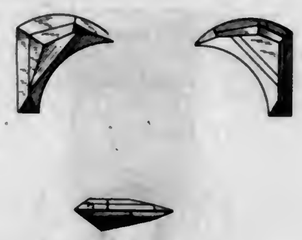
The ornamental design for precious, semiprecious or synthetic cut stone, as shown.

81,378. PRECIOUS, SEMIPRECIOUS, OR SYNTHETIC CUT STONE. JULIUS DINHOFER, New York, N. Y. Filed Oct. 29, 1929. Serial No. 33,195. Term of patent 7 years.



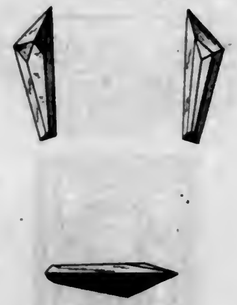
The ornamental design for precious, semiprecious or synthetic cut stone, as shown.

81,379. PRECIOUS, SEMIPRECIOUS, OR SYNTHETIC CUT STONE. JULIUS DINHOFER, New York, N. Y. Filed Oct. 29, 1929. Serial No. 33,196. Term of patent 7 years.



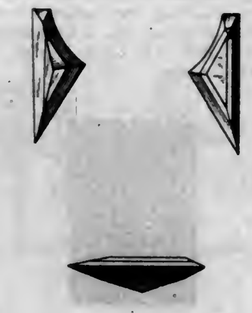
The ornamental design for precious, semiprecious or synthetic cut stone, as shown.

81,380. PRECIOUS, SEMIPRECIOUS, OR SYNTHETIC CUT STONE. JULIUS DINHOFER, New York, N. Y. Filed Oct. 29, 1929. Serial No. 33,197. Term of patent 7 years.



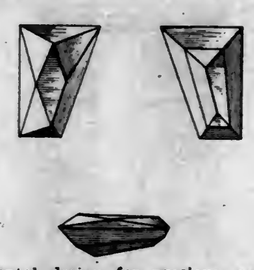
The ornamental design for precious, semiprecious or synthetic cut stone, as shown.

81,381. PRECIOUS, SEMIPRECIOUS, OR SYNTHETIC CUT STONE. JULIUS DINHOFER, New York, N. Y. Filed Oct. 29, 1929. Serial No. 33,198. Term of patent 7 years.



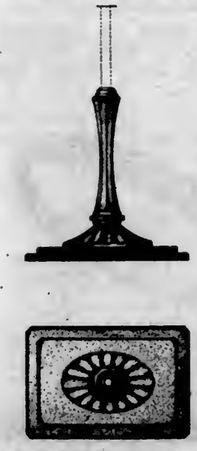
The ornamental design for precious, semiprecious or synthetic cut stone, as shown.

81,382. PRECIOUS, SEMIPRECIOUS, OR SYNTHETIC CUT STONE. JULIUS DINHOFER, New York, N. Y. Filed Nov. 23, 1929. Serial No. 33,530. Term of patent 7 years.



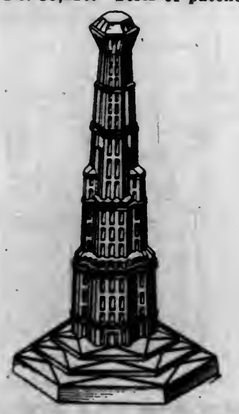
The ornamental design for precious, semiprecious or synthetic cut stone, as shown.

81,383. PEDESTAL FOR DISPLAY FIXTURES. WILLIAM C. CANDLISH, Berkeley, Calif., assignor to J. R. Palmenberg's Sons, Inc., New York, N. Y. Filed July 1, 1929. Serial No. 31,920. Term of patent 7 years.



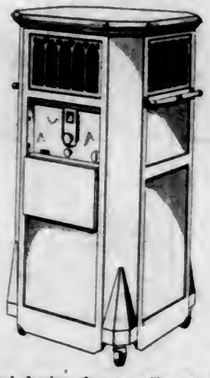
The ornamental design for a pedestal for display fixtures as shown.

81,384. LAMP BASE OR ARTICLE OF ANALOGOUS NATURE. PAUL CRICCHIO, New York, N. Y., assignor to Majestic Lamp Works, New York, N. Y., a partnership consisting of Philip Silberhartz, Jacob Silberhartz, and Harry Scheiner, Brooklyn, N. Y. Filed Apr. 11, 1930. Serial No. 35,210. Term of patent 3½ years.



The ornamental design for a lamp base or article of analogous nature substantially as shown and described.

81,385. RADIOCABINET. JACOB ELLSWORTH GRIFFIN, Milwaukee, Wis. Filed Apr. 26, 1930. Serial No. 35,405. Term of patent 14 years.



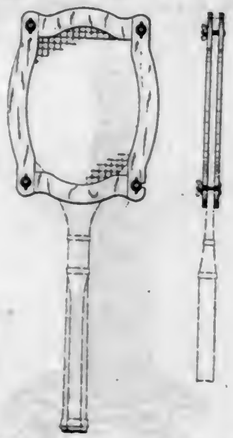
The ornamental design for a radio cabinet, substantially as shown and described.

81,386. FINGER RING OR ARTICLE OF SIMILAR NATURE. BENJAMIN GROSS, New York, N. Y. Filed Apr. 9, 1930. Serial No. 35,202. Term of patent 7 years.



The ornamental design for a finger ring, or article of similar nature, as shown and described.

81,387. TENNIS RACKET PRESS OR SIMILAR ARTICLE. ABRAHAM HALPIN, New York, N. Y. Filed Apr. 23, 1930. Serial No. 35,358. Term of patent 14 years.



The ornamental design for a tennis racket press or similar article substantially as shown.

81,388. FLOWER BOWL OR ARTICLE OF SIMILAR NATURE. T. CLARENCE HEISEY, Newark, Ohio, assignor to A. H. Heisey & Company, Newark, Ohio. Filed Mar. 29, 1930. Serial No. 35,068. Term of patent 14 years.



The ornamental design for a flower bowl or article of similar nature as shown.

81,389. BELT BUCKLE. FRED HIRSH, New York, N. Y., assignor to Adjusta Company, New York, N. Y., a Corporation of New York. Filed Apr. 5, 1930. Serial No. 35,171. Term of patent 7 years.

The ornamental design for a belt buckle, as shown.

81,390. ELASTIC NARROW TEXTILE FABRIC. OTTO EUGENE HUBER, Reading, Pa., assignor to The Narrow Fabric Co., West Reading, Pa., a Corporation of Pennsylvania. Filed Mar. 14, 1929. Serial No. 30,468. Term of patent 14 years.



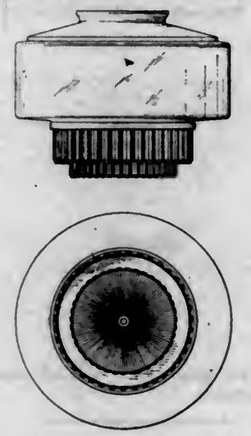
The ornamental design for an elastic narrow textile fabric, as shown.

81,391. ELASTIC NARROW TEXTILE FABRIC. OTTO EUGENE HUBER, Reading, Pa., assignor to The Narrow Fabric Co., West Reading, Pa., a Corporation of Pennsylvania. Filed Mar. 14, 1929. Serial No. 30,469. Term of patent 14 years.



The ornamental design for an elastic narrow textile fabric, as shown.

81,392. ILLUMINATING GLASS BOWL OR SIMILAR ARTICLE. NICHOLAS KOPP, Pittsburgh, Pa., assignor to Kopp Glass, Incorporated, Swissvale, Pa., a Corporation of Pennsylvania. Filed Sept. 21, 1929. Serial No. 32,826. Term of patent 7 years.



The ornamental design for an illuminating glass bowl or similar article, as shown.

81,393. ELECTRICALLY-ILLUMINATED SANTA CLAUS. GOTTHILF LEHMANN, Bronx, N. Y. Filed Oct. 23, 1929. Serial No. 33,140. Term of patent 7 years.



The ornamental design for an electrically illuminated Santa Claus, as shown.

81,394. ENSEMBLE SUIT. DOROTHY LONG, New York, N. Y., assignor to Franklin Simon & Company, Inc., New York, N. Y., a Corporation of New York. Filed Feb. 12, 1930. Serial No. 34,511. Term of patent 3½ years.



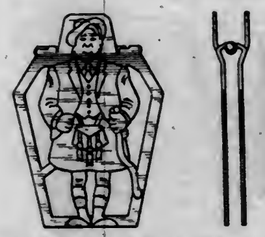
The ornamental design for an ensemble suit substantially as shown and described.

81,395. ENSEMBLE SUIT. DOROTHY LONG, New York, N. Y., assignor to Franklin Simon & Company, Inc., New York, N. Y., a Corporation of New York. Filed Feb. 12, 1930. Serial No. 34,517. Term of patent 3½ years.



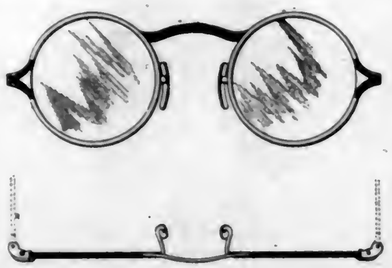
The ornamental design for an ensemble suit substantially as shown and described.

81,396. BILL CLIP. HARRY NEGBAUR, New York, N. Y., assignor to Wm. Demuth & Co., a Corporation of New York. Filed Apr. 9, 1930. Serial No. 35,197. Term of patent 3½ years.



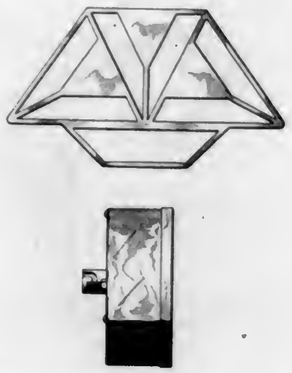
The ornamental design for a bill clip substantially as shown.

81,397. OPHTHALMIC MOUNTING. JOHN N. NELSON, Cranston, R. I., assignor to Universal Optical Corporation, Providence, R. I., a Corporation of Rhode Island. Filed Feb. 20, 1930. Serial No. 34,596. Term of patent 14 years.



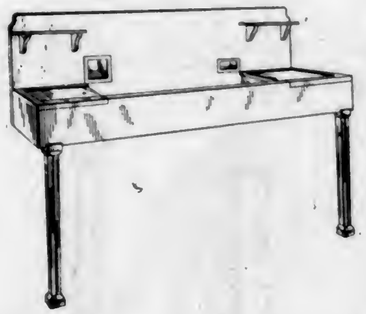
The ornamental design for an ophthalmic mounting, substantially as shown and described.

81,398. STOP LIGHT FOR AUTOMOBILES. REMY PELTIER, Riverside, N. J. Filed Apr. 11, 1930. Serial No. 35,217. Term of patent 7 years.



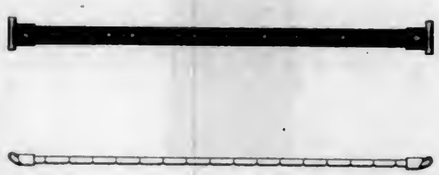
The ornamental design for a stop light for automobiles, as shown.

81,399. SINK OR SIMILAR ARTICLE. ALBERT F. PREMO, Springfield, Mass. Filed Apr. 3, 1930. Serial No. 35,143. Term of patent 14 years.



The ornamental design for a sink or similar article, as shown.

81,400. BRACELET. EUGEN PRESTINARI, Irvington, N. J., assignor to Gemex Company, Newark, N. J., a Corporation of New Jersey. Filed Jan. 22, 1930. Serial No. 34,225. Term of patent 3½ years.



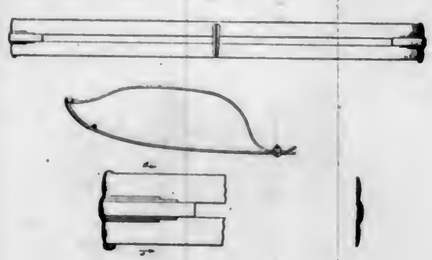
The ornamental design for a bracelet, substantially as shown.

81,401. BRACELET. EUGEN PRESTINARI, Irvington, N. J., assignor to Gemex Company, Newark, N. J., a Corporation of New Jersey. Filed Feb. 3, 1930. Serial No. 34,300. Term of patent 3½ years.



The ornamental design for a bracelet, substantially as shown and described.

81,402. VEHICLE BUMPER. JOHN J. PUNKE, Detroit, Mich., assignor to Hupp Motor Car Corporation, Detroit, Mich., a Corporation of Virginia. Filed Aug. 5, 1929. Serial No. 32,298. Term of patent 3½ years.



The ornamental design for vehicle bumper substantially as shown.

81,403. BOOTH. RUFUS B. RAWLINS, El Paso, Tex. Filed June 24, 1929. Serial No. 31,810. Term of patent 14 years.



The ornamental design for a booth as shown and described.

81,404. SHOE ORNAMENT. SAMUEL M. RIKER, Chester, N. J. Filed Jan. 31, 1930. Serial No. 34,360. Term of patent 7 years.



The ornamental design for a shoe ornament, as shown.

81,405. SHOE ORNAMENT. SAMUEL M. RIKER, Chester, N. J. Filed Jan. 31, 1930. Serial No. 34,361. Term of patent 7 years.



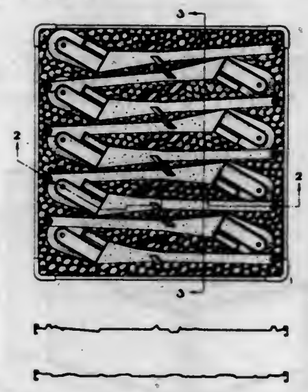
The ornamental design for a shoe ornament as shown.

81,406. SHOE ORNAMENT. SAMUEL M. RIKER, Chester, N. J. Filed Jan. 31, 1930. Serial No. 34,362. Term of patent 7 years.



The ornamental design for a shoe ornament, as shown.

81,407. GAME BOARD. FRED A. SCHMITZ, Canton, Ohio, assignor, by direct and mesne assignments, to The Just Manufacturing Company, Canton, Ohio, a Corporation of Ohio. Filed Mar. 22, 1930. Serial No. 35,003. Term of patent 14 years.



The ornamental design for a game board, substantially as shown.

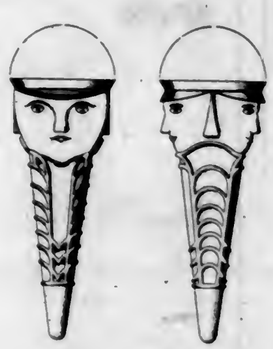
81,408. ICE-CREAM CONE. LORRAINE J. SCHUMAKER, Philadelphia, Pa. Filed Jan. 31, 1929. Serial No. 29,863. Term of patent 3½ years.



The ornamental design for an ice-cream cone as shown.

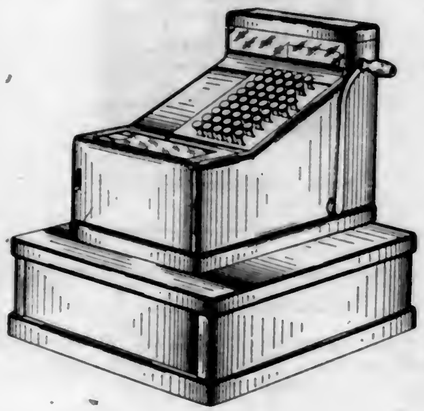
81,409. [WITHDRAWN.]

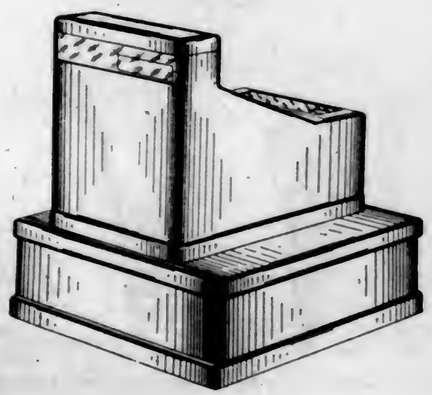
81,410. ICE-CREAM CONE. EDWARD SHAPIRO, Chelsea, Mass. Filed Oct. 4, 1929. Serial No. 32,949. Term of patent 14 years.



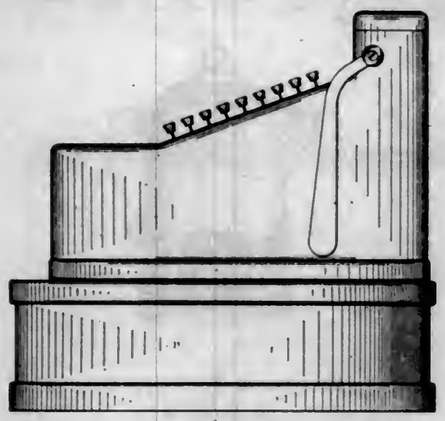
The ornamental design for an ice cream cone, as shown.

81,411. CASH REGISTER. BERNIS M. SHIPLEY, Dayton, Ohio, assignor to The National Cash Register Company, Dayton, Ohio, a Corporation of Maryland. Filed May 23, 1929. Serial No. 31,336. Term of patent 14 years.





81,411—Continued



The ornamental design for a cash register as shown and described.

81,412. SHOE BUCKLE. WALTER EDWARD SMITH, Warwick Downs, R. I., assignor to C. G. King & Co., Inc., Providence, R. I. Filed Apr. 17, 1930. Serial No. 35,287. Term of patent 3½ years.



The ornamental design for a shoe buckle as shown.

81,413. SHOE BUCKLE. WALTER EDWARD SMITH, Warwick Downs, R. I., assignor to C. G. King & Co., Inc., Providence, R. I. Filed Apr. 17, 1930. Serial No. 35,288. Term of patent 3½ years.



The ornamental design for a shoe buckle as shown.

81,414. SHOE BUCKLE. WALTER EDWARD SMITH, Warwick Downs, R. I., assignor to C. G. King & Co., Inc., Providence, R. I. Filed Apr. 17, 1930. Serial No. 35,289. Term of patent 3½ years.



The ornamental design for a shoe buckle as shown.

81,415. SHOE ORNAMENT. WALTER EDWARD SMITH, Warwick Downs, R. I., assignor to C. G. King & Co., Inc., Providence, R. I. Filed Apr. 17, 1930. Serial No. 35,290. Term of patent 3½ years.

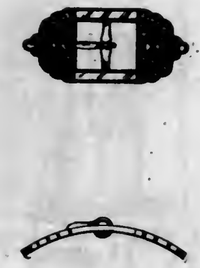
The ornamental design for a shoe ornament as shown.

81,416. SHOE ORNAMENT. WALTER EDWARD SMITH, Warwick Downs, R. I., assignor to C. G. King & Co., Inc., Providence, R. I. Filed Apr. 17, 1930. Serial No. 35,291. Term of patent 3½ years.



The ornamental design for a shoe ornament as shown.

81,417. SHOE BUCKLE. WALTER EDWARD SMITH, Warwick Downs, R. I., assignor to C. G. King & Co., Inc., Providence, R. I. Filed Apr. 17, 1930. Serial No. 35,292. Term of patent 3½ years.



The ornamental design for a shoe buckle as shown.

81,418. SHOE ORNAMENT. WALTER EDWARD SMITH, Warwick Downs, R. I., assignor to C. G. King & Co., Inc., Providence, R. I. Filed Apr. 17, 1930. Serial No. 35,293. Term of patent 3½ years.



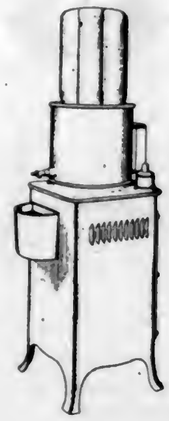
The ornamental design for a shoe ornament as shown.

81,419. BADGE. CHARLES L. STANGE, St. Louis, Mo. Filed Apr. 19, 1929. Serial No. 30,935. Term of patent 14 years.



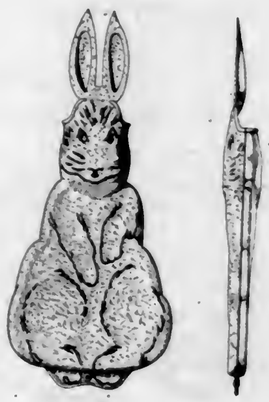
The ornamental design for a badge as shown and described.

81,420. WATER COOLER. CHRISTIAN STEENSTRUP, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Oct. 26, 1929. Serial No. 33,171. Term of patent 14 years.



The ornamental design for a water cooler substantially as shown.

81,421. HOT-WATER BOTTLE OR ARTICLE OF SIMILAR NATURE. HENRY E. THAYER, Pleasantville, N. Y., assignor to I. B. Kleinert Rubber Company, New York, N. Y. Filed Apr. 23, 1930. Serial No. 35,360. Term of patent 7 years.



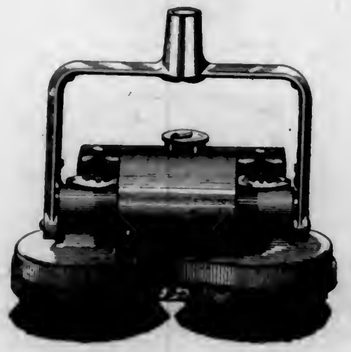
The ornamental design for a hot water bottle or article of similar nature, as shown.

81,422. BOTTLE. ALLEN B. THOMAS, Rochester, N. Y., assignor to F. E. Reed Glass Company, Rochester, N. Y., a Corporation of New York. Filed Apr. 1, 1930. Serial No. 35,093. Term of patent 14 years.



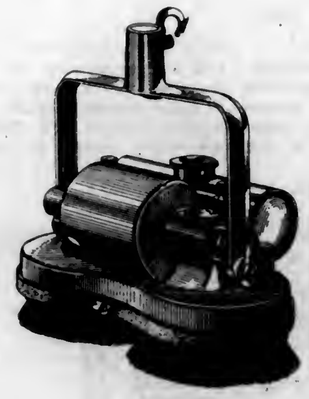
The ornamental design for a bottle, as shown and described.

81,423. CASING FOR A FLOOR-POLISHING BRUSH. CLINTON E. WOODS, deceased, Yeadon, Pa., by Julia E. Woods, administratrix, Upper Darby, Pa. Filed June 12, 1929. Serial No. 31,648. Term of patent 3½ years.





81,423—Continued



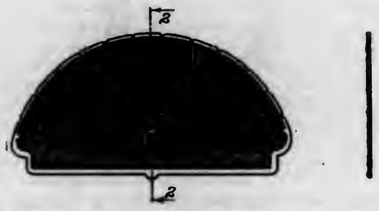
The ornamental design for a casing for a floor-polishing brush, substantially as shown.

81,424. WEBBING FOR SUSPENDERS, GARTERS, AND SIMILAR ARTICLES. FREDERICK J. ZIMMERER, Middletown, Conn., assignor to The Russell Manufacturing Company, Middletown, Conn., a Corporation of Connecticut. Filed Apr. 5, 1930. Serial No. 35,168. Term of patent 3½ years.



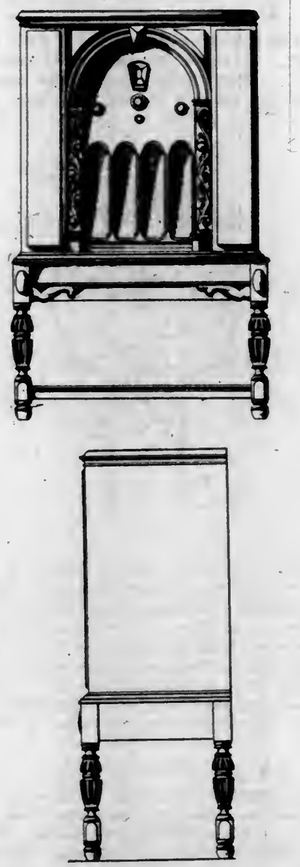
The ornamental design for webbing for suspenders, garters and similar articles, as shown.

81,425. BADGE. JOHN C. TYLER and THOMAS E. LEAVEY, Los Angeles, Calif., assignor to Farmers' Underwriters Association, Los Angeles, Calif., a Corporation of Nevada. Filed Aug. 5, 1929. Serial No. 32,309. Term of patent 14 years.



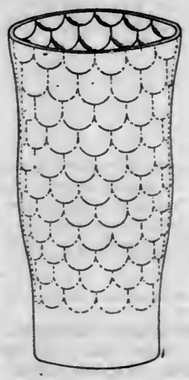
The ornamental design for a badge, substantially as shown, and described.

81,426. RADIOCABINET. EDWARD L. COMBS, Philadelphia, Pa., assignor to Philadelphia Storage Battery Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Apr. 17, 1930. Serial No. 35,298. Term of patent 7 years.



The ornamental design for a radio cabinet, as shown.

81,427. TUMBLER. EDWARD E. BARTLETT, Sapulpa, Okla. Filed Apr. 16, 1930. Serial No. 35,269. Term of patent 14 years.

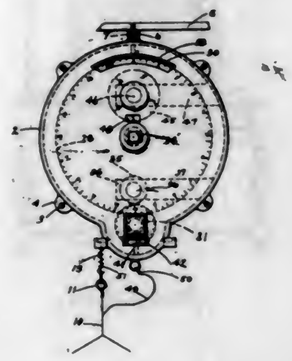


The ornamental design for a tumbler, substantially as shown.

PATENTS

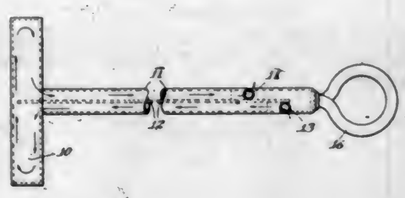
GRANTED JUNE 17, 1930

1,763,636. DEVICE FOR MEASURING THE LOAD ON VEHICLES. CHARLES ANDERSON, Rochester, N. Y. Filed Dec. 16, 1927, Serial No. 240,437, and in Great Britain Jan. 26, 1927. 9 Claims. (Cl. 265—42.)



1. In combination with a vehicle having a wheel-supported member, a spring structure mounted on said member and a floor supported on said spring structure, a weight-measuring device including a series of indicators for indicating the component parts of the weight to be indicated, said weight-measuring device being mounted on the vehicle and being actuated by the relative movement of said member and said floor, and adjustable compensating means to compensate for variations in said spring structure.

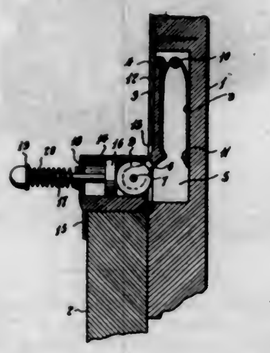
1,763,637. SKIMMER. RUSSELL J. ANDERSON, Racine, Wis., assignor to Belle City Malleable Iron Company, Racine, Wis., a Corporation of Wisconsin. Filed June 17, 1929. Serial No. 371,503. 3 Claims. (Cl. 266—37.)



1. In a skimmer, a hollow shaft, a hollow skimmer head connected to and in communication with the shaft, a partition disposed longitudinally in the shaft to provide passageways, said partition extending part way into the head, and means for circulating a liquid through the passageways and head.

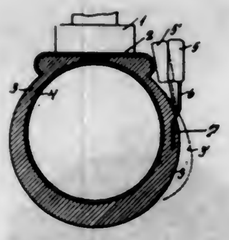
1,763,638. WINDOW-SASH FASTENER. SIBLEY BONNER, Detroit, Mich. Filed Aug. 28, 1928. Serial No. 302,600. 2 Claims. (Cl. 292—227.)

1. A window sash fastener of the character described, comprising an elongated roller carrying member designed to be swingingly supported at one end within a recess of a window sash frame, a plate covering the major portion of said recess, means within the recess for normally forcing the member and roller outwardly for the projection of the roller from the lower part of said recess beneath said plate, a cylindrical keeper member having one end



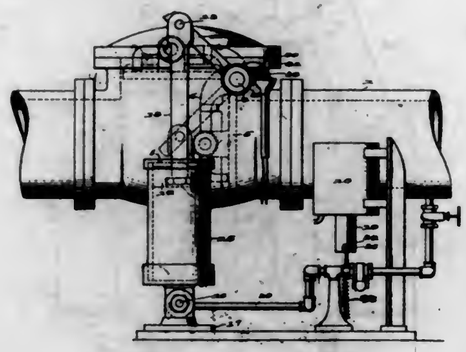
open and adapted to be mounted upon an adjacent sash with the open end opposing the first mentioned sash to receive said roller therein, and a plunger member reciprocably mounted in the cylinder designed when actuated in one direction to eject the roller from the open end of the cylinder to permit movement of the sashes.

1,763,639. TIRE DEFLATION SIGNAL. HAGBART SYLVESTER CHRISTOPHERSEN, Odense, Denmark. Filed Aug. 8, 1929, Serial No. 384,399, and in Denmark Nov. 30, 1928. 6 Claims. (Cl. 116—34.)



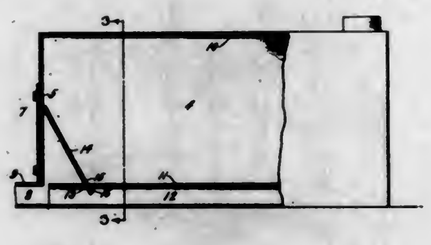
1. A device for indicating deflation of pneumatic tires on vehicle wheels comprising means carried by the tire wall and extending to a point slightly spaced from and alongside a portion of the wheel when the tire is properly inflated, whereby the bending of the tire wall when the tire is deflated will cause the said means to strike the wheel to give out an audible signal.

1,763,640. VALVE-OPERATING MECHANISM. DULUTH G. COOPER, Honolulu, Territory of Hawaii. Filed June 4, 1928. Serial No. 282,637. 6 Claims. (Cl. 137—139.)



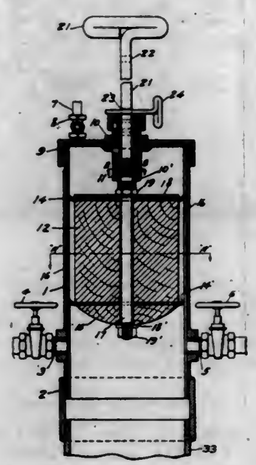
1. A current conveying conduit, a valve mounted in said conduit and adapted for swinging movement therein, and electrically-operated means, actuated upon movement of the valve, to a certain degree, adapted to positively move said valve to a position out of the path of the current.

1,763,641. INSERTABLE GRATE FOR BOX STOVES. ELLA COX, Magnolia, N. C. Filed Apr. 24, 1928. Serial No. 272,523. 2 Claims. (Cl. 126—152.)



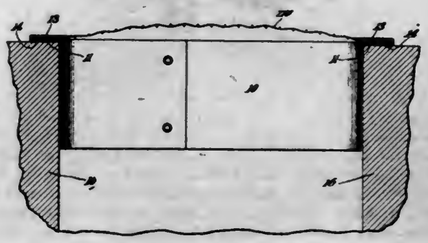
1. In a grate for a box stove having a doorway that is wider at its middle part than at its lower end and having flanges extending inward at opposite sides of the doorway; the combination of a horizontal grate-member provided with supporting flanges at its opposite edges, said grate-member having openings therein at points near its front part but spaced a considerable distance from its front part, and an upright grate-member having depending legs provided with reduced lower ends that normally extend through said openings, and are loose therein, the upper parts of said legs being too wide to extend into said openings, so spaces are provided between them for receiving a poker for poking the fuel which is directly on the first said grate-member, the upper part of the said upright grate-member being wider than the lower part and providing a secure engagement with the said flanges of the doorway, said upright grate-member being normally inclined forward and adapted to lean against said flanges of the doorway, said upright grate-member being of less height than said doorway, so it can be passed through said doorway and placed into engagement with said openings of said horizontal grate-member.

1,763,642. APPARATUS FOR CEMENTING WELLS. HORTON H. DIEVENDORFF, Santa Paula, and SIDNEY O. BARTON, Ventura, Calif., assignors to Pacific Oil Well Cementing Company, Incorporated, Los Angeles, Calif., a Corporation of California. Filed June 6, 1928. Serial No. 283,352. 5 Claims. (Cl. 166—1.)



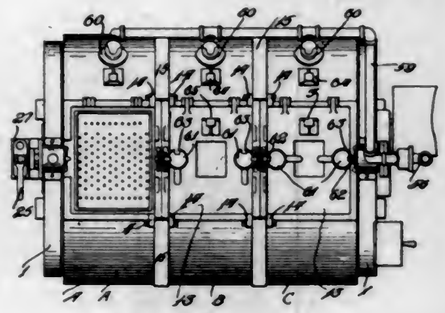
1. A well cementing apparatus, comprising, a capped metal casing head with grooved passageways extending longitudinally along the inside wall of the casing head, means for attaching the casing head to a well casing, a mechanically controlled slidable plug in said casing head and controlled inlet means into the casing head.

1,763,643. SPARK ARRESTER. WILLIAM ADAMS, Lawrence, and CORNELIUS W. WICKERSHAM, Cedarhurst, N. Y., assignors to Adwick Corporation, New York, N. Y., a Corporation of New York. Filed Nov. 10, 1927. Serial No. 232,325. 3 Claims. (Cl. 183—51.)



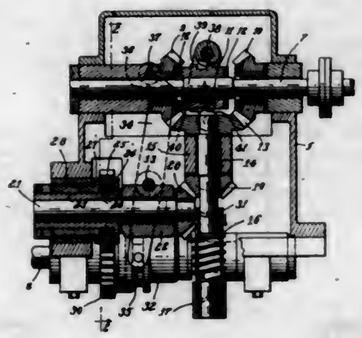
3. A device of the character described comprising a hollow shell, said shell being provided with an external flange extending at right angles to the top of the shell, wire mesh cloth covering the top of the shell and resting on said flange, a binding strip holding said wire mesh in place, said strip being of such width as to substantially cover said flange, said device being adapted to fit within and conform to the interior of a hollow tile and to be supported by the contact of the flange thereof with the top of the tile.

1,763,644. OSCILLATING WASHER. DANIEL BELL, Chicago, Ill., assignor to Invincible Laundry Equipment Co., Chicago, Ill., a Corporation of Illinois. Filed Apr. 4, 1927. Serial No. 180,649. 5 Claims. (Cl. 68—21.)



1. In a machine of the class described, spaced supports, a cradle having end trunnions journaled in said supports, a tub secured to said cradle, a yoke pivoted to said cradle, an inclined shaft connected to said yoke, and a horizontal gear connected to said inclined shaft and means for rotating said gear.

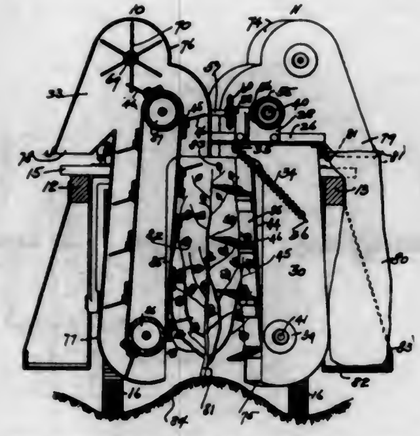
1,763,645. GEARING. HARRY J. CALDWELL, Rockford, Ill., assignor to The Ingersoll Milling Machine Company, Rockford, Ill., a Corporation of Illinois. Original application filed Oct. 17, 1921, Serial No. 508,374. Divided and this application filed Dec. 31, 1925. Serial No. 78,515. 3 Claims. (Cl. 74—59.)



1. A gearing mechanism of the character described adapted for use with a reciprocating type machine tool, comprising a driven shaft, a driving worm shaft, an intermediate shaft having a bevel gear fixed thereon, a second bevel gear meshing therewith and fixed to the worm shaft, a spur gear fixed on said intermediate shaft, a second spur gear meshing therewith and loose on the driven shaft, a worm gear loose on the driven shaft, a worm screw on said worm shaft meshing with said worm gear, a clutch element splined on the driven shaft and adapted for connecting either the loose spur gear or loose worm gear thereto, and means for shifting said clutch element.

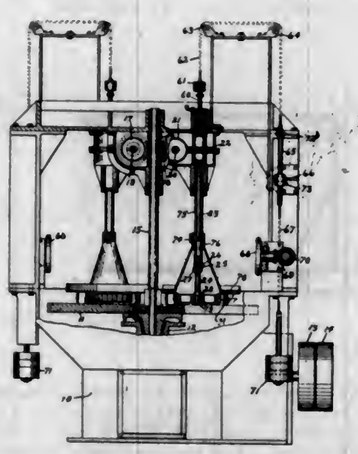
1,763,646. COTTON HARVESTER. CHARLES F. CALLAHAN, Memphis, Tenn., assignor to Callahan Cotton Harvester, Inc., Memphis, Tenn., a Corporation of Tennessee. Filed Feb. 7, 1927. Serial No. 166,311. 5 Claims. (Cl. 56—49.)

1. In a cotton harvester, a wheeled frame, a secondary frame supported thereby and vertically adjustable with respect thereto, said frame including two angularly disposed sets of parallel transverse members, a bracket carried by each transverse member, a picker unit swung from



the pair of brackets of each set, means for urging the lower ends of said picker units inward and means for driving said picker units.

1,763,647. GRINDING MACHINE. EDWARD DANNER, Newark, Ohio, assignor to The Libbey Glass Manufacturing Company, Toledo, Ohio, a Corporation of Ohio. Filed Sept. 28, 1923. Serial No. 665,268. 2 Claims. (Cl. 51—131.)

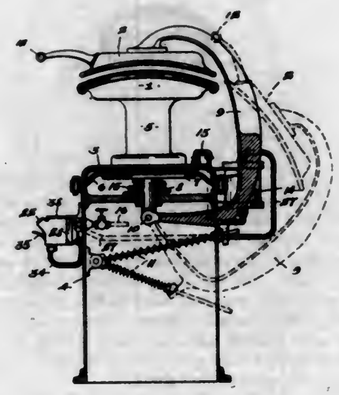


1. In grinding apparatus, a member having a flat grinding surface, a holder adapted to revolve a plurality of articles about an axis normal to the grinding surface, a presser member moving with the holder and having a flat surface adapted to contact an annular series of articles in the holder, and means to maintain the presser members with its pressing surface parallel with the grinding surface.

1,763,648. PRESSING MACHINE AND ACTUATING MECHANISM THEREFOR. ERNEST DAVIS, Syracuse, N. Y., assignor to The Prosperity Company Inc., Syracuse, N. Y., a Corporation of New York. Filed July 11, 1927, Serial No. 204,694. Renewed Nov. 7, 1929. 8 Claims. (Cl. 68—9.)

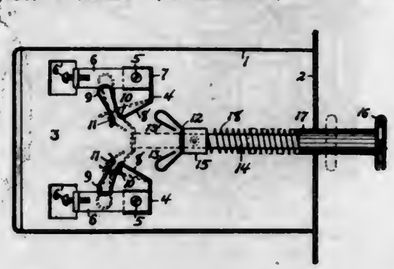
3. A pressing machine comprising a buck, a head, means for moving the head toward and from the buck

comprising a pressure chamber, a movable pressure member therein, motion transmitting means between one side of the pressure member and the head, means for supplying fluid pressure to the other side of the pressure member, the pressure chamber being located below the buck and



the buck being mounted on the pressure chamber, and the motion transmitting means including a link in the form of a C in side elevation, the lower arm of which is extended under the pressure chamber and connected to the pressure member below the pressure chamber and the upper arm of which is connected to the head.

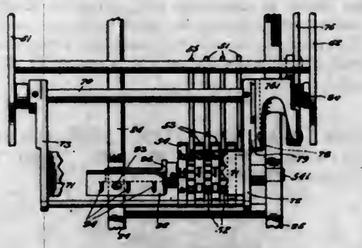
1,763,649. ELECTRIC SWITCH. LEO H. GOETZ, Fort Wayne, Ind., assignor of one-half to William T. Tassler, Fort Wayne, Ind. Filed Mar. 5, 1929. Serial No. 344,286. 4 Claims. (Cl. 200—163.)



1. An electric switch having a base; a pair of oppositely disposed contact members fixed upon the base and spaced apart, each member having a spring arm provided with a loop at its free end, the ends of which loop are divergent, and the arms of which members are disposed convergently with respect to each other, a longitudinally movable rod supported in connection with the base and having a knob for actuating it; a connecting member on said rod having oppositely disposed loops that engage and spread the arms of said contact members as the switch is closed and being engageable between the ends of the loops of said contact members respectively and held thereby in closed position; and a compression spring tending to hold the connecting member in open position.

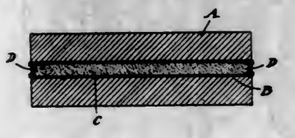
1,763,650. CASH REGISTER. HARRY W. GREGORY, Philadelphia, Pa., assignor to Remington Arms Company, Inc., a Corporation of Delaware. Filed Mar. 18, 1925. Serial No. 16,418. 11 Claims. (Cl. 101—93.)

1. In a cash register, the combination of a series of keys, type carriers differentially adjustable to different positions under the control of the keys and adapted to print upon record material, a fixed member having integral



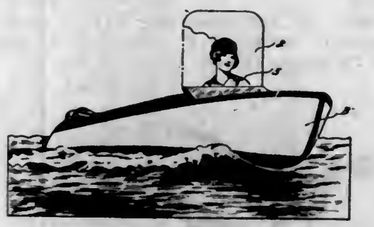
projecting members for printing a plurality of lines upon the record material, and a platen co-ordinated with the type carriers and said member.

1,763,651. METHOD OF MANUFACTURING HOLLOW DRILL STEEL. OLOF ARVID ENGELBREKT GUMAELIUS, Osterbybruk, Sweden, assignor to Fagersta Bruks Aktiebolag, Fagersta, Sweden, a Company of Sweden. Filed Dec. 24, 1926, Serial No. 156,994, and in Sweden Oct. 9, 1926. 4 Claims. (Cl. 80—62.)



1. A method of manufacturing hollow drill steel which comprises providing a hole in a drill steel blank, filling a metallic pipe with a suitable filling material, inserting the pipe in the hole in the blank, closing the ends of the pipe, then rolling the blank until it has the desired dimensions, and then removing the filling material.

1,763,652. PHOTOGRAPHIC CUT-OUT. CARL HALPERN, Atlantic City, N. J. Filed Mar. 22, 1928. Serial No. 263,846. 2 Claims. (Cl. 40—149.)



1. As a new article of manufacture, a cut-out picture comprising a stock cutout having suitable configurations thereon, a blank member secured to said cutout, said blank member being adapted to receive a suitable photograph for cutting out, and a pair of end portions adapted to be bent rearwardly for holding said cutout in vertical position.

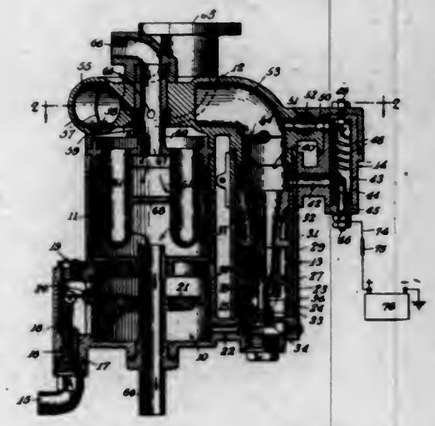
1,763,653. RESIN-COATED PULPBOARD. HAROLD C. HARVEY and HUBERT L. BECHER, Trenton, N. J. Filed June 14, 1926. Serial No. 115,709. 2 Claims. (Cl. 154—45.9.)



1. As an article of manufacture a warped base of compressed fibre intermingled with a fusible binder having

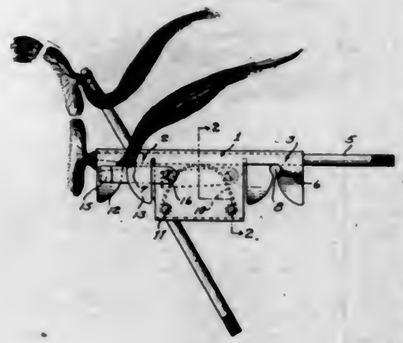
a relatively low co-efficient of expansion, said warped base having firmly attached thereto by a surface lock a warped layer of insoluble and infusible artificial resin, said layer being thicker in some portions than in others, the thickness of the thicker portions being substantially sufficient to compensate for the warping of the base and the layer.

1,763,654. FUEL RECTIFIER. JOB HUTCHINSON, Great Neck, N. Y. Filed Oct. 27, 1925. Serial No. 65,073. 6 Claims. (Cl. 261—12.)



1. A fuel rectifier comprising the combination with a carburetor, of means to separate from a mixture of air and hydro-carbon fuel any incompletely vaporized portions of the mixture, said means consisting of a body having a circular passage connected with the carburetor and provided with semi-circular interior projections, a receptacle for the incompletely vaporized portions of the fuel, and means for raising the region of said receptacle to a high temperature.

1,763,655. SELF-WINDER FOR HAIR CURLERS. LEON INGRASSIA, Astoria, N. Y. Filed Oct. 18, 1927. Serial No. 226,835. 8 Claims. (Cl. 132—33.)



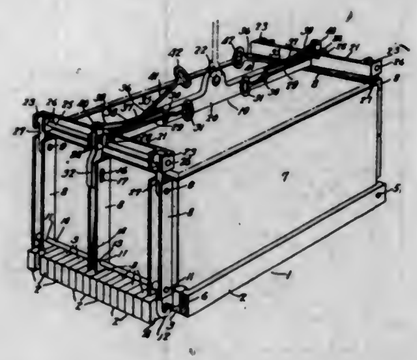
1. A curling device comprising a body member, an extension on said body member, said body member and extension forming a longitudinal passageway for a curling rod and means on said extension over which the hair passes, said means being constructed and designed to twist the strand of hair prior to its being applied to said curling rod.

1,763,656. SELF-FASTENING BUTTON. ELIAS JAFFE, New York, N. Y. Filed Mar. 28, 1929. Serial No. 350,545. 6 Claims. (Cl. 24—96.)



1. A self-fastening button having a top section and fastening means therefor comprising, an anchor member, an aperfured back-plate having outwardly struck prongs arranged around the circumferential periphery thereof, said prongs being adapted to extend through a supporting fabric and clinched radially inwardly over the outer peripheral edges of said anchor member, the apertures in said back-plate being produced upon the formation of said prongs, said apertures acting in cooperation with said prongs and said anchor member to secure said button to the supporting fabric.

1,763,657. APPARATUS FOR HANDLING BRICKS. EDGAR T. JUDSON, Westfield, N. J. Filed July 5, 1928. Serial No. 290,651. 19 Claims. (Cl. 294—63.)



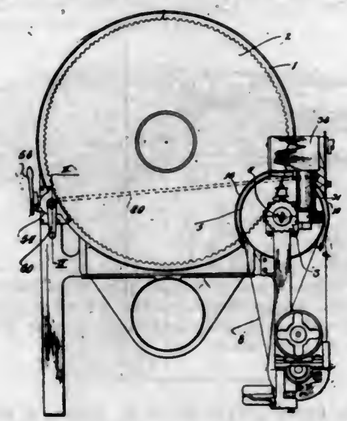
1. An apparatus for handling bricks comprising a pallet for supporting a stack of bricks; a cage to surround said stack; a hoisting head adapted to be suspended; grappling means carried by the cage for lifting the pallet; grappling means carried by the hoisting head for lifting the cage and thereby lifting the pallet; manually operable means carried by the hoisting head for operating the said grappling means carried by the cage; and manually operable means carried by the hoisting head for operating the said grappling means carried thereby.

1,763,658. REVERSING MECHANISM FOR LAUNDRY DRIERS. ALBERT C. KALK, Chicago, Ill., assignor to Invincible Laundry Equipment Company, a Corporation of Illinois. Filed Aug. 23, 1926. Serial No. 131,020. 8 Claims. (Cl. 64—4.)

1. In a reversing mechanism, a driving shaft, a fast pulley on said shaft, a loose pulley on each side of said fast pulley, a pair of belts trained over a pair of said pulleys, a shifter member for each belt, each shifter member having a recess, a rockable shaft, an arm on said shaft for engaging said shifter members, a bifurcated

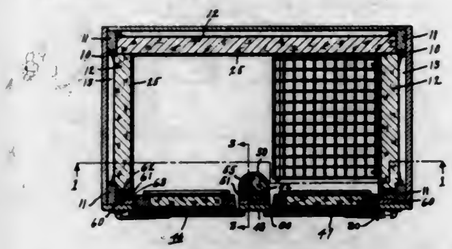
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member on said shaft, a rotatable device for alternately actuating said bifurcated member in opposite directions,



a shaft for supporting said rotatable device, and a connection between said last mentioned shaft and one of said loose pulleys.

1,763,659. REFRIGERATING APPARATUS. LESTER S. KEILHOLTZ and ERNEST DICKEY, Dayton, Ohio, assignors, by mesne assignments, to Frigidaire Corporation, a Corporation of Delaware. Filed Oct. 23, 1923, Serial No. 670,352. Renewed Mar. 24, 1928. 8 Claims. (Cl. 62—51.)



1. In combination, a refrigerator cabinet having a cooling compartment and a food compartment, a plurality of doors, one for each of said compartments, a post interposed between said doors, said post being provided with heat-insulating means, and a drain pipe for said cooling compartment, said drain pipe passing lengthwise through said heat-insulating means.

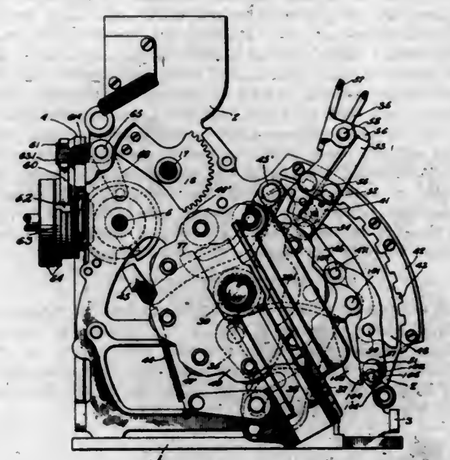
6. A refrigerator cabinet comprising a metal lining structure forming a compartment, insulation for said cabinet, a cooling chamber in said compartment, a recess in said lining structure, and a drain pipe in said recess for said cooling chamber.

1,763,660. VIOLIN-BOW ATTACHMENT. JULIUS W. KNOPP, Toledo, Ohio. Filed Feb. 7, 1929. Serial No. 338,110. 3 Claims. (Cl. 84—282.)



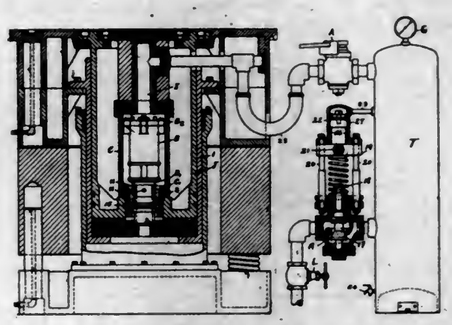
1. A bow having a frog and hair clamping band thereon, and a thumb-piece attached to said band.

1,763,661. CASH REGISTER. LOUIS Z. LA FOREST, Ilion, N. Y., assignor to Remington Arms Company, Inc., a Corporation of Delaware. Filed May 9, 1925. Serial No. 29,249. 19 Claims. (Cl. 235—27.)



1. In a cash register, the combination with a normally locked operating mechanism, of a manually operable device for controlling the unlocking of said mechanism, a differential mechanism, a plurality of depressible keys controlling the extent of movement of the differential mechanism by the operating mechanism, and means controlled by the manually operable device for releasing depressed keys preliminary to the operation of the machine.

1,763,662. PNEUMATIC JAR-RAMMING MOLDING MACHINE. WILFRED LEWIS, Haverford, Pa. Filed June 15, 1927. Serial No. 198,896. 6 Claims. (Cl. 121—14.)



1. In a jar ramming molding machine having a cylinder and a hollow plunger and a source of air supply under pressure and an exhaust port for the cylinder, and in combination a tubular air chamber and a sleeve fixed in spaced relation to the plunger to provide an air inlet passage to the cylinder, a tubular valve body spaced from the inner wall of the chamber to provide a continuation of said inlet passage, a spring interposed between the sleeve and body to support the weight of the latter, a hollow valve spindle mounted in the body and having one end closed and exposed through the top of the body and having near the other end an exhaust port, a two faced exhaust valve carried by and having lost motion in respect to the spindle and having one face for cooperation with the spindle exhaust port and the other face for cooperation with the cylinder exhaust port, admission valve elements provided between the air chamber and the body

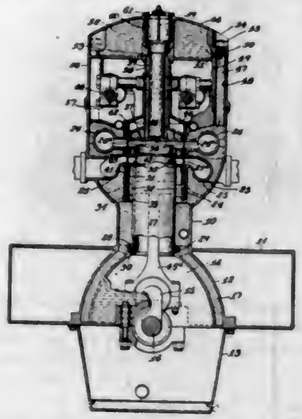
and which also operates to raise the body by the plunger, air admission ports arranged below the admission valve elements and in position for cooperation with the sleeve and extending from the inlet passage to the interior of the spindle, a piston element provided on the spindle, cylinder spaces provided in the body above and below the piston element and of which the lower one is provided with a head adapted to lift the spindle element by the piston element and away from the seated exhaust valve as the body is moved by the moving chamber and plunger, and ports provided from the lower cylinder space to the air inlet passage and ports provided from the upper cylinder space to the interior of the spindle whereby when the spindle uncovers the seated exhaust valve by the lifting action of the chamber and body and plunger the spindle is moved by its piston under the differential air pressure in the cylinder spaces and quickly lifts the exhaust valve to uncover the cylinder exhaust port.

1,763,663. BAG CLOSURE AND METHOD OF MAKING THE SAME. SCOTT H. LILLY and GEORGE E. LILLY, Toledo, Ohio, assignors, by mesne assignments, to St. Regis Paper Company, New York, N. Y., a Corporation of New York. Filed May 10, 1928. Serial No. 276,593. 4 Claims. (Cl. 222—56.)



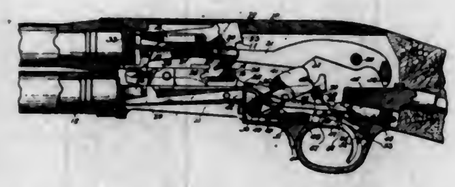
4. The method of closing a bag which comprises applying a series of metal clips transversely of a continuous connecting member, adhering the connecting member across the portion of the bag to be closed, bending the clips to hold the walls of the bag in closed position and thereafter corrugating the clips along the line of bending and thereby increasing their resistance to straightening along said line.

1,763,664. SLEEVE-VALVE ENGINE. FRANK E. LONAS, New York, N. Y. Filed Sept. 3, 1925. Serial No. 54,202. 18 Claims. (Cl. 123—170.)



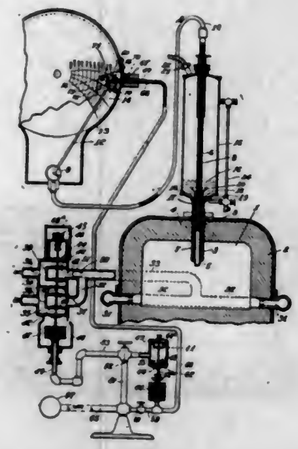
1. A sleeve valve engine comprising a cylinder structure, means for dividing the cylinder structure into a cylinder proper, a sleeve valve receiving portion encircling the cylinder proper and an outer wall, a water jacket at the base of the cylinder structure below the lowermost point of piston travel, means for circulating water from said jacket upwardly around the cylinder proper within and around the valve receiving portion of the cylinder structure and into a cylinder head through independent passages.

1,763,665. FIREARM. OLIVER H. LOOMIS, Ilion, N. Y., assignor to Remington Arms Company, Inc., a Corporation of Delaware. Filed Feb. 16, 1925. Serial No. 9,582. 5 Claims. (Cl. 42—17.)



1. In a fire control mechanism, in combination, a trigger plate, a hammer and a trigger pivoted in said trigger plate, and a trigger controlled hammer latch pivoted in said plate and adapted to engage said hammer when said trigger is held depressed.

1,763,666. REGULATING DEVICE. GEORGE F. MACHLET, Elizabeth, N. J. Filed Jan. 21, 1927. Serial No. 162,589. 22 Claims. (Cl. 236—82.)

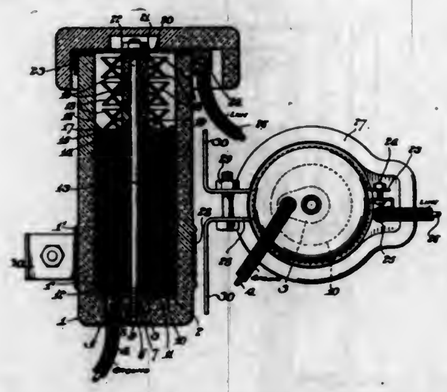


1. The combination of a graduated dial, an indicator to co-operate with the dial, a furnace, means for automatically shifting said indicator in accordance with the fluctuations of heat in said furnace, and a pneumatic heat-regulator connected to said furnace and including a regulating vent provided with a self-closing closure in the path of said indicator, and means whereby said vent and closure may be adjusted manually as a unit to and fro in the path of the indicator and along said indicator-dial, to vary the point of regulation of the furnace, said indicator being capable of opening said closure wherever the unit is adjusted.

1,763,667. LIGHTNING ARRESTER AND METHOD OF MAKING THE SAME. JOHN ROBERT MCFARLIN, Philadelphia, Pa., assignor to Electric Service Supplies Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Apr. 5, 1926. Serial No. 99,809. 23 Claims. (Cl. 175—30.)

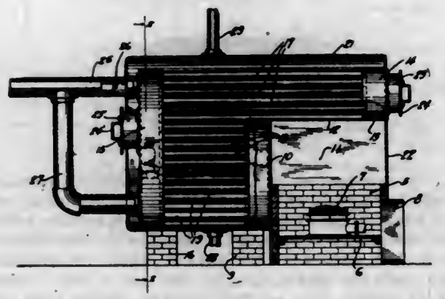
6. A lightning arrester comprising electrodes forming a spark gap and a mass of silicon carbide crystals connected therewith having the size of the crystals and the length of the conducting path formed thereby proportioned to provide an arc suppressive effect greater than

the arc suppressive effect of a similar mass of minimum practicable length and the area and length of the path being proportioned to provide conductance to high voltage discharge greater than the conductance of a similar mass of minimum practicable length.



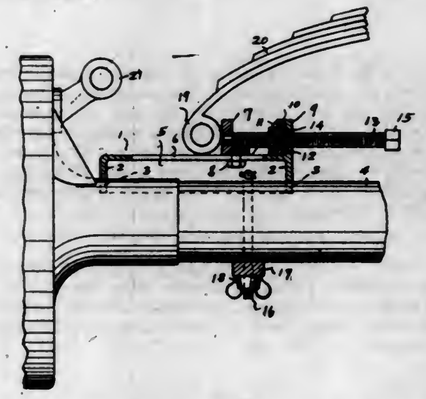
9. A lightning arrester comprising granular crystalline material decreasing to a minima in conductance of high voltage discharges with increases in the length relatively to the volume thereof, and increasing to a maxima in conductance of high voltage discharges with further increases in the length relatively to the volume thereof, and decreasing in conductance of high voltage discharges with further increases in the length relatively to the volume thereof, the mass of material comprised in said arrester having such geometrical constants relatively to the size of its grains that the ratio between its length and volume is greater than the ratio causing such minimum conductance and less than the higher ratio causing a conductance equal to the minimum conductance.

1,763,668. HEATING APPARATUS. ROY L. MEYERS, Janesville, Wis. Filed Apr. 28, 1928. Serial No. 273,721. 1 Claim. (Cl. 122—85.)



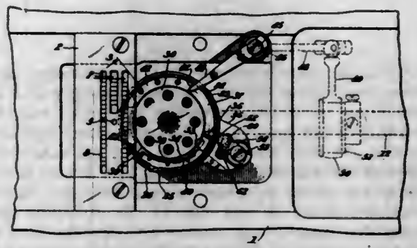
A heating apparatus, comprising an outer casing adapted to contain fluid, said casing having a main body portion and an upper horizontal extension portion, an enclosed fire pot against the end of the main casing portion, a combustion chamber over the fire pot and below the extension portion of the outer casing, a small upper drum within said extension portion adjacent the combustion chamber, there being a port between said combustion chamber and said drum, a large drum within the opposite end portion of the main body of the casing, an intermediate drum within said casing spaced from the large drum, a plurality of elongated smoke tubes within the upper portion of said casing and connecting the upper drum and the upper portion of the large drum, a plurality of intermediate smoke tubes connecting the upper portion of the intermediate drum with an intermediate portion of the large drum, a plurality of lower smoke tubes connecting the lower portions of the intermediate and large drums, all of said smoke tubes being horizontally disposed, a baffle within the large drum between the openings of the intermediate tubes and the lower tubes, a smoke discharge pipe extending from the lower portion of the large drum outwardly of the casing, a fluid inlet pipe entering the lower portion of the casing, and a fluid outlet pipe extending from the upper portion of the casing.

1,763,669. JACK. ARNOLD W. NEWMAN, Alvin, Tex. Filed May 17, 1928. Serial No. 278,371. 4 Claims. (Cl. 29—87.1.)



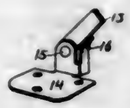
1. A jack including a frame adapted to be mounted on a vehicle axle, a head movable on the frame, a holder carried by and upstanding from the frame, said holder having overturned top and side flanges, a nut in said holder held against turning by said flanges, a jack screw threaded through said nut and having a swivelling connection with said head.

1,763,670. LOOP-TAKER MECHANISM FOR SEWING MACHINES. WILLIAM NELSON PARKES, Brooklyn, N. Y., assignor to The Singer Manufacturing Company, Elizabeth, N. J., a Corporation of New Jersey. Filed Jan. 15, 1929. Serial No. 332,612. 8 Claims. (Cl. 112—184.)



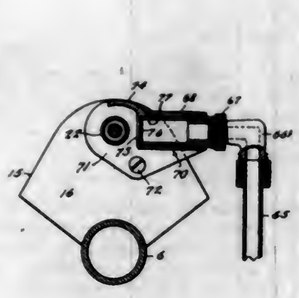
1. In a sewing machine provided with a throat-plate having a needle aperture, a reciprocatory needle, a vertical-axis rotary loop-taker complemental to said needle in the formation of lock-stitches, a bobbin-carrier journaled in said loop-taker provided with spaced stop-shoulders upon the loop cast-off side of the path of rotation of the loop-taker, a stop-lug depending from the throat-plate engaged by one stop-shoulder to prevent rotation of the bobbin-carrier with the loop-taker, and an adjustable stop-finger independent of said throat-plate engageable with the other shoulder of the bobbin-carrier to limit rotation of said carrier in a direction opposite to the direction of rotation of the loop-taker.

1,763,671. FOLDING TABLE. WILLIAM C. RASTETTER, Fort Wayne, Ind. Filed May 27, 1927. Serial No. 194,691. 1 Claim. (Cl. 45—11.)



In a table structure having folding legs, a guard pivoted to each leg, brackets fixed to the underside of the top, a leg brace pivoted to each bracket and having a sliding connection with said pivoted guard, locking means carried by said guard, a spring tongue carried by each bracket and adapted to engage said brace and press said brace into engagement with said locking means when the leg is intended for use.

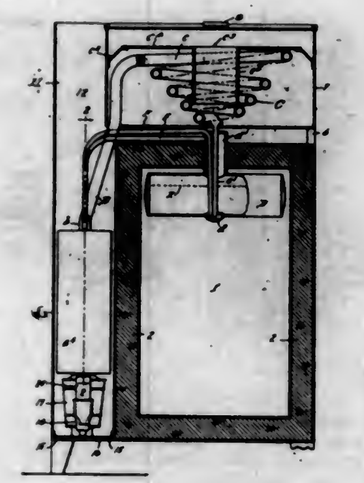
1,763,672. STARTING BURNER FOR RETORT STOVES. MARC RESEK, Cleveland Heights, Ohio, assignor to Perfection Stove Company, Cleveland, Ohio, a Corporation of Ohio. Filed Dec. 3, 1926. Serial No. 152,356. 4 Claims. (Cl. 158—81.)



2. A starting burner for use with a combustion device having a retort, said starting burner consisting of a self-contained unit comprising a hollow cylindrical body having a gas emitting opening, an attaching plate formed integral with the body and extending along one side thereof and beyond the gas emitting opening, and a hood projecting from the body over and beyond the gas emitting opening and joined at one side to the attaching plate, the attaching plate being formed to cooperate with and position the retort of the combustion device beneath the hood and in such relation to the gas emitting opening as to cause the flame of the starting burner to be diverted about and along the retort.

1,763,673. REFRIGERATOR. MARC RESEK, Cleveland Heights, Ohio, assignor to Perfection Stove Company, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 17, 1928. Serial No. 262,351. 8 Claims. (Cl. 62—118.)

1. In refrigeration apparatus of the class set forth, the combination of a cabinet enclosing both a refrigeration chamber and a relatively narrow and deep flue to one side thereof, a plurality of vessels arranged in line depthwise of said flue and constituting a generator-absorber, an evaporator in the refrigeration chamber, a system of



conduits through which the generator-absorber and the evaporator communicate, and means for heating the generator-absorber.

1,763,674. MEANS FOR SECURING NAME PLATES. DAVID N. ROSS, Indianapolis, Ind., assignor to David N. Ross, Incorporated, Indianapolis, Ind., a Corporation of Indiana. Filed Jan. 30, 1929. Serial No. 336,036. 3 Claims. (Cl. 40—20.)

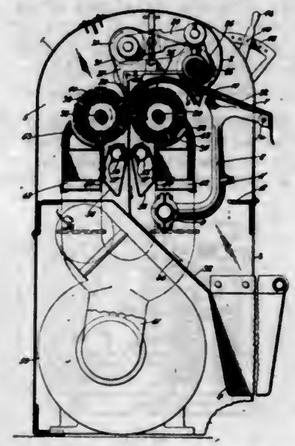


1. The combination of a radiator shell having an opening and an inturned flange, a name plate, a pair of spaced apart resilient legs attached to the inner side of the name-plate, said legs having ends normally at a considerably less distance apart than the distance across the inturned flange, each leg having near its free end a bead formed with an outside face portion normally spaced from the corresponding portion of the other bead a distance greater than the distance across the inturned flange, retaining means on the legs normally making a close fit in the flange and barbs to prevent rotation of the legs in the flange.

1,763,675. NAP-RAISING MACHINE. ALBERT O. SCHRAMM and JOHN H. SCHREIBER, St. Louis, Mo., assignors, by mesne assignments, to The American Laundry Machinery Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Feb. 17, 1928. Serial No. 254,927. 19 Claims. (Cl. 26—32.)

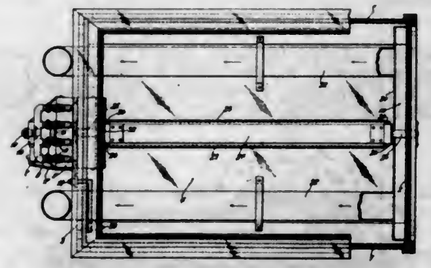
1. A machine of the character described comprising a stationary support, a flexible actuator operative to move fabrics over said stationary support and between

said actuator and said support, brushing rolls arranged to operate against the fabric passing between them



from said stationary support, and mechanism for operating said brushing rolls at greater speed than said flexible actuator.

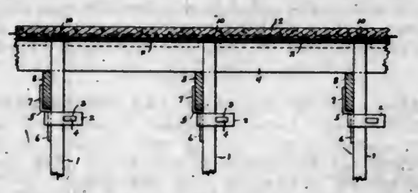
1,763,676. LAUNDRY DRIER. ALBERT O. SCHRAMM, St. Louis, Mo., assignor, by mesne assignments, to The American Laundry Machinery Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Nov. 21, 1928. Serial No. 320,812. 8 Claims. (Cl. 34—17.)



1. A laundry drier comprising a cabinet having an opening thereto through one end wall thereof and having an open top, a frame surrounding said opening, a heater mounted in said frame, a device mounted in said frame adjacent to the outer side of said heater for forcing air through said heater and said opening into said cabinet, means for closing and supporting fabrics across the top of said cabinet, and means in said cabinet forming a passage for conducting air from said cabinet and having an inlet opening near the upper side of the cabinet and at the opposite end of the cabinet from said heater

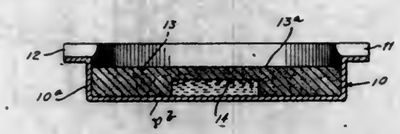
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1,763,677. FALSEWORK CLAMP. ORVILLE O. SCOTT, Houston, Tex. Filed June 1, 1928. Serial No. 282,202. 4 Claims. (Cl. 304—40.)



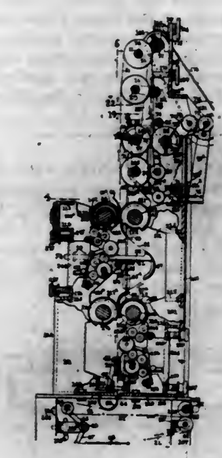
1. In a false work for supporting a floor mould, a yoke adapted to embrace a supporting post of the false work, said yoke having aligned keyways, a wedge shaped key, adapted to be driven into said keyways to wedge against one side of said post, bracket secured to the yoke, one end of which fits against a side of the post opposite said key and whose other end is spaced from said post.

1,763,678. ASH RECEIVER. FRANKLIN S. SMITH, Brooklyn, N. Y. Filed Jan. 27, 1927, Serial No. 163,952. Renewed Nov. 9, 1929. 7 Claims. (Cl. 131—51.)



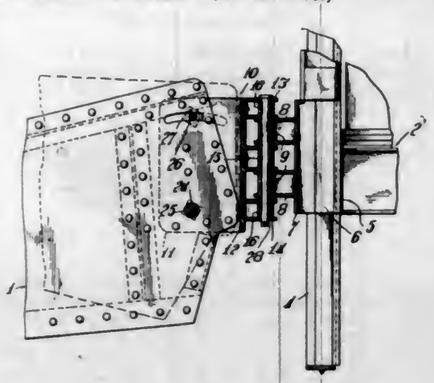
1. In an ash receiver, in combination, a receptacle provided with means projecting outwardly from the side wall thereof and adapted to hold a cigar or cigarette with the lighted end thereof overhanging said receptacle, a rigid porous member resting in said receptacle and adapted to retain water in its pores, said porous member being exposed to receive thereon ashes dropping from said cigarette or cigar, whereby said ashes are wetted by water transmitted thereto from the pores of said member, and means for supplying water to said porous member.

1,763,679. PRINTING PRESS. BURNHAM C. STICKNEY, Hillside, N. J. Filed Mar. 27, 1926. Serial No. 97,846. 118 Claims. (Cl. 101—224.)



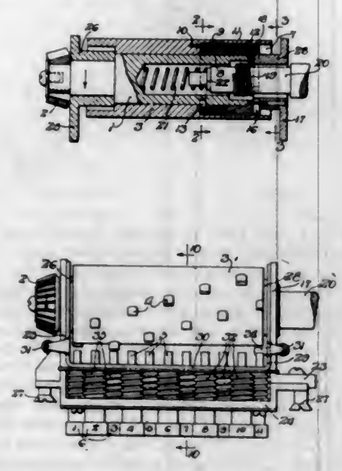
1. In a printing press, the combination with a printing couple, of co-operative power-driven web-advancing rolls at the delivery side of the printing couple, means for separating said rolls automatically at every revolution of the printing couple, co-ordinated means on the intake-side of the printing couple for intermittently stopping the web, a single power-driven cam controlling both the web-advancing and web-stopping means, movable arms whereon one of said advancing rolls is mounted, means to enable said cam to control the movements of said arms, said stopping means including a movable web-arresting jaw and a stationary jaw co-operative therewith, and connections from said movable jaw to said cam, said connections including a pivoted arm which rides upon the cam, and a link connecting said pivoted arm to said web-arresting jaw, said pivoted arm co-operating with said roll-carrying arms to separate the web-advancing rolls as the web-jaws are closed.

1,763,680. HINGE PLATE FOR RAILROAD SPREADER WINGS. VSEVOLOD G. TELLIS, East Chicago, Ind., assignor to O. F. Jordan Company, East Chicago, Ind., a Corporation of Indiana. Filed Oct. 14, 1926. Serial No. 141,483. 1 Claim. (Cl. 37—105.)



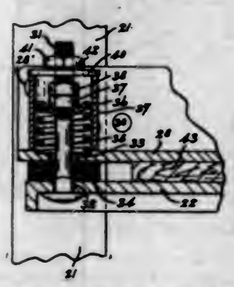
In combination with a spreader wing having an arcuate slot in its inner end, a hinge block having vetrically spaced bearing ears, a hinge plate open at its top and bottom ends and including spaced parallel side walls to receive said inner end of the spreader wing and an end wall connecting said side walls together, ears on said end wall engaged with the ears on said hinge block, a pin pivotally connecting said ears on said hinge block and hinge plate respectively, a second pin concentric with said slot and disposed at a right angle to said first pin and pivotally connecting said spreader wing to the bottom end of said side walls of the hinge plate and a third pin fixed in the top portion of said side plates and extending through said solts to limit the movement of said spreader wing about said second pin, the top portion of the wing extending above the top portion of the side walls of the hinge plate.

1,763,681. FEEDING MECHANISM FOR SLICING MACHINES. WILLEM PETRUS VAN LAMMEREN, Rotterdam, Netherlands, assignor to U. S. Slicing Machine Company, La Porte, Ind., a Corporation of Indiana. Filed Oct. 9, 1925, Serial No. 61,397, and in Denmark, Sweden, Hungary, Belgium, and Germany Mar. 18, 1925. 15 Claims. (Cl. 192—148.)



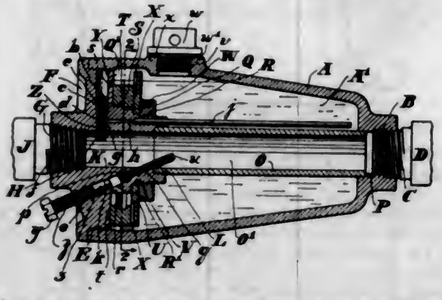
5. In combination, a rotatable driver, a helical spring wound upon said driver and frictionally engaging the same, a driven member connected with the trailing end of said spring and freely rotatable, a stop carrier connected with the advancing end of said spring, and a stop for engaging said stop carrier to arrest the advancing end of said spring and break the frictional connection between said spring and rotatable driver.

1,763,682. REFRIGERATING APPARATUS. HUGH WALLACE, Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation, a Corporation of Delaware. Filed Feb. 8, 1926. Serial No. 86,770. 5 Claims. (Cl. 248—16.)



1. In a refrigerator cabinet including a wall, a base for refrigerating machinery, means for supporting said base in non-vibratory resilient relation to said wall, said means comprising a supporting member carried by said wall, a spring mounted on the top side of said supporting member, a member secured to the base below the supporting member and carried by the spring and a layer of yielding friction material betwen the base and said supporting member.

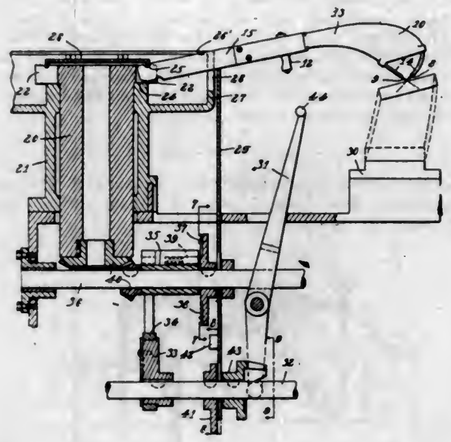
1,763,683. OILING DEVICE. LEWIS C. BAYLES, Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed Sept. 3, 1927. Serial No. 217,428. 6 Claims. (Cl. 184—55.)



3. In a lubricator, the combination with a casing having a lubricant reservoir and a passageway therethrough, a fixed ring having radial grooves therein, a loosely mounted ring having an annular channel therein, said radial grooves carrying lubricant to said annular channel, said annular channel carrying said lubricant to said passageway, a tube leading from the passageway into the reservoir for conducting pressure fluid from the passageway into the reservoir, and a second tube leading from said first tube to deliver pressure fluid from the passageway to the reservoir when the said lubricator is in such positions that the said first tube cannot function.

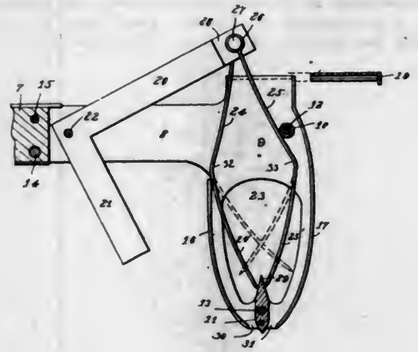
1,763,684. WORK HOLDING AND TRANSFERRING MECHANISM. FRED L. BORCHERT, Rockford, Ill. Original application filed Nov. 10, 1923, Serial No. 673,905. Divided and this application filed Aug. 3, 1928. Serial No. 297,349. 18 Claims. (Cl. 198—210.)

7. Work holding apparatus of the character described, comprising a rotary head, a plurality of picker arms detachably connected to the head and radiating therefrom, means for imparting rotative movement to the head for moving the picker arms from station to station, and means on each picker arm for impaling an article to hold it and for releasing said article comprising wire fingers adapted to be projected from the picker arm in angular relation and lengthwise of the axis of each finger to impale the article.



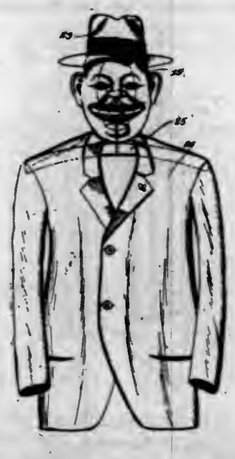
9. A work holder having a pair of prongs guided for lengthwise movement to impale an article at substantially a common point and to diverge therefrom within the article for supporting and carrying it.

1,763,685. WORKHOLDER. FRED L. BORCHERT, Rockford, Ill. Filed Feb. 18, 1929. Serial No. 340,756. 15 Claims. (Cl. 294—61.)



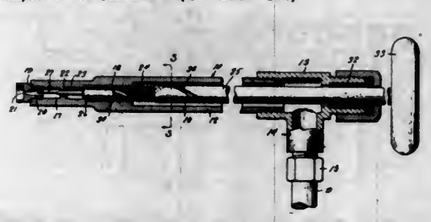
1. A work holder of the character described having impaling elements each adapted to be projected lengthwise therefrom through a substantially cross-wise movement thereof within the holder, and enter a block of material substantially on the arc of a circle.

1,763,686. CLOTHES HANGER. DOMENIC M. CAMPANA, Wilmette, Ill. Filed Nov. 9, 1927. Serial No. 232,013. 7 Claims. (Cl. 223—61.)



1. A clothes hanger comprising a horizontally extending bracket, a hat supporting member simulating the head of a person carried at the forward end of said bracket and extending upwardly therefrom, and a coat hanger suspended below said bracket.

1,763,687. RETORT. LEE S. CHADWICK, Shaker Heights, and MARC RESEK, Cleveland Heights, Ohio, assignors to Perfection Stove Company, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 17, 1928. Serial No. 262,580. 5 Claims. (Cl. 158—53.)

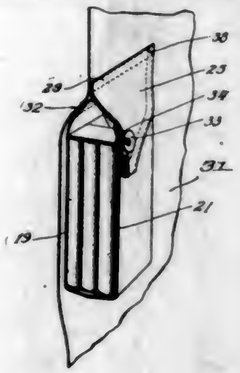


1. A retort comprising a substantially horizontally disposed, elongated hollow body enclosing a generating chamber and having a threaded bore leading therefrom, and a stem having a threaded portion operating within said bore, there being a passageway between opposed surfaces of the stem and body that leads past the threaded portion of the stem and extends diagonally of the threads and at least a part of which passageway is at all times a material distance above the bottom of the bore irrespective of the adjustment of the stem.

1,763,688. CIGARETTE POCKET FOR SHIRTS. JOHN W. CHAMPION, Evanston, Ill., assignor to Reliance Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 16, 1929. Serial No. 386,364. 7 Claims. (Cl. 2—247.)

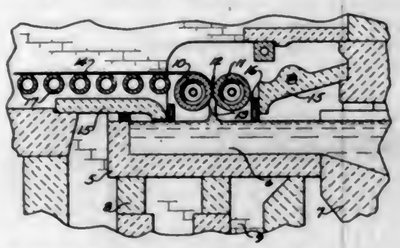
7. The combination with a work shirt body of a pocket therefor adapted snugly to receive a standard cigarette package and comprising an exposed front wall and a rear wall for the pocket, closed at their lateral and bottom edges and accessible from the top for the insertion of a cigarette package, said pocket being secured to the body of the shirt along its lateral edges substantially from top to bottom, the rear wall being free from

the body intermediate the lateral edges of the pocket and leaving a ventilated space between the rear wall and the body, the bottom of the pocket being free from the body to permit circulation of air to and from the ventilated space, and a closure flap for the pocket stitched to



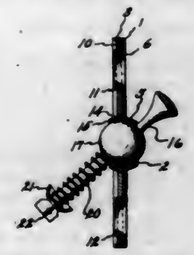
the body along its upper edge adjacent the upper edge of the pocket, buttoning at its lower edge to the front wall of the pocket, the flap having tapering sides whereby a lateral edge of the flap may be pushed aside for removal of a cigarette from the package without unbuttoning the flap.

1,763,689. COOLED ROLL FOR PRODUCING SHEET GLASS. JOHN L. DRAKE, Toledo, Ohio, assignor to Libbey-Owens Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Sept. 21, 1927. Serial No. 220,911. 3 Claims. (Cl. 257—95.)



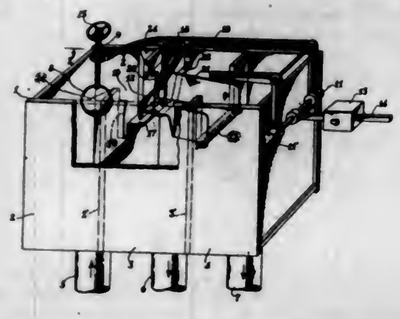
1. In sheet glass apparatus, a roll having an opening therethrough, said opening being of such a nature that the wall of the roll becomes progressively thicker from its center towards both ends thereof.

1,763,690. LEVER-CONTROL ASSEMBLY. FRANK M. EDGAR and JOHN B. FLYNN, Detroit, Mich., assignors to Ternstedt Manufacturing Company, Detroit, Mich., a Corporation of Michigan. Filed Jan. 24, 1927. Serial No. 163,030. 1 Claim. (Cl. 74—39.)



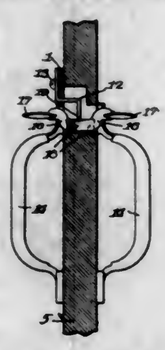
A lever control assembly comprising in combination a plate with a spherical depression surrounding an opening, an escutcheon with a spherical depression surrounding an opening arranged to register with the first mentioned opening, a lever with a ball portion trapped in the spherical socket formed by the depressions when the plate and escutcheon are secured together, the said plates being provided with registering counter-sunk screw openings in which the edges of the openings in the escutcheon are passed through the openings in the plate and riveted over to secure the escutcheon and plate together, a coil spring fixedly mounted around the lever and engaging between the end of the lever and the ball portion, the end of the lever being arranged to connect up with a controlled device having a prescribed path of movement which intersects the arc through which the end of the lever swings, whereby the movement of the lever compresses the spring until the lever has passed the median point of its movement, whereupon the spring snaps the lever and the controlled member to the other extreme of their movement.

1,763,691. STOCK REGULATOR. WILLIAM P. FEENEY, Manistee, Mich. Filed Aug. 5, 1929. Serial No. 383,446. 6 Claims. (Cl. 92—46.)



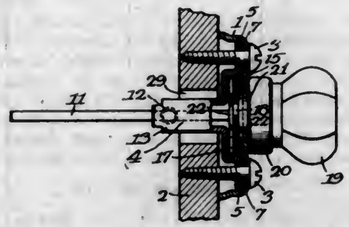
1. A stock regulator comprising an inlet chamber, an overflow chamber, an outlet chamber, a float operating in said inlet chamber, a gate operated by said float between said inlet chamber and said overflow chamber, and a trough between said inlet chamber and said outlet chamber adapted to catch the overflow from said gate.

1,763,692. DOOR LATCH. WILLIAM D. FERRIS, Sterling, Ill., assignor to Frantz Manufacturing Co., Sterling, Ill., a Corporation of Illinois. Filed Apr. 21, 1927. Serial No. 185,503. 4 Claims. (Cl. 292—236.)



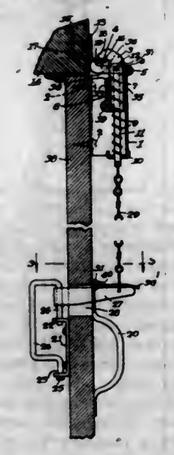
1. In a door latch mechanism, the combination of a pivoted latch bar on one side of the door, a thumb piece at one side of the door for lifting the latch bar, a duplicate thumb piece at the other side of the door for lifting the latch bar, identical means for mounting the two duplicate thumb pieces to fulcrum on their lower edges in operative position, on opposite sides of the door, one of said mounting means being in the plane of said latch bar, engaging means rigid with the latch bar and reaching laterally from the bar inside the door a distance between said identical means to directly engage each of said thumb pieces, the two thumb pieces being structurally separate and each thumb piece being operative independently of the other to lift the latch bar without disturbing the other thumb piece, together with means for engaging the latch bar to latch the door in closed position.

1,763,693. LATCH. WILLIAM D. FERRIS, Sterling, Ill., assignor to Frantz Manufacturing Co., Sterling, Ill., a Corporation of Illinois. Filed Apr. 11, 1928. Serial No. 269,262. 8 Claims. (Cl. 292—124.)



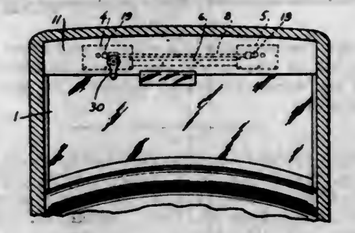
1. In a door latch mechanism, the combination of a mounting unit comprising an outer part and an inner part, the outer part being cup-like on its inner side, the inner part engaging within the outer part, having retaining means for holding the inner part in engagement with the interior of the outer part, a rotary knob swiveled only in the outer part and having its inner end provided with a swivel head disposed in the cavity of the outer portion and having a cam-like engaging portion, a latch member pioted on said inner part and provided with means comprising a reciprocating slide for engaging said portion, said slide being movable back and forth in the plane thereof and having engagement with the latch member, a spring carried by the inner part and engaging said latch member, and a strike piece for engaging said latch member.

1,763,694. DOORBOLT. WILLIAM D. FERRIS, Sterling, Ill., assignor to Frantz Manufacturing Co., Sterling, Ill., a Corporation of Illinois. Filed May 10, 1928. Serial No. 276,545. 6 Claims. (Cl. 292—110.)



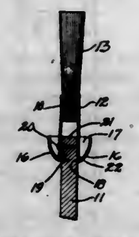
1. In overhead bolt or latch mechanism for doors, the combination of a strike piece on the building over the doorway, a vertically reciprocating bolt member, a catch pivoted on said bolt member, a pull connection attached to said catch, a spring normally holding said catch and bolt member in raised position, said bolt member having an overhanging portion to rest upon said strike piece when the door is in closed position, and said strike piece having means for engaging said catch to latch the door in closed position.

1,763,695. WINDSHIELD REGULATOR. HERBERT C. FIELD, Windsor, Ontario, Canada, and EMORY GLENN SIMPSON, Detroit, Mich., assignors to Ternstedt Manufacturing Company, Detroit, Mich., a Corporation of Michigan. Filed Jan. 9, 1929. Serial No. 331,202. 7 Claims. (Cl. 296—84.)



7. In a windshield regulator, an apertured support plate having a pressed-in seat, a housing for said seat, a shaft for said housing having a gear arranged to rotate transversely of said plate and mounted on one side of the plate, and a gear on the other side of the said plate arranged to rotate parallel to the said plate and at substantially right angles to the shaft gear and meshing with the said shaft gear through the opening in the support plate.

1,763,696. PAINTBRUSH. SAMUEL M. FRENKEL, New York, N. Y., assignor to Superset Brush Co., Inc., New York, N. Y., a Corporation of New York. Filed Feb. 6, 1930. Serial No. 426,231. 4 Claims. (Cl. 15—248.)

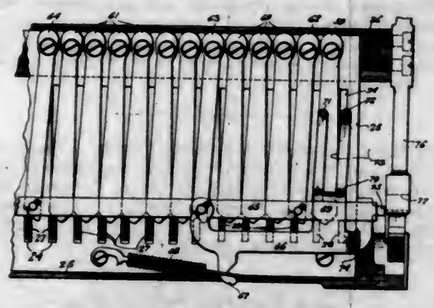


1. A paint brush having a handle, a ferrule for the bristles engaging a relatively short portion of the handle, a separate concave paint drip collector on the handle spaced at a distance from the bristles to avoid interference with the latter in the normal use of the brush, and being adjacent to the ferrule engaging portion of the handle, and a fastening means securing together and extending through the handle, the ferrule and a portion of the paint drip collector, said fastening means being positioned at the concave side of the paint drip collector and being accessible at said concave side.

1,763,697. CASH REGISTER. FREDERICK L. FULLER, Ilion, N. Y., assignor to Remington Arms Company, Inc., a Corporation of Delaware. Original application filed Nov. 19, 1918, Serial No. 263,125. Divided and this application filed May 4, 1926. Serial No. 106,598. 30 Claims. (Cl. 235—130.)

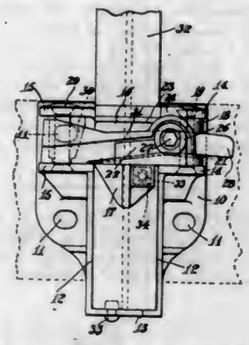
1. In a machine of the class described, the combination of a series of keys, a special key having an initial and a

final movement in one direction, pendants for the series of keys constructed to prevent the operation of more than one key in the series, a normally effective locking device



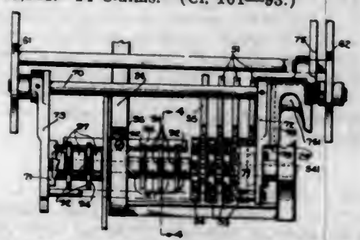
for holding the pendants in a position to prevent poeration of any key of the series, and means controlled by the special key during its initial movement for disabling the locking device.

1,763,698. CANE CAR AND THE LIKE. WILLIAM BURR GREGG, Hackensack, N. J., assignor to The Gregg Company, Limited, New York, N. Y., a Corporation of New York. Filed June 29, 1928. Serial No. 289,184. 4 Claims. (Cl. 105—383.)



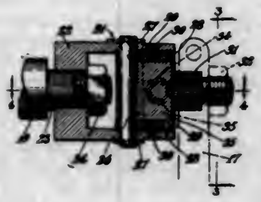
1. In a cane car or the like, the combination of a stake, a releasing stake pocket having a hinged front closure and means including a screw lock bolt set in a threaded opening surrounded by an outwardly projecting annular rim for locking the same in closed position, and means carried by the stake and effective to prevent the removal of the stake from the stake pocket when the front thereof is closed.

1,763,699. CASH REGISTER. CHARLES W. GREEN, Ilion, N. Y., assignor to Remington Arms Company, Inc., a Corporation of Delaware. Filed Aug. 30, 1924. Serial No. 735,148. 14 Claims. (Cl. 101—93.)



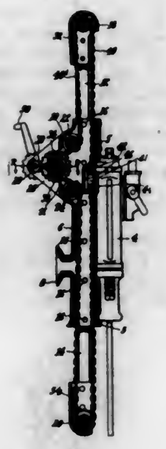
1. In a cash register, the combination with a record strip, of a plurality of axially adjustable printing members formed with edges capable of printing lines upon the record strip, a platen common to the printing members, and means for actuating the platen.

1,763,700. STEERING MECHANISM. JOHN I. GRUSS, Nashua, N. H. Filed Jan. 18, 1929. Serial No. 333,344. 4 Claims. (Cl. 74—38.)



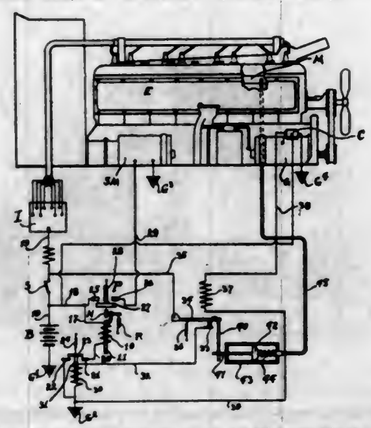
2. The combination in the steering mechanism of an automotive vehicle of a cylindrical member secured to the steering yoke, a second cylindrical member secured to the pitman arm and pivoted for oscillation within the first member, said first member having a layer of resilient material surrounding the second member for cushioning the oscillation of the second member, said second member being positively rotated by rotation of the first member.

1,763,701. FEEDING DEVICE FOR ROCK DRILLS. CHARLES C. HANSEN, Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed Feb. 27, 1929. Serial No. 342,998. 2 Claims. (Cl. 255—45.)



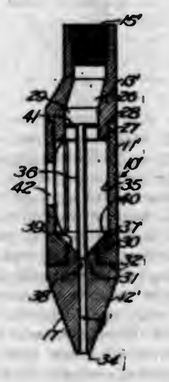
1. In a rock drill feeding device, the combination of a rock drill shell having an opening in the bottom wall thereof, a rock drill slidably mounted on said shell, arms extending longitudinally from said shell, sprockets mounted on the extremities of the arms, a pair of plates secured to the shell adjacent said opening in the shell, a sprocket mounted between said plates in alignment with said opening, a crank mounted laterally on said plates, a gear train supported by said plates and operatively connecting the crank and the sprocket between the plates, a chain attached to the rock drill, said chain extending through the shell and being trained over the sprockets at the ends of the arms and over the sprocket between the plates, said chain being adapted to transmit movement from the crank to the rock drill, and a ratchet mounted on the crank and adapted to cooperate with a pawl to maintain the rock drill in a fixed position with respect to the shell.

1,763,702. STARTER FOR INTERNAL-COMBUSTION ENGINES. JOHN HASSELBRING, Jr., New York, N. Y., assignor to Royalty Holding Corporation, Brooklyn, N. Y., a Corporation of New York. Filed Jan. 10, 1929. Serial No. 331,683. 8 Claims. (Cl. 290—37.)



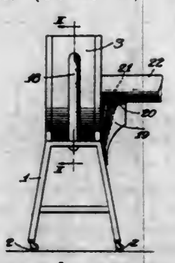
1. In a starter for internal combustion engines, of the class in which power from an electric source is temporarily applied by an electric motor to an engine through a coupling having a movable member actuated by a lever, a circuit from said source to said motor, a switch in said circuit acted upon by said lever, a circuit from said source, an ignition system included in said last named circuit, and a generator driven from said engine, an electro-receptive device having a winding, mechanical connections between said device and said lever, a normally open magnetic switch having a winding and contacts, a circuit from said source including said contacts and the winding of said electro-receptive device, a normally closed magnetic switch having a winding and contacts, the contacts of which control the circuit including the winding of said normally open magnetic switch, a manually operative switch simultaneously controlling the circuits from said source to said ignition system, and to the contacts of said normally closed magnetic switch and the winding of said normally open magnetic switch, and electrical connections between said generator and the winding of said normally closed magnetic switch.

1,763,703. OIL-WELL FISHING TOOL. FRANK J. HINDERLITER, Tulsa, Okla., assignor to Hinderliter Tool Company, Tulsa, Okla., a Corporation of Oklahoma. Filed May 25, 1927. Serial No. 194,015. 16 Claims. (Cl. 294—113.)



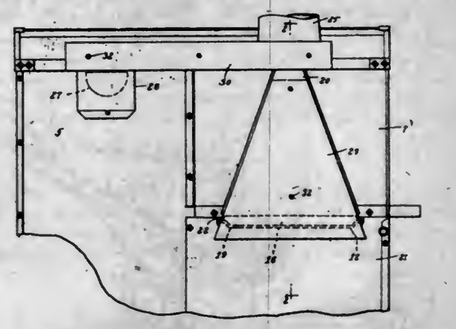
1. In combination in a tool for removing broken drill parts and the like from a well, a member adapted to be lowered to the bottom of a well and having a pocket for receiving a broken drill part and means connected with said member operable to displace the broken drill part from the bottom of the well and to cause the part to crawl upwardly alongside said means into said pocket.

1,763,704. METHOD OF HEAT TREATING BITS. FRANK J. HINDERLITER, Tulsa, Okla. Original application filed Feb. 23, 1927, Serial No. 170,187. Divided and this application filed Mar. 21, 1929. Serial No. 348,696. 4 Claims. (Cl. 148—1.)



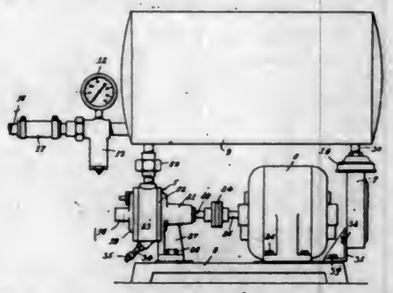
2. The method of heat treating the end of a bit and the like which consists in forming a substantially true ring of flame about and concentric with the nose end of the bit being treated but out of contact with the bit and creating a fire pocket adjacent the nose end of the bit so as to enable the same to be heated prior to the web portion of the bit thereby causing a substantially even heating of the different portions at said nose end of the bit.

1,763,705. GAS RANGE. STANLEY H. HOBSON, Rockford, Ill., assignor to Geo. D. Roper Corporation, Rockford, Ill., a Corporation of Illinois. Filed June 13, 1927. Serial No. 198,462. 2 Claims. (Cl. 126—39.)



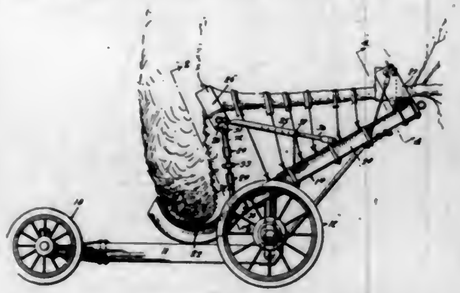
1. A gas range having a closed cooking top, a shallow combustion and flue chamber beneath the cooking top to which air is admitted only through secondary air openings and having a relatively wide outlet opening across one end, Bunsen burners arranged so that their flames project through said secondary air openings and entrain secondary air for supporting combustion for heating the cooking top, an upright flue conduit having its lower end corresponding in area and connected to the said outlet opening and having its upper end restricted to provide an outlet opening of predetermined area, and a flue structure into which said restricted outlet end of the upright flue discharges and which is adapted to be connected to a chimney or conduit for carrying the products of combustion away, said flue structure having an inlet opening separate from the upright flue communicating with the atmosphere, the area of said restricted outlet opening being so proportioned with respect to the secondary air inlet openings of the combustion chamber as to effect a balanced elimination of products of combustion without excess of secondary air entrainment under varying draft and atmospheric conditions.

1,763,706. WATER-SYSTEM PUMPING APPARATUS. STANLEY H. HOBSON, Rockford, Ill., assignor to Geo. D. Roper Corporation, Rockford, Ill., a Corporation of Illinois. Filed July 13, 1928. Serial No. 292,477. 5 Claims. (Cl. 103—7.)



1. In a pumping apparatus of the character described, the combination in a self-contained unit, of a supporting base, a pump mounted on said base, a motor connected therewith for driving the same, the motor also being mounted on said base, a storage tank disposed above the pump having one end thereof directly connected with the outlet side of the pump in close coupled relation therewith, the connection serving to support the one end of the tank on the pump, and means for supporting the other end of said tank on the base, comprising a pressure regulator for automatically controlling the circuit for the motor, the same being disposed vertically with the upper end thereof provided with a diaphragm casing in fluid communication with the tank, and the lower end thereof fastened to the supporting base.

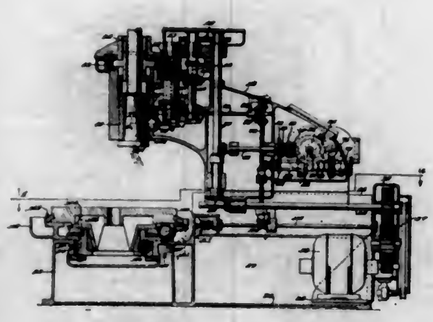
1,763,707. TREE-TRANSPLANTING DEVICE. CHARLES F. IRISH, Bratenahl, Ohio. Filed Apr. 1, 1929. Serial No. 351,492. 3 Claims. (Cl. 214—3.)



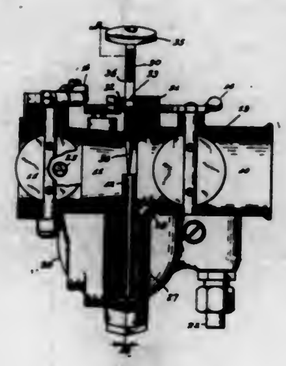
3. In a device for transporting trees, a frame member, a cradle secured to one end of said frame adapted to support the root mass of a tree, a saddle on the other end of the frame for holding the trunk of the tree, telescopical struts extending from the top side of said frame, a second saddle supported by said struts adjacent said cradle adapted to receive said trunk near its root mass to prevent lateral shifting of the same on the frame, and telescopical braces extending from said second saddle to said frame for holding said saddle in the desired longitudinally adjusted position relative to said cradle.

1,763,708. UNIVERSAL MILLING MACHINE. JOHN R. JOHNSON, Rockford, Ill., assignor to The Ingersoll Milling Machine Company, Rockford, Ill., a Corporation of Illinois. Filed Nov. 8, 1921. Serial No. 513,842. 60 Claims. (Cl. 90—15.)

1. A milling machine comprising a bed, a spindle slide housing mounted on horizontal ways on the bed to move forwardly and backwardly, a cutter spindle on said slide on a vertical axis, a table saddle mounted on the bed to move laterally with respect to the spindle slide, a rotary work table mounted on said saddle to revolve about a vertical axis on ways substantially co-planar with said horizontal spindle housing ways, and mechanism on the spindle slide for driving the spindle having an extension between the slide and the bed and between the bed and the saddle to transmit lateral feed to the saddle.

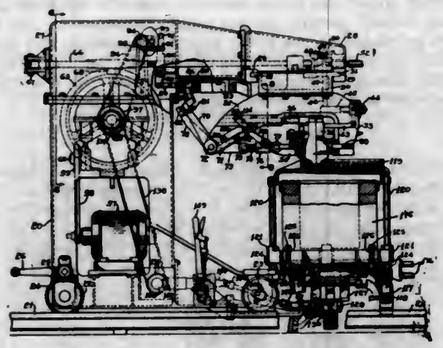


1,763,709. CARBURETOR. MALDWYN E. JONES, Indianapolis, Ind., assignor to The Wheeler-Schebler Carburetor Co., Indianapolis, Ind., a Corporation of Indiana. Filed July 22, 1926. Serial No. 124,219. 2 Claims. (Cl. 261—44.)



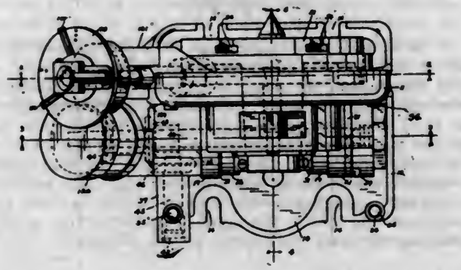
1. In combination with a carburetor having an air and fuel mixture conduit including a venturi and a throttle in the said conduit, a fuel discharging nozzle member discharging into the said venturi at substantially the most restricted portion of the venturi, a member slidable transversely of said venturi in approximate alignment with the said nozzle member to vary the effective of the venturi, the said member having a substantially arcuate lower face conforming to the configuration of the venturi when the said member is at its uppermost position, the said nozzle member being vented to the intake side of the said conduit ahead of the said restriction, and a tapered regulating needle carried by the said slidable member, said tapered needle being arranged to progressively enter said fuel nozzle member to decrease the effective discharge area thereof in proportion to the restriction of the venturi by said slidable member.

1,763,710. METAL-CASTING APPARATUS. AUGUST KADOW, Toledo, Ohio, assignor to The Vacuum Casting Company, Toledo, Ohio, a Corporation of Ohio. Filed June 2, 1928. Serial No. 282,368. 19 Claims. (Cl. 22—73.)



1. In apparatus of the character described, a crucible, a plurality of molds, means to move the molds in succession into the same position over the crucible, each mold having an inlet opening in its under side, and means to raise the crucible to immerse in molten metal within the crucible the inlet of a mold thereover.

1,763,711. MACHINE-TOOL ATTACHMENT. EDWARD J. KEARNEY, Wauwatosa, Wis., assignor to Kearney & Trecker Corporation, West Allis, Wis. Filed Apr. 24, 1923. Serial No. 634,292. 38 Claims. (Cl. 90—58.)



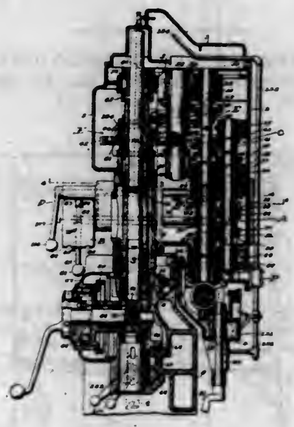
1. In a machine tool attachment, the combination with a pair of hingedly related members, of a central lug connected with one member, a set of clamping lugs connected with the other member and disposed adjacent opposite sides of said central lug, a second set of clamping lugs disposed outside of said first set, washers interposed between certain of said lugs, the adjacent faces of washers and lugs being accurately surfaced and closely fitted, and a clamp arranged to act throughout the series of said lugs and washers whereby to set up clamping pressures through said second and first sets of clamping lugs upon each other and said central lug.

16. In a machine tool attachment adapted for angular adjustment bodily upon a milling machine table, the combination with a base and a work support hingedly and rotatably mounted thereon, of a drive shaft for said work support extending axially of said hinge and provided at one side thereof with a coupling, a secondary drive shaft connected with the first at an angle corresponding approximately to the angle of adjustment for which said attachment is designed and disposed at the other side of the hinge from said coupling, said secondary drive shaft being provided also with a coupling and the coupling portions of the respective drive shafts being arranged to project in approximately corresponding positions in the various positions of bodily angular adjustment of the attachment, whereby one or the other may be presented to a fixed source of power on a machine tool table.

1,763,712. PROCESS OF MAKING CALCIUM MOLYBDATE. ALAN KISSOCK, Forest Hills, N. Y. Filed Nov. 6, 1926. Serial No. 146,849. 12 Claims. (Cl. 23—51.)

12. The process of producing calcium molybdate, consisting in roasting molybdenite, mixing the roasted product with lime, and calcining the mixture.

1,763,713. SELF-OILING CENTRALIZED CHANGE GEARS. DAVID C. KLAUSMEYER, Cincinnati, Ohio, assignor to The Cincinnati Bickford Tool Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Jan. 6, 1925. Serial No. 804. 9 Claims. (Cl. 74—57.)



1. A drill-head combining a closed oil-tight casing comprising a plurality of complemental sections secured together; a tool spindle rotatably journaled wholly in one of said casing sections; a power shaft; and driving mechanism including first, second and third speed-change mechanisms intermediate said power-shaft and said spindle, two of said speed change mechanisms being located wholly within one of said casing sections and arranged one above the other.

1,763,714. FIREARM. CRAWFORD C. LOOMIS, Ilion, N. Y., assignor to Remington Arms Company, Inc., a Corporation of Delaware. Filed June 7, 1927, Serial No. 197,118. Renewed Apr. 16, 1930. 13 Claims. (Cl. 42—17.)



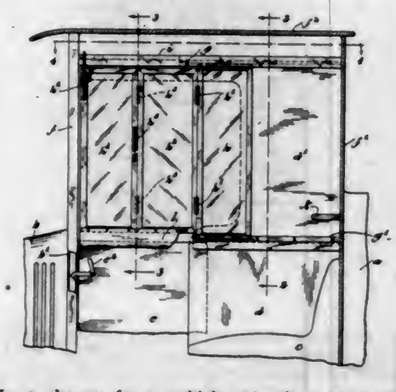
1. In a firearm, the combination of a receiver, a reciprocating slide, a breech block supported on the slide, a carrier having arms pivoted in the receiver one located at each side of the breech block between which the breech block is adapted to pass, said carrier arms being connected at their free ends by an integral shelf, and means for raising the carrier during the rearward movement of the breech block and then lowering the carrier to permit the shelf to clear the slide during the forward movement of the breech block.

10. In a firearm, the combination of a receiver having magazine and firing chamber entrances, a carrier adapted to be positioned to receive a fresh shell at the magazine entrance, a reciprocable breech action, means whereby the carrier is positioned adjacent to and below the firing

chamber and then depressed to position it adjacent the magazine entrance to receive a fresh shell during one movement of the breech action, and then elevated to position the carrier and fresh shell adjacent the firing chamber entrance to permit the breech action to force the shell into the firing chamber during the other movement of the breech action, said carrier having a position intermediate the aforementioned positions when the action is closed.

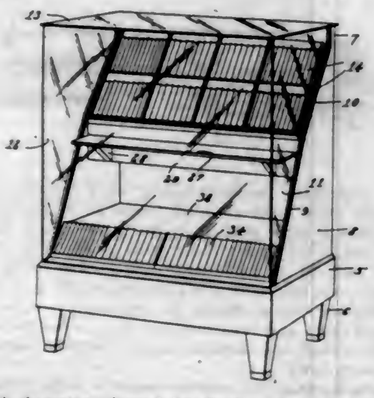
13. In a firearm, the combination of a reciprocating breech block, a receiver provided with a locking shoulder adapted to co-operate with the breech block, a recess in said receiver forward of said shoulder provided with a slot, a bar received by said slot, means for securing the bar to the receiver, and a channel in said breech block co-operating with said bar.

1,763,715. VEHICLE BODY CONSTRUCTION. ROBERT D. MARX, Brooklyn, N. Y. Filed May 22, 1929. Serial No. 365,119. 5 Claims. (Cl. 296—47.)



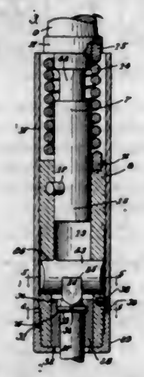
1. In a closure for a vehicle cab, the combination of upper and lower guideways, a rear sliding door member supported and guided by said guideways, a hinged door member supported by the sliding door member forward of the same, and an upper guideway independent of the first named guideways and with which the hinged member is engaged at its forward edge.

1,763,716. SHOW CASE. HENRY G. MICHAELSON, Rockford, Ill. Filed July 7, 1928. Serial No. 290,912. 2 Claims. (Cl. 312—128.)



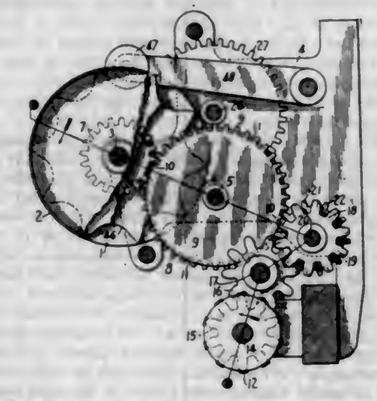
2. A showcase adapted for display of small articles, like fountain pens, and larger articles, like desk sets, comprising a frame having bottom and back walls of suitable opaque material and side walls suitably of the same material of acute triangular form, a lower display platform in said case between the base portions of the side walls adapted to receive the larger articles for display, an upper display platform for smaller articles disposed in said case between the top portions of the side walls and supported thereby above the lower platform over the rearward portion thereof, leaving enough space therebetween for the articles placed on the lower platform, glass top and front walls for said case and glass side walls for the case of acute triangular form fitting in between the front and top walls and the aforesaid opaque side walls.

1,763,717. TAPPING CHUCK. EVERETTE K. MORGAN, Rockford, Ill., assignor to The Ingersoll Milling Machine Company, Rockford, Ill., a Corporation of Illinois. Filed Aug. 11, 1924. Serial No. 731,359. 4 Claims. (Cl. 279—1.)



1. In a chuck, the combination of a driving member, a driven member, one of said members having an axial recess therein and the other having an axial part slidably received therein whereby the members are held positively in axial alignment, means providing a positive but lost motion connection between said members without affecting the axial relationship therebetween, and a torsion spring positively connected at opposite ends with said members to provide a yielding driving connection therebetween limited positively by said lost motion connection also without affecting the axial relationship of said members.

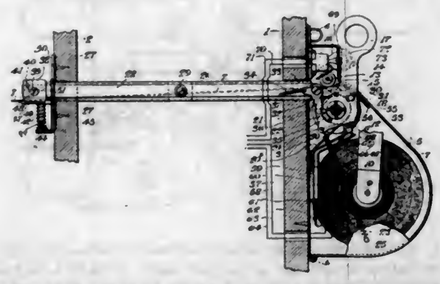
1,763,718. PENNY-MULTIPLE REGISTER. JOHN F. OHMER, Jr., Dayton, Ohio, assignor to Ohmer Fare Register Company, Dayton, Ohio. Filed Mar. 23, 1922. Serial No. 545,941. 26 Claims. (Cl. 235—44.)



1. In a mechanism of the character described, an indicator comprising two members separately rotatable about

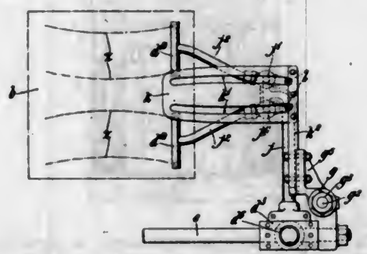
a common axis, a gear connected with each of said members mutilated gears cooperating with the respective first mentioned gears, and means for simultaneously actuating said mutilated gears, said mutilated gears being so arranged that they will successively engage the respective first mentioned gears.

1,763,719. CALL REGISTER. ARTHUR PENTECOST, Montclair, N. J. Original application filed Dec. 7, 1925, Serial No. 73,672. Divided and this application filed July 19, 1927. Serial No. 206,812. 6 Claims. (Cl. 281—13.)



1. In a device of the class described, means forming a housing for a supply of record tape, said housing having an opening in its wall through which messages may be inscribed on the tape, means for supporting the tape in the housing in a manner to pass the tape by the opening, a lever and ratchet mechanism for feeding the tape in correspondence to the extent of the manipulations thereof, a shutter for controlling the opening in the housing and operable by the lever and ratchet mechanism in synchronism with the feeding of the tape, said shutter being reciprocated by the lever oscillations to an extent corresponding therewith, and a signal operated by the lever and ratchet mechanism and functioning at all times during the opening of the shutter.

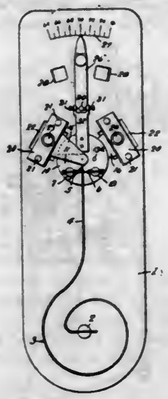
1,763,720. MACHINE FOR BAKING WAFERS AND THE LIKE. WILLIAM EDWARD PRESCOTT, London, England, assignor to Baker Perkins Company, Inc., Saginaw, Mich., a Corporation of New York. Filed June 4, 1925, Serial No. 34,853, and in Great Britain June 27, 1924. 5 Claims. (Cl. 107—27.)



1. A feed nozzle for liquid wafer material having means for producing two separate movements in relation to an associated mould viz, a depositing movement longitudinally of the mould and an arcuate movement to and away from the mould and means for imparting a curvilinear movement to the nozzle during longitudinal movement.

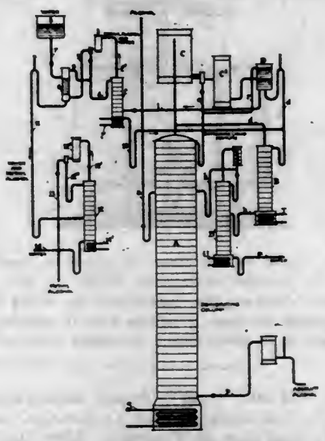
1,763,721. AUTOMATIC HEAT REGULATOR. MARC RESEK, Cleveland Heights, Ohio, assignor to Perfection Stove Company, Cleveland, Ohio, a Corporation of Ohio. Filed Dec. 4, 1926. Serial No. 152,529. 22 Claims. (Cl. 200—139.)

1. In an instrument of the character set forth, the combination of spaced contact points movable as a unit, a contact member arranged to swing between and into engagement with said contact points, stop means limiting



the movement of the contact points to less than the possible movement of the contact member, and thermosensitive means for moving the contact member.

1,763,722. PROCESS FOR THE DEHYDRATION OF IMPURE ETHYL ALCOHOL. ELOI RICARD, Melle, France, assignor, by mesne assignments, to U. S. Industrial Alcohol Co., New York, N. Y., a Corporation of West Virginia. Filed Nov. 20, 1925, Serial No. 70,319½, and in Belgium Nov. 20, 1924. 11 Claims. (Cl. 202—42.)

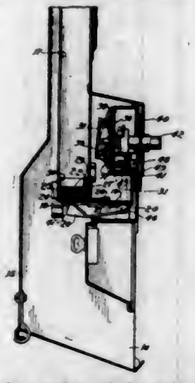


1. The process which comprises dehydrating aqueous ethyl alcohol containing low boiling impurities compared with the ethyl alcohol by distilling off an azeotropic mixture of a minimum boiling point with the aid of benzol as an entraining liquid, condensing the vapors of the azeotropic mixture, allowing the condensate to separate into liquid layers, decanting the layer containing the principal part of the low boiling impurities and treating the same so as to remove said impurities.

1,763,723. VENDING MACHINE. MYRON H. RICHARDSON and ALFRED D. ANTOINE, Chicago, Ill., assignors to Advance Machine Company, Chicago, Ill., a Corporation of Illinois. Original application filed June 23, 1924, Serial No. 721,661. Divided and this application filed June 20, 1928. Serial No. 286,951. 5 Claims. (Cl. 312—67.)

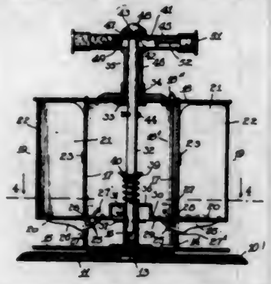
1. A vending machine including a holder for the articles to be vended, a support for receiving the articles from the holder, an element secured to the bottom of the support, a portion of the said element, extending around the edges of

the support over the top thereof and terminating in close proximity to the upper face of the support for holding down a comparatively thin article when ejected by the ejector, the said article passing between said face of the



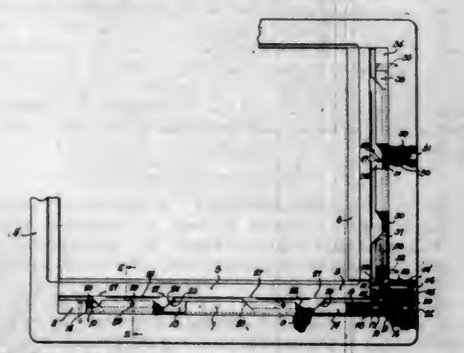
support and the said portion of the said element adjacent thereto, an ejector for the articles, and means for actuating the ejector, the said ejector also passing between the said support and the adjacent portion of said element.

1,763,724. COLLAPSIBLE CONTAINER. AMBROSE H. ROSENTHAL, Brooklyn, N. Y. Filed Sept. 17, 1929. Serial No. 393,188. 16 Claims. (Cl. 312—155.)



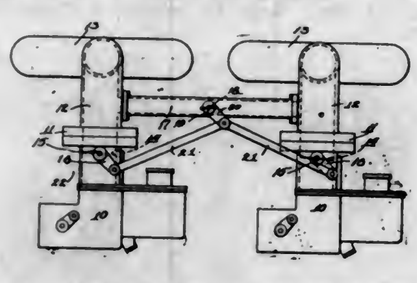
1. In a device of the class described, a center post, a plurality of upright containers hinged to the post, and means for releasing the containers to swing outwardly simultaneously to open positions and to return the same simultaneously to their closed positions against said post.

1,763,725. CHASE. CARL C. SWEET, Milwaukee, Wis., assignor to Claybourn Process Corporation, Milwaukee, Wis., a Corporation of Wisconsin. Filed May 25, 1929. Serial No. 366,013. 7 Claims. (Cl. 254—42.)



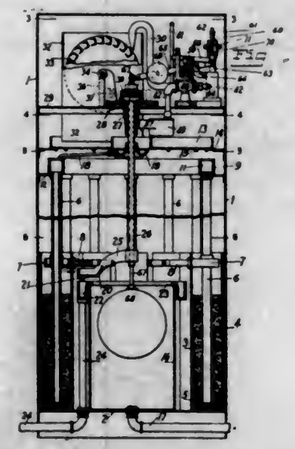
3. In a chase, the combination of adjacently disposed quoins, each quoin including a channelled frame, cooperative wedges slidably mounted in each of said frames, a fixed wedge at the end of each frame, and means for transmitting the thrust of said wedges to the chase.

1,763,726. DUPLEX CARBURETOR SYSTEM. HAROLD H. TIMIAN, Indianapolis, Ind., assignor to Wheeler-Schebler Carbureter Company, Indianapolis, Ind., a Corporation of Indiana. Filed Dec. 14, 1928. Serial No. 325,964. 3 Claims. (Cl. 123—52.)



1. In combination in a multi-cylinder engine comprising a plurality of groups of one or more cylinders, separate carbureting systems for each group of cylinders, a common control for said carbureting systems, a control valve in said bypass passage and means connecting said valve to said common control adapted to operate said valve.

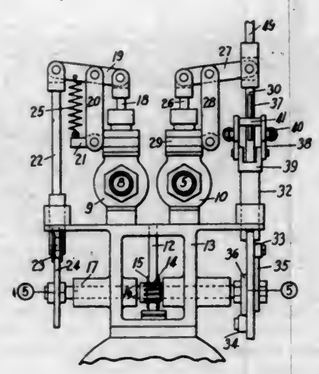
1,763,727. WATER-SOFTENING APPARATUS. EDWARD T. TURNER, Dayton, Ohio. Filed July 9, 1925. Serial No. 42,453. 35 Claims. (Cl. 210—24.)



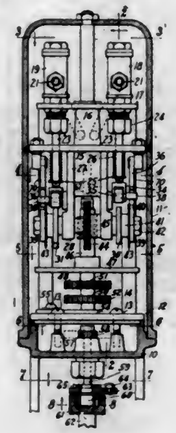
1. In a water softening mechanism, a plurality of stationary containers for water softening material, means for delivering hard water to said containers, means for delivering regenerating solution to said containers successively, each of said containers having a single outlet for softened water and regenerating solution, a receptacle to receive softened water from said outlets, and means for diverting the regenerating solution from said receptacle as said regenerating solution is discharged through said outlets.

1,763,728. VALVE-ACTUATING DEVICE. EDWARD T. TURNER, Dayton, Ohio. Filed Aug. 10, 1925. Serial No. 49,361. 15 Claims. (Cl. 137—144.)

1. In an apparatus of the character described, two pipes, a valve to control the flow of liquid through one of said pipes, a longitudinally reciprocatory actuating member operatively connected with said valve, and means for imparting operative movement to said actuating member at intervals determined by the quantity of water passing through the other of said pipes.

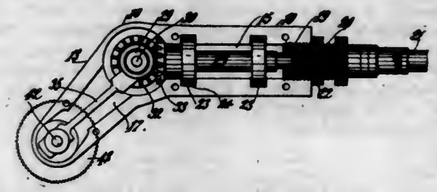


1,763,729. VALVE-ACTUATING DEVICE. EDWARD T. TURNER, Dayton, Ohio. Filed Jan. 3, 1927. Serial No. 158,712. 15 Claims. (Cl. 137—145.)



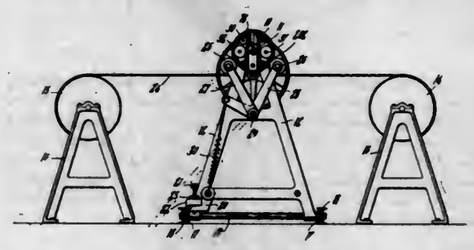
1. In a mechanism of the character described, a supporting structure, a driving member mounted at one end of said structure, a valve mounted at the other end of said structure and comprising a movable valve member having a reciprocatory stem, a spring to move said valve toward its closed position, a cam arranged in line with said stem and acting thereon to move said valve member to its open position, a detent to retain said valve member in its open position, a tripping device to move said detent to an inoperative position and release said valve member, and means comprising a gear train for operatively connecting said driving member with said cam and said tripping device.

1,763,730. SURGICAL SAW. HERMAN LE ROY VON LACKUM, deceased, New York, N. Y., by Herman Julius Von Lackum, administrator, Dysart, Iowa. Filed Feb. 7, 1929. Serial No. 338,258. 16 Claims. (Cl. 128—317.)



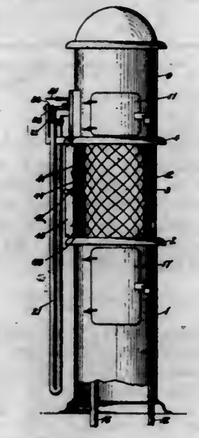
1. A surgical instrument comprising a handle; an oscillatory member mounted thereon; means for imparting oscillation to said member; and a circular saw angularly adjustably mounted on said member co-axial with the axis of the oscillation the saw being oscillatory and operative in its different positions of adjustment.

1,763,731. AUTOMATIC LOOPER AND KNOTTER. HANS H. WANDERS, Boston, Mass. Filed May 26, 1926. Serial No. 111,852. 14 Claims. (Cl. 112—2.)



1. A machine of the class described comprising a shaft and a cylinder mounted co-axially for relative rotation, a group of members carried by said cylinder, and another group of members carried by said shaft and cooperating with the first said group to form successive loops from a strand, cut off lengths therefrom, and knot together the ends of each length.

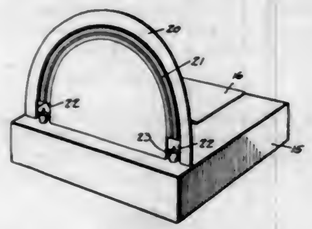
1,763,732. DEVICE FOR DISPENSING LIQUIDS. GEORGE FRANKLIN WENTZ, Colorado Springs, Colo. Filed Dec. 2, 1925. Serial No. 72,695. 10 Claims. (Cl. 221—100.)



4. In a liquid dispensing device, the combination of a container, an inlet passageway therefor, an outlet passage-

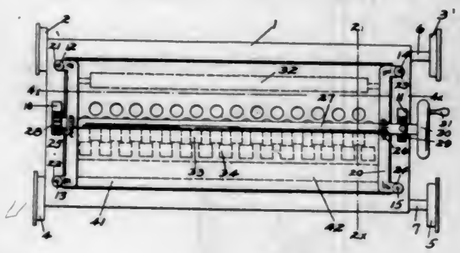
way leading from the bottom of the container to a higher point, a dispensing nozzle connected with the discharge passageway, means associated with said nozzle for creating a partial vacuum in the discharge passageway to draw liquid from the container and discharge the same through the nozzle, a vertically adjustable pipe in the shape of an inverted U with one leg extending through the top of the container and the other outside of the same and in communication with the discharge passageway, whereby to break the vacuum in the latter when the level of the liquid in the container is lowered to the lower end of the first-mentioned leg.

1,763,733. GIFT-DISPENSING APPARATUS. ALICE C. WESTGATE, San Fernando, Calif. Filed Dec. 13, 1927. Serial No. 239,751. 3 Claims. (Cl. 272—8.)



1. An apparatus of the character described comprising a board in representation of a rainbow having chutes thereon provided with entrance openings through which articles may be deposited into the chutes, and exit openings from which the articles are discharged, the exit openings being disposed adjacent the ends of the rainbow to cause the articles to appear as being discharged from the ends of the rainbow.

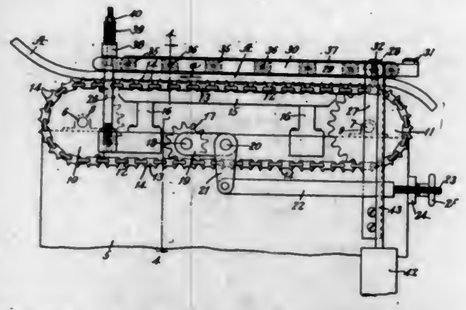
1,763,734. APPARATUS FOR MARKING PATTERNS ON CLOTH. JAMES B. WHITTAKER, Rochester, N. Y. Filed May 28, 1929. Serial No. 366,723. 8 Claims. (Cl. 101—123.)



1. In an apparatus for marking cloth, the combination of a frame adapted to travel over the cloth, a row of marking devices on said frame, patterns on the cloth having means on the edge thereof to cause the marking devices to deposit marking material on the cloth as they pass over the edge of the patterns, while the rest of the marking devices remain idle.

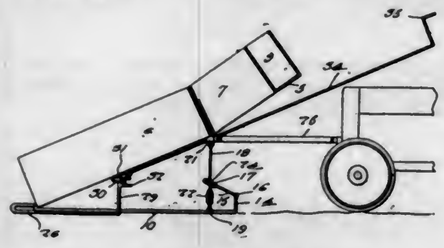
1,763,735. FEEDING MECHANISM FOR SHEET MATERIAL. HERBERT H. WYDOM, Boston, Mass., assignor, by mesne assignments, to Hood Rubber Company, Inc., Wilmington, Del., a Corporation of Delaware. Filed Apr. 23, 1928. Serial No. 272,008. 5 Claims. (Cl. 271—2.1.)

1. A feeding mechanism for sheet material having, in combination, an endless flexible feeding member, spurs projecting therefrom and penetrating material resting thereagainst, a frame, a plurality of rollers rotatably mounted upon said frame, an endless belt movable upon



said rollers and engaging said sheet material and holding the latter in contact with the points of said spurs, and yielding means engaging said frame and forcing said belt against the surface of said sheet material.

1,763,736. SNOWPLOW. PETER E. ADAMS, Brule, Wis. Filed Mar. 15, 1928. Serial No. 261,847. 3 Claims. (Cl. 37—49.)



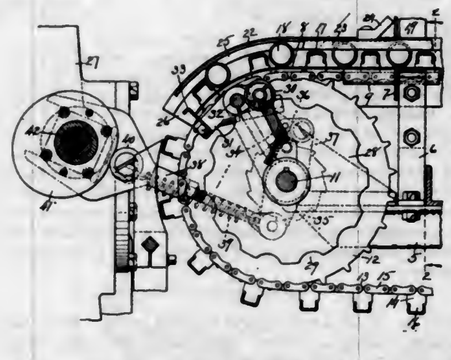
3. In combination, a plow, runners for the plow, a pair of auxiliary runners, means pivotally connecting the rear ends of the auxiliary runners with the plow, means for swinging the auxiliary runners, and pin and slot connections between the forward portions of the auxiliary runners of the plow.

1,763,737. CURTAIN OR OTHER ARTICLE SUPPORT OR BRACKET. ELIOT ARMSTRONG, Niagara Falls, N. Y., assignor to Niagara Metal Stamping Corporation, Niagara Falls, N. Y. Filed July 15, 1925. Serial No. 43,758. 12 Claims. (Cl. 156—33.)



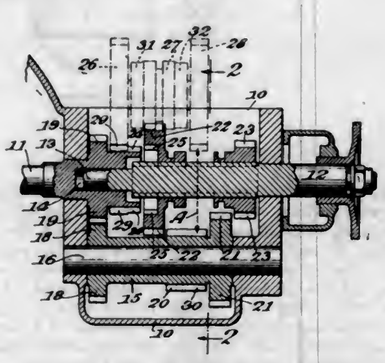
1. In a bracket of the character described, the combination of an arm having an end thereof formed with a pair of spaced, offset portions, and an attaching member adapted to be secured to a support and including a horizontal plate having a plurality of spaced holes arranged in pairs in different angular relations to one another, whereby said end of the arm may be detachably connected to said plate so as to extend in different directions therefrom, by threading the offset portions of said arm through the different pairs of apertures, the directions in which the arm extends depending upon the particular pair of apertures with which the offset portions are engaged.

1,763,738. CONVEYER. SAMUEL W. AVIS, West Hartford, Conn., assignor to The Fuller Brush Company, Hartford, Conn., a Corporation of Connecticut. Filed Mar. 22, 1924. Serial No. 701,234. 16 Claims. (Cl. 198—24.)



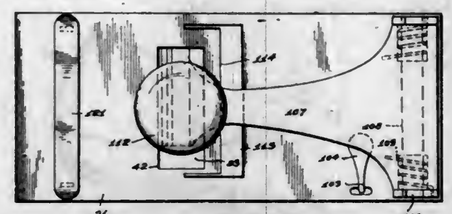
1. A conveyer comprising an endless flexible conveyer member having spaced receiving openings, a table underlying said opening to sustain articles for movement thereon by said conveyer, means for operating said conveyer member, including a driven supporting shaft therefor, and means operable by turning of said shaft for removing articles from said openings while the conveyer is moving.

1,763,739. POWER-TRANSMITTING MECHANISM. STUART G. BAITS, Grosse Pointe Park, Mich., assignor to Hudson Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed June 7, 1929. Serial No. 369,228. 4 Claims. (Cl. 74—58.)



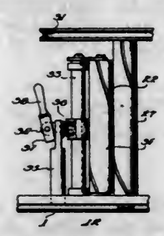
1. In a power transmitting mechanism, in combination, coaxial driving and driven shafts, a countershaft and a reverse shaft both parallel to said driving and driven shafts, gears on said driving shaft, driven shaft, and countershaft including coacting gears whereby said countershaft may be driven from said driving shaft and coacting gears whereby said driven shaft may be driven from said countershaft, a gear on said reverse shaft coacting with a gear on said driving shaft, a second gear on said reverse shaft coacting with a gear on said countershaft, a third gear on said reverse shaft coacting with a gear on said driven shaft, and means for operatively connecting said third gear alternatively with said first and second named gears on said reverse shaft, whereby said driven shaft may be driven from said driving shaft either in a forward direction independently of said countershaft through said first and third named gears or in a reverse direction through said countershaft and said second and third named gears.

1,763,740. TIME-RECORDING MACHINE. ROLLAND M. BARBOUR and HENRY H. KNIPE, Lawrenceville, Ill. Filed Oct. 31, 1927. Serial No. 229,938. 4 Claims. (Cl. 234—57.)



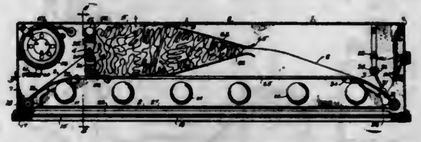
1. In a time recording apparatus having a support and adjustable time printing means carried by the support, the combination of a ticket shifting device having a forward starting position with relation to the printing means, and means to shift the ticket shifting device rearwardly with respect to the printing means whereby the time recorded at the end of a period may be printed upon the ticket above the time recorded at the beginning of the period.

1,763,741. DISPLAY DEVICE. HARRY B. BARKER, Chicago, Ill., assignor, by mesne assignments, to Charles W. Raynor, New York, N. Y. Filed Jan. 19, 1928. Serial No. 247,917. 8 Claims. (Cl. 40—32.)



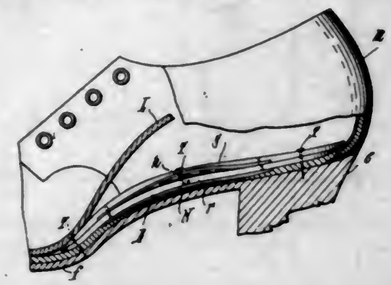
1. In a device of the class described, a supporting frame, a plurality of rollers journaled in rigid position on said frame, an endless belt supported in edgewise position by said rollers, means for rotating one of said rollers to drive said belt, an idler roller swingably mounted on said frame adjacent said driving roller, yielding means for normally urging said idler roller toward said drive roller to grip said belt therebetween, and manually operable means for retracting said idler roller from frictional contact with said belt, said drive roller having a helical groove in its peripheral surface for aiding its frictional grip on said belt.

1,763,742. DISPLAY SIGN. HARRY B. BARKER, Chicago, Ill., assignor, by mesne assignments, to Charles W. Raynor, New York, N. Y. Filed Feb. 23, 1929. Serial No. 342,052. 8 Claims. (Cl. 40—32.)



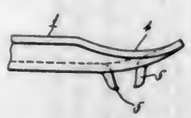
1. A display device comprising a housing, a magazine located in said housing, an endless display belt movable endwise through said magazine, said belt being adapted to accumulate in folds within said magazine, and a pair of yieldable arms mounted in said magazine in position to engage respectively opposite sides of said belt for unfolding said belt as it travels from said magazine, said yieldable arms being adjustable longitudinally of said magazine.

1,763,743. METHOD OF REPAIRING SHOES. REINHARD E. BARTELS, Lynn, Mass.; IDA M. BARTELS and R. BURLEIGH BARTELS, executors of said Reinhard E. Bartels, deceased. Filed Nov. 20, 1925. Serial No. 70,343. 1 Claim. (Cl. 12—142.)



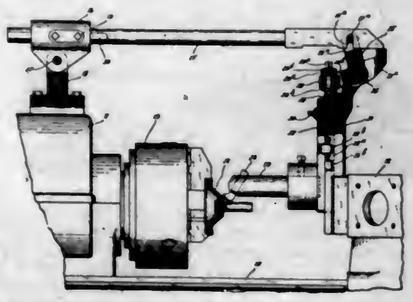
A method of repairing shoes wherein the shank stiffener is faulty, which comprises forming a hole through the shank piece and stiffener of a stiffener unit at the desired location, superimposing the unit above the old stiffener, tacking it to the shoe near its ends, and inserting a tack through said hole formed through said unit and driving said tack in a manner to cause the end of said tack to be clinched against a portion of said old stiffener.

1,763,744. SHOE-SHANK STIFFENER. REINHARD B BARTELS, Melrose, Mass. Filed July 31, 1928. Serial No. 296,571. 1 Claim. (Cl. 36—76.)



A shoe shank stiffener, comprising a strip of ductile metal having a curved end portion, portions of the material of said stiffener at said curved portion being struck out to form a pair of opposed attaching prongs projecting from the convex face of said stiffener and slightly inclined toward each other in a plane of the curvature, whereby when said convex portion is flattened said prongs will be bent further toward each other.

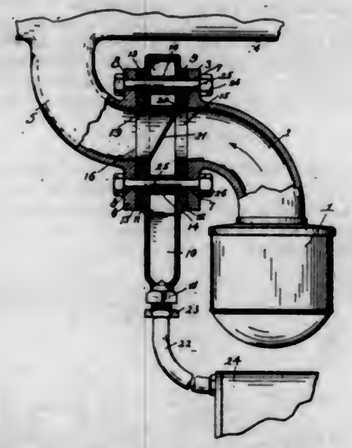
1,763,745. TAPER TURNING OR BORING MECHANISM FOR MACHINE TOOLS. JULIUS L. BAYER, Cleveland, and JOHN J. N. VAN HAMERSVELD, Cleveland Heights, Ohio, assignors to The Warner & Swasey Company, Cleveland, Ohio, a Corporation of Ohio. Filed Jan. 7, 1928. Serial No. 245,220. 21 Claims. (Cl. 29—57.)



1. The combination with a machine tool having relatively movable work and tool holding members, of means for turning or boring a tapered surface comprising an abutment adapted to be supported by the machine, a tool support mounted on said tool holding member for movement thereon at right angles to the axis of the machine, and a positive movement transmitting connecting member between the abutment and the tool support for imparting to said support a lateral movement having a fixed relation to the relative movement of the tool and work holding members during the cutting operation.

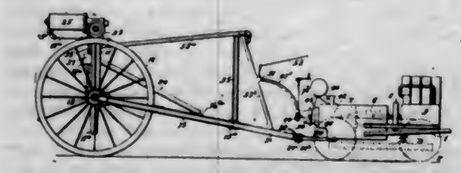
15. The combination with a machine tool having relatively movable work and tool holding members, of a normally stationary abutment, a tool support carried by the tool holding member and movable laterally with respect to the axis of the machine, and a member forming a positive connection between the abutment and the tool support and imparting to the latter a lateral movement having a fixed relation with respect to the axial relative movement between the work and tool holding members, said abutment extending longitudinally of the machine and being pivotally supported so that it may be swung to inoperative position.

1,763,746. GAS AND VAPOR SEPARATOR. PAUL BENKISER, Cleveland, Ohio. Filed Mar. 26, 1926. Serial No. 97,678. 7 Claims. (Cl. 123—119.)



1. In a device of the type described, a chamber provided with an inlet opening and an outlet opening, adapted to be interposed between the carburetor and the intake manifold of an internal combustion engine, separating means adapted to fit within the outlet opening and extending angularly to within the inlet opening, the said means being adapted to permit the passage of vaporized fuel therethrough but to prevent the passage of unvaporized fuel, and means for drawing off the unvaporized fuel into a receptacle independent of the fuel supply.

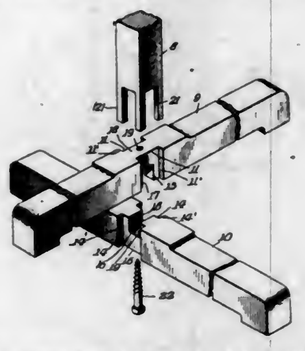
1,763,747. HOISTING AND TRANSPORTING APPARATUS. CLARENCE LEO BEST, San Leandro, Calif., assignor, by mesne assignments, to Caterpillar Tractor Co., San Leandro, Calif., a Corporation of California. Filed Sept. 10, 1924. Serial No. 736,975. 11 Claims. (Cl. 212—140.)



1. A log hoisting and transporting apparatus including a carrying vehicle comprising an arched frame, wheels

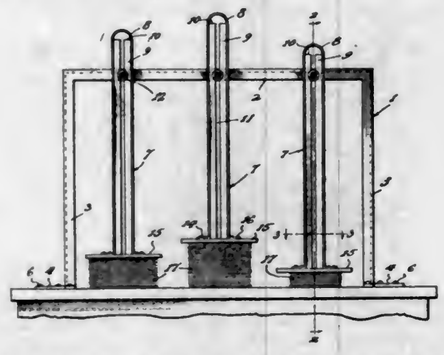
at each side of the frame for supporting the same, said arched frame having lower portions extending outwardly and downwardly at an inclination.

1,763,748. JOINT FOR COSTUMERS AND OTHER ARTICLES. HARRY SUMNER BEST, Galva, Ill., assignor to John H. Best & Sons, Galva, Ill., a Firm composed of Charlotte Sumner Best, Don Jewell Best, Leon Henson Best, and Harry Sumner Best. Filed Oct. 10, 1928. Serial No. 311,476. 3 Claims. (Cl. 20—92.)



1. A joint comprising a pair of crossed interlocked feet members and a column having a plurality of corner disposed tenons, said feet members being mortised to provide bridges and said bridges being halved to interlock, said members being of substantially the same width and the length of said bridges being substantially equal to the width of said members whereby rectangular enclosed openings are formed diagonally disposed with respect to the center of the interlocked members to receive the tenons of said column.

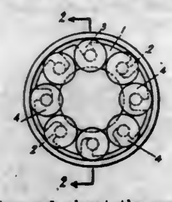
1,763,749. STATIONERY PADDING DEVICE. CLARK WATSON BOND, Denver, Colo. Filed July 27, 1928. Serial No. 295,776. 2 Claims. (Cl. 11—1.)



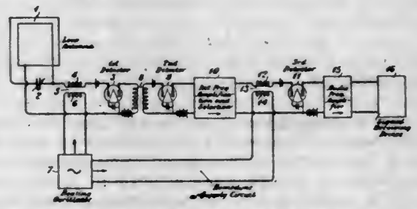
1. A device of the class described, comprising a frame for attachment to a bench, said frame including a horizontal bar, a standard form from a single length of metal bent intermediate its ends to provide sides laterally spaced providing a longitudinal slot, a clamping bolt carried by the bar and engaged in the slot for holding the standard in adjusted position, and a presser foot carried by the lower end of the standard.

1,763,750. ROLLER BEARING. AUGUSTUS D. BOOTH, Columbus, Ohio. Filed Apr. 29, 1927. Serial No. 187,517. 8 Claims. (Cl. 308—217.)

1. In a roller bearing, the combination of bearing rollers having peripheral grooves near their ends, an end ring for said rollers comprising an annular plate member whose thickness substantially corresponds to the width of the peripheral grooves of said rollers and a plurality of mortices or grooves disposed about the periphery of said end ring, said mortices or grooves being undercut and adapted to receive said rollers.

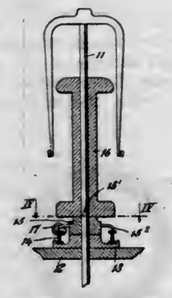


1,763,751. RADIO RECEIVING SYSTEM. RALPH BOWN, Maplewood, N. J., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Nov. 17, 1925. Serial No. 69,693. 8 Claims. (Cl. 250—20.)



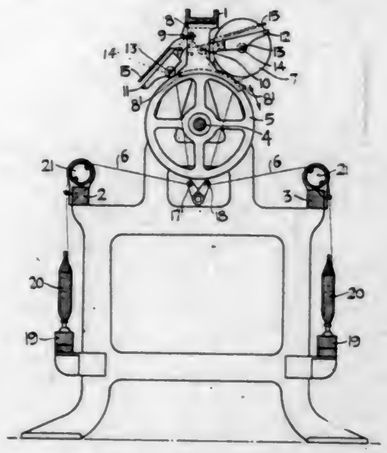
1. In a high frequency signaling system, the combination with a receiving circuit having impressed thereon a carrier frequency modulated by a signal frequency of a detector connected therewith, a source of beating oscillations of a frequency differing from the said carrier frequency connected with the said detector, a second detector having its input connected with the output of the said first detector to beat together the products of the first step of detection, means to select the band of signal frequencies based upon the carrier having the same frequency as the beating oscillations, a third detector upon which the selector band is impressed, means coupling the latter detector with the said source of beating oscillations so as to homodyne the signaling frequency superimposed upon the selected carrier and means connected with the output side of the third detector to indicate the signal.

1,763,752. APPLYING DRAG TO THE SPINNING BOBBINS IN FLYER SPINNING AND LIKE FRAMES. HAROLD ARTHUR BOYD, Shettleston, near Glasgow, Scotland. Filed Mar. 14, 1928, Serial No. 261,563, and in Great Britain Mar. 24, 1927. 4 Claims. (Cl. 118—55.)



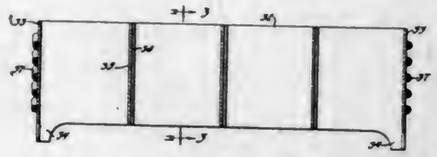
1. In a flyer spinning frame, a spinning bobbin, in combination with a ring and a segmental annular loop partly surrounding said ring adapted to impart drag to said spinning bobbin.

1,763,753. WINDING FRAME FOR YARNS OR THREADS. THOMAS ALEXANDER BOYD and HAROLD ARTHUR BOYD, Shettleston, near Glasgow, Scotland. Filed Jan. 10, 1928, Serial No. 245,702, and in Great Britain Feb. 11, 1927. 2 Claims. (Cl. 242—43.)



1. In a so-called drum winder, a split drum and means for winding two cheeses one on each side of said split drum in combination with a thread plate supported only at one end and thereby being adapted to permit insertion of the thread between the split drum and the thread plate, substantially as described.

1,763,754. EXPANSION ELEMENT. HENRI A. BAYSSELBOUT, Detroit, Mich., assignor to Copeland Products, Inc., a Corporation of Michigan. Filed Jan. 18, 1928. Serial No. 247,580. 4 Claims. (Cl. 257—36.)



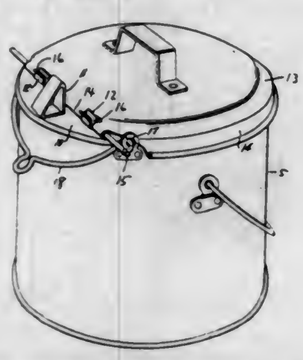
1. In a device of the class described, an elongated box-like member of heat conducting material having an open top and bottom, vertically extending members of heat conducting material extending between the sides of said member and in thermal contact therewith, and a refrigerant passage in thermal contact with said member.

1,763,755. TUBING. HARRY W. BUNDY, Detroit, Mich., assignor, by mesne assignments, to Bundy Tubing Company, Detroit, Mich, a Corporation of Michigan. Filed Nov. 4, 1927. Serial No. 231,093. 6 Claims. (Cl. 137—75.)



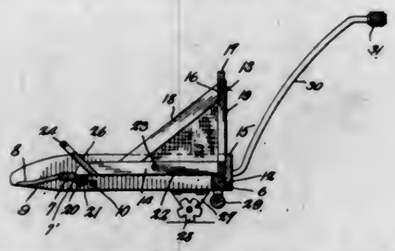
1. A tube comprising a length of stock which is made up of a ply of non-corrodible metal and a ply of corrodible metal, and which has a layer of solder on the ply of corrodible metal, said length of stock having a hollow cross-sectional shape to provide a double-thickness tube wall with the coating of solder serving to fix the double walls together, and serving to provide a substantially non-corrodible covering for the tube.

1,763,756. GARBAGE CAN. NICHOLAS CASAPOLLO, New York, N. Y. Filed July 9, 1928. Serial No. 291,310. 2 Claims. (Cl. 220—36.)



1. In a garbage can of the character described, a container open at its upper end, a pair of pin receiving members associated with the upper open end of the container, a lid for the container and a pivot pin associated with the perimeter of the lid and adapted for engagement within said pin receiving members whereby to provide a detachable and pivotal connection between the lid and the container, and means associated with the container and adapted to be moved into engagement with the pin whereby to cause the releasing of the pin from said receiving members.

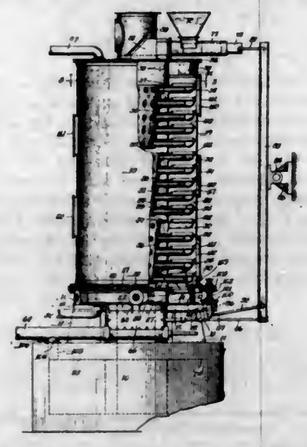
1,763,757. LAWN RAKE AND FERTILIZING MACHINE. REUBEN A. CHARLES, Great Bend, Kans. Filed Dec. 27, 1927. Serial No. 242,935. 1 Claim. (Cl. 275—2.)



A distributor of the class described including a frame, a receiver having a bottom formed of wire mesh material, supported by the frame, an inclined end gate removably supported at the forward end of the receiver to normally restrict the passage of material from the forward end of the receiver, a handle at one end of the frame, and agitating rollers on which the frame is mounted.

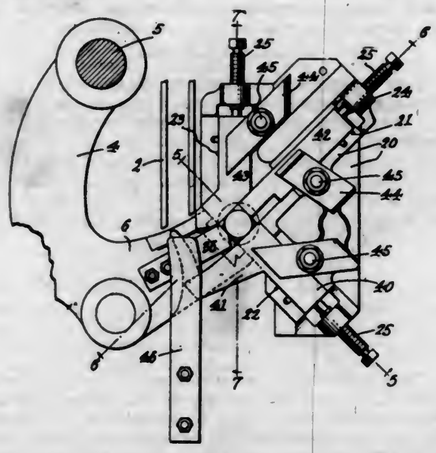
1,763,758. APPARATUS FOR SUBJECTING MATERIALS TO THE ACTION OF INDIRECT HEAT. MCGARVEY CLINE, Jacksonville, Fla., assignor to Wood Process Company, Inc., Eastport, Fla., a Corporation of Florida. Filed June 17, 1926. Serial No. 116,520. 15 Claims. (Cl. 202—104.)

1. In a retort for distilling oil from solid substances, the combination of a vertical series of spaced superposed hollow annular heating plates open through their inner peripheries, an outer shell encircling said plates, an inner shell having a closed bottom and an open top, said inner shell extending through and spaced from the inner peripheries of said plates, tubes mounted in said inner shell and extending into said hollow plates, means for charging material to be treated onto the top plate of the



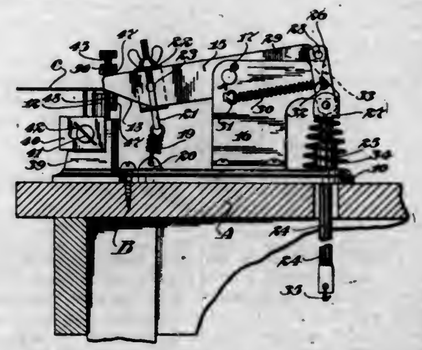
series, means for moving the material from each plate to the next underlying plate, means for supplying a gaseous heating medium between said inner shell and said plates, means for discharging spent material from the lower end of said retort, and means for conduiting vapors from said retort.

1,763,579. BOLT-TRIMMING MACHINE. WILLIAM L. CLOUSE, Tiffin, Ohio, assignor to The National Machinery Co., Tiffin, Ohio. Filed Nov. 13, 1926. Serial No. 148,291. 16 Claims. (Cl. 10—20.)



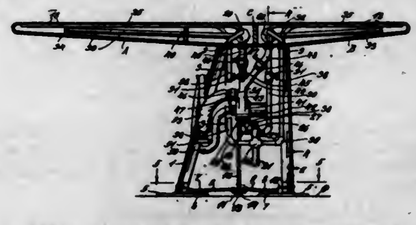
16. In a trimming machine the combination with normally stationary trimming dies adjustable relative to each other to form a space of any predetermined size for receiving the article to be trimmed, said space having an open side, of a movable trimming die for directing a bolt into said space through the open side and for closing said side irrespective of the size of the space to which the stationary dies have been adjusted, all of said dies constituting means for supporting the flashing of the object being trimmed, and means carried by all of the dies and adjustable independently thereof for extending over the flashing and gripping said object.

1,763,760. SAW SET. FREEMAN E. COLLIER, Minneapolis, Minn., assignor to Foley Saw Tool Company, Incorporated, Minneapolis, Minn., a Corporation of Minnesota. Filed June 20, 1928. Serial No. 286,861. 9 Claims. (Cl. 76—62.)



1. A saw set comprising a base frame, an anvil, and a bearing on the base frame, a hammer intermediately pivoted on the bearing for co-operation with the anvil and having a lock shoulder on its rear end, a propelling spring for the hammer, operating connections for retracting the hammer and tensioning its propelling spring, a latch co-operating with the lock shoulder for connecting the operating connections to the hammer, said hammer having a surface for directing the latch into a position to be engaged by the lock shoulder during the resetting of said connections and latch, said bearing having a cam surface for releasing the latch from the lock shoulder during the retracting movement of the hammer, and means for resetting the operating connections and latch.

1,763,761. DRY-STEAM FINISHER. IRWIN W. COX, Denver, Colo. Filed Dec. 30, 1927. Serial No. 243,704. 6 Claims. (Cl. 223—17.)

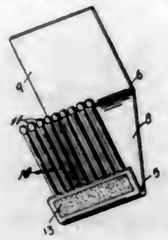


1. A device of the class described comprising, in combination, a hollow steam finisher whose upper surface is slightly convex and provided with a plurality of openings, a steam coil located within the finisher directly below the top member, a manifold located within the finisher, a plurality of pipes of different length extending from the manifold to spaced points within the finisher below the steam coil, means for conducting live steam to the interior of the manifold, an air compressing device having an exhaust port, means for conducting air from the exhaust port to the manifold, and means for controlling the flow of steam and the flow of air.

1,763,762. METHOD OF EXTRACTING SULPHUR. ARTHUR J. CROWLEY, Sulphur, Nev., assignor to Humboldt Sulphur Company, Sulphur, Nev., a Corporation of Delaware. Filed July 6, 1927. Serial No. 203,799. 9 Claims. (Cl. 23—229.)

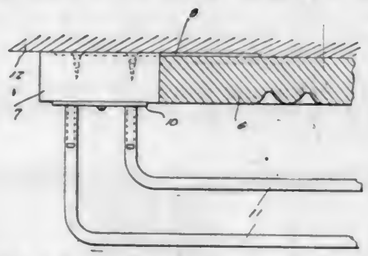
1. A process of extracting sulphur which comprises subjecting a mass of sulphur containing material to superheated water to melt the sulphur therefrom, and forcing the resulting mixture into a flow of superheated water resting on a mass of molten sulphur.

1,763,763. MATCH FOLDER. PERRY T. DENMEAD, Akron, Ohio, assignor to Ada Denmead and John W. Denmead, Akron, Ohio, and William Byrider, Cleveland, Ohio. Filed Nov. 3, 1928. Serial No. 316,986. 1 Claim. (Cl. 206—29.)



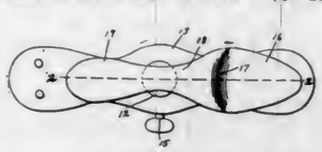
In a match package, a flat strip bent to form a folder having a base portion, a back portion and a cover portion and a plurality of independent stick matches arranged in parallel relation in a laterally extending row, the handle ends of said matches adhesively secured to said base portion only, along an area extending in close spaced relation to the free end thereof, the back and cover portions of said strip being free whereby the same may be opened to extend in the plane of the base portion and may be folded around said matches with one end of the cover portion inserted beneath the free end of the base portion to hold the package in a closed position.

1,763,764. CURTAIN-BRACKET-FIXTURE BLOCK. EUGENE DIGNAN, Boyne City, Mich. Filed Aug. 13, 1929. Serial No. 385,497. 2 Claims. (Cl. 156—22.)



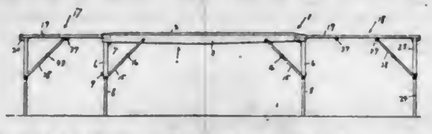
1. As a new article of manufacture, a curtain fixture comprising a block, a leaf spring fixed to the block and extending beyond one side thereof, said spring being longitudinally curved.

1,763,765. REPAIRING LAST. JOHN DISCENZA and JOSEPH FILIPPONE, New York, N. Y. Filed Jan. 29, 1929. Serial No. 335,882. 1 Claim. (Cl. 12—123.)



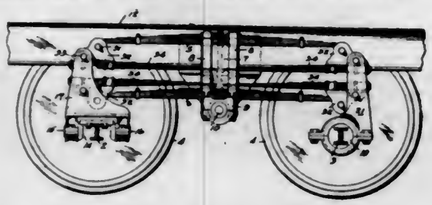
A repairing last having a shoe bottom supporting face conforming to the length of a shoe of the size or number for which the last is intended, the fore and heel portions of said face conforming in width to the fore and heel portions of the shoe bottom, the shank portion of the last being reduced in width to permit the supporting face portion formed thereon to support either a wide or a narrow shoe bottom shank portion, so that when the last is used in repairing a shoe having a shank portion of minimum width, the shank portion of the last has no injurious contact with the upper at the shank portion of the shoe.

1,763,766. PLATFORM CONSTRUCTION. CHARLES ERWIN, Akron, Ohio. Filed Mar. 27, 1928. Serial No. 265,009. 3 Claims. (Cl. 304—6.)



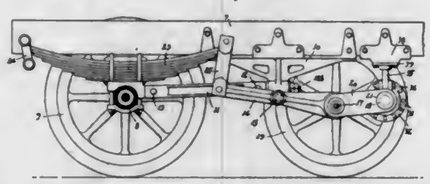
1. In a scaffold of the class described, a central main section including a top, and legs at the outer ends thereof, a pair of end sections, each including a top and leg members at the outer ends only of the top of each end section, the inner ends of the top of each end section being removably and slidably associated with the respective ends of the central main section, the leg members for the outer end of the top of each end section being removable for attachment to the inner end of the top of either end section when the latter is entirely removed from the main section to provide an individual scaffold.

1,763,767. VEHICLE. ROLLIE B. FAGEOL, Los Angeles, Calif. Filed Jan. 20, 1922, Serial No. 530,554. Renewed Mar. 2, 1928. 24 Claims. (Cl. 180—22.)



1. In a vehicle, a truck comprising two transverse axles, wheels on said axles, spring mountings connected to said axles, leaf springs spanning the space between the axes of said axles and auxiliary spring housings fulcrumed on said mountings beyond the axes of the axles and pivotally connected to the ends of said springs.

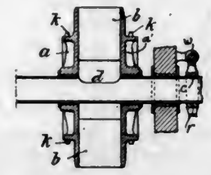
1,763,768. VEHICLE RUNNING GEAR. ALBERT H. FAGER, Los Anegles, Calif. Filed Sept. 7, 1926, Serial No. 134,053. Renewed Sept. 9, 1929. 10 Claims. (Cl. 180—22.)



1. The combination of a vehicle frame, a pair of wheels, a crank axle connecting said wheels and having a flexible joint between its ends, means connecting said axle to the frame for the forward and rearward movement of the axle relatively to the frame, and a yieldable connection between the wheels and frame for transmitting the load from the frame to the wheels.

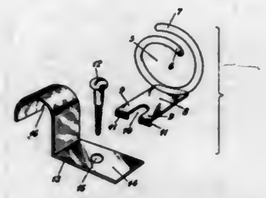
1,763,769. EXCAVATING TOOL FOR DITCHING OR DREDGING MACHINES. HINKO FISCHER, Lubeck, Germany, assignor to Lübecker Maschinenbaugesellschaft, Lubeck, Germany. Filed Feb. 11, 1927, Serial No. 167,530, and in Germany Dec. 3, 1925. 1 Claim. (Cl. 37—189.)

A power-driven excavating tool of the character set forth, comprising a wheel having two parallel disks and a number of radial digging blades between and rigidly connected with the said two disks, said disks and blades being coextensive in the radial direction of the wheel, a stationary hollow shaft for said wheel to rotate thereabout, an opening in the said hollow shaft between the disks for the blades to discharge therein the excavated



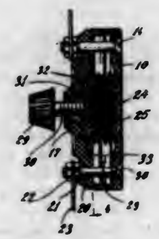
material, and means for continuously discharging the material from the said hollow shaft, the latter being adjustable with relation to the wheel, in order to properly position the said opening in accordance with the angular position of the excavated material discharged by the blades into the hollow shaft.

1,763,770. CABLE CLAMP AND BRIDLE RING. LEWIN B. FISH, Maplewood, N. J., and EVERETT ST. JOHN, Brooklyn, N. Y., assignors to American Telephone and Telegraph Company, a Corporation of New York. Filed Dec. 15, 1926. Serial No. 155,022. 2 Claims. (Cl. 248—36.)



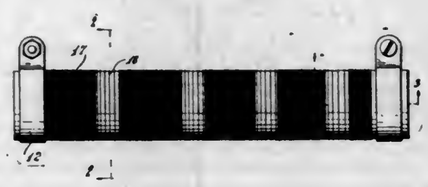
1. A bridle ring comprising an elongated plate, a wire retaining portion on one end of the plate to retain runs of bridle wires, the axis of the wire retaining portion being parallel to the longitudinal edges of the plate, a bifurcated portion on the other end of the plate, the plate being adapted to have an attaching device associated with said bifurcated portion to secure the bridle ring to a supporting wall, and toe members associated with said bifurcated portion, extending at right angles to the plate and disposed in the manner whereby they may bite into the supporting wall to prevent rotation of said bridle ring when under pressure exerted by the attaching device.

1,763,771. VARIABLE-CAPACITY ELEMENT. JOHN GELOSO, New York, N. Y., assignor, by mesne assignments, to Pilot Radio & Tube Corporation, Brooklyn, N. Y., a Corporation of Delaware. Filed July 13, 1927. Serial No. 205,315. 10 Claims. (Cl. 175—41.5.)



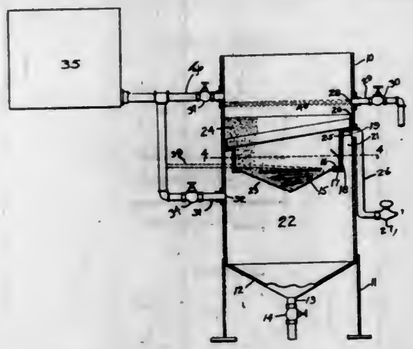
1. A variable condenser comprising an insulating casing, a series of flexible conductor members, comprising metal disks, having their outer peripheries shaped into a series of segmental projections, adjacent projections being angularly disposed with respect to one another, and alternate projections being in the same plane, dielectric means interposed between adjacent conductor members, a pressure block positioned within said casing and in contact with the uppermost of said conductor members and means cooperating with said pressure block for urging the same towards the conductor member to compress the conductor members and dielectric means; said conductor members being adapted to expand on the withdrawal of pressure thereagainst whereby to vary the capacitance.

1,763,772. RESISTANCE. JOHN GELOSO, New York, N. Y., assignor, by mesne assignments, to Pilot Radio & Tube Corporation, Brooklyn, N. Y., a Corporation of Delaware. Filed Sept. 27, 1927. Serial No. 222,231. 6 Claims. (Cl. 201—62.)



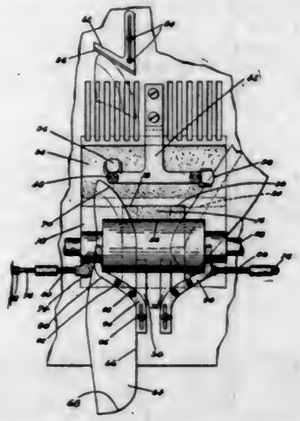
1. A resistance element comprising a length of wire formed as a plurality of sections of sparsely wound and densely wound wire turns, contact rings slidable over said sections of wire and adapted to be positioned on the sparsely wound sections whereby the resistance formed by the passage of current from one contact ring through the resistance and through the second contact ring is that of the densely wound section.

1,763,773. METHOD OF AND APPARATUS FOR SEPARATING SOLIDS FROM LIQUIDS. ANTHONY H. GODBE, Los Angeles, Calif., assignor to Universal Process Company, a Corporation of Utah. Filed Nov. 1, 1926. Serial No. 145,573. 10 Claims. (Cl. 210—140.)



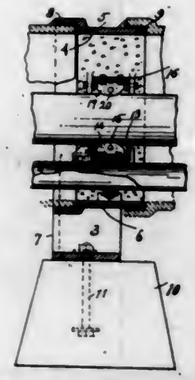
1. The method of separating solids from liquids by filtration comprising, regulating the feed and discharge of the liquid to be filtered and the filtrate so as to always maintain separate bodies of the liquids in contact with both sides of the filter medium; discharging the filtrate at a point above the plane of the intake side of the filter medium; trapping any accumulated air in the liquid, on the intake side of the filter medium, at a point above the plane of the intake side of the filter medium and removing said air during the filtering operation.

1,763,774. BUFFING MACHINE. GEORGE N. GORDON and GEORGE SAMPSON, Brockton, Mass., assignors to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Mar. 19, 1926. Serial No. 96,026. 23 Claims. (Cl. 51—78.)



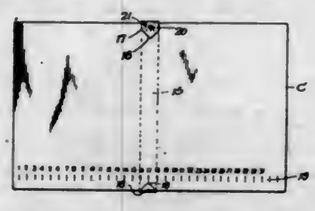
1. In a finishing machine, a cylindrical finishing roll provided with a yieldable supporting peripheral surface, an abrasive covering for said roll wrapped around a portion of the roll and secured in place thereon, said covering having a length less than the total length of said supporting surface, said yieldable supporting surface having a taperingly relieved portion within its uncovered area and extending within the covered area, and means for feeding a piece of work past said roll so as to overlap an end of the abrasive covering so that a portion of the piece of work will be finished while the remainder of the piece of work which is positioned opposite to the relieved portion of the finishing roll is untreated.

1,763,775. SUPPORTING MEANS FOR PIPES IN CONDUITS. CHRISTIAN GOTTWALD, Cleveland, Ohio, assignor to The Ric-Wil Company, Cleveland, Ohio, a Corporation of Ohio. Filed Aug. 12, 1927. Serial No. 212,504. 5 Claims. (Cl. 137—75.)



1. In a device of the character described, a section adapted to be interposed between the ends of adjacent conduit sections to join them together, said section comprising a lower supporting member and an upper cover member, anti-friction means carried by said supporting member for engaging a pipe to be supported, and means carried by said cover member for engaging said pipe, the combined means serving to support and maintain the pipe in the desired position within the conduit.

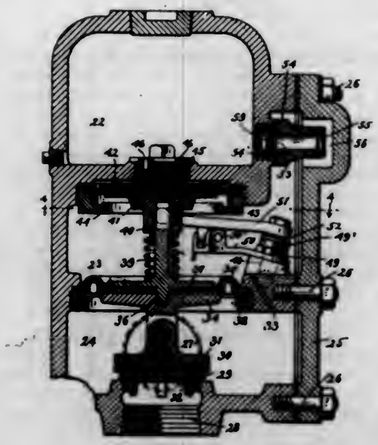
1,763,776. INDEX-CARD TAB. ALBERT E. N. GRAY, East Orange, and SAMUEL M. SCHENKEIN, Newark, N. J. Filed Mar. 12, 1927. Serial No. 174,833. 9 Claims. (Cl. 129—16.8.)



1. The combination with a card having straight parallel edges; of an index card tab, comprising a long, narrow strip of material having hooks thereon for engaging over the opposite straight parallel edges of the card, and slidable along said card to any position along said edges, at least one of said hooks formed as a pointer for cooperation with a scale on the margin of the card proximate to said hook.

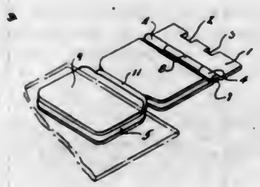
2. The combination with a card having straight parallel edges; of an index card tab, comprising a long, narrow strip of material having hooks thereon for engaging over the opposite straight parallel edges of the card and slidable along said card to any position along said edges, and a tab extension projecting above the upper edge of the card.

1,763,777. AUTOMATIC EXHAUSTER. JOHN R. HAMILTON, Cleveland Heights, Ohio, assignor to Automatic Sprinkler Company of America, Cleveland, Ohio, a Corporation of Delaware. Filed Jan. 28, 1927. Serial No. 164,206. 3 Claims. (Cl. 169—17.)



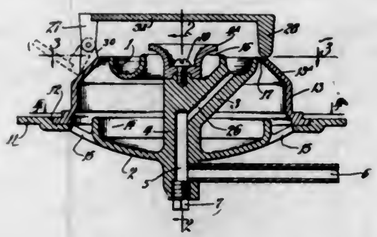
1. In a dry pipe sprinkler system, an automatic water valve having a neutral chamber, an air exhauster having an air storage compartment, an air exhausting compartment and a third compartment all in communication through relatively restricted passages, the passage connecting the third compartment and the air storage compartment being more restricted than the passage connecting the third compartment and the air exhausting compartment, a connection communicating with the neutral chamber and leading from said third compartment to atmosphere through said neutral chamber, means for normally closing the atmosphere connection, means controlled by a pressure difference between said third and said air storage compartments for suddenly opening said atmosphere connection, the air exhausting compartment having an open communication with the pipe system, an exhaust valve in said air exhausting compartment, spring means for urging said valve toward closed position and adapted to be overcome by the pressure difference set up between said third and said air exhausting compartments, means controlled by said pressure difference for opening said exhaust valve, and means for automatically closing said neutral chamber from atmosphere upon the opening of the water valve, whereby water pressures in said third and air exhausting compartments are equalized, permitting said exhaust valve to close.

1,763,778. LAUNDRY MARKING TAG. ANGUS F. HANNEY, Cincinnati, Ohio, assignor to The American Laundry Machinery Company, Cincinnati, Ohio, a Corporation of Ohio. Filed June 10, 1927. Serial No. 197,896. 1 Claim. (Cl. 40—23.)



An identifier for marking apparatus comprising a pair of substantially flat members, one consisting of a body portion having a hinge part, identifying means, and a clamp portion having a waist, and the other member comprising a clamping portion having a waist and a hinge part at the end thereof, a pintle connecting the hinge parts and a staple surrounding said waists.

1,763,779. OIL BURNER. WILLIAM DOW HARVEY, Macomb, Ill., assignor to American Steel Products Co., Macomb, Ill., a Corporation of Illinois. Filed Oct. 25, 1928. Serial No. 314,866. 9 Claims. (Cl. 158—91.)



1. A liquid fuel burner comprising an outer annular wall having its upper portion tapering upwardly, an upwardly flaring air deflector disposed within and concentric with the said upper portion of the outer annular wall and presenting its upper edge at a height approximating that of the upper edge of the said outer wall, an annular fuel-burning trough disposed between the said wall and deflector and concentric with the said air deflector and supported with its upper edge at a height approximating the aforesaid height, the trough having its upper edges freely spaced by annular spaces from both the said wall and the air deflector, and means rigidly connecting the trough with the air deflector and the said outer wall, the said means being arranged for an air-admitting area between the air deflector and the outer wall below the said tapering portion of the upper wall.

1,763,780. ACOUSTIC DIAPHRAGM. SAMUEL W. HATTON, Villa Park, N. Y. Filed June 18, 1926. Serial No. 116,899. 2 Claims. (Cl. 181—32.)



1. An acoustic diaphragm of concavo-convex form having a plurality of regions of the material constructed of variable density for increasing resiliency of the diaphragm.

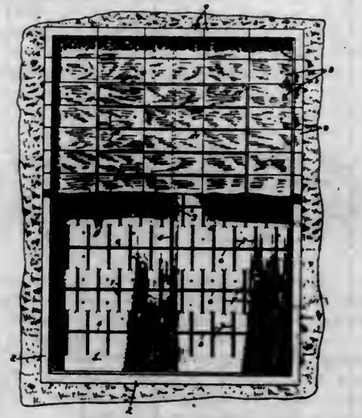
1,763,781. METHOD OF MAKING CUPROUS COMPOUNDS. SHELDON B. HEATH and MERLIN O. KELLER, Midland, Mich., assignors to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Feb. 4, 1928. Serial No. 252,034. 17 Claims. (Cl. 23—97.)

10. The method of producing cuprous compounds comprising adding a free halogen to a solution of cuprous cupric, and ammonium salts in the presence of a halide and metallic copper, stopping the addition of the halogen when the resultant reaction causes the solution to boil, allowing the solution to react thus with the metallic copper therein until substantially 98+% of the copper is converted to the cuprous state, the molecular ratio of the ammonium salt to the cuprous salt being maintained at least equal to unity, then cooling the solution.

13. The method of producing cuprous hydroxide comprising adding a free halogen to a solution of cuprous, cupric, and ammonium salts in the presence of a halide and metallic copper, maintaining the molecular ratio of ammonium salt to cuprous salt in solution at least equal to unity, and adding an alkali.

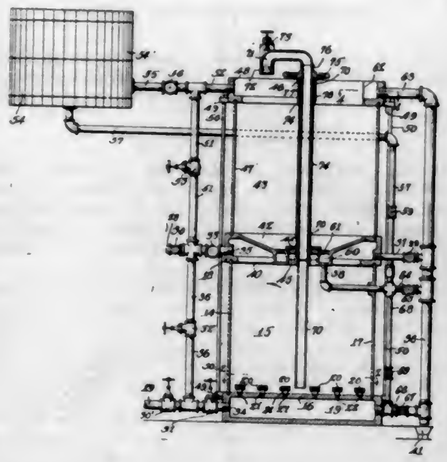
15. The method of producing cuprous chloride comprising adding chlorine into a solution of cuprous, cupric, and ammonium chlorides in the presence of metallic copper having large surface per unit weight.

1,763,782. OUTDOOR-SPORTS FIELD. WILLIAM W. HENDERSON, San Francisco, and RUDOLF A. ISENBERG, Los Altos, Calif. Filed Aug. 2, 1929. Serial No. 383,126. 6 Claims. (Cl. 94—4.)



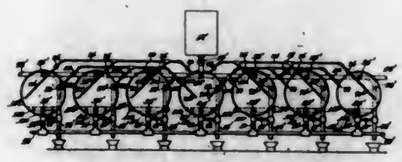
3. An outdoor sports field comprising a cement basin provided with draining means formed in the bottom thereof to drain water therefrom; and a plurality of resilient fibrous mats removably fitted into the basin and surfacing the same, each mat having its sides and ends diverging upwardly whereby the mats may be pressed and wedged into tight contact when fitted into the basin to form a playing field.

1,763,783. ZEOLITE WATER SOFTENER. GEORGE F. HODKINSON, Philadelphia, Pa., assignor to The Permutit Company, New York, N. Y., a Corporation of Delaware. Filed Apr. 6, 1922. Serial No. 550,130. 4 Claims. (Cl. 210—24.)



1. In processes of softening water by a pervious body of zeolites, said body being successively used in softening, cleansed, regenerated and rinsed, the process which comprises exposing a pervious body of zeolite to a flow of hard water in one compartment until its activity lessens substantially, then transferring it to another water-filled compartment by a flow of water, the transferred zeolite being allowed to fall through said water, thereby cleansing said zeolite, removing the water, regenerating with a flow of salt solution, rinsing and returning the charge of zeolite to the first compartment for renewed use.

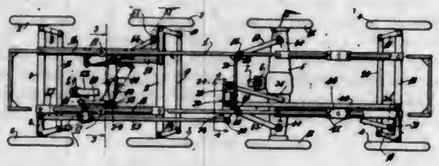
1,763,784. WATER SOFTENER FOR BASE-EXCHANGING SUBSTANCES. GEORGE F. HODKINSON, Blue Bell, near Ambler, Pa., assignor to The Permutit Company, New York, N. Y., a Corporation of Delaware. Original application filed Apr. 6, 1922, Serial No. 550,130. Divided and this application filed Nov. 10, 1928. Serial No. 318,364. 11 Claims. (Cl. 210—24.)



1. The process of handling base-exchanging substances in a water softener system which consists in hydraulically transferring the substances from different softeners operating in overlapping phase one at a time to a common regenerating tank, regenerating the substances in said tank and hydraulically retransferring the regenerated substances from the regenerating tank to the same or a different softener for subsequent use.

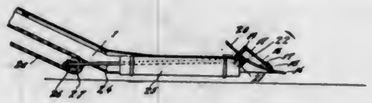
1,763,785. STEERING APPARATUS FOR AUTOMOBILES. FRED M. HOLADAY, Virginia Place Tract, Calif. Filed Aug. 10, 1925. Serial No. 49,288. 8 Claims. (Cl. 280—91.)

1. In a steering-gear for an automobile, the combination of a frame, axles with springs supporting the frame, wheels carried by the axles and including a pair of wheels having steering knuckles, a steering-wheel mounted on the frame, mechanism connecting the steering wheel with said steering knuckles for steering the automobile, said mechanism including a lever through which the movement is imparted from the steering wheel to the



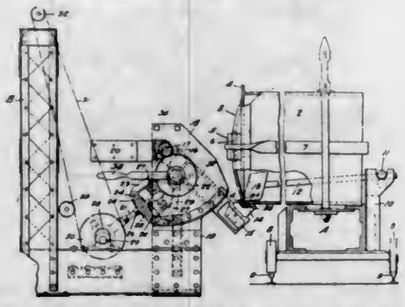
knuckles, and a floating support for the lever, with means for controlling the floating support to shift the fulcrum of the lever when the axle carrying the steering knuckles shifts its relative position with respect to the frame of the automobile.

1,763,786. MATERIAL EXCAVATING AND CONVEYING MACHINE. WILLIAM MONROE HUFFMAN, Kentenia, Ky. Filed Apr. 10, 1929. Serial No. 354,051. 3 Claims. (Cl. 198—10.)



1. As a new product of manufacture, an attachment for the loading end of a conveyor frame of the class described comprising a longitudinally extending curved apron adapted to be fixedly mounted on the frame, said apron being provided adjacent its opposite ends with longitudinally elongated guide slots, and having its working edge formed into a cutting edge to burrow beneath the material being acted on, and a mole head slidably mounted for transverse reciprocation on said apron and including operating brackets extending through said slots, together with operating means connected with said brackets.

1,763,787. FLANGING AND WELDING MACHINE. PERCY E. HUNTER, Pittsburgh, Pa. Filed Apr. 26, 1927. Serial No. 186,691. 3 Claims. (Cl. 78—89.)



1. A device for welding to the edges of a box a head having a flange extending beyond the box at right angles thereto consisting of an upwardly acting hammer having a face adapted to strike the edge of the extending flange to slightly upset it at the region of the joint and provided with a concaved surface adapted to press the flange into welded engagement with the edge of the box.

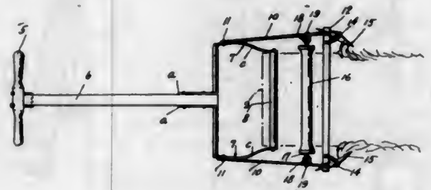
1,763,788. RADIO TOY. WALTER L. JOBE, Sr., Topeka, Kans. Filed Oct. 19, 1929. Serial No. 400,873. 1 Claim. (Cl. 46—40.)

In a dancing toy in combination with an audio frequency circuit a steel diaphragm an electromagnet adjacent to the diaphragm as vibrating means therefor, the said magnet having windings connected to a source of pulsating energy, a puppet positioned on the diaphragm



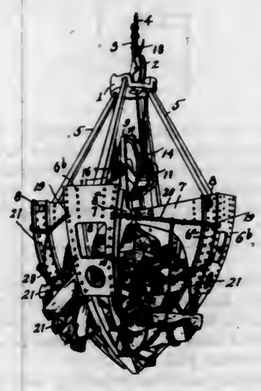
and slidable thereon, the diaphragm vibrating to the pulsations of the circuit and actuating the puppet to movement.

1,763,789. MULCH-PAPER-LAYING MACHINE. CARL JUDY, New Philadelphia, Ohio. Filed Sept. 14, 1929. Serial No. 392,717. 2 Claims. (Cl. 47—9.)



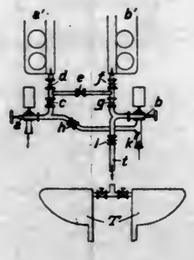
1. A machine of the class described comprising a tongue, frame bars of substantially Z-shaped formation secured to the tongue and having a roller journaled between their extremities adapted to have mulch paper wound thereon, bars secured to the frame bars to extend rearwardly, a roller, adjustable brackets for engaging the roller with the last mentioned bars, a cross bar between the extremities of the last mentioned bars, and shanks attached to said extremities and having shovels on the ends thereof to throw dirt up on the paper as the same is placed on the ground.

1,763,790. GRAB BUCKET. ROBERT W. KALTENBACH, Cleveland Heights, Ohio. Filed Apr. 30, 1928. Serial No. 273,937. 5 Claims. (Cl. 294—111.)



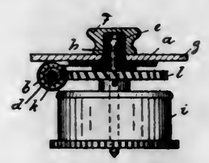
1. A grab having grapple jaws, and means extending between and connected to adjacent jaws for the purpose of retaining therein articles smaller in dimensions than the spaces between the jaws.

1,763,791. AIR SCAVENGING AND CHARGING BLOWER FOR ENGINES. EMIL KLINGELFUSS and ADOLF BAUMANN, Baden, Switzerland, assignors to Aktiengesellschaft Brown, Boveri and Cie., Baden, Switzerland. Filed Feb. 26, 1925, Serial No. 11,901, and in Switzerland Mar. 15, 1924. 5 Claims. (Cl. 114—16.)



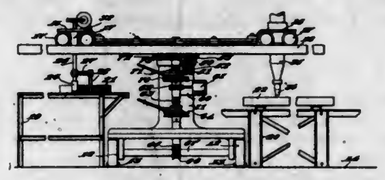
1. In a power installation, in combination, separate engines, a container, separately driven blowers, means for connecting the respective blowers to serve the engines separately or collectively, and means for connecting the blowers to serve the container in series.

1,763,792. ADJUSTABLE WINDING SPINDLE FOR SPRING MOTORS. EMIL KNECHT, Erkner, near Berlin, Germany, assignor to Edward D. Feldman, New York, N. Y. Filed Mar. 26, 1928, Serial No. 264,837, and in Germany Jan. 24, 1928. 2 Claims. (Cl. 185—39.)



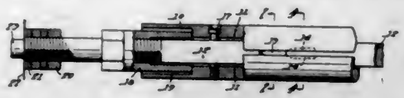
1. Means for adjusting winding spindles of spring motors of talking machines and the like in angular relation to the supporting frame, comprising the combination with a frame plate, of a spring motor shaft passing therethrough, a flanged bushing surrounding said shaft, a worm wheel on said shaft below said bushing, a plate rotatable on said bushing between the flange thereof and said frame plate, a nut on said bushing above said frame plate, bearings carried by said plate and a worm in mesh with said wheel.

1,763,793. REPRODUCING MECHANISM. CARLOS KREBS, Boston, Mass. Filed June 25, 1928. Serial No. 288,023. 16 Claims. (Cl. 266—23.)



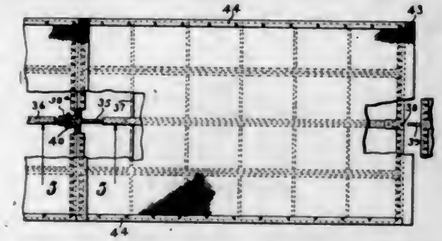
1. A torch cutting machine comprising a platform having a support intermediate its ends, parallel tracks on said platform one track on each side of and equidistant from said support, a tracer carriage and a torch carriage carried by and reciprocable over said tracks and means for maintaining said carriages at a predetermined relative distance from said support at all times.

1,763,794. EXPANDING SHAFT FOR WINDING PAPER AND THE LIKE. CHARLES S. LENSTON, Worcester, Mass., assignor to Hobbs Manufacturing Company, Worcester, Mass., a Corporation of Massachusetts. Filed Nov. 26, 1926. Serial No. 150,863. 1 Claim. (Cl. 242—72.)



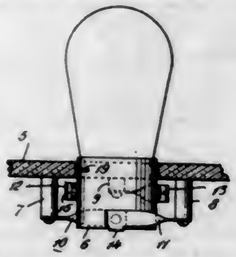
In an expanding shaft, the combination with two halves and a pull bar located between them and having transverse keys thereon, the edges of the two halves having recesses for the keys, whereby the forcing of the keys out of the recesses will expand the shaft, of a nut screwed on the pull bar and engaging the two halves to move the pull bar longitudinally, said pull bar having studs at its ends for supporting it and having a nut and check nuts at one end for fitting it against a flat surface and a screw threaded plug at the other end providing means for longitudinal adjustment of the stud at that end.

1,763,795. STRAINER FOR CANE MILLS. MIGUEL LOPEZ, Santa Clara, Cuba; Estela Perez y Perez, executrix of said Miguel Lopez, deceased, assignor of one-third to Mauricio Quiterio Lopez y Perez, and two-thirds to Estela Perez y Perez, Habana, Cuba. Filed Nov. 4, 1925. Serial No. 66,753. 23 Claims. (Cl. 210—149.)



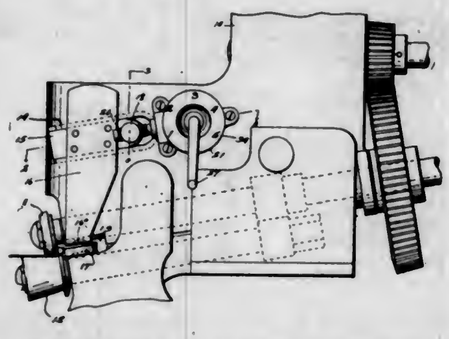
1. In a cane mill, a normally stationary strainer, means for delivering juice expressed from the cane to said strainer, said strainer being made up of a plurality of sections directly and detachably connected together and forming an elongated substantially continuous unit, and means for supporting said unit under said delivering means, said supporting means permitting longitudinal movement of the strainer therein, whereby a strainer section at one end may be withdrawn from under the delivering means and detached from the remaining sections.

1,763,796. VACUUM-TUBE SOCKET. WILLIAM A. MACDONALD, Little Neck, N. Y., assignor to Hazeltine Corporation, a Corporation of Delaware. Filed May 21, 1925. Serial No. 31,736. 12 Claims. (Cl. 173—328.)



1. A socket for resiliently mounting a vacuum tube having a plurality of terminals, said socket comprising a support having an opening therein adapted to receive the base of a vacuum tube, and flexible shock-absorbing conducting springs secured to said support and adapted to engage said terminals by means of spring-pressed contacts formed by doubling back upon themselves the bifurcated ends of the springs, said springs being twisted so as to engage said terminals with a friction surface at right angles to the plane of said support and so as to be flexible both vertically and horizontally, said springs being the only supporting means for said vacuum tube, whereby said vacuum tube is rendered substantially immune to mechanical vibration of said socket.

1,763,797. GAUGE FOR SHEET-METAL-EDGE-BENDING MACHINES. WILBER R. MAGEE, Ann Arbor, Mich. Refiled for abandoned application Serial No. 347,705, filed Mar. 16, 1929. This application filed April 15, 1930. Serial No. 444,530. 5 Claims. (Cl. 153—59.)



1. In a sheet metal edge bending machine, bending rolls, a slide shiftable toward and away from the general plane of the rolls, a rotatable element, a shaft rotated by rotation of the element and having a screw-threaded portion, and a nut carried by the slide with which the screw-threaded portion of the shaft engages.

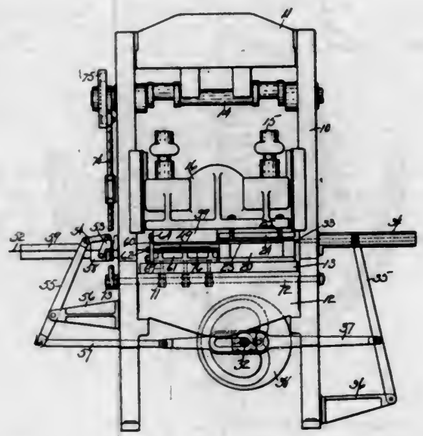
1,763,798. RECEPTACLE SUPPORT. FREDERICK E. MANN, Cherrydale, Va. Filed Mar. 23, 1929. Serial No. 349,486. 2 Claims. (Cl. 224—29.)



1. A hanger for receptacles comprising an elongated member, the end portions of said member being connected to said receptacle, the intermediate portions of said member being weakened so that the member may be broken, and bent outwardly to provide supporting hooks for the receptacle.

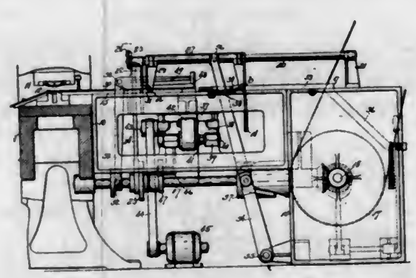
1,763,799. MOP-MAKING MACHINE. GEORGE FRANKLYN MATTESON, Rocky Hill, Conn., assignor to The Fuller Brush Company, Hartford, Conn., a Corporation of Connecticut. Filed May 2, 1925. Serial No. 27,574. 19 Claims. (Cl. 300—16.)

1. A mop making machine including means for forming a grooved blank, means for moving a blank into operative position with respect to the first means, means for moving the grooved blank, means for feeding a wire, a single actuating member for simultaneously operating said grooved blank moving means and said wire feeding means in opposite directions to associate a grooved blank and wire in connection with a thread mass, means for locating said



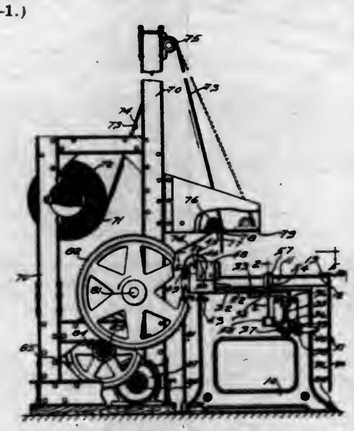
wire and thread mass in said grooved blank, and means for closing the sides of the grooved blank together to secure said thread mass.

1,763,800. FEEDING MECHANISM FOR MOP-MAKING MACHINES. GEORGE FRANKLYN MATTESON, Rocky Hill, Conn., assignor to The Fuller Brush Company, Hartford, Conn., a Corporation of Connecticut. Filed May 2, 1925. Serial No. 27,575. 14 Claims. (Cl. 300—16.)



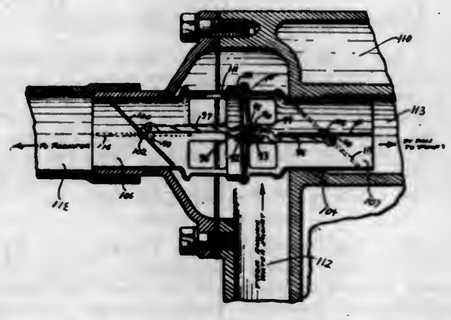
1. A feeding mechanism for a strip of material having devices attached thereto in spaced relation, said mechanism comprising a plurality of feeding members, mechanism for imparting movement to each of said members from an engaging end of its path of movement forward to a releasing end of said path and back, and including means for positioning one of said members at the forward end of its path of movement approximately in the position of the other member at the rearward end of its path of movement, the strip at one point of travel positioning the devices slightly in advance of the point of engagement by the feeding members, independent means for moving the strip backwardly to present the devices for engagement by the feeding members, and means for engaging said members with the devices on said strip at the ends of their paths of movement and for releasing them at the opposite ends of their paths of movement.

1,763,801. DEVICE FOR LAMINATING RUBBERIZED MATERIAL. CHARLES EDGAR MAYNARD, Northampton, Mass., assignor to The Fisk Rubber Company, Chicopee Falls, Mass., a Corporation of Massachusetts. Filed Dec. 1, 1927. Serial No. 236,912. 7 Claims. (Cl. 154—1.)



3. A device for laminating layers of bias-cut rubberized fabric comprising a flat-top table, fabric edge guides thereon, a heavy roll movable manually across the top of the table, and stops to prevent overtravel of the roll.

1,763,802. THERMOSTAT. EDWARD J. LEVY (now by judicial change of name Edward Levy Mayo), Cleveland, Ohio, assignor to The Bishop & Babcock Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed May 26, 1927, Serial No. 194,276. Renewed Oct. 27, 1928. 13 Claims. (Cl. 236—34.)

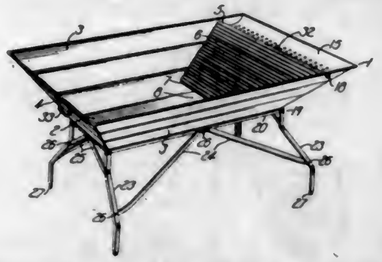


1. In a thermostatic valve mechanism, the combination with a conduit, a valve therein controlling the flow of fluids therethrough, a thermostat element comprising a composite metallic sheet having a non-developable depression adapted to suddenly change its form with a "snap" action upon a predetermined change of its temperature, said conduit having passages therethrough adapted to convey fluid at substantially the same pressure simultaneously to both surfaces of the sheet and a lever connection between the valve and element for communicating multiplied "snap" movements of the element to the valve to move the same, and means adapted to stop the movement of the valve before the element has reached its otherwise ultimate form to effect continued spring pressure derived from the inherent resiliency of the element.

1,763,803. WASHTUB. JAMES S. MERMIGIS, Kansas City, Kans. Filed Jan. 4, 1929. Serial No. 330,311. 4 Claims. (Cl. 68—31.)

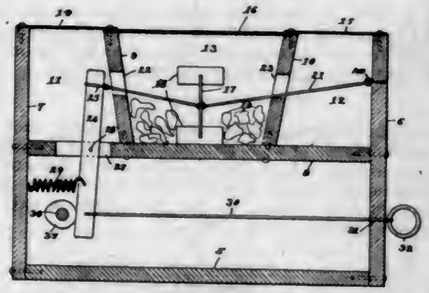
1. In combination with a tub including a bottom and side walls converging toward the bottom, a wash board

located in an inclined position transversely in the tub in spaced relation with the bottom to form a passage and having side edges tapering conformably to said side walls



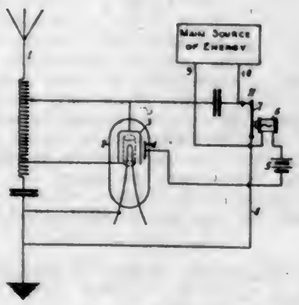
for engaging the same and a lower edge wider than said bottom for limiting downward movement of the board in the tub to space the board from the bottom.

1,763,804. MECHANICAL TOY. GARABED MAZIGIAN, Bridgeport, Conn. Filed Nov. 30, 1928. Serial No. 322,835. 4 Claims. (Cl. 46—37.)



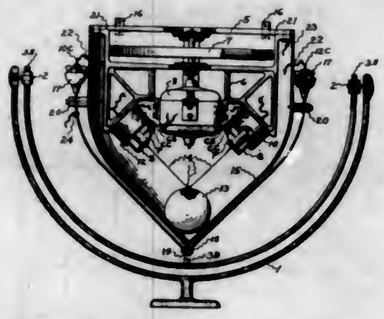
1. A toy of the class described, comprising a casing, a chamber having a transparent cover, a pair of horizontally arranged cords passing through the chamber and having one end secured to one side of the casing, a rotatable fan mounted upon the cords within the chamber, a pivotally mounted lever to one end of which one end of the cords are attached, and means connected with the lever for operating the same upon its pivot.

1,763,805. ARRANGEMENT FOR PROTECTING VACUUM TUBES. ALEXANDER MEISSNER, Berlin, Germany, assignor to Gesellschaft Für Drahtlose Telegraphie m. b. H. Hallesches, Berlin, Germany, a Corporation of Germany. Filed Nov. 14, 1922, Serial No. 600,846, and in Germany Nov. 14, 1921. 8 Claims. (Cl. 250—27.)



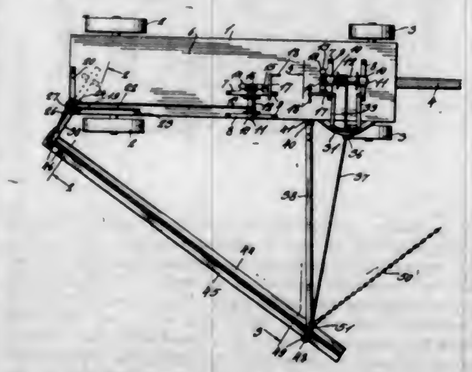
7. In combination, an electron discharge device comprising an anode and cathode, a circuit for maintaining a potential difference between the anode and cathode and means dependent on the electron emitting property of said anode for interrupting said circuit.

1,763,806. STABILIZED GYROSCOPIC INSTRUMENT. GERALD E. METHVIN, Baltimore, Md. Filed Aug. 24, 1927. Serial No. 215,018. 1 Claim. (Cl. 74—78.)



A gyroscopic stabilizer for use on an unstable platform comprising a support, a frame, gimbal bearings interposed between said frame and support, a gyroscope mounted in said frame for spinning about a vertical axis, four liquid containers equi-distantly spaced on the frame about the spin axis, means connecting said containers for intercommunication, said containers being adapted to contain a conducting liquid, a weight, solenoids corresponding in number to said containers spaced on the frame about the spin axis, means connecting each solenoid with the weight to move the same to throw the frame out of balance upon actuation of any one or more of the solenoids, contact means carried by each container and adapted to be closed by the liquid therein, and circuit means whereby each solenoid is controlled by one of the liquid containers and its contact to cause the frame to precess into the vertical upon departure therefrom.

1,763,807. ROAD GRADER. ANTONIO MONTANO, La Jara, Colo., assignor of one-half to Fred Gonzales, La Jara, Colo. Filed Jan. 7, 1929. Serial No. 330,815. 2 Claims. (Cl. 37—153.)



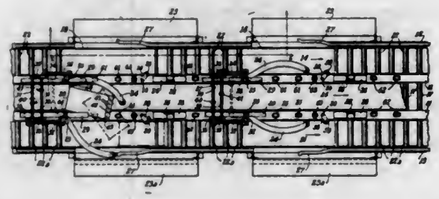
1. A road grading machine comprising a truck having a body mounted on wheels, a grader blade located to one side of the truck, the rear end of the blade being nearer the truck than the front end, a brace member rigidly secured to the rear end of the blade and projecting underneath the truck body, means for connecting said brace member with the truck body, said means and the brace member being slidably connected whereby the latter may move in the direction of its length, means carried by the truck for adjusting the position of the rear end of the grader blade towards the truck body, a rigid member extending from the front end of the blade to the truck body, a pulley supported above the truck, a cable having one end connected with the outer end of the rigid member and passing over the pulley, and a windlass carried by the truck, the other end of the cable being attached to the windlass whereby when the windlass is operated the front end of the blade will be raised and lowered with respect to the truck.

1,763,808. FOUNTAIN HEAD. GLENN MUFFLY, Detroit, Mich., assignor to Copeland Products, Inc., a Corporation of Michigan. Filed Aug. 11, 1927. Serial No. 212,168. 2 Claims. (Cl. 299—15.)



1. A fountain head comprising an inverted generally cup-shaped fitting, the open end of said fitting being threaded for securement to a water passage, the bottom of said cup being provided with an angularly extending and a vertically extending opening, a plug threaded in said angularly extending opening, and a return bent tube threaded in said vertically extending opening.

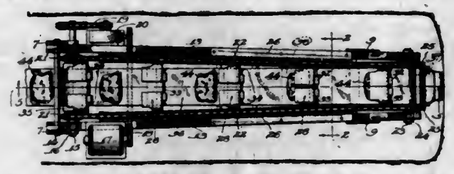
1,763,809. CONVEYER APPARATUS. HARRY J. MURPHY, Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed Aug. 24, 1928. Serial No. 301,832. 9 Claims. (Cl. 198—21.)



1. A conveyer system embodying a trunk conveyer for carrying articles, work stations positioned at the respective sides of the trunk conveyer along the path of travel thereof, respective deflectors for diverting articles from the trunk conveyer onto the work stations, means operable by an article for effecting operation of the deflectors selectively, and mechanism so controlling the deflectors that one of the same moves away from the trunk conveyer when another moves to a position over the same to divert the article.

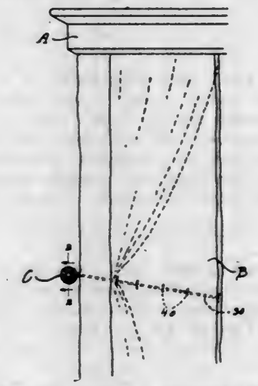
1,763,810. EXCAVATING MACHINE. WILLIAM J. NEWMAN and JOHN P. CARROLL, Chicago, Ill. Filed Oct. 8, 1926. Serial No. 140,300. 13 Claims. (Cl. 37—192.)

6. The combination with a chain bucket excavating apparatus, of a conveyor belt arranged to travel within the chains and driven at a higher rate of speed than the chains.



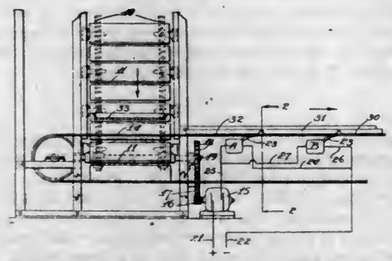
11. A sectional digging bucket of the character set forth, having a bottom, back and sides and divided longitudinally through the bottom and back to form the sections, means for moving the sections bodily relatively to each other, and means for guiding the sections during such movement.

1,763,811. AUTOMATIC CURTAIN TIE BACK. WILLIAM OCCHIUZZO, New York, N. Y. Filed Aug. 27, 1928. Serial No. 302,307. 8 Claims. (Cl. 156—33.)



1. A tieback for curtains comprising a housing for mounting adjacent one side edge of the curtain, a spring actuated drum rotatably mounted in the housing, a tie cord wound on said drum and extending from the housing, said tie cord when withdrawn from the housing to place the spring of the drum under tension, means for attaching the tie cord to a curtain, and release means for said drum for allowing rewinding of the tie cord thereon.

1,763,812. AUTOMATIC SAFETY CONTROL FOR CONVEYERS. PETER OLSON, Oak Park, Ill., assignor to Samuel Olson & Company, Inc., Chicago, Ill., a Corporation of Illinois. Continuation of application Serial No. 78,851, filed Jan. 2, 1926. This application filed Jan. 7, 1928. Serial No. 245,095. 5 Claims. (Cl. 198—21.)



1. In combination, two conveyers extending transversely of each other at a point of intersection at which load units

are fed from one to the other, an electric motor for driving the feeding conveyer, two switches connected in parallel in the motor circuit and spaced longitudinally adjacent the receiving conveyer beyond the point of intersection in position to be opened by load units thereon, whereby the opening of both switches simultaneously by said loads breaks the motor circuit and arrests the feeding conveyer.

1,763,813. GLOVE. FRED O'NEIL, Redlands, Calif. Filed Feb. 25, 1929. Serial No. 342,515. 1 Claim. (Cl. 2—162.)



In a cloth glove, said glove having a cut-out portion on the back thereof, said cut-out portion extending from the knuckles to the wrist, and an elastic band secured to the glove at the wrist below the thumb and extending across said cut-out portion, said elastic band extending at an angle upwardly towards the thumb of the glove, and said band being sewed at each end thereof to the glove.

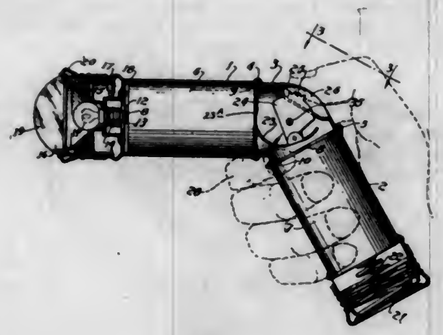
1,763,814. TRICK EGG TOY. FREDERICK M. OSGOOD, Boston, Mass., assignor to Tilton & Cook Co., Leominster, Mass., a Corporation of Massachusetts. Filed Mar. 13, 1930. Serial No. 435,400. 2 Claims. (Cl. 273—154.)



1. A trick egg comprising a hollow body portion having the shape of an egg and flattened at one end, a dome-shaped partition extending transversely across the body portion and provided at its center with a depression, a deflecting member rising from the partition and extending from the side wall of the body to a point just beyond and at one side of said depression, said deflecting member having a stop flange at its inner end and a ball supported on said partition and adapted when the body is properly manipulated to roll against the deflector and along the latter to the stop flange and then into the central depression.

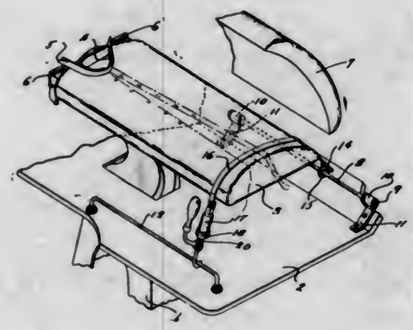
1,763,815. FLASH LIGHT. CHARLES HAMILTON PAJEAU, Glencoe, Ill., assignor to The Toy Tinkers, Inc., Evanston, Ill., a Corporation of Illinois. Filed June 7, 1928. Serial No. 283,492. 9 Claims. (Cl. 240—10.5.)

8. A flash-light comprising a casing having forward and rearward portions of approximately equal length connected at an angle to each other by a bend in the casing, two counterpart battery cells respectively disposed in the said forward and rearward casing portions adjacent to its said bend, both cells having the same polarity terminal forwardly directed, a lamp bulb mounted in the forward end of the casing and having its axial terminal engaging the said polarity terminal of the forward battery cell, means electrically connecting the other lamp bulb terminal with the other polarity terminal of the rear battery cell,



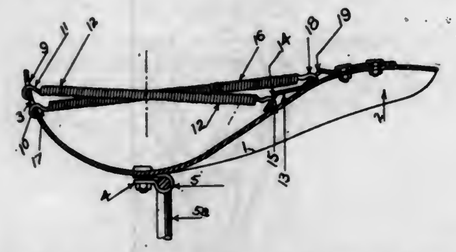
and a switching member mounted in the said bend of the casing and having an actuating portion projecting through the casing outwardly of the angle of the said bend, the switching member being movable into and out of a position in which it electrically connects the first named polarity terminal of the rearward battery with the opposite polarity terminal of the forward battery.

1,763,816. CLAMPING MECHANISM FOR PRESSING MACHINES. ROBERT C. PAULY, Cincinnati, and STUART NOTTAGE, Norwood, Ohio, assignors to The American Laundry Machinery Company, Cincinnati, Ohio, a Corporation of Ohio. Filed June 16, 1927. Serial No. 199,251. 2 Claims. (Cl. 68—9.)



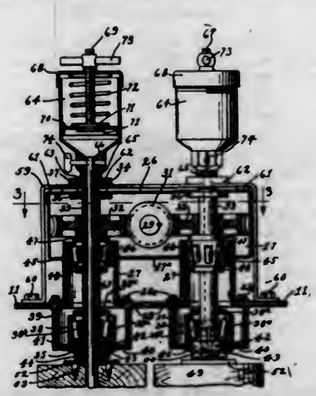
1. A pressing machine, a frame, a bed, a flexible stiff work clamping band, a rod at the rear of the bed and arranged in parallelism with the axis thereof, a permanent slidable connection between the rear end of the band and said rod, a front rod secured to the frame and in parallelism with the axis of the bed, a removable hook connection between the front end of the band and the front rod, and yielding hook mechanism between the front end of the band and the front rod and comprising a casing member attached to the band, a hook having a polygonal shank entering a correspondingly shaped opening in said casing member for preventing the hook from turning, and spring means tending to retract said hook.

1,763,817. SADDLE FOR MOTOR CYCLES AND THE LIKE. CHARLES A. PERSONS, Worcester, Mass., assignor to Persons-Majestic Manufacturing Company, Worcester, Mass., a Corporation of Massachusetts. Filed Dec. 31, 1928. Serial No. 329,349. 4 Claims. (Cl. 208—15.)



1. In a saddle, a rigid concave seat providing a pommel and a flange flaring outwardly from said pommel and a series of resilient members extending between said pommel and said flange for yieldingly supporting the rider out of engagement with the concave portion of said seat between said pommel and said flange.

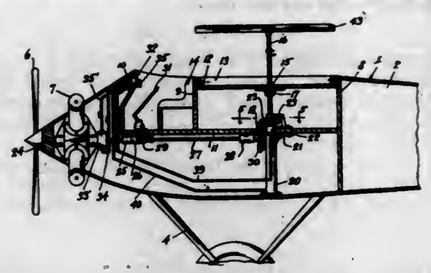
1,763,818. FLOOR-POLISHING DEVICE. THOMAS R. PONTON, Los Angeles, Calif. Filed Mar. 7, 1927. Serial No. 173,229. 2 Claims. (Cl. 91—39.)



1. In a device of the character described, the combination of a portable base, power means carried by the base, a hollow vertically disposed shaft, gear means operatively connecting said power means and shaft, a horizontally rotatable brush detachably connected to the lower end of said shaft and having a central aperture therethrough coaxial with the shaft, the detachable connection between said shaft and brush being adapted for quick interchangeability of brushes, a polishing material container including force feed means situated above the hollow shaft, a feed tube extending from said container through the hollow shaft and into the central aperture of the brush.

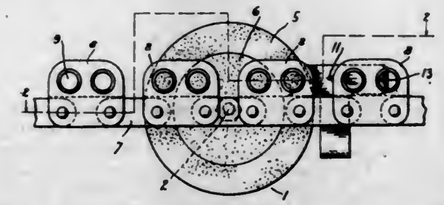
1,763,819. AEROPLANE. FRANCIS O. REED, Paris, Tex. Filed Sept. 4, 1929. Serial No. 390,299. 1 Claim. (Cl. 244—15.)

In an aeroplane of the character described comprising a fuselage having an open top compartment in its upper portion and an engine and crank shaft therein, a vertical shaft slidably mounted in said fuselage, said shaft extending upwardly therefrom, a horizontally disposed propeller on the upper end of the shaft, a piston on the lower end of the shaft, a fluid containing cylinder supported on the fuselage for the reception of the piston, a fluid pump connected to the engine and actuated thereby, conduits connecting said pump with the upper and lower ends of the cylinder, a control valve for selectively directing the fluid into the upper or lower end of the cylinder in a manner to shift the piston therein, and means for coupling the vertical shaft to the engine, said means



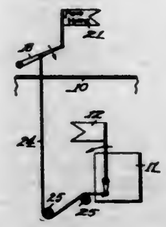
comprising a longitudinally extending drive shaft, a shiftable clutch thereon, a gear element on one end of the drive shaft, and a gear element slidably mounted on the vertical shaft and in mesh with the first named gear.

1,763,820. GRINDING APPARATUS AND METHOD. HARRY RODEMEYER, Detroit, Mich., assignor to Barnes-Gibson-Raymond Co. Inc., Detroit, Mich., a Corporation of Michigan. Filed Aug. 4, 1928. Serial No. 297,429. 6 Claims. (Cl. 51—112.)



1. An apparatus for grinding articles, comprising in combination, a grinding element composed of grinding material which has relatively great resistance to wear, another grinding element composed of grinding material which has relatively low resistance to wear but which effects a grinding action relatively great as compared to the grinding action of the first element, means for carrying an article to be ground past the said grinding elements in the order named, whereby the first mentioned element removes burrs or sharp projections from the articles to prevent undue wearing away of the second named grinding element.

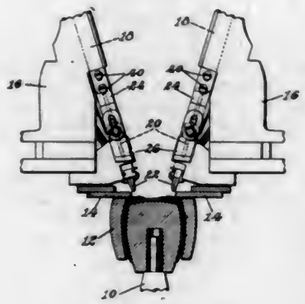
1,763,821. TAXICAB INDICATOR. OSCAR C. ROESEN, Brooklyn, N. Y. Filed July 19, 1928, Serial No. 293,957. Renewed Jan. 22, 1930. 5 Claims. (Cl. 116—114.)



1. In a device of the character described, the combination with a vehicle having on the roof a vacuum windshield wiper cylinder and a signal pivoted thereon and operated thereby so as to oscillate when the cylinder is

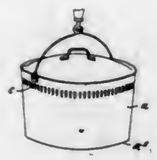
connected with a source of suction, of a taxi-meter in the vehicle having a signal flag adapted to be moved to two positions, and means connected with the signal flag for connecting the manifold with the vacuum cylinder and thus operate the movable signal.

1,763,822. MACHINE FOR SHAPING SHOE UPPERS. EDGAR E. ROWE, Chicago, Ill., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Nov. 27, 1926. Serial No. 151,203. 14 Claims. (Cl. 12—4.)



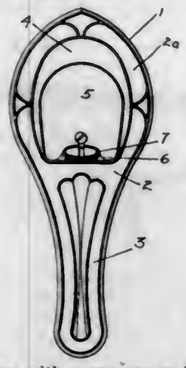
1. In a machine of the class described, the combination with means for shaping the margin of the heel end of a shoe upper to produce an internal flange, and means for driving fastenings to fasten said flange to an insole, of mechanism mounted in predetermined relation to said driving means for forming slits in the margin of the upper in front of said fastenings at definite distances from the fastenings to permit the margin in front of the slits to be turned outwardly.

1,763,823. TRANSPORTING VESSEL. WILHELM SCHMIDT, Peine, Germany, assignor to the Firm Gebr. Karges, Brunswick, Germany. Filed Aug. 28, 1929, Serial No. 389,042, and in Germany Jan. 18, 1927. 4 Claims. (Cl. 53—1.)



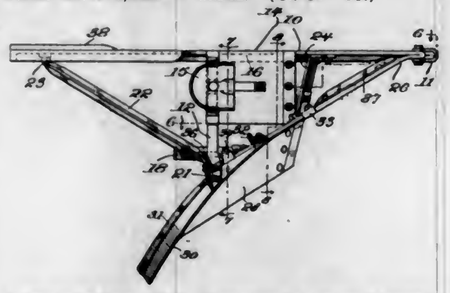
1. In an apparatus for boiling, washing and dyeing vegetables, fruit and the like the combination with a transport vessel, having suspending or carrying means, a perforated bottom and perforations in its upper part, of a plate, an opening in the said plate, a sealing ring surrounding the said opening for supporting the rim at the bottom of the vessel and pipes for the supply of the boiling, washing and dyeing media disposed below the said opening, as and for the purpose set forth.

1,763,824. REAR CORNER LIGHT FOR VEHICLE BODIES. WILLIAM SCHNELL, Detroit, Mich., assignor to Ternstedt Manufacturing Company, Detroit, Mich., a Corporation of Michigan. Filed June 20, 1929. Serial No. 372,293. 5 Claims. (Cl. 240—7.1.)



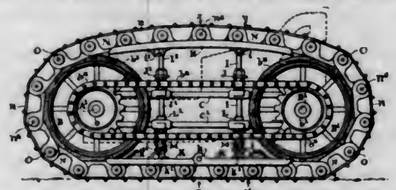
1. The combination with a rear corner light, or the like, for a vehicle body having a recessed rim, of an anchor plate having a plurality of struck-out lugs and arranged to be secured to the vehicle body, the said lugs of the anchor plate being arranged to slidably engage the recessed rim to removably secure the light to the anchor plate.

1,763,825. BANKING PLOW FOR SNOW FENCING. OSCAR SMITH, Jump River, Wis. Filed Apr. 28, 1928. Serial No. 273,615. 1 Claim. (Cl. 37—50.)



A snow banking plow, comprising a beam, a plate element diverging outwardly and rearwardly from the forward end of the beam, a blade sloping downwardly in a transverse direction and upwardly and rearwardly in a longitudinal direction and connected with the plate element, and an upwardly extending and rearwardly and outwardly curved flange having a surface at an angle with the blade and merging into the surface of the plate, the flange having connection with said plate and blade, and the point where the plate meets the edges of the flange and blade presenting a tongue and reentering angle type of construction.

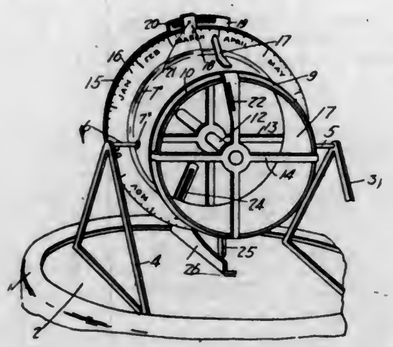
1,763,826. CUSHION-TIRE TRACK-LAYER TRACTOR. WILLIAM H. SMYTH, Berkeley, Calif. Filed Aug. 18, 1925. Serial No. 50,990. 5 Claims. (Cl. 305—8.)



5. Running-gear for vehicles comprising two-point-support cushion-tire-wheel assemblies with an axle transverse-

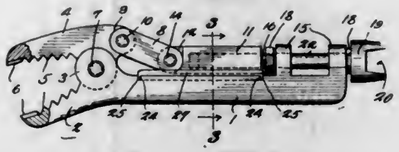
ly thereof to constitute a four-point-support wheel-base, track-chains trained around the support-wheels in friction-driven circumferential contact and spring-opposed means adapted to resiliently control the flexure of each track-chain between support-wheel peripheries in the ground run of the chain.

1,763,827. OBSERVATION INSTRUMENT. JAMES STEPHEN, Toronto, Ontario, Canada, assignor of sixty per cent to Carolyne Harwood Quipp, Toronto, Canada. Filed June 14, 1928. Serial No. 285,383. 4 Claims. (Cl. 35—3.)



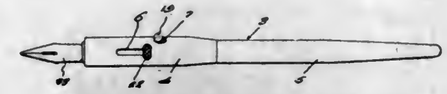
1. An observation instrument comprising a cylindrical member, a pair of annular disc members surrounding the cylinder, the exposed face of one member being graduated into hours and minutes and the exposed face of the other member into months and days, a stationary pointer carried by the cylinder and coacting with the calendar scale, a pointer carried by the cylinder to move circumferentially thereabout and coacting with the time scale, a slotted member extending radially inward from the adjustable pointer and through which the star is observed as it travels in its orbit around the North Star, and a sighting tube mounted centrally in the cylinder and through which the North Star is observed.

1,763,828. GRIP. JAMES BARDLEY STEWART, Los Angeles, Calif. Filed Apr. 15, 1929. Serial No. 355,216. 2 Claims. (Cl. 81—111.)



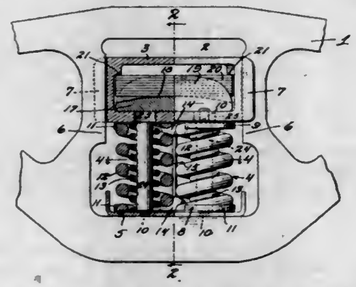
1. A grip including a body having a fixed jaw, a movable jaw pivoted to the body and cooperating with the fixed jaw, a rider slidable longitudinally of the body, a link pivoted to the forward end of the rider and to the rear of the movable jaw, an operating member threaded into the rear end of the rider, means for holding the operating member on the body for rotation and against longitudinal movement, and a combined guide and wear plate interposed between the rider and the body, the wear plate being provided with oppositely extended flanges, one flange engaging one side of the rider and the link, and the other flange engaging the opposite side of the body, and means for holding the plate against movement lengthwise of the body.

1,763,829. PENHOLDER. CHARLES B. SUITER, Bluefield, W. Va. Filed Apr. 17, 1929. Serial No. 355,772. 2 Claims. (Cl. 120—101.)



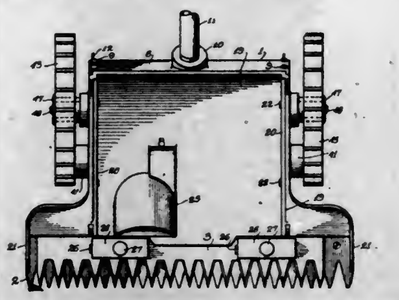
1. An article of manufacture comprising a pen holder having an opening at one end, a sectional plug for disposition within the said opening, the sections of said plug being adapted to clamp against the opposite sides of a pen point, and a spring detent for retaining the plug in clamped position in the opening of the pen holder.

1,763,830. ABSORPTION MECHANISM. THOMAS H. SYMINGTON, Baltimore, Md., assignor to T. H. Symington & Son, Inc., Baltimore, Md., a Corporation of Maryland. Filed Dec. 1, 1928. Serial No. 323,017. 9 Claims. (Cl. 105—197.)



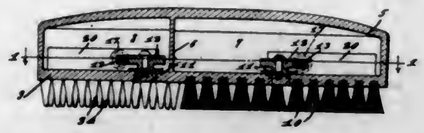
1. In a railway car truck, side frames, a bolster mounted therein, a nest of supporting springs beneath each end of the bolster, auxiliary springs mounted within each end of the bolster and adapted to operate in parallel with the first named springs, and a movable carrier for the auxiliary springs partially embracing the same.

1,763,831. LAWN MOWER. JOSEPH M. TAUBER, Chicago, Ill. Filed Feb. 1, 1929. Serial No. 336,758. 2 Claims. (Cl. 56—261.)



1. A mower comprising a carriage, traction wheels for supporting said carriage, a reciprocable cutter blade on said carriage, bearings on said carriage, a drive shaft journaled in said bearings and driven by one of said wheels, a gear housing on said carriage adapted to contain a lubricant, a pair of coacting gears in said housing, one of said gears being fast on said shaft, a crank connected to the other gear and arranged to reciprocate said blade, said housing having an oil outlet located above the level of said shaft, and means providing communication between said outlet and bearings for conducting some of the lubricant to said bearings.

1,763,832. SCALP-TREATING BRUSH. WILLIAM ALFRED TAYLOR, Detroit, Mich. Filed May 11, 1929. Serial No. 362,369. 1 Claim. (Cl. 15—138.)

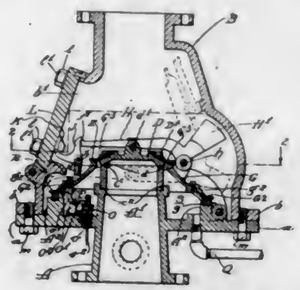


A brush comprising a body portion having a water chamber, said body portion having openings establishing communication between the water chamber and atmosphere adjacent to the bristles of the brush, a valve member having a plurality of openings, mounted for rotary movement above the openings of the body portion, said valve member having teeth formed along the edge thereof, a rod slidably mounted within the water chamber and having teeth meshing with the teeth of the valve member, one end of the rod extending beyond the side of the body portion to be pressed by the operator to rotate the valve to cause the openings of the valve and body portion to register, and means for holding the rod against movement.

1,763,833. LEATHER-TREATING COMPOSITION. WILLIAM H. TAYLOR and ADA M. TAYLOR, Baltimore, Md., assignors of twelve per cent to Clarence W. Taylor. Filed Jan. 10, 1928, Serial No. 245,805. Renewed Apr. 30, 1930. 9 Claims. (Cl. 149—6.)

6. A leather treating material comprising water, alcohol and an essential oil in proportions of approximately 750 parts of water, 250 parts alcohol and one part oil.

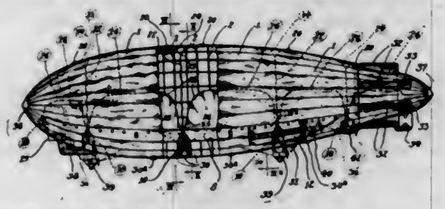
1,763,834. SPRINKLER-SYSTEM MAIN VALVE. EMIL TYDEN, Evanston, Ill. Filed Oct. 7, 1927. Serial No. 224,536. 11 Claims. (Cl. 169—22.)



1. In a valve structure for a fire extinguishing sprinkler system, in combination, a main valve body having a main water inlet port and a valve seat thereat; an atmospheric pressure chamber encompassing said inlet port and valve seat; a main valve seating at the main water inlet port; an annular element dimensioned for spanning said atmospheric pressure chamber from the outer bounding wall thereof to the periphery of the main valve; a latch connecting parts moving with the main valve and the annular element respectively for movement of said parts together in a predetermined initial opening movement of the main valve, and means for releasing said latch upon completion of said predetermined initial movement.

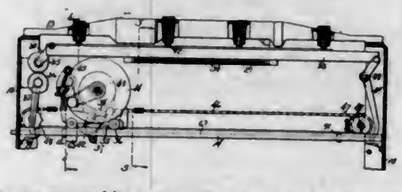
1,763,835. AIRSHIP. RALPH H. UPSON, Birmingham, Mich., assignor to Aircraft Development Corporation, Detroit, Mich., a Corporation of Michigan. Filed Jan. 24, 1924. Serial No. 688,115. 34 Claims. (Cl. 244—3.)

1. A rigid airship having a part of the hull consisting of a plurality of transverse frames braced in their plane transverse to the ship to a rigid nondeformable substantially circular shape and having the plural transverse frames interconnected by flexible metallic sheathing form-



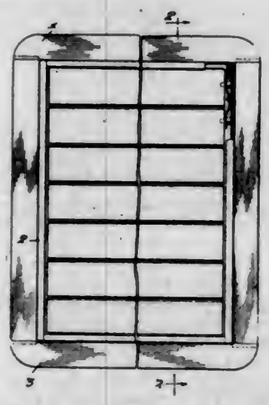
ing the skin and envelope taking the shear stresses of the hull and resisting the gas pressure stresses and means supporting the vertical fixed loads directly from said frames.

1,763,836. CUTTING MECHANISM FOR MOP-MAKING MACHINES. ANTON VAN VEEN, West Hartford, Conn., assignor to The Fuller Brush Company, Hartford, Conn., a Corporation of Connecticut. Filed July 3, 1926. Serial No. 120,360. 25 Claims. (Cl. 300—16.)



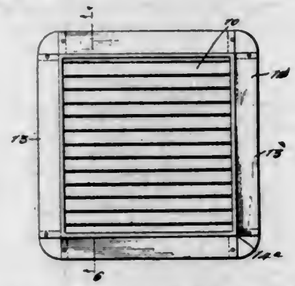
1. In a mop making or similar machine in combination, means for twisting wires, means for supplying mop material transversely to the wires associated with said twisting means, a cutter arranged to move back and forth across said material to sever it at each stroke of said cutter, reversing mechanism for changing the direction of movement of said cutter manually, actuated means to start movement of the cutter, and self-actuated means for stopping movement of the cutter at each end of its path of movement.

1,763,837. RADIATOR SHUTTER. SERGIUS VERNET, Brooklyn, N. Y. Filed Apr. 9, 1926. Serial No. 100,811. 12 Claims. (Cl. 189—62.)



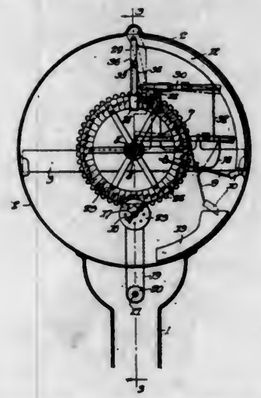
1. In a radiator shutter having a plurality of rotatable vanes, means to mount said vanes comprising a pair of strips of sheet metal having a plurality of projections formed thereon, means to prevent said vanes from rattling, comprising spring members between said vanes and one of said strips to urge said vanes toward the other of said strips, and means to hold said spring members in place against said strips when said vanes are removed therefrom.

1,763,838. RADIATOR SHUTTER. SERGIUS VERNET, Brooklyn, N. Y. Original application filed Oct. 10, 1925, Serial No. 61,646. Divided and this application filed Sept. 29, 1926. Serial No. 138,392. 1 Claim. (Cl. 189—62.)



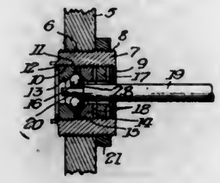
An anti-squeak and rattle shutter for radiators of internal combustion engines comprising a one-piece rigid frame; a plurality of vanes having their ends bent at right angles to the axis of said vanes and pivotally mounted in the frame; a single strip rigidly attached to each side of the frame interiorly thereof adjacent the ends of said vanes; spaced unbroken projections formed from and integral with said strip, said projections acting as bearings for the vanes; a second strip at one side of the frame adjacent one of the first-mentioned strips; projections on and integral with said second strip, each of said vanes having a hole at one end eccentric of the rotating axis of said vanes and into which one of said projections on said second strip fits, whereby said second strip is supported between said vanes and said frame; a spring secured to one end of said second strip and to the frame to normally urge said vanes into open position; means for moving the second strip against the action of said spring to close the vanes and a plurality of spring elements interposed between one of the strips secured on the frame and an end of each vane and bearing directly against said end to normally urge the vanes against their pivots.

1,763,839. AMUSEMENT APPARATUS. THOMAS W. B. WATLING, Chicago, Ill. Filed Dec. 26, 1922. Serial No. 608,865. 7 Claims. (Cl. 194—95.)



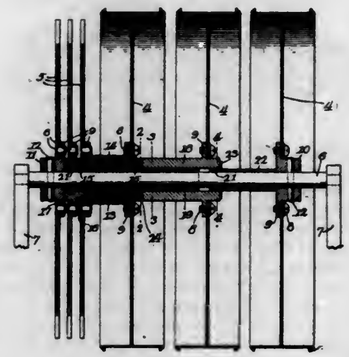
1. In an apparatus of the class described, the combination with a casing, of a pointer operable from the exterior of the casing for indicating one of a number of questions, a dial in the casing geared to said pointer and bearing on different subdivisions thereof a plurality of answers to each of the questions, a shutter shiftable to expose one of the sections of the dial, means for shifting said shutter, and means adapted to be released by the movement of said pointer for holding said shutter in shifted position, substantially as described.

1,763,840. COMBINED DUTY AND THRUST BEARING. BURNS S. WATLING, Chicago, Ill. Filed June 18, 1925. Serial No. 36,791. 6 Claims. (Cl. 308—233.)



1. An anti-friction bearing device for a shaft of the type having a reduced diameter at its supported portion forming a shoulder having a face perpendicular to the axis of the shaft, comprising a sleeve carried by a support within which the shaft is supported, complementary ball race elements within the sleeve mounted to be adjustable with respect to the balls carried thereby, and the balls therewithin being seated directly on the reduced diameter of the shaft and against the shoulder to antifrictionally mount the shaft and take up end thrust, the sleeve being adjustable with respect to the support and axially of the shaft to take up play and looseness between the balls and the shoulder.

1,763,841. DISPLAY APPARATUS. BURNS S. WATLING, Chicago, Ill. Filed Dec. 21, 1928. Serial No. 327,563. 5 Claims. (Cl. 273—143.)



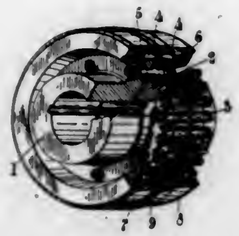
1. In combination, a supporting shaft, a series of independently rotatable, display wheels disposed side by side on said shaft, a corresponding series of disks on said shaft at one side of the wheels, the outermost wheel and disk being fixed to said shaft, separate sleeves to which an intermediate wheel and its corresponding disk are connected respectively, said sleeves being journaled on said shaft, a key member for connecting said sleeves and telescopically engaging at least one of the sleeves, and a sleeve journaled on one of said first mentioned sleeves to which the adjacent wheel and disk are fixed, substantially as described.

1,763,842. MACHINE COUPLING. JAMES BIBBY, London, England, assignor to The Falk Corporation, Milwaukee, Wis., a Corporation of Wisconsin. Filed July 19, 1928, Serial No. 293,841, and in Great Britain July 19, 1927. 2 Claims. (Cl. 64—96.)

1. A machine shaft coupling comprising aligned shaft coupling members having axially directed peripheral grooves, grid-like inter-connecting resilient means having

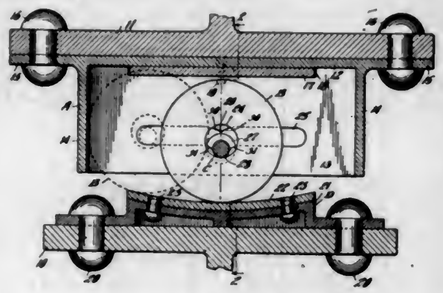
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their limbs bridging and lying removably in said grooves, comprising two circumferentially jointed halves enclosing



respectively the peripherally grooved portions of the shaft coupling members, and means securing both halves of the casing together but to only one of the coupling members.

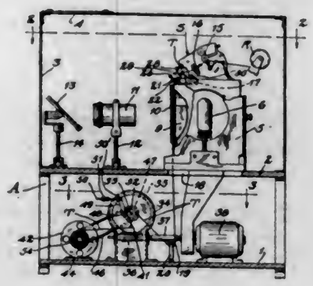
1,763,843. SIDE BEARING. AAILD M. BRENNE, Chicago, Ill., assignor, by mesne assignments, to W. H. Miner, Inc., a Corporation of Delaware. Filed May 24, 1923. Serial No. 641,045. 2 Claims. (Cl. 308—226.)



1. In an anti-friction bearing, the combination with an anti-friction roller having an axial opening; of a mounting for said roller permitting movement thereof to either side of center position, said mounting including a concave bearing surface for returning said roller toward central position under the influence of gravity; and means for checking said roller during its returning movement, said means including: a pin loosely carried in the axial opening of said roller and normally resting on the bottom wall of said opening, horizontal guide slots in the walls of said mounting into which the ends of the pin project, said guide slots being so located with reference to said bearing surface and said roller as to lift and guide the pin when the roller is moved in either side of central position, each of said guide slots having a central portion projecting below the upper wall defining the guide slot so as to be in line with the ends of said pin to bring about contact between said pin and said projecting portions when said roller is returned toward central position under excessive speed.

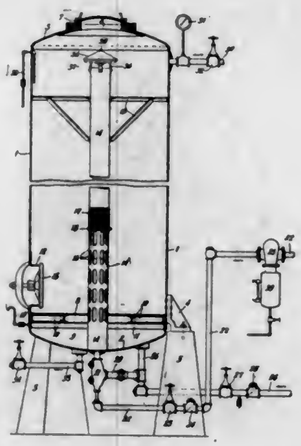
1,763,844. REWINDING MECHANISM FOR THE TAPE OF NEWS PROJECTING MACHINES. JAMES W. DECKER, New York, N. Y., assignor to News Projection Corporation, New York, N. Y., a Corporation of New York. Filed June 17, 1926. Serial No. 116,513. 3 Claims. (Cl. 88—24.)

1. The combination with a printing mechanism for printing news items on a tape, of a projecting mechanism, means for imparting a feeding impulse to the tape to advance the tape from said printing mechanism to said projecting mechanism, loop forming means for forming a loop between said printing mechanism and said projecting mechanism during the operation of the feeding means, means for imparting a uniform drawing action on said tape to draw the tape past said projecting mechanism and cooperating with said loop forming means to maintain taut the portion of the tape located at the projecting mechanism, a driving shaft operatively connected to said drawing means, said drawing means being free to slip relative to said tape when said feeding means is arrested thereby initially



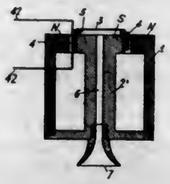
to take up the slack formed by said loop forming means and thereupon maintain a uniform tension on the tape between said printing mechanism and said drawing means, a rewind reel, and an extensible belt connecting said driving shaft with the rewind reel whereby slippage between the belt and driving shaft will permit the reel to rest whnever the feeding means is stopped.

1,763,845. APPARATUS FOR DISSOLVING SILICATE OF SODA. LLOYD B. EDGERTON, Narberth, Pa., assignor to Philadelphia Quartz Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Oct. 6, 1927. Serial No. 224,353. 5 Claims. (Cl. 23—271.)



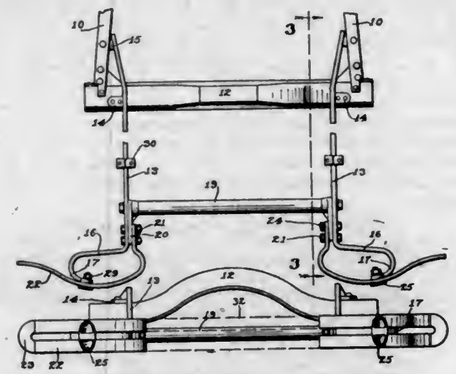
1. A silicate dissolver comprising in combination, a tank, a silicate supporting screen near the bottom of said tank, a standpipe in the tank, openings in the lower portion of the standpipe communicating with the silicate chamber above the screen, and means for introducing a heating medium into the bottom of the standpipe below said openings.

1,763,846. TELEPHONE RECEIVER. RICHARD D. FAY, Cambridge, Mass., assignor, by mesne assignments, to Radio Corporation of America, New York, N. Y., a Corporation of Delaware. Continuation of application Serial No. 579,191, filed Aug. 2, 1922. This application filed Oct. 16, 1926. Serial No. 142,122. 8 Claims. (Cl. 179—115.5.)



2. In apparatus for sound reproduction, a diaphragm unit in the form of a cup and elastic supporting means for said unit located inside the cup.

1,763,847. BUMPER. JOSEPH GALAMB, Detroit, Mich., assignor to Ford Motor Company, Dearborn, Mich., a Corporation of Delaware. Filed May 25, 1929. Serial No. 366,024. 8 Claims. (Cl. 293—55.)



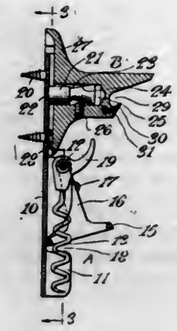
5. In an automobile bumper, a pair of spaced bumper brackets, a bumper bar, and means for securing said bumper bar to said bumper brackets so that the center portion of said bar will be flexed outwardly from its normal shape when clamped on said bumper brackets.

1,763,848. WALL BOTTLE OPENER. JOSEPH A. HOEGGER, Jersey City, N. J. Filed Jan. 14, 1928. Serial No. 246,669. 1 Claim. (Cl. 65—46.)



A wall bottle opener having a relatively broad flat back base adapted for attachment to a wall, said base merging in an outwardly extending post which is integral with the base and which is of progressively decreasing cross sectional size from the base to the outer end of the post, said post being transversely slotted across the outer end and terminating on the upper side in a projecting over-hanging member and on the lower side in an up-turned claw.

1,763,849. BOTTLE OPENER. JOSEPH A. HOEGGER, Jersey City, N. J. Filed Aug. 27, 1928. Serial No. 302,157. 5 Claims. (Cl. 65—48.)



1. An article of the class described comprising an elongated flat base member, flanges along the sides of the base member, a corkscrew adapted to lie between the flanges in inactive position, a pivot pin supported between the flanges and on which one end of the corkscrew is journaled, said corkscrew being adapted to swing on said pin away from the base member, a circular cork guide member disposed around the corkscrew, and legs for the guide member journaled on said pin, said flanges having notches to accommodate the guide member for snug dispositions against the base member in inactive position.

1,763,850. BEAD-CHAIN CONNECTER. JOHN W. W. HOLDEN, Providence, R. I. Filed Nov. 10, 1928. Serial No. 318,576. 6 Claims. (Cl. 24—116.)



1. A connecter for a bead series comprising two arms disposed face to face connected at their inner ends by a fold and provided at their outer ends with holes registering with each other, one of said arms and the fold being provided with a longitudinal slot communicating with the hole in the last mentioned arm.

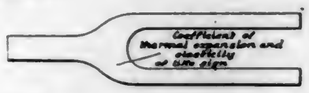
1,763,851. CONCENTRATION OF ORES. BENJAMIN L. JOHNSON, Garfield, Utah. Filed Oct. 31, 1928. Serial No. 316,366. 5 Claims. (Cl. 209—166.)

1. The improvement in the concentration of ore by froth flotation which comprises subjecting the ore in the form of a pulp to a froth flotation operation in the presence of the reaction product of diethyl dithio phosphoric acid with strong sulphuric acid.

1,763,852. TETRATHIO DIPHOSPHO ORGANIC COMPOUND. BENJAMIN L. JOHNSON, Garfield, Utah. Filed Oct. 31, 1928. Serial No. 316,367. 4 Claims. (Cl. 260—98.)

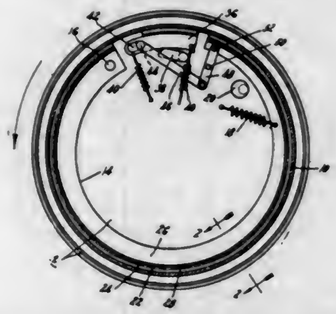
1. A composition of matter comprising a tetrathio diphospho organic compound.

1,763,853. MECHANICAL OSCILLATOR OF CONSTANT-FREQUENCY VALUE. AUGUST KAROLUS, Leipzig, Germany, assignor to Radio Corporation of America, a Corporation of Delaware. Filed Nov. 25, 1927, Serial No. 235,761, and in Germany Dec. 22, 1926. 8 Claims. (Cl. 84—454.)



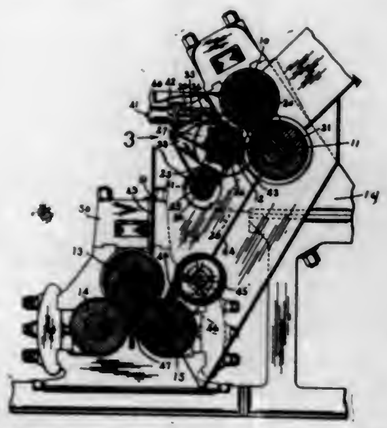
4. A tuning fork formed of a ferrous alloy in which changes in length of said fork due to variations in temperature, are compensated for by changes in the elastic properties of the said ferrous alloy.

1,763,854. BRAKE. KENNETH E. LYMAN, Chicago, Ill., assignor to Bendix Brake Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 19, 1927. Serial No. 220,315. 13 Claims. (Cl. 188—78.)



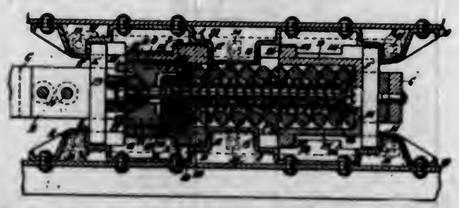
1. A brake comprising, in combination, a rotatable drum, friction means engageable with the drum, a servo member engageable with the drum and operable to apply the friction means by direct engagement therewith when the drum is turning in one direction, and connections operated by the servo member for applying the friction means when the drum is turning in the other direction.

1,763,855. SUGAR-CANE-CRUSHING APPARATUS. FRANCIS MAXWELL, Wallington, England. Filed June 23, 1927. Serial No. 200,891. 1 Claim. (Cl. 100—47.)



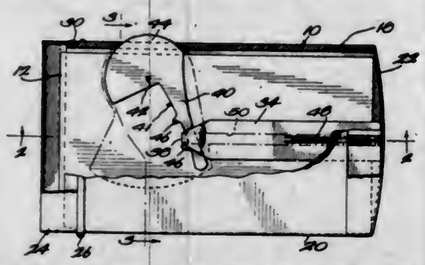
In cane crushing apparatus, a pair of frame members, a pair of cooperating pressure rolls between said frame members, a driven shaft extending between said frame members and supported thereby, a bracket swingably mounted on said shaft, a roll carried by said bracket, and means to swing said bracket relatively to said pair of rolls to move said roll carried thereby into cooperating position with one of said pair of rolls, and means to urge said rolls from said driven shaft.

1,763,856. TANDEM DRAFT RIGGING. JOHN F. O'CONNOR, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed Feb. 27, 1928. Serial No. 257,126. 2 Claims. (Cl. 213—25.)



1. In a draft rigging, the combination with tandem stop castings having front main and intermediate stops, rear intermediate and main stops, and corresponding limiting stops; of a friction shell anchored to said castings between the front intermediate and corresponding limiting stops; wedge friction elements co-operable with said shell; a spring extending from said shell approximately to the rear main stops; and means associated with the inner end of said spring, said means having a plurality of follower acting portions movable between and respectively co-operable with the rear main stops and corresponding limiting stops, and the rear intermediate stops and corresponding limiting stops, whereby a spring friction action is obtained in buff and a spring action only in draft.

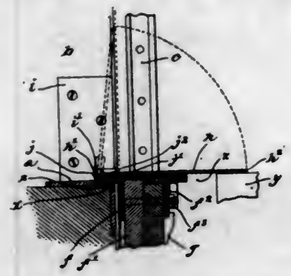
1,763,857. CARDCASE. WILLIAM H. OSTRANDER, Chicago, Ill., assignor to Novelties Incorporated, Chicago, Ill., a Corporation of Illinois. Filed Aug. 1, 1928. Serial No. 296,661. 3 Claims. (Cl. 206—40.)



1. In a card case of the class described, a container for retaining a supply of cards, an elongated member slidable longitudinally within the casing and having one extremity adapted to engage individual cards, and a lever pivotally mounted within the casing having one extremity thereof pivotally connected to one extremity of said slidable member, the opposite extremity of the lever having an arcuate surface which projects through one wall of the container and is positioned for convenient manual manipulation, movement imparted to the lever serving to effect longitudinal movement of the slidable member within the container.

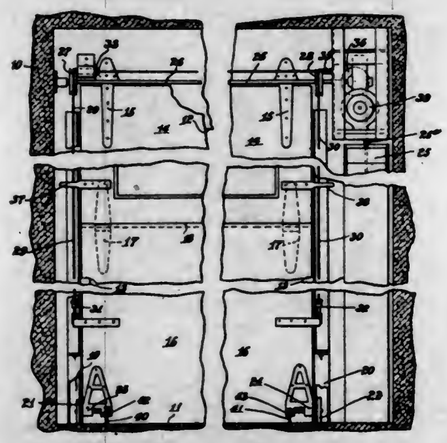
1,763,858. ELEVATOR DOOR. JOHN W. PEELLE, New York, N. Y., assignor to The Peelle Company, Brooklyn, N. Y., a Corporation of New York. Filed Dec. 12, 1924. Serial No. 755,446. 6 Claims. (Cl. 20—19.)

1. An elevator door having a vertically and downwardly movable section, a trucking plate, said plate being of a length to project across the top of said door section and engage the floor of an elevator car, bearing plates on the jambs of the door opening adjacent the sill thereof, trunnion fittings secured to said plate and co-operating with said bearing plates respectively, whereby said plate will completely close all gaps between the sill and the car and be moved into or out of the operative relation to the car by the opening and closing movement of said door



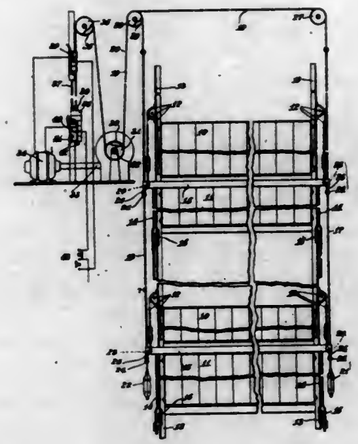
section, extensions upon said trunnion fittings of a height to engage the sill when the door is open, whereby said trunnions are relieved from all stresses from loads upon said plate, and means affording support for said trucking plate intermediate its point of pivotal support and the elevator car, whereby the major portion of the weight of a load passing upon said plate will be transmitted to the wall of the elevator shaft.

1,763,859. WAREHOUSE DOOR. ROBERT S. PEELLE, New York, N. Y., assignor to The Peelle Company, Brooklyn, N. Y., a Corporation of New York. Filed Dec. 3, 1926. Serial No. 152,360. 9 Claims. (Cl. 20—20.)



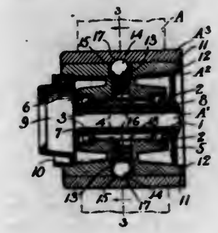
1. A warehouse door embodying therein an upper section hinged adjacent the lintel of a door opening, a lower section hinged thereto, co-operating means adjacent the jambs of the door openings and carried by and permitting pivotal movement of said lower section, whereby the lower portion of said section is caused to have only a vertical and turning movement, means for raising and lowering said sections, including therein a power operated actuating member offset from the plane of the door, flexible connections co-operating therewith and connected with said lower section, and a fixed member carried by one of said movable sections above the point of connection of said flexible connections with the lower door section, said flexible connections passing about and being in engaging relation with said fixed member between their point of connection with the door and their connection with said power operated actuating member whereby with the initial application of power for raising said sections, the joint therebetween will be automatically broken.

1,763,860. ELEVATOR DOOR. ROBERT S. PEELLE, New York, N. Y., assignor to The Peelle Company, Brooklyn, N. Y., a Corporation of New York. Filed Apr. 14, 1927. Serial No. 183,648. 15 Claims. (Cl. 268—59.)



1. An elevator door embodying therein a vertically movable section, counterbalancing means co-operating therewith, said section being overweighted in relation to said counterbalancing means, stops arresting downward movement of said section when it is in the fully open position, and means whereby said section may be locked when in the closed position, in combination with cables or rods on opposite sides of said door section, co-operating means carried by said cables or rods and said door section, whereby with the movement of said cables or rods in one direction when said locking mechanism is released, said section may have opening movement therewith, and movement of said cables or rods in the opposite direction will impart closing movement to said section, a counterweight operative upon said cables or rods, a motor driven friction device acting upon said cables or rods intermediate said counterweight and said door section, and guides for said rods or cables intermediate said friction device and said counterweight, and intermediate said device and said door section, whereby differential pressure upon said cable or rod on opposite sides of said friction device will make said device inoperative to impart further movement to said cables or rods.

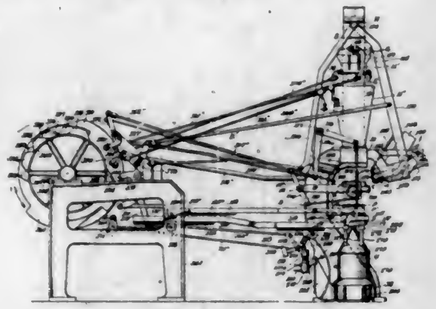
1,763,861. YARN CARRIER. BURT A. PETERSON, Rockford, Ill., assignor to Barber-Colman Company, Rockford, Ill., a Corporation of Illinois. Filed May 26, 1927. Serial No. 194,253. 3 Claims. (Cl. 242—130.)



1. A yarn-carrier comprising an inner sleeve-like member, a roller rotatably mounted on said inner member, a yarn-

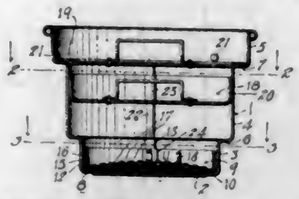
supporting sleeve adapted to be slipped over one end of said roller, means to prevent said sleeve from being slipped upon the roller with the wrong end foremost, and means to releasably secure the sleeve upon the roller.

1,763,862. MOLDING MACHINE. GEORGE E. PICKUP, Newark, Ohio, assignor to The Wehrle Company, Newark, Ohio, a Corporation of Ohio. Filed Sept. 24, 1926. Serial No. 137,407. 108 Claims. (Cl. 22—9.)



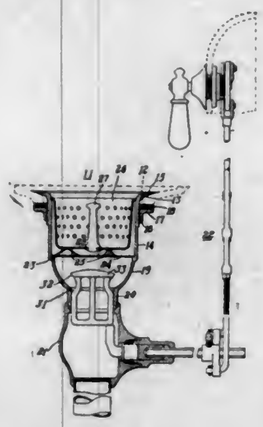
1. An automatic molding machine comprising, in combination, a main frame, a pattern plate supported on said frame, a flask comprising cope and drag sections movably mounted on said frame, sand supply devices supported above said flask, a ramming device supported below said flask, a drag board supported on one side of said flask, a cope board supported on another side of said flask, means to assemble said flask with said pattern plate therebetween, means to pivot said flask to position the drag section uppermost, means to operate said sand devices to discharge sand into said drag section, means to move said drag board onto said drag section, means to clamp said drag board onto said filled drag section, means to position said flask with the cope uppermost, said sand device operating means being adapted to again discharge sand into the cope section, means to move said cope board onto the cope section, means to raise said ram to ram said flask, means to lower said ram, means including a portion of said assembling means to part said flask sections to draw said pattern, means to withdraw said pattern from between said flask sections, said ram actuating means being again operable to raise said ram to close said flask, and means to retain said flask in a raised position to permit the completed mold to descend with the ram.

1,763,863. COFFEE-MAKING APPARATUS. ISAAC D. RICHHEIMER, New York, N. Y. Filed July 20, 1929. Serial No. 379,653. 2 Claims. (Cl. 53—3.)



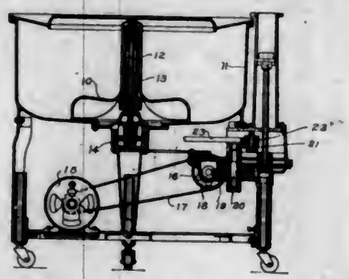
1. Coffee-making apparatus including a casing having a perforated bottom, a filter medium upon said bottom, and a perforated binder plate upon said filter medium to hold it upon said bottom, said bottom and said binder plate being corrugated and the corrugations of one being arranged reversely to the corresponding corrugations of the other so that alternate corrugations form channels between said bottom and said binder plate to conduct liquid from the perforations of the binder plate to the perforations of said bottom and the corrugations reenforce said bottom and said plate.

1,763,864. SINK STRAINER. ELMER K. ROBERTSON, Louisville, Ky., assignor to Standard Sanitary Manufacturing Company, a Corporation of Pennsylvania. Filed June 25, 1928. Serial No. 288,224. 3 Claims. (Cl. 4—289.)



1. A sub-sink comprising a cylindrical body having an inwardly extending annular projection, a perforated container and strainer disposed within the said body, the annular projection adapted to support the said strainer, the said strainer being stamped to form a plurality of V-shaped projections thereon for supporting the container in spaced relation thereto.

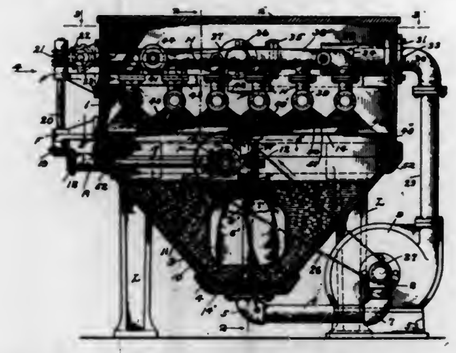
1,763,865. GEARING FOR WASHING MACHINES. JOHN ROCKE, Bloomington, Ill. Filed July 15, 1926. Serial No. 122,558. 1 Claim. (Cl. 74—36.)



In gearing for washing machines or the like, a worm gear and a driving worm therefor, a worm and gear casing, an aperture in said casing, a cap member provided with a bushing for supporting the worm shaft, said bushing projecting freely into said aperture, an adjusting screw engaging the bushing to vary its position within the aperture, and means for fixedly connecting the cap member to the casing in the position set by the adjusting screw, comprising bolt members passing through holes in the cap and into the casing, the bodies of the bolt members having smaller diameters than the holes in the cap.

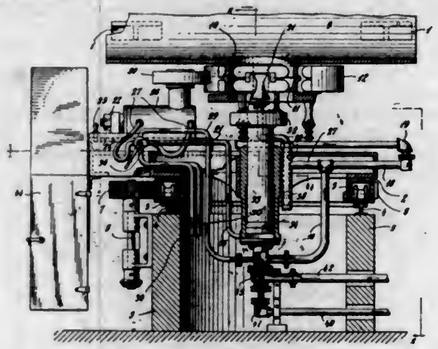
1,763,866. WAX-MATRIX BLACK-LEADING MACHINE. EDGAR RODD, Chicago, Ill., and JOHN H. EBEL, Mahwah, N. J., assignors to R. Hoe & Co. Inc., New York, N. Y., a Corporation of New York. Filed Dec. 7, 1926. Serial No. 153,143. 27 Claims. (Cl. 91—7.5.)

1. In a spray machine, a fluid container, a reciprocatable gang spray mechanism including a fluid-pump in communication with said container, a stationary work holder over which the gang spray reciprocates, an outlet from said container, a valve for said outlet, and automatic means for lifting said valve from the outlet.



25. An apparatus of the character described comprising a container; means for supporting work over the container; an agitator in the container; and a baffle over the agitator and disposed entirely under all parts of the work to prevent up-splash on the work from the agitator.

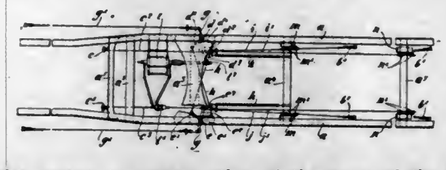
1,763,867. WELDING MACHINE. CHARLES L. ROWLAND, Carbondale, Pa., assignor to American Welding Company, Carbondale, Pa., a Corporation of Pennsylvania. Filed Jan. 27, 1926. Serial No. 84,134. 38 Claims. (Cl. 78—85.)



5. A welding machine including: a work holder to support hollow work, an exterior furnace equipment surrounding the work and having a gap affording access to the work, an exterior welding member to act on the work in the plane of the gap, an interior furnace equipment within the work, an interior welding member also within the work, transmission devices to effect with respect to the exterior furnace equipment and the welding members as one element and the work holder as another element, a relative rotating movement one with relation to the other, means for moving the interior furnace equipment and interior welding member lengthwise of the work to bring said interior welding member into and out of engagement with the work and means for moving the exterior welding member toward and away from the work.

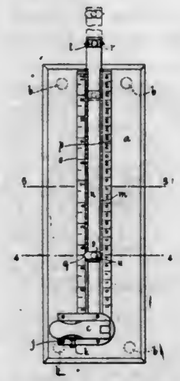
1,763,868. BRAKE SYSTEM FOR SIX-WHEEL DRIVES. HENRY B. SHIELDS, Freeport, N. Y., assignor to International Motor Company, New York, N. Y., a Corporation of Delaware. Filed May 29, 1928. Serial No. 281,402. 2 Claims. (Cl. 188—10.)

1. In a vehicle having a plurality of driving axles, and braking means on the axles, a plurality of steering wheels and braking means on the steering wheels, brake operating mechanism including bell cranks pivotally mounted on opposite sides of the vehicle frame, a plurality of arms on the bell cranks, means to connect certain of the arms of each bell crank with the braking means on the driving



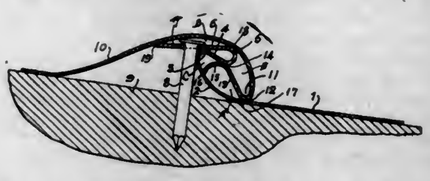
axles, means to connect other of the arms of the bell cranks with the braking means on the steering wheels, connections between certain of the arms of the bell cranks to cause them to move simultaneously, and a connection between one of the arms and the brake operating mechanism.

1,763,869. MACHINE FOR PUNCHING HOLES IN DOCUMENTS AND THE LIKE. WILLIAM WALLACE SPIERS, London, England. Filed Oct. 21, 1927, Serial No. 227,752, and in Great Britain Dec. 18, 1926. 2 Claims. (Cl. 164—96.)



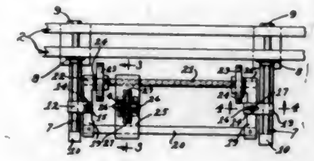
1. A machine for punching holes in documents and the like comprising, in combination, a punch, a guide member in juxtaposition to the punch, a bar adjustable in the guide member and removable and reversible relatively thereto, a scale device in association with the guide member, the means for locking the bar in the adjusted position forming an anchor to the article under operation.

1,763,870. METAL-ROOF CONSTRUCTION. EVERETT TALMAGE, Sabina, Ohio. Filed Apr. 2, 1928. Serial No. 266,801. 6 Claims. (Cl. 108—17.)



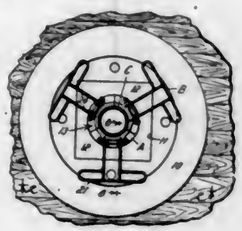
5. In a roof construction, a roof plate having an upper edge bent in the form of a sigmoid flexure having an inner and an outer curve with the free end adapted to receive nails for the attachment of the plate to the roof, and an upper plate having its lower edge bent in the form of a sigmoid flexure having an inner and an outer curve, the outer curve of which is adapted to engage the outer curve of the first plate to form a substantially watertight roof connection therebetween.

1,763,871. SPOOLING DEVICE. ELMER H. TAYLOR, Long Beach, Calif. Filed July 2, 1928. Serial No. 289,701. 6 Claims. (Cl. 242—157.)



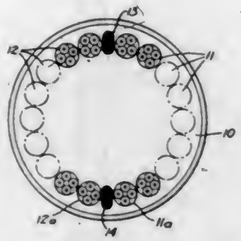
1. A cable spooling device comprising, substantially horizontal fixed guides transverse to the main axis of a winding drum, a transversely movable carriage comprising a longitudinal guide, a longitudinal threaded shaft and transverse means connecting said longitudinal guide and shaft, means connecting the fixed transverse horizontal guides with said carriage adapted to offer a walking support for said carriage and a cable frame movably mounted on said carriage and in threaded engagement with said shaft, said frame being adapted to receive a cable and impart rotation to said shaft by longitudinal motion of said frame.

1,763,872. SLIP. RICHARD V. UHRIG, Alhambra, Calif. Filed Apr. 4, 1929. Serial No. 352,351. 12 Claims. (Cl. 24—263.)



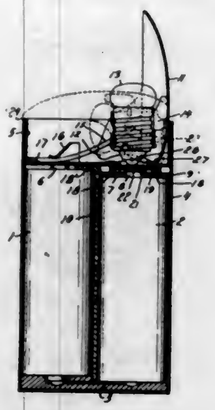
1. A slip for use in the slip carrying opening of a rotary table including, a body to fit the opening, and a handle on the body including a support for holding it in position to be gripped, the handle having a part wider than the greatest dimension of the opening.

1,763,873. TELEPHONE CABLE. WILLIAM K. WESTON, Sanderstead, England, assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Feb. 16, 1929, Serial No. 340,527, and in Great Britain Mar. 29, 1928. 4 Claims. (Cl. 173—81.)



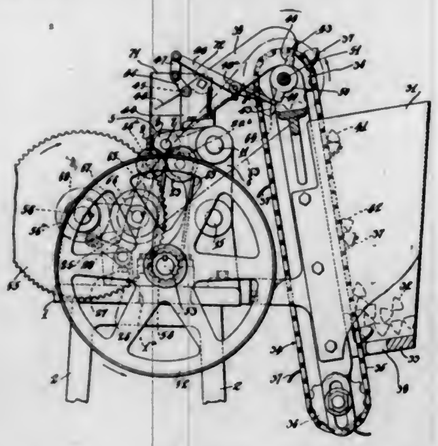
4. In a telephone cable, a plurality of wires, a spacing strand between two of said wires comprising a metallic screening tape, a reenforcing strip for said tape of insulating material, and an outer serving of insulating material for maintaining said tape and said strip in a fixed mutual relaton, said reenforcing strip being folded to introduce a plurality of air spaces within said serving.

1,763,874. BATTERY HAND LAMP. JOHN S. ZOOK, Madison, Wis., assignor to Burgess Battery Company, Madison, Wis., a Corporation of Wisconsin. Filed Oct. 16, 1928. Serial No. 312,809. 6 Claims. (Cl. 240—105.)



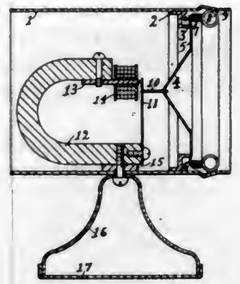
1. In a battery hand lamp, a battery, a cup at one end of said battery, said cup being electrically connected to one pole of said battery and having an opening for exposing the other pole and being insulated from said second pole, flanges along the edges of said opening, a piece of insulating sheet material fitting between said flanges, a perforation in said sheet material, a metal eyelet mounted in said perforation, and fusible conducting material in said eyelet connecting said eyelet with said exposed pole.

1,763,875. NUT-CRACKING MACHINE. LEON P. ANTHONY, Los Angeles, Calif., assignor of forty-five per cent to Ralph W. Reynolds, Los Angeles, Calif. Filed Mar. 12, 1927. Serial No. 174,810. 13 Claims. (Cl. 146—12.)



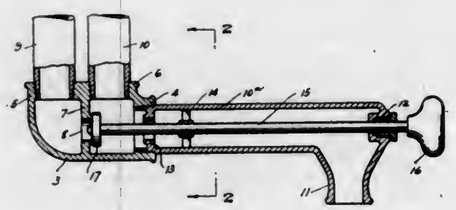
1. In a nut cracking machine, the combination of a frame, means for supporting the nut, a movable jaw, a plunger guided to slide on the frame, means connecting the plunger and the movable jaw operating to set the jaw against the nut during the first part of the movement of the plunger and permitting a relatively forward movement of the jaw with respect to the plunger and operating in the latter part of the movement to move the jaw in unison with the plunger to crack the nut.

1,763,876. ACOUSTIC DIAPHRAGM AND MOUNTING. NATHANIEL BALDWIN, East Mill Creek, Utah. Filed Jan. 4, 1926. Serial No. 79,165. 5 Claims. (Cl. 181—31.)



3. A diaphragm with cone-shaped inner portion and substantially plain outer portion, a reenforcing rim consisting of a band folded over the edge of the outer portion, a cylindrical housing, for said diaphragm, an annular seat for said diaphragm secured to said housing, an annular inclined surface in said housing, and a compressed annular spiral spring pressing against said inclined surface and against said rim and adapted to put tension on said diaphragm by pressing it against said seat.

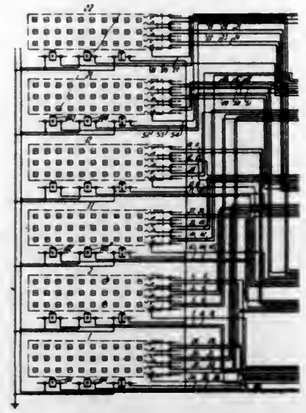
1,763,877. COMBINATION SPOUT AND DIVERTER. DANIEL H. BOWLZER, Los Angeles, Calif., assignor, by mesne assignments, to Bucknell Supply Company, Los Angeles, Calif., a Corporation of California, doing business as Sphinx Manufacturing Company. Filed Aug. 12, 1926. Serial No. 128,746. 2 Claims. (Cl. 251—22.)



1. A spout structure comprising a valve casing of elbow form having a ported partition with a valve seat dividing the casing into an outlet chamber and an inlet chamber, there being a first outlet in one branch of the elbow communicating with said inlet chamber, there being an inlet communicating with said inlet chamber at the other branch of the elbow and a second outlet by the side of said inlet communicating with said outlet chamber, a spout connected to said first outlet extending in alignment therewith and having a port and valve seat therefor, valve means between said seats to alternately open and close the ports whereby to divert water to either outlet and operating means for said valve means extending axially through said spout to a place adjacent the mouth convenient for manipulation.

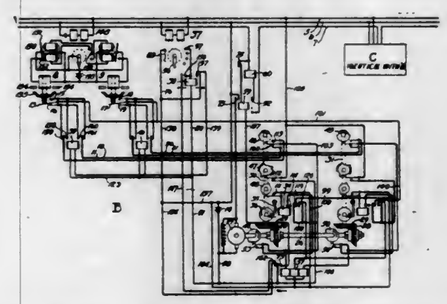
1,763,878. TESTING SYSTEM. WILLIAM BRESTERS, Berwyn, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Oct. 26, 1928. Serial No. 315,115. 13 Claims. (Cl. 179—175.)

1. A plurality of switches, wipers therefor, means for moving the wipers of two switches in synchronism in a primary movement in one direction followed by a secondary movement in another direction, means for releasing said



switches in regard to the secondary movement, and means for continuing the primary movement and repeating said movements in the order mentioned.

1,763,879. SELECTOR SUPERVISORY SYSTEM. LOUIS J. BURNS, Nutley, and LESLIE E. COON, Chatham, N. J., assignors, by mesne assignments, to Western Electric Company, Incorporated, a Corporation of New York. Filed Feb. 9, 1925. Serial No. 7,757. 1 Claim. (Cl. 177—353.)

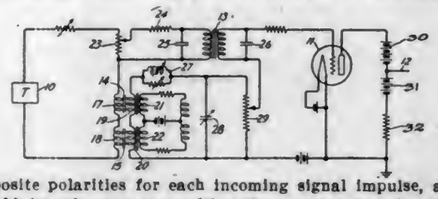


In a signaling system, a central station, a remote station, a circuit connecting the same, a plurality of devices at said remote station capable of assuming different positions, selectors at the remote station, means at the central station for controlling the same over said circuit to selectively actuate said devices, a pair of visual signals at the central station for each device to indicate its position, a code signal transmitter for each device for selectively operating said visual signals and operated by the associated device changing its position, and means controlled from said central station and actuated by a single selecting operation for causing said transmitters to successively operate independently of said devices first to render inert the visual signal displayed which indicates the position of the corresponding device and render the alternate signal of said device displayed and then to restore the original indication.

1,763,880. SIGNALING SYSTEM. EVERETT T. BURTON, East Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed June 2, 1928. Serial No. 282,381. 11 Claims. (Cl. 178—63.)

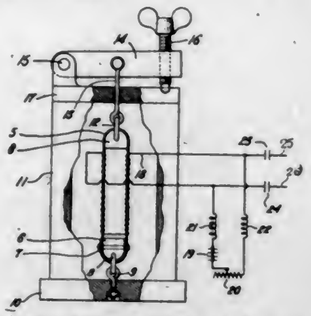
1. In a signaling system, the method of repeating signals for transmission, which consists in at least partially

separating the high frequency components from the low frequency components of the signaling currents, reproducing the low frequency components substantially without change, operating upon the high frequency components by reshaping them to produce a plurality of impulses of



opposite polarities for each incoming signal impulse, and combining the waves resulting from reshaping the high frequency components with the reproduced low frequency components to give a sharp discrete signal for transmission over a line.

1,763,881. VARIABLE INDUCTANCE. PAUL P. CIOFFI, Brooklyn, N. Y., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed July 8, 1924. Serial No. 724,763. 4 Claims. (Cl. 171—242.)

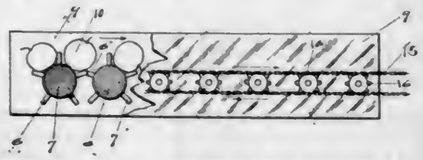


3. In an electric circuit including an inductive device having a core with a permeability which is highly sensitive to mechanical strain, the method of varying the inductance of said circuit which comprises producing a unidirectional biasing flux by applying a magnetizing force to said core to secure high sensitivity of its permeability at said flux to variations in strain and applying a mechanical strain to said core to secure a desired permeability and adjusting said strain to effect a different permeability of said flux.

1,763,882. REFRACTORY PRODUCT. SANDFORD S. COLE, Pittsburgh, Pa., assignor to The Koppers Company, a Corporation of Delaware. Filed Feb. 23, 1927. Serial No. 170,436. 7 Claims. (Cl. 106—9.)

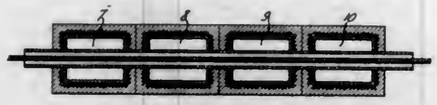
1. A refractory product containing a refractory base material and a cyanide compound of iron in admixture therewith.

1,763,883. FRUIT TUMBLER AND CONVEYER. FRED S. COLVIN and JOHN V. ROGERS, Yakima, Wash. Filed May 8, 1929. Serial No. 361,360. 14 Claims. (Cl. 146—202.)



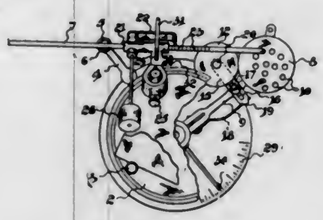
14. In a conveyer to support and advance and turn fruit; the combination of a series of rotatable rollers and intercurrent fingers thereon, each of said fingers being yieldable in every direction.

1,763,884. HEAT TREATMENT OF LOADED CONDUCTORS. GUSTAF W. ELMEN, Leonia, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed May 29, 1926. Serial No. 112,637. 3 Claims. (Cl. 178—45.)



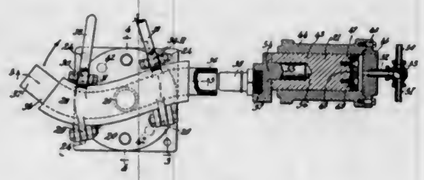
1. The method of increasing the permeability of an alloy consisting chiefly of nickel and iron applied to a conductor as loading material, which method comprises heating said loaded conductor to approximately 900° C. and subsequently cooling the same by passing said conductor continuously through a plurality of heated chambers maintained at progressively lower temperatures, so as to cool said loaded conductor at a rate of about 50° C. per minute.

1,763,885. GEOMETRIC SCRIBING MACHINE. ALEXANDER D. FISHER, Toronto, Ontario, Canada, assignor to The Design-O-Graph Limited, Toronto, Canada. Filed Jan. 9, 1928. Serial No. 245,407. 7 Claims. (Cl. 33—27.)



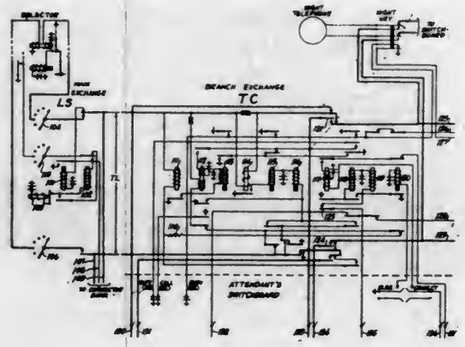
1. A geometric scribing machine comprising a rotary table; a crank disk; a bar substantially parallel to the surface of the table having a pivotal connection with the disk eccentric thereto; a fulcrum spaced from the centre of the table slidably and rockably supporting the said bar; a scribing point carried by the said bar adapted to engage the upper surface of the table, and a variable speed drive between the table and crank disk comprising stepped friction pulleys connected with the table and with the crank disk, and an idler friction disk adjustably mounted for engagement with any two complementary friction pulleys.

1,763,886. NIPPLE-INSERTING MACHINE. EDWARD E. GOLD, New York, N. Y., assignor to Gold Car Heating & Lighting Company, Brooklyn, N. Y., a Corporation of New York. Filed July 10, 1928. Serial No. 291,647. 5 Claims. (Cl. 29—88.2.)



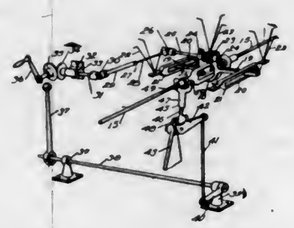
5. A nipple-inserting ram adapted for use as a part of means whereby nipples may be inserted in the opposite ends of curved tubing, said ram having a nipple-holder eccentrically mounted therein adapted to be shifted to positions such as to hold a nipple in either of two laterally separated positions with its axis parallel but non-coincident with the axis of movement of the ram.

1,763,887. AUTOMATIC TELEPHONE SYSTEM. ROY F. GOULD, Chicago, Ill., assignor to Reserve Holding Company, Kansas City, Mo., a Corporation of Delaware. Filed Dec. 3, 1928. Serial No. 323,326. 7 Claims. (Cl. 179—27.)



5. In a telephone system, a trunk line accessible to final connectors, means for seizing said trunk line and for making an application of ringing current thereto, a locking device on said trunk line responsive to ringing current, and means responsive to said trunk being freed for unlocking said device.

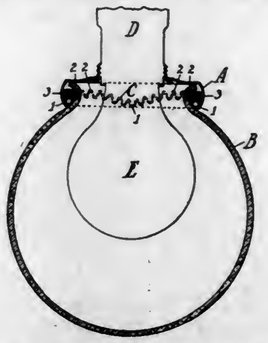
1,763,888. AEROPLANE. ROGER W. GRISWOLD, 2D, Erie, Pa. Filed Nov. 11, 1927. Serial No. 232,580. 1 Claim. (Cl. 244—29.)



In an aeroplane, the combination of wings, each having a rigid wing body and a leading edge flexibly connected with the wing body and adapted to be depressed, or elevated, relatively to the body; control means actuating the leading edges of the wings, said means comprising a series of levers within the wing bodies; links connecting the levers with the leading edges; rods extending from the levers toward the center of the plane; and means operating the rods toward and from each other comprising screws on the rods, a turn buckle on the screws, a worm gear operating the turn buckle, a crank operating the gear, and a floating support for the turn buckle comprising slotted plates and arms extending from the turn buckle into the slots.

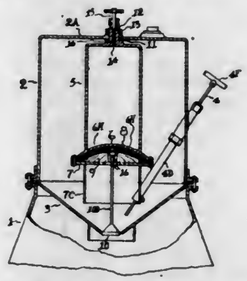
1,763,889. GLOBE SUPPORT AND THE LIKE. JOSEPH HENRY HUDSON, Brooklyn, N. Y. Filed Dec. 1, 1928. Serial No. 323,113. 3 Claims. (Cl. 240—134.)

1. A globe support consisting of a holder having a groove on its inner side, a resilient open cylindrical coil having a plurality of deformations adapted to engage and press against the neck of a globe and to engage



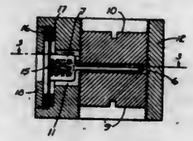
and press against the inside of the groove in said holder when the said coil is positioned between said neck and said groove.

1,763,890. ACETYLENE GENERATOR. HERBERT G. IRWIN, Amarillo, Tex. Filed Aug. 22, 1927. Serial No. 214,468. 3 Claims. (Cl. 48—533.)



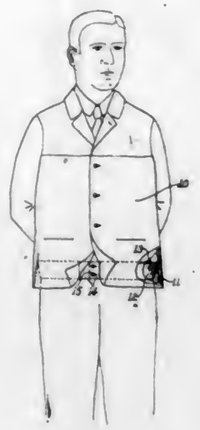
1. In an automatic carbide feed for an acetylene generator, a carbide hopper, a stationary gas pressure tank, said tank disposed substantially within the walls of said carbide hopper, a passageway adapted to admit gas into said pressure tank, a hand operated valve associated with said passageway, said valve adapted to close said passageway whereby gas may be confined in said pressure tank, a hand hold for operating said valve, said hand hold being on the outside of the wall of the carbide hopper, a depressible resilient carbide feed control diaphragm, the upper side of said diaphragm being exposed to gas pressure from said pressure tank, and a housing for said diaphragm within the walls of said hopper.

1,763,891. SOUND RECORDING. WARREN C. JONES, Flushing, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed June 9, 1928. Serial No. 284,244. 3 Claims. (Cl. 274—1.)



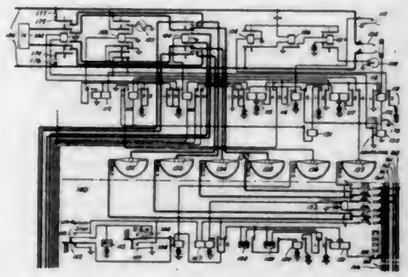
3. In a vibration damping device, a casing having a pair of adjustably spaced plates, a wing-like member between the plates, viscous matter in the casing for impeding the motion of said member, and a thin flexible diaphragm attached to said member and said casing for confining the viscous matter.

1,763,892. COAT. WILLIAM C. KNOERNSCHILD, Milwaukee, Wis., assignor to Milwaukee Tanning & Clothing Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Mar. 15, 1928. Serial No. 261,902. 2 Claims. (Cl. 2—93.)



1. The combination of a coat having a lining, a wind-excluding band disposed within said coat for concealment thereby and having edge portions secured along substantially their entire length to said lining only and resilient portions engageable about the lower trunk portions of a wearer, and means for detachably connecting the end portions of said band at the forward portions of said coat.

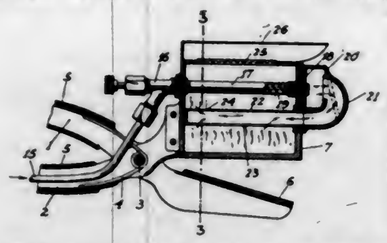
1,763,893. TELEPHONE SYSTEM. JOSEPH A. KRECEK, Brooklyn, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Oct. 20, 1928. Serial No. 313,665. 12 Claims. (Cl. 179—41.)



1. In a telephone exchange system, lines of different characteristics, a link, means in said link for interconnecting said lines, a group of repeaters, automatically operable means in said link for determining the character of the lines with which it is connected, switching means in interconnected lines of a particular character operable in response to the said determining means to search for and seize an idle repeater and means in said lines for directing the transmission circuit of said lines through said seized repeater.

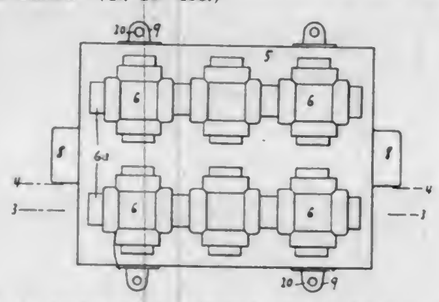
1,763,894. FLESH CUTTING AND SEARING SHEARS. CELESTIN I. LAGIER, Stockton, Calif. Filed Nov. 30, 1928. Serial No. 322,736. 7 Claims. (Cl. 128—318.)

4. A flesh cutting shears including a hollow blade whose sides converge toward each other to form a cutting edge, a hydrocarbon burner tube extending lengthwise in the blade from one end thereof and having an opening facing the plane of convergence of the sides, a generating tube in the blade disposed parallel to the burner tube and be-



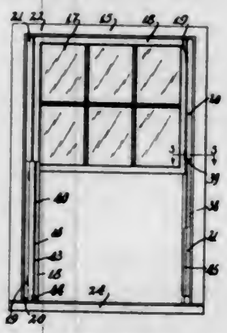
tween the burner tube and the edge of the blade opposite the sharp edge, said generator tube being adapted at one end for connection to a source of fuel supply, and passage means between the opposite end of the generating tube and one end of the burner tube.

1,763,895. METHOD AND MOLD FOR CASTING HOLLOW METAL ARTICLES. ALBERT LAW, Jackson Heights, N. Y. Filed Feb. 27, 1929. Serial No. 342,966. 6 Claims. (Cl. 22—193.)



3. An apparatus for forming a mold in which to cast hollow metal articles comprising a plate with protuberant patterns in relief on one side for impressing in the sand contained in the flask one portion of a mold, said plate having a cavity in its reverse side for producing a portion of a core, bores located in the wall of the cavity, means located in the cavity wall for supporting an arbor, and locking means extending through said bores coacting with the arbor to prevent it from dropping out of the cavity when reversing the plate.

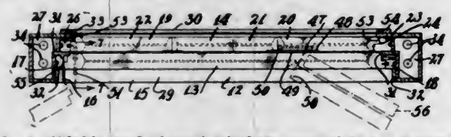
1,763,896. SLIDING AND SWINGING WINDOW AND SASHES. EMIL LEINDORF and NOAH PHILIP NORMAN, New York, N. Y. Filed Sept. 25, 1929. Serial No. 394,935. 2 Claims. (Cl. 20—50.)



1. A window of the class described, comprising a frame with inner and outer sashes, each sash consisting of a

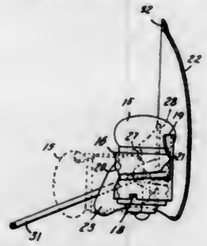
central portion hinged at one side to a slide strip, and means for latching the other side of the central portion to a second slide strip, comprising a vertical strip projecting from the central portion of the sash and formed with a flared top and engageable in a vertical slot in the second slide strip, a bracket with a flared portion engaged in the top of the slot for receiving the flared end of the vertical strip, and a vertical strip projecting from the second slide strip and formed with a flared bottom and engageable in a vertical slot in the central portion of the sash, and a bracket with a flared portion engaged in the bottom of the slot for receiving the flared end of the second vertical strip.

1,763,897. SLIDING AND SWINGING WINDOW AND SASHES. EMIL LEINDORF and NOAH PHILIP NORMAN, New York, N. Y. Filed Oct. 21, 1929. Serial No. 401,020. 3 Claims. (Cl. 20—50.)



1. A slidable and pivotal window, comprising a screened frame provided with inner and outer sashes, the inner sash consisting of a central portion hinged at one side to a slide strip and means for latching the other side of the central portion to a second slide strip, the outer sash consisting of a central portion of several hingedly connected sections with the outer end of the first section hingedly connected with a slide strip and the outer end of the last section provided with latching means for connection with a second slide strip, and weather strips for producing a weather-proof structure, said means for latching the other side of the central portion of the inner sash to the second slide strip consists of a tapered dovetailed groove bracket mounted upon the slide strip and engaged by a flared catch mounted upon the central portion and both of these elements being of a height substantially equal to the distance between apertures in a catch plate mounted upon the frame and engageable by the bolt of a catch arranged upon the slide strip.

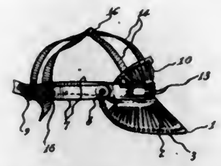
1,763,898. HAND LAMP. ROBERT A. LORIG, Madison, Wis., assignor to Burgess Battery Company, Madison, Wis., a Corporation of Wisconsin. Filed Apr. 20, 1929. Serial No. 356,827. 4 Claims. (Cl. 240—10.5.)



1. A separable head for a hand lamp comprising a holder, cams depending from the sides of said holder, a bulb socket pivotally mounted between said cams, and outwardly flaring flanges formed on said socket and adapted to engage said holder to retain said socket in operative position.

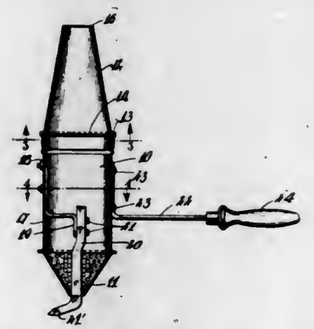
1,763,899. VISOR. MARGARET E. MCCLAY and CHARLES E. MCCLAY, Los Angeles, Calif. Filed Apr. 16, 1928. Serial No. 270,313. 2 Claims. (Cl. 2—12.)

1. In a visor the combination of an outer band adapted to partially encircle the head of the wearer, a bill attached to the lower edge of said band, crown straps, a crown member between said crown straps and outer band, means for connecting said crown member to said crown



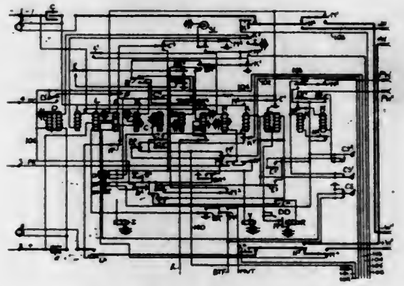
straps and outer band, and a sweat rim covering said connecting means, said sweat rim having an up-turned edge held between said crown member and outer band.

1,763,900. SOLDERING IRON. NATHAN MORRIS, Brooklyn, N. Y. Filed June 16, 1927. Serial No. 199,197. 1 Claim. (Cl. 126—236.)



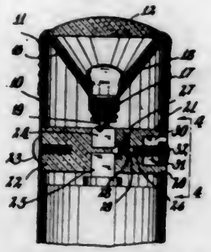
In a soldering iron of the class described, a fuel container comprising a tubular member connected with a bottom conical shaped member, a bracket located on the inner side of the tubular member, means for attaching the bracket on the tubular member, said bracket having an inwardly extended portion and a downwardly extended portion, and a soldering iron removably attached on the downwardly extended portion and extending thru the conical shaped member and formed with an angularly extended tip.

1,763,901. TELEPHONE SYSTEM. JOHN ELLIS OSTLINE, Liverpool, England, assignor, by mesne assignments, to Associated Telephone & Telegraph Company, Kansas City, Mo. Filed Nov. 13, 1926, Serial No. 148,120, and in Great Britain Jan. 16, 1926. 13 Claims. (Cl. 179—27.)



8. In a telephone system as claimed in claim 7, means effective in case the number transmitted by the calling party is not correctly recorded on the register switches for releasing the register switches and for connecting up a signaling current to the calling line.

1,763,902. FLASH LIGHT. JOAQUIN R. PATRON, Campeche, Mexico. Filed June 13, 1929. Serial No. 370,701. 5 Claims. (Cl. 240—10.5.)



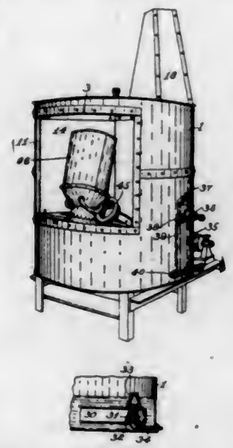
1. A flash light, comprising a casing supporting a lamp socket and formed with a side opening, flanges surrounding said opening, an insulation bridge within the casing and secured at its inner end to the casing by a screw having its head on the outer side of the casing, the front end of the bridge being supported by said flanges, and a switch mounted on the bridge and operable by a knob on the outer end of the bridge and arranged to complete a circuit from battery cells arranged within said casing thru a lamp engaged in said lamp socket.

1,763,903. TOY. JONATHAN PERKINS, Los Angeles, Calif. Filed Aug. 20, 1928. Serial No. 300,644. 6 Claims. (Cl. 46—45.)



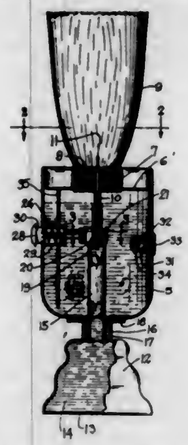
4. A toy comprising an inner spherical member and an outer hemispherical shell, a shaft having its ends connected to diametrically opposite parts of the interior of said shell and passing through said sphere and means supported by said connecting means to maintain said shell in a position covering the upper half of said sphere.

1,763,904. APPARATUS FOR WASHING AND DRYING UTENSILS. CHESTER W. ROUSE, Hopkinton, Iowa. Filed Sept. 19, 1927. Serial No. 220,296. 4 Claims. (Cl. 141—7.)



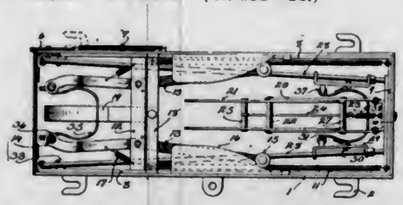
3. In an apparatus of the character described, a closed hollow casing having in its side wall an aperture, a rotatable carrier mounted in said casing and having partitions erected thereon, the lower part of the casing serving as a receptacle for a heated liquid, mechanism in communication with the liquid in the casing to deliver the liquid under pressure upon and to wash the surfaces of articles on the carrier during one stage of its rotation, an injector in said casing in communication with a superheated steam conduit and an air conduit, said air conduit being at the bottom of the casing and adapted to be submerged in the heated liquid and opening to the atmosphere, whereby a mixed current of dry steam and air in combination under pressure is caused to impinge upon said articles on said carrier during another stage of its rotation, for quick heating and drying purposes.

1,763,905. FOUNTAIN SHAVING BRUSH. ALEXANDER C. RUSELL, New York, N. Y. Filed Aug. 30, 1929. Serial No. 389,473. 3 Claims. (Cl. 15—133.)



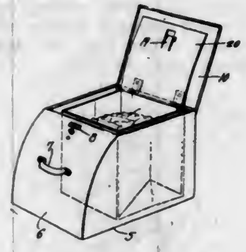
1. A fountain shaving brush comprising a water reservoir, constituting the brush handle, a liquid soap container secured to one end of the handle and having a passage extending therethrough, and a flexible wall in said liquid soap container for ejecting liquid soap through the passage and into the brush.

1,763,906. TIRE-CHAIN-APPLYING DEVICE. BERTRAM A. SMALL, Chicago, Ill., assignor of one-third to William D. Thompson, Racine, Wis. Filed Nov. 13, 1926. Serial No. 148,296. 5 Claims. (Cl. 152—14.)



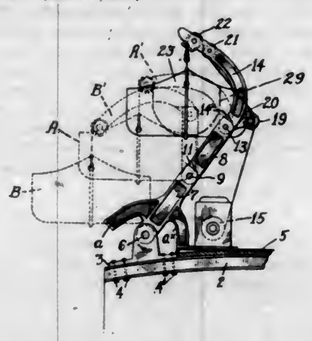
1. The combination of a vehicle having wheels and a body portion, a container carried by said body portion adjacent a wheel, a U-shaped carriage slidably carried within said container, manually controlled means for projecting said carriage outwardly towards said wheel, a pair of levers pivotally carried by said carriage and positioned upon opposite sides of said wheel when said carriage is moved outwardly, a tire chain normally stored within said container and having spring clips at its outer ends adapted to transversely grip a peripheral portion of said wheel, the outer ends of said levers engaging the ends of one of said spring clips, cam means for first spreading said outer ends of said levers to spread the ends of the corresponding clip when said carriage is moved outwardly and thereafter releasing said levers to allow the spring clip to grip the wheel, springs tending to rock said outer ends away from each other, a pair of guide rods carried by said carriage and diverging outwardly towards the outer end of said carriage, a pair of slides mounted upon said guide rods and having fingers temporarily engaging the ends of the second of said spring clips.

1,763,907. GARBAGE RECEPTACLE. BENJAMIN SOMMERS, New York, N. Y. Filed Nov. 3, 1927. Serial No. 230,825. 1 Claim. (Cl. 220—1.)



A refuse container comprising a can, a slotted cover hinged thereto, an inner receptacle, a lid on the receptacle, a tongue on the lid in engagement with the slot in the cover, releasable latching means for normally maintaining the cover and lid in closed position, and a spring for urging the cover and lid to assume an open position when the latching means is released.

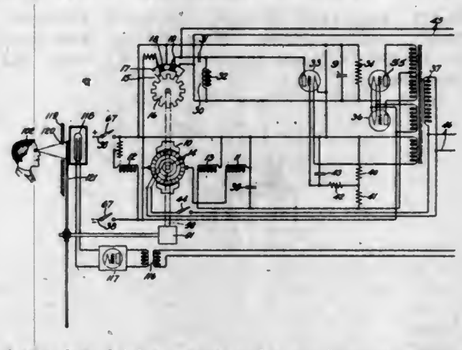
1,763,908. SHIP'S DAVIT. ROBERT B. STEWARD, New York, N. Y. Filed Apr. 30, 1929. Serial No. 359,206. 5 Claims. (Cl. 9—22.)



1. In gravity davits for ships, a lowermost davit section having opposed laterally projecting stop members and adapted to be pivotally connected to the ship structure at a point intermediate said stop members, an uppermost davit section, and an intermediate davit section pivotally connecting the lowermost and uppermost sections.

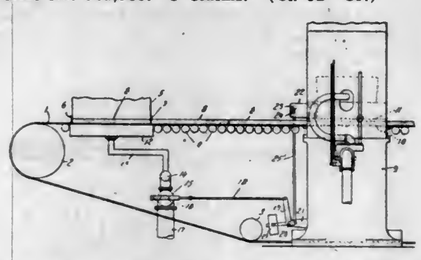
1,763,909. SPEED REGULATOR. HUGH M. STOLLER, Mountain Lakes, N. J., and EDMUND R. MORTON, Brooklyn, N. Y., assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed June 23, 1927. Serial No. 200,799. 9 Claims. (Cl. 178—6.)

1. In combination, means including scanning apparatus for producing image forming waves, means including a second scanning apparatus for producing an image corresponding to said waves, mechanically independent means for driving each of said scanning apparatus, means for obtaining a wave of a frequency of one cycle per second per revolution of one of said driving means, means controlled by said last mentioned wave for pulling said other driving means approximately into a desired phase relation with respect to said first driving means, means for obtaining a wave of high frequency proportional to the speed



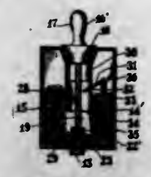
of said first driving means, and a synchronous motor mechanically coupled to said other driving means and arranged to be driven by said high frequency wave to maintain said driving means at one of a plurality of phase positions, within a range of position determined by said low frequency wave, with respect to said first driving means.

1,763,910. SUCTION BOX. EDWIN H. STREETER, Cloquet, Minn., assignor to Wood Conversion Company, Cloquet, Minn., a Corporation of Delaware. Filed May 9, 1929. Serial No. 361,563. 8 Claims. (Cl. 92—39.)



1. The process of making fiber board which comprises forming a slurry of pulp containing sufficient water to permit it to flow and form a substantially uniform layer, depositing the pulp on an intermittently moving screen in a layer, withdrawing a portion of the moisture therefrom, feeding the screen between the platens of a press to withdraw additional moisture from the pulp slurry and form a sheet, and then drying the sheet to its final moisture content.

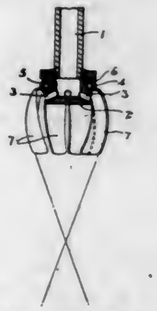
1,763,911. CIGARETTE LIGHTER. MAX TANNENBAUM, New York, N. Y. Filed June 29, 1928. Serial No. 289,152. 2 Claims. (Cl. 67—4.1.)



1. In a cigarette lighter, a tubular member, a lever pivotally mounted on the tubular member and extending from the interior to the exterior, a link pivotally connected with the lever, a valve hingedly mounted on the tubular member and adapted to close the latter element and formed with an arm pivotally connected with the link, and a

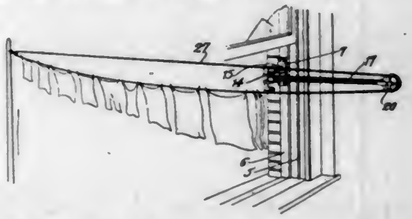
spring mounted on the container and acting against the link for holding the lever inclined upwards or downwards as positioned by a ring fixed on a torch insertable in the tubular member, and holding the valve opened or closed.

1,763,912. SPRAYING DEVICE. WILFRED R. THORNTON, Toronto, Ontario, Canada. Filed Apr. 26, 1926, Serial No. 104,682. Renewed Apr. 26, 1930. 3 Claims. (Cl. 299—126.)



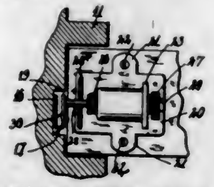
1. A spraying device comprising a nozzle having laterally directed openings, and a rotary member encircling said nozzle and provided with a plurality of angularly set blades extending in an axial direction past said openings, the adjacent longitudinal edges of said blades being spaced radially apart in overlapped relation, said blades being each concaved longitudinally and transversely on their inward sides.

1,763,913. SAFETY CLOTHESLINE PULLEY. ALFRED E. VAUTHIER, New York, N. Y. Filed Apr. 4, 1928. Serial No. 267,290. 1 Claim. (Cl. 68—3.)



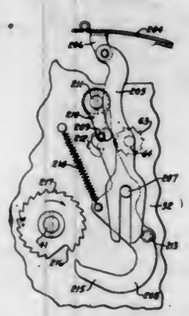
A clothes line safety device comprising a base, a bracket, a bolt joining said base and bracket and permitting adjustable movement of the latter, spaced extensions on the bracket, a pulley arm having an end disposed between said bracket extensions, one side of the arm being spaced from a side of said bracket, a pivot pin connecting the bracket and arm to permit swinging movement of the latter, a bolt on the arm slidable into the space between the arm and the bracket to prevent swinging movement of the arm and a post on each of said bracket extensions to be engaged by the clothes line.

1,763,914. WINDOW LOCK. CARMINE VITALE, New York, N. Y. Filed Nov. 13, 1928. Serial No. 319,056. 1 Claim. (Cl. 292—57.)



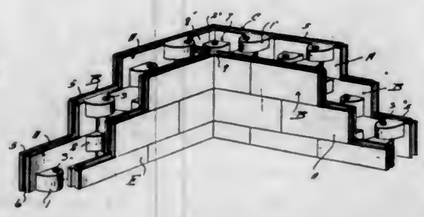
In combination with a window having a frame and a sash movable therein, a dove-tailed tongue mounted in a dovetailed groove on the sash, a tubular boss integral with said dovetailed tongue, said tubular boss being formed with a threaded barrel open at both ends, a threaded shank engaging in the barrel and extending beyond the barrel at both ends, a manipulating handle attached at one end of the shank, a lock foot attached at the other end, a lock tongue engaged on the frame for receiving the lock foot, and means for adjusting said dove-tailed tongue in the groove for moving the boss to a convenient distance from the lock tongue for permitting the shank to be operated for securing the lock foot in locked relation with said tongue.

1,763,915. CASH REGISTER. EDWARD J. VON PEIN, Dayton, Ohio, assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio, a Corporation of Maryland. Filed Feb. 10, 1926. Serial No. 87,348. 6 Claims. (Cl. 235—130.)



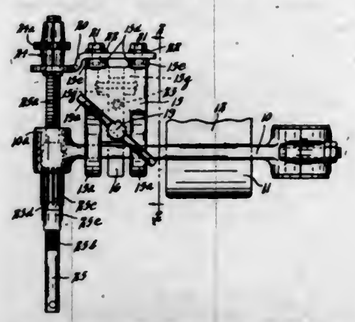
1. In a machine of the class described, the combination of a totalizer, an actuator therefor, a main operating mechanism, a closure normally concealing the totalizer, a normally ineffective locking member to cooperate with the main operating mechanism, means intermediate the closure and said member to hold said member in its inefficient position when the closure is shut, means for moving said member to its effective position when the closure is opened, a normally ineffective locking device for cooperating with the totalizer, and means intermediate said device and said member for moving said device from ineffective position to effective position and vice versa simultaneous with the movement of said members to its effective and ineffective positions, respectively.

1,763,916. WALL STRUCTURE. WILLIAM ANDERSON, Ferndale, Mich. Filed Oct. 17, 1928. Serial No. 313,073. 6 Claims. (Cl. 72—39.)



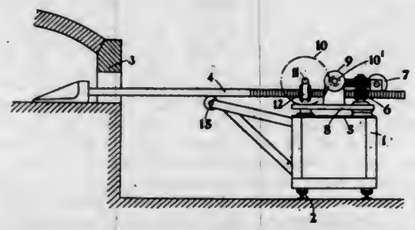
1. As a new article of manufacture, a block, and lugs extending in the same general direction from the block adjacent to opposite ends thereof, said lugs being offset one with respect to the other in a direction transversely of the block, opposed faces of the lugs being provided with locking means whereby to interlock a block in one wall structure with a plurality of blocks in the opposing wall structure.

1,763,917. REAMING TOOL FOR CONNECTING RODS. WILLIAM AAB, New Ulm, Minn. Filed Sept. 23, 1926. Serial No. 137,829. 7 Claims. (Cl. 77—62.)



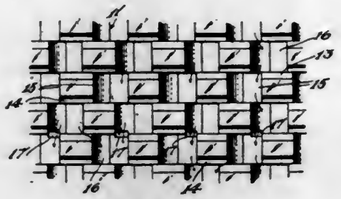
1. A device for use in reaming the bores of bushings in connecting rods or similar devices having in combination, means for engaging and clamping a connecting rod comprising a member having a jaw at one end with one surface extending substantially normal to the longitudinal axis of said member and another surface inclined at an acute angle to said surface, a member pivoted to said member having a jaw at one end with a surface making an angle of slightly less than ninety degrees with said first mentioned surface, means for moving said jaws to clamp a connecting rod therebetween, said member having a flat surface at its end opposite said jaw, spaced headed screws threaded into said member, a plate engaging said flat surface disposed under the heads of said screws and having a slot therein embracing said screws with an enlargement at one end about one of said screws, said plate having an opening therein at one side of said member, and a centering means positioned in said opening adapted to receive a reamer to position said plate with said opening co-axially alined with the bore of said bushing, said centering means being adapted to guide and feed said reamer.

1,763,918. APPARATUS FOR MOVING INGOTS OR MASSES IN FURNACES. HEINRICH BANGERT and MATHIEU PETERS, Dusseldorf, Germany, assignors to **Ofenbau-Gesellschaft mit beschrankter** Haftung, Dusseldorf, Germany. Filed Mar. 23, 1926, Serial No. 96,730, and in Germany May 23, 1925. 3 Claims. (Cl. 214—23.)



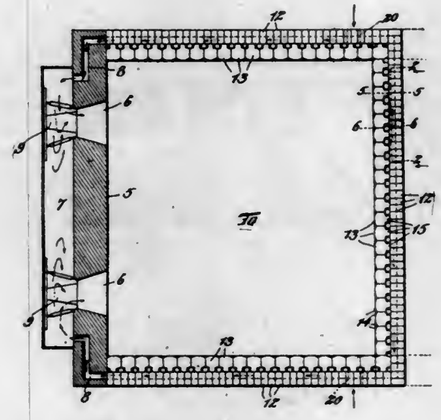
1. Apparatus for turning over blocks in a heating furnace, comprising in combination a supporting frame, a rod supported upon the said frame adapted to have an oscillating movement in a substantially horizontal plane, to be rotatable about its longitudinal axis, and to be axially movable, said rod being cylindrical and having teeth and spaces between the teeth to extend around its periphery, and means carried upon the said frame by which the said rod may have imparted to it an oscillating movement in a horizontal plane, a movement of rotation and an axial movement, the means employed for causing the rotation of the rod and its axial movement operating directly upon the rod itself, and the means for imparting axial movement to the rod comprising a pinion adapted always to be in engagement with said teeth on the rod notwithstanding its rotation, substantially as hereinbefore described.

1,763,919. FURNACE STRUCTURE. JOHN FRANCIS BOORAEM and EDWARD J. HATTON, Greenwich, Conn. Filed May 6, 1927. Serial No. 189,424. 2 Claims. (Cl. 72—39.)



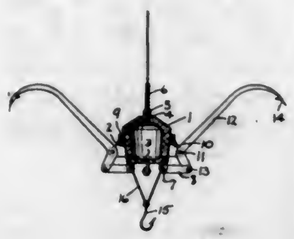
1. A furnace lining wall composed of refractory blocks each having an elongated rectangular body portion and a part projecting centrally from one side of said body portion for a distance substantially equal to the thickness of the body portion of the block, said part being substantially square in cross section and adapted for abutting contact against the inner face of the furnace wall, said blocks being arranged in horizontal courses, and the spaces between said projecting parts of adjacent blocks providing air passages therebetween of substantially equal area to the area of contact of said parts with the face of the main furnace wall.

1,763,920. FURNACE STRUCTURE. JOHN FRANCIS BOORAEM and EDWARD J. HATTON, Greenwich, Conn. Filed May 12, 1927. Serial No. 190,946. 5 Claims. (Cl. 110—72.)



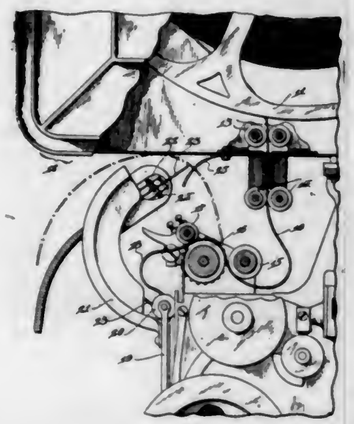
1. In a furnace, an outer wall consisting of alternating courses of stretcher brick having their longer dimension parallel with the wall, and header brick having their longer dimension extending transversely of the wall, an inner lining for the outer wall consisting of courses of refractory blocks, the joints between the blocks in one course bestaggered with relation to the joints of the blocks of adjacent courses, and each of said blocks having a reduced outwardly projecting portion spaced from the stretcher brick in the outer wall and engaged by the inner ends of adjacent header brick above and below the stretcher brick to thereby provide a plurality of longitudinally extending air passages, said passages at one of their ends opening through the outer wall to the external atmosphere, and means affording communication between the other ends of said passages and the combustion chamber of the furnace.

1,763,921. SNARE. WILLIAM J. BUFORD, Houston, Tex., assignor, by direct and mesne assignments, of fifty per cent to Walter R. Jones, Houston, Tex. Filed Feb. 20, 1928. Serial No. 255,660. 4 Claims. (Cl. 43—89.)



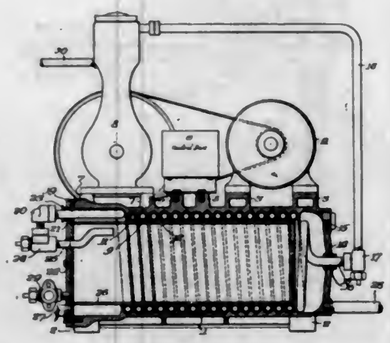
1. A device of the character described, including a holder, a plurality of hooked arms pivoted thereon, a ring releasably secured on said holder and having a pivotal connection with said arms, the said ring acting when in set position to hold said arms elevated, a hook secured to said ring and adapted to communicate a strain thereto to move it from set position, and means to support said holder.

1,763,922. SAFETY DEVICE FOR MOTION-PICTURE-PROJECTING MACHINES. JOSEPH ELLIS COHEN, Philadelphia, Pa., assignor to Sentry Safety Control Corporation, Philadelphia, Pa. Filed July 9, 1927. Serial No. 204,455. 3 Claims. (Cl. 88—17.)



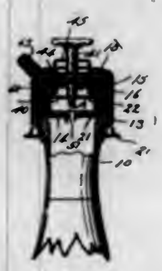
3. Fire prevention apparatus for motion picture machines having a film loop guard whose upper end terminates short of the bottom of the upper magazine, a switch mounted on said guard and adapted to close an electric circuit for actuating a safety device to cut off the light rays from the film, an actuating plate for said switch, and a deflector plate secured to the bottom of the magazine and a short distance from the upper end of the loop guard for directing a broken film or excessively enlarged loop thereof against said actuating plate and preventing its passing over the actuating plate and loop guard.

1,763,923. REFRIGERATING APPARATUS. FRENCH E. DENNISON, Beloit, Wis., assignor to National Refrigeration Corporation, Beloit, Wis., a Corporation of Delaware. Filed July 26, 1928. Serial No. 295,424. 8 Claims. (Cl. 257—28.)



1. In a refrigerating apparatus, the combination of a housing, and a condensing coil the convolutions of which are threadedly engaged with said housing.

1,763,924. BOTTLE ATTACHMENT. WELDON CHARLES ERWIN, Yorba Linda, Calif. Filed Aug. 14, 1928. Serial No. 299,574. 8 Claims. (Cl. 225—22.)

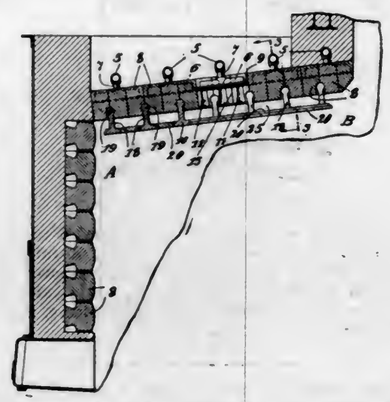


1. A device for use on a capped bottle including, a body to have sealing engagement with the cap of the bottle, a substantially rigid carrier encasing the body, and a member in connection with the body operable to puncture the cap and actuated by the body to normally yieldingly prevent discharge from the bottle.

1,763,925. FURNACE STRUCTURE. JOHN W. GATES, Montreal, Quebec, Canada, assignor, by mesne assignments, to American Air-Cooled Block-Arch Combustion Co. Inc., New York, N. Y., a Corporation of New York. Filed Sept. 10, 1925. Serial No. 55,469. 16 Claims. (Cl. 110—99.)

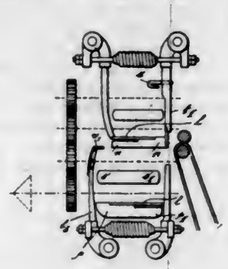
1. In a furnace structure, an arch wall comprising a plurality of rows of blocks having portions forming parallel channels in the inner face of the wall, each channel at spaced intervals having restricted entrance portions, and a protecting wall for said arch wall extending in spaced parallel relation to the inner face of said arch wall and consisting of a plurality of hanger blocks having

means insertable through the unrestricted portions of said channels and movable into the restricted portions thereof



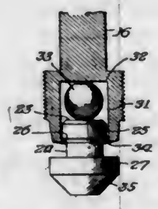
to sustain said blocks in suspended relation to the arch wall, and additional blocks disposed between and supported by said hanger blocks.

1,763,926. CUSHIONING MEANS FOR THE FALLERS OF GILL BOXES AND INTERSECTING FRAMES. CHARLES GÉGAUFF, Mulhouse, Alsace, France. Filed Sept. 22, 1928, Serial No. 307,728, and in France Oct. 1, 1927. 4 Claims. (Cl. 19—129.)



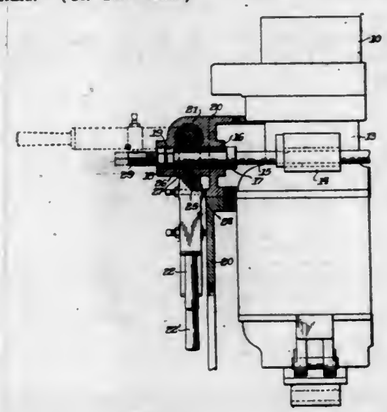
1. In gill boxes with intersecting fallers and upper and lower guide rails for both sets of fallers, longitudinal saw cuts in both lower guide rails of sufficient depth to form a flexible part of very small mass for taking the impact of the fallers at the end of their fall, the arrangement being such that the space occupied by the guide rails is not increased at all.

1,763,927. VALVE. WARD S. IRELAND, Beloit, Wis., assignor to National Refrigeration Corporation, Beloit, Wis., a Corporation of Delaware. Filed July 17, 1926. Serial No. 123,063. 1 Claim. (Cl. 251—46.)



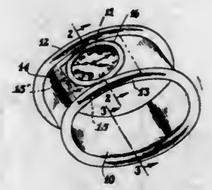
A valve comprising a casing having a valve seat formed therein, a valve stem journaled in said casing and having a longitudinally extended socket formed in the lower end thereof, a closure member having an enlarged bearing portion at the upper end thereof, an inwardly extending annular rib formed on the lower end of said stem and loosely embracing said bearing portion for loosely retaining said closure member in said socket and a bearing ball loosely mounted in said socket between said bearing portion and the inner end of the socket and contacting with said closure member whereby said closure member may properly align itself on said valve seat.

1,763,928. CUTTER-HEAD QUICK RELEASE. WALLACE D. JOHNSON, Beloit, Wis., assignor to Yates-American Machine Company, Beloit, Wis., a Corporation of Delaware. Filed Mar. 21, 1927. Serial No. 177,026. 8 Claims. (Cl. 144—130.)



1. In a wood-working machine, the combination with a cutter head unit movable relative to the machine, of a screw-threaded connection for adjusting the working position of the unit, and a pinion and rack connection for releasing the unit quickly from any adjusted working position and returning it accurately to the same.

1,763,929. WRIST-WATCH PROTECTOR FOR BATHERS. PAUL KELLNER, New York, N. Y. Filed June 11, 1928. Serial No. 284,640. 1 Claim. (Cl. 224—4.)



In a wrist watch protector for bathers, an elastic band with one of its edges rolled, an outer elastic band upon said band and secured thereto all along its entire surface except for a small portion constituting a pocket having its entrance beneath said rolled edge, and resilient arc shaped members within the rolled edge for applying closing pressure to the opening of said pocket.

1,763,930. EYELASHES FOR DOLLS. VICTOR KENEY, New York, N. Y. Filed Feb. 20, 1930. Serial No. 429,842. 5 Claims. (Cl. 46—40.)

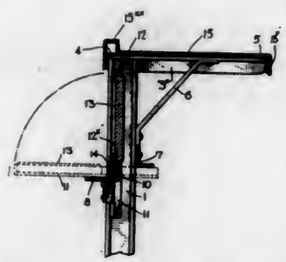
1. In combination with a doll's head having slits over its eyes extending thru a knitted fabric and form constituting the doll's head, eye lashes held in and extending thru said slits and consisting of a plurality of hair strands

arranged in a line, bound together at their inner ends and engaging in metallic tape sheets adapted to maintain



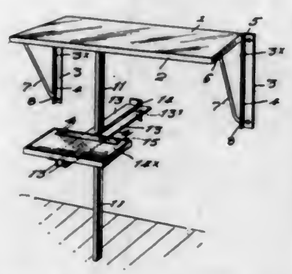
bent positions for changing the tilt of the eye lashes, and the edges of said tape sheets slightly projecting from the outer surface of the doll's head to permit bending.

1,763,931. TABLE. JOHN S. KONOP, Flushing, N. Y. Filed May 8, 1928. Serial No. 275,982. 1 Claim. (Cl. 45—31.)



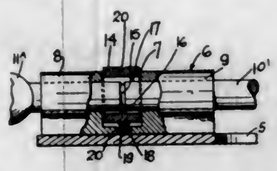
In a table for institutions and the like, comprising a plurality of vertical metallic supports, a forwardly projecting metallic bar secured to each support and longitudinal metallic frame members connecting said bars, a top member comprising a metallic plate, formed with downwardly extending flanges at its front and at its end, and at its rear being bent upwardly, thence rearwardly, thence downwardly to form a hollow box-like structure, and plates welded to the end flanges of the top and closing the ends of the box-like structure, said top member being supported by said forwardly projecting bars.

1,763,932. COMBINED WALL TABLE AND SEAT. JOHN S. KONOP, Flushing, N. Y. Filed May 22, 1929. Serial No. 364,970. 3 Claims. (Cl. 155—124.)



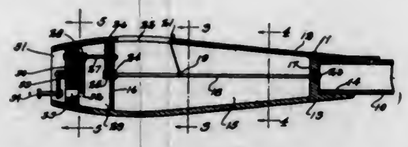
1. A wall table for institutions comprising opposed forwardly flanged bracket members adapted for securing to a wall, the flanges being forwardly extended and slotted, a table top pivoted to the flanges, bracket arms each having a connection with one flange and including a member passing through said slot, the bracket arms being pivoted to the table top, a supporting leg pivoted to the table top, a seat support pivoted to the wall and to said leg and a seat carried by the seat support.

1,763,933. JEWELRY PIN TONGUE AND CATCH. ABRAHAM I. ROSENBLATT, Brooklyn, and GEORGE H. WEBB, Glendale, N. Y. Filed Apr. 8, 1929. Serial No. 353,446. 3 Claims. (Cl. 24—162.)



1. In a device of the character described a catch housing constituting spaced sleeve portions, a catch sleeve positioned between said sleeve portions, a grooved holding pin slidable through said portions and said catch sleeve, a groove engaging tongue in said catch sleeve, and a receptacle for the end of the pin.

1,763,934. FISHING ROD. JOHN W. SOLTIS, Yonkers, N. Y. Filed Apr. 29, 1929. Serial No. 358,954. 2 Claims. (Cl. 43—20.)



1. A fishing rod comprising a slotted handle, containing a plurality of compartments, a rod journalled in the end walls of one compartment and extending longitudinally therethrough, a train of gears in the other compartment adapted to rotate said rod, a line guide displaceable in the slot of said handle, a line attached to said rod, the end partition formed with a recess, and a crank handle journalled in said end partition for operating said train of gears to wind the line on said rod at varying points thereof, said crank adapted to be hidden in said recess when not in use.

1,763,935. HAIR ORNAMENT DEVICE. AIBLIE E. STEPHEN, Los Angeles, Calif. Filed Sept. 27, 1927. Serial No. 222,227. 7 Claims. (Cl. 132—48.)

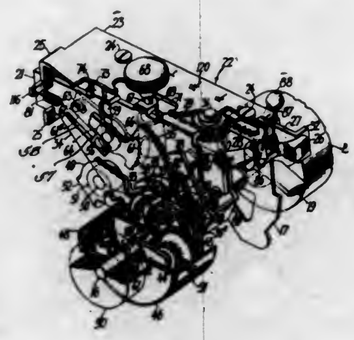


1. In a device of the class described, an ornamental member, a pin member connected at one end thereto and provided with a pair of prongs extending to and adapted to engage the opposite lateral sides of the ornamental member, and means for clasping the prongs at their ends to the side portions of the ornamental member.

1,763,936. TYPEWRITING MACHINE. BURNHAM C. STICKNEY, Hillside, N. J., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Filed May 5, 1927, Serial No. 188,988. Renewed June 4, 1928. 48 Claims. (Cl. 197—114.)

1. The combination with a revoluble typewriter-platen and a line-space lever, of a reciprocatory slide operable by said lever, a member forming a circular rack, a pin shiftably mounted on said slide and engaging said member for joint reciprocatory movement of said slide and member, means upon said slide for shifting said pin at

will to change its position upon said slide relative to the fulcrum of said member thereby to vary the movement of said member for any given movement of said slide, and

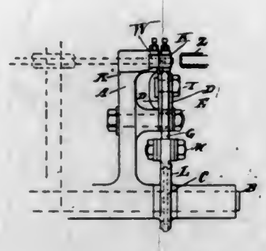


means driven by said rack whereby the movement of said member in one direction is translated into line-space rotation of the platen.

1,763,937. EXTENDER FOR PAINTS, ETC. HARRY J. STIEVATER, Buffalo, N. Y. Filed July 12, 1927. Serial No. 205,271. 9 Claims. (Cl. 134—39.)

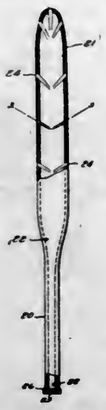
4. An extender for use in the paint industry consisting of silica ranging from 28% to 37% lime ranging from 32% to 49%, alumina ranging from 8% to 15%, magnesium oxide ranging from 6% to 22%, with traces of manganese and sulphur.

1,763,938. SWAGING MECHANISM FOR NIPPLES. EDWARD W. STOLER, Mansfield, Ohio. Filed Dec. 24, 1928. Serial No. 328,300. 4 Claims. (Cl. 10—18.)



1. In a forming head of the character described, a standard, a shearing plate therein, said plate having a feed opening therethrough, a pair of dies reciprocable in said standard across said opening, a pair of arms to which said dies are respectively secured, an oscillating member pivoted in said standard in which said arms are pivoted, toggle links connecting said arms and cam means for alternately operating said arms to oscillate said oscillating member, said cam means serving also to operate said toggle links to close said dies.

1,763,939. SURGICAL INSTRUMENT. THOMAS W. TREHARNE, Xenia Pike, Ohio. Filed Sept. 12, 1925. Serial No. 55,978. 2 Claims. (Cl. 128—361.)



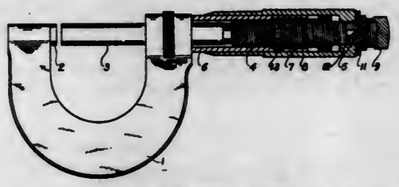
1. An intra uterine lubricator adapted for obstetrical use comprising a body having a hollow blade portion having a duct opening at the narrow edge of the blade for the conveyance of lubricant.

1,763,940. METAL JOIST AND THE MANUFACTURE THEREOF. ARTHUR C. WALLEN, Chicago, Ill., assignor to Bates Expanded Steel Truss Co., East Chicago, Ind., a Corporation of Delaware. Filed Oct. 8, 1927. Serial No. 224,795. 10 Claims. (Cl. 189—37.)



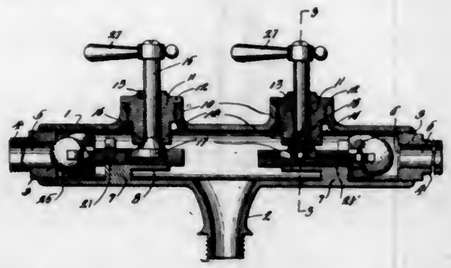
1. That improvement in the manufacture of expanded metal joists which consists in slitting the medial portion of a flanged beam to form a pair of longitudinal members and a series of expansible strands between and bonded to said members, and slitting the ends of the beam to form expansible strands of greater height than the strands in the medial portion of the beam; and then expanding the beam to space the two members apart and form oppositely extending diagonal truss members in the medial portion and ends of the beam.

1,763,941. MICROMETER CALIPER. EUGENE J. WITCHGER, Saginaw, Mich., assignor to Lufkin Rule Co., Saginaw, Mich., a Corporation of Michigan. Filed Mar. 9, 1928. Serial No. 260,266. 1 Claim. (Cl. 33—164.)



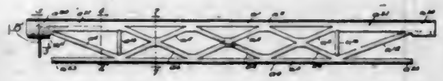
A micrometer gauge including a threaded spindle having a slotted end and a sleeve with graduations thereon, wherein the graduated sleeve has an end bored and threaded upon the spindle for endwise and rotary adjustment in relation thereto to facilitate correctional zero setting of said sleeve, and means securing the sleeve and spindle together, said means comprising an internally threaded cap received on the threaded end of the spindle and a bar washer engaging the slotted end of the spindle and received between the end of the sleeve and the base of said cap, for the purposes set forth.

1,763,942. VALVE. GILBERT L. BAKER, Oakland, Calif., assignor to William P. Grant, Berkeley, Calif. Filed Sept. 19, 1927. Serial No. 220,612. 6 Claims. (Cl. 251—39.)



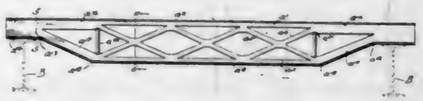
2. A valve structure of the character set forth, comprising a tubular casing having an inlet and an outlet, means to set up a valve seat at said inlet, a channel shaped body mounted longitudinally within said casing, an elongated body arranged for sliding movement in said channeled body and having a recess in the upper surface thereof, a valve ball carried at one end of said elongated body for co-action with said valve seat, a valve actuating stem, and a cam member at the inner end of said stem designated to engage in said body recess, to shift the body upon rotation of the stem.

1,763,943. METAL JOIST AND THE MANUFACTURE THEREOF. ALBERT J. BATES, Jr., Chicago, Ill., assignor to Bates Expanded Steel Truss Co., East Chicago, Ind., a Corporation of Delaware. Filed Oct. 8, 1927. Serial No. 224,802. 7 Claims. (Cl. 189—37.)



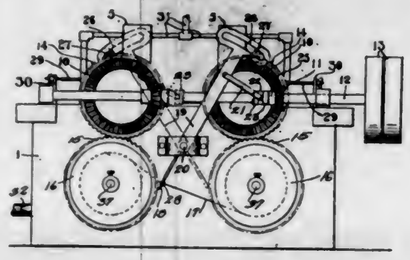
1. That improvement in the manufacture of expanded metal joists which consists in slitting the medial portion of a flanged beam to form a pair of longitudinal members and two intermediate and side-by-side series of expansible strands with bonds between themselves and said members, and slitting the ends of the web to form single expansible strands only; and then expanding the beam to space apart the longitudinal members and to form single diagonal truss members adjacent the ends of the beam and oppositely extending centrally united diagonal truss members in the medial portion of the beam.

1,763,944. JOIST AND THE MANUFACTURE THEREOF. RICHARD A. BATES, East Chicago, Ind., assignor to Bates Expanded Steel Truss Company, East Chicago, Ind., a Corporation of Delaware. Filed Nov. 2, 1927. Serial No. 230,473. 5 Claims. (Cl. 189—37.)



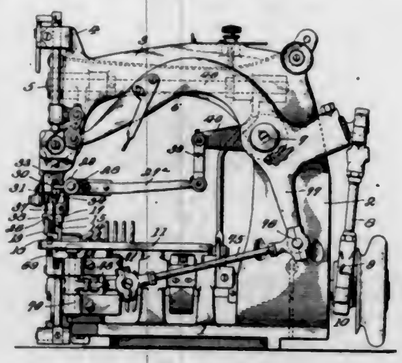
1. That improvement in the manufacture of metal joists which consists in slitting the medial portion of a flanged beam on three longitudinal lines to form an upper and a lower longitudinal member and two intermediate and side by side series of expansible strands with bonds between themselves and the members, and slitting the ends of the beam from points adjacent the ends of the series of strands to points located inwardly of the extreme end parts of the beam to form single expansible strands in substantial alignment with and in the nature of continuations of the lower member; and then expanding the beam to space the lower longitudinal member from the upper member and to form of the two side by side series of expansible strands oppositely extending centrally united diagonal truss members adjacent the medial portion of the beam, and of the single expansible strands end truss members extending upwardly from the lower member and connected directly to and integral with the ends of the upper member.

1,763,945. DYEING AND LIKE MACHINE. CHARLES SAMUEL BEDFORD, Leeds, England. Filed Dec. 20, 1928. Serial No. 327,381, and in Great Britain Dec. 31, 1927. 9 Claims. (Cl. 8—19.)



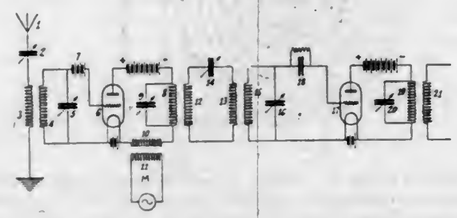
1. A dyeing or like machine of the type specified, comprising in combination a vat for the dye, alternately driven winding rollers in the vat, and adapted to be submerged in the dye therein, winding barrels geared to the winding rollers, a tape carried between the winding barrels, sliding clutch mechanism for reversing the drive of the winding rollers, and a pivoted lever adapted to operate said clutch mechanism and to be actuated by said tape.

1,763,946. FEEDING MECHANISM FOR SEWING MACHINES. JOSEPH BERGER, Utica, N. Y., assignor to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 9, 1926. Serial No. 147,263. 6 Claims. (Cl. 112—207.)



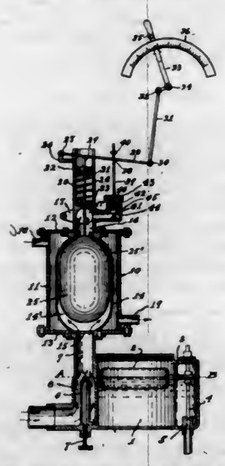
2. A sewing machine comprising a work support, a lower feed dog beneath the work support, means for raising and lowering said feed dog, an upper feed dog above the work support, means for moving said feed dogs back and forth, a presser foot at one side of the upper feed dog, a support therefor, and means for raising and lowering alternately said foot and said upper feed dog, including a lever fulcrumed on the support for the presser foot, said lever lying in a plane at right angles to the line of feed and connected at its free end to the upper feed dog and at its other end to an actuating part of the sewing machine, said lever being substantially horizontal and having the distance between the fulcrum on the support for the presser foot and the actuating part therefor, several times greater than the distance between the fulcrum of the lever and its connection to the upper feed dog.

1,763,947. ELECTRICAL SIGNALING SYSTEM. JOSEPH BETHENOD, Paris, France. Filed Dec. 12, 1924, Serial No. 755,371, and in France Apr. 14, 1924. 6 Claims. (Cl. 250—20.)



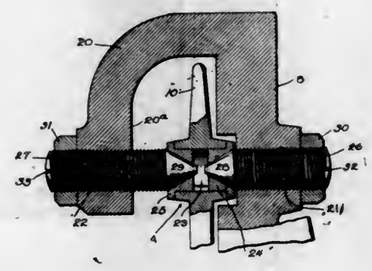
1. In a radio signaling system the combination of an antenna circuit, a space discharge device having a grid circuit and a plate circuit, said grid circuit being coupled to the antenna circuit and tuned to the frequency thereof, an auxiliary source of electrical oscillations of super-audible frequency coupled to the plate circuit of said space discharge device, a circuit tuned to the frequency of said antenna circuit coupled to the plate circuit of said space discharge device, and a second space discharge device coupled to said last mentioned tuned circuit and arranged to detect the current flowing in said tuned circuit, the plate circuit of said second space discharge device being tuned to the frequency of said auxiliary source of oscillations of super-audible frequency.

1,763,948. CARBURETING DEVICE FOR CALORIC MOTORS. CARL BJORK, Seattle, Wash., assignor of one-third to Edgar Ames and one-third to Mary B. Oakes, New York, N. Y. Filed Feb. 26, 1927. Serial No. 171,202. 8 Claims. (Cl. 123—119.)



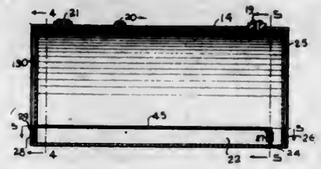
1. In combination, a member having a passage from a carburetor outlet to a manifold; a yieldably closed inwardly opening fuel valve between said passage and intake; a stem connected to said valve; said member having a duct to said passage and a yieldably closed outwardly opening drift valve opening to the exterior air; a lever fulcrumed at one end on said member and having a hole through the lever, said lever engaging a stem secured to said drift valve and extending loosely through said hole; and a nut on said stem adapted to be raised by the lever to open the drift valve; said lever when in one position holding the fuel valve open and permitting the drift valve to close, when in another position opening the drift valve and permitting the fuel valve to close, when in an intermediate position, permitting both valves to close.

1,763,949. ADJUSTABLE NEEDLE-LEVER BEARING FOR SEWING MACHINES. LOUIS G. BOWMAN, Chicago, Ill., assignor to Sexton Mfg. Company, Fairfield, Ill., a Corporation of Illinois. Filed Feb. 15, 1928. Serial No. 254,507. 3 Claims. (Cl. 112—221.)



1. In a sewing machine, the combination with an overhanging arm, of a needle bar reciprocating in said arm, a needle lever for reciprocating said needle bar, and means for pivotally supporting said needle lever comprising a bearing arm rigidly connected to the overhanging arm and extending forwardly thereof, and transversely disposed alined bearing studs respectively mounted in said overhanging arm and said bearing arm and engaging the needle lever on opposite sides thereof.

1,763,950. GASOLINE STORAGE TANK. CLINTON MORGAN BRILL, Petersburg, W. Va. Filed Aug. 20, 1929. Serial No. 387,186. 3 Claims. (Cl. 221—74.)

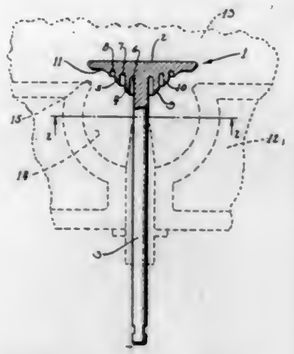


1. An improved gasoline dispensing device comprising a storage tank having means to fill and vent the same and having end heads, a partition extending across the lower portion of said storage tank and secured at its side edges to the side walls of the tank and at one end to one head of the tank but being spaced at its other end from the opposite head of the tank, said partition having at said spaced end a downwardly projecting end wall for resting upon the bottom portion of the storage tank and being secured thereto, said wall having a port, a check valve for governing said port, said partition forming a compartment in the lower portion of the tank, and means whereby compressed air may be introduced to said compartment to close said check valve and subsequently deliver the fuel therefrom.

1,763,951. VALVE. CARL FREDERICK BURGMANN, Chicago, Ill. Filed July 5, 1928. Serial No. 290,520. 3 Claims. (Cl. 123—188.)

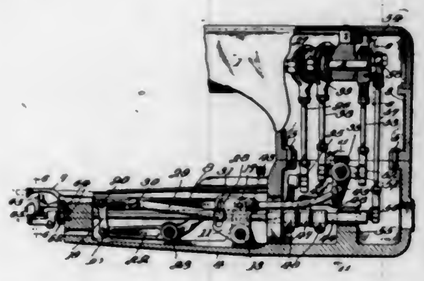
1. A device of the type described comprising a head portion, a valve stem carried by said head portion, and

an annular flange disposed concentric with said valve stem and carried by said head portion, said annular flange pro-



viding a recess adjacent said valve stem and said head portion, said annular flange having a transversely extending directing surface.

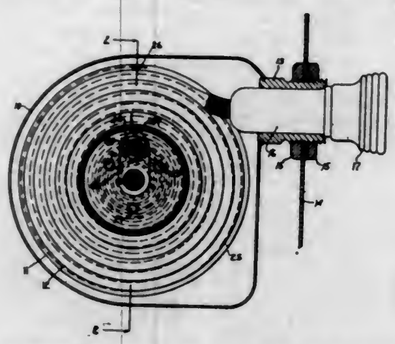
1,763,952. FEEDING MECHANISM FOR SEWING MACHINES. NORMAN V. CHRISTENSEN and WALTER M. HANNEMAN, Chicago, Ill., assignors to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 12, 1926. Serial No. 94,250. 6 Claims. (Cl. 112—215.)



1. A sewing machine including in combination, a work supporting arm, a feed bar extending lengthwise of said arm, a feed dog carried thereby, a swinging link support, means carried thereby for slidingly supporting one end of the feed bar, devices for swinging said support, means for connecting said support to the feed bar whereby the swinging movements of said support impart longitudinal movements to said feed bar, swinging links for supporting the other end of the feed bar, a lever on which said swinging links are mounted, means for oscillating said lever for raising and lowering the feed dog, a fulcrum pin having an eccentric member for supporting said swinging support, means for holding said pin in adjusted positions, a fulcrum pin having an eccentric member for supporting said lever, and means for holding said pin in adjusted positions.

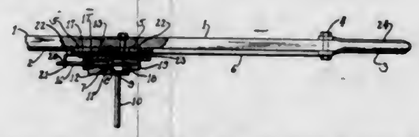
1,763,953. SWITCH FOR CABLE-CARRYING DRUMS. JOSEPH H. COHEN, Bridgeport, Conn. Filed Apr. 3, 1928. Serial No. 267,115. 9 Claims. (Cl. 200—153.)

1. A take-up device for current-carrying cables comprising a drum casing provided with a cover plate; a take-up drum mounted in the casing; a current-carrying contact member mounted on the cover plate; a contact member electrically connected to the cable on the drum; a rotor threaded element rotatable with the drum; and a stator threaded element cooperating with said rotor ele-



ment to cause the contact to move into engagement with the current-carrying member mounted on the cover plate when the drum is rotated to unwind the cable therefrom.

1,763,954. AIR-ACTUATED MECHANISM FOR LOCKING THROTTLE LEVERS. WILLIAM M. CROSS, Chicago, Ill. Filed Aug. 31, 1928. Serial No. 303,333. 5 Claims. (Cl. 74—39.)

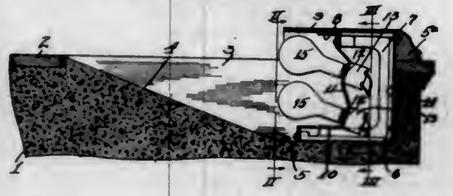


4. The combination with a throttle lever, a quadrant, a catch carried by said throttle lever and adapted to be moved into engagement with said quadrant, of a casing carried by said throttle lever, an air inlet for said casing, an air outlet for said casing, a valve disposed in said casing between said air inlet and said air outlet, means for normally holding said valve in closed position, and an actuating member operatively connecting said valve with said catch whereby said valve may be opened when said catch is moved out of engagement with said quadrant thus allowing air to pass by said valve and through said air outlet.

1,763,955. STENCIL SHEET AND METHOD OF MANUFACTURING THE SAME. ALEX BROOKING DAVIS, Cincinnati, Ohio, assignor to A. B. Dick Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 26, 1926. Serial No. 144,403. 10 Claims. (Cl. 41—38.6.)

1. A stencil sheet of the character described, comprising base material having a type impressible cellulose compound coating including polyhydric alcohol ununiformly esterified by means of acetic acid and propionic acid.

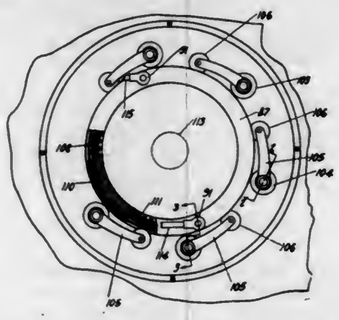
1,763,956. FOOTLIGHT STRUCTURE. FRANK L. DECKER, Maywood, Ill. Filed May 7, 1928. Serial No. 275,657. 12 Claims. (Cl. 240—8.)



3. The combination with a stage and the footlight trough thereof, of a sectional housing mounted in said trough and

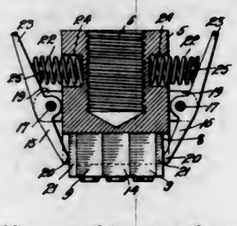
projecting thereabouts, a plurality of lamp sockets mounted in said housing at a predetermined angle with respect to the level of the stage, electric lamps supported in said sockets on the exterior of said housing and projecting above the level of the stage with the center of the source of light of said lamps substantially positioned in the plane of said stage, and a tread plate removably supported on the top of said sectional housing and projecting over said lamps to afford a shield therefor.

1,763,957. ADJUSTABLE CAM. HAROLD F. ELLIOTT, Palo Alto, Calif., assignor, by direct and mesne assignments, to Victor Talking Machine Company, Camden, N. J., a Corporation of New Jersey. Original application filed Nov. 27, 1926, Serial No. 151,134. Divided and this application filed Feb. 1, 1928. Serial No. 251,165. 4 Claims. (Cl. 74—1.)



1. In a cam structure, a convex supporting member having a peripheral groove, a series of adjusting screws in said member having tips extending into the bottom of the groove, a laminated flexible strip arranged in the groove and unrestrained to move longitudinally with respect to said tips, and a spring joining the ends of said strip for stretching it over the screws.

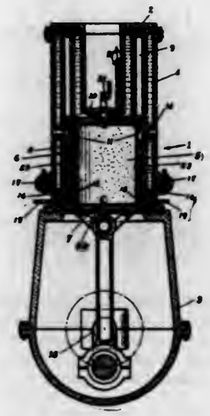
1,763,958. TYPE HOLDER. ALBERT O. ELMER, Otisville, N. Y., assignor to The Borden Company, New York, N. Y., a Corporation of New Jersey. Filed Oct. 23, 1928. Serial No. 314,432. 3 Claims. (Cl. 101—28.)



1. A type holder comprising, a body portion adapted for attachment to a stamping mechanism, the outer end of said body portion being provided with a transverse type receiving slot extending across the end of the body portion and two radial type receiving slots, one on one side and the other on the other side of the transverse slot and separated therefrom by partitions formed of the body portion, type pieces received in the slots, and spring pressed clamps for removably holding the type pieces in the slots.

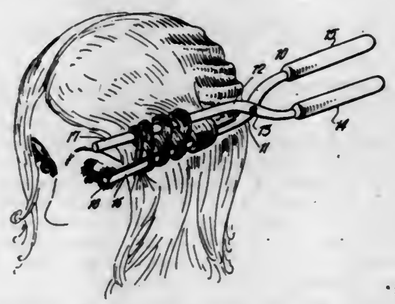
1,763,959. ENGINE. FRED F. FINCH, San Francisco, Calif. Filed Mar. 26, 1928. Serial No. 264,873. 5 Claims. (Cl. 123—69.)

1. A two cycle engine comprising a cylinder having a head descending thereinto so as to form an annular recess with the same, an inverted piston having its skirt slidably mounted in the recess, said cylinder and piston having exhaust ports disposed at the top of the inverted piston and cylinder, air intake ports near the bottom of the



piston and cylinder, and gas intake ports at the bottom of the piston and cylinder, said ports being designed to register with each other during the movement of the piston, and valves cutting off the flow of air through the cylinder air ports on the compression stroke of the piston.

1,763,960. HAIR-WAVING DEVICE. JOSEPH GIRARD, New York, N. Y. Filed Aug. 14, 1929. Serial No. 385,898. 1 Claim. (Cl. 132—37.)

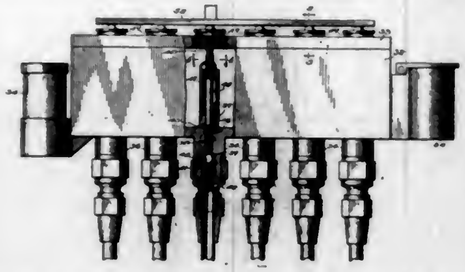


A hair waving device comprising a pair of pivotally connected members, manipulating handles at one end of said members, the opopsite ends of said members constituting jaws provided with inner flat coacting surface, the other side of the same being rounded in cross section to enable the hair to be entwined thereon without breaking in the formation of a wave or curl, the flat coacting surfaces being disposed inwardly of the longitudinal axis of each jaw and further being of considerably less width than the diameter of the jaws.

1,763,961. MULTIPLE OILER. REMI J. GITS, Chicago, Ill. Filed Mar. 19, 1928. Serial No. 262,919. 2 Claims. (Cl. 184—81.)

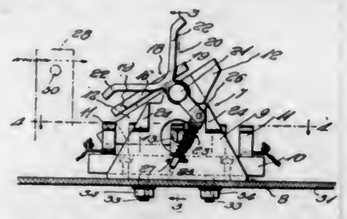
1. In a device of the class described, a main reservoir having a discharge opening leading therefrom, a valve seat in said discharge opening distantly located with respect to the inner end of said discharge opening, a valve cooperating with said seat to control said discharge opening, a valve stem slidably mounted in said discharge opening and having one portion thereof of substantially

the same diameter as said discharge opening so as to serve as a piston, the lower end of said valve stem being of reduced diameter to form an auxiliary reservoir for lubricant, means for filling said auxiliary reservoir with lubricant from said main reservoir when said valve is



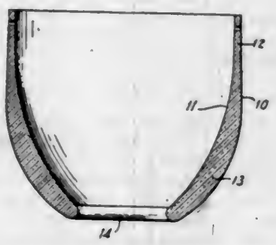
closed and said valve stem is in one position, said valve stem being adapted to close communication between said reservoirs when shifted to a position which opens said valve, such shifting causing said valve stem to forcibly eject the lubricant from said auxiliary reservoir.

1,763,962. QUICK-MAKE AND QUICK-BREAK SWITCH. CHARLES W. GORMAN, Muskogee, Okla. Filed Apr. 2, 1928. Serial No. 266,842. 4 Claims. (Cl. 200—67.)



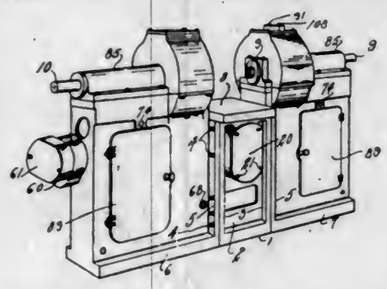
1. A quick-make and quick-break switch comprising a base, a wall rising rigidly from said base, a movable switch member at the inner side of said wall pivotally mounted on an axis transverse thereto, said switch member having spaced lateral lugs projecting beyond the outer side of said wall, an actuator at said outer side of said wall and pivoted to the latter on an axis extending in the same direction as the pivotal axis of said switch member, said actuator being movable between said lugs, a spring device operatively connected with said actuator for rapidly moving the latter in either direction when forced past a dead-center position, means for so forcing said actuator, and stops for said actuator.

1,763,963. GLOBE FOR LIGHTING FIXTURES. EDWIN F. GUTH, St. Louis, Mo. Filed Apr. 3, 1928. Serial No. 266,882. 1 Claim. (Cl. 240—100.)



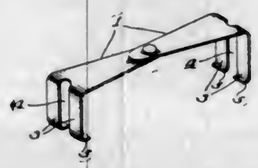
A globe for lighting fixtures, having an upper portion, cylindrical in cross section, and a lower portion which extends downwardly therefrom and then curves inwardly to an orifice in the central portion of the bottom of said globe, the wall of said lower portion varying in thickness from a point adjacent the lower edge of said upper cylindrical portion to a point at the edge of said central orifice, the greatest thickness of said wall being at a point approximately midway between said extreme points, the inner surface of said globe being continuously concave in vertical section from the point of termination of said cylindrical portion.

1,763,964. BORING MACHINE. GEORGE E. HALLENBECK, Toledo, Ohio, assignor to Baker Brothers, Inc., Toledo, Ohio, a Corporation of Ohio. Filed May 25, 1925. Serial No. 32,666. 1 Claim. (Cl. 77—3.)



A machine tool including three sections, each having a support independently of the other, connecting means assembling the sections in a row with the supports approximating a common plane base region therefor, a motor carried by the intermediate section, said intermediate section providing a spacer between and connecting the terminal sections, primary transmission from the motor terminating in rotary gears protruding oppositely from the intermediate section, a spindle carried by each terminal section, and secondary transmission means embodying a gear in each terminal section brought into meshing assembly with said intermediate section respective protruding gears by said connecting means, one of said terminal sections having a second gear in mesh with said protruding gear, and spindle feed reciprocation tertiary transmission means therefrom.

1,763,965. RECEPTACLE LIFTER. ANTONY HIGH, Philadelphia, Pa., assignor to Abbotts Alderney Dairies, Inc., Philadelphia, Pa. Filed Aug. 29, 1925. Serial No. 53,228. 5 Claims. (Cl. 294—27.)

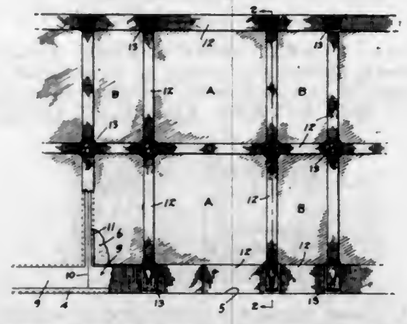


1. A lifter comprising members rotatable relatively to one another about an axis located at substantially the center of the expanded lifter, said members being provided with terminal graspers for lifting an object in substantially the direction of said axis when said members are diametrically disposed.

1,763,966. PANEL CONSTRUCTION. LOUIS HOFFMAN, San Francisco, Calif. Filed June 18, 1928. Serial No. 286,330. 4 Claims. (Cl. 20—15.)

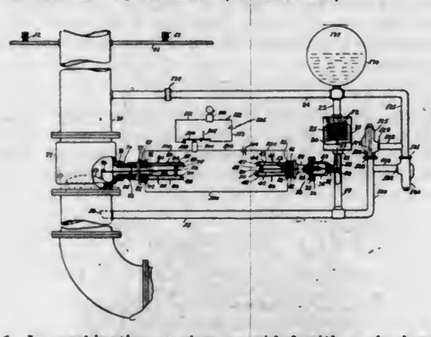
1. The combination with a supporting surface, of a plurality of frames removably secured to said surface,

each frame having a recessed portion for receiving a panel, panels carried by each frame and being receivable in



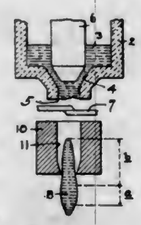
the recesses, strips covering the adjacent edges of said panels, and brackets covering the ends of said strips, said brackets being secured to said frames by screws.

1,763,967. RETARD ALARM DEVICE. RICHARD M. HOPKINS, Rutherford, N. J., assignor to American District Telegraph Company, New York, N. Y., a Corporation of New Jersey. Filed Dec. 29, 1925. Serial No. 78,151. 28 Claims. (Cl. 169—23.)



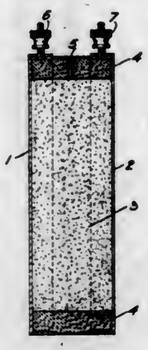
1. In combination, a riser provided with a check valve; a conduit having a restriction therein shunted around said valve; a signal operated by flow of water in the riser; and pressure responsive control means associated with said conduit whereby the signal is disabled by upward flow in the conduit.

1,763,968. METHOD OF DELIVERING AND SHAPING MOLTEN GLASS. GEORGE E. HOWARD, Butler, Pa., assignor, by mesne assignments, to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed May 25, 1921. Serial No. 472,587. 12 Claims. (Cl. 49—55.)



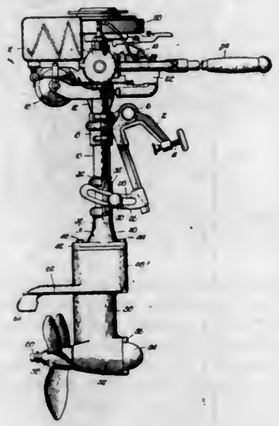
2. The method of feeding molten glass that comprises successively detaching a series of suspended masses of glass from a parent body, temporarily applying a force to the lower portion only of each mass, after detachment, to retard it sufficiently to prevent substantial elongation thereof, and receiving the said mass in a mold.

1,763,969. ELECTRIC DRY CELL. JOHN GRANT JACKSON, Chatham, Ontario, Canada. Filed Jan. 15, 1927. Serial No. 161,373. 1 Claim. (Cl. 136—7.)



An electric dry cell comprising positive and negative electrodes, each of said electrodes forming one side wall, insulation spacing said electrodes and forming the bottom and end walls, and an absorbent material contained within the cell.

1,763,970. STREAM-LINE CONSTRUCTION. LOUIS JAMES JOHNSON, Waukegan, Ill., assignor to Johnson Brothers Engineering Corporation, South Bend, Ind., a Corporation of Indiana. Filed June 18, 1928. Serial No. 286,223. 21 Claims. (Cl. 115—18.)

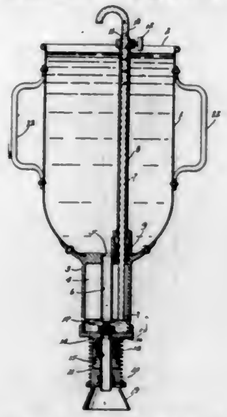


12. A propeller carrying casing for the lower unit of an outboard motor propulsion device having an integrally formed anti-cavitation plate, and the casing having a stream line contour with its front vertical edge of comparatively blunt-like stream line contour trailing rearwardly to a substantially knife edge stream line contour.

1,763,971. DISPENSING DEVICE. JAMES KANTOR and CHARLES HERMAN MILLER, Chicago, Ill. Filed Oct. 21, 1927. Serial No. 227,717. 2 Claims. (Cl. 226—108.)

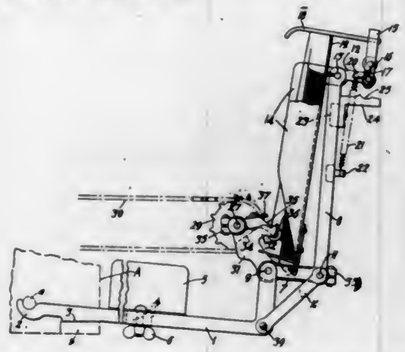
1. A device of the type described comprising a housing, a receptacle mounted upon said housing, said housing being provided with an inlet and an outlet opening, a tubular member disposed in said housing and in communication with said inlet opening for providing com-

munication between said receptacle and said housing, a sleeve mounted upon said housing and extending through



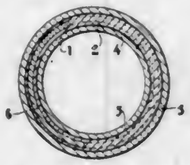
said receptacle, and means disposed in said sleeve and extending into said housing for varying the flow of a fluid into said housing.

1,763,972. SLIP SHEETER, PARTICULARLY ADAPTED FOR MIMEOGRAPHS. FREDERICK KLEIN, New York, N. Y., assignor to A. B. Dick Company, a Corporation of Illinois. Filed Feb. 18, 1928. Serial No. 255,445. 10 Claims. (Cl. 34—1.)



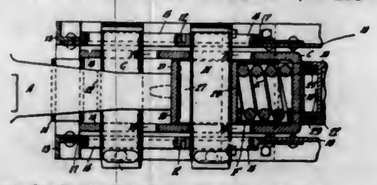
1. A device for inserting separators between successively delivered sheets comprising, means for holding a stack of separators in upright position resting on one edge, a stop means for yieldingly holding the lower part of the stack of separators against the stop, means for engaging, lifting and then releasing the outermost separator, said lifted separator descending onto and being supported by the stop and said lifting means then re-engaging the separator to deposit it upon the delivered sheets.

1,763,973. MANUFACTURE OF HOSE. VICTOR LEFFBURE, Fulham, London, England. Filed June 8, 1926, Serial No. 114,572, and in Great Britain July 9, 1925. 17 Claims. (Cl. 137—90.)



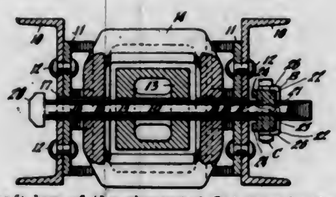
1. A hose resisting organic solvents, comprising an outermost and an innermost ply of fabric impregnated with a synthetic resin, and an intermediate layer of rubber, whereby one of said impregnated layers is subjected to the direct effects of the said organic solvents.

1,763,974. RAILWAY DRAFT RIGGING. EDWARD H. LEHMAN, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed Apr. 9, 1928. Serial No. 268,462. 8 Claims. (Cl. 213—7.)



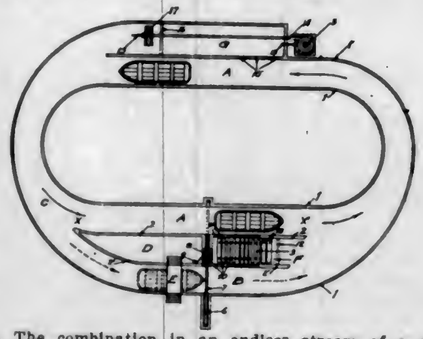
1. In a draft rigging for railway cars, the combination with spaced draft sills and a rear stop member fixed with respect to said sills; of a coupler; a yoke having a lost motion connection with the coupler; a friction shock absorbing mechanism interposed between the yoke and the rear stop member; spring shock absorbing means within the yoke, adapted to be compressed upon inward movement of the coupler with respect to the yoke; a pressure-transmitting member movable inwardly with respect to the yoke and normally spaced from said friction shock absorbing mechanism, said pressure-transmitting member being movable inwardly with the coupler and adapted to actuate said friction shock absorbing mechanism after a predetermined compression of the spring shock absorbing mechanism.

1,763,975. DRAFT-RIGGING KEY RETAINER. GOODRICH Q. LEWIS, Wheaton, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed Nov. 14, 1925. Serial No. 69,013. 3 Claims. (Cl. 35—5.)



3. A draft key of the elongated flat type having a notch formed in one of the wide faces adjacent one end of the key, said notch being of greater length than half of the width of the key and being adapted to receive a key retainer.

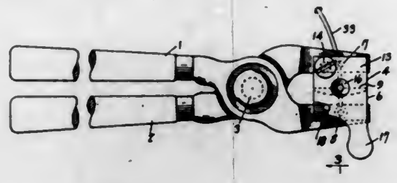
1,763,976. ENDLESS WATER COURSE. JOHN W. LIPPINCOTT, Little Rock, Ark. Filed Nov. 5, 1928. Serial No. 317,414. 5 Claims. (Cl. 104—73.



1. The combination in an endless stream of a main channel with an interconnected and normally obstructed

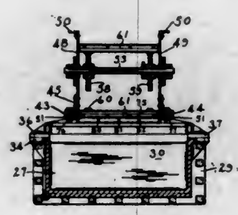
shunting channel, and means to open said shunting channel and at the same time obstruct the main channel, and thereby divert the stream into and through the shunting channel, and vice versa.

1,763,977. BULLET MOLD. MARION G. MCNEELY, Oakland, Calif. Filed Apr. 22, 1929. Serial No. 357,294. 5 Claims. (Cl. 22—153.)



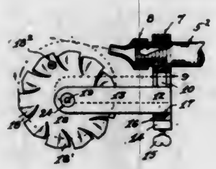
1. A bullet mold comprising two mold sections forming a bullet cavity when in contacting engagement, means for moving the sections into and out of engagement, a pin, and means for projecting the pin into the cavity when the sections are moved toward one another and for withdrawing the pin from the cavity when the sections move away from one another.

1,763,978. JUICE STRAINER. THOMAS M. NALON, Ansonia, Conn., assignor, by mesne assignments, of two-thirds to Estela Perez y Perez and one-third to Mauricio Quiterio Lopez y Perez, Habana, Cuba. Filed Feb. 6, 1926. Serial No. 86,612. 22 Claims. (Cl. 210—149.)



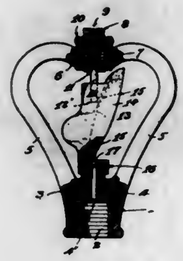
1. In a sugar cane mill or the like, a juice tank, a trash conveyor provided with side walls, said conveyor being spaced from said tank, a plurality of laterally removable strainer sections between said tank and trash conveyor, means for clamping said strainers against the side walls of said conveyor and means for supporting said strainers while being removed.

1,763,979. SPRINKLER. LEWEN R. NELSON, Peoria, Ill. Filed Nov. 19, 1926. Serial No. 149,311. 10 Claims. (Cl. 299—69.)



4. A sprinkler including a water supply arm, a water conducting support upon which the arm is mounted to rotate, said arm having a free end provided with a discharge opening, a mounting at the free end of the arm, an unbalanced wheel rotatably mounted thereon on an axis approaching the vertical adapted to be driven by a water stream issuing from said discharge opening, and means to adjust the wheel in its own plane in the direction of a water stream issuing from the discharge opening.

1,763,980. SPRINKLER. LEWEN R. NELSON, Peoria, Ill. Filed Nov. 28, 1927. Serial No. 236,117. 1 Claim. (Cl. 299—126.)



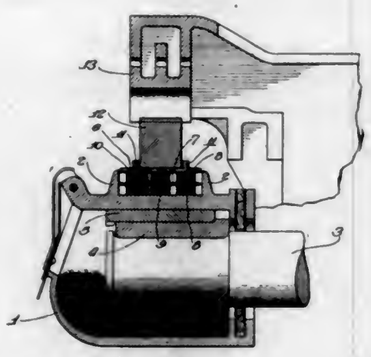
A sprinkler head comprising a rigid body including a base having a passage and an arm a portion of which lies opposite and in spaced relation to said base, a screw adjustably mounted in the said arm opposite said base and having a conical socket, a rotor, a stem inserted therein to engage in the said socket of the screw, the other end of the rotor having a cavity, and a screw adjustably mounted in said base opposite the first named screw and having a spherically curved end to engage in the cavity of the rotor, there being a passage extending through the last named screw communicating with the passage of the base, and there being a passage through that portion of the rotor having the cavity communicating with the passage of said last named screw.

1,763,981. BELT BUCKLE. CHARLES S. NICHOLS and WILLIAM M. JORDAN, Lincoln, Nebr. Filed Sept. 12, 1927. Serial No. 218,960. 5 Claims. (Cl. 24—180.)



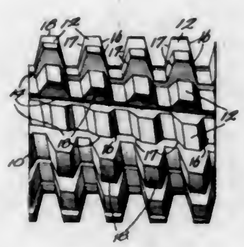
1. A belt buckle comprising a buckle plate having opposed lateral ears with apertures therein, a yoke member adapted to be engaged through the looped end of a belt and to be rotatable through and angle relative thereto and having the ends of the arms thereof inserted through said apertures and bent over to provide loops, a lug extending from said yoke at a right-angle to said yoke arms, and said lug being adapted to extend through holes in a belt and to engage the rear edge of said buckle plate whereby to hold the belt in a predetermined contracted state.

1,763,982. JOURNAL-BOX CUSHION. RICHARD J. O'BRIEN, Depew, N. Y., assignor to Waugh Equipment Company, Depew, N. Y., a Corporation of Maine. Filed July 25, 1929. Serial No. 380,886. 3 Claims. (Cl. 105—224.)



2. The combination with a journal box, having spaced upstanding flanges, of a rubber cushion seated between said flanges, a plate upon said cushion a pedestal upon said plate and a frame supported upon said pedestal.

1,763,983. HOB. CARL G. OLSON, Chicago, Ill., assignor to Illinois Tool Works, Chicago, Ill., a Corporation of Illinois. Filed Mar. 25, 1927. Serial No. 178,248. 12 Claims. (Cl. 29—103.)

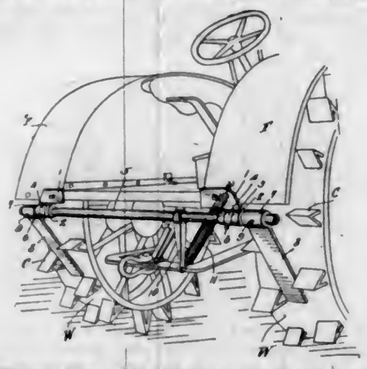


1. A hob for producing ordinary involute tooth gears, said hob having gashes oblique to the thread of the hob in a direction to increase considerably the sharpness of the cutting edge at the leading side of the hob teeth, the hob teeth having sides steeper than the teeth of hobs wose axial pitch is equal to the circular pitch of the gear to be cut.

2. A hob having spiral gashes oblique to the thread of the hob and of the same hand lead as the thread of the hob thereby increasing the sharpness of the cutting edge at the leading side of the hob teeth, the hob teeth having sides steeper than the teeth of hobs whose axial pitch is equal to the circular pitch of the gear to be cut.

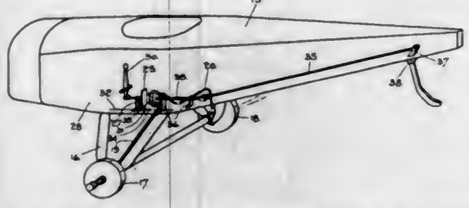
1,763,984. WHEEL-CLEANING ATTACHMENT FOR TRACTORS. GUY RABY, Vermont, Ill. Filed Nov. 7, 1927. Serial No. 231,596. 1 Claim. (Cl. 280—158.)

A wheel cleaning attachment for tractors including attaching brackets for engagement with opposed fenders of a tractor, spaced integral sleeves extending from each bracket, a rock shaft journaled in all of the sleeves and adapted to extend transversely of a tractor, collars adjustably mounted on the shaft and interposed between the sleeves on each bracket, thereby to hold the shaft against longitudinal movement relative to the brackets, said brackets and collars being adjustable along the shaft for positioning the brackets on fenders at different distances apart, scraping blades, a sleeve on one end of each blade into which one end of the shaft projects, means carried by the sleeve for binding it on the shaft, thereby



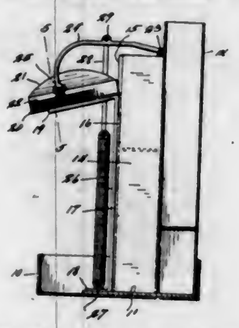
to insure rotation of the blade with the shaft, said blades being adjustable toward and from each other on the shaft, an arm radiating from the shaft, and a spring for connecting the arm to a portion of a tractor thereby to hold the blades pressed yieldingly against the periphery of the tractor wheels.

1,763,985. MEANS FOR OPERATING ALIGHTING-GEAR BRAKES. WILFRID THOMAS REID, St. Laurent, Quebec, Canada, assignor to Curtiss-Reid Aircraft Company, Limited, Montreal, Quebec, Canada. Filed Dec. 3, 1928. Serial No. 323,494. 5 Claims. (Cl. 244—2.)



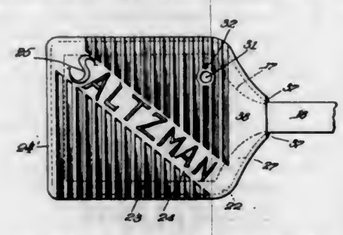
1. A brake operating mechanism comprising a cylinder block having cylinders and plungers and flexible connections to brake application mechanisms, a tail skid operatively connected to the cylinder mounting and levers for operating said plungers.

1,763,986. WIRE AND PICK HOLDER FOR FLORISTS. GEORGE F. RHEA, Greeneville, Tenn. Filed Jan. 5, 1929. Serial No. 330,685. 8 Claims. (Cl. 211—60.)



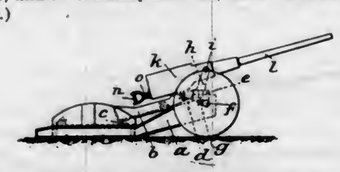
1. A holder for florists' picks and wire comprising a base, vertical wire receptacles at different depths extending upward from the base and open at the top and designed to contain wire of different lengths and pick holders mounted upon the receptacles and including an element having laterally flaring sides to receive the picks, and a resiliently actuated clamp associated with the element and yieldingly urged toward the bottom thereof.

1,763,987. CUSHION PAD FOR FOOT TREADLES. JOSEPH SALTZMAN, Chicago Ill. Filed Oct. 2, 1926. Serial No. 139,027. 1 Claim. (Cl. 74—81.)



A pad for pedals of the type formed with a shank substantially in line with and in the same plane as the face of a pedal, comprising a body portion shaped to cover the face of the pedal, a depending extension formed about the edges of the pad to either side of the shank, said extension covering the edges of the pedal and having an inturned flange portion for engagement under the edges of the pedal to hold the pad in place thereon, the ends of the depending extension and flange being spaced apart substantially the width of the shank to closely hug the sides thereof, and the under side of the pad being provided with means for positive interlocking engagement with the shank to prevent displacement of the pad, said latter means being concealed below and not interrupting the continuity of the top of the pad.

1,763,988. GUN MOUNTED ON A WHEEL CARRIAGE. HERMANN SCHULER and FRITZ HERLACH, Dusseldorf, Germany, assignors to Rheinische Metallwaaren- und Maschinenfabrik, Dusseldorf-Derendorf, Germany, a Corporation of Germany. Filed Aug. 16, 1929, Serial No. 386,450, and in Germany Nov. 29, 1926. 6 Claims. (Cl. 89—40.)



1. A gun comprising a wheeled carriage, an intermediate member carrying the gun barrel and adapted to be turned on said carriage in a vertical plane into an upright and a low position, and means for turning the gun barrel on said intermediate member about three setting axes.

1,763,989. PHOTOGRAPHIC LIGHT-SENSITIVE MATERIAL AND PROCESS FOR MAKING SAME. SAMUEL E. SHEPPARD and EUGENE P. WIGHTMAN, Rochester, N. Y., assignors to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Feb. 25, 1929. Serial No. 342,658. 11 Claims. (Cl. 95—7.)

1. A photographic emulsion comprising a colloid, particles of photographic silver salts suspended therein, and an added compound therein which stabilizes the emulsion and on which at least part of the light sensitiveness depends, said compound being of the type

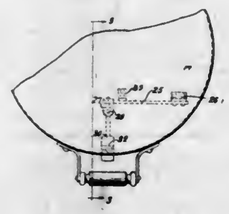
$$\begin{matrix} R-X \\ R-Y \end{matrix}\rangle NH$$

in which R is a nitrogen free organic radical and X and Y are selected from activating electro-negative radicals.

1,763,990. PHOTOGRAPHIC LIGHT-SENSITIVE MATERIAL AND PROCESS FOR MAKING SAME. SAMUEL E. SHEPPARD and EUGENE P. WIGHTMAN, Rochester, N. Y., assignors to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Feb. 25, 1929. Serial No. 342,659. 9 Claims. (Cl. 95—7.)

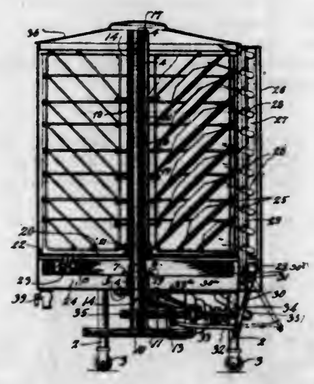
1. A photographic emulsion comprising a colloid, particles of photographic silver salts suspended therein, and an added compound therein which stabilizes the emulsion and on which at least part of the light sensitiveness depends, said compound being selected from the group of carbamides including the substituted carbamides, cyclic carbamides, acid amides, substituted acid amides and alpha amide hydrazides.

1,763,991. DEVICE FOR INDICATING COOKING TEMPERATURES OF WAFFLE IRONS AND THE LIKE. JOSEPH FREDERICK SMART, New Britain, Conn., assignor to Landers, Frary & Clark, New Britain, Conn., a Corporation of Connecticut. Filed Feb. 20, 1929. Serial No. 341,399. 4 Claims. (Cl. 116—114.)



1. A device for indicating cooking temperatures of waffle irons and the like, and comprising a thermostatic element fixed at one end and adapted to flex in a horizontal plane, a horizontally disposed indicator adapted to be moved by said element to and from an exposed position, said indicator at its forward end and on its upper face bearing indicating means, means for connecting the inner end of said indicator to the free end of said element, and a stop for limiting the extent to which said element may move in a direction to withdraw said indicator.

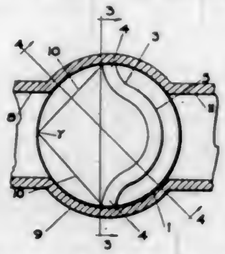
1,763,992. DISHWASHER. ALBERT WOODALL SMITH, Lakewood, Ohio. Filed May 14, 1927. Serial No. 191,438. 6 Claims. (Cl. 141—9.)



6. In an article cleansing apparatus, rotatable supporting means for the articles, jet directing means oscillatingly mounted at one side of the support, means for rotating the article supporting means, and means for oscillating the jet directing means in a plane other than

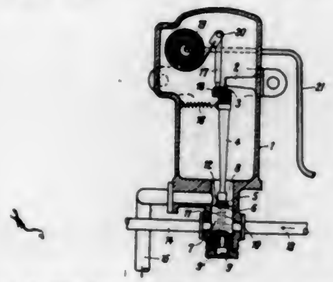
one perpendicular to the supporting means axis, said rotating means and oscillating means having a common drive, said drive including gearing whose ratio is other than an integer such that each succeeding path of the jet on the articles to be cleansed will bear an angularly spaced relation to the preceding path in each rotation of the supporting means.

1,763,993. EXPLOSIVE ENGINE PISTON. OWEN H. SPENCER, Indianapolis, Ind. Filed Mar. 21, 1929. Serial No. 348,908. 1 Claim. (Cl. 123—73.)



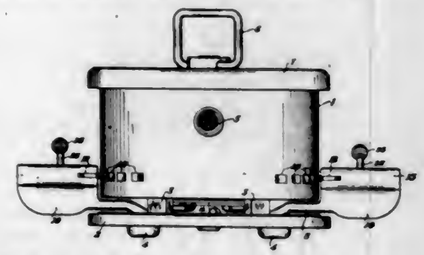
In a piston structure, a baffle at the upper end of the piston comprising a substantially ogee shaped ridge extending from side to side of the piston, a valley formed on one side of said ridge, and oval swells at the discharge end of the valley.

1,763,994. FRICTIONLESS SLIDING VALVE FOR SELF-ACTING REGULATORS OR GOVERNORS. HANS THOMA, Munich, Germany. Filed Feb. 26, 1926, Serial No. 90,985, and in Germany Feb. 26, 1925. 4 Claims. (Cl. 251—18.)



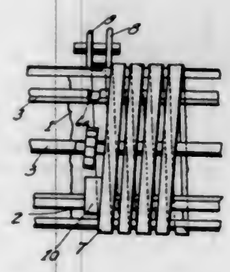
1. In a self acting regulator the combination with a sliding valve, of a frictionless suspending device for allowing said valve to swing about a point situated outside of the valve face, the suspension device consisting of a neutral flat spring for avoiding the friction and the play of a pivot at the place of suspension.

1,763,995. CONTROLLER FOR DENTAL ENGINES. HENRY E. WEBER, Canton, Ohio. Filed May 26, 1927. Serial No. 194,359. 5 Claims. (Cl. 200—17.)



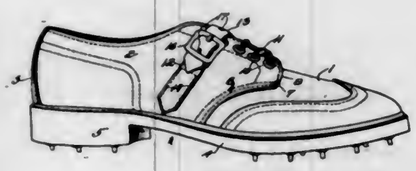
1. In a controller for a dental engine including a cylindric casing, an operating lever pivotally mounted concentrically of the casing at one end of the casing, the ends of the lever extending outward beyond the casing, enlarged foot engaging portions extending from each end of the lever adjacent the outer surface of the casing, a plurality of series of diametrically disposed spaced sockets in the outer surface of the casing, and means carried by each foot portion for selective engagement with certain of said diametrically disposed sockets.

1,763,996. PROCESS OF MAKING WELL STRAINERS. GEORGE E. WILLERS, Lawrenceburg, Ind., assignor to A. D. Cook, Inc., Lawrenceburg, Ind., a Corporation of Indiana. Filed Mar. 23, 1928. Serial No. 264,221. 7 Claims. (Cl. 29—163.5.)



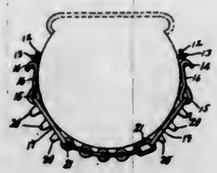
1. A process for making a well strainer, which consists in mounting a series of ribs on a support and securing a header at one end of the ribs, then in sequence cutting grooves in the ribs in spiral sequence, and a short interval thereafter spacing and treating the metal of the ribs so as to permanently secure a filter wire within the cut grooves so that a strainer is provided with filtering apertures between the spirally spaced wires.

1,763,997. SHOE. ARTHUR A. WILLIAMS, Holliston, Mass. Filed Dec. 14, 1927. Serial No. 239,902. 1 Claim. (Cl. 36—45.)



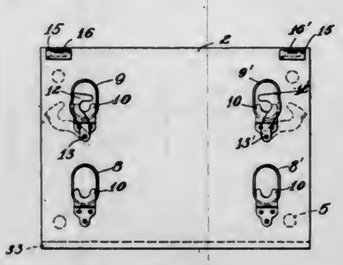
In a low shoe of the blucher type having an upper provided with instep flaps overlying the vamp of the shoe and secured together by means of a lace, the combination therewith of two supplemental straps disposed upon the exterior of the upper above the sole, one at each side of said upper; longitudinal rows of stitches fastening a substantial length of the lower portion of each of said straps to one quarter of said upper at one side of the shank portion thereof, and non-elastic means separably fastening the free ends of said straps together in overlapped instep-supporting relationship closely adjacent the tied ends of said lace so as to cause them to hold the tops of the quarters closed against the foot thereby relieving the knot of the lace and the latter from the strain imposed by the foot upon the shoe while it is in use, both of said straps being positioned obliquely with respect to the sole of the shoe so that their median lines are approximately normal to the outline of the upper end portions of the instep flaps as viewed in side elevation.

1,763,998. ANTISKID CHAIN. JOSEPH G. ALLMON, Melrose, Mass. Filed Jan. 2, 1929. Serial No. 329,837. 1 Claim. (Cl. 152—14.)



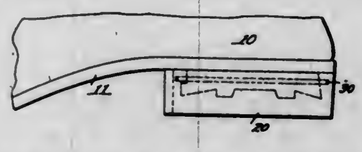
In an antiskid chain which includes a pair of side chains and a plurality of cross chains engaged with and extending between the side chains, and adapted to extend across a tire tread, a pair of spaced apart members provided with anti-slipping barbs of stepped lengths, arranged in rows which are spaced apart and extend crosswise of the cross chains, each of said spaced apart members comprising a rigid oblong base portion elongated in the direction of the length of the cross chain and having an inner side arranged to face the tire tread, and an outer side arranged to face the tire track, the barbs of each member being rigid and each integral with the base portion thereof.

1,763,999. TYPEWRITER-CARRYING CASE. WALTER E. BARNARD, Ithaca, N. Y., assignor to Barr-Morse Corporation, Ithaca, N. Y., a Corporation of New York. Filed Apr. 23, 1927. Serial No. 186,124. 3 Claims. (Cl. 45—68.2.)



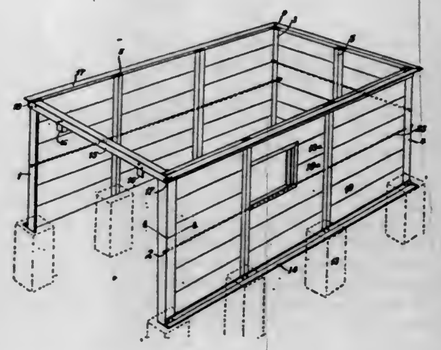
1. In a typewriter carrying case, the combination of a cover, a removable base adapted to form one wall of the case and together with the cover complete the enclosure of the case, a handle attached to the cover, sockets in the base for the feet of the typewriter, forked members adapted to engage the feet of the typewriter on three sides and hold them in the sockets, said forked members opening on the side toward the handle, the cover, sockets and forked members being proportioned so that the cover will limit the movement of the feet to less than the depth of the forked members so that they cannot be disengaged from the forked members when the cover is in place.

1,764,000. DETACHABLE RUBBER HEEL. WILFRED L. BERNIER, Gardner, Mass., assignor of one-half to Alfred G. Pelletier, Winchendon, Mass. Filed June 19, 1929. Serial No. 372,005. 3 Claims. (Cl. 36—36.)



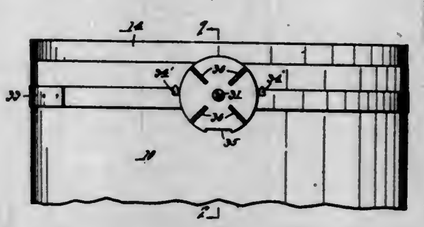
1. In a shoe, a heel, a heel-attaching member permanently secured thereto, a detachable rubber heel, said member and heel having cooperating flanged and undercut edge portions, a tension wire substantially encircling said heel at the edge portion thereof, and means to tension said wire.

1,764,001. BUILDING CONSTRUCTION. HYMEN A. BLANCHARD, Buffalo, N. Y. Filed Aug. 17, 1927. Serial No. 213,568. 4 Claims. (Cl. 72—1.)



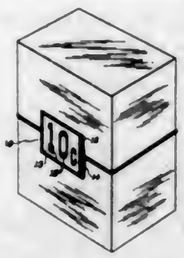
1. In a concrete building structure a framework consisting of vertical columns, each having its lower end anchored in a pre-cast concrete block and formed with vertical structural channels to be arranged in opposing relation to the similar vertical channel of an adjacent column and horizontal sill bars adapted for connection to said columns along the lines of wall extent and at corresponding points of their height thereby to brace said columns to one another and effect their alinement and relative centering in combination with wall elements for which said blocks provide support, the assembly of said wall elements being maintained by the opposing channels of adjacent columns, said blocks being adapted for alining adjustment in holes in the ground severally provided therefor and for support on individual foundations in such holes.

1,764,002. LATCHING DEVICE FOR SHIPPING CONTAINERS. WILLIAM R. BROWN and ARCHIE C. TOWNE, Winchendon, Mass., assignors to Brown Package Company, Winchendon, Mass., a Corporation of Massachusetts. Filed Aug. 1, 1927. Serial No. 209,745. 2 Claims. (Cl. 292—259.)



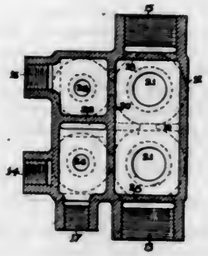
1. In a shipping container comprising a body and a cover, a latching bar extending transversely of said cover and projecting beyond the side surfaces of said body, and a pair of cam discs mounted one at each side of said body and effective to engage and draw downward said latching bar, said body having notches in its upper edge to receive said bar thereby to position the bar relative to said cam discs, and to prevent angular movement of said bar and cover, and also having reinforcing members secured thereto, said discs having pivotal fastening members extending through the reinforcing means and secured to the body.

1,764,003. PRICE TAG. SERGINS K. BUSH, Canton, Ohio. Filed July 8, 1927. Serial No. 204,265. 2 Claims. (Cl. 40—21.)



1. A price tag for selective placement upon articles, containers and the like of varying size, including a strip having end portions cooperating to form a sleeve, a price designation on the sleeve, an endless elastic band removably slidable in the sleeve, and the cooperating end portions of the sleeve forming means for centering the band in one direction with respect to the sleeve.

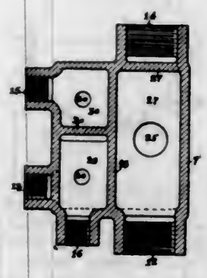
1,764,004. VALVE FOR LIFTING DEVICES. JOHN D. COCHIN, San Francisco, Calif. Filed May 16, 1927. Serial No. 191,579. 6 Claims. (Cl. 277—1.)



1. In a control valve, a casing having a plurality of openings in its sides, a vertical partition extending from the top to the bottom of the casing, a longitudinally extending partition located at one side of the vertical partition between the top and bottom of the casing and having a plurality of openings therein, a plurality of partitions located in the casing at the opposite side of the vertical partition, each having an opening therein, and means movably associated with the openings in the partitions for closing and opening the said openings therein, whereby quantities of compressed air and liquid may be allowed to pass through the casing in certain directions at given times.

1,764,005. CONTROL VALVE FOR LIFTING DEVICES. JOHN D. COCHIN, San Francisco, Calif. Filed June 25, 1928. Serial No. 288,050. 1 Claim. (Cl. 277—1.)

In a control valve, a casing having a plurality of openings therein, a vertical partition extending from one end of the casing to the other end thereof, a horizontal partition extending through the inside of the casing at one side of the vertical partition, whereby two chambers are formed, each communicating with one of the openings in the casing, said horizontal partition having an opening therein for the passage of liquid from one chamber to the other, a plurality of partitions located in the casing at the opposite side of the vertical partition, whereby a plurality of chambers are formed which communicate with others of the openings, each of the last named partitions

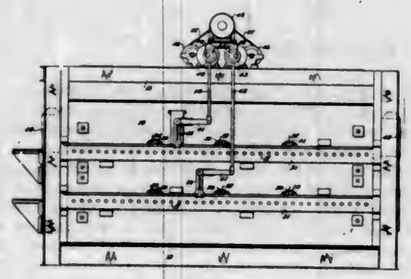


having openings, therein for the passage of compressed air from one chamber to another, and means associated with the openings in the partitions for closing certain of the openings and opening other of the openings.

1,764,006. TEXTILE CRAYON PROCESS. LAWRENCE HARVEY COOK, Menlo Park, Calif., assignor to John T. Lemos, Palo Alto, Calif. Filed Nov. 19, 1927. Serial No. 234,564. 5 Claims. (Cl. 41—26.)

1. The method of designing on textile fabrics which comprises drawing on the fabric with a substantive dye crayon, and subsequently setting the dye image in the fiber of the material.

1,764,007. ROLLER-HEARTH FURNACE. FRANK T. COPE, Salem, Ohio, assignor to The Electric Furnace Company, Salem, Ohio, a Corporation of Ohio. Filed Oct. 11, 1928. Serial No. 311,886. 9 Claims. (Cl. 263—6.)



4. A furnace including a heating chamber, means for passing material through the heating chamber, a signal outside of the furnace, and means located inside of the heating chamber extending through the passing means and operated by the material passing through the heating chamber for operating the signal when material approaches the discharge end of the heating chamber.

1,764,008. PUSH-PULL ELECTROSTATIC SOUND REPRODUCER. WILLIAM D. CAOZIER, Geneva, Ill., assignor, by mesne assignments, to United Reproducers Patents Corporation, St. Charles, Ill., a Corporation of Nevada. Filed Oct. 24, 1928. Serial No. 314,722. 13 Claims. (Cl. 179—111.)

1. A sound producing device comprising electrically conducting members having undulated portions providing

juxtaposed troughs and crests, a dielectric between said members and contacting the same at said crests, the por-



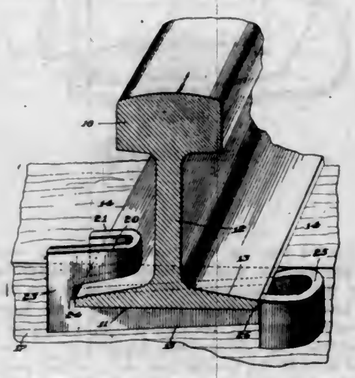
tions of said dielectric opposite the troughs being movable therein, and a flexible electrically conducting element in said dielectric.

1,764,009. SECTIONAL SOAP CAKE AND METHOD OF MAKING SAME. SPENCER D. EMBREE, Elizabeth, N. J. Filed Apr. 17, 1926. Serial No. 102,666. 2 Claims. (Cl. 87—23.)



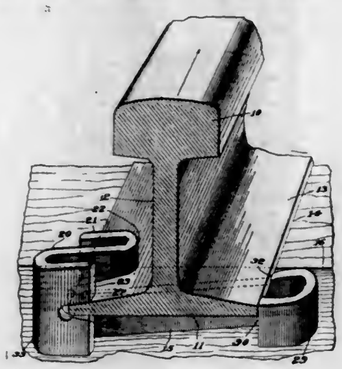
1. The method of making a sectional cake of soap which consists in positioning a plug member of soap and of predetermined size and shape in a recess formed in a cake member also of soap, said recess being of a depth of not substantially less than half that of the cake member and substantially the entire area of the soap directly below the recess comprising homogeneously worked soap, then successively compressing first the plug and then compressing the plug and cake jointly while effecting rubbing engagement therebetween in order to upset and deform the respective side walls of the cake and plug and thus effectively interlock said plug and cake and prevent the accidental displacement of the plug during a washing operation.

1,764,010. RAIL ANCHOR. CHARLES G. ERICSON, Toronto, Ontario, Canada. Filed June 24, 1929. Serial No. 373,197. 18 Claims. (Cl. 238—330.)



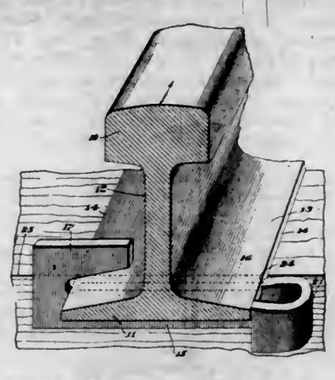
1. A one-piece rail anchor consisting of a shank adapted to extend across the rail base to abut against a tie and provided at one end with a plurality of laterally spaced overhanging jaws formed to extend inwardly a substantial distance over the rail base and to engage the upper inclined face thereof to hold the shank firmly against the rail base, and provided at its opposite end with a laterally extending arm the entire end portion of which is disposed at one side of the vertical plane of the shank to bear against the rail edge in non-overhanging relation and is held in firm abutting engagement with the rail edge by the overhanging jaws.

1,764,011. RAIL ANCHOR. CHARLES G. ERICSON. Toronto, Ontario, Canada. Filed June 24, 1929. Serial No. 373,198. 16 Claims. (Cl. 238—330.)



1. A rail anchor consisting of a shank adapted to extend across the rail base and provided at one end with three integral jaws positioned to extend over the rail base flange a substantial distance and engage the upper inclined face of said flange with sufficient force to hold the shank firmly against the under face of the rail base, and means at the opposite end of the shank for engaging the base flange at the opposite side of the rail.

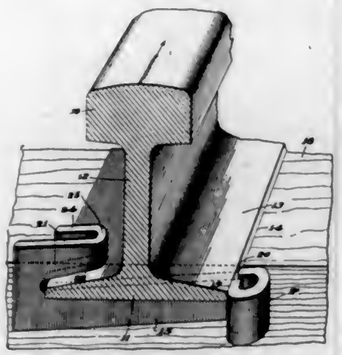
1,764,012. RAIL ANCHOR. CHARLES G. ERICSON, Toronto, Ontario, Canada. Filed June 24, 1929. Serial No. 373,199. 6 Claims. (Cl. 238—330.)



1. A one-piece sheet-metal, rail anchor consisting of a shank adapted to extend across the rail base to abut against the tie and having an overhanging jaw at one end and a rail engaging arm of gradually increasing width at its opposite end all cut from a sheet of metal, the jaw being constructed to extend inwardly over the rail base to engage the inclined upper face of the rail base at a substantial distance from the rail base edge and hold the shank firmly against the rail base, and having the arm at the opposite end of the shank cut to provide the same with an upper surface that slopes upwardly to the outer

end of the arm and the arm being bent laterally in the direction of the on-coming traffic and adapted to have its outer end portion sprung into firm abutting engagement with the rail base edge and held thereagainst in non-overhanging relation with the rail edge by said shank and jaw.

1,764,013. RAIL ANCHOR. CHARLES G. ERICSON, Toronto, Ontario, Canada. Filed June 24, 1929. Serial No. 373,107. 6 Claims. (Cl. 238—330.)



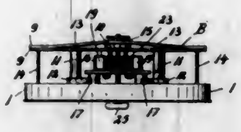
1. A one-piece rail anchor consisting of a shank adapted to extend across the rail base to abut against a tie and provided at one end with an overhanging jaw adapted to extend inwardly a substantial distance over the rail base flange and engage the upper face thereof to hold the shank firmly against the under face of the rail, and an arcuate arm at the opposite end of said shank extending lengthwise of the rail in the direction of the on-coming traffic and having a side face adapted to be sprung into abutting engagement with the rail edge and disposed in its entirety at one side of the shank.

1,764,014. LATCH. JOHN ALEXANDER FRASER, Berkeley, Calif, assignor to The Kawneer Company, Niles, Mich., a Corporation of Michigan. Filed July 22, 1925. Serial No. 45,186. 11 Claims. (Cl. 292—145.)



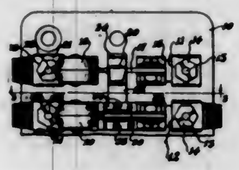
1. A locking device for swinging sashes, comprising a socketed keeper for the lower sash and a bar for the upper sash, said bar being capable of extending into the socket of the keeper when the sashes are in closed position, said bar and keeper being arranged that the keeper will move away from or toward the bar for unlocking or locking when the lower sash is opened or closed while the upper sash remains in closed position.

1,764,015. LOUD-SPEAKER. ADOLPH O. GOODYEAR, Cleveland, Ohio. Filed July 5, 1928. Serial No. 290,300. 10 Claims. (Cl. 179—116.)



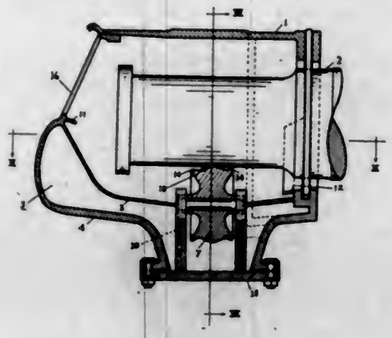
1. In a sound producing device of the class described, the combination with a sounding drum, of a diaphragm spaced therefrom, means for rendering taut the diaphragm, and instrumentalities for transmitting vibrations of the diaphragm to the drum.

1,764,016. TESTING JACK AND PLUG. RICHARD W. GRACE, Canton, Ohio, assignor to The Superior Switchboard & Devices Company, Canton, Ohio, a Corporation of Ohio. Filed Sept. 8, 1928. Serial No. 304,783. 2 Claims. (Cl. 200—2.)



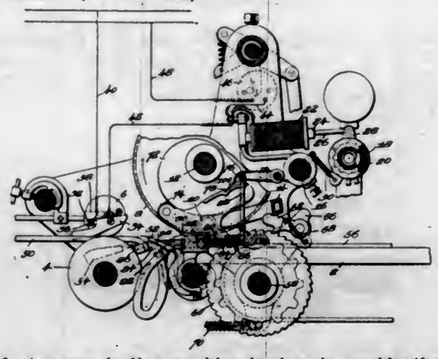
1. The combination of a testing jack including two spring members normally contacting with each other, a testing plug adapted to be inserted between the spring members and comprising two conductor bars insulated from each other and having terminals for connection to a test meter and the like, each of the spring members having a longitudinal slot therein and lugs upon each of the conductor bars for engagement in said slots.

1,764,017. JOURNAL BOX. MARTIN L. HARGER, Newell, Pa., assignor of one-third to Charles O. Downer, Newell, Pa., and one-third to Kerfoat W. Daly, Charleroi, Pa. Filed Oct. 31, 1927. Serial No. 229,844. 2 Claims. (Cl. 308—91.)



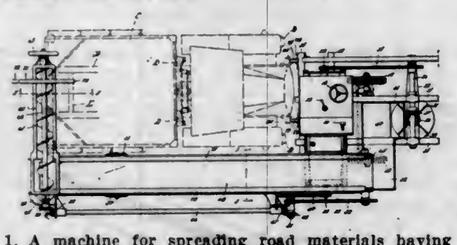
1. A journal box for a car axle containing within its walls a false bottom which extends in the direction of the length of the axle to which the box when in service is applied, from the opposite inner and outer journal-box walls to an intermediate opening, and oil-retaining pockets formed within the journal-box walls and at the inner and outer ends of the journal box, with which pockets the space beneath the false bottom is at the inner and outer ends thereof in communication.

1,764,018. PAPER-FEEDING MACHINE. HENNING HALLSTREAM, Braintree, Mass., assignor to Cross Paper Feeder Company, Boston, Mass., a Corporation of Massachusetts. Filed Oct. 3, 1924. Serial No. 741,363. 8 Claims. (Cl. 271—62.)



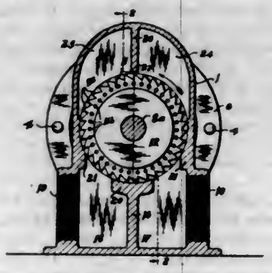
1. A paper feeding machine having, in combination, a table, means for feeding a feathered bank of sheets to the table, and pneumatic means cooperating with the front end of the bank for controlling the feed of the bank to maintain its front end in substantially uniform position.

1,764,019. MACHINE FOR SPREADING ROAD MATERIALS. NATHAN WATSON HARDENBERGH, North Canaan, Conn. Filed July 28, 1928. Serial No. 295,961. 11 Claims. (Cl. 275—2.)



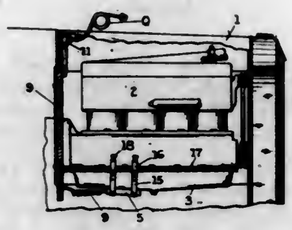
1. A machine for spreading road materials having a wheeled frame with a portion adapted to be placed in front of and propelled by a truck, a distributor at the forward end of said frame, and conveying means adapted to extend rearwardly along side of the truck and transversely at the rear of the truck for receiving the material from the rear end of the truck and delivering the same to said distributor, said conveying means rearwardly of the truck being arranged to be moved into and out of position to permit the truck to be moved into and out of position with respect to said portion of said frame.

1,764,020. ROTARY CUTTING, MIXING, AND ATTRITION MILL. ROBERT C. HOPKINS, Alliance, Ohio. Filed Mar. 12, 1928. Serial No. 260,863. 10 Claims. (Cl. 83—6.)



1. A rotary mill including a housing, a plurality of revolving disks within the housing, cutting edges upon the interior of the housing in close contact with the peripheral portions of the disks, and means for passing oil and the like through the housing between the disks and said cutting edges.

1,764,021. ENGINE PREHEATER. SYLVESTER V. JACKSON, Indianapolis, Ind. Filed Mar. 6, 1928. Serial No. 259,434. 3 Claims. (Cl. 219—38.)



1. A heating element for the crank case of an internal combustion engine, comprising a heating element proper, flexible straps for suspending said heating element at any suitable point on the external surface of the crank case and shaped to the contour of the parts over which they extend, clamps attached to the ends of said straps adapted to engage parts of the engine and means carried by the clamps adapted to be forced against the parts of the engine engaged by the clamps for drawing the heating element firmly against the face of the crank case.

1,764,022. ESTERS OF PHTHALIC ACID. ALPHONS O. JAEGER, Crafton, Pa., assignor to The Selden Company, Pittsburgh, Pa., a Corporation of Delaware. Filed May 19, 1928. Serial No. 279,212. 1 Claim. (Cl. 260—103.)

A mixture of amyl phthalates produced by esterifying "Pentasol" with a phthalic acid substance and having a boiling point range when purified by distillation under 10 mm. mercury of 190–205° C., the product being a colorless or slightly yellow liquid.

1,764,023. OXIDATION OF FLUORENE. ALPHONS O. JAEGER, Crafton, Pa., assignor to The Selden Company, Pittsburgh, Pa., a Corporation of Delaware. Filed Oct. 4, 1928. Serial No. 310,488. 12 Claims. (Cl. 260—131.)

1. A method of oxidizing fluorene substances, which comprises vaporizing the fluorene substances, admixing the vapors with an oxidizing gas and passing them over a contact mass containing at least one salt of a metal acid of the fifth and sixth groups of the periodic system.

12. A method of oxidizing fluorene substances, which comprises vaporizing the fluorene substances, admixing the vapors with an oxidizing gas in the presence of steam and passing them over a contact mass containing iron vanadate.

1,764,024. PROCESS FOR PREPARING CONTACT MASS. KENNETH B. JOHN, Wilmington, Del., and CARL W. COSLOW and CHRISTIAN J. SCHWINDT, Pittsburgh, Pa., assignors to The Selden Company, Pittsburgh, Pa., a Corporation of Delaware. Original application filed June 21, 1928, Serial No. 287,170. Divided and this application filed Feb. 14, 1929. Serial No. 339,899. 2 Claims. (Cl. 18—55.)

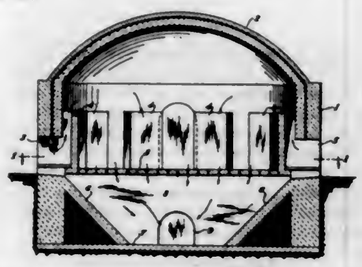
1. A process of forming catalyst pellets, which comprises introducing a compactible pulverulent catalyst ma-

terial into the perforations extending entirely through a plate or die, passing the plate between compacting means acting from both sides and adapted to exert substantially



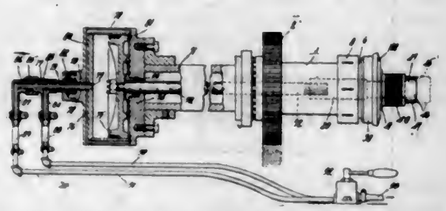
uniform pressure on both sides of the plate, removing adherent material from the surfaces of the plate and pressing out the pellets therefrom.

1,764,025. KILN BOTTOM. LEE DELL S. KLOTZ, Malvern, Ohio, assignor to The Whitacre-Greer Fireproofing Company, Waynesburg, Ohio, a Corporation of Ohio. Filed Jan. 8, 1927. Serial No. 159,883. 1 Claim. (Cl. 25—145.)



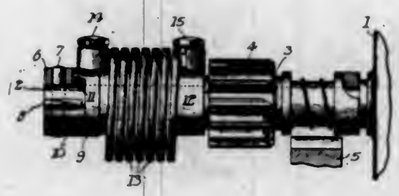
A down draft kiln provided with perforate floor, downwardly and inwardly inclined side walls beneath the floor, spaced walls beneath the floor and abutting the side walls forming transverse flues between the walls unrestricted throughout the length and breadth of the walls, said spaced walls having aligned openings in their lower portions forming an exit flue freely communicating with the transverse flues, said downwardly and inwardly inclined walls terminating at their lower ends at points spaced laterally from the aligned openings in the spaced walls, and an outlet communicating with said exit flue.

1,764,026. FIXTURE FOR HOLDING RING GEARS. JOHN E. LOVELY, Springfield, Vt., assignor to Jones & Lamson Machine Company, Springfield, Vt., a Corporation of Vermont. Filed Mar. 1, 1924. Serial No. 696,382. 7 Claims. (Cl. 279—1.)



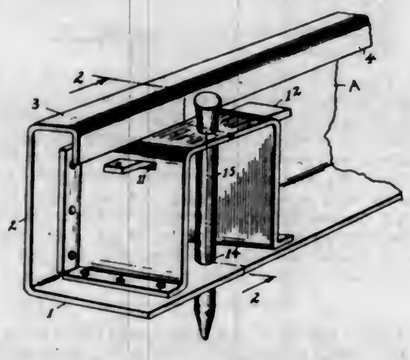
2. A device of the class described comprising an annular locating plate, means for rotating said plate about its axis, a member movable axially of said plate and on which annular work may be carried and pressed against the face of said plate, means engageable with said member on the opposite side of the work from said plate to clamp the work against said plate on movement of said member in one direction, and means on said member engageable with the work on the same side with said plate and acting to remove the work therefrom on movement of said member in the opposite direction.

1,764,027. ENGINE STARTER. WILLIAM L. MCGRATH, Elmira, N. Y., assignor to Eclipse Machine Company, Elmira, N. Y., a Corporation of New York. Filed Aug. 18, 1922, Serial No. 582,668. Renewed Jan. 19, 1927. 11 Claims. (Cl. 74—7.)



1. An engine starter drive including a driving shaft, a driven shaft, a driving member mounted on the latter shaft, a driving head loosely mounted on the driving shaft and a coiled drive spring connected respectively with the driven shaft and with the driving head, said driving shaft and driving head having complementary clutch-jaws normally held in engagement by the expansion of the spring but adapted to be automatically declutched when a predetermined degree of torque is reached.

1,764,028. ROAD RAIL OR FORM. GEORGE H. MILLER, Milwaukee, Wis., assignor to Metal Forms Corporation, Milwaukee, Wis., a Corporation of Wisconsin. Filed Feb. 10, 1928. Serial No. 253,413. 2 Claims. (Cl. 25—118.)



1. In a road rail or form construction of the class described, the combination, with a rail having a short depending flange, of a stake box having a flat surface supported by substantially perpendicular side members, which surface is in a right-angular relationship with the depending flange of the rail and in engagement therewith, whereby the stake box provides a support for said flange without necessitating a connection between the box and the flange.

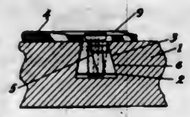
1,764,029. CURB FORM. GEORGE H. MILLER, Milwaukee, Wis., assignor to Metal Forms Corporation, Milwaukee, Wis. Filed Sept. 7, 1928. Serial No. 304,420. 2 Claims. (Cl. 25—118.)

2. A road rail of the class described, comprising, in combination, a base, an upright body, a head portion, the base having notches therein which extend part way up the upright body, and reinforcing members on each side of



said notches and engaging the under side of the head portion, the reinforcing members having flanges secured to the base and upright body portion.

1,764,030. PRINTER'S REGISTERING DEVICE. ELMER F. NOELL, Cincinnati, Ohio, assignor to The Printing Machinery Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Mar. 29, 1929. Serial No. 351,049. 7 Claims. (Cl. 101—387.)



1. A printer's registering device comprising a supporting base having parallel sides inclined at the same angle as one of the sides of a groove in a foundation plate within which said device is adapted to be dropped, and clamping members having sides parallel with another side of said groove movably mounted in said supporting base.

1,764,031. PURIFICATION OF CRUDE ANTHRACENE. ROBERT AMES NORTON, Crafton, Pa., assignor to The Selden Company, Pittsburgh, Pa., a Corporation of Delaware. Filed Aug. 17, 1928. Serial No. 300,397. 6 Claims. (Cl. 260—168.)

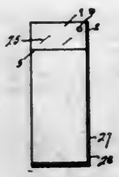
1. A method of purifying impure anthracene, which comprises subjecting it to the solvent action of a hydrogenated furfuryl alcohol.

1,764,032. HYDRAULIC TRANSMISSION FLUID. ROBERT AMES NORTON, Crafton, Pa., assignor to The Selden Company, Pittsburgh, Pa., a Corporation of Delaware. Filed Apr. 16, 1929. Serial No. 355,679. 9 Claims. (Cl. 252—5.)

1. A process of power transmission which comprises transmitting power by means of a liquid containing a substantial portion of a hydrogenated phthalid substance.

1,764,033. FABRIC-SAMPLE BINDER AND METHOD OF FOLDING SAID SAMPLES. LOUIS H. PALL, Cincinnati, Ohio. Filed Oct. 10, 1927. Serial No. 225,218. 6 Claims. (Cl. 206—82.)

3. An article of manufacture comprising a fabric sample folded upon itself end to end, a binder secured to the ends of said sample, and said binder and said sample being folded with one end edge and one side edge, respectively, of said binder and said sample adjacent the inner portion of said binder and sample, and with the other end edge and side edge, respectively, of said binder and said sample being folded adjacent the edges of said binder and said



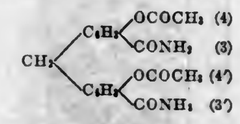
sample formed by the last mentioned fold, and means to releasably retain said binder and the ends of said sample in the last mentioned folded position.

1,764,034. ALLOY. JOHN V. O. PALM, Cleveland Heights, Ohio, assignor to The Cleveland Graphite Bronze Company, Cleveland, Ohio, a Corporation of Ohio. Filed Oct. 1, 1926. Serial No. 139,020. 1 Claim. (Cl. 75—1.)

An aluminum bronze alloy comprising 85 to 90 per cent. of copper, about 4 per cent. of aluminum, 5 to 8 per cent. of zinc, and 1 to 2 per cent. of iron.

1,764,035. METHYLENE-DISALICYLIC-ACID DERIVATIVE. SAMUEL LEWIS SUMMERS, Fort Washington, Pa. Filed July 5, 1928. Serial No. 290,709. 2 Claims. (Cl. 260—64.)

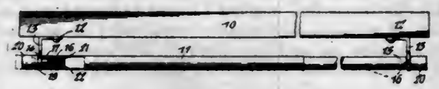
2. The herein described methylene-diacetyl-disalicyl amide; insoluble in water and substantially tasteless, but soluble in alcohol and ether; and having the formula



1,764,036. METHYLENE-DISALICYLIC-ACID DERIVATIVE. SAMUEL LEWIS SUMMERS, Fort Washington, Pa. Filed July 5, 1928. Serial No. 290,710. 1 Claim. (Cl. 260—64.)

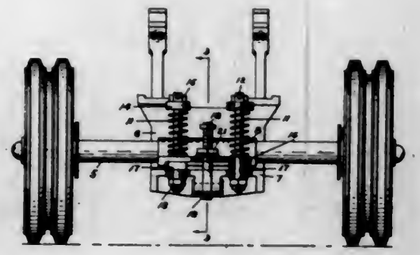
The hereindescribed condensation product of methylene-disalicyl-amide successively with benzaldehyde and pyruvic acid; insoluble in cold water, but soluble in alcohol.

1,764,037. CURTAIN ROD. MATTHEW J. BRUNNER, Buffalo, N. Y., assignor of one-half to Charles G. Buscaglia, Buffalo, N. Y. Filed June 28, 1928. Serial No. 289,020. 5 Claims. (Cl. 156—19.)



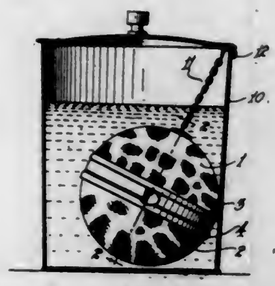
1. In a curtain fixture, a bracket adapted for attachment to a window casing and having a locking notch therein, and a curtain rod having a longitudinally-movable, yieldingly-restrained latching element at its end engageable with said locking notch.

1,764,038. SUSPENSION FOR VEHICLES. THOMAS A. CONLON, Silver Spring, Md. Filed Sept. 27, 1929. Serial No. 395,713. 9 Claims. (Cl. 89—40.) (Granted under the act of Mar. 3. 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



9. A vehicle, an axle, a balance beam on axle, a carriage having engagement with one end of the balance beam, a yielding suspension establishing connection between the carriage and the other end of the balance beam.

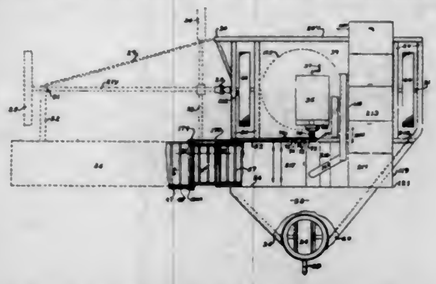
1,764,039. RICE-COOKING DEVICE. RUTH J. COOPER, Dallas, Tex. Filed Aug. 29, 1929. Serial No. 389,162. 1 Claim. (Cl. 53—1.)



A hollow foraminous sphere for cooking rice and the like, and adapted to be loosely suspended at one point only within a cooking vessel containing water, said ball comprising two semispherical members, both of foraminous material, upper and lower bands, one secured to each of said foraminous members, one of said bands having a reduced portion, a shoulder at the juncture of the said reduced portion with the remainder of the band, the other band fitting over said reduced portion and limited by said shoulder, said bands being hinged together at one side and having detachable fastening means opposite the hinge, said fastening means comprising a protuberance on one of the bands and a catch rotatably mounted on the other band and adapted to coact with the protuberance, and a chain-like suspension member secured to one of said semispherical members, said member constituting the sole means of suspension for said ball, whereby free movement of the ball in all directions within the cooking vessel is permitted.

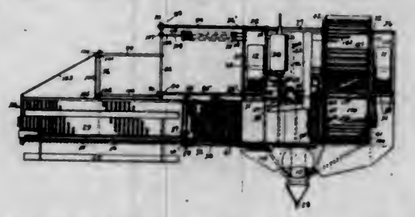
1,764,040. COMBINATION HARVESTER, THRASHER AND SEPARATOR. WILLIAM C. EDWARDS, Jr., Kansas City, Mo. Filed Dec. 20, 1926. Serial No. 155,945. 37 Claims. (Cl. 130—27.)

12. In a thrasher of the class described, wheels, axles and frame elements as supports therefor; a transverse body portion housing cylinder elements and a longitudinal body portion housing straw carrier and cleaning mechanisms; said composite body portions forming an L-shaped passage;



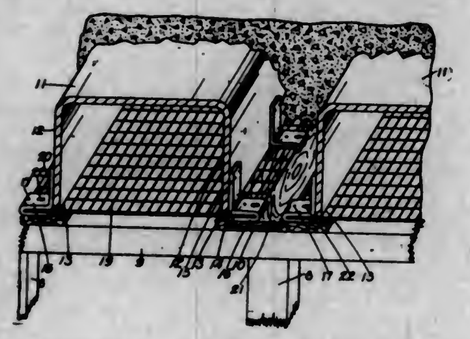
and a motor carried at the rear of the transverse body portion and at the side of the longitudinal body portion, for driving the moving elements of the thrasher.

1,764,041. COMBINATION HARVESTER THRASHER. WILLIAM C. EDWARDS, Jr., Kansas City, Mo. Filed May 16, 1927. Serial No. 191,943. 26 Claims. (Cl. 58—20.)



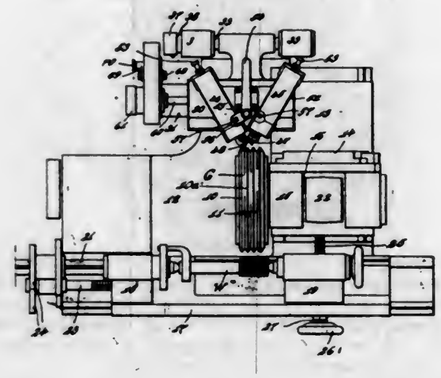
1. In a machine of the class described, wheel, axle and supporting frame elements therefor; a thrasher having a forward portion intermediate lateral walls as a passage transversely positioned to the line of draft and having another passage intermediate longitudinal walls intersecting the first passage and parallel to the line of draft; a cylinder-concave assembly in the forward passage, a harvester mechanism beyond and arranged in prolongation of the forward passage; conveying means for delivering from the platform of the harvester, to and through the cylinder-concave; the outer longitudinal wall extending crosswise of the forward passage as a closure thereto and a cross conveyor in the second passage for changing the direction of straw travel in parallelism to the line of draft.

1,764,042. METAL-TILE STRUCTURE. WILLIAM M. GOLDSMITH, Cincinnati, Ohio, assignor to The Goldsmith Metal Lath Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Feb. 11, 1926. Serial No. 87,661. 9 Claims. (Cl. 72—66.)



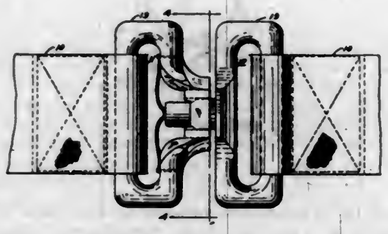
6. The combination with a U-shaped metal tile, of a strip of ceiling material, and spaced means carried by the tile on opposite sides thereof for securing the ceiling material to the tile and for receiving holding means for securing the tile.

1,764,043. METHOD OF AND APPARATUS FOR TRUING SERRATED GRINDING WHEELS. BENGT M. W. HANSON, Hartford, Conn.; Einar A. Hanson executor of said Bengt M. W. Hanson, deceased. Filed Dec. 24, 1924. Serial No. 757,923. 14 Claims. (Cl. 125—11.)



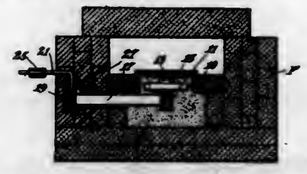
3. The method of shaping or truing a grinding wheel having a plurality of concentric serrations for cutting threads and the like, which consists in angularly adjusting said wheel so that the serrations are inclined correspondingly to the lead of the thread to be ground, and then truing said serrations in a practical grinding plane.

1,764,044. SEPARABLE FASTENER. EDWARD L. HOFFMAN, Dayton, Ohio. Filed Nov. 29, 1929. Serial No. 410,615. 1 Claim. (Cl. 24—230.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



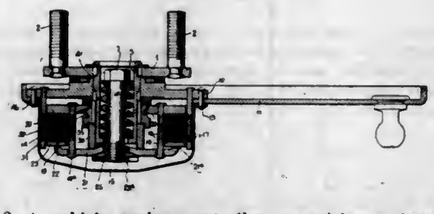
A separable fastener composed of a male and female member each comprising a loop including a cross bar for the reception of the ends of a strap, the male member having a locking lug extending from the side of the loop opposite to that of the cross bar, the female member having a socket portion extending from the loop from the side opposite to that of the cross bar, and having an opening formed therein for the reception of the locking lug, said female member, also having a shallow recess adapted to seat the locking lug when said members are in a locked position, and a restraining means on the inner face of the loop of the female member, and spaced from the cross bar of the loop, the said restraining means spanning the inner end of the opening in the socket portion to engage the locking lug when inserted through said opening and rotated into said shallow recess.

1,764,045. TERMINAL. JAMES KELLEHER, Chippawa, Ontario, Canada, assignor to Harper Electric Furnace Corporation, Philadelphia, Pa., a Corporation of New York. Filed Feb. 29, 1928. Serial No. 257,822. 11 Claims. (Cl. 266—1.5.)



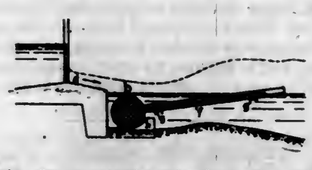
8. An electric terminal for use in an electric resistor furnace comprising a carbonaceous inner block secured to the resistor of the furnace, an outer carbonaceous block within the walls of the furnace, a water cooling means extending through the walls of said furnace for cooling said outer block, a carbonaceous rod of relatively small cross sectional area secured at each end to said blocks and a refractory coating for sealing said outer block and rod within the walls of said furnace adapted to become plastic without melting at the temperature at which oxidation of said rod begins.

1,764,046. VEHICLE SPRING CONTROLLER. RAYMOND P. LANSING, Montclair, N. J. Filed Jan. 7, 1927. Serial No. 159,570. 18 Claims. (Cl. 267—9.)



12. A vehicle spring controller comprising a base, a tubular spindle extending laterally therefrom, a plate revolvable about the spindle and having a lever arm, a pack of friction discs about the spindle, corresponding ones of said discs being connected to rotate with said plate and lever arm, an actuator on the spindle and relatively immovable in operation, a pressure plate engaging said disc pack at its inward end and having screw connection with the actuator, the other discs of said pack being connected to move with said plate, a spring within the spindle having an outward abutment, and means engaging the inward end of the spring for transferring effective pressure thereof to the outward end of the disc pack, said means including a bolt passing through the spindle and a pressure plate engaged with the outward end of the spindle.

1,764,047. DEVICE FOR PREVENTING THE FORMATION OF GULLIES. ALOIS VIKTOR LUTZ, Zurich, Switzerland. Filed June 16, 1928, Serial No. 285,873, and in Germany Mar. 7, 1927. 3 Claims. (Cl. 61—3.)



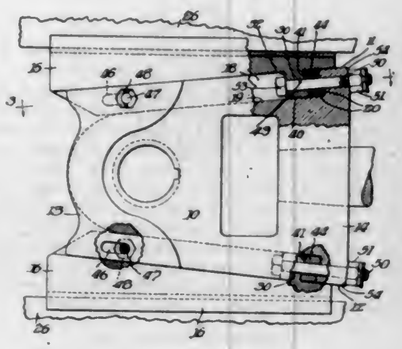
1. A device for preventing the formation of gullies behind weirs consisting of a unitary structure comprising a heavy beam of reinforced concrete adapted to be sunk behind the weir, an iron frame secured to said beam, and a plurality of wood beams secured in spaced relation to said iron frame, said wood beams extending at right angles to the reinforced concrete beam.

1,764,048. LUMINOUS ELECTRICAL DISCHARGE TUBE. JOHN J. MADINE, Cleveland, Ohio, assignor to Sun Ray Gas Corporation, Cleveland, Ohio, a Corporation of Nevada. Filed Dec. 17, 1927. Serial No. 240,903. 3 Claims. (Cl. 176—122.)



1. A luminescent electric discharge tube comprising a body of glass tubing having a thimble shaped electrode sealed to an end thereof, the end of said glass tubing being formed to provide a trap for retaining mercury within the electrode in contact therewith, and having an opening for the passage of mercury vapor to the interior of the glass tubing.

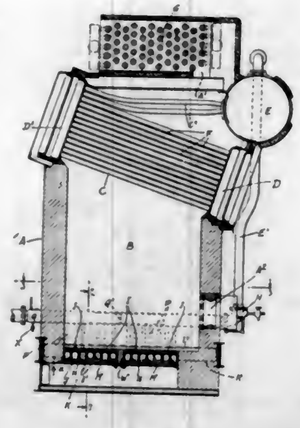
1,764,049. CROSSHEAD. CHARLES MARKEL, Schenectady, N. Y., assignor to Barco Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 1, 1921. Serial No. 497,784. 14 Claims. (Cl. 308—3.)



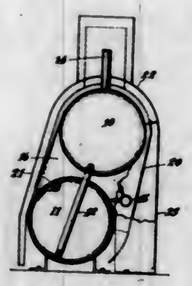
1. In a cross-head structure, in combination, a cross-head and a slipper movable longitudinally thereof for adjustment, the cross-head proper and the slipper having surfaces co-operating in the direction of adjustment of said slipper, and a replaceable wear compensating thrust absorbing piece between said co-operating surfaces.

1,764,050. SUPERHEATER BOILER. JOSEPH JOHN NELIS, Brooklyn, N. Y., assignor to Foster Wheeler Corporation, New York, N. Y., a Corporation of New York. Filed Apr. 26, 1926. Serial No. 104,538. 6 Claims. (Cl. 122—481.)

1. The combination with a boiler furnace comprising a combustion chamber, of means for burning fuel in suspension in said chamber comprising a burner inlet in a vertical wall of said chamber, and a radiant heat superheater comprising horizontally disposed elements extending across said chamber at the bottom of the latter adjacent said vertical wall and adapted to absorb radiant heat at their upper sides from said chamber.



1,764,051. BOILER ABSORBER FOR REFRIGERATING MACHINES. STUART OTTO, Wilton, Conn., and LUDWIG REICHERT, Brooklyn, N. Y., assignors to Gas Refrigeration Corporation, Scranton, Pa., a Corporation of Delaware. Filed Mar. 22, 1927. Serial No. 177,314. 8 Claims. (Cl. 62—118.)

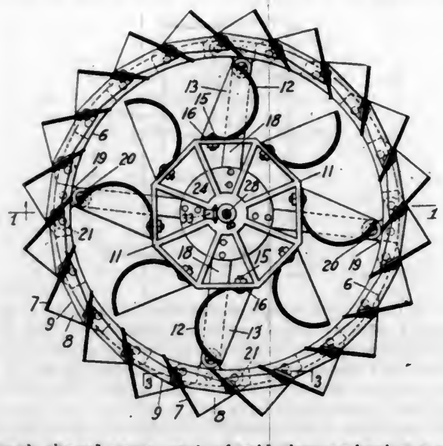


1. A boiler-absorber for refrigerating apparatus including a pair of cylindrical tanks, spaced apart one above the other the upper having a gas outlet and a passage connecting the lower part of the upper tank with the lower part of the lower tank, a burner pipe extending lengthwise thereof between said tanks, an inner casing extending over the upper tank and said burner tube, and open to the atmosphere at its lower edge, an outer casing extending around said inner casing and spaced therefrom, and a pair of flues connected to said casings.

1,764,052. WINDMILL. FERDINAND A. PFEIFER, Springfield, Ohio, assignor of one-half to Spencer W. Waring, Springfield, Ohio. Filed July 20, 1926. Serial No. 123,754. 17 Claims. (Cl. 170—12.)

1. In a windmill, an outer structure substantially cylindrical in shape and comprising a series of stationary vanes, spaced apart and each extending at an acute angle to the corresponding radius of said cylindrical structure, a rotor

mounted within said cylindrical structure and comprising a supporting structure, a plurality of trough shaped vanes carried by said structure, and closures for the ends of said trough shaped vanes, each of said closures having a part extending beyond the inner edge of the vane to provide means for securing said vane to said supporting structure.

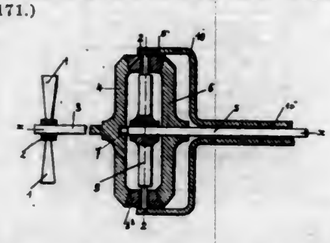


1,764,053. ROLLED THREAD WOOD SCREW. EDWIN W. REED and ADOLPH WERME, Worcester, Mass., assignors to Reed and Prince Manufacturing Company, Worcester, Mass., a Corporation of Massachusetts. Original application filed June 15, 1928, Serial No. 285,529. Divided and this application filed Dec. 23, 1929. Serial No. 416,090. 3 Claims. (Cl. 10—10.)



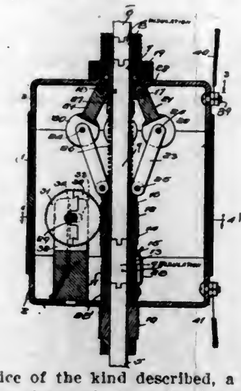
1. In a process of making rolled thread wood screws, the steps of forming a blank from wire, reducing a portion of the blank by extrusion, controlling the extrusion process so that the juncture between the original and the reduced portion of the blank is tapered, the taper conforming substantially to the natural flow lines of the metal, and thereafter rolling threads in said tapered and in said reduced portions.

1,764,054. AUTOMATICALLY-VARIABLE-SPEED FAN FOR MOTOR-CARS. PIERRE EDOUARD MARIE JOSEPH SAUTAI, Amiens, France. Filed May 17, 1929, Serial No. 363,934, and in France June 28, 1928. 5 Claims. (Cl. 123—171.)



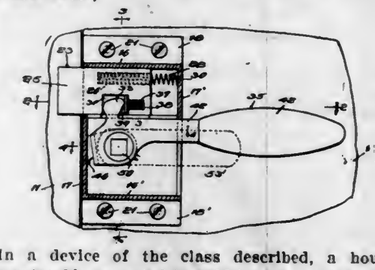
1. In a motor car, a fan for cooling the engine, a first transmission connecting the fan with the car wheels, a second transmission connecting the fan with the car engine, this arrangement thus giving the fan a rotary speed automatically varying according as the car puts on speed or slows down and as the engine runs with decreased or increased speed the degree of cooling thus remaining constant.

1,764,055. CENTRIFUGAL SWITCH. JOHN F. SCHYLANDER, Chicago, Ill., assignor to Julius Reynolds Kline, Chicago, Ill. Filed Sept. 9, 1926. Serial No. 134,493. 11 Claims. (Cl. 200—80.)



1. In a device of the kind described, a rotatable shaft provided with a sleeve of nonconducting material and an associated sleeve of conducting material secured thereto, said sleeves being slidably mounted on said shaft and provided with a continuous spiral groove at the exterior thereof constituting a thread, a rotatable wheel having a toothed periphery arranged to engage with said sleeve, a portion of said periphery being formed of conducting material and another portion thereof being formed of nonconducting material, said portions bounding sectors on said wheel, and means controlled by the rotative speed of said shaft for moving said sleeve longitudinally on said shaft.

1,764,056. LOCK. JOHN F. SCHYLANDER, Chicago, Ill. Filed Jan. 12, 1929. Serial No. 331,999. 7 Claims. (Cl. 292—169.)



1. In a device of the class described, a housing, a handle rotatably mounted in said housing, a latch slidable in said housing, means integral with said handle operatively engaging said latch, and means for maintaining said engaging means in contact with said latch so as to prevent rattling thereof, said last-named means comprising a follower and a coiled spring for urging said follower into contact with said engaging means.

1,764,057. PORTABLE OIL AND GAS SERVICE STATION. FRITZ P. STEINHAUER, Chicago, Ill., assignor of one-fifth to George A. Schneider, Chicago, Ill. Filed Apr. 26, 1926. Serial No. 104,862. 7 Claims. (Cl. 221—99.)

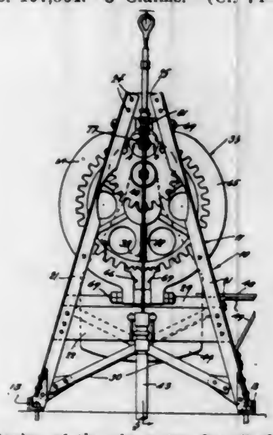
1. A motor driven vehicle equipped with storage tanks for oil and gasoline or other liquid fuel, standpipes with visible meters, a supply pipe connecting each meter with a tank, a dispensing hose from each meter, pumps in-

serted between the tanks and meters, and means for utilizing the vehicle motor to drive any one of the pumps at



will, said means comprising a motor driven counter shaft, and clutches interposed between the counter shaft and each of the pumps.

1,764,058. PUMP JACK. EDWARD E. STEVENSON, Los Angeles, Calif., assignor, by mesne assignments, to Emsco Derrick & Equipment Company, Los Angeles, Calif., a Corporation of California. Filed June 8, 1927. Serial No. 197,364. 3 Claims. (Cl. 74—14.)



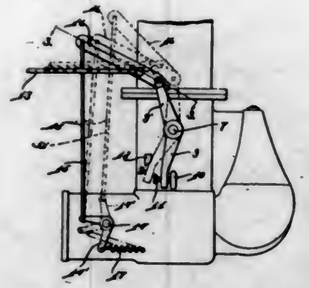
1. In a device of the character described, a supporting member, a pair of complementary segment-racks secured to the supporting member in complementary arrangement to form an internal gear and having their opposed ends spaced apart to provide tooth spaces of greater extent than the tooth spaces of the racks, and a spur pinion adapted to mesh with a travel about said gear and having an enlarged tooth adapted to enter said larger tooth spaces.

1,764,059. SOUND AMPLIFIER. ROBERT F. TACK, New York, N. Y. Filed Nov. 12, 1928. Serial No. 318,833. 3 Claims. (Cl. 179—146.)



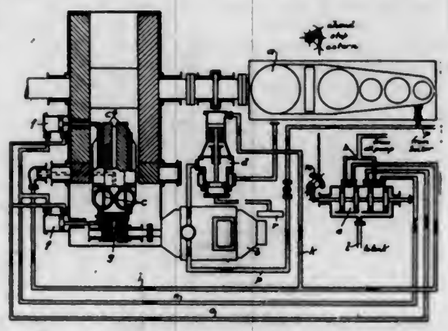
1. An amplifier horn comprising a sound receiving end arranged to receive a telephone receiver and having a sound passage of cross section increasing in accordance with the equation $S = S_1 \cdot E^{mx}$.

1,764,060. PRIMING DEVICE. RAY H. THRASHER, Ferndale, Mich. Filed Aug. 22, 1928. Serial No. 301,287. 2 Claims. (Cl. 123—180.)



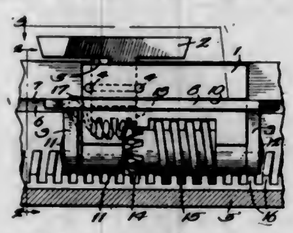
1. In combination with an internal combustion engine having a throttle control valve; a choke valve; an arm for operating each of said valves; and an abutment for limiting the operation of said throttle control valve; a link pivotally connected at one end to the throttle control valve operating arm; a rod connecting the opposite end of said link to the choke valve operating arm; and an actuating rod pivotally connected to said link intermediate its ends.

1,764,061. COMBINED RECIPROCATING ENGINE AND TURBINE. HANS WACH, Wesermunde-Lehe, Germany. Filed Apr. 6, 1926, Serial No. 100,070, and in Germany Feb. 12, 1926. 13 Claims. (Cl. 60—21.)



1. In combination, a reciprocating steam engine, a drive shaft operatively connected thereto, a steam turbine, means comprising a fluid coupling operatively connecting said turbine to said drive shaft, a reversing gear for said engine, and means controlled by the reversing gear for releasing the coupling on operation of said reversing gear.

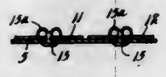
1,764,062. PRINTER'S REGISTER HOOK. WALLACE S. WARNOCK, Chicago, Ill. Filed June 14, 1929. Serial No. 371,034. 4 Claims. (Cl. 101—388.)



1. In a printer's register hook, the combination with the body portion thereof; of a jaw at the top side of the said body portion; a beveled gear journaled within the body portion, this gear having a bore formed to afford

turning engagement of a wrench therewith and said jaw having an opening in alignment with said bore to afford passage for the wrench; a second beveled gear in mesh with the aforesaid beveled gear; a shaft for said second beveled gear, this shaft being carried by the aforesaid body portion; a gear driven by the second beveled gear and provided for engagement with a stationary rack; and a detent in the form of a spring, the shaft passing through one end of the spring and having a head in retaining engagement with this spring end, the unmounted end of the spring passing through a slot that is provided in the aforesaid body portion in the region of the first aforesaid beveled gear and through which slot the aforesaid detent passes into engagement with this gear, the engaging end of the spring being receivable between adjacent teeth to have engagement therewith, the crowns of the teeth of this gear being formed with concave faces which also are adapted to receive the engaging end of the detent.

1,764,063. INDICATING DEVICE. THEODORE YOUNGBERG, Minneapolis, Minn. Filed Sept. 27, 1928. Serial No. 308,635. 3 Claims. (Cl. 40—70.)



1. In a device of the class described, a front of sheet material, a pivot pin passing through said front and extending normal thereto, a disc at the rear side of said front, said pivot passing through said disc and having its rear end extended outwardly and then toward said disc, the extremity thereof engaging said disc to fix the same to said pin, the outwardly extending portion forming an operating handle by which said disc may be turned and said front having an aperture through which a portion of said disc may be viewed.

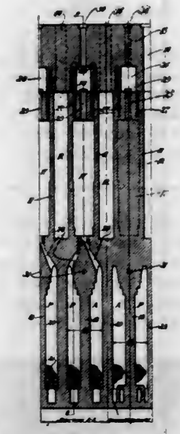
1,764,064. SHANK STIFFENER. REINHARD E. BARTELS, Lynn, Mass.; Ida M. Bartels and R. Burleigh Bartels, executors of said Reinhard E. Bartels, deceased. Original application filed June 30, 1922, Serial No. 571,859. Divided and this application filed Mar. 10, 1926. Serial No. 93,598. 7 Claims. (Cl. 36—76.)



2. A shank stiffener comprising superposed stiffener strips molded to the desired longitudinal curvature, one of said strips being shorter than the other and having tines engaging in slots in the other to fasten them together, said shorter strip being molded to a lateral curvature, and tines on said longer member beyond the ends of said shorter member for fixing said stiffener in a shoe.

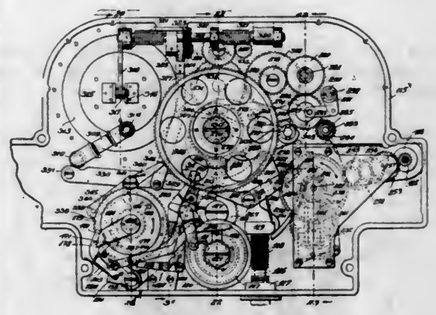
1,764,065. COKING RETORT OVEN. JOSEPH BECKER, Pittsburgh, Pa., assignor to The Koppers Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed May 22, 1922, Serial No. 562,578. Renewed June 18, 1926. 6 Claims. (Cl. 202—144.)

6. A coking retort oven having a series of alternate substantially parallel horizontal coking chambers and heating walls therefor arranged side-by-side in a substantially horizontal row, each of said heating walls comprising vertical combustion flues and each of said coking chambers extending above the levels of the tops of said vertical combustion flues in the heating walls contiguous thereto, combined with horizontal flues located substantially above the levels of the tops of the coking chambers and also above the levels of the tops of said vertical combustion flues and each of said horizontal flues being communicably connected with a plurality of the combustion flues of one of said heating walls, for passage of combustion products to and from said combustion flues in alteration, by ducts which lie above the levels of the tops of said combustion flues and below the levels of the bottoms of said horizontal flues and communicate with the combustion flues at the tops thereof and with the horizontal flues at the bottoms thereof; said ducts being both vertically elongated and of substantially uniform



horizontal cross-sectional area from the levels of the tops of the coking chambers adjoining said heating walls down to the levels of the tops of the combustion flues and also separated throughout their vertical dimensions from the top portions of the adjacent coking chambers by walls that are substantially thicker than the portions of the combustion flue walls facing the coking chambers at the tops of the combustion flues.

1,764,066. AUTOMATIC CAMERA. BENJAMIN DAY CHAMBERLIN, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Jan. 29, 1921, Serial No. 440,908. Renewed July 25, 1929. 51 Claims. (Cl. 88—17.)



5. In an aerial camera, the combination with a camera body having a lens disposed with its axis vertical, means at the top thereof for shifting sensitive material in the focal plane of said camera and a shutter, of a case mounted at one side of said body, mechanism therein for automatically and successfully operating the shifting means and shutter in timed relation to each other and a motor for driving said mechanism mounted on the body and having a shaft extending into the case.

1,764,067. ORTHODONTIC APPLIANCE. JOHN M. CRAIGO, Hartford, Conn., assignor to Edward Harold Rowan, New York, N. Y. Filed Mar. 15, 1928. Serial No. 262,007. 6 Claims. (Cl. 32—19.)



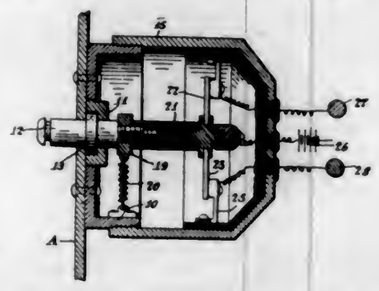
1. In a removable orthodontic appliance, a hooked member adapted to be connected to a tooth and providing a seat, an orthodontic element adapted to be received in the seat of said hooked member, and rotatable means on said element adapted to interlock with said member, said means being rotatable within said seat.

1,764,068. STEEL SUCKER ROD AND THE LIKE AND ITS PRODUCTION. WELTON J. CROOK, Stanford University, Calif., assignor, by mesne assignments, to Emsco Derrick & Equipment Company, Los Angeles, Calif., a Corporation of California. Filed Jan. 8, 1927. Serial No. 159,808. 6 Claims. (Cl. 148—2.)



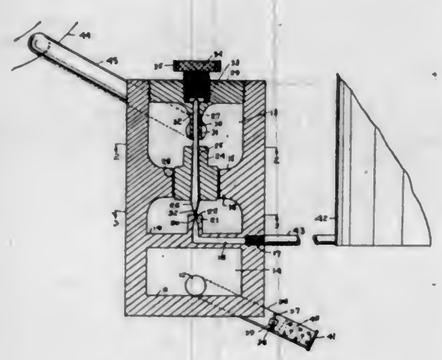
3. The method of increasing the ultimate strength and resistance to fatigue and yet retaining the ductility of carbon steel sucker rods, the ends of which have been forged and machined to form pins by subjecting said rods, containing between 0.26% and 0.50% carbon and between 0.5% and 1% manganese, to heat at a temperature above the transformation point and for a sufficient period of time to bring about complete migration of carbon across the ferrite grains and then quenching the steel rapidly in suitable medium as a final step in the process.

1,764,069. FLOAT-OPERATED SWITCH. CLIFTON ALVADE FARON, Los Angeles, Calif. Filed Aug. 28, 1923. Serial No. 659,903. 2 Claims. (Cl. 200—84.)



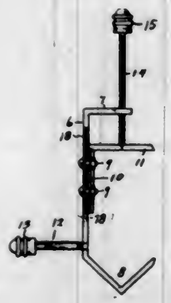
1. A float operated circuit closer, including a support, an oscillatory shaft journaled in said support and having a radially offset arm actuated by the float, a coil spring also disposed radially of the shaft and connected thereto to normally tension the same against the action of the float, an insulated section carried by the end of the shaft, a battery connected contact carried by said insulated section and having spaced radially disposed arms, a housing having an insulated inside covering and fitted to said support, and signal contacts carried on said insulated inside cover and adapted to be engaged by the arms of the battery contact.

1,764,070. PRIMARY MIXING CHAMBER IN OIL-BURNING MECHANISMS. ORVILLE ALDEN FOGARTY, Montreal, Quebec, Canada, assignor to Vilas Oil Burners Limited, Cowansville, Canada. Filed July 22, 1926. Serial No. 124,284. 1 Claim. (Cl. 261—51.)



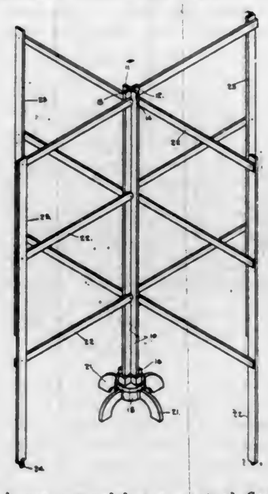
A primary mixing chamber in oil burning mechanisms, a cylinder having an inwardly extending circular flange in the interior intermediate of its height forming a central cylindrical hole and a circular block of cylindrical shape sliding freely in said hole and mounted on the needle valve and forming a filming passage for the mixture from a mixing chamber to an outlet chamber.

1,764,071. RADIO AERIAL BRACKET. FRANK P. FOULKE, Indianapolis, Ind., assignor of forty-nine per cent to Thomas E. Grinslade, Indianapolis, Ind. Filed Jan. 30, 1920. Serial No. 336,057. 3 Claims. (Cl. 173—251.)



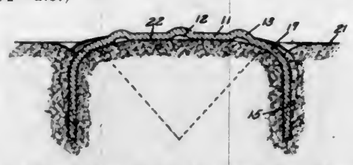
1. A radio aerial bracket comprising a body member having an arm at one end and a jaw at the other, a jaw member located between the arm and jaw of the body member and adjustably secured to the body member, a threaded bolt screwing through the arm into contact with the adjustable jaw and an aerial insulator attached to the outer end of the bolt.

1,764,072. CLOTHESHORSE. JAMES WILLIAM FRAZER, Moncton, New Brunswick, and GILBERT FERRABEE, Montreal, Quebec, Canada. Filed Nov. 5, 1928. Serial No. 317,435. 1 Claim. (Cl. 211—78.)



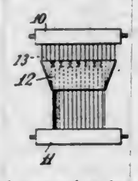
A clothes horse comprising a central flanged post and vertically folding arms and a pedestal formed of a centre standing on legs and having a central orifice therethrough and an adjustable socket member having a stub shaft journalled in said orifice and a body supporting a socket proper shaped to receive said flanged post.

1,764,073. UNIVERSAL STREET BUTTON. FREDERICK M. FUREY, Los Angeles, Calif., assignor to Union Tank & Pipe Co., Los Angeles, Calif., a Corporation of California. Filed July 5, 1927. Serial No. 203,371. 3 Claims. (Cl. 94—1.5.)



2. A marker adapted to be driven into a road, said marker comprising: a plate adapted to engage the surface of the road; and legs extending from said plate at substantially right angles thereto, the portions of said plate where said legs connect thereto and said legs being transversely and inwardly arched so as to resist longitudinal bending when the legs are driven into the paving material.

1,764,074. PROCESS AND APPARATUS FOR PREPARING STAPLE OR FIBROUS MATERIAL FOR SPINNING. EMIL GMINDER, Reutlingen, Germany. Filed Oct. 25, 1928, Serial No. 314,894, and in Germany Nov. 2, 1927. 5 Claims. (Cl. 19—150.)



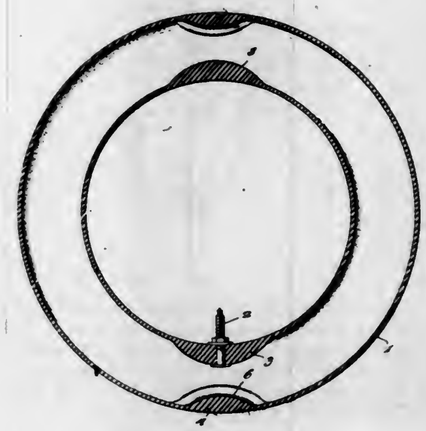
1. The process of preparing lap for spinning which includes the step of rotating a member around the lap to smooth down the fibre ends protruding from the edges, but without effecting rotation of the body of the lap.

1,764,075. LOCK-BOTTOM PUMP. ROBERT W. GUNN and WILLSIE A. S. THOMPSON, Los Angeles, Calif., assignors, by mesne assignments, to Emsco Derrick & Equipment Company, Los Angeles, Calif., a Corporation of California. Filed Dec. 7, 1927. Serial No. 238,265. 23 Claims. (Cl. 103—181.)



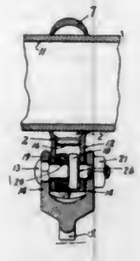
1. A gripping member for lock-bottom pumps and the like, embodying a tubular mandrel, a sleeve encircling the mandrel, said sleeve being slit longitudinally from one end thereof to provide a plurality of spring fingers forming together a radially resilient portion of the sleeve, said fingers having an appreciable inherent tendency to spring radially away from the mandrel at their free ends, and a radially extending keeper member on the mandrel adapted to engage the free ends of the fingers to limit outward radial movement of said fingers, said fingers having gripping portions which extend radially beyond the keeper.

1,764,076. INNER TUBE. JAMES L. HAYES, Ottawa, Ill. Filed July 17, 1929. Serial No. 379,047. 4 Claims. (Cl. 116—34.)



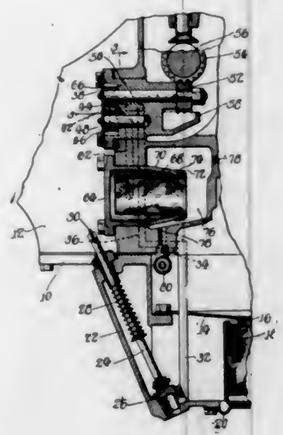
1. An inner tube for pneumatic tires provided with interior means for indicating under inflation by causing a bumping of the wheel, the same consisting of opposed projections, each decreasing in thickness from a central point toward opposite ends and sides.

1,764,077. HANGER. CHARLES E. HOPPES, Springfield, Ohio, assignor to Everwear Manufacturing Company, Springfield, Ohio, a Corporation of Ohio. Filed Feb. 29, 1928. Serial No. 257,906. 4 Claims. (Cl. 248—64.)



1. In a hanger, a two-part clamp the lower one of which is provided with an integral downwardly depending housing having side walls and a bottom to retain lubricant, a pivot member extending transversely through the side walls of said housing, anti-friction bearings in said housing supporting said pivot member, and a hanger member secured to said pivot member.

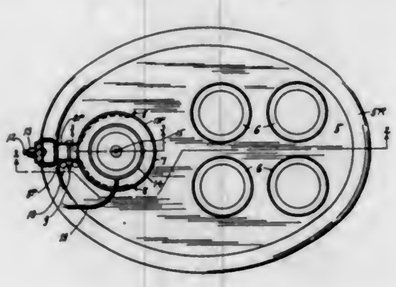
1,764,078. OILING SYSTEM. HARRY L. HORNING, Waukesha, Wis., assignor to Waukesha Motor Co., Waukesha, Wis., a Corporation of Wisconsin. Filed Oct. 22, 1924. Serial No. 745,188. 3 Claims. (Cl. 184—6.)



1. In an internal combustion engine, having a cam shaft and side wall outside the same, in combination, a unitary pump assembly set in an aperture in said side wall, drive means on said assembly meshing with the cam shaft, and a cup projecting from said assembly under the point of meshing engagement to maintain an oil bath.

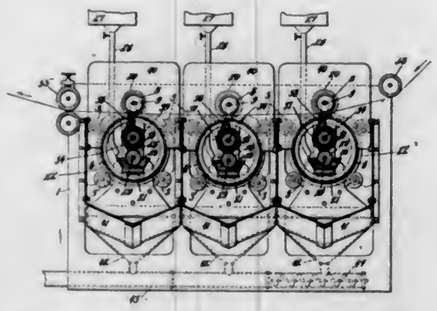
1,764,079. DRINK-MIXING DEVICE. HENRY K. JENSEN, St. Paul, Minn. Filed June 30, 1928. Serial No. 289,541. 1 Claim. (Cl. 259—1.)

A holding device for a drink-mixing device of the class described and including a receptacle, and a tray with angular perimetrical flange, said device comprising a horizontal arm having spring jaws adapted to frictionally engage said receptacle, an upright portable member and having means at its top for holding said horizontal arm, said upright member bifurcated below said arm holding means in two downwardly spreading arms, the lower



termini of said arms directed angularly corresponding to the angular plane of the tray-flange and adapted to be placed one inside and one outside of said flange, and screw clamp means above said termini to close said arms and their lower extremities to the tray flange as shown and described.

1,764,080. MACHINE FOR COATING. ROBERT T. JOHNSTON, New Brunswick, N. J., assignor, by mesne assignments, to The Patent and Licensing Corporation, Boston, Mass., a Corporation of Massachusetts. Filed Mar. 20, 1923. Serial No. 626,438. 11 Claims. (Cl. 91—44.)

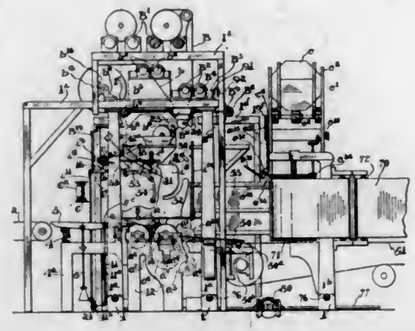


1. A machine of the class described, comprising a sheet feeding mechanism comprising a roller and a drum beneath said roller between which the sheet material passes, said drum having peripheral openings, means in said drum for projecting a column of coating material toward the axis of the roll with sufficient velocity to impinge on the inner surface of the drum and on the areas of the sheet exposed by the openings of the drum in the line of motion of the projected material and means for reclaiming the coated material not deposited on the sheet.

1,764,081. AUTOMATIC WRAPPING MACHINE. CHARLES H. LE P. JONES, Sault Ste. Marie, and WILLIAM J. HUSSEY, Espanola, Ontario, Canada. Filed Dec. 13, 1926. Serial No. 154,507. 84 Claims. (Cl. 93—2.)

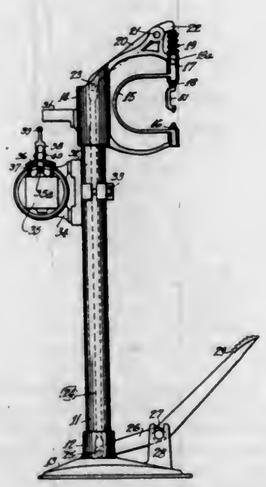
1. In a wrapping machine for rolls, the combination with means for rolling a wrapper about the roll, of means

for automatically shifting a roll fed to the machine to center it, relative to the wrapping mechanism.



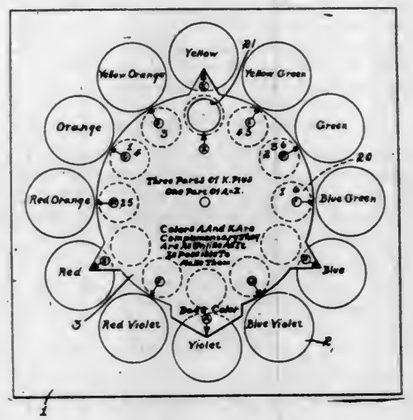
2. In a wrapping machine for rolls, the combination with means for rolling a wrapper about the roll, of means for automatically centering, relative to the wrapping mechanism, a roll fed to the machine comprising a carriage movable transversely of the machine; and devices carried by relatively stationary parts and engageable by the ends of the roll and adapted to apply pressure to the roll ends to move the roll and carriage if the roll is not accurately alined between the said devices.

1,764,082. BRAKE-LINING MACHINE. JAMES R. LEWIS, Philadelphia, Pa., assignor to Breeze Corporations, Newark, N. J., a Corporation of New Jersey. Filed Jan. 10, 1929. Serial No. 331,504. 1 Claim. (Cl. 218—1.)



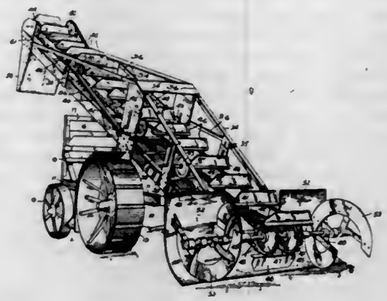
A machine of the class described for riveting fabric to a flange of a brake shoe having an overhanging cross-section, comprising a head formed as a jaw with one member of the jaw provided with a socket and the opposing member formed to receive an anvil, a non-turning plunger operating in said socket, means for reciprocating said plunger, an off-set tool holder secured to said plunger having an aperture, and a tool having a cylindrical base with a flat side inserted in said aperture in said holder, said holder being machined to align with the flat side of said tool and said tool operating between the overhanging sections of the brake shoe.

1,764,083. COLOR GUIDE. WILLIAM J. MISKELLA, Oak Park, Ill. Filed Mar. 5, 1928. Serial No. 259,156. 7 Claims. (Cl. 41—6.)



1. A color guide comprising a series of different colors arranged in a circle, an indicator pivoted concentrically of said circle, and symbols on said indicator arranged in such manner that in any position of the indicator like symbols indicate the relationships between the colors to which they correspond.

1,764,084. TRACTOR ATTACHMENT FOR FEEDING AND ELEVATING SNOW. NELS P. NELSON and FREDERIC W. JAMES, Brooklyn, N. Y., assignors to N. P. Nelson Iron Works Inc., Passaic, N. J., a Corporation of New York. Filed Feb. 12, 1925. Serial No. 8,695. 13 Claims. (Cl. 37—190.)



1. In a loading device of the character described, a trough, means for elevating material in said trough, means for feeding material from outside the path of the elevating means comprising oppositely disposed screw blades, automatically operated adjustable means for supporting said screws comprising a transverse rotatable member, coplanar arms rigidly attached to said rotatable member, and terminating in bearings for said screws.

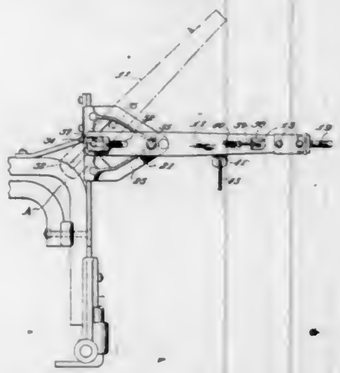
1,764,085. VITAMIN FOOD AND METHOD OF PRODUCING SAME. HARRY PLACAK, Cleveland, Ohio, assignor to The G. E. Conkey Company, Cleveland, Ohio, a Corporation of Ohio. Filed Sept. 3, 1927. Serial No. 217,538. 9 Claims. (Cl. 99—11.)

7. A food product of the character described comprising a vitamin containing vegetable substance in granular form, the individual granules of such mixture being permeated with paraffine and cod liver oil.

9. The herein-described method, which consists in placing a quantity of paraffine in a suitable receptacle, apply-

ing heat to the receptacle to melt the paraffine, adding to the mixture a predetermined quantity of cod liver oil, allowing the mixture to remain subjected to the heat until it is clear, agitating the mixture and while it is still in a liquid condition adding a predetermined quantity of dry, granular, vegetable material and stirring the said vegetable material into the melted mixture, stirring the mixture until the same is reduced to a homogeneous, granular condition and finally cooling the mass so obtained.

1,764,086. DRAFT MECHANISM. CHARLES T. RAY, Louisville, Ky., assignor to B. F. Avery & Sons, Louisville, Ky., a Corporation of Kentucky. Filed Oct. 13, 1927. Serial No. 226,009. 13 Claims. (Cl. 280—33.11.)

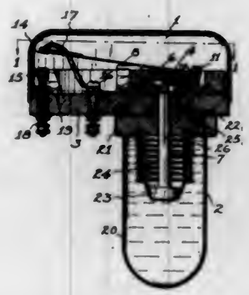


1. A draft mechanism comprising, in combination, a draft member mounted to have advancing and retracting movements and also to have pivotal movement, relatively to the means drawn through the medium of said mechanism, means automatically engageable with each other by the advancing movement of the draft member when draft in a forward direction is applied to said member and when so engaged co-operating to hold the draft member against pivotal movement, and means operative upon cessation of the draft to retract the draft member automatically and thereby disengage the holding means and leave the draft member free for pivotal movement.

2. A draft mechanism comprising, in combination, a draft member mounted to have advancing and retracting movements and also to have pivotal movement relatively to the means drawn through the medium of said mechanism, means automatically engageable with each other by the advancing movement of the draft member when draft in a forward direction is applied to said member and when so engaged co-operating to hold the draft member against pivotal movement, and a spring placed under tension by the advancing movement of the draft member and operative upon cessation of the draft to retract the draft member and thereby automatically disengage the holding means and leave the draft member free for pivotal movement.

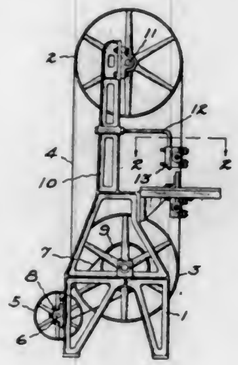
1,764,087. THERMOSTAT CARTRIDGE. CHARLES B. SAWYER, Cleveland Heights, Ohio, assignor to The Brush Laboratories Company, Cleveland, Ohio, a Corporation of Ohio. Filed Aug. 29, 1927. Serial No. 216,093. 5 Claims. (Cl. 236—99.)

1. In mechanism of the character described, the combination with a supporting base and control mechanism carried by said base of a thermostat cartridge for operating said control mechanism adjustably carried by said base and adapted to be bodily moved relative thereto for adjusting the operation of said control mechanism, said cartridge comprising a relatively inextensible cup-shaped member, a relatively extensible cup-shaped member disposed entirely within said inextensible cup-shaped member, an apertured closure member engaging the edge portions of the open end of each of said members to define a liquid-tight chamber between said members for receiving a thermostatic liquid, said apertured member being provided with an externally threaded neck portion, and an actuating plunger extending



through the apertured neck portion of said member to the end of said extensible cup-shaped member, said cartridge being adjustably secured to said base by means of said neck portion, said actuating plunger being adapted to substantially fill the aperture in said member and to be accurately positioned thereby.

1,764,088. CUTTING SECTIONS OF PIEZO CRYSTALS. CHARLES B. SAWYER, Cleveland Heights, Ohio, assignor, by mesne assignments, to The Cleveland Trust Company, Cleveland, Ohio, a Corporation of Ohio. Filed Jan. 26, 1928. Serial No. 249,778. 8 Claims. (Cl. 83—61.)

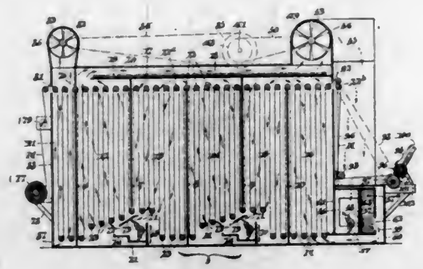


1. The method of cutting sections from piezo-electric crystals of the Rochelle salt type, which includes bringing the crystalline material to a predetermined temperature suitable for the material to be cut, separating a section from the crystal in substantially a single plane by removing the crystalline particles continuously in the same direction at a rate of speed low enough to substantially prevent localized heating of the crystalline material.

1,764,089. FABRIC-TREATING MACHINE. WALTER W. SIBSON and THOMAS J. MILLER, Philadelphia, Pa., assignors to The Philadelphia Drying Machinery Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Feb. 21, 1929. Serial No. 341,626. 7 Claims. (Cl. 26—46.)

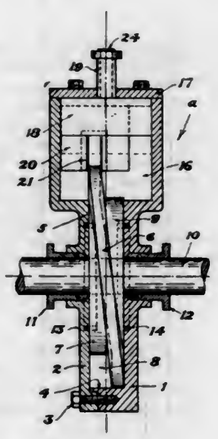
1. In a machine of the type described, the combination of an inclosure subdivided to define a cooling chamber, and a series of intercommunicating compartments that define

sinuous flow of conditioning medium; means progressing material through the cooling chamber and conditioning compartments in compacted flights over a sinuous course



alternatingly with and counter to the flow of the conditioning medium, and means automatically controlling injection of predetermined degrees of vapor at intervals of the conditioning medium flow.

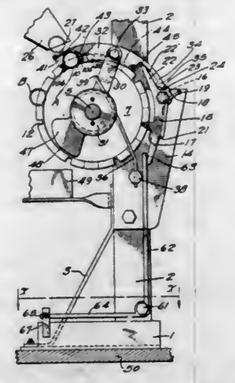
1,764,090. ROTARY-MOTION-CONTROL DEVICE. URAL E. WOOD, Long Beach, Calif. Filed Aug. 23, 1926. Serial No. 130,818. 7 Claims. (Cl. 188—90.)



1. A rotary motion control device comprising a casing, a runner in said casing, a shaft to which said runner is secured, an angularly positioned flange on said runner, said casing having chambers formed therein by said flange, said chambers being adapted to contain a liquid, and means cooperating with said flange whereby the liquid is impeded while being driven by said runner.

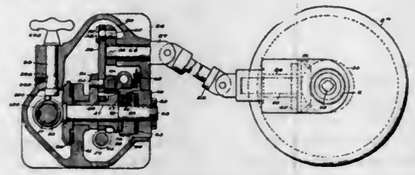
1,764,091. CHECK-CONTROLLED MECHANISM. HUGH E. WURZBACH and LESLIE H. WADSWORTH, Magna, Utah, and HARRY G. NUTT, Altadena, Calif., assignors to The Selector Corporation, Salt Lake City, Utah, a Corporation of Utah. Filed May 6, 1929. Serial No. 360,698. 10 Claims. (Cl. 194—61.)

1. A check controlled mechanism comprising a movable member, pocket means on said movable member for receiving and holding a check, means for locking said movable member against movement, and actuating means mounted for movement so as to engage a check in said pocket means, said pocket means being adapted to substantially prevent movement of said check relative to said movable member upon such engagement of said actuating means therewith, and said actuating means being operable, upon such engagement, to be moved thereby into position to first release



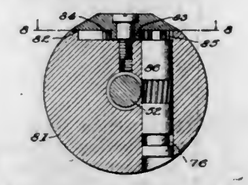
said locking means from the movable member and to thereafter act through said check to move said movable member.

1,764,092. SHAPER FEED MECHANISM. WILLIAM F. ZIMMERMANN, Maplewood, N. J., assignor to Gould & Eberhardt, Newark, N. J., a Corporation of New Jersey. Filed Mar. 5, 1926. Serial No. 92,561. 9 Claims. (Cl. 90—38.)



1. A shaper feed mechanism comprising a crank-gear wheel; feed means comprising a shaft rotating once for each stroke of the shaper ram and having one end geared to said crank-gear wheel and the other end thereof supported on the shaper cross rail; a lever on the cross rail; means operated by said rotating shaft for oscillating said lever through a fixed arc; a pawl lever mounted on the cross rail and oscillated by said oscillating lever; means mounted on the cross rail for varying the arc through which said pawl lever is oscillated; a feed screw for moving the shaper table along the cross rail; a ratchet-wheel for intermittently rotating said feed screw in accordance with the movement of the pawl lever; and a bevel-gear reverser between said feed-screw and said ratchet wheel.

1,764,093. STROKE ADJUSTER FOR IDLE SHAPERS. WILLIAM F. ZIMMERMANN, Maplewood, N. J., assignor to Gould & Eberhardt, Newark, N. J., a Corporation of New Jersey. Filed Sept. 16, 1927. Serial No. 219,925. 14 Claims. (Cl. 74—38.)



12. A shaper combining ram reciprocating means including a rotary driving member therefor; means for varying the length of stroke of said ram; an operating shaft for said last named means mounted in said driving member

and rotatable relative thereto; indicating means secured to said driving member and disposed to rotate about an axis transverse to the axis of driving member; and reduction gearing for connecting said rotary indicating means to said shaft whereby a plurality of rotations of said shaft relative to said driving member results in less than one rotation of said indicating means on its own axis.

1,764,094. COMPOSITION FOR OILLESS BEARINGS AND PROCESS FOR PRODUCING SAME. JOHN O. CARREY, St. Louis, Mo., assignor to Carrey-Morse Engineering Company, St. Louis, Mo., a Corporation of Missouri. Filed Oct. 26, 1925. Serial No. 65,046. 5 Claims. (Cl. 308—242.)

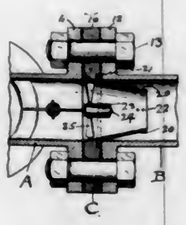
1. A composition for oilless bearings composed of the following ingredients, mixed in approximately the proportion specified: 1 part Babbitt metal, ½ part finely-divided graphite, ½ part finely-divided mica, ¼ part sulphur.

1,764,095. BRACE FOR BROOM HANDLES. HENRY CAVE, Hartford, Conn., assignor to The Fuller Brush Company, Hartford, Conn., a Corporation of Connecticut. Filed Dec. 13, 1927. Serial No. 239,786. 2 Claims. (Cl. 306—26.)



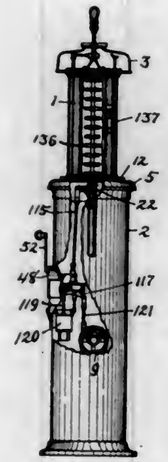
1. In combination with a broom head and a handle having its end extended into a hole in said head, a brace comprising branching arms connected by a yoke at one end and removably engaged with said head at their opposite ends, said yoke extending partially around said handle, and a strand of wire forming a tie secured at its ends by loops to said branches and passing around the opposite side of the handle from said yoke.

1,764,096. FUEL MIXER. JAMES DEARMANN, Milwaukee, Wis., assignor to Nicholas A. Boehm and Samuel Rosen, Milwaukee, Wis. Filed July 31, 1925, Serial No. 47,280. Renewed Apr. 28, 1930. 4 Claims. (Cl. 48—180.)



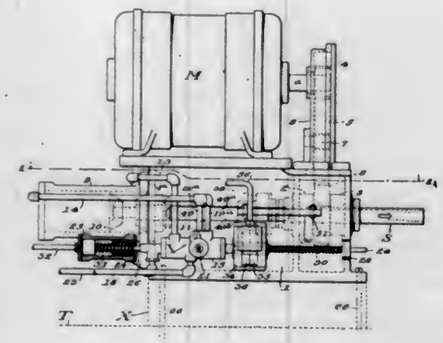
1. In an auxiliary air supplying device for an internal combustion engine, a plate having a transverse opening for alignment with the passages connecting the carburetor and manifold, the said plate having affixed at one side a tapering generally imperforate tubular member extending into the passage of the manifold, and a normally closed air passage leading to the said transverse opening, with a movable valve plug for effecting such closure.

1,764,097. LIQUID-DISPENSING APPARATUS. FRANK B. EILERS, Fort Wayne, Ind., assignor to Tokheim Oil Tank and Pulp Company, a Corporation of Indiana. Filed Aug. 26, 1926. Serial No. 131,583. 27 Claims. (Cl. 221—100.)



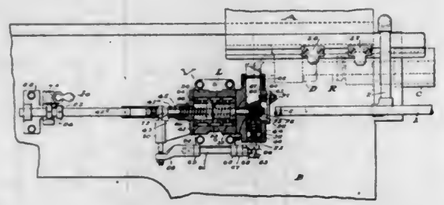
1. In a liquid dispensing apparatus, a transparent measure for holding and displaying a quantity of liquid; a filling means for the measure including an electric motor and switch therefor; an emptying means for the measure including a vertically sliding gauge tube and dispensing valve having communication therewith; a controlling mechanism including a handle therefor, having operable relation with said gauge tube, and also operable relative selectively with said dispensing valve and switch, there being interlocking relation between said mechanism and gauge tube when the dispensing valve is operated; and an adjustable stop mechanism for limiting movement of the operating handle when actuated to lower the gauge tube.

1,764,098. FLUID-ACTUATED DRILL UNIT. ROBERT M. GALLOWAY, Richmond, Ind., assignor to The National Automatic Tool Company, Richmond, Ind., a Corporation of Indiana. Filed May 16, 1927. Serial No. 191,781. 17 Claims. (Cl. 77—32.)



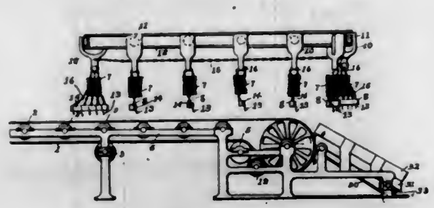
1. A machine tool combining a bed having a plane surface; a tool head having a base member adapted to be secured to said bed upon said plane surface in any desired angular position relative thereto; a spindle rotatably and translatably journaled in said tool head; an electric motor supported by said tool head; a driving connection between said motor and said spindle to effect rotation of the latter; a hydraulic motor embodied in said tool head for effecting translation of said spindle relative to said tool head; and an automatically actuated valve mechanism for controlling the flow of fluid to said hydraulic motor to vary the reciprocation of said spindle.

1,764,099. CONTROL-VALVE MECHANISM. ROBERT M. GALLOWAY, Richmond, Ind., assignor to The National Automatic Tool Company, Richmond, Ind., a Corporation of Indiana. Filed May 27, 1927. Serial No. 194,746. 15 Claims. (Cl. 121—45.)



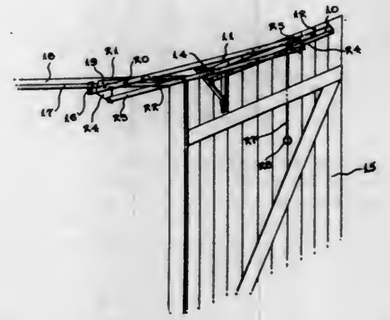
1. In combination, a translatable member; fluid pressure means to translate said member; a valve to control the rate and direction of translation of said member; means tending to move said valve through a plurality of positions each of which effects a different translation of said member; a member movable with said valve and providing a stop-shoulder; an interference member provided with a plurality of abutment surfaces adapted successively to engage said stop-shoulder to limit the movement of said valve; and a plurality of dogs carried by said translatable member and acting successively to depress said interference member to cause said abutment surfaces successively to release said stop-shoulder thereby to permit said valve to be moved to its various operative positions.

1,764,100. RAW-SUGAR CONVEYER. WILLIAM H. HOOPLESS, Philadelphia, Pa. Filed Feb. 26, 1927. Serial No. 171,343. 19 Claims. (Cl. 198—177.)



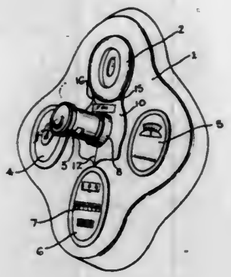
1. In a machine for binning raw sugar from bags, having a constantly moving bag conveying apron and means for distributing the bags along the same, a bag emptier consisting of a series of bag carriers adapted to be engaged with the bags while lying on said apron, supports for said carriers, connections between the bag carriers spacing them from each other and transmitting the motion imparted to one of said bag carriers to the others, said bag carriers being movable in the direction of the movement of the bag conveying apron by the movement of the bag on the conveying apron, and an inclined apron receiving the bags from the discharge end of the bag conveying apron.

1,764,101. EXTENSION LINK FASTENER FOR SWINGING DOORS. WILLIAM F. HUBER, Coraopolis, Pa. Filed Dec. 6, 1928. Serial No. 324,221. 4 Claims. (Cl. 292—262.)



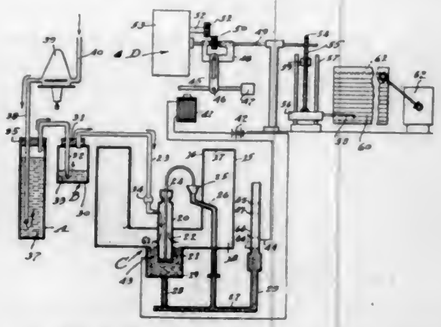
1. A swinging door latch having a terminal stop member and an adjacent spring-actuated pawl, a stop member mountable on the door frame for abutting engagement on opposite sides by the stop and pawl, and manual means for actuating the pawl.

1,764,102. MEMORANDUM CARD. EARLE S. HUDLER, Everett, Wash. Filed Apr. 1, 1929. Serial No. 351,633. 2 Claims. (Cl. 40—2.)



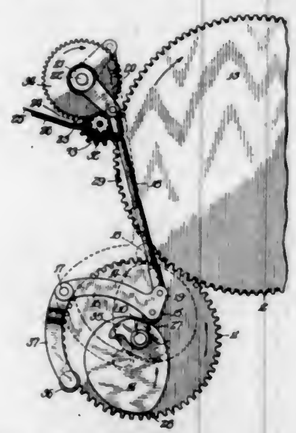
1. The combination with an instrument panel having various instruments projecting therefrom, of an oil change reminder consisting of a card on which a notation may be made; said card having an opening therein for receiving one of said instruments to serve as a support for the card and having an edge surface engaged with another of said instruments to retain it against movement about its support.

1,764,103. APPARATUS FOR AUTOMATICALLY DETERMINING AND RECORDING THE SPECIFIC GRAVITIES OF FLUIDS. HARRY A. HURLEY, Los Angeles, HERBERT J. JONES, Fullerton, and HONORATO JIMENEZ, Los Angeles, Calif. Filed Aug. 1, 1927. Serial No. 209,971. 9 Claims. (Cl. 265—44.)



1. An apparatus for determining the specific gravity of fluids comprising a pump, and means for supplying a fluid under constant pressure to the pump so as to actuate the latter and in such manner that the duration of the pump's filling stroke varies in accordance with the specific gravity of the fluid.

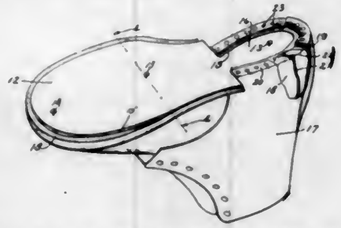
1,764,104. TRANSFER-GRIPPER-OPERATING MECHANISM. ARTHUR G. JACOBSON, Chicago, Ill., assignor to The Miehle Printing Press & Mfg. Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 7, 1928. Serial No. 324,476. 4 Claims. (Cl. 271—53.)



3. In sheet feeding mechanism, the combination of a continually rotating element for transmitting accelerating motion to a sheet transfer member having a sheet engaging gripper and cooperating pad, continually driven cams for operating said gripper and rotating in opposite direction to said continually rotating element, and means to withdraw said gripper and pad from their operative plane.

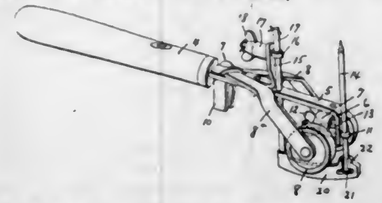
1,764,105. PROCESS OF MAKING SHOES. ALVIN L. JUNG, Milwaukee, Wis., assignor to Albert H. Weinbrenner Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed July 28, 1928. Serial No. 295,978. 4 Claims. (Cl. 12—142.)

1. That improvement in the art of making shoes which comprises providing a last with a sole plate portion conforming to the shape of an inner sole, assembling upon the last a sole member having a heel seat portion conforming to the heel seat portion of said sole plate portion and a sole portion having a part projecting beyond said sole plate forwardly of said heel seat portion, assembling an upper upon the last, turning out the lower margin of the upper forwardly of the heel seat adjacent the projecting portion of said sole member and progressively shaping



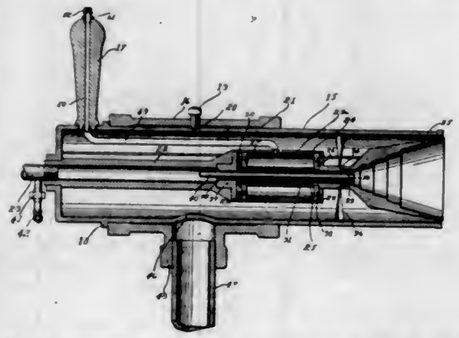
the upper to the last against the edge of said sole plate portion and permanently securing said upper to said sole member adjacent said sole plate portion, lasting the upper inwardly over the heel seat portion of the last and securing it to the heel seat portion of said member, laying a welt upon the outturned margin of the upper and outsole upon said sole member, and uniting the welt, upper and sole members.

1,764,106. BRICK-MASON TOOL. JOHN ADAM KAUFMAN, Seymour, Ind. Filed July 12, 1927. Serial No. 205,080. 4 Claims. (Cl. 72—138.)



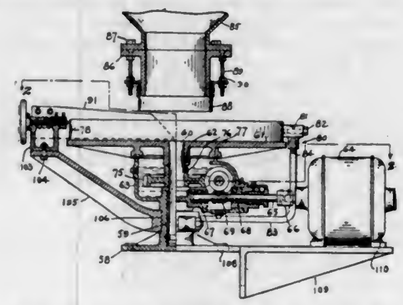
4. In a mason tool of the class described, a handle, a shank rigidly mounted on said handle, and extending therefrom, a raking implement adjustably mounted on the outer end of said shank, guide rollers carried by said shank and located inwardly of said raking implement, said implement being disposed between said rollers, a shaft mounted on the intermediate portion of said shank, fastening means for said shaft, a runner carried by the lower end of the shaft, said runner functioning as a jointer and being provided with means for connection to said raking implement.

1,764,107. ATOMIZER. OSCAR KAY, Los Angeles, Calif. Filed June 15, 1927. Serial No. 199,027. 5 Claims. (Cl. 261—76.)



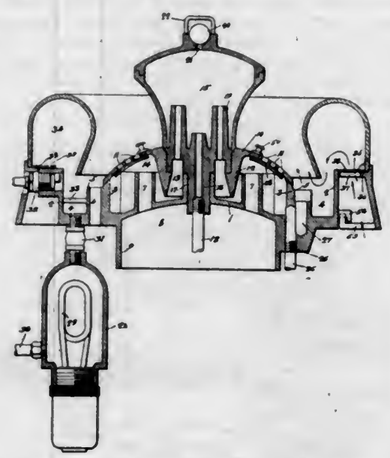
3. An atomizer comprising a housing to which air under pressure is adapted to be supplied, said housing having an opening through which the air is adapted to be discharged therefrom, an atomizing element rotatable in the housing and positioned within said opening to cause the air to be discharged in an annular film about said element, means for discharging oil radially into the atomizing element to produce in conjunction with the rotative movement of the element a spray of oil bounded in its discharge by the annular film of air, a conduit for conducting fluid under pressure from the housing to a point axially of the nozzle so as to discharge the fluid into the nozzle axially thereof, and means for continuously rotating the atomizing element.

1,764,108. FEEDING DEVICE FOR MATERIALS. JOSEPH E. KENNEDY, New York, N. Y. Original application filed Dec. 10, 1927, Serial No. 239,156. Divided and this application filed Oct. 23, 1928. Serial No. 314,527. 5 Claims. (Cl. 198—209.)



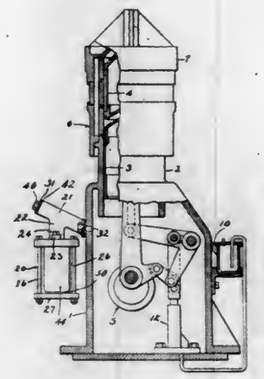
1. In a disc feeding device for materials, a base, a rotatable disc, a centrally arranged feeding means, a peripherally arranged material retaining means, an adjustable blade directing materials from the center of said disc, an oil immersed driving mechanism within said base and means for variably driving the said mechanism.

1,764,109. OIL BURNER. LOUIS LA BRANCH, Dayton, Ohio. Filed Oct. 6, 1927. Serial No. 224,388. 14 Claims. (Cl. 158—63.)



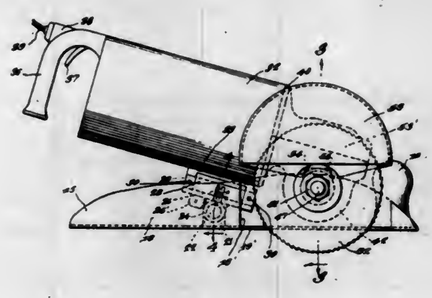
1. In a burner of the character described, a chamber comprising a base member having upstanding peripheral walls, a perforated dome for said chamber, the peripheral portion of which rests loosely upon the upstanding walls of the base member to permit expansion and contraction, and centrally disposed means for positioning the perforated dome relative to said base, and means for supplying a combustible mixture of fuel and air to said chamber.

1,764,110. AIR DRIER. IVAR LUNDGAARD, Worcester, Mass., assignor to Devon Manufacturing Company, Boston, Mass., a Corporation of Massachusetts. Filed Aug. 5, 1926. Serial No. 127,295. 6 Claims. (Cl. 62—136.)



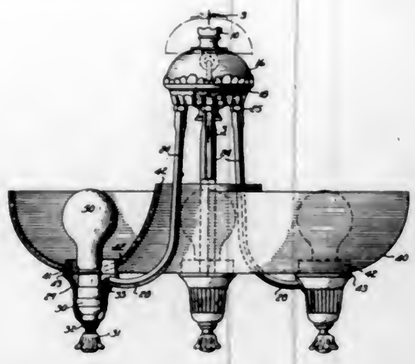
1. Refrigerating apparatus adapted to use air as a mediating fluid and comprising pistons for compressing and expanding the mediating air, an intake duct connecting the interior of the machine with the atmosphere, a drier for absorbing moisture from air passing through said duct, and a second drier communicating with the interior of the machine and sealed from the outer air and adapted to receive the surge of air due to piston movement, said second-named drier being detachably secured to the machine and connected thereto by a single air passage, and means for closing said passage in order to keep the interior of the machine sealed from the outer air when the drier is removed.

1,764,111. ELECTRICALLY-DRIVEN SAW. EDWARD F. MANTHEY, Fennville, Mich., assignor to Alex. A. Clarke, Chicago, Ill. Filed Mar. 19, 1926. Serial No. 95,964. 14 Claims. (Cl. 143—43.)



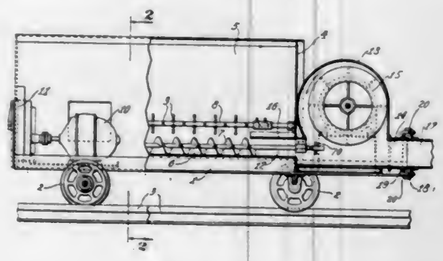
1. A device of the class described including a base plate having means thereon providing bearings, a shaft journaled in said bearings, a member including right angularly disposed bearing sleeves arranged in different planes, said shaft being journaled in one of said sleeves, another shaft journaled in the other of said sleeves, a housing having downwardly projecting lugs, said second mentioned shaft being fixed in openings provided in said lugs, a saw element and motive means therefor carried by said housing, and means for clamping said sleeves to said shafts in various angular positions with respect to said base plate.

1,764,112. LIGHTING FIXTURE. ALBERT B. MEGRAW, Meriden, Conn., assignor to The Miller Company, Meriden, Conn., a Corporation of Connecticut. Filed Apr. 23, 1927. Serial No. 185,967. 11 Claims. (Cl. 240—78.)



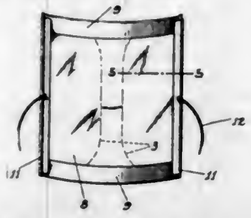
6. A chandelier comprising a two part central assemblage, the upper part being in the form of a suspension element through which supply wires pass, the lower part being in the form of a body member adapted to support chandelier arms, the two parts carrying cooperative quick detachable devices to permit hanging the lower part from the upper part, downwardly and outwardly extending chandelier arms fixedly carried by the lower part, lamp sockets carried by the arms, socket supply wires leading into the said lower part and connected to plug contacts, cooperative receptacles carried by the supply wires whereby the electrical connections between supply wires may be made or broken when the lower part of the assemblage is hanging from the upper part, and an annular one piece glass shade carried by the outer ends of the chandelier arms, the shade being non-removable downward past the arms, but being removable upwardly past the lower part of the central assemblage when disconnected from the upper part thereof.

1,764,113. APPARATUS FOR ROCK DUSTING MINES. JAMES B. MILLER, St. Louis, Mo., assignor to The American Mine Door Co., Canton, Ohio, a Corporation of Ohio. Filed Aug. 14, 1926. Serial No. 129,171. 11 Claims. (Cl. 169—2.)



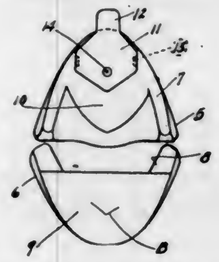
1. An apparatus for rock-dusting mines, comprising, a hopper, a blower having a casing communicating with said hopper by a passage, an outlet conduit from said blower adapted for direction toward the surface to be dusted, and a conveyor adapted to feed the dust through said passage from said hopper to said conduit so as to be taken up by the draft from said blower, and said passage being positioned and arranged to cause a collection of dust adapted to protect said hopper against back pressure from said blower.

1,764,114. CERTIFICATE HOLDER. EDWARD A. MORRIS, Sacramento, Calif. Filed Nov. 19, 1928. Serial No. 320,303. 4 Claims. (Cl. 40—10.)



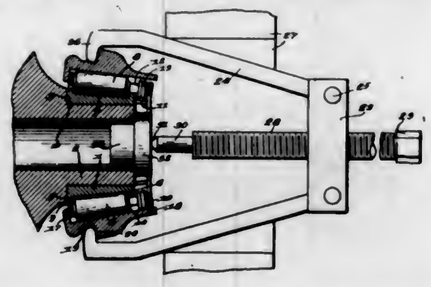
1. A certificate holder including a body consisting of a frame surrounding an opening, and side flaps formed with the frame to fold over against the back of the frame; metal mouldings along the sides of the outer faces of the frame and engaging the outer faces of the frame and flaps adjacent the junction thereof, and means for securing the holder about a steering post, mounted in direct connection with the mouldings.

1,764,115. METHOD OF OBTAINING CENTRAL OCCLUSION IN THE CONSTRUCTION OF ARTIFICIAL DENTURES. FRANK J. MULCAHY, Bay City, Mich. Filed Aug. 13, 1928. Serial No. 299,186. 4 Claims. (Cl. 32—1.)



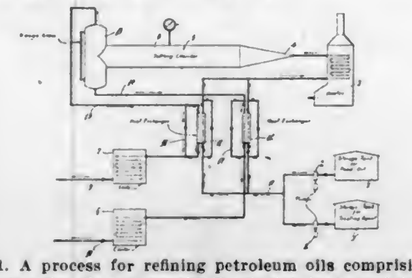
1. The method of obtaining central occlusion in the construction of artificial dentures which comprises securing upper and lower members to a pair of base plates, providing a pin in the medium line on the upper member for tracing the movements of the lower jaw on the lower member, and drilling a hole at the apex of said tracing for engagement by the pin to hold said plates in central occlusion.

1,764,116. PULL-OFF MECHANISM FOR ROLLER BEARINGS. RONALD B. NOBLE, Spokane, Wash. Filed Aug. 29, 1927. Serial No. 216,185. 7 Claims. (Cl. 29—85.)



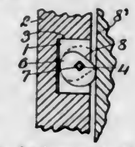
2. As a new and useful article of manufacture, segmental shoes having portions for peripheral and endwise engagement with a roller bearing and provided with puller shoulders projecting exteriorly therefrom, and springs for holding said shoes in position on the bearing.

1,764,117. METHOD FOR THE LYE TREATMENT OF PETROLEUM OILS. CHARLES K. PARKER, Richmond, Calif., assignor, by mesne assignments, to Standard Oil Company of California, San Francisco, Calif., a Corporation of Delaware. Filed Aug. 6, 1925. Serial No. 48,489. 6 Claims. (Cl. 196—41.)



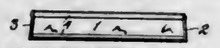
1. A process for refining petroleum oils comprising admixing the oil and an alkali solution in a conduit while continually passing the same to a settling chamber, the oil and alkali solution being heated prior to the introduction into such settling chamber to a temperature above the boiling point of water, continuously passing the admixture through the settling chamber while maintaining the same under a pressure substantially above atmospheric, and separatively removing the petroleum oil and the alkali solution therefrom.

1,764,118. WINDOW-SASH FASTENER. ALBERT A. POTTERF, Kansas City, Mo. Filed May 13, 1929. Serial No. 362,497. 1 Claim. (Cl. 292—241.)



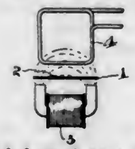
In a window sash fastener, a support adapted to be fastened to a window sash, a shaft oscillative on said support, and a cam loosely mounted on and having means engaging said shaft by which the cam may tilt laterally and have a limited oscillative movement with respect to the shaft, and adapted to be moved by said shaft to and from a position in which the cam will engage a jamb associated with said sash.

1,764,119. LOCKING MEANS FOR ASSEMBLED TYPES. WINFRED ELMO REAVIS, Los Angeles, Calif. Filed Apr. 6, 1929. Serial No. 352,976. 3 Claims. (Cl. 276—37.)



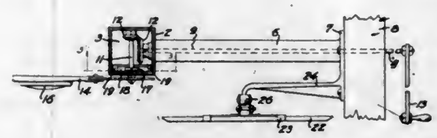
1. A holder for individual lines of assembled types comprising a body having inclined, yielding end portions bent at substantially right angles to the plane thereof, in combination with members at each end of a line having inclined edges, the bent portions of said resilient body arranged for cooperation with the inclined edges of said members to lock up the line of types.

1,764,120. SOUND-REPRODUCING MECHANISM. PERCY A. ROBBINS, Highland Park, Ill. Filed May 20, 1929. Serial No. 364,549. 3 Claims. (Cl. 274—43.)



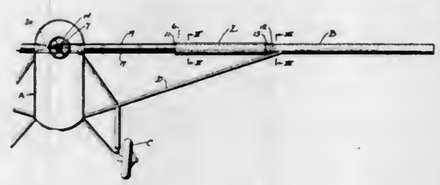
1. A sound record formed as a flexible strip having a sound trace formed thereon of a highly diamagnetic material.

1,764,121. VEHICLE SIGNAL. ANTONIO J. SALAZAR, San Francisco, Calif. Filed Apr. 17, 1929. Serial No. 355,800. 2 Claims. (Cl. 116—47.)



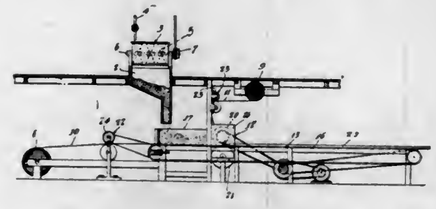
1. A vehicle signal comprising a housing having an open side and provided with a cover secured thereto, a pair of spaced brackets mounted on said cover adjacent a wall of said housing, each bracket having an aperture adjacent said wall, a spring mounted in said apertures, a rotatably mounted shaft in said housing, a cam mounted for movement with said shaft and abutting against said spring, said cam having sides, a signal element mounted for movement with said shaft, and means for rotating the shaft to move the signal element.

1,764,122. VARIABLE-AREA WING STRUCTURE FOR AIRPLANES. HERVEY M. SALISBURY, Walnut Grove, and ARTHUR E. MILLER, Sacramento, Calif. Filed Feb. 6, 1928. Serial No. 252,086. 1 Claim. (Cl. 244—12.)



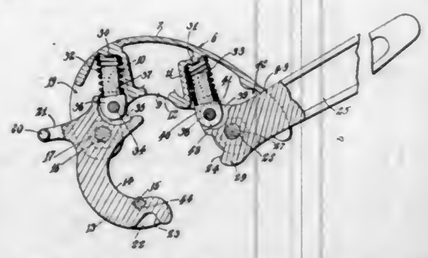
In an airplane, a body portion, wing beams disposed on each side thereof, a permanent covering for the wing beams and forming a supporting surface, said covering extending from the outer ends of the beams to points adjacent the sides of the body but leaving the inner ends of the beams uncovered for a predetermined distance, and a pair of cover members surrounding the beams and slidably mounted thereon, said cover members being movable to and away from the body to cover or uncover the inner ends of the wing beams, and said cover members when moved outwardly assuming a position exterior of the permanent covering on the wing beams.

1,764,123. METHOD AND MEANS OF APPLYING EDGE-COVERING STRIPS TO PLASTER BOARD. JOHN SCHUMACHER, Los Angeles, Calif. Filed Feb. 23, 1926. Serial No. 89,998. 3 Claims. (Cl. 154—1.)



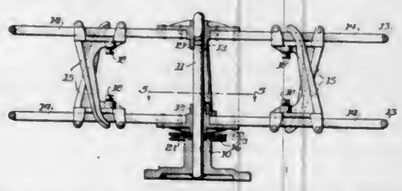
1. In a process of producing plaster board, the steps of smoothing the edges of plaster board as the same is formed by the incorporation of plastic or cementitious material between fibrous covering sheets and then knurling said edges and supplying thereto thin sheets of fibrous covering material to cover the edges of said produced board.

1,764,124. PIPE TONG. NELSON K. SMITH, Los Angeles, Calif., assignor to Byron Jackson Co., West Berkeley, Calif., a Corporation of Delaware. Filed Nov. 6, 1928. Serial No. 317,577. 5 Claims. (Cl. 81—66.)



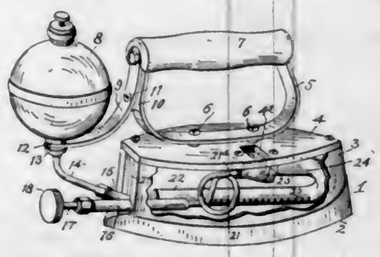
1. A pipe tong comprising pivotally connected jaws, a lever pivoted to one of said jaws and provided with a shoulder, the other jaw provided with a shoulder engageable by the first mentioned shoulder when the last mentioned jaw is in closed position and the lever is moved into one of its positions, the jaw with the shoulder and the lever being movable into open positions, spring seats within the first mentioned jaw, springs engaging said seats, other spring seats pivoted to the second mentioned jaw and to the lever and engaged by the springs, the prolonged axis of one of the springs passing on opposite sides of the jaw pivot when the second mentioned jaw is in open and closed positions, and the prolonged axis of the other spring extending on opposite sides of the lever pivot when the lever is in the open and closed positions.

1,764,125. REEL. IVAN H. SPOOR, Berwyn, Ill., assignor to The Gerrard Company, Inc., Chicago, Ill., a Corporation of Delaware. Filed Oct. 6, 1927. Serial No. 224,294. 9 Claims. (Cl. 242—94.)



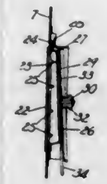
5. In a device of the character described, a pedestal, a shaft journaled in the pedestal in perpendicular relation to the base of the same, and two reel end members rigidly secured to the shaft above the pedestal for supporting therebetween a coil of wire.

1,764,126. SADIRON CONSTRUCTION. JAY C. STEESE and CHESTER A. HOFF, Akron, Ohio, assignors to The Akron Lamp Company, Akron, Ohio, a Corporation of Ohio. Filed Apr. 9, 1923, Serial No. 630,761. Renewed Nov. 25, 1929. 4 Claims. (Cl. 158—23.2.)



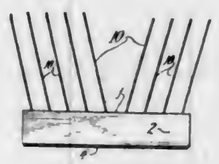
1. A sad iron having a hollow body portion, a burner in said body portion, a mixer connected with the burner, an assembled unit comprising a vaporizing coil adapted to communicate with the mixer, a tubular member connected with the vaporizer, a valve in said tubular member, a pipe communicating with said tubular member, a reservoir connected with said pipe, means carried by the sad iron for supporting the reservoir, the said vaporizer having sliding connection with the mixer and the said reservoir having a sliding connection with its supporting means whereby the parts of said unit may be removed together.

1,764,127. VACUUM-CLEANER BAG. DAVID E. STOLPE, New York, N. Y. Filed Sept. 1, 1927. Serial No. 216,856. 9 Claims. (Cl. 183—51.)



9. A vacuum-cleaner bag comprising in combination, a receptacle of material which is impervious to air and having an opening in a side thereof, a window of foraminous material over said opening, a cage surrounding said opening and window for receiving a pad and having an open side, a pad of absorbent material in said cage overlying said window having an end spaced therefrom to provide a space therebetween which co-operates with the open side of the cage to form an air passageway for air discharged through the window.

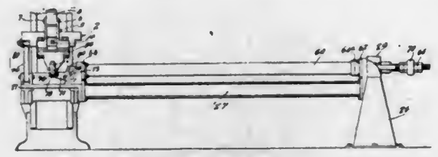
1,764,128. SORTING DEVICE. FREDERICK L. G. STRAUBEL, Green Bay, Wis. Filed Feb. 14, 1929. Serial No. 339,893. 7 Claims. (Cl. 211—11.)



1. A sorting device for papers or the like, comprising a horizontal elevated platform provided with parallel and counterpart slits; counterpart partitions each having a bottom tab adapted to extend freely through any one of the slits and a shoulder engaging the top of the platform; a horizontal false bottom spaced downwardly from the platform by a distance less than the length of one of the said tabs; the false bottom having openings respectively in vertical axial alinement with the slits, each of the said openings being considerably wider than the width of the slits and a base frame connecting the platform with the false bottom and supporting both of the latter with the false bottom sufficiently above the bottom of the base frame so that the tabs on the partitions project downwardly beyond the false bottom through the slits in the latter.

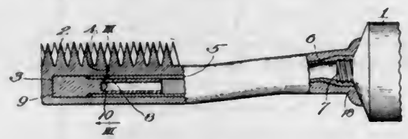
1,764,129. APPARATUS FOR PERFORATING CASINGS. MILON J. TRUMBLE, Alhambra, and RICHARD C. WOODWARD, Los Angeles, Calif., assignors to McEvoy Wireless Well Strainer Corporation, Los Angeles, Calif., a Corporation of California. Filed Sept. 28, 1925. Serial No. 59,246. 9 Claims. (Cl. 164—108.)

1. In an apparatus of the class described, the combination of a base member forming a rest for a casing, a punch press having a plunger ram carrying a die and operative to reciprocate said die to alternately position the die and retract the die from the exterior of a casing resting upon said base member, a punch carried by a guide, means for mounting the guide within such casing in position to



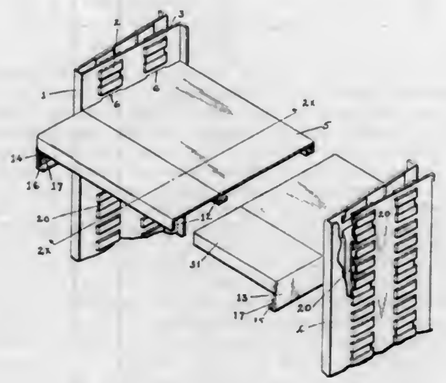
cooperate with the die, reciprocally mounted means for actuating the punch, and rocker arms connecting said means to said ram and operative to actuate said means from said reciprocations of said ram.

1,764,130. FOUNTAIN TOOTHBRUSH. ROBERT W. VARDEMAN, Independence, Mo. Filed May 28, 1928. Serial No. 281,191. 4 Claims. (Cl. 15—139.)



1. The combination with a resilient toothed brush head having a bore and an orifice leading from the bore to the toothed face of the brush, of a pair of tubes each fitting tightly in the resilient brush head and movable relatively to each other, one of said tubes having an orifice permanently communicating with the orifice of the brush head and the other constituting a feed tube and having an orifice normally out of register with the orifice of the first-named tube but adapted to register therewith upon deformation of the resilient brush head by the application of force thereto.

1,764,131. SHELF EXTENSION. FRANK K. WALTER, Minneapolis, Minn., assignor to James H. Hine, New York, N. Y. Filed Oct. 16, 1928. Serial No. 312,897. 2 Claims. (Cl. 211—136.)

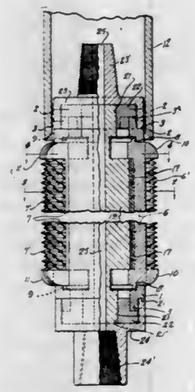


1. A shelf extension for a book stack comprising a shelf, uprights on each end of the shelf, bars fastened to the uprights and extending back therefrom under the main shelf of the stack, said bars being adapted to engage between blisters formed in the stack and hold the shelf extension on a level with and in front of a shelf.

1,764,132. HEAT-RESISTANT METAL SHEET. EARL R. WEHR and CARL C. MAHLIE, Middletown, Ohio, assignors to The American Rolling Mill Company, Middletown, Ohio, a Corporation of Ohio. Filed Sept. 13, 1926. Serial No. 135,276. 1 Claim. (Cl. 126—19.)

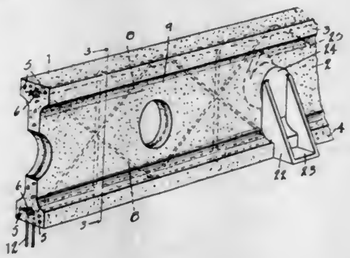
An oven lining plate or sheet, having a steel or iron base coated with an alloy of commercially pure zinc with aluminum as the main alloying agent, said aluminum being present in proportions to the zinc by weight of two per cent or more, but less in proportion by weight than the zinc.

1,764,133. UNDERREAMER. EDWIN C. WEISGERBER, Long Beach, Calif., assignor to John Grant, Los Angeles, Calif. Filed Jan. 18, 1927. Serial No. 161,758. 9 Claims. (Cl. 255—74.)



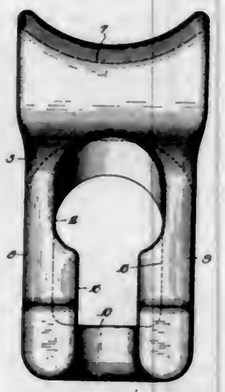
1. An under reamer comprising a housing having longitudinal openings therein, a plurality of reaming members within said housing and normally extending into said openings, said members provided at each end with milling cutters, a stem extending through said housing and provided with means for causing said cutters to move outwardly, means interlocking said housing and stem, and means engaging said interlocking means and formed for connection with a drill pipe.

1,764,134. CONCRETE BEAM. HOWARD F. YOUNG, Kalamazoo, Mich. Filed May 21, 1928. Serial No. 279,353. 3 Claims. (Cl. 72—61.)



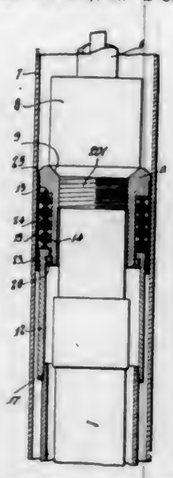
1. A concrete I-beam or joist comprising upper and lower heads and connecting web portion, longitudinal central strands in each head and longitudinal lateral strands each side of the main strand, diagonal cross strands connecting the said main strands and disposed within the web of the beam and forming diagonal squares, knock-out sections at the center of each square with surrounding metal ring, and cross reinforcing members connecting the longitudinal reinforcing members, folded upon themselves and forming leg supports, as specified.

1,764,135. CHOKER HOOK FOR LOGGING INDUSTRY. DONALD H. YOUNG, Berkeley Calif., assignor to American Manganese Steel Company, Chicago, Ill., a Corporation of Maine. Filed Dec. 24, 1928. Serial No. 328,130. 4 Claims. (Cl. 24—123.)



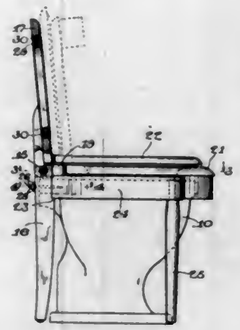
1. In combination, a cable provided with a retaining enlargement at its end, a choker hook comprising a body, said body having a reeved opening at one end through which said cable is extended and having a vertical axial opening closed at the reeved end but open at the opposite end, said axial opening being slightly larger in diameter than the cable enlargement for the greater portion of its length in the interior of the body, but narrowed substantially to the cable diameter at the end of the body, said body having an angular opening in one side adjacent the reeved end having its axis directed toward the center of the body and being slightly larger in diameter than the cable enlargement, said body having a slot in the same side as the angular opening extending from the angular opening to the axial opening and to the end of the body, said slot being slightly larger than the cable diameter.

1,764,136. WELL PACKER. PAUL F. YUNGLING, Los Angeles, Calif., assignor to Scott-Ross and Company, Los Angeles, Calif., a Corporation of Delaware. Filed Mar. 24, 1928. Serial No. 264,302. 1 Claim. (Cl. 166—10.)



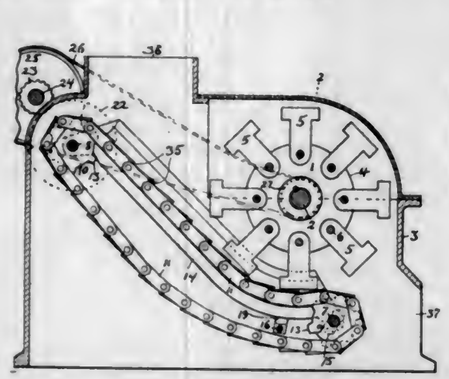
A well packer comprising two relatively movable elements, a metallic packing body between said elements, and a sleeve of relatively thin metal secured at one end of one of said elements and extending over the outer face of the metallic packing body and in telescoping relation with the other of said elements.

1,764,137. CLOSET CHAIR. EUGENE A. ZUNDEL, Chicago, Ill. Filed Sept. 27, 1928. Serial No. 308,613. 11 Claims. (Cl. 4—134.)



1. In a closet chair, a cross-piece having pins to fit in the vertical openings of a closet bowl flange for positioning the closet seat with respect to the closet bowl, said cross-piece being adjustable with respect to the closet chair for effecting adjustment of the closet chair to the closet bowl.

1,764,138. DISINTEGRATING MACHINE. DIEDRICH C. ADDICKS, Rockmart, Ga. Filed Aug. 19, 1927. Serial No. 214,035. 5 Claims. (Cl. 83—11.)

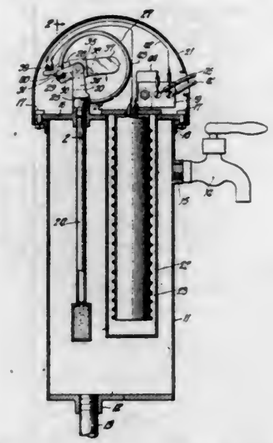


3. In a grinding mill, a housing; a rotatable disintegrating member; a breaker member in the form of an endless traveling belt made up of a series of anvil bars hinged together, the face of each bar being disposed upon an incline lengthwise of the belt; guideways for the opposite sides of said belt, those portions thereof adjacent said disintegrating member being arcuate and concentric therewith; and mechanism for imparting continuous movement to said disintegrating member and breaker member.

1,764,139. HEATER. MAX ALEX, Bloomington, Ill. assignor to The Summit Corporation, Davenport, Iowa, a Corporation of Delaware. Filed June 2, 1928. Serial No. 282,435. 4 Claims. (Cl. 219—39.)

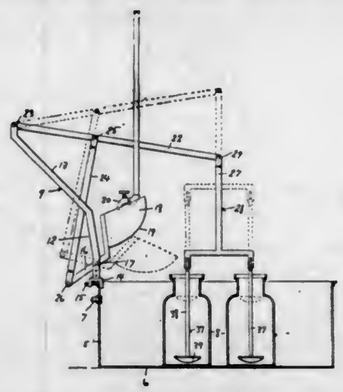
1. In a device of the character described the combination with a casing having an inlet and an outlet, heating means associated with said casing for heating the fluid in said casing, contact means for controlling the flow of current through said heating means, a tube extending into said casing and having a portion in position to be encountered by fluid entering said inlet before the fluid passes said heating means, said tube containing a heat

expansible element and means responsive to the expansion and contraction of said element controlling said contact



means, said casing having a cover carrying said heating means, contact means and tube whereby they may be removed from said casing as a unit with said cover.

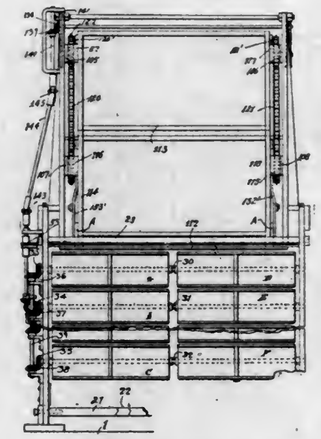
1,764,140. AUTOMATIC MILK-COOLING DEVICE. ELMER P. ALLARD, Bradley, Wis. Filed June 25, 1929. Serial No. 373,536. 4 Claims. (Cl. 31—4.)



2. In combination with a reservoir including an outlet and a column of water flowing into the reservoir, of a supporting arm having one end connected with the reservoir, a lever arm having one end pivotally connected to the other end of the support arm, a stirring arm, means for detachably and pivotally connecting the stirring arm to the other end of said lever arm, a beam rockably connected to the supporting arm, a bucket secured to the beam and disposed in the path of incoming water and a link connecting the beam with the lever arm for translating rocking movement of the beam into oscillatory movement of the stirring arm, said means including a spider having sockets in the ends of the legs thereof to receive the end of the stirring arm and a spring pressed latch associated with the sockets in the spider legs for detachably locking the stirring arms therein.

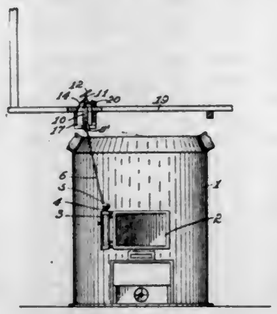
1,764,141. ADVERTISING MACHINE. WALDEMAR F. ANDERSEN, Alameda, Calif. Filed Jan. 15, 1929. Serial No. 332,671. 3 Claims. (Cl. 40—33.)

1. An advertising machine comprising a frame, a plurality of rectangular card carrying frames, each frame having lugs on opposite ends for picking the same up, a chain at opposite ends of said frame, means on each chain to engage the lugs of the frames to lift them one frame at a time out of the stack of frames and restore them to the rear of the stack of frames, means to push the stack of



frames forwardly, means to hold the frames in a given position, and means to strike the frame at its top when it is being restored to the position at the back of the stack of frames to insure its proper placement in the stack.

1,764,142. FURNACE-DOOR OPENER. ADA BANDOW, Appleton, Wis. Filed May 23, 1929. Serial No. 365,538. 2 Claims. (Cl. 110—178.)

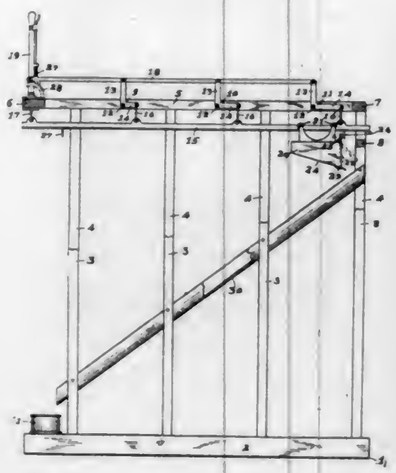


1. A door opening and closing mechanism of the character described, comprising the combination with a hinged door of a furnace or other construction, of a resiliently controlled operating swinging arm supplied with flat parallel furcations, and a linkage connecting member having one end loosely connected to said door and the other end seated between said flat furcations and pivoted in an enlarged hole in one of the furcations.

1,764,143. CONVEYER. WILLIAM R. BANKSON, Pittsburgh, Pa. Filed June 29, 1929. Serial No. 374,722. 2 Claims. (Cl. 104—164.)

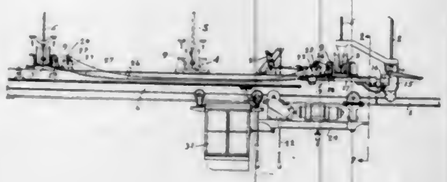
1. In combination, a conveyer of the character described comprising a frame structure, a track member mounted in said frame structure and having the forward end thereof pivotally connected with the latter, a carriage suspended from said track member having a sloping bottom and provided with a door pivotally connected therewith, a shifting mechanism carried by said frame structure for

shifting said track member to cause the travel of said carriage in either direction on the latter, an inclined channel chute mounted in said frame structure and having its upper end disposed adjacent to the rear end of said track member, a securing element carried by said carriage



for securing said door in closed position, means fixed in the rear end of said track member and engaging said door for automatically releasing the latter from said securing element, and means fixed in the forward end of said track member and engaging said door for automatically moving said door to closed position.

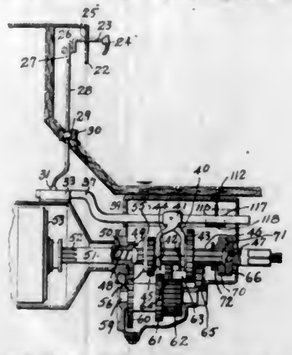
1,764,144. OVERHEAD TRAVELING BRIDGE. EARL T. BENNINGTON, Cleveland Heights, Ohio, assignor to The Cleveland Crane & Engineering Company, Wickliffe, Ohio, a Corporation of Ohio. Filed Aug. 12, 1927. Serial No. 212,422. 14 Claims. (Cl. 104—98.)



1. The combination with spaced parallel overhead track rails each provided with oppositely projecting flanges, of a bridge having supporting wheels traveling on opposite flanges of each of said rails, and propelling motors at opposite ends of the bridge each having a driving connection to wheels traveling on opposite flanges of the adjacent rail.

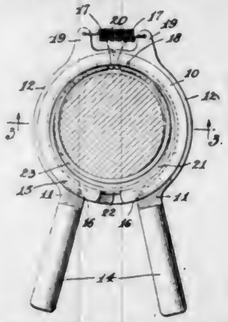
1,764,145. GEAR SHIFT. JASPER BLACKBURN, Webster Groves, Mo. Filed Aug. 8, 1927. Serial No. 211,338. 5 Claims. (Cl. 74—58.)

1. A gear shift comprising a sliding gear transmission and its housing, clutches located at the front and rear of said transmission, means for disengaging said clutches in sequence, a dog for holding said rear clutch in disengaged position, means for operating said dog for re-



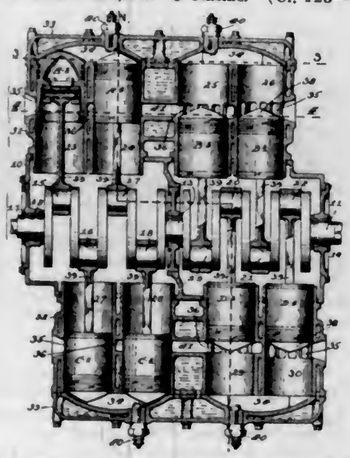
leasing said rear clutch when a shift has been partially completed, and means for returning said rear clutch to its engaged position independently of the front clutch.

1,764,146. RING TOOL. HARRY M. BRAMBERRY, Norfolk, Va. Filed May 14, 1927. Serial No. 191,329. 11 Claims. (Cl. 29—86.4.)



1. A ring tool comprising a grooved collar adapted to surround a split ring, a pair of operating levers mounted in the groove of the collar, each lever having an outwardly projecting handle and an inwardly extending finger adapted to extend into the gap of the ring.

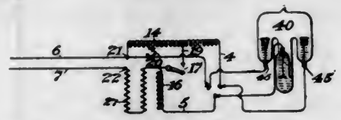
1,764,147. INTERNAL-COMBUSTION ENGINE. EVERETT R. BURTNETT, Santa Rosa, Calif. Filed Apr. 11, 1929. Serial No. 354,266. 8 Claims. (Cl. 123—56.)



1. In an internal combustion engine, two rows of four cylinders each arranged to form a horizontal opposed struc-

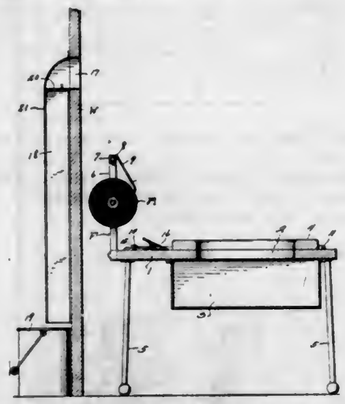
ture, the eight cylinders being arranged in four pairs with the head ends of the members of each pair connected by a common compression and combustion clearance chamber, one cylinder of each four pairs having exhaust ports and the other cylinder of each four pairs having inlet ports, eight pistons, one piston arranged for reciprocatory movement with'n each of the eight cylinders, a crank shaft having eight crank pins disposed in two co-axial groups of four crank pins each, the eight crank pins being formed in one plane, two pistons of each of the two opposed rows of cylinders being connected respectively of opposed rows of cylinders to two adjacent crank pins of one co-axial group and an ignition device provided with each common compression chamber.

1,764,148. MERCURY VAPOR LAMP AND APPARATUS. LEROY J. BUTTOLPH, Grantwood, N. J., assignor to General Electric Vapor Lamp Company, a Corporation of New Jersey. Original application filed Sept. 27, 1923, Serial No. 665,069. Divided and this application filed Apr. 18, 1925. Serial No. 24,066. 2 Claims. (Cl. 176—13.)



1. In an electric vapor lamp circuit, in combination, a vapor arc lamp having a cathode and two anodes, an inductance connected at one end to said cathode and at its other end to a resistance, said resistance being connected at its other end to a power main, an auto-transformer connected across said anodes, means for connecting at will an intermediate point on said auto-transformer to the line leading to the cathode, and another point on said auto-transformer connected to another power main.

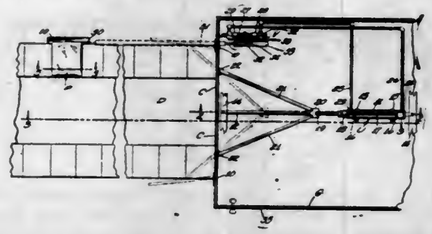
1,764,149. DRY CLOSET. CLYDE T. CADWALLADER. Buffalo, N. Y. Filed June 11, 1929. Serial No. 370,007. 2 Claims. (Cl. 4—142.)



1. A dry closet comprising a slab having an opening, a box arranged under the slab and with which the opening communicates, a ring member adapted to engage the slab around the opening, and a paper clamping means associated with the slab and hingedly mounted on said slab, said paper clamping member substantially surrounding said ring member.

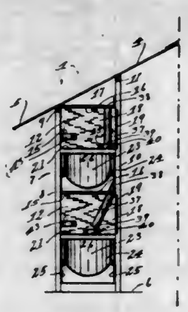
1,764,150. CLOSURE-OPERATING MECHANISM. GEORGE G. CANDEE, Long Beach, Calif. Filed Jan. 23, 1928. Serial No. 248,832. 6 Claims. (Cl. 268—34.)

1. A closure operating mechanism comprising means adapted to be operatively connected to a closure and responsive to fluid pressure to move the closure to open or closed position, means adapted for connection to a source of fluid supply under pressure for controlling the supply of fluid to the first means in such manner that the latter will be moved by the fluid to one or the other of its positions according as the control means occupies one position or another, and manually operable means for moving the



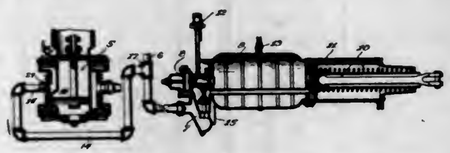
control means, a wheel operated device for actuating the control means, and a lost motion operative connection between the wheel operated device and the control means by which the latter is moved to one or the other of its positions according as the wheel operated device is moved to one position or another, yet allows independent actuation of the control means to one or the other of its positions, by the manually operable means.

1,764,151. SELF-CLEANING HUTCH. CECIL COSPER, Walla Walla, Wash. Filed Nov. 21, 1928. Serial No. 320,769. 6 Claims. (Cl. 119—16.)



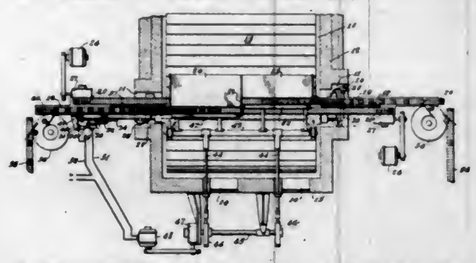
1. A self cleaning hutch comprising in combination a resilient openwork floor, an excreta trough disposed to enclose the underside of the floor of said hutch, and having extended sides arranged to provide a dead air space therebetween, end closures for said trough adapted to provide for cleaning purposes and to complete said dead air space, and means to clean said trough.

1,764,152. AIR-BRAKE SYSTEM FOR RAILWAY ROLLING STOCK. GEORGE W. COWAN. Bartlett, Ill. Filed Aug. 29, 1927. Serial No. 216,020. 18 Claims. (Cl. 303—80.)



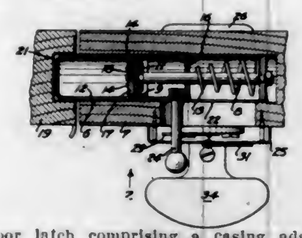
1. In an air brake system having an air pump and an auxiliary reservoir, the combination of a bleeder valve for the auxiliary reservoir responsive to suction developed by the air pump for bleeding said reservoir.

1,764,153. LEER FEEDER. ALBERT N. CRAMER, Toledo, Ohio, assignor to Owens-Illinois Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Jan. 21, 1928. Serial No. 248,336. 10 Claims. (Cl. 198—31.)



1. In combination, a leer, means to convey ware therethrough, means comprising a pair of endless belts extending through feed openings in the leer side walls to feed ware transversely into the leer from both sides of the latter, means to periodically arrest movement of ware into the leer on said belts, and means operating at regular intervals to move ware from portions of the belts to the ware conveying means in the leer.

1,764,154. LATCH. OTTO P. CRAMER, San Francisco, Calif. Filed Apr. 15, 1929. Serial No. 355,365. 7 Claims. (Cl. 70—46.)



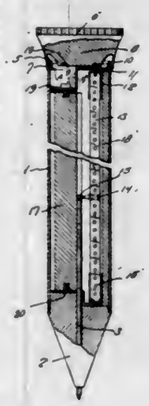
1. A door latch comprising a casing adapted to be mounted within the door, a piston mounted in said casing and spaced from the wall thereof, a cylinder slidably mounted in said casing and surrounding the piston, a spring interposed between the cylinder and casing for urging the cylinder outwardly of the casing, and a pin carried by said cylinder whereby it may be moved against the spring.

1,764,155. WATER SOFTENER. LEE G. DANIELS, Rockford, Ill. Filed Mar. 7, 1927. Serial No. 173,249. 15 Claims. (Cl. 210—24.)



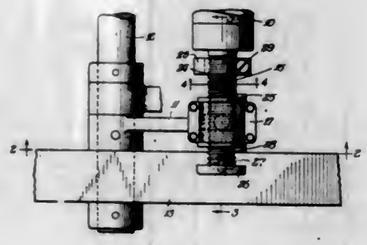
1. In a water softener, the combination with a softener tank containing softening material, means for establishing communication between said tank and a source of hard water supply, and means for establishing communication between said tank and a service system, of a valve for controlling communication between the first means and said tank whereby to introduce hard water into either end of said tank, a waste outlet, another valve for controlling communication between said tank and said waste outlet, and a hand lever for operating one of said valves in the swinging movement thereof, said lever being arranged in a certain position to also operate the other valve.

1,764,156. MAGAZINE PENCIL. DAVID H. DOUGLAS, Cropseyville, N. Y. Filed June 23, 1928. Serial No. 287,729. 8 Claims. (Cl. 120—14.)



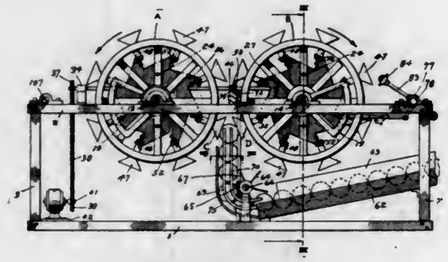
2. A pencil having a plurality of magazine chambers for holding leads movable about a center, and endless propelling means for moving leads in said chambers and for turning the magazine.

1,764,157. INKING ROLLER. EDWARD F. DUDLEY, Oak Park, Ill., assignor to The Miehle Printing Press & Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed June 14, 1928. Serial No. 285,260. 10 Claims. (Cl. 101—348.)



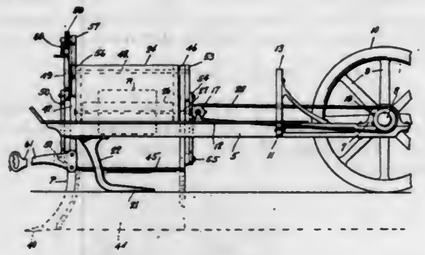
1. In a printing press, the combination of a vibrator roller having a threaded shaft, a threaded bushing cooperating with said shaft, and means for applying frictional action to said bushing whereby said roller is vibrated and for withdrawing frictional action whereby said bushing acts as a bearing.

1,764,158. MACHINE FOR EXTRACTING JUICE FROM CITRUS FRUITS. GEORGE W. EDWARDS, Oakland, Calif., assignor to Sunset Gold Packing Company, Oakland, Calif., a Corporation of West Virginia. Filed June 8, 1928. Serial No. 283,964. 11 Claims. (Cl. 146—3.)



1. A fruit juice extractor comprising in combination, a rotating member having means for holding sections of the fruit, a perforated hollow reamer head engageable with the fruit and suction means operatively connected with the head for drawing the juices from the fruit into the head.

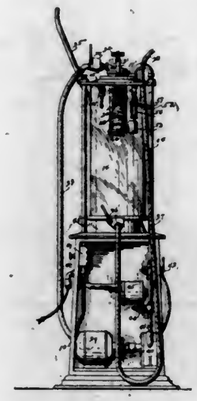
1,764,159. SUGAR-CANE PLANTER. ANDRÉS QUINTERO ESTEVEZ, Franklin, Mass. Filed Mar. 12, 1928. Serial No. 260,960. 7 Claims. (Cl. 111—5.)



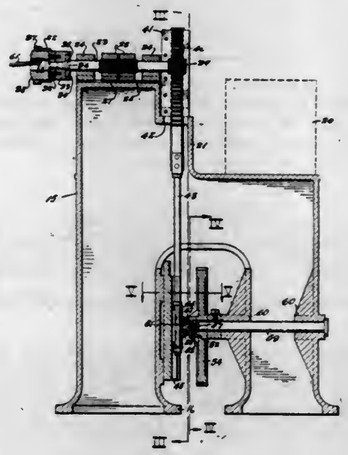
1. In a sugar cane planter, and in combination, a mobile frame, a hopper supported on the frame and provided in its bottom with an opening, a partition in the hopper to provide therein a cane compartment and a fertilizer compartment, means for feeding individual stalks of cane through the opening, means for feeding a quantity of fertilizer simultaneously with each stalk of cane, a plow supported by the frame below the hopper, a pair of vertical walls mounted on the plow to extend rearwardly from the plow in spaced relation to each other, so that the space between the walls is below the opening.

1,764,160. DEVICE FOR CLEANING LIQUID CONTAINERS. PAUL R. FINCH, Des Moines, Iowa. Filed Aug. 22, 1927. Serial No. 214,539. 5 Claims. (Cl. 210—207.)

1. An apparatus for cleaning liquid containers comprising an air-tight receptacle, an inlet conduit communicating with said receptacle, an outlet conduit also communicating with said receptacle, a centrifugal pump having a suction inlet and a pressure outlet, a prime mover in operative engagement wtih said pump, a four-way valve designed to communicate with the inside of said receptacle, the suction side of said pump, the pressure side of the pump, and the outside atmosphere, and a liquid cleansing means inside said receptacle for the purposes stated.



1,764,161. POLISHING MACHINE. FLOYD FLEXON, Fairmont, W. Va., and CLARENCE CHEW, Pitman, N. J., assignors to Owens-Illinois Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Oct. 28, 1927. Serial No. 229,420. 9 Claims. (Cl. 51—237.)

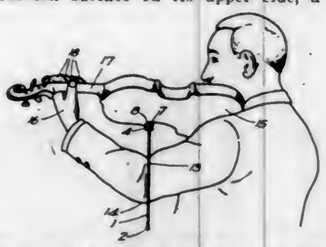


1. In a polishing machine, the combination of a chuck to hold an article to be polished, means to oscillate the chuck, means to reciprocate the chuck axially in timed relation to oscillation thereof, and an adjustable device included in the chuck oscillating and reciprocating means to vary the degree of oscillation and reciprocation of the chuck simultaneously.

1,764,162. MEANS FOR POSITIONING THE LEFT ELBOW OF A PUPIL WITH RELATION TO THE VIOLIN. ISIDORE GLUCKSMAN, Oklahoma City, Okla. Filed Aug. 26, 1929. Serial No. 388,605. 4 Claims. (Cl. 84—281.)

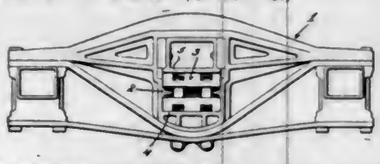
1. A device of the character described comprising a longitudinal rod having a threaded portion adjacent its

upper end, and a right angled portion at said end having its lower surface cushioned, a button around said rod with a cushion surface on its upper side, a thumb-nut



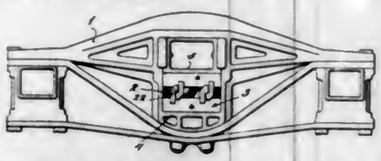
around said rod adapted to hold said cushioned surfaces securely against one edge of a violin, or viola, with said rod extending below said instrument.

1,764,163. RAILWAY-CAR-TRUCK SPRING. CYRUS HANKINS, Baltimore, Md., assignor, by mesne assignments, to T. H. Symington and Son, Inc., Baltimore, Md., a Corporation of Maryland. Filed June 13, 1925. Serial No. 36,975. 17 Claims. (Cl. 267—3.)



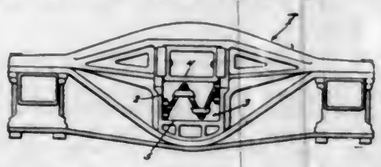
1. In a railway car truck spring structure, upper and lower spaced casing sections, cushioning means located therebetween, and link means engaging against the cushioning means and slidably connected with both casing sections for permitting relative vertical movement in one direction and limiting separating movement.

1,764,164. RAILWAY-CAR-TRUCK SPRING. CYRUS HANKINS, Baltimore, Md., assignor, by mesne assignments, to T. H. Symington and Son, Inc., Baltimore, Md., a Corporation of Maryland. Filed June 13, 1925. Serial No. 36,997. 14 Claims. (Cl. 267—3.)



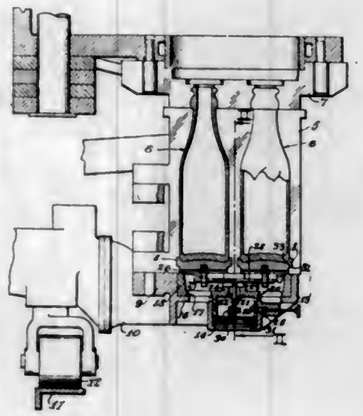
1. A railway truck spring device comprising upper and lower relatively movable supporting members, cushioning means interposed between said members, and abuttingly engageable means rigidly secured exteriorly upon said supporting members for limiting separating movement thereof.

1,764,165. RAILWAY-CAR-TRUCK SPRING. CYRUS HANKINS, Baltimore, Md., assignor, by mesne assignments, to T. H. Symington and Son, Inc., Baltimore, Md., a Corporation of Maryland. Filed June 20, 1925. Serial No. 38,547. 15 Claims. (Cl. 267—3.)



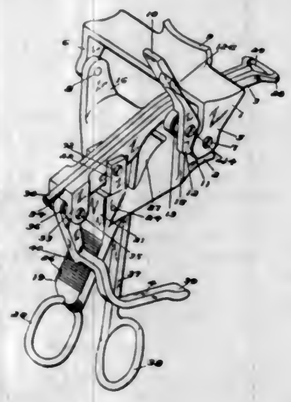
1. In a railway truck spring device, casing sections having flanges, cushioning means located between the sections, means connecting the sections at each corner thereof and located outwardly of the flanges for maintaining the springs under initial compression, and means for adjusting said last-named means for varying the degree of compression.

1,764,166. GLASSWARE-FORMING MACHINE. STANLEY L. HEWITT, Glassboro, N. J., assignor to Owens-Illinois Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Mar. 22, 1928. Serial No. 263,890. 6 Claims. (Cl. 49—41.)



1. In combination, a tiltable bottom plate holder comprising a pair of open frames nested one within the other, means separably interconnecting said frames, a pair of bottom plates, and means including a single spring providing a yielding connection between said bottom plates and the inner frame operating at times to effect a sufficient degree of frictional engagement between said plates and holder to prevent relative lateral movement between said elements.

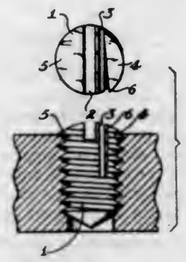
1,764,167. MOUTH GAG. CARL E. J. HIGHBERG, Worcester, and JAMES ALLAN THOMPSON, Cambridge, Mass. Filed Aug. 17, 1928. Serial No. 300,264. 11 Claims. (Cl. 128—17.)



1. In a mouth gag, the combination with relatively movable, pivoted jaw separating members, of a thumb piece integral with one of the members to adjust the same, a spring pressed pawl on the lower jaw member, ratchet teeth on the upper jaw member, said pawl and ratchet holding said jaw separating members in adjusted

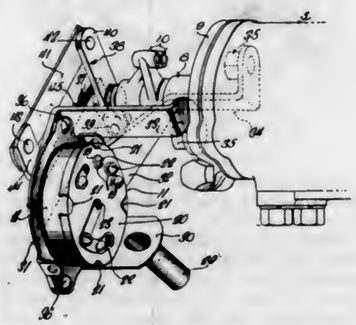
position, a tongue depressor, a pawl and ratchet to hold said tongue depressor in adjusted position and means to administer an anesthetic integral with said tongue depressor.

1,764,168. SELF-LOCKING SCREW. RICHARD T. HOSKING, Wilmette, Ill., assignor, by mesne assignments, to Shakeproof Lock Washer Company, Incorporated, Chicago, Ill., a Corporation of Delaware. Original application filed Apr. 30, 1928, Serial No. 273,805. Divided and this application filed Jan. 4, 1929. Serial No. 330,339. 4 Claims. (Cl. 151—31.)



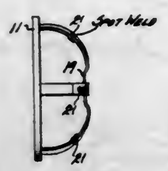
2. A bolt member adapted to be received in a complemental hole in a piece of work and formed with a slit extending lengthwise from an end thereof and providing a spring tongue formed to substantially rectangular cross sectional shape, the tongue twisted axially to produce an offset portion whereby there is presented to the work a biting edge that normally projects beyond the cylindrical periphery of the bolt, to engage the work in locking relation by the strut-like action of its diagonal dimension, for the purposes set forth.

1,764,169. STEERING-COLUMN SWITCH. EDWARD N. JACOBI, Milwaukee, Wis., assignor to Briggs & Stratton Corporation, Milwaukee, Wis., a Corporation of Wisconsin. Filed May 13, 1927. Serial No. 191,081. 10 Claims. (Cl. 200—59.)



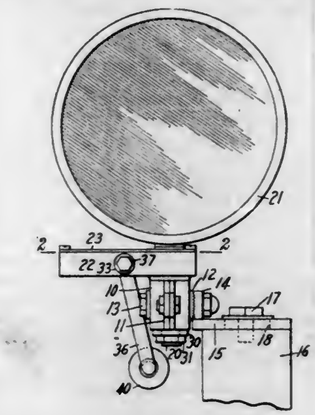
1. A switch mechanism, comprising a terminal carrying head, terminals on said head, a movable contactor engageable with one terminal of the head, a second contactor engageable with another of the terminals, a rocker arm connected with one contactor and adapted, upon rocking movement, to actuate the same, a rotatable and slidable actuating member axially off-set with respect to the terminal carrying head and its cooperating contactors, connections between the actuating member and rocker arm whereby shifting thereof actuates the rocker arm, and means connecting the actuating member with the other contactor whereby rotation of the actuating member actuates the said other terminal.

1,764,170. OIL-PUMP SCREEN CAGE. CLARENCE E. JACOBS, Detroit, Mich. Filed Dec. 7, 1927. Serial No. 238,331. 1 Claim. (Cl. 210—169.)



A two-piece cup-like cage for oil pump screens comprising a large ring having integral ribs extending downwardly for a substantial distance and inwardly, and a small bottom member having integral ribs extending upwardly for a substantial distance and outwardly, the ribs of one set being secured to the ribs of the other on a circle larger than that of the bottom member but smaller than that of the ring, whereby a cage of considerable depth is formed.

1,764,171. DIRIGIBLE HEADLIGHT. GEORGE S. KECK, Pasadena, and CHARLES M. CRONKHITE, Glendale, Calif., assignors to Pilot Ray Corporation, Wilmington, Del., a Corporation of Delaware. Filed Aug. 15, 1927. Serial No. 213,000. 4 Claims. (Cl. 240—62.)

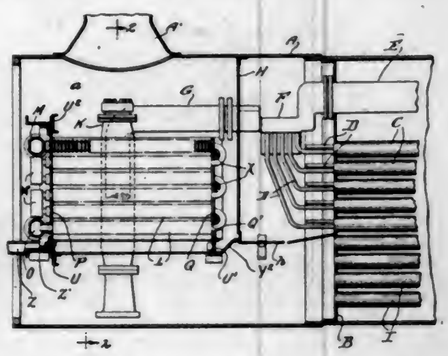


4. In a dirigible headlight mechanism a tubular member, means for rigidly mounting said member on a part of an automobile, a laterally extending housing rigidly supported on the upper end of said tubular member, a shaft journaled in said tubular member, extending through said housing and having means for connecting a headlight to the upper end thereof, an actuating arm arranged within said housing and having one end rigidly secured to said shaft, and an operating device comprising a flexible sheath having one end anchored in the wall of said housing and a wire extending through said sheath and connected with said actuating arm.

1,764,172. LOCOMOTIVE BOILER. WALTER FRANCIS KEENAN, Jr., Pelham, N. Y., assignor to Foster Wheeler Corporation, New York, N. Y., a Corporation of New York. Filed Apr. 16, 1925. Serial No. 23,509. 9 Claims. (Cl. 122—426.)

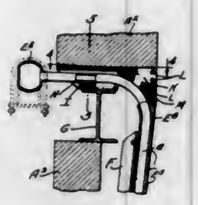
1. In a locomotive comprising fire tubes and a front tube sheet into which the front ends of the fire tubes are connected, and a smoke box in front of said tube sheet, the improvement which consists in a structural frame

work extending across the lower portion of the smoke box, an economizer comprising a box-like casing open at top and bottom removably supported on said frame work,



tubular elements located in said casing, and baffle provisions arranged to confine the flow of the heating gases issuing from the fire tubes through said casing.

1,764,173. FURNACE WALL. WALTER F. KEENAN, Jr., Pelham, N. Y., assignor to Foster Wheeler Corporation, New York, N. Y., a Corporation of New York. Filed May 27, 1926, Serial No. 111,908, and in Great Britain Apr. 10, 1926. 17 Claims. (Cl. 122—235.)



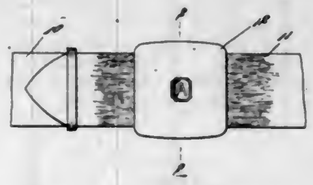
1. In a fluid cooled furnace chamber wall, the combination with conduit elements each comprising a metal tube having a wall lining body portion and a transverse wall penetrating end portion having an integral fin at its furnace chamber side, and refractory material in the spaces between the fins of adjacent elements.

1,764,174. METHOD OF MAKING FLUID-HEATING ELEMENT. WALTER F. KEENAN, Jr., Pelham, N. Y., assignor to Foster Wheeler Corporation, New York, N. Y., a Corporation of New York. Original application filed Mar. 23, 1927, Serial No. 177,796. Divided and this application filed June 15, 1928. Serial No. 285,625. 7 Claims. (Cl. 29—157.6.)



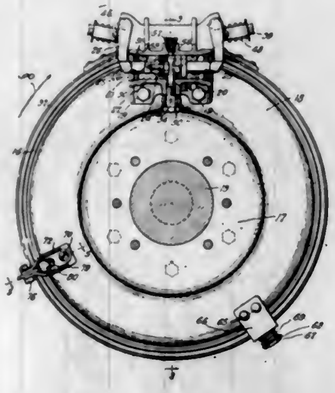
1. The method of forming a tubular fluid heating element having a plane surface adapted to absorb radiant heat which comprises expanding the end portions of a thick walled tubular blank of circular cross section, compressing the end of said expanded end portions to substantially close the ends of the element channel, closing the ends of said channel, applying welding material in molten form to thicken the end walls of said channel, and changing the cross sectional outline of said element from circular to rectangular.

1,764,175. INSIGNIA ATTACHMENT. JOSEPH KERKHOFF, Attleboro, Mass., assignor to F. L. Torrey & Company, a Copartnership composed of Fred L. Torrey and Joseph Kerkhoff, Attleboro, Mass., doing business at Attleboro, Mass. Filed Feb. 8, 1929. Serial No. 338,397. 3 Claims. (Cl. 40—140.)



1. In a device of the character described, a face plate having spaced slots therein, an element having insignia thereon, integral fingers extending from said element, one offset from the plane of said element of a size to extend through one of said slots and engage the surrounding stock and the other finger folded into a coil to form a resilient knob to resiliently engage the stock surrounding the other slot and retain the element in position.

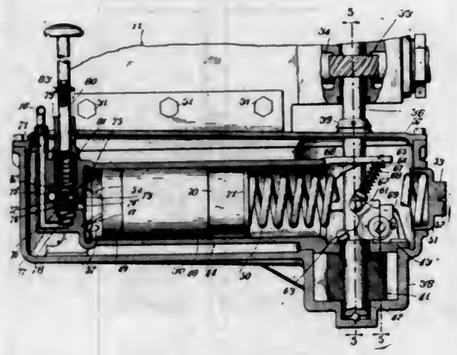
1,764,176. HYDRAULIC BRAKE. MALCOLM LOUGHEAD, Detroit, Mich., assignor, by mesne assignments, to Hydraulic Brake Company, Los Angeles, Calif., a Corporation of California. Filed May 31, 1923. Serial No. 642,390. 10 Claims. (Cl. 188—152.)



5. In a fluid operated brake system, a pivoted axle, a wheel thereon, a brake drum carried by said wheel, a brake band about said drum, a closure plate for said drum carried by said axle, a cylinder mounted on said closure plate, a pair of oppositely movable pistons in said cylinder, a mounting plate carried by said closure plate and overlying the periphery of said drum, a pair of levers pivotally supported on said plate, each of said levers including a pair of downwardly extending substantially parallel arms, and links joining the ends of said brake band to corresponding arms of said lever respectively, said pistons being arranged to move the other arms of said lever from each other to tighten said band about said drum.

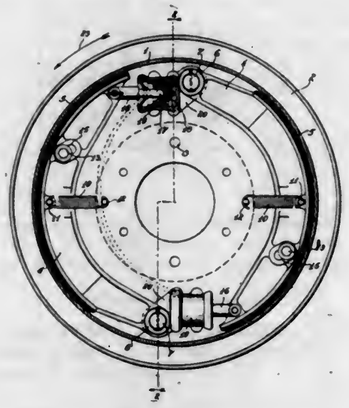
1,764,177. BRAKING APPARATUS FOR MOTOR VEHICLES. MALCOLM LOUGHEAD, Detroit, Mich., assignor to Hydraulic Brake Company, Detroit, Mich., a Corporation of California. Filed Jan. 8, 1925, Serial No. 1,145. Renewed May 9, 1927. 17 Claims. (Cl. 188—152.)

1. The combination with a motor vehicle, of a braking system therefor comprising a liquid-actuated brake mechanism for one of the wheels, a reservoir for liquid comprising a cylinder having a resiliently mounted piston for holding the liquid therein under pressure, means including



a control valve connecting the reservoir and the brake mechanism, a pump, and means controlled by movement of the piston for delivering liquid under pressure from the pump to the reservoir.

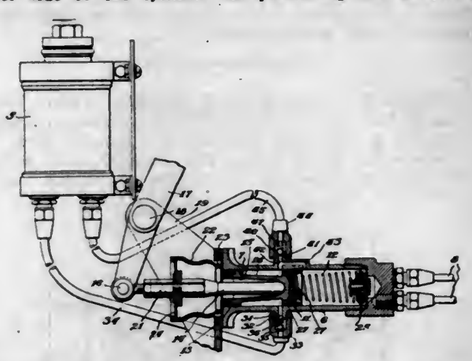
1,764,178. MULTICYLINDER HYDRAULIC BRAKE. MALCOLM LOUGHEAD, Detroit, Mich., assignor to Hydraulic Brake Company, Los Angeles, Calif., a Corporation of California. Filed Mar. 17, 1927. Serial No. 175,958. 2 Claims. (Cl. 188—78.)



1. A vehicle wheel brake comprising a drum, a plurality of brake shoes for engagement with the drums, a fixed pivotal mounting pin for each of said shoes, said shoes being arranged with their pivotally mounted end adjacent to the free end of the adjacent shoe and motors having relatively stationary parts pivotally mounted upon the fixed pivotal mounting pins and having movable driven movable parts connected with the free end of the adjacent shoe.

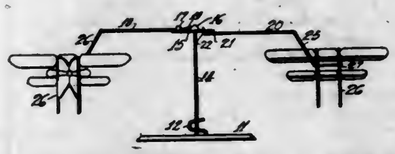
1,764,179. HYDRAULIC BRAKE MECHANISM. MALCOLM LOUGHEAD, Detroit, Mich., assignor to Hydraulic Brake Company, Los Angeles, Calif., a Corporation of California. Filed Nov. 6, 1928. Serial No. 317,593. 8 Claims. (Cl. 60—54.6.)

1. In a hydraulic brake system, a master cylinder, a piston movable therein to produce a fluid pressure for operating the brakes, a valve in the lower side of the cylinder for admitting fluid into the cylinder during the retractile movement of the piston, and a valve in the upper side of the cylinder for permitting the escape of



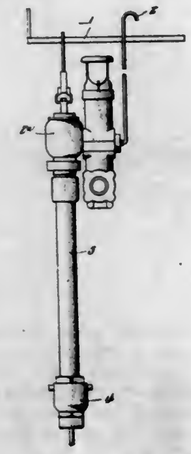
excess fluid in the cylinder at the end of the retractile movement of the piston, said excess fluid moving upwardly to carry any air present in the cylinder from the cylinder.

1,764,180. AIR-DRIVEN NOVELTY. WILLIAM MORELAND, Newark, N. J. Filed Apr. 17, 1929. Serial No. 355,911. 1 Claim. (Cl. 46—14.)



In a collapsible air driven novelty as described, the combination, a stand including a vertical pivot, a bearing plate mounted for rotation on said pivot, said plate being provided with a cone shaped projection forming the bearing, and with a cleat, a flat spring arm engaging the face of said plate and passing through said cleat and engaging said cone-shaped projection whereby tension is applied to said arm and a display figure supported from the outer end of said arm.

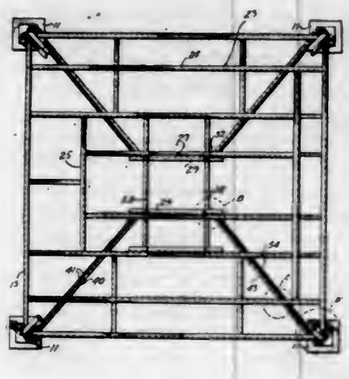
1,764,181. SAFETY VALVE FOR INJECTOR OVERFLOW. STEPHEN J. RAETZ and WILLIAM J. GREENE, Proctor, Minn. Filed May 2, 1927. Serial No. 188,355. 9 Claims. (Cl. 103—275.)



1. In a device of the character described, the combination of an injector having an overflow pipe associ-

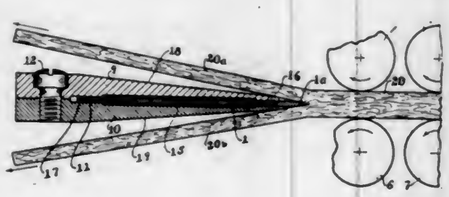
ated therewith, a valve assembly associated with said pipe, said assembly including a valve seat, a normally unseated valve disc, and means for yieldingly maintaining said disc in unseated position.

1,764,182. STRUT-TYPE-BASE CONSTRUCTION. LESLIE A. RAWSON, Los Angeles, Calif., assignor to Emsco Derrick & Equipment Company, Los Angeles, Calif., a Corporation of California. Filed Jan. 30, 1929, Serial No. 336,091. Renewed Apr. 7, 1930. 17 Claims. (Cl. 189—21.)



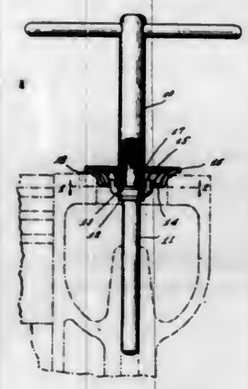
1. A base construction for derricks comprising: a perimetric-frame including irons secured together to form a rectangle; cross-members secured to said perimetric-frame, extended parallel to two sides of said frame; traversing-members extending at right angles to said cross-members, said cross-members and said traversing-members forming an inner structure; and compression braces extending diagonally inward from the corners of said perimetric-frame, said compression braces being secured to said perimetric-frame and to said inner structure.

1,764,183. GUIDE FOR BANDSAWS. GLENN G. RHINEVAULT, Saginaw, Mich., assignor to W. B. Mershon Co., Saginaw, Mich., a Corporation of Michigan. Filed Mar. 9, 1928. Serial No. 260,270. 1 Claim. (Cl. 143—160.)



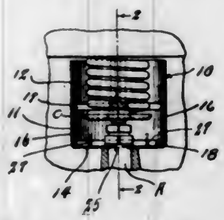
A guide for a cutting band comprising a stationary sheath consisting of two plates secured together face to face, their inner faces formed with a channel the thickness of which corresponds to the thickness of the band, the walls of said channel recessed lengthwise the sheath to present guideways along the front edge of the sheath and a similar pair of guideways along its rear edge, the working faces of both guideways being uninterrupted throughout their length.

1,764,184. VALVE SEAT REAMER. ALBERT C. SAVIDGE, Indianapolis, Ind. Filed Mar. 2, 1923. Serial No. 622,397. 11 Claims. (Cl. 90—12.5.)



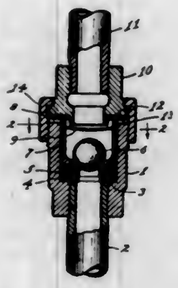
1. A valve-seat reamer, comprising a handle, a shouldered guiding portion, a toothed sheet-metal member, a supporting member for supporting the outer ends of the teeth of said toothed member, and means for clamping said toothed member and said supporting member between said handle and the shoulder on said guiding portion.

1,764,185. SPLIT-LOCK CATCHER. JOSEPH SUNNEN, St. Louis, Mo. Filed July 8, 1929. Serial No. 376,572. 12 Claims. (Cl. 81—3.)



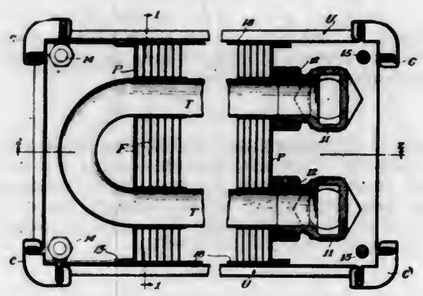
1. A split lock catcher comprising a cup-shaped member having one side open and provided with a split bottom having a split opening for receiving a valve tappet.

1,764,186. COMBINED CHECK VALVE AND UNION. JOHN B. TEESDALE, East Grand Rapids, Mich. Filed June 13, 1928. Serial No. 284,915. 4 Claims. (Cl. 137—69.)



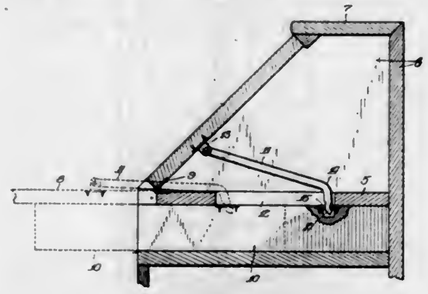
1. A combined check valve and union, comprising a pair of tubular body members adapted to abut end to end in axial alignment, a ring shaped gasket forming a valve seat carried in the bore of one of said members, a valve for said seat, a sleeve slidable in said member with one end thereof engaging said gasket, said other member being adapted to engage said sleeve, and a coupling for joining said members and causing said sleeve to bear against said gasket.

1,764,187. RADIATOR. REUBEN N. TRANE, La Crosse, Wis. Filed June 21, 1926. Serial No. 117,266. 4 Claims. (Cl. 257—136.)



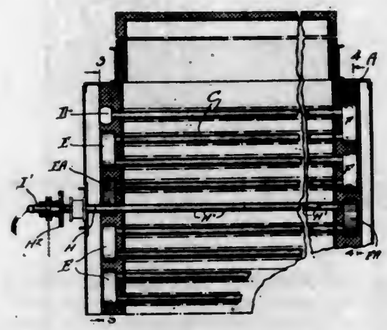
2. In a heating unit the combination with a radiator comprising a horizontal heat tube bent into a U-shape, a multiplicity of spaced vertical radiating fins mounted upon the legs of the U-shaped heat tube, an end plate also mounted upon the heat tube at each end of the radiator and adjacent the first and last fins respectively, the end plates having outwardly extending flanges forming horizontal baffles at the regions of the bight of the U-shaped tube and of couplings at the free ends of the tube, legs for the radiator unit supported by the end plates,—of a cabinet for augmenting the air draft through the radiator set over the radiator, the outer margins of the end plates abutting the end walls of the cabinet to confine the air flow therethrough to the region of the fins.

1,764,188. OPERATING DEVICE FOR A DESK-FALL SUPPORT. EUGENE D. TRUESBURY, Rockford, Ill., assignor to Ornamental Brass Shops, Rockford, Ill., a Corporation of Illinois. Filed July 5, 1928. Serial No. 290,346. 4 Claims. (Cl. 45—91.)



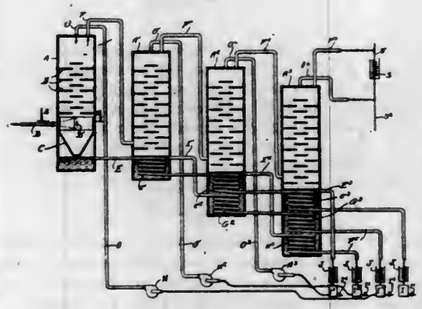
2. In an operating device for a desk fall support, the combination of a plate having a slot therein, a link, and means on said link for pivotally connecting said link to said plate, said means comprising a notch formed in one side of said link and adapted to engage one edge of said slot to prevent withdrawal of said link from said slot, said link being of sufficient width and the edge thereof opposite from said notch being shaped to engage the opposite edge of said slot to maintain said notch in engagement with the edge of said slot throughout a predetermined range of pivotal movement of the link.

1,764,189. APPARATUS FOR CLEANING ECONOMIZER TUBES. JOHN E. BELL, Brooklyn, N. Y., assignor to Foster Wheeler Corporation, New York, N. Y., a Corporation of New York. Filed Sept. 17, 1923. Serial No. 663,106. 2 Claims. (Cl. 122—392.)



1. Fluid heating apparatus comprising a bank of tubular elements one or more of which are soot blower pipes while the remainder form conduits for the fluid to be heated and connections to the ends of the conduit elements connecting said elements in rows and thereby forming multiple paths of flow for the fluid to be heated, from one side of the bank to the other, each of which paths includes all of the conduit elements in the corresponding row, said connections including parts connecting the two conduit elements at opposite sides of each soot blower pipe and in the same row with the latter through a conduit element in an adjacent row.

1,764,190. OIL-VAPOR SEPARATION AND CONDENSATION. JOHN E. BELL, Brooklyn, N. Y., assignor to Foster Wheeler Corporation, New York, N. Y., a Corporation of New York. Filed Aug. 27, 1924. Serial No. 734,384. 8 Claims. (Cl. 196—94.)

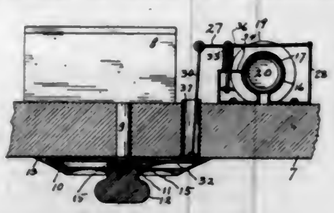


7. The method of fractionally condensing vapors which consists in treating the vapors in successive stages at successively lower temperatures, separately recovering condensates formed in the successive stages, and utilizing available heat in the condensate obtained in the earlier stages to reboil the condensate formed in later stages by separately passing the condensate in each earlier stage through the condensate in a plurality of later stages.

1,764,191. DEVICE FOR PREVENTING SAFE ROBBERIES. ORTON L. BEVERLY, Indianapolis, Ind. Filed Feb. 23, 1928. Serial No. 256,197. 10 Claims. (Cl. 109—6.)

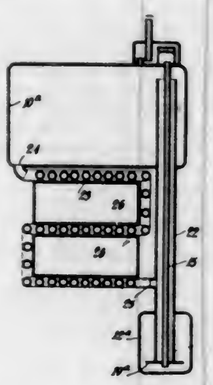
1. A device for preventing safe robberies and the like, comprising a dial plate, a grenade containing incapacitat-

ing gas producing materials, a striker, a plunger to operate the striker, and means cooperating with the dial plate for holding the plunger out of operative contact



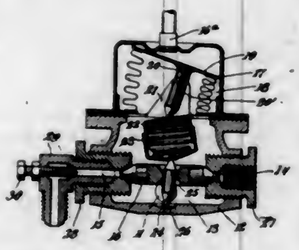
with the striker while the dial plate is in normal position and for releasing the plunger by the removal of the dial plate from normal position.

1,764,192. EVAPORATOR FOR REFRIGERATING APPARATUS. LAWRENCE BRUEHL, Brooklyn, N. Y., assignor to Gas Refrigeration Corporation, Scranton, Pa., a Corporation of Delaware. Filed Jan. 4, 1927, Serial No. 158,846. Renewed Mar. 7, 1929. 15 Claims. (Cl. 62—120.5.)



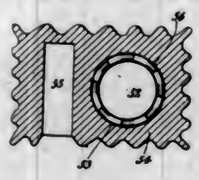
1. An evaporator for absorption refrigeration systems including a main evaporator vessel, a chamber disposed therebeneath, means for delivering liquid from the lower portion of the vessel to said chamber, at a point below the top of the latter, and a liquid return conduit leading from the lower portion of said chamber, the upper part of said chamber serving as a gas chamber to force liquid from said chamber through said conduit.

1,764,193. FLUID CONTROL. LAWRENCE BRUEHL, Brooklyn, N. Y., assignor to Gas Refrigeration Corporation, Scranton, Pa., a Corporation of Delaware. Filed Mar. 22, 1927. Serial No. 177,313. 10 Claims. (Cl. 137—153.)



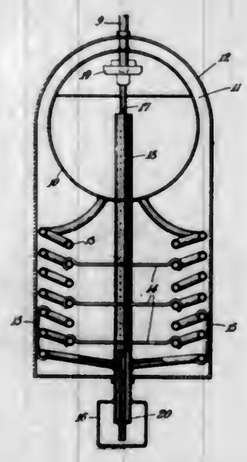
1. The combination of a valve having a valve chamber, an inlet and an outlet, a valve member for closing said outlet, and means for shifting said valve member to and from a position to close said outlet comprising a bellows having a substantially cylindrical, extensible, peripheral wall and a closed end, said bellows forming one side of said valve chamber, a casing surrounding said bellows and connected with a source of pressure, a lever rigidly connected to and extending approximately at right angles from the closed end of said bellows and pivoted at a point eccentrically disposed with respect to said bellows, and means including a spring interposed between said lever and said valve member for snapping said valve member in one direction or the other in accordance with the expansion or contraction of the bellows due to excess of internal pressure over external pressure or of external pressure over internal pressure.

1,764,194. CONTROLLING DEVICE FOR HEAT TRANSFERENCE IN REFRIGERATORS. LAWRENCE BRUEHL and LUDWIG REICHERT, Brooklyn, N. Y., assignors to Gas Refrigeration Corporation, Scranton, Pa., a Corporation of Delaware. Filed Apr. 4, 1927. Serial No. 180,749. 11 Claims. (Cl. 62—95.)



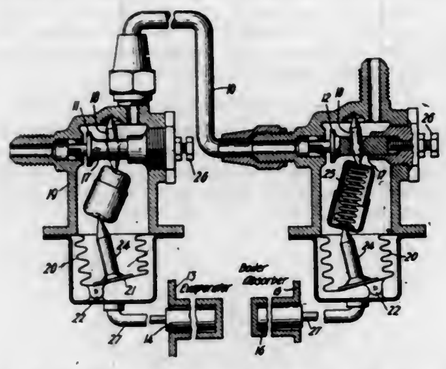
6. In combination, a cooling element having a wall, a heat conducting wall spaced therefrom and parallel thereto, and a plurality of thermostatically operated members for making or breaking thermal connection between said walls.

1,764,195. EVAPORATOR. LAWRENCE BRUEHL, Brooklyn, N. Y., assignor to Gas Refrigeration Corporation, Scranton, Pa., a Corporation of Delaware. Filed May 19, 1927. Serial No. 192,530. 11 Claims. (Cl. 62—95.)



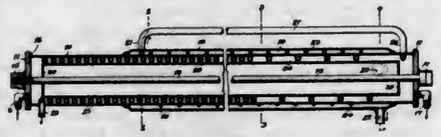
1. An evaporator for an intermittently operating absorption machine having means for supplying and withdrawing refrigerant at the top thereof and having a heat conductive housing around the evaporator, the upper part of the housing being insulated from the upper part of the evaporator, and the lower part of the housing being in good thermal contact with the lower part of the evaporator.

1,764,196. AUTOMATIC CONTROLLER FOR REFRIGERATING SYSTEMS. LAWRENCE BRUEHL, Brooklyn, N. Y., assignor to Gas Refrigeration Corporation, Scranton, Pa., a Corporation of Delaware. Filed June 2, 1927. Serial No. 195,964. 4 Claims. (Cl. 62—5.)



1. A refrigerating apparatus of the intermittently operating absorption type, including a conductor for the heating medium for the boiler absorber, a pair of separate identic interchangeable valves in said conductor for controlling the supply of the heating medium, each of said valves being provided with a movable fluid pressure operated member, resilient connections between said member and the valve for holding the latter in either closed or full open position, and adjustable means for limiting the opening movement, means for moving the member of one of said valves in accordance with the temperature in the evaporator, and means for moving the other of said members in accordance with the temperature in the boiler-absorber.

1,764,197. AMMONIA CONDENSER AND RECTIFIER. LAWRENCE BRUEHL and LUDWIG REICHERT, Brooklyn, N. Y., assignors to Gas Refrigeration Corporation, Scranton, Pa., a Corporation of Delaware. Filed Jan. 19, 1928. Serial No. 247,769. 18 Claims. (Cl. 257—235.)



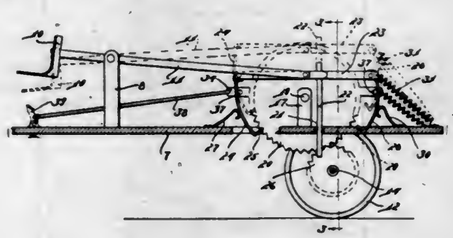
1. A heat interchanger, including a pair of concentric walls forming an annular chamber therebetween, a coil within said chamber and having spaced turns to subdivide said space into a helical passage, and a helical passage encircling the outer of said walls and connected at one end to one end of said coil.

1,764,198. CAGE FOR ROLLER BEARINGS. GUSTAF CARLSON, Buffalo, N. Y. Filed June 29, 1929. Serial No. 374,884. 2 Claims. (Cl. 308—217.)



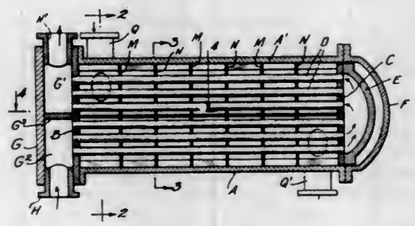
1. A roller bearing cage adapted for automatic production including the assembly of rollers therein, comprising a strip of metal bent into tubular form and formed to provide end rings and longitudinally slotted to provide spaced parallel bars connecting said end rings, the central portions of said bars being widened and said central portions being offset radially outward to provide relatively narrow outwardly directed connecting portions connecting the relatively narrow inner end portions of said bars and the wide outer central portions of said bars, the space between the narrow end portions of said bars being narrower than the diameter of the rollers to be received to prevent inward displacement thereof and the central outer widened portions thereof being spaced slightly less than the diameter of said rollers to permit said rollers to be sprung into said slots and to prevent outward displacement thereof, said end rings preventing endwise displacement of said rollers.

1,764,199. TOY VEHICLE. LOUIS A. COLELLA, Detroit, Mich. Filed Mar. 14, 1929. Serial No. 346,822. 2 Claims. (Cl. 208—38.)



1. A device of the class described comprising: a base; a rockable arm; a gear rotatably mounted on said base; an arm pivotally connected to one end of said rockable arm and extending diametrically of said gear; a resilient arm on each end of said bar engaging the teeth of said gear and adapted for effecting rotation of said gear upon rocking of said rockable bar.

1,764,200. HEAT EXCHANGER. DION KANOUSE DEAN, Rahway, N. J., assignor to Foster Wheeler Corporation, New York, N. Y., a Corporation of New York. Filed Jan. 11, 1928. Serial No. 245,853. 7 Claims. (Cl. 251—239.)

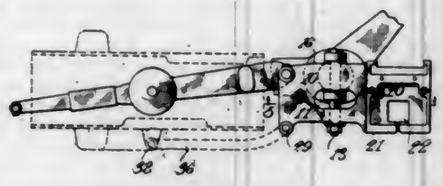


1. A heat exchanger comprising a longitudinal bank of tubes through which a fluid is passed, a series of pairs of transverse baffles at spaced points along said tube bank, an opening in one sector of one of the baffles of each pair, an opening in an adjacent sector in the other baffle of each pair and a longitudinal baffle extending between said sectors, whereby a second fluid is passed through a substantially circular flow path between each pair of adjacent baffles.

1,764,201. PEDESTAL LEVER FOR PICTURE-PROJECTION MACHINES. AUGUSTO DINA, Jersey City, N. J., assignor to International Projector Corporation, New York, N. Y., a Corporation of Delaware. Filed May 31, 1928. Serial No. 281,873. 5 Claims. (Cl. 248—47.)

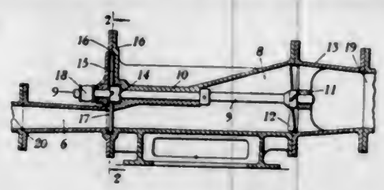
1. In a motion picture projecting machine, a supporting pedestal having a pair of arms, a pedestal lever having an elongated slot, means for pivotally mounting said lever

on said pedestal whereby one of said arms extends into said slot, and the other of said arms extends externally of said lever, a projection head support carried by the front



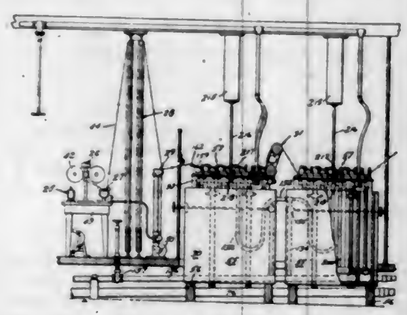
of said lever, and a downwardly extending flange formed at the rear thereof having means associated therewith for pivotally mounting the lamp house support thereon.

1,764,202. APPARATUS FOR THE PRODUCTION OF STAPLE FIBERS. HENRY DREYFUS, London, England. Filed June 24, 1929, Serial No. 373,303, and in Great Britain June 12, 1928. 5 Claims. (Cl. 164—61.)



1. Apparatus for the production of uniform staple fiber from continuous lengths of filaments, comprising an unobstructed conduit adapted to receive the filaments from a source of supply and for the passage of the filaments, an impeller arranged in said conduit and adapted to produce a filament conveying fluid stream through the conduit and a cutting blade in said conduit, means to actuate said blade to sever substantially uniform short lengths from the filaments fed through the conduit by the fluid stream, the impeller and cutting device being so arranged that the filaments are cut into lengths suitable for making "spun" yarn.

1,764,203. STRIP-FEEDING MECHANISM FOR MOVING-PICTURE FILMS. FRANK E. GARBUTT and LEIGH M. GRIFFITH, Los Angeles, Calif., assignors to Paramount Famous Lasky Corporation, New York, N. Y., a Corporation of New York. Original application filed Apr. 26, 1926, Serial No. 104,609. Divided and this application filed Nov. 7, 1927. Serial No. 231,475. 20 Claims. (Cl. 271—23.)

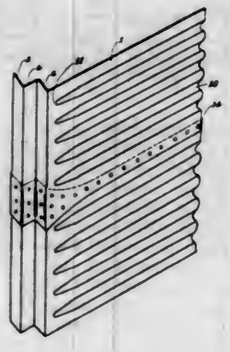


1. A film feeding apparatus consisting of: a series of drive rollers; a series of driven rollers, there being a film wound on said drive and driven rollers; and turbines for driving each of said drive rollers.

1,764,204. PROCESS OF MAKING ACETYLCELLULOSE. HENRY A. GARDNER, Washington, D. C. Filed Apr. 27, 1928. Serial No. 273,440. 1 Claim. (Cl. 260—102.)

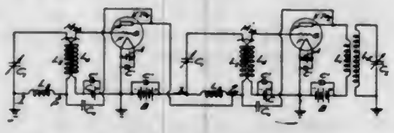
In the manufacture of acetylcellulose from cellulose with the aid of a reaction mixture containing acetic acid and acetic anhydrid, the process of recovering the reagents which comprises precipitating the reaction mixture with ethyl ether and washing the precipitated acetylcellulose with ether under refluxing conditions.

1,764,205. CORRUGATED PLATE WITH INTEGRAL POST. GARTH G. GILPIN, Riverside, Ill., assignor to Union Metal Products Company, Chicago, Ill., a Corporation of Delaware. Filed Sept. 24, 1928. Serial No. 308,104. 5 Claims. (Cl. 105—410.)



1. In a railway car; the combination of oppositely disposed framing elements, a metallic wall comprising two metallic plates secured together by a lap joint, said wall having an integral Z shaped member formed at one vertical margin thereof having each end secured to one of said framing elements, said member comprising a web and an outer flange, the overlapping relation of the webs and the outer flanges being greater than elsewhere, and means to secure said webs and outer flanges together.

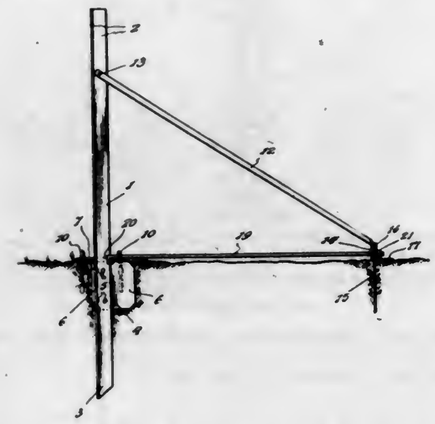
1,764,206. ELECTRON-TUBE CIRCUIT. LEWIS M. HULL, Mountain Lakes, N. J., assignor to Radio Frequency Laboratories, Incorporated, Boonton, N. J., a Corporation of New Jersey. Filed Apr. 13, 1928. Serial No. 269,807. 6 Claims. (Cl. 179—171.)



1. An electrical circuit comprising, in combination, an electron tube including at least an electron-emitting cathode, an anode, and a control element; an output circuit for said tube associated with the anode and cathode thereof; a tuned input circuit including, in series, a coil arranged to impress input voltage between the control element and cathode of said tube, a second coil connected to said first coil but having negligible electromagnetic coupling therewith, and a tuning condenser connected across both of said coils in series; a connection from one point in said tuned input circuit to ground; and capacitive impedance arranged between said anode and a point in said tuned circuit at which the alternating current potential

is substantially different from that of said grounded point; whereby said electrical circuit may be balanced to cause the flow of compensating currents through said capacitive impedance of the proper phase to oppose undesired retroactive currents due to capacitive coupling between said output and input circuits.

1,764,207. FENCE POST. JOHN G. JOHNSON, Dennison, Minn. Filed May 15, 1929. Serial No. 363,353. 5 Claims. (Cl. 189—31.3.)



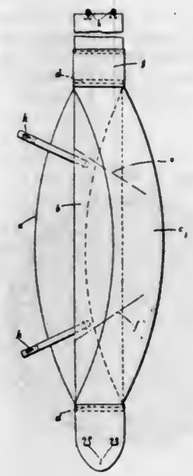
1. A fence post comprising a standard adapted to be driven into the ground, a plate fitting about said standard and adapted to rest upon the ground, means to secure said plate, an anchor adapted to be driven into the ground in spaced relation to said standard, a brace secured at its inner end to said standard and extending downwardly from the standard with its outer end bearing against said anchor, and a tie rod to extend between the standard and anchor close to the ground with its inner end engaged with said plate and its outer end joining the brace and anchor.

1,764,208. DUSTCAP DEVICE. ANTHONY P. KEARNS, Newark, N. J. Filed Jan. 26, 1928. Serial No. 249,604. 5 Claims. (Cl. 152—12.)



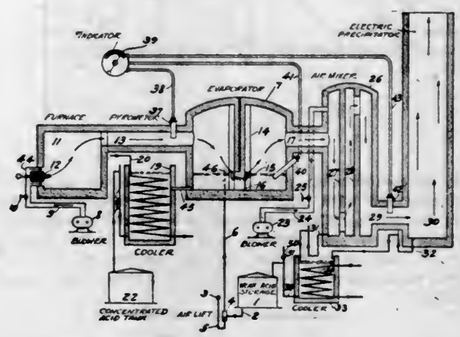
1. A dust cap device comprising a lock nut member adapted to slip over the valve stem of an automobile tire, a plurality of lock arms formed with cam surfaces loosely mounted in said member, a spring means coacting with each of the arms to normally maintain the same in retracted position and out of engagement with said valve stem, a cap member formed interior thereof with an annular member having a cam face for engagement with the cam surfaces of said arms to force the latter inwardly against the action of the springs and simultaneously effect interlocking engagement between the locking arms and valve stem and lock nut and felly concomitant with the rotation of the cap in a predetermined direction with respect to the lock nut member to secure said device to the felly and prevent movement of said valve stem with respect thereto.

1,764,209. DIAPHRAGM SUPPORT FOR PERSONAL WEAR. VIVIAN FITCH KEMP, Brixton, London, England. Filed Jan. 16, 1930, Serial No. 421,242, and in Great Britain Jan. 2, 1929. 2 Claims. (Cl. 2—43.)



2. A support for personal wear comprising a central elastic strip, arcuate diverging operatively opposed strips respectively disposed on opposite faces of said central strip in overlapping relation thereto, the respective end portions of all the strips being permanently secured together, means for connecting the end portions of said central strip, means for maintaining said strips in overlapping relation at all points under all conditions of use, and means passing across portions of one of said arcuate strips and secured to said central strip for holding said support in proper position on the wearer.

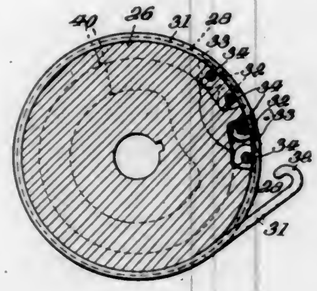
1,764,210. PROCESS AND APPARATUS FOR CONCENTRATING SULPHURIC ACID. FRANKLIN E. KIMBALL, Watson, Calif. Filed Nov. 9, 1927. Serial No. 232,147. 7 Claims. (Cl. 23—171.)



1. A method of concentrating liquids, comprising, causing the liquid to pass from a primary compartment to a secondary compartment through an upper passageway partly filled with the liquid, by blowing hot gases there-

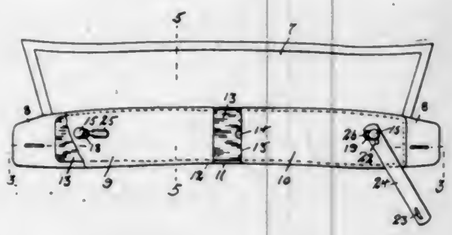
through, above the surface of the liquid, and permitting the liquid to return by gravity flow back to the primary compartment through a lower passageway, introducing dilute liquid into one of said compartments and withdrawing concentrated liquid therefrom.

1,764,211. FRICTIONAL DRIVE. EDWARD JOSLIN KINGSBURY and JOHN ELMER ANDERSON, Keene, N. H., assignors to Kingsbury Machine Tool Corporation, Keene, N. H., a Corporation of New Hampshire. Filed Sept. 15, 1928. Serial No. 306,129. 2 Claims. (Cl. 74—26.)



2. In a frictional device, a wheel having a peripheral groove therein, a plurality of frictional wire elements having rebent hooks at the ends located in said groove, the width of the groove being greater than the total width of the elements so that said elements are spaced apart, said groove being deepened by cavities to receive said rebent hooks, and means to secure said wire elements in position in said groove.

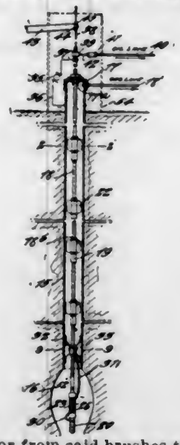
1,764,212. SOFT-COLLAR SUPPORT. FREDERICK B. A. KIRSTEN, Mason City, Iowa. Filed July 25, 1927. Serial No. 208,254. 6 Claims. (Cl. 2—132.)



1. In combination with a collar having a neck band fold provided with longitudinal pockets intermediate the ends thereof, a stiffener adapted to be seated substantially entirely within said pockets, said stiffener having buttons thereon adapted to project through button holes in said pocket members whereby the stiffener will be held against curling.

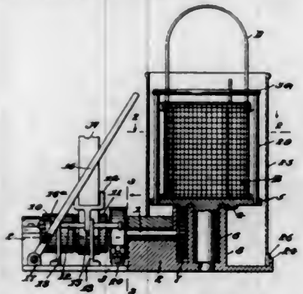
1,764,213. CONDUCTOR FOR OIL-WELL HEATERS. GEORGE WASHINGTON KNOX, Oklahoma City, Okla. Filed Feb. 21, 1927. Serial No. 169,983. 6 Claims. (Cl. 103—1.)

1. An oil well heater comprising an electric heater, a well casing, pump tube therein, means for insulating the pump tube from the well casing, means for electrically connecting the heater and casing including brushes mounted on and insulated from the tube engaging the said cas-



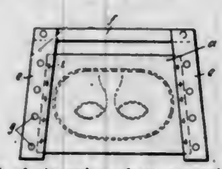
ing, and a conductor from said brushes to the heater, means for electrically connecting the heater and tube, and conductors from a source of electricity to the casing and tube.

1,764,214. CENTRIFUGAL EXTRACTOR. JOHN M. KREIDER, Neffsville, Pa. Filed Oct. 3, 1928. Serial No. 310,155. 7 Claims. (Cl. 210—71.)



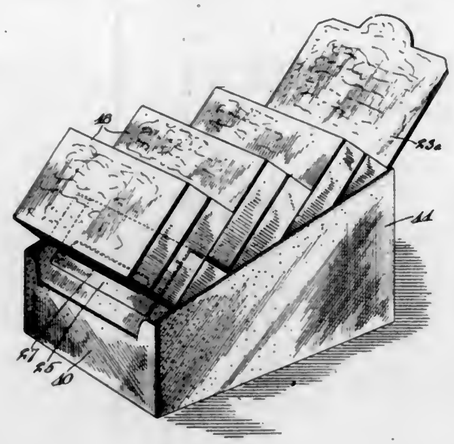
3. A centrifugal extractor comprising a rotary support, and a receiving frame secured to said support to turn therewith and extending above the same and comprising vertical members, in combination with a work holding cylindrical basket adapted to be inserted in said frame and to rest on said support and to be removed therefrom while said support is at rest, said basket having elements extending radially outward beyond the rest of said basket and in the path of travel of said vertical members of the frame during the rotation of said supporting member.

1,764,215. METHOD OF MANUFACTURING FACE MASKS, PSEUDO-REPRODUCTIONS OF ARTICLES AND THE LIKE, AND A DEVICE FOR CARRYING THIS METHOD INTO PRACTICE. JOSEF KÜPPER, Cologne, Germany. Filed Nov. 22, 1927, Serial No. 235,065, and in Germany Dec. 21, 1926. 3 Claims. (Cl. 18—69.)



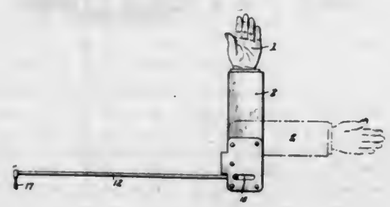
1. The method of stamping sheet material consisting in increasing the degree of sag of the material in the vicinity of the portions of the die, having the greatest surface irregularities.

1,764,216. DISPLAY CARTON. WALTER J. LAUBENHEIMER, Chicago, Ill. Filed Sept. 14, 1926. Serial No. 135,445. 6 Claims. (Cl. 206—45.)



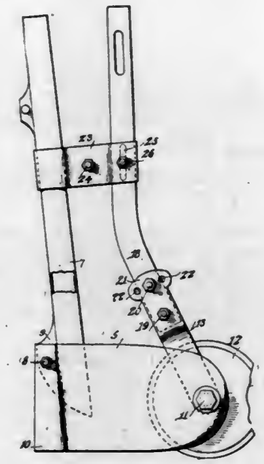
1. A display carton having a base in the form of a container, a goods-supporting rack in the latter, and interlocking connections between the rack and walls of the container for the support of the rack, one of said connections comprising a reverted prop-like flap carried by the container wall and having a lateral end in flat contact with a portion of said rack to hold the same against the bottom of the carton, and the rack having a portion engaging said lateral end to hold the same in operative position.

1,764,217. CAR-TACKING INDICATOR. DOMINGO MASSARDO, Santiago, Chile. Filed Oct. 25, 1928. Serial No. 315,056. 1 Claim. (Cl. 116—52.)



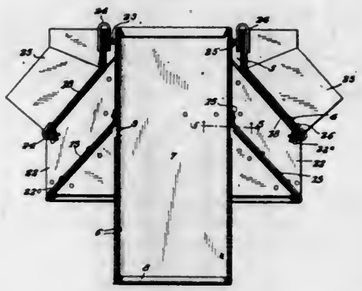
A vehicle indicator including a casing, an indicating member pivotally mounted therein, a slotted arm integrally secured to said indicating member, an angular lever pivoted in said casing and having a pin engaging in the slot in the arm, the extremity of the lever opposite said arm having a slot therein, and an actuating rod for the indicating member having one terminal engaged in the slot in said lever, said casing having a slot therein guiding the end of the actuating rod and connected with said lever causing said rod to move in a direction parallel to said axis.

1,764,218. GRAIN SHOE. THOMAS H. MAYFIELD, Roby, Tex. Filed June 1, 1929. Serial No. 367,710. 3 Claims. (Cl. 111—85.)



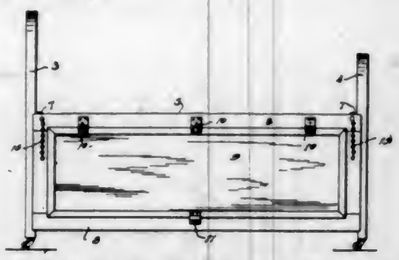
1. A furrow opening device for planters, comprising a pair of parallel spaced plates, a disk operating between the forward ends of the plates, adjustable members for connecting the plates and disk to the plow foot of a planter, and means for connecting the plates to the delivery spout of a planter.

1,764,219. CHIMNEY VENTILATOR. ALEXANDER McDONALD, Pittsburgh, and WILLIAM O. SMITH, Wilkinsburg, Pa., assignors of thirty per cent to said Smith and seventy per cent to John C. Young, Pittsburgh, Pa. Filed Dec. 8, 1927. Serial No. 238,540. 11 Claims. (Cl. 98—66.)



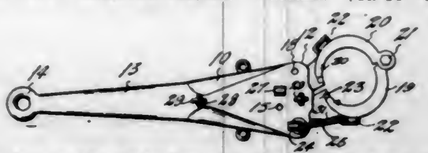
1. A chimney ventilator comprising a main pipe consisting of angular sections, means slidably connecting the sections, a lower frustum consisting of angular sections and secured to the sections of the main pipe, an upper frustum consisting of angular sections and secured to the sections of the lower frustum, and an auxiliary pipe consisting of angular sections secured to the sections of the upper frustum and spaced from the main pipe, the sections of the lower frustum and the main pipe having interfitting slotted portions interlocking such sections against lateral separation.

1,764,220. LIGHT-REFLECTING BED DEVICE. DONALD B. MCLEOD, Vancouver, British Columbia, Canada. Filed Nov. 21, 1929. Serial No. 408,857. 3 Claims. (Cl. 174—172.)



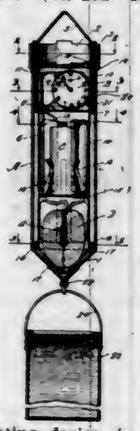
1. A bed device for the light-ray treatment of sick persons comprising, a bedstead supporting a partly transparent mattress of wire-mesh fabric, a light reflecting surface-member adjustably secured to said bedstead whereby light rays may be received upon it and reflected upwardly upon the body of a patient.

1,764,221. TONGS. THEODORE H. MILLS, Fresno, Calif., assignor of one-half to The Guiberson Corporation, Dallas, Tex., a Corporation of Delaware. Filed Dec. 12, 1927. Serial No. 239,294. 2 Claims. (Cl. 81—66.)



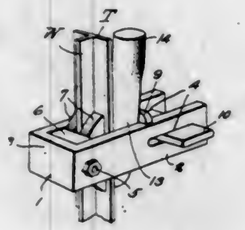
1. In a tongs, a head having a yoke formed with a pair of pivoting holes in parallel planes and a second pair of holes, one at each side of the pivoting holes and adjacent the edge of said yoke, gripping jaws connected at the outer ends by a fixed pivot and formed at their inner ends with outer bearing faces and pivoting holes, a pivot engageable with either pivot hole of the yoke and the pivot hole of one jaw, a closure pin disposed in one of the second pair of holes to engage the outer bearing face of the jaw which is not pivoted to the yoke and means connecting said closure pin with the jaw engaged thereby.

1,764,222. WELL-SHOOTING DEVICE. JESSE A. MORRISON, Salt Creek, and EUGENE T. WILLIAMS, Casper, Wyo., assignors, by mesne assignments, to William J. Cheley, Tulsa, Okla. Filed Sept. 15, 1923. Serial No. 662,963. 12 Claims. (Cl. 102—4.)



6. In a well shooting device, in combination an exploding unit comprising a casing having a self contained time controlling means, and an associated initial exploder, said unit being water tight and adapted to be pre-set in relation to the time controlling unit to set off the initial exploder whenever desired, and a main sand shattering exploder external to said shell and its self contained features, and adapted to be operated by the explosion of the initial exploder within the shell.

1,764,223. POST-DRIVING HEAD. JAMES HENRY OSTEN, White City, Kans. Filed Nov. 30, 1928. Serial No. 322,809. 5 Claims. (Cl. 61—77.)



1. A driving head for fence posts and the like, including a yoke for straddling the same, a block pivotally suspended between the sides of the yoke and bearing against the closed end of the yoke, a guide plate supported in the yoke, a backing wedge therefor, a wedging block insertable into the yoke between the guide plate and a post or the like engaging the block, and an anvil on said wedging block.

1,764,224. PLATEN-ROLLER CLUTCH FOR TYPEWRITERS. ARTHUR PATEMAN, Leicester, England, assignor of one-half to Imperial Typewriter Company Limited, Leicester, England, a British Company. Filed Sept. 3, 1927, Serial No. 217,459, and in Great Britain Oct. 2, 1926. 3 Claims. (Cl. 192—75.)

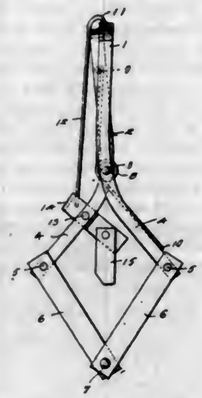


1. In a clutch, the combination with a rotatable hollow shaft, of a disc mounted rigidly on said shaft, a member mounted loosely on said shaft, a dog pivoted at one end in said disc about an axis transverse to the axis of rotation of said shaft, an element slidable axially of said shaft and engaging said dog to move the latter into clutching engagement with said member, a second shaft disposed within said hollow shaft, and means extending through said disc for rigidly connecting said second shaft to said element.

1,764,225. MOLE AND GOPHER TRAP. WILLIAM I. RAYMOND, Portland, Oreg. Filed May 7, 1929. Serial No. 361,049. 2 Claims. (Cl. 43—88.)

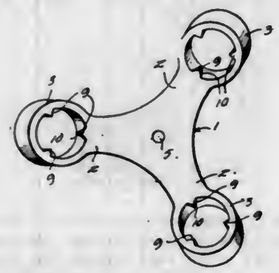
1. A trap of the character described, comprising a pair of inverted substantially U-shaped frames arranged one within the other, a pivotal connecting member between the legs of said frames, said frames each having the free ends of the legs thereof bent to extend outwardly, link elements constituting jaws connecting the legs of one frame with those of the other frame at the ends thereof,

a spring member carried by said pivotal connection and designed to normally urge the free ends of the legs of the frames together, a trip element pivotally attached



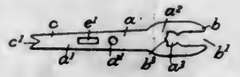
to a leg of one frame, and a trigger bar carried by the yoke of the other frame and adapted to engage said trip to maintain the trap set.

1,764,226. LEG-HOLDING CASTING. PAUL AUGUST RENNACK, Genesee Depot, Wis. Filed Oct. 11, 1928. Serial No. 311,877. 2 Claims. (Cl. 155—196.)



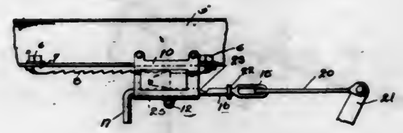
2. A casting for use in connection with leg supported articles comprising a spider body portion having a plurality of radially arranged arms, a plurality of converging sleeve members secured to said arms at the outer ends thereof and integrally formed therewith, and a plurality of tapering wedge shaped leg securing members carried by said sleeves.

1,764,227. ELECTRIC COUPLING MEMBER. DOUGLAS GWYN ROBINSON, Weymouth, England. Filed Nov. 10, 1928, Serial No. 318,378, and in Great Britain Nov. 22, 1927. 11 Claims. (Cl. 173—269.)



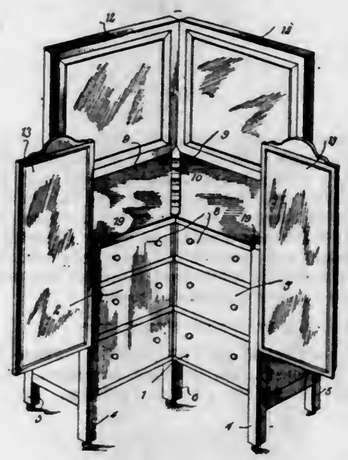
1. An electric coupling member, comprising a strip of metal, one end of said strip being formed to engage a complementary coupling member, the other end of said strip being cranked, and the body of said strip being folded to bring said ends together, said engaging end of the strip having an aperture to receive said cranked end, and the portion of said cranked end projecting through said aperture being adapted to be folded back upon said engaging end after a conductor has been passed through said aperture.

1,764,228. REGULATOR FOR BRAKE RIGGING. WILLIAM H. SAUVAGE, New York, N. Y., assignor, by mesne assignments, to Royal Railway Improvements Corporation, New York, N. Y., a Corporation of Delaware. Filed June 13, 1928. Serial No. 285,172. 14 Claims. (Cl. 188—200.)



1. In a manually operated regulator for truck brake rigging, in combination, a toothed support, a regulating rod in parallel position thereto, a regulator casing having a detent housed therein adapted to engage with said support and be held in positive engagement therewith by said rod, said rod having means to permit release of said detent, thereby to permit relative movement of the detent with respect to said support.

1,764,229. DRESSER. ELIJAH H. SMITH, Morgantown, W. Va. Filed Aug. 2, 1927. Serial No. 210,111. 1 Claim. (Cl. 45—5.)

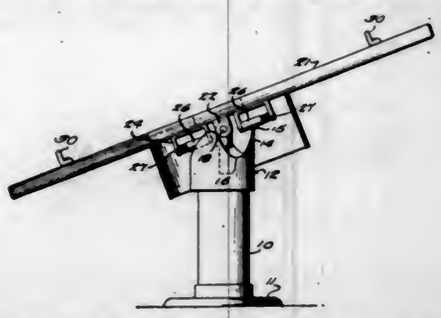


A dresser comprising a body having side portions extending transversely from each other, a top for said body consisting of sections having inner ends meeting at the intersection of the side sections of the body, and a strip extending longitudinally of the meeting ends of the top sections in bridging and covering relation thereto and having its upper face formed with transversely extending recesses constituting seats for articles placed upon said top.

1,764,230. ROTARY TESTER. EWING HORACE TAYLOR, Beaumont, Tex. Filed Oct. 15, 1926. Serial No. 141,805. 6 Claims. (Cl. 272—30.)

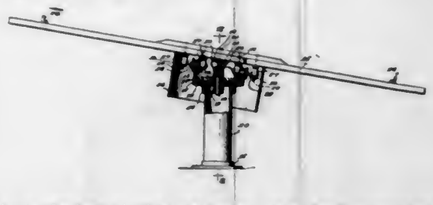
1. A device of the character described comprising a pedestal, a trackway mounted at the upper end of said pedestal and provided with a plurality of circularly arranged undulations having alternate high and low points, each high point of the undulations lying nearly but not exactly opposite one of the low points, a shaft mounted

coaxial with respect to said undulations and adapted to rotate with respect thereto, a teeter board carried by the upper end of said shaft and adapted to oscillate about



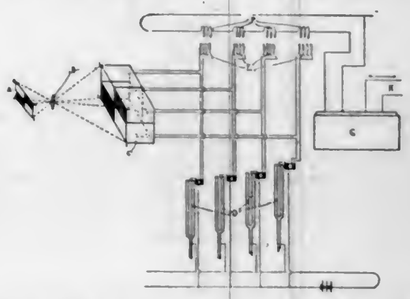
a horizontal axis, a pair of supports arranged on opposite sides of the axis of said shaft, and a roller carried by each of said supports, said rollers being adapted to partake of radial movement with respect to said shaft.

1,764,231. ROTARY TEETER. EWING HORACE TAYLOR, Beaumont, Tex. Filed Dec. 1, 1927. Serial No. 237,089. 5 Claims. (Cl. 27—30.)



1. A device of the character described comprising a support provided with a series of undulations forming a trackway, a teeter board mounted above said trackway and supported to rotate about a vertical axis by said support, said board being adapted to partake of oscillation about a horizontal axis, and a pair of rollers carried by said board and adapted to engage said trackway, said support constituting a lubricant container into which portions of said rollers are adapted to dip.

1,764,232. SYSTEM OF TELEVISION. PEDRO TORRABADELLA, Concepcion Del Uruguay, Argentina. Filed Jan. 21, 1927. Serial No. 162,617. 1 Claim. (Cl. 178—6.)

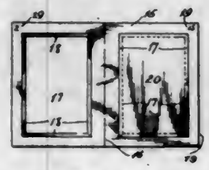


A system of television comprising a transmitting and receiving apparatus, said transmitting apparatus comprising a light sensitive cell having a plurality of cells sensible to the different variations of the intensity of light and adapted to be varied by the passage of light through images brought in its vicinity, each of said cells being connected in circuit with the primary of a transformer, a tuning fork having a predetermined frequency and a source of supply, each of said transformers having their secondaries connected in zones with an amplifier, an antenna connected to said amplifier, whereby upon the change of intensity of light upon said light sensitive cells, the different vibrations of the tuning forks induce different impulses into the secondaries of said transformers, said receiving apparatus comprising an amplifier connected to an antenna for receiving the waves from said transmitting apparatus, a relay in circuit with said amplifier, a plurality of tuned reeds having frequencies corresponding to the frequencies of the tuning forks in said transmitting apparatus connected in circuit with said relay, through a corresponding number of transformers, and a source of supply, each of said reeds being connected to corresponding light cells in a light sensitive cell, a source of light, and a reproducing screen, said light being adapted to cast light rays through said cell whereby the picture transmitted is reproduced on said screen dot by dot with the same position and luminosity.

1,764,233. STRING FROM ANIMAL ORIGIN AND PROCESS FOR MANUFACTURING THE SAME. MARCEL VARINOIS, Paris, France, assignor to Société Anonyme des Laboratories Robert & Carriere, Paris, France. Filed July 5, 1929, Serial No. 376,294, and in France May 16, 1929. 2 Claims. (Cl. 117—52.)

2. Strings for rackets, musical string instruments and for surgical purposes, made from fresh animal tendons or sinews whose fibers are cleaned, sterilized, dried at low temperature, separated and twisted to the desired size.

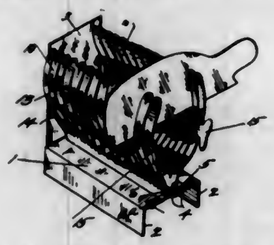
1,764,234. BOOK REPAIRING. JAMES W. WARD, Pittsburgh, Pa. Filed June 4, 1928. Serial No. 282,785. 6 Claims. (Cl. 281—38.)



1. A method of repairing books which includes separating the leaves from the old binding, uniting a binder strip to each leaf at an edge thereof, the joining edges of the leaf and the strip being skived whereby to form a joint passing through and diagonally between the opposite surfaces of the leaf, the edge of the binder strip parallel with the joint being free to be secured in the book cover.

3. A book leaf having a repair strip attached to its edge, the meeting edges of the strip and the leaf overlapping and forming a joint passing through and obliquely between the opposite surfaces of the leaf.

1,764,235. HOLDER FOR CUTTING FRUIT. FRIEDRICH WILMKING, Gutersloh, Westphalia, Germany. Filed Aug. 4, 1928, Serial No. 297,457, and in Germany Apr. 1, 1928. 2 Claims. (Cl. 146—150.)



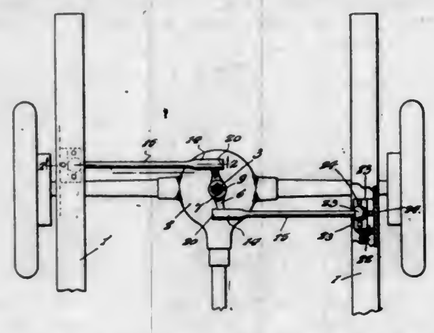
1. A holder for cutting fruit, including a base formed at one end with an upright wall, projections rising from the base at the end remote from the wall, a pair of slotted holder sections removably engaging the upright wall and projections, and latching means cooperating with the projections to prevent separation of the holder sections from the wall or projections, said wall closing the space between the sections at one end of the latter.

1,764,236. MOUNT FOR CALENDARS. ERNEST ALFRED ABBOTT, Sale, England. Filed Nov. 29, 1929, Serial No. 410,577, and in Great Britain July 27, 1929. 3 Claims. (Cl. 40—121.)



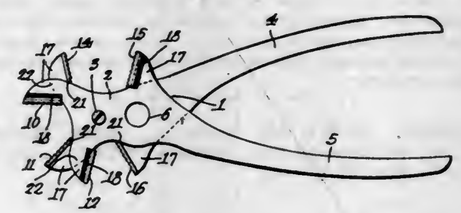
1. A combined calendar, catalogue holder and postal folder, comprising a back-piece having means for suspending it on a wall, a pocket on the front of the back-piece, a calendar on the front of the article, which back-piece has one edge folded over double towards the front of the back-piece and perforated, and is also creased in the direction parallel to the folded over edge in such manner as to facilitate folding of the article and at such a location that when the back-piece is so folded an edge thereof will reach under the aforesaid doubled over edge, a string threaded through said perforations, and a tab located in such a position on the rear face of the back-piece as to be brought close to the string when the back-piece is folded under the aforesaid doubled over edge, which tab is adapted to have the string secured under it, for the purpose specified.

1,764,237. EQUALIZER BAR. THEBO J. APPLEBAKER, Jacksonville, Oreg., assignor of one-half to A. S. Kleinhammer, Jacksonville, Oreg. Filed Apr. 3, 1929. Serial No. 352,300. 1 Claim. (Cl. 280—104.)



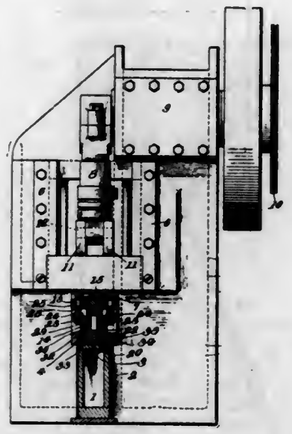
Apparatus for the purpose set forth comprising a pivot member, an equalizer bar mounted on said pivot member, links, means for establishing universal connections between the outer ends of the links and the sills of an automobile chassis, tubular sockets at the inner ends of the links having keyhole slots in their bottoms, pins carried by the ends of the equalizer bar and rising through said slots and provided within said sockets with balls, cupped washers within the sockets engaging opposite sides of the balls, an expansion spring in each socket between the inner washer and the base of the socket, a plug fitted in the outer end of the socket and bearing against the outer washer, and means for locking the plug in place.

1,764,238. NUTCRACKER. ADOLPH E. ASHLEMAN, Waco, Tex. Filed Dec. 27, 1928. Serial No. 328,722. 2 Claims. (Cl. 146—13.)



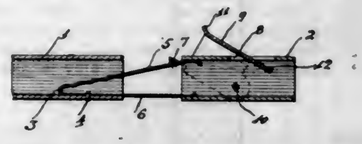
1. A tool of the class described, comprising pivotally connected heads having cooperating jaws, and handles joined to the heads, the handles being trough-shaped in cross section, one head having a laterally projecting lug, and a U-shaped spring engaged removably through the lug, the spring comprising arms received at their ends in the trough-shaped handles, the handles being cut away on a bevel on the same side of the tool at the place of juncture between the handles and the heads, thereby to render the lug accessible, and to facilitate the insertion of the spring through the lug.

1,764,239. MECHANISM FOR CURLING THE EDGES OF IRREGULAR-SHAPED CONTAINERS. CHARLES J. AULBACH, Passaic, N. J., assignor to Continental Can Company, Inc., New York, N. Y., a Corporation of New York. Filed Nov. 28, 1928. Serial No. 322,507. 9 Claims. (Cl. 113—16.)



1. A mechanism for die curling the edge of an irregular shaped container, comprising a reciprocating head, a die carried by said head for engaging the walls of the container body for curling the same, and means carried by said head for holding the walls of the container against the entering walls of the die as the container passes into said die for insuring a uniform curl.

1,764,240. SAFETY SPRING CLASP. ABRAHAM BLUSTEIN, Washington, D. C. Filed Feb. 21, 1929. Serial No. 341,786. 4 Claims. (Cl. 24—230.)



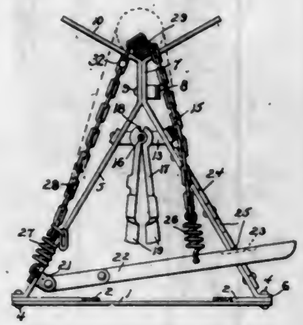
4. A safety catch comprising two members which are separately secured together, one of said members having a slot and the other of said members having means cooperating with said slot to lock the members together, and additional means on one of said members passing thru said slot and cooperating with said means to unlock the members.

1,764,241. CONTAINER. MILON H. BORZIN, Chicago, Ill. Filed Mar. 19, 1928. Serial No. 262,958. 1 Claim. (Cl. 206—1.5.)



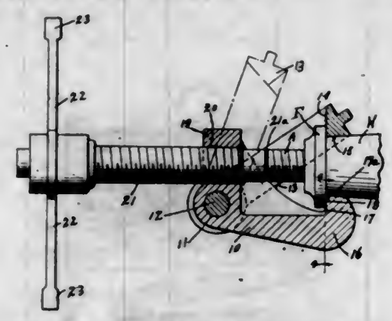
A container of the class described comprising a bottom, side walls rising from the bottom, a rear wall rising from the bottom and having an inwardly directed ear at its upper edge parallel with the bottom, a pin rising from said ear, a front wall rising from the bottom and having an inwardly and rearwardly directed wall extension parallel with the bottom and merging into a downwardly extending partition in parallelism with the front wall and being provided with an opening, said front wall, extension and partition forming a compartment for a lock, a cover having a plate extension under one end thereof, said plate extension being provided with a slot to receive the pin, and a bolt at the other end of the cover projecting therefrom to be disposed through the opening in the partition.

1,764,242. WORKHOLDING DEVICE. ARTHUR BROWN, Lake City, Iowa. Filed May 11, 1929. Serial No. 362,376. 4 Claims. (Cl. 144—288.)



1. In work holding devices, a supporting frame, a clamp having two arms with jaws at one end and a rule joint at the other end, a pin on said frame on which said clamp arms are fulcrumed, said pin constituting a part of said rule joint, said frame including a stop bar, a lever fulcrumed to said frame, a flexible element, one end of which is connected to said lever, the arms of said clamp being apertured to permit said flexible element to pass through, and a stop on said flexible element to engage one arm of said clamp while holding the other arm against said stop bar for the purposes specified.

1,764,243. WHEEL PULLER. ARTHUR L. CORNWELL, Wellsville, N. Y. Filed Mar. 16, 1929. Serial No. 347,571. 3 Claims. (Cl. 29—85.)



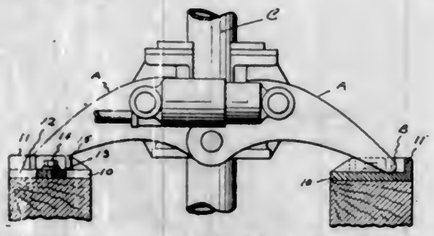
1. A device of the kind described comprising a body equipped with a hub engaging beak, a yoke shaped latch pivoted to said body equipped to engage the hub opposite said beak, said body equipped with an offset extension, and an operating stem threaded in said extension adapted to engage the end of an axle within said hub.

1,764,244. DENTAL IMPRESSION INSTRUMENT. JOHN M. CRAIGO, Hartford, Conn. Filed Oct. 17, 1928. Serial No. 313,020. 5 Claims. (Cl. 32—6.)



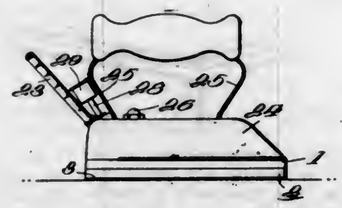
1. A device adapted to constitute a part of a dental impression mould, and comprising a saddle formed of two parts, each part having a wing and a flange, said wings being adapted to straddle the gum and said flanges being adapted to abut against one another, one of said flanges having dowel pins, the other of said flanges having openings in which said dowel pins are adapted to engage, and a U-shaped clip fitting about said flanges for holding parts together.

1,764,245. FULCRUM PLATE FOR SPIDERS. CHARLES S. CRICKMER, Dallas, Tex., assignor to The Guiberson Corporation, Dallas, Tex., a Corporation of Delaware. Filed Apr. 15, 1929. Serial No. 355,167. 3 Claims. (Cl. 24—248.)



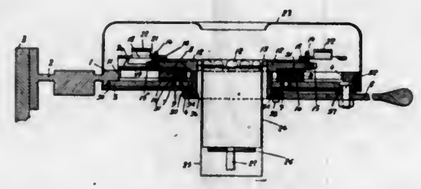
1. The combination with a pair of oppositely arranged sides of a support, of fulcrum plates disposed one on each of said sides, a pair of arms, and means pivotally connecting said arms at their inner ends, said arms having their opposite ends loosely resting on the respective plates, said plates each having upstanding walls arranged to limit the lateral movement and also the longitudinal travel of said arms.

1,764,246. ELECTRIC IRON. CARROLL DE ATLEY, Baltimore, Md., assignor to Superior Steam Iron Company, Inc., Baltimore, Md., a Corporation of Maryland. Filed Feb. 1, 1924. Serial No. 689,868. 3 Claims. (Cl. 68—26.)



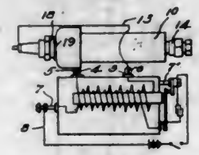
1. A pressing iron including in combination a body having a superheating chamber located substantially centrally of the body, means for supplying said chamber with steam, said body having a channel lying in a horizontal plane, surrounding said superheating chamber and connected thereto at a point above the bottom portion of the chamber whereby water of condensation will be trapped in the superheating chamber and regenerated into steam, said body having ports leading from said channel to the pressing face of the iron.

1,764,247. MACHINE FOR TURNING DOWN AND FOLDING THE ENDS OF BOX COVERS. GUILLAUME DUCART, Paris, France. Filed May 31, 1927, Serial No. 195,521, and in France June 4, 1926. 3 Claims. (Cl. 93—2.)



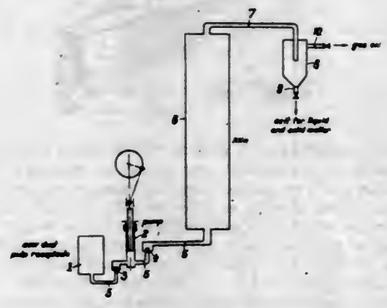
1. A machine for turning down and folding the ends of wrappers for containers comprising a frame having a central circular opening, movable blades mounted on said frame, in equiangular relation to said opening, means to move the blades radially of said opening to form folds in said wrapper and means to rotate said blades a partial revolution to smooth down the folds formed in the wrapper against the end of the container, said means for advancing said blades also being operable in an opposite direction to withdraw said blades.

1,764,248. SPARK-PLUG TESTER. ALEXANDER C. EKLE, Mankato, Minn. Filed Dec. 26, 1923. Serial No. 682,736. 1 Claim. (Cl. 175—183.)



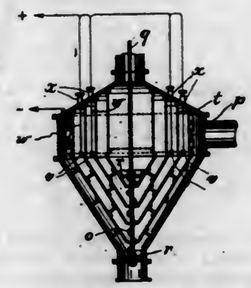
A spark plug tester embodying a casing, a spark coil mounted within the casing and having contact points and having a buzzer, a bolt extending through the casing and contacting with one of the contact points of the spark coil, a bolt extending through the opposite side of the casing and engaging another contact point of the spark coil, a bolt extending through one end of the casing and in circuit with the buzzer of the spark coil, a wire leading from the first mentioned bolt to a spark plug, a plug supporting cylinder in which the spark plug is positioned, said plug supporting cylinder adapted to rest on the second mentioned bolt to ground the circuit passing to the spark plug, and said plug supporting cylinder having a sight opening in one end thereof.

1,764,249. PROCESS OF TREATING SAWDUST. EDGAR EALENBACH, Berlin, Germany. Filed Aug. 12, 1926, Serial No. 128,911, and in Germany Aug. 18, 1925. 3 Claims. (Cl. 202—5.)



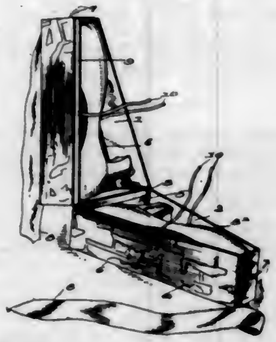
1. A process of decomposing sawdust which comprises transporting sawdust as an aqueous pulp for about two hours through a pressure proof system at a temperature at which the sawdust is appreciably decomposed and at a superatmospheric pressure corresponding to the vapor pressure of the aqueous pulp at said temperature.

1,764,250. SEPARATING AND MIXING APPARATUS. ERWIN FALKENTHAL, Berlin-Dahlem, Germany. Filed Oct. 4, 1923, Serial No. 666,608, and in Germany Apr. 23, 1921. 6 Claims. (Cl. 183—75.)



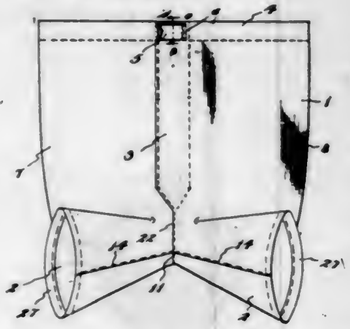
1. In an apparatus for settling foreign particles of dust-size from flowing matter, in combination: a compartment arranged for being passed through by the flowing matter, a vertical grid forming a wall of said compartment and arranged for being passed through by the same flowing matter, the grid consisting of a very thin sheet, preferably of metal, and having numerous equally sized sharp edged openings, said openings having no projecting sharp edges and being a distance apart from each other equal with the minimum dimension of an opening, said distance being measured in the direction of said dimension, the grid being thus enabled for producing on its rear side a whirling zone of uniform thickness in the flowing matter, means being provided for collecting the foreign particles falling down behind the said grid from the said whirling zone.

1,764,251. SHOE BOX. JOE FARAGO, Chicago, Ill., assignor to Carson Pirie Scott & Co., Chicago, Ill., a Corporation of Illinois. Filed June 13, 1928. Serial No. 285,183. 1 Claim. (Cl. 206—44.)



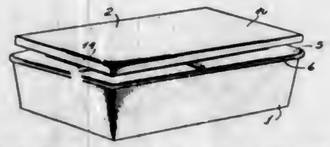
A box consisting of a pair of like sections each having a symmetrical trapezoidal rear or bottom wall and rectangular side walls extending from the edges of said rear wall at right angles thereto, said rectangular sections being all of the same width, the walls rising from the longer parallel sides of the rear walls being hingedly connected whereby the sections may close on each other with their side walls alined, the closed box forming a truncated wedge adapted to rest in stable equilibrium upon its base, and tie ribbons connecting the shorter parallel sides of the rear walls whereby to enable the box to be lifted without stressing the side walls.

1,764,252. UNDERWEAR. HARRISON H. FESSLER, Orwigsburg, Pa. Filed Oct. 10, 1928. Serial No. 311,673. 2 Claims. (Cl. 2—224.)



1. A garment comprising a body having leg extensions, said body consisting of side sections meeting at the front and having recesses at their upper ends and intermediate their depths, the front portions of the side sections between the recesses being extended to provide flaps and the flaps being folded longitudinally to provide inner and outer layers sewed together along their margins, the folded flaps being disposed one in overlying relation to the other and the side sections being sewed together below the overlapped flaps and along the margins of the upper and lower portions of the flaps, the intermediate portions of the flaps being free and readily separable from each other to form a normally closed fly, a connecting strip joining the upper marginal portions of the side sections and spaced above the overlapped flaps, the upper marginal portions of the side sections and said strip being folded downwardly and secured to form a belt receiving pocket extending about the body and having openings in its outer wall at the front of the garment above the flaps and constituting a passage for end portions of a belt.

1,764,253. BAKING PAN. JOHN W. FOERCH, Jr., Wilkes-Barre, Pa. Refiled for abandoned application Serial No. 87,265, filed Feb. 10, 1926. This application filed Feb. 21, 1930. Serial No. 430,330. 2 Claims. (Cl. 53—6.)



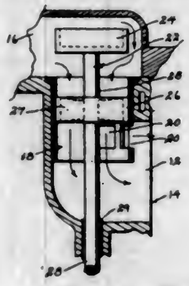
1. A baking pan comprising a body formed with inner and outer walls uniformly spaced apart the space between the walls being filled with a filler of fireproof material, and an imperforate cover having a flat under surface, said cover being provided with means adapted to engage the upper edge of the pan body to keep said cover uniformly spaced from said body entirely around the top thereof, thereby providing means for preventing the moisture from reaching the contents of the pan and at the same time providing means for preventing the burning of said contents.

1,764,254. SYRINGE HYDROMETER. FRANCIS L. FREAS, Conshohocken, Pa. Filed Oct. 23, 1925. Serial No. 64,446. 1 Claim. (Cl. 265—45.)



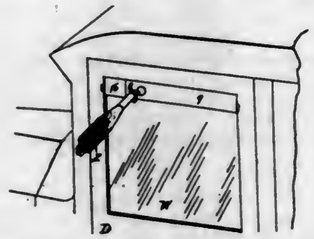
In a hydrometer syringe, the combination of a transparent tubular body portion affording a liquid chamber, and a hydrometer float within said chamber having its bulb characterized by parallel-spaced longitudinally-extending spiral ridges serving to prevent adherence to the side walls of said body portion, to maintain said float in axial equilibrium within the tubular body portion and also to obviate interference with correct reading of the instrument.

1,764,255. INTERNAL-COMBUSTION ENGINE VALVE AND VALVE GEAR. CHARLES HENRY MONROE FRY, Point Pleasant, W. Va. Filed Aug. 3, 1926. Serial No. 126,811. 3 Claims. (Cl. 123—188.)



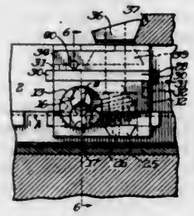
1. In an internal combustion engine valve and gear, a valve comprising a valve head mounted on a valve stem having guide means substantially adjacent said valve head and the other extremity of the said stem and a valve sleeve inserted in the engine block providing a bearing for one of the aforesaid stem guide means and providing a seat for the aforesaid head engaging the outer periphery of said head when the valve is closed; said sleeve having ports substantially adjacent to discharge end and increasing the discharge thereof.

1,764,256. SASH-MOUNTED AUTOMOBILE SIGNAL. SAMUEL A. GAEDE, Los Angeles, Calif. Filed May 18, 1929. Serial No. 364,191. 7 Claims. (Cl. 116—52.)



1. A manually operated automobile signal device including a ball having a projecting semaphor arm and an oppositely projecting operating lever, a bearing socket for the ball having a series of lever guideways merging into a crotch, abutment means for tilting the lever to a ready position in the crotch, and borns on the lever having cam notches to engage said means.

1,764,257. PLATE HOOK. HYMAN ELI GOLBER, Chicago, Ill., assignor to The Miehle Printing Press & Manufacturing Company, a Corporation of Illinois. Filed Oct. 15, 1927. Serial No. 226,302. 10 Claims. (Cl. 101—388.)



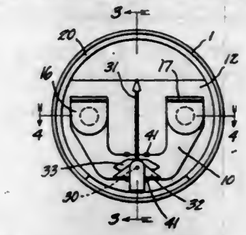
2. In printing plate securing means, the combination of a plate supporting base, having a groove, rack means within said groove, a plate engaging hook including a rack engaging pinion, the diameter of the pitch circle of the teeth on said pinion being less than one-half of the diameter of the pinion.

3. A printing plate supporting element having a groove, rack means within said groove, and a clip adapted to be wedged within said groove to hold said rack means securely in position.

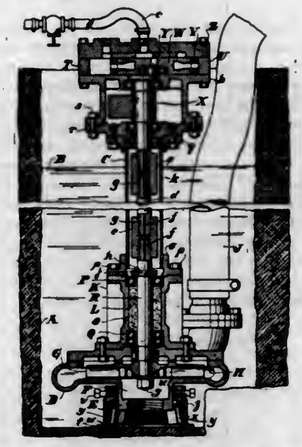
13. In printing plate securing means, the combination of a plate supporting base, a rack associated therewith, and a plate engaging hook including a driven element having a tooth the base of which is located in a plane which extends at right angles to the axis of said element, said tooth being arranged to pass into said rack sidewise of the rack teeth, thereby adapting it to remove foreign matter accumulated therebetween.

1,764,258. ELECTRICAL MEASURING INSTRUMENT. WILLIAM HALLACK, Dearborn, Mich. Filed Dec. 21, 1925. Serial No. 76,919. 8 Claims. (Cl. 171—95.)

5. An electrical instrument comprising a support, a one-piece flat substantially U-shaped conductor carried thereby and insulated therefrom, binding posts connected to the respective end portions of said conductor, a permanent magnet, means including an armature and a pointer supported by said conductor and influenced by the magnet and by the magnetic field resulting from flow of current in said conductor to indicate the direction of said flow.

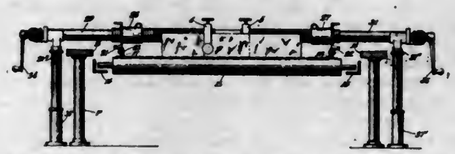


1,764,259. PORTABLE PUMPING UNIT. CHARLES C. HANSEN, Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed Oct. 14, 1927. Serial No. 226,109. 1 Claim. (Cl. 103—87.)



In a portable pumping unit, the combination of a rotary motor having a shaft, a pump having a shaft arranged coaxially with the shaft on the motor, an intermediate shaft between the pump and motor shafts, means slidably interlocking the intermediate shaft to the pump and motor shafts, a distance piece secured to the pump and having a chamber therein forming a reservoir for lubricant, frictionless bearings for the pump shaft seated in the distance piece and adapted to receive lubricant from the chamber, and a tube encircling the shafts and connected with its ends to the motor and the distance piece to support the motor above the surface of the liquid being pumped.

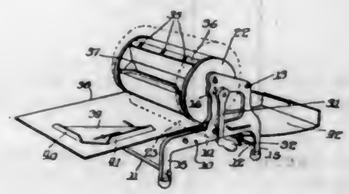
1,764,260. DECKLE FOR PAPER-MAKING MACHINES. JAMES W. HARRIS, Rumford, Me., assignor, by mesne assignments, to Paper Machinery Corporation, Dayton, Ohio, a Corporation of Ohio. Filed Aug. 4, 1925. Serial No. 48,024. 3 Claims. (Cl. 92—44.)



1. In a paper making machine a substantially stationary deckle, comprising a sheet of flexible material,

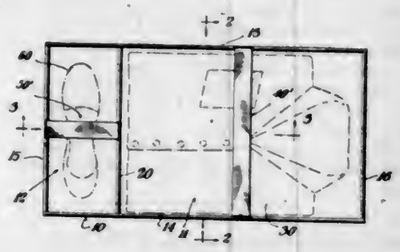
means for holding the same, and a laterally adjustable means to which the flexible material holding means is removably secured for supporting the holding means.

1,764,261. DUPLICATING MACHINE. HERMAN F. HEILEMAN, Chicago, Ill., assignor to Heyer Duplicator Company, Inc., Chicago, Ill., a Corporation of Illinois. Filed July 20, 1928. Serial No. 294,106. 4 Claims. (Cl. 101—116.)



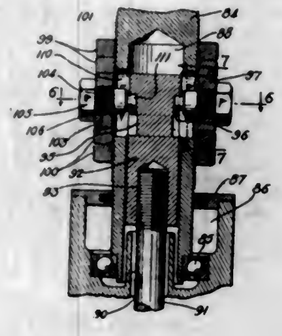
1. In a duplicating machine, the combination of a frame comprising side members, a compression roller journalled between the side members, each side member having upper and lower journal openings formed therein, half circular journal flanges formed on the inner faces of the respective side frame members concentrically with the respective journal openings, a stencil carrying cylinder provided at each end with a hub adapted to socket within corresponding half circular journal flanges, each of the hubs being provided with a centrally disposed opening, a shaft entered through corresponding journal mountings in the side frame members and through the openings in the cylinder hubs for mounting the cylinder, and a handle on the end of the shaft, the arrangement providing for the interchangeable use of stencil cylinders of different sizes.

1,764,262. BATH-ROBE PACKAGE AND THE LIKE. SAMUEL HOROWITZ, New York, N. Y., assignor to Royal Robes Co., Inc., New York, N. Y., a Corporation of New York. Filed Apr. 13, 1928. Serial No. 269,855. 9 Claims. (Cl. 206—7.)



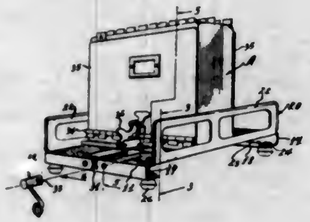
1. A box or like container for bathrobes, bathrobe and slippers combinations, and the like, comprising, in combination, a receptacle having side walls, and a combined retaining and reenforcing member spanning said receptacle and having a tab at each end passing into a corresponding side wall of said receptacle, the tab at one end of said combined retaining and reenforcing member being more readily insertible and removable than the tab at the other end of said combined retaining and reenforcing member.

1,764,263. BOTTOM ATTACHMENT FOR NONREVERSING ATTACHMENT FOR MOTOR-DRIVEN PUMP HEADS. CARL E. JOHNSON, Los Angeles, Calif., assignor to United States Electrical Manufacturing Company, Los Angeles, Calif., a Corporation of California. Filed Jan. 11, 1926. Serial No. 80,685. 12 Claims. (Cl. 103—102.)



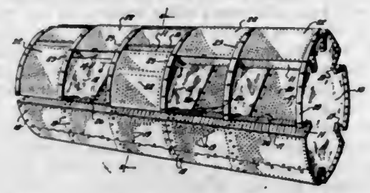
1. In a deep well turbine pump, the combination of: a pump head; a vertically extending motor shaft rotatably mounted in said pump head; a pump shaft extending into a position adjacent said motor shaft and formed in lengths adapted to unscrew one from the other to raise the top of said pump shaft should said shaft be rotated in a reverse direction; extensions on the upper end of said pump shaft; and means drivably connected to said motor shaft and providing slots opening upward and in which said extensions rest unless said shaft is rotated in a reverse direction at which time said extensions are removed from said slots.

1,764,264. TRAY BINDER. JESSE M. JONES and ROBERT R. WEBB, Los Angeles, Calif., assignors to Charles R. Hadley Company, Los Angeles, Calif., a Corporation of California. Filed Feb. 13, 1928. Serial No. 254,020. 7 Claims. (Cl. 129—16.)



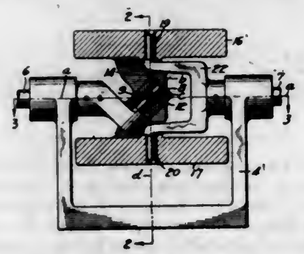
1. A tray binder comprising a support provided with a laterally adjustable extension member, a means including a foot to secure the extension member in different positions of adjustment, clamping members, a means on the support to move one of the clamping members toward the other, and end members mounted on the clamping members.

1,764,265. CYLINDER FOR LAUNDRY MACHINES. JOHN JORGENSON, Racine, Wis., assignor of one-half to Michael Jorgenson, Racine, Wis. Filed Nov. 5, 1926. Serial No. 146,399. 3 Claims. (Cl. 68—18.)



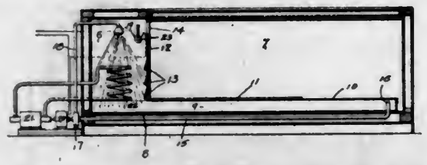
1. As a new article of manufacture, a plate for reciprocating cylinders having a plurality of tapered openings, the tapers of said openings being graduated as to inclination toward the side edges of the plate, to act on a liquid when the plate is moved, the metal adjacent the openings being non-protruding so that the plate surfaces are smooth.

1,764,266. TORQUE TRANSMITTER. LEOPOLD M. KARNASCH, San Francisco, Calif. Filed Oct. 10, 1927. Serial No. 225,385. 5 Claims. (Cl. 74—14.)



1. A torque transmitter comprising a driving shaft, a driving pin affixed on and inclined to said shaft, a body rotatably mounted on said driving pin, a flywheel directly pivoted to said body, and a driven shaft pivoted to said flywheel.

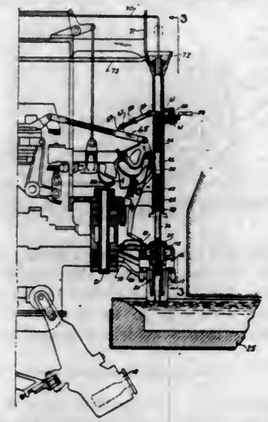
1,764,267. APPARATUS FOR AND METHOD OF REFRIGERATION. CHARLES A. KOHL, St. Louis, Mo., assignor to St. Louis Butcher's Supply Co., St. Louis, Mo., a Corporation of Missouri. Filed Oct. 15, 1925. Serial No. 62,523. 7 Claims. (Cl. 62—104.)



7. The combination with a cooling chamber, of means for retaining a pool of cooled secondary refrigerant in said chamber pipe coils for a primary refrigerant in said chamber, and means for withdrawing said cooled secondary refrigerant from said pool and spraying it into contact with the air in said chamber and then into contact with said coils.

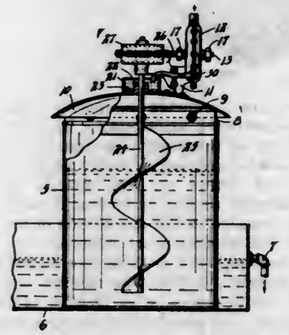
1,764,268. GLASS-FORMING MACHINE. RICHARD LA FRANCE, Toledo, Ohio, assignor to Owens-Illinois Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Nov. 1, 1926. Serial No. 145,456. 6 Claims. (Cl. 49—5.)

6. In a machine for forming hollow glass articles, the combination of a blank mold, a neck mold, means for introducing a charge of glass into the molds, a rod projecting into the molds and having a screw threaded or spiral surface formation for forming a threaded surface on the interior of a blank within the molds, mechanism including a train of gears for imparting to said rod a



combined rotative and lengthwise movement for withdrawing it from the mold, mechanism for imparting a straight line movement of the rod away from the mold, and an actuating device connected to said mechanisms and arranged to operate them in succession by a single movement of the actuating device.

1,764,269. MILK COOLER AND AERATOR. RALPH B. LATTERELL, Kandiyohi, Minn. Filed May 7, 1928. Serial No. 275,772. 6 Claims. (Cl. 257—74.)

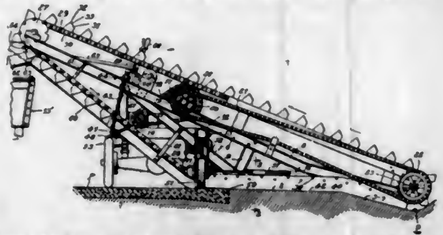


3. An aerating and cooling device for milk, assembled in a single unit and adapted to be applied to cover the top of a milk can, said device comprising a dome-shaped cap adapted to be secured in the top opening of a milk can to overlie the same, said cap having a plurality of openings therein, for the admission and exhaust of air to and from the milk can, a vertical shaft journaled in said cap and adapted to project downwardly therefrom into the milk of the milk can, stirring means mounted on said shaft, a water motor fixed to the top of said cap, means for driving said shaft from said water motor, an annular casing formed at the top central portion of the said cap and having a plurality of circumferential openings therein, and a conduit leading from the exhaust port of said water motor to the interior of said casing.

1,764,270. ROAD-SHOULDER-FINISHING MACHINE. HERMAN K. LEHMER, Rockford, Ill. Filed Oct. 5, 1928. Serial No. 310,511. 30 Claims. (Cl. 37—109.)

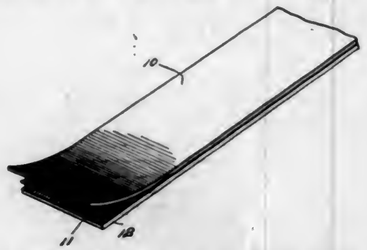
1. A machine of the character described comprising, in combination, a portable carrier arranged to travel on a

pavement, a frame mounted on said carrier in transverse relation thereto with one extremity overlying the side of the road and the other extremity overhanging the pavement alongside the carrier, and an endless chain belt having ground cutting and conveying means thereon carried by and operating on said frame, the portion of the



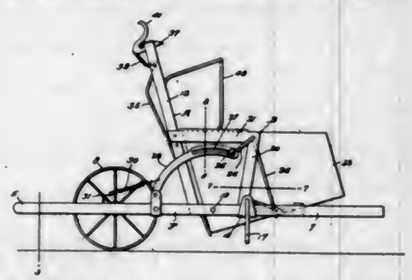
frame overlying the side of the road having guideways provided thereon for determining the conformation of the road shoulder, the ground removed in the cutting of the shoulder being arranged to be dumped at the opposite end of the frame into a vehicle arranged to be run therebeneath.

1,764,271. METHOD OF PRODUCING A COMPOSITE METAL. FREDERICK C. LEONARD, Providence, R. I., assignor to Leonard-Rooke Co., Providence, R. I., a Corporation of Rhode Island. Filed Dec. 8, 1925. Serial No. 74,144. 4 Claims. (Cl. 78—93.)



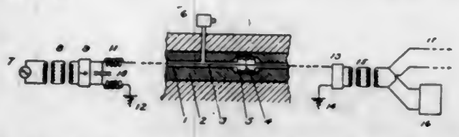
1. A method for producing composite metal for thermostatic use, comprising assembling a plate of expandible metal and a plate of relatively non-expandible metal with a thin leaf therebetween of a metal fusible at a lower temperature than either of said plates, progressively feeding the assembly section by section through a welding zone, exerting pressure on the one section of the assembled metals within the welding zone while at the same time transmitting welding heat to both the upper and lower plates of the pressed portions, the pressed portions being fed out of the welding zone after melting of the intermediate leaf thereof and another section positioned in the welding zone.

1,764,272. GRAIN STOOKER. AMÉDÉE LETHIECQ, Neville, Saskatchewan, Canada. Filed June 19, 1928. Serial No. 286,694. 3 Claims. (Cl. 56—419.)



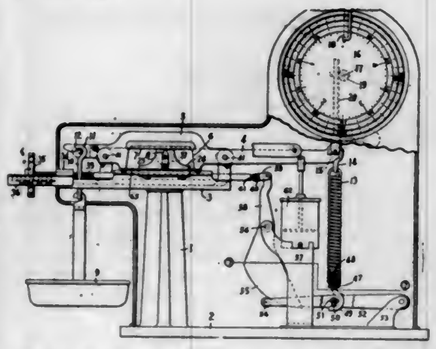
1. In combination, a main frame adapted to have one side thereof supported on a binder, wheel means for supporting the other side of the main frame, an auxiliary frame, said arms pivoted to the main frame intermediate the ends thereof for rocking the auxiliary frame, the arm adjacent said one side provided with a slot, a trip crank rockable on the main frame and having a projection slidable in said slot, brackets rigidly secured to the intermediate ends of the arms and auxiliary frame, the arm adjacent said one side provided with a slot, a trip crank rockable on the main frame and having a projection slidable in said slot, brackets rigidly secured to the intermediate ends of the arms and auxiliary frame, a bracket having trunnions pivoted to the brackets, a bar pivoted at one end to the main frame and a slot on the other end, one of said trunnions terminating in a laterally extending crank arm slidable in said bar slot, a spring on the main frame connected with said bar for urging said bracket to a dumping position, a head pivotally connected with the auxiliary frame having tines mounted therein, a latch pivotally connected to the main frame and engageable with said head for locking said head, and arm on the latch adapted to abut the main frame in dumping position to release the head, so that the sheaves will slide therefrom.

1,764,273. ELECTRICAL POWER-TRANSMITTING SYSTEM. ROBERT A. MILLIKAN, Chicago, Ill. Filed July 13, 1921. Serial No. 484,397. 8 Claims. (Cl. 171—97.)



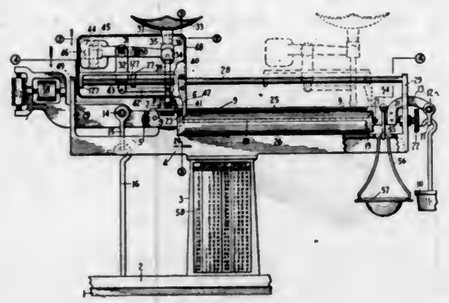
1. A long distance high tension electrical power transmitting system comprising a conduit, a conductor within said conduit, means for supporting the conductor in the axis of the conduit, the surface of said conductor and the inner surface of the conduit being prepared by heat treatment, said conduit having a high vacuum therein, means to maintain such high vacuum in the conduit, means to apply a high voltage direct current electromotive force at one end of the conductor, and means to utilize an electric current of high voltage at the other end.

1,764,274. BALANCING MECHANISM. WILLIAM R. MITTENDORF, Cincinnati, Ohio, assignor, by mesne assignments, to International Business Machines Corporation, New York, N. Y., a Corporation of New York. Filed Dec. 15, 1922. Serial No. 607,207. 61 Claims. (Cl. 265—39.)



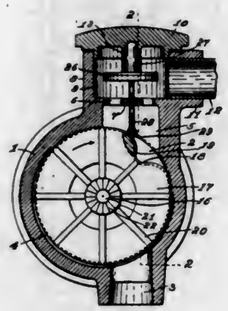
1. In a balancing mechanism, a supporting structure, a load supporting lever having an elongated pivot bearing, a pivot member mounted on said supporting structure adjustable along said pivot bearing and forming the sole support for said lever, and means to hold said lever against lengthwise movement relative to said supporting structure.

1,764,275. COUNTING SCALE. WILLIAM R. MITTENDORF, Cincinnati, Ohio, assignor, by mesne assignments, to International Business Machines Corporation, New York, N. Y., a Corporation of New York. Filed Oct. 9, 1923. Serial No. 667,511. 21 Claims. (Cl. 265—30.)



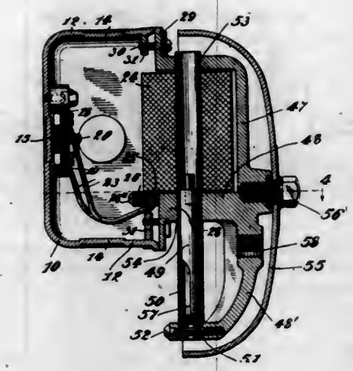
1. In a scale, a beam, a computing chart supported adjacent to but independently of said beam, a unit receptacle adjustable lengthwise of said beam and arranged to subject the beam to the weight of a unit in said receptacle, an indicating member supported independently of said unit receptacle and movable with said unit receptacle along said beam and cooperating with said chart, and means supported independently of said beam for adjusting said unit receptacle and said indicating member.

1,764,276. FLUSH VALVE. WILLIAM MOONEY, Waterloo, Iowa. Filed Sept. 15, 1928. Serial No. 306,241. 3 Claims. (Cl. 221—101.)



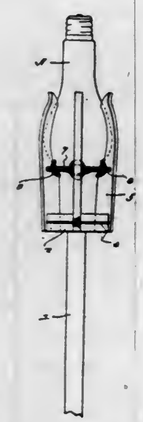
1. In a device of the character described, a casing having oppositely located inlet and outlet ports, a valve chamber in communication between said inlet port and a supply of liquid under head, a valve in said chamber to close said inlet port, an adjustable movable device in said casing coacting with said valve to intermittently cause the opening of the valve while movably adjustably controlling the passage of liquid from said inlet port through the casing to said outlet port, and resiliently controlled manually operable starting means axially longitudinally shiftable and releasably engageable with said movable device, said movable device having a releasable locking engagement with said valve at each actuation of the movable device to restrict the device to a single action induced by said starting means.

1,764,277. ELECTROMAGNETIC BELL. JOHN F. MORAN, Jersey City, N. J. Filed May 12, 1923. Serial No. 638,475. 7 Claims. (Cl. 177—7.)



2. In a signal mechanism, a tubular coil to develop a symmetrical magnetic field about its axis, a plunger-core having its stroke through said coil, said plunger-core having axial asymmetry over the follow portion of its length for effecting bias of said magnetic field to damp said plunger-core against oscillation following its stroke.

1,764,278. IMPLEMENT. ODIN OLBY, Ashland, Wis. Filed Sept. 21, 1928. Serial No. 307,481. 3 Claims. (Cl. 294—20.)

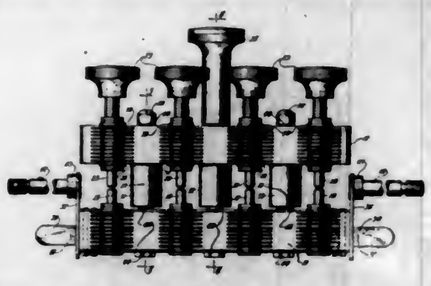


1. In an implement of the character described, a handle, an annular head at one end of the handle, said head being formed with radiating slits and with a peripheral groove, a plurality of fingers engaged at one of their ends in said slits, a member arranged in said groove and disposed through said ends of the fingers for pivotally connecting the same to the head, and tensional means for contracting said fingers.

1,764,279. SPARK GAP. HOWARD H. OSBORN, Chicago, Ill., assignor to H. G. Fischer & Co., Chicago, Ill., a Corporation of Illinois. Filed May 13, 1925. Serial No. 29,897. 6 Claims. (Cl. 250—38.)

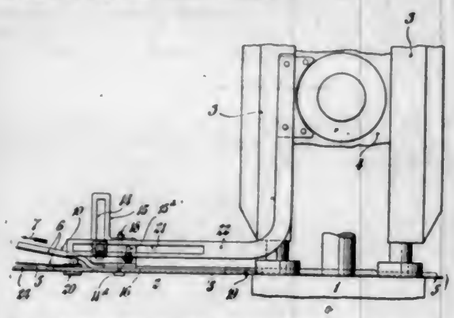
5. A spark gap device, comprising a plurality of pairs of spark gap electrodes, each pair comprising a fixed and

a movable electrode, means for adjusting the movable electrode of each pair toward and into contact with its



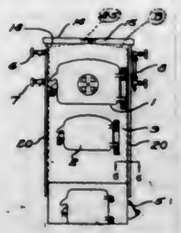
companion fixed electrode, and means for simultaneously moving all of said movable electrodes toward and from their companion fixed electrodes.

1,764,280. MACHINE FOR CUTTING BISCUITS FROM DOUGH. LAURENT RONDOLIN, Bermondsey, London, England, assignor to Laurent Rondolin and Peek Frean & Company, Limited, London, England. Filed Aug. 29, 1929, Serial No. 389,260, and in Great Britain Apr. 26, 1929. 2 Claims. (Cl. 107—6.)



1. In a machine of the kind referred to, the combination with a travelling supporting web for the blanks and scrap material and a second travelling web onto which the first one delivers the scrap material alone, of prong means adapted to be inserted in the scrap material while on the first said supporting web, means whereby the prongs are raised to lift said scrap material while being directed onto the second travelling web and means for mechanically stripping the waste sheet from the prongs while being thus lifted.

1,764,281. CASING FOR BOILERS AND THE LIKE. FRED A. SCHMITZ, Canton, Ohio, assignor, by mesne assignments, to The Berger Manufacturing Company, Canton, Ohio, a Corporation of New Jersey. Filed Dec. 9, 1927. Serial No. 238,901. 8 Claims. (Cl. 122—494.)



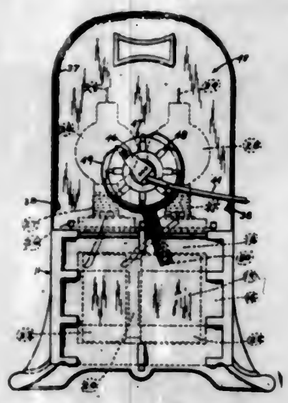
1. In combination with a boiler, a casing including front, rear and side plates; said front and rear plates being rigidly secured to the boiler and said side plates being held in slidable engagement with said front and rear plates for the purpose of permitting limited relative movement between the front and rear plates and the side plates.

1,764,282. FROZEN CONFECTIONERY. MILTON SCHNAIER, New York, N. Y. Filed Dec. 23, 1927, Serial No. 242,110, and in Sweden Aug. 5, 1927. 4 Claims. (Cl. 107—54.)



1. The method of preparing a frozen confection, which consists in water-logging a handle and core stick, depositing the same in a mold, charging the mold with a syrup, congealing the contents under intense refrigeration, and then removing from the mold the frozen product, thereby bonded to the core length of the stick.

1,764,283. VACUUM-TUBE RECTIFIER. HARRY H. STRONG, Toledo, Ohio, assignor to The Strong Electric Corporation, Wilmington, Del., a Corporation of Delaware. Filed Nov. 1, 1927. Serial No. 230,255. 14 Claims. (Cl. 175—363.)

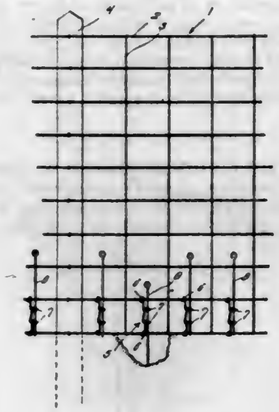


1. A vacuum tube rectifier comprising: a transformer having portions of its core projecting beyond its coil means on the two ends of said coil means; a pair of side plates flanking said transformer, provided on their edges with flanges extending substantially to the sides of said projecting portions of said cord, and extending above said transformer to outline a vacuum tube chamber; and an apertured metal shield extending between said side plates to enclose said chamber.

10. A vacuum tube rectifier comprising: a core provided with a gap; an autotransformer disposed on one side of said gap and provided on its secondary side with a neutral lead and with two end leads; and a pair of secondary coils disposed on the other side of said gap and connected on terminals of said end leads and the other to the other terminals.

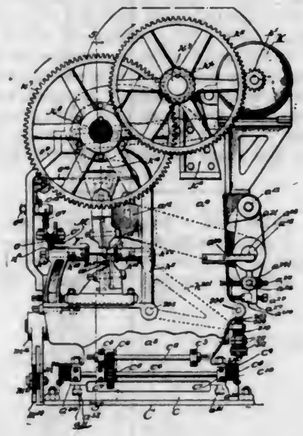
1,764,284. FENCE. [illegible] BARTON, San Angelo, Tex. Filed Nov. 14, 1929. [illegible] No. 407,261. 1 Claim. (Cl. 256—2.)

In a structure of the class described, a fence guard in the form of an attachment for the lower wires of a wire fence, said attachment being intended to prevent animals from crawling beneath the fence through a hole dug by the animals, said attachment comprising a guide member formed from a single length of wire having its intermediate portion bent to provide a pair of vertically spaced hori-



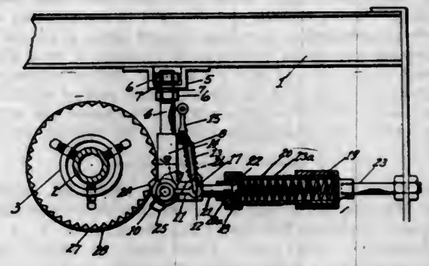
zontal guide eyes and having its ends constructed for bending around a pair of the lower horizontal fence wires, and a gravity lowered drop wire freely slidable through the guide eyes and adapted to have its lower end disposed in said hole, said drop wire being formed at its lower end with an eye.

1,764,285. SHEARING MACHINE. ALBERT J. BATES, Jr., Chicago, Ill., assignor to Bates Expanded Steel Truss Co., East Chicago, Ind., a Corporation of Delaware. Filed Nov. 5, 1926. Serial No. 146,332. 61 Claims. (Cl. 164—6.5.)



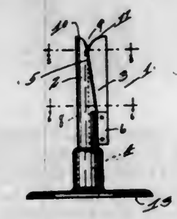
1. In a machine of the character described, the combination of shearing mechanisms for cutting beams or bars on different lines, each comprising a reciprocable shearing element, mechanism for intermittently feeding the work longitudinally to said shearing mechanisms so the latter will cut series of connected slashes to form slits, individual mechanisms for reciprocating said elements, and means to relatively vary the spacing of the elements longitudinally of the work so they will operate at points differently spaced apart longitudinally.

1,764,286. REVERSE STOP FOR AUTOMOBILES. FRED N. BIERCE, Cincinnati, Ohio. Filed May 10, 1927. Serial No. 190,310. 6 Claims. (Cl. 188—80.)



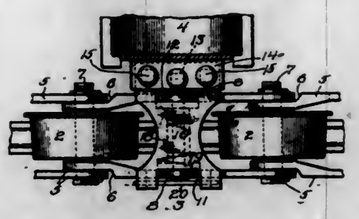
1. In combination with a motor vehicle having an element through which power is transmitted from the motor to the driving wheels, and a foot controlled member the movement of which is essential to the operation of the vehicle, a stop tending to prevent reversing of said element comprising a toothed wheel carried by said element, and a pawl to engage said toothed wheel, said pawl having a support, interconnecting means between said pawl and said foot controlled member, and a resilient support for said pawl support whereby said pawl may be inhibited.

1,764,287. TWINE CUTTER. WILLIAM O. CARLEY, Walla Walla, Wash. Filed Apr. 20, 1927. Serial No. 185,134. 2 Claims. (Cl. 30—14.)



1. In a twine cutter, the combination of a cutting means consisting of a guard of general tubular form and shape to provide a U-shaped cross section at its upper part and a yielding tubular split sleeve at its lower part, and having intermediately positioned wings, and having the parts corresponding to the legs of the U provided with friction edges on their inner sides, said friction edges being formed to provide a smooth outer surface, and a cutting blade removably attached to said wings and having a cutting edge positioned to be covered by said guard, and a support adapted to yieldingly receive and frictionally secure the yielding tubular portion of said guard.

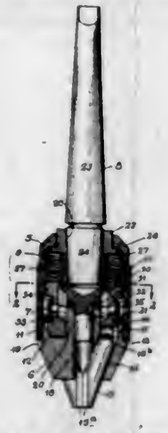
1,764,288. CONVEYER. GLENN E. EDMUNDS, Columbus, Ohio, assignor to The Bonney-Floyd Company, Columbus, Ohio, a Corporation of Ohio. Filed Sept. 16, 1927. Serial No. 219,918. 5 Claims. (Cl. 198—151.)



1. In a conveyer of the character described, a chain formed to include a pair of longitudinally extending trans-

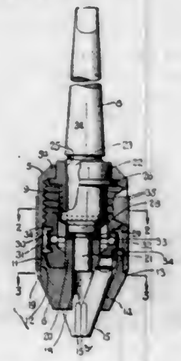
versely spaced links, the intermediate portions of said links being provided with lugs, a chair plate bridging said links and having slots formed therein for the reception of said lugs, said chair plate being provided with lugs having openings formed therein and disposed in registration with openings provided in the lugs of said links, a headed pin removably positioned within said openings, a mold bucket carried by one end of said chair plate, and a transversely extending pin carried by the opposite end of said chair plate and arranged to engage with the headed end of said first named pin to lock the latter in its applied position.

1,764,289. SPINDLE FOR CHUCK DEVICES. GEORGE W. EMRICK, Brooklyn, N. Y., assignor, by mesne assignments, to Ettco Tool Co. Inc., Brooklyn, N. Y., a Corporation of New York. Filed Sept. 18, 1928. Serial No. 306,753. 1 Claim. (Cl. 279—60.)



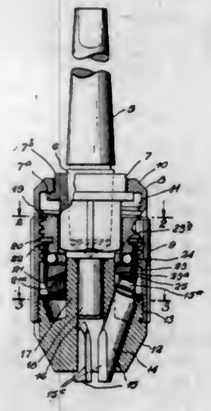
The combination with a chuck comprising a casing and a collar arranged in and in screw threaded engagement with said casing and movable longitudinally thereof, of a spindle member rotatably mounted in the casing, a comparatively long clutch portion on said member within the casing, said clutch portion having outwardly and radially projecting integral clutch elements extending throughout substantially the full length of said clutch portion and adapted to cooperate with corresponding clutch elements on said collar, in the several positions of the collar in said casing.

1,764,290. CHUCK DEVICE. GEORGE W. EMRICK, Brooklyn, N. Y., assignor, by mesne assignments, to Ettco Tool Co. Inc., Brooklyn, N. Y., a Corporation of New York. Filed Oct. 12, 1928. Serial No. 311,995. 2 Claims. (Cl. 279—60.)



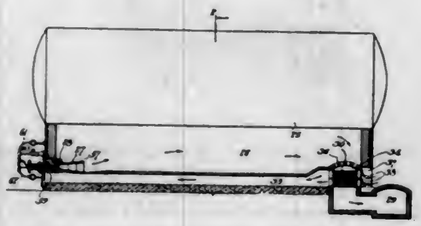
2. A jaw supporting and operating unit for a chuck device, said device involving a casing and a spindle part rotatably mounted in one end of the casing, said unit comprising a collar having external screw threads adapted to operatably engage said casing to feed said unit longitudinally with respect thereto, a jaw supporting ring coupled with said collar and rotatable independently thereof and bearing balls disposed between adjacent faces of said ring and collar, an annular body for coupling said ring and collar together with said balls disposed therebetween, and the engagement of said body with said ring and collar preventing relative separation of said parts and the bore of said collar having inwardly and radially projecting members forming clutch elements adapted to engage corresponding elements on said spindle part.

1,764,291. DRILL CHUCK. GEORGE W. EMRICK, Brooklyn, N. Y., assignor, by mesne assignments, to Ettco Tool Co. Inc., Brooklyn, N. Y., a Corporation of New York. Filed Apr. 24, 1929. Serial No. 357,648. 12 Claims. (Cl. 279—60.)



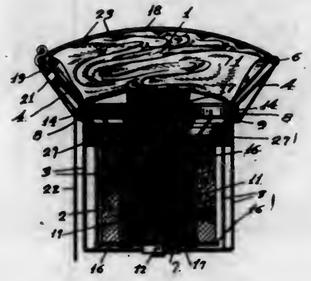
12. The combination with a spindle supporting part of a chuck of the class described having a shank of angular cross sectional form and a casing in which said part is rotatable, of a jaw actuating mechanism in said casing and involving an operative part in screw threaded engagement with said casing and slidably engaging said angular shank and said last mentioned part having shoulder portions adapted to clutch said shank to limit free rotary movement of said parts one with respect to the other.

1,764,292. FURNACE. WILLIAM FERGUSON, Philadelphia, Pa., assignor to National Airoil Burner Company, Incorporated, a Corporation of Delaware. Filed Oct. 19, 1927. Serial No. 227,105. 11 Claims. (Cl. 158—1.)



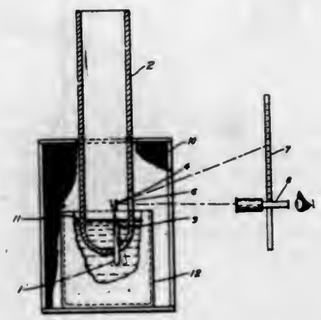
1. In a furnace, the combination of means forming a combustion chamber, a flue at one end thereof for discharge of the products of combustion, a fuel burner discharging into the combustion chamber at the other end thereof, an air duct delivering to the burner, the top and side walls of said duct formed of sheet metal sections, and transverse spacers, means for securing said elements in required position but adapted to permit relative movement between the elements, and a heater in the path of travel of burnt products for heating the air passing into the air duct.

1,764,293. PARACHUTE. ANTONIO FERRETTI and ATTILIO CORDA, San Francisco, Calif. Filed Aug. 21, 1929. Serial No. 387,412. 16 Claims. (Cl. 244—21.)



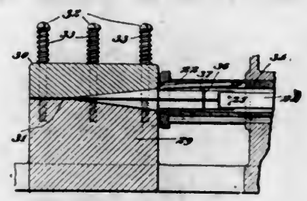
1. A parachute comprising a cage; a drum rotatable within the cage; a parachute adapted to be folded into the top of the cage; a plurality of cords each connected at one end to the parachute and at the opposite end to the drum, said cords being adapted to be wound upon the drum; releasable means mounted across the top of the cage to normally retain the parachute therein; and expandible means mounted within the drum to expel the parachute from the cage when the releasable means is released.

1,764,294. HIGH-VOLTAGE VOLTMETER. FREDERICK D. FIELDER, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed June 13, 1929. Serial No. 370,514. 2 Claims. (Cl. 171—95.)



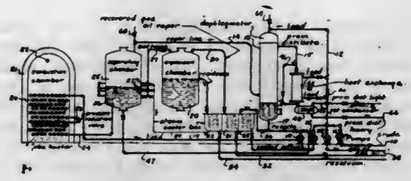
1. In combination, a hollow terminal having a smooth-surface semi-spherical end, an elongated member pivotally hung within said end, said terminal having an opening therein for the passage of said member, the electrostatic field of said terminal exclusively tending to move said member against the influence of gravity in accordance with the voltage producing it, and means for indicating the relative movement of said member.

1,764,295. MACHINE FOR MAKING GOLF TEES. FRED O. FISH, Winchester, Mass. Filed Oct. 29, 1927. Serial No. 229,768. 11 Claims. (Cl. 93—1.)



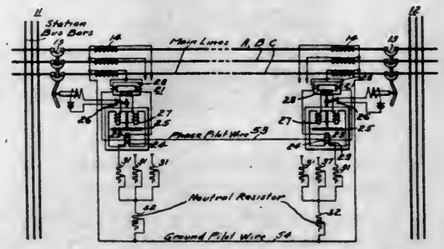
1. A machine for making golf tees, having in combination means for rolling a sector shaped blank into a sharp pointed cone shaped tee and means for forming an outwardly extending ball supporting flange at the base of the cone.

1,764,296. METHOD AND APPARATUS FOR TREATING HYDROCARBONS. RICHARD FLEMING, Plainfield, N. J. Filed Oct. 29, 1923. Serial No. 671,277. 16 Claims. (Cl. 196—58.)



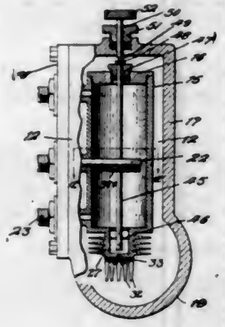
2. The method of treating liquid hydrocarbon material to form lighter gravity hydrocarbons which comprises heating the material to about 800° F. and under a high enough pressure to prevent vaporization, reducing the pressure to vaporize the major portion of such material in the presence of a protective liquid having a specific gravity less than that of any asphaltic residues, and superheating the vapors formed to about 750° F.

1,764,297. PILOT-WIRE-PROTECTIVE SYSTEM. HERBERT C. GRAVES, Jr., Verona, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Nov. 21, 1927. Serial No. 234,648. 12 Claims. (Cl. 175—294.)



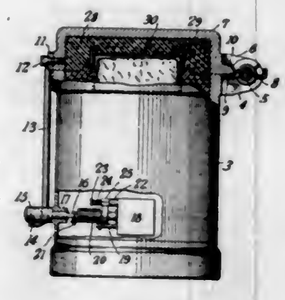
1. The combination in a pilot-wire protective system of the circulating-current type utilizing a differential relay, of a pilot wire, a relay balancing circuit including a neutral circuit, means for normally dividing the circulating current between the pilot wire and the relay balancing circuit, and a special impedance means connected to the neutral circuit.

1,764,298. OIL-REFINING APPARATUS FOR COMBUSTION-ENGINE LUBRICATION. GEORGE H. GREENHALGH and ERNEST J. SWEETLAND, Hazleton, Pa.; said Greenhalgh assignor to said Sweetland. Filed Oct. 16, 1922. Serial No. 594,723. 6 Claims. (Cl. 196—16.)



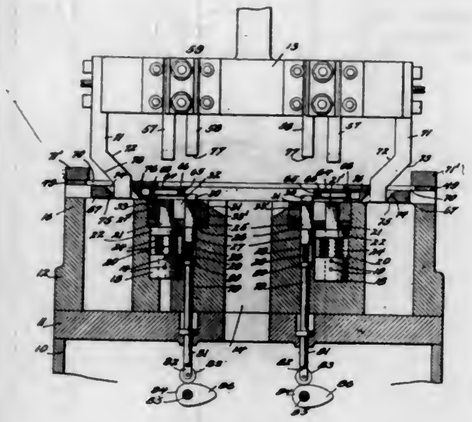
1. In a device of the class described for use with internal combustion engines to refine the used lubricating oil thereof, the combination of a vaporizing chamber adapted to be projected into the exhaust gases of the engine, a cover plate for closing the opening through which the vaporizing chamber is extended into the exhaust gases, and means for adjusting the relative positions of said cover plate and said vaporizing chamber to vary the area of said vaporizing chamber exposed to the exhaust gases.

1,764,299. REFRIGERATING DEVICE. JOSEPH GRISON, New York, N. Y. Filed June 15, 1929. Serial No. 371,080. 5 Claims. (Cl. 62—121.)



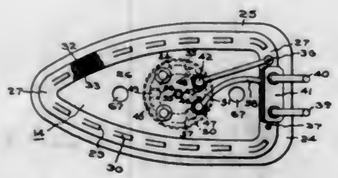
1. In a carbon dioxide freezing apparatus having a casing and cover hinged thereon, resilient means normally tending to raise the cover, a rod fixed to the cover and extending downwardly along the sides of the casing, said rod having its lower end bent at an angle, a handle extending through the casing and positioned near the rod, means to normally urge the handle to a vertical position, said handle being adapted when in a horizontal position to engage the angular portion of the rod to prevent raising of the cover, and means to latch the handle in a horizontal position.

1,764,300. METHOD OF AND APPARATUS FOR MAKING NUTS. CARL FREDERICK HAMMAN, New York, N. Y., assignor to Chapman Self-Locking Nut Co., Baltimore, Md., trustees of a common-law trust estate. Filed Jan. 15, 1925, Serial No. 2,700. Renewed Sept. 18, 1928. 27 Claims. (Cl. 10—72.)



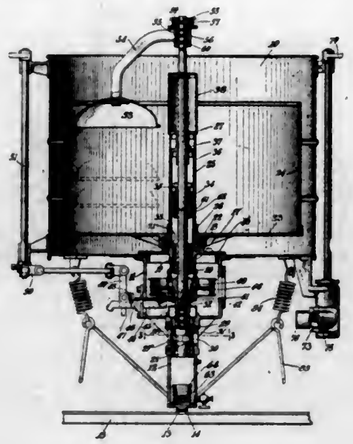
7. Mechanism for making folded lock nuts, in combination, means for feeding a strip of metal, a blanking die having cutting edges at the top thereof, a bending post beneath said cutting edges, an ejector slidably mounted around said bending post and having its top normally level with the cutting edges of said die, a blanking punch adapted to cooperate with said cutting edges to cut a blank from said strip of metal, means on said punch cooperating with said bending post to bend said blank and means to release said bent blank from said punch.

1,764,301. HEATING UNIT. CLYDE C. HARPSTER, Mansfield, Ohio, assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed July 27, 1926. Serial No. 125,135. 3 Claims. (Cl. 201—67.)



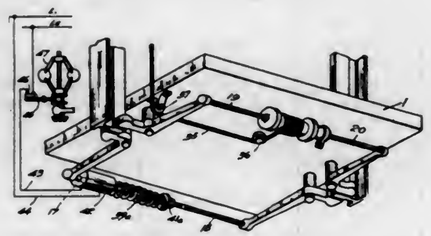
2. The method of making a sheathed, electrically insulated heating unit comprising a pair of metal plates having grooves therein and having also struck-out portions in the walls of the grooves, a resistor located in the groove, and means for insulating the resistor from the plates, which consists in inserting the resistor in a sheath of metallic magnesium, inserting the sheathed resistor in the grooves, securing the plates together, subjecting the magnesium metal to an oxidizing agent to convert it to magnesium oxide, and then closing said openings after the magnesium metal has been converted to magnesium oxide.

1,764,302. WASHING AND DRYING MACHINE. GEORGE D. HAUSER, Utica, N. Y., assignor to Utica Products, Inc., Utica, N. Y., a Corporation of New York. Filed Jan. 6, 1928. Serial No. 244,805. 25 Claims. (Cl. 68—19.)



1. A washing machine comprising a container, a reciprocating and rotating plunger therein, a pounder frictionally mounted on said plunger, and a resilient member having one end fixed and the other end connected to said pounder.

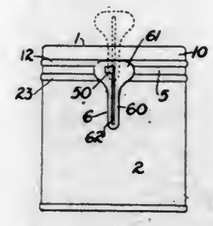
1,764,303. SAFETY DEVICE FOR ELEVATORS. RAY P. HIGBEE, Philadelphia, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed May 3, 1928. Serial No. 274,765. 8 Claims. (Cl. 187—91.)



5. In a safety device for an elevator, a plurality of safety jaws mounted on the car for gripping the guide rails, a plurality of cooperating levers for operating said jaws, a spring for biasing said jaws toward a closing position, a safety drum for applying positive pressure to said levers, and a pressure-transmitting member disposed between the drum and one of said levers, said member being operated by said drum through a screw-threaded connection and being in frictional engagement with its corresponding lever, and said frictional engagement being sufficient to cause said member to be moved longitudinally by said drum through the screw-threaded connection until the compression of the spring is overcome.

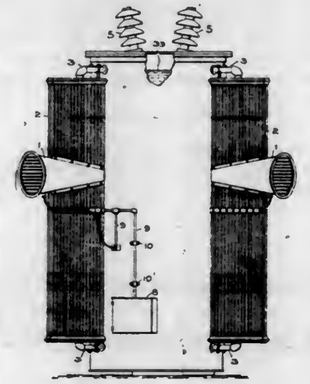
1,764,304. CAN AND SLIP COVER. EDWARD HILDEBRANDT, Tacoma, Wash. Filed Nov. 2, 1928. Serial No. 316,863. 8 Claims. (Cl. 220—52.)

1. In combination with a can body and a downwardly flanged cover fitting thereon, said body terminating at its upper edge in a stiffening bead and said cover flange including a stiffening seam, a tearoff strip positioned immediately below the seam in the cover flange, and



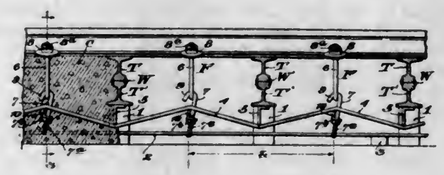
united both to the cover flange and to the can body, and means including a peripheral joint for securing the cover to the can body.

1,764,305. TRANSFORMER COOLING SYSTEM. LELAND H. HILL, Sharon, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Feb. 14, 1928. Serial No. 254,218. 10 Claims. (Cl. 257—191.)



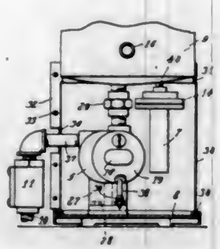
4. In combination, a casing, a plurality of radiators connected to said casing for cooling a fluid contained therein, a separate air cooling apparatus for each of said radiators comprising a bifurcated housing mounted thereon having air outlet ports on opposite sides thereof, means within said housing for producing an air current, and means including said housing for directing said air current upwardly along the radiating surface of said radiator.

1,764,306. TRACKWAY. MEIER GEO. HILPERT, Bethlehem, Pa. Filed Oct. 10, 1927. Serial No. 225,268. 26 Claims. (Cl. 238—25.)



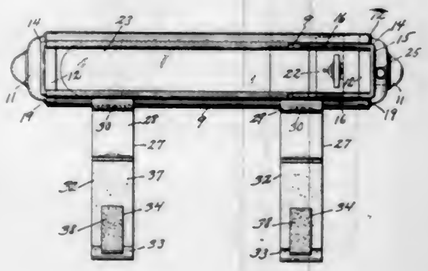
1. A trackway construction including metallic ties, rails resting upon but not fastened to the ties, anchoring means arranged beneath the ties, and adjustable fastening devices for connecting the anchoring means with the rails.

1,764,307. WATER-SYSTEM PUMP UNIT. STANLEY H. HOBSON, Rockford, Ill., assignor to Geo. D. Roper Corporation, Rockford, Ill., a Corporation of Illinois. Filed Dec. 24, 1928. Serial No. 328,262. 6 Claims. (Cl. 103—7.)



1. In a pumping apparatus of the character described, the combination in a self-contained unit, of a supporting base, a pump mounted thereon, a storage tank disposed vertically directly above and connected at its bottom with the discharge side of the pump in close coupled relation therewith, the said connection serving to support the tank on the pump, a jacket enclosing the pump and extending from the base up to the tank serving by engagement with the tank to hold the same rigid with the base, and a motor mounted on the base and having a driving connection with the pump through an opening provided in the jacket.

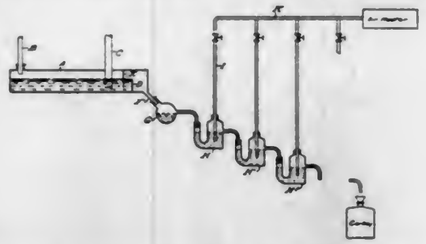
1,764,308. PIANO LAMP. OSCAR HOLTHER, Attleboro, Mass. Filed May 21, 1929. Serial No. 364,750. 2 Claims. (Cl. 240—4.)



1. In a piano lamp, a reflector hood comprising a horizontally disposed semicylindrical resilient body having its resultant longitudinal open portion in its bottom, and heads comprising tapering body portions, annular shoulders near the inner ends of the body portions, and flanges upon the inner ends of the body portions of the heads embraced by the ends of the hood, tubular beads upon the margins of the body, and clamping members comprising studs in the beads, and cross bars engaging the heads at points outside the annular shoulders.

1,764,309. PROCESS FOR THE MANUFACTURE OF SULPHURIC ACID OF HIGH PURITY. HENRY HOWARD, Cleveland, Ohio, assignor, by mesne assignments, to The Grasselli Chemical Company, Cleveland, Ohio, a Corporation of Delaware. Filed Apr. 22, 1927. Serial No. 185,850. 1 Claim. (Cl. 23—169.)

The process of producing pure, concentrated sulphuric acid which comprises distilling liquid SO_3, absorbing the gaseous SO_3 in counter current arrangement in pure, distilled water, in such a manner that the SO_3 comes mainly in contact with strong sulphuric acid and the water with dilute acid, combining the concentrated acid produced in



a plurality of absorbing units into a single flow and freeing the still hot acid from dissolved SO_3 by passing it in continuous flow through successive steps in each of which it is blown with fresh portions of air.

1,764,310. CURTAIN FIXTURE. DANIEL HOYT, East Orange, N. J., assignor to National Lock Washer Company, Newark, N. J., a Corporation of New Jersey. Filed Dec. 8, 1928. Serial No. 324,715. 3 Claims. (Cl. 156—26.)

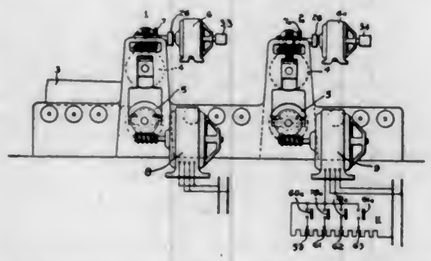


2. A curtain fixture comprising a bar having lugs at its ends offset from its axis, said lugs being in parallel lines.

1,764,311. RESISTOR MATERIAL AND METHOD OF MAKING THE SAME. MARSDEN H. HUNT, East Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Nov. 1, 1922. Serial No. 598,420. 13 Claims. (Cl. 201—76.)

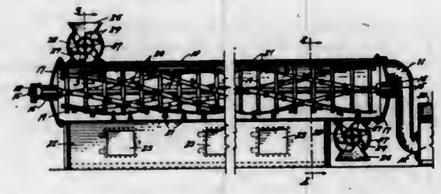
13. A method of preparing resistor material which comprises grinding a mixture of a conducting and non-conducting substance, a plastic clay and a silicate glass that fuses at a temperature below 900° C. thoroughly together, forming the mass into the shape of a resistor, drying the formed body at a temperature of about 150° C. and then firing the dried body at a temperature between 500 and 900° C.

1,764,312. CONTROL SYSTEM FOR ROLLING MILLS. HAROLD C. JENKS, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Dec. 13, 1927. Serial No. 239,671. 28 Claims. (Cl. 80—35.)



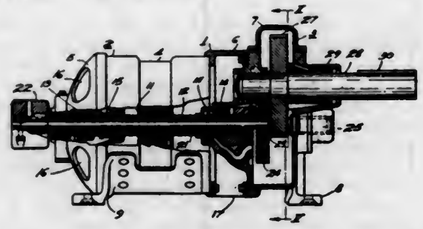
1. In a control system for rolling mills provided with a plurality of rolls, in combination, a screw-down motor for adjusting the rolls, a limit switch, means for effecting the operation of said limit switch in accordance with the operation of the screw-down motor, means cooperative with the limit switch to effect the stopping of the screw-down motor in a plurality of predetermined positions and means for variably controlling the distances between the respective positions.

1,764,313. ORE FURNACE. CHARLES T. KNIGHT, Denver, Colo. Filed Oct. 29, 1928. Serial No. 315,684. 6 Claims. (Cl. 263—25.)



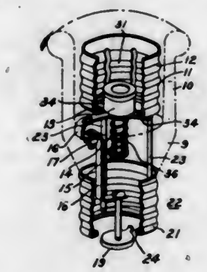
6. Means for conveying material through a furnace cylinder comprising: a shaft extending longitudinally within said cylinder; and a series of flexible brush members supported in spaced relation about said shaft substantially into contact with the internal surface of said cylinder.

1,764,314. GEAR-REDUCTION MECHANISM. GUSTAV H. KOCH, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Sept. 19, 1928. Serial No. 306,800. 4 Claims. (Cl. 74—7.)



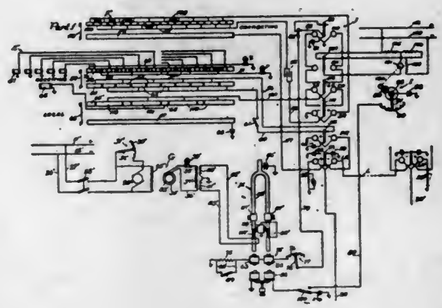
1. A transmission mechanism comprising a hollow driving shaft, a flexible torque shaft disposed within the driving shaft and secured thereto at one end, a driving gear wheel disposed on the torque shaft and a plurality of driven gear wheels meshing with the driving gear wheel, said driving gear wheel being adapted to exert equal forces upon the driven gear wheels by reasons of the adjustment permitted by the flexible torque shaft.

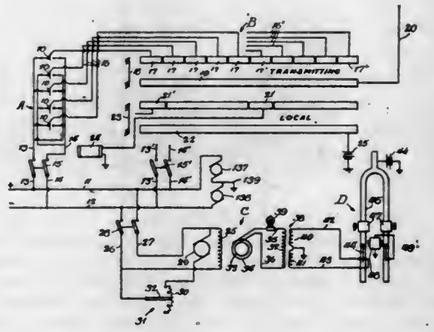
1,764,315. LAMP SOCKET. SAMUEL B. KRAUT, South Bend, Ind., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Dec. 14, 1928. Serial No. 326,031. 4 Claims. (Cl. 173—344.)



1. In a lamp receptacle comprising an extension lamp socket and a resiliently mounted center contact member, means for short-circuiting the electrical circuits of the receptacle comprising wing members on the center contact member adapted to contact with the base of the socket only when the lamp is removed.

1,764,316. TELEGRAPH SYSTEM. HOWARD L. KRUM and JOHN O. CARR, Chicago, Ill., assignors, by mesne assignments, to Teletype Corporation, Chicago, Ill., a Corporation of Delaware. Filed Aug. 28, 1922, Serial No. 583,718. Renewed May 11, 1928. 51 Claims. (Cl. 178—53.)



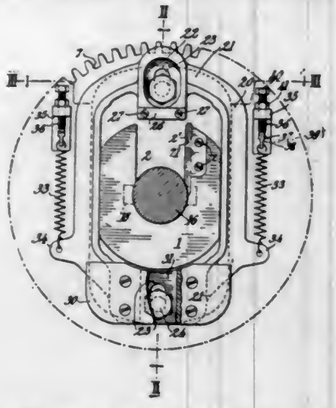


1. A system of the class described including means for transmitting signals by current variations, a distributer, a motor for driving said distributer, a vibrating member and connections for controlling said motor, means responsive to said current variations for exercising control of said vibrating member by intermittent action, and means also responsive to said current variations for exercising an additional control of said vibrating member by a continuous variable action.

1,764,317. SAFETY CLUTCH. PETER KRUSE, Brooklyn, N. Y., assignor to E. W. Bliss Company, Brooklyn, N. Y., a Corporation of Delaware. Filed Feb. 15, 1927. Serial No. 168,343. 6 Claims. (Cl. 192—67.)

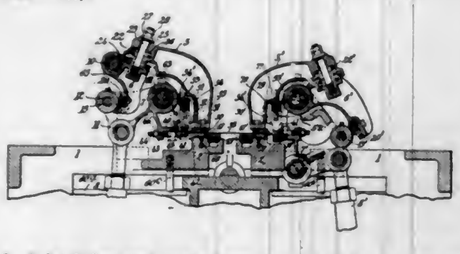
1. A safety clutch mechanism comprising a positive rotary mechanical coupling device, a frame slidably mounted on the driving element of said device, the driven element of said device being adapted to engage the said driving element through an opening in said frame when the frame is in one position, said frame in another or safety position being adapted to prevent the engagement of said

elements, yielding means tending to move said frame towards the said first-mentioned position, and the mass



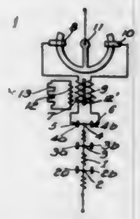
associated with said frame tending under the action of centrifugal force to move said frame into the opposite or safety position.

1,764,318. MARGINAL HOOK-FORMING MECHANISM FOR CAN-BODY-MAKING MACHINES. PETER KRUSE, Brooklyn, N. Y., assignor to E. W. Bliss Company, New York, N. Y., a Corporation of Delaware. Filed May 21, 1927. Serial No. 193,275. 13 Claims. (Cl. 153—17.)



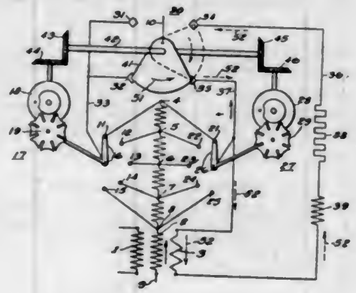
1. A hook-forming mechanism for can body making machines, said mechanism comprising blank-gripping means, hook-bending means, intermediate, independently-movable means positively actuated by said hook-bending means and a yielding connection between said blank-gripping means and said intermediate means.

1,764,319. VOLTAGE-CONTROL SYSTEM. KARL KURDA, Nuremberg, Germany, assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed July 11, 1928, Serial No. 291,862, and in Germany Apr. 8, 1927. 5 Claims. (Cl. 171—119.)



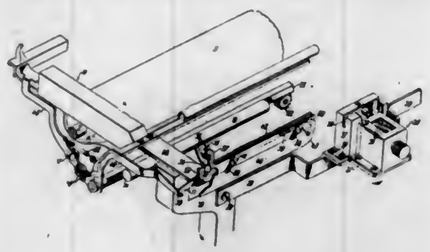
1. A regulator switch for tap-changing-under-load equipment comprising, parallel circuits, movable contact members associated with the terminals of said circuits, a main transformer winding divided into a plurality of sections, said contact members cooperating with the ends of said sections, and means including a rotary switch for deenergizing said contact members during movement and a Maltese gear for controlling said switch, return-current contacts mounted on said rotary switch, two coils wound on the same iron core, a terminal of each of said coils being connected to one of said return-current contacts, the other terminal of each of said coils being connected to one of said movable contact members, a third winding inductively associated with said coils, and an ohmic resistance in circuit relation with said third winding.

1,764,320. REGULATING TRANSFORMERS. KARL KURDA and PAUL SCHADE, Nuremberg, Germany, assignors to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed June 27, 1929, Serial No. 373,989, and in Germany June 14, 1928. 3 Claims. (Cl. 171—119.)



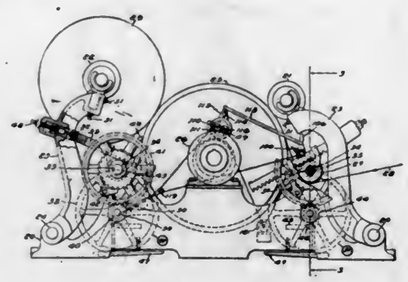
1. In combination, a transformer winding having a plurality of tap points, a plurality of selector switches, each adapted to be connected to a selected one of said tap points, a circuit-interrupting switch connected between a power-circuit conductor and said selector switches and having a plurality of contact members connected, respectively, to each selector switch, means for actuating said several switches in a predetermined sequence for changing the connection between said power-circuit conductor and said winding without interrupting the flow of power therethrough, and an auxiliary transformer winding connected between one selector switch and said power circuit conductor during a certain portion of a cycle of operation of the circuit interrupting switch.

1,764,321. TYPEWRITING MACHINE. ALFRED G. F. KUROWSKI, Brooklyn, N. Y., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Filed Mar. 26, 1928. Serial No. 264,753. 17 Claims. (Cl. 235—102.)



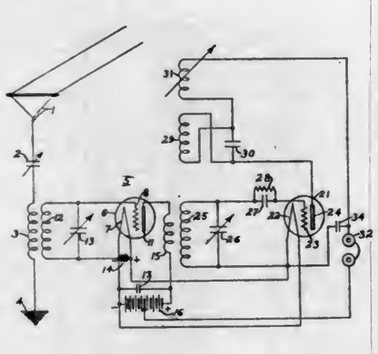
16. In a typewriting machine, the combination with a letter feeding carriage, of a line-counter, said carriage having means for operating said line-counter at each cycle of carriage movement, a release-key for said carriage, and means operated by said release-key for disabling said line-counting means.

1,764,322. PAPER MACHINERY. HERMAN L. KUTTER, Hamilton, Ohio, assignor to The Black-Clawson Company, Hamilton, Ohio, a Corporation of Ohio. Filed Mar. 20, 1924. Serial No. 700,590. 25 Claims. (Cl. 242—55.)



13. An apparatus of the character described comprising a winding mandrel adapted to receive a continuously moving sheet of paper and to wind the same into a roll thereon, a second winding mandrel adapted to receive said sheet of paper, and means for cutting from the moving sheet of paper a lead strip adapted to be wound about the second mandrel while the body of the sheet continues to wind upon the first mandrel, said means being operable thereafter upon actuation to sever said body of the sheet from the first mandrel whereby to cause the sheet to wind upon the second mandrel.

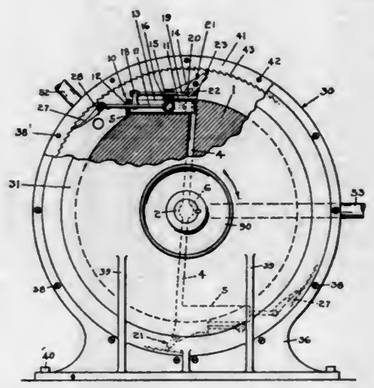
1,764,323. RADIO RECEIVING SYSTEM. VERNON D. LANDON, East Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Jan. 29, 1927. Serial No. 164,492. 8 Claims. (Cl. 250—27.)



1. In a tunable radio system comprising thermionic devices, means for securing critical regeneration over the entire tuning range, said means comprising a plurality of inductors in an output circuit each regeneratively backcoupled to an input circuit, and means whereby one of said inductors is a more efficient feed-back agent at low frequencies than another of said inductors.

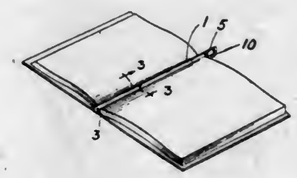
1,764,324. AIR MOTOR. JAMES LIVINGSTONE, Seattle, Wash., assignor of one-tenth to Harry E. Stanley, Seattle, Wash. Filed Sept. 28, 1929. Serial No. 395,858. 6 Claims. (Cl. 121—58.)

1. An air motor, comprising a substantially airtight casing, a wheel rotatable in the casing, an annular ratchet member mounted in the casing and encircling the wheel, a piston cyclinder mounted on the wheel, a piston mounted in the cyclinder, a pawl pivotally mounted and linked with the piston, said pawl being engageable with said member, a second pawl pivotally connected with the piston and engageable with said member, and means for reciprocating the piston in said cyclinder by exhausting air within the motor and at one end of the piston and introducing atmospheric pressure within the motor and at the other end



of the piston, and alternately reversing said exhaustion of air and said introduction of atmospheric pressure, and whereby a thrust is imparted to each of said pawls alternately as each is brought into operative engagement with said member by the piston.

1,764,325. BOOKHOLDER. LOUIS A. LUPIEN, Brooklyn, N. Y., assignor to Edwin B. Stimpson Company, Brooklyn, N. Y., a Corporation of New York. Filed Feb. 13, 1929. Serial No. 339,550. 2 Claims. (Cl. 129—38.)

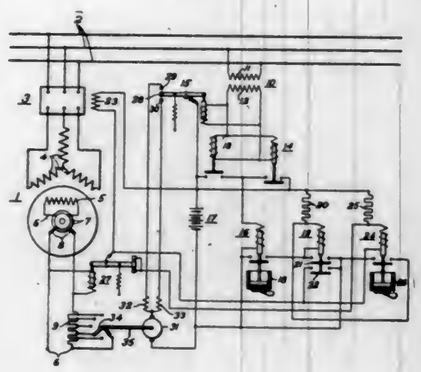


1. A book holder comprising a flat bar having an opening at one end and a second opening adjacent the opposite end, a wire member having an eye projecting laterally from one end to engage the first opening in the bar, said wire member having a hook projecting laterally from its other end to detachably engage in said second opening, said bar extending beyond the second opening away from the first opening and having a third opening adjacent the extremity of the extension, and a ring loosely engaged in said third opening.

1,764,326. AUTOMATIC STATION. CYRIL C. LEVY, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 2, 1927. Serial No. 180,395. 8 Claims. (Cl. 171—118.)

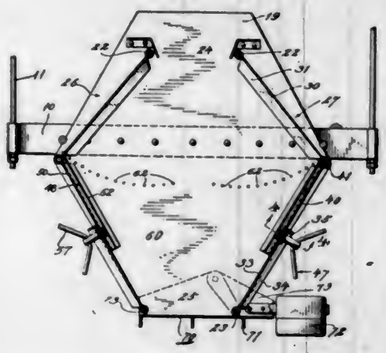
1. In combination, an electric circuit, a translating device for controlling the voltage of the circuit, connecting means between the translating device and the circuit, a field-magnet winding for the translating device, means

for energizing the field-magnet winding, and means responsive to the existence of a predetermined steady cur-



rent in the field-magnet winding for a predetermined time for controlling the connecting means to disconnect the translating device from the electric circuit.

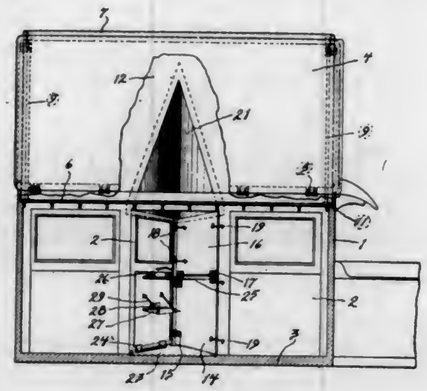
1,764,327. BATCH BOX. MARTIN MADSEN, Huntington Park, Calif., assignor to Madsen Iron Works, Huntington Park, Calif., a Corporation of California. Filed July 11, 1928. Serial No. 291,783. 14 Claims. (Cl. 221—95.)



1. In a batch-box, the combination of: a pair of end members; a primary side-structure extending between said end members; and a secondary side-structure comprising vertically adjacent plates extending between said end members with their respective outer edges pivotally secured to said side members, the free inner edges of said plates being hingedly united.

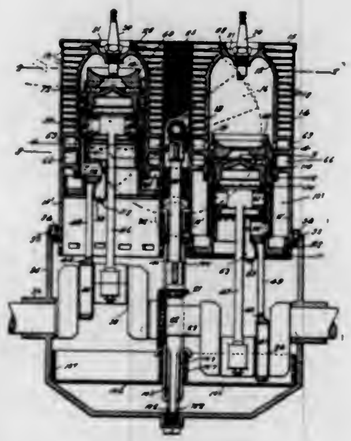
1,764,328. CONVERTIBLE VEHICLE BODY. ELLEN WILLETT MAGILL, Chicago, Ill. Filed July 25, 1927, Serial No. 208,190. Renewed Sept. 5, 1929. 12 Claims. (Cl. 296—23.)

1. In a convertible vehicle body the combination with a normal rooted body structure, of means adapted to convertibly form therewith an elevated sleeping shelter including a floor arranged immediately below the normal horizontal position of the roof of the body structure and means whereby said roof is marginally pivoted on the



vertical structure of the body for angular movement upwardly from its normal horizontal position to form a part of said shelter.

1,764,329. TWO-CYCLE VALVELESS INTERNAL-COMBUSTION ENGINE. WESLEY C. MARTIN, Donnelsville, Ohio. Filed Aug. 12, 1927. Serial No. 212,573. 4 Claims. (Cl. 123—59.)



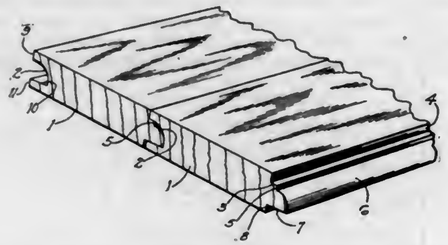
4. In a two cycle engine, a plurality of cylinders, a crank shaft, a plurality of pistons for each cylinder, one of the pistons being open thru the top, and the other having a head including an open chamber therein, means for operating the pistons one within the other and each independently of the other, from the crank shaft, means for admitting air to one of the cylinders, for compression by one of the pistons, means for transmitting air to the other cylinder for flushing the latter, means for admitting fuel under air pressure to each cylinder, and means for admitting air to each cylinder during the latter part of each compression stroke, for producing increased compression of each charge, and means for firing the charge against the heads of both pistons of the respective cylinders, these pistons imparting thrust to the crank shaft.

1,764,330. WALKING MANIKIN. LOUIS MARX, New York, N. Y. Filed Jan. 6, 1928. Serial No. 244,810. 8 Claims. (Cl. 46—40.)



1. In combination, a manikin figure having relatively movable body sections, motor mechanism carried by the figure operative for relatively moving said body sections so as to impart a walking movement to the manikin in simulation of a figure in flight, a second figure simulating an animal in pursuit movably attached to said manikin figure, and means connecting the animal figure with said motor mechanism operative for imparting movement to said animal figure during the walking movement of the manikin.

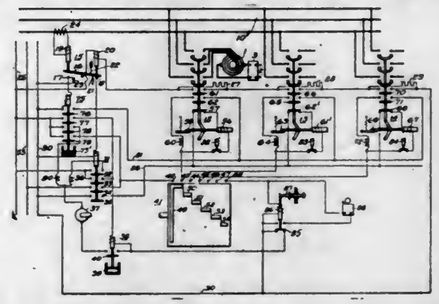
1,764,331. MATCHED HARDWOOD FLOORING. PAUL O. MORATZ, Bloomington, Ill. Filed Feb. 23, 1929. Serial No. 342,231. 2 Claims. (Cl. 20—8.)



1. A matched hardwood flooring comprising a plurality of hardwood floor strips, each strip provided with an outstanding tongue along one longitudinal edge and a groove along the opposite edge adapted to receive the tongue of the next adjacent strip, said tongue having a longitudinal right angular off set adapted to receive the head of a nail driven through the tongue and body of the strip nad having an undercut portion sloping twoard the underside of the strip to the longitudinal vertical edge, and said groove curved to clear the nail heads received within the offset, and formed with a correspondingly shaped lower portion of less length than the undercut of the tongue and adapted to engage thereunder and tie upper edges of the adjacent strip together in the same plane.

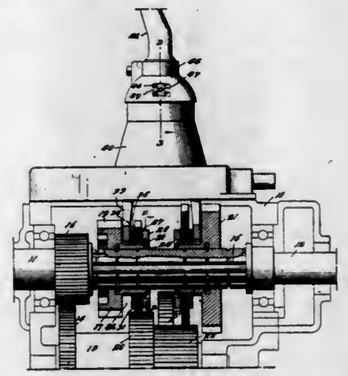
1,764,332. AUTOMATIC STATION. CHARLES MCL. MOSS, Pittsburgh, and ALFRED J. A. PETERSON, Wilkinsburg, Pa., assignors to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed June 23, 1928. Serial No. 287,758. 8 Claims. (Cl. 171—118.)

1. In an automatic translating station, a load circuit, a supply circuit and a plurality of translating devices adapted to be connected to the supply circuit through circuit-breakers, means for successively closing said circuit-breakers in response to an increase in the load on the station, including a motor-driven drum switch, a balance relay having two opposing coils, one of which is ener-



gized in proportion to the load on the station and the other in proportion to the number of translating devices connected to the supply circuit, and means whereby the relay controls said switch.

1,764,333. DOUBLE-CLUTCH SYNCHRONIZER. HOWARD J. MURRAY, New York, N. Y., assignor to R. M. Company, Inc., East Pittsburgh, Pa., a Corporation of Delaware. Filed Nov. 18, 1922. Serial No. 601,689. 18 Claims. (Cl. 74—58.)

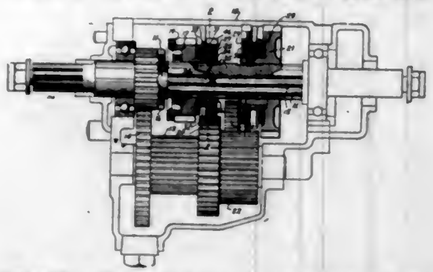


1. In a device of the class described, the combination of a pair of gears adapted to be shifted into a driving relation, one of said gears constituting an element of a double face friction clutch, a two sided coacting clutch element adapted to be moved into meshing relation with the other gear with one of its faces frictionally engaging said first named element, and shiftable means for frictionally engaging the other face of said coacting clutch element.

1,764,334. SLIDING-CLUTCH-GEAR SYNCHRONIZER. HOWARD J. MURRAY, Brooklyn, N. Y., assignor to R. M. Company, Inc., East Pittsburgh, Pa., a Corporation of Delaware. Continuation of forfeited application Serial No. 548,237, filed Apr. 11, 1923. This application filed June 22, 1927. Serial No. 200,746. 23 Claims. (Cl. 74—58.)

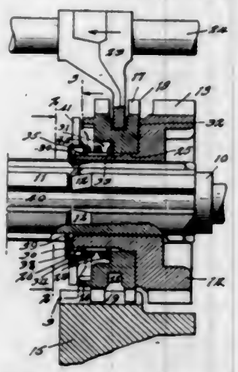
1. In a power transmission, the combination with a driving shaft and a driven shaft provided with a recess, a countershaft geared to the power shaft and provided with a power gear fixed thereto, a gear unit slidably mounted on the part of the driven shaft having the recess, said unit including a power gear adapted to mesh with the power gear on the countershaft and having a hub with a radially extending bearing face projecting therefrom, a synchronizer gear mounted for rotary movement on the hub and

provided with a bearing face adapted to contact with the face on the hub to form a friction clutch, a spring controlled locking cam carried by the sliding gear unit and controlled by the movement of a part of same into and



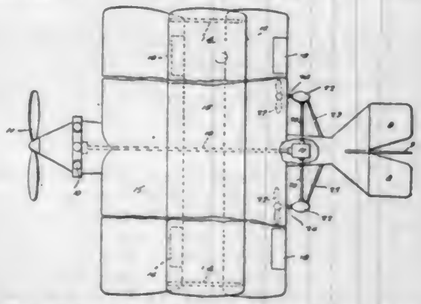
out of said recess to interpose a resistance to the free sliding movement of the unit while functionnig as part of the friction clutch and for locking the synchronizer gear to the driven shaft.

1,764,335. RESILIENT SYNCHRONIZER. HOWARD J. MURRAY, Brooklyn, N. Y. Filed Sept. 22, 1927. Serial No. 221,392. 23 Claims. (Cl. 74—58.)



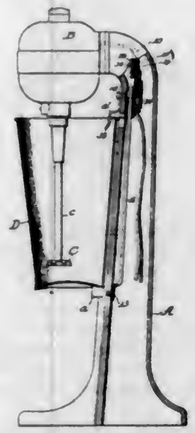
8. In a device of the class described, the combination of a shaft, a sliding gear unit splined to said shaft, a mounting member having a splined connection with both the shaft and sliding gear to rotate therewith, an outstanding spring finger secured at its inner end to said member, a synchronizing gear journalled for rotary and axial movement on said unit and provided with a rigid finger for engaging the spring finger adjacent its outer, free end to provide a slip clutch connection between the unit and gear.

1,764,336. LIGHTER-THAN-AIR CRAFT. JOSEPH T. NARUSCH, Akron, Ohio. Filed Oct. 28, 1929. Serial No. 403,064. 5 Claims. (Cl. 244—14.)



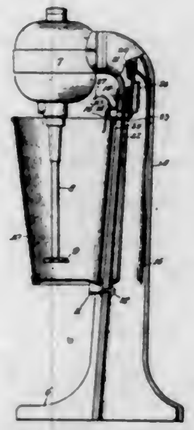
1. An aeroplane having front and rear spaced apart wings, an intermediate wing above the first mentioned wings, supporting walls rising from the first mentioned wings at the ends thereof for supporting the ends of said intermediate wings.

1,764,337. ELECTRIC SWITCH. EMANUEL NIELSEN, Racine, Wis., assignor to Hamilton Beach Manufacturing Company, Racine, Wis., a Corporation of Wisconsin. Filed Mar. 24, 1928. Serial No. 264,467. 21 Claims. (Cl. 200—163.)



1. In an electric switch, the combination of a pair of members, one of which has two rigid contacts mounted in fixed relation to, and insulated from, each other, the other of which has a plate to bridge the contacts, one of the members being mounted to move in a direction to effect sliding engagement between the faces of the contacts and plate, and a connection which permits universal movement of one of the members while the switch is being closed.

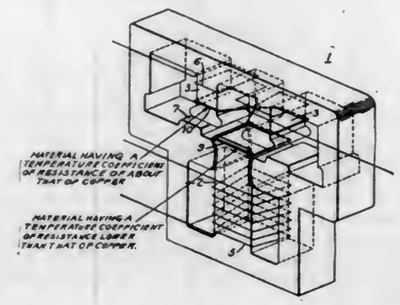
1,764,338. DRINK MIXER. EMANUEL NIELSEN, Racine, Wis., assignor to Hamilton Beach Manufacturing Company, Racine, Wis., a Corporation of Wisconsin. Filed July 24, 1929. Serial No. 380,571. 8 Claims. (Cl. 259—108.)



1. In a drink mixer, the combination of a standard, an electric motor mounted on the standard, a shaft driven by the motor and provided with an agitator, means for retaining a container in operative position beneath the motor, a switch for controlling the operation of said motor,

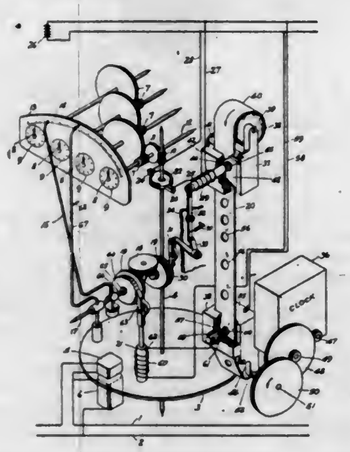
a switch operating element extending into position to be operated by the top of the container, and a finger-piece for manually operating the switch when the container is out of its operative position, said finger-piece being associated with, but unattached to, the switch-operating element.

1,764,339. ELECTRICAL MEASURING INSTRUMENT. CARL OMAN, Swissvale, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Aug. 9, 1924. Serial No. 731,054. 17 Claims. (Cl. 171—264.)



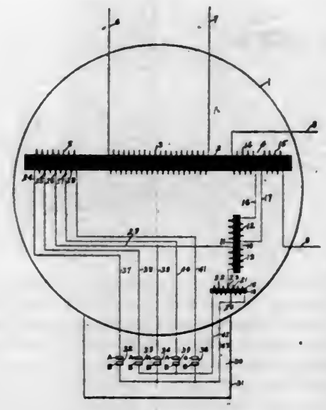
1. The combination with an electro-responsive device comprising voltage and current means for creating a plurality of co-operating fluxes therefor, of means responsive to temperature changes for inductively affecting said fluxes and maintaining the same in substantially constant phase relation during persistence of substantially the same phase angle between the voltage and current producing said fluxes.

1,764,340. MAXIMUM-DEMAND METER. CARL OMAN, Swissvale, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Aug. 9, 1927. Serial No. 211,650. 6 Claims. (Cl. 235—92.)



1. In combination, a quantity conveyor, a time-actuated tape, means for affecting said tape in accordance with the magnitude of said quantity, a device affected by said tape at a later time, and means, including differential mechanism actuated by said device in accordance with the magnitude of said quantity, for performing an indicating function.

1,764,341. ELECTRICAL TRANSFORMING SYSTEM. KIRK A. OPLINGER, Sharon, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Feb. 11, 1928. Serial No. 253,626. 5 Claims. (Cl. 171—119.)



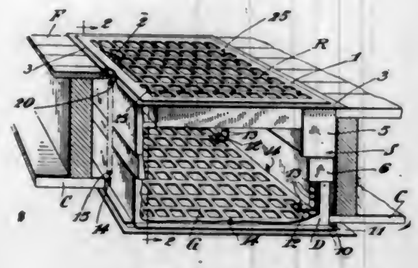
1. In a transformer, the combination with a primary and a secondary winding, of means for changing the voltage ratio between said windings while under load comprising a transformer in circuit relation with one of said windings at a point intermediate the ends thereof, and means comprising a tertiary winding and a series of contacting switches for energizing said last named transformer.

1,764,342. KNITTING NEEDLE. ALEXANDER C. PARLINI, Woodside, N. Y., assignor to Gotham Knitbac Machine Corporation, New York, N. Y., a Corporation of Delaware. Filed July 3, 1929. Serial No. 375,659. 1 Claim. (Cl. 66—121.)



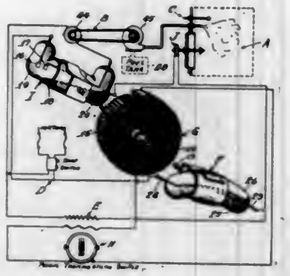
A run repair needle having a hook shaped end portion and a shank portion having an elongated slot extending up said shank from a point in the shank adjacent the hook shaped end portion to form resilient walls, said elongated slot being narrower at the point thereof adjacent the hooked end portion than at its upper end, pivot holes in the walls of the shank at the narrow portion of the slot, a latch member provided at one end with a hooded head portion adapted to cooperate with the hook shaped end portion and at its other end with side faces which are adapted to frictionally engage the side walls of the elongated slot at its narrow portion and lugs on said side faces adapted to be received in the pivot holes in the walls of said shank portion.

1,764,343. VENTILATOR THIMBLE. JOSEPH V. PETRELLI, New Rochelle, N. Y. Filed July 3, 1928. Serial No. 290,226. 1 Claim. (Cl. 126—314.)



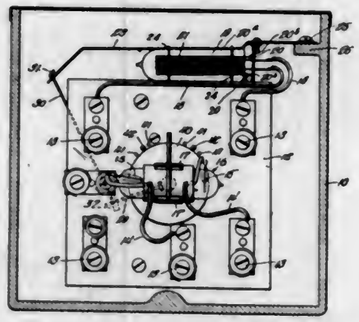
In a ventilating thimble adapted to be positioned in an opening between the floor of an upper room and the ceiling of a lower room, the combination of telescoping lower, intermediate, and upper sleeves of progressively increasing diameter, said intermediate and upper sleeves being provided with cooperating lips for permitting relative telescoping movement but preventing complete separation from each other, said upper and lower sleeves being provided with flanges for engaging respectively the edges of the openings in said floor and ceiling, spring means positioned exterior of the thimble and attached to the lower sleeve and to the edge of the floor opening to support said lower sleeve directly from said floor and to resiliently maintain said lower sleeve with its flange against the lower edge of said ceiling opening, permitting said upper and intermediate sleeves to be placed in telescoping engagement with said lower sleeve after positioning said spring-means-supported lower sleeve in said ceiling opening and for permitting maximum inward collapsing telescoping movement of said upper, intermediate and lower sleeves.

1,764,344. TEMPERATURE CONTROL APPARATUS. LOUIS A. M. PHELAN and CLIFFORD HOTCHKISS, Beloit, Wis., assignors, by mesne assignments, to Indiana Time-O-Stat Controls Company, Elkhart, Ind., a Corporation of Maryland. Filed Jan. 29, 1923. Serial No. 615,530. 25 Claims. (Cl. 158—28.)



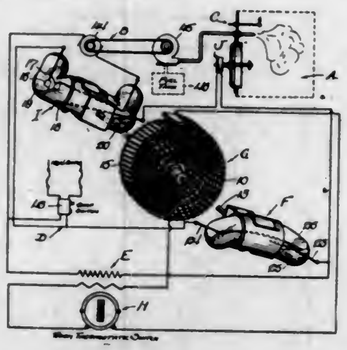
1. A system for controlling a fuel burning device and comprising a fuel supply means, an eelctric motor therefor, a control circuit for said motor, a room thermostatic switch, an electrically heated relay the electric heater circuit of which is controlled by said room thermostatic switch and is connected in series circuit therewith, and a common source of power supplying both said motor circuit and the circuit comprising said room thermostatic switch, said relay being provided with electric switching mechanism operated thereby for controlling said circuits.

1,764,345. THERMOSTATIC SWITCH. LOUIS A. M. PHELAN, Beloit, Wis., assignor, by mesne assignments, to Time-O-Stat Controls Company, Elkhart, Ind., a Corporation of Maryland. Filed Nov. 27, 1925. Serial No. 71,857. 19 Claims. (Cl. 200—122.)



19. A thermostatic element comprising a bimetallic member fixed at one end and having heating means therefor depending therefrom and comprising a sealed tube having an elongated reentrant portion with a current-carrying coil wrapped around the interior of said reentrant portion.

1,764,346. THERMALLY-OPERATED CIRCUIT BREAKER. LOUIS A. M. PHELAN, Elkhart, Ind., and CLIFFORD HOTCHKISS, Milwaukee, Wis., assignors, by mesne assignments, to Time-O-Stat Controls Company, Elkhart, Ind., a Corporation of Maryland. Original application filed Jan. 29, 1923, Serial No. 615,530. Divided and this application filed Dec. 5, 1927. Serial No. 237,637. 8 Claims. (Cl. 200—122.)

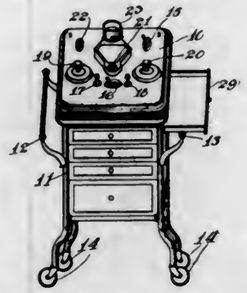


1. A relay having a predetermined time lag comprising a thermosensitive element, a contactor operatively associated with said element to open and close an electric circuit through said contactor, and an electrical heating element of predetermined dimensions disposed in thermal relation to said element to cause the latter to actuate said contactor, said contactor comprising a container, electrodes sealed therein which are adapted to be connected to an external electric circuit, and a movable conductor in said container controlling the electric circuit between said electrodes and said heating element being connected in series relationship with said electrodes.

1,764,347. ELECTROTHERAPEUTIC MACHINE. HERMAN P. PULLWITT, Oak Park, Ill., assignor to McIntosh Electrical Corporation, Chicago, Ill., a Corporation of Delaware. Filed Oct. 26, 1928. Serial No. 315,139. 48 Claims. (Cl. 174—177.)

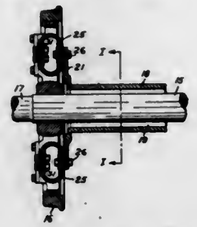
1. In an electro-therapeutic machine, the combination of a flat block of insulating material, a resistance winding

having its turns extending in parallel relation across the flat surface of said block, a brush mounted for rotation upon and laterally of the turns of said winding on said



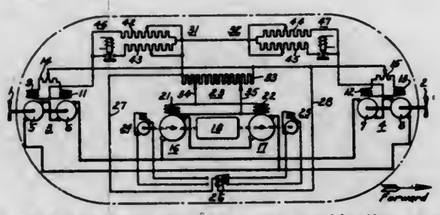
flat surface, means imparting continuous operation to said brush, and devices for selectively maintaining certain turns of said winding within the path of travel of said brush at substantially the same electrical potential.

1,764,348. LOCOMOTIVE DRIVE MECHANISM. FRITZ RAMPACHER, Berlin-Charlottenburg, Germany, assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed May 12, 1928, Serial No. 277,129, and in Germany May 13, 1927. 6 Claims. (Cl. 105—131.)



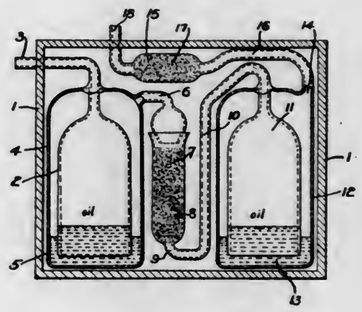
5. A locomotive drive mechanism comprising a wheel axle, a quill shaft surrounding the whel axle and coupling means for transmitting power between the quill shaft and the wheel axle, said coupling means comprising resilient members so disposed that they are substantially rigid circumferentially.

1,764,349. CONTROL SYSTEM. MERLE ROBISON, Detroit, Mich., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed May 22. 1928. Serial No. 279,770. 14 Claims. (Cl. 172—8.)



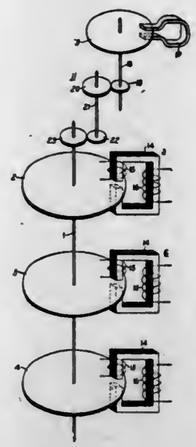
1. In a ship-propulsion system, in combination, a propeller located at each end of the ship, motors for driving the propellers, means for supplying power to the motors, means for controlling the power supplied to the motors to change their speed and direction of operation, and means disposed to change the relative speeds of the motors a predetermined amount, said means being responsive to the initial operation of the power-controlling means, and auxiliary means disposed to vary the degree of relative speed change independently of the controller operation.

1,764,350. BREATHING ATTACHMENT. CLARENCE J. RODMAN, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Dec. 21, 1922. Serial No. 608,370. 11 Claims. (Cl. 220—85.)



1. In an apparatus including a casing, oil therein, and a space above the surface of said oil, a passageway between the space above the oil and the outside atmosphere, a device for maintaining an atmosphere inert to said oil, comprising a vessel in said passageway, a deoxidizer therein, a second vessel in said passageway and a drier therein.

1,764,351. ELECTRICAL MEASURING INSTRUMENT. ARGYLE R. RUTTER, East Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Aug. 20, 1924. Serial No. 733,050. 5 Claims. (Cl. 171—34.)

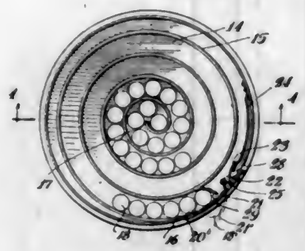


1. An induction meter comprising a shaft, a plurality of armatures thereon, an actuating electromagnet for each armature, an auxiliary armature relatively-movably connected to said shaft and a damping magnet for cooperation with said auxiliary armature.

1,764,352. DISPENSING CONTAINER. GUIDO M. SACERDOTE, New York, N. Y. Filed July 14, 1928. Serial No. 292,652. 17 Claims. (Cl. 312—94.)

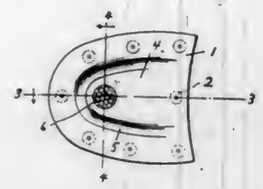
1. A container of the class described comprising two substantially parallel side walls and a peripheral wall extending therebetween, a partition extending between said two side walls, forming a tubular chamber adapted to retain in serial arrangement articles to be discharged from said container, and an outlet through one of the

walls of said container, registering with the discharging end of said chamber, the width of said chamber substantially corresponding to the transverse dimension of said



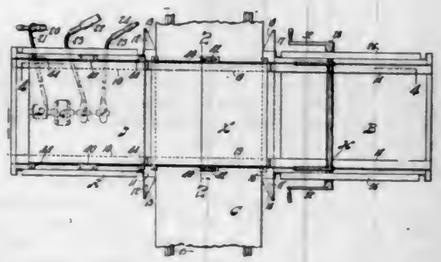
articles, and the distance between said two side walls substantially corresponding to the dimension of said articles in a direction at right angle to said transversal dimension.

1,764,353. CUSHION HEEL. FRANK SANSONE, New Orleans, La. Filed Oct. 23, 1928. Serial No. 314,336. 1 Claim. (Cl. 36—35.)



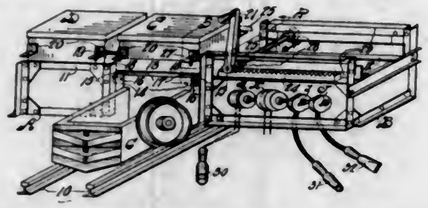
A cushion heel comprising a heel block of the usual shape provided with a recess on its upper face and the lower portion of the said recess closed by a tongue-like member of substantially rigid material united to the heel block at its front edge portion and being flush with the lower surface of the heel block at this point, said tongue-like member having its rear portion normally disposed below the lower surface of the heel block and having its edge portion united to the heel block by a relatively thin flexible web.

1,764,354. BATTERY-HANDLING APPARATUS. EUGENE W. SCHELLENTRAGER, Shaker Heights, and BRADLEY E. CLARKSON, Cleveland, Ohio, assignors to Atlas Bolt & Screw Company, Cleveland, Ohio. Filed June 13, 1927. Serial No. 198,650. 39 Claims. (Cl. 104—34.)



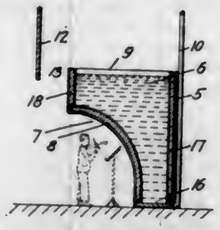
1. An apparatus of the character described including a platform having a battery track means and a locomotive having a battery track means alignable vertically as well as horizontally with said track means on the platform.

1,764,355. BATTERY-HANDLING METHOD. EUGENE W. SCHELLENTRAGER, Shaker Heights, and BRADLEY E. CLARKSON, Cleveland, Ohio, assignors to Atlas Bolt & Screw Company, Cleveland, Ohio. Filed June 20, 1927. Serial No. 200,266. 17 Claims. (Cl. 104—34.)



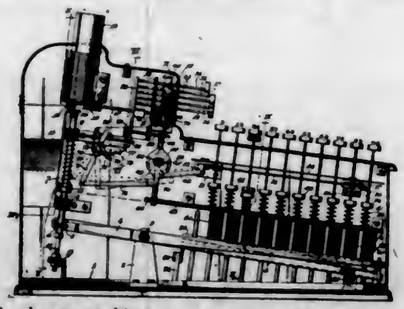
1. A method of the character described including moving a section of a battery track into horizontal alignment with another section of said track and aligning the first said section vertically with said other section by movement of the first said section.

1,764,356. ILLUSION APPARATUS. ELMER E. SCHLOTZ, Denver, Colo. Filed Dec. 5, 1927. Serial No. 237,858. 3 Claims. (Cl. 272—26.)



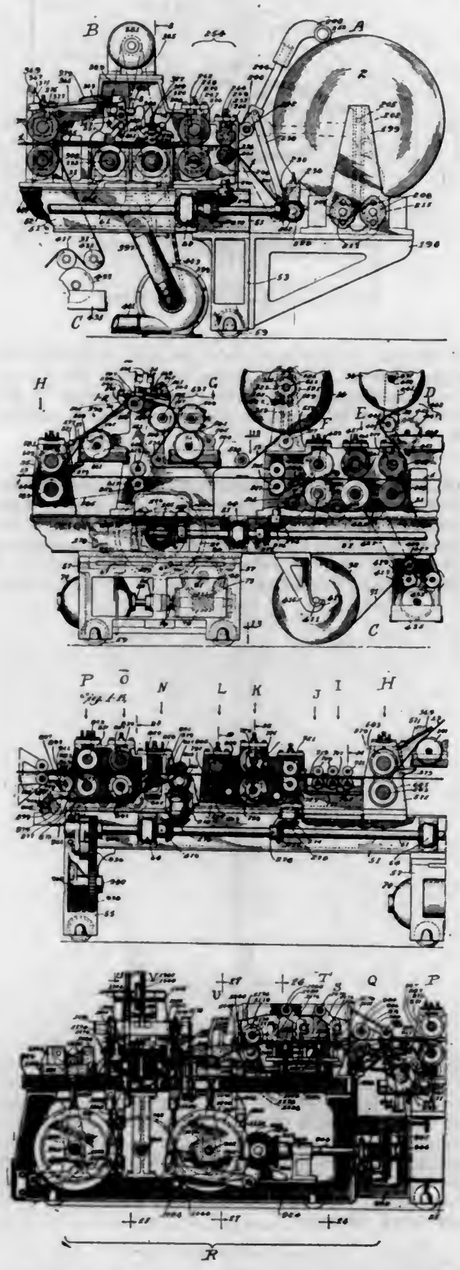
3. In illustion apparatus, a tank containing a body of water and adapted to form a liquid screen before an audience in a place of entertainment, the rear wall of the tank extending inwardly to provide a chamber for performers.

1,764,357. CHANGE-MAKING MACHINE. CARL SCHWARTZ, Detroit, Mich. Filed Feb. 24, 1923. Serial No. 620,880. 3 Claims. (Cl. 133—2.)



1. A change making machine comprising a plurality of coin receptacles adapted to contain coins of each of the different denominations, a coin support movably mounted in said receptacle, a plurality of ejector means each including an ejector bar, and means operated by the bar to eject coins from said receptacles a plurality of selector keys, a plurality of levers mounted for pivotal movement, each of said keys causing pivotal movement of a plurality of said levers, each of said levers being adapted by its pivotal movement to move a coin support whereby to cause movement of the coins in a receptacle relative to the bar operated ejecting means, whereby pressure upon a selector key will cause a selective setting of a plurality of levers to prevent the ejection of coins from one or more receptacles when an ejector bar is operated.

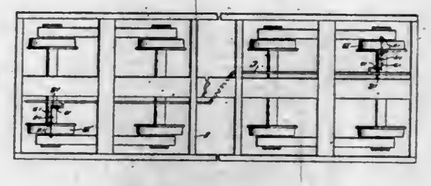
1,764,358. MACHINE FOR MAKING PAPER BOX BLANKS AND BOXES. HARRY BRIDGMAN SMITH, Brooklyn, N. Y., assignor, by mesne assignments, to Hoague-Sprague Corporation, Lynn, Mass., a Corporation of Massachusetts. Filed Jan. 3, 1924. Serial No. 684,116. 171 Claims. (Cl. 93—36.)



146. A box blank machine comprising means for advancing sheet box material, and means for producing beveled formations at intervals thereon.

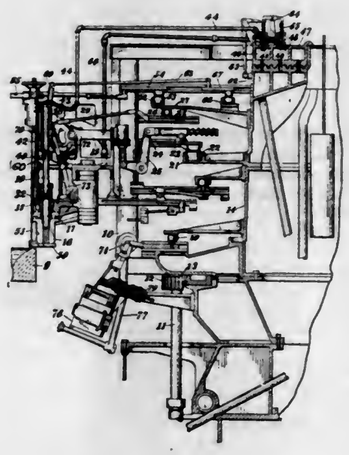
170. In a box-folding machine, means comprising oppositely disposed wings reciprocatorily movable longitudinally of the machine for engaging and folding the stock.

1,764,359. SAFETY APPLIANCE FOR AIR-BRAKE SYSTEMS. WALTER B. SMITH, WILLIAM M. HAMMONS, and JOHN B. MULLENS, Corbin, Ky. Filed Feb. 15, 1930. Serial No. 428,694. 3 Claims. (Cl. 246—170.)



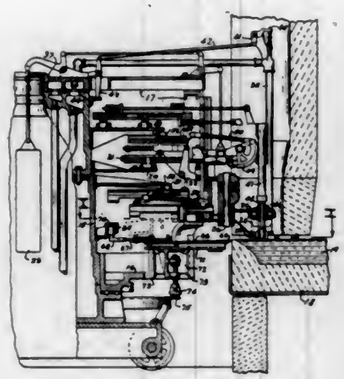
1. The combination with a car having a truck, a car wheel and an air brake system including a train pipe, of a valve for venting the train pipe upon a movement of the valve from a normal train pipe closing position in either direction to a venting position, and means embracing the wheel and operatively connected to the valve to cause the valve to shift to its venting position when the wheel moves laterally in either direction, said means being mounted upon the car and being independent of the truck or wheel.

1,764,360. GLASS-BLOWING MACHINE. LEONARD D. SOUBIER, Toledo, Ohio, assignor to Owens-Illinois Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Oct. 2, 1922. Serial No. 591,750. 16 Claims. (Cl. 49—5.)



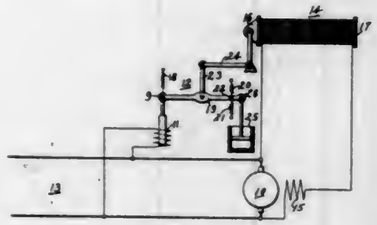
5. In a glass forming machine, the combination of a blank mold, a neck mold, a plunger, means to project the plunger downward within the blank mold, means to charge the mold beneath the plunger by suction, the lower end of the plunger being substantially the same diameter as the mold cavity, whereby the glass entering the mold is prevented from passing upward past the plunger, means to withdraw the plunger, means to cause the glass to follow upward with the plunger, a neck mold, a shaping member surrounding the plunger and forming with the neck mold a neck cavity in which the glass is molded to form the neck of the article, and means to withdraw the plunger and said shaping member from the neck mold.

1,764,361. GLASS-FORMING MACHINE. LEONARD D. SOUBIER, Toledo, Ohio, assignor to Owens-Illinois Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Nov. 15, 1926. Serial No. 148,324. 3 Claims. (Cl. 49—5.)



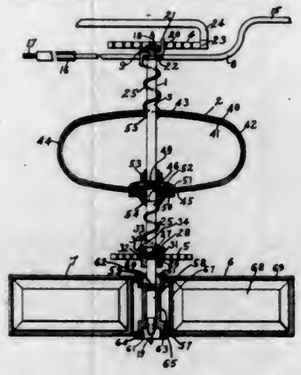
1. In a machine for forming glass articles, the combination of a mold, a plunger projecting into the mold through one end thereof and having a surface formation corresponding to the interior surface of the article to be formed, the mold and plunger together providing a mold cavity closely approximating the size and shape of the finished article, means for introducing molten glass by suction into the mold through the end thereof opposite to that through which the plunger projects and thereby substantially completely filling said mold cavity, means for severing the blass at the filling end of the mold, a closure plate movable into position to close said filling end, and means for forcing the plunger further into the mold while the closure plate is in mold closing position and thereby compressing the glass in the mold.

1,764,362. REGULATOR. STEPHEN A. STAEGE, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed May 19, 1928. Serial No. 279,121. 5 Claims. (Cl. 171—229.)



1. In a regulator of the carbon-pile type, a plurality of current-conducting discs, electromagnetic means and operating mechanism actuated thereby for varying the resistance of said discs in accordance with the energization thereof, said operating mechanism comprising a lever, one end of which is connected to said electromagnetic means, means for resiliently supporting a point on said lever, retarding means pivotally attached to said lever whereby, upon sudden movement of said lever, the supported point will be displaced and gradually restored to its original position by the yielding of retarding device.

1,764,363. ELECTRICAL MEASURING INSTRUMENT. LOUIS STALDER, Turtle Creek, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Feb. 14, 1928. Serial No. 254,243. 13 Claims. (Cl. 171—95.)



6. The combination with a spindle, and a damping vane carried thereby, of means for securing said vane to said spindle, said means comprising a bushing carried by said spindle and a hollow-walled cylindrical member coacting therewith.

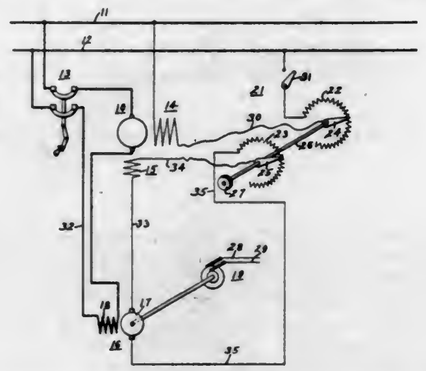
1,764,364. PUMP AND METHOD OF PACKING THE SAME. ROSCOE W. STEPHENS, Los Angeles, and CHARLES E. WILCOX, Anaheim, Calif., assignors of one-fourth to Charles Drader, Beverly, Calif., and one-fourth to Earl W. Bailey, Bakersfield, Calif. Filed July 16, 1927. Serial No. 206,311. 14 Claims. (Cl. 103—204.)



1. In a pump, the combination of: a barrel having a standing valve; a pump delivery tube; a plunger adapted to operate in said barrel, said plunger having a traveling valve discharging pumped fluid into said delivery tube; and means subjected to the pressure of the pumped fluid and supplying an additional pressure for forcing an abrasive excluding fluid medium through the space between the external surface of said plunger and the internal surface of the barrel with more pressure than the pressure of the fluid being pumped.

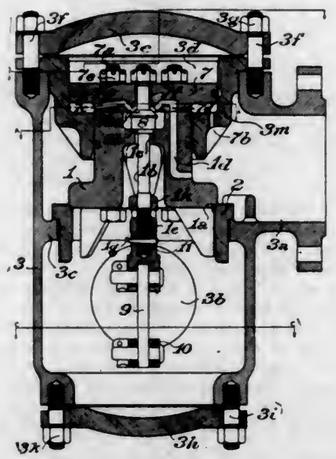
1,764,365. SERIES EXCITER. GLENN E. STOLTZ, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Dec. 13, 1927. Serial No. 239,659. 9 Claims. (Cl. 172—179.)

1. In a motor-control system, in combination, a motor provided with shunt and auxiliary field windings, a source of power for the motor, means for connecting the shunt field winding to the source of power, an exciter for energizing the auxiliary field winding, a constant-speed motor



for driving the exciter and means for simultaneously varying the degree of the energization of each field winding to change the speed of the motor and the degree of compounding provided by the auxiliary field winding.

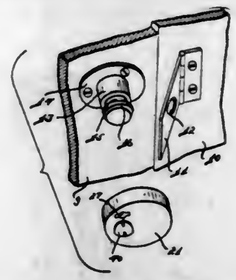
1,764,366. LOCOMOTIVE THROTTLE VALVE. ALBERT F. STUEBING, Scarsdale, N. Y. Filed May 5, 1927. Serial No. 189,101. 10 Claims. (Cl. 137—139.)



1. The combination of a throttle valve chest, having inlet and outlet passages; a throttle valve, controlling communication between said passages; a balancing chamber; a differential pressure area piston, fitting in said chamber, and dividing it into two compartments, said piston being connected to said valve; and means for balancing the throttle valve by releasing pressure from one of said compartments.

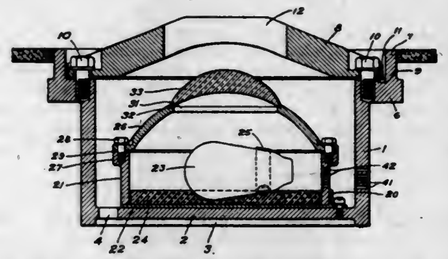
1,764,367. LOCK. VINCENT SZYMANSKI, Detroit, Mich. Filed Feb. 18, 1928. Serial No. 255,296. 2 Claims. (Cl. 70—5.)

1. A lock of the class described comprising: a stem having a peripheral flange adjacent one end to provide a tapered head on said end; a supporting portion on the opposite side of said stem adapted for attachment to a supporting object; a detachable locking member comprising a cup-shaped housing; a cover for said housing, said cover having an inwardly projecting neck for engaging in a recess formed on the inner face of said cup-shaped



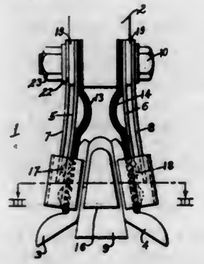
member, said neck having diametrically opposite openings formed therein; and swingable locking members in said cup-shaped member adapted for projecting through said openings and engaging in the groove in said stem.

1,764,368. RECEPTACLE FOR LIGHT-SENSITIVE UNITS. PHILLIPS THOMAS, Edgewood, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed May 10, 1929. Serial No. 362,102. 3 Claims. (Cl. 177—329.)



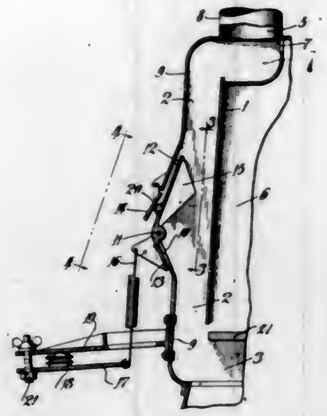
1. In a receptacle for a light-sensitive cell, an outer box and a cover therefor having slots therein for the admission of light, an inner water-tight box and a light-sensitive cell therein, said inner box being provided with a transparent cover of dome-shape for admission of light and the shedding of extraneous matter.

1,764,369. CIRCUIT INTERRUPTER. ROSWELL C. VAN SICKLE, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed May 19, 1928. Serial No. 278,938. 5 Claims. (Cl. 200—87.)



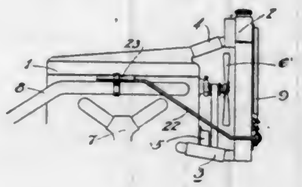
1. A parallel-path contact member, a cooperating member therefor and a loop of iron about the contact member and the cooperating member forming a magnetic path about the point of contact between the said members for drawing them into more intimate current-carrying relation.

1,764,370. CHECK-DRAFT DAMPER AND SOOT ELIMINATOR FOR HEATERS. DONALD B. TOLLEY, Macomb, Ill., assignor to American Steel Products Co., Macomb, Ill., a Corporation of Illinois. Filed Oct. 10, 1929. Serial No. 398,770. 7 Claims. (Cl. 126—58.)



1. The combination with a heater having a by-pass duct extending from its ashpit to its flue, the said duct having an air inlet opening intermediate its height, of an inlet damper controlling the admission of air through the lower part of the said openiag, a duct damper controlling the duct above the inlet damper, and a flap above the inlet damper for controlling the upper part of the said opening, the flap being movable by gravity to its closure position and movable by one of the said dampers to its open position.

1,764,371. AUTOMATIC RADIATOR SHUTTER. SERGIUS VERNET, Brooklyn, N. Y., assignor of one-half to William P. Hammond, Scarsdale, N. Y. Filed Feb. 8, 1927. Serial No. 166,633. 8 Claims. (Cl. 123—174.)

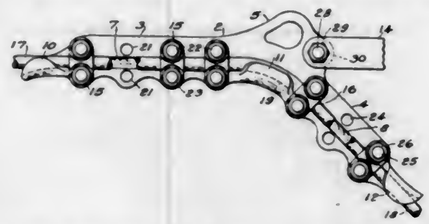


1. In an automatic radiator shutter for internal combustion engines, an exhaust manifold to remove hot gases from the engine, a radiator, a radiator shutter in front of said radiator adapted to vary the amount of air flowing therethrough from all to none and a thermostatic control containing a volatile liquid adjacent to and effected by the heat of the exhaust manifold, said heat vaporizing said liquid to operate the said shutter, by vapor pressure means

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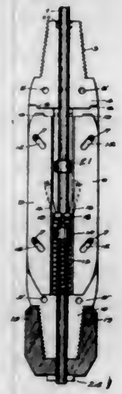
1,764,372. STRAIN CLAMP. NILS A. WAHLBERG, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed July 30, 1927. Serial No. 209,438. 11 Claims. (Cl. 24—135.)

1. A clamp comprising a channeled arm for substantially parallel relation to a span section of a transmission-line conductor, a channeled arm constituting a continuation of said arm but disposed in angular relation thereto, means for positioning the conductor including a lip adjacent to the outer end of each of said arms, means disposed between each of said lips and the intersection of



the arms for clamping the conductor and means at one side only of one of said channel portions for mounting the clamp.

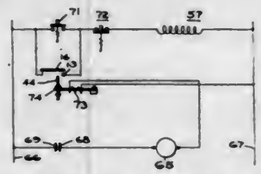
1,764,373. COMBINATION EXPANSION MILL AND UNDERREAMER. LENNIE WELLS and OLIVER W. ECKSTEIN, Long Beach, Calif. Filed June 29, 1925. Serial No. 40,285. 8 Claims. (Cl. 255—74.)



1. In a combined expansion mill and under reamer, in combination, a two part casing, projections extending from each end of said casing, an inner operating member in all its positions extending through the entire length of said casing, a set of longitudinally and transversely movable elongated cutting elements positioned in said casing and adapted to be operated by said member, the cutting portion of each of said elements being in a single vertical plane, and a mill detachably associated with the lower of asid projections, and distinct and separate from said casing, said mill functioning as a cutting element and also assisting in holding the parts of said casing together

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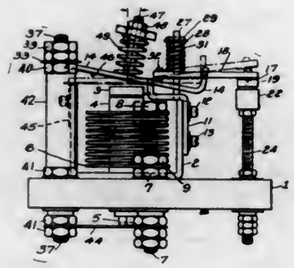
1,764,374. THERMAL RELAY. HAROLD E. WHITE, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Aug. 6, 1927. Serial No. 211,050. 5 Claims. (Cl. 175—294.)



1. A control means for a contactor having a main switch, a magnet coil controlling said main switch and an auxiliary switch in the circuit of the magnet coil,

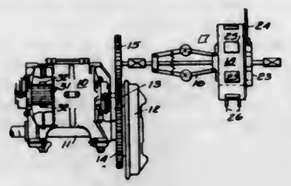
said control means including thermally-actuable means for effecting opening of the auxiliary switch and thereby of the main switch, and mechanical means operatively associated with the main switch for holding open the auxiliary switch as long as the main switch is open.

1,764,375. THERMAL RELAY. HAROLD E. WHITE, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 5, 1928. Serial No. 267,538. 5 Claims. (Cl. 200—88.)



1. A protective relay comprising an armature, a coil for actuating the armature, means for restraining the armature from movement by said coil according to an inverse-current-time characteristic when the coil is traversed by currents of normal value long continued, and adjustable means operatively associated with said armature for effecting instantaneous operation of the armature when a current of abnormal predetermined value traverses the coil.

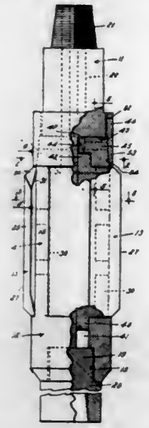
1,764,376. COMMUTATOR-ROCKING DEVICE. CHARLES C. WHITTAKER, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed June 29, 1928. Serial No. 289,317. 16 Claims. (Cl. 172—276.)



1. In a motor-control system, in combination, a plurality of driving motors provided with armatures and commutators, a source of power for the motors, means for connecting the motors to the source of power, means for varying the voltage applied to the motors and causing the voltage applied to one motor to increase as the voltage applied to another decreases to thereby vary the torque in the motors, and a resilient drive connecting the motors to the load, said resilient drive and variable torque coacting to oscillate the motor armature and commutator during the starting of the motor.

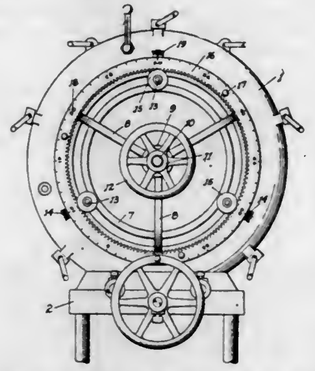
1,764,377. REAMER. HARRY P. WICKERSHAM, Brea, Calif., assignor to Henry George Yahraus, Los Angeles, Calif. Filed Dec. 21, 1922. Serial No. 608,164. 5 Claims. (Cl. 255—76.)

1. A tool of the character described including, a body, end parts in connection with the ends of the body, one of the end parts having a round opening the other having a recess, a cutter adapted to be arranged at the body, trunnions on the ends of the cutter one adapted to extend into the opening the other adapted to extend into the recess, a block adapted to be arranged in the recess



to retain the trunnion therein, and a sleeve screw threaded onto the end part having the recess to engage the block to hold it in the recess.

1,764,378. TIRE-RETREADING MOLD. HERBERT J. WOOCK, Lodi, Calif., assignor, by mesne assignments, to Super Mould Corporation, Reno, Nev., a Corporation of Nevada. Filed Nov. 6, 1928. Serial No. 317,515. 11 Claims. (Cl. 18—18.)



1. A tire retreading mold including an annular mold structure to receive the tire to be retreaded, a pair of rigid opposed annular rings to project inwardly of the mold to engage the opposite sides of a tire engaged with the mold, means applied to the rings for moving the same axially toward each other, and means for limiting the movement of the rings irrespective of the manipulation of the ring moving means.

1,764,379. WRENCH. JOHN ZILLIOX, Orchard Park, N. Y. Filed Mar. 7, 1928. Serial No. 259,654. 1 Claim. (Cl. 81—58.)



A wrench comprising a handle, a stem projecting laterally from one side of said handle, an open end wrench head having jaws and a shank, said shank being provided

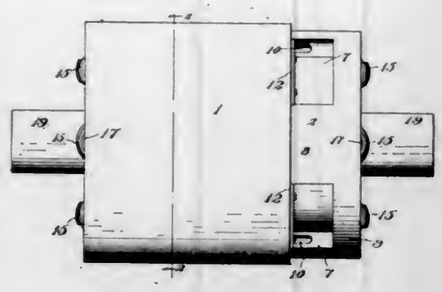
with an opening adapted to fit said stem and said shank being formed on its outer side to provide at least three flat faces arranged at an angle to one another and forming pointed projections, and a ridge formed on said handle adjacent the outer side of said shank, said ridge being formed to provide a flat face opposing said shank and adapted to engage any of said faces on said shank and said ridge being formed to provide a V-shaped notch at the center of its flat face, said notch being adapted to receive any one of the pointed projections on said wrench head.

1,764,380. CLAMP. EDWARD H. ALLEN, Palmyra, N. J. Filed June 10, 1929. Serial No. 369,782. 3 Claims. (Cl. 24—135.)



1. A clamp of the character stated comprising a main member of generally rectangular configuration and of substantially inverted, U-shaped cross section the pendant or flanged portions of which are angular and are arranged at right angles to the top of said member and have opposed pairs of V-shaped notches, a second rectangular member of a dimension less than the dimension of the main member, said second member having notched portions arranged for alignment with the notches of said main member, a bolt having screw-threaded relation with said second member and having free passage through said main member, and a nut for advancing said main member toward said second member.

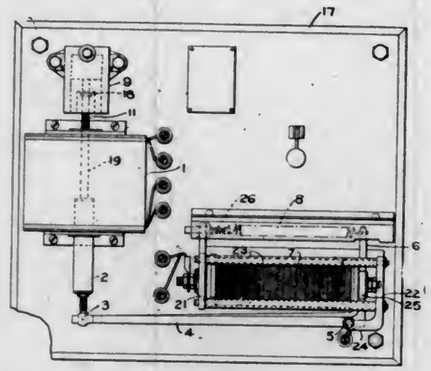
1,764,381. UNIVERSAL JOINT. CLAUDE H. ARBUTHNOT, Lake Alfred, Fla. Filed May 24, 1928. Serial No. 280,275. 5 Claims. (Cl. 64—91.)



1. A universal joint comprising coupling sleeves telescopically fitted together, universal rings one mounted in the outer end of each sleeve, and rotatable elements each having a head pivotally engaged in and held by one of said rings.

1,764,382. REGULATOR SYSTEM. JOHN H. ASHBAUGH, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Dec. 6, 1927. Serial No. 238,048. 4 Claims. (Cl. 171—229.)

1. In a regulator of the carbon-pile type, a pile of current conducting wafers, a biasing member for normally compressing said wafers, an electromagnet for releasing the pressure of said biasing member in accordance with the energization thereof, and anti-hunting means comprising a retarding element resiliently connected to said



magnet for permitting movement of the magnet core in either direction prior to movement of the retarding element.

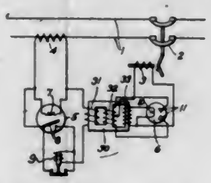
1,764,383. DEVICE FOR LOCKING A MOTOR VEHICLE IN GEAR. FRANK A. BEZEK, San Francisco, Calif., assignor to General Automotive Equipment Company of California. Filed Dec. 4, 1928. Serial No. 323,743. 10 Claims. (Cl. 70—126.)



2. In combination, a clutch, a lever to disengage said clutch, a rack secured to said lever, a casing, in which said rack is slidably confined, a latch in said casing, engageable with said rack, means connected to said latch to move it into or from engagement with the rack, means intermediate said latch and said rack which prevents said engagement, spring means which holds said latch normally inoperative, and means actuated by the movement of the clutch lever, which removes said intermediate means upon compression of said spring means whereby said latch is freed to engage said rack.

1,764,384. [WITHDRAWN.]

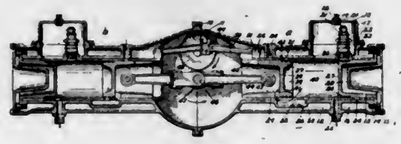
1,764,385. PROTECTIVE SYSTEM. JOHN V. BREISKY, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed July 27, 1926. Serial No. 125,144. 4 Claims. (Cl. 175—294.)



1. In an electrical circuit having a circuit interrupter therein and an actuating winding therefor, a thermionic

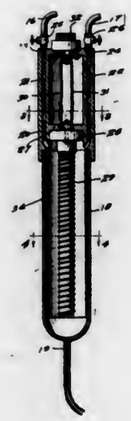
device having an anode and a cathode, a transformer core having a winding thereon for energization in accordance with an electrical condition in said circuit, a second winding on said core for energizing said cathode and means for limiting the energization thereof, and a third winding on said core for energizing the actuating winding of said interrupter through a circuit including the anode and cathode of said thermionic device.

1,764,386. SLEEVE-VALVE GAS ENGINE. CARL P. BROCKWAY, Paterson, N. J., and DON D. MYERS, Toledo, Ohio, assignors to Industrial Research Corporation, Toledo, Ohio, a Corporation of Delaware. Filed June 18, 1921, Serial No. 478,475. Renewed Mar. 11, 1929. 7 Claims. (Cl. 123—56.)



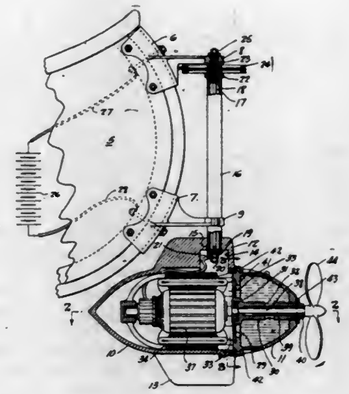
4. In a gas engine having an enclosed crank case having a crankshaft therein, the combination of a cylinder having an axial passageway in its wall; a reciprocable sleeve movable within the cylinder operated by said crankshaft, said sleeve forming an explosion chamber; and a piston having an opening adapted to communicate between the crank case and cylinder passageway; said sleeve by its motion being adapted to alternately establish and dis-establish communication from the crank case to the explosion chamber through the piston port and cylinder passageway.

1,764,387. APPARATUS FOR FLUSHING GREASE CONTAINERS. CONRAD ROBERT BUCHET, Long Beach, Calif., assignor, by direct and mesne assignments, to Adjusto Equipment Company, Los Angeles, Calif., a Corporation of California. Filed Mar. 13, 1928. Serial No. 261,212. 8 Claims. (Cl. 184—1.5.)



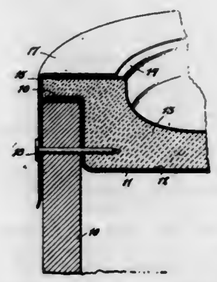
1. A manually portable device for use in flushing a grease container comprising a barrel having an elongated nozzle for insertion into the container, a passage extending through said barrel for liquid, a passage extending through said barrel for gas, and means in said barrel to heat the fluids introduced thereinto.

1,764,388. ELECTRIC MOTOR AND PROPELLER UNIT. CONRAD R. BUCHET, Long Beach, Calif., assignor, by direct and mesne assignments, to Adjusto Equipment Company, Los Angeles, Calif., a Corporation of California. Filed Jan. 28, 1930. Serial No. 423,980. 10 Claims. (Cl. 115—18.)



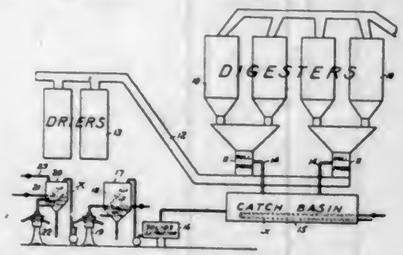
1. A propeller and motor unit for boats comprising supporting brackets to overhang the stern of the boat, a column mounted in said brackets and depending therefrom, a housing fixed to the lower end of said column with its length extending fore and aft; said housing being divided transversely to form fore and aft chamber sections, said aft chamber section having an internal ledge, means to detachably secure said fore and aft chamber sections together; a motor having a frame with a lateral plate for resting against said ledge and forming a leak tight fit between the chambers, said plate having an outstanding bearing for the motor shaft, said aft chamber section having an opening at its stern for passage therethrough of said bearing, means on said bearing engaging said aft chamber section to clamp said lateral plate against said ledge and support said motor thereon, and a propeller on said shaft.

1,764,389. CONTAINER HEAD. HERBERT LYON CARPENTER and JAMES NORMAN CARPENTER, Brooklyn, N. Y., assignors to Carpenter Container Corporation, New York, N. Y., a Corporation of New York. Filed Feb. 23, 1926. Serial No. 90,137. 3 Claims. (Cl. 229—5.7.)



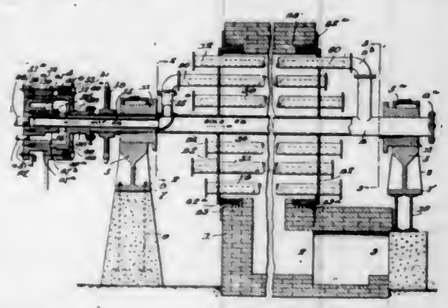
1. A container head comprising a complete unit made of loose material stuck or bound together under suitable pressure, and a covering of sheet material enclosing all surfaces of said combined material and secured thereto, said covering being strong and relatively non-stretchable.

1,764,390. PROCESS OF RECOVERING GREASE FROM GARBAGE. WALTER D. CLEARY, Brooklyn, N. Y., assignor to The De Laval Separator Company, New York, N. Y., a Corporation of New Jersey. Filed Nov. 19, 1926. Serial No. 149,325. 1 Claim. (Cl. 87—6.)



The process of extracting grease from the impure liquor expressed from digested garbage and containing grease, water and inseparated solids, which comprises settling out a proportion of the solids, subjecting the impure liquor, while at a temperature sufficiently high to render it sufficiently fluid to centrifugal force to effect the separation of the major part of the remaining solids from impure liquor containing the grease and water and a minor part of the solids, skimming off the grease with some water from the centrifugally separated impure liquor, and subjecting the skimmed-off liquor to centrifugal force and thereby separating from the grease the water and any solids that have not been eliminated in the previous operations.

1,764,391. PROCESS OF AND APPARATUS FOR DISTILLING AND CRACKING HYDROCARBON OILS. DAVID E. DAY, Los Angeles, Calif. Filed Aug. 21, 1922, Serial No. 583,170. Renewed Dec. 12, 1927. 29 Claims. (Cl. 196—47.)



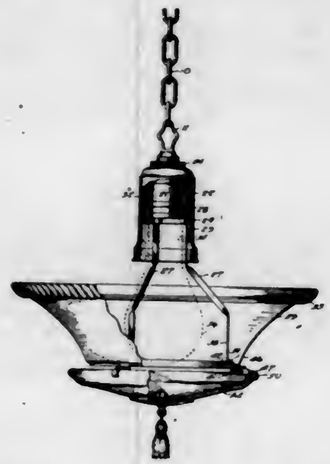
1. The process of producing low boiling hydrocarbon oils from high boiling hydrocarbon oils which comprises forcing liquid oil to be treated at high speed into and in one direction through a tube mounted to revolve about a given center and moving the oil at relatively increased speed as compared to the prior rate of speed as it passes lengthwise of a rod freely movably located in said tube and extending lengthwise thereof, subjecting the oil to a heat treatment applied directly to the exterior of the tube sufficient to effect cracking conditions therein, the increased speed of movement of the oil in the region of the rod aiding to prevent deposit of carbon.

19. Apparatus for heat treating hydrocarbon oil, material comprising a rotatable hollow axle, a first pipe extending parallel to said hollow axle and revoluble about it, a second pipe connected to said hollow axle for the introduction of oil to be treated, a third pipe extending from said hollow axle to said first pipe and providing communication for oil between said hollow axle and said first pipe, and a furnace embracing a portion of said hollow axle and said first pipe and having both of its opposite end walls located between said third pipe and said second pipe.

1,764,392. COMPOSITION FOR CLEANING GLASS WINDOWS. FRITZ DIEBOLD, Zurich, Switzerland, and OSCAR FRIEDBERG, Berlin, Germany. Filed Oct. 16, 1926, Serial No. 142,146, and in Germany Apr. 29, 1925. 2 Claims. (Cl. 87—5.)

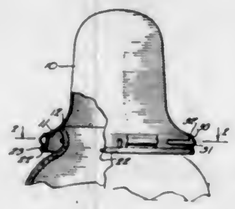
1. A composition of matter for cleaning shining surfaces comprising a thin liquid vehicle consisting of a dilute alkaline soap solution, and gasoline dispersed throughout said vehicle as fine particles capable of remaining stably suspended and capable of adsorbing dirt or the like from soiled surfaces.

1,764,393. LIGHTING FIXTURE. LEROY C. DOANE, Meriden, Conn., assignor to The Miller Company, Meriden, Conn., a Corporation of Connecticut. Filed Mar. 9, 1927. Serial No. 173,831. 18 Claims. (Cl. 240—78.)



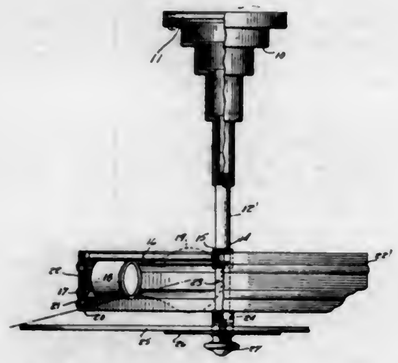
4. A semi-indirect lighting fixture comprising a single centrally located downwardly opening lamp socket, a support therefor, a socket cover, a lamp in the socket, a ring, a plurality of straps having hooks at their lower ends which pass through holes in the ring for supporting the ring and hooks at their upper ends which enter holes in the socket cover, a collar for locking the upper ends of the straps in place, an outwardly and upwardly flaring deflector for redirecting light upwardly, and a glass diffuser under the ring for reflecting light onto the outside of the deflector, both the deflector and diffuser being removably supported from the ring.

1,764,394. SHADE HOLDER. LEROY C. DOANE, Meriden, Conn., assignor to The Miller Company, Meriden, Conn., a Corporation of Connecticut. Filed Apr. 13, 1928. Serial No. 269,651. 5 Claims. (Cl. 240—134.)



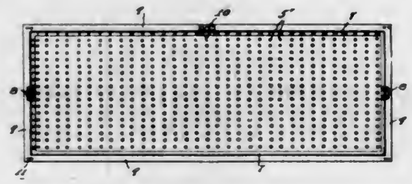
1. A shade holder comprising a fixed inner ring carrying a plurality of spring fingers attached at one end to the ring, each having a movable end passing through a slot in the ring, and an outer ring engaging with the ends of the fingers to hold them in a predetermined position in the slots for gripping a shade, said ring being movable to another position to permit the spring fingers to expand and release the shade, the outer ring having a circular groove to receive the ends of the spring fingers and permit complete rotation of the outer ring, the ends of the fingers then actuating to hold the outer ring on the inner ring.

1,764,395. LIGHTING FIXTURE. LEROY C. DOANE, Meriden, Conn., assignor to The Miller Company, Meriden, Conn., a Corporation of Connecticut. Filed Aug. 8, 1929. Serial No. 384,353. 5 Claims. (Cl. 240—78.)



1. A lighting fixture comprising a central stem, a plurality of tubular arms extending outwardly from the stem, a lamp socket carried by each arm in a position to dispose an incandescent lamp carried therein with its bulb close to the stem, a band supported from the arms of sufficient width to screen off the sockets and bulbs, and a diffuser underneath the bulbs and band and adapted to receive the downwardly emitted light.

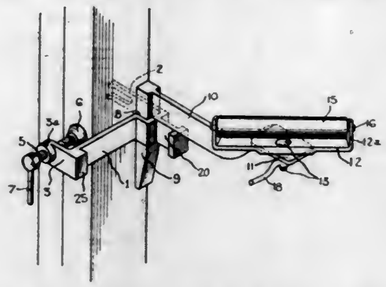
1,764,396. METHOD AND APPARATUS FOR DRAPING CURTAINS. HENRY DREYFUSS, New York, N. Y. Filed May 23, 1929. Serial No. 365,359. 12 Claims. (Cl. 156—46.)



8. A curtain suspension means for use with a window frame or the like, comprising, a horizontally suspended frame, adapted to be connected to the top of said window frame, a curtain suspending member, pivotally mounted on said frame and normally latched thereto, and position indexing means, carried by said suspending member, adapted to hold a curtain in any desired draped arrangement.

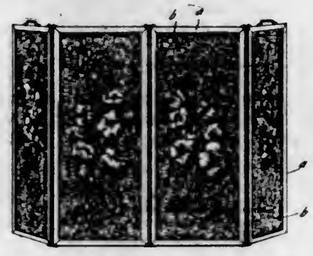
1,764,397. LUMBER-LOADING ROLL. EMIL FELDIN, Everett, Wash. Filed Nov. 19, 1928. Serial No. 320,339. 2 Claims. (Cl. 193—42.)

1. A device of the character described comprising a clamp bar adapted to be detachably fixed to a support and having a socket therein, a bracket having a mounting shank applicable to the socket in various ways to support the bracket at different positions and a roller adjustably



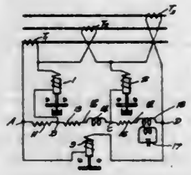
mounted by the bracket; said clamp having lateral supports extending therefrom for supporting engagement with the bracket at points spaced from the shank.

1,764,398. ORNAMENTED SCREEN. MARION FORSYTH FITZ GERALD, Portland, Oreg. Filed Feb. 26, 1927. Serial No. 171,179. 2 Claims. (Cl. 41—34.)



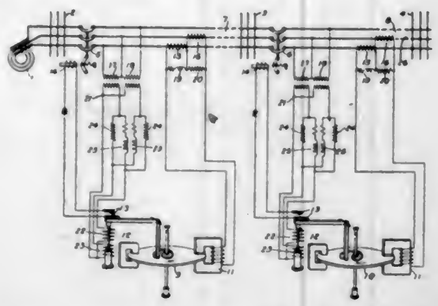
1. An ornamental screen of the character described, comprising a body of open mesh fabric, a decorative web affixed in those meshes of the fabric of the screen body lying within the outline of the ornamentation to be placed on the screen, said decorative web consisting of a semi-resilient material and bearing the embellishments of the decoration, and a skin of elastic moisture and heat proof material encasing both sides of the decorative web and securing the same on the fabric, thereby to prevent the chipping and breaking off of the decorative web from the strands of the fabric by the flexing of the screen body.

1,764,399. PROTECTIVE SYSTEM. VLADIMIR GENKIN, Marseille, France. Filed Dec. 23, 1924, Serial No. 757,619, and in Belgium Jan. 18, 1924. 6 Claims. (Cl. 175—294.)



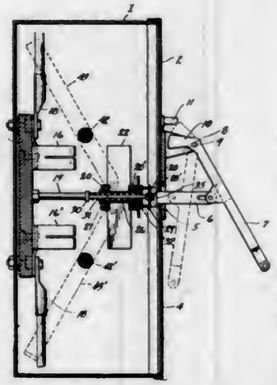
1. A protective relay system for polyphase circuits comprising a plurality of current transformers in different phase-conductors of the circuit, time-element relays, a relay having substantially no time elements and a series of impedances so connected in the circuits of each of said transformers and relays that the time-element relays are energized in accordance with the magnitude of the current traversing said circuit and the other relay in accordance with the extent of unbalance of the currents in said circuit.

1,764,400. PROTECTIVE SYSTEM. VLADIMIR GENKIN, Marseille, France. Filed Apr. 28, 1925. Serial No. 26,328. 16 Claims. (Cl. 175—294.)



1. An electrical system comprising a polyphase circuit, a circuit-interrupter therein, a relay having actuating and restraining members responsive to the circuit conditions and a contact member upon which said members act in opposition for controlling said interrupter upon the occurrence of a fault and means responsive to phase-sequence currents interposed between the actuating member and the circuit whereby the degree of energization of said member is independent of the particular phase or phases affected by the fault.

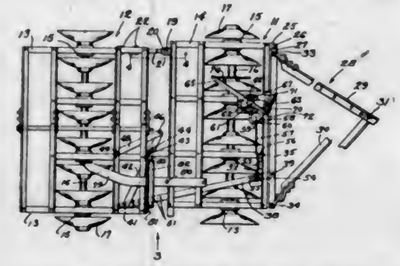
1,764,401. QUICK-MAKE-AND-BREAK SAFETY SWITCH. ANDREW E. GAISWOLD, Seattle, Wash. Filed Dec. 27, 1926. Serial No. 157,154. 5 Claims. (Cl. 200—16.)



1. A switch of the character described, comprising a mounting base, switch jaws on the base, guide posts fixed to the base, a carriage slidable on the guide posts, blades mounted by the carriage and movable therewith into and from the jaws, a pivotally mounted control lever having a lost motion connection with the carriage and through which the carriage may be actuated toward or from the jaws, and mechanism under spring tension for yieldably retaining the switch in "on" or "off" positions, and for throwing the carriage quickly between "on" and "off" positions after a predetermined movement by the control lever.

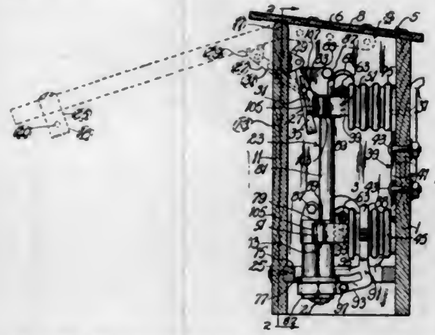
1,764,402. DISK CULTIVATOR. WILLIAM FRANCIS HAMILTON, Ventura, Calif., assignor to Ventura Manufacturing and Implement Company, Ventura, Calif., a Corporation of California. Filed Sept. 17, 1928. Serial No. 306,370. 12 Claims. (Cl. 55—83.)

1. In a disk cultivator, the combination of: a front-gang; a rear-gang; a gang-pivot for pivoting together said front-gang and rear-gang; a draft-frame; a frame-pivot for pivoting together said front-gang and said draft-frame for relative swinging movement; and rear-gang operating-



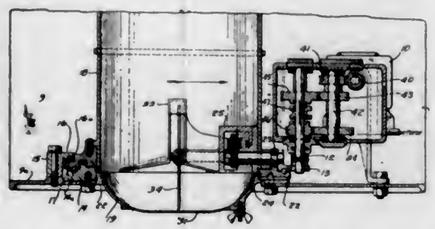
means connected to said rear-gang and said draft-frame for insuring a rearward swinging of said rear-gang relative to said front-gang upon a forward swinging of said draft frame relative to said front-gang.

1,764,403. SWITCH. WALTER A. HEINRICH, St. Louis, Mo., assignor to W. N. Matthews Corporation, St. Louis, Mo., a Corporation of Missouri. Filed Jan. 25, 1926. Serial No. 83,530. 5 Claims. (Cl. 200—133.)



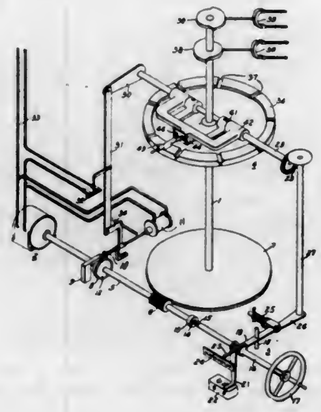
1. A fused switch comprising a box, an insulator block assembly therein carrying terminals, a fuse block adapted to electrically connect the terminals, a clamp fastened to said assembly, a socket pivoted to said clamp, said pivot being substantially aligned with said terminals, the socket being adapted to loosely receive the fuse block, and a lug fastened to said clamp adapted to prevent movement of the fuse block from the terminals when the fuse blows.

1,764,404. ELECTRICALLY-DRIVEN AGITATING MACHINE. ERNEST J. HILEMAN, Detroit, Mich. Filed June 25, 1929. Serial No. 373,547. 8 Claims. (Cl. 259—85.)



1. In a machine of the kind described, the combination of a revolvable bowl, a ring gear surrounding the same, means to revolve the bowl, a rotary tool in the bowl and revoluble therewith, and means actuated by the gear to rotate the tool when the bowl is revolved.

1,764,405. TAP-CHANGING INTERLOCK. LELAND H. HILL and WALTER M. DANN, Sharon, Pa., assignors to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed May 27, 1926. Serial No. 112,096. 9 Claims. (Cl. 192—.02.)



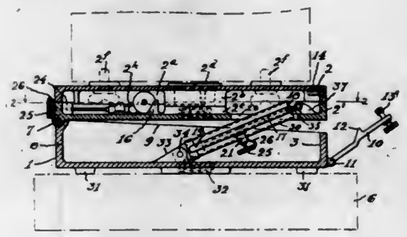
9. The combination with a shaft and a notched wheel carried thereby, of an indicating and stop mechanism comprising a second shaft, a bracket fixedly attached to the second shaft, a second bracket loosely mounted thereon, a resilient connection between the brackets and an arm mounted on one of the brackets whereby upon the turning of the second shaft the arm is brought into yielding engagement with the notched wheel.

1,764,406. KNITTING NEEDLE. RICHARD K. HOHMANN, Brooklyn, N. Y., assignor, by mesne assignments, to Gotham Knitbac Machine Corporation, New York, N. Y., a Corporation of Delaware. Filed Aug. 2, 1928. Serial No. 296,909. 2 Claims. (Cl. 66—121.)



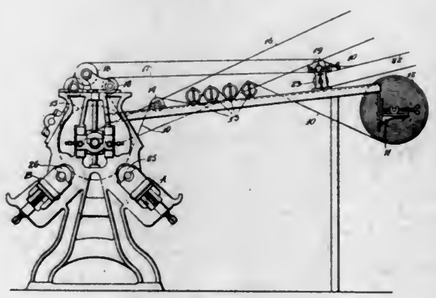
1. In a knitting needle of the type described, the combination comprising a straight shank portion, a long inclined slotted portion connected to the shank and lying at an angle in respect thereto, a hooked shaped portion attached to the angularly inclined portion said hooked shaped portion being sharply curved at the point of attachment with the long inclined portion and terminating in a straight portion which extends at an angle to the axis of the straight shank portion, a latch member having one end formed with a cam surface and pivoted in the slot of the inclined portion at such a point that its free end will contact with the end of the straight portion of the hook when the latch is closed, and a spring secured in the slot of the inclined portion which is adapted to engage the cam surface of the latch to hold said latch in open position under a slight tension when the latch is moved from closed to open position.

1,764,407. MOUNT FOR MOVING-PICTURE CAMERAS. JOHN F. HOWELL, Baldwin, N. Y., assignor to Akeley Camera, Inc., New York, N. Y., a Corporation of New York. Filed Feb. 9, 1927. Serial No. 166,973. 19 Claims. (Cl. 248—47.)



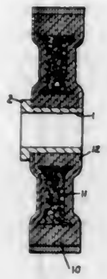
1. In combination, a platform comprising upper and lower relatively rotary sections; a guiding means mounted fast across the lower section; a rod guided therein and projecting at both ends; means retarding movement of said rod; and arcuate cam flanges fast on the upper section and engaging said ends, the cam being of a shape to cause sliding of the rod when the upper section is rotated.

1,764,408. MANUFACTURE OF WALL PAPER. JACOB J. JANEWAY, New Brunswick, N. J.; Lucius P. Janeway and Charles J. Scudder executors of said Jacob J. Janeway, deceased. Filed Dec. 18, 1925. Serial No. 76,282. 3 Claims. (Cl. 91—67.9.)



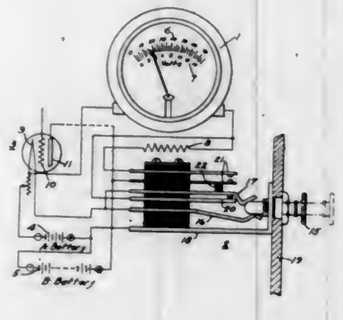
1. The process of making a washable, patterned wall paper, which consists in applying a coating of water-proofing material to a web of paper, over printing a pattern on said coat with water-proofing material before the coating is allowed to dry, and then drying the web.

1,764,409. GEAR. GEORGE C. KENT, Turtle Creek, and RUDOLF SIEGFRIED, Pittsburgh, Pa., assignors to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Feb. 10, 1925. Serial No. 8,193. 13 Claims. (Cl. 74—28.)



1. A composite article comprising a disk member having radially laminated hub and rim portions and a partially laminated and partially heterogeneous web portion formed integrally therewith.

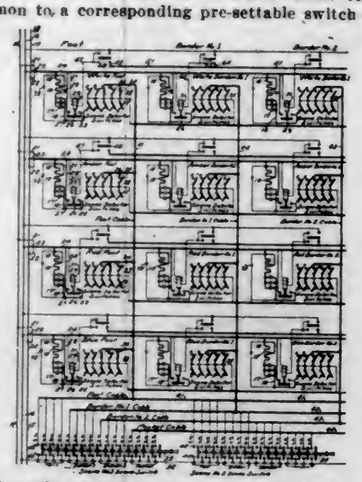
1,764,410. CONTROL OF ELECTRICAL INSTRUMENTS. JOSEPH W. LEGG, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed June 23, 1925. Serial No. 38,996. 12 Claims. (Cl. 250—27.)



1. The combination with an electrical translating device and a plurality of sources of current therefor, of a measuring instrument having a plurality of ranges corresponding to the values of said sources and unitary switching means controlling the energization of said device from said sources and the connection of said sources to said instrument.

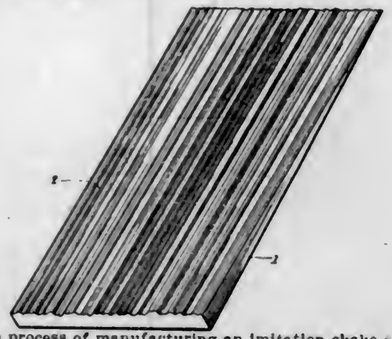
1,764,411. THEATER-LIGHTING-CONTROL APPARATUS. JAMES C. MASEK, Irwin, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed June 18, 1927. Serial No. 199,702. 4 Claims. (Cl. 171—97.)

2. A theater lighting control system comprising a plurality of load circuits, and a feed circuit, a group of presettable independently operable switches for each load circuit, each group having a separate switch for each separate scene, a scene switch for each scene connected in common to a corresponding pre-settable switch of each



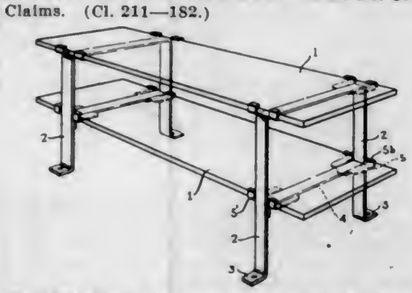
group through separate conductors, and a main switch for concurrently controlling the circuits through all of the pre-settable switches.

1,764,412. SHINGLE. CHARLES J. MELBY, Everett, Wash. Filed July 21, 1926. Serial No. 123,981. 1 Claim. (Cl. 144—309.)



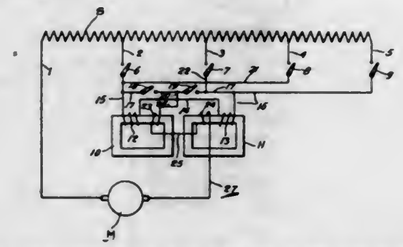
The process of manufacturing an imitation shake shingle which consists in passing the sawed shingle against a planing tool whereby its top surface is formed with a plurality of longitudinally extending, parallel, smoothly cut grooves of irregular depth and width and contiguous to each other.

1,764,413. DISPLAY STAND. LAURITS A. NIELSEN, Seattle, Wash. Filed Nov. 28, 1928. Serial No. 322,399. 3 Claims. (Cl. 211—182.)



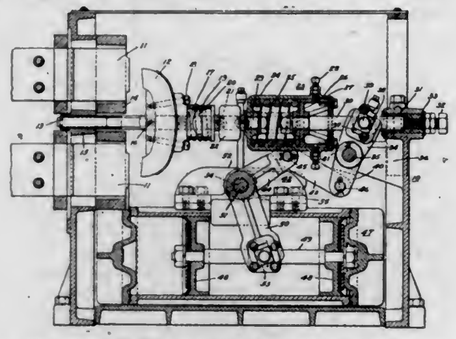
1. In a stand of the character described, a frame comprising spaced legs and a cross bar joining said legs, a shelf overlying the cross bar, a clamp plate underlying the cross bar and abutting against one of said legs and having hooked portions engaging the adjacent edge of the shelf, and another clamp plate underlying the cross bar at the other side of the frame and having hooked portions engaging the opposite edge of the shelf and a clamp screw mounted by the last named plate for engaging the adjacent frame leg to retain the hooks tightly engaged with the shelf.

1,764,414. VOLTAGE-CONTROL SYSTEM. RUDOLF PULLER, Berlin-Siemensstadt, Germany, assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed July 6, 1927, Serial No. 203,776, and in Germany July 6, 1926. 3 Claims. (Cl. 171—119.)



1. The combination with a source of electromotive force, of means comprising circuit-interrupting devices for deriving from said source a plurality of different magnitudes of electromotive force, a connection comprising a plurality of windings connected in series in an additive sense with each other and with said circuit-interrupting devices, means for eliminating one of said windings from said connection, and a winding coacting with the windings of said connection and connected to the latter.

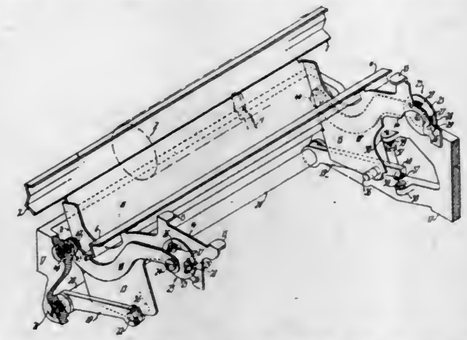
1,764,415. CONTROL APPARATUS. LYNN G. RILEY, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed May 8, 1925. Serial No. 28,990. 3 Claims. (Cl. 200—82.)



1. In control apparatus, in combination, a plurality of contact members, a bridging member disposed for reciprocatory movement, a toggle for actuating the bridging member, a reciprocatory engine for actuating the toggle, a plurality of pivotally mounted crank arms for connecting the engine to the toggle and the toggle to the bridging member, and crossheads slidably mounted on the crank arms to permit the transmission of motion from the engine through the crank arms to the bridging member.

1,764,416. TYPEWRITING MACHINE. EDWARD G. ROWLEY, Belleville, N. J., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Filed June 30, 1927. Serial No. 202,620. 11 Claims. (Cl. 197—71.)

1. In a typewriting machine including a main frame, a carriage mounted for case-shift movement and swinging type-bars, the combination of a system of swingable arms carried by the main frame, said system including a pair of arms, an upper and a lower one, with their swinging ends extending forwardly at either side of the machine, a shift-frame within the main frame supporting the carriage and to be guided by said arms for case-shift move-



ment, and an eccentric device at either side of the case-shift frame including a disk rotatably fastened to the shift-frame and carrying eccentrically one end of one of said upper arms, said disk to be rotated to adjust the shift-frame relatively to the main frame to secure proper relation between said carriage and said type-bars.

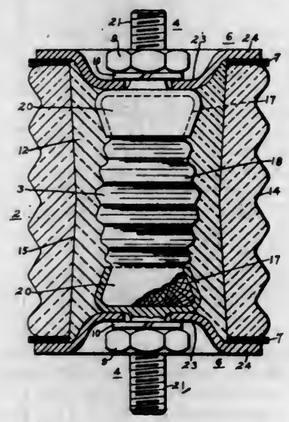
1,764,417. METHOD OF PREPARING COLLOIDAL SILVER. TEIKICHI SATOW, Tokio, Japan. Filed Jan. 23, 1926. Serial No. 83,201. 6 Claims. (Cl. 252—6.)

1. The method of preparing a silver colloid which comprises taking a silver nitrate solution of approximately 20% concentration and mixing thereto a mixed solution of dextrin and sodium hydroxid with lanolin.

4. In the method of preparing a silver colloid which comprises treating silver nitrate with a reducing carbohydrate in the presence of an alkali and a substantial amount of lanolin and maintaining said preparation in a state of quiet until a colloid of silver is formed.

1,764,418. INSULATOR. WALTER H. SCHRAMM, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 2, 1927. Serial No. 180,442. 10 Claims. (Cl. 173—318.)

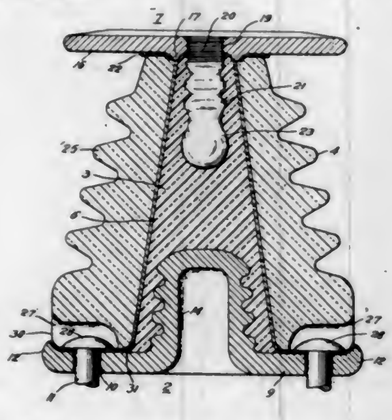
2. An insulator comprising a tubular insulating member, a strain insulator disposed therein with an end in-



wardly offset from an end of the tubular member and an end-closure member of discoidal sheet-material character

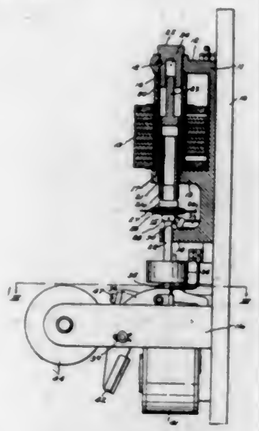
having its outer perimeter co-operating with the end of the tubular member and a depressed central portion co-operating with the end of the strain insulator.

1,764,419. INSULATOR. WALTER H. SCHRAMM, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 2, 1927. Serial No. 180,443. 2 Claims. (Cl. 173—318.)



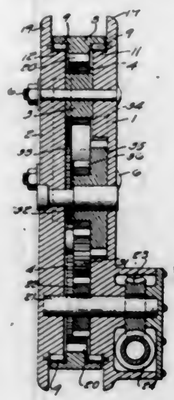
1. An insulator comprising a central insulating column of substantially frusto-conical shape, a base member having a central projecting portion embedded in the larger end of said column and a laterally extending flange, a terminal member having a central projecting portion embedded in the smaller end of said column and a laterally projecting flange, and a tubular insulating member surrounding said column between said flanges.

1,764,420. CONTROL APPARATUS. WALTER H. SMITH, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Oct. 9, 1926. Serial No. 140,534. 10 Claims. (Cl. 200—98.)



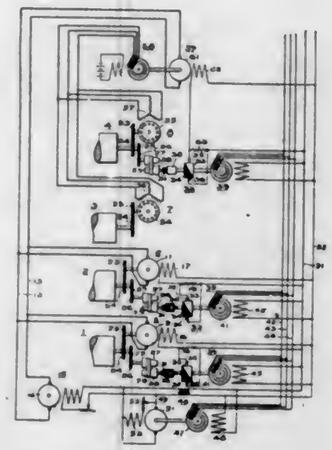
1. In control apparatus, in combination, a movable contact carrier, means for restricting the operation of the contact carrier, means for releasing the contact carrier from said means provided to restrict its operation, means for actuating the contact carrier when subject to and when released from the restricting means, and means for retarding the operation of said releasing means.

1,764,421. CHAIN HOIST. JAMES W. SNEDEKER, Adrian, Mich., assignor to Page Steel & Wire Company, a Corporation of New Jersey. Filed July 20, 1926. Serial No. 123,607. 3 Claims. (Cl. 254—170.)



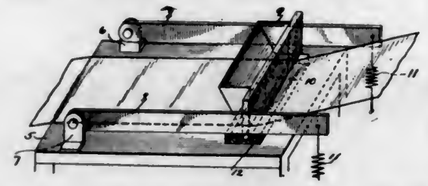
1. A hoist of the class described, comprising side members connected together in spaced relation and a drum mounted rotatably on bearings carried by one of said members adjacent to its periphery, a series of gears mounted within the space enclosed by said drum and disks, one of said gears being connected with the drum, and a worm-shaft arranged to actuate another of the gears, said worm-shaft being mounted in bearings carried by one of the said members and adapted to be actuated by means outside of said hoist, including a pulley and a flexible endless member.

1,764,422. SPEED-REGULATOR SYSTEM. STEPHEN A. STAEGE, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 15, 1926. Serial No. 102,169. 2 Claims. (Cl. 172—293.)



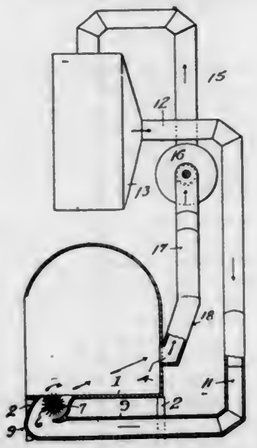
1. In a regulator system wherein a plurality of members are required to run in predetermined speed relation, individual direct-current motors for driving certain of said members, individual asynchronous motors for driving certain other of said members, a generator for supplying power to said asynchronous motors, and means for regulating the speed of said generator and of said direct-current motors to maintain the desired speed relation of said members.

1,764,423. APPARATUS FOR COATING ARTICLES. HENRY A. STONE, Bogota, N. J. Filed Sept. 10, 1925. Serial No. 55,583. 1 Claim. (Cl. 91—30.)



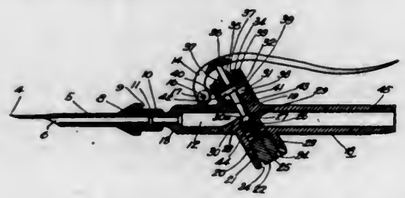
In an apparatus for coating material, the combination of a pivotally mounted tank or reservoir, said tank being provided with an opening in the bottom thereof for the discharge of coating material therefrom, a resilient cushion below the opening in said tank, and means for yieldingly holding said tank in adjusted position on its pivot.

1,764,424. CLEANING MACHINE. HUGO R. SWANSON, Brooklyn, N. Y., assignor to Triangle Kapok Machine Corporation, New York, N. Y., a Corporation of Delaware. Filed Apr. 13, 1928. Serial No. 269,668. 7 Claims. (Cl. 15—7.)



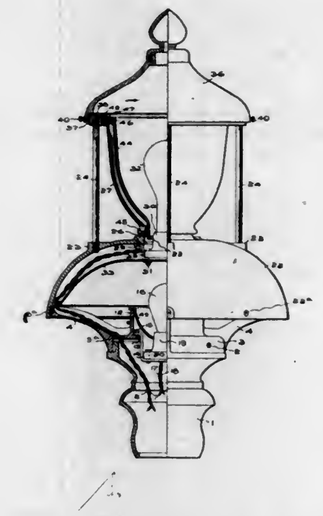
1. In a device of the type described, the combination of a platform having an opening therein, a brush in registry with said opening, a hood over said platform having a discharge opening, a conduit system connected to the platform opening, and to the hood discharge opening, means for creating a continuous current of air in said system, and means for removing dust from the air leaving said discharge opening.

1,764,425. APPARATUS FOR SKINNING ANIMALS. LOGAN E. THOMAS, Choctaw, Okla. Filed June 10, 1929. Serial No. 369,888. 4 Claims. (Cl. 17—21.)



1. A device of the character described, comprising a valve, a long longitudinal body member having an air chamber therein and housing said valve, and having a handle member thereon adapted to open and close said valve, a second body member crossing said first body member and integral therewith, and seating and housing said valve, a hollow necked metallic member having a two-edged pointed cutting blade at its front end being adapted to cut an incision in the skin, and having a ferrule at its other end being adapted to fit the front end of said first body member; a beveled rubber shoulder intermediate said ferrule and said cutting blade, said cutting blade and said hollow neck being adapted to penetrate under the skin in said incision and said shoulder being adapted to close said incision, the outer end of said first body member being adapted to connect a source of supply of compressed air, and the like.

1,764,426. TRAFFIC SIGNAL DEVICE. JOHN R. TOWNSEND, South Bend, Ind., assignor, by mesne assignments, to Westinghouse Electric & Manufacturing Company, East Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Mar. 31, 1926. Serial No. 98,720. 3 Claims. (Cl. 177—327.)



3. In a traffic beacon employing two light sources, a supporting standard, a cover structure, comprising a pair of collars and a plurality of supporting arms, disposed to rest upon and cover the top of the standard, one of said collars being adapted to support a reflector, a reflector, a bracket disposed in the cover structure, a light source mounted on the bracket, a canopy having an opening at its central portion mounted on the supporting arms, a bracket in the opening and a reflector disposed beneath the canopy and supported by the bracket.

1,764,427. GARMENT GUARD OR PROTECTOR. ISIDORE UNKER and HENRY S. ROSENTHAL, New York, N. Y. Filed Dec. 11, 1926. Serial No. 154,094. 3 Claims. (Cl. 223—61.)

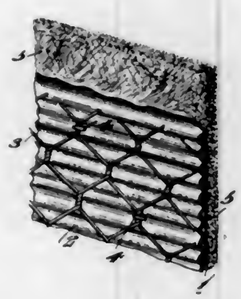
1. In a device of the class described, the combination with a garment hanger, having a supporting hook or member, of a dust guard or protector consisting of a pair of wings, the inner ends of which are pivotally connected, so that said wings may be swung relatively to each other, friction devices cooperating with said pivotal ends whereby said wings may retain adjusted positions

with respect to each other, and said wings being provided with side flaps, adapted to engage with the shoul-



der portions of the garment mounted upon said hangar, and having an opening through which the supporting hook or member of the hangar may extend.

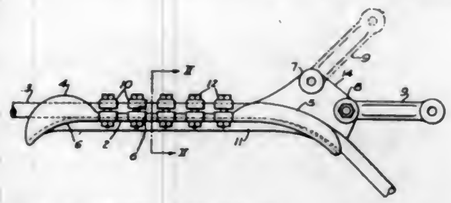
1,764,428. BUILDING PARTITION. FREDERICK M. VENZIE, Philadelphia, Pa. Filed Mar. 12, 1926. Serial No. 94,292. 1 Claim. (Cl. 72—46.)



As a new article of manufacture, a combined key and insulator for plastering purposes comprising a sheet of cardboard having inner and outer plane surfaces, said cardboard being treated with fire proofing material, a sheet of insulating material possessing temperature and fire resisting properties adhesively secured to the inner face of said cardboard, a sheet of corrugated paper treated with fire resisting material covering the outer face of said cardboard, a piece of wire mesh covering the exposed face of said corrugated paper, and staples for attaching said wire mesh with respect to the aforesaid element in a manner to present a unit flexible enough to be manufactured at a central plant and shipped therefrom in roll form as a unitary structure for instant erection by a single group of mechanics, the points of said staples penetrating said corrugated paper and cardboard and entering said insulating material.

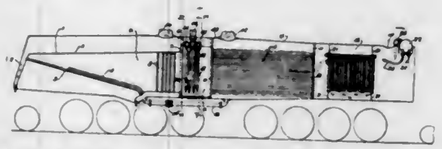
1,764,429. CONDUCTOR CLAMP. NILS A. WAHLBERG, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 6, 1927. Serial No. 181,333. 4 Claims. (Cl. 24—135.)

1. A conductor clamp comprising a conductor-receiving portion, means for clamping the conductor to said portion and means adjacent to one end of the clamp having diagonally related portions for receiving a mount-



ing link in different angularly-related positions, in one of which positions the link is substantially in alignment with the conductor when under tension.

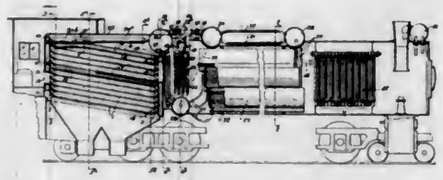
1,764,430. LOCOMOTIVE. CARL A. W. BRANDT, Great Neck, N. Y., assignor to The Superheater Company, New York, N. Y. Filed Jan. 19, 1925. Serial No. 3,538. 17 Claims. (Cl. 122—460.)



4. In a locomotive boiler, in combination, a firebox evaporating unit, a second evaporating unit spaced therefrom, and through which the combustion gases flow after leaving said fire box unit, means connecting said units below the water level thereof, and a supreheater located in the space between said units, said superheater providing the sole communication between the steam spaces of said units.

13. In a locomotive boiler; the combination with a fire tube evaporating unit and the main boiler shell extending forward therefrom to form a smokebox section; of an economizer located within said smokebox section and delivering feed water to said fire tube unit, a feed water heater, a connection from said feed water heater to said economizer, means adjacent said economizer forming a primary settling space in said connection, a connection from said economizer to said fire tube unit, and means located adjacent said economizer forming a secondary settling space in said last named connection.

1,764,431. HIGH-PRESSURE LOCOMOTIVE. CARL A. W. BRANDT, Great Neck, N. Y., assignor to The Superheater Company, New York, N. Y. Filed Jan. 24, 1925. Serial No. 4,584. 36 Claims. (Cl. 122—460.)

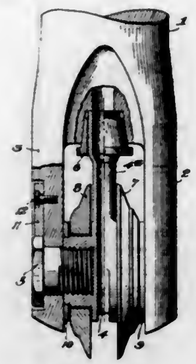


4. A locomotive boiler comprising a primary water tube evaporating unit having a complete water circulation within itself, a secondary fire tube evaporating unit, said secondary unit having a complete water circulation independent of that of said primary unit, and a feed water connection from said secondary to said primary unit, a common steam offtake from said units, and a superheater located between said units and connected to said steam offtake.

25. In a locomotive boiler, an evaporating unit comprising a plurality of parallel fire tube evaporating drums a water drum connected to one end of each of said

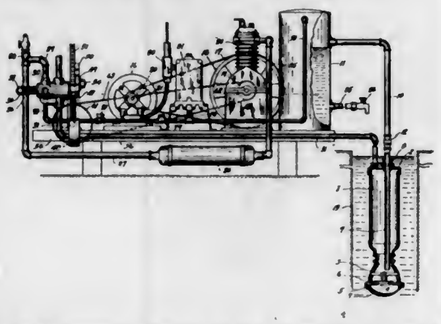
evaporating drums, a steam and water drum connected to the opposite end of each of said evaporating drums, whereby a direct longitudinal flow through said drums is imposed, and means of returning water from said steam and water drum to said water drum.

1,764,432. WELL-BORING BIT. FRED L. BRONSON, Los Angeles, Calif. Filed Feb. 24, 1925. Serial No. 11,178. 1 Claim. (Cl. 255—71.)



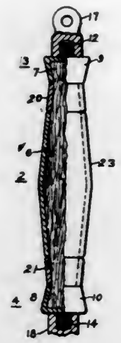
A rotary disk bit comprising a tubular shank having a pair of legs projecting from the lower end thereof, a connecting member carried by said shank and disposed between said legs, said member being longitudinally adjustable with respect to said shank, said member also having offset laterally extending integrally formed tubular bearing arms extending to points adjacent said legs, bolts extending through each leg and threaded into said bearing arms, and a cutting disk mounted on each of said bearing surfaces.

1,764,433. PUMP. WILLIAM H. CARSTEN, Seattle, Wash. Filed Feb. 21, 1927. Serial No. 169,089. 2 Claims. (Cl. 103—240.)



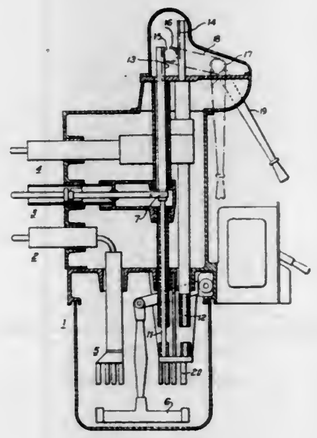
1. In a pumping system of the character described, a pump cylinder having a water inlet at its lower end, a closed water storage tank, a supply pipe leading from near the lower end of the pump cylinder into the storage tank, a back check valve in said pipe, an air pump, a conduit connecting the air pump with the top of the pump cylinder and a valve in said conduit having an exhaust port and having a conduit connection with the storage tank, means for adjusting the valve to a position at which air will be admitted into the pump cylinder to expel water therefrom into the storage tank and adjustable to another position to permit air to exhaust from the cylinder through said exhaust port of the valve as the cylinder fills with water through the inlet valve and to admit air into the storage tank from the pump during the interval the tank is filling.

1,764,434. INSULATOR. PAUL B. COCHRAN, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 21, 1927. Serial No. 176,949. 7 Claims. (Cl. 173—28.)



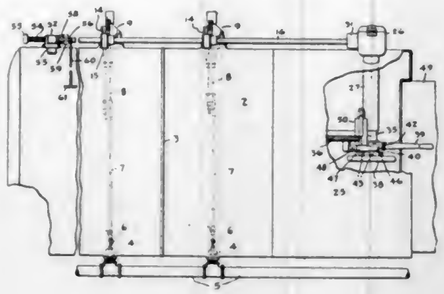
4. An insulator comprising an insulating member of material subject to progressive charring by corona from a terminal portion thereof toward the opposite terminal portion and means for covering a sufficient portion of the member to prevent said charring including a dielectric element which remains insulating under the influence of corona and extends only a relatively short distance from said first terminal portion toward said opposite terminal portion.

1,764,435. SWITCH MECHANISM. DAVID REGINALD DAVIES, Didsbury, England, assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Dec. 29, 1925, Serial No. 78,130, and in Great Britain Jan. 7, 1925. 5 Claims. (Cl. 200—50.)



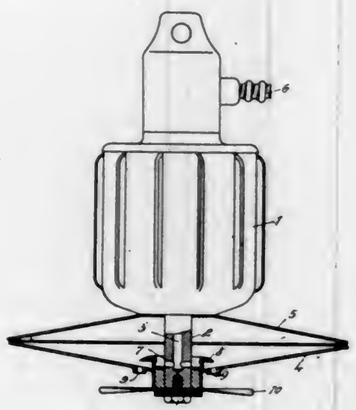
1. The combination with a circuit breaker having a pair of separate main contact members and a bridging switch member for connecting the said contact members, of a plurality of conductors and means for selectively connecting one of the contact members to any of the said conductors and for permitting one only of the conductors to be connected to the said contact member at one time including conductor members movable into engagement with the last said contact members.

1,764,436. TANK-VALVE-CONTROL MECHANISM. LEONARD HOWARD DUERR, Cincinnati, Ohio, assignor to Augustine Davis, jr., Cincinnati, Ohio. Filed Sept. 18, 1928. Serial No. 306,713. 12 Claims. (Cl. 137—21.)



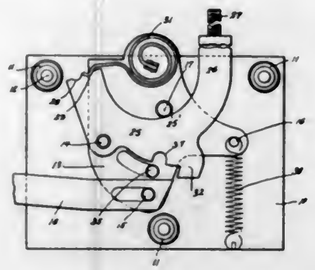
1. A valve mechanism for controlling a plurality of valves, comprising a common control shaft turnable in opposite directions, manual means for operating said shaft, members related to the several valves, and instrumentalities on said shaft adapted by turning movement of the shaft in one direction to be placed in operative relation to said members and then by turning movement in the reverse direction to operate the member or members selectively.

1,764,437. ATOMIZER FOR LIQUIDS. ROBERT ELSÄSSER, Berlin-Charlottenburg, Germany, assignor to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany, a Corporation of Germany. Filed Mar. 8, 1928, Serial No. 260,094, and in Germany Mar. 15, 1927. 3 Claims. (Cl. 261—88.)



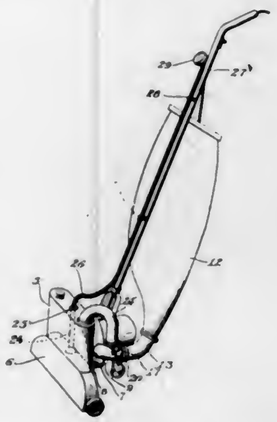
1. In an atomizer for liquids, in combination, an atomizer disc, an electric motor with vertical shaft adapted to drive said atomizer disc, a protective hood adapted to cover said atomizer disc, a supply conduit for the liquid terminating near the center of said atomizer disc and adapted to feed the liquid to said atomizer disc in a uniform thin layer, a distributor disc mounted on the motor shaft and forming a collecting basin for the liquid, and a bent-over flange on said distributor disc adapted to conduct the liquid upon said atomizer disc smoothly and without impact.

1,764,438. LATCH-CONTROLLING MECHANISM. JOHN B. FREYSINGER, New Britain, Conn., assignor to North and Judd Manufacturing Company, New Britain, Conn., a Corporation of Connecticut. Filed Dec. 7, 1928. Serial No. 324,372. 6 Claims. (Cl. 292—174.)



1. A latch controlling mechanism including a reciprocating member through which the latch is operated, a pivoted assembly associated with said member and adapted to actuate said member when the assembly is turned in one direction, an actuating member having a limited movement with respect to said assembly and adapted to turn the same to retract the latch when turned in one direction, and means carried by and movable with said actuating member and adapted to directly engage said reciprocating member to lock the same against actuation when said actuating member is moved in the opposite direction.

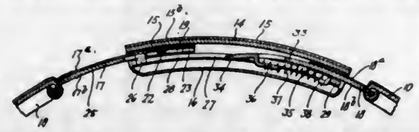
1,764,439. ATTACHMENT FOR VACUUM CLEANERS. PAUL FUHRMANN, Philadelphia, Pa. Filed Aug. 2, 1927. Serial No. 210,058. 5 Claims. (Cl. 15—257.)



1. An attachment for vacuum cleaners including a liquid tank, removably mountable upon a vacuum cleaner, a flexible conduit connected to the tank, a nozzle on the conduit, and means for supplying the tank with compressed air from the vacuum cleaner.

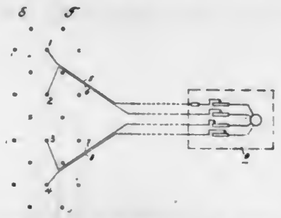
1,764,440. EXPANSIVE MEMBER FOR INSEPARABLE BRACELETS. OVE L. GAMMELL and ROLAND W. WOODWARD, Attleboro, Mass., assignors to Smith & Crosby, a Copartnership composed of Alfred D. Crosby and George H. Crosby, Attleboro, Mass. Filed Nov. 8, 1928. Serial No. 317,967. 13 Claims. (Cl. 24—206.)

1. In bracelet construction, in combination, a pair of overlapping bracelet members relatively slidable in a direction to change the length of the bracelet, means adapted to limit the movement of said members, resilient means tending to hold said members in contracted relation, a third member telescoped by and relatively slidable



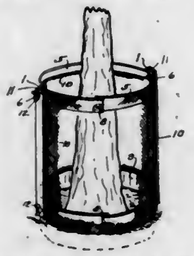
within the exterior member of said pair in a direction to change the length of said bracelet, and means for selectively latching said third member and said exterior member together in a plurality of predetermined positions.

1,764,441. ARRANGEMENT FOR DIRECTIONAL TRANSMISSION AND RECEPTION BY MEANS OF ELECTRIC WAVES. WALTER HAHNEMANN, Kitzeberg, near Kiel, Germany. Filed July 28, 1925, Serial No. 46,589, and in Germany Aug. 4, 1924. 18 Claims. (Cl. 250—11.)



4. In combination an arrangement for directional radio communication comprising a multiplicity n of more than three antennæ mounted at distances from one another; each of the said distances being approximately equal to the value $\frac{n-1}{n} \cdot \lambda$ in which λ is the length of the wave employed for signaling; an arrangement for shifting the vector of maximum effect.

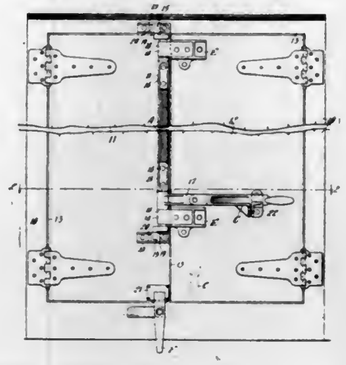
1,764,442. TREE PROTECTOR. CHRISTIAN HANSEN, Puyallup, Wash. Filed Aug. 19, 1929. Serial No. 386,789. 3 Claims. (Cl. 47—23.)



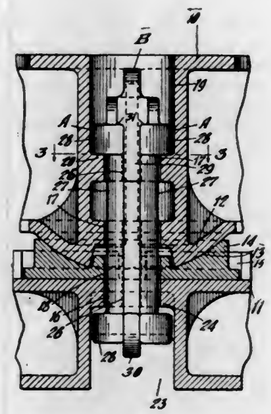
3. A tree protector, comprising a pair of posts on opposite sides of the tree; semi-circular brace-bars secured to each other at their ends and to said posts and forming a ring around the tree; netting extending around the tree and engaging the outer surface of the ring formed of said brace-bars and extending therefrom into the ground to form an enclosure; and removable clamping means secured to said posts and clamping said netting thereto and clamping the ends of said netting together.

1,764,443. DOOR-OPERATING MECHANISM. STACY B. HASELTINE, Chicago, Ill., assignor, by mesne assignments, to W. H. Miner, Inc., a Corporation of Delaware. Filed Feb. 18, 1924. Serial No. 693,647. 4 Claims. (Cl. 268—72.)

1. In a door operating mechanism, the combination with a member having a door opening and provided with a pair of pivoted doors; of a keeper secured to said member adjacent one edge of one of said doors; a second keeper secured to said last named door; an operating shaft rotatably carried by the other door and having actuating means thereon cooperating with both of said keepers to force said last named door either closed or open, one of said actuating means being disposed within the confines of the door and the other actuating means projecting beyond the adjacent edge of the door into cooperating relation with the keeper means mounted on said member.

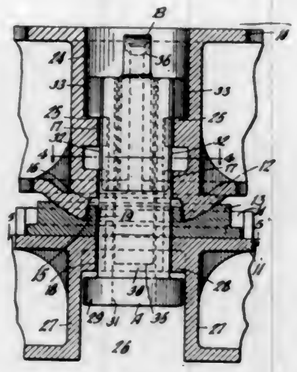


1,764,444. CAR CONSTRUCTION. STACY B. HASELTINE, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed Dec. 19, 1929. Serial No. 415,168. 5 Claims. (Cl. 105—200.)



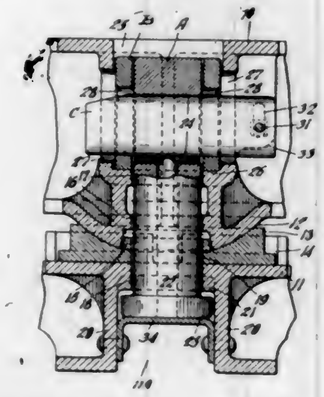
1. In car construction, the combination with cooperating body and truck bolsters provided with alined center pin receiving openings, each bolster having a shoulder adjacent the outer end of its opening, each shoulder being recessed at diametrically opposite sides, thereby providing spaced ledges; of a pair of connecting members each having a shank and head portions at opposite ends of the shank, said shanks extending through the pin receiving openings of the bolsters; and a spreading member between said first named members for holding the same apart and the head portions thereof engaged with said shoulders, said head portions being of such a size and shape that the same pass freely through the combined space provided by center pin receiving openings and the recessed portion of the shoulders when said spreading member is omitted from between said outer members.

1,764,445. CAR CONSTRUCTION. STACY B. HASELTINE, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed Dec. 19, 1929. Serial No. 415,170. 5 Claims. (Cl. 105—200.)



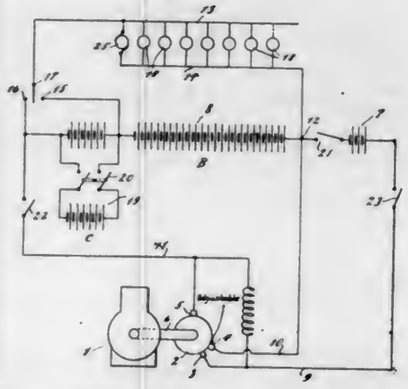
1. In car construction, the combination with body and truck bolsters having alined center pin receiving openings, each bolster having a shoulder adjacent the outer end of its opening; of a connecting member insertible through the opening of one of said bolsters into the opening of the other bolster, and a locking member insertible through the opening of the last named bolster into the opening of the other bolster, each of said members having a shank extending through said openings, the connecting member having head elements at opposite ends thereof having shouldered engagement with the shoulders of the respective bolsters, the shape of one of said members and the cross section of the openings being such that said head may be inserted therethrough while in one position, but is prevented from passing therethrough when given a partial turn, said locking element engaging one of said bolsters and said connecting member to prevent relative rotation of the connecting member with respect to said bolster when the connecting member is so positioned that the last named head thereof will not pass through the pin receiving openings, and the shank of said locking member being embraced and reinforced by the shank of the connecting member.

1,764,446. CAR CONSTRUCTION. STACY B. HASELTINE, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed Dec. 19, 1929. Serial No. 415,172. 6 Claims. (Cl. 105—200.)



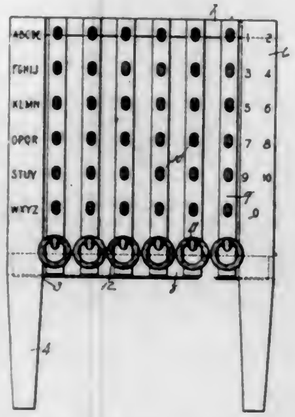
1. In car construction, the combination with body and truck bolsters provided with alined center pin receiving openings; of a center pin extending through said openings and having shouldered engagement at one end with one of said bolsters to prevent removal of the pin in one direction; and means extending through the free end of the pin and bearing on an adjustable member having shouldered engagement with the other bolster to prevent removal of the pin in the opposite direction.

1,764,447. COMBINED ELECTRIC-LIGHT AND RADIO POWER PLANT AND BATTERY-CHARGING SYSTEM. CHARLES F. HAUNZ, Bath, N. Y., assignor of one-half to George R. Berger, Chicago, Ill., and one-half to Alexander McGary, New York, N. Y. Filed Nov. 10, 1927. Serial No. 232,271. 5 Claims. (Cl. 171—314.)



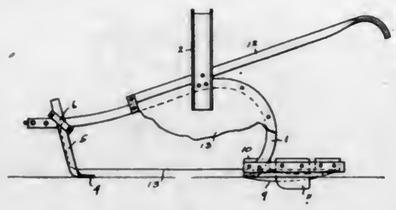
1. In combination, in a battery charging system, a high voltage generator having three brushes, a storage battery of low voltage and high current capacity connected between one main brush and the third brush and a storage battery of high voltage and low current capacity connected between the other main brush and the third brush.

1,764,448. EDUCATIONAL APPLIANCE. HARRY HERZFELD, Hartford, Conn. Filed Nov. 7, 1927. Serial No. 231,470. 4 Claims. (Cl. 35—9.)



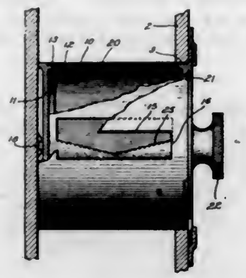
1. An educational appliance including a frame formed with parallel bars, pegs arranged in rows on said bars, each row of pegs being of a color different from that of another row, and rings adapted to be interchangeably placed upon said pins and pegs.

1,764,449. AGRICULTURAL IMPLEMENT. CHARLES E. HESS, Donna, Tex. Filed Sept. 3, 1929. Serial No. 389,964. 2 Claims. (Cl. 55—60.)



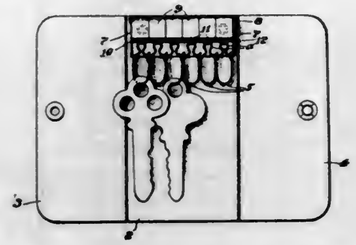
2. A stalk cutter including side beams spaced apart, a transverse frame to which said beams are attached, a shoe attached to the rear end of each beam, a transversely disposed cutter blade anchored to the implement between said beams and a side guard plate carried by each beam.

1,764,450. FILM-CAMERA APPARATUS. CHARLES F. HINDLE, Ossining, N. Y., assignor to Cambridge Instrument Company, Inc., Ossining-on-Hudson, N. Y., a Corporation of New York. Filed Aug. 28, 1925. Serial No. 53,064. 5 Claims. (Cl. 242—71.)



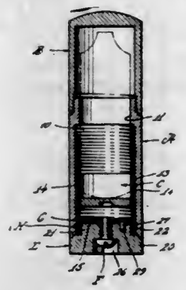
1. In a camera, in which sensitized material may be exposed, and having an opening through which the sensitized material may be fed out of the camera, a cylindrical receptacle comprising an outer cylindrical casing and an inner cylindrical casing housed in the outer casing, the casings being each open at one end and closed at the other end, the closed ends being disposed at opposite ends of the receptacle, the casings being provided in their sides with longitudinally disposed registrable openings the walls of which constitute cutting blades, one of the casings having a locking member for locking the said one casing against rotation when the opening of the said one casing is alined with the camera opening, the other casing being rotatable with respect to the said one casing, to aline the opening of the said other casing with the camera opening, whereby the receptacle may be mounted adjacent to the camera with the registrable openings alined with the camera opening to permit the sensitized material to be fed, after exposure in the camera, into the receptacle through the registrable openings, the said other casing having means for locking the receptacle against detachment from its mounting when the registrable openings are alined with the camera opening and means for rotating the said other casing relatively to the said one casing to cause the cutting blades to move relatively past each other to sever the material and to close the registrable openings to render the receptacle light proof and to render the locking means ineffective so as to permit the inner and outer casings to become detached as a light-proof-unit receptacle with the severed material therein.

1,764,451. KEY HOLDER. GEORGE A. HOLMES, Newton, Mass., assignor, by mesne assignments, to United-Carr Fastener Corporation, Cambridge, Mass., a Corporation of Massachusetts. Filed Sept. 19, 1927. Serial No. 220,408. 4 Claims. (Cl. 150—40.)



2. In a key holder comprising a case; a series of key supporting hooks, each of said hooks being made of spring wire and having an attaching eye and a loop for holding a key, each hook also including a catch and a latch cooperating with said catch, both said catch and latch being integral with the loop and the latch normally being held in the catch by the resilience of the loop and having an outwardly bent extremity immediately beyond the catch; and means for engaging the eyes of said hooks and anchoring them to said case but permitting them to swing and swivel freely relatively to the case.

1,764,452. CONTAINER FOR LIP STICKS AND THE LIKE. ANDRE JANER, Flushing, N. Y., assignor to The A. J. & K. Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Aug. 24, 1927. Serial No. 215,233. 3 Claims. (Cl. 206—56.)

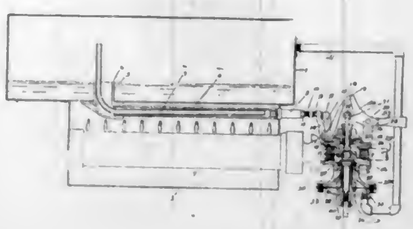


1. A container for material in stick form, comprising a casing internally threaded and provided near its inner end with an annular groove, a follower for engaging said stick and having external threads for engagement with the internal threads of the casing, and a feeding device for advancing the follower in the casing and having a portion for slidably interlocking with said follower and a second portion connected to the first portion and projecting from the casing for turning the feeding device, said feeding device having an annular groove therein opposite the groove in the casing, and a locking ring adapted to seat in said grooves for holding the feeding device against longitudinal movement in the casing and permitting turning of the feeding device to operate the follower.

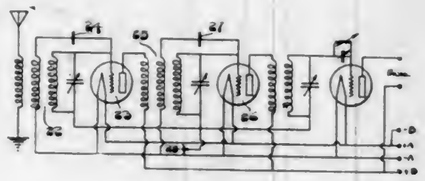
1,764,453. STEAM-GENERATOR-CONTROLLING MECHANISM. RAYMOND L. JEWELL, Millcreek Township, Erie County, Pa., assignor to American Sterilizer Company, Erie, Pa., a Corporation of Pennsylvania. Filed Nov. 25, 1925. Serial No. 71,482. 8 Claims. (Cl. 122—504.)

1. In a steam generator controlling mechanism, the combination of a generator chamber; an elbow having an arm

extending upwardly into the chamber and a horizontal arm without the chamber; a thermally sensitive tube extending from the horizontal arm; a burner under the thermal tube; a valve controlling the burner and responsive to temperature rises in the tube; and a tube venting the thermal tube in the chamber extending from a point remote from the elbow to above the upper end of the elbow.



1,764,454. RADIO FREQUENCY CIRCUITS. EUGENE A. KUEN, Cincinnati, Ohio. Filed Apr. 7, 1927. Serial No. 181,853. 2 Claims. (Cl. 179—171.)



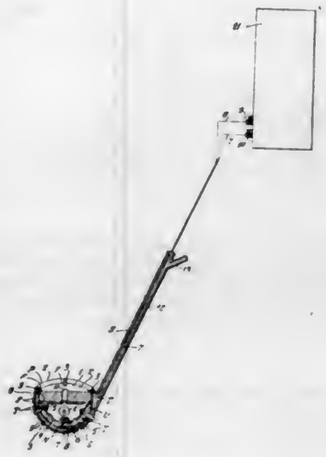
1. In a radio frequency amplification circuit, the combination of a series of alternately associated electron emission devices and radio frequency transformers, said transformers having duplicate secondary windings connected with duplicate grids in all the devices, the connection of one of said secondary windings with one of the grids being effected through a condenser in series therewith, the connection of the other of said secondary windings with the other of the grids being effected with a condenser in parallel therewith.

1,764,455. AIR-EMITTING AND ELECTRIC-LIGHT-ACTUATING MIRROR. IRVING KULIK, Brooklyn, N. Y. Filed Jan. 24, 1925. Serial No. 4,617. 15 Claims. (Cl. 32—27.)

1. In a device of the character described, a hollow casing, means for introducing fluid into the casing, a mirror supported by the casing and provided with an aperture through which the fluid introduced into the casing may escape in the form of a blast, and illuminating means positioned within the casing.

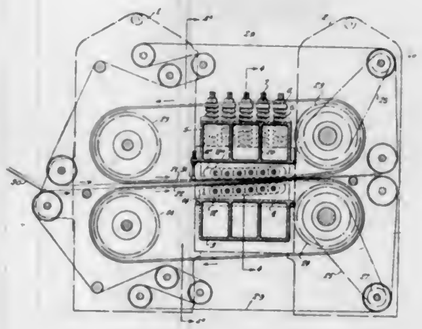
10. A dental device embodying a mirror with a reflecting surface, and means comprising a conduit having a plurality of air outlets adjacent the reflecting surface of the mirror to direct a blast of air across said surface to keep said surface free from deposits of dust and other extraneous matter.

12. A dental device embodying a dental mirror provided with a perforation therein through which fluid may pass, and a handle for the mirror which handle is hollow and forms a conduit through which fluid is fed to said perforation.



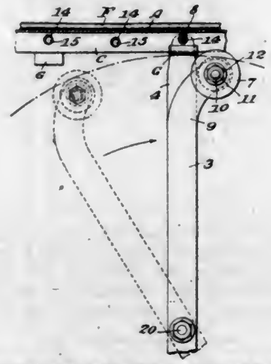
15. A dental mirror embodying a hollow casing having an open side, a perforated mirror forming a closure for said open side and a source of illumination within the casing.

1,764,456. FIBER-BOARD MACHINE. OTTO MANTIUS, New York, N. Y. Filed Mar. 16, 1928. Serial No. 262,224. 7 Claims. (Cl. 92—39.)



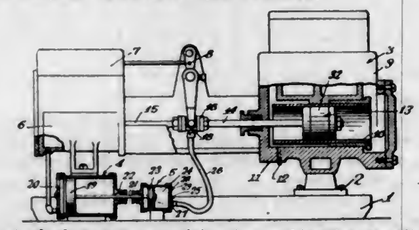
1. In an apparatus of the character described, a pair of hard surface conveyors positioned in cooperative relation with one another and with one reach of each conveyor traveling in spaced apart cooperative relation with one reach of the other conveyor, gangs of rollers back of the cooperating reaches of said conveyors, each gang of rollers embodying a plurality of rolls positioned in overlapping staggered relation and engaging with said conveyors to form between the cooperating reaches thereof a converging mouth terminating in a passage of uniform dimension and appreciable length, means for feeding pulp to the converging mouth, and means for causing the conveyors to travel in the direction of their convergence, whereby the pulp is compressed into a sheet while passing through the converging mouth and thereafter set during continued passage through the uniformly spaced apart walls of the passage.

1,764,457. SHEET-METAL-WORKING TOOL. CHARLES MCCURLEY, Halfway, Mich., assignor to Hudson Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Jan. 14, 1928. Serial No. 246,667. 1 Claim. (Cl. 81—15.)



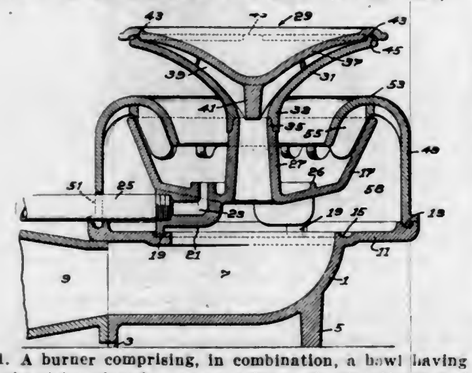
A tool comprising a pair of arms crossed and pivotally joined together, a wiping roll carried by one of said arms, a stud fixed to the other of said arms and extending in a direction parallel with the axis of said wiping roll, and handles for both of said arms.

1,764,458. EXTERNALLY-EXPANDED PISTON. ANDY MCLEAN, Fullerton, Calif. Filed Apr. 4, 1927. Serial No. 180,842. 6 Claims. (Cl. 74—109.)



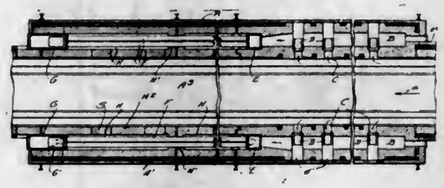
1. A slush pump comprising in combination a cylinder, a piston within said cylinder, a connecting-rod extending through said piston, an annular groove on said piston, a packing of flexible material disposed within said groove, said connecting-rod having a bore therethrough and means communicating with said bore and the internal, annular area of said packing, said means including a cylinder, a piston therein, and a conduit leading from the cylinder of the slush pump to said second named cylinder, whereby fluid pressure may be applied to said area to expand said packing.

1,764,459. LIQUID-FUEL-BURNING APPARATUS. JOHN T. MCTARNAHAN, Boston, Mass. Filed July 22, 1926. Serial No. 124,239. 5 Claims. (Cl. 158—92.)



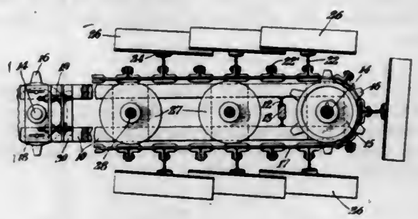
1. A burner comprising, in combination, a bowl having a tube rising therefrom, means for conducting liquid fuel to the bowl, a deflector mounted on the tube provided with channels communicating with the tube, a casing having an annular arch projecting over the rim of the bowl and provided with channels, and means to conduct air to said tube and channels.

1,764,460. TUNNEL KILN. PAUL A. MEEHAN, Cleveland, Ohio, assignor to American Dressler Tunnel Kilns, Inc., Cleveland, Ohio, a Corporation of New York. Filed Apr. 3, 1928. Serial No. 266,922. 6 Claims. (Cl. 25—142.)



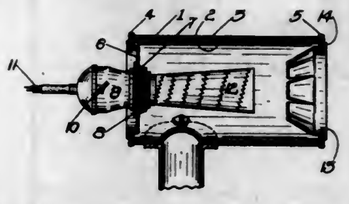
1. A tunnel kiln having a kiln chamber therein for the passage of ware carrying cars therethrough, a preheating section, a longitudinally extending chamber in the side wall of said preheating section, means for passing heating gases through said wall chamber, and separate means providing a positive circulation of the kiln atmosphere in said preheating section through said wall chamber out of direct contact with said heating gases whereby said atmosphere absorbs heat from the heating gases therein.

1,764,461. CONVEYER. JAMES C. MEEM, Brooklyn, N. Y. Filed Jan. 25, 1929. Serial No. 334,922. 5 Claims. (Cl. 198—196.)



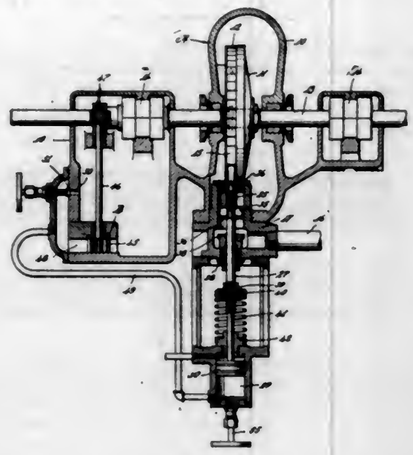
1. A conveyer comprising spaced longitudinal chain members, cross members secured thereto, bucket members secured to said cross members, said cross members having flanges passing through the links of said chain members and secured thereto.

1,764,462. HAIR DRIER. DONALD C. MOSIER, Sultan, Wash. Filed July 1, 1929. Serial No. 375,035. 3 Claims. (Cl. 34—26.)



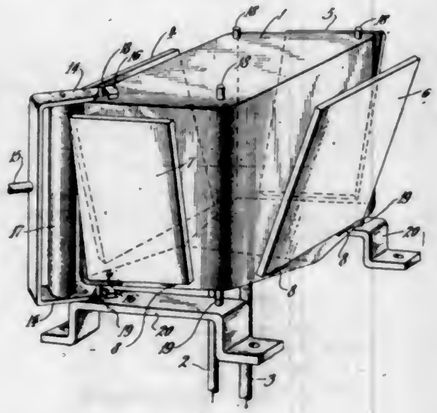
1. The combination with a cylindrical housing, a heating element therein and a tubular handle forming an air inlet pipe, of a nozzle at the discharge end of the housing, said nozzle having a frusto-conical body projecting into the housing, and V-shaped slits in said body for the purpose described.

1,764,463. SPEED-GOVERNING MECHANISM. RICHARD O. MULLER, Hartford, Conn., assignor to The Terry Steam Turbine Company, Hartford, Conn., a Corporation of Connecticut. Filed June 8, 1927. Serial No. 197,483. 3 Claims. (Cl. 137—158.)



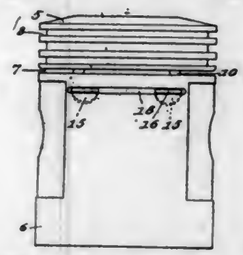
1. In combination, a steam prime mover, a valve for controlling the flow of actuating fluid thereto during the normal operation of the same, an auxiliary valve movable with said first mentioned valve, a spring normally urging said first mentioned valve away from its seat and said auxiliary valve to a position where it shuts off the admission of steam to said prime mover, a pressure responsive device associated with said valves and acting in opposition to said spring, and a pump driven by said prime mover for controlling the pressure in said pressure responsive device.

1,764,464. MACHINE FOR BENDING PANELS. CHARLES B. NORRIS, Grand Rapids, Mich., assignor to Haskelite Manufacturing Corporation, a Corporation of New York. Filed Mar. 15, 1929. Serial No. 347,438. 3 Claims. (Cl. 144—256.)



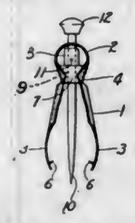
1. A machine for bending panels comprising a form having rounded corners, projecting pins at the ends of the form at the axes about which the corners are curved, and a bending device comprising a fork having at the free ends of its prongs hooks one of which is adapted to engage with any one of the pins at one end of the form while the other engages the corresponding pin at the other end.

1,764,465. PISTON. ARTHUR P. NUTE, Seattle, Wash. Filed July 30, 1928. Serial No. 296,305. 4 Claims. (Cl. 74—108.)



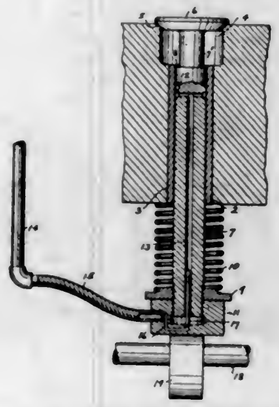
1. A piston for an internal combustion engine having a deep lubricant retaining pocket extending from a thrust surface of the piston, the width of the mouth of said pocket measured on the periphery of the piston being small in comparison with the periphery of the piston.

1,764,466. DEVICE FOR SQUEEZING FRUIT SECTIONS. BRUNO PAGE, New York, N. Y. Filed Dec. 2, 1927. Serial No. 237,199. 2 Claims. (Cl. 100—41.)



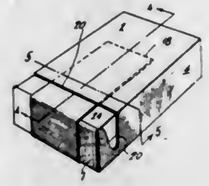
2. A device for squeezing fruit sections comprising an integral spring member having a curved spring portion and a pair of tongs extending therefrom, said spring member being bent inwardly at the upper portions of said tongs, a plunger comprising a unitary element passing through the curved portion of said spring member and extending between said tongs, and a cam member fixed on said plunger and normally positioned within the curved portion of the spring member, said cam member being operative upon depression of the plunger to engage the bent in portions of the spring member to spread the tongs apart.

1,764,467. INTERNAL-COMBUSTION MOTOR. JAMES A. PORTIS, Jr., Baytown, Tex. Filed Mar. 6, 1928. Serial No. 259,411. 3 Claims. (Cl. 138—188.)



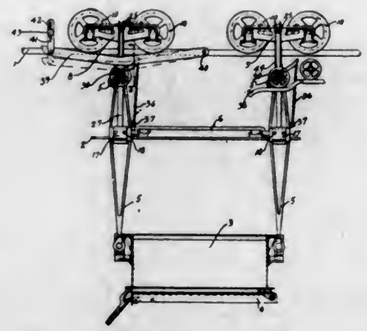
1. In combination a valve and a valve stem bearing; a stem attached to the valve and having a peripheral groove within said bearing and an axial bore leading from said groove, means for constantly supplying a lubricant to said bore, and a floating plunger in the bore and movable from end to end thereof.

1,764,468. DISPLAY AND DISPENSING DEVICE. LEWELLYN E. PRATT, Nutley, N. J., assignor to Pratt & Florea, Inc., New York, N. Y., a Corporation of New York. Filed Oct. 20, 1928. Serial No. 313,670. 5 Claims. (Cl. 206—44.)



1. A display and dispensing carton comprising top, bottom, side and end walls, the top and side walls being cut away adjacent one end of the carton to provide an opening through which articles may be removed, and a flap cut from the bottom of the carton and adapted to be folded over the end of the carton and tucked into the interior thereof through said opening to overlie articles in the carton and preclude them from falling through the opening during shipment of the carton.

1,764,469. CABLE GRIP. BYRON C. RIBLET, Spokane, Wash. Filed Feb. 18, 1929. Serial No. 340,724. 9 Claims. (Cl. 104—212.)



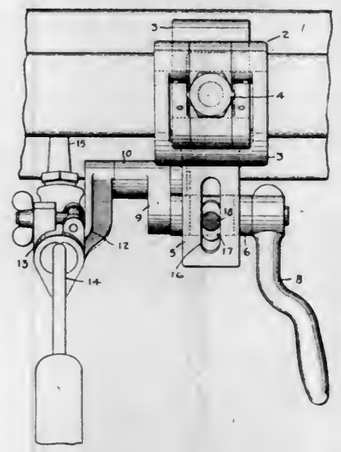
1. In a cable grip the combination with a support forming a stationary jaw, of a movable jaw slidably mounted in the support and a spaced wedge block rigid with the movable jaw, a wedge operable between the wedge block and a portion of the support, and means for operating the wedge.

1,764,470. FOUNTAIN PEN. ANTONIO S. ROMERO, Santurce, Porto Rico. Filed Jan. 8, 1927. Serial No. 159,835. 9 Claims. (Cl. 120—47.)



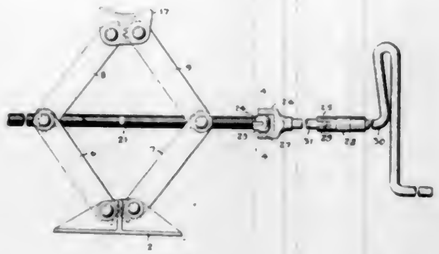
1. A fountain pen comprising, in combination with a penholder having a reservoir to contain writing fluid, a cap portion for application to either end of the penholder, and a plunger member mounted in and normally carried by the cap portion for detachable connection with the butt end of the penholder for filling said reservoir.

1,764,471. RAIL-CUTTING APPLIANCE. ROBERT M. ROOKE, Jr., Jersey City, N. J., assignor to Air Reduction Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Dec. 1, 1928. Serial No. 323,076. 2 Claims. (Cl. 266—23.)



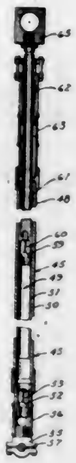
1. An appliance for cutting of rails and other irregular shapes by means of jets of cutting gases, comprising a support adapted to be applied to the article to be cut, only two freely jointed members which are operable to move the jets, the first of said members being movably mounted on the support, and the second member being pivoted to the first member and carrying the jet-delivering means, and two manually operable handles operatively connected, respectively, with the two members, in order that the operator by simultaneously manipulating the two handles can cause the jets to follow the contour of the shape.

1,764,472. LIFTING JACK. FRANK H. SCHWERIN, Bellevue Borough, Pa., assignor to The Duff-Norton Manufacturing Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Original application filed Mar. 2, 1928, Serial No. 258,495. Divided and this application filed Feb. 21, 1929. Serial No. 341,619. 1 Claim. (Cl. 64—91.)



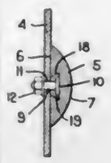
In a lifting jack, a separable connection between a rotary actuating element and an extension handle element, comprising a squared head connected with one of said elements, the faces of said head being convex in the longitudinal direction and having longitudinal grooves in their inner portions, and a fork connected with the other of said elements and having internal retainer projections to engage said grooves, the relation being such that the handle element is entered on and removed from the jack when at a decided angle and is retained against disengagement when straightened more or less in line with the actuating element.

1,764,473. LIQUID PUMP. BERNARD H. SCOTT, Glendale, and SAMUEL E. ROSS, Long Beach, Calif., assignors to Scott-Ross and Company, Los Angeles, Calif., a Corporation of Delaware. Filed July 20, 1926. Serial No. 123,629. 1 Claim. (Cl. 103—150.)



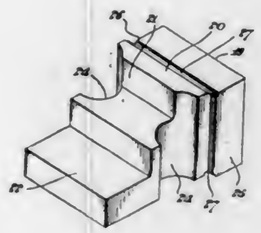
In a pump of the character described, the combination of: a pump barrel; means for pivotally supporting said pump barrel; a pump plunger adapted to reciprocate in said pump barrel; a crank attached to said pump plunger for reciprocating said pump plunger in said pump barrel; a flexible inlet for said pump barrel; a swivel joint positioned on the pivotal axis of said pump barrel; and an outlet for said pump barrel connected to said swivel joint.

1,764,474. AUTOMOBILE HEADLIGHT. CHARLES W. SHIPPEE, Boston, Mass. Filed Sept. 17, 1927, Serial No. 220,070. Renewed Dec. 27, 1929. 1 Claim. (Cl. 240—48.4.)



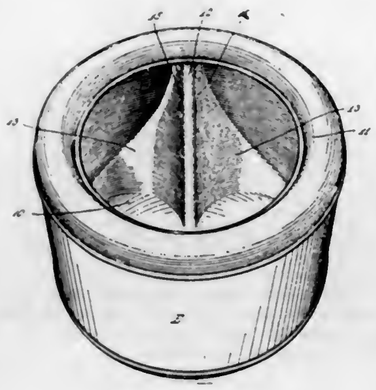
In an automobile light, the combination with a lamp body having a lens, of a bulb within the lamp body, and a glare-preventing element of translucent glass on the front face of the lens in the axial line of the lamp, said glare-preventing element having a flat rear face which fits against the front face of the lens, which rear face is provided with a dove-tail recess, an anchoring bolt extending through the lens and having its head occupying the recess, said recess being filled with a filling material which anchors the head therein, the front face of the lens having a general convex shape but being formed with a plurality of individual flat faces, and said glare-preventing element having a color contrasting with that of the lens.

1,764,475. FURNACE STRUCTURE. EDWIN SMILEY, Penfield, Pa. Filed Oct. 27, 1927. Serial No. 229,063. 4 Claims. (Cl. 72—102.)



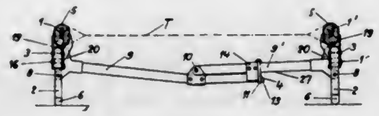
1. A block for furnace structures having one of its horizontal surfaces disposed substantially in a single plane, the front portion of the block being of a height substantially equal to three ordinary bricks; the intermediate portion of the block being of a height substantially equal to two ordinary bricks, thereby to provide horizontal passageways when the blocks are built in the furnace structure; and the rear portion of the block being of a height substantially equal to an ordinary brick, thereby to provide a bonding tongue; and the block having a passageway extending vertically through the same, thereby to provide communications between the aforesaid horizontal passageways.

1,764,476. WASHING MACHINE. CHARLES F. SMITH, New Britain, and SVEND J. HELWEG, Hartford, Conn., assignors to Landers, Frary & Clark, New Britain, Conn., a Corporation of Connecticut. Filed Sept. 14, 1926. Serial No. 135,319. 15 Claims. (Cl. 259—75.)



1. In a washing machine, a vertical tub mounted for rotary oscillation and provided with a single inclined fin, said fin having a central convex rib with symmetrical concave side walls merging into the side wall of the tub.

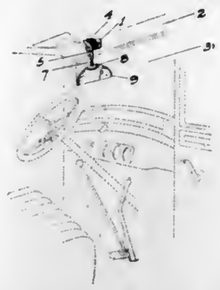
1,764,477. STRETCHER. ERNST WEBER-STIERLIN, Zurich, Switzerland. Filed Jan. 30, 1928, Serial No. 250,442, and in Switzerland Feb. 17, 1927. 3 Claims. (Cl. 5—82.)



1. Foldable braces and leg structure for the separable longitudinal pole parts of a stretcher, comprising a sleeve fixed adjacent the end of each pole part and provided with a bracket projecting perpendicularly thereto and having an opening adjacent its outer end, a U-shaped leg pivotally mounted at the end of one of its arms at a corner within said bracket, said arms having a cap for the ends of the legs provided with an opening disposed to register with the opening in the bracket when the leg is swung to position perpendicular to the sleeve and pole part, and a locking member pivotally mounted between the arms of the leg and provided with a projection which projects into the registered openings in the bracket and leg cap to secure the leg in position perpendicular to the pole part.

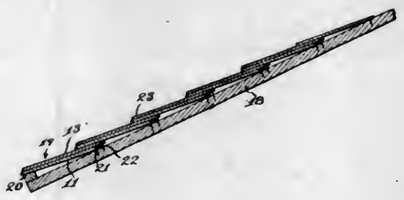
1,764,478. NONGLARE SHIELD. RALPH E. TIDMARSH, Sonora, Calif. Filed Mar. 16, 1928. Serial No. 262,197. 2 Claims. (Cl. 269—97.)

1. A nonglare shield including a bracket adapted to be mounted in a fixed position, a member pivoted at one end on the bracket, a shield element fixed on the other end of the member, a spring band on the outside of the bracket and secured thereto in common with the pivot of the said member, said spring band pressing at its other



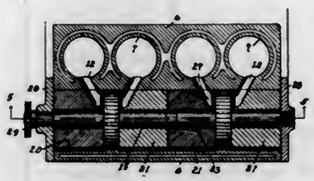
end toward the bracket, and a pin on said other end projecting through the bracket to engage a socket provided in said member.

1,764,479. ROOF. WILFRED R. TOBIAS, Los Angeles, Calif. Filed Aug. 10, 1927. Serial No. 211,910. 1 Claim. (Cl. 108—9.)



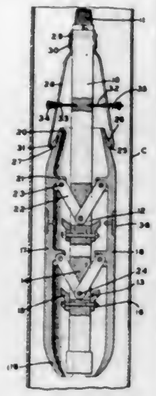
In a roof construction, a covering composed of rows of slates, each row comprising an upper and a lower layer of slates, the lower edge of each slate being in obtuse angularity with the plane of the slate, and the lower edges of the slates of said upper and lower layers of each row, merging into each other to present a substantially continuous lower edge for said row of slates, and the slates of each upper layer being longer than and overlapping those of the associated lower layer, and fastening means extending through each slate, each fastening means engaging but one slate.

1,764,480. INTERNAL-COMBUSTION ENGINE. FRANK VOREL, Cleveland, Ohio, assignor of one-half to Joseph E. Moravec, Cleveland, Ohio. Filed Feb. 21, 1928. Serial No. 255,940. 12 Claims. (Cl. 123—59.)



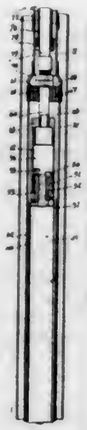
1. In a multi-cylinder gas engine of the rotary valve type, a common valve casing adjacent the engine cylinders, in combination with a composite valve of alined sections in the bore of the casing, each section comprising a disc for supplying a set of engine cylinders, and means mounted in said bore between the discs for affording communication between the discs and the several engine cylinders.

1,764,481. COMBINED FISHING AND SWAGING TOOL. ALBERT B. WATKINS, Los Angeles, Calif. Filed May 29, 1929. Serial No. 366,971. 6 Claims. (Cl. 294—93.)



1. A fishing and swaging tool comprising a central support, convex members arranged about said support, links pivotally connecting the convex members to the support, and means attached to the support providing stops for the links to limit the downward movement of the links.

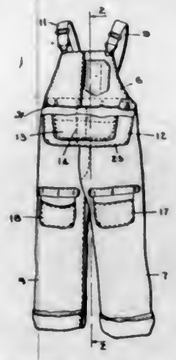
1,764,482. FLUID-OPERATED PUMP. PAUL F. YUNGLING, Los Angeles, Calif., assignor to Scott-Ross and Company, Los Angeles, Calif., a Corporation of Delaware. Filed Mar. 20, 1928. Serial No. 263,105. 10 Claims. (Cl. 103—46.)



1. A fluid-operated pump comprising a vertical tube provided at its upper end with a strainer, a power fluid induction tube slidably engaging the first mentioned tube and spaced from the strainer, pump tubing surrounding the tubes and spaced therefrom, and a means within the pump tubing operable by fluid pressure within the first mentioned tube to pump a fluid through the pump tubing.

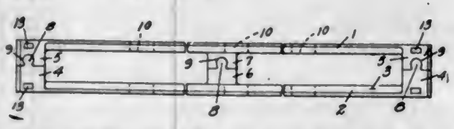
1,764,483. OVERALLS WITH DETACHABLE POCKETS. WILLIAM E. WATKINS, Clearlake Highlands, Calif. Filed Oct. 24, 1927. Serial No. 228,285. 2 Claims. (Cl. 2—247.)

1. In a pair of overalls, a strip secured adjacent its lower edge to said overalls, the upper edge of said strip being reversed to form a dependent flap, hooks secured to the inner surface of said flap, a pocket comprising a front strip and a backing strip, eyes secured to the outer surface



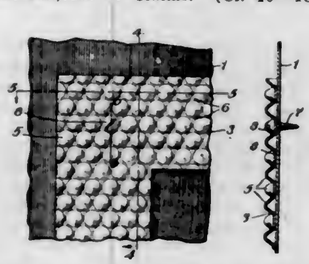
of said backing strip adjacent its upper edge, said hooks being adapted to engage said eyes to secure the pocket to the overalls, and fasteners adjacent the lower edge of said pocket for retaining it in position.

1,764,484. FURNACE GRATE. EDWARD V. WICKEY, Spokane, Wash., assignor to Union Iron Works, Spokane, Wash. Filed July 19, 1927. Serial No. 206,853. 2 Claims. (Cl. 126—168.)



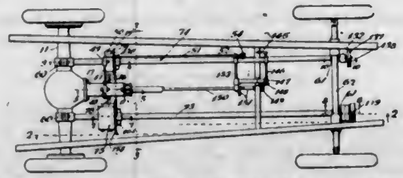
1. The combination with a pair of bearing bars each having integral lateral heads and complementary interlocking tongues and grooves on adjoining faces of said heads, of removable grate-bar end sections and an intermediate section, co-acting retaining means on the end sections and bearing bars, and co-acting retaining means between said sections.

1,764,485. ELECTRIC SIGN. ROY R. WILEY, Buffalo, N. Y., assignor to Flexlume Corporation, Tonawanda, N. Y., a Corporation of New York. Filed Apr. 30, 1926. Serial No. 105,713. 7 Claims. (Cl. 40—130.)



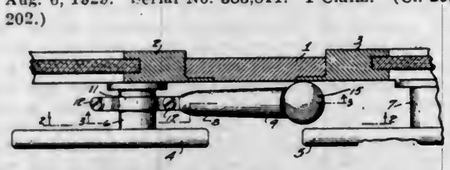
1. An electric sign comprising a display board provided with integral letters formed from individual metal sheets and exposed lamps located beyond the field of the letters and by which they may be illuminated, the letters having uniformly distributed throughout their areas immediately adjacent symmetrically warped inclined surfaces and interstitial flat surfaces to intercept light rays from said lamps and to reflect said rays in all directions through a range of angles conforming to he varying lines of vision at which the sign may be viewed from different points, said inclined surfaces reflecting the rays at narrow angles to and below the horizontal and said flat surfaces reflecting the rays at wider angles below the horizontal, and the display board beyond the strokes of said letters being colored to provide a contrasting background against which the letters may be read.

1,764,486. PARKING GEAR FOR MOTOR VEHICLES. GEORGE W. WOOLLEY, Pasadena, Calif. Filed Sept. 17, 1927. Serial No. 220,247. 11 Claims. (Cl. 180—1.)



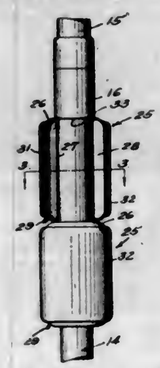
1. In the art described, a vehicle having a chassis and running wheels, a pair of longitudinally extending shafts, means connecting said shafts to the chassis, arms mounted on said shafts, parking wheels connected to said arms, a propeller shaft operating on the differential to drive the running wheels, and means to interconnect the propeller shaft with the longitudinal shafts to rock said shafts and swing the said arms, depressing and elevating the parking wheels.

1,764,487. SUPPLEMENTAL LOCK FOR MOTOR-CAR DOORS. ANDREW P. YOUNG, Pleasantville, N. Y. Filed Aug. 6, 1929. Serial No. 383,811. 1 Claim. (Cl. 292—202.)



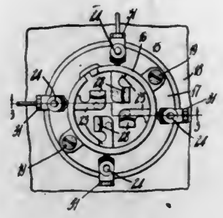
In a motor car body having front and rear doors hinged to swing outwardly with their free edges adjacent when closed and provided with latches engaging said body controlled by revoluble handles, the combination, with said above described structure, of a supplemental locking device mounted on the handle of one of said doors and adapted to overlap and engage the edge of the other door when both doors are closed and the handle of the first door is in normal position for holding it latched in such closed position.

1,764,488. FLOATING SUPPORTER FOR DRILL PIPE. JOHN A. ZUBLIN, Los Angeles, Calif. Filed Apr. 22, 1929. Serial No. 357,009. 3 Claims. (Cl. 255—28.)



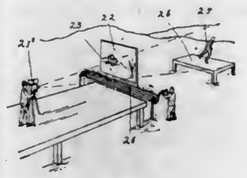
1. In apparatus for use in a well, the combination of: a column for extension into the well; and a buoy rotatable on said column for supporting said column.

1,764,489. VACUUM-TUBE SOCKET AND CONTACT TERMINALS THEREFOR. MILTON ALDEN, Springfield, Mass., assignor to The Alden Manufacturing Company, Brockton, Mass., a Corporation of Massachusetts. Filed Dec. 19, 1924. Serial No. 756,904. 8 Claims. (Cl. 173—328.)



1. A socket comprising an insulating body having a supporting base flange and means for receiving a vacuum tube and conducting strips secured to said body, each strip having a spring contact portion for engaging a prong of the tube and having a portion integral therewith extending outwardly through the base flange and bent to have a solder-receiving groove and having a wire passage in one wall of said source.

1,764,490. METHOD OF MAKING MOTION PICTURES. PIERRE ARTIGUE, Los Angeles, Calif. Filed Nov. 12, 1925. Serial No. 68,681. 8 Claims. (Cl. 88—16.)



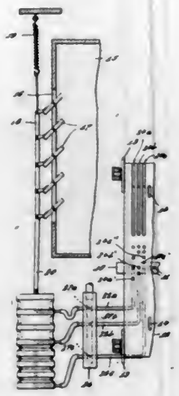
1. In the method of making motion pictures, comprising positioning a transparent screen with an artificial foreground picture thereon in front of a camera, taking a picture of a distant moving object through the screen and shifting the camera relative to the screen to conform to the lateral movements of the object to give the effect of a distant object moving behind and past a foreground.

1,764,491. STABILIZED PINEAPPLE AND PROCESS FOR PRODUCING THE SAME. CHARLES SEYMOUR ASH, San Francisco, Calif., assignor to California Packing Corporation, San Francisco, Calif., a Corporation of New York. Filed Feb. 17, 1926. Serial No. 88,919. 4 Claims. (Cl. 99—8.)

3. A process of canning pineapple to stabilize and retain the flavor thereof comprising, substantially removing the intercellular natural atmosphere present in pared, uncooked pineapple by the use of partial vacuum, replacing such atmosphere with an inert stabilizing gas, then syruping the pineapple, heating the syruped pineapple in open containers exposed to the natural atmosphere, capping the containers and then sterilizing the capped containers and contents with heat.

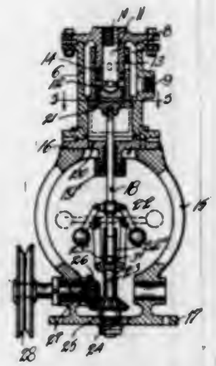
4. A canned and sterilized pineapple immersed in syrup, said pineapple containing a stabilizing gas only in its intercellular cavities adapted to prevent deterioration in color and taste.

1,764,492. SWELL-SHUTTER-CONTROLLING MECHANISM. JOHN T. AUSTIN, Hartford, Conn., assignor to The Austin Organ Company, Hartford, Conn., a Corporation of Connecticut. Filed Feb. 6, 1925. Serial No. 7,295. 7 Claims. (Cl. 84—89.)



6. In combination, a swell box provided with shutter means, a plurality of bellows operatively connected thereto and arranged to singly and severally expand and collapse in various combinations, a tracker bar having a plurality of ports through which said bellows are controlled, and a music sheet passing over said tracker bar and controlling said ports.

1,764,493. DRIFT VALVE. FRED BALL, Spokane, Wash. Filed May 22, 1926. Serial No. 111,004. 1 Claim. (Cl. 137—140.)



The combination with a closed cylinder casing having a radial inlet port, of an inner cylinder forming an annular space within the casing, said inner cylinder having an end port and a radial port, a cylindrical valve reciprocable in said space, said valve having one closed end and a radial port, the latter for coaction with the complementary port of the cylinder, a stem at the closed end of the valve, and a governor mechanism connected with the stem for operating the valve.

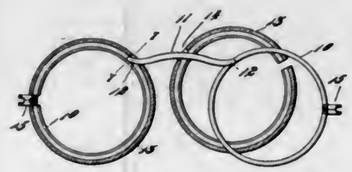
1,764,494. REENFORCED-CONCRETE BRIDGE. BRUNO BAUER, Vienna, Austria. Filed Sept. 22, 1927, Serial No. 221,267, and in Austria July 23, 1927. 1 Claim. (Cl. 72—8.)

In reenforced concrete bridge construction, a core for the concrete, said core comprising an independent supporting arch acting as such and consisting of a plurality of preformed metallic pressure resistant rods, each



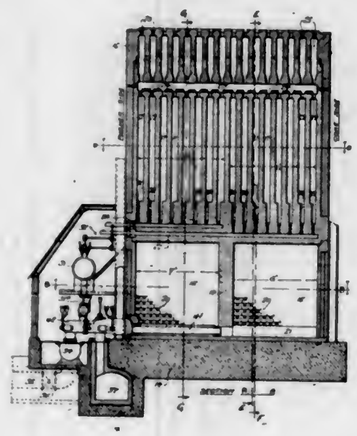
wrapped in bracing wire and means for retaining said plurality of rods together in properly spaced end to end relation.

1,764,495. OPHTHALMIC MOUNTING. EARLE J. R. BEATTEY, Edgewood, R. I., assignor to Universal Optical Corporation, Providence, R. I., a Corporation of Rhode Island. Filed Feb. 27, 1928. Serial No. 257,216. 3 Claims. (Cl. 88—41.)



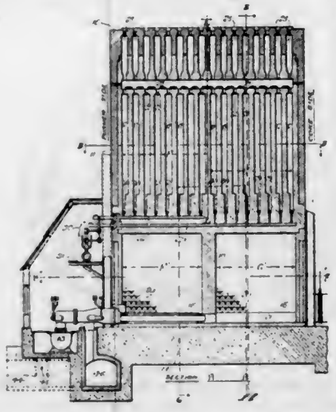
1. A method of applying non-metallic rims to the metallic eyewires of an ophthalmic mounting, which consists in attaching one end of the bridge-bar to one of the eyewires, piercing the non-metallic rims with a hole of a size to receive the bridge member, threading the first non-metallic rim onto the bridge-bar and snapping it into position over its eyewire, threading the second non-metallic rim onto the free end of the bridge-bar then soldering the free end of the bridge-bar to its eyewire, and subsequently sliding the second rim along the bridge-bar and snapping it in position over its eyewire.

1,764,496. COKING RETORT OVEN. JOSEPH BECKER, Pittsburgh, Pa., assignor to The Koppers Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Nov. 18, 1920. Serial No. 424,846. 9 Claims. (Cl. 202—151.)



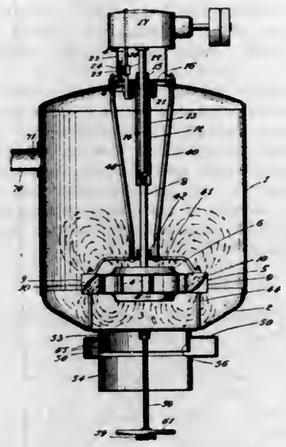
1. In a coke oven battery, in combination: a plurality of coking chambers; heating walls contiguous to such coking chambers and respectively constituted of vertical combustion flues; regenerators located at a lower level than the coking chambers and the heating walls parallel therewith, said regenerators being grouped into pairs crosswise of the battery, each pair of such regenerators being communicably connected with combustion flues of two adjacent heating walls; a main located on one side of the battery and alternatively operable for feeding waste gas or producer gas; reversing valve connections between said main and alternate pairs of such regenerators; another main located on the same side of the battery as said first mentioned main and alternatively operable for supplying coke oven gas to said heating walls or air to the pairs of regenerators that are intermediate such alternate pairs of regenerators; means for alternately feeding the coke oven gas to the flues on the opposite sides of the battery; reversing valve connections between said last named main and the regenerators with which it is connected; and means individual to said last named main for controlling the volume of air permitted to flow therein; substantially as specified.

1,764,497. COKING RETORT OVEN. JOSEPH BECKER, Pittsburgh, Pa., assignor to The Koppers Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Nov. 17, 1920. Serial No. 424,619. 20 Claims. (Cl. 202—144.)



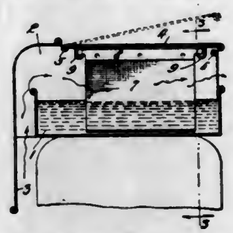
1. In a coke oven battery, in combination: a plurality of coking chambers; heating walls contiguous to such coking chambers and respectively constituted of vertical combustion flues; regenerators located at a lower level than the coking chambers and the heating walls and parallel therewith, said regenerators being grouped into pairs crosswise of the battery, each pair of such regenerators being communicably connected with combustion flues of two adjacent heating walls; a coke oven gas supply combined with means for alternately feeding the coke oven gas to the flues on the opposite sides of the battery; a main located on one side of the battery and alternatively operable for feeding waste gas or producer gas; reversing valve connections between said main and alternate pairs of such regenerators; a pair of air mains located on the other side of the battery; flow connections between said air mains and the pairs of regenerators that are intermediate such alternate pairs of regenerators; flow regulating dampers individually controlling the individual flow in said flow connections; means individual to each of said air means for controlling the entire volume of flow therein; and reversing valve devices for permitting air to flow alternately into said air mains; substantially as specified.

1,764,498. MIXING AND DISCHARGING APPARATUS. HENRY S. BEERS, Westport, Conn., assignor to The Turbo-Mixer Corporation, New York, N. Y., a Corporation of New York. Filed Oct. 24, 1929. Serial No. 401,997. 16 Claims. (Cl. 259—96.)



1. Mixing and discharging apparatus comprising a tank having a discharge chamber, a rotary material circulator in the tank, and means for positioning the circulator in the tank for mixing and in the discharge chamber for discharging material from the tank.

1,764,499. HUMIDIFIER AND DEFLECTOR DEVICE. MAUDE MAYO BENTZ, Montclair, N. J. Filed Apr. 26, 1928. Serial No. 273,077. 3 Claims. (Cl. 237—78.)



1. A humidifier and deflector device for use with heat radiators comprising a trough member adapted to be positioned upon a radiator, a deflecting shield member supported thereon in spaced relation to the trough to provide an air passage from the rear of the radiator extending forwardly over the trough member, supporting bars carried by the end wall members of the trough and provided with spaced notches, a plurality of wick elements of fabric and supporting bars attached to the respective ends of the wick elements and adapted for supporting engagement with the notches for supporting the wick elements with depending loops within the trough.

1,764,500. NONGLARE ATTACHMENT FOR HATS. GEORGE L. BLAKESLEY, Merced, Calif. Filed Apr. 15, 1929. Serial No. 355,189. 2 Claims. (Cl. 24—81.)



1. In connection with a non-glare eye shade, a clip comprising spaced jaws to receive the brim of a hat there-

between, and a channel shaped member cut from and depending from the lower jaw intermediate its ends to frictionally engage the upper edge of the shade.

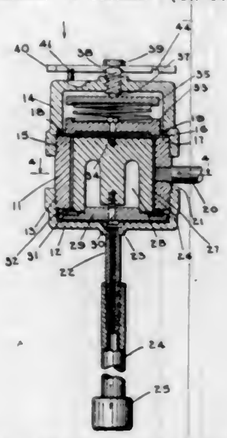
1,764,501. PROCESS OF MAKING ALUMINUM CHLORIDE. HENRY BLUMENBERG, Jr., Moapa, Nev. Filed Apr. 14, 1927. Serial No. 183,923. 3 Claims. (Cl. 23—93.)

1. A process of making aluminum chloride comprising heating a mixture of a chloride of an alkali forming group and aluminum sulphate to a temperature necessary to cause a double decomposition forming aluminum chloride and the sulphate of the alkali forming group by controlling the temperature of the reaction below the volatilization point of the sulphate of the alkali forming group so that aluminum chloride only will be distilled and recovering the aluminum chloride.

1,764,502. PROCESS OF MAKING ALUMINUM CHLORIDE. HENRY BLUMENBERG, Jr., Los Angeles, Calif. Original application filed Apr. 14, 1927, Serial No. 183,923. Divided and this application filed Feb. 12, 1930. Serial No. 427,963. 2 Claims. (Cl. 23—93.)

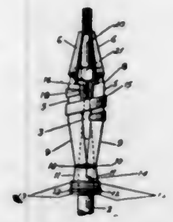
1. A process of making aluminum chloride comprising heating a mixture of a chloride of the alkaline earth metal group, aluminum sulphate and a carbonaceous material to a temperature sufficient to cause the aluminum sulphate to be reduced to aluminum sulphide, which latter will react with said chloride to produce aluminum chloride, and distilling and recovering said aluminum chloride.

1,764,503. PRESSURE REGULATOR. CHARLES E. BRIDGES, Long Beach, Calif. Filed Aug. 17, 1927. Serial No. 213,522. 4 Claims. (Cl. 50—8.)



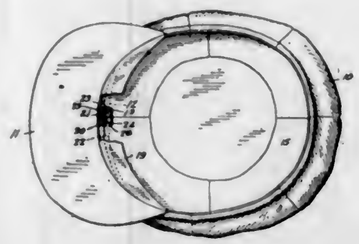
1. A pressure regulator comprising in combination a tubular barrel having covers on the bottom and the top, said covers having chambers therein, a diaphragm connected across the end of the barrel and under the upper cover, a core slidably mounted in the barrel and having an air space therebetween, an inlet through the barrel into said space, a disk secured on the lower end of the barrel and fitting in the chamber in the lower cover, a ring on the disk and forming a valve closure against the lower end of the barrel, an outlet from the lower cover, a second disk in the chamber in the upper cover and secured to the core through the diaphragm, a spring bearing on said second disk, a screw threaded through the upper cover and operative to compress the spring, and means on the screw outside of the upper cover to operate said screw, said latter means co-operating with indicia on the upper cover to indicate air pressure at which the core operates to close the ring against the barrel.

1,764,504. ATTACHMENT FOR SCREW DRIVERS. CHARLES W. BRONK, Binghamton, N. Y. Filed Aug. 28, 1928. Serial No. 302,537. 5 Claims. (Cl. 142—52.)



1. An attachment for screw drivers comprising a pair of complementary and interchangeable clamping jaws adapted to encircle the screw driver and provided with a crimp intermediate their ends forming pivot means therefor, and resilient means encircling said clamping jaws and adapted to be moved to force said jaws toward each other at one end.

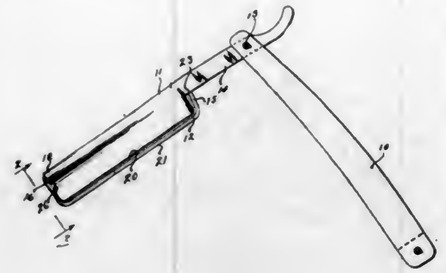
1,764,505. ADJUSTABLE CAP. JULIUS CARLSON, Brooklyn, N. Y. Filed May 7, 1928. Serial No. 275,659. 2 Claims. (Cl. 2—197.)



1. In an adjustable cap, a substantially unmutilated lining extending to the lower edge of the cap, a strip secured to the lower edge of the lining and cooperating with one face thereof for forming a pocket throughout the lower edge thereof, an inelastic band entirely enclosed in said pocket and having free overlapping ends thereon arranged at the front of the cap, said pocket being provided with an opening at the front of the cap and in the interior face of the pocket through which opening the ends of the band are accessible without removing said ends from the pocket, said band being completely detached from the pocket throughout its entire length, adjusting means in the pocket and near the end of said band, and means arranged interiorly of the ends of said band for protecting the forehead of the wearer against the pressure of the ends of the band and of the adjusting means thereon.

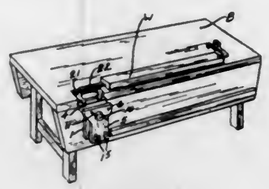
1,764,506. RAZOR. DEAN J. CASE, Little Valley, N. Y. Filed Aug. 30, 1927. Serial No. 216,478. 3 Claims. (Cl. 30—12.)

1. A barber's razor comprising a handle, a blade having a shank pivotally mounted upon said handle, a rod-like guard spaced from and shaped to conform to the contour of said blade being terminated in upturned ends, said shank having a vertical pocket therein by which to receive the inner end of said guard, a pin loosely securing said guard within said pocket, the outer end of said blade having an opening therein by which to pivotally engage the outer end of said guard, a channular stop formed upon the outer



upturned end of said guard and adapted to engage the outer end of said blade to limit the relative movement between said blade and said guard.

1,764,507. BENCH VISE. GUS O. DANIELSON, Clarkia, Idaho. Filed May 21, 1929. Serial No. 364,773. 3 Claims. (Cl. 144—306.)



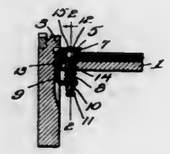
1. The combination with a fixed plate having a jaw and a key-hole slot, of a movable plate having a complementary slot and jaw, a clamping screw joining the jaws, and a key located in said slots, said key having spaced lugs and alternating notches for the purpose described.

1,764,508. SEALING TABLE. ANTHONY FULCO, Los Angeles, Calif. Filed Mar. 21, 1928. Serial No. 263,321. 3 Claims. (Cl. 93—2.)



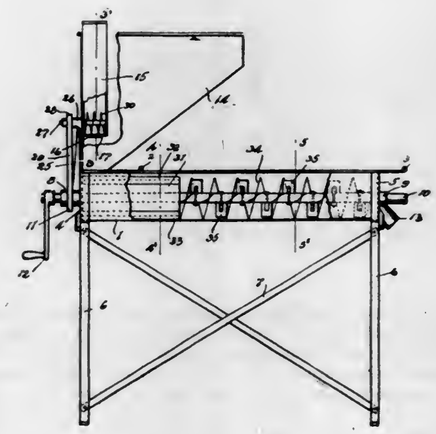
1. A sealing table adapted for special use in connection with an article wrapping machine, comprising a flat base, a hinge portion on one end of said base, an extension depending upon said hinge portion, a downwardly bent pin engaging portion, and spring means associated with said extension and said pin for causing said downwardly bent portion to be raised and lowered on said pin.

1,764,509. SHEET-COLLATING MEANS. FRANKLIN C. GIBSON, Fairfax County, Va., assignor to Elliott-Fisher Company, a Corporation of Delaware. Filed Apr. 12, 1926. Serial No. 101,597. 8 Claims. (Cl. 197—127.)



1. The combination with a flat platen for supporting a form for line spacing movement thereover, of a form provided with openings, and a spring pressed locating ball disposed in the face of the platen to seat in the openings in the form.

1,764,510. GRAIN-TREATING MACHINE. SAMPSON J. GOODFELLOW, Regina, Saskatchewan, Canada, assignor to Western Implements Limited, Regina, Canada. Filed Feb. 17, 1927. Serial No. 169,054. 6 Claims. (Cl. 83—28.)



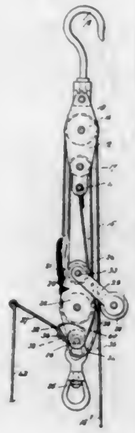
1. In a grain treating machine, in combination, a stationary horizontally disposed and closed trough-shaped member having a discharge spout at one end thereof, a main shaft extending lengthwise of the member and rotatably mounted in the ends thereof, a grain hopper feeding into the end of the trough member remote from the spout, a powder hopper mounted within the grain hopper and having a perforated bottom, a gate adjustably controlling the discharge of the powder into the grain hop-

per, means for rotating the shaft, an agitator contained within the lower end of the powder hopper and driven by the shaft, a mixing blade secured to the shaft at the end thereof remote from the discharge spout and within the trough member and a worm secured to the shaft between the blade and the discharge spout and operating within the trough member.

1,764,511. PROCESS FOR PRODUCING METALS AND ALLOYS. TURE ROBERT HAGLUND, Stockholm, Sweden. Filed Jan. 28, 1928, Serial No. 250,328, and in Sweden Feb. 1, 1927. 6 Claims. (Cl. 75—22.5.)

1. Process for reducing oxide or oxide ores by means of carbon reducing agents in an electric furnace working with one or more electrodes against a slag bath covering the reduced metal or alloy comprising adding round the electrodes ore of difficultly reducible oxide together with carbon reducing agents previously prepared for diminishing the tendency, owing to the conductivity of the carbon material, of spreading the energy sideways in the unfused charge and regulating during the reduction with the carbon material the current density to be as an average below 2.5 amperes per cm.² of the cross-section of the electrodes.

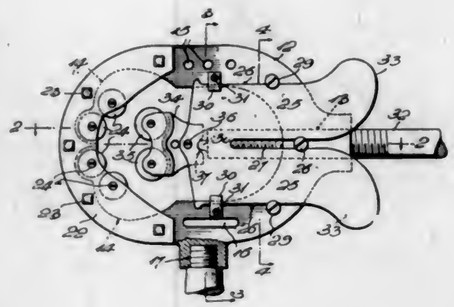
1,764,512. HOISTING TACKLE. GEORGE C. HUME, Chilton, Wis. Filed Mar. 26, 1928. Serial No. 264,598. 5 Claims. (Cl. 254—188.)



1. A tackle, comprising an upper block provided with rollers, a band secured at one end to the upper block, a lower block also provided with rollers, the said band being arranged to pass over the rollers of both blocks and having a fall which extends downwardly from the upper block and hangs clear of the lower block, a cam-shaped sustaining catch pivoted to the lower block and provided with a depressible releasing arm, a pivot pin supporting the said catch, and a spring carried by the lower block and operating the catch so as to normally grip the band against one of the rollers of the lower block and support the said arm in its raised position.

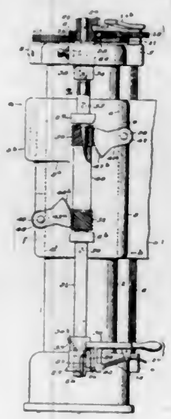
1,764,513. CONVERTIBLE TOOL. VICTOR KALFUS, New York, N. Y. Filed Sept. 6, 1928. Serial No. 304,313. 5 Claims. (Cl. 81—192.)

1. A tool of the class described comprising a continuous yoke having an opening at one end, two arcuate plates lying against opposite sides of said yoke at the other end thereof, means detachably securing said plates to said yoke, both of said plates projecting inwardly from the inner edge of said yoke to form therewith a channel, work-engaging rollers received in and projecting from said



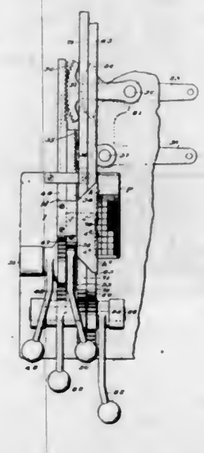
channel, means rotatably mounting said rollers on said projecting portions of said plates; a screw threaded through the aforesaid opening, and a die holder movably connected with said yoke and movable toward said rollers under the influence of said screw.

1,764,514. EQUALIZED ARM CLAMP. DAVID C. KLAUSMEYER, Cincinnati, Ohio, assignor to The Cincinnati Bickford Tool Company, Oakley, Cincinnati, Ohio, a Corporation of Ohio. Filed Mar. 10, 1925. Serial No. 14,542. 25 Claims. (Cl. 77—28.)



1. A drilling machine combining a column; a projecting arm supported on and adjustable on said column; and means for clamping said arm on said column, said clamping means being located to be effective only at the upper part of the arm on the projecting side of the column, and at the lower part of the arm on the opposite side whereby the arm may be clamped relatively easy and without disturbing the adjusted position.

1,764,515. DIRECT-READING GEAR-SHIFT MECHANISM. DAVID C. KLAUSMEYER, Cincinnati, Ohio, assignor to The Cincinnati Bickford Tool Company, Cincinnati, Ohio, a Corporation of Ohio. Filed June 2, 1925. Serial No. 34,337. 10 Claims. (Cl. 74—57.)



1. In a machine-tool; a rotatable member; a driveshaft; a plurality of speed-change devices adapted to rotate said member at a plurality of speeds from a single speed in said drive shaft, each of said speed-change devices including at least one shiftable gear-unit; independent means for shifting each of said gear-units; and an index physically cooperating with said gear-shifting means and designed by such co-operation to show to the operator the required position of adjustment for certain ones of said gear shifting means and to show graphically the required direction of movement of others of said gear shifting means to produce a predetermined speed in said member.

1,764,516. TANNING COMPOSITION AND METHOD OF PRODUCING SAME, ETC. FRANK S. LOW, Niagara Falls, N. Y., assignor, by mesne assignments, to the said Frank S. Low and A. W. Berresford, Detroit, Mich. Filed Aug. 9, 1928. Serial No. 298,627. 10 Claims. (Cl. 149—5.)

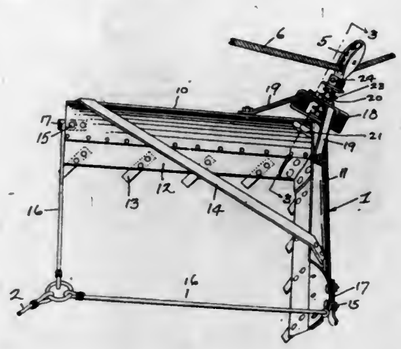
9. The method of producing a tanning composition which comprises causing anhydrous chromic chloride to react with a reducing agent in the presence of a limited amount of water to form a solution of chromium chloride and causing the resulting solution to react with an added base, the amount of water present being such that a solid basic chromic chloride reaction product will be directly produced.

1,764,517. TANNING. FRANK S. LOW, Niagara Falls, N. Y., assignor, by mesne assignments, to the said Frank S. Low and A. W. Berresford, Detroit, Mich. Filed Aug. 9, 1928. Serial No. 298,628. 9 Claims. (Cl. 149—5.)

1. A composition adapted when added to water to form a basic chromium chloride solution, said composition comprising anhydrous chromic chloride, a reducing agent and a base.

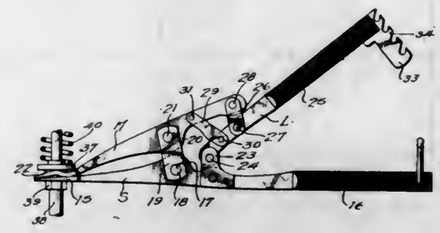
7. A method of producing a tanning bath which comprises adding anhydrous chromic chloride, a reducing agent and a base in predetermined proportions to water to form a tanning liquor containing basic chromium chloride.

1,764,518. EXCAVATOR. HOWARD MARKS, Newman, Calif. Filed Feb. 20. 1928. Serial No. 255,511. 10 Claims. (Cl. 37—147.)



3. An excavator comprised of a V shaped scraper; and a pulley block yieldingly supported on the upper side of the scraper adjacent the apex thereof.

1,764,519. VALVE-SPRING-LIFTING TOOL. ARTHUR L. METTLER, Lomita, Calif. Filed Feb. 18, 1929. Serial No. 340,977. 4 Claims. (Cl. 29—86.3.)



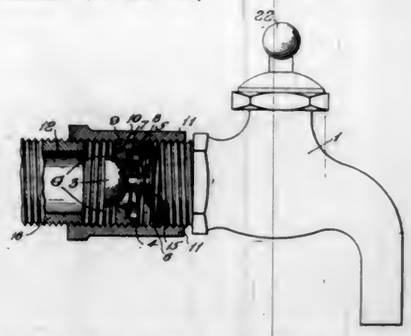
1. In a valve spring lifting tool, a pair of levers having jaws, a link connection between the levers providing a shifting fulcrum for one of the levers, an operating lever pivoted on the other lever, a link connection between the operating lever and the first mentioned jaw lever by which movement of the operating lever swings the jaw lever and compounds its movement, and a second link connection between the operating lever and the said jaw lever for shifting the latter as it swings so that its jaw moves in a path substantially straight and at right angles to the jaw of the other lever.

1,764,520. CREEPER ATTACHMENT FOR TRACTOR WHEELS. JOHN TURNER MOORE, near Wernersville, Pa., assignor, by mesne assignments, to Rex-Watson Corporation, Canastota, N. Y., a Corporation of New York. Filed Dec. 27, 1926. Serial No. 157,398. 4 Claims. (Cl. 305—10.)



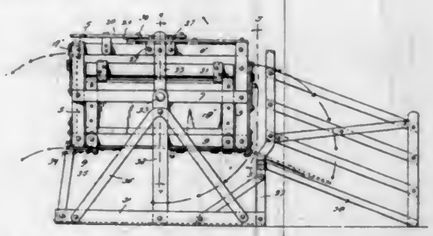
3. In an endless track structure for vehicles, a series of tread blocks forming part of the track, each tread block being provided with opposed apertured surfaces, and wear plugs engaging said surfaces and having shanks detachably mounted in said apertures.

1,764,521. CHECK VALVE. JOHN F. MULLANEY, Colorado Springs, Colo. Filed Jan. 2, 1925. Serial No. 48. 2 Claims. (Cl. 284—18.)



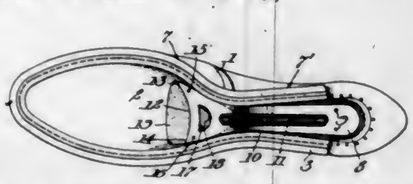
1. A check valve adapted to be inserted into the outlet of a container, comprising a valve seat ring secured to the inside wall of said outlet, a ball-shaped valve fitted to an annular seat in the back of said ring, a plunger arm secured to the front of said valve and extending forwardly through said ring and adapted to open said valve, a cross member extending transversely of said arm near its end, and a coil spring encircling said arm between said cross member and said ring and having its ends secured in recesses in the face of said ring and adapted to press said cross member and said ring apart expansively and adapted to close said valve against said seat.

1,764,522. HOG CRATE. WILLIAM N. PRIMM, Kenesaw, Nebr. Filed May 3, 1928. Serial No. 274,815. 6 Claims. (Cl. 119—98.)



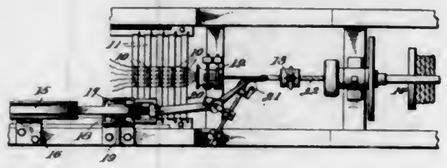
1. Means to facilitate the treatment of hogs comprising a crate pivotally mounted upon a transverse axis to be inverted end for end, manually operable clamping means in the crate to support the hog upon its back when the crate is inverted, said clamping means being adapted to tightly clamp the hog when the crate is inverted and to release the hog when the crate is again righted, and a door for the bottom of the crate adapted to be opened when the crate is righted to permit dumping of the hog out of the crate onto his feet when the crate is so righted.

1,764,523. ARCH-SUPPORT SHOE. JOHN L. PUTZEL, Baltimore, Md. Filed Sept. 12, 1927. Serial No. 218,964. 3 Claims. (Cl. 36—76.)



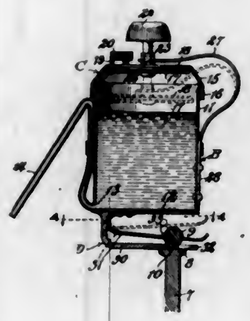
1. An arch support shoe, provided with a shank piece or stiffener of rigid material curved longitudinally and transversely to conform to the arch of the shoe and extending from the forward portion of the heel of the shoe to the break line of the shoe and provided at its forward end with laterally extending horns, the forward portion having an opening, and a cushion underlying said opening and the forward end of the shank piece or stiffener.

1,764,524. APPARATUS FOR MAKING COMBINED PAPER AND FIBER CORDAGE. JAMES B. REBER, Auburn, N. Y., assignor to Columbian Rope Company, Auburn, N. Y., a Corporation of New York. Filed July 30, 1926. Serial No. 125,942. 3 Claims. (Cl. 117—15.)



2. In a machine for making twine, the combination of means, including a nipper, for feeding and twisting a plurality of unspun fibers together to form a unitary core for the twine, and means for feeding a flat strip of paper to the fibers as they are being twisted together but after they have passed through said nipper, the rotation of the fibers while being twisted drawing the paper thereon whereby said strip of paper will be wound around the twisted fibers in a series of substantially flat spirally arranged convolutions.

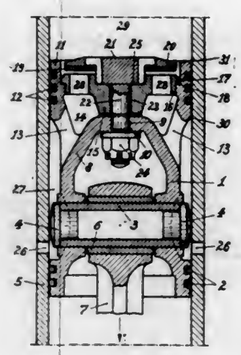
1,764,525. LIQUID-DISPENSING DEVICE. JACOB J. ROBINSON, Washington, D. C. Filed Aug. 30, 1928. Serial No. 303,031. 5 Claims. (Cl. 221—94.)



1. In a liquid dispensing device, the combination with a standard having a head connected to the upper end thereof by a reduced neck, a liquid dispensing container, and a clamp carried by the bottom of the container for detachable connection with the standard, said clamp including a laterally extending rigid arm having a slotted free end for receiving the neck of the standard, and a laterally extending spring arm disposed above the rigid arm and provided with a socket to receive the head of the standard.

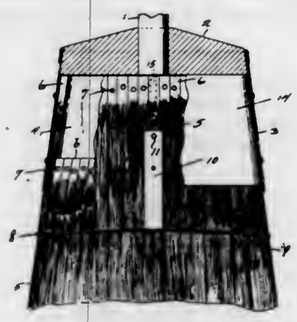
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1,764,526. WORKING PISTON FOR HIGH-SPEED RECIPROCATING COMPRESSORS. GERHARD ROTHMANN, Herne, Germany. Filed June 24, 1929, Serial No. 373,256, and in Germany July 2, 1928. 9 Claims. (Cl. 230—221.)



1. A working-piston for high-speed reciprocating compressors comprising a piston-body, a gudgeon seated in said piston-body, a piston-head, ribs connecting said piston-head to said piston-body, a valve-seat provided in said piston-head, an inlet-valve arranged on said valve-seat, a valve-stop for limiting the valve movement, and a connecting-member for releasably attaching said valve-seat and valve-stop to said piston-body in proximity to said gudgeon so as to transmit the inertial stress due to said valve-seat and valve-stop by the shortest path to said gudgeon.

1,764,527. BROOM. WILLIAM B. RUPE, Louisville, Ky. Filed June 1, 1929. Serial No. 367,743. 2 Claims. (Cl. 15—171.)

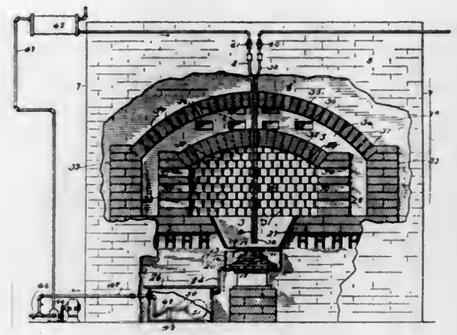


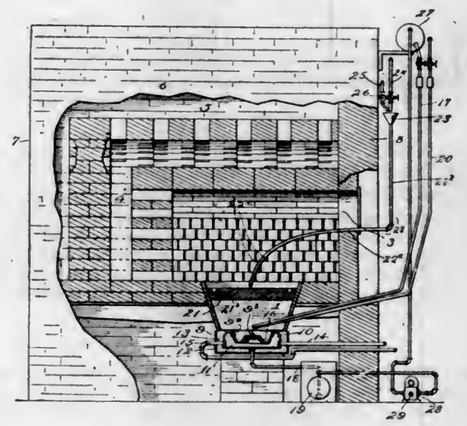
1. A broom comprising a head, a handle secured to said head, a pin depending from said handle, a block engaging said pin, straw tufts arranged about said block, means for securing said straw tufts on said block, a saddle secured to said straw tufts spaced downwardly from said block, strap members secured at one end to said block and at the opposite end engaging said saddle, and a casing carried by said head and removably secured to said block.

1,764,528. FURNACE FOR BURNING LIQUID FUEL. JOSEPH E. RUTTER, Fort Lee, N. J. Filed June 16, 1927. Serial No. 199,180. 3 Claims. (Cl. 158—4.)

1. In an apparatus of the type described, the combination of a liquid fuel burner unit, means for feeding liquid fuel to said unit, an expansion chamber in position to receive the burning fuel from the burner unit, a primary combustion chamber communicating with the expansion chamber, and a secondary combustion chamber substantially surrounding the primary combustion chamber and communicating therewith.

1,764,529. FURNACE FOR BURNING LIQUID FUEL. JOSEPH E. RUTTER, Fort Lee, N. J. Filed Oct. 20, 1927. Serial No. 227,370. 2 Claims. (Cl. 158—4.)



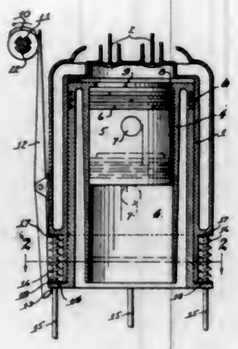


1. In an apparatus of the type described, the combination of a main ignition burner, means for supplying liquid fuel thereto, an expansion chamber over said burner in position to receive the burning gases therefrom, a combustion chamber communicating with the expansion chamber, a secondary ignition burner arranged in said expansion chamber above the main burner and spaced from the sides of the expansion chamber, and means for supplying liquid fuel to the secondary burner.

1,764,530. INTERNAL-COMBUSTION ENGINE. DAVID PAINGLE SAVAGE, Sydney, New South Wales, Australia. Filed Apr. 15, 1929. Serial No. 355,094. 3 Claims. (Cl. 123—78.)

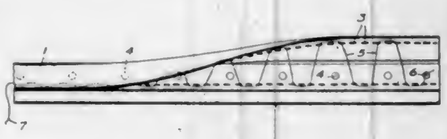
1. In an engine, a cylinder; a piston comprising an open ended sleeve member and a core member, one of said members being connected with the engine crank shaft and

the other member moving therewith for a portion of the cycle; means controlled by said shaft-connected member



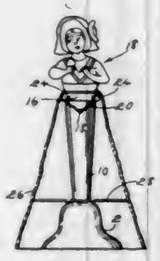
for holding said other member stationary for the remainder of the cycle; and means for yieldably stopping said other member prior to the holding thereof.

1,764,531. PULL-TIGHT MOLDING. AUGUST W. SCHMID, Connersville, Ind. Filed Jan. 8, 1929. Serial No. 331,121. 4 Claims. (Cl. 155—184.)



1. In a welt the combination of a bead portion and a nail concealing portion connected thereto by a nail receiving strip, a flexible stiffening member normally in position for holding said portions separated, means for attaching said member to said portions and permitting said member to be pulled taut and straightened whereby said concealing portion is folded over on to said strip.

1,764,532. ORNAMENTAL HAND BELL. ISABELLE W. SCHMITZ, Los Angeles, Calif., and LOUIS C. RUPP, Bisbee, Ariz. Filed Dec. 12, 1928. Serial No. 325,608. 4 Claims. (Cl. 46—40.)



1. An article of manufacture comprising a bell support, a standard secured at one end to said support, a bust fitting over the other end of said standard and forming a handle, means securing said bust to said standard, a standard and bell concealing means associated with said bust, and means associated with said standard for holding said last means out of contact with said bell support.

1,764,533. CLAMPING TONGS FOR SHOE REPAIRING. GEORGE H. SCHRODER, Oakland, Calif. Filed June 18, 1928. Serial No. 286,098. 1 Claim. (Cl. 12—103.)

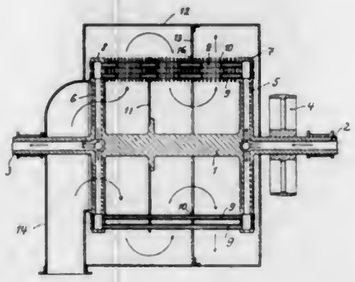


A clamp for use in mending shoes comprising arms; spring means joining said arms between the ends thereof and normally forcing certain free ends of the arms towards one another; rubber jaw members having flat opposed faces carried on certain free ends of said arms, said jaw members having knobs on the outer sides thereof; and eyes formed on said arms and surrounding said knobs to hold the jaws in place.

1,764,534. METHOD OF PREPARING PAVEMENT COMPOSITION. MELDRUM D. SHANNON, Sacramento, Calif. Filed June 16, 1925. Serial No. 37,581. 3 Claims. (Cl. 106—31.)

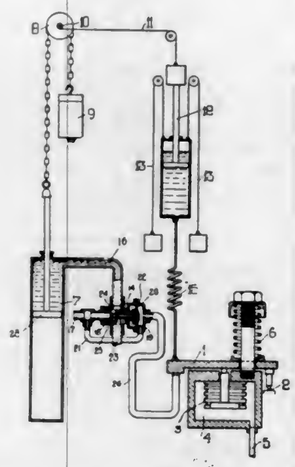
1. The method of preparing a pavement composition which consists in combining a mixture of asphalt, powdered limestone, and sand containing not less than 3 percent of moisture, said materials being thereafter subjected to a temperature in excess of 375 degrees Fahr.

1,764,535. APPARATUS FOR EXCHANGE OF HEAT. HANS SIMMON, Vienna, Austria. Filed May 18, 1926. Serial No. 109,883, and in Austria May 19, 1925. 8 Claims. (Cl. 257—242.)



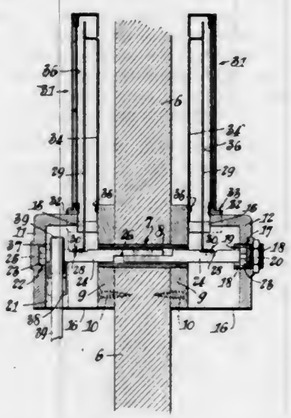
1. An apparatus for the exchange of heat comprising a casing adapted to have a gas circulated therethrough; a shaft mounted to rotate in said casing and having hollow arms secured thereto; a plurality of tubes connected to and in communication with said arms and through which a liquid is adapted to circulate; a plurality of fins on said tubes adapted to radiate heat; and an inlet and outlet in the casing for the gas which is forced through the casing by the centrifugal effect of the rotation of the tubes.

1,764,536. AUTOMATIC REGULATOR. FRANK EWART SMITH, Billingham, Stockton-on-Tees, England, assignor to Imperial Chemical Industries Limited, London, England, a British Company. Filed June 15, 1927, Serial No. 199,030, and in Great Britain June 21, 1926. 5 Claims. (Cl. 236—26.)



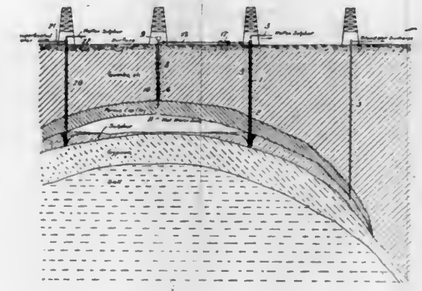
1. An automatic control apparatus comprising an element displaceable according to the variations of pressure, temperature or volume; a machine part controlling said pressure, temperature or volume, a relay mechanism through which said element operates said part, an extensible spring and a dash-pot transmitting the displacement of said part to said element, said dash pot allowing said spring to gradually return to its normal loading after a predetermined time period.

1,764,537. BALANCE INDICATOR FOR PLATFORM SCALES. MORTON HULL STARR, Highland Park, Mich. Filed Dec. 16, 1929. Serial No. 414,503. 17 Claims. (Cl. 116—129.)



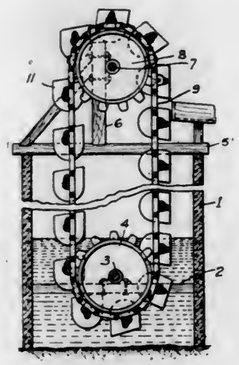
1. In a platform scale wherein is provided a platform, a weigh-beam and a partition wall between the platform and the weigh-beam; an "over" and "under" indicator at each side of the partition wall, and means common to both indicators and actuated by the weigh-beam for indicating at both sides of the wall the balanced or unbalanced condition of said weigh beam.

1,764,538. MINING OF SULPHUR. ROBERT HOLDEN STEWART, Vancouver, British Columbia, Canada, assignor to Texas Gulf Sulfur Company, New York, N. Y., a Corporation of Texas. Filed Sept. 22, 1926. Serial No. 137,098. 4 Claims. (Cl. 262—3.)



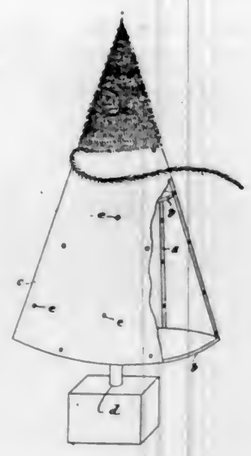
1. The improvement in the mining of sulphur by underground fusion from partially exhausted sulphur deposits, which comprises withdrawing from the upper part of a deposit hot water at a temperature higher than the melting point of sulphur, maintaining the temperature of the water above the melting point of sulphur, reintroducing the withdrawn hot water into the deposit at a localized well zone remote from the point of withdrawal and coincidentally therewith introducing fresh hot water into and removing sulphur from the deposit at another localized well zone.

1,764,539. WATER ELEVATOR AND CONVEYER. JOSEPH S. STINSON, Denver, Colo. Filed Feb. 7, 1929. Serial No. 338,182. 3 Claims. (Cl. 198—145.)



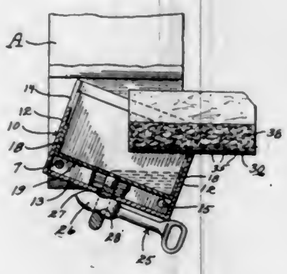
1. In a water elevator of the character described, the combination with endless carriers having buckets arranged therebetween, of trunnions carrying the ends of said buckets, means carried by said endless carriers for pivotally receiving said trunnions and coacting normally disengaged elements carried by the buckets and endless carrier designed to come together after the buckets reach the upward limit of their movement to cause tipping of the buckets.

1,764,540. ARTIFICIAL TREE. ROBERT VYDRA, Nuremberg, Germany. Filed Jan. 3, 1929, Serial No. 330,071, and in Germany Nov. 30, 1928. 2 Claims. (Cl. 41—15.)



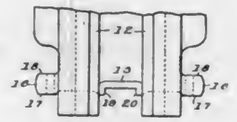
1. An artificial tree of conical form with ropes wound in long veins around the conical form, comprising in combination a lattice work, a covering of even pasteboard arranged around said lattice work, horizontal reinforcing disks fixed at the middle and the foot of said lattice work.

1,764,541. JOURNAL BOX. MONT WICKIZER, Brookfield, Mo. Filed June 30, 1927. Serial No. 202,702. 1 Claim. (Cl. 308—88.)



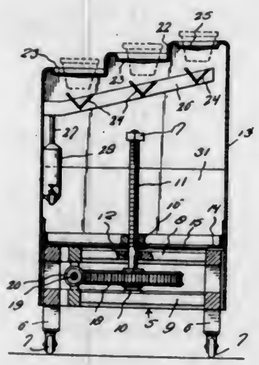
In a cellar for journal boxes of the class described, the combination of a housing including end, side and bottom walls, a waste cellar including end, side and bottom walls, mounted for vertical sliding movement within said housing, a plunger post secured to the bottom wall of the waste cellar and projecting downwardly through an opening in the bottom wall of said housing, said post having an opening provided therein adjacent its lower end, an expansion coil spring encircling the post between said bottom walls of the housing and waste cellar for normally urging the waste cellar upwardly in the housing, a key embodying an elongated head insertible transversely through the opening in said plunger post and engageable with the under surface of the bottom wall of said housing for drawing the waste cellar downwardly within the housing and retention of the waste cellar in its retracted position, a perforated carrier plate removably supported in the waste cellar, and a waste filler carried by the upper side of the carrier plate for vertical movement with the waste cellar.

1,764,542. RAIL GUIDE AND CLAMPING SURFACE FOR SHAPERS. WILLIAM F. ZIMMERMANN, Maplewood, N. J., assignor to Gould & Eberhardt, Newark, N. J., a Corporation of New Jersey. Filed June 24, 1927. Serial No. 201,180. 10 Claims. (Cl. 90—38.)



1. A frame for shapers combining horizontally extending ram ways; a forward vertical wall adapted to support a cross-rail; and guideways and supporting surfaces on said wall for said cross-rail, said ram ways extending forwardly beyond the vertical wall and said guideways and supporting surfaces being so positioned that the longitudinal projections thereof pass adjacent to but without intersecting the frame parts providing said ram ways.

1,764,543. FLOWER TABLE. ANNIE EVA BARTON, Roy, Utah. Filed Aug. 7, 1928. Serial No. 298,039. 5 Claims. (Cl. 47—39.)



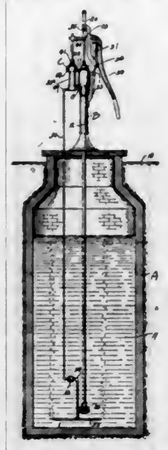
4. In a flower table, the combination with a supporting base, of a hollow open bottom body slidably telescoped at its lower end over said base for vertical adjustment relative thereto, said body having a stepped top wall provided with a plurality of series of flower pot receiving openings, and means to vertically adjust said body relative to said base.

1,764,544. COATING FOR SURFACING PERMANENT MOLDS. HURLBUT L. BAUMGARDNER, Chicago, Ill. Filed Jan. 11, 1926. Serial No. 80,637. 4 Claims. (Cl. 22—189.)

1. A coating for metal molds consisting of a mixture of diatomaceous earth and a refractory binder as its principal ingredients.

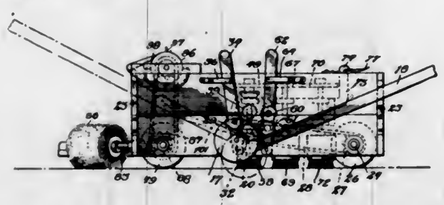
1,764,545. CISTERN AGITATOR AND PURIFIER. GEORGE S. BROWN, Harriman, Tenn. Filed Apr. 30, 1928. Serial No. 274,150. 2 Claims. (Cl. 103—6.)

1. A combined pump and purifier for cisterns, and the like, comprising a water lifting pump adapted to be mounted over a well and having a tube extending downwardly into the body of water and open at its lower end to provide a water intake for the pump, and an air compressing pump adapted to be mounted over the well and connected to the water lifting pump for operation therewith, said air compressing pump having an outlet pipe extending downwardly in the well to a point below the lower open end of the water pump tube and having an outlet opening at its lower end located below the open end of the tube,



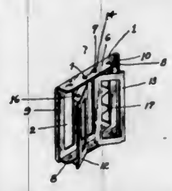
whereby upon operation of the water lifting pump fresh air from above the well is forced into the body of water below the point from which the water is raised to prevent lifting of obnoxious gases with the water.

1,764,546. STREET-MARKING APPARATUS. WILLIAM B. BURNLEY, Los Angeles, Calif. Continuation of application Serial No. 71,336, filed Nov. 25, 1925. This application filed Oct. 22, 1926. Serial No. 143,530. 6 Claims. (Cl. 91—39.)



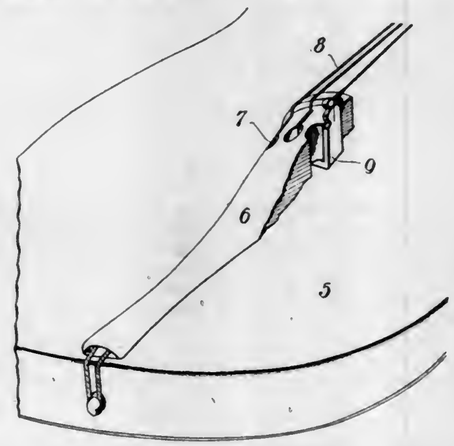
1. In a street marking apparatus, a shaft, a cupped element fixed to the shaft and having a perforated bottom, a second cupped element movable beneath the first element and having an opening in its bottom, a spring interposed between the elements for yieldably urging the lower element downwardly, a brush on the lower element, and means for supplying a marking fluid to the upper element whereby the fluid is caused to gravitate to the interior of the brush.

1,764,547. KNICKER BUCKLE. MASSIMINO CARFAGNO, Philadelphia, Pa. Filed Apr. 18, 1929. Serial No. 356,148. 1 Claim. (Cl. 24—74.)



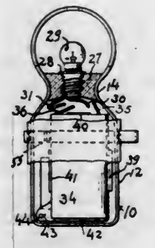
A buckle of the character described comprising a plate, said plate having outwardly extending side and end portions, said side portions having spaced recesses positioned inwardly from the opposite ends thereof, a pair of belt gripping members pivotally mounted in the side portions of the plate, each of said gripping members having an elongated slot therein for receiving a belt therethrough, one of said gripping members having teeth extending inwardly of the slot and being mounted on the inner side thereof, one of the end portions of the plate having outstanding teeth whereby to engage a belt, said gripping members having recess engaging means for engagement with the spaced recesses in said side portions whereby to hold the gripping members between the side portions of the plate when in locked position.

1,764,548. STRING-FASTENING DEVICE FOR MUSICAL INSTRUMENTS. FRANK J. CALLIER, San Antonio, Tex. Filed May 12, 1928. Serial No. 277,218. 5 Claims. (Cl. 84—297.)



1. In a string fastening device for violins, a body adapted to be extended through a violin tail piece and having one end portion extended angularly to define an abutment adapted to engage the under side of the tail piece, the other end portion of the body being provided with a longitudinal incision extending out through the upper end thereof and defining a string anchoring member and a lug, the said lug being adapted to be bent into pressure engagement with the upper side of the tail piece to cooperate with said abutment in anchoring the body in place.

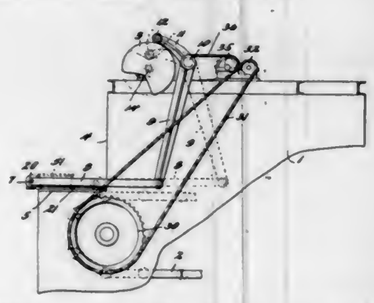
1,764,549. HAND SIGNAL LIGHT. BERNARD CAROSELLI and HERMAN G. ESSMAN, New York, N. Y.; said Caroselli assignor to said Essman. Filed Feb. 9, 1925. Serial No. 8,011. 4 Claims. (Cl. 177—329.)



2. A hand signalling lamp comprising a casing, a signal light, an electric cell, switch means for electrically connecting the light to the cell comprising a movable contact electrically connected to the cell and a fixed contact electrically connected to the light, a cell gripping device pivot-

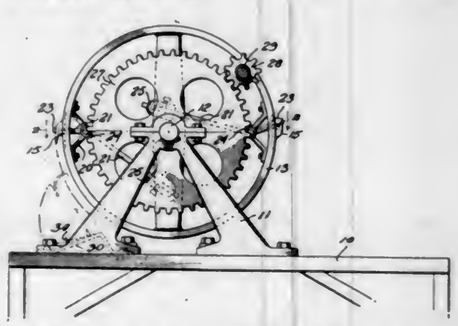
ally mounted within said casing, the said cell being gripped by said device, whereby the cell and said device may be moved with relation to the casing by gravity to operate the switch and to cause the light to be connected and disconnected from said cell.

1,764,550. FEEDING APPARATUS FOR BAKERS' OVENS. CORRY B. COMSTOCK, New York, N. Y., assignor to Comstock Oven Company, Inc., New York, N. Y., a Corporation of New York. Filed May 16, 1927. Serial No. 191,879. 17 Claims. (Cl. 107—57.)



1. The combination with a baker's oven provided with an endless conveyor for transporting articles through the baking chamber thereof and having a feeding table in front of the inlet to said chamber, of means for moving articles to be baked through said inlet and onto the oven conveyor including a bar-like member extending transversely of the feed table and adapted to be reciprocated to and from the oven inlet, means actuated by the oven conveyor for moving said member away from the oven, and independent means for moving said member toward the oven.

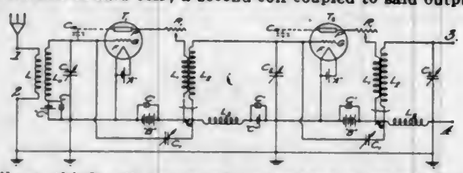
1,764,551. HOG-SNOUT PULLER. JOHN J. DOLZER, Elm Grove, W. Va. Filed Oct. 1, 1929. Serial No. 396,543. 6 Claims. (Cl. 17—1.)



1. A hog snout puller, comprising a drum, means for turning the drum, a pair of pulling points mounted in the drum, means for supporting the head of a hog adjacent one side of the drum with the snout of the head in the path of the puling points for removal of the snout from the head, and means for removing the snouts from the pulling points at the opposite side of the drum.

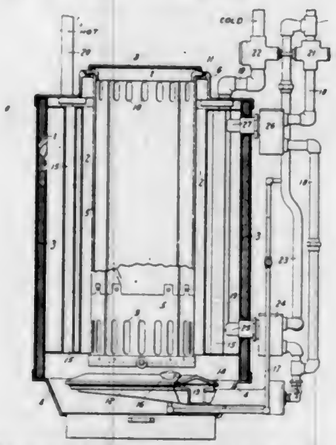
1,764,552. ELECTRICAL AMPLIFIER CIRCUIT. FREDERICK H. DRAKE, Boonton, N. J., assignor to Radio Frequency Laboratories, Incorporated, Boonton, N. J., a Corporation of New Jersey. Filed May 4, 1928. Serial No. 275,178. 13 Claims. (Cl. 179—171.)

1. An electrical amplifier circuit comprising, in combination, a vacuum tube including at least an anode, a cathode, and a control grid; an input circuit for said stage associated with said control grid; an anode circuit connected between said anode and cathode and including an output coil and resistive impedance in excess of the normal self-resistance of said coil; a second coil coupled to said output



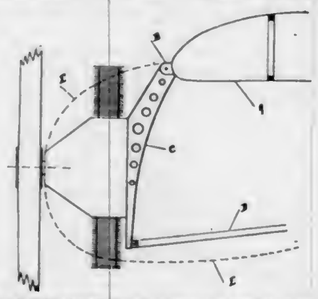
coil; a third coil connected in series with said second coil but having substantially negligible electromagnetic coupling therewith; and a connection between said cathode and said third coil.

1,764,553. COMBINED INCINERATOR AND WATER HEATER. WILLIAM C. EPSTEIN, Dayton, Ohio, assignor to the Duo-Tor Manufacturing Company, Dayton, Ohio, a Corporation of Ohio. Filed Dec. 10, 1928. Serial No. 324,937. 7 Claims. (Cl. 122—2.)



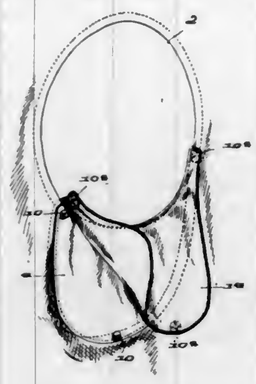
1. In an incinerating apparatus, a hopper to receive material to be consumed, a water heating element having an inlet and an outlet, a burner arranged beneath said hopper, a fuel supply pipe leading to said burner, means controlled by the flow of water through said heating element to control the operation of said burner, and means to maintain said burner in operation after the flow of water through said heating element has been interrupted.

1,764,554. ARRANGEMENT OF MOTORS ON THE WINGS OF AIRCRAFT. HENRICH FOCKE, Bremen, Germany. Filed Jan. 11, 1930, Serial No. 420,194, and in Germany Mar. 31, 1928. 1 Claim. (Cl. 244—31.)



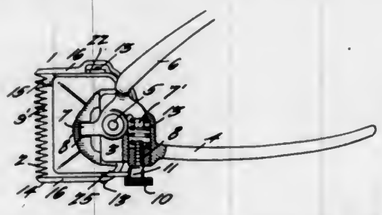
A motor arrangement on aircraft wings thereby characterized that a motor frame is suspended to suitably strengthened ribs in the neighbourhood of the leading edge or trailing edge of the wing.

1,764,555. SHIELD FOR GARMENTS. ADÈLE S. FRIEDLANDER, San Francisco, Calif. Filed July 17, 1929. Serial No. 378,999. 3 Claims. (Cl. 2—56.)



3. In a dress protector, the combination of a flap of soft textile material shaped as a shield and having a curved portion to fit beneath the armhole of a garment and adapted to be permanently stitched to said garment, said flap carrying three like members of a snap fastener located at spaced points thereon, of a protecting shield composed of an inner portion and an outer portion for fitting within the arm opening of a garment, the outer portion of said shield corresponding substantially to the size and shape of the flap and arranged to overlie the latter, and having equally spaced cooperating parts of a snap fastener which are arranged to engage with the members of the fastener carried by said flap.

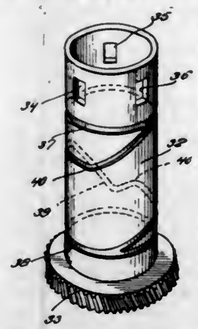
1,764,556. HAIR CLIPPERS. SAM FRIEDMAN, Atlanta, Ga. Filed Aug. 27, 1929. Serial No. 388,824. 4 Claims. (Cl. 30—1.)



1. In combination, hair clippers having a comb and pintles, a gauge comprising teeth to cooperate with the teeth of the comb, bearings on the gauge to receive the pintles, a cam lever extending upwardly from the gauge, a cam carried by the clippers and mounted at right angle to the cam lever in rear of the pintles to cooperate with said cam lever to tilt the gauge, and a spring between the gauge and clippers to resist the movement of the cam.

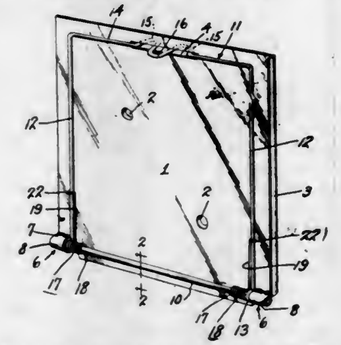
1,764,557. INTERNAL-COMBUSTION ENGINE. EARL GAUSEL, Minneapolis, Minn. Filed Aug. 24, 1928. Serial No. 301,772. 1 Claim. (Cl. 123—59.)

In an internal combustion engine of the class described, a crank case, a crank shaft mounted therein, a plurality of cylinder jackets mounted on said case, a cylindrical tubular valve mounted for rotation in each cylinder jacket and provided at one end with an operating worm gear and at its other end with circumferentially spaced equidistant rectangular ports, the intermediate exterior portion thereof being formed with spaced circumferential grooves connected by a longitudinally disposed spiral groove, having irregular shaped portions forming lubricant collecting and retaining pockets, means for operating said valves from the crank



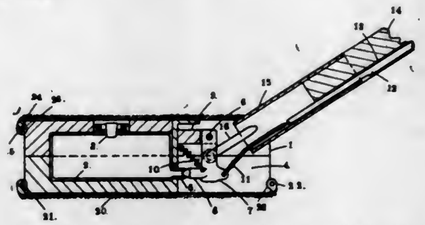
shaft, and means for establishing communication between the lower circumferential oil groove of each valve and the crank case for the purpose set forth.

1,764,558. SIGN HOLDER. HARRY J. GINSBERG, Chicago, Ill., assignor to H. T. Windsor, Batavia, Ill. Filed June 12, 1928. Serial No. 284,752. 2 Claims. (Cl. 40—13.)



1. In a sign holder, a base constructed from a single blank of sheet metal having its lower corner portions slotted vertically to establish lower corner supporting lugs, said lugs being bent forwardly then downwardly and rearwardly to establish rod supporting sockets, the lower rearwardly extending portions aforesaid being slotted to establish relatively narrow edge tines, a horizontal rod extending between and supported by the sockets aforesaid, said tines having their rear ends bent upwardly to lock the end portions of the rod in place, a U-shaped clamping member having its lower ends journaled on said horizontal rod adjacent to said corner supports, and suitable spring means tending to swing said clamping member upwardly and into contact with the base member, substantially as described.

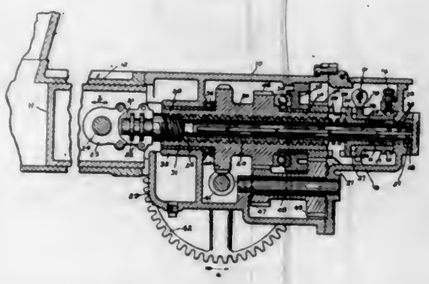
1,764,559. FLOOR POLISHER. THOMAS GLEN, Jr., Coogee, Sydney, New South Wales, Australia. Filed Jan. 12, 1929. Serial No. 332,169. 2 Claims. (Cl. 15—131.)



1. In a floor polisher the combination of a body, a receptacle therein, a pipe from the receptacle located in a

gap in the body, a crank lever pivoted within the gap, a pin valve upon the crank lever adapted to close the end of the pipe, a spring operating upon the crank lever, a handle having a longitudinal recess, a slide rod therein, and a flexible medium connecting the crank lever to the slide rod substantially as specified and illustrated.

1,764,560. RECIPROCATING MECHANISM. DALLAS F. GRAHAME, Westmount, Quebec, Canada, assignor to Riley Stoker Corporation, Worcester, Mass., a Corporation of Massachusetts. Filed Sept. 24, 1924. Serial No. 739,701. 10 Claims. (Cl. 74—14.)



1. A reciprocating mechanism comprising a nut and a screw threaded therein, means to hold one part immovable longitudinally, means permitting the other part to move axially, means to rotate the longitudinally immovable part in one direction, means to rotate the axially movable part in the same direction at a higher rate of speed, a clutch effective to hold the axially movable part rotatably stationary or permit rotation thereof, and means operated by the axially movable part effective to throw the clutch and thus cause said part to reciprocate.

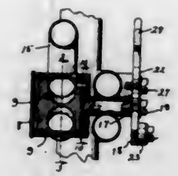
1,764,561. METHOD AND THE MEANS FOR SHAPING TUBES. EDWARD J. GULICK, Elkhart, Ind., assignor to C. G. Conn, Ltd., Elkhart, Ind., a Corporation of Indiana. Filed Feb. 8, 1928. Serial No. 252,709. 2 Claims. (Cl. 113—44.)



1. The method of cylindrically shaping a deformed hollow ductile metal tube which is exteriorly un-reenforced, which consists of closing one end of the tube by folding it upon itself, then flaring the opposite end of the tube, then closing said flared tube end by a tool which is clamped on both sides of the wall of the tube flared portion, then introducing fluid under pressure through said tool to the tube interior to spread the walls thereof, and then removing any deformation remaining in the tube ends including the folded end.

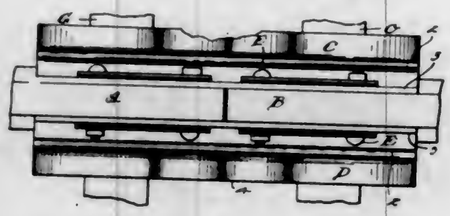
2. A tool for shaping a deformed unreenforced ductile metal element having an opening therein which comprises a ring-like head encompassing the tube end and provided with a flared end, a gland element provided with a ribbed boss adapted to flare and close the end of the tubular element by pressing same snugly against the flared portion of said head, screw means for clamping the end of the tubular element between the ribbed boss of said gland element and said flared end of the ring-like head, and means for introducing fluid under pressure through said gland element to the interior of the tubular element to spread the walls of the latter.

1,764,562. WIND MUSICAL INSTRUMENT. EDWARD J. GULICK, Elkhart, Ind., ass'gnor to C. G. Conn, Ltd., Elkhart, Ind., a Corporation of Indiana. Filed July 19, 1928 Serial No. 293,895. 5 Claims. (Cl. 84—393.)



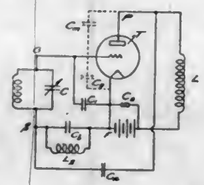
4. In a wind musical instrument of the character described, the combination of a valve casing, a by-pass tube connected therewith, a rockable key-changing valve mounted within said valve casing, a reduced tubular valve casing extension, a valve stem connected with said valve and rockably arranged within said casing extension, and means for rocking said valve, said means including an arm rigidly connected with the outer end of said valve stem, a manually operable lever, and a link connecting said lever with said valve stem arm.

1,764,563. ANGLE OR JOINT BAR FOR INSULATED RAILWAY RAIL JOINTS. HANS J. HAUSKEN, Myers, Mont. Filed June 22, 1929. Serial No. 372,921. 1 Claim. (Cl. 238—155.)



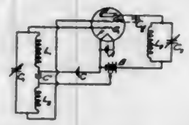
Angle or joint bars for an insulated railway rail joint provided with base flanges having inner and outer portions, said inner portions being adapted to underlie rail bases and being uninterrupted and straight throughout their entire length, said outer portions being adapted to be located wholly and laterally beyond the rail bases and transversely corrugated to provide tie seats at opposite sides of the longitudinal centers of the bars and to provide downwardly extending tie retaining portions between and laterally beyond the seats, said seats being wider than the usual ties, and said seats being alined with the lower surfaces of said inner portions.

1,764,564. AUDION AMPLIFIER. LEWIS M. HULL, Boonton, N. J., assignor to Radio Frequency Laboratories, Incorporated, Boonton, N. J., a Corporation of New Jersey. Filed June 29, 1925. Serial No. 40,435. 6 Claims. (Cl. 179—171.)



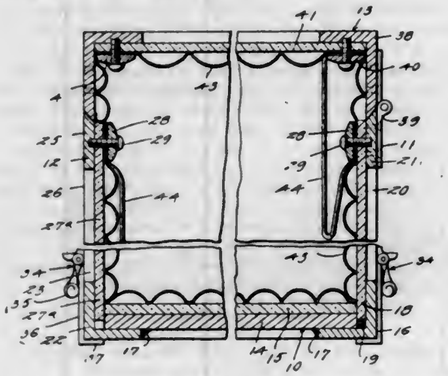
1. In an audion amplifier network arranged at a Wheatstone bridge which may be balanced to control retroactive currents, input and output circuits of the amplifier stage forming the respective conjugate arms of the bridge, and four balancing arms, three of said arms comprising substantially pure capacities and the fourth arm comprising a composite impedance having an effective capacity which is a function of the frequency.

1,764,565. AMPLIFIER CIRCUIT. LEWIS M. HULL, Mountain Lakes, N. J., assignor to Radio Frequency Laboratories, Incorporated, Boonton, N. J., a Corporation of New Jersey. Original application filed Nov. 17, 1926, Serial No. 148,975. Patent No. 1,668,151, dated May 1, 1928. Divided and this application filed Mar. 13, 1928. Serial No. 261,292. 7 Claims. (Cl. 179—171.)



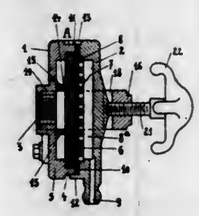
1. An electrical amplifier circuit comprising an electron tube device having an emitting cathode, an anode, a control grid, and a second grid, said grids being positioned in the field between said anode and cathode; an output circuit associated with said cathode and anode; and an input circuit including inductance having one terminal connected to said control grid, an intermediate point connected to said cathode, and a second terminal connected to said sceond grid.

1,764,566. BURIAL CASKET. PETER P. JASPER, Coketville, Pa. Filed Oct. 20, 1928. Serial No. 313,828. 1 Claim. (Cl. 27—8.)



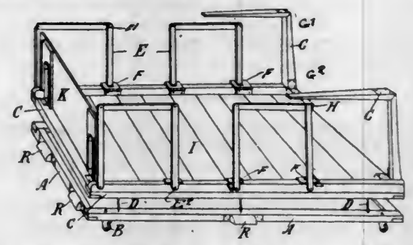
A burial casket comprising a bottom plate of metal, a sheet of glass resting upon the bottom plate and having its edges arranged in alinement with the edges of the bottom plate, side and end frames having lower members of angular formation, the vertical flanges of said lower members being spaced from the edges of the bottom plate and sheet of glass and the horizontal flanges of said lower members underlying and welded to the bottom plate, one of said side frames consisting of upper and lower sections, a hinge connecting the adjacent longitudinal edges of the sections, glass panels secured to said upper and lower sections and the lowermost of said panels having their lower edges arranged between the vertical flanges of said lower section and of the adjacent edges of the bottom plate and sheet of glass thereon, glass panels secured to the end frames and to the other of said side frames and having their lower edges arranged between the vertical flanges of these parts and the adjacent edges of the bottom plate and the sheet of glass thereon, a top frame having side and end members of angular formation with the lower edges of the vertical flanges resting upon the upper edges of the side and end frames, and a hinge connecting one of said last flanges to said other side frame.

1,764,567. FILTER FOR LIQUIDS UNDER PRESSURE. GRÉGOAI JAVITCH, Levallois-Perret, France. Filed Apr. 4, 1929, Serial No. 352,564, and in France Apr. 5, 1928. 2 Claims. (Cl. 210—185.)



1. In a filter for liquids under pressure, the combination of a filtering device comprising a casing made of two halves, a yoke and a set-screw on said yoke adapted to secure a filtering member between said halves, means whereby a leak is rendered visible if the pressure of said set-screw is insufficient for ensuring the perfect filtration of the whole quantity of liquid flowing through the filter.

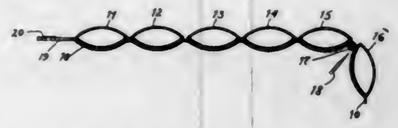
1,764,568. TRANSPORT STRETCHER. ELIZABETH KENNY, Sydney, New South Wales, Australia. Filed Mar. 23, 1927, Serial No. 177,790, and in Australia Aug. 9, 1926. 2 Claims. (Cl. 5—82.)



1. A transport stretcher comprising a lower rectangular skeleton frame, an upper frame having a floor therein, supported on the lower frame, collapsible side frames pivotally attached to the sides of the upper frame adapted to be moved to an upright position and held in such position by hinged clips attached to the sides of the upper frame, roll curtains on the side edges of the upper frame adapted to be unrolled and attached to said side frames, a foot board hingedly connected to one end of said upper frame, straps on the collapsible side frame adjacent to said foot board for maintaining said foot board in position, double hinged curtain supports on the other end of the upper frame adapted to be moved in an upright position, a roll

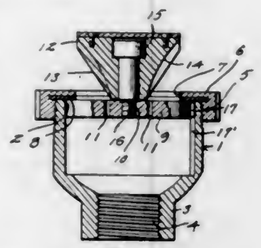
curtain on said end adapted to be unrolled and attached to said double hinged curtain supports in their upright position and held in such position by the over-stretched curtain, straps on the side edges and the end edge of said upper frame having the roll curtains secured thereto for maintaining the curtains in a rolled up position, and a strap on the upper frame for fastening a mattress and pillows to the floor of said frame.

1,764,569. BAG FOR BULK EDIBLES AND THE LIKE. AARON A. KNEE, Charlotte, N. C., assignor to The Lance Packing Company, Charlotte, N. C. Filed Sept. 21, 1928. Serial No. 307,353. 2 Claims. (Cl. 206—56.)



1. A paper ribbon having a plurality of paper bags secured thereon, said bags being oval in cross-section and having their edges and middle portions secured to the paper ribbon with the edges of adjacent bags touching each other, with the securing means being less secure at the edges to allow the edges of the bags to separate from the ribbon when a bag is folded to a position at an angle to the main ribbon portion.

1,764,570. SPRINKLER HEAD. JOHN CURT LOHMAN, Detroit, Mich. Filed Oct. 2, 1928. Serial No. 309,704. 3 Claims. (Cl. 299—126.)



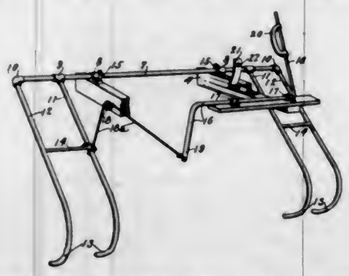
1. A sprinkler head of the character described comprising a casing head, a threaded cap for said casing head having an inwardly extending flange, a gasket interposed between the flange and the outer end of the casing head, an apertured plate loosely mounted within the casing head, and water spreading means pivotally mounted on said apertured plate.

1,764,571. BRAZING ROD. ARTHUR R. LYTLE, Elmhurst, N. Y., assignor to U. C. & C. Research Labs. Inc., a Corporation of New York. Filed Sept. 7, 1928. Serial No. 304,622. 3 Claims. (Cl. 75—1.)

1. A brazing rod comprising a brass alloy of the 70–30 copper-zinc type containing about 1.25% to 2.50% phosphorus.

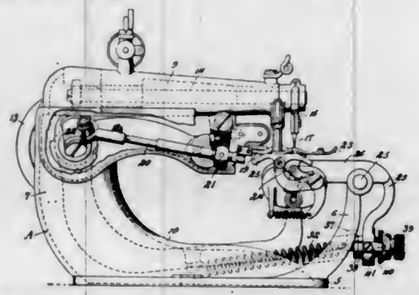
1,764,572. VINE-LIFTING ATTACHMENT. OLIVER J. MCNEES, New Castle, Pa. Filed Aug. 3, 1928. Serial No. 297,159. 1 Claim. (Cl. 97—192.)

In a vine-lifting device, the combination with a vehicle including a frame and ground-wheels carrying the frame, of a shaft extending transversely across said frame, bearings in which said shaft is journalled on said frame, two pairs of vine-lifting hooks, each of said pairs being secured on a respective end of said shaft and being spaced from one another and extending downward into position for contact with the ground on opposite sides of the respective ground-wheels, a combined shaft and lever journalled on said frame in rear of the first said shaft, said combined shaft and lever including a depending arm and an upwardly extending arm, a flexible element connected to said depending arm and to one of said hooks, a guiding pulley over which the intermediate part of said flexible element extends, said guiding pulley being carried by said frame, said upwardly



extending arm having a pedal thereon and having its upper end extended beyond said pedal, and a spring-catch on said frame and adapted for engagement with the extended end of said upwardly extending arm and to releasably hold said upwardly extending arm in an approximately parallel position in which it cooperates with the said depending arm and flexible element and pulley for holding the hooks out of engagement with the ground.

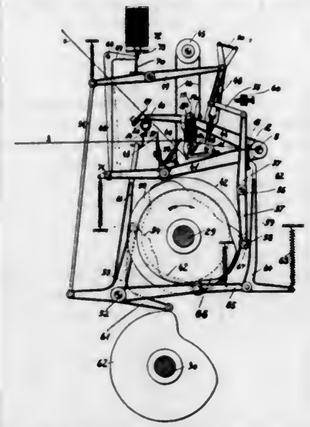
1,764,573. SEWING-MACHINE WORK SUPPORT. CHARLES W. MUELLER, St. Louis, Mo., assignor to Lewis Invisible Stitch Machine Company, St. Louis, Mo., a Corporation of Maine. Original application filed Oct. 15, 1927, Serial No. 226,398. Divided and this application filed July 7, 1928. Serial No. 291,001. 1 Claim. (Cl. 112—260.)



In a sewing machine, the combination with a frame including a base, a forwardly extending horizontal arm, and a standard extending upwardly from the front of the base and located in front of the forwardly extending horizontal arm, of a presser foot carried by the forward end of said horizontal arm, a substantially horizontal work support pivoted on the standard and extending rearwardly under the presser foot, said work support having an arm extending downwardly and disposed in front of said standard, an adjustable pin mounted in the arm of the work support, a spring connected to the frame and to the pin for urging the work support upwardly toward the presser foot, and a nut threaded on the pin and cooperating with the front face of the arm for adjusting the tension of said spring, and an adjustable stop carried by the arm of the work support for cooperation with the standard to variably limit the upward movement of the work support.

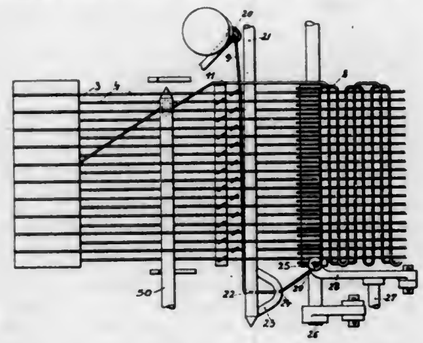
1,764,574. ART OF WEAVING. WALTER NICOLET, Leipzig, Germany. Filed Dec. 7, 1925, Serial No. 73,718, and in Germany Dec. 18, 1924. 32 Claims. (Cl. 139—11.)

1. The method of producing a fabric by weaving comprising bodily moving one of two groups of warp threads alternately in one and the other direction so as to form in each alternate operation two sheds, a closed shed and an open shed to the rear of said closed shed, and passing



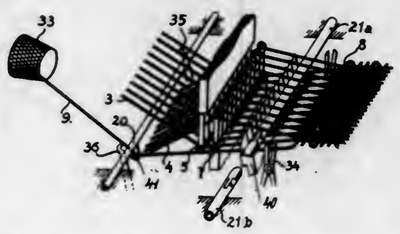
a weft thread through the front shed and another weft thread through the rear shed, before hte front shed has been dissolved and beating up each weft thread.

1,764,575. METHOD AND MEANS FOR MAKING A TEXTILE PRODUCT. WALTER NICOLET, Leipzig, Germany. Filed May 26, 1927, Serial No. 194,382, and in Germany June 3, 1926. 15 Claims. (Cl. 139—11.)



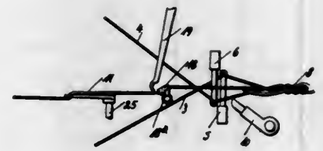
1. The method of producing a fabric by weaving comprising moving the warp threads so as to form a shed and inserting in said shed a weft in the form of a loop and casting on first that part of the loop which faces the edge of the fabric, and only thereafter the other part.

1,764,576. ART OF WEAVING. WALTER NICOLET, Leipzig, Germany. Filed June 22, 1927, Serial No. 200,650, and in Germany June 28, 1926. 17 Claims. (Cl. 139—11.)



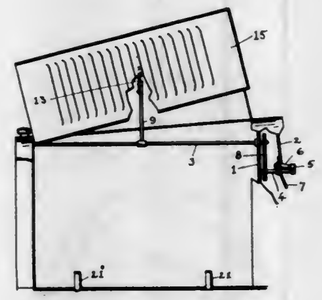
1. The method of producing a fabric by weaving comprising moving two diverging groups of warp threads to form a closed shed, pulling a weft thread into and across said shed, pulling an adjoining part of the same weft thread through between the two groups of warp threads to the rear of said shed so as to form said weft into a loop, moving said groups of warp threads in the opposite direction to open said shed, carrying the weft entered to the rear of said shed forward in the direction towards the fabric and casting both parts of the weft onto the fabric.

1,764,577. MEANS FOR WEAVING FABRICS. WALTER NICOLET, Leipzig, Germany. Filed Oct. 22, 1928, Serial No. 314,278, and in Germany Oct. 24, 1927. 6 Claims. (Cl. 139—11.)



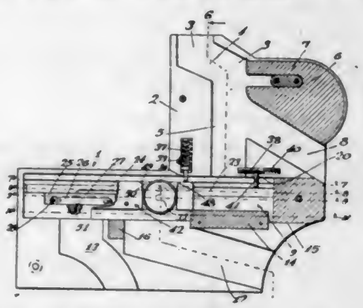
1. The method of weaving which comprises moving the warp threads so as to form in each alternate operation two sheds, a closed shed and an open shed to the rear of said closed shed, causing a weft thread to enter said closed shed and another weft thread to enter said open shed, casting on the first mentioned weft thread, causing the warp threads to move relative to each other so as to open the closed shed and extend the open shed up to the fabric before the rear weft thread has reached the end of its course, carrying the second mentioned weft thread forward towards the fabric into casting-on position, causing said weft thread to be carried forward in the direction towards the fabric while it is still on its course, and simultaneously tightening it and casting it on.

1,764,578. LIFTING DEVICE AND LOCK FOR AUTOMOBILE HOODS. SIDNEY M. O'BRIEN, Rochester, N. Y. Filed Sept. 24, 1928. Serial No. 308,111. 5 Claims. (Cl. 180—69.)



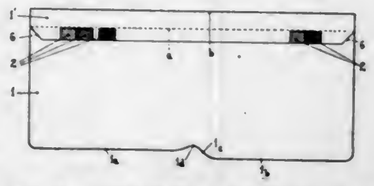
1. A lifting device for an automobile hood comprising a shaft, an arm on said shaft, a pin thereon, a link pivotally mounted on said pin at one end and pivotally connected to the hood at the other end, a lug on said arm adapted to engage the link at some distance from the pin and cause the link to swing with the arm in a fixed angular relation thereto to raise the link and hood above the arm.

1,764,579. SLUG EJECTOR FOR COIN MACHINES. NELS P. PETERSEN, Los Angeles, Calif. Filed July 2, 1926. Serial No. 120,125. 19 Claims. (Cl. 194—97.)



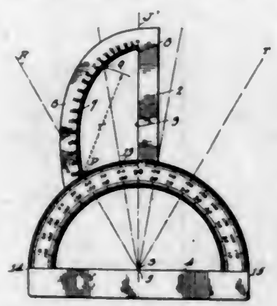
1. In a slug ejector, a movable coin or slug carrier, a slug chute, means to delay movement of the carrier at all speeds of movement over the slug chute to allow time for ejection of slugs.

1,764,580. ABSTRACT-CARD SYSTEM OR INDEX. EUGENIO RAVIOLIONE, Turin, Italy. Filed May 22, 1928, Serial No. 279,815, and in Italy Jan. 30, 1928. 7 Claims. (Cl. 129—16.)



1. A file card comprising a body portion and three upper approximately parallel folds, the inner fold being less than half the width of the middle one and bent downwardly towards the front face of the card body, the middle fold being bent upwardly and approximately parallel to and positioned forward of the front face of the card so as to form the card top, the outer fold being somewhat wider than the difference in height between the first two folds and bent backwards in contact with the rear card face.

1,764,581. ANGLE TRISECTOR. SOJIRO FRANK SHIBUYA, San Francisco, Calif. Filed July 27, 1929. Serial No. 381,507. 2 Claims. (Cl. 33—1.)

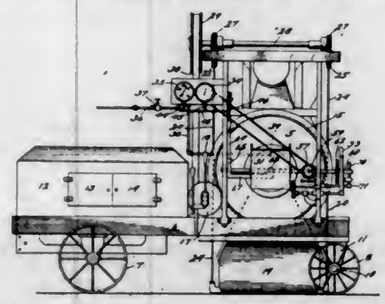


1. A trisector for an angle having a semi-circular shaped member, a radially-extending arm projecting from said member, and a curved arm having its ends secured to the semi-circular member and the free end of said radially-extending arm, the inner edge of said curved arm being shaped in a predetermined manner for use in trisecting angles, said curved arm having markings thereon for indicating the proper point for trisecting the angle.

1,764,582. METHOD OF CARRYING OUT EXOTHERMIC REACTIONS. KARL STAIB, Bitterfeld, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed May 12, 1927, Serial No. 190,973, and in Germany July 10, 1926. 6 Claims. (Cl. 23—90.)

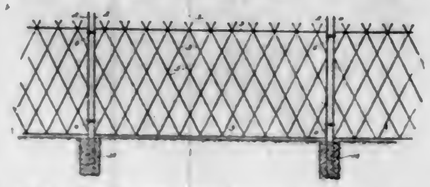
1. In the continuous performance of exothermic reactions in which the reaction temperature is bound to a maximum limit, the improvement which consists in forming into pieces the mixture of substances to be reacted with the gases, loosely intermixing the said pieces with inert bodies in quantity sufficient to absorb the excess of heat produced, and separating the said pieces from the said bodies after the reaction has been completed.

1,764,583. CONCRETE MIXER AND THE LIKE. EUGENE JOHN STERN, Little Rock, Ark. Filed Mar. 1, 1929. Serial No. 343,594. 5 Claims. (Cl. 83—73.)



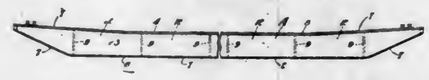
1. The combination with a concrete mixer having a rotary drum, and also having a pan for raw materials located adjacent to one side of said drum, and movable towards and from the drum at that side for the introduction of raw materials into the drum, and a delivery chute at the other side of the drum movable towards and from the drum for controlling delivery of mixed batches from the drum, of a water meter and a revolution counter located adjacent to the drum, both of said devices being provided with resetting stems for resetting to zero, suitable water conduits for delivery of water to the water meter and for delivery of water from the water meter to the interior of the drum, and control valve in said conduits, operative connections between the drum and the revolution counter, operative effectively to count in terms of revolutions of the drum and including a disengaging element, connections between the pan and the meter stems for actuating both of the meter stems effectively to reset the meters to zero when the pan is raised, connections between the pan and the water valve for thereafter opening the valve in the water conduit after the pan is raised, manual means for thereafter closing the valve aforesaid and simultaneously making effective the connections to the revolutions counter to count revolutions, and means for again making ineffective said connections when the delivery chute is moved into position to deliver the batch of concrete, substantially as described.

1,764,584. FENCE CONSTRUCTION. FRED A. TARRIER, Columbus, Ohio. Filed Feb. 21, 1928. Serial No. 256,035. 2 Claims. (Cl. 256—21.)



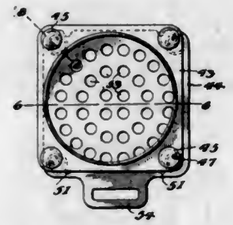
1. A fabricated fence comprising a pair of transversely spaced upstanding post rods at each end thereof, upper and lower sets of longitudinally extending horizontally disposed and transversely spaced brace rods having the ends thereof connected with said post rods, and a plurality of angularly extending relatively intersecting cross rods arranged between the post and brace rods and welded to said post and brace rods at points where the latter are in engagement with the cross rods.

1,764,585. BARGE. JOHN L. TAYLOR, West View, Pa. Filed Nov. 16, 1928. Serial No. 319,892. 3 Claims. (Cl. 114—79.)



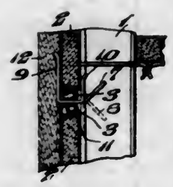
1. A barge shell composed of bottom and side units, said bottom unit having its end portions inclined upwardly to form rake ends, each of said units comprising inner and outer skins held in spaced relation by a single series of ribs composed of rolled metal shapes arranged in parallel lines and spaced from each other, said skins being formed from metal plates and said plates being welded to said ribs and to each other to form substantially continuous, smooth, water-tight inner and outer skins, and tubular connecting ribs extending along the junction line of said bottom and side units and the skins of said units being welded to said tubular ribs.

1,764,586. DOUGH DIVIDER AND ROUNDER. FRANK H. VAN HOUTEN, Beacon, N. Y., assignor to Dutchess Tool Company, Beacon, N. Y., a Corporation of New York. Filed June 4, 1929. Serial No. 368,345. 12 Claims. (Cl. 107—20.)



1. In a dough divider and rounder, the combination of a pan support, means for imparting a gyratory motion to said support, a pan adapted to be placed on said support, said pan comprising relatively movable rim and bottom portions attached to one another, and means for transferring said gyratory motion to one of said pan portions while the other is held stationary.

1,764,587. BUILDING CONSTRUCTION. FREDERICK M. VENZIE, Philadelphia, Pa. Filed June 10, 1929. Serial No. 369,537. 5 Claims. (Cl. 72—46.)



1. In a building structure, a channel beam, a pair of plaster boards arranged end to end, each plaster board being provided with a fibrous cushion-like end adapted to be compressed, and a metallic clip provided with prongs for fitting around the channel iron and provided with lips to receive adjacent ends of said plaster boards.

1,764,588. SYRINGE NOZZLE OR TUBE. AUGUST VON BONOSINI, Lugano, Switzerland. Filed Apr. 23, 1927, Serial No. 186,142, and in Germany Apr. 28, 1926. 1 Claim. (Cl. 128—239.)

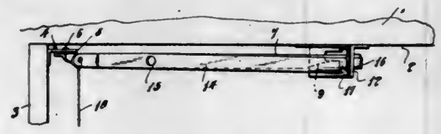


A syringe nozzle or tube comprising lugs provided at its ends which projects from the cavity of a human or animal body during treatment, said lugs adapted to serve for the reception of a supporting ribbon, and a clip projecting during treatment from said nozzle or tube in a direction towards the rear, and a further lug provided at the end of said clip and adapted for the reception of a further supporting ribbon.

1,764,589. COATING FOR WELDING RODS. WILLIAM A. WISSLER, Jackson Heights, N. Y., assignor to Haynes Stellite Co., a Corporation of Indiana. Filed Nov. 22, 1927. Serial No. 235,122. 2 Claims. (Cl. 148—23.)

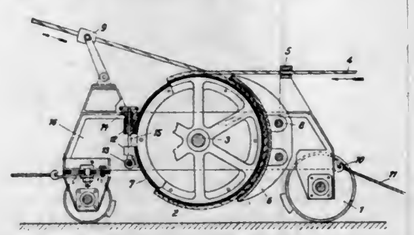
1. A flux forming material containing about equal parts of an alkaline earth carbonate, silica and borax glass, said material being free from reducible metals and substances that emit water when heated.

1,764,590. DOOR-HOLDING DEVICE. FRANK J. YACHYBA, Port Chester, N. Y. Filed Aug. 25, 1928. Serial No. 302,079. 4 Claims. (Cl. 292—262.)



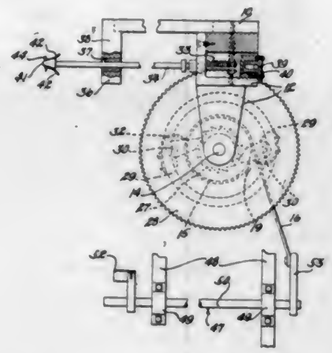
1. A door holder comprising a bar member, means for pivotally securing one end of the bar to a door, said bar having a notch formed therein adjacent the other end thereof, a keeper designed to be fixed at a point adjacent the door and adapted to slidably receive said bar, and a latch member shiftably carried by the bar and coacting with the notch thereof for securing the bar to the keeper after the bar has been drawn a predetermined distance therethrough in the opening of the door.

1,764,591. BRAKE DEVICE FOR LAYING ELECTRICAL OPEN-AIR LINES, CABLES, AND THE LIKE. JOHANN ZAGORSKI, Frankfort-on-the-Main, Germany. Filed Feb. 10, 1928, Serial No. 253,376, and in Germany Dec. 21, 1926. 3 Claims. (Cl. 188—65.)



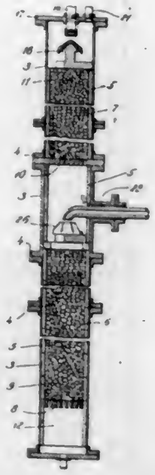
2. The invention as set forth in claim 1, wherein the said drum is provided with end flanges against which said helically grooved guide is seated.

1,764,592. METHOD OF MAKING CONDUCTOR TERMINALS. ARTHUR HERMAN ADAMS, La Grange, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Original application filed July 3, 1924, Serial No. 724,021. Divided and this application filed Nov. 26, 1927. Serial No. 235,926. 6 Claims. (Cl. 140—149.)



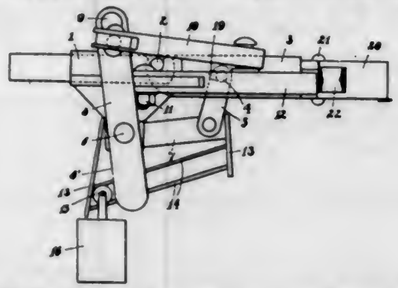
1. The method of forming reinforced terminals for insulated electrical conductors, which consists in removing the insulation from a portion of the conductor, arranging longitudinally therewith a portion of another strand of a different characteristic, retaining a part of each of the two portions stationary, and then twisting the free ends of the two portions over each other into a terminal.

1,764,593. METHOD OF GENERATING HYDROCHLORIC-ACID GAS. GEORGE P. ADAMSON, New York, N. Y., assignor to General Chemical Company, New York, N. Y., a Corporation of New York. Filed Feb. 5, 1927. Serial No. 166,037. 4 Claims. (Cl. 23—154.)



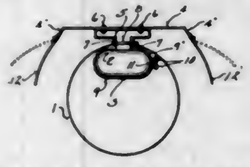
1. The herein described process of producing dry hydrochloric acid gas which consists in continuously contacting hydrochloric acid solution with concentrated sulphuric acid thereby generating moist hydrochloric acid gas, and passing the moist hydrochloric acid gas in counter-current flow in contact with the incoming concentrated sulphuric acid prior to its contact with the hydrochloric acid solution.

1,764,594. CAR COUPLING. ADAM AMRHEIN, Munich, Germany, assignor of one-half to Eduard Glanz, Munich, Germany. Filed Oct. 18, 1928, Serial No. 313,235, and in Germany Nov. 7, 1927. 1 Claim. (Cl. 213—81.)



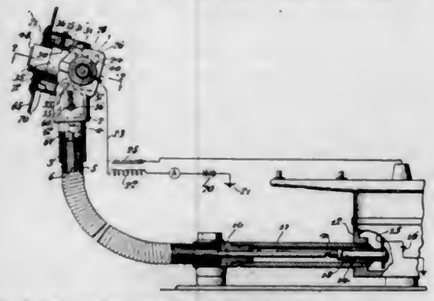
In a car coupling a tug-iron, a gripper, a linked connection between them, a guide rail and a running weight on the same, adapted to press only slightly on the tug-iron when engaged, but heavily when disengaged.

1,764,595. METALLIC SHIELD FOR STOVES. ALBERT E. ANDERSON, Milwaukee, Wis. Filed Jan. 9, 1928. Serial No. 245,498. 1 Claim. (Cl. 126—202.)



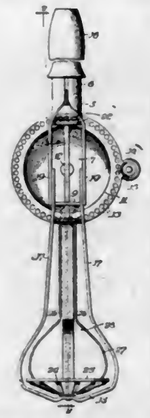
The combination of a stove having a pipe collar, a pipe fitting over said collar, a shield partially surrounding and spaced from said stove and pipe, and a supporting clip rigid with said shield and surrounding and clamping said pipe at said collar, whereby crushing of said pipe is prevented and said pipe is held tightly clamped to said collar.

1,764,596. ELECTRIC SWITCH. FREDERICK W. ANDREW, Andalusia, Pa., assignor, by mesne assignments, to The Electrolock Manufacturing Company, Vicksburg, Miss., a Corporation of Mississippi. Filed Apr. 7, 1928. Serial No. 268,302. 6 Claims. (Cl. 200—42.)



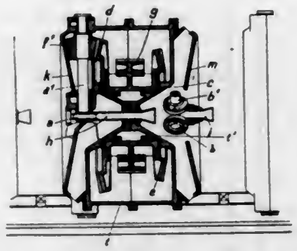
1. A switch for controlling the ignition circuit of an internal combustion engine, comprising a casing, locking means movably mounted within said casing and supporting a contact fixedly connected thereto and movable therewith, stationary contacts mounted within said casing, said contacts being included within the ignition circuit and both of which are in contact with the said movable contact when the movable locking element is in unlocked position, and one of said contacts being out of contact with the said movable contact when the said locking element is moved into locking position and in contact with the said locking means.

1,764,597. BEATER. CHARLES ANDREWS, Jr., Rockford, Ill., assignor to The Washburn Company, Worcester, Mass., a Corporation of Massachusetts. Filed Mar. 9, 1928. Serial No. 260,317. 2 Claims. (Cl. 251—132.)



1. In a device of the class described, a frame, a rotatable member carried thereby and having means thereon for directing the material to be beaten in an axial direction and a second rotatable member carried by said frame and being provided with blades having their broad faces substantially in the plane of rotation, said second member being arranged to revolve in close proximity to said first rotatable member to receive the material delivered by said first mentioned rotatable member and disperse the material laterally to aerate the same.

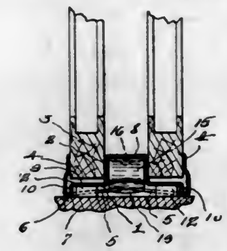
1,764,598. ROLLING MILL. GUSTAV ASBECK, Dusseldorf-Rath, Germany. Filed July 21, 1926, Serial No. 123,879, and in Germany June 3, 1926. 4 Claims. (Cl. 80—11.)



1. In a rolling mill, a set of work-shaping rolls grouped to form a pass for the work and comprising a plurality of pairs of rolls with the center of the pass of the rolls in each pair rotating in a common plane intersecting the axis of the work at an angle with respect to the plane of rotation of the other rolls, each roll having an axis positioned out of radial relation to the work pass and provided with a gear, and a common driving gear meshed with the gears on the roll axes and rotatably mounted in concentric relation to the work pass.

1,764,599. WINDOW-GUIDE CONSTRUCTION FOR REMOVABLE SASHES. ROY T. AXE, Syracuse, N. Y., assignor to The O. M. Edwards Company, Inc., Syracuse, N. Y., a Corporation of New York. Filed May 23, 1928. Serial No. 280,045. 17 Claims. (Cl. 189—73.)

1. A window construction comprising a frame element and a sash element, one of said elements being provided with a channel for receiving the other element, one side wall of the channel being movable toward and from the other element and formed with an angular arm rigid therewith at its base and extending at an angle thereto whereby



said wall and the angular arm form an angle lever fulcrumed near the angle of the lever formation, and means coacting with the arm to move said lever on its fulcrum.

1,764,600. SULPHITE WASTE-LIQUOR PRODUCT AND PROCESS OF MAKING SAME. WEBSTER E. BYRON BAKER, York Haven, Pa. Filed Apr. 7, 1923. Serial No. 630,604. 4 Claims. (Cl. 149—4.)

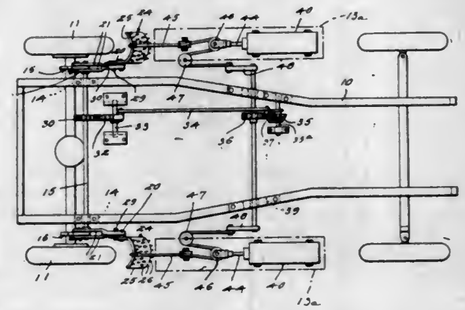
4. In the process of making sodium lignosulfonate which comprises the production of a product containing calcium by neutralization and concentration of waste sulphite liquor, the step which comprises the removal of calcium therefrom by interchange with the sodium of a zeolite, and recovering the sodium lignosulfonate and acidifying it with an organic acid having a relatively low dissociation constant.

1,764,601. PRODUCT AND PROCESS OF MAKING THE SAME FROM SULPHITE WASTE LIQUORS. WEBSTER E. BYRON BAKER and FRED G. ROBERTS, York Haven, Pa., assignors, by mesne assignments, to W. E. B. Baker, Brooklyn, N. Y. Filed May 26, 1923. Serial No. 641,759. 5 Claims. (Cl. 252—7.)

1. As an article of manufacture lignin in the form of a reversible colloid gel devoid of ligno-sulfonic acid.

2. The process of making lignin gel from sulphite cellulose extract which consists in subjecting the same to the action of chromic acid solution, and washing the gel with water.

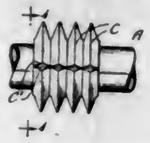
1,764,602. ANTISKID BRAKE FOR SELF-PROPELLED VEHICLES. STEPHEN H. BANDLA, Buffalo, N. Y. Filed May 14, 1929. Serial No. 362,978. 6 Claims. (Cl. 188—4.)



1. In combination with the wheel of a vehicle, a shoe associated therewith and adapted for movement from an inoperative position where it is out of engagement with the wheel and ground to an operative position where it is disposed between the wheel and ground, means for shift-

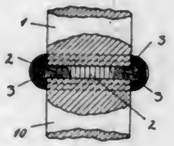
ing said shoe to cause a partial engagement of the shoe between the wheel and ground providing a yielding mounting for the shoe permitting its further movement to completely engaged position, and means yieldably resisting such further movement.

1,764,603. WELDED TUBULAR ELEMENT. JOHN E. BELL, Brooklyn, N. Y., assignor to Foster Wheeler Corporation, New York, N. Y., a Corporation of New York. Filed May 29, 1924. Serial No. 716,591. 2 Claims. (Cl. 257—262.)



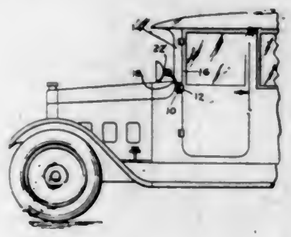
1. A tubular heat transfer element comprising a tube and a series of circumferentially extending ribs welded thereto and each tapering in cross section to increase its heat conductivity in a radial direction adjacent the tube, each of said ribs being formed by a plurality of arc shaped segments the end surfaces of which are spaced from the end surfaces of adjacent segments and constitute a substantial portion of the aggregate heat absorbing surface of the element.

1,764,604. ART OF SOLDERING. GEORG BRUNHÜBNER, Pforzheim, Germany, assignor to Ernst Gideon Bek, Pforzheim, Germany. Filed Dec. 24, 1926, Serial No. 156,935, and in Germany Oct. 12, 1925. 5 Claims. (Cl. 148—23.)



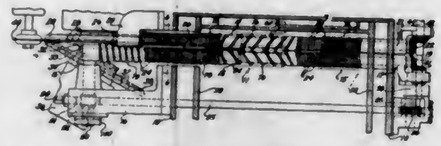
2. A composition for use in soldering the ends of links or rings of mesh fabric, chains or the like, consisting of a metal powder, red phosphorus, a deoxidizing acid, and oil.

1,764,605. COMBINED SPOTLIGHT AND HINGE STRUCTURE. RALPH J. BURTON, Detroit, Mich. Filed Mar. 21, 1928. Serial No. 263,359. 7 Claims. (Cl. 240—7.1.)



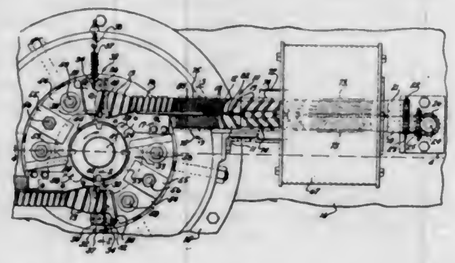
1. In combination with a vehicle door hinge comprising a pair of hinge leaves provided with aligned hinge pin bearings, a spotlight supporting bracket having a pintle portion receivable within the hinge pin bearings of the leaves and means engaging said pintle portion exerting a yielding tension thereon to hold the same relatively stationary with respect to at least one bearing.

1,764,606. MATERIAL-WORKING APPARATUS. JAMES MILTON COOK, La Grange, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed June 8, 1927. Serial No. 197,257. 14 Claims. (Cl. 10—6.)



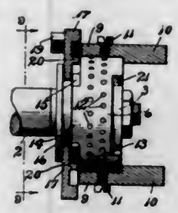
6. In apparatus for forming screw blanks, a forming means, means for receiving and successively advancing blanks into association with the forming means, means for delivering blanks to the receiving means, and a rotary clamping member angularly disposed with respect to the advancing means for yieldingly clamping a blank in position during the association thereof with the forming means.

1,764,607. SCREW-THREADING APPARATUS. JAMES MILTON COOK, La Grange, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed June 8, 1927. Serial No. 197,258. 8 Claims. (Cl. 80—7.)



1. In apparatus for working blanks, a blank working means, a reciprocable means for feeding individual blanks to the working means at predetermined intervals, and a screw mechanism operable in timed relation with the feeding means and having a spiral way for advancing associated blanks in a predetermined spaced relation to feed individual blanks directly to the reciprocable feeding means.

1,764,608. MAGNETO COUPLING. GEORGE M. CUSICK, Grand Rapids, Mich. Filed Apr. 4, 1928. Serial No. 267,362. 2 Claims. (Cl. 123—149.)



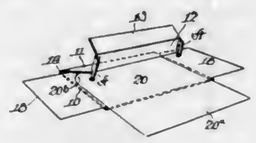
1. A device of the class described comprising, a bushing adapted to be keyed to a magneto armature shaft and having a continuous annular groove around the same between its ends, a sleeve located around said bushing having two rows of spaced apart openings therearound, a coiled spring located within the groove of said bushing having one end attached to said sleeve, a coupling member located around said sleeve, means for connecting the coupling member to the sleeve comprising screws threading into

said coupling member and having pins at their inner ends received in selected openings of the other of said rows of openings in said sleeve, said sleeve at one end having a plurality of projections, a plurality of centrifugal members pivotally connected to said bushing adjacent said projections, lugs one on each centrifugal member adjacent its free end and at the side thereof nearest said projections and under which said projections may pass on turning movement of the sleeve in one direction with respect to said bushing, and other lugs one on each centrifugal member projecting therefrom at the opposite side thereof between the ends of said members and near the outer edges thereof.

1,764,609. OXIDATION INHIBITOR. REGINALD SCOTT DEAN, Oak Park, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed May 12, 1924. Serial No. 712,549. 4 Claims. (Cl. 148—6.)

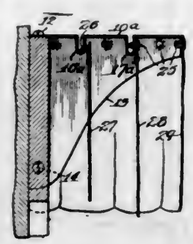
4. A new composition of matter comprising a stable suspension of boric anhydride, carbon tetrachloride, and about 1% of an aqueous peptizing agent.

1,764,610. CONTAINER FOR SHEETS. HAROLD L. DE LISLE, Chicago, Ill. Filed July 16, 1928. Serial No. 293,070. 6 Claims. (Cl. 129—1.)



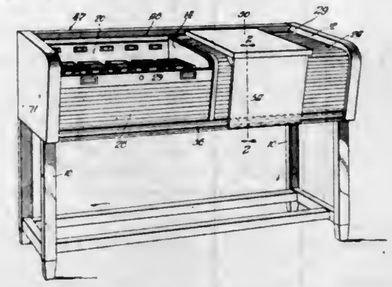
1. A sheet container of the character described for holding loose sheets in a stack and comprising a flat sheet-like base of substantially strong material, and a lid or cover member of strong sheet-like material and substantially coextensive with the base, the cover member comprising at least three laterally-extending sections flexibly connected together side by side in series, the rear section and base being flexibly connected adjacent to their rear edges respectively and the front section being substantially narrow with respect to the rear section.

1,764,611. CURTAIN SUPPORT. HAROLD L. DE LISLE, Chicago, Ill. Filed Aug. 1, 1928. Serial No. 296,694. 7 Claims. (Cl. 156—13.)



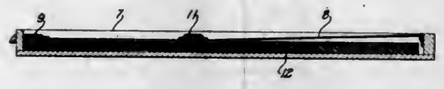
4. A curtain support of the character described comprising a substantially flat main body of thin sheet metal normally horizontally disposed and having its normally front end provided with an integral flange and having rib-like curtain-holding elements projecting normally downward from the under surface of the body, said elements being arranged in rows extending from end to end of the device, the rows being spaced apart from front to back of the device, said flange and said elements having means for attaching curtains thereto.

1,764,612. LEDGER DESK. JOHN DAVID DICKINSON, Chicago, Ill., assignor to Yawman & Erbe Manufacturing Co., Rochester, N. Y., a Corporation of New York. Filed Mar. 31, 1927. Serial No. 179,760. 9 Claims. (Cl. 45—2.)



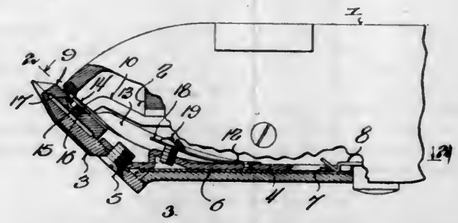
2. A ledger desk having side and rear walls forming a compartment for the reception of trays of cards, the compartment having an open front and top and a slidably supported flexible closure therefor movable upwardly to close the front and further movable rearwardly to close the front and the top.

1,764,613. APPARATUS FOR FILING SHEETS OF MATERIAL. EDWARD JOSEPH DONNELLEY, Western Springs, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed July 6, 1927. Serial No. 203,696. 7 Claims. (Cl. 129—26.)



6. In a drawer for filing sheet material, a flexible covering attached immediately to the rear of the drawer for preventing the sheets from creeping over the back of the drawer and for excluding dust from the sheets, and a weight associated with said covering for subjecting the sheets to compression.

1,764,614. CLIPPERS. ALBERT J. DREMEL, Racine, Wis. Filed Mar. 11, 1929. Serial No. 346,049. 8 Claims. (Cl. 30—1.)

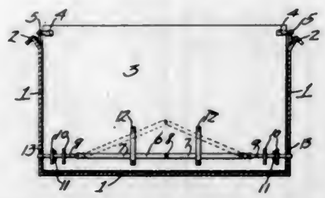


1. In a clipper of the class described, a stationary blade, a cutter blade slidably mounted upon said stationary blade, unitary guiding and tension means for said cutter blade, said means being anchored with relation to said stationary blade and including a central body portion of resilient material having spaced arms pivotally engaging said cutter blade.

1,764,615. TRUCK-BODY PARTITION. WILLIAM HOWARD EDWARDS, South Bend, Ind., assignor to Edwards Iron Works, Incorporated, South Bend, Ind. Filed Mar. 12, 1928. Serial No. 261,080. 2 Claims. (Cl. 296—50.)

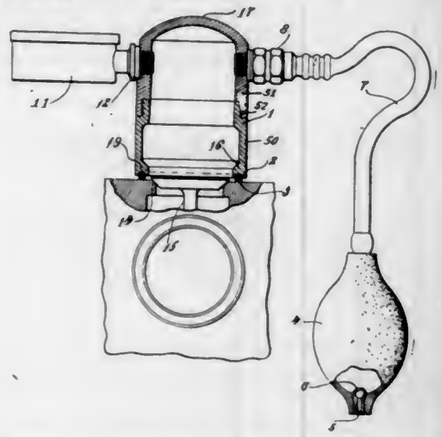
1. The combination with a truck body having apertures in the opposite sides thereof, of a detachable partition

pivotally mounted in said truck body, keeper brackets carried by said partition, shiftable pivotally connected link members carried by said brackets, lock bolts pivotally connected to the outer ends of said link members and shiftable for engagement with said apertures upon ver-



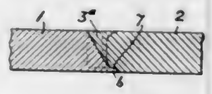
tical movement of the link members, said brackets being adapted to limit the pivotal movement of said link members whereby upon application of force upwardly applied against said members the lock bolts will be withdrawn from the apertures and the partition lifted free from its pivot.

1,764,616. VALVE TESTER. JARED BARTON FLEMING, Baltimore County, Md., assignor to The Black & Decker Manufacturing Company, Towson, Md., a Corporation of Maryland. Filed Nov. 24, 1926. Serial No. 150,427. 2 Claims. (Cl. 73—51.)



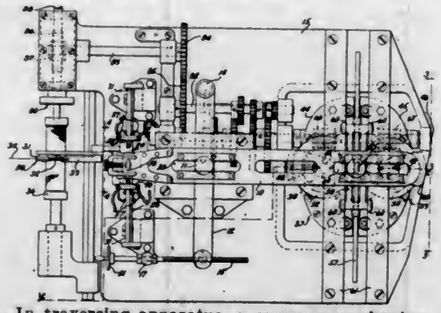
2. Means for testing valve or piston contact in internal combustion engines, comprising a cup composed of two separable sections, one having means for connecting said cup to a source of fluid under pressure, and the other having an opening adapted to be placed over the contact to be tested, in sealed relation thereto, said last named section being selectively interchangeable with sections having openings of different size.

1,764,617. BURNED OR PUDDLED JOINT STRUCTURE. BRUCE FORD, Philadelphia, Pa. Filed Feb. 3, 1926. Serial No. 85,621. 2 Claims. (Cl. 287—103.)



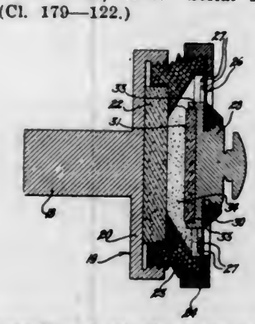
1. A burned or puddled joint structure for connecting abutting elements which comprises overlapping and interengaging vertical side and horizontal walls provided on the abutting elements and affording between them a pocket open at the top and closed at the bottom, and metal burned or puddled into the pocket.

1,764,618. STRAND-DISTRIBUTING APPARATUS. CLEM H. FRANKS, La Grange, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed July 14, 1927. Serial No. 205,821. 9 Claims. (Cl. 242—158.)



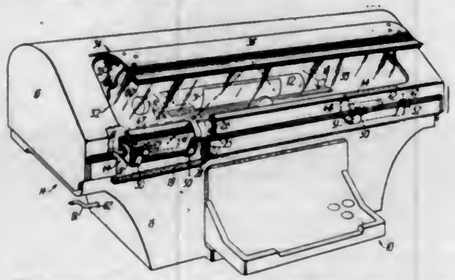
1. In traversing apparatus, a conveyor mechanism traversing a predetermined path, rotary driving means, electromagnetic means for causing the rotary driving means to directly engage the conveyor mechanism by maguetic attraction and thereby drive the conveyor mechanism, and means for actuating the rotary driving means.

1,764,619. TRANSMITTER. HAL FREDERICK FRUTH, Chicago, Ill., and TERRENCE ONAS WESTHAFER, Downers Grove, Ill., assignors to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Oct. 11, 1927. Serial No. 225,434. 8 Claims. (Cl. 179—122.)



1. In a transmitter, a resistance varying means including a pair of electrodes, a supply of resistance material positioned therebetween, a diaphragm operatively associated with one of the electrodes comprising metallic materials having different coefficients of expansion, and a second diaphragm adapted to actuate one of the electrodes.

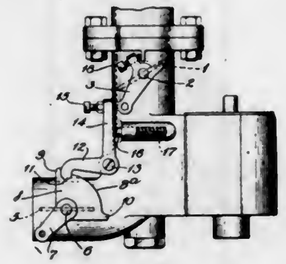
1,764,620. TYPEWRITING MACHINE. A. EDGAR GOETZ, Far Rockaway, N. Y., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Filed Aug. 11, 1928. Serial No. 299,087. 17 Claims. (Cl. 240—2.)



1. The combination with a typewriting machine and a sound-deadening case having a body portion, a cover for

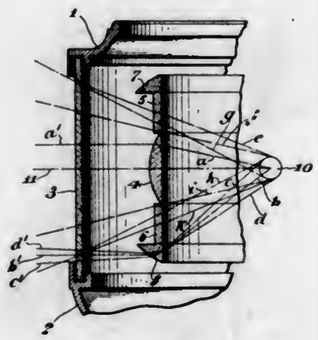
the same, a glass-covered view opening in said cover and a glare-preventing blind for said opening, of an electric lamp mounted in said case at each side of said machine and in front of the carriage of said machine, a mirror at the front of each lamp for reflecting light therefrom to the adjacent end portion of the platen of said machine extending out beyond the side edge of the same, and a mirror fastened to the under side of said blind, which is effective to reflect light from said lamps to the central portion of said platen between the sides of said machine.

1,764,621. CHOKE-OPERATED THROTTLE. JOHN GOOD, Garden City, N. Y., assignor to Good Inventions Co., New York, N. Y., a Corporation of New York. Filed Feb. 20, 1926. Serial No. 89,553. 4 Claims. (Cl. 261—52.)



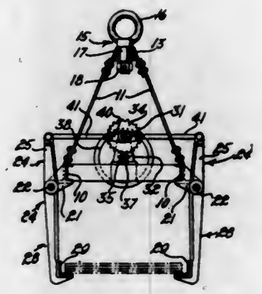
1. In a carburetor, a throttle and choke mechanism interconnected therewith to open the throttle by movement of the choke to enrich the mixture, the interconnecting means being organized to produce a greater degree of throttle opening when the choke is slightly moved from its inactive position than during the latter part of its said movement, whereby even a partial use of said choke so increases the normal idling speed of an engine as to give appreciable notice to the operator of the enriched condition of the mixture.

1,764,622. OPTICAL SIGNAL DEVICE. GEORGE GOODWIN, Brentford, England, assignor to American Gas-accumulator Company, Elizabeth, N. J., a Corporation of New Jersey. Filed Mar. 3, 1928, Serial No. 258,812, and in Great Britain Mar. 23, 1927. 4 Claims. (Cl. 240—106.)



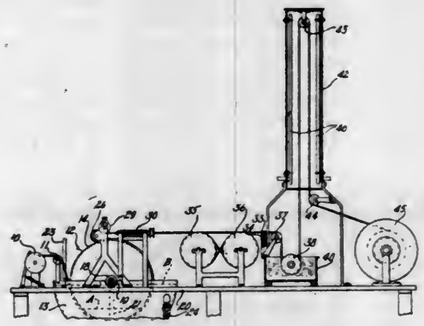
1. In an optical signal device, the combination of a central condensing lens, a source of light located practically at the focal point of said lens, a band of transparent material located in adjoining relation to an edge of said lens, the opposing sides of the said band being parallel with each other, and a condensing lens located outside of said band and in adjoining relation thereto.

1,764,623. CARRIER. HANS HENRIK CHRISTIAN GRONDAHL, Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed July 31, 1926. Serial No. 126,168. 8 Claims. (Cl. 294—106.)



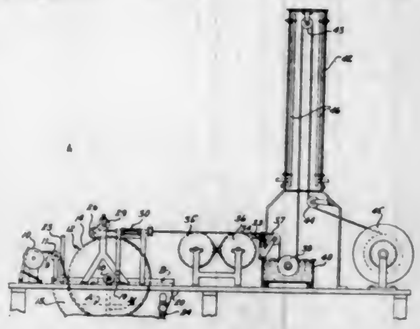
1. In a carrier, a frame, arms pivotally mounted on the frame, clamping members carried by the arms, a rock-shaft, means operable from opposite sides of the frame for rocking the shaft, and means for connecting the pivoted arms with the rock-shaft to effect positive rocking of the arms in either direction and for locking the arms in clamping position.

1,764,624. METHOD OF COATING MATERIAL. EARL C. HALL, Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Sept. 16, 1926. Serial No. 135,720. 19 Claims. (Cl. 92—41.)



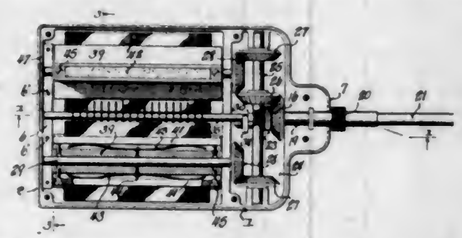
1. A method of applying a coating upon a fibrous material, consisting in subjecting the material to a mixture of a coating substance and a liquid which is a non-solvent for said coating substance and which is readily absorbed by the fibrous material, whereby the liquid is absorbed by the fibrous material and the coating substance is retained upon the surface thereof thereby forming a surface coating thereon.

1,764,625. METHOD OF COATING MATERIAL. EARL C. HALL, Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Original application filed Sept. 16, 1926, Serial No. 135,720. Divided and this application filed May 4, 1928. Serial No. 275,136. 13 Claims. (Cl. 92—41.)



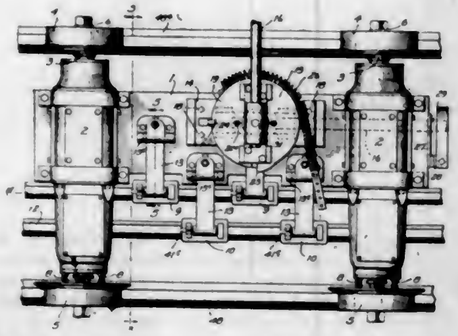
1. A method of applying a coating upon a fibrous material, consisting in first subjecting the material to water, and then subjecting the material to cellulose acetate.

1,764,626. PNEUMATIC GROOMING DEVICE FOR ANIMALS. MARTIN HECKMAN, Merrill, Wis. Filed May 21, 1928. Serial No. 279,313. 4 Claims. (Cl. 119—85.)



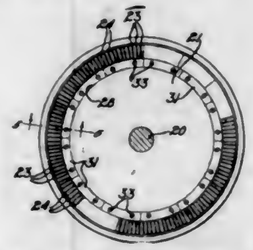
1. A grooming device comprising a casing, a pair of reversely rotating brushes, power driven means for driving said brushes, a rocking cleaner adapted to alternately engage said brushes, and a slotted bar through which said cleaner oscillates, whereby said slotted bar will remove material caught by said cleaner.

1,764,627. ELECTRICALLY-OPERATED CAR FOR RACING APPARATUS. GEORGE W. HEINTZ, Hamilton, Ohio. Filed Nov. 25, 1927. Serial No. 235,500. 6 Claims. (Cl. 272—4.)



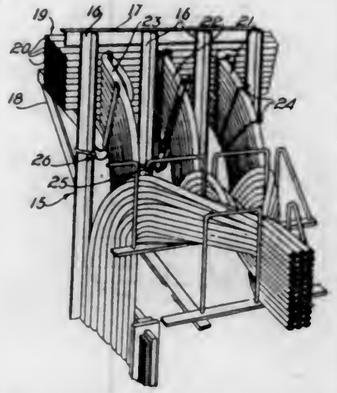
2. A car or truck for racing apparatus, comprising a frame provided with wheels, a turntable on said frame, a lure carrying arm on said frame that is adapted to project laterally from the car when the car is in use in a race, a spring combined with said turntable for retracting said arm, a locking device that co-operates with said table to hold the arm in its extended or operative position, said locking device being adapted to be tripped to release the arm, a lug on said turntable that comes in contact with said locking device when the arm moves into its retracted position, and a bifurcated resilient buffer on the frame of the car arranged so as to receive said arm when said arm approaches its retracted position.

1,764,628. INDICATING APPARATUS. ROBERT HOPSTETTER, Downers Grove, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed June 16, 1926. Serial No. 116,294. 3 Claims. (Cl. 200—11.)



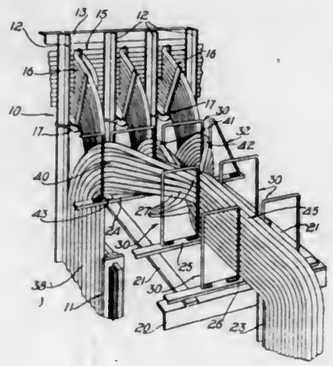
1. In an indicating apparatus, a circuit controlling disk provided with a circular dove-tailed groove around one face thereof, a plurality of trapezium shaped contact members adjustably secured in the groove, a plurality of trapezium shaped insulating spacing blocks mounted in the groove separating the contact members, a plurality of arcuate insulating blocks for adjustably securing the contact members and the spacing blocks in the groove, each of the insulating blocks extending laterally of a group of the contact members and the spacing blocks at one end thereof, means for rotating the disk at a constant velocity, and brushes adapted to coact with the contact members and the spacing blocks for intermittently opening and closing an electric circuit.

1,764,629. APPARATUS FOR SUPPORTING STRANDS. GUY JOSEPH HOUTS, Oak Park; EDWARD PAUL TOURNIER, Chicago; and JOHN FREDERICK WULFF, Oak Park, Ill., assignors to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 27, 1925. Serial No. 26,063. 6 Claims. (Cl. 248—34.)



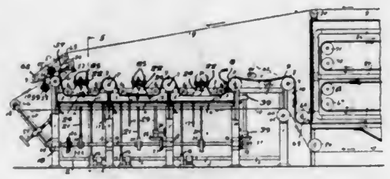
5. In an apparatus for guiding and supporting strands, means for supporting a plurality of horizontal layers of strands, and means for diverting some of the strands in a different path consisting of a pair of spaced members radiating from a common point and support and adjustable longitudinally of the support in accordance with the horizontal position of the horizontal layers.

1,764,630. DEVICE FOR SUPPORTING AND DISTRIBUTING STRANDS. GUY JOSEPH HOUTS, Oak Park, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 27, 1925. Serial No. 26,064. 4 Claims. (Cl. 248—34.)



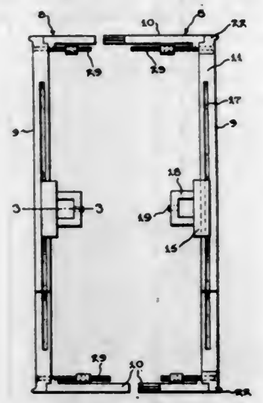
1. In an arrangement for confining a group of cables in a channel consisting of a support, a plurality of spaced loop members secured to the support and having portions cooperating with oppositely disposed portions of an adjacent loop member to provide spaced open channels.

1,764,631. WASHING MACHINE. ROLAND A. HUBINGER, Milwaukee, Wis. Filed Oct. 5, 1926. Serial No. 139,748. 1 Claim. (Cl. 68—22.)



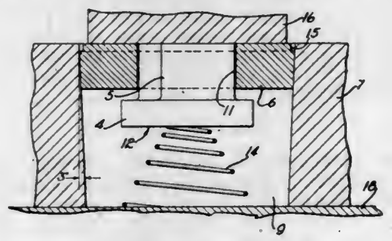
In a washing machine, the combination of a pair of perforated, flexible belts adapted to receive articles to be washed between them, a liquid receiving compartment, means for guiding said belts into and out of said compartment a plurality of times, a pair of spaced rollers located outside of said compartment over which said belts pass, and means for shaking said belts between said rollers to remove liquid adhering to said belts and to the articles carried between said belts.

1,764,632. ADJUSTABLE FORM FOR BOX-COVERING MACHINES. JOHN F. KACHLINE, Reading, Pa. Filed Oct. 25, 1928. Serial No. 314,960. 10 Claims. (Cl. 93—59.)



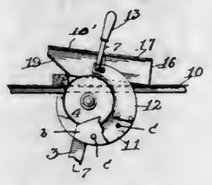
5. A box carrier form consisting of two cooperating sections, each of said sections comprising a longitudinally extensible side wall having rigid corner pieces, said corner pieces having longitudinally variable extensions movable in parallel planes arranged perpendicularly to said side wall.

1,764,633. METHOD OF MANUFACTURING DIES. FREDERICK LAWRENCE KELLER, Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed May 22, 1926. Serial No. 110,847. 4 Claims. (Cl. 76—107.)



1. A method of making a dies, which consists of forming a circular beveled edge around a die blank, reducing the periphery of the die blank at its greatest diameter to prevent buckling, making an opening in the die blank and reducing the size of the opening by exerting a pressure on the beveled edge of the die blank to force the material around a member of the desired shape.

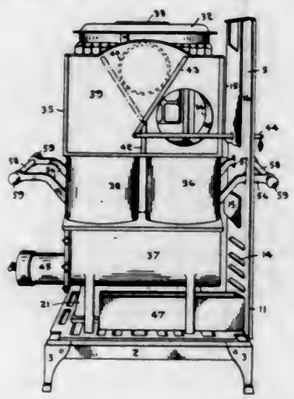
1,764,634. SAW GUARD. FREDERICK C. KUMMER, Wauwatosa, Wis., assignor to Kerner Incinerator Company, Wauwatosa, Wis. Filed Aug. 24, 1929. Serial No. 388,205. 3 Claims. (Cl. 143—159.)



1. In a device of the class described including a movable arm, a rotatable saw blade carried thereby, an arcuate

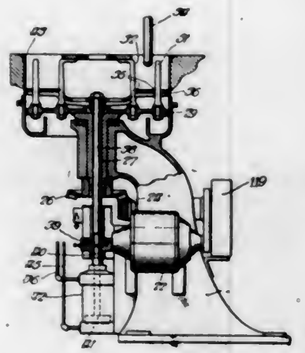
arm carried by the movable arm and aligned with the saw blade, a box-like guard member having connection with the arcuate arm to permit swinging and rotating movement, and a hand lever carried by the arcuate arm for imparting movement thereto, and simultaneously imparting movement to the movable arm.

1,764,635. HEATER. ALBERT J. LINDEMANN, Milwaukee, Wis., assignor to A. J. Lindemann & Hoverson Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Feb. 27, 1928. Serial No. 257,143. 4 Claims. (Cl. 126—67.)



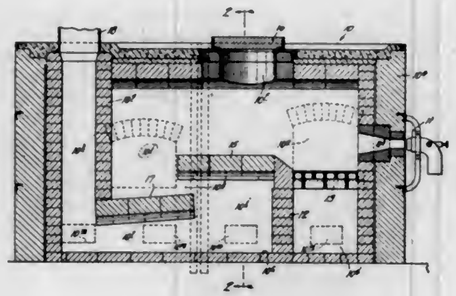
1. A heater of the character described comprising an outer casing having a plurality of louvers in each face, and an open top and base, an inner lining associated with at least one face of said outer casing and defining a vertical air duct, a combustion chamber having an arcuate air duct therethrough housed in said casing, a discharge flue for said chamber, a U-shaped circulation flue within said casing communicating with said discharge flue and a damper controlling said flues.

1,764,636. CONTROLLING SYSTEM. CLARENCE FRANCIS LINKENHELD, Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Dec. 29, 1924. Serial No. 758,571. 13 Claims. (Cl. 242—81.)



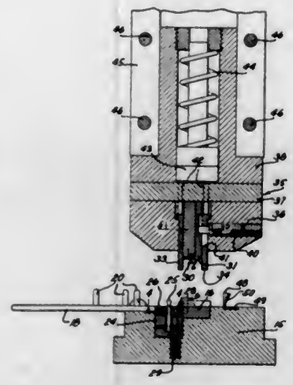
7. In a control system for a coiling mechanism having a coil stripping means associated therewith, driving means connected to the coiling mechanism, means for rendering the driving means inoperative, means for applying a braking torque to the coiling mechanism, and means preventing the operation of the stripping means while the coiling mechanism is in motion.

1,764,637. APPARATUS FOR DESTROYING WASTE. ARTHUR H. MANN, Nyack, N. Y., assignor, by mesne assignments, to Morse Boulger Destructor Co., a Corporation of Delaware. Filed Sept. 27, 1926. Serial No. 137,854. 3 Claims. (Cl. 110—12.)



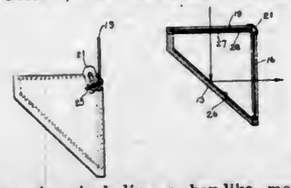
1. A furnace of the character described comprising in combination a grate for the reception of relatively dry combustible waste, an elevated imperforate hearth extending from said grate and having associated therewith means to permit the deposit of moist and relatively combustible refuse thereon, said hearth being terminated short of the furnace wall in the direction of travel of gases of combustion to provide a downwardly extending passage therefor, and a second imperforate hearth located below said passage and having means by which infectious material may be deposited thereon and positioned relatively to the first hearth to provide a passage for gases of combustion above said second hearth, said furnace being constructed and arranged to provide a space beyond said passage over the second hearth enlarged in cross section relative to said passage to check the velocity of the gases and permit the settling out of particles carried thereby.

1,764,638. ARTICLE-HOLDING DEVICE. ELISHA JAMES MCKEON, Plainfield, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Dec. 21, 1928. Serial No. 327,601. 3 Claims. (Cl. 153—1.)



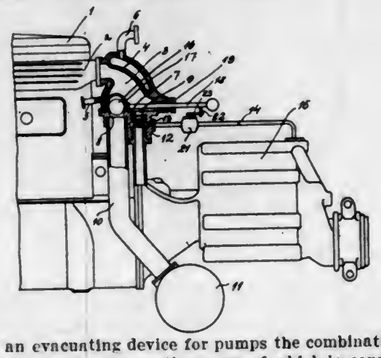
1. The combination with means for attaching a terminal to a strand, and means for simultaneously therewith shearing the free end portion of the strand, of a plate member provided with a V-shaped slot with turned edges to hold the strand under predetermined tension during the shearing operation.

1,764,639. DISPLAY SIGN. HENRY NATHANSOHN, Oslo, Norway. Filed June 16, 1928, Serial No. 286,002, and in Norway October, 1927. 3 Claims. (Cl. 40—130.)



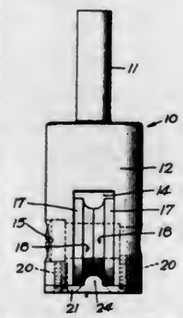
1. A display sign including a box-like member comprising relatively rectangularly disposed frames, either one of which is adapted to hold a plate comprising blocked out characters in sliding engagement and having a common corner, an angularly disposed reflecting surface substantially, equally reflectively positioned to each of said frames and a readily disengageable corner molding strip over said common corner whereby either of said plates may be replaced or interchanged.

1,764,640. DEVICE FOR EVACUATING PUMPS. FRANZ OBERASCHER, Salzburg, Austria. Filed June 19, 1928, Serial No. 286,640, and in Austria June 30, 1927. 9 Claims. (Cl. 103—154.)



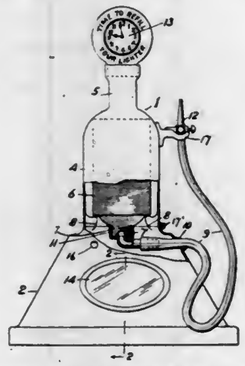
1. In an evacuating device for pumps the combination of a pump, an ejector, the suction room of which is connected to the suction side of the pump, an internal combustion engine having an exhaust branch, an exhaust line for the internal combustion engine, a distribution chamber between the exhaust branch of the internal combustion engine and the exhaust line, said distribution chamber being provided with two outlets, the one leading to the ejector and the other to the exhaust line, a ball designed for alternately closing one and the other of said outlets, and a device for moving the ball from one outlet to the other and vice versa.

1,764,641. TOOL. FRANK DWIGHT OESTERLE, Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Oct. 15, 1926. Serial No. 141,693. 8 Claims. (Cl. 78—53.)



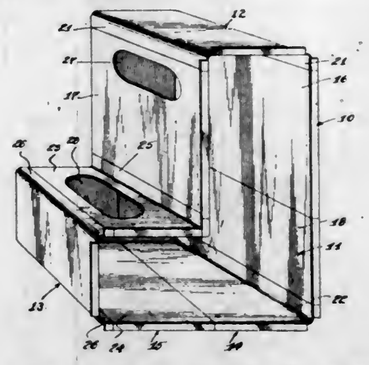
1. In a spinning tool, a mounting, a forming member carried by the mounting, and means attached to the mounting and operating independently of the forming member for engaging work associated with the tool to remove burrs produced by the action of the forming member.

1,764,642. DISPENSING DEVICE. DAVID P. POLK and JOSEPH P. REMINGTON, Philadelphia, Pa. Filed Jan. 14, 1928. Serial No. 246,682. 3 Claims. (Cl. 221—25.)



1. A dispensing device comprising a hollow shell including a pedestal having an opening through its base and a column mounted on the pedestal, a container provided with a filling opening and adapted for insertion and removal through the opening in the base into and out of the space provided in the column with the filling opening confronting the base, means near the foot of the column for detachably holding the container, a flexible tubular connection movable through an opening provided in the wall of the shell below the level of the outlet of the container when mounted in the column, said flexible connection provided at the end inside the casing with a coupling adapted for connection and disconnection with the opening of the receptacle when the latter is outside of the column and at its other end with a normally closed band opened valve and outlet, and a rest on the outside of the casing for the free end of the flexible connection.

1,764,643. REFRIGERATOR LINING. HAROLD L. POPE, Grand Rapids, Mich., assignor to Kelvinator Corporation, Detroit, Mich., a Corporation of Michigan. Filed May 2, 1927. Serial No. 188,279. 2 Claims. (Cl. 220—63.)



1. A refrigerator lining comprising two members of substantially U-shape in cross-section disposed at an angle to each other and having the side edge of one leg of one of said members secured to the side edge of one leg of the other member, a substantially rectangular member secured to the three side edges of each of said U-shape members, a member of substantially L-shape in cross-section having one edge of one leg secured to the side

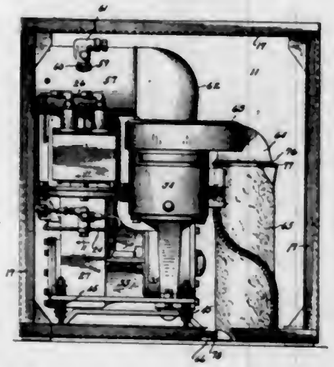
edge of one leg one of said U-shape members and the corresponding edge of the other leg secured to the central portion of said U-shape member and having the end edge of one of said legs secured to the edge of the central portion of the other U-shape member, and a substantially rectangular member secured along two edges to one edge of both legs of the L-shape member, and having one edge secured to the remaining side edge of one of the U-shape members.

1,764,644. THORIATED TUNGSTEN FILAMENT. JOHN HUMPHREYS RAMAGE, Bloomfield, N. J., assignor to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed July 27, 1926. Serial No. 125,333. 6 Claims. (Cl. 75—18.)



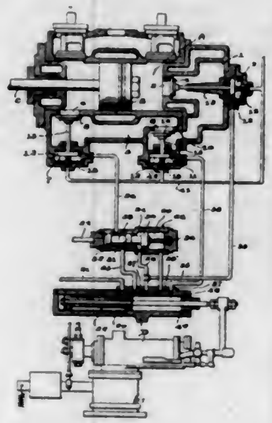
6. The method of preparing thoriated tungsten metal powder which comprises forming an ammoniacal solution of tungsten trioxide, adding thereto a proportion of ammonium fluoride, acidifying the solution with an acid solution containing a proportion of an acid soluble thorium compound substantially equivalent in amount to the ammonium fluoride content of the tungsten solution, recovering the precipitated tungstic acid and thorium fluoride admixture, and effecting the reduction of the tungsten component of the admixture to metal by heating the admixture to elevated temperatures in hydrogen.

1,764,645. REFRIGERATING APPARATUS. JOHN R. REPLOGLE, Detroit, Mich., assignor, by mesne assignments, to Kelvinator Corporation, Detroit, Mich., a Corporation of Michigan. Filed Sept. 11, 1926. Serial No. 134,700. 11 Claims. (Cl. 62—115.)



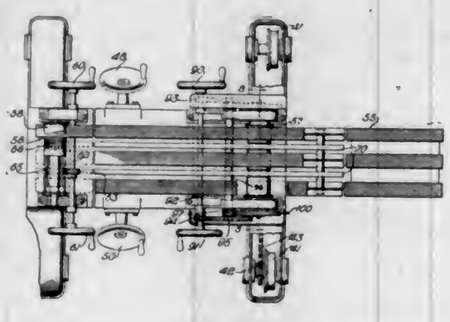
1. In refrigerating apparatus, a compressor, a motor operatively connected to said compressor, an evaporator, a casing enclosing the outlet end of said compressor forming therewith a refrigerant reservoir, an air cooled condenser receptacle secured upon the top of said casing, said condenser and casing having aligned ports through which compressed refrigerant is discharged from said casing and returns in liquid form into said reservoir, a fan operatively connected to said motor and adapted to blow air over said condenser, and conduits leading from said evaporator to said compressor and said reservoir.

1,764,646. VARIABLE-CAPACITY COMPRESSOR. MICHAEL RIESNER, Cincinnati, Ohio, assignor to Worthington Pump and Machinery Corporation, New York, N. Y., a Corporation of Virginia. Filed July 27, 1929. Serial No. 381,596. 8 Claims. (Cl. 230—21.)



1. In a variable capacity compressor, the combination with a cylinder, of a clearance chamber for wholly unloading one end of the cylinder, a second clearance chamber for partly unloading the other end of the cylinder, a plurality of pressure operated unloading devices each acting to partially unload the cylinder, and pressure controlled governor mechanism including means for successively bringing one of said devices into action a plurality of times during each of the cylinder unloading and loading operations.

1,764,647. HEAT-TREATING APPARATUS. ROBERT ROSCOE, Clarendon Hills, Ill., assignor to Western Electric Company, Incorporated, New York, N .Y., a Corporation of New York. Filed Sept. 30, 1925. Serial No. 59,577. 6 Claims. (Cl. 214—23.)



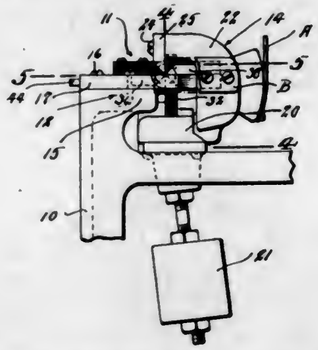
5. Apparatus for handling materials to be treated, comprising a wheeled carriage, a plurality of charging arms, a plurality of racks for separating the charging arms, an anti-friction member for supporting the charging arms and having pinion portions meshing with the racks, a roller mounted in a fixed position directly above the anti-friction member, a movable roller supporting the charging arms, an eccentric gear operatively associated therewith, means for rotating the gear to elevate the movable roller and the charging arms, and means positioned on both sides of the carriage for effecting the propelling thereof.

1,764,648. CAN OPENER. WALTER PHELPS SCHAAP, St. Louis, Mo. Filed Mar. 29, 1929. Serial No. 350,940. 1 Claim. (Cl. 220—51.)



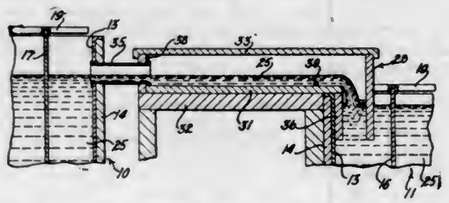
A can opener comprising a cap adapted to fit over the top of a can; a reinforcing bar extending diametrically across the under side of the top of said cap and in continuous contact therewith; and two penetrating pins mounted on opposite ends of said bar and supported exclusively thereby.

1,764,649. SCALE BEARING. HARRY C. SCHAPER, St. Louis, Mo., assignor to Schaper Scale Company, St. Louis, Mo., a Corporation of Missouri. Filed Apr. 20, 1928. Serial No. 271,542. 20 Claims. (Cl. 308—2.)



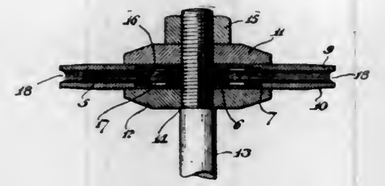
1. A bearing comprising a stationary part, a movable part, a plurality of knife edge bearing members fixed to said stationary part, and a plurality of knife edge bearing members fixed to said movable part, all of said bearing members being detachably mounted and having their knife edges disposed angularly relative to each other around a common axis.

1,764,650. ELECTROLYTIC SYSTEM. JAMES WALTER SCOTT, Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Dec. 23, 1926. Serial No. 156,588. 12 Claims. (Cl. 204—5.)



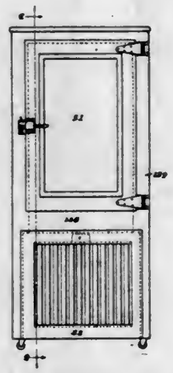
6. In a system for the electrolytic deposition of metals, a plurality of electrolytic cells, a conducting lining within each of the cells, means electrically connecting the cells in series to produce electrolysis therein, connecting means to direct the passage of an electrolyte between the cells, an anode positioned within the connecting means and electrically connected with the lining of one cell, and a cathode positioned within the connecting means and connected with the lining of another cell, the anode and cathode serving to control electrolytic deposition in the portion of the electrolyte within the connecting means.

1,764,651. FINISHING WHEEL. FREDERICK C. SIMMONS, Highland Park, Pa., assignor to Pioneer Suspender Company, a Corporation of Pennsylvania. Filed Jan. 4, 1929. Serial No. 330,381. 5 Claims. (Cl. 69—1.)



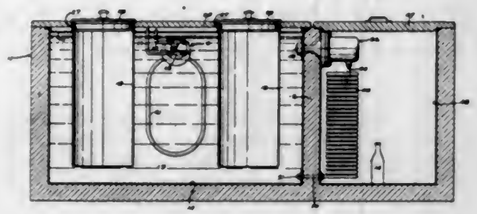
1. In a device of the character described, a brush having a semi-circular peripheral channel comprising bristle-like strands radiating from a substantially common center, means for clamping both sides of the brush at its periphery to limit the lateral displacement of the said strands, and means for supporting and rotating the same.

1,764,652. MECHANICAL REFRIGERATION. CHARLES C. SPREEN, Detroit, Mich., assignor, by mesne assignments, to Kelvinator Corporation, Detroit, Mich., a Corporation of Michigan. Original application filed Jan. 2, 1925, Serial No. 133. Divided and this application filed Nov. 5, 1925. Serial No. 66,981. 4 Claims. (Cl. 62—116.)



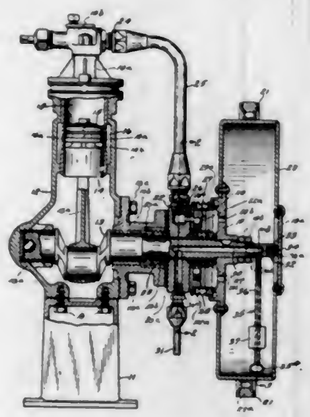
1. A refrigerator unit comprising a cabinet having a refrigerated chamber, refrigerating apparatus disposed in said chamber compressor mechanism disposed exteriorly of said chamber comprising a condenser coil operatively connected to said refrigerating apparatus, an open tank positioned within the turns of said condenser coil in position to be subjected to the heat from said condenser coil, drip pan means disposed below said refrigerating apparatus, a duct leading from said drip pan means to said tank, and a liquid tray interposed in said duct within a refrigerated space.

1,764,653. MECHANICAL REFRIGERATION. CHARLES C. SPREEN, Detroit, Mich., assignor to Kelvinator Corporation, Detroit, Mich., a Corporation of Michigan. Filed Oct. 22, 1926. Serial No. 143,313. 1 Claim. (Cl. 62—6.)



In a refrigerated cabinet having chambers separated by a partition, a brine tank in one of said chambers, refrigerant expansion means in said brine tank, a conduit extending through the lower portion of said partition for circulating brine from said brine tank through said chamber adjacent thereto, a removable housing secured to the upper portion of said partition within the chamber adjacent said brine tank, said conduit being connected in communication with said housing, conduit means extending from said brine tank to said housing, a valve in said housing for controlling the flow of brine through the outlet end thereof, and a thermostat in said housing for operating said valve, said thermostat and valve being assembled with said housing as a unitary structure.

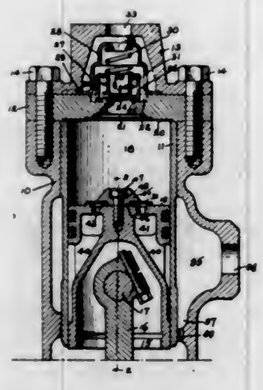
1,764,654. COMPRESSOR CONDENSER UNIT. CHARLES C. SPREEN, Detroit, Mich., assignor to Kelvinator Corporation, Detroit, Mich., a Corporation of Michigan. Filed June 3, 1927. Serial No. 196,299. 11 Claims. (Cl. 62—115.)



1. In a mechanical refrigerating system, a refrigerant compressor, means for securing the latter rigidly against rotation, a rotatable drive shaft for said compressor, a combined condenser and fly wheel comprising a hollow drum secured to an end of said drive shaft, and means for conducting refrigerant to and from said drum.

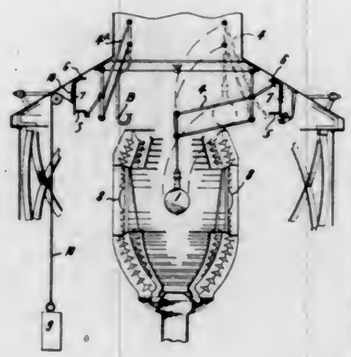
1,764,655. COMPRESSOR. CHARLES C. SPREEN, Detroit, Mich., assignor to Kelvinator Corporation, Detroit, Mich., a Corporation of Michigan. Filed Nov. 7, 1927. Serial No. 231,499. 2 Claims. (Cl. 230—190.)

1. In a compressor, the combination of a cylinder, a cylinder head extending across said cylinder, a valve housing seated upon said cylinder head, exhaust valve mechanism including a cage, and means for securing said



housing to said cylinder head, said valve cage having a portion clamped between said housing and cylinder head when secured together.

1,764,656. LIGHTHOUSE AND THE LIKE. ROBERT READMAN STEEL, Brentford, England, assignor to American Gasaccumulator Company, Elizabeth, N. J., a Corporation of New Jersey. Filed May 11, 1926, Serial No. 108,215, and in Great Britain May 14, 1925. 7 Claims. (Cl. 240—37.)



1. In signal lighting means, the combination of an electric lamp, means for supplying electric current thereto, means for movably supporting said lamp, a gas burner, means operating independently of the support for said electric lamp to movably support the said burner, means acting automatically upon the failure of said electric lamp to remove the same from illuminating position, and separate means operating to move the said gas burner into illuminating position.

1,764,657. PUMP. ARTHUR B. STEEN, Houston, Tex., assignor, by mesne assignments, to The Texas Company, New York, N. Y., a Corporation of Delaware. Filed July 31, 1926. Serial No. 126,302. 4 Claims. (Cl. 103—46.)

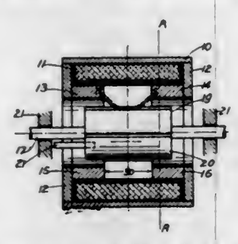
1. Well pumping apparatus comprising a casing extending into a well, a hollow piston rod disposed within the

casing and formed with two spaced piston heads of different diameters, means for introducing a pressure fluid between the piston heads for actuating the piston rod in



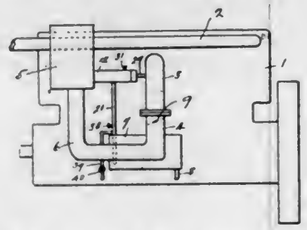
the direction of the larger head, and a weight on the piston rod for accelerating the return thereof at the end of each pressure impulse.

1,764,658. ROTARY MAGNET. JOSEF STOECKLIN, Zurich, Switzerland, assignor to Aktiengesellschaft Brown Boveri & Cie, Baden, Switzerland, a joint-stock Company of Switzerland. Filed Aug. 23, 1928, Serial No. 301,465, and in Germany Oct. 25, 1927. 8 Claims. (Cl. 175—336.)



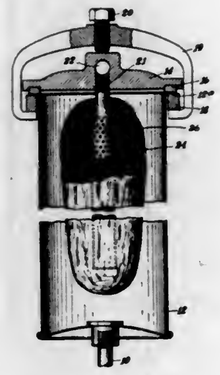
1. In an electro-magnet of the character described, a magnetizing coil, a plurality of pole pieces forming a core for said coil, said pole pieces being arranged in spaced pairs, and a rotatable armature within said pole pieces, said pole pieces and said armature being spaced to secure a varying torque relative to the changing angular position of said armature from the normal position thereof.

1,764,659. AUTOMATIC FUEL REGULATOR. CHARLES LAWRENCE STOKES, Los Angeles, Calif., assignor to Curtis B. Camp, trustee, Glencoe, Ill. Filed Nov. 9, 1925. Serial No. 67,864. 13 Claims. (Cl. 123—180.)



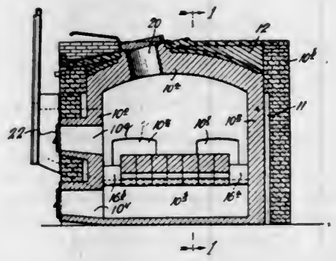
1. Means for providing excess fuel for starting an internal combustion engine including a liquid fuel reservoir, a hollow stemmed valve for passing liquid fuel from the reservoir to the engine responsive to its suction and a thermostat for causing said valve to cut off said suction at predetermined temperatures upon heating up of said engine.

1,764,660. FILTER AND METHOD OF FORMING THE SAME. ERNEST J. SWEETLAND, Hazleton, Pa. Filed Oct. 31, 1927. Serial No. 229,885. 7 Claims. (Cl. 210—204.)



6. In an internal combustion engine an oil pumping system of the class described, a filter element comprising a central drainage portion having a layer of relatively coarse filter pulp adjacent thereto, a layer of pulp of very fine texture surrounding said first mentioned layer and a layer of less fine texture surrounding last mentioned layer.

1,764,661. FURNACE FOR DESTROYING WASTE. SAMUEL H. THOMPSON, New York, N. Y., assignor, by mesne assignments, to Morse Boulger Destructor Company, a Corporation of Delaware. Filed Sept. 27, 1926. Serial No. 137,874. 7 Claims. (Cl. 110—12.)

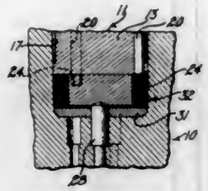


1. A furnace of the class described provided with a combustion chamber, a hearth located therein, said hearth comprising an arch supported at one end and curving upwardly and outwardly therefrom, a horizontally arranged arch stayed at its ends and contacting the upper end of said arched hearth to buttress the same against diassembly.

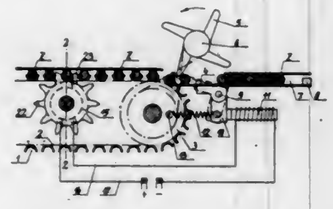
1,764,662. METHOD OF MOLDING ARTICLES. JAMES HARVEY TOMLIN, Cicero, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed July 31, 1926. Serial No. 126,154. 6 Claims. (Cl. 18—59.)

6. The method of molding plastic material into articles which consists in partially forming an article from molding material in a mold under heat and pressure, withdrawing the partially formed article, placing additional molding material in the mold, reinserting the partially

formed article in the mold and applying pressure to the partially formed article to compress the additional molding material thereby molding the molding material and the partially formed article into a completely formed integral article.

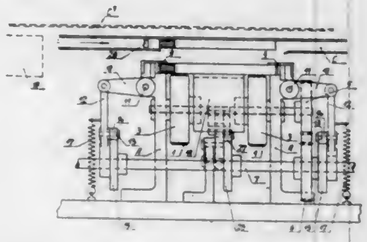


1,764,663. DEVICE FOR FORMING GROUPS OF A DEFINITE NUMBER OF ARTICLES. ROBERT WILHELM VOIGT, Dresden, Germany, assignor to the Firm "Universelle" Cigaretten-Maschinen-Fabrik J. C. Müller & Co., Dresden, Germany. Filed May 21, 1929, Serial No. 364,834, and in Germany May 25, 1928. 2 Claims. (Cl. 226—5.)



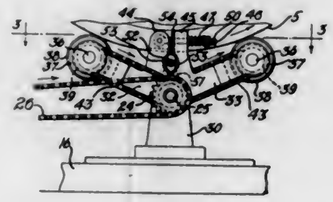
1. A device for forming groups of a definite number of articles with uninterrupted supply of the articles along a feed track, comprising a collecting station, means for feeding a number of articles exceeding the number required to form the group to the collecting station, a counting mechanism disposed in front of the collecting station and operated by the articles and a valve operable by the counting mechanism to allow surplus articles to move out of the feed track.

1,764,664. APPARATUS FOR COLLECTING AND SUPERPOSING GROUPS OF CIGARETTES. ROBERT WILHELM VOIGT, Dresden, Germany, assignor to the Firm "Universelle" Cigaretten-Maschinen-Fabrik J. C. Müller & Co., Dresden, Germany. Filed May 21, 1929. Serial No. 364,835, and in Germany May 25, 1928. 4 Claims. (Cl. 226—5.)



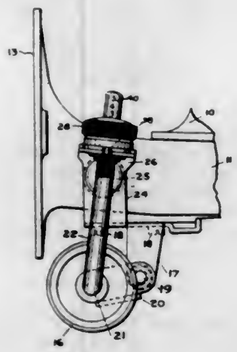
1. Apparatus for collecting and superposing groups of cigarettes comprising a plurality of adjacent feed tracks for the cigarettes, a plurality of collecting devices, a plurality of elevating devices one associated with each feed track, superposed channels for delivering the cigarettes from the different elevating devices and a plurality of pushers in superposed arrangement for feeding such groups along said feed channels.

1,764,665. POWER-DRIVEN APPARATUS. AUGUST WENNERBERG, Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Nov. 26, 1926. Serial No. 150,871. 6 Claims. (Cl. 74—26.)



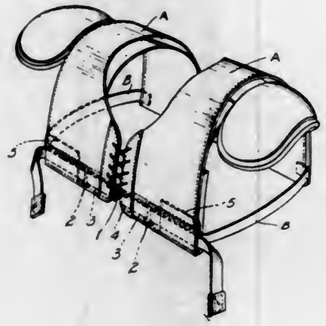
3. In a power driven apparatus, a driven element, a plurality of friction drive members therefor, a plurality of pivoted members supporting the drive members, and means operatively associated with the pivoted members for simultaneously disengaging the drive members from the driven element and disassociated from the pivoted members when the drive members are in driving engagement with the driven element.

1,764,666. SUCTION SWEEPER. HARRY B. WHITE, Canton, Ohio, assignor to The Hoover Company, a Corporation of Ohio. Filed Dec. 21, 1925. Serial No. 76,659. 2 Claims. (Cl. 15—257.)



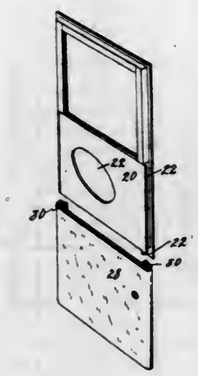
1. An adjustment device comprising a bracket which forms a base element, an adjusting nut rotatably mounted relative to said base element comprising an inner and an outer portion in non-rotatable but slidable relation to each other, a latching device arranged to lock said outer portion in fixed relation with respect to said base element, supporting means for said base element movably connected thereto, a connecting member between said supporting means and said adjusting nut in screw threaded relation with said nut, and yielding means interposed between said inner and said outer portion of said adjusting nut arranged to react against relative lengthwise movement therebetween and accordingly hold said latching device in engagement.

1,764,667. SHOULDER AND CHEST PROTECTING DEVICE. WILLIAM P. WHITLEY, St. Louis, Mo., assignor to Rawlings Manufacturing Company, St. Louis, Mo., a Corporation of Missouri. Filed May 2, 1928. Serial No. 274,549. 2 Claims. (Cl. 2—2.)



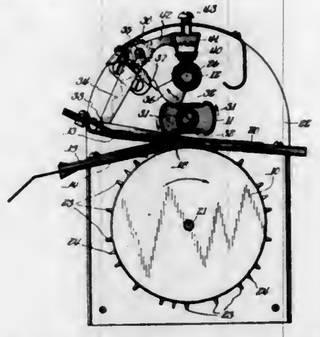
1. A shoulder and chest protecting device, comprising two connected pads or main sections, side straps arranged under the user's arms and having their rear ends connected to the rear portions of said sections, a tunnel in the front portion of each of said sections that extends inwardly from the side edge of said section, a device arranged in each of said tunnels and permanently anchored in same, for receiving a doubled portion of the side strap that is positioned in the tunnel, and a vertically-disposed immovable partition in each of said tunnels that divides the interior of the tunnel into two separate and distinct passageways, each of which comprises side walls that exert frictional pressure on one part of the doubled portion of the side strap.

1,764,668. AUTOMOBILE CLOSED-BODY CONSTRUCTION. HERBERT J. WOODALL and MEREDITH S. RANDALL, Detroit, Mich. Filed Aug. 2, 1926. Serial No. 126,587. 5 Claims. (Cl. 45—138.)



1. In body construction, a frame having a pair of spaced apart substantially parallel panel supporting members formed of readily malleable metal, a panel upon the frame having marginal flanges engaged over said members; said members being bent toward the frame and out of their normal plane against the marginal flanges of the panel.

1,764,669. TAG-ADDRESSING MACHINE. PARVIN WRIGHT, Seattle, Wash., assignor to The Gerrard Company, Inc., Chicago, Ill., a Corporation of Delaware. Filed Dec. 5, 1927. Serial No. 237,704. 15 Claims. (Cl. 101—49.)



1. In a tag addressing machine, the combination with means for printing an address on a tag, of means for feeding the tag in proper register with the printing means, consisting of a movable member having projections which are adapted to extend through apertures in the tag and move the latter while the address is being printed thereon.

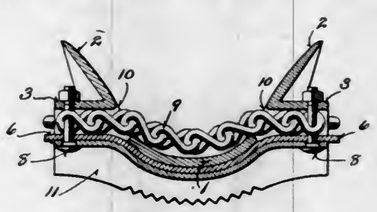
1,764,670. BUCKLE. WILLIAM F. ARNDT, Watertown, Wis., assignor of one-half to Edward McAdams, Watertown, Wis. Filed May 13, 1929. Serial No. 362,817. 3 Claims. (Cl. 24—180.)



1. A buckle including a bady having an opening therethrough, a yieldable arm on one side of the body, a pin carried by the arm and normally projecting through the opening, a movable member on the other side of the body, and means carried by the movable member for engagement with the arm whereby to actuate said arm to withdraw the pin from the opening.

1,764,671. TRACTION BELT. BRUNO F. ARPS, New Holstein, Wis. Filed Sept. 6, 1927. Serial No. 217,710. 2 Claims. (Cl. 305—10.)

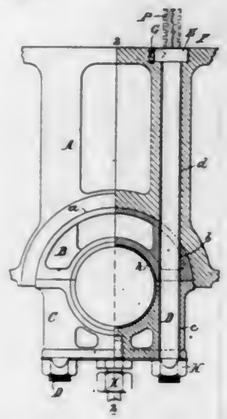
2. A traction belt unit comprising a yoke piece having openings in the side walls thereof and a central depressed



portion, upwardly slanting end wings on said yoke projecting above said openings, lateral arms at each end of the yoke and extending from each side, a shoe having a central depressed portion to receive the body of the yoke whereby the upper face of the central portion of the shoe will be disposed flush with the upper face of the central portion of the yoke with the ends of said shoe spaced from said arms, bolts connecting said arms and shoe, and a chain having its end links passed through

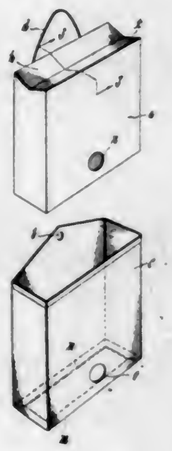
the openings in the yoke and connected to one of the bolts at each end of the yoke with the intermediate portion of the chain spaced from the central depressed portion of the yoke.

1,764,672. CRANK-SHAFT BEARING. HERBERT AUSTIN, Bromsgrove, England. Filed Oct. 10, 1927, Serial No. 225,159, and in Great Britain Dec. 7, 1926. 3 Claims. (Cl. 308—74.)



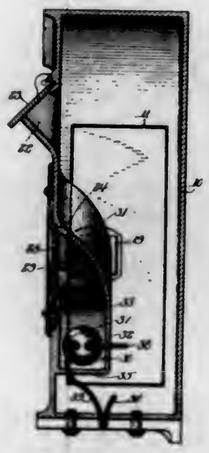
1. A bearing for a crank shaft comprising a bearing member in two parts, an inner part bearing and an outer part bearing, a bearing carriage having a part cylindrical concave surface to receive a counterpart surface of said inner part bearing, and said outer part bearing entering to some extent within the confines of said concave surface of the carriage, so that the said outer part bearing may transmit lateral pressure to said carriage, and securing bolts passing through said outer part bearing and through said inner part bearing, said bolts being entirely within the confines of the concave surface of said carriage at the line where said outer and inner bearing parts contact.

1,764,673. COMBINED PACKAGE AND HOLDER. ROGER W. BABSON, Wellesley, Mass. Filed Apr. 25, 1930. Serial No. 447,231. 10 Claims. (Cl. 312—60.)



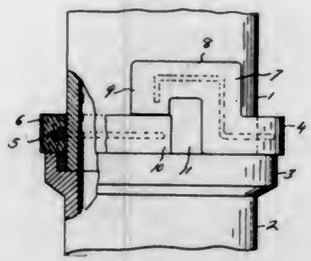
1. The combination of a holder open at the upper end with a package occupying said holder and having a concave fireproof top.

1,764,674. MAIL BOX. CHARLES F. BECK, Park Ridge, Ill. Filed Nov. 7, 1927. Serial No. 231,416. 7 Claims. (Cl. 40—132.)



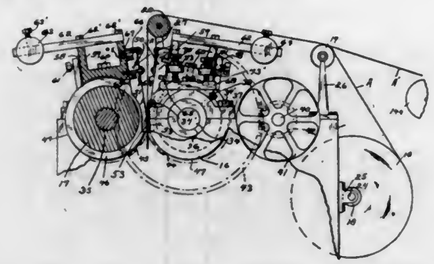
4. A mail box having an opening in its front wall, a translucent panel mounted in said opening, a light reflecting and diffusing chamber in rear of said panel and co-extensive lengthwise with the latter, a lamp pocket formed as an offset extension of said chamber of less length than the latter and disposed outside the boundaries of said panel opening, and an electric lamp housed in said lamp pocket.

1,764,675. CALKING RING. HENRY C. BURT, Laingsburg, assignor of one-half to Charles W. Lee, Detroit, Mich. Filed Dec. 17, 1928. Serial No. 326,671. 7 Claims. (Cl. 22—118.)



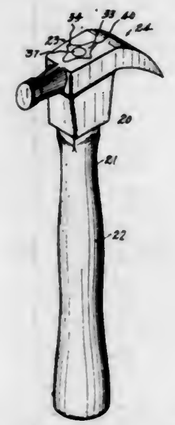
7. A calking ring comprising a transversely split metal ring having a laterally projecting substantially U-shaped offset portion, and a covering for said ring and offset portion formed of non-combustible material, said covering throughout its length being substantially square-shape in cross section, and the covering for the offset portion cooperating with the covering for the ring to form a pouring spout.

1,764,676. CREPING MACHINE. SAMUEL J. CAMPBELL, Green Bay, Wis. Filed Dec. 20, 1924. Serial No. 757,232. 30 Claims. (Cl. 92—69.)



1. In a device of the character described, a plurality of yieldable fingers in spaced relation, and means opposed to said fingers to provide opposed surfaces having interposed spaces for crinkling pliable material.

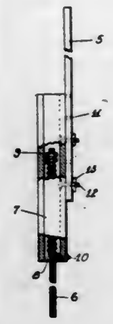
1,764,677. REENFORCED SAFETY TOOL HANDLE. EDWARD COHN, Brooklyn, N. Y. Filed Oct. 8, 1928. Serial No. 311,113. 2 Claims. (Cl. 306—38.)



1. A tool handle, a handle, a tool head having a comparatively large opening extending entirely therethrough to receive an end portion of the handle, a thin plate in said opening at the end of the handle, said plate having a plurality of projecting lugs in the plane thereof, said tool head having recesses at said opening to receive and afford seats for the lugs, said lugs providing the sole support for said plate in said seats, with the outer face of the plate flush with the adjacent face of the tool head, a metallic rod extending through the handle and the plate and having a comparatively large head, said plate being countersunk to receive the head of the rod, said head affording a uniform bearing action on the plate to equalize strains, and tension means engaging the other end of the rod to cause the latter to draw tightly on the plate at the lugs thereof and cause the handle to be reliably retained in engagement with the tool head.

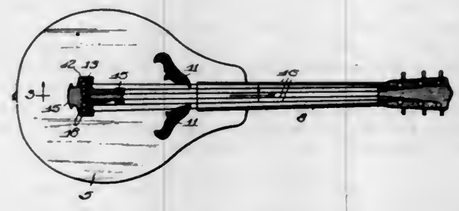
1,764,678. SUPPORTING DEVICE. NATHAN H. FOX, St. Louis, Mo. Filed Sept. 28, 1928. Serial No. 308,907. 1 Claim. (Cl. 248—2.)

A work-holding support of the kind described, adapted to support a piece of work overhead and comprising a housing member, a scaffold-engaging member telescoping with said housing member, a coil spring encircling and receiving said scaffold-engaging member therethrough and



fixed at one end to the same and fixed at its other end to the other member to resiliently control relative movement therebetween, substantially as described.

1,764,679. GUITAR. THEODORE A. GAST, Chicago, Ill., assignor to The Harmony Co., Chicago, Ill., a Corporation of Illinois. Filed Feb. 1, 1928. Serial No. 251,010. 3 Claims. (Cl. 84—298.)



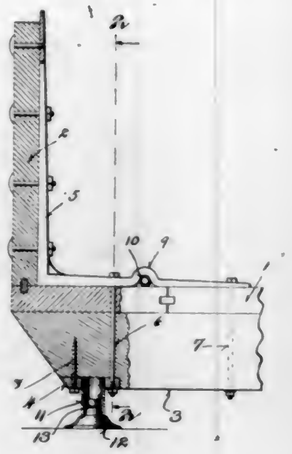
1. A stringed musical instrument comprising a sounding board, and a bridge arranged for the attachment of strings thereto and having a transverse saddle receiving portion over which the strings extend, and a relatively long member at right angles to the saddle receiving portion which extends lengthwise of the instrument, the entire lower face of the bridge being contiguous with the sounding board and secured to the top thereof.

1,764,680. EXTRACTION OF FOREIGN BODIES FROM SPINNING MATERIAL. EMIL GMINDER, Reutlingen, Germany. Filed June 27, 1929, Serial No. 378,987, and in Germany Jan. 31, 1928. 5 Claims. (Cl. 19—84.)



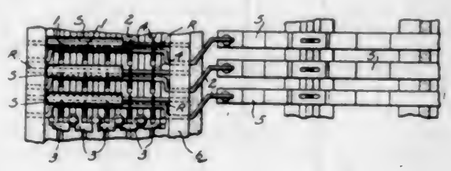
1. An apparatus for the extraction of foreign bodies from fibres, including a carding drum, a turning roller, a working roller receiving fibre from the turning roller and adapted to throw out coarse material by centrifugal force, and a grate bar adjacent to the surface of the drum and disposed beyond said working roller to leave a free space through which the coarse material may be thrown from said working roller.

1,764,681. CHEESE VAT. WILLIAM GREENHECK, Lone Rock, Wis. Filed Aug. 25, 1928. Serial No. 302,009. 1 Claim. (Cl. 37—47.)



A crib for a vat comprising a bottom, a plurality of spaced, transverse sills, each transverse sill having bearing plates secured thereto, said bearing plates being apertured and internally threaded, short lengths of pipes threaded and screwed into the apertures of said reinforcing plates, shoes upon which said pipes bear, said shoes having central conical portions extending upwardly into said pipes, said supporting crib having side walls, L-shaped angle braces bolted at a plurality of points to said side walls, bolts securing said L-shaped angle braces to said bottom and to said sills, certain of said last mentioned bolts passing through said reinforcing plates.

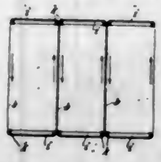
1,764,682. PIPE ORGAN. MAX HESS, Maplewood, Mo., assignor to George Kilgen & Son, Inc., St. Louis, Mo., a Corporation of Missouri. Filed June 25, 1928. Serial No. 288,153. 5 Claims. (Cl. 84—343.)



3. In a circuit controlling mechanism for electrically-operated pipe organ actions, the combination of an organ key, a contact arranged in an electric circuit, a conducting device combined with said organ key and adapted to be moved by same into engagement with said contact so as to energize the circuit in which the contact is located, means for shifting said contact into an inactive position with relation to said conducting device, and an insulator arranged so that it serves as an abutment on which the organ key rests when said contact is in its raised position.

1,764,683. TRAVELING SIGNBOARD. BERNHARD HOETGER, Worpswede, near Bremen, Germany. Filed Mar. 15, 1929, Serial No. 347,249, and in Germany Mar. 30, 1928. 1 Claim. (Cl. 40—32.)

A sign board comprising a plurality of traveling aprons, a pair of front rollers for each apron, said rollers being arranged in co-planar relation whereby a composite display surface is presented by said aprons, similarly arranged pairs of rear rollers for said aprons whereby a rear display surface is presented, a flexible driving element for rotating said rollers, and a stationary plate connecting the rollers of each pair and forming a backing for the visible portions of the aprons.

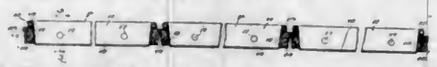


1,764,684. CAN COVER. ARTHUR F. JUNGERHELD, Bridgeport, Mich. Filed Jan. 9, 1928. Serial No. 245,290. 3 Claims. (Cl. 220—90.)



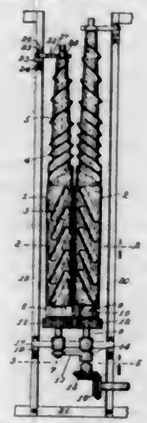
1. In combination, a plug type can cover, a can having an internal flange presenting a circumferential channel arranged to receive the plug element of said cover, the wall of said channel formed in its bottom with drainage openings for clearing said channel of the contents thereof and for access of air from the can to the channel during removal of said cover.

1,764,685. BAKING PAN. JACOB KOLLMAN, Chicago, Ill., assignor to Edward Katzinger Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 19, 1929. Serial No. 393,613. 8 Claims. (Cl. 53—6.)



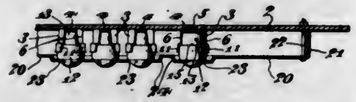
1. The combination with a baking pan, including a bottom and side walls, of an insulator coacting with each of said side walls, comprising a quantity of heat insulating material and an independent sheet inclosing said material.

1,764,686. GATHERING, SNAPPING, AND HUSKING ROLLS FOR CORN HARVESTERS. HENRY J. KUHLMAN, Colesburg, Iowa. Filed Oct. 5, 1927. Serial No. 224,149. 4 Claims. (Cl. 130—5.)



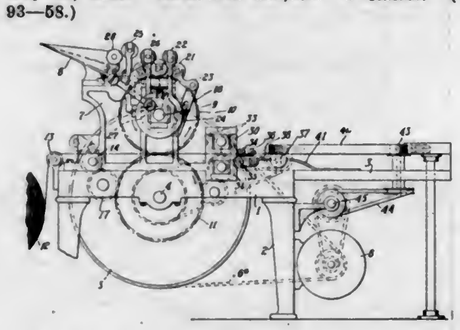
1. In a device of the character described, a pair of coacting rolls mounted in juxtaposition, the forward part of each roll having a thread of a relatively wide pitch changing along the intermediate part of the roll into a pair of threads, and the rear part of each roll having alined therealong rows of obliquely disposed elongated hollows with angular edges.

1,764,687. LIGHT-REFLECTOR SIGN AND SIGNAL. RICHARD W. LUCE, Mountainside, N. J., assignor to American Gasaccumulator Company, Elizabeth, N. J., a Corporation of New Jersey. Filed Oct. 29, 1929. Serial No. 403,172. 4 Claims. (Cl. 40—130.)



1. A device of the character described comprising a supporting plate, a plurality of spring holding elements secured to said plate, each of said elements having oppositely disposed spring sides, light reflector units mounted in the said spring holding elements and held by the said oppositely disposed sides thereof, and a protecting plate mounted upon the first named plate and having openings which register with the said reflector units.

1,764,688. STRIP-PRINTING MACHINE. THOMAS A. PALMER and JOHN W. DENMEAD, Akron, Ohio, assignors to Palmer Match Company, a Corporation of Ohio. Filed May 18, 1929. Serial No. 364,080. 4 Claims. (Cl. 93—58.)



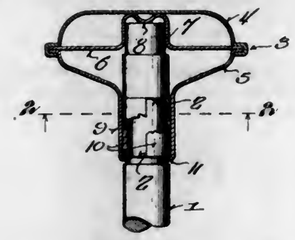
1. Apparatus for making printed strips comprising the combination of a printing cylinder, a pair of scoring rolls in the path of the sheet material, a rotatable cutter acting upon the material transversely of its length and having edges in angularly spaced relation, a conveyor for engaging the cut-off portions, and means for bending the ends of the cut-off portions on the line of scoring, and conveying means for engaging the bent strips and for stacking them.

1,764,689. AUTOMATIC FIRE EXTINGUISHER. HOWARD W. PARTLOW, Utica, N. Y. Filed Aug. 31, 1928. Serial No. 303,231. 10 Claims. (Cl. 74—93.)



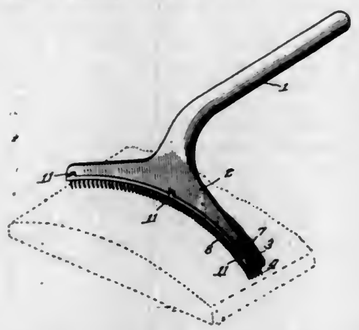
1. A latching mechanism for weight-actuated fire extinguishers wherein the weight has a headed supported pin, including a support, a latch pivoted to the support and having a slot opening through its bottom to receive the pin and having a forked part to engage the head of the pin to support same, one end of the latch being free and having a tooth and a lip spaced from the tooth, a substantially L-shaped lever pivoted to the support and having one end thereof receivable in the space between the tooth and lip, a second lever pivoted to the support and having one end thereof engageable with the other end of the L-shaped lever to hold the latter against rocking, a spring connected to the second lever and engaging the latch, and thermostatically controlled means engaging the other end of the second lever to actuate same thereby to actuate the L-shaped lever and therethrough to release the latch.

1,764,690. TOOL HANDLE. EDWARD M. PFAUSER, Milwaukee, Wis., assignor to Blackhawk Mfg. Co., Milwaukee, Wis. Filed Apr. 16, 1929. Serial No. 355,472. 2 Claims. (Cl. 145—66.)



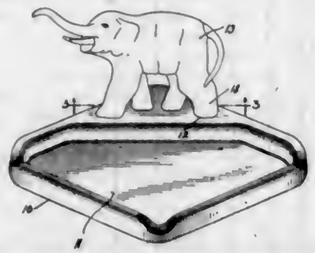
1. A tool handle comprising a hollow shell for receiving the shank of a tool, said shell comprising upper and lower sections secured together by crimping the material of one section over the other section, the lower section being provided with a restricted sleeve extension, a hardened plate secured between said sections and provided with a recess for receiving the end of said shank, and a rounded extension in said recess to form an end bearing for said shank, and a split hardened bushing secured in said sleeve extension by crimping over the end of said sleeve, said split bushing engaging an annular restricted portion in said shank to form a bearing for the handle and retain the same against longitudinal movement on the shank.

1,764,691. VELVET-HOLDING DEVICE. ISSIDORE POLLACK, Evanston, Ill. Filed Aug. 24, 1929. Serial No. 388,119. 2 Claims. (Cl. 68—11.)



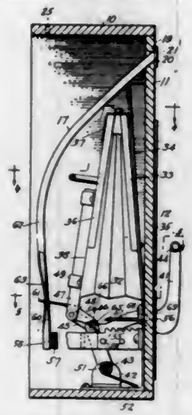
2. A fabric holding device for holding a piece of fabric upon a steam table comprising a sheet metal member formed into a tubular handle portion terminating in a flanged head portion extending laterally from each side of said handle portion a substantial distance, a block, bristles secured to said block, and means securing said block to said flange.

1,764,692. ASH TRAY. GUSTAVE D. RUBENSTEIN, Brooklyn, N. Y., assignor to Indestructible Pearl Bead Makers, Inc., New York, N. Y., a Corporation of New York. Filed Nov. 1, 1929. Serial No. 403,991. 2 Claims. (Cl. 46—40.)



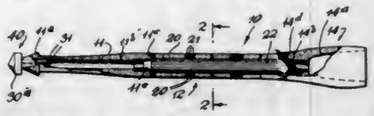
1. The combination with a base provided in its upper face with a plurality of recesses, of a statuette having feet snugly fitted into said recesses, and a single fastening means passing through said base into one of the feet of said statuette.

1,764,693. PERFUME-VENDING MACHINE. SALVATORE SCHIANO, Brooklyn, N. Y. Filed June 27, 1929. Serial No. 374,042. 8 Claims. (Cl. 194—53.)



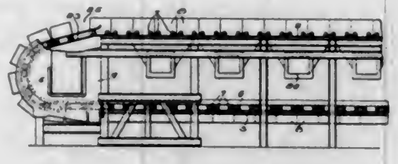
1. In a coin-controlled perfume vending machine, a manually operable crank, means for connecting the crank to a dispensing mechanism, and coin-controlled locking means normally preventing operation of said crank comprising a movable pivot on the dispensing mechanism, a locking lever on said pivot, means for operatively connecting the crank to the pivot for moving said pivot, means arranged in the path of the lever for preventing movement of the pivot until the lever is released by a coin, and means for maintaining the lever out of engagement with the lever movement-preventing means during movement in one direction after said lever has been released.

1,764,694. ORNAMENTAL CIGARETTE AND CIGAR HOLDER AND THE LIKE ARTICLE AND METHOD FOR MAKING SAME. SAMUEL SEROTA, Ossining, N. Y. Filed Mar. 25, 1929. Serial No. 349,594. 6 Claims. (Cl. 131—12.)



4. A cigarette holder having a central metallic tube having longitudinally extending ribs and a plurality of contiguous sections of varyingly colored material carried by said tube.

1,764,695. SINTERING MACHINE. EDWARD W. SHALLOCK, Chicago, Ill., assignor to American Ore Reclamation Company, Chicago, Ill., a Corporation of New York. Filed Oct. 12, 1928. Serial No. 312,061. 4 Claims. (Cl. 266—21.)



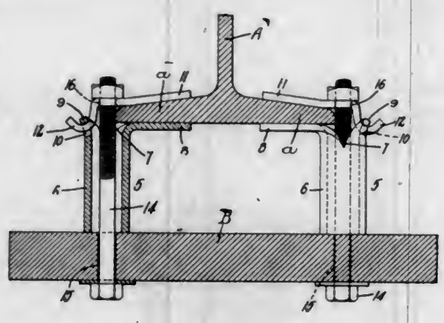
1. In a sintering machine, an endless track, a train of separate pallets traveling upon the track, said track being of greater length than the train of pallets, and means for elevating the pallets and for propelling them along the track to the delivery end thereof, said track having a straight portion inclined downwardly from the upper run of the track to the return bend at the delivery end thereof, the space between the end pallets of the train being substantially coincident with said inclined portion of the track.

1,764,696. SINTERING MACHINE. EDWARD W. SHALLOCK, Chicago, Ill., assignor to American Ore Reclamation Company, Chicago, Ill., a Corporation of New York. Filed Mar. 25, 1929. Serial No. 349,616. 20 Claims. (Cl. 266—21.)



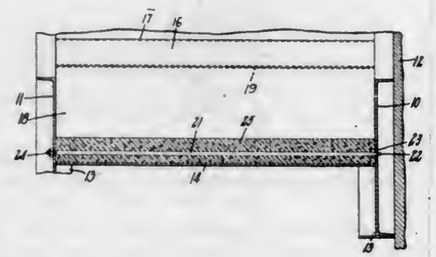
1. In a sintering machine, an endless track, a train of separate pallets of less length than the track and traveling thereon, means for propelling the pallets along the track, and mechanical retarding means on the lower run of the track and having positive engagement with the pallets for retarding the travel thereof, said retarding means being adjustable to vary the retarding effect thereof.

1,764,697. CLAMP. ABRAHAM E. SHLAGER, LOUIS SHLAGER, and BENNETT M. GROISSER, Boston, Mass. Filed Apr. 9, 1929. Serial No. 353,834. 7 Claims. (Cl. 25—131.5.)



4. A clamp of the character described having, in combination, a tubular spacing member provided with a laterally projecting fixed jaw portion formed integral therewith and also having an opening provided therein, a movable jaw provided with a tongue projecting through said opening and interlocking with the spacing member, and a bolt extending through the tubular member and engaging the movable jaw whereby the latter is rocked upon the tubular member.

1,764,698. STAIR CONSTRUCTION. ABRAHAM E. SHLAGER, LOUIS SHLAGER, and BENNETT M. GROISSER, Boston, Mass. Filed Apr. 11, 1929. Serial No. 354,404. 3 Claims. (Cl. 72—96.)



1. A stair construction having, in combination, a pair of side stringers, a sheet metal tread support mounted upon said stringers and extending therebetween, bolts extending through and between the stringers above the tread support and spaced apart from the surfaces of the latter and tying the stringers together, and a temporarily plastic material upon said tread support and surrounding said bolts and constituting the tread portion of the stairs.

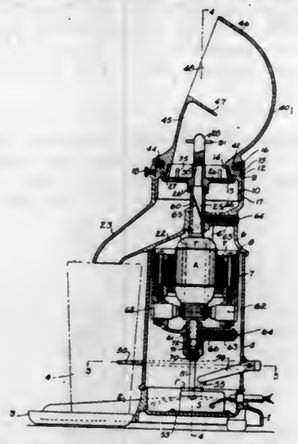
1,764,699. MIXING IMPLEMENT. EMIL SIMOLA and STANLEY F. SMOKES, South Ozone Park, N. Y. Filed Nov. 28, 1928. Serial No. 322,544. 1 Claim. (Cl. 72—128.)



The combination with an implement having a mixing blade, and a handle therefor; of a liquid supply pipe extending longitudinally thereof and having an outlet end adjacent said blade and disposed relative thereto so that the stream of liquid from the pipe will be impinged against said blade at substantially a right angle thereto, bolts extending laterally through said handle, and couplings at the ends of said bolts through which said supply pipe extends, and means to removably secure the bolts to the handles whereby said supply pipe is detachably supported by the latter.

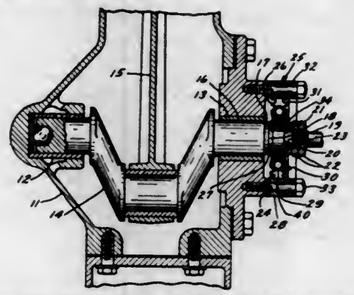
1,764,700. MATERIAL-TREATING MACHINE. MILTON H. SPIELMAN and WALTER H. POESSE, Shaker Heights, Ohio, assignors to The Domestic Electric Company, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 28, 1928. Serial No. 265,305. 16 Claims. (Cl. 83—7.)

1. A material treating machine, having in combination, rotary means for disintegrating and mixing material, a material receiving shell disposed above said means and formed to provide a tortuous passageway first leading



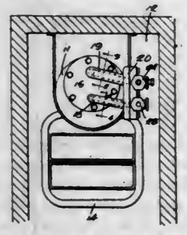
entirely away from and then toward the axis of the rotary means, for preventing material from being splashed out of the shell during the operation of the machine.

1,764,701. BEARING SEAL. CHARLES C. SPREEN, Detroit, Mich. Filed Dec. 30, 1926. Serial No. 157,935. 1 Claim. (Cl. 286—11.)



The combination with a shaft rotatably mounted in a journal bearing, of a pair of opposed annular bearing seats associated with the shaft, a pair of thrust rings disposed in abutting relation against such bearing seats, said rings being provided with diverging annular guide plates, an expanded helical spring of toroidal formation disposed between the guide plates for urging the rings against the aforesaid seats, and a pair of resilient diaphragms secured in sealed relation between the rings and an annular projecting portion of the aforesaid journal bearing.

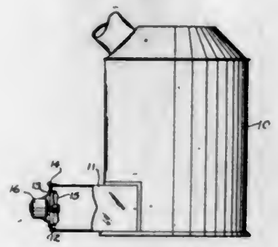
1,764,702. REFRIGERATION. CHARLES C. SPREEN, Detroit, Mich., assignor to Kelvinator Corporation, Detroit, Mich., a Corporation of Michigan. Filed Mar. 25, 1927. Serial No. 178,484. 4 Claims. (Cl. 62—95.)



4. In an expansion device for mechanical refrigerating system, a refrigerant expansion tank adapted to contain

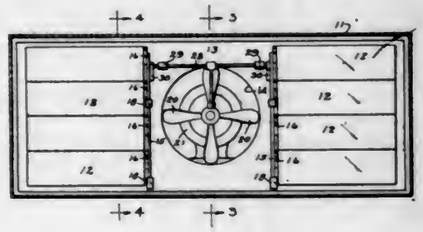
liquid refrigerant, said tank having an opening in one end thereof, a detachable face plate secured to close the opening in the end of said tank, and an extension formed integral with said face plate and extending in a plane beyond the lateral confines of said tank, said face plate and said extension having a service duct extending therethrough.

1,764,703. HEATING AND VENTILATING APPARATUS. ALBERT R. TEARE, Lakewood, Ohio, assignor to James C. Miles, Cleveland, Ohio. Filed Mar. 5, 1928. Serial No. 259,112. 4 Claims. (Cl. 126—110.)



1. The combination with the heating chamber of a hot air furnace having an air inlet leading thereto, said conduit having a plurality of enclosing walls, one of the walls having an opening therein, a closure member pivotally mounted on the conduit adjacent the mid-portion of the opening and adapted to be swung in an arc of substantially 180°, said member having an apertured depending portion projecting into the conduit, a motor driven fan mounted on said portion with the fan adjacent said aperture, said fan and damper being arranged to be swung upwardly through the wall opening when the fan is not in operation.

1,764,704. HEATING AND VENTILATING APPARATUS. ALBERT R. TEARE, Lakewood, Ohio, assignor to James C. Miles, Cleveland, Ohio. Filed June 18, 1928. Serial No. 286,336. 5 Claims. (Cl. 126—110.)



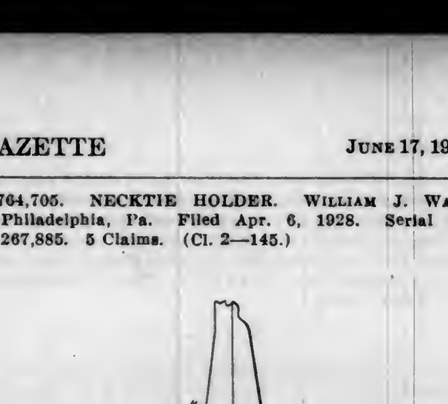
1. In combination, an air conduit having an opening therein, a motor driven fan occupying part of the opening, a movable closure adapted to occupy another part of the opening, and means connected with the closure mechanism and coacting with and movable axially along the motor shaft for closing the closure during substantially the first revolution of the fan.

1,764,705. NECKTIE HOLDER. WILLIAM J. WARD, Philadelphia, Pa. Filed Apr. 6, 1928. Serial No. 267,885. 5 Claims. (Cl. 2—145.)



1. A necktie holder comprising a strip of flexible material detachably connected in a longitudinal position on the end of a necktie and a tab having a button hole therein carried by the strip and adjustable lengthwise thereof.

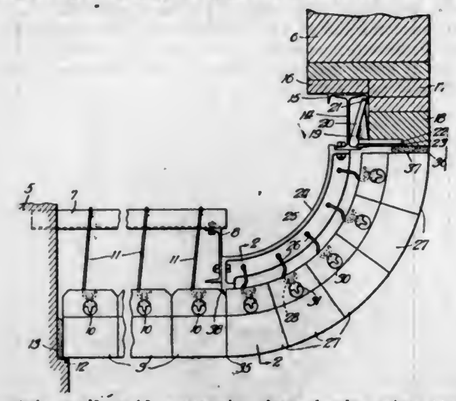
1,764,706. PUMP. ALBERT B. WILLI, Detroit, Mich., assignor to Continental Motors Corporation, Detroit, Mich., a Corporation of Virginia. Filed Oct. 17, 1927. Serial No. 226,610. 10 Claims. (Cl. 103—103.)



1. A pump comprising a drive shaft, an impeller, means for driving the impeller from the drive shaft, an element having a water seal face fixed against movement axially of the drive shaft, said impeller provided with a water seal face, and yielding means forcing the said water seal faces relatively together for maintaining a water seal, said impeller being slidably mounted on the drive shaft.

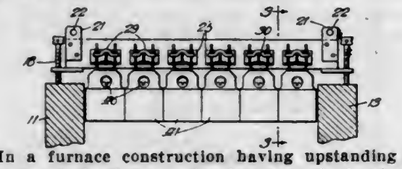
1,764,707. FURNACE-ARCH CONSTRUCTION. LYLE STOCKTON ABBOTT, Chicago, Ill. Filed Mar. 7, 1927. Serial No. 173,413. 3 Claims. (Cl. 110—99.)

1. In a furnace construction, a top arch extending rearwardly from the front wall of the furnace, a curtain wall spaced rearwardly of said top arch and extending transversely of the furnace above the level of said top arch, a support beam having means thereon supporting said curtain wall, a support beam for the rear end of said top arch, suspension bars supported by said beams, and a plurality of refractory tile carried by said suspension bars forming a curved arch closing the space between said top arch and



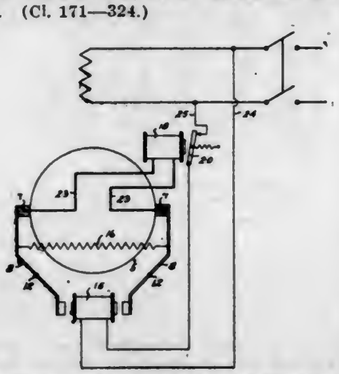
curtain wall, said suspension bars having stop means thereon supporting the refractory tile at the end of said curved arch abutting said top arch.

1,764,708. INTEGRAL ROOF CONSTRUCTION FOR FURNACES. LYLE STOCKTON ABBOTT, Chicago, Ill. Filed Apr. 4, 1927. Serial No. 180,910. 5 Claims. (Cl. 110—99.)



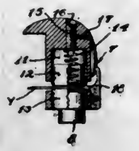
1. In a furnace construction having upstanding sidewalls around the furnace chamber, a roof of refractory material for said furnace and supporting means for said refractory material comprising a framework including a plurality of substantially parallel cross bars and saddle members having their under faces rounded and curved upwardly at the center to provide rounded faces slidable on said cross bars, U-bolts having the legs thereof adjustably secured to said saddle members and depending therefrom and hanger bars pivoted to said U-bolts carrying said refractory material.

1,764,709. BRUSH LIFTER FOR ELECTRIC MOTORS. GORDON R. ANDERSON, Indianapolis, Ind., assignor to Fairbanks, Morse & Co., Chicago, Ill., a Corporation of Illinois. Filed Dec. 9, 1926. Serial No. 153,622. 12 Claims. (Cl. 171—324.)



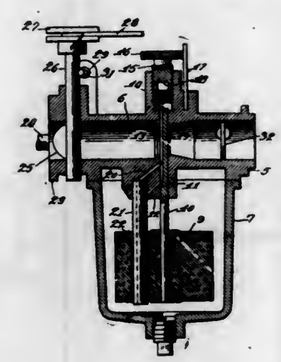
1. In a motor including brushes, an armature and brush-lifting mechanism, electromagnetic means connected across said brushes and arranged for controlling said mechanism by armature current through the brushes.

1,764,710. TENSION DEVICE FOR SHUTTLES. LUTHER C. BALDWIN, Providence, R. I., assignor to U. S. Bobbin & Shuttle Company, Providence, R. I., a Corporation of Rhode Island. Filed Oct. 12, 1928. Serial No. 312,112. 12 Claims. (Cl. 139—217.)



1. A shuttle tension comprising a housing having an elongate bore therein, a pair of tension elements fitting in slidable engagement with the walls of the bore within said bore, one at least of said elements sliding longitudinally of said bore toward and from the other tension element, said elements having continuous yarn engaging faces, bearing with equal pressure over that portion of the yarn disposed between them, and means resiliently urging the movable element toward the other.

1,764,711. CARBURETOR. WELLBY ALLEN BRACKETT and WILLIAM EDWARD RICHARD, Evansville, Ind., assignors to Sunbeam Electric Manufacturing Company, Evansville, Ind., a Corporation of Indiana. Filed Aug. 8, 1927. Serial No. 211,310. 15 Claims. (Cl. 123—187.5.)

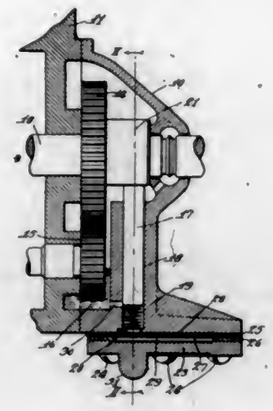


1. A carburetor comprising a mixing chamber, means for conducting air and fuel thereto, a fuel reservoir containing a float, and means controlled by the float for decreasing the rate of fuel supply from the reservoir to the mixing chamber when the amount of fuel in the reservoir is increased.

1,764,712. PUMP. WELLBY ALLEN BRACKETT and WILLIAM EDWARD RICHARD, Evansville, Ind., assignors to Sunbeam Electric Manufacturing Company, Evansville, Ind., a Corporation of Indiana. Filed Oct. 24, 1927. Serial No. 228,141. 8 Claims. (Cl. 103—44.)

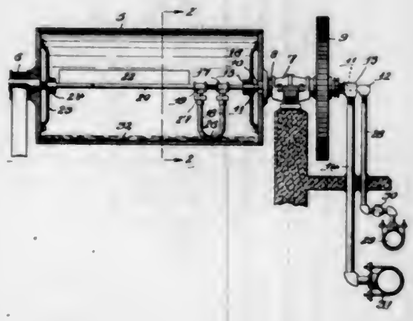
1. The combination with an internal combustion engine having a cam-shaft, actuating mechanism therefor and a housing for said actuating mechanism adapted to be secured to the body of the engine, of an auxiliary fluid pump comprising a piston adapted to be reciprocated within a cylinder bore provided in an integral portion of said housing, a cylindrical cam eccentrically mounted on said cam-shaft, a compression spring co-acting between a portion of said housing and said piston to bias the latter into oper-

ative engagement with said cam, inlet and outlet conduits for conducting fluid to and from said pump, and a check-



valve disposed within each of said conduits to prevent the flow of fluid therethrough in the reverse of normal direction.

1,764,713. CONDENSATE-REMOVAL DEVICE FOR HIGH-SPEED PAPER DRIERS. ARTHUR E. BROUGHTON, Minneapolis, Minn. Filed Apr. 23, 1928. Serial No. 272,166. 8 Claims. (Cl. 34—4.)

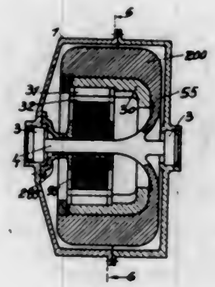


1. In a condensate removal device for a high speed cylindrical drier, a condensate removal pipe having an intake opening spaced from the lower periphery of said drier to retain a predetermined minimum of condensate within the drier which is in excess of that which will adhere to the entire periphery of said drier when the same is operated at a predetermined high speed and a receptacle arranged to continuously remove condensate in excess of a predetermined amount when said drier is operated at the same high speed.

1,764,714. GYROSCOPE. JOHANN-MARIA BOYKOW, Berlin, Germany, assignor to The Firm Messgeräte Boykow, G. m. b. H., Berlin-Lichterfelde-West, Germany. Filed Sept. 28, 1926, Serial No. 138,158, and in Germany Oct. 3, 1925. 6 Claims. (Cl. 172—120.)

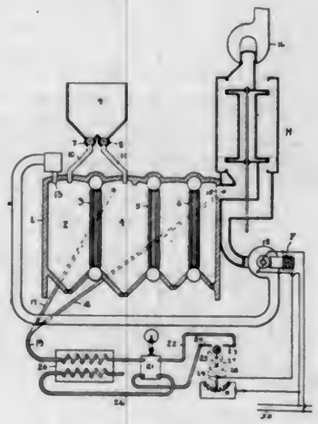
1. A gyroscope, comprising a gyratory body, and a synchronous motor for driving the same, the armature of said synchronous motor having polar regions of lower magnetic resistance than the intervening portions of said armature.

2. A gyroscope, comprising a gyratory body, and a synchronous motor and an asynchronous motor for driving the same, the armature of said synchronous motor having polar regions of lower magnetic resistance than the intervening portions of said armature.



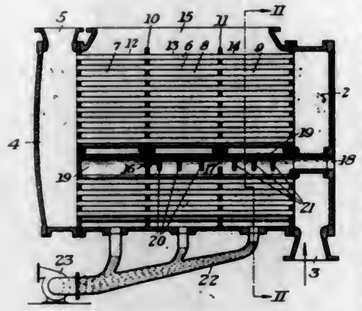
6. A gyroscope, comprising a gyratory body, a synchronous motor for driving the same, the poles of the rotor of said synchronous motor being connected by a ring of soft iron and an electrically energized stator disposed within said ring, said ring being provided at one side with bars forming the armature of an asynchronous motor.

1,764,715. AUTOMATIC FURNACE CONTROL. HERBERT H. DOW, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed July 28, 1926. Serial No. 125,558. 20 Claims. (Cl. 236—15.)



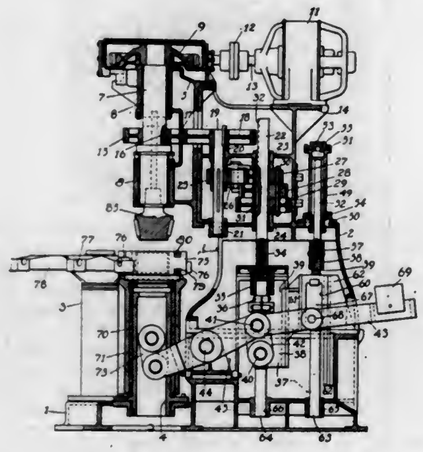
1. A method of feeding a combustion zone, which comprises translating into a differential rotative mechanical motion the dynamic energy of oppositely operating jets of the gaseous combustion products and of a gas of uniform composition, and thereby gauging the feed of a component supplied to the combustion zone.

1,764,716. CONDENSER. RAYMOND N. EHRHART, Edgewood, Pa., assignor to Elliott Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Feb. 11, 1926. Serial No. 87,545. 18 Claims. (Cl. 257—43.)



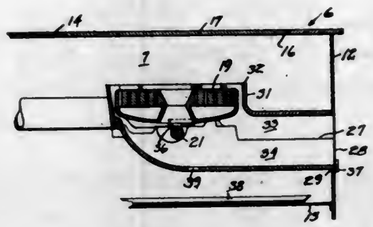
1. In a single pass surface condenser, means providing a plurality of cells having a vapor flow therethrough in parallel and a water flow therethrough in series, and means for directing a flow of gas from the terminus of at least one cell later to receive cooling water into a cell earlier to receive cooling water.

1,764,717. BORING AND TAPPING MACHINE. WILLIAM C. FOWNES, Jr., Pittsburgh, and CHARLES R. BARTON, Sewickley, Pa., and WILLIAM G. BENNINGHOFF, Cleveland, Ohio, assignors, by mesne assignments, to Spang, Chalfant & Company, Inc., Pittsburgh, Pa., a Corporation of Pennsylvania. Filed June 24, 1927. Serial No. 201,128. 7 Claims. (Cl. 10—128.)



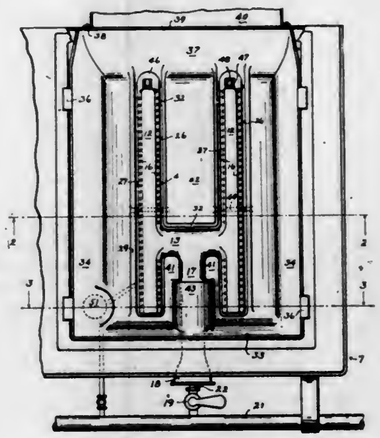
3. In a boring and tapping machine, the combination of a rotatable turret provided with a plurality of trunnion bearing supports for rotatably supporting on horizontal axes work at uniformly spaced angular intervals, boring and tapping tools in alignment with each adjacent pair of said trunnions, means for rotating said tools, means for rapidly elevating work from said trunnion bearing supports to positions adjacent said tools and for rapidly returning it to the trunnion-bearing supports, and means coordinated with said tool rotating means to positively feed work at a predetermined rate of speed from its elevated positions to said tools.

1,764,718. AIR-SUPPLYING MEANS FOR CLOSED-TOP GAS-STOVE BURNERS. FREDERICK A. GERCICH and WILLIAM S. SMITH, Oakland, Calif., assignors to Hammer-Bray Company, Oakland, Calif., a Corporation of California. Filed Aug. 28, 1924. Serial No. 734,631. 2 Claims. (Cl. 126—39.)



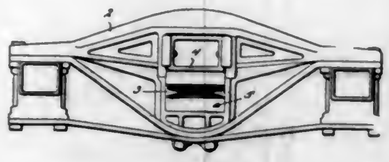
1. In combination with the burner chamber of the cooking top of a closed-top gas stove, a burner mounted in said chamber, a supporting member for said burner, air supplying means for said burner comprising a conduit formed in vertically separable sections and arranged to supply air to said burner from a source external to said chamber, the lower section of said conduit being arranged to be supported by the burner supporting member, and the upper section of said conduit being arranged to be supported by said lower conduit section.

1,764,719. GAS-BURNER INSTALLATION. FREDERICK A. GERCICH, Oakland, Calif., assignor to Hammer-Bray Company, Oakland, Calif., a Corporation of California. Filed Jan. 21, 1928. Serial No. 248,358. 3 Claims. (Cl. 126—39.)



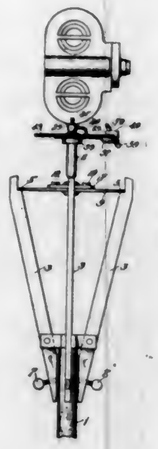
1. In a stove, an H shaped burner, a plate member substantially coplanar with said burner and having an H shaped opening therein in which said burner is disposed in such manner as to define an air passage between edges of the opening and portions of said burner, and a fuel supply conduit connected with the cross member of said burner and lying in substantially coplanar relation thereto, said plate being constructed to allow such disposition of said conduit.

1,764,720. RAILWAY-CAR-TRUCK SPRING. CYRUS HANKINS, Baltimore, Md., assignor, by mesne assignments, to T. H. Symington and Son, Inc., Baltimore, Md., a Corporation of Maryland. Filed June 13, 1925. Serial No. 36,978. 15 Claims. (Cl. 267—3.)



1. In a spring for railway trucks, a plurality of curved plates arranged in a plurality of successively contacting banks, the curved plates in one or more banks being arranged in a varying number from the other banks, and the whole having a varying rate of deflection proportional to the loads imposed thereon.

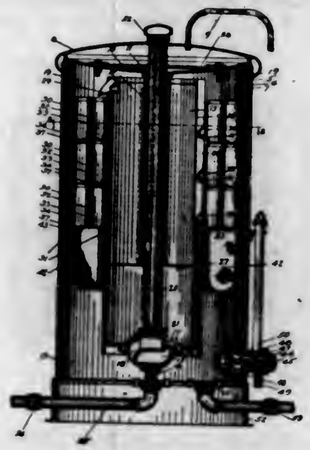
1,764,721. SUPPORT FOR PANORAMIC CAMERAS. ARTHUR C. HAYDEN, Brockton, Mass. Filed Nov. 13, 1926. Serial No. 148,224. 5 Claims. (Cl. 248—45.)



3. A panoramic camera support comprising a base, a plate carried by the base, a worm gear resting on and rotatably mounted on the plate, a worm meshing with said gear, a shaft for the worm, a bearing for the shaft carried by the plate, means for connecting the gear to the camera, a member overlying the margin of the gear to prevent lift of the gear from the plate, and engageable with said shaft to retain same against endwise movement, and a handle for rotating the worm thereby to impart rotative movement to the gear and camera.

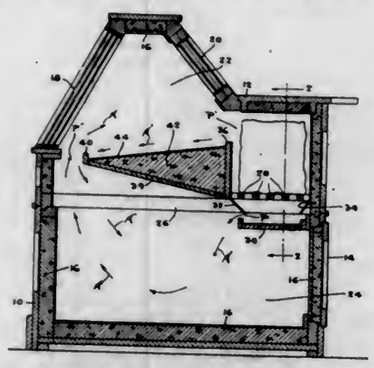
1,764,722. OIL FILTER. FRANKLIN G. HOBART, Beloit, Wis., assignor to Fairbanks, Morse & Co., Chicago, Ill., a Corporation of Illinois. Filed July 9, 1926. Serial No. 121,413. 14 Claims. (Cl. 210—43.)

1. In an oil filter, a container having an inner compartment and an outer compartment, an oil receiving container near the top of the filter, a conduit connected to the container and adapted to deliver, at a substantial depth in the inner compartment, the oil to be treated, and fluid conducting means associated with the bottom of the inner compartment, and extending outwardly be-



yond said compartment, forming an inlet to the outer compartment independent of direct fluid connection with said inner compartment.

1,764,723. REFRIGERATING SHOW CASE. ALBERT A. HOPPENRATH, Minneapolis, Minn. Filed Feb. 27, 1928. Serial No. 257,245. 1 Claim. (Cl. 62—37.2.)

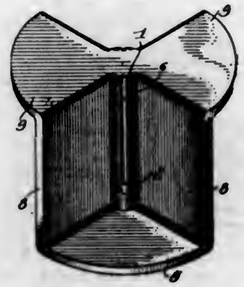


A refrigerating show case comprising a casing, a shelf in said casing dividing the interior thereof into upper and lower compartments, the front edge of said shelf being spaced from the front wall of said casing to provide a passageway between said upper and lower compartments, a refrigerant receiving chamber, an openwork bottom for said chamber which is substantially in horizontal alinement with the rear of said shelf, and a drip pan supported toward the top of said lower compartment at such distance below said openwork bottom as to provide a restricted passageway between the bottom of said refrigerant chamber and the top of said lower compartment, the inner wall of said refrigerant chamber stopping short of the top of the casing to provide a comparatively large passageway whereby a portion of the cold air from said refrigerant chamber passes therethrough into said upper chamber while the remainder of the cold air from said refrigerant chamber passes through said restricted passageway into said lower compartment.

1,764,724. INSULATOR. CARLETON E. HOWELL, New York, N. Y. Filed Jan. 11, 1928. Serial No. 245,990. 1 Claim. (Cl. 173—366.)

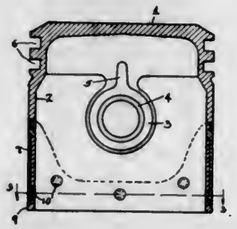
An insulator comprising a central body portion cylindrical in form and having transverse openings near its

ends at right angles to each other to receive metal supporting members, said cylindrical body portion having four relatively wide radial walls arranged at right angles to each other and constituting electrical barriers between the metal supporting members, said walls alternating



radially with the aforementioned openings and equally spaced therebetween, and relatively wide transverse walls which are symmetrically arranged connecting alternate pairs of said radial walls at opposite ends, acting to prevent leakage around the ends of the cylindrical body portion or around the ends of the radial walls.

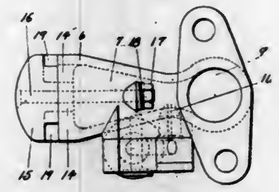
1,764,725. COMPOSITE CASTING. JOHN E. HOY, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Mar. 29, 1924. Serial No. 702,996. 5 Claims. (Cl. 74—108.)



1. In a piston, or like article, the combination with a head and integral skirt depending therefrom; of a cylindrical shell closely surrounding said skirt and composed of a material having a different co-efficient of expansion, said skirt and surrounding shell each having a plurality of projections extending through to the respective surfaces and formed to have clinching engagement and an even surface level.

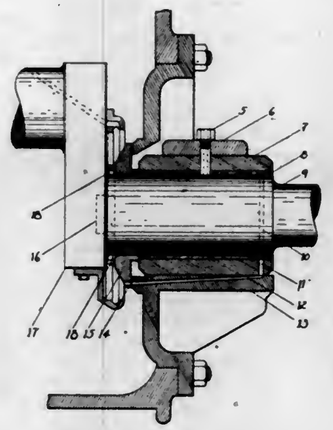
1,764,726. CARBURETOR. CHARLES B. JAHNKE, Beloit, Wis., assignor to Fairbanks, Morse & Co., Chicago, Ill., a Corporation of Illinois. Filed Oct. 9, 1924. Serial No. 742,632. 2 Claims. (Cl. 261—59.)

1. A fuel mixer for an engine of the hit-and-miss type, comprising in combination, a curved body-member having a curved Venturi passage therethrough, said member comforming substantially, in shape, with said Venturi passage and being substantially circular in cross section, said member having an air-inlet opening at one end thereof, an angularly adjustable damper abutting the inlet end of said body member and adapted to permit variation of the area of said air inlet opening, a pivot member for the damper, carried by a side wall of the body member, a spring and a retaining nut for the adjustable frictional retention of said damper, located outside of said body portion; a fuel nozzle of non-adjustable type projecting into



the most restricted portion of said Venturi passage, and transversely to the axis of the passage, and a fuel nozzle support, detachably mounted on the body member, and arranged to permit ready access to said nozzle.

1,764,727. LUBRICATION OF BEARINGS. LEONARD B. KAPP, Beloit, Wis., assignor to Fairbanks, Morse & Co., Chicago, Ill., a Corporation of Illinois. Filed Sept. 24, 1923. Serial No. 664,512. 8 Claims. (Cl. 308—134.)

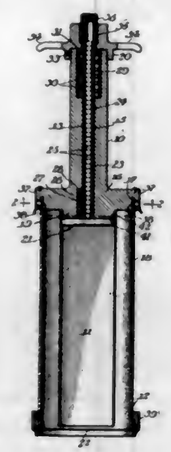


4. In combination with a crank case in which there exists a periodically varying pressure, a lubricated bearing associated with the crank case, an oil conduit outside of said crank case, and communicating with said bearing, a port in the crank case, adapted for access to the bearing, a crank shaft, and a combined air-stop plate and rotary oil-valve member mounted on said crank shaft and adapted to seal said port, said member having a single fluid opening therethrough, disposed opposite the crank and adapted to register with said conduit to establish a periodical communication of said conduit with said crank case when said crank case pressure is less than the pressure in said conduit.

1,764,728. DISPENSING DEVICE. THOMAS KASKOURAS, Chicago, Ill. Filed Nov. 5, 1928. Serial No. 317,157. 12 Claims. (Cl. 31—12.)

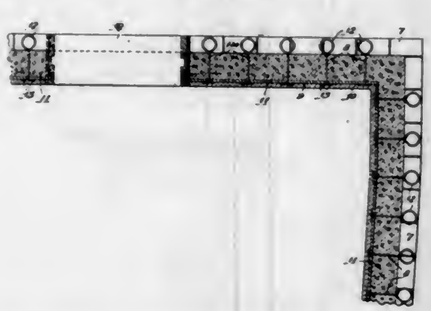
12. In a device of the class described, the combination of a member providing a handle, a rectangular container separably secured to said handle, a cylindrical element in which said rectangular container is arranged, said cylindrical element being provided with severing means, means for separably and rotatably connecting said cylindrical

element to said handle, said handle and container being rotatable relatively to the cylindrical element, and a



feeding device reciprocable along the axis of said handle, and means for regulating the movement of said feeding device.

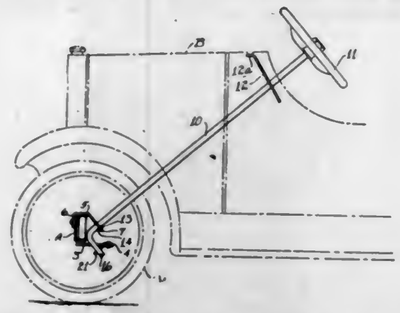
1,764,729. BUILDING CONSTRUCTION. WILLIAM C. KOCH, St. Paul, Minn. Filed June 27, 1927. Serial No. 201,618. 1 Claim. (Cl. 72—30.)



The method of constructing buildings, which consists in erecting a thin, outer, permanent but only temporarily self sustaining shell, consisting of a single thickness of face brick and securing between said brick a multiplicity of spacing members arranged to project inward therefrom, then securing to said spacing members in spaced relation to said outer shell, an inner shell consisting of a foraminous plaster support constituting a permanent portion of the wall, then applying plaster to said inner shell and allowing the same to harden with portions thereof projecting into the space between said inner and outer shells and finally rendering the wall permanently self sustaining by filling the space between said outer and inner shells with a relatively thick plastic body of concrete or the like and allowing said body to harden and form a direct, permanent bond between said plaster and the outer shell.

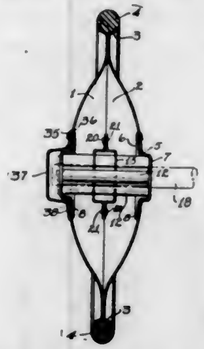
1,764,730. STEERING MECHANISM. HERMAN L. KRAEFT, East Cleveland, Ohio, assignor to The Murray Ohio Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 23, 1927. Serial No. 177,508. 6 Claims. (Cl. 280—95.)

1. Steering mechanism for a vehicle having the usual steering knuckles and a tie-bar, a bracket removably secured to the vehicles and having an opening therein, a steering post arranged to enter said opening and having a laterally extending arm, means for preventing longitudinal



movement of the post with reference to the bracket, and a recessed member rigid with the tie-bar, the sides of the recess being relatively diverging and arranged to embrace the said arm.

1,764,731. WHEEL AND BEARING CONSTRUCTION. HERMAN L. KRAEFT, Cleveland, Ohio, assignor to The Murray Ohio Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed Nov. 14, 1927. Serial No. 233,002. 4 Claims. (Cl. 308—208.)



1. In a wheel having hub forming means providing spaced bearing surfaces, and having a plurality of rollers with the ends thereof respectively engaging said surfaces, a plurality of spaced apart mutually rigid substantially flat sheet metal plates carried loosely on the rollers and having portions extending radially materially beyond all the rollers in a common plane and then bent toward each other, said plates having portions thereof stamped out to provide through openings for receiving an axle and the rollers, said opening being foliate in contour to provide projections between the rollers for spacing the same and to prevent inward movement thereof when disengaged from the axle.

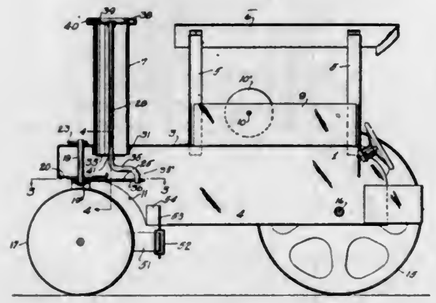
1,764,732. SHEET-METAL TOY CONSTRUCTION. HERMAN L. KRAEFT, Cleveland, Ohio, assignor to Murray Ohio Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed Oct. 17, 1929. Serial No. 400,251. 1 Claim. (Cl. 46—48.)



In a toy airplane, a body, a single sheet metal stamping secured thereto, said stamping having a disc-like

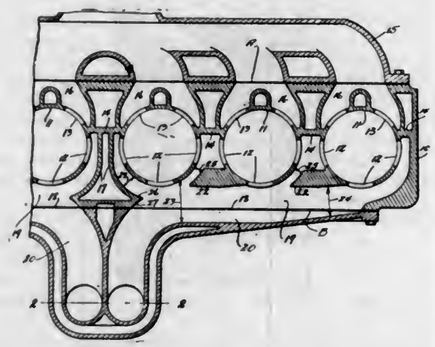
central portion, a plurality of spoke-like portions extending radially therefrom, and a corresponding plurality of cylinder head simulating portions transverse to said spoke-like portions at their extremities, said spoke-like portions being arcuate in cross section, whereby the outward appearance of an airplane motor is effected.

1,764,733. WHEELED TOY. HERMAN L. KRAEFT, Cleveland, Ohio, assignor to Murray Ohio Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed Feb. 24, 1930. Serial No. 430,783. 3 Claims. (Cl. 46—48.)



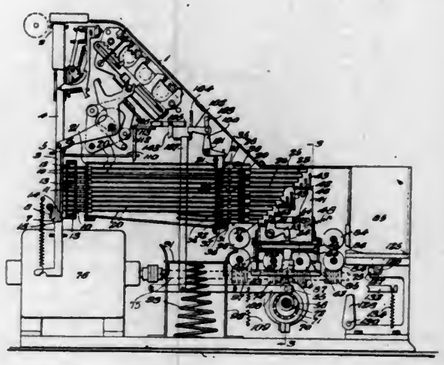
1. A toy construction including supporting wheels, one of which wheels is adapted to be turned to steer the toy, a smoke stack simulating device on the toy, and steering means connected to said turnable wheel and associated with the stack.

1,764,734. INTERNAL-COMBUSTION ENGINE. OSCAR C. KREIS, Detroit, Mich., assignor to Continental Motors Corporation, Detroit, Mich., a Corporation of Virginia. Filed Jan. 30, 1928. Serial No. 250,354. 20 Claims. (Cl. 123—52.)



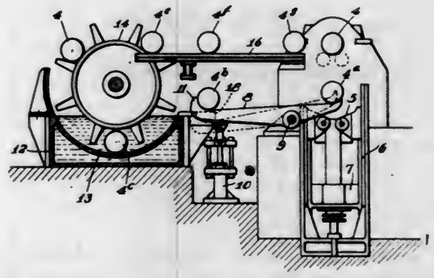
1. An internal combustion engine of the sleeve valve type comprising in combination, a cylinder block having a plurality of engine cylinders laterally ported for passage of intake and exhaust gases, an intake chamber within the cylinder block communicating with the intake ports of and partially surrounding a plurality of the cylinders, an intake manifold communicating with the intake chamber, and filler means within said chamber providing an intake gas passage wall.

1,764,735. PIN-BOX SELECTIVE MECHANISM FOR ACCOUNTING MACHINES. WILLIAM W. LASKER, Brooklyn, N. Y., assignor, by mesne assignments, to Remington Rand Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 31, 1923, Serial No. 671,891. Renewed Apr. 12, 1930. 22 Claims. (Cl. 235—91.)



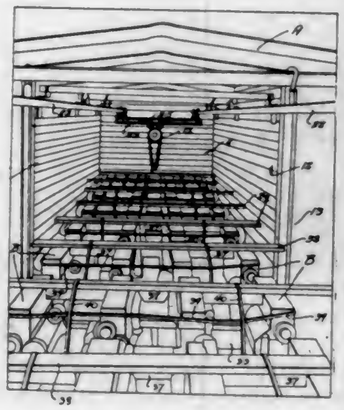
3. In a machine of the character stated, an accounting mechanism, means to cause said mechanism to be actuated in a predetermined manner, a card controlled selecting mechanism arranged to control said actuating means, and means to lock said actuating means in a set position while said selecting mechanism is moving upon a succeeding selecting operation upon a different card.

1,764,736. MANDREL MOVING AND COOLING APPARATUS. LUDWIG LÖWY, Dusseldorf, Germany, assignor to Schloemann Aktiengesellschaft, Dusseldorf, Germany. Filed Mar. 12, 1928, Serial No. 261,173, and in Germany Mar. 21, 1927. 3 Claims. (Cl. 80—1.)



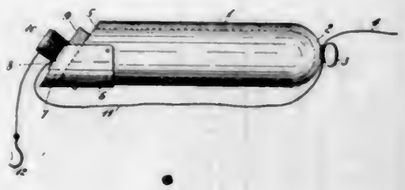
3. A mandrel cooling apparatus, comprising a reservoir, a vertically movable mandrel support at a side of said reservoir, a horizontally pivoted skeleton table for receiving a mandrel from said support when the support is lowered and for transferring the mandrel laterally to said reservoir, a vaned wheel for moving a mandrel through and elevating it above said reservoir, and a skeleton table for receiving mandrels from the upper portion of said wheel and for transferring them back to said support when elevated.

1,764,737. METHOD AND APPARATUS FOR SHIPPING ENGINES. GUSTAV. L. LUNDBORG and RICHARD B. ISRAEL, Muskegon, Mich., assignors to Continental Motors Corporation, Detroit, Mich., a Corporation of Virginia. Original application filed Apr. 11, 1927, Serial No. 182,557. Divided and this application filed Sept. 20, 1928. Serial No. 307,104. 10 Claims. (Cl. 105—367.)



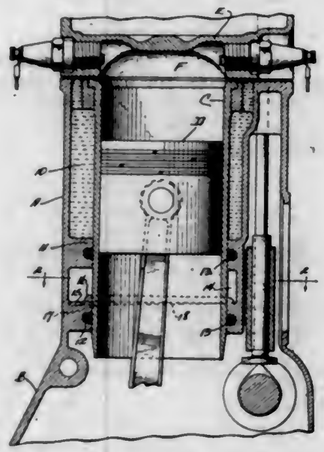
1. Means for grouping internal combustion engines for shipment in freight cars comprising a frame support mounted within the car for receiving a plurality of engines, a member overlying the engines, and flexible material wound about the frame and said member for preventing relative movement of the engines during shipment.

1,764,738. CASTING DEVICE FOR LIVE BAIT. ERNEST R. MARSTERS, Arlington, Mass. Filed May 22, 1929. Serial No. 365,034. 5 Claims. (Cl. 43—41.)



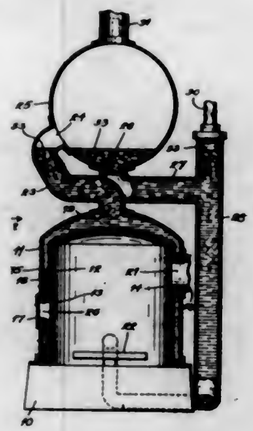
1. A bait casting device comprising a floatable hollow plug closed at one end, means whereby a line may be attached to the plug, means whereby the plug will assume a tipped position in water when the plug is cast with the open end thereof having downward extension, a floatable cover for the open end of the plug, means for connecting the cover to the plug whereby it may be borne by the plug when cast and permitted to float from off the end of the plug when in its tipped position as aforesaid, and means whereby a winding of hook-carrying line extension connected to the plug may be borne by the cover during the casting of the plug, and permitted to unwind from the cover after the cover has become released from the end of the plug as aforesaid.

1,764,739. INTERNAL-COMBUSTION ENGINE. ANDRE J. MEYER, Detroit, Mich., assignor to Continental Motors Corporation, Detroit, Mich., a Corporation of Virginia. Filed Aug. 6, 1928. Serial No. 297,779. 7 Claims. (Cl. 123—173.)



1. In an internal combustion engine comprising in combination, a crankcase, a cylinder block, a cylinder separate from the cylinder block and cooperating therewith to provide a cooling water jacket, and a plurality of sealing structures between the crankcase and water jacket said sealing structures being separated by an air chamber.

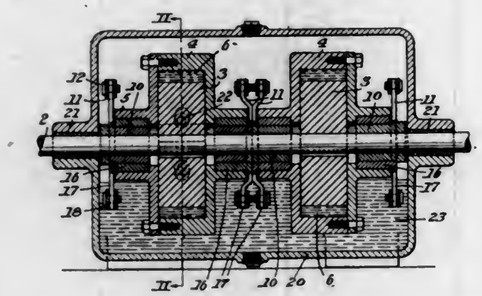
1,764,740. STEAM-GENERATING APPARATUS. GEORGE J. MULLER, Baltimore, Md., assignor to The Home Heating Corporation, Baltimore, Md., a Corporation of Maryland. Filed Apr. 11, 1927. Serial No. 182,863. 1 Claim. (Cl. 122—155.)



A low pressure steam generator comprising a water heater, a steam disengaging chamber located at a level above said heater and at a point removed therefrom, a conduit leading from said heater at its highest point to said chamber at a point materially above the bottom thereof, and a second conduit leading from substantially the bottom of said chamber to the lower portion of said heater, a steam offtake from the upper portion of said chamber, and a condensate return communicating with the lower portion of said heater.

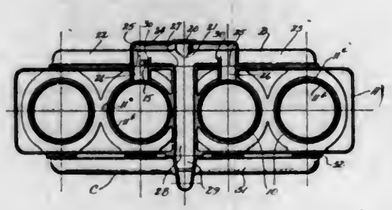
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1,764,741. FLUID-PRESSURE BRAKE. FREDERICK C. NENZEL, Pittsburgh, Pa. Filed Feb. 28, 1929. Serial No. 343,343. 13 Claims. (Cl. 188—90.)



1. In an apparatus of the class described, a fluid pressure unit comprising a cylinder member having a substantially circular chamber therein, a substantially circular piston member within the cylinder, a rotatable member which carries one of said members, an eccentric on which the other of said members is mounted, a vane carried jointly by the cylinder and piston member, and means for rotating the unit.

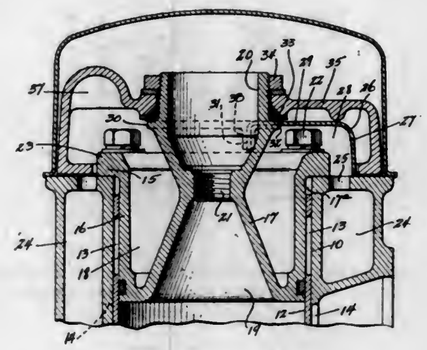
1,764,742. SLEEVE-VALVE ENGINE. ARCHIE MACPHAIL NIVEN, Detroit, Mich., assignor to Continental Motors Corporation, Detroit, Mich., a Corporation of Virginia. Filed June 20, 1927. Serial No. 199,881. 6 Claims. (Cl. 123—122.)



1. An engine comprising in combination, a cylinder provided with main intake and exhaust ports, a pair of sleeve valves concentrically arranged with the cylinder and having reciprocating movement with respect to the cylinder axis, a piston reciprocating within said sleeves, said sleeves provided with main intake and exhaust ports moving with the sleeves to control the main cylinder intake and exhaust ports respectively, fuel conducting means for the cylinder intake ports, said sleeve valves and cylinder provided with auxiliary ports communicating during that portion of the engine cycle when the main exhaust ports of the sleeves and cylinders are in registration, and means conducting the auxiliary exhaust gases from the auxiliary ports to heat the fuel conducting means.

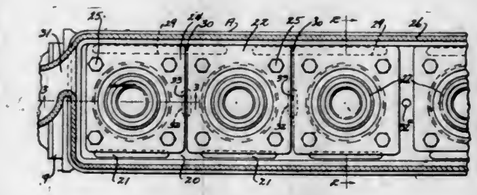
1,764,743. SLEEVE-VALVE ENGINE. ARCHIE MACPHAIL NIVEN, Detroit, Mich., assignor to Continental Motors Corporation, Detroit, Mich., a Corporation of Virginia. Filed Dec. 5, 1927. Serial No. 237,611. 14 Claims. (Cl. 123—173.)

1. An internal combustion engine of the sleeve valve type comprising in combination, a plurality of water jacketed cylinders, a water jacketed cylinder head forming a sleeve pocket with each cylinder and provided with a barrel portion, a cylinder head cover through which said barrel extends, a sealing ring between the barrel and cylinder head cover, and a member intermediate the cylinder head cover and cylinder head constructed to form a water deflecting passage in conjunction with the cylinder head jacket and provided with a downwardly extended baffle



positioned to one side of the plane of the cylinder axes for directing water from the cylinder jacket to flow generally downwardly into and across the cylinder head.

1,764,744. INTERNAL-COMBUSTION ENGINE. ARCHIE MACPHAIL NIVEN, Detroit, Mich., assignor to Continental Motors Corporation, Detroit, Mich., a Corporation of Virginia. Filed Dec. 16, 1927. Serial No. 240,377. 19 Claims. (Cl. 123—173.)

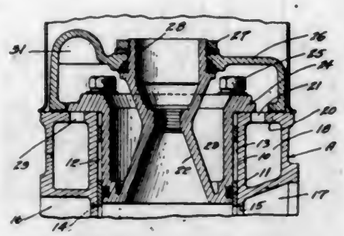


1. An internal combustion engine of the sleeve valve type comprising in combination a cylinder block having a plurality of engine water jacketed cylinders, water jacketed cylinder heads for the cylinders, said cylinder block having a top wall provided with water outlet means adjacent the cylinder heads along one side longitudinally of the cylinder block permitting passage of water from the cylinder jacket to the cylinder head jackets, said top wall having core openings therethrough longitudinally along the other side of said cylinder block, water outlet means for the cylinder head jackets along the last said side of the cylinder block, and means closing the major portions of said core openings thereby restricting the passage of water from the cylinder jacket to the cylinder head jackets and to the said cylinder head jacket outlet means for the most part to the said top wall water outlet means and thereby preventing the formation of steam pockets in the cylinder jacket in the vicinity of said core openings.

1,764,745. INTERNAL-COMBUSTION ENGINE. ARCHIE MACPHAIL NIVEN, Detroit, Mich., assignor to Continental Motors Corporation, Detroit, Mich., a Corporation of Virginia. Original application filed Dec. 16, 1927, Serial No. 240,377. Divided and this application filed Sept. 9, 1929. Serial No. 391,125. 12 Claims. (Cl. 123—173.)

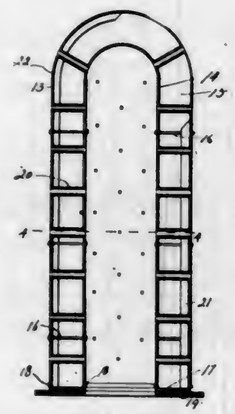
1. A sleeve valve engine comprising in combination a cylinder block having a jacketed cylinder, said block pro-

vided with openings on opposite sides of the longitudinal plane of the engine including the cylinder axis, a cylinder



head member for the cylinder, and a cylinder head cover member, said cylinder head member having a portion restricting at least one of said openings.

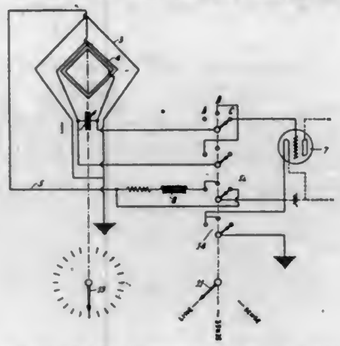
1,764,746. WATER-COOLED AIR AND STEAM NOZZLE FOR GAS GENERATORS. JAMES N. PAFF, Pitman, N. J. Filed May 7, 1927. Serial No. 189,493. 5 Claims. (Cl. 122—6.6.)



1. A water cooled air and steam nozzle comprising a pair of concentric different sized casings providing a water space between them, the upper ends of the casings being closed and the lower end of the space between said casings being closed, an inlet water leg within the space between the casings terminating below the upper end of the nozzle, an outlet water leg within the space between the casings with its upper end terminating at the highest point of the nozzle, said water legs adapted to be connected with suitable inlet and outlet pipes to produce a circulation through the space between the casings, nozzle tubes bridging the space between the casings and having their ends mounted in said casings whereby steam and air may pass from the inner casing to the outside of the nozzle, and means to brace said casings.

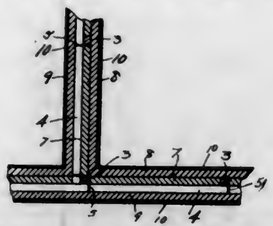
1,764,747. DIRECTION FINDER. HAROLD O. PETERSON, Riverhead, N. Y., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Nov. 18, 1925. Serial No. 69,752. 4 Claims. (Cl. 250—11.)

1. The combination with directional finding equipment, and natural circuits adjacent thereto which cause error producing magnetic flux, of a fixed closed loop arranged in proper position and size to cause error compensating magnetic flux of such direction and magnitude that the resultant space signal applied to the direction finding equipment is unchanged in direction, and means for causing



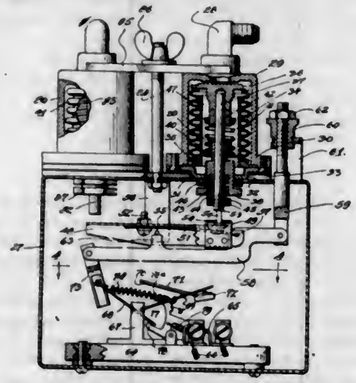
said loop to act as an electrostatic shield with respect to said direction finding equipment, including a connection between said loop and ground.

1,764,748. SOLID-WALL CONSTRUCTION. JOHN S. RAYNOR, Holmesburg, Pa. Filed Feb. 20, 1929. Serial No. 341,388. 1 Claim. (Cl. 72—46.)



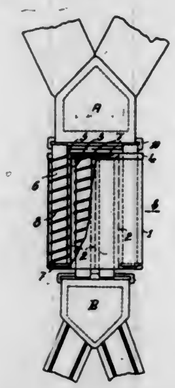
A solid wall construction including supports, a base consisting of a plurality of panels of stiff material, means to secure said panels to the supports, a backing-up coat of plaster on the back of the base, a straightening coat of plaster on both the backing-up coat and the front of the base, and a finishing coat on each straightening coat.

1,764,749. CONTROL MECHANISM FOR MECHANICAL REFRIGERATING APPARATUS. JOHN R. REPLOGLE, Detroit, Mich., assignor, by mesne assignments, to Kelvinator Corporation, Detroit, Mich., a Corporation of Michigan. Original application filed June 6, 1921, Serial No. 475,344, and in Canada Feb. 11, 1922. Divided and this application filed Nov. 3, 1927. Serial No. 230,745. 2 Claims. (Cl. 62—4.)



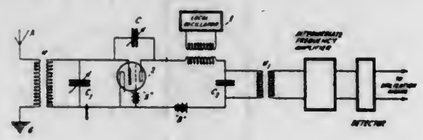
1. In a refrigerating system having a motor driven compressor, an automatic motor control comprising a switch through which the motor circuit extends, mechanism for opening and closing said switch, a bellows actuated by the pressure in the low side of the refrigerating system, a member connected with the bellows for actuating the switch opening and closing mechanism, an adjustably disposed support for the member, and a pair of oppositely disposed resilient elements associated with the support and the member for determining the operational characteristics of the bellows.

1,764,750. ELASTIC OR RESILIENT CONNECTING MEMBER. HANS RICHTER, Vienna, Austria. Filed Nov. 25, 1927, Serial No. 235,559, and in Austria July 17, 1926. 7 Claims. (Cl. 267—70.)



1. Elastic connecting or intermediate member for use in connection with braces, belts, and the like, comprising in combination a flat casing, partitions arranged in the same to form a number of laterally closed compartments, a puling tape enclosed by a flat compression spring arranged in each compartment, and a guide-member provided on each tape and cooperating with the walls of its compartment to provide for an exact axial guidance of the spring-loaded pulling tape.

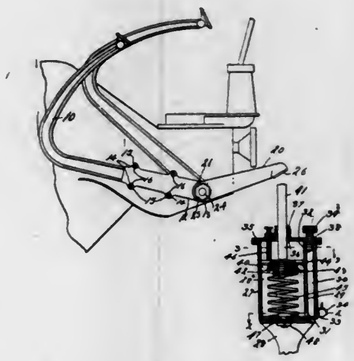
1,764,751. SUPERHETERODYNE RECEIVER. WALTER VAN B. ROBERTS, Princeton, N. J., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Mar. 29, 1929. Serial No. 350,947. 9 Claims. (Cl. 250—20.)



1. A heterodyne receiver comprising signal energy collecting means, local oscillation means, a frequency changing tube having its grid circuit coupled to the collecting means and its plate circuit coupled to said local means, a reactance connected between the grid and plate of said tube, said reactance being adjusted to such a value that the grid potential due to local oscillations of a predetermined frequency is opposite in phase to the plate potential due to the same oscillations.

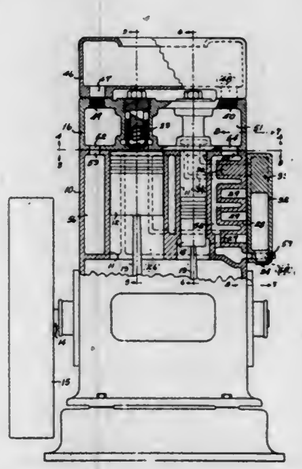
1,764,752. CLUTCH CHECK. JOHN RODGER, East Lansdowne, Pa. Filed May 22, 1928. Serial No. 279,679. 2 Claims. (Cl. 192—109.)

1. A clutch check comprising a cylinder having a piston compartment therein, a by-pass at one side of said compartment and communicating at opposite ends with adjacent ends of the piston compartments through apertures in a wall of the by-pass, a piston slidably mounted in the piston compartment between the two apertures forming communications with the by-pass, said piston having passageways therethrough, a check valve controlling said passageways, a spring tending to force the piston upward, a screw stop for regulating the stroke of the piston, means to



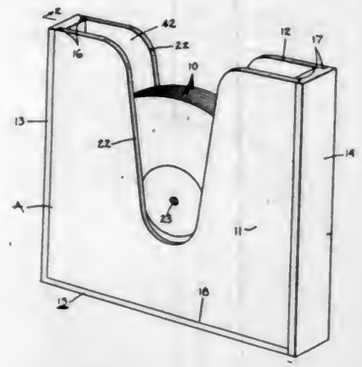
regulate the flow of fluid through the by-pass into the upper portion of the piston compartment, a piston rod carried by the piston and projecting through the head of the cylinder, and means for connection with the clutch pedal of an automobile for co-operation witht he piston rod for checking the movement of the clutch pedal and associated parts in the clutch engaging direction.

1,764,753. FLUID-COMPRESSING MEANS. JOHN SEAGREN, Beloit, Wis., assignor to Fairbanks, Morse & Co., Chicago, Ill., a Corporation of Illinois. Filed Sept. 30, 1926. Serial No. 138,713. 12 Claims. (Cl. 230—182.)



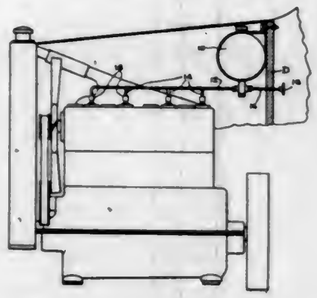
1. In a fluid compressor, a jacketed cylinder, a compressed fluid cooling means disposed in the lower portion of the cylinder jacket, connecting means between said cylinder and cooling means, said cylinder, cooling means, and connecting means being cast as a unit.

1,764,754. CASE FOR PHONOGRAPH RECORDS. HOLLAND S. SCOTT, St. Paul, Minn. Filed Aug. 15, 1927. Serial No. 212,897. 4 Claims. (Cl. 211—40.)



1. A device for holding phonograph records comprising a rack aranged for the edgewise reception of records, a rest carried by said rack, said rest having two inclined converging intersecting surfaces, adapted to bring the centering holes of the same size records into register and to bring the centering holes of different size records out of register.

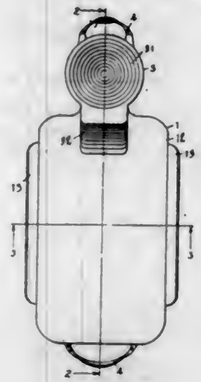
1,764,755. DEVICE FOR INTRODUCING WATER INTO ENGINE CYLINDERS. ORLANDO O. SKREEN, Minneapolis, Minn. Filed Aug. 23, 1926. Serial No. 130,911. 1 Claim. (Cl. 123—25.)



A device for introducing water into engine cylinders comprising a receptacle for water, valve casings secured to the engine wall outside the respective combustion chambers of the engine, inwardly opening check valves in said valve casings, spray nozzles leading from said valve casings into the combustion chambers adjacent the spark gaps therein, and a pipe line leading directly from said water receptacle to said valve casings whereby small quantities of water only are continuously drawn from said receptacle through said spray nozzles by the suction of the engine.

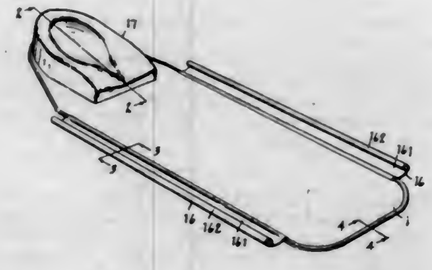
1,764,756. AUTOMOBILE CREEPER. ROBERT W. SLEE, Three Rivers, Mich. Filed June 8, 1928. Serial No. 283,793. 8 Claims. (Cl. 5—344.)

1. An automobile creeper comprising a body portion containing a layer of corrugated board with the corrugations disposed longitudinally, a stiffened wear sole beneath the same, a fiber upper deck therefor with extended upwardly projecting side guards, suspension handle straps at each end secured between the layers, a head rest comprising a wedge-shaped laminated base of criss-cross corrugated board, a head support of laminated criss-cross corrugated boards with depression at the center formed by cut out center parts of each layer, the corrugations being open both within and without the said depression,



a laminated inclined support in front of the said head rest and connected thereto by the extension top layers of the laminated head support disposed over the joint, all coacting as specified.

1,764,757. AUTO CREEPER. ROBERT W. SLEE, Lansing, Mich. Filed May 20, 1929. Serial No. 364,408. 6 Claims. (Cl. 5—344.)

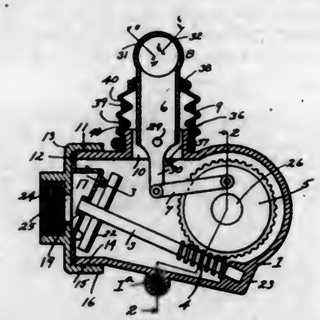


1. In an automobile creeper, the combination of a broad flat body portion with head extension, comprising a cushioned central part of corrugated board, an upper water proofed fiber sheet, and a sheet metal wear sole hemmed over the edges of said corrugated board and fiber sheet, and having side trays and guards of light sheet metal with rolled outer edges and being flanged and hemmed on their inner edges into the sides of the said body by the wear sole hems, a head rest on the said body extension comprising a base board with cross supports curved and conformed to the neck and shoulder, a sheet metal shell over the top of said support having depression to receive the head of the user, and suitable upholstering comprising padding and covering retained in place by screws through the said body portion into the base board of said head rest.

1,764,758. LAWN SPRINKLER. HENRY G. SLINING, Walnut Park, Calif. Filed Dec. 21, 1928. Serial No. 327,705. 4 Claims. (Cl. 299—67.)

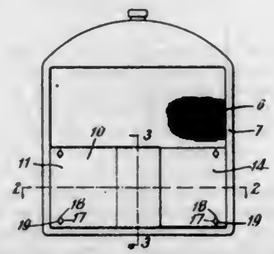
1. A lawn sprinkler comprising a casing provided with an inlet and an outlet, a water wheel rotated by water passing through said inlet, an outlet pipe pivoted in said outlet, a nozzle on the outer end of said outlet pipe,

means actuated by said water wheel for oscillating said outlet pipe and nozzle, and a flexible sleeve surrounding



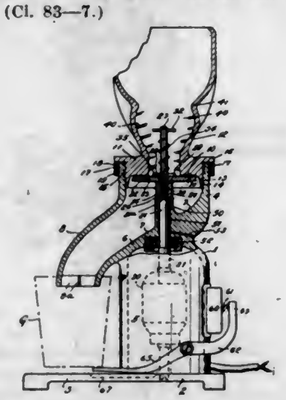
said outlet pipe clamped at one end to the casing over said outlet and clamped at its other end to the outer end of said outlet pipe.

1,764,759. RADIATOR SHIELD. GEORGE L. SMITH, Boston, Mass. Filed Dec. 13, 1927. Serial No. 239,798. 3 Claims. (Cl. 257—132.)



1. A radiator shield having, in combination, a body member embodying therein front and rear walls and edge portions connecting said walls, and a plate slidably mounted between said walls and edge portions and constituting an extension for the body member, said slide also being reversible within the body member to present either face thereof at the front of the shield.

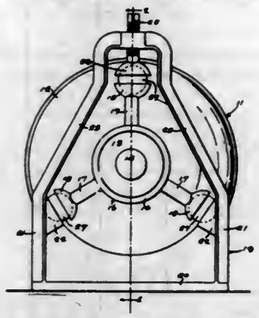
1,764,760. MATERIAL-TREATING MACHINE. GEORGE M. SOULE, Cleveland, Ohio, assignor to The Domestic Electric Company, Cleveland, Ohio, a Corporation of Ohio. Filed June 8, 1927. Serial No. 197,301. 10 Claims. (Cl. 83—7.)



1. In a machine of the class described, a stationary housing member, a rotor in axially fixed relation to and

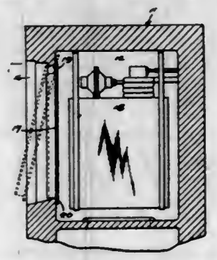
supported by the housing, said rotor having a circular surface, an axially movable housing member comprising a chamber and supporting a surface complementary to the rotor surface and slightly spaced therefrom, and adjustable means interposed between the housing members for fine adjustment between the said surfaces including an abutment rigid with one housing member and an adjusting member cooperable with the abutment and in threaded engagement with the other housing member.

1,764,761. MACHINE SUPPORT. CHARLES C. SPREEN, Detroit, Mich., assignor to Kelvinator Corporation, Detroit, Mich., a Corporation of Michigan. Filed Dec. 30, 1926. Serial No. 157,044. 1 Claim. (Cl. 248—16.)



A vibration reducing motor support comprising a motor supporting member having a plurality of radially disposed sockets formed externally thereof, a vertically disposed end member provided with a plurality of sockets located in complementary relation to the first mentioned sockets but spaced radially therefrom, means for varying the spacing between a registering pair of the sockets, and a plurality of spherical and resilient compression members disposed loosely in the aforesaid complementary registering sockets for absorbing the vibrational movement of the motor.

1,764,762. REFRIGERATION. CHARLES C. SPREEN, Detroit, Mich., assignor to Kelvinator Corporation, Detroit, Mich., a Corporation of Michigan. Filed Jan. 7, 1927. Serial No. 159,623. 6 Claims. (Cl. 62—89.)

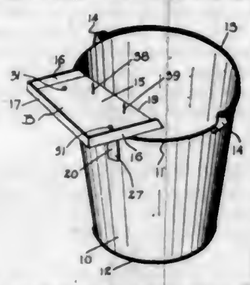


6. A refrigerator cabinet having a wall provided with an opening therein, a detachable closure member for the opening, end flanges projecting from the closure for engagement with one side of the wall beyond the end extremities of the opening, side flanges projecting from the closure into engagement with the opposite side of the wall beyond the side extremities of the opening, said side flanges terminating in spaced relation to the upper extremity of the opening to permit upward movement of the closure and its removal from the opening.

1,764,763. BRUSH HOLDER. HENRY A. STANG, Minneapolis, Minn. Filed Jan. 25, 1926. Serial No. 83,532. 6 Claims. (Cl. 248—49.)

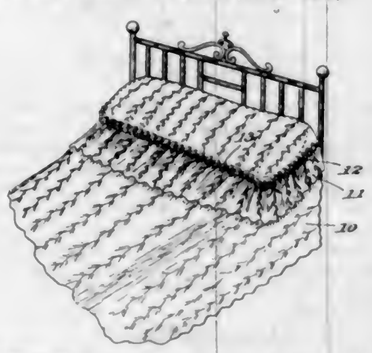
1. A brush holder for application to a pail comprising a tray, a pair of clips each formed with a base and a pair

of spaced legs issuing outwardly from said base adapted to straddle the rim of a pail and to grip the body thereof, and means pivotally connecting the bases of said clips



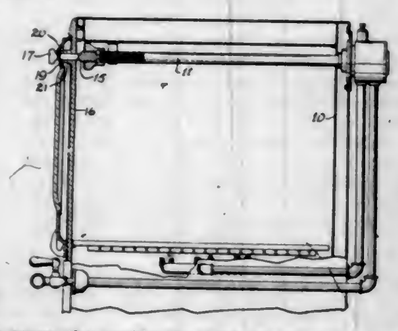
to said tray to permit the simultaneous swiveling of both legs of each of said clips to conform to the curvature of the pail.

1,764,764. BEDSPREAD. SAMUEL STEWART, Lewiston, Me., assignor to Bates Manufacturing Company, Lewiston, Me., a Corporation of Maine. Filed July 2, 1929. Serial No. 375,448. 1 Claim. (Cl. 5—334.)



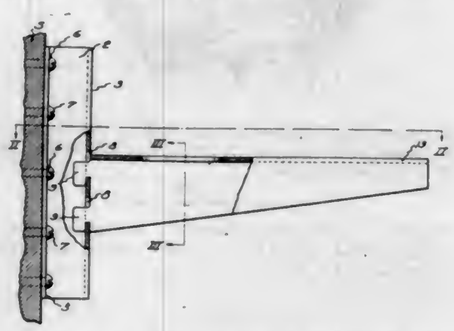
A bedspread comprising a body portion adapted to cover a mattress and pillow when the latter is in usual position at the head of the bed, and a ruffle attached to the body portion near the top edge thereof and arranged in a three-sided figure having one of its sides parallel with the bottom edge of the spread, the other two sides being parallel with the side edges of the spread, thereby leaving the top edge of the spread free, said ruffle forming a figure substantially defining the outline of the pillow and having the appearance of a separate cover therefor.

1,764,765. THERMOSTATIC CONTROL FOR STOVE OVENS. ALBERT H. TINNERMAN, Cleveland, Ohio. Filed May 5, 1928. Serial No. 275,315. 1 Claim. (Cl. 236—15.)



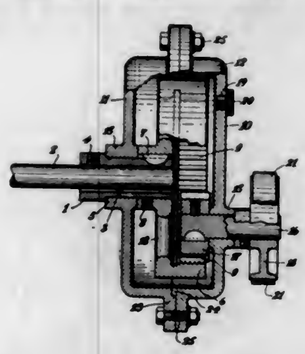
In a stove, the combination with an oven structure having a front frame member and a door, a thermostatic control device mounted within the oven, and having an operating portion thereof projecting through the frame member, a dial mounted on the member, a key associated with said operating portion, and positioned in front of the dial outside the oven, said door having an opening sufficient to clear the dial and key when the door is opened.

1,764,766. SUPPORTING BRACKET. THOMAS L. WHITE, Youngstown, Ohio, assignor to The Commercial Shearing and Stamping Company, Youngstown, Ohio, a Corporation of Ohio. Filed Oct. 15, 1927. Serial No. 226,335. 1 Claim. (Cl. 248—19.)



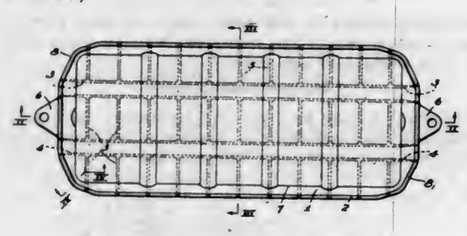
As an article of manufacture, a supporting bracket comprising a pressed metal supporting member of channel shaped cross section adapted to be secured to a supporting surface and provided with a plurality of openings spaced transversely and vertically of said supporting member in the bottom thereof, and a sheet metal bracket arm of channel shaped cross section, each of the side flanges of the bracket arm having projections thereon at the top and bottom of the flanges and lying in the plane of the flanges, said projections being adapted to engage said spaced openings, the web of the channel shaped bracket arm between the side flanges thereof being several times wider than the thickness of the side flanges so that the web cooperates with the supporting member between the transversely spaced openings to provide lateral stability for the supporting bracket.

1,764,767. AUTOMATIC BELT-TIGHTENING DEVICE. HAROLD F. WILHELM, East Orange, N. J., assignor to Verne E. Minich, Scarsdale, N. Y. Filed May 24, 1927. Serial No. 193,772. 2 Claims. (Cl. 64—5.)



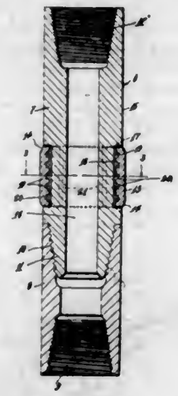
1. A belt tightening power transmission device comprising a sleeve adapted to be fixedly secured to a supporting shaft, an annular gear having internal teeth and fixedly secured to said sleeve, a split casing comprising sections, the first section having a bearing journaled on said sleeve, the second section having a bearing at a point spaced from the first bearing, a shaft in said second bearing having a spur gear meshing with said annular gear, a pulley outside said second section on said shaft, one of said sections having an annular seat for the other, and means for holding said sections together.

1,764,768. ANNEALING BOX. HARVEY WILLIAMS, Massillon, Ohio, and JOSEPH W. MCHUGH, Pittsburgh, Pa., assignors to Pittsburgh Steel Foundry Corporation, Glassport, Pa., a Corporation of Pennsylvania. Filed Feb. 10, 1928. Serial No. 253,364. 3 Claims. (Cl. 263—49.)



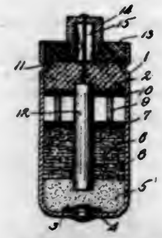
1. An annealing box comprising a bottom of substantially rectangular outline provided at its edges with a peripheral upwardly extending flange, and a hood adapted to rest on said bottom and to form with said flange a trough for a sealing medium, the corners of said bottom being biased to bring said flange closer to the hood at the corners than along the sides and thus to reduce the amount of unsupported metal at the corners and to eliminate the breaking of a seal by the sagging of corners when the box is in service.

1,764,769. DEVICE FOR PREVENTING ABRASION BETWEEN DRILL PIPES AND SURROUNDING WELL CASINGS. WALTER T. WOODS, Long Beach, Calif., assignor, by mesne assignments, to Byron Jackson Co., San Francisco, Calif., a Corporation of Delaware. Filed Feb. 17, 1928. Serial No. 254,966. 9 Claims. (Cl. 308—4.)



1. A device for protecting a well casing from abrasion by a rotary string of drill pipe comprising a coupling member provided with an annular recess, a continuous sleeve of bearing metal cast into said recess and shrunk upon said coupling member thereby forming an integral part thereof, and a contacting sleeve disposed within said recess and revolvably mounted upon said sleeve of bearing metal, said contacting sleeve being externally of a size greater than the coupling member but substantially less than the diameter of the interior of the well casing.

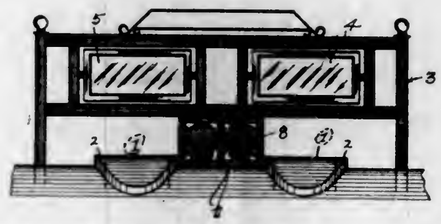
1,764,770. RECTIFYING APPARATUS AND METHOD OF MAKING. HENRI G. ANDRÉ, Paris, France. Filed Oct. 29, 1926. Serial No. 145,017. 5 Claims. (Cl. 175—318.)



3. In a rectifier, a receptacle containing the following in combination, an anode in subdivided form, the particles of which are under relatively high stress, a cathode adapted to be oxidized, and means including an acid for producing a heavy layer of oxide on the cathode and for operating in conjunction with the anode and cathode to cause unidirectional flow of current.

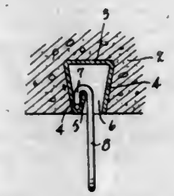
5. A rectifier comprising a cup shaped container and anodic mass in finely divided form at the bottom thereof, said anodic mass having a corrosive liquid therein, a member connecting said anodic mass with the outside of said container, a cathode centrally disposed of the container and having a portion buried in the anodic mass, a layer of liquid absorbing material above said anodic mass, two layers of liquid absorbing material and different from the first layer, means including a glass member for spacing said two layers of absorbing material whereby creepage of liquid is prevented and means for sealing the top of said container.

1,764,771. RACK FOR AUTOMOBILES. PETER ARNOTT, Palo Alto, Calif. Filed Mar. 16, 1929. Serial No. 347,695. 7 Claims. (Cl. 104—27.)



6. In a reflecting device for runways of service stations, the combination with the tracks of a gasoline and oil service runway, of a reflecting member in advance of the far end of the runway, and means for supporting the reflecting member in a position whereby the tracks are discernible in the member by the automobile operator.

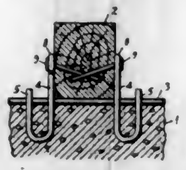
1,764,772. ANCHOR INSERT FOR CONCRETE WORK. DEWEY H. BITNEY, Albion, Mich., assignor to Union Steel Products Company, Albion, Mich. Filed Feb. 11, 1927. Serial No. 167,418. 3 Claims. (Cl. 72—105.)



3. An anchor for concrete work comprising a channel member adapted to be embedded in a concrete body facing

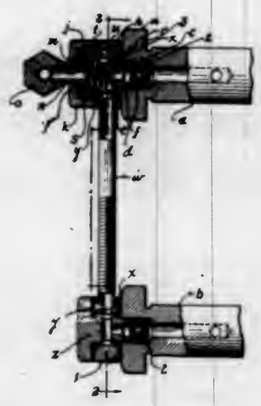
outwardly, one of the side walls having a continuous inwardly and rearwardly turned flange, the other being without a flange, and tie members provided with hooks engageable with said flange.

1,764,773. STRUCTURAL UNIT. DEWEY H. BITNEY, Albion, Mich., assignor to Union Steel Products Company, Albion, Mich. Filed May 21, 1928. Serial No. 279,225. 1 Claim. (Cl. 72—101.)



An anchoring unit for concrete structures comprising a longitudinal rod of substantial length, and a plurality of U-shaped combined anchoring and attaching members having one arm longer than the other and angled, said members being disposed transversely of the longitudinal rod and their shorter arms welded thereto, the angled arms being adapted to be bent to upright positions for attachment to the members to be secured, the bight portions of said members constituting anchoring members adapted to be imbedded in a concrete body.

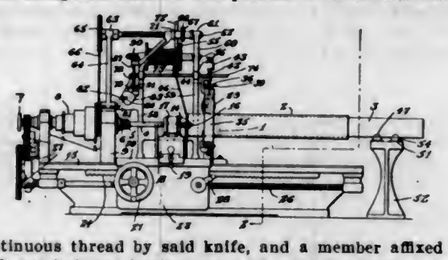
1,764,774. LUBRICATING FIXTURE. EDGAR J. BLOOM, Tiffin, Ohio, assignor, by mesne assignments, to Auto Research Corporation, a Corporation of Delaware. Filed May 19, 1922, Serial No. 562,060. Renewed Nov. 20, 1928. 8 Claims. (Cl. 184—7.)



1. In a lubricating system for the purpose specified, the combination of a pair of shackle bolts, means for furnishing lubricant to one bolt, a stud fitting into the end of each bolt and arranged for the passage of the lubricant, and a connector between the studs for conveying the lubricant from one stud to the other, said connector having ring-like terminals fitted over said studs in liquid-tight relation.

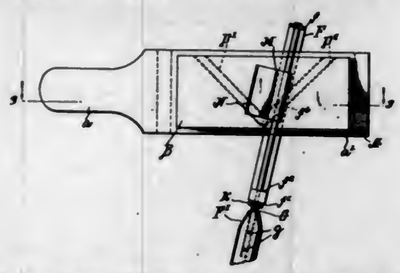
1,764,775. THREAD CUTTING AND FORMING MACHINE. FRED W. BOMMER, Everett, Mass. Filed July 3, 1928. Serial No. 290,137. 12 Claims. (Cl. 164—69.)

1. In a machine of the kind for cutting a continuous thread or strip from a tubular body of rubber or like elastic material, a mandrel adapted to engage said body, means to rotate said mandrel, a cutting knife, means to feed said stock along said mandrel into position to be severed into a



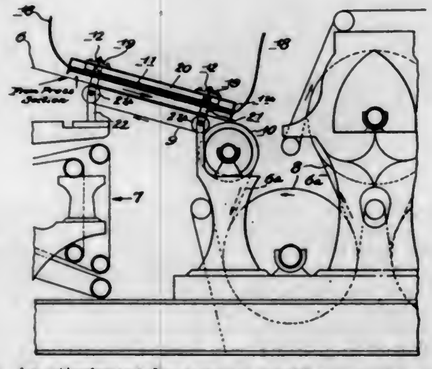
continuous thread by said knife, and a member affixed to said mandrel and having reversible shearing edges adapted to be engaged by said knife.

1,764,776. RAZOR-BLADE SHARPENER. WILSON J. BREAUX, New Orleans, La. Filed Mar. 15, 1928. Serial No. 261,960. 3 Claims. (Cl. 34—18.)



1. A hand razor blade sharpener comprising a handle and a housing block projecting forwardly therefrom, said block being provided with a recessed upper face and a plane lower face, an abrading block held in the recess in the upper face, a base block mounted below the housing block, transverse spacing strips interposed between the ends of said housing block and said base block and spacing the two apart, said base block having a V-shaped groove in its upper surface, a blade holding frame provided with a cross bar projecting through the space and between said housing block and said base block, and slidable both longitudinally and laterally in said space, said frame having a projection engaging in said groove, a rotatable blade clamp carried by said frame, a handle rotatable attached to said frame, and means actuated by rotating said handle for rotating said clamp.

1,764,777. MEANS FOR ELIMINATING WET STREAKS IN PAPER. ARTHUR E. BROUGHTON, Minneapolis, Minn. Filed Dec. 31, 1927. Serial No. 243,896. 3 Claims. (Cl. 34—18.)



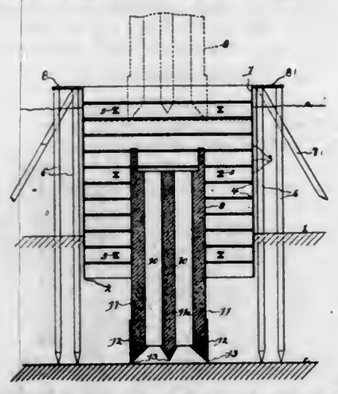
1. An attachment for a paper machine comprising supporting means extending transverse a wet portion of the paper web, a plurality of normally stationary heating units adjustable transverse said web on said support in close proximity but out of contact with said web, each of said units being adapted to apply radiant heat to a selected, longitudinal band of said web and each extending a substantial distance in the direction of movement of said web but being of relatively narrow width.

1,764,778. TIE CLASP. OSCAR CARLSON, East Providence, R. I., assignor to Dolan & Bullock, Providence, R. I., a firm composed of Arthur F. Dolan, Fred A. Bullock, Attleboro, Mass., and William G. Bennett, Providence, R. I. Filed Feb. 8, 1930. Serial No. 426,958. 4 Claims. (Cl. 24—261.)



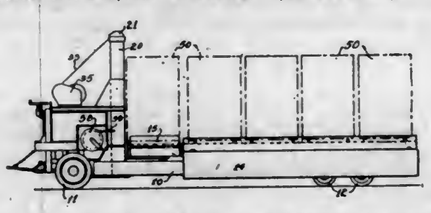
1. A tie clasp comprising a single piece of wire folded upon itself, one end being folded to provide an open loop, the opposite end overlying the opening in the loop to cooperate with the side portions of the loop to bite the fabric therebetween.

1,764,779. METHOD OF CONSTRUCTING SUBAQUEOUS FOUNDATIONS. MELVILLE F. CLEMENTS and NICK F. HELMERS, St. Paul, Minn. Filed Apr. 25, 1929. Serial No. 357,995. 8 Claims. (Cl. 61—46.)



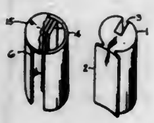
1. The method of preparing a foundation for subaqueous piers or the like, which consists in placing a shell around the site of the proposed pier and extending above high water line, then placing granular material within the shell, then constructing a caisson upon the island thus formed within the shell and sinking the caisson in the granular material.

1,764,780. SYSTEM AND APPARATUS FOR HANDLING FREIGHT. CLYDE E. COCHRAN, Cleveland, Ohio, assignor to The Elwell-Parker Electric Company, Cleveland, Ohio, a Corporation of Ohio. Filed July 22, 1927. Serial No. 207,635. 2 Claims. (Cl. 214—75.)



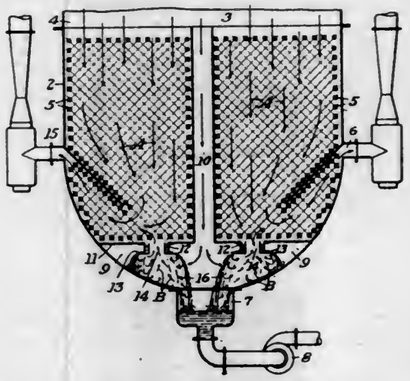
1. A system of handling freight, which includes the steps of loading it into a plurality of containers of convenient size to be drawn by and placed upon an industrial truck, coupling the containers together to form a train, operating the truck to move the train as a unit onto the platform of the truck, providing an elevating mechanism on the truck for raising one of the containers above the platform, moving the container laterally from the truck at a transposed level, and then progressively moving each subsequent container onto the elevating mechanism and moving it laterally from the truck at a transposed level.

1,764,781. DENTAL ATTACHMENT FOR REMOVABLE BRIDGEWORK. EDWARD H. ECKER, New York, N. Y. Filed Mar. 6, 1929. Serial No. 344,669. 4 Claims. (Cl. 32—12.)



1. A dental attachment for removable bridgework comprising a longitudinally grooved body member made integral with a web member adapted to be permanently mounted on an abutment tooth in the mouth, a socket member provided with a longitudinal opening in the wall thereof adapted to be permanently mounted on the removable denture and a double leaf spring member adapted to be permanently mounted within the opening of said socket member to engage within the groove of the body member.

1,764,782. CONDENSER. RAYMOND N. EHRHART, Edgewood, Pa., assignor to Elliott Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Apr. 23, 1924. Serial No. 708,425. 6 Claims. (Cl. 257—43.)

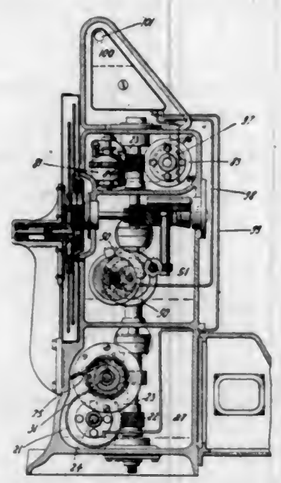


1. In a surface condenser, a tube nest, means for conducting steam from the point of substantially highest pressure in said condenser to a point adjacent the region of lowest pressure therein out of contact with the tubes of said tube nest, and means for conducting the condensate formed by said tube nest to said region out of contact with said steam and bringing the condensate and said steam into direct contact for the first time in said region.

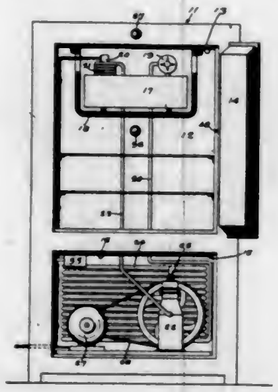
1,764,783. LUBRICATING SYSTEM FOR PROJECTION MACHINES. LOUIS SIMON FRAPPIER and EWALD BOECKING, Brooklyn, N. Y., assignors to International Projector Corporation, New York, N. Y., a Corporation of Delaware. Original application filed Aug. 31, 1928, Serial No. 303,162. Divided and this application filed Nov. 30, 1928. Serial No. 322,786. 8 Claims. (Cl. 184—11.)

8. In a projection head, a plurality of oil chambers, lubricating means including an oil bath in each of said cham-

bers, elements dipping in said baths, an oil reservoir, and supply pipes from said reservoir terminating in each of said chambers adjacent said elements at the level of the required bath, said pipe serving to maintain the bath at the required level for permitting said gears to dip therein irrespective of the angle of inclination of the projection head.

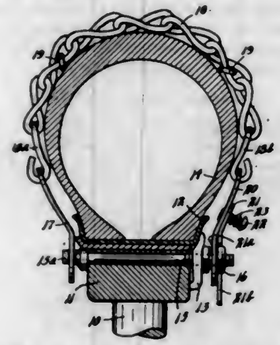


1,764,784. MECHANICAL REFRIGERATION. HADLEY F. FREEMAN, Lakewood, Ohio, assignor, by mesne assignments, to Kelvinator Corporation, Detroit, Mich., a Corporation of Michigan. Filed Aug. 20, 1926. Serial No. 130,443. 2 Claims. (Cl. 62—4.)



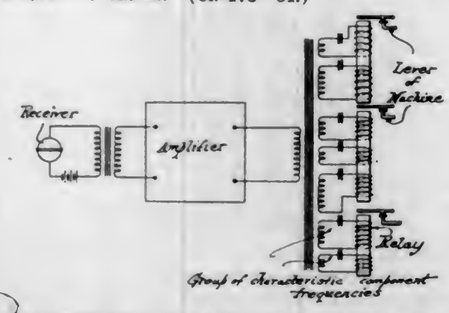
1. In combination a refrigerator cabinet having an opening therein affording access to a refrigerated portion of said cabinet, and a door arranged to close said opening; electrically operated mechanical refrigerating means operable to automatically refrigerate a portion of said cabinet, comprising an electric motor, and a circuit for connecting said motor to a source of power; signal means comprising electric means disposed exteriorly of said cabinet, and a circuit for connecting said electric means to a source of power; and single switch means in said circuits actuated automatically by said door to prevent operation of said mechanical refrigerating means, and to permit energization of said signal means, when said door is open, and to permit operation of said mechanical refrigerating means, and prevent energization of said signal means, when said door is closed.

1,764,785. TIRE CHAIN. AUGUST FRYKMAN, Bottineau, N. Dak. Filed Apr. 4, 1928. Serial No. 267,194. 3 Claims. (Cl. 152—14.)



1. In a tread chain device of the class described, the combination of a bolt extending through the felloe of a tire equipped wheel, said bolt being constructed and arranged at one end to be held from rotation, a nut threaded on the other end of said bolt and having a reduced intermediate portion, a plate adapted to be secured to a tread chain, said plate having an aperture therethrough with a reduced portion at one end, said aperture being of a size to pass over said nut and said reduced portion being adapted to engage in said reduced intermediate portion of said nut, a member pivoted to said plate and having a portion adapted to move into said aperture when said plate is engaged over said nut and be disposed to engage one side of said nut and prevent rotation thereof.

1,764,786. SOUND-RECORDING MACHINE. ALBERT W. GEYER, Chicago, Ill. Filed June 22, 1928. Serial No. 287,547. 7 Claims. (Cl. 178—31.)



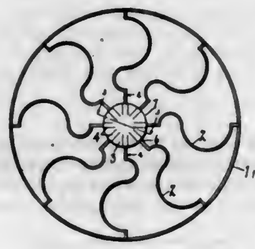
1. In combination, means to receive sound waves, means to transform said sound waves into electrical waves, means to amplify and analyze said electrical waves in their characteristic component frequencies, means to group said characteristic component frequencies in individual groups, and means to record the sound waves by the action of said individual groups of characteristic component frequencies.

1,764,787. ICE-CUBE TRAY FOR REFRIGERATORS. CHARLES T. HATCH, Albion, Mich., assignor to Union Steel Products Company, Albion, Mich. Filed May 6, 1929. Serial No. 360,640. 8 Claims. (Cl. 62—111.)



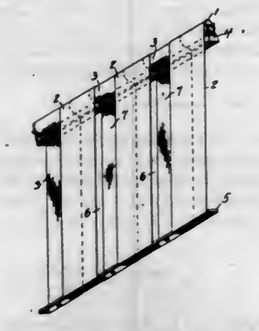
8. In an ice cube tray for refrigerators, the combination of a container holder comprising a frame and longitudinal and transverse members secured thereto, and a container of flexible resilient material having integral longitudinal and transverse partitions removably supported by said holder.

1,764,788. FAN GUARD. CHARLES T. HATCH, Albion, Mich., assignor to Union Steel Products Company, Albion, Mich. Original application filed Sept. 15, 1928, Serial No. 306,263. Divided and this application filed Dec. 11, 1929. Serial No. 413,190. 1 Claim. (Cl. 230—275.)



A fan guard comprising a rim, radially disposed guard wires extending inwardly from said rim, and a center disk having radial ribs struck up therefrom providing radial grooves in which the inner ends of said guard wires are disposed and secured by welding, said center disk having peripheral notches at the outer ends of the grooves, the segments of the periphery between the notches being turned between and constituting supports for the guard wires.

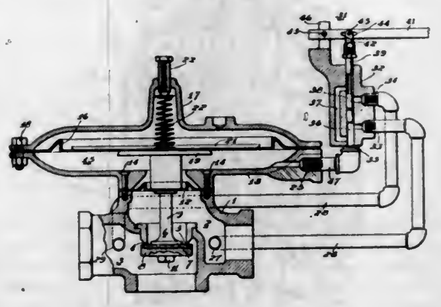
1,764,789. WINDOW SHADE. JOHN HEALD, Pasadena, Calif. Filed May 27, 1929. Serial No. 366,244. 4 Claims. (Cl. 156—16.)



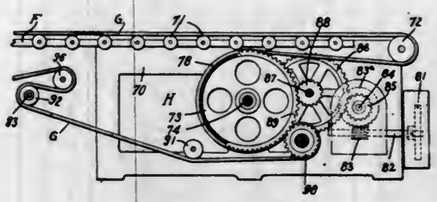
3. The combination with a shade roller, of two rows of shade cloth strips mounted on said roller, the strips of one row covering and overlapping the spaces between the strips of the other row, a member hung on the pivots of the roller and capable of maintaining the two rows spread apart, and a member to which the free ends of both rows of strips are fastened from opposite sides.

1,764,790. PRESSURE-REGULATING AND SHUT-OFF VALVE. CHARLES HOWARD HOOK, Pittsburgh, and NATHAN L. MERCUR, McKeesport, Pa. Filed June 28, 1928. Serial No. 289,026. 7 Claims. (Cl. 50—23.)

1. A combination fluid regulating and shut-off valve mechanism, comprising a casing having an inlet chamber an outlet chamber and a pressure chamber, said inlet and outlet chambers being connected by a valve regulated opening, a valve disposed in said opening, pressure responsive means in said pressure chamber connected to said valve, means establishing communication between said inlet chamber and said pressure chamber, means establishing communication between said outlet chamber and said pressure chamber, and independently operable means for positively opening and closing said communicating means whereby said pressure responsive means may be rendered solely responsive to the pressure in the inlet chamber to close the valve or to the pressure in the outlet chamber to automatically actuate the valve to regulate the flow of fluid through the valve opening.



1,764,791. CONVEYER DRIVE FOR GLASS-ANNEALING LEERS. HENRY W. INGLE, West Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed Jan. 29, 1927. Serial No. 164,457. 6 Claims. (Cl. 198—203.)



1. The combination with a conveyer of woven wire fabric for transporting articles of glassware, of a drum of relatively large diameter provided with a resilient anti-slipping covering for driving said conveyer and a roller for maintaining said conveyer in contact with said drum through a major portion of the periphery thereof, said drum and said roller being both positively driven, whereby to provide a large surface of driving contact for said conveyer.

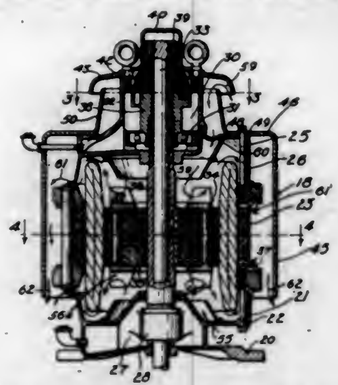
1,764,792. INSECTICIDE AND FUNGICIDE COMPOUND. JOSEPH HIDY JAMES, Pittsburgh, Pa., assignor to Clarence P. Byrnes, trustee, Sewickley, Pa. Filed Sept. 1, 1925. Serial No. 53,946. 6 Claims. (Cl. 166—22.)

1. An insecticide and fungicide composition containing a material percentage of a partial oxidation product of mineral oil, said product comprising a mixture of aliphatic compounds having artificially-introduced chemically-combined oxygen and of different molecular weights.

1,764,793. WEATHERPROOF PUMP MOTOR. CARL E. JOHNSON, Los Angeles, Calif., assignor to United States Electrical Manufacturing Company, Los Angeles, Calif., a Corporation of California. Filed Sept. 15, 1926. Serial No. 135,671. 13 Claims. (Cl. 172—36.)

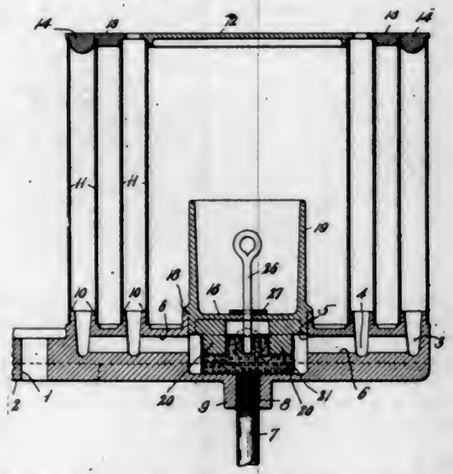
4. In combination: a stator; a rotor inside said stator; means for supporting said rotor; a frame for supporting

said stator and having a closed upper end portion; a rim extending outwardly from and surrounding said closed upper end portion of said frame; and a jacket supported



by said frame, said jacket surrounding said stator and having an annular flange extending upward and terminating beneath said rim.

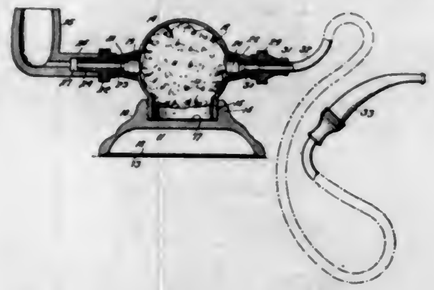
1,764,794. FUEL-OIL BURNER. LAWRENCE E. JOHNSON, Melrose, and ERNEST C. LEACH, West Peabody, Mass., assignors to Lynn Products Co., Lynn, Mass., a Corporation of Massachusetts. Filed Mar. 26, 1928. Serial No. 264,591. 9 Claims. (Cl. 158—87.)



2. A fuel oil burner comprising, in combination with a source of liquid fuel supply, a base having a horizontally arranged endless vapor-distributing groove underlying a combustion chamber, a cup-shaped vaporizing chamber, associated with said combustion chamber and deriving heat therefrom to convert liquid fuel within the vaporizing chamber into vapor, having a pipe from the fuel source connected to its bottom from below and said bottom being in a plane below the level of the bottom of said groove, and vapor-conducting conduits connecting the bottom of said groove with the vaporizing chamber, said connection with the vaporizing chamber being through the wall thereof at a level substantially above the bottom thereof.

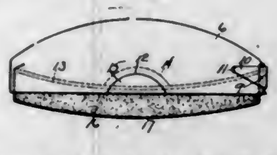
1,764,795. TOBACCO-SMOKING APPLIANCE. LYMAN D. JONES, New York, N. Y. Filed May 5, 1928. Serial No. 275,481. 4 Claims. (Cl. 131—12.)

1. A tobacco smoking appliance, comprising a holder for absorbent material, having a wide-mouthed, exteriorly screw-threaded, downwardly extending, neck, a supporting base having a shallow, cylindrical top recess with a screw-threaded wall to be engaged by the screw-threaded neck, a substantially flat packing disk secured between the lower



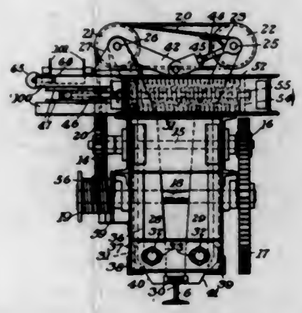
end of the neck and the bottom of the recess and closing the neck, and a tobacco holder and a mouth-piece connected with the holder at opposite points thereof, said holder for absorbent material being considerably larger than the tobacco holder.

1,764,796. BLOTTER. CHARLES JULIAN KAISER, West Hartford, Conn. Filed Dec. 8, 1928. Serial No. 324,622. 5 Claims. (Cl. 120—24.)



1. A blotter including a case having a slot therein spaced upwardly of its lower edge, a blotting pad removably secured in the case and spaced from its upper wall to provide a chamber, and a U-shaped clamp movably mounted on one end of the case to extend across the end wall of the case and to secure the end of a blotting strip projected from within said chamber across the outer face of the pad, upwardly into the case and out through said slot.

1,764,797. RAIL CLAMP FOR TRAVELING BRIDGES. BERNARD H. KESSTING, Ben Avon, Pa., assignor to The Dravo Contracting Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed June 19, 1924. Serial No. 721,066. 14 Claims. (Cl. 188—43.)



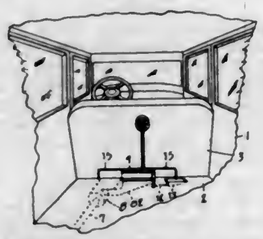
1. In a rail clamp mechanism, a pair of clamp levers adapted to grip the opposite sides of a rail, toggle means connected to said levers and including bell crank means, an equalizer connected to said bell crank means, and a pair of springs connected to said equalizer for rocking said levers into engagement with the rail, substantially as described.

1,764,798. HOLLOW TILE FOR BUILDING PURPOSES. FRITZ KOCH, St. Paul, Minn. Filed Oct. 1, 1928. Serial No. 309,516. 3 Claims. (Cl. 72—41.)



1. A tile for building purposes comprising a rectangular body of hollow tubular shape having a wall adapted to be exposed on the exterior of a building structure and formed with longitudinally extending ribs upon the interior of said wall, the sides of said ribs being of reentrant form to positively interlock with mortar applied to the ends of the tile.

1,764,799. HEATING MEANS FOR MOTOR VEHICLES. WALTER A. KYSOR, Cadillac, Mich. Filed July 20, 1928. Serial No. 294,246. 3 Claims. (Cl. 237—12.3.)



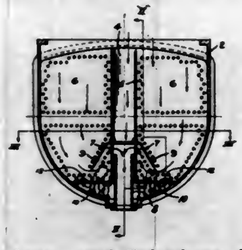
1. The combinat'on with a motor vehicle body and an internal combustion engine, of an air heating unit operatively associated with the exhaust of said engine, an air discharge connection from said heating unit to the vehicle body provided with a control valve, a pneumatic operatively connected to said valve, a conduit connecting said pneumatic to the intake of said engine, said conduit having an air inlet port open to the atmosphere, a valve for said port, and a thermostatic control means for said valve located within the vehicle body.

1,764,800. SHAFT FOR GOLF CLUBS AND THE LIKE. ALBERT C. LINK, Detroit, Mich., assignor to L. A. Young Company, Detroit, Mich. Filed May 1, 1929. Serial No. 359,477. 3 Claims. (Cl. 273—81.)



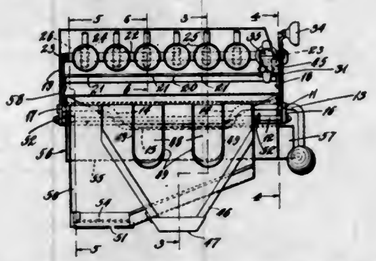
1. A shaft for golf clubs and the like comprising a tubular shaft, a shouldered tip of wood inserted in the end of said shaft to project substantially therefrom, the outer end of said tip being outwardly tapered, a grip covering wrapped upon said shaft with the wrappings extended upon said tip, a cap having an inwardly tapered socket for the tapered portion of said tip and the covering wrapped thereon, said cap having a central hole therein, a screw threaded into the end of said tip through said hole in said cap to clamp the cap upon the covering wrapped upon the tapered portion of said tip.

1,764,801. CONDENSER. GEORGE L. MACNEILL, Wilkinsburg, Pa., assignor to Elliott Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed July 27, 1922. Serial No. 577,862. 24 Claims. (Cl. 257—43.)



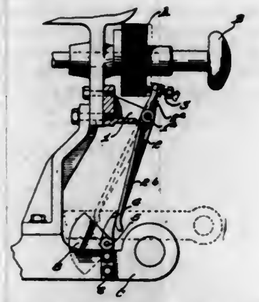
1. In a condenser, a shell having a heating chamber therein, two tube nests disposed above the heating chamber, and a conduit between the tube nests for passing steam independently of the tube nests into the heating chamber to raise the temperature of the water therein, said condenser and said chamber each having a gas take-off communicating therewith and located adjacent the termini of their respective condensing zones.

1,764,802. EGG-INSPECTION APPARATUS. JOHN F. MAHLSTEDT, Los Angeles, Calif. Filed Aug. 21, 1928. Serial No. 301,049. 14 Claims. (Cl. 146—2.)



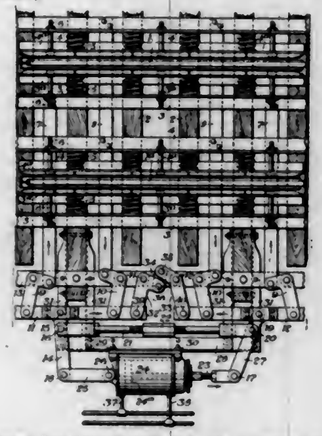
1. An egg inspection apparatus comprising a frame, a cup carrier tiltably connected with the frame, cups detachably mounted on the carrier, a white and yolk separating device movably mounted on the carrier and selectively positionable over said cups, and a chute positioned to receive the contents of the cups when said cups are tilted.

1,764,803. SAFETY ATTACHMENT FOR TYPESETTING MACHINES. DENIS P. MCLAUGHLIN, San Diego, Calif. Filed Jan. 7, 1929. Serial No. 330,742. 8 Claims. (Cl. 199—52.)



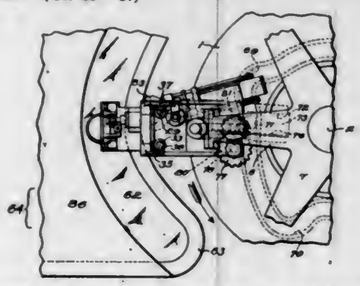
1. In a safety attachment of the class described, the combination with a type setting machine having a mold disc drive pinion and ejector blades operated by an ejector lever, of a rod and lever means operated by said mold disc pinion and engageable with said ejector lever for shifting said ejector lever so as to permit the operation of only a predetermined minimum number of ejector blades.

1,764,804. RAILWAY BRAKING APPARATUS. WILLIAM C. MCWHIRTER and HAROLD S. LOOMIS, Wilkinsburg, Pa., assignors to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed May 20, 1926. Serial No. 110,365. 16 Claims. (Cl. 188—62.)



1. In railway braking apparatus, the combination with a section of railway track, of a motor device supported on the ties, a plurality of brake bars carried by the ties, and link mechanism connected between said brake bars and said motor device for operating the brake bars by the motor device without stress between the motor device and the ties.

1,764,805. SUCTION BOTTLE MACHINE. KARL E. PEILER, West Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed Feb. 11, 1929. Serial No. 338,932. 19 Claims. (Cl. 49—5.)



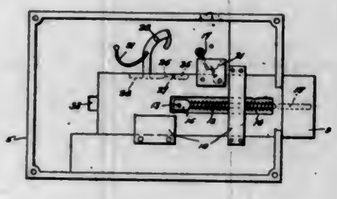
1. Glass gathering apparatus comprising a suction gathering receptacle mounted to swing about an inclined axis, and means for swinging said receptacle about said inclined axis to move said receptacle periodically to and from position to gather glass from a gathering pool.

1,764,806. FASTENER. NICOLAS SACCOCCIA, Cranston, R. I., assignor to Fulford Mfg. Co., Providence, R. I., a Corporation of Rhode Island. Filed Dec. 5, 1928. Serial No. 323,962. 7 Claims. (Cl. 292—128.)



1. A fastener comprising in combination a clasp member and a cooperating keeper member with a loop-shaped catch, said clasp member having a body portion for extending through the catch and spring-pressed notched catch-engaging jaws to receive and retain said keeper, and means in said keeper member and in said clasp member for attaching them to different parts of an article to releasably secure these parts together.

1,764,807. DOORLOCK. CARAPIET DAVID SARKISIAN, Ciudad Juarez, Mexico. Filed Apr. 13, 1928. Serial No. 269,844. 2 Claims. (Cl. 70—14.)



1. A door fastener comprising a casing attachable to the door, a bolt slidably arranged therein, spring means normally urging the bolt outwardly of the casing into door securing position and key engaging means carried by the bolt adapted upon the actuating of the key for moving the same into door releasing position and comprising a plate protruding upwardly from the bolt and having a notched upper edge with the side walls of the notch inclined toward the adjacent ends of the bolts whereby to receive a tang formed on the key and maintaining the same in position within the notch during the sliding movement of the plate through the turning movement of the key in a predetermined direction.

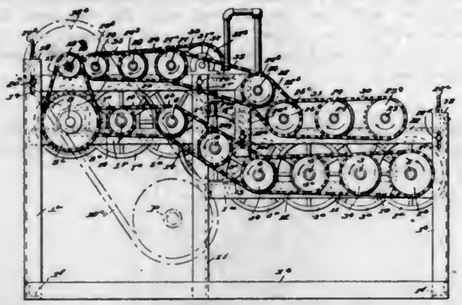
1,764,808. PLAIT-HOLDING APPARATUS. HARRY SCHLESINGER, Des Moines, Iowa. Filed Aug. 20, 1928. Serial No. 300,900. 8 Claims. (Cl. 68—10.)



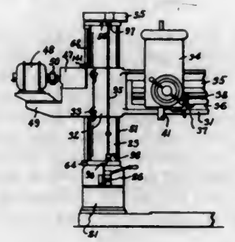
8. In a plait holder, a support including longitudinal side members, a supporting member slidable longitudinally on each side member, a presser bar having its ends carried by said supporting members, a plurality of presser feet mounted on said presser bar for sliding movement, means for yieldingly tending to move the presser feet downwardly, and triggers adapted to coact with the respective presser feet for locking them in their upper positions.

1,764,809. MACHINE FOR SCRUBBING AND OILING LEATHER. ELMER H. SMITH, Endicott, N. Y., assignor to Endicott Johnson Corporation, Endicott, N. Y., a Corporation of New York. Filed Dec. 23, 1927. Serial No. 242,235. 16 Claims. (Cl. 149—15.)

15. In a machine of the character specified, a frame, a set of parallel shafts mounted in said frame; a plurality of carrier wheels of same diameter mounted on said shafts, the wheels of each shaft being staggered with respect to and overlapping the wheels of the adjacent shafts and adapted to convey the leather through the machine; a set of parallel rotary brushes mounted in the frame above said carrier shafts and adapted to contact with the leather; means for rotating the carrier and brush shafts in the opposite directions; each shaft of each set being rotated in the same direction and at a speed slightly greater than that of the shaft immediately preceding same; the brush shafts being rotated at higher speeds than the carrier shafts; and means for supplying oil to one of the intermediate brushes to oil the leather passing through the machine.



1,764,810. ELEVATING MECHANISM FOR DRILLING MACHINES. AUGUSTUS M. SOSA, Cincinnati, and WILLIAM G. HOELSCHER, Norwood, Ohio, assignors to The American Tool Works Company, Cincinnati, Ohio, a Corporation of Ohio. Filed June 13, 1927. Serial No. 198,427. 3 Claims. (Cl. 77—28.)



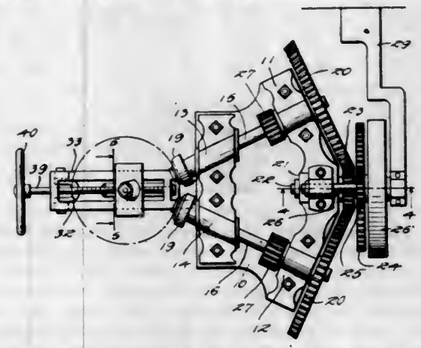
1. In a drilling machine, the combination of a column, a drill-arm adjustable to elevation on said column, a drill-slide adjustable laterally on said drill-arm, a drill-spindle on said drill-slide, driving means on said drill-arm including a cross-shaft extending lengthwise of said drill-arm for rotating said drill-spindle throughout the lateral adjustments of said drill-slide, said driving means substantially continuously rotating during operation of the machine, an upright screw extending lengthwise of the column, a nut on said drill-arm coacting with said screw, an upright shaft extending lengthwise of said column, a gear-housing at the top of said column, a train of gears in said gear-housing between said upright shaft and said upright screw for selectively rotating said upright screw in reverse directions for respectively raising and lowering said drill-arm into adjusted positions, a clutch including a releasable clutch-member operatively connecting and disconnecting said driving means and said upright shaft, and a rockable control cam provided with a plurality of cam-faces for axially moving said clutch-member in reverse directions and with resting faces for positioning said clutch-member in clutching relation and in unclutching relation, an upright rock-shaft extending lengthwise of said column and having control connection with said clutch-member, and a handle on said rock-shaft below said drill-arm for operating said clutch-member.

1,764,811. SELF-ADJUSTING TIRE-CHAIN DEVICE. BURTON A. SPINNEY, Des Moines, Iowa. Filed July 2, 1928. Serial No. 289,805. 4 Claims. (Cl. 267—72.)

1. In a device of the class described, a resilient member comprising a casing formed with two halves, said halves being composed of opposite, spaced members, each in the shape of a quarter cylinder, the halves being slidably connected together and having at their ends disc-shaped end members, whereby an extensible closed housing is formed and a coil spring in said housing.



1,764,812. DISK SHARPENER. BENJAMIN F. TALLEY, Drummond, Okla., assignor of one-half to Scovil Swart, Drummond, Okla. Filed Jan. 6, 1927. Serial No. 159,443. 1 Claim. (Cl. 76—89.2.)



A disk sharpener including a base, pairs of shafts supported on the base in superimposed planes, the pairs of shafts converging in a common direction with a shaft of each pair being in vertical alinement with a corresponding shaft of the other pair, gears on the shafts, pressing rolls on all of the shafts constituting two sets of vertically alined rolls, the gears on said shafts arranged in such relation that the gear of each upper shaft meshes with the gear of a corresponding lower shaft, means mounted on the base for supporting a disk with its cutting edge between said sets of rolls, one pair of said vertically alined rolls being spaced from the other vertically alined pair for gripping the periphery of a disk at spaced points, and driving means engaged with said shafts.

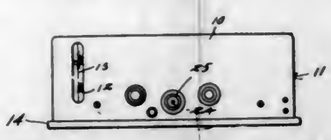
1,764,813. SNAP. OLNEY THORNLEY, Coyle, Okla. Filed Aug. 14, 1929. Serial No. 385,874. 9 Claims. (Cl. 24—236.)



1. A snap, as described, embodying a hook having a straight spring, removably clamped to its shank, by an

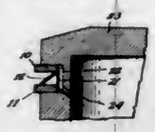
inverted U shaped clamp bolted laterally to said shank and over the shank end of said spring, said spring having an upturned end portion engaging a slot in said clamp for preventing lateral and longitudinal movement of said spring.

1,764,814. RADIO DIAL AND LOG. CHARLES LEE WATSON, Strawn, Tex. Filed Feb. 21, 1929. Serial No. 341,761. 1 Claim. (Cl. 116—124.3.)



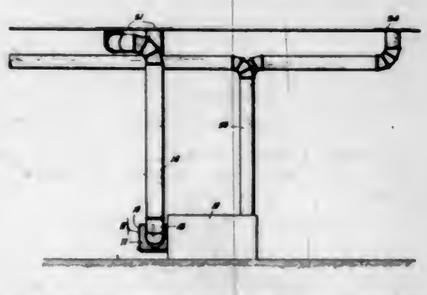
In an indicating device for a radio receiving set, the combination with the condenser actuating shaft, of a vertical stub shaft mounted adjacent the actuating shaft, a disk having an integral tubular portion disposed for rotation on said stub shaft, a vertical drum having a depending stub shaft removably secured within said tubular portion for rotation with said disk, the lower end of the drum having a peripheral upstanding flange spaced from the face of the drum, a sheet of flexible material engaged around the drum with its lower edge retained between the drum and flange, a resilient band retaining the upper end portion of the sheet, and operative driving connections between the said actuating shaft and the drum shaft.

1,764,815. PISTON RING. JUDSON WILLIAMS, Philadelphia, Pa. Filed Dec. 3, 1927. Serial No. 237,454. 2 Claims. (Cl. 74—109.)



1. The combination with a piston having an annular groove therein, of upper and lower sealing rings engaged, respectively, with the top and bottom walls thereof, an expanding ring in the groove bearing against the inner wall thereof and the inner peripheries of said rings, and a tensioning ring frusto-conical in shape extending diagonally between said sealing rings and bearing against the sealing rings and the expanding ring.

1,764,816. VENTILATING SYSTEM. OLIVER PRESTON WILTERMOOD and OLIVE EDNA WILTERMOOD, Spokane, Wash. Filed June 14, 1929. Serial No. 370,896. 2 Claims. (Cl. 98—33.)



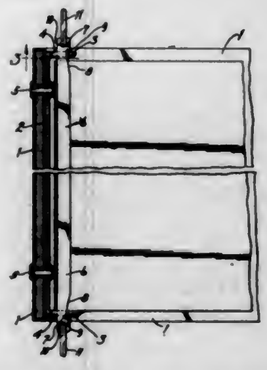
1. A ventilating system comprising a compartment including a housing upon one end thereof and in communication therewith, sleeve portions carried by and laterally projecting from diametrically opposite sides of the housing, partition walls carried within the housing defining a passageway therebetween and restricting pressure interference between the sleeve portions, elbow fittings carried by the sleeve portions, inlet pipes having connection with the elbow fittings, discharge pipes having direct connection with the compartment, and fan members included within the elbow fittings and compartment to facilitate the circulation of air through the pipes and compartment.

1,764,817. LOG TURNER. WILLIAM H. WINTERS, Willamina, Oreg. Filed Nov. 20, 1928. Serial No. 320,628. 5 Claims. (Cl. 143—97.)



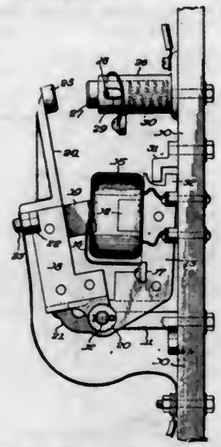
1. A log turner comprising in combination, a vertically movable bar, vertically spaced log engaging and turning teeth carried by the bar, a pair of vertically arranged guides disposed on opposite sides of the bar, one of the guides being pivotally supported at its lower end, guide blocks carried by the lower end of the toothed bar for cooperation with the respective guides, means for raising and lowering the toothed bar, and means associated with the pivoted guide for setting up a clamping action upon the guide blocks to prevent sliding movement of the toothed bar.

1,764,818. BOOKHOLDER. HENRY T. ADAMS, Chicago, Ill. Filed Jan. 9, 1929. Serial No. 331,212. 6 Claims. (Cl. 281—34.)



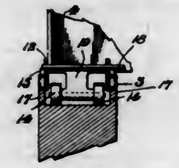
1. A detachable book holder comprising a cover, a metal strip secured to said cover and having upturned ends, said ends being provided with slots, and a binding bar adapted to pass between the pages of a book and having its ends equipped with notches, the ends of said binding bar being adapted to pass through and extend beyond said slots, the notches thereon being adapted to engage the upturned ends of said metal strip.

1,764,819. CONTACT CLOSER. CARL J. ANDERSON, Chicago, Ill. Filed Dec. 15, 1927. Serial No. 240,124. 10 Claims. (Cl. 200—87.)



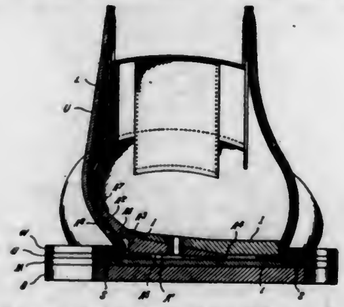
1. In a contact closer, a pivotal support, a magnet and armature mounted on said support and each independently movable on it as a pivot, retracting means for separating armature and magnet, and stopping means by which the momentum of one part absorbs that of the other part.

1,764,820. FLOATING POWER PLANT. JOSEPH JAMES BAKER, Kokomo, Ind. Filed Nov. 21, 1927. Serial No. 234,882. 2 Claims. (Cl. 170—84.)



1. In a water power plant having blades engaged by the water, the combination with a wheel grooved in its periphery to provide side flanges having their outer edges toothed, of connected chains, one for each of the flanges and comprising inner and outer links, the outer links being in the plane of the flanges and coacting with the teeth thereof, and the inner links being disposed to engage the inner faces of the flanges to prevent lateral movement of the connected chains, the inner links having extensions to which the blades are connected.

1,764,821. SHOE. LAFAYETTE BEAN, Fredericksburg, Va., assignor to Virginia Shoe Company, Inc., Fredericksburg, Va., a Corporation of Virginia. Filed Dec. 5, 1927. Serial No. 237,875. 1 Claim. (Cl. 36—71.)



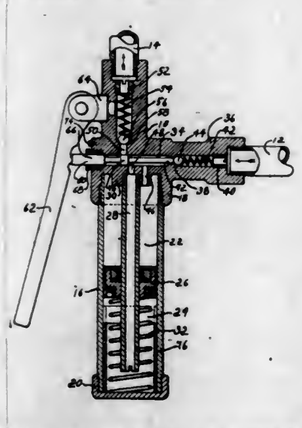
A shoe having incorporated therein during its fabrication an inner sole having a skived portion, and a wedge member inserted under said inner sole having a curved surface on its under side, a notch curved to conform to the curve of the inner edge of the shank of the inner sole and forming a shoulder thereunder, and its outer edge formed in substantially a semi-circular arc, and an extension integral with said wedge member having a curved inner edge conforming to the curve of the upper of the shoe against which it is positioned, and having a curved upper surface.

1,764,822. SHOW CASE. WISTER P. BOTT, Homer, La. Original application filed Jan. 12, 1927, Serial No. 160,686. Divided and this application filed Aug. 17, 1927. Serial No. 213,673. 1 Claim. (Cl. 312—140.)



A showcase comprising corner posts having their inner side faces grooved longitudinally to form seats, a top frame having longitudinal and end cross rails extending between said corner posts and provided with tongues at their ends received in the upper portions of the grooves in said posts, grooves being formed longitudinally in the under faces of said rails and communicating with the grooves of the posts, closure sheets for the sides and ends of said case having marginal portions fitting into the grooves of the rails and posts, reinforcing strips extending along the inner side faces of the longitudinal rails with the ends bent to extend along the inner side faces of the end rails, removable fasteners securing said strips to said rails, and a removable top supported upon said rails with its marginal portions sunk into the rails.

1,764,823. LUBRICATING DEVICE. CLAUDE A. BOWLUS, Birmingham, Mich. Filed June 16, 1927. Serial No. 199,313. 4 Claims. (Cl. 221—102.)

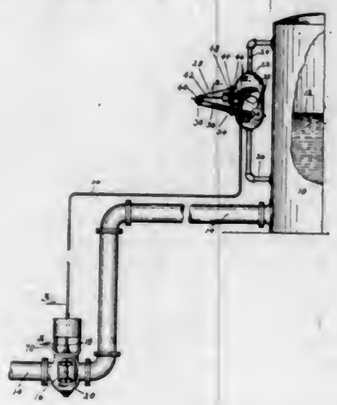


1. In a device of the class described comprising a body portion having an inlet passage and an outlet passage, a cylinder adapted for communication with said inlet passage and said outlet passage, a piston in said cylinder between said inlet passage and said outlet passage, a reciprocating valve when in one position for directing a flow of fluid into said cylinder on one side of said piston to cause it to force a fluid on the other side of said piston through said outlet passage and when in another position to form a communication between the portions of the cylinder at the opposite sides of the piston and means for returning said piston.

1,764,824. CELLULAR STRUCTURAL MATERIAL. HARRY E. BROOKBY and GEORGE D. KING, Chicago, Ill., assignors to United States Gypsum Company, Chicago, Ill., a Corporation of Illinois. Filed May 8, 1925. Serial No. 28,942. 5 Claims. (Cl. 106—20.)

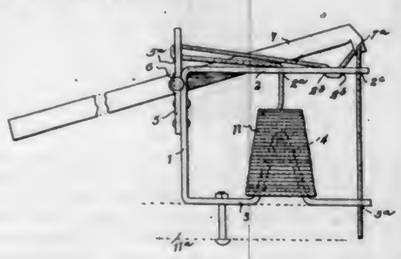
1. The process for producing a cellular structure which consists in adding sufficient water to a mixture of commercial calcined gypsum, sodium carbonate and copper sulphate to render the mass plastic and allow a chemical reaction between the carbonate and sulphate to liberate a gas within the plastic mass and precipitate a copper compound upon the interfaces of the gas cell walls, and then allowing the mass to dry.

1,764,825. REMOTE-CONTROL STRUCTURE FOR VALVES. LYLE W. BROWNE, Marshalltown, Iowa, assignor to The Fisher Governor Company, Inc., Marshalltown, Iowa. Filed Sept. 27, 1927. Serial No. 222,329. 3 Claims. (Cl. 137—103.)



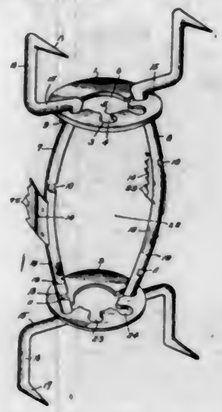
1. In a structure of the class described, the combination of a float controlled shaft with a link pivoted thereto, a fluid holding bellows having one end member pivoted to said link and the other end member fixedly mounted, a tube communicating with the interior of said bellows, a valve structure, a second bellows, means for supporting one end of said second bellows fixedly from said valve structure, said valve structure having a valve and projecting stem, said stem being operatively connected with the other end of the second bellows, said tube being arranged in communication with the interior of the second bellows.

1,764,826. TWINE HOLDER. ENOCK A. CARLSON, Delvalle, Tex. Filed Nov. 15, 1927. Serial No. 233,479. 1 Claim. (Cl. 242—144.)



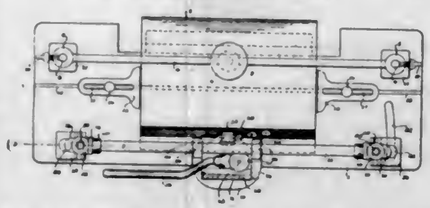
A twine holder comprising a frame formed of a metal strap including an upright, upper and lower members projecting laterally in the same direction from the ends of the upright to a like extent, the lower member having an intermediate portion bent upwardly to provide a loop shaped bobbin support, and a take-up lever mounted upon the upper portion of the said upright, the said take-up lever and the outer ends of the upper and lower members of the frame having openings formed therein through which the twine or cord is passed for proper direction.

1,764,827. CATTLE POKE. CHARLES F. CAROTHERS, Salome, Ariz. Filed Aug. 23, 1929. Serial No. 387,897. 6 Claims. (Cl. 119—138.)



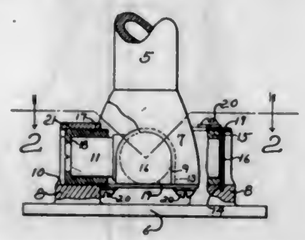
1. A cattle poke comprising, two spaced washer-like ring members and two spaced side bars pivoted to said washers, each ring member having a central aperture adapted to receive said side bars, and the pivoted connection comprising slots in the ring members opening into said central apertures.

1,764,828. BOOK-INDEX NOTCHER AND PRINTER. HAROLD H. COTTON, Rochester, N. Y. Filed Nov. 10, 1927. Serial No. 232,293. 22 Claims. (Cl. 164—57.)



1. A book index notcher and printer comprising a movable notcher, and a printing mechanism having a printing point beyond the range of movement of the notcher but in line with such line of movement.

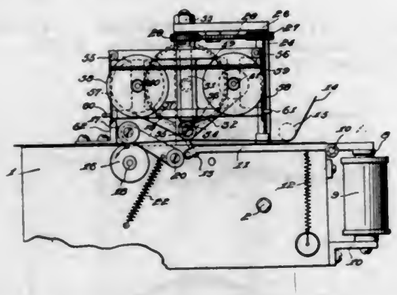
1,764,829. UNIVERSAL JOINT. CHARLES D. CUTTING, Detroit, Mich. Filed July 11, 1927. Serial No. 204,676. 16 Claims. (Cl. 64—102.)



1. A universal joint comprising a pair of yokes, bearings in each of the yoke arms, bearing members in the bearings,

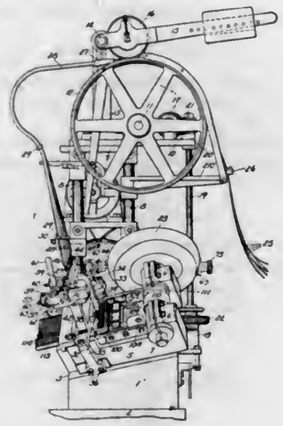
and end thrust bearings for each of the bearing members, one of the end thrust bearings for each yoke arm being fixed and the other being adjustable.

1,764,830. TELEGRAPHIC RECORDER. ERNEST A. FALLER, Brooklyn, N. Y. Filed Mar. 23, 1927. Serial No. 177,650. 17 Claims. (Cl. 178—36.)



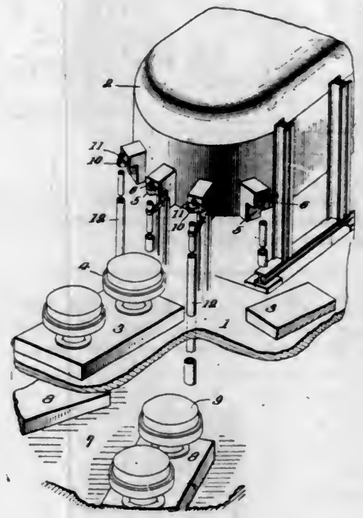
1. A telegraphic recorder comprising receiving means; marking means actuated by said receiving means; a record tape; means for advancing said record tape during the reception of signals; an ink ribbon having no normal tendency to move; and means for moving said ribbon in the direction of movement of said tape only during marking operations of said marking means.

1,764,831. STRIP-FEEDING MECHANISM. CHARLES J. FANCHER, Windsor, Vt., and ROBERT A. JOHNSON, Longmeadow, Mass., assignors, by mesne assignments, to Woodward, Hubbard Company, Hill, N. H., a Corporation of New Hampshire. Original application filed Jan. 12, 1927, Serial No. 160,639. Divided and this application filed Dec. 21, 1927. Serial No. 241,574. 19 Claims. (Cl. 271—2.5.)



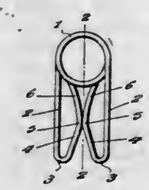
1. In a strip-feeding mechanism, clamping means for a strip, continuously operating feeding means for said strip, rotary feeding means for said strip at the leading end, continuously operating driving means for said last-named feeding means, and means to enable said last-named feeding means to be held against rotation by the strip when in the grasp of said clamping means, while said driving means continues to revolve.

1,764,832. METHOD AND APPARATUS FOR INCREASING THE PRODUCTION OF GLASS. FRANCIS C. FLINT, Washington, Pa., assignor to Hazel-Atlas Glass Co., Wheeling, W. Va., a Corporation of West Virginia. Filed Jan. 25, 1929. Serial No. 335,045. 10 Claims. (Cl. 49—5.)



2. The method of increasing the production of glassware which consists in arranging the forming machines on two different levels, the two levels being spaced a vertical distance at least greater than the height of the forming machines, and dropping glass charges vertically from a tank to the forming machines on both levels.

1,764,833. WIRE CLOTHESPIN. ARTHUR FORGET, Woonsocket, R. I., assignor of one-third to Carlton J. Aldrich and one-third to Albert Ferrier, Woonsocket, R. I. Filed May 8, 1929. Serial No. 361,333. 2 Claims. (Cl. 24—139.)

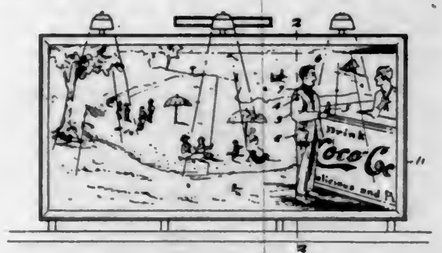


1. A clothes pin consisting of spaced arms, a spring coil connecting the arms at one end, and jaws between the arms and connected thereto at their outer ends and in contact at their inner ends with the said coil, said jaws being in the same plane and in contact intermediate their ends, and having the inner and the outer ends diverging whereby the pin may be readily applied to or removed from a line, the jaws spreading as the line passes their intermediate point of contact in each direction.

1,764,834. ADVERTISING DEVICE. ROBERT L. GATLIFF, Tampa, Fla. Filed July 5, 1929. Serial No. 376,206. 3 Claims. (Cl. 40—126.)

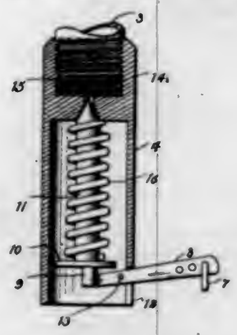
1. An advertising sign including a board portraying a background scene, a figure being included as a part of the

scene, a movable head forming a part of the figure, yielding means for holding the head normally in one position, a



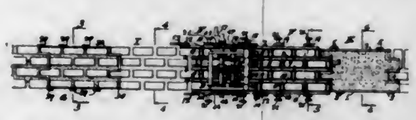
pivoted member forming a part of the figure, and motor operated means for intermittently actuating said member to engage and shift the head.

1,764,835. AUTOMATIC LIQUID FEEDER. OCTAVE BERNARD GEER, Willoughby, Ohio. Filed Feb. 5, 1927. Serial No. 166,148. 1 Claim. (Cl. 137—68.)



An automatic liquid feeder of the character specified including a valve casing having an inner partition formed with a central opening, and having a slot in a side, a valve within the casing having its upper end adapted to close the openings in the partition thereof, and having a head at its lower end, an open coil spring mounted upon the valve and confined between its head and the partition of the casing, and a lever pivoted to the casing and extending through the slot formed in the side thereof, and having its inner end engaging the head of the valve.

1,764,836. MECHANICAL BRICKLAYER DEVICE. ANNIBALE A. GUERINI, New York, N. Y. Filed Sept. 29, 1927. Serial No. 222,828. 11 Claims. (Cl. 72—129.)

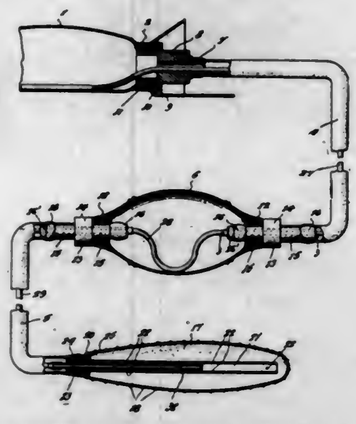


1. In a mechanical bricklayer, a pattern divided into compartments shaped to receive the bricks to be laid and suitably disposed to produce a staggered relation between the respective bricks, and means for maintaining the pattern in horizontal position on a wall and against inadvertent movement in a direction perpendicular to the face of the wall, said means comprising a plurality of supporting projections carried by the pattern and arranged to extend into the joints between previously laid courses of bricks to support the pattern in firm position directly upon an already built portion of the wall.

1,764,837. LUBRICATING COMPOUND. WALTER D. HODSON and ROY E. COLEMAN, Chicago, Ill., assignors, by mesne assignments, to The Hodson Corporation, Chicago, Ill., a Corporation of Delaware. Filed Mar. 15, 1924. Serial No. 699,445. 5 Claims. (Cl. 87—9.)

4. A lubricant having the character of an elastic gel and comprising a mineral lubricating oil, from 0.5 to 25% of a gelling metallic soap, whereby a gel structure is produced, and from 1 to 50% of finely powdered asbestos.

1,764,838. HYDRAULIC PULSATOR. NEWTON H. HORNE, Kansas City, Mo. Filed Nov. 3, 1928. Serial No. 316,962. 5 Claims. (Cl. 128—64.)

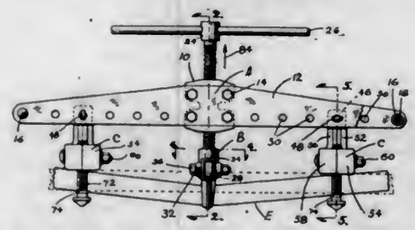


1. In a massaging device, a fluid receptacle, a pipe leading therefrom, a hollow head of elastic material at the other end of said pipe having communication with the receptacle through the pipe whereby fluid in the receptacle may flow through the pipe into the head, a bulb intermediate the length of said pipe which when compressed and allowed to expand will cause fluid in the pipe and head to pulsate with resulting expansion and contraction of the head, and a return tube for the fluid extending through the pipe and bulb with one end communicating with the head and its other end communicating with the receptacle.

1,764,839. PLASTIC COMPOSITION. WILLIAM HOSKINS, Chicago, Ill. Filed Apr. 7, 1924. Serial No. 704,860. 5 Claims. (Cl. 105—39.)

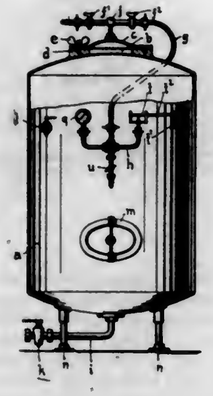
5. A self sustaining, transparent flexible sheet of non hygroscopic character comprising gelatine and 5 to 20% of sulphonated castor oil.

1,764,840. AUTOMOBILE FRAME STRAIGHTENER. HARRY J. KICHERER and R. B. NILES, Minneapolis, Minn., assignors to Marquette Manufacturing Company, St. Paul, Minn. Filed June 20, 1928. Serial No. 286,823. 8 Claims. (Cl. 153—38.)



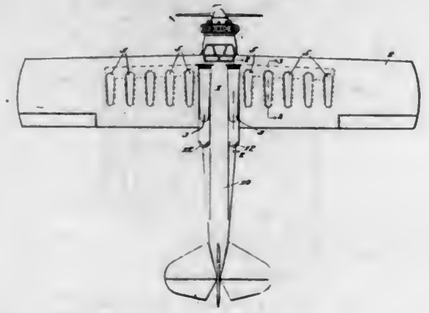
1. A device of the character disclosed comprising a main frame, an engaging head longitudinally adjustable with respect thereto and including a pressure bar, a pair of hook arm supports longitudinally adjustable on said pressure bar, hook arms slidably mounted with respect to said supports and bolt means for clamping said supports and hook arms in stationary position relative to said pressure bar.

1,764,841. FERMENTING VAT. HANS KOCK, Lubeck, Germany. Filed July 12, 1926, Serial No. 121,939, and in Germany June 19, 1925. 1 Claim. (Cl. 195—18.)



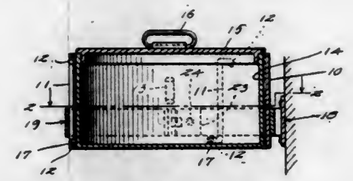
An apparatus for the manufacture of beer, comprising a vat, a flange surrounding an opening in the top of the vat, a plate secured to the flange, a pipe connected to said plate, a pipe protruding from the side of the vat, a four-branched fitting on said last-named pipe, a connection from one of the four branches to an end of the first-named pipe, a manometer and a safety valve connected respectively to two other branches, means for connecting the fourth branch to a source of compressed air, and means for connecting the other end of said first-named pipe to a source of compressed air, substantially as and for the purposes set forth.

1,764,842. AIRFOIL. CLIFFORD CLARKE JONES, Detroit, Mich. Filed Feb. 15, 1929. Serial No. 340,192. 5 Claims. (Cl. 244—12.)



1. In an airplane, in combination an airfoil, a fuselage having a turtleback, a plurality of vents communicating with the upper surfaces and arranged at a plurality of points along the span of said airfoil, a header located on said turtleback having an inlet and a commmunicating passageway connecting with said vents and an exhaust at one end of said passageway.

1,764,843. PORTABLE TOILET. IRENE E. LEDGER, Lake Geneva, Wis. Filed July 24, 1929. Serial No. 380,665. 4 Claims. (Cl. 4—137.)

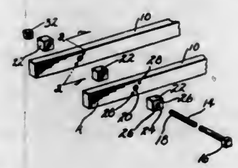


1. A portable toilet comprising a support, a receptacle telescoped therein, and means for maintaining the receptacle at different longitudinal positions within the support.

1,764,844. PROCESS FOR IMPROVING THE HEADS OF RAILWAY RAILS. JACOB LUKASCZYK, Rosenberg Oberpfalz, Germany. Filed Aug. 25, 1927, Serial No. 215,514, and in Germany Oct. 21, 1926. 1 Claim. (Cl. 148—21.)

The process of increasing the resistance of railway rails to wear, said rails having a carbon content between 0.40 and 0.45 per cent, usual in commerical rails, which process comprises, first cutting the rail to the desired length and then plunging the head of the rail while still retaining its rolling heat into cold water for a length of time varying from 1¼ minutes for the low carbon content to ¾ minute for the high carbon content so that the rail-head assumes a black appearance and that the temperature of the rail-head after removal from the water does not exceed 450° C. and does not again become red while the foot and web of the rail remain warm, whereby only the outer zone of the rail-head is given a martensite structure.

1,764,845. PAVEMENT GRID STRUCTURE. LEON R. MACKENZIE, Des Moines, Iowa. Filed Sept. 8, 1928. Serial No. 304,788. 5 Claims. (Cl. 94—39.)

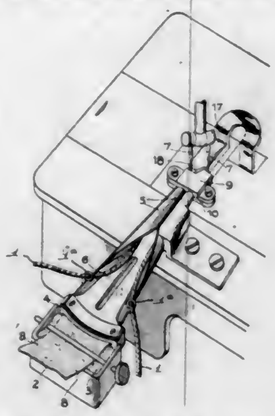


2. A pavement grid structure including a plurality of uniformly spaced cleats having flat upper and lower surfaces, means of connection for said cleats, said means of connection projecting through said cleats between the upper and lower surfaces thereof and extending transversely of the cleats, whereby the upper and lower surfaces are unobstructed, spacer elements carried by said means of connection and frictionally held relative to said cleats, said means of connection being successively arranged in different horizontal planes.

1,764,846. APPARATUS FOR PRODUCING STITCHED TRIMMING STRIPS. KARL MAIER, Stuttgart, Germany, assignor to Union Special Maschinenfabrik, G. m. b. H., Stuttgart, Germany. Filed Oct. 18, 1926, Serial No. 142,377, and in Germany Nov. 12, 1925. 7 Claims. (Cl. 112—139.)

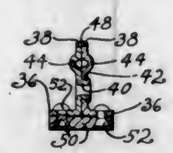
1. The combination of a folder, a guide for directing a narrow strip into said folder, said folder being shaped so as to roll in the edge portions of the narrow strip and turn the edges of the infolded portions underneath said respective infolder portions, cord guides for directing

cords into said inturned edge portions of the narrow strip, a former located at the delivery end of the folder and having a tapered passage therethrough shaped so as to press the inturned edge portions of the narrow strip



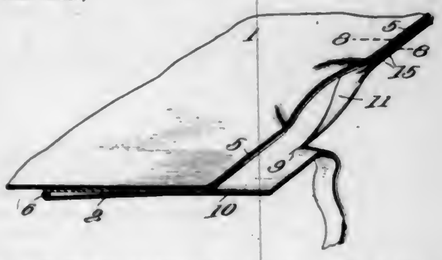
flat against the body portion of the narrow strip adjacent the cords, and stitching needles located at the delivery end of the former for stitching through the parts and securing the same together.

1,764,847. BRAKE SHOE. HOWARD E. MAYNARD, Detroit, Mich., assignor to Chrysler Corporation, Detroit, Mich., a Corporation of Delaware. Filed May 23, 1928. Serial No. 279,893. 5 Claims. (Cl. 188—250.)



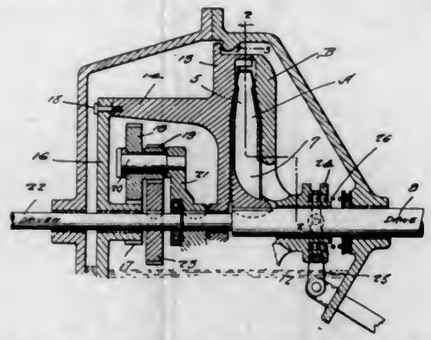
1. A brake shoe comprising a pair of angle members each having a cylindrical flange and a radial flange, tubular flanges on one of said radial flanges adapted to be received in openings in the other of said radial flanges, and a stamped out portion on each of said radial flanges forming a groove, said groove extending approximately the full length of said cylindrical flanges, one to coincide with the other when the radial flanges are secured together.

1,764,848. HEM FOR SEWED ARTICLES AND METHOD OF MAKING THE SAME. JAMES R. MOFFATT, Chicago, Ill., assignor to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 21, 1925. Serial No. 76,705. 3 Claims. (Cl. 112—268.)



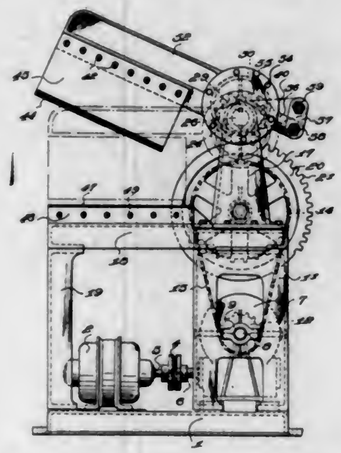
1. The method of forming a hem in a body fabric comprising folding the body fabric back upon itself to form a hem, progressively lifting the body fabric and a portion of the hem connected thereto, progressively inturning the edge of the hem portion and laying the same beneath the lifted portions, returning said lifted portions to normal position, and stitching the body fabric at the fold therein to said inturned portion of the hem.

1,764,849. TRANSMISSION. THOMAS J. O'CONNOR, Charleston, W. Va. Filed Sept. 14, 1927. Serial No. 219,464. 3 Claims. (Cl. 74—34.)



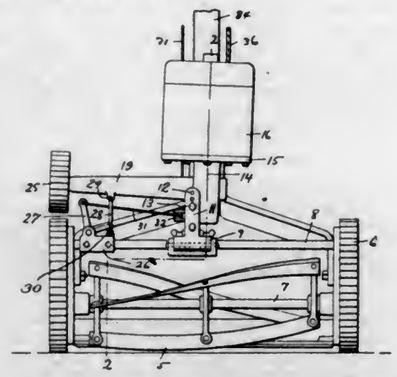
1. In a device of the character described comprising a casing with a quantity of fluid therein, a drive and driven shaft extending into the casing, an impeller fixed to the drive shaft, a drum including a gear journaled for rotation on the drive and driven shafts, a gear fixed to the driven shaft, a bracket fixed to the drive shaft, a planet pin supported on the bracket and having its axis concentric with the driven shaft, planetary gears journalled on the planet pin meshing with the first and second mentioned gears, and means slidably supported on the drive shaft and detachably engageable with the drum for locking the drive and driven shaft together thereby causing a direct drive.

1,764,850. MEAT CUTTING AND HANDLING APPARATUS. ARTHUR E. OZOUF, Chicago, Ill., assignor to The Allbright-Nell Company, Chicago, Ill. Filed Dec. 3, 1926. Serial No. 152,39'. 12 Claims. (Cl. 146—81.)



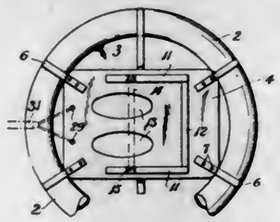
2. A meat cutting machine comprising a cutting block, a cutter support projecting over said block but spaced therefrom vertically and laterally from the longitudinal edge thereof, a cutter mounted on said support to move in planes extending in the same longitudinal direction as said block, means to intermittently actuate said cutter and means to facilitate feeding the meat beneath the cutter in a direction longitudinal of said cutter.

1,764,851. PARALLEL DRIVE ATTACHMENT FOR LAWN MOWERS. HUGO WILLIAM PALM, Pequannock, N. J. Filed Nov. 26, 1928. Serial No. 322,077. 1 Claim. (Cl. 180—19.)



A motor drive attachment for lawn mowers comprising a lawn mower clamping member, an attaching plate extending upwardly therefrom, a motor support pivotally carried by said attaching plate, a shaft housing formed on said support and extending laterally of the mower, a drive shaft mounted for rotation in the housing, a drive wheel mounted on the outer end of said shaft and disposed in position for engagement with one of the ground wheels of the mower, said support having a motor secured thereto in operative engagement with said drive shaft, a clamping member secured to the mower adjacent the free end of said shaft, a bell crank lever pivotally attached to said last named clamping member having one end coupled to the shaft housing, spring means carried by said last named clamping member engaging the bell crank lever in a manner to rock the same and raise the shaft housing for yieldably retaining the drive wheel out of driving engagement and means attached to the other end of said bell crank and extending to a remote position on the mower and adapted for actuating said bell crank whereby to move the drive wheel into operating position.

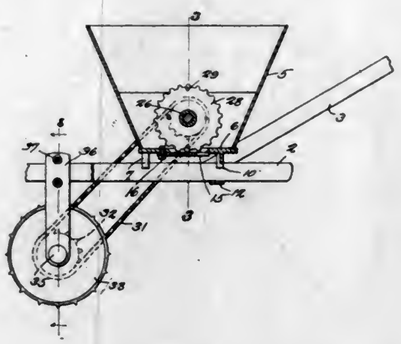
1,764,852. BOUYANT-SEAT OR LIKE DEVICE FOR AQUATIC PURPOSES. THOMAS PHILLIPS, Elsternwick, Melbourne, Victoria, Australia. Filed Oct. 17, 1928, Serial No. 313,083, and in Australia Jan. 14, 1928. 4 Claims. (Cl. 9—11.)



1. A device for the purpose indicated, comprising a rigid seat provided with one or more apertures through which the legs of an occupant may pass, and an inflatable member detachably retained to said seat so as to encompass same and to maintain the seat upon the surface of the water.

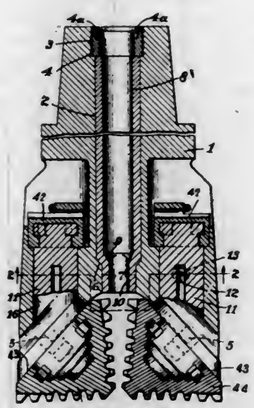
1,764,853. DISTRIBUTING ATTACHMENT FOR HARROWS AND THE LIKE. JESSE C. PRIDGEN, Norlina, N. C. Filed June 28, 1928. Serial No. 288,873. 2 Claims. (Cl. 111—79.)

1. The combination with an agricultural machine including ground engaging devices and beams extending therefrom, of an attachment including a hopper having an outlet in the bottom thereof, means depending from the bottom of the hopper for engaging the beams to support the hopper, there being recesses in said means



for the reception of one of the beams to hold the hopper against lateral displacement, means for clamping the hopper to the beams, and agitating means within the hopper.

1,764,854. DEEP-WELL-DRILLING APPARATUS. CLARENCE E. REED, Wichita, Kans., assignor to Chicago Pneumatic Tool Company, New York, N. Y., a Corporation of New Jersey. Filed Sept. 22, 1927. Serial No. 221,271. 7 Claims. (Cl. 255—71.)

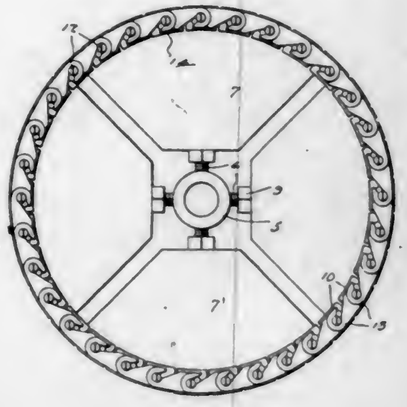


1. In combination with the bit head having a recess to receive the shank of a roller cutter unit, and provided with stepped shoulders within said recess, a roller cutter unit having a shank fitted to said recess with shoulders complementary to those of the recess, gaskets between said shoulders, an oil conduit extending across the joint between the shank and recess wall and between the gaskets, said unit having a base portion to seat against the lower end of the head, and means for holding the shank of the unit in the head, substantially as described.

1,764,855. ADJUSTABLE BELT PULLEY. ELMER R. ROUSE, Rolfe, Iowa. Filed June 7, 1928. Serial No. 283,554. 2 Claims. (Cl. 64—8.)

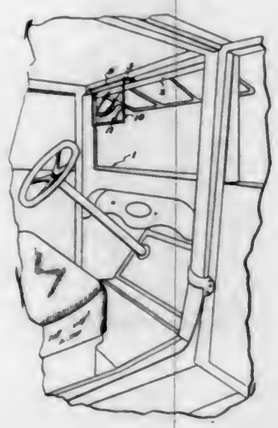
1. In an adjustable belt pulley of the character described, a hub member, an expansible web associated with

the hub, a facing for the web forming the periphery of the pulley and consisting of a plurality of detachably associ-



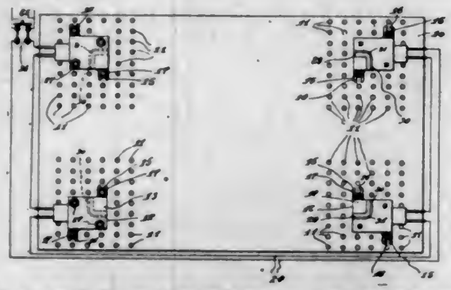
ated segments adapted to be loosely arranged upon the periphery of the expansible web after which the web is expanded for tightly securing the facing to the web.

1,764,856. AUTOMOBILE GLARE SHIELD. FOREST C. RYDER, Elgin, Oreg. Filed July 12, 1927. Serial No. 205,209. 2 Claims. (Cl. 296—97.)



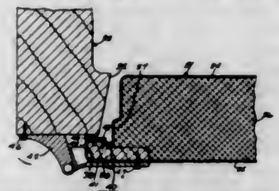
1. A glare shield including a pair of brackets comprising arms, tongues carried by the arms, a rod having its ends journaled in the arms, a bar including a pair of spaced plates adapted to confine the rod, a frame secured between the plates of the bar for supporting a glass panel, circular heads rotatably engaged upon the rod and having extensions carried thereby provided with projections for engagement between the plates of the bar, said heads having shoulders carried thereby for engagement with said tongues to limit the swinging movement of the frame in one direction, and yieldable means for maintaining the frame in adjusted positions.

1,764,857. REFRIGERATOR-GASKET MOLD. PERCY T. SEALEY, Grand Rapids, Mich., assignor to Kelvinator Corporation, Detroit, Mich., a Corporation of Michigan. Filed June 17, 1927. Serial No. 199,517. 3 Claims. (Cl. 18—55.)



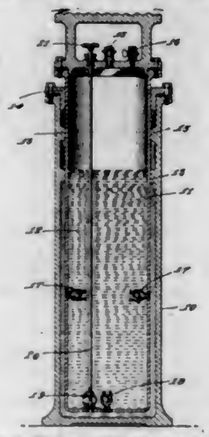
2. A mold for making refrigerator door gaskets comprising a main base plate, a plurality of relatively movable molds movably secured to said base plate, means for heating each of said molds, and means for simultaneously energizing all of said heating means.

1,764,858. REFRIGERATION. CHARLES C. SPREEN, Detroit, Mich., assignor to Kelvinator Corporation, Detroit, Mich., a Corporation of Michigan. Filed Nov. 5, 1026. Serial No. 146,386. 1 Claim. (Cl. 20—35.)



A door for refrigerator cabinets comprising a frame member formed of heat insulating material, a rib extending laterally from the front of said frame member and provided with spaced grooves, a sheet metal outer facing enclosing the front of said frame member and said rib, and a sheet metal inner facing substantially enclosing the remainder of said frame member, the edges of each of said facings projecting into the grooves in said rib.

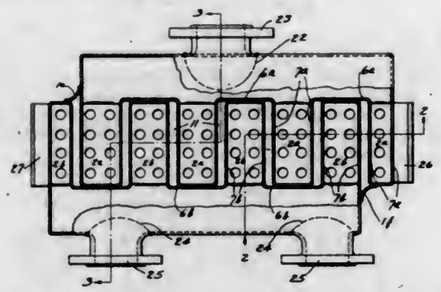
1,764,859. HYDRAULIC JACK. LOUIS C. STUKENBORG, Memphis, Tenn., assignor to Oildraulic Lift Company, Memphis, Tenn., a Corporation of Delaware. Filed July 9, 1928. Serial No. 291,340. 2 Claims. (Cl. 254—93.)



1. A hydraulic jack comprising a casing, a hollow piston arranged therein and adapted to contain oil, a valve in

the head of said piston for regulating the admission of air under pressure to the piston, check valves carried by the piston at appropriate points in its length to control communication between the piston and said casing and permit the oil to escape from the piston as the air enters the latter and thereby govern the upward movement of the piston, said last mentioned valves being located to pass beyond the upper end of the casing to permit the escape of air and thereby automatically stop the piston at a predetermined height, and a valve carried by the piston and controlling communication between the latter and the casing for the return of oil to the piston.

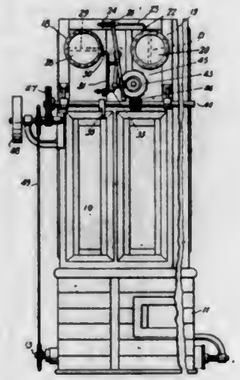
1,764,860. SUPERHEATER HEADER. OTTO V. THIELE, Ridgewood, N. J., assignor to The Superheater Company, New York, N. Y. Filed Aug. 1, 1928. Serial No. 296,703. 10 Claims. (Cl. 122—462.)



7. In a sheet-steel superheater header, the combination of a steel sheet having a portion bent to form three sides of an elongated chamber and having spaced tabs extending from the two long free edges, the tabs extending from one edge being alined with those extending from the other, and a steel strip bent to follow the edges of the tabs and the edges of the sheets between the tabs and secured to said edges.

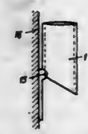
8. In a sheet-steel superheater header, the combination of two structures in accordance with claim 7, each having an elongated chamber with parallel spaced hangers extending from and communicating with it, the fingers of one being inserted between the fingers of the other and the portions of each strip at the tips of the fingers being secured to the portions of the other strip between the fingers.

1,764,861. APPARATUS FOR SEPARATING DUST OR FUME FROM AIR. JOHANNES PIETER VAN GELDER, Granville, New South Wales, Australia. Filed Nov. 15, 1926, Serial No. 148,566, and in Australia June 28, 1926. 2 Claims. (Cl. 183—57.)



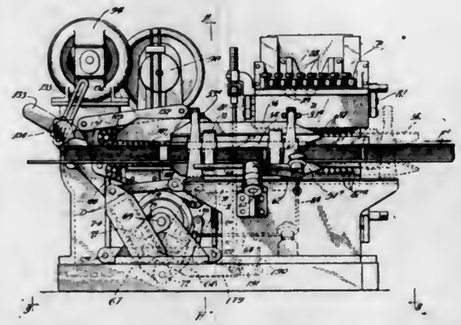
2. In a tubular filter for extracting dust from air, a casing, fabric tubes arranged in spaced relation within the casing, the casing having a dusty air inlet below the tubes, a filtered air suction connection from the space in said casing which surrounds the tubes, a valve for controlling the air suction connection, means for closing said valve periodically, a vent to atmosphere from said casing space, a valve controlling said atmosphere vent, means for repeatedly opening and closing said vent valve at short intervals while the suction valve remains closed including a shaft, a striker on said shaft, a cam, a slow gear between said shaft and said cam, an arm connected to the valve controlling the air suction connection and reciprocated by said cam to operate said valve, a tappet connected to the atmospheric valve and reciprocated by said striker to operate said atmospheric valve, and means operable by said arm for moving said tappet into register with said striker to repeatedly operate said atmospheric valve while the valve in the air suction connection is held closed and for moving said tappet out of register with said striker when the valve in said air suction connection is held open.

1,764,862. CIGAR OR CIGARETTE EXTINGUISHER. FRITZ VOGELSANG, Berlin, Germany, assignor to Sächsische Metallwaren Fabrik August Weiner Söhne, Aktiengesellschaft of Auei Sa. Saxony. Filed Dec. 7, 1926, Serial No. 153,129, and in Germany Dec. 7, 1925. 5 Claims. (Cl. 206—37.)



1. A cigar or cigarette extinguisher comprising a cylindrical sleeve having a sloped end and a base having a sloped portion, the said sleeve resting with its sloped end against a correspondingly sloped portion of the said base, the two parts being coaxial, said base having an opening controlled by the sleeve for the discharge or retention of the ashes in the base, said sloped base portion leading to said opening.

1,764,863. BOOK-SEWING MACHINE. RAYMOND E. ACKLEY, Chicago, Ill., assignor to R. R. Donnelley and Sons Company, Chicago, Ill., a Corporation of Illinois. Filed June 10, 1927. Serial No. 197,865. 14 Claims. (Cl. 112—21.)

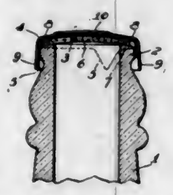


1. A book sewing machine comprising means for forming in a book holes which extend only part way therethrough to cause certain of the leaves of the book in line with certain of said holes to be imperforate, means for sewing through said holes and the portions of the leaves of the book in line with said holes, and means in timed relation to said sewing means for advancing the book as it is being sewed.

9. In a machine for sewing books and the like, a sewing head, two spaced conveyors intermittently driven at

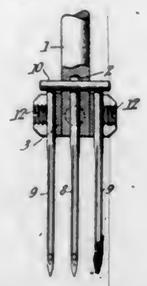
the same speeds, in timed relation to the sewing head, means for exerting pressure between said conveyors, and means for releasing the pressure between said conveyors after a predetermined number of stitches have been made by said sewing head so as to permit the insertion of another book.

1,764,864. CLOSURE SEAL. ELI FRANCK ANDERSEN, Arnold, and JOHN E. SHARP, New Kensington, Pa., assignors to Aluminum Company of America, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Aug. 3, 1927. Serial No. 210,312. 2 Claims. (Cl. 215—38.)



1. The combination with a container having an outwardly projecting annular bead at its mouth; of a closure seal comprising a cap formed of a resilient metal and integrally provided with a plurality of spaced inwardly tapering fingers yieldingly engaging said container bead and snugly conforming to it both interiorly and exteriorly, a sealing gasket seated in and secured to said cap, and a disruptable continuous metal band having at its upper end an inwardly turned flange engaging the top of said cap and having a skirt spun inwardly to engage said bead and hold said cap in sealing engagement with the top of the container, said cap upon the removal of said band forming a reclosure for said container adapted to be held thereon by said fingers.

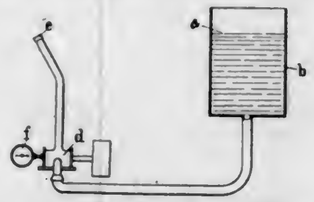
1,764,865. NEEDLE BAR FOR SEWING MACHINES. ALBERT W. BARBER, Chicago, Ill., assignor to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed May 28, 1928. Serial No. 281,101. 2 Claims. (Cl. 112—226.)



1. The combination of a needle bar having a central passage for receiving a needle, a needle supporting head carried by the needle bar and having passages for receiving needles, an abutment bar carried by the needle bar and engaging all of the needles for positioning the same, and means for securing the respective needles in position against the abutment bar.

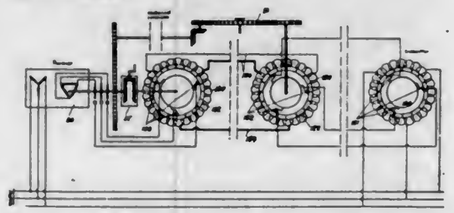
1,764,866. PRODUCTION OF SOAP THREADS. ARTHUR HERBERT CHARLTON, Brentford, England, assignor of one-half to T. B. Rowe and Company, Limited, Brentford, England. Filed Nov. 1, 1926, Serial No. 145,623, and in Great Britain Nov. 24, 1925. 1 Claim. (Cl. 87—16.)

Process of producing filaments of soap from hot liquid soap of a temperature at which soap is usually taken from the boiling pan and of materials which readily solidify upon cooling, which comprises passing such hot soap through a conduit and forcing same through a fine



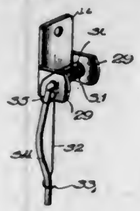
orifice into a cooling atmosphere the soap being continuously cooled by radiation during its passage through such conduit.

1,764,867. STATIC TRANSMITTER FOR POLYPHASE DISTANT CONTROL SYSTEMS. ELIE GRANAT, Paris, France, assignor of one-half to Compagnie des Forges et Acieries de la Marine et d'Homecourt, Paris, France, a Company of France. Filed Oct. 18, 1926, Serial No. 142,448, and in France Oct. 31, 1925. 3 Claims. (Cl. 172—239.)



1. In an electric distant control system comprising a transmitter fed by the mains and in which a set of three brushes rubs on a commutator in such a manner that said brushes are always connected with three equidistant points of the winding connected with said commutator, and a receiver one component of which is fed by the mains, the other component being fed at three equidistant points by intermediate of brushes in connection with the set of brushes of the transmitter: an arrangement adapted to bring a racer back in concordance with the receiver in case of accidental shifting between said racer and said receiver actuating it, this arrangement consisting in two movable sets of three brushes each, the first set being connected with the three brushes of the transmitter and actuated by the racer, the second set being connected with the three brushes of the receiver and actuated by its rotor, means to transmit the potential of the brushes of the first set to the brushes of the second one in such a manner that a shifting occurring between the potentials of these sets causes the receiver to rotate in order to correct the discordance.

1,764,868. WINDSHIELD WIPER. WILLIAM B. GRAY, Chicago, Ill. Filed Feb. 15, 1928. Serial No. 254,464. 3 Claims. (Cl. 15—253.)

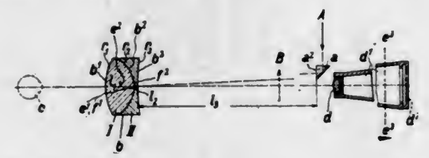


1. In combination a wind shield wiper mechanism comprising a wiper arm, said arm having a bearing sleeve, a wiper holding stem having a horizontally disposed upper end portion extending into said sleeve, and a coil spring on the exterior of said sleeve having one end extended and adapted to engage said stem to hold the wiper in contact with the wind shield, the opposite end of the spring being extended to beyond said sleeve to form a guard to prevent the unintentional removal of the stem from the sleeve.

1,764,869. PREPARATION OF ARYLAMINES. WILLIAM J. HALE, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Mar. 1, 1926. Serial No. 91,622. 16 Claims. (Cl. 260—130.5.)

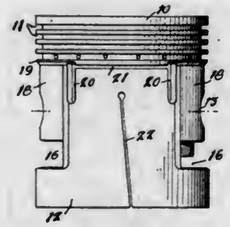
1. In a method of making an arylamine, the step which consists in reacting between the corresponding halogenated aromatic hydrocarbon and ammonia in the presence of a cuprous compound and a sub-cuprous compound.

1,764,870. APPLIANCE FOR EXAMINATION OF THE EYES. HANS HABTINGER, Jena, Germany, assignor to the Firm Carl Zeiss, Jena, Germany. Filed Feb. 28, 1929, Serial No. 343,445, and in Germany Feb. 24, 1928. 1 Claim. (Cl. 88—20.)



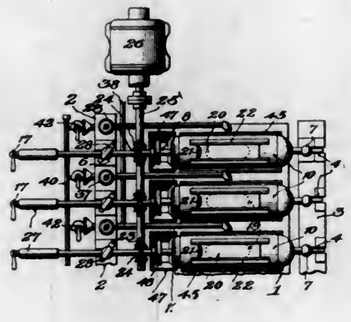
In an appliance for examination of the eyes an examination device, an apertured diaphragm, a lens adapted to conduct to the eye to be examined rays of light coming from the aperture in the diaphragm and to the examination device rays coming back from the interior of the eye to be examined, the said lens being composed of a biconcave lens and a biconvex lens, which two lenses are cemented together and of which the biconcave one is facing the diaphragm, the exterior surface of the biconvex lens projecting of the diaphragm a real reflexion image on the cemented surfaces of the joint lenses, and the interior surface of the bi-convex lens projecting of the diaphragm a virtual reflexion image on the interior of the biconvex lens, and two stops provided between the cemented surfaces, of which stops one is on the locus of the said real reflexion image and the other covers the said virtual reflexion image for the examination device.

1,764,871. PISTON. HARRY J. HATER, Cincinnati, Ohio. Filed July 9, 1928. Serial No. 291,427. 6 Claims. (Cl. 74—108.)



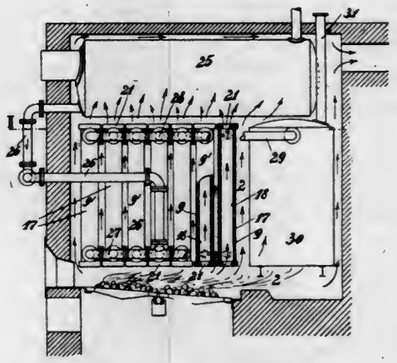
1. A piston comprising a head and a depending skirt, said skirt having a pair of piston pin openings with relieved areas therearound, a transverse opening underlying each piston pin opening and extending into said relieved area, said transverse opening being spaced a substantial distance from the bottom of the skirt to provide a substantially continuous bearing surface adjacent the lower end of the skirt, said skirt having a pair of slots extending along the edge of the relieved areas from a point immediately below the head of the piston to a point below the tops of the piston pin openings on the minor thrust side of the skirt.

1,764,872. COFFEE ROASTER. ANGELES IDONAS, Orange, and JOHN C. POTTER, West Orange, N. J. Filed Apr. 4, 1928. Serial No. 267,193. 14 Claims. (Cl. 34—5.)



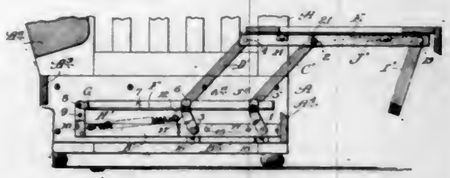
1. In combination, a base, bearing members thereon, a plurality of rotatably mounted roasting drums mounted on said bearing members, a common driving shaft for all of said drums, gearing connecting the driving shaft and drums, and means for raising said drums and thereby disconnecting the gearing.

1,764,873. APPARATUS FOR THE GENERATION OF STEAM AND HOT WATER. FRIEDRICH WILHELM CARL ALEX FELD, Barmen-Rittershausen, Germany. Filed Feb. 8, 1926, Serial No. 86,891, and in Germany Feb. 14, 1925. 2 Claims. (Cl. 122—271.)



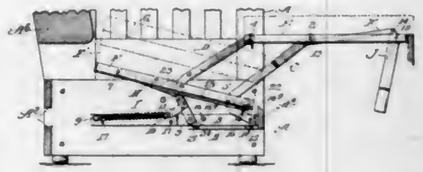
1. Apparatus for the generation of hot water and steam comprising a plurality of interconnected water tubes arranged in parallel relation, and vertically above a source of heat, each consisting of an inner and an outer tubular wall, forming between them a narrow annular water space, and caps connecting the lower ends of said walls, said caps being similar, and each having spaced inner and outer peripheral flanges, forming a channel, the sides of which are threaded to the ends of said tubular walls, said caps presenting a relatively large area to the radiant energy from said source of heat.

1,764,874. SOFA BED. CHARLES R. HULTGREN, Chicago, Ill., assignor to S. Karpen & Bros., Chicago, Ill., a Corporation of West Virginia. Filed Feb. 3, 1927. Serial No. 165,557. 7 Claims. (Cl. 5—22.)



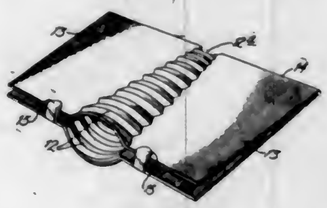
1. In a sofa-bed; a main frame; a pair of elbow levers having their short arms pivotally mounted on each end of said frame; a rear bed-section, means by which the rear section is slidably mounted on the elbow-portions of said levers; and a front bed-section pivotally mounted on the extremities of the long arms of said levers.

1,764,875. SOFA BED. CHARLES R. HULTGREN, Chicago, Ill., assignor to S. Karpen & Bros., Chicago, Ill., a Corporation of West Virginia. Filed June 6, 1927. Serial No. 196,767. 5 Claims. (Cl. 5—22.)



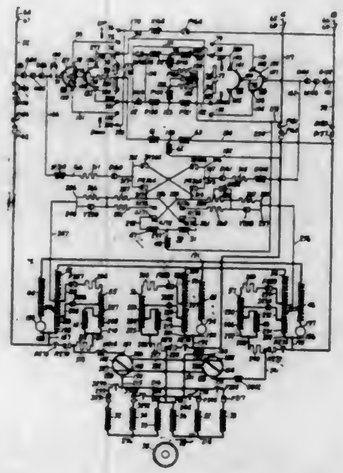
1. In a sofa-bed: a main frame; a front pair of bent levers and a rear pair of bent levers adjacent the ends of said frame each of said levers composed of a long and a short arm and having its short arm pivoted to the frame, said levers being equipped at their elbow portions with studs; a rear bed-section equipped at its ends with slots slidably engaged by said studs; and a front bed-section mounted on the extremities of the long arms of said levers the short arms of the front levers being of less length than the short arms of the rear levers, whereby said bed-sections will be disposed at an angle with relation to each other when the structure is in intermediate position between the extended and folded positions.

1,764,876. BROOM CONSTRUCTION. LEO LAUBER, Chicago, Ill. Filed Feb. 4, 1928. Serial No. 251,853. 4 Claims. (Cl. 15—175.)



1. In a broom construction, a sheet metal member bent along a median line so as to form two overlapping portions open at the upper end and having an enlarged screw threaded central portion adapted to receive a screw threaded handle, broom fibers on each side of said member, a sheath enclosing the broom fibers and member, and means for securing said parts together.

1,764,877. CONTROL SYSTEM. JACOB D. LEWIS, Yonkers, N. Y., BENJAMIN N. JONES, Glen Ridge, N. J., and ARTHUR H. SCHLAF, Yonkers, N. Y., assignors to Otis Elevator Company, Jersey City, N. J., a Corporation of New Jersey. Filed July 27, 1926. Serial No. 125,194. 31 Claims. (Cl. 172—274.)

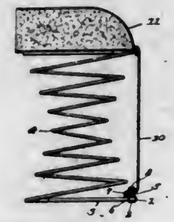


1. A control system for a polyphase alternating current motor comprising; a source of polyphase alternating current; means for causing voltage, derived from said source and consisting of the combination of two voltages of constant value, to be applied to said motor, said means comprising two inductively related polyphase windings, the phase of one of said two voltages with respect to that of the other being dependent upon the relative position of said windings; means for causing relative movement of said windings to vary the value of the derived voltage; and means for causing the derived voltage to be substantially in phase with the source voltage when it becomes substantially equal thereto whereby the motor may be directly connected to the source when the derived voltage is substantially equal to the source voltage.

2. A control system for a polyphase alternating current motor comprising; a source of polyphase alternating current for said motor; and means for controlling the voltage applied to said motor, said means comprising relatively movable inductively related windings interposed between said motor and said source, said windings being arranged so that when in certain relative positions their voltages act in opposition to cause a low value of voltage to be applied to said motor for starting and when in certain other relative positions their voltages act cumulatively to cause full operating voltage to be applied to said motor, and means for causing said windings to be in their first mentioned relative positions upon starting said motor and for causing relative movement of said windings from such positions to said other relative positions to cause a gradual increase in the value of the voltage applied to said motor to full operating voltage.

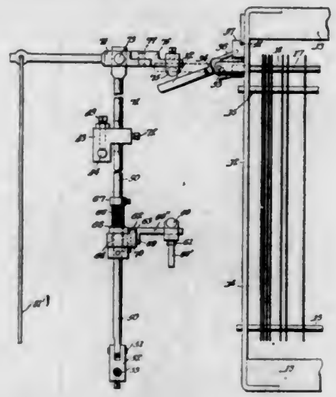
3. A control system for a polyphase alternating current motor comprising; a source of polyphase alternating current for said motor; and means for controlling the voltage applied to said motor, said means comprising relatively movable inductively related windings interposed between said motor and said source, said windings being arranged so that when in certain relative positions their voltages act in opposition to cause a low value of voltage to be applied to said motor for starting and when in certain other relative positions their voltages act cumulative to cause the voltage applied to said motor to be of a value substantially equal to that of the source, means for causing said windings to be in their first mentioned relative positions upon starting said motor and for causing relative movement of said windings from such positions to said other relative positions to cause a gradual increase in the value of the voltage applied to said motor, and means for connecting said motor directly to said source upon said applied voltage reaching a value substantially equal to that of the source.

1,764,878. WELT LOCK FOR SPRING CONSTRUCTIONS. CLARENCE V. LOVELL, Jackson, Mich., assignor to The Reynolds Spring Company, Jackson, Mich. Filed Feb. 18, 1928. Serial No. 255,415. 8 Claims. (Cl. 155—180.)



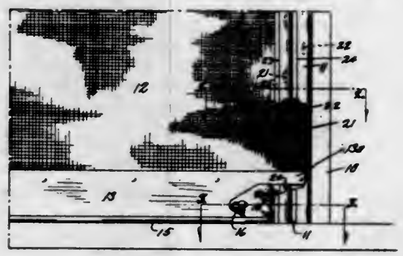
1. A welt lock including a base frame having a groove or channel opening outwardly at the front of the frame to form a pocket and provided with a restricted front entrance opening, said base frame being provided in one of the walls of the groove or panel with a plurality of separate seats, and an apron or curtain provided at its lower marginal portion with a locking welt consisting of a plurality of welt cords fitting in the said separate seats and forming a welt of greater width than thickness adapted to be introduced edgewise into the pocket and to be arranged cross-wise with relation to the entrance opening to prevent accidental removal from the pocket.

1,764,879. WARP STOP MOTION. JOSEPH G. MENZER and HARRY E. KHOURY, New Bedford, Mass., assignors to Khoury Warp Stop Motion, Inc., New Bedford, Mass., a Corporation of Massachusetts. Filed Jan. 27, 1928. Serial No. 249,960. 33 Claims. (Cl. 139—364.)



1. In a warp stop motion for looms, and in combination with the heddle frame and its shed forming heddles, a detector bar having a detecting movement in one direction in said frame, movable means carried by said frame adapted upon movement to impart a detecting movement to said bar, contact means mounted on the loom adapted to be engaged by said first mentioned means as the heddle frame moves downwardly and to actuate the latter whereby to give said bar its detecting movement, means for automatically moving said bar in the opposite direction upon disengagement of said contact means and said means on the loom frame, and means other than the upward movement of the harness frame permitting disengagement of said movable means and said contact means on the loom.

1,764,880. GUIDE TRACK FOR ROLLING WINDOW SCREENS. NELS H. NELSON, Des Moines, Iowa, assignor, by direct and mesne assignments, to Rolscreen Company, Des Moines, Iowa, a Corporation. Filed June 8, 1925. Serial No. 35,774. 4 Claims. (Cl. 156—39.)



2. A rolling window screen having a guide for its side edge and a binder for its lower edge, a vertically arranged tubular member mounted upon the end of said binder and capable of lateral movement relative thereto, said tubular member being connected with said binder by a pin and slot device and a shoulder on said binder arranged in parallel relation to said slot to prevent pivotal movement of the friction block by slidably engaging one edge thereof, said tubular member being adapted to travel in the guide.

1,764,881. WINDOW-AWNING CONSTRUCTION. NELS H. NELSON, Des Moines, Iowa. Filed June 8, 1925. Serial No. 35,775. 4 Claims. (Cl. 156—44.)



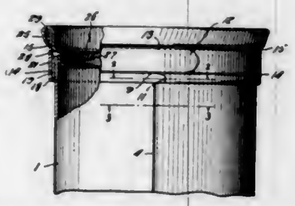
2. In a window awning structure including a frame member having a ball member on one end and a canvas fixed to said frame member and arranged to be wound and unwound; a guide structure for said frame member comprising a longitudinally channeled member in which said ball member is arranged for travel, and a member at the lower end of said channeled member formed with a laterally and upwardly directed continuation of the channel thereof to provide a socket for receiving said ball member, whereby to prevent upward sliding movement of said ball member and to permit pivotal movement of said frame member.

1,764,882. GLAZIER'S POINT. FREDERICK NEWQUIST, Essex, Iowa. Filed June 11, 1927. Serial No. 198,220. 1 Claim. (Cl. 85—15.)



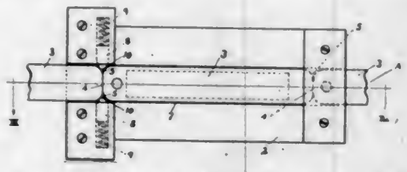
A glazier's point comprising a sheet metal member having similar pointed ends of equal length and a comparatively wide central portion, said member being bent so that the pointed ends extend in opposite directions and lie in parallel planes, the central portion forming a shoulder at right angles to the pointed ends, said glazier's point being capable of reversal for the use of either end thereof to enter a window frame and retain a pane of glass therein.

1,764,883. REPLACEABLE RECEPTACLE CLOSURE. FRANK J. O'BRIEN, Baltimore, and WILLIAM PUNTE, Fullerton, Md., assignors, by mesne assignments, to Continental Can Company, Inc., New York, N. Y., a Corporation of New York. Filed May 25, 1928. Serial No. 280,498. 2 Claims. (Cl. 220—54.)



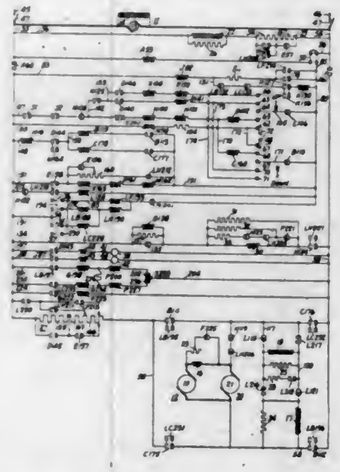
1. A receptacle comprising a body portion having a side seam extending from end to end thereof and ends secured to said body portion, said body portion having the wall thereof folded to form a triple layer reinforcing band adjacent one end thereof and score lines forming a tearing strip whereby the end may be separated from the body portion for the opening of the receptacle, the ends of the inner layer of the band being abutted and the ends of the intermediate layer of the band being abutted and staggered relative to the abutted ends of the inner layer within the limits of the side seam whereby the bonding solder applied to the side seam firmly joins the ends of said band.

1,764,884. METALLIC TAG STRIP. OSCAR M. PANNIER, Pittsburgh, Pa., assignor to Pannier Bros. Stamp Company, Inc., Pittsburgh, Pa., a Corporation of Pennsylvania. Filed July 16, 1928. Serial No. 293,046. 4 Claims. (Cl. 40—2.)



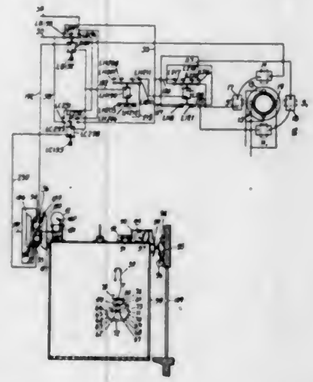
1. A metallic tag strip for use in metallic tags comprising a length of strip of a relatively soft metal provided with transverse scorings, the depth of such scoring being so regulated with respect to the thickness of the strip and tensile strength of the metal as to provide lines of weakness for ready division of the strip into separate tags by intentional action but leaving sufficient continuity of the metal of the strip to permit winding of the same upon a spool of moderate diameter without severance of the tag sections.

1,764,885. CONTROL SYSTEM FOR ELEVATORS. ANTHONY PINTO, New York, N. Y., assignor to Otis Elevator Company, Jersey City, N. J., a Corporation of New Jersey. Filed Oct. 6, 1925, Serial No. 60,769. Renewed Dec. 18, 1929. 9 Claims. (Cl. 172—152.)



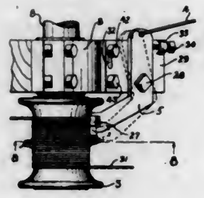
1. In combination, an elevator car, a hoisting motor therefor, a generator for supplying current to said motor, means for driving said generator, a field winding for said generator, said field winding having a plurality of portions, a source of current for said winding, means for connecting said winding to said source to cause current to flow in a certain direction through all of said portions to obtain full speed operation of the car, and means for causing said motor to bring the car to a level with a desired landing in stopping, regardless of whether the car overruns or underruns said landing, said last included means comprising means for causing the flow of current through one of said portions of said winding to be in a reversed direction to that through another of said portions.

1,764,886. CONTROL SYSTEM. ANTHONY PINTO, New York, N. Y., assignor to Otis Elevator Company, Jersey City, N. J., a Corporation of New Jersey. Original application filed Oct. 6, 1925, Serial No. 60,769. Divided and this application filed Apr. 27, 1928. Serial No. 273,290. 4 Claims. (Cl. 172—239.)



4. In combination, a motor, a variable voltage generator for supplying current to said motor, said generator having a field winding, a source of current for said winding, means for causing the motor to run at a certain speed, said means comprising means for connecting said field winding to said source, means for causing the motor to run at a slower speed, said last inclined means comprising means for reversing the connections for a portion of said winding, a resistance and means for connecting said resistance in parallel with said winding portion to decrease the excitation thereof below that of the remainder of the winding.

1,764,887. SAFETY DEVICE FOR ROTARY CATHEADS. ALFRED W. POSEY, Long Beach, Calif., assignor of one-half to James M. Queen, Los Angeles, Calif. Filed Dec. 11, 1924. Serial No. 755,354. 7 Claims. (Cl. 254—173.)

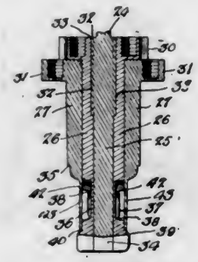


1. In an apparatus of the class described including a steam engine provided with distributing valves and a reverse lever, of a rotary shaft, a cat head mounted on said shaft, a rope coiled about said cat head, a bearing in which said shaft is adapted to rotate, sets of means connected to said bearing and engaging said rope, which means, when said rope fouls on said cat head functions to bring said reverse lever to neutral position so that said engine will without extraneous assistance function as a brake to bring said cat head to a stand still substantially within a quarter of a revolution thereof.

1,764,888. ART OF DISINFECTING SEEDS. WALTER P. RALEIGH, Ames, Iowa, assignor to Pittsburgh Plate Glass Company, a Corporation of Pennsylvania. Filed Apr. 26, 1928. Serial No. 273,162. 12 Claims. (Cl. 167—38.)

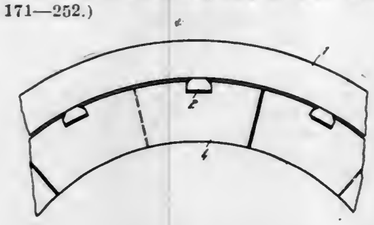
6. The herein described finely pulverized disinfectant for corn and like seeds comprising an inert carrier and an addition product of hexamethylenetetramine and a mercurial salt.

1,764,889. MOLD. HAROLD A. REDMOND, Cincinnati, Ohio, assignor to Harry J. Hater, Cincinnati, Ohio. Filed June 7, 1929. Serial No. 369,135. 14 Claims. (Cl. 22—168.)



1. A core for piston molds comprising intermediate sections, a center section arranged between the intermediate sections, means preventing transverse movement of the center section relative to the intermediate sections and allowing longitudinal movement of the center section, outer core sections and means preventing longitudinal movement of the outer sections relative to the intermediate sections.

1,764,890. MEANS FOR ATTACHING LAMINATED SHEET-METAL RINGS. WALTER REICHEL, Berlin-Lankwitz, Germany, assignor to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany, a Corporation of Germany. Filed June 25, 1928, Serial No. 288,178, and in Germany July 6, 1927. 2 Claims. (Cl. 171—252.)



1. In combination an annular carrier element, a laminated ring element disposed within said carrier element and being radially spaced a suitable distance from the inner periphery of said carrier element, and a plurality of keys fixed to one of said elements, the other element having a correspondingly disposed number of slots dimensioned with relation to said keys to fix said ring element with respect to said carrier element in circumferential direction, each of said slots having a greater depth than required to accommodate a key, whereby said ring is permitted to freely expand in radial direction.

1,764,891. DRAPERY SUPPORT. DICKRAN M. SARKISIAN, Forest Hills, N. Y. Filed Nov. 4, 1927. Serial No. 231,088. 3 Claims. (Cl. 156—20.)



1. In a drapery supporting device, a track member having two laterally separated runways, a pair of rollers arranged to travel along the runways, a common axle for the rollers, and a drapery suspending member attached to the axle member and extending downwardly between said runways, said runways being convexly and concavely curved in cross section and the rollers being concavely and convexly curved to conform to the runway surfaces and substantially fill the track section.

1,764,892. MACHINE FOR CLEANING, IMPROVING, AND SOFTENING WOOL AND OTHER TEXTILE MATERIALS. FERMIN ROCAMORA, Sabadell, Spain. Filed Feb. 1, 1929, Serial No. 336,762, and in Spain Nov. 20, 1928. 4 Claims. (Cl. 19—65.)



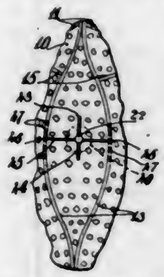
1. A machine to soften carded and combed textile fibres and to separate from them the defective fibres and impurities, having in combination a series of rulers to impart shaking movement to the fibres, said rulers being supported by arms, means for rapidly oscillating said arms, and a series of guiding and feeding rollers for presenting said fibres to the action of the rulers which beat and shake them repeatedly.

1,764,893. ENGINE STARTER. WERNER F. ROTHERMUND, Keyport, N. J. Filed Apr. 26, 1926. Serial No. 104,685. 13 Claims. (Cl. 123—179.)



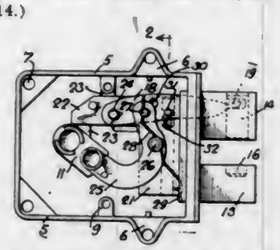
1. In a starter, the combination of a flywheel, a means to operate the flywheel to high speed, a friction drive connectible to said flywheel and adapted to transmit a progressively increasing torque to a means to be started, and means by which the rate of progression may be varied at will.

1,764,894. HIP-REDUCING GARMENT. JOHN T. RUDZINSKI, New York, N. Y. Filed Sept. 19, 1928. Serial No. 306,818. 2 Claims. (Cl. 2—26.)



1. In a garment of the class described, front material formed with a vertical slot, a navel engager having a headed end passing through the vertical slot, a thin wire passing through the headed end, a vertical row of eye fasteners attached on the material of the garment on each side of the vertical slot, hooks secured to the free ends of the thin wire engageable in the vertical rows of eye fasteners for the navel engager in adjusted positions.

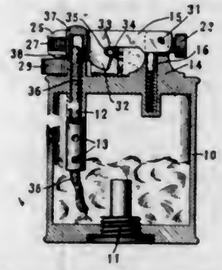
1,764,895. LOCK. SAMUEL SEGAL, New York, N. Y. Filed Aug. 9, 1927. Serial No. 211,647. 12 Claims. (Cl. 70—14.)



1. A lock, including a bolt formed with a slit, an arm movably mounted by said bolt and riding within said slit, a second bolt movably carried by said first-named bolt and connected with said arm, means connected with said arm to move the same and to also project and retract said first-named bolt, and means carried by said first-named bolt and connected with said arm to be moved thereby, said means cooperating with said casing to prevent a forcible retraction of said first-named bolt.

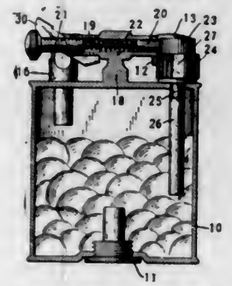
1,764,896. LIGHTER. SAMUEL SEGAL, New York, N. Y., assignor to Segal Automatic Tweezer Corporation, New York, N. Y., a Corporation of New York. Filed Sept. 27, 1927. Serial No. 222,281. 13 Claims. (Cl. 67—7.1.)

2. A lighter including an axially movable barrel, spark-producing means mounted on said barrel, a nozzle adjacent the said spark-producing means, a cover therefor, a latch mechanism connecting said cover with said barrel to normally retain the former in applied position and



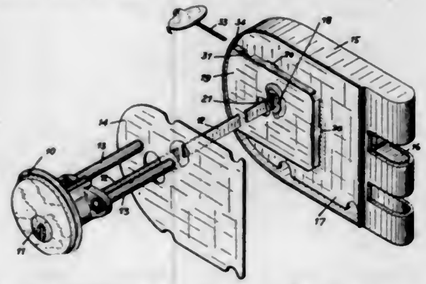
means carried by said barrel and extending to one side of the same and tending to prevent a shifting of said barrel and an actuation of said latch mechanism.

1,764,897. LIGHTER. SAMUEL SEGAL, New York, N. Y., assignor to Segal Automatic Tweezer Corporation, New York, N. Y., a Corporation of New York. Filed Mar. 5, 1928. Serial No. 259,020. 5 Claims. (Cl. 67—7.1.)



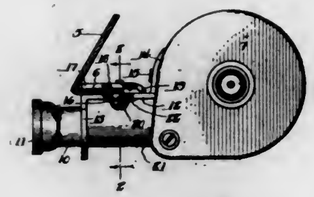
5. A device of the character described including a case, a wick tube extending from said case, means for directing sparks towards said wick tube, a snuffer cap cooperating with said tube a lever pivotally supported by said case and mounting said cap, a second lever also pivotally supported by said case and having one of its ends extending beyond said first named lever, its opposite end being contactible with said first named lever to elevate the latter and said cap, and said second lever being movable with respect to said first named lever.

1,764,898. LOCK. SAMUEL SEGAL, New York, N. Y., assignor to Segal Lock & Hardware Co., Inc., New York, N. Y., a Corporation of New York. Filed July 7, 1928. Serial No. 291,069. 12 Claims. (Cl. 70—14.)



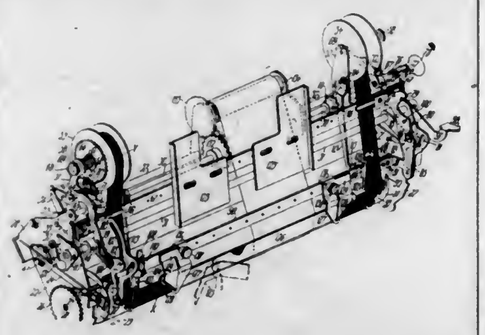
1. In combination a bolt, means for moving the same, a key mechanism, a connecting element between said mechanism and said bolt-moving means, means operating automatically and associated with said bolt-moving means to render the latter in accessible upon said connecting element being detached therefrom and means for preventing a subsequent operation of said last named means.

1,764,899. MOUNTING FOR CIGAR LIGHTERS. JOHN SINKO, Chicago, Ill. Filed Nov. 1, 1926. Serial No. 145,645. 2 Claims. (Cl. 224—29.)



1. The combination with the casing of a cigar lighter, of an angle bracket comprising a horizontal plate adapted to underlie the flange of an instrument board, an apertured vertical plate depending from the front end of said horizontal plate forming a holder for the socket member of the cigar lighter, and a tongue extending from the rear end of said horizontal plate secured to a wall of said casing, a co-operating clamp plate adapted to overlie said flange, and at its rear end bear on the horizontal limb of said bracket, and clamp screws passed through said horizontal bracket limb and screwing into tapped holes in said co-operating clamp plate.

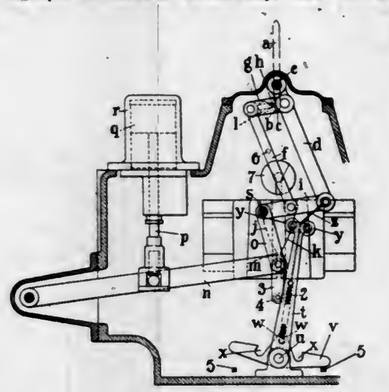
1,764,900. TYPEWRITING MACHINE. JESSE A. B. SMITH, Stamford, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Filed Mar. 24, 1927. Serial No. 177,884. 39 Claims. (Cl. 197—153.)



1. In a front-strike typewriting machine, the combination with a carriage having a platen, a ribbon-spool, and an angle guide over which the ribbon folds to travel along the platen, of means for enabling the tightening of the worn edge-portion of the ribbon where it extends along the platen, including means on the carriage for affording adjustment of the angle guide to tension the worn edge of the ribbon to keep the ribbon in a flat condition, while maintaining said ribbon in an unchanged operative position at the front of the platen.

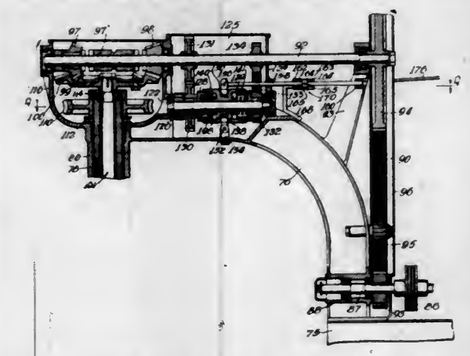
1,764,901. TRIMMING MECHANISM FOR GRINDING WHEELS. JOHN WILDSMITH SNARRY, Birmingham, England, assignor to The Gear Grinding Company Limited, Birmingham, England. Filed Oct. 14, 1929, Serial No. 399,675, and in Great Britain Dec. 15, 1928. 2 Claims. (Cl. 125—11.)

1. In trimming mechanisms for formed grinding wheels used in grinding gear wheels, spline shafts and the like, the combination of a single pantagraph mechanism, a trimming tool carried at a suitable position on the mechanism, a pair of templets the operative parts of which engage the pantagraph mechanism alternately, and means for



moving the said mechanism past its central position out of engagement with one templet into engagement with the other, substantially as described.

1,764,902. TRACTION VEHICLE. LAWRENCE Y. SPEAR and CECIL P. CAULKINS, New London, Conn., assignors to General Ordnance Corporation, New York, N. Y., a Corporation of New York. Filed Aug. 2, 1926. Serial No. 126,518. 3 Claims. (Cl. 180—79.4.)

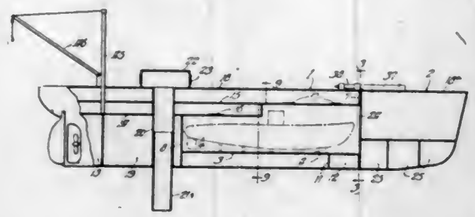


1. In combination, a main frame having a bearing head, a wheel frame having a hollow spindle rotatably mounted in said bearing head, a wheel associated with said wheel frame, a worm gear fixed upon said wheel frame, a steering shaft provided with a worm meshing with said worm gear, a drive shaft, a normally idle driven shaft, a pair of driving members on said driven shaft, drive means between the drive shaft and said driving members for driving said members in opposite directions, a sprocket chain connecting said driven shaft to said steering shaft, means for fixing either of said members upon said driven shaft to rotate the steering shaft accordingly, a second driven shaft projecting through said spindle, a bevel gear on each end of said second driven shaft, a gear fixed to said wheel meshing with one of said bevel gears, a driving gear mounted on said drive shaft, meshing with the other of said bevel gears, and control means for fixing said driving gear upon said drive shaft to rotate said wheel.

1,764,903. COMBINED TESTING DOCK AND SALVAGE VESSEL. LAWRENCE Y. SPEAR, New London, Conn., assignor to Electric Boat Company, Groton, Conn., a Corporation of New Jersey. Filed Feb. 20, 1928. Serial No. 255,686. 4 Claims. (Cl. 114—0.5.)

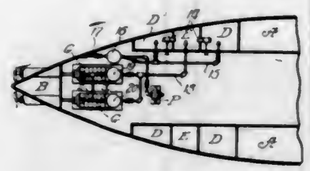
2. In a combined testing dock and salvage ship, a main hull section having an air and water tight compartment

opening through the forward end thereof and adapted for reception of a submarine boat to be tested, the forward portion of said compartment being of increased height, said hull section having a deck in the plane of the top of the aft portion of the compartment and a second deck



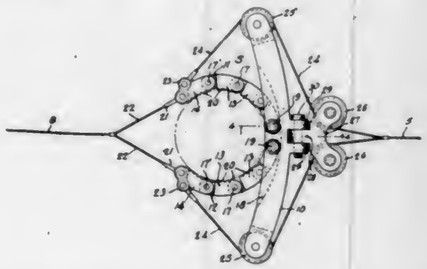
in the plane of the top of the forward portion of the compartment, a bow hull section, and means for detachably securing said sections together and effecting a fluid tight closure of the forward end of the boat receiving compartment.

1,764,904. COMPENSATING SYSTEM. LAWRENCE Y. SPEAR, New London, Conn., assignor to Electric Boat Company, Groton, Conn., a Corporation of New Jersey. Filed Sept. 4, 1928. Serial No. 303,814. 9 Claims. (Cl. 114—16.)



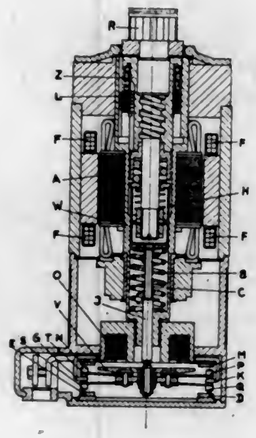
1. In compensating means for submarine boats, storage tanks for fuel lighter than but not miscible with water, fuel service tanks, means for supplying fuel to said service tanks from the storage tanks, and means for supplying to the storage tanks water equal in weight to the weight of the fuel withdrawn from said storage tanks.

1,764,905. STUMP PULLER. ERNEST R. STANDFUSS, Milwaukee, Wis., assignor to Harnischfeger Corporation, Milwaukee, Wis., a Corporation of Wisconsin. Filed Apr. 5, 1928. Serial No. 267,540. 17 Claims. (Cl. 254—135.)



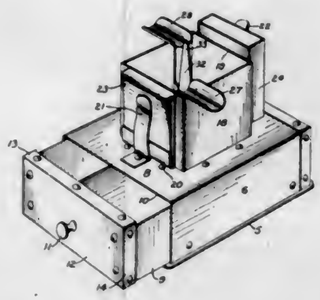
1. An apparatus for pulling stumps including a frame, a pair of grippers connected to the frame, a drag line connected to the grippers and adapted to contract the grippers when tensioned and a hoist line associated with the frame and with the grippers and adapted to spread the grippers when tensioned.

1,764,906. ELECTRIC STARTER FOR INTERNAL-COMBUSTION ENGINES. GOTTLIEB STEINER, Solothurn, Switzerland, assignor to Scintilla A. G., Solothurn, Switzerland. Filed Dec. 22, 1928, Serial No. 327,954, and in Germany Mar. 15, 1928. 3 Claims. (Cl. 290—38.)



1. An electric starting device for internal combustion engines including an electric motor, a ring of teeth on the engine flywheel, a pinion on its shaft engaging therewith by axial translation and simultaneous slight rotation, a current reversing switch and means, operated by arresting the axial translation of said pinion, for changing over the said current reversing switch.

1,764,907. ASH TRAY. HARRY ABRAHAM STERN, New York, N. Y. Filed Jan. 13, 1928. Serial No. 246,464. 9 Claims. (Cl. 131—51.)

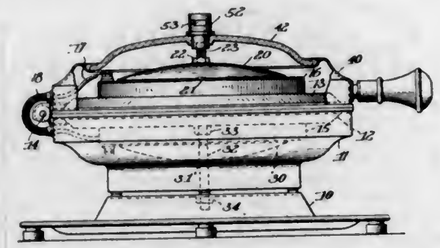


1. An ash receiver comprising a receptacle having an opening in its top, a superposed body positioned over said opening and communicating therewith, means for removing the contents of said receptacle, a plate positioned within the superposed body, said plate having a blade like projection for flicking or scraping the ash from a cigar, cigarette or pipe.

1,764,908. WAFFLE IRON. HERMAN M. ALFRED STRAUSS, Rochester, N. Y., assignor to Robeson-Rochester Corporation, Rochester, N. Y., a Corporation of New York. Filed July 18, 1929. Serial No. 379,292. 7 Claims. (Cl. 53—10.)

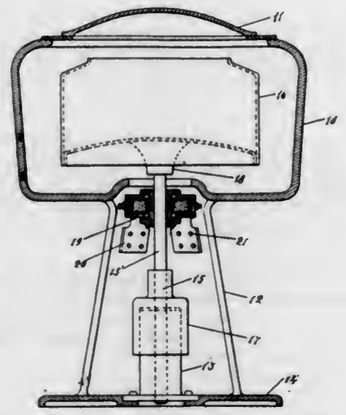
1. The combination with a waffle iron having a housing, of an indicator casing projecting above the top of said

housing, an indicator within said casing having a target portion, a thermostatic element for moving said indicator to bring said target portion into predetermined position within said casing when the waffle iron is heated to a



predetermined temperature, and sight openings on opposite sides of said casing so that said target when in said predetermined position may be observed from opposite sides of said waffle iron.

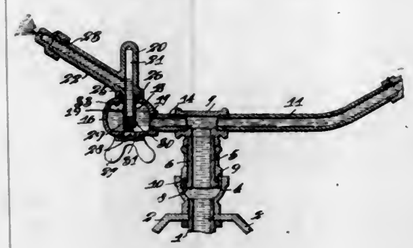
1,764,909. CENTRIFUGAL DRIER. CHARLES W. TERWILLIGER, Brooklyn, N. Y. Filed Nov. 28, 1927. Serial No. 236,253. 7 Claims. (Cl. 210—71.)



1. In a machine of the character specified, the combination, with a bowl, a stand therefor, a normally vertical shaft, a basket within said bowl carried by said shaft, and a bearing for the lower end of said shaft, of a frame surrounding the upper part of said shaft, a bushing for said shaft inserted through said frame, said bushing being provided with a peripheral groove, an opening through said frame allowing lateral displacement of said shaft and bushing, and resilient means carried by said frame, and bearing against said bushing, said resilient means interlocking with said groove and being guided to move radially of the normal axis of rotation of said shaft.

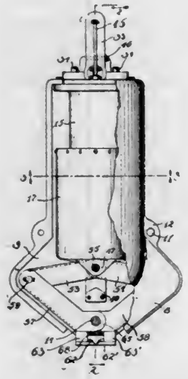
1,764,910. SPRINKLER. WILLIAM CHARLES TODD, Victoria, British Columbia, Canada, assignor to Economy Irrigation Company, Inc., Seattle, Wash., a Corporation of Washington. Filed Feb. 16, 1929. Serial No. 340,507. 10 Claims. (Cl. 299—69.)

1. In sprinklers wherein is provided a stand pipe, a rotatable coupling mounted on the stand pipe, an arm secured to said coupling and having a reaction nozzle to impart rotation to the coupling; a control arm unit comprising a second arm secured to said coupling, a hollow balancing body having an inlet eccentric to the axis of said body and having an axial bore through the same, said balancing body being mounted on said second arm, a control nozzle comprising a chambered head, a hollow nozzle duct extending laterally from said head below the chamber thereof and a hollow stem projecting from said head into said balancing body, means passing into said



balancing body and secured to said stem for holding the same in place, means to effect air and water-tight joints between said hollow body and said stem and between said hollow body and said securing means, said hollow stem having a water inlet, substantially as shown and described.

1,764,911. PNEUMATIC STRAP SEALER. SIDNEY W. TREAT, Chicago, Ill., assignor, by mesne assignments, to Signode Steel Strapping Company, a Corporation of Illinois. Filed May 10, 1926. Serial No. 107,917. 8 Claims. (Cl. 81—9.1.)

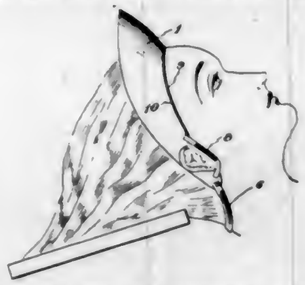


1. In a device of the class described, the combination of a piston, a reciprocable cylinder, reciprocable valve means for alternately admitting air to said cylinder on opposite sides of said piston, jaws adapted to form seals on metallic strappings operatively connected to said cylinder, and a casing completely surrounding said cylinder, fixed relative to said piston, and forming a pivotal support for said jaws.

1,764,912. SHIELD. BESSIE CASTER-UDELL, Dodge City, Kans., assignor of one-tenth to Naomi Schnur Olive, Dodge City, Kans. Filed June 28, 1929. Serial No. 374,495. 2 Claims. (Cl. 2—174.)

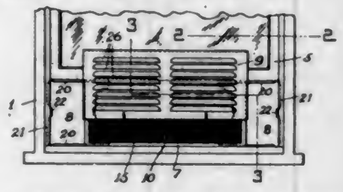
1. A shield comprising a sheet of pliable waterproof material of a length to extend across a person's forehead with its end portions extending along sides of the face below the ears, said sheet having its ends formed with ear-

receiving recesses in its inner edge, elastic strips bridging the outer ends of said recesses and adapted to extend in front of the ears, and means to secure said sheet with the



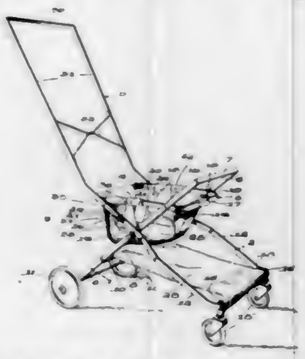
inner edge of the sheet contacting with a person's head and the body of the sheet extending upwardly at a rearward incline over the hair.

1,764,913. WINDOW VENTILATOR AND SCREEN. EUGENE S. VANDE MARK, Springmont, Pa., assignor to Reading Sheet Metal Products Co., Reading, Pa., a Corporation of Pennsylvania. Filed Aug. 1, 1927. Serial No. 209,688. 4 Claims. (Cl. 98—99.)



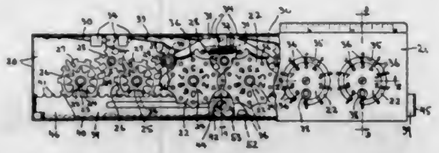
1. A combination window ventilator and screen comprising a frame carrying wire mesh, adjustable extensions for the ends of the frame, slidable laterally towards and away from each other, and a louver panel adjustably mounted on the screen frame and slidable upwardly and downwardly thereon.

1,764,914. BABY WALKER AND STROLLER. EUGENE S. VANDE MARK, Springmont, Pa., assignor to Reading Sheet Metal Products Co., Reading, Pa., a Corporation of Pennsylvania. Filed Oct. 3, 1927. Serial No. 223,556. 1 Claim. (Cl. 280—41.)



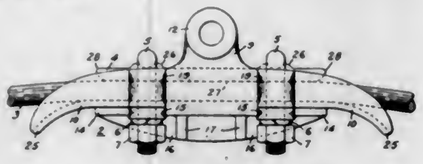
In combination with a foldable supporting frame carrying a foldable seat-supporting ring; a fabric saddle seat of substantially cross-shaped outline having the ends of its separated extensions removably secured respectively to opposite sides and the front and rear of said ring, with space between said front and side connections forming leg openings, and a fabric foot supporting apron detachably secured to the forward lower portion of said frame.

1,764,915. CALCULATING APPARATUS. ANDERS E. VETHE, Chicago, Ill. Filed Sept. 10, 1928. Serial No. 304,921. 6 Claims. (Cl. 235—74.)



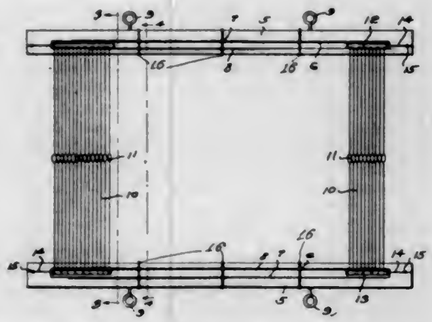
6. A calculating mechanism comprising in combination two indicating discs rotatably mounted in spaced relation to each other, intermediate driving means for driving the indicating disc at the left by power from the indicating disc at the right, resetting gears carried by said indicating discs respectively, and a resetting bar slidably mounted in position adjacent to said gears and provided with a plurality of sets of teeth for engaging the gears, the distance from the operative face of the leading tooth adapted to engage one gear to the operative face of the leading tooth adapted to engage the other gear being made to differ from the distance between centers of the indicating discs by approximately one-half of the distance between the operative faces of teeth of the same set.

1,764,916. CONDUCTOR CLAMP. NILS A. WAHLBERG, Derry, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Sept. 13, 1928. Serial No. 305,732. 13 Claims. (Cl. 24—135.)



1. A clamp comprising a multi-part conductor-receiving structure for position at one side of the conductor and common means including an element extending through a plurality of said parts for holding the same together and clamping the conductor relative thereto.

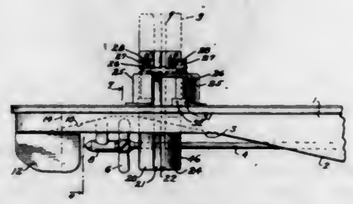
1,764,917. HARNESS SHAFT FOR LOOMS. WILLIAM E. WALL, Lancaster, S. C. Filed Aug. 21, 1929. Serial No. 387,424. 1 Claim. (Cl. 139—91.)



A harness for looms comprising separate upper and lower harness shafts, each shaft embodying a pair of spaced wooden shaft sections rigidly connected at their ends only for providing a relatively wide continuous slot between the same, fibrous heddles having their ends secured together and formed into ribs, the heddles forming

an endless structure, the sides of the endless structure engaging the opposite sides of the inner shaft sections and the ends of the endless structure passing through the slots with the ribs arranged within the slots, the endless structure and ribs being free from clamping engagement with the shaft sections so that the heddles are capable of partaking of limited movements upon the inner shaft sections in a direction longitudinally of the heddles due to the slight rolling action of the endless structure upon the inner shafts, and cords attached to the ends of the ribs and secured to the inner shaft sections to limit the relative movement of the heddles, and metal actuating elements secured to the outer sides of the outer shaft sections and thereby being free from engagement with the fibrous heddles.

1,764,918. FLANKING-VANE FOR SHIPS. CHARLES E. WARD, Charleston, W. Va. Filed Dec. 30, 1929. Serial No. 417,500. 18 Claims. (Cl. 115—34.)



7. Auxiliary flanking means for vessels provided with a propeller and a rudder, said means comprising a curved vane retractable into the hull of the vessel.

1,764,919. TONGS. DANIEL J. WEEDEN, East Greenwich, R. I. Filed Aug. 10, 1927. Serial No. 212,044. 1 Claim. (Cl. 55—148.)



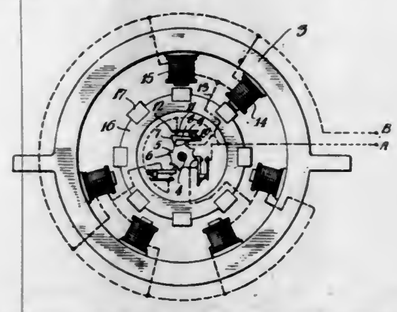
In an implement of the class described, the combination of a substantially rectilinear member including a handle portion and a jaw which has a substantially plane sharp pointed gripping surface and has its remaining surface converging to the sharp point at the end of said gripping surface, a movable jaw having its free end formed substantially the same as that of the first mentioned jaw and having an arm extending substantially at right angles from its plane surface and being pivotally connected to the said rectilinear member, a lever pivoted to said rectilinear member, a link connecting said arm to said lever and being operable by the latter for closing the jaws with respect to one another, and spring means to hold the jaws normally open with the respect to one another.

1,764,920. WELT-LOCK FRAME. ABRAM C. WISNER, Jackson, Mich., assignor to Reynolds Spring Company, Jackson, Mich. Filed Mar. 3, 1928. Serial No. 258,903. 5 Claims. (Cl. 155—180.)



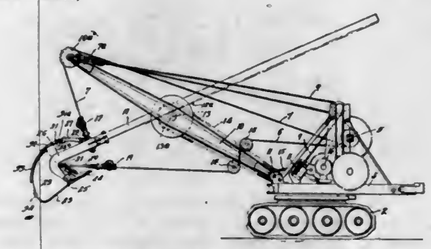
1. A welt lock base frame provided with an outwardly opening groove or channel forming a pocket having a bottom wall provided with an intermediate shoulder forming a stop seat to be engaged by one edge of a lock welt, a top wall connected at the back with the bottom wall, and a front wall depending from the top wall to be engaged by the opposite edge of the lock welt and spaced from the bottom wall to provide a constricted entrance opening adapted to permit a lock welt of greater width than thickness to be introduced edgewise through the entrance opening, the top and bottom walls of the pocket being of greater width than the lock welt to provide an extension in rear of the welt to facilitate removal of the latter from the pocket.

1,764,921. ELECTRIC MOTOR. ARTHUR WIEDNER, Port Lavaca, Tex. Filed Nov. 16, 1928. Serial No. 319,754. 1 Claim. (Cl. 172—36.)



An electric motor of the impulse type comprising a casing, a shaft journaled therein, a disc on said shaft rotating therewith, a plurality of projections formed on the periphery of said disc, levers having hooked ends adapted to engage said projections intermittently during the rotation of said shaft, for raising said levers, supports to which said levers are pivotally connected and springs attached to said supports and levers for holding the hooked ends thereof normally in engagement with said disc, sets of stationary bars to which said supports are attached, a contact on the bar of each set, electrically connected to one pole of a source of current, sets of electromagnets, one of said levers connected to the solenoids of two of said sets of said electromagnets, connections between said solenoids and the other pole of said source of current, a plurality of magnetic bars mounted on the armature of the motor and embedded in the periphery thereof for intermittently closing electrical circuits through said electromagnets to energize the same for attracting the bars, and rotating the armature, said disc during its rotation interrupting said circuit for allowing another set of electromagnets to attract another set of bars for continuing the rotation of the armature.

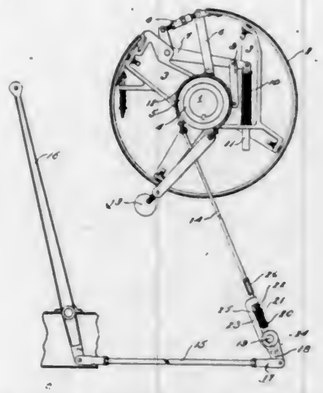
1,764,922. BACK-DIGGING EXCAVATOR. EMERY J. WILSON, Cleveland, Ohio, assignor to The Thew Shovel Company, Lorain, Ohio, a Corporation of Ohio. Filed Apr. 21, 1927. Serial No. 185,569. 10 Claims. (Cl. 214—137.)



1. An excavator provided with a swinging boom, a dipper stick mounted thereon, a dipper mounted to swing

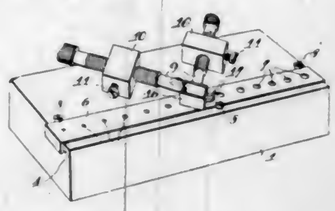
on said stick and balanced to normally tend when loaded to swing toward a load maintaining position, a drag line operatively connected to said dipper in a position to dump said dipper when loaded, and holding means between said stick and said dipper for resisting the drag line pull to maintain the dipper in a plurality of digging positions on the dipper stick.

1,764,923. FRICTION-CONTROL MECHANISM. EMERY J. WILSON, Cleveland, Ohio, assignor to The Thew Shovel Company, Lorain, Ohio, a Corporation of Ohio. Filed Nov. 18, 1926. Serial No. 149,146. 1 Claim. (Cl. 192—36.)



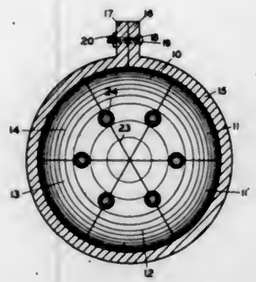
Friction clutch mechanism of the class described, comprising a movable main clutch member, a pair of booster brake members associated therewith for control of the same, and means for controlling the engagement of said brake members and including an operator-operated member arranged for movement between clutch-released and predetermined clutch-engaged positions and having connection with one of said brake members, said connection including a crank lever, a pull rod, and means associating said rod with the crank of said lever, said parts being so arranged that as said operator-operated member is moved to clutch-engaged position, said crank is caused to move to dead center position relative to said rod, and a pair of springs of differing strengths arranged in series relation and arranged to be effective in yielding relation between said rod and said crank, whereby as the parts are moved to clutch-engaged position said springs yield in sequence, and the weaker spring determines the clutch-engaging characteristic and the stronger spring determines the maximum braking friction.

1,764,924. APPARATUS FOR PERFORATING JEWELRY ELEMENTS. ROBERT ANDERSON, New York, N. Y. Filed Oct. 6, 1928. Serial No. 310,744. 8 Claims. (Cl. 164—86.)



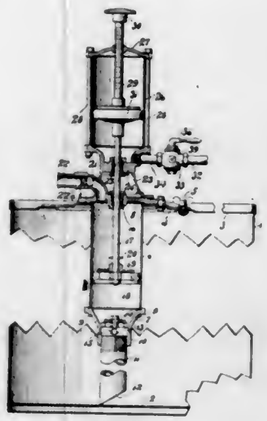
1. In apparatus of the class described, the combination with a punch press having a punch, of a die block, means rigidly to locate said block with respect to said press, a die plate having a plurality of apertures adjustably mounted on said block whereby any aperture may be located beneath the punch of said press, means to secure said plate in position on said block, and a pair of positioning members mounted on said block in cooperative relation to said die plate for the purposes specified and means for independently adjusting said positioning members with respect to one another and to said die plate.

1,764,925. SUN'S RAYS MAGNIFYING LENS. WILL W. BEACH, Los Angeles, Calif. Filed June 2, 1928. Serial No. 282,313. 1 Claim. (Cl. 88—57.)



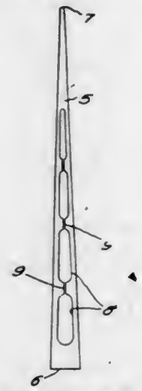
As a new article of manufacture a split resilient ring, a plurality of sector-shaped equal sized interchangeable magnifying lenses whose arcuate edges contact flush against the ring and whose opposing lateral edges interengage in abutting relation with the next adjoining lenses whereby a unitary cylindrical lens is provided, a plurality of transparent balls fitting the coinciding edges of the lenses and each extending partially into one and partially into the other of the mated abutting lenses, said balls, holding the lenses against relative compressive movement, said lenses and said balls being cemented with a vitreous material onto their contacting surfaces, and means for drawing said ring in binding relation around all of said lenses.

1,764,926. PNEUMATIC GREASE PUMP. THOMAS B. BENNETT, Muskegon, Mich., assignor to Bennett Pumps Corporation, Muskegon, Mich., a Corporation of Michigan. Filed Mar. 15, 1926. Serial No. 94,674. 2 Claims. (Cl. 221—103.)



1. In a construction of the class described, a container for grease having an upper end with an opening therein, a grease pump adapted to be inserted through said opening in the end of the container and located in said container, comprising a grease pump cylinder, a lower cylinder head with an inlet valve and means communicating with said inlet valve and extending near the bottom of the container, a piston in the grease pump cylinder, a passage through said piston, a check valve in said passage an upper cylinder head having a grease outlet above the head of the container, a plate connected with said upper cylinder head covering said opening in the end of the container and supporting the structure, a piston rod attached to said piston and extending through said upper piston head and pneumatic means located above the upper piston head and connected with said piston rod for reciprocating said rod and piston.

1,764,927. HOLLOW-METAL PROPELLER. BENOT EMIL BERG, Charlotte, N. C. Filed July 21, 1928. Serial No. 294,443. 1 Claim. (Cl. 170—159.)

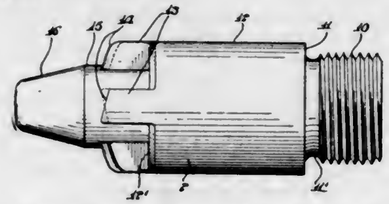


In a hollow metal propeller, a shell comprising front and rear plates, one of said plates being flat, the other plate being convex and rising abruptly from one lateral edge of said flat plate and then tapering gradually to the opposite lateral edge, said plates having their meeting edges welded together, a hub connecting said plates and being welded thereto, and a pair of twin tapered ribs extending longitudinally of said plates upon opposite sides of said hub and being welded thereto and to said plates, said ribs lying in a common plane and being formed with elongated spaced perforations, said perforations successively becoming narrower as they recede from the larger ends of said ribs, said perforations being connected by narrow slots.

1,764,928. ABRASIVE COMPOSITION. ARTHUR BIDDLE, Trenton, N. J., assignor to United Products Corporation of America, a Corporation of Delaware. Filed June 15, 1926. Serial No. 116,227. 4 Claims. (Cl. 51—280.)

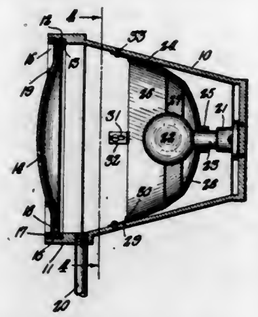
1. An abrasive composition comprising fifty parts by weight of rubber latex, casein ten parts, a casein solvent three parts, water twenty-five parts, sand eighty parts.

1,764,929. PILOT PIN FOR ROLLING MILLS. EDWARD G. BUDD, Philadelphia, Pa., assignor to Budd Wheel Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Dec. 24, 1926. Serial No. 156,839. 8 Claims. (Cl. 80—1.)



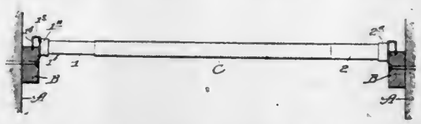
8. A work centering and retaining device for a rotatable rolling mill platen, said device comprising a pin having one portion adapted to be held in a platen, a second portion next adjacent said first portion and having laterally extending lugs whereby work may be held against rotation relative to said pin, and a third portion including a tapered outer end.

1,764,930. LIGHT. SYLVAN M. BYCK, Savannah, Ga. Filed Apr. 6, 1929. Serial No. 353,104. 1 Claim. (Cl. 240—6.)



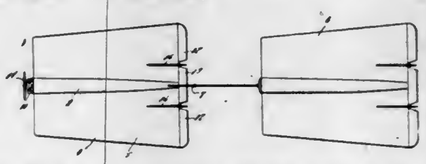
A subaqueous light comprising a housing, a reflector for the housing movable rectilinearly thereof toward and away from the projection end thereof, arms of angular formation arranged at intervals upon the projecting periphery of the reflector having the remaining portions of their lengths slotted and lying flush against the adjacent surface of the housing, fastening elements carried by the housing and projecting through said slots to retain said reflector against displacement from adjusted position, and an illuminating element having support upon the housing slidably connected with the reflector to facilitate the reflecting, diffusing and focusing of the rays of light therefrom.

1,764,931. EXTENSIBLE CLOSET POLE. GUSTAV A. CARLSON, Chicago, Ill., assignor to The Boye Needle Company, Chicago, Ill., a Corporation of Illinois. Filed July 13, 1928. Serial No. 292,519. 2 Claims. (Cl. 211—123.)



1. An extensible closet-pole comprising telescopically related tubes; and bracket-members located substantially in the plane of said pole and rigidly secured to the outer ends of said tubes, said bracket-members comprising shanks secured to the ends of said tubes and webs projecting from the upper portions of said shanks away from the planes of the ends of the tubes and equipped with depending elongated flanges having cleat-engaging edges located near the horizontal central plane of the pole.

1,764,932. AEROPLANE. PHILIP RAYMOND CHADBOURNE, Everett, Wash. Filed Dec. 31, 1929. Serial No. 417,726. 1 Claim. (Cl. 244—12.)



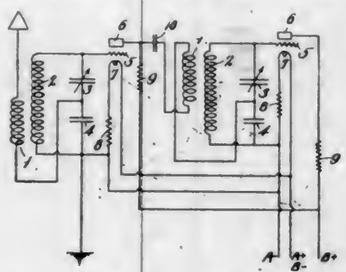
An aeroplane comprising a fuselage, wings at each side thereof having their ends terminating at the transverse

plane of the front and rear ends of the fuselage, said wings being of a gradually increasing width from the front to the rear ends thereof, allerons carried at the rear edges of the wings adjacent the side ends thereof, an elevator carried at the rear end of the fuselage and overlapping the adjacent edges of the wings and rudders positioned between the allerons and the elevator.

1,764,933. STABLE SALICYLATE COMPOSITION. MYER COPLANS, London, England. Filed Dec. 20, 1928, Serial No. 327,477, and in Great Britain Jan. 12, 1928. 6 Claims. (Cl. 23—250.)

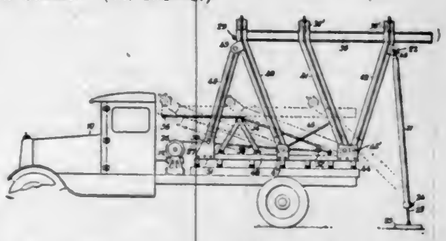
1. As a new composition of matter, a non-poisonous alkaline earth salt of acetyl-salicylic acid mixed with a small quantity of the chloride of the non-poisonous alkaline earth.

1,764,934. MEANS AND PROCESS FOR THE AMPLIFICATION OF RADIANT ENERGY. JOSEPH J. DALEY, Boston, Mass., assignor to Walter M. Cusick, Boston, Mass. Original application filed Oct. 24, 1927, Serial No. 228,249. Divided and this application filed Apr. 26, 1930. Serial No. 447,715. 12 Claims. (Cl. 179—171.)



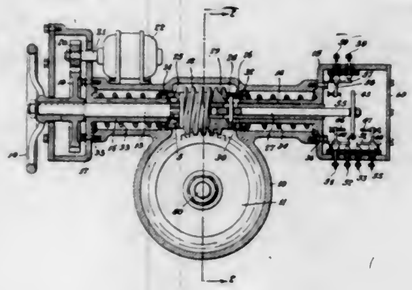
1. A system of amplification of radiant energy comprising electromagnetic and electrostatic paths of energy transfer and an electronic device wherein the electromagnetic and the electrostatic values of said transfer paths are balanced to produce a zero difference of potential in respect to all undesired currents between the elements of the electronic device and to obtain a substantially equal energy transfer throughout the range of frequencies to which the system is turnable.

1,764,935. TREE-MOVING APPARATUS. PAUL H. DAVEY, Kent, Ohio, and JAMES A. DAVEY, Sound Beach, Conn. Filed Apr. 23, 1929. Serial No. 357,555. 11 Claims. (Cl. 214—3.)



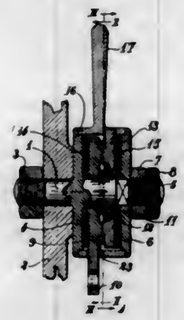
3. Tree-moving apparatus comprising a vehicle having a body, a collapsible superstructure on the body including an elevated track, supporting means for the track pivoted to the track and to the vehicle body, means for limiting the collapsing movement of the superstructure, a roller on said limiting means, a power-operated winch on the vehicle, means adjacent one end of the collapsed superstructure for attachment of a cable, a pulley adjacent the opposite end of the vehicle, and a cable operated by said winch said cable passing over said pulley and said roller to the attaching means.

1,764,936. CONTROL MEANS FOR POWER-OPERATED MECHANISMS. PETER PAYNE DEAN, New Canaan, Conn., assignor to The Limitorque Corporation, a Corporation of New York. Filed June 25, 1927. Serial No. 201,308. 9 Claims. (Cl. 192—150.)



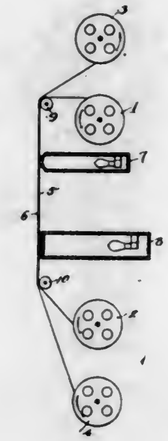
5. A contact controlling device comprising a rotatable shaft, a worm rotatable therewith and slidable thereon, a worm wheel meshing therewith to be driven by the same, a housing for said worm wheel, worm and shaft, end housing members closing the said housing, having sleeves extending inwardly therein to afford bearings for the said shaft and provided with recessed flanges, helical springs coiled about the bearings for the shaft on opposite sides of the worm to offer resistance to its movement along the shaft, thrust bearings at the respective inner ends of said springs, movably mounted on the corresponding bearings and abutting opposite ends of the worm wheel, the opposite ends of the said springs fitting in the corresponding recessed flanges of the bearings.

1,764,937. SELF-LOCKING CONTROL DEVICE. GUY DE BONAL, Genas, and PIERRE MASSON, Villeurbanne, France. Filed Nov. 13, 1928, Serial No. 319,136, and in France Nov. 16, 1927. 10 Claims. (Cl. 192—8.)



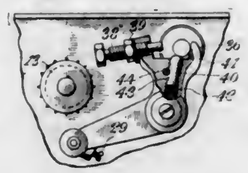
1. A device of the character and for the purpose described comprising a movable master member connected with the mechanism to be controlled; a movable jamming member cooperating with said master member; ratchet teeth on said master member; ratchet teeth on said jamming member, the first-named ratchet teeth being adapted to cooperate with the second-named ratchet teeth; fixed surfaces between which said master and jamming members are interposed; spring means adapted to move said jamming member in such a direction that said master and jamming members are separated from each other under the action of said ratchet teeth and are thus pressed and jammed against said fixed surfaces, whereby the device is locked; and control means adapted to unlock said jamming member and to drive said master member.

1,764,938. METHOD OF PRODUCING TALKING-MOTION-PICTURE FILMS. LEE DE FOREST, New York, N. Y., assignor to De Forest Phonofilm Corporation, New York, N. Y., a Corporation of Delaware. Filed Apr. 27, 1927. Serial No. 187,026. 2 Claims. (Cl. 95—75.)



2. The method of producing a positive film having sound and picture records thereon from a negative having sound and picture records thereon comprising exposing the picture area of said positive to the picture record of said negative, longitudinally displacing the positive and negative films relatively to each other and exposing the sound area of said positive to the sound record of said negative to produce a positive having the sound and picture records separated a predetermined distance.

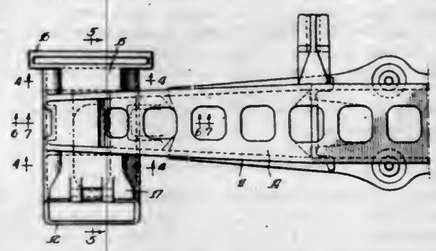
1,764,939. PAD ROLLER ARM. AUGUSTO DINA, Jersey City, N. J., assignor to International Projector Corporation, New York, N. Y., a Corporation of Delaware. Filed Apr. 18, 1928. Serial No. 271,091. 11 Claims. (Cl. 88—17.)



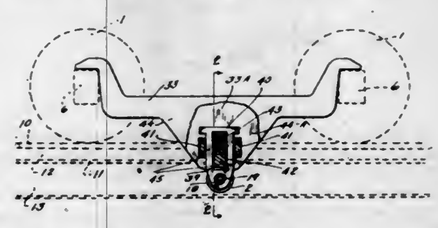
1. A pad roller arm comprising an L-shaped member, one end of said member being bifurcated to provide stop members and the other end thereof being drilled to receive a roller supporting arm, and means associated with said bifurcated end for securing said arm in either extreme position.

1,764,940. SIDE FRAME. HARRY E. DOERR, St. Louis, Mo., assignor to Scullin Steel Co., St. Louis, Mo., a Corporation of Delaware. Filed Sept. 8, 1928. Serial No. 304,717. 18 Claims. (Cl. 105—205.)

1. In combination, a side frame having tension and compression members, and a journal box integral therewith, a wedge-engaging portion disposed within said journal box, the roof of said journal box inwardly and outwardly of said tensio and compression members and on the two opposite sides of said wedge-engaging portion being at a higher level than said wedge-engaging portion.

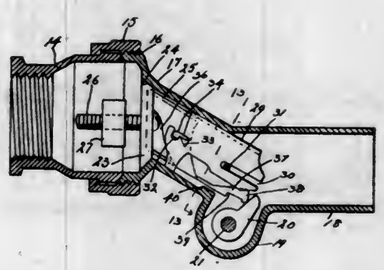


1,764,941. SAFETY RAILWAY TRUCK. ELMER ROCKWOOD EDSON, Portland, Oreg. Filed Apr. 11, 1928. Serial No. 269,133. 6 Claims. (Cl. 104—246.)



1. The combination, in a railway truck having equalizer bars, of supporting frames depending from said equalizer bars, a bearing block located between the supporting frames, guide blocks providing a vertical guideway for the bearing block, a block head designed to engage the upper surfaces of certain guide blocks, a spring seated between the block head and one of the guide blocks, a stub shaft secured to the bearing block proximate its lower extremity, and a safety wheel journaled upon said shaft, and so disposed that it will engage a suitable trend.

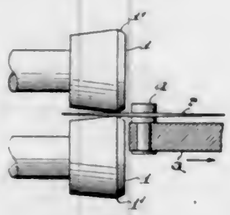
1,764,942. FLUSH VALVE. STEPHEN P. ENRIGHT, Philadelphia, Pa. Filed June 7, 1928. Serial No. 283,578. 4 Claims. (Cl. 4—29.)



1. A valve of the character described, comprising a casing, a supply pipe formed with the casing, said casing being at an angle to the supply pipe, an off-set also formed with said casing, a spindle journalled in the off-set, said spindle carrying a handle, a dog secured upon the spindle within the off-set, a tilting member, a shoulder carried by said member, a shoulder formed within the casing with which the first-mentioned shoulder is adapted to engage, said member being adapted to be slid in one direction by the action of the dog to bring said shoulder in engagement,

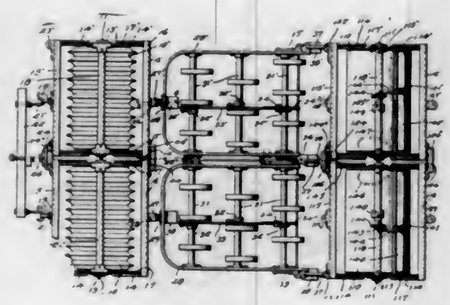
a housing into which the tilting member telescopes, a bridge formed with the housing upon which the tilting member slides and tilts, a stationary pin projecting through slots formed in the housing, lugs carried by the tilting member, said lugs adapted to fit within seats and slots formed in the housing, a clapper carried by the tilting member, a seat formed within the casing upon which said clapper is adapted to be seated, and means for adjusting the downward tilting force of the inner end of the tilting member.

1,764,943. DISK-ROLLING PROCESS. GORDON M. EVANS, Detroit, Mich., assignor to Budd Wheel Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Jan. 22, 1927. Serial No. 162,700. 5 Claims. (Cl. 80—60.)



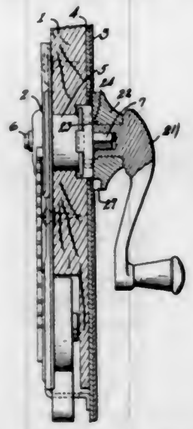
5. A method of making tapered disks comprising the rolling of a disk blank between narrow-faced opposed rolls which contact with said blank at successive points of the blank, the said rolling being initiated near the center of the blank with the plane of contact of the rolls perpendicular to the roll axes intersecting a circle concentric with the blank and progressing the rolling toward the periphery with the plane of contact of the rolls approaching tangency with a circle concentric with the blank.

1,764,944. GROUND-WORKING IMPLEMENT. WILLIAM J. FISHER, York, Pa., assignor to A. B. Farquhar Co. Limited, York, Pa., a Limited Partnership of Pennsylvania. Filed Mar. 7, 1929. Serial No. 345,069. 16 Claims. (Cl. 55—12.)



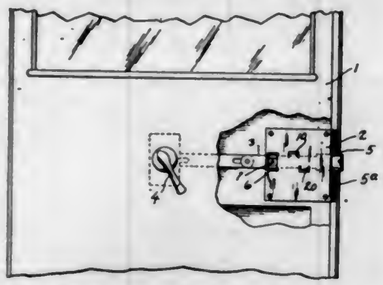
1. An earth working implement comprising a series of devices connected together for operation, one behind another, in the line of travel, the connection between one device and another device forward thereof comprising means to permit tilting of either device from side to side relative to the other, another connection between two devices comprising means to prevent tilting from side to side relative to each other but permit of relative swinging from side to side so that the axes are out of alignment with each other during turning.

1,764,945. HANDLE MOUNTING. JOHN B. FLYNN, Detroit, Mich., assignor to Ternstedt Manufacturing Company, Detroit, Mich., a Corporation of Michigan. Filed July 11, 1928. Serial No. 291,717. 9 Claims. (Cl. 292—348.)



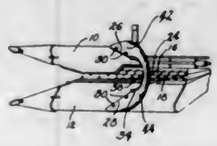
1. In a handle mounting, the combination of a mounted member, a handle member, said members being provided with cooperating bayonet slot type connecting means, and means permitting relative rotational movement between the members to establish connection but frictionally resisting reverse relative movement whereby to hold the two members connected together.

1,764,946. SPRING-CLIP GUIDE FOR DOOR-LOCK BOLTS. JOHN B. FLYNN, Detroit, Mich., assignor to Ternstedt Manufacturing Company, Detroit, Mich., a Corporation of Michigan. Filed Dec. 21, 1928. Serial No. 327,522. 6 Claims. (Cl. 292—139.)



1. In a door lock having a frame, the combination of a sliding bolt, and a spring clip mounted on the frame the free ends of which serve as a guide for said bolt.

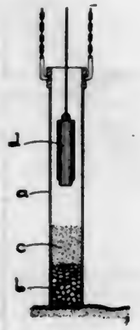
1,764,947. ATTACHMENT FOR CORN-PICKING MACHINES. JOHN W. FRANK, Milo, Iowa. Filed Nov. 26, 1928. Serial No. 321,912. 3 Claims. (Cl. 56—119.)



1. An attachment for a corn picking machine having spaced divider boards inclined laterally and rearwardly, comprising an apron and guiding member of substantially semi-annular shape and having its end portions attached to the respective divider boards and extending rearwardly

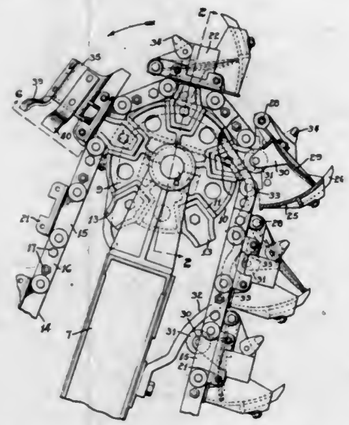
and upwardly on gradual curves, the lower forward surfaces of such end portions having substantially concaved faces merging upwardly and rearwardly into convex faces; the central part of said member between said convex faces being arranged in substantially upright position, whereby corn stalks may be raised from laterally reclining to substantially vertical positions in the advance of the machine.

1,764,948. METHOD FOR DRIVING LINING TUBES FOR MOLDING CONCRETE PILES IN THE GROUND. EDGARD FRANKIGNOUL, Liege, Belgium, assignor to Société Anonyme Compagnie Internationale des Pieux Armés Frankignoul, Liege, Belgium. Filed July 25, 1929, Serial No. 381,025, and in Belgium June 14, 1929. 6 Claims. (Cl. 61—57.)



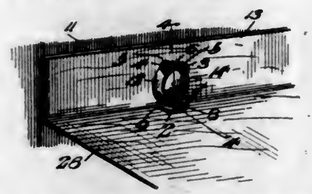
1. In a method of molding concrete piles in the ground, those steps involving providing a hollow form with a terminal, dry, unset concrete plug, and driving the form to the required depth into the ground by driving action directly on the plug.

1,764,949. BUCKET CLEANER. CHARLES L. GEORGE, Findlay, Ohio, assignor to The Buckeye Traction Ditcher Company, Findlay, Ohio, a Corporation of Ohio. Filed Mar. 21, 1929. Serial No. 348,814. 7 Claims. (Cl. 198—144.)



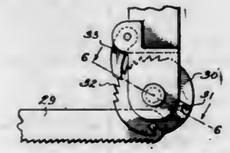
1. In a machine of the class described, a series of buckets, means for causing said buckets to travel in an orbit, a cleaning blade associated with each bucket, and means for quickly flipping each blade several times back and forth across the bottom of the bucket toward the end of each upward flight thereof and stopping the blade with a jar at the end of each movement in either direction.

1,764,950. FASTENER FOR AWNINGS. HARRY B. GRINER, Oaklyn, N. J. Filed May 3, 1928. Serial No. 274,778. 2 Claims. (Cl. 24—224.)



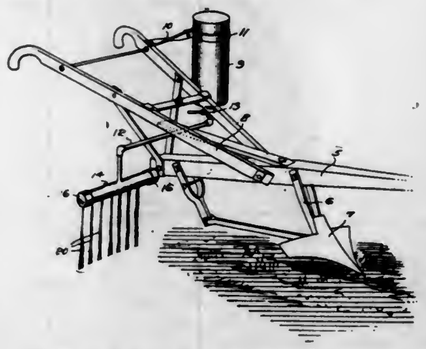
2. As a new article of manufacture, a one-piece fastener comprising a flat body portion and a pair of flat arms integral with and at an angle to said body portion, there being an enlarged opening in said body portion, a second enlarged opening formed in the central portion of said arms and a narrow slot at the junction of said arms with said body interconnecting said enlarged openings and the free ends of said arms being diverged to form a tapering throat portion leading to said second enlarged opening.

1,764,951. ATTACHMENT FOR SAWS. GEORGE HARE, St. Petersburg, Fla. Filed July 8, 1929. Serial No. 376,803. 2 Claims. (Cl. 145—33.)



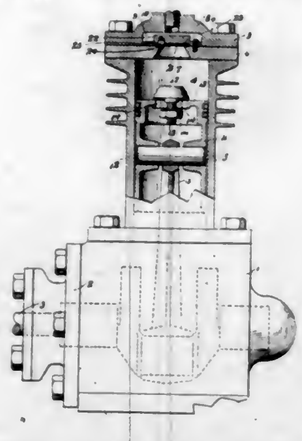
1. A saw comprising a frame, a blade detachably engaged with one end thereof, a disk mounted for rotation and formed with a peripheral groove to receive the other end of the blade, means for detachably connecting the last mentioned end of the blade with said disk, means for partially rotating the disk to obtain a quick and positive tension on the blade, and means for preventing retrograde movement of the disk, at different stages of the partial rotation thereof.

1,764,952. INSECT DESTROYER. CLARENCE B. HAY, Sumpter, S. C. Filed Aug. 30, 1929. Serial No. 389,575. 6 Claims. (Cl. 299—30.)



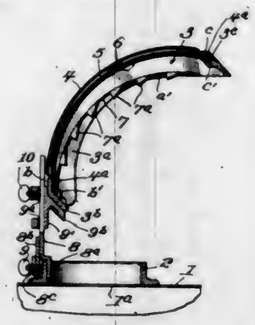
1. A device for applying poison to cotton plants or the like, comprising a reservoir having its longitudinal axis extending transversely of the row of plants and having spaced apertures arranged in a set extending longitudinally of the reservoir, separate spaced mop elements formed of flexible absorbent material depending from the reservoir and having their upper ends passing through the apertures to enter said reservoir, and an attaching rod extending longitudinally within the reservoir and having the mop elements secured thereto.

1,764,953. COMPRESSOR. DELOS P. HEATH, Detroit, Mich. Filed Jan. 6, 1926. Serial No. 79,559. 1 Claim. (Cl. 230—190.)



A compressor comprising, a cylinder having an open end, a piston reciprocable in said cylinder, a plate covering the open end of said cylinder and having a passage therethru, a disk located over said passage on the outer side of said plate, a housing member having a recess in its under side and outlet openings therefrom, said member being detachably fastened against the outer surface of said plate over said disk, a cylinder head located over said plate and having a chamber enclosing said housing and also having a passage communicating with said chamber, and means for fastening both said cylinder head and said plate to the cylinder.

1,764,954. GREASE ABSORBING AND DEFLECTING ATTACHMENT FOR GAS-STOVE FLUES. PAUL J. HENTSCHEL, Baltimore, Md., assignor to Monarch Products Company, Baltimore, Md., a Corporation of Maryland. Filed May 18, 1929. Serial No. 364,192. 10 Claims. (Cl. 126—299.)

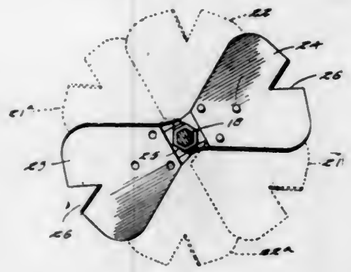


1. A device for catching flue impurities comprising a frame composed of cross bars and connecting carrying side bars having inwardly extended flanges, a closure member having flanged edges engaging said aforenamed flanges, an absorbent sheet carried by the inner face of said closure member, means for holding such sheet in position, and means for securing said frame to a flue ring.

1,764,955. STABILIZATION OF CEREAL BEVERAGES. HERMAN HEUSER, Evanston, Ill. Filed Aug. 13, 1928. Serial No. 299,445. 18 Claims. (Cl. 195—4.)

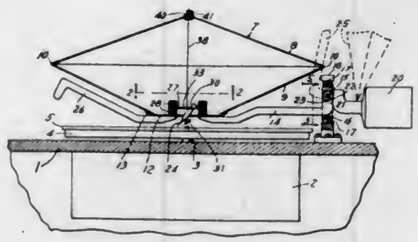
14. The method of stabilizing cereal beverages, which consists in adding thereto, after cooling between 4 and 12 grams of catechu tannin and an amount of proteolytic enzyme having a digesting capacity equal to that of about 0.5 and 3.00 grams of such an enzyme of 1 : 3000 digesting power, per 100,000 cc. of beverage, filtering the beverage from the precipitate formed by the tannin, and pasteurizing the beverage.

1,764,956. WIDE-SPREAD. HARRY C. HOLLINGER, York, Pa., assignor to A. B. Farquhar Co. Limited, York, Pa., a Limited Partnership of Pennsylvania. Filed Mar. 7, 1929. Serial No. 345,119. 11 Claims. (Cl. 275—6.)



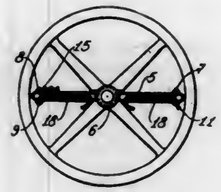
1. In a manure spreader, a wide-spread having a shaft, radially placed blades mounted thereon, the axes of adjacent blades being angularly spaced about the shaft so that the planes which pass through the shaft axis and the axes of the blades, will make unequal angles relative to such planes of other adjacent blades.

1,764,957. PHONOGRAPH REPRODUCER. JOHN J. JAKOSKY, Los Angeles, Calif., assignor to International Precipitation Company, Los Angeles, Calif., a Corporation of California. Filed Sept. 15, 1926. Serial No. 135,504. 3 Claims. (Cl. 274—16.)



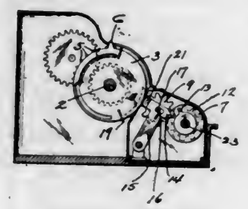
1. An apparatus for reproducing sound from phonograph records comprising a supporting plate, a vibratory membrane mounted on said supporting plate and formed of such material and of such size as to be substantially aperiodic, a rocking member disposed in a plane substantially parallel to said supporting plate and spaced therefrom and provided with needle holding means adapted to hold a needle in a plane substantially perpendicular to said rocking member, aperiodic resilient means supporting said rocking member on said supporting plate and so disposed as to permit rocking movement of said rocking member about an axis lying substantially at the intersection of the plane of said rocking member and said perpendicular plane in which the needle is disposed while substantially preventing motion of said rocking member about an axis perpendicular to said first named axis and lying substantially in the plane of said rocking member, and link means connected at one end to said rocking member at a point spaced from said first named axis and substantially in the line of said axis perpendicular to said first named axis, said link means extending substantially perpendicular to said rocking member and being connected at its other end to said aperiodic vibratory membrane.

1,764,958. AUTOMOBILE SIGNAL SWITCH. CLAUDE T. JAMISON, Alton, Ill., assignor to Day and Night Auto Safety Signal Company, Alton, Ill., a Corporation of Delaware. Filed Oct. 12, 1925. Serial No. 62,115. 5 Claims. (Cl. 200—59.)



1. In an automobile having a steering column, a bracket on said column having an arm, said arm comprising two portions joined at the end thereof, a control button on each arm portion and leads to said buttons passing within said arm.

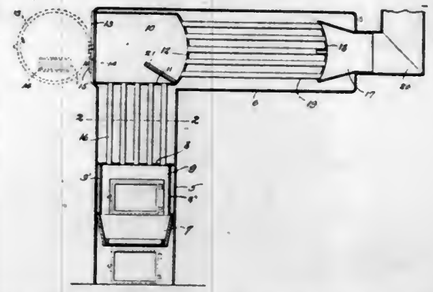
1,764,959. CALCULATING MACHINE. CLARENCE L. JOHNSTON, Oakland, and CARL M. F. FRIDEN, Piedmont, Calif., assignors to Marchant Calculating Machine Company, Oakland, Calif., a Corporation of California. Filed Mar. 17, 1920. Serial No. 366,583. 7 Claims. (Cl. 235—144.)



6. In a calculating machine, numeral wheels, a plurality of selective driving means for said numeral wheels having different driving strengths, and means responsive to the driving strength of the effective drive for determining whether said wheels will be arrested at a common registration.

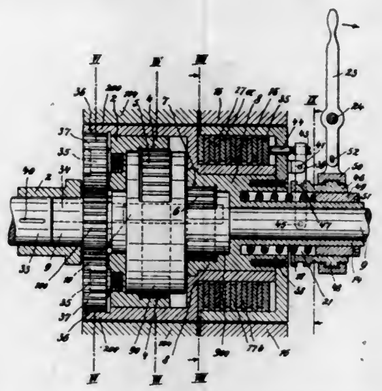
1,764,960. BOILER. JOHN EARNEST JONES, Minneapolis, Minn. Filed Apr. 16, 1928. Serial No. 270,375. 1 Claim. (Cl. 122—49.)

A boiler comprising a casing having a vertical portion and a laterally extending portion at the upper end of the vertical portion and in open communication therewith, a fire-box in the vertical portion, said fire-box having its top wall formed as a tube sheet, a combustion chamber free from water tubes, disposed within the space enclosed by the junction of said vertical and laterally extending portions and having its bottom wall formed as a tube sheet mating with the said fire-box tube sheet, vertical fire tubes connecting said tube sheets, an outwardly tapering smoke chamber disposed within the outer end of the laterally extending portion and having its inner wall formed as a tube sheet, the vertically extending inner wall of said combustion chamber being also formed as a tube sheet, horizontal fire tubes connecting said two last named tube



sheets, certain of said tubes being so disposed as to direct their gases against the tapering wall of said smoke-box, a stack communicating with the outer end of said smoke-box, an inclined baffle disposed in the lower inner end of said combustion chamber and overlying the upper ends of certain of said vertical fire tubes, and a damper controlled air inlet to said combustion chamber.

1,764,961. PLANET GEARING. COOM KITTILSEN, Porsgrund, Norway. Filed Mar. 28, 1929, Serial No. 350,697, and in Germany Feb. 25, 1928. 7 Claims. (Cl. 74—34.)



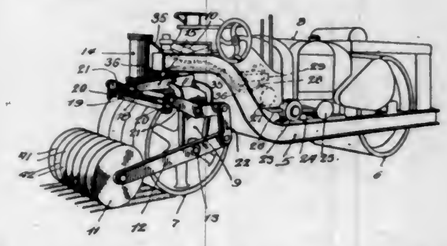
1. In a planet gear for the purpose described, a driving shaft, a driven shaft, a pair of internally toothed drums having different numbers of teeth, one of said drums being secured to one of said shafts, a carrier on the other of said shafts, a pair of pinions of different diameter mounted in said carrier to rotate together and engaging the teeth of said drums, yieldable means for causing the drums and pinions to rotate together as a unit so as to give direct transmission or automatically operable to permit partial relative movement of said drums and gears upon an overload so as to vary the ratio of transmission.

1,764,962. PROCESS OF DEHYDROGENATING ALCOHOLS. KENNETH B. LACY, Chicago, Ill., assignor to Van Schaack Bros. Chemical Works, Inc., Chicago, Ill. Filed July 22, 1926. Serial No. 124,302. 18 Claims. (Cl. 260—138.)

7. The process of dehydrogenation of ethyl alcohol which comprises the passage over a copper catalyst of a mixture

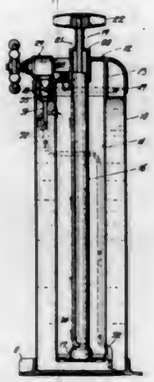
of alcohol vapor, air, and water vapor, the water and alcohol being present in substantially equal proportions by weight, and the air being present in sufficient proportion to oxidize, to the form of water, approximately one-half of the hydrogen liberated by the dehydrogenation of the alcohol.

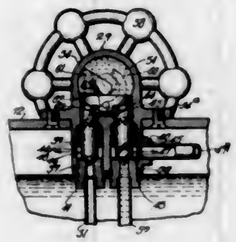
1,764,963. PAVING ROLLER. HARRY W. LASTER, Oak Park, Ill. Filed Mar. 13, 1929. Serial No. 346,537. 7 Claims. (Cl. 94—50.)



1. A paving roller having front and rear smooth paving rolls, an auxiliary circumferentially corrugated vertically adjustable roll, adjacent one of said rolls, and power operated mechanism for depressing said corrugated roll into effective contact with the pavement upon which the roller rests.

1,764,964. FIRE EXTINGUISHER. PETER GRAHAM MACGREGOR, Pequanock, N. J., assignor to Pyrene Manufacturing Company, Newark, N. J., a Corporation of Delaware. Filed July 11, 1928. Serial No. 291,872. 12 Claims. (Cl. 299—96.)

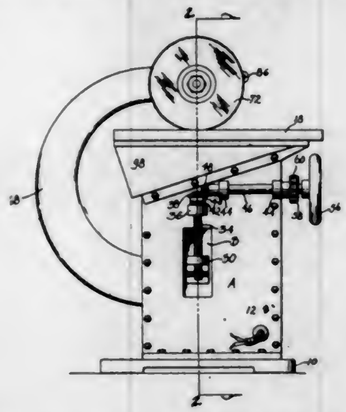




1. In a fire extinguisher of the type including pressure and liquid chambers, a valve mechanism for controlling the flow of pressure from the pressure chamber to the liquid chamber and for controlling the flow of liquid from the liquid chamber and comprising a housing containing a pair of connected valve chambers, a pair of reciprocating valve heads, a yoke plate connecting them, a rotatable cam cooperating with said yoke plate to move said heads to closed positions and an auxiliary cam cooperating with said yoke plate to move said heads to open positions.

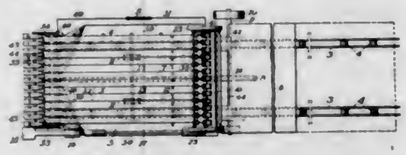
9. In a valve mechanism for fire extinguishers, a housing comprising adjacent parallel chambers open at one end and having seats at the other end, valve heads cooperating with the seats and extending out of the chambers, a yoke resting upon the valve heads and attached thereto and provided with a laterally extending projection, an oscillatory operating member comprising a cam cooperating with the projection to move the valve heads relatively to their seats and a locking portion bearing against the yoke when the heads are in engagement with their seats.

1,764,965. STRAIGHT-LINE OVERHEAD CUT-OFF SAW. SERN MADSEN, Clinton, Iowa, assignor to Curtis Companies, Incorporated, Clinton, Iowa. Filed Apr. 25, 1928. Serial No. 272,693. 8 Claims. (Cl. 143—46.)



1. In a structure of the class described, the combination of a base frame, and a saw bench thereon with a saw, a curved arm, said saw being mounted on one end of said arm, said arm being inclined downwardly and extended into said base frame, a cross arm on the lower end of said saw arm, having its lower end mounted for vertical sliding movement and its upper end mounted for movement in the arc of a circle having its center in the axis of rotation of the saw, when such axis is directly above the lower end of said cross arm.

1,764,966. GLASS-CUTTING APPARATUS. ALFRED M. MAZER, Jeannette, Pa. Filed May 15, 1925, Serial No. 30,448. Renewed Oct. 14, 1927. 37 Claims. (Cl. 33—32.)

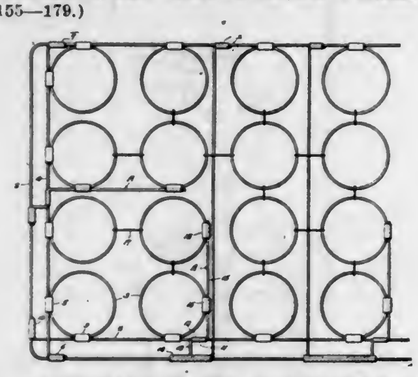


16. In a glass cutting apparatus, a plurality of cutters, magnetic means for each of said cutters and normally operative for maintaining the cutters in inoperative position, a keyboard, a key in said keyboard for each of said cutters, and circuits for said magnetic means under the individual control of the respective keys.

29. In glass cutting apparatus, means for supporting the glass, a plurality of cutters arranged above said supporting means, a separate electro-magnet associated with each cutter, and a keyboard connected with said electro-magnets for controlling the movement of said cutters.

32. In glass cutting apparatus, means for supporting the glass, a plurality of cutters above the glass, a mounting carrying said cutters, a keyboard independent of said mounting for controlling the movement of said cutters, and operative connections between said keyboard and cutters.

1,764,967. CONNECTER ELEMENT FOR SPRING STRUCTURES. ROBERT E. MCELROY, Jackson, Mich., assignor to Reynolds Spring Company, Jackson, Mich. Filed Mar. 6, 1928. Serial No. 259,559. 6 Claims. (Cl. 155—179.)



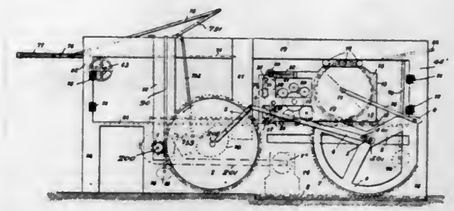
1. The combination of a base frame, springs within the frame, an upper frame having a part overhanging the springs, a frame wire between the overhanging part of the upper frame and the adjacent border springs and connected to the latter, and a connecter element secured intermediate its ends to the frame wire adjacent one of the springs and having a double armed part secured to the overhanging part of the upper frame and also having an arm extending inwardly from the frame wire and secured to the top coil of the said adjacent body spring.

1,764,968. GREASE-DISPENSING CONTAINER. BAYARD W. MENDENHALL, Salt Lake City, Utah. Filed Nov. 17, 1927. Serial No. 233,852. 3 Claims. (Cl. 221—47.1.)



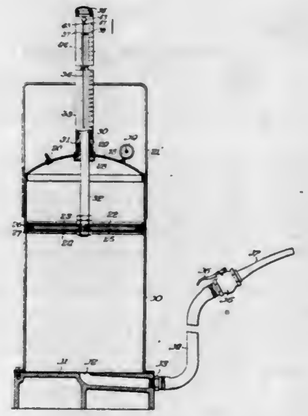
1. A grease storing and dispensing device comprising a cylindrical container having an outlet opening formed in the bottom thereof, a removable head for said container having a piston guide rod rigidly secured thereto and extending to the bottom of said container, receiving means in the bottom of said container into engagement with which the lower end of said guide rod is slidable to hold the same against lateral movement, a plunger freely slidable on said guide rod and means on said head for admitting air under pressure into said container above said plunger, said plunger having a flexible sleeve secured to the rim thereof and said container having an annular recess at the lower end thereof to receive said sleeve.

1,764,969. RAPID PRINTING PRESS. WILHELM MÖCKEL, Berlin-Neutempelhof, Germany. Filed Apr. 23, 1928, Serial No. 272,300, and in Germany Apr. 30, 1927. 2 Claims. (Cl. 101—269.)



1. A printing machine having a stationary type bed, an impression cylinder capable of rolling over the said bed, a carriage in which the impression cylinder is journalled, means for imparting a forward and backward motion to the carriage and cylinder and means for imparting a rotary motion to the cylinder in the same direction both during the forward and backward motion of the cylinder, the said latter means comprising a ring of teeth on the cylinder, a movable upper rack and a movable lower rack and means for moving the lower rack into engagement with the said ring of teeth during the forward operative motion of the cylinder and for moving the upper rack into engagement with the said ring of teeth during the backward idle motion of the cylinder and delivery of the printed sheet, as and for the purpose set forth.

1,764,970. PORTABLE GREASE DISPENSER. ROLLIN H. MOULTON, Berwyn, Ill. Filed Dec. 1, 1926. Serial No. 151,924. 2 Claims. (Cl. 221—47.2.)



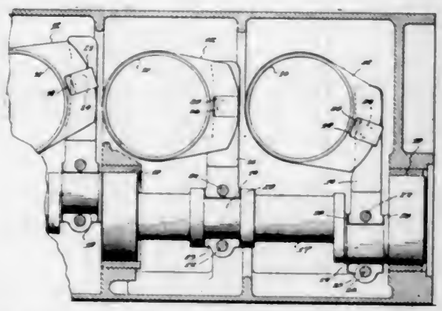
1. A portable lubricant dispenser comprising in combination, a container, a piston dividing said container into two compartments, one of said compartments being adapted to confine a compressed fluid and the other adapted to contain a lubricant, a lubricant conductor connected to said container, a valve in said conductor, a rod connected to the piston, a calibrated tube secured to said container into which the said rod projects, an indicator movable with said rod and along said calibrations, and a manually movable normally stationary indicator mounted in said tube, said indicator being adapted to cooperate with said first named indicator to determine quantities of lubricant discharged and forming a stop for said rod to thereby indicate each initial reading of said calibrations for computing the amount of lubricant discharged at each operation of said dispenser.

1,764,971. TOWING DOLLY. LEONARD D. NILSON, Wayzata, Minn., assignor to Marquette Manufacturing Company, St. Paul, Minn. Filed July 16, 1928. Serial No. 293,157. 5 Claims. (Cl. 280—33.55.)



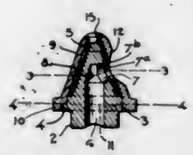
3. In a device of the character disclosed, an axle member, a tow pole pivoted thereto, yoke members secured to the ends of said axle member, spindle members pivotally mounted in said yoke members, wheels on said spindle members, axle receiving members secured to said yoke members, and operative means of connection between said tow pole and said spindle members.

1,764,972. SLEEVE-VALVE-ACTUATING MECHANISM. ARCHIE MACPHAIL NIVEN, Detroit, Mich., assignor to Continental Motors Corporation, Detroit, Mich., a Corporation of Virginia. Filed Nov. 7, 1927. Serial No. 231,421. 15 Claims. (Cl. 123—81.)



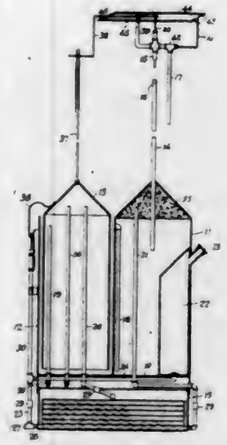
1. Sleeve valve driving mechanism for engines comprising in combination a sleeve valve having spaced lugs projecting outwardly therefrom, a rotary valve shaft provided with a crank, a link connected at one end with the crank and having its other end positioned between the sleeve lugs, said lugs each provided with a slot opening outwardly thereof, a pin extending transversely through the link, heads for the pin slidably engaging the slots respectively, said link moving in a plane perpendicular with the axis of rotation of the valveshaft, said heads having an oscillating movement with respect to the link and a sliding movement in the respective slots, for imparting to the sleeve valve a combined oscillating and reciprocating movement.

1,764,973. CLOSURE FOR CONTAINERS. GRAYSTON L. OHMART, Detroit, Mich. Filed Apr. 23, 1928. Serial No. 272,068. 9 Claims. (Cl. 221—60.)



1. A closure for collapsible tubes or the like, comprising a member having a discharge opening, a cap mounted on said member and having a discharge opening, said member and cap being secured together for relative movement so that the openings may be aligned or disaligned, and an insert of compressible material between the member and the cap and extending entirely around said member, and which is held under compression to seal the closure, said insert having an opening for alignment with the first mentioned openings.

1,764,974. GAS GENERATOR. WILLIAM G. PAQUETTE, Asheville, N. C. Filed Mar. 5, 1929. Serial No. 344,394. 8 Claims. (Cl. 261—26.)



1. A gas generator comprising a stationary container having a closed compartment and a compartment open at the top, a pipe extending upward from the closed compartment, a water outlet positioned to direct a jet of water into the open end of said pipe, a valve for the water outlet, a conduit between the two compartments, means for limiting the depth of water in the second compartment, a liquid fuel tank in the first compartment, a carbureter secured to said container said carbureter being approximately equal in length and width to said container, a conduit for moistened air leading from the upper part of the closed compartment to one end of the carbureter, a conduit for liquid fuel leading from said tank to the other end of the carbureter, a valve in said conduit, means providing a tortuous path for fluid from the bottom to the top of said carbureter, a conduit leading from the top of the carbureter to a point above the water level in the open-topped compartment, a bell fitting in the last-named compartment for up and down movement, a rod extending upward from said bell, a lever having lost motion connection with said rod and the valve for the water outlet, means in connection with said lever for opening and closing said valve with a snap action, a triangular head pivotally connected to said valve for liquid fuel, a hook on the bell for lifting the valve, and and a guide alongside said triangular head for holding it in engagement with the hook up to a predetermined height and then permitting disengagement of such parts.

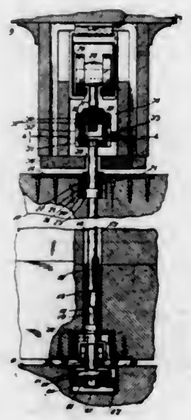
1,764,975. FENCE-POST ANCHOR. HENRY M. FENNING, Mandan, N. Dak. Filed Dec. 26, 1928. Serial No. 328,585. 1 Claim. (Cl. 189—29.)

A fence post anchor comprising a plate adapted to be secured against a fence post with side portions projecting from the post, the said side portions being slit from the upper edge of the plate to form tongues having beveled side edges, the side edges of one tongue converging in an opposite direction to the side edges of the other tongue where-



by the tongues may only be bent to extend from opposite faces of the plate and extend upwardly at an outward incline.

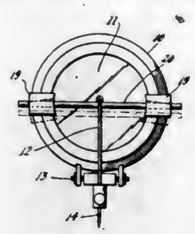
1,764,976. FOLDING DOOR. ELLIS J. G. PHILLIPS, Aurora, Ill., assignor to Richards-Wilcox Manufacturing Company, Aurora, Ill., a Corporation of Illinois. Filed June 23, 1924. Serial No. 721,882. 18 Claims. (Cl. 20—20.)



1. A folding door comprising a leaf, a door hanger mounted over the doorway to travel longitudinally thereof, an extensible rod on which said leaf is pivoted to turn about a vertical axis, said rod being connected to travel with said door hanger and to rotate relatively thereto about its own axis, means for holding said rod against tipping in the plane of the doorway when said leaf is moved longitudinally of the doorway, and a floor engaging support for the lower portion of said rod.

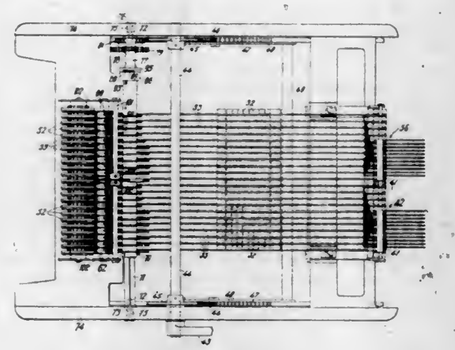
1,764,977. PHONOGRAPH. EDWARD E. PINKERTON, Chicago, Ill. Filed Nov. 5, 1923. Serial No. 672,702. 4 Claims. (Cl. 274—25.)

1. The combination with a sound box of a phonograph having a diaphragm, of a needle arm pivotally mounted on said sound box and having a bend operatively connected with said diaphragm; clips slidably mounted on the rim of said box; and a tension member mounted on said clips and passing under and impinging against



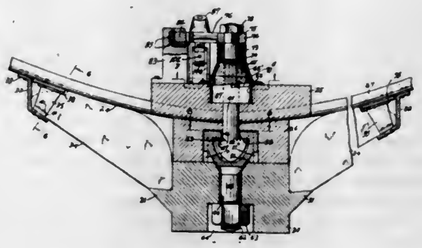
an inclined part of said needle arm whereby adjustment of said clips varies the tension on said needle arm, substantially as described.

1,764,978. COMBINED TYPEWRITING AND COMPUTING MACHINE. HENRY L. PITMAN, Westfield, N. J., assignor, by mesne assignments, to Elliott-Fisher Company, New York, N. Y., a Corporation of Delaware. Filed May 16, 1923. Serial No. 639,266. 22 Claims. (Cl. 235—60.)



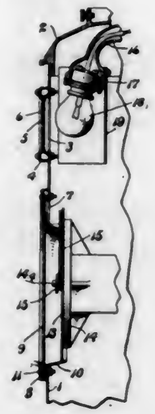
1. In a computing machine, a series of denominational dials, a series of carry-over elements, each settable by a dial for actuating the dial of the next higher denomination, and a rotatable carry-over-completing device effective on said elements in successive rotations to effect carry-overs between successive groups of dials.

1,764,979. DROP KEEL FOR SUBMARINES. JOHN PLUM, Bridgeport, Conn. Filed July 24, 1929. Serial No. 380,546. 17 Claims. (Cl. 114—16.4.)



1. A submarine safety device comprising a drop keel, weights held to the submarine bottom by said drop keel, means for securely attaching said drop keel to the submarine, and means for detaching said drop keel and weights from any compartment in the submarine.

1,764,980. ILLUMINATING DEVICE. LE ROY A. PRESCOTT, Muskegon, Mich., assignor to Bennett Pumps Corporation, Muskegon, Mich., a Corporation of Michigan. Filed May 31, 1929. Serial No. 367,485. 2 Claims. (Cl. 40—132.)



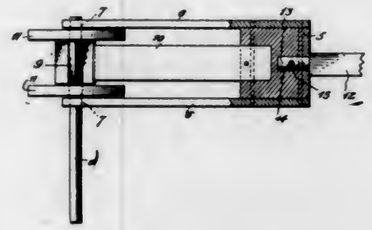
1. In a device of the class described, a vertical pump enclosing housing having two openings therein, one below the other, in the same side of the housing, an indicating card secured at the upper of said openings, a dial and indicating hands movable thereover, a short distance within the housing back of the lower opening, a ring member having an inwardly extending flange and a vertical flange and having a section including both flanges removed at its upper side extending through said lower opening, the vertical flange bearing against the outer side of the housing and the inwardly extending flange extending to and passing around the sides and lower portion of said dial, means for securing said ring member in place, and an electric light located within the housing back of said upper opening and directly above the open upper side of said ring member.

1,764,981. LOCOMOTIVE BOILER AND FIRE BOX. LOUIS A. REHFUSS, Philadelphia, Pa. Filed Jan. 11, 1928. Serial No. 245,895. 7 Claims. (Cl. 122—235.)



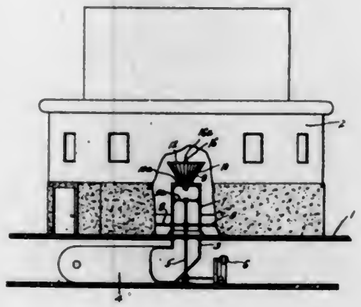
1. In a locomotive comprising a water tube type of boiler and a smoke box forwardly thereof and successive lengths of the boiler including from the rearward end thereof a fire box, a combustion chamber and a flue section, a pair of horizontally spaced upper drums extending substantially the length of the boiler, a pair of horizontally spaced lower drums extending substantially the length of the fire box and having substantially vertical water tube connections with the upper drums, a transverse water leg connecting the forward ends of the lower drums, a pair of horizontally spaced lower drums extending forwardly of the fire box beyond the forward ends of the upper drums and connected at their rearward ends into said transverse water leg, headers connecting said upper drums to one another at near intervals along a portion of their length forwardly of the fire box, other headers connecting said second mentioned pair of lower drums to one another at near intervals along a forward portion of their length and rearwardly and upwardly inclined water tubes connecting said upper headers to said lower headers, the inclination of said tubes providing a combustion chamber between the fire box and said water tubes.

1,764,982. TOY. GEORGE REICH and HARRY RENO LE GRAND, Corydon, Ind. Filed Mar. 3, 1930. Serial No. 432,858. 1 Claim. (Cl. 46—47.)



A toy comprising a block, opposed arms secured to and projecting in the same direction from said block, the free ends of said arms having bearing openings, a shaft rotatably mounted in said openings, a toothed wheel secured on said shaft between said arms, surface-engaging wheels also secured on said shaft adjacent said arms, said shaft projecting laterally to a sufficient extent from one of said wheels and arms to allow gripping of said shaft in one hand, and a "clack" co-operable with said toothed wheel and secured to the inner end of said block, the outer end of said block being provided with a socket to receive one end of a pushing handle when desired, the axis of said socket being substantially uni-directional with said arms.

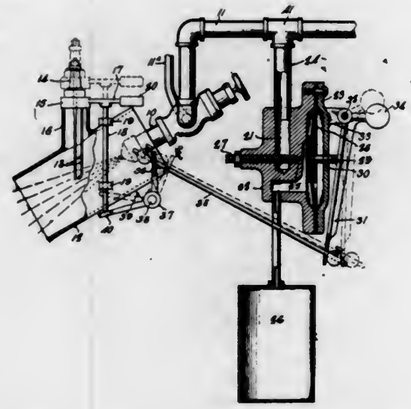
1,764,983. BAFFLE. WILLIAM F. RICHARDS, Mason, Mich., assignor to The Laboratory Products Company, Cleveland, Ohio, a Corporation of Ohio. Filed Dec. 7, 1928. Serial No. 324,560. 4 Claims. (Cl. 159—4.)



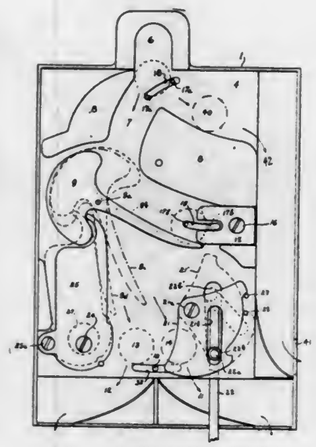
1. A baffle for the flues of spray driers, comprising a series of vertically disposed horizontally spaced blades, and fins carried by said blade and arranged in overlapping or shingle-like spaced relation, for preventing the collection of material upon the top of the baffle.

1,764,984. OIL-BURNING APPARATUS. HOMER S. ROGERS and RICHARD RADDATZ, Milwaukee, Wis., assignors to Combustion Fuel Oil Burner Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Nov. 22, 1924. Serial No. 751,455. 14 Claims. (Cl. 158—28.)

1. In oil burning apparatus, a spray nozzle, means for supplying oil to said nozzle, means for supplying air to said nozzle, means in the path of the spray issuing from said nozzle for igniting the same, and means actuated by the air fed to said nozzle for automatically removing said igniting means from said spray after the latter has been ignited.



1,764,985. SLUG EJECTOR. ALBERT S. ROSS, Dallas, Tex. Filed Aug. 20, 1928. Serial No. 300,645. 16 Claims. (Cl. 194—101.)



1. A slug ejector having a pivoted coin-selecting beam and a magnetic stop member adjacent said beam to arrest and hold magnetic slugs and to arrest and hold coins and slugs of less than a predetermined weight.

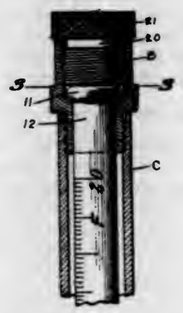
1,764,986. STOCKING-INSPECTING DEVICE. AUGUST C. SCHOEN, Lansdale, Pa. Filed Mar. 19, 1929. Serial No. 348,223. 8 Claims. (Cl. 223—19.)

1. In a device of the character stated, an inner rigid frame, an upper arched support carried by the upper end thereof, an outer expansible frame of substantially the same contour, links pivotally connected to said frames, a plunger connected to the bottom of said inner rigid frame,



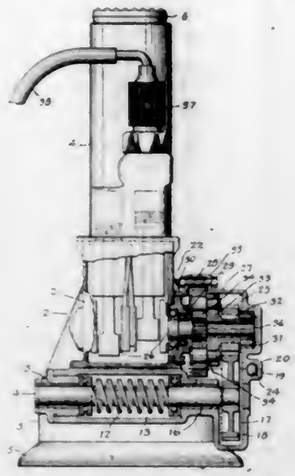
means engaging and guiding the lower ends of said outer frame and means for raising said plunger and inner frame to expand said outer frame.

1,764,987. POCKET THERMOMETER. JOHN LEONARD SCHWARTZ, Philadelphia, Pa., assignor to Philadelphia Thermometer Co., Philadelphia, Pa., a Copartnership composed of John Leonard Schwartz, George W. Rossman, and Clarence A. Rossman. Filed July 21, 1928. Serial No. 294,381. 1 Claim. (Cl. 206—16.5.)



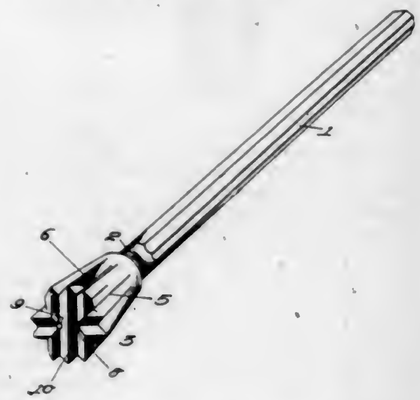
A pocket thermometer comprising an open ended hollow body, the body having a lower restricted internal bore and a larger threaded upper bore, and having a curved shoulder at the junction of the two bores, the body being externally threaded at the lower end, a glass thermometer having a shank of such diameter as to slide within the lower restricted bore, and having a beaded or curved flange arranged to seat directly upon said curved shoulder, a plug threadedly engagable in the upper larger bore and arranged to abut the head or flange of the thermometer over substantially its entire area to compress the flange between the plug and the shoulder, raised knurling formed on the body at substantially the level of the flange of the thermometer, raised knurling formed on the plug, the knurlings and the body forming a non-slip handle for the unit, and a casing threaded upon the threads of the lower end of the body the engagement of the plug against the thermometer end being such as to rigidly and immovably hold the thermometer in the body.

1,764,988. MOTOR-OPERATED JACK. FRANK H. SCHWERIN, Bellevue Borough, Pa., assignor to The Duff-Norton Manufacturing Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Nov. 5, 1926. Serial No. 146,293. 5 Claims. (Cl. 254—103.)



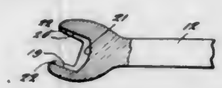
1. A jack comprising a housing frame forming a base and standard, the latter provided with a nut, a lifting member, a lifting screw coacting with said nut, a worm-wheel on the lower portion of said screw, a worm meshing said worm-wheel, an air motor mounted on the base of the jack directly over said worm and having a horizontal crank-shaft parallel with the worm, power-multiplying gearing between said crank-shaft and the worm shaft, the motor and gearing having a housing joining with the main jack housing, the motor with part of said gearing, on the one hand, and the remainder of the jack, including the worm wheel and worm and the remainder of said gearing, on the other hand, being separable as units on a plane of cleavage cutting the housing between said horizontal shafts, and means rigidly uniting said units together.

1,764,989. DRILL. CARL A. SIGNELL and OTTO SIGNELL, Jamestown, N. Y. Filed Mar. 14, 1927. Serial No. 175,244. 1 Claim. (Cl. 255—64.)



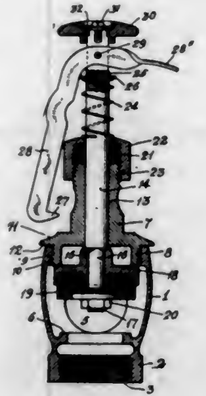
In a drill, a shank having a longitudinal central bore, a head adapted for removable attachment to one end of said shank, said head having a recessed periphery, the depth of said recesses being greater at one end than at the other, the ribs between said recesses being bevelled from the outer to the inner end of said head, cutting edges formed upon the outer end of said head, one only of said cutting edges extending diametrically of said head and being spaced by parallel grooves from all of the remaining cutting edges, the said remaining cutting edges being separated by radial grooves into a plurality of groups, the cutting edges of each group being angularly disposed with relation to each other, and intercommunicating water passageways in said head communicating with the bore in said shank.

1,764,990. NONSLIPPING WRENCH. JOSEPH B. SCHULTZ, Cleveland, Ohio. Filed May 9, 1929. Serial No. 361,621. 1 Claim. (Cl. 81—119.)



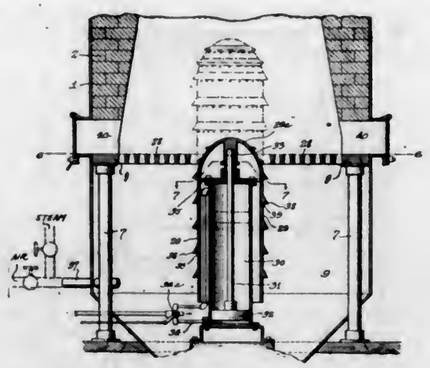
In a wrench, an elongated body portion having a head at the end thereof, said head formed with a recess opening inwardly and longitudinally of the body portion, inwardly directed flanges formed on the opposite edges of the recessed wall and co-extensive therewith to overlap the sides of the nut when the nut is seated in the recess.

1,764,991. VALVE. WILLIAM H. SIEBS, Floral Park, N. Y. Filed Mar. 5, 1929. Serial No. 344,297. 6 Claims. (Cl. 251—26.)



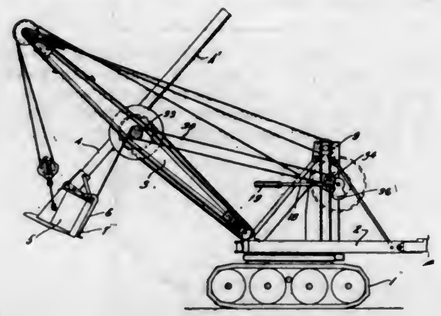
2. A valve comprising a metal body, a seat incorporated within said body, an inlet and an outlet communicating with the interior of said body, a metal bonnet secured to the top of said body in alignment with said seat, a smooth faced spindle slidably mounted within said bonnet, sealing means located at the top of said bonnet and positioned around said spindle to form a fluid-tight joint between the said bonnet and the said spindle, a rigid washer holder mounted on the lower end of said spindle, a washer secured to said holder and adapted to make a fluid-tight joint with said seat, a spring associated with said spindle for normally holding the latter in a raised position and the valve open, a locking arm pivotally mounted on the upper part of said spindle and adapted to lock the spindle in a lowered position with the washer making contact with said seat to close the valve, and a releasing arm associated with said locking arm whereby the said locking arm can be released and the valve opened.

1,764,992. GAS GENERATOR. FRANK W. STEERE, Detroit, Mich., assignor to Semet-Solvay Engineering Corporation, New York, N. Y., a Corporation of New York. Filed Apr. 7, 1923. Serial No. 630,676. 19 Claims. (Cl. 48—85.2.)



1. In a water gas generating apparatus, a gas generating chamber containing a fuel bed, means for introducing air and steam to maintain combustion and produce a combustible gas, and means projectable into the fuel bed in direct contact with said bed and retractable therefrom during the production of the combustible gas, said latter means being arranged to discharge said air and steam directly into the fuel bed above the base portion thereof.

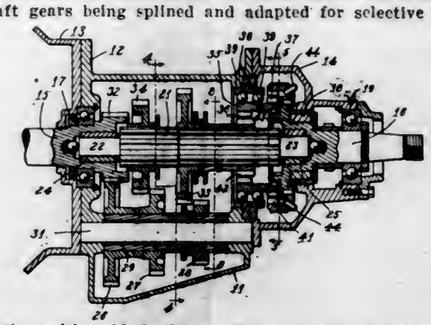
1,764,993. POWER TRIP. THOMAS F. STRINGER, Lorain, Ohio, assignor to The Thew Shovel Company, Lorain, Ohio, a Corporation of Ohio. Filed Feb. 15, 1929. Serial No. 340,146. 7 Claims. (Cl. 214—146.)



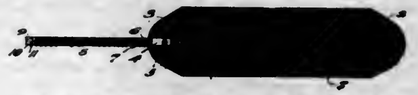
1. Apparatus for tripping a dipper latch and comprising a rotating driving member, a driven member having an eccentric portion associated with said latch to trip the same as said eccentric is thrown in one direction, means arranged to yieldably urge said eccentric in latch-releasing direction during its return throw, driving connection for said members having interengageable portions characterized by ability to automatically disengage upon overrunning of the driven member, and operator-controlled means for effecting said drive.

1,764,994. TRANSMISSION. CARL E. SWENSON, Rockford, Ill., assignor of one-fourth to Levin Faust, one-fourth to Eric S. Ekstrom, and one-fourth to Carl L. Anderson, Rockford, Ill. Filed Nov. 5, 1926. Serial No. 146,456. 1 Claim. (Cl. 74—58.)

A transmission for motor vehicles comprising, in combination, a driving shaft, a driven shaft, an intermediate driven shaft, said shafts being in coaxial relation, a plurality of counter-shaft gears, a gear on the driving shaft in mesh with one of the counter-shaft gears, a shiftable gear splined on the intermediate driven shaft movable into and out of selective connection either with one of the counter-shaft gears or with the driving shaft, a gear fixed to the intermediate driven shaft, one of the counter-shaft gears being splined and adapted for selective connection with said fixed gear, internal-external gears rotatable about the intermediate driven shaft eccentric thereto, an internal gear on the driven shaft in mesh with said external gear, and a second shiftable gear splined on the intermediate driven shaft adapted for selective connection either with the first mentioned internal gear or with the driven shaft.



1,764,995. ABDOMINAL BABY BAND. EDWARD H. WALTER, Woodlynne, N. J. Filed Aug. 30, 1928. Serial No. 302,929. 2 Claims. (Cl. 128—167.)

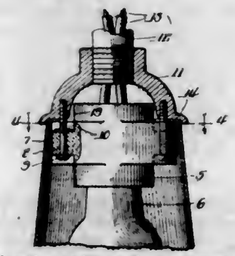


1. In a device of the character stated, an abdominal infant's one piece band composed of longitudinally laterally stretchable textile material, an elongated stretchable tape attached to one end thereof, a short tab also attached to the same end of the band and a ball and socket fastener device having its members attached to said tab and to the opposite end of the said tape, the latter being of sufficient length when stretched to encircle the body of the infant.

1,764,996. STABLE EFFERVESCENT COMPOSITION. LIONEL T. ANDREWS, North Jamaica, N. Y., assignor to E. R. Squibb & Sons, New York, N. Y., a Corporation of New York. Filed Apr. 12, 1928. Serial No. 269,618. 5 Claims. (Cl. 167—66.)

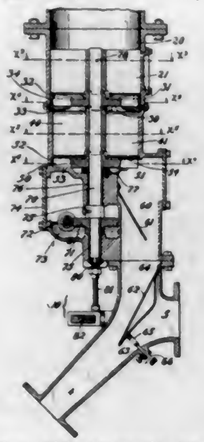
1. An effervescent composition containing a soluble acid citrate.

1,764,997. FIXTURE SUPPORT. GEORGE ARRAS, Chicago, Ill. Filed Oct. 20, 1928. Serial No. 313,704. 10 Claims. (Cl. 240—143.)



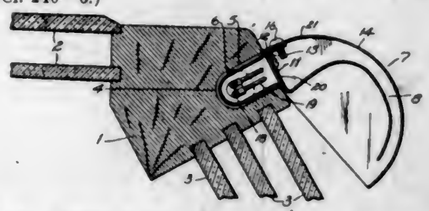
1. The combination with a fixture support; of a socket having fastening means to secure it to the support; and a shade having an opening in its base insertable over the socket, and rotatable to directly engage the base between the socket and its support.

1,764,998. APPARATUS FOR FEEDING AND METERING PULVERULENT MATERIAL. ERVIN G. BAILEY, Cleveland Heights, Ohio, assignor, by mesne assignments, to Fuller Lehigh Company, a Corporation of Delaware. Filed Apr. 24, 1924. Serial No. 708,821. 2 Claims. (Cl. 302—49.)



1. The combination with a supply bin and duct for powdered material, of a preparing appliance comprising a pocketed wheel and recessed plates above and below the same, alternately covering and uncovering the said pockets at top and bottom as the wheel rotates; a receiving chamber below said wheel, and a pocketed discharge wheel at the lower end of said chamber and a closure for the lower ends of the pockets, except at one portion of their movement, said closure having a discharge port longer than the peripheral length of one of the pockets and narrower than the radial width of said pockets near one end and increasing to a width substantially equal to the radial width of the pockets at the other end, and a closure above said wheel for the upper ends of said pockets while passing over said discharge port.

1,764,999. ELECTRIC-LIGHTING FIXTURE. DAVID J. BILLER, St. Louis, Mo., assignor to Day-Brite Reflector Company, St. Louis, Mo., a Corporation of Missouri. Filed Aug. 20, 1927. Serial No. 214,254. 8 Claims. (Cl. 240—6.)

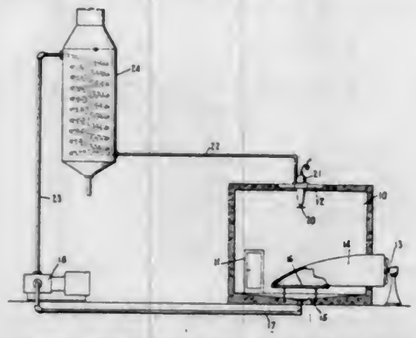


6. An electric lighting fixture for display cases and the like having a longitudinal frame member, comprising a reflector member having a flanged portion and a separate flange member secured flatwise to said reflector member flange and to said frame member and having a rebent marginal flange and an outer shell secured to said rebent marginal flange along one edge, said outer shell being otherwise clear of said reflector member.

1,765,000. COATING FOR FLAME-RETARDING COVERINGS AND METHOD OF MANUFACTURING THE SAME. HARRY N. BOCKUS, Maplewood, N. J., assignor to Solar Compounds Corporation, Linden, N. J., a Corporation of New Jersey. Filed Aug. 8, 1928. Serial No. 298,409. 7 Claims. (Cl. 91—68.)

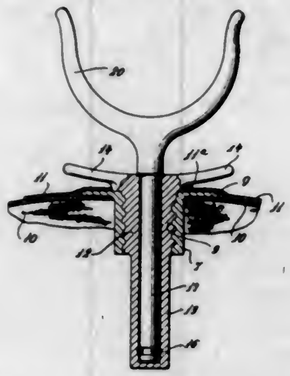
1. As an article of manufacture, a conduit or covering for wires consisting of a non-metallic jacket treated with a flame retarding hydro-carbon material including fatty acid pitches and a flexible colored coating thereon comprising a solution of an alcohol soluble gum containing a pigment.

1,765,001. COOLING TOWER. WILLIAM SPENCER BOWEN, Westfield, N. J. Filed May 1, 1929. Serial No. 359,441. 2 Claims. (Cl. 261—89.)



1. Cooling apparatus for liquids, comprising a closed chamber having an inlet opening at the top for the introduction of a cooling gas, a centrifugal disintegrating device for delivering the liquid into the chamber in finely subdivided condition and located axially with respect to said inlet opening of the chamber, the liquid being delivered therefrom below said inlet opening and substantially at right angles to its axis, and the said chamber being provided with a sump at the bottom for collection of the cooled liquid and with an outlet opening, a suction fan located at said outlet opening for positively drawing the cooling gas through the inlet opening and through said chamber, and means for effecting removal of the liquid from said sump.

1,765,002. PNEUMATIC WATER CRAFT. JAMES F. BOYLE, New Haven, Conn., and ADRIAN VAN MUFFLING, New York, N. Y., assignors to Air Cruisers, Inc., New York, N. Y., a Corporation of Delaware. Filed July 19, 1929. Serial No. 379,393. 8 Claims. (Cl. 9—26.)



1. A sealing device for an air inlet for use in pneumatic water craft embodying a socket adapted to receive and house the stem of an oar-lock, said stem being rotatable within said socket.

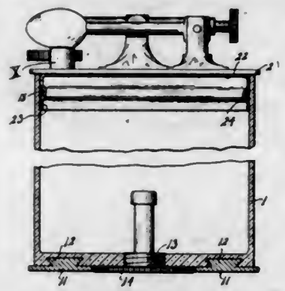
1,765,003. BUST SUPPORTER. EARL S. CALDOR, New York, N. Y. Filed Apr. 18, 1928. Serial No. 270,833. 1 Claim. (Cl. 2—42.)

In combination with a garment having an attached inelastic band provided with buttonholes at spaced intervals, an elastic band with buttonholes spaced at smaller intervals than the buttonholes of the said inelastic band, and a second inelastic band provided with buttons attached at spaced intervals greater than the spaces between the buttonholes of the elastic band, said buttons being



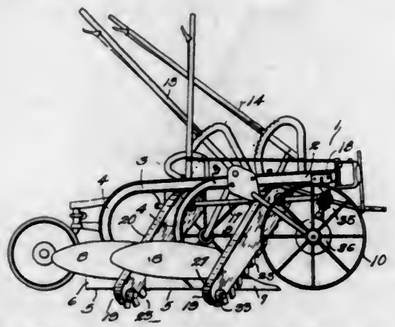
adapted to pass through the buttonholes of the first mentioned inelastic band and then through the buttonholes of the elastic band, whereby the size of the inelastic bands may be varied by a variation of the relative positions of the buttonholes in the elastic band with respect to the buttons on the said second inelastic band.

1,765,004. POCKET VAPOR CIGAR LIGHTER. EDWARD F. CLARK, North Attleboro, and JULIAN H. MURDOCK, Holbrook, Mass., assignors, by mesne assignments, to Clark Lighter Co., Inc., North Attleboro, Mass., a Corporation of Maryland. Filed Mar. 23, 1927. Serial No. 177,744. 5 Claims. (Cl. 67—7.1.)



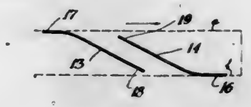
1. In a cigar lighter, an open ended molded fuel container; a bottom plate structure and a top plate structure. said top plate structure comprising a top plate having a wick hole therein and an inverted rectangular cup also having a wick hole therein brazed to the under side of said plate in such fashion that the wick holes in the top plate and cup register, said cup having grooved faces acting as depending flanges adapted to fit within the open end of said molded container; a bead adherent to the container wall adapted to fill the groove, lock the parts together and hermetically seal the joint between the container and faces.

1,765,005. STUBBLE REMOVER AND SEED-BED FERTILIZER. THOMAS L. DIGGINS, Milton, Oreg., assignor of one-half to Ernest Harris, Seattle, Wash. Filed Oct. 13, 1928. Serial No. 312,313. 5 Claims. (Cl. 97—46.)



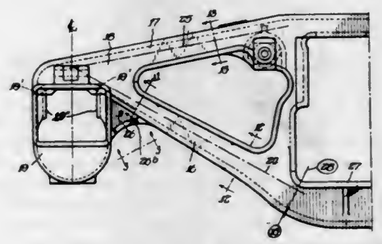
1. In stubble remover and seedbed fertilizer, the combination with a plow comprising a frame, supported by wheels and provided with plow bottoms, of a raking means having an endless chain which can be driven operably mounted on said frame, and extended to rest in an adjacent furrow, and means operably connected with said wheels to drive said rake.

1,765,006. SHUTTER FOR PROJECTION MACHINES (BENT EDGES) FOR MOTION-PICTURE PROJECTION MACHINES. AUGUSTO DINA, Jersey City, N. J., assignor to International Projector Corporation, New York, N. Y., a Corporation of Delaware. Filed Apr. 1, 1929. Serial No. 351,585. 7 Claims. (Cl. 88—19.3.)



3. A shutter for projection machines comprising a blade having its main body portion twisted at an angle to the plane normal to the axis of rotation and its trailing edge portion disposed in a plane normal to said axis.

1,765,007. SIDE FRAME. HARRY C. DREIBUSS, St. Louis, Mo., assignor, by mesne assignments, to Scullin Steel Co., St. Louis, Mo., a Corporation of Delaware. Filed Feb. 11, 1926. Serial No. 87,541. 3 Claims. (Cl. 105—205.)

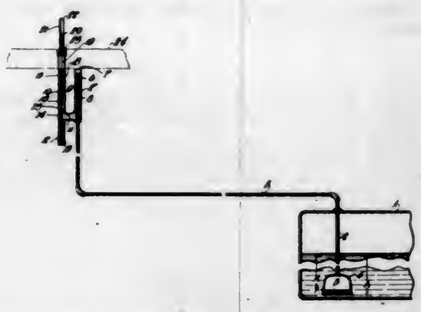


1. A side frame comprising a bolster receiving portion, a compression member connected to the upper part of said bolster receiving portion, a tension member connected to the lower part of said bolster receiving portion, said tension and compression members beng disposed in angular relationship with each other and being connected together at their outer ends, a journal box joined to said tension and compression members adjacent to the point of junction of said members, said tension and compression members comprising channel sections having their neutral axes disposed at a relatively low level, which neutral axes intersect substantially at the vertical central plane of said journal box, said journal box and tension member being provided with a reinforcing web therebetween, the lower portion of said web being provided with a rib of greater width at its mid portion than at its end portions.

1,765,008. GASOLINE INDICATOR. THOMAS M. EYNON, Philadelphia, Pa. Filed July 27, 1922. Serial No. 577,805. 2 Claims. (Cl. 73—31.)

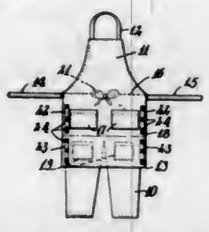
2. In a pressure gauge of the character stated, a U-shaped tube composed of two upright members of different lengths communicating at their lower portions, the longer of said members being provided with a float, an indicating device on the upper end of said float, a transparent tube

enclosing the upper end of said indicating device, a rod secured to the bottom of said float, a guide for said rod,



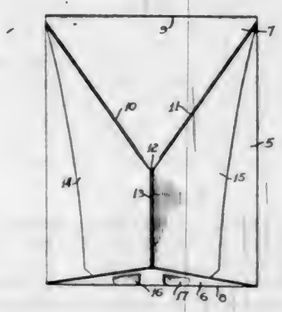
a chain attached to the bottom of said rod, and a pressure conveying tube having its upper end terminating at the upper portion of the shorter member of said tube.

1,765,009. APRON OVERALL. JOHN FEDORCAK, Trenton, N. J. Filed Mar. 8, 1929. Serial No. 345,322. 2 Claims. (Cl. 2—51.)



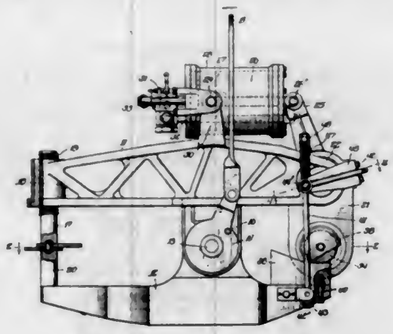
2. In a garment of the class described, a trouser portion, an apron attached at its top edge of the waist portion of the trouser, posts projecting from the top corners of the apron, apertures formed in the lower corners to engage over the posts when the apron is in a folded position, means for securing the sides of the folded apron together, pockets mounted on the front face of the apron when in folded position, movable engager members coactable with rows of hooks for closing the parts, pins projecting from the engager members into transverse apertures in the aforementioned posts for locking the apron in folded position.

1,765,010. EASEL PHOTO HOLDER. OLIVER GROSS, Toledo, Ohio, assignor to The Gross Photo Supply Company, Toledo, Ohio, a Corporation of Ohio. Filed Mar. 11, 1929. Serial No. 345,948. 5 Claims. (Cl. 40—149.)



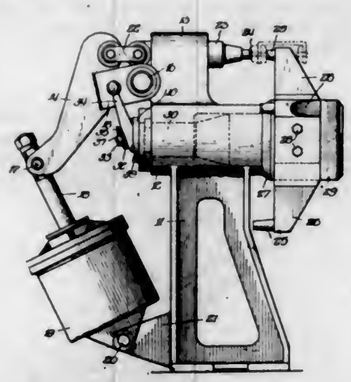
1. A device of the character described, comprising a panel adapted to be supported in inclined position, a flap connected to the upper edge of the panel by a fold line to constitute a prop, said flap having a central longitudinal fold line extending from its end part way of its length about which the flap may be flexed to stiffen the same longitudinally, a flap connected to the lower edge of the panel, and tabs formed at the end of one of said flaps, the other flap having slits arranged in angular relation in a position to receive said tabs to effect an interlocking engagement.

1,765,011. RIVETER. JOHN C. HANNA, Chicago, Ill. Filed July 5, 1924. Serial No. 724,232. 3 Claims. (Cl. 78—48.)



2. In a riveter, a pair of jaw members pivoted together at an intermediate point, a lever pivoted to one jaw member, a cam carried by the other jaw member, said lever carrying means adapted to engage the cam, said lever having a portion extending above the first jaw member, and an operating cylinder and piston pivotally supported from the first jaw member, said piston being connected to the upper end of the lever.

1,765,012. TURRET RIVETER. JOHN C. HANNA and ADOLF NORIN, Chicago, Ill., assignors to Hanna Engineering Works, Chicago, Ill., a Corporation of Illinois. Filed Aug. 10, 1925. Serial No. 49,374. 9 Claims. (Cl. 78—48.)

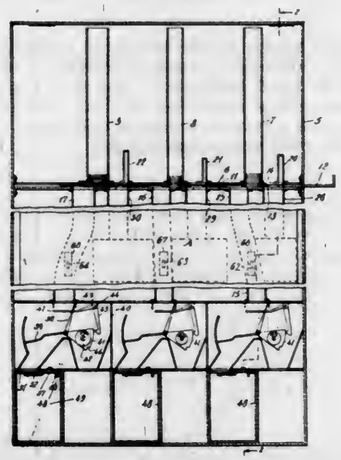


1. In a riveter construction, a frame, a die movable through a predetermined throw, means for operating said die, a plurality of fixed dies, said dies being located at varying distances from the movable die, a rotatable turret carrying the fixed dies to bring said dies selectively into registration with the movable die whereby to vary the distance between movable and fixed dies to accommodate material of different thicknesses.

1,765,013. HYPOCHLORITE IN COLLOIDAL FORM AND PROCESS OF MAKING THE SAME. PAUL R. HERSHMAN, Chicago, Ill., assignor of one-fourth to C. O. Sethness, one-fourth to C. H. Sethness, and one-fourth to Paul Rudnick, Chicago, Ill. Filed Mar. 28, 1927. Serial No. 179,189. 3 Claims. (Cl. 23—250.)

1. The process of making solid or semi-solid compounds containing water-soluble hypochlorite, which consists in mixing compounds, containing hypochlorites, with colloids or substances capable of precipitating a colloidal mass that can be dried by evaporation, and then evaporating the mass until it is dry.

1,765,014. CHECK-CONTROLLED MACHINE. GUSTAV F. HOCHRIEM, Chicago, Ill. Filed June 20, 1928. Serial No. 286,782. 10 Claims. (Cl. 194—1.)



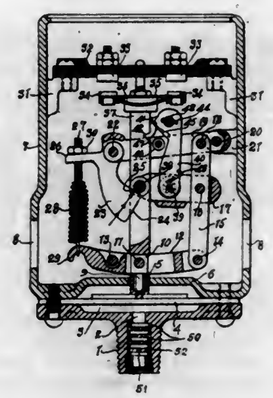
1. The combination of a coin controlled machine, means adapted upon the insertion of a check to be actuated to deliver a coin to actuate the machine, receptacles to receive the coins from the machine and means to divert the coin into the receptacles in predetermined proportion.

1,765,015. PROCESS FOR TREATING RUBBER LATEX COMPOSITION AND ARTICLE FORMED THEREBY. ERNEST HOPKINSON, New York, and MERWYN C. TEAGUE, Elmhurst, N. Y., assignors to American Rubber Company, East Cambridge, Mass., a Corporation of Massachusetts. Filed Aug. 18, 1923. Serial No. 658,183. 4 Claims. (Cl. 18—50.)

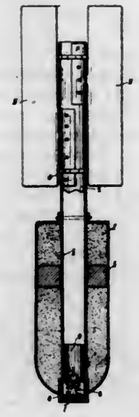
1. A process for preparing articles from rubber latex which comprises making an uncoagulated mixture therewith of cellulose material, a vulcanizing agent, and a colloidal material, and drying the mixture with retention of the solid constituents of the latex.

1,765,016. ELECTRIC SWITCH. ANTHONY G. HORVATH, Dayton, Ohio, assignor to The Dayton Pump and Mfg. Co., Dayton, Ohio, a Corporation of Ohio. Filed Nov. 14, 1928. Serial No. 319,419. 8 Claims. (Cl. 200—83.)

1. In a pressure switch, a pressure-operating diaphragm, a system of levers, a spring operated thereby for storing energy, a cam moved by the spring, a switch arm and roller engaged by the cam, movable contacts on the switch arm, stationary contacts, latch means for holding the switch arm in closed position, means on the system of levers for detaching the latch upon a predetermined amount of energy being accomplished in the spring, a lever of the system of levers connected to the switch arm for positively moving the switch arm in the event the spring and associated mechanism do not, and supplemental unlatching mechanism adapted to unlatch the latch at a higher pressure in the event the normal unlatching means does not operate.



1,765,017. DRILL PROJECTILE FOR BOMBARDING PLANES. FÉLIX MARIE, Cazaux, France, assignor to Etat Français (Ministère de l'Air), Paris, France. Filed Jan. 3, 1929, Serial No. 330,006, and in France Jan. 19, 1928. 4 Claims. (Cl. 102—2.)

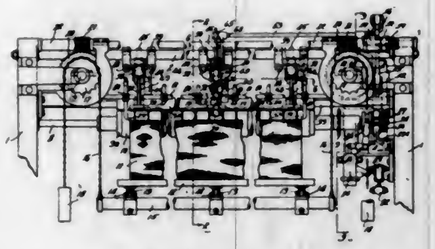


1. In a projectile, a container adapted to receive a cartridge, means supported on said container for exploding a cartridge positioned in the container, a flexible sack positioned outside said container, and marking material supported in said sack.

1,765,018. AUTOMATIC FEEDING DEVICE FOR FLATWORK IRONERS. ALBERT MATTHEWS, Cincinnati, Ohio, assignor to The American Laundry Machinery Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Aug. 27, 1925, Serial No. 52,823. Renewed Feb. 18, 1929. 4 Claims. (Cl. 271—18.)

1. In a machine of the class described adapted to handle limp fabric articles, means for supporting a pile

of said articles, feeding means, pick-up means including a carding cloth member arranged for movement in a fixed path and adapted to pick the top article from said pile and deliver the same to said feeding means, automatic means for elevating said pile-supporting means, and con-



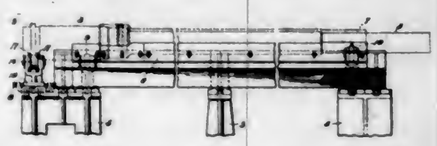
trol means for said pick-up means and said elevating means and associated with said feeding means and arranged to interrupt the operations of said pick-up and of said elevating means during manipulation of an article by said feeding means, and to cause said operations to be resumed after said article has cleared said feeding means.

1,765,019. BALL-PUZZLE DEVICE. WILLIAM R. MAXWELL, Brooklyn, N. Y., assignor to Rida May Edgar. Filed Apr. 6, 1929. Serial No. 353,023. 1 Claim. (Cl. 273—153.)



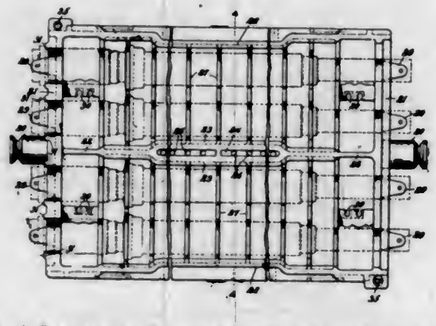
In a puzzle device, a cross shaped block having a curved bottom, said block having a curved central depression, each extension of said block having a curved upwardly inclined depression forming a continuation of said central depression and a horizontal recess, a plurality of loose balls adapted to fit into the horizontal recesses of the block extensions upon movement of the block, transverse pins crossing at the center of the central depression, said pins being at an angle of 45° to the extensions of the block whereby the central depression is divided into four areas, one adjacent each extension, and means for adjusting the elevation of said pins.

1,765,020. CORE-BAR SUPPORT. JAMES R. MCWANE, Birmingham, Ala., assignor to McWane Cast Iron Pipe Company, Birmingham, Ala., a Corporation of Alabama. Filed Aug. 30, 1927. Serial No. 216,467. 8 Claims. (Cl. 22—12.)



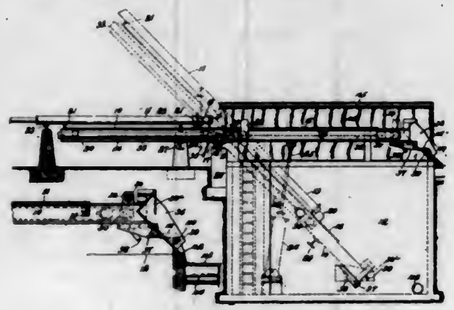
1. A core bar support comprising, in combination, two sets of rollers for rotatably supporting the core bar; and another set of rollers engaging the core bar to prevent any longitudinal movement thereof while supported by said two sets of rollers.

1,765,021. FLASK SECTION FOR MOLDING CAST-IRON PIPES AND THE LIKE. JAMES R. MCWANE, Birmingham, Ala., assignor to McWane Cast Iron Pipe Company, Birmingham, Ala., a Corporation of Alabama. Filed Mar. 19, 1928. Serial No. 262,683. 10 Claims. (Cl. 22—96.)



1. A flask section for the molding of a plurality of cast iron pipes horizontally, having provision at its opposite ends to be lifted horizontally and double longitudinal strengthening webs separating the flask section into pouring units and arranged to prevent destructive deflections of the flask when rammed and lifted.

1,765,022. APPARATUS FOR REMOVING CORES FROM CAST-IRON PIPES AND THE LIKE. JAMES R. MCWANE, Birmingham, Ala., assignor to McWane Cast Iron Pipe Company, Birmingham, Ala., a Corporation of Alabama. Filed July 2, 1928. Serial No. 289,802. 30 Claims. (Cl. 22—1.)

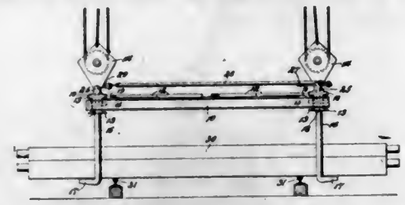


1. Apparatus for removing cores from cast iron pipes comprising, in combination, a tiltable platform: means on the platform to receive a pipe with a core bar therein; means to tilt the platform to an angular position in which the core bar will fall out of the pipe; means engaging the end of the pipe which is lowermost when the platform is tilted to prevent downward movement of the pipe; a movable abutment on the platform against which the core bars strikes upon falling; means permitting the abutment to descend to a point where the core bar is free of the pipe; and means associated with the platform to recover the core sand.

1,765,023. CRANE RIG. JAMES R. MCWANE, Birmingham, Ala., assignor to McWane Cast Iron Pipe Company, Birmingham, Ala., a Corporation of Alabama. Filed Aug. 7, 1928. Serial No. 298,005. 2 Claims. (Cl. 294—67.)

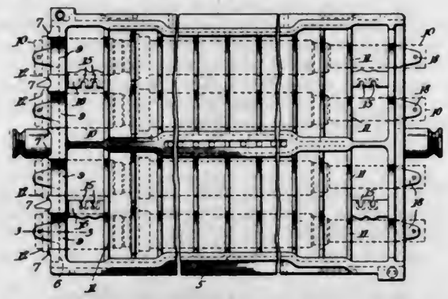
1. A crane carrying rig of the character described, comprising in combination, a structural frame adapted to be supported in a horizontal plane; a plurality of vertically arranged spindles supported by the frame and spaced

apart to straddle a completed pipe mold; bearings for said spindles carried by said frame; means for manual control of the axial positions of said spindles whereby



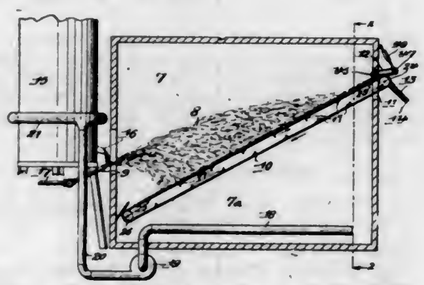
they may be located in unison to engage underneath the mold and be disengaged therefrom; and means whereby the spindles may be adjusted so that the rig may be applied to molds of different widths.

1,765,024. CORE GUIDE. JAMES R. MCWANE, Birmingham, Ala., assignor to McWane Cast Iron Pipe Company, Birmingham, Ala., a Corporation of Alabama. Original application filed Mar. 19, 1928, Serial No. 262,683. Divided and this application filed Mar. 2, 1929. Serial No. 343,887. 4 Claims. (Cl. 22—184.)



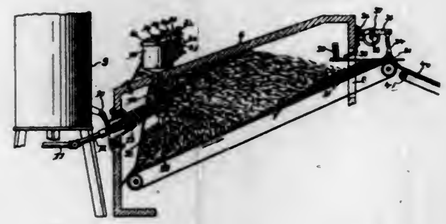
4. In combination, a flask section for pipe and the like having an end wall provided with an outwardly projecting integral boss, said boss having an outer machined face and being so spaced relative to the mold as to guide the core bars longitudinally; the top of said boss being flush with the top of the flask section; a core having a flange projecting laterally thereof for contact with the outer machined face of the boss; machined seats on the flask section near the opposite ends thereof for support and lateral guiding of the core bar; and core bar clamping means located beyond the core bar seats and adjacent the opposite ends of the flask section.

1,765,025. MACHINE AND METHOD FOR FORMING MINERAL-WOOL BATS. WILLIAM LOTT MILLER, Winona, Minn. Filed July 28, 1927. Serial No. 208,955. 5 Claims. (Cl. 154—27.)



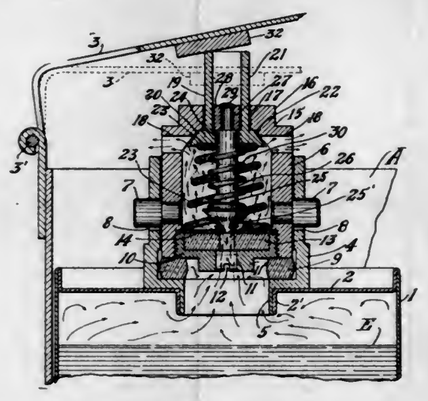
2. In a machine of the class described the combination with a settling chamber, of means for forming mineral wool fibers and for blowing them into said chamber, a conveyor arranged to receive said fibers as they fall in the chamber and means for operating said conveyor to deliver a loosely felted blanket of fibers of predetermined thickness and density at an end of said chamber.

1,765,026. METHOD OF MAKING MINERAL OR ROCK WOOL BATS. WILLIAM LOTT MILLER, Winona, Minn. Filed Dec. 28, 1928. Serial No. 329,063. 7 Claims. (Cl. 154—28.)



3. The method of forming a mineral wool bat, which consists in producing fibre-like particles from a molten mass, blowing a stream of said particles while hot into a chamber and allowing them to settle therein while controlling the distribution of the particles to form a loose blanket of substantially uniform thickness, simultaneously introducing into the stream of particles in said chamber a stream of cementitious material while limiting the quantity of such cementitious material to prevent excessive coating of the particles and then compressing the blanket so formed to produce a bat of the desired thickness and density in which at least some of the particles are cemented together.

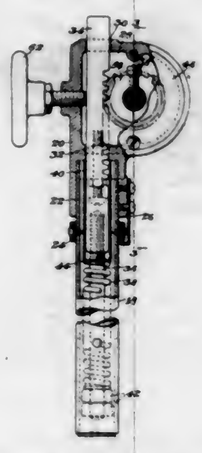
1,765,027. STORAGE-BATTERY CELL. ROY C. MITCHELL, East Orange, N. J., assignor to Edison Storage Battery Company, West Orange, N. J., a Corporation of New Jersey. Filed Mar. 8, 1927. Serial No. 173,644. 15 Claims. (Cl. 136—178.)



1. A battery cell having a vent device, said vent device comprising a member having an opening, a valve adapted to cooperate with said opening to control the passage of fluid therethrough, a member movable with respect to said valve, means associated with said valve and movable member for limiting the movement of the latter with respect to the valve in one direction, and a compression spring disposed between said valve and movable member and tending to maintain the latter at such limit of its said relative movement, said movable member when in a given

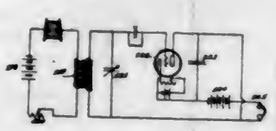
position acting through said means positively to hold the valve open and when moved from said position acting to compress said spring and through such spring to move the valve to and yieldingly hold the same in closed position.

1,765,028. ADJUSTABLE SUPPORT STAND FOR ELECTRIC LAMPS. OTTO J. MOEHLER, Newark, N. J., assignor to General Electric Vapor Lamp Company, a Corporation of New Jersey. Filed Dec. 21, 1926. Serial No. 156,243. 2 Claims. (Cl. 248—3.)



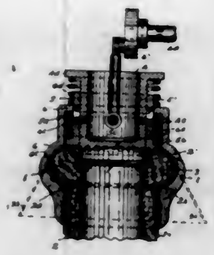
1. An adjustable support apparatus comprising an upright tube, a head member swiveled on the upper end of said tube, said head member being provided with a slideway connecting at all rotative positions with the opening of said tube, a rack slidable in said slideway and in the tube opening, a sleeve in said tube and about said rack bearing against the lower side of said head member, a compression spring bearing at one end against the lower end of said sleeve and at its other end against a shoulder on said rack, said shoulder being adjustable on said rack for varying the compression of said spring, a load supporting shaft journaled in said head member and a pinion on said shaft and engaging said rack.

1,765,029. SOUND-REPRODUCING APPARATUS. HOWARD J. MURRAY, Brooklyn, N. Y., assignor to R. M. Company, Inc., East Pittsburgh, Pa., a Corporation of Delaware. Original application filed Sept. 15, 1921, Serial No. 500,938. Divided and this application filed Mar. 21, 1927. Serial No. 178,516. 12 Claims. (Cl. 179—100.3.)



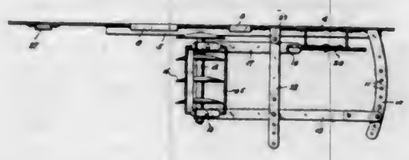
2. In a device of the class described, a light source of constant intensity, means to select a light beam of constant area of cross-section from said source, a sensitive member responding in electrical resistance according to the illumination thereon and comprising a plurality of electrical paths which each has a different resistance from that of the other paths when illuminated by sa'd constant beam, and means to cause said beam to impinge on a selected path whereby to determine the electrical resistance across said member.

1,765,030. APPARATUS FOR APPLYING BOTTLE CLOSURES. JOHN A. PEABE, Syracuse, N. Y., assignor to Kleen Kap Corporation, Syracuse, N. Y., a Corporation of New York. Filed Mar. 16, 1928. Serial No. 262,284. 6 Claims. (Cl. 226—80.)



1. In a device for assembling and applying two-part milk bottle closures, composed of a sheet of pliable metal and a fibrous disc, means to feed the sheet over the bottle mouth and to position said disc over said sheet in registry with the bottle mouth, means to engage and force the disc and the medial portion of said sheet into the mouth, means to conform the adjacent portion of said sheet to the portion of the bead that extends into the mouth, and means positioned below and movable laterally relative to the last named means to conform the marginal portion of said sheet to the remaining portion of the bead and the adjacent portion of the bottle neck.

1,765,031. DITCH CLEANER. JOHN WILLIAM PECK, Fresno, Calif. Filed Aug. 25, 1927. Serial No. 215,407. 3 Claims. (Cl. 37—80.)



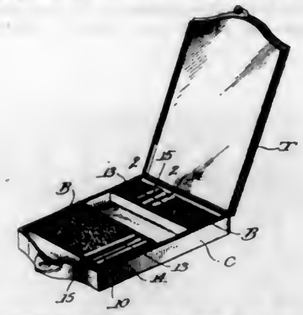
3. A ditch cleaner including an elongated bar, one margin of which is formed to provide a runner which issues into a blade projecting below the latter, ground engaging discs mounted on the bar, the peripheries of which extend beyond the runner and terminate in the horizontal plane of the blade margin.

1,765,032. METHOD OF SEASONING CONDENSERS. LEON H. RICHMOND, Fort H. G. Wright, N. Y. Filed Apr. 6, 1927. Serial No. 181,615. 6 Claims. (Cl. 175—41.)

1. The method of seasoning or treating a condenser after being rolled in the usual manner, which method consists in exposing said condenser to a cycle of temperature changes said cycle of temperature changes being sufficient to permanently set the electrical capacity of the condenser but insufficient to melt the elements thereof.

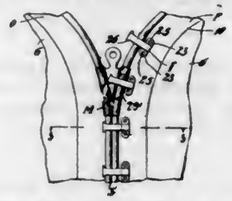
1,765,033. VANITY CASE. WALTER F. SHELGREN, Bradford, Pa. Filed May 15, 1929. Serial No. 363,339. 3 Claims. (Cl. 132—83.)

1. In a vanity case having a powder container, an endless powder conveyor movably arranged in the container and being capable of carrying powder from the container to a point where it may be removed from the conveyor, said conveyor comprising a strip of flexible material and fastening means securing the ends of the strip together, said



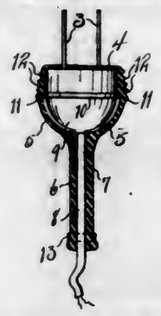
fastening means being provided with a channel-like groove in its upper surface in which a finger or other instrument may be inserted for shifting the belt.

1,765,034. SPRING FASTENING DEVICE AND MEANS FOR OPERATING THE SAME. NOEL STATHAM, Irvington-upon-Hudson, N. Y. Filed June 10, 1924. Serial No. 719,074. 7 Claims. (Cl. 24—205.)



1. In a fastening device comprising a fastener-supporting portion, and a plurality of fasteners in the form of unitary spring clips each provided with a pair of opposed, cooperating spring arms and with lateral extension for attaching the clip to the edge portion of said fastener-supporting portion.

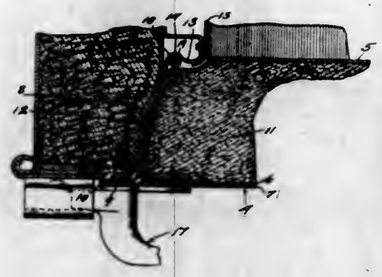
1,765,035. CORD PROTECTOR FOR ELECTRIC PLUGS. MARIE M. STUBBS, Dallas, Tex. Filed Apr. 19, 1928. Serial No. 271,327. 5 Claims. (Cl. 173—269.)



1. An attachment for electric plugs comprising a body of resilient non-conducting material having a flat member engaging the end of the plug and provided with slots to receive the contact members of the plug and having securing members curved to conform to the contour of the plug and enclosing same and having securing members engaging and enclosing a portion of cord of the plug.

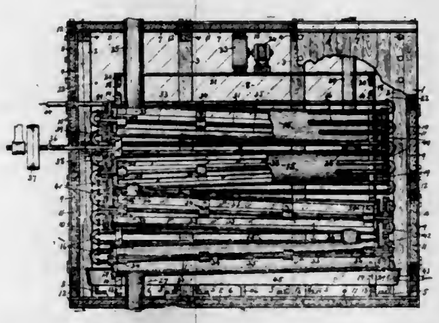
1,765,036. DOOR AND THE LIKE. STEPHEN S. THOMAS, Lebanon, Ohio. Filed Aug. 20, 1928. Serial No. 300,856. 4 Claims. (Cl. 126—190.)

1. The combination with a rectangular door jamb having a relatively deep outwardly tapered sealing surface, termination at its inner edge in an outwardly facing concave recess encircling the inner edge of said jamb, and a relatively thick door for said jamb, said door having its edge portion also tapered to conform to the taper of the door jamb, said inner edge of the door terminating in an inwarding reaching encircling projection working into the concave recess of the door jamb, of means for sealing said inner



edge of the door with respect to the jamb comprising a sectional gasket composed of straight sections of asbestos tubing with reinforcing wires extending through them and beyond their ends, said tubing sections being seated into the concave recesses of the jamb in position to receive the edge of the door, and the projecting ends of the wires extending through openings in the corners of the jamb, substantially as described.

1,765,037. COCOA COOLING APPARATUS. WALTER WAIN, Fulton, N. Y. Filed Mar. 29, 1927. Serial No. 179,384. 3 Claims. (Cl. 257—23.)

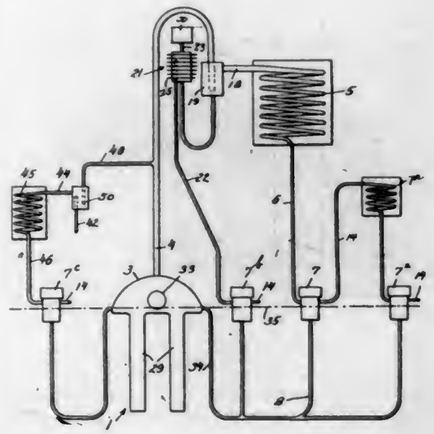


2. In a device of the class described, a housing having therein a pair of chambers arranged one above the other, said chambers being in communication with each other at their outer edges, a plurality of tubular conduits connected in series and disposed in sequence in the lower chamber, the disconnected ends of the uppermost and lowermost conduits being provided respectively with an inlet and an outlet conduit, rotary agitators disposed in the conduits, a plurality of cooling coils for the reception of a refrigerant disposed in the lower chamber in spaced relation to said conduits, means comprising a fan positioned in the upper chamber for circulating the air within the housing around the conduits and refrigerating coils and means for rotating said agitators.

1,765,038. APPARATUS FOR TRANSFERRING HEAT. JUSTIN F. WAIT, New York, N. Y., assignor to Sun Oil Company, Philadelphia, Pa., a Corporation of New Jersey. Filed Aug. 8, 1925. Serial No. 48,987. 7 Claims. (Cl. 257—241.)

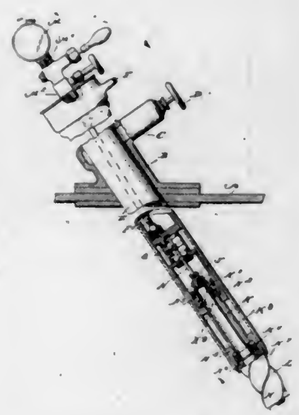
1. In a heating apparatus, in combination, a heater adapted for the vaporization of a metal, a heat exchanger,

a conduit for the passage of vapors from the heater to the exchanger, and means for limiting the pressure of vapors



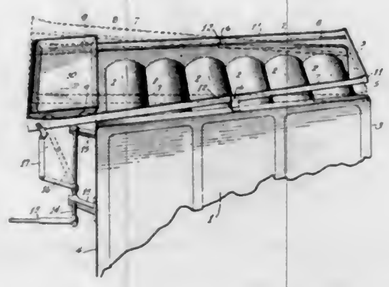
in said apparatus comprising a second conduit receiving vapors from said apparatus and having an outlet controlled by a liquid metal seal.

1,765,039. SHIP LOG. JEFFERY WALKER, Birmingham, England. Filed May 14, 1928, Serial No. 277,722, and in Great Britain July 7, 1927. 4 Claims. (Cl. 73—122.)



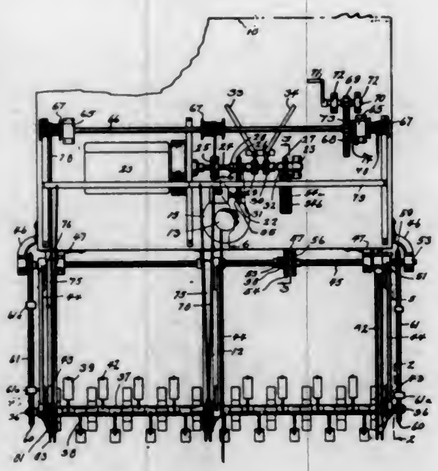
1. A ship log comprising a tubular bracket having means for supporting it at an inclination over an opening in the hull of a ship with its lower end directed toward the stern of such ship, a tubular housing removably fitting within said tubular bracket to project into the water, a rotator spindle extending axially of said housing, a bearing within said housing to support said spindle adjacent its upper end, a second bearing in said housing adjacent the lower end of the latter to support said rotator spindle adjacent its lower end, and a rotator carried by the lower end of said rotator spindle, said rotator having its upper end extending into the lower end of said housing, said rotator having its lower end projecting beyond the housing and comprising vanes each of such a contour as to present the maximum effective surface at substantially a right angle to the flow of water past said rotator.

1,765,040. IRONING-MACHINE ATTACHMENT. WILLARD WARNER, Sacramento, Calif., assignor of one-half to Joseph N. Burroughs, Oakland, Calif. Filed Oct. 21, 1926. Serial No. 143,071. 4 Claims. (Cl. 104—164.)



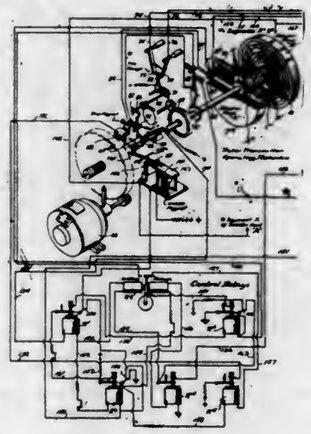
1. A device of the type described comprising a track pivoted at an intermediate point thereof, a carrier supported by said track and being movable thereonlong, and operator-controlled toggle links connected to an end of the track for tilting said track in either direction.

1,765,041. CHANNEL-FORMING DEVICE FOR SILT-CARRYING RIVERS. MICHAEL WATERS, Sioux City, Iowa. Filed Apr. 6, 1927. Serial No. 181,435. 5 Claims. (Cl. 37—77.)



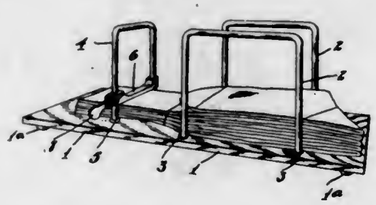
1. In a channel-forming device, a floating structure, adapted to be moved against the current of a river, a power plant thereon, a shaft journalled on said structure forwardly thereof in a position transverse to the direction of travel thereof, said shaft being driven from the power plant, a cutter frame swingingly mounted on said shaft at one end, a cutter journalled in the free end of said frame, on an axis parallel to said shaft, a driving connection between the cutter and shaft, a plurality of floating booms, each journalled at one end upon said shaft and extending over said cutter a plurality of fixed booms secured to the floating structure and extending above said floating booms, a plurality of cables secured to the frame extending around the ends of the floating booms and slidingly engaged thereby and thence extending around the ends of the fixed booms and means for winding said cables.

1,765,042. AUTOMATIC TAPE-CONTROLLED TRANSMISSION FOR TICKERS. EVAN R. WHEELER, North Plainfield, N. J., assignor to The Western Union Telegraph Company, New York, N. Y., a Corporation of New York. Filed Dec. 5, 1924. Serial No. 754,188. 25 Claims. (Cl. 178—4.)



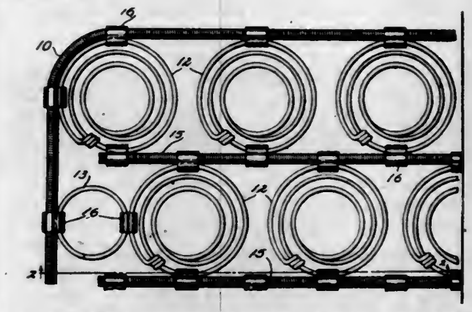
1. An automatic telegraph system, comprising a tape-controlled transmitting apparatus and a typewheel printing mechanism, said transmitting apparatus embodying a selecting device having cooperating movable and stationary contacts, means for selecting and positioning certain of said movable contacts simultaneously with relation to their co-operating stationary contacts in accordance with a code combination determined by the permutations of the perforations in the tape, a segmented circuit controller having circuit connections to said contact device, motor-actuated brushes movable over the segments of said controller, and electro-magnetic means for stopping said brushes at a point determined by a circuit passing serially through a plurality of said segments and contacts predetermined by the selected arrangement of perforations in the tape.

1,765,043. DISPLAY HOLDER FOR SOCKS OR OTHER ARTICLES. WILLIAM H. WHITE, East Rutherford, N. J., assignor to Regal Shoe Company, Whitman, Mass., a Corporation of Massachusetts. Filed May 18, 1926. Serial No. 278,863. 2 Claims. (Cl. 211—49.)



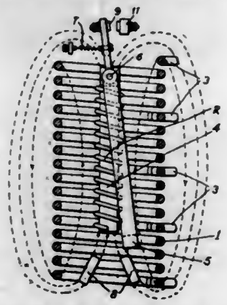
1. A display holder embracing in its construction a base member, substantially parallel side frames secured to said base in spaced relation to position interposed articles in piled relation, clamping means arranged near one end of the base and comprising parallel uprights spaced apart to receive the articles to be displayed and a vertically movable cross-bar provided with open slotted ends dimensioned to slidingly embrace said uprights, and a cam lever pivotally mounted in one of the slotted ends in positions to firmly lock the clamping bar against displacement from clamping position at different levels on said upright.

1,765,044. SOFT SPRING CUSHION. HARRY E. WOLF, Pittsburgh, Pa., assignor to Fort Pitt Bedding Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Mar. 10, 1928. Serial No. 260,628. 1 Claim. (Cl. 5—248.)



A spring skeleton for cushion seats, mattresses, and the like, comprising upper and lower spaced border frames, the upper border frame being formed of a tubing of coiled wire; a plurality of large helical springs of uniform size positioned within and between the frames, the said springs being arranged in spaced rows with the springs in one row staggered with respect to the springs in an adjacent row, the spring of the outer rows being secured to the border frames by means of suitable clips, the end springs of the outer rows being positioned in the corners of the border frames, each of said end springs being in contact with and secured to two sides of the border frames, the corners of the border frames conforming in contour to that of the top and bottom convolutions of the said end springs; other helical springs of less size, positioned at the ends of and in alignment with the rows in which the springs are staggered with respect to the outside rows and secured by means of clips at diametrically opposed points to the border frame and end springs of the said aligned rows; flexible coiled tubings of wire disposed between adjacent rows of springs and contacting tangentially with the springs in the rows, the said tubings of wire being terminated at a point lying between the center line of said end springs and the side of the border frame, the said tubings of wire being free from contact with and connection to the border frame; and clips encircling the said tubings of wire and the springs in tangential contact therewith and securing the said springs to the said tubings at diametrically opposed points at the top and bottom of said springs, each of said clips contacting only one of said tubings and one of said springs.

1,765,045. CONTROL SYSTEM. CHARLES B. BARTLEY and VIRGIL H. DAKE, Pittsburgh, Pa. Filed Mar. 19, 1928. Serial No. 262,698. 17 Claims. (Cl. 175—336.)

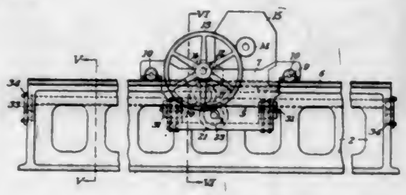


1. In an electro-magnet comprising a plurality of solenoids concentrically mounted one within the other, an armature disposed to be actuated by the magnetic flux surrounding said solenoids, and permeable means adapted to be adjusted to vary the amount of magnetic flux affecting the armature.

1,765,046. MANUFACTURE OF FELT. GEORGE D. BEAL and ROB ROY MCGREGOR, Pittsburgh, Pa. Filed Dec. 19, 1928. Serial No. 327,178. 5 Claims. (Cl. 8—21.)

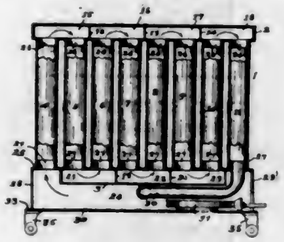
1. The method of preparing animal fibre for felt-making which consists in subjecting it to the action of steam under pressure, together with an acidic hydrolytic agent.

1,765,047. DRAWING MACHINE. ALBERT C. BELLES, New Brighton, Pa., assignor to Union Drawn Steel Company, Beaver Falls, Pa., a Corporation of Pennsylvania. Filed Sept. 8, 1926. Serial No. 134,179. 2 Claims. (Cl. 205—3.)



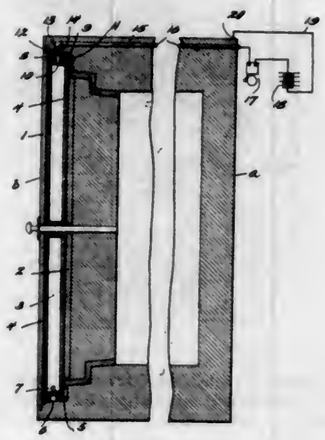
1. In a drawing machine, a supporting frame having two parallel side members, transverse brace members connecting the side members to each other and spaced apart a distance equal to the length of the longest article to be drawn, a guide on the upper portion of each of the side members, a rack on each side member below the guide thereon, a carriage supported on the guides between the racks and extending below the racks, a transverse shaft on the carriage below the racks, a gear on each end of the shaft on the exterior of the carriage and below the racks, each of said gears meshing with the teeth of one of the racks, a motor on the carriage, gearing connecting the motor and said shaft for moving the carriage, a die support connected to the side members of the frame in substantially the plane of the racks, and a gripper on the carriage in line with a die when mounted in the die support.

1,765,048. HEATING APPARATUS. WILLIAM A. BOLLINGER, Pittsburgh, Pa., assignor of one-fourth to William Augustus Bollinger and one-fourth to Elmer N. Bollinger, Pittsburgh, Pa. Filed June 22, 1928. Serial No. 287,616. 1 Claim. (Cl. 126—91.)



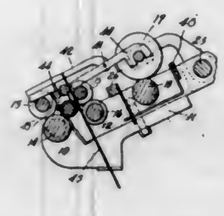
In combination, a heating apparatus comprising a horizontally disposed upper casing divided into a plurality of separate compartments; a horizontally disposed lower casing divided into a plurality of separate compartments; a plurality of vertically disposed conductor pipes; the upper ends, of two adjacent conductor pipes communicating with each of the said upper casing compartments; a combustion chamber disposed below said lower casing; the bottom of said lower casing constituting the top of said combustion chamber; the lower ends of the two conductor pipes, which are disposed on respective ends of said lower casing, communicating with said combustion chamber; the lower ends, of two adjacent of the others of said conductor pipes, communicating with each of respective lower casing compartments; a flue member mounted in said combustion chamber and communicating with the lower end of one of said end conductor pipes; and a heating element mounted in one end of said combustion chamber below and in close proximity to said flue member, substantially as described and for the purpose set forth.

1,765,049. BURGLAR-PROOF SAFE. WILLIAM W. BURNS, Baltimore, Md. Filed July 25, 1928. Serial No. 295,254. 3 Claims. (Cl. 177—316.)



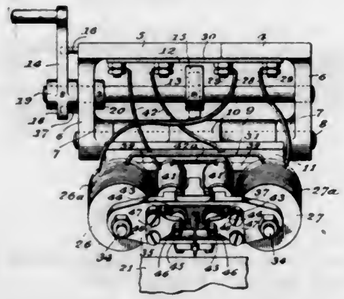
1. The combination, with a safe, of a closed tank for an obnoxious gas under pressure secured to the safe and arranged to the rear of an outer side plate thereof, insulating material interposed between the safe side plate and the tank, a signal, and an electric circuit connecting the signal with the safe and the tank, the said circuit being closed when a drill penetrates the side plate and insulating material and engages with the tank, and the gas being liberated when the drill penetrates the tank.

1,765,050. DRAWING MECHANISM. ARTHUR CECIL BUTLER, Boston, Mass. Filed Aug. 22, 1928. Serial No. 301,232. 13 Claims. (Cl. 19—130.)



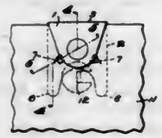
1. A drawing mechanism comprising front and rear pairs of rollers, an intermediate set of rollers including an upper roller and forward and rear lower rollers engaging therewith, a draft bar adjustably located between the rear rollers and the intermediate set at a distance from the intermediate set about equal to the average length of the fibers of the roving or sliver being drawn, means for adjusting the distance between the front rollers, and the forward lower intermediate roller, a cap having portions fitting on the surface of one of said intermediate lower rollers, and means for retaining said cap in place on top of said lower roller.

1,765,051. RECORDING MEANS. FRANK L. CAPPS, Milford, Conn., assignor to Columbia Phonograph Company, Inc., Bridgeport, Conn., a Corporation of New York. Filed June 7, 1926. Serial No. 114,119. 9 Claims. (Cl. 179—100.41.)



1. In a recording device, a pivoted armature, cushion means at each side of the pivot of said armature, and adjustable means for maintaining said cushion means in contact with the armature in the normal position of the latter for preventing free movement thereof about its pivot, and non-magnetic means supporting said adjusting means.

1,765,052. SEPARABLE FASTENER. FRED S. CARR, Newton, Mass., assignor, by mesne assignments, to United-Carr Fastener Corporation, Cambridge, Mass., a Corporation of Massachusetts. Filed July 22, 1925. Serial No. 45,272. 9 Claims. (Cl. 24—219.)



1. A one-piece fastener stud including a clip portion having upper and lower flanges secured together at one end to provide a hinge portion, a head and neck portion presented by the upper flange, a plurality of attaching prongs extending toward said lower flange from said upper flange, and cooperating apertures in said lower flange through which said prongs may pass.

1,765,053. FASTENER STUD. FRED S. CARR, Newton, Mass., assignor, by mesne assignments, to United-Carr Fastener Corporation, Cambridge, Mass., a Corporation of Massachusetts. Filed July 22, 1925. Serial No. 45,278. 3 Claims. (Cl. 24—219.)



2. A slip cover fastener element comprising a U-shaped clip-like portion providing a base portion and an attaching portion adapted to be engaged against opposite faces of a support and a fastener member presented by the base portion, said fastener member being offset laterally with relation to the center of the attaching portion to permit proper positioning of the fastener member with relation to a cooperating fastener element attached to a slip cover when the clip portion is attached to a support near a fastening means which secures the said socket to another part and a pair of fingers formed as a part of the attaching portion, as and for the purposes illustrated and described.

1,765,054. SHEET-METAL BUTTON AND THE METHOD OF MAKING THE SAME. MOSES F. CARR, Lexington, Mass., assignor to United-Carr Fastener Corporation, Cambridge, Mass., a Corporation of Massachusetts. Filed Aug. 6, 1928. Serial No. 297,807. 15 Claims. (Cl. 24—95.)



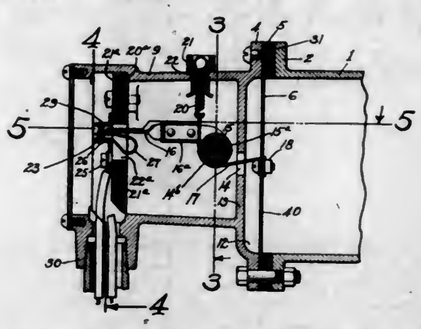
1. A metal button having a body formed of sheet metal, said body having as integral parts thereof, a head, a shank having a restricted opening at the bottom end thereof, and a generally arch-shaped anvil portion housed within and integral with said shank, said anvil portion providing a fastener-receiving recess in which a fastening element may be upset.

1,765,055. TACK-ATTACHED SHEET-METAL BUTTON. MOSES F. CARR, Lexington, Mass., assignor to United-Carr Fastener Corporation, Cambridge, Mass., a Corporation of Massachusetts. Filed Aug. 6, 1928. Serial No. 297,808. 4 Claims. (Cl. 24—95.)



1. A two piece sheet metal button having a head formed from two pieces of metal secured together, a cup-shaped shank formed integral with one of the pieces of said head and fastener upsetting and retaining means formed integral with said shank for automatically upsetting and clenching a portion of a fastening element forced into engagement therewith.

1,765,056. AUTOMATIC DEVICE. LEWIS L. CUNNINGHAM, Minneapolis, Minn., assignor, by mesne assignments, to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a Corporation of Delaware. Filed Feb. 8, 1926, Serial No. 86,849. Renewed Apr. 15, 1929. 15 Claims. (Cl. 297—11.)

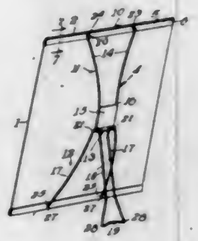


1. A device of the class described comprising a hollow member, a heat-conducting diaphragm attached crosswise of the member and arranged to be deflected by radiant rays incident thereupon, a radiator member engaging the diaphragm on the opposite side, the material of said radiator members and diaphragm having substantially the same coefficient of expansion, and an element interposed between the diaphragm and one of the radiator members to prevent heat conduction.

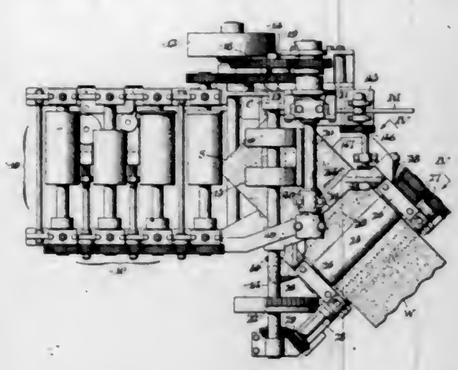
1,765,057. POSTER DISPLAY MEANS. CASTRO M. DABROHUA, Chicago, Ill. Filed Apr. 20, 1928. Serial No. 271,483. 5 Claims. (Cl. 40—125.)

1. In a poster support of the kind described, two longitudinally relatively movable resilient members, each hav-

ing two laterally spaced ends for engagement with a poster, one of said members being formed back upon itself to provide a brace, the brace normally lying substantially in the plane of the member and provided with formed up cam portions adapted to be engaged by the other relatively movable member as it approaches its extended position and whereby the brace member is forced out of the plane of the device to serve as an inclined brace to support the device and an attached poster in substantially vertical position.



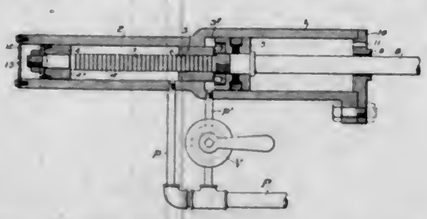
1,765,058. MACHINERY FOR MANUFACTURING SHINGLES. MARIUS S. DARROW, St. Louis, Mo., WILLIAM J. HART, East St. Louis, Ill., FRED G. GRONEMEYER, St. Louis, Mo., and FRANCIS B. WATKINS, Edwardsville, Ill., assignors to The Barber Asphalt Company, Philadelphia, Pa., a Corporation of West Virginia. Filed July 24, 1926. Serial No. 124,578. 2 Claims. (Cl. 154—1.)



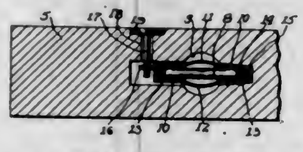
2. A shingle manufacturing machine including means for intermittently feeding a strip of material in the direction of its length, a knife arranged to sever the strip on a transverse line to form a shingle therefrom while the strip is stationary, means for stapling a corner of a shingle substantially concurrently with its severing, means for operating on the stapled corner of a shingle, and means for intermittently feeding a severed shingle in the direction of its diagonal and at an angle to the direction of feed of the strip to the said operating means.

1,765,059. AIR-CUSHIONED MECHANISM. ADOLPH L. DE LEEUW, Plainfield, N. J., assignor to The Goss and De Leeuw Machine Company, New Britain, Conn., a Corporation of Connecticut. Filed June 29, 1928. Serial No. 289,312. 7 Claims. (Cl. 121—38.)

1. An air actuated device combining a plurality of aligned cylinders; a piston slidably mounted in each of said cylinders said pistons presenting unequal effective areas; a partition separating said cylinders; a piston rod connected with both of said pistons and passing through said partition; a work rod connected with one of said pistons; an air pressure line permanently connected with the cylinder containing the piston of lesser effective area between the piston therein and said partition; means to admit air pressure from said line into the cylinder containing the piston having the greater effective area between the piston and said partition to move said work rod in one direction under the differential forces exerted on said pistons; and means to exhaust the air from the last named cylinder to cause said work rod to be moved in the opposite direction by pressure in the other cylinder.

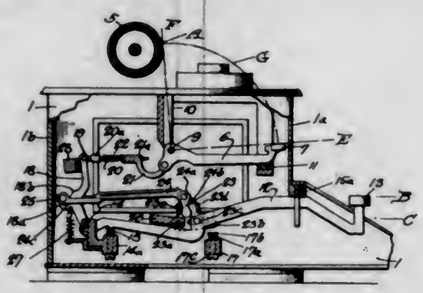


1,765,060. LEVEL. ANICETO DE ANGELIS, Clairton, Pa. Filed Sept. 25, 1926, Serial No. 137,652. Renewed Dec. 20, 1929. 1 Claim. (Cl. 33—214.)



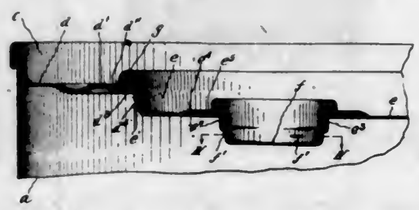
In a level of the character described, a bar having a transverse side opening and communicating longitudinal recesses, a level glass holder having sockets in said recesses and pivoted at one end within one of said recesses, a level vial in said holder, means for adjusting said holder including an adjusting screw, an arm with which said screw engages and bows intermediate said sockets adapted to expose to view the midportion of the level vial, said sockets, bows and arm forming an integral structure.

1,765,061. KEY ACTION FOR TYPEWRITERS AND OTHER MACHINES. ORVILLE U. DESHA, Fort Collins, Colo., assignor of one-fifth to The Desha Typelex Trust Estate, Fort Collins, Colo. Filed Jan. 27, 1928. Serial No. 249,880. 18 Claims. (Cl. 197—27.)



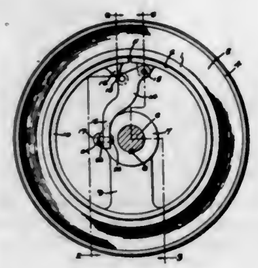
1. In a typewriter key action, a type bar, a key lever, a pivot rod for the rear end of said key lever, an angular vibratory level loosely mounted on said key lever pivot rod beside its key lever, an accelerating linkage operatively connecting the type bar and vibratory lever, a reversely breaking actuating connection operatively connecting the key lever and vibratory lever moving the type bar to printing point upon depression of the key lever, means reversely breaking said connection after printing impact of the type bar for returning the type bar to normal position while the key lever is in depressed position.

1,765,062. SHEET-METAL GREASE DRUM AND METHOD OF USING SAME. CHARLES T. DRAPER, Cleveland, Ohio, assignor to The Draper Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed Nov. 20, 1924. Serial No. 751,141. 2 Claims. (Cl. 220—60.)



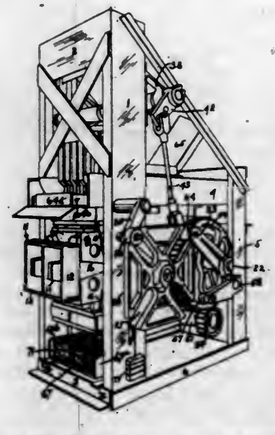
1. A sheet metal drum having one end substantially open near an annular U-sectioned seat, a closure member therefor having a coacting U-sectioned rim forcibly engaged over said seat and sealed in tested air-tight relation thereon; said closure being provided with an inwardly rimmed opening, and a secondary closure member fitting within said opening having intermediate ribs taking above or below the rim to afford non-sealing and sealing positions therefor, substantially as set forth.

1,765,063. CLUTCH. CHARLES M. EBERLING, Cleveland, Ohio. Filed Jan. 13, 1927. Serial No. 160,844. 1 Claim. (Cl. 192—77.)



In a clutch, in combination, a receiving member defining a surface of revolution, a shaft, coaxial with said surface and rotatable relative to said member, a companion member having a split flexible rim inside of and complementary to said first surface, said companion member having a hub rigidly connected to said shaft and said rim being split at one point and having a rigid connection with said hub at a point removed from said split, a lever pivoted to said rim at one side of said split, the pivot axis being parallel to the shaft and the free end of the lever projecting past one side of said shaft, said lever and the opposite end of said rim being provided, one with a slant-faced abutment and the other with a roller adapted to engage said abutment in camming relation and expand the rim when the inner end of said lever is displaced outwardly, and to return said lever to disengaging position against the effect of centrifugal force when said lever is released, a longitudinally slidable spool mounted on said shaft, and a shifting member for said spool, said lever and spool having cooperating camming portions.

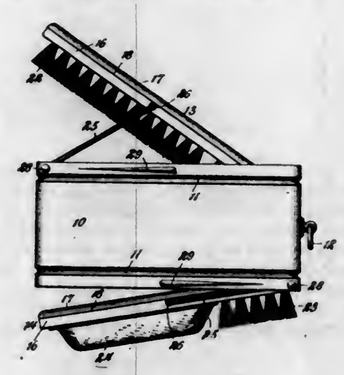
1,765,064. BUILDING-BLOCK MACHINE. CHARLES M. EBERLING, Cleveland, Ohio. Filed Apr. 4, 1927. Serial No. 180,638. 30 Claims. (Cl. 25—41.)



9. In a concrete block machine: the combination of a rotatable shaft, a radially extending mold carried by said shaft, means for intermittently rotating said shaft, a pallet having upstanding end portions, and means on said mold for engaging said upstanding portions and thereby to hold the face portion of said pallet disposed over the open face of said mold.

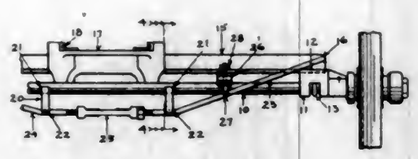
24. In a concrete block machine: the combination of a rotatable shaft, a radially extending mold carried by said shaft, means for intermittently rotating said shaft, a sliding charger for feeding material to said mold, a gear wheel for intermittently rotating said shaft, cams carried by one face of said gear wheel for reciprocating said charger a plurality of times during each rotation of said wheel, and other cams carried by the other face of said gear wheel for causing a descent of said tamper a plurality of times during each rotation of said gear wheel.

1,765,065. SHOE-POLISHING KIT. ARTHUR FEAR, Hastings, New Zealand. Filed Apr. 24, 1928. Serial No. 272,527. 6 Claims. (Cl. 15—258.)



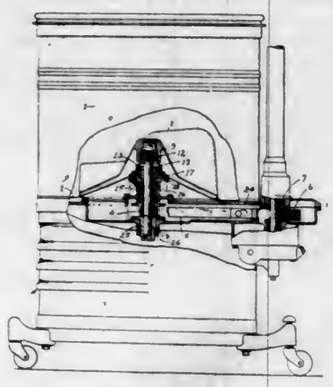
1. In a device of the character described, a casing having an open side, a member adapted to fit telescopically within said open side, and permanent pivotal means connecting said member with said side, said member being rotatable with respect to said means whereby to be telescoped within the casing with either side outermost, said means comprising a substantially U-shaped member having the ends of its arms pivoted to the casing and having its bight portion extending through said member, said casing having means to engage said arms to hold said first-mentioned member in either position.

1,765,066. COMBINED AXLE AND FRAMING STRUCTURE. DAVID I. FOGGER, Peru, Ill., assignor to Peru Plow & Wheel Co., Peru, Ill., a Corporation of Illinois. Filed Mar. 12, 1928. Serial No. 260,961. 3 Claims. (Cl. 301—125.)



1. An axle assembly comprising an axle, a T-bar mounted on the axle at a spaced distance therefrom, means for trussing the axle comprising opposed truss rods having their intermediate portions bent about the outer ends of the T-bar, the ends of each of said truss rods projecting downwardly and towards the other truss rod to a point below the axle, means attached to the axle for holding the ends of each truss rod at a spaced distance apart and below the axle, and adjustable members connecting the adjacent ends of the truss rods.

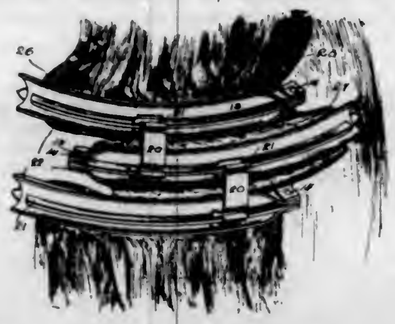
1,765,067. DOMESTIC WASHING MACHINE. WALTER A. FRANTZ, Cleveland Heights, Ohio, assignor to The Apex Electrical Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed June 25, 1928. Serial No. 288,081. 13 Claims. (Cl. 259—101.)



1. In a washing machine, a tub, a fitting secured in the bottom thereof, an agitating device in the tub, a drive shaft therefor, an enlarged driving head rigidly carried by said shaft to provide a detachable connection for said shaft detachably secured in said fitting, a pinion carried by said shaft and having a diameter smaller than that of said bearing sleeve, said sleeve and shaft and head and pinion being detachable and removable from above, and means for detachably securing said bearing sleeve to said fitting.

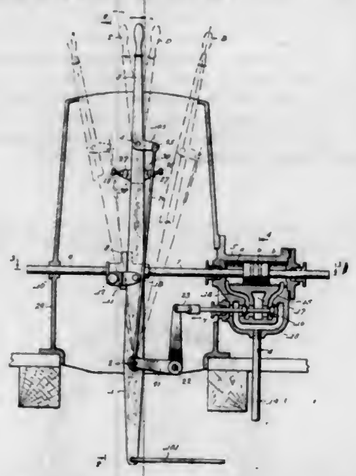
1,765,068. HAIR WAVER. NELL FULTON, New York, N. Y. Filed June 27, 1929. Serial No. 374,141. 7 Claims. (Cl. 132—41.)

1. A hair waver comprising a base member curved to the configuration of the head and being relatively flat for sliding engagement against the scalp and beneath a layer of hair, and a second member hingedly connected at one end in edgewise relation to the base member and adapted for swinging movement toward the same and arranged to overlie the base member, said members having interlocking means at their free ends, said second member having depending comb teeth extending toward the base member and adapted to engage in the layer of hair to hold the same



flat and intact during the longitudinal sliding movement of the waver subsequent to closing the same on the layer of hair.

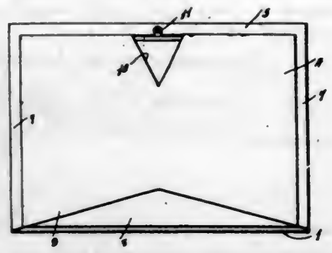
1,765,069. POWER STEAM-FEED LEVER. EDWIN J. GIBSON, Olean, N. Y. Filed June 3, 1927. Serial No. 196,316. 1 Claim. (Cl. 211—38.)



In a power actuated and manually controlled device for operating steam feed valves, a fluid pressure reversing means, a lever mounted on a fixed pivot, a connection between said lever and said means, a link pivotally connected to the driving member of the fluid pressure reversing means and coupled to the lever at a point above the pivot of the lever so that the motion imparted by the power means is sustained by the lever, a bell crank rockably mounted on a fixed pivot, the horizontal arm of the bell crank having a pin so located that said pin coincides with the lever pivot when the bell crank is in neutral position, a single connection from the pin on the bell crank to a pin on a manually operated controlling lever pivotally mounted at the upper end of said lever, the vertical arm of the bell crank being adapted for connection with the valve regulating the motion of the fluid pressure reversing means, and means to convert the power actuating lever into a manually actuated lever operating without imparting motion to any of the power actuating parts.

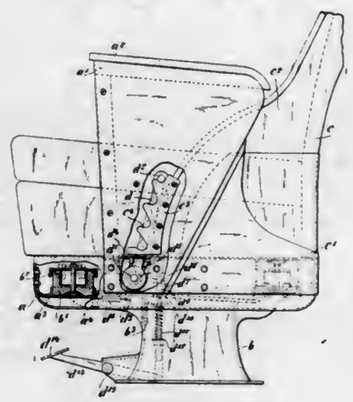
1,765,070. FRAME FOR CALENDARS AND THE LIKE. VIRGIL E. GRAHAM, Hershey, Nebr. Filed Oct. 10, 1929. Serial No. 398,728. 2 Claims. (Cl. 40—152.)

1. A frame for calendars and the like, comprising a frame-member having a sight-opening therein, a sheet of material secured to the back of said member at some of the edges thereof and providing, with the frame member, a pocket to hold an article for display through said open-



ing, and the sheet of material being provided with an aperture adapted to expose a hanging means secured to said article.

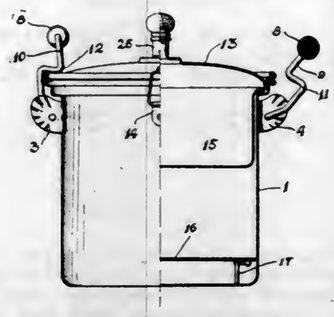
1,765,071. RECLINING CHAIR. WILLIAM E. B HASSELKUS, Jamaica, N. Y., assignor to International Motor Company, New York, N. Y., a Corporation of Delaware. Filed Oct. 17, 1927. Serial No. 226,546. 3 Claims. (Cl. 155—8.)



1. A reclining chair comprising a seat, a back, means to pivot the back to the seat, side extensions on the back, notches carried by one of the extensions, an arm mounted on the seat frame and adapted to engage the notches, a fork-shaped lever mounted on the seat frame and engaging the arm, means to cause the lever to hold the arm normally in engaging position, and means to engage the lever to move the arm out of engagement with the notches.

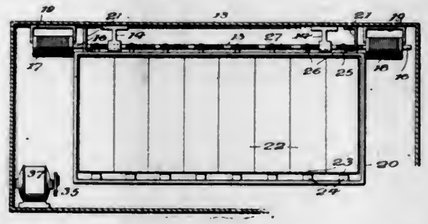
1,765,072. STEAM-PRESSURE COOKER. TAKICHI HASHIMOTO, Kamakura-Gun Kanagawa, Japan. Filed Sept. 19, 1928. Serial No. 306,996. 3 Claims. (Cl. 53—1.)

1. In a cooker construction of the character described, a cooker body, a lid therefor, a plurality of plates secured to the outer side of said body, each plate having a pair of spaced ears extending outwardly therefrom, each ear being provided with an opening and having grooves extending radially from said opening upon the inner side of the cars, and a handle comprising a U-shaped member made of resilient material and having its legs journaled in the openings of the ears, and said legs disposed on



the inside of the ears so that they engage the radial grooves and permit the handle to be sustained in different positions.

1,765,073. ELECTRIC SIGN. HAYDEN PATRICK HESTER and DONALD HAYDEN GARDNER, New Orleans, La., assignors of one-third to Jules F. Grillot, New Orleans, La. Filed Nov. 2, 1929. Serial No. 404,369. 7 Claims. (Cl. 40—52.)



1. A changeable sign, comprising a plurality of pivotally supported panels having opposed display surfaces, a reciprocating member connected to said panels, a solenoid at each end of the reciprocating member, and means for alternately energizing and de-energizing the solenoids to shift the reciprocating member back and forth and turn the panels.

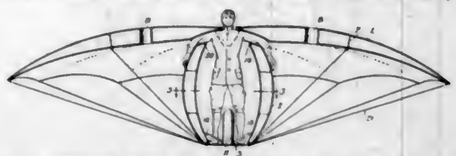
1,765,074. WADING POOL. JAMES P. HOOPER, Ruxton, Md., assignor to Wm. E. Hooper & Sons Company, Baltimore, Md., a Corporation of Maryland. Filed June 29, 1929. Serial No. 374,652. 2 Claims. (Cl. 4—177.)



1. A swimming pool having a flexible water proof cover and a knock down frame on which the cover is supported by the edges in the form of a bag, the frame consisting of corner uprights and tubular top rails, the cover having an edge bead and the top rails being slotted to receive portions of the fabric adjacent the bead, the slots being narrower than the bead and the bead being located inside the top rail in the assembled position of the pool, means for securing the top rails to the uprights comprising arms

secured to the uprights and adapted to be inserted inside the top rails at the ends, said arms being grooved to admit the bead.

1,765,075. PARACHUTE AND AERIAL LIFE BUOY. EDWARD G. JOHNSON, Cape May, N. J. Filed Sept. 19, 1928. Serial No. 306,997. 3 Claims. (Cl. 244—21.)



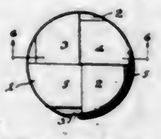
1. A combined parachute and aerial life buoy, including a double-walled umbrella having an opening in the center and a plurality of air vents between the center and the periphery, a double-walled barrel shaped body connected to the center of the umbrella near the center opening, means acting as a platform connected to the bottom of said barrel-shaped body for supporting a person within said body, means carried by said platform for discharging lifting gas into the body and the umbrella, and guy members for connecting the outer portion of the umbrella with the bottom of the body.

1,765,076. MOUNTAIN-CLIMBING PICK. MANNER O. JUNG, Boulder, Colo. Filed June 24, 1927. Serial No. 201,252. 1 Claim. (Cl. 135—45.)



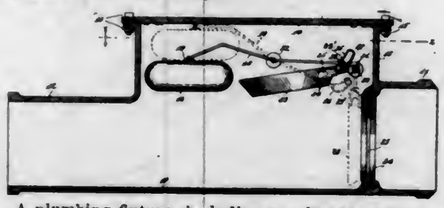
A pike for mountain climbers including a handle member and a pike element secured to one end thereof, said handle member being formed intermediate its ends with a grip portion of varying circumfrence and further formed with a tapered portion extending from a point adjacent the forward end thereof to one end of said grip portion, said grip portion having its peripheral face formed in continuation of the peripheral face of the handle and further having a maximum circumference greater than the circumference of the handle at the points of mergence between the handle and grip portion.

1,765,077. BUTTON. ISIDORE KRAMER, New York, N. Y. Filed Oct. 21, 1929. Serial No. 401,312. 3 Claims. (Cl. 24—90.)



1. In a button of the class described, the combination of a covering, of a foundation therefor, said covering made from four equal pieces of material woven together and placed around said foundation with the edges tucked inwardly.

1,765,078. PLUMBING FIXTURE. ALBERT M. KHUN, Elizabeth, N. J. Filed Apr. 3, 1929. Serial No. 352,271. 3 Claims. (Cl. 182—26.)



1. A plumbing fixture, including a valve and valve seat, and buoyant means for controlling the movement of said valve, said means including a float and an associated leverage system between said float and said valve, said leverage system including a U-member intermediately pivoted to said fixture.

1,765,079. METAL AEROPLANE WING. HARRY G. LANDIS, Marshall, Mo. Filed Dec. 13, 1929. Serial No. 413,921. 7 Claims. (Cl. 244—31.)



1. An aeroplane wing consisting of a rigid one-piece metal truss member comprising a plurality of bays, each bay formed of a plurality of equally spaced pairs of diagonal braces, said bays inclined at an angle toward each other, U-shaped beams connecting adjoining upper and lower ends of said bays and integral therewith, a corrugated vertical strut between each pair of said diagonal braces integral therewith and extending from an upper U-shaped beam to a lower U-shaped beam, and a metal cover positioned over said truss member and rigidly attached thereto.

1,765,080. BELT CONNECTION. PAUL DAMEN LATIMER, Ennis, Tex., assignor of seven-tenths to Robert Neel Burnett and one-fourth to A. M. Bowman, Houston, Tex. Filed Apr. 14, 1928. Serial No. 270,028. 1 Claim. (Cl. 24—31.)



A belt connection wherein the ends of the belt are cut to form a belt joint, including a saddle made up of superposed layers of tough flexible material impregnated with rubber, and a plurality of layers shorter than the others adjacent the belt ends, and means extending through said layers and said belt to secure the said layers together and to said belt.

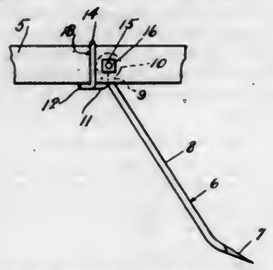
1,765,081. ANIMAL TRAP. ELMER LEE, Livingston, Mont. Filed July 25, 1929. Serial No. 380,985. 2 Claims. (Cl. 43—61.)



1. A trap of the class described having a casing, inwardly movable closures, detent rods engaging the closures

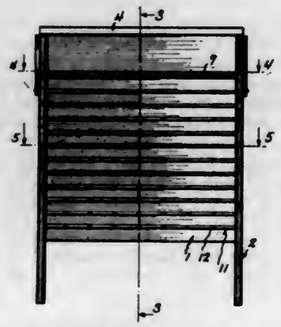
to prevent closing thereof, links pivoted to said rods and together, expansive coil spring means serving to retain the rods in door-retaining position, bait supporting means carried by the links, and a trip platform, and means whereby movement of the platform will operate the links and rods to release the doors.

1,765,082. HARROW TOOTH. SAMUEL C. LEMMONS, Cedar Hill, Tenn., assignor of one-half to James L. Sparks, Russellville, Ky. Filed July 9, 1929. Serial No. 376,902. 2 Claims. (Cl. 55—94.)



1. In a tooth for harrows, wherein the tooth comprises a shank, said shank being formed at one end with a penetrating point, said shank at its opposite end terminating in a loop adapted to be disposed against one face of the tooth supporting frame of the harrow, said shank being provided adjacent its upper end with a substantially right angularly disposed hook portion adapted to engage the tooth supporting frame of the harrow at the opposite side of the harrow frame for clamping said frame between the looped extremity of the shank and said hook.

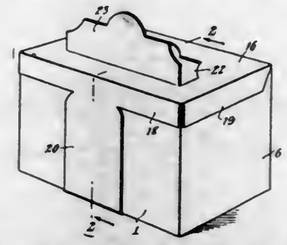
1,765,083. WASHBOARD. EDWARD E. LEWIS, NICK D. ZITO, and JOSEPH J. FERTITTA, Kenner, La. Filed Mar. 13, 1928. Serial No. 261,299. 2 Claims. (Cl. 68—29.)



1. A wash board comprising a board proper, and a plurality of rods extending transversely of the surface of the board, the rods having alternately inwardly and outwardly presented bends therein curved longitudinally, the face of the board being formed with a plurality of series of transversely extending spaced concave recesses therein spaced from each other at their ends and accommodating the inwardly presented bends of the rods with the rods continuously in contact with the board but projecting outwardly therefrom for the entire width of the board.

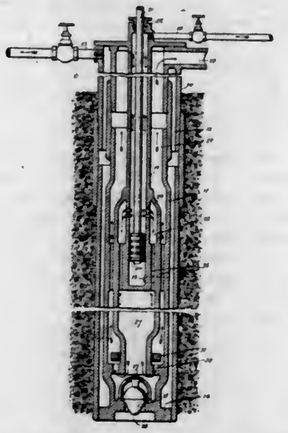
1,765,084. BOX. EDWIN A. LOCKE, Jr., Arlington, Mass., assignor to The Nevins Church Press, New York, N. Y., a Corporation of New Jersey. Filed June 27, 1928. Serial No. 288,770. 1 Claim. (Cl. 229—52.)

A box of the collapsible type, including a construction involving the use of a front wall having an opening at one edge and a superimposed top panel, said panel having a cut-out section bent to produce a handle, and a front section extending from said panel formed with a locking



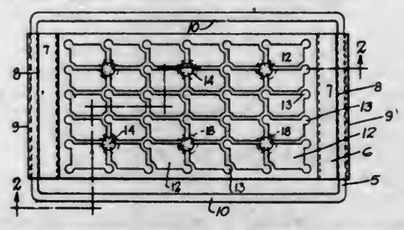
extension extending across said front wall and a portion extending into said opening for locking the front section of the panel in assembled relationship.

1,765,085. PUMP. HARLEY H. MARKEY, Homer, La. Filed July 1, 1927. Serial No. 202,924. 2 Claims. (Cl. 103—235.)



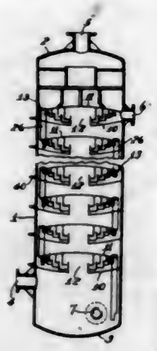
1. An oil well casing, and a tubing therein cooperatively forming an annular vacuum chamber, a liquid pumping chamber disposed interiorly of the tubing and spaced therefrom having a valved inlet therein communicating with oil in the well and a valved outlet through which oil is discharged through the annular space between the chamber and tubing, a cylinder extending into the pumping chamber and having ports communicating therewith above the liquid level therein, and means for alternately admitting compressed air through said ports into the pumping chamber and placing the pumping chamber in communication with the vacuum chamber.

1,765,086. MEANS FOR ORNAMENTING FOODSTUFFS. ALBERT MARTIN, New York, N. Y. Filed Sept. 5, 1929. Serial No. 390,635. 8 Claims. (Cl. 107—1.)



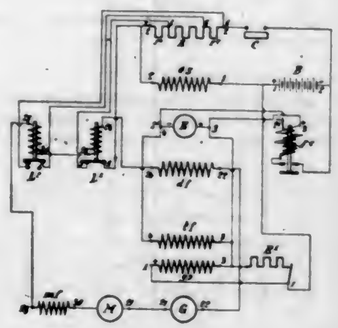
1. The combination with a container of a bridge having relatively small and large openings therein and some of said openings being arranged to receive plugs.

1,765,087. LIQUID AND GAS CONTACT APPARATUS. ROSCOE P. MASE, Wilkinsburg, Pa. Filed Aug. 2, 1928. Serial No. 297,050. 1 Claim. (Cl. 261—114.)



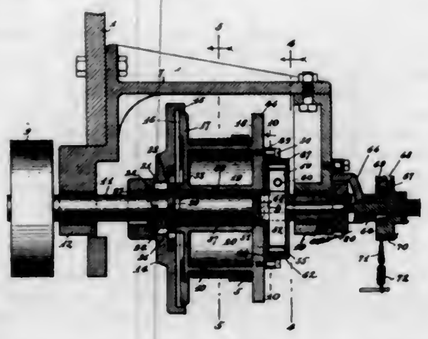
A liquid and gas contact apparatus comprising a tower having a gas inlet and a liquid outlet at its bottom, and a liquid inlet and a gas outlet at its top; a plurality of contact units arranged between the top and bottom of the tower each comprising a transversely-extending, interiorly concaved liquid containing basin, an exteriorly convex cover having a serrated edge, a plurality of vertically disposed baffles arranged between and cooperating with the basin and cover, alternate baffles being serrated at their lower edges and arranged to permit the gas to flow below their lower edges, and the intermediate baffles being positioned to prevent the gas flowing under their lower edges but permitting it to flow above them, whereby the gas is caused to make a plurality of contacts with the liquid in the basin, said baffles, forming a circuitous passage of substantially uniform cross sectional area throughout for the lateral flow of gas; each basin being provided with a centrally located gas inlet, and each cover having a gas outlet at its exterior edge, and means for conducting liquid from a predetermined level above the outer edge and below the centrally raised portion of the cover in each unit downwardly into a lower unit, said conducting means being provided with a check valve for preventing gas from flowing upwardly through it.

1,765,088. CONTROL FOR DIRECT-CURRENT GENERATORS. ALFRED F. MASURY and WILLIAM B. JUPP, New York, N. Y., and FRANK E. QUEENEY, Teaneck, N. J., assignors to International Motor Company, New York, N. Y., a Corporation of Delaware. Filed Nov. 28, 1927. Serial No. 236,058. 1 Claim. (Cl. 290—14.)



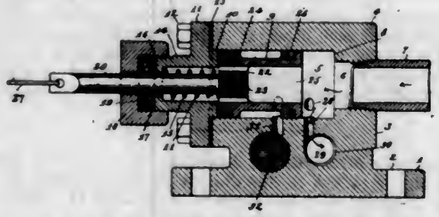
In a device including an internal combustion engine, a generator having a separately excited field for supplying power to drive a vehicle, wherein a plurality of resistance elements are selectively inserted in circuit with said field to vary the excitation thereof in successive stages in accordance with the building up, normal running, and increased speed portion of the speed torque curve of an internal combustion engine for driving the generator, an exciter for energizing the separately excited field of the generator, a field winding for the exciter, a source of current for energizing the field winding of the exciter, a plurality of resistance elements, automatic means operated by the generator current to increase the number of resistance elements in the field of the exciter during the acceleration of the vehicle and to decrease the number of resistance elements therein after the accelerating period has ceased, to cause the generator to pick up its load in proportion to that of the engine, and means to decrease the number of resistance elements in the exciter field still further after the power developed is greater than that called for by the vehicle to cause the generator to increase its load in proportion to the ability of the engine to assume an added load.

1,765,089. SEMIAUTOMATIC DIPPER TRIP AND MONKEY-LINE WINDER. GEORGE GEDEON MORIN, Holyoke, Mass. Filed Aug. 9, 1927. Serial No. 211,698. 5 Claims. (Cl. 214—146.)



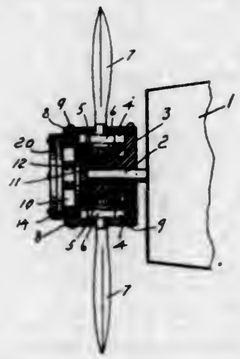
1. In a trip for power-shovels, a trip cable, a winding drum connected with said cable for winding the same, an annular friction member connected to said winding drum, a constantly rotating shaft on which said winding drum is loosely mounted, a friction drum connected to said winding drum, a bar extending through said shaft adjacent said friction drum, a spring mounted on each end of said bar formed with contact shoes frictionally engaging the inner surface of said friction drum for urging said friction drum and said winding drum to rotate for taking up the slack in said cable, a power disk rigidly secured to said constantly rotating shaft, and manually actuated means for forcing said bar and winding drum so that the winding drum will frictionally engage said power disk and be rotated thereby.

1,765,090. BALANCED THREE-WAY VALVE. GEORGE G. MORIN, Holyoke, Mass. Filed Jan. 4, 1928. Serial No. 244,463. 7 Claims. (Cl. 251—76.)



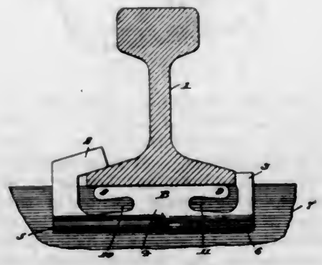
1. A balanced valve formed with a casing having a piston chamber, an inlet port extending through one end of said casing centrally of said cylinder, a plurality of outlet ports extending from the side walls of said chamber, a plurality of exhaust ports, a piston arranged in said chamber, said piston being formed with a central cutaway portion and a passageway extending entirely therethrough for admitting steam at both ends, means for shifting said piston to one end of said piston chamber for causing said inlet ports and outlet ports to be in communication, said means being capable of movement for shifting the piston to the opposite end of said chamber for causing said outlet ports and said exhaust ports to be in communication and a spring positioned in said casing acting to move said piston to a closed position.

1,765,091. AUTOMATIC VARIABLE-PITCH PROPELLER BLADE FOR AIRPLANES. LOUIS MORRIS, Kansas City, Mo. Filed Mar. 11, 1929. Serial No. 346,033. 1 Claim. (Cl. 170—162.)



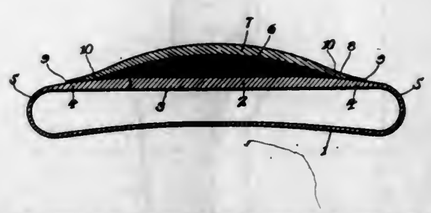
In an automatic variable pitch propeller blade for airplanes, the combination with the motor shaft, of a propeller hub mounted free on the shaft, a plurality of propeller blades journaled in said hub and having gear wheels on their inner ends, a clutch wheel mounted on the shaft and adapted to revolve said hub and having axially a gear wheel enmeshed with the gear wheels on said blades, and compression springs carried by said clutch wheel and engaging said propeller hub.

1,765,092. RAILWAY-RAIL ANCHOR. HARRY G. NORWOOD, Washington, D. C., assignor to Theodore F. von Dorn, New York, N. Y. Filed Jan. 9, 1930. Serial No. 419,619. 7 Claims. (Cl. 238—330.)



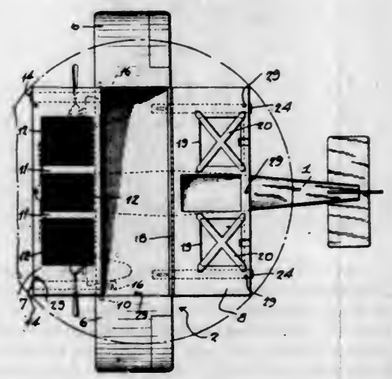
1. A one-piece rail anchor adapted to be fixedly secured to the rail base, comprising a body portion adapted to contact with said rail base and formed with oppositely disposed curved extensions formed at the lowermost end of said body portion, and a clamping member formed at each end portion of said anchor.

1,765,093. INNER TUBE FOR PNEUMATIC TIRES. ARTHUR W. OTT, Dubuque, Iowa. Filed Feb. 21, 1930. Serial No. 430,408. 3 Claims. (Cl. 152—13.)



2. An inner tube formed with a composite tread portion having an inner wall, an outer wall, and a healing compound interposed between said walls, said walls and the remaining wall portion of the tube being formed of like material, said walls being of substantial thickness and of equalized strength and having a combined strength materially greater than the remaining wall portion of the tube in order that said composite tread portion will be moved as a unit when air is introduced into the tube to inflate the same, said inner wall being flat transversely of the tube when the latter is deflated in order that the composite tread portion will assume substantially its normal position when flexed by the resistance of a road surface in the normal use of the tube to prevent any creasing or breaking of the inner wall by such flexing with attendant displacement of the healing compound.

1,765,094. PARACHUTE ATTACHMENT FOR AEROPLANES. JOSEPH PONIATOWSKI, Huntington Park, Calif. Filed Sept. 5, 1929. Serial No. 390,499. 19 Claims. (Cl. 244—21.)

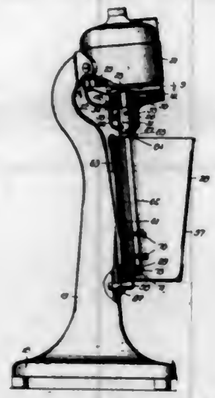


1. In a parachute attachment for aeroplanes, a sustaining wing of hollow formation having cover wall sections hinged thereto, a parachute confined within the wing and attached to the wall sections and wing, means for automatically opening the cover wall sections to release the parachute, and manually operable means for retaining the cover walls in closed position.

1,765,095. DRINK MIXER. STEPHEN J. POPLAWSKI, Racine, Wis., assignor to Arnold Electric Company, Racine, Wis., a Corporation of Wisconsin. Filed July 3, 1925. Serial No. 41,241. 36 Claims. (Cl. 259—131.)

1. In a drink mixer, a standard, an electric motor supported on said standard and having a downwardly

extending shaft, a receptacle, an agitator, a switch for said motor, and an actuating member for said switch



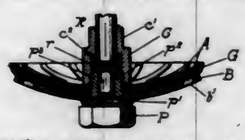
mounted concentrically of said shaft and movable for the closing of said switch by the placing of said receptacle in operative position.

1,765,096. WATERPROOF OVERALLS. MEYER REINGOLD, Brooklyn, N. Y. Filed May 21, 1929. Serial No. 364,850. 1 Claim. (Cl. 2—82.)



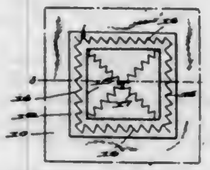
In a waterproof overalls, a body having a front opening disengageable fastening means for closing the opening, a shield extending from the bottom of the opening upwardly for approximately half the distance of the opening, and an eyelet positioned in said body near the bottom of the opening, acting as a drain for draining water from between the front part of the overalls and the shield.

1,765,097. PUMP PLUNGER. EDWIN A. ROBERTSON, Lake Wawasee, Ind., assignor to Wayne Company, Fort Wayne, Ind., a Corporation of Indiana. Filed Aug. 29, 1927. Serial No. 216,151. 3 Claims. (Cl. 103—225.)



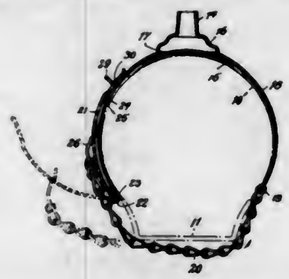
1. In combination with a plunger, a valve in said plunger to control the flow of fluid therethrough and a rigid plunger rod independent of said valve; separate means ensuring lost motion between said plunger and plunger rod.

1,765,098. METHOD OF REPAIRING DAMAGED SPOTS IN FABRICS. SIEGFRIED J. ROOZENDAAL, Cologne-on-the-Rhine, Germany. Filed Feb. 5, 1930, Serial No. 426,067, and in Denmark May 25, 1929. 4 Claims. (Cl. 2—243.)



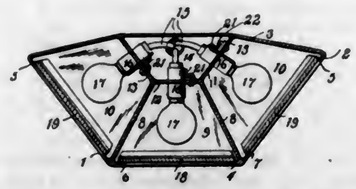
2. The method of mending damaged spots in fabrics, which includes cutting out the damaged area along lines parallel to the warp and weft of the fabric; inserting in the resultant opening in the fabric a patch of a shape conforming to the shape of said opening; applying a fabric plaster and having soluble adhesive thereon to the wrong or inner face of the fabric so that the plaster will entirely cover the patch and the area of the fabric surrounding the patch; pressing the plaster in position to adhere to the patch and said fabric; then folding the assembly upon itself along the line defined by the contiguous edges of the fabric and patch with the plaster outermost and said fold forming a ridge on the outer surface of the plaster; sewing the parts together by a single row of button hole stitching at said ridge, said stitching penetrating the folds of the plaster adjacent the apex of said ridge and the edge portions of the fabric and patch; then securing the marginal portions of said plaster adjacent the edge thereof to said fabric by a row of stitches extending along said marginal portions of the plaster; then sewing said plaster to said patch by rows of stitches, each latter row crossing the other and extending diagonally of the patch; then subjecting the plaster to an adhesive solvent; and then subjecting the plaster, fabric and patch to a pressing operation whereby the assembly is made flat and smooth.

1,765,099. DEVICE FOR SUPPORTING ARTICLES ON TIRES OR THE LIKE. ABRAHAM W. ROSEN, New York, N. Y. Filed Mar. 22, 1928. Serial No. 263,748. 6 Claims. (Cl. 24—19.)



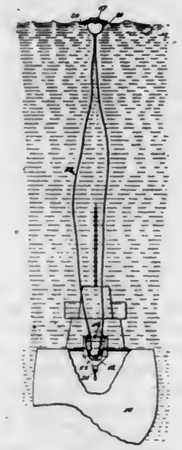
1. An adjustable anchoring, tightening and securing device of the class described including a stationary plate, a lever hingedly connected thereto and capable of being swung flatly thereagainst, said lever having a plurality of transverse slots therein and having notches therein intersecting the intermediate portion of each slot, an anchoring member adapted to be carried by the free end of a flexible device, said member including a body, a neck inclined relatively to the body and sufficiently narrow to fit within the notches, a head at the end of the neck offset from the plane of the body, said head being wider than the notches and narrower than the slots, whereby as the head is inserted through one of the notches and the lever swung against the plate, the flexible device will be tightened and the head clamped between the lever and plate and locked against withdrawal.

1,765,100. DIRECTION SIGNAL FOR MOTOR VEHICLES. LOUIS SCHERZ, Wilkes-Barre, Pa. Filed Jan. 18, 1927. Serial No. 161,822. 1 Claim. (Cl. 177—329.)



In a signal, a casing comprising a rear wall, a front wall having an intermediate portion and side portions extending diagonally from its intermediate portion to ends of its rear wall and formed with openings, lenses closing the openings in the intermediate and side portions of said front wall, partitions in said casing extending rearwardly from intersections of the said portions of the front wall and converging rearwardly and dividing the casing into an intermediate chamber and side chambers, said partitions terminating in spaced relation to the rear wall, a partition having an intermediate portion joining the rear ends of the first-mentioned partitions and end portions diverging rearwardly and joined to the rear wall, the intermediate and end portions of the last-mentioned partitions forming rear walls for said chambers and together with the intermediate portion of the rear wall forming a rear compartment in the casing, and lamp sockets extending through the rear walls of the intermediate and side chambers to support lamps therein and each having its rear portion projecting into the rear chamber and removably secured to the wall through which it passes.

1,765,101. SUBMARINE-SALVAGING APPARATUS. JOHN SCHIERENBECK, Albany, N. Y. Filed Mar. 20, 1928. Serial No. 263,172. 2 Claims. (Cl. 114—16.8.)



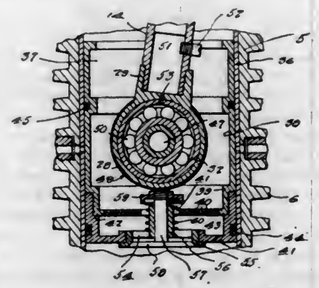
1. The combination with the hull of a submarine boat, of a cable raising float, a casing on the hull adapted to receive and support the float, said float serving as an outside closure for the casing, means interiorly of the casing adapted to move said float outwardly relatively to said casing, means which holds said float in place and which may be operated to release said float so that the latter will be acted on by the first mentioned means, and means operated by the operation of the second mentioned means to allow water to enter said casing, to obtain water pressure inside of said casing equal to that on the outside thereof to supplement the action of the first mentioned means.

1,765,102. NEEDLE THREADER. VIRGIL A. SCOFIELD, Cochise, Ariz. Filed Mar. 15, 1924. Serial No. 699,474. 1 Claim. (Cl. 223—36.)



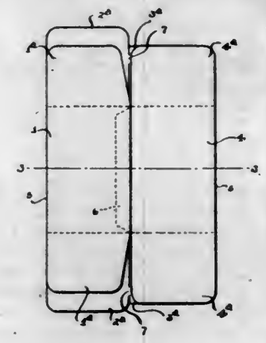
A needle threader made primarily from a blank, said blank being formed into a split cylindrical portion adapted to fit the bore of a spool, the device being cut away above the cylindrical portion and above the cut away portion having relatively close flattened portions, one of the flattened portions extending above the other to provide a guard, a threading element consisting of a fine wire in the form of a loop disposed between said flattened portions, a portion of said loop being disposed in said cut away portion, the loop being fastened to the upper edge of the cylindrical portion.

1,765,103. PISTON. GEORGE M. SCOTT, Tulsa, Okla. Original application filed Aug. 14, 1928, Serial No. 299,474. Divided and this application filed July 25, 1929. Serial No. 381,012. 2 Claims. (Cl. 230—221.)



1. In a piston construction, a cylindrical body open at one end to provide a fluid inlet, the closed end of the cylindrical body being provided with a plurality of fluid emitting openings, a cap arranged on the closed end of the cylindrical body and spaced therefrom to provide a cooling chamber to receive the fluid discharged through said openings, and a valve arranged in the cap to permit the discharge of the fluid from said cooling chamber.

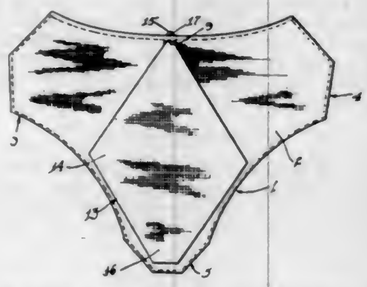
1,765,104. FOLDING PAPER BOXES. JOHN PORTER SHEARER, Newark, N. Y. Filed Jan. 26, 1928. Serial No. 249,721. 1 Claim. (Cl. 229—37.)



As a new article of manufacture, a folded box formed of a single blank having four side sections secured to-

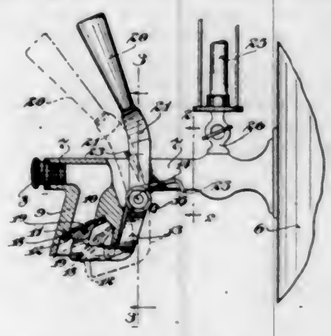
gether, and flaps extended from each end of each said side sections, two of said side sections having a readily fracturable connection between adjacent edges of their flaps at both ends of the sections spaced from the ends of the flaps so that the box may lie in a folded condition in a stack and provide a flat substantially uninterrupted surface on one side which will prevent its flaps interlocking with the flaps of an adjacent folded box in the stack when the box is removed from the stack in a line transversely of the side sections.

1,765,105. GARMENT. BERTHA B. SKINNER, Chicago, Ill. Filed June 8, 1928. Serial No. 283,980. 2 Claims. (Cl. 128—284.)



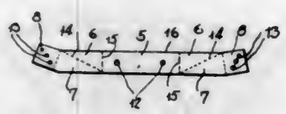
1. A garment of the type described comprising a body portion having side flaps, a center flap, a reinforcing means disposed between said side flaps, a waterproof means disposed between said side flaps and disposed upon said center flap, said reinforcing means having an opening therein, an insert having one end arranged to extend through said opening, means carried by said reinforcing means for securing the end of said insert thereto, and means for securing said insert, said side flaps and said center flaps to the body of a wearer, said waterproof means extending to said reinforcing means at one end and to a position a short distance from the end of said center flap at the other end.

1,765,106. FAUCET. ALBERT SLATEN, Minneapolis, Minn. Filed Oct. 1, 1928. Serial No. 309,418. 7 Claims. (Cl. 251—125.)



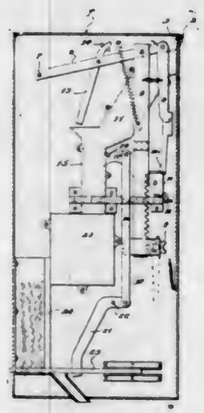
1. A faucet comprising a body having a nozzle provided with an internal valve seat that is oblique to a horizontal plane, a substantially U-shaped arm, one end of which is hinged to the body above the valve seat, a valve member on the other end of the arm, said valve seat and valve member being in planes that extend substantially radially from the axis of the hinged end of the arm and radially spaced therefrom, a spring normally holding the arm in a position in which the valve member engages the valve seat and closes the nozzle, and an operating connection for the arm.

1,765,107. TIE-BAR HANGER. CLIFFORD L. SNYDER, Detroit, Mich., assignor to The Evans Auto Loading Co. Inc., Detroit, Mich. Filed Feb. 13, 1928. Serial No. 254,080. 1 Claim. (Cl. 20—94.)



A sheet metal blank for tie bar hangers, having parallel longitudinal edges and consisting of an elongated central portion adapted to form the seat of the hanger, side portions parallel and co-extensive with said central portion and embodying sections adapted to be bent at right angles to the central portion to form vertical cheeks and further sections adapted to be bent on oblique lines to form outwardly directed inclined wings on the forward edges of the cheeks, and end portions normally set at an obtuse angle to and projecting laterally of the central and side portions parallel with the wing forming sections, said end portions being adapted to be bent at an angle to the wing-forming sections to form supporting parts.

1,765,108. VENDING MACHINE. JESSE J. SOMERGARY and ALEX LEICHTMAN, Detroit, Mich., assignors of one-third to Mrs. John A. Urbanek, Detroit, Mich. Filed June 28, 1926. Serial No. 118,092. 7 Claims. (Cl. 194—69.)

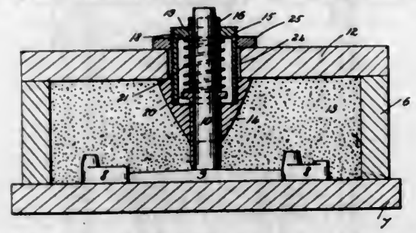


5. A vending machine for newspapers or similar articles, comprising in combination vending mechanism, a chute for receiving coins of a plurality of denominations, a container positioned below said chute for receiving coins of a certain denomination for making change, means registering with the lower end of said chute and adapted in normal position to direct coins of a certain denomination into the said container, and means controlled by coins of a larger denomination but unaffected by coins of smaller denomination which is movable to deflect said last named means out of its former position to direct coins of a large denomination away from said change container and means operably connecting the vending mechanism with the said means which is controlled by the coins of larger denomination.

1,765,109. SPRUE-FORMING DEVICE. MICHELE STABILE, Milford, Mass. Filed July 17, 1929. Serial No. 378,912. 3 Claims. (Cl. 22—162.)

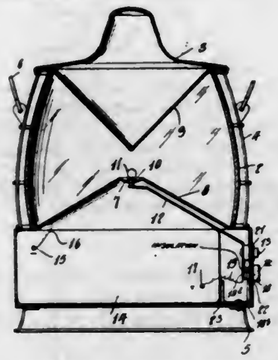
1. In a sprue forming device, a molding box or flask, a bottom board for a pattern to rest on, a top board having a hole in it, a basin-shaped member arranged under the hole in the top board and having a screw-threaded hole

in its upper part and a guide hole in its lower part, an externally screw-threaded cylinder screwed into the upper hole of the basin-shaped member and projecting through the hole in the top board and having an inwardly projecting flange at its upper part also provided with a guide hole, a nut screwed on the upper projecting part of the cylinder and clamping it and the basin-shaped member to



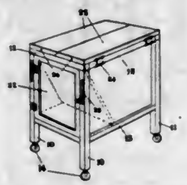
the top board, a tubular stem slidable in the guide holes of the said basin-shaped member and flange and having a projection arranged in the lower part of the cylinder, a spring arranged between the said flange and projection and operating to press the tubular stem downwardly, and a sprue pin slidable in the tubular stem and adapted to connect with the pattern on the bottom board.

1,765,110. ELECTRIC LANTERN. EDGAR STROKE, Los Angeles, Calif. Filed Dec. 9, 1926. Serial No. 153,627. 1 Claim. (Cl. 200—60.)



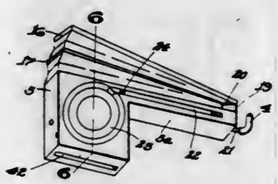
An electric lantern comprising a metallic base having an elongated slot therethrough, a spring conductor arranged within the base, insulating means securing the conductor adjacent one of its ends to the base, said means spacing said end of the conductor from said wall, said end extending beyond said means and in spaced relation to said base, an insulating member within the base covering said slot at all times and having an element passing through said slot and slidably associated with the base, and a metal contact block within the base carried by said member and movable thereby into and out of contact with said conductor end.

1,765,111. CORNCOB CONTAINER. HAROLD WARREN TOOL, Murdock, Nebr. Filed Mar. 25, 1929. Serial No. 349,826. 1 Claim. (Cl. 312—147.)



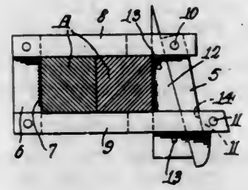
A two-compartment cabinet having full openings at the top and forward side thereof, hinged closures for the openings, a transversely arranged partition extending from the forward upper edge of said cabinet to a transverse line intermediate the forward and rear edges of the floor of said cabinet and secured to the side walls and the bottom thereof, supporting means secured to the forward side of said partition, and a removable corn cob receptacle shaped and dimensioned to seat within the rear compartment of said cabinet, said receptacle being provided with handles on the upper edges of the lateral walls thereof for facilitating the passage of said receptacle into and out of said cabinet through the top opening thereof.

1,765,112. PNEUMATIC STRIKER UNIT FOR PLAYER PIANOS. WILLIAM B. TUNSTALL, Worcester, Mass. Original application filed July 11, 1927, Serial No. 204,873. Divided and this application filed July 9, 1928. Serial No. 291,312. 8 Claims. (Cl. 84—30.)



1. In a valve action for striker pneumatics, a diaphragm chamber, normally under exhaust, and covered by a diaphragm, a valve chamber and a valve mounted therein, said valve chamber being normally filled with air below atmospheric pressure, a passage between the valve chamber and diaphragm, means providing communication between said passage and the atmosphere, and means for providing communication between said passage and the proper pneumatic, said first named means being closed by movement of the diaphragm when atmospheric pressure is admitted to the diaphragm chamber.

1,765,113. CLAMP. AUBREY DELOS TURNER, Minneapolis, Minn. Filed Dec. 3, 1928. Serial No. 323,365. 2 Claims. (Cl. 304—40.)



2. A clamp of the class described including an end bar, pairs of side bars pivotally connected to the end bar, a swinging end bar held between one pair of side bars and adapted to swing between the bars of the opposite pair, latching means for latching the free end of the last mentioned bar, and a wedge contacting with the swinging bar and articles being connected by the clamp to hold the swinging end member against movement.

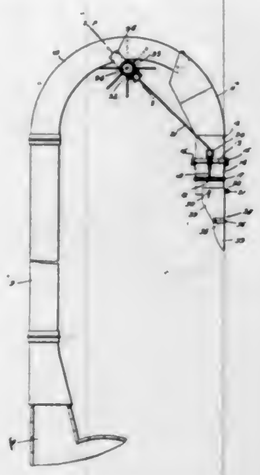
1,765,114. ATTACHMENT FOR COLLAPSIBLE TUBES. GEORGE S. TURNER, New Brunswick, N. J. Filed Sept. 25, 1928. Serial No. 308,179. 3 Claims. (Cl. 128—233.)



1. As an article of manufacture, a collapsible tube to be employed as an applicator, and a discharge nozzle on

the tube, said nozzle being formed of soft, pliable metal to be bendable, the thickness of the walls of said discharge nozzle being so proportioned relatively to the size of the bore of the nozzle that the said nozzle is bendable to provide a terminal at an angle to the axis of the tube, without choking the bore.

1,765,115. ENSILAGE-DISTRIBUTING APPARATUS. WILLIAM G. WELLES, Lebanon, Wis. Filed July 29, 1929. Serial No. 381,917. 2 Claims. (Cl. 302—60.)



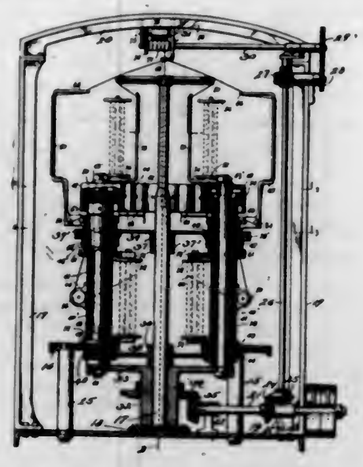
1. In a structure of the class described, a delivery conduit including a vertical portion, and a discharge gooseneck having a pipe at its discharge end provided with a track, a rotary discharge sleeve including hangers having rollers mounted for movement on said track, a ring gear carried by said sleeve, a pinon in mesh with said ring gear, a shaft on which said pinion is carried, said shaft being mounted on the discharge end portion of the conduit, a fan on the conduit at a remote point, a connection between the fan and shaft, a deflector adjustably mounted on said sleeve, whereby to permit the angularity thereof to be regulated at will, said deflector including a scoop-like body portion, and an adjustable terminal portion.

1,765,116. SWIMMING DEVICE. LINWOOD R. WILLIAMS, Orange, N. J. Filed Jan. 30, 1930. Serial No. 424,656. 5 Claims. (Cl. 9—21.)



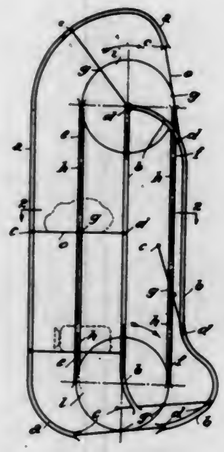
1. A swimming device, comprising a plate, two spaced angular supporting members attached to said plate, a pair of spaced supporting elements pivotally attached to said supporting members, a handle fixed between said spaced supporting elements at their free ends, and means to permit said plate to rock about said handle within a predetermined range.

1,765,117. BRAIDING MACHINE. WILLIAM COSKEY WRIGHT and JOHN F. SCHENCK, Sr., Lawndale, N. C. Filed Aug. 9, 1929. Serial No. 384,567. 14 Claims. (Cl. 96—8.)



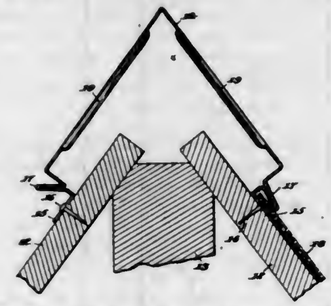
1. In a braiding machine, the combination of a pedestal, a rotary carriage mounted thereon, means for rotating the carriage, a plurality of fixed vertical shafts mounted in and carried by said carriage, two telescopic tubular shafts mounted upon each fixed shaft, cooperating driving means for the outer telescopic shafts connected to said shafts and in the path thereof, cooperating driving means for the inner telescopic shafts connected to said shafts and to the pedestal, and means mounted upon the upper portion of the pedestal and embracing all of the telescopic shafts to brace the upper ends of the shafts against relative circumferential and radial displacement.

1,765,118. SHIP-UNLOADING DEVICE. MARIO ABBIANI, Genoa, Italy. Filed July 30, 1927, Serial No. 209,485, and in Italy Aug. 16, 1926. 3 Claims. (Cl. 198—138.)



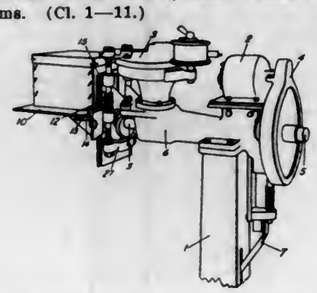
1. In connection with an air pipe in ships, a plurality of conveying plates moving up and down within said pipe, said plates being provided with end lugs and central lugs at two opposite sides, funicular members pivotally connected to said central lugs, upper and lower wheels to guide and drive said funicular members, rectilineal guides tangent to said upper and lower wheels wherein slide said central lugs, upright guides for the said end lugs, extending between the center levels of said wheels, outward circular and discontinued guide sections forming a continuation of one set of said upright guides and cooperating with the other set to swing the conveying plates to an inclined unloading position, rectilineal descending guides parallel to said upright guides cooperating with one set of said tangent guides to keep the conveying plates in an inclined position while descending within said air pipes, curved guide sections joining one set of said upright guides from the center line of said upper wheels to the said rectilineal descending guides and cooperating with the said circular guide sections to swing the conveying plates to their inclined descending position, curved guide sections at the lower ends of the said rectilineal descending guides, curved guide sections at the lower ends of the said upright guides to receive the end lugs as left free by the said circular guide sections and said rectilineal descending guides, when the conveying plates have reached the hold and have taken their horizontal position.

1,765,119. RIDGE CAP. ALFRED AUDET, Salem, Mass. Filed Mar. 22, 1929. Serial No. 349,142. 1 Claim. (Cl. 108—24.)



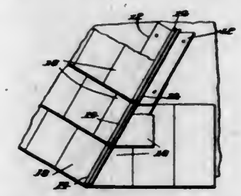
A sheet metal ridge cap, for peaked roofs, consisting of a strip of sheet metal bent at its central part to form two slanting members corresponding to the slant of a peaked roof, the lower ends of said slanting members having parts which are bent inwardly at right angles to said slanting members, said inwardly bent parts having fastening strips at their lower edges, said strips extending in the planes of said slanting members, and said inwardly bent parts having, between their outer and inner edges, doubled, outwardly extending flanges adapted to be bent down over said fastening strips and thus cover fastening nails.

1,765,120. WIRE-STITCHING MACHINE. HOWARD G. ALLEN, Niagara Falls, N. Y., assignor to H. R. Bliss Company, Inc., Niagara Falls, N. Y., a Corporation of New York. Filed Dec. 9, 1927. Serial No. 238,755. 8 Claims. (Cl. 1—11.)



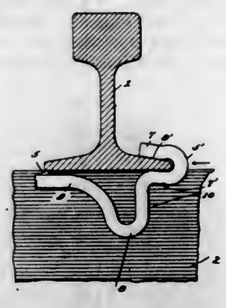
1. A wire stitching machine for stitching a cover onto a container adapted to be filled, comprising in combination, a stitcher head positioned to throw a stitch in a horizontal direction, a table for supporting the container, a presser head positioned above the table so as to normally clear the top of the container and the cover therefor, means for moving the presser head towards the table to engage the cover and properly position it upon the container, means for operating the stitcher head while the presser head so engages and holds the cover of the container, and an anvil adapted to take a position on the opposite side of portions of the container and cover therefor from the stitcher head and against which the stitch is urged so that the same is clinched after being ejected through the said portions of the cover and container by the stitcher head.

1,765,121. ANGLE PIECE FOR ROOFS OR SIDINGS. ALFRED AUDET, Salem, Mass. Filed Mar. 22, 1929. Serial No. 349,141. 1 Claim. (Cl. 108—24.)



An angle-piece, for use at the ridge, hip or corner siding of a building, consisting of a strip of metal comprising two yieldingly connected, angularly disposed wings, and doubled flanges disposed above and separated from said wings and joined thereto by crimped connections.

1,765,122. RAILWAY-RAIL ANCHOR. ARTHUR E. H. BARILI and JACOB A. HYLE, Los Angeles, Calif., assignors, by direct and mesne assignments, of one-half to said Hyle, one-eighth to Joseph H. Green, Philadelphia, Pa., one-fourth to D. F. Morris, Boston, Mass., and one-eighth to Samuel E. Holdzkom, Pleasantville, N. J. Filed July 3, 1929. Serial No. 375,856. 4 Claims. (Cl. 238—330.)



1. A single piece rail anchor formed with a reinforced thickened portion at each side thereof extending uniformly throughout its entire length, an intermediate thinner portion, a depending body portion, an overlapping clamping jaw formed at one end portion thereof, and an upwardly extended jaw member adjacent the other end portion disposed intermediate its width.

1,765,123. OPHTHALMIC MOUNTING AND METHOD OF MAKING THE SAME. FREDERICK RICE BISHOP, North Attleboro, Mass., assignor to The Bishop Company, North Attleboro, Mass., a Corporation of Massachusetts. Filed Mar. 14, 1928. Serial No. 261,687. 5 Claims. (Cl. 88—43.)

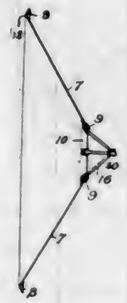
3. An ophthalmic mounting comprising a bridge member having an intermediate portion and two end portions

joined to the intermediate portion at sharp angles, the intermediate portion being bent upward and outward away from the forehead of the wearer at its middle and having a



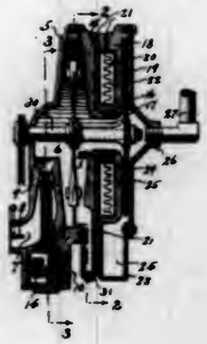
point of inflexion between the said middle and each end portion, and a lens-holding member and a guard carried by each of the said end portions.

1,765,124. ACOUSTIC DEVICE. MAX PAUL BONNAT, New York, N. Y., assignor of one-half to Peter Podell Co. Inc., New York, N. Y., a Corporation of New York. Filed Dec. 16, 1927. Serial No. 240,509. 7 Claims. (Cl. 181—31.)



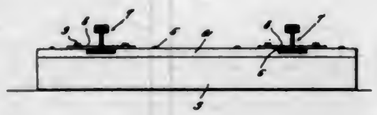
1. An acoustical device comprising a diaphragm, said diaphragm defining a frusto-conical tube, the smaller opening in the tube defining the throat of the acoustical device, a connecting sleeve secured to the sound reproducing apparatus, and a series of spaced rods defining vibrating members secured to the sleeve and to the periphery of the throat.

1,765,125. FORCED-FEED VAPORIZER. CHARLES A. BREWER, Noroton Heights, Conn. Substitute for application Serial No. 42,676, filed July 10, 1925. This application filed Nov. 7, 1929. Serial No. 405,528. 6 claims. (Cl. 261—12.)



1. A vaporizer apparatus, comprising a casing subdivided to provide an intake chamber and a vaporizing chamber with means of communication leading from the former to the latter, an air-intake means leading to said intake chamber, a liquid delivery nozzle provided in said air intake means, means for supplying liquid to said nozzle, a rotatable blower and nebulizer in said intake chamber, a rotatable plate in said vaporizing chamber, means for heating the interior of said vaporizing chamber and said plate disposed therein, and a discharge conduit leading from said vaporizing chamber.

1,765,126. RAIL TIE. JULIAN CHARLIE BROUILLARD, Bemidji, Minn. Filed Oct. 17, 1929. Serial No. 400,297. 1 Claim. (Cl. 238—288.)



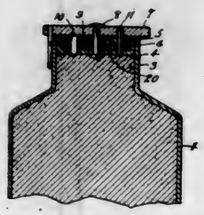
A rail tie comprising a main wooden tie, a metallic supplemental tie secured to the top side of the wooden tie and being of a length commensurate with the wooden tie and being of a width less than the wooden tie, said meallic tie being fastened centrally between the opposite longitudinal edge portions of the wooden tie and being provided adjacent its opposite ends with notches functioning as seats for the reception of the base flanges of the rails to be supported thereby, said seats being greater in depth than the greatest thickness of the base flanges of the rails to entirely receive and support the latter so that the upper surfaces of the metallic tie will be level with the junction of the rail webs with the base flanges and at the same time leave substantial thickness of material intervening between the wooden tie and the said base flanges, and clamping strips of flat rectangular material fastened to the metallic tie on opposite sides of each of the said seats having their adjacent end portions overlapping the base flanges of the rails and abutting the webs of the latter in the angles formed at the junction of the webs with the spaced flanges.

1,765,127. DRAWING MECHANISM FOR TEXTILE ROVINGS. FERNANDO CASABLANCAS, Sabadell, Spain. Filed Apr. 4, 1929, Serial No. 352,521, and in Spain Apr. 17, 1928. 6 Claims. (Cl. 19—131.)



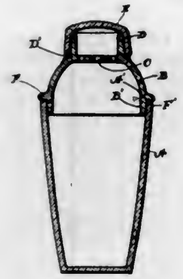
1. A drawing mechanism for textile rovings provided with endless belts, having in combination a frame which guides two belts laterally and two guiding rods supported on said frame which guide internally the front loops of the belts, said two guiding rods being united forming one single U-shaped piece in order that the distance apart of the rods may be invariable and that the rods can be easily retracted from the frame.

1,765,128. CLOSURE FOR TOOTHPASTE TUBES. CLAUDE A. CONOVER, Newburgh, N. Y. Filed June 7, 1929. Serial No. 369,148. 5 Claims. (Cl. 221—60.)



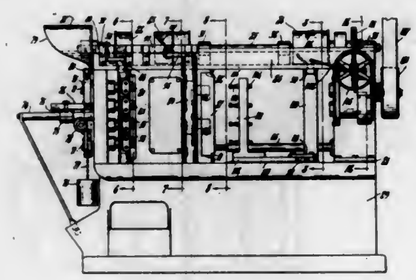
1. A closure for toothpaste tubes, including means for forming a chamber at the top of the neck of the tube, a discharge pipe extending through said chamber, a closure disk movably mounted on said neck and formed with an opening adapted to be brought into registry with said discharge pipe, and means in said chamber surrounding said pipe and presenting a lubricant for preventing the disk from adhering to the pipe.

1,765,129. BEVERAGE MIXER. HUGH JOHN DUNNE COOKE, London, England. Filed Oct. 23, 1926, Serial No. 143,720, and in Great Britain and Australia Oct. 23, 1925. 1 Claim. (Cl. 215—1.)



A beverage shaker comprising, an open top container having its upper edge ground to present a convex inner surface, a dome-shaped cover having a flat perforated top and further having its lower end ground for reception within the upper end of said container to provide a fluid-tight, spigot-joint therebetween, a circumferentially extending, outwardly directed flange formed on said cover with the lower surface of said flange formed in continuation of the ground surface of the lower end of said cover and coacting therewith to form a concave seat for the convex inner surface of the upper edge of said container to provide an arcuate extension for said fluid tight joint, said cover having an outwardly directed bead in horizontal alinement with said perforated top, said bead formed in its upper face with a transversely extending groove, an open top, imperforate neck formed on the upper end of said cover, and a cap detachably fitting over said neck for closing the open top thereof and seating on said head, said neck being formed in its outer surface with a vertical groove extending throughout the entire height thereof and opening into the groove in the upper face of said head.

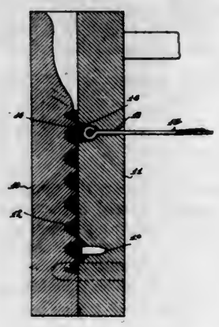
1,765,130. AUTOMATIC SPINDLE LATHE. FRANK L. CONE, Windsor, Vt. Filed July 14, 1926. Serial No. 122,457. 6 Claims. (Cl. 82—3.)



1. In a machine of the class described, a plurality of work spindles having their axes substantially in a common vertical plane, means for rotating said spindles in unison, movable tool carriages adapted to carry tools for simultaneous operation on the work, cams located above said spindles, and means actuable by said cams for moving said tool carriages toward and from the work.

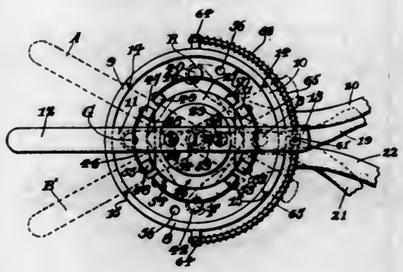
5. In a machine of the class described, a plurality of work spindles, chucks associated with said spindles, means for automatically operating all said chucks in unison, said means including a rock shaft and a plurality of rock arms, each rock arm being operatively connected to one of said chucks and normally locked to said rock shaft, and means for severally unlocking said rock arms from said shaft.

1,765,131. PIN HINGE. ISRAEL W. COOPER, New York, N. Y. Filed May 6, 1929. Serial No. 360,963. 1 Claim. (Cl. 24—160.)



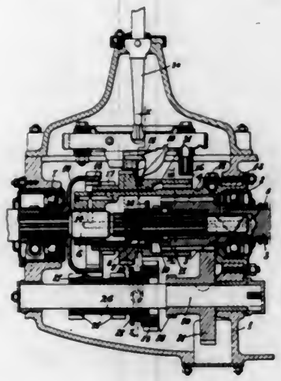
An ornament having the combination of a molded body, a pin having an eye on one end thereof, and integral provision on said body which extends through the eye of the pin hingedly connecting the pin with said body.

1,765,132. ROTARY CURRENT-REVERSING SWITCH. FRED F. CRITSER, Roseburg, Oreg. Filed Apr. 16, 1928. Serial No. 270,560. 15 Claims. (Cl. 200—8.)



1. A current reversing switch comprising a positive terminal, a negative terminal, a right hand field terminal, a left hand field terminal, each of said terminals including a carrier at one end thereof provided with a pair of spaced brushes, said carriers spaced from each other, and a normally inactive rotatable current reversing device including a pair of brushes each for selectively bridging brushes of a selected pair of terminals when said device is shifted from normal position.

1,765,133. GEAR BOX. ROBERT EMILE CHARLES DELEVOYE, Paris, France, assignor to Societe Anonyme des Anciens Etablissements Hotchkiss & Cie., St.-Denis, Seine, France, a Joint Stock Company of France. Filed Feb. 14, 1929, Serial No. 339,869, and in France Jan. 14, 1929. 10 Claims. (Cl. 74—57.)



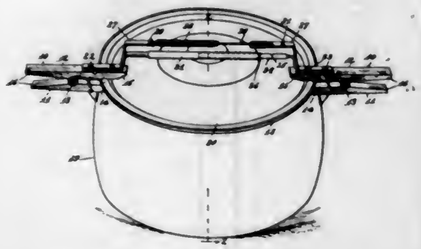
1. In a change-speed gear, the combination of a driving shaft, a driven shaft, a fixed hollow drum disposed eccentrically about said driving and driven shafts, a sliding gear surrounding said fixed drum and continuously rotated by said driving shaft, and coupling means between said sliding gear and said driven shaft engageable with and disengageable from said sliding gear.

1,765,134. SEALING COMPOSITION. BRADLEY DEWEY, Cambridge, and ERNEST C. CROCKER, Belmont, Mass.; said Crocker assignor to said Dewey. Filed June 10, 1924. Serial No. 719,129. 9 Claims. (Cl. 134—17.)

1. A sealing fluid, with viscosity increased by an admixture of gum karaya which has been treated with sodium carbonate, and rendered plastic by an admixture of bentonite.

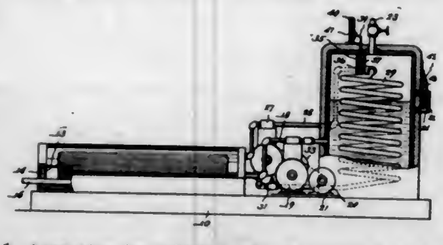
3. Sealing composition comprising an uncoagulated latex bns's and solid suspensoid particles associated with a hydrophilic colloid dispersed in the latex in such proportions as to impart plasticity to the composition but leave it fluid in response to moderate pressure differential.

1,765,135. COVER HOLDER. EBEN G. DOLAND, Starksboro, Vt. Filed Apr. 30, 1929. Serial No. 359,378. 7 Claims. (Cl. 53—8.)



1. A cover holder for cooking vessels comprising a pair of manipulatable spring clamps adapted to grip the rim of a vessel and its cover, means connecting the clamps together for relative adjustment, and tension means interposing said clamps and having a normal tendency to urge them toward each other.

1,765,136. APPARATUS FOR UTILIZING SOLAR HEAT. CHARLES HADDOX DRANE, Jr., Delray, Fla. Filed May 6, 1927. Serial No. 189,324. 2 Claims. (Cl. 122—32.)



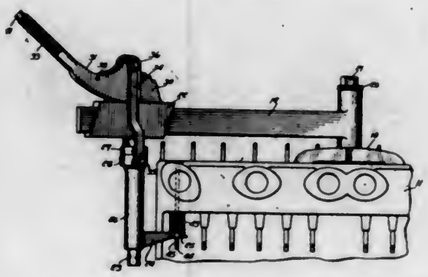
1. Apparatus for utilizing solar heat including a glass topped heat-collecting chamber adapted to be exposed to the rays of the sun, a heat exchanger, a closed gas circulating system including a coil in the heat collector and a coil in the heat exchanger, a compressor for compressing the hot gas from the heat collector and delivering it to the heat exchanger, means for delivering water to the heat exchanger, including a feed water pipe led through the collector to reheat the feed water, a pump for delivering the preheated water to the exchanger, and a float in the exchanger electrically controlling the pump.

1,765,137. GALVANIC BATTERY. LE ROY S. DUNHAM, East Orange, N. J., assignor to Thomas A. Edison, Incorporated, West Orange, N. J., a Corporation of New Jersey. Filed July 3, 1926. Serial No. 120,310. 1 Claim. (Cl. 136—115.)



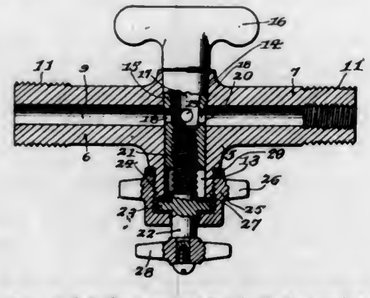
A galvanic cell comprising electrolyte, electrode elements disposed in the electrolyte, one of said elements comprising a plate formed of oxid of copper, supporting means for said plate comprising a U-shaped frame which is channel-shaped in cross section and which embraces the top and side edge portions of the plate, and a U-shaped strip separate from said plate and supporting means disposed between the bottom of the channel of said frame and the top and side edges of the plate, said strip being formed of material which is soluble in said electrolyte and more electro-positive than copper, substantially as described.

1,765,138. VALVE LIFTER. WILLARD J. DUNSTON, Somerville, Mass. Filed Oct. 5, 1928. Serial No. 310,632. 7 Claims. (Cl. 29—86.3.)



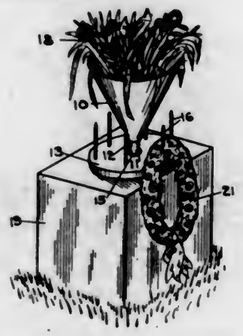
1. In a device of the class described, an attachment adapted to be fixedly secured to the cylinder block of an engine, an arm pivotally mounted on said attachment, a lifting arm provided with means on one end for the purpose of compressing a spring on the stem of a valve member of the engine, coacting means on the first mentioned arm and the lifting arm mounting the lifting arm for sliding movement, swinging movement and guided up and down movement with respect to the first mentioned arm, and means operable to effect the up and down movement of said lifting arm.

1,765,139. COMBINATION STOP AND DRAIN COCK. HERBERT F. DYCK, Ness City, Kans. Filed Mar. 3, 1927. Serial No. 172,374. 2 Claims. (Cl. 251—110.)



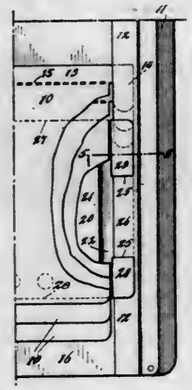
1. In a cock for the purpose set forth a housing providing a valve chamber open at each end, the wall of said chamber having an inwardly tapered upper portion and a straight lower portion of uniform diameter, a pair of oppositely disposed, lengthwise aligning nipple extensions integral with the opposite sides of said housing and communicating with the tapered portion of said chamber, a drain extension integral with the outer face of said housing, disposed at right angles to said extensions and opening in the tapered portion of said chamber, a hollow valve mounted in and corresponding in shape to said chamber, said valve projecting above the upper end of the chamber, a winged head for the upper end of said valve, said valve formed with a pair of diametrically opposed openings for establishing communication between the interior of the valve and said nipple extensions when the valve is in one position, said valve further having an opening selectively registering with the nipple extensions for establishing communication between a nipple extension and said drain extension when the valve is in another position, flanged means extending into said housing and threadedly engaging with the interior of said valve for loosening or tightening the latter with respect to the wall of said chamber, and means for rendering said flanged means leak-proof at the lower end of the housing.

1,765,140. GRAVE VASE. JAMES J. FITL, Swanton, Nebr. Filed Aug. 30, 1929. Serial No. 389,402. 4 Claims. (Cl. 47—41.)



1. A grave vase comprising a weighted disc, pins projecting from the disc, a threaded bushing extending through the disc and spaced inwardly of the pins, a cup, and a threaded pintle carried by the cup for engaging in the bushing.

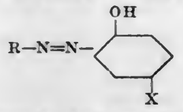
1,765,141. VISIBLE-LOOSE-LEAF DEVICE. CHARLES A. FINLEY, Rutherford, N. J., assignor to Boorum & Pease Company, Brooklyn, N. Y., a Corporation of New York. Filed July 11, 1928. Serial No. 291,991. 11 Claims. (Cl. 129—16.)



1. In a loose leaf filing device a follower having an abutting edge intersected by a crimp.

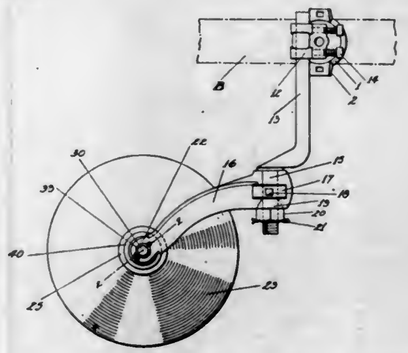
1,765,142. PROCESS FOR DYEING AND PRINTING CELLULOSE ESTERS AND CELLULOSE ETHERS. ERICH FISCHER and CARL ERICH MÜLLER, Hochst-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Apr. 20, 1927, Serial No. 185,355, and in Germany Apr. 23, 1926. 8 Claims. (Cl. 8—5.)

1. The process which comprises dyeing a compound of the group consisting of cellulose esters and ethers with a mono-azo dye of the general formula:



wherein R represents an aryl residue which may be substituted but does not contain more than one sulfonic acid group and X represents a mono-valent substituent.

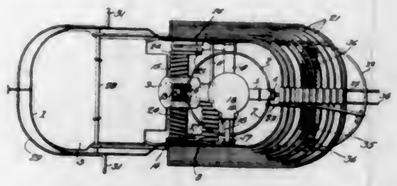
1,765,143. COLTER. LOUIS L. FOJTIK, Needville, Tex. Filed Jan. 5, 1929. Serial No. 330,642. 3 Claims. (Cl. 97—209.)



1. A colter mount comprising a plate to be clamped on a plow beam and said plate having an outer disc extension

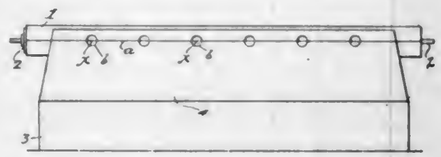
which is toothed, a block, pivotally secured to the plate and having teeth for engaging with the teeth of the plate, said block having spaced sockets for a colter standard, and binding bolts screwed through the block and entering the sockets for frictionally engaging with the standard.

1,765,144. TRAP FOR TAKING LIVE ANIMALS. WALTER A. GIBBS, Holly Oak, Del. Filed Dec. 24, 1926. Serial No. 156,950. 28 Claims. (Cl. 43—63.)



27. In an animal trap for taking animals alive, the combination with a cage or container for confining the trapped animal, said cage being movable from an initial to an elevated position, of means for elevating the confined animal and the cage from the initial to the elevated position.

1,765,145. WINDOW SHADE. MANUEL T. GILLBEE, Philadelphia, Pa., assignor to A. M. Collins Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Nov. 24, 1928. Serial No. 321,716. 3 Claims. (Cl. 156—25.)



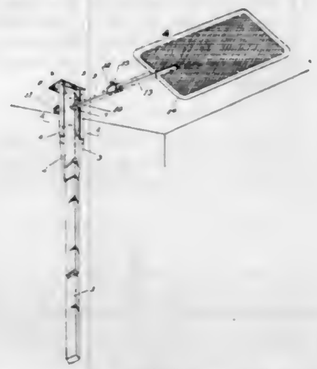
2. The combination of a window shade roller having a longitudinal line extending parallel with the center line of the roller and a window shade having a securing strip attached thereto, said securing strip having a series of perforations arranged on a line at right angles with the sides of the window shade so that when the window shade is applied to the roller, the longitudinal line of the window shade will be exposed through the perforations in mounting the shade on the roller.

1,765,146. SAFETY ENVELOPE. ALFREDO GONZALEZ, Habana, Cuba. Filed Apr. 27, 1928, Serial No. 273,401, and in Cuba Nov. 5, 1927. 3 Claims. (Cl. 229—76.)



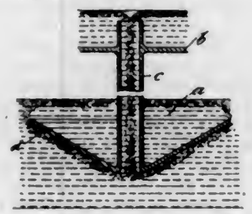
1. A safety envelope comprising a body having its walls marginally united at all but one edge, one of the walls having a closure flap foldable to overlap the other wall and close the body at the said edge, the flap bearing a coating of an adhesive on its inner side for uniting it to the wall overlapped thereby, and a sheet of waterproof material disposed against the outer side of the last mentioned wall of the body and secured thereto along its margins except its upper margin whereby to constitute, in connection with said wall, a packet to house the closure flap.

1,765,147. EXTENSION FOR FLY SWATTERS. JOHN P. HABERLE, Glen Olden, Pa. Filed May 10, 1929. Serial No. 361,963. 3 Claims. (Cl. 43—137.)



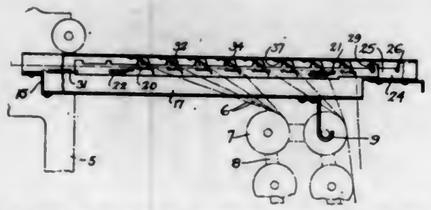
1. A rod having an extension, a headed member guided on said extension, both the extension and the body of the head member being provided with openings, a rocker arm received through the openings and designed to have the handle of a fly swatter removably attached thereto and whereby the combined weight of the rocker arm and the fly swatter will normally swing the rocker arm downwardly and project the headed member a distance outwardly from the rod, for the purpose set forth.

1,765,148. HEAT-TREATMENT PROCESS AND APPARATUS IN WHICH A HOT LIQUID MASS IS EMPLOYED. CECIL FEATHERSTONE HAMMOND, Westminster, London, England, assignor of one-fifth to William Shackleton, London, England. Filed Apr. 1, 1927, Serial No. 180,318, and in Great Britain Apr. 15, 1926. 7 Claims. (Cl. 122—31.)



1. In heat treatment comprising the employment of a heated circulatory liquid mass, the utilization of a defined stream of said mass for entraining treatment material floating on said mass, said stream being so directed as to produce descent of the entrained material into and beneath the surface of a body of the liquid mass.

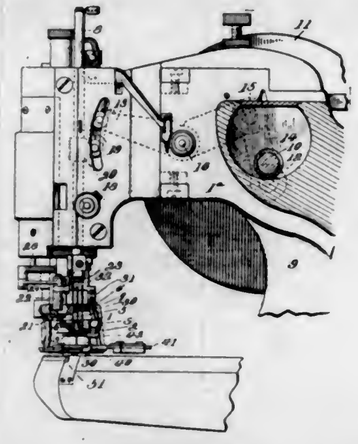
1,765,149. TENSIONING DEVICE. EDWARD HANO, Holyoke, Mass., assignor to Philip Hano Company, Inc., New York, N. Y., a Corporation of Massachusetts. Filed May 7, 1928. Serial No. 275,935. 3 Claims. (Cl. 271—2.1.)



1. A tensioning device for use in permitting the feed of paper in web formation to a writing machine comprising

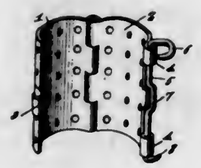
a main frame having notches therein, pins on the main frame, a movable frame having cam slots therein with which the pins are in engagement, rollers supported solely on the movable frame, shelves for the rollers, stop extensions on said movable frame for limiting the movement of the rollers relative to the said frame, springs for yieldably maintaining the rollers against said extensions, a spring for normally urging the movable frame in one direction and bringing the rollers into engagement with the shelves, and a locking bar carried by the movable frame and arranged to drop into the notches of the main frame for preventing operation of the movable frame by its spring.

1,765,150. COVERING-THREAD-LAYING MECHANISM FOR SEWING MACHINES. WALTER M. HANNEMAN, Oak Park, Ill., assignor to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 29, 1927. Serial No. 164,494. 7 Claims. (Cl. 112—100.)



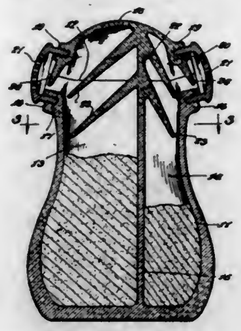
1. The combination of a needle bar, a plurality of needles carried thereby, a needle lever for reciprocating said bar, a shaft fixed to and supporting said lever, means for oscillating said lever and for oscillating said shaft from said lever, covering thread laying devices, an eccentric on the end of said shaft, and means operated thereby for actuating said thread laying devices.

1,765,151. ATTACHMENT FOR PENCILS. HANS P. K. HANSEN, Staplehurst, Nebr. Filed June 21, 1929. Serial No. 372,748. 3 Claims. (Cl. 120—38.)



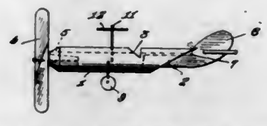
1. A means for attaching a rubber to a pencil or like writing implement whose body is of penetrable material, comprising a clamping sleeve designed to be arranged over one end of the implement to receive a rubber eraser therein, means for forcing the sleeve against the pencil and eraser, and said means including an impinging element which enters the body of the writing implement.

1,765,152. CONDIMENT HOLDER. FRANK A. HART and EARLE ASKEW, New York, N. Y. Filed Nov. 14, 1928. Serial No. 319,258. 4 Claims. (Cl. 65—45.)



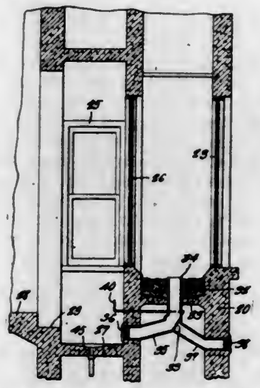
1. A condiment dispenser comprising a body open at the top, threaded semi-circular hollow bosses on said body, a cover sented on said body and having threaded semi-circular hollow bosses in mating relation with said first semi-circular bosses, thereby providing openings in said bosses, a partition in said body, a partition in said cover contacting with said first partition and providing a pair of compartments in said body, the openings of said bosses communicating with said compartments, and a pair of perforated caps having threads thereon in threaded engagement with the threads on said semi-circular bosses thereby removably attaching said cover on said body.

1,765,153. WHISTLE. BERNARD H. HARTLEY, Lewistown, Pa. Filed Sept. 14, 1928. Serial No. 306,032. 3 Claims. (Cl. 46—46.)



1. A novelty of the class described, comprising a toy whistle shaped to represent the body of an aeroplane, a rudder at the mouth end of the whistle, a propeller pivotally secured to the second end of the whistle, and a plane supported from and arranged above the body and disposed opposite the sound outlet opening in the body.

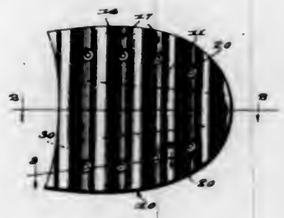
1,765,154. BUILDING CONSTRUCTION. CARREL VERNON HEAD, Slaton, Tex. Filed Dec. 3, 1927. Serial No. 237,552. 4 Claims. (Cl. 47—17.)



1. In a building construction, a walled enclosure forming a part of the building and opening into the said build-

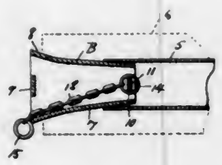
ing, a soil box, windows arranged within the walls of the enclosure, means to conduct warm air from the building into the enclosure through the soil box, means to conduct air from the outside of the building into the enclosure through the soil box, and means to control the supply of air.

1,765,155. RUBBER HEEL. HARRY HEADY, Los Angeles, Calif. Filed Mar. 27, 1929. Serial No. 350,354. 1 Claim. (Cl. 36—59.)



A heel formed of compressible material and comprising a body member having one face provided with transverse ribs and complemental grooves, said ribs being substantially rounded in cross section and provided in their interior with air spaces, the other face having a channel extending transversely of the ribs, said body having sockets opening into the grooves and terminating adjacent the inner surface to provide recesses for the reception of means for attaching the body to the bottom portion of a shoe, the widths of the grooves being relatively less than the width of the ribs so that the rounded surfaces of the ribs present a relatively large wearing surface.

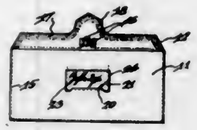
1,765,156. BELL FOR CONDUITS. CORNELIUS DENNIS HEALY, Newark, N. J. Filed Aug. 9, 1926. Serial No. 128,284. 2 Claims. (Cl. 25—128.)



2. A core for forming a depression in concrete about the mouth of a conduit that is to be encased in concrete comprising a hollow frusto-conical body having the smaller end adaptable to be inserted in the end of a conduit while the concrete is being poured about said conduit, a bar extending across the opening at the larger end of the body and flush with the edges at the end thereof having an opening therein adapted for clinching nails that project from the form in which the concrete is poured, a bar across the opening at the smaller end of the body, and a chain movably connected at one end to the last mentioned bar and extending outwardly through the opening in the body for pulling said body out of the concrete after the latter has set.

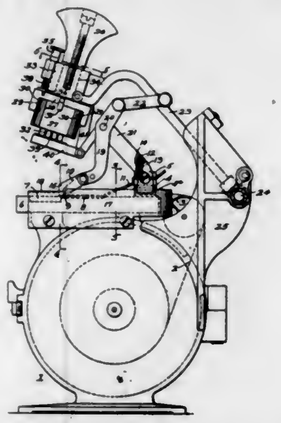
1,765,157. ENVELOPE. WALTER HELEZER, Chicago, Ill., assignor of one-tenth to Joseph Zajaczek, Chicago, Ill. Filed Apr. 21, 1928. Serial No. 271,918. 4 Claims. (Cl. 229—82.)

1. In a device of the class described, an envelope including a flap portion, means adapted to receive a portion of said flap when said flap is disposed in closing position, said means including a sheet of transparent material and a sheet of relatively thin and weak paper



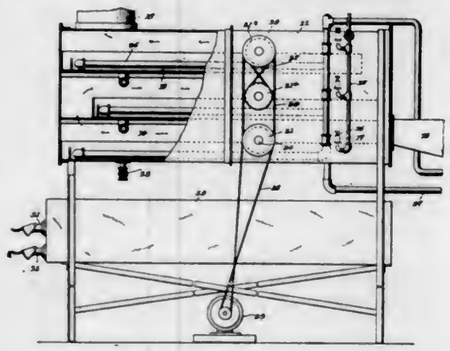
adapted to be mounted below said transparent sheet whereby the portion of said flap inserted thereunder may be adhesively secured thereto.

1,765,158. TICKET AND LABEL PRINTING MACHINE. GEORGE W. HENRY, Jr., and SAMUEL J. THACKERAY, Philadelphia, Pa., assignors to Soabar Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Dec. 8, 1928. Serial No. 324,741. 8 Claims. (Cl. 93—89.)



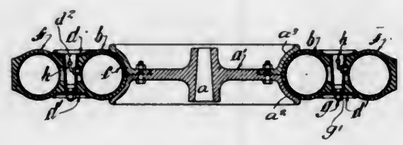
1. The combination in a machine for printing tickets and labels, of a base; a feed table over which the tickets or labels are fed; a pawl engaging one strip of tickets; a narrow pawl for engaging one edge of another strip of tickets; and mechanism for printing the tickets or labels.

1,765,159. SMOKE CONDENSER. JOSEPH M. HILL, Ogden, Utah. Filed Sept. 22, 1928. Serial No. 307,563. 2 Claims. (Cl. 261—92.)



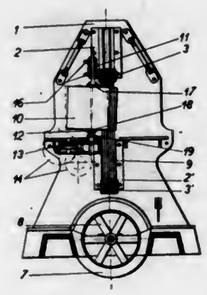
1. In a device for removing smoke from furnace or boiler gases, a casing having an inlet near its bottom adapted to communicate with the furnace or boiler and an outlet near its top adapted to communicate with a stack or flue, a series of vertically spaced water receptacles in said casing forming a passage between them through the casing through which gases from the furnace or boiler pass to said stack, means for supplying water to said receptacles, means for circulating, a heating medium through water in said receptacles, and means for agitating the water in said receptacles to project a spray of water from the receptacles into the gas passage.

1,765,160. SPRING WHEEL FOR VEHICLES. ALFRED JAMES JOHNSEN, Durban, South Africa. Filed Oct. 27, 1928, Serial No. 315,535, and in Great Britain July 31, 1928. 1 Claim. (Cl. 152—33.)



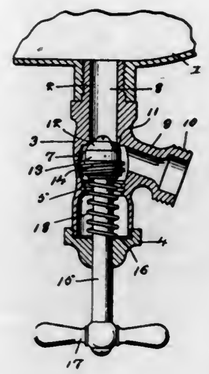
In a spring wheel for vehicles of the kind comprising two pneumatic tyres, one encircling the other, and the inner one carried by the central part of the wheel, a rim intermediate of the tyres in the form of two annular plate-like parts and one part having a hollow and conical web portion extending at right angles to a point near the other part, and bolts and nuts for adjustably connecting the parts together and causing them to grip the tyres between them, the closed side of the inner tyre lying next the central part of the wheel, and the beaded edges of both tyres lying next the conical connecting member of the intermediate rim, as set forth.

1,765,161. CASK, BARREL, OR LIKE CONTAINER. ROMAN KAEMPF, Nawojowa, and ANTONI LANKOFF, Lwow, Poland. Filed Oct. 15, 1927, Serial No. 226,487, and in Poland July 13, 1926. 3 Claims. (Cl. 143—77.)



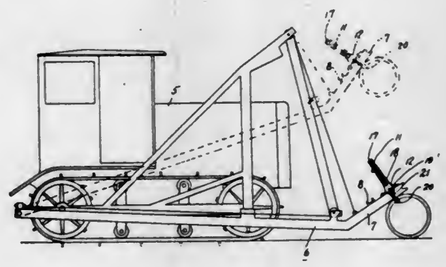
1. In a machine for the manufacture of casks, barrels and the like containers having a seam, the combination of: centering and block rotating means comprising ball and socket joint for each end of the block adjustable one laterally of the other so that the longitudinal axis of the block can be brought to any desired small angle of inclination to the vertical without hindering its capacity of rotation, a saw frame, a plurality of parallel saws arranged on said frame, and means for moving said frame up and down with said saws in contact with the block during the rotation of the latter, whereby said saws cut concentric conical cask casings out of the block during its rotation.

1,765,162. SAFETY VALVE AND DRAIN FOR BOILERS. THOMAS J. KEENAN, Steubenville, Ohio. Filed Apr. 12, 1929. Serial No. 354,647. 1 Claim. (Cl. 251—3.)



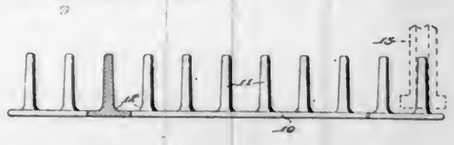
A device for the purpose set forth comprising a valve body designed to have one end screwed in a boiler, said body having a central chamber therein, a second chamber outward of the central chamber, a flanged cap closing the outer chamber, and interior threads between the chambers, said body also having an angle extension having a passage which communicates with the central chamber, a valve having a compressible facing received in the central chamber and designed to close the passage between the central chamber and the end of the body connected with the boiler, said valve being round in cross section and having threads thereon, a stem extending from the valve and passing through the cap, a handle on the outer end of the stem, and a spring surrounding the stem, arranged in the body and exerting a pressure between the cap and the valve for normally seating the valve, and said valve designed to be unseated when an outward pressure is exerted on the handle and the latter is turned to bring the threads of the valve into coengagement with the interior threads of the body.

1,765,163. PIPE-HANDLING APPARATUS. HERMAN CHARLES KEISER, Rock Springs, Wyo. Filed May 28, 1929. Serial No. 366,714. 1 Claim. (Cl. 214—130.)



An attachment for a material handling apparatus embodying a boom having a pair of laterally spaced members, a horizontal bar extending across said base members and terminating substantial distances beyond the sides of the boom, the end portions of said bar being provided with caps having ears, a truss connected to said ears and flexible elements connected to said caps and having pipe engaging devices and separate tightening means to take up the slack in the flexible elements.

1,765,164. PIN BOARD. HUGH KIRKPATRICK, Waltham, Mass. Filed Sept. 21, 1927. Serial No. 221,077. 1 Claim. (Cl. 242—130.)



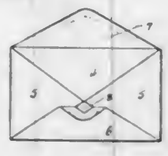
A one piece bobbin pin board comprising a base, and spaced pins rising from and integral with the base, said pins gradually tapering upwardly from the base to the top of the pins and suddenly increasing in diameter adjacent the base to frictionally engage the end portions of the bobbins to yieldingly hold the latter on the pins, and to space the lower ends of the bobbins above the base to permit of limited rocking movement of the bobbins on said base.

1,765,165. TOOL. FREDERICK KROSTA, New York, N. Y. Filed Mar. 12, 1928. Serial No. 261,159. 1 Claim. (Cl. 81—9.5.)



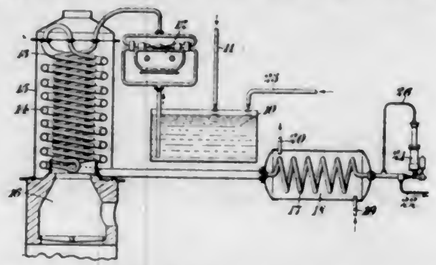
A tool for cutting spirally wound armoured conduits comprising a holder, an anvil in the holder having a transverse groove disposed at an angle to the horizontal median line of the holder, a ridge formed in the groove and arranged to fit between the spiral turns of the conduit, an arm pivoted in the holder and having a slotted end overhanging the anvil, a piercing tool in the slot, the tool being arranged to cut one of the convolutions of the conduit at a right angle to said convolution, and an anvil engaging offset portion on the arm for limiting the piercing movement of said cutting tool.

1,765,166. POSTAL ENVELOPE. REGINALD LEE, Windsor, Victoria, Australia. Filed Apr. 3, 1928, Serial No. 267,031, and in Australia Nov. 16, 1927. 3 Claims. (Cl. 229—82.)



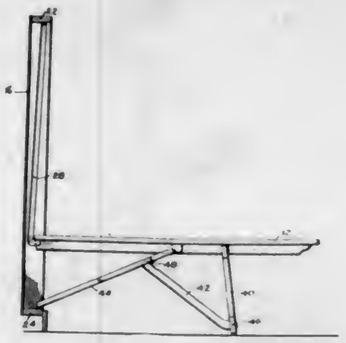
1. In a postal envelope, a sealing flap and a lower flap completing, with side members, the envelope body, a gummed strap formed in the lower flap near its apex and capable of hinging on said flap while the sealing flap is gummed to the main body, the sealing flap being sealed at the same time to the lower flap and the hinged strap afterwards sealed over the tip of the main flap.

1,765,167. CONVERSION OF HEAVY HYDROCARBON OILS INTO LIGHT HYDROCARBON OILS OR SPIRITS. FREDERICK LAMPLOUGH, Middlesex, England. Filed May 27, 1926, Serial No. 112,056, and in Great Britain June 23, 1925. 2 Claims. (Cl. 196—132.)



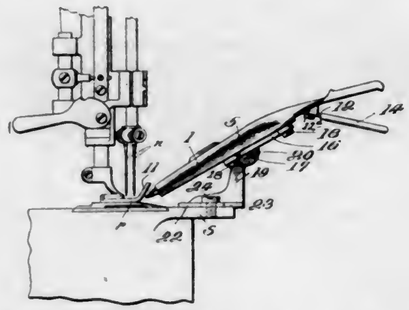
1. In an apparatus for the treatment of hydrocarbon oils the combination of a pump, a heating chamber supplied thereby, a release valve comprising a yieldingly-controlled piston subject to the pressure of the heating chamber, a movable valve element which opens and closes the outlet from the heating chamber, operative connections including a lost-motion device between the piston and the valve element and a throw-over mechanism for the lost motion device having its centre of gravity above its pivot for the purpose described.

1,765,168. FOLDING FURNITURE. BRUNO LAURIS LAURSEN, Dunedin, Fla., assignor, by mesne assignments, of forty-eight per cent to Clearwater Lumber Company, Incorporated, Clearwater, Fla., a Corporation of Florida. Filed Nov. 23, 1926. Serial No. 150,181. 3 Claims. (Cl. 45—51.)



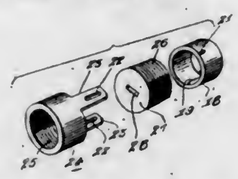
1. In a device of the class described, in combination with a unit having a horizontal operative position and a vertical inoperative position, a stationary upright member, havng spaced uprights and grooves at opposed sides thereof, each groove with a short horizontal section at substantially the level of said unit when in operative position and also with a long section extending upwardly from the rear end of the short section and inclined toward the front of the upright member, means on said unit to engage said grooves of said upright member whereby said member may guide and retard the movement of said unit while said unit is being moved from inoperative to operative position.

1,765,169. FOLDER SUPPORT FOR SEWING MACHINES. JOSEPH MANN, Philadelphia, Pa., assignor to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 31, 1926. Serial No. 98,751. 5 Claims. (Cl. 112—136.)



1. In a sewing machine, a folder, a bracket having a projecting arm, means for securing said bracket to said folder whereby the same may be inverted and the arm positioned so as to project from said folder at either side thereof, a support in which said arm may be mounted, said support being adapted to be shifted from one side of the folder to the other and attached to the work support of the machine, said projecting arm being cylindrical, and said support having a sleeve to receive the same from either end thereof, and means for holding said arm in adjusted positions in said sleeve.

1,765,170. SHADE-ROLLER STOP. BERTRAM E. MESSLER, Brooklyn N. Y. Filed July 12, 1929. Serial No. 377,811. 5 Claims. (Cl. 156—36.)



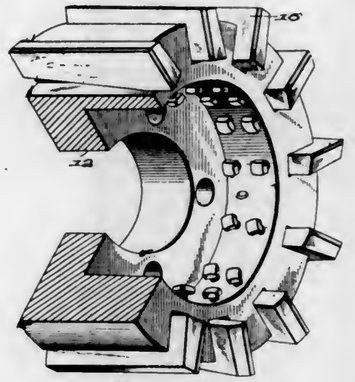
4. A stop attachment for shade rollers comprising a structure adapted to be fixedly connected to a shade roller adjacent one end thereof, an exteriorly threaded member adapted to fit over the end of a shade roller to turn therewith, an internally threaded sleeve threadedly connected to said threaded member, and co-acting means operatively connecting said structure with said threaded sleeve for causing the same to simultaneously turn and for permitting longitudinal movement of said sleeve by said exteriorly threaded member, said means including an elongated slot provided in said threaded sleeve.

1,765,171. REAMER. FRANK P. MILLER, Meadville, Pa. Filed May 16, 1925. Serial No. 30,787. 4 Claims. (Cl 77—75.5.)



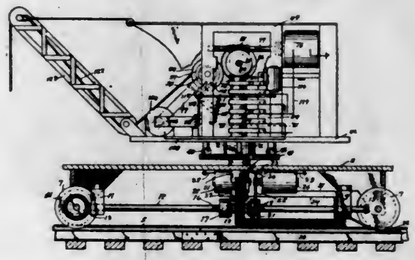
4. In a reamer, a bar having a reduced portion, a collar on said reduced portion and consisting of sections having the meeting portions thereof provided with interfitting means to hold the sections in line, the collar being provided with grooves defining ribs, a wrapping of wire in said grooves to permanently and rigidly connect the sections, and a binding and filling medium in said grooves and being approximately flush with said ribs.

1,765,172. ROTARY CUTTER. FRANK P. MILLER, Meadville, Pa. Filed Dec. 20, 1926. Serial No. 155,918. 6 Claims. (Cl. 29—105.)



1. In a rotary cutter, a body having a slot provided with a bottom wall and converging side walls, a blade adjustable endwise in said slot and having an inner longitudinal edge at an angle to the opposed bottom wall of the slot, an adjustable abutment wedging means embodying pressure screws engaging the angularly disposed inner edge of the blade at spaced points and forcing the blade outward into binding engagement with the converging side walls of the slot thereby cooperating with said converging side walls in inhibiting endwise shifting of the blade.

1,765,173. REMOTE CONTROL MEANS FOR CRANES. DEAN S. MORROW, Eugene, Oreg. Filed July 11, 1928. Serial No. 291,817. 1 Claim. (Cl. 104—149.)

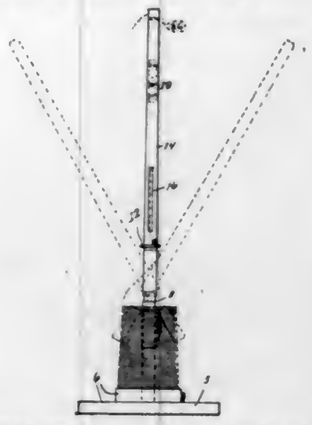


A remote control means for actuating mechanism positioned upon a movable carriage and adapted to move over tracks, of a plurality of conductors positioned between said tracks, a plurality of contact fingers carried on said carriage and engaging said conductors, a rotatble platform positioned on said carriage, a motor positioned on said rotatable platform, means for conducting current from one of said conductors to said motor, and a plurality of magnets positioned on said platform for the purpose of connecting said motor to apparatus mounted on said platform, each of said magnets being electrically connected to one of said conductors whereby said magnets may be actuated from a remote point.

1,765,174. STRING-DISPENSING DEVICE. LEVI F. OWEN, San Francisco, Calif. Filed Sept. 5, 1928. Serial No. 303,998. 1 Claim. (Cl. 242—143.)

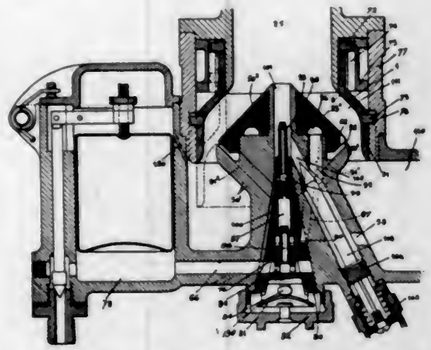
In a device of the character described a base, a support positioned on said base, a bracket secured to said support, a loop formed on the end of said bracket, a peg positioned in said base and adapted to have a supply of

rord positioned thereon, an arm pivoted to said support and having a slot formed therein to permit the cord being dispensed to pass through said arm, screw eyes posi-



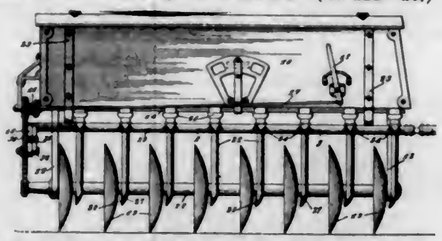
tioned on said arm, tension means carried on said arm, and a counter weight secured to said arm, for the purpose specified.

1,765,175. CARBURETOR. ERNEST LOUIS HENRI l'EPINSTER and FRÉDÉRIC GENÈVE, Paris, France. Filed Feb. 17, 1928, Serial No. 255,070, and in France June 15, 1927. 5 Claims. (Cl. 261—54.)



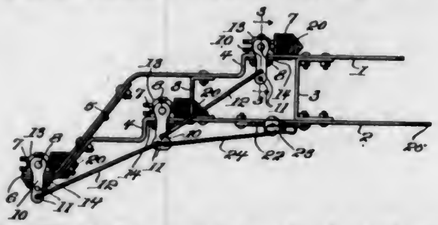
1. In a carburetor for internal combustion engines, in combination, a liquid fuel chamber, a carburetor body, a core located within said body and having a valve seat, means connecting said body to said liquid fuel chamber, a conical member engaged in a conical recess of said core, means ensuring the removable maintenance of said conical member in said core, a nozzle holder of conical shape engaged in a conical recess of said conical member, removable means maintaining said nozzle holder in said recess, a main nozzle mounted in said nozzle holder, means conducting liquid fuel from said liquid fuel chamber to said main nozzle, means conducting primary air to said main nozzle, means conducting the atomized liquid fuel from said nozzle to the exterior of said core, means conducting secondary air toward said fuel conducting means so as to ensure the formation of an explosive mixture, a valve disposed over said core and mounted in said carburetor body for controlling said means admitting secondary air and seating in its closed position on the seat of said core in proximity to the means for conducting the atomized liquid fuel, mechanical means enabling said valve to be displaced relative to said body and said core and providing a free cross-section in immediate proximity to said fuel conducting means and toward which the suction of the engine acts, thus enabling a rich explosive mixture and an easy speed recovery of the engine to be obtained.

1,765,176. DISK-HARROW SEEDER ATTACHMENT. OTTO E. REIMER, Elm Springs, S. Dak. Filed Feb. 27, 1929. Serial No. 343,053. 2 Claims. (Cl. 111—10.)



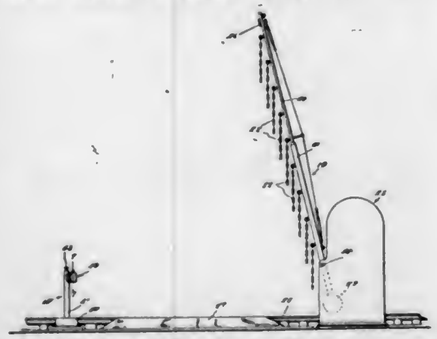
1. In a seeder attachment for disk harrows, a seed hopper, a substantially U-shaped bar having spaced openings therein, grain delivering boots adjustably positioned within said openings, means to secure the bar to the hopper, and spouts to direct the grain from the hopper into the boots.

1,765,177. SHIFTING-SHOVEL CULTIVATOR GANG. CHARLES A. RICE, Dunnegan, Mo. Filed June 6, 1928. Serial No. 283,284. 1 Claim. (Cl. 97—187.)



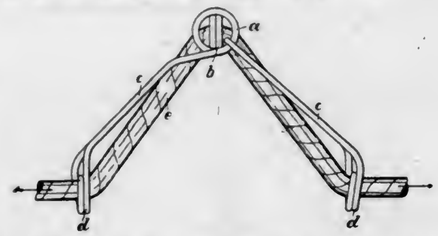
A cultivator rig comprising a pair of spaced beams, bearing blocks mounted on the beams and spaced in stepped relation longitudinally thereof, cultivator shovels including shafts journaled in said blocks, flat levers connected with the upper ends of said shanks and projecting therefrom in a common direction toward one side of the rig, each lever having a plurality of openings adjacent the free end thereof, a pair of rods having downturned extremities received by adjacent openings of the respective levers, with the rods arranged in end to end relation and connecting all of said levers, a manually operable lever pivoted on one of said beams, and having an opening adjacent one end thereof, and an additional rod having offset extremities received by said opening and an opening in the intermediate lever, whereby all of said levers and cultivator shoes are simultaneously adjusted incident to the movement of the hand operated lever.

1,765,178. HIGHWAY-CROSSING BARRIER. ERICH HEINRICH RICK, Kiel, Wis. Filed June 26, 1928. Serial No. 288,339. 5 Claims. (Cl. 39—7.)



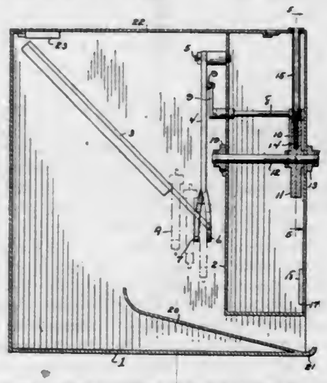
1. In a structure of the class described, in combination, a support, a barrier pivotally mounted on the support, a post adapted to be located opposite the support, said post embodying a box and an upstanding hollow standard, a switch located in said box, a spring pressed rod located in said standard and cooperable with said switch, said barrier being engageable with said rod.

1,765,179. TENSIONING SPRING. WILHELM RÖDERS, Jr., Soltau-Hannover, Germany. Filed Dec. 20, 1927. Serial No. 241,434. 3 Claims. (Cl. 267—69.)



3. In a tensioning device, a spring wire or rod which is shaped to provide diverging side members with eyes for the passage therethrough of a rope to maintain the rope in the same plane and in V-shaped formation, such wire also being bent to provide coils and an eye located between and at right angles with coils, also to provide a pair of arms which extend from the coils, each of the arms converging and being shaped to provide eyes which are in the same plane.

1,765,180. TIRE-VALVE-CORE-VENDING MACHINE. CHRIS SCHAUM, Lincoln, Nebr. Filed Feb. 8, 1929. Serial No. 338,514. 1 Claim. (Cl. 312—48.)



A dispensing device of the class described comprising a diagonally arranged rack for holding the articles to be vended, a forked lever pivotally supported and having its prongs curving toward each other, with the prongs bent outwardly in opposite directions beyond the longitudinal plane of the lever, with the extremities of the prongs overlapping, the lower end of the rack extending between the prongs and means for oscillating the lever to release the lowest article on the rack while holding the next article on the rack.

1,765,181. STITCHLESS HOOK TAPE. DAVID SILBERMAN, New York, N. Y., assignor to Simon L. Ruskin, trustee, New York, N. Y. Filed Feb. 23, 1927. Serial No. 170,244. 3 Claims. (Cl. 2—265.)



2. Stitchless hook tape comprising a strip of fabric folded to form a face ply, a return ply on the back of the face ply, a third ply extending over the free edge of the return play then outwardly to form a fourth ply and inwardly again to form a fifth ply and a hook member passing through all of said plies with its bill exposed on the face ply and the base loops lying between the third and fourth plies, the shank of the hook being exposed on the back of the tape.

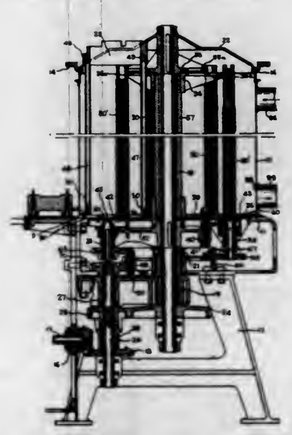
1,765,182. NESTED-CAN BODY AND METHOD THEREFOR. WALTER M. TOMKINS, San Francisco, Calif., assignor to Continental Can Company, Inc., New York, N. Y., a Corporation of New York. Filed Oct. 20, 1928. Serial No. 313,850. 10 Claims. (Cl. 113—120.)



1. A pack of the character described, comprising a plurality of deformed can bodies fitted one within another and contained entirely within the outer body.

7. The method of nesting can bodies, which consists of deforming the bodies to decrease them diametrically and fitting them one within another and entirely within the enclosing body.

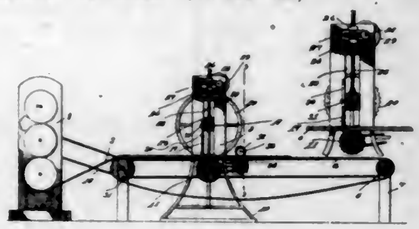
1,765,183. CAN-END-DRYING MACHINE. NELSON TROYER and RALPH M. MERO, Seattle, Wash., assignors to Seattle Astoria Iron Works, Seattle, Wash., a Corporation of Washington. Filed Oct. 1, 1928. Serial No. 309,661. 11 Claims. (Cl. 198—213.)



1. In a can end drying machine, a plurality of can end lifter units each embracing a pair of rotative, threaded lifter shafts and an adjustable support common to one shaft of each of the several units whereby these shafts may be moved together from and toward their complemental shafts for the accommodation of can ends of various diameters.

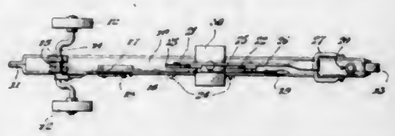
9. In a can end drying machine of the character described, a central shaft, a plurality of threaded lifter shafts arranged concentrically about and rotatable with the central shaft, a central gear revoluble about the central shaft, relatively small driving gears on the lifter shafts meshing with the central gear, means for rotating the central shaft and means for rotating the central gear to maintain a certain ratio of rotation between the central shaft and lifter shafts.

1,765,184. SHEET-CUTTING MACHINE. ELNO H. TRUMP, Akron, Ohio. Filed Mar. 8, 1928. Serial No. 260,179. 12 Claims. (Cl. 164—68.)



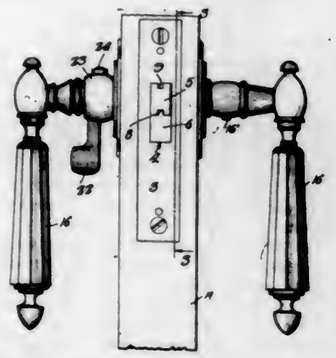
1. In combination a rotatable work support, a conveyor movable thereover for moving sheet material in a longitudinal direction, a rotary knife supported above the work support and cooperating therewith in severing the sheet material in uniform lengths, and means for determining the length of the cut of the sheet material.

1,765,185. BLIND DITCHER. HARLOW ISAAC UMBARGER, Buford, Alberta, Canada. Filed May 5, 1928. Serial No. 275,465. 3 Claims. (Cl. 37—193.)



1. An improved ditcher comprising in combination, a beam carried by adjustable land wheels, an orificed colter member and an orificed standard member in parallel relation to one another adjustably connecting with the beam through slots formed therein, bolt members traversing the beam slots adapted to engage the orifices in the colter member and standard member, a colter integral with the lower end of the colter member, a drill carried by the standard member in detachable engagement with the colter, a pivotal bracing member anchored to the beam, common to and connecting with the upper end of the colter member and standard member, a water tank carried on the beam, a delivery line in connection with the tank connected with the rear surface of the colter member, and directed to discharge a jet of water over the forward portion of the drill, and drag swells in pivotal attachment with the drill.

1,765,186. LOCK. ALBERT VAICEKAUCKAS, Rockford, Ill. Filed Dec. 14, 1928. Serial No. 325,963. 4 Claims. (Cl. 292—140.)



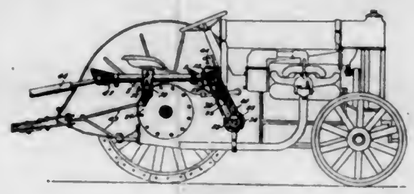
1. A lock of the class described comprising a casing, a spring actuated latch bolt slidably arranged in the casing, a dead bolt slidably arranged in the casing, a spring actuated locking dog in the casing for positively locking the dead bolt in either projected or retracted position, a stem passing through the casing, handles on the ends of the stem, a member movable with the stem for contracting the latch bolt, a manually operated member rotatably mounted on the stem, an arm carrying member rotatably arranged in the casing and actuated by said manually operated member, a pin on the arm engaging a part of the dead bolt for projecting and retracting the same, said pin also moving the locking dog to releasing position.

1,765,187. TREE PRUNER. JOHN P. WARRENFELTZ, Elyria, Ohio. Filed Mar. 29, 1929. Serial No. 351,047. 1 Claim. (Cl. 30—11.)



A tree pruning tool of the character described comprising a pole, a head including a shank secured to one end of the pole and terminating to provide a hook, one side of the hook being beveled and concaved to the cutting edge thereof and also extended along the shank for a portion of its length, a cutting blade pivoted upon the shank adjacent the hook and having a beveled cutting edge cooperating with the corresponding edge of the hook and shank, a lever pivoted upon the pole, a pull rod terminally connected with the cutting blade and lever, a coil retractile spring terminally connected with the lever and pole, said lever having notches in its opposed longitudinal edges adjacent the pivot therefor, and flanges supported by the pole and adapted to be singly received by one of said notches to limit the movement of said lever in opposite directions.

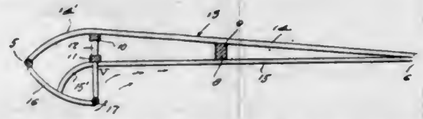
1,765,188. POWER TAKE-OFF FOR TRACTORS. FORREST E. WEBB, Defiance, Ohio. Filed Apr. 22, 1929. Serial No. 357,269. 3 Claims. (Cl. 180—53.)



1. A take-off for the pulley shaft of a tractor, comprising a housing extending transversely of the tractor, a shaft

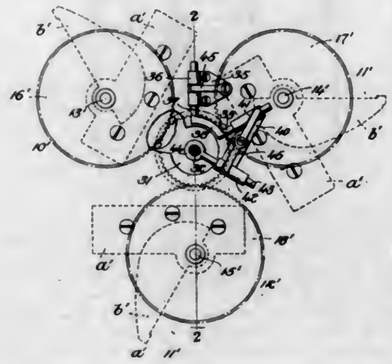
in said housing, chain and sprocket means for connecting the outer end of the shaft with the pulley shaft of the tractor, a bracket adjustably connected with the inner end of the housing and attached to a part of the tractor, adjustable supporting means for connecting the outer end of the housing with the pulley shaft housing, a housing extending rearwardly from the first housing, a shaft passing through the second housing, gears connecting the two shafts together, means for adjustably supporting the second housing from a part of the rear axle housing of the tractor and means for connecting the rear end of said second shaft with the machinery attached to the tractor.

1,765,189. AEROPLANE-WING CONSTRUCTION. WILLIAM ARTHUR WOOLGAR, Jr., Detroit, Mich. Filed Aug. 12, 1929. Serial No. 385,134. 5 Claims. (Cl. 244—31.)



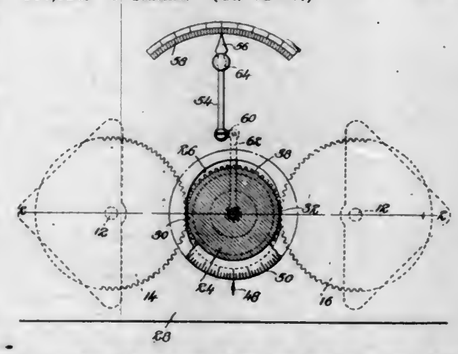
1. An aeroplane wing embodying a frame comprising a pair of longitudinal strips gradually converging toward each other at the tip of the wing, one of the strips being of a length greater than the other of said strips, and said one strip projecting beyond the adjacent ends of said other strip at the tip of the wing, a transverse strip connecting said ends of the first mentioned strip, longitudinally spaced transverse rib frames secured at their ends to said longitudinal strip, each of said rib frames comprising upper and lower opposed members, the upper member of said rib curving downwardly at the leading edge of the wing, the lower member at said rib curving downwardly and forwardly at the leading edge of said wing, an arcuate shaped connecting member secured to the terminals of the upper and lower rib members, said arcuate connecting members having their free ends extending inwardly of the frame, a longitudinally extending bar secured to said ends of said arcuate connecting members, and longitudinally spaced vertical supporting staunchions secured at their upper ends to the frame adjacent the lower rib members, said supporting staunchions at their lower end being secured to the last mentioned longitudinal bar opposite the end of the respective arcuate connecting members.

1,765,190. RADIO APPARATUS. DORSEY F. ASBURY, Broomes Island, Md. Filed Jan. 12, 1926. Serial No. 80,833. 14 Claims. (Cl. 175—41.5.)



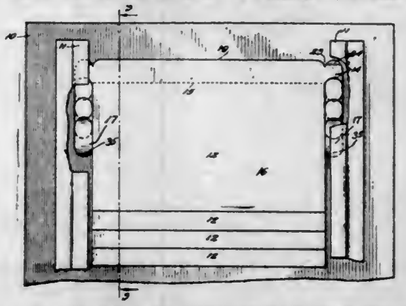
1. In radio apparatus, a tuning unit a part of which is movable, means for moving said movable part including a pair of intermeshing gears one of which is fixed with respect to said movable part and the other of which constitutes an operator for the one that is fixed to said movable part, one of said gears having diagonally extending teeth whereby tilting movement of said operating gear is effective to move said movable part, and means mounting said operating gear for tilting movements.

1,765,191. RADIO APPARATUS. DORSEY F. ASBURY, Broomes Island, Md. Filed Feb. 7, 1927. Serial No. 166,516. 6 Claims. (Cl. 74—7.)



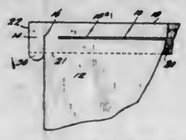
1. In radio apparatus, a pair of tuning units a part of each of which is movable, an operator having continuous driving connection with the movable part of each unit, means whereby said operator is movable to move the movable parts of said units collectively and individually, and means cooperating with said operator to prevent movement of one unit while the other unit is being moved individually by the operator.

1,765,192. VISIBLE INDEX. ALWIN VON AUW, Brooklyn, N. Y., assignor to Boorum & Pease Company, New York, N. Y., a Corporation of New York. Filed May 17, 1928. Serial No. 278,587. 9 Claims. (Cl. 129—16.)



1. A visible index card comprising a body portion in combination with an ear having a depending lobe at either side of said body portion adjacent to the upper edge, the lower tip of said ears being bent at an angle dorsal to the body of the card.

1,765,193. VISIBLE INDEX. ALWIN VON AUW, Brooklyn, N. Y., assignor to Boorum & Pease Company, Brooklyn, N. Y., a Corporation of New York. Filed June 15, 1928. Serial No. 285,581. 17 Claims. (Cl. 129—16.)



6. A visible index card comprising a body portion and a depending ear at either side of said body portion adja-

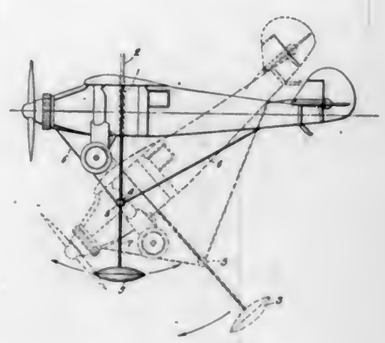
cent the upper edge, said body portion being hinged on a line reaching from one free side edge of said body portion to the other, said card being reinforced substantially as described.

1,765,194. TEMPORARY BOOK OF SHEETS. ALWIN VON AUW, Brooklyn, N. Y., assignor to Boorum & Pease Company, Brooklyn, N. Y., a Corporation of New York. Filed July 21, 1928. Serial No. 294,454. 9 Claims. (Cl. 281—21.)



1. A temporary book comprising a plurality of sheets with the ends of the sheets in stepped relation, in combination with a backing adhering to and following the surfaces exposed by the stepped relation of the sheets, said book being adapted to permit removal of the sheets.

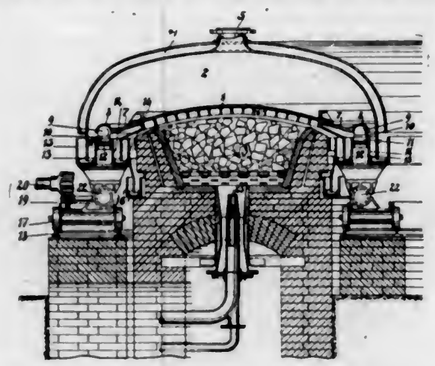
1,765,195. CONTROLLING MECHANISM FOR AEROPLANES. SIMON J. AX, Longmont, Colo. Filed June 5, 1929. Serial No. 368,667. 1 Claim. (Cl. 244—31.)



In an aeroplane, a vertically arranged tube passing through the fuselage and the wing, a rod having its upper part slidably arranged in said tube, a weight on the lower end of the rod, a stationary collar on the rod an appreciable distance from the lower end thereof, a sliding collar on the rod below the first collar, cables connecting the sliding collar with parts of the fuselage and wing of the plane, a shaft journaled in the fuselage, a pair of drums connected with the shaft, cables connecting the drums with the weight, a hand wheel on the shaft whereby the same can be rotated to wind the cables on the drums and ratchet means associated with one drum for preventing retrograde movement of the drums and permitting the cables to unwind from the drums when the ratchet means are disengaged.

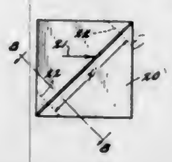
1,765,196. ROTARY HEARTH OVEN. FRIEDRICH BARTLING, Munich, Germany. Filed June 27, 1927, Serial No. 201,953, and in Germany Jan. 15, 1927. 6 Claims. (Cl. 263—35.)

1. A rotary annular hearth oven comprising an annular oven chamber, an annular working hearth plate rotatable in said chamber, said annular hearth plate being upwardly arched in cross section, said chamber having a furnace space beneath the annular working hearth, a radiant body in said furnace space, and means fixed to the chamber



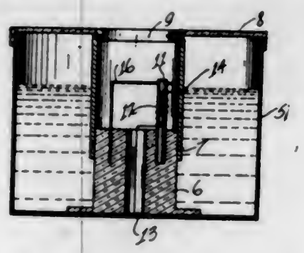
walls to supply combustible gas to said body for flameless combustion therein whereby the parts of the roasting hearth are heated uniformly by successively passing said means.

1,765,197. ROOFING STARTER. CLEMENTS BATCHELLER, Portsmouth, N. H., assignor to Bemis Industries, Incorporated, Boston, Mass., a Corporation of Delaware. Filed Jan. 24, 1929. Serial No. 334,845. 9 Claims. (Cl. 108—8.)



8. An oversize roofing blank having a weakened portion along one diagonal.

1,765,198. DEVICE FOR TESTING LIGHT-SENSITIVE MATERIALS. ALFRED BAUER, Weimar, Calif. Filed May 27, 1929. Serial No. 366,465. 1 Claim. (Cl. 175—183.)

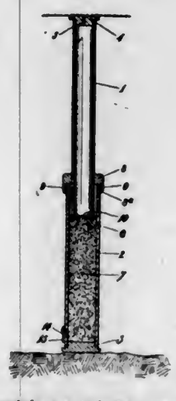


In a device of the character described, a receptacle, an insulating member positioned within said receptacle, a tubular element carried on said insulating member, a rod positioned within said tubular element and mounted on said insulating member, an indicator mounted on said insulating member and having one end in close proximity to said rod, a coil surrounding said rod and having one end electrically connected to said tubular member and having its opposite end connected to said receptacle, and a cover for said receptacle, said cover having an opening formed therein and with a downwardly extending flange surrounding said opening and extending into said tubular element.

1,765,199. PROCESS FOR DEPILATING HIDES AND SKINS. MAX BERGMANN, Dresden, Germany. Filed July 27, 1925, Serial No. 46,493, and in Germany Feb. 12, 1925. 12 Claims. (Cl. 149—2.)

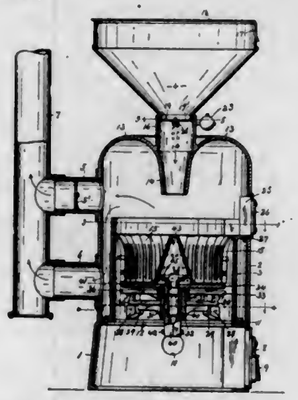
8. A process for unhairing skins and hides which comprises treating the skins and hides with a watery solution containing a nitrogen base readily soluble in water while giving it an alkaline reaction and with an alkaline unhairing means.

1,765,200. PIT PROP. ENOCH BULLOUGH, Ashton-in-Makerfield, England. Filed Nov. 10, 1928, Serial No. 318,529, and in Great Britain Nov. 17, 1927. 3 Claims. (Cl. 248—2.)



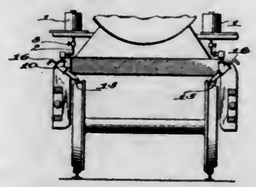
1. A support comprising a tubular member closed at one end, a second tubular member slidable within said first mentioned tubular member and terminating therewithin in a piston-like abutment, granular material filling the space between said abutment and the closed end of said first mentioned tubular member, and an aperture near the closed end of said first mentioned tubular member, said aperture being closed by a plug to which is attached a flexible wire which extends within said granular material and is adapted when withdrawn to remove some of said granular material thereby enabling the axial length of said support to be reduced.

1,765,201. HEATER. GUSTAV BORGESON, Syracuse, N. Y. Filed Jan. 28, 1929. Serial No. 335,613. 7 Claims. (Cl. 126—107.)



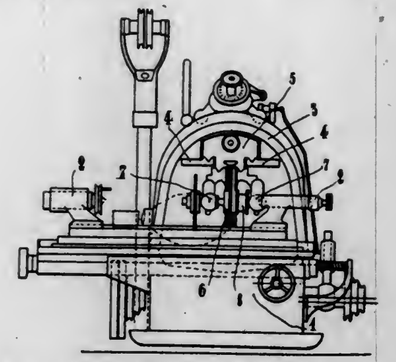
1. In a heater of the character described, an upright shell having a combustion chamber, the top wall of which is curved inwardly and downwardly from the outer walls toward the center to form a central pendant extension having a fuel inlet opening therethrough.

1,765,202. FLANGE OILER. JAMES C. BURFORD, Winston-Salem, N. C. Filed Nov. 1, 1927. Serial No. 230,294. 1 Claim. (Cl. 184—3.)



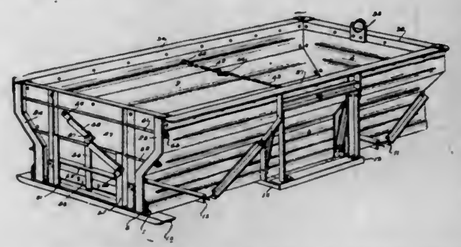
In a flange lubricator, a reservoir, a pipe fitting, said fitting comprising angular extensions, a bore formed through each of said extensions, a plug closing one of said bores, a needle valve arranged to seat within said other bore to regulate the flow of lubricant through said bores, a second pipe fitting upon one of said extensions, said second named pipe fitting having a sight and vent opening, said opening being disposed so as to intercept the bore of said extension at right angles, means to conduct lubricant from said reservoir to said first named fitting, and means to supply lubricant to said flange.

1,765,203. MACHINE TOOL. ALFRED BUSSY, Paris, France, assignor to Compagnie Française des Machines-Outils de Précision, Paris, France. Filed Mar. 29, 1928, Serial No. 265,658, and in France Apr. 15, 1927. 6 Claims. (Cl. 51—50.)



1. In a machine tool, in combination, a bed, a tool, means for supporting the tool above said bed, a work holding table to one side of said supporting means, mechanism for driving said tool located on the opposite side of said supporting means, and transmission means from the driving mechanism to the tool passing through the tool supporting means.

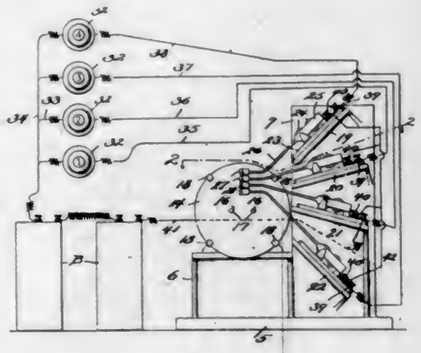
1,765,204. WAGON BOX. CLARENCE D. CARD, Rivers, Manitoba, Canada. Filed Dec. 17, 1928, Serial No. 326,549, and in Canada Mar. 9, 1928. 1 Claim. (Cl. 296—28.)



An all metal wagon box comprising a rectangular bottom plate, angle bars having their horizontal flanges underly-

ing and permanently riveted to the edges and front end of the plate and their vertical flanges upstanding at the sides and front end of the plate, closure side and front plates lengthwise corrugated and having their lower edges doubly seamed to provide inverted U-shaped channels receiving the upstanding flanges of the angle bars, vertically disposed angle bars connecting the side and end plates at the front corners of the box, vertically disposed channel bars permanently secured to the rear ends of the side plates and applied on the inner sides thereof with the flanges turned inwardly, an end plate having the ends thereof provided with vertical angle bars slidably received within the channel bars, said plate being provided centrally at the lower edge with a rectangular outlet opening, horizontal suitably spaced tie bolts passing through the channel bars and the angle bars of the plate and fastening the sides of the box together, a vertically slidable gate carried by the latter end plate and normally closing the opening, suitably spaced reinforcing cross bars underlying the bottom plate and permanently riveted thereto and reinforcing angle bars permanently secured to the upper edges of the side and front plates.

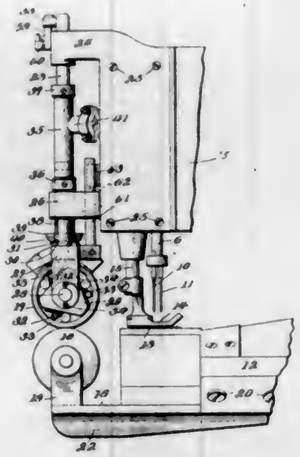
1,765,205. WATCHMAN'S ELECTRIC CLOCK. SAMUEL B. CHAPMAN, Baltimore, Md. Filed May 25, 1927. Serial No. 194,165. 1 Claim. (Cl. 234—37.5.)



In a watchman's clock, the combination of a base, a support carried thereby, an upright also carried by the base and adjacent to the support, a clock mounted upon the support, a recorder dial attached to and carried by the hour hand arbor of the clock, a plurality of angularly disposed shelves carried by the upright, a plurality of vibrator arms, one to each shelf supported by the shelves with their free ends radially aligned and in spaced relation adjacent the face of the dial, recording indicia carried by the free end of each arm, and a plurality of electromagnets carried by the shelves one to each shelf and each arm, and in influencing relation to the respective vibrating arms.

1,765,206. FEEDING MECHANISM FOR SEWING MACHINES. NORMAN V. CHRISTENSEN and HAROLD J. LE VESCONTE, Chicago, Ill., assignors to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 1, 1929. Serial No. 351,675. 9 Claims. (Cl. 112—214.)

4. The combination of a work supporting arm having a feeding mechanism for feeding the articles as stitched off the end of the arm, a puller feeding mechanism including a lower puller roller located in line with the arm and spaced from the free end thereof, a bracket carried by the arm and extending in the direction of the arm on which said roller is mounted whereby a tubular article stitched on said arm will pass over said bracket and feeding roller, an upper feeding roller located above and cooperating with said lower feeding roller, a presser bar, a yoke bracket carried by said presser bar and supporting said roller, a clutch lever for intermittently rotating said



roller, a sector gear carried by said lever, a sleeve mounted on said bar for free rotation, a segment gear carried thereby and meshing with said sector gear for oscillating the clutch lever, an arm mounted on said sleeve, a rock lever, a link connecting said rock lever to said arm, and means for oscillating the rock lever.

1,765,207. LATCHING MEANS FOR THE COVERS OF LAUNDRY APPARATUS. JOHN MOSES COFFEE, Gainesville, Ga. Filed Mar. 13, 1928. Serial No. 261,294. 1 Claim. (Cl. 292—37.)



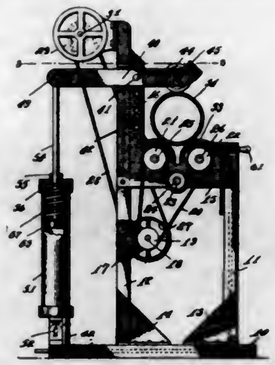
Latching means for a curb extractor cover having a plate adapted to engage the upper surface of the rim of the curb and support the plate therefrom, the plate being provided with an opening, a plurality of projectible latch bars for engaging beneath the rim of the curb, a disc rotatable upon the plate, connections between the disc and the latch bars to permit the turning of the former to shift the latter, and a handle for turning the disc and engaged in the opening in the plate when the bars are in extended position, said handle being slidably directed through the disc.

1,765,208. BOILER FLUE AND PIPE CUTTER. JAMES IRWIN CUNNINGHAM, Shawnee, Okla., assignor of one-half to Earl H. Waldrop, Shawnee, Okla. Filed Apr. 17, 1929. Serial No. 355,794. 4 Claims. (Cl. 164—60.)

1. A pipe cutter comprising a frame, a cutter arm pivotally and adjustably mounted on the frame, a bracket

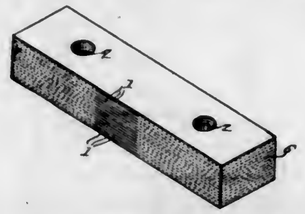
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swingably mounted from the arm, a pair of spaced cutters rotatably supported at the free end of the bracket, rollers



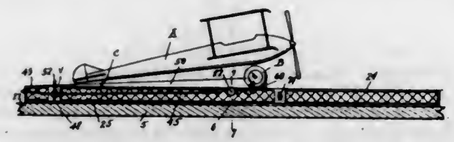
for supporting a pipe to be cut, means for rotating the rollers, and means for causing oscillation of the cutter arm for forcing the cutter into operative relation with a pipe.

1,765,209. FLEXIBLE COUPLING PIN. GEORGE A. DALTON and JOHN R. DUNHAM, Highland Park, N. J., assignors to John Waldron Corporation, New Brunswick, N. J., a Corporation of New Jersey. Filed Dec. 29, 1926. Serial No. 157,786. 3 Claims. (Cl. 64—96.)



1. As a new article of manufacture, a flexible element consisting of a series of flat flexible steel strips laid together and welded in the end sections, the strips in the intermediate section being free to move with respect to each other.

1,765,210. AEROPLANE CATAPULT. FIDEL FRANK DANIEL, Ironwood, Mich. Filed Nov. 28, 1928. Serial No. 322,392. 6 Claims. (Cl. 244—2.)



1. An aeroplane launching catapult apparatus including a runway platform, means for urging movement of an aeroplane along the platform, a pair of chock-like stops slidable vertically through openings in the platform to chock the wheels of the running gear of the aeroplane and hold the aeroplane stationary on the platform, brackets depending from the platform below said openings, stems depending from the stops and slidable through the brackets, springs engaged with the stems to normally urge the stops downwardly, a pivoted catch on each bracket to engage the stems to hold the stops upwardly against the tension of said spring, said catches having aramatures, and electro-magnets for attracting the armatures to release the catches.

1,765,211. REFRIGERANT. JOSEPH G. DAVIDSON, Yonkers, N. Y., assignor to Carbide and Carbon Chemicals Corporation, a Corporation of New York. Filed Apr. 7, 1927. Serial No. 181,866. 6 Claims. (Cl. 252—5.)

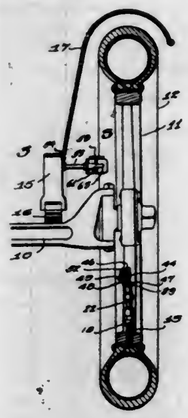
1. A refrigerant containing at least 20% of vinyl chloride.

1,765,212. SHADE HOLDER FOR ELECTRIC LAMPS. JAY J. DECKER, Garrett, Pa. Filed Jan. 13, 1928. Serial No. 246,523. 1 Claim. (Cl. 240—138.)



In combination a transversely bowed shade to snugly embrace one side of an electric light bulb, having a shoulder formed on its outer face and extending to the longitudinal edges thereof and a relatively short slot formed in said edges and adjacent said shoulder, and a split resilient clamp formed of a single semi-circular strand of wire engageable with the shade beneath the shoulder and having inwardly extending terminal portions projecting through said slots and beyond the longitudinal edges of the shade for engagement with the electric light bulb to hold said shade thereon.

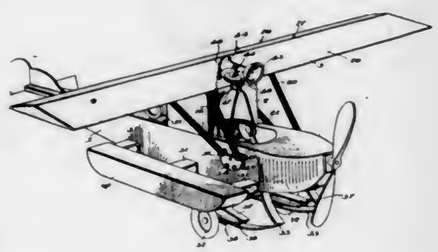
1,765,213. TIRE-DEFLATION INDICATOR. ROY DEPEW, Century, Okla. Filed Feb. 8, 1927. Serial No. 166,794. 1 Claim. (Cl. 200—58.)



A device of the character described comprising a thimble threaded at its lower end for connection with the valve stem of a pneumatic tire and provided with a head adapted to hold the valve thereof in open position, a sleeve arranged in axial alinement with said thimble and threaded thereto, said head being provided with an opening, a longitudinally expansible member arranged in said sleeve and having a flange at its lower end clamped between said thimble and said sleeve, a stem slidable in the upper end of said sleeve and projecting upwardly therebeyond, a head arranged on the lower end of said stem and contacting with the upper end of said expansible member, a cap arranged on the upper end of said sleeve, a slidable member arranged in said cap and contacting with the upper end of said stem, signal actuating means including a stem slidable in the upper end of said cap, said slidable member

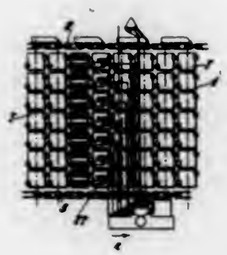
being adapted to lock said last named stem against movement when the pressure in said expansible member is above a predetermined point, said slidable member being movable downwardly upon a decrease in pressure below such predetermined point to release said last named stem, said cap being provided with an internal annular groove, arms carried by said last named stem and having fingers at the lower end thereof engageable in said groove, the upper face of said slidable member being conical and adapted to engage said arms to urge the fingers thereof outwardly into engagement with said groove, and resilient means normally urging said last named stem upwardly.

1,765,214. AMPHIBIAN AIRPLANE. FEDERICO GUILLERMO DIAGO, Habana, Cuba. Filed June 3, 1927. Serial No. 196,281. 13 Claims. (Cl. 244—12.)



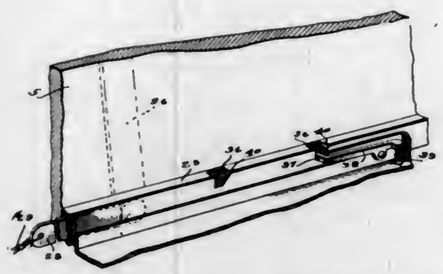
1. An aircraft comprising a fuselage having a turret, a main plane situated upon the turret and having part of the sustaining surface concealed and covered by the turret, articulated connections between the fuselage and main plane, and means permitting swinging of the main plane upon said connections to displace the main plane from the turret and expose the formerly concealed sustaining surface to the atmosphere thus to retard the gravitational movement of the aircraft.

1,765,215. PUBLICITY APPARATUS. HENRI MAURICE DUCHARD, Paris, France. Filed Aug. 6, 1928, Serial No. 297,819, and in Germany Aug. 22, 1927. 13 Claims. (Cl. 40—52.)



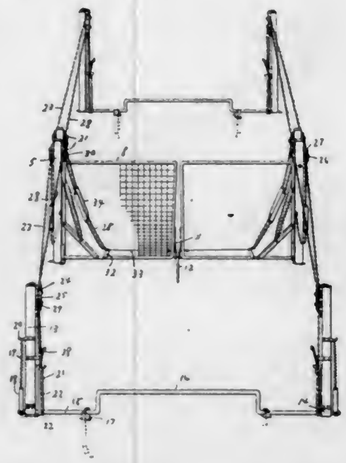
1. Publicity apparatus for passing advertisements in continuous succession before the public gaze, said apparatus comprising, in combination, an endless member, means for imparting continuous movement to said endless member, a plurality of shutters disposed in rows and capable of assuming two different positions, a plurality of spindles carried by said endless member, each of said spindles carrying a row of shutters pivotally mounted thereon, and a plurality of means for pivoting said shutters whereby an advertisement sign is created by the contrasted positions of said shutters.

1,765,216. VENDING MACHINE. MAJOR DUNCAN, Baltimore, Md. Filed Aug. 7, 1928. Serial No. 298,118. 6 Claims. (Cl. 194—58.)



1. In combination a horizontally arranged channel shaped member into which coins are adapted to be deposited and having a notch therein, a slide movable longitudinally along the channel shaped member, a latch element carried thereby and normally engaged with the notch, and a coin pushing element slidably mounted in the channel shaped member for moving a coin into engagement with the latch element to move the latter out of the notch.

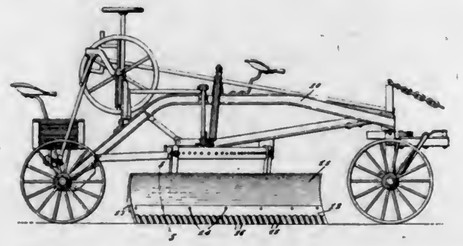
1,765,217. FARM GATE. CLARENCE W. EHLERS, Junction City, Kans. Filed June 8, 1928. Serial No. 283,942. 2 Claims. (Cl. 39—60.)



1. A gate of the class described comprising a gate section pivotally mounted at its outer edge for upward swinging movement, a lever pivotally mounted on the lower edge of said gate section, means for actuating said gate section for moving the latter into open and closed positions, said means comprising a rock-shaft, means for mounting said rock-shaft remotely from said gate section, an operating lever mounted on said rock shaft, spring means for normally holding the operating lever in a vertical position, a pair of flexible operating members, each of said operating members having one end thereof secured to said shaft on opposite sides of said operating lever, one of said flexible operating members having its other end connected to said gate section rearwardly thereof and intermediate the top and bottom edges of said gate section whereby when said shaft is moved in one direction for bringing said operating lever into engagement with said one flexible operating member, said gate section will be actuated for movement from an open to a closed position, the other of said

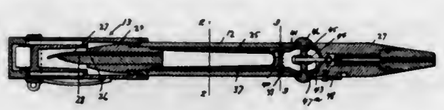
pair of flexible operating members having its opposite end secured to said pivoted lever carried by said gate section, latch means carried by said gate section normally securing said section in closed position, means operatively connecting said latch means with said pivoted lever whereby when said shaft is initially moved in an opposite direction, said operating lever will be brought into engagement with the other of said flexible operating members, said latch mechanism will be released so that a subsequent movement of said shaft may effect an upper swinging movement of said gate section, all in the manner and for the purpose set forth.

1,765,218. SCRAPER BLADE. JULIUS P. ERHART, Anderson, Calif., assignor of one-half to Leon P. Miller and Ralph M. Miller, Anderson, Calif. Filed Dec. 26, 1928. Serial No. 328,420. 2 Claims. (Cl. 57—143.)



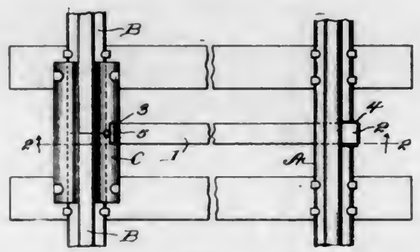
1. A scraper bit comprising an elongated blade of arcuate cross section, corrugations formed upon the working face of the bit, and said corrugations being right angularly disposed to obviate side draft of the bit while in use.

1,765,219. WRITING INSTRUMENT. MAXIMO ESCALANTE, New York, N. Y. Filed Mar. 15, 1928. Serial No. 261,822. 2 Claims. (Cl. 120—46.)



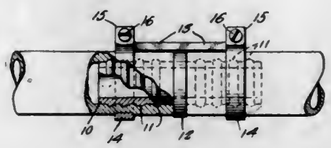
1. In a writing instrument of the class described, a barrel, an ink bag located in the barrel, a substantially U-shaped compressor whose arms are disposed at diametrically opposite sides of the bags, anchoring means for said compressor, an expansion spring associated with the arms thereof, and a rotary finger operating member operable with said arms for compressing them against the action of the expansion spring.

1,765,220. ANTISPREADING DEVICE. WILLARD E. EVERETT, Cumberland, Md. Filed Jan. 28, 1929. Serial No. 335,592. 1 Claim. (Cl. 238—51.)



In combination with the rails of a track and a splice bar for one rail, said bar having a hole in its base part, a strip having a hook-shaped part at one end thereof adapted to engage the base of one rail, a hook forming part at its other end for engaging the hole in the splice bar, the last mentioned hook shaped part being formed by bending the strip upwardly and then forwardly and then downwardly, with the downwardly extending part passing through the hole in the bar and a pin passing through the extremity of the downwardly extending part and engaging the under face of the bar.

1,765,221. CONNECTER. HEDLEY FALLA, Milford, N. H. Filed Aug. 28, 1926. Serial No. 132,156. 1 Claim. (Cl. 285—84.)



A pipe connector comprising a nipple, an annular flange carried at an appropriate point in the length of the nipple and extended horizontally thereof to abut the adjacent end of a pipe section carried upon the nipple, a supporting arm carried by and rigidly connected with the outer surface of the flange and projecting therefrom in spaced parallelism to the adjacent wall of the nipple, and a split clamping band horizontally arranged about the nipple parallel with the flange and having connection at one end thereof with the outermost projecting end of the supporting arm whereby the aforementioned end of a pipe section may be rigidly retained upon the nipple and the portion thereof unengaged by the clamping band may swell circumferentially of the nipple and between the space between the latter and said arm.

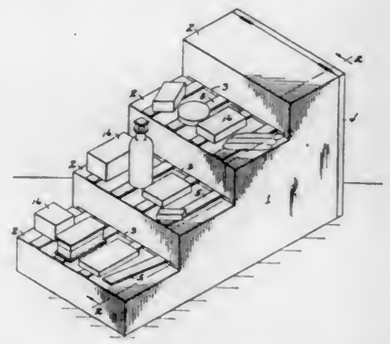
1,765,222. CAN OPENER. HEDLEY FALLA and FRED BERGAMI, Milford, N. H. Filed Mar. 25, 1927. Serial No. 178,341. 1 Claim. (Cl. 30—3.)



A can opener of the character described comprising a blade, a curved body for said blade, guide means for said blade and including a substantially U-shaped yoke having one arm bent rearwardly upon itself, a projection included in said guide means for engaging the outer wall of a can and being formed with and depending from the rearwardly bent portion, means for pivotally securing said curved body to said guide means and passing through the rearwardly bent portion, a guide member formed with the other arm of the U-shaped yoke, a reduced portion depend-

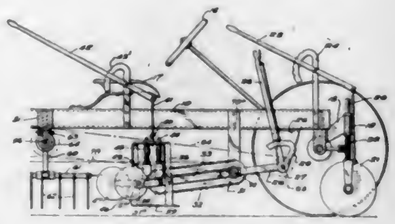
ing from the guide member and being aligned with the projection for cooperation therewith, said blade being recessed adjacent its juncture with its body, said blade including a cutting edge and said edge being notched at its outer end.

1,765,223. DISPLAY RACK. CURZON C. FERRIS, Elmira, N. Y. Filed Jan. 27, 1926. Serial No. 84,181. 1 Claim. (Cl. 200—85.)



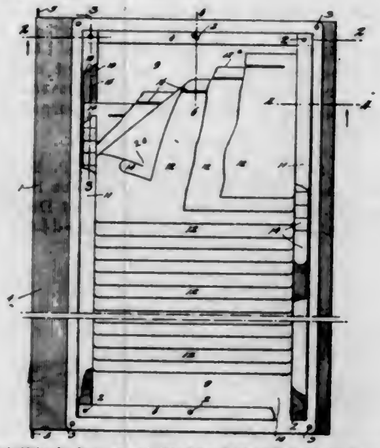
In combination with a hollow stepped-like support, having a transverse slot arranged above and adjacent the stepped portion of the support, of a circuit closer for a normally open circuit including a transversely arranged rod arranged within and mounted on the support, a second rod similarly supported but in spaced relation to the first mentioned rod, said first mentioned rod constituting a fixed contact for the circuit, a substantially flat metallic bar partly arranged within the support, and having a portion projecting through the slot and located directly above the step thereof, depending apertured lugs formed on the bar slightly to one side of the transverse center thereof and pivotally supporting the bar on the second mentioned rod, the inner end of said bar being thickened to weight the bar at one end, and the exposed portion of the bar being adapted to normally contact the step held in such position by removable objects, to maintain the bar in spaced relation to the fixed contact.

1,765,224. BEET HARVESTER. GEORGE M. FEUERSTEIN and CARL FEUERSTEIN, Algoma, Wis. Filed June 14, 1927. Serial No. 198,803. 4 Claims. (Cl. 55—107.)



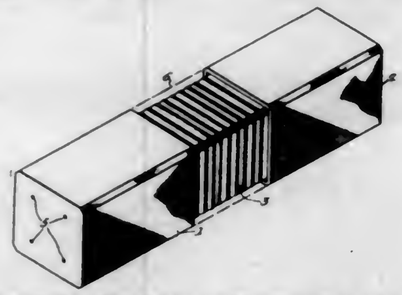
4. In a beet harvesting machine, a wheeled supporting frame, a beet topping knife carried by the frame, beet engaging means acting to raise or lower the beet topping knife to bring it in proper relaton to the beets, means disposed rearward of said knife and acting to discharge the tops of the beets laterally, and a rotatable top clearer mounted rearward of the topping knife and rotatable in a horizontal plane.

1,765,225. VISIBLE-LOOSE-LEAF DEVICE. CHARLES A. FINLEY, Rutherford, N. J., assignor to Boorum & Pease Company, Brooklyn, N. Y., a Corporation of New York. Filed May 31, 1928. Serial No. 282,015. 13 Claims. (Cl. 129—16.)



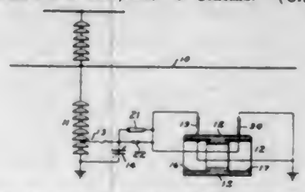
1. A visible index panel having inwardly facing opposed flanges, cards having portions underlying said flanges and a spring metal floor between said flanges exerting an upward pressure on the cards and tending to grip them between itself and the flanges.

1,765,226. CONTAINER FOR DRY-ICE PACKS. LEVI W. FOUNTAIN, Philadelphia, Pa., assignor to Strawbridge & Clothier, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Apr. 25, 1928. Serial No. 272,734. 3 Claims. (Cl. 229—9.)



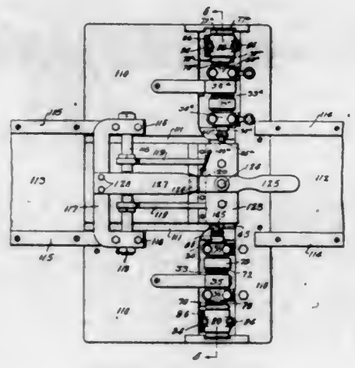
1. A container for dry-ice packs comprising an inner container, closures for said container adapted to telescope with the latter and being adjustable by reason of said telescoping relation to vary the carrying capacity of the container and means embracing the inner container for closing the space between the ends of said closures.

1,765,227. SURGE-VOLTAGE RECORDER. CLIFFORD M. FOUST, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Aug. 6, 1926. Serial No. 127,710. 3 Claims. (Cl. 234—1.5.)



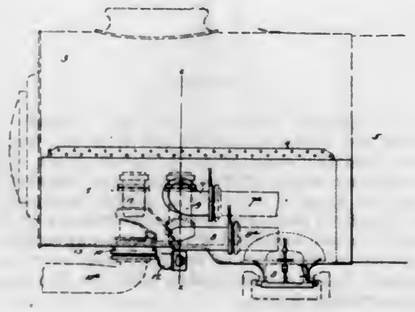
1. Apparatus for recording figures indicative of the polarity and magnitude of voltages comprising two similar recording devices each comprising a sensitive recording element and electrodes for passing an electric discharge through such element and parallel circuit connections associated with said electrodes for impressing voltages of equal magnitude but of opposite polarity upon said recording devices.

1,765,228. WIRE-LOOP-BENDING MACHINE. GUSTAV H. GEBHARDT, Philadelphia, Pa., assignor to Proctor & Schwartz, Incorporated, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Jan. 11, 1929. Serial No. 331,856. 20 Claims. (Cl. 140—24.)



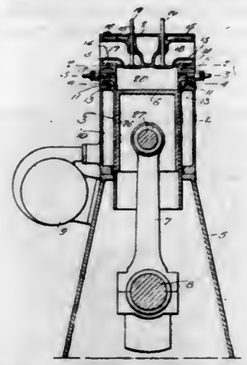
1. In a machine for twisting loops formed at spaced intervals along the edge of a wire mesh screen, from a plane coincident with the plane of the body of the screen to a plane disposed at an angle with respect thereto, the combination of a twisting head comprising means for gripping one of said loops and means adapted to enter the gripped loop, means for rotating said twisting head to twist the engaged loop, means for axially moving the twisting head to stretch the loop longitudinally to a predetermined position relative to the body of the screen, and means for releasing the twisted loop from the twisting head.

1,765,229. SMOKE BOX FOR LOCOMOTIVES. HARRY GLAENZER, Philadelphia, Pa. Filed Oct. 17, 1929. Serial No. 400,243. 3 Claims. (Cl. 105—37.)



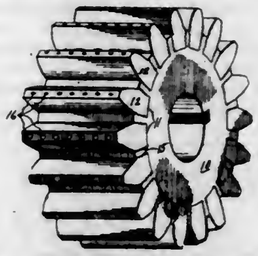
1. The lower section of a smoke box of a "Mallet" locomotive made as an integral casting, the forward portion of which is flattened and raised above the rear portion; and an integral bearing pad formed on the rear portion of the smoke box.

1,765,230. INTERNAL-COMBUSTION ENGINE. CHARLES O. GUERNSEY, Philadelphia, Pa. Filed Sept. 22, 1928. Serial No. 307,721. 7 Claims. (Cl. 123—173.)



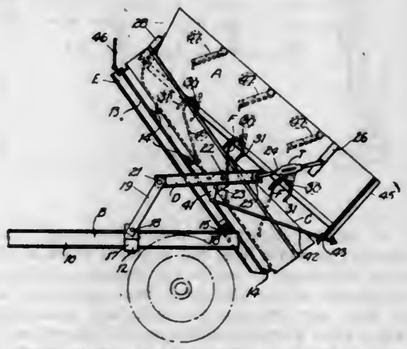
1. In an internal combustion engine, a cylinder block, a cylinder head, a cylinder sleeve having at its upper end an outwardly extending flanged portion interposed between said cylinder block and said cylinder head, bosses in said flanged portion for the reception of spark plugs, and cooling means within said flanged portion.

1,765,231. COMPOSITE GEAR. PAUL C. HAAS, Mendon, Mich., assignor, by mesne assignments, to Continental-Diamond Fibre Company, Newark, Del., a Corporation of Delaware. Filed July 20, 1927. Serial No. 207,060. 4 Claims. (Cl. 74—28.)



1. A gear including a metallic body portion having openings in the periphery thereof, non-metallic teeth inserted into said openings, and means extending from the teeth and into the body portion for holding the teeth against endwise movement.

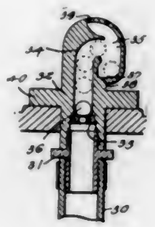
1,765,232. TRUCK BODY. CHRISTIAN J. HUG, Highland, Ill. Filed June 6, 1929. Serial No. 368,760. 2 Claims. (Cl. 298—1.)



1. A device of the class described comprising a truck body; a bottom for said body composed of a series of trap

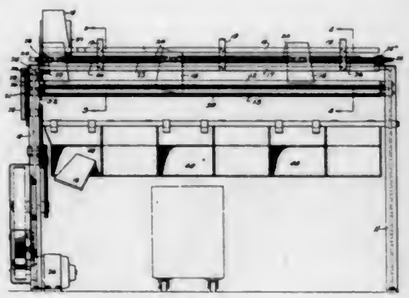
doors; a trough wherein said body normally rests; a chassis frame whereon said trough is hingedly mounted; and means for elevating the forward end of said trough to discharge the contents of said body; in combination with a lever mechanism arranged to control the relative positions of said body, trough and chassis frame when in loading position, and when unloading.

1,765,233. SAFETY CHAMBER FOR SUBMERGED VESSELS. ALBERT G. JOHNSON, Fellows, and CHARLES W. DEWING, Taft, Calif. Filed May 17, 1928. Serial No. 278,431. 3 Claims. (Cl. 114—16.5.)



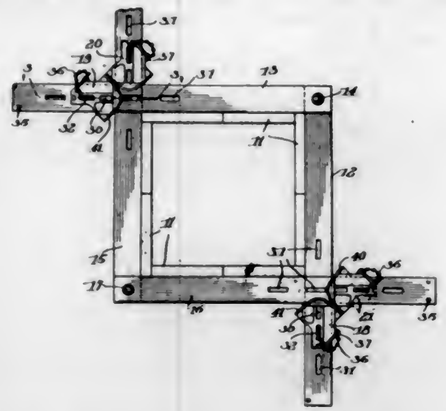
1. The combination with an air hose connected at one end to a submergible vessel and connected at its other end to a buoy, that end of the air hose carried by the buoy being provided with a valve casing in the form of a head and formed to provide a centrally disposed bore, a chamber into which the bore opens, the chamber being provided with a pocket depressed below the mouth of the bore and having air openings in its outer walls, and a valve normally resting upon said seat and held thereto by pressure of water but adapted to be blown from the seat and into said pocket by a blast of air directed upward through the air hose and through said bore.

1,765,234. LEATHER-SORTING MACHINE. HAROLD E. JOHNS, Lansdowne, Pa., assignor to Cover & Company, Philadelphia, Pa., a Partnership consisting of Thomas Cover, jr., and Thomas C. Barton, Bryn Mawr, Pa., and Bernard J. Segul, Merion, Pa., and himself. Filed June 29, 1929. Serial No. 374,875. 12 Claims. (Cl. 209—107.)



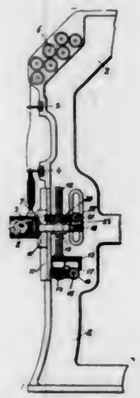
1. In sorting apparatus, means providing a tapering slot varying in width from end to end, a series of receivers arranged therebeneath, means for causing articles to shift longitudinally of the slot until their arrival at a point where they may pass therethrough, and means engaging an article after a predetermined portion thereof has passed through the slot and discharging the same to the underlying receiver.

1,765,235. CLAMP. JOSEPH W. KEFFER, Chicago, Ill. Filed Oct. 26, 1927. Serial No. 228,806. 8 Claims. (Cl. 144—291.)



1. A clamp comprising, in combination, a plurality of clamping members, adapted to cross each other and a bearing block slidably mounted on each of said clamping members, each of said bearing blocks having oblique bearing surfaces on opposite sides thereof, either of said surfaces being adapted to cooperate with a bearing surface on a block on the other clamping member so as to hold said clamping bars in clamping position.

1,765,236. SPINNING AND TWISTING MACHINE. JOHANN JACOB KEYSER, Aarau, Switzerland. Filed Jan. 28, 1928, Serial No. 250,250, and in Germany Jan. 19, 1927. 4 Claims. (Cl. 242—18.)

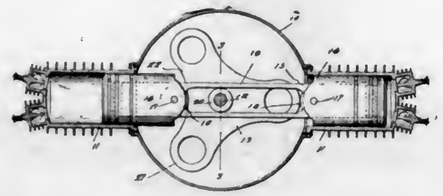


1. In a spinning machine, a ring rail, a spindle beam mounted for movement toward and from the ring rail, spindles rotatably mounted on the spindle beam, a shaft for imparting motion to the spindles and movable with the spindle beam, a drive shaft, gearing interposed between the drive shaft and the spindle rotating shaft for rotating the last mentioned shaft, and means actuated by an element of the gearing for imparting movement to the spindle beam in synchronism with the formation of the cops on the spindles.

1,765,237. TRIPLE-CAM-DRIVE GASOLINE ENGINE. FRED H. KING, Canton, Ohio. Filed Feb. 17, 1928. Serial No. 255,099. 1 Claim. (Cl. 74—14.)

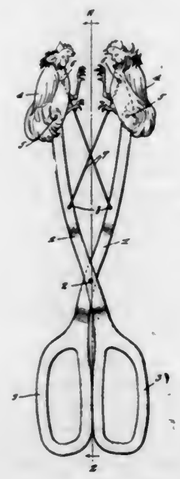
A cam drive engine comprising a housing provided with a multiplicity of cylinders adapted for communication

therewith and located upon opposite sides thereof, a shaft mounted within the housing and disposed at right angles to the bores of the cylinders, a single cam common to all the cylinders mounted upon the shaft and having rounded cam faces and curved raceways therebetween, plate members arranged in spaced parallelism upon opposite sides of the cam between and adapted to establish direct driving connections for the pistons of the cylinders and having registering elongated slotted portions therein,



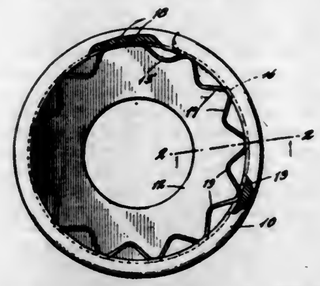
said pistons having portions removed upon diametrically opposite sides of the inner periphery thereof, bosses carried upon opposite sides of the cam adjacent the shaft being extended within the slotted portions of the plate members, and roller members carried within each of the pistons and journaled between the plates for engagement with the rounded ends and curved raceways of the cam through the guideways formed by the portions removed in the pistons.

1,765,238. TOY. FRANK MCKAIE, Plymouth, Pa. Filed Sept. 25, 1929. Serial No. 395,141. 1 Claim. (Cl. 46—40.)



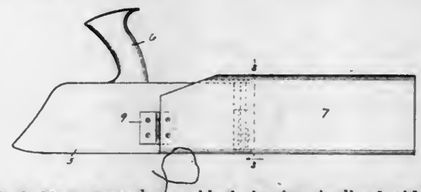
A hand operated toy of the class described comprising two curved arms which are crossed and which are pivotally connected and which have one of their ends merging into handles, toy figures having the outer edges of their body portions centrally slotted in which slots the second ends of the arms are received and pivoted, a rod pivoted in the bifurcated portion of each body adjacent to the forward end thereof and said rods crossing each other and being pivotally secured to the respective arms.

1,765,239. RETAINING RING FOR SPINNING-BOX LIDS. IVAR MEURLING, Ridley Park, Pa., assignor to The Viscose Company, Marcus Hook, Pa., a Corporation of Pennsylvania. Filed Dec. 22, 1928. Serial No. 327,900. 5 Claims. (Cl. 118—49.)



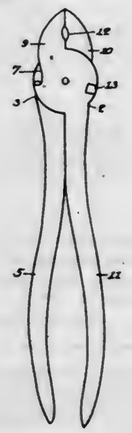
4. A corrugated split retaining ring for a spinning box, said ring having an effective length exceeding the circumference of the part of the box wall engaged by the ring.

1,765,240. LINOLEUM-SEAM SPREADER. GUY R. NICHOLS, Sanger, Calif. Filed July 16, 1928. Serial No. 293,017. 1 Claim. (Cl. 81—3.)



In a seam spreader, a block having inclined sides, a handle secured to said block, a pair of inclined wing members having considerable width pivotally secured to said block, the wing members being curved adjacent their upper and lower edges, a cross bar extending between said wings and means for vertically actuating said cross bar for the purpose of moving said wings on their pivotal connections so as to spread the free ends thereof.

1,765,241. FENCING TOOL. CHARLES H. PURCELL, Bloomingdale, Ind., assignor of one-half to Lee O. Engle, Danville, Ill. Filed Jan. 28, 1928. Serial No. 250,180. 1 Claim. (Cl. 7—3.)



A tool of the character described comprising members substantially alike except as to shifting of features to

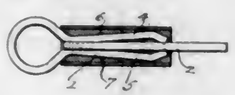
counterpart relation, a substantially circular body included in each member and having an opening centrally arranged therein, the body of each member being provided with a recess disposed on one of the sides thereof, a handle formed with one body adjacent the recessed side thereof and merging into the recess, a jaw formed with the other body adjacent the recessed side thereof and merging into its recess, a handle formed with the last mentioned body and extending from adjacent its opposite side, a jaw formed with the other body and extending from adjacent the side thereof opposite its recess, a beak formed with each circular body and by the formation of the recesses thereof, the beak of one circular body being directed toward the handle that merges into the recess thereof and the beak of the other body being directed toward the jaw that merges into the recess thereof, said beaks being directed in opposed relation with respect to each other, and cooperating to provide a puller, and means arranged in the openings of the bodies for pivotally securing the members together in a manner whereby the beaks cooperate and the handle and jaw of one body cooperate with the handle and jaw of the other body, while the jaws cooperate with the bodies in providing a fulcrum therefor during the use of said beaks.

1,765,242. LAMP BULB. CASPAR REITER, Berlin, Germany, assignor to General Electric Company, a Corporation of New York. Filed Apr. 21, 1925, Serial No. 24,841, and in Germany Sept. 15, 1924. 1 Claim. (Cl. 176—34.)



An incandescent lamp comprising a filament and a sealed vitreous bulb enclosing said filament and having a colored coating and a white translucent light diffusing layer outside of and covering said colored coating and of a density sufficient to obscure said colored coating when the lamp is not lighted.

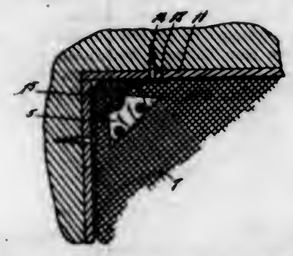
1,765,243. FUSIBLE LINK. ARTHUR C. ROWLEY, Philadelphia, Pa., assignor to Globe Automatic Sprinkler Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed June 21, 1928. Serial No. 287,276. 3 Claims. (Cl. 169—42.)



1. In a fusible link, a pair of elements comprising means for yieldingly interlocking one with the other, a housing for said elements, and a fusible material within the housing for normally preventing the yielding of said elements and to thereby maintain said interlock.

1,765,244. SCREEN BRACKET FOR AUTOMOBILE WINDOWS AND THE LIKE. BRUCE SCHWEIN, Turon, Kans. Filed Oct. 5, 1929. Serial No. 397,653. 2 Claims. (Cl. 156—14.)

2. A device of the class described comprising a pair of plates, means for clamping the plates on opposite sides of a screen panel, an apertured ear extending from one of the plates, a bracket plate, means for attaching the bracket plate in the corner of a window diagonally there-



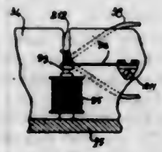
of, and means for engaging the apertured ear in the center of the bracket plate, said bracket plate having obtuse end-extensions for mounting the same in place.

1,765,245. FLAG HOLDER. JOHN P. SCOTT, Pittsburgh, Pa. Filed Jan. 31, 1930. Serial No. 424,972. 1 Claim. (Cl. 116—173.)



In a flag staff, a tubular member having a longitudinally disposed slot therein for the passage of a flag, an elongated clamping member disposed longitudinally within the tubular member to engage the inner end of the flag, means secured to opposite ends of the clamping member and engageable within the tubular member to hold said clamping member rigid with respect to said tubular member, a holder, and combined means to secure the tubular member within the holder and prevent removal of the clamping member.

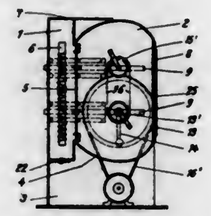
1,765,246. CIRCULAR-WEAVING LOOM. CLAUDE SÉRY, Aix-en-Provence, France, assignor to Société à Responsabilité Limitée "Etablissements Rotatiss," Paris, France, a French Company. Filed Feb. 23, 1929, Serial No. 342,209, and in France Mar. 6, 1928. 3 Claims. (Cl. 139—15.)



1. In circular weaving looms of the kind in which the warp treads are given a small initial motion which is com-

pleted by means carried by the shuttles, a selector mechanism comprising movable thread guides through which the warp threads are passed, and fixed electro-magnets adapted to actuate said thread guides without at the same time actuating the warp thread bobbins.

1,765,247. ELECTRIC MEAT AND LIKE ROASTER. JULES SEEGMULLER, Strasbourg, France. Filed Sept. 12, 1928, Serial No. 305,497, and in France Sept. 16, 1927. 5 Claims. (Cl. 219—35.)



1. A meat and like roaster comprising a closed chamber, a vertical grid in said chamber, electric heating elements arranged at one side of said grid, a plurality of horizontal shafts mounted rotatably at the other side of the grid, carriers on said shafts for the articles to be roasted, and driving elements for imparting rotation to said shafts and carriers, the chamber being formed with an air vent situated above and with a regulable air inlet situated below the heating elements.

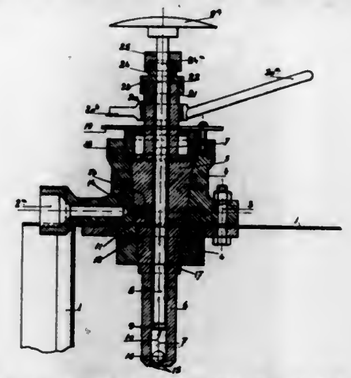
1,765,248. HINGE JOINTS FOR ANCHOR JACKS. FRED C. SOULEYRET, White Star, Ky. Filed Aug. 14, 1929. Serial No. 385,941. 2 Claims. (Cl. 262—8.)



1. An anchor jack for the purpose set forth, having a rope and chain engaging shoe pivotally secured in the lower end thereof, and spring means for holding the shoe in longitudinal alinement with the jack.

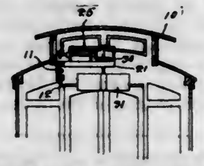
1,765,249. MULTIWAY LIQUID-PRESSURE-DISTRIBUTING PUMP, WITH RETURN OF THE LIQUID TO THE RESERVOIR AFTER USE. WYNANT TASTENHOYE, Brussels, Belgium. Filed Sept. 10, 1928, Serial No. 305,101, and in Belgium Aug. 8, 1928. 1 Claim. (Cl. 103—2.)

A multi-way liquid pressure distributing pump comprising a body having a conical bore extending there-across and a plurality of radial ducts leading from said bore and arranged in a common plane, a conical valve plug seated in said bore and having an extension at each end and also provided with a bore extending from end to end, the said plug being further provided with a valved passage arranged in the common plane of the said ducts and adapted to be put in communication wih any of said ducts and also with a groove diametrically opposite said valved paseage open at its lower end and adapted at its



upper end to communicate with any of the first named ducts, and said plug being further provided at its lower end with an inwardly opening valve, a pump plunger in the bore of said plug and of such length as to extend above said plug, said plunger being of somewhat less diameter than the bore of the plug so that said plunger forces liquid to one of said ducts during its entire downward stroke and a stuffing box for said plunger and arranged on the upper extension of said valve plug.

1,765,250. SIGN ADJUSTER OR SEAT-INDICATING DEVICE. FRANCIS A. TRAVIS, Dallas, Tex. Filed Mar. 13, 1929. Serial No. 346,615. 2 Claims. (Cl. 40—68.)



1. A signal comprising a supporting apparatus, conduits carried thereby, rotatable elements carried adjacent the ends of the apparatus, an endless connector trained over the rotatable elements and extended within the conduits, a carriage slidably mounted within the conduits having connection with the endless connector, a reverse mechanism carried by the carriage, a signal element operable in conjunction with the reverse mechanism, a gear member carried by the reverse mechanism, rack bar portions in line with the gear, shift members located in the path of movement of the carriage to shift the latter to effect meshing engagement of the gear and rack bar portions and reversing of the signal element.

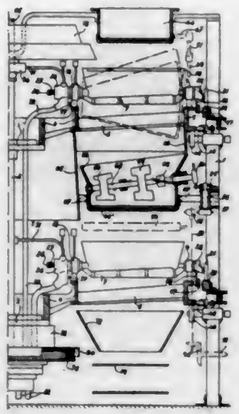
1,765,251. LOCOMOTIVE. SAMUEL M. VAUCLAIN, Rosemont, and HARRY GLAENZER, Philadelphia, Pa. Filed May 10, 1929. Serial No. 361,936. 5 Claims. (Cl. 105—37.)



1. The combination in a locomotive, of a cylinder; a piston rod and a cross-head; a main side rod; and a

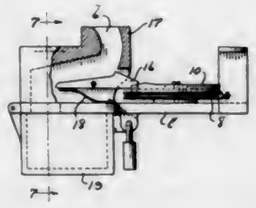
main rod having its forward end connected to the crosshead and curved at the rear end and coupled to the middle of the main side rod and located in a vertical plane above the said side rod.

1,765,252. ROTATING FILTER APPARATUS. JEAN BAPTISTE VERNAY, Villeurbanne, France. Filed Sept. 17, 1928, Serial No. 306,456, and in Germany Sept. 20, 1927. 4 Claims. (Cl. 210—196.)



1. A filtering apparatus comprising a plurality of superposed sets of tipping troughs radially arranged with respect to a common substantially vertical axis around which they rotate as a whole; filtering means on said troughs; means to feed the material to be treated in succession into the troughs of the uppermost set; an intermediate receiver located between each two successive superposed sets of tipping troughs; means whereby the troughs of a set are tipped for transferring the material which they contain into the receiver immediately below; means adapted to said receiver to break the material discharged into it; and means for discharging the broken material into the troughs of the lower set.

1,765,253. COIN-CONTROLLED MECHANISM. JOHN A. WILLIAMSON and ALICE LOWE WILLIAMSON, Parsons, Kans. Filed Oct. 14, 1929. Serial No. 399,558. 1 Claim. (Cl. 194—19.)

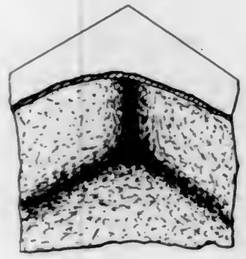


Coin controlled mechanism of the class described comprising a ratchet wheel, a disk adjustably connected therewith, an annular flange on the disk having a notch therein, a spring actuated latch lever for engaging the notch for holding the wheel against movement and means whereby a coin inserted in the mechanism will raise the lever out of the notch so that the wheel can be turned, the lever riding on the flange until the notch again comes under the same.

1,765,254. PROCESS FOR CONCENTRATING NITROUS GASES. JOSEPH A. WYLER, Allentown, Pa., assignor to Trojan Powder Company, New York, N. Y., a Corporation of New York. Filed Dec. 8, 1927. Serial No. 238,729. 7 Claims. (Cl. 23—161.)

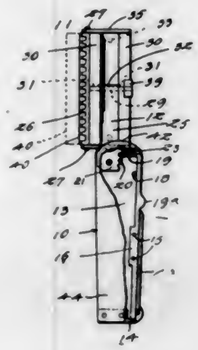
3. The process of concentrating nitrous gases, which consists in absorbing the gases in a solution of an alkali metal salt of an -ic acid of the metals of Group V, odd series, long periods and of Group VI, even series, long periods, of the Mendelejeff Periodic Classification, evaporating to dryness, and heating the residue to drive off the nitrous gases in concentrated form and to regenerate the original salt for use in further absorption operations.

1,765,255. BUILDING WALL. LEN A. BANTA, Clearfield, Pa. Filed May 11, 1927. Serial No. 190,606. 4 Claims. (Cl. 72—41.)



1. The method of forming a section of building wall, which includes forming internal cells by securing a frame upon a side sheet, pouring a predetermined quantity of fluid cement into the cells thus formed, covering the cells by permanently securing an opposite side sheet over the frame and slowly rotating the section of wall thus formed to cause the fluid cement to flow into and close the crevices within the cells and to cover the internal surfaces thereof.

1,765,256. SAFETY RAZOR. ROBERT O. BARNES, Phoenix, Ariz. Filed Mar. 19, 1929. Serial No. 348,306. 7 Claims. (Cl. 30—12.)



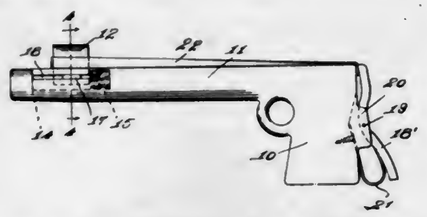
1. In a razor of the type described, parallel side members secured in spaced relation to one another, a standard pivoted at one end between the side members and swingable about the pivot thereof from a position where it extends in the same general direction as the side members and lies therebetween to a position where it aligns with the side members and extends from one end thereof, means for securing the standard in the last named position or in positions intermediate to the first and last named positions, said standard being in the form of a flat strip and having at its longitudinal edges adjacent its free end outwardly extending pivot elements, and a razor head comprising a guard plate and resilient elements adjacent the under surface thereof having guard plate confronting faces provided with notches for the reception of said pivots, the guard plate in alignment with the notches of the resilient elements having a groove for the reception of the end of the standard.

1,765,257. LOUD-SPEAKER. FRANK R. BECKERT, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Sept. 15, 1924. Serial No. 737,660. 11 Claims. (Cl. 179—114.)



1. A sound reproducing device comprising a diaphragm, a magnet having a pair of opposing poles separated by a short air gap and an armature located in said air gap and spaced from said diaphragm, said armature being supported from a plurality of points on said diaphragm.

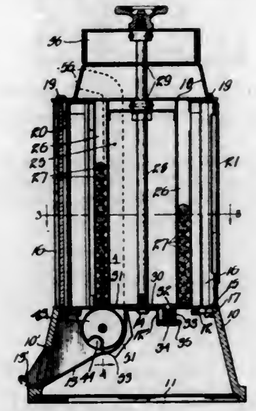
1,765,258. TOY. JOSEPH H. BUHRIE, Yukon, Pa. Filed Jan. 28, 1929. Serial No. 335,590. 2 Claims. (Cl. 124—14.)



1. In a toy pistol comprising a stock including a barrel, said barrel having an elongated groove within the upper side and adjacent the outermost end thereof, a sight, an extension carried by the sight slidably mounted within the groove, a compression spring carried within the groove and engageable with said sight, and a trigger carried upon the stock of the pistol to release the adjacent portions of an elastic projectile stretched from the sight.

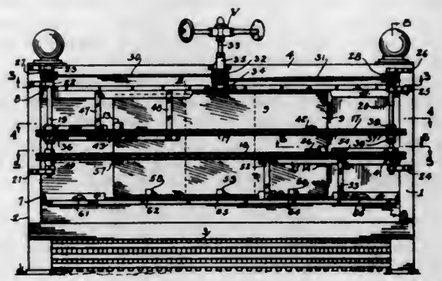
1,765,259. VENDING MACHINE. WALTER WILLIAM CADWELL, Lagrange, Ga. Filed Aug. 1, 1927. Serial No. 209,954. 2 Claims. (Cl. 194—35.)

1. A vending machine comprising a base, a case having transparent walls mounted upon the base, and supporting means for displaying an advertisement for goods to be sold by the machine, a cabinet rotatably mounted on the base and enclosed within the said case, means for rotating the cabinet and locking it in any one of several predetermined positions, a cylinder mounted in the base, said cylinder having a longitudinal groove for receiving the article to be vended, manually operable means for rotating said cylinder to cause the slot to register with the said chamber to receive an article to be vended, a pocket in the



end of said cylinder adapted to receive a coin, a disk on said manually operable member having a lug thereon for engaging the coin to lock the manually operable member to the cylinder upon rotation of the former to rotate the cylinder, said lug serving to eject the coin and unlock the connection between the cylinder and the manually operable member at a predetermined period in the rotation, and means for reversely rotating the cylinder to return it to its normal postion, substantially as set forth.

1,765,260. CHANGEABLE ADVERTISING DEVICE. CHARLES C. CHINSKI, Beaumont, Tex. Filed May 14, 1929. Serial No. 363,013. 9 Claims. (Cl. 40—37.)

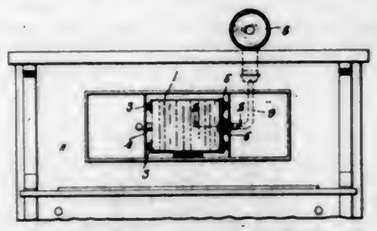


1. An advertising device comprising a board having a display aperture, a panel slidable on the back of said board across said aperture, a wind operated shaft, and means connecting said shaft to said panel to reciprocate said panel successively into predetermined positions relative to said aperture.

1,765,261. COMBINED PLAYER PIANO AND PHONOGRAPH. CHARLES DOBLE, Mount Carmel, Pa. Filed July 2, 1929. Serial No. 375,432. 1 Claim. (Cl. 84—4.)

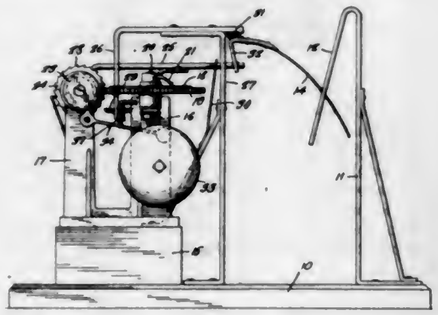
In combination with a player piano, a record sheet therefor having a strip attached to one of its side edges which contains sound grooves of the words of the song

on the sheet, a phonograph having its horn supported on the top of the piano, with a projecting portion passing through a hole in the top, a tube depending from said portion and bent at right angles and a reproducer connected



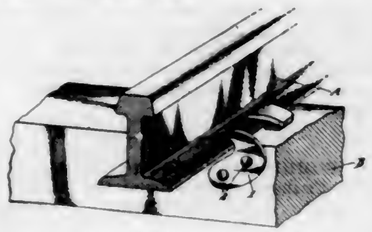
with the lower end of the tube and having its stylus engaging the groove and a cushion forming member placed on the tracker and arranged under that portion of the record sheet which carries the strip.

1,765,262. COUNTING DEVICE. JULIAN I. FARRIOR, Gibsonville, N. C. Filed July 11, 1928. Serial No. 291,950. 2 Claims. (Cl. 235—91.)



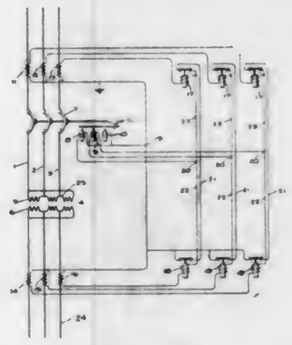
1. In a machine of the character described, a base, a frame-like structure reposing upon the base, a shaft journaled on said frame-like structure, a ratchet wheel associated with said shaft, a horizontally disposed sliding pawl mounted on the frame-like structure, resilient means for holding the pawl normally inactive, a graduated rotatable dial intermittently rotated from said shaft, a stationary finger arranged above the dial and cooperating with the graduations thereon for the purpose specified, and a lever pivoted upon the frame-like structure and including an offset extremity connected with the adjacent end of said pawl, whereby the latter is actuated to rotate said shaft incident to the depression of the lever.

1,765,263. TIE RAIL CLAMP. GEORGE M. FIERO, Pittsburgh, Pa. Filed Jan. 24, 1930. Serial No. 423,203. 1 Claim. (Cl. 238—345.)



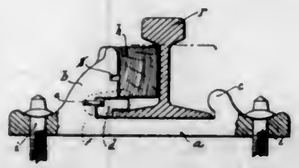
In combination with a rail and a tie, a pair of plate-like clamps, each having an elongated body, with a hook extending laterally from one end thereof and each plate having a pair of perforations therein, whereby one plate can be fastened to one side of a tie by fastening means driven through the perforations with its hook engaging an edge of the base of the rail and the other clamp can be fastened to the opposite side of the tie with its hook engaging the opposite edge of the base of the rail.

1,765,264. PROTECTIVE ARRANGEMENT. ALFRED C. FINNEY, Upper Darby, Pa., assignor to General Electric Company, a Corporation of New York. Filed July 24, 1929. Serial No. 380,733. 5 Claims. (Cl. 175—294.)



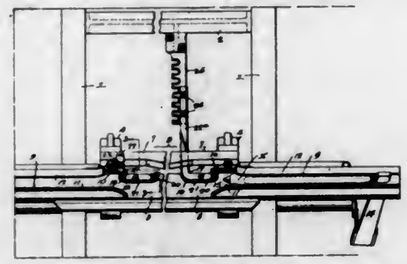
1. In combination, an electric circuit, circuit interrupting means therefor, means for effecting the opening of the interrupting means connected to be energized from said circuit, a plurality of relays respectively connected to be energized in accordance with the currents in said circuit at two different points thereof and a circuit controlled by the conjoint action of said relays for preventing the energization of the opening means until at least one of the relays operate.

1,765,265. RAIL CHAIR. JAMES PAUL GRIFFITHS, Durban, Natal, South Africa, and WILLIAM STREET-WILSON, deceased, Durban, Natal, South Africa, by Edmund M. Laughton and Edmund H. Clemmans, executors. Filed Oct. 26, 1928, Serial No. 315,336, and in Union of South Africa Nov. 10, 1927. 4 Claims. (Cl. 238—20.)



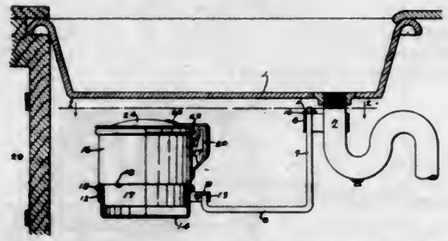
1. A chair for railway rails or the like comprising a bed plate having two lugs so located as to permit the placing of a rail between them, one of said lugs adapted to engage one lateral edge of the rail flange, the other lug having within it a keyway which is double tapered toward one end thereof, a wedge-shaped key which is double tapered in complemental relation to the key-way, said key being adapted to engage within said keyway to coact therewith and with the other lateral edge of the rail flange to anchor the rail against both the first lug and the bed plate.

1,765,266. SHUTTLE GUIDE FOR LOOMS. JAMES E. HARDING, New Bunswick, N. J., assignor to Gulbenkian Seamless Rug Company, New Brunswick, N. J., a Corporation of New Jersey. Filed Nov. 27, 1926. Serial No. 151,147. 2 Claims. (Cl. 139—183.)



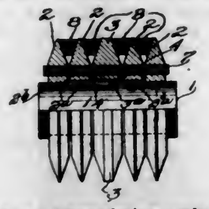
1. In a loom having a frame, a lay pivoted to said frame, comprising lay arms, a lay beam and a shuttle race, and having shuttle boxes on said shuttle race; a shuttle guide adjacent the mouth of each shuttle box, one of said guides being secured to said lay and the other being secured to said loom frames.

1,765,267. SINK BUCKET. JACOB HARTMAN, Cleveland Heights, Ohio. Filed May 8, 1926. Serial No. 107,587. 2 Claims. (Cl. 4—187.)



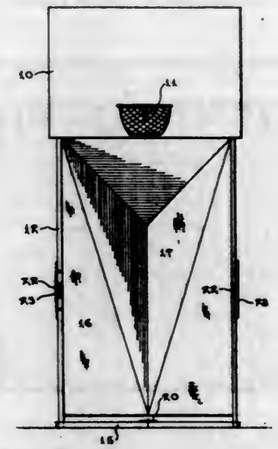
1. In a sink bucket device, in combination, a clamp adapted for attachment to a sink spout and having at one side a vertical socket, a U-shaped rod having arms of unequal length, one of said arms supported pivotally in said socket, a circular receiving member having at one side a socket pivotally receiving the other arm of said U, and a garbage bucket removably supported by said member.

1,765,268. VARIABLE-SPEED-TRANSMISSION DEVICE. EDGAR F. HATHAWAY, Wellesley, Mass., assignor to Shawmut Engineering Company, Boston, Mass., a Corporation of Massachusetts. Filed Jan. 11, 1928. Serial No. 245,881. 10 Claims. (Cl. 64—8.)



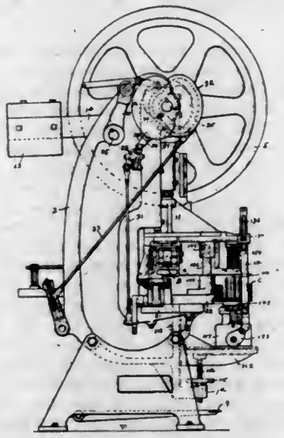
1. A speed change transmission embracing a pair of rotatable belt connected pulley elements, each comprising a series of axially spaced beveled sheaves secured upon a coaxial shaft by means permitting equal variation in the spacing of the sheaves through rotative adjustment of the sheaves about the shaft, and a series of transversely tapered belts interposed between corresponding sheaves of the respective pulley elements and having engagement with the beveled faces of such sheaves at different distances from the respective shafts dependent upon the spaced adjustment of the sheaves.

1,765,269. BASKET-BALL RETRIEVER. FRED J. HATLEY, Blue Mound, Ill. Filed Apr. 1, 1929. Serial No. 351,635. 2 Claims. (Cl. 273—1.)



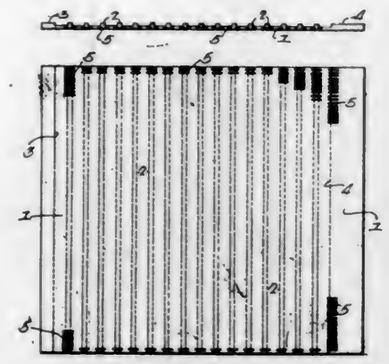
1. A basketball retriever consisting of side rails provided with means for detachable connection with the backboard of a basketball basket, a fabric stretched between the side rails and provided with a central fold portion defining a pocket with downwardly converging side walls, and a foot rail connected with the side rails at the lower end and serving as a stretcher for the fabric.

1,765,270. APPARATUS FOR MAKING LAMINATED PULLEY UNITS. WILLIAM T. HENSLEY, Indianapolis, Ind., and ROBERT H. LEWIS, Cleveland, Ohio; said Lewis assignor to said Hensley. Filed May 31, 1927. Serial No. 195,364. 8 Claims. (Cl. 164—21.)



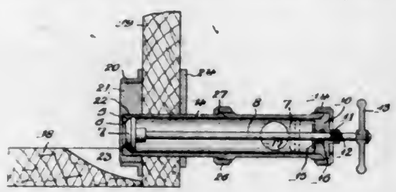
1. A machine for assembling blanks of grained fibrous material comprising means for moving a strip of the material in step by step relation through the machine, means for suitably perforating the material to provide a plurality of symmetrically disposed apertures therein, shearing means for severing the perforated blank of material from the strip and for depositing the same on a stacking member, a stacking member having guides adapted to enter certain of the apertures formed in said blanks, and means for rotating the stacking member a predetermined degree following each deposition of blanks thereon.

1,765,271. BATTERY SEPARATOR. WALTER E. HOLLAND, Philadelphia, Pa., assignor to Philadelphia Storage Battery Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Oct. 17, 1922. Serial No. 595,056. 10 Claims. (Cl. 136—149.)



1. A battery separator of porous material having impressed fibre-rupturing indentations over at least one face.

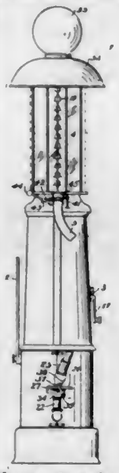
1,765,272. VALVE. ALBERT C. HOUGLAND, St. Paul, Minn., assignor to Crane Company of Minnesota, St. Paul, Minn., a Corporation of Minnesota. Filed Jan. 11, 1928. Serial No. 245,989. 1 Claim. (Cl. 251—156.)



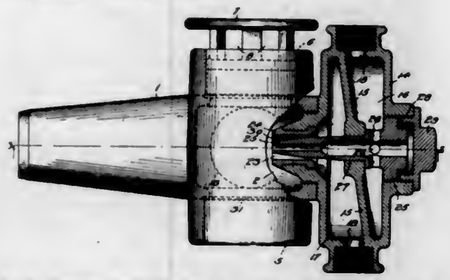
In a valve, a casing, a straight tubular member of said casing adapted to extend through the wall of a vat or the like and formed with an opening in its inner end, an internal valve seat formed on said end around said opening, a closure arranged to removably fit said seat, a second tubular member of said casing disposed in continuation of said first mentioned member, a coupling between said members having a sleeve revoluble independently of said members to permit rotation of said second member independently of said first mentioned tubular member, said coupling being located outside of said vat and said members having a smooth, continuous bore without obstruction, an operating rod for said closure extending axially through both members of said casing and arranged to draw said closure from one end to the other of said casing, a removable cap on the outer end of said second member, a laterally projecting conduit communicating with said second member of the casing and means associated with said operating rod for retaining said closure on its seat, said closure and rod being removable through the casing upon the removal of said cap.

1,765,273. LIQUID-DISPENSING PUMP OR THE LIKE. OLIVER C. HUFNAGLE and WILTON F. REICHELDERFER, Dayton, Ohio, assignors to The Dayton Pump & Manufacturing Company, Dayton, Ohio. Filed Aug. 12, 1926. Serial No. 128,844. 8 Claims. (Cl. 221—100.)

1. A liquid dispensing pump including in combination, a serving hose having a nozzle, an open end drain line having a housing adapted to be connected with the hose nozzle, a hinged cover applied to the said end for normally closing the drain line, the said cover being operatively associated with the housing which is provided with a flange and gasket shaped to conform to a portion of the said nozzle, and a lever operable for successively securing the said cover and nozzle respectively relative to the said end.

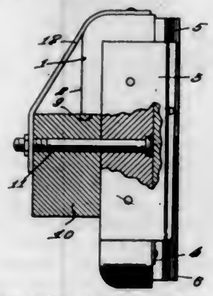


1,765,274. BURNER. CAMPBELL M. HUNTER, London, England. Filed May 24, 1927. Serial No. 193,889. 11 Claims. (Cl. 158—74.)



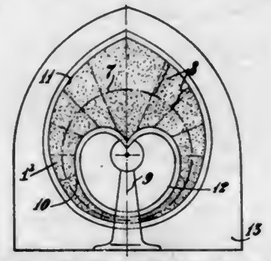
1. A burner comprising a mixing chamber, a gas port and an air port, the axes of said ports being in alinement and spaced from and extending at an angle to the longitudinal axis of the chamber and the said ports having communication with the mixing chamber through a common discharge opening leading into the side of said chamber.

1,765,275. BRAKE BLOCK. HANS E. JENSEN, Huntington, Utah. Filed Dec. 27, 1926. Serial No. 157,305. 1 Claim. (Cl. 188—220.)



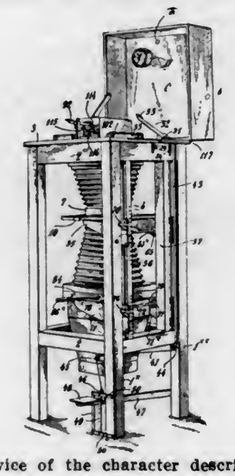
In combination with a brake beam, a brake shoe or holder comprising a block of elongated contour supported on the beam, a metallic strap terminally secured to the top of block and said beam to reinforce the structure, a pair of plates secured to the opposed sides of the block and having their outer edges projecting beyond the face of the block and bent toward each other at an angle to said face to form a guide-way therewith, each of said outer edges being curved inwardly at an appropriate point in its length in the direction of the block, and then extended longitudinally in a downward direction and secured to the block to close the lower ends of said guide, a brake shoe of substantially elongated contour having a flat intermediate surface and oppositely beveled surfaces arranged at either side of the flat surface to engage the inclined outer edges of the plates as the shoe is positioned in said guide, a reduced extension projecting from the lower end of the shoe and defining shoulders at its point of juncture with the shoe, said extension projecting beyond the guide with the shoulders resting upon the inwardly curved portion of said edges.

1,765,276. SOUND-TRANSFORMING APPARATUS. ADRIANUS ARNOLDUS MARINUS ANTONIUS KALMEIJER, The Hague, Netherlands. Filed Jan. 16, 1928, Serial No. 247,215, and in the Netherlands Dec. 30, 1927. 5 Claims. (Cl. 181—31.)



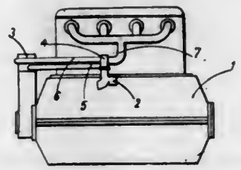
1. Apparatus for effecting transformation of electrical and mechanical energy into sound vibrations, comprising resonant acoustic means supported at oppositely-located places and having, in a direction across connecting lines between the said places, different natural periods; and means connected to the acoustic means for exerting a vibrating force thereon at a plurality of points located between said oppositely-located places of the resonant acoustic means.

1,765,277. PHOTOGRAPHIC REPRODUCING APPARATUS. MISCHA KOUSMINSKY, New York, N. Y., assignor to Anatol M. Josepho, New York, N. Y. Filed Jan. 4, 1928. Serial No. 244,388. 2 Claims. (Cl. 88—24.)



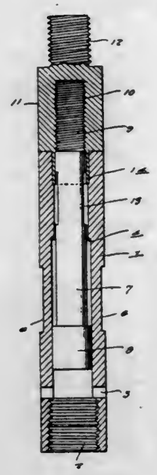
1. In a device of the character described, a lens and a mounting therefor, a bellows at each side of the lens and connected to its mounting, a support for carrying the image holding unit to be reproduced, means for throwing a light upon said unit, a support for a sensitized sheet, said support having an image aperture communicating with one of said bellows, a set of opposed brackets for carrying the lens mounting, a second set of opposed brackets for carrying said support, a frame and a rack carried thereby, a pinion and rotating means therefor carried by each bracket, said means comprising a shaft carrying the pinion, a second pinion on said shaft, a screw engaging the second pinion and an operating handle for the screw, the pinions engaging the rack, whereby rotation of the pinions will cause the brackets and the pinion rotating means to be given bodily movement for adjustment of the bellows at either side of the lens.

1,765,278. MECHANICAL DEVICE FOR THE SUPPLY OF EXPLOSIBLE GAS TO INTERNAL-COMBUSTION ENGINES. JEAN LAVERGNE, Paris, France, assignor to René Forest, Paris, France. Filed Apr. 18, 1927, Serial No. 184,736, and in France Apr. 24, 1926. 2 Claims. (Cl. 123—119.)



1. A device of the kind described comprising a carburetor, an injector arranged in the feed conduit, a compressor having its suction conduit connected with the carburetor and its delivery conduit connected with the injector, a chamber surrounding the feed injector, a conduit connecting the said chamber with the carburetor.

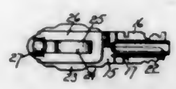
1,765,279. SWIVEL SUCKER-ROD JOINT. LESTER BURK LEVERICH, Red Barn, Tex. Filed June 4, 1928. Serial No. 282,738. 4 Claims. (Cl. 255—28.)



1. In a swivel sucker rod joint of the class described, a tubular member having a transverse slot in its upper end, an annular shoulder formed in the upper portion of the bore of the tubular body, a coupling member surmounting the tubular member and formed with a threaded socket in its bottom face, a depending tongue formed on

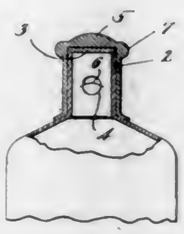
the bottom of the coupling member and provided with an opening for registration with the threaded socket, a rod threaded at its upper end in said socket and for disposition within the tubular member, an enlarged head formed on the lower end of the rod, the weight of the rod causing the tongue to be disposed in said slot to prevent the rotation of the bodies with respect to each other, said members being capable of rotation with respect to each other when the tongue is disposed out of engagement with the slot, the head on the lower end of the rod cooperating with the shoulder to limit the upward movement of the coupling member with respect to the tubular member.

1,765,280. LOCK AND KEY THEREFOR. GEORGE A. LONG, Hartford, Conn., assignor to The Long Security Lock Company, Hartford, Conn., a Corporation of Connecticut. Filed Nov. 18, 1927. Serial No. 234,258. 6 Claims. (Cl. 70—9.)



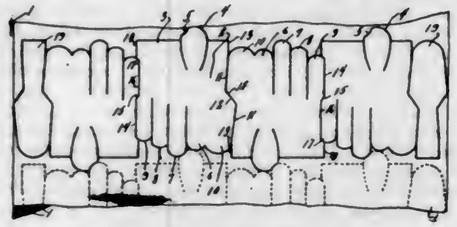
1. A key comprising a plurality of members separable lengthwise thereof and adapted for independent operation of different sets of lock tumblers, means for uniting said members for joint operation of a lock mechanism, and means to permit separation of said members and removal of one from within the lock and thereafter the locking operation of the lock by the other member.

1,765,281. DISPENSING TUBE. FREDERICK L. MACDONALD, Waltham, Mass. Filed Mar. 14, 1928. Serial No. 261,633. 2 Claims. (Cl. 221—60.)



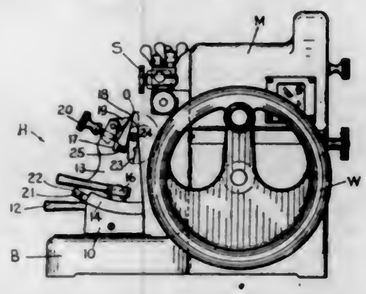
1. A dispensing tube comprising a container having a tubular rigid neck provided with an outlet, a tubular elastic closure device revolubly mounted upon the exterior of said neck and having a discharge-slit the edges of which automatically close together, said closure device being stretched on the neck to thereby have a frictional fit thereon to thus hold the tubular closure device after it is adjusted to the points desired on the neck, said slit being so located that in one position of angular adjustment of the closure device it will register with said outlet to permit discharge of the container contents through the outlet and slit, and in another adjustment of the closure device it will be out of register with said outlet whereby the unslitted portion of the closure device seals the outlet.

1,765,282. GLOVE-BLANK FORMING. MELVIN MCKINLEY, Coshocton, Ohio, assignor to The Coshocton Glove Co., Coshocton, Ohio, a Corporation of Ohio. Filed June 25, 1927. Serial No. 201,341. 2 Claims. (Cl. 2—169.)



1. A palm and finger blank having a thumb portion with its tip of full form on one side only protruding from the wrist portion of the palm, whereby in progressing blank outlines successively along the material, finger portion tips may more closely approach the wrist region of an adjacent outline.

1,765,283. MICROTOME KNIFE HOLDER. WILLIAM L. PATTERSON and GEORGE B. GALLASCH, Rochester, N. Y., assignors to Bausch & Lomb Optical Company, Rochester, N. Y., a Corporation of New York. Filed Apr. 6, 1929. Serial No. 353,048. 5 Claims. (Cl. 88—40.)



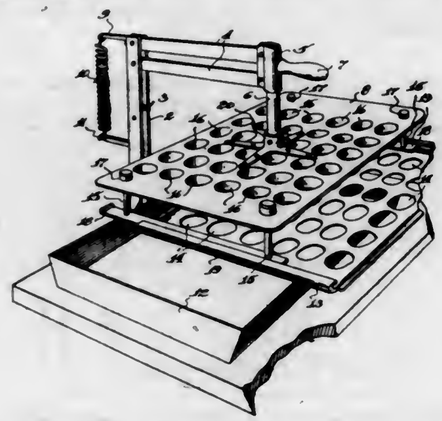
1. A microtome comprising a specimen carrier adapted to be reciprocated, a knife holder carrying a knife adjacent to said carrier, said holder having a curved base, all points on the curve of said base being equidistant from the cutting edge of said knife.

1,765,284. INKWELL CLOSURE. LUDWIG B. PROSNITZ, New York, N. Y., assignor to Jacobus School Products Co., Inc., New York, N. Y., a Corporation of New York. Filed Nov. 6, 1928. Serial No. 317,587. 1 Claim. (Cl. 120—57.)



A closure cap for ink-wells having an outer cap-shaped member provided with a downwardly extending peripheral threaded flange adapted to be received on a threaded ink-well top, a similarly shaped metal inner member provided with a shorter skirt-like flange closely fitting within that on the outer member and ending at the upper termination of the threaded portion thereon, the flanges on both members being punched together at spaced points, the inner member being provided with a downwardly depressed channel-like groove of uniform depth terminating adjacent diametrically opposite points on the flange of the inner member, said inner and outer members having registering pen-receiving openings and an imperforate slide movable in the groove between the inner and outer members.

1,765,285. MACHINE FOR CUTTING DOUGHY SUBSTANCES. LULA H. ROBINSON, Dallas, Tex. Filed June 9, 1928. Serial No. 284,024. 3 Claims. (Cl. 107—26.)



1. In a cutting machine of the type set forth, a base, an upright secured to the base, a cutter, a pair of independent parallel arms pivoted to said upright and to said cutter to support the latter for vertical movements, a perforated dough tray, means movably engaged with the cutter to suspend the tray spaced below the cutter and to enable the cutter to move toward the tray when the latter reaches its lowest position, one of said arms having an extension which projects rearwardly of the pivotal connection of said last named arm to the upright, and a coil spring connected to said extension to normally hold each of said arms and thereby the cutter in raised position.

1,765,286. ENDLESS PATTERN BAND FOR TEXTILE MACHINERY. PAUL SANDER, Chemnitz, Germany. Filed Oct. 13, 1927, Serial No. 225,950, and in Germany June 18, 1927. 2 Claims. (Cl. 66—154.)



1. A knitting machine comprising a needle bed arranged to describe a circle, an endless apertured pattern band, means for supporting the operative portion of said band, means for transporting said band to operative pattern selecting position, the inoperative portion of said band being wound into a flat spiral, the operative portion extending from the inner and outer part of the spiral as a continuous band around said transporting means and to pattern selecting position and means for driving said transporting means in synchronism with said needle bed to transport said pattern band from said spiral to the operative position of pattern selection and back to inoperative position in the spiral.

1,765,287. OPTICAL GLASS. MURRAY R. SCOTT, Rochester, N. Y., assignor to Bausch & Lomb Optical Co., Rochester, N. Y., a Corporation of New York. Filed June 11, 1928. Serial No. 284,653. 3 Claims. (Cl. 106—36.1.)

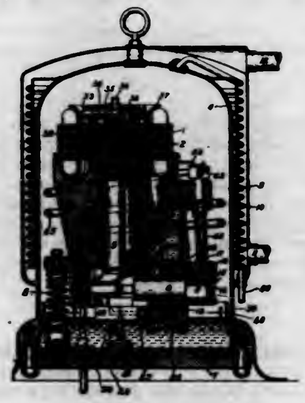
1. A dense barium crown optical glass which is resistant to tarnishing comprising over 25 percent of barium and under 5 percent of a zirconium compound.

1,765,288. GRASS-CUTTING DEVICE. ARTHUR LOUIS SCHMIDT, Baldwin Park, Calif. Filed Aug. 16, 1929. Serial No. 386,402. 3 Claims. (Cl. 97—227.)



1. In a device of the character described, a brace, a cap carried by said brace, and rotatable with respect thereto, and a cutting implement rotatably positioned on said brace for the purpose specified.

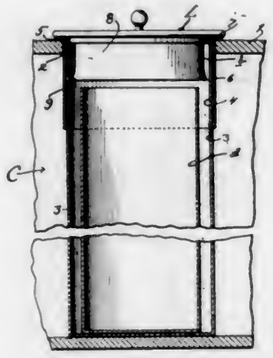
1,765,289. REFRIGERATING MACHINE. CHRISTIAN STEENSTRUP, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Dec. 29, 1928. Serial No. 329,108. 20 Claims. (Cl. 230—206.)



1. In a refrigerating machine, a compressor, a motor for driving said compressor, means forming a chamber

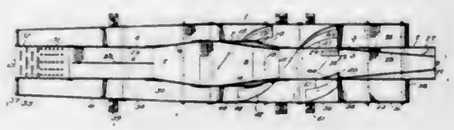
for compressed refrigerant, said compressor having a cylinder, said cylinder having an intake port, a movable member having a passage therethrough, and means for moving said movable member from the position in which said intake port opens directly into said compression chamber to the position where said intake port communicates with the passage in said member.

1,765,290. REFRIGERATOR ATTACHMENT. NICK STEFANIDE, Linwood, Pa., assignor of one-half to Theodore Christy, Linwood, Pa. Filed Sept. 8, 1928. Serial No. 304,715. 5 Claims. (Cl. 62—75.)



1. In combination with a refrigerating cabinet having an opening in its top wall, a receptacle positioned below said opening and having its upper end spaced below the top wall of the cabinet, a container freely placed within the receptacle, said container when arranged within the receptacle having its upper portion extending above the upper portion of the receptacle, an insulating attachment comprising a tubular member insertible through the opening in the top wall of the cabinet and of such length as to extend below the upper portion of the container.

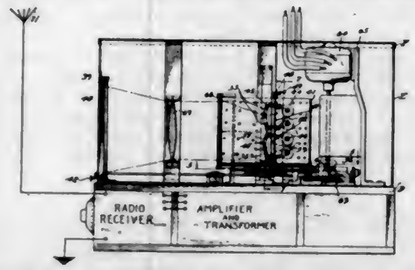
1,765,291. TUMBLING-MILL STRUCTURE. HARRY W. TITGEN, Glenside, Pa. Filed Sept. 22, 1926. Serial No. 137,053. 14 Claims. (Cl. 51—164.)



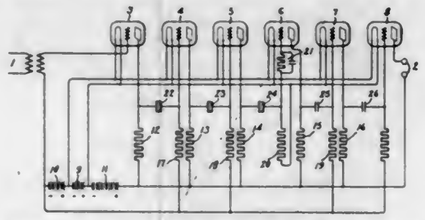
1. A tumbling barrel shell provided with a principal working chamber and inlet and outlet passages for said chamber, said inlet passage having openings through which undesirable materials may be removed, and cleaning elements inserted, respectively, said outlet passage having openings through which the cleaning elements may be discharged and means for receiving the cleaning elements at an outlet passage and for returning them to said openings in the inlet passage.

1,765,292. TELEVISION SENDING AND RECEIVING APPARATUS. CARL J. WAGNER, Cleveland, Ohio. Filed Oct. 26, 1927. Serial No. 228,708. 15 Claims. (Cl. 178—6.)

1. In television apparatus, mechanism for creating an image in accordance with a varying electric current, comprising, in combination, scanning means having openings arranged in a helix, a plurality of light sources cooperating with said scanning means, means for successively illuminating said light sources, and instrumentalities for concentrating and moving the light emanating from the light sources over the scanning means.



1,765,293. AMPLIFICATION OF ELECTRICAL IMPULSES. DOW O. WHELAN, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Jan. 18, 1927. Serial No. 161,910. 3 Claims. (Cl. 179—171.)



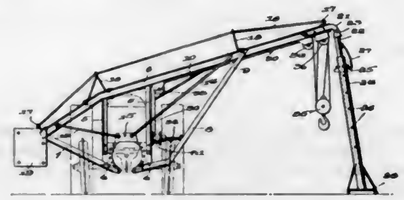
1. The combination of a plurality of space discharge devices each provided with an input circuit including a resistor and with an output circuit including a resistor, and means including a piezo electric element arranged to connect said devices in cascade with one another.

1,765,294. DELAY-ACTION DETONATOR. GILBERT C. BACON, Tamaqua, Pa., assignor to Atlas Powder Company, Wilmington, Del., a Corporation of Delaware. Filed Dec. 22, 1928. Serial No. 328,004. 18 Claims. (Cl. 102—10.)



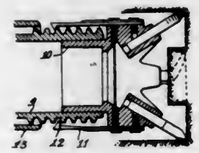
1. A delay action detonator comprising a main shell, a priming charge therein, a delay tube in the shell containing a combustible delay material, an electric igniter and a separate flame tube within the shell and between the igniter and the delay material.

1,765,295. TRACTOR BOOM CRANE. FRED G. BECKMAN, Muskogee, Okla. Filed Aug. 1, 1927. Serial No. 209,874. 8 Claims. (Cl. 189—16.)



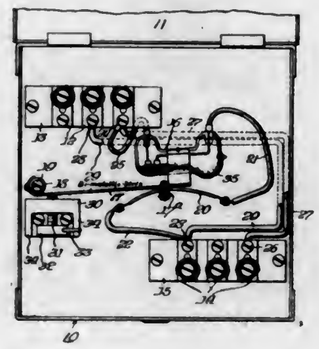
1. A boom crane including a boom, side plates adapted to be attached to a tractor and carried thereby and upwardly extending supports carried by the side plates and attached at their upper ends to the boom in spaced apart relation.

1,765,296. BORING MACHINE. FRANCOIS JACQUES BARTHELEMY BERRY, Lille, Nord, France. Original application filed Nov. 29, 1926, Serial No. 151,512, and in France June 21, 1926. Divided and this application filed Aug. 8, 1928. Serial No. 298,277. 2 Claims. (Cl. 255—61.)



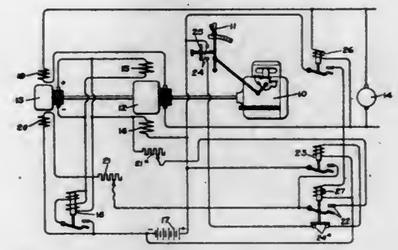
1. In a boring machine, an auger shaft formed with an external helical rib having its outer edge face toothed, a tool head at the front end of said shaft, and catches engaged with the teeth of said rib to detachably secure the tool head to the shaft.

1,765,297. ELECTRICAL SWITCH. JOHN C. BOGLE, River Forest, Ill., assignor, by mesne assignments, to Time-O-Stat Controls Company, Elkhart, Ind., a Corporation of Maryland. Filed Dec. 2, 1926. Serial No. 152,123. 12 Claims. (Cl. 200—122.)



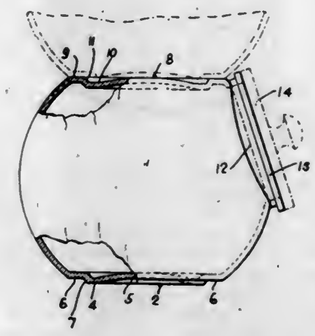
1. In a device of the class described, a horizontally disposed heat responsive element secured at one end to a fixed pivot, a tiltably actuated switch mounted wholly on the other end thereof and actuated thereby, an electrical heating element having its circuit connected through said tiltable switch for operating said heat responsive element, and adjustable means independent of said fixed pivot and associated with said heat responsive element for predetermining the amount of current required by said heating element to tilt said tiltable switch.

1,765,298. SELF-PROPELLED VEHICLE. ERROL W. BRANDENSTEIN, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Oct. 11, 1928, Serial No. 311,853. Renewed Nov. 12, 1929. 14 Claims. (Cl. 290—14.)



1. An electrically driven vehicle having an engine, a generator driven by said engine, a driving motor for said vehicle connected to said generator, an excitation system for said generator, means for maintaining the major portion of the excitation of said system substantially constant throughout a portion of the range of operation of said generator, and means for varying the major portion of the excitation of said system substantially in accordance with an electrical characteristic of said generator throughout the remainder of the range of operation thereof.

1,765,299. DISPLAY CONTAINER. EDWARD Y. CROSSMORE, Yonkers, N. Y., assignor to National Biscuit Company, New York, N. Y., a Corporation of New Jersey. Filed Mar. 31, 1928. Serial No. 266,212. 11 Claims. (Cl. 215—1.)



1. A container unit, comprising a hollow receptacle generally spherical in form and having its interior relatively free from sharp corners, a laterally-disposed emptying opening disposed mainly above the medial horizontal plane of the receptacle, and a plurality of opposed flattened portions disposed transversely of said lateral emptying open-

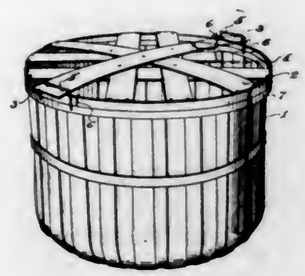
ing; said portions being complementary in configuration with each other whereby a plurality of said units may be stacked vertically upon each other.

1,765,300. SHOULDER STRAP. JOSEPH REX DAVIS, Clarksburg, W. Va. Filed July 16, 1928. Serial No. 293,134. 3 Claims. (Cl. 241—12.)



1. The combination with a garment having apertures at its upper edge, of a pair of shoulder straps detachably connected to said garment by means of said apertures, each of said shoulder straps including garment attaching plates adjustably secured to the ends of said straps, buttons on said plates for engagement with said apertures, said buttons extending inwardly through said apertures toward the body of the wearer.

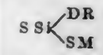
1,765,301. TOP-SECURING MEANS FOR BASKETS. ROBERT A. DENNISON, Dallas, Tex. Filed Dec. 5, 1927. Serial No. 237,693. 1 Claim. (Cl. 217—125.)



A holder and handle for baskets having top hoops, covers provided with hoops and also with strips which latter extend beyond the cover edges, composed of a substantially inverted U-shaped member formed to receive the strip ends between its legs and to have its horizontal part seat on and against the upper face of the strip, the legs of the member engaging against the periphery of the cover hoop and against the periphery of the top hoop of the basket and being extended through the said top hoop, the legs having portions extending upwardly at an angle to said legs and in divergent relation across the said confronting edges of the hoops and tightly against the inner face of each hoop and having their free ends bent over and tightly against the top edge of the cover hoop so as to hold the two hoops in tight engagement with each other and extending downwardly in divergent relation in engagement with the outer face of the cover hoop.

1,765,302. ORE FLOTATION PROCESS AND REAGENT. IRA H. DERBY and ORIN D. CUNNINGHAM, Indianapolis, Ind., assignors to Peter C. Reilly, Indianapolis, Ind. Filed Nov. 22, 1928, Serial No. 321,269. Renewed May 9, 1930. 12 Claims. (Cl. 209—166.)

1. A process which comprises subjecting ores to froth flotation in the presence of a compound having the general structure



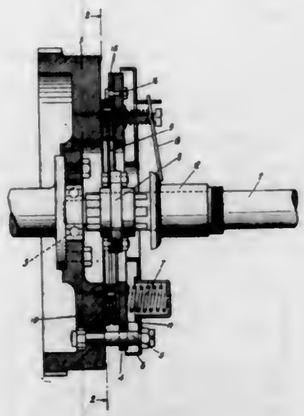
in which D represents a diad metalloid element oxygen or sulfur, R represents an alkyl, aralkyl or aryl group and M represents alkali-forming metal or hydrogen or alkyl, aryl or aralkyl.

1,765,303. REKNITTING NEEDLE. EDWARD J. HOFFMAN, Boston, Mass., assignor to Eldeen Automatic Hosiery Mender Inc., Boston, Mass. Filed Nov. 20, 1928. Serial No. 320,575. 8 Claims. (Cl. 66—117.)



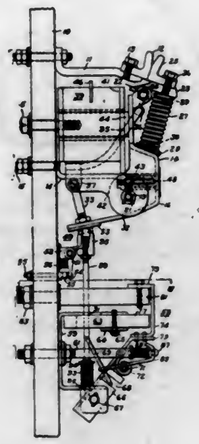
1. A device of the class described comprising a needle having a hooked end, a latch adapted to close said hooked end, a magnet disposed in spaced relation to the latch and adapted to attract the latch away from said hooked end, and means rigidly connecting the magnet with the needle.

1,765,304. CLUTCH FRICTION DEVICE. ERNEST E. WEMP, Detroit, Mich. Filed Aug. 17, 1928. Serial No. 300,174. 3 Claims. (Cl. 192—30.)



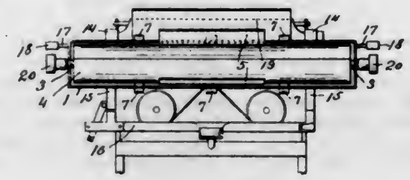
3. In a clutch, the combination of a driving member, a driven member, clutch facing material on the driven member adapted for engagement with the driving member, a friction brake device pivotally mounted upon the driving member and positioned radially removed from the clutch facing material, said friction device being formed so that its center of gravity is radially removed from its pivot point whereby change of angular velocity of the driving member effects rocking of the device upon its pivot, and friction shoe portions on said friction device adapted to frictionally engage the edge of the said clutch facing material upon rocking movement of the said friction device.

1,765,305. THERMAL RELAY. EDWARD M. CLAYTON, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed June 24, 1927. Serial No. 201,055. 8 Claims. (Cl. 200—88.)



1. A thermal relay comprising a support, a magnet carried thereby, a reversibly magnetic member, a movable member carried by said support, and an inductor carried by the movable member, said inductor being magnetically secured to said reversibly magnetic member by the magnetizing effect of said magnet.

1,765,306. COPYHOLDER. RALPH B. HARRIS, Wilder, Kans. Filed Feb. 25, 1929. Serial No. 342,593. 4 Claims. (Cl. 120—31.)



1. In a copy holder, a support, a feed roller rotatable thereon, a flexible sheet fastened at one end only to and adapted to embrace the periphery of said roller, and adapted to receive between its free end and said roller one end of a copy sheet and to release said end of the copy sheet when said roller has been turned to feed said copy sheet a predetermined distance, said support being adjacent to said periphery of said roller and arranged to guide said sheets along the periphery of said roller, and resilient presser means on said support adapted to engage and press said sheets against the periphery of said roller.

1,765,307. METHOD OF PREPARING COLLOIDAL SULPHUR. HENRY HOWARD, Cleveland, Ohio, assignor, by mesne assignments, to The Grasselli Chemical Company, Cleveland, Ohio, a Corporation of Delaware. Filed Nov. 17, 1926. Serial No. 148,999. 6 Claims. (Cl. 167—20.)

1. A process for preparing colloidal sulphur, which comprises reacting a sulfid of calcium with sulphur dioxide in aqueous solution, the sulphur dioxide being maintained in excess throughout the reaction.

1,765,308. FLOTATION PROCESS. GEORGE LUTZ, Rocky River, Ohio, assignor, by mesne assignments, to The Grasselli Chemical Company, Cleveland, Ohio, a Corporation of Delaware. Filed Jan. 30, 1928. Serial No. 250,735. 4 Claims. (Cl. 209—166.)

1. In a process of concentrating ores or minerals by a froth flotation operation, the step which comprises performing the froth flotation operation in the presence of an alkyl-naphthalene sulfonic acid compound.

1,765,309. PULVERIZING MACHINE. BENJAMIN A. O'NEILL, Minneapolis, Minn., assignor to Schutz-O'Neill Company, Minneapolis, Minn., a Corporation of Minnesota. Filed Sept. 28, 1923. Serial No. 665,386. 3 Claims. (Cl. 83—11.)

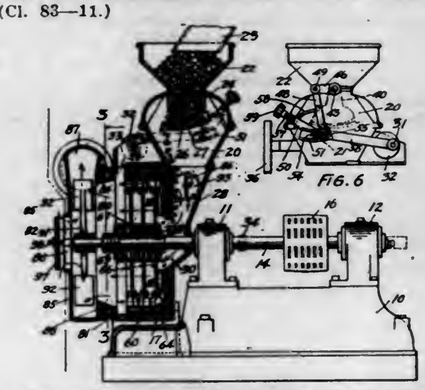
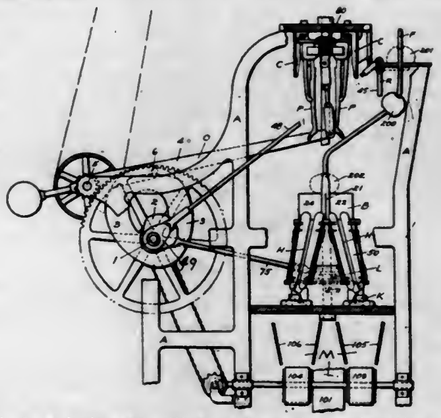


FIG. 6

1. A grinding mill comprising a base having bearings thereon, a shaft mounted in said bearings and having an end extending outwardly therefrom, a fan mounted on the extended end of said shaft, a housing for said fan having an air trunk and mounted for rotary adjustment to change the position of said trunk with respect to said fan, an internal annular flange on the fan housing an external annular flange on the housing of the grinders, one lapping the other, and a releasable clamping ring for holding the fan housing to its adjustment, grinders mounted on said shaft between said fan and bearings, a housing for said grinders and a feed hopper therefor said fan and grinders being removable from said shaft without disturbing its bearings.

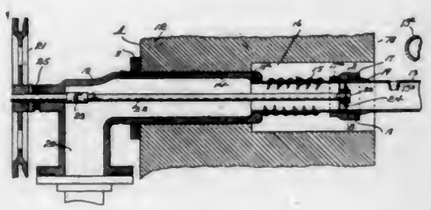
1,765,310. CONTINUOUS FRUIT-CUTTING AND SEED-CELLING MACHINE. FRANK A. REYNOLDS, Lowell, Mass., assignor, by mesne assignments, to Lowell Machine Company, a Corporation of Massachusetts. Filed Feb. 9, 1929. Serial No. 338,869. 13 Claims. (Cl. 146—40.)



1. In a fruit seed celling machine, the combination with a frame; of radial quartering knives attached to said

frame; adjustable pusher latch releasing guides positioned above and equally spaced from the quartering knives; a fruit guide rod which extends from the centre of the quartering knives up and out; angular chutes which extend down and away from said quartering knives each chute having in the same horizontal plane a cutting slot and each having spring actuated fruit segment retaining doors to resiliently retain a segment of fruit in the chute; radially arranged slicing cutters positioned below the bottom end of each chute; a movable seed celling knife movable in a horizontal plane through the cutting slots; a series of pushers movable between the releasing guides and the chutes, having vertically slidable legs each being notched and having a foot in position to rest on top of the fruit and to push a segment thereof continuously down through the quartering knives along the chutes and through the slicing cutters permitting it to dwell while the seed celling knife is operated, each of said pushers having a spring pressed locking latch in position to engage a notch on a leg when released by the latch releasing guide; and means to move the pushers and seed celling knife as described.

1,765,311. BOILER CLEANER. NORMAN L. SNOW, New Canaan, Conn., assignor to Diamond Power Specialty Corporation, Detroit, Mich., a Corporation of Michigan. Filed Sept. 29, 1924, Serial No. 740,596. Renewed Aug. 7, 1929. 4 Claims. (Cl. 122—392.)



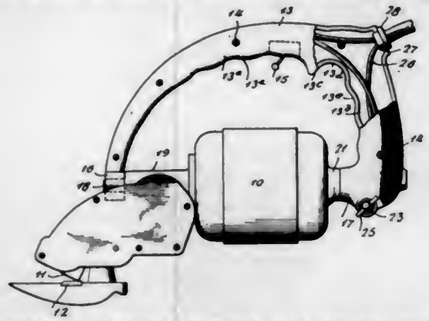
3. In a boiler cleaner, a blower head having a flexible extension, a blower element journaled in said extension, a rotatable shaft journaled in said head, and a flexible connection between said shaft and said blower element.

1,765,312. INSULATING MATERIALS AND PROCESS OF MANUFACTURE OF SAME. WALTER L. STEFFENS, Wyoming, Ohio, assignor to The Philip Carey Manufacturing Company, a Corporation of Ohio. Filed Apr. 8, 1925. Serial No. 21,725. 5 Claims. (Cl. 91—70.)

1. In the manufacture of insulating material, the process which comprises forming a block composed of a major proportion of magnesia and a minor proportion of a suitable fibrous binder, and subjecting said block to the action of an aqueous solution of sodium silicate, the fluidity and strength of the solution and the duration of the treatment being such that the block is completely impregnated with said solution and thereafter hardened substantially throughout.

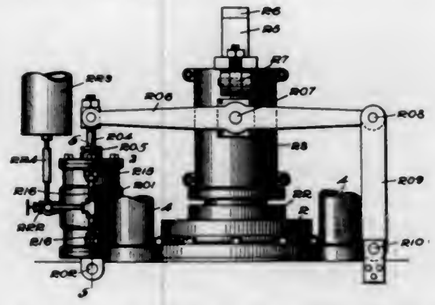
1,765,313. PORTABLE SHEARS. ULRICH F. L. STEINDORFF, New York, N. Y., and GUSTAVE A. UNGAR, Pelham Manor, N. Y., assignors to Unishear Company, Inc., a Corporation of New York. Filed Oct. 4, 1928. Serial No. 310,235. 6 Claims. (Cl. 164—75.)

1. The combination with a portable tool of a handle pivotally secured thereto, said handle having a pair of hand grip portions, one of said grip portions having its center located substantially in the same vertical plane as the center of gravity of the tool so as to permit said tool to be swung readily about a vertical axis and the other of said handle portions being located rearwardly of said center



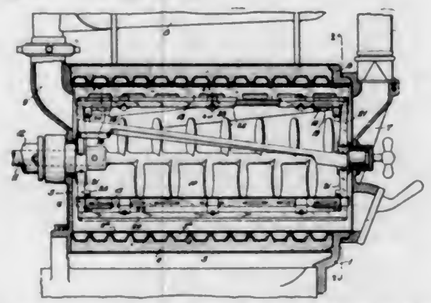
of gravity for enabling pressure to be exerted readily for forcing the tool forwardly in a substantially horizontal direction.

1,765,314. CONTROL FOR PRESSES. WILLIAM B. STUART, Tampa, Fla., assignor to The International Pavement Company, Hartford, Conn., a Corporation of Connecticut. Filed Mar. 19, 1924. Serial No. 700,312. 2 Claims. (Cl. 188—97.)



1. A dash pot for controlling the movement of the mold plunger of a press comprising, in combination, a cylinder, a piston therein, said cylinder provided with by-pass conduit means of relatively large effective cross-sectional area for the portion of said cylinder intermediate its length, conduit means of relatively small effective cross-sectional area connecting opposite end portions of said cylinder, and a liquid reservoir for the cushioning fluid of said dash pot connected to said first mentioned conduit means.

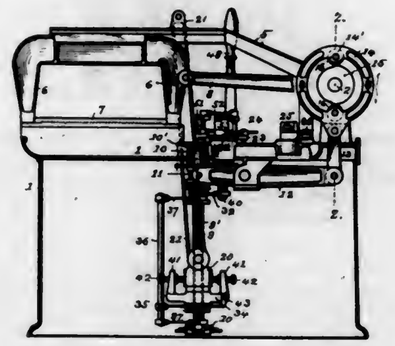
1,765,315. FREEZING MECHANISM. WILLIAM H. THOMPSON, Canton, Ohio, assignor to The H. H. Miller Industries Company, Canton, Ohio, a Corporation of Ohio. Filed Mar. 2, 1929. Serial No. 343,896. 6 Claims. (Cl. 259—105.)



1. In a freezing mechanism, the combination of a freezing chamber having an inlet and a valved discharge port,

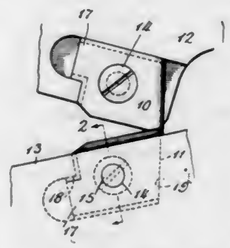
an agitating mechanism in said chamber including a movable scraping member extending substantially from end to end of said chamber, and means carried by said agitating mechanism for holding said member in a predetermined spaced relation to the wall of said chamber during operation of said mechanism to effect scraping of material from the chamber wall.

1,765,316. METAL-SAWING MACHINE. JOHN S. TOOHEY and MALCOLM E. ERSKINE, Racine, Wis., assignors to Racine Tool & Machine Company, Racine, Wis., a Corporation of Wisconsin. Filed Sept. 1, 1926. Serial No. 132,968. 14 Claims. (Cl. 29—73.)



2. In combination in a metal sawing machine, a saw blade, a movable supporting means for said saw blade, means for imparting reciprocation to the saw blade in relation to said supporting means, means for imparting continuous and unyielding downward movement to said supporting means and saw blade during the entire cutting stroke of the saw blade, the same comprising a screw shaft, manually adjustable automatic means for imparting intermittent rotation to said screw shaft, a head encircling said screw shaft, a pair of split nut members slidable in said head and having eccentrically formed outer sides, a plurality of springs tending to force said nut members apart, an oscillatory support associated with the screw shaft, opposed members on said support in engagement with the eccentric sides of said nut members, manual means for imparting movement to said oscillatory support, and a link connection extending from said head to the aforesaid supporting means.

1,765,317. CUTTING BLADE FOR SHEARS. GUSTAVE A. UNGAR, Pelham Manor, N. Y., assignor to Unishear Company, Inc., a Corporation of New York. Filed Apr. 28, 1928. Serial No. 273,470. 3 Claims. (Cl. 164—58.)

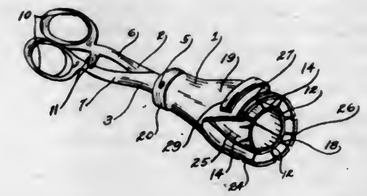


1. A cutting blade for power driven shears of the type wherein a pair of cutting blades are mounted upon blade holders with their cutting edges inclined to each other to provide an open throat into which the material to be cut is adapted to be fed, each of said blade holders being cut away on one face thereof to provide a recess which is open both on the lateral face and at one end of said blade holder and in which its respective cutting blade is adapted to be seated, means for detachably fastening said blade within said recess, and said blade and blade holder in one wall of said recess being provided with interlocking engaging means which prevent rotation of said blade holder about the axis of said attaching means.

1,765,318. PROCESS FOR THE MANUFACTURE OF ACETIC ACID. ROBERT H. VAN SCHAACK, Jr., Evanston, and ROBERT CALVERT, Wilmette, Ill., assignors to Van Schaack Bros. Chemical Works, Inc., Chicago, Ill. Filed Feb. 9, 1928. Serial No. 253,206. 6 Claims. (Cl. 260—118.)

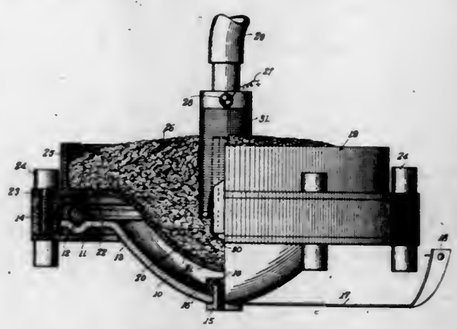
1. The process of manufacturing acetic acid which comprises the interaction of sulfuric acid and calcium acetate, in the presence of added water, at 80° to 150° C., and in the separation of the resulting calcium sulfate by filtration.

1,765,319. SURGICAL INSTRUMENT FOR CIRCUMCISIONS. JOHN W. WILLIAMS, Tampa, Fla. Filed Nov. 16, 1929. Serial No. 407,745. 19 Claims. (Cl. 128—346. (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



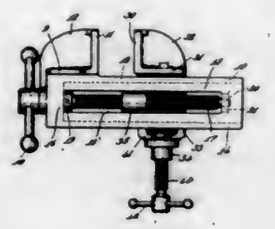
1. A circumcision clamp of the pivoted link type having handle portions and jaw portions, said jaw portions provided with spaced threaded needles.

1,765,320. METHOD AND APPARATUS FOR FORMING MOLDS. BLASIUS BART, East Orange, N. J., assignor to Bart Reflector Co., Inc., Newark, N. J., a Corporation of New Jersey. Filed Oct. 28, 1926. Serial No. 144,903. 19 Claims. (Cl. 204—1.)



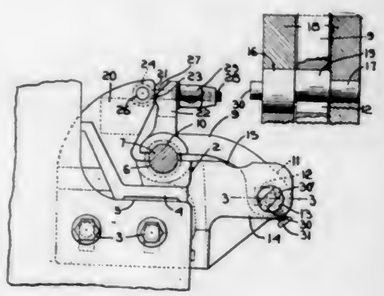
1. In the art of electroplating the recessed portion of a surface, the method which consists in positioning the depositing metal in solid form within the recess, adjacent to but not in contact with the surface of the recess to be plated, and in fixed relation thereto, and subjecting the same to the action of an electrolytic bath while causing the electrolyte to flow through the solid metal and into depositing contact with the recessed surface.

1,765,321. BENCH VISE. CHRISTIAN BODMER, New Britain, Conn., assignor to The Stanley Works, New Britain, Conn., a Corporation of Connecticut. Filed Dec. 17, 1927. Serial No. 240,808. 5 Claims. (Cl. 81—33.)



3. In a vise of the character described, a movable jaw element having a bar adapted to extend along the edge of a support, and a jaw arising from and extending transversely of said bar and adapted to overhang the top surface of said support; and a fixed jaw element having a jaw opposed to said first jaw and extending transversely of said bar, said fixed jaw element having an arm extending downwardly and then transversely of said bar and forming an open channel in which said bar is slidably mounted; a screw carried by said movable jaw element; said fixed jaw element having a threaded aperture receiving said screw in threaded engagement; and means carried by said arm for clamping said vise to a support.

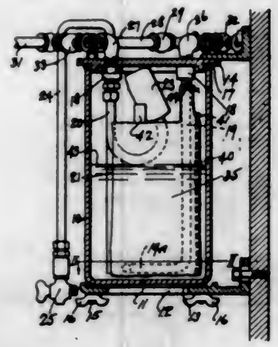
1,765,322. BEAM LOCK FOR LOOMS. CARL D. BROWN, Hopedale, Mass., assignor to Draper Corporation, Hopedale, Mass., a Corporation of Maine. Filed Nov. 6, 1928. Serial No. 317,556. 7 Claims. (Cl. 308—24.)



1. A beam lock for looms comprising a bearing block, an open bearing therein, a bearing closing member pivoted thereon and capable of swinging into open position, a stop to determine the closed position thereof, means at the pivot point movable to adjust the side of the journal formed by said bearing members and means to lock the bearing members in closed position.

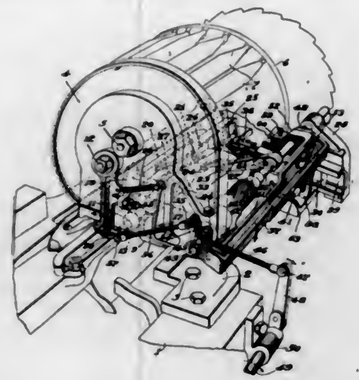
1,765,323. FILTER FOR LIQUIDS. FREDERICK O. CATRON, Memphis, Tenn., assignor of one-half to Nettie P. Catron, Memphis, Tenn. Filed Sept. 3, 1927. Serial No. 217,430. 4 Claims. (Cl. 210—183.)

3. In a filter for liquids, a container, a top therefor, an inlet pipe passing downward through said top into said container, adjacent one side thereof, a discharge pipe leading from the upper portion of said container, and a sediment retaining bag doubled along its longitudinal center line, and loosely and unrestrainedly coiled, disposed



in said container along and adjacent to said inlet pipe, and having the outer half of its peripheral end disposed and secured around said inlet pipe.

1,765,324. THREAD-PARTING MECHANISM FOR LOOMS. HARRY A. DAVIS, Hopedale, Mass., assignor to Draper Corporation, Hopedale, Mass., a Corporation of Maine. Filed Feb. 2, 1929. Serial No. 337,014. 12 Claims. (Cl. 139—267.)



1. In a loom provided with mechanism to automatically replenish the filling in the shuttle, parting means for parting the spent filling adjacent the shuttle eye when the shuttle is boxed for replenishment, mechanism for moving the parting means into operative position on call for replenishment, a bobbin guide mounted for movement by the replenishing bobbin during its transfer, and mechanism for actuating the parter including a rocking yoke, a parter actuator carried by the yoke adjacent the delivery eye end of the boxed shuttle, and connections between the other end of the yoke and bobbin guide to operate the parter actuator to part the filling by movement of the bobbin guide during replenishment.

1,765,325. BUTTON RECEPTACLE. JAMES C. DAY, South Orange, N. J., assignor to The Whitehead and Hoag Company, Newark, N. J., a Corporation of New Jersey. Filed Dec. 14, 1928. Serial No. 326,078. 7 Claims. (Cl. 40—10.)

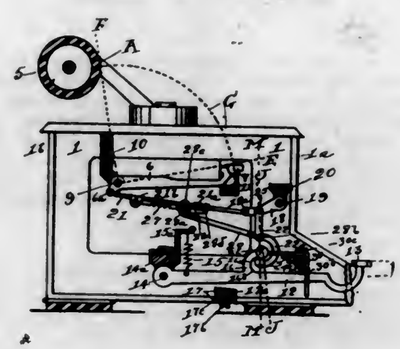
1. A button receptacle comprising a front plate, a back plate secured at its edge to the front plate, said back plate having a slit therein and a portion of the back plate bordering one side of said slit being pressed into a

position offset from the portion on the other side of said slit to render available a receptacle between the front and back plates adapted to receive an article through



said slit, the portion bordering the other side of the slit being formed into a holding means for a means for attaching the button to a garment, and an attaching means secured in such holding means.

1,765,326. KEY ACTION FOR TYPEWRITERS AND OTHER MACHINES. ORVILLE U. DESHA, Fort Collins, Colo., assignor of one-fifth to The Desha Typelex Trust Estate, Fort Collins, Colo. Filed Jan. 27, 1928. Serial No. 249,878. 13 Claims. (Cl. 197—27.)



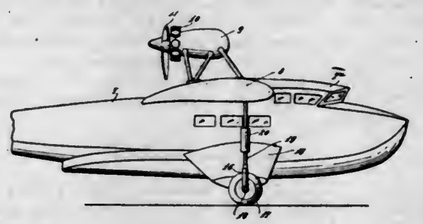
1. In a key action for typewriter and other machines, a type bar, a rearwardly disposed vibratory lever pivotedly supported by a bar extending across the front of the machine, means operatively connecting the type bar and vibratory lever, a depending trip lever actuating said vibratory lever, a key lever, an upward curved arm intermediate the ends of the key lever forming an integral part of the latter and said arm convexed backwardly and concaved forwardly, a reversely breaking roller trip coupling comprising a trip roller bob supported by the depending trip lever, and a roller grip supported by the key lever arm, the forward concavity of said arm providing an operative plane forwardly thereof and above the key lever for the operation of said trip roller bob for operatively interlocking the elements of said roller trip coupling moving the type bar to printing point upon depression of the key lever, means disinterlocking said coupling and simultaneously returning the vibratory lever, type bar and immediate connection to normal operative position while the key lever is held depressed, means restoring said disinterlocked elements to normal operative interlocked position upon release of the key lever.

1,765,327. AUTOMATICALLY-THREADING LOOM SHUTTLE. CLARE H. DRAPER, Hopedale, Mass., assignor to Draper Corporation, Hopedale, Mass., a Corporation of Maine. Filed Feb. 2, 1929. Serial No. 336,937. 15 Claims. (Cl. 139—212.)



1. An automatically threading loom shuttle having a longitudinal thread passage and side delivery eye, a scroll mounted in the longitudinal thread passage and having its ends secured at opposite sides of the thread passage that the thread may be deflected and tensioned by passing over and under the terminal portions of the scroll in the longitudinal thread passage on the first pick of the shuttle following replenishment.

1,765,328. AMPHIBIAN AIRCRAFT. ANTHONY H. G. FOKKER, Tenafly, N. J., and ALFRED A. GASSNER, New York, N. Y., assignors to Fokker Aircraft Corporation of America, a Corporation of Delaware. Filed Sept. 27, 1928. Serial No. 308,812. 9 Claims. (Cl. 244—2.)

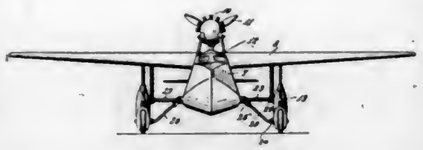


1. An airplane of the amphibian type, comprising a hull, a wing associated therewith, means connected to the hull and variably adjustable relatively thereto for imparting lateral stability to the craft when on the water, wheels for supporting the airplane from the ground, means connecting said wheels to the wing, said latter means being yieldable in response to landing impacts, and movable means of connection between said lateral stabilizing means and said wheels.

1,765,329. AMPHIBIAN AIRCRAFT. ANTHONY H. G. FOKKER, Tenafly, N. J., and ALFRED A. GASSNER, New York, N. Y., assignors to Fokker Aircraft Corporation of America, a Corporation of Delaware. Filed Sept. 27, 1928. Serial No. 308,813. 9 Claims. (Cl. 244—2.)

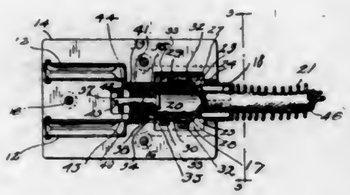
1. An amphibian airplane, embodying an undercarriage structure for supporting the craft when on the ground, including a float disposed on each side of the hull of the airplane, means rigidly connected to said hull below the wing and to each float for maintaining the latter in spaced

relationship to the hull, lateral bracing means rotatably connected to said hull and to said float, tension and compression struts connecting said rigid spacing means to the wing of the airplane, a wheel carried by each of



said float and means connected to said floats and actuatable to rotate the same on said rigid spacing means to render said landing wheels or said floats effective as contributory supporting means for the craft, at the option of the operation.

1,765,330. ELECTRICAL SWIVEL CONNECTER. ALBERT R. GOLDRICK, Cleveland, Ohio. Filed Oct. 22, 1921. Serial No. 509,573. 5 Claims. (Cl. 123—324.)



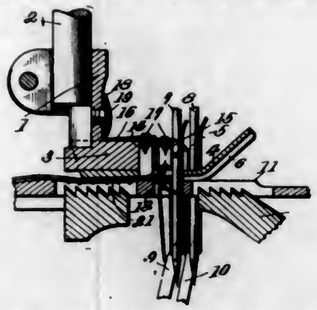
1. In a flat iron plug connecter, the combination of a pair of complementary contact insulating members, a pair of socket contacts formed to receive the terminal plugs of a flat iron and positioned within the insulating members and means in swivel connection with said complementary members for electrically connecting the strands of an electric cord to said socket contacts said means being adapted for positively gripping the outer insulating cover of an electrical cord so that the outer insulating cover receives all of the torsional strains thereby protecting the bared cord strand ends.

1,765,331. PREPARING METAL FOR PAINTING. JAMES H. GRAVELL, Elkins Park, Pa., assignor to American Chemical Paint Company, Ambler, Pa., a Corporation of Delaware. Filed May 23, 1929. Serial No. 365,575. 7 Claims. (Cl. 148—8.)

1. The method of preparing metal for painting comprising treating the metal with an aqueous solution of acid salt of phosphoric acid in which one hydrogen atom of the acid is replaced by basic elements or radicals, permitting the solution to act on the metal, and then removing the solution together with the deleterious products of the reaction.

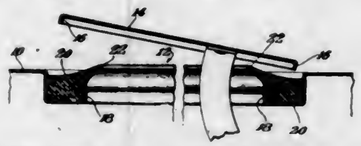
1,765,332. PRESSER FOOT FOR SEWING MACHINES. WALTER M. HANNEMAN, Oak Park, Ill., assignor to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 10, 1927. Serial No. 225,260. 3 Claims. (Cl. 112—235.)

1. A presser foot for felling comprising a supporting shank, a foot portion pivoted to said shank, said foot portion having a needle opening therethrough, and a channel in its under face extending longitudinally thereof so as to receive and guide the interfolded portions of the fell seam, and a bodily yielding clamping device disposed directly and wholly in rear of the needle opening and adapted to cooperate with the solid portion of the throat plate for clamping the enchained thread loops during chaining between articles being stitched, said clamping device being rela-



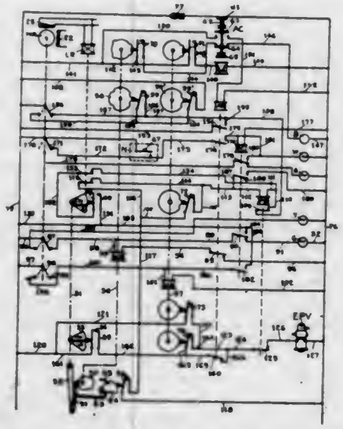
tively short in the direction of feed so as to engage the enchaining thread loops and maintain a substantially continuous control of the same when the stitched article is passing from the machine.

1,765,333. SEALING MEANS FOR COWL VENTILATORS FOR AUTOMOBILES. HARRY M. HOOD, Chicago, Ill., assignor to Featheredge Rubber Company, Inc., a Corporation of Illinois. Filed Oct. 31, 1929. Serial No. 403,697. 3 Claims. (Cl. 98—2.)



1. A cowl ventilator construction for automobiles comprising in combination, a cowl member having a ventilator opening, a sponge rubber body positioned around such opening with an upturned flange at its inner edge, and a cover member having a downwardly extended flange adapted to compress the body of sponge rubber and thereby tend to tilt the flange of the sponge rubber body upwardly while said cover member presses against such rubber flange to depress the same.

1,765,334. TRAIN CONTROL. WINTHROP K. HOWE, Rochester, N. Y., assignor to General Railway Signal Company, Rochester, N. Y. Filed Oct. 29, 1924. Serial No. 746,578. 14 Claims. (Cl. 246—63.)

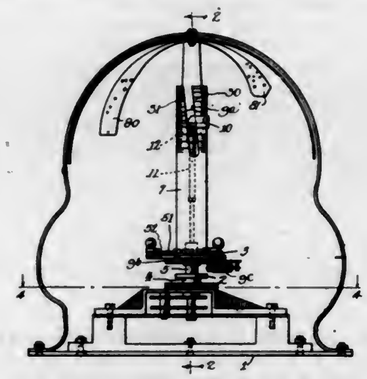


11. An automatic train control system comprising, means partly on the vehicle and partly along the trackway for manifesting on the vehicle conditions of traffic existing ahead of the vehicle, a delayed action device normally maintained inactive which if initiated changes in accordance with the progress of the vehicle along the trackway, and which if changed to a predetermined extent sets up a low permissive speed limit which the vehicle cannot exceed without incurring an automatic brake application, an acknowledging device having an active and an inactive position, and which is normally in its inactive position, means for effecting an automatic brake application regardless of the speed of the train if the acknowledging device is not in its active position when the delayed action device has changed to a predetermined extent, and means for effecting an automatic brake application if the acknowledging device is not in its inactive position when said delayed action device has changed to a slightly greater extent.

1,765,335. ELECTRIC-CURRENT VALVE. ROBERT C. JACQUELET, Norwood, Ohio. Filed Aug. 12, 1927. Serial No. 212,603. 2 Claims. (Cl. 175—366.)

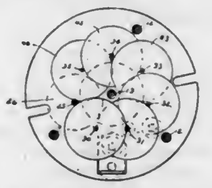
1. The method of developing the ultimate inverse resistance of copper oxide current valves, which comprises, subjecting the elements to electrical potential in the direction of the proposed inverse current, said potential from 100%–400% in excess of that to which the elements are to be subjected in service.

1,765,336. ASTRONOMICAL APPARATUS. ALEXANDER E. JOHNSON, Chicago, Ill. Filed Jan. 30, 1928. Serial No. 250,654. 6 Claims. (Cl. 35—3.)



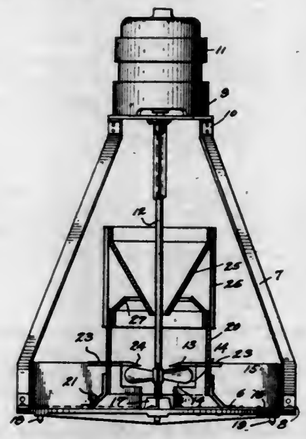
1. An astronomical apparatus comprising sun, moon and earth devices, and means for causing the rotation of the sun and moon devices around the earth and means for adjusting said sun and moon devices transversely with reference to their orbits.

1,765,337. SIGNALING ATTACHMENT FOR METERS. EMIL M. KRUEGER, Milwaukee, Wis., assignor to Badger Meter Manufacturing Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Dec. 1, 1922. Serial No. 604,444. 6 Claims. (Cl. 200—52.)



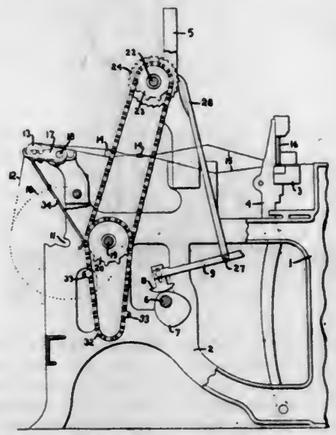
1. In a device of the character described, the combination with a driven shaft, of a stationary contact, a rotatable contact element having a resiliently supported contact portion adapted in one position to touch said stationary contact, means for frictionally driving said rotatable contact from said driven shaft, and a stop circumferentially adjustable and supported in the path of said rotatable contact and adapted to limit the movement thereof in one direction of rotation, said stop being adapted to permit the passage of said contact in another direction of rotation.

1,765,338. AGITATOR, AERATOR, AND MIXER. WILLIAM N. JONES and CHESTER C. HUMPHREYS, Tampa, Fla., assignors to Rotex Engineering Company, a Corporation of Tennessee. Filed Nov. 14, 1928. Serial No. 319,256. 11 Claims. (Cl. 261—84.)



1. A device of the character described, comprising a supporting frame consisting of a spider-like base, a vertical bearing at the center of the spider-like base, a propeller shaft journaled in the vertical bearing, a propeller carried by said shaft, a plurality of legs supported from the outer ends of the spider, a cap plate upon the upper ends of said legs, a prime mover for the propeller shaft mounted upon said cap plate, and a group of baffle plates supported upon the legs of the spider, about said propeller.

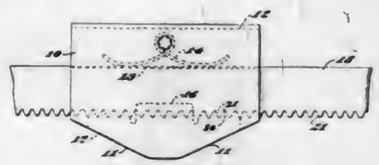
1,765,339. MECHANISM FOR WEAVING STRIPED CLOTH. DAVID C. JONES, Chesnee, S. C., assignor to Draper Corporation, Hopedale, Mass., a Corporation of Maine. Filed Oct. 16, 1929. Serial No. 399,919. 2 Claims. (Cl. 139—97.)



1. A loom comprising a whip roll, a support for the whip roll mounted on the loom frame and movable to effect ver-

tical bodily movement of the whip roll, a sprocket wheel, a pattern chain on the sprocket wheel, risers on the pattern chain, an arm extending from the whip roll support into the path of the risers on the pattern chain, and means for rotating the sprocket wheel thereby to increase the tension in the warps at predetermined intervals for predetermined periods and produce a transverse striped effect in the cloth.

1,765,340. ADJUSTABLE CONTROL CAM. WALTER W. LANDSIEDEL, Cincinnati, Ohio, assignor to Remington Rand Inc., Buffalo, N. Y., a Corporation of Delaware. Filed Oct. 1, 1927. Serial No. 223,438. 8 Claims. (Cl. 74—1.)

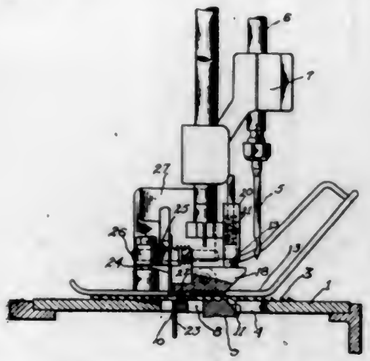


3. A control cam comprising a main body portion having one of its edges bent back upon itself to form a U and its other edge constituting a cam, and a rack member secured against one side of said main body portion and lying in the plane of the opening of the U.

1,765,341. SURFACE PROTECTION FOR MAGNESIUM ALLOYS. RUSSELL E. LOWE, New York, N. Y., assignor to Doherty Research Company, New York, N. Y., a Corporation of Delaware. Filed Mar. 14, 1927. Serial No. 175,429. 5 Claims. (Cl. 148—6.)

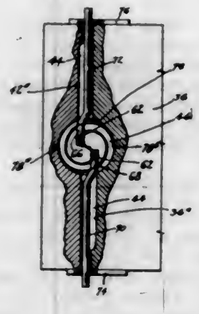
4. A method of providing magnesium alloy with a protective coating comprising initially dipping said alloy in a mild cleaning solution of nitric acid, washing, immersing said alloy in a 5% solution of phosphoric acid long enough to allow a film to form thereon, and finally immersing it in a 5% solution of ammonium phosphate for a period of two to five days.

1,765,342. PRESSER FOOT AND CHAIN CUTTER FOR SEWING MACHINES. FRIEDRICH LUTZ, Stuttgart, Germany, assignor to Union Special Maschinenfabrik, G. m. b. H., Stuttgart, Germany. Filed Oct. 27, 1928, Serial No. 315,464, and in Germany June 29, 1928. 6 Claims. (Cl. 112—252.)



1. The combination of a presser foot having fabric engaging portions and a needle opening, said fabric engaging portions being spaced from each other in rear of the needle opening, an independently yielding auxiliary fabric and chain engaging portion located in said space, and a chain severing device located directly at the rear of said yielding section for severing the enchained thread loops.

1,765,343. IRONING-BOARD STRUCTURE. SERN MADSEN, Clinton, Iowa, assignor to Curtis Companies, Incorporated, Clinton, Iowa. Filed Dec. 31, 1928. Serial No. 329,609. 6 Claims. (Cl. 68—10.)

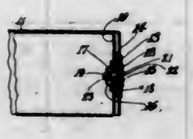


6. A retractible bolt construction comprising a pair of disks adapted to lie against opposite sides of a board having a hole therethru, a key having legs extending off center thru said disks, bolts having their inner ends pivoted to said legs, means for slidably supporting said bolts adjacent their outer ends, and means within said hole to retain said bolts in extended position.

1,765,344. ALKALINE OXIDANT AND ALUMINUM METAL. ALBERT PIETZSCH and GUSTAV ADOLPH, Solln, near Munich, Germany, assignors to Buffalo Electro-Chemical Company, Inc., Buffalo, N. Y. Filed June 16, 1927, Serial No. 199,416, and in Germany Sept. 3, 1926. 4 Claims. (Cl. 23—239.)

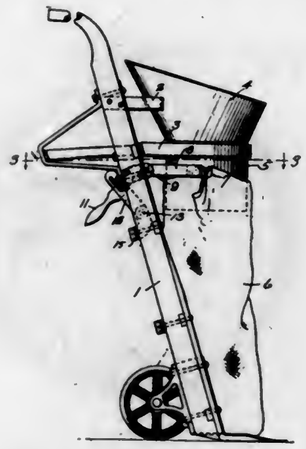
1. The method of preventing a dilute corrosive alkaline solution from attacking the aluminum content of a metal subjected to corrosive action of said solution, which comprises maintaining in the alkaline solution in contact with said metal a protective concentration of hydrogen peroxide.

1,765,345. FASTENING DEVICE. SYLVESTER RAPHAEL, Brooklyn, N. Y., assignor to Just Right Lock Company, New York, N. Y., a Corporation of New York. Filed Aug. 19, 1927. Serial No. 214,001. 2 Claims. (Cl. 292—307.)



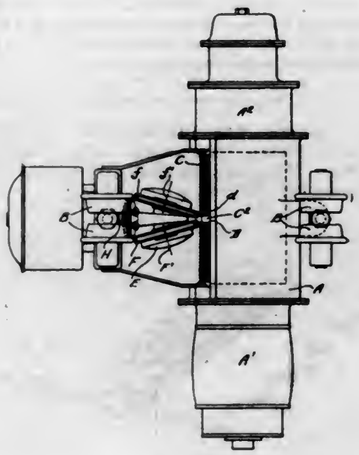
1. A fastener of the character described comprising a tubular member having a countersunk recess at one end, a box-like member having an aperture in one wall, a coupling pin having a head at one end and a groove at the other end, said coupling pin having its head seated within said recess and its grooved end extending into said box-like member, a resilient detent in said box-like member, said detent being yieldable radially with respect to the axis of said pin and arranged within said groove, whereby said coupling pin is locked against movement.

1,765,346. BAG HOLDING AND FILLING DEVICE. EDWARD L. ROSENFELD, Cleveland Heights, Ohio, assignor to The Grabler Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed July 16, 1928. Serial No. 292,926. 6 Claims. (Cl. 83—26.)



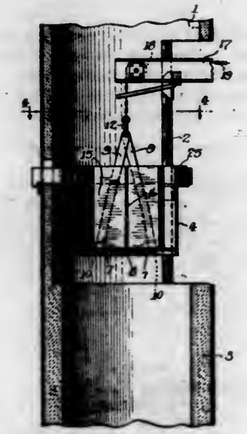
1. In a device of the character described, the combination of a supporting structure, a hopper sustained thereby, said hopper having a discharge spout, a yoke pivoted to the supporting structure and incorporated arms that are disposed on opposite sides of the spout when the yoke is in bag sustaining position, a handle on the yoke for swinging it to said position, a latch carried by the supporting structure for cooperation with said handle to maintain the yoke in bag sustaining position, and means on said arms wherewith a bag is adapted to be engaged at restricted points on opposite sides of the spout of the hopper for holding the bag with its mouth spread open by the spout.

1,765,347. CRANE HOIST. JAMES A. SHEPARD, Montour Falls, N. Y., assignor to Shepard-Niles Crane & Hoist Corporation, Montour Falls, N. Y., a Corporation of New York. Filed July 7, 1928. Serial No. 290,956. 2 Claims. (Cl. 254—190.)



1. In a hoist comprising a winding drum and two cable elements each having one end connected to an anchorage and having its opposite end connected to said winding drum at a point displaced longitudinally of the drum from the point at which the other element is connected to the drum, and in combination therewith a pulley block comprising a frame and two pulley wheels, one of which is supported in a looped portion of one of said elements extending between its anchored end and the winding drum, and the other of which is supported by a corresponding looped portion of the other cable element, said pulley wheels being journalled in said frame to turn about axes so inclined to one another that the sides of said pulley wheels from which the respective cable elements pass to said winding drum are closer together than are the sides of said wheels from which said elements pass to said anchorage.

1,765,348. CUPOLA BUCKET. OSCAR L. COFFEY, Harvey, Ill., assignor to Whiting Corporation, Harvey, Ill., a Corporation of Illinois. Filed June 8, 1928. Serial No. 283,887. 7 Claims. (Cl. 294—71.)

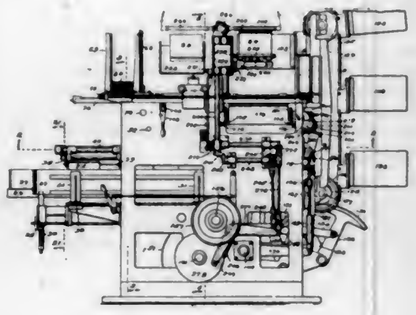


7. A cupola bucket provided with a pair of swinging bottom members in combination with a pair of operating members extending upwardly from said bottom members and having their lower ends pivotally connected with the bottom members and their upper ends pivotally connected to one another, and means on the bucket arranged to engage bucket-supporting-means which are stationarily attached to the cupola to be served.

1,765,349. CASING-IN MACHINE. CARL SCHRAMM, West Hartford, and ERNEST WAYNE CLARK, Hartford, Conn., assignors to The Smyth Manufacturing Company, Hartford, Conn., a Corporation of Connecticut. Filed Dec. 10, 1929. Serial No. 413,044. 33 Claims. (Cl. 11—3.)

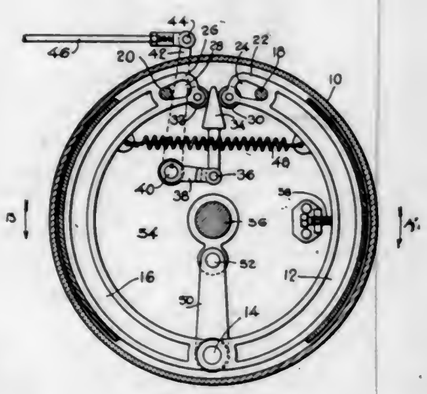
1. A casing-in machine comprising means for successively feeding fillers, means for receiving the fed fillers and carrying them inward, means which open the fillers as they are carried inward, a saddle upon which the fed fillers are deposited, means for heading the fillers on the saddle, elevator blades for lifting the fillers from the saddle, means for leveling the fillers on said blades, rolls movable toward and from the path of the fillers for applying adhesive to the sides of the fillers, means for rotating said rolls first opposite to and then in the same direction as the upward movement of the fillers, a case magazine, means for feeding cases successively from the magazine into the

path of the fillers, a former for shaping the backs of the cases as they are fed, means for folding the cases against the adhesive-coated sides of the fillers, means for pressing and lifting the cased fillers from the elevator blades, means



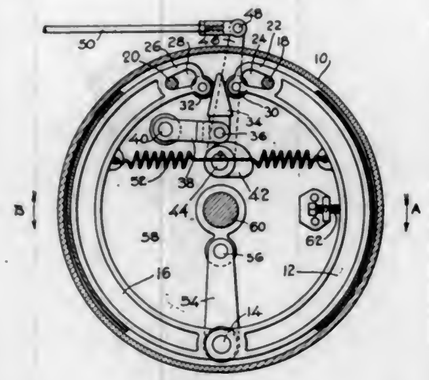
which grasp the cased fillers at the backs and remove them from the path of the elevator blades and deposit them on a discharge chute, and means actuated from the filler feeding means for disconnecting the case feeding means upon the failure of the filler feed to receive a filler.

1,765,350. BRAKE MECHANISM. ADIEL Y. DODGE, South Bend, Ind., assignor to Bendix Brake Company, a Corporation of Illinois. Original application filed Oct. 8, 1924, Serial No. 742,282. Divided and this application filed May 16, 1928. Serial No. 278,155. 1 Claim. (Cl. 188—78.)



Brake mechanism comprising, in combination with a rotatable brake drum, substantially inflexible brake shoes pivotally connected one to another said shoes arranged within the drum and having spaced apart free separable slotted ends, an anchor arranged within each slotted end to take the torque of the adjacent shoe when the drum is turned in one direction, said shoe adapted to travel over said anchor when the drum is turned in the opposite direction to urge the anchored shoe against the drum, operating mechanism including a floating wedge adapted to be urged between the free ends of said shoes and a pivotally supported link carrying at its free end the pivotal connection for said shoes, said link together with the anchors providing a three-point support for the brake shoes.

1,765,351. BRAKE MECHANISM. ADIEL Y. DODGE, South Bend, Ind., assignor to Bendix Brake Company, a Corporation of Illinois. Original application filed Oct. 8, 1924, Serial No. 742,282. Divided and this application filed May 16, 1928. Serial No. 278,156. 2 Claims. (Cl. 188—78A.)

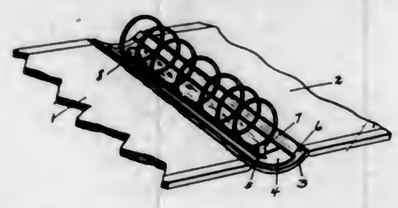


1. Brake mechanism comprising, in combination with a rotatable brake drum, substantially inflexible brake shoes directly pivoted together and arranged within the drum having spaced apart free separable slotted ends, an anchor arranged within each slotted end to anchor the shoes when the drum is rotating in the direction to bring either shoe against its anchor while permitting the said shoe to travel over the anchor when the drum is turning in the opposite direction to apply the anchored shoe to the drum, a wedge member pivotally supported at the free end of a pivotally mounted link, operating mechanism comprising a rotatably supported involute cam engaging the pivoted end of said wedge member to urge it between the shoes to spread said shoes against the drum, and a swinging link supporting the pivotal connection between said shoes.

1,765,352. CATALYTIC OXIDATION OF AMMONIA. ALPHONS O. JAEGER, Crafton, Pa., assignor to The Selden Company, Pittsburgh, Pa., a Corporation of Delaware. Filed Apr. 14, 1928. Serial No. 270,162. 15 Claims. (Cl. 23—162.)

1. A method of oxidizing ammonia to oxides of nitrogen, which comprises passing ammonia admixed with an oxygen containing gas at an elevated temperature over a contact mass containing a multi-component zeolite.

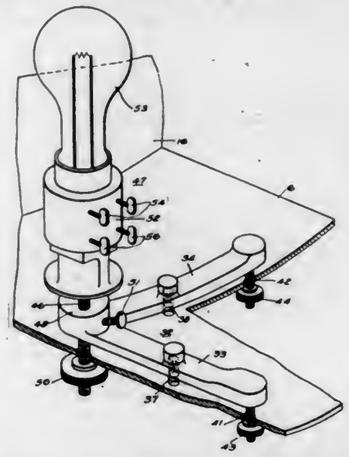
1,765,353. LOOSE-LEAF BINDER AND METHOD OF MANUFACTURING THE SAME. DON D. MYERS, Toledo, Ohio. Filed Mar. 14, 1928. Serial No. 261,549. 8 Claims. (Cl. 129—24.)



4. In a device of the class described, opposed covers, a back portion connecting said covers, a spring back plate

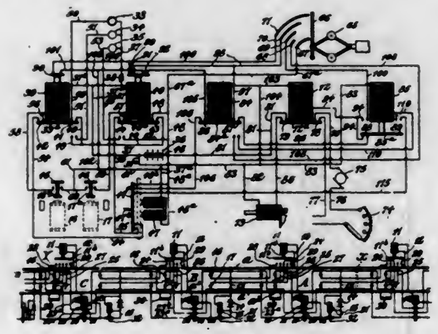
rigidly secured to said back portions, stop posts having cross-heads rigidly secured in the opposite ends of said spring back plate, a pair of ring-carrying plates each having on its inner longitudinal edge adjacent one end thereof a slot adapted to permit the passage therethrough of a portion of a cross-head on a post, means on the inner longitudinal edges of the ring-carrying plates whereby they are held in pivotal relation with each other, and means on the outer longitudinal edges of the spring back plate for the reception and retention of the outer longitudinal edges of the ring-carrying plates.

1,765,354. AIRPORT FLOOD-LIGHTING PROJECTOR. OSCAR WERNER, South Bend, Ind., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed June 22, 1927. Serial No. 200,565. 7 Claims. (Cl. 240—44.)



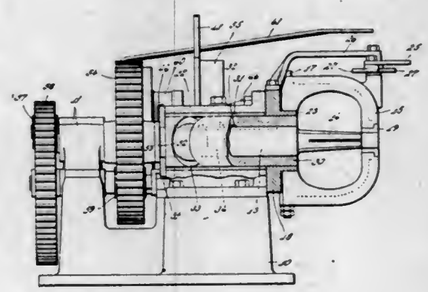
2. A focusing device comprising means for mounting said device on a lamp housing, an L-shaped member, a lamp standard mounted at right angles at the intersection of the branches of said L-shaped member, adjusting means at said intersection, and adjusting means at the ends of said L-shaped members whereby three-dimensional adjustment of the lamp standard is secured.

1,765,355. AUTOMATIC TRAIN CONTROL AND SIGNAL. CHARLES W. BREWSTER, New York, N. Y., assignor, by mesne assignments, to Sprague Safety Control and Signal Corporation, New York, N. Y., a Corporation of Virginia. Filed Jan. 6, 1916. Serial No. 70,579. 96 Claims. (Cl. 246—63.)



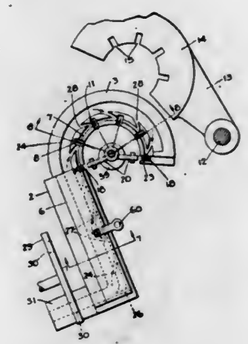
1. A system of train control embodying electrical means upon a track and a moving vehicle cooperating independently of mechanical contact to effect a reduction in the speed of a vehicle approaching a preceding vehicle, said electrical means operating to effect a speed reduction of the first vehicle proportionately to the distance separating the two said vehicles.

1,765,356. SCRAP-BUNDLING MACHINE. FRANK P. PRINDLE, New Britain, Conn., assignor to The Stanley Works, New Britain, Conn., a Corporation of Connecticut. Filed Oct. 27, 1927. Serial No. 229,165. 19 Claims. (Cl. 100—1.)



1. A machine for bundling scrap including a rotary spindle having an arbor, a bundle former about said arbor comprising two sections pivoted for lateral movements, and means independent of said former and rotatable with and movable longitudinally of said spindle for freeing the bundle therefrom when said former is opened.

1,765,357. FILAMENT-MOUNTING MACHINE. JAKOB REGENSTREIF, Berlin, Germany, assignor to General Electric Company, a Corporation of New York. Filed May 3, 1928, Serial No. 274,877, and in Germany May 17, 1927. 10 Claims. (Cl. 176—3.)

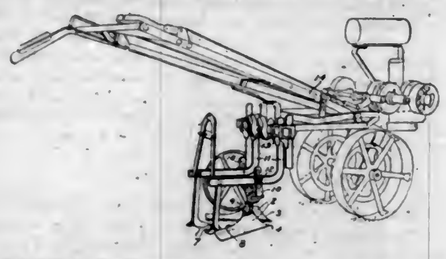


1. In a device for mounting a coiled filament by threading it thru loops on the outer ends of radial anchors on

a stem, the combination of a guide having a curved conduit for the filament and radial slots across said conduit to permit the loops on the outer ends of the anchors to be placed across said conduit, a filament feeder having a straight feed groove with its outlet end in registry with the inlet end of said curved conduit, and means for sliding the filament endwise along the feed groove and said conduit to thread it thru the anchor loops across said conduit.

1,765,358. CULTIVATOR. FORREST V. DONALD, Port Washington, Wis., assignor to Gilson Manufacturing Company, Port Washington, Wis., a Corporation of Wisconsin. Filed Nov. 26, 1926. Serial No. 150,687. 3 Claims. (Cl. 97—170.)

1. In a cultivator, a pair of oppositely disposed but slightly staggered rearwardly diverging shares having backwardly and inwardly inclined front cutting edges and having trailing ends of considerably less height than the forward portions thereof adapted to advance entirely beneath the ground, the lower edges of said shares lying in approximately the same plane and being rectilineal throughout the length of the shares, means for supporting said



shares in fixed position relative to each other, and a spreading device located in the path of travel of the trailing end of each of said shares for distributing material passing thereover across the path of said share.

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Patents Nos. 1,765,359 to 1,768,532

THE

OFFICIAL GAZETTE

OF THE

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Patents	3,174—No.	1,765,359 to No.	1,768,532, inclusive.
Total	3,388		

PLANT PATENTS

[PUBLIC—No. 245—71ST CONGRESS]

[S. 4015]

An Act To provide for plant patents

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That sections 4884 and 4886 of the Revised Statutes, as amended (U. S. C., title 35, secs. 40 and 31), are amended to read as follows:

"SEC. 4884. Every patent shall contain a short title or description of the invention or discovery, correctly indicating its nature and design, and a grant to the patentee, his heirs or assigns, for the term of seventeen years, of the exclusive right to make, use, and vend the invention or discovery (including in the case of a plant patent the exclusive right to asexually reproduce the plant) throughout the United States and the Territories thereof, referring to the specification for the particulars thereof. A copy of the specification and drawings shall be annexed to the patent and be a part thereof.

"SEC. 4886. Any person who has invented or discovered any new and useful art, machine, manufacture, or composition of matter, or any new and useful improvements thereof, or who has invented or discovered and asexually reproduced any distinct and new variety of plant, other than a tuber-propagated plant, not known or used by others in this county, before his invention or discovery thereof, and not patented or described in any printed publication in this or any foreign country, before his invention or discovery thereof, or more than two years prior to his application, and not in public use or on sale in this country for more than two years prior to his application, unless the same is proved to have been abandoned, may, upon payment of the fees required by law, and other due proceeding had, obtain a patent therefor."

SEC. 2. Section 4888 of the Revised Statutes, as amended (U. S. C., title 35, sec. 33), is amended by adding at the end thereof the following sentence: "No plant patent shall be declared invalid on the ground of noncompliance with this section if the description is made as complete as is reasonably possible."

SEC. 3. The first sentence of section 4892 of the Revised Statutes, as amended (U. S. C., title 35, sec. 35), is amended to read as follows:

"SEC. 4892. The applicant shall make oath that he does verily believe himself to be the original and first inventor or discoverer of the art, machine, manufacture, composition, or improvement, or of the variety of plant, for which he solicits a patent; that he does not know and does not believe that the same was ever before known or used; and shall state of what country he is a citizen."

SEC. 4. The President may by Executive order direct the Secretary of Agriculture (1) to furnish the Commissioner of Patents such available information of the Department of Agriculture, or (2) to conduct through the appropriate bureau or division of the department such research upon special problems, or (3) to detail to the Commissioner of Patents such officers and employees of the department, as the commissioner may request for the purposes of carrying this Act into effect.

SEC. 5. Notwithstanding the foregoing provisions of this Act, no variety of plant which has been introduced to the public prior to the approval of this Act shall be subject to patent.

SEC. 6. If any provision of this Act is declared unconstitutional or the application thereof to any person or circumstance is held invalid, the validity of the remainder of the Act and the application thereof to other persons or circumstances shall not be affected thereby.

Approved, May 23, 1930.

NOTICE—PHOTOSTATS AND PHOTOPRINTS—CHANGE IN FEES—EFFECTIVE JULY 1, 1930

Under the amendment to Rule 191, effective July 1, 1930, the price of photostat copies of records and photoprints of drawings will be 20 cents per sheet regardless of size.

THOMAS E. ROBERTSON,
Commissioner of Patents.

Condition of Applications Under Examination at Close of Business June 13, 1930

Room No.	(Total number of applications awaiting action, excluding Trade-Mark Division, 120,317; Trade-Mark Division, 2,040. Oldest new case, Aug. 7, 1929; oldest amended, Aug. 8, 1929. The dates given are 1929 except where † indicates 1930.) DIVISIONS, EXAMINERS, AND SUBJECTS OF INVENTIONS	Oldest new application awaiting office action: New	Oldest new application awaiting office action: Amended	No. of applications awaiting action
112	1. LOEFFLER, F. A., Closure Operators; Fences; Gates; Tillage; Scattering Unloaders; Handling and Hoist Line Implements.	Oct. 3	Oct. 28	1,350
126	2. HADEN, C. F., Bee Culture; Dairy; Presses; Tobacco	Sept. 18	Aug. 30	2,230
331	3. LINDSEY, A., Heating; Metal Founding; Metallurgy; Metal Treatment	Sept. 6	Jan. 10	1,613
234	4. MERRITT, A. D., Conveyers; Hoists; Handling Apparatus; Excavating	Nov. 12	Nov. 14	1,317
108*	5. MACNAB, J. F., Harvesters; Music; Acoustics; Sound Recording; Knotters	Sept. 16	Sept. 28	1,490
318	6. LEWERS, A. M., Carbon Chemistry	Aug. 9	Aug. 12	2,448
106	7. JARBOE, C. O., Optics; Photography	Aug. 26	Aug. 28	2,679
133	8. HENRY, C. C., Beds; Chairs; Kitchen and Table Articles; Racks and Cabinets	Sept. 9	Oct. 29	1,950
221	9. ADAMS, R. E., Pumps; Fluid and Fluid-Current Motors	Nov. 20	Dec. 2	1,488
118	10. HUNTER, O. F., Land Vehicles—Animal Draft Appliances, Bodies and Tops	Aug. 19	Sept. 12	1,815
148*	11. ARMSTRONG, H. C., Boots, Shoes, and Leggings; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Whip Apparatus.	Nov. 26	Dec. 13	1,044
380	12. PIERCE, P. P., Machine Elements	Oct. 11	Oct. 23	1,707
154*	13. CLIFT, J. W., Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Working; Needle and Pin Making; Turning; Boring and Drilling.	Sept. 18	Sept. 18	1,647
102*	14. BRUMBAUGH, N. J., Farriery; Metal Bending; Metal Tools and Implements, Making; Sheet-Metal Ware, Making; Wire Fabrics; Wire Working; Metal Working, Assembling, and Blanks and Processes.	Aug. 19	Aug. 20	1,487
329	15. WORRELL, L. W., Glass; Plastic Block and Earthenware Apparatus; Plastics	Aug. 19	Aug. 24	3,101
242*	16. SPENCER, C. J., Telegraphy; Telephony	Sept. 10	Oct. 1	1,338
307	17. RAFTER, G. S., Label Pasting and Paper Hanging; Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet-Material Associating or Folding; Sheet or Web Feeding; Type Setting.	Aug. 13	Sept. 13	1,721
229	18. PORTER, M. E., Motors, Expansible-Chamber Type; Power Plants; Speed-Responsive Devices	Oct. 18	Oct. 15	1,553
236	19. GLASCOCK, E. S., Furnaces; Heating Systems; Liquid and Gaseous Fuel Burners; Stoves and Furnaces.	Sept. 10	Aug. 26	2,367
179	20. GROVE, S. D., Miscellaneous Hardware; Closure Fasteners; Locks and Latches; Safes; Undertaking.	Sept. 30	Oct. 8	1,669
212	21. THOMPSON, T. J., Textiles; Cloth Finishing	Oct. 25	Dec. 28	943
244*	22. COLWELL, J. H., Aeronautics; Firearms, Ordnance, and Explosive Devices; Air Guns, Catapults, and Targets; Boats and Buoys; Ships; Marine Propulsion.	Oct. 21	Nov. 26	1,677
217	23. GROESBECK, W. D., Coin Handling; Recorders; Registers	Aug. 29	Sept. 7	1,184
147*	24. DURAS, C. O., Apparel; Apparel Apparatus; Garment Supporters; Sewing Machines	Aug. 19	Sept. 3	1,324
202*	25. LIGHTFOOT, J. H., Agitating; Butchering; Classifying Solids; Centrifugal-Bowl Separators; Mills; Threshing; Vegetable and Meat Cutters and Comminutors.	Sept. 19	Oct. 1	1,660
228*	26. HODGES, J. S., Electricity, Generation; Motive Power	Sept. 18	Sept. 17	1,293
214	27. ANDERSON, L. S., Brush, Broom, and Mop Making; Brushing, Scrubbing, and General Cleaning; Laundry; Washing Apparatus.	Sept. 7	Sept. 10	1,664
225	28. BENSON, A. R., Internal-Combustion Engines	Sept. 16	Sept. 18	2,332
160*	29. MORRIS, B. N., Woodworking; Tools; Compound Tools	Jan. 6	Jan. 7	737
248	30. SHIPMAN, J. L., Automatic Temperature and Humidity Regulation; Illuminating Burners; Illumination; Thermostats and Humidostats.	Sept. 19	Mar. 18	1,213
312	31. HOLMES, W. N., Distillation; Gas, Heating and Illuminating; Mineral Oils	Aug. 29	Aug. 23	2,814
249	32. BARTHOLOMEW, J. A., Gas and Liquid Contact Apparatus; Heat Exchange; Gas Separation	Nov. 2	Nov. 7	1,733
152	33. WYMAN, W. I., Bridges; Masonry and Concrete Structures; Metallic Building Structures; Roads and Pavements; Roofs; Wooden Buildings.	Sept. 12	Sept. 11	2,600
304	34. SIMPSON, G. R., Electricity, Transmission to Vehicles; Pneumatic Dispatch; Railways, Rolling Stock, Switches, and Signals; Store Service; Vehicle Fenders.	Oct. 2	Oct. 15	1,203
116*	35. REYNOLDS, E. C., Buckles, Buttons, Clasps, Etc.; Card and Sign Exhibiting; Signals; Toilet	Nov. 4	Dec. 2	1,773
105	36. MORTON, G. L., Automatic Weighers; Geometrical and Measuring Instruments; Force Measuring	Oct. 7	Oct. 17	2,404
224*	37. WEAVER, M. E., Electricity, Circuit Makers and Breakers	Sept. 26	Sept. 27	2,102
145	38. KRAFFT, C. F., Animal Husbandry; Earth Boring; Hydraulic and Earth Engineering; Mining, Quarrying, and Ice Harvesting; Stoneworking; Wells.	Sept. 3	Sept. 3	1,446
220	39. COWLES, A. W., Fluid-Pressure Regulators; Multiple Valves; Valves; Water Distribution	Sept. 3	Sept. 5	2,001
262*	40. OBERLIN, J. J., Bottles and Jars; Receptacles	Aug. 14	Oct. 24	3,429
125	41. BROWN, J. I., Land Vehicles, Wheels, and Axles; Resilient Tires and Wheels; Wheel Substitutes; Railway Draft Appliances.	Nov. 14	Nov. 15	1,401
223*	42. CUTTING, H. O., Electric Signaling	Oct. 22	Nov. 9	1,600
124*	43. HOPKINS, F. M., Baths, Closets, Sinks, and Spittoons; Sewerage; Electricity, Medical and Surgical; Medicines; Surgery; Dentistry; Artificial Body Members.	Aug. 16	Aug. 16	2,213
253	44. SHAFFER, C. H., Dispensing; Filling and Closing Portable Receptacles; Refrigeration	Aug. 7	Aug. 9	2,471
379	45. GILES, A. H., Pulleys and Shafting; Lubrication; Bearings and Guides; Spring Devices	Sept. 9	Sept. 6	2,560
233	46. WOLCOTT, C. L., Concentrating Evaporators; Fluid Sprinkling, Spraying, and Diffusing; Fire Extinguishers; Liquid Heaters and Vaporizers.	Oct. 1	Oct. 1	1,676
264	47. BARKER, H., Clutches and Power Stops; Brakes and Motors	Aug. 16	Sept. 23	2,612
212*	48. ROEPKE, O. B., Electricity, General Applications	Sept. 13	Sept. 19	1,410
239	49. EDINBURG, F. P., Check-Controlled Apparatus; Domestic Cooking Vessels; Ventilation; Driers; Liquid Separation or Purification.	Dec. 6	Dec. 18	1,351
322	50. BLAKE, C. L., Plastic and Liquid Coating Compositions; Coating	Aug. 31	Sept. 13	2,964
240*	51. BACKUS, C. D., Radiant Energy, Wave Transmission	Sept. 16	Sept. 16	2,471
144	52. MORGAN, E. T., Supports; Chucks; Joint Packing; Pipe and Rod Joints or Couplings; Tool-Handle Fastenings.	Oct. 16	Oct. 21	2,757
201*	53. PECK, M. K., Books; Manifolding; Printed Matter; Stationery, Educational Appliances; Paper Files and Binders; Tents, Canopies, Umbrellas, and Canes; Curtains, Shades, and Screens.	Dec. 10	Nov. 20	1,347
241	54. LANE, C. H., Electric Lamps; Conductors; Vapor Electric Devices; Space Discharge Tubes	Aug. 21	Aug. 22	3,033
102	55. BOWEN, S. T.—Bread, Pastry, and Confection Making; Cutlery	†Apr. 1	†Mar. 15	386
	55. BOWEN, S. T.—Designs	†May 15	†May 24	521
309	56. PORTER, F. J., Electrochemistry; Laminated Fabrics; Paper Making; Substance Preparation	Aug. 30	Sept. 12	2,585
257*	57. NICOLSON, G. D. G., Cutting and Punching; Bolt, Nut, Rivet, Nail, Screw, Chain, and Horseshoe Making; Driven and Screw Fastenings; Jewelry; Nut and Bolt Locks.	Aug. 9	Aug. 24	1,204
270*	58. DOWELL, E. F., Abrading; Typewriting	Aug. 19	Aug. 8	1,544
315	59. RICHARD, V. I., Chemistry; Alcohol; Fertilizers; Cement and Lime; Hides, Skins, and Leather; Fuel	Aug. 20	Aug. 26	2,241
213*	60. GLASS, R. L., Electricity, Heating, and Welding; Batteries; Resistances and Rheostats; Prime Mover Dynamo Plants; Conduits and Housings.	Aug. 30	Sept. 6	2,516
269	61. PARKS, G. E., Elevators; Winding and Reeling; Pushing and Pulling; Fire Escapes; Ladders; Scaffolds; Velocipedes; Horology; Time-Controlling Apparatus.	Aug. 13	Aug. 22	2,735
248*	62. COCHRAN, W. W., Toys; Amusement Devices; Furniture; Fishing and Trapping; Baggage; Package and Article Carriers.	Aug. 29	Aug. 27	2,529
300	63. WINKELSTEIN, A. H., Bleaching and Dyeing; Explosive, Pyrotechnic, and Match Compositions; Oils, Fats, and Glue; Preserving; Sugar, Starch, and Carbohydrates.	Sept. 3	Sept. 5	2,554
163	TRADE-MARKS, LABELS, AND PRINTS: F. A. RICHMOND.—Trade-Marks	†May 13	†May 29	1,797
	TRADE-MARKS, LABELS, AND PRINTS: F. A. RICHMOND.—Labels and Prints	†May 14	†May 31	243

* Refers to room numbers in the annex.

DECISIONS IN PATENT AND TRADE-MARK CASES

U. S. Court of Customs and Patent Appeals

IN RE GILLAM

No. 2,212. Decided March 3, 1930

[37 F. (2d) 959]

PATENTABILITY—TIRE ADAPTER.

Claims for a metallic tire adapter *Held* patentable.

APPEAL from the Patent Office. Reversed.

Mr. Albert E. Dieterich for Gillam.

Mr. T. A. Hostetler for the Commissioner of Patents.

GRAHAM, *P. J.:*

Wallace R. Gillam, the appellant, filed his application, Serial No. 5,868, on January 30, 1925, for a patent on an improvement in rim adapters. Eight claims in all were filed, of which claim No. 7 was allowed and the balance rejected by both the Examiner and the Board of Appeals.

Claim one, which is typical of all the claims, is as follows:

1. In a means for the conversion of a pneumatic-tired wheel of standard make having a fixed rim formed of an annular band and side walls having rim seats at their edges formed to receive a pneumatic-tire with its demountable rim, into a cushion-tired wheel; the combination with the fixed rim, of an adapter comprising a channelled ring having a peripheral wall and side walls, one of said side walls having a flange to seat on one of the fixed rim side wall flanges, the other side wall of the adapter having a seat portion adapted to seat on the other rim seat of the fixed rim, means carried by said adapter and lapping over one of the side walls of said fixed rim and apertured to receive securing bolts, and securing bolts passed through said fixed rim side walls and said apertures to secure said adapter in place, and a cushion-tire rim carried by said adapter and secured to the same, the radius of the adapter and the cushion tire rim being such that said radius plus the thickness of the cushion tire which is carried by the rim will be substantially the same as the radius of the penumatic tire and demountable rim it replaces, so that the adapter and its cushion rim may have substantially the same tread circumference as the replaced pneumatic tire and demountable rim.

The Board of Appeals, in affirming the decision of the Examiner, rejected said claims one to six, inclusive, and eight, on certain references, to wit: Nice, 369,202, Aug. 30, 1887; Booth, 1,469,769, Oct. 9, 1923; Wagenhorst, 1,509,382, Sept. 23, 1924; Spence, French, 432,592, of 1911.

The references to Nice, Booth, and Wagenhorst were incidental, referring largely to devices having tires shrunken on metallic rims, and to demountable rims. In this respect these three cited references embody applications of the art well known for a long period.

The principal reference relied upon is the patent to Spence. This is a French patent, No. 432,592, class X—1, and was granted October 7, 1911, and published December 9, 1911. In the case of foreign patents it has been held that they cannot be measured as anticipatory by what might be made out of them, but only what is clearly and definitely expressed in them. *Henifen* v. *Armitage*, 117 F., 845; *Cimiotti* v. *American*, 120 F. 672; *In re Ek*, 57 App. D. C. 203, 19 F. (2d) 677, 364, O. G. 1021; *DeLore* v. *St. Louis Lith Co.*, 26 F. (2d) 864.

The invention of the appellant, in substance, consists of a metallic adapter which he interposes between a rim bearing a cushion or other tire and the ordinary rim mounted upon the felly of an automobile wheel. The object of the device is to produce a means by which an automobile wheel of ordinary type and with an ordinary rim on the felly, may be used to accommodate a rim and tire of a different size and type than that intended to be used on the wheel by its maker. As is generally known, balloon tires are much larger in diameter than cushion or high-pressure pneumatic tires. Therefore the wheel, felly, and rim of cars intended to be used with balloon tires are smaller in diameter than wheels, fellies, and rims, which are used with cushion or high-pressure tires. Appellant has perfected an annular adapter which will fit any style of rim on any automobile wheel, and by means of which the same wheel, felly, and rim can be used, without change, on a tire of different size, character, and diameter. His method of accomplishing this is well stated in count one heretofore quoted.

The Patent Office is of opinion that the Spence patent is anticipatory of the application of appellant. We have examined it with great care, being loath to reverse the decision of the experts in the Patent Office unless there is clear justification for so doing. However, we are of opinion that there is a clear distinction between the idea embodied in the Spence patent and the application here in issue, and that this distinction is essential. In the Spence patent the device consists of an ordinary metallic rim to hold a tire, to which is bolted a fastening piece turned in such a way as to form a fold on the inner side and a flange on the outer face of the wheel, which flange has bolt holes through which bolts are inserted to fasten the rim and fastening piece to the felly. In this respect the device simulates the device of Gillam. However, in one essential detail, Spence differs from Gillam. Spence provides that the rim and fastening piece shall be attached to the felly in connection with a special fastening piece of metal having a flange on the inside and being applied against the outer peripheral circle of the rim of the wheel, and which said fastening piece must be bolted to the felly in lieu of the ordinary rim, and which can only be applied after such ordinary rim has been removed. In other words, Spence does not described a device which can be placed on the ordinary felly and rim of any automobile wheel,

but his device makes it necessary to remanufacture the ordinary felly and wheel by the removal of the rim which customarily is supplied with them. It is only after this is done that the Spence device can be utilized.

We thus observe that the principal utility of the device which appellant has in mind, namely, to take ordinary stock automobile wheels and fit them with any kind of tires desired, was lacking in the Spence patent, which could only utilize such changed tires after the stock rims had been removed. In view of the suggestions we have concluded the Patent Office has overlooked this essential detail, and that Gillam is entitled to the allowance of his claims one to six, inclusive, and eight.

It has been brought to our attention by counsel for appellant that since the present appeal was perfected, the Patent Office has permitted the filing of amended claims herein, and has caused certain interference issues to be made up between this application, as amended, and a certain other application. These are not issues that concern us here. Our only jurisdiction is to review the final decision of the Patent Office, as shown by the record before us, in its refusal to grant a patent upon the claims rejected. *Ritter* v. *Krakau*, 24 App. D. C. 271, 114 O. G. 1553.

The decision of the Board of Appeals is reversed.

Reversed.

U. S. Court of Customs and Patent Appeals

JANETTE *v.* FOLDS AND PERSONS

No. 2,322. Decided March 3, 1930

[38 F. (2d) 361]

1. INTERFERENCE—PRIORITY.

Evidence reviewed and *Held* to establish that F. and P. were the first to conceive the invention and the first to reduce it to practice and are therefore entitled to the award of priority.

2. SAME—SAME—REDUCTION TO PRACTICE.

Mere accidental practice does not constitute a reduction to practice.

APPEAL from the Patent Office. Affirmed.

Mr. Chas. D. Davis and *Mr. Glenn S. Noble* for Janette.

Mr. Robt. L. Ames and *Mr. Bertram W. Coltman* for Folds and Persons.

GRAHAM, *P. J.*:

On May 15, 1925, George R. Folds and Lawrence M. Persons filed their joint application, Serial No. 30,578, for a patent on a combined safety device and resetting mechanism relating to liquid-fuel-burning systems. The device, as set forth in the application, is, in brief, a fuel pump operated by an electric motor. The motor circuit is controlled by a float-controlled switch mechanism. This mechanism consists of three floats within a cylindrical receptacle. The fuel is pumped into and through this receptacle, where it rises to a predetermined level controlled by a float operating an electric switch. When the fluid reaches such a level as will depress the middle float, the switch closes and the motor starts; the receptacle will then fill until the fluid reaches a high level therein, when another float rises and breaks the electric circuit, stopping the pump. The mechanism thus ordinarily operates with these two floats, alternatively closing and opening the electric circuit. Another lower float is provided, which, in case a leak or break in the pipe line below the pump drains the receptacle, operates to open the circuit, and stop the pump.

This application also disclosed a similar operation to be performed by a single float and switch.

On April 24, 1925, John T. Janette had filed his application, Serial No. 25,530, for a similar device to be controlled by one float.

On December 7, 1925, an interference was declared between said copending applications, the application of one Albert B. Frenier for an auxiliary control device being also joined in said interference. Frenier filed his application December 12, 1924, Serial No. 755,586, but as he took no testimony and filed no brief, he was restricted by the Examiner to his filing date for conception and reduction to practice. No appeal has been taken by him from such decision.

The counts in this interference are three, and are as follows:

1. In a float controlled liquid feeding apparatus, including a pump, a motor, an electric circuit for said motor, a float chamber, and a float adapted to control the opening and closing of said circuit at predetermined high and low levels of the liquid in said float chamber, and normally inoperative means for opening said circuit when the liquid in said float chamber falls below the said low level.

2. A pumping apparatus for pumping liquid into a receptacle, provided with controlling means whereby the pump will be stopped when the liquid reaches a predetermined upper level, will be started when the liquid reaches a predetermined intermediate level and will be stopped when the liquid reaches a predetermined lower level.

3. Float actuated means for a pump, adapted to stop the pump when the liquid in the float chamber reaches an upper level, to start the pump when the liquid reaches an intermediate level, and to stop the pump when the liquid reaches a lower level.

In their preliminary statement, Folds and Persons claim they conceived and made the first disclosure and drawings of the invention in question in January, 1924: that they made a written description thereof in May, 1924, and in the same month made a full-sized operable device and successfully operated the same; that since that time they have made and sold a large number of the same. Janette claims, in his second amended statement, that he conceived the invention in February, 1924, made drawings of portions of it in June, 1924, and a complete drawing in November, 1924, a written description in December, 1924, explained the invention to others on or about February 1, 1924, embodied his invention in a full-sized device in February, 1924, and at that time successfully operated the same, and that since that time he has manufactured and sold a large number thereof.

In support of the issues, both parties took testimony and a very large record is the result. The Examiner of Interferences, after an apparently very careful examination of the record, awarded priority to the junior party, Folds and Persons. On appeal, after a like exhaustive examination and discussion of the testimony, the Board of Appeals came to the same conclusion. These decisions, concurring, will not be disturbed unless manifestly wrong. *Beidler* v. *Caps*, 17 C. C. P. A. , 36 F. (2d) 122, 392 O. G. 241; *Clancy* v. *De Jahn*, 17 C. C. P. A. , 36 F. (2d) 131, 392 O. G. 244.

[1] The facts, as disclosed by the record made by the junior party, Folds and Persons, are as follows: George R. Folds was the manager of, and Lawrence M. Persons was employed as an engineer by, the Cook Electric Company of Chicago, in 1923. During 1922 this company had given its attention to an automatic fuel-supply system for automobiles. This proved impractical and thereupon the company engaged in the production of a pump known as "Cook type C", for use in connection with fuel-oil-burner systems. This pump was automatically controlled by a single float so arranged in a cylindrical receptacle that it closed an electric circuit and started the pump when at low level and opened it and stopped the pump at high level. These pumps were sold in large numbers in the latter part of 1923.

The party, Albert B. Frenier, was at that time connected with the American Nokol Company. In the fall of 1923, and continuing into June, 1924, Folds and Persons were in communication with Frenier, endeavoring to interest his company in their type of automatic pump. Frenier visited the Cook plant April 25, 1924, about this matter and at that time there was a discussion about a device to prevent flooding of a basement with oil in case of leakage of fuel from the feed pipes. Folds and Persons began to discuss this problem in the latter part of 1923 and first part of 1924 with various persons, among whom were J. S. Baker and Albert Wilkins. In January or February, 1924, Folds claims he prepared a rough sketch showing a two-float mechanism which would shut off the motor in case of a break or leak draining the oil from the auxiliary tank. Early in 1924 Folds and Persons also took up and discussed with the Underwriters' Laboratories this problem.

The type C pump was submitted to the Underwriters' Laboratories on April 9, 1924. At about the same time Folds and Persons set up and operated a two-float structure. This was submitted to the Underwriters' Laboratories soon after July 22, 1924, and about three or four weeks thereafter a three-float structure, identical with that described in the application of Folds and Persons herein, was also submitted. In the last of September or first of October, 1924, Folds had an interview with Frenier and he testifies that the three-float device had been submitted to the Underwriters' Laboratories before that time.

On September 29, 1924, a complete sketch of the three-float device in question was made and delivered to Folds' and Persons' attorney. During November, 1924, Folds and Persons caused to be installed in the home of Mr. Pierce, then the president of the Underwriters' Laboratories, one of their three-float fuel pumps. This device operated successfully for several months, until it was removed to give way to a single-float device of later design. The record seems to indicate that reasonable diligence was exercised after this device was completed and reduced to practice until application for patent was made. These facts seem to be reasonably well established by the testimony of many witnesses.

Janette testifies, in his own behalf, that he is president and treasurer of the Janette Manufacturing Company and of the Monroe Machine Tool Company; that, on July 30, 1912, he patented a two-position automatic control for motor-driven air compressors. This patent is No. 1,033,900, and has but two functions—starting and stopping. Thereafter, in 1912, he states he built a three-point switch, which was so constructed that if a hose blew off, creating an abnormal low pressure, the pump would stop. All these devices were used, chiefly, on beer pumps. He states that about twenty-five of these devices were made and sold. One of them has been introduced in evidence and shows that the switch was operated not by a float, but by a diaphragm. He did not seek for or obtain any patent on this three-point modification of his original control.

In 1913 Janette discontinued the three-position control by equipping his devices with a set screw which prevented the switch from going into the third position. He states that it was still possible to operate the third position by adjusting the set screw, but the evidence shows that they were never so adjusted by him. In February, 1924, he claims to have conceived the idea of an automatic fuel-oil control to operate by the same type of switch, and a sample of the device was offered. It, also, is equipped with a set screw to prevent the third position, and whether it was to be operated with a float or not, Janette does not disclose.

Nothing further was done by him until in June, 1924, when he says he developed the pump to operate by a float. In September, 1924, he states Mr. Frenier told him about a device on an oil-fuel pump to stop the flow when a break or leak occurred in the feed pipe. Thereupon he states he proceeded to develop, in September, a quick-break switch at an abnormally low level. An example of this device is offered as Exhibit 4, and is the first exhibit offered by him, except his original diaphragm beer pump control, which did not have a set screw to prevent the third position. In his experiments with these devices, Janette testifies that he used a pail of water and a float made of a gallon pail. Up until and including June, 1924, when he says he made his exhibit 3, Janette was using his set screw to prevent his switch from taking the third position.

Janette states further that he first sold devices such as his Exhibit 4 in December, 1924, although his circulars advertising the same were not issued until the latter part of 1925. Exhibit 4 was sub-

mitted to the Underwriters' Laboratories on March 31, 1925.

In support of his claims Janette also called the witnesses, Axel Anderson and Carl Norman, employees of Janette's Company. These witnesses corroborated Janette to some degree about his Exhibit No. 2, said to have been prepared in February, 1924, but neither of them saw the device fully completed or in operation. Norman also states he worked on Exhibits 3 and 4 in the latter part of August, 1924. The testimony of these witnesses is not satisfactory and fails to corroborate, definitely, the claims of Janette that his float-operated devices were fully completed, tested and operated prior to his date of filing. If there was not such corroboration, Janette could not succeed. *Winslow* v. *Austin*, 14 App. D. C. 137, 86 O. G. 2171.

From a consideration of this testimony we conclude that the Board of Appeals properly found Folds and Persons to be entitled to priority, and that Janette should be confined to his filing date, April 24, 1925, for conception and reduction to practice. In the first and third counts where the float mechanism is specifically called for, it is quite obvious that they conceived, disclosed and reduced to successful practice the mechanism in question before Janette had completely disclosed the same. By his own admission, he did not attempt to construct a float-controlled third-position switch until after he had talked with Frenier, who, in turn, doubtless received his information on the subject from Folds and Persons. His earlier devices were not float controlled, but operated with a diaphragm, which, in our view of the matter, was not an anticipation of Folds and Persons conception as set out in these counts.

[2] Count two is probably broad enough to include Janette's three-point switch as shown in his Exhibits 1 to 3, inclusive. There is nothing in the record, however, to indicate that Janette ever had any conception of any such function or use of the third emergency position of his switch as is here involved until after he had talked to Frenier and until after Folds and Persons had entered the field. He claimed nothing for it in his original application for patent and did not describe it therein. It appears, therefore, that the possible operation of the switch in a third position was accidental. Mere accidental practice does not constitute reduction to practice. *Thompson* v. *Smith*, 33 App. D. C. 284, 145 O. G. 513; *Clough* v. *Barker*, 106 U. S. 166, 174, 22 O. G. 2137; *Tilghman* v. *Proctor*, 102 U. S. 707, 19 O. G. 859.

We have been favored with an elaborate and well-prepared brief by counsel for appellee on a question raised on oral argument relative to the duty or right of this court to pass upon the patentability of a device in an interference proceeding where such device is involved. This is quite helpful to the court in its work. However, inasmuch as no issue of patentability is made on this record, we refrain from discussing the subject here.

The decision of the Board of Appeals is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

JANETTE *v.* PERSONS

No. 2,323. Decided March 3, 1930

[38 F. (2d) 364]

INTERFERENCE—PRIORITY.

Evidence reviewed and *Held* to establish that P. was the first to conceive the invention and the first to reduce it to practice and is therefore entitled to the award of priority.

APPEAL from the Patent Office. Affirmed.

Mr. Chas. D. Davis and *Mr. Glenn S. Noble* for Janette.

Mr. Robt. L. Ames and *Mr. Bertram M. Coltman* for Persons.

GRAHAM, *P. J.*:

This appeal was heard by the court with No. 2,322 and the cases were briefed together. The party Janette also relies on his application for patent, Serial No. 25,530, and his preliminary statement and record made by him in said No. 2,322, *Janette* v. *Folds and Persons*, 17 C. C. P. A. ——, 38, F. (2d) 361.

Lawrence M. Persons, the appellee, filed his application, Serial No. 85,370, for an improvement in automatic fuel oil pumps, on February 1, 1926, which application was a division of his copending application, Serial No. 43,064, filed July 13, 1925. On February 4, 1926, an interference was declared between said divisional application and the said application of the appellant, John T. Janette, Serial No. 25,530. The counts in the interference are two, and are as follows:

1. The combination with a motor driven pump, having a switch for controlling the circuit to the motor, of a float for actuating said switch, arranged so that the switch will be open when the float is in raised position, and will be closed when the float is in intermediate position, and will be opened when the float is in lowered position.

2. In a pumping apparatus, the combination of a source of supply, a receptacle, a motor driven pump for pumping liquid from the source of supply into said receptacle, a switch for controlling said motor, and a float in the receptacle, which is adapted to open the switch when the liquid reaches an upper level, to close the switch when the liquid reaches an intermediate level, and to again open the switch when the liquid reaches a lower level.

In appellee's preliminary statement he declares that he conceived and disclosed the invention in question in May, 1924; that he made the first drawing in August and a written description in December, 1924; and that on June 16, 1924, he reduced the invention to practice.

We held in *Janette* v. *Folds and Persons*, supra, that Janette should be confined to his filing date, April 24, 1925, for conception and reduction to practice. This record seems to show, quite definitely, an earlier conception and reduction to practice. This record seems to show, quite definitely, an earlier conception and reduction to practice by Persons of the invention in question.

The device shown by Persons' application is an alleged improvement upon the three float mechanism described in said *Janette* v. *Folds and Persons*, supra, and consists of a similar control operated by a single float, which float closes an electric circuit at normal low level, and opens it at normal high level and abnormal low level. Persons states that he first disclosed the subject matter of his invention to Folds, R. W. Schroeder and a person by the name of Brinker, sometime prior to April 9, 1924, at which time he suggested a lever on the automatic float switch which would open the circuit at an extreme low level; that soon thereafter he made and tested such a device in a bucket of oil. As the Underwriters' Laboratories seemed to prefer the multiple float structure, thereafter he prepared several of these. In June, 1924, one of his single float structures, Exhibit 39, equipped with a lever as theretofore conceived by him, prepared by an employee, Herman Hempel, was operated in the development room for two weeks. One of these single float devices was also submitted to the Underwriters' Laboratories in August, 1924, equipped with a mercury tube switch, which was in evidence as Exhibit 22. Shortly thereafter, complete tracings were made of the device, all of which are in evidence, preparatory to commercial production. In September, 1924, Persons explained this device to his patent attorney, Coltman. It appears that but the two devices, Exhibits 39 and 22, were assembled before the original application of Persons was made.

Person's testimony, in its essential details, is fully corroborated by Schroeder, of the Underwriters' Laboratories, Herman Hempel, his mechanic, and by several other apparently reliable witnesses. From this record we are convinced Persons conceived, fully disclosed and reduced to practice the invention here in issue not later than October 1, 1924. This being true, his conception and reduction to practice antedates that of Janette, and he is entitled to priority.

The decision of the Board of Appeals is, therefore, affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

MITCHELL *v.* MORRISON, WILLIAMS, AND TRAPP
TRAPP *v.* MORRISON, WILLIAMS, AND MITCHELL

Nos. 2,236 and 2,237. Decided March 3, 1930

[38 F. (2d) 356]

INTERFERENCE—PRIORITY.

Evidence reviewed and *Held* to establish that M. & W. were the first to conceive the invention and the first to reduce it to practice; that they did not conceal or suppress the invention and therefore are entitled to the award of priority.

APPEAL from the Patent Office. Affirmed.

Mr. A. V. Cushman, Mr. John B. Macauley, Mr. Luther E. Smith, and *Mr. Rodney Bedell* for Mitchell.

Messrs. Pennie, Davis, Marvin & Edmonds, Mr. Arba B. Marvin, Mr. George J. Hesselman, Mr. Richard K. Stevens, Mr. Daniel V. Mahoney, and *Mr. C. M. Fisher* for Trapp.

Mr. Harry F. Riley, Mr. C. J. Rollandet, Mr. Carlos G. Stratton, and *Mr. George C. Shoemaker* for Morrison and Williams.

GARRETT, *J.*:

These cases constitute an appeal and cross appeal in a three-party interference proceeding relating to the alleged invention of a time bomb for shooting oil wells.

The counts in issue are as follows:

1. In a well-shooting device, in combination, an exploding unit comprising a casing having a self-contained time controlling means, and an associated initial exploder, said unit being water tight and adapted to be preset in relation to the time controlling unit to set off the initial exploder whenever desired, and a main sand shattering exploder external to said shell and its self-contained features, and adapted to be operated by the explosion of the initial exploder within the shell.

2. In a well-shooting device, in combination, an exploding unit consisting of a shell of water tight construction, a time controlling means within said shell, and an initial exploder in said shell operable from said time controlling means, together with a main exploder external to the shell and adapted to be exploded by the initial exploder within the shell.

Upon the hearing the Examiner of Interferences in the Patent Office awarded priority to Mitchell. The Board of Appeals reversed the devision of the Examiner and awarded priority to Morrison and Williams, claiming to be joint inventors. Mitchell and Trapp both appeal from the decision of the Board and thus bring the matter before us.

The claim on behalf of Morrison and Williams, made through Harriet Morrison, as widow and administratrix of the estate of Jesse A. Morrison, deceased, and Williams, is that there was conception, production, and explanation to others of the invention on or about March 1, 1918, and reduction to practice on or about January 1, 1920. It is really insisted that their reduction to practice, in fact, took place at about the same time as the acts of conception, production, and explanation to others, but in filing the preliminary statement the date was given as about January 1, 1920, and having failed to secure an amendment they had to stand upon the later date, and this was assigned them by the Board's decision. Their application for patent was filed September 15, 1923.

On behalf of Mitchell the claim is that there was conception about May 1. 1921, drawings made about June 1, 1921, written description and explanation to others about December 15, 1921, completion of a full-sized machine about March 17, 1923, and successful operation thereof May 7, 1923. His application for patent was filed August 25, 1923.

The claim of Trapp in his preliminary statement is that he conceived in the year 1916 and made pencil sketches about March of that year; that in May, 1922, he explained his invention to others and in that same month embodied it in a full size device which was then successfully operated. His application for patent was filed January 17, 1923.

The case received very thorough consideration in the Patent Office and many different steps of procedure relating to it were had which there is no necessity for our reviewing. There was considerable testimony taken, all of which we have most carefully examined. To enter upon a review and analysis of this testimony would extend this opinion to an undue length with no compensating value therefor and we refrain from so doing.

If it be held that Morrison and Williams are entitled to the date assigned them by the Board for reduction to practice—that is about January 1,

1920,—and that there was no suppression, concealment or abandonment by them, such holdings are admittedly decisive of the question of priority, the only question with which we are concerned.

We think the Board of Appeals held correctly upon both of the stated questions.

The Examiner held that the evidence of the witnesses, McLoney and Horton, established the fact that a device produced and used in a well by Morrison near Bumback Springs, Colorado, in May, 1918, "did have every essential element called for by the counts in issue" and so "it would constitute conception."

It seems clear to us, as it apparently did to the Board of Appeals, that the testimony of these same two witnesses likewise established with equal clearness the fact that it was then and there used and that it functioned as it was intended to function, exploding at a predetermined time in the manner expected. This we think was reduction to practice.

The fact that in the pleading—the preliminary statement—a date subsequent to the actual date of reduction to practice was stated and that the parties did not succeed in their efforts to amend the statement, only affects the legal situation to the extent that in fixing the date legally effective the one named in the statement must control. It is a technical procedure rendered necessary no doubt for proper administration of the patent laws and provided for by the Patent Office rules.

This gives to the joint parties, Morrison and Williams, dates of conception, explanation to others, production and reduction to practice prior to either Trapp or Mitchell. It is true that Trapp claims conception in 1916, but this is not satisfactorily established, and, it is immaterial, since he does not claim explanation to others, production or reduction to practice earlier than May, 1922.

It was the view of the Examiner of Intereferences, to whose opinion reference may be had for a very terse and excellent review of the testimony in the case, that the use of the device at Bumback Springs constituted nothing more than "an abandoned experiment," and upon the theory of abandonment by Morrison and Williams he accorded priority to Mitchell, having determined against Trapp.

The Board of Appeals said upon this:

> The Bumback Springs test was made at the side of a highway. No attempt to conceal the invention was made. Subsequently wells located at other places were shot. The Morrison and Williams application was not filed until September 15, 1923, but we find nothing in the record to warrant the holding that the invention was concealed and abandoned after the reduction to practice in 1918.

While we do not find any very definite testimony to support the statement "subsequently wells located at other places were shot"—at least not before 1922, still we do not think there is any material evidence indicating suppression or concealment, and the record satisfies us that there was no error in the finding of the Board to the effect that it would not warrant a holding that there had been any abandonment which should defeat the Morrison and Williams claim.

We therefore concur with the Board of Appeals and affirm its decision.

Affirmed.

U. S. Court of Customs and Patent Appeals

WALTER BAKER & COMPANY, LTD., *v.* ALTAMAY CHOCOLATE COMPANY

No. 2,232. Decided February 21, 1930

[37 F. (2d) 957]

1. TRADE-MARKS—SIMILARITY—CHARACTER OF THE GOODS IS TO BE CONSIDERED.
In determining whether two marks as used upon chocolate preparations are confusingly similar "it must be remembered that chocolate is a food product in daily use, consumed by multitudes of people, and the same care and discrimination would not be exercised by an ordinary purchaser in buying it as would be the case in a more valuable non-consumable article, such as was involved in the case of *International Silver Company* v. *The American Silver Company* [395 O. G. 339]."

2. SAME—SAME.
A mark consisting of the representation of a woman in the act of pouring a liquid from a pot into a cup and the word "Altamay's" in large letters, used upon a compound of chocolate, powdered milk, and sugar, *Held* not confusingly similar to a mark consisting of the figure of a woman in a Quaker costume, wearing a cap and white kerchief about her shoulders, with a white apron, carrying a tray upon which appears a cup and saucer, used as a trade-mark for preparations of chocolate and cocoa, since the word "Altamay's" is the most prominent feature of the former mark and the one which first attracts the eye.

3. SAME—SAME.
Testimony that the opposer's goods are often called for as the "Chocolate Girl" products is not sufficient to justify a holding that the marks here involved are confusingly similar since the words "Chocolate Girl" would apply to any figure of a woman in connection with any representation having to do with chocolate and it is considered that the opposer possesses no exclusive rights to the figure of a woman in trade marks for chocolate.

APPEAL from the Patent Office. Affirmed.

Messrs. Putnam, Bell, Dutch & Santry, Mr. Stoughton Bell, Mr. John S. Prescott, and *Mr. Parker Dodge* for Walter Baker & Company, Ltd.

Mr. Arthur E. Wallace for Altamay Chocolate Company.

LENROOT, *J.:*

This is an appeal from the Commissioner of Patents, dismissing the opposition of appellant, Walter Baker & Company, Ltd., and allowing the registration of a trade-mark for appellee, Altamay Chocolate Company. The mark of appellant is used upon preparations of chocolate and cocoa, and that of appellee is used upon a compound of chocolate, powdered milk, and sugar. The goods upon which both marks are used have the same descriptive properties.

Appellee, on January 30, 1926, made application for registration of a composite mark consisting of a partial representation of a woman in the act of pouring a liquid from a pot into a cup, and the word "Altamay's" in large letters appearing at the left of the figure of the woman, said word being in width about twice the width of the said figure; under the name "Altamay's" is a paraph in solid black. There were other words in the combination, set out in appellee's application, but these have been eliminated and the case comes to us with the mark as above described.

The mark of appellant, first registered in 1905, consists of a figure of a girl or woman in a Quaker costume, wearing a cap and white kerchief about her shoulders, with a white apron, carrying a tray upon which appears a cup and saucer. Only the appellant took testimony.

The question in the case is whether the mark of appellee so nearly resembles that of appellant as to be likely to cause confusion or mistake in the mind of the public, or to deceive purchasers.

The only feature in common in the two marks is the figure of the woman. The Commissioner in his decision said:

> Unless it can be held the opposer is entitled to such protection as will preclude any later comer from using a trade-mark which includes any sort of a representation of a woman, it would seem the opposition can not be sustained. As was noted by the Examiner, the two marks have in common only the feature of the representation of the figure of a woman. The particular representations are quite different and have nothing else in common. The costume of opposer's waitress is wholly different from that shown in the figure adopted by the applicant, and there is nothing in common with the tray and the cups of the opposer's mark and the pot and cup of the applicant's mark. It is believed the holding in the case of *Nestle and Anglo-Swiss Condensed Milk Company* v. *Walter Baker & Company, Ltd.*, 167 O. G. 765, 37 App. D. C. 148, is controlling in the instant proceeding. In that adjudicated case the court found that appellee, opposer here, was not the originator of the mark and that the figure of a woman in various costumes had been many times registered as a trade-mark, and reached the conclusion that the opposer in the instant case was not entitled to such a broad interpretation of its mark or its rights as would preclude others from using any representation whatever of the figure of the woman in connection with goods of this character. It is believed the applicant's mark in the case at bar is more readily distinguishable from that of the opposer than was that of the appellant in the above noted adjudicated case.

[1] Were a comparison of the two figures of a woman all that is involved, we would be unable to agree with the conclusions of the Commissioner of Patents. It is true that there are pronounced dissimilarities in the two figures. They face in opposite directions. One is pouring a liquid into a cup, the other is carrying a tray. One is dressed in a full skirt and the other is not. One is a full-length figure, the other is half-length, with a mere line suggesting the lower portion of the figure. It is stated in the answer of the appellee to the notice of opposition that the figure in its mark is a picture of the wife of a member of the appellee firm. No proof was offered upon this point, and we mention it only to say that it is strange, if the figure represents a modern woman, that she was not clothed in a modern waitress's costume. While, as stated by the Commissioner, there are pronounced dissimilarities, were the figures of the two marks alone involved, we would be compelled to hold that they so nearly resembled each other as to be likely to cause confusion or mistake in the mind of the public. It must be remembered that chocolate is a food product in daily use, consumed by multitudes of people, and the same care and discrimination would not be exercised by an ordinary purchaser in buying it as would be the case in a more valuable nonconsumable article, such as was involved in the case of *International Silver Company* v. *The American Silver Company*, decided by us at this term.

[2] However, we agree with the Examiner of Interferences that appellee's mark must be considered as a whole. As we view it, the word "Altamay's" is the most prominent feature of the combination mark. It is that feature which first attracts the eye. It is in fanciful script, placed in an oblique angle to the figure, and is about twice its width, with a striking paraph in solid black underneath.

[3] Appellant introduced testimony that its goods were often called for and spoken of as the "Chocolate Girl" products, and contend that appellee's mark is confusingly similar to anyone who is accustomed to purchase appellant's goods under the name of "Chocolate Girl." But the Commissioner has correctly stated that appellant is not entitled to such protection as will preclude any later comer from using any sort of a representation of a woman. The words "Chocolate Girl" would apply to any figure of a woman in connection with any representation having to do with chocolate, however dissimilar in features, costume, or pose the two figures might be, and appellant concedes that it possesses no exclusive right to the figure of a woman in a trade-mark for preparations of chocolate.

We therefore think that the testimony as to purchasers of chocolate designating appellant's products as "Chocolate Girl" products is immaterial to the question here involved.

Considering the mark applied for by appellee in its entirety, and that the dominant feature of the mark is the word "Altamay's," we are of the opinion that it does not so nearly resemble that of appellant as to be likely to cause confusion or mistake in the mind of the public.

Should appellee vary the combination shown in his application by reducing the size of the word "Altamay's," or in any other way, making the representation of the woman the dominant feature of the mark, so that confusion is likely to result from the two marks, a court of equity can grant full relief to appellant.

The decision of the Commissioner is affirmed.

Affirmed.

Adverse Decisions in Interference

In interferences involving the indicated claims of the following patents final decisions have been rendered that the respective patentees were not the first inventors with respect to the claims listed:

Pat. 1,611,653, J. E. Lilienfeld, Rectifying apparatus for alternating current, decided May 9, 1930, claims 1, 9, and 11.

Pat. 1,634,871, A. L. Hepler, Septic tank, decided May 16, 1930, claim 3.

Pat. 1,681,101, John Coyle, Apparatus for treating food products in closed containers, decided May 10, 1930, claims 17 and 18.

Pat. 1,733,016, E. E. Hicken, Locomotive tenders, decided May 14, 1930, claim 1.

Final devision in interference has been rendered against the following trade-mark:

T. M. 254,464, Medical preparation in the form of a pill, Ygnacio Medino, of New Orleans, Louisiana. Registered May 26, 1929. Decided May 5, 1930.

Adjudicated Patents

(C. C. A. Mo.) Hill patent, No. 1,598,819, for apparatus for removing ink from printing-press inking rolls, *Held* not infringed. *Commercial Lithographing Co.* v. *Clean-A-Press Mach. Co.*, 39 F. (2d) 322.

(C. C. A. N. J.) Ray patent, No. 1,613,055, for composition for stopping leaks in hot-water-circulating systems, *Held* valid. *Radiator Specialty Co.* v. *Buhot*, 39 F. (2d) 373.

ORDER NO. 3,154

ACTIONS UNDER RULE 41 AS AMENDED JUNE 1, 1930

U. S. PATENT OFFICE, *Washington, June 9, 1930.*

1. Where an application is filed with claims specific to each of *more* than three species and a claim generic to all of them, the Examiner, in the first action, will cite the art resulting from a cursory examination, require division and that the applicant limit his specific claims to three species. A complete search upon the merits will not be made until the number of species specifically claimed is thus limited.

2. Where an applicant has complied with the requirement for division or election between claims for different species and there is included in the application a claim generic to all the species, such applicant may at any time prior to allowance or final rejection reinstate the claims specific to the other species, not to exceed in all three, only if a claim generic to all the species is allowed.

3. Where such a case as noted in 2 has proceeded to final rejection or allowance, the applicant may have the case reopened for the insertion of claims to the additional species only if a claim generic to all the species has been allowed or is found allowable on appeal. In the latter instance the claims to the various species would necessarily be allowable except as to matters of form in view of the allowance of the generic claim, and such claims to the additional species, not to exceed three in all, may be admitted under rule 78 if the application has been passed for issue.

4. Where an application is presented with claims specific to three species and a claim generic to all of them, and the Examiner after a *complete* search holds that the generic claim is not patentable, he will in his first action reject the generic claim and require the applicant to elect the species he prefers and restrict the specific claims to that species. As above indicated, should the Examiner at any time be persuaded, or on appeal it be held, that the generic claim is allowable, the claims to the different species may be reinstated.

WM. A. KINNAN,
Acting Commissioner.

Trade-Marks Canceled

148,378. Certain named electric tools, hoists, and circuit breakers. Chicago Pneumatic Tool Company, Chicago, Ill. Registered November 15, 1921. Canceled June 11, 1930.

192,312. Certain named men's, women's, and children's clothing. Clive E. Hockmeyer, Lowell, Mass. Registered December 2, 1924. Canceled May 17, 1930.

249,817. Linoleum. Carthage Mills Incorporated, Cincinnati, Ohio. Registered November 20, 1928. Canceled June 11, 1930.

252,609. Certain named medicines and pharmaceutical preparations. The Weinberger Drug Company, Cleveland, Ohio. Registered February 12, 1929. Canceled May 17, 1930.

254,874. Wire-drawing die. Union Wire Die Corp., New York, N. Y. Registered April 2, 1929. Canceled June 11, 1930.

256,032. Paprika and other spices. Emeterio Flores, New York, N. Y. Registered May 7, 1929. Canceled May 17, 1930.

261,067. Kerosene, gasoline, and lubricating oils and greases. Central Texas Refining Company, Brownwood, Tex. Registered September 3, 1929. Canceled May 17, 1930.

263,154. Linoleum. Carthage Mills Incorporated, Cincinnati, Ohio. Registered October 29, 1929. Canceled June 11, 1930.

263,343. Linoleum. Carthage Mills Incorporated, Cincinnati, Ohio. Registered November 5, 1929. Canceled June 11, 1930.

263,344. Linoleum. Carthage Mills Incorporated, Cincinnati, Ohio. Registered November 5, 1929. Canceled June 11, 1930.

263,345. Linoleum. Carthage Mills Incorporated, Cincinnati, Ohio. Registered November 5, 1929. Canceled June 11, 1930.

263,430. Linoleum. Carthage Mills Incorporated, Cincinnati, Ohio. Registered November 5, 1929. Canceled June 11, 1930.

263,831. Linoleum. Carthage Mills Incorporated, Cincinnati, Ohio. Registered November 12, 1929. Canceled June 11, 1930.

264,234. Moth repellent. Emanuel T. Blau, doing business as Super Chemical Products Co., New York, N. Y. Registered November 19, 1929. Canceled May 17, 1930.

264,600. Certain types of liquid pumps and woodworking saws, saw tables, and saw rigs. Chain Belt Company, Milwaukee, Wis. Registered November 26, 1929. Canceled June 11, 1930.

Disclaimer

1,734,624.—*Henry C. Harrison,* Port Washington, N. Y. PISTON DIAPHRAGM HAVING TANGENTIAL CORRUGATIONS. Patent dated November 5, 1929. Disclaimer filed June 9, 1930, by the assignee, by mesne assignments, *Western Electric Company, Incorporated.*

Hereby disclaim from the scope of said claim 11 of said Letters Patent any and all acoustical devices other than those in which the diaphragm driving means is attached to the diaphragm at points removed from the center thereof.

Please enter the disclaimer in the following words—i. e., in claim 11, at the end thereof, add "at points removed from the center thereof".

Notices of Cancellation

U. S. PATENT OFFICE, *Washington, May 26, 1930.*

Robert B. Karoff, his assigns or legal representatives, take notice:

A cancellation proceeding having been instituted by this Office upon the application of The American Products Company, of 3265 Colerain Avenue, Cincinnati, Ohio, to effect the cancellation of the trade-mark registration of Robert B. Karoff, of 45 East 17th Street, New York, N. Y., No. 222,205, dated December 28, 1926, and the notice of such proceeding sent by registered mail to the said Karoff at the said address having been returned by the post office as undeliverable, notice is hereby given that unless said Karoff, his assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the cancellation will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

U. S. PATENT OFFICE, *Washington, May 26, 1930.*

Roliand Ellis Thompson, his assigns or legal representatives, take notice:

A cancellation proceeding having been instituted by this Office upon the application of the Cliequot Club Company, of Millis, Mass., to effect the cancellation of the trade-mark registration of Roliand Ellis Thompson, of 505 D Street, N. W., Washington, D. C., No. 108,315, dated January 25, 1916, and the notice of such proceeding sent by registered mail to the said Thompson at the said address having been returned by the post office as undeliverable, notice is hereby given that unless said Thompson, his assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the cancellation will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

TRADE-MARKS

OFFICIAL GAZETTE, JUNE 24, 1930

[VOL. 395. No. 4]

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this publication.

Marks applied for " under the ten-year proviso " are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 1 of said act, a fee of ten dollars must accompany each notice of opposition.

CLASS 1

Raw or Partly-Prepared Materials

Ser. No. 285,173. REPUBLIC FUEL CO., Bay City, Mich. Filed June 6, 1929.

SILVER KING

For Coal.
Claims use since Nov. 6, 1928.

Ser. No. 285,551. CLARK-MCWILLIAMS COAL COMPANY, Clarksville, Ark. Filed June 14, 1929.

"IT'S AS HOT AS BLUE BLAZES"

CLARK-McWILLIAMS
BLUE BLAZE
ANTHRACITE

Applicant disclaims the right to the exclusive use of the words "It's as Hot as Blue Blazes, Blue Blaze," and "Anthracite" apart from the trade-mark as shown in the drawing.

For Coal.
Claims use since Oct. 9, 1928.

Ser. No. 298,346. MILWAUKEE CHAPLET & MFG. CO., Milwaukee, Wis. Filed Apr. 3, 1930.

TRIPOLEX

For Foundry Parting Compound.
Claims use since Dec. 16, 1929.

Ser. No. 298,460. ROBERTSON LEATHER COMPANY, INC., New York, N. Y. Filed Apr. 5, 1930.

RANI

For Tanned Leather Skins.
Claims use since December, 1928.

Ser. No. 298,531. FLORIDA GREENS CORPORATION, Leesburg, Fla. Filed Apr. 8, 1930.

FLORAGREENS

For Natural Asparagus Plumosus Sprays and Prepared Natural Plumosus Sprays.
Claims use since Oct. 1, 1929.

Ser. No. 300,373. STONE MOUNTAIN GRIT COMPANY, INC., Lithonia, Ga. Filed May 12, 1930.

STONEMO

For Poultry Grit.
Claims use since on or about Apr. 1, 1929.

Ser. No. 300,380. WARREN-TEED SEED COMPANY, Chicago, Ill. Filed May 12, 1930.

SEEDTOWN

For Lawn-Grass Seeds.
Claims use since Apr. 4, 1930.

Ser. No. 300,436. RAINIER PULP & PAPER COMPANY, San Francisco, Calif. Filed May 13, 1930.

RAYONIER

For Wood Pulp.
Claims use since Feb. 3, 1930.

Ser. No. 300,514. THE GULF & WEST INDIES COMPANY, INC., New York, N. Y. Filed May 14, 1930.

GULF

For Sponges and Chamois Skins.
Claims use since June, 1927.

Ser. No. 300,515. THE GULF & WEST INDIES COMPANY, INC., New York, N. Y. Filed May 14, 1930.

SEA GARDEN

For Sponges and Chamois Skins.
Claims use since June, 1927.

Ser. No. 300,517. BENJAMIN HARDOCK, INCORPORATED, Philadelphia, Pa. Filed May 14, 1930.

CEDARITE

For Palm Fibre.
Claims use since Feb. 13, 1930.

CLASS 2

Receptacles

Ser. No. 299,455. MID-WEST BOX COMPANY, Chicago, Ill. Filed Apr. 25, 1930.

MYRACOL COLORS

No claim is made to the word "Colors" apart from the mark as shown in the drawing.
For Cartons.
Claims use since about Apr. 14, 1930.

CLASS 3

Baggage, Animal Equipments, Portfolios, and Pocketbooks

Ser. No. 298,487. BUXTON, INCORPORATED, Springfield, Mass. Filed Apr. 7, 1930.



For Leather Key Cases, Purses, Bill Folds, and Pocketbooks.
Claims use since Jan. 1, 1930.

CLASS 4

Abrasive, Detergent, and Polishing Materials

Ser. No. 281,870. THE APEX ELECTRICAL MANUFACTURING COMPANY, Cleveland, Ohio. Filed Apr. 5, 1929.

Apex

For Grind Wheels, Buffing Wheels, Soaps, and Washing Powders.
Claims use since July 3, 1918.

Ser. No. 284,213. ALLIED INDUSTRIAL PRODUCTS CO., Chicago, Ill. Filed May 18, 1929.



For Turkish Emerys, Bim-stein (a Composition Pumice Brick Imported from Germany and Used for Polishing Marble), Buffs, Bullneck Wheels for Polishing Metal, Canvas Wheels, Artificial Abrasives Made from Coke and Sand, Emery, Metal Seamers, Pumice Stone, Putty Powder, Rottenstone Used as an Abrasive, Rouge for Polishing Plate Glass and for Polishing Optical Glasses, Rubbing Stone, Sandpaper, Sheepskin Wheels for Polishing Metal, Steel Wool; Tripoli, Rottenstone, and White Polishing Compound Used for Coloring Purposes on Aluminum.
Claims use since on or about April, 1923.

Ser. No. 298,982. THE MARTIN DENNIS COMPANY, Newark, N. J. Filed Apr. 17, 1930.

ALBAOIL

For Oil for Softening or Fat-Liquoring Leather.
Claims use since Jan. 8, 1910.

Ser. No. 299,239. THE WAVENLOCK COMPANY, Detroit, Mich. Filed Apr. 21, 1930.

Breezy

For Shaving Cream.
Claims use since Jan. 16, 1922.

Ser. No. 300,080. FRANK MEYERS, doing business as the F & M Chemical Co., Los Angeles, Calif. Filed May 7, 1930.

LEATHERAID

For Liquid Preparation for the Removal of Scratches, Grease, and Dirt from Leather and for Polishing the Same.
Claims use since July 1, 1929.

CLASS 5

Adhesives

Ser. No. 279,332. INDEPENDENT GROCERS' ALLIANCE DISTRIBUTING COMPANY, Chicago, Ill. Filed Feb. 14, 1929.



For Mucilage.
Claims use since Sept. 1, 1927.

CLASS 6

Chemicals, Medicines, and Pharmaceutical Preparations

Ser. No. 270,520. SOCIETE A RESPONSABILITE LIMITEE N. G. PAYOT ET Y. BEAUMEVIEILLE, Paris, France. Filed Aug. 2, 1928.



For Skin Lotions, Beauty Cream for the Skin, Cream for Retaining Powder, Massage Cream, Eau de Cologne, Brilliantine for the Hair, Perfume Extracts, Eyebrow Pencils, Toilet Water, and Camphorated Jelly.
Claims use since February, 1928.

Ser. No. 282,060. SCHERING-KAHLBAUM A. G., Berlin, Germany. Filed Apr. 8, 1929.

RENOFORM

For Medicine for the Treatment of the Swelling of the Mucous Membranes of the Nose.
Claims use since about September, 1927.

Ser. No. 284,198. PHILADELPHIA QUARTZ COMPANY, Philadelphia, Pa. Filed May 17, 1929.



The conventional color lining in the drawing merely represents shading.
For Silicate of Soda and Silicate of Potash Either Alone or in Admixture with Other Chemicals.
Claims use since Mar. 2, 1929.

Ser. No. 288,390. MARY NEWMAN, Detroit, Mich. Filed Aug. 10, 1929.



MARY'S INSPIRATION

The word "Corns" is disclaimed apart from the mark shown. The female figure illustrated is fanciful.

For Salve for Corns, Skin Diseases, Sores, Burns, Ulcers, and Bruises.

Claims use since June 10, 1929.

Ser. No. 289,271. Dr. N. GERBER'S Co. M. B. H., Leipzig, Germany. Filed Sept. 3, 1929.

„Thybromol"

For Test Chemicals Used in the Examination of Milk Samples for Proving the Existence of Mastitis Streptococs and Other Products of the Inflammation of the Udder.

Claims use since July, 1928.

Ser. No. 291,734. THE MILSON COMPANY, doing business as The Health-O Quality Products Co., Cincinnati, Ohio. Filed Oct. 29, 1929.

Nobilitee

For Vanishing Cream Particularly for Day Use and Known as Day Cream, and Cream Particularly for Night Use of the Cold-Cream Type Known as Night Cream.

Claims use since Oct. 1, 1929.

Ser. No. 291,979. THEO. HAMM BREWING COMPANY, St. Paul, Minn. Filed Nov. 4, 1929.

Digesto

For Medicinal Malt Tonic.

Claims use since June 18, 1907.

Ser. No. 292,362. SAUL J. LEVY, doing business as Rosaul, Brooklyn, N. Y. Filed Nov. 13, 1929.

ROSAUL

For Cosmetics—Namely, Lip Sticks, Rouge; Skin, Hand, Face Lotions; Solid Brilliantines, Cold Creams; Vanishing, Massage, Hand, Bleaching, Facial, Freckle, Skin Cream; Wrinkle Creams, Dandruff Lotions, Dandruff Ointments; Liquid, Powder, Paste Dentifrices; Liquid, Powder, Paste Deodorants; Depilatory Preparations; Eyebrow Cosmetics—Namely, Pencils, Lotions, Face Powders, Liquids, Compact and Compact Rouges; Liquid, Powder, Paste Hair-Curling Preparations; Liquid, Powder, Paste Hairdressing Preparations; Liquid Hair Tonics, Hair Oils, Pomades; Liquid, Powder Manicuring Preparations; Manicuring Preparations in Stick and Cake Form; Perfume Extracts—Namely, Plain Flower Odors and Compounded Bouquets, Liquid and Solid; Liquid, Powder, Paste, Compact Rouges; Salves to Allay Chapping Skin, Sachets, After-Shaving Lotions, Toilet Waters; Liquid, Powder, and Smelling Salts.

Claims use since Oct. 1, 1929.

Ser. No. 292,496. OSCAR A. GROSS, doing business as Cora Fontanne, New York, N. Y. Filed Nov. 16, 1929.



The expression "Fifth Ave" is claimed only in association with the other features of the mark.

For Toilet Preparations—Namely, Creams, Hair Tonics, Rouge, Lip Sticks, Powders, Perfumes, Toilet Waters, and Nail Polish.

Claims use since Dec. 2, 1923.

Ser. No. 293,250. PETER WASKIS, Laona, Wis. Filed Dec. 4, 1929.

Wastus

For Preparation for Treating Rheumatism.

Claims use since Nov. 9, 1929.

Ser. No. 294,438. PETROLEUM CHEMICAL COMPANY, Tulsa, Okla. Filed Jan. 6, 1930.

KENY

For Chemical Preparation for Treating Cut Oil to Separate Water Therefrom.

Claims use since Feb. 1, 1929.

Ser. No. 295,423. CREPIN & DOUMIN LTD., London, England. Filed Jan. 31, 1930.

Vioflor

For Compound of Essential Oils and Synthetics Used as a Deodorizer for Spirits, Paints, and Varnishes.

Claims use since Oct. 22, 1909.

Ser. No. 296,242. THE SCHOLL MFG. CO. INC., Chicago, Ill. Filed Feb. 19, 1930.

DR. SCHOLL'S Zino-pads



The word "Pads," together with the representations of pads, is disclaimed apart from the mark as shown on the drawings.

For Adhesive Medicated Shields or Pads for Corns, Callouses, and Bunions.

Claims use since June 16, 1921.

Ser. No. 296,657. MANHATTAN-KREOLE PRODUCTS, INC., New York and Brooklyn, N. Y. Filed Feb. 28, 1930.



The portrait shown is that of George Washington. Applicant hereby disclaims the exclusive right to the use of the words "Oil Black Stain" appearing in the drawing, except as this term is used in connection with the other features of the mark shown. The lining shown on the drawing is used for shading purposes only.

For Staining or Dyeing Material for Making All Colored Leathers Permanently Black.

Claims use since 1898.

Ser. No. 297,484. KAIRY, INC., New York, N. Y. Filed Mar. 18, 1930.

Air de Paris

For Astringents, Astringent Cerates, Bleach Creams, Beauty Creams, Cold Creams, Cleansing Creams, Obesity Creams, Refreshing Creams, Obesity Astringents, Dry Rouges, Liquid Rouges, Face Bleaches, Face Packs, Eyebrow and Eyelash Grower, Eyedrops, Hand Lotions, Skin Lotions, After-Shaving Lotions, Pomades, Face Powders, Talcum Powders, Sachets, Hair Salves, Hair Elixirs, Dandruff Preparations, Hair Tonics, Hair Oils, Shampoos, Hair Dyes, Bath Salts, Smelling Salts, Lip Sticks, Incense, Tooth Powders, Mouth Washes, Dentifrices, Tooth Pastes, Nail Powders, Nail Creams, Nail Bleaches, Witch-Hazel, Peroxide, Petroleum Jellies, Witch-Hazel Salves, Camphor Creams, Foot Powders, Corn Salves, Deodorants, Disinfectants, Bay Rum, Perfumes, and Toilet Waters.

Claims use since Feb. 1, 1930.

Ser. No. 297,504. WILLIAMS REMEDY COMPANY, Ty Ty, Ga. Filed Mar. 18, 1930.



The trade-mark consists of the portrait of I. A. Williams, one of the members of the firm, and the signature of said I. A. Williams.

For Internal and Topical Medicinal Preparation for Diseases of the Stomach and Bowels; Also for Colds, the Grippe, and Croup; and for Sprains, Bruises, Pleurisy, Sore Throat, Headache, Sciatica, and Rheumatism.

Claims use since June 16, 1909.

Ser. No. 297,564. ARMIN J. KRAUSZ, Woodbridge, N. J. Filed Mar. 14, 1930.

Antoxylin

For Chemical Solutions for Removing Grease and Rust.
Claims use since Mar. 5, 1930.

Ser. No. 297,603. KIEFER-STEWART COMPANY, Indianapolis, Ind. Filed Mar. 20, 1930.



The representation of the label is disclaimed per se.
For Liquid Antiseptic.
Claims use since on or about Mar. 1, 1930.

Ser. No. 297,627. STANCO INCORPORATED, Wilmington, Del., and New York, N. Y. Filed Mar. 20, 1930.



No claim is made to the printed language appearing on the drawing with the exception of the word "Flit" and "Stanco Incorporated." No claim is made to the representation of a label. The drawing is lined for shading purposes only.
For Insecticides, Deodorants, and Disinfectants.
Claims use since Dec. 24, 1929.

Ser. No. 297,776. THE PROCTER & GAMBLE COMPANY, Cincinnati, Ohio. Filed Mar. 22, 1930.

STAR★BRAND

No claim is made for the word "Brand" apart from the mark as shown on the drawing.
For Glycerine.
Claims use since July 8, 1929.

Ser. No. 297,819. OLIVER V. REIS, doing business as Halitosine Company, St. Louis, Mo. Filed Mar. 24, 1930.

HALITOSINE

ANTISEPTIC

No claim is made to the exclusive use of the word "Antiseptic" apart from the trade-mark shown.
For Antiseptic for Personal Use.
Claims use since about Nov. 1, 1926.

Ser. No. 298,104. THE HUXLEY LABORATORIES, INC., New York, N. Y. Filed Mar. 29, 1930.

BET-U-LOL

For Liniments Used for Muscular Aches and Pains.
Claims use since Apr. 1, 1897.

Ser. No. 298,229. SPENCER D. EMBREE, doing business as Embree Mfg. Co., Elizabeth, N. J. Filed Apr. 1, 1930.

Airite

For Deodorants.
Claims use since about July 29, 1929.

Ser. No. 298,241. OLIVE M. HERTZ, doing business as The Carefre Company, Detroit, Mich. Filed Apr. 1, 1930.



The drawing is lined to indicate the color orange. No claim is made to the words "Skin Lotion" apart from the mark shown.
For Skin Lotion.
Claims use since Sept. 1, 1928.

Ser. No. 298,443. ROY I. HARDIN, Chicago, Ill. Filed Apr. 5, 1930.

TONSOTONE

For Medicine for Coughs and Sore Throat.
Claims use since Mar. 1, 1930.

Ser. No. 298,462. CHARLES SCHMID, Long Island City, N. Y. Filed Apr. 5, 1930.



No claim is made to the exclusive use of the word "Tablets" apart from the mark as shown on the drawing.
For Medicinal Preparations for Treating Lung, Stomach, and Intestine Diseases.
Claims use since Mar. 1, 1930.

Ser. No. 298,478. ERNEST WHITEHEAD, doing business as The Whitehead Brokerage Co., Indianapolis, Ind. Filed Apr. 5, 1930.

Punkin Seds

For Laxative Preparation.
Claims use since Oct. 10, 1929.

Ser. No. 298,490. JNO. B. DANIEL, INC., doing business as Regens Laboratories, Atlanta, Ga. Filed Apr. 7, 1930.

Regens

For Sedative and Nervine.
Claims use since Feb. 15, 1930.

Ser. No. 298,700. JOHN E. HUBER, doing business as Hulo Laboratories, Columbus, Ohio. Filed Apr. 11, 1930.

HŪLO

For Medical Preparation to Aid Digestion.
Claims use since July, 1929.

Ser. No. 298,887. CHELF CHEMICAL COMPANY, Richmond, Va. Filed Apr. 15, 1930.

CHELF'S C.C. COMP'D
4C's

No claim is made herein broadly to the word "Comp'd" apart from the mark illustrated.
For Nerve Sedative, Febrifuge, Laxative, and Diuretic.
Claims use since July 1, 1929.

Ser. No. 299,158. SAMPSON & BURNHAM COMPANY, Lynn, Mass. Filed Apr. 19, 1930.



For Mouth Wash and Gargle.
Claims use since Dec. 14, 1929.

Ser. No. 299,381. ELLIS JONES DRUG COMPANY, Memphis, Tenn. Filed Apr. 24, 1930.

FLY-RID

For Insecticides.
Claims use since 1911.

Ser. No. 299,506. THE KOLBALM CHEMICAL CORPORATION, Greensboro, N. C. Filed Apr. 26, 1930.

KOL BALM

The use of the word "Balm" is disclaimed apart from the mark as shown on the drawing.
For Liquid Analgesique for External Application in the Treatment of Colds.
Claims use since Dec. 9, 1929.

Ser. No. 299,525. E. R. SQUIBB & SONS, New York, N. Y. Filed Apr. 26, 1930.

ZOONOL

For Cod-Liver-Oil Preparation for Use in Poultry and Animal Husbandry as a Vitaminous Dietary Supplement.
Claims use since Apr. 8, 1930.

Ser. No. 299,575. CHARLES G. HAYNE, doing business as Hayne's Laboratory, Richmond Hill, N. Y. Filed Apr. 28, 1930.

SELDOS

For Vaginal Tablet Suppositories.
Claims use since Mar. 29, 1930.

Ser. No. 299,719. THE LA VALLIERE COMPANY, New Orleans, La. Filed Apr. 30, 1930.

La Valliere

For Talcum Powders, Face Powders, Rouges, Lip Sticks, Skin Creams of All Descriptions, Deodorants, Dentifrices, Bath Salt, Hair Tonics, Shampoos, Bay Rum, Nail Polish, Depilatory, Hairdressings, Brilliantines, Colognes, Smelling Salts, Headache Cologne, Camphor Ice, Sachet Powders, Perfumes, Toilet Waters, Almond Meal, Orris Root, Rose Water and Glycerine, After-Shaving Lotion.
Claims use since 1902.

Ser. No. 299,774. ESTELLA M. GARDNER, doing business as Vevo Laboratories, Boston, Mass. Filed May 1, 1930.

VEVO

For Blood Purifier, a Preparation for High Blood Pressure, and a Blood Tonic.
Claims use since Feb. 14, 1930.

Ser. No. 299,821. LULU ASHE, Brooklyn, N. Y. Filed May 2, 1930.

LULU'S ALTERATIVE

No rights are asserted to the exclusive use of the word "Alterative" apart from the trade-mark shown in the drawing.
For Medicinal Preparation for the Relief of Rheumatism.
Claims use since Mar. 29, 1930.

Ser. No. 299,975. HARRY E. KIMBLE, doing business as Kim Chemical Products Company, Albuquerque, N. Mex. Filed May 5, 1930.

KIM

For Tooth Powder.
Claims use since April, 1928.

Ser. No. 300,405. BEATRICE H. CRAWFORD, doing business as Auto Cold Tablet Co., Phoenix, Ariz. Filed May 13, 1930.

ACT

For Tablets for Treating Colds.
Claims use since Feb. 1, 1930.

Ser. No. 300,411. HAREGSO COMPANY, INC., Bellows Falls, Vt. Filed May 13, 1930.



For Preparation Used on the Scalp to Promote the Growth of Hair.
Claims use since Mar. 25, 1930.

Ser. No. 300,424. ADOLF D. LINDEMANN, New York, N. Y. Filed May 13, 1930.

Jane Eyre

For Face Powder, Rouge, Lip Stick, Talcum, Cold Cream, and Brilliantine.
Claims use since Jan. 1, 1929.

Ser. No. 300,451. ANDREW WILSON, INCORPORATED, Springfield, N. J. Filed May 13, 1930.

SCALE-O

For Insecticide.
Claims use since May, 1915.

CLASS 8

Smokers' Articles, Not Including Tobacco Products

Ser. No. 266,102. SOCIETE ANONYME DES ANCIENS ETABLISSEMENTS BRAUNSTEIN FRERES, Paris, France. Filed May 8, 1928. Under 10-year proviso.



No claim of right to the exclusive use of the word "Paris" being made.
For Cigarette Paper.
Claims use since Aug. 8, 1888.

Ser. No. 300,442. SASIENI LONDON LTD., New York, N. Y. Filed May 13, 1930.

"Cockney"

For Smokers' Pipes.
Claims use since Feb. 10, 1930.

CLASS 9

Explosives, Firearms, Equipments, and Projectiles

Ser. No. 291,945. VULCAN MATCH CO., INC., New York, N. Y. Filed Nov. 2, 1929.



No claim being made to the exclusive use of the outline of the label nor of the words "Safety Matches, Made in Sweden" apart from the mark as shown in the drawing.
For Matches.
Claims use since Oct. 29, 1929.

Ser. No. 299,763. COAST MANUFACTURING & SUPPLY CO., Livermore, Calif. Filed May 1, 1930.



No claim is made to the exclusive use of a blue label.
For Powder-Train Fuses.
Claims use since about July 15, 1903.

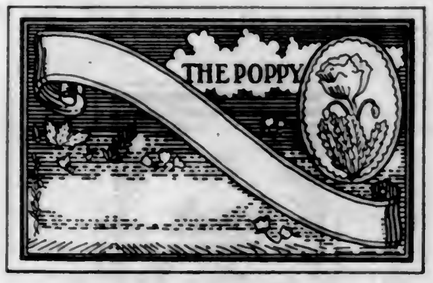
Ser. No. 299,764. COAST MANUFACTURING & SUPPLY CO., Livermore, Calif. Filed May 1, 1930.

"PACIFIC"



For Fuses.
Claims use since about July 1, 1906.

Ser. No. 300,897. VULCAN MATCH CO., INC., New York, N. Y. Filed May 20, 1930.



No claim being made to the exclusive use of the outline of the label apart from the mark as shown in the drawing. The lining shown in the drawing is intended for shading only.

For Matches.

Claims use since Aug. 15, 1925.

CLASS 10

Fertilizers

Ser. No. 297,759. PALESTINE OIL MILL & FERTILIZER COMPANY, Palestine, Tex. Filed Mar. 22, 1930.

PALESTINE BLUE



BRAND

The word "Blue" is lined for the color blue, also the representation of the star is lined for the color blue. The word "Brand" is disclaimed apart from the other features of the mark shown in the drawing.

For Fertilizer, Cottonseed Meal, and Cracked-Cottonseed Cake.

Claims use since January, 1925.

CLASS 11

Inks and Inking Materials

Ser. No. 300,226. MITTAG & VOLGER, INCORPORATED, Park Ridge, N. J. Filed May 9, 1930.

M. & M.

For Carbon Paper and Typewriter Ribbons.

Claims use since August, 1889, on carbon papers, and since Dec. 1, 1899, on typewriter ribbons.

Ser. No. 300,227. MITTAG & VOLGER, INCORPORATED, Park Ridge, N. J. Filed May 9, 1930.

MITVOL

For Carbon Paper and Typewriter Ribbons.

Claims use since Mar. 10, 1903, on carbon papers, and since July 21, 1926, on typewriter ribbons.

CLASS 12

Construction Materials

Ser. No. 251,477. THE BALSA WOOD COMPANY, INC., New York, N. Y. Filed July 5, 1927.



No claim is made in this registration to the exclusive use of the word "Lata" or the words "Light as the Air, Trade Mark, Balsa Wood," or "New York" when used separately from the other features of the mark.

For Balsa Wood in the Form of Dressed Lumber.

Claims use since Jan. 1, 1926.

Ser. No. 285,900. THE NATIONAL LIME & STONE COMPANY, Findlay, Ohio. Filed June 21, 1929.

MONARCH

For Finishing Lime, Powdered Lime, Mason's Lime, Lump Lime, and Brick Mortar.

Claims use since about March, 1904.

Ser. No. 297,468. CLINTON MOTORS CORPORATION, Reading, Pa. Filed Mar. 18, 1930.

CLINTONIZED

For Ready-Mixed Concrete.

Claims use since Jan. 2, 1930.

Ser. No. 297,923. LOREN W. MARSH, Arlington, Mass. Filed Mar. 26, 1930.

PYROPLY

For Composite Sheet to be Used Primarily as a Thermal Insulation and Secondarily as an Electrical Insulation.

Claims use since Mar. 24, 1930.

Ser. No. 298,632. THE HIGGINSON MANUFACTURING COMPANY, Newburgh, N. Y. Filed Apr. 10, 1930. Under 10-year proviso.

HIGGINSON'S

For Plaster.

Claims use since on or about April, 1877.

Ser. No. 298,682. AMERICAN TAR PRODUCTS COMPANY, INC., Pittsburgh, Pa. Filed Apr. 11, 1930.

CUROID

For Paving Materials Made of or Including Pitch and Tar.

Claims use since Mar. 7, 1930.

Ser. No. 298,744. THE ELECTRO REFRACTORIES CORPORATION, Buffalo, N. Y. Filed Apr. 12, 1930.

MAG-NA-LINE

For Refractory Cement.

Claims use since May 31, 1929.

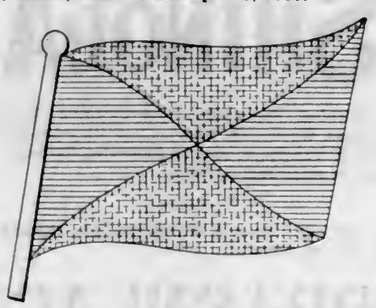
Ser. No. 298,878. AMIESITE ASPHALT COMPANY OF AMERICA, Camden, N. J., and Philadelphia, Pa. Filed Apr. 15, 1930.

INTERACO

For Paving Material Comprising a Mineral Aggregate Intimately Mixed with Bonding Material.

Claims use since on or about Apr. 2, 1930.

Ser. No. 298,924. THE GOODYEAR TIRE & RUBBER COMPANY, Akron, Ohio. Filed Apr. 15, 1930.



The line-shading in the drawing indicates the colors blue and gold.

For Rubber Flooring and Tiling.

Claims use since July 10, 1929.

CLASS 13

Hardware and Plumbing and Steam-Fitting Supplies

Ser. No. 298,512. POLAR WARE COMPANY, Sheboygan, Wis. Filed Apr. 7, 1930.

POLAR

RE-FRESH-O

For Metal Refrigerator Pans.

Claims use since Mar. 19, 1930.

Ser. No. 299,198. THE IMPERIAL BRASS MANUFACTURING COMPANY, Chicago, Ill. Filed Apr. 21, 1930.



The word "Service" is disclaimed apart from the mark shown.

For Tube Fittings of Brass and Bronze.

Claims use since Dec. 21, 1929.

CLASS 14

Metals and Metal Castings and Forgings

Ser. No. 297,904. THE FOREST CITY WALWORTH RUN FOUNDRIES CO., Cleveland, Ohio. Filed Mar. 26, 1930. Under 10-year proviso.

WALWORTH RUN

For Soft Grey Iron Castings and Bronze, Brass, and Aluminum Castings and Semisteel Castings.

Claims use since Feb. 20, 1895.

Ser. No. 299,370. BUTLER BROTHERS, Chicago, Ill. Filed Apr. 24, 1930.

CANNON BALL

For Galvanized Wire.

Claims use since Jan. 1, 1929.

CLASS 15

Oils and Greases

Ser. No. 284,533. FORTUNA-WERKE SPEZIALMASCHINENFABRIK A.-G., Stuttgart-Cannstatt, Germany. Filed May 23, 1929.

MINITEST

For Lubricating Oils and Greases and Power-Transmission Oils.
Claims use since November, 1928.

Ser. No. 298,537. HOUSTON OIL COMPANY OF TEXAS, Houston, Tex. Filed Apr. 8, 1930.



For Gasoline, Kerosene, Gas Oil, Motor-Lubricating Oils, and Transmission Oil and Grease Compounds.
Claims use since Dec. 18, 1925.

Ser. No. 298,538. HOUSTON OIL COMPANY OF TEXAS, Houston, Tex. Filed Apr. 8, 1930.

HOCO

For Gasoline, Kerosene, Gas Oil, Motor-Lubricating Oils, and Transmission Oil and Grease Compounds.
Claims use since Dec. 18, 1925.

Ser. No. 299,023. SOUTHWESTERN LUBRICANT COMPANY, Waco, Tex. Filed Apr. 17, 1930.

METALEZE

For Lubricating Oil and Grease.
Claims use since Mar. 5, 1930.

Ser. No. 299,162. SKELLY OIL COMPANY, Tulsa, Okla. Filed Apr. 19, 1930.

SKELLY AERODYNAMIC GASOLINE

No claim is made herein to the exclusive use of the word "Gasoline" apart from the mark shown.
For Gasoline and Motor-Fuel Oils.
Claims use since Feb. 19, 1930.

Ser. No. 299,163. SKELLY OIL COMPANY, Tulsa, Okla. Filed Apr. 19, 1930.

AERODYNAMIC

For Gasoline and Motor-Fuel Oils.
Claims use since Feb. 19, 1930.

Ser. No. 299,354. UNITED OIL COMPANY, INC., Baltimore, Md. Filed Apr. 23, 1930.

Oil ways Yours Truly

For Lubricating Oil.
Claim use since Mar. 19, 1929.

CLASS 16

Paints and Painters' Materials

Ser. No. 297,721. ASHWORTH ADVERTISING COMPANY, INCORPORATED, New York, N. Y. Filed Mar. 22, 1930.



For Automobile Polish.
Claims use since Dec. 1, 1929.

Ser. No. 298,295. 2 IN 1-SHINOLA-BIXBY CORPORATION, New York, N. Y. Filed Apr. 2, 1930.

SHINOLA

For Polishing, Renovating, and Cleaning Composition for Furniture, Woodwork, Automobiles, Bicycles, Carriages, and Painted, Varnished, and/or Enameled Surfaces.
Claims use since Jan. 1, 1900.

Ser. No. 298,899. MAAS & WALDSTEIN CO., Newark, N. J. Filed Apr. 15, 1930.

PRISMLAC

For Lacquers, Lacquer Enamels, and Paint Enamels.
Claims use since about Feb. 15, 1930.

CLASS 17

Tobacco Products

Ser. No. 300,147. SAMUEL SCHWARTZ, West New York, N. J. Filed May 8, 1930.

BLACK CROW

For Cigars.
Claims use since Apr. 3, 1930.

Ser. No. 300,413. F. & M. HERBS CO. INC., doing business as Hoffman & Co., Red Hook, N. Y. Filed May 13, 1930.

YUM YUM

For Chewing Tobacco.
Claims use since Dec. 1, 1886.

CLASS 19

Vehicles, Not Including Engines

Ser. No. 296,455. TAN-SAD LIMITED, Tyseley, Birmingham, England. Filed Feb. 24, 1930.

FOLDELIT

For Perambulators and Baby Carriages.
Claims use since Oct. 1, 1929.

CLASS 21

Electrical Apparatus, Machines, and Supplies

Ser. No. 290,033. SAYLOR ELECTRIC & MANUFACTURING COMPANY, Detroit, Mich. Filed Sept. 20, 1929.



The drawing is lined to indicate a color—namely, red—although such coloring is not claimed herein. The word "Circuit" and the representation of the goods are hereby disclaimed apart from the mark as shown in the drawing.
For Insulated Cable.
Claims use since Jan. 1, 1927.

Ser. No. 290,707. KULP THEFTPROOF LAMP COMPANY, Chicago, Ill. Filed Oct. 5, 1929.



Applicant hereby disclaims the word "Theftproof" and the representation of a lamp apart from the particular mark as shown.
For Electrical Apparatus—Namely, Theftproof Electric Lamps and Removing Devices Therefor, Which are Sold Therewith.
Claims use since Oct. 1, 1923.

Ser. No. 294,440. THE PRISMOLITE COMPANY, Los Angeles, Calif. Filed Jan. 6, 1930.

PRISMOLITE

For Gas-Bombarded Electrical Signs.
Claims use since July 4, 1927.

Ser. No. 298,710. THE PACKARD ELECTRIC COMPANY, Warren, Ohio. Filed Apr. 11, 1930.



The trade-mark consists in a series of diamond-shaped figures formed upon the surface of the goods by weaving into the light yellowish brown loom a single strand of red and a single strand of black so spaced that they cross each other at an angle at regular intervals.
For Electric Insulated Wire.
Claims use since Dec. 1, 1927.

Ser. No. 299,045. JOSEPH H. COHEN, doing business as The Perfection Motor Products Company, Bridgeport, Conn. Filed Apr. 18, 1930.

BEACON

For Electric Cigar Lighters.
Claims use since Feb. 1, 1930.

Ser. No. 299,346. TIME-O-STAT CONTROLS COMPANY, Elkhart, Ind. Filed Apr. 23, 1930.

TEMP-O-STAT

For Electrical Switches for Controlling Automatic Heating Systems.
Claims use since October, 1928.

Ser. No. 299,351. TIME-O-STAT CONTROLS COMPANY, Elkhart, Ind. Filed Apr. 23, 1930.

AQUASWITCH

For Electrical Switches for Controlling Automatic Heating Systems.
Claims use since April, 1925.

Ser. No. 299,389. HAMILTON BEACH MANUFACTURING COMPANY, Racine, Wis. Filed Apr. 24, 1930.

DRINKMASTER

For Electrically-Operated Drink Mixers.
Claims use since Mar. 29, 1930.

Ser. No. 299,592. I'RESTO I'RODUCTS Co., New York, N. Y. Filed Apr. 28, 1930.

FLASHETTE

For Miniature Electrical Interrupter Operated by a Thermo Switch Used to Make and Break the Circuit in Electric Bulbs.
Claims use since Feb. 1, 1930.

CLASS 22

Games, Toys, and Sporting Goods

Ser. No. 295,199. WIZ-WORL TOY CO., Los Angeles, Calif. Filed Jan. 24, 1930.



The shading on the drawing indicates the colors blue and orange.
For Whirling Toys.
Claims use since Dec. 26, 1929.

Ser. No. 296,330. GEORGE S. FELKER, Boston, Mass. Filed Feb. 21, 1930.

SCOROGRAF

For Baseball Scoring or Counting Method.
Claims use since Feb. 15, 1930.

Ser. No. 300,327. OSCAR C. CANNON, San Antonio, Tex. Filed May 12, 1930.

MARBLE-LETTE

For Coin-Controlled Cue and Ball Game Table.
Claims use since Apr. 1, 1930.

Ser. No. 300,328. OSCAR C. CANNON, San Antonio, Tex. Filed May 12, 1930.

POO-LETTE

For Coin-Controlled Cue and Ball Game Table.
Claims use since Jan. 1, 1930.

Ser. No. 300,476. RALPH SADLIER COONEY, doing business as School Service Co., New York, N. Y. Filed May 14, 1930.



For Punch-Board Cards.
Claims use since Sept. 2, 1928.

Ser. No. 300,724. I. B. KLEINERT RUBBER COMPANY, New York, N. Y. Filed May 17, 1930.

"JIFFY"

For Dolls and Apparel Therefor.
Claims use since Apr. 15, 1930.

CARNEGIE LIBRARY OF ATLANTA

CLASS 23

Cutlery, Machinery, and Tools, and Parts Thereof

Ser. No. 276,436. SOCIÉTÉ D'APPLICATIONS DES GÁZ INDUSTRIELS LIQUIDES, Paris, France. Filed Dec. 7, 1928.

"SAGIL"

For Industrial Apparatus for Atomizing Liquids and for the Utilization of Compressed and Liquid Gases.
Claims use since July 2, 1928.

Ser. No. 284,529. FORTUNA-WERKE SPEZIALMASCHINENFABRIK A.-G., Stuttgart-Cannstatt, Germany. Filed May 23, 1929.

MINITEST

For Machines and Apparatus for Working Leather and Other Soft Materials and for Manufacturing Shoes—Namely, Heel-Making Machines, Beveling Machines, Finishing Machines, Blocking Machines, Indenting Machines, Braiding Machines, Levelling Machines, Machines for Taking the Shoes Off the Last, Boarding and Graining Machines, Engraving Machines, Glazing Machines, Skiving Machines, Slitting Machines, Cutting Machines, Splitting Machines, Punching Machines, Embossing Machines, Turning-Over Machines, Fulling Machines, Polishing Machines, Lasting Machines; Machine Tools of All Kinds for Working Metal, Wood, and Stones—Namely, Drilling Machines, Drilling Templates, Lathes, Milling Machines, Planing Machines, Grinding Machines, and Attachments Therefor Exclusive of the Abradant; Grinding Spindles, Grinding Tools, Chucking Tools, Chucks; Machines and Apparatus for Manufacturing and Working Paper and Goods of Paper—Namely, Book-Covering Machines, Printing Presses, Label Machines, Folding Machines, Sheeting Machines, Tacking Machines, Gluing Machines, Pleating Machines, Stamping Machines; Machines and Apparatus for Closing, Sealing, and Labeling Bottles and Like Vessels and for Carrying and Taking Off the Bottles; Ball and Roller Bearings, Balls and Rollers for Bearings, Gears of All Kinds.
Claims use since November, 1928.

Ser. No. 289,223. V. D. ZEVE, INC., Cleveland, Ohio. Filed Aug. 30, 1929.

SPEEDEE

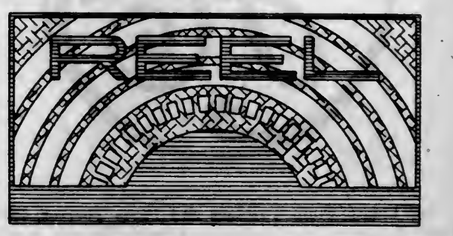
For Slicing Machines.
Claims use since on or about Aug. 20, 1929.

Ser. No. 292,270. MAINE STEEL PRODUCTS CO., South Portland, Me. Filed Nov. 11, 1929.



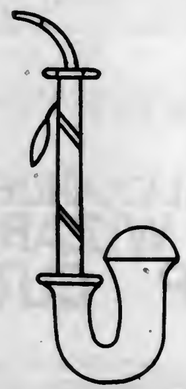
The trade mark consists in a colored design painted on the front face of the nose and wings of the snow plow in which the lower portion beginning narrower in the front and broadening toward the rear is colored gray, and the upper portion beginning broader and narrowing backward is colored orange, with a narrow band of silver color interposed between the two. No exclusive claim is made to the representation of a snow plow, apart from the mark shown.
For Snowplows.
Claims use since about Aug. 1, 1929.

Ser. No. 292,814. LUCKY PRODUCTS INC., Newark, N. J. Filed Nov. 23, 1929.



In the drawing parts of the mark are lined with horizontal lines to indicate the color blue and other parts are lined with crossed broken diagonal lines to indicate the color orange, to correspond with the colors of said parts as appearing in the specimens.
For Safety-Razor Blades.
Claims use since about Sept. 13, 1929.

Ser. No. 293,749. P. D. RASSPE SÖHNE, Solingen-Stocken, Germany. Filed Dec. 16, 1929.



For Land-Cultivation Machinery and Implements—Namely, Ploughs, Cultivators, Harrows, and Hoes; Drilling, Planting, and Manure-Distributing Machinery and Implements—Namely, Drills, Sowing Machines, and Potato Planters; Harvesting Machinery and Implements—Namely, Mowers, Reapers, Grain Binders, Rice Binders, Headers, Push Headers, Header Binders, Push Binders, Header Threshers, Potato Diggers, Pea Harvesters, and Grain Lifters; Haying Machinery and Implements—Namely, Horse Rakes, Side-Delivery Rakes, and Hay Tedders; Threshing Machinery, Hay- and Straw-Presses, Straw Trussers, Loading and Stacking Machinery and Implements; Elevators for Hay, Corn, Straw, and Beets; Overhead Carrying and Cow-Stall Equipment—Namely, Hay Carriers, Milking Machinery, and Cream Separators; Tractors; Food-Preparing Machinery and Implements—Namely, Turnip Cutters and Chaff Cutters; Grinders for Sharpening Agricultural Knives; and Parts of All of the Foregoing.
Claims use since December, 1868.

Ser. No. 293,994. GENERAL ELECTRIC COMPANY, Schenectady, N. Y. Filed Dec. 21, 1929.

For Elastic-Fluid Turbines and Parts Thereof, Elastic-Fluid Reciprocating Engines and Parts Thereof, Centrifugal Compressors and Parts Thereof, Reciprocating Compressors and Parts Thereof, Pumps and Parts Thereof, Air Whistles, Metallic and Nonmetallic Gear Wheels and Gear-Wheel Blanks, Change-Speed Gearing and Parts Thereof, Hydraulic Operators, Pickers for Looms.

Claims use on elastic-fluid turbines and parts thereof, and elastic-fluid reciprocating engines and parts thereof, since 1915; on centrifugal compressors and parts thereof since 1923; on reciprocating compressors and parts thereof since 1926; on pumps and parts thereof since 1917; on air whistles since 1923; on metallic and nonmetallic gear wheels and gear-wheel blanks and change-speed gearing and parts thereof since 1914; on hydraulic operators since 1928; on pickers for looms since 1927.

Ser. No. 297,571. SAMUEL ALEXANDER, New York, N. Y. Filed Mar. 20, 1930.

ALEXANDER'S
WIZARD
ZIP CUTTER

The words "Alexander's Cutter" being disclaimed apart from the mark as shown.

For Woodworking Knives, Cutters, and Scrapers With or Without Handles.

Claims use since Jan. 1, 1928.

Ser. No. 298,243. INDIAN MOTOCYCLE COMPANY, Springfield, Mass. Filed Apr. 1, 1930.

Indian

For Outboard Motors and Parts.
Claims use since Feb. 19, 1930.

Ser. No. 298,320. GONZALO BOZA & CO. INC., New York, N. Y. Filed Apr. 3, 1930.



SIMON BOLIVAR

The portrait is that of Simon Bolivar, the great South American liberator.

For Agricultural Machetes and Knives.
Claims use since Feb. 14, 1928.

Ser. No. 299,091. STANDARD SAFETY RAZOR CORPORATION, East Norwalk, Conn. Filed Apr. 18, 1930.

SPAN

For Razor Blades.
Claims use since Mar. 21, 1930.

Ser. No. 299,092. STANDARD SAFETY RAZOR CORPORATION, East Norwalk, Conn. Filed Apr. 18, 1930.

TOKEN

For Razor Blades.
Claims use since Mar. 21, 1930.

Ser. No. 299,094. STANDARD SAFETY RAZOR CORPORATION, East Norwalk, Conn. Filed Apr. 18, 1930.

RIO

For Razor Blades.
Claims use since Mar. 21, 1930.

Ser. No. 299,095. STANDARD SAFETY RAZOR CORPORATION, East Norwalk, Conn. Filed Apr. 18, 1930.

VIM

For Razor Blades.
Claims use since Mar. 12, 1930.

Ser. No. 299,236. OTTO W. THOMPSON, Chicago, Ill. Filed Apr. 21, 1930.

CLIMAX

For Hand Rake.
Claims use since Mar. 22, 1930.

Ser. No. 299,533. UTILITY BLADE CORPORATION, Irvington, N. J. Filed Apr. 26, 1930.

UTILITY

For Safety Razors and Safety-Razor Blades.
Claims use since Apr. 17, 1930.

CLASS 24

Laundry Appliances and Machines

Ser. No. 299,948. BEH & CO. INC., New York, N. Y. Filed May 5, 1930.

Betsy Ross

For Curtain Stretchers and for Ironing Boards.

Claims use since on or about Feb. 15, 1930, on curtain stretchers and since on or about May 1, 1930, on ironing boards.

CLASS 26

Measuring and Scientific Appliances

Ser. No. 284,581. FORTUNA-WERKE SPEZIALMASCHINENFABRIK A.-G., Stuttgart-Cannstatt, Germany. Filed May 23, 1929.

MINITEST

For Balancing Apparatus for Grinding Wheels, and Specially Manufactured Instruments and Apparatus for Technical, Physical, Optical, Geodetical, Nautical, Aeronautical Purposes, and Measuring Apparatus, Lever Gauges and Holders for Same, Measuring Machines.

Claims use since November, 1928.

Ser. No. 293,231. RAYCOL LIMITED, London, England. Filed Dec. 4, 1929.

RAYCOL

For Apparatus Used in Optical Projection, Apparatus for Use in Taking and Projecting Cinematograph Films, Lenses Therefor, Separating Prisms for Cinematograph Apparatus, Separating and Reflecting Apparatus Used in Making and Projecting Films, and Cinematograph Films.

Claims use since Dec. 4, 1928.

Ser. No. 296,735. FILMTONE CORPORATION, Astoria, N. Y. Filed Mar. 3, 1930.

FILMTONE

For Talking-Motion-Picture Film.
Claims use since on or about Oct. 18, 1928.

Ser. No. 298,275. FILMTONE CORPORATION, Wilmington, Del., and Astoria, N. Y. Filed Apr. 2, 1930.



Exclusive right to the representation of a film is not claimed except in conjunction with the trade-mark as shown.

For Tape Record Films Having Sound Records Thereon.
Claims use since Mar. 20, 1930.

Ser. No. 298,587. PHOTO MARKETING CORPORATION, New York, N. Y. Filed Apr. 9, 1930.

ORTHOPLAN

For Photographic Light Filters and Photographic Lenses.
Claims use since Apr. 1, 1929.

Ser. No. 299,037. AMPRO CORPORATION, Chicago, Ill. Filed Apr. 18, 1930.



No claim is made to the words "Precision Projector" apart from the mark as shown.

For Cameras, Motion-Picture Cameras, Motion-Picture Projectors, and Sound Pictures.
Claims use since Oct. 1, 1929.

Ser. No. 299,089. SPERRY-SUN WELL SURVEYING COMPANY, Philadelphia, Pa. Filed Apr. 18, 1930.

SYFO

For Instruments for Surveying the Courses of Bore Holes.
Claims use since Mar. 29, 1930.

Ser. No. 299,146. E. B. MEYROWITZ, INC., New York, N. Y. Filed Apr. 19, 1930.

LUXOR

For Goggles and Eye Protectors.
Claims use since about June 1, 1922.

CLASS 27

Horological Instruments

Ser. No. 300,516. LOUIS HANSON COMPANY, Chicago, Ill. Filed May 14, 1930.

ELECTRA

For Clocks and Parts Thereof.
Claims use since May 1, 1930.

CLASS 28

Jewelry and Precious-Metal Ware

Ser. No. 290,257. C. A. KIGER CO., doing business as Virgin Diamond Syndicate, Kansas City, Mo. Filed Sept. 26, 1929.



The word "Diamonds" and the representation of diamonds are disclaimed apart from the mark shown in the drawing.
For Cut Diamonds.
Claims use since July 1, 1929.

Ser. No. 294,120. MORSE, ANDREWS COMPANY, Attleboro, Mass. Filed Dec. 27, 1929.



The portrait comprising a part of this trade-mark is fanciful.
For Belt Buckles, Suspender Buckles, and Belt or Button Key-Chain Holders Which are Made Wholly or Partly of Precious Metal.
Claims use since Nov. 21, 1929.

Ser. No. 298,131. ALPHA OMEGA ALPHA HONORARY FRATERNITY, Slaterville Springs, N. Y. Filed Mar. 31, 1930.

ΑΩΑ

For Fraternity Pins, Badges; Scarf, Lapel, and Breast Pins; Cuff Links, Ornamental Shields, Lapel Buttons, Tie Clasps, Charms, Finger Rings, and Belt Buckles, All Made of or Plated with Precious Metal.
Claims use since August, 1902.

Ser. No. 299,142. MAYER & MULLIGAN INC., New York, N. Y. Filed Apr. 19, 1930.

SUN-RAY

For Pendants, Precious and Semiprecious Stones and Imitations Thereof.
Claims use since June, 1927.

Ser. No. 299,404. ONEIDA COMMUNITY, LIMITED, Oneida, N. Y. Filed Apr. 24, 1930.

FLIGHT

For Silver Flatware and Hollow Ware.
Claims use since Mar. 27, 1930.

Ser. No. 299,405. ONEIDA COMMUNITY, LIMITED, Oneida, N. Y. Filed Apr. 24, 1930.

AVION

For Silver Flatware and Hollow Ware.
Claims use since Oct. 24, 1929.

Ser. No. 299,406. ONEIDA COMMUNITY, LIMITED, Oneida, N. Y. Filed Apr. 24, 1930.

CHATELAINE

For Silver Flatware and Hollow Ware.
Claims use since Mar. 27, 1930.

Ser. No. 299,407. ONEIDA COMMUNITY, LIMITED, Oneida, N. Y. Filed Apr. 24, 1930.

TEMPO

For Silver Flatware and Hollow Ware.
Claims use since Feb. 27, 1930.

Ser. No. 299,905. DOBBS & CO., New York, N. Y. Filed May 3, 1930.

Dobbs

For Stud Sets Studded with Semiprecious Stones; Cuff Links, Necklaces, Chokers, Pendants, Earrings, Bracelets, Collar Pins, Cigarette Cases, Garters, Belts for Outer Wear, Belt Buckles, Hand Bags, Brooches, Gold Pins for Stock Ties, Stick Pins, All Such Articles Being Made in Whole or in Part of Precious Metal.
Claims use since about July, 1908.

Ser. No. 300,114. GEMEX COMPANY, Newark, N. J. Filed May 8, 1930.

MURIEL

For Watch Bracelets, Watch Straps, Watch Attachments—Namely, Watch Chains, Fobs, and Charms; Neck Chains, Bracelets, Scarf Pins, Finger Rings and Belt Buckles and Ear and Hair Ornaments Made of or Plated with Precious Metal.
Claims use since Mar. 12, 1930.

Ser. No. 300,115. GEMEX COMPANY, Newark, N. J. Filed May 8, 1930.

THELMA

For Watch Bracelets, Watch Straps, Watch Attachments—Namely, Watch Chains, Fobs, and Charms; Neck Chains, Bracelets, Scarf Pins, Finger Rings, and Belt Buckles and Ear and Hair Ornaments Made of or Plated with Precious Metal.
Claims use since Mar. 12, 1930.

Ser. No. 300,116. GEMEX COMPANY, Newark, N. J. Filed May 8, 1930.

CONSUELO

For Watch Bracelets, Watch Straps, Watch Attachments—Namely, Watch Chains, Fobs, and Charms; Neck Chains, Bracelets, Scarf Pins, Finger Rings, and Belt Buckles and Ear and Hair Ornaments Made of or Plated with Precious Metal.
Claims use since Mar. 12, 1930.

Ser. No. 300,117. GEMEX COMPANY, Newark, N. J. Filed May 8, 1930.

BARBARA

For Watch Bracelets, Watch Straps; Watch Attachments—Namely, Watch Chains, Fobs, and Charms; Neck Chains, Bracelets, Scarf Pins, Finger Rings; and Belt Buckles and Ear and Hair Ornaments Made of or Plated with Precious Metal.
Claims use since Mar. 12, 1930.

Ser. No. 300,118. GEMEX COMPANY, Newark, N. J. Filed May 8, 1930.

MEREDITH

For Watch Bracelets, Watch Straps; Watch Attachments—Namely, Watch Chains, Fobs, and Charms; Neck Chains, Bracelets, Scarf Pins, Finger Rings; and Belt Buckles and Ear and Hair Ornaments Made of or Plated with Precious Metal.
Claims use since Mar. 12, 1930.

Ser. No. 300,119. GEMEX COMPANY, Newark, N. J. Filed May 8, 1930.

ADRIENNE

For Watch Bracelets, Watch Straps; Watch Attachments—Namely, Watch Chains, Fobs, and Charms; Neck Chains, Bracelets, Scarf Pins, Finger Rings; and Belt Buckles and Ear and Hair Ornaments Made of or Plated with Precious Metal.
Claims use since Mar. 12, 1930.

Ser. No. 300,120. GEMEX COMPANY, Newark, N. J. Filed May 8, 1930.

LESTER

For Watch Bracelets, Watch Straps; Watch Attachments—Namely, Watch Chains, Fobs, and Charms; Neck Chains, Bracelets, Scarf Pins, Finger Rings; and Belt Buckles and Ear and Hair Ornaments Made of or Plated with Precious Metal.
Claims use since Mar. 12, 1930.

Ser. No. 300,121. GEMEX COMPANY, Newark, N. J. Filed May 8, 1930.

ASTRID

For Watch Bracelets, Watch Straps; Watch Attachments—Namely, Watch Chains, Fobs, and Charms; Neck Chains, Bracelets, Scarf Pins, Finger Rings; and Belt Buckles and Ear and Hair Ornaments Made of or Plated with Precious Metal.
Claims use since Mar. 12, 1930.

Ser. No. 300,122. GEMEX COMPANY, Newark, N. J. Filed May 8, 1930.

ELVIRA

For Watch Bracelets, Watch Straps; Watch Attachments—Namely, Watch Chains, Fobs, and Charms; Neck Chains, Bracelets, Scarf Pins, Finger Rings; and Belt Buckles and Ear and Hair Ornaments Made of or Plated with Precious Metal.
Claims use since Mar. 12, 1930.

Ser. No. 300,123. GEMEX COMPANY, Newark, N. J. Filed May 8, 1930.

EUNICE

For Watch Bracelets, Watch Straps; Watch Attachments—Namely, Watch Chains, Fobs, and Charms; Neck Chains, Bracelets, Scarf Pins, Finger Rings; and Belt Buckles and Ear and Hair Ornaments Made of or Plated with Precious Metal.
Claims use since Mar. 12, 1930.

CLASS 29

Brooms, Brushes, and Dusters

Ser. No. 298,570. HENRY B. GROSS, Augusta, Ga. Filed Apr. 9, 1930.

TRU-DEN

For Toothbrush.
Claims use since Mar. 12, 1930.

Ser. No. 298,837. MIDWAY CHEMICAL COMPANY, Chicago, Ill. Filed Apr. 14, 1930.

"THE MOP WITH THE STRONG BACK-BONE"

The word "Mop" does not form a part of the registration sought apart from the trade-mark shown in the drawing.
For Mops, Brooms, and Dusters.
Claims use since about Dec. 1, 1925.

Ser. No. 299,507. JOHN E. LUDDY, doing business as The Windsor Company, Windsor, Conn. Filed Apr. 26, 1930.

AUTOBRITE

For Polishing Cloths.
Claims use since Mar. 31, 1925.

CLASS 32

Furniture and Upholstery

Ser. No. 290,842. KIRSCH COMPANY, Sturgis, Mich. Filed Oct. 9, 1929.

Kir-Co-Base

For Curtain Poles and Brackets and Ornaments Therefor, All of Wood.
Claims use since Sept. 26, 1929.

Ser. No. 292,518. THE ASBESTOSHIELD CORP., Cleveland, Ohio. Filed Nov. 18, 1929.

Asbestoshield

No claim is made to the representation of the goods apart from the mark as shown.
For Household Radiator in the Nature of Furniture.
Claims use since Sept. 18, 1929.

Ser. No. 294,432. SAMUEL S. MITTLEBURG, Brooklyn, N. Y. Filed Jan. 6, 1930.

FOLDOROL

No claim is made to the representation of the goods apart from the mark shown on the drawing.
For Folding and Rolling Furniture Made of Metal, Wood, and Composition—Namely, Chairs, Tables, Beds, Window Boxes, Sliding Doors, and Partitions for Separating Sections of Rooms.
Claims use since Dec. 20, 1929.

Ser. No. 297,361. L. E. DAVID & COMPANY, Philadelphia, Pa. Filed Mar. 15, 1930.



For Household Furniture—Namely, Chairs, Tables, China Closets, Servers, Buffets, Cabinets, Divans, Bookcases, Wardrobes, Cedar Chests, Utility Closets, Beds, Mattresses, Pillows, Bed Springs, Desks, Davenports, Settees, Day Beds, Bureaus, Chiffoniers, Chifforobes, Dressing Tables, Hatracks, Footstools, Smoking Stands, Magazine Racks, Benches, and Mirrors.
Claims use since Feb. 18, 1930.

CLASS 34

Heating, Lighting, and Ventilating Apparatus, Not Including Electrical Apparatus

Ser. No. 284,520. AMERICAN GAS FURNACE CO., Elizabeth, N. J. Filed May 23, 1929.

AMERICAN GAS FURNACE CO. PIONEERS IN 1878 LEADERS TO-DAY

For Gas Furnaces, Carbonizing Machines, Annealing Machines, Hardening Machines, Tempering Machines, Gas Burners, Gas and Air Burners, Furnaces for Heat Treating Metal, Blowers, Blow Pipes and Torches, Brazing Tables, Cyanide Furnaces, Forges, Heating Machines, Muffle Furnaces, Oil-Tempering Furnaces, Oven Furnaces, Plating Furnaces, Rivet Heaters, Soldering-Iron Heaters, Tempering Plates, Tire Heaters, Tube Heaters, and Gas Blast Burners.
Claims use since about 1921.

Ser. No. 297,488. ROBERT E. MILLER, New York, N. Y. Filed Mar. 18, 1930.

REMCO LITE

The word "Lite" is disclaimed apart from the mark as disclosed.
For Pyrophoric Lighters.
Claims use since Nov. 30, 1928.

Ser. No. 299,701. GLOBE AMERICAN CORPORATION, Kokomo, Ind. Filed Apr. 30, 1930.

RAY MAID

For Coal-Burning and Wood-Burning Kitchen Ranges.
Claims use since Apr. 17, 1930.

Ser. No. 299,702. GLOBE AMERICAN CORPORATION, Kokomo, Ind. Filed Apr. 30, 1930.

GLOW MAID

For Coal-Burning and Wood-Burning Kitchen Ranges.
Claims use since Apr. 17, 1930.

Ser. No. 299,990. PLANT RUBBER & ASBESTOS WORKS, San Francisco, Calif. Filed May 5, 1930.

VITEX

For Vent and Flue Pipes and Fittings Therefor.
Claims use since about Jan. 1, 1928.

Ser. No. 300,174. DOBBS & CO., New York, N. Y. Filed May 9, 1930.

Dobbs

For Friction Cigar Lighters and Friction Cigarette Lighters.
Claims use since about July, 1908.

CLASS 35

Belting, Hose, Machinery Packing, and Non-metallic Tires

Ser. No. 293,830. THE GOODYEAR TIRE & RUBBER COMPANY, Akron, Ohio. Filed Dec. 18, 1929.



For Pneumatic Tires Constructed Wholly or Partly of Rubber and Used for Motor Trucks, Motor Cars, Motor Cycles, Bicycles, Aeroplanes, and Other Vehicles, and Including Parts of Such Tires, Such as Treads, Outer Casings, or Tire Shoes and Inner Tubes Therefor; Rubber Nonskid Devices for Automobile Tires, Inside Tire Protectors, Outside Tire Protectors, Portable Tire and Tube Repair Outfits, and Tire and Tube Repair Patches and Bandages.
Claims use since Nov. 30, 1929.

Ser. No. 299,292. VICTOR BALATA & TEXTILE BELTING CO., New York, N. Y. Filed Apr. 22, 1930.

"PALMETTO"

For Transmission, Conveying, and Elevating Belting.
Claims use since Mar. 1, 1929.

Ser. No. 299,695. THE FEDERAL RUBBER COMPANY, Chicago, Ill., Cudahy, Wis., and Chicopee Falls, Mass. Filed Apr. 30, 1930.

FEDERAL

Applicant claims ownership of trade-mark registrations No. 172,277, No. 264,063, No. 264,976, and No. 267,969.
For Vehicle Tires, Inner Tubes, Tire Flaps, Belts and Belting, Hose and Tubing, Tire and Tube Patches, Portable Tire and Tube Repair Kits, Valve Bases, Inside Tire Sleeves, Annular and Sectional Air Bags for Tire Repairing, Universal Transmission Discs, and Tire-Repair Plugs, All Made Wholly or Partly of Rubber; and Tire Covers Made of Waterproofed Fabric.
Claims use since on or about Oct. 10, 1929.

CLASS 37

Paper and Stationery

Ser. No. 297,552. TRUSSELL MANUFACTURING COMPANY, Poughkeepsie, N. Y. Filed Mar. 10, 1930.

$=My Budget=$

No right to the exclusive use of the word "Budget" is claimed except as part of the mark shown.
For Account Books and Binders Therefor.
Claims use since Mar. 13, 1930.

Ser. No. 298,546. R. C. NOBLE, INC., Cleveland, Ohio. Filed Apr. 8, 1930.

PERENNIAL

For Bond, Ledger, Writing, Parchment, Book, and Index Papers.
Claims use since Apr. 1, 1930.

Ser. No. 300,026. JAMES P. LANGLEY, doing business as Langley Studios, Berkeley, Calif. Filed May 6, 1930.

Milestone Portraits

The word "Portraits" is disclaimed apart from the mark shown.
For Portrait-Album Leaves and Other Portrait Mountings.
Claims use since Oct. 31, 1929.

Ser. No. 300,088. SOLOMON M. SAGER, Evanston, Ill. Filed May 7, 1930.

"MULTIP"

For Pen Points.
Claims use since Apr. 9, 1930.

Ser. No. 300,128. HANO PAPER CORPORATION, New York, N. Y. Filed May 8, 1930.

ALGONQUIN

For Paper Products—Namely, Bond Paper for Writing and Printing Purposes, Manifold, Drawing, Index Bristol, Onion Skin, Cardboard, Pads, Correspondence and Mailing Envelopes, Cards, Legal Cap.
Claims use since Oct. 7, 1917.

Ser. No. 300,407. GILBERT PAPER COMPANY, Menasha, Wis. Filed May 13, 1930.

BARRISTER BOND

No claim is made herein to the word "Bond" apart from the mark shown in the drawing.
For Bond Paper.
Claims use since 1910.

CLASS 38

Prints and Publications

Ser. No. 291,826. HARPER'S BAZAR, INC., New York, N. Y. Filed Oct. 31, 1929.

Harper's Bazaar

For Monthly Magazine.
Claims use since November, 1867.

Ser. No. 296,050. WELFARE COMMITTEE OF THE INLAND STEEL COMPANY OF WISCONSIN, Milwaukee, Wis. Filed Feb. 28, 1930.

THE INLANDER

For Monthly Publications.
Claims use since Dec. 3, 1926.

Ser. No. 298,941. GERHARD, INC., New York, N. Y. Filed Apr. 16, 1930.

COLORAMA

For Drawings, Designs, and Pictorial Illustrations.
Claims use since Mar. 29, 1930.

Ser. No. 299,884. AMERICAN NATIONAL LIVE STOCK ASSOCIATION PUBLISHING CO., Denver, Colo. Filed May 3, 1930.

The PRODUCER

For Magazine Relating to Livestock.
Claims use since June 15, 1919.

CLASS 39

Clothing

Ser. No. 284,910. HARRY ISAACS, New York, N. Y. Filed June 1, 1929.



The word "Import" appearing on the drawing is disclaimed apart from the other features of the mark shown therein.
For Ladies' Hats.
Claims use since Jan. 1, 1927.

Ser. No. 286,756. LEOPOLD H. GLICKMAN, Philadelphia, Pa. Filed July 8, 1929.



For Shoes of Leather, Canvas, Rubber, and Combinations Thereof.
Claims use since May 30, 1929.

Ser. No. 290,045. STERN BROTHERS, New York, N. Y. Filed Sept. 20, 1929.

Pam

For Junior Misses' Wearing Apparel—Namely, Cloth Coats, Suits, Jackets, Knickers, Dresses, Frocks; Slippers Made of Leather, Rubber, and Fabric; Blouses, Scarfs, Waists for Outer and Under Wear, Collar and Cuff Sets,

Neckties, Belts for Outer Wear and Garter Belts, Sweaters, Smocks; Lingerie, as Petticoats, Slips, Step-Ins, Panties, Bloomers, Shirts, Vests, Brassières, Chemises, Girdles, Corsets; Aprons, Boots of Leather; Shoes of Leather, Calfskin, Satin, Brocade, and Kid; Overshoes; Sandals Made of Leather, Rubber, and Fabric; Bathing Shoes, Waterproof Coats and Capes, Bathing Suits, Bathing Caps, Millinery as Hats and Caps, Gloves and Gauntlets of Leather and Wool, Riding Habits, Fur Coats and Capes and Fur Neck Pieces, and Hosiery.

Claims use since Aug. 11, 1929.

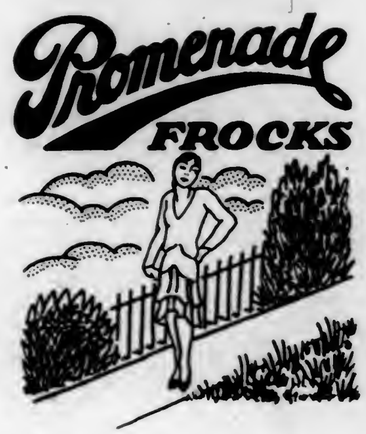
Ser. No. 290,151. MORRIS SHUWARGER, doing business as Bettermade Garment Company. Los Angeles, Calif. Filed Sept. 23, 1929.



For Ladies' Silk Dresses, Ladies' Wool Dresses, Ladies' Cotton Dresses, Ladies' Dresses Manufactured from the Combination of Silk and Wool, Ladies' Silk Coats, Ladies' Wool Coats, Misses' Silk Dresses, Misses' Wool Dresses, Misses' Cotton Dresses, Misses' Dresses Manufactured from the Combination of Silk and Wool, Misses' Silk Coats, Misses' Wool Coats, Children's Silk Dresses, Children's Wool Dresses, Children's Cotton Dresses, Children's Dresses Manufactured from the Combination of Silk and Wool, Children's Silk Coats, and Children's Wool Coats.

Claims use since Jan. 1, 1927.

Ser. No. 291,191. B & B MANUFACTURING COMPANY, Orange, N. J. Filed Oct. 17, 1929.



Applicants hereby disclaim any right to have the word "Frocks" registered as part of its trade name in conjunction with the word "Promenade."

For Women's Wash Frocks.

Claims use since July 29, 1929.

Ser. No. 291,662. GUITERMAN BROS., INC., St. Paul, Minn. Filed Oct. 28, 1929. Under 10-year proviso.

SUMMIT

For Men's and Boys' Garments—Namely, Working Shirts, Duck Coats, Aviation Suits, Overalls, Pantaloons, and Mackinaws.

Claims use since Sept. 15, 1894.

Ser. No. 294,076. BELLE M. LAURITSEN, doing business as B. M. Lauritsen Company, Manila, P. I., and New York, N. Y. Filed Dec. 26, 1929.



For Infants' Underwear, Dresses, Rompers, Creepers, Nightgowns, Panties, Combined Panties and Waists, Petticoats, Waists, Bibs.

Claims use since Aug. 1, 1926.

Ser. No. 294,578. ELF DRESSES, INC., New York, N. Y. Filed Jan. 9, 1930.

Petite Miss

For Dresses for Women and Misses.

Claims use since Nov. 20, 1929.

Ser. No. 297,200. MOSKIN CREDIT CLOTHING COMPANY, INC., New York, N. Y. Filed Mar. 12, 1930.



For Men's Suits, Overcoats, Topcoats, Dress and Work Shirts, Men's Neckties, and Shoes of Leather and of Fabric and Combinations of Both.

Claims use since Feb. 1, 1930.

Ser. No. 297,309. KLINE BROTHERS CO., New York, N. Y. Filed Mar. 14, 1930.



For Ladies', Misses', Children's Sweaters and Gloves, Made of Silk, Rayon, Cotton, Wool, Silk and Wool, and Rayon and Cotton Material.

Claims use since March, 1929.

Ser. No. 297,660. THE CENTURY TIE COMPANY, Detroit, Mich. Filed Mar. 21, 1930.

CENTURY TIE

No claim is made to the word "Tie" apart from the mark as shown in the drawing.

For Neckwear—Namely, Leather and Artificial Leather Bow Ties.

Claims use since June 1, 1928.

Ser. No. 297,849. CARSON PIRIE SCOTT & CO., Chicago, Ill. Filed Mar. 25, 1930.

ALOHA

For Women's Underwear.

Claims use since about Feb. 20, 1926.

Ser. No. 297,891. BUTLER BROTHERS, Chicago, Ill. Filed Mar. 26, 1930.

LADDIE

For Boys' Blouses and Play Suits.

Claims use since Feb. 1, 1912, on boys' blouses; since Feb. 1, 1929, on play suits.

Ser. No. 297,935. JESSE RAFELMAN, Norfolk, Va. Filed Mar. 26, 1930.



Applicant also disclaims the right to the exclusive use of the descriptive words "Hats" and "Art in Hats" as used on the trade-mark.

For Men's Felt and Straw Hats.

Claims use since Jan. 15, 1929.

Ser. No. 298,119. SNYDER'S HAT STORES, INC., New York, N. Y. Filed Mar. 29, 1930.

OUTSTANDER

For Negligee Shirts and Caps, Garters, Arm Bands, Pajamas, Hosiery, and Suspenders.

Claims use since Jan. 4, 1930.

Ser. No. 298,557. WRIGHT-LAMONTAGNE COMPANY, Springfield, Mass. Filed Apr. 8, 1930.

W. L.

For Corsets, Girdles, Brassière Combinations Comprising a Combination Corset and Brassière; Step-Ins Comprising Step-In Corsets and Hook-Side Girdles.

Claims use since on or about Feb. 1, 1927.

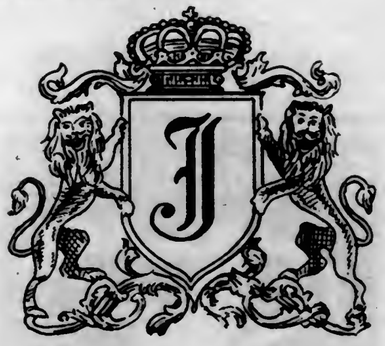
Ser. No. 298,782. H. A. BAKER COMPANY, Sioux City, Iowa. Filed Apr. 14, 1930.

HELLO WORLD

For Men's, Boys', Girls', and Women's Overalls; Men's, Boys', Girls', and Women's Riding Breeches; Men's and Boys' Jackets, Work Trousers, Dress Trousers, Work Shirts, Dress Shirts, Sheepskin Coats, Leather Coats, Mackinaw Coats, Windbreakers, Sport Coats, and Blazers.

Claims use since Jan. 15, 1930.

Ser. No. 298,852. FRANK SCHOBLE & CO., Philadelphia, Pa. Filed Apr. 14, 1930.



Jameson

The word "Jameson" is disclaimed apart from the mark shown in the drawings.

For Men's Felt Hats.

Claims use since Mar. 18, 1930.

Ser. No. 299,050. THE WALKER T. DICKERSON COMPANY, Columbus, Ohio. Filed Apr. 18, 1930.

SPORT STYLES HER ACTIVITY SHOES KOLLEGE KICKS

"Fashioned to Fit"

The right to the exclusive use of the words "Sport Styles, Shoes," and "Fashioned to Fit," is disclaimed apart from the mark shown in the drawing.

For Shoes Made of Leather, Leather and Fabric, and the Combination of Leather, Rubber, and Fabric.

Claims use since Feb. 18, 1930.

Ser. No. 299,068. LA CONQUEROR CO., Providence, R. I. Filed Apr. 18, 1930.



For Corsets.

Claims use since February, 1927.

Ser. No. 299,115. ETABLISSEMENTS M. POULET, SOCIETE ANONYME, Paris, France. Filed Apr. 19, 1930.

ETS M. POULET PARIS FRANCE

The words "Paris, France" being disclaimed apart from the mark shown.

For Ties, Cravats, Scarfs, Night Robes, Pyjamas, Dressing Gowns.

Claims use since Mar. 7, 1930.

Ser. No. 299,202. S. H. KRESS & CO., New York, N. Y. Filed Apr. 21, 1930.



For Ladies' Garters.

Claims use since Mar. 1, 1930.

Ser. No. 299,306. FAMOUS BATHROBE COMPANY, INC., New York, N. Y. Filed Apr. 23, 1930.



For Infants' Bath Robes and Buntings.

Claims use since about Mar. 15, 1930.

Ser. No. 299,321. A. S. ISBERSON, INC., New York, N. Y. Filed Apr. 23, 1930.

WEE WALKERS

For Children's Dresses.

Claims use since about Feb. 1, 1930.

Ser. No. 299,355. WEIL & DAMSEY, INC., New York, N. Y. Filed Apr. 23, 1930.

RUGBY

"PREP"

For Boys', Students', and Young Men's, Suits, Knickers, Reefers, and Overcoats.

Claims use since April, 1928.

Ser. No. 299,421. PETER YOUNG, INC., Buffalo, N. Y. Filed Apr. 24, 1930.

OUR LEADER
THE WHIP

Peter Young INC

For Coats, Suits, Topcoats, Overcoats, Trousers, Fancy Vests, for Men's Wear.

Claims use since Mar. 23, 1929.

Ser. No. 299,434. MICHAEL EWASZCZYSZYN, Amsterdam, N. Y. Filed Apr. 25, 1930.



The picture shown is the portrait of applicant.

For Short-Sleeve Shirts.

Claims use since May 1, 1929.

Ser. No. 299,442. INTERNATIONAL HARVEST HAT CO., St. Louis, Mo. Filed Apr. 25, 1930.

SHOO-FLY

For Men's Hats.

Claims use since Apr. 5, 1930.

Ser. No. 299,443. INTERNATIONAL HARVEST HAT CO., St. Louis, Mo. Filed Apr. 25, 1930.

SHADO

For Men's Hats.

Claims use since Apr. 5, 1930.

Ser. No. 299,444. INTERNATIONAL HARVEST HAT CO., St. Louis, Mo. Filed Apr. 25, 1930.

CELLOBRIM

For Men's Hats.

Claims use since Apr. 5, 1930.

Ser. No. 299,487. CELANESE CORPORATION OF AMERICA, New York, N. Y. Filed Apr. 26, 1930.

CELANDA

For Men's and Women's Underwear and Hose.

Claims use since Apr. 24, 1930.

Ser. No. 299,488. CELANESE CORPORATION OF AMERICA, New York, N. Y. Filed Apr. 26, 1930.

DURACEL

For Men's and Women's Underwear and Hose.

Claims use since about Apr. 25, 1930.

Ser. No. 299,536. BENZION WOLF, Chicago, Ill. Filed Apr. 26, 1930.

B-Z

For Garters.

Claims use since March, 1930.

Ser. No. 299,671. BEE HAT & CAP CO., St. Louis, Mo. Filed Apr. 30, 1930.

Popularity

For Men's and Boys' Hats and Caps.

Claims use since Apr. 25, 1930.

Ser. No. 299,841. NATH'L FISHER & CO., New York, N. Y. Filed May 2, 1930.

PAUL JONES

For Boots and Shoes, Made of Leather, Rubber, Fabric, or Combipations of These Materials.
Claims use since Nov. 1, 1928.

Ser. No. 299,843. R. H. FYFE & CO., Detroit, Mich. Filed May 2, 1930.



For Men's Leather Shoes.
Claims use since on or about Apr. 1, 1930.

Ser. No. 299,939. TUTELMAN & KOHN, Philadelphia, Pa. Filed May 3, 1930.



For Men's Dress, Work, or Negligee Shirts, Boys' Shirts, and Boys' Blouses.
Claims use since Apr. 30, 1930.

CLASS 42

Knitted, Netted, and Textile Fabrics

Ser. No. 284,765. ALBERT GODDE, BEDIN, INC., New York, N. Y. Filed May 29, 1929.

DANABAS

For Silk Piece Goods.
Claims use since 1926.

Ser. No. 293,601. JOSEPH M. SHAPIRO, doing business as The Personality Company, New York, N. Y. Filed Dec. 12, 1929.

Personality

For Cotton, Silk, Wool, Linen, and Angora Fabrics.
Claims use since Oct. 15, 1929.

Ser. No. 294,521. R. P. GORMAN & COBBE, LIMITED, Belfast, Northern Ireland. Filed Jan. 8, 1930.

GUARDSMAN
HANDKERCHIEFS



No claim is made to the word "Handkerchiefs."
For Cotton Handkerchiefs Not in the Piece.
Claims use since July 27, 1927.

Ser. No. 297,349. MEYER APPEL, New York, N. Y. Filed Mar. 15, 1930.

SWEETER-THAN-SWEET PRINTS

The word "Prints" is disclaimed apart from the mark shown.
For Goods in the Piece of Silk, Artificial Silk, Rayon, Cotton, Wool, and Linen Woven, Netted, or Knitted, and/or Combinations.
Claims use since Mar. 1, 1930.

Ser. No. 298,016. HARRY S. COHEN, doing business as Stylpax Handkerchief Company, Hartford, Conn. Filed Mar. 28, 1930.

STYLTEX

For Handkerchiefs.
Claims use since Aug. 27, 1928.

Ser. No. 298,035. MONADNOCK MILLS, Claremont, N. H. Filed Mar. 28, 1930.

MARSERAY

For Rayon Bedspreads.
Claims use since on or about Mar. 17, 1930.

Ser. No. 298,926. ARTHUR BERGMAN, doing business as Star Embroidery Company, New York, N. Y. Filed Apr. 16, 1930.

BEST-QUALITY
SWISS-O-GRAM
IMPROVES WITH WASHING

No registration rights are claimed herein to the words "Best Quality" and "Improves With Washing" apart from the mark as shown.
For Sheets, Pillowcases, Tablecloths, Napkins, Towels, Doilies, Handkerchiefs, Bedspreads, Mats; Said Articles being Made of Woolen, Cotton, Linen, Rayon, Silk, and Mixtures of the Foregoing Materials.
Claims use since Apr. 10, 1930.

Ser. No. 299,086. HARRY SCHARFER, doing business as French Importing Co., Chicago, Ill. Filed Apr. 18, 1930.

Sextette

For Hair Nets.
Claims use since May 27, 1924.

Ser. No. 300,484. THE FARNSWORTH COMPANY, Lisbon, Me. Filed May 14, 1930. Under 10-year proviso.

Lisbon Fabrics

For Woolen Piece Goods.
Claims use since 1868.

Ser. No. 300,488. FORSTMANN & HUFFMANN COMPANY, Passaic, N. J. Filed May 14, 1930.

GANTA

For Woolen Piece Goods.
Claims use since Apr. 15, 1930.

Ser. No. 300,490. FORSTMANN & HUFFMANN COMPANY, Passaic, N. J. Filed May 14, 1930.

CRYSANA

For Woolen Piece Goods.
Claims use since Apr. 15, 1930.

Ser. No. 300,491. FORSTMANN & HUFFMANN COMPANY, Passaic, N. J. Filed May 14, 1930.

CHONGA

For Woolen Piece Goods.
Claims use since Apr. 15, 1930.

Ser. No. 300,492. FORSTMANN & HUFFMANN COMPANY, Passaic, N. J. Filed May 14, 1930.

BAROCA

For Woolen Piece Goods.
Claims use since Apr. 15, 1930.

Ser. No. 300,494. FORSTMANN & HUFFMANN COMPANY, Passaic, N. J. Filed May 14, 1930.

KANDRA

For Woolen Piece Goods.
Claims use since Apr. 15, 1930.

Ser. No. 300,503. FORSTMANN & HUFFMANN COMPANY, Passaic, N. J. Filed May 14, 1930.

ZENITA

For Woolen Piece Goods.
Claims use since Apr. 15, 1930.

CLASS 43

Thread and Yarn

Ser. No. 290,560. DOLLFUS-MIEG & CIE, SOCIETE ANONYME, Mulhouse, Haut-Rhin, France. Filed Oct. 3, 1929.

DOLLFUS-MIEG & Cie
SOCIÉTÉ ANONYME
D·M·C
MULHOUSE-BELFORT-PARIS

Applicant makes no claim in this application to "Societe Anonyme, Marque de Fabrique Déposée, Mulhouse-Belfort-Paris, Soie Artificielle, A. Broder, No. 30, 24, Ech (4×C) de 5 Met."
For Yarns, Twists, and Threads of Cotton, Silk, Linen, Wool, Jute, Ramie, Spun Floret Silk, Artificial Silk, and Other Textile Materials, in Gold, Silver, Fine, or Simili or any Other Metals, Whatever Their Combination in These Various Products and Whatever Their Make-Up and Structure.
Claims use since September, 1929.

Ser. No. 290,562. DOLLFUS-MIEG & CIE, SOCIETE ANONYME, Mulhouse, Haut-Rhin, France. Filed Oct. 3, 1929.



Applicant makes no claim to "Soie Artificielle, A. Broder, 30, 6 Ech. De 5 Met.=5½ yds."

For Yarns, Twists, and Threads of Cotton, Silk, Linen, Wool, Jute, Ramie, Spun Floret Silk, Artificial Silk, and Other Textile Materials, in Gold, Silver, Fine, or Simili or any Other Metals, Whatever Their Combination in These Various Products and Whatever Their Make-Up and Structure.

Claims use since September, 1929.

Ser. No. 290,563. DOLLFUS-MIEG & CIE, SOCIETE ANONYME, Mulhouse, Haut-Rhin, France. Filed Oct. 3, 1929.



Applicant makes no claim to "Soie Art., A. Broder, 30, 5 metres," and "5½ yards."

For Yarns, Twists, and Threads of Cotton, Silk, Linen, Wool, Jute, Ramie, Spun Floret Silk, Artificial Silk, and Other Textile Materials, in Gold, Silver, Fine, or Simili or any Other Metals, Whatever Their Combination in These Various Products and Whatever Their Make-Up and Structure.

Claims use since September, 1929.

Ser. No. 296,914. GROVES MILLS, INCORPORATED, Gastonia, N. C. Filed Mar. 6, 1930.



For Cotton Yarns.
Claims use since Feb. 26, 1918.

Ser. No. 299,632. THE VISCOSE COMPANY, Marcus Hook, Pa. Filed Apr. 29, 1930.

BEVAZE

For Synthetic Yarn.
Claims use since Apr. 19, 1930.

Ser. No. 300,133. NYANZA MILLS, Boston, Mass. Filed May 13, 1930.

NANZA

For Worsted and Rayon and Worsted and Cotton Yarns.
Claims use since Apr. 15, 1930.

CLASS 44

Dental, Medical, and Surgical Appliances

Ser. No. 290,676. 'VULKAN' GUMMIWARENFABRIK WEISS & BAESSLER A.-G., Leipzig-Lindenau, Germany. Filed Oct. 4, 1929.

Amulette

For Pessaries Made of Rubber, Rubber Articles for Use in the Prevention of Contagion of Venereal Diseases, Rubber Finger Stalls, Rubber Operating Gloves, and India-Rubber Teats for Nursing Bottles.
Claims use since July, 1929.

Ser. No. 291,148. MRS. SALLY ROBERTS, New York, N. Y. Filed Oct. 16, 1929.

ARTFINGER

For Instrument for Use in the Art of Hair Waving.
Claims use since Sept. 1, 1929.

Ser. No. 298,494. ROBERT L. FLOYD, Chicago, Ill. Filed Apr. 7, 1930.

URI-LARM

For Bed-Wetting Alarm.
Claims use since Jan. 16, 1930.

Ser. No. 299,327. GEORGE KOLLSTEDE, Providence, R. I., assignor to George Kollstede, Inc., Providence, R. I., a Corporation of Rhode Island. Filed Apr. 22, 1930.



For Atomizers Specifically Perfume Atomizers.
Claims use since Jan. 21, 1930.

Ser. No. 299,837. DU PONT VISCOLOID COMPANY, New York, N. Y. Filed May 2, 1930.

Arlton

For Nail Polishers, Cuticle Pushers, and Nail Files.
Claims use since Feb. 7, 1930.

CLASS 45

Beverages, Nonalcoholic

Ser. No. 295,191. JACOB S. POLEFSKY, New York, N. Y. Filed Jan. 24, 1930.



For Nonalcoholic, Noncereal, Maltless Beverages Sold as Soft Drinks and Flavoring Extracts and Syrups for Making the Same.
Claims use since August, 1929.

Ser. No. 296,805. JOHN L. FRANKLIN, doing business as The Cordova Company, Atlanta, Ga. Filed Mar. 4, 1930.



For Carbonated, Nonalcoholic, Noncereal, Maltless Beverages Sold as Soft Drinks and Syrups and Extracts for Making the Same.
Claims use since Dec. 17, 1929.

Ser. No. 298,208. SCHIMMEL & CO., AKTIENGESELLSCHAFT, Miltitz, near Leipzig, Germany. Filed Mar. 31, 1930.

KALAROM

For Concentrated Alcoholic Essences to be Used as Flavorings in the Making of Soft Drinks Such as Orangeades, Lemonades, Cola.
Claims use since Oct. 3, 1928.

Ser. No. 298,673. ELTON E. SULLIVAN, Audubon, N. J., assignor to Beverages, Incorporated, Burlington, N. J., a Corporation of New Jersey. Filed Apr. 10, 1930.



For Nonalcoholic, Maltless Syrup for Soft-Drink Purposes.
Claims use since Feb. 15, 1930.

Ser. No. 299,811. STEWART'S ROOT BEER INC., Mansfield, Ohio. Filed May 1, 1930.



The drawing is lined for orange. No claim is made to the word "Root" or the word "Beer" apart from the mark as shown.

For Root Beer and Root-Beer Concentrate.
Claims use since Apr. 18, 1930.

Ser. No. 300,093. TRIPURE PRODUCTS CO., Miami, Fla. Filed May 7, 1930.

DELMAR DRY

No claim is made to the word "Dry" apart from the mark shown in the drawing.
For Ginger Ale and Nonalcoholic Beverages Sold as Soft Drinks.
Claims use since Apr. 10, 1930 .

Ser. No. 300,701. JAMESTOWN GINGER ALE CORP., Norfolk, Va. Filed May 17, 1930.

SEA BOARD DRY

The word "Dry" is disclaimed.
For Ginger Ale.
Claims use since May 7, 1930.

Ser. No. 300,777. G. G. BALCH, Pittsburgh, Pa. Filed May 19, 1930.

"HOOT-MON"

For Nonalcoholic, Maltless Beverages, and Syrups and Concentrates.
Claims use since March, 1920.

CLASS 46

Foods and Ingredients of Foods

Ser. No. 280,352. SCHIMMEL & CO., AKTIENGESELLSCHAFT, Miltitz, near Leipzig, Germany. Filed Mar. 6, 1929.

KALAROM

For Concentrated Alcoholic Essences to be Used for Flavoring Confectionery Such as Sweets, Candies, Rocks, Drops, Ice Creams, and Jellies.
Claims use since Oct. 3, 1928.

Ser. No. 286,432. E. B. GROSS CANNING CO., Monterey, Calif. Filed July 1, 1929.

EL CAPITAN

For Canned Sardines and Canned Pilchards.
Claims use since Feb. 19, 1918.

Ser. No. 289,642. D. PAPAGNI, doing business as D. Papagni Fruit Co., Fresno, Calif. Filed Sept. 11, 1929.

BLACK-ARROW

For Fresh Grapes.
Claims use since Aug. 9, 1929.

Ser. No. 291,482. JOHN SKITTONE, doing business as Skittone Fruit Co., Modesto, Calif. Filed Oct. 23, 1929.

BALD EAGLE RANCH

For Fresh Grapes.
Claims use since Sept. 27, 1929.

Ser. No. 292,164. H. HICKS & SON, INC., New York, N. Y. Filed Nov. 8, 1929.

Merry Trip Box

The descriptive word "Box" is disclaimed apart from the mark as shown.
For Candy; Fleshy, Drupaceous, Citrous, Deciduous (Canned and Uncanned), and Dry Fruits—Namely, Bananas, Grapes, Apples, Pears, Peaches, Oranges, Lemons, Plums, Pomegranates, Nuts; Carbohydrate, Nitrogenous, and Proteid Food Stuffs and Edibles—Namely, Flesh and Fruit Preserves, Breads, Fleshy Meats in Raw and Heat-Treated States, Sandwiches, Butters, Cakes, Cheeses, Eggs; Fresh, Dried, and Canned Vegetables—Namely, Tomatoes, Artichokes, Lettuce, Celery, Water Cress, Onions; Vegetable Salads with Dressing and/or Condiments and/or Chopped Meats, Fish, Chicken, and Lobster.
Claims use since Oct. 30, 1929.

Ser. No. 292,505. MOUQUIN, INCORPORATED, New York, N. Y. Filed Nov. 16, 1929.

Mouquin



The word "Mouquin" is claimed only in association with the other features shown on the drawing.
For Bouillon Tablets, Wine Sauces.
Claims use since Dec. 1, 1920.

Ser. No. 293,226. THE LIGHT GRAIN & MILLING CO., Liberal, Kans. Filed Dec. 4, 1929.

OVEN PERFECT FLOUR

The words "Perfect" and "Flour" are claimed only in association with the other features of the mark.
For Wheat Flour.
Claims use since Nov. 26, 1929.

Ser. No. 293,844. JOHN MORRELL & CO., Ottumwa, Iowa. Filed Dec. 18, 1929.

MORRELL'S RED HEART

The drawing is lined for red.
For Stock and Poultry Feeds of All Kinds.
Claims use since Nov. 27, 1929.

Ser. No. 293,845. JOHN MORRELL & CO., Ottumwa, Iowa. Filed Dec. 18, 1929.

MORRELL'S RED HEART

For Stock and Poultry Feeds of All Kinds.
Claims use since Nov. 27, 1929.

Ser. No. 293,846. JOHN MORRELL & CO., Ottumwa, Iowa. Filed Dec. 18, 1929.

RED HEART

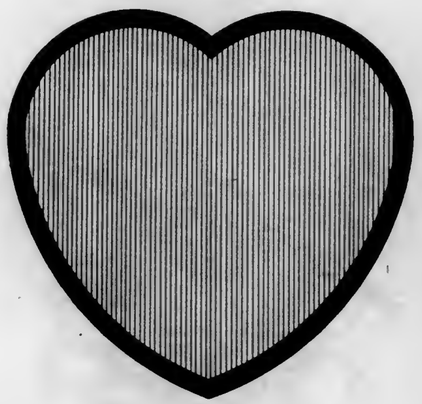
For Stock and Poultry Feeds of All Kinds.
Claims use since Nov. 27, 1929.

Ser. No. 293,847. JOHN MORRELL & CO., Ottumwa, Iowa. Filed Dec. 18, 1929.



For Stock and Poultry Feeds of All Kinds.
Claims use since Nov. 27, 1929.

Ser. No. 293,849. JOHN MORRELL & CO., Ottumwa, Iowa. Filed Dec. 18, 1929.



The drawing is lined for red.
For Stock and Poultry Feeds of All Kinds.
Claims use since Nov. 27, 1929.

Ser. No. 295,186. THE MIDLAND FLOUR MILLING CO., Kansas City, Mo.; also doing business as The Halstead Milling & Elev. Co., Halstead, Kans. Filed Jan. 24, 1930.

SIGLO DE ORO

For Wheat Flour.
Claims use since Aug. 6, 1928.

Ser. No. 297,191. THE HAUSWALD BAKERY, Baltimore, Md. Filed Mar. 12, 1930.

Mrs HAUSWALD'S

DeLuxe

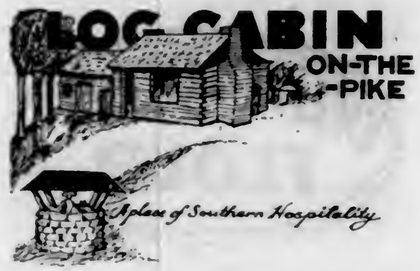
For Bread, Rolls, and Buns.
Claims use since Jan. 10, 1928.

Ser. No. 297,828. F. G. VOGT & SONS, INCORPORATED, Philadelphia, Pa. Filed Mar. 24, 1930.



The portion within the circle is blue in color, while the border is red in color. The ribbons are red outlined in blue.
For Sliced Meats—Namely, Sliced Bacon.
Claims use since Feb. 15, 1930.

Ser. No. 297,997. JENNIE K. SAWYER, Dallas, Tex. Filed Mar. 27, 1930.



For Fried-Chicken Sandwiches, Chicken-Leg Sandwiches, Barbecue-Chicken Sandwiches, Barbecue-Beef Sandwiches, and Barbecue-Pork Sandwiches.
Claims use since Apr. 25, 1927.

Ser. No. 298,351. NORTHWESTERN YEAST COMPANY, Chicago, Ill. Filed Apr. 3, 1930.

YEAST FOAM

No claim is made to the word "Yeast" apart from the mark shown.
For Bread.
Claims use since Mar. 31, 1930.

Ser. No. 298,353. MARIE OTT, Brooklyn, N. Y. Filed Apr. 3, 1930.

Food of the Gods

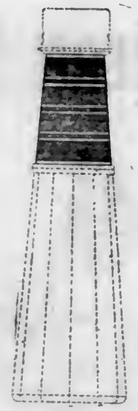
For Cocoa, Chocolate, Candy, Chocolates, Malted Cocoa and Chocolate, and Chocolate-Covered Fruits and Nuts.
Claims use since Mar. 14, 1930.

Ser. No. 298,561. RICARDO ANDRADE, New York, N. Y. Filed Apr. 9, 1930.

PINDOBA

For Coffee.
Claims use since Apr. 15, 1922.

Ser. No. 298,568. CURTICE BROTHERS CO., Rochester, N. Y. Filed Apr. 9, 1930.



The drawing is lined to denote the colors blue and green. The representation of the bottle is disclaimed.
For Prepared Tomato Juice.
Claims use since Feb. 14, 1930.

Ser. No. 298,761. NORTH AMERICAN TRADING & IMPORT CO., Philadelphia, Pa. Filed Apr. 12, 1930.

NATICO

For Molasses.
Claims use since Mar. 15, 1930.

Ser. No. 298,779. AMTORG TRADING CORPORATION, New York, N. Y. Filed Apr. 14, 1930.

KAMKO

For Canned Crab Meat.
Claims use since about Feb. 1, 1930.

Ser. No. 298,863. STRIETMANN BISCUIT COMPANY, Cincinnati, Ohio. Filed Apr. 14, 1930.

GRAND SLAM

For Crackers and Cakes.
Claims use since Dec. 2, 1929.

Ser. No. 298,942. GOLDEN STATE MILK PRODUCTS COMPANY, San Francisco, Calif. Filed Apr. 16, 1930.



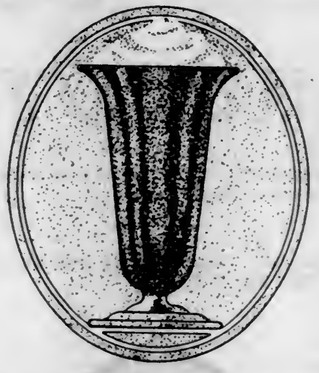
The drawing of the trade-mark is lined to indicate the colors red and gold. The word "Butter" and the term "Golden State" are disclaimed apart from the mark as shown on the drawing.
For Butter.
Claims use since on or about January, 1913.

Ser. No. 299,261. COLUMBIA CHEESE COMPANY, Newark, N. J. Filed Apr. 22, 1930.

PRIMA

No claim is made for the word "Prima" apart from the mark shown on the drawing.
For Cheese.
Claims use since August, 1929.

Ser. No. 299,283. SEEMAN BROTHERS INC., New York, N. Y. Filed Apr. 22, 1930.



For Desserts in Powdered Form and Sweetened and Flavored.
Claims use since Jan. 1, 1930.

Ser. No. 299,319. THE JOHN D. HAMILTON COMPANY, Tacoma, Wash. Filed Apr. 23, 1930.

R-K-O

For Candy.
Claims use since Apr. 1, 1930.

Ser. No. 299,402. THE MARMITE FOOD EXTRACT CO., LIMITED, London, England. Filed Apr. 24, 1930.

CEREMA-YEAST

No claim being made to the exclusive use of the word "Yeast" apart from the mark shown on the drawing.
For Foods for Birds and Animals.
Claims use since Dec. 1, 1923.

Ser. No. 299,498. CONE CONFECTION CO., Chicago, Ill. Filed Apr. 26, 1930.

WALKING SUNDAE

For Bakery Product Commonly Designated as Ice-Cream Cones.
Claims use since May 1, 1929.

Ser. No. 299,509. L. CHARLES MAZZOLA, Rochester, N. Y. Filed Apr. 26, 1930.

PETRONAISE

For Mayonnaise Dressing.
Claims use since Mar. 1, 1928.

Ser. No. 299,635. ELMER E. WADE, doing business as Anna Elizabeth Wade, Orange, N. J. Filed Apr. 29, 1930.

RUDDY

For Chocolate and Other Flavored Food Drinks.
Claims use since Mar. 15, 1930.

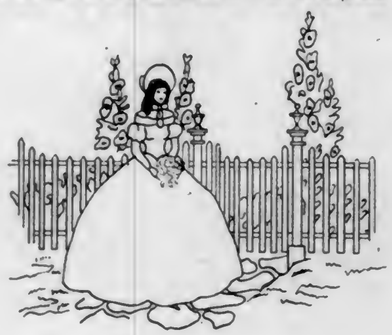
Ser. No. 299,812. STEWART'S ROOT BEER INC., Mansfield, Ohio. Filed May 1, 1930.

ROOT Stewart's BEER

The drawing is lined for orange.
For Popped and Salted Pop Corn and Pop Corn in its Natural State.
Claims use since Apr. 18, 1930.

Ser. No. 299,958. DIAMOND COFFEE MILLS, INC., Shreveport, La. Filed May 5, 1930.

SOUTHERN GIRL



The lining on the drawing is intended for shading only.
For Coffee.
Claims use since Nov. 20, 1928.

Ser. No. 299,959. DIAMOND COFFEE MILLS, INC., Shreveport, La. Filed May 5, 1930.

BROWN MUG



The portrait is fanciful.
For Coffee.
Claims use since Nov. 18, 1928.

Ser. No. 300,604. J. ARON & COMPANY, INC., New Orleans, La. Filed May 16, 1930.

MANABOG

For Green Coffee.
Claims use since November, 1928.

Ser. No. 300,694. TUSCALOOSA COFFEE COMPANY, Tuscaloosa, Ala. Filed May 16, 1930.

LONE JOY

For Coffee.
Claims use since Feb. 8, 1930.

Ser. No. 300,706. JOHN FRANCIS BROWN, doing business as National Park Chocolates, Palo Alto, Pa. Filed May 17, 1930.

CREME DE NU-CHE

For Candy.
Claims use since Feb 15, 1930.

Ser. No. 300,737. MUELLER-KELLER CANDY CO., St. Joseph, Mo. Filed May 17, 1930.

ALIMOS

For Candy.
Claims use since April, 1924.

CLASS 49

Distilled Alcoholic Liquors

Ser. No. 299,908. THE FRANKFORT DISTILLERY, INC., Louisville, Ky. Filed May 8, 1930.

SWASTIKA



For Whiskey.
Claims use since Jan. 1, 1902.

CLASS 50

Merchandise Not Otherwise Classified

Ser. No. 298,885. BRISTOY INC., Knoxville, Tenn. Filed Apr. 15, 1930.

BRISTOY

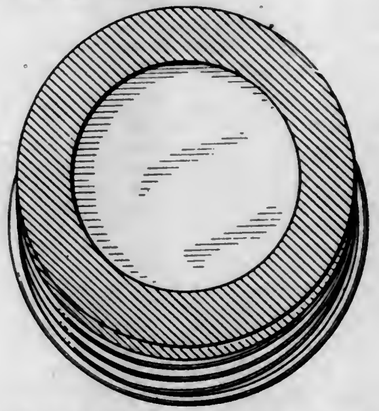
For Advertising Devices in the Form of Combination, Composite, or Built-Up Signs, and Display Figures, Images, Manikins, Models, and Statuettes Used in Connection Therewith.
Claims use since Jan. 1, 1930.

Ser. No. 300,011. BOSTON BLACKING COMPANY, INC., Boston, Mass. Filed May 6, 1930.

Bostik

For Sheet Fabric Coated with Adhesive.
Claims use since about Feb. 10, 1930.

Ser. No. 300,264. EMPIRE METAL CAP CO., INC., Brooklyn, N. Y. Filed May 10, 1930.



The trade-mark consists of a broad circle of green color bordering the top and side of the cap. No claim is made to the representation of a cap.
For Sheet-Metal Caps for Bottles and Jars.
Claims use since about June 15, 1924.

Ser. No. 300,429. MORLEY BUTTON MANUFACTURING COMPANY, Portland, Me., and Portsmouth, N. H. Filed May 13, 1930.

RANGER

For Dry Mats for Use in the Stereotyping Process of Printing.
Claims use since Apr. 30, 1930.

TRADE-MARK REGISTRATIONS GRANTED

[ACT OF FEBRUARY 20, 1905]

JUNE 24, 1930

271,951. MONTHLY MAGAZINE. GOOD STORY MAGAZINE COMPANY, INC., New York, N. Y.
Filed March 3, 1930. Serial No. 296,743. PUBLISHED APRIL 8, 1930. Class 38.

271,952. MONTHLY MAGAZINE. GOOD STORY MAGAZINE COMPANY, INC., New York, N. Y.
Filed March 3, 1930. Serial No. 296,742. PUBLISHED APRIL 8, 1930. Class 38.

271,953. MONTHLY MAGAZINE. WORZALLA PUBLISHING CO., Stevens Point, Wis.
Filed February 27, 1930. Serial No. 296,622. PUBLISHED APRIL 8, 1930. Class 38.

271,954. DAILY NEWSPAPER. MANUFACTURERS RECORD PUBLISHING COMPANY, Baltimore, Md.
Filed February 26, 1930. Serial No. 296,536. PUBLISHED APRIL 8, 1930. Class 38.

271,955. BOOKLETS, PAMPHLETS, REAL ESTATE AND FINANCIAL PUBLICATIONS. WALDO LYON, Traverse City, Mich.
Filed February 24, 1930. Serial No. 296,507. PUBLISHED APRIL 8, 1930. Class 38.

271,956. BULLETINS AND PAMPHLETS PUBLISHED FROM TIME TO TIME. MERCHANTS' MINUTE MEN OF AMERICA, Shreveport, La.
Filed February 21, 1930. Serial No. 296,308. PUBLISHED APRIL 8, 1930. Class 38.

271,957. MINERAL-COATED PAPER SUITABLE FOR PRINTING. THE CHAMPION COATED PAPER COMPANY, Hamilton, Ohio.
Filed February 20, 1930. Serial No. 296,260. PUBLISHED APRIL 8, 1930. Class 37.

271,958. HEEL PAD AND HOSE PROTECTOR. S. B. WRIGHT, doing business as Wright Products Co., Chicago, Ill.
Filed February 15, 1930. Serial No. 296,095. PUBLISHED APRIL 1, 1930. Class 39.

271,959. MECHANICALLY-REFRIGERATED WATER COOLERS AND BEVERAGE COOLERS, CABINETS AND FIXTURES THEREFOR, AND FOR PARTS OF SAID COOLERS, CABINETS, AND FIXTURES. LIQUID COOLER CORPORATION, Detroit, Mich.
Filed February 15, 1930. Serial No. 296,067. PUBLISHED APRIL 8, 1930. Class 31.

271,960. MONTHLY PERIODICALS. BENJAMIN, HILL & Co., New York, N. Y.
Filed February 15, 1930. Serial No. 296,045. PUBLISHED APRIL 8, 1930. Class 38.

271,961. BRASSIÈRES, GARTER BELTS, AND GIRDLES. ENID MANUFACTURING CO. INC., New York, N. Y.
Filed February 14, 1930. Serial No. 296,005. PUBLISHED APRIL 1, 1930. Class 39.

271,962. BRASSIÈRES, GARTER BELTS, AND GIRDLES. ENID MANUFACTURING CO. INC., New York, N. Y.
Filed February 14, 1930. Serial No. 296,003. PUBLISHED APRIL 1, 1930. Class 39.

271,963. COTTON BIAS BINDING, SILK BIAS BINDING, AND RAYON BIAS BINDING. ASSEMBLED PRODUCTS COMPANY, INC., New York, N. Y.
Filed February 14, 1930. Serial No. 295,990. PUBLISHED APRIL 1, 1930. Class 40.

271,964. DAILY PUBLICATIONS OF STRIPS AND PANELS CONSISTING OF COMIC FEATURES. THE ASSOCIATED PRESS, New York, N. Y.
Filed February 11, 1930. Serial No. 295,918. PUBLISHED APRIL 8, 1930. Class 38.

271,965. DAILY PUBLICATIONS OF STRIPS AND PANELS CONSISTING OF COMIC FEATURES. THE ASSOCIATED PRESS, New York, N. Y.
Filed February 11, 1930. Serial No. 295,917. PUBLISHED APRIL 8, 1930. Class 38.

271,966. DAILY PUBLICATIONS OF STRIPS AND PANELS CONSISTING OF COMIC FEATURES. THE ASSOCIATED PRESS, New York, N. Y.
Filed February 11, 1930. Serial No. 295,916. PUBLISHED APRIL 8, 1930. Class 38.

271,967. DAILY PUBLICATIONS OF STRIPS AND PANELS CONSISTING OF COMIC FEATURES. THE ASSOCIATED PRESS, New York, N. Y.
Filed February 11, 1930. Serial No. 295,915. PUBLISHED APRIL 8, 1930. Class 38.

271,968. DAILY PUBLICATIONS OF STRIPS AND PANELS CONSISTING OF COMIC FEATURES. THE ASSOCIATED PRESS, New York, N. Y.
Filed February 11, 1930. Serial No. 295,914. PUBLISHED APRIL 8, 1930. Class 38.

271,969. DAILY PUBLICATIONS OF STRIPS AND PANELS CONSISTING OF COMIC FEATURES. THE ASSOCIATED PRESS, New York, N. Y.
Filed February 11, 1930. Serial No. 295,913. PUBLISHED APRIL 8, 1930. Class 38.

271,970. PILE FABRICS IN THE PIECE. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y.
Filed March 1, 1930. Serial No. 296,685. PUBLISHED APRIL 8, 1930. Class 42.

271,971. PILE FABRICS IN THE PIECE. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y.
Filed March 1, 1930. Serial No. 296,684. PUBLISHED APRIL 8, 1930. Class 42.

271,972. PILE FABRICS IN THE PIECE. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y.
Filed March 1, 1930. Serial No. 296,683. PUBLISHED APRIL 8, 1930. Class 42.

271,973. PILE FABRICS IN THE PIECE. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y.
Filed March 1, 1930. Serial No. 296,682. PUBLISHED APRIL 8, 1930. Class 42.

271,974. PILE FABRICS IN THE PIECE. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y.
Filed March 1, 1930. Serial No. 296,681. PUBLISHED APRIL 8, 1930. Class 42.

271,975. PILE FABRICS IN THE PIECE. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y.
Filed March 1, 1930. Serial No. 296,680. PUBLISHED APRIL 8, 1930. Class 42.

271,976. APRON DUCK IN THE PIECE FOR LAUNDRY MACHINES. MITCHELL WING COMPANY, Cambridge, Mass.
Filed February 28, 1930. Serial No. 296,662. PUBLISHED APRIL 8, 1930. Class 42.

271,977. PIECE GOODS OF SILK AND RAYON AND MIXTURES THEREOF. DUPLAN SILK CORPORATION, New York, N. Y.
Filed February 27, 1930. Serial No. 296,588. PUBLISHED APRIL 8, 1930. Class 42.

271,978. WHEAT FLOUR. BUENA VISTA MILLS, Buena Vista, Va.
Filed February 27, 1930. Serial No. 296,578. PUBLISHED APRIL 8, 1930. Class 46.

271,979. TRUE-FRUIT AND IMITATION FLAVORING EXTRACTS FOR FLAVORING NONALCOHOLIC, NONCEREAL, MALTLESS BEVERAGES. MILTON PAUL, doing business as International Extract Co., New York, N. Y.
Filed February 24, 1930. Serial No. 296,438. PUBLISHED APRIL 8, 1930. Class 45.

271,980. BAKERY PRODUCTS—NAMELY, CAKES, COOKIES, BREAD, PIES, ROLLS, DOUGHNUTS, CREAM PUFFS, CRACKERS, FIG BARS, PRETZELS. H. JEVNE CO., Los Angeles, Calif.
Filed February 24, 1930. Serial No. 296,424. PUBLISHED APRIL 8, 1930. Class 46.

271,981. FISHING REELS. SOUTH BEND BAIT CO., South Bend, Ind.
Filed February 21, 1930. Serial No. 296,363. PUBLISHED APRIL 8, 1930. Class 22.

271,982. MEN'S AND BOYS' HATS AND CAPS. LEVEL HAT CO., INC., South Norwalk, Conn.
Filed January 10, 1930. Serial No. 294,642. PUBLISHED MARCH 25, 1930. Class 39.

271,983. INTERNAL-COMBUSTION ENGINES FOR AERONAUTICAL PURPOSES. WRIGHT AERONAUTICAL CORPORATION, Paterson, N. J.
Filed January 9, 1930. Serial No. 294,605. PUBLISHED APRIL 1, 1930. Class 23.

271,984. LEATHER SHOES. DUNN & MCCARTHY, INC., Auburn, N. Y.
Filed January 28, 1930. Serial No. 295,296. PUBLISHED MARCH 25, 1930. Class 39.

271,985. BOOTS, SHOES, AND SLIPPERS OF LEATHER, FABRIC, OR COMBINATIONS THEREOF. J. W. CARTER COMPANY, Nashville, Tenn.
Filed January 27, 1930. Serial No. 295,252. PUBLISHED APRIL 8, 1930. Class 39.

271,986. SLIPPERS COMPOSED OF SATIN, FELT, LEATHER, PRINTED DUCK, OR LIKE MATERIAL OR COMBINATIONS THEREOF. DOLGEVILLE SLIPPER COMPANY, INC., Dolgeville, N. Y.
Filed January 25, 1930. Serial No. 295,211. PUBLISHED MARCH 25, 1930. Class 39.

271,987. MEN'S, WOMEN'S, AND CHILDREN'S BOOTS, SHOES, AND SLIPPERS MADE WHOLLY OR IN PART OF LEATHER, CANVAS, OR TEXTILE MATERIAL. JAMES M. DALY, Lynn, Mass.
Filed January 25, 1930. Serial No. 295,209. PUBLISHED MARCH 25, 1930. Class 39.

271,988. GLOVES. INDIANAPOLIS GLOVE COMPANY, Indianapolis, Ind.
Filed January 24, 1930. Serial No. 295,179. PUBLISHED APRIL 8, 1930. Class 39.

271,989. CANVAS WORK GLOVES. INDIANAPOLIS GLOVE COMPANY, Indianapolis, Ind.
Filed January 24, 1930. Serial No. 295,178. PUBLISHED APRIL 1, 1930. Class 39.

271,990. STORAGE BATTERIES. LILLIAN SCHWARTZ, Philadelphia, Pa.
Filed January 21, 1930. Serial No. 295,055. PUBLISHED APRIL 8, 1930. Class 21.

271,991. LUBRICATING OILS AND GREASES. PANHARD OIL CORPORATION, New York, N. Y.
Filed January 21, 1930. Serial No. 295,047. PUBLISHED APRIL 1, 1930. Class 15.

271,992. WHOLE-WHEAT FLOUR. THE PANIPLUS COMPANY, Wilmington, Del.
Filed January 20, 1930. Serial No. 294,993. PUBLISHED APRIL 8, 1930. Class 46.

271,993. LEATHER, CLOTH, AND RUBBER BOOTS, SHOES, AND SLIPPERS. HERBERT W. HANAN, doing business as Hanan & Son, Brooklyn, N. Y.
Filed January 20, 1930. Serial No. 294,972. PUBLISHED MARCH 25, 1930. Class 39.

271,994. HATS INTENDED FOR THE USE OF MEN. BENJAMIN SCHAENGOLD, Cincinnati, Ohio.
Filed January 18, 1930. Serial No. 294,950. PUBLISHED APRIL 8, 1930. Class 39.

271,995. HATS INTENDED FOR THE USE OF MEN. BENJAMIN SCHAENGOLD, Cincinnati, Ohio.
Filed January 18, 1930. Serial No. 294,949. PUBLISHED APRIL 8, 1930. Class 39.

271,996. PAINT SCRAPERS. SEED FILTER & MANUFACTURING CO., INC., New York, N. Y.
Filed January 18, 1930. Serial No. 294,927. PUBLISHED APRIL 1, 1930. Class 23.

271,997. BOARD GAME. WILLIAM HENRY STOREY, Southend-on-Sea, England.
Filed January 17, 1930. Serial No. 294,899. PUBLISHED APRIL 8, 1930. Class 22.

271,998. LADIES' READY-TO-WEAR CLOTHES—NAMELY, COATS, SUITS, DRESSES, AND HATS. BLAIR BROS., Chicago, Ill.
Filed January 17, 1930. Serial No. 294,867. PUBLISHED MARCH 18, 1930. Class 39.

271,999. SHOE LACES. JOSEPH PELLEGRIN, New York, N. Y.
Filed January 17, 1930. Serial No. 294,888. PUBLISHED APRIL 1, 1930. Class 40.

272,000. GLASSWARE—NAMELY, TABLEWARE. B. TOMBY & CO. INC., New York, N. Y.
Filed January 10, 1930. Serial No. 294,651. PUBLISHED APRIL 8, 1930. Class 33.

272,001. LEATHER. THE MICHIGAN CITY TANNING COMPANY, Michigan City, Ind.
Filed January 13, 1930. Serial No. 294,735. PUBLISHED APRIL 8, 1930. Class 1.

272,002. CERTAIN NAMED WEARING APPAREL. LEPSELTER & HOFFER, New York, N. Y.
Filed November 28, 1929. Serial No. 292,811. PUBLISHED APRIL 1, 1930. Class 39.

272,003. BOND, LEDGER, AND WRITING PAPERS. EMPIRE PAPER COMPANY, Chicago, Ill.
Filed November 22, 1929. Serial No. 292,773. PUBLISHED APRIL 8, 1930. Class 37.

272,004. GROUND FELDSPAR. TENNESSEE MINERAL PRODUCTS CORPORATION, Spruce Pine, N. C.
Filed November 22, 1929. Serial No. 292,760. PUBLISHED APRIL 8, 1930. Class 1.

272,005. RADIO RECEIVING SETS. GRIGSBY-GRUNOW COMPANY, Chicago, Ill.
Filed November 21, 1929. Serial No. 292,665. PUBLISHED FEBRUARY 11, 1930. Class 21.

272,006. FLYING SUITS, LEATHER COATS, LEATHER VESTS, LEATHER TROUSERS, HELMETS. H. L. FRIEDLEN & COMPANY, Chicago, Ill.
Filed November 16, 1929. Serial No. 292,493. PUBLISHED APRIL 8, 1930. Class 39.

272,007. LEATHER BOOTS AND SHOES WITH UPPERS WHOLLY OR MAINLY OF LEATHER, SOLES WHOLLY OF LEATHER OR OF ALTERNATIVE SOLING MATERIALS, INCLUDING RUBBER SOLES. SAXONE SHOE CO. LIMITED, Kilmarnock, Scotland.
Filed November 5, 1929. Serial No. 292,051. PUBLISHED APRIL 1, 1930. Class 39.

272,008. METAL NURSING-BOTTLE WARMERS. ROBERT BARTHOLOMEW, doing business as The Bartholomew Manufacturing Company, Scotch Plains, N. J.
Filed November 2, 1929. Serial No. 291,902. PUBLISHED APRIL 8, 1930. Class 13.

272,009. PLAIN PINS, HAIRPINS, AND SAFETY PINS MADE OF STEEL, ALUMINITE, AND OTHER NONPRECIOUS METALS. S. H. KRESS & Co., New York, N. Y.
Filed November 1, 1929. Serial No. 291,883. PUBLISHED MARCH 25, 1930. Class 40.

272,010. LADIES' GARTERS. S. H. KRESS & Co., New York, N. Y.
Filed November 1, 1929. Serial No. 291,880. PUBLISHED APRIL 8, 1930. Class 39.

272,011. PLAIN PINS, HAIRPINS, AND SAFETY PINS MADE OF STEEL, ALUMINITE, AND OTHER NON-PRECIOUS METALS. S. H. KRESS & Co., New York, N. Y.
Filed November 1, 1929. Serial No. 291,881. PUBLISHED MARCH 25, 1930. Class 40.

272,012. PUBLICATIONS (MAGAZINES) GENERALLY PUBLISHED MONTHLY, BUT ALSO AT OTHER PERIODS. H STEWART SAR, doing business as American Masters Press, Hollywood, Calif.
Filed October 21, 1929. Serial No. 291,359. PUBLISHED APRIL 8, 1930. Class 38.

272,013. SPRAYERS, PUMPS, SQUIRT GUNS, ATOMIZERS, ETC. STANCO INCORPORATED, New York, N. Y.
Filed October 3, 1929. Serial No. 290,624. PUBLISHED APRIL 1, 1930. Class 23.

272,014. TOOTH-CHAMFERING MACHINE, GRINDING CHUCK, BURNISHING MACHINE, ETC. O. M. POOCK, doing business as City Machine & Tool Works, Dayton, Ohio.
Filed September 9, 1929. Serial No. 289,507. PUBLISHED APRIL 1, 1930. Class 23.

272,015. CANTON FABRIC. CARAFIOL-SILVERMAN GARMENT CO., St. Louis, Mo.
Filed September 3, 1929. Serial No. 289,264. PUBLISHED APRIL 8, 1930. Class 42.

272,016. COMBINATION RUBBER AND LEATHER SHOES AND COMPOSITION SOLES FOR SHOES. MISHAWAKA RUBBER AND WOOLEN MANUFACTURING COMPANY, Mishawaka, Ind.
Filed August 19, 1929. Serial No. 288,715. PUBLISHED APRIL 1, 1930. Class 39.

272,017. SPATS. WILLIAMS MANUFACTURING COMPANY, Portsmouth, Ohio.
Filed August 6, 1929. Serial No. 288,211. PUBLISHED OCTOBER 15, 1929. Class 39.

272,018. LADIES' UNDERWEAR—NAMELY, BRASSIÈRE AND PANTY COMBINATIONS, BRASSIÈRE AND STEP-IN COMBINATIONS, AND BRASSIÈRE AND BLOOMER COMBINATIONS. WILSON, McGOWN & TENZER, INC., New York, N. Y.
Filed July 10, 1929. Serial No. 286,847. PUBLISHED APRIL 1, 1930. Class 39.

272,019. GLASS AND STRENGTHENED GLASS IN SHEETS OR TUBES, UNMOUNTED WIND SCREENS, UNMOUNTED WINDOW PANES, ALL OF GLASS OR OF STRENGTHENED GLASS. XETAL SAFETY GLASS, LIMITED, Stapleford, England.
Filed June 8, 1929. Serial No. 285,316. PUBLISHED NOVEMBER 5, 1929. Class 33.

272,020. TRANSFER PATTERNS. AMERICAN TRADE MARK CORPORATION, New York, N. Y.
Filed December 15, 1928. Serial No. 276,757. PUBLISHED APRIL 8, 1930. Class 40.

272,021. TRANSFER PATTERNS. AMERICAN TRADE MARK CORPORATION, New York, N. Y.
Filed December 15, 1928. Serial No. 276,756. PUBLISHED APRIL 8, 1930. Class 40.

272,022. ELECTRIC BATTERIES. GENERAL DRY BATTERIES, INC., Cleveland, Ohio.
Filed November 30, 1928. Serial No. 276,074. PUBLISHED APRIL 8, 1930. Class 21.

272,023. WHEAT FLOUR AND COFFEE. THE JOHN C. GROUB COMPANY, doing business as The Jay C. Stores, Seymour and Mitchell, Ind.
Filed October 22, 1928. Serial No. 274,108. PUBLISHED APRIL 8, 1930. Class 46.

272,024. CUTLERY WARE—NAMELY, SAFETY RAZORS, BLADES FOR SAFETY RAZORS, HAIR CLIPPERS AND SHEARING MACHINES, MECHANICAL RAZOR-BLADE AND CORN-PLANE STROPPERS. ROTH-BUCHNER AKTIENGESELLSCHAFT, Berlin-Tempelhof, Germany.
Filed August 31, 1928. Serial No. 271,825. PUBLISHED APRIL 1, 1930. Class 23.

272,025. GUMMED PAPER TAPE, UNGUMMED PAPER TAPE, GUMMED CLOTH TAPE, AND UNGUMMED CLOTH TAPE. THE GUMMED PRODUCTS COMPANY, Troy, Ohio.
Filed January 5, 1928. Serial No. 259,730. PUBLISHED MARCH 13, 1928. Class 37.

272,026. CEREAL MALT SYRUPS. TACOMA BREWING CO., San Francisco, Calif.
Filed December 29, 1927. Serial No. 259,471. PUBLISHED APRIL 1, 1930. Class 46.

272,027. TAILORED CAPS FOR MEN, WOMEN, AND CHILDREN. PEERLESS CAP CO., Covington, Ky.
Filed December 1, 1927. Serial No. 258,282. PUBLISHED APRIL 1, 1930. Class 39.

272,028. CHAINS, CHAIN BELTS, AND PARTS THEREOF. LINK-BELT COMPANY, Chicago, Ill.
Filed May 16, 1927. Serial No. 249,075. PUBLISHED APRIL 8, 1930. Class 13.

272,029. JARS COMPOSED OF GLASS WITH METAL TOPS. CONTAINER SALES COMPANY, INC., New York, N. Y.
Filed May 11, 1927. Serial No. 248,813. PUBLISHED APRIL 8, 1930. Class 33.

272,030. LUBRICATING OILS AND GREASES. "YACCO" S. A. F., Paris, France.
Filed May 21, 1929. Serial No. 284,432. PUBLISHED APRIL 8, 1930. Class 15.

272,031. HAIR-WAVING ROLLS AND ENVELOPES. ETERNE PERMANENT WAVE CORPORATION, now by change of name Eterne Manufacturing Corporation, Newark, N. J.
Filed April 27, 1929. Serial No. 283,105. PUBLISHED AUGUST 6, 1929. Class 44.

272,032. DRESS SHIRTS, NEGLIGEE AND WORK SHIRTS MADE OF KNITTED WOOL, SILK, SILK AND WOOL, AND NECKTIES. HERDT AND CHARTON INCORPORATED, Montreal, Quebec, Canada.
Filed April 13, 1929. Serial No. 282,350. PUBLISHED MARCH 25, 1930. Class 39.

272,033. REFRIGERATING MACHINES AND APPARATUS AND PARTS THEREOF—NAMELY, WATER, OIL, VAPOR, AIR AND GAS COOLERS, STEAM AND VAPOR CONDENSERS, COOLERS, CONDENSERS. HUGO JUNKERS, Dessau, Germany.
Filed February 26, 1929. Serial No. 279,930. PUBLISHED APRIL 8, 1930. Class 31.

272,034. BATH ROBES, SLEEPING BAGS, CHILDREN'S COATS, JACKETS, CAPS, HATS, TROUSERS, PANTS, SUITS, AND MISSES' SKATING JACKETS, TOQUES, SCARFS. F. C. HUYCK & SONS, Rensselaer and Albany, N. Y.
Filed January 26, 1929. Serial No. 278,506. PUBLISHED APRIL 23, 1929. Class 39.

272,035. MEN'S HATS. ABRAHAM & STRAUS, INC., New York, N. Y.
Filed January 16, 1929. Serial No. 278,021. PUBLISHED MARCH 25, 1930. Class 39.

272,036. LADIES' HOSIERY AND KNITTED UNDERWEAR. RICE-NEUMAN CO., Milwaukee, Wis.
Filed December 20, 1928. Serial No. 277,021. PUBLISHED APRIL 8, 1930. Class 39.

272,037. WALL PAPER. SAMUEL SCHULTZ, Philadelphia, Pa.
Filed November 30, 1929. Serial No. 293,111. PUBLISHED APRIL 8, 1930. Class 37.

272,038. SHOES OF LEATHER AND OF LEATHER AND FABRICS COMBINATIONS. THE P. HAGERTY SHOE COMPANY, Washington Court House, Ohio.
Filed December 2, 1929. Serial No. 293,138. PUBLISHED MARCH 18, 1930. Class 39.

272,039. RADIO SPEAKERS. OPERADIO MANUFACTURING COMPANY, St. Charles, Ill.
Filed December 2, 1929. Serial No. 293,149. PUBLISHED APRIL 8, 1930. Class 21.

272,040. CERTAIN NAMED FANCY GOODS AND TRIMMINGS. ARTISTIC NOVELTY CO., INC., New York, N. Y.
Filed December 4, 1929. Serial No. 293,206. PUBLISHED APRIL 8, 1930. Class 40.

272,041. ELECTRIC GENERATORS AND ELECTRIC MOTORS AND STARTERS FOR THE MOTORS. CROCKER-WHEELER ELECTRIC MANUFACTURING COMPANY, Ampere, N. J.
Filed December 4, 1929. Serial No. 293,211. PUBLISHED APRIL 8, 1930. Class 21.

272,042. CANDLES. WEST INDIA OIL COMPANY, Bayonne, N. J.
Filed December 10, 1929. Serial No. 293,499. PUBLISHED APRIL 8, 1930. Class 15.

272,043. STEAM BOILERS, SUPERHEATERS, FURNACES, AND FUNNELS FOR STEAM BOILERS, AND WASTE-GAS-FEED HEATERS. CHANTIERS NAVALS & CHAUDRONNERIES DU MIDI, Marseille, France.
Filed December 11, 1929. Serial No. 293,518. PUBLISHED APRIL 8, 1930. Class 34.

272,044. LADIES' AVIATION OUTFITS—NAMELY, COATS, DRESSES, HELMETS, AND LEATHER AND FABRIC GLOVES. WM. T. KNOTT COMPANY, INC., New York, N. Y.
Filed December 17, 1929. Serial No. 293,779. PUBLISHED APRIL 8, 1930. Class 39.

272,045. BOOTS AND SHOES PRINCIPALLY OF LEATHER AND BOOTS AND SHOES OF A COMBINATION OF LEATHER AND FABRIC. JAMES E. DONOVAN, Millis, Mass.
Filed December 11, 1929. Serial No. 293,812. PUBLISHED APRIL 8, 1930. Class 39.

272,046. MEN'S, WOMEN'S, BOYS' AND GIRLS', AND CHILDREN'S BOOTS, SHOES, SLIPPERS AND FOOTWEAR OF LEATHER, FABRIC, CANVAS, RUBBER, FELT, OR SATIN. KAUFMANN DEPARTMENT STORES, INC., Pittsburgh, Pa.
Filed December 18, 1929. Serial No. 293,839. PUBLISHED APRIL 8, 1930. Class 39.

272,047. STEEL BARS OF VARIOUS SHAPES AND SIZES; FORGINGS, BLOCKS, AND DISCS ALL OF STEEL; AND PIECES OF STEEL. FIRTH-STERLING STEEL COMPANY, McKeesport, Pa.
Filed December 27, 1929. Serial No. 294,110. PUBLISHED APRIL 1, 1930. Class 14.

272,048. WRITING PAPER, WRAPPING PAPER, AND TOILET PAPER. A. KICKBUSCH GROCERY CO., Wausau, Wis.
Filed December 31, 1929. Serial No. 294,264. PUBLISHED APRIL 8, 1930. Class 37.

272,049. FIRE-EXTINGUISHING BOMBS COMPLETE WITH BRACKETS. SOUTHWEST FIRE EQUIPMENT CORPORATION, San Antonio, Tex.
Filed December 31, 1929. Serial No. 294,278. PUBLISHED APRIL 1, 1930. Class 23.

272,050. OLEOMARGARINE. JOHN F. JELKE COMPANY, Chicago, Ill.
Filed January 2, 1930. Serial No. 294,308. PUBLISHED APRIL 8, 1930. Class 46.

272,051. MECHANICAL SPEED REDUCERS ADAPTED TO PROVIDE ROTATIVE MOVEMENT AT A REDUCED RATE FROM ROTATING SHAFTS AND THE LIKE. UNIVERSAL GEAR CORPORATION, Chicago, Ill.
Filed January 6, 1930. Serial No. 294,448. PUBLISHED APRIL 1, 1930. Class 23.

272,052. SOUND-PICTURE APPARATUS AND PARTS THEREOF. WESTERN ELECTRIC COMPANY, INCORPORATED, New York, N. Y.
Filed February 15, 1930. Serial No. 296,090. PUBLISHED APRIL 1, 1930. Class 26.

272,053. GLOVE LEATHER. BACMO-POSTMAN CO. INC., New York, N. Y.
Filed February 20, 1930. Serial No. 296,252. PUBLISHED APRIL 8, 1930. Class 1.

272,054. LEATHER. CARL FREUDENBERG, INCORPORATED, Boston, Mass.
Filed January 30, 1930. Serial No. 295,369. PUBLISHED APRIL 8, 1930. Class 1.

272,055. HATS, HAT CROWNS, AND SCARFS FOR WOMEN. N. SCHWEIGER HAT CO., New York, N. Y.
Filed February 1, 1930. Serial No. 295,496. PUBLISHED APRIL 1, 1930. Class 39.

272,056. MAGAZINES. RACKLIFF & CO. INCORPORATED, New York, N. Y.
Filed February 3, 1930. Serial No. 295,534. PUBLISHED APRIL 8, 1930. Class 38.

272,057. CHEESE. BURKI & CIE., Bern, Switzerland.
Filed February 4, 1930. Serial No. 295,555. PUBLISHED APRIL 8, 1930. Class 46.

272,058. FLAVORING MEDIUM FOR NONALCOHOLIC BEVERAGES AND SYRUPS. ELIAS SHEINKER, doing business as W. Sheinker & Son, New York, N. Y.
Filed February 4, 1930. Serial No. 295,577. PUBLISHED APRIL 8, 1930. Class 45.

272,059. PERIODICALS. BEVERLY HALL CORPORATION, Beverly Hall, Quakertown, Pa.
Filed February 5, 1930. Serial No. 295,600. PUBLISHED APRIL 8, 1930. Class 38.

272,060. SENSITIZED PHOTOGRAPHIC PAPER. EASTMAN KODAK COMPANY, Rochester, N. Y.
Filed February 5, 1930. Serial No. 295,609. PUBLISHED APRIL 1, 1930. Class 26.

272,061. JAR RINGS MADE OF RUBBER OR OF SOME OTHER SUITABLE PACKING MATERIAL. FIRST NATIONAL STORES INC., Boston and Somerville, Mass.
Filed February 6, 1930. Serial No. 295,667. PUBLISHED APRIL 1, 1930. Class 35.

272,062. CANDLES. FIRST NATIONAL STORES INC., Boston and Somerville, Mass.
Filed February 6, 1930. Serial No. 295,670. PUBLISHED APRIL 8, 1930. Class 15.

272,063. IMITATION PEARLS AND IMITATION-PEARL NECKLACES. E. F. HIGGINS LABORATORIES, INC., New York and Brooklyn, N. Y.
Filed February 6, 1930. Serial No. 295,675. PUBLISHED APRIL 8, 1930. Class 28.

272,064. DAILY NEWSPAPER. THE ABENDPOST COMPANY, Chicago, Ill.
Filed February 7, 1930. Serial No. 295,721. PUBLISHED APRIL 8, 1930. Class 38.

272,065. SUNDAY NEWSPAPER. THE ABENDPOST COMPANY, Chicago, Ill.
Filed February 7, 1930. Serial No. 295,722. PUBLISHED APRIL 8, 1930. Class 38.

272,066. DIAMOND RINGS. BLUEBIRD DIAMOND SYNDICATE, Chicago, Ill.
Filed February 7, 1930. Serial No. 295,724. PUBLISHED APRIL 8, 1930. Class 28.

272,067. WASHBOARDS. NATIONAL WASHBOARD COMPANY, Chicago, Ill.
Filed February 8, 1930. Serial No. 295,804. PUBLISHED APRIL 8, 1930. Class 24.

272,068. TRUCK BODIES. PERIN-WALSH CO., Boston, Mass.
Filed February 8, 1930. Serial No. 295,809. PUBLISHED APRIL 8, 1930. Class 19.

272,069. WEDDING RINGS, DINNER RINGS, ENGAGEMENT RINGS, AND OTHER FINGER RINGS OF PRECIOUS METAL. SHUTTLES BROS. & LEWIS, Dallas, Tex.
Filed February 8, 1930. Serial No. 295,813. PUBLISHED APRIL 8, 1930. Class 28.

272,070. DOLLS. BERT B. BARRY AND ASSOCIATES, Chicago, Ill.
Filed February 10, 1930. Serial No. 295,828. PUBLISHED APRIL 8, 1930. Class 22.

272,071. LEATHERS. NORTHWESTERN LEATHER COMPANY TRUST, Boston, Mass.
Filed February 10, 1930. Serial No. 295,860. PUBLISHED APRIL 8, 1930. Class 1.

272,072. MAGAZINE. CHARLES M. RICHTER, Chicago, Ill.
Filed February 10, 1930. Serial No. 295,866. PUBLISHED APRIL 8, 1930. Class 38.

272,073. LEATHER AND CANVAS BOOTS AND SHOES. E. T. WRIGHT & COMPANY, INC., Rockland, Mass.
Filed February 10, 1930. Serial No. 295,878. PUBLISHED APRIL 1, 1930. Class 39.

272,074. LEATHERS. NORTHWESTERN LEATHER COMPANY TRUST, Boston, Mass.
Filed February 10, 1930. Serial No. 295,861. PUBLISHED APRIL 8, 1930. Class 1.

272,075. CARBONATED, NONALCOHOLIC, NONCEREAL, MALTLESS BEVERAGES SOLD AS SOFT DRINKS. JOS. POELLINGER, doing business as Huron Beverage Co., Huron, S. Dak.
Filed February 10, 1930. Serial No. 295,865. PUBLISHED APRIL 8, 1930. Class 45.

272,076. FUR SKINS. MICHAEL MILLER FUR DYEING CORPORATION, New York and Brooklyn, N. Y.
Filed February 11, 1930. Serial No. 295,905. PUBLISHED APRIL 8, 1930. Class 1.

272,077. ELECTRICAL HAIR DRIERS AND ELECTRICAL SCALP STEAMERS. CHARLES ARNAO COMPANY, Minneapolis, Minn.
Filed February 13, 1930. Serial No. 295,972. PUBLISHED APRIL 1, 1930. Class 44.

[ACT OF MARCH 19, 1920, SEC. 1 (b)]

THESE REGISTRATIONS ARE NOT SUBJECT TO OPPOSITION.

272,078. (CLASS 39. CLOTHING.) THE NO-SLIP RUBBER CORPORATION, New York, N. Y. Filed Nov. 3, 1928. Serial No. 274,791.

NO-SLIP

For Protective Articles for Infants' Use—Namely, Rubber Baby Pants.
Claims use since July 1, 1927.

272,079. (CLASS 39. CLOTHING.) JOHN EBBERTS SHOE CO., INC., Buffalo, N. Y. Filed June 26, 1928. Serial No. 268,684.

Trained Nurse

For Shoes Made Mainly of Leather.
Claims use since July 8, 1921.

272,080. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) THE GREIST MANUFACTURING CO., New Haven, Conn. Filed Apr. 7, 1927. Serial No. 247,078.

GREIST
Flexible Lamp

For Electric Lamps.
Claims use since Feb. 1, 1927.

272,081. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) WHITTEMORE BROS. CORP., Cambridge, Mass. Filed May 29, 1929. Serial No. 284,832.

WHITT

For Cleaners for Cleaning White Kid and Calf Leathers.
Claims use since May 1, 1929.

272,082. (CLASS 16. PAINTS AND PAINTERS' MATERIALS.) KLEEN-KOAT PRODUCTS CO., Chicago, Ill. Filed May 22, 1929. Serial No. 284,471.

KLEEN KOAT

For Automobile and Furniture Polish.
Claims use since Nov. 27, 1927.

272,083. (CLASS 39. CLOTHING.) VANITY FAIR SILK MILLS, Reading, Pa. Filed Apr. 30, 1929. Serial No. 283,313.

"Approaching Perfection"

For Hosiery.
Claims use since Apr. 18, 1929.

272,084. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) P. G. ROGERS, doing business as Rite-Taste Products Co., Los Angeles, Calif. Filed Mar. 18, 1929. Serial No. 280,946.

RITE-TASTE

For Jams and Jellies, Fruit Preserves, Pickles, Sweet and Sour Relishes, Honey, and Vinegar.
Claims use since Mar. 1, 1929.

272,085. (CLASS 39. CLOTHING.) RICE-STIX DRY GOODS CO., St. Louis, Mo. Filed Feb. 21, 1929. Serial No. 279,755.

"SIX BITS"

For Wearing Apparel—Namely, Men's, Youths', and Boys' Dress, Negligee, and Work Shirts and Boys' Blouses.
Claims use since Feb. 2, 1929.

272,086. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) CHAS. F. L'HOMMEDIEU & SONS CO., Chicago, Ill. Filed Dec. 28, 1928. Serial No. 277,312.

NUWHITE

For Cutting Compositions for Metals and Other Materials and Products, Such Compositions Having Incidental Coloring Properties—Namely, for the Cutting and Coloring of Brass, Copper, Tin, Nickel, Silver, Aluminum, Bronze, Cadmium, Zinc, Die Castings, Ivory, Bone, Duco, Celluloid, Bakelite, and for Cutting Down Precious Metals.
Claims use since 1911.

272,087. (CLASS 39. CLOTHING.) RITTER & MEYER, Youngstown, Ohio, assignor to The Strouss-Hirshberg Co., Youngstown, Ohio, a Corporation of Ohio. Filed Mar. 5, 1930. Serial No. 296,883.

Broadbrook

For Men's Clothing—Namely, Suits, Overcoats, Knickers, Riding Habits, Vests, Trousers, Topcoats, Sweaters, Coats, and Raincoats.
Claims use since 1918.

272,088. (CLASS 19. VEHICLES, NOT INCLUDING ENGINES.) AMERICAN AERONAUTICAL CORPORATION, New York, N. Y. Filed Apr. 18, 1930. Serial No. 299,028.

AMERICAN SAVOIA MARCHETTI

For Aeroplanes, Seaplanes, Flying Boats, and Amphibian Aeroplanes.
Claims use since Mar. 1, 1929.

272,089. (CLASS 19. VEHICLES, NOT INCLUDING ENGINES.) DUESENBERG INCORPORATED, Indianapolis, Ind. Filed Mar. 10, 1930. Serial No. 297,064.

DUESENBERG

For Automobiles and Their Structural Parts.
Claims use since Nov. 1, 1920.

272,090. (CLASS 39. CLOTHING.) MICHAELS, STERN & Co., Rochester, N. Y. Filed Sept. 10, 1929. Serial No. 289,590.

TIFFANY WORSTED

For Men's and Boys' Suits.
Claims use since Apr. 1, 1929.

272,091. (CLASS 37. PAPER AND STATIONERY.) SALZ BROTHERS, INC., New York, N. Y. Filed Aug. 13, 1929. Serial No. 288,485.

Hi-Test

For Fountain Pens and Mechanical Pencils.
Claims use since May 4, 1929.

272,092. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) AIR-WAY ELECTRIC APPLIANCE CORPORATION, Toledo, Ohio. Filed Aug. 6, 1929. Serial No. 288,165.

INSECT CONTROL

For Chemical Compositions for Combating Insects.
Claims use since Mar. 1, 1928.

272,093. (CLASS 43. THREAD AND YARN.) BULLARD THREAD COMPANY, Holyoke, Mass. Filed July 15, 1929. Serial No. 287,112.

LENOX

For Thread.
Claims use since 1914.

272,094. (CLASS 16. PAINTS AND PAINTERS' MATERIALS.) EDWARD A. WILL, doing business as Skum-Off Products Company, North Tonawanda, N. Y. Filed July 10, 1929. Serial No. 286,910.

SKUM-OFF

For a Cleaning and Polishing Compound for Automobiles, Furniture, and All Painted, Varnished, or Lacquered Surfaces.
Claims use since Feb. 1, 1929.

LABELS

REGISTERED JUNE 24, 1930

37,595.—*Title:* OLD RELIABLE COFFEE. For Coffee. THE DAYTON SPICE MILLS COMPANY, Dayton, Ohio. Published May 17, 1930.

37,596.—*Title:* MELANSON SHOE CO. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published March 27, 1930.

37,597.—*Title:* DR. KIMMEL'S. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published April 21, 1930.

37,598.—*Title:* VANITIES. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published April 18, 1930.

37,599.—*Title:* THE SLIPPER SHOP. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published April 17, 1930.

37,600.—*Title:* CRYSTAL SHOE CO. INC. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published March 12, 1930.

37,601.—*Title:* D. S. P. CO. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published April 7, 1930.

37,602.—*Title:* PLATELL SHOE CO. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published April 17, 1930.

37,603.—*Title:* PIN MONEY. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published February 28, 1930.

37,604.—*Title:* THE JOHNNY RHINES FOUR. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published March 5, 1930.

37,605.—*Title:* JEWEL DESSERT. For Coconut Dessert. JEWEL TEA CO., INC., Barrington, Ill. Published March 15, 1930.

37,606.—*Title:* JEWEL DEVIL'S FOOD. For Cake Mixture. JEWEL TEA CO., INC., Barrington, Ill. Published March 15, 1930.

37,607.—*Title:* BAKED GOODS. For Baked Goods. KALAMAZOO LABEL COMPANY, Kalamazoo, Mich. Published August 1, 1929.

37,608.—*Title:* LIFE SAVERS. For Packaged Confectionery. LIFE SAVERS, INC., Port Chester, N. Y. Published September 20, 1929.

37,609.—*Title:* LAND O'LAKES HONEY. For Honey. MOUNTAIN STATES HONEY PRODUCERS ASSOCIATION, Boise, Idaho. Published December 15, 1929.

PRINTS

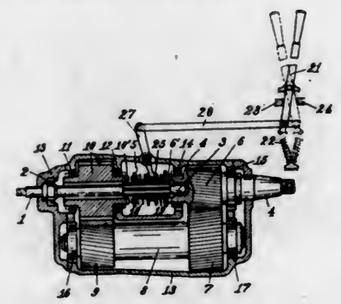
REGISTERED JUNE 24, 1930

12,609.—*Title:* NEW JERSEY'S FASTEST GROWING STORE. For Clothing, Furniture, Fabrics, and Novelties, Dresses, Shoes, Suits, Gloves, Fruit Baskets, Baby Carriages, Typewriters, Lamps, Cushions, and Piece Goods. KRESGE DEPARTMENT STORE CORPORATION, doing business under name Kresge Department Store. Published February 27, 1930.

REISSUES

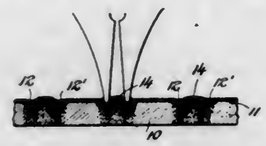
JUNE 24, 1930

17,707. TRANSMISSION GEAR. KARL MAYBACH, Friedrichshafen, Germany, assignor to Maybach-Motorenbau Gesellschaft mit beschrankter Haftung, Friedrichshafen, Germany. Filed Apr. 15, 1930. Serial No. 444,587. Original No. 1,719,188, dated July 2, 1929, Serial No. 266,292, filed Mar. 31, 1928, and in Germany Oct. 5, 1927. 10 Claims. (Cl. 74—59.)



10. A change speed gearing including a pair of concentric gears of different pitch diameters, means operatively connecting said gears to effect simultaneous rotation at different speeds and in fixed speed ratio, a sleeve between said gears, a claw coupling for connecting said sleeve with the larger of said gears, having teeth with faces so inclined that said coupling will overrun and not engage when said sleeve is rotating faster than said gear, and a second claw coupling for connecting said sleeve with the smaller of said gears, having teeth with faces so inclined that said coupling will overrun and not engage when said gear is rotating faster than said sleeve.

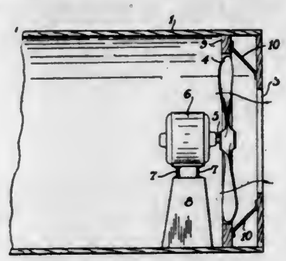
17,708. DOCUMENT PAPER. THEODORE J. SNYDER, Chicago, Ill., assignor to Snyder Document Protection Co., a Corporation of Illinois. Filed Jan. 23, 1930. Serial No. 422,945. Original No. 1,727,912, dated Sept. 10, 1929, Serial No. 122,162, filed July 13, 1926. 2 Claims. (Cl. 91—67.95.)



2. A document carrying written characters in ink upon a bibulous absorbent paper base treated with casein, the ink creating said characters being so diffused into the paper that the characters cannot be altered or removed without permanently destroying or disfiguring the said paper.

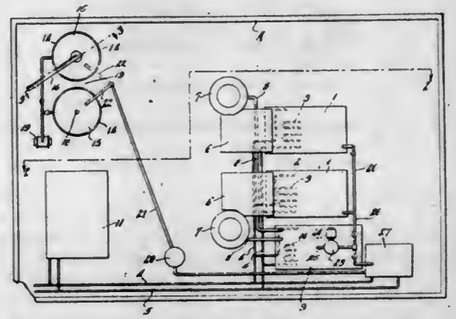
17,709. PROPELLER-VENTILATING MEANS. FREDERICK CHARAVAY, Piqua, Ohio, assignor, by mesne assignments, of one-half to Hartzell Industries, Inc., Piqua, Ohio, a Corporation of Delaware. Filed Jan. 8, 1930. Serial No. 419,445. Original No. 1,657,496. dated Jan. 31, 1928, Serial No. 98,045, filed Mar. 27, 1926. 7 Claims. (Cl. 230—117.)

1. An enclosure to be ventilated having an air discharge opening, a partition in said enclosure behind said opening and having a circular hole larger than said opening and through which air can only pass to it, and a fan of larger diameter than the opening in said enclosure,



said fan being mounted for rotation in said partition hole and having a diameter slightly less than said hole to prevent back draft.

17,710. WASTE-RECLAMATION SYSTEM. EDWIN S. PEARCE, Indianapolis, Ind., assignor to The American Laundry Machinery Company, Norwood, Ohio, a Corporation of Ohio. Filed Dec. 30, 1929. Serial No. 417,577. Original No. 1,713,711, dated May 21, 1929, Serial No. 72,977, filed Dec. 3, 1925. 18 Claims. (Cl. 91—13.)

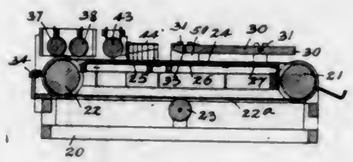


1. Apparatus for reclaiming used journal box waste, comprising a soaking tank for the waste to be reclaimed, means for removing the major part of the oil of the waste from the fibrous part thereof, an old oil storage tank arranged at a lower level than said soaking tank and said oil removing means and connected to said oil removing means for receiving therefrom by drainage the oil removed from said waste and having a connection to said soaking tank for supplying oil thereto for soaking purposes, a mechanical device for cleaning the fibrous waste part after removal of oil therefrom, an impregnator for impregnating with oil said fibrous waste part, and means for supplying oil to said impregnator for impregnation purposes.

17,711. MOLDING MACHINE. FRANK ANDERSON SCRUGGS, Los Angeles, Calif. Filed July 25, 1929. Serial No. 381,058. Original No. 1,674,229, dated June 19, 1928, Serial No. 681,813, filed Dec. 20, 1923. 12 Claims. (Cl. 107—9.)

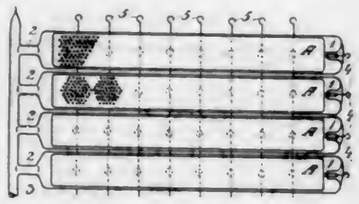
11. In a dough molding machine, shaping means including a pair of superposed spaced apart mold boards,

dough flattening means, coiling mechanism between the flattening means and the adjacent end of the top board, a conveyer co-acting with both boards of the shaping means and with the flattening means and the said coiling means, so that dough acted upon by the flattening means will be progressively moved to the coiling means, thence



to the space between the two mold boards, the top mold board having its under surface flared upwardly in the direction of the coiling means and the said coiling means embodying a longitudinal series of spaced apart tilting curtains of respectively increasing lengths toward the flared surface of the said top mold board.

17,712. FLUORESCENT TUBE. MICHEL SCHMIERER, Berlin-Lichterfelde, Germany, assignor to Radio Patents Corporation, New York, N. Y., a Corporation of New York. Filed Oct. 6, 1927. Serial No. 224,509. Original No. 1,595,735, dated Aug. 10, 1926, Serial No. 821,609, filed Feb. 27, 1914, and in Germany Mar. 5, 1913. 9 Claims. (Cl. 176—122.)



7. In combination, a glow discharge lamp comprising a plurality of spaced electrodes in row formation, a single electrode adapted to cooperate with said spaced electrodes, and lead in means for conducting a potential producing a discharge between said common electrode and each of said first mentioned electrodes in succession.

17,713. FUSE PLUG. LEON J. CAHN, New York, N. Y., assignor to Noma Electric Corporation, New York, N. Y., a Corporation of New York. Filed Aug. 15, 1929. Serial No. 385,984. Original No. 1,639,077, dated Aug. 16, 1927, Serial No. 44,208, filed July 17, 1925. 9 Claims. (Cl. 200—130.)



4. A fuse plug comprising a substantially tubular member having an inner support, a member fitted into said tubular member and resting on said support, said tubular member having an external slot communicating with interior of said tubular member, and a fuse wire extending into said tubular member and having a bent portion resting on said second member and extending from the interior of said tubular member into said slot.

17,714. TABLE COVER. CHARLES A. HUPP, Indianapolis, Ind., assignor of one-half to Wakefield M. Wilt, Syracuse, Ind. Filed Apr. 10, 1930. Serial No. 443,205. Original No. 1,744,769, dated Jan. 28, 1930, Serial No. 280,845, filed May 26, 1928. 5 Claims. (Cl. 45—68.3.)



1. In combination, a table top comprising a body having channels and a rubber cover for said top having molded beads which are compressed in the channels.

2. In combination, a table top comprising a body having its under surface provided with channels, a molded rubber table top comprising a top plate, a depending skirt formed on the margin of the top plate, inwardly directed flat flanges formed on the skirt engaging the lower face of the table top body, and upwardly directing holding ribs on said flanges compressed in the channels.

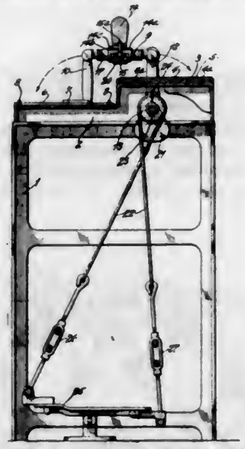
3. In combination, a table top comprising a body having the under surface thereof provided with channels near the edges thereof and spaced inwardly from said edges, a cover for said top comprising a body of rubber fitted over the top and having depending marginal flanges merging into inwardly directed flanges having beads compressed in the channels.

4. As a new article of manufacture, a molded rubber table top cover comprising a top plate, a depending skirt formed on the margin of the top plate, inwardly directed flat flanges on the skirt, upwardly directed holding ribs on the flanges, and substantially triangular shaped lugs connecting the ribs and the skirt at the corners of the table top cover.

5. In combination, a conventional table top having its lower face provided with channels in spaced parallel relation to the margin thereof and substantially triangular shaped recesses communicating with the channels at the corners of the top, and a molded rubber table top cover comprising a top plate for engaging the top face of the table top, a depending skirt formed on the margin of the table top plate for engaging the marginal edges of the table top, inwardly directed flat flanges formed on the skirt for engaging the lower face of the table top, upwardly directed holding ribs formed on said flanges for engaging in said channels, and a substantially triangular shaped lug connecting the ribs and the skirt at each corner of the table top cover for engaging in said substantially triangular shaped recesses.

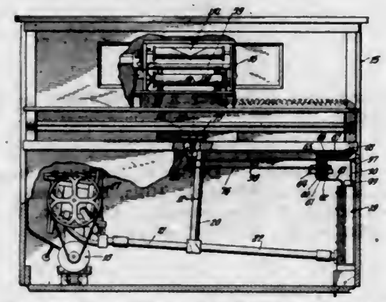
17,715. MARKING MACHINE. ROY V. WOODWORTH, St. Louis, Mo., assignor to Western Supplies Co., St. Louis, Mo., a Corporation of Missouri. Filed Dec. 3, 1928. Serial No. 323,510. Original No. 1,639,360, dated Aug. 16, 1927, Serial No. 118,665, filed June 26, 1926. 16 Claims. (Cl. 101—301.)

10. A marking device for shoe parts and the like, comprising a base member, a member movable relatively thereto and engageable therewith, a guide pattern on said base for receiving the parts to be marked, said pattern comprising a card provided with guide elements and removably



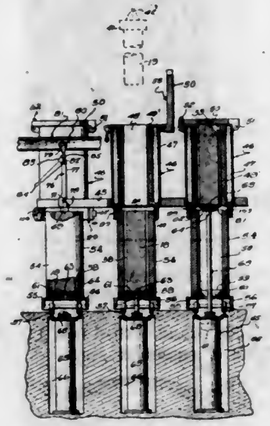
secured to said base member, and a marking pattern removably secured to said movable member and provided with marking means.

17,716. DEVICE FOR CONTROLLING AIR PRESSURE. JAMES CLARKE HAGEY, Chicago, Ill., assignor to The Cable Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 18, 1922. Serial No. 601,841. Original No. 1,359,698, dated Nov. 23, 1920, Serial No. 143,463, filed Jan. 20, 1917. 82 Claims. (Cl. 84—39.)



82. In an automatic musical instrument, the combination of a main source of power; a bellows provided with a port to atmosphere and having communication with the main source of power; a valve to control admission of atmosphere to said bellows; an abutment against which said valve normally bears; and means to move said abutment to produce changes in playing intensities.

17,717. APPARATUS FOR MANUFACTURING BIMETALLIC BILLETS. HAROLD E. MCCREERY and ALBERT E. JESSER, Apollo, Pa., assignors to Copperweld Steel Company, Glassport, Pa., a Corporation of Pennsylvania. Filed Apr. 16, 1930. Serial No. 444,847. Original No. 1,747,784, dated Feb. 18, 1930, Serial No. 118,039, filed June 23, 1926. 21 Claims. (Cl. 22—60.)

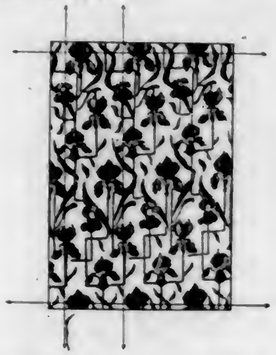


13. Apparatus constructed in accordance with claim 11 wherein said vertically movable means comprises a rod movable vertically through said mold, a cylinder arranged wholly beneath said mold, and a piston secured to said rod and reciprocable in said cylinder.

DESIGNS

JUNE 24, 1930

81,428. TEXTILE FABRIC. FRED W. BADER, Hillsdale, N. J., assignor to J. Kridel, Sons & Co., a Partnership of New York. Filed Jan. 18, 1930. Serial No. 34,178. Term of patent 3½ years.



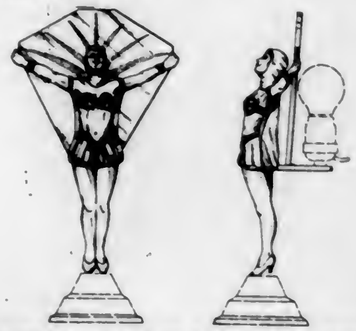
The ornamental design for a textile fabric as shown and described.

81,429. BRIDGE FOR AN EYEGLASS MOUNTING. EARLE J. R. BEATTEY, Edgewood, R. I., assignor to Universal Optical Corporation, Providence, R. I., a Corporation of Rhode Island. Filed Dec. 11, 1928. Serial No. 29,215. Term of patent 14 years.



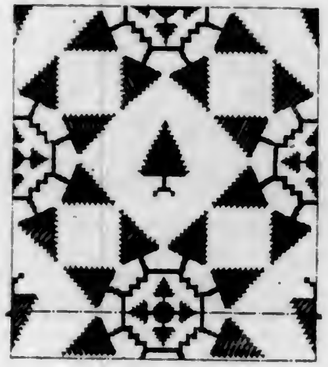
The ornamental design for a bridge for an eyeglass mounting, substantially as shown.

81,430. LAMP STAND. CHARLES M. BECKER, Brooklyn, N. Y. Filed Apr. 14, 1930. Serial No. 35,248. Term of patent 3½ years.



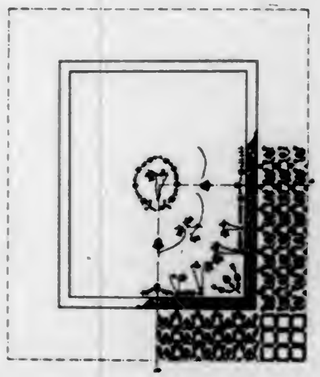
The ornamental design for a lamp stand, substantially as shown.

81,431. TEXTILE FABRIC. DORIS V. BELKNAP, Brooklyn, N. Y., assignor to Monument Mills, Housatonic, Mass., a Corporation of Massachusetts. Filed Feb. 11, 1930. Serial No. 34,486. Term of patent 7 years.



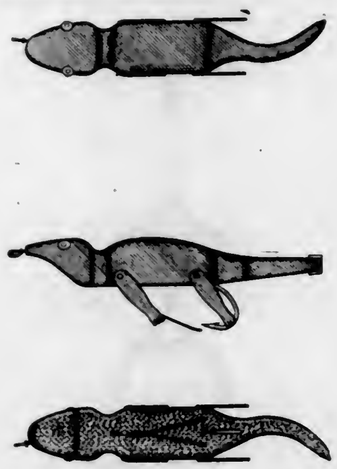
The ornamental design for a textile fabric as shown and described.

81,432. BEDSPREAD. DORIS V. BELKNAP, Brooklyn, N. Y., assignor to Monument Mills, Housatonic, Mass., a Corporation of Massachusetts. Filed Feb. 7, 1930. Serial No. 34,448. Term of patent 7 years.



The ornamental design for bedspread as shown and described.

81,433. FISH LURE. ALBERT F. BOEHM, Lake Villa, Ill. Filed Apr. 2, 1930. Serial No. 35,111. Term of patent 14 years.



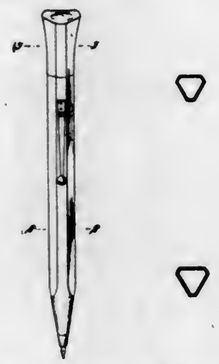
The ornamental design for a fish lure, as shown.

81,434. BOTTLE. SPENCER U. BOEHMER, Lombard, Ill. Filed Oct. 10, 1929. Serial No. 32,991. Term of patent 14 years.



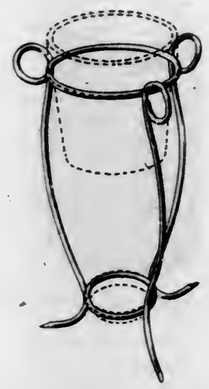
The ornamental design for a bottle as shown and described.

81,435. PENCIL. GEORGE COBY, Cranston, R. I., assignor to Tripen Manufacturing Co., Inc., Providence, R. I., a Corporation of Rhode Island. Filed Oct. 1, 1929. Serial No. 32,905. Term of patent 14 years.



The ornamental design for a pencil, substantially as shown.

81,436. FLOWERPOT HOLDER. JOHN ROY DEW, South Jacksonville, Fla., and ROY GUFFEY, Somerset, Ky. Filed Jan. 6, 1930. Serial No. 34,034. Term of patent 14 years.



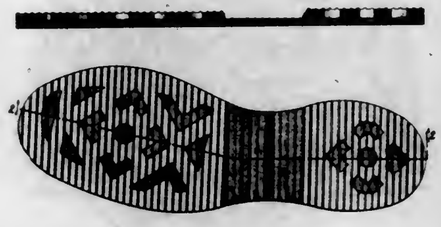
The ornamental design for a flower pot holder as shown.

81,437. DISH. SIMON W. FARBER, Brooklyn, N. Y., assignor to S. W. Farber, Inc., Brooklyn, N. Y., a Corporation of New York. Filed Oct. 21, 1929. Serial No. 33,128. Term of patent 14 years.



The ornamental design for a dish substantially as shown.

81,438. COMBINED SHOE SOLE AND HEEL. CONRAD FERRETTIE and GEORGE W. BLAIR, Mishawaka, Ind., assignors to Mishawaka Rubber and Woolen Manufacturing Company, Mishawaka, Ind., a Corporation of Indiana. Filed Sept. 16, 1929. Serial No. 32,766. Term of patent 14 years.



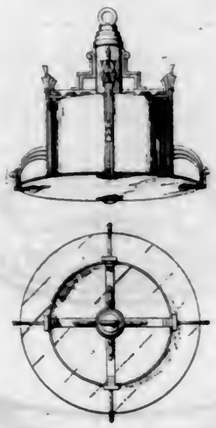
The ornamental design for a combined shoe sole and heel as shown.

81,439. JAR OR SIMILAR ARTICLE. EMIL FRANK, Cincinnati, Ohio. Filed Aug. 22, 1929. Serial No. 32,499. Term of patent 14 years.



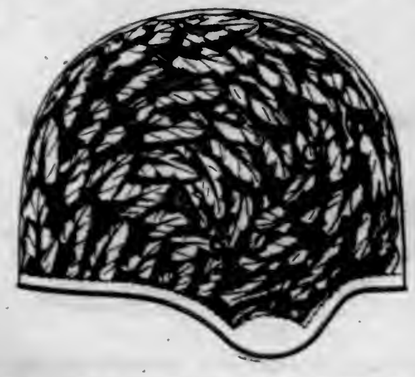
The ornamental design for jar or similar article, as shown.

81,440. LIGHTING FIXTURE. SAMUEL I. GOLDBERG, New York, N. Y. Filed Mar. 8, 1930. Serial No. 34,785. Term of patent 7 years.



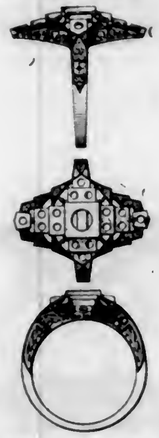
The ornamental design for a lighting fixture, as shown.

81,441. BATHING CAP. ALBERT GODFREY GREENE, Providence, R. I., assignor to Revere Rubber Company, Providence, R. I., a Corporation of Rhode Island. Filed Nov. 2, 1929. Serial No. 33,264. Term of patent 14 years.



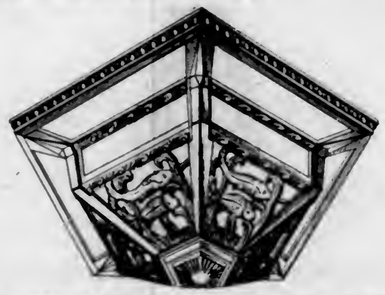
The ornamental design for a bathing cap, as shown.

81,442. FINGER RING. SAMUEL GROSSMAN, New York, N. Y., assignor to David Klebanoff and Samuel Grossman, Copartners trading as Klebanoff and Grossman, New York, N. Y. Filed Apr. 9, 1930. Serial No. 35,200. Term of patent 3½ years.



The ornamental design for a finger ring as shown.

81,443 CANOPY FOR LIGHTING FIXTURES OR SIMILAR ARTICLES. OTTO HOFFMANN, Woodhaven, N. Y., assignor to Art Fixtures, Inc., New York, N. Y., a Corporation of New York. Filed Jan. 8, 1930. Serial No. 34,053. Term of patent 3½ years.



The ornamental design for a canopy for lighting fixtures, or similar articles as shown and described.

81,444. STOCKING. ALFRED E. ISCHINGER, Wyomissing, Pa., assignor to Berkshire Knitting Mills, Wyomissing, Pa., a Corporation of Pennsylvania. Filed Jan. 12, 1929. Serial No. 29,576. Term of patent 14 years.



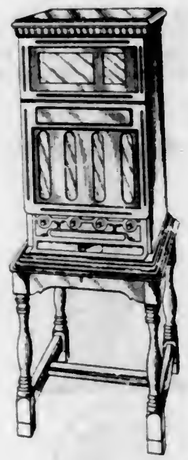
The ornamental design for a stocking, as shown.

81,445. STOCKING. ALFRED E. ISCHINGER, Wyomissing, Pa., assignor to Berkshire Knitting Mills, Wyomissing, Pa., a Corporation of Pennsylvania. Filed Jan. 12, 1929. Serial No. 29,577. Term of patent 14 years.



The ornamental design for a stocking, as shown.

81,446. VENDING-MACHINE CASING OR SIMILAR ARTICLE. ODE D. JENNINGS, Chicago, Ill., assignor to O. D. Jennings & Company, a Corporation of Illinois. Filed Apr. 4, 1930. Serial No. 35,155. Term of patent 3½ years.



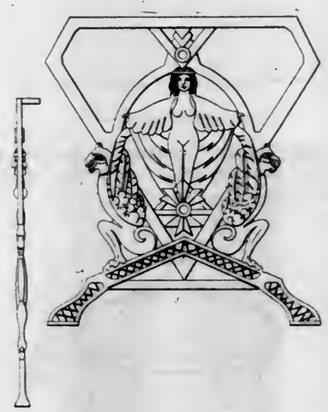
The ornamental design for a vending machine casing or similar article, as shown.

81,447. BOTTLE. RUTH D. MAURER and HERBERT D. JOYCE, New York, N. Y., assignors to Ruth D. Maurer Corporation, New York, N. Y., a Corporation of New York. Filed Mar. 28, 1930. Serial No. 35,059. Term of patent 14 years.



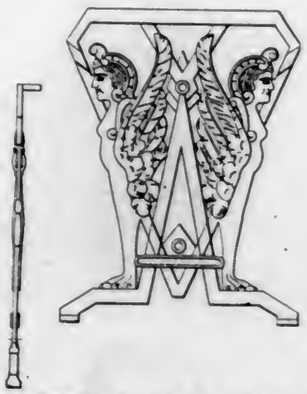
The ornamental design for a bottle, as shown.

81,448. BENCH END SUPPORT OR THE LIKE. FRED MUGNAI, Chicago, Ill., assignor to Art Specialty Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 12, 1929. Serial No. 32,734. Term of patent 3½ years.



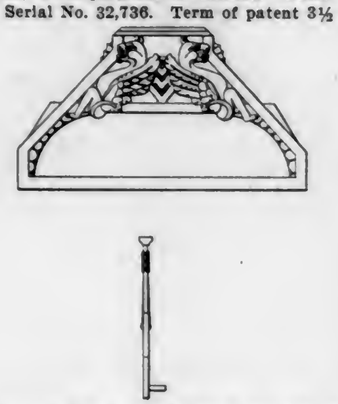
The ornamental design for a bench end support or the like as shown.

81,449. BENCH END SUPPORT OR THE LIKE. FRED MUGNAI, Chicago, Ill., assignor to Art Specialty Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 12, 1929. Serial No. 32,735. Term of patent 3½ years.



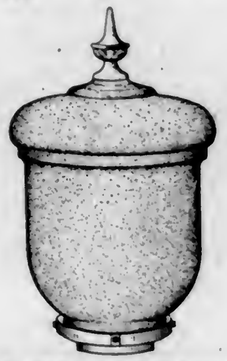
The ornamental design for a bench end support or the like as shown.

81,450. BENCH END ARM OR THE LIKE. FRED MUGNAI, Chicago, Ill., assignor to Art Specialty Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 12, 1929. Serial No. 32,736. Term of patent 3½ years.



The ornamental design for a bench end arm or the like, as shown.

81,451. LAMP GLOBE. CHESLEY E. OSBORN, Pasadena, Calif. Filed Mar. 14, 1930. Serial No. 34,872. Term of patent 14 years.



The ornamental design for a lamp globe as shown.

81,452. FRAME FOR A LAMP GLOBE. CHESLEY E. OSBORN, Pasadena, Calif. Filed Mar. 14, 1930. Serial No. 34,874. Term of patent 14 years.



The ornamental design for a frame for a lamp globe as shown.

81,453. SCREW. FRANCIS J. PLYM, Niles, Mich., assignor to The Kawneer Company, Niles, Mich., a Corporation of Michigan. Filed May 13, 1929. Serial No. 31,186. Term of patent 14 years.



The ornamental design for a screw substantially as shown.

81,454. COMBINED LAMP BASE AND BODY. VIOLA RAFFAELLI, New York, N. Y., assignor to Raffaelli Trading Co., Inc., a Corporation of New York. Filed Jan. 24, 1930. Serial No. 34,278. Term of patent 7 years.



The ornamental design for a combined lamp base and body substantially as shown.

81,455. SHOE BUCKLE. ORLANDO RICHARD RECCHIA, Cranston, R. I., assignor to C. G. King & Co., Inc., Providence, R. I. Filed Feb. 28, 1930. Serial No. 34,692. Term of patent 3½ years.



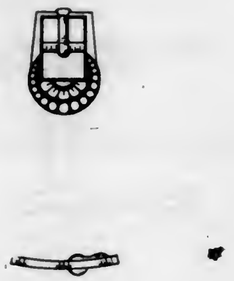
The ornamental design for a shoe buckle as shown.

81,456. SHOE BUCKLE. ORLANDO RICHARD RECCHIA, Cranston, R. I., assignor to C. G. King & Co., Inc., Providence, R. I. Filed Apr. 22, 1930. Serial No. 35,345. Term of patent 3½ years.



The ornamental design for a shoe buckle as shown.

81,457. SHOE BUCKLE. ORLANDO RICHARD RECCHIA, Cranston, R. I., assignor to C. G. King & Co., Inc., Providence, R. I. Filed Apr. 22, 1930. Serial No. 35,346. Term of patent 3½ years.



The ornamental design for a shoe buckle as showu.

81,458. SHOE BUCKLE. ORLANDO RICHARD RECCHIA, Cranston, R. I., assignor to C. G. King & Co., Inc., Providence, R. I. Filed Apr. 22, 1930. Serial No. 35,347. Term of patent 3½ years.



The ornamental design for a shoe buckle as shown.

81,459. SHOE BUCKLE. ORLANDO RICHARD RECCHIA, Cranston, R. I., assignor to C. G. King & Co., Inc., Providence, R. I. Filed Apr. 22, 1930. Serial No. 35,348. Term of patent 3½ years.



The ornamental design for a shoe buckle as shown.

81,460. CORN-SHUCK DOLL. MARGARET C. REVIS, Weaverville, N. C., assignor to Allan-Stand Cottage Industries, Incorporated, Asheville, N. C., a Corporation of North Carolina. Filed Apr. 10, 1930. Serial No. 35,207. Term of patent 7 years.



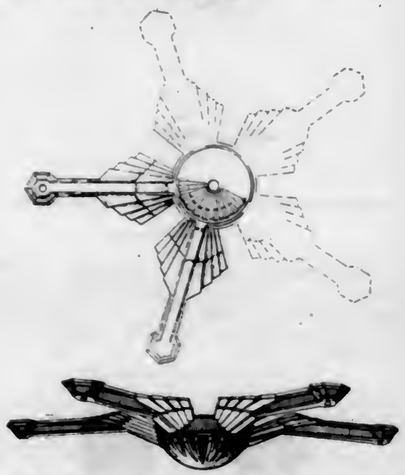
The ornamental design for a corn-shuck doll, as shown.

81,461. CORN-SHUCK DOLL. MARGARET C. REVIS, Weaverville, N. C., assignor to Allan-Stand Cottage Industries, Incorporated, Asheville, N. C., a Corporation of North Carolina. Filed Apr. 10, 1930. Serial No. 35,208. Term of patent 7 years.



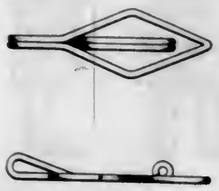
The ornamental design for a corn-shuck doll, as shown.

81,462. BODY PLATE FOR LIGHTING FIXTURE OR ARTICLE OF SIMILAR NATURE. FREDERICK W. ROETTGES, Brooklyn, N. Y., assignor to Lighting Appliance Company, Inc., New York, N. Y. Filed Jan. 30, 1930, Serial No. 34,350, and in Canada Dec. 4, 1929. Term of patent 3½ years.



The ornamental design for a body plate for lighting fixture, or article of similar nature, as shown and described.

81,463. CLIP. EVERETT IRVING ROGERS, Jr., Providence, R. I. Filed Jan. 28, 1930. Serial No. 34,327. Term of patent 3½ years.



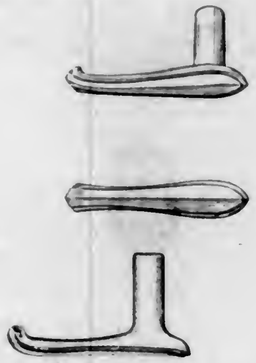
The ornamental design for a clip substantially as shown.

81,464. LIGHTING-FIXTURE BRACE. ARMIN SCHELER, New York, N. Y., assignor to Ideal Lighting Novelty Co., New York, N. Y., a partnership consisting of Harry Brettler and Aron Hollander. Filed Apr. 28, 1930. Serial No. 35,417. Term of patent 3½ years.



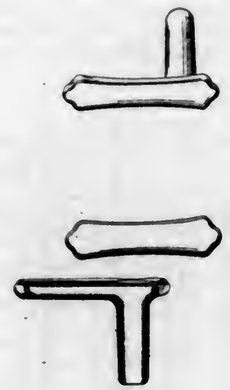
The ornamental design for a lighting fixture brace substantially as shown.

81,465. MOTOR-VEHICLE DOOR HANDLE OR SIMILAR ARTICLE. WILLIAM SCHNELL, Detroit, Mich., assignor to Ternstedt Manufacturing Company, Detroit, Mich., a Corporation of Michigan. Filed Nov. 1, 1929. Serial No. 33,258. Term of patent 7 years.



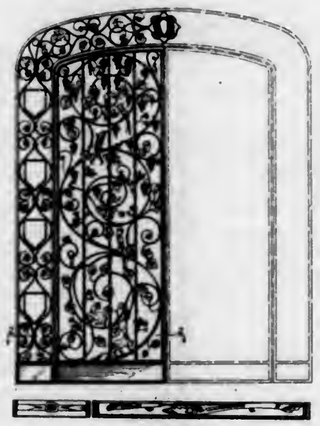
The ornamental design for a motor vehicle door handle, or similar article, substantially as shown.

81,466. MOTOR-VEHICLE DOOR HANDLE OR SIMILAR ARTICLE. WILLIAM SCHNELL, Detroit, Mich., assignor to Ternstedt Manufacturing Company, Detroit, Mich., a Corporation of Michigan. Filed Nov. 1, 1929. Serial No. 33,261. Term of patent 7 years.



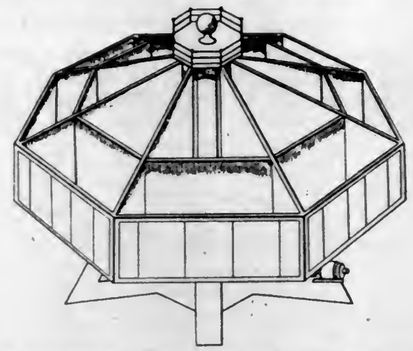
The ornamental design for a motor-vehicle door handle, or similar article, substantially as shown.

81,467. GATEWAY. EDMUND SCHULTE, Bronxville, N. Y. Filed Dec. 27, 1929. Serial No. 33,947. Term of patent 3½ years.



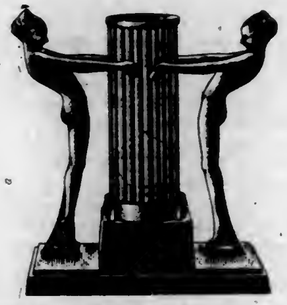
The ornamental design for a gateway, as shown and described.

81,468. ADVERTISING DISPLAY DEVICE. ROY B. SIMPSON, Webster Groves, Mo. Filed Mar. 24, 1930. Serial No. 35,011. Term of patent 14 years.



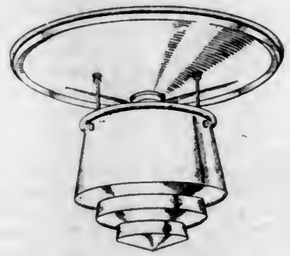
The ornamental design for an advertising display device, as shown.

81,469. LAMP OR SIMILAR ARTICLE. ARTHUR VON FRANKENBERG, New York, N. Y., assignor to Frankart, Inc., New York, N. Y., a Corporation of New York. Filed Apr. 3, 1930. Serial No. 35,140. Term of patent 7 years.



The ornamental design for a lamp or similar article, substantially as shown.

81,470. LIGHTING FIXTURE. RAYMOND V. OWEN, St. Louis, Mo., assignor to The Edwin F. Guth Company, St. Louis, Mo., a Corporation of Missouri. Filed Oct. 5, 1929. Serial No. 32,954. Term of patent 14 years.

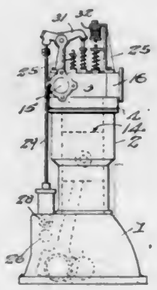


The ornamental design for a lighting fixture, as shown.

PATENTS

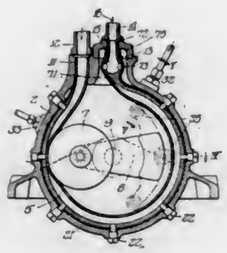
GRANTED JUNE 24, 1930

1,765,359. INTERNAL-COMBUSTION ENGINE. ERNIE ADAMSON, New York, N. Y. Filed Feb. 16, 1929. Serial No. 340,611. 7 Claims. (Cl. 123—79.)



1. In an engine as described the combination with a cylinder having an end valve-seat, a master valve adapted to close said seat and means for opening the valve, an intake valve for controlling admission of fuel mixture through a port opening within said seat, and an exhaust valve for controlling exit of gases through another port within said seat.

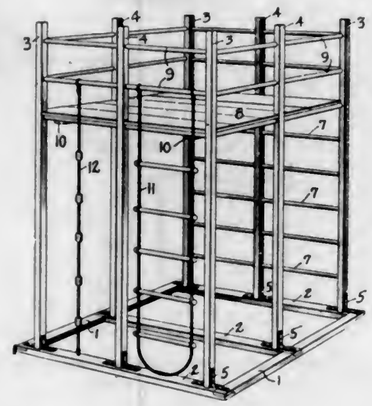
1,765,360. ROTARY PUMP. ADOLPH BAUMANN, Baden, Switzerland, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland, a Joint Stock Company of Switzerland. Filed Feb. 7, 1927, Serial No. 166,548, and in Germany Feb. 18, 1926. 24 Claims. (Cl. 103—194.)



1. In a pump comprising a tubular impeller chamber of elastic material and means for propelling fluid through said chamber by successively flattening portions of said tubular chamber in the direction in which the fluid is to be moved, means associated with and disposed in said chamber and providing for complete closure of any section thereof without introducing sharp bends into the flexible working walls thereof.

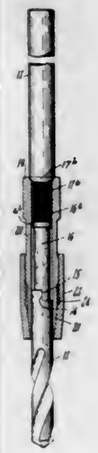
1,765,361. NURSERY PLAY APPARATUS. RITA BERMAN, New York, N. Y. Filed Sept. 21, 1928. Serial No. 307,470. 1 Claim. (Cl. 272—60.)

A nursery play apparatus comprising an elevated rectangular deck, a vertical supporting member secured to the deck at each corner and extending above the same, horizontal rails connecting said corner members above the deck, a supplementary vertical supporting member for the deck intermediate each of said corner supporting members and connected to said horizontal rails, horizontal bars connecting opposed corner members and one



of the supplementary supporting members, a horizontal, rectangular base for said vertical supporting members, and a rope device suspended from one of said rails above the deck, said rope device lying immediately adjacent the deck.

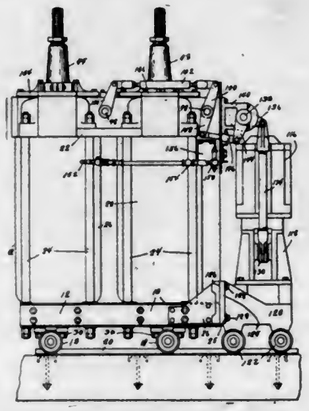
1,765,362. DRILL-OPERATING HOLDER. GEORGE W. BERRY, Wolfeboro, N. H. Filed Sept. 4, 1928. Serial No. 303,854. 3 Claims. (Cl. 279—48.)



1. A drill holder constituting a drill-press extension and adapted to hold either of a plurality of cylindrical drills of different diameters, said holder comprising a tubular member longitudinally slotted from its inner end through-

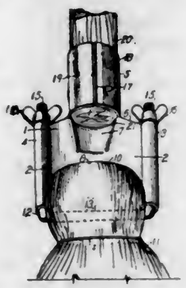
out the major portion of its length, to form chuck jaws, and provided with compressing means adapted to close said jaws on a cylindrical drill, the outer end portion of said member being rigid and internally screw-threaded to constitute an elongated coupling sleeve, and a sectional shank including an inner section composed of a reduced body and an enlarged externally threaded end constituting a coupling member separably engaged with said coupling sleeve, and an outer section composed of an elongated body, adapted to be engaged by a drill-press member, and a reduced externally threaded end, constituting a coupling member separably engaged with the coupling sleeve, and separably abutting the inner section, the inner shank section having a stepped end adapted to engage the stepped end of a drill grasped by said jaws, the reduced body of the inner shank section permitting the jaws to be closed on cylindrical drills of different diameters, the separability of the outer section permitting outer sections of different lengths to be used interchangeably.

1,765,363. ELECTRIC SWITCH. CHESTER D. AINSWORTH, Wollaston, Mass., assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass., a Corporation of Massachusetts. Filed Feb. 18, 1927. Serial No. 169,361. 19 Claims. (Cl. 200—150.)



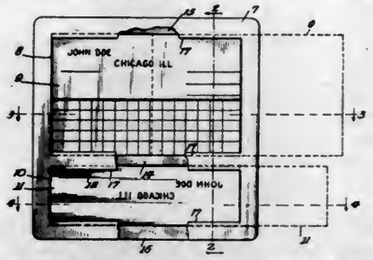
1. A single-pole electric switch having a plurality of sets of electrically-interconnected movable and stationary switch members, separate oil receptacles containing said sets, and a switch frame common to and comprising a cover for said oil receptacles and constituting a common support for said sets, said switch frame characterized by having provision for supporting each of said sets of switch members in either of two angularly related circuit controlling positions.

1,765,364. MOP. JAMES A. ATCHITY, Kansas City, Mo. Filed June 25, 1928. Serial No. 288,044. 5 Claims. (Cl. 15—153.)



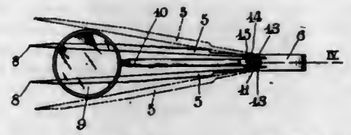
1. A mop head comprising a body having sleeves on its vertical edges and a handle receiving socket extending from the upper edge of the body, a swab and a clamp having a swab supporting portion and branches engageable with said sleeves for clamping the swab supporting portion to the lower edge of the body.

1,765,365. PRINTING DEVICE. JAMES A. BAILEY, Chicago, Ill., assignor to Addressograph Company, Wilmington, Del., a Corporation of Delaware. Filed Aug. 11, 1928. Serial No. 298,971. 1 Claim. (Cl. 101—369.)



A printing device comprising a frame made of cardboard or similar light material, a metal printing plate having printng characters embossed thereon in lines extending lengthwise of the plate, and a card having informtaion thereon in lines extending lengthwise of the card, said frame having a continuous back, a mat of the same dimensions as the back and secured to the back and having a top, a bottom, two sides, openings to receive said plate and card, and a transverse strip between said openings, filler strips between the back and the top, bottom, one side and the transverse strip of the mat, the other side of the mat being spaced from the back to form slots through which the plate and card may be freely moved lengthwise thereof into and out of said openings, the inner marginal edges of the top and bottom of the mat and the top and bottom marginal edges of the transverse strip projecting beyond the filler strips thereof to form flanges at the top and bottom of said openings to retain the plate and card in place in the openings and in the frame.

1,765,366. DERMATOLOGICAL INSTRUMENT. WILLARD S. CRATER, Columbus, Ohio. Filed June 27 1928. Serial No. 288,675. 2 Claims. (Cl. 128—356.)



1. In an instrument of the class described including a pair of spring tweezer arms joined together at one end in fixed relation to each other and having their operating ends symmetrically slanted longitudinally and pointed for diverse dermatological operations by reversing the position of the instrument with respect to the skin to be treated, a magnifying glass having a shank pivotally mounted near the junction of said tweezer arms, said glass adapted to be swung between said tweezer arms and to stand projected at opposite sides of the instrument whereby observation can be made through said glass of the operation of the instrument in either of said positions.

1,765,367. REDUCTION OF AROMATIC NITRO COMPOUNDS. PAUL DIETERLE, Buffalo, N. Y., assignor to National Aniline & Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed Oct. 3, 1927. Serial No. 223,834. 21 Claims. (Cl. 260—130.5.)

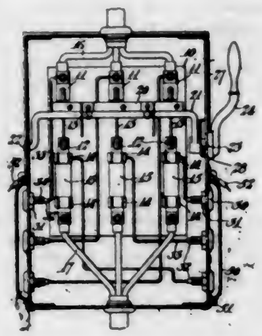
1. In the manufacture of an amino compound, a method which comprises subjecting an aromatic nitro compound which is free from a nuclear-bound hydroxyl group to the action of hydrated lime and sulfur in the presence of a ferrous compound.

1,765,368. METHOD OF WELDING. CARL A. FRAHM and EDMUND W. RIEMENSCHNEIDER, Canton, Ohio, assignors to The Union Metal Manufacturing Company, Canton Ohio, a Corporation of Ohio. Filed Feb. 13, 1928. Serial No. 253,948. 5 Claims. (Cl. 78—94.)



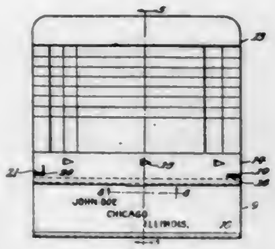
5. The method of butt welding the edges of commercial sheet metal, which consists in uniformly thickening the metal at and adjacent to the edges to be abutted, and then holding the edges closely together and fusing the edge portions only of the thickened metal, to melt the same and form a welded joint with thickened metal adjacent to each side of the weld.

1,765,369. SERVICE SWITCH. WILLIAM R. FRAMPTON, Glendale, Calif., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 14, 1920. Serial No. 373,919. 2 Claims. (Cl. 175—183.)



1. An enclosed switch comprising a casing, a cover for the casing, a current-controlling device within the casing having a meter test terminal member, an insulating bushing mounted on the casing and extending exteriorly thereof, and a socket for receiving a detachable test terminal mounted in the bushing and accessible from the exterior of the casing and connected to the said terminal member.

1,765,370. PRINTING DEVICE. WALTER T. GOLLWITZER, Chicago, Ill., assignor to Addressograph Company, Wilmington, Del., a Corporation of Delaware. Filed Aug. 11, 1928. Serial No. 299,008. 6 Claims. (Cl. 101—369.)



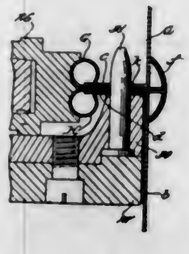
1. A printing device comprising a printing plate member and a card member, said members having interengaging means at adjacent edges for mounting the card member on the plate member in juxtaposed relation thereto, said means adapted to be engaged by overlapping said members and removing one member bodily in a transverse direction and relatively to the other member.

1,765,371. LEG AND ANKLE PROTECTOR. FRANCES M. GRAU, Washington, Nebr. Filed Oct. 6, 1928. Serial No. 310,764. 1 Claim. (Cl. 32—2.)



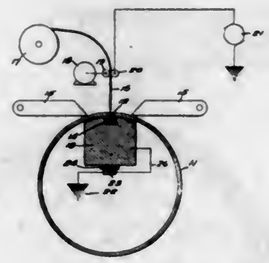
A leg and ankle protector, comprising a pair of fabric sheets stitched together at their marginal edge portions and providing a space between the sheets, a flat vertical spring disposed in said space and located midway between the lateral edges of the sheets and extending substantially throughout the length of the sheets, and a plurality of horizontal cross springs curved to the general configuration of the leg and ankle disposed at spaced intervals throughout the length of the vertical spring and interposed between said sheets, said horizontal springs adapted to overlap at their free ends at a point diametrically opposite the vertical spring, and lines of stitching securing said sheets together and extending along the opposite edge and end portions of said springs to provide individual pockets for the springs for maintaining the same against edgewise and longitudinal displacement between the sheets, said lines of stitching reinforcing the sheet structure and maintaining the sheets from separating.

1,765,372. METHOD OF MAKING PANEL JOINTS. OTTO J. GROEHN, Grosse Pointe Park, Mich., assignor to Hudson Motor Car Company, Detroit, Mich., a Corporation of Michigan. Original application filed Jan. 26, 1926, Serial No. 83,960. Divided and this application filed Oct. 1, 1927, Serial No. 223,459, and in Great Britain Nov. 1, 1926. 9 Claims. (Cl. 153—48.)



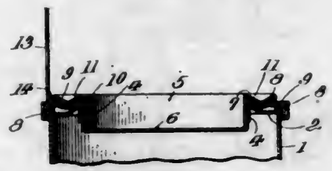
1. The hereindescribed method of joining the flanged edges of two panels or plates by means of a molding strip having a head and a flange, said method including interposing the molding flange between the panel flanges and exerting upon said molding flange opposed pressures respectively in the directions and at the points to draw said head into close engagement with the faces of said panels and to crimp or curl said molding flange over the free edges of said panel flanges.

1,765,373. ARC-WELDING SYSTEM. ALBERT K. HARFORD, Oskland, Calif., assignor, by mesne assignments, to New Metal Products Company, Emeryville, Calif., a Corporation of California. Filed Aug. 5, 1925. Serial No. 48,207. 3 Claims. (Cl. 219—8.)



1. In an arc welding system, a conducting support on which the article to be welded may be placed, and forming a path for the arc current extending along a seam to be welded, a conductor adjacent and substantially parallel to said support, and means for connecting the support and conductor in series for carrying the arc current.

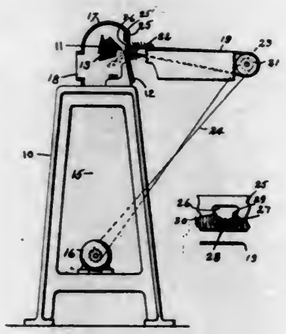
1,765,374. HAND FIRE EXTINGUISHER. HENRY C. HAYS, Detroit, Mich., assignor to Continental Can Company, Inc., New York, N. Y., a Corporation of New York. Filed July 5, 1927. Serial No. 203,481. 1 Claim. (Cl. 169—35.)



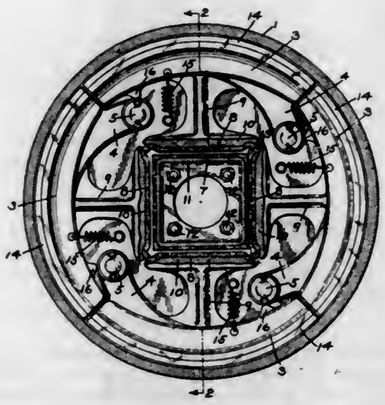
A hand fire extinguisher comprising a container body having a top with an opening therethrough surrounded by a substantially vertical friction wall, a closure having a central depressed portion adapted to engage said friction wall, and a flange overlying the top of the container and terminating within the limits of the outer wall of the container, a flat metal ring surrounding said central depressed portion of the closure and located beneath the flange thereof, said ring having a projecting neck portion extending beyond the edge of the flange and a vertically extending supporting tab formed integral therewith and disposed substantially in alignment with the wall of the body of the container, said tab having a perforation therethrough whereby said container may be suspended by said tab and the cover withdrawn from the container by a pull exerted on the body portion of the container.

1,765,375. FUR-ORNAMENTING MACHINE. FREDERICK W. HORSTMANN, Maplewood, N. J. Filed Apr. 16, 1927. Serial No. 184,281. 5 Claims. (Cl. 149—26.)

5. A machine for producing ornamental effects in the fur surface of pelts which comprises shearing mechanism, means for conveying a fur past said mechanism, a guard plate disposed between said shearing mechanism and said conveying means, said guard plate having at least one opening therein having outwardly diverging sides, said opening being so formed as to permit the fur to be presented therethrough so that the ends of the fur projecting through said opening define a predetermined contour as presented to the shearing mechanism.

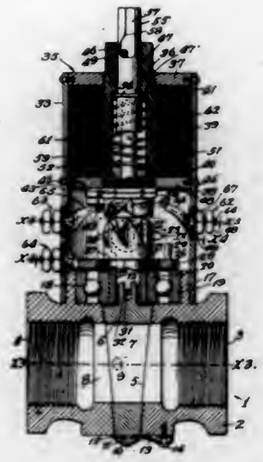


1,765,376. AUTOMOTIVE BRAKE DIAPHRAGM. FREMONT P. LIVINGSTON, Denver, Colo., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Jan. 13, 1926. Serial No. 81,101. 4 Claims. (Cl. 188—152.)



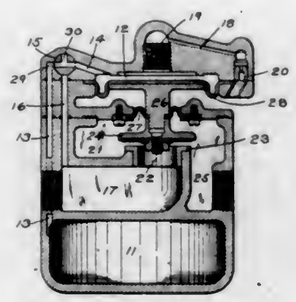
4. In a vehicle brake, the combination with a brake drum, of a plurality of brake heads mounted within said drum and each provided with a flat pressure plate and a brake chamber formed of a flexible diaphragm having pairs of inner end and outer flat walls, the outer flat wall of each pair engaging a corresponding pressure plate and operable by fluid under pressure supplied to said brake chamber.

1,765,377. MAGNETIC VALVE. DONN OTTO MARKS, Los Angeles, Calif., assignor to George Gartling, Los Angeles, Calif. Filed May 28, 1923. Serial No. 641,950. 13 Claims. (Cl. 137—139.)



2. A valve comprising a spigot having a slotted extension; a sleeve adapted to receive said extension and having a cross member adapted to be received in said slotted extension, said sleeve having teeth; a solenoid; and means operable by said solenoid and adapted to engage said teeth to turn said sleeve and spigot.

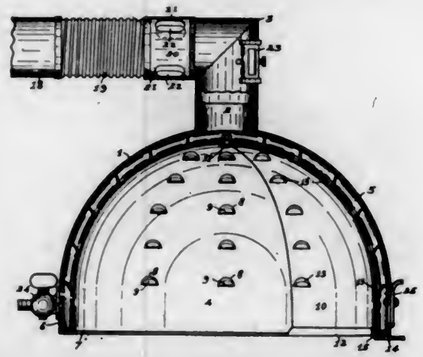
1,765,378. ANGLE-COCK DEVICE. JOSEPH C. MCCUNE, Edgewood, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Oct. 1, 1928. Serial No. 309,402. 4 Claims. (Cl. 303—86.)



1. A device of the class described comprising a casing provided with a conduit, a chamber, a passage connecting the chamber and conduit, a cock controlling the passage, and means actuated by the fluid from said chamber for temporarily closing the conduit.

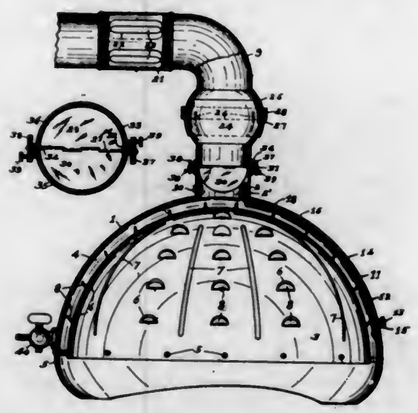
1,765,379. HAIR DRIER. EDWARD A. MCGINNIS, Pittsburgh, Pa. Filed Dec. 1, 1928. Serial No. 323,171. 1 Claim. (Cl. 34—26.)

In a hair drier, the combination of a confining dome, a distributor fixedly mounted in said confining dome and spaced from the latter to provide a heat circulating chamber between said confining dome and said distributor, said distributor being provided with a plurality of apertures for the passage of the heat, a segmental regulating plate pivotally mounted against inner surface of said distributor at the forward side of the latter, said regulating plate being provided with a plurality of perforations which are positioned therein for registration with the apertures at the forward side of said distributor, a retaining guide formed at the lower forward edge of said



confining dome and engaging said regulating plate, said retaining guide provided with a slot, and an operating arm carried at the lower end of said regulating plate for adjusting said regulating plate in said distributor, said operating arm projecting through said slot and being limited in its movement by the length of the latter substantially as described and for the purpose set forth.

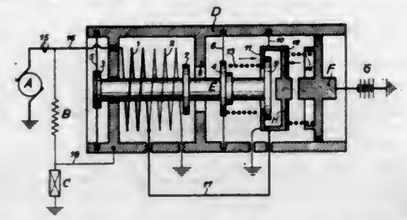
1,765,380. HAIR DRIER. EDWARD A. MCGINNIS, Pittsburgh, Pa. Filed Jan. 14, 1929. Serial No. 332,476. 7 Claims. (Cl. 34—26.)



1. In a hair drier of the character described, a hot air confining dome having a hot air inlet opening, and means for opening and closing the latter, said means further operable for selectively directing the hot air from said inlet opening to different portions of said confining dome.

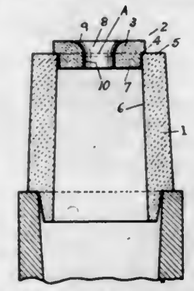
1,765,381. COMBINED AUTOMATIC SWITCH AND REGULATOR. FRIEDRICH MENZEL, Stuttgart, Germany, assignor to Robert Bosch Aktiengesellschaft, Stuttgart, Germany. Filed July 19, 1926, Serial No. 123,540, and in Germany Sept. 11, 1925. 9 Claims. (Cl. 200—111.)

1. In a combined automatic switch and vibration voltage regulator for generators, the combination of a switch element, a vibration voltage-regulator element, a single armature operating the switch and the regulator, and a



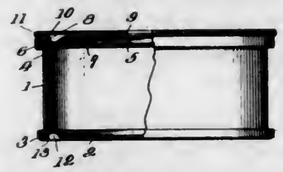
plurality of separate regulating circuits controlled by the regulator at different times for the regulation of the voltage of a generator.

1,765,382. CAP FOR HOT TOPS. EUGENE L. MESSLER and JAMES M. GUTHRIE, Pittsburgh, Pa.; said Guthrie assignor to said Messler. Filed May 9, 1929. Serial No. 361,620. 5 Claims. (Cl. 22—147.)



1. A refractory cap for ingot mold hot tops comprising a cover portion arranged to cover the bore opening at the upper end of the hot top, a seating shoulder arranged to rest on the hot top, a portion arranged to extend downwardly a material distance from the upper end and into the bore of the hot top, and a teeming orifice extending through both said cover portion and said downwardly extending portion and disposed substantially centrally of both said portions.

1,765,383. COMBINED SHIPPING AND DISPLAY CONTAINER. WILLIAM F. PUNTE, Passaic, N. J., assignor to Continental Can Company, Inc., New York, N. Y., a Corporation of New York. Filed Mar. 16, 1929. Serial No. 347,670. 2 Claims. (Cl. 220—82.)



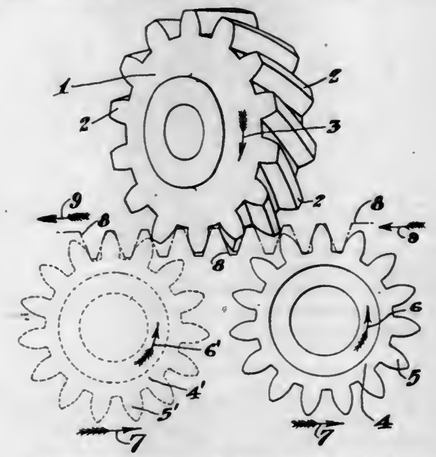
1. A combination shipping and display container including a body portion, a top end secured thereto having a central depression and an opening therethrough forming a friction seat centrally of the depressed portion, said opening being so spaced inwardly from the wall of the depression as to form a surrounding ledge at the base of said depression, a transparent fragile closure for said container located within said container and in contact with said top portion, a metal cover adapted to fit within the frictional seat and held from contact with the fragile closure by the ledge at the base of the seat, and a bottom end secured to the body portion, said bottom end having in its outer face a similar cover seat for securely holding and storing the cover when removed from the transparent closure for displaying the contents of the container.

1,765,384. TUBULAR-COLUMN-FORMING MACHINE. EDMUND W. RIEMENSCHNEIDER, Canton, Ohio, assignor to The Union Metal Manufacturing Company, Canton, Ohio, a Corporation of Ohio. Filed Aug. 30, 1926, Serial No. 132,369. Renewed Jan. 10, 1928. 20 Claims. (Cl. 113—33.)



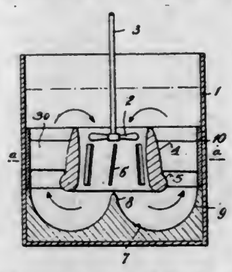
1. A tapered, tubular column forming apparatus including a pair of initial bending rolls for bending a sheet blank into trough shape, a plurality of curved forming dies for forming the trough shape blank into a tapered tube, means for pulling the blank through the bending rolls and forming dies, and means for adjusting the forming dies to the taper of the tube.

1,765,385. METHOD OF CUTTING GEAR TEETH. OLIVER G. SIMMONS, Lakewood, Ohio. Filed Mar. 24, 1927. Serial No. 178,021. 8 Claims. (Cl. 90—9.)



1. A method of generating teeth in gear blanks by continuously rotating a gear shaped cutter on its axis and reciprocating the cutter across the face of a gear blank continuously rotating on its axis in intermeshing relation with said cutter, and moving the axes of the cutter and blank closer together by relative movement along a line tangential to the pitch circle of the cutter and continuing this movement to move said axes apart.

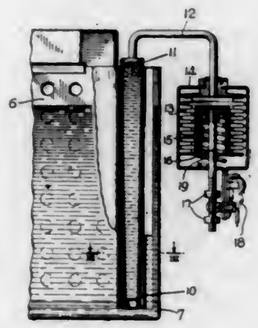
1,765,386. PRODUCING NONTURBULENT CIRCULATION OF LIQUIDS. JUSTIN F. WAIT, New York, N. Y., assignor to National Aniline & Chemical Co., Inc., a Corporation of New York. Filed Jan. 17, 1925. Serial No. 3,205. 16 Claims. (Cl. 259—96.)



1. In an apparatus of the character described, a vessel having an annular trough-shaped bottom curvilinear in

cross section, means for circulating liquid in said vessel in vertical planes, said means including a propeller, and curved guiding walls coacting with the curvilinear bottom, to produce substantially non-turbulent flow of the liquid.

1,765,387. TEMPERATURE CONTROL. LAWRENCE E. WARNER, New Hartford, N. Y., assignor to Savage-De Remer Corporation, New York, N. Y., a Corporation of New York. Filed Aug. 14, 1926. Serial No. 129,125. 5 Claims. (Cl. 236—1.)



1. An expansion control device of the kind described comprising a movable controlling element, a tapered container holding a medium whose freezing temperature is substantially the same as the temperature to be maintained and means for communicating the expansion pressure of said medium at the larger end of the container to the controlling element.

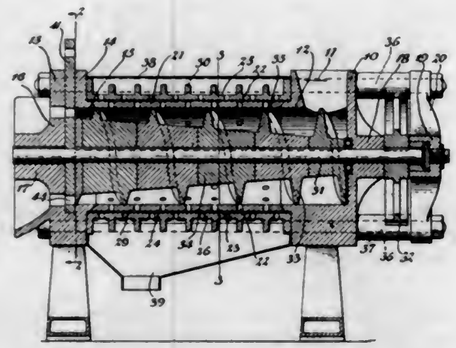
1,765,388. SCREEN. WILLIAM W. WATSON, Jamestown, N. Y. Filed June 3, 1925. Serial No. 34,646. 6 Claims. (Cl. 156—14.)



5. In a screen having a metallic frame made up of a side and a cross rail meeting at the corner in a miter joint, said cross rail having a hollow longitudinal chamber, and an opening through the top of said rail, a locking mechanism in said chamber including a reciprocatory bar the inner end of which is below said opening and has a plurality of apertures and a handle in said cross rail terminating in prongs which are passed through said apertures when said parts are assembled and bent over, thus uniting said handle to said bar.

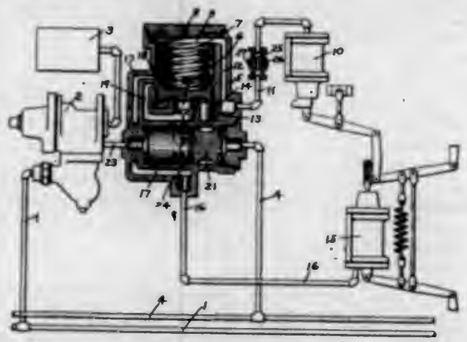
1,765,389. FILTER PRESS. ADOLPH F. WENDLER, Buffalo, N. Y., assignor to National Aniline & Chemical Company, Incorporated, New York, N. Y., a Corporation of New York. Filed May 14, 1926. Serial No. 109,069. 2 Claims. (Cl. 100—48.)

1. In a filter press the combination comprising an end abutment member having a bearing, another abutment having a hopper, a cylindrical perforated shell interposed between the two abutments and a rotatable screw journaled in said bearing to feed and compress the material,



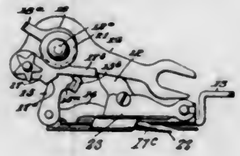
and a split removable plate slidably mounted in the first mentioned end abutment member and having openings therein for discharging the compressed material.

1,765,390. FLUID-PRESSURE-BRAKE SYSTEM. HARRY J. WINTER, London, England, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Nov. 5, 1928, Serial No. 317,150, and in Great Britain Feb. 2, 1928. 10 Claims. (Cl. 303—23.)



1. In an empty and load brake apparatus, the combination with an empty and a load brake cylinder, of means for supplying fluid under pressure to the empty brake cylinder, and means operated upon a predetermined increase in pressure in the empty brake cylinder, for supplying fluid under pressure to the load brake cylinder and for limiting the rate of flow to the empty brake cylinder.

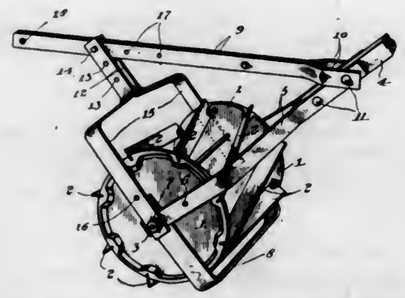
1,765,391. SEWING-MACHINE RUFFLER. AUGUST D. ZEECK, New Haven, Conn., assignor to The Greist Manufacturing Company, a Corporation of Connecticut. Filed June 27, 1928. Serial No. 288,595. 1 Claim. (Cl. 112—135.)



In a sewing machine ruffler, the combination with a ruffling blade and its carrier, of a pendulous lever having a

jointed connection with said carrier and provided with a laterally extending contact lug, an operating lever adapted to be actuated from the needle-bar of a sewing machine, a regulating lever mounted on the said operating lever and having a broad contact part and a tail portion for alternate engagement with said lug, and an adjustable eccentric by which the position of the said regulating lever may be varied to regulate the throw of the said ruffling blade.

1,765,392. WEEDER. JOHN F. ZEILINGER, David City, Nebr., assignor to The Barker Manufacturing Company, Inc., David City, Nebr., a Corporation of Nebraska. Filed Mar. 11, 1929. Serial No. 345,962. 4 Claims. (Cl. 97—52.)



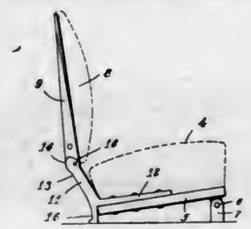
1. An implement of the class described comprising a rotary reel arranged to travel along the ground and having at its periphery a plurality of cutting blades; trunnions provided at the ends of said reel; a handle pivotally connected with said trunnions; a hitch bar pivotally connected with said handle and projecting over said reel; and a support for said hitch bar pivotally connected therewith and with the trunnions of said reel.

1,765,393. COVERED-JOINT HINGE. SETH B. ATWOOD, Rockford, Ill. Filed Apr. 30, 1927. Serial No. 187,725. 2 Claims. (Cl. 16—128.)



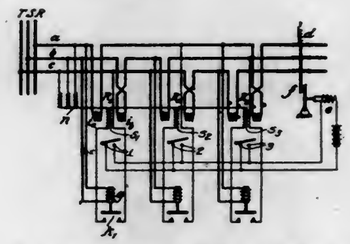
1. A hinge member comprising a metal blank curved at one end to provide a cover portion, said cover portion being grooved on its inner side, and a separate pintle bearing knuckle part located and held in said groove with its end walls abutting against the side walls of the groove.

1,765,394. SEAT-BACK MOUNTING. JAMES T. ATWOOD, Rockford, Ill. Filed Nov. 12, 1926. Serial No. 147,895. 1 Claim. (Cl. 155—160.)



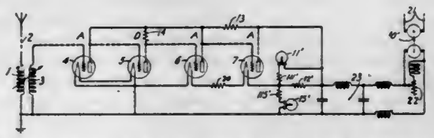
A seat back mounting especially adapted for folding seats of motor vehicles comprising a bracket structure having two upstanding bracket arms each bifurcated at its upper end, a seat back having parts fitting between the separated ears of said bifurcated ends and each having a stop shoulder, a pivot pin connecting each seat back part to its complemental ears and located adjacent to the front of the bracket ears so as to allow a comparatively long lever arm for its stop shoulder, said ears each being extended upwardly relative to the pivots sufficiently to cover the otherwise exposed adjacent rear corner of its stop shoulder part in any position of the seat back, each bracket part having an abutment between the ears thereof against which its associated stop shoulder is adapted to strike in the upright operative position of the seat, said ears serving to prevent admission of objects between the stop shoulders and abutments, thereby preventing injury to such objects or obstruction to the operation of the seat back.

1,765,395. ELECTRICAL PROTECTIVE SYSTEM. RICHARD BAUCH, Berlin-Charlottenburg, Germany, assignor to Westinghouse Electric & Manufacturing Company, New York, N. Y., a Corporation. Filed Feb. 14, 1925, Serial No. 9,276, and in Germany Feb. 8, 1924. 6 Claims. (Cl. 175—294.)



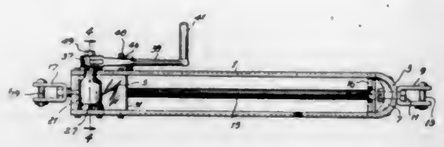
1. In a polyphase electrical system, the combination with a circuit interrupter, of protective means for controlling the operation of the interrupter comprising a relay for each phase of the system provided with current-responsive winding means and a voltage-responsive winding means, and means for connecting one of the winding means to the system in such manner that the current-responsive winding means will be energized from phases other than that to which the voltage winding means is connected.

1,765,396. INDICATING SYSTEM. PHILANDER H. BETTS, Belmar, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Jan. 31, 1927. Serial No. 164,952. 4 Claims. (Cl. 177—311.)



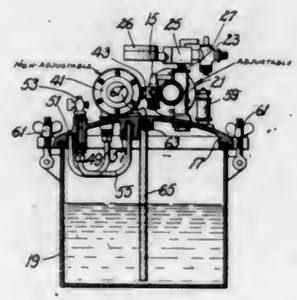
1. An electric space discharge tube having a filamentary cathode and an anode, a circuit including said cathode, a source of electromotive force for said circuit, connections from said source for supplying space current to said tube, an impedance connected in serial relation to said circuit with respect to said source, a circuit connected in shunt to said first circuit at the terminal of said impedance remote from said source, a lamp included in said second circuit, normally dark but lighting in response to voltage from said source applied to said second circuit when said first circuit is interrupted, a circuit connected in shunt to said impedance, and a signal lamp included in the latter circuit, normally lighted in response to voltage applied to the latter circuit from said impedance, due to current flowing from said source through said impedance and said first circuit.

1,765,397. SLACK PULLER. THEODORE BIRKENMAIER, St. Louis, Mo., assignor to W. N. Matthews Corporation, St. Louis, Mo., a Corporation of Missouri. Filed Sept. 13, 1926. Serial No. 135,112. 5 Claims. (Cl. 254—67.)



1. A slack puller comprising a frame, a housing joined thereto, a screw passing longitudinally and slidably through the housing, means for preventing rotation of the screw, a split nut mounted within the housing adapted when in closed position to cooperate with the screw and with walls in the housing to be held shut, means associated with said housing adapted to open the nut upon longitudinal movement thereof, and means for rotating said nut.

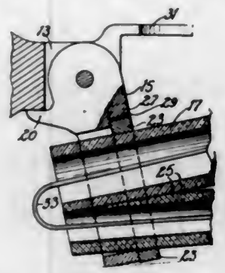
1,765,398. SPRAYER. THEODORE BIRKENMAIER, St. Louis, Mo., assignor to W. N. Matthews Corporation, St. Louis, Mo., a Corporation of Missouri. Filed Dec. 31, 1926. Serial No. 158,189. 3 Claims. (Cl. 91—45.)



1. In a liquid sprayer, a main air supply tank, a pressure tight pot for liquid, a communicating line between said tank and said pot including therein a non-adjustable pressure reducer, a branch from said line on the high pressure side of said reducer to an adjustable pressure reducer, an outlet from said pot adapted to have liquid forced therefrom by means of the fixed pressure within said pot, said outlet communicating with a volume contr l valve, a spray gun including means for atomizing liquid by means of air under pressure, communicating means from said adjustable reducer to the air inlet of the spray gun and communicating means from said volume control valve to the liquid inlet of said spray gun, said volume control valve comprising a body having a passage, a movable closing stem intersecting said passage and having openings of various sizes therein adapted to control the volume of fluid going through said passage when the stem is moved.

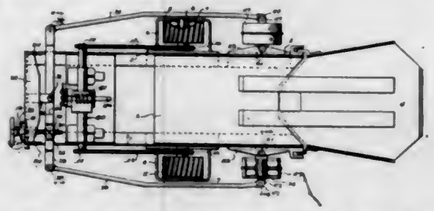
1,765,399. SWITCH. THEODORE BIRKENMAIER, St. Louis, Mo., assignor to W. N. Matthews Corporation, St. Louis, Mo., a Corporation of Missouri. Filed Jan. 21, 1929. Serial No. 333,841. 4 Claims. (Cl. 200—114.)

1. In a switch, line terminals, a switch cartridge including terminal engaging elements, a hinge including a swingable socket, a portion on the cartridge loosely engaging in said socket, a stop on the cartridge limiting its descent into the socket, a lug on the socket and a recess in the stop snugly engaging the lug and adapted to more



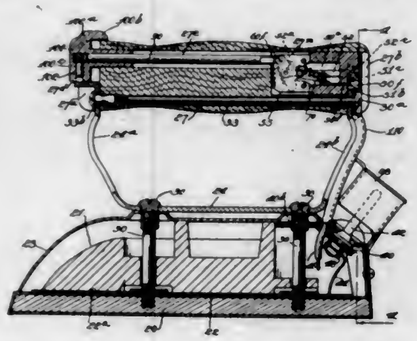
perfectly align the engaging elements with the line terminals than would be possible with the loose fit between the cartridge and the socket.

1,765,400. MINING-MACHINE TRUCK. GEORGE BODIN, Chicago, Ill., assignor to Goodman Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed July 6, 1926. Serial No. 120,575. 9 Claims. (Cl. 180—1.)



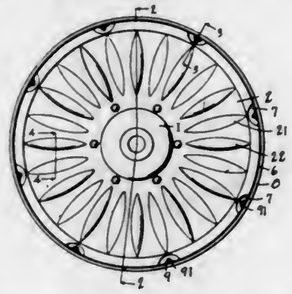
1. A mining machine truck comprising a body portion and front and rear supporting wheels, driving mechanism for said rear wheels adapted to be detachably connected with the motor of the mining machine, means supporting said front wheels for steering movement, controlling members connected at the outside of said steering wheels extending to the rear of said truck, a transversely disposed steering beam pivotally mounted at the rear of said truck and connected at opposite ends with said controlling members, and screw means carried on said body portion adapted to actuate said steering beam.

1,765,401. ELECTRIC LAUNDRY-IRON SWITCH. GEORGE BROWNING, Wilmette, Ill., assignor to Chicago Flexible Shaft Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 14, 1927. Serial No. 239,832. 6 Claims. (Cl. 200—157.)



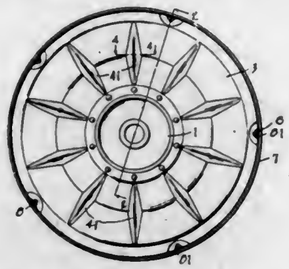
1. In combination with a handle of a manually operable electrically energized implement, a switch for controlling the energizing circuit mounted in the hand piece of the handle at the rear end thereof; a switch-operating rod extending in the upper part of the hand piece longitudinally thereof having a manually engageable terminal positioned forward of the front end of the hand piece and projecting transversely past said end for exposure to manipulation by the fingers of the operator's hand to actuate the switch rod longitudinally for operating the switch while grasping the hand piece.

1,765,402. WHEEL OR PULLEY FOR BAND SAWS. ANDREW G. CARTER, Grand Rapids, Mich., assignor to The Carter Products Company, Inc., Grand Rapids, Mich. Filed July 20, 1929. Serial No. 379,689. 7 Claims. (Cl. 143—30.)



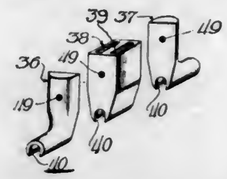
1. A band saw wheel comprising a hub, a sheet metal disk web with radial ribs struck up in opposite directions alternating with each other to give rigidity to the web of the wheel, the periphery being turned into a flange forming part of the rim, a sheet metal ring secured to the front of the said web by spot welding and with a flat peripheral flange completing the said flat metal rim, with cut away openings within the rim, and a cushion tire with supporting plates and screws in the said cut away openings retaining the same in place.

1,765,403. WHEEL OR PULLEY FOR BAND SAWS. ANDREW G. CARTER, Grand Rapids, Mich., assignor to The Carter Products Company, Inc., Grand Rapids, Mich. Filed July 20, 1929. Serial No. 379,690. 4 Claims. (Cl. 143—30.)



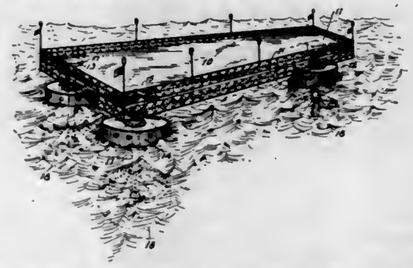
1. In a band saw wheel, the combination of a suitable hub, a web for the wheel made up of opposed identical disk plates of sheet metal formed with opposed struck up radial ribs the peripheries of which disks are outturned to form the opposed halves of a flat metal rim, semi-circular cuts being made at intervals in the web within the rim, a reinforced cushion tire therefor comprising a central band with staggered longitudinal rows of perforations therein and with attaching plates secured to the interior of said band and having screw threaded holes at the center, a vulcanized rubber tread embracing the said reinforcing band and projecting through the perforations therein, and stud screws disposed through the rim of the said wheel at the semi-circular cuts bottomed into said attached plates, and clamp nuts on said screws.

1,765,404. APPARATUS FOR FORMING OUTLETS. WILLIAM JOHN COOK, Berwyn, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed May 10, 1928, Serial No. 276,538. Renewed Jan. 3, 1930. 5 Claims. (Cl. 25—128.)



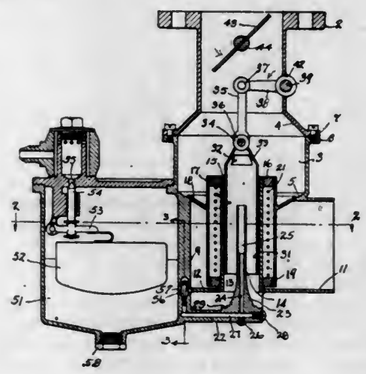
5. A collapsible form for molding an outlet for a distributive passageway molded within a building slab, comprising a pair of oppositely disposed hollow metallic members and a central wedge-shaped hollow metallic member having a depressed handle for facilitating the removal of the form, the lower portions of said members being designed to extend into the passageway and having registering longitudinal grooves for enclosing a portion of a cable contained within the passageway.

1,765,405. FLOATING DOCK. ROBERT B. DE LONG, Cleveland, Ohio, assignor of one-half to Lincoln R. Scafe, Cleveland, Ohio. Filed May 10, 1929. Serial No. 361,944. 4 Claims. (Cl. 114—0.5.)



1. In floating docks, the combination of a platform, a plurality of pontoons on which said platform is supported, a universal joint carried by each of said pontoons from which is suspended a relatively heavy submerged weight that is substantially immovable vertically by the action of surface disturbances of the water on the pontoons.

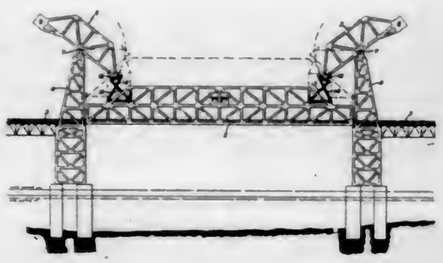
1,765,406. CARBURETOR. LOUIS DE MARCO, Cleveland, Ohio. Filed Sept. 8, 1925. Serial No. 54,924. 2 Claims. (Cl. 261—52.)



1. A carburetor having a vertical mixing chamber, a fuel nozzle disposed centrally thereof and having an enlarged

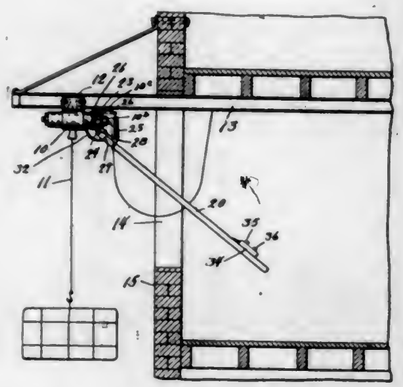
tapered base, a stationary sleeve spaced from the upper end of said nozzle, an air cut-off sleeve movably co-operating with the inner walls of said stationary sleeve, an auxiliary air control sleeve slidably engaged with the exterior walls of said stationary sleeve, manually operable means for controlling the position of said inner sleeve and spring means for controlling the position of said external sleeve.

1,765,407. LIFT BRIDGE. RALPH E. DODGE, San Francisco, Calif. Filed Aug. 26, 1924. Serial No. 734,270. 4 Claims. (Cl. 14—42.)



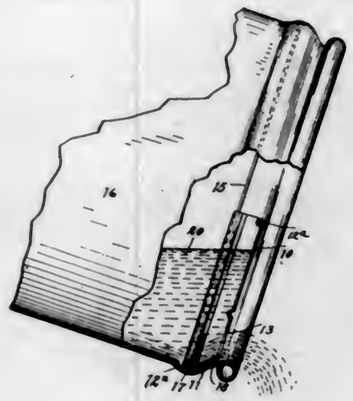
1. In a device of the class described, a span adapted to be moved thru a given path, a support adjacent said span, a pivoted counterbalance lever mounted on said support, one end of said lever extending over said span, a plurality of links connecting said end of the lever with two spaced points on the span whereby the effective point of application of the force of the lever is caused to shift between said points for different positions of the span.

1,765,408. CRANE. HARMON P. ELLIOTT, Cambridge, Mass., assignor to The Cleveland Crane & Engineering Company, Wickliffe, Ohio, a Corporation of Ohio. Filed Feb. 4, 1924. Serial No. 690,415. 6 Claims. (Cl. 212—134.)



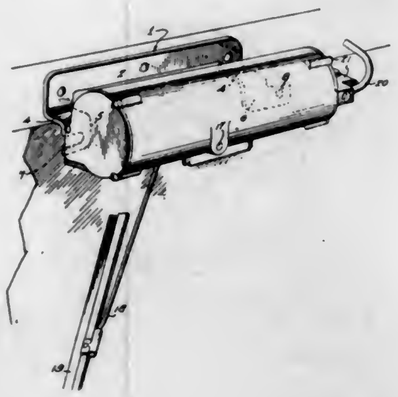
1. An overhead track type traveling device including a carrier and a hoist and having a handle extended rearwardly and downwardly therefrom, means connecting said handle pivotally with said device for vertical pivotal movement, and yielding means to restrict the downward movement of said handle.

1,765,409. POURING ATTACHMENT FOR PAILS. JAMES E. FITZGERALD, Youngstown, Ohio, assignor to The Niles Steel Products Company, Niles, Ohio, a Corporation of Ohio. Filed June 5, 1928. Serial No. 283,016. 4 Claims. (Cl. 221—23.)



1. A device for use in conjunction with a container having an upwardly and inwardly extending portion adjacent its upper end, said device comprising a body portion having a pouring aperture therein, a flange on said body portion adapted to engage the inwardly extending portion of the container, and resilient means for securing the parts in engagement.

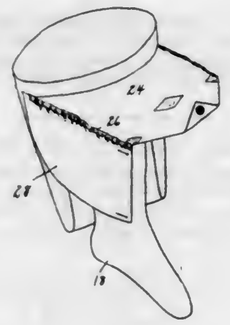
1,765,410. SUPPORT. FREDERICK G. FOLBERTH and WILLIAM M. FOLBERTH, Cleveland, Ohio, assignors to Trico Products Corporation, Buffalo, N. Y., a Corporation of New York. Filed Jan. 9, 1925. Serial No. 1,454. 1 Claim. (Cl. 248—20.)



A support for holding a windshield cleaner motor spaced forwardly from a windshield to permit its wiper actuating shaft to operate between the windshield glass and the motor, comprising a one-piece member stamped from sheet metal and adapted to be secured to a windshield frame, said member being provided with integral but spaced terminal offsets between which the wiper actuating part of

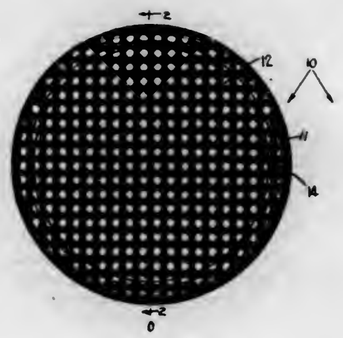
the motor may operate, and an arm integral with and extending substantially at right angles from each of said offsets for supporting the motor, said arms being offset from the body portion of said member and provided with openings for the reception of fastening elements arranged in said motor, and being disposed in a plane forwardly of and substantially parallel to said member.

1,765,411. UNDERGARMENT. ARTHUR F. FOOTE, New Haven, Conn. Filed Apr. 5, 1929. Serial No. 352,652. 2 Claims. (Cl. 2—224.)



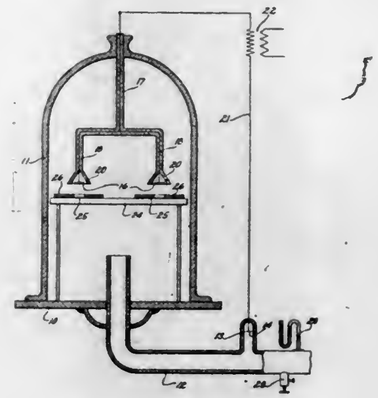
1. The combination with a pair of stockings, of a bridge, comprising two members, each permanently secured to a stocking, a guard secured to the rear edge of each member and depending therefrom, and means for connecting the adjacent edges of the two members and guards together.

1,765,412. WICKER, CANE, AND REED FURNITURE MANUFACTURE. JOHN FORST, New York, N. Y., assignor to Manhattan Wicker Co., New York, N. Y., a Corporation of New York. Filed Mar. 13, 1929. Serial No. 346,657. 3 Claims. (Cl. 155—187.)



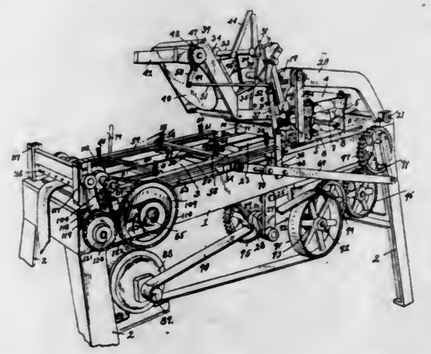
2. A furniture structure comprising a ring frame having a center opening, a preformed unitary woven cane sheet mounted against one side of the frame over said opening and having portions bent around the outer periphery and secured to the inner periphery of said ring and a covering strip secured over said sheet to said inner periphery of the ring.

1,765,413. VIBRATORY ELEMENT AND METHOD OF PRODUCING THE SAME. HAL FREDERICK FRUTH, Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Dec. 31, 1928. Serial No. 329,646. 71 Claims. (Cl. 179—181.)



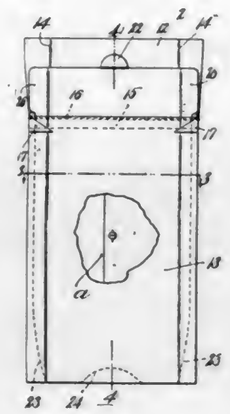
1. The method of applying a metallic microphonic electrode member to another member which consists in depositing thereon by cathodic sputtering a coating of the metal to form the metallic member.

1,765,414. MACHINE FOR PERFORMING PRINTING, PERFORATING, AND OTHER OPERATIONS ON STRIP MATERIAL. GEORGE L. FULK, Cleveland Heights, Ohio, assignor, by mesne assignments, to Bonnar-Vawter Fanform Company, Inc., Cleveland, Ohio, a Corporation of Delaware. Filed Nov. 3, 1927. Serial No. 230,732. 12 Claims. (Cl. 101—288.)



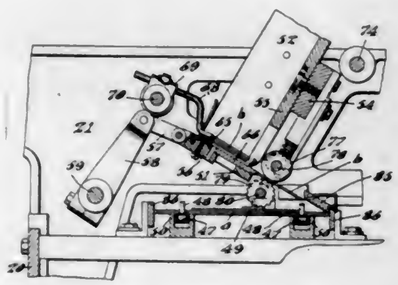
1. In a machine of the character described, a supporting frame having a bed extending longitudinally thereof, a plurality of heads mounted for vertical movement above the bed and arranged one in advance of the other, means carried by one head for forming lines of perforations across the strip, means carried by the other head for printing upon the strip, a bar extending across said bed, punches carried by said bar in the path of movement of one of said heads, and means for simultaneously reciprocating said heads.

1,765,415. ARTICLE HOLDER. LEON E. LA BOMBARD, West Newton, and MELVIN H. SIDEBOTHAM, Newtonville, Mass., assignors to Specialty Automatic Machine Company, Chelsea, Mass. Filed Jan. 28, 1927. Serial No. 164,210. 8 Claims. (Cl. 206—7.)



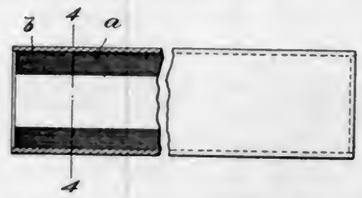
1. The combination with an article holder comprising front and back members connected at opposite edges, of an artcile inserter comprising two sections connected solely at one end and having oppositely tapered margins at its other end, and an article completely enclosed between said inserter sections.

1,765,416. FEEDING MECHANISM FOR ASSEMBLING AND PACKAGING MACHINES. LEON E. LA BOMBARD, Waltham, and MELVIN H. SIDEBOTHAM, Newtonville, Mass., assignors to Specialty Automatic Machine Company, Chelsea, Mass., a Corporation of Massachusetts. Original application filed Mar. 22, 1926, Serial No. 96,649. Divided and this application filed July 3, 1928. Serial No. 290,220. 4 Claims. (Cl. 271—44.)



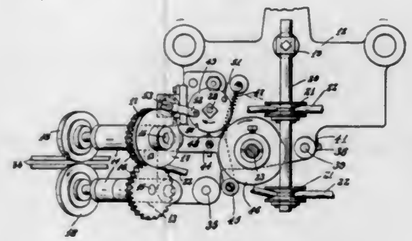
1. In a machine of the character described, a hopper for a pile of the articles, means for feeding the articles singly from the bottom of the pile, and means for temporarily and substantially lifting an edge portion of the article next to the bottom one during the advance of the bottom one to prevent feeding of more than a single article at one time.

1,765,417. PACKAGE OF ROLLED SHEETS. LEON E. LA BOMBARD, West Newton, Mass., assignor to Specialty Automatic Machine Company, Chelsea, Mass., a Corporation of Massachusetts. Filed Nov. 8, 1927. Serial No. 231,846. 3 Claims. (Cl. 206—59.)



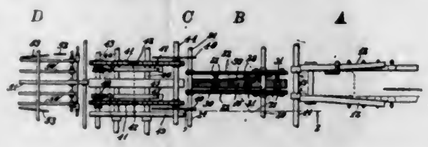
1. A package comprising a container and a single roll therein, said roll comprising a plurality of sheets, each of said sheets being in the formr of a complete coil free from intercoiling with any other sheet.

1,765,418. POWER-OPERATED COUNTER. HAROLD J. GOSS, Nashua, N. H., assignor to The International Paper Box Machine Company, Nashua, N. H., a Corporation of Maine. Filed June 16, 1928. Serial No. 286,009. 11 Claims. (Cl. 93—93.)



1. A counter having a pair of angularly mounted normally separated friction disks, means for positively rotating both of them, and means for bringing said disks close together momentarily when one of a predetermined number of moving articles reaches position to be grasped by said disks.

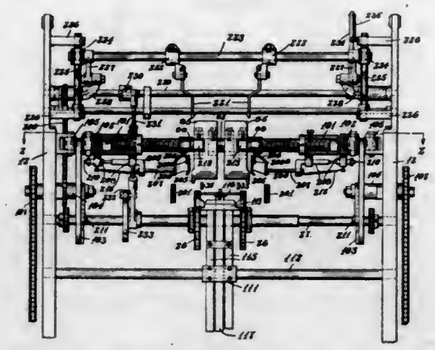
1,765,419. ENVELOPE MACHINE. HAROLD J. GOSS, Nashua, N. H., assignor to The International Paper Box Machine Company, Nashua, N. H., a Corporation of Maine. Filed June 16, 1928. Serial No. 286,010. 9 Claims. (Cl. 93—62.)



1. A blank folding machine having primary and secondary folding mechanisms, and a travelling turn-table mechanism for transporting the blanks from one folding mechanism to the other and turning them while travelling.

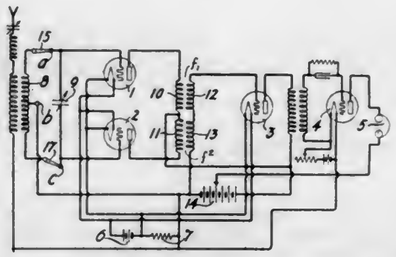
1,765,420. MACHINE FOR MAKING SET-UP BOXES. HAROLD J. GOSS, Nashua, N. H., assignor to The International Paper Box Machine Company, Nashua, N. H., a Corporation of Maine. Filed Sept. 28, 1928. Serial No. 309,050. 8 Claims. (Cl. 93—51.)

3. In a machine for converting blanks into boxes, a forming chamber, a plunger movable into and from said chamber, pressers movable toward and from the end faces of the plunger, and pressers movable toward and from a side face of the plunger, means being provided for timing the action of the angularly related pressers to cause the end pressers to begin their action in advance of the action of the other pressers.



4. The method of making boxes with adhesively united reinforced corner portions, said method consisting in forming blanks with portions to provide inner and outer flaps for said corner portions of the boxes, folding the blanks with said flaps extending around the corners in opposite directions, and applying pressures in different directions and in times sequence to said corner portions.

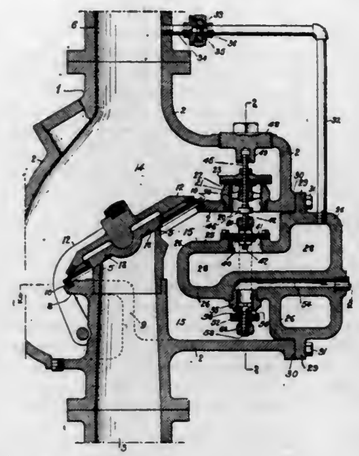
1,765,421. SIGNAL RECEPTION. DANA A. GRIFFIN, Summit, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Aug. 1, 1923. Serial No. 654,990. 5 Claims. (Cl. 250—20.)



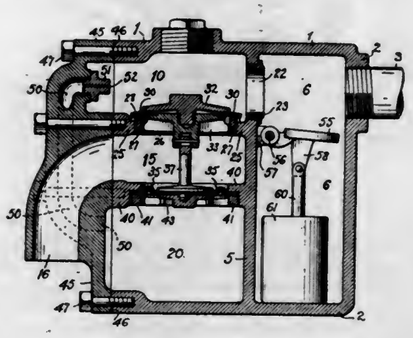
1. In a receiving circuit an incoming circuit carrying a wide band of frequencies comprising the waves to be received, a pair of electric discharge devices having cathode, anode and grid or control electrodes, the cathodes and grids of the devices being connected in respectively opposite sense to said incoming circuit to impress said band upon each of said devices and a signal receiver differentially associated with the individual cathode-anode circuits of said devices through separate coupling-circuits having respectively different frequency-transmission characteristics, whereby said band of frequencies is transmitted to said signal receiver substantially without distortion.

1,765,422. ACCELERATED DRY-PIPE VALVE. WILLIAM B. GRIFFITH, Audubon, N. J., assignor to Star Sprinkler Corporation, a Corporation of New Jersey. Filed Dec. 13, 1927. Serial No. 239,644. 12 Claims. (Cl. 169—22.)

1. A dry pipe valve comprising a casing having an inlet and an outlet passage, a water clapper for closing said inlet passage, an air pressure chamber within said casing, an air clapped held in the closed position by air pressure within said pressure chamber adapted for holding the water clapper closed, an intermediate chamber within said casing separated from said pressure chamber by the air clapper, said casing having a passageway formed therein communicating between said pressure and intermediate chambers located adjacent to said air clapper, an accelerator valve located within said pressure chamber positioned for closing said passageway arranged so that its opening movement is opposed by the pressure within the pressure chamber, and means actuated by a sudden reduction of pressure in the pressure chamber for opening said accelerator valve.



1,765,423. EXHAUSTER FOR SPRINKLER SYSTEMS. WILLIAM B. GRIFFITH, Audubon, N. J., assignor to Star Sprinkler Corporation, a Corporation of New Jersey. Filed July 27, 1928. Serial No. 295,719. 5 Claims. (Cl. 169—17.)

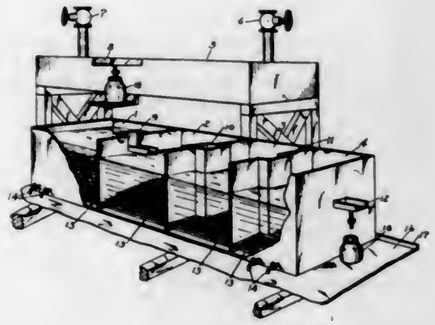


1. An exhauster for a sprinkler system comprising, a casing having a float chamber formed therein, a connection upon the casing forming a means of communication between the system and said float chamber, said casing having an outlet passageway formed in the upper portion of the float chamber, a valve for closing said outlet passageway, a float within said chamber operatively associated with said valve for closing said passageway when water enters the float chamber, said casing having a pressure chamber formed therein communicating with the float chamber through said outlet passageway from the float chamber, an exhaust valve located in said pressure chamber, normally held closed by the pressure in said chamber, said casing having an exhaust outlet formed therein controlled by said exhaust valve, said casing having a pressure re-

taining chamber formed therein, a member associated with said retaining chamber movable by relative changes of pressure within said retaining and pressure chambers, said member operably associated with said exhaust valve for opening the latter, and said casing having a restricted passageway forming a communication between said pressure and retaining chambers.

5. An exhauster for a sprinkler system comprising, a casing having a pressure chamber formed therein, said casing having a connection forming a communication between the pressure chamber and said system, said casing having a passageway forming an exhaust outlet from the pressure chamber to the atmosphere, an exhaust valve for closing said passageway normally held closed by the pressure in said pressure chamber, said casing having a pressure retaining chamber formed therein, a movable member operatively associated with said retaining chamber, a rod operatively positioned between said movable member and said exhaust valve for opening the latter upon the rapid decrease in pressure in said pressure chamber, said pressure and retaining chambers being located in spaced relation to each other having said exhaust outlet positioned between the exhaust valve and said movable member, said casing having a passageway formed therein communicating between the pressure chamber and the retaining chamber, and a slow leak device located in said last mentioned passageway.

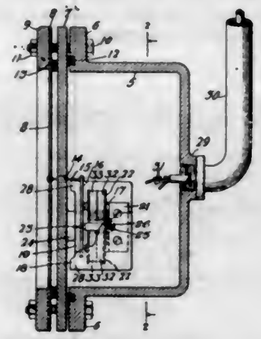
1,765,424. NEUTRALIZATION OF ACID WASTE WATERS. AARON M. HAGEMAN, and WILLIAM L. SULLIVAN, Bloomfield, N. J., assignors to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed Apr. 25, 1929. Serial No. 357,927. 8 Claims. (Cl. 210—16.)



1. The method of effecting the removal of free acid in waste waters which comprises passing said waste waters in a free flowing stream over a neutralizing agent such as dolomite, thence in a free flowing stream over substantially pure calcium carbonate materials, maintaining a constant approximate initial acidity of said waste water and regulating the rate of flow with respect to the surface area of said neutralant so that the effluent from said system is substantially neutral with respect to an acid indicator such as methyl orange.

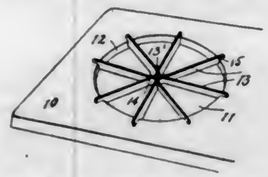
1,765,425. SUBMARINE SIGNALING. HENRY C. HARRISON, Port Washington, N. Y., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Dec. 29, 1919. Serial No. 348,107. 5 Claims. (Cl. 177—386.)

1. A translating device for sound wave energy comprising an inertia member including an electro-magnetic device; a diaphragm; means connecting said diaphragm to said inertia member, said connecting means comprising an armature and resilient means supporting said armature on said inertia member and in operative relation to said elec-



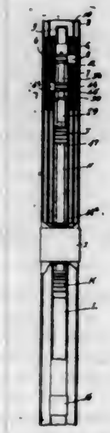
tro-magnetic device; a mounting, and means rotatably supporting said inertia member on said mounting and for movement in a fixed path with said diaphragm.

1,765,426. GRATE. RUDOLPH HOFFMAN, Cleveland, Ohio. Original application filed Oct. 26, 1925, Serial No. 64,743. Divided and this application filed Apr. 4, 1929. Serial No. 352,486. 2 Claims. (Cl. 126—214.)



1. A grate bar for gas and oil stoves and the like, comprising a plurality of metal bars each having a curved portion intermediate of its ends thereby providing arms extending from the said curved portion, each of the said bars being so bent as to stand on edge, with the curved portion of each bar being directly connected to the curved portions of each adjacent bar so that the arms of each bar lie in substantially radial directions.

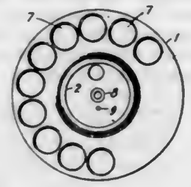
1,765,427. PUMPING APPARATUS. IRA B. HUMPHREYS, Denver, Colo. Filed Aug. 19, 1924. Serial No. 732,938. 26 Claims. (Cl. 103—46.)



1. A fluid pressure actuated well pump including an inner pipe and an outer pipe, a pumping mechanism

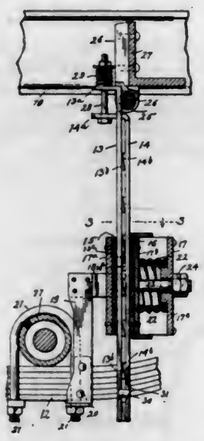
suspended from the end of the inner pipe and embraced within the outer pipe, said pumping mechanism provided with a unitary control and working valve, a pressure mechanism communicating with one of said pipes above said pumping mechanism and providing liquid under pressure for actuating the pumping mechanism, and said valve controlling and directing the inlet of fluid pressure to the pumping mechanism and the discharge of the pumped fluid from the pumping mechanism, whereby said valve controls the operation of the pumping mechanism.

1,765,428. MOLDED FINGER PLATE FOR DIAL SWITCHES. GEORGE HUAFORD and NORMAN V. KIPPING, Aldwych, London, England, assignors to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Oct. 17, 1928, Serial No. 312,962, and in Great Britain Oct. 19, 1927. 2 Claims. (Cl. 179—90.)



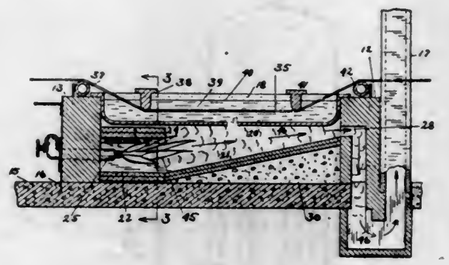
2. A molded finger plate for a dial switch comprising a disc having a plurality of finger holds, said plate being thickened in the region of said finger holds, a frame portion on the front of the plate, said portion being molded integral with said plate and having an integral circular rib for receiving an instruction card.

1,765,429. SHOCK ABSORBER. ROBERT E. KIMBALL, Cleveland, Ohio. Filed Apr. 9, 1927. Serial No. 182,222. 13 Claims. (Cl. 188—129.)



1. In a shock absorber, a pair of relatively movable friction members adapted to be connected respectively to the axle and chassis frame of a vehicle, and means responsive to a relative movement of a predetermined acceleration or greater between said members of the vehicle for causing said friction members to frictionally resist such movement by a definite resistance.

1,765,430. FURNACE. JOHN KUBIK, New York, N. Y., assignor of one-half to Joseph Lorincz, New York, N. Y. Filed Dec. 13, 1927. Serial No. 239,629. 1 Claim. (Cl. 263—3.)



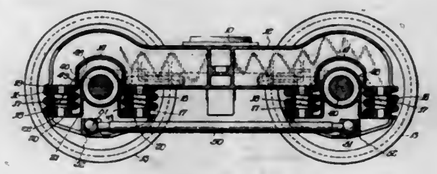
In a furnace of the character described, a rectangular cavity surrounded by walls of refractory material, a tank supported within the said cavity, jets adapted to direct their flames into the said cavity, means to carry off the waste gases of combustion, and an inclined bottom in the said cavity which extends downward and rearwardly from a point beneath the forward end of the said tank, and a sub-bottom at the base end of the said inclined bottom and the floor of the said sub-bottom inclined downward in a direction transverse to that of the inclined bottom, and a discharge tube at the lower extremity of the sub-bottom.

1,765,431. BADGE. WILLIAM H. KUPFER, Chicago, Ill. Filed Mar. 18, 1929. Serial No. 347,771. 11 Claims. (Cl. 40—1.6.)



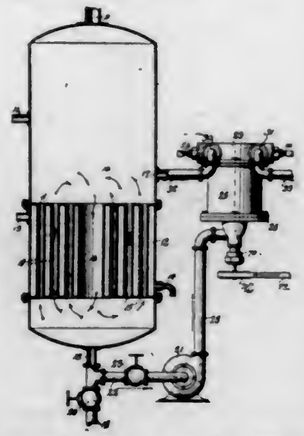
1. A badge comprising a button badge having an inturned rim, and a badge having integral supporting means thereon containing lip portions adapted to be flexed and sprung into the inturned rim of the button badge, for securely mounting the two badges together as a combination badge.

1,765,432. ROLLER-BEARING TRUCK. JOHN A. LAMONT, Chicago, Ill., assignor to American Steel Foundries, Chicago, Ill., a Corporation of New Jersey. Filed Sept. 30, 1927. Serial No. 223,117. 38 Claims. (Cl. 105—182.)



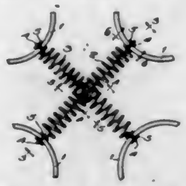
1. In wheel and axle assemblies for railway trucks and the like, the combination of inner and outer axles associated with wheels, and spring seats integral with one of said axles.

1,765,433. APPARATUS FOR CONTROLLING DENSITY OR VISCOSITY OF LIQUIDS. CHARLES O. LAVETT, Buffalo, N. Y. Filed Jan. 7, 1928. Serial No. 245,134. 8 Claims. (Cl. 137—78.)



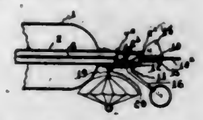
1. An apparatus for use in connection with an evaporator and controlling the density of a liquid which is being treated for increasing the density or viscosity of the same, comprising a chamber through which the liquid from a treating device is adapted to be circulated and which has a discharge for the finished liquid, operating means which are arranged within said chamber and which are responsive to variations in the density of the liquid in said chamber, and means which are actuated by said operating means and which control the delivery of the liquid issuing from said chamber so that when the liquid is very limpid the same is returned to the treating device, and when it has reached a predetermined density or viscosity it is discharged to another place.

1,765,434. WIRE-SPRING FABRIC OR THE LIKE. MICHAEL R. MANGAN, Chicago, Ill. Filed Apr. 12, 1928. Serial No. 269,425. 4 Claims. (Cl. 5—269.)



1. In a fabric of the kind described, a series of springs, a plurality of connecting springs arranged between said first-mentioned springs, and means for securing the ends of said connecting springs to said first-mentioned springs consisting of a coiled keeper arranged on the first-mentioned spring and engaging the same intermediate the coils of the keeper, said connecting springs extending through the coils of said keepers and back around the first-mentioned spring.

1,765,435. TOY AIRSHIP. FRED J. MCBRIDE, Toronto, Ontario, Canada. Filed June 29, 1928. Serial No. 289,094. 2 Claims. (Cl. 46—54.)

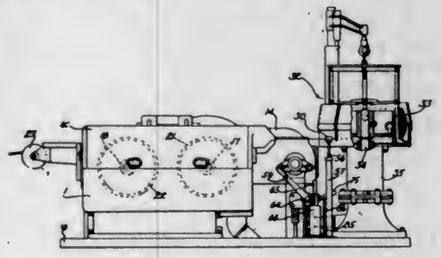


1. An airship including a gas bag; a propeller; means including a spring adapted to be tensed to rotate the propeller; a weight adjacent the rear of the airship; and means controlled by the propeller rotating means for releasing the weight.

1,765,436. METHOD OF PRODUCING MAGNETIC MATERIALS. PAUL STANCLIFF MCCANN, La Grange, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Nov. 6, 1924. Serial No. 748,043. 10 Claims. (Cl. 178—45.)

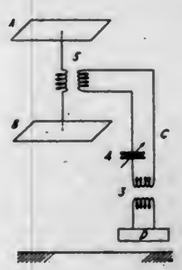
1. A method of securing high permeability in magnetic materials which consists in heating the material to a temperature above 800° C., cooling quickly, performing work thereon to produce final thickness of the material, and then subjecting the material to a heat treatment determined by the hardness of the material to develop therein desirable magnetic properties.

1,765,437. WIRE-DRAWING APPARATUS. SAMUEL MCMULLAN, Downers Grove, and ARTHUR EHRHOLD SCHULZ, Chicago, Ill., assignors to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Mar. 26, 1926. Serial No. 97,644. 4 Claims. (Cl. 242—25.)



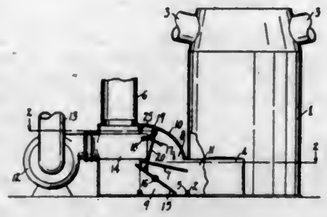
1. In a wire drawing apparatus, a wire coiling element, means for driving said element, a clutch for controlling said driving means, a pinion for operating said clutch, a spring actuated rack for operating said pinion, and a resiliently mounted latch actuated by the wire being coiled for controlling the actuation of said rack.

1,765,438. SPACE-RADIATION ANTENNA. ALEXANDER MEISSNER, Berlin, Germany, assignor to Gesellschaft Für Drahtlose Telegraphie m. b. H. Hallesches, Berlin, Germany, a Corporation of Germany. Filed Sept. 10, 1925, Serial No. 55,417, and in Germany Sept. 22, 1924. 5 Claims. (Cl. 250—33.)



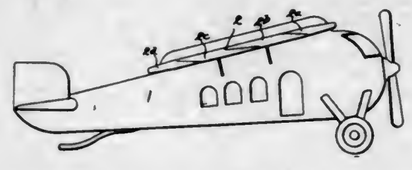
1. Antenna arrangement comprising a plurality of conducting areas disposed freely above ground so that substantially no electrostatic flux leaks from the conducting areas to ground, communication apparatus, means for transferring energy between said areas and said apparatus including a circuit symmetrically disposed with respect to said areas, and means for tuning said circuit to the operating wave length.

1,765,439. HOT-AIR FURNACE. EDWARD G. MILLER, Grand Rapids, Mich. Filed Sept. 9, 1929. Serial No. 391,193. 9 Claims. (Cl. 126—110.)



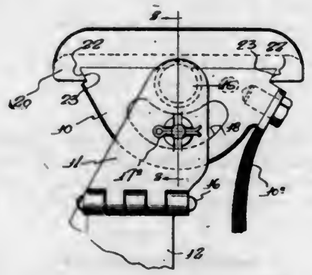
9. The combination with the heating chamber of a hot air furnace, an air inlet chamber delivering thereto and provided with a horizontally disposed partition providing a gravity air feed passage below the partition and an independent forced air passage above the partition, a blower delivering to said forced air passage above said partition, a pivoted vane associated with the discharge of the blower, a damper for said gravity air passage, and operating connections for said damper to said vane.

1,765,440. AEROPLANE-WING ARRANGEMENT. STEPHEN V. MÜLLER, Detroit, Mich. Filed Sept. 16, 1929. Serial No. 392,891. 18 Claims. (Cl. 244—20.)



1. In an aeroplane wing arrangement, the combination of an aeroplane, a plurality of transverse wing sections thereon, all the sections on each side being adapted to lie contiguous to one another, means for moving the end wing sections longitudinally of the aeroplane, and means for flapping the intermediate wing sections.

1,765,441. CURRENT COLLECTOR. GLENN WASHINGTON PACKER, Chicago, Ill., assignor to Goodman Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed July 29, 1929. Serial No. 382,030. 2 Claims. (Cl. 191—59.1.)



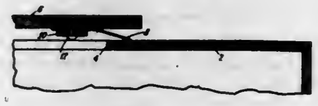
1. In a trolley pole, a base, a separable yoke engaging opposite sides of said base and permitting pivotal movement therebetween, and a detachable shoe having overhanging end portions interlocking opposite ends of said base and secured at opposite sides within said yoke.

1,765,442. WINDOW CONSTRUCTION. MICHAEL J. PAITL, Chicago, Ill. Filed June 10, 1929. Serial No. 369,659. 5 Claims. (Cl. 20—55.)



1. A storm window comprising an outer rigid frame, a guide frame removably mounted in said outer frame, said guide frame comprising a tubular member and a pair of laterally extending wing members projecting from opposite sides of the tubular member, and an upper and lower sash mounted in the guide frame between the tubular member and the adjacent wing member, one of said sash being slidable in the guide frame.

1,765,443. SHIELDING. HAROLD OLAF PETERSON, Riverhead, N. Y., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Feb. 25, 1928. Serial No. 257,063. 6 Claims. (Cl. 247—1.)



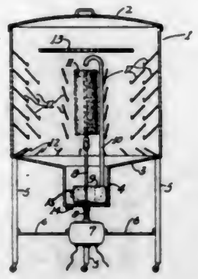
1. The combination with a conductive shielding plate having an opening, and a removable conductive shielding plate for covering said opening, of resilient conductive means situated between the plates at the rim of the opening for insuring good electrical contact between the plates.

6. In combination, alternating current apparatus to be shielded, a metallic enclosure for shielding apparatus having an opening for access thereto, a removable metallic cover for said opening, and a resilient conductive flange, transversely slotted to form a plurality of independently yieldable flange portions, fixed to the cover adjacent its periphery for insuring good electrical contact between the cover and enclosure.

1,765,444. DISHWASHING MACHINE. HOMER L. PHILLIP, South Bend, Ind. Filed Oct. 12, 1927. Serial No. 225,767. 2 Claims. (Cl. 141—9.)

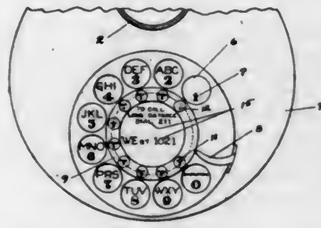
1. A dish washing machine comprising a receptacle, means for supporting dishes therein, a high speed motor having a shaft extending vertically in said receptacle, a

brush, connected to said shaft within said receptacle, and means for discharging liquid on said brush, said



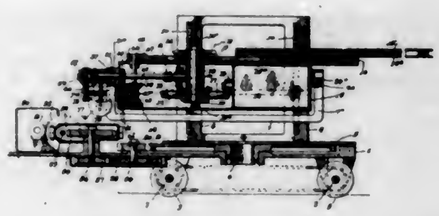
motor rotating said brush at high speed whereby the liquid discharged on the brush is thrown outwardly to cause a spray.

1,765,445. DIAL-TELEPHONE DEVICE. ANTOINETTE L. PORTER, San Francisco, Calif. Filed Apr. 16, 1929. Serial No. 355,644. 7 Claims. (Cl. 179—90.)



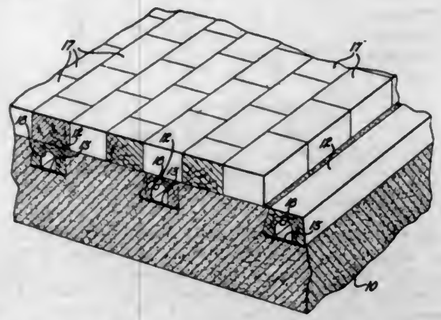
1. In a dial telephone, a ring carrying spaced indicia similar to the dial indicia and formed in a manner to engage the dial telephone apparatus with the indicia of the ring in relation to the indicia of the telephone dial inwardly therefrom.

1,765,446. MINING MACHINE. THOMAS E. PRAY, Chicago, Ill., assignor to Goodman Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 31, 1926. Serial No. 158,294. 12 Claims. (Cl. 262—28.)



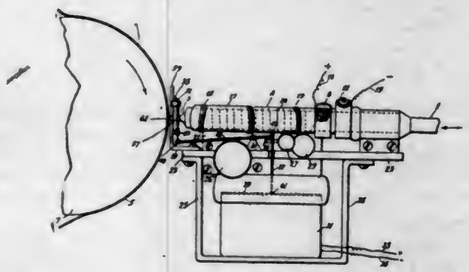
4. In a mining machine mounted on a track guided truck, a turntable, a sub-frame vertically adjustable relative to said turntable, a cutting mechanism rotatable about the longitudinal axis thereof and having pivotal support at both front and rear ends in said sub-frame, said cutting mechanism including a frame, a motor carried at the forward end of said frame, driving mechanism disposed rearwardly of and operably connected to said motor, a cutter arm pivotally mounted on said frame about an axis rearwardly of the axis of rotation of said turntable.

1,765,447. DISTRIBUTING SYSTEM. AMOS DURBIN PRITCHARD, Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 30, 1927. Serial No. 188,030. 10 Claims. (Cl. 247—3.)



1. A concrete floor construction comprising a concrete slab and a member grooved on its under side and having a plane upper surface, said member being embedded in the concrete with its upper surface in a common plane with the upper surface of the concrete, and a removable upper floor layer supported upon the concrete and the grooved member.

1,765,448. RECORDER FOR FACSIMILE SYSTEMS RICHARD HOWLAND RANGER, Newark, N. J., assignor to Radio Corporation of America, a Corporation of Delaware. Original application filed Aug. 12, 1926, Serial No. 128,720. Divided and this application filed Dec. 19, 1928. Serial No. 327,009. 14 Claims. (Cl. 178—5.)



1. An arrangement for recording pictures comprising a rotatable drum support for carrying a heat sensitive recording medium, means for projecting a heated recording fluid upon said support for producing a record thereon, means for controlling the amount of said heated recording fluid directed to said recording surface, said control means including a shutter and a diaphragm associated therewith whereby the said shutter is moved toward and away from the point of projecting said recording medium in proportion to the strength of signal impulses reaching and influencing said diaphragm.

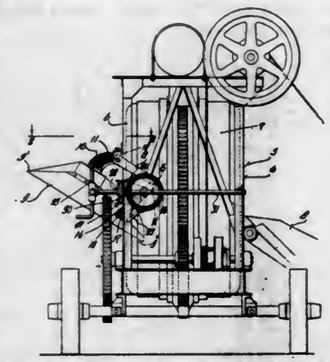
1,765,449. MICROPHONE. HENRY JOSEPH ROUND, London, England, assignor to Radio Corporation of America, a Corporation of Delaware. Filed June 21, 1927, Serial No. 200,339, and in Great Britain July 8, 1926. 6 Claims. (Cl. 179—122.)



1. In an electro-acoutic device, a plura'ity of stationary electrodes positioned to form a substantially flat surface, a layer of conducting, powdered material in contact with

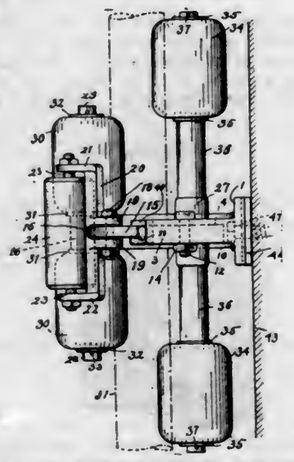
the flat surface formed by said electrodes, means for applying pressure to said material whereby its conductivity is changed and leads connecting alternate electrodes in parallel.

1,765,450. MATERIAL-HANDLING MACHINE. ADOLPH W. RYBECK, Milwaukee, Wis., assignor to T. L. Smith Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Dec. 7, 1927. Serial No. 238,323. 4 Claims. (Cl. 193—10.)



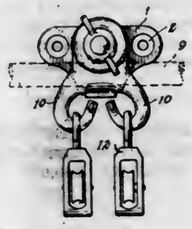
1. In a material mixing machine including a discharge chute and means mounting the same for movement from an inoperative position with its receiving end lowermost, said chute tending to move by gravity to elevate and shift its receiving end inwardly, means for swinging the chute from its inoperative position to an operative position with its receiving end uppermost and inward of a line extending vertically from its position when inoperative, said means including a lever having one end connected with the chute, a second lever pivotally mounted at its inner end, a link pivotally connecting the outer ends of the levers, a driven shaft, a crank connected with the shaft, and a link connecting the outer end of the crank and the outer end of the second lever, whereby the crank swings the second lever on its pivot, as the shaft is rotated, which in turn swings the first lever through its connection therewith to move the chute from one position to another.

1,765,451. INTERMEDIATE AWNING BRACKET. EDWARD H. SCHANE, Cleveland, Ohio, assignor to The Fanner Mfg. Co., Cleveland, Ohio, a Corporation of Ohio. Filed Apr. 25, 1928. Serial No. 272,638. 6 Claims. (Cl. 156—44.)



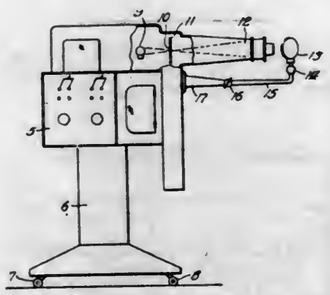
4. A bracket adapted to be used as an intermediate bracket for an awning comprising a supporting member adapted to be adjustably connected to a supporting wall and having outwardly extended spaced upper and lower arms each of which is provided with a channel, an adjustable member arranged in the channel of the upper arm for adjustment longitudinally thereof having spaced lugs adjacent its outer end, a roller supporting member pivoted to the outer end of said first named member and limited in its movement by said lugs, a longitudinally adjustable member associated with the channel in the lower arm, said last named member having a plurality of longitudinally spaced parallel shafts, and rollers rotatably mounted on said shafts at a plurality of spaced points.

1,765,452. AWNING SUPPORT. EDWARD H. SCHANE, Cleveland, Ohio, assignor to The Fanner Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed Sept. 24, 1928. Serial No. 308,113. 3 Claims. (Cl. 156—44.)



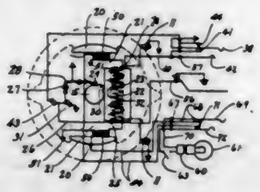
2. A support and clamp of the character described, comprising a base member and a movable member, one of said members being provided with a threaded extension, a nut mounted upon the threaded extension and adapted to move the movable member with respect to the base member, cooperating means upon the said members adapted to receive a rod to be clamped between them, the movable member being provided with hooks for the reception of pulleys.

1,765,453. TELEVISION APPARATUS. GILBERT T. SCHMIDLING, Chicago, Ill., assignor to Alva J. Carter, Chicago, Ill. Filed Mar. 1, 1929. Serial No. 343,644. 2 Claims. (Cl. 178—6.)



1. In television apparatus, a device having means for directing a beam of light through a scanning disk and a lens, means associated with said lens for directing the light emanating therefrom in any one of several directions comprising an arm on said device having an extension projecting to a point adjacent the outer end of said lens, and a mirror adjustably mounted on said extension in the field of view of said lens.

1,765,454. ELECTRICAL SYSTEM FOR OUTBOARD MOTORS. AUGUST SCHREIL and HERBERT J. HILLBORN, Milwaukee, Wis., assignors, by mesne assignments, to Outboard Motors Corporation, Detroit, Mich., a Corporation of Michigan. Original application filed Dec. 30, 1926, Serial No. 158,057. Divided and this application filed Jan. 30, 1929. Serial No. 336,142. 2 Claims. (Cl. 123—148.)



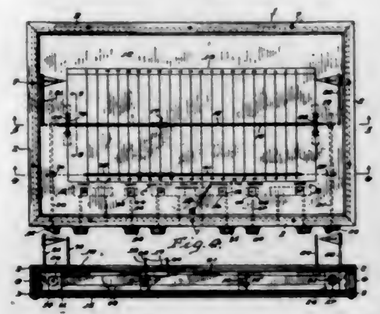
1. The combination with an ignition circuit including a primary magneto coil, an interrupter, and a condenser shunted across said interrupter, of a battery, and switch means for connecting said battery into said circuit, together with an additional condenser shunted across said interrupter when said battery is so connected.

1,765,455. COLLAPSIBLE SIDE RAIL FOR BEDSTEADS. ABRAHAM J. SCHULTZ, Newark, N. J. Filed Dec. 17, 1927. Serial No. 240,679. 3 Claims. (Cl. 5—286.)



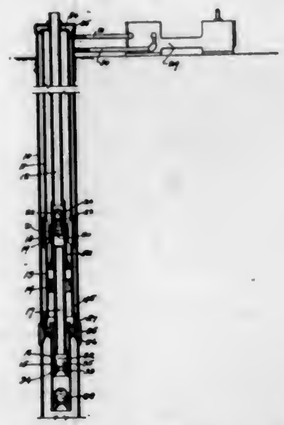
1. A side rail for separable attachment between the head and foot ends of a bedstead, said side rail comprising a pair of angle-iron sections adapted to be normally disposed in abutting end to end longitudinally extended relation, an angle-iron coupling means extending across the meeting ends of said sections and within the angle thereof, lateral fastening devices joining the vertical flanges of said respective sections to the vertical flange of said coupling means, vertical fastening means cooperating with the horizontal flanges of said sections and the horizontal flange of said coupling means, at least one of said lateral fastening devices and said vertical fastening means being releasable to permit relative displacement of said sections from normal aligned relation whereby the latter may be moved to a collapsed condition.

1,765,456. GAME-SCORING DEVICE. WALTER S. SHAW VAN, Philadelphia, Pa. Filed Apr. 24, 1929. Serial No. 357,869. 8 Claims. (Cl. 116—120.)



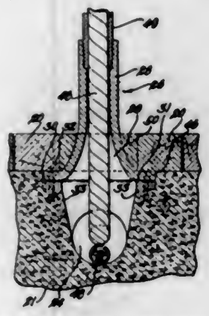
1. A device for visualizing the progress of the play of a football game, comprising a frame, a chart mounted within the said frame, a simulation of a football field upon said chart, a slot extending longitudinally of said field, a miniature football movable within the slot, a second slot extending longitudinally of said field, a distance marker movable within the second slot, and cooperating operating means for moving the football and the distance marker along the said slots having separate operating devices independently operable to move either the ball or the distance marker.

1,765,457. DEEP-WELL PUMP. JOHN E. SHUTT, Stuttgart, Ark. Filed Sept. 27, 1928. Serial No. 308,604. 11 Claims. (Cl. 103—44.)



1. In a deep well pump, a well casing, an inner casing within said well casing, and a discharge pipe within said inner casing, means for sealing the lower end of said pipe to said inner casing, and the end of said inner casing to said well casing to define annular chambers, a power cylinder, having its upper end in communication with the inner of said annular chambers, and its lower end in communication with the outer of said chambers, a piston in said power cylinder, a pump cylinder secured to said power cylinder, a plunger in said pump cylinder connected with said power piston, said power piston and connection having a passage-way therethrough communicating with said discharge pipe, a check valve in the lower end of said pump cylinder, a check valve in the lower end of said discharge pipe, and means for alternating pulsation of liquid columns in said annular chambers to reciprocate said power piston.

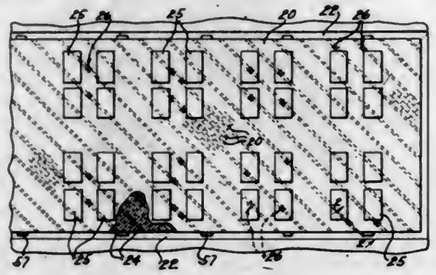
1,765,458. SYSTEM AND METHOD OF ELECTRICAL DISTRIBUTION. CLAUDE THEODORE SIEBS, Cranford, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Nov. 26, 1927. Serial No. 235,829. 4 Claims. (Cl. 247—3.)



4. In a distribution system, a building slab construction having a distributive passageway formed therein provided

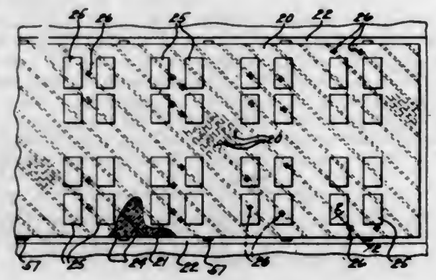
with an unlined outlet, and an anchoring means molded wholly within the slab at the mouth of the outlet and spaced from the passageway.

1,765,459. METHOD OF FORMING OUTLETS. CLAUDE THEODORE SIEBS, Cranford, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Feb. 23, 1929. Serial No. 341,968. 6 Claims. (Cl. 25—155.)



6. The method of constructing an outlet in a concrete floor slab having an unlined passageway molded therein, which consists in removing a portion of the concrete slab above the passageway at a point determined by the location of an apparatus to be served, associating a collapsible molding form with the passageway, associating an anchoring member with the positioned form, adding cementitious material to the space adjacent the form and the anchoring member, removing the collapsible form after the material has set, and sealing the outlet opening.

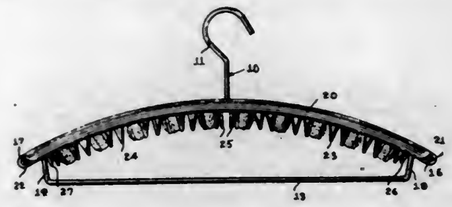
1,765,460. SYSTEM OF ELECTRICAL DISTRIBUTION. CLAUDE THEODORE SIEBS, Cranford, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Original application filed Nov. 26, 1927, Serial No. 235,829. Divided and this application filed Feb. 23, 1929. Serial No. 341,967. 3 Claims. (Cl. 247—3.)



1. In a distribution system, a building slab construction having a trench, and a plurality of distributive passageways molded in the slab, extending diagonally with respect to the trench and terminating therein.

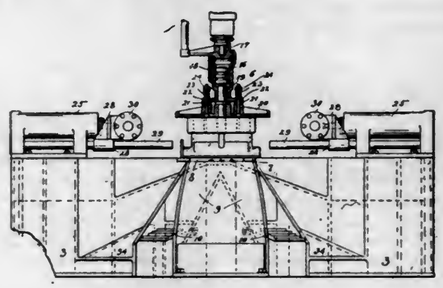
1,765,461. GARMENT HANGER. PHILIP SINITZER, Brooklyn, N. Y. Filed Mar. 13, 1929. Serial No. 346,665. 16 Claims. (Cl. 223—61.)

1. A garment hanger comprising; an integral wire bent to form a supporting hook, a pair of shoulder supporting arms, a horizontal trouser support and a horizontally disposed loop at the end of each shoulder arm; a longitudinally and transversely curved cover plate, having a central aperture to receive said hook, and disposed over said shoulder arms, said plate having a stamped integral lug at each end thereof bent over said horizontal loops to hold the elements in proper assembly; and a moth ball container carried by each shoulder arm, said container consisting of an open helical coil of resilient wire; each of



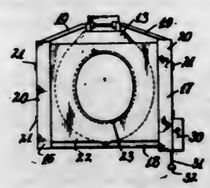
said containers having one conical end closure at the outer end of said shoulder arms, the open ends of said coils being disposed adjacent each other and serving as closures each for the other, whereby either container may be compressed at its open end to provide access to the interior thereof.

1,765,462. APPARATUS FOR DISCHARGING CORES FROM CASTINGS AND FOR CLEANING CASTINGS. JOHN T. STONEY, Lakewood, Ohio. Filed Feb. 21, 1927. Serial No. 169,737. 16 Claims. (Cl. 22—1.)



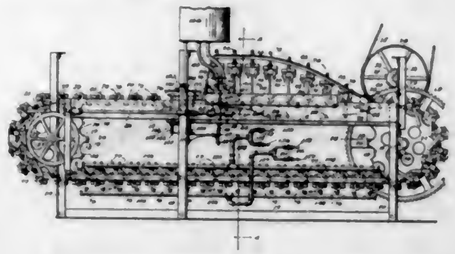
1. Apparatus for separating sand cores from castings comprising a rigid support upon which a casting may be placed and a movably mounted vibrator engageable with the top of a casting on said support.

1,765,463. SANITARY TOILET-SEAT COVER. THEODORE STRUMPF, New York, N. Y. Filed Oct. 2, 1929. Serial No. 396,602. 2 Claims. (Cl. 4—247.)



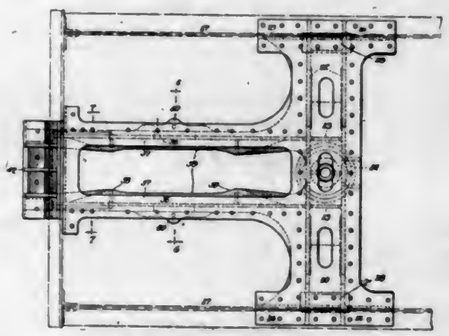
1. In combination with a toilet bowl having a seat, a frame for engaging over the bowl and having side-forming members on opposite sides of the seat, a sanitary web on rolls mounted on the frame and extending across the seat, and means for manually advancing the web for positioning new portions over the seat, said frame also includes a transverse brace between the side-forming members, and rear arms pivotally connecting with the bowl.

1,765,464. ICE-CREAM-CONE MACHINE. HARRY G. TATOSIAN, Bridgeport, Conn., assignor to Ice Cream Cone Machinery Inc., Bridgeport, Conn., a Corporation of Connecticut. Filed Apr. 29, 1930. Serial No. 448,360. 10 Claims. (Cl. 107—58.)



1. In a machine of the character described, a frame including pairs of upper and lower spaced parallel tracks, conveyor wheels at the ends of the frame, said tracks being substantially tangential thereto, a continuous conveyor extending about said wheels and along said tracks, mold sections carried by said conveyor and each comprising a two-part mold socket member hinged along an axis parallel with the line of movement of the conveyor and a core member hingedly mounted along an axis parallel with the line of movement of the conveyor, means for opening and closing said mold sections, means for supplying batter to said sections during their open period, and means for heating said sections to cook the batter therein.

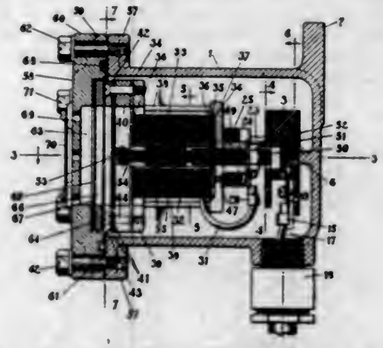
1,765,465. COMBINED BODY-BOLSTER AND DRAFT-SILL CASTING. WILLIAM S. TROWBRIDGE, Chicago, Ill., assignor to American Steel Foundries, Chicago, Ill., a Corporation of New Jersey. Filed July 25, 1928. Serial No. 295,322. 8 Claims. (Cl. 105—420.)



1. A casting for railway car construction comprising an integrally formed body bolster and draft gear housing, said draft gear housing extending perpendicularly from the central portion of said body bolster and said body bolster having enlargements at its ends of greater length than the width of said bolster and extending longitudinally of the railway car.

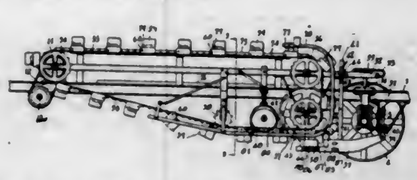
2. A casting for railway car construction comprising an integrally formed body bolster and draft gear housing, said draft gear housing extending perpendicularly from the central portion of said body bolster and said body bolster having enlargements at its ends of greater length than the width of said bolster and extending longitudinally of the railway car, said enlargements having laterally projecting horizontal shelves extending therefrom constituting supports for the side sills of the car.

1,765,466. ELECTRICAL SIGNALING DEVICE. ARTHUR W. UHL, Brooklyn, N. Y., assignor to Ford Instrument Company, Inc., Long Island City, N. Y., a Corporation of New York. Filed Aug. 4, 1924. Serial No. 729,967. 4 Claims. (Cl. 177—7.)



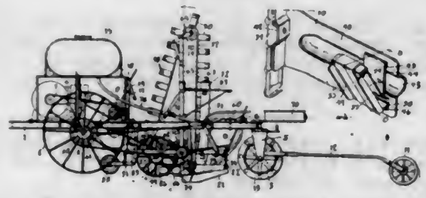
1. In a signaling device, a container having an open end, a perforated cover therefor, a sound-producer mounted in the container removable as a unit and having a contacting diaphragm, means retaining said diaphragm in said sound-producer, a free diaphragm constituting a portion of the closure, retaining means to hold said free diaphragm fixedly in said cover, and means adapted to connect said sound-producer with an external circuit.

1,765,467. TRANSPLANTER. SIMON W. VOLLINK, Hastings, Mich. Filed Jan. 29, 1927. Serial No. 164,480. 14 Claims. (Cl. 111—3.)



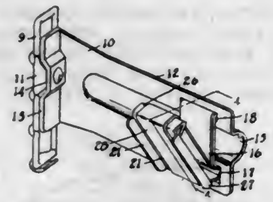
4. In a machine of the class described, the combination of a conveyor disposed longitudinally of the machine, means for driving said conveyor at a speed corresponding to the speed of travel of the machine, a plurality of holders mounted on said conveyor and provided with coacting plant engaging jaws, at least one of the jaws having resilient plant gripping means supported at spaced points, and means for closing said jaws and holding them closed as they move from plant receiving to discharging position.

1,765,468. TRANSPLANTING MACHINE. SIMON W. VOLLINK, Nashville, Mich. Filed Feb. 27, 1928. Serial No. 257,382. 22 Claims. (Cl. 111—3.)



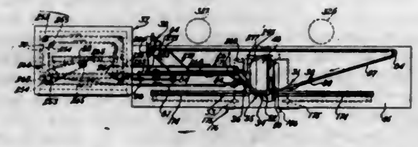
8. In a machine of the class described, the combination of a main carrying frame, a sub-frame mounted on said main frame, a furrow opener provided with spaced wings mounted at its forward end on said sub-frame, furrow closing means disposed on said sub-frame at the rear of the furrow opener, a conveyor provided with a plurality of normally open holders, supporting and driving means therefor disposed so that said conveyor has a downward reach and a horizontal reach substantially parallel with the surface of the ground and alined with said furrow opener, and holder closing members disposed at the sides of the path of travel of said holders and adapted to close and retain the same in closed position to a point adjacent said furrow closing wheels.

1,765,469. TRANSPLANTING MACHINE. SIMON W. VOLLINK, Tecumseh, Mich. Original application filed Feb. 27, 1928, Serial No. 257,382. Divided and this application filed May 8, 1929. Serial No. 361,425. 10 Claims. (Cl. 198—179.)



8. In a structure of the class described, the combination of a conveyor provided with a plurality of holders, each comprising a body member having a longitudinal channel in its face, a yielding gripper supported at its ends disposed transversely across said channel, a jaw pivotally mounted on said body member to swing transversely of said channel, and a resilient gripper on said jaw disposed in opposed relation to said gripper on said body member.

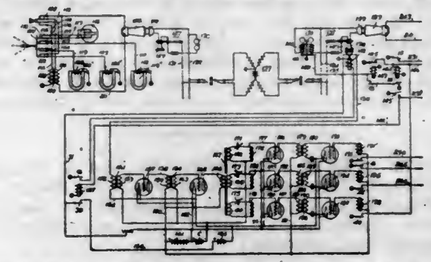
1,765,470. APPARATUS FOR ASSEMBLING AND TREATING ARTICLES. CHARLES WALES, La Grange, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Dec. 16, 1926. Serial No. 155,148. 14 Claims. (Cl. 18—1.)



1. In an apparatus for assembling an incandescent lamp bulb with its supporting base, means for supporting the bulbs and bases, a receptacle containing an adhesive material, means for transferring adhesive therefrom and applying it to diametrically opposed restricted areas of a bulb, and means for causing a relative movement between the bulb and a base to assemble them in attached relation by the coherence of the adhesive.

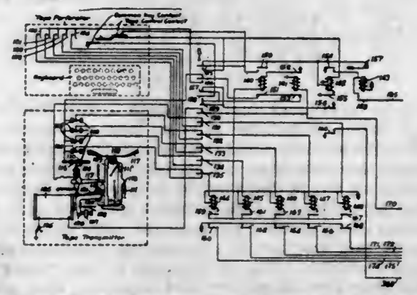
1,765,471. TELEVOX CONTROLLER AND SUPERVISOR. ROY J. WENSLEY, Edgewood, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Oct. 14, 1927. Serial No. 226,116. 21 Claims. (Cl. 179—2.)

1. In combination, a telephone system, the first subscriber comprising a dispatching office, a second subscriber comprising a substation, said substation comprising a plurality of power operated apparatus units, a telephone system for connecting said subscribing dispatching office to said substation, means at said dispatching office for transmitting telephone signal currents of predetermined frequency over said telephone line, means at said substation responsive to the frequency of said telephone currents for selecting one of said apparatus units for operation, means at said dispatching office for transmitting other telephone currents of a different frequency, and means at



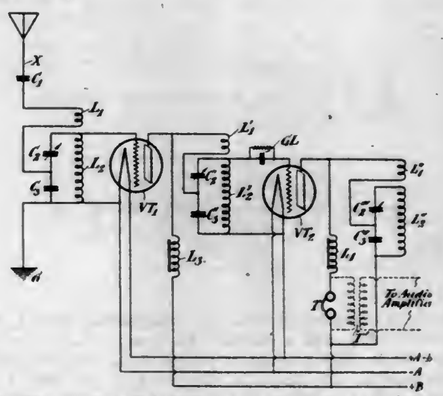
said substation responsive to the frequency of said second telephone current for operating said selected apparatus unit.

1,765,472. TELEGRAPH SYSTEM. THOMAS U. WHITE, Genoa, Ill., assignor, by mesne assignments, to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Feb. 19, 1925, Serial No. 10,232. Renewed Oct. 18, 1928. 9 Claims. (Cl. 178—53.)



1. In a telegraph system, the combination with a first and second station, of automatic transmitting apparatus at the first station and automatic receiving apparaus at the second station, a trunk line connecting said stations, a holding circuit extending from said first station to said second station over said trunk line, and means for interrupting the holding circuit to initiate the operation of the automatic transmitting and receiving apparatus.

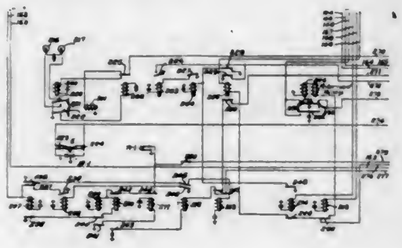
1,765,473. ELECTRICAL DETECTOR-AMPLIFIER CIRCUITS. SIDNEY Y. WHITE, New York, N. Y., assignor, by mesne assignments, to Radio Corporation of America, New York, N. Y., a Corporation of Delaware. Filed Sept. 1, 1925. Serial No. 53,799. 8 Claims. (Cl. 250—27.)



1. The combination of a three-electrode vacuum tube, a turnable high frequency input circuit, an output circuit,

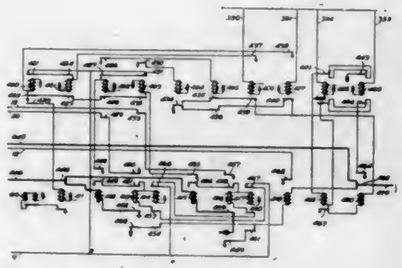
means operating said vacuum tube as a detector, a high frequency circuit, variable in consonance with said input circuit, means for coupling said high frequency circuit to said output circuit, the ratio of energy transfer of said coupling being substantially less than unity, said coupling being adjusted to remain substantially constant as said second circuit is varied, and means associated with said output circuit for abstracting detected energy therefrom.

1,765,474. CONTROL SYSTEM. THOMAS U. WHITE, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed June 24, 1924. Serial No. 722,037. 6 Claims. (Cl. 177—353.)



4. In a supervisory control system, a first station, a second station, apparatus units at said second station, signaling devices individual thereto at said first station, a signalling line connecting said stations, selectors at each of said stations, means controlled by said selectors for transmitting impulses of a predetermined frequency over said signalling line, means responsive to said impulses for operating said selectors in synchronism, means operative when said selectors are in synchronism for associating one of said apparatus units with said signalling line, means including impulses of the same predetermined frequency transmitted over said signalling line for operating said associated apparatus unit, means controlled by the operation of the unit for transmitting impulses of the same predetermined frequency over said signalling line, and means responsive to said impulses for operating said signalling device individual to said apparatus unit.

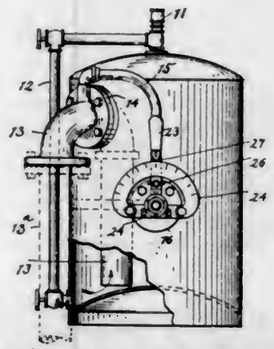
1,765,475. SIGNALING SYSTEM. THOMAS U. WHITE, Pittsburgh, and JOHN E. GARDNER, Wilkinsburg, Pa., assignors to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Nov. 15, 1924. Serial No. 750,068. 26 Claims. (Cl. 177—353.)



1. In a signaling system, the combination with a dispatcher's office, and a station, of a group of relays at the dispatcher's office, a group of relays at the station, means for operating the relays in the group at the office in a predetermined sequence and means for operating the relays in the group at the station in synchronism therewith, releasing means for restoring the relays in the group at the office to normal in a predetermined sequence, and means operative in the event that one of said relays fails to restore to normal for interrupting the sequential operation of the relays in the group at said office.

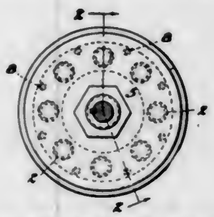
11. In a signaling system, a first station, a second station, a selector at each of said stations, a drive line connecting said stations, means controlled by said selectors for periodically transmitting impulses over said drive line, means responsive to said impulses over said drive line for operating said selectors in synchronism, means operative in between the transmission of said impulses over said drive line for switching said drive line to a check position and means operative while said drive line is on said check position for checking the synchronism of said selectors.

1,765,476. WATER-MEASURING DEVICE FOR CONCRETE MIXERS. HENRY F. WILMS, Cleveland, Ohio, assignor, by mesne assignments, to The Jaeger Machine Company, Columbus, Ohio, a Corporation of Ohio. Filed Apr. 19, 1928. Serial No. 271,240. 2 Claims. (Cl. 221—95.)



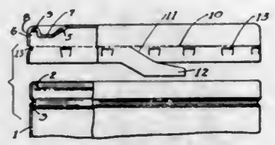
1. A device adapted to be used with a liquid dispensing apparatus including a tank which has associated therewith a siphon provided with a leg communicating with a lower portion of the tank, said device comprising a housing adapted to be secured to the exterior of the tank and having a tapered bore and an annular chamber, a pipe associated with said housing and communicating at one end with the bore therein and at its other end with the siphon, a rotatable member in said tapered bore of said housing, a second pipe associated with said rotatable member and having a radially disposed portion extending into the liquid holding portion of said tank, a lever associated with said rotatable member, and means for effecting communication between said pipes.

1,765,477. VIBRATION-DAMPENING DEVICE. ELI O. ACKERMAN, Columbus, Ohio. Original application filed Oct. 12, 1927, Serial No. 225,995, now Patent No. 1,718,100, dated June 18, 1929. Divided and this application filed June 10, 1929. Serial No. 369,550. 9 Claims. (Cl. 295—7.)



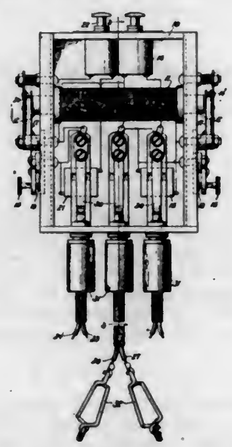
1. In a power driven railway car, the combination with a driving axle and the traction wheels fixed thereto, of means for driving the axle, and means for dampening torsional vibrations in said axle and attached traction wheels.

1,765,478. METAL CONTAINER. CHARLES J. AULBACH and ERNEST D. ANDERSON, Passaic, N. J., assignors to Continental Can Company, Inc., New York, N. Y., a Corporation of New York. Filed Jan. 19, 1929. Serial No. 333,656. 3 Claims. (Cl. 220—54.)



1. A metal container comprising a body portion having an annular shoulder parallel with the open end of the body and spaced therefrom, a cover having a depending flange adapted to extend down over the body, said cover having means for supporting a sealing material for forming a seal between said cover and the end of the body of the container, said cover flange having a score line substantially midway of the height of the flange and forming therein a rip strip at the lower edge portion of the flange, said rip strip being provided with spaced inwardly projecting locking lugs adapted to engage said shoulder when the cover is pressed into sealed engagement with the body for securing the cover to the body, said lugs and shoulder being constructed so as to maintain the cover in sealed engagement with the body until said rip strip is torn from the cover.

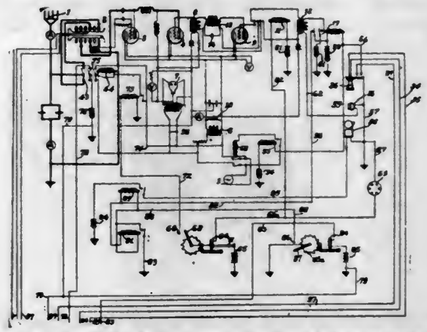
1,765,479. ELECTRICAL TESTING INSTRUMENT. ADOLPH H. BENSON, Michigamme, Mich. Filed Apr. 7, 1927. Serial No. 181,769. 2 Claims. (Cl. 175—345.)



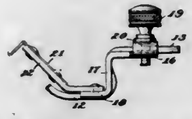
1. In an interrupter for electromagnets of the class described, a spring armature; a pivoted leaf spring having one end engaging the underside of the armature; and an adjustable abutment for the other end.

1,765,480. CARRIER-WAVE TELEPHONY OVER POWER LINES. CLARENCE A. BODDIE, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Oct. 24, 1923. Serial No. 670,511. 2 Claims. (Cl. 179—2.5.)

1. In a signalling system, a first station, a remote station, transmitting apparatus at said first station including a radio frequency current generator, means for modulating the radio frequency currents from said generator, means for controlling said modulations in accordance with a code comprising an evacuated tube, circuit connections electrically associated with said tube whereby said tube generates current of audio frequencies, circuit connections including a microphone connected to said tube, whereby said tube operates as an amplifier of the currents flowing from the microphone, means including a relay for switching said tube from said first to said second connection, a receiving device at said second station including a detector, means including circuit connections for translating said audio frequencies received at said receiver from said transmitting station, means including circuit connections for translating said code signals received from said transmitting station and means including a relay for associating either of said last two mentioned means with said receiving device.



1,765,481. SEWING-MACHINE-ATTACHMENT HOLDER. ANDREW J. CARMICHAEL and ALBERT M. WUNDERLICH, New Haven, Conn., assignor to The Greist Manufacturing Company, a Corporation of Connecticut. Filed Dec. 29, 1927. Serial No. 243,350. 5 Claims. (Cl. 112—257.)



1. A one-piece sewing machine attachment holder comprising a clamp adapted to embrace a sewing machine presser member and consisting of two integral sheet metal jaws, said clamp having, integral therewith, an extension to which a sewing machine attachment may be secured, combined with means for forcing the jaws of said clamp towards each other in rigidly affixing said clamp to the presser member.

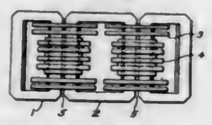
1,765,482. METHOD FOR PROMOTING DATE CULTURE. HUBERT L. CAVANAGH, Indio, Calif., assignor of one-half to C. M. Westcott, Los Angeles, Calif. Filed Aug. 2, 1927. Serial No. 210,087. 2 Claims. (Cl. 47—58.)



1. The method of promoting the culture of growing clusters which includes yieldingly tying such a cluster to

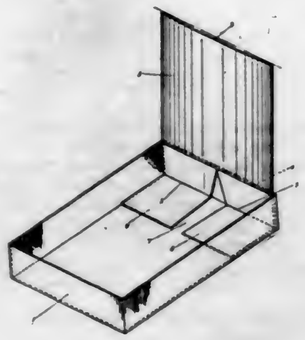
hold the same together while permitting expansion by growth and permitting said cluster to move from an upright to a down-hanging position.

1,765,483. TRANSFORMER CORE-STRUCTURE. HORACE L. COLE, Sharon, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 12, 1929. Serial No. 346,394. 7 Claims. (Cl. 175—356.)



1. In a single-phase transformer, a core structure consisting of at least three apertured units, said units being placed end to end and in substantially the same plane, two of units being end units having one of the dimensions of the intermediate units and substantially one-half of another dimension of the intermediate units, said units having their apertures in parallel relation.

1,765,484. DISPLAY CARD. RICHARD A. GRAY, Binghamton, N. Y. Substitute for application Serial No. 175,818, filed Mar. 16, 1927. This application filed Feb. 23, 1929. Serial No. 343,446. 4 Claims. (Cl. 40—7.)



1. In combination, a display card comprising a body portion, one end thereof being widened, said widened end being split centrally thereof, and a carton receiving and restricting said split widened end.

1,765,485. METHOD OF COATING SAUSAGES AND SMOKED OR COOKED MEATS. CARL G. HASSELBLAD, Grosse Pointe, and AIMER J. CATELLIER, Detroit, Mich. Filed Apr. 23, 1928. Serial No. 273,766. 5 Claims. (Cl. 99—8.)

5. A coating process for smoked sausages and meats consisting of covering the goods with warm fluid gelatine, exposing them immediately thereafter to a cold temperature, then subjecting the goods to a cold smoke, and finally drying and hardening the gelatine by exposing the goods to hot smoke.

1,765,486. SOUND AMPLIFIER. JESSE B. HAWLEY, Wilmette, Ill., and RALPH H. TOWNSEND, Mount Vernon, N. Y., assignors, by mesne assignments, to United Reproducers Corporation, St. Charles, Ill., a Corporation of New Jersey. Filed Apr. 19, 1924. Serial No. 707,578. 20 Claims. (Cl. 181—27.)



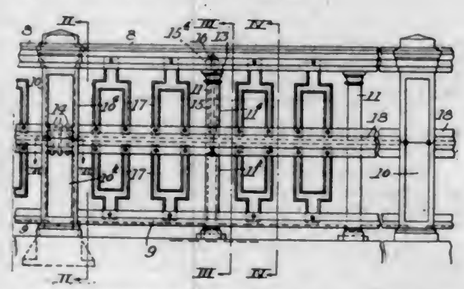
1. A sound amplifier comprising an approximately semi-ellipsoidal hollow body having an opening at one side thereof, means for directing sound waves against the inner surface of said body whereby the sound waves may be reflected and amplified.

1,765,487. ELECTRON-DISCHARGE DEVICE WITH INDIRECTLY-HEATED CATHODE. CHARLES E. HUFFMAN, Montclair, N. J., assignor to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed July 1, 1927. Serial No. 202,812. 1 Claim. (Cl. 250—27.5.)



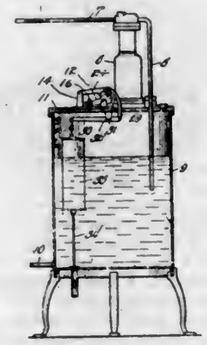
An electron discharge device including an anode, control electrode, cathode, and a separate heating element for said cathode, a base for said device, terminals for each of said electrodes and heating element on said base arranged on the circumference of a circle, the terminals for said heating element being positioned next to each other and the terminal for said control electrode being spaced at an equal distance from each of said terminals for said heating element.

1,765,488. BRIDGE STRUCTURE. PERCY E. HUNTER, Pittsburgh, Pa., assignor of one-half to Frank J. Lanahan, Pittsburgh, Pa. Filed Apr. 30, 1928. Serial No. 273,874. 7 Claims. (Cl. 256—24.)



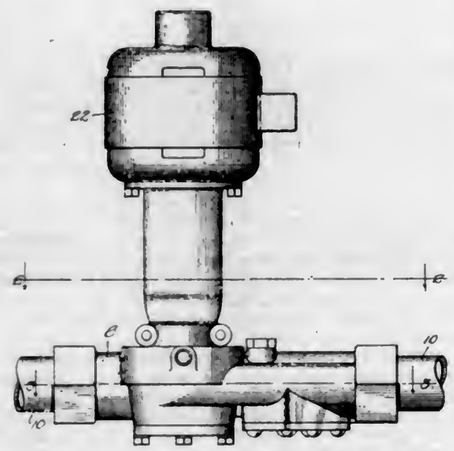
1. Railing structure for roadways, comprising posts, upper and lower rails supported by said posts, an intermediate rail of T form supported by said posts and having its stem flange disposed in a horizontal plane and extending rearwardly of the railing structure, and panels each composed of upper and lower sections, the adjacent ends of the panel sections being each secured to the rear side of one of the head flanges of said intermediate rail and their remote ends being secured to the upper and lower rails respectively.

1,765,489. MOTOR CONTROL. JOHN T. JANETTE, Chicago, Ill. Filed Dec. 6, 1924. Serial No. 754,441. 8 Claims. (Cl. 200—68.)



1. A switch operating lever having more than two engaging faces at one end thereof and an actuating member adapted to engage with said faces to throw the switch to predetermined opened or closed position.

1,765,490. CIRCULATING APPARATUS. JOHN T. JANETTE, Chicago, Ill. Filed June 24, 1927. Serial No. 201,100. 3 Claims. (Cl. 137—78.)



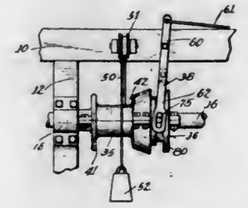
1. Circulating apparatus comprising an integral pipe section having a main passage and a bypass therethrough, a centrifugal pump in the bypass having its shaft at right angles to the main passage, a spring pressed valve at the outlet of the bypass adapted to be operated by the discharge from the pump to close the main passage in any position of the bypass relative to the main passage, a motor having its shaft in alignment with and connected to the pump shaft, and a bearing on said pipe section which is engaged by a portion of the motor frame for detachably mounting the motor on said section.

1,765,491. EGG OPENER. DAVID H. JONES, Soda Springs, Calif. Filed Jan. 16, 1929. Serial No. 332,820. 2 Claims. (Cl. 146—2.)



1. An egg opener comprising a handle, an egg receptacle divided into sections, said sections being pivotally mounted on said handle, egg cutting knives cooperatively mounted on said sectional receptacles, a trigger mounted on said handle, a lip formed at one end of said trigger, a wire loop cooperatively attached to said trigger and to said knives, said handle having outwardly extending grooves wherein portions of said wire loop are passable to remove said loop from cooperative contact with said trigger, a second wire loop eccentrically positioned with respect to said sectional receptacle said second loop being engaged by said trigger lip upon depression of said trigger to move said receptacles pivotally, and a spring attached to said handle and to said trigger lip.

1,765,492. TONG-ACTUATING DEVICE FOR WELL-DRILLING RIGS. JOSEPH R. LUCAS, Montebello, Calif. Filed Nov. 28, 1924. Serial No. 752,563. 2 Claims. (Cl. 192—33.)

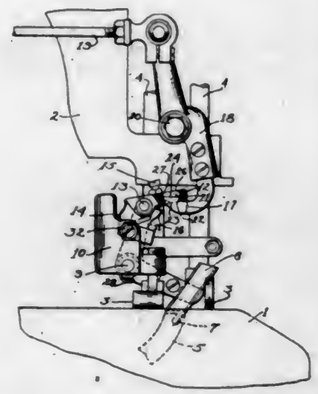


1. In combination, a drive shaft, a spool free on the shaft, a drive member operating with the shaft and movable longitudinally thereof, a part connected with the drive member and held against rotation, a clutch connection between said spool and drive member controlled by movement of the drive member on the shaft, and cam means for automatically moving the drive member to actuate the clutch at a predetermined point of operation including, a cam on the spool, and a cam on said part.

1,765,493. CHAIN CUTTER FOR SEWING MACHINES. FRIEDRICH LUTZ, Stuttgart, Germany, assignor to Union Special Maschinenfabrik, G. m. b. H., Stuttgart, Germany. Filed Jan. 23, 1929, Serial No. 334,427, and in Germany Sept. 27, 1928. 10 Claims. (Cl. 112—252.)

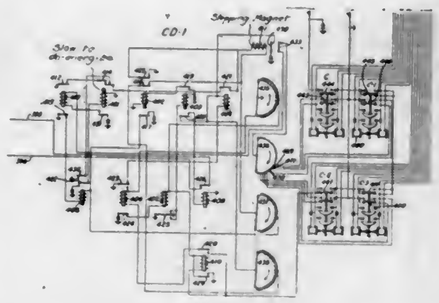
1. In a sewing machine a presser foot, a chain cutter for cutting enchained thread loops between stitched articles, comprising cutting blades, means for imparting a

relative movement to said blades for cutting the enchained thread loops, and means for shifting said blades laterally



relative to each other for bringing said blades into shearing relation prior to the severing of the enchained thread loops.

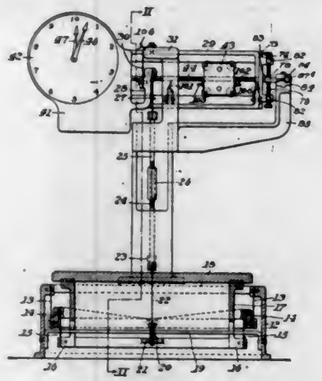
1,765,494. SUPERVISORY CONTROL SYSTEM. JAMES L. McCOY, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Jan. 2, 1924. Serial No. 683,963. 5 Claims. (Cl. 177—353.)



1. In an electrical control system, the combination with a control office, a substation and apparatus units in said substation, of a selector switch comprising a plurality of selecting contacts and a wiper moving thereon at said office and substation, means for moving the switches at the control office and substation in synchronism, means operative during the movement of said switches for momentarily stopping them at a plurality of positions, means operative during each of said momentarily stops to select a particular apparatus unit, and means for thereafter simultaneously operating the selected units.

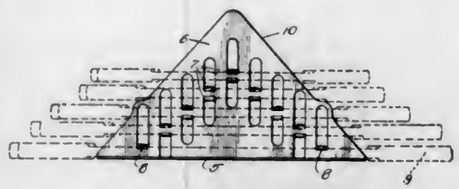
2. In a signalling system, a first station, a second station, apparatus units at said second station, synchronously operated rotatable selectors comprising contacts and wipers at said first and said second station, means whereby one of said selectors controls the movement of the other selector to each selecting position in synchronism with its own movement, means, including said selectors, for sequentially selecting a plurality of said apparatus units for operation from said first station, and means for operating said selected units simultaneously only if said selectors are in synchronism.

1,765,495. WEIGHING APPARATUS. WILMER E. McKIM, New Kensington, Pa., assignor to Walter E. Spill, trustee, Pittsburgh, Pa. Filed June 16, 1927. Serial No. 199,237. 6 Claims. (Cl. 265—56.)



1. Scale apparatus comprising a depending flexible member supported at its upper end, a weight-supporting flexible member, a scale beam connected to the adjacent ends of said members, a poise mounted on said beam, a motor having driving connection with said poise, a stationary contact member in the circuit of said motor, a pair of contact members connected to said beam in position to engage the stationary contact member, and each in the motor circuit, electrical connections whereby the motor will be caused to turn in one direction when the beam is in one position and will be caused to turn in the opposite direction when the beam is in another position, and indicator mechanism having driving connection with said motor.

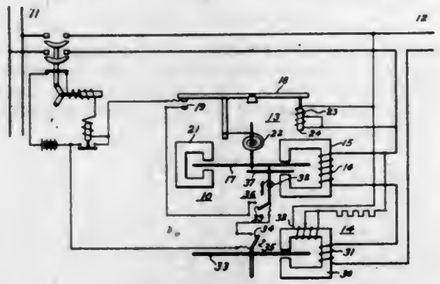
1,765,496. WRENCH-DISPLAY HOLDER. FRED W. MILLER, Highland Park, Ill. Filed June 1, 1928. Serial No. 282,125. 1 Claim. (Cl. 211—154.)



A device for holding engineers' wrenches of the type set forth which consists of a substantially rectangular base formed of sheet metal and having an integrally formed upwardly extending triangular support at the back thereof, said support having one pair of lugs adapted to coact with the base for holding the bottom wrench and having oppositely disposed pairs of lugs arranged in receding formation toward the top, each of said pairs being adapted to receive and support a wrench, the arrangement being such that the heads of the wrenches will engage with the edges of the triangular support to prevent longitudinal movement thereof, and the wrenches will be supported so that the center of gravity thereof will come within the base.

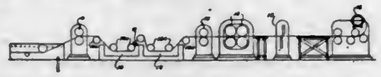
1,765,497. RELAY. CHARLES MORRISON, Hagerstown, Md., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 15, 1928. Serial No. 261,816. 7 Claims. (Cl. 175—294.)

1. The combination with a protective relay embodying a current-actuated induction-disc element normally restraining in its operation, a directional induction disc element, and two switching devices respectively controlled by the two elements to cooperate to control an external circuit upon the occurrence of abnormal conditions in that circuit, of an auxiliary switching device cooperatively related to the other switching devices and means associated



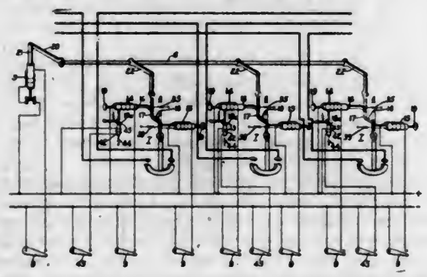
with the current-actuating element for controlling the auxiliary switching device to disturb the cooperative relationship between the other two switching devices upon the occurrence of conditions resulting after the actuation of the current-actuated switch to its effective position but before that switch can leave such position in response to those conditions.

1,765,498. CONTINUOUS-PICKLING PROCESS. HARRY M. NAUGLE and ARTHUR J. TOWNSEND, Canton, Ohio, assignors, by mesne assignments, to The American Rolling Mill Company, Middletown, Ohio, a Corporation of Ohio. Filed Nov. 12, 1926. Serial No. 147,878. 1 Claim. (Cl. 148—8.)



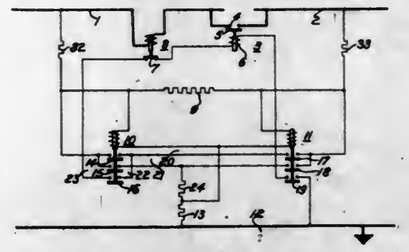
The method of continuously pickling coiled steel strips having a width of ten inches and upward, which includes straightening the coil curvature, connecting the ends of successive strips, and then pulling the same straight through a liquid pickling solution, all during continuous endwise movement of the strips.

1,765,499. CIRCUIT-CONTROLLING SYSTEM. ALFRED J. A. PETERSON, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Dec. 20, 1923. Serial No. 681,785. 10 Claims. (Cl. 175—375.)



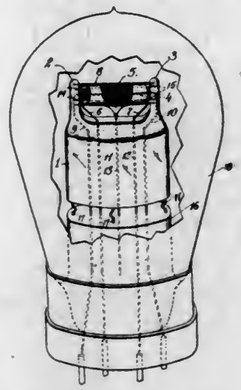
10. The combination, in a circuit-breaker-operating system, with a plurality of circuit-breakers, and a rotatable shaft, of a plurality of normally engaged disconnectible links for connecting said shaft and said breakers, whereby said breakers may be closed by the rotation of said shaft, means for disconnecting said disconnectible links to permit the circuit breakers to open independently of the operation of the shaft, and means for disconnecting said disconnectible links to prevent the closing of the interrupters by the rotation of the shaft.

1,765,500. AUTOMATIC SECTIONALIZING SWITCH. MAURICE E. REAGAN, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Sept. 16, 1921. Serial No. 501,156. 13 Claims. (Cl. 175—294.)



1. In an automatically-reclosing sectionalizing circuit-controlling system, means for connecting two circuit sections, means, including a Wheatstone bridge, for controlling the connecting means, and means for connecting the Wheatstone bridge selectively to either circuit section.

1,765,501. VACUUM TUBE. BRUNO ROSENBAUM, Berlin, Germany, assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Aug. 26, 1921, Serial No. 495,749, and in Germany Aug. 18, 1917. 17 Claims. (Cl. 250—27.5.) (Granted under the provisions of the act of Mar. 3, 1921, 41 Stat. L., 1313.)



1. An electron discharge device having a plurality of electrodes rigidly secured against motion relative to one another, and a flexibly mounted support for said electrodes.

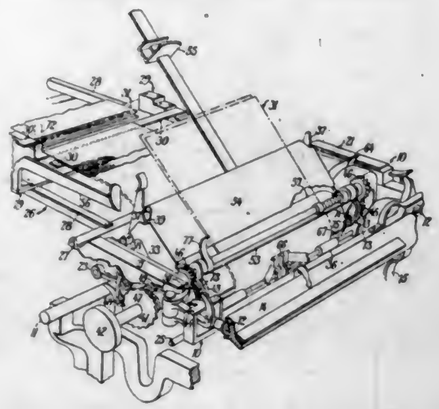
1,765,502. COPPER-OXIDE RECTIFIER. JOSEPH SLEPIAN, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 2, 1927. Serial No. 180,629. 17 Claims. (Cl. 175—366.)



3. A rectifying unit comprising oxidized copper having a portion of its surface covered with a layer comprising a phenolic condensation product and graphite.

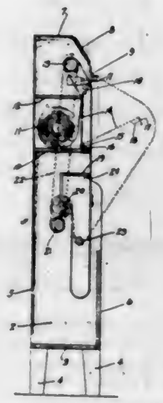
8. The method of making good electrical contact to a relatively poor conducting surface which comprises coating said surface with a layer of a phenolic condensation product and impregnating said coating with a layer of a conducting material.

1,765,503. TYPEWRITING MACHINE. JESSE A. B. SMITH, Stamford, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Filed Jan. 13, 1927. Serial No. 160,809. 42 Claims. (Cl. 197—126.)



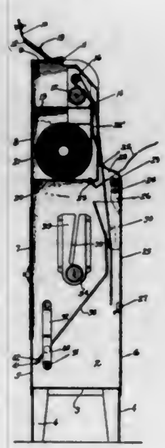
1. In a typewriting machine having a carriage and a platen-frame thereon, the combination with typing instrumentalities, of a main platen rockable about a main axis upon said frame, work-sheets being guidable toward the typing position on the carriage, an auxiliary platen arranged between said work-sheets and associated with said main platen in such manner as to be rockable together with said platen about the same axis in order to alternate with the main platen at the typing position and thereby either back up all said sheets by means of said main platen or back up one or more of said sheets overlying said auxiliary platen by means of the latter, whereby to permit selective typing on said work-sheets, said auxiliary platen being also independently movable to a different spaced position relative to said main platen so as to normally float between said work-sheets and facilitate introduction and feeding of said sheets, and means for feeding said work-sheets to said platens.

1,765,504. CLOSED-BACK TOWEL STAND. FRANK M. STEINER and GOTTFRID OLSON, Minneapolis, Minn., assignors to American Linen Company, Minneapolis, Minn., a Corporation of Minnesota. Filed Mar. 28, 1927. Serial No. 179,082. 5 Claims. (Cl. 312—38.)



5. A towel cabinet having a fixed shelf therein for holding a supply of clean toweling, a door extending upwardly in front of said shelf and terminating short of the top wall of said cabinet, instrumentalities mounting said door for swinging movement on said cabinet, the upper edge of said door being provided with means for contacting with and directing toweling downwardly in front of and spaced from said door into position of use.

1,765,505. TOWEL CABINET. FRANK M. STEINER and AXEL H. ANDERSON, Minneapolis, Minn., assignors to Steiner Sales Company, Salt Lake City, Utah, a Corporation of Utah. Filed July 25, 1928. Serial No. 295,224. 12 Claims. (Cl. 312—38.)

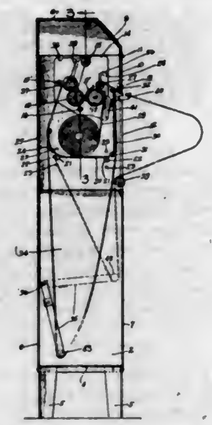


1. A towel cabinet having a support for a supply of clean towel, a delivery feed roll mounted in the cabinet, a take-up feed roll in the cabinet operatively connected with said delivery feed roll, a take up roll on which the soiled towel may be wound, a door having its upper portion pivoted in the front of the cabinet, a guide having a wall supported on said door within the cabinet and open at the top and bottom and through which guide the web of towel may be passed, whereby said door when raised to an open position, will fold said web across the upper and lower portion of said wall, thereby straightening and smoothing the web for delivery to said take up roll.

4. In a towel cabinet, a pull-back device adapted to draw a web of soiled towel within the cabinet, a rod having a pivotal sliding connection with said pull-back, and means for actuating said rod to raise said pull-back to a position convenient to engage a towel web therewith.

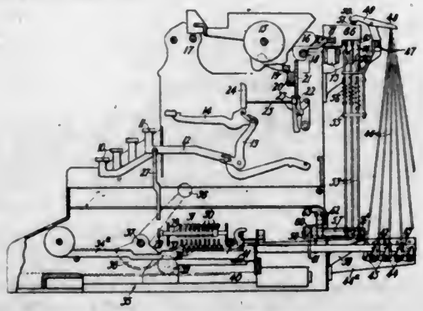
12. A towel cabinet having a support for a supply of clean towel, a delivery feed roll mounted in said cabinet, the front of said cabinet having an opening through which access may be had to a towel supply, said cabinet having guides formed therein extending downwardly and terminating near said feed roll, the upper portion of said guides having notches forming seats therein, a pinch roll adapted to slide in said guides and be placed in said notches when the attendant is filling the cabinet, the relative position of said feed roll and pinch roll being such that a web of towel may be stretched between them to depend from said feed roll in position for use, a door in the top of said cabinet adapted to be lifted to expose said feed roll and pinch roll, said door having lugs thereon in position to engage said pinch roll when the door is closed and automatically eject it from its seat in said notches, for the purpose specified.

1,765,506. TOWEL CABINET. FRANK M. STEINER, Minneapolis, Minn., assignor to Steiner Sales Company, Salt Lake City, Utah, a Corporation of Utah. Filed July 25, 1928. Serial No. 295,225. 8 Claims. (Cl. 312—38.)



1. A towel cabinet having an opening in the front thereof for delivery of the clean towel, a support within the cabinet in the rear of said opening adapted to receive a supply of clean towel, a feed roll above said support whereto the clean towel may be stretched for delivery through said opening, a gate in front of said feed roll and said towel support and adapted to move forwardly through said opening and allow access to the space above said support, said gate normally concealing the towel supply and preventing access thereto, and a door mounted above said gate in the front of the cabinet and having a lower portion depending below the upper portion of said gate and thereby preventing the opening of said gate until said door is also opened, and means for holding said door in its closed position.

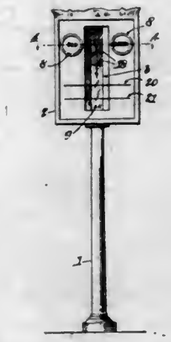
1,765,507. COMBINED TYPEWRITING AND ADDING MACHINE. BURNHAM C. STICKNEY, Hillside, N. J., assignor to Elliott-Fisher Company, New York, N. Y., a Corporation of Delaware. Filed Aug. 11, 1922. Serial No. 581,051. 49 Claims. (Cl. 235—63.)



1. In a typewriting and computing machine, in combination, a carriage, a set of digit keys, a plurality of registers, index pin-bars for said registers adapted to be set by operation of the digit keys but normally maintained away from position to be set, a series of shafts, arms on each shaft for moving the pin-bars of a single denomination in all of the registers to operative positions simultaneously, and means controlled by the carriage for operating the shafts in succession.

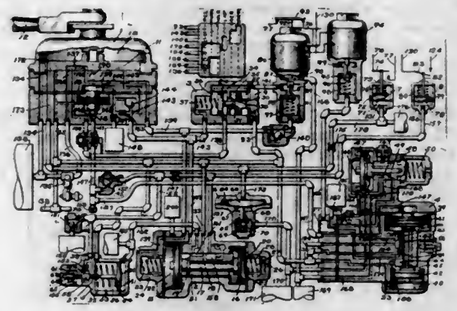
26. For use in a typewriting and computing machine, a control block adapted to be readily inserted and removed from the machine having, in combination, means for positioning the block in various locations laterally of the machine, a plurality of register-selecting cams on its lower face, and a denomination-selector on the upper face of the block.

1,765,508. TRAFFIC SIGNAL. LOIS SWAM, St. Louis, Mo. Filed Oct. 10, 1929. Serial No. 398,686. 8 Claims. (Cl. 116—63.)



1. In a traffic signal, the combination of a clear travel signal operative at intermittent predetermined intervals, a signal light operative during the same intervals, a mechanical shutter, means to actuate the shutter to obliterate the light through gradual stages during each operative interval, and means to indicate the passage of a safety stage in the course of the light obliteration.

1,765,509. AUTOMATIC TRAIN-CONTROL EQUIPMENT. THOMAS T. THOMAS, Edgewood, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Sept. 17, 1928. Serial No. 306,511. 50 Claims. (Cl. 303—18.)



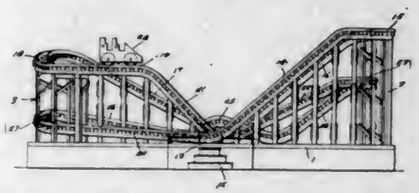
1. In a train control apparatus, the combination with electrical means operative upon a change in signal indication for effecting an application of the brakes, of pressure sensitive means operative to suppress the operation of said electrical means.

5. In a train control apparatus, the combination with a magnet operative upon deenergization, caused by a change in signal indication, to effect an application of the brakes, of a pressure sensitive switch device operative to a position to prevent deenergization of said magnet, and a brake valve device operative in service position to cause said switch to be operated.

1,765,510. TOY SCENIC RAILWAY. ROCCO VEZZUSO and JAMES PETRINO, Brooklyn, N. Y. Filed Jan. 10, 1929. Serial No. 331,552. 1 Claim. (Cl. 104—63.)

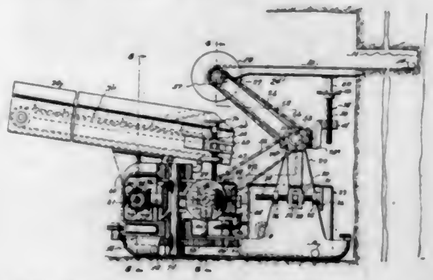
In a toy scenic railway of the class described, a series of track supporting trestles arranged in a predetermined

manner, a continuous track supported by said trestles, said track including an upwardly inclined track, the upper end of which terminates in a horizontally disposed loop, a downwardly inclined portion having communication at its upper end with the other end of the horizontal looped portions, said inclined portions being spaced apart in parallel relation, an upwardly inclined portion having connection at its lower end with the lower end of the downwardly inclined portion, a horizontally disposed looped portion for communication at one end with the upper end of the last mentioned inclined portion, said last mentioned looped portion being arranged in a plane below the first mentioned looped portion, a downwardly inclined portion having connection at its upper end with the other end of the last mentioned looped portion, the last mentioned downwardly inclined portion being disposed inwardly of the starting point and the uptrack portion, a



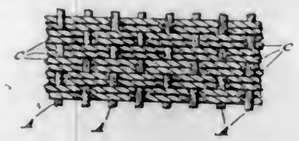
slightly upwardly inclined portion connected at its lower end, with the lower end of the last mentioned downwardly inclined portion and disposed inwardly of and parallel with the uptrack portion, an additional horizontally disposed looped portion arranged in the plane below both of the aforementioned looped portions and connected with the last mentioned upwardly inclined portion, and being disposed inwardly of the first mentioned looped portion, an undulated track section arranged inwardly of the first mentioned downwardly inclined portion and the adjacent upwardly inclined portion, a further looped portion arranged in a plane below all of the aforesaid looped portions, and a home stretch portion connecting the last mentioned loop portion with the lower end of the uptrack portion, the trestles that support the uppermost portion of the continuous track also supporting the adjacent portions of the lowermost portions of the track, and a car elevator associated with the uptrack portion.

1,765,511. DEVICE FOR HANDLING LOOSE MATERIALS. FREDERICK W. VODOZ, Chicago, Ill., assignor to Goodman Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 6, 1927. Serial No. 211,191. 5 Claims. (Cl. 198—10.)



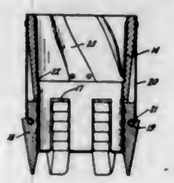
1. In a device of the class described, a body portion slideable on a mine bottom, a winding drum adjustably supported near the forward end thereof, a supporting plate projecting forwardly from said drum adaptable to engage a mine wall, and a flexible material handling device insertible in a kerf in a mine wall, supported on said supporting plate and adaptable to be wound in by said drum over the top portion thereof for removing said material handling device from said kerf loaded with loose material.

1,765,512. RUG. PHILIP C. WAITE, Oshkosh, Wis., assignor to Waite Carpet Company, Oshkosh, Wis., a Corporation of Wisconsin. Filed July 16, 1928. Serial No. 293,193. 1 Claim. (Cl. 139—420.)



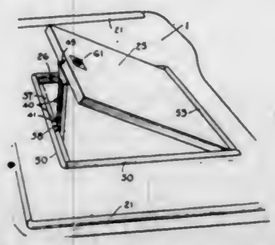
A rug composed of relatively widely spaced bulky warp strands composed of uncabled twisted paper fibre, in combination with equally bulky woof strands arranged in pairs interwoven through the warp strands, each woof strand being composed of cabled sub strands of China sea grass, and the pairs of woof strands passing over and under the warp strands in easy bends or undulations and serving to imbed the warp strands below the surface planes of the rug.

1,765,513. CORE CATCHER. LOUIS H. WELLENSIEK, Houston, Tex., assignor to Hughes Tool Company, Houston, Tex., a Corporation of Texas. Filed Apr. 12, 1928. Serial No. 269,314. 4 Claims. (Cl. 255—72.)



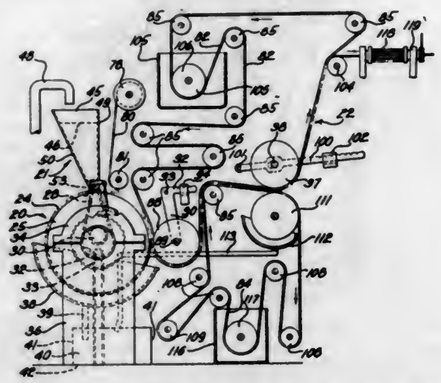
1. In a core drill having an inner core passage and a downwardly-tapered seat therein, the combination of a core catcher including a sleeve tapered downwardly from the upper end, a lower cylindrical skirt thereon, spring arms secured to the outer face of said sleeve, toothed jaws secured pivotally to said arms, and fitting through slots in said skirt, in the manner described.

1,765,514. BED TABLE. WILLARD C. WETMORE, Saybrook, and RICA HARWOOD SEELEY, Essex, Conn. Filed Mar. 27, 1928. Serial No. 265,002. 2 Claims. (Cl. 45—74.)



1. A table of the character described comprising a table top having an aperture and a leaf hingedly secured in the aperture and provided with means for supporting it in adjustable angular relation above the table top surface and also adapted to be retained in closed position flush with the table top, said supporting means comprising an adjustable strut hingedly connected to the underface of the leaf and having an end portion adapted to co-operate with a socket at the rear of the table aperture, and means for detachably securing the supporting means in inactive position against the underface of the leaf, and pairs of hooks on an upper portion of the strut arranged to co-operate with sockets at the rear of the table aperture, to support the leaf in relatively low angular positions.

1,765,515. COATED CORE AND METHOD OF AND APPARATUS FOR APPLYING THE COATING THERETO. HAROLD BARNARD WHITFIELD, La Grange, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Mar. 19, 1929. Serial No. 348,151. 20 Claims. (Cl. 92—41.)



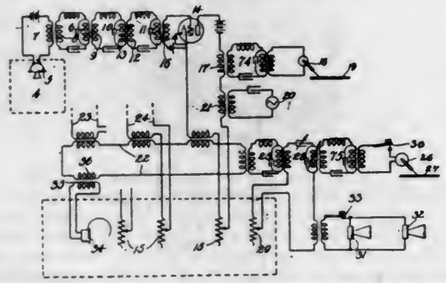
1. The method of coating a core in strand form which consists in producing a corrugated coating of pulp on the core, the corrugations extending transversely of the core.

1,765,516. METHOD OF MAKING SLACK ADJUSTER SCREWS. LOREN L. WHITNEY, Hammond, Ind., assignor to American Steel Foundries, Chicago, Ill., a Corporation of New Jersey. Filed Dec. 9, 1925. Serial No. 74,261. 5 Claims. (Cl. 10—27.)



1. The method of making a slack adjuster screw having an apertured head which consists in providing two elongated blanks, forming a hole in the end of one of said blanks, then placing the end of the second blank in said hole, then upsetting the first blank and the metal of the second blank which is within said hole to permanently secure said blanks together, then upsetting the first blank again to form a transversely arranged head and to flow the metal of said second blank within said head to form a thin transverse end lying in close prox'mity to the periphery of said head whereby the head may be centrally drilled without exposing any of the enclosed metal of said second blank.

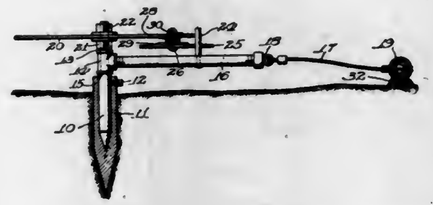
1,765,517. RECORDING OF MUSIC AND SPEECH. HARRY B. WIER, Plainfield, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Aug. 14, 1919. Serial No. 317,410. 25 Claims. (Cl. 179—100.4.)



1. The combination of an instrument for producing sound vibrations, an acoustically corrected chamber for such instrument, an electrical circuit, means for converting said vibrations into electrical vibrations in said circuit, means in said circuit for modifying the vibratory effect of the sound vibrations on said chamber, and means for recording such electrical vibrations.

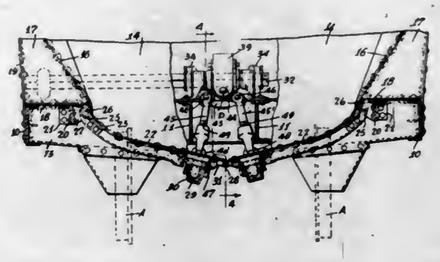
23. In means for recording sound, an electromagnetic recorder operating a stylus, which recorder has one period of vibration relative to its supporting structure, and valve circuits for modifying the effect of the natural period of the recording device.

1,765,518. GOLF-STROKE-REGISTERING DEVICE. CLAUDE W. WILLIAMS, Pawhuska, Okla. Filed Aug. 9, 1926. Serial No. 128,132. 4 Claims. (Cl. 265—20.)



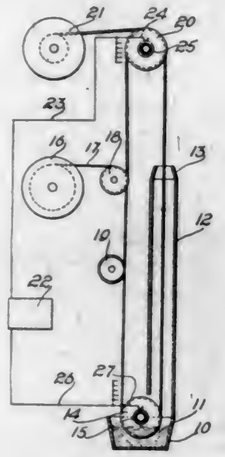
2. In a device of the character set forth, the combination of a socket, a pin adapted to fit in said socket, means for holding the pin in the socket, an arm rotatably mounted on the pin, a flexible member secured to the arm, a resilient ball secured to the flexible member, a disk fixed on said pin and having a scale around the periphery thereof, a projection on said arm adapted to register with said scale, a star wheel adapted to be engaged by said projection for rotating the same, a bolt secured to the star wheel and passing through the disk a pointer on said bolt, and frictional means tending to hold the star wheel against rotation.

1,765,519. CENTER-DISCHARGE ORE CAR. ALBERT E. ZIMMER, Chicago, Ill., assignor to Enterprise Railway Equipment Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 9, 1927. Serial No. 232,041. 8 Claims. (Cl. 105—250.)



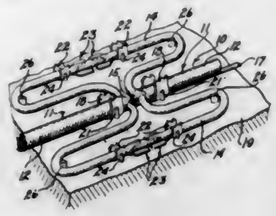
1. In a railway car, having a dumping opening; the combination with longitudinally extending oppositely disposed doors adapted to close said opening; of a shaft disposed at an angle to the axes about which said doors swing; a winding connection centrally disposed between the doors, said connection being adapted to wind on the shaft; an equalizing lever pivotally mounted on said winding connection; a pair of door supporting elements, pivotally connected with said equalizing lever at one set of ends; and adjustable supporting means interposed between the opposite set of ends of said elements and said doors, whereby adjustment of the means associated with one element and door will be equalized through said equalizer lever with respect to the opposite element and door.

1,765,520. METHOD OF AND APPARATUS FOR INSULATING ELECTRICAL CONDUCTORS. ARTHUR HERMAN ADAMS, La Grange, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed July 25, 1925. Serial No. 46,052. 11 Claims. (Cl. 219—11.)



2. The method of baking a coating on an electrical conductor, which consists in generating a high frequency electrical current outside of said wire, passing said current through the coating and through a selected portion of the conductor and thereby heating the portion to bake the coating.

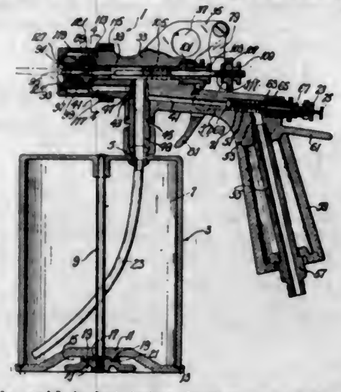
1,765,521. METHOD OF MAKING COMPOSITE ELECTRICAL CONDUCTORS. WILLIAM THOMAS BARRANS, La Grange, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed July 14, 1927. Serial No. 205,824. 5 Claims. (Cl. 153—1.)



1. The method of making telephone cords, which consists in clamping to a sheathed cord having a conductor extending therefrom a length of stay cord which is separate from the cord sheathing and in contemporaneously clamping a terminal tip to the conductor, and severing the conductor and the stay cord.

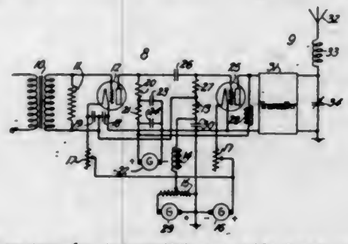
1,765,522. COATING APPARATUS. THEODORE BIRKENMAIER, St. Louis, Mo., assignor to W. N. Matthews Corporation, St. Louis, Mo., a Corporation of Missouri. Filed Aug. 1, 1925. Serial No. 47,393. 6 Claims. (Cl. 91—45.)

6. A spray head for paint guns comprising a cylinder having a passage therein for leading air to the face of said cylinder, a rotatable jacket cooperating with said cylinder at said face, said cylinder having holes therein spaced in pairs, said holes cooperating with said passage and said cylinder, a material nipple, said jacket being provided with a central opening adapted to receive said nipple and centrally space said nipple with respect to said holes, said opening receiving air from said first-



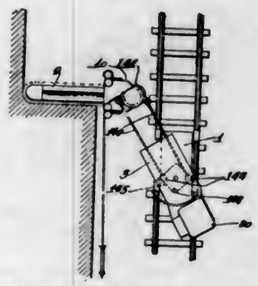
named hole, said jacket being further provided with two passages adapted to receive air from any of the pairs of holes if so desired, and to direct said air on that air leaving the central opening about the nipple.

1,765,523. SIGNAL-TRANSMISSION SYSTEM. OLINDO O. CECCARINI, Mahwah, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed June 15, 1925. Serial No. 37,156. 4 Claims. (Cl. 179—171.)



1. A system for transmitting a wide band of frequencies comprising an electric discharge device having an anode and a cathode, and a non-resonant impedance network connected between the anode and cathode and comprising only resistance and capacity elements, said elements being so proportioned as to give said system an overall frequency-transmission characteristic which is substantially uniform throughout said band of frequencies.

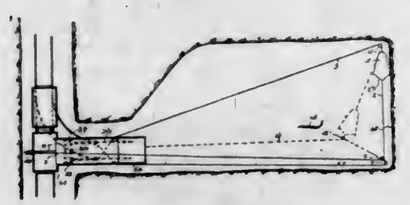
1,765,524. MINING MACHINE. CHARLES E. DAVIS, Chicago, Ill., assignor to Goodman Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 30, 1922, Serial No. 597,722. Renewed May 2, 1929. 11 Claims. (Cl. 262—28.)



1. In a mining machine, a base frame, a moving frame, a swinging cutting element forward of said moving frame

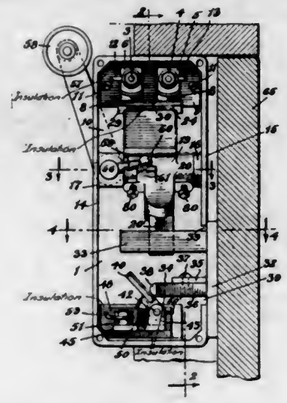
including a cutter arm and a support therefor, two separated arms pivotally connected at their forward ends with said cutter arm support and so connected at their rear ends to both the base and swinging frames as to be movable horizontally with respect to either, and means affording a fixed connection for the rear ends of said arms either with respect to said base frame or said moving frame.

1,765,525. APPARATUS FOR HANDLING LOOSE MATERIAL. CHARLES E. DAVIS, Davenport, Fla., assignor to Goodman Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Original application filed Jan. 19, 1920, Serial No. 352,413. Divided and this application filed July 15, 1926, Serial No. 122,524. Renewed Nov. 29, 1929. 10 Claims. (Cl. 37—115.)



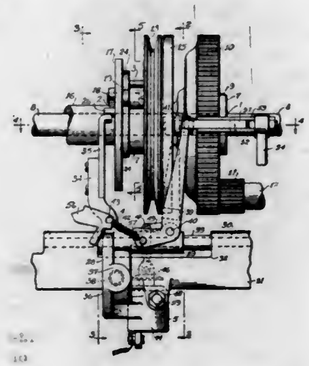
1. A device for handling loose material comprising a scraper, a head line connected therewith, a tail line connected with said scraper, an actuating device connected with said head and tail line so as to act thereupon to move said scraper, a movable direction changing device engaging said head line so as to change its direction at a predetermined point during the first part of movement of the scraper, a control line connected with said movable direction changing device for controlling its position, said control line being connected with said actuating device, and means for rendering the connection between the control line and said actuating device inoperative during a portion of the time that the actuating device is acting upon the head line.

1,765,526. LOCK. HERBERT GLASER, New York, N. Y. Filed Dec. 10, 1928. Serial No. 324,845. 6 Claims. (Cl. 187—31.)



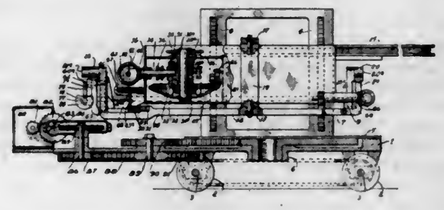
4. In an elevator shaft door lock, a pair of spaced terminals connected in circuit with an elevator-operating means, means for closing said circuit across said terminals comprising a rocker member provided with a contact, an elevator shaft door carrying a protruding lock member adapted to engage with a portion of said rocker member when contact is established across said terminals, an elevator having a movable cam, electric means for operating said cam, a pair of terminals in circuit with said cam-operating means, and circuit-closing means carried by the door for closing circuit between the last mentioned terminals when the door is in its closed position.

1,765,527. CLUTCH MECHANISM. PAUL A. GOLLNICK, JOHN J. TOOLAN, and GEORGE HARRED, Chicago, Ill., assignors, by mesne assignments, to Selectograph Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 7, 1928. Serial No. 268,223. 5 Claims. (Cl. 192—28.)



1. A device of the class described comprising a driving member, a driven member, means for connecting said members together, a movable carriage, a tripper arm mounted on said carriage and adapted to secure said means in an inoperative position for disconnecting said members, a lever pivoted on said carriage, a cam adapted to engage said lever to move said carriage into position to retract said tripper arm for releasing said means, resilient means normally urging said lever out of the path of said cam, and electromagnetically controlled mechanism for moving said lever into the path of said cam.

1,765,528. MINING MACHINE. WALTER S. GRAY, Chicago, Ill., assignor to Goodman Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 3, 1927. Serial No. 172,253. 5 Claims. (Cl. 262—28.)



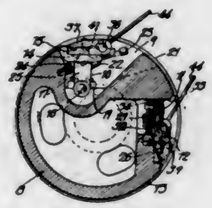
1. In a mining machine, the combination of a base frame having upright supports thereon, a subframe adjustable vertically between said supports, an intermediate frame pivoted on a horizontal axis on said subframe, a swinging frame pivotally mounted on a vertical axis on said intermediate frame, a cutter arm mounted on said swinging frame, a motor carried by said swinging frame and movable therewith having operative connection with said intermediate frame for moving said swinging frame on its vertical axis, and means carried by said subframe for moving the same with said intermediate and swinging frames vertically between said upright supports.

1,765,529. MINING MACHINE. MICHAEL HARDICK, Punxsutawney, Pa., assignor to Goodman Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed July 15, 1925. Serial No. 43,668. 2 Claims. (Cl. 262—30.)



1. In a kerf cutting mining machine, a main frame, a horizontally disposed main cutter arm projecting from said main frame having a cutter chain thereon, an auxiliary parallel cutter arm supported rigidly on said main cutter arm forwardly of said main frame, cutter chain driving mechanism on said main frame for driving said main cutter chain, and a driving connection between said main cutter chain and said auxiliary chain intermediate the ends of said main cutter arm, said driving connection comprising a sprocket mounted eccentric of the longitudinal axis of said main cutter arm and engaging said main cutter chain, and a sprocket driven by said first named sprocket and engaging said auxiliary chain.

1,765,530. PLATE CLAMP. CHARLES W. HARROLD, Cleveland, Ohio, assignor to Harris-Seybold-Potter Company, Cleveland, Ohio, a Corporation of Delaware. Filed Oct. 22, 1927. Serial No. 227,882. 20 Claims. (Cl. 101—415.1.)



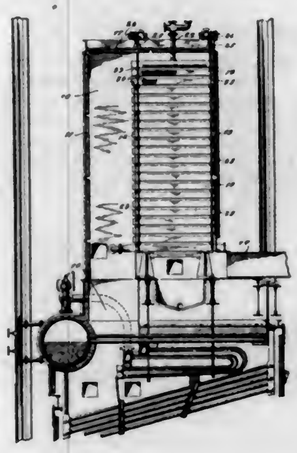
1. A plate-clamp for positioning a flexible plate on its support comprising coacting clamping members to grip the plate and cam means between and bearing on each of said members throughout their operative width to actuate the latter in either direction.

1,765,531. PROTECTIVE DEVICE. RUSSELL SAMUEL HOWARD, La Grange, GEORGE HENDRIE BRODIE, Riverside, and TERRENCE ONAS WESTHAFER, Downers Grove, Ill., assignors to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Mar. 31, 1927. Serial No. 179,844. 9 Claims. (Cl. 175—30.)



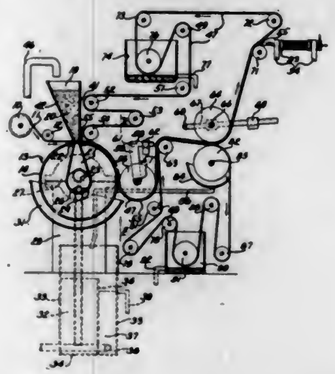
8. In an electrical protective device, an electrode having a plane arcing surface, and a second electrode having a cooperating arcing surface adjacent the plane arcing surface and having oppositely disposed arcing surfaces adjacent said cooperating arcing surface and inclined thereto at such angles as to cause an arc formed between the first mentioned arcing surfaces to extend over the inclined arcing surfaces.

1,765,532. ECONOMIZER. DAVID S. JACOBUS, Jersey City, N. J., and WILLIAM A. JONES, West New Brighton, N. Y., assignors to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed Oct. 20, 1924. Serial No. 744,548. 10 Claims. (Cl. 122—392.)



1. A flue, a heat exchange device therein having a pair of sets of parallel boxes with the sets located respectively at opposite sides of the flue and water tubes extending across the flue and connecting the boxes, and a soot blower tube extending crosswise of the water tubes and between the tubes and a wall of the flue, sufficient space being provided between said water tubes and the associated side of the flue to permit movement of a soot blower tube lengthwise of the water tubes and substantially throughout the length of said water tubes.

1,765,533. METHOD OF AND APPARATUS FOR COATING CORES. HELGO WIGGO JESPERSEN, Western Springs, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Feb. 16, 1929. Serial No. 340,363. 11 Claims. (Cl. 92—41.)



1. The method of coating a core in strand form which consists in projecting a liquid containing pulp in a stream around the core to form a coating thereupon, and separating the liquid from the pulp.

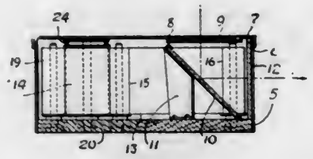
1,765,534. PRODUCTION OF AMMONIA. LOUIS CLEVELAND JONES, Greenwich, Conn., assignor to Chemical Engineering Corporation, New York, N. Y., a Corporation of Delaware. Filed Mar. 24, 1925. Serial No. 18,060. 3 Claims. (Cl. 23—7.)

3. In the production of ammonia, the steps for purifying the gaseous nitrogen-hydrogen mixture from catalyst-poisoning compounds containing moisture which comprise introducing ammonia into said mixture before compression sufficient in amount to make alkaline the acidic impurities therein, and thereafter compressing and cooling same whereby the ammonia and said compounds therein chemically combine to form an alkaline aqueous condensate.

1,765,535. METHOD OF PRODUCING HYDROGEN-NITROGEN MIXTURE IN THE MANUFACTURE OF SYNTHETIC AMMONIA. LOUIS CLEVELAND JONES, Greenwich, Conn., assignor to Chemical Engineering Corporation, New York, N. Y., a Corporation of Delaware. Filed Oct. 28, 1925. Serial No. 65,495. 5 Claims. (Cl. 23—7.)

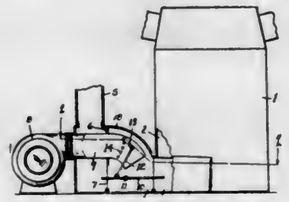
5. The method of producing hydrogen-nitrogen mixture in predetermined ratio for ammonia synthesis which comprises passing a gas having carbon monoxide as its major constituent in contact with an oxidation catalyst in the presence of air and of two to ten volumes of steam at a temperature of about 500° C., removing a part only of the carbon dioxide formed in the reaction, simultaneously adding air to the residual gaseous mixture and passing same into reacting contact with another oxidation catalyst while adding excess steam to maintain the temperature of reaction below 500° C., and condensing any excess steam from the resulting reaction products.

1,765,536. SIGN. JAROSLAV KRIZEK, New York, N. Y. Filed Feb. 15, 1929. Serial No. 340,306. 3 Claims. (Cl. 40—32.)



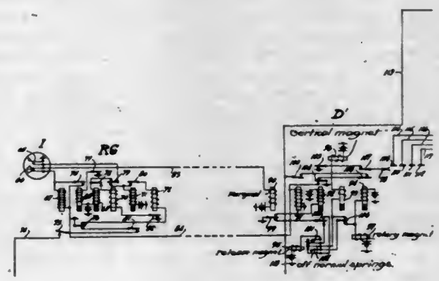
1. A sign of the character described, comprising an enclosed box, a movable lid, an open front, a front glass, a traveling belt for display through said open front and through said glass, an upper opening in said lid for the admission of light, a prism glass secured in said upper opening and an angularly disposed mirror for the reflection of light through the belt.

1,765,537. AIR FEED FOR HOT-AIR HEATING APPARATUS. EDWARD G. MILLER, Grand Rapids, Mich. Filed May 8, 1929. Serial No. 361,501. 9 Claims. (Cl. 126—110.)



9. The combination with an air heating chamber, of an air intake chamber communicating with said heating chamber and provided with a gravity air inlet, a blower provided with a discharge pipe delivering to said air inlet chamber at a point in advance of its gravity inlet, a damper mounted in said chamber and adapted when closed to check the gravity air passage at a point at the rear of the blower discharge pipe, and a vane operatively associated with said discharge pipe to receive the blast therefrom and operatively connected to said damper whereby the damper is actuated to closed position when the blower is in operation.

1,765,538. REMOTE CONTROL SYSTEM. MARTIN L. NELSON, Chicago, Ill., assignor, by mesne assignments, to Automatic Electric Inc., Chicago, Ill., a Corporation of Delaware. Filed Nov. 16, 1921. Serial No. 515,664. 21 Claims. (Cl. 177—353.)



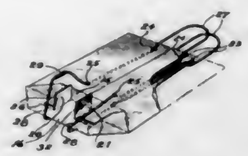
1. In a power system comprising a control station and a distant substation, an interconnecting control circuit, a plurality of circuit breakers at the substation, a group of "in" and "out" lamp signals at the control station for each circuit breaker, a third signal lamp in each of said groups, a relay associated with each of said groups, a key for preparing alternate circuits for said lamp including contacts on said relay, and means at the control station actuated automatically over said control circuit responsive to the operation of any circuit breaker for operating said associated relay to light one of the in and out lamps and the change lamp to indicate the changed position of the circuit breaker.

4. In a power system comprising a control station and a distant substation, remote control equipment for enabling an attendant at the control station to start and stop electrical machines in the substation, a circuit over which the control is exercised, an automatic overload machine starting device at the substation which is normally inoperative, and means responsive to the opening of said circuit for automatically rendering said device operative whenever said control circuit gets out of order.

12. In a remote control system comprising a control station and a distant substation, a control circuit between said stations, a sending device in said substation, a contact making ammeter movable to different positions, means whereby said sender is operated through the contacts of said ammeter to transmit a code of impulses over said circuit, a selective switch operated by said code of impulses transmitted to position it in a position characteristic of said code, an indicating device at said control station, and means operated through said positioned switch to position said indicating device in accordance with the position of said ammeter.

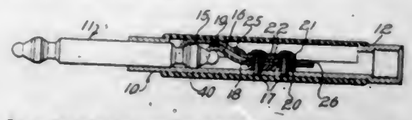
20. In an electrical control system, the combination with a control office, a substation, and apparatus units in said substation for controlling a supply of electrical current, a two-conductor trunk line connecting said office and substation, a signalling device at said office, means controlled by any one of said units for operating said device over a circuit including said trunk line and independent of ground, and means controlled over the same said circuit for registering at the control office the amount of said current supply.

1,765,539. SHOPPING BAG. ADOLPH POTDEVIN, Garden City, N. Y., assignor to Potdevin Machine Company, Brooklyn, N. Y., a Corporation of New York. Filed Oct. 12, 1928. Serial No. 312,005. 4 Claims. (Cl. 229—54.)



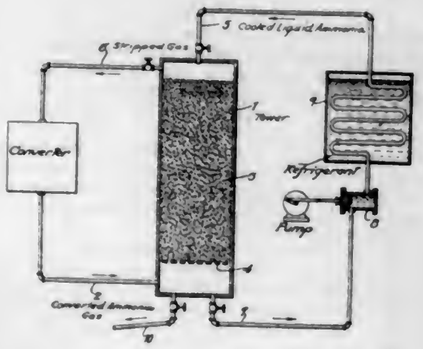
1. A shopping bag comprising side walls, a satchel bottom therefor, including overlapping sealing flaps whereof the outer flap is formed with spaced-apart flexible tongues, and a carrying cord looped at the upper end of the bag and extended through and longitudinally of the side walls and transversely of the bottom of the bag, the bottom strands of the cord being spaced-apart and interposed between the inner flap and the respective tongues of the outer flap, and the said tongues being fastened to the said inner flap in a manner to secure the cord to the bag bottom.

1,765,540. TERMINAL PLUG. WILLIAM HARRY RAY, Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Dec. 19, 1925. Serial No. 76,372. 7 Claims. (Cl. 173—361.)



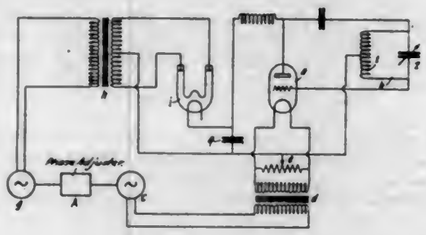
1. In a terminal plug for use with a terminal jack having a plurality of contacting portions, a tubular body having a plurality of individually insulated contact springs, and a cylindrical contacting member having similarly arranged contacting portions at each end for interchangeably, resiliently and rotatably engaging the contact springs and the contacting portions of the terminal jack.

1,765,541. SYNTHETIC PRODUCTION OF AMMONIA. RALPH S. RICHARDSON, Teaneck, N. J., assignor to Chemical Engineering Corporation, New York, N. Y., a Corporation of Delaware. Filed Feb. 26, 1927. Serial No. 171,144. 7 Claims. (Cl. 23—198.)



1. In the synthetic production of ammonia, the step for separating ammonia from synthesized ammonia-containing gases which consists in passing the synthesized gases after catalysis in actual contact with, but in counter-current flow to, relatively cooler liquid ammonia in circulation.

1,765,542. METHOD AND ARRANGEMENT FOR DIMINISHING NOISE IN VACUUM TUBES. WALTER SCHAFFER, Berlin, Germany, assignor to Gesellschaft für Drahtlose Telegraphie m. b. H., Berlin, Germany, a Corporation of Germany. Filed Oct. 28, 1924, Serial No. 746,268, and in Germany Dec. 18, 1923. 8 Claims. (Cl. 250—27.)



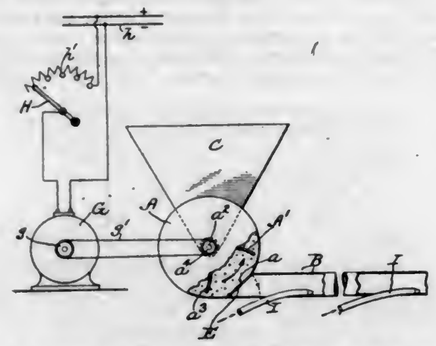
6. In radio apparatus, a thermionic valve including a cathode, grid and anode, a source of alternating current for heating the cathode, a grid cathode circuit, an anode cathode circuit, a source of alternating current potential for said anode cathode circuit of the same frequency as said cathode heating current, means for adjusting the phase relationship of the two currents, and coupling means for relatively adjusting the magnitude of the two currents.

1,765,543. WINDOW. HENRY J. SCHLACKS, Chicago, Ill. Filed Oct. 20, 1928. Serial No. 313,886. 16 Claims. (Cl. 20—48.)



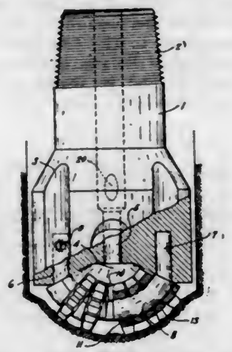
1. In an inset casement window a frame member bent to shape from sheet metal and comprising a web with inwardly and outwardly extending continuous flanges, one of which is formed hollow to provide a larger bearing surface and also serve as a reinforcement and the other of which is extended to form a stop for the window.

1,765,544. MIXING MACHINE. KARL R. SCHUSTER, Hopatcong, N. J. Filed Nov. 3, 1925. Serial No. 66,463. 13 Claims. (Cl. 83—73.)



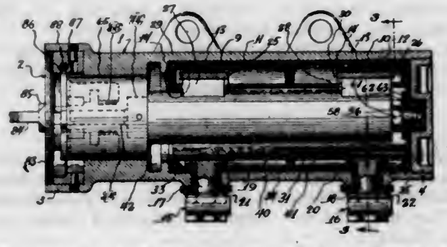
1. A mixer including a rotor operable for mixing the materials by a tumbling action and for applying propulsive force to the mixed mass for discharging the same, and a conduit or pipe extending upwardly from the mixer substantially tangentially thereto.

1,765,545. ROLLER WELL DRILL. FLOYD L. SCOTT, Houston, Tex., assignor to Hughes Tool Company, Houston, Tex., a Corporation of Texas. Filed June 27, 1927. Serial No. 201,610. 4 Claims. (Cl. 255—71.)



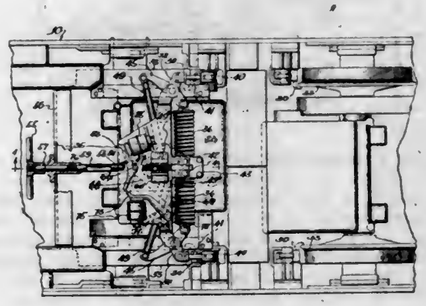
1. A drill head having a pair of shaft-receiving recesses in the forward end thereof, a U-shaped shaft, the ends of which are secured in said recesses, cutters on said shaft, and a pair of side cutters set in separate recesses in said head to cut the side wall of the hole.

1,765,546. EXPLOSIONPROOF FUSE. WILLIAM W. SLOANE, Chicago, Ill., assignor to Goodman Manufacturing Company, Chicago, Ill., a Corporation of Illinios. Filed June 25, 1927. Serial No. 201,403. 13 Claims. (Cl. 200—129.)



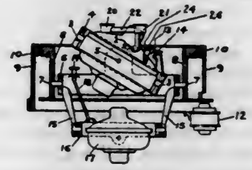
1. In a device of the class described, a casing, a removable fuse element having a portion thereof adapted to form a closure for said casing, electrical contacts for said fuse element within said casing, contact members associated with said fuse element adapted to engage said contacts, and a spring actuated means independent of said contacts for locking said closure member in all positions of engagement between said contacts and contact members.

1,765,547. CABLE-REEL LOCOMOTIVE. WILLIAM W. SLOANE, Chicago, Ill., assignor to Goodman Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 20, 1928. Serial No. 307,120. 19 Claims. (Cl. 192—2.)



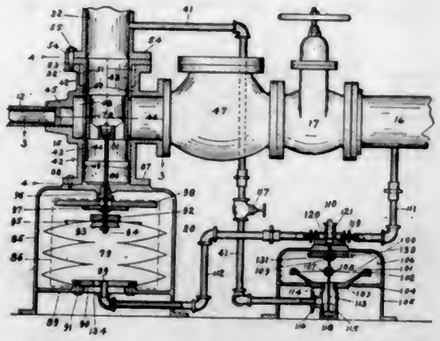
1. In combination with a cable reel locomotive, a cable, braking devices for said locomotive, and means on said locomotive responsive to a predetermined deflection or lack of tension of said cable for simultaneously cutting off power from said locomotive and automatically applying said braking devices to stop said locomotive comprising a plurality of compression members, a plurality of bell crank levers having operative connection therewith, and means for connecting said bell crank levers with said braking devices for engaging said braking devices with said locomotive wheels upon release of said compression members.

1,765,548. DAMPING GYROSCOPIC COMPASSES. HARRY L. TANNER, Brooklyn, N. Y., assignor to Ford Instrument Company, Inc., Long Island City, N. Y., a Corporation of New York. Filed Apr. 25, 1925. Serial No. 25,894. 2 Claims. (Cl. 33—226.)



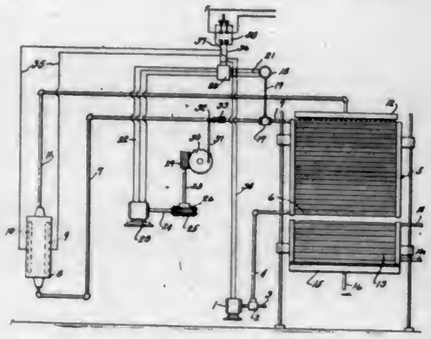
2. In a gyroscopic compass, the combination with a gyroscopic element including a rotor having its axis of rotation inclined to the surface of the earth at a substantial angle to the vertical and to the horizontal and a case therefor, of liquid damping means rigidly mounted on and diagonally across the case with respect to a vertical plane containing the axis of rotation, said means being so constructed that the center of gravity of the contained liquid shifts substantially in phase with the changes in inclination of its gyroscopic element to the surface of the earth.

1,765,549. GAS FIRING SYSTEM. RICHARD THURM, Saginaw, Mich., assignor to Baker Perkins Company, Saginaw, Mich., a Corporation of New York. Filed May 7, 1926. Serial No. 107,345. 8 Claims. (Cl. 158—119.)



1. In a gaseous fuel burner system, a gas supply line, an air supply line, a chamber wherein said gas and air are mixed to form a combustible fuel mixture, and a pressure-operated valve arranged to control the admission of gas and air to said mixing chamber, means actuated by the pressure in one of the supply lines for operating the valve, and means actuated by the pressure of the fuel mixture for controlling the valve.

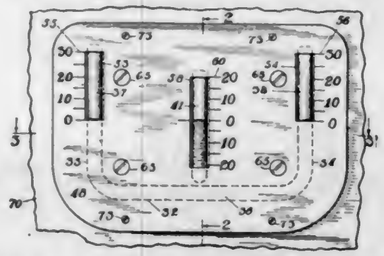
1,765,550. SYSTEM FOR THE PASTEURIZATION OF LIQUIDS. FRANK F. VAN TUYL, Ann Arbor, Mich. Filed Feb. 4, 1928. Serial No. 252,017. 7 Claims. (Cl. 219—40.)



1. In apparatus for pasteurization of liquids, a regenerative cooler to which liquid is supplied, electrically controlled means for supplying liquid continuously thereto throughout an indeterminate period in which liquid of differing temperatures may be supplied and whereby the liquid discharging from the cooler, while increased in temperature, tends to correspondingly vary during the period of operation, a pasteurizer through which the liquid passes freely, means for supplying heat at practically constant rate to the pasteurizer whereby the liquid passing therethrough becomes heated, and means controlling the volume of flow per unit of time to the pasteurizer to cause variation in the rate of flow to the pasteurizer by reason of variation in temperature of the liquid whereby the temperature of the liquid discharging from the pasteurizer is practically constant.

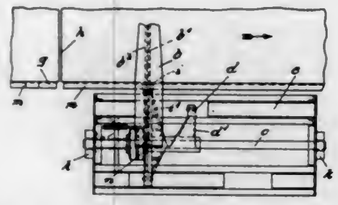
1,765,551. BANKING AND NOSING LEVEL INDICATOR. JOHN E. VAYDA, Bayonne, N. J. Filed Nov. 14, 1928. Serial No. 319,432. 2 Claims. (Cl. 33—209.)

1. In a banking and nosing spirit level indicator the combination of a supporting block comprising a pair of members detachably clamped to each other, each of said members having formed therein in their adjacent faces a longitudinal groove comprising a lower member with a front upright member and a rear upright member, the front face of the members of the supporting block having formed therein a cross groove comprising a lower member with upright members at its ends, a nosing spirit level comprising a longitudinal member, with a front upright



member and a rear upright member, all of said members being tubular and communicating clamped in said longitudinal groove, a double spirit banking level with a lower tubular member and upright tubular end members located in the cross groove in the end face of the supporting block, the normal vertical planes of said spirit levels being at right angles to each other and means to clamp the supporting block in operative position.

1,765,552. MEANS FOR CUTTING SHEET GLASS. LAMBERT VON REIS, Herzogenrath, Germany, assignor, by mesne assignments, to The American Bicheroux Company, a Corporation of Delaware. Filed July 20, 1926, Serial No. 123,763, and in Germany July 27, 1925. 17 Claims. (Cl. 49—14.)



1. A device for cutting sheet glass, comprising in combination a conveyor for the sheet glass, a drop knife arranged for sliding movement in the direction of travel of the conveyor at one side thereof, knife supporting rails at one of the longitudinal edges of the conveyor, transverse interstices in the conveyor and in the knife supporting rails into which the knife is adapted to drop for cutting the sheet glass, and means on the conveyor for engaging the knife and carrying it along with the conveyor during the cutting operation.

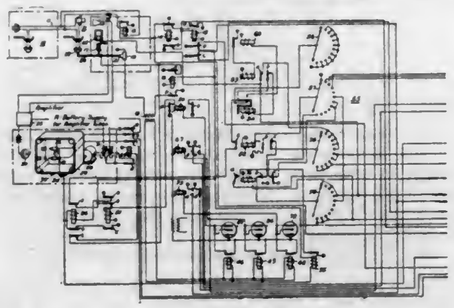
1,765,553. PROCESS OF TREATING BELT LEATHER. JAMES A. WEBB, Buffalo, N. Y. Filed Jan. 22, 1929. Serial No. 334,372. 6 Claims. (Cl. 149—6.)

1. The process of treating belt leather to condition it for immediate use consisting in impregnating it to a suitable degree with blown tallow.

1,765,554. TALKING TELEVOX. ROY J. WENSLEY, Edgewood, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 26, 1929. Serial No. 350,103. 9 Claims. (Cl. 179—2.)

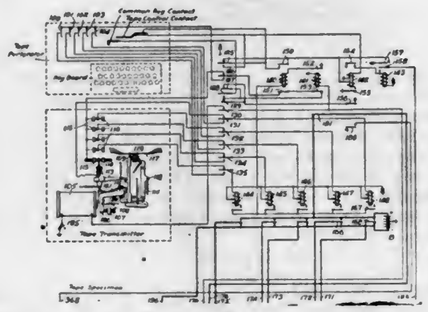
1. A remote-control system adapted to be operated by sounds of different frequencies over standard telephone

circuits including a control office, a remote station, telephone connections therebetween, speech-reproduction means at said station, a receiver-lifting device for the remote station telephone, means responsive to the ringing current for the station telephone bell for energizing the receiver lifting device and initiating the operation of said speech reproduction means to transmit a predetermined



vocal message to said office to identify the station, automatically operable apparatus units at said station and means responsive to the operation of one of said units for energizing the receiver lifting device and initiating the operation of said speech-reproduction means to transmit to a telephone operator a call for the central-station telephone.

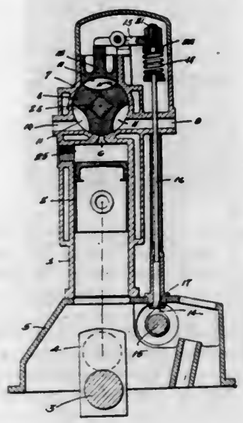
1,765,555. TELEGRAPH SYSTEM. THOMAS U. WHITE, Pittsburgh, Pa., assignor, by mesne assignments, to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed May 6, 1925. Serial No. 28,281. 13 Claims. (Cl. 178—53.)



1. In a telegraph system, a transmitting station, a receiving station having a receiver, a distributor at each of said stations comprising a chain of relays, each of said chains of relays being arranged in groups, means including said distributors for transmitting code combinations of impulse conditions from said transmitting station to said receiving station, means including said distributor at said receiving station for distributing said impulses to said receiver at said receiving station, means whereby the succeeding relays energized are in different groups and means whereby said code combinations of impulse conditions maintain said distributors in synchronism.

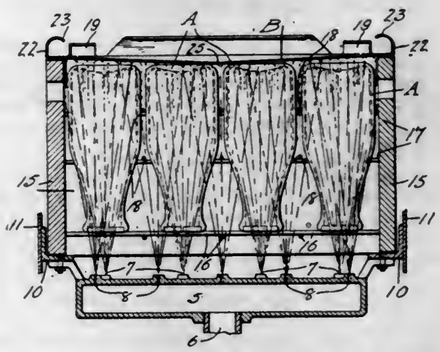
1,765,556. ROTARY-VALVE MECHANISM FOR INTERNAL-COMBUSTION ENGINES. JOHN WILKINSON, Syracuse, N. Y. Filed Aug. 25, 1927. Serial No. 215,293. 4 Claims. (Cl. 123—190.)

1. In an internal combustion engine the combination of a cylinder, a piston movable therein, the cylinder having a port, a rotary valve mechanism comprising a casing having a port opening thereinto, the cylinder port also opening into the casing, a rotor in the casing for closing the ports and having a transfer passage arranged to connect the said ports at intervals during the rotation of the rotor, and means for intermittently applying yielding



pressure at predetermined intervals to press the rotor against the wall of the casing adjacent the cylinder port; said means including a spring and means for intermittently tensioning the spring at predetermined intervals whereby the pressure is applied to the rotor through said spring.

1,765,557. APPARATUS FOR CLEANING BOTTLES. KIRK K. WRIGHT, Kenmore, N. Y. Filed May 5, 1928. Serial No. 275,472. 3 Claims. (Cl. 141—7.)

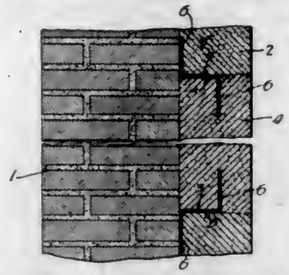


1. A bottle cleaning apparatus including a support for a crate with open top and bottom and adapted to contain bottles arranged with their mouths downwardly, spraying means arranged in operative relation to said support for directing sprays of liquid upwardly at the bottles and between the bottles, and a splash plate removably positioned on the upper portion of said crate above said bottles and against which sprays passing upwardly between bottles impinge and are splashed downwardly against said bottles, said plate having the edges thereof bent upwardly to facilitate handling of said plate and to reinforce the same.

1,765,558. METHOD OF REPAIRING FURNACE LININGS. JOHN E. ANDERSON, Chicago, Ill., assignor to Plibrico Jointless Firebrick Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 1, 1926. Serial No. 145,483. 6 Claims. (Cl. 72—101.)

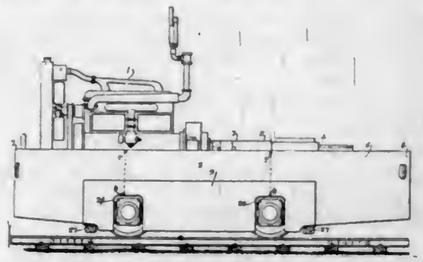
3. A method of repairing a furnace wall construction consisting in removing the defective or damaged portion

of the construction to form an opening for reception of a patch, securing anchor members in position to extend into



the opening, and then filling the opening with plastic material forming a monolithic patch, the anchor members being enclosed by and embedded in the patch.

1,765,559. GASOLINE ENGINE LOCOMOTIVE. WILLIAM C. ARMSTRONG, Springfield, Ohio, assignor to The Ceramic Machinery Company, Hamilton, Ohio, a Corporation of Ohio. Filed Feb. 6, 1928. Serial No. 252,122. 8 Claims. (Cl. 105—172.)

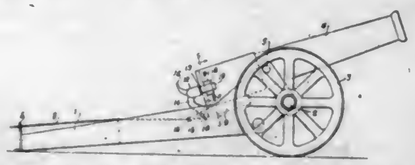


1. In a locomotive of the character described, a general frame formed in one integral body, having side and end walls and supporting provisions for a power plant to be associated with the frame consisting of a pair of ledges at one end of the frame and a plurality of lugs at the other.

1,765,560. PROCESS FOR THE RECOVERY OF SODIUM SULPHITE FROM SPENT SULPHITE LIQUORS. PIERRE ALFRED BARBOU, Paris, France, assignor to Société Barbou & Cié., Paris, France, a Corporation of France. Filed Jan. 12, 1928, Serial No. 246,388, and in France Jan. 21, 1927. 2 Claims. (Cl. 23—129.)

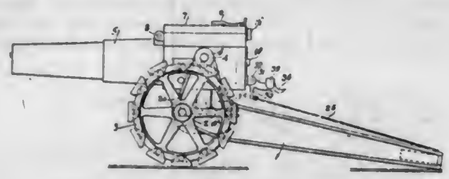
1. The method of recovering sodium sulphite from spent sulphite liquors, which consists in treating the liquors with sulfuric acid to convert the sodium compounds into sulphate, and transforming the latter into sodium sulfite by the addition of an alkali earth bisulphite.

1,765,561. TOY CANNON. CHARLES C. BLACKMORE, Dayton, Ohio. Filed Jan. 16, 1929. Serial No. 332,992. 12 Claims. (Cl. 42—55.)



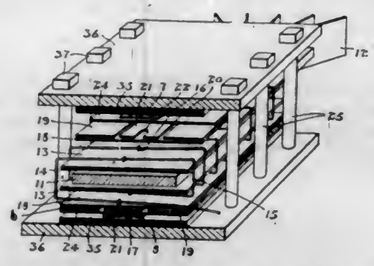
1. In a cannon, a barrel, a cap carrying fulminate chamber independent of the barrel and means for positioning the fuse of a fire cracker in said chamber.

1,765,562. GAS CANNON. CHARLES C. BLACKMORE, Dayton, Ohio. Filed Feb. 1, 1929. Serial No. 336,816. 21 Claims. (Cl. 42—55.)



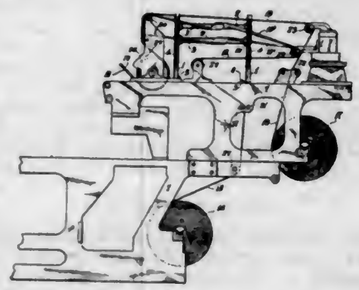
3. In combination, a gun barrel, a cover therefor adapted when elevated to ventilate the barrel, a measuring chamber in said cover, means connecting said measuring chamber with a water chamber, a remotely located water chamber, and means of conveying gas therefrom to the gun barrel.

1,765,563. MEANS FOR MEASURING ELECTRICAL QUANTITIES. PERRY A. BORDEN, Toronto, Ontario, HARRY S. BAKER, Niagara Falls, Ontario, and LOUIS A. PAINE, Toronto, Ontario, Canada, assignors to The Lincoln Meter Company, Limited, Toronto, Canada. Filed Feb. 17, 1925. Serial No. 9,879. 4 Claims. (Cl. 136—4.)



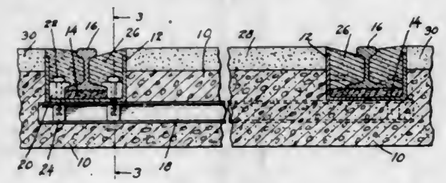
1. A thermal battery comprising a thermal conductor, a plurality of thermo-couples electrically connected and encircling said conductor and being electrically insulated therefrom, electric heating means arranged adjacent to the junction ends of said thermo-couples, insulating means arranged on the outward side of said heating means, and means for clamping said members in a compact unit with the heating means and thermo-couples in intimate thermal relation.

1,765,564. PAPER-BAG MACHINE. WILLIAM A. BUCHANAN, Cincinnati, Ohio, assignor to The Duplex Paper Bag Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Aug. 17, 1928. Serial No. 300,261. 2 Claims. (Cl. 93—33.)



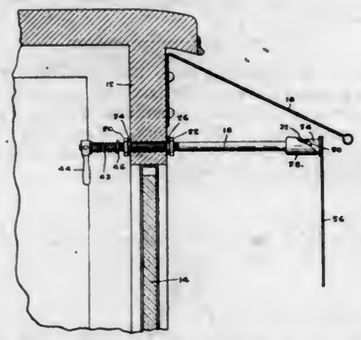
1. In a duplex paper bag machine of the character specified, the combination of means carried by the frame for rotatably supporting two rolls of paper, means for synchronously feeding a web from each roll, slitting means for dividing the lower web into two sections, and means for spacing said sections apart and in superimposed relation with the upper web comprising a pair of suitably mounted standards, a pair of bars horizontally arranged between said standards, and adjusting means capable of varying the angle to which the bars can be set with respect to the standards to insure proper positioning of the said sections beneath the upper web.

1,765,565. RAILWAY-TRACK CONSTRUCTION. JAMES J. BURNS, Detroit, Mich. Filed Sept. 28, 1928. Serial No. 308,935. 12 Claims. (Cl. 238—9.)



8. A railway track comprising, in combination with a foundation bed, cross ties, rail supporting plates arranged upon and secured rigidly to said cross ties, said cross ties and plates forming a rigid rail supporting framework embedded as a unit in said foundation bed, and a railway rail extending lengthwise over and yieldingly supported upon each supporting plate and removably secured thereto.

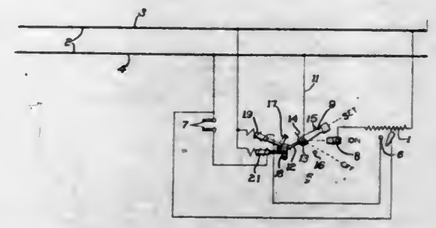
1,765,566. GLARE-SHIELD DEVICE FOR AUTOMOBILES. WILLIAM H. BURTIS, Minneapolis, and MONROE S. HOWARD, Hastings, Minn. Filed Mar. 26, 1928. Serial No. 264,640. 5 Claims. (Cl. 296—97.)



1. A glareshield device for automobiles comprising a support positioned in advance of and above the windshield, a screen swingingly mounted on said support whereby it may be swung down into operative position ahead of the windshield and may be swung up into folded position, a slidable rotatable spring-tensioned rod extending into the automobile, and connections between the outer end of said rod and said screen whereby rotative movement of said rod causes said screen to move from one position to another and whereby sliding movement of said rod serves to firmly hold said screen in its two positions and to release it therefrom.

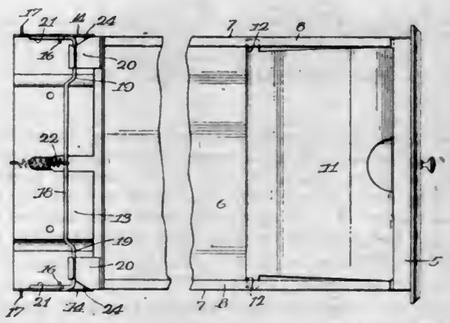
1,765,567. TWO-STEP SWITCH. ORA A. COLBY, Irwin, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Aug. 30, 1923. Serial No. 660,125. 2 Claims. (Cl. 200—97.)

1. Switch mechanism comprising a pair of relatively movable contact members, a switch-operating mechanism therefor comprising a plurality of independent electro-responsive latches, a spring for biasing one of said contact members in one direction, clock-controlled contact members, and a thermo-responsive member, said clock-controlled contact members controlling one of said latches



for causing said spring to move one of said contact members so as to engage the other of said contact members and said thermo-responsive element controlling another of said latches for causing said spring to disengage said contact members in accordance with a predetermined thermal condition of said thermo-responsive element.

1,765,568. VISIBLE INDEX SYSTEM. HERBERT AUSTIN CONSOR, HAROLD LOUIS MATTHES, and ALBERT G. WUEST, Monroe, Mich., assignors to The Weis Manufacturing Company, Monroe, Mich., a Corporation of Michigan. Filed Sept. 12, 1925. Serial No. 55,993. 7 Claims. (Cl. 45—96.)

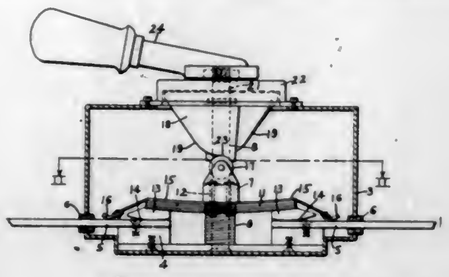


1. In a visible index system, the combination of a cabinet, a member slidable therein, a follower for the inner end of the member, the cabinet having means to provide guides for said member and follower, and to keep the follower in the same plane, means to limit the outward movement of the follower, a spring controlled lost motion connection between the follower and said member permitting relative movement between said member and the follower in the plane thereof, by movement of the member away from the follower, after the follower reaches the limit of its outward movement, so that the said member may be free to swing down and hang vertically, said connection having spring means on the follower to draw the member and follower toward each other a distance when the member is pushed back in the cabinet.

1,765,569. CONTACT FOR CHANNEL-BRUSH SWITCHES. ALFRED CORBETT, Irwin, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Aug. 6, 1927. Serial No. 211,041. 2 Claims. (Cl. 200—146.)

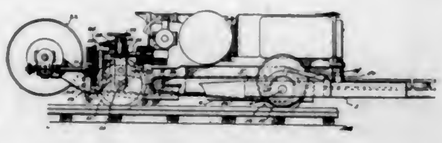
1. A switch comprising a pair of spaced contact members, and a movable switch member comprising a carrier,

a yielding laminar member mounted on the carrier and extending transversely of the direction of movement of the carrier and comprising a plurality of separate flexible plates, contacts mounted on the free ends of the undermost plate having convex contact surfaces for engaging



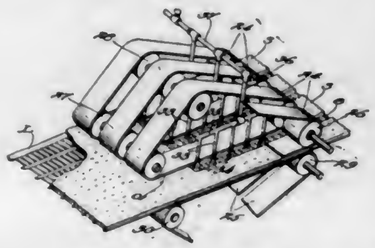
the contact members with a sliding and rolling movement, and means for moving the carrier to closed position, wherein the laminar member is flexed and yieldingly presses the contacts into engagement with the contact member.

1,765,570. MINING MACHINE. CHARLES E. DAVIS, Davenport, Fla., assignor to Goodman Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 3, 1927. Serial No. 165,639½. 24 Claims. (Cl. 105—102.)



1. In combination with a mining machine, a truck, supporting wheels and axles therefor, driving means for a pair of track wheels of said truck, auxiliary traction driving wheels eccentrically mounted on said pair of track wheel axles, and means whereby said truck may be supported and propelled on either said track wheels or said traction wheels.

1,765,571. METHOD AND APPARATUS FOR MAKING LATH MATERIAL. JOHN W. EDSON, Cambridge, HERBERT S. STONE, Walpole, and DAVID B. ARNOLD, Brookline, Mass., assignors to Eastern Expanded Metal Company, Cambridge, Mass., a Corporation of Massachusetts. Filed Sept. 29, 1928. Serial No. 309,278. 33 Claims. (Cl. 92—40.)



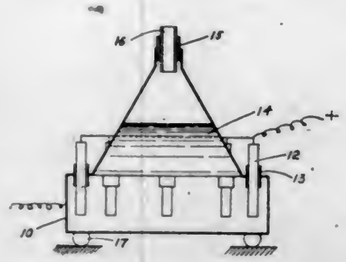
1. The method of making lath material which comprises depositing on a sheet of metal lath fibrous material, and allowing said material to become entangled in the strands of certain areas of said lath while leaving the strands of other areas exposed.

1,765,572. PROCESS FOR PRODUCING ELECTRICAL RESISTANCE ELEMENTS AND THE LIKE. FERDINAND EICHENBERGER, Aarau, Switzerland, assignor, by mesne assignments, to Globar Corporation, Niagara Falls, N. Y., a Corporation of New York. Filed May 5, 1923, Serial No. 636,957, and in Switzerland May 11, 1922. 8 Claims. (Cl. 201—76.)



7. The process of producing molded electrical resistance heating elements, which comprises pressing comminuted material containing silicon carbide as an essential and substantial constituent thereof into an enclosing mold of tubular form and having its wall provided with through apertures and with a heat-decomposable liner between said mold and the material to be molded, heating the mold and its contents to an extent required to solidify said element and to decompose said liner, and removing said element from said mold.

1,765,573. ELECTROLYTIC RECTIFIER. FERDINAND EICHENBERGER, Aarau, Switzerland, assignor, by mesne assignments, to Globar Corporation, Niagara Falls, N. Y., a Corporation of New York. Filed May 28, 1923, Serial No. 642,105, and in Switzerland June 10, 1922. 14 Claims. (Cl. 175—318.)

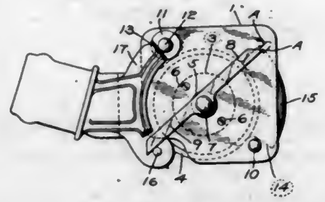


1. An electrolytic rectifier, comprising an anode, and a cathode essentially and substantially composed of silicon immersed in an electrolyte.

3. An electrode for electrolytic rectifiers adapted for immersion therein and having a portion adapted for exposure to the electrolyte composed essentially of silicon and silicon carbide.

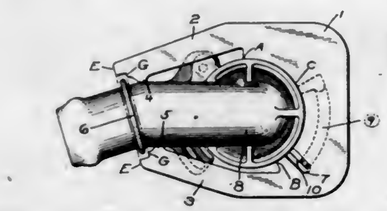
5. An electrode for a rectifying system consisting of a heat-hardened element formed from a mixture containing silicon carbide as an essential and substantial constituent and having one portion thereof of greater electrical conductivity than another portion thereof.

1,765,574. TEST GAUGE. ALEXANDER ENGLAND, Wilkinsburg, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Oct. 18, 1928. Serial No. 313,224. 4 Claims. (Cl. 33—174.)



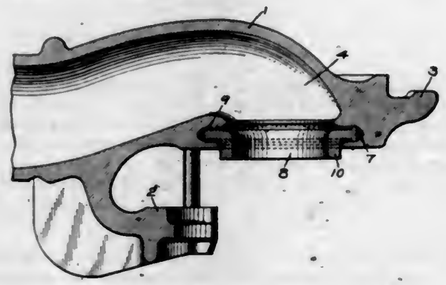
1. A gauge for testing a hose coupling having a guard arm pin and a locking flange comprising a plate provided with a portion engaging the outlet conduit opening of the coupling head and having indicating marks, a pin adapted to engage the shoulder end of the locking flange of the coupling head and a movable member mounted on said plate having a portion adapted to be moved into engagement with the guard arm pin and a portion for indicating by relation to said marks the position of engagement.

1,765,575. HOSE-COUPLING GAUGE. ALEXANDER ENGLAND, Wilkinsburg, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Oct. 18, 1928. Serial No. 313,225. 5 Claims. (Cl. 33—174.)



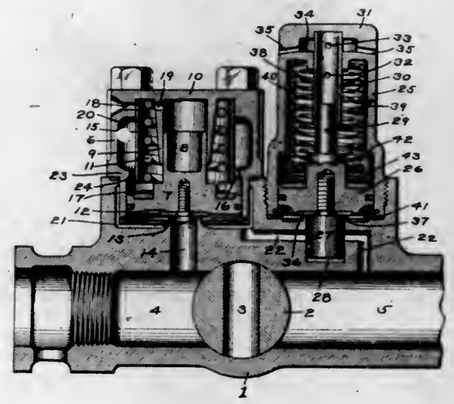
3. A gauge for testing the extent of the circular machined surface of a hose coupling head adjacent to the locking flange comprising a plate having a portion cut away to provide an arcuate edge of predetermined angular extent and adapted to engage said machined surface, and means on the gauge for positioning the gauge on the coupling head.

1,765,576. HOSE COUPLING. CLYDE C. FARMER, Pittsburgh, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Mar. 25, 1927. Serial No. 178,306. 2 Claims. (Cl. 285—63.)



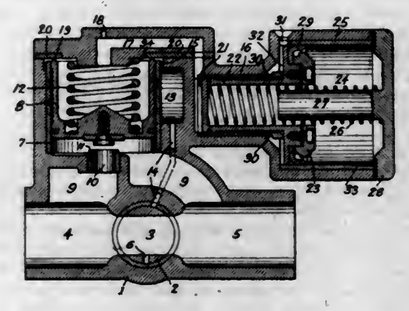
1. The combination with a hose coupling head having an annular groove provided with an annular lateral recess in the wall of the groove, of a gasket of the type having a flange extending into said groove and an annular section having a face for engaging the face of a counterpart gasket, said flange having an annular bead engaging in said lateral recess.

1,765,577. ANGLE-COCK DEVICE. CLYDE C. FARMER, Pittsburgh, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Nov. 24, 1928. Serial No. 321,542. 4 Claims. (Cl. 303—86.)



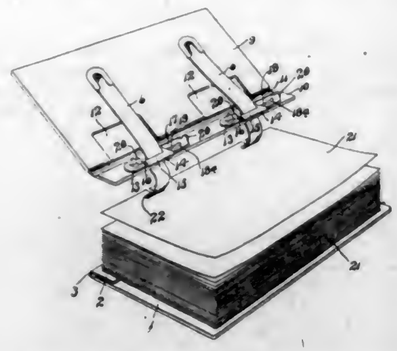
1. An angle cock device comprising a cock, and having a passage for establishing communication from one side of the cock to the other, valve means operated upon a predetermined increase in pressure of fluid at one side of the cock for opening the passage, and separate valve means for restricting the flow of fluid through the passage, said second valve means being operated by further increase in pressure of fluid in the passage whereby the restriction therein is removed.

1,765,578. ANGLE-COCK DEVICE. CLYDE C. FARMER, Pittsburgh, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Nov. 24, 1928. Serial No. 321,546. 7 Claims. (Cl. 303—86.)



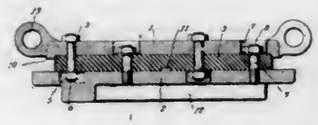
1. A device of the class described comprising a cock, and having a passage for establishing communication from one side of the cock to the other, valve means for the passage, and pneumatic means for actuating the valve means when the pressure of fluid at one side of the cock increases or decreases a predetermined amount.

1,765,579. LOOSE-LEAF BINDER. EDWARD F. GRAF, Grand Rapids, Mich., assignor, by mesne assignments, to Cyrus B. Newcomb, Grand Rapids, Mich. Filed May 3, 1926. Serial No. 106,193. 4 Claims. (Cl. 129—41.)



3. A clamp comprising, a member having a slot and a second member adapted to slide longitudinally of the slot in the first member, said second member having a slot, a portion of which registers with the slot in the first member and a portion of which is laterally offset therefrom and an inclined portion joining the two.

1,765,580. TRACTOR SHOE. JOHN C. HAGGART, Jr., Alma, Mich., assignor to Republic Truck Sales Corporation, Alma, Mich., a Corporation of Michigan. Filed Jan. 9, 1928. Serial No. 245,293. 2 Claims. (Cl. 305—10.)



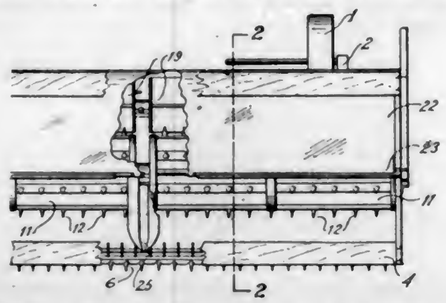
1. In a tractor shoe, a substantially flat upper section, a substantially flat lower section, a resilient pad inserted between said sections, binding members securing the pad to the upper section and free from the lower section, and similar members securing the pad to the lower section and free from the upper section.

1,765,581. PROCESS IN WHICH CELLULOSE ACETATE ARTIFICIAL SILK AND LIKE PRODUCTS ARE TREATED WITH HOT LIQUORS. ARCHIBALD JOHN HALL, Timbersbrook, Congleton, England, assignor to Celanese Corporation of America, a Corporation of Delaware. Filed July 22, 1925, Serial No. 45,416, and in Great Britain July 31, 1924. 2 Claims. (Cl. 8—20.)

1. Process for preventing loss of lustre in bleaching, dyeing, printing, steaming and otherwise treating textile materials, films and other materials comprising cellulose acetate at temperatures in excess of about 85° C., characterized in that the treatment is effected in the presence of a protective saline agent comprising a neutral ammonium salt in an aqueous solution of a concentration effective to maintain the lustre of said materials.

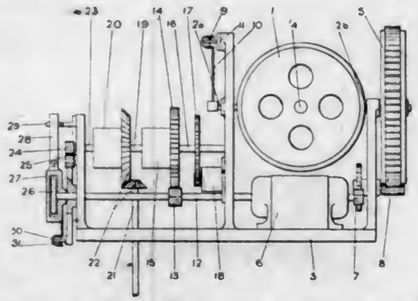
1,765,582. COMBINED HARVESTING AND THRASHING MACHINE. WILLIAM L. HANLON, Sterling, Kans. Filed July 5, 1927. Serial No. 203,559. 2 Claims. (Cl. 56—123.)

1. A combined harvester and thrasher, comprising a frame, cutter bars in front of the frame, a feeder in rear of the cutter bars co-extensive with the lengths of the cutter bars, a cylinder and concave in rear of the feeder co-extensive with the lengths of the cutter bars,



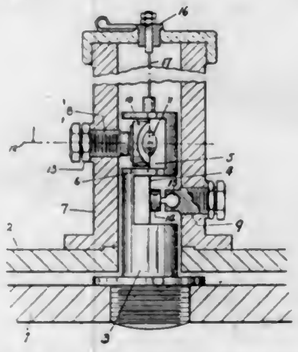
a beater above and in rear of the cylinder and concave and straw discharging means in rear of the beater and in rear of the cylinder and concave.

1,765,583. AUTOMATIC CONTROL OF THE STEERING OF DIRIGIBLE CRAFT. JAMES BLACKLOCK HENDERSON, Blackheath, England. Filed Oct. 28, 1925, Serial No. 65,499, and in Great Britain Nov. 5, 1924. 10 Claims. (Cl. 244—29.)



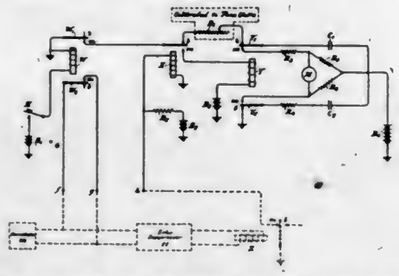
1. In automatic steering control mechanism for dirigible craft, the combination of a constrained gyroscope responsive to movements of the craft about a vertical axis; motive mechanism controlled by said gyroscope, and means for measuring the angular acceleration of said craft partly controlled by said mechanism and provided with a constraining connection responsive thereto.

1,765,584. BEARING. JAMES BLACKLOCK HENDERSON, Blackheath, England. Filed June 19, 1926, Serial No. 117,178, and in Great Britain June 22, 1925. 7 Claims. (Cl. 308—2.)



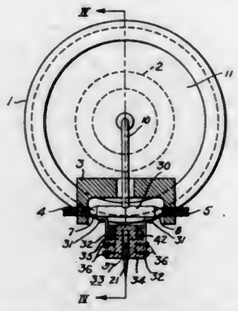
1. A knife edge bearing for the relative motion of two members which are required to have limited relative movement about an axis substantially vertical with minimum friction, comprising three vertical and colinear knife edges on one of the members engaging with five plane surfaces on the other member, each of said surfaces being arranged to provide line contact with one of said knife edges.

1,765,585. SET FOR MEASURING OPERATING TIME OF RELAYS. JOSEPH HERMAN, Westfield, N. J., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Sept. 21, 1926. Serial No. 136,887. 5 Claims. (Cl. 175—183.)



1. The combination with an electrical circuit including a source of voltage and a responsive device operated thereby of a testing set for measuring the time intervals in the operation of said responsive device, said testing set comprising a short circuit across said electrical circuit, two condensers, separate charging circuits for said condensers, a variable resistance included in the charging circuit of one of said condensers, manually controlled switching means for closing the charging circuits of said condensers and for controlling the short circuit across said electrical circuit, and means controlled by said responsive device for simultaneously discharging said condensers through a differential meter.

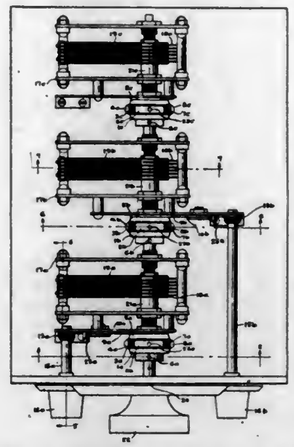
1,765,586. REPRODUCING DEVICE. JURJEN S. HIGH, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed June 24, 1927. Serial No. 201,048. 7 Claims. (Cl. 274—35.)



1. In a reproducing device, a diaphragm, a needle-carrying assembly rigidly connected to said diaphragm in the plane in which the needle is actuated by the undulations of a phonograph record representing sound intentionally recorded thereon and flexibly connected to said diaphragm in planes approximately perpendicular to the first-mentioned plane.

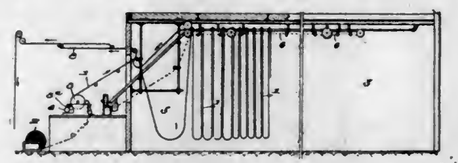
1,765,587. TUNING DEVICE FOR RADIO APPARATUS. MONROE S. HOWARD, Hastings, Minn. Filed Oct. 4, 1926. Serial No. 139,386. 4 Claims. (Cl. 74—7.)

1. A tuning device for radio apparatus comprising a plurality of stationary condenser members, a plurality of movable condenser members cooperating respectively with said stationary members, sleeves to which said movable members are secured, a shaft passing through said



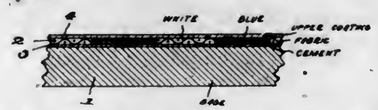
sleeves, means for causing the rotation of said shaft to be imparted to said sleeves in unison, and means for independently turning said sleeves.

1,765,588. PROCESS OF MAKING FLOOR COVERINGS. RALPH G. JACKSON, Woodbury, N. J. Filed Oct. 13, 1926. Serial No. 141,396. 7 Claims. (Cl. 91—67.9.)



1. The process of making floor coverings which consists in the steps of first coating an asphaltic base material on both sides with a quick drying oil paint having a high content of a low boiling diluent and drying said paint by artificial means to quickly seal the asphaltic constituents in the base, and then printing a design on one surface of the painted base with a relatively slow drying paint.

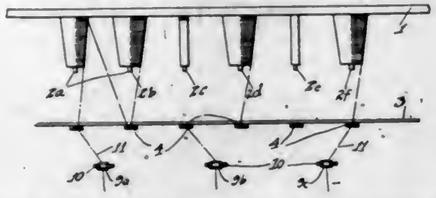
1,765,589. SMOOTH-SURFACE TEXTILE FLOOR COVERING. RALPH G. JACKSON, Woodbury, N. J. Filed June 6, 1927. Serial No. 196,815. 7 Claims. (Cl. 154—49.)



1. A floor covering of the smooth surface flexible variety comprising a tough flexible supporting base, a decorative woven fabric mounted on said base and having decorative coloring in the fibers but not filling the spaces between the fibers and extending substantially throughout the thickness of said fabric, said fabric being saturated substantially throughout its thickness with a transparent penetrating saturant filling material which is dense, tough and flexible, and which seals the decoration in said fabric and fills the pores between the fibers of the thread of the fabric and the spaces between the thread.

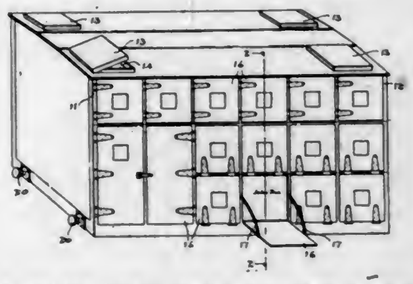
5. A floor covering comprising an asphalt saturated felt base, a colored fabric associated therewith and a binder between the two that seals the asphalt saturant against association with the fabric.

1,765,590. THREAD-CONTROLLING DEVICE FOR CREELS. FRANK B. JAVERY, Worcester, Mass., assignor to Warp Compressing Machine Company, Worcester, Mass., a Corporation of Massachusetts. Filed Dec. 14, 1927. Serial No. 239,988. 1 Claim. (Cl. 242—131.)



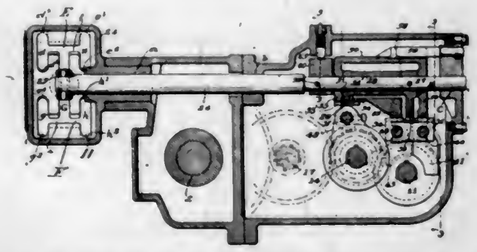
In a device of the class described, a pair of spindles in parallel relation, means for drawing thread endwise from said spindles, with the point of draft located between said spindles and equidistant therefrom, and a pair of thread holders in alinement with said spindles, with the thread passing from one spindle through one holder back to the base of the second spindle and from thence through the second holder to the point of draft, the draft on the thread retaining it in said second holder until the second spindle is exhausted, whereupon the thread automatically draws through the first holder.

1,765,591. PACKAGE-FREIGHT CARRIER. WILLIAM PLATTS KELLETT, New York, N. Y. Filed Feb. 4, 1929. Serial No. 337,416. 11 Claims. (Cl. 105—366.)



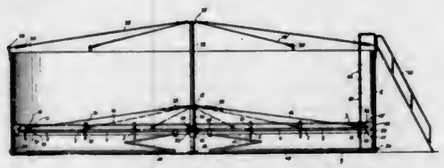
8. A package freight carrier, comprising a container having its interior subdivided into a plurality of individual compartments permanently spaced apart and each having open outer ends, and means for closing the open outer ends of said compartments.

1,765,592. SINGLE-LEVER EIGHT-SPEED SHIFT MECHANISM. DAVID C. KLAUSMEYER, Cincinnati, and HOWARD E. DARBY, Norwood, Ohio, assignors to The Cincinnati Bickford Tool Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Sept. 29, 1924. Serial No. 740,498. 10 Claims. (Cl. 74—39.)



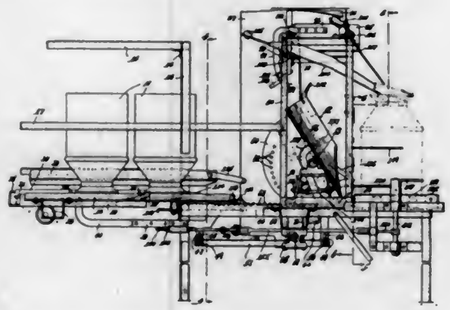
1. In combination with speed-change mechanism, including two independent serially arranged sets of speed-change gears comprising three fixed gear units and three shiftable gear-units, each shiftable gear-unit having two operative positions to produce two speed-changes, a gear shifter operatively connected with each shiftable gear-unit; a rotatable and translatable shaft; a single member carried by said shaft and adapted to engage one of said gear-shifters in each three axial positions of said shaft; a lever pivoted to said shaft and fulcrumed on one side thereof; and a guide controlling the action of said lever and permitting it to be shifted lengthwise of said shaft to a mean position and to two extreme positions, and transversely of said shaft to two effective positions in said mean position and to four effective positions in each of said extreme positions; said lever, in its transverse movements, acting through said shaft and gear shifter to shift said gears thereby selectively to produce eight speed changes.

1,765,593. FLOATING ROOF FOR OIL TANKS. FREDERICH W. KUEFFER, Independence, Mo.; Madge Kueffer, administratrix of the said Frederich W. Kueffer, deceased, assignor to Safety Oil Tank Company, Independence, Mo., a Corporation of Missouri. Filed Apr. 16, 1923. Serial No. 632,487. 32 Claims. (Cl. 220—26.)



1. In combination, a tank, a guide pole rising vertically from said tank and extending above the level of the upper end thereof, a floating roof reciprocable within said tank and rising appreciably above the edge of the latter when sustained by the maximum liquid level therein, said roof being slidable along said guide pole and provided with an expansible peripheral edge, brackets secured to the side of said tank, guy cables connected to said brackets and guide pole, said brackets extending above the side of said tank to keep said guy cables out of contact with said roof when at its maximum level, said brackets being outwardly off-set to permit expansion of said edge slightly beyond the upper end of the side of said tank.

1,765,594. CAN-DELIVERING AND COVER-APPLYING MECHANISM. HARRY D. LATHROP and WALTER H. PAULSON, Chicago, Ill.; said Paulson assignor to said Lathrop. Filed July 16, 1928. Serial No. 293,078. 31 Claims. (Cl. 29—84.)



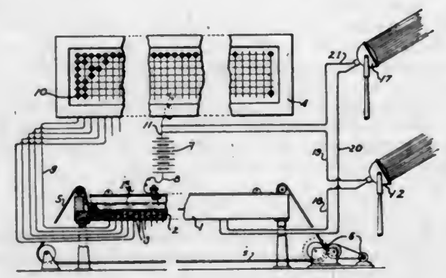
1. In a can washing machine, means for advancing cans and covers therethrough, a can reversing cradle adapted to engage and reverse successive cans from inverted to upright position; and vertically reciprocating means for successively elevating covers in position for application to successively reversed cans, said reversing cradle and covering elevating means being operatively connected to the washing machine mechanism, substantially as described.

1,765,595. CURTAIN BATTEN. JOHN F. LEVAN, Elkhart, Ind., assignor to Excel Curtain Company, Elkhart, Ind., a Corporation of Delaware. Filed Feb. 27, 1929. Serial No. 343,176. 3 Claims. (Cl. 156—31.)



2. A curtain batten comprising a mandrel having a contracted portion at one end, an eye member having a threaded shank extending into the contracted portion, the inner wall of the contracted portion being interlocked with the threads of the shank.

1,765,596. SWITCH CONTROL FOR AUXILIARY DEVICES. JOHN E. LONG, Multnomah, Oreg. Continuation of application Serial No. 212,755, filed Aug. 13, 1927. This application filed Apr. 26, 1928. Serial No. 273,076. 6 Claims. (Cl. 200—46.)

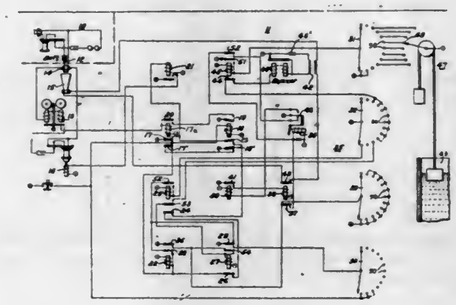


1. The combination with electric circuit controlling apparatus of the character described comprising a container adapted to hold a body of electrical conductive liquid constituting one common terminal of a plurality of electric circuits, and a plurality of terminals, one in each of such circuits, embedded in one wall of such container, a tape-like control element adapted to overlie such latter terminals and separate them from such body of liquid, such control element being electrically non-conductive and perforated in predetermined pattern to uncover such embedded terminals when in registration therewith thus to make corresponding electric circuits thru such liquid body, of a plurality of auxiliary embedded terminals and registering perforations spaced apart a distance greater than their width lengthwise of such tape, such latter terminals and perforations being differently spaced, such terminals being connected in electric series to permit uninterrupted electrical connections when such perforations pass over such terminals.

1,765,597. COMPOSITION OF MATTER. HERBERT EUGENE MALONE, Riverside, and RALPH WILLIAM PRYOR, La Grange, Ill., assignors Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed July 7, 1926. Serial No. 121,049. 4 Claims. (Cl. 106—23.)

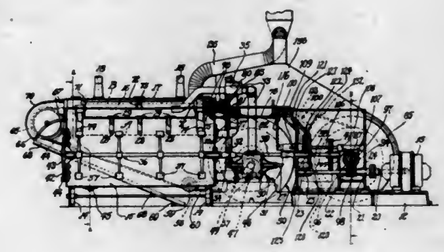
1. A composition of matter comprising rubber 26.5%, sulphur 8%, vermilion 49.25%, cottonseed oil 1.5%, lithopone 12%, and india rubber yellow 2.75%.

1,765,598. TELEPHONOMETER. JAMES L. McCOY and GENNERO DE CROCE, Forest Hills, Pa., assignors to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 12, 1929. Serial No. 346,339. 7 Claims. (Cl. 179—2.)



1. In a signalling system, the combination with a dispatcher's office and a remote station, telephones at said office and station adapted to be connected through a public telephone system, of a solenoid at said station for lifting the telephone receiver thereat, a relay controlled by the telephone ringer for energizing said solenoid, a measuring device at said station, and means including a selector switch responsive to the operation of said relay for producing a number of sounds at the transmitter of the substation telephone determined by the condition of said measuring device, and means for causing the sound-producing means to repeat said sounds and subsequently de-energize said solenoid.

1,765,599. STRAND-WORKING MECHANISM. ROBERT ERNEST MCFARLAND, Cicero, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Aug. 9, 1924. Serial No. 731,199. 7 Claims. (Cl. 91—32.)

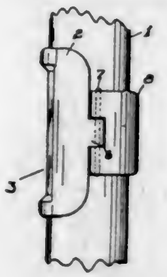


1. In a strand treating machine, a supply spool, a take-up spool, a receptacle containing a treating bath, means for driving the take-up spool to pass the strand through the treating bath, a wiping mechanism including means for directing a blast of air against the peripheral surface of the treated strand, and common means for controlling said wiping mechanism and said driving means.

1,765,600. IDENTIFICATION HOLDER. JOHN D. McGILVRAY, San Francisco, Calif. Filed Aug. 28, 1928. Serial No. 302,527. 1 Claim. (Cl. 40—10.)

A clamp of the class described, comprising a semi-cylindrical plate having a central window, a transparent cover-

ing for said window, a lug on each side of said plate, a second semi-cylindrical plate having a pair of lugs on each

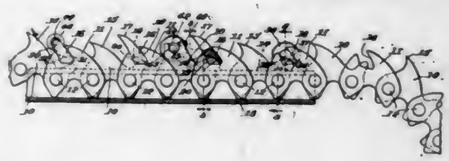


side thereof adapted to engage the lugs on said first plate and a normally bent pin driven into and snugly fitting aligning openings in said lugs.

1,765,601. PROCESS OF CHLORINATING SATURATED HYDROCARBONS. RALPH H. MCKEE and CARROLL M. SALLS, New York, N. Y. Filed May 16, 1923. Serial No. 639,445. 10 Claims. (Cl. 260—162.)

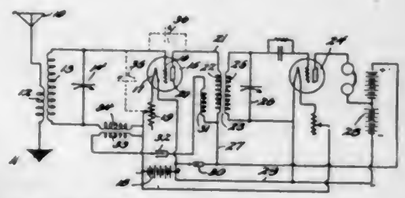
1. The process of chlorinating saturated hydrocarbons which comprises treating such hydrocarbons with sulfuryl chlorid in the presence of an ionizing influence.

1,765,602. CHAIN CUTTER. EDWARD S. MCKINLAY, Denver, Colo. Filed Feb. 11, 1924, Serial No. 692,159. Renewed Jan. 6, 1928. 15 Claims. (Cl. 262—33.)



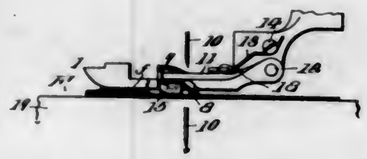
1. In a chain cutter of the character described, a plurality of chain units pivotally connected together, each unit including a series of spaced links, tools adapted to be supported by the links of certain units, and designed to kerf the work, and subsequently break it down between the kerfs with a wedging rotary action, and means carried by the links of the adjacent unit for interlocking engagement with sa'd tools to hold the latter in position for use.

1,765,603. THERMIONIC AMPLIFIER SYSTEM. BYRON B. MINNIUM, Chicago, Ill., assignor, by mesne assignments, to Story & Clark Radio Corp., Chicago, Ill., a Corporation of Delaware. Filed Mar. 2, 1926. Serial No. 91,795. 8 Claims. (Cl. 179—171.)



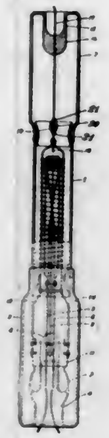
1. In a radio receiving apparatus, in combination, a vacuum tube having a filament, a grid and a plate, a source of plate potential, an output circuit between said source and plate, a tuned input circuit having a secondary and an inductance therein and connected to said grid and filament, which inductance is excluded from the output circuit, and a link circuit having inductance therein connected through capacity with one terminal of said first mentioned inductance and connecting said input circuit and said output circuit and having coupled relation with at least one of said circuits.

1,765,604. PRESSER FOOT FOR SEWING MACHINES. JAMES R. MOFFATT, Chicago, Ill., assignor to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 30, 1928. Serial No. 274,117. 5 Claims. (Cl. 112—235.)



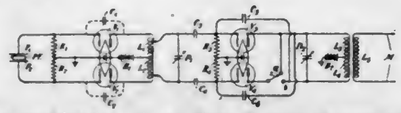
1. A presser foot for sewing machines including in combination a body portion having a needle opening therethrough, a guiding channel extending from the front end of the foot portion longitudinally thereof for directing upturned edge portions of the fabric sections, said presser foot having means for turning down said edge portions into overlapped relation with each other, said presser foot at the inner end of the channel and in front of the needle opening having a vertically movable section carrying the turning down means for the top section, and means for yieldingly supporting the same whereby said movable section moves downward and remains in contact with the fabric section when the presser foot is raised by the passing of a cross seam beneath the same.

1,765,605. SPACE-CURRENT DEVICE. ILIA E. MOUROMSTEFF, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 28, 1925. Serial No. 26,339. 3 Claims. (Cl. 250—27.5.)



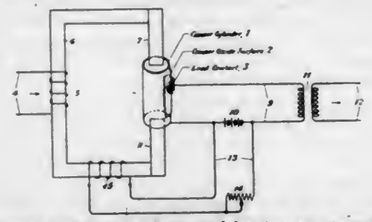
3. In a vacuum tube, an electrode, supports therefor at each end of the tube, one of said supports including a yieldable connection comprising a cage-like member having bars co-directional with said supports.

1,765,606. HARMONIC PRODUCER. RUSSELL S. OHL, New York, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Oct. 29, 1926. Serial No. 145,062. 1 Claim. (Cl. 250—36.)



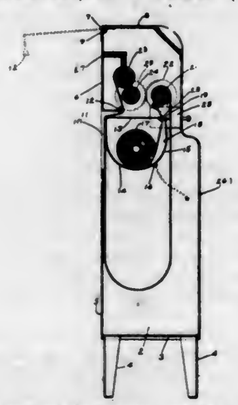
The combination of two three-element vacuum tubes, a resistance interconnecting the grid electrodes of said vacuum tubes, a source of alternating current of fundamental frequency coupled to said resistance, a winding, means to connect the plate electrodes of said vacuum tubes in parallel relationship with each other and in series relationship with said winding whenever even harmonics are desired, means to connect the plate electrodes of said vacuum tubes in series relationship with each other and with said winding whenever odd harmonics are desired, means for rendering said winding selective to any predetermined odd or even harmonic, and a piezo-electric device coupled to said source to maintain its frequency constant as well as the harmonic selected by said winding.

1,765,607. AMPLIFYING DEVICE. RUSSELL S. OHL, Cliffwood, N. J., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Apr. 26, 1928. Serial No. 272,985. 5 Claims. (Cl. 179—171.)



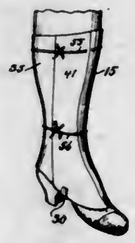
1. A body consisting of a metal having an electronically conducting compound of the metal formed thereon and integral thereto, a circuit for applying a voltage to said metal and said compound whereby an electron flow will take place between said metal and said compound, and means for creating an electromagnetic field for controlling said electron flow.

1,765,608. TOWEL CABINET. GOTTFRID OLSON, Minneapolis, Minn., assignor to Steiner Sales Company, Salt Lake City, Utah, a Corporation of Utah. Filed Nov. 29, 1926. Serial No. 151,477. 7 Claims. (Cl. 312—38.)



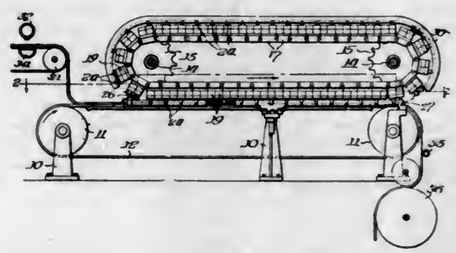
5. A towel cabinet having an opening in its front and also having an intermediate compartment for surrounding and supporting a towel supply, said intermediate compartment having a door openable toward the front of the cabinet for the insertion of a towel supply, feed rolls geared together above said intermediate compartment and means having a rounded edge overlapping the rear of said intermediate compartment for tensioning the toweling as it passes upwardly back of said intermediate compartment to said feed roll.

1,765,609. LEGGING. MARY LOUISE ORR, Hauppauge, N. Y. Filed Nov. 1, 1928. Serial No. 316,414. 2 Claims. (Cl. 36—2.)



1. In a legging the combination of a central member, a pair of end members, strips of material connecting the longitudinal edges of the central member and a longitudinal edge of each of the end members, said strips having openings, said openings also extending through the central member and the end members, tie cords extending through said openings, and a strap connecting said central member and one of said end members.

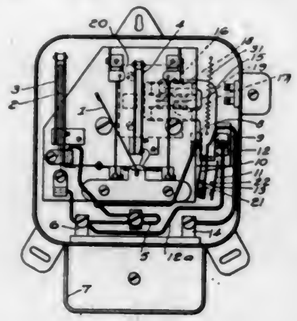
1,765,610. FABRIC-CLEANING MACHINE. GEORGE H. PALM, Chicago, Ill., assignor, by direct and mesne assignments, to Chase Machine Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 10, 1925. Serial No. 55,434. 14 Claims. (Cl. 15—40.)



1. Fabric cleaning mechanism comprising a brush mounted for progressive movement, means for reciprocating the brush when in progressive movement, and means for supporting a fabric for progressive movement in contact with the brush.

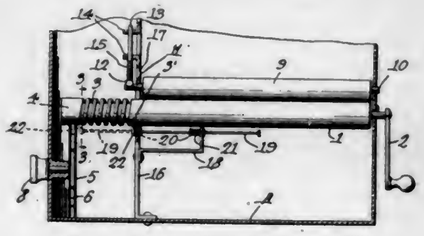
13. In a fabric cleaning machine, in combination, a conveyor belt for supporting the fabric, a progressively movable brush for cooperation with the belt to feed a sheet of fabric progressively, means for moving the brush to scrub the fabric during its progressive movement, a device for flushing the fabric during its progressive movement, and a wringer arranged to act upon the fabric in its progressive movement from the belt.

1,765,611. ELECTRICAL METER. PAUL PASCHEN and GEORG REIME, Nuremberg, Germany, assignors to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed July 30, 1928, Serial No. 296,137, and in Germany Aug. 11, 1927. 7 Claims. (Cl. 171—34.)



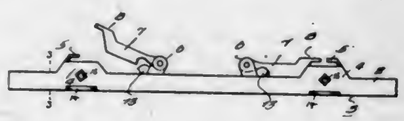
1. In combination, a maximum demand meter and means, including a frequency-responsive relay, having a switch that normally short circuits the meter to render the meter active only during peak-load periods.

1,765,612. MEASURING APPARATUS. FRANK HOWARD PATTERSON, Fredonia, Kans. Filed Oct. 11, 1928. Serial No. 311,819. 5 Claims. (Cl. 194—70.)



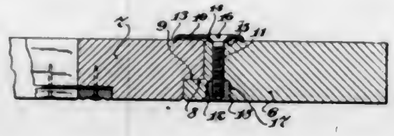
1. Measuring apparatus including a tiltable feed roll, a pressure roll tiltable therewith, a spiral groove in the feed roll having terminal shoulders, a member projecting into and adapted to be shifted by the grooved portion of the feed roll, said member cooperating with the terminal shoulders for holding the roll against rotation in opposite directions respectively, means for conveying a coin or the like against the roll to disengage the grooved portion thereof from said member, and means for shifting said member from one extreme position to its other extreme position when disengaged from the groove.

1,765,613. RAILWAY TIE. GARRIE C. RAMSEY, Lebanon, N. J. Filed May 7, 1926. Serial No. 107,498. 14 Claims. (Cl. 238—360.)



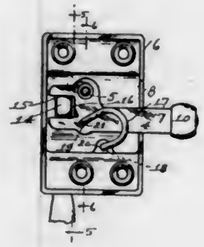
3. In combination with a tie; a member pivotally supported by the tie and adapted to engage a rail flange, and bolt means for holding the pivoted member in engagement with the flange, the bolt means at an acute angle to the top of the tie.

1,765,614. COMBINATION SASH AND SCREEN DOOR FASTENER. GLEN ROBERTS and MARTINIUS DYSTHE, Minneapolis, Minn. Filed Jan. 3, 1928. Serial No. 244,090. 1 Claim. (Cl. 292—194.)



A fastener of the kind described comprising an elongated turn-button having at one end a screw hole and an inwardly extended re-enforcing rib surrounding said hole forming a countersunk seat for a screw head, said turn-button being relatively thin and having on its inner face, at its marginal edge a re-enforcing rib, a screw extending through said hole with its head in said countersunk seat, the outer edges of the ribs being in substantially the same plane, and a nut-acting member applied to the screw and having at its outer end an external flange beveled to a sharp outer edge.

1,765,615. LATCH. GORDON E. ROEDDING and ELMER C. OSBECK, Grand Rapids, Mich., assignors to Grand Rapids Brass Company, Grand Rapids, Mich., a Corporation of Michigan. Filed July 6, 1926. Serial No. 120,711. 4 Claims. (Cl. 292—239.)

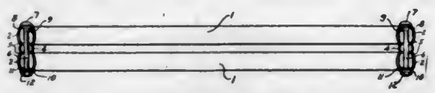


1. In combination with a keeper, a latch comprising: a bolt swingably mounted on a door member and movable to latching position in the keeper and to retracted position; a U-shaped spring pivotally secured at one end on the bolt and yieldingly holding the bolt in one of its said positions, and at a point in the bolt's movement urging the same to the other of its said positions.

1,765,616. CEMENTITIOUS SUBSTANCE AND METHOD OF MAKING THE SAME. FRANK LOUIS ROMAN, Chicago, and HARRY THOMAS WINSEMIUS, Congress Park, Ill., assignors to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Dec. 31, 1924. Serial No. 758,990. 10 Claims. (Cl. 87—17.)

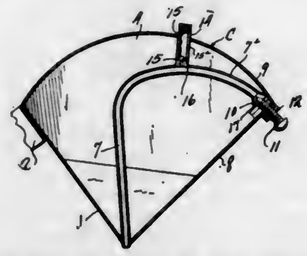
10. A method of producing a cementitious emulsion which consists in adding a solution of dammar resin in carbon tetrachloride to a water solution of gum arabic to form an emulsion thereof, dispersing a solution of shellac in alcohol throughout the emulsion, and finally dispersing rosin oil throughout the resulting emulsion.

1,765,617. BUMPER BAR. RALPH H. ROSENBERG, Springfield, Ohio, assignor to The Central Brass and Fixture Co., Springfield, Ohio, a Corporation of Ohio. Filed May 31, 1929. Serial No. 367,172. 14 Claims. (Cl. 293—55.)



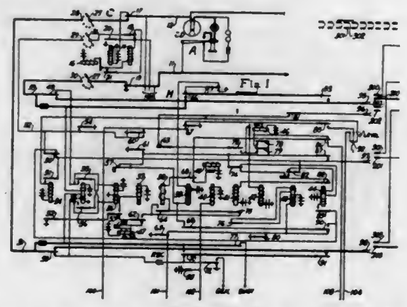
1. In a bumper, a pair of bars, each having its ends turned and formed into large, massive oval-shaped eyes, and means to unite each end of one bar to an end of the other bar and hold the bars in spaced relation to each other.

1,765,618. OIL-FEEDING DEVICE. CLARENCE H. RUDGE and EDWARD ANDERSON BUCHANAN, Nampa, Idaho. Filed Dec. 1, 1925. Serial No. 72,518. 1 Claim. (Cl. 10—126.)



A lubricant applicator for a die stock comprising a container adapted to be applied to the head of the stock at one side of the axis thereof, a tube housed within the container, one end of which constituting an inlet, the opposite end of the tube discharging from the container at the inner portion of the container, the portion of the tube adjacent to the inlet end of the tube being laterally disposed on an outward curvature with respect to the discharge end of the tube, a vent tube in communication with the curved portion of the first named tube and extending exteriorly of the container, said vent tube being provided with longitudinally spaced internal valve seats, a valve member freely mounted within the vent tube between the valve seats for coaction therewith, the wall of the vent tube having a port affording communication between the container and the vent tube between the valve seats.

1,765,619. PARTY-LINE TELEPHONE SYSTEM. NORMAN H. SAUNDERS, Homewood, Ill., assignor to Reserve Holding Company, Kansas City, Mo., a Corporation of Delaware. Filed July 2, 1928. Serial No. 289,739. 24 Claims. (Cl. 179—17.)



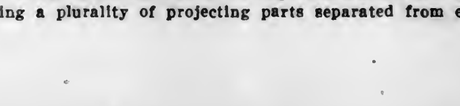
1. In a code signalling machine, a plurality of cam and brush sets each arranged to transmit a different predetermined number of code impulses, another cam and brush set controlling the starting and stopping of the transmission of the code impulses, means for selecting one of said brush sets over either of two paths, and a relay controlled by said starting and stopping brush set for cancelling one of the code impulses adapted to be transmitted by the selected brush set in case said set has been selected over a particular one of said paths.

1,765,620. PRODUCTION OF MENTHOL. WALTER SCHOELLER, Berlin-Charlottenburg, HANS JORDAN, Berlin-Steglitz, and REINHARD CLERC, Berlin, Germany, assignors to Schering-Kahlbaum A.-G., Berlin, Germany. Filed June 22, 1928, Serial No. 287,637, and in Germany July 14, 1927. 4 Claims. (Cl. 260—153.)

1. The process of producing alkylcyclohexanols comprising heating a dihydroxydiphenylmethane-derivative in a hydrogen atmosphere at a temperature from about 150° C. to 280° C. in the presence of a hydrogenation catalyst and of a contact mass having a high porosity until no further hydrogen is taken up.

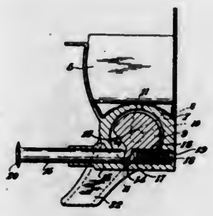
1,765,621. PRODUCTION OF ANÆSTHETICS. WALTER SCHOELLER, Berlin-Charlottenburg, and HANS GEORG ALLARDT, Berlin-Reinickendorf-West, Germany, assignors to Schering-Kahlbaum A.-G., Berlin, Germany. Filed Aug. 18, 1928, Serial No. 300,614, and in Germany Aug. 6, 1927. 3 Claims. (Cl. 260—105.)

3. As a new product the sulfate of 4-iodo-3-aminobenzoic acid diethylaminoethanol corresponding to the formula:



which forms colourless watersoluble crystals melting at 163° C.

1,765,622. DISPENSING DEVICE. OTTO A. SCHOEN, Canton, Ohio, assignor to The Climalene Company, Canton, Ohio, a Corporation of Ohio. Filed July 26, 1928. Serial No. 295,471. 3 Claims. (Cl. 221—106.)

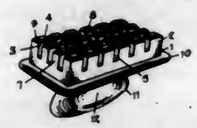


1. A dispensing device including a receptacle portion, a cylindric valve casing communicating with the receptacle through an inlet opening and provided at its opposite side with a discharge opening, a rotary valve within the casing and having a pocket normally communicating with the inlet opening, a lug upon one end portion of the valve, a plunger having a notch engaging said lug for rotating the valve to bring the pocket thereof into communication with the outlet opening, means upon the valve adjacent the lug cooperating with a portion of the plunger adjacent the notch for limiting the opening movement of the valve, and means for returning the valve to normal position.

1,765,623. LATHER RUBBER. ALVIN W. SCHWEIBOLD, Monroe, Mich. Filed Oct. 5, 1929. Serial No. 397,509. 1 Claim. (Cl. 15—187.)

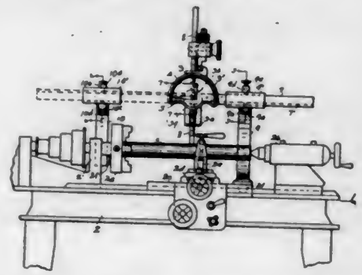
A lather rubber formed of non-pliable material and having a plurality of projecting parts separated from each

other by narrow spaces, the ends of each projecting part having a flat surface in the plane of the other projecting parts and having surfaces surrounding the flat surface



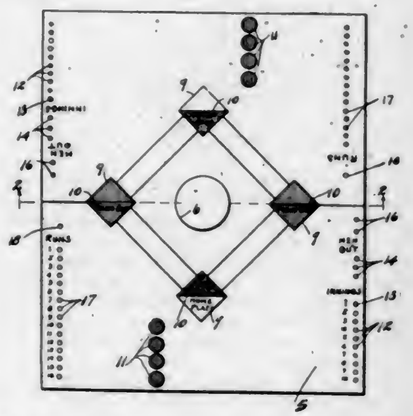
inclined to the flat surface and the side surface of the projecting part and a handle part for manipulating the rubber.

1,765,624. SUPPORT FOR INDICATOR GAUGES. LINO SCUSA, Phoenix, N. Y. Filed Feb. 27, 1928. Serial No. 257,386. 7 Claims. (Cl. 33—172.)



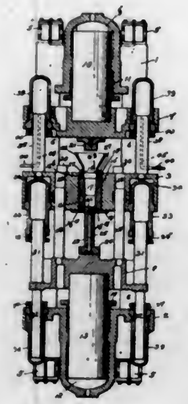
6. An indicator gauge for a lathe or the like including a pair of spaced supports each having a tubular head, a rod receivable in either of said heads, and means to rotatably connect the rod to a gauge so as to enable same to be rotated throughout substantially 180° thereby to support the gauge from either of the supports and with the gauge maintaining its same relation to the work in either of the said positions of the rod, said rod having a longitudinal groove, and tensioned rod holding means carried by the supports and disposed to engage in said groove in its respective positions.

1,765,625. GAME. CHARLES F. SNOVER, Bay City, Mich. Filed Nov. 12, 1928. Serial No. 318,634. 2 Claims. (Cl. 273—93.)



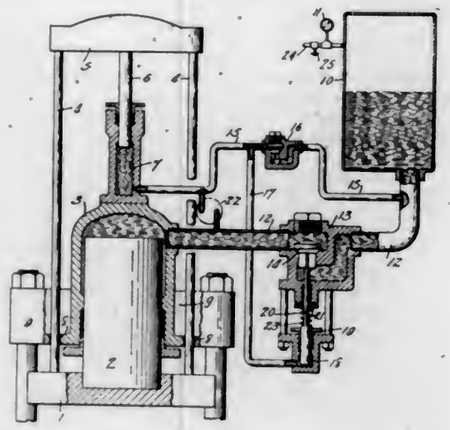
1. In a device of the character described, including a game board having a base ball diamond thereon, each base and the home plate being divided, and the parts thereof being painted different colors and the parts and colors being symmetrically arranged, so that said diamond presents the same aspect when viewed from either end of said board.

1,765,626. PRESS. THOMAS F. STACY, Piqua, Ohio, assignor to The French Oil Mill Machinery Co., Piqua, Ohio. Filed Apr. 14, 1927. Serial No. 183,873. 8 Claims. (Cl. 25—91.)



1. In a press, a mold support, a pair of heads disposed at opposite faces of the mold support, elements connecting said heads and support to form a rigid structure, platens slidably guided toward and from said support from opposite faces thereof, a mold carried by said support and having open ends of different sizes and a tapered intermediate section connecting said open ends, dies carried by said platens to enter said mold from opposite ends, means for limiting the movement of one of said dies into the larger open end of said mold, the other die being free to move through the mold, and fluid pressure means for operating the platens selectively and individually in both directions to compress material that may be placed in said mold, and provide a direct fluid pressure backing for each die during the compression of material in said mold.

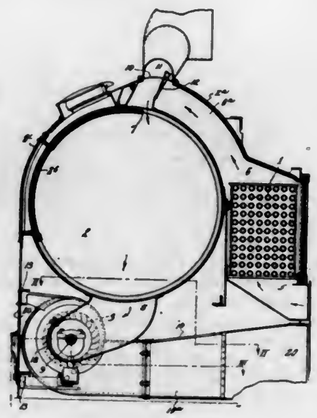
1,765,627. HYDRAULIC PRESS AND THE LIKE. THOMAS F. STACY, Piqua, Ohio, assignor to The French Oil Mill Machinery Co., Piqua, Ohio. Filed May 11, 1927. Serial No. 190,521. 25 Claims. (Cl. 138—10.)



1. In a hydraulic press system, a main ram, an oppositely acting pull-back ram, a source of fluid under pressure connected to both of said rams, valve means normally permitting free flow of said fluid to both rams and preventing return flow to said source automatically, means

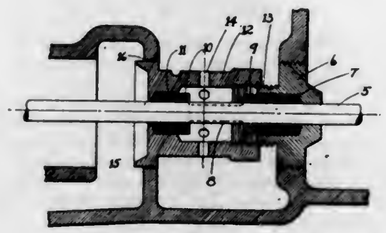
for transferring fluid between said rams in either direction selectively, and means operable automatically during transfer of said fluid to said pull-back ram for operating one of said valve means in a manner to permit direct return of the surplus fluid from said main ram to said source.

1,765,628. DRYING MACHINE. ALONZO D. STALEY, Pleasant Ridge, Ohio, assignor to The American Laundry Machinery Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Nov. 2, 1925. Serial No. 66,251. 2 Claims. (Cl. 34—5.)



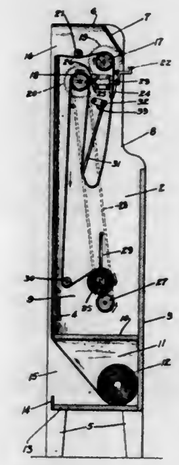
1. In a machine of the character described, a casing having a drying chamber provided with air inlet means at the top thereof and with air outlet means at the bottom thereof, said outlet means comprising an opening at substantially each end of said chamber and an intermediate opening at substantially the middle thereof, two fans one located between each end opening and the intermediate opening, each fan having its inlet communicating with said intermediate opening and with one end opening, and a conduit discharge means communicating with the outlet of each of said fans and leading to a point outside of said casing.

1,765,629. STUFFING BOX. FRED D. STANLEY, Three Rivers, Mich., assignor to Fairbanks, Morse & Co., a Corporation of Illinois. Filed Sept. 17, 1923. Serial No. 663,194. 2 Claims. (Cl. 286—13.)



1. In a stuffing box, the combination with a threaded member, of means for removably positioning said member in a stationary portion of a machine, a threaded second member cooperating when united with said first member to produce a structure adapted to accommodate a piston rod and packing glands, and comprising a creepage chamber thereabout, and drain openings from the chamber, a primary packing disposed substantially within the first member, a secondary packing disposed substantially within the second member, a double gland intermediate said packings, said double gland comprising a unitary structure embodying a head adapted to compress the primary packing and a head adapted to compress the secondary packing said heads being joined by spacing means provided with creepage drain openings, and adapted when the members are united to produce uniform pressure on both packings.

1,765,630. TOWEL CABINET. FRANK M. STEINER, Minneapolis, Minn., assignor to Steiner Sales Company, Salt Lake City, Utah, a Corporation of Utah. Filed Jan. 13, 1927. Serial No. 160,964. 7 Claims. (Cl. 312—38.)

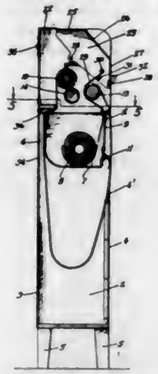


1. A towel cabinet having an opening in its front wall, a pair of feed rolls in said cabinet having substantially the same diameter and also having adhering surfaces and intergeared for the same peripheral speed, a third roller having substantially the same diameter as the first mentioned rollers and geared thereto, a take up roll resting on the third roller, the web of clean towel being adapted to be carried over one roll and formed into a depending loop and then carried over another roll and thence led to the take up roll whereby a pull on the loop would cause the same travel on all the rolls and the towel loop when formed will remain the same length throughout the feed of the web, a device pivoted in the upper portion of the cabinet and adapted to hang down in said loop, said device being swingable through said opening to return the portion of the loop after the same has been pulled through the opening by the user and released.

1,765,631. TOWEL CABINET. FRANK M. STEINER and GOTTFRID OLSON, Minneapolis, Minn., assignors to Steiner Sales Company, Salt Lake City, Utah, a Corporation of Utah. Filed Apr. 2, 1928. Serial No. 266,637. 7 Claims. (Cl. 312—38.)

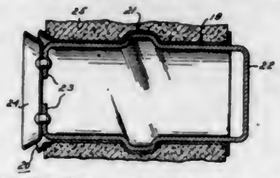
1. A towel cabinet having a delivery opening in its front and also having a compartment in rear of said opening adapted to hold a supply of clean towel said compartment being provided with a door opening outwardly through said opening, a delivery feed roll mounted in said cabinet and over which the clean towel web may be stretched to said delivery opening, a second feed roll in the rear of said first named roll and on substantially

the same level, and having a driving connection therewith for simultaneous movement in opposite directions, a take-up roll whereon the web of soiled towel is wound for contact with said second feed roll, a door arranged to close the space above and in front of said feed rolls and pivotally supported intermediate to its ends in the side



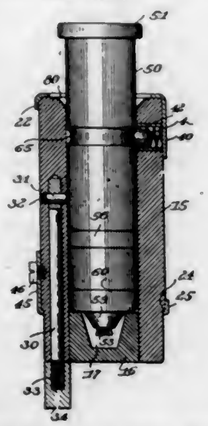
walls of said cabinet, the front portion of said door being adapted when released to move upwardly and expose said feed rolls and allow the clean towel web to be stretched to form a loop over said delivery feed roll without contacting therewith, and said door in its closed position preventing the towel web from being raised out of contact with said delivery feed roll.

1,765,632. VALVE CONSTRUCTION. EDWARD A. STEPHENS, Los Angeles, Calif. Filed Nov. 6, 1928. Serial No. 317,646. 4 Claims. (Cl. 251—39.)



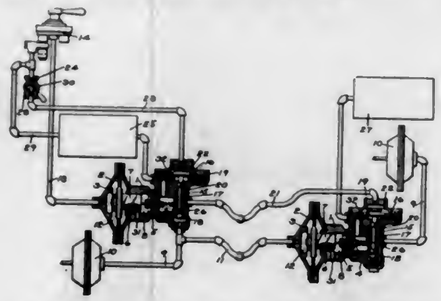
1. Valve construction comprising; a valve; a tubular body having at one end a seat for the valve; and a ball engaging the wall of said body helically, and adapted by rotation to open or seat the valve.

1,765,633. LIGHTER. ARTHUR G. STEVENSON, Rochester, N. Y. Filed May 31, 1928. Serial No. 281,969. 10 Claims. (Cl. 175—296.)



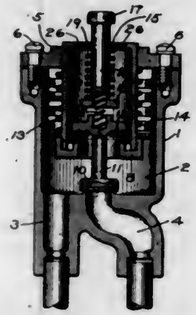
1. The combination with a torch having a spark gap thereon, of a holder in which said torch is normally received, said torch and holder being capable of movement relative to each other, and means for causing a spark across said spark gap while said torch is being withdrawn from its normal position in the holder.

1,765,634. FLUID-PRESSURE BRAKE. CARLTON D. STEWART, Berkeley, Calif., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Oct. 18, 1928. Serial No. 313,295. 4 Claims. (Cl. 303—26.)



1. In a fluid pressure brake apparatus for a truck and a trailer vehicle, the combination with an emergency brake pipe, of a brake cylinder, a valve device on the trailer operated upon a reduction in emergency reservoir pressure for supplying fluid under pressure to the brake cylinder, and a valve device on the truck operated upon an increase in fluid pressure for venting fluid under pressure from the emergency brake pipe.

1,765,635. BRAKE-VALVE DEVICE. CARLTON D. STEWART, Berkeley, Calif., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Oct. 18, 1928. Serial No. 313,297. 4 Claims. (Cl. 303—50.)

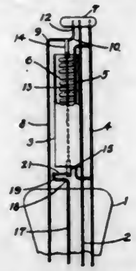


1. A brake valve device for automotive brakes comprising a casing, a movable abutment mounted in said casing and subject to the opposing pressures of the atmosphere and a chamber, a valve for controlling communication from a vacuum creating source to said chamber, a valve connected to the first valve and controlling communication from said chamber to the atmosphere, said release valve being adapted to seat on said abutment upon movement of the abutment, and manually operable means for moving said abutment.

1,765,636. ELECTRICAL VACUUM-TUBE STRUCTURE. LEE SUTHERLIN, East Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Dec. 21, 1923. Serial No. 682,049. 4 Claims. (Cl. 250—27.5.)

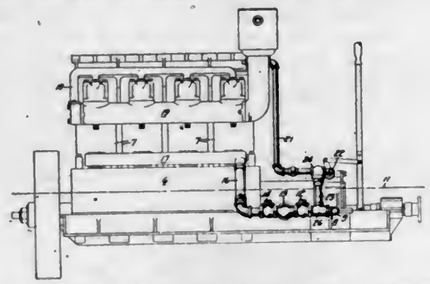
1. In a vacuum tube, a vertical filament, a grid, and an anode, two standards respectively conductively connected

to the two ends of said filament, a press in which said standards are supported and bracing means comprising two standards extending through said press and to a point



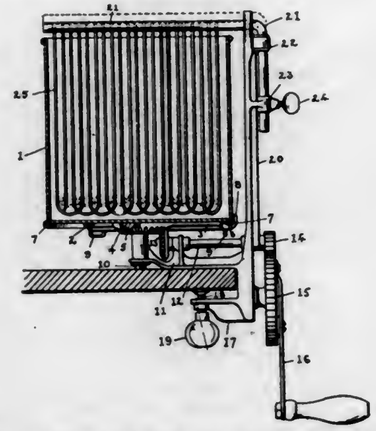
adjacent the upper end of the filament for preventing movement of one of the first named standards, one of said bracing standards supporting said grid, and the other of said bracing standards supporting said anode.

1,765,637. COOLING SYSTEM FOR MARINE ENGINES. HARLAN THOMPSON, Benicia, Calif., assignor to Yuba Manufacturing Company, San Francisco, Calif., a Corporation of California. Filed Jan. 24, 1928. Serial No. 249,191. 4 Claims. (Cl. 123—178.)



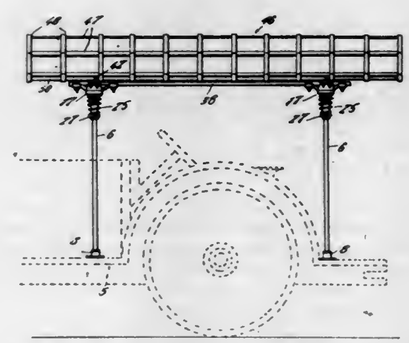
1. A cooling system for marine engines comprising means located below the sea level for supplying sea water to the jackets of said engine, an outlet to the sea above the level thereof for the water from said jackets, a by-pass from said outlet to said supplying means, and a valve in said by-pass for controlling water flow therethrough.

1,765,638. MIXING APPARATUS. KAZIMIER J. TRYNOSKI, Cold Water, N. Y. Filed Mar. 31, 1927. Serial No. 180,038. 3 Claims. (Cl. 259—88.)



1. In a mixing apparatus, the combination of a bracket having an upright thereon, a pair of bevel gears and a horizontal shaft for driving them on the base of said bracket, an upright shaft driven by said beveled gears having a spider thereon, a mixing drum detachably mounted on said spider and rotated by said gears, a bracket mounted on said upright overhanging the mixing drum horizontally, wire fingers projecting downward from said bracket into the mixing drum, said upright having a fork on the top thereof, guide lugs on the side of said upright in which said bracket is adapted to engage, and by which lugs and fork it is held in place.

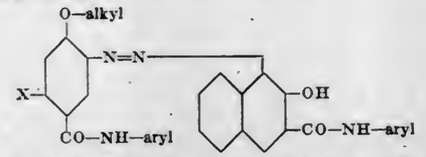
1,765,639. TRACTOR CANOPY. ELA J. TUCKER, National City, Calif. Filed June 18, 1929. Serial No. 371,831. 8 Claims. (Cl. 296—102.)



1. In a structure of the class described, a base, a plurality of supporting standards rising from the base, yielding devices carried by each of said standards at the upper end of the respective standards, side and end members adapted to be supported on said yielding devices, a resilient frame structure, spring actuated hook members carried by each of said end members, and said hook members being adapted to engage said frame at opposite sides thereof for holding the frame in an arched position above said standards.

1,765,640. AZO DYESTUFFS. HERMANN WAGNER, Bad-Soden-on-the-Taunus; OTTO SOHST, deceased, Frankfort-on-the-Main-Hochst, by Adele Sohst, administratrix, Frankfort-on-the-Main-Hochst; and JOSEPH RACHOR, Frankfort-on-the-Main-Hochst, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Aug. 27, 1928, Serial No. 302,432, and in Germany Sept. 19, 1927. 7 Claims. (Cl. 260—95.)

1. As new products, azo dyestuffs of the following general formula:

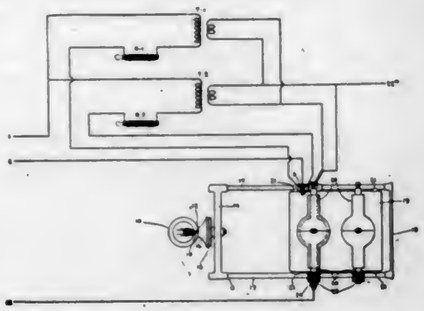


wherein X stands for halogen or O—alkyl, being red to Bordeaux-red powders dyeing shades of good fastness properties.

1,765,641. CIRCUIT FOR X-RAY MULTIPLE-TUBE STANDS. JULIUS B. WANTZ, Oak Park, Ill., assignor to Victor X-ray Corporation, Chicago, Ill., a Corporation of New York. Filed Dec. 8, 1927. Serial No. 238,512. 1 Claim. (Cl. 250—34.)

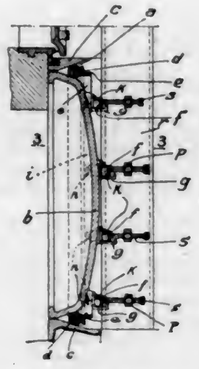
A holder for a plurality of X-ray tubes shiftable to bring such tubes into operable position one at a time, in

combination with means for impressing an electromotive force of a selected magnitude upon the electron emitting electrode of each of said X-ray tubes employed, and com-



prising a plurality of circuits each including a transformer and a regulatory member, and a switch member actuated by movement of said holder to select the circuit to the electron emitting electrode of each separate tube.

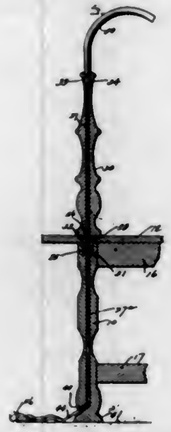
1,765,642. SEALING MEANS FOR COKE-OVEN DOORS. RUDOLF WILHELM, Essen-Altenessen, Germany, assignor to Arnold Beckers, Koln-Kalk, Germany. Filed Feb. 15, 1926, Serial No. 88,205, and in Germany Feb. 25, 1925. 9 Claims. (Cl. 202—248.)



3. The combination with the walls of a door frame and a door inserted therein, the edges of the door being separated from the walls of the door frame, stirrup-like vertically adjustable supports seated on the door; cross bars seated in the said stirrup-like supports, with arms on the cross bars extending into the space between the door and door-frame; a pressure frame consisting of several sections supported at the ends of the arms; said space tapering away from the pressure frame; a packing strip disposed in the space between the door and doorframe, said strip being engaged by the pressure frame and adapted to be compressed thereby into the space between the door and doorframe to seal the door therein; and means at the ends of the cross bars for adjusting the sections of the pressure frame relative to each other and to the cross bars.

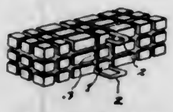
1,765,643. LAMP TABLE. THOMAS ALLISONE and WILLIAM ALLISONE, Tacoma, Wash. Filed Oct. 22, 1928. Serial No. 314,191. 2 Claims. (Cl. 240—4.)

2. In a device of the class described a table including a supporting leg having an axial passageway therethrough opening at the lower end adjacent the lower end of the leg, the table including a top, said top and the upper end of the leg adjacent thereto having a socket aligning with the passageway and larger than the passageway, a lamp standard including a reduced shank rotatably fitting in said socket, a laterally offset lamp fixture at the upper end of the standard including wires extending through the stand-



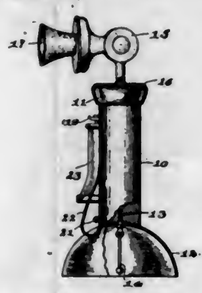
ard and through the passageway of the leg, said table top having a groove therein inwardly from the top surface thereof concentrically about said socket and annularly extending for less than 360°, and a depending stop pin eccentrically carried by the standard and spaced from the shank and extending into said groove.

1,765,644. TOY BLOCKS AND CONNECTING MEANS THEREFOR. RICHARD AUKENTHALER, Cincinnati, Ohio. Filed July 19, 1928. Serial No. 294,031. 1 Claim. (Cl. 46—35.)



Toy blocks each having right angularly disposed intersecting grooves in its sides forming facial projections, a fastener having a shank passing between adjoining blocks and seated in registering grooves thereof, and rectangular loops at the ends of said shank bearing against opposite sides of the blocks and seated in grooves thereof about corresponding facial projections to releasably secure the blocks in assembled position.

1,765,645. COMBINATION TOY. JACOB P. BAUER, Jeanette, Pa. Filed Feb. 14, 1929. Serial No. 339,909. 4 Claims. (Cl. 46—46.)



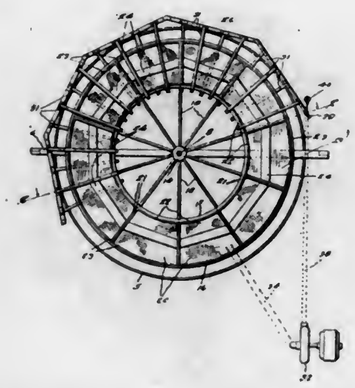
1. A device of the character described including a standard, a subjacent metallic base, and a superjacent rubber pacifying superstructure, means for securing said standard and base together, and sounding means within said base depending from said securing means.

1,765,646. COMBINATION TOY. JACOB P. BAUER, Jeanette, Pa. Continuation of application Serial No. 339,909, filed Feb. 14, 1929. This application filed Apr. 24, 1929. Serial No. 357,779. 1 Claim. (Cl. 46—46.)



A combined toy telephone and receptacle comprising a hollow metallic bell-like base, a medially positioned and upwardly extending and exteriorly threaded boss formed on said base, a sleeve having one end threaded upon said boss which provides a closure for such sleeve end, a removable mouthpiece-simulating and receiver-carrying closure for the other end of said sleeve, and a clapper pivotally secured to said boss within said bell-like base.

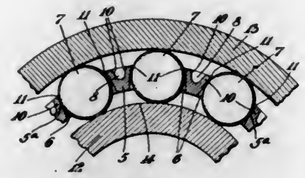
1,765,647. ROTARY CONVEYER AND WASHER FOR VEGETABLES AND FRUITS. ULRICH J. BOEHNKE, San Juan, Tex. Filed Feb. 23, 1929. Serial No. 342,081. 4 Claims. (Cl. 146—194.)



1. In an apparatus of the class described, an open top round tank, a bar across the tank, a shaft journaled on the bar to ride upwardly therefrom centrally of the tank, a rotary conveyer on the shaft, and sprinkling means about a portion of the rotary conveyer, said rotary conveyer including a pair of vertically spaced hubs on the shaft, spokes radiating from the lower hub, a ring on the outer ends of the spokes, a ring on the intermediate portion of the spokes, spokes extending from the inner ring in the upper hub, and removable baskets resting on the spokes between the rings.

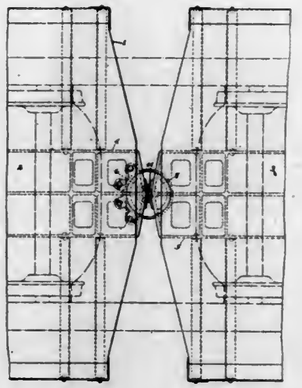
1,765,648. ROLLER-BEARING CAGE. GEORGE R. BOTT, Stamford, Conn., assignor to Norma-Hoffmann Bearings Corporation, Stamford, Conn., a Corporation of New York. Filed Sept. 9, 1926. Serial No. 134,372. 2 Claims. (Cl. 308—217.)

1. A roller bearing cage consisting of a one piece cage ring having spaced rectangular openings extending radially therethrough, bearing rollers rotatable in said openings and each opening having portions of its opposite side walls extending in substantially parallel relation to each other to the inner face of the cage ring, and other portions of said walls converging inwardly towards each other to the outer face of the ring on arcs the radii of



which are greater than the periphery of the roller so that said roller will have contacting engagement with the opposite side walls of the opening only at points inwardly of the outer face of the ring to limit outward movement of the roller through said opening and the outer edges of said side walls are thereby prevented from contacting with the periphery of the roller.

1,765,649. ARTICULATED CAR. FRANCIS McF. BRINCKERHOFF, Suffern, N. Y., assignor to Pressed Steel Car Company, Pittsburgh, Pa., a Corporation of New Jersey. Filed Jan. 31, 1930. Serial No. 424,865. 14 Claims. (Cl. 105—4.)

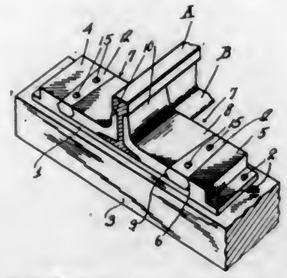


1. An articulation for adjacent ends of two car bodies supported on a common truck, comprising a downward depending member on one of said bodies having a convex end portion in the shape of a portion of a sphere, a bearing on said truck for the reception of said convex end portion, a downward depending member on the other of said bodies having an end portion in the shape of a portion of a sphere and a suitably shaped concave depression in the top face of said convex end portion of the first mentioned downward depending member for the reception of the second downward depending member, said last referred to downward depending member having its bearing surface wholly on one side of the medial line of the spherical concave surface upon which it rests.

1,765,650. RAIL JOINT. ADELIN H. BROUSSARD and LOUIS K. THIBODEAUX, New Orleans, La. Filed Mar. 5, 1929. Serial No. 344,381. 1 Claim. (Cl. 238—210.)

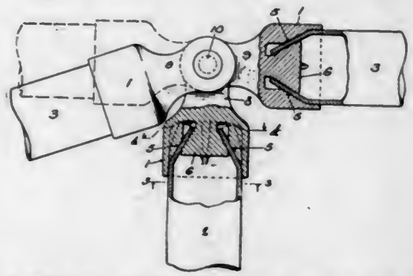
In combination, a tie, a tie plate secured on the upper face thereof, the intermediate portion of the upper face of the tie plate providing a seat supporting a rail, shoulders formed on the upper face of the respective end portions of the tie plate, the inner edge of each shoulder

being inclined gradually from one end thereof to the other end, the inner edge of each shoulder being formed with a V-shaped channel, a pair of fish plates for disposition on the tie plate on opposite sides of the rail, the outer ends of the horizontal portions of said fish plates being spaced with respect to the inclined inner edges of the respective shoulders, the outer edge of the horizontal



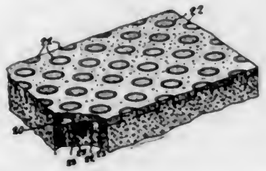
portion of each fish plate being inclined gradually from one end to the other and being formed with a V-shaped channel, and locking wedges slidably fitted between the outer ends of the horizontal portions of the fish plates and the respective shoulders, the longitudinal edges of the locking wedges being beveled for cooperation with said V-shaped channels, and means for positively securing the locking wedges in their adjusted positions.

1,765,651. FITTING FOR TUBULAR STRUCTURES. HENRY BRYANT, Waukesha, Wis. Filed June 25, 1928. Serial No. 647,489. 2 Claims. (Cl. 287—119.)



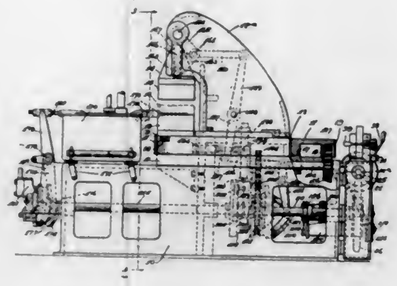
1. A fitting for tubular structures formed with a socket having inwardly inclined ribs on its outer wall and a core having inwardly inclined ribs opposite the recesses between the ribs on the outer wall, said ribs being adapted when the fitting is forced axially upon the end of a pipe, to flute and bend said end into interlocking engagement with the fitting.

1,765,652. FLOOR OR PAVEMENT AND METHOD OF PRODUCING THE SAME. EDWARD W. BURGESS, Milwaukee, Wis., assignor to A. O. Smith Corporation, Milwaukee, Wis., a Corporation of New York. Filed June 6, 1928. Serial No. 283,156. 20 Claims. (Cl. 94—8.)



18. A reenforcing and wear-resisting grid for pavements and the like, comprising a sheet metal body and integral projections extending upwardly and downwardy from said body, said body having openings therethrough for receiving filler material.

1,765,653. AUTOMATIC DIE-CASTING MACHINE. ERIC CARLSON, Chicago, Ill., assignor to Stewart Die Casting Corporation, Chicago, Ill., a Corporation of Delaware. Filed June 28, 1928. Serial No. 289,034. 17 Claims. (Cl. 22—77.)



1. In a machine of the character described, the combination of a main frame, conveying means supported by said frame, a die member carried by said conveying means, a movable head carrying a co-operating die member, and positively actuated means for stopping said conveying means at a predetermined point with said die members in exact alignment with each other.

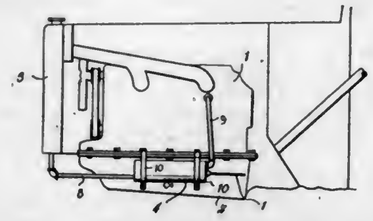
1,765,654. CARBURETOR. WILLIAM C. CARTER, Flint, Mich. Filed May 17, 1926. Serial No. 109,660. 7 Claims. (Cl. 261—50.)

1. A carburetor provided with a mixing chamber, a throttle valve, a tubular member connected with said throttle valve and arranged to project into the mixing chamber, said tubular member serving as an opening through which atomized fuel is introduced into the mixing chamber, a venturi inside of said tubular member mounted in fixed relation with the same and spaced away from the side wall of said tubular member so as to form an air passageway, and air inlet ports for said passageway located above the throttle valve.

1,765,655. INTERNAL-COMBUSTION-ENGINE HEATER. FRED A. CHAPMAN and WILLIAM KOTVIS, Hillsboro, Wis. Filed Sept. 13, 1928. Serial No. 305,772. 1 Claim. (Cl. 123—196.)

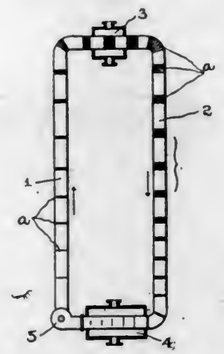
In an internal combustion engine, a heater comprising a hollow body of semi-circular formation in cross section and having an open-sided recess formed in its flat side,

said flat side being engaged against the oil pan of the engine whereby the recess is closed by said pan, a heat-



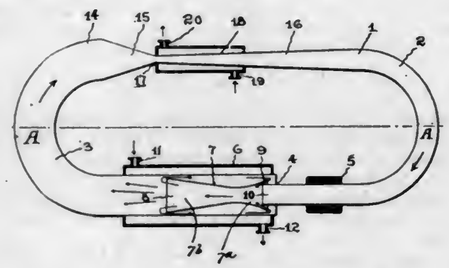
ing unit mounted in the recess, and means connecting the hollow body with the water jacket and radiator of the engine.

1,765,656. ART OF REFRIGERATION. BARTON H. COFFEY, Elizabeth, N. J. Original application filed Aug. 9, 1920, Serial No. 402,403. Divided and this application filed Nov. 17, 1925. Serial No. 69,624. 8 Claims. (Cl. 62—115.)



1. In a device of the character described, the combination of a closed valveless circulating system, including a pair of risers adapted to set up static pressures in a refrigerant therein by gravity alone and constituting compressor means in said system, a cooler operatively connected in said system and a condenser also operatively connected in said system.

1,765,657. ART OF REFRIGERATION. BARTON H. COFFEY, Elizabeth, N. J. Filed Dec. 21, 1925. Serial No. 76,697. 8 Claims. (Cl. 62—115.)

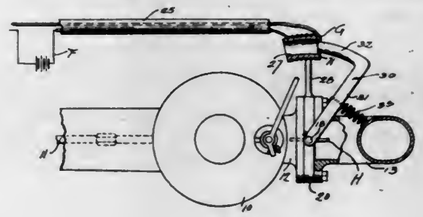


1. In a refrigerating system the combination of a closed and unbroken conduit having a refrigerant of mixed vapor and liquid therein, an expanding nozzle, a compressing nozzle, said nozzles being joined in said conduit, a brine cooler in contact with said expanding nozzle, means to impart heat energy to said refrigerant and means to transform said heat energy into kinetic energy at high pressure.

1,765,658. PROCESS FOR PRODUCING FAST COLORED RESISTS UNDER ANILINE BLACK. WILLIAM COTTON, Hochst-on-the-Main, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Jan. 28, 1926, Serial No. 84,510, and in Germany Feb. 5, 1925. 2 Claims. (Cl. 8—5.)

1. Process for producing fast colored resists under aniline black, which consists in printing on the goods, previously treated with a padding-bath as it is generally used in the dyeing with aniline black, enol esters of vat dyestuffs to which are added compounds which give an acid reaction on steaming without tendering the fiber and then finishing the goods in the manner practiced in the production of aniline black.

1,765,659. SPEED REGULATOR FOR MOTOR VEHICLES. WALTER B. DAVIS, Aurora, Ill. Filed June 18, 1923. Serial No. 646,241. 1 Claim. (Cl. 137—139.)



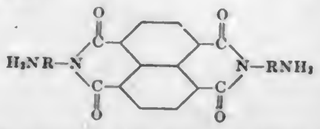
In a speed regulator attachment for motor vehicles the combination of a relatively thin supporting ring having a passageway therethrough, a valve operating in said passageway having a pin rotatably bearing in said ring, a lever arm connected with said pin in right angled relation therewith exteriorly of the ring, said arm at the free end thereof having a rigidly connected arcuate armature struck concentric with the pivot axis of said pin, a bracket arm radially carried by said ring rigid therewith, and a solenoid tube carried by said bracket arm at the outer end thereof having an arcuate passageway therein struck concentric with the valve pin axis, the passageway of the solenoid tube being adapted to receive the arcuate armature of the valve arm therein, the valve arm bearing such a relation to the tube that it will contact the solenoid tube prior to the closing of the valve in the passageway of the ring to hold said passageway partially open.

1,765,660. REDUCTION OF AROMATIC NITRO COMPOUNDS. ARTHUR W. DAWES, Cedarhill, N. Y., assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Feb. 23, 1929. Serial No. 342,302. 4 Claims. (Cl. 260—130.5.)

1. The process which comprises subjecting an aromatic nitro compound to the action of manganous sulfide.

1,765,661. DERIVATIVES OF 1.4.5.8-NAPHTHALENE-TETRACARBOXYLIC ACIDS AND PROCESS OF PREPARING THEM. WILHELM ECKERT and HEINRICH GREUNE, Hochst-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Jan. 27, 1927, Serial No. 164,125, and in Germany Feb. 9, 1926. 6 Claims. (Cl. 260—44.)

3. The process of making vat dyestuffs which comprises heating at a temperature of about 150° C. a compound of the formula:

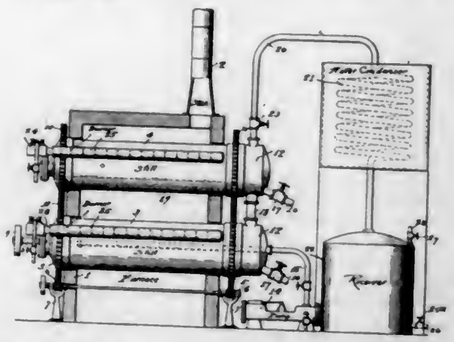


wherein RNH_2 represents an aminoaryl radical having the amino group adjacent to the R—N linkage.

1,765,662. DERIVATIVES OF 1,4,5,8-NAPHTHALENE-TETRACARBOXYLIC ACID AND PROCESS OF PREPARING IT. WILHELM ECKERT and HEINRICH GREUNE, Frankford-on-the-Main-Hochst, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Original application filed Jan. 27, 1927, Serial No. 164,125, and in Germany Aug. 30, 1926. Divided and this application filed Oct. 9, 1928. Serial No. 311,414. 6 Claims. (Cl. 260—124.)

1. The process which comprises treating with an orthodiamine compound a 1.4.4.8-naphthalenetetracarboxylic acid compound in the presence of a diluent at a temperature below 100° C.

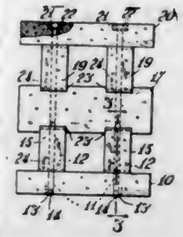
1,765,663. PROCESS FOR CONVERTING OIL. GUSTAV EGLOFF and HARRY P. BENNER, Chicago, Ill., assignors to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Sept. 1, 1920, Serial No. 407,406. Renewed Mar. 18, 1929. 8 Claims. (Cl. 196—61.)



8. A process for treating petroleum oil comprising subjecting a body of oil while in motion to surface distillation by external heating, removing the vapors from the zone wherein they are generated and subjecting the same while travelling through an elongated enlarged zone at relatively slow velocity to an increased temperature adequate to effect substantial cracking thereof, condensing the vapors and collecting the resulting distillate, and maintaining a superatmospheric pressure on the oil and vapors during the heat treatment.

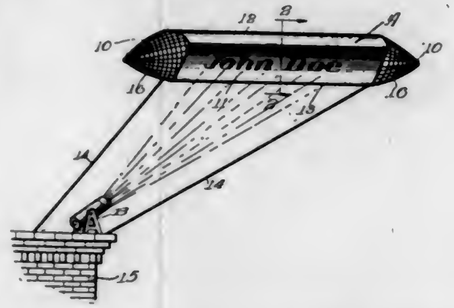
1,765,664. SIGNAL FOUNDATION. OTTO S. FLATH, Chicago, Ill. Filed Sept. 11, 1926. Serial No. 134,827. 6 Claims. (Cl. 72—77.)

1. A foundation of the character described, comprising a plurality of precast reenforced units adapted to be arranged in transversely disposed superposed relation, all of said units being provided with openings therethrough, the openings in the respective units being adapted to register with each other, the surfaces of said units about said



openings being countersunk, tie-rods passing through the registering openings in the superposed units, and means embedded in the lower surfaces of the bottom unit for locking said rods in place.

1,765,665. AERIAL ADVERTISING DEVICE. OSCAR E. FRIEDER, Chicago, Ill. Filed June 25, 1927. Serial No. 201,311. 1 Claim. (Cl. 40—127.)



An aerial advertising device comprising in combination an aerostat of elongated, cigar-shaped, balloon type formed in cross-section to provide flat sides converging toward the bottom and affording elongated projector screen surfaces on opposite sides; a guy rope secured to said aerostat adjacent each end thereof and anchored at their ends to a fixed support; and a light projector located on said fixed support in convenient proximity to the anchorage of said guy ropes in position to project light rays displaying advertising matter on one of said screens, said projector being adjustable to varying angles to maintain light projection in alignment with the aerostat, the inclined formation of said screens serving to present the same in downwardly tilted position toward the projector so as to be presented substantially at right angles to the light rays and prevent distortion and render the advertising matter readily visible from the ground.

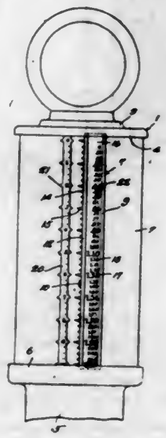
1,765,666. MANUFACTURE OF HOLLOW BODIES CONSISTING OF VULCANIZED RUBBER. WILFRIED GENTH, Cologne-Stammheim, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Mar. 14, 1929, Serial No. 347,179, and in Germany Mar. 21, 1928. 2 Claims. (Cl. 18—56.)

2. Improvement in the manufacture of hollow articles consisting of vulcanized rubber, comprising the use of methaldehyde as aerating or inflating agent in an amount of about 0,5—1 gram calculated upon the formation of balls of 10 cms. diameter.

1,765,667. PROCESS FOR THE TREATMENT OF BEVERAGES. AAGE GUSMER, Woodbridge, N. J. Filed July 29, 1925. Serial No. 46,887. 7 Claims. (Cl. 195—1.)

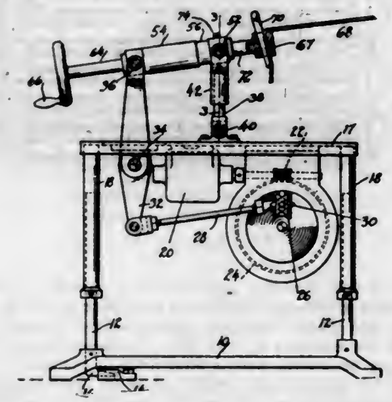
6. In the treatment of malt material containing alcohol in excess of that specified by the National Prohibition Act, the steps of boiling the malt material until the quantity of alcohol remaining therein is non-violative of said act, substantially immediately adding to said malt material sulfur dioxid and body sugars, and continuing the boiling.

1,765,668. COMPUTATOR CARD HOLDER. MAX WAITE HARTZELL, Woodland, Calif. Filed Jan. 7, 1929. Serial No. 330,945. 2 Claims. (Cl. 116—135.)



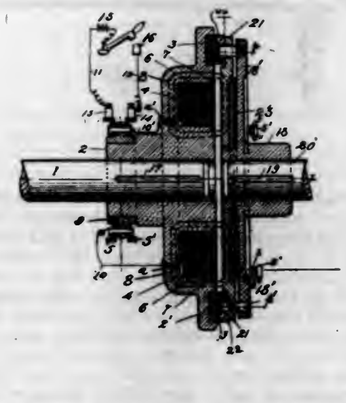
1. A card holder including a base plate provided along one edge with a first flange, and along its opposite edge with an S-shaped flange forming inner and outer sockets, a card having calibrations and removably mounted in the first flange and in the inner socket, and an indicating finger cooperating with the calibrations, the indicating finger being mounted in the outer socket for adjustment longitudinally of the card holder.

1,765,669. THERAPEUTIC ARTICULATING APPARATUS. PAUL HENZE and GUSTAF S. GILLBERG, Detroit, Mich., assignors to Electro-Motive Instrument Co., Detroit, Mich., a Corporation of Michigan. Filed Oct. 11, 1929. Serial No. 399,072. 5 Claims. (Cl. 128—75.)



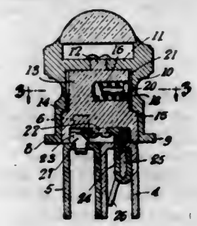
1. Therapeutic articulating apparatus comprising a frame, power mechanism carried by and depending below the frame, a rock lever pivotally mounted upon the frame and extending above and below the same, a driving connection between the lower end of the rock lever and said power mechanism, a swinging standard pivoted at one end to the frame, a telescoping driving spring tension connection between the upper end of the rock lever and the free end of the swinging standard and a harness support carried by and longitudinally adjustable through said telescoping spring tension connection.

1,765,670. MAGNETIC CLUTCH. HOMER A. HEAR, Philadelphia, Pa. Filed Jan. 17, 1923. Serial No. 613,304. 8 Claims. (Cl. 192—84.)



1. In a magnetic clutch the combination of a magnet member, an armature, a friction disc on the said armature, mounted free and loosely thereon, a fixed support for the said armature and a means for locking the armature, the disc and the support together in a manner to permit the said disc to reciprocate longitudinally on the support and oscillate axially permitting the disc and the contacting face of the magnet member to engage in uniform parallelism when magnetically united comprising a series of pins passing thru enlarged holes in the armature and into enlarged holes of the disc of the armature and rigidly fixed to and held by the armature support.

1,765,671. BAG-FRAME FASTENER. WILLIAM C. HIERING, Newark, N. J., assignor to J. E. Mergott Company, Newark, N. J., a Corporation of Delaware. Filed Apr. 17, 1929. Serial No. 355,695. 4 Claims. (Cl. 292—204.)



1. A bag fastener comprising the combination of a pair of frame members, of a post hinged on one of said frame members, means to resiliently retain said post erect, a stud fixed on the mating frame member, means in said post to engage said stud, a knob rotatable on said post, a plurality of recesses in the inner walls of the knob, a spring

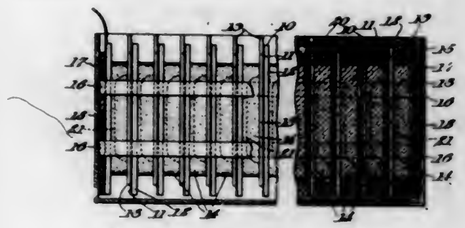
pressed plunger carried by the post and adapted to snap into said recesses to prevent accidental rotation of the knob, opposed keepers on the mating frame members, and means on said knob to engage said keeper.

1,765,672. GAS BURNER. LYMAN C. HUFF, Chicago, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Jan. 9, 1926. Serial No. 80,284. 4 Claims. (Cl. 158—109.)



1. A gas burner of the class described for producing an induced draft comprising an elongated mixing tube, a steam jet extending through the rear end of said tube and terminating a substantial distance from the front end of the tube, a partition wall disposed in said tube to the rear of the discharge end of said jet, said partition being provided at spaced intervals along its periphery with groups of saw tooth serrations, means for supplying gas to said tube to the rear of said partition member to flow in a substantially annular stream through said serrations, and means for admitting air to said tube in advance of said partition member.

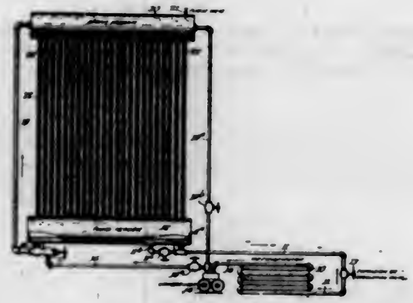
1,765,673. DRY-CELL BATTERY. ALTON KARL HUNTLEY, Cleveland, Ohio, assignor to National Carbon Co., Inc., a Corporation of New York. Filed June 6, 1927. Serial No. 196,865. 3 Claims. (Cl. 136—111.)



1. A dry cell having a moist mix substantially surrounded by walls of insufficient permeability to vent the gases produced within the cell, a bibulous spacer separating said mix from the anode, and a tab permeable to gases but water-repellent, said tab being joined to said spacer and extending through one of said walls to provide capillary gas passages therethrough.

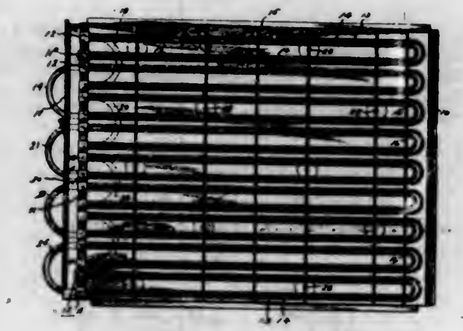
1,765,674. REFRIGERATION APPARATUS. WALTER A. INMAN and ALVIN L. BRUMUND, Waukegan, Ill. Filed Mar. 13, 1923. Serial No. 624,817. 3 Claims. (Cl. 62—115.)

1. In a refrigerating apparatus, in combination, a condenser including a fluid collector, a cooling element communicating therewith, means for comminuting fluid and delivering it to the said cooling element in the form of a spray including an injector having a connection to said fluid collector, a refrigerator, a compressor, a connection



from said compressor to said injector and a connection from said compressor directly to said cooling element and a plurality of connections between said refrigerator and said collector, one of said connections being disposed on a different level from that of another thereof.

1,765,675. FLUID HEATER. DAVID S. JACOBUS, Jersey City, N. J., assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed Nov. 7, 1922, Serial No. 599,516. Renewed Apr. 23, 1929. 14 Claims. (Cl. 257—230.)

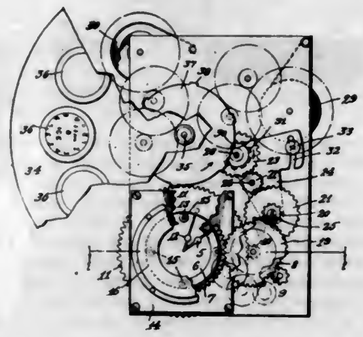


1. In a fluid heater, a vertical flue, a plurality of parallel headers arranged in pairs and extending across the flue at one side thereof and one above another, U-tubes connecting the members of each pair of adjacent headers and extending across the flue, a fluid inlet in the header next to the top header and a fluid outlet in the header next to the bottom header, and connections between the headers arranged to connect the lower one of a pair of headers with the upper one of the next upper adjacent pair of headers.

1,765,676. PROTECTIVE COATING. LOUIS CLEVELAND JONES, Greenwich, Conn. Filed Nov. 21, 1925. Serial No. 70,662. 3 Claims. (Cl. 134—1.)

1. As a new composition of matter, a protective coating comprising an aqueous emulsion of coalescible hydro-asphalt to form the base mixed with finely-divided particles of a metallic powder suspended in, and coating various particles of, said base, said metallicly coated particles being inherently floatable in said emulsion.

1,765,677. CLOCK MECHANISM. FRED R. KALCK, Philadelphia, Pa. Filed Mar. 16, 1927, Serial No. 175,722. Renewed Apr. 28, 1930. 1 Claim. (Cl. 58—125.)

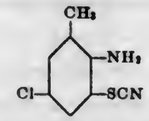


In a mechanism of the type set forth, a frame having a hole, forwardly-projecting spaced pins mounted on said frame around said hole, a ring-gear journaled on said pins in front of said frame so as to surround said hole, this ring-gear carrying a minute-hand, a set of rearwardly-extending pins mounted on the frame around said hole, an hour-gear mounted rotatably upon these rearwardly-extending pins so as to surround said hole in the frame, this hour-gear being provided with a supporting arm extending radially inwardly and through the hour-gear and the hole in the frame and having its forwardly-projecting end provided with an hour-hand lying in a plane adjacent to the aforesaid minute-hand.

1,765,678. PROCESS FOR INTRODUCING SULPHOCYANIC GROUPS INTO ORGANIC COMPOUNDS. HANS PAUL KAUFMANN, Jena, and MAX SCHUBERT, Fechenheim, near Frankfort-on-the-Main, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, a Corporation of Germany. Filed Mar. 6, 1928, Serial No. 259,602, and in Germany Mar. 11, 1927. 7 Claims. (Cl. 260—130.5.)

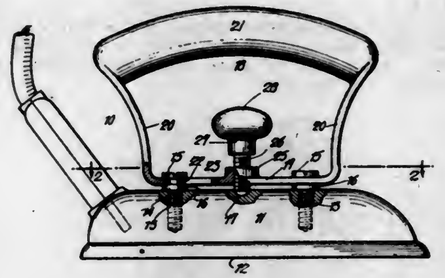
3. An improved process for introducing sulphocyanic groups into organic compounds which process comprises causing an inorganic sulphocyanic salt and a halogen to act at temperatures below room temperature on a primary aromatic amine having the para-position to the aminogroup blocked in presence of a solvent of a neutral character which is an equally good solvent for the amine as for the sulphocyanic salt.

7. As a new product the 1-methyl-2-amino-3-sulphocyanogeno-5-chlorobenzene of the formula:



which crystallizes from dilute spirit as colorless needles melting at about 102°, soluble in the usual organic solvents, the diazocompound of which yields a red dyestuff, when combined with R-salt.

1,765,679. PRESSING IRON. JOHN W. KIRKNER and JOSEPH O. SNOWDEN, New York, N. Y. Filed Aug. 9, 1929. Serial No. 384,682. 1 Claim. (Cl. 68—26.)



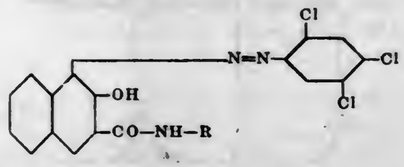
In combination with a pressing iron having longitudinally spaced threaded sockets in its upper side and an unthreaded depression intermediate the sockets, studs threaded into the sockets and projecting upwardly from the iron, an integral right angularly disposed head on said studs engageable with the upper side of the iron, a transversely slotted head on the upper ends of the studs extending at right angles thereto in spaced opposed relation to the first named head, a handle member including a flat base provided with keyhole shaped slots for the reception of the studs at a point intermediate the heads, said heads embracing the base therebetween, and a set screw threaded through the base portion of the handle member and adapted to rotatably seat in the depression in a manner to urge the iron and handle apart and prevent relative longitudinal movement therebetween.

1,765,680. PRODUCTION OF COMPLEX METAL COMPOUNDS OF O-HYDROXYAZO DYESTUFFS. HANS KRZIKALLA, Mannheim, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Aug. 27, 1927, Serial No. 215,998, and in Germany Aug. 28, 1926. 7 Claims. (Cl. 260—12.)

2. The process of producing complex metal compounds of o-hydroxy-azo-dyestuffs, which comprises heating azodysestuffs, which contain an oxalkyl group in ortho position to the azo group, with metal compounds capable of giving rise to complex compounds with o-hydroxy-azodyestuffs, in the presence of water at temperatures above 100° C.

1,765,681. MANUFACTURE OF FAST AZODYESTUFFS. LEOPOLD LASKA and ARTHUR ZITSCHER, Offenbach-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Aug. 27, 1928, Serial No. 302,438, and in Germany Sept. 5, 1927. 6 Claims. (Cl. 260—95.)

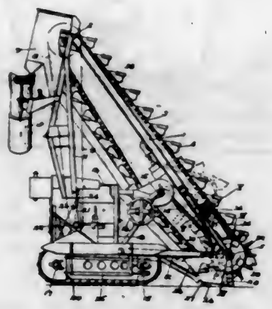
1. As new compounds azodyestuffs corresponding probably to the general formula:



wherein R means a residue of the benzene or naphthalene series which may contain further substituents, which compounds are when dry reddish to brownish powders, soluble in concentrated sulfuric acid with a reddish-violet

to bluish violet tint being suitable for the production of valuable color lakes and yielding, when produced on the vegetable fiber, dyeings and printings of an excellent fastness to light.

1,765,682. EXCAVATING MACHINE. WILLIAM K. LIGGETT, Columbus, Ohio, assignor to The Jeffrey Manufacturing Company, Columbus, Ohio, a Corporation of Ohio. Filed June 24, 1924. Serial No. 722,108. 21 Claims. (Cl. 37—190.)

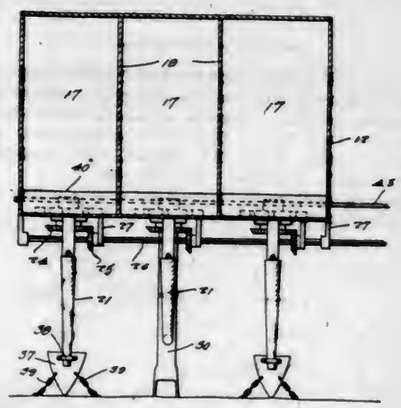


4. In an excavating machine, the combination with an automobile truck, of an elevator comprising an endless chain and a series of elevator buckets attached thereto, a foot shaft about which said chain and buckets turn to gather material from the ground in front of said truck, a rotary digger positioned adjacent the elevator, and means independent of said foot shaft and actuated by said elevator chain to actuate said digger as and for the purpose set forth.

14. In a machine of the class described, the combination of a supporting frame, an elevator frame, link members pivotally connected to opposite ends of said elevator frame and to said support, frame tilting means connected to said elevator frame between said link members, and means for actuating said tilting means to move said elevator frame to different positions on said support.

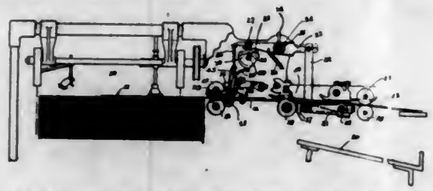
16. A material dislodging wheel for machines of the class described having a mutilated rim with dislodging projections on either side of the mutilating openings.

1,765,683. CORN-PLANTER FERTILIZING-DRILL ATTACHMENT. BEN M. LINVILLE, Mechanicsburg, Ohio. Filed May 12, 1928. Serial No. 277,124. 6 Claims. (Cl. 111—59.)



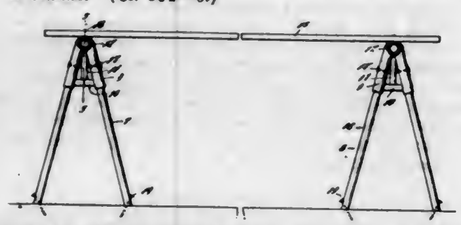
1. In combination with a corn planter including planting mechanism having a pair of boots associated therewith, of an attachment comprising a pair of containers one container for each of said boots, conduits leading from the container to the respective boot for conveying fertilizer from the containers to said boots, a plurality of shovels, one to each side of each boot, and additional conduits leading from said containers for delivering fertilizer to the rear of said shovels.

1,765,684. AUTOMATIC FEEDER. BELL MANDRICH, Brooklyn, N. Y., assignor to Crown Cork & Seal Company, Inc., New York, N. Y., a Corporation of New York. Filed Apr. 12, 1928. Serial No. 269,350. 10 Claims. (Cl. 271—56.)



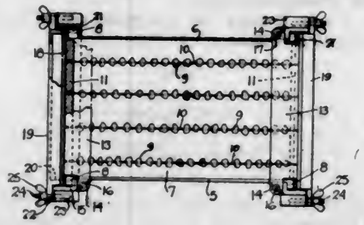
1. An automatic feeder embodying therein a conveyor mechanism including therein supports for a sheet while passing along said mechanism, means adapted to successively deliver sheets to said mechanism, a reject member, means normally tending to position said member across the plane of movement of sheets upon said supports, means for positively moving said member out of the plane of movement of sheets upon said supports, and caliper controlled means normally maintaining said member out of the path of movement of sheets upon said supports.

1,765,685. SCAFFOLD. SAMUEL RAYMOND MANSFIELD, Akron, Ohio. Filed May 31, 1929. Serial No. 367,459. 2 Claims. (Cl. 304—6.)



1. In a scaffold, in combination, a pair of complemental trestles including horizontal supporting members in the form of telescopically connected tubes, said tubes being provided with longitudinally spaced pairs of openings adapted to be selectively registered with each other, platform planks resting on said tubes, and nails passing through the registering openings in the tubes and through the plank with their pointed ends clenched against the ends of the planks, whereby to fasten the planks to the trestles.

1,765,686. RECEPTACLE. ALBERT MARTIN, New York, N. Y. Filed May 14, 1929. Serial No. 362,955. 6 Claims. (Cl. 107—1.)



1. A receptacle comprising a body portion, plates constituting closures disposed in the ends of the body, orna-

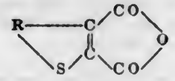
ment supporting pins supported by said plates, a plurality of frames, and means for securing the frames together in plate holding relation.

1,765,687. SULPHUR-CONTAINING HYDROXYQUINONES AND PROCESS OF PREPARING THEM. FRITZ MAYER and KARL ZAHN, Frankfort-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Aug. 11, 1928, Serial No. 299,111, and in Germany Sept. 7, 1927. 16 Claims. (Cl. 260—53.)

1. The process which consists in causing a compound of the general formula:

HO-aryl-OH

which may be substituted in any manner, but contains two hydrogen atoms in ortho position to each other, to act upon a thionaphthene-2.3-dicarboxylic acid anhydride of the general formula:

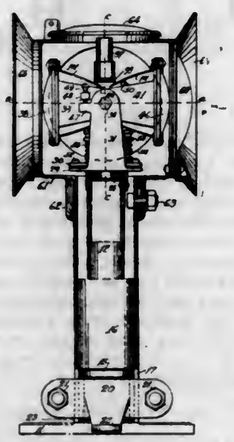


wherein R stands for an aromatic residue of the benzene-, naphthalene- or anthracene series which may be substituted in any manner, in the presence of a metal chloride capable of acting as a condensing agent and at a temperature exceeding 100° C.

1,765,688. PROCESS OF MAKING SULPHURYL CHLORIDE. RALPH H. MCKEE and CARROLL M. SALLS, New York, N. Y. Filed June 26, 1923. Serial No. 647,899. 19 Claims. (Cl. 23—203.)

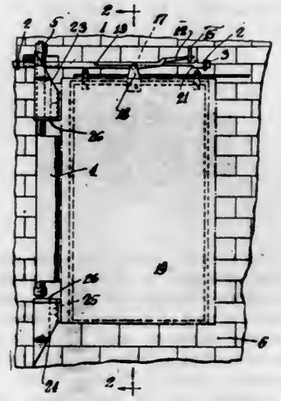
1. The process of making sulphuryl chloride which comprises passing chlorine gas and sulfur dioxid into a body of sulphuryl chloride containing a minor proportion of a catalyst in suspension.

1,765,689. LIGHT SIGNAL AND PROJECTOR. JAMES C. MOCK, Detroit, Mich. Filed May 21, 1928. Serial No. 279,536. 20 Claims. (Cl. 246—476.)



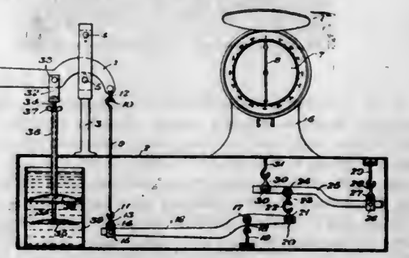
1. In a signal as described, the combination, a stationary support, a source of light and a plurality of projecting lenses carried by said support, a housing for said source and lenses, said housing having colored roundels aligning with said lenses and means for rotating said housing.

1,765,690. SAFETY DEVICE FOR ELEVATORS. FRANK L. MOORE, Chatham, N. J. Filed Jan. 25, 1929. Serial No. 334,899. 7 Claims. (Cl. 187—74.)



5. An elevator safety device in combination with an elevator car and shaft having a plurality of door openings, including an operating bar mounted transversely of each door opening, means for limiting the transverse movement of said bar, a rudder plate mounted at the side of each door opening and being operatively connected with said bar, a slotted bracket adjacent each of said bars, a cam plate pivotally supported on each bar adapted to extend through said slotted brackets, and cams mounted at the top and bottom of said car for engaging the rudder plate as the car ascends or descends to force the plate out of the path of the car and against the wall of the shaft.

1,765,691. WEIGHING SCALE. FRANK R. MOSER, Jr., St. Louis, Mo., assignor to St. Louis Scale Corporation, St. Louis, Mo., a Corporation of Missouri. Filed Mar. 20, 1929. Serial No. 348,487. 4 Claims. (Cl. 265—59.)

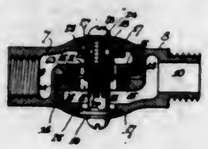


1. An indicating attachment for scales of the beam type, comprising a casing, an indicating mechanism mounted on the casing, a system of levers within the casing and connected to said indicating mechanism, a link extending through the casing and attached to the end of the scale beam and to the system of levers, and a dash-pot attached to the said beam adjacent the end thereof to decrease the vibrations of the beam during the weighing operation.

1,765,692. MOTOR FUEL. MARTIN MÜLLER-CUNRADI, Ludwigshafen-on-the-Rhine, and WILHELM WILKE, Mannheim, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Oct. 21, 1924, Serial No. 745,027, and in Germany Jan. 14, 1924. 3 Claims. (Cl. 44—9.)

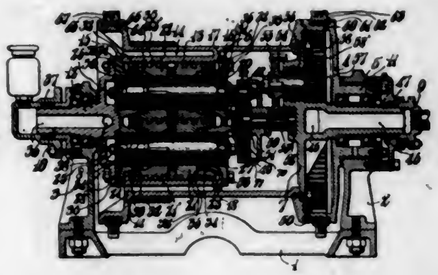
2. A motor fuel comprising a combustible liquid in combination with iron acetyl acetonate.

1,765,693. SWING-JOINT COUPLING. CHARLES J. MUEND, Philadelphia, Pa. Filed Jan. 30, 1928. Serial No. 250,405. 1 Claim. (Cl. 285—104.)



A swing joint coupling, comprising two elements having communicating channels, a gland and annular bodies of packing on each side thereof interposed between said channelled elements, a pair of telescoping sleeves for connecting said coupling elements, each sleeve having a flanged head, means preventing relative rotative movement of the sleeves, a headed screw extending loosely through one sleeve and threaded into the other sleeve, and a substantial body of resilient material interposed between the screw head and a sleeve head whereby adjustable resilient pressure is exerted between the gland and the flanking bodies of packing.

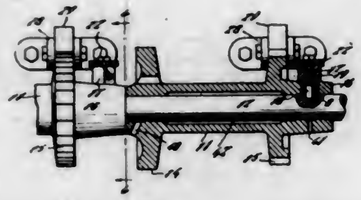
1,765,694. HOISTING MECHANISM. ROBERT C. OSGOOD, Claremont, N. H., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed Aug. 3, 1922. Serial No. 579,448. 2 Claims. (Cl. 254—186.)



1. In a hoisting mechanism, in combination, a rotatable winding drum, a driving motor therefor disposed within said drum and held in immovable relation thereto, said motor having a motor shaft offset from the axis of said drum, and driving connections between said motor shaft and drum comprising reduction gearing including a transmission shaft having an end adjacent said motor, a detachable bearing bracket for supporting said end of said shaft, and means to position one end of said bearing on the adjacent end of the motor casing.

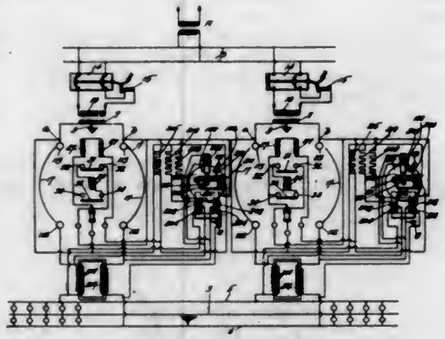
1,765,695. RUG-DRYING APPARATUS. LOUIS E. OWENS, Peoria, Ill. Filed Nov. 23, 1928. Serial No. 321,498. 3 Claims. (Cl. 254—141.)

1. In a mechanism of the class described, a shaft, a plurality of drums, said drums being rotatable on a fixed axis, a bolt housing threaded into each drum, said shaft having a plurality of recesses one adjacent each housing, a spring pressed bolt adjacent each housing, a stem extending from each bolt, a knob on the stem having an opening, a pin on the housing to project through the opening so



that the spring may urge the bolt into the respective recess or the knob may be turned so that the pin will hold the knob and the stem in a position with the bolt released from engagement with the recess.

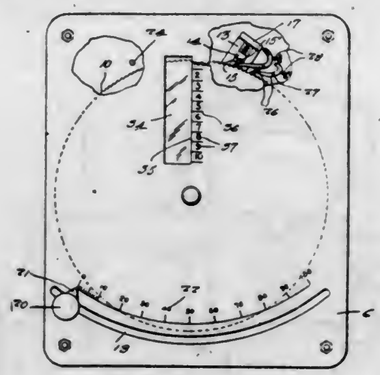
1,765,696. DISTRIBUTION SYSTEM FOR ALTERNATING CURRENTS. GRANVILLE E. PALMER, Cambridge, Mass., assignor, by mesne assignments, to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Aug. 12, 1921, Serial No. 491,702. Renewed Feb. 26, 1925. 42 Claims. (Cl. 175—294.)



1. In an alternating current system of distribution, a working circuit, a plurality of feeder circuits arranged in multiple for feeding energy to said working circuit, a transformer in each feeder circuit, a switch in the primary circuit of each transformer, and means in the secondary circuit of each transformer acting to close and maintain closed said secondary circuit when the working circuit is energized when said switch is closed, the potentials of said secondary and said working circuit are approximately in phase, and the potential of said secondary circuit is sufficiently higher than that of said working circuit to insure energy flow to said working circuit on the closing of said secondary circuit.

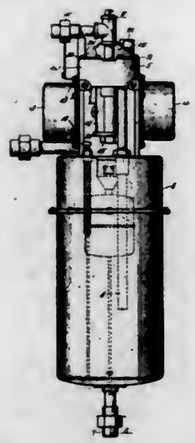
1,765,697. CALCULATING MACHINE. NELSON P. PALMER and WILMER B. HERRON, Butler, Pa. Filed Mar. 19, 1928. Serial No. 262,970. 6 Claims. (Cl. 235—83.)

1. A calculating device of the character described comprising a spring controlled rotatable disc, means engageable with the disc for rotating the same in one direction against the tension of the control spring, means engageable with the disc for retaining the same against rotation



in the opposite direction, the first named means engageable with the last-named means for disengaging said last named means from the disc and allowing the same to be rotated in the opposite direction by the control spring.

1,765,698. PUMP. LAWRENCE M. PERSONS, Chicago, Ill., assignor to Cook Electric Company, Chicago, Ill., a Corporation of Illinois. Filed July 13, 1925. Serial No. 43,064. 20 Claims. (Cl. 103—57.)

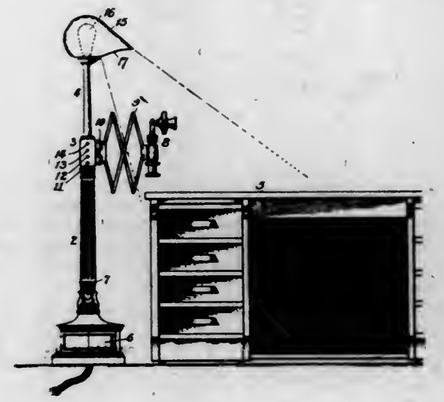


1. In a pump adapted to supply liquid to a receptacle, the combination of a housing, a plurality of pump units each individually mounted thereon and comprising a cylinder and a piston operating therein, each being detachable at the exterior of said housing, a driving connection for said pistons, and a motor within said housing and between said pumping units for actuating said driving connection.

1,765,699. STAND. FRANCIS J. PLYM, Niles, Mich., assignor to The Kawneer Company, Niles, Mich., a Corporation of Michigan. Filed Jan. 10, 1924. Serial No. 685,304. 1 Claim. (Cl. 240—2.)

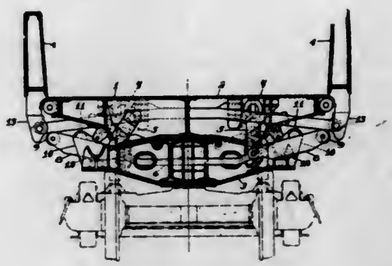
A stand of the character described comprising a base member, an upright column having its lower end mounted on said base member, a telephone support projecting from said column, an upwardly and outwardly flared shade support fixedly mounted on the upper end of said column,

and a hood-like shade having a bottom edge which extends into and rests upon the flared portion of said shade support, said shade having an opening in its under portion which is laterally disposed with respect to said bottom edge, so that a beam of light may be projected there-



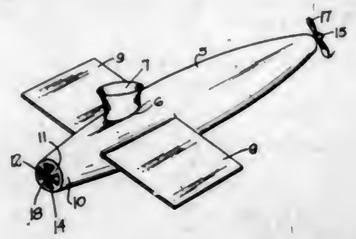
through laterally and downwardly at a radial angle different from the radial angle of said telephone support, said shade being normally free to rotate upon said shade support, so that the angle of said beam may be changed with respect to the angle of said telephone support.

1,765,700. DUMP CAR. NATHANIEL S. REEDER, New York, N. Y., assignor to Pressed Steel Car Company, Pittsburgh, Pa., a Corporation of New Jersey. Filed Apr. 9, 1929. Serial No. 353,704. 8 Claims. (Cl. 105—276.)



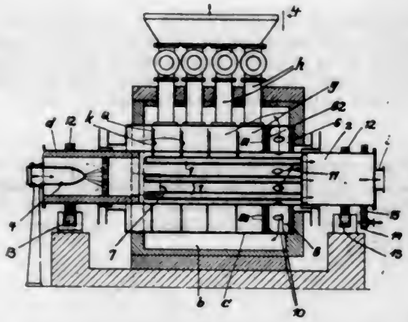
1. In a dump car, an underframe, a dump body tiltably mounted on said underframe in stable equilibrium, side doors for said body hinged adjacent the floor thereof, downward depending members on said doors and a door operating mechanism mounted on the underframe for selectively engaging with said body and depending door members to control the opening and closing of the side doors as the body moves in dumping, said mechanism comprising a member mounted on each side of the underframe and controlled by the body tilting toward said members, a member mounted on each side of said underframe adjacent the depending door members and movable into and out of engagement therewith, and means connecting the adjacent underframe mounted members.

1,765,701. TOY. THEODORE REIAS, Passaic, N. J. Filed Nov. 29, 1929. Serial No. 410,494. 1 Claim. (Cl. 46—46.)



A toy comprising a hollow cylindrical body, a noise emitting spout in the body, a siren disk, a propeller, a shaft on which said disk and propeller are mounted, said body being provided with openings cooperating with said siren disks to produce a sound when air is forced through said opening, and wings on said body.

1,765,702. APPARATUS FOR GASIFYING AND DISTILLING SOLID FUEL. EDMUND ROSER, Bochum, Germany. Filed Dec. 31, 1925, Serial No. 78,636, and in Germany July 6, 1925. 5 Claims. (Cl. 202—136.)

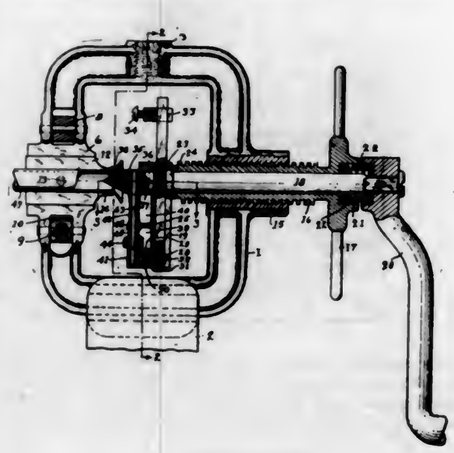


1. In an apparatus for producing gas, consisting of an outer drum and an inner drum arranged with an annular space between them, the inner drum being rotatable, longitudinal and transverse partition walls arranged between the drums and subdividing the annular space therebetween into a plurality of independent fuel chambers, said partition walls being secured to one of the drums and having a mere clearance relation to the opposed face of the other drum, means connected to the outer drum for charging the independent chambers with fuel, means for heating the fuel in the chambers whereby to liberate gas therefrom, and pipe connections in communication with said chambers connected to one of the said drums and forming outlet passageways for the gas liberated in the chambers.

1,765,703. ALKOXY-3-KETO-DIHYDRO-THIONAPHTHENES AND PROCESS OF MAKING THEM. ERNST RUNNE, KARL MOLDAENKE, and ERNST FISCHER, Frankfort-on-the-Main-Hochst, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Sept. 18, 1928, Serial No. 306,781, and in Germany Oct. 8, 1927. 9 Claims. (Cl. 260—53.)

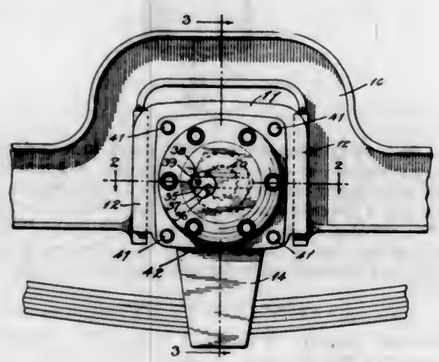
1. The process of preparing alkoxy-3-keto-dihydro-thionaphthenes which consists in treating an alkoxy-arylthioglycollic acid halide having at least one free ortho-position to the thioglycollic residue with an aluminium halide.

1,765,704. PIPE-FLANGING MACHINE. CHARLES F. SCHULTIS, Cleveland, Ohio, assignor, by direct and mesne assignments, of one-fourth to Isadore Herzbrun, Cleveland, Ohio, and one-fourth to S. W. Goldman, Cleveland, Ohio. Filed Dec. 29, 1927. Serial No. 243,240. 10 Claims. (Cl. 153—81.)



1. In a tube flanging machine, a spindle, means for rigidly holding the tube with an end thereof adjacent an end of the spindle and in axial alinement therewith, a transverse guide member fixed to the end of said spindle, a head mounted for adjustment longitudinally of said guide member, a tube swaging member fixed to the head, and a tube flanging roller carried by said head, said swaging member and flanging roller being spaced one from the other in a direction lateral with respect to the spindle axis a distance greater than the radius of the tube, said head being adjustable to bring either the swaging member or the flanging roller into tube engaging position.

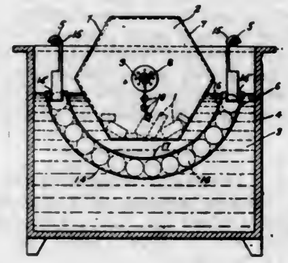
1,765,705. BEARING FOR RAILWAY CARS AND THE LIKE. CHARLES HENRY SMITH, Chelmsford, England, assignor to Norma-Hoffman Bearings Corporation, Stamford, Conn., a Corporation of New York. Filed May 18, 1927, Serial No. 192,197, and in Great Britain July 21, 1926. 2 Claims. (Cl. 308—180.)



1. In a bearing for the purpose set forth, consisting of a supporting structure which receives an axle and a housing removably fitting therein around the axle, inner and outer shoulders formed on the housing and extending, respectively, outwardly away from and inwardly toward the axle, a sleeve surrounding the axle within the housing

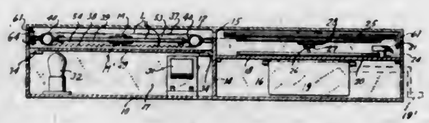
and having an interlocking connection with the housing, anti-friction bearing devices arranged between the sleeve and housing at opposite sides of said shoulders, the axle having a threaded outer end portion and the sleeve and axle tapering toward said portion, providing for the removal of the sleeve, housing and bearing devices as an unitary structure, the interior of the sleeve having at its outer end an open recess spaced from the axle threaded portion, a retaining device received in said recess and thradedly engaged with said axle threaded portion, and a part on said retaining device constituting an abutment for holding such unitary structure in place.

1,765,706. DUAL ANODE. OTHO V. STEWART and EMIL URBAN, Forest Hills, Pa., assignors to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Aug. 13, 1927. Serial No. 212,652. 11 Claims. (Cl. 204—4.)



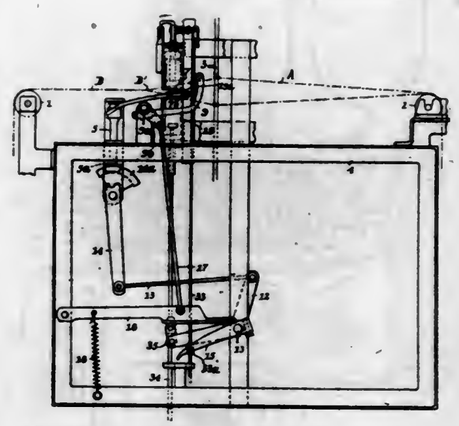
11. A two-element anode comprising a curved tubular recessed body of inactive material and a plurality of bodies of active material supported thereby, said tubular body being provided with a longitudinal slot in its normally upper portion to provide a definite ratio between the exposed area of the active and that of the inactive material and an opening at each end for insertion of additional active material, and means for supporting said anode.

1,765,707. ELECTRIC PHONOGRAPH. ADOLPH A. THOMAS, New York, N. Y. Filed Feb. 1, 1927. Serial No. 165,052. 12 Claims. (Cl. 179—100.4.)



6. A portable electric phonograph comprising a carrying case provided with a hinged cover, a frame pivoted to said case and normally lying flat therein to permit closing of the cover, said frame being movable into substantially upright position, a pair of loudspeaking diaphragms carried by said frame, electric reproducing mechanism for operating said diaphragms, and means connected to said cover for holding said frame in upright position during the operation of the diaphragms.

1,765,708. LOOM. WILLIAM S. WELLS, Los Angeles, Calif., assignor, by mesne assignments, to Wonder Weave, Inc., Boston, Mass., a Corporation of Massachusetts. Filed Oct. 3, 1928. Serial No. 310,162. 12 Claims. (Cl. 139—124.)



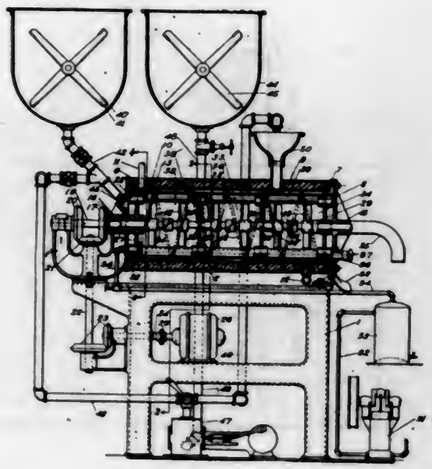
1. A mechanism for incorporating filling as a part of the fabric of a fabric-and-warp sheet including, in combination, a frame having means to support such sheet in stretched condition, a beating-up device having support in the frame in proximity to the fabric fell and movable forward toward the fell to beat up the filling and then back from the fell, a filling feeder movable in a fixed part of the frame from one side of the sheet forward through sheds formed in the warp and back, and means operatively connecting said device and feeder for reciprocation together so that the forward and back movements of the feeder shall, respectively, approximately begin and end when the back and beating-up movements of said device begin and end.

1,765,709. METHOD FOR MAKING PROGRESSIVELY REDUCED TUBES. WINTHROP WITHINGTON, Cleveland, Ohio, assignor to The American Fork & Hoe Company, Cleveland, Ohio, a Corporation of Ohio. Filed Sept. 28, 1928. Serial No. 309,097. 9 Claims. (Cl. 29—156.)



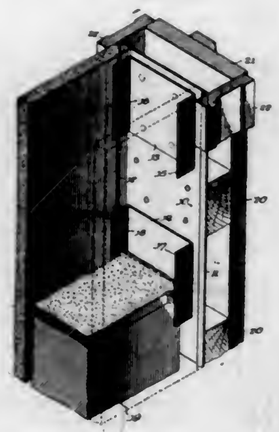
1. The method of making tubes comprising shearing from a thin sheet of steel a substantially flat strip having its longitudinal side edges inclined progressively inwardly at intervals throughout substantially the entire length of the strip, interposed between longitudinally disposed strip sections of successively less and less width proceeding towards an end of the strip, then bodily offsetting the successively narrowed sections to form steps extending transversely across the strip between the inclined edge portions, then transversely arcuately folding the stepped strip to bring the side edges into contiguously opposed relative positions, and then rigidly securing the contiguous side edges together.

1,765,710. APPARATUS FOR MANUFACTURING FROZEN CONFECTIONS. ALBERT C. WOOD, Philadelphia, Pa., and THOMAS HALL, Harrisburg, Pa. Filed Sept. 22, 1927. Serial No. 221,194. 15 Claims. (Cl. 62—114.)



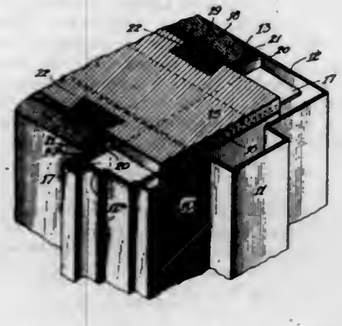
1. A freezer containing a plurality of communicating chambers and means movable about an axis for agitating the contents of the respective chambers said chambers communicating adjacent to the axis of said means.

1,765,711. METAL BUCK CONSTRUCTION. ISAAC A. BAUM, Chicago, Ill. Filed May 5, 1928. Serial No. 275,431. 2 Claims. (Cl. 72—98.)



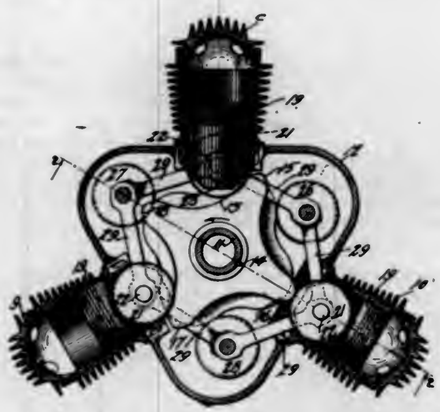
1. In metal frame construction, the combination of a flat buck member, having a margin acting as a plaster terminal, channel shaped wall clips secured to the inner face of the buck, said clips being adapted to contact the sides of the tile at spaced intervals in the height thereof, a wood block secured to the outer face of the buck by fastening devices passing through the buck, and trim secured to said block.

1,765,712. DOOR CASING. ISAAC A. BAUM, Chicago, Ill. Filed Mar. 11, 1929. Serial No. 346,058. 4 Claims. (Cl. 72—98.)



1. The combination with the edge of a masonry wall, of a hollow metal door casing fitted over the said edge, an anchor projecting into the wall for holding the casing, a plaster terminal having a flange perpendicular to the wall, said flange being arranged closely adjacent to the inside edge of said casing, and means for securing the plaster terminal directly to the masonry wall, whereby said casing and terminal are independent of each other.

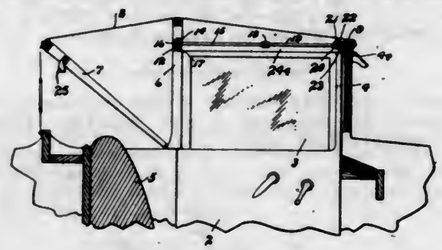
1,765,713. INTERNAL-COMBUSTION ENGINE. JOSEPH J. BOLAND, Keyport, N. J., assignor to Aeromarine Plane & Motor Co., Inc., a Corporation of New York. Filed Nov. 1, 1929. Serial No. 404,122. 6 Claims. (Cl. 74—14.)



1. In a reciprocating piston engine having a drive shaft, the combination of a plurality of cylinders arranged radially about the drive shaft, pistons adapted to reciprocate in said cylinders, a main driving cam secured to the drive shaft and rotationally actuated by the thrust of the pistons, a further cam means having a peripheral contour dissimilar to that of the main cam, a plurality of elements having a rolling contact with said cam means, and a series of linkages articulated both to said rolling elements and to said pistons; said linkages adapted to restrain the pistons against lateral displacement.

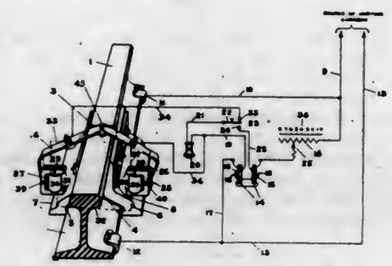
1,765,714. AUTOMOBILE TOP. RALPH W. BULKELEY, Grand Rapids, Mich. Filed Feb. 25, 1929. Serial No. 342,342. 5 Claims. (Cl. 296—107.)

1. The combination with a motor vehicle body having a front windshield frame, of top bows pivotally mounted on said body back of the windshield frame, a covering connected to the body and extending over said bows and adapted to extend to and over the windshield frame, a bar to which the top covering is connected at its front end adapted to lie above the windshield frame, means for detachably securing the bar to the windshield frame, brackets including rearwardly extending horizontal portions secured one adjacent each end and at the rear side of said bar,



a toggle link pivotally mounted at its front end on each of said horizontal portions of the brackets, a second toggle link pivotally connected to the rear end of each of said first toggle links and extending rearwardly therefrom to the adjacent vertical side of the frontmost of said bows, and a universal joint connection between the rear end of each second toggle link and the adjacent side of the foremost of said bows.

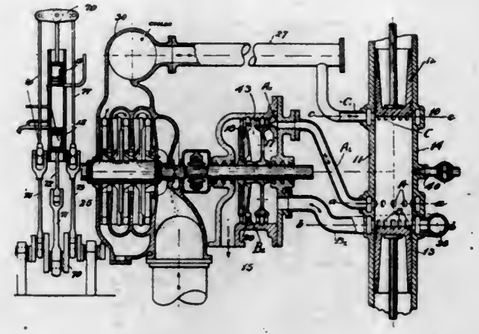
1,765,715. MEANS FOR TESTING LEAKAGE THROUGH INSULATED JOINTS. DWIGHT BYERS, Cleveland, Ohio; Thos. S. Henderson administrator of the estate of said Byers. Filed Apr. 16, 1923. Serial No. 632,329. 6 Claims. (Cl. 175—183.)



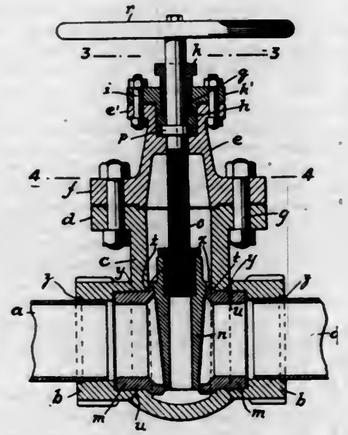
1. In a device for testing insulated joints, means for impressing a fluctuating current across the joint to be tested, laminated core members provided with windings which are adapted to be inductively energized by flux set up by leakage current through the joint, means whereby said core members may be tilted to neutralize the effect of stray fields set up by conductors in proximity to the joint being tested, and a detector operatively connected with said windings whereby leakage through the joint may be detected without interference by stray fields of flux.

1,765,716. POWER PLANT. CHARLES G. CURTIS and EARLE R. NEWTON, New York, N. Y., assignors to Curtis Gas Engine Corporation, New York, N. Y., a Corporation of New York. Filed Jan. 24, 1924. Serial No. 688,179. 9 Claims. (Cl. 60—13.)

9. A supercharged two-stroke cycle internal combustion engine prime mover, comprising a cylinder in which a partial expansion of the combusted gas takes place, and a piston, said cylinder having an exhaust opening, in combination with secondary expansion apparatus wherein a further expansion of the gas to approximately atmospheric pressure takes place, and a source of precompressed air, means for releasing gas from the cylinder during the latter part of the expansion stroke resulting in a sudden drop in cylinder pressure to the cylinder scavenging pressure before the end of the expansion stroke, an inlet passage adapted to admit said precompressed air to the cylinder, said air admission being arranged to displace gas in said cylinder at a substantially constant cylinder scavenging pressure, and to supply it to said secondary expansion apparatus through an exhaust opening at substantially constant superatmospheric pressure.

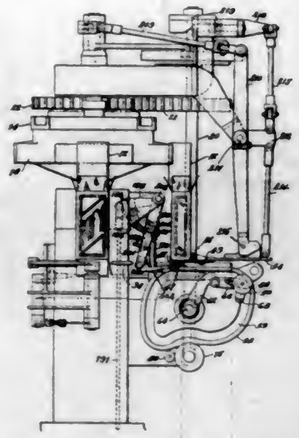


1,765,717. HIGH-DUTY-VALVE STRUCTURE. GUNNAR ERICSSON, Philadelphia, Pa. Filed Apr. 23, 1927. Serial No. 186,016. 1 Claim. (Cl. 251—51.)



A valve structure comprising a valve body, valve seats therein, a valve between said seats, a cover mounted on the body, an annular member extending upward from the top of the cover, an annular cap a major part of the length of whose body extends within the annular cover member, a gland extending within the annular cap, a valve rod extending upward through and beyond the annular member, the annular cap and the gland, a flange on the upper part of the annular member, flanges extending from opposite sides of the upper part of the cap, flanges extending from opposite sides of the gland, bolts connecting the flange on the annular member and the cap flanges, and bolts connecting the flange on the annular member and the gland flanges; the construction affording a long guiding bearing between the cover and cap which, in the bolting of the cap on the cover, prevents angular displacement of the axis of the cap relatively to the axis of the rod.

1,765,718. PACKAGING MACHINE. ARTHUR CLARENCE EVERETT, Boston, Mass., assignor to Pneumatic Scale Corporation, Limited, Quincy, Mass., a Corporation of Massachusetts. Filed Feb. 15, 1928. Serial No. 254,421. 5 Claims. (Cl. 93—44.)

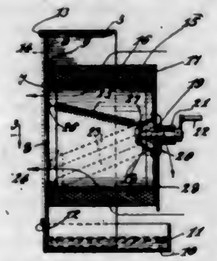


1. A packaging machine having, in combination, a supporting member for a carton, means for folding one pair of the opposed flaps at one end of the carton, adhesive applying means arranged to travel in a direction transversely across said folded flaps, and means for thereafter folding the remaining flaps at said end of the carton.

1,765,719. METHOD OF MAKING COMPOSITION BLANKS. WILLIAM J. GAVEN, Wilkes-Barre, Pa., and MICHAEL FRIED, Mount Vernon, N. Y.; Mary E. Gaven administratrix of said William J. Gaven, deceased. Filed Dec. 24, 1923. Serial No. 682,580. 1 Claim. (Cl. 154—2.)

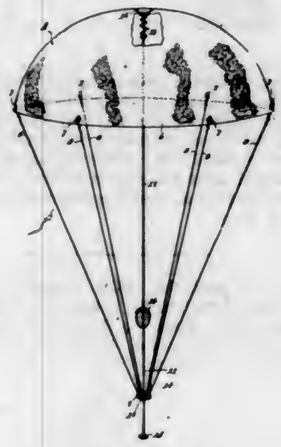
The herein-described method for molding composite plastic and non-plastic articles, which consists in assembling upon a non-plastic base, a coating of unrolled, dry, mixed, powdered, raw ingredients involving a resinous binder in its virgin state, with a central depression in the material whereby the material will be forced to move radially to secure an equal distribution when heated, subjecting said base with the composition ingredients thereon to a single heating for a period of from one to two minutes at a temperature of from 300 to 400° F. whereby the several ingredients are united with each other in a coherent plastic mass and simultaneously permanently fixed to said non-plastic base.

1,765,720. AIR AND GAS FILTER. ALFRED M. GOODLOE, Bradford, Pa., assignor, by mesne assignments, to American Air Filter Company, Inc., Louisville, Ky., a Corporation of Delaware. Filed June 17, 1926. Serial No. 116,596. 9 Claims. (Cl. 183—9.)



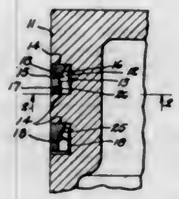
9. In filter apparatus, an open top trough adapted to contain a cleaning liquid and a supporting wall extending vertically above the trough at the rear side thereof provided with air passages, an air filtering drum closed at one end and open at its other end, means for effecting a substantially air tight connection between the latter end of said drum and said supporting wall, and additional means mounted on the supporting wall retaining the drum in assembled relation therewith and connected with the other end of the drum at the front side of the trough, said means sustaining the drum with its axis spaced above the open top of the trough and for rotation relative to the supporting wall through the cleaning liquid.

1,765,721. TOY PARACHUTE. GEORGE JOHN GROSSMAN, Chicago, Ill. Filed Sept. 21, 1929. Serial No. 394,179. 7 Claims. (Cl. 46—52.)



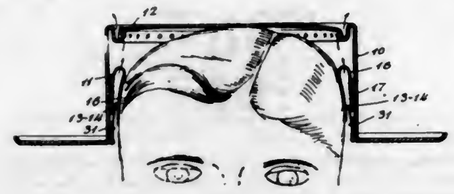
1. A device of the kind described comprising a foldable body portion, a plurality of cords attached to said body portion in spaced relation, a central cord connected to a mid-point in the body portion, a weight slidably mounted on said central cord, and a disk member operatively associated with said cords, substantially as described.

1,765,722. PISTON PACKING RING. ANTHONY GUERRIERO, Brooklyn, N. Y. Filed July 2, 1929. Serial No. 375,359. 9 Claims. (Cl. 74—109.)



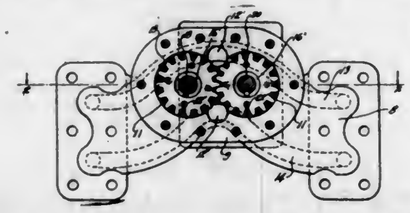
1. The combination with a piston having a groove, of a ring in the groove, said ring having on its inner side a substantially vertical surface, and a conical surface, and a single resilient member in the groove having spaced portions bearing against both surfaces of the ring, the portions bearing against the conical surface being tapered.

1,765,723. HAT. JOSEPH C. GUSTAVESON, New York, N. Y. Filed May 8, 1929. Serial No. 361,306. 4 Claims. (Cl. 2—182.)



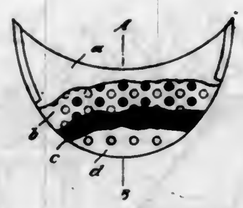
1. In a hat, a crown, a head-engaging band in said crown including a lazy-tongs, and a plurality of bowed fingers forming extensions of certain of the arms of said lazy-tongs and having their free ends adapted for engagement with the head of the wearer.

1,765,724. OIL PUMP. JULIUS P. HEIL, Milwaukee, Wis., assignor to The Heil Co., Milwaukee, Wis., a Corporation of Wisconsin. Filed Feb. 13, 1928. Serial No. 253,930. 6 Claims. (Cl. 103—126.)



1. A pump oiler comprising a casing having gear recesses and inlet and outlet openings in communication with said recesses, and intermeshing gears positioned in said recesses, said gears having a distinct, independent interior oil duct for each face, said ducts extending from peripheral portions of said gears to a side face thereof.

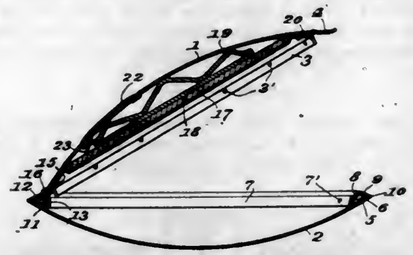
1,765,725. DRESS SHIELD. SIEGFRIED IMBACH, Dresden, Germany. Filed Jan. 4, 1928, Serial No. 244,439, and in Germany Jan. 10, 1927. 3 Claims. (Cl. 2—53.)



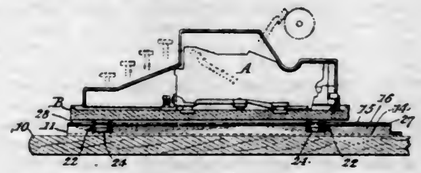
1. An improved dress-shield composed of two sections, each section having at least two layers of waterproof material with perforations therein and having means for spacing said layers, said spacing means permitting the passage of air between and through said perforated layers.

1,765,726. VANITY CASE. FAITZ R. JOHNSON, Providence, R. I. Filed Sept. 19, 1927. Serial No. 220,377. 1 Claim. (Cl. 220—31.)

A hinged container comprising concavo-convex top and bottom casing members proportioned to overlie one another when the container is closed, a single annular hinge ring affixed to said bottom member and presenting an inner wall against which the edge of the top member is adapted to abut when the container is closed, said wall extending outwardly of the container as a downwardly and outwardly inclined portion following the general curvature of the top member and substantially co-planar therewith and terminating at the edge of the bottom member in a sharply bent downwardly and rearwardly inclined attaching portion overlapping said bottom member, and a hinge disposed interiorly of said container and anchored to said ring and to said top member respectively.

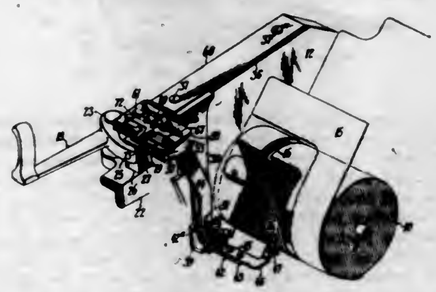


1,765,727. TYPEWRITING MACHINE. ALFRED G. F. KUROWSKI, Brooklyn, N. Y., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Filed Nov. 10, 1926. Serial No. 147,410. 7 Claims. (Cl. 248—16.5.)



1. The combination with a typewriter-baseboard, of grooved buttons, secured to said baseboard, parallel rails to be secured to a desk to extend rearwardly thereon, one for engaging the grooved buttons on one side of the baseboard, a plate slidably mounted on the other rail for engaging the grooved buttons on the other side of the baseboard, and means co-operating with the plate to lock the baseboard with the typewriter in an adjusted position along said rails relative to the front of the desk.

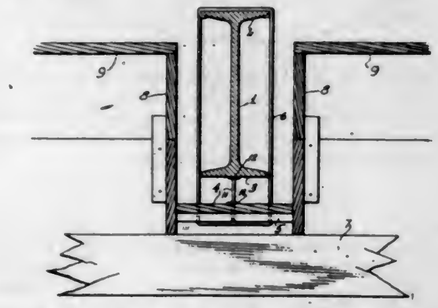
1,765,728. TYPEWRITING MACHINE. ALFRED G. F. KUROWSKI, Brooklyn, N. Y., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Filed May 31, 1929. Serial No. 367,287. 5 Claims. (Cl. 197—141.)



1. In a typewriting machine, the combination with a rotatable platen and line-spacing mechanism therefor, of a sheet-controlled locking mechanism, including a latch, to prevent operation of the line-spacing mechanism and

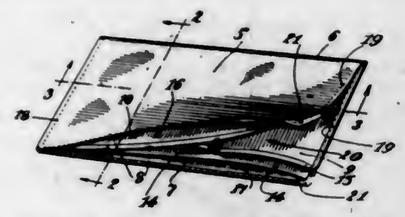
thereby indicate the approach of the bottom of the sheet to the printing line, a release device independent of the sheet and movable independently of the locking mechanism to move the latter out of operative position and hold it there, a guide-pin on the latch, and a guide for the pin, said release device including a slidable plate provided with a knob and having a spring-arm which contacts with the pin to move the latch to inoeprative position, said spring-arm having a detent engageable with a depression in said guide.

1,765,729. STRUT USED IN CONCRETE FIREPROOFING. WILLIAM F. LA MORTE, New York, N. Y. Filed Jan. 13, 1928. Serial No. 246,403. 1 Claim. (Cl. 25—131.5.)



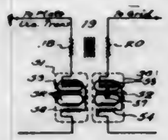
In an assembly of the character described, a strut comprising a shank provided at one end with a head and at the opposite end with a point, and provided intermediate its head and point with an integral cross-axial detent adapted to limit the thrust of the shank a predetermined dimension and likewise to establish a predetermined dimension between said detent and said head, in combination with a girder which it is desired to enclose in concrete, a form board in which the shank is driven to seat the detent against the face of the form board, and means, independent of the strut, for supporting the form board in cooperative relation to the girder with the head of the shank in end abutting engagement with the girder to space the form board said predetermined dimension from the girder.

1,765,730. BILL AND CARD CASE. CHARLES L'ENFANT, New York, N. Y. Filed July 3, 1929. Serial No. 375,641. 3 Claims. (Cl. 150—38.)



1. A case of the character described comprising opposite side walls formed from a single sheet of flexable material folded upon itself to provide walls of equal area, and reinforced fabric walls arranged between said outer side walls and cooperating respectively therewith to form two bill receiving pockets, the inner and outer walls of the respective pockets of one end of the case being secured together, and said pocket walls of each side of the case being permanently secured to each other at the opposite end of the case, said bill receiving pockets being open along one longitudinal edge of the case and the opposite side walls of the case being unconnected along the other end edge of the case or to provide an additional pocket for the reception of papers, bills and memoranda.

1,765,731. RADIO RECEIVING DEVICE. WALTER F. LUHNOW, Greeley, Colo. Filed Mar. 12, 1928. Serial No. 261,114. 8 Claims. (Cl. 175—356.)



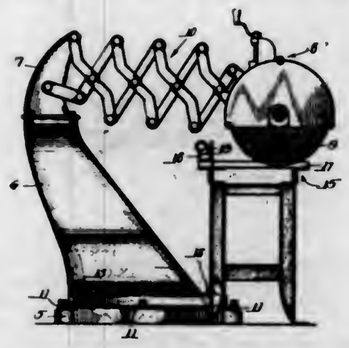
1. In an electric wave controlling system an impedance device comprising a magnetic core in combination with an inherently closed circuit winding to serve reactively as an inductive impedance and another winding, both substantially concentric with said core, the latter winding including two serially connected and radially spaced sections, said core including end parts which extend outwardly and converge between said sections and embrace the first said winding.

1,765,732. OPHTHALMIC MOUNTING. GERARDO F. MARCIANO, Providence, R. I., assignor to Universal Optical Corporation, Providence, R. I., a Corporation of Rhode Island. Filed Oct. 1, 1928. Serial No. 309,596. 5 Claims. (Cl. 88—42.)



5. An ophthalmic mounting comprising a pair of spaced eyewires, a bridge member having a cross bar with spaced elongated downwardly-extending side arms in the plane of said eyewires curved to follow the contour of the eyewire and spaced rivets projecting from the inner surface thereof and in the plane of the arms, and a nose guard attached to each of said arms.

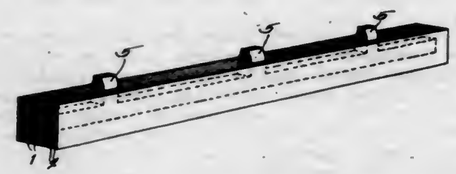
1,765,733. POWER-DRIVEN SAW. JOSEPH O. OLSEN, Rockford, Ill., assignor to Mattison Machine Works, Rockford, Ill., a Corporation of Illinois. Filed Nov. 20, 1926. Serial No. 149,598. 1 Claim. (Cl. 143—6.)



A machine of the character described, comprising, in combination, a base having a flat upper surface, an upright pedestal mounted thereon for relative pivotal movement about an axis positioned adjacent the front side of said base, a work supporting table in front of said pedestal, a work guide on the rear side of said table extending longitudinally thereof, an extensible frame supported on the pivot side of said pedestal for reciprocating movement relative thereto in a horizontal path, and a tool head

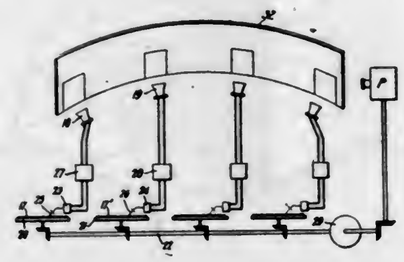
including a cutting tool carried on the free end of said frame for movement away from and toward said pedestal, said work guide having a transverse slot therein positioned with the work side thereof on the pivotal axis of said pedestal to insure the passage of said cutting tool therethrough at a point definite and fixed for every position of said pedestal relative to said base.

1,765,734. INSULATED CONDUCTOR. WILLIAM J. O'NEILL, River Forest, Ill., assignor to Elmer J. Mercil, Oak Park, Ill. Filed Mar. 7, 1927. Serial No. 173,488. 3 Claims. (Cl. 173—264.)



1. A conductor comprising a plurality of sheet metal portions, a plurality of sheet insulating portions adapted to be rendered plastic under the influence of heat and positioned in the spaces between and projecting laterally in both directions beyond the sheet metal portions and there merged by the application of heat, and means electrically connecting all of the sheet metal portions, said means extending laterally from each sheet metal portion to the exterior of the formed insulation.

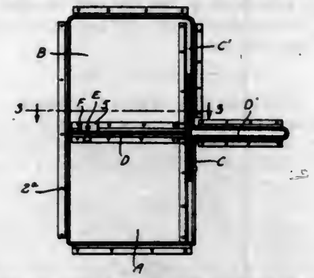
1,765,735. RECORDING AND REPRODUCING SYSTEM. EDWARD D. PHINNEY, Mount Vernon, N. Y., assignor of one-half to Paul Kolisch, New York, N. Y. Filed Sept. 14, 1927. Serial No. 219,487. 11 Claims. (Cl. 179—100.4.)



2. Means for receiving and combining the simultaneous concerted performance of groups of artists located at widely separated points, comprising a recording room for each group of artists, an electrical pick-up device in each room, sound recording mechanism at a central station operated under control of said pick-up devices, means for transmitting, during the recording process, from the central station to each room, a contemporaneous reproduction of the concerted performance of all the groups, and means for transmitting from said central station to each room during the recording process visual signals for the purpose of coordinating the performances of the several groups.

1,765,736. THEFT-PREVENTION APPARATUS. ANTHONY J. PICHL, St. Louis, Mo., assignor of one-fourth to Edward B. Holly, Jr., St. Louis, Mo. Filed Jan. 21, 1929. Serial No. 333,872. 7 Claims. (Cl. 20—1.01.)

5. An apparatus for the purpose described, comprising a passageway arranged so as to serve as the entrance to a compartment or space in which valuables are stored, a sliding entrance door for said passageway, and a sliding exit door for said passageway, said doors being arranged



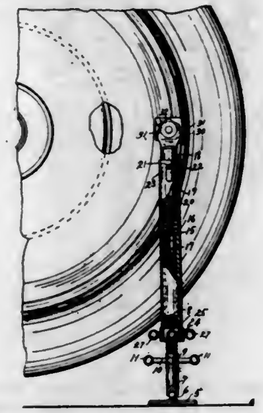
in such relation that either of said doors when in other than a fully closed condition acts as an abutment which blocks or prevents the other door from being opened.

1,765,737. BARIUM SULPHATE AND METHOD OF MAKING SAME. JAMES B. PIERCE, Jr., Charleston, W. Va. Filed Nov. 10, 1924. Serial No. 749,028. 4 Claims. (Cl. 23—122.)

2. The process of making precipitated pure barium sulphate and pure sodium sulphydrate, which consists in causing carbon dioxide gas to react on barium sulphide liquor to thereby produce precipitated barium carbonate and barium sulphydrate liquor, effecting the separation of the barium carbonate so formed from the barium sulphydrate liquor, then causing the barium sulphydrate liquor to react with pure sodium sulphate to produce precipitated barium sulphate and sodium sulphydrate.

4. The process of making pure barium sulphate and pure sodium sulphydrate and certain by-products, which consist in causing substantially pure carbon dioxide gas to react upon barium sulphide liquor to form precipitated barium carbonate and barium sulphydrate liquor, effecting the separation of the barium carbonate so formed from the barium sulphydrate liquor, then causing the barium sulphydrate liquor to react with pure sodium sulphate to produce precipitated barium sulphate and sodium sulphydrate liquor, decanting off the sodium sulphydrate liquor, then washing the precipitated barium sulphate substantially free of sodium sulphydrate and other salts of sodium and sulphur with pure water, and the last traces of salts of sodium and sulphur being oxidized to sodium sulphate by hydrogen peroxide and then removing the resulting sodium sulphate by washing with water.

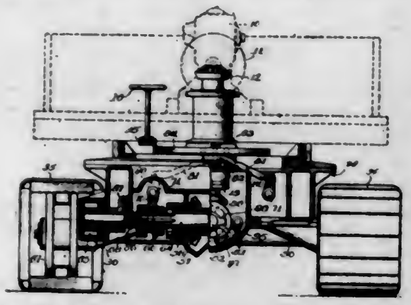
1,765,738. BRAKE-TESTING DEVICE. WILBER J. PINE, Kenosha, Wis. Filed Sept. 27, 1926. Serial No. 137,952. 10 Claims. (Cl. 265—1.)



1. In a device of the character described, the combination with a base, of a screw swiveled thereto, a handle

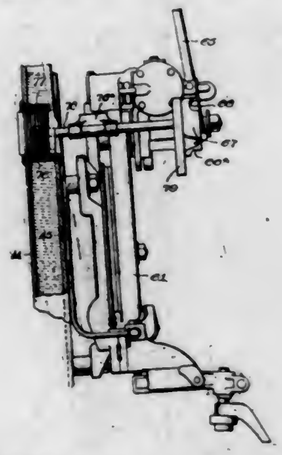
for the rotation of said screw, a nut threaded upon said screw, a member mounted on said nut and providing a spring seat, a plunger guided in said member, a spring supporting said plunger from said seat, and a forked arm carried by said plunger.

1,765,739. CONTINUOUS-TREAD TRUCK. JOHN D. RAUCH, Lima, Ohio, assignor to The Ohio Power Shovel Company, Lima, Ohio, a Corporation of Ohio. Filed Aug. 27, 1926. Serial No. 131,936. 1 Claim. (Cl. 180—92.)



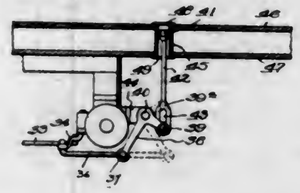
In a continuous tread truck and in combination with a turntable mounted thereon, power means carried by said turntable, an axially disposed vertical shaft connected with said power devices, a pair of continuous tread devices supporting said truck, and power connections between said vertical shaft and said treads including a rotatable transverse member, a pair of clutch devices at opposite ends of said transverse member for selectively connecting said member with said treads, tension means tending to force said clutches into driving engagement, and controlling means for said clutches comprising a wheel mounted coaxially with said vertical shaft, rock arms connected with said clutches, a slotted link connected to each of said rock arms and extending into mutually overlapping position adjacent said wheel and a pin carried by said wheel and engaging both of said slotted links to effect selective operation of said rock arms by movement of said wheel in opposite directions.

1,765,740. FIRE-BOX DOOR. JAY G. ROBINSON, Chicago, Ill. Filed July 22, 1929. Serial No. 380,117. 8 Claims. (Cl. 110—176.)



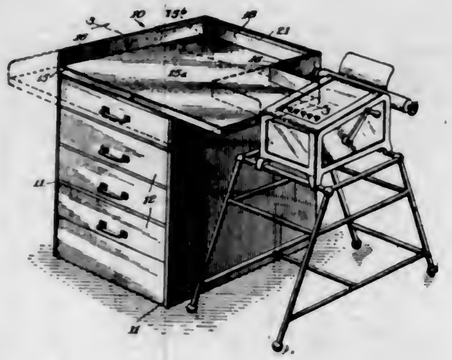
1. In a locomotive, a fire box, a fire door, means for opening and closing said door, and other means responsive to pressure in said fire box for automatically closing said door.

1,765,741. FIRE-BOX DOOR. JAY G. ROBINSON, Chicago, Ill. Filed July 29, 1929. Serial No. 381,763. 3 Claims. (Cl. 110—176.)



1. In a boiler fire-box, a door, door operating mechanism comprising means controllable by the operator for opening and closing said door and for retaining said door in open position, means operable by pressure within the fire-box occurring when said door is retained in open position for returning said door to closed position, said last named means comprising a pressure member exposed on one side to the interior of the fire-box and having a lost motion connection with said door operating mechanism, said lost motion connection permitting transmission between the connected members of a part only of their movement.

1,765,742. BOOKKEEPER'S DESK. GEORGE W. SCHULZ, Cleveland, Ohio, assignor to Yawman & Erbe Manufacturing Co., Rochester, N. Y., a Corporation of New York. Filed Mar. 21, 1927. Serial No. 176,981. 15 Claims. (Cl. 45—6.)

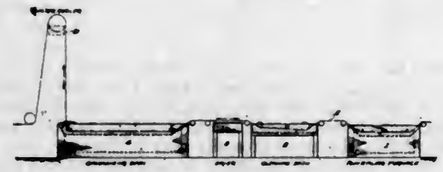


1. In a desk structure, an adjustable top comprising a pair of parallel elongated right angle members, means to secure said right angle members to the top of a desk, a top piece having depending parallel sides the lower ends of which are flared outwardly, said depending sides being secured complementary to said channel members to form elongated grooves therebetween, a pair of parallel U-shaped channel members the lower edges of which are adapted to be contained by and slide in the aforesaid elongated grooves, and a second top piece permanently secured to the upper edges of said U-shaped channel members.

15. The combination with a sheet metal desk of the class described comprising a rectangular body unit and a sheet metal top structure therefor substantially coextensive with the vertical projection of the body at the rear and one lateral side thereof, but at the opposite side and forwardly of the rear, extending considerably beyond the lateral wall of the body to overhang the same leaving a cut-out rear corner at said opposite side and wherein the top structure has a low upstanding wall along the rear edge and along a portion of each contiguous lateral edge and wherein the top structure presents an edge of

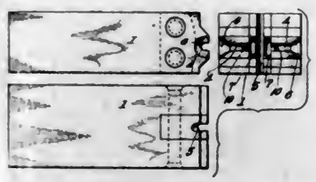
substantial thickness along the front including the laterally overhanging portion,—of means for forwardly extending the top structure, including said front edge, to provide a continuous open working surface of increased area considerably overhanging the front wall of the body, said means being included in the top structure and comprising a fixed rearward top surface member, a second top surface member of sheet metal extending substantially from the first-mentioned lateral edge to the lateral edge of the laterally overhanging portion and carrying an exposed downward thickness-simulating flange along substantially its entire front edge, and means on the top structure for slidably mounting the second surface member for reciprocation from a rearward position superposed upon the fixed surface member with the horizontal projection of the latter within said front flange to a forward suspended position overhanging the front wall of the body, at which position any vertical offset between the fixed and slidable surface members is less than the height of said flange.

1,765,743. APPARATUS FOR COATING METALLIC ARTICLES. WILLIAM H. SOMMER, Peoria, Ill. Original application filed Nov. 7, 1927, Serial No. 231,621. Divided and this application filed June 26, 1928. Serial No. 288,485. 3 Claims. (Cl. 91—59.4.)



1. In an apparatus for coating iron or steel wire with "spelter," in combination, a receptacle to hold the spelter and thru which the wire is adapted to be moved, a skimmer member thru which the coated wire passes having free moving ends, whereby its wire skimming portion may align itself to the axial movement of the wire and guiding means for the skimmer member disposed on opposite sides of said member.

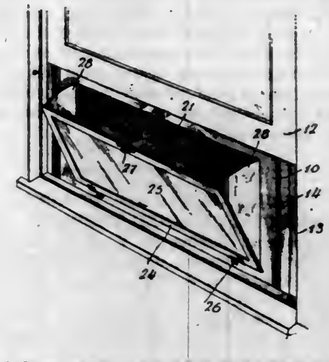
1,765,744. DIE STRUCTURE. WILLIAM H. SOMMER, Peoria, Ill. Filed Nov. 15, 1928. Serial No. 319,603. 6 Claims. (Cl. 140—116.)



1. In a machine for staple tying strand and stay wires of a wire fence, means for stapling the wires, and means for substantially simultaneously straightening the stay wires which are bowed or flexed during the stapling operation.

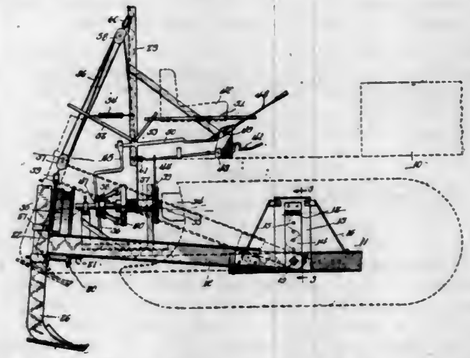
1,765,745. WINDOW VENTILATOR. WILLIAM STROM, Bronx, N. Y. Filed Apr. 12, 1928. Serial No. 269,419. 4 Claims. (Cl. 98—99.)

1. A ventilator including a main frame having an opening therein, a closure member for said opening pivoted to said frame, and end sections hinged to said closure member and engageable with portions of said main frame to frictionally maintain said closure member in various positions of adjustment, said end sections being capable of



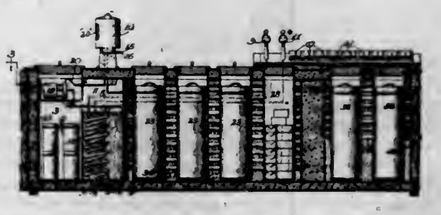
withdrawal from engagement with said frame and thereafter moved to a plane substantially parallel to said frame and closure member and in interposed relation thereto.

1,765,746. SUBSOILER. ARTHUR F. STUBENBERG, Wahiawa, T. H. Filed Oct. 27, 1927. Serial No. 229,000. 2 Claims. (Cl. 97—47.)



1. In a device of the character described the combination of a vehicle, a frame pivotally attached to said vehicle at substantially the mid-point of its length, said frame comprising a pair of side arms and a cross arm connecting the ends of said side arms, said cross arm being located in close proximity to the end of said vehicle and means mounted at the end of said vehicle and connected to said frame for raising and lowering said frame, said cross arm being arched throughout its central portion.

1,765,747. FREEZER FOUNTAIN. CHARLES TAYLOR, Beloit, Wis., assignor to Taylor Freezer Corporation, South Beloit, Ill., a Corporation of Delaware. Filed Nov. 30, 1928. Serial No. 322,856. 9 Claims. (Cl. 62—101.)



1. A freezer fountain comprising a unitary structure having an ice cream hardening compartment containing

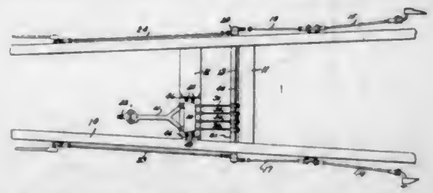
a heat transferring fluid, an ice cream dispensing compartment containing a separate heat transferring fluid, means for conducting a refrigerant through both fluids for cooling them, a freezer, means for circulating fluid from one of said compartments through the freezer and returning it to one of said compartments, and syrup tanks mounted on said structure, sealed from but in heat conducting relation to one of said compartments whereby said tanks are cooled but protected against air circulation from said compartments.

1,765,748. MANUFACTURE OF FLOOR COVERINGS AND PRODUCTS OBTAINED THEREBY. MERWYN C. TEAGUE, Jackson Heights, N. Y., assignor to American Rubber Company, Boston, Mass., a Corporation of Massachusetts. Filed Apr. 4, 1925. Serial No. 20,680. 12 Claims. (91—68.)

1. Flooring comprising a fibrous base material and a surfacing of a dried compounded rubber dispersion containing a polar compound.

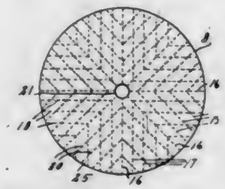
12. A method of making sheet material comprising embedding granular material in a fibrous backing treated with an asphaltic material, and uniting a surfacing of a rubber latex compound to the backing and granular material by the aid of a polar compound.

1,765,749. DEVICE FOR EQUALIZING STRESSES. ISIDOR YASSENOFF, Detroit, Mich. Filed Sept. 4, 1928. Serial No. 303,626. 4 Claims. (Cl. 188—204.)



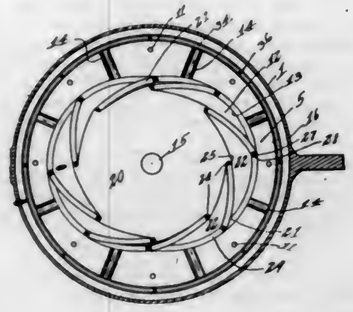
1. Means for distributing a single applied force to a plurality of force receiving devices comprising a casing, means for applying a force tending to move said casing, a plurality of floating wedges in said casing, a plurality of other wedges in said casing spaced apart by said floating wedges, and a force receiving element secured to each of said other wedges.

1,765,750. STITCHED BUFFING WHEEL. HARRY ZIMMERMAN, Lakeland, Fla., assignor, by mesne assignments, to The Yerges Manufacturing Company, Fremont, Ohio, a Corporation of Ohio. Filed Mar. 14, 1927. Serial No. 175,408. 1 Claim. (Cl. 51—193.)



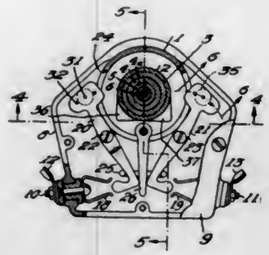
A buffing section comprising a plurality of superposed plies of fabric for forming a circular disk, and stitching forming nested V-shaped pockets in series, the stitching of pockets of one series overlapping the stitchnig of pockets of another series for forming minor closed diamond shaped pockets with the stitching approximating uniformity throughout the buffing section, the points of the V-pockets of both series being directed toward the center of the section.

1,765,751. HYDRAULIC CHANGE-SPEED TRANSMISSION. JOSEPH E. BITTNER, Yakima, Wash. Filed July 11, 1927. Serial No. 204,725. 13 Claims. (Cl. 192—58.)



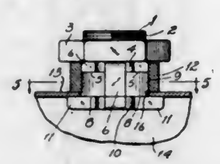
1. A hydraulic change speed transmission, comprising a flywheel, said flywheel being provided with a non-circular recess in the interior, said recess forming a fluid reservoir, a rotary member mounted concentrically with said flywheel and mounted for rotation independently thereof, means interposed between said flywheel and said rotary member for subdividing the interspace between the walls of said non-circular recess and said rotary member into a plurality of chambers of alternately increasing and decreasing volume, and providing for equal volume of diametrically opposite chambers the flywheel being provided with ports, an outer casing surrounding said flywheel and forming a fluid reservoir in communication with said ports, and means carried by and rotatable with said fly wheel for varying the effective cross-section of said ports.

1,765,752. CIRCUIT CLOSER. WALTER BONSOR, Chicago, Ill. Filed Mar. 21, 1928. Serial No. 263,466. 1 Claim. (Cl. 200—59.)



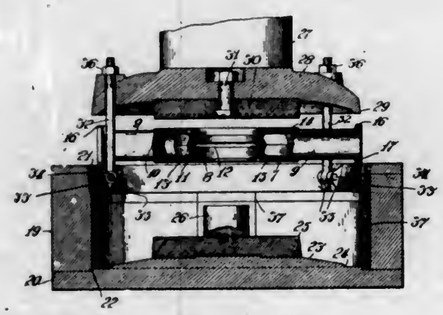
In a circuit closer device for automobiles, a housing secured to the steering column jacket, binding posts in opposed walls of said housing, connection clips carried by said binding posts within said housing, contact levers fulcrumed in said housing and movable as an unit through a perforation in the steering column jacket for engagement with one of said connection clips at a time, said levers being offset with respect to each other, said levers being yieldingly retained normally in disengaged relation with said clips, a rod extending longitudinally of the column jacket, a handle for said rod, a finger fast to said rod, a yoke connecting said finger and levers, and cam lugs carried by the vehicle steering tube and offset to correspond to said levers for repositioning engagement therewith as the vehicle makes a quarter turn with said levers out of normal position.

1,765,753. PIPE UNION. WILLIAM S. BREMER, St. Charles, Mo., assignor to Economy Aluminum Company, a Corporation. Filed July 8, 1927. Serial No. 204,266. 1 Claim. (Cl. 285—52.)



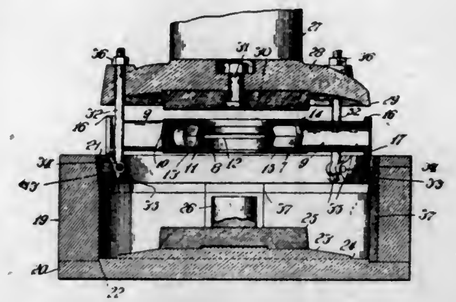
A pipe union of the class described, comprising detachable members, an internally screw threaded nut and a hollow, cylindrical body portion having a relatively deep concentric groove intermediate of its ends, said groove having straight side walls at right angles to the major axis of said body portion, the upper end of said body portion being externally screw-threaded and engaging like threads in the nut and having its opposite end of a reduced external diameter, the portion of the body between the said groove and said reduced end having a plurality of longitudinal grooves disposed at equal distances apart about its periphery which receives and holds said detachable members, said detachable members having plain-faced shoulders lying opposite each other in the same plane, said detachable members having their lower portions L-shaped so that when inserted in an opening of a tank the bottom of the L-shaped portions contact with and closely fit the interior marginal edge of said opening in said tank or other closed vessel, an annular washer of resilient material closely fitting the body of said union and disposed between the nut screw-threaded on the union and the external surface of said tank or other closed vessel when said union is in position.

1,765,754. METHOD OF MAKING CAST-METAL WHEELS. FREDERICK W. BUAGER, Niles, Mich., assignor to Clark Equipment Company, Buchanan, Mich., a Corporation of Michigan. Filed Aug. 10, 1925, Serial No. 49,161. Renewed Nov. 27, 1929. 24 Claims. (Cl. 29—174.)



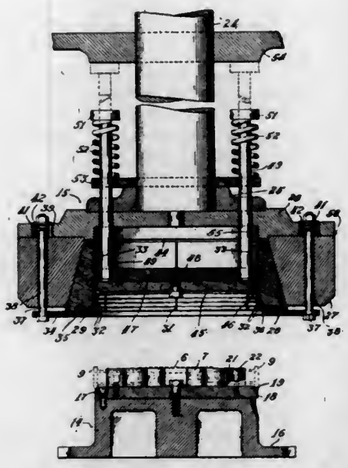
1. The method of making cast metal wheels, which consists in casting a unitary spider comprising a hollow hub portion and spokes radiating therefrom, and then pressing the hub portion and spokes to size and shape in a suitable die.

1,765,755. APPARATUS FOR MAKING CAST-METAL WHEELS. FREDERICK W. BURGER, Niles, Mich., assignor to Clark Equipment Company, Buchanan, Mich., a Corporation of Michigan. Filed Aug. 10, 1925. Serial No. 49,162. 24 Claims. ((Cl. 153—48.)



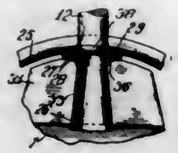
14. An apparatus for shaping wheel spiders comprising a follower, means suspended from the follower for supporting the spider, a ring die, and means for actuating the follower to move the spider into said die to shape the peripheral portions thereof, and to withdraw the spider from said die.

1,765,756. DIE MECHANISM FOR SIZING AND TESTING METAL-WHEEL SPIDERS. FREDERICK W. BURGER, Niles, Mich., assignor to Clark Equipment Company, Buchanan, Mich., a Corporation of Michigan. Filed Apr. 19, 1926. Serial No. 102,893. 25 Claims. (Cl. 29—33.)



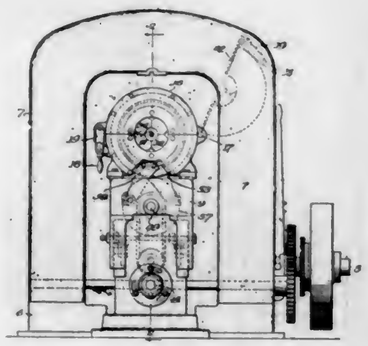
25. An apparatus for finishing wheel spiders comprising a die ring having a tapered internal surface, a plurality of circularly arranged die segments bearing against such tapered surface and adapted to be moved therealong for relative converging and separating movement of said die segments, a follower cooperating with said die segments, means for producing relative axial movement between said follower and said die segments for causing relative movement between said segments and the spider in a direction transversely across the circumference of the spider, and means for adjustably limiting the extent of sliding movement of said die segments along said tapered surface whereby to adjust said apparatus to different sizing diameters.

1,765,757. DIE MECHANISM FOR CONSTRUCTING METALLIC WHEELS. FREDERICK W. BURGER, Niles, Mich., assignor to Clark Equipment Company, Buchanan, Mich., a Corporation of Michigan. Filed Apr. 19, 1926. Serial No. 102,894. 17 Claims. (Cl. 153—21.)



1. In die mechanism for pressing portions of a wheel rim into interlocking engagement with a hollow spoke structure, the combination of a male pressing die for pressing a solid portion of the rim down into cupped engagement with openings in the spoke structure and female die means adapted to cooperate with said male die and comprising two separable supporting members adapted to engage over and support the spoke during said pressing operation.

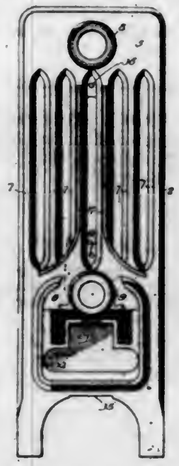
1,765,758. MECHANISM FOR OPERATING ON CAN BODIES. WILLIAM CAMERON, Chicago, Ill., assignor to Cameron Can Machinery Co., Chicago, Ill., a Corporation of Illinois. Filed Mar. 4, 1927. Serial No. 172,587. 6 Claims. (Cl. 153—25.)



1. In a can body making machine, the combination of a tool adapted to operate upon a can body, a rotatable oscillatory member for actuating said tool and means for driving said member including a shaft, a cam thereon, the latter having a track adapted to confine a follower thereto and a connection between said cam and member provided with a cam follower confined to said track.

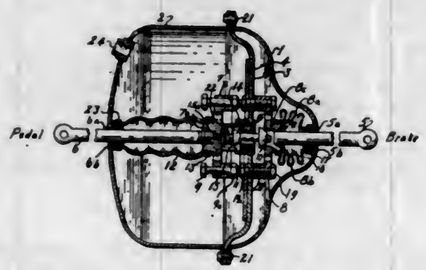
1,765,759. GAS-FIRED RADIATOR. GLEN C. CARNAHAN, Chicago, Ill., assignor to James B. Clow & Sons, Chicago, Ill., a Corporation of Illinois. Filed June 13, 1928. Serial No. 285,125. 3 Claims. (Cl. 237—17.)

1. In a radiator of the character described, a loop comprising columns, a header connecting said columns, means providing a portion of a combustion chamber below said header, a laterally projecting rib secured to said loop on one side thereof and bounding the sides and the bottom



of the combustion chamber, and an inwardly and upwardly directing rib secured to said loop and having a portion spaced above the first said rib.

1,765,760. SERVO-MOTOR FOR BRAKES. DORSEY G. DUTY and ROY P. SKERRITT, Detroit, Mich. Filed Oct. 6, 1927. Serial No. 224,307. 1 Claim. (Cl. 121—41.)



Brake applying means comprising a closed cylindrical casing, a diaphragm dividing said casing into two compartments and having fixed to one side and spaced therefrom a spider, a rod secured to said spider and extending through one of said compartments and loosely through the adjacent casing wall, said rod being enclosed in a flexible sleeve fixed air-tight to said spider and around the opening in said wall whereby to seal said compartment, a passage-way from within said spider into said sleeve, a second spider on the other side of said diaphragm, and in alignment with the first, said spiders being movable with respect to each other, a rod fixed to said second spider and extending through said other compartment and through its adjacent casing wall in alignment with the first mentioned rod, a flexible sleeve around said second rod and fixed air-tight to said second spider and around the opening through which said rod extends whereby to seal said compartment, an opening through said diaphragm within said spider, a double valve member adapted to close said opening and also to close the first mentioned passage, said double valve member being provided with a stem of such length as to open one of said valves when the other is seated, spring means adapted to seat said valve to close the first mentioned passage, means for moving the second mentioned rod and the spider attached thereto, means connected to said last mentioned spider to move said diaphragm whereby to seat the valve in the

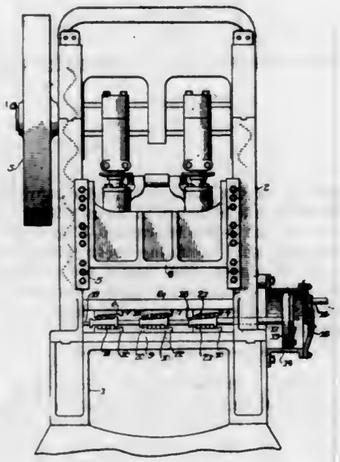
opening therein and open the said passageway normally closed by the other portion of said valve and means adapted to connect the chamber thru which said second rod passes to an exhaust means.

1,765,761. ADHESIVE AND METHOD OF ITS MANUFACTURE. LOUIS K. FACKLER, Ridgewood, N. J., assignor to Stein, Hall & Company, Inc., a Corporation of New York. Filed Dec. 29, 1927. Serial No. 243,484. 4 Claims. (Cl. 87—17.)

1. The process of forming a liquid adhesive of substantially uniform consistency which comprises adding to dry dextrine a soluble alkaline sulfate, and adding water thereto to effect the solution of the mixture.

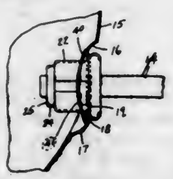
3. A composition of matter for use in forming a liquid adhesive containing dextrine and a soluble alkaline sulfate, both in dry form.

1,765,762. MECHANO-PNEUMATIC CUSHION FOR POWER PRESSES. JOHN C. HANNA, Chicago, Ill., assignor to Hanna Engineering Works, Chicago, Ill., a Corporation of Illinois. Filed Dec. 3, 1928. Serial No. 323,548. 12 Claims. (Cl. 113—46.)



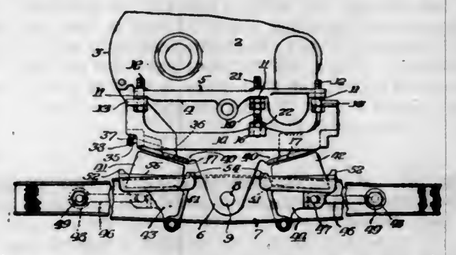
1. Supporting mechanism for the lower platen of a die press, comprising a transversely movable element, blocks having lower inclined bearing surfaces secured to the lower surface of the platen, blocks secured to the transverse movable element having upper inclined bearing surfaces, and bearing means comprising rollers held between the inclined bearing surfaces.

1,765,763. FERRULE AND RETAINER FOR HEAD LAMPS. SAMUEL W. HYATT, Connersville, Ind., assignor to Indiana Lamp Corporation, Connersville, Ind., a Corporation. Filed Feb. 16, 1929. Serial No. 340,514. 7 Claims. (Cl. 240—57.)



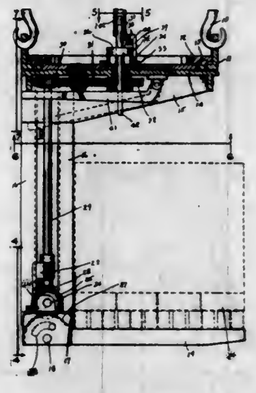
1. The combination with a pair of headlamps and a tie bar therebetween, of a detachable anchorage between each lamp and the tie bar comprising a supporting plate portion of the lamp having a circular aperture therein, a cylindrical ferrule receivable by said aperture and including a plate engaging flange, said ferrule and plate having a tongue and slot connection preventing relative rotation therebetween, and a circularly apertured and curved ferrule encircling spring having a complementary portion for tongue and slot connection with said ferrule and with the first mentioned tongue and slot connecting portion thereof, said spring being directed toward the opposite face of the flange engaged plate portion for clampingly retaining the ferrule thereon.

1,765,764. FRONT-AXLE BUMPER. GEORGE C. JETT, Milwaukee, Wis., assignor of two-fifths to Walter H. Stiemke, Milwaukee, Wis. Filed May 23, 1927. Serial No. 193,402. 2 Claims. (Cl. 280—111.)



1. In a tractor, a transverse supporting member, a tractor body including a power plant incasement pivotally connected to said supporting member for swinging movements relative thereto, stop means on said support for resiliently limiting said relative swinging movements, and rigid means rigidly secured to said incasement and normally unconnected with said limiting means for distributing any shock effects of limitation of such relative movements over a relatively large area of said incasement.

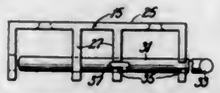
1,765,765. BRICK-HANDLING APPARATUS. GRAFTON E. LUCE, Chicago, Ill., assignor to Lancaster Iron Works, Inc., Lancaster, Pa. a Corporation of Pennsylvania. Filed Nov. 3, 1927. Serial No. 230,704. 19 Claims. (Cl. 294—63.)



1. A brick handling fork comprising a support having a downwardly extending portion, a plurality of brick supporting fingers pivotally mounted on the lower end of said downwardly extending portion, a shaft extending from the lower end of said downwardly extending portion to the upper end thereof, a gear connection between the lower end of said shaft and said fingers, and means positioned

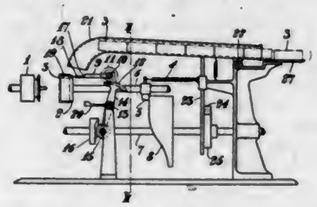
in the upper portion of said support for locking said shaft against rotation for maintaining said fingers in supporting position and releasing said shaft so as to permit the free rotation thereof, whereby said fingers may freely swing about their pivotal mounting to dumping position.

1,765,766. FURNITURE. CARLOS LYON, Decatur, Ill. Filed Feb. 18, 1929. Serial No. 340,838. 2 Claims. (Cl. 45—11.)



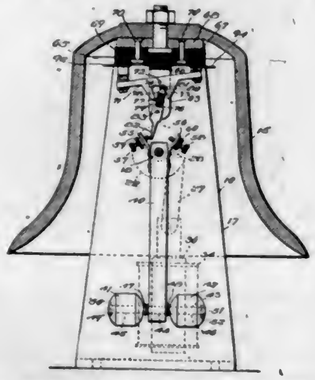
1. In a catch for tables having foldable legs and braces of the class described, a catch comprising spaced pairs of legs, adapted to receive said braces between the respective pairs, holes in said legs and said braces, a pin adapted to pass through said holes to hold the braces unfolded, a lug on the pin, openings associated with at least some of said holes adapted to accommodate said lug in one angular position of the pin, said lug being positioned between the innermost legs of the pairs when in holding position so that the pin may be turned to an angular position whereby the lug prevents withdrawal.

1,765,767. MACHINE FOR MAKING MATCH INNER BOXES. GUNNAR EMANUEL MELLGREN, Tidaholm, and JOHN GOTTHARD SJÖSTRÖM, Jonkoping, Sweden. Filed July 21, 1928, Serial No. 294,380, and in Sweden Aug. 1, 1927. 4 Claims. (Cl. 93—36.)



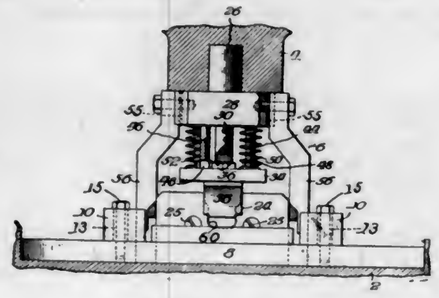
1. A machine for making match inner boxes, comprising a rotary winding mandrel on which the boxes are partially formed, a second mandrel on which the boxes are finished, means for transferring the boxes from the first to the second mandrel, and means for conveying the finished boxes from said second mandrel and maintaining the boxes in predetermined arrangement during such conveyance.

1,765,768. GONG. JOHN T. MILLER and MICHAEL HANLEY, Chicago, Ill. Filed July 14, 1926. Serial No. 122,303. 3 Claims. (Cl. 177—288.)



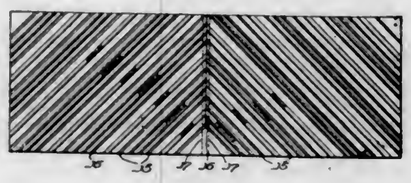
2. In a gong ringing mechanism, a shaft pivotally mounted on a support, a rigid arm mounted on said shaft, a pair of pins attached to the free end of said arm at opposite sides thereof, a hammer mounted on each of said pins and capable of sliding with respect thereto, and a coil spring disposed around each pin between the arm and hammer to regulate the movement of the hammer on the pin.

1,765,769. BRUSH-MAKING MACHINE. AUGUSTO E. MUELLER, Chicago, Ill., assignor of one-half to Maurice Britz, Chicago, Ill. Filed Nov. 3, 1924. Serial No. 747,483. 6 Claims. (Cl. 300—15.)



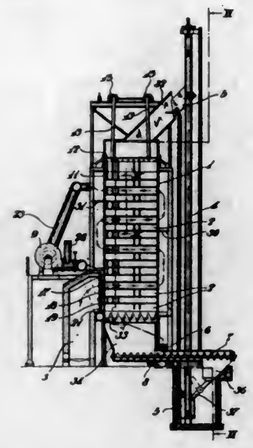
1. A machine of the class described comprising, means to laterally confine a plurality of fibers within a predetermined area and for a predetermined fiber length, means cooperative with said confining means to compact said fibers at spaced places, and means independent of said cooperative means operative to apply a fastener about said fibers between said spaced places to hold them in compacted relation.

1,765,770. DIE. ALBERT OLGAY, Glen Ellyn, Ill., assignor to Gaw-O'Hara Envelope Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 27, 1928. Serial No. 273,417. 8 Claims. (Cl. 93—68.)



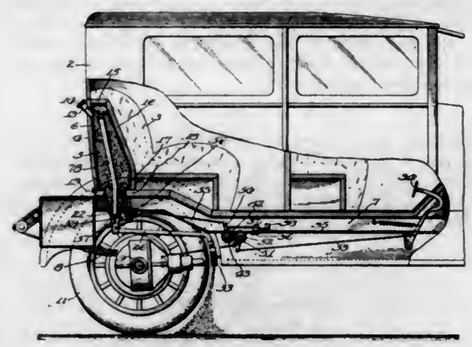
1. As an article of manufacture, a hollow metal cylinder having a plurality of die impression surfaces formed in its surface adjacent one another and separated by a relatively thin severable strip of metal of the cylinder, each impression surface having a portion which is parallel a surface generated by a right line, lying wholly in the surface of a cylinder, which relatively moves uniformly about the axis of the cylinder, and at the same time relatively moves uniformly in a direction parallel said axis.

1,765,771. PREHEATING SYSTEM. FRANZ PUENING, O'Hara Township, Allegheny County, Pa., assignor to The Koppers Company, a Corporation of Delaware. Filed July 20, 1927. Serial No. 207,043. 10 Claims. (Cl. 257—230.)



1. In a heating system, the combination with a passageway for heated gases, of means for supplying gases at different temperatures thereto, said gases being so disposed initially that the hotter gas is surrounded by a layer of gas of lower temperature.

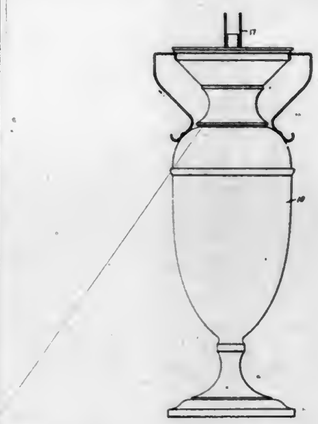
1,765,772. SANDING DEVICE FOR AUTOMOBILES AND THE LIKE. JOHN N. REESE, Chicago, Ill. Filed Sept. 18, 1926. Serial No. 136,235. 11 Claims. (Cl. 291—3.)



1. In combination with an automotive vehicle having wheels and an internal combustion engine, means for distributing sand in front of one of said wheels, a sand reservoir having an outlet connected with said means, a conduit for the engine exhaust extending into the sand in said reservoir to heat the sand and adapted to discharge exhaust gases into the sand in said reservoir adjacent the reservoir outlet to impel the sand toward said outlet and said distributing means.

1,765,773. SMOKING VASE. JAMES H. REICHART, Muncie, Ind. Filed June 18, 1928. Serial No. 286,156. 3 Claims. (Cl. 131—51.)

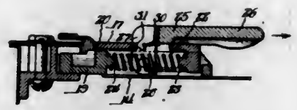
1. A smoking vase consisting of a receptacle open at the top, a removable lid thereon with depressions sloping downwardly toward the center of the lid and with an opening through the lower part of each depression for depositing ashes of cigars or the like, a closure plate mounted adjacent the under side of the lid with openings therethrough adapted to register with the openings through the lid for opening and closing the lid, and means central of said lid and closure plate for turning the closure plate to its opening and closing positions.



1,765,774. INSULATING PAPER. REED P. ROSE, Jackson Heights, and HAROLD E. CUDE, Floral Park, N. Y., assignors to General Rubber Company, New York, N. Y., a Corporation of New Jersey. Filed July 30, 1927. Serial No. 209,636. 34 Claims. (Cl. 92—21.)

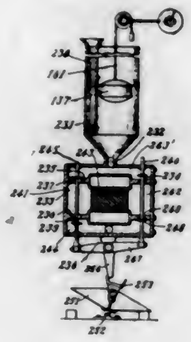
1. A method of making flexible insulating sheet material which comprises hydrating paper making pulp to a gelatinous condition, combining normally hydrated pulp therewith, mixing dispersed rubber therewith, and forming into sheets.

1,765,775. HANDLE CONSTRUCTION. LE ROY C. SCHENCK, East Moline, Ill., assignor, by mesne assignments, to Troy Laundry Machinery Company, Inc., Dover, Del., a Corporation of Delaware. Filed Aug. 5, 1926. Serial No. 127,261. 8 Claims. (Cl. 292—173.)



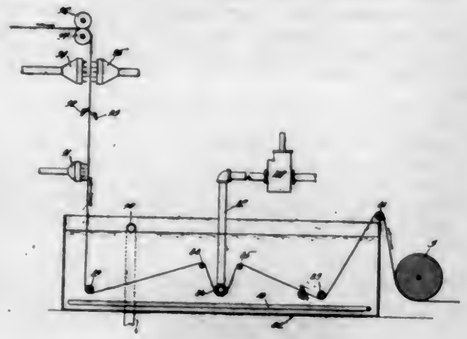
8. In combination, a housing, a reciprocable bolt within said housing, a handle for moving said bolt, said handle being adapted to engage said housing with a pivoting movement about an axis which changes relative to said handle as said handle is swung, said handle being pivotally connected to said bolt about an axis which is fixed relative to said bolt, a spring positioned to react between said housing and said bolt, said handle being provided with surfaces in angular relationship with one another adapted to engage said housing in alternative positions, in cooperation with said spring, to yieldably hold said bolt in either retracted or projected position, said handle and said housing having a tongue and groove engagement with one another when said bolt is in projected position, whereby said handle may not swing until said handle has been moved in the line of action of said spring to disengage said tongue and groove connection.

1,765,776. LIQUID-FLOW METER. MILTON O. SCHUR, Berlin, N. H., assignor to Brown Company, Berlin, N. H., a Corporation of Maine. Original application filed June 20, 1924, Serial No. 721,246. Divided and this application filed Jan. 23, 1926. Serial No. 83,325. 11 Claims. (Cl. 265—11.)



1. In a device of the class described, a member formed with a defined capillary, means for causing liquid to flow therethrough, and means for periodically reversing the direction of flow.

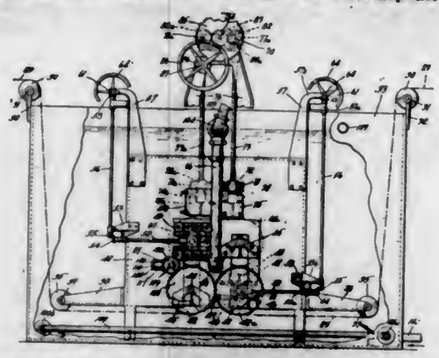
1,765,777. APPARATUS FOR SATURATING FIBROUS MATERIAL. AUGUST E. SCHUTTE, Northboro, Mass., assignor to The Flintkote Company, Boston, Mass., a Corporation of Massachusetts. Filed Sept. 5, 1925. Serial No. 54,612. 6 Claims. (Cl. 91—46.)



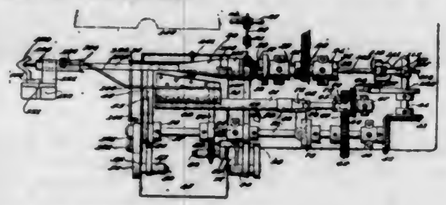
1. In an apparatus of the character set forth, a tank for containing a bath of molten asphalt, a stationary cylindrical box submerged in the asphalt in said tank and provided with a plurality of slots arranged diagonally side by side and spaced so that any plane intersecting the cylinder and perpendicular to its axis passes through at least two of said slots, means for supplying asphalt to said box, and rolls for propelling and guiding a sheet of fibrous material through said bath and in contact with said pressure box.

1,765,778. METHOD OF SATURATING FIBROUS MATERIAL. AUGUST E. SCHUTTE, Northboro, Mass., assignor to The Flintkote Company, Boston, Mass., a Corporation of Massachusetts. Filed Sept. 18, 1925. Serial No. 57,094. 10 Claims. (Cl. 91—68.)

1. In the manufacture of roofing, a process which comprises conducting a plurality of sheets of fibrous material into a bath of molten asphalt, conjoining and then squeezing said sheets together in said bath to force asphalt entrapped between the facing surfaces outwardly thereinto, and on the outer surfaces of said sheets inwardly thereinto, to effect a thorough penetration or permeation thereof.

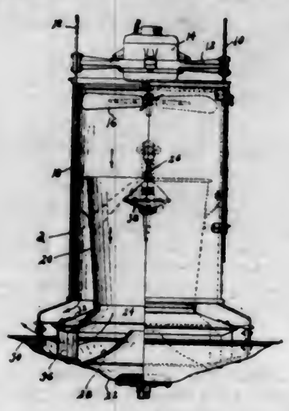


1,765,779. SHEET-WINDING MACHINE. ETHIL TONELLI, Fall River, Mass., assignor to The Pairpoint Corporation, New Bedford, Mass., a Corporation of Massachusetts. Filed Aug. 8, 1928. Serial No. 298,276. 17 Claims. (Cl. 93—79.)



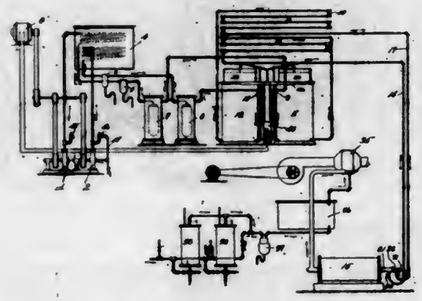
1. In a machine for winding blanks into cones upon a mandrel, means for rotating the mandrel, means for clamping the blank against the surface of the mandrel, means for applying paste to the blank and means for holding the blank against rotation with the mandrel as the paste applying means operates.

1,765,780. HUMIDIFIER. WILLIAM M. TRAFTON, Providence, R. I., and JOSEPH ARMSTRONG, Allston, Mass., assignors to American Moistening Company, Boston, Mass., a Corporation of Maine. Filed Oct. 1, 1926. Serial No. 138,959. 3 Claims. (Cl. 261—116.)



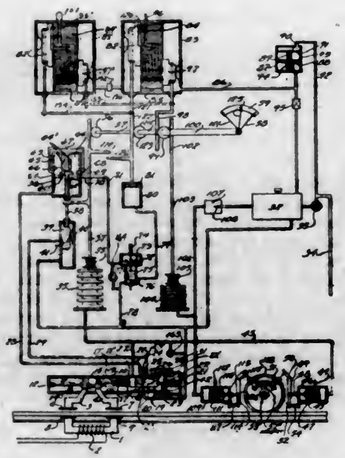
1. In a forced draft humidifier having means for producing within a casing a blast of air through which water is directed in a conical jet against the wall of the casing, the combination, with a nozzle and a spraying impact element of an intercepter for the spray adapted to be attached to the said impact element in position to entrap jetted water particles, the force and direction of whose travel as deflected by said element would be insufficient to carry them to the said casing wall.

1,765,781. APPARATUS FOR PRODUCING NITROGEN. WALLACE B. VAN ARSDEL, Berlin, N. H., assignor to Brown Company, Berlin, N. H., a Corporation of Maine. Filed Nov. 10, 1921. Serial No. 514,191. 10 Claims. (Cl. 230—18.)



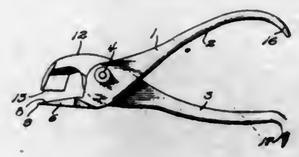
1. In an apparatus of the class described, a plurality of gas pumps, a common motor for actuating said pumps, a gasometer for receiving the gas from each pump, and manually reset means actuated by abnormal movement of any gasometer for stopping said motor.

1,765,782. PNEUMATIC TRAIN CONTROL. THOMAS W. VARLEY and WILLIAM C. NEIN, New York, N. Y., assignors to General Railway Signal Company, Rochester, N. Y., a Corporation of New York. Filed May 6, 1921, Serial No. 467,362. Renewed Nov. 11, 1925. 25 Claims. (Cl. 246—63.)



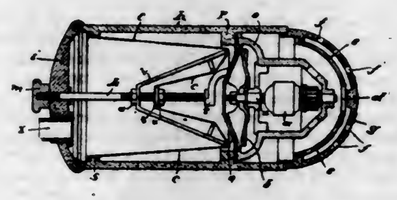
1. The combination with a vehicle, of air brakes therefor, a plurality of slide valves controlling the application of the brakes, one being operated according to the speed of the vehicle, the other being operated according to the distance traveled by the vehicle.

1,765,783. PLIERS. ROSS W. YOUNG, Oakland, Calif. Filed Feb. 9, 1926. Serial No. 87,018. 2 Claims. (Cl. 81—5.1.)



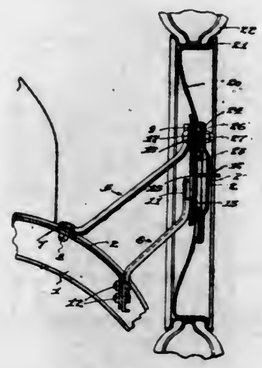
1. A pliers comprising a pair of levers pivoted intermediate their ends and terminating in gripping jaws spaced from their pivotal point, one of said jaws being twisted and terminating in a gripping portion for engaging the other of the jaws, the gripping portion being in alignment with one of the sides of the last named jaw.

1,765,784. CARPET DUST CLEANER. OTTO ALDINGER, Stuttgart, Germany. Filed Jan. 15, 1926, Serial No. 81,530, and in Germany Sept. 2, 1924. 1 Claim. (Cl. 183—51.)



Carpet dust cleaner comprising a casing or envelope of cork composition and an electric motor, a fan and a filter mounted in said casing or envelope.

1,765,785. SPARE-WHEEL CARRIER. EARL K. BAKER, Chicago, Ill. Filed Apr. 26, 1926. Serial No. 104,691. 3 Claims. (Cl. 224—29.)



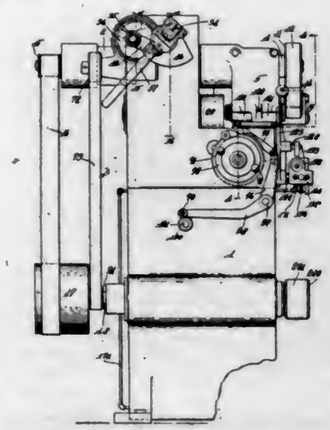
1. In a spare wheel carrier, a central arm and a duplex member comprising diverging arms, a substantially triangular wheel disc engaging plate, a bolt carried by the central arm, and extending through one corner of said plate and other bolts extending through the diverging arms of the duplex member and through the other two corners of the plate, all the corners of said plate conforming to the wheel disc which is adapted to be supported by said bolts.

1,765,786. CHILD'S COLLAPSIBLE VEHICLE. REINHARDT H. BROWN, La Porte, Ind., assignor to John Howard McElroy, trustee. Filed Sept. 29, 1928. Serial No. 309,239. 17 Claims. (Cl. 280—41.)



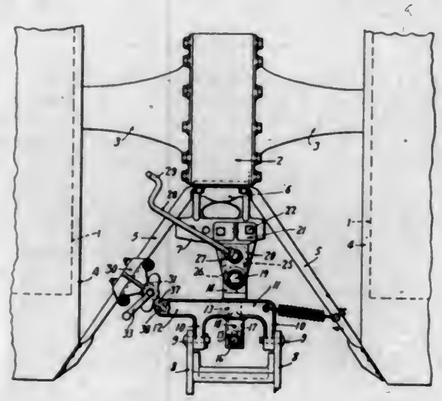
1. In a collapsible vehicle, the combination with a generally U-shaped main frame, and a generally U-shaped foot-well frame, said frames being pivotally connected to each other at their open ends, of a rear-wheel frame pivotally connected at its upper end to said main and foot-well frames where they are pivotally connected, a front-wheel frame pivotally connected to said rear-wheel frame, a handle frame pivotally connected toward its open lower end to said main frame and at said open lower end to the upper end of the front-wheel frame, a flexible trough-like body connected at the top of its sides and ends to said main frame and foot-well frame, and means for holding said foot-well frame either in its generally horizontal position to form a trough-like holder or lowered for the occupant to take a sitting position, substantially as and for the purpose described.

1,765,787. GRINDING MACHINE. WILLIAM L. BRYANT, Springfield, Vt. Filed Dec. 2, 1925. Serial No. 72,692. 47 Claims. (Cl. 51—50.)



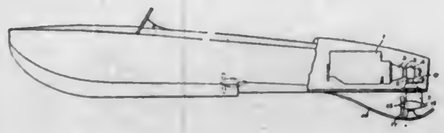
1. A machine of the class described comprising a pair of spaced bearings, a sleeved rock shaft journaled in said bearings, an arm fixed to said rock shaft outwardly of one of said bearings, a rotary shaft journaled in said arm, a tool actuated by said rotary shaft, a counter shaft journaled in said rock shaft, and driving connections between said counter and rotary shafts.

1,765,788. HITCHING DEVICE FOR TRACTOR-DRAWN IMPLEMENTS. EARLE H. DANIEL, Springfield, Ohio. Filed Mar. 12, 1928. Serial No. 261,094. 4 Claims. (Cl. 97—47.)



1. In a hitch for a tractor and implement, a hitch member connected with the implement, a second hitch member connected with the tractor, a vertical pin forming a connection between said members arranged to permit relative vertical movement between the same, a screw carried by the tractor hitch member, a follower on said screw having a sliding engagement with said pin, and a connection between said follower and said implement hitch member whereby raising and lowering of the follower causes a corresponding movement of the implement.

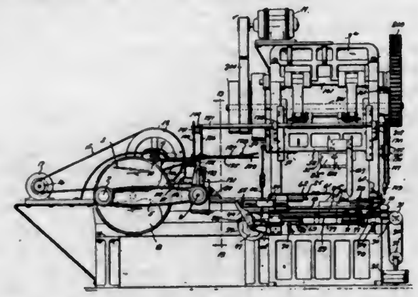
1,765,789. MOTOR BOAT. HERBERT DITCHBURN, Gravenhurst, Ontario, Canada. Filed Mar. 26, 1928. Serial No. 264,644. 8 Claims. (Cl. 115—34.)



1. In a motor boat, the combination with a hull having an engine compartment at the rear end, of an engine fixed in said compartment having a shaft extending therefrom, a casing enclosing the extension shaft from the engine provided with a vertical extension, a casing extending vertically downward from said extension below the hull, a propeller shaft mounted in the lower end of the extension casing, a vertical shaft geared to the propeller shaft and extending upwardly, a vertical shaft geared to said extension shaft and extending downwardly in said extension casing from the engine, and means detachably and operatively connecting said vertical shafts.

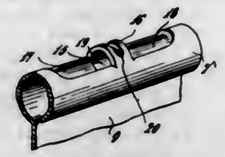
1,765,790. BENDING MACHINE. OWEN DOUTT, Detroit, Mich., assignor, by mesne assignments, to General Spring Bumper Corporation, a Corporation of Michigan. Filed July 27, 1925. Serial No. 46,264. 52 Claims. (Cl. 153—2.)

1. In a multiple bending machine, the combination of a bed having a fixed bottom die and a fixed end die, a horizontally reciprocating bender having a die cooperating with the fixed end die, a vertically reciprocating bender having a die cooperating with the bottom die, a work



holder for supporting work over the bed between both sets of dies, and means to operate the said benders successively, whereby one bender will first act on the work and then the other.

1,765,791. METHOD AND MEANS FOR CONSTRUCTING AIRPLANE WINGS, FUSELAGES, AND OTHER STRUCTURES. ANTHONY H. G. FOKKER, New York, N. Y., assignor to Fokker Aircraft Corporation of America, a Corporation of Delaware. Filed Jan. 29, 1927, Serial No. 164,385. Renewed May 6, 1930. 10 Claims. (Cl. 244—31.)



1. A rib for use in airplane wing construction embodying integral rolled top and bottom edges having depressions and cooperating raised surfaces located at intervals from end to end of said edges to provide means through which a flexible tying element for anchoring a fabric covering to said rib, may be passed longitudinally of the rib.

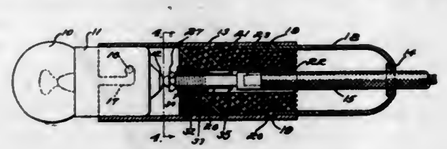
1,765,792. BODY-HANDLING DEVICE. FRANKLIN L. FOULKS, Mount Holly, N. J. Filed Oct. 1, 1926. Serial No. 138,907. 3 Claims. (Cl. 27—12.)



1. In a combined body basket and handling or operating table, a body basket, a body table and connections therebetween adapting the table to be raised from inside the basket, to a position above the basket to receive a body and then to be lowered again into the basket with the body in place upon it, the connections being suited to hold the table in raised position.

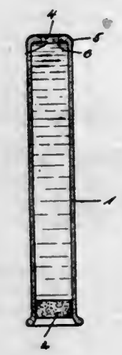
1,765,793. LAMP SOCKET AND TERMINAL THEREFOR. FREDERICK C. HERSEE, Watertown, and NATHANIEL T. WILEY, Somerville, Mass., assignors, by direct and mesne assignments, to F. C. Hersee Company, Watertown, Mass., a Corporation of Massachusetts. Filed June 15, 1927. Serial No. 199,019. 6 Claims. (Cl. 173—328.)

1. In a terminal, in combination, a support having a bore therethrough, a conductor extending into said bore, a terminal member secured at one end to said conductor within said support and having a reduced portion at the opposite end extending through and beyond said support, a sleeve mounted on and detachably secured to said ter-



minal reduced portion and having a head arranged beyond said support, a spring mounted on the sleeve and engaging said head, and a support-engaging bushing enclosing said spring and providing an abutment for the rear end of the spring.

1,765,794. TUBULAR CONTAINER FOR VISCOUS MATERIALS. ALBERT HIRTH, Nonnenhorn-on-the-Bodensee, Germany. Filed Mar. 8, 1928, Serial No. 259,996, and in Germany Mar. 11, 1927. 2 Claims. (Cl. 215—1.)



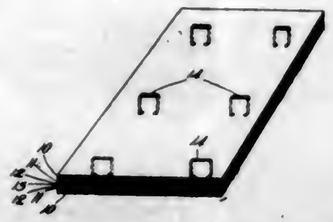
1. Tubular container for dispensing viscous and pasty materials comprising a tube, a bottom at one end of said tube having a hole, a piston-like plug in the other end of said tube and a coherent film of liquid-tight cellulosic material extending across and sealing said hole.

1,765,795. FABRIC WITH INTERWOVEN METAL WIRE. ALBERT KESSLER, Mittweida, Germany. Filed Mar. 19, 1927, Serial No. 176,795, and in Germany Jan. 15, 1927. 1 Claim. (Cl. 139—425.)



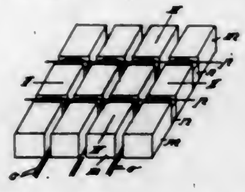
Closely woven scrubbing cloth comprising a fabric having normal warp and weft threads and metal wire worked together with and into the substance of part of said weft threads.

1,765,796. SEALED LAMINATED ROOFING ELEMENT. LESTER KIRSCHBRAUN, Leonia, N. J., assignor to The Flintkote Company, Boston, Mass., a Corporation of Massachusetts. Filed Apr. 10, 1926. Serial No. 101,097. 10 Claims. (Cl. 108—7.)



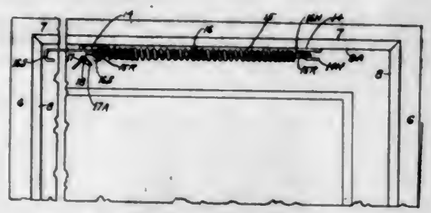
1. A roofing unit having a structure comprising a plurality of laminæ of sheet material, a layer of binder between successive laminæ, fasteners passing through said laminæ and layers, and a sealing coat of waterproof substance enveloping the exposed portion of said structure including edges.

1,765,797. ARMORED CONCRETE FLOOR. WALTER KLINKE, Zurich, Switzerland. Filed Feb. 16, 1926, Serial No. 88,589, and in Germany Feb. 18, 1925. 2 Claims. (Cl. 72—66.)



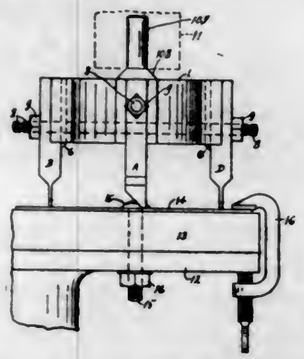
1. Armored concrete floor comprising two systems of armored concrete beams, one system extending transversely to the other, and two sets of blocks, one set being positioned between the beams, the other set being positioned in the beam space with concrete beams resting thereon in the zone of compression, the reinforcements thereof extending above and in contact with the blocks of said other set so as to act as compression reinforcing.

1,765,798. DOOR SPRING AND STOP. RALPH M. LA BARR, St. Paul, Minn. Filed Feb. 3, 1928. Serial No. 251,528. 2 Claims. (Cl. 16—72.)



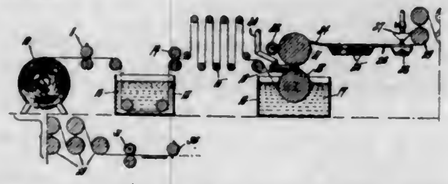
1. In a door closing and stop device of the class described, two counterpart pivot brackets, one adapted to be fixed to the upper horizontal door frame member adjacent the hinged edge of a door, the other adapted to be fixed to the door in spaced relation horizontally from the first bracket, an elongated close coiled tension spring pivotally engaging said brackets with its opposite ends and under tension when the door is closed, a rod extending longitudinally through said spring and one end thereof pivotally engaging the bracket fixed on the door frame and its other end protruding normally beyond the bracket on the door in parallel spaced relation to the said door, and a downwardly directed hook on the latter extremity of the said rod, said hook adapted to engage the bracket on the door when the latter is swung to a predetermined open position, and a stop member pivotally secured on the door outwardly of its spring bracket to engage the said hooked part of the rod and hold the door open, each of said brackets comprising a flat base and an integral L-shaped arm projecting therefrom with one part of said arm at right angles to the plate and the extremity in parallel relation to the base.

1,765,799. CIRCLE CUTTER. ALBERT J. LAWRENCE, St. Paul, Minn. Filed May 14, 1928. Serial No. 277,533. 1 Claim. (Cl. 77—69.)



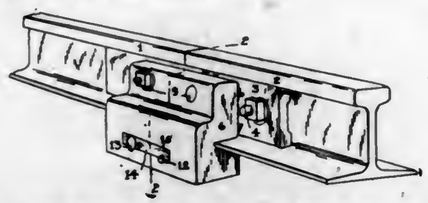
In a circle cutter of the class described, the combination of a cylindrical chuck having a number of equally spaced longitudinal grooves in its exterior face, said chuck having a central polygonal bore, a shank member with one end shaped to fit removably in said bore and a round concentric shank portion normally exteriorly of the chuck body, cutter bars with shanks adapted to lie one in each of said grooves and having each an elongated bore, means for holding said cutter bars in pairs with their cutting ends a predetermined distance from the chuck, said latter means comprising for each pair of diametrically opposite cutter bars a bar threaded at both ends and passed diametrically through the chuck and said bars and a nut exteriorly of each cutter bar, threaded on said bar to clamp said pairs of cutter bars inwardly and to frictionally retain each bar in its groove, and gage blocks for said grooves provided in sets, each block having a longitudinal rib arranged to fit in one of said grooves of the chuck and an outer groove adapted to snugly receive a cutter bar and said blocks provided with elongated apertures corresponding to the aperture of the cutter bars.

1,765,800. METHOD OF AND APPARATUS FOR MAKING STRIP SHINGLES. FREDERICK C. OVERBURY, Hillsdale, N. J., assignor to The Flintkote Company, Boston, Mass., a Corporation of Massachusetts. Filed Aug. 16, 1926. Serial No. 129,485. 7 Claims. (Cl. 91—68.)



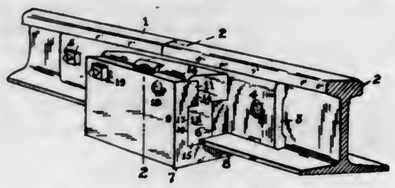
2. Steps in the method of making roofing elements, which comprise coating a face of a sheet of roofing base with a film of liquefied waterproofing compound, pressing said film against the face, and cutting a slit through the sheet from the opposite face while said film is so pressed.

1,765,801. CONNECTER FOR RAILWAY RAILS. JOHN V. PALMER, Pittsburgh, Pa., assignor of one-third to Harry I. Neaman and one-third to James M. Magee, Pittsburgh, Pa. Filed Jan. 30, 1930. Serial No. 424,623. 5 Claims. (Cl. 238—190.)



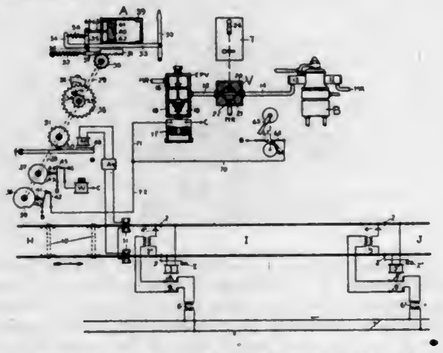
1. A connecter for rail ends comprising a pair of fish plates bridging the rail joint and fitting against the webs of the rails, abutments on the outer faces of said fish plates and bridging the joint, a clamping block fitting against each of the fish plates and bridging the joint, said blocks being recessed to receive the abutments and to receive the base flanges of the rails, clamping bolts extending through the rails, the fish plates and the clamping blocks, and through-bolts extending beneath the rails at either side of the joint and clamping the blocks together.

1,765,802. CONNECTER FOR RAILWAY RAILS. JOHN V. PALMER, Pittsburgh, Pa., assignor of one-third to Harry I. Neaman and one-third to James M. Magee, Pittsburgh, Pa. Filed Jan. 30, 1930. Serial No. 424,624. 4 Claims. (Cl. 238—208.)



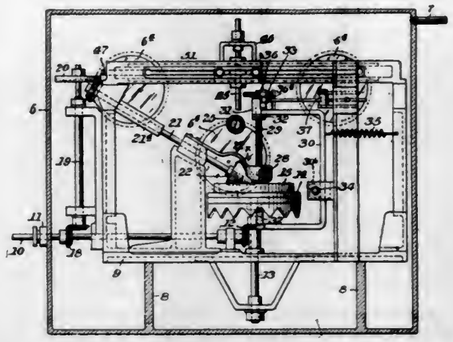
1. A rail connecter comprising a pair of fish plates fitting against the webs of the rails at either side and bridging the joint, a chair having a bridge portion extending beneath the rails at the joint to support the rails from beneath and portions extending upwardly at each side, wedge members driven between the fish plates and the chair, and bolts extending through the rails, the fish plates and the chair.

1,765,803. AUTOMATIC TRAIN-CONTROL SYSTEM FOR RAILROADS. JAMES A. PEABODY, Evanston, Ill., assignor to General Railway Signal Company. Filed Dec. 4, 1925. Serial No. 73,177. 14 Claims. (Cl. 246—63.)



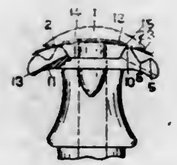
1. In an automatic train control system, car-carried apparatus comprising, a brake applying device acting to apply the vehicle brakes when active, manually operable means for maintaining said device inactive if operated at predetermined time intervals, and a manually operable locking device having a key, said locking device acting to render said brake applying device active when operated to remove said key, and to permit said brake applying device to be rendered inactive when said key is inserted.

1,765,804. METHOD OF AND APPARATUS FOR MAKING CLAY POTS. FRANK W. PRESTON, Butler, Pa. Filed May 5, 1927. Serial No. 189,094. 24 Claims. (Cl. 25—26.)



4. Apparatus for forming articles of plastic material comprising a mold, a roller, means for imparting relative movement to said roller and mold to compress the material against the mold, and means for simultaneously kneading the material.

1,765,805. SAFETY RAZOR. ALFRED SCHLÜSSLER, Berlin-Neukolln, Germany. Filed Mar. 20, 1925, Serial No. 17,061, and in Germany Mar. 22, 1924. 2 Claims. (Cl. 30—12.)

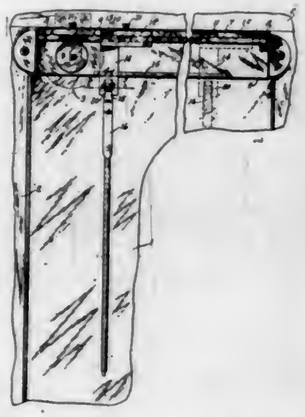


1. A safety razor comprising in combination an elastic blade, a lower clamping plate having a convex upper surface, an upper clamping plate having a concave lower surface concentric with said convex surface, the concave surface of said upper clamping plate being undercut along its edges so that two contact strips are formed along each edge, the outer strip extending to a greater radial distance from the centre about which said surfaces are curved, than the inner strip.

1,765,806. WINDSHIELD WIPER. HOWARD SCHRODER, Oakland, Calif. Filed Sept. 7, 1927. Serial No. 217,906. 1 Claim. (Cl. 74—14.)

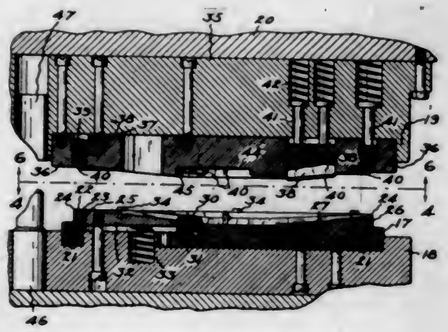
A drive mechanism for a windshield wiper, comprising a screw shaft having an endless right and left screw thread rotatably supported alongside the outside face of a windshield, a housing of substantially rectangular cross section secured to the outside face of the windshield and surrounding said screw shaft; a traveler of rectangular cross section slidable inside of the housing and on said screw shaft; a lug for carrying a windshield wiper, de-

pending from said traveler; said traveler projecting downwardly through a longitudinal slot formed in the base of said housing and corresponding in length to the stroke of said traveler; a pin fixedly secured in said traveler and extending into the grooves of the screw shaft, so as to be



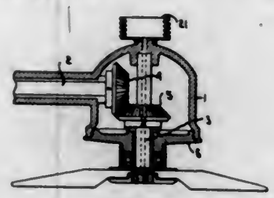
longitudinally advanced by the rotation of the screw shaft, whereby the traveler is reciprocated in said housing; means for rotating said screw shaft; and oil cups on the outside of the housing opposite said screw shaft and said driving means for lubricating said screw shaft.

1,765,807. APPARATUS FOR MAKING FLANGED METAL SPIDERS. DAVID W. THOMAS, Youngstown, Ohio. Filed Feb. 20, 1929. Serial No. 341,345. 6 Claims. (Cl. 153—48.)



1. Apparatus for forming flanged spiders of dished form from a metal blank having a continuous rim portion, a hub portion and spoke portions connecting the rim and hub portions, comprising a press having a bed and a movable head provided with complemental dies, one of the dies being concave and having blank engaging portions conforming to the rim, hub and spokes of the spider on one side thereof, said die also having positioning members engageable with the rim portion of the blank at circumferentially spaced points and with the spokes to hold the rim portion against inward movement and to hold the blank against angular displacement, the other of said dies being of convex form and having blank engaging portions conforming to the hub, rim and spokes of the spider on the opposite side thereof.

1,765,808. SURFACING APPARATUS. FRANK J. TONE, Niagara Falls, N. Y., assignor to The Carborundum Company, Niagara Falls, N. Y., a Corporation of Pennsylvania. Filed Feb. 23, 1926. Serial No. 90,174. 5 Claims. (Cl. 51—197.)

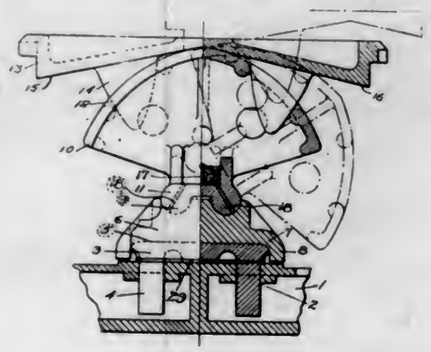


1. A surfacing machine comprising a casing enclosing a shaft having a suction conduit therein, a compressible disc secured to said shaft, said disc being provided with a plurality of suction openings in one surface, means placing in communication said suction openings and said conduit in said shaft, and means mounted on said casing for exhausting air from said shaft conduit.

1,765,809. PROCESS OF MAKING CARBON BISULPHIDE. FREDERICK W. VOGEL, Berlin, N. H., assignor to Brown Company, Berlin, N. H., a Corporation of Maine. Filed Dec. 22, 1924. Serial No. 757,369. 8 Claims. (Cl. 23—206.)

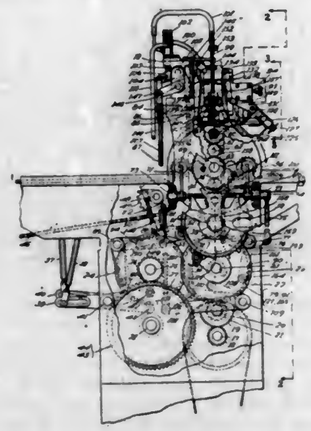
8. A process of recovering carbon bisulphide from the mixed vapors and gases containing hydrogen sulphide arising from the reaction of sulphur and heated carbonaceous material, which comprises commingling sulphur dioxide gas with such gases and vapors to oxidize the hydrogen sulphide to sulphur, cooling the resulting mixture to a temperature of about 120° to 150° C., recovering the sulphur produced in liquid condition, cooling the remaining vapor to a temperature below the boiling point of carbon bisulphide, and recovering the condensed carbon bisulphide.

1,765,810. ROCKER BEARING. CHARLES T. WESTLAKE, deceased, St. Louis, Mo.; by Lilian A. Westlake, administratrix, St. Louis, Mo., assignor, by mesne assignments, to General Steel Castings Corporation, Granite City, Ill., a Corporation of Delaware. Original application filed Apr. 4, 1925, Serial No. 20,832. Divided and this application filed Feb. 18, 1926. Serial No. 89,071. 20 Claims. (Cl. 308—224.)



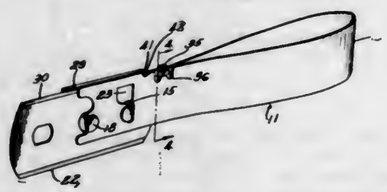
1. A rocker bearing including a rocker having curved segmental faces with openings therein meeting in a peak and off-center cylindrical feet on said rocker on which said rocker is adapted to pivot, a load supporting member, and lugs on said load supporting member, one or more of which engages said openings in all operating positions of said rocker.

1,765,811. CIGAR-BANDING MACHINE. HENRY H. WHEELER, Brooklyn, N. Y., assignor to International Cigar Machinery Company, a Corporation of New Jersey. Filed July 17, 1928. Serial No. 293,368. 13 Claims. (Cl. 131—61.)



1. In a cigar banding machine in combination, an intermittently rotating turret, a series of clamps projecting from a side of said turret and arranged to support cigars perpendicular to the plane of rotation thereof and with a substantial portion of the cigar extending beyond said clamps, separate means for successively banding said extending parts of the cigars, and means for operating said clamps to receive and deliver the cigars respectively before and after banding.

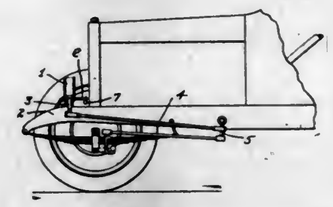
1,765,812. BLADE HOLDER. ETHEL F. WHITE and MYRON WHITE, Los Angeles, Calif. Filed June 27, 1927. Serial No. 201,638. 1 Claim. (Cl. 30—25.)



A holder for supporting a razor blade with one edge thereof in exposed operative position, said holder comprising a strip of resilient metal bent upon itself to form a handle, the outer ends of the strip forming blade holding members, means for holding the members together with a razor blade therebetween, said means comprising an integral hooked ear on one of said members, the other of said members having a slot therein, the hooked end of the ear being adapted to pass through the aperture of the razor blade and the slot and engage over the last named member and a projection extending from the upper edge of one of said members and a lug formed on the upper edge of the other member, said projection and lug being adapted to interlock to prevent relative upward sliding movement of the members beyond operative blade holding position.

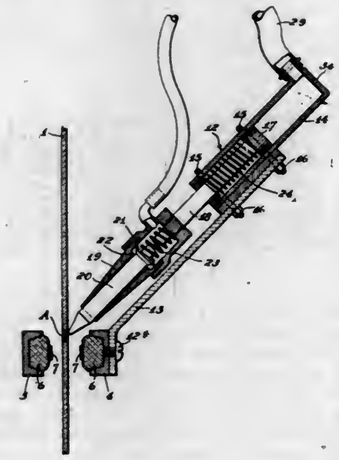
1,765,813. DIRIGIBLE HEADLIGHT. LAWRIE L. WITTER, Jamaica Plain, Mass. Filed June 16, 1928. Serial No. 285,903. 6 Claims. (Cl. 240—62.)

5. A dirigible light for automobiles, comprising the combination of a pressed sheet metal member having an outwardly extending horizontal flange portion, supporting means connected to the member and adapted to mount the same on a vehicle, an inverted cup-shaped pressed sheet metal light-supporting member mounted on the first member for pivotal movement thereon about a vertical axis



and having an outwardly extending horizontal flange portion covering and housing the first said flange portion, and resilient means carried by one member and acting on the other to normally hold the light-supporting member in a predetermined pivoted position.

1,765,814. APPARATUS FOR SEPARATING GLASS SHEETS. CHARLES H. WRIGHT, Mount Vernon, Ohio, assignor to Pittsburgh Plate Glass Company, a Corporation of Pennsylvania. Filed Aug. 30, 1928. Serial No. 302,997. 6 Claims. (Cl. 49—50.)

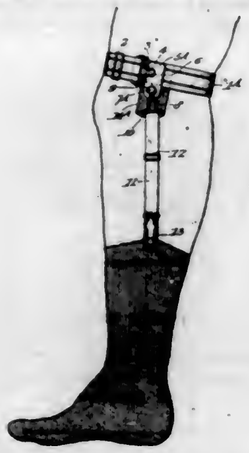


6. Apparatus for cracking off sections from a forwardly moving sheet or ribbon of glass comprising a bar extending transversely of the sheet provided with a heating ribbon and adapted to move with the glass during the heating operation, a chilling tool carried by the bar, and mounted for movement toward and from the sheet, so that, in one position, it touches the sheet on the line at which the ribbon has engaged such sheet, and means for giving the tool its movement toward and from the sheet.

1,765,815. GARTER OR STOCKING SUPPORTER. EDWARD J. YETTER, Denver, Colo. Filed June 8, 1928. Serial No. 283,827. 1 Claim. (Cl. 241—6.)

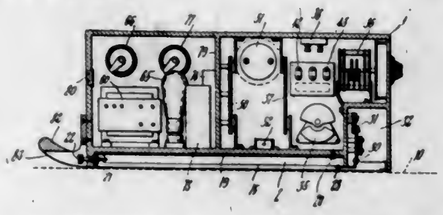
A stocking supporter, comprising a leg band adapted to be worn above the knee, having a tab stitched upon one end thereof at right angles to the band, one end of said tab extending below the band, a headed stud on the extended end of said tab in line with the knee joint, an extensible strap having a fixture on one end which is

pivotally connected to said headed stud, and a stocking-gripping clasp on its opposite end; a fastening element on said tab in line with the center of the width of the



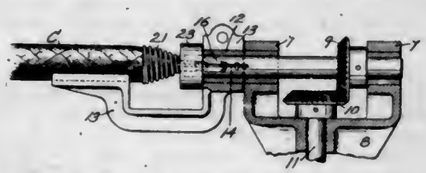
band and in vertical line with the headed stud, and a fixture on the opopsite end of the band for connection with said fastening element.

1,765,816. HYGROMETER. ALBERT ALLEN, Winchester, Mass., assignor to Atlantic Precision Instrument Company, Boston, Mass., a Corporation of Massachusetts. Filed Jan. 5, 1928. Serial No. 244,653. 3 Claims. (Cl. 177—351.)



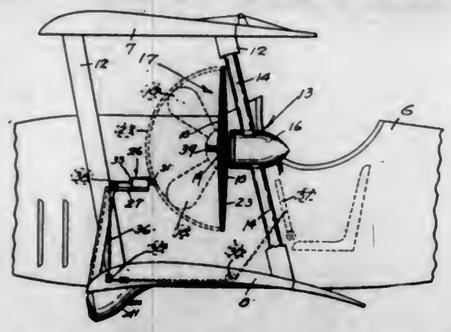
1. An instrument of the class described comprising a metal casing having a recess in one face, a hygrometric body in said recess, primary and secondary oscillatory high frequency circuit devices housed within said casing, said devices including means responsive to the moisture content of said body for varying the current response in said secondary circuit in accordance with variations in the moisture content of said body, and means for indicating such response.

1,765,817. FLEXIBLE KNURLER FOR CIGAR MACHINES. THURE WILHELM ALM, Stewart Manor, N. Y., assignor to International Cigar Machinery Company, a Corporation of New Jersey. Filed May 4, 1929. Serial No. 360,555. 6 Claims. (Cl. 131—39.)



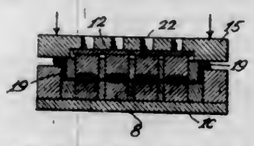
1. A cigar knurling device comprising a conoidal coil of flexible wire for rotatably engaging and yieldingly following irregularities of the head and shoulder of a cigar to smooth its wrapper thereon.

1,765,818. AIRPLANE-LANDING SPEED-RETARDING DEVICE. OSCAR ALVISTUS, Oakland, Calif. Filed Oct. 10, 1928. Serial No. 311,627. 5 Claims. (Cl. 244—25.)



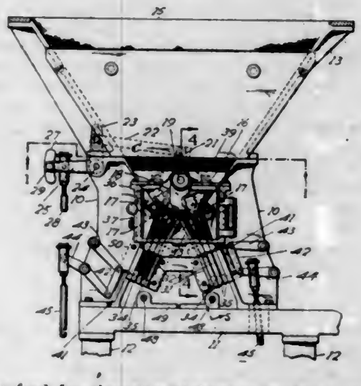
1. A landing speed reducing device for airplanes, comprised of collapsible pusher propellers, rotatably mounted on the airplane at each side of the fuselage thereof; means for holding said propellers in a collapsed position; and releasing means for said holding means; said propellers being adapted to be unfolded and maintained in an operative position and rotated by the wind pressure thereon.

1,765,819. METHOD OF MAKING ARTICLES FROM CASEIN. LYNFORD A. APPLE, Glen Ridge, N. J., assignor to American Machine & Foundry Company, a Corporation of New Jersey. Filed May 2, 1927. Serial No. 188,257. 6 Claims. (Cl. 18—55.)



1. The method of making articles from casein, which consists in first subjecting cool uncomminuted extruded casein to pressure to give it the form of the desired articles and while still under said pressure heating and then cooling it.

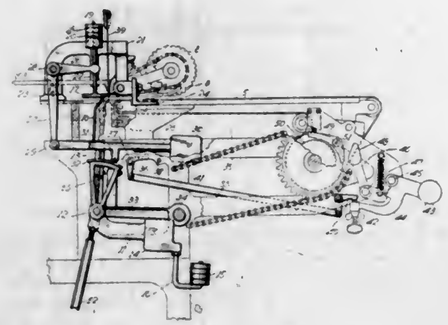
1,765,820. HOPPER FOR CIGARETTE-PACKAGING MACHINES. WILHELM B. BRONANDER, Montclair, N. J., and Gustaf E. Hagquist, Brooklyn, N. Y., assignors to American Machine & Foundry Company, a Corporation of New Jersey. Filed Sept. 19, 1928. Serial No. 306,929. 7 Claims. (Cl. 226—5.)



1. In a feed for cigarette packaging machines, the combination with a holder for a supply of cigarettes, of a

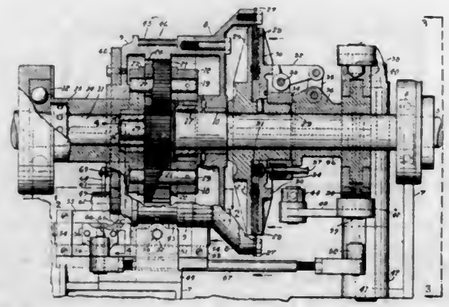
plurality of parallel rollers on which a portion of said supply rests, said rollers being spaced apart to permit passage of only one cigarette at a time between adjacent rollers, and means for oscillating said rollers, whereby said rollers alternately move cigarettes to adjacent passages.

1,765,821. VOLUMETRIC MEASURING DEVICE FOR CIGAR MACHINES. WILHELM BERTIL BRONANDER, Montclair, N. J., assignor to International Cigar Machinery Company, a Corporation of New Jersey. Filed May 25, 1929. Serial No. 365,959. 16 Claims. (Cl. 131—39.)



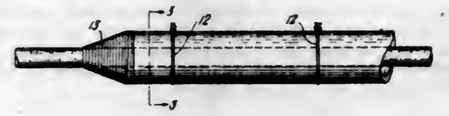
11. The combination with mechanism for intermittently feeding a continuous mass of cigar filler to charge severing position, of a device for mensuring the depth of the mass at said position, and means actuated by said device for varying the amplitude of the feeding action in accordance with variations in the action of said device.

1,765,822. VARIABLE-SPEED DRIVE FOR CIGARETTE MACHINES AND THE LIKE. WILHELM B. BRONANDER, Montclair, N. J., assignor to American Machine & Foundry Company, a Corporation of New Jersey. Filed Oct. 22, 1929. Serial No. 401,499. 4 Claims. (Cl. 74—84.)



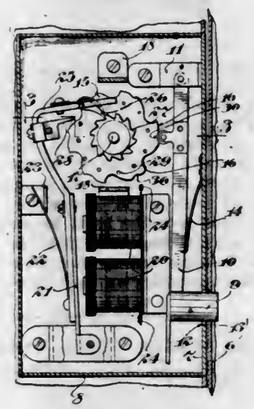
1. The combination with a planetary gear transmission for connecting driving and driven members, including a master gear designed to be selectively held immovable or connected to the driving member to change speeds, of means acting on said gear to prevent slippage between the members during said change of speeds only, and movable means actuating said last named means.

1,765,823. WIRE GUARD. EDMUND BURKE, Portland, Me., assignor to Brown Company, Berlin, N. H., a Corporation of Maine. Filed Apr. 5, 1928. Serial No. 267,594. 1 Claim. (Cl. 173—28.)



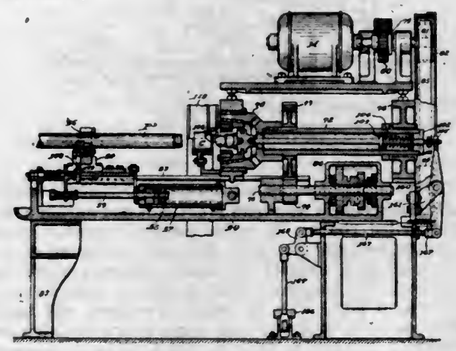
The combination with a wire, of a tubular guard, formed of asphalt saturated felted fibrous material, having a slot extending throughout its length and permitting positioning of the guard on the wire, and a binding of adhesive tape surrounding and engaging both the guard at one end and a section of the wire beyond said end.

1,765,824. LOCK. PHILIP E. CARLSON and CARL J. ULRICH, Minneapolis, Minn. Filed June 15, 1928. Serial No. 285,667. 4 Claims. (Cl. 70—50.)



1. In a lock of the class described, a casing, a lock bolt mounted in the casing, a wheel having circumferentially spaced cams arranged to cause alternate projecting and retracting movements of the lock bolt, ratchet teeth on the wheel, electro-magnetic means including a pawl movable thereby and operative on the ratchet teeth for imparting steps of movement to the wheels for successively positioning the cams.

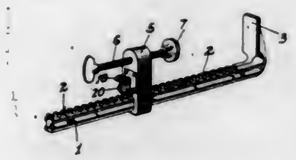
1,765,825. MACHINE FOR SCREWING COUPLINGS ON PIPE. HERBERT VIVIAN CORK, Chicago, Ill. Filed Sept. 24, 1928. Serial No. 307,858. 20 Claims. (Cl. 29—88.2.)



1. A machine for screwing couplings on pipes comprising means for conveying the threaded pipe consecutively

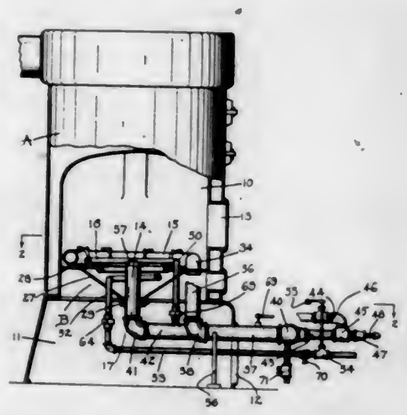
to a predetermined position, a rotatable chuck adapted to receive and hold a coupling, means for supporting a coupling adjacent the chuck, means for moving the pipe longitudinally toward the coupling to engage the pipe therewith and thereafter push the coupling into the chuck, and means operable through the longitudinal movement of the pipe and coupling after the coupling is received in the chuck to cause the chuck to close on the coupling and thereby rotate the same relatively to the pipe to screw the coupling onto the end thereof.

1,765,826. ADJUSTABLE CLAMP. ANGELO DISIBIO, Pittsburg, Calif. Filed Dec. 1, 1928. Serial No. 323,090. 2 Claims. (Cl. 144—303.)



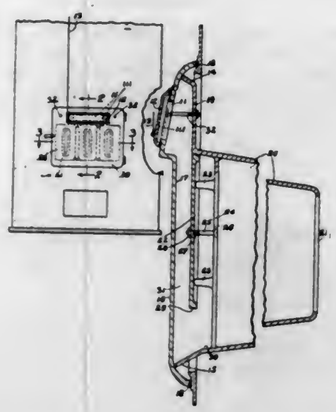
1. A clamp including a bar having ratchet teeth along one face thereof, a block slidable along the bar, a pawl mounted in the block at an angle to the toothed face thereof and normally engaging one of the teeth, means for releasing the pawl from the teeth comprising a depressible finger-lever pivoted in connection with and projecting at one end into the block to permanently engage the pawl and a rigid finger-ring fixed in connection with the block on the same end as that from which the lever projects and disposed between said lever and the bearing.

1,765,827. OIL BURNER. HENRY DITTES, Minneapolis, Minn. Filed Oct. 22, 1926. Serial No. 143,385. 6 Claims. (Cl. 158—4.)



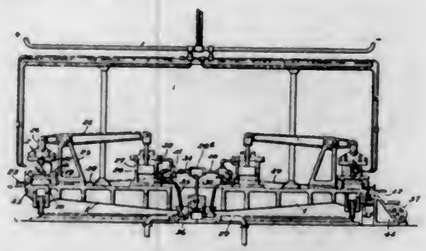
1. In combination, an oil burner comprising a conical plate disposed with its vortex lowermost and having a horizontal flared rim at the upper portion thereof, a nozzle extending centrally upwardly through the xertex of said conical plate, a toroidal air heater disposed above said horizontal rim, a conical steam generator disposed above said conical plate with its vertex lowermost and spaced therefrom, said air heater and steam generator being concentrically arranged relative to said nozzle and connected therewith, a water pipe connected to said generator and a fuel pipe connected to said nozzle.

1,765,828. SMOKE-CONSUMING DEVICE. WILLIAM J. DOYLE, Cincinnati, Ohio, assignor to The Williamson Heater Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Oct. 1, 1927. Serial No. 223,443. 3 Claims. (Cl. 110—175.)



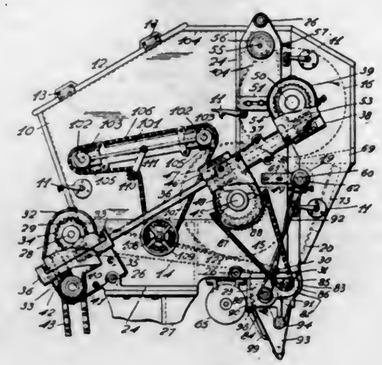
1. In a device of the class described the combination with a furnace comprising a body having a fire box opening, a perforate feed door controlling said opening, a hollow tuyère secured to the door and having its edges in abutment with the inner face thereof, and having hollow nozzles of truncated rectangular pyramidal shape extending inwardly into the fire box, said nozzles having perforations in their innermost ends and baffle means disposed intermediate the opposite ends of the nozzle and the door whereby movement of air through the perforation in the door is directed downwardly over the bottom walls of the nozzles for heating prior to its exit through the perforation in the nozzles.

1,765,829. APPARATUS FOR MAKING COMPOSITE GLASS. JOHN H. FOX and WILLIAM OWEN, Pittsburgh, Pa., assignors to Pittsburgh Plate Glass Company, a Corporation of Pennsylvania. Original application filed Dec. 17, 1926, Serial No. 155,424. Divided and this application filed Aug. 1, 1928. Serial No. 296,778. 2 Claims. (Cl. 18—17.)



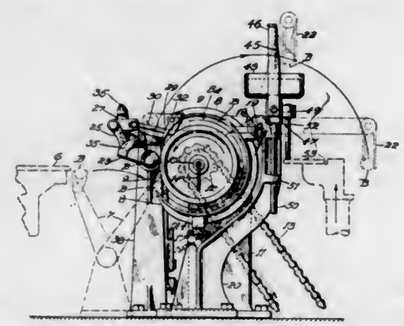
1. Apparatus for applying heat and pressure to a plurality of sets of glass sheets and reinforcing layers therebetween, comprising a carrier mounted for movement, a power press carried thereby, having a fixed base and a vertically movable top to which the pressing power is applied, a track mounted on the carrier transversely thereof beneath the top, an assembling table at one side of the carrier, a runway on the assembling table with which said track is aligned by the movement of the carrier, and a car on said runway on which the sheets to be pressed are stacked, the said track being mounted for vertical movement so that after the car is positioned beneath the press top, it may be lowered to bring its body portion into engagement with said fixed base.

1,765,830. CIGARETTE-MACHINE FEED. CHRISTIAN J. FUSE, Brooklyn, N. Y., assignor to American Machine & Foundry Company, a Corporation of New Jersey. Filed Apr. 4, 1928. Serial No. 267,460. 16 Claims. (Cl. 131—39.)



1. In a cigarette machine feed, the combination with a feed drum, of means for regulating the amount of tobacco forwarded by said drum, worm gearing driving said drum and said regulating means, picking mechanism acting on tobacco forwarded by said drum, and means independent of said gearing for driving said mechanism.

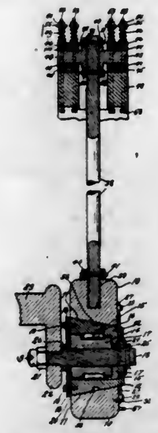
1,765,831. CIGAR-BUNCH MANIPULATOR. JOHN FREDRIK HALSTEAD, Brooklyn, N. Y., assignor to International Cigar Machinery Company, a Corporation of New Jersey. Filed Aug. 30, 1928. Serial No. 303,056. 12 Claims. (Cl. 131—39.)



1. In a cigar bunch manipulator, the combination with a rotating drum, of a member having a surface encircling the major portion of the circumference of the drum and spaced therefrom less than the diameter of a bunch to squeeze cigar bunches between said surface and the drum, said member having an opening at one side of the drum to receive the bunches between said surface and the drum for rolling movement in a path approximately circumscribing said drum and to permit subsequent ejection adjacent the receiving position, transfer means to seize and forward the ejected bunches, and means for holding the binders thereof against loosening from the moment of ejection until the bunches are seized by said transfer means.

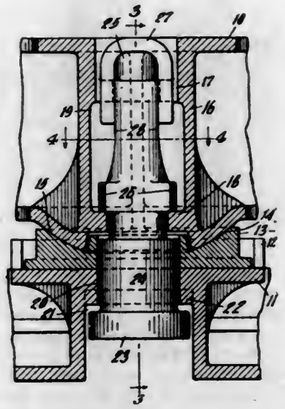
8. In a cigar machine provided with a bunch shaper, the combination with a cigar bunch manipulator, of transfer means for forwarding bunches from said manipulator to the shaper and wicks in the path of said transfer means for moistening either end of the cigar bunches.

1,765,832. PITMAN. GLENN A. HART, Bell, Calif., assignor to Bert L. Culver, Bell, Calif. Filed Nov. 21, 1928. Serial No. 320,933. 5 Claims. (Cl. 74—17.)



1. A pitman including a head having a tapered socket, a roller bearing having an outer member tapered to fit into the socket in said head, and a U-bolt supported on guides on said head that is adapted to extend through holes in said outer member for detachably securing said head to said bearing.

1,765,833. CAR CONSTRUCTION. STACY B. HASELTINE, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed Nov. 26, 1928, Serial No. 321,864. Renewed Dec. 5, 1929. 13 Claims. (Cl. 105—200.)

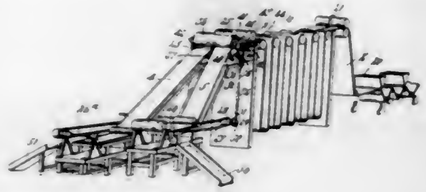


1. In car construction, the combination with body and truck bolsters having alined center pin openings; of a center pin extending through said openings, having shouldered engagement at one end with one of said bolsters to prevent removal of the pin in one direction and having shouldered engagement with the other bolster at spaced points to prevent removal of the pin in the opposite direction.

1,765,834. MACHINE FOR MAKING ROOFING. GEORGE P. HEPPES, Chicago Heights, Ill., assignor, by mesne assignments, to The Patent and Licencing Corporation, Boston, Mass., a Corporation of Massachusetts. Filed Feb. 21, 1924. Serial No. 694,845. 1 Claim. (Cl. 164—65.)

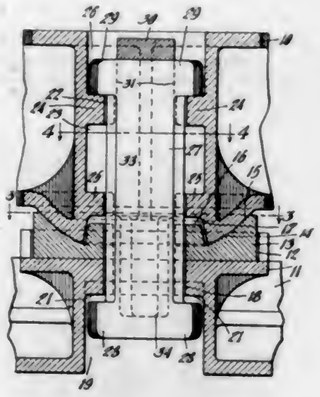
A machine of the class described comprising means for feeding a continuous web of sheet material, means for

slitting the web, means for cutting the slit sections into lengths, means for winding each length into a roll, and means acting to increase the speed of each winding mecha-



nism after a length to be wound has been cut, whereby said length may be wound and removed before the forward end of the succeeding length shall have reached the winding mechanism.

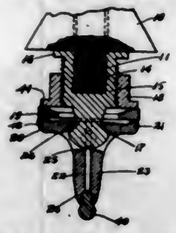
1,765,835. CAR CONSTRUCTION. GEORGE A. JOHNSON and STACY B. HASELTINE, Chicago, Ill., assignors to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed Nov. 26, 1928. Serial No. 321,885. Renewed Dec. 5, 1929. 8 Claims. (Cl. 105—200.)



1. In car construction, the combination with body and truck bolsters having alined center pin receiving openings; of a center pin having a head at one end having shouldered engagement with one of said bolsters, said pin having locking lugs at the opposite end forming a head member having shouldered engagement with the other bolster, the walls of said pin receiving openings being slotted to permit passage of said lugs and said pin being rotatable to bring the lugs thereof in shouldered engagement with the corresponding bolster; and means for locking the pin against rotation with respect to said last named bolster, including a member engaging within the slots of both bolsters and occupying the space between the shank of the pin and the opposed walls of said slots.

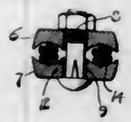
1,765,836. TROLLEY SUSPENSION CLAMP. LYNN JOHNSTON and FRANCIS A. TICE, Cincinnati, Ohio, assignors to The Electric Railway Equipment Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Jan. 25, 1928. Serial No. 249,421. 12 Claims. (Cl. 191—43.)

1. In a device of the class described the combination of an insulating hanger having a threaded stud depending therefrom, a threaded stem received by the stud, a semi-globular head on the end of the stem, a pair of clamping jaws resting on the semi-globular head, a nut on the stem



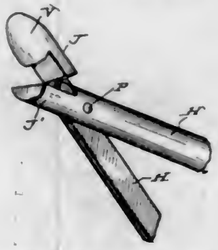
adapted to be actuated toward the clamping jaws, and a washer between the nut and the clamping jaws to prevent wear on the jaws and to transmit the strain on the nut into clamping effect of the jaws.

1,765,837. CABLE CLAMP. EDWARD O. KEATOR, Dayton, Ohio. Filed Feb. 27, 1929. Serial No. 343,193. 4 Claims. (Cl. 24—135.)



1. A cable clamp comprising two elements, and means to cause the elements to grip cables between them, each of said elements having recesses at spaced intervals to receive the cables in crossed relation to each other without full contact pressure therewith by the elements at the points of crossing.

1,765,838. METHOD OF MAKING PIPE TONGS. ENOCH B. KIRBY, Youngstown, Ohio. Filed June 23, 1928. Se- No. 287,861. 7 Claims. (Cl. 76—101.)



1. The method of manufacturing pipe tongs adapted for passage through a drawing bell which comprises the steps of forming as an integral unit the jaw and handle of each of the pair of members forming the tongs by upsetting the end of a piece of half-round stock by successive action of a plurality of dies so as to ultimately form thereon a jaw of a shape suitable for cooperation with the corresponding jaw of the other member and then pivoting said members together to form the tongs.

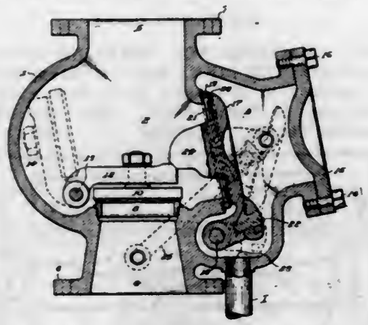
1,765,839. COMPOSITION BOARD. LESTER KIRSCHBRAUN, Leonia, N. J., assignor to The Flintkote Company, Boston, Mass., a Corporation of Massachusetts. Filed Jan. 24, 1927. Serial No. 163,000. 8 Claims. (Cl. 154—45.9.)



2. A laminated composition board comprising a plurality of layers of roofing felt saturated with sodium sili-

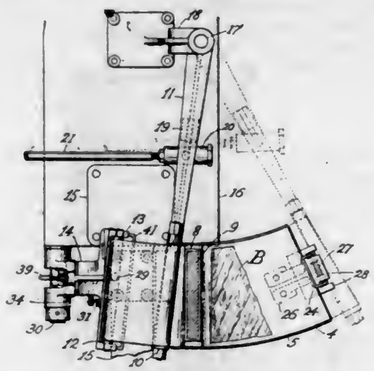
cate, said layers being adhesively united in face to face relationship and a facing layer of water resistant paper stuck to a face of said board.

1,765,840. TORRENT VALVE FOR SPRINKLER SYSTEMS. LEROY M. LEWIS, Rosemont, Pa., assignor to Central Automatic Sprinkler Company, Philadelphia, Pa., a Corporation of Delaware. Filed Apr. 30, 1928. Serial No. 273,890. 4 Claims. (Cl. 169—20.)



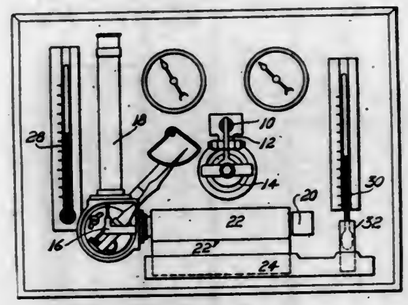
1. A valve of the class described, comprising a casing having an inlet and an outlet, a main chamber disposed therebetween and an auxiliary chamber communicating with the main chamber, a main valve clapper pivoted in the main chamber for movement in a vertical plane and operative to control the admission of fluid to said chamber from the inlet, an auxiliary valve clapper of greater area than said main valve clapper horizontally pivoted for movement in a vertical plane in said auxiliary chamber and operative when in one position to close the passage between the main and auxiliary chambers, a lug carried by the auxiliary valve clapper operative to hold the main clapper closed over the inlet when said auxiliary clapper is in said position, and means forming a fluid passage from the inlet to the auxiliary valve chamber operative to maintain the same fluid pressure in the auxiliary chamber as in the inlet when both of said valve clappers are in closed position.

1,765,841. TENSION-EQUALIZING CHIANTI BELT TIGHTENER. CHARLES V. LINDBLAD, Brooklyn, N. Y., assignor to International Cigar Machinery Company, a Corporation of New Jersey. Filed Sept. 15, 1927. Serial No. 287,861. 7 Claims. (Cl. 76—101.)



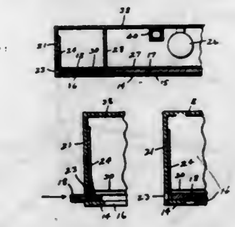
1. The combination with bunch rolling means having an arcuate chianti belt, of means for producing tension on said belt as a tapered bunch is rolled therein including positively actuated means for equalizing the tension as the bunch is rolled along its natural curved path by said belt.

1,765,842. MEANS FOR SUPPLYING MOISTURE TO HYGROMETERS, HUMIDITY REGULATORS, AND THE LIKE. ALBERT J. LOEPSINGER, Providence, R. I., assignor, by mesne assignments, to General Fire Extinguisher Company, Providence, R. I., a Corporation of Delaware. Filed Jan. 30, 1924. Serial No. 689,511. 10 Claims. (Cl. 73—24.)



1. A capillary and evaporating cooling device for a thermally responsive element, having a portion encasing said element and a fin integral therewith for feeding said portion with water by capillary action; said device being of porous, capillary ceramic material having a surface free from filamentary projections.

1,765,843. IDENTIFYING ATTACHMENT FOR MOTOR VEHICLES. BENJAMIN C. LORING, New York, N. Y., assignor to Rosana C. Loring, Detroit, Mich. Filed Oct. 4, 1928, Serial No. 310,290. Renewed Nov. 23, 1929. 5 Claims. (Cl. 40—132.)

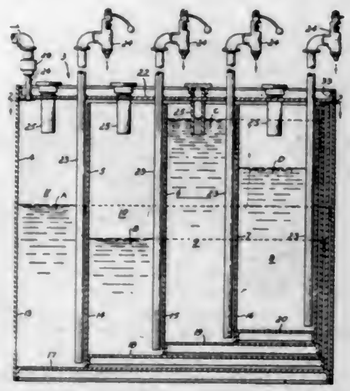


1. An identifying attachment for motor vehicles, comprising a casing having openings in one side formed to expose a license plate and a symbol plate within the casing, a symbol plate-receiving slot in one end, and an internal detent adapted to automatically lock a symbol plate inserted in the casing through the slot, illuminating means within the casing, a light-transmitting license plate built into the casing and visible through one of said openings, and a dated symbol plate inserted in said slot and locked within the casing by said detent, the symbol plate being exposed to breaking force and separable from the casing only when broken.

1,765,844. LIQUID DISPENSER. BLANSHARD B. MAYNARD and FREDERICK L. DE SANNO, Oakland, Calif., assignors, by mesne assignments, to Rheem Manufacturing Company, Emeryville, Calif., a Corporation of California. Filed Sept. 19, 1928. Serial No. 306,824. 3 Claims. (Cl. 221—74.)

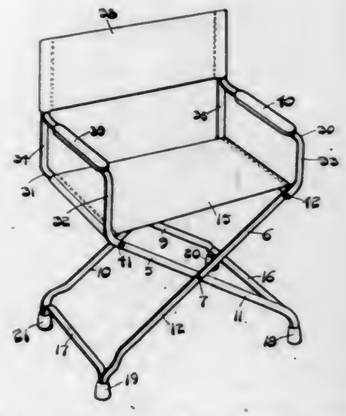
3. In a container from which to dispense a plurality of liquids, a battery of mutually unattached receptacles nested in mutually supporting relation to define a plurality of mutually encircling compartments for the liquids within

the outermost receptacle, said latter receptacle being provided with a sealing top therefor and the remaining receptacles having open tops whereby the various said compartments are in communication, a set of discharge pipes for the compartments carried by said receptacle top extending downwardly into the compartments and upwardly from



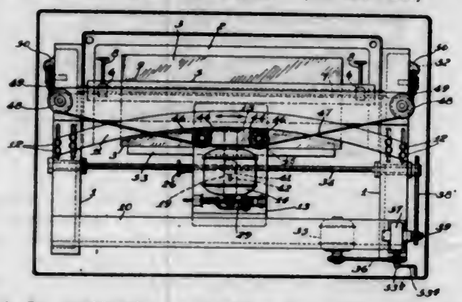
said top and provided with dispensing valves at their upper ends, and a set of capped filler pipes carried by and extending through said top for discharge at the different said compartments, the pipes of each said set being mutually coplanar and the said pipes being mutually cooperative with said receptacles to retain the same in relatively fixed relation in the battery.

1,765,845. FOLDING CHAIR. THOMAS G. MELISH, Cincinnati, Ohio, assignor to The Bromwell Wire Goods Company, Michigan City, Ind., a Corporation of Delaware. Filed Oct. 21, 1926. Serial No. 143,136. 1 Claim. (Cl. 155—140.)



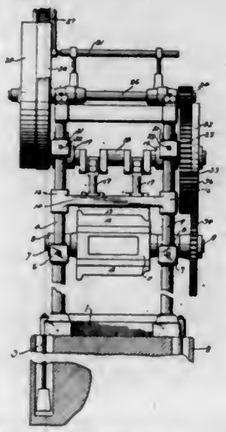
A folding chair comprising a pair of substantially rectangular elements pivoted together between correspondingly opposed sides, one side of each element constituting a brace between and adjacent to the floor engaging ends or feet of the pivotally joined sides, the side of each element opposite said side functioning as a brace forming a seat stretching bar, a removable bolt in and extending between the pivotally joined sides of each element spaced from the stretching bar thereof, a flexible seat having bolt receiving loops in two of its opposite sides, passing over the stretching bars and having its loops occupied by the bolts, said bars functioning to stretch the seat over them when the elements are moved to expanded position, said bars when the chair is collapsed loosening the seat and permitting removal thereof when the bolts are removed, a back support pivoted on each side of the frame for folding movement away from the seat, a lug on each support to limit its movement toward the seat, and a flexible back detachably mounted on each support adapted when the seat supporting frame is expanded to be stretched taut between said supports against the resistance afforded by said lugs on said supports, the folding movement of the rectangular elements permitting detachment of the back and the folding movement of the back supports.

1,765,846. MACHINE FOR SEVERING COMPOSITE GLASS AND THE LIKE. WILLIAM OWEN, Pittsburgh, Pa., assignor to Pittsburgh Plate Glass Company, a Corporation of Pennsylvania. Filed Feb. 23, 1929. Serial No. 341,988. 10 Claims. (Cl. 125—14.)



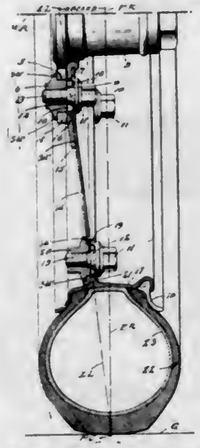
1. In combination, a machine for cutting curves in sheets of hard material, comprising a fixed table adapted to support the sheet to be cut, a template extending longitudinally of the table fixed with respect thereto and having a contour corresponding to the desired line of cut, a carriage mounted for movement longitudinally of the table and also transversely thereof, cooperating means between the template and the carriage whereby the carriage is caused to follow the line of curvature of the template, as such carriage is moved longitudinally of the table, means for giving the carriage its movement longitudinally of the table, and a thin, driven cutting disc mounted upon the carriage in position to engage and cut said sheet.

1,765,847. TILE-MOLDING MACHINE. JOSEPH PESSAGNO, Oakland, Calif. Filed Jan. 4, 1927. Serial No. 158,869. 8 Claims. (Cl. 25—80.)



1. A tile molding machine having two coacting mold sections, means for reciprocating one of the said sections and mutilated gears having co-acting lugs for revolving the other section intermittently and in timed relation to the reciprocation of the first named section.

1,765,848. DISHED WHEEL. SYDNEY I. PRESCOTT, New York, N. Y. Filed Sept. 16, 1927. Serial No. 219,896. 8 Claims. (Cl. 301—9.)

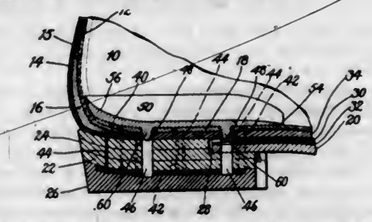


1. A dished wheel having an inclined load line intersecting its plane of rotation at the central point of wheel and ground contact and intersecting the wheel axis at a point inboard from said plane, comprising a hub, a body and fastening means therefor carried by said hub, a rim and fastening means therefor carried by said body, and a tire carried by said rim, said body and said fastening means being substantially on said load line when directly under the hub.

7. In a wheel, the combination with a hub having a flange provided with lateral threaded apertures and laterally projecting body supports internally and externally tapered and divided into expansible segments, of a body having tapered holes fitting the external taper of said supports to cause said supports to center and support said body, and screws having flanged heads engaging the outboard side of said body and having tapered sections engaging the internal taper of said supports and having threaded sections engaging the threads of said apertures and operating to expand said segments to demountably lock said body on said flange.

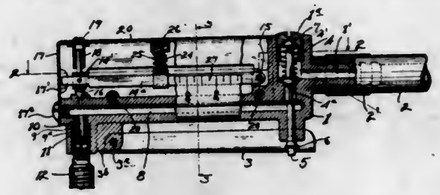
8. In a wheel, the combination with a body provided with lateral threaded apertures and laterally projecting rim supports internally and externally tapered and divided into expansible segments, of a rim having a flange provided with tapered holes fitting the external taper of said supports to cause said supports to center and support said rim, and screws having flanged heads engaging the outboard side of said flange and having tapered sections engaging the internal taper of said supports and having threaded sections engaging the threads of said apertures and operating to expand said segments to demountably lock said rim on said body.

1,765,849. SHOE AND METHOD OF MAKING THE SAME. EUGENE J. RAY, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed May 2, 1927. Serial No. 188,219. 11 Claims. (Cl. 36—37.)



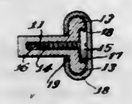
6. In a shoe, the combination of an upper, an insole provided with cylindrical jig holes in its heel portion and a heel, with a heel pad having two integral, substantially conical jig pins projecting from its under face, the bases of said pins being constructed and arranged to engage and fit tightly the top edges of said cylindrical jig holes.

1,765,850. AUTOMATIC SAFETY PRESSURE GAUGE FOR INFLATING TIRES. EMMETT W. RICHARDSON, Oakdale, Calif. Filed Jan. 17, 1927. Serial No. 161,546. 1 Claim. (Cl. 137—53.)



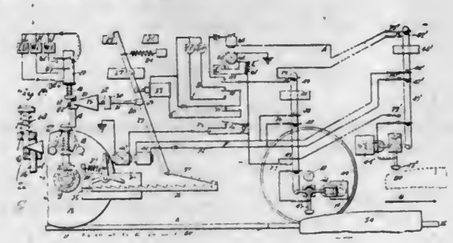
An automatic safety pressure gauge comprising an elongated base having a longitudinal bore therein, means to admit air under pressure to said bore at one end thereof, a small bore at the other end thereof, a safety valve for said small bore, a bar having one end attached to said safety valve, and the other end pivoted to said base, a slide on said bar, lateral arms on said slide, a detachable cap for said base adapted to cover said bar, slots on each side of said cap parallel with said bar through which said lateral arms extend a post on said slide, a spring on said post adapted to bear against the top of said cap and slide thereon, and a scale on the outside of said cap adjacent said slots.

1,765,851. ADJUSTABLE ATTACHMENT FOR DENTURES. SIDNEY RICHARDSON, Hollywood, Calif., assignor to Annie Richardson, Los Angeles, Calif. Filed Aug. 16, 1928. Serial No. 299,975. 2 Claims. (Cl. 32—12.)



1. In an attachment for dentures, a substantially T-shaped member, a socket adapted to receive the head portion of said T-shaped member, and an adjusting screw seated in the body of said T-shaped member, the outer face of the head of which screw is adapted to frictionally engage the inner face of the socket in which said head is seated.

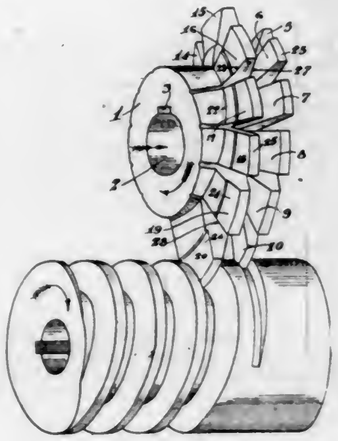
1,765,852. SPEED-CONTROL APPARATUS FOR RAILWAY CARS. CARL A. RICHMOND, New York, N. Y., assignor to The General Railway Signal Company, a Corporation of New York. Filed July 29, 1916, Serial No. 111,975. Renewed Aug. 11, 1920. Serial No. 402,860. 26 Claims. (Cl. 246—182.)



1. In combination, a track, a car thereon, a safety appliance for excessive speed on the car, apparatus on

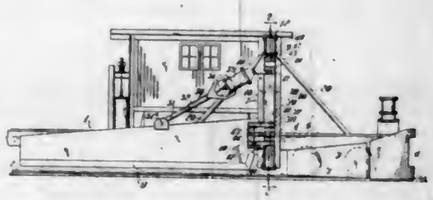
the car to actuate said appliance and adapted to change progressively through successive stages, a shoe, a ramp adapted to be engaged by a shoe in passing to determine the presence or absence of a certain condition of said apparatus, and other ramps at the same height and distance from the center of the track as said first mentioned ramp adapted thereafter to be engaged by a shoe in passing and each acting to cause said apparatus to change to the next stage in its progressive change provided an appropriate condition thereof has been determined by said first mentioned ramp.

1,765,853. WORM GENERATING HOB. OLIVER G. SIMMONS, Lakewood, Ohio, assignor to The National Tool Company, Cleveland, Ohio, a Corporation of Ohio. Filed Aug. 27, 1927. Serial No. 215,970. 6 Claims. (Cl. 29—103.)



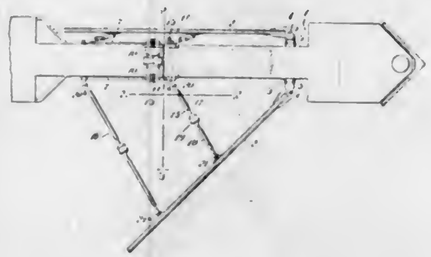
1. A worm generating hob having circumferentially spaced cutting teeth of substantially uniform size and shape in axial cross section and extending around the hob axis in a helicoidal spiral curve, each tooth having its cutting edges lying in an axial plane and at opposite and substantially equal inclinations with respect to a plane perpendicular to the axis of the hob.

1,765,854. WING POST AND CARRIAGE STRUCTURE FOR RAILROAD SPREADERS. VSEVOLOD G. TELLIS, East Chicago, Ind., assignor to O. F. Jordan Company, East Chicago, Ind., a Corporation of Indiana. Filed Oct. 14, 1926. Serial No. 141,487. 6 Claims. (Cl. 37—105.)



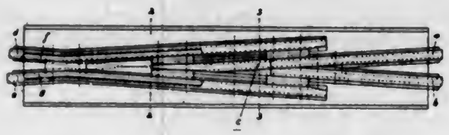
1. In combination with a car, an upright post at one side of the car embodying therein, a pair of spaced post members, opposed guide rails carried by said spaced post members, a wing supporting member positioned between said post members and including rollers engaging three sides of each guide rail.

1,765,855. WING-BRACE ARRANGEMENT FOR RAILROAD SPREADERS. VSEVOLOD G. TELLIS, East Chicago, Ind., assignor to O. F. Jordan Company, East Chicago, Ind., a Corporation of Indiana. Filed Dec. 24, 1926. Serial No. 156,790. 4 Claims. (Cl. 37—105.)



1. In combination with a railroad spreader embodying therein a car body, a side wing hinged thereto, a rock shaft journalled on the car body, a folding brace connecting one portion of the wing with said shaft, a second folding brace connecting another portion of the wing with the car body and arranged in a plane above the first brace, and means causing said braces to operate in unison.

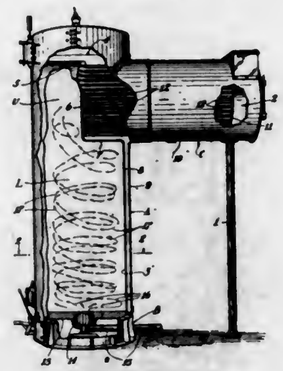
1,765,856. CROSSING COMPOSED OF VIGNOLES RAILS. FRITZ WERTHMANN, Duisburg-Ruhrort, Germany, assignor to the Firm Vereinigte Stahlwerke, Aktiengesellschaft, Dusseldorf, Germany. Filed Sept. 27, 1929, Serial No. 395,624, and in Germany Oct. 19, 1928. 1 Claim. (Cl. 246—460.)



A crossing composed of Vignoles rails the crossing point of which is formed on the one side by joining rails, the two rails on the other side being bent off and extending side by side with the rails forming the crossing point, comprising a cap of wear-proof material like manganese steel of ⊓-shaped section covering both joining rails of the crossing point, the lower edges of said cap being fixed on the rails by welding; and an insert of wear-proof material provided on the inner side of the head of each bent rail, said insert undercutting the rail heads on the outer side, the inner edge of their flat bottom face being welded on the said rails.

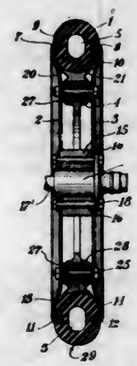
1,765,857. HEATING BOILER. HOMER ADDAMS, Oswego, N. Y. Filed Nov. 19, 1927. Serial No. 234,321. 1 Claim. (Cl. 122—73.)

In a boiler, the combination of a vertical combustion chamber cylindrical throughout the major portion of its height and terminating in an extension of restricted cross-sectional area offset from one side of the longitudinal axis of said major cylindrical portion, a vertical shell spaced from the combustion chamber and surrounding the same to provide a water chamber, a horizontal shell intersecting the vertical outer shell in the plane of the offset part and on the side of said outer vertical shell opposite said offset part, the inner vertical wall of said offset portion constituting a flue sheet, smoke tubes connected to said flue sheet and extending longitudinally of said



horizontal shell to communicate with an outlet for the gases, and a mechanical rotatable burner positioned centrally of the base of said combustion chamber to discharge its fuel upwards in a spiral path.

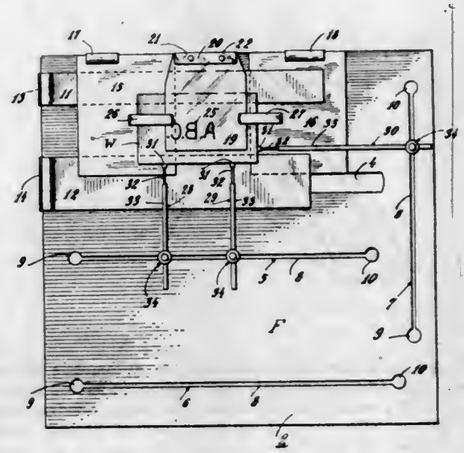
1,765,858. WHEEL. FRANK E. ANDERSON, Brooklyn, N. Y. Filed July 6, 1927. Serial No. 203,755. 4 Claims. (Cl. 152—28.)



2. In a wheel, the combination with a rubber annulus having an annular air chamber and an air valve communicating with said air chamber for supplying pressure in said chamber, of metal disks connected to the sides of said annulus at their peripheries, and an annular felloe anchored to said annulus and floatingly supported by and between said disks.

1,765,859. FEED BOARD FOR PRINTING PRESSES. ENGLEBERT A. BARTEL, Brooklyn, N. Y., assignor to P-W Device Corporation, Brooklyn, N. Y., a Corporation of New York. Filed Feb. 11, 1927. Serial No. 167,457. 8 Claims. (Cl. 101—407.)

1. The combination with a feed board having an opening therein for the operation of the impression die, of a sheet of transparent material adapted to extend across said opening to receive a trial impression, means for attaching a trial sheet of work to said transparent material after positioning the same to determine the position of the work relative to the impression of the impression



die, and guides formed on said feed board adapted to register with the edges of the trial sheet of work to determine the position of the work relative to the feed board during the printing operation.

1,765,860. LINER BOARD OR PAPER. ALBERT L. CLAPP, Danvers, Mass. Filed Dec. 22, 1922. Serial No. 608,579. 10 Claims. (Cl. 92—41.)

1. A composite sheet comprising a bottom layer of cellulosic material, and a top layer comprising a mixture of pulverulent coating material, and kieselguhr.

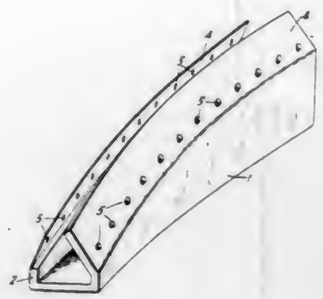
1,765,861. BOX TOE. ALBERT L. CLAPP, Danvers, Mass., assignor to Beckwith Manufacturing Company, Boston, Mass., a Corporation of Massachusetts. Original application filed Oct. 31, 1922, Serial No. 598,214. Divided and this application filed Sept. 27, 1924. Serial No. 740,414. 6 Claims. (Cl. 92—21.)

1. A dense, hard and resilient box toe comprising a layer of felted fibers and a thermoplastic material precipitated upon and adherent to the fibers thereof, the content of thermoplastic material in said box toe being in excess of the weight of the fibers, so that said box toe is capable of being made limp by moderate heat and of setting rapidly when cooled.

1,765,862. METAL-COATED PAPER ARTICLE AND METHOD OF MAKING SAME. ALBERT L. CLAPP, Danvers, Mass. Filed July 16, 1926, Serial No. 123,022. Renewed Mar. 18, 1930. 7 Claims. (Cl. 204—8.)

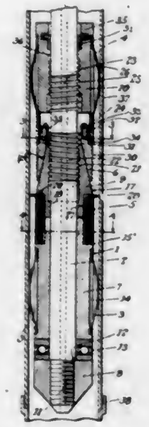
1. A method which comprises forming paper comprising a material capable of reacting with a reagent to produce a hardening compound, treating the paper with the reagent, applying electro-conductive material to the surface of the paper, moulding the paper under pressure at an elevated temperature into an article of the desired shape, and then electro-depositing a metal on the article.

1,765,863. AUTOMOBILE SPRING COVER. ALBERT L. CLAPP, Danvers, Mass. Filed Oct. 29, 1927. Serial No. 229,746. 2 Claims. (Cl. 267—37.)



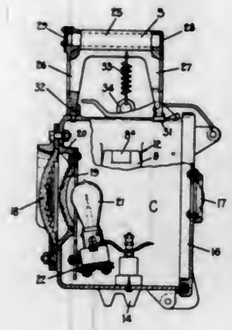
1. As an article of manufacture, an automobile spring cover made of comparatively rigid fiberboard having waterproof and greaseproof properties and lined substantially throughout with a relatively thick pad of fibrous material capable of carrying a considerable amount of liquid lubricant.

1,765,864. TRIP CASING SPEAR OIL-WELL ROTARY FISHING TOOL. PERCIVAL C. COREY, Los Angeles, Calif., assignor of one-third to John C. Massey and one-third to Charlton Wallace, jr., Los Angeles, Calif. Filed July 19, 1929. Serial No. 379,415. 4 Claims. (Cl. 294—96.)



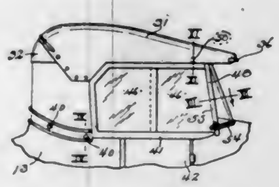
1. A fishing tool including a body formed with a conical section and an upper section, said sections being provided respectively with opposite screw threads, a mandrel extending through said sections and formed with threads engaging respectively the threads of said sections, slips slidable on said conical section and arranged to be engaged by said upper section when the mandrel is rotated in one direction for forcing the slips down on said conical section to expand the slips into engagement with the well casing.

1,765,865. SIGHTING ATTACHMENT FOR ELECTRIC SEMAPHORE LAMPS. SALISBURY M. DAY, Rochester, N. Y., assignor to General Railway Signal Company, Gates, N. Y., a Corporation of New York. Filed Mar. 14, 1923, Serial No. 624,989. Renewed Dec. 4, 1926. 6 Claims. (Cl. 88—14.)



1. In a signal system for railways, the combination with a lamp unit comprising, a casing, a light concentrating device associated with said casing emitting a well defined light beam from a source of light in said casing, a sighting device having three legs the ends of which have a definite relation with a line of vision defined by said device, and surfaces on said casing forming a counterpart to the three legs of the sighting device and having a relation to the axis of the light beam emitted so that the line of vision defined by said sighting device is substantially parallel to the axis of the emitted light beam.

1,765,866. AUTOMOBILE INCLOSURE AND SHIELD CONSTRUCTION. JAMES D. DYER, Kansas City, Mo. Filed Sept. 13, 1926. Serial No. 135,105. 2 Claims. (Cl. 296—44.)

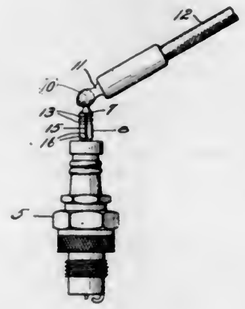


1. In an automobile inclosure and shield construction, a side frame supported by the door of the automobile, an angle iron part supporting the shield member and means for supporting said side frame to guide the front side thereof against the inner side of said angle iron as the door is closed.

1,765,867. METHOD FOR MAKING CANDY. HENRY G. GRANGER, Ruskirk, N. Y. Filed Dec. 15, 1928. Serial No. 326,412. 2 Claims. (Cl. 99—11.)

1. The method of making a candy composed of a candy compound and the salts of calcium and phosphorus consisting in mixing the candy compound, heating the same to the temperature of about 240° F., and thereupon introducing salts containing calcium and phosphorus, thereupon heating the resulting mixture to about 300° F., thereupon pouring the resulting mass upon a cooling table, thereupon introducing the coloring matter and the flavoring element, and thereupon kneading the resulting batch to thoroughly mix and disseminate the added ingredients.

1,765,868. TERMINAL-POST ATTACHMENT FOR SPARK PLUGS. ROGER G. LAFITE, Kansas City, Mo. Filed Nov. 28, 1927. Serial No. 236,112. 4 Claims. (Cl. 173—269.)



1. As a new article of manufacture, a terminal post attachment, comprising an internally threaded body having an open and a closed end, a plurality of spaced apart annular grooves of different depths in the outer wall of said body, and longitudinal slots of different lengths extending into the wall of said body from its open end.

1,765,869. PURIFICATION OF GASES. ALPHONS O. JAEGER, Chicago, Ill., and JOHANN A. BERTSCH, St. Louis, Mo.; said Jaeger assignor to The Selden Company, Pittsburgh, Pa., a Corporation of Delaware. Filed Aug. 28, 1925. Serial No. 53,204. 13 Claims. (Cl. 23—2.)

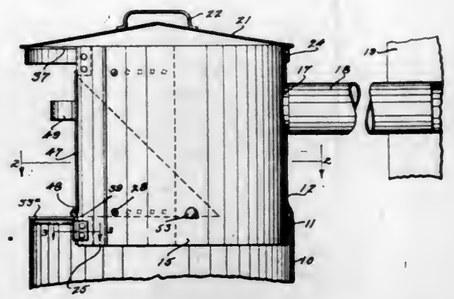
6. The method of purifying gases containing metalloid substances which comprises treating the gases with halogen and removing at least part of the reaction products of halogen and the metalloid substances by means of solvents followed by chilling.

7. The method of purifying gases containing metalloid substances and hydrogen or hydrocarbon gases which comprises treating the gases with halogen and removing at least part of the reaction products of halogen and the metalloid substances by means of solvents followed by treatment with solid absorbents.

1,765,870. PREPARATION OF VANADIC ACID. ALPHONS O. JAEGER and JOHANN A. BERTSCH, St. Louis, Mo.; said Jaeger assignor, by mesne assignments, to The Selden Research & Engineering Corporation, Pittsburgh, Pa., a Corporation of Delaware. Filed May 15, 1926. Serial No. 109,429. 9 Claims. (Cl. 23—22.)

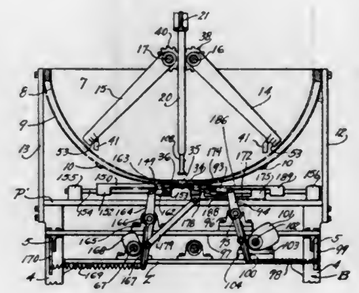
1. The method of producing purified vanadic acid, which comprises subjecting a crude vanadate solution to oxidation in alkaline solution rendering the solution acid to litmus, and carrying out a further oxidation in the acid solution, the total amount of oxidation being sufficient to transform all of the vanadium compounds into the pentavalent state and to transform all impurities into products which can be separated from the vanadium compounds.

1,765,871. DUST COLLECTOR. CARL LESLIE JOHNSON, Jamestown, N. Y. Filed July 12, 1929. Serial No. 377,741. 8 Claims. (Cl. 126—242.)



1. A removable ash-receptacle attachment comprising a generally cylindrical element formed from two relatively adjustable walls, spaced plates joining remote ends of said walls, a door mounted between said plates and a U-shaped rod hingedly supporting said door upon the lower of said plates.

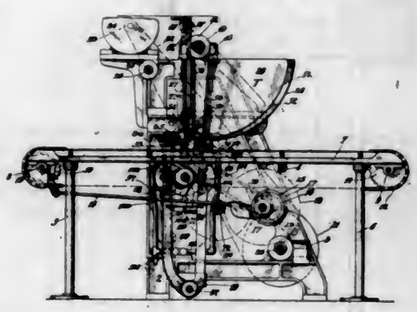
1,765,872. METHOD OF AND MACHINE FOR FORMING CONFECTIONS HAVING IRREGULAR SHAPES. WILLIAM BARTLETT LASKEY, Brooklyn, N. Y., assignor to Mason, Au & Magenheimer Confectionery Manufacturing Company, Brooklyn, N. Y., a Corporation of West Virginia. Filed Dec. 21, 1925. Serial No. 76,570. 31 Claims. (Cl. 107—4.)



28. The combination with a tank for a mass of plastic material, of corrugated side forming blades, means for actuating the said side forming blades to approach one another and select a unit from said mass, and simultaneously form the sides thereof, there being a discharge opening in the bottom of said tank conforming to the lateral contour defined by the said forming blades, there being a return opening in the bottom of said tank adjacent to said discharge opening, a plunger, a die on the lower end of said plunger conforming in shape to the lateral contour defined by the side forming blades, means for actuating said plunger to engage the unit selected and pass down between said side forming blades to discharge the unit selected through said discharge opening, corrugated upper surface forming blades, means for actuating said upper surface forming blades to approach one another thereby to engage the unit discharged and remove portions from the upper end thereof to form the upper surface of the unit discharged, a scraper blade having an upper plane surface and an advance face having a lower corrugated edge conforming to the contour

defined by the upper surface forming blades, and means for actuating said scraper blade to cause the corrugated edge of its advance face to engage and traverse the upper surfaces of the forming blades to remove the surplus material lodged thereon and return it to the tank through said return opening.

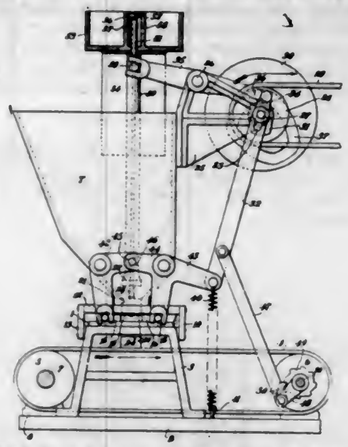
1,765,873. CANDY MACHINERY. WILLIAM BARTLETT LASKEY, Brooklyn, N. Y., assignor to Mason, Au & Magenheimer Confectionery Manufacturing Company, Brooklyn, N. Y., a Corporation of West Virginia. Filed July 20, 1926. Serial No. 123,624. 30 Claims. (Cl. 107—4.)



1. In a machine of the class described, the combination with a plastic mass containing tank having a vertically extending plane wall at one end and an arcuate wall at the other end extending from the upper edge of the tank down to the lower end of said plane wall, there being a discharge opening in said tank adjacent to said plane wall, of a fixed die disposed adjacent to said plane wall and in line with one side of said discharge opening for defining one side of the confection unit to be formed, a movable die adapted to move into engagement with said fixed die and into alinement with the other side of said discharge opening to define the other side of the confection unit to be formed, a closure for the discharge opening temporarily to support the confection unit being formed, a discharging head for engaging the confection unit disposed between said dies and discharging said unit through said discharge opening, and means for causing said closure to open when said discharge member functions to discharge a unit.

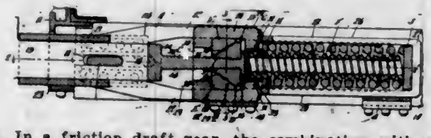
1,765,874. PROCESS FOR FORMING CANDY. WILLIAM B. LASKEY, Brooklyn, N. Y., assignor to Mason, Au & Magenheimer Confectionery Manufacturing Company, Brooklyn, N. Y., a Corporation of West Virginia. Filed Apr. 26, 1927. Serial No. 186,626. 1 Claim. (Cl. 107—54.)

The process of forming and shaping a candy unit composed of a plastic mass and a filling, consisting in segregating and shaping a predetermined amount of plastic material from a main mass of plastic material, segregating a predetermined supply of a second character of substance to constitute the filling, extruding the predetermined amount of plastic material by subjecting the same to a predetermined pressure and simultaneously forming a depression in the same, during the latter portion of the extruding action, extruding a predetermined portion of said segregated second character of substance into the depression formed in the extruded portion of plastic material by subjecting the segregated second character of substance to a predetermined pressure, thereupon cutting off a unit from the portion of plastic mass so extruded to form the upper surface of the unit so formed and simultaneously forming the lower surface of the succeeding unit to be extruded, and thereupon replenishing



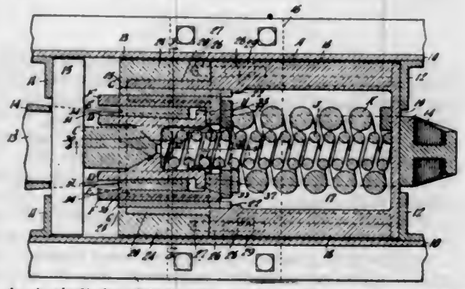
the segregated predetermined supply of the second character of substance in preparation for the succeeding extruding action.

1,765,875. FRICTION GEAR. JOHN F. O'CONNOR, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed Apr. 9, 1928. Serial No. 268,565. 10 Claims. (Cl. 213—22.)



1. In a friction draft gear, the combination with yoke means provided with laterally, inwardly acting wedge means; of a tapered friction post adapted to receive the actuating force when the gear is operated in one direction, said post being movable inwardly of the yoke and held against movement in a reverse direction; differential friction blocks interposed between the friction post and the wedge means of the yoke, said blocks receiving the actuating force when the gear is operated in the reverse direction to effect movement of the blocks with respect to the post longitudinally of the mechanism in one direction; means for holding said blocks against movement in the opposite direction; and spring resistance means directly opposing relative movement of the yoke and post.

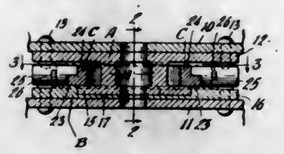
1,765,876. FRICTION SHOCK-ABSORBING MECHANISM. JOHN F. O'CONNOR, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed May 12, 1928. Serial No. 277,265. 10 Claims. (Cl. 213—33.)



1. A shell for friction shock absorbing mechanisms, including a tubular friction shell section at the forward end

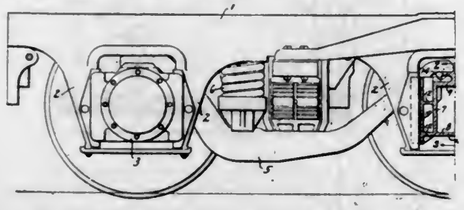
and a spring casing formed rearwardly thereof, and reinforcing means exteriorly embracing the friction shell section and having retaining means thereon overhanging the mouth of the shell.

1,765,877. CENTER BEARING. JOHN F. O'CONNOR, Chicago, Ill., assignor to W. H. Miner, Inc., Chcago, Ill., a Corporation of Delaware. Original application filed June 25, 1923, Serial No. 647,436. Divided and this application filed June 18, 1928. Serial No. 286,171. 3 Claims. (Cl. 308—137.)



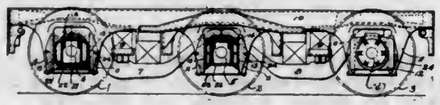
1. In car construction, the combination with body and truck bolsters; of a center bearing member fixed to one of said bolsters, said member being provided with a horizontally disposed annular bearing flange; a center bearing plate provided with a bearing socket accommodating said bearing flange fixed to the other bolster; fixed retaining means on said plate adjacent said socket having abutments thereon, said retaining means also having overhanging sections providing shoulders; locking blocks held against vertical displacement by said shoulders, and against separation by said abutments said locking blocks overlapping the flange of the center bearing member to hold the same in the seat when engaged with said shoulders and abutments, said blocks being displaceable inwardly toward each other to disengage the same from said shoulders to unlock the bolsters from each other; and detachable retaining means for holding said blocks separated to an extent to engage said shoulders.

1,765,878. APPARATUS FOR JOURNALING RAILWAY VEHICLE AXLES. HARRY M. PFLAGER, St. Louis, Mo., assignor, by mesne assignments, to General Steel Castings Corporation, Granite City, Ill., a Corporation of Delaware. Filed July 14, 1928. Serial No. 292,683. 29 Claims. (Cl. 105—218.)



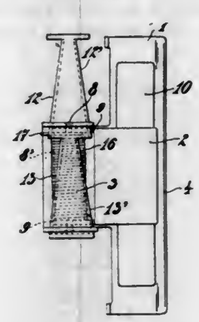
1. A railway vehicle journal box having an inner contour arranged for mounting an axle journal bearing for a given size of journal, the exterior of said box corresponding in size and pedestal engaging contour to a journal box arranged for a bearing which requires a wider box.

1,765,879. RAILWAY-TRUCK STRUCTURE. HARRY M. PFLAGER, St. Louis, Mo., assignor, by mesne assignments, to General Steel Castings Corporation, Granite City, Ill., a Corporation of Delaware. Filed Aug. 17, 1928. Serial No. 300,204. 24 Claims. (Cl. 105—195.)



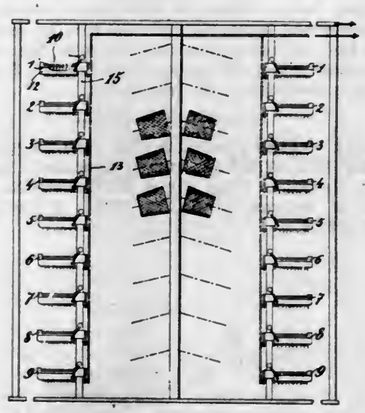
1. As a new article of manufacture, a member adapted to be placed over a railroad friction journal box to provide a pedestal engaging surface corresponding to that provided by a railroad roller bearing journal box for a similar size of journal.

1,765,880. CLAMPING DEVICE FOR FILES, NEWSPAPER HOLDERS, AND THE LIKE. FRITZ POHL, Vienna, Austria, and MAX VOGEL, Frankfort-on-the-Main, Germany, assignors to the Firm M. Vogel A. G., Geschaftsbücher- und Metallwaren-Fabrik, Frankfort-on-the-Main, Germany. Filed Jan. 31, 1929, Serial No. 336,588, and in Germany Apr. 10, 1928. 5 Claims. (Cl. 24—66.)



1. A clamping device, specially designed for files, newspaper holders and the like, comprising in combination a yieldable clamping element adapted to be lowered upon the papers and to be raised from the same, an axle of said clamping element, a base plate in the file supporting the axle of said clamping element and a locking slide having wedge faces shiftable along said axle to secure said clamping element in the locking position.

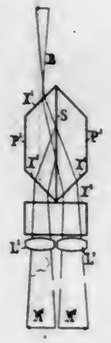
1,765,881. BREAKAGE-INDICATING MECHANISM FOR WARPING MACHINES AND THE LIKE. WILHELM REINERS and GUSTAV KAHLISCH, Munich-Gladbach, Germany, assignors to W. Schlafhorst & Co., Munich-Gladbach, Germany, a Corporation of Germany. Filed Mar. 8, 1929, Serial No. 345,345, and in Germany Mar. 13, 1928. 7 Claims. (Cl. 28—51.)



1. In apparatus of the class described, a support, said support comprising a straight rod, sets of rigid conductive elements supported by said support and projecting laterally thereof, each of said sets comprising a pair of parallel elements, a series of guide hooks mounted on one of the elements of each set, each of said hooks being nor-

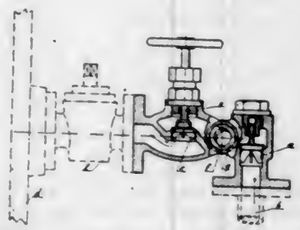
mally held out of contact with the other element of its associated set by the tension of a thread engaged thereby but being adapted to move into contact with said other element upon breakage of such thread, and a separate electric signalling circuit associated with each of said sets and completed upon such movement of any guide hook of a respective series.

1,765,882. OPTICAL DEVICE FOR PHOTOGRAPHIC, CINEMATOGRAPHIC, AND OTHER PURPOSES. JAMES FREDERICK ROMER, West Hampstead, London, England, assignor to John Edward Thornton, London, England. Filed Mar. 31, 1927, Serial No. 180,026, and in Great Britain May 28, 1926. 3 Claims. (Cl. 88—1.)



1. Optical apparatus for producing a plurality of complementary images from a single object comprising a right angle prism, a semi-reflecting semi-transparent layer coated upon the hypothenuse of said prism, a second right angle prism cemented by its hypothenuse to the hypothenuse of the first prism, the hypothenuses being arranged parallel to the axial ray of the incident beam, this ray striking the first prism at an angle of 45° refracted on to the hypothenuse and divided into two beams, two further prisms, semi-reflecting, semi-transmitting surface layers coated upon adjacent faces to divide each half beam into two, one half of each half beam passing through the said layers and emerging parallel with the axial ray of the incident beam, a totally reflecting surface on one of the prisms parallel to the said layers the other half of each half beam being reflected by the said layers and impinging upon the parallel surface from which they are reflected so that they also emerge parallel to the axial ray of the incident beam, to give four images in square formation in the same plane.

1,765,883. SAFETY DEVICE FOR BOILER FEED AND DELIVERY PIPINGS. EWALD RUSCHKE, Luder, Hanover, Germany. Filed Dec. 8, 1927, Serial No. 238,663, and in Germany July 14, 1926. 2 Claims. (Cl. 137—153.)



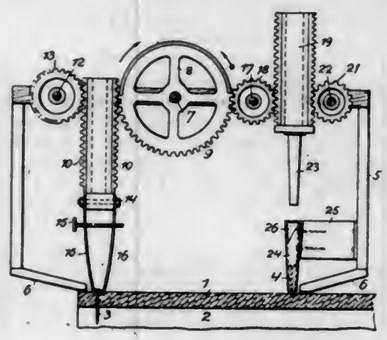
1. A safety device for boiler feed valves characterized by the combination of an interchangeable diaphragm plate with a boiler feed valve and built directly into the valve case between the valve head and the shut off valve and adapted to protect the valve case against excessive pressure and at the same time protect the feed water pipe on fracture of the hand operated valve.

1,765,884. GASKET. ROBERT C. SCHEMMEL, Union City, Ind. Filed Nov. 7, 1929. Serial No. 405,468. 5 Claims. (Cl. 20—60.)



1. A gasket comprising a packing, a fabric covering therefor extending from one side of the packing to form a multi-ply tacking flange, and stitches passing through the flange at substantially right angles to the longitudinal edge thereof.

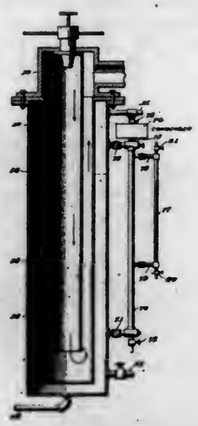
1,765,885. MACHINE FOR DRIVING IN AND PULLING OUT NAILS. HANS SCHERM, Jr., Eschenbach, Germany. Filed Oct. 13, 1928. Serial No. 312,327. 1 Claim. (Cl. 1—47.)



A machine for driving in and pulling out nails comprising a frame, a driving wheel rotatably mounted in the top end of said frame and having teeth in only one half of its circumference, a pulling-out device at one side of said driving wheel consisting of a rack meshing with the teeth of said driving wheel, a pair of gripper arms fixed on the lower end of said rack and an adjusting screw for adjusting the position of said gripper arms, a driving in device on said frame at the other side of said driving wheel consisting of a rack carrying a ram at its lower end and nail holding means for positioning a nail beneath said ram, and an intermediate spur gear rotatably mounted in said frame and meshing with the teeth of said driving wheel and with the teeth of the rack carrying said ram.

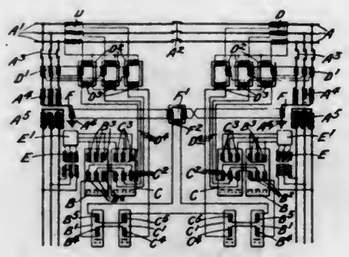
1,765,886. APPARATUS FOR DISTILLING OIL. ALFRED SCHWARZ, Montclair, N. J. Filed June 16, 1928. Serial No. 285,855. 3 Claims. (Cl. 196—117.)

3. The combination with an oil still having a vapor outlet of a standpipe having communication with the still at points above and below the liquid level in the still, a gauge glass communicating with said standpipe, a condenser,



and means effecting communication between said vapor line and condenser and between said condenser and standpipe.

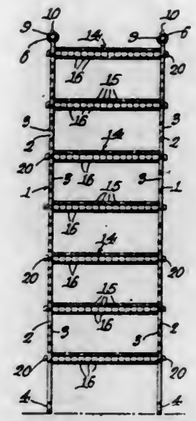
1,765,887. PROTECTIVE ARRANGEMENT FOR SECTIONALIZED ELECTRIC POWER CIRCUITS. ERIC WALTER MARBURY SCOTT, Church Stretton, and BRUCE HAMER LEESON, Tynemouth, England, assignors to A. Reyrolle & Company Limited, Hebburn-on-Tyne, England, a Company of Great Britain. Filed Feb. 27, 1929, Serial No. 343,162, and in Great Britain Apr. 2, 1928. 15 Claims. (Cl. 175—294.)



1. The combination with a sectionalized electric power circuit, of circuit-breakers for isolating the sections of the power circuit from one another, a tripping circuit for each circuit-breaker, and means for protecting each section independently of the other sections comprising a tripping relay device at each end controlling the tripping circuit for the adjacent circuit-breaker, a stabilizing relay device at each end operative on the occurrence of a fault on the system only when the current in the power circuit is flowing out from the section at the end adjacent to the stabilizing relay device, means whereby each stabilizing relay device when operated causes a stabilizing current to be transmitted to the remote end of the section and means at each end operated by the stabilizing current from the remote end to prevent the adjacent circuit-breaker from being opened by its tripping relay device.

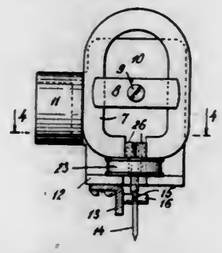
1,765,888. SHELVING. JOHN D. SMID, Wichita, Kans. Filed Sept. 27, 1928. Serial No. 308,834. 2 Claims. (Cl. 211—148.)

1. In a device of the class described, a shelf made up of like, interchangeable strips, located side by side and provided at their ends with eyes, cross members insertable through the eyes and having lateral projections at their ends, standards having openings through which the ends of the cross members are inserted, the ends of the cross members being movable transversely in the openings of the standards, to cause the projections to engage with the standards, the strips having their longitudinal edges



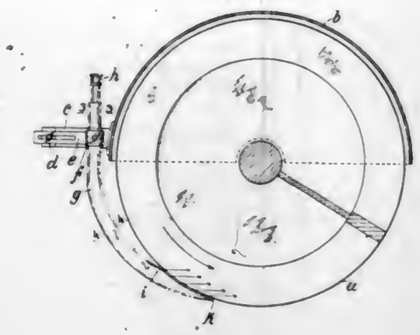
in contact, and the eyes being as wide as the strips, thereby to form continuous tubular passages through which the projections may move without catching, when the cross members are inserted through the eyes, the openings of the eyes being of greater diameter than the cross members, and of sufficient diameter to permit the passage of the projections, and means for holding the strips together.

1,765,889. SOUND RECORDING AND REPRODUCING APPARATUS. RALPH H. TOWNSEND, Mount Vernon, N. Y., assignor to The Brunswick-Balke-Collender Company, Wilmington, Del., a Corporation of Delaware. Filed Jan. 13, 1925. Serial No. 2,064. 1 Claim. (Cl. 179—100.41.)



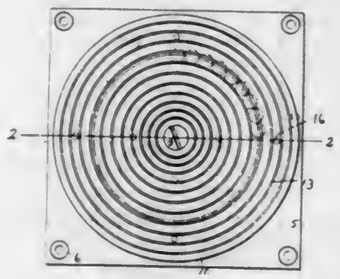
In combination, a permanent magnet having the poles thereof turned toward each other, said poles having an air gap therebetween, a frame piece, means for connecting said magnet to said frame piece, said frame piece including a portion disposed below the poles of said magnet, a support on said portion, bearings on said support, a pivot bar carried by said bearings, an armature on said pivot bar including a portion disposed in said air gap, a coil carried by said portion of the frame piece and disposed about said armature, and means in said air gap for dampening movement of said armature.

1,765,890. DEVICE FOR SUPPLYING WATER TO STONE SAWS. ADOLF VATES, Cologne-on-the-Rhine, Germany. Filed Apr. 21, 1928, Serial No. 271,961, and in Germany May 11, 1927. 1 Claim. (Cl. 125—12.)



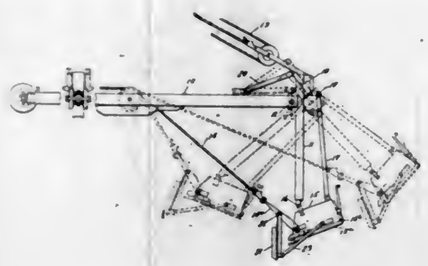
A device for supplying cooling water to the cutting point of circular saws of carborundum or the like for cutting stones, comprising a jet-tube the mouth-end of which is curved, according to the circular shape of the circular saw, and of such narrow cross-section that it can be introduced into the cut down to the bottom thereof.

1,765,891. STEP PLATE FOR THE RUNNING BOARDS OF VEHICLES. JESSE E. WAGGONER, Hickory, N. C. Filed May 19, 1928. Serial No. 278,991. 1 Claim. (Cl. 280—163.)



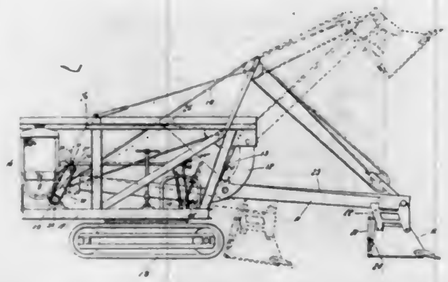
A step plate of the character described comprising a flat polygonal plate having openings in its corner portions for the passage of securing elements, a pivot pin threadedly anchored in the central portion of the plate and extending outwardly therefrom and having a tapered slotted head on its upper end, a flat metallic disc mounted for rotation on the pin in spaced relation to the plate, and having a countersunk bore for the reception of said pin and the tapered head, said disc of less diameter than the plate, the opposed faces of the disc and the plate being provided with complemental annular concentric grooves, anti-friction balls disposed in the grooves and a depending marginal flange on the disc for rotatable engagement with the plate.

1,765,892. BACK-FILLING ATTACHMENT FOR EXCAVATORS. GEORGE E. WAGNER, Akron, Ohio, assignor, by mesne assignments, to Clutter-Wagner, Inc., a Corporation of Ohio. Filed Oct. 28, 1927. Serial No. 229,442. 7 Claims. (Cl. 37—144.)



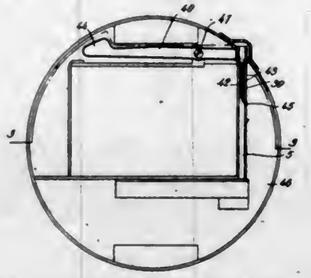
4. In an excavator, a pivoted stick, means for operating the stick, a back-filler carried by the stick, and means connected to the back-filler and actuated during operation of the stick to shift the back-filler relative to the stick so as to maintain the back-filler at a steep inclination to the horizontal over a wide range of movement of the stick.

1,765,893. POWER-OPERATED TRIP FOR EXCAVATOR SCOOPS. GEORGE E. WAGNER, Akron, Ohio, and LE ROY P. CLUTTER, Deer Lick, Pa., assignors, by mesne assignments, to Clutter-Wagner, Inc., a Corporation of Ohio. Filed Mar. 18, 1927. Serial No. 176,434. 21 Claims. (Cl. 214—146.)



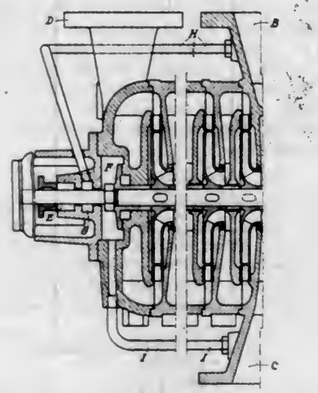
1. A power-operated trip for excavators comprising a trip line extending to the scoop of the excavator, a drum upon which the trip line is reeled, yielding means effective on the drum to maintain the line taut, a shaft adapted to be driven by the prime mover of the excavator, said drum being freely journaled on said shaft, a friction clutch member secured to said shaft, a shiftable friction clutch member journaled on the shaft and arranged to cooperate with the first clutch member, means operable by said shiftable clutch member for positively rotating the drum, said means including a retractile pin on the shiftable clutch member and circumferentially spaced teeth on the drum arranged to be engaged by said pin, means effective on the shiftable clutch member for normally urging said member to an initial angular position, means for disengaging said shiftable clutch member after a predetermined angular travel thereof, said means including a cam on said shiftable clutch member and a fixed cam plate arranged in the path of said cam, and means for controlling the shiftable clutch member from the operative's station on the excavator.

1,765,894. COIN-CONTROLLED VENDING APPARATUS. CARLOS WETZELL, Friedenau, near Berlin, and WALTHER INHOFFEN, Wilmersdorf, near Berlin, Germany, assignors to N. V. Internationale Automaten Maatschappij, La, Lange Voorhout, Den Haag, Holland. Filed Aug. 29, 1927, Serial No. 216,242, and in Germany Sept. 6, 1926. 3 Claims. (Cl. 194—103.)



1. A controlling mechanism for vending machines, comprising a coin chute having openings in its front and rear walls located substantially opposite each other; a pivoted balance lever; and a depending catching arm secured to one end of said lever and projecting through the rear chute opening into the interior of the chute to be struck and thereby rocked backward through said opening by a coin falling through the chute; said catching arm having a deflecting member at its lower end for ejecting a coin of insufficient weight through the front opening in the chute.

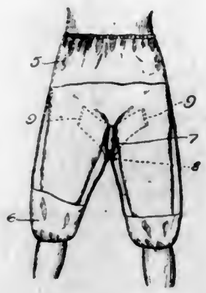
1,765,895. MULTISTAGE HOT-WATER CENTRIFUGAL PUMP. GEORG WEYLAND, Frankenthal, Germany. Filed Sept. 7, 1929, Serial No. 391,011, and in Germany Sept. 15, 1928. 3 Claims. (Cl. 103—112.)



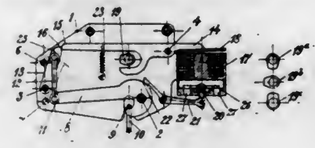
1. In a multi-stage hot-water centrifugal pump, a preheater for pre-heating the delivery liquid between two of the pressure stages of the pump, a leakage water chamber, a stuffing box, and means for preventing access of hot water to the said stuffing box by maintaining at a point between the said stuffing box and the said leakage water chamber a higher pressure and a lower temperature than prevails in the said leakage water chamber.

1,765,896. SANITARY GARMENT SHIELD. HENRY ABRAHAMSON, Chicago, Ill. Filed Apr. 25, 1928. Serial No. 272,733. 5 Claims. (Cl. 128—288.)

1. A hygienic appliance comprising a bifurcated undergarment, and body shields secured at the crotch portion thereof and extending above said crotch portion so as to occupy the space between said crotch portion and the crotch of the wearer, said shields being erected upon said crotch portion of said garment and positioned to seat upon the contiguous areas of the limbs between the garment crotch and the body crotch.



1,765,897. ELECTROMECHANICAL APPARATUS FOR THE AUTOMATICAL DROPPING OF ANY ARTICLE. ROBERT ALKAN and GEORGES LESOURD, Paris, France. Filed Mar. 26, 1924. Serial No. 702,167. 1 Claim. (Cl. 74—93.)

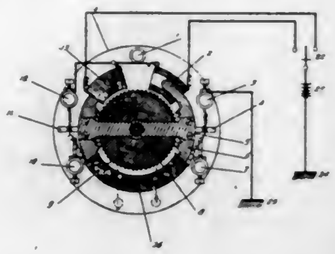


An electro-mechanical apparatus for dropping articles of any kind from aircraft, comprising in combination a hook, an arm of said hook, two connecting rods hingedly connected at the lower ends to said arm, an axle fixed at a short distance on the outer side of the plane in which said connecting rods are situated, a cam lever oscillably mounted on said fixed and hingedly connected to the upper end of said connecting rods, a releasing lever pivotably mounted on a stationary axle bearing with its inner end against the upper end of said cam lever, a curved arm on the lower side of said releasing lever, an armature fixed to the outer end of said releasing lever, and a coil of an electro-magnet adapted to attract said armature, and a cam engaging with said curved arm.

1,765,898. ELECTRIC UNIVERSAL INDICATOR. WALDEMAR ALTNER, Pachuca, Mexico. Filed Dec. 21, 1928, Serial No. 327,703, and in Mexico Dec. 10, 1928. 1 Claim. (Cl. 177—328.)

In an electric indicator, the combination with main supporting plates of non-magnetic material and means for securing the same in superimposed relation; of a shaft centrally journaled in said plates and a toothed disc of magnetic metal mounted on said shaft for rotation between said plates; an annular ring and means for rigidly securing the same to the shaft, said ring having opposite portions of its inner periphery provided with teeth in magnetic relation to said toothed disc, said disc being adapted

for intermittent rotation in unison with said annular ring; an electro-magnetic coil rigidly secured to one portion of the annular ring, said ring having its opposite portion cut away to form solenoid cores; adjustable stop means and means for securing the same to the supporting plates; insulated lugs oppositely located on the periphery of the



annular ring, said lugs being alternately engageable with said stop means; and solenoids secured to one of the supporting plates and in circuit with the electro-magnetic coil, said solenoids being adapted when alternately energized to effect selective rotation of said annular ring within the limits defined by the said stop means.

1,765,899. NONALCOHOLIC BEVERAGE. THEODORE P. AYLON, Schenectady, N. Y. Filed Mar. 24, 1925. Serial No. 18,063. 5 Claims. (Cl. 99—11.)

1. A syrup or base for the preparation of soft drinks comprising an infusion prepared by the cold extraction of unroasted and unfermented St. John's-bread in water.

5. In the art of compounding non-alcoholic beverages, the step of extracting the bouquet of unroasted, unfermented carob fruit with cold aqueous solvent.

1,765,900. ELECTRIC SAFETY LAMP. JOHANNES BECKMANN, Altona, Ottensen, Germany. Filed Aug. 27, 1928, Serial No. 302,202, and in Germany June 4, 1928. 2 Claims. (Cl. 240—1.)



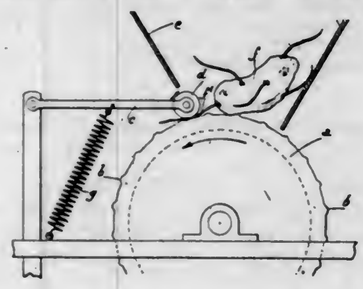
1. An electric lamp comprising in combination with a chamber with check valve and pneumatic switch and with a second chamber and the lamp holder, hollow contact screws in said lamp holder, spring controlled contact pins in said contact screws, a lamp foot, hollow contact projections of said lamp foot designed to receive said contact pins, a ring having a projection adapted to centre said holder, and a screw cap for fixing said ring on said holder.

1,765,901. PEN FOR DRAWING AND RULING PURPOSES. RUDOLF BLANCKERTZ, Berlin, Germany, assignor to the Firm: Heintze & Blanckertz, Berlin, Germany. Filed Oct. 2, 1926, Serial No. 139,152, and in Germany Oct. 5, 1925. 6 Claims. (Cl. 120—114.)



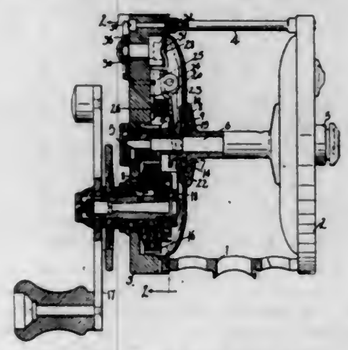
1. A pen for drawing and ruling purposes provided with a writing point ending in a bent disc and provided with a longitudinal slot, said longitudinal slot extending into said disc and terminating short of the rim thereof, the rim of said disc being unbroken.

1,765,902. APPARATUS FOR FREEING POTATOES FROM GERMS. FERNAND BROCHET, Fontenay-Tresigny, France. Filed Mar. 21, 1928, Serial No. 263,531, and in France Mar. 31, 1927. 1 Claim. (Cl. 146—55.)



An apparatus for freeing potatoes from germs, comprising in combination a rotatable drum adapted to support the potato, longitudinal rounded ribs on said drum, a cylinder of small diameter bearing against said drum parallel to said ribs, and means for elastically pressing said cylinder against said drum so that it successively presses against the periphery of said drum and against said rounded ribs.

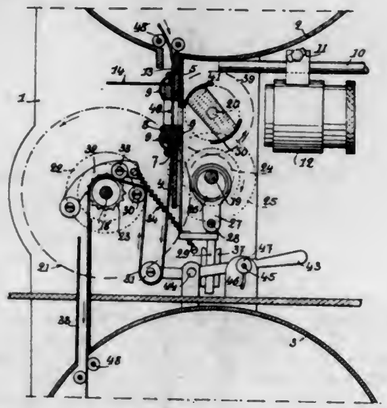
1,765,903. SALT-WATER REEL. FRANCIS M. CASE, Cleveland, Ohio, assignor to The Enterprise Manufacturing Company, Akron, Ohio, a Corporation of Ohio. Original application filed Mar. 25, 1922, Serial No. 546,637. Divided and this application filed July 22, 1927. Serial No. 207,682. 4 Claims. (Cl. 242—84.7.)



1. In a fishing reel of the free spool type, a reel housing, a shaft in the reel housing, a spool mounted upon

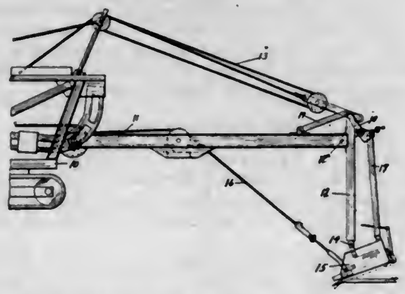
the shaft, a clutch member attached to one end of the spool, a driven pinion on the shaft, a non-circular shank on the pinion, a mating clutch member slidable on the shank, and means to shift the last named clutch member toward and from the spool, comprising a lever pivoted on the reel housing, one end of the lever engaging the said clutch member and the other end of the lever being provided with an extension, a rotatable cam button having a transverse slot and flat surfaces thereon on which the lever extension may bear selectively and a spring bearing against the lever and operating to hold its extension in contact with the cam button.

1,765,904. APPARATUS ADAPTED FOR CONTINUOUS FILM TRAVEL, FOR VIEW TAKING, PRINTING, AND PROJECTION OF CINEMATOGRAPHIC FILMS. PIERRE CHAVAROUX, Paris, France. Filed May 2, 1928, Serial No. 274,557, and in France Apr. 13, 1928. 1 Claim. (Cl. 88—16.8.)



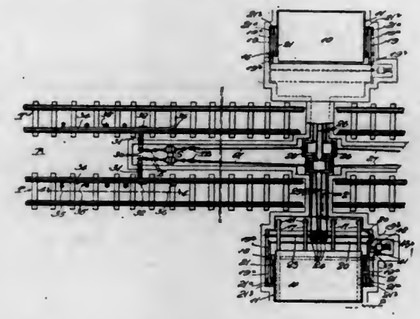
A cinematographic apparatus adapted for the continuous travel of the film, which comprises a movable window corresponding to the dimensions of an image, means for framing the image in the said window, means for displacing said window through one-half the height of the image and for then returning the said window to the rear through a like distance, a glass plate with parallel faces which is pivotally mounted between the film and the lens, flanges mounted on the small sides of the said glass plate and adapted to cut off the beam of light during the back motion of the window, and means for rotating the said glass plate during the travel of the film whereby the beam of light will be directed upon the lens.

1,765,905. EXCAVATOR. LE ROY P. CLUTTER, Deer Lick, Pa., assignor, by mesne assignments, to Clutter-Wagner, Inc., a Corporation of Ohio. Filed Oct. 18, 1926. Serial No. 142,183. 7 Claims. (Cl. 214—138.)



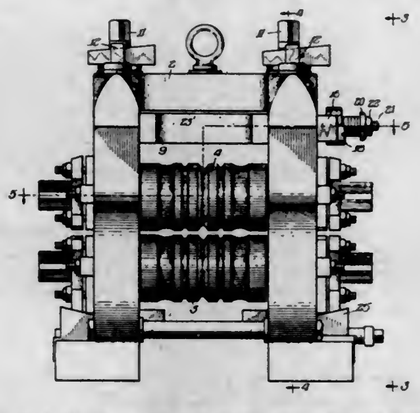
5. In an excavating machine, a boom pivoted to swing in a vertical plane, a dipper stick pivoted on the boom to swing in said plane, a scoop pivoted upon the dipper stick, and means between the boom and scoop and operable by relative movement of the stick and boom for shifting the scoop on the stick to increase the cutting angle thereof at both the extremes of the swinging movement of said dipper stick.

1,765,906. GRADE-CROSSING SAFETY EQUIPMENT. HARRY S. CODER, Bridgeton, N. J. Filed Oct. 28, 1929. Serial No. 402,969. 11 Claims. (Cl. 246—127.)



1. In grade crossing safety equipment, a self-projecting traffic stopping barrier, means normally holding said traffic stopping barrier against projection, a train-actuated member, and operating connections between said train-actuated member and said holding means for releasing the latter, allowing said barrier to move to projected position, said barrier when projected being free to move under the influence of a vehicle, whereby the latter may temporarily restore said barrier to inoperative position if necessary.

1,765,907. ROLLING-MILL HOUSING. FRANK C. CZEMBA and HENRY W. WILSON, Duluth, Minn. Filed May 11, 1927. Serial No. 190,457. 11 Claims. (Cl. 80—56.)

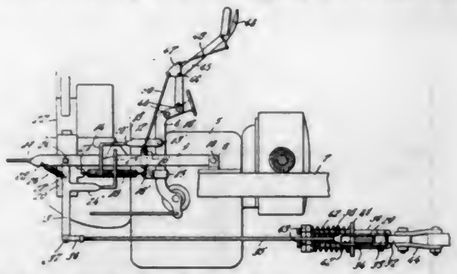


1. In a device of the character described, the combination with rolls, one of which is adjustable and the other of which is nonadjustable in the direction of its length, adjustable bearings for said rolls, a cradle, and a yoke for adjustingly cooperating with said cradle to align said adjustable roll with respect to the other roll.

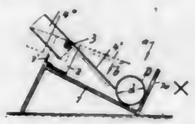
1,765,908. AUTOMATIC CLUTCH RELEASE. HAROLD W. DRENNAN, Conover, Ohio. Filed May 24, 1929. Serial No. 365,771. 7 Claims. (Cl. 180—14.5.)

1. In a device of the character described, the combination of a tractor, embodying among other parts, a clutch

pedal, spring means for normally holding said clutch pedal in a disengaged position, an elongated rod disposed on the tractor adjacent the clutch pedal, said rod having a notch formed therein, an angularly shaped strap member pivoted to the clutch pedal and adapted for engagement with the notch in said rod for holding said clutch pedal in an engaged position against the action of said spring means, said rod being provided with a downwardly dpending rod pivotally associated therewith, and said last mentioned rod having a laterally extending projection merging into a riser terminating in spaced relation to said strap member, means on the tractor for coupling a plow thereto, and means operatively associating said coupling means with said last mentioned rod, whereby upon any untoward movement of the plow, said last mentioned rod will be actuated for bringing said riser into engagement with said strap member for disengaging said strap member with said first mentioned rod for permitting the said clutch pedal to assume a disengaged position.

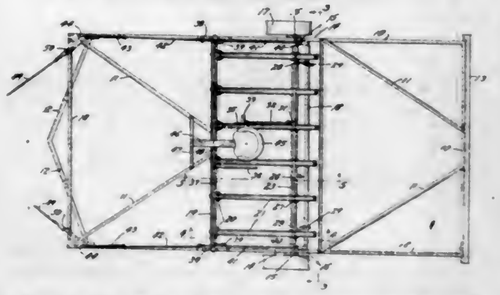


1,765,909. APPARATUS FOR SORTING GUTS. HERMANN EBERHARDT, Breslau, Germany. Filed Mar. 9, 1929, Serial No. 345,874, and in Germany Mar. 16, 1928. 1 Claim. (Cl. 33—178.)



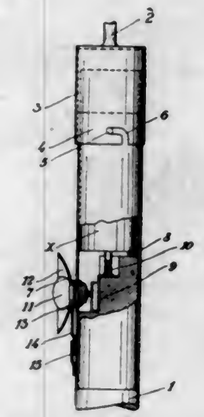
A sorting apparatus especially for guts, comprising in combination with the base plate having a vertical front wall, an axle parallel to said wall and fixed on said base plate, and a number of levers normally perpendicular to said wall and pivotally mounted on said axle so that their corresponding ends are standing at different distances from said vertical wall, said levers being adapted to be depressed to move approximately parallel to said stationary wall.

1,765,910. AUTOMATIC LAND-LEVELING DEVICE. LEWIS W. EVERSMAN, Julesburg, Colo., assignor to The Eversman Manufacturing Company, Denver, Colo., a Corporation of Colorado. Filed Aug. 5, 1929. Serial No. 383,642. 6 Claims. (Cl. 37—169.)



1. An automatic land leveling device comprising a frame; bearings carried by said frame; axle cranks rotatably maintained in said bearings; wheels supported on one extremity of said axle cranks; a scraper blade vertically actuated by the other extremity of said axle cranks so that as said wheels move downwardly from said frame said blade will move upwardly therein; blade supports extending forwardly from said blade; hinge members supporting the forward extremities of said supports so as to allow said blade to swing upwardly; a set lever carried by one of said supports; and an operative connection between said set lever and said axle crank so that movement of said set lever will change the relative position of said blade to said axle crank.

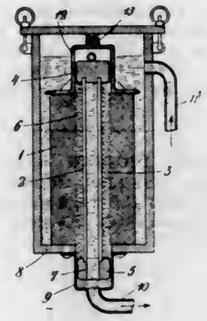
1,765,911. ELECTRIC ILLUMINATION FOR TENTS. ERICH FABIANKE, Berlin-Schoneberg, Germany. Filed Apr. 29, 1929. Serial No. 359,131. 2 Claims. (Cl. 240—6.4.)



1. An electric illumination for tents, comprising in combination with the tent post, a brass sleeve rotatably mounted on the upper end of said tent post which has a cavity in its upper portion, said brass sleeve having an aperture, a laterally projecting pin on said brass sleeve, a top sleeve of said tent post having a bayonet slot in its lower edge adapted to engage over said laterally projecting pin, an upwardly projecting stud on the top end of said top sleeve adapted to hold the tent canvas, a dry battery in said cavity of the tent post having two electrodes, a contact spring connected to one electrode arranged behind the aperture in said brass sleeve, a contact spring on the outer surface of said brass sleeve connected to the other electrode of said battery, a lamp holder, an incandescent lamp in said lamp holder, and a downwardly extending contact spring on said reflector said lamp holder with reflector designed to be inserted through said aperture of said brass sleeve so that the circuit through said lamp is automatically closed at the inserting of the lamp holder and automatically interrupted at the removing of said lamp holder.

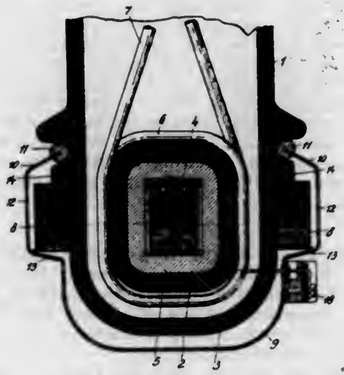
1,765,912. APPARATUS FOR DYEING AND WET-TREATING OF FABRIC. WOLDEMAR FEHRMANN, Dresden-Strehlen, Germany. Filed June 7, 1927, Serial No. 197,166, and in Germany Feb. 15, 1925. 3 Claims. (Cl. 8—18.)

1. Apparatus for dyeing and wet treating of fabric by circulating liquid, comprising a tank with lid and having a hole in its bottom plate, means for circulating liquid through said tank, a cylinder permeable for liquid in said tank adapted to have a roll of fabric wound thereon the lower end of said cylinder projecting through said hole in the bottom plate of the tank and the whole inserted in the tank so that the roll of fabric rests at its lower end on the bottom of said tank, a cap on the bottom of the tank



adapted to receive the lower end of said cylinder, a movable cap-shaped disc, resting on the upper end of said roll of fabric so that both end faces of said roll of fabric are protected against stronger flow of the liquid than at the middle part of the roll.

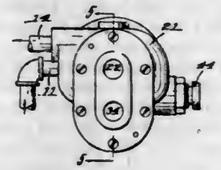
1,765,913. CURRENT TRANSFORMER. FRANZ JOSEPH FISCHER, Dresden, Germany, assignor to Koch & Sterzel, Aktiengesellschaft, Dresden, Germany. Filed June 5, 1928, Serial No. 282,921, and in Germany Jan. 23, 1928. 4 Claims. (Cl. 175—358.)



1. In a current transformer, an insulator having a recess, a casing surrounding part of said insulator, and a flange on said casing adapted to engage said recess.

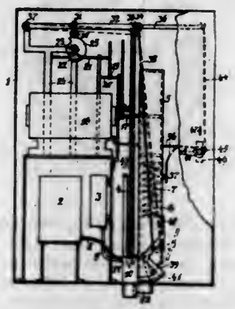
1,765,914. OIL PUMP. ALBERT J. GIFFORD and BENJAMIN S. T. BISHOP, Shrewsbury, Mass., assignors to Leland-Gifford Company, Worcester, Mass., a Corporation of Massachusetts. Filed Feb. 3, 1926, Serial No. 85,695. Renewed May 10, 1930. 1 Claim. (Cl. 103—126.)

In a gear pump for a lubricating system, the combination with a pair of gears meshing with each other for pumping a liquid and means for driving one of the gears, of a casing surrounding the gears, said casing having an inlet passage extending from one side thereof around one of said gears



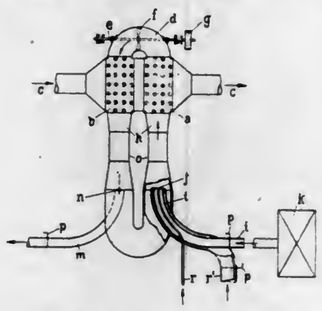
and into a position to deliver all of the liquid to the inlet side of the gears on the opposite side of said casing, and an outlet passage from the gears direct and on the same side of the casing as the inlet passage and adjacent thereto.

1,765,915. AUTOMATIC APPARATUS FOR WASHING AND DRYING HANDS. OSKAR HAASE, Kassel, Germany. Filed Nov. 10, 1928, Serial No. 318,442, and in Germany Mar. 1, 1928. 1 Claim. (Cl. 4—167.)



An automatic apparatus for washing and drying hands, comprising in combination with a casing, a container for liquid soap, a container for liquid perfume, a tube connected to a water supply, a fan and an electric heating resistance, a common discharge tube, means for connecting said several elements with said common discharge tube, an electric motor for the fan, said electric motor and said heating resistance inserted in a circuit, a switch for closing said circuit, and for establishing in predetermined succession and intervals the communication of said containers, water tube and hot air with said common discharge tube.

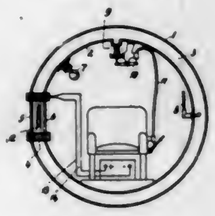
1,765,916. AIR HEATER. EUGEN HABER, Berlin-Charlottenburg, Germany. Filed June 14, 1926, Serial No. 116,060, and in Germany Feb. 18, 1924. 5 Claims. (Cl. 257—166.)



1. An apparatus for heating air by means of hot waste gases, comprising in combination a pair of heat exchanging

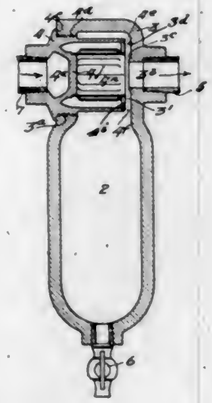
elements working in cross current and each having gas channels open at both ends and air channels, a short tube connecting the upper open ends of said heating gas channels, a long tube connecting the lower open ends of said gas channels of said two heating elements said short and long tubes forming together with the gas channels, a closed channel for a gas flow, a gas supply pipe connected to said long connecting tube, a gas discharging pipe connected to said long connecting tube opposite the point at which said gas supply pipe is connected, means for propelling the gas in the closed channel formed by said connecting tubes and by said gas channels in said heat exchanging elements, an air supply tube, and an air discharging tube connected to the corresponding ends of the air channels in said air heating elements.

1,765,917. AIRCRAFT. ASMUS HANSEN, Berlin-Schoneberg, Germany. Filed June 28, 1928, Serial No. 288,825, and in Germany July 21, 1927. 3 Claims. (Cl. 244—30.)



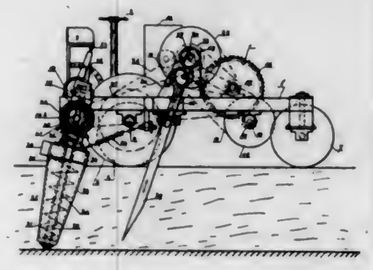
1. An aircraft cabin comprising two substantially concentric hollow bodies having thin, rigid walls arranged in spaced relation, each of said walls being resistive to tensile stresses, arising from a difference of the inner atmospheric pressure against outer sub-atmospheric pressure, and means for controlling the pressure in the space enclosed between said walls, to maintain it intermediate the pressure in the cabin and the pressure of the outer air.

1,765,918. CENTRIFUGAL FIXTURE. CHARLES GILBERT HAWLEY, Chicago, Ill., assignor to Centrifix Corporation, Cleveland, Ohio, a Corporation of Ohio. Filed May 4, 1925. Serial No. 27,864. 3 Claims. (Cl. 183—80.)



3. A horizontal line separator comprising a vertically extended pocket having a drain hole at the bottom and at the top provided with a transverse head portion the lower side of which opens into the upper part of said pocket, said transverse portion having a large opening in one end to receive a tuyère enclosing plug and coaxially a smaller opening in its other end, in combination with a fixed fluid entrance tuyère mounted in said plug which is coaxial with said large opening and which presents an open end toward but in longitudinally spaced relation to said smaller opening, said tuyère including a circumferential series of inclined blades between which the fluid flows inwardly and, taking on a whirling motion within the tuyère and in the space between the same and the smaller opening, results in centrifugally separating the heavier substances carried by the fluid and their discharge into said pocket.

1,765,919. DITCH DIGGING AND CLEANING MACHINE. EMIL HEUMANN, Itzehoe, Germany. Filed July 9, 1927, Serial No. 204,623, and in Germany Feb. 2, 1927. 5 Claims. (Cl. 37—80.)



1. A ditch digging and cleaning machine, comprising in combination a frame mounted on wheels, an envelope of semi-circular cross section oscillatably mounted on the side of said frame so that the open portion of said envelope faces said frame, a worm-like cutter rotatable in said envelope for digging and elevating the earth, a casing above said envelope and having a lateral outlet opening, circulating centrifugal vanes in said casing, a fore-cutting knife on said frame in front of said cutter and for loosening the earth, and a cutting mechanism on the lower end of said cutter for cutting the grass and weeds in the ditch.

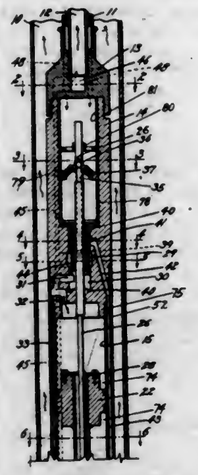
1,765,920. PRODUCTION OF ACID-RESISTING WRAPPING MATERIAL. KARL HUMPERT, Pratteln, near Basel, Switzerland, assignor to Staniolfabrik Burgdorf A. G., Burgdorf, Switzerland. Filed Aug. 16, 1927, Serial No. 213,434, and in Switzerland June 17, 1927. 1 Claim. (Cl. 91—68.)

Wrapping material for articles of food, consisting of tin foil provided with a coating comprising a film obtained from a shellac spirit solution to which salicyclic acid has been added.

1,765,921. DEEP-WELL PUMP. CHARLES A. JOY, Denver, Colo. Filed May 7, 1928. Serial No. 275,933. 10 Claims. (Cl. 103—46.)

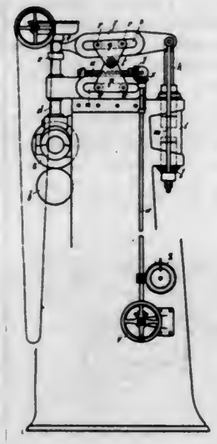
1. A deep well pump comprising an actuating cylinder; a pump cylinder; valve mechanism for controlling the supply of operating fluid to said actuating cylinder; a conduit adapted to extend from the surface to supply operating fluid under pressure to said valve mechanism and a second conduit adapted to extend to the surface

to discharge operating fluid from said valve mechanism, said second conduit adapted to pass to the surface



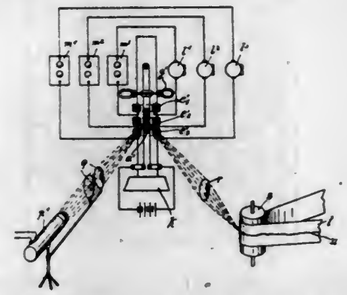
through the interior of the first conduit; and means for discharging the pumped fluid into said well about said conduits.

1,765,922. CALENDER. JOHANNES KLEINEWEFERS, Krefeld, Germany, assignor to the Firm: Joh. Kleinewefers Söhne, Krefeld, Germany, a Firm of Germany. Filed June 10, 1929, Serial No. 369,899, and in Germany Apr. 27, 1927. 4 Claims. (Cl. 149—23.)



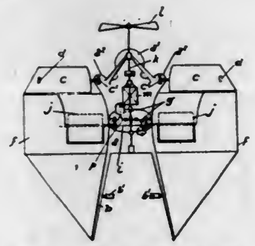
4. A calender as specified in claim 1, comprising in combination with the loading levers for the upper pressure roll having each a horizontal slot and with the uprights of the machine having each a horizontal slot, a bearing bracket for each loading lever, rollers on the lower end of said bracket engaging with the guide slot in the corresponding upright, a hinge piece hingedly mounted on the upper end of said bearing bracket, rollers on the upper end of said hinge piece engaging with the horizontal guide slot of the corresponding loading lever, and driving gears one for each adjustable bearing bracket for shifting said bracket and thereby the fulcrum of the corresponding loading lever.

1,765,923. APPARATUS FOR MAKING SOUND RECORDS. HEINRICH KÜCHENMEISTER, Berlin, Germany. Filed Dec. 15, 1927, Serial No. 240,327, and in Germany Dec. 15, 1926. 7 Claims. (Cl. 179—100.3.)



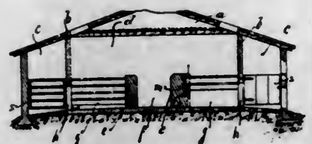
1. An apparatus for making sound records comprising a movable recording element including a mirror and an oscillograph loop, a plurality of controlling units for said recording element, a sound receiver connected with each unit, means for projecting light on said mirror, means for moving a sensitized film past said mirror in such a manner as to be struck by the light reflected by said mirror and means intermediate each controlling unit and said recording element for independently, simultaneously and directly influencing said single recording element.

1,765,924. FLYING APPARATUS. EMILE MARIUS LAURENT, St.-Mande, France. Filed July 14, 1928, Serial No. 292,685, and in France Aug. 4, 1927. 2 Claims. (Cl. 244—14.)



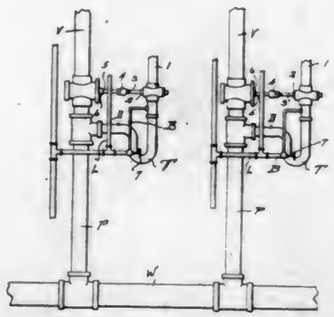
1. A flying apparatus, comprising in combination a cuirass to be fixed on the body to cover the back and the head, a propeller, two movable lateral planes the angle of inclination of which may be altered at will, means for operating by hand said lateral planes, two lateral stationary supporting planes, two supporting turbines with eccentric extensible blades, and a motor with oval case arranged on said cuirass and driving said turbines and said propeller.

1,765,925. PIGSTY FOR REARING PIGS. WILHELM LÖDIGE, near Paderborn, Germany. Filed June 9, 1928, Serial No. 284,221, and in Germany Feb. 15, 1927. 2 Claims. (Cl. 119—16.)



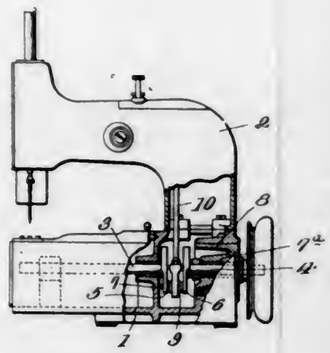
1. A pigsty for rearing pigs, comprising partitions having very low passages and separating the sleeping and feeding rooms from the rooms for the droppings, a manger for the sow in each feeding room, a separate manger for the sucking pigs at the side of each sow-manger, and an adjustable protecting box over each manger for the sucking pigs.

1,765,926. PLUMBING CLEAN-OUT SYSTEM. THURMAN F. LYLE, Bridgeport, Ohio. Filed June 25, 1929. Serial No. 373,661. 1 Claim. (Cl. 182—22.)



In a plumbing system having vent and drain pipes positioned in spaced relation to each other and trap means, a valve interposed in the drain pipe intermediate the trap and the inlet, a second valve mounted in said vent pipe, coplanar with said first valve and in spaced relation thereto, connecting means for connecting said first and second valves whereby to effect simultaneous operation of the valves, and flushing means connected to said drain pipe and interposed therein intermediate said first valve and said trap, said connecting means comprising a tubular member and means for securing said tubular member to said valves.

1,765,927. SEWING MACHINE AND ACTUATING MECHANISM THEREFOR. KARL MAIER, Stuttgart, Germany, assignor to Union Special Maschinenfabrik G. m. b. H., Stuttgart, Germany. Filed July 23, 1928. Serial No. 294,710. 3 Claims. (Cl. 112—220.)



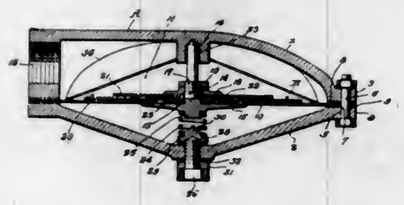
1. In a sewing machine a supporting frame structure, a main actuating shaft mounted therein and formed in sections, a crank head on each section and a crank connecting said crank heads, a sleeve detachably supported in said frame structure and having a bearing for the outer section of said actuating shaft, said sleeve being of such dimensions as to permit a section of the actuating shaft carried thereby and the crank head attached thereto to be withdrawn through the opening for the sleeve, the crank head on one of said sections being provided with a radial slot, said crank pin having a sleeve thereon disposed in said radial slot and freely movable therein, and means for mounting said crank pin on the other crank head so that it may be adjusted toward and from the axis of the actuating shaft.

1,765,928. PROCESS AND APPARATUS FOR PRODUCING PAPER SLEEVES AND COILS WITH REENFORCEMENTS WOUND AROUND. CHRISTIAN MAJER, Tubingen, Germany. Filed July 30, 1928, Serial No. 296,386, and in Germany June 25, 1926. 2 Claims. (Cl. 93—1.)



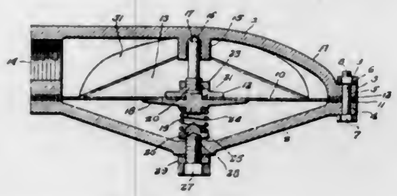
1. A feeding device for feeding severed paper strips to a winding spindle for winding said strips around the strip wound on said winding spindle consisting of an oscillatable arm and of two guides on said arm for conducting the paper strip periodically to a winding spindle.

1,765,929. HYDRAULIC SHOCK ABSORBER. SAMUEL L. MARSH, New York, N. Y. Filed Jan. 7, 1929. Serial No. 330,786. 2 Claims. (Cl. 137—71.)



1. A device for preventing water hammer and the like, comprising a shell having an inlet communicating with a pipe system, a spring metal diaphragm providing a fluid receiving chamber communicating with said inlet, the said diaphragm being adapted to vibrate synchronously with the vibration in the fluid, and a plurality of flat spring metal reinforcing elements located adjacent said diaphragm and spaced to permit the fluid entering the receiving chamber to pass between the reinforcing elements, whereby to strengthen and cushion the diaphragm during vibration thereof.

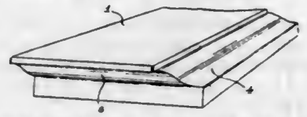
1,765,930. HYDRAULIC SHOCK ABSORBER. ALFRED R. MCGONEGAL, Clarendon, Va., assignor of seven-eighths to Samuel L. Marsh, Los Angeles, Calif. Filed Sept. 8, 1928. Serial No. 304,821. 13 Claims. (Cl. 137—71.)



1. A device for preventing water hammer and the like comprising a shell having an inlet communicating with a pipe system, a flat spring metal diaphragm therein providing a fluid receiving chamber communicating with said inlet, the said diaphragm being adapted to vibrate synchronously with the vibrations in the fluid.

1,765,931. LUMBER FOR FORMING CASINGS FOR WINDOW AND DOOR INTERIOR TRIM. NORMAN F. MCMILLEN, Rochester, N. Y. Filed May 27, 1929. Serial No. 366,230. 1 Claim. (Cl. 20—74.)

As a new article of manufacture, a window or door casing side piece or mullion casing having a greater width than thickness and of such a length as to extend throughout the length of a door or window, at least one longitudinal edge of said piece being moulded, one transverse end having a straight cut and the other transverse end having a coping which meets and is at right angles to the moulded longitudinal edge and is complementary to such moulded edge, the rear edge of the coping lying in the plane of the rear face of the piece and being set inwardly a distance equally as great as the depth of the

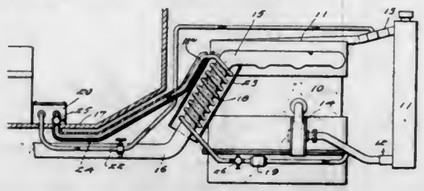


moulded longitudinal edge, said coped end being free of any projections beyond the coping, which coping when placed over the moulded edge on the longitudinal side of a like piece of casing makes an accurate interfit and the faces of both are in the same plane and their moulded longitudinal edges are adjacent and at right angles to each other, the coping and the moulded edge being of such a width that the two pieces of the casings may be nailed to each other at this point.

1,765,932. PROCESS OF SOLDERING ORNAMENTAL AND OTHER CHAINS AND CHAIN MAIL OF WIRE OF SOLID CROSS SECTION. ANDREAS MEYLEIN, Pforzheim, Germany. Filed Sept. 27, 1926, Serial No. 138,110, and in Germany Sept. 27, 1925. 2 Claims. (Cl. 113—112.)

1. A process of soldering ornamental or similar chains and chain mail of wire of solid cross section, consisting in thoroughly freeing from fat with the aid of chromic acid in combination with sulphuric acid and water the ring blanks hooked the one in the other, in cleaning the ring blanks thus treated, in dipping the same for a short time into the solution of a simple salt of such a metal which is more electronegative than the metal of which the chain or chain mail is made, and in heating the chain or chain mail thus coated to fuse the coating metal to bring about alloying of the two metals and soldering of the link joints.

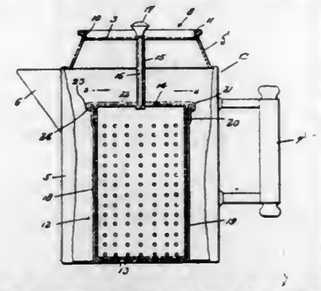
1,765,933. VEHICLE HEATER. ERNEST E. MILLER, David City, Nebr. Filed Jan. 24, 1928. Serial No. 249,154. 1 Claim. (Cl. 237—12.3.)



In combination with the inclined exhaust manifold portion and the water cooling radiator of an internal combustion engine, a coil surrounding said manifold portion, a pipe extending from the lower end of the radiator to the lower end of the coil, a check valve in said pipe and seating in the direction of the radiator, a heater casing arranged in a horizontal plane intersecting the coil and provided with a passage of U-form in plan, a pipe extending downwardly from the upper end of the coil to one end of the casing passage, and a pipe extending downwardly from the other end of the casing passage and then upwardly to the upper end of the radiator.

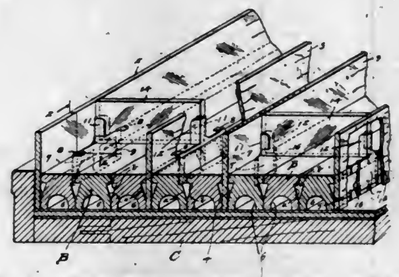
1,765,934. PERCOLATOR. CARRIE MITCHELL, La Junta, Colo. Filed Jan. 24, 1930. Serial No. 423,114. 4 Claims. (Cl. 53—3.)

1. In a percolator of the class described, an inner and outer receptacle, said inner receptacle resting on the bottom of said outer receptacle, said receptacles being open at their top, covers for the open top of said receptacles and the walls of said inner receptacle being perforated, a



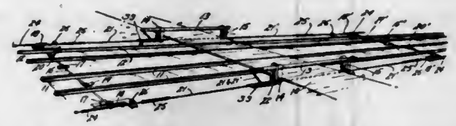
bolt extending through said covers, and a nut threaded on the outer end of said bolt, and a tube disposed about said bolt between said covers.

1,765,935. DISPLAY EQUIPMENT. WILLIAM B. MORTON and LAWRENCE F. BEISNER, Beatrice, Nebr. Filed Aug. 15, 1929. Serial No. 386,029. 5 Claims. (Cl. 312—140.)



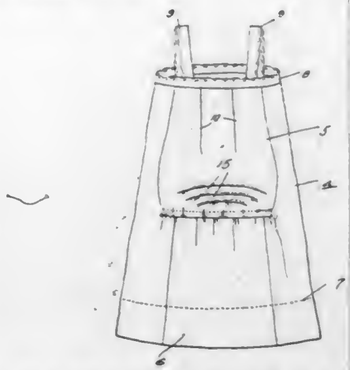
4. In a display equipment for counters comprising a series of elongated blocks arranged side by side between vertically disposed members thereby supporting said members in vertical position, each of said blocks having registering grooves in opposite faces thereof.

1,765,936. RAILROAD-CROSSING GATE. HENRY FRITZ CHRISTOPH MUSMANN, Denver, Colo. Filed Sept. 23, 1929. Serial No. 394,555. 2 Claims. (Cl. 246—293.)



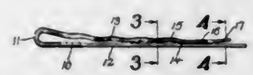
1. A railway crossing gate comprising: a support adapted to be positioned at the side of a railway track; a gate pivoted to said support; a pair of operating shafts extending under said tracks at each side of said gate; a lever on the extremity of each of said operating shafts; cables extending from the extremities of each of said levers to one extremity of said gate; a drum journaled below said support, both said cables passing about said drum; a tension spring positioned in said cables; a balance spring for each of said levers and operatively connected therewith so as to pull said levers away from said gate; track dogs secured to said shaft between the rails of said track; and means adapted to be carried by a train to engage said dogs so as to rotate said shaft; and a guide pulley for each of said cables, said guide pulleys being positioned so as to maintain said cables in a dead center position with reference to said levers when said gate is in the open position so as to lock said gate in the open position until said track dogs are actuated.

1,765,937. MATERNITY SLIP. RUTH H. PATTEN, Bradenton, Fla. Filed May 31, 1929. Serial No. 367,395. 2 Claims. (Cl. 2—73.)



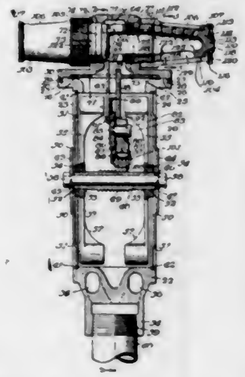
1. As a new product of manufacture, a maternity slip comprising a combination garment including a bodice and girth, said bodice having shoulder straps, and being provided at its top with a normally gathered annulus, the waist band portion of said garment being formed with a horizontally disposed pocket containing an elastic band forming an automatically adjustable girth, the portion of the garment above said girth being formed with a plurality of horizontally disposed plaits defined by temporary stitching, whereby to allow for length adjustment.

1,765,938. HAIRPIN. IRVING H. PECK, Derby, Conn., assignor to The Sterling Pin Company, Derby, Conn. Filed Sept. 11, 1928. Serial No. 305,208. 10 Claims. (Cl. 132—50.)



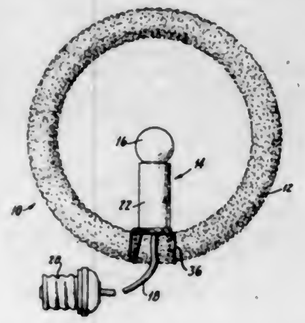
10. A hairpin comprising a single piece of material folded intermediate of its ends to form two legs, one of said legs being of greater width than thickness and having a flat inner face extending throughout the major portion of its length, the other leg presenting a rounded inner face opposing the first leg, a portion of said second leg being of substantially less width than the first and said leg contacting with the inner face of said first leg.

1,765,939. SPRINKLER. FINIS E. ROACH, Chicago, Ill. Filed Apr. 8, 1927. Serial No. 181,915. 17 Claims. (Cl. 299—67.)



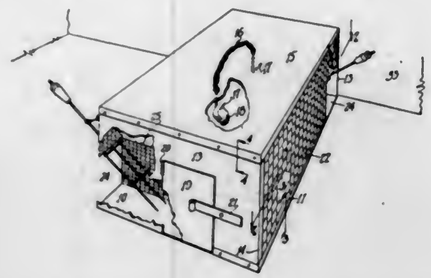
1. In a sprinkler, the combination of a casing having an inlet nozzle in its wall, a water wheel rotatably mounted adjacent said casing, a shaft within said casing, a sleeve rotatably mounted on said shaft and confined between the walls of said cas'ng, said water wheels being fixed on said sleeve, a worm on said sleeve, a cover for said casing having a downwardly extending boss, a pinion on said boss actuated by said worm, a gear meshing with said pinion, a connecting rod on said gear, and a discharge nozzle carried by said cover and oscillated by said connecting rod.

1,765,940. DECORATIVE DEVICE. JACOB RUDGES, Hollis, N. Y., assignor, by mesne assignments, to Noma Electric Corporation, New York, N. Y., a Corporation of New York. Filed Oct. 5, 1927. Serial No. 224,102. 2 Claims. (Cl. 240—10.)



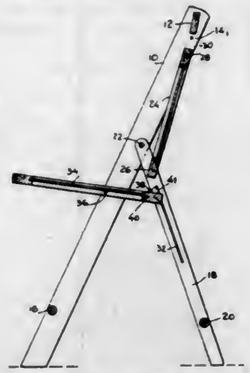
1. In a device of the character described, the combination with a decorative body portion, of an attachment secured to said body, said attachment including a sleeve, an electrical fitting attached to one end of said sleeve, a stopper fitted in an end of said sleeve, and a wire having an intermediate portion overlying the inner end of said stopper, and having its ends projecting outward between said stopper and said sleeve, said ends being twisted around an adjacent portion of the said body to secure the attachment thereto.

1,765,941. TRAP. HOWARD H. SAWYER, Portland, Oreg. Filed Oct. 18, 1927. Serial No. 226,858. 1 Claim. (Cl. 43—66.)



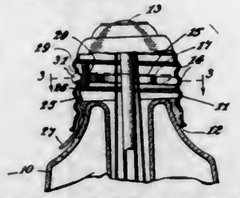
A rat trap consisting of a floor, a top member having channels formed around the edges thereof, end members of sheet metal occupying said channels and themselves having inturned channels formed along their edges, sides between the ends, the side members consisting of wire cloth occupying said channels and having diagonally opposite inlet openings, the material from said openings turning inwardly to form a partition providing a hallway between it and the adjacent end member, grated doors within said hallway hinged at the top of said opening and sloping downwardly and inwardly almost to the bottom of said trap.

1,765,942. FOLDING CHAIR. GEORGE D. SCHERMERHORN, Reading, Mich. Filed Apr. 9, 1928. Serial No. 268,397. 2 Claims. (Cl. 155—142.)



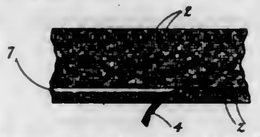
1. A folding chair having a pair of uprights, a pair of legs pivoted therebetween to be swung outwardly therefrom into supporting relationship therewith or to be folded therebetween, said legs having longitudinal slots formed on their inner sides, a seat pivoted intermediate its ends between the uprights, a gudgeon pivoted to each side of the seat at its rear end having a portion slidably arranged within the slot of the adjacent leg to travel therethrough to limit the upward movement of the rear end of the seat and the rearward movement of the legs, a back pivoted at its upper end between the uprights and having a gudgeon at its lower end upon each side arranged within the slot of the adjacent leg to travel therethrough upon the folding and unfolding of the chair, said seat gudgeon having that portion which is engaged in the slot of the leg offset rearwardly its pivotal connection with the seat whereby upon the folding of the chair the seat is thrown forwardly of the legs and in overlapping relationship with the back within the uprights.

1,765,943. THEFTPROOF LAMP. LAMBERT SCHMIDT, Brooklyn, N. Y. Filed Oct. 8, 1926. Serial No. 140,414. 10 Claims. (Cl. 176—31.)



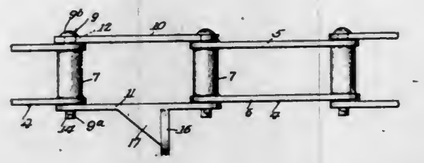
1. A lamp for a standard threaded socket comprising a standard threaded base, an opening in the threaded portion of the base having an opening, means for holding a locking member, and a locking member adapted to be inserted into the opening and held by said means when said lamp is to be rendered theft proof, and designed to be entirely omitted therefrom when said lamp is to be non-theft proof.

1,765,944. METHOD OF PREPARING SOUND AND PICTURE FILMS. PAUL C. SEEL, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Mar. 30, 1929. Serial No. 351,243. 5 Claims. (Cl. 88—16.2.)



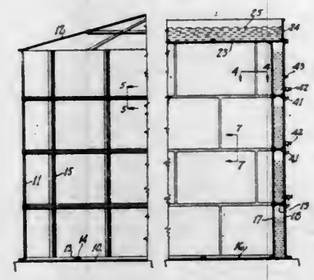
1. In connection with a photographic film having exposure areas and a related sound track, the method of tinting the exposure areas while keeping the sound track untinted which comprises applying a removable adhesive layer impervious to tinting material overlying the sound track and applying the tint to all of one side of said film including said layer.

1,765,945. CONVEYER CHAIN. ARTHUR L. SHAW, Chicago, Ill., assignor to Chicago Automatic Conveyor Co., Cicero, Ill., a Corporation of Illinois. Filed July 9, 1928. Serial No. 291,175. 1 Claim. (Cl. 198—175.)



A conveyer chain comprising in combination, a plurality of one piece and four-sided chain-members having transverse pivot pins of uniform length extending through the end elements thereof, pairs of parallel links extending between and positioned outwardly of said members, the links at one side of the chain having openings through which the pins extend and being held in place by heads on said pins, the links at the other side of the chain fitting against and contacting with the chain-members and having openings through which the pins extend, some of the last mentioned links being provided with integral outwardly projecting drag lugs on the outer faces thereof, said lugs projecting above and below the s'de edges of the links that are associated therewith and having flat faces extending transversely and at substantially right angles to said associated links whereby drag bars may be operatively connected to the chain and cotter pins extending through the unheaded ends of said pins, operable to hold said second mentioned links in place.

1,765,946. TANK AND JOINT FOR FORMING SAME. THOMAS J. SHEA, Portland, Oreg., assignor of sixty one-hundredths to Lou F. Knowlton, Portland, Oreg. Filed Mar. 29, 1928. Serial No. 265,619. 4 Claims. (Cl. 220—13.)

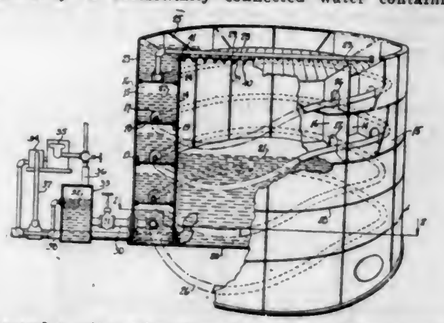


1. A container for volatile liquids consisting of a plurality of arcuate hollow sections adapted to be joined together into cylindrical form in a manner that each of said sections shall form a separate water container.

1,765,947. TANK AND ROOF STRUCTURE THEREFOR. THOMAS J. SHEA, Portland, Oreg., assignor of sixty one-hundredths to Lou F. Knowlton, Portland, Oreg. Filed Sept. 4, 1928. Serial No. 303,748. 4 Claims. (Cl. 220—13.)

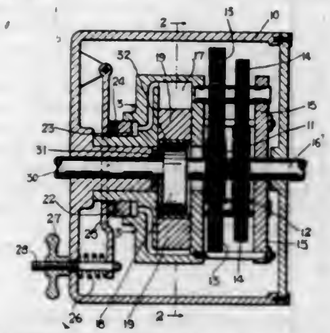
1. A tank for storing volatile liquids having a water space around the sides and tops thereof, said water space

having dividing partitions whereby same is broken up into a plurality of horizontally connected water containing



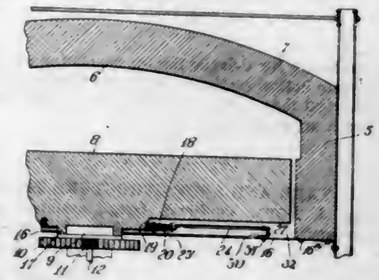
units and a coil passing through said units for condensing and returning evaporated liquids to the interior of said tank.

1,765,948. POWER-TRANSMITTING DEVICE. LESLIE MITCHELL SHERIDAN, Coppercliff, Ontario, Canada. Filed Oct. 10, 1929. Serial No. 398,650. 5 Claims. (Cl. 74—34.)



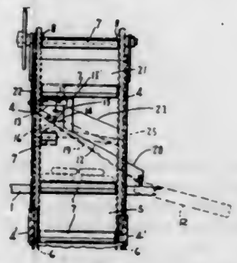
1. In a power transmitting device, a main casing having shaft bearings, driving and driven shafts journalled in said bearings, a rotary casing forming dash pots and having transfer passages and a valve chamber, a ring valve operating in said valve chamber, a spring-held lever pivotally secured within said main casing and engaging said ring valve, plungers reciprocating in said dash pots, a disc eccentrically mounted on said driving shaft and engaging said plungers, a planetary reducing gear mechanism operatively connecting said driving and driven shafts and a gear frame supported by said rotary casing and said driven shaft.

1,765,949. ROTARY FURNACE. MAX SKLOVSKY, Moline, Ill., assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed Nov. 10, 1927. Serial No. 232,266. 10 Claims. (Cl. 263—7.)



10. The combination with a rotary furnace comprising stationary enclosing means, rotating table means, a stationary plate, a movable plate, one of said plates overlapping the other, one of said plates being connected with one of the aforesaid means, and a flexible attachment between the other plate and the other of the aforesaid means, both of said plates coacting to form a gas tight connection respectively with said stationary enclosing means and said rotating table means.

1,765,950. CORN PICKER AND HUSKER. HENRY SYNCK, Coldwater, Ohio, assignor to The New Idea Spreader Company, Coldwater, Ohio, a Corporation of Ohio. Filed June 24, 1929. Serial No. 373,083. 8 Claims. (Cl. 130—5.)



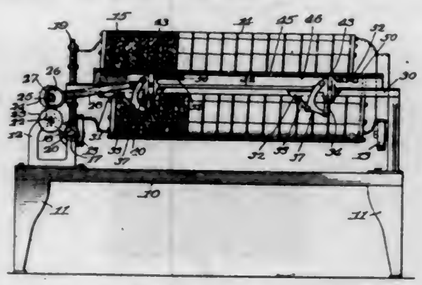
2. In a corn picker and husker, a divided chute, a conveyor located at right angles of and leading to said chute, said conveyor being arranged to discharge into both sides of said chute, and an adjustable gate to regulate the proportionate discharge.

1,765,951. TICKET-ISSUING MACHINE. WILLIAM L. SULLIVAN, Ferguson, Mo., assignor to National Electric Ticket Register Company, St. Louis, Mo., a Corporation of Missouri. Filed Aug. 13, 1927. Serial No. 212,704. 5 Claims. (Cl. 101—3.)



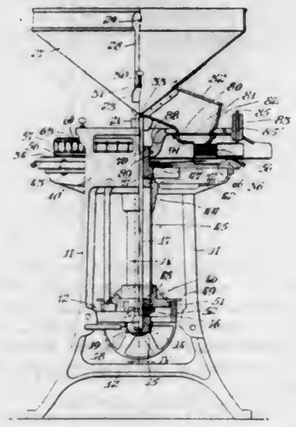
1. In a machine of the class described, ticket feeding mechanism including a gear wheel over which the ticket or ticket strip moves as it is being issued, and a segment gear immediately over the ticket or ticket strip and adapted to mesh with said gear wheel during a relatively short portion of the passage of the ticket thereover.

1,765,952. BEAN SNIPPER. WILLIAM E. URSCHEL, Valparaiso, Ind. Filed July 17, 1926. Serial No. 123,175. 5 Claims. (Cl. 146—86.)



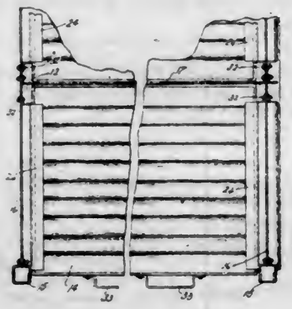
1. In a bean snipper, a knife, a support at each end of said snipper, a plurality of levers on said support and pivoted normally to the cutting edge of said knife and designed so that said knife may be reciprocated in a linear path, means for imparting a reciprocating motion to said knife, and means for moving a plurality of beans into the path of said knife.

1,765,953. BERRY-CLEANING DEVICE. WILLIAM E. URSCHEL, Valparaiso, Ind. Filed Feb. 27, 1928. Serial No. 257,119. 6 Claims. (Cl. 146—55.)



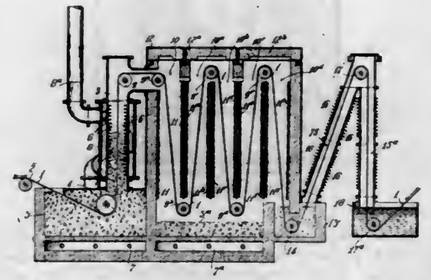
1. The combination with means for feeding articles, of an apertured disc, means for eccentrically moving said disc, means suspended above said disc to bear the articles thereagainst so that the appendages thereof will project through the apertures in said disc, a plurality of severing means mounted adjacent said disc, and means for moving said severing means eccentrically and relative to said disc to remove the article appendages.

1,765,954. RACK WITH SHALLOW SLIDING TRAYS. WALTER N. VANCE, Chicago Heights, Ill., assignor, by mesne assignments, to Lyon Metal Products, Incorporated, Aurora, Ill., a Corporation of Illinois. Filed Dec. 10, 1925. Serial No. 74,583. 11 Claims. (Cl. 45—2.)



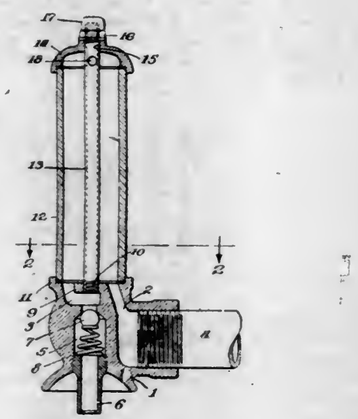
10. A tray rack, comprising tubular upright supporting members provided with a vertical series of spaced slots, means for maintaining said supporting members in spaced relationship and plurality of horizontally disposed tray supports formed at one end for interlocking engagement in the slots of a said upright support member and means for detachably securing the other ends of said horizontally disposed tray supports to each other and to a frame portion remote from said supporting member.

1,765,955. APPARATUS FOR ANNEALING ROLLED-METAL PRODUCTS. EDMUND VON MALTITZ, Gary, Ind., and FREDRIK WILLE, Wilmette, Ill., assignors to H. A. Brassert & Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 5, 1927. Serial No. 159,072. 9 Claims. (Cl. 263—3.)



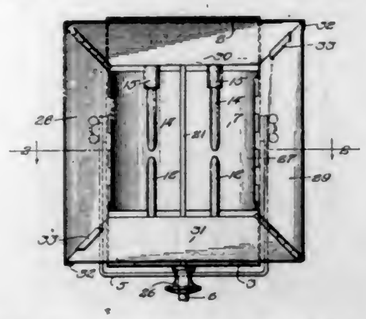
5. In a device of the class described, a cooling chamber comprising a plurality of substantially vertical passes, each pass being defined by a tubular heat radiating wall, and a roller at the junction of each pair of passes for conducting a metal strand through said passes out of contact with the wall thereof.

1,765,956. DISPLAY DEVICE FOR DISPENSING PUMPS. AUSTIN L. WERTZ, Lakewood, Ohio. Filed Mar. 20, 1930. Serial No. 437,380. 3 Claims. (Cl. 221—80.)



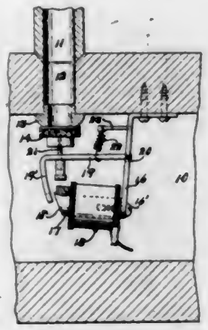
1. A display device for dispensing pumps comprising a transparent container having a pair of oppositely disposed openings in the base thereof, said base having a bore connected with one of said openings and leading through said base and adapted for connection with the discharge side of a pump, the delivery end of said bore being disposed at an angle to the vertical axis of said transparent container, and a second bore connected with the other of said openings and leading through said base and constituting a discharge outlet, and a spring seated valve normally closing said discharge outlet and adapted to be opened by the pressure of the liquid in said container whereby the liquid delivered into said container will be given a swirling motion.

1,765,957. PHOTOGRAPHER'S TWIN-ARC LAMP. LEONARD WESTPHALEN, Chicago, Ill. Filed Nov. 30, 1928. Serial No. 322,788. 6 Claims. (Cl. 240—1.)



1. In a lamp, forwardly open casing having upright sides; two pairs of reflector wings, each pair comprising a side wing and a transverse wing hinged at one end of a side wing, the hinges of the two wings in the two pairs being respectively at the upper end of one side wing and at the lower end of the other side wing, means associated with the free end of each side wing for releasably latching the same to the free end of one of the transverse wings; two hinges respectively connecting each side wing with the mouth end of one of the upright sides of the casing, the said hinges projecting laterally inward of the said sides, an auxiliary reflector bowed about a vertical axis and having its side edges respectively engaging the said casing sides behind the two hinges, and means within the casing engaging the back of the auxiliary reflector to press the said edges of the auxiliary reflecto. against the hinges.

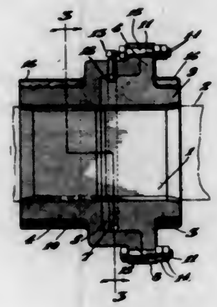
1,765,958. ELECTROMAGNET. LOUIS J. WICK, Highland, Ill., assignor to Wicks Pipe Organ Co., Highland, Ill., a Corporation of Illinois. Original application filed Mar. 14, 1928, Serial No. 261,509. Divided and this application filed Mar. 6, 1929. Serial No. 344,705. 9 Claims. (Cl. 175—336.)



1. A unitary mechanism, adapted for controlling a valve, comprising a bracket having an electromagnet mounted thereon, and an armature on the bracket for carrying the valve to be actuated by the electromagnet, said electromagnet including an inner coil and an outer looped coil wound thereover and connected therewith at the terminals, to provide a sparkless and compact construction.

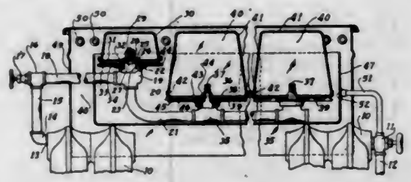
1,765,959. SAFETY COUPLER. RICHARD H. WORCESTER, Honolulu, Territory of Hawaii. Filed Mar. 1, 1927. Serial No. 171,887. 1 Claim. (Cl. 64—105.)

A device of the class described, comprising, a sectional driving shaft, companion coupler members each having a central bore for insertion of and rotative connection to the adjoining ends of the shaft sections, adjoining peripheral flanges formed on said coupler members, a series of fastening elements traversing said flanges and rotatably binding the coupler members together, said fastening elements weakened along the line of the adjoining faces of the flanges, one of said coupler members having a bearing



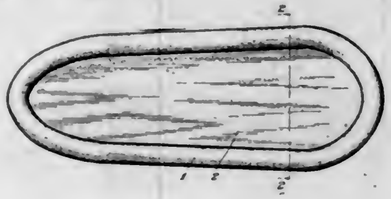
portion extending into the second, journalling the members together for relative rotation, said bearing member having an annular groove therein and radially disposed screws in the second member entering said groove, thereby preventing longitudinal displacement of the members in the event of breakage of the rotative connection between the members.

1,765,960. CONDENSER. JOHN O. WRENN, Chicago, Ill. Filed June 2, 1927. Serial No. 195,956. 4 Claims. (Cl. 257—36.)



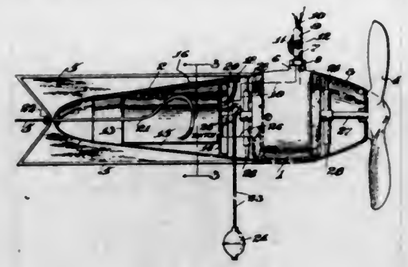
1. In a humidifier, the combination with a steam delivery element of a condenser comprising a bell over said steam delivery element, and a plate about said element, said condenser being disposed over said element for support by said plate to enable the passage of liquid therebetween.

1,765,961. DARNING SUPPORT. ALICE ANTHONY, Sterling, Ill. Filed Mar. 30, 1927. Serial No. 179,441. 1 Claim. (Cl. 223—14.)



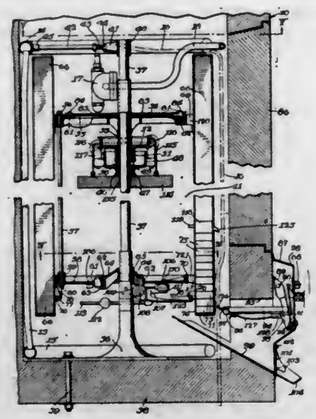
A darning frame comprising a rim member in the form of an elongated oval ring of appropriate size to smoothly stretch a corresponding stocking into parallel sections on opposite sides of the ring, and a diaphragm of sheet material on the inside of said ring forming a partition member lying in a plane passing between and spaced from the planes of said opposite sides whereby a working space is formed on each side of the partition.

1,765,962. VENTILATING AND AIR-PURIFYING UNIT. WILLIAM P. ARON, Dallas, Tex., assignor, by mesne assignments, to W. D. Kennedy, Dallas, Tex. Filed Jan. 19, 1928. Serial No. 248,002. 5 Claims. (Cl. 299—1.)



1. A device of the type set forth including a perforated body formed to receive a deodorant, radially and longitudinally extending wings on the body, and a rotary fan carried by the body and positioned so as to cause air currents created thereby to be directed by said wings longitudinally of the body and over the perforations.

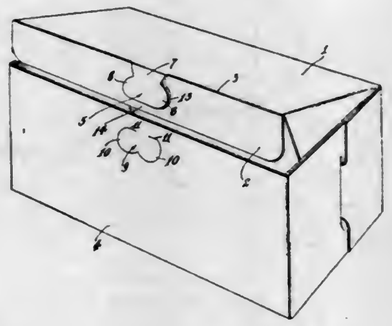
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In a device of the character described, a pair of plates, rods for maintaining said plates in spaced relation, spaced hooks projecting from one of said plates, spring means on the other of said plates in aligned relation with said hooks, article confining magazines, and means on said magazines spaced to correspond with said hooks and spring means to enable the detachable connection of said magazines with said plates which constitute a carrier therefor.

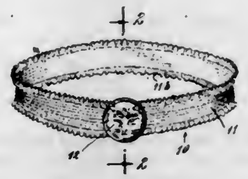
1,765,964. LATCH FOR PAPER BOXES. ORVAL B. BERTON, Los Angeles, Calif. Continuation of application Serial No. 119,527, filed June 30, 1926. This application filed Oct. 8, 1928. Serial No. 311,011. 5 Claims. (Cl. 229—45.)

1. A box of this kind described, having a forward wall and having a cover with a tuck juxtaposed back of the said forward wall when the cover is in its closed position, said tuck having a tongue cut in the material thereof projecting toward the free edge of the tuck, said tongue having its greatest width toward its free end, and a tongue formed in the material of the said front wall having its free edge disposed downward and located so that when the tuck is superposed on the front wall, the said second named



tongue will lie in juxtaposition with the first named tongue, said tongue in the said wall having substantially the same shape and size as the first named tongue adjacent its free end, said tongues being capable of being forced rearwardly together into the interior of the box so as to lock the tongue of the tuck into the opening formed by displacement of the tongue in the wall.

1,765,965. GARTER. JACOB COHEN, Middle Village, N. Y. Filed Jan. 5, 1926. Serial No. 79,333. 1 Claim. (Cl. 241—5.)

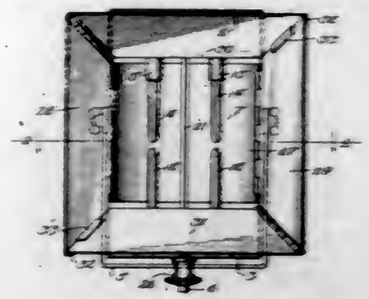


In combination, a shallow thimble shaped cap member, an annular member insertable thru the open end of said first mentioned member and snugly fitting against the inner surface thereof, and, a single strip of flexible material, having end portions frictionally clamped between said members and extending from between the annular walls of said members, said annular member comprising a backing shell having a flange, a covering for said shell, and an annular disc within said shell clamping an edge of said cover to the inner surface of said flange.

1,765,966. WRIST-WATCH-STRAP FASTENER. JAMES W. CLARK, Chicago, Ill. Filed Apr. 25, 1927. Serial No. 186,189. 3 Claims. (Cl. 224—4.)

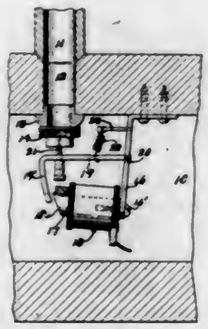
3. The combination with a wrist watch having a case provided with a pair of laterally spaced, outwardly projecting lugs on opposite sides thereof and a pin bar extending between and engaged with each pair of lugs, of a wrist band having one end secured to one pin bar between the lugs thereof, a one-piece metal clip carried at the other end of the band and providing a releasable connection therefor with the other pin bar, said clip having a rigid body portion lying under the band and having an integrally

1,765,957. PHOTOGRAPHER'S TWIN-ARC LAMP. LEONARD WESTPHALEN, Chicago, Ill. Filed Nov. 30, 1928. Serial No. 322,788. 6 Claims. (Cl. 240—1.)



1. In a lamp, forwardly open casing having upright sides; two pairs of reflector wings, each pair comprising a side wing and a transverse wing hinged at one end of a side wing, the hinges of the two wings in the two pairs being respectively at the upper end of one side wing and at the lower end of the other side wing, means associated with the free end of each side wing for releasably latching the same to the free end of one of the transverse wings; two hinges respectively connecting each side wing with the mouth end of one of the upright sides of the casing, the said hinges projecting laterally inward of the said sides, an auxiliary reflector bowed about a vertical axis and having its side edges respectively engaging the said casing sides behind the two hinges, and means within the casing engaging the back of the auxiliary reflector to press the said edges of the auxiliary reflector against the hinges.

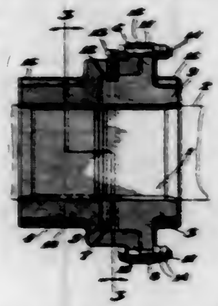
1,765,958. ELECTROMAGNET. LOUIS J. WICK, Highland, Ill., assignor to Wicks Pipe Organ Co., Highland, Ill., a Corporation of Illinois. Original application filed Mar. 14, 1928, Serial No. 261,509. Divided and this application filed Mar. 6, 1929. Serial No. 344,705. 9 Claims. (Cl. 175—336.)



1. A unitary mechanism, adapted for controlling a valve, comprising a bracket having an electromagnet mounted thereon, and an armature on the bracket for carrying the valve to be actuated by the electromagnet, said electromagnet including an inner coil and an outer looped coil wound thereover and connected therewith at the terminals, to provide a sparkless and compact construction.

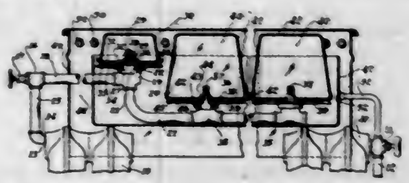
1,765,959. SAFETY COUPLER. RICHARD H. WORCESTER, Honolulu, Territory of Hawaii. Filed Mar. 1, 1927. Serial No. 171,887. 1 Claim. (Cl. 64—105.)

A device of the class described, comprising, a sectional driving shaft, companion coupler members each having a central bore for insertion of and rotative connection to the adjoining ends of the shaft sections, adjoining peripheral flanges formed on said coupler members, a series of fastening elements traversing said flanges and normally binding the coupler members together, said fastening elements weakened along the line of the adjoining faces of the flanges, one of said coupler members having a bearing



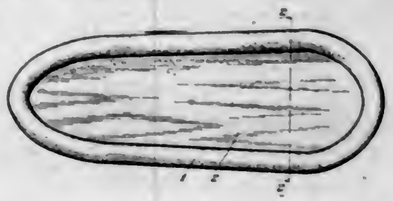
portion extending into the second, journalling the members together for relative rotation, said bearing member having an annular groove therein and radially disposed screws in the second member entering said groove, thereby preventing longitudinal displacement of the members in the event of breakage of the rotative connection between the members.

1,765,960. CONDENSER. JOHN O. WRENN, Chicago, Ill. Filed June 2, 1927. Serial No. 195,956. 4 Claims. (Cl. 257—36.)



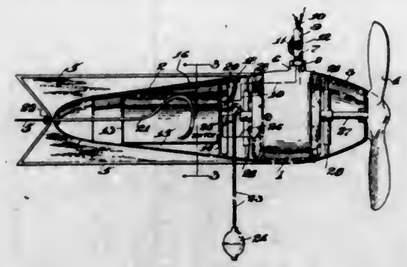
1. In a humidifier, the combination with a steam delivery element of a condenser comprising a bell over said steam delivery element, and a plate about said element, said condenser being disposed over said element for support by said plate to enable the passage of liquid therebetween.

1,765,961. DARNING SUPPORT. ALICE ANTHONY, Sterling, Ill. Filed Mar. 30, 1927. Serial No. 179,441. 1 Claim. (Cl. 223—14.)



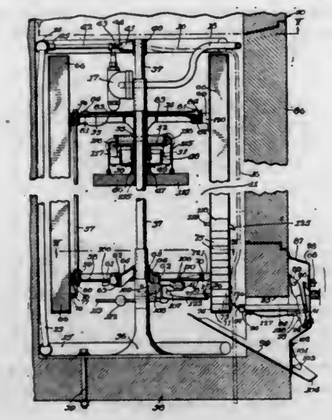
A darning frame comprising a rim member in the form of an elongated oval ring of appropriate size to smoothly stretch a corresponding stocking into parallel sections on opposite sides of the ring, and a diaphragm of sheet material on the inside of said ring forming a partition member lying in a plane passing between and spaced from the planes of said opposite sides whereby a working space is formed on each side of the partition.

1,765,962. VENTILATING AND AIR-PURIFYING UNIT. WILLIAM P. ARON, Dallas, Tex., assignor, by mesne assignments, to W. D. Kennedy, Dallas, Tex. Filed Jan. 19, 1928. Serial No. 248,002. 5 Claims. (Cl. 299—1.)



1. A device of the type set forth including a perforated body formed to receive a deodorant, radially and longitudinally extending wings on the body, and a rotary fan carried by the body and positioned so as to cause air currents created thereby to be directed by said wings longitudinally of the body and over the perforations.

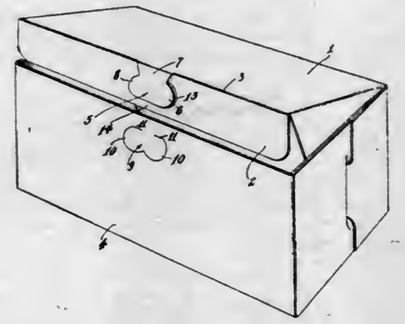
1,765,963. VENDING MACHINE. WILLIAM M. BAXTER, Louisville, Ky., assignor to Eskimo Pie Corporation, Louisville, Ky., a Corporation of Delaware. Filed July 16, 1927. Serial No. 206,221. 1 Claim. (Cl. 312—36.)



In a device of the character described, a pair of plates, rods for maintaining said plates in spaced relation, spaced hooks projecting from one of said plates, spring means on the other of said plates in aligned relation with said hooks, article confining magazines, and means on said magazines spaced to correspond with said hooks and spring means to enable the detachable connection of said magazines with said plates which constitute a carrier therefor.

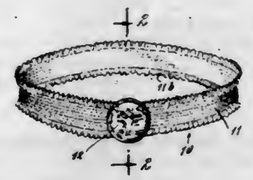
1,765,964. LATCH FOR PAPER BOXES. ORVAL B. BERTON, Los Angeles, Calif. Continuation of application Serial No. 119,527, filed June 30, 1926. This application filed Oct. 8, 1928. Serial No. 311,011. 5 Claims. (Cl. 229—45.)

1. A box of this kind described, having a forward wall and having a cover with a tuck juxtaposed back of the said forward wall when the cover is in its closed position, said tuck having a tongue cut in the material thereof projecting toward the free edge of the tuck, said tongue having its greatest width toward its free end, and a tongue formed in the material of the said front wall having its free edge disposed downward and located so that when the tuck is superposed on the front wall, the said second named



tongue will lie in juxtaposition with the first named tongue, said tongue in the said wall having substantially the same shape and size as the first named tongue adjacent its free end, said tongues being capable of being forced rearwardly together into the interior of the box so as to lock the tongue of the tuck into the opening formed by displacement of the tongue in the wall.

1,765,965. GARTER. JACOB COHEN, Middle Village, N. Y. Filed Jan. 5, 1926. Serial No. 79,333. 1 Claim. (Cl. 241—5.)

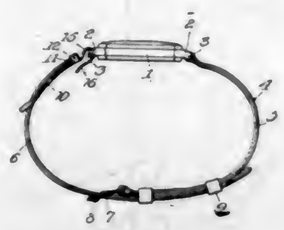


In combination, a shallow thimble shaped cap member, an annular member insertable thru the open end of said first mentioned member and snugly fitting against the inner surface thereof, and, a single strip of flexible material, having end portions frictionally clamped between said members and extending from between the annular walls of said members, said annular member comprising a backing shell having a flange, a covering for said shell, and an annular disc within said shell clamping an edge of said cover to the inner surface of said flange.

1,765,966. WRIST-WATCH-STRAP FASTENER. JAMES W. CLARK, Chicago, Ill. Filed Apr. 25, 1927. Serial No. 186,189. 3 Claims. (Cl. 224—4.)

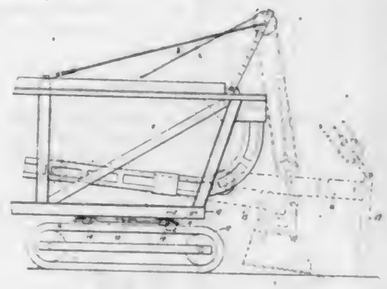
3. The combination with a wrist watch having a case provided with a pair of laterally spaced, outwardly projecting lugs on opposite sides thereof and a pin bar extending between and engaged with each pair of lugs, of a wrist band having one end secured to one pin bar between the lugs thereof, a one-piece metal clip carried at the other end of the band and providing a releasable connection therefor with the other pin bar, said clip having a rigid body portion lying under the band and having an integrally

formed hook at one end to engage about the last named pin bar between the lugs thereof, and means providing a connection between the band and the clip on the upper



side thereof adjacent the hook so that the body portion of the clip will lie under the band and have an extended engagement therewith.

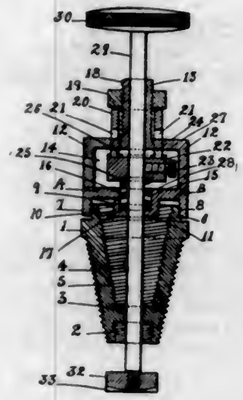
1,765,967. FULL-REVOLVING EXCAVATOR. BIRD C. CLUTTER and GEORGE E. WAGNER, Akron, Ohio, assignors, by mesne assignments, to Clutter-Wagner, Inc., a Corporation of Ohio. Filed Mar. 25, 1927. Serial No. 178,239. 1 Claim. (Cl. 214—101.)



An excavator of the full-revolving type, comprising a vehicle, a circular table on the vehicle, a revolving deck bearing on the table, a pivot for the revolving deck on the vehicle at the center of the table, a lateral flange on the edge of the table, circumferentially spaced non-rotatable gibs on the under side of the deck extending under the flange and normally out of engagement therewith but adapted to engage under the flange with non-rolling friction when a heavy load is applied to the deck to prevent teetering and sideplay thereof, and an excavator attachment on the forward end of the deck, including a boom tending to lift the forward end of the deck during an excavating operation.

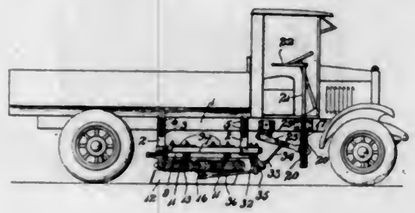
1,765,968. DEVICE FOR RECUTTING VALVE SEATS. WILLIAM DAVEY, Cleveland, Ohio. Filed Mar. 18, 1929. Serial No. 348,021. 8 Claims. (Cl. 90—12.5.)

1. A device of the class described comprising a foundation unit with a socket therein, and also having a receiving opening in it, said unit having an integral threaded boss with an axial bore therethrough at its upper end, and an integral threaded centrally located boss with an axial bore therethrough located on the lower end of the foundation unit and also an interiorly threaded retaining wall at its lower end, an adjustable socketed securing means adjustably mounted in the receiving opening, and having an axial bore therethrough and also having a threaded set screw for a locking device mounted therein, a non-rotatable sleeve member vertically movably mounted on the upper boss and engaging the socket in the securing means, a feeding device threadedly engaging the upper boss, an expansion spring mounted in the socket in the foundation unit and engaging the socket in the securing means, an internally and externally threaded



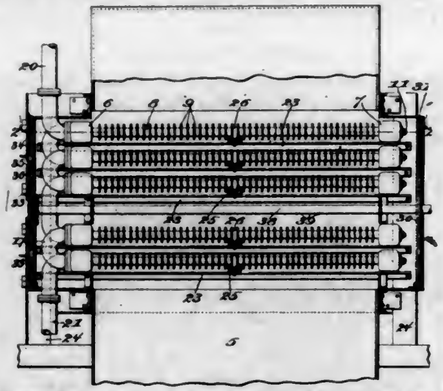
frusto-conoidal body member having an integral diaphragm formed therein and detachably secured to the foundation unit, and a slidably and rotatably mounted tool shaft extending axially through said device and having an actuating means on its upper end and a detachably mounted cutter on its lower end.

1,765,969. ROAD SCRAPER. GEORGE E. DEAN, Grand Rapids, Mich., assignor to Charles C. Willett, Grand Rapids, Mich. Filed Dec. 5, 1927. Serial No. 237,662. 8 Claims. (Cl. 37—155.)



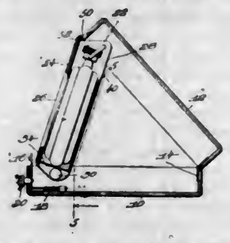
1. In combination with a truck frame having spaced apart chassis side frame members, a pair of bars located below each side frame member of the truck, two vertical depending supporting bars connected at their upper ends to a chassis side frame member and depending therefrom and at their lower ends passing between the bars of a pair of bars and secured thereto, a scraper carrying beam located transversely of and below said pairs of bars, clips detachably connected with said supporting beam at each side thereof, and means passing through the clips and extending between the bars of said pairs of bars and at their upper ends being provided with tightening and loosening devices for clamping the beam against said pairs of bars or releasing the same for adjustable movement with respect thereto.

1,765,970. HEAT-EXCHANGE APPARATUS. GARDNER C. DERBY, Sharon, Mass., assignor to B. F. Sturtevant Company, Hyde Park, Mass., a Corporation of Massachusetts. Filed July 6, 1925, Serial No. 41,493. Renewed Jan. 11, 1929. 17 Claims. (Cl. 257—230.)



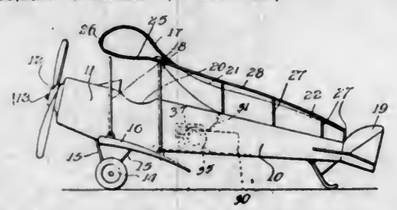
1. Heat exchange apparatus comprising a plurality of sections each consisting of a front and a rear header, the front header having separated inlet and outlet chambers, and of conductors between said chambers and the rear header, and connections between the inlet chamber and the outlet chamber of adjacent front headers.

1,765,971. FOLDING CASE FOR TIMEPIECES. WILLIAM B. EARL, Leominster, Mass. Filed June 9, 1927. Serial No. 197,575. 1 Claim. (Cl. 58—56.)



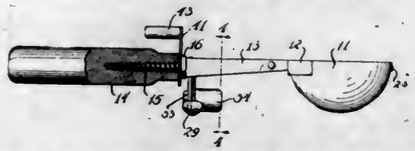
A folding case for time pieces of celluloid comprising complementary bottom and cover portions of sheet material hingedly connected, an intermediate holder having a front portion with a sight opening formed therein adapted to lie within the bottom and cover portions when the case is closed and hingedly connected with one of the portions, rearwardly extending wings upon the holder having a depth sufficient to encompass a time piece, and a U-shaped clamp connected to the wings and designed to frictionally maintain a time piece centered within the holder behind the front portion and with the face exposed through the sight opening.

1,765,972. AEROPLANE SAFETY DEVICE. KURT FECHTER, Joliet, Ill. Filed June 14, 1928. Serial No. 285,293. 6 Claims. (Cl. 244—21.)



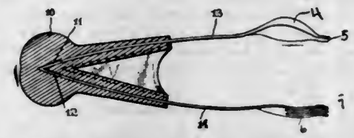
1. In an aeroplane safety device, the combination with a heavier-than-air craft having a hollow wing, of a collapsible container in said wing and projecting therefrom for disposition on the fuselage of said craft, a tank for confining lighter-than-air gases under pressure, valved means for establishing communication between said tank and container, and a pump connected to said communicating means to selectively inflate or deflate said container.

1,765,973. ICE-CREAM DISHER. HARRISON D. FLEGEL, Racine, Wis., assignor to Arnold Electric Company, Racine, Wis., a Corporation of Wisconsin. Filed May 3, 1926. Serial No. 106,194. 18 Claims. (Cl. 107—48.)



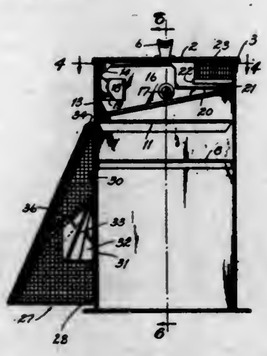
14. In a device of the class described, a bowl, a frame, a scraper rotatably supported in said bowl, a spindle secured to said scraper and rotatable relative to said frame, a movable bearing in said frame adjacent said bowl for said spindle, a handle, and means for securing said frame to said handle comprising a screw riveted to said frame, the head of said screw having a socket bearing for the end of said spindle formed therein.

1,765,974. TABLE IMPLEMENT. ANESTIS FOLTIS, New York, N. Y. Filed Feb. 13, 1929. Serial No. 339,589. 2 Claims. (Cl. 30—22.)



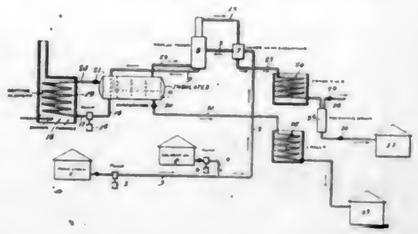
1. In a device of the character described, a pair of arms having free ends, a spoon on the free end of one said arm and a fork on the free end of the other said arm and a block of elastic medium adapted to normally space apart the free ends of said arms.

1,765,975. ANIMAL TRAP. LOUIS HAEGE, New Memphis, Ill. Filed Oct. 17, 1928. Serial No. 312,942. 10 Claims. (Cl. 43—67.)



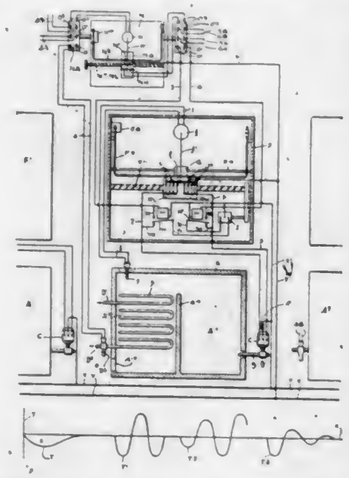
1. An animal trap comprising a housing having an upper compartment and a lower compartment, a trap door on which the animal passes from the upper to the lower compartment, said upper compartment being provided with an entrance, and a closure for said entrance, said closure being provided with an operating element in the path of a portion of said trap door, so as to open said closure in response to the opening of said trap door.

1,765,976. PROCESS OF CRACKING PETROLEUM OILS. RALPH A. HALLORAN and ARCHIE L. STROUT, Berkeley, Calif., assignors, by mesne assignments, to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Sept. 4, 1923, Serial No. 660,828. Renewed Dec. 5, 1927. 8 Claims. (Cl. 196—59.)



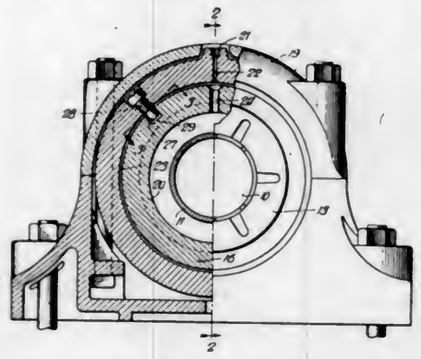
4. A process of cracking petroleum oils under a substantially constant temperature and pressure, both of which are substantially uniform throughout the cracking system, which includes first forcibly circulating the oil undergoing treatment from a vaporization and cycling chamber through a heating zone and back into said chamber, continually withdrawing a portion of the oil from such circulating system and passing it to a cracking chamber in which a relatively larger volume of oil is maintained than in said vaporization and cycling chamber, the oil in said second chamber being maintained in a quiescent state to permit removal of residuals, the vapor formed in the first chamber being passed through the oil in the second chamber, feeding the oil to be treated to said circulation in sufficient quantity to maintain substantially a uniform volume of oil in circulation, withdrawing the vapors formed, and withdrawing residual oil from said second chamber so as to remove heavy derivatives therefrom.

1,765,977. METHOD OF AND APPARATUS FOR FURNACE CONTROL. THOMAS R. HARRISON, Wyncote, Pa., assignor to The Brown Instrument Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Dec. 12, 1927. Serial No. 239,506. 15 Claims. (Cl. 236—15.)



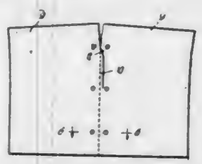
1. The method of controlling a furnace which consists in correctively adjusting the rate at which heat is supplied to the furnace periodically to an extent depending on the difference between the furnace temperature at the time of each such adjustment and a previously established normal temperature, and in changing said normal temperature at the time of each such adjustment to diminish said difference by a definite amount, and in periodically adjusting the relation between the rate at which heat is supplied to the furnace and the then normal temperature to thereby correct for variations in a heating effect produced by the furnace.

1,765,978. BEARING. DONALD K. ISBELL, Mishawaka, Ind., assignor to Dodge Manufacturing Corporation, a Corporation of Delaware. Filed Jan. 10, 1927. Serial No. 160,042. 9 Claims. (Cl. 308—207.)



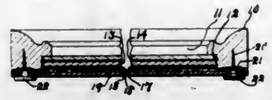
1. A bearing comprising, in combination, a tube to receive a shaft, means for clamping the tube frictionally in place on the shaft, an inner race carried by said tube and clamping means, an outer race, rotary anti-friction members between said races, an inner housing supporting said outer races and having a cylindrical outer surface, an outer housing slidably supporting said inner housing, said outer housing having a spherical outer surface, a chair having spherical inner surfaces receiving and supporting said outer housing, said outer housing and chair having registering irregularities of contour limiting the relative movement between them, a lubricant opening in the top of said chair, said housings having radial passages for conveying lubricant in to said rotary anti-friction members, and a circumferential channel between said housings communicating with said radial passages, said inner housing having a slot parallel to the axis, a radial opening through said outer housing, and a member mounted in said radial opening and projecting into said slot to limit both the relative rotation and the relative axial movement of said housings, the combined axial dimensions of said circumferential channel and the radial passage in the inner housing at its point of communication with said circumferential channel being not less than the axial movement permitted between said housings.

1,765,979. BOOK. BERNICE HARDY JOHNSON, Boulder, Colo. Filed Dec. 23, 1927. Serial No. 242,027. 2 Claims. (Cl. 281—15.)



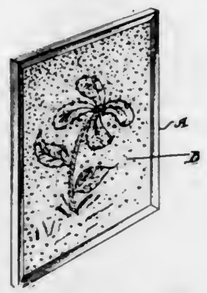
1. As a new article of manufacture, a booklet comprising a plurality of leaves secured together by a line of sewing extending from top to bottom of the leaves and the holes made by the sewing providing a line of close perforations which facilitates ready separation of the leaves by tearing along the line of sewing, said line of sewing constituting the sole means for securing the leaves together, said leaves having openings adjacent the line of sewing and disposed between the line of sewing and the free edges of the leaves, the portions of the leaves between the line of sewing and the free edges of the leaves being otherwise free of perforations or openings which would tend to weaken them.

1,765,980. PICTURE FRAME. MORRIS J. KAUFMAN, Chicago, Ill. Filed July 27, 1929. Serial No. 381,549. 3 Claims. (Cl. 40—152.)



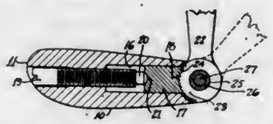
2. A picture frame rabbeted at the rear for mounting a picture therein, a substantially rigid back member mounted on the rear of said frame and having first wadding and then fabric material on its inward side to provide a dust-proof closure between said member and the frame and for engaging and retaining the picture firmly in position, and means including a socket on said back member and a stud on said frame to mount said back member on said frame to provide for convenient opening and closing of said member and removal of said picture.

1,765,981. TRANSLUCENT DECORATION AND SIGN. LEO KATHE, Lakewood, Ohio. Filed Dec. 22, 1927. Serial No. 241,983. 1 Claim. (Cl. 41—21.)



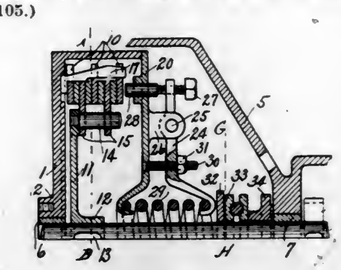
The method of making translucent articles of the class described, which consists in building up a base by filling in the spaces of an open mesh woven fabric with a cellulose compound, sensitizing a surface of the base, inscribing a design on the sensitized surface, treating the surface to develop opaque and translucent portions in the base, coating a side of the base with a translucent adhesive, and applying a diffusing medium to the base by embedding the same in the adhesive.

1,765,982. ADJUSTABLE GOLF CLUB. JOHN H. KEATING, Portland, Oreg. Filed Sept. 6, 1928. Serial No. 304,289. 3 Claims. (Cl. 273—79.)



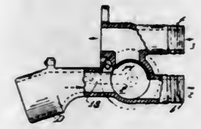
2. A golf club having a head, a hosel hinged to said head in a manner to permit changes in its angle of lie, said hosel having a serrated outer surface at its hinged end, a concavely serrated holding jaw slidably mounted in said head adapted to engage said hosel, and a set screw in said head adapted to hold said jaw in rigid relation to said hosel.

1,765,983. AUTOMATIC CLUTCH DEVICE. DAVID R. KNAPP, Philadelphia, Pa., assignor, by mesne assignments, to Automatic Drive and Transmission Company, Gloucester City, N. J., a Corporation of New Jersey. Filed Sept. 21, 1926. Serial No. 136,818. 1 Claim. (Cl. 192—105.)



In an automatic clutch, the combination of a flywheel driven from a driving shaft, a driven shaft, slidably mounted friction plates between said flywheel and said driven shaft, certain of said plates being driven by said flywheel and others of said plates being connected to said driven shaft, means including centrifugal weights for causing said plates to engage at predetermined speeds of said flywheel, a series of springs opposing said weights to separate said plates at idling speed, a cover plate for said flywheel, a plurality of levers mounted on said plate, a helical spring interposed between the inner ends of said levers and a fixed part to maintain said levers under pressure, parts respectively held by the outer ends of said levers pressed toward said plates, and manually actuated means for overcoming said spring to shift said levers irrespective of the centrifugal force of said weights whereby said plates can be declutched at will.

1,765,984. CONNECTION AND VALVE FITTING FOR AUTOMOBILE WATER-CIRCULATING SYSTEMS. HENRY KOCOUREK and LOUIS ARBY, Chicago, Ill. Filed Oct. 28, 1922. Serial No. 597,449. 1 Claim. (Cl. 137—69.)



A fitting for the purpose indicated comprising two parallel water passages each open at both ends with a transverse water connection between them intermediate their ends, one of said passages having a cylindrical chamber disposed substantially at the point of intersection between the passage and the transverse connection, the axis of said chamber being transverse to the axis of the passage and the connection, whereby the cylindrical wall of said chamber comprises three ports, together with a valve member in the form of a hollow cylinder having a portion of its cylindrical wall cut away, the remaining portion being sufficient in extent to cover only one of said three ports at a time, and means for turning said valve member about the axis of the valve chamber, one of said parallel passages terminating in a connection flange for attachment to a pump, the other end of said passage and the corresponding end of the other parallel passage being formed for connection with flexible tubing to communicate with a heater coil or the like.

1,765,985. PORTER'S TRUCK. ALEC C. MCHAFFIE, Brooklyn, N. Y. Filed June 22, 1928, Serial No. 287,418, and in Great Britain Oct. 12, 1927. 1 Claim. (Cl. 280—53.)

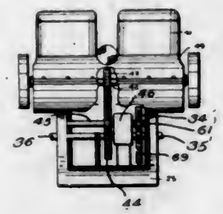
In a porter's truck, a load carrying body structure comprising a pair of spaced carrier members each having

angularly related arms and formed of a single piece of sheet metal and with a flange projecting substantially at right angles to the plane of such piece and along the inner edge of each arm, and a bridge member consisting



of a metal plate bridging said carrier members and bent on a line crossing them and secured to said flanges with the outer faces of the portions thereof on both sides of the line of bend respectively bearing against the flanges of each such member.

1,765,986. REAR AXLE STRUCTURE AND DRIVING MECHANISM. DONALD GORDON MACKENZIE, Montreal, Quebec, Canada, assignor to Donmac Products Corporation, New York, N. Y., a Corporation of Delaware. Filed Feb. 12, 1926. Serial No. 87,919. 5 Claims. (Cl. 180—73.)



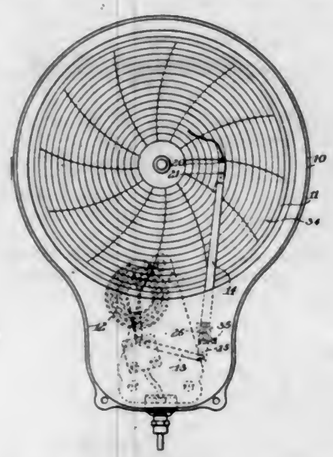
1. In vehicle driving mechanism a vehicle frame, a differential and transmission casing forming a frame bearing for the rear end of said vehicle frame, an axle structure resiliently supporting said casing centrally, axle shafts from said casing, an engine operating a crank shaft and gear centrally mounted thereon and communicating with said differential casing and wheels driven by said axle shafts.

1,765,987. MACHINE FOR SAWING TIMBERS. GARDNER S. MARION, Concord, Mass., assignor to Pope & Cottle Company, Chelsea, Mass., a Corporation of Massachusetts. Filed July 23, 1927. Serial No. 207,886. 3 Claims. (Cl. 144—134.)



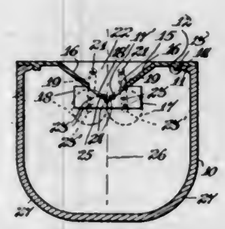
1. A machine for sawing roof rafters having, in combination, rotary saws for shaping the lower ends and notching the rafters, a saw for shaping the upper ends of the rafters, a continuously travelling work support for feeding the rafters horizontally at spaced intervals, a carriage for the latter saw adjustable to determine the length of the rafters, and means for clamping the carriage rigidly in position comprising an inclined face on the carriage and cooperating rolls for engaging the same.

1,765,988. RECORDING DEVICE. CHARLES W. MAYER and EVERETT F. SILLER, Rochester, N. Y. Filed Nov. 10, 1927. Serial No. 232,434. 5 Claims. (Cl. 234—1.)



1. In a recording instrument, the combination with a movable support and a sheet having a surface coating of relatively soft material mounted on said support, of a heated stylus positioned adjacent the coated surface of said sheet.

1,765,989. RECEPTACLE-CLOSURE MEANS. HERBERT J. MELVILLE, Chicago, Ill. Filed Jan. 18, 1928. Serial No. 247,471. 8 Claims. (Cl. 131—51.)

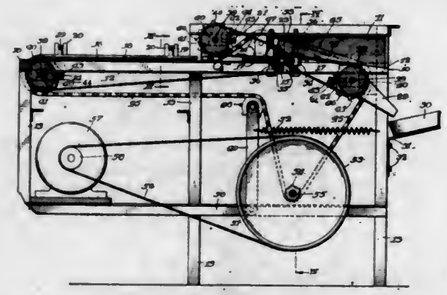


1. In a device of the character described, the combination with a receptacle having an orifice, of a closure therefor comprising paired rollers, and a pendent support for said rollers to normally effect the gravitation thereof to shield said receptacle.

1,765,990. CANDY-SLAB DIVIDER. HERBERT J. MELVILLE and HAROLD E. ATCHISON, Chicago, Ill., assignors to The Curtiss Candy Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 31, 1927. Serial No. 179,839. 8 Claims. (Cl. 107—7.)

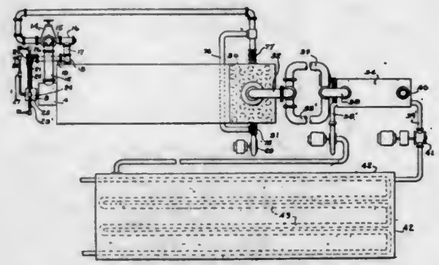
8. In a device of the character described, a belt, another belt confronting said first named belt in spaced

relation thereto to hold articles therebetween, another belt disposed in the path of an article held between the first two referred to belts to grip a portion of such article



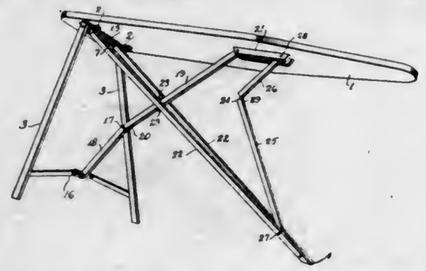
to change the directional movement thereof to effect a division of said article into sections, said last named belt being effective to discharge said segments at a predetermined position.

1,765,991. METHOD OF AND APPARATUS FOR MAKING INK, ETC. AMOS L. MILLER, Philadelphia, Pa., assignor to The Ault & Wiborg Co., Cincinnati, Ohio, a Corporation of Ohio. Filed Feb. 28, 1927. Serial No. 171,523. 17 Claims. (Cl. 134—35.)



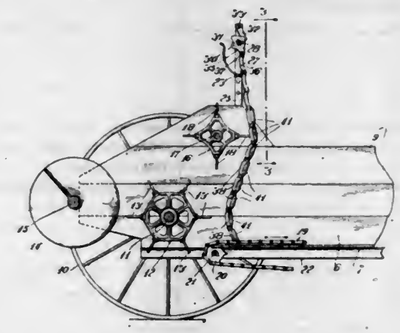
12. The method of making carboniferous ink which consists in effecting the incomplete combustion of a hydrocarbon, cooling the products of combustion, effecting the intimate mixing of the products of combustion with a film of oil while the same are travelling at high speed and effecting the precipitation of oil-laden soot flakes from the unabsorbed products of combustion by causing the same to pass through an electrical field produced by a non-disruptive corona discharge.

1,765,992. IRONING TABLE. ROBERT A. MORRISON and FRANKLIN L. OSWALD, Portland, Oreg. Filed May 27, 1929. Serial No. 366,429. 2 Claims. (Cl. 68—10.)



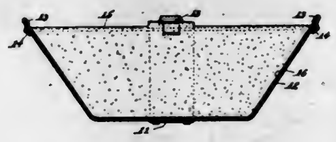
1. A collapsible table comprising a top, a batten extending transversely across the lower face of said top adjacent one end thereof, a pair of brackets secured to said top, the top face of each of said brackets being recessed to receive said batten, said brackets comprising depending bearing members having apertures therein, a hinge pin supported in said apertures, a diagonal leg structure hinged on said pin, a pair of lugs integrally formed on said brackets and diverging downwardly, and a pair of rear legs hinged on said lugs on fixed axes converging downwardly, the axes of said rear legs being offset from the axis of said hinge pin longitudinally of the table top.

1,765,993. MANURE SPREADER. LEONARD B. NEIGHBOUR, Moline, Ill., assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed May 22, 1926. Serial No. 110,908. 14 Claims. (Cl. 275—3.)



1. An end gate for manure spreaders comprising a flexible curtain adapted to fold rearwardly under the pressure of the load and means operable to move said curtain out of engagement with the manure preparatory to the spreading thereof.

1,765,994. NESTING DEVICE. GEORGE W. NESBITT, Sycamore, Ill. Filed June 13, 1928. Serial No. 284,903. 2 Claims. (Cl. 119—45.)

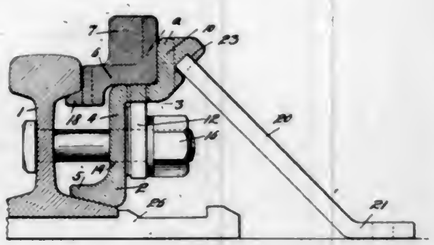


1. A nesting device comprising a plurality of metal straps disposed in crossed relation to each other and secured at the points of contact, the ends of said straps being bent upwardly to form a nest basket, a lug provided adjacent the end of each strap, a metal ring member adapted to be engaged by said lugs, a nest bowl of fibrous material disposed within said basket, and a projection upon the end of each strap adapted to be bent into engagement with the upper periphery of said bowl, substantially as described.

1,765,995. SWITCH-POINT PROTECTOR. EBEN RAY PACKER, New Rochelle, N. Y. Filed Apr. 20, 1929. Serial No. 356,791. 3 Claims. (Cl. 246—441.)

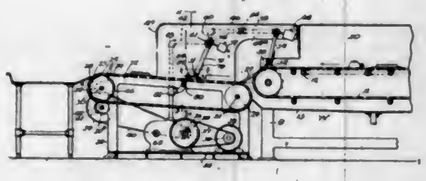
1. A switch point protector adapted for use in combination with a main rail and a movable switch point operatively associated therewith and to be positioned for

deflecting a car wheel in the direction of switching comprising a deflector member adapted to be secured with relation to the rail and formed with angularly disposed deflecting surfaces and with an outwardly directed seat



or recess and a separable bracing member therefor fitted to the recess and inclined downwardly therefrom to the tie and said recess being elongated with relation to the width of the bracing member to allow of adjustably positioning of the bracing member with relation to the tie.

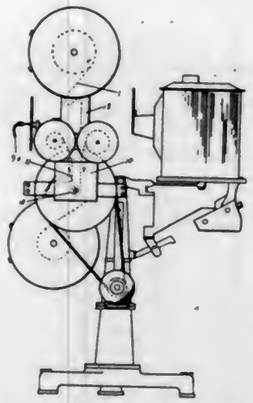
1,765,996. DISH-DRYING APPARATUS. SAMUEL OLSON, Chicago, Ill., assignor of one-fifth to William F. Smith, one-fifth to Philip Van Horne, one-fifth to Raynor F. Starr, one-fifth to Owen T. Weber, Chicago, Ill., and one-fifth to Samuel Olson & Company, Chicago, Ill., a Corporation of Illinois. Filed June 21, 1926. Serial No. 117,306. 11 Claims. (Cl. 34—12.)



1. In combination with a dish washer comprising a conveyor, a drying apparatus comprising a frame, a conveyor supported by the frame and adapted to receive the dishes discharged from the washer-conveyor, means supported by the frame and adapted to extend over the discharge end of the washer-conveyor for delivering air under pressure to the dishes carried by said washer-conveyor to disperse the water thereon, said means being movably mounted and shiftable by the articles carried by the washer-conveyor, and means supported by the frame for drying the dishes carried by the drier-conveyor.

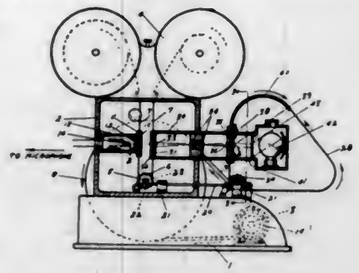
1,765,997. METHOD FOR SYNCHRONIZING SOUND AND MOTION PICTURES. FREEMAN H. OWENS, New York, N. Y. Filed Jan. 3, 1927. Serial No. 158,692. 9 Claims. (Cl. 88—16.2.)

7. The method of synchronizing sound and motion pictures comprising the steps of providing a picture film with footage marks, scoring a sound guide in accordance with said picture film, simultaneously projecting said picture film and photographically recording sound made in accordance with said guide while maintaining the rate of movement of said footage marks visible at the source of



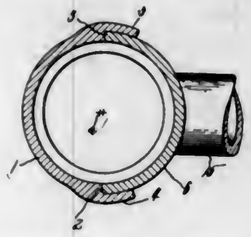
sound, providing the photographic sound record with footage marks corresponding to those of said picture film and matching the footage marks of both films.

1,765,998. TITLE ATTACHMENT FOR SOUND CAMERAS. FREEMAN H. OWENS, New York, N. Y. Filed July 13, 1927. Serial No. 205,448. 10 Claims. (Cl. 88—16.2.)



9. In combination, means for recording a sound record on a film, a second film shiftable laterally and bearing a plurality of titles in parallel arrangement, means for synchronously moving said films, and means for titling said sound recording film simultaneously with the recording of a sound record thereon.

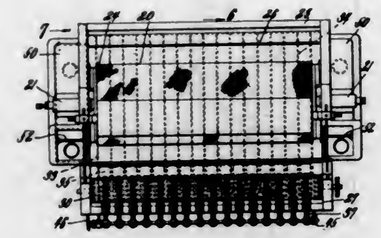
1,765,999. BRANCH CONNECTER FOR FIBROUS CONDUITS. HOWARD PARKER, Berlin, N. H., assignor to Brown Company, Berlin, N. H., a Corporation of Maine. Filed July 14, 1925. Serial No. 43,601. 3 Claims. (Cl. 285—194.)



2. A fibrous branch connecter adapted for use with cylindrical fibrous conduits, said connecter comprising a pair

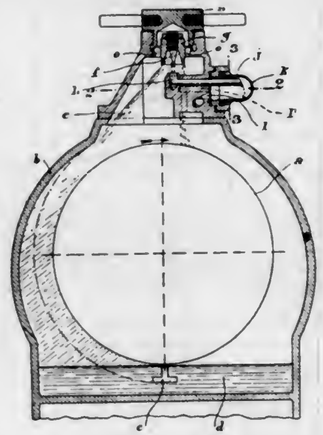
of complemental resilient and substantially semi-tubular sections, one of said sections having curved lapping members of an inside diameter sufficient to permit lapping of the other section, the longitudinal edges of said members being separated a sufficient distance to permit the said edges to be sprung apart and snap over the other section without being permanently deformed or cracked, and the ends of the connecter being formed to mate with the ends of the conduits with which it is used.

1,766,000. PULP-STOCK VAT. HOWARD PARKER, Berlin, N. H., assignor to Brown Company, Berlin, N. H., a Corporation of Maine. Filed Nov. 22, 1928. Serial No. 321,080. 13 Claims. (Cl. 92—43.)



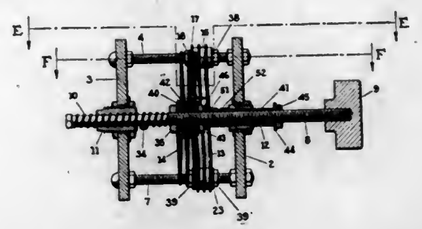
1. Apparatus of the class described comprising a vat to contain a pool of pulp stock, a cylinder mold rotatably mounted therein for partial immersion in said pool, and means for locally agitating the stock at spaced points adjacent to the submerged surface of the cylinder, and means for selective regulation of stock agitation at the several said points.

1,766,001. CONTROL-PLUG UNIT FOR SPLASH-FEED LUBRICATING SYSTEMS. BENJAMIN RENÉ PLANCHE, Villefranche-S-Saone, France. Filed Jan. 3, 1929, Serial No. 330,115, and in France Jan. 14, 1928. 4 Claims. (Cl. 184—13.)



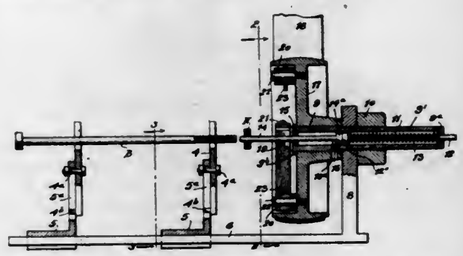
1. A lubricating system for rotary engines comprising a casing, a flywheel within the casing, a hollow internally domed plug screwed into the top of the casing, a pointed member screwed into the hollow plug, a fin on the flywheel to lift oil from the bottom of the casing and project it into the hollow plug, and onto the pointed member and an apertured delivery pipe below the pointed member to receive the oil dripping therefrom and feed it to the lubricating points.

1,766,002. RADIO CAPACITANCE AND INDUCTANCE REGULATOR. JOHN LANGFORD PRICE, Indianapolis, Ind. Filed Feb. 28, 1927. Serial No. 171,552. 3 Claims. (Cl. 250—40.)



1. In a radio receiver circuit, a tuning device whose elements constitute a combined variable inductance and variable capacity, the tuning device consisting of a rotor having spiral convolutions and a coacting stator having spiral convolutions, several mounting means for the stator forming conductors in the circuit, a supporting shaft for the rotor forming a conductor in the circuit, said stator being in conducting relation with a different one of said mounting means adjacent to each of its extremities and being otherwise insulated from said mounting means, said rotor at one extremity being in conducting relation with said shaft, conductor means in the circuit for making contact with the other extremity of the rotor, said rotor between its extremities being insulated from the said shaft, the insulation in the aforesaid instances aiding in producing an inductor effect.

1,766,003. NUT AND BOLT ASSEMBLING MACHINE. TAMIS C. SCHENK, Brooklyn, N. Y. Filed June 1, 1927. Serial No. 195,626. 2 Claims. (Cl. 10—155.)

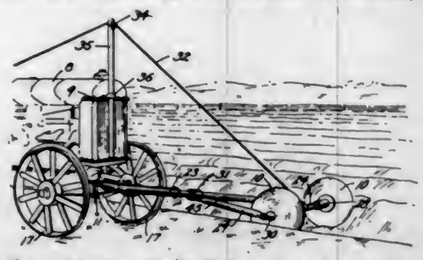


1. A machine for assembling nuts having peripheral flat faces and bolts, including the combination of a rotary device carrying a plurality of spring fingers for engaging the flats of the nut, a support for the bolt opposite said rotary device in which the same may be slid along its axis, and a movable support for the nut in line with the axis of the bolt, the bolt support guiding the bolt for movement toward the nut support to engage and move the latter and thereby bring the nut into the field of operation of said fingers.

1,766,004. TRACTOR GUIDE. ROY G. SELLON, Hugo, Colo., assignor of one-half to Arthur M. Sellon, Randolph, Nebr. Filed Oct. 18, 1928. Serial No. 313,237. 4 Claims. (Cl. 97—49.)

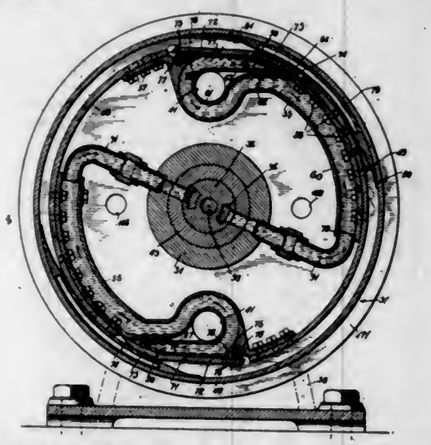
1. A guide mechanism for tractors comprising: a fixed pivot; a second pivot adapted to be secured to the steering rod of said tractor; a guide bar extending between said pivots and forwardly therefrom; a stud projecting forwardly from guide bar; a hinge member adapted to fit over said stud; a supporting arm hinged to said hinge member and extending forwardly therefrom; and guide discs carried adjacent the forward extremity of said sup-

porting arm, said hinge member comprising: a T-shaped member, said supporting arm adapted to rotatably en-



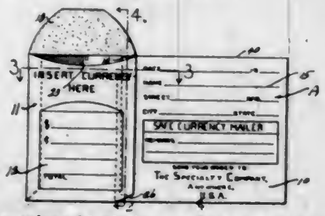
gage the extremities of said T-shaped member; and means for raising the forward extremity of said supporting arm.

1,766,005. ROTARY ENGINE. WILLIAM SHACKELFORD SULLIVAN, Philadelphia, Pa., assignor of forty-five per cent to James G. Cumming, Washington, D. C. Filed Aug. 2, 1926. Serial No. 126,616. 5 Claims. (Cl. 60—44.)



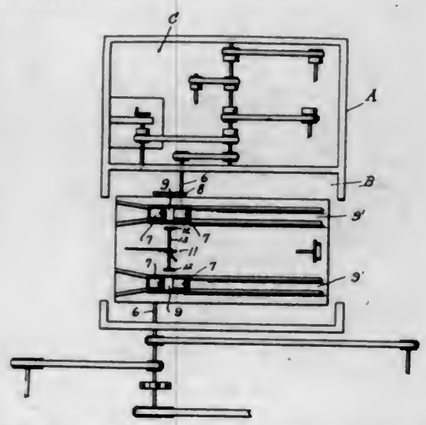
4. A rotary engine comprising, in combination, a stator having an axis and a face substantially perpendicular thereto, a rotor mounted on said axis and having a face revolving closely adjacent the face of said stator, said rotor having an annular chamber opening through its face, a stationary element carried by the stator projecting into said chamber to obstruct the same at one point, a movable element carried by the rotor adapted to be moved into said chamber to obstruct the same at a second point, said rotor provided with an explosion chamber opening to said face and to said annular chamber, said stator provided with a port to admit an explosive mixture to said explosion chamber and with means to ignite said mixture.

1,766,006. COMBINED ADVERTISING CARD AND MAILER FOR CURRENCY, ETC. WALTER W. F. TEES, Brooklyn, N. Y. Filed Dec. 11, 1928. Serial No. 325,312. 4 Claims. (Cl. 229—92.8.)



1. In an envelope blank for mailing cards the combination of a flexible envelope blank sheet comprising back and body flaps, the body flap having side attaching flaps and the back flap having an end closure flap opposite the body flap, the attaching flaps of the body flap being provided with gummed surfaces on relatively opposite sides thereof, and the back and closure flaps having gummed surfaces on the inner sides thereof.

1,766,007. AUTOMOBILE POWER-TAKE-OFF DEVICE. JAMES W. WHITE, Bainbridge, Ga., assignor of one-fourth to Wallace Calvin White, Bainbridge, Ga. Filed Aug. 22, 1928. Serial No. 301,253. 2 Claims. (Cl. 74—106.)



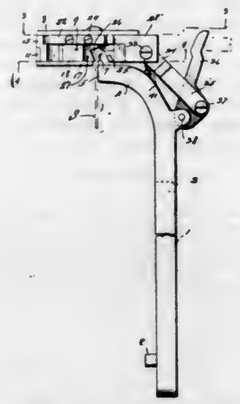
1. In a power take-off device, the combination of a frame unit adapted to be located beneath the surface of the garage floor, a pair of spaced parallel shafts journaled within the frame, drums keyed to the shafts adjacent their outer ends, said drums adapted to project through slots in the garage floor so as to permit the rear wheels of a vehicle to rest thereon, longitudinally extending wheel guide troughs arranged upon the floor surface in alignment with said drums, means at certain ends of said shafts whereby the power may be taken therefrom, a pair of uprights rising from the floor intermediate the troughs, a third shaft rockably supported between said uprights, a ratchet wheel carried by said third shaft, a flexible attaching member carried by the ratchet wheel and adapted to engage with the vehicle, and an operating lever for the third shaft for actuating said ratchet wheel, the flexible connection between the ratchet wheel and the vehicle, together with the dog pivotally mounted on the floor of the garage and engageable with the teeth of the ratchet wheel, all in the manner and for the purpose set forth.

1,766,008. TOY. WALTON A. WILCOX, Rochester, N. Y., assignor of one-half to Hugh H. Hamill, Rochester, N. Y. Filed Mar. 1, 1929. Serial No. 343,697. 6 Claims. (Cl. 46—40.)



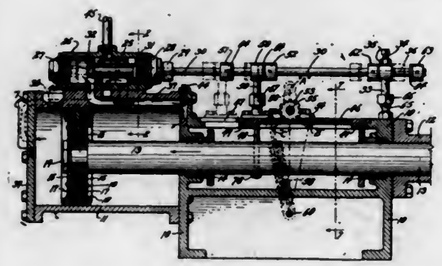
1. A toy comprising a support, and a three armed member pivoted to the support one of said arms being weighted and the other two arms being positioned to be projected one from one side of the support when the weighted arm moves in one direction and the other from the other side of the support when the weighted arm moves in the other direction.

1,766,009. SAW SET. JAMES ORVILLE WOODS, Cheyenne, Wyo. Filed July 11, 1929. Serial No. 382,351. 4 Claims. (Cl. 76—66.)



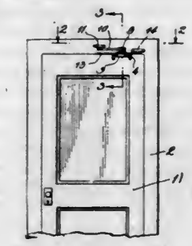
1. In a saw set, a member provided with a fixed anvil, a plate carried by the outer portion of said anvil and extending in advance thereof, said plate having a depending block in advance of the anvil, an anvil block supported in a position adjacent the inner face of said depending block and supported for sliding movement in a direction transversely of the plate, an arm freely disposed through the block and having a setting die for coaction with the fixed anvil, a rock arm operatively supported by the plate outwardly of the depending block, the first named arm being operatively engaged with an end portion of said rock arm, a member supported by the block for endwise movement and having a setting die for coaction with the sliding anvil block, said endwise movable member being operatively engaged with the opposite end portion of the rock arm, automatic means coacting with said endwise movable member for maintaining the setting dies at their limit of movement from their associated anvils, and means coacting with the sliding member for moving both of the setting dies in unison toward their associated anvils.

1,766,010. FORCE PUMP. JUL BINDERUP, Denver, Colo. Filed Nov. 12, 1926. Serial No. 147,930. 5 Claims. (Cl. 121—164.)



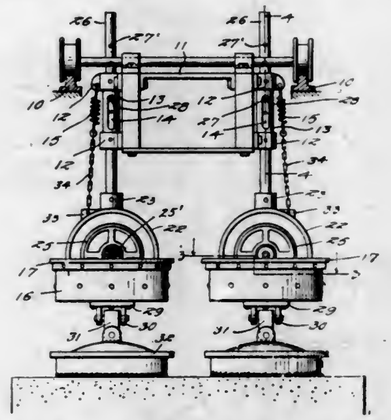
1. In a motor having an operating cylinder and a piston rod extending from a piston within said cylinder; a valve box carried by said cylinder; a slide valve within said valve box adapted to control passages from said box to opposite ends of said cylinder; a valve rod extending from said valve box substantially parallel to said piston rod; a projection on said piston rod; means for communicating motion from said projection to said valve rod, said means comprising a movable standard; stops on said valve rod adapted to be engaged by said standard; and means for causing said standard to be operated from said projection, said means comprising contacts adapted to move with said standard and be engaged by said projection only at the extremities of its travel and a spring arranged to move said standard beyond the extremities of travel of said projection after the intial movement has been imparted by said projection.

1,766,011. DOORCHECK. BRITTON E. BYRD, Gastonia N. C. Filed Mar. 5, 1928. Serial No. 259,263. 4 Claims. (Cl. 16—65.)



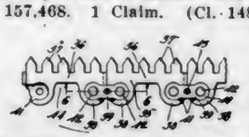
1. A door check including a shaft, a spring connected with the shaft to rotate it in one direction, a flexible member having at one end means for connection with the door frame and connected at the other to the shaft to be unwound therefrom when the door is opened, thereby to tension the spring, and to be wound thereon by the spring thereby to close the door, a slotted guide arm having means for pivotal connection with the frame, the shaft passing through the slot, a brake disk loosely mounted on the shaft and resting on the arm, and means in connection with the shaft and the disk cooperating to press the disk toward the arm when the shaft is rotated under the influence of the spring, and inoperative to exert pressure when the shaft is rotated under the influence of the flexible member.

1,766,012. STONE POLISHER. CHARLES S. CUSHMAN, Barre, Vt. Filed Jan. 6, 1927. Serial No. 159,457. 1 Claim. (Cl. 51—56.)



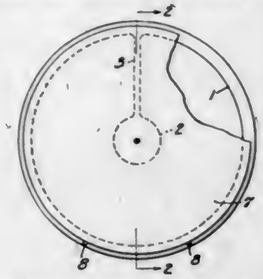
A polishing device including a horizontally movable carriage, vertically alined guides on the carriage, a vertical tubular member extending between the guides and having its ends secured therein, said tubular member having longitudinal slots in opposite sides thereof between the guides, a polishing wheel, a motor for driving the wheel including a casing, a vertical shaft attached to the casing and slidably disposed through said tubular member, and a transverse pin removably disposed through the shaft and having its ends provided with rollers disposed in said slots to maintain the motor operated unit in a rigid upright position, whereby to prevent overbalancing thereof when a small polishing wheel is used.

1,766,013. PORTABLE CHAIN SAW. JOSEPH DAW, Quebec, Quebec, Canada, assignor to Brown Company, Berlin, N. H., a Corporation of Maine. Filed Dec. 28, 1926. Serial No. 157,468. 1 Claim. (Cl. 148—135.)



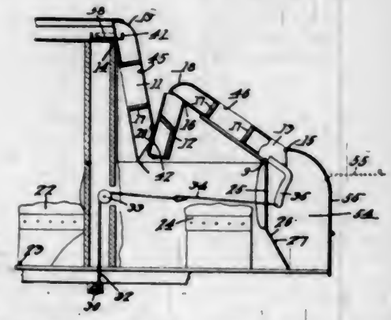
A chain saw comprising a plurality of saw-toothed links and a pair of connecting links between each two successive toothed links, said toothed links each having at each end a pair of circular shallow recesses in the side faces thereof opening out toward its end and a perforation concentric with each pair of recesses, said connecting links having circular end portions with central countersunk perforations registering with the perforations in the toothed links, each said circular end portion having an arcuate edge engaging the edge of the corresponding recess over an arc of more than 180°, and fastening elements extending through and filling said countersunk perforations so as to retain the end portions of said connecting links in corresponding recesses in the toothed links, the outer faces of said connecting links and the end faces of said fastening elements being flush with the side faces of said toothed links.

1,766,014. LOUD-SPEAKER-DIAPHRAGM MOUNTING. JOHN BRADLEY DEANE, Brooklyn, N. Y. Filed Jan. 17, 1928. Serial No. 247,409. 5 Claims. (Cl. 181—31.)



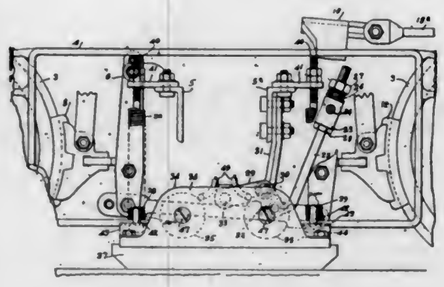
1. In a loud speaker flat ring shaped diaphragm mounting, a diaphragm supporting sound board, means extending from the vicinity of the center of the sound board to its inside edge for supporting it in position, a reproducer unit carried on the sound board supporting means, supporting means for the member, a diaphragm having its peripheral edge engaging a face of the sound board, but being free of attachment thereto.

1,766,015. CONVERTIBLE AUTOMOBILE BODY. WILFRED DUPRÉ, Worcester, Mass. Filed May 2, 1928. Serial No. 274,633. 4 Claims. (Cl. 296—99.)



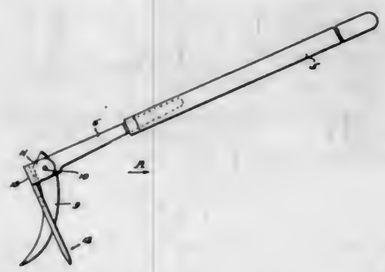
1. In an automobile, the combination with a stationary part of the body, of three movable elements constituting the rear wall and top thereof, one of said elements being connected to a stationary part of the body and movable from a horizontal position to a vertical position, the second element being connected to a stationary part of the body near the top thereof and movable from a vertical position to a horizontal position, the third element being pivoted to the first, and a pair of straps flexibly connecting the third element to the second, the third element being arranged, when either of the other elements is in horizontal position, to lie in the same horizontal plane and constitute a continuation thereof all the way from one to the other.

1,766,016. RAIL BRAKE FOR RAILWAY CARS. CHARLES J. ELLIS, Hamilton County, Ohio, assignor to The Cincinnati Car Corporation, Cincinnati, Ohio, a Corporation of Ohio. Filed Aug. 5, 1926. Serial No. 127,424. 10 Claims. (Cl. 188—41.)



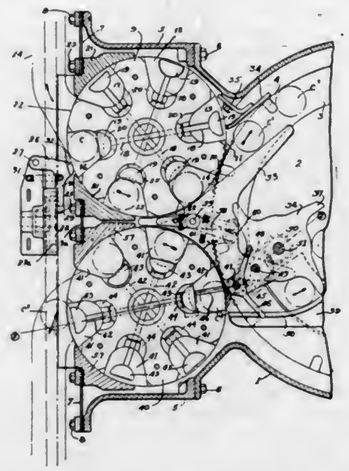
1. In railway brakes, the combination with wheel brakes and operating mechanism therefor, of rail brakes, magnets to magnetize them, yielding suspension devices to support the rail brakes safely remote from the rails and permit positioning them within the magnetic field between them and the rails, and actuating devices connected with the wheel-brake operating-mechanism to cause the actuating devices to position the rail brakes within said magnetic field.

1,766,017. SELF-CLEANING LAWN RAKE. QUINCY FISHER, Ottawa, Kans. Filed Jan. 8, 1929. Serial No. 331,105. 3 Claims. (Cl. 55—10.)



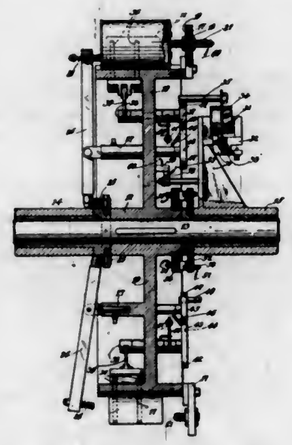
1. A garden rake comprising a handle, a toothed raking head pivotally mounted on the forward end of the handle, and a longitudinally curved lifting finger for said head pivotally mounted on said handle and cooperable with the pivotal connection of said head, said finger constituting a drag element and being engageable with the ground.

1,766,018. TRANSFER VALVE FOR VACUUM-CLOSING MACHINES. GEORGE FLOOK, Syracuse, N. Y., assignor to Continental Can Company, Inc., New York, N. Y., a Corporation of New York. Filed Mar. 20, 1929. Serial No. 348,648. 12 Claims. (Cl. 126—272.)



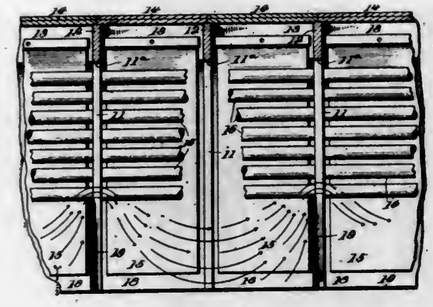
1. The combination of a casing having a vacuum chamber and a rotary transfer valve for transferring containers to or from said chamber, said casing having a valve seat contacting with the valve, and a diaphragm section supporting said seat, said seat being disposed relative to said valve so that the vacuum pull on the diaphragm holds said seat in sealing contact with the valve.

1,766,019. APPARATUS FOR DETECTING LEAKY CANS. RICHARD M. GARRETT, Yonkers, N. Y. Filed June 7, 1928. Serial No. 283,610. 8 Claims. (Cl. 209—81.)



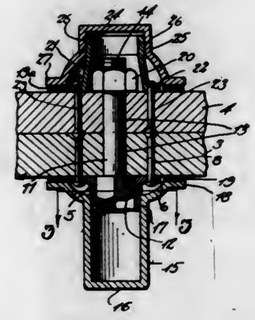
1. Means for detecting and separating gas bulged cans from normal cans, comprising a can carrier to carry the cans transversely, means for pushing each can axially on the carrier at a predetermined point, contacts axially opposite the can pushing means positioned to meet the center and edge respectively of each bulged can but only the edge of normal cans when pushed, an electric circuit including the contacts, an electric motor in circuit, and a can separating device controlled by the electric motor.

1,766,020. BRINE TANK FOR ICE PLANTS. NORMAN H. GAY, Los Angeles, Calif. Filed Sept. 13, 1926. Serial No. 135,134. 1 Claim. (Cl. 62—160.)



In a brine tank for ice making plants having an inlet and an outlet for brine at opposite ends thereof, cooling pipes extending through the tank and spaced from the bottom thereof whereby to cool the cold brine at the upper portions thereof, means to maintain the ice cans in position in the brine flow from said inlet to said outlet, said cans being located above the bottom of the tank and extending below said coils, and baffles arranged at the bottom of the tank across the line of flow of the brine and extending upwardly to said cooling pipes to prevent a direct flow of brine along the bottom of the tank beneath the ice cans while permitting a direct flow over the upper parts of the cans and over said cooling pipes.

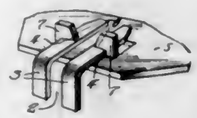
1,766,021. LIFE-SAVING DEVICE FOR SHIPS AND THE LIKE. NICOLA GRABICH, West New York, N. J. Filed Apr. 17, 1929. Serial No. 355,881. 3 Claims. (Cl. 114—77.)



1. In a life saving device for ships and the like, the combination with a ship body, of a floating cabin section detachably connected to the ship body, the connection comprising a plurality of bolts extending vertically through the ship deck and cabin floor, the bolt head being of polygonal formation and disposed below the ship deck, a thimble anchored to the under side of the deck and having a bore of a configuration similar to the bolt head with the latter disposed therein to be held against rotation, an elongated housing inclosing the thimble, anchored thereto and having a watertight joint with the lower face of the ship deck, a nut threaded on the upper end of the bolt within the cabin, an exteriorly threaded thimble sur-

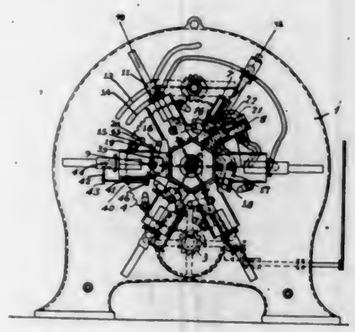
rounding the upper end of the bolt and nut and anchored to the cabin floor and a cap nut threaded onto the last named thimble and having a watertight connection with the cabin floor.

1,766,022. METAL STRUCTURAL TOY. HENRY W. GRAVES, Chicago, Ill. Filed May 28, 1928. Serial No. 280,972. 8 Claims. (Cl. 46—35.)



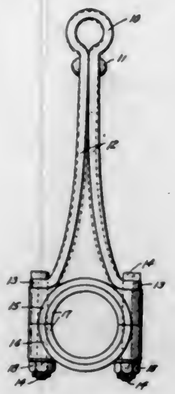
3. A structural toy comprising flat strips having counterpart longitudinally slotted end portions each provided with opposite edge recesses, and connectors having flat portions each provided with pairs of hook elements projecting in the same direction from a face thereof, each pair of hook elements being formed from the adjacent flat portion of the connector and shaped both for extending into one of the strip edge recesses and for overhanging the strip to clamp the latter against the said flat connector portion.

1,766,023. BAKING MACHINE. KARL OSKAR HEBENSTREIT, Dresden, Germany. Filed Sept. 15, 1927, Serial No. 219,737, and in Germany June 25, 1927. 9 Claims. (Cl. 107—58.)



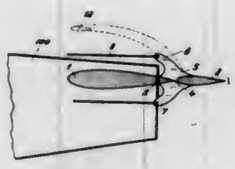
1. A machine of the character described for baking hollow cakes and biscuits, comprising a frame, a revolving shaft mounted in said frame, polygonal castings mounted on the shaft, cake moulds mounted on said castings in a radial fashion, one half of each mould being rigidly secured to the casting and the other half hinged to the rigid half, cores for said moulds, holders for said cores, rods on the rigid mould halves whereon said core holders are guided, means on the rigid mould halves for locking the cores to the moulds, a dough pump mounted on the machine frame, connection between the shaft and the pump for operating the latter, closing and locking elements for the moulds carried by the rigid mould halves, heating elements for the moulds and for the cores carried by the rigid mould halves, and means for controlling the different elements so that all will be operated during one revolution of the shaft.

1,766,024. CONNECTING ROD FOR INTERNAL-COMBUSTION ENGINES. HENRY JONES, Antioch, Nebr. Filed June 25, 1928. Serial No. 287,987. 4 Claims. (Cl. 74—17.)



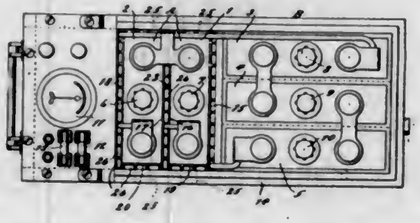
1. A connecting rod for internal combustion engines comprising: a crank shaft bearing; and an endless strip of resilient metal, said strip being bent back upon itself to form a wrist pin bearing, the extremities of said strip being outwardly flared to a connection with said crank shaft bearing.

1,766,025. ARRANGEMENT OF RUDDERS FOR AIRCRAFT. HUGO JUNKERS, Dessau, Germany. Filed Jan. 4, 1929, Serial No. 330,331, and in Germany Jan. 14, 1928. 5 Claims. (Cl. 244—29.)



1. In aircraft a damping surface having a sharp rear edge and a rudder of stream-lined cross section to the rear of said edge and pivoted to an axis extending across said surface, the pivotal axis of said rudder being disposed forward of said rear edge.

1,766,026. METHOD AND APPARATUS FOR COOLING ELECTROLYTIC CELLS AND THE LIKE. RAYMOND A. KLOCK, Closter, N. J., assignor, by mesne assignments, to Gould Storage Battery Company, Inc., New York, N. Y., a Corporation of New York. Filed July 17, 1924. Serial No. 726,415. 1 Claim. (Cl. 136—180.)



In an electrical device including an enclosure, a container and an electrolytic device within the container,

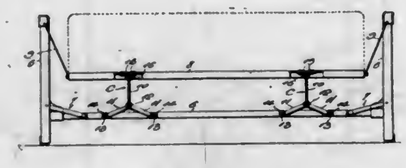
means for dissipating heat generated within the container comprising a plurality of plates disposed against and coextensive with the sides of the container, said plates being smooth at one side and having vertically extending ribs at the other, other plates smooth on both sides disposed against the ribs of the first named plates to define a series of vertical flues extending from top to bottom of the device, the enclosure having openings at its lower portion, and said plates being cut away at their lower ends to define an air circulating space in communication with said vertical flues and said openings.

1,766,027. HEEL FOR BOOTS OR SHOES. PERCY H. LETCHFORD, Winnipeg, Manitoba, Canada. Filed Dec. 1, 1927. Serial No. 237,082. 1 Claim. (Cl. 36—35.)



A unitary rubber heel, adapted to be attached as a unit to a shoe, comprising an outer layer of comparatively hard rubber and an inner layer of comparatively soft cushioning rubber, there being suitably disposed nail holes passing through the outer layer and into the inner layer and terminating below the upper surface of the inner layer, and anchoring nail receiving washers wholly imbedded in the soft rubber layer and situated at the upper ends of the holes.

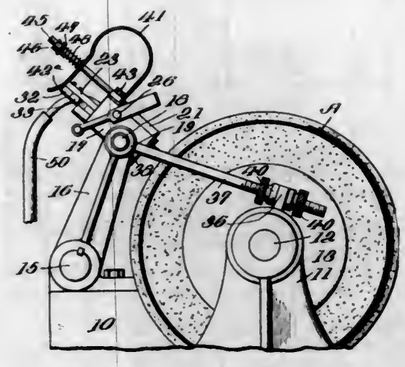
1,766,028. GLIDER. DUANE M. LILLIBRIDGE, St. Charles, Ill. Filed Mar. 28, 1929. Serial No. 350,763. 3 Claims. (Cl. 5—129.)



1. In a glider, a stationary frame member, a seat member movable with respect thereto, twin links pivoted at spaced points to one of said members and converging to a common po'nt, and another link pivoted to said twin links at said common point, said other link being pivoted also to the other of said members, the pivotal axes of the links being all transverse to the front-to-rear line of movement of the seat member, said links being substantially rigid in directions at right angles to said front-to-rear line to prevent movement of the seat member transversely of this line.

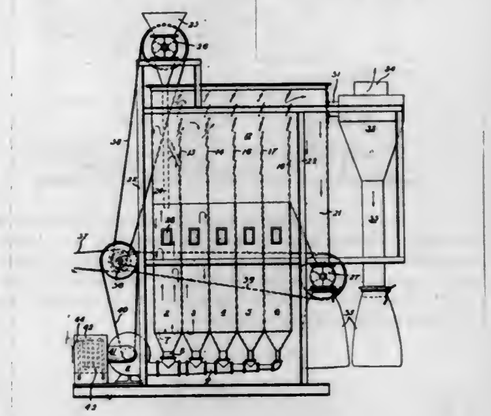
1,766,029. DRESSING DEVICE FOR ABRASIVE WHEELS. JOSEPH MAICKEL, Butte, Mont. Filed Nov. 22, 1926. Serial No. 149,921. 5 Claims. (Cl. 125—111.)

2. A dressing device for abrasive wheels comprising a frame, a mandrel journalled on said frame and receiving the wheels to be dressed, a rock shaft journalled on said frame, rock arms splined to said shaft, a base plate carried by said arms and movable therewith toward and from said mandrel, a carriage guided on said plate for movement parallel to said mandrel, a tool holder and a tool therein slidable in a plane at right angles to said mandrel, a feed screw journalled on said plate to move said carriage along said plate, a leaf spring fastened to said carriage and pressing said holder and tool toward said mandrel, a guide



rod on said carriage to guide the free end of said leaf spring, a coil spring on said guide rod to assist said leaf spring, and a cam on said plate to limit the movement of said holder.

1,766,030. APPARATUS FOR AND METHOD OF TREATING MATERIAL. EDGAR T. MEAKIN, Berkeley, Calif. Filed Aug. 2, 1926. Serial No. 126,357. 8 Claims. (Cl. 34—34.)

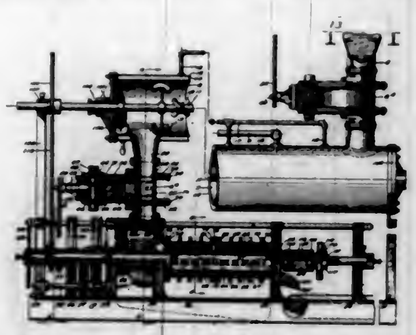


1. A dryer comprising a plurality of substantially vertical drums, passages connecting the upper portions of adjacent drums, gates arranged in said passages to control the areas thereof, means for introducing material to be dried into the first of said drums below the passage leading into the second drum, means for collecting dried material from the last drum, and means for introducing air under pressure into the lower portion of each drum.

1,766,031. APPARATUS FOR PROCESSING ANIMAL MATTER. EDGAR T. MEAKIN, Berkeley, Calif. Filed Nov. 13, 1922. Serial No. 600,593. 5 Claims. (Cl. 87—13.)

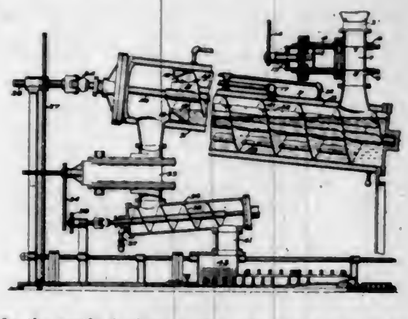
1. In an apparatus for processing animal matter, an oven, means for heating said oven, means for vacuumizing said oven, a feed chamber communicating with one end of said oven and a discharge chamber communicating with the opposite end thereof, rotary inlet and a rotary outlet valve

for each chamber, and means interconnecting and interoperating the two valves in each of said chambers whereby the inlet valve is closed when the outlet valve is open and



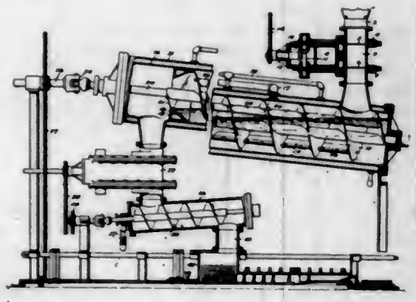
the outlet valve is closed when the inlet valve is open thereby maintaining the degree of vacuum in said oven substantially constant.

1,766,032. METHOD OF PROCESSING ANIMAL MATTER. EDGAR T. MEAKIN, Berkeley, Calif. Filed Feb. 18, 1924. Serial No. 693,581. 13 Claims. (Cl. 87—13.)



1. In the method of extracting oils and fats from animal material, the step which comprises immersing and cooking said material in hot grease rendered from the same character of fat as contained in said material while maintaining a substantially high degree of vacuum to liberate moisture at a comparatively low temperature.

1,766,033. APPARATUS FOR PROCESSING ANIMAL MATTER. EDGAR T. MEAKIN, Berkeley, Calif. Filed Feb. 18, 1924. Serial No. 693,582. 7 Claims. (Cl. 87—13.)



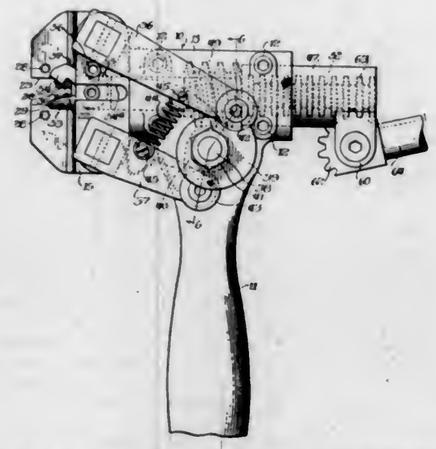
1. In an apparatus for extracting grease from grease bearing material, a cooking receptacle positioned with its bottom inclined, means for vacuumizing the receptacle, means for heating the receptacle, a feed chamber communicating with the receptacle adjacent the lower end of its bottom; a discharge chamber communicating with the receptacle adjacent the upper end of its bottom, valve means in each of said chambers for respectively admitting material into the receptacle and discharging material therefrom while maintaining the vacuum therein, and means for moving material thru the receptacle.

1,766,034. END CLOSURE FOR FABRIC ROLLS. JENS P. NIELSEN and JOSEPH R. RICHER, Chicago, Ill.; said Richer assignor to said Nielsen. Filed Nov. 30, 1927. Serial No. 236,704. 2 Claims. (Cl. 206—59.)



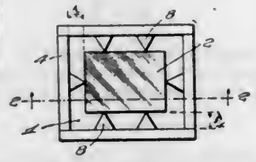
1. A protective means for paper rolls having a central bore, comprising in combination a pair of apertured plates one for each end of the roll, a rod extending through said bore and having its opposite ends projecting through the apertures in the plates with upset heads on said projecting ends, and washers interposed between said heads and the outer sides of said plates, said heads being positioned on the rod so as to hold it under tension with the plates in firm contact with the ends of the roll, and said rod further having an upset portion spaced inwardly from one of said heads and adapted to retain one of said washers between it and the head before assembly of the rod in the roll.

1,766,035. METHOD OF AND MEANS FOR APPLYING WIRE TO PACKAGES. JENS P. NIELSEN and JOSEPH R. RICHER, Chicago, Ill.; said Richer assignor to said Nielsen. Filed Sept. 24, 1928. Serial No. 307,938. 29 Claims. (Cl. 140—93.)



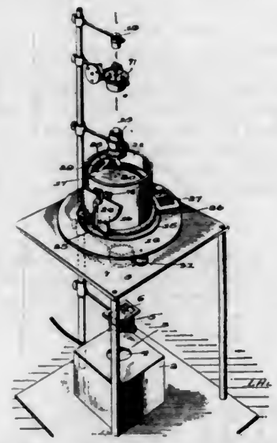
1. In a tool of the character described, the combination of a body, means mounted on said body operable to deform a wire, means mounted on said body including a rotatable member for operating said deforming means, and gripping and stretching means comprising a rod mounted in said body for longitudinal sliding movement, a handle mounted on said rotatable member operable to move said rod longitudinally and to rotate said member, and means on the one end of said rod automatically operable during sliding movement of said rod to grip or release a wire, said gripping means comprising a jaw rigid with said rod, a movable jaw pivoted on and arranged to cooperate with said rigid jaw to grip a wire, a groove in said body parallel to said rod, an abutment in said groove, a finger on said movable jaw arranged to move in said groove to prevent rotation of said rod in said body and to strike said abutment to open said jaw when moved in one direction, said abutment closing said jaw by striking it as the rod is moved in a reverse direction.

1,766,036. PIEZO-ELECTRIC CRYSTAL APPARATUS. ALFRED CROSSLEY, Washington, D. C., assignor, by mesne assignments, to Federal Telegraph Company, a Corporation of California. Filed Apr. 14, 1927. Serial No. 183,887. 8 Claims. (Cl. 171—327.)



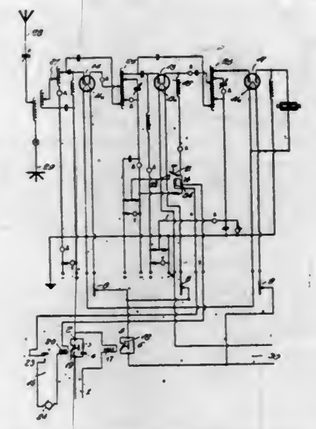
1. In a mounting for a piezo electric crystal element, a casing, comprising a base member constituting a conductive electrode and walls mounted upon said base member and supporting a top closure member and a piezo electric crystal element mounted upon said electrode and spaced from the walls of said casing for a distance substantially equal to an odd multiple of a quarter wave length of the air wave length corresponding to the frequency of said piezo electric crystal element for eliminating the absorption of energy from said piezo electric crystal element by space vibrations in the immediate vicinity of said piezo electric crystal element.

1,766,037. PIEZO-ELECTRIC CRYSTAL APPARATUS. LEO H. DAWSON, Washington, D. C., assignor, by mesne assignments, to Federal Telegraph Company, a Corporation of California. Filed Mar. 25, 1927. Serial No. 178,354. 8 Claims. (Cl. 88—14.)



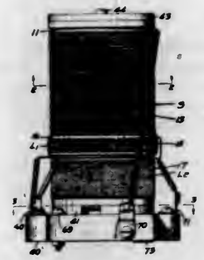
1. Apparatus for determining the cutting planes for piezo electric crystals from bodies of quartz comprising a tank rotatable about a vertical axis, a platform pivotally mounted on a horizontal axis within said tank, a central axis substantially normal to said first mentioned axis, scale members for determining the rotative movement of said tank and the angular disposition of said platform and central section, said central section being arranged to support a test section of quartz and optical means aligned with said vertical axis of said tank for observing said test section of quartz.

1,766,038. ELECTRON-TUBE CIRCUIT. LOUIS A. GEBHARD, Washington, D. C., assignor, by mesne assignments, to Federal Telegraph Company, a Corporation of California. Filed Mar. 26, 1927. Serial No. 178,791. 12 Claims. (Cl. 250—19.)



4. An electron tube transmitter comprising a plurality of electron tubes, a cathode supply circuit for said electron tubes, connections for supplying power to the cathodes from said cathode supply circuit, a keying circuit, and means controlled by said keying circuit for reducing the effective value of cathode heating energy at a predetermined time interval after the cessation of operation of said keying circuit.

1,766,039. HIGH-FREQUENCY COUPLING UNIT. FREDERICK A. KOLSTER, Palo Alto, Calif., assignor to Federal Telegraph Company, San Francisco, Calif., a Corporation of California. Filed May 5, 1926. Serial No. 106,827. 4 Claims. (Cl. 175—359.)

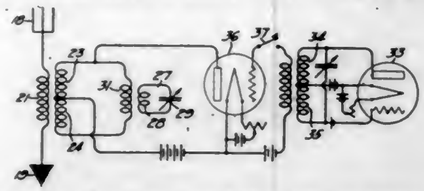


1. In a high frequency coupling unit, a secondary inductance coil comprising a pair of windings adapted to be tuned in resonance with radio frequency energy, a relatively small primary coil divided into two portions each portion thereof being closely coupled to one of the pair of windings constituting said secondary coil, and a second primary coil connected with said aforementioned primary windings and loosely coupled to said secondary coil.

1,766,040. SIGNAL-TRANSMITTING SYSTEM. FREDERICK A. KOLSTER, Palo Alto, Calif., assignor to Federal Telegraph Company, San Francisco, Calif, a Corporation of California. Filed July 30, 1927, Serial No. 209,405. Renewed Aug. 19, 1929. 3 Claims. (Cl. 250—17.)

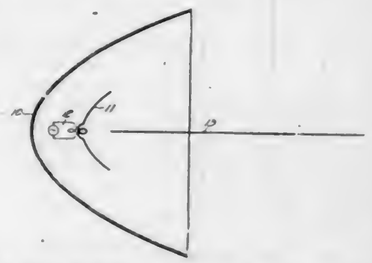
3. The method of suppressing harmonics in radio transmission systems characterized by the use of a pair of

coils for conjointly coupling a radio generator to a transmitting circuit, said method comprising admitting the energy of undesired harmonics to both coils whereby the effect of such energy is neutralized with respect to the



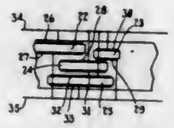
transmission circuit, and imposing a high impedance for energy flow thru one coil for energy of the desired frequency band whereby said other coil serves to transfer energy of the desired band to the transmission circuit.

1,766,041. RADIO APPARATUS AND METHOD. FREDERICK A. KOLSTER, Palo Alto, Calif., assignor to Federal Telegraph Company, San Francisco, Calif., a Corporation of California. Filed Oct. 15, 1928. Serial No. 312,431. 1 Claim. (Cl. 250—11.)



In a radio system, a paraboloid wave reflector, an antenna conductor positioned within said reflector, and another conductor extended for a substantial distance coincident with the axis of the reflector.

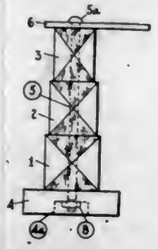
1,766,042. COMPOSITE PIEZO-ELECTRIC CRYSTAL DEVICE. ALEXANDER MCLEAN NICOLSON, New York, N. Y., assignor, by mesne assignments, to Federal Telegraph Company, a Corporation of California. Filed Dec. 20, 1926. Serial No. 155,898. 6 Claims. (Cl. 171—327.)



1. A piezo-electric device comprising a plurality of optically similar piezo-electric crystals of hetrogeneous size and shape physically secured in a single entity by means of a homogeneous binder surrounding each of said crystals and extending between the interstices with their principal axes parallel to each other, said crystals being completely embedded in said binder.

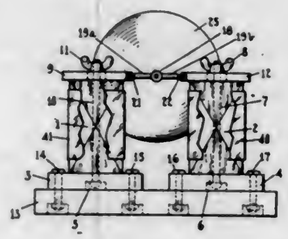
1,766,043. INTERNALLY-CLAMPED COMPOSITE PIEZO-ELECTRIC CRYSTAL DEVICES. ALEXANDER MCLEAN NICOLSON, New York, N. Y., assignor, by mesne assignments, to Federal Telegraph Company, a Corporation of California. Filed Dec. 20, 1926. Serial No. 155,900. 8 Claims. (Cl. 171—327.)

1. A composite piezo-electric Rochelle salt crystal adapted for torsional vibration comprising a plurality of component piezo-electric Rochelle salt crystals physically secured together with their c-axes parallel into a single entity by metallic clamping means passing internally through



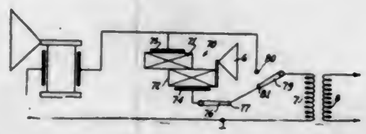
coincident bores in a plurality of said crystals, said crystals being so connected that piezo-electric torsional vibrations of said individual components may be integrated.

1,766,044. MECHANICAL COUPLING FOR PIEZO-ELECTRIC CRYSTAL DEVICE. ALEXANDER MCLEAN NICOLSON, New York, N. Y., assignor, by mesne assignments, to Federal Telegraph Company, a Corporation of California. Filed Jan. 11, 1927. Serial No. 160,360. 1 Claim. (Cl. 179—110.)



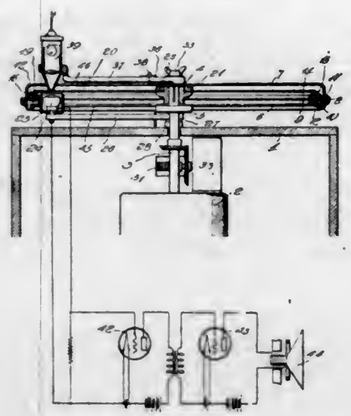
A piezo-electric translating device including a pair of spaced piezo-electric crystals disposed in substantially parallel relation, separate bases for said crystals, a common base to which said separate bases are secured, internal electrode and clamping assemblies comprising bolts and cap plates, said bolts extending through said crystals and securing said cap plates at one end of said crystals and engaging said separate base members at the other, thereby clamping said crystals between said cap plates and said separate bases and a movable element held between said caps and adapted to be driven thereby.

1,766,045. PIEZO-ELECTRIC CRYSTAL MODULATION. ALEXANDER MCLEAN NICOLSON, New York, N. Y., assignor, by mesne assignments, to Federal Telegraph Company, a Corporation of California. Filed Jan. 25, 1927. Serial No. 163,323. 4 Claims. (Cl. 179—1.)



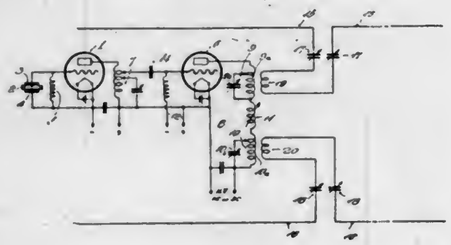
1. A pick-up system for converting sound into electrical oscillations corresponding thereto, said systems comprising a plurality of piezo-electric crystal devices arranged to convert sound waves into electrical oscillations disposed at different acoustic positions with respect to the source of sound and connected in series, and means for varying the piezo-electric effect of the individual piezo-electric crystal devices.

1,766,046. SOUND-REPRODUCING SYSTEM. JOHN O. PRESCOTT, Glenbrook, Conn., and FREDERICK A. KOLSTER, Palo Alto, Calif., assignors to Federal Telegraph Company, Newark, N. J., a Corporation of California. Filed Jan. 7, 1929. Serial No. 330,952. 2 Claims. (Cl. 179—100.3.)



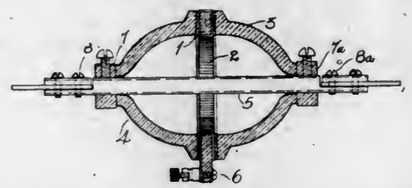
1. A sound reproducing system comprising a rotary mechanism, a casing arranged to be mounted downwardly upon said rotary mechanism, an annular raceway positioned round the interior periphery of said casing, a photographic sound record having it outer periphery terminating in an annular member rotatable with respect to said raceway, a photo-electric cell projecting through one side of said casing to a position adjacent said photographic sound record, a light beam projecting device extending through the opposite side of said casing to a position adjacent said photographic sound record, and means for simultaneously shifting said photo-electric cell and light beam projecting device at a speed proportioned to the rate of rotation of said photographic sound record.

1,766,047. RADIO TRANSMISSION SYSTEM. ALBERT H. TAYLOR, Washington, D. C., assignor, by mesne assignments, to Federal Telegraph Company, a Corporation of California. Filed Dec. 15, 1926. Serial No. 155,048. 1 Claim. (Cl. 250—17.)



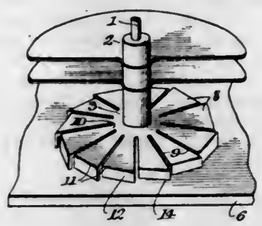
A high frequency transmission system comprising a piezo electric crystal element, an electron tube oscillator circuit for sustaining oscillations developed by said piezo electric crystal element, an electron tube having input and output circuits with the input circuit thereof connected with said electron tube oscillator circuit, a pair of independently tuned circuits connected in series in said output circuit, a tuning device located between said pair of independently tuned circuits and separate antennæ systems independently coupled to each of said tuned circuits one of said antennæ systems being arranged to radiate signaling energy at a frequency which is a harmonic of the frequency of said piezo electric crystal device and the other of said antennæ circuits being arranged to radiate signaling energy which is a different harmonic of the frequency of said piezo electric crystal device, said tuning device operating to regulate the relative amount of energy supplied to said antennæ at said different frequencies, said signaling energy being maintained in predetermined frequency displacement by operation of said piezo electric crystal device.

1,766,048. CURRENT TRANSFORMER FOR HIGH-FREQUENCY CURRENTS. ARTHUR M. TROGNER, East Orange, N. J., assignor, by mesne assignments, to Federal Telegraph Company, a Corporation of California. Filed Dec. 10, 1928. Serial No. 325,105. 10 Claims. (Cl. 175—358.)



1. A current transformer comprising a primary conductor having a relatively low inductance and a secondary conductor comprising a toroidal coil encircling said primary conductor and insulated members located adjacent opposite ends of said primary conductor and extending toward each other, said toroidal coil being disposed between the ends of said insulated members and spacially positioned and supported thereby.

1,766,049. HIGH-FREQUENCY CONTACT DEVICE. ARTHUR M. TROGNER, East Orange, N. J., assignor, by mesne assignments, to Federal Telegraph Company, a Corporation of California. Filed Mar. 9, 1929. Serial No. 345,853. 1 Claim. (Cl. 173—324.)

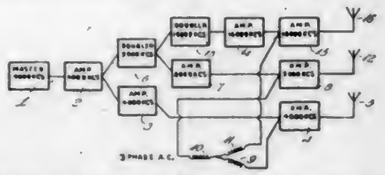


A device for establishing connection between a rotatable shaft and a conductive plate comprising an integral metallic sheet secured at its center to the rotatable shaft and being constituted by a multiplicity of radially positioned sectors each terminating in angularly disposed end portions with the extreme edges thereof engaging the surface of said conductive plate, each of said edges extending in a plane substantially tangent to a circle drawn through the smallest radius of the sector to which the edges connect.

1,766,050. MULTIPHASE CORNET SYSTEM. LEO C. YOUNG, Washington, D. C., assignor, by mesne assignments, to Federal Telegraph Company, a Corporation of California. Filed July 20, 1928. Serial No. 294,284. 20 Claims. (Cl. 250—10.)

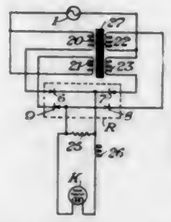
8. A high frequency transmission system comprising in combination a source of constant frequency energy, means

for amplifying the energy of fundamental frequency of said energy, means for amplifying the energy of harmonic



frequencies of said high frequency energy and a source of multiphase energy for alternately energizing said amplifying means in successive order.

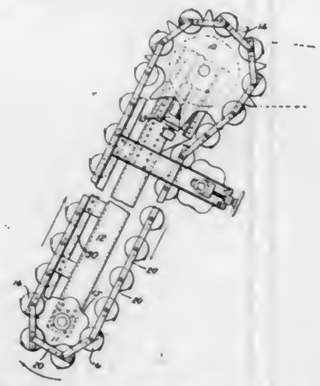
1,766,051. RECTIFIER CIRCUIT. DONALD G. ACKERLY, Wilkinsburg, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Oct. 29, 1926. Serial No. 145,008. 6 Claims. (Cl. 175—363.)



3. The combination with a source of alternating current, of four inductively related windings connected to the source, a rectifier comprising four asymmetric elements, two of the elements being connected between and in series with two of the windings and the other two elements being connected between and in series with the other two windings, and a load connected to the rectifier.

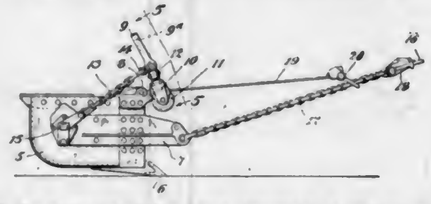
5. The combination with a source of alternating current, of four inductively related windings connected to the source, a full-wave rectifier having its elements for passing the positive half-wave of current connected between two of the windings and its elements for passing the negative half-wave of current connected between the other two windings and a load connected to the rectifier.

1,766,052. CONVEYER. JOHN A. BETTIN, Los Angeles, Calif., assignor to Emma A. Bettin, Los Angeles, Calif. Filed Aug. 6, 1927. Serial No. 211,027. 6 Claims. (Cl. 198—151.)



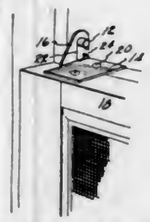
1. A conveyer mechanism embodying, in combination, a sprocket-shaped rotating member and a composite conveyer chain adapted to pass around that member, said composite conveyer chain comprising scoops contacting directly with the rotating member at the recessed portions thereof, and interconnecting links between the scoops, each scoop being non-rotatively connected to one end of an interconnecting link.

1,766,053. EXCAVATING SHOVEL. HERMAN J. BRENDLIN, New York, N. Y., assignor to The Hayward Company, New York, N. Y., a Corporation of New York. Filed Sept. 27, 1926. Serial No. 137,934. 6 Claims. (Cl. 37—135.)



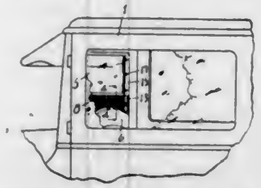
3. In a device of the class described, a shovel, means for suspending it including a spreader-bar, a haul rope, a draft bridle fixedly and directly attached to said shovel and said haul rope and a control-bridle adjustably connected adjacent the forward portion of said draft bridle and having operative connection with said spreader-bar whereby the angle of inclination of said shovel may be varied.

1,766,054. SCREEN HANGER. ARTHUR T. BRENNAN, Detroit, Mich. Filed Nov. 15, 1926. Serial No. 148,363. 1 Claim. (Cl. 156—14.)



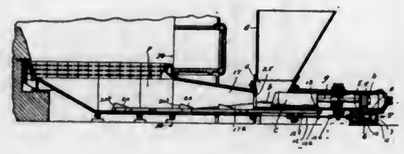
A screen hanger comprising a base adapted to be secured to a screen and having a perpendicular ear on one side provided with a vertical slot terminating at its lower end at the base and a diagonal slot extending downwardly from a point intermediate the ends of the vertical slot to an upright edge of the ear and terminating at its lower end at the base.

1,766,055. WINDSHIELD SCREEN. EDGAR B. CLEMENT and RAYMOND J. THOMPSON, Jackson, Mich. Filed Sept. 9, 1926. Serial No. 134,504. 11 Claims. (Cl. 296—94.)



4. The combination with a windshield frame provided with vertical slideways for the windshield pane and with a bottom sill having a forwardly facing gutter disposed at the rear of said slideways, a windshield pane, a screen disposed with its lower edge in front of said gutter and its upper edge on the inside of the pane, and attaching plates on the ends of said screen.

1,766,056. AUTOMATIC STOKER. ARTHUR O. DADY, Portland, Oreg. Filed Feb. 6, 1929. Serial No. 337,951. 10 Claims. (Cl. 110—44.)



1. In an automatic stoking device for furnaces, a retort, a fuel hopper including in its lower part a ram-chamber, a fuel-tunnel connecting said chamber with the retort of the furnace, said tunnel having a sloping floor provided with a horizontal longitudinal groove lying in a plane below the floor of the ram-chamber, a ram reciprocated in said ram-chamber, a pusher element connected to said ram and sliding in said floor groove and means for reciprocating said ram.

1,766,057. PROCESS FOR BREAKING PETROLEUM EMULSIONS. MELVIN DE GROOTE, St. Louis, and LOUIS T. MONSON, Maplewood, Mo., assignors to Wm. S. Barnickel & Company, Webster Groves, Mo., a Corporation of Missouri. Filed Jan. 21, 1929. Serial No. 334,100. 3 Claims. (Cl. 196—4.)

1. A process for breaking a petroleum emulsion of the water-in-oil type, which consists in subjecting the emulsion to the action of a demulsifying agent containing wood sulfite liquor.

1,766,058. PROCESS FOR BREAKING PETROLEUM EMULSIONS. MELVIN DE GROOTE, St. Louis, and LOUIS T. MONSON, Maplewood, Mo., assignors to Wm. S. Barnickel & Company, Webster Groves, Mo., a Corporation of Missouri. Filed Jan. 21, 1929. Serial No. 334,101. 9 Claims. (Cl. 196—4.)

1. A process for breaking a petroleum emulsion of the water-in-oil type, which consists in subjecting the emulsion to the action of a demulsifying agent containing a water-soluble derivative of lignin.

1,766,059. PROCESS FOR BREAKING PETROLEUM EMULSIONS. MELVIN DE GROOTE, St. Louis, and LOUIS T. MONSON, Maplewood, Mo., assignors to Wm. S. Barnickel & Company, Webster Groves, Mo., a Corporation of Missouri. Filed Jan. 21, 1929. Serial No. 334,102. 3 Claims. (Cl. 196—4.)

1. A process for breaking a petroleum emulsion of the water-in-oil type, which consists in subjecting the emulsion to the action of a demulsifying agent containing a tannin body.

1,766,060. PROCESS FOR BREAKING PETROLEUM EMULSIONS. MELVIN DE GROOTE, St. Louis, and LOUIS T. MONSON, Maplewood, Mo., assignors to Wm. S. Barnickel & Company, Webster Groves, Mo., a Corporation of Missouri. Filed Jan. 21, 1929. Serial No. 334,103. 10 Claims. (Cl. 196—4.)

1. A process for breaking a petroleum emulsion of the water-in-oil type, which consists in subjecting the emulsion to the action of a demulsifying agent comprising wood sulfite liquor material and an organic saponaceous detergent-forming body.

1,766,061. PROCESS FOR BREAKING PETROLEUM EMULSIONS. MELVIN DE GROOTE, St. Louis, and BERNHARD KEISER, Webster Groves, Mo., assignors to Wm. S. Barnickel & Company, Webster Groves, Mo., a Corporation of Missouri. Filed Jan. 21, 1929. Serial No. 334,110. 20 Claims. (Cl. 196—4.)

1. A process for breaking a petroleum emulsion of the water-in-oil type, which consists in subjecting the emulsion to the action of a demulsifying agent comprising a sulfonic body derived from the condensation of an aromatic body, an aldehyde, and an organic detergent-forming body.

1,766,062. PROCESS FOR BREAKING PETROLEUM EMULSIONS. MELVIN DE GROOTE, St. Louis, and BERNHARD KEISER, Webster Groves, Mo., assignors to Wm. S. Barnickel & Company, Webster Groves, Mo., a Corporation of Missouri. Filed Jan. 21, 1929. Serial No. 334,111. 20 Claims. (Cl. 196—4.)

1. A process for breaking a petroleum emulsion of the water-in-oil type, which consists in subjecting the emulsion to the action of a demulsifying agent containing a sulfonic acid body derived from the condensation of an aromatic body and an aldehyde.

1,766,063. PROCESS FOR BREAKING PETROLEUM EMULSIONS. MELVIN DE GROOTE, St. Louis, and LOUIS T. MONSON, Maplewood, Mo., assignors to Wm. S. Barnickel & Company, Webster Groves, Mo., a Corporation of Missouri. Filed Jan. 21, 1929. Serial No. 334,112. 16 Claims. (Cl. 196—4.)

1. A process for breaking a petroleum emulsion of the water-in-oil type, which consists in subjecting the emulsion to the action of a demulsifying agent containing a petroleum sulfonic body derived from the condensation of a petroleum body, characterized by being capable of producing a sulfonic acid, and an alcohol having fewer than twelve carbon atoms.

1,766,064. PROCESS FOR BREAKING PETROLEUM EMULSIONS. MELVIN DE GROOTE, St. Louis, and LOUIS T. MONSON, Maplewood, Mo., assignors to Wm. S. Barnickel & Company, Webster Groves, Mo., a Corporation of Missouri. Filed Jan. 21, 1929. Serial No. 334,113. 16 Claims. (Cl. 196—4.)

1. A process for breaking a petroleum emulsion of the water-in-oil type, which consists in subjecting the emulsion to the action of a demulsifying agent containing a petroleum sulfonic body derived from the condensation of a petroleum body, characterized by being capable of reaction with sulfuric acid, and an aldehyde.

1,766,065. PROCESS FOR BREAKING PETROLEUM EMULSIONS. MELVIN DE GROOTE, St. Louis, and LOUIS T. MONSON, Maplewood, Mo., assignors to Wm. S. Barnickel & Company, Webster Groves, Mo., a Corporation of Missouri. Filed Jan. 21, 1929. Serial No. 334,114. 16 Claims. (Cl. 196—4.)

1. A process for breaking a petroleum emulsion of water-in-oil type, which consists in subjecting the emulsion to the action of a demulsifying agent containing a petroleum sulfonic body derived from the condensation of a petroleum body, characterized by being capable of reaction with sulfuric acid, and a ketone.

1,766,066. PROCESS FOR BREAKING PETROLEUM EMULSIONS. MELVIN DE GROOTE, St. Louis, and ARTHUR F. WIRTEL, Webster Groves, Mo., assignors to Wm. S. Barnickel & Company, Webster Groves, Mo., a Corporation of Missouri. Filed Jan. 21, 1929. Serial No. 334,115. 16 Claims. (Cl. 196—4.)

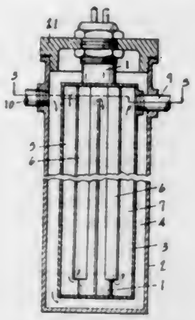
1. A process for breaking a petroleum emulsion of the water-in-oil type, which consists in subjecting the emul-

sion to the action of a demulsifying agent containing an aromatic sulfonic body obtained by condensation of an aromatic body and a ketone.

1,766,067. PROCESS FOR BREAKING PETROLEUM EMULSIONS. MELVIN DE GROOTE, St. Louis; LOUIS T. MONSON, Maplewood; and ARTHUR F. WIRTEL, Webster Groves, Mo., assignors to Wm. S. Barnickel & Company, Webster Groves, Mo., a Corporation of Missouri. Filed Jan. 21, 1929. Serial No. 334,117. 20 Claims. (Cl. 196—4.)

1. A process for breaking a petroleum emulsion of the water-in-oil type, which consists in subjecting the emulsion to the action of a demulsifying agent containing an aromatic sulfonic body obtained by condensation of an aromatic body and an aliphatic polyhydric alcohol having fewer than twelve carbon atoms.

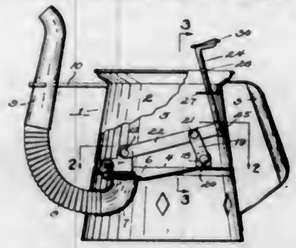
1,766,068. INSTANTANEOUS ELECTRIC WATER HEATER. GEORGE C. DE LANNOY, Yountville, Calif., assignor to Holland Furnace Company, Holland, Mich. Filed Sept. 14, 1928. Serial No. 305,890. 5 Claims. (Cl. 219—39.)



1. The combination in an instantaneous electric water heater of a centrally disposed encased cylindrical electric heater unit, an outer surrounding shell with a head to which said heater unit is connected forming an outer reservoir, an inner labyrinthine reservoir comprising a cylindrical shell within the outer shell and embracing the said heating unit and held in spaced relation to the said electric heating unit by alternating longitudinal partitions extending from top to near bottom and from bottom to near top of the said space, a water supply connection leading to the outer shell and connecting to one end of the labyrinthine passage of the said labyrinthine reservoir, a discharge connection from the end of the labyrinthine reservoir out through the outer shell, a faucet to control said discharge, a pressure gauge with reverse switch means controlled thereby connected to said discharge, and a reverse relay for switching the current off and on.

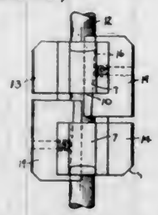
1,766,069. OIL MEASURE. HAROLD B. DONLEY and HOWARD BALZER, Columbus, Ohio, assignors to The Columbus Auto Brass Company, Columbus, Ohio, a Corporation of Ohio. Filed Mar. 30, 1928. Serial No. 266,050. 1 Claim. (Cl. 221—16.)

An oil measure device comprising a body, a wall secured within said body and constituting the bottom of an oil measuring chamber said body being provided with a discharge opening, a conduit leading from said discharge opening, a valve disk for controlling fluid flow through said opening, a bracket mounted on said bottom, an arm pivotally secured to said bracket and having the outer portion thereof secured to said disk, spring means carried by said bracket and operating on said disk to normally maintain the same in a closed position, a bar pivotally connected at one end of said arm, a floating link



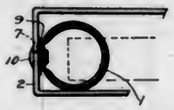
having the upper portion connected with an intermediate part of said bar, the lower end of said link being pivotally connected with the bottom wall, and an operating stem connected with the outer end of said bar and extending above said body.

1,766,070. SUCKER-ROD GUIDE. JOHN C. GARROTT, Houston, Tex. Filed July 5, 1927. Serial No. 203,377. 8 Claims. (Cl. 308—4.)



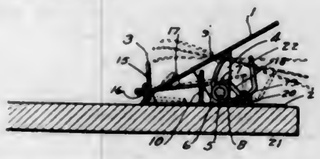
1. A sucker rod guide comprising a rigid body having a longitudinal channel centrally thereof for the rod, two opposite radial guide ribs, one of which has a transverse slot midway thereof extending to said channel, short ribs on said body at right angles to said guide ribs, one at one side of said slot, and the other on the opposite side, said channel being open beyond said short ribs to admit said rod, and wedge blocks to clamp said body to said rod.

1,766,071. BINDER. LESTER C. GREEN, Seattle, Wash. Filed June 17, 1929. Serial No. 371,667. 4 Claims. (Cl. 281—25.)



3. In a binder of the character described, a plurality of open rings upon which the leaves of the binder may be placed, and means for permanently closing, attaching, and rigidly holding the rings to the back of the binder cover.

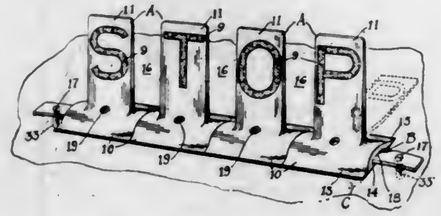
1,766,072. PAPER FILE. MARCUS M. HANSEN, Seattle, Wash. Filed Feb. 10, 1927. Serial No. 167,128. 5 Claims. (Cl. 24—66.)



4. In a file of the class described, a base, means for holding letters or similar papers in the file against the

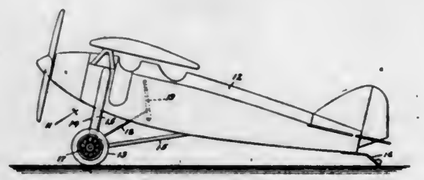
base, a transverse bar mounted on the base adjacent to and cooperating with the said letter holding means, and a pivotally mounted lever upon the base also cooperating with and positioned below the said letter holding means and located to be engaged by the said letter holding means for operating the said bar to adjust the ends of the letters to such positions that they will be gripped by the letter holding means.

1,766,073. YIELDING UPRIGHT TRAFFIC MARKER. MELVIN E. HARTZLER, Downers Grove, and THOMAS H. FERGUSON, Oak Park, Ill.; said Ferguson assignor to said Hartzler. Filed Mar. 15, 1929. Serial No. 347,325. 7 Claims. (Cl. 40—125.)



1. A traffic marker construction of the class described, comprising a normally upstanding display portion of inherently flexible material and a base portion integral with and of the same material as said display portion and having a substantially horizontal under surface for engaging the surface of the pavement, a core of metal in said base portion, and an anchor for engaging said core and securing the marker to the pavement.

1,766,074. AIRPLANE BRAKE. HARVEY HIEBS, Los Angeles, Calif. Filed July 5, 1928. Serial No. 290,313. 17 Claims. (Cl. 244—2.)

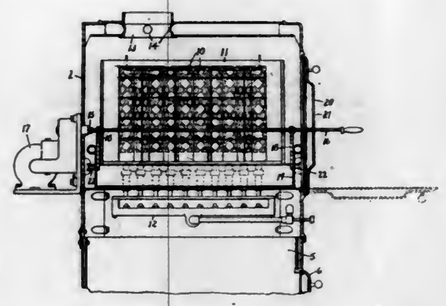


11. A braking device embodying: a ground wheel; a brake drum; and means interposed between said wheel and said drum for imparting rotation to said drum opposite to the rotation of said wheel.

16. A braking device embodying a ground wheel; a brake drum; and means interposed between said wheel and said drum for imparting a speed of rotation to said drum less than the speed of rotation of said wheel.

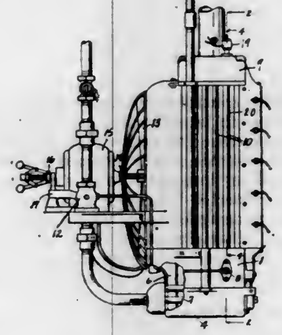
1,766,075. GAS STOVE. HUBERT R. HUMPHREY, Kalamazoo, Mich., assignor to General Gas Light Company, Kalamazoo, Mich. Filed Jan. 19, 1926. Serial No. 82,248. 16 Claims. (Cl. 126—41.)

16. In a structure of the class described, the combination of a main casing, a cooking chamber within said casing having a side opening, a heating unit casing mounted within said main casing and comprising a burner, radiating elements disposed to face said opening in said cooking chamber in operative relation to said burner, an implement driving element disposed at the rear of the cooking chamber, and a pan slidable within said cooking chamber



and provided with implement supports adapted to guide an implement into coacting relation to said driving element.

1,766,076. HEATING APPARATUS. HUBER9 R. HUMPHREY and GEORGE A. HUMPHREY, Kalamazoo, Mich., assignors to General Gas Light Company, Kalamazoo, Mich. Filed Jan. 23, 1929. Serial No. 334,545. 13 Claims. (Cl. 126—90.)

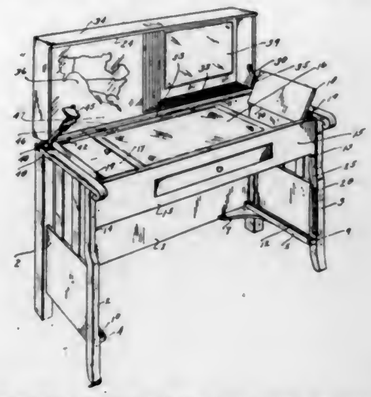


5. In a heating apparatus, the combination of a combustion chamber, a flue header, radiating flues opening to said combustion chamber and flue header, a main burner within said combustion chamber, a pilot disposed in said combustion chamber in operative relation to said burner and adjacent the lower end of one of said flues, and a control mechanism for said heating apparatus including a switch, a spring acting to close said switch, a tubular thermal element disposed in said flue associated with said pilot and a second thermal element operatively associated with said switch arranged within said tube and operatively connected thereto.

1,766,077. COMBINATION BENCH AND WRITING DESK. NIELS HANSEN JENSEN, Portland, Oreg. Filed Nov. 5, 1928. Serial No. 317,251. 4 Claims. (Cl. 155—43.)

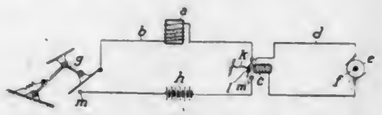
3. In a device of the class described, the combination of a frame, a seat member comprising a seat section and a writing desk section each hinged relative to the other, the desk section being hingedly secured to the frame to

form a device normally to be used as a settee and means for actuating the seat section into a back for a writing desk and for actuating the desk section into position for use as



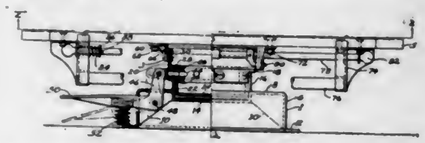
a writing desk and means for maintaining the oppositely disposed surfaces of the desk and the seat section in spaced relation when the device is being used as a settee.

1,766,078. ELECTRICALLY-CONTROLLED BRAKING DEVICE FOR POWER VEHICLES. GEORG KELLNER, Berlin-Wilmersdorf, Germany. Filed May 11, 1928, Serial No. 276,885, and in Germany Dec. 11, 1926. 4 Claims. (Cl. 188—158.)



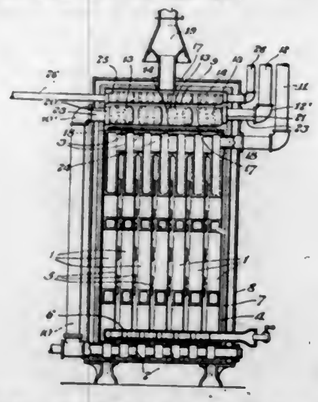
1. An electrically controlled braking device for power vehicles, comprising, in combination, an electric brake, a source of electric current for exciting its magnet, a common manually controllable circuit for said brake and said source, a circuit closer inserted into this circuit, another circuit-closer also inserted into said circuit and adapted to be actuated electromagnetically, electromagnetic means for actuating said other circuit closer, a separate circuit into which said electromagnetic means are inserted, and speed-operated means for closing said separate circuit.

1,766,079. RAILWAY-CAR SEAT. JOHN M. KNIGHT, Atlantic Highlands, and VICTOR WILLOUGHBY, Ridgewood, N. J., assignors to American Car and Foundry Company, New York, N. Y., a Corporation of New Jersey. Filed Mar. 31, 1927. Serial No. 179,952. 10 Claims. (Cl. 155—96.)



10. In a car, a plurality of pedestals arranged relatively close together, a plurality of seats, mechanism secured to each seat for rotatably mounting the latter on a pedestal when in position of use and for permitting the seat to tilt forwardly, means normally restraining the seats against rotation, and locking means for normally restraining the seats against movement on said mechanism, the said mechanism permitting said seats to be moved vertically and normally preventing their rotation when moved vertically to provide clearance space for rotating adjacent seats.

1,766,080. WATER HEATER. ALEXANDER A. MARKS, Philadelphia, Pa. Filed Nov. 22, 1922. Serial No. 602,591. 2 Claims. (Cl. 122—20.)



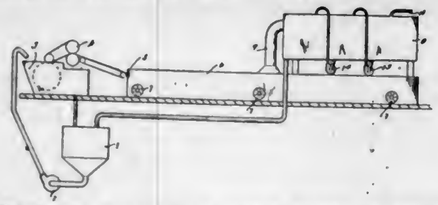
1. A boiler comprising a plurality of hollow elements recessed to form a combustion chamber and having passages between them to which products of combustion are discharged from said chamber, and a heater disposed above said passages and comprising a casing forming chambers with a plurality of substantially straight vertical flues passing therethrough and a plurality of external vertically extending fissures between the walls of said chambers.

1,766,081. DEVICE FOR ADJUSTABLY ATTACHING CYLINDER LOCKS TO DOORS AND FURNITURE LOCKS. HEINRICH MÜNCH, Schlagbaum, near Velbert, Germany, assignor to The Firm Schlossfabrik-Aktiengesellschaft vorm. Wilh. Schulte, Schlagbaum, near Velbert, Germany. Filed July 23, 1929, Serial No. 380,299, and in Germany Apr. 21, 1927. 2 Claims. (Cl. 70—46.)



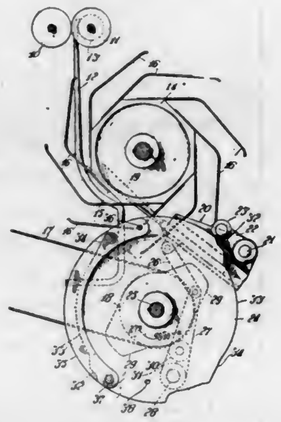
1. In a lock, a lock casing, a support attached to a wall of said casing, guiding means carried by said support, a cylinder lock slidably and non-rotatably engaging said guiding means, and a barrel in engagement with said support so as to be held from axial movement while permitted to revolve, said cylinder lock and barrel having a threaded connection whereby on rotation of the barrel the cylinder lock will be slidably adjusted toward or from said casing wall on said guiding means.

1,766,082. METHOD OF CONSERVING THE HEAT AND PULP FROM PULP-DRYING MACHINES. SIGURD NORMAN, Newberg, Oreg. Filed Jan. 29, 1929. Serial No. 335,993. 1 Claim. (Cl. 92—38.)



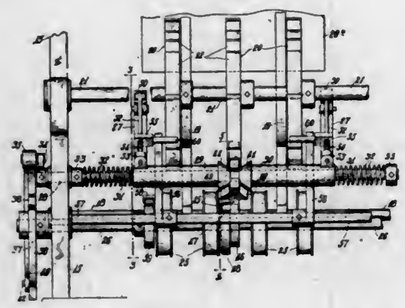
The herein described continuous method of utilizing the heat of a drying chamber and retrieving the pulp particles held in suspension by the heated vapor consisting in driving the vapors into a condensing chamber, spraying water upon the vapors, utilizing the spent spray a plurality of times, and finally conducting the condensed vapors and retrieved matter in a warm condition to a mixing chamber.

1,766,083. DELIVERY APPARATUS FOR PRINTING PRESSES. CHARLES J. RICHTER, Berwyn, Ill., assignor to The Goss Printing Press Co., Chicago, Ill., a Corporation of Illinois. Filed Sept. 10, 1928. Serial No. 305,022. 19 Claims. (Cl. 93—93.)



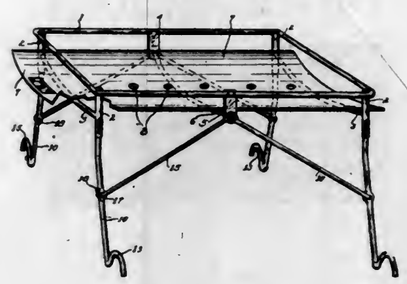
1. In a delivery apparatus for papers moving downwardly in timed relation, the combination of a receiver to which said papers are delivered, and means movable into the normal path of the papers adapted by continued engagement with one of said papers at intervals as it moves downwardly to said receiver to lead said paper to a different position on said receiver from that at which the adjacent preceding papers are deposited thereon.

1,766,084. DELIVERY APPARATUS FOR PRINTING PRESSES. CHARLES J. RICHTER, Berwyn, Ill., assignor to The Goss Printing Press Co., Chicago, Ill., a Corporation of Illinois. Filed Sept. 10, 1928. Serial No. 305,023. 15 Claims. (Cl. 93—93).



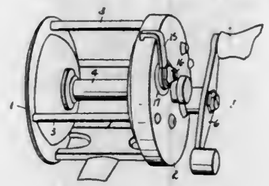
1. In a delivery apparatus for papers moving downwardly in timed relation, the combination of a receiver, means serving normally to deposit the papers in regularly piled arrangement on said receiver, and means adapted at intervals to grip one of said papers and to carry the paper downwardly into changed position on said receiver as compared with the position at which the other papers are deposited on said receiver.

1,766,085. ELEVATED BATH SUPPORT FOR INFANTS. FRANK A. RUMER, Portland, Oreg. Filed Oct. 24, 1929. Serial No. 402,179. 3 Claims. (Cl. 4—185.)



1. In a device of the class described, the combination of an endless rim, tubular posts downwardly extending from the rims, straps downwardly extending from opposite sides of the rim and substantially central of the sides, stiffener supports disposed laterally of the rim and in spaced relation with the endless rim, a supporting hammock removably disposed upon the stiffener supports, folding legs associated with the corner posts, said legs having their outer ends formed to engage the upper rim surface of a bath tub and side braces hingedly secured to the central straps and adapted for engagement and disengagement with the folding legs.

1,766,086. FISHING REEL. SAMUEL G. RUSSELL, Kalamazoo, Mich., assignor to Shakespeare Company, Kalamazoo, Mich. Filed Sept. 26, 1928. Serial No. 308,444. 3 Claims. (Cl. 242—87.7.)



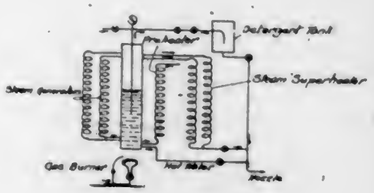
1. In a fishing reel, the combination with a frame comprising a head member, a spool provided with a pinion, a U-shaped support arranged to embrace said pinion and pivoted at the end of one arm to said head member, a driving gear mounted on said support in coacting relation with said pinion, an eccentric rotatably mounted on said head member and provided with a finger piece, said eccentric being engaged with the other arm of said support whereby when the eccentric is actuated the support is shifted on its pivot, said eccentric being provided with a keeper member having spaced notches, and a spring detent mounted on the pivoted end of said support to coact with said keeper member.

1,766,087. MUSIC CHART BLACKBOARD. NELL LUCILLE SULLIVAN, New London, Wis. Filed Sept. 9, 1926. Serial No. 134,491. 2 Claims. (Cl. 84—471.)



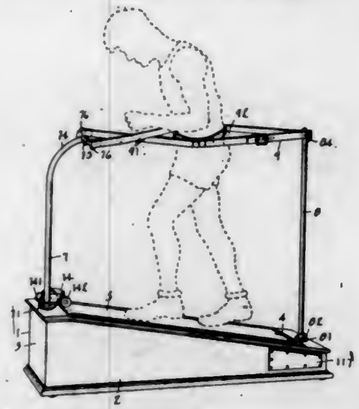
1. As a new article of manufacture, a blackboard having delineated thereon a musical instrument keyboard in perspective and music staffs arranged parallel to said keyboard delineation, said board having a surface upon which characters or notes may be inscribed upon said staffs or keyboard so that the notes may be readilyl associated with the keys which they designate, the construction of the blackboard permitting the erasure of the inscribed notes and the insertion of new ones.

1,766,088. APPARATUS FOR CLEANING SURFACES. STUART A. WIER, Dallas, Tex., assignor to Tridex Corporation, Dallas, Tex., a Corporation of Delaware. Filed Feb. 14, 1927. Serial No. 168,161. 14 Claims. (Cl. 299—84.)



1. In a surface cleaning apparatus, a generator for producing hot fluids and including a central vertical column surrounded by coils, a tank for containing a detergent solution means for conducting a hot fluid of water content from the column to the tank, one of said coils having a connection for receiving water under pressure and delivering it to the column, another of said coils having its upper end only connected with the column, a steam conductor leading from the bottom of said last named coil, a solution conductor leading from the tank, a liquid conductor connected with the lower portion of the column and also connected with the solution and steam conductors, and a distributor receiving fluids from all three of said conductors.

1,766,089. TREADMILL EXERCISING DEVICE. A. J. WOOD, Grand Rapids, Mich. Filed Aug. 6, 1928. Serial No. 297,725. 11 Claims. (Cl. 272—69.)



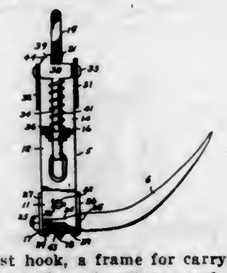
2. In a tread mill exerciser, the combination of a frame with inclined top, a series of transverse rollers disposed to support the tread, an endless tread belt disposed around said roller, and a tensioning roller within said tread belt beneath said rollers with independent adjustment for the opposite ends thereof, as specified.

1,766,090. MEANS FOR OBTAINING VERY SHARP PHOTOGRAPHS WITH FREE CAMERAS. RICHARD WÖRSCHING, Starnberg, Germany. Filed Apr. 5, 1926. Serial No. 99,687, and in Germany Feb. 10, 1926. 1 Claim. (Cl. 248—30.)



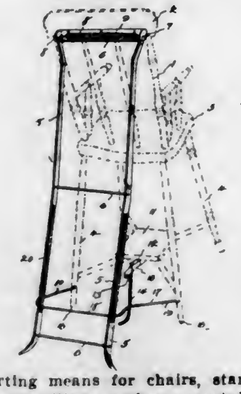
Means for steadying a camera by anchoring it to the ground while it is held in the hands of the operator so that sharp photographs can be obtained, comprising an oblong rectangular cast-metal bracket member having a transverse opening extending therethrough from side to side thereof and provided at an end thereof with a machine-screw stud for engagement with a coacting socket centrally arranged in the bottom of the camera, whereby the bracket member is adapted to be secured to the camera, an anchoring device consisting of a single length of linear flexible material having one end movable through the opening in the bracket, whereby the anchoring device may be adjusted for varying its effective operative length, the other end of said device being free from connection with the bracket so as to depend therefrom and be disposed to permit it to be held by the pressure of the foot of the operator against the ground surface, and a fastening element for holding the first-named end of said anchoring device against shifting movement.

1,766,091. BALE-HOIST HOOK. MICHELE P. BACCOMO, Greenfield, Calif. Filed June 19, 1928. Serial No. 286,583. 9 Claims. (Cl. 294—124.)



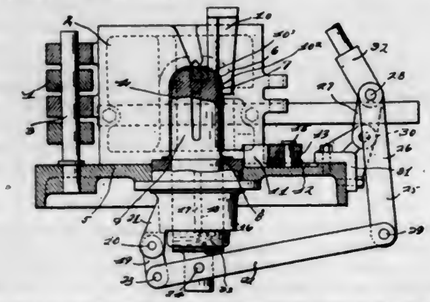
1. In a bale hoist hook, a frame for carrying prongs, a bail having the parts thereof coplanar and providing axially aligned trunnions at the extremities thereof, and means providing bearings in said frame for the pivotal reception of said trunnions whereby said frame is arranged to be disposed entirely between said bail extremities.

1,766,092. SUPPORT FOR CHAIRS, STANDS, AND THE LIKE. ALBERT W. BAILEY, New Haven, Conn. Filed Mar. 22, 1929. Serial No. 349,247. 4 Claims. (Cl. 155—77.)



1. A supporting means for chairs, stands or the like comprising an auxiliary spring operated leg or prop; means comprising a latch for retaining said leg or prop in its closed position; a tripping means for releasing said latch operating automatically and means comprising a spring normally under tension for throwing said leg or prop into its open or supporting position.

1,766,093. MOLD. ARTHUR T. BATEMAN and ANDREW IRVINE, Detroit, Mich., assignors to Bohn Aluminum & Brass Corporation, Detroit, Mich., a Corporation of Michigan. Filed July 30, 1928. Serial No. 296,379. 7 Claims. (Cl. 22—136.)



4. The combination with a support and a permanent mold upon the support having a downwardly opening mold cavity, of a permanent core adapted to be positioned within the mold cavity and to be withdrawn therefrom, a member secured to the support and forming a bushing for the core, a link pivotally connected to and depending from the member, a lever pivotally connected to the lower end of the first mentioned link and connected to the core, and toggle linkage connected to the support and lever for swinging the latter to actuate the core.

1,766,094. PLANT-SUPPORTING CLIP. JOHN W. BAUER, Naperville, Ill. Filed Mar. 16, 1929. Serial No. 347,509. 15 Claims. (Cl. 47—47.)



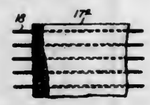
1. In combination, a relatively rigid upright supporting member, a clip for holding the stem of a growing plant, said clip being formed of a single piece of material shaped to form a loop at one end having an entrance opening for a plant stem thereinto, and means for frictionally securing the clip to said member at different points in the length of the body of the clip and at any point throughout the length of the said supporting member.

1,766,095. SOUND-PRODUCING TOY. OLLIE M. BEALL, Des Moines, Iowa. Filed May 13, 1929. Serial No. 362,758. 6 Claims. (Cl. 46—46.)



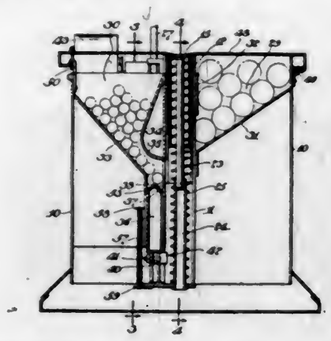
1. In a device of the class described, a base member having an opening and designed to be held between the two hands of the operator, a projection on the said base member designed to rest between the thumb and forefinger of the operator, and a pipe secured to said base member and terminating adjacent said opening.

1,766,096. SHEET MATERIAL AND METHOD OF MAKING THE SAME. EDWARD L. BENEDICT, Pittsburgh, Pa., Filed Aug. 15, 1928. Serial No. 299,773. 1 Claim. (Cl. 92—40.)



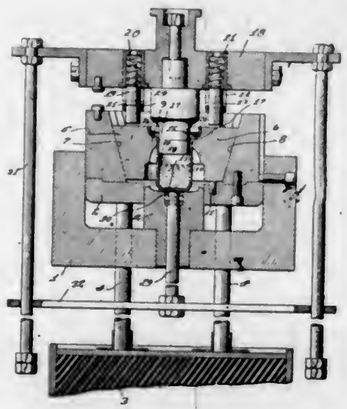
A paper sheet containing reinforcing strands composed of paper pulp imbedded therein and disposed between the exposed surfaces thereof.

1,766,097. DISPENSING RECEPTACLE FOR CIGARS AND CIGARETTES. PHILIP BONAVENTURA, Philadelphia, Pa. Filed July 15, 1929. Serial No. 378,294. 9 Claims. (Cl. 312—79.)



1. A device of the character described comprising a casing, a vertically movable delivery member mounted in said casing, means for actuating said delivery member, the casing having a cigar magazine arranged on one side of the delivery member and a cigarette magazine arranged on the other side thereof, and means for selectively feeding a cigar or a cigarette from the respective magazines to the delivery member.

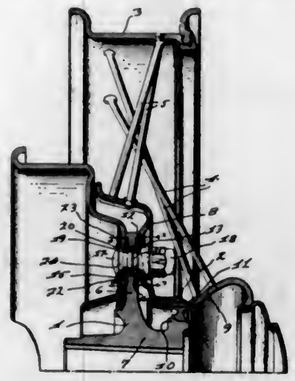
1,766,098. APPARATUS FOR FORMING CUP-SHAPED MEMBERS. WILLIAM N. BOOTH, Detroit, Mich., assignor to Kelsey-Hayes Wheel Corporation, Detroit, Mich., a Corporation of New York. Filed May 2, 1927. Serial No. 188,340. 12 Claims. (Cl. 113—44.)



1. In an apparatus for forming cup-shaped members, the combination with a die for receiving a cup-shaped member, of means engageable within said cup-shaped member for forcing liquid outwardly thereagainst to expand the same, and means for shearing a portion from the bottom of the cup-shaped member.

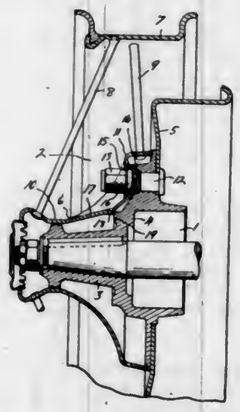
1,766,099. DEVICE FOR SECURING WHEEL BODIES TO WHEEL HUBS. WILLIAM N. BOOTH, Detroit, Mich., assignor to Kelsey-Hayes Wheel Corporation, Detroit, Mich., a Corporation of New York. Filed Dec. 12, 1927. Serial No. 239,564. 4 Claims. (Cl. 301—9.)

1. In a vehicle wheel, in combination, a hub member, a wheel body member, cooperating means upon the hub member and wheel body member for driving the latter with the former, including a tubular projection upon the wheel body member having a cammed face, means for securing the wheel body member to the hub member, including a bolt extending through the projection and a nut upon the bolt having a cammed face engaging the cammed face



of the projection, and a brake drum having a web resiliently providing for movement of the nut over the projection and cooperating with the latter to normally lock the former in place and also holding the projection firmly in place.

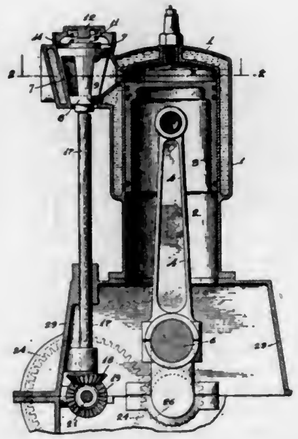
1,766,100. WIRE WHEEL. WILLIAM N. BOOTH, Detroit, Mich., assignor to Kelsey-Hayes Wheel Corporation, Detroit, Mich., a Corporation of New York. Filed June 25, 1928. Serial No. 288,195. 3 Claims. (Cl. 301—9.)



1. In a wire wheel, the combination with a hub member having a flange, of a wire wheel body having a rim member, a flexible hub shell and spokes extending between said rim member and hub shell, said hub shell being depressed at angularly spaced points intermediate its points of connections with said spokes to bear upon said flange and limit axial movement of said wire wheel body upon said hub member, and means for securing said wire wheel body to said hub member, said means engaging said hub shell and flexing the same after it bears upon said flange.

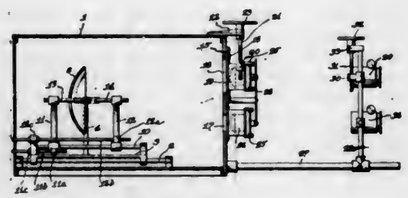
1,766,101. ROTARY VALVE. BENJAMIN F. BOWEN, Richmond, Calif., assignor of one-half to H. W. Bottger, Richmond, Calif. Filed Aug. 9, 1928. Serial No. 298,534. 5 Claims. (Cl. 123—80.)

1. The combination with the cylinder block and head of an internal combustion engine having intake and exhaust passages adapted to communicate with each cylinder of the engine and having a conical valve seat formed between the intake and exhaust passage for each cylinder, of a conical valve rotatably seated within each valve seat and having a channel arranged to alternately connect and disconnect the exhaust and intake passages with the cylinder; caps mounted upon the block to normally close openings formed over each valve, and removable to permit the inserting and removal of said valves through said



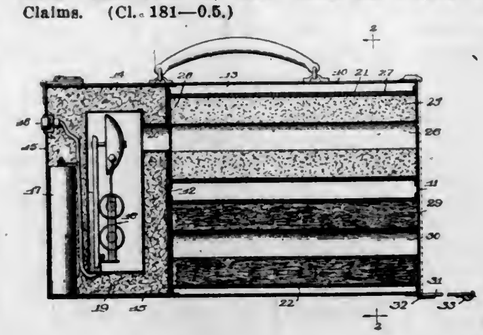
openings; means mounted between the caps and the valves to normally hold the valves seated; valve shafts rotatably mounted upon the block and having their upper ends engaging the valves to rotate the same, said valves being slidably movable axially relative to the shafts to compensate for wear and to permit removal of the valves from said shafts; and means for rotating the shafts to actuate the valves in timed relation to the movement of pistons mounted within the cylinders.

1,766,102. PROJECTION APPARATUS. KARL BRENKERT, and JOSEPH W. BRENKERT, Detroit, Mich. Filed Apr. 25, 1927. Serial No. 186,206. 5 Claims. (Cl. 88—24.)



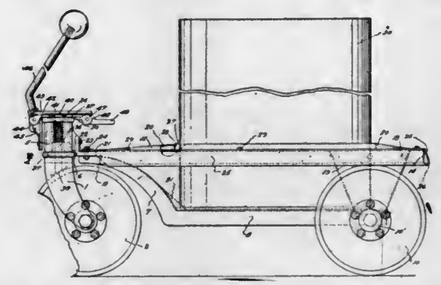
1. A projector comprising a light source, a tiltably mounted concave reflector adapted to produce a converging beam, means for tilting said reflector, a pair of lenses positioned to divide the beam, one of said lenses being adjustably mounted, and means for adjusting said lens to follow its division of the beam on tilting of said reflector.

1,766,103. APPARATUS FOR DEMONSTRATING SOUND-ABSORBING PROPERTIES. CHARLES F. BURGESS, Bokeelia, Fla., assignor to C. F. Burgess Laboratories, Inc., Madison, Wis., a Corporation of Delaware. Filed June 19, 1929. Serial No. 372,018. 7 Claims. (Cl. 181—0.5.)



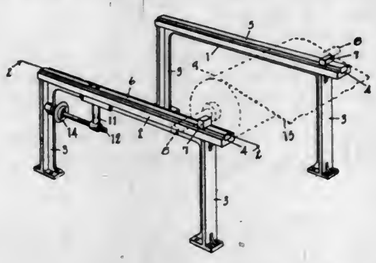
1. Apparatus of the class described, comprising a vibration absorbing construction, a controllable sound generating device therein, a duct for conveying sound from said device and a member to be demonstrated having a passage therethrough in communication with said duct.

1,766,104. TRUCK. JOHN W. COATES, Detroit, Mich. Filed May 18, 1927. Serial No. 192,204. 4 Claims. (Cl. 188—119.)



1. In a truck, a wheeled body, a leg pivotally supported by said body, a steering wheel carried by said leg, a stem slidably mounted in said leg, a brake shoe carried by said stem and adapted to engage said wheel, a member fixed to said leg and rotatable therewith, and a handle having an extension operative in said member and adapted to engage said stem.

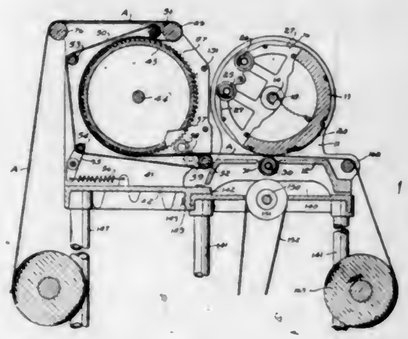
1,766,105. SUPPORT FOR PAPER ROLLS AND THE LIKE. ARTHUR W. COLE, Kalamazoo, Mich., assignor to Rex Paper Company, Kalamazoo, Mich. Filed July 30, 1928. Serial No. 296,268. 2 Claims. (Cl. 242—55.2.)



1. A support for paper rolls and the like comprising spaced horizontal bed members provided with supporting

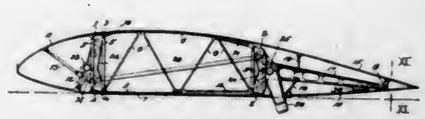
pedestals at the ends thereof and having groove-like ways in the faces thereof, one of said bed members being longitudinally slotted, roll supporting bars slidable in said ways and provided with stops, a downwardly projecting arm on one of said supporting bars disposed through said slot in said bed member, an adjusting shaft rotatably mounted on one of the pedestals and having threaded engagement with said arm, and a hand wheel on said shaft.

1,766,106. PAPER-FEEDING MECHANISM. PETER M. COLQUHOUN, Lakewood, and WILLIAM R. ALLEN, Hudson, Ohio, assignors to The American Multigraph Company, Cleveland, Ohio, a Corporation of Ohio. Filed Dec. 6, 1927. Serial No. 238,100. 11 Claims. (Cl. 101—228.)



1. The combination, with a multigraph comprising a rotary drum and an impression platen, of a paper feed drum arranged to move at the same speed as the multigraph drum, a gear mounted coaxially with said paper fed drum and constantly geared with the multigraph, and settable means for automatically connecting and disconnecting said gear to the paper feed drum during a portion of one rotation of the multigraph drum.

1,766,107. AEROFOIL. JOHN F. COOK, Jr., Detroit, Mich. Filed Sept. 5, 1924. Serial No. 735,986. 7 Claims. (Cl. 244—12.)



1. An aerofoil comprising spars, rigid trussed ribs connecting said spars and having upper and lower flexible chord members extended beyond one of the spars forming a flexible nose framing and formed to conform to the desired cross-sectional outline of said nose portion of the aerofoil, means within said nose portion connected to said flexible chord members for flexing the same, to modify the cross-sectional curvature of said nose portion, and a flexible covering secured to said chord members.

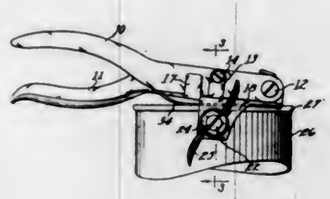
1,766,108. RECIPROCATING CORE DRILL. LEONARD S. COPELIN, Compton, Calif. Filed Nov. 29, 1926. Serial No. 151,399. 4 Claims. (Cl. 255—72.)

4. A reciprocating core drill comprising a body member adapted to be attached to a cable, a chamber in said body member communicating with mud passages therein, resilient means in said chamber, a plug for said chamber having a passage therein,—an outer barrel on said body member, an inner barrel freely mounted in said outer barrel spaced apart therefrom, cutters on the lower end of both



barrels,—a head on the inner barrel having a passage therethrough, a valve in said passage, and a hollow nipple on said head adapted to enter and close the passage in said plug and engage the resilient means in said chamber.

1,766,109. CAN OPENER. CALEB COTTEN, Salt Lake City, Utah, and ISRAEL P. DUNCAN, Los Angeles, Calif., assignors to said Israel P. Duncan, as trustee. Filed Feb. 11, 1928. Serial No. 253,589. 7 Claims. (Cl. 30—3.)

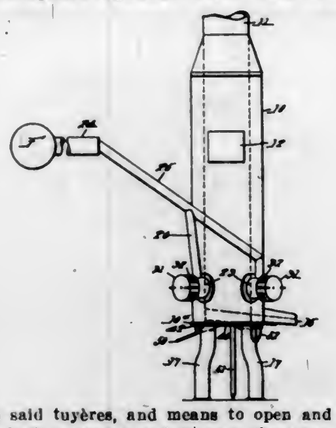


1. A can opener comprising a pair of lever arms movable to and from each other, a knife blade on one of said arms for penetrating and cutting a can end, a traction wheel on the other arm disposed in a plane offset from the plane of said blade for engaging the underside of a can bead, a catch to lock said arms together with said wheel and blade in near position, resilient means on one of said arms opposite to said wheel to frictionally press said wheel against the underside of said bead when said arms are locked in near position, and means to drive said wheel.

1,766,110. METALLURGICAL FURNACE. DANIEL CUSHING, Cambridge, Mass. Original application filed July 19, 1926, Serial No. 123,279, and in Great Britain Sept. 26, 1927, now Patent No. 1,703,337, granted Feb. 26, 1929. Divided and this application filed Dec. 12, 1928. Serial No. 325,557. 5 Claims. (Cl. 266—30.)

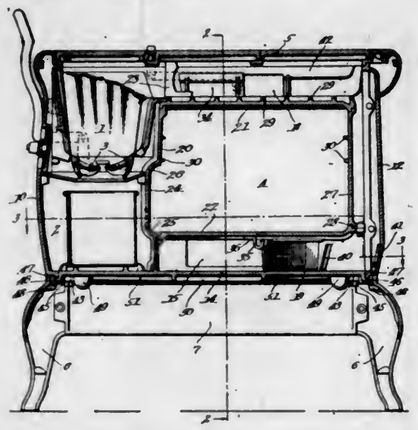
1. A metallurgical furnace comprising a cupola having a plurality of spaced tuyères therein, means to supply air

under pressure above atmospheric to said tuyères, said cupola having also a passage to admit air under natural



draft to said tuyères, and means to open and close said natural draft passages, and to vary the area of the air-admitting openings to said passages.

1,766,111. STOVE CONSTRUCTION. LESLIE DANA, St. Louis, Mo., assignor to Charter Oak Stove and Range Company, a Corporation of Missouri. Original application filed Apr. 4, 1928, Serial No. 267,401. Divided and this application filed Mar. 21, 1929. Serial No. 348,950. 11 Claims. (Cl. 126—1.)

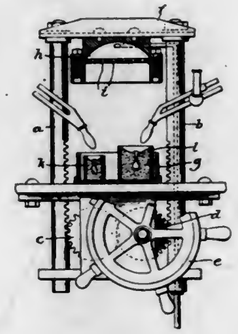


1. In a cooking range of the type having a fire box and ashpit to one side of and of greater height than an oven, and adjacent said oven in a common external casing, a common wall between said fire box and said oven formed of a unitary casting having its intermediate portion offset from its upper and lower sections, and projecting into said fire box, whereby said upper section narrows the top part of said oven and widens said fire box, said intermediate portion widens the lower portion of said oven, forms a rounded bottom corner therefor, and narrows said fire box below the grates, and said lower portion widens said ashpit and constitutes a support for one end of the bottom of said oven.

1,766,112. PROCESS FOR BREAKING PETROLEUM EMULSIONS. MELVIN DE GROOTE, St. Louis, and LOUIS T. MONSON, Maplewood, Mo., assignors to Wm. S. Barnickel & Company, Webster Groves, Mo., a Corporation of Missouri. Filed Jan. 21, 1929. Serial No. 334,116. 16 Claims. (Cl. 196—4.)

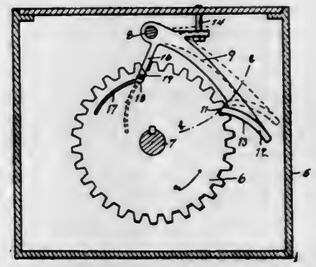
1. A process for breaking a petroleum emulsion of the water-in-oil type, which consists in subjecting the emulsion to the action of a demulsifying agent containing a petroleum sulfonic body derived from the condensation of a petroleum body, characterized by being capable of reaction with sulfuric acid, and a polyhydric alcohol having fewer than twelve carbon atoms.

1,766,113. MOLDING APPARATUS FOR MAKING DENTURES AND PLATES FOR DENTAL PURPOSES. KARL DEHNE, Burgstadt, Germany. Filed Nov. 28, 1928, Serial No. 322,408, and in Germany Sept. 17, 1928. 1 Claim. (Cl. 22—69.)



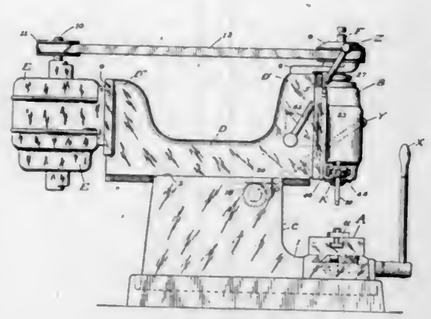
In an air pressure apparatus for casting plates and duplicates thereof for dental purposes, the combination of a mold holding receptacle, a stationary solid base support carrying said receptacle, a pair of rack-toothed standards, a transverse bar connecting said standards at their upper ends, a cover of bell shape for closing the receptacle and having a perforated transverse partition dividing it interiorly into upper and lower chambers, said cover being fixed to said transverse bar, pinions meshing with the rack teeth of the standards for moving the same to shift the cover into and out of sealing engagement with the receptacle, one of the standards having an air duct for feeding air under pressure to the upper chamber of the cover for passage through the holes in the transverse partition of said cover into the receptacle whereby the whirling air current entering the upper chamber of the cover is converted into straight line streams on its passage through said partition and the flowing air thereby checked and governed to secure a uniform air pressure upon the molten metal in the molds.

1,766,114. AUTOMOBILE REVERSE-CONTROL MECHANISM. CLAYTON L. DREW, San Francisco, Calif. Filed May 21, 1929. Serial No. 364,864. 10 Claims. (Cl. 192—4.)



1. A locking device for preventing retrograde movement of a motor vehicle, having a rotating element, of a gravity actuated latch adapted to engage the rotating element, and fluid actuating means for holding said latch in suspended position out of contact with said rotating element when said rotating element is rotating in one direction only.

1,766,115. PROFILER AND MILLER. SOL EINSTEIN, Cincinnati, Ohio, assignor to Cincinnati Milling Machine Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Nov. 6, 1923. Serial No. 673,116. 2 Claims. (Cl. 90—13.2.)



1. A milling machine combining a main frame; a work-table translatably mounted on horizontal guideways provided by said main frame; manual means operable from the front of the machine for translating said work-table; an auxiliary frame translatably monted on horizontal guideways provided by the main frame above the plane of the table guideways and arranged at right angles thereto; manual means operable from the front of the machine for translating said auxiliary frame on said main frame; an electric motor mounted on one end of said auxiliary frame; a spindle head translatably mounted on vertical guideways provided by said auxiliary frame; a tool spindle rotatably but non-translatably journaled in said spindle head; yielding means for normally maintaining said spindle head and spindle elevated; manual means operable from the front of the machine to depress said spindle-head to give to the tool vertical movement relative to a work piece carried by said table; a spindle rotating pulley journaled on said auxiliary frame and having a spline connection with said pulley; and a driving connection betwen said motor and said pulley.

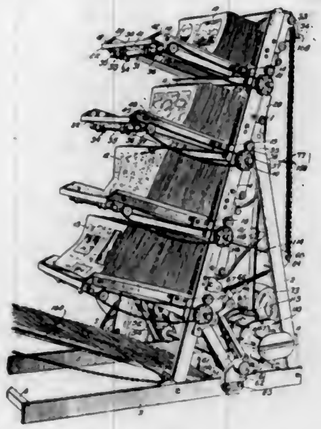
1,766,116. MECHANICAL ANIMAL. JULIUS B. ELLINGER, Seattle, Wash. Filed Mar. 18, 1929. Serial No. 347,843. 9 Claims. (Cl. 272—25.)



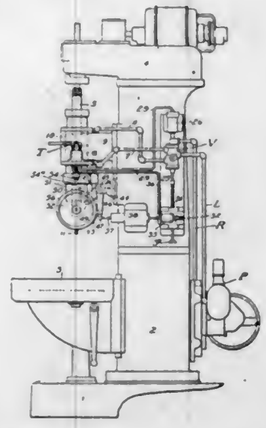
1. In a mechanical animal of the character described, a continuous flexible vertebra comprising a plurality of individual independent sections, means for holding the sections together, and means cooperating with the sections to automatically bend one end of the animal in a direction opposite to which the other is bent.

1,766,117. PAPER-STUFFING MACHINE. CARLETON J. ELLSWORTH, Kansas City, Mo., assignor to The Ellsworth Machine Company, Kansas City, Mo., a Corporation of Missouri. Filed Feb. 20, 1928. Serial No. 255,656. 17 Claims. (Cl. 270—55.)

1. In a machine for assembling folded sections of a newspaper including superimposed racks for supporting the sections on their folded edges, a conveyor, means for driving the conveyor across the racks, pins on the conveyor for engaging the folds of the sections to move the sections into nested relation, means opening the sections to receive the pins, means for withdrawing the pins laterally from engagement with the nested sections, and means for discharging the assembled sections.

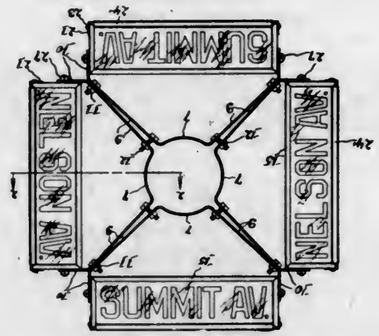


1,766,118. FEED CONTROL FOR HYDRAULICALLY-OPERATED MACHINES. ROBERT M. GALLOWAY and CHARLES HENRY MUHL, Richmond, Ind., assignors to The National Automatic Tool Company, Richmond, Ind., a Corporation of Indiana. Filed Sept. 8, 1928. Serial No. 304,712. 10 Claims. (Cl. 77—32.)



1. A machine combining a translatable member; hydraulic means to give to said member feeding movements; a control valve for said hydraulic feeding means; automatic means to actuate said control valve to limit the feed of said member, said automatic means comprising a movable member operatively connected to actuate said control valve; a cam, having a spiral periphery, pivoted upon said movable member; a feed throw-out element carried by said translatable member and adapted to engage the spiral periphery of said cam to cause bodily movement of said cam and its supporting member, thereby to actuate said feed control valve; and means for holding said cam in any desired position of angular adjustment to present to said feed throw-out element selected contact points at various distances from the pivot of said cam.

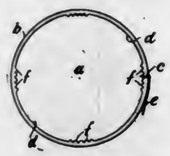
1,766,119. ILLUMINATED STREET SIGN. HERMAN C. GEBAUER, St. Paul, Minn., assignor of one-half to Bernard J. Malmgren, St. Paul, Minn. Filed Feb. 27, 1929. Serial No. 343,008. 4 Claims. (Cl. 40—131.)



1. A street sign comprising a plurality of similar units, each unit having a clamping member adapted to engage an upright post or the like, each of said members being formed at its ends with a pair of outwardly projecting arms arranged to be secured to the arms of the adjacent unit, the outer ends of the arms of each unit being disposed in parallel relation to each other, a frame secured between each pair of parallel ends and a sign on each frame.

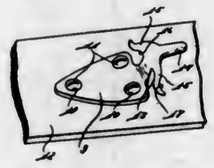
3. In a street sign adapted to be secured to a lamp-post or the like, a substantially horizontal and translucent sign adapted to be illuminated from above, a reflector disposed at an acute angle with said sign beneath the same to display the image of said sign and an auxiliary reflector projecting above said sign to reflect light therethrough.

1,766,120. CLOSURE DEVICE. FREDERICK GUSTAVOUS GINZLER, London, England, assignor of one-half to Harry Clifford Wallis, London, England. Filed June 18, 1928, Serial No. 286,110, and in Great Britain Jan. 24, 1928. 8 Claims. (Cl. 215—95.)



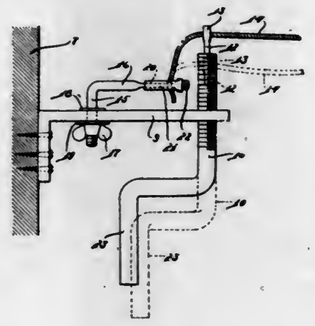
1. A closure device embodying therein a clamping band having separable ends, a lid of penetrable material, and means, holding said band in closed position about, and connecting it to, said lid, comprising projections upon said band penetrating the material of said lid.

1,766,121. ROPE FASTENER. MICHAEL HALEY, West Branch, Mich. Filed Mar. 20, 1929. Serial No. 350,913. 3 Claims. (Cl. 24—129.)



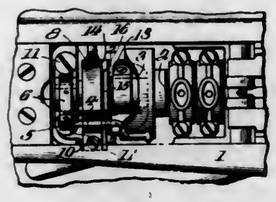
1. A rope fastener of the class described comprising: a plate mounted on a supporting surface; a curved neck projecting outwardly from one end of said plate; a head mounted on the upper end of said neck a pair of lateral extensions on said head and an angularly turned forwardly projected portion on said head.

1,766,122. ROPE STRETCHER. MICHAEL HALEY, West Branch, Mich. Filed Mar. 29, 1929. Serial No. 350,914. 2 Claims. (Cl. 254—67.)



1. A rope stretcher of the class described comprising: a supporting member; a threaded member having a socket formed in its upper end, said threaded member being vertically extended and threaded through said supporting member; a rope engaging member loosely carried on the upper end of said threaded member; a crank on the lower end of said threaded member for effecting its rotation; and a clamping member carried by said supporting member for clamping the free end of said rope.

1,766,123. THREAD-CONTROLLING MECHANISM FOR SEWING MACHINES. WALTER M. HANNEMAN, Chicago, Ill., assignor to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 14, 1927. Serial No. 240,005. 4 Claims. (Cl. 112—261.)

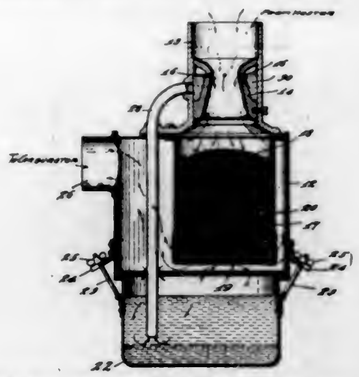


1. In a thread controlling mechanism, a shaft, thread clamping devices, a cam mounted on said shaft and adapted to operate said thread clamping devices, a stationary sleeve mounted on the shaft, a housing carried by the sleeve and enclosing the sides of said cam, said housing being cut away so that said cam may project through the housing and operate said thread clamping devices.

1,766,124. AIR CLEANER FOR INTERNAL-COMBUSTION ENGINES. ROBERT O. HENDRICKSON, Racine, Wis., assignor to J. I. Case Company, Racine, Wis., a Corporation. Filed Sept. 18, 1929. Serial No. 393,378. 4 Claims. (Cl. 183—18.)

4. In an air cleaner, a body portion, an inlet communicating with the body for withdrawing air into the cleaner, a Venturi tube within the inlet having an oil intake therein and so exteriorly formed as to provide an oil reservoir between it and said inlet, a filter in the body portion, a sump beneath the filter, and a circulating tube

having its lower end positioned in the sump and its upper end connected to said inlet for conveying oil through the



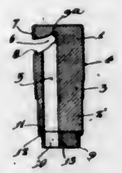
inlet into said reservoir from which it is withdrawn through the intake in the Venturi tube by the action of the air passing downwardly through the latter into said filter.

1,766,125. BATH CABINET. ALFRED H. JAHNS, Seattle, Wash. Filed May 27, 1929. Serial No. 366,240. 3 Claims. (Cl. 189—2.)



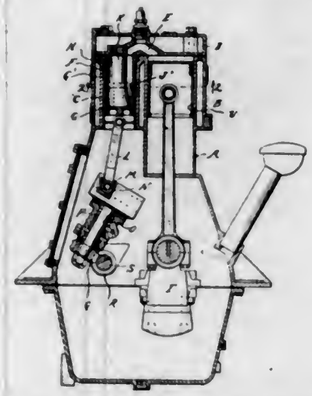
1. In a shower bath cabinet of the character described, a pan with a continuous flange extending upward at the edges and the bottom sloping downward to a drain opening in the center forming a base, upwardly extending plates with their lower edges fitting inside of the flange of the base, lap joints at the lower edges of the plates fitting over the flange of the base, other lap joints at the sides of the plates fitting over flanges at the sides of adjoining plates forming sealed joints at the corners, a door opening in one of the sides, and channel shaped sections indented at the upper edges of the plates for reenforcing the same and through which the plates may be held to adjoining frame work.

1,766,126. SPRINKLER HEAD. FREDERICK H. JOHNSON, South Pasadena, Calif. Filed May 6, 1925. Serial No. 28,333. 1 Claim. (Cl. 299—121.)



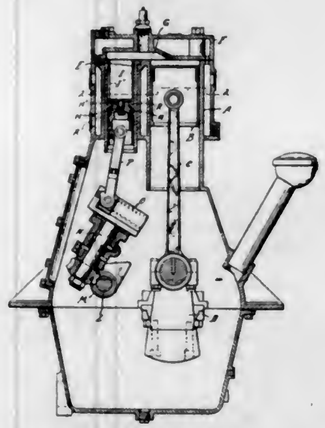
A half-spray nozzle comprising a body cylindrical in form, having a bore extending longitudinally therein, said bore being tangent to and in advance of the diameter of said vertical body, and being tangent to the longitudinal axis of the body, and a lateral slot in said body intersecting the end of said bore and terminating in a substantially straight rear wall that is substantially tangent to the bore and terminates at the periphery of said body.

1,766,127. ROTARY RECIPROCATING VALVE FOR INTERNAL-COMBUSTION ENGINES. ALFRED W. KATH, Detroit, Mich. Filed Sept. 13, 1926. Serial No. 135,227. 5 Claims. (Cl. 123—188.)



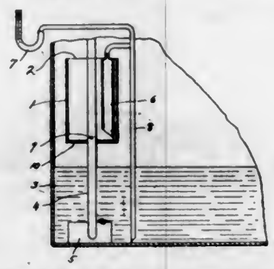
1. In an internal combustion engine, the combination with a cylindrical valve chamber and a sleeve valve revoluble therein, of a crank revoluble about an axis oblique to the axis of said valve and a rod for connecting said crank and said valve sleeve to impart to the latter a combined rotary and reciprocating movement.

1,766,128. ROTARY RECIPROCATING VALVE FOR INTERNAL-COMBUSTION ENGINES. ALFRED W. KATH, Detroit, Mich. Filed Mar. 7, 1927. Serial No. 173,510. 8 Claims. (Cl. 123—188.)



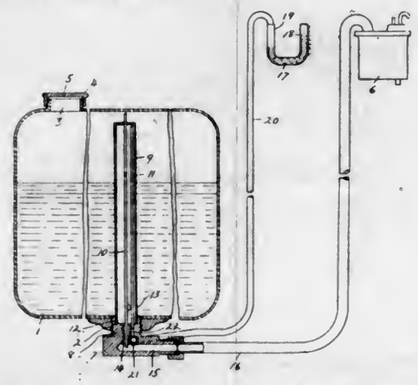
1. In an internal combustion engine, the combination with a power cylinder, of a valve cylinder provided with inlet and exhaust ports in the walls thereof and having one end in constant communication with said power cylinder, a radially expansible sleeve valve in said valve cylinder having an opening for placing the interior of the sleeve in constant communication with the combustion chamber and port means adapted for alternate registration with said inlet and exhaust ports and means for moving said sleeve valve to open and close said ports in proper sequence.

1,766,129. LIQUID-DEPTH-INDICATING DEVICE. HORACE W. KING, Ann Arbor, Mich., assignor to King-Seeley Corporation, Ann Arbor, Mich., a Corporation of Michigan. Filed Nov. 13, 1922. Serial No. 600,513. 7 Claims. (Cl. 73—54.)



6. The combination with an internal combustion engine and a lubricating oil pump communicating with its crank case, of a liquid depth indicating device forming an attachable unit, said device including means dependent upon the operation of said pump for measuring the lubricating oil in said crank case and comprising a receptacle open at its top and adapted to receive oil pumped from the crank case, said receptacle having a liquid discharge opening in its lower portion, a chamber within said receptacle open at its lower end above the discharge opening and closed to the atmosphere at its upper end and communicating with the oil in the crank case, and a pressure gage communicating with said chamber at its upper end.

1,766,130. LIQUID-DEPTH-INDICATING DEVICE. HORACE W. KING, Ann Arbor, Mich., assignor to King-Seeley Corporation, Ann Arbor, Mich., a Corporation of Michigan. Filed Apr. 16, 1923. Serial No. 632,343. 11 Claims. (Cl. 73—54.)

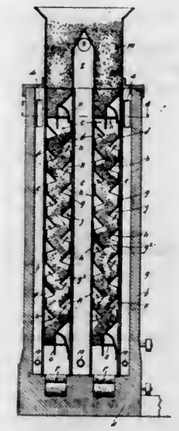


11. The combination with a tank containing liquid, of an air chamber extending upwardly within said tank and having a closed upper end and communicating at its lower end with the liquid in said tank, means for withdrawing liquid from said tank, a connection for placing said liquid withdrawing means n communication with the lower portions of said tank and air chamber, a pressure tube opening into the upper portion of said air chamber, a pressure gauge, a connection between said pressure tube and gauge, and an upwardly extending air supply tube having an open upper end in communication with the air above the normal level of liquid within said tank and having its lower end opening into said first mentioned connection at a point below said air chamber.

1,766,131. CYTO-VACCINE OF TUBERCLE BACILLI. JACOB S. KOMINZ, Rochester, N. Y. Filed Oct. 29, 1923. Serial No. 671,390. 10 Claims. (Cl. 167—79.)

1. The process of making vaccine of tubercle bacilli which consists in killing the tubercle bacilli, injecting the killed tubercle bacilli into an animal, evacuating the fluctuating mass developed upon the animal at the point of injection to obtain a liquid, and treating the liquid thus obtained to break down capsular structures to render its absorption complete into another mammal in which it may be injected subsequently.

1,766,132. RETORT FOR DISTILLING OIL SHALE AND THE LIKE. MAGNUS RUDOLF KRAUL, Portland, Oreg.; Anna E. Kraul administratrix of said Magnus R. Kraul, deceased. Filed June 20, 1927. Serial No. 200,074. 5 Claims. (Cl. 202—124.)

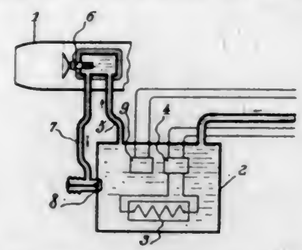


1. In a retort, the combination of a vertical rectangular enclosure comprising walls on two sides and one end, longitudinal walls within the said enclosure arranged to divide the same into a central elongate distilling chamber and a heating chamber on each side of the distilling chamber, heating means located in each heating chamber, wall sections closing the other ends of said heating chambers, and removable wall plates secured to said wall sections closing the same end of the distilling chamber, a rectangular elongate frame in said distilling chamber, said frame comprising two opposite spaced sides each supporting a series of vertically spaced horizontal shelves extending inward midway of the distilling chamber and sloping downward, with the shelves of one series arranged in staggered relationship with those of the other, whereby to hold layers of the material being retorted, and to feed the same from an upper shelf onto a lower, said frame being of lesser length horizontally than the distilling chamber thereby to provide a gas-collecting chamber, at one end within the latter, spaces under the shelves adapted to constitute gas-collecting sheds and passageways and which open into said gas-collecting chamber, said latter chamber adapted to be connected to gas withdrawing means.

1,766,133. LIQUID-FUEL APPARATUS. ALFRED LANSEN, Corseaux-Vevey, Switzerland. Filed Aug. 10, 1929. Serial No. 385,033. 8 Claims. (Cl. 158—36.)

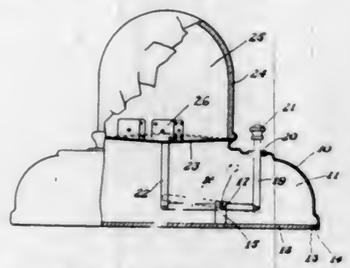
1. A heating installation for liquid combustibles having a fuel tank, a burner, an atomizer in said burner, and a feed pipe for said fuel tank, the combination of a pair of

conduits interconnecting said burner and said fuel tank, pressure responsive means for closing one of said conduits, heating means disposed in said fuel tank, temperature re-



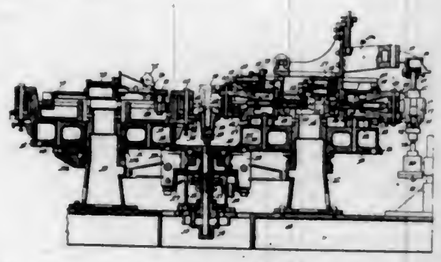
sponsive means in said fuel tank adapted to control said heating means and temperature responsive means disposed in said fuel tank adapted to control the supply of combustible through said feed pipe.

1,766,134. GAME DEVICE. FREDRIK LAUTERBACH, New York, N. Y. Filed June 5, 1929. Serial No. 368,494. 4 Claims. (Cl. 273—145.)



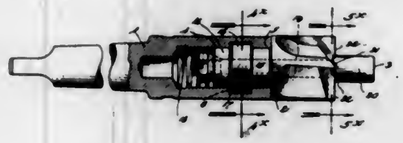
1. In a gaming device, a housing, a transparent crown mounted on said housing, a normally dished-out diaphragm having its edge mounted rigidly in said housing, a link rigid with said diaphragm at the axis of the latter, dice supported on said diaphragm, and means for raising said link to flex said diaphragm.

1,766,135. APPARATUS FOR BLOWING THIN-WALL GLASSWARE. JAMES W. LYNCH, Anderson, Ind., assignor, by mesne assignments, to Lynch Glass Machine Company, a Corporation of Indiana. Filed Aug. 28, 1926. Serial No. 132,266. 13 Claims. (Cl. 49—9.)



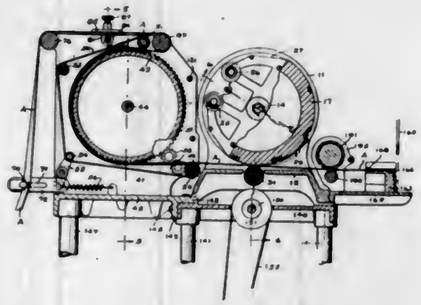
3. In a glassware forming machine of the character described, the combination of separable blank molds and solid blow molds movable to successive operating stations including a transfer station, said blank and blow molds being so positioned that the blank mold is directly above the blow mold at the transfer station, separable neck rings associated with said blank molds, separable bust-off rings associated with said blow molds, said blow mold having its bust-off rings open at the transfer station, means for disengaging the blank mold from the blank, means for closing the bust-off rings over the upper end of the blow mold, and means for disengaging the neck rings from said blank to permit the latter to drop into said blow mold and be engaged by said bust-off rings.

1,766,136. CUTTING TOOL. JOHN A. MARKSTRUM, Detroit, Mich., assignor to Continental Tool Works, a Corporation of Michigan. Filed Nov. 28, 1924. Serial No. 752,702. 4 Claims. (Cl. 279—89.)



1. In a tool of the type described, a shank having a tubular socket end, a detachable head having a stem enterable into the socket end of said shank and a shoulder adapted to abut the end thereof, laterally projecting lugs on said stem, said lugs having faces approximately tangential to said stem, and abutments within said shank limiting the rotation of said head in one or other direction, said abutments being adapted to driving contact with the outer ends of said lugs, said shank being provided with recesses permitting the insertion into and rotation of said lugs within said shank.

1,766,137. PAPER-FEEDING MECHANISM. LAWRENCE H. MORSE, Cleveland, Ohio, assignor to The American Multigraph Company, Cleveland, Ohio, a Corporation of Ohio. Filed Dec. 6, 1927. Serial No. 238,034. 30 Claims. (Cl. 101—227.)

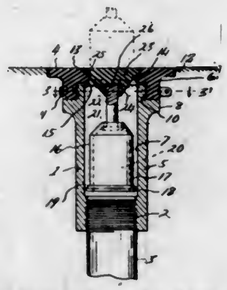


1. The combination with a continuously moving rotary printing couple, of a paper feed mechanism alternately stationary and moving, means whereby said paper feed mechanism automatically over-feeds a web of paper for each cycle of the rotary couple, means for automatically retracting said over-fed web during said cycle, and means acting on the retracting means to stop it in a definite position.

1,766,138. SPRINKLER. ELMER G. MUNZ, Detroit, Mich. Filed Aug. 6, 1928. Serial No. 297,699. 6 Claims. (Cl. 299—61.)

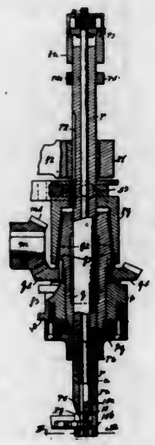
1. In a sprinkler for lawns and the like, a casing having its upper portion formed of a resilient material and lying substantially flush with the surface of the ground,

a nozzle member movable in said casing and having a metallic stem, and a resilient spray directing member



secured to the upper end of said stem and having a cap cooperating with the upper portion of said casing to form a protecting surface.

1,766,139. NUT-SETTING MACHINE. JOSEPH W. MYERS, Jackson, Mich. Filed Oct. 20, 1926. Serial No. 142,889. 9 Claims. (Cl. 81—57.)



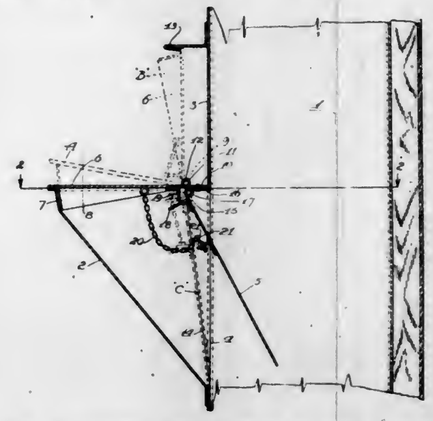
1. In an apparatus of the kind described, a spindle, means for reciprocating and rotating said spindle, said spindle being provided with an aperture through its side wall, said spindle being adapted to receive and set a nut in place, means for feeding nuts consecutively to said spindle through said aperture, one wall of said aperture being chamfered to separate the nut being fed toward said spindle from the nuts in said spindle.

1,766,140. ROTARY BRUSH. GIULIO NARDUCCI, South Tacoma, Wash. Filed Apr. 30, 1928. Serial No. 274,142. 3 Claims. (Cl. 15—23.)



1. A rotary brush, comprising a handle rotatively supporting a shaft carrying a brush, said shaft being formed with an enlarged portion disposed adjacent one end of the handle, a brake lever pivotally mounted at one end intermediate the ends of the handle, and extending beyond the ends of the handle, and engageable against the said enlarged portion for producing a braking action, and a grip member pivotally mounted at one end coaxially with the brake lever and capable of assuming a position superimposed on the brake lever, or in the opposite direction flush against the said handle.

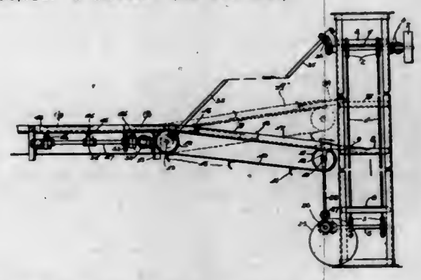
1,766,141. REFUSE CHUTE. SAMUEL OLSON, Oak Park, Ill., assignor to Samuel Olson & Company, Inc., Chicago, Ill., a Corporation of Illinois. Filed May 5, 1927. Serial No. 188,909. 8 Claims. (Cl. 193—34.)



1. In combination with a chute, a hopper connected thereto having an intake opening and an opening for discharge into said chute, a lid for the intake opening hinged to the hopper, a door for the discharge opening hingedly mounted and means disposed on adjacent sides of the lid and door dimensioned for impinging engagement as the lid approaches the final portion of its closing movement whereby the door is positively swung to open position when the lid is closed.

7. In combination with a chute, a hopper connected thereto having an intake opening and an opening for discharge into the chute, a lid for the intake opening arranged to seal said opening throughout a limited range of final closing movement, a door for the discharge opening, and means actuated by the lid during its limited range of closing movement for positively opening said door.

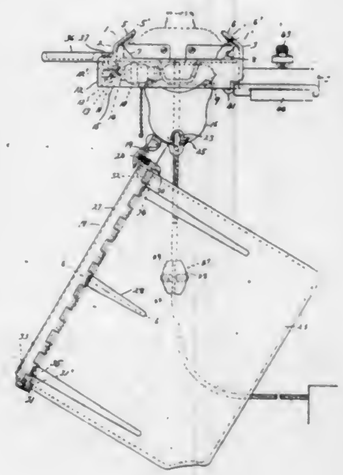
1,766,142. AUTOMATIC TRANSFER MECHANISM FOR CONVEYERS. SAMUEL OLSON, Oak Park, Ill., assignor to Samuel Olson & Company Inc., Chicago, Ill., a Corporation of Illinois. Filed June 11, 1927. Serial No. 198,081. 8 Claims. (Cl. 198—20.)



1. The combination of a vertically travelling conveyer with load supporting means disposed at intervals thereon,

a transversely travelling conveyer adjacent thereto, provided with flights at regular intervals for positively discharging the load to the load supporting means of the vertical conveyer, means interconnecting the two conveyers for timing said flights in relation to said load supporting means of the vertical conveyer, and means for moving said transverse conveyer for a limited distance in substantially vertical direction in correlation with the load supporting means of the vertical conveyer during transfer of the load.

1,766,143. TELEPHONE STAND. DAVID W. OVAITT, Flint, Mich. Filed Feb. 21, 1923. Serial No. 620,519. 10 Claims. (Cl. 45—82.)

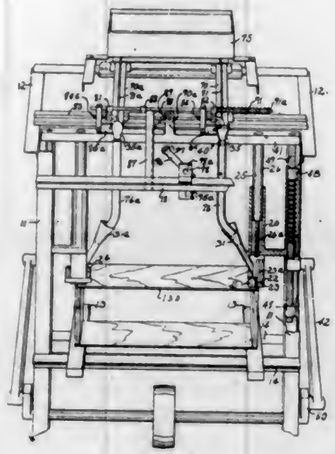


5. In a device of the character described, the combination with a telephone receiving platform, a brace for said platform, said brace having a slot therein, a binder for a telephone directory or the like, an arm secured to said binder and swiveled to said brace so as to be movable in said slot successively in two directions substantially at right angles to position the directory rearwardly or forwardly to a position convenient for using the directory.

8. A book support comprising a supporting member provided with a slot of angular formation, and a book supporting arm pivotally connected to said member and movable in and guided by said slot for carrying the book from a position of non-use to a position convenient for use.

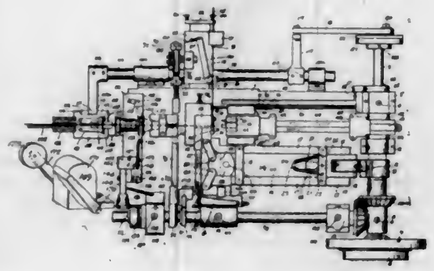
1,766,144. NAIL-PICKING DEVICE FOR NAILING MACHINES. HALE PAXTON, Sanger, Calif. Filed Nov. 28, 1928. Serial No. 322,522. 3 Claims. (Cl. 1—16.)

1. In combination with a nailing machine having nail driving means and having a nail feeding device consisting of a slideway adapted to receive nails suspended by their heads permitting them to slide therein, a reciprocating member carrying a nail check and a nail pick adapted to cooperate with said slideway in alternately checking the nails from sliding therein, and releasing the nail at the lower end of the slideway, said reciprocating member being actuated and timed by the nail driving mechanism and by spring means, the means for positioning and holding the nail check in active relation with the slideway being operative on the lower half of the cycle of the nail driving means, and the means for releasing



said nail holding means and for simultaneously positioning the nail picking means in active relation with the slideway being actuated by the upper portion of the downward stroke of the nail driving means.

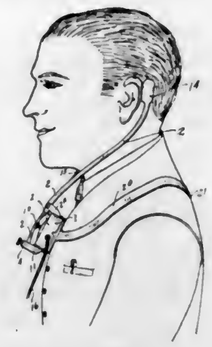
1,766,145. MACHINE FOR MAKING CHAPLETS. HERBERT S. POWELL, Utica, N. Y. Filed June 3, 1927. Serial No. 196,205. 2 Claims. (Cl. 10—157.)



2. In a machine for making chaplets having a base part and a stem, a carriage for feeding a wire to said machine, a second carriage for feeding a tape to said machine, means carried with said second named carriage for effecting a quick impulsive motion thereto to retract said tape, a plunger, and means for effecting a quick impulsive motion to said plungers, whereby to cut said wire, another plunger member carrying members therein whereby to cut and punch a hole through said tape, and cam means on said machine for actuating said member at a predetermined time.

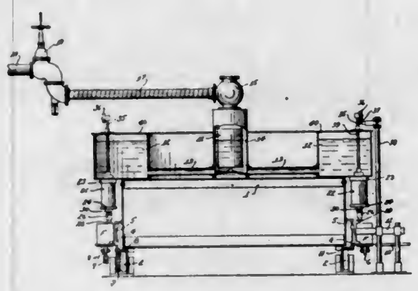
1,766,146. SOUND REPRODUCER FOR THE DEAF. CARL ALBERT RATH, Estacada, Oreg. Filed Dec. 11, 1928. Serial No. 325,264. 4 Claims. (Cl. 179—107.)

1. In a device of the class described, in combination with an audible vibration producer of a bifurcated seasoned hard wood carrying element, secured to the vibration producer, means associated with the vibration producer for stressing the free end of the sound carrying



member and terminal ends of the sound carrying member adapted for engaged with and resting upon the mastoid portion of the temporal bone.

1,766,147. CAN-FILLING MACHINE. ALPHEUS E. ROE, Oakland, Calif. Filed May 2, 1928. Serial No. 274,480. 4 Claims. (Cl. 226—96.)

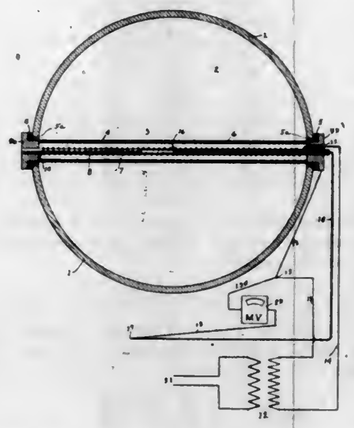


1. A can filling machine comprising a rotating turret; a vertically movable can holder mounted thereon; a measuring receptacle carried by said turret; a vertically adjustable outlet connection extending through the bottom of said receptacle; a valve in said connection; means for conducting fluid from said connection to the can upon said holder; and means for operating said valve by the vertical movement of said can.

2. A can filling machine comprising a rotating turret; a reservoir carried thereby; means for filling a can from said reservoir; a valve head positioned centrally above said reservoir; a connection between said head and said reservoir, adapting them for independent rotative movement; a valve in said head; a float in said reservoir adapted to operate said valve; a flexible conduit connected with said head; and a plurality of fluid supply pipes adapted for separable connection with said flexible conduit.

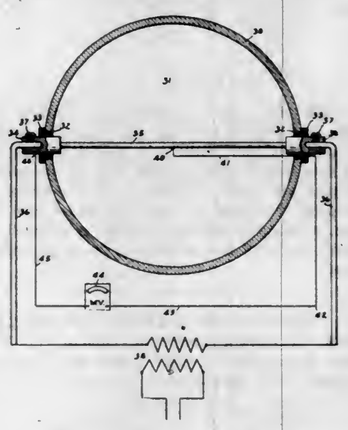
1,766,148. FLOW METER. CHARLES B. SAWYER, Cleveland, Ohio, assignor to The Brush Laboratories Company, Cleveland, Ohio, a Corporation of Ohio. Filed Sept. 21, 1925. Serial No. 57,549. 8 Claims. (Cl. 73—167.)

7. In a device of the class described, in combination, a thermally sensitive body arranged to be disposed in heat interchanging relation with a fluid, means for supplying electrical heat to said thermally sensitive body including a constant current transformer receiving electric energy from a source of alternating current supply, whereby said thermally sensitive body may be heated at an automatically



controlled rate, and means for determining a temperature of said thermally sensitive body, whereby a characteristic of said fluid may be determined.

1,766,149. FLOW METER. CHARLES B. SAWYER, Cleveland, Ohio, assignor to The Brush Laboratories Company, Cleveland, Ohio, a Corporation of Ohio. Original application filed Sept. 21, 1925, Serial No. 57,549. Divided and this application filed Mar. 30, 1928. Serial No. 266,063. 6 Claims. (Cl. 73—167.)

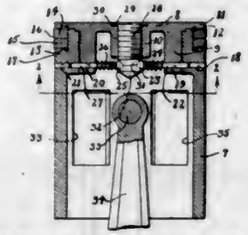


5. In a meter for determining a characteristic of a fluid, in combination, a thermally sensitive body of relatively high electrical constant resistivity arranged to be disposed in heat interchanging relation with a fluid, means for supplying alternating current to said thermally sensitive body including a constant current transformer, whereby said thermally sensitive body may be heated at an automatically controlled rate, and means for determining a temperature of said thermally sensitive body.

1,766,150. PISTON. WILLIAM H. SCHULZE, Detroit, Mich. Filed Oct. 20, 1927. Serial No. 227,414. 4 Claims. (Cl. 74—108.)

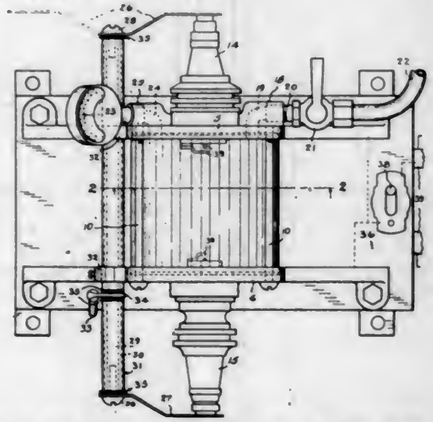
1. A piston of the class described, comprising: a skirt; a head threadable on said skirt; means projectable through

said head and said skirt for preventing rotation of said head relatively to said skirt; resilient means for normally



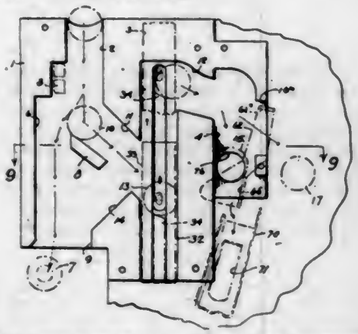
tending to move said retaining means out of operative position and radially inwardly of skirt; and means for resisting said resilient means.

1,766,151. SPARK-PLUG TESTER. HUGH SWARTZ, Seattle, Wash. Filed May 22, 1928. Serial No. 279,666. 2 Claims. (Cl. 175—183.)



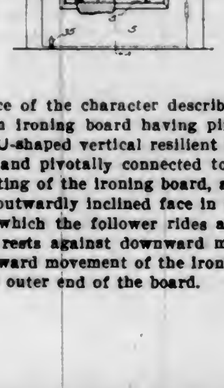
1. A spark plug tester, embodying a hollow glass cylinder, two end plates forming air tight closures for the ends of said cylinder, said end plates having threaded openings into which spark plugs may be screwed, means for supplying air under pressure to said cylinder, a metal rod extending crosswise of said end plates and insulated therefrom, a contact spring pivotally connected with the end of said rod, and means for supplying electric current to said rod.

1,766,152. CONTROL MECHANISM FOR VENDING MACHINES. WALTER A. TRATSCH, Chicago, Ill. Filed Nov. 9, 1928, Serial No. 318,152. Renewed Feb. 3, 1930. 10 Claims. (Cl. 194—97.)



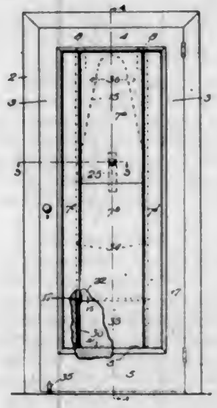
7. In a control device for a vending mechanism the combination of a coin chute; a slide in said chute to move a coin therein; means to actuate the vending mechanism; an operating shaft; and means carried by said shaft to move said slide, said means being governable by a coin of predetermined character to move said first named means.

1,766,153. SLIDING GEAR AND METHOD OF SYNCHRONIZING THE SAME. NIKOLA TESOJEVICH, Highland Park, Mich. Filed Nov. 19, 1928. Serial No. 320,493. 6 Claims. (Cl. 74—58.)



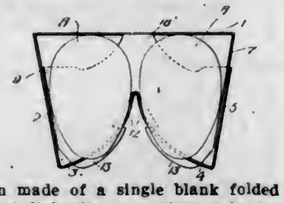
1. In a transmission, a pair of gears having teeth thereon constructed to intermesh, one of said gears being axially movable relative to the other and surfaces formed at the entering ends of said teeth being of a diameter proportional to their respective numbers of teeth to frictionally engage and synchronize each other prior to the intermeshing thereof.

1,766,154. DOOR-CONCEALED IRONING BOARD. BENJAMIN J. TRILLER, Dubuque, Iowa. Filed Sept. 4, 1925. Serial No. 54,462. 2 Claims. (Cl. 68—10.)



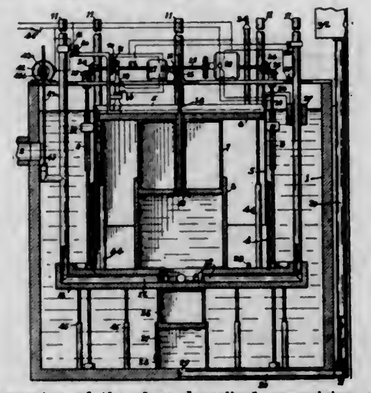
1. In a device of the character described, parallel vertical guides, an ironing board having pintles slidable in said guides, a U-shaped vertical resilient follower slidable in said guides and pivotally connected to the pintles for preventing canting of the ironing board, a detent with an upwardly and outwardly inclined face in the path of said follower, over which the follower rides and another face upon which it rests against downward movement, means for limiting upward movement of the ironing board, and a support for the outer end of the board.

1,766,155. CUSHIONED CARTON. FELIX TROYK, Chicago, Ill., assignor to Self Locking Carton Company, a Corporation of Illinois. Filed June 21, 1928. Serial No. 287,335. 9 Claims. (Cl. 229—29.)



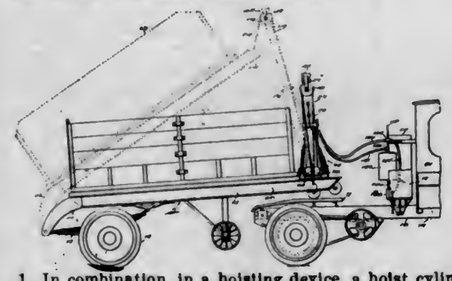
1. A carton made of a single blank folded and glued to produce a shell having a continuous bottom wall bent into the form of an inverted V, and transverse partitions shaped to fit into and fill the valleys in the bottom of the carton and secured at their upper ends to the adjacent side walls of the carton.

1,766,156. PUMPING SYSTEM. ELMER E. VINSON, San Francisco, Calif. Filed Dec. 5, 1928. Serial No. 323,820. 8 Claims. (Cl. 103—56.)



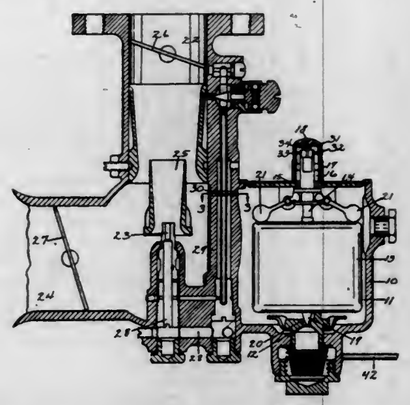
1. Apparatus of the class described comprising a tank, having an inlet, a float movably located in the tank, carrying a plurality of telescopic sides, a cylinder carried by the float, a cover movably fitting inside the sides, carrying a plunger movably fitting inside the cylinder, means for allowing water to pass upward through the plunger, a cylinder attached to the tank, a plunger carried by the float and adapted to fit inside the cylinder attached to the tank, means associated with each cylinder for allowing water to pass to and from the cylinders, and means for elevating and lowering one of the sides.

1,766,157. HOIST. CLARENCE J. WEBER and ROY A. SEEK, Chicago, Ill., assignors to National Brick Company, Chicago, Ill., a Corporation of Illinois. Original application filed June 29, 1926, Serial No. 119,312. Divided and this application filed Apr. 18, 1927. Serial No. 184,468. 4 Claims. (Cl. 138—9.)



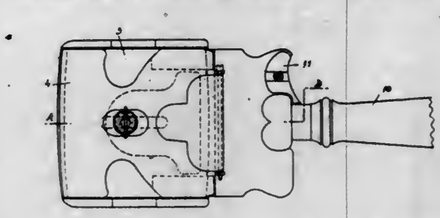
1. In combination, in a hoisting device, a hoist cylinder, a reciprocable plunger in the said cylinder, a fluid tank associated with the said cylinder, a pump for pumping fluid from the tank to the cylinder to raise the plunger therein, a pipe line between the said pump and the lower part of the cylinder, a pipe line for an overflow between the upper part of the cylinder and the tank, a pipe connection between the said pipe lines, the pipe line between the pump and the lower part of the cylinder being adapted to supply fluid for operating the plunger independently of the pipe line from the top of the cylinder, and a control valve associated with the said connection for controlling the raising and lowering of the plunger within the cylinder, said valve when in one position serving to cause the fluid coming from the pump to vibrate the said plunger, and when in another position serving to cause the plunger to be maintained stationary in a given elevated position.

1,766,158. CARBURETOR. JOHN WILLIAM WHITE, Buffalo, N. Y. Filed June 6, 1924. Serial No. 718,247. 1 Claim. (Cl. 158—64.4.)



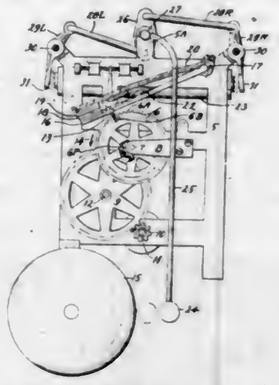
The combination with a hydrocarbon engine, of a carburetor having a mixing chamber and a float chamber, a passage betwen said chambers above the level of fuel in the float chamber open at all times, a pump for supplying fuel to said carburetor float chamber from a supply at a level below the pump, a valve controlled connection between the pump and the float chamber, a valve therefor, a vent for the float chamber, a valve therefor, and means in said float chamber for opening said fuel valve, said means also closing said air valve only when said float chamber is empty.

1,766,159. WHITENING KNIFE FOR TREATING LEATHER. HEINRICH WILL, Usingen, Taunus, Germany. Filed Sept. 22, 1928, Serial No. 307,684, and in Germany Apr. 18, 1928. 4 Claims. (Cl. 149—13.)



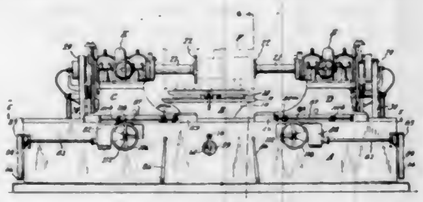
4. A whitening knife as specified in claim 1, comprising in combination with the base plate and the clamping lid, an upwardly curved supporting plate for the index on the upper surface of said clamping lid, and a protecting shield on the rear end of said base plate designed to hold and protect the middle finger.

1,766,160. ELECTRIC BELL-SOUNDING DEVICE FOR CLOCKS. KENNETH G. WILLIAMS, St. Paul, Minn. Filed Mar. 29, 1928. Serial No. 265,789. 1 Claim. (Cl. 58—38.)



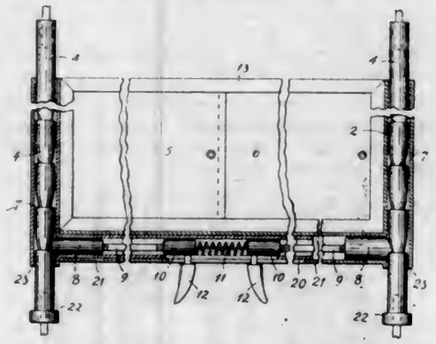
In a bell striking device for clocks having a striking gear having a toothed rim with the usual shallow and deep notches, an oscillatable arm with a tooth normally engaging in a deep notch of said rim of the striking gear, means for rotating said gear and lifting said tooth at predetermined intervals and said tooth adapted to ride over said shallow notches until it drops into the next deep notch; sounding means comprising a hammer fixed to the lower end of an oscillatable depending arm suitably journaled to a rock shaft mounted in the upper part of the clock frame with said hammer in proximity to the clock bell, an electric circuit, a double magnetic core in said circuit and fixed in the clock frame, means associated with said oscillatable arm and in said circuit for closing and opening circuit to said magnetic core to alternately magnetize its opposite ends and cause corresponding oscillation of said depending arm and bring the hammer to contact with the sounding means, and means for oscillating the depending arm comprising a beam lever fixed in vertical plane on said rock shaft, a reach rod connected to each end of said lever, each said reach rod pivotally connected at its outer end to a horizontally oscillatable lever, the free end of each said lever having a contact plate normally close to one end of said magnetic core.

1,766,161. GRINDING MACHINE. HENRY H. YERK and WILLIAM J. BAUMBERGER, Davenport, Iowa, assignors to Micro Machine Company, Bettendorf, Iowa, a Corporation of Iowa. Filed Nov. 5, 1925. Serial No. 67,185. Renewed July 8, 1929. 9 Claims. (Cl. 51—43.)



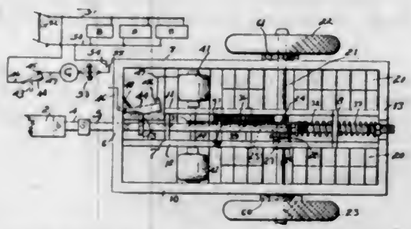
1. In a grinding machine, in combination, a base, a vertically adjustable bracket disposed at the rear side of said base, said bracket extending over the top of said base and in spaced relation thereto, a work table mounted on said overhanging bracket portion and adjustable transversely of said base, a pair of headstocks mounted on the top of said base and slidable longitudinally thereof and beneath said work table, said headstocks each having a grinding wheel spindle extending outwardly toward the opposed headstock, independent power units carried by each headstock for rotating said spindles on their respective axes, means operated from a common source of power for rotating said spindles in orbital paths about axes eccentric to their own, and means operated from the same last-mentioned source of power for reciprocating said headstocks longitudinally of said base.

1,766,162. ANTIDAZZLE SCREEN FOR MOTOR VEHICLES. GEORGE WILLIAM YOUNG, London, England. Filed Mar. 26, 1928, Serial No. 264,857, and in Great Britain June 2, 1927. 1 Claim. (Cl. 296—97.)



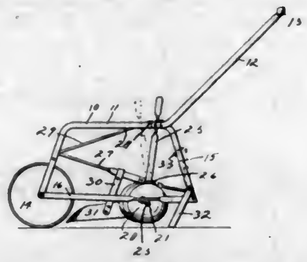
In a motor vehicle having a wind screen, an anti-dazzle screen comprising a glazed metal frame arranged behind the wind screen and extending horizontally across the body of the vehicle, the frame being composed of hollow one horizontal and two vertical members, a pair of notched vertical rods whereon the frame is slidably guided by means of its vertical members, and a pair of spring-controlled latches housed in the lower horizontal frame member and adapted to engage in the notches of different guide rods for retaining the frame in various positions, the horizontal frame member being composed of two telescopically connected tubes each of which is integral with one of the vertical members of the frame.

1,766,163. AUXILIARY DRIVE FOR ELECTRIC TRUCKS. MIKE P. VUKOSAV, San Francisco, Calif. Filed Nov. 10, 1928. Serial No. 318,415. 2 Claims. (Cl. 180—14.)



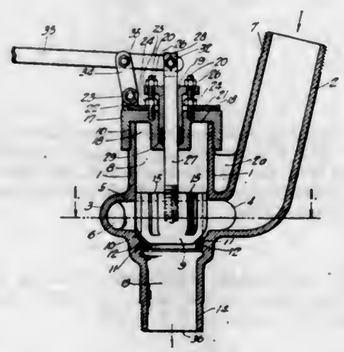
1. An auxiliary drive for trailer trucks adapted to be drawn by electric storage battery vehicle, a slidable drawbar in said trailer, a link connecting said bar to the vehicle, springs to hold said drawbar against forward or backward movement, a pair of wheels mounted on an axle in said trailer, a clutch on said axle, a chain of gears connecting said clutch and an electric generator, storage batteries connected to said generator, means to operate said clutch by the backward movement of said bar, and means to release the clutch on the forward movement of the bar whereby the chain of gears is operated to drive the generator to charge said storage batteries and act as a brake on said trailer.

1,766,164. DISK CULTIVATOR. FRANK E. ALLEN, Boone, Iowa. Filed July 15, 1929. Serial No. 378,316. 5 Claims. (Cl. 97—54.)



1. In a device of the class described, a frame having spaced side portions rigidly connected, wheels attached to the frame to movably support the front end of said frame, earth working elements adapted to allow plants in a plant row to pass between said elements, each earth working element comprising a rotatable shaft, a series of spaced disks on said shaft, means for adjusting the disks longitudinally of the shaft, and means between the earth working elements for preventing the loosened earth from covering the plants.

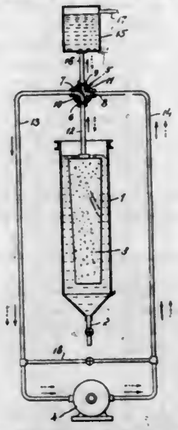
1,766,165. QUICK-OPENING BLOW-OFF VALVE. EDWARD M. BEEBE, Shawnee, Okla. Filed Apr. 29, 1929. Serial No. 359,078. 3 Claims. (Cl. 251—133.)



1. A quick opening valve, as described, embodying a hollow cylindrical valve housing having a circular enlarged hollow portion there surrounding, a hollow cylindrical portion extending outwardly and upwardly from one side of said enlarged portion for connecting a pipe line, a valve seat removably positioned within said housing below said enlarged portion, a vertically slotted valve head adapted to seat within and hermetically seal said removable seat, a valve stem having its upper end portion bifurcated, threadedly attached to said head and extending above said housing, a centrally perforated cap threadedly attached over the upper end of said housing, a packing gland around said stem housed within said cap, an annular plate disposed above said cap, and a lever arm anchored to said plate adapted to raise and lower said stem and head.

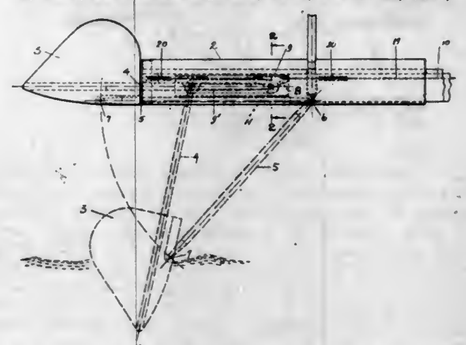
1,766,166. FILTERING APPARATUS. JOHN M. CALLOW, New York, N. Y., assignor to Genter Thickener Company, Salt Lake City, a Corporation of Delaware. Filed Mar. 31, 1926. Serial No. 98,693. 12 Claims. (Cl. 210—153.)

1. The combination in a filtering apparatus in which the mixture to be filtered and the filtrate are continuously in contact with opposite sides of a filter medium, of a pump operatively connected to the filtrate side of said medium, and means associated with the pump whereby said



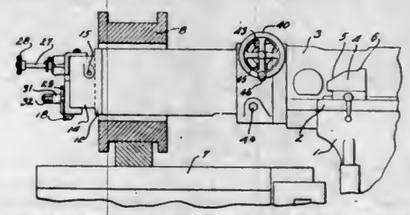
pump operates alternately to subject said filter medium to suction and pressure adapted to provide a filtering current and a filtrate counter-current while the current flow through the pump continues in the same direction.

1,766,167. AIRCRAFT. CLEM H. CONGDON, Cleveland, Ohio. Filed Feb. 4, 1927. Serial No. 165,927. 5 Claims. (Cl. 244—2.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928, 370 O. G., 757.)



1. In combination with aircraft wings, extensions adjustably attached thereto, the extensions in raised position comprising wing tips flush with the under surface of the wings and projecting above the upper surface thereof, and in lowered position comprising floats, and means for raising and lowering the extensions.

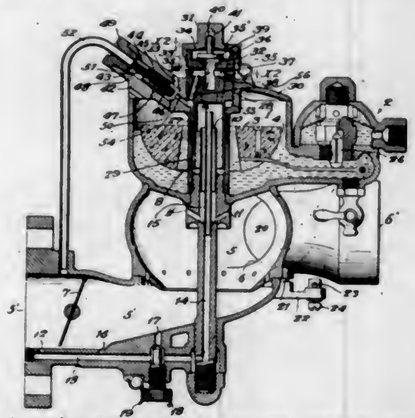
1,766,168. SHAPER. CECIL J. DAVIS, Kenton, Ohio, assignor to The Ohio Machine Tool Company, Kenton, Ohio, a Corporation of Ohio. Filed Mar. 5, 1928. Serial No. 259,349. 1 Claim. (Cl. 90—38.)



A shaper for cutting cylindrical surfaces, comprising a reciprocating ram body having a free advance end portion

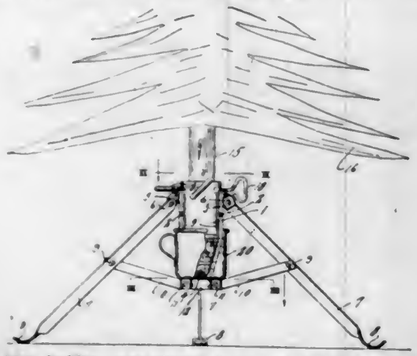
adapted to enter and recede from the work, a tool head mounted at the advance end of said body to rotate about a longitudinal axis, a tool carrier mounted on said head to swing fore and aft about a transverse axis to relieve the tool on the receding stroke, a tool holder slidable laterally on said carrier, and operating mechanism therefor, comprising feed screw mechanism rotatable about a transverse axis and connecting said carrier and holder for laterally adjusting the latter, and an operating shaft connected to said mechanism and rotatable in the carrier and having a forwardly extending portion readily accessible and operable manually while the ram body is moving in advanced position, said head, carrier, holder and operating mechanism being wholly contained within the outer boundry of the ram body for reciprocation through a confined opening.

1,766,169. CARBURETOR. ORVILLE H. ENSIGN, Pasadena, Calif., assignor to Ensign Carburetor Company, Los Angeles, Calif., a Corporation of California. Filed May 8, 1924. Serial No. 711,913. 4 Claims. (Cl. 261—72.)



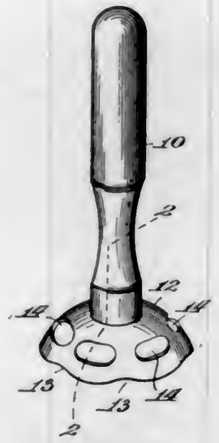
1. A carburetor having a suction chamber through which fuel is supplied to the main air stream; a mixture passage; an air vent leading from the suction chamber and being open to the atmosphere at two points; and valves controlling said air vent, one of said valves being operable by the depression at one point in said mixture passage to control one of said openings, and another of said valves being operable by the depression at another point along said mixture passage to control both of said openings.

1,766,170. CHRISTMAS-TREE HOLDER. GURTON L. GOLDWOOD, Toledo, Ohio. Filed Nov. 14, 1927. Serial No. 233,071. 1 Claim. (Cl. 248—38.)



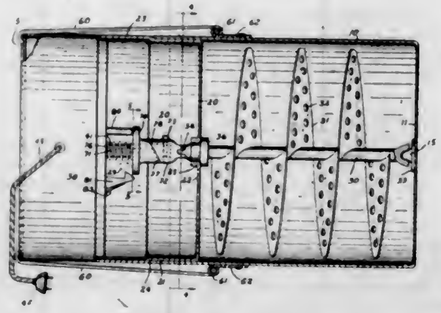
A tree holder comprising a ring, spread legs having their upper termini pivoted to the ring, a spider including linkage connected to the legs below the ring in providing the only connection of the legs in the ring, said spider being shiftable away from the ring to effect collapsing of the legs and toward the ring for spreading the legs, depending means fixed to the ring and extending downward from the ring and providing a stop for the upward movement of the spider, and independently adjustable radially extending clamping means at and through the ring in providing holding means operable independently of the legs.

1,766,171. MIXING TOOL. JOHN HETHERINGTON, Los Angeles, Calif. Filed Sept. 1, 1927. Serial No. 216,865. 2 Claims. (Cl. 259—144.)



1. In a mixing tool, comprising a concavo-convex disc provided with a sinuous edge, a handle secured to and projecting from the center of said disc, and there being a series of apertures formed in said disc between said handle and said sinuous edge.

1,766,172. ICE-CREAM FREEZER. WILLIAM A. HILES, Cleveland, Ohio. Filed Jan. 15, 1930. Serial No. 420,866. 16 Claims. (Cl. 259—122.)



1. An ice cream freezer adapted for mounting horizontally in an iceless refrigerator and comprising a closed horizontal compartment for the material to be frozen, a motor compartment, and a leakage compartment between them, a stirrer in the material compartment, and a coupling in the leakage compartment between the motor and stirrer.

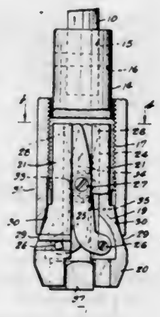
1,766,173. CONSTRUCTION FOR AND METHOD OF EVACUATING CANS. LESLIE W. HILLS, San Francisco, Calif., assignor to Hills Bros., San Francisco, Calif., a Corporation of California. Filed Mar. 20, 1928. Serial No. 263,196. 8 Claims. (Cl. 113—82.)



1. The process of evacuating a metallic can filled with products, consisting of placing a flanged can end having a rolled periphery over the flanged mouth of a can; in turning both the flange of the can end and the flange of the can downwardly at spaced intervals; in turning the rolled periphery of the can end under and in spaced relation with the flange of the can at the said spaced intervals; in subjecting the filled can to a vacuum and in then permanently sealing the can end to the can.

8. In combination a can end with a can body, said end and said body including a lost motion connection limiting the longitudinal movement of said end with respect to said body, said end and said body providing a free fluid passage to said body upon said longitudinal movement.

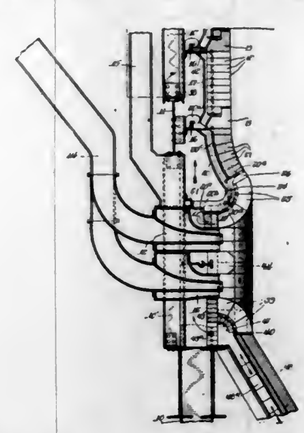
1,766,174. PARALLEL-JAW WRENCH OR BRACE. WILLIS F. HOBBS and JOHN A. ANDERSON, Bridgeport, Conn., assignors to The Bridgeport Hardware Manufacturing Corporation, Bridgeport, Conn., a Corporation of Connecticut. Filed Sept. 17, 1927. Serial No. 220,109. 6 Claims. (Cl. 279—56.)



1. In a wrench or brace, a pair of jaws adapted to grip the opposite sides of an article to be rotated, a body member having a transverse slot in which the jaws are mounted for lateral movement toward and from each other, a pair of levers pivoted one to each jaw and to each other and having tail ends slidably engaging extensions of the jaws on the opposite side of the pivot between the levers from the pivotal connections to the jaws, a sleeve threaded to the outside of said body member, and coacting cam surfaces on the sleeve and the jaws.

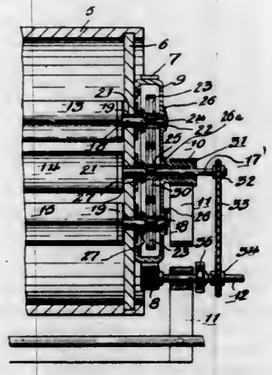
1,766,175. FURNACE CONSTRUCTION. LOUIS H. HOSBEIN, Winnetka, and OTTO WELCOME, Chicago, Ill., assignors to M. H. Detrick Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 17, 1928. Serial No. 306,571. 17 Claims. (Cl. 110—1.)

1. In a furnace, an upright furnace chamber wall formed of refractories arranged in superposed horizontally running courses, said wall being provided with a burner opening therethrough, refractories above and adjacent the burner



opening being offset inwardly with respect to the general inner surface plane of the wall to form an inwardly protruding wall portion about the burner opening.

1,766,176. DRIVING MECHANISM FOR BUTTER-WORKING ROLLS. ALBERT C. HOUGLAND, St. Paul, Minn., assignor to Crane Company of Minnesota, St. Paul, Minn., a Corporation of Minnesota. Filed Dec. 22, 1927, Serial No. 241,844. Renewed May 10, 1930. 6 Claims. (Cl. 259—84.)

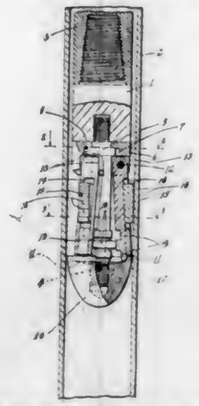


1. In a churn having a butter working element, a drive shaft for said element and a support for said shaft disposed in spaced relation to the outer surface of the churn, the combination of means on the inner end of said drive shaft adapted to engage said element for turning the same, a drive gear mounted on said shaft between said support and outer wall of the churn, a key operatively connecting said gear and shaft, removable means for preventing longitudinal movement of said gear on said shaft, a removable bearing for said shaft in said support and removable means for retaining said bearing in said support, said bearing being formed to permit longitudinal removal of said shaft with said key in place thereon.

1,766,177. DEEP-WELL TOOL. CLINTON A. LANGSTAFF, Hawthorne, Calif. Filed May 27, 1929. Serial No. 366,120. 10 Claims. (Cl. 294—96.)

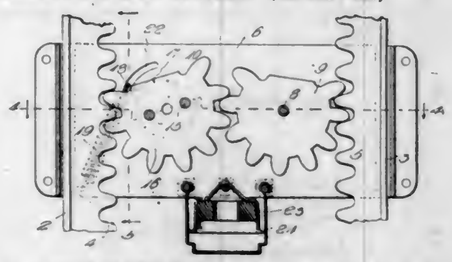
1. In a deep well tool, the combination of a head having means for securing the same to the lower end of a tool

string, a collar associated with the head with means permitting a limited angular movement of the collar on the axis of the head, a mandrel extending down from the head, a plurality of tool members movably supported on the



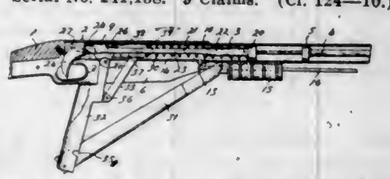
collar, and means on the mandrel corresponding to, and engaging, each tool member, and operating by a relative rotation of the mandrel, to move the tool members outwardly or inwardly.

1,766,178. BOTTLE CAPPER. HARRY J. LEBHERZ, Frederick, Md., assignor to The Everedy Company, Frederick, Md., a Corporation of Maryland. Filed Aug. 27, 1927. Serial No. 215,926. 3 Claims. (Cl. 226—84.)



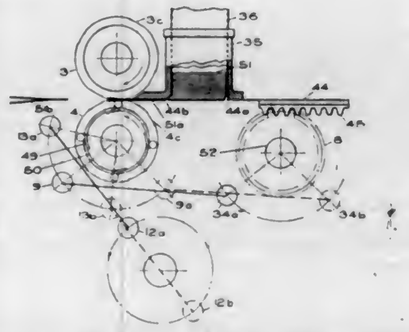
1. A bottle capper comprising a pair of standards, racks formed on the extremities of said standards, a rider slidably mounted on said standards, cooperatively related gear members journaled in said rider and meshing with said racks, said gear members being mutually intermeshed and housed within said rider between said standards in a plane passing through said racks, a capper throat carried by said rider for impressing a crown cap upon a bottle located between said standards, an actuating lever connected to one of said gear members and spring means engaged by one of said gear members for constantly urging said gear members into a position in which said actuating lever is normally in an elevated position.

1,766,179. AIR GUN. CHARLES F. LEFEVER, Plymouth, Mich., assignor to Daisy Manufacturing Company, Plymouth, Mich., a Corporation of Michigan. Filed Dec. 19, 1927. Serial No. 241,138. 9 Claims. (Cl. 124—10.)



4. In an air gun, the combination with a barrel, of a plunger therewithin, a spring for moving said plunger in one direction, a handle reciprocable longitudinally of said barrel, an actuating abutment for said spring, a toggle lever pivotally connected to said handle, a second pivotal toggle lever pivotally connected to said first mentioned toggle lever, and a link for moving said actuating abutment pivotally connected to said second toggle lever at a point such that when said toggle levers extend adjacent to said barrel said spring functions to normally hold said toggle levers in place.

1,766,180. BOOK-MATCH MACHINERY. WILLIAM J. LILLY, Tacoma, Wash., assignor to H. A. Sutliffe, Tacoma, Wash. Filed Nov. 14, 1927. Serial No. 233,257. 6 Claims. (Cl. 144—51.)



1. A device of the character described, composed of interlocking manifold combined circular cutters and spreaders, rotatably mounted; said combined cutters and spreaders having depressions below the periphery of the cutting edges, for the passage of material over said depressions without being cut.

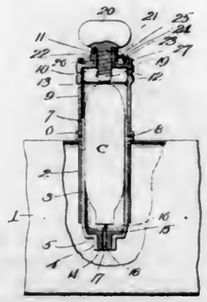
1,766,181. STRUCTURAL UNIT. STANLEY MACOMBER, Edgefield District, Stark County, Ohio, assignor to The Macomber Steel Company, Canton, Ohio, a Corporation of Ohio. Filed Feb. 3, 1927. Serial No. 165,578. 4 Claims. (Cl. 189—37.)



1. In a truss-like structural unit, the combination of a top chord-member; a bottom chord-member lying parallel with said top chord-member throughout the major portion of its length and having its ends bent upwardly and then into parallel closely proximate relation to the corresponding ends of said top chord-member; a member bent to form a series of alternate oppositely directed angles, said angles being secured to the top and bottom chord-members, respectively, said last-named member forming a central web-member; stiffening plates secured to said ends of said top and bottom chord-members; and additional end web-members rigidly secured to the upwardly bent ends of said bottom chord-member and also rigidly secured to the top chord-member and to the connected ends of said top and bottom chord-members, and serving to tie such connected ends into the central truss portion so as to adapt the unit as a whole to sustain a predetermined load irrespective of its points of support upon said connected ends and stiffening plates.

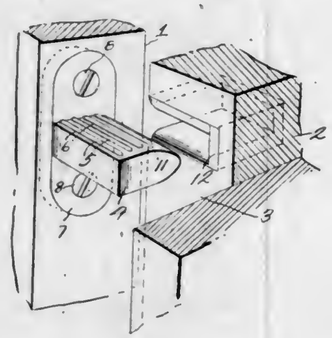
1,766,182. INFLATING DEVICE. PETER MARKUS, Kansas City, Mo. Filed Feb. 25, 1929. Serial No. 342,335. 4 Claims. (Cl. 9—19.)

1. In a device of the character described, an inflatable body, a compressed-fluid cartridge container fitting in the inflatable body with an air-tight relationship and communicating at its inner end with the interior of said body and provided with a puncturing pin, adjustable means mounted on the container, a diaphragm interposed between said adjustable means and the cartridge and forming an air-tight



partition for the container between the said adjustable means and the cartridge and adapted to transmit power from the adjustable means to the cartridge to cause the puncturing of the latter by said pin, and means for preventing accidental reverse adjustment of said adjustable means.

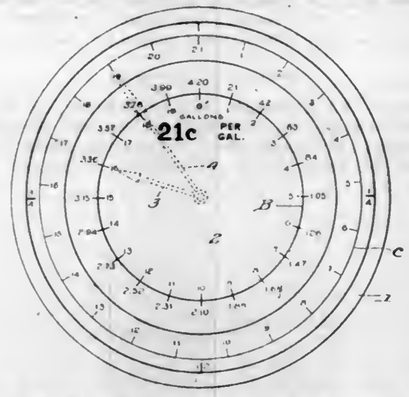
1,766,183. AUTOMOBILE DOOR GUIDE. TONY ALBERT MEALIA, Roseville, Calif. Filed Oct. 21, 1929. Serial No. 401,284. 2 Claims. (Cl. 16—82.)



1. The combination with a door guide lug and a stationary receiving member adapted to receive the lug, of anti-frictional rollers carried by the upper and lower sides of said lug and adapted to cooperate with the receiving member when the lug is forced into and out of the receiving member.

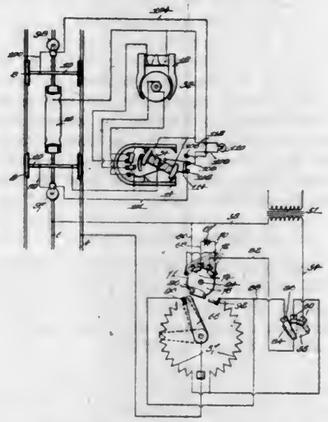
1,766,184. COMPUTING METER. PERLEY B. MILLS and ELBY R. MILLS, Sabina, Ohio. Filed Nov. 11, 1927. Serial No. 232,688. 1 Claim. (Cl. 235—194.)

A computing index adapted for attachment to indicating mechanisms of the type having an index surface and a pair of revolving index hands, one of which hands revolves through an arc of a circle to indicate one unit of measurement while the other hand revolves through a complete circle, said computing index comprising a circular index surface, said index surface including an inner and outer scale, said inner scale being adapted for cooperation with the first mentioned of said hands and provided with equally spaced graduations indicating a number of progressively increasing units of measure, price data cooperative with the graduations of said inner scale and constituting multiples of a determined price per unit of measure, the said outer scale being adapted for cooperation with the second named hand and provided with equally spaced graduations in number corresponding to the



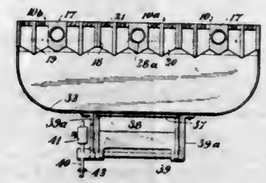
number of price units contained in the determined price per unit of measurement, and numerals arranged in sequence and opposite each of said graduations.

1,766,185. TOY ELECTRIC LOCOMOTIVE. HARRY B. MORTON, Hyde Park, Mass. Filed Dec. 17, 1927. Serial No. 240,915. 8 Claims. (Cl. 104—151.)



1. A toy electric locomotive having an electric motor and an electric headlamp, a power circuit for supplying current to the motor and to the headlamp when the motor is in operation, a supplementary circuit for supplying current to the headlamp when the motor is stationary, and a remotely operated controlling device for both circuits.

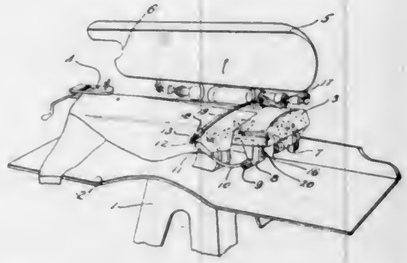
1,766,186. FIRE GRATE. VACLAV OCENASEK, New York, N. Y., assignor, by mesne assignments, to Joseph F. C. Luhan, New York, N. Y. Filed Feb. 14, 1925, Serial No. 9,164. Renewed Nov. 5, 1929. 2 Claims. (Cl. 122—374.)



2. A fire grate comprising a plate providing a plain top surface and having a plurality of openings extending

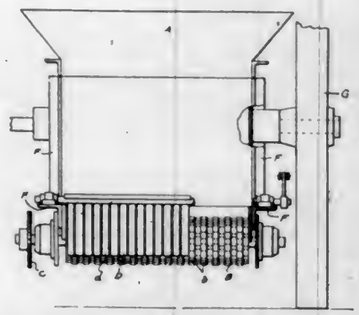
therethrough, longitudinal strengthening ribs on the under side of the plate and high pressure resisting pipes in certain of said ribs, adapted to convey a cooling medium therethrough and diagonally arranged ribs on the under side of said plate crossing one another to form a plurality of substantially diamond shaped air chambers.

1,766,187. TAIL CLAMP. ROBERT C. PAULY, Cincinnati, Ohio, assignor to The American Laundry Machinery Company, Cincinnati, Ohio, a Corporation of Ohio. Filed May 14, 1928. Serial No. 277,514. 5 Claims. (Cl. 68—9.)



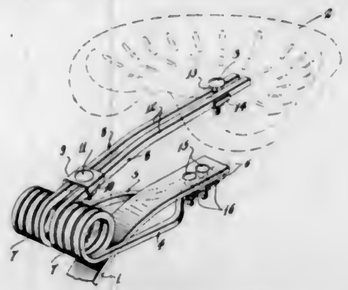
1. In a machine of the class described, an ironing board, a tail clamp frame including side members and a shaft member, bearings for said shaft member arranged transverse to, beneath and near the tail end of said board to permit the free end of the frame to swing to and from positions upon the surface, and beyond the end of the board, a yielding strap carried by the free ends of the side frame members and adapted to extend across the board, means for creating a tension upon said frame in either of its two extreme positions, and means for manipulating said clamp to a position over the board and to a position beyond the same.

1,766,188. METHOD OF SPREADING BITUMINOUS MIXTURES. GEORGE HOWARD PERKINS, Cambridge, Mass., assignor to Warren Brothers Company, Cambridge, Mass., a Corporation of West Virginia. Filed Dec. 18, 1928. Serial No. 326,863. 3 Claims. (Cl. 94—22.)



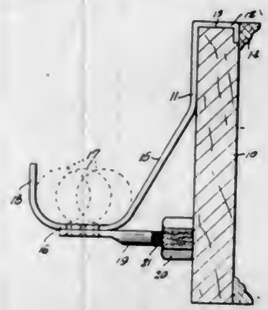
1. The method of spreading bituminous paving mixtures to obtain uniform compactness of the same when being compressed which comprises first comminuting said mixtures in transit to provide separated bitumen coated particles and then immediately depositing said particles while still separated upon a foundation in the form of a layer of uniform density throughout.

1,766,189. SPRING SEAT ATTACHMENT. WILLIS B. REDFIELD, Downey, Calif. Filed Nov. 21, 1927. Serial No. 234,704. 1 Claim. (Cl. 155—51.)



An attachment for spring seats including a pair of flat spring steel bars bent inwardly at one end, the bars being spirally wound to provide coil springs having their axes in alignment and having their opposite ends terminating from adjacent ends of said coils and extending rearwardly from the said coils, a seat, a clip adapted to hold said bars together at the last named ends, a bolt passing through the seat and through said clip for holding the seat to said bars and the clip clamped to said bars, a spring seat pole, a clip for securing the first named ends of said bars together, and a bolt passed through said clip and said pole for holding the clip engaged with said bars, and the bars secured to said pole.

1,766,190. BEDSPRING SUPPORT. ISADORE B. ROSENBERG and ROBERT MULWITZ, Port Chester, N. Y. Filed Apr. 2, 1928. Serial No. 266,571. 1 Claim. (Cl. 5—207.)

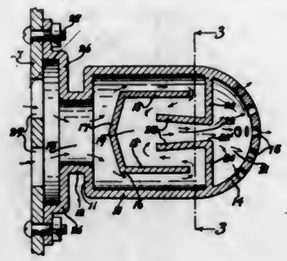


A bed spring support comprising a strap having a hook at its upper end to engage over the upper edge of the side bar member of a wooden bed and having its lower end extending inwardly and upwardly to provide a recess to receive the side bar of a bed spring frame, a brace connected to the lower portion of said strap and extending toward the side bar member, and an adjustable nut on said brace to engage the side of said member.

1,766,191. FUEL-SAVING DEVICE. NELSON J. RUSSELL, Chicago, Ill. Filed May 16, 1929. Serial No. 363,438. 2 Claims. (Cl. 110—175.)

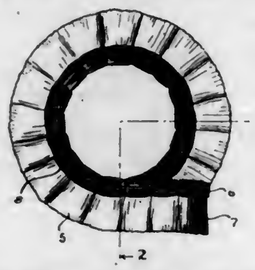
1. A fuel saving device in the form of a casing having at one end air inlet means and means for mounting it in a heating plant, baffle means within the casing, extending entirely across the same and having its ends integral therewith and its sides spaced therefrom, partition webs integral with and extending inwardly from the sides of said baffle means and having their sides integral with the casing, to provide a main expansion chamber, a transverse baffle integral with the walls of the casing and

spaced from the inner ends of said webs, said transverse baffle having a central slot, diverging webs extending outwardly from the edges of said slot and being in spaced



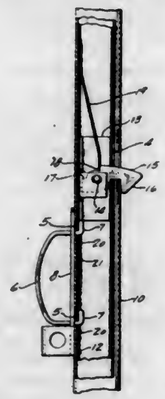
relation with said baffle means and said partition webs, and having their sides integral with the casing, and a rounded head with outlet openings therein to form with said transverse baffle an outer expansion chamber.

1,766,192. GUN SWAB. CHARLES P. SCHLEGEL, Rochester, N. Y., assignor to Schlegel Mfg. Company, Rochester, N. Y., a Corporation of New York. Filed Nov. 7, 1927. Serial No. 231,401. 4 Claims. (Cl. 42—91.)



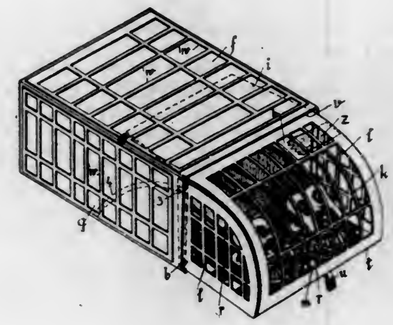
4. A ring for forming gun swab bodies having an inner annular closely woven portion and an outer free fringe portion.

1,766,193. LOCKER LATCH. FRED A. SCHMITZ and JOSEPH STURM, Canton, Ohio, assignors, by mesne assignments, to The Berger Manufacturing Company, Canton, Ohio, a Corporation of New Jersey. Filed Aug. 25, 1927. Serial No. 215,422. 8 Claims. (Cl. 292—219.)



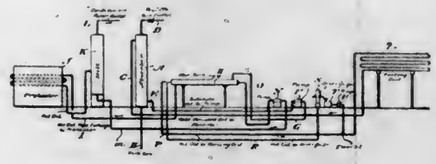
1. In combination with a locker comprising a body having a hinged door and a tubular reinforcement extending along one edge of the door and arranged to form a housing; latching mechanism disposed in said housing and comprising a bar having hooks pivotally mounted thereon, and springs normally urging said hooks into their lowermost pivotal position.

1,766,194. BOX WITH FOLDING LID. BENNO SCHUBART, Nuremberg, Germany, assignor to Vereinigte Schuhfabriken Berneis-Wessels A. G., Augsburg-Oberhausen, Germany. Filed Oct. 6, 1928, Serial No. 310,904, and in Germany Apr. 11, 1928. 7 Claims. (Cl. 206—44.)



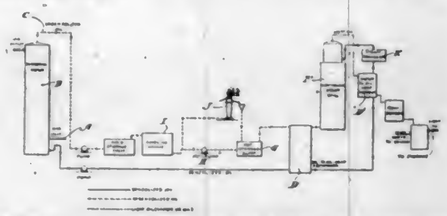
1. A box, comprising in combination with the side walls of the upper wall, the rear wall of the bottom plate and a drop-down front wall formed in one piece with said bottom plate, quadrant shaped side walls at right angle on said front wall, a cut out grating-like flap combined with and applied to the outer edge of the drop-down front wall and longer than the height of said front wall and then the curved outer edge of the side wall of said front walls and adapted to assume a bow-shaped position at the lowering of said front wall according to the quadrant curves of said side walls and to form a grating like front closure of the box at the lowering of said front wall.

1,766,195. ABSORPTION PROCESS. PHILIP TRIEST SHARPLES, Merion, Pa., assignor to The Sharples Specialty Company, Philadelphia, Pa., a Corporation of Delaware. Filed Apr. 4, 1925. Serial No. 20,758. 7 Claims. (Cl. 196—8.)



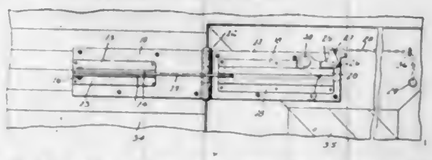
4. The process which comprises absorbing a constituent of a gas in and stripping it from a liquid menstruum in a cyclic operation, subjecting a portion of the stripped liquid to high centrifugal force to separate therefrom contaminating material of higher specific gravity than the menstruum, and absorbing further quantities of said constituent in the combined centrifuged and uncentrifuged menstruum in the cyclic operation.

1,766,196. PROCESS FOR THE RECOVERY OF BENZOL AND THE LIKE. PHILIP TRIXST SHARPLES, Merion, Pa., assignor to The Sharples Specialty Company, Philadelphia, Pa., a Corporation of Delaware. Filed July 20, 1925. Serial No. 44,907. 5 Claims. (Cl. 196—8.)



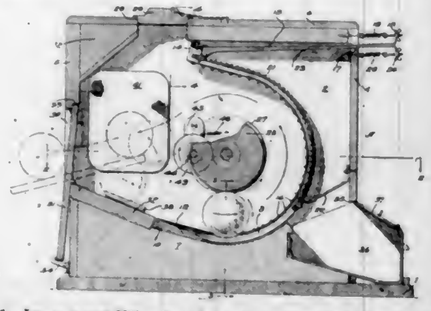
3. The process which comprises absorbing a constituent of a gas in and stripping it from a liquid menstruum in a cyclic operation, and centrifuging the menstruum flowing in the cycle and thereby removing therefrom suspended particles of finely divided matter.

1,766,197. DOOR HINGE AND STOP. CARL A. SHEPARD, Des Moines, Iowa. Filed June 4, 1928. Serial No. 282,656. 5 Claims. (Cl. 16—191.)



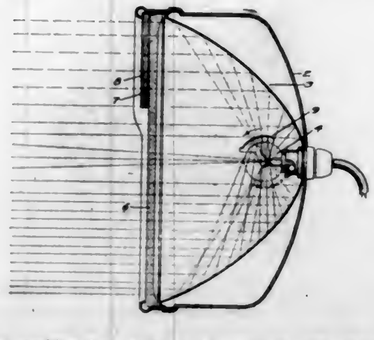
1. In a device of the class described, a pair of hinge plates, a link supported in a plane perpendicular to the pivotal axis of said hinge, means for pivotally connecting one end of said link to one of said hinge plates, a roller guide supported on the other hinge plate for receiving the free end of said link, a pair of rollers on said link within said guide, said rollers being designed to move longitudinally of said guide as the hinge members are moved toward and from each other, a latch device for automatically locking the rollers to their outer limit of movement as the hinge members are swung toward each other, and means for releasing said latch device, said latch device having a tapered edge adapted to rest between said rollers and said hinge plate to wedge the rollers against said guide.

1,766,198. RECONDITIONING DEVICE FOR TENNIS BALLS. ROBERT H. SMILIE, Oakland, Calif. Filed Sept. 7, 1927. Serial No. 218,093. 28 Claims. (Cl. 26—29.)



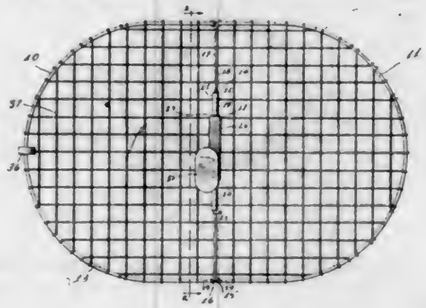
1. In a reconditioning device for tennis balls, a needle belt with which the tennis balls contact to raise a nap thereon, and means for simultaneously moving the centers of the balls in one direction and the surface of the balls in contact with said needle belt in the opposite direction.

1,766,199. DIRECTION INDICATOR. BRYAN H. SMITH, Berkeley, Calif. Filed Jan. 8, 1923. Serial No. 611,466. 4 Claims. (Cl. 177—329.)



1. The combination with an automobile headlight having a source of light, of a lens having a signaling area and a road lighting area, and means for alternately directing light from the source to the respective areas.

1,766,200. TRAP. RUSSELL F. TAYLOR, Scotts, Mich. Filed Mar. 24, 1928. Serial No. 264,471. 3 Claims. (Cl. 43—63.)



1. A trap including a pair of pivotally connected side wall sections having base portions, means carried by the sections normally urging the latter together to form a cage, a projection carried by one of said base portions and operable in the open position of said sections to project through an aperture formed in the other of said base portions, and a lever pivotally connected to said last mentioned base portion and engageable with the projection aforesaid to hold said sections in open position.

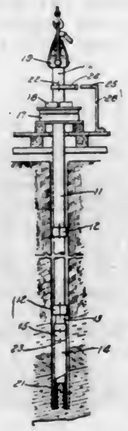
1,766,201. COPPER-COATED WIRE ROPE. ALBERT F. W. THORMANN, Pittsburgh, Pa. Filed July 25, 1927. Serial No. 208,310. 4 Claims. (Cl. 173—13.)



1. A steel wire rope composed of a plurality of strands and having a continuous electrodeposited copper coating.

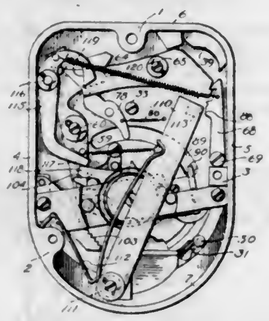
1,766,202. MEANS FOR DETERMINING THE DIP OF STRATA. CHARLES C. THOMPSON, Glendale, Calif. Filed Sept. 22, 1924. Serial No. 739,151. 3 Claims. (Cl. 33—205.)

1. An organization for ascertaining the direction of dip of unexposed strata, comprising: an operating string provided at its lower end with a core barrel for cutting a core without disturbing the original orientation thereof; and oriented means having a point of reference thereon, said oriented means being separate from said drill string,



and said drill string having a series of marks thereon in predetermined azimuthal relation for cooperating with said point of reference to determine the original orientation of said core.

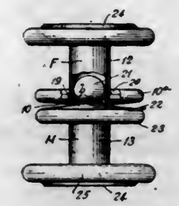
1,766,203. COIN-CONTROLLED RELEASE FOR MECHANISMS. WALTER A. TRATSCH, Chicago, Ill. Filed Sept. 3, 1929. Serial No. 390,000. 10 Claims. (Cl. 194—92.)



1. In a coin controlled release for mechanisms the combination of an operating bar; holding means for said bar; coin-controlled unlatching means for said holding means; operating bar releasing means; and means for moving said releasing means as well as placing said bar under tension.

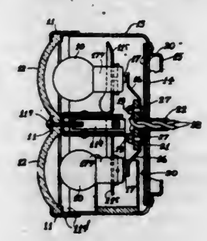
1,766,204. BUTTON. JINDRICH WALDES, New York, N. Y. Filed May 11, 1928. Serial No. 276,845. 2 Claims. (Cl. 24—108.)

1. A detachable cuff button section comprising a deep central stem having a portion near its free end reduced from the normal cross section of the stem to form a shoulder on the stem and then adjacent to said reduced portion an enlargement approximating and not materially exceeding the normal cross-section of the stem, two plate-like members, one of said plate-like members being adapted to lie against the outer surface of a cuff while the other plate-like member is adapted to be inserted loosely through the buttonhole in a cuff and in said position to coact detachably with a complementary cuff button section, one of said plate-like members being an integral extension of the stem while the other is non-integral, the non-integral plate-like member being provided with a central aperture smaller than the normal cross section of the stem and



seated against the shoulder of the stem, said aperture corresponding closely to and having edge walls in contact with the reduced portion of the free end of the stem, the enlargement of the stem being in contact with a surface of the plate and at such distance from the shoulder of the stem that the plate is firmly held and retained in place between the said shoulder and the said enlargement.

1,766,205. LAMP. OLIVER C. RITZ WOLLER, Chicago, Ill. Original application filed July 18, 1925, Serial No. 43,105. Divided and this application filed Mar. 1, 1926. Serial No. 91,359. 1 Claim. (Cl. 177—329.)

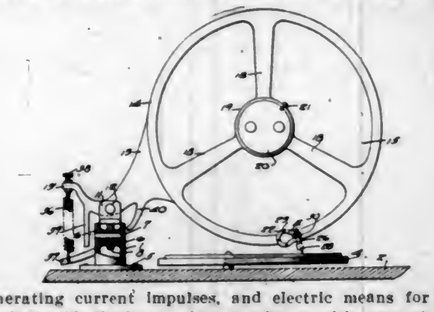


A lamp comprising in combination a metallic casing member having an opening through its rear wall portion, a sheet of insulating material on the front face of said rear wall portion and having an opening in registry with said first named opening, an insulating bushing extending through said openings and having a flange on its inner end engaging the front face of said sheet of insulating material, a block of insulating material engaging the front face of said bushing and having an opening therethrough in registry with the opening through the bushing, securing devices passing through said sheet of insulating material and said rear wall portion of the casing for holding said parts securely together and serving to hold said bushing in position, a contact arm extending from one side of said block within the casing, a bolt for securing said contact arm on said block and having its head located between said sheet of insulating material and said block, and means on the front end of said bolt for tightening the bolt in position and for securing thereto a lead-in wire extending inwardly through said bushing.

1,766,206. ELECTRIC PHONOGRAPH. ADOLPH A. THOMAS, New York, N. Y. Filed Mar. 4, 1927, Serial No. 172,610. Renewed Apr. 7, 1928. 26 Claims. (Cl. 179—1004.)

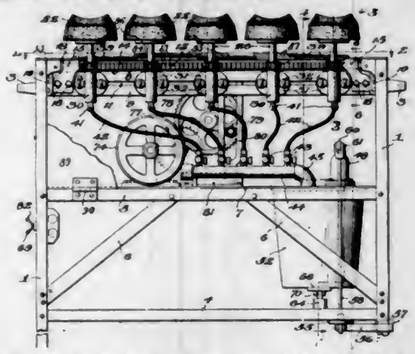
1. A horniess electric phonograph having a horizontally and vertically movable frame, a loudspeaking diaphragm and an electromagnetic reproducer both carried by said

frame, said reproducer including a stylus-holding member mounted to vibrate laterally in relation to a magnet for



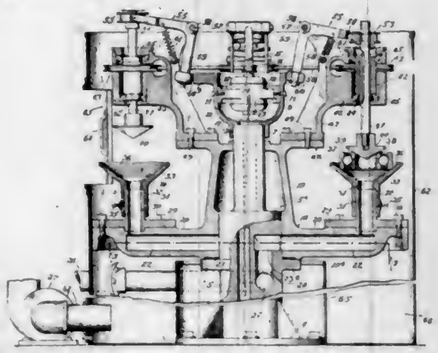
generating current impulses, and electric means for operating said diaphragm in accordance with current impulses generated by said reproducer.

1,766,207. PAN-GREASING MACHINE. JACOB S. ALLEN, Philadelphia, Pa. Filed Sept. 4, 1925. Serial No. 54,527. 13 Claims. (Cl. 91—39.)



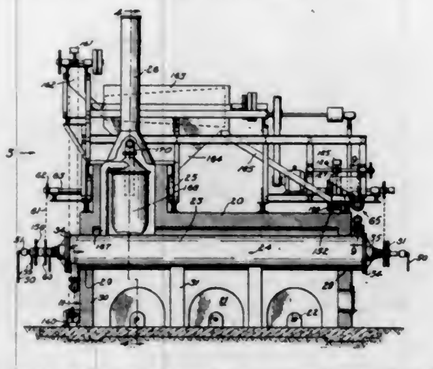
1. A pan greasing machine, comprising an upright tubular rotatable brush spindle, a removable brush carried by the spindle and in communication with the interior thereof, means for rotating the brush, and means for feeding grease through the spindle to the brush, the brush end of the spindle having a notch, and the brush having a spindle receiving bore and a pin carried by the brush and extending across the bore and seated in the notch.

1,766,208. APPARATUS FOR WASHING ANTIFRICTION BEARINGS. GEORGE P. ANSTISS, Oak Park, Ill., assignor to G. S. Blakeslee & Co., Cicero, Ill., a Corporation of Illinois. Filed May 2, 1925. Serial No. 27,420. 15 Claims. (Cl. 141—1.)



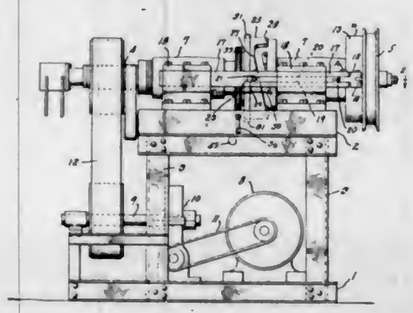
1. An apparatus for cleansing anti-friction bearings, comprising supporting means on which an anti-friction bearing can be readily placed and removed, means for rotating the anti-friction devices of the bearing, and means for forcing fluid under pressure between the raceways of the bearing.

1,766,209. CONTINUOUS CRACKING STILL. WALTER C. BAILEY, Norwalk, Calif. Filed Sept. 20, 1926. Serial No. 136,464. 21 Claims. (Cl. 214—18.)



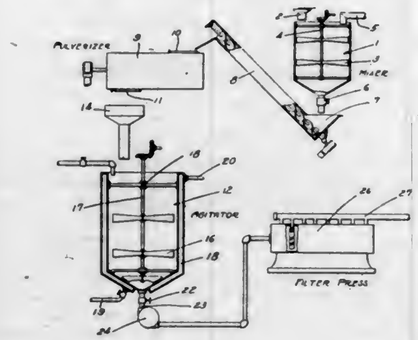
1. In a feeding mechanism, the combination of: walls forming a lower cylinder and an outlet connected to said lower cylinder; walls forming an upper cylinder and an intermediate passage connected to said upper and lower cylinders, there being an inlet for said upper cylinder; an upper feeding piston in said upper cylinder; a lower feeding piston in said lower cylinder; means for operating said upper and lower pistons; an upper plunger independently operable in said upper cylinder; means for operating said upper plunger; a lower plunger independently operable in said lower cylinder; and resilient means for operating said lower plunger.

1,766,210. MACHINE FOR TURNING BRAKE DRUMS AND THE LIKE. JOSEPH E. BATIE, Detroit, Mich., assignor to Kelsey-Hayes Wheel Corporation, Detroit, Mich., a Corporation of New York. Filed Oct. 12, 1925. Serial No. 62,124. 10 Claims. (Cl. 82—2.)



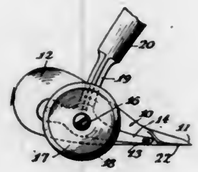
1. In a machine for turning brake drums and the like, the combination with a revoluble arbor adapted to receive a brake drum, of a reciprocable bar movable parallel to the axis of the arbor, a cutter and cutter holder pivotally mounted upon said bar, means for normally urging said cutter away from the brake drum, said means including a yieldable member associated with said bar and engageable with the cutter holder at one side of the pivotal connection thereof to said bar, and means for holding the cutter into engagement with said drum including a member engageable with said holder at a point spaced from the point of contact between said yieldable member and holder and upon the opposite side of the pivotal connection aforesaid.

1,766,211. PROCESS OF PURIFYING GASOLINE. WALTER S. BAYLIS, Los Angeles, Calif., assignor, by mesne assignments, to Filtrol Company of California, Los Angeles, Calif., a Corporation of California. Original application filed May 22, 1926, Serial No. 110,960. Divided and this application filed Sept. 19, 1927. Serial No. 220,385. 5 Claims. (Cl. 196—40.)



1. A process of treating water free gasoline which comprises: applying a decolorizing clay which has no free water or water of crystallization and anhydrous sulfuric acid simultaneously to the said gasoline and thereafter separating the clay from the liquid.

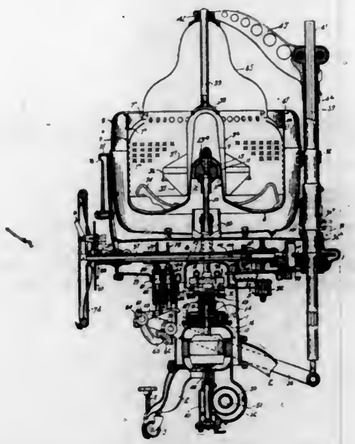
1,766,212. HAND CULTIVATOR. GEORGE R. BELLAH, Los Angeles, Calif., assignor of one-half to E. J. Naffziger, Glendale, Calif. Filed Nov. 26, 1928. Serial No. 321,849. 2 Claims. (Cl. 97—58.)



1. In a hand cultivator, the combination with a cultivator shovel, of a plate secured to the rear face of said shovel, a stud formed integral with and projecting outwardly from the center of said plate, a disc coulter journalled on said stud, an arm formed integral with and projecting upwardly from the center of said plate, and a handle receiving socket formed integral with the upper end of said arm.

1,766,213. WASHING MACHINE. WILLIAM EMIL BOCK, Toledo, Ohio, assignor, by mesne assignments, to The Bock Laundry Machine Company, Toledo, Ohio, a Corporation of Ohio. Filed Feb. 23, 1926. Serial No. 90,197. 31 Claims. (Cl. 68—19.)

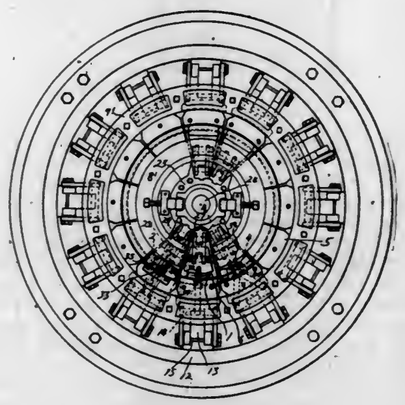
1. In a washing machine, the combination of a receptacle for holding both the articles to be washed and the washing fluid, a frame, a floating support on said frame upon which said receptacle is universally rockably supported, means for agitating the contents of said receptacle to effect the washing and alternatively operable means for communicating torque to said receptacle to revolve the same at a high rate of speed in substantial dynamic balance to centrifugally extract and discharge the fluid.



9. In a washing machine, the combination with a frame, of a revoluble receptacle for containing the articles to be washed and the washing fluid, said receptacle having a central post, and a reciprocating hollow plunger surrounding said post for agitating the contents of said receptacle.

27. In a washing machine, the combination with a revolving container and a closed housing surrounding the same, of means for preventing the air loading of said container while revolving at high speed.

1,766,214. RIM SIZING AND PUNCHING MACHINE. WILLIAM N. BOOTH, Detroit, Mich., assignor to Kelsey-Hayes Wheel Corporation, Detroit, Mich., a Corporation of New York. Filed July 1, 1925. Serial No. 40,943. 36 Claims. (Cl. 153—2.)



1. In a rim sizing and punching machine, the combination with radially inwardly movable blocks engageable with the rim to size the same, of a radially movable punch engageable with the rim and means for actuating said blocks and punch in timed relation to successively size and punch the rim, including heads reciprocable in directions transverse to those of said blocks and punch.

1,766,215. BRAKE DRUM. WILLIAM N. BOOTH, Detroit, Mich., assignor to Kelsey-Hayes Wheel Corporation, Detroit, Mich., a Corporation of New York. Filed Apr. 12, 1926. Serial No. 101,484. 7 Claims. (Cl. 188—218.)



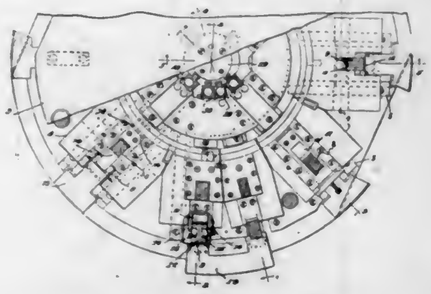
1. A brake drum including a brake flange and a hardened rib formed on said brake flange for reinforcing and holding the same circular.

1,766,216. BRAKE DRUM. WILLIAM N. BOOTH, Detroit, Mich., assignor to Kelsey-Hayes Wheel Corporation, Detroit, Mich., a Corporation of New York. Filed Apr. 12, 1926. Serial No. 101,485. 8 Claims. (Cl. 188—218.)



1. A brake drum having a brake flange portion and a curled terminal flange portion forming a substantially semi-circular reinforcing rib for maintaining said brake flange portion circular.

1,766,217. MACHINE FOR SIZING AND PERFORATING RIMS. WILLIAM N. BOOTH, Detroit, Mich., assignor to Kelsey-Hayes Wheel Corporation, Detroit, Mich., a Corporation of New York. Filed July 8, 1926. Serial No. 121,253. 9 Claims. (Cl. 153—2.)



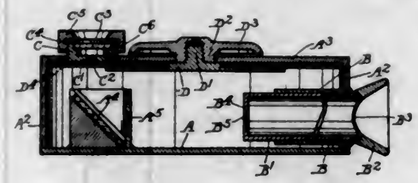
9. In a machine for sizing and perforating a rim, the combination with means movable into engagement with the rim to size the same, of means subsequently movable relative to said sizing means and in a corresponding direction into engagement with the rim to perforate the same and means cooperating with said perforating means and movable in the opposite direction into engagement with the rim.

1,766,218. CROSS CHAIN. WILLIAM J. BOYER, Wilmington, Del. Filed June 16, 1923. Serial No. 645,795. 4 Claims. (Cl. 152—14.)



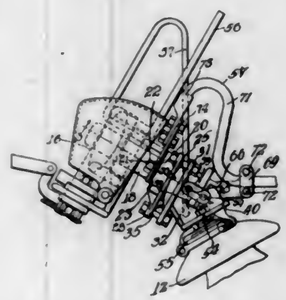
2. A cross chain comprising in combination, a link, a ring tiltably mounted on a side of said link and having an internal diameter so related to the gauge of the material of the link as to bind therewith when tilted thereon.

1,766,219. PHOTOMETER. CHARLES W. DAKE, Chicago, Ill., assignor to The Pyle-National Company, Chicago, Ill., a Corporation of New Jersey. Filed Jan. 3, 1928. Serial No. 244,100. 1 Claim. (Cl. 88—23.)



A photometer comprising a flat cylindrical housing, one of the curved walls being apertured, a tubular socket located within said aperture and extending into the housing, an eye piece tube thereon, a reflector in line with the axis of the eye piece, a wall projecting upwardly from the base of the reflector, a plurality of walls associated with the reflector being apertured in line, a light opening in one of the flat walls of the housing in register with the reflector, a shutter mounted on the flat wall of the housing of varying opacity and a hand wheel projecting through the wall whereby this shutter may be adjusted to mask with progressive degrees of opacity the light opening, a reading scale on the shutter, the wall of the reflector being apertured in register with said scale to permit determination of the shutter position by the use of said scale.

1,766,220. ADJUSTABLE TERMINAL MOUNTING. ALFRED F. C. LOTZ, Chicago, Ill., assignor to Electrical Engineers Equipment Co., Chicago, Ill., a Corporation of Illinois. Filed Dec. 31, 1923. Serial No. 683,572. 10 Claims. (Cl. 200—48.)

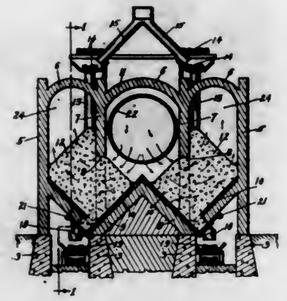


1. In combination, a pedestal having a spherical seating surface and means for mounting same upon a support, a contact carrying member having complementary supporting means adjustably seated upon said surface, a contact carried by said contact carrying member, apertured lugs on the pedestal and contact carrying members and bolt means extending through said apertured lugs for clamping the contact carrying members in adjusted position upon the supporting pedestal.

1,766,221. AIR AND GAS FILTER. GEORGE E. LYNCH, Los Angeles, Calif. Filed Feb. 15, 1927. Serial No. 168,301. 3 Claims. (Cl. 183—46.)

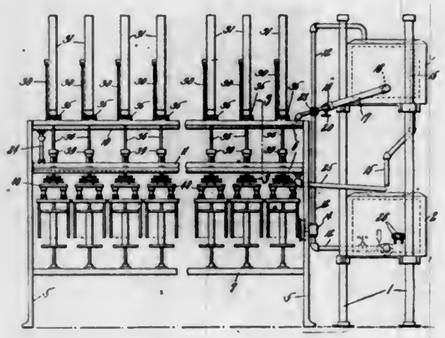
1. In a filtering apparatus, a housing having vertical partitions dividing said housing into separate chambers, openings through said partitions at the floor, feeding means for maintaining a pile of loose filter material in said housing and filling the openings through said partitions,

the opposite sides of said pile of filter material resting in inclines corresponding to the natural angles of repose at opposite sides of said partitions, means for inlet and outlet from opposite sides of said partitions, said means being adapted to be connected with means for causing a difference in pressure in said chambers, whereby gas to be filtered is



caused to pass downwardly through one side of said pile and upwardly through the material in the openings in said partition and into the chamber at the opposite side of said partition, and means for drawing off said filter material from the bottom, whereby to keep it moving gradually downwardly along its inclined upper surfaces at opposite sides of said partition.

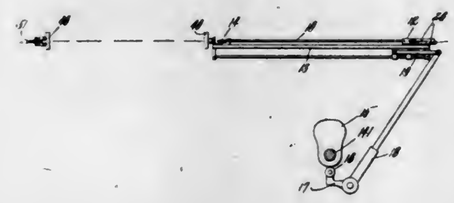
1,766,222. TWISTING MACHINE. JOHN E. MILLETT, Gardner, Mass., assignor to American Fibre Corporation, Gardner, Mass., a Corporation of Massachusetts. Filed May 6, 1927. Serial No. 189,225. 4 Claims. (Cl. 117—3.)



1. In a machine of the class described, a supply tank, an elevated tank, means for pumping liquid from said supply tank to said elevated tank, an overflow from said elevated tank to said supply tank, a downwardly inclined trough, means for conducting liquid by gravity from said elevated tank to the upper end of said trough, means for passing strips through the liquid in said trough, and means for conducting liquid from the lower end of said trough to said supply tank.

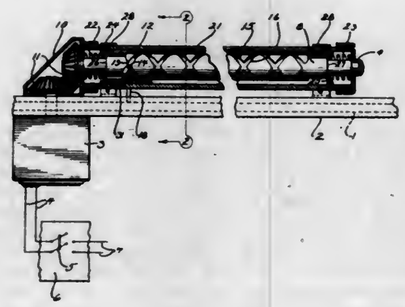
4. In combination, a frame comprising side pieces, a rod joining said side pieces adjacent to one end, a sleeve arranged parallel to said rod and fixed to one of said side pieces adjacent to its other end and abutting against said other side piece, a pair of spaced supporting bars, and a screw passing through said side pieces and said sleeve, said screw having threaded engagement with one of said supporting bars adjacent to said other side bar and having its head extending into an opening in the other of said supports when in tightened condition.

1,766,223. METHOD OF AND MECHANISM FOR WEAVING STAKE FABRIC. JOHN E. MILLETT and GUSTAF E. NORDSTROM, Gardner, Mass., assignors to American Fibre Corporation, Gardner, Mass., a Corporation of Massachusetts. Filed Dec. 28, 1926. Serial No. 157—452. 8 Claims. (Cl. 139—127.)



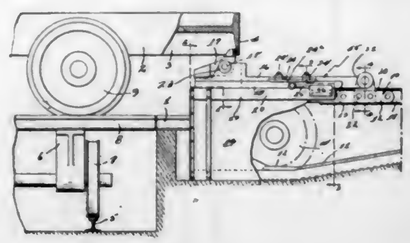
1. In a machine of the class described, a weft laying mechanism comprising a needle having a strand passage, means to project one end of said needle through the shed and to retract said needle, and a series of pins at the opposite end of said needle and a series of pins at the opposite end of said needle and about which the strand to be laid may pass in zigzag relation before entering said strand passage.

1,766,224. WINDSHIELD WIPER. JOHN JOSEPH MONTEVALDO, San Jose, Calif. Filed June 2, 1926. Serial No. 113,165. 1 Claim. (Cl. 74—14.)



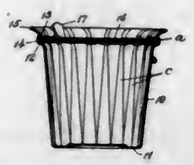
In a device of the character described, a casing, a shaft having reduced ends and oppositely threaded grooves thereon, the reduced ends of said shaft being rotatably supported on the casing, said grooves extending thru shoulders formed adjacent said reduced ends; a sleeve slidably mounted on the said shaft; a cam member pivotally carried by said sleeve and being slidable in said grooves; means for rotating said shaft, thereby causing said cam to ride free of one groove, thus allowing the cam to swing in a position parallel with the shoulder; a cup-shaped washer on each reduced end; a spring for pressing the washer against the adjacent shoulder of the shaft, said washer being slidable on the reduced end; said sleeve being adapted to force said washer away from said shoulder before the cam reaches the end of the groove, so as to allow the freeing of the cam from the groove; the action of said washer and spring forcing said cam in abutment with said shoulder so that the cam is forced to enter the groove of the opposite thread when said groove is rotated in alignment therewith, whereby said sleeve is reciprocated.

1,766,225. CONVEYER. CHARLES L. MOON, Detroit, Mich., assignor to Mechanical Handling Systems, Inc., Detroit, Mich., a Corporation of Michigan. Filed Feb. 6, 1928. Serial No. 252,381. 8 Claims. (Cl. 104—172.)



1. In a conveyer apparatus, the combination with a conveyer movable between definite limits, of a transfer device actuated by said conveyer for actuating an object beyond said conveyer, and automatically operable means for controlling the operation of the conveyer.

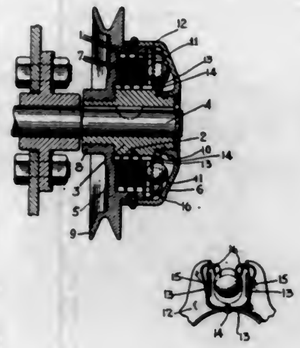
1,766,226. CONTAINER. HENRY NIAS and WILLIAM POSTER, Brooklyn, N. Y., assignors, by mesne assignments, to Lily-Tulip Cup Corporation, New York, N. Y., a Corporation of Delaware. Filed Sept. 14, 1926. Serial No. 135,304. 2 Claims. (Cl. 229—5.5.)



1. A paper container comprising a body having a bottom and an open end, a disconnected removable cover for closing the open end of the container, an outwardly extending flange located near the open end of the body, an inwardly extending shoulder above the flange and spaced therefrom so as to form a cover receiving groove, the inner face of said flange being adapted to form a seat for and to limit inward movement of the cover and the inwardly extending shoulder serving to retain the cover in the groove and prevent unintentional removal thereof, a flaring lip on the body above the inwardly extending shoulder, the sides of the body below the outwardly extending flange having a smooth and unbroken taper to permit a plurality of containers to be telescopically assembled in a stack, the zone formed by the outwardly extending flange, the inwardly extending shoulder, and the flaring lip being relatively narrow as compared with the remainder of the body, and the outer face of the flange of one container being adapted to contact with the inwardly extending shoulder of the adjacent telescoping container, whereby the containers may be closely assembled in stacked formation, and when assembled the sides of the containers will be spaced sufficiently to prevent any substantial frictional contact therebetween and permit ready separation of the stacked containers.

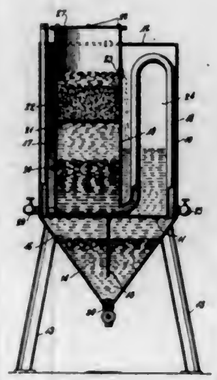
1,766,227. AUTOMATIC CLUTCH. FREDERICK T. RUSSELL, Utica, N. Y., assignor to Savage Arms Corporation, Utica, N. Y., a Corporation of Delaware. Filed Sept. 2, 1925. Serial No. 53,971. 36 Claims. (Cl. 192—105.)

1. A clutch having spaced centrifugal members, a spring member at each side of each centrifugal member having a free end extending toward the centrifugal member and meeting the surface thereof at an angle which decreases as the centrifugal member moves outward.



29. A clutch comprising sets of inter-registering driving and driven clutch disks, a hub member splined to one set, a housing splined to the other, centrifugal members rotated with the driving set and loosely mounted in confined outwardly narrowing space in said housing between it and said disks for wedging the disks together, and means opposing outward movement of each centrifugal member and having its maximum effect only below a certain motor speed.

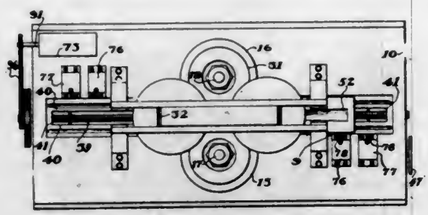
1,766,228. FILTER AND STORAGE UNIT. GEORGE L. ROSENBAUM, Atlanta, Ga. Filed May 9, 1929. Serial No. 361,709. 6 Claims. (Cl. 210—43.)



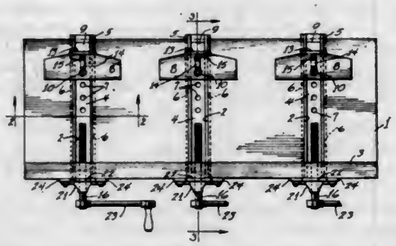
1. A unit of the character described comprising a container, a bath cylinder therein, a purifying chamber below the container adapted to receive material for purification, means within the container establishing communication between said chamber and said cylinder, said cylinder above the outlet and below the top of said means communicating with the interior of the container.

1,766,229. APPARATUS FOR WELDING HOLLOW METALLIC ARTICLES. HORACE P. SAILOR, Cleveland, Ohio. Filed July 6, 1926. Serial No. 120,567. 17 Claims. (Cl. 219—4.)

1. An electric welding machine comprising in combination a frame, a carriage associated therewith, a screw shaft operatively connected with the carriage, means for rotating the screw shaft so as to effect movement of the carriage with reference to the frame, a work holder mounted on the carriage and adjustable vertically with reference thereto, a pair of electrodes mounted on opposite sides of the work holder, there being space at each end of the frame for enabling work to be passed into or removed from said holder at the end of each stroke of the carriage.

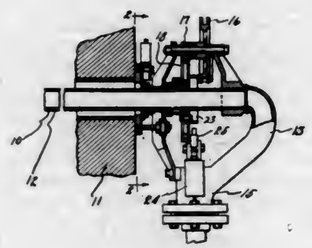


1,766,230. CABINETMAKER'S CLAMP. JOHN SEA, Alameda, Calif. Filed Dec. 10, 1926. Serial No. 153,874. 1 Claim. (Cl. 144—291.)

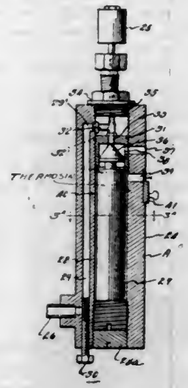


A clamping device comprising a table having guideways in the top thereof, a U-shaped member capable of reciprocal movement within the guideways, a plurality of screw-threaded blocks secured within the U-shaped member, a removable closure plate for the front end of the guideways, latches for securing the closure plate in position for closing the end of the slot, a traveling screw for screw-threaded engagement with the closure plate and with the internally screw-threaded blocks.

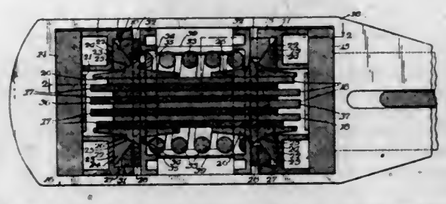
1,766,231. BOILER CLEANER. NORMAN L. SNOW and ALBERT W. HONYWILL, Jr., Detroit, Mich., assignor to Diamond Power Specialty Corporation, Detroit, Mich., a Corporation of Michigan. Filed July 27, 1925. Serial No. 46,451. 9 Claims. (Cl. 122—392.)



1. In a boiler cleaner, a blower element, provided with a nozzle adapted to discharge cleaning fluid, means for supplying a cleaning fluid to said nozzle, a valve controlling the supply of cleaning fluid, means for actuating said valve, means automatically actuated a predetermined length of time following the actuation of the valve for advising the operator of the passage of cleaning fluid to said nozzle, and means for regulating the said time interval.

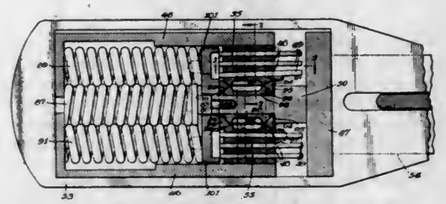


1,766,232. DRAFT GEAR. HERBERT E. TUCKER, South Bend, Ind., assignor to Universal Draft Gear Attachment Co., a Corporation of Illinois. Filed July 9, 1927. Serial No. 204,618. 5 Claims. (Cl. 213—36.)



2. In a draft gear, in combination, opposed followers, cooperating friction elements located between the followers and relatively movable thereby, wedging friction shoes cooperating with such elements, a thrust member, wedges movable with the thrust member and cooperating with the shoes, wear compensating elements having sliding bearing against a longitudinal wall of the thrust member and inclined faces for urging the wedge elements together, and spring means for resisting the advance of the wear compensating elements and the compression of the gear.

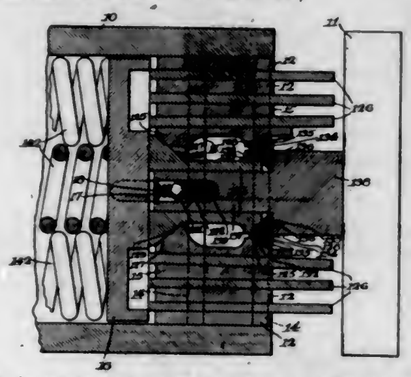
1,766,233. DRAFT GEAR. HERBERT E. TUCKER, South Bend, Ind., assignor to Universal Draft Gear Attachment Co., a Corporation of Illinois. Original application filed July 9, 1927, Serial No. 204,618. Divided and this application filed July 13, 1928. Serial No. 292,467. 5 Claims. (Cl. 213—33.)



3. In a draft gear in combination, a chambered follower, an opposed follower, two groups of intercalated friction plates located respectively on opposite sides of the gear axis, wedge means acting compressively on each

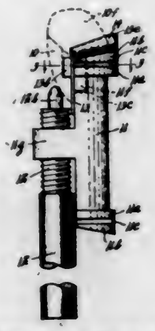
group of plates, a pusher element interposed between the second named follower and the wedge means and having a central stem with parallel sides projecting between the two sets of wedge means, one of the elements of each set of wedge means being a wear-compensating element and being in sliding engagement with a side of the stem and spring means opposing the inward movement of the friction and wedging means, the wear compensating elements and the thrust element.

1,766,234. DRAFT GEAR. HERBERT E. TUCKER, South Bend, Ind., assignor to Universal Draft Gear Attachment Co., a Corporation of Illinois. Original application filed July 9, 1927, Serial No. 204,618. Divided and this application filed July 13, 1928. Serial No. 292,468. 2 Claims. (Cl. 213—33.)



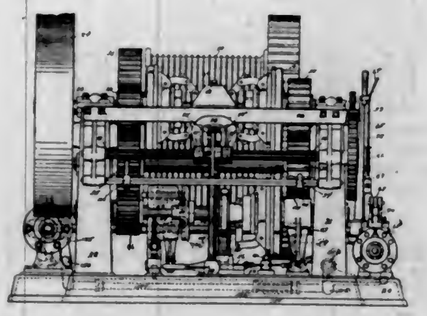
2. In a draft gear in combination, a casing, an opposed follower, two groups of intercalated friction plates within the casing, a thrust element seated against the named follower and having forwardly facing shoulders and a forwardly projecting stem having parallel sides, friction wedge shoes engaging the plates, triangular wedge blocks, seated on the shoulders of the thrust member and engaging wedging faces of the shoes, a plate seated against each of the named faces of the stem and having spreading wedging faces cooperating with the shoes and wedge blocks, and spring means resisting the advance of the plates and for restoring the gear elements to normal position upon release.

1,766,235. TOOTH-HOLDNG DEVICE. AMOS S. WELLS, Minneapolis, Minn. Filed Mar. 31, 1926. Serial No. 98,919. Renewed July 26, 1929. 14 Claims. (Cl. 32—10.)



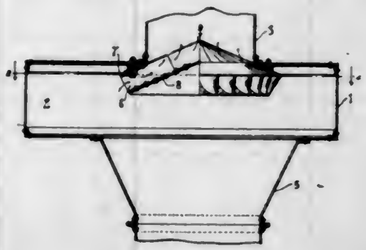
1. A tool for supporting a tooth facing with a recess therein, having in combination, a pair of adjustable retaining members adapted to hold said tooth facing, one of said members having a portion adapted to enter said recess in the facing and having a supporting surface extending at one side of said facing on which the tip may be built up.

1,766,236. AUTOMATIC HOISTING APPARATUS. • FREDERICK N. WHITESELL, Chicago, Ill., assignor to Fairbanks, Morse & Co., Chicago, Ill., a Corporation of Illinois. Filed Nov. 6, 1926. Serial No. 146,720. 21 Claims. (Cl. 192—141.)



14. In a winding mechanism, a fluid control system comprising a control operating device, a valve therefor, a safety device adapted to control said mechanism upon a predetermined variation of pressure in said control system, an automatic pressure release valve, a fluid pressure maintaining means and a fluid circulating means, said operating device, the valve therefor, said safety device, release valve, pressure maintaining means and circulating means being hydraulically interconnected, and said system being adapted to effect a predetermined sequence of control over said mechanism.

1,766,237. DUST COLLECTOR OR SEPARATOR. JOHN WHITMORE, Belfast, Ireland, assignor to Davidson & Company Limited, Belfast, Ireland. Filed Nov. 16, 1925, Serial No. 69,393, and in Great Britain Mar. 14, 1925. 6 Claims. (Cl. 183—87.)

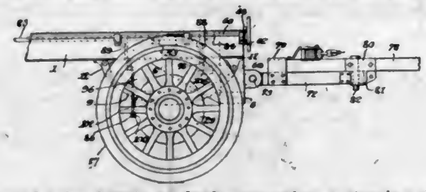


1. In dust collectors, separators and the like, the combination with a vortex chamber in which the separation takes place under the action of centrifugal force, of an inlet thereto for the dust-laden gas arranged tangential to the maximum radius of the chamber, a gas outlet therefrom arranged in the upper side of the chamber with its lower end situated between planes coinciding with the top and bottom edges of the inlet respectively, a set of guide vanes projecting into the lower end of said outlet and extending partly above and partly below the top of the said tangential inlet in order to convert the whirling motion of the gas to a linear motion parallel to the axis of the outlet.

1,766,238. VEHICLE. FRANK J. ZALESKY, Buckholts, Tex. Filed May 31, 1927. Serial No. 195,331. 5 Claims. (Cl. 280—99.)

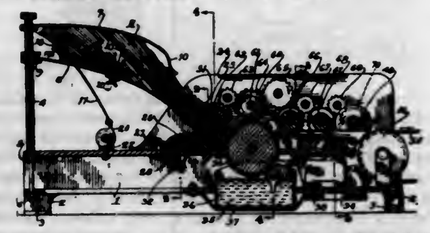
1. In a vehicle having front and rear axles, wheel spindles pivoted to the axles to move on vertical axes,

and road wheels on said spindles; steering mechanism including transverse steering rods pivotally connected to the front and rear spindles, respectively, a pivotally



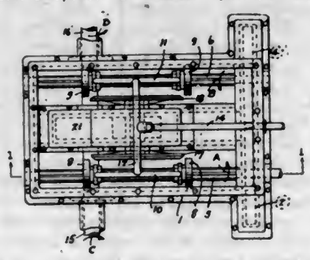
mounted yoke, forming a draft connection, a steering shaft steering arms fixed to said shaft and connecting rods connecting said arms, one with the draft connection and the others with the respective steering rods.

1,766,239. GUM-LABELING MACHINE. MAXWELL ZURNDORF, Baltimore, Md. Filed Jan. 4, 1928. Serial No. 244,541. 12 Claims. (Cl. 91—50.)



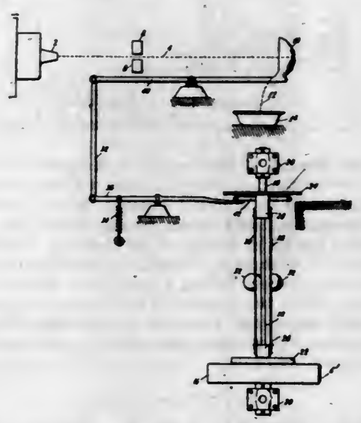
7. In a gumming and folding apparatus for labels, a main body portion, adjustable means on the main body portion for supporting a bundle of labels, gumming and folding elements mounted on the main body portion, means for delivering one label at a time from the bundle into the gumming and folding elements, the support for the bundle of labels comprising a suitably curved feeding platform adjustably mounted at one end and on a threaded element extending from the main body portion, the other end being free, the means for delivering the label comprising a friction roll rotatably mounted in the main body portion and located in such a manner that it will tend to force one label at a time from the free end of the feeding platform, resilient means supported by the main body portion for providing tension between the friction roller label and free end of the feeding platform, a gumming device for receiving the label comprising guide roll and gumming wheel rotatably mounted in the main body portion, a container for holding the gum and means within the container for contacting with the gumming wheel in such a manner that the label may be gummed as desired, means mounted on the main body portion for folding the labels comprising a plurality of grooved rolls in cooperation with a bending bar, the rolls being arranged in series and each roll having a different depth of groove.

1,766,240. VARIABLE-SPEED TRANSMISSION. JULIUS L. ALLEN, Sacramento, Calif. Filed June 7, 1927. Serial No. 197,115. 3 Claims. (Cl. 74—26.)



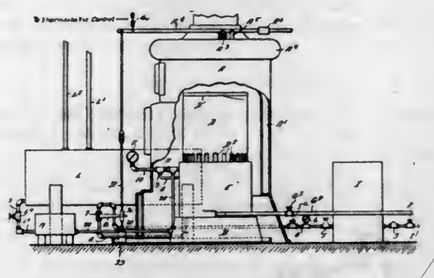
2. A variable speed transmission comprising a casing, a pair of drive shafts, a pair of friction wheels mounted on each drive shaft, a pair of discs disposed between the pairs of wheels, said discs being operatively connected to each other, and means for simultaneously moving all of said friction wheels for causing said wheels to contact with said discs for rotating said discs in either direction.

1,766,241. DEFLECTOR. LUDWIG BATTERMANN, Rocky Point, N. Y., assignor to Radio Corporation of America, a Corporation of Delaware. Filed June 15, 1929. Serial No. 371,247. 5 Claims. (Cl. 178—89.)



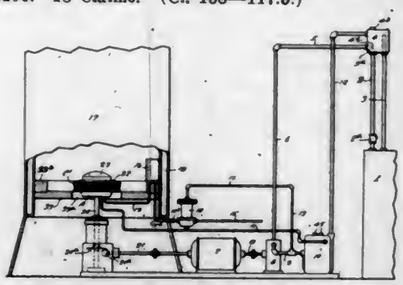
1. In a recorder, a travelling tape, a stream for outlining signal characters thereon, a baffle, means for moving said baffle into said stream thereby preventing said stream from outlining signal characters on the tape, means responsive to the speed of the tape for moving said baffle out of said stream, thereby allowing the stream to outline signal characters on the tape, and means for preventing additional movement of the baffle out of the stream when said tape reaches a predetermined speed.

1,766,242. OIL-BURNING SYSTEM. JOHN W. CANNON, Providence, R. I. Filed Jan. 28, 1925. Serial No. 5,218. 22 Claims. (Cl. 158—36.)



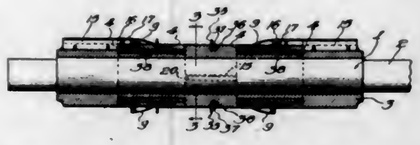
1. In an oil burning system, the combination of a combustion chamber of refractory heat-radiating material, a burner for said chamber, and means for supplying a combustible mixture to said burner, the said means comprising a steam-generator located outside the said combustion chamber and arranged to be heated by radiation therefrom, means for supplying water to said generator, an ejector with which the delivery end of said generator communicates, an oil conduit communicating with said ejector, means for supplying oil continuously to a predetermined level in said conduit below said ejector, and a conduit connecting the said ejector with the said burner and arranged to be heated by radiation from said combustion chamber.

1,766,243. PROCESS FOR BURNING LIQUID FUEL. JOHN W. CANNON, Providence, R. I. Original application filed May 29, 1925, Serial No. 33,626. Divided and this application filed Feb. 1, 1926. Serial No. 85,400. 18 Claims. (Cl. 158—117.5.)



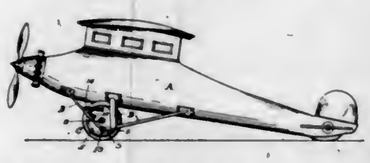
1. The process of burning oil in a furnace which consists in transmitting oil and water to said furnace, developing steam in a vessel exposed to the burning fuel and transmitting said steam wholly within the furnace, atomizing the oil by means of the steam so developed, delivering the mixture of steam and atomized oil to the interior of a burner having a peripheral discharge outlet, supplying air to the interior of said burner to be admixed with said steam and atomized oil, rotating the burner, and igniting the mixture delivered by centrifugal action through said outlet.

1,766,244. CUTTING CYLINDER. HARRY A. CUMFER, Chicago, Ill., assignor to Guyton & Cumfer Mfg. Co., Chicago, Ill., a Corporation of Illinois. Filed June 4, 1928. Serial No. 282,777. 3 Claims. (Cl. 164—28.)



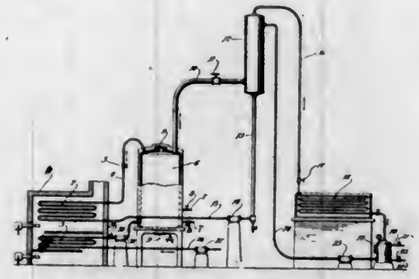
1. In combination, a cylinder, movable plates mounted on and secured to said cylinder in such manner as to leave spaces between adjacent plates, knives mounted in said spaces, and an adjustable wedge cooperatively associated with said plates adapted to be manipulated to secure the plates and knives in predetermined fixed position.

1,766,245. LANDING GEAR FOR AIRPLANES. GEORGE H. DAVIS, Augusta, Me. Filed Mar. 5, 1929. Serial No. 344,221. 4 Claims. (Cl. 244—2.)



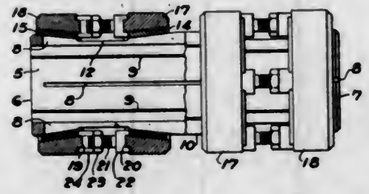
1. In a device of the character described comprising a shaft, a disc concentrically fixed on one end of said shaft, a felly on said disc, a plurality of rolls revolubly mounted in said felly, a rim revoluble over said rolls, flanges on said rim adapted to enclose said felly, packing means between said felly and said flanges, a tire on said rim, a crank-pin mounted in said disc in parallel and spaced relation to said shaft, a yoked frame straddling said tire and disc, bearings in said frame in which the ends of said crank-pin are journalled, said frame extending upwardly to the body of said plane, a stop member to limit the rotation of said disc in either direction, a spring adapted to hold said stop in yielding engagement with said frame, and a duplicate set of the foregoing elements disposed on the opposite end of said shaft.

1,766,246. PROCESS OF CRACKING OIL. JEAN DELATTRE-SEGUY, Chicago, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed June 28, 1926. Serial No. 118,979. 2 Claims. (Cl. 196—48.)



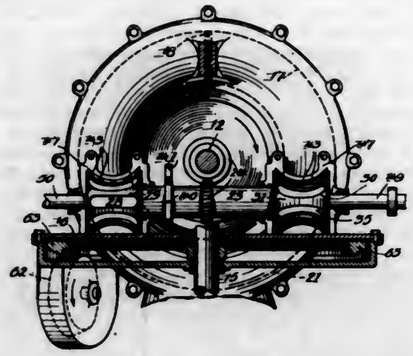
1. A process for cracking hydrocarbon oil containing salt and other deleterious solid constituents comprising maintaining a bulk supply of oil constituents in an enlarged reaction zone, taking off vapors from said reaction zone, subjecting such vapors to reflux condensation, delivering hydrocarbon oil constituents containing salt or other deleterious compounds to a heating coil wherein such hydrocarbon oil is subjected to a high temperature while under a relatively low pressure, increasing the pressure on said hydrocarbon oil and delivering the same to said enlarged reaction zone wherein the salt and solid constituents separate from the oil, continuously passing reflux condensate separated from the vapors subjected to reflux condensation through an independent heating coil wherein it is subjected to a cracking temperature while maintained under a super-atmospheric pressure, delivering the heated reflux condensate to said enlarged reaction zone and maintaining said enlarged reaction zone under substantially the same pressure as that maintained on the reflux condensate passing through said independent heating coil.

1,766,247. SHAFT COUPLING. THOMAS ELLIOTT, Birmingham, Ala., assignor to Continental Gin Company, a Corporation of Delaware. Filed Oct. 21, 1926. Serial No. 143,239. 1 Claim. (Cl. 287—112.)



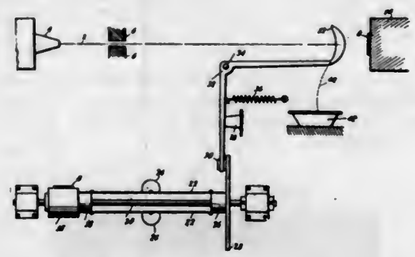
A shaft coupling for the opposed ends of alined shafts comprising a slit sleeve adapted to be gripped about said opposed ends, each end portion of the sleeve having its outer periphery formed to define opposed frusta of cones with the outer ends of the sleeve forming the bases of the outer frusta, the opposed frusta at one end portion of the sleeve adapted to surround the end of one of the opposed shafts and the other opposed frusta the end of the other shaft, an annular member surrounding each cone and of greater diameter than the frusta cones, a split frusto-conical bushing between each of the members and its associated cone, and screw means between each pair of members at the end portions of the coupling sleeve to spread said members apart and cause the bushings to bear against the sleeve and grip it tightly about the ends of the shafts.

1,766,248. ROTARY INTERNAL-COMBUSTION ENGINE. ELOV ERICSSON, St. Paul, Minn. Filed Apr. 24, 1926. Serial No. 104,335. 8 Claims. (Cl. 123—18.)



2. In an engine, the combination with a rotary piston and an annular chamber therefor, of a disc dividing said chamber into arcuate segments, one of said segments constituting a power cylinder and said disc having an opening adapted to permit the passage of said piston into and out of said cylinder, intake and outlet ports near opposite ends respectively of said cylinder, means for admitting fluid fuel to said cylinder through said intake port, means for igniting the fuel so admitted behind said piston, means for admitting fluid to be compressed in front of said piston, a cylindrical, rotary valve and a chamber extending longitudinally and spirally in said valve and having openings in the opposite ends thereof adapted to communicate with said intake and outlet ports respectively, said chamber being arranged to receive a charge of fluid from said cylinder at one end and to discharge said fluid into said cylinder at its other end.

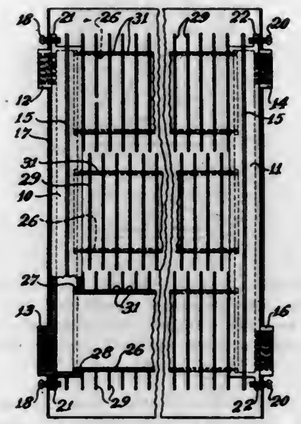
1,766,249. DEFLECTOR. JAMES L. FINCH, Port Jefferson, N. Y., assignor to Radio Corporation of America, a Corporation of Delaware. Filed June 14, 1929. Serial No. 370,818. 5 Claims. (Cl. 178—89.)



1. In a recorder, a travelling tape, a stream for outlining signal characters thereon; a baffle; means for moving said baffle into said stream thereby preventing said stream from outlining signal characters on the tape; and means, responsive to the speed of the tape, for moving said baffle out of said stream, thereby allowing the stream to outline signal characters on the tape.

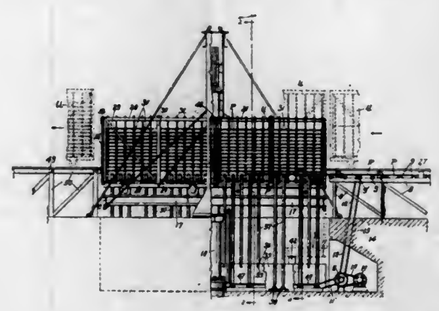
1,766,250. RADIATOR. WILLIAM A. FINLEY, Birmingham, Ala. Filed Sept. 23, 1927. Serial No. 221,587. 4 Claims. (Cl. 257—137.)

3. In a radiator, having an enclosing flue with an inlet and an outlet for a current of air, a pair of spaced manifolds for a heating medium one at each side of the flue and extending longitudinally thereof, a plurality of relatively thin flattened tubes joining the manifolds, and



radiating plates closely embracing the tubes and spaced from the walls of the flue, said plates being arranged in staggered relation with respect to each other on adjacent tubes.

1,766,251. MEANS FOR HANDLING WET WALL BOARD AND THE LIKE. ROBERT M. GREENLEAF, Los Angeles, Calif., assignor to Plastoid Products, Inc., Los Angeles, Calif., a Corporation. Filed Apr. 21, 1927. Serial No. 185,477. 2 Claims. (Cl. 214—41.)

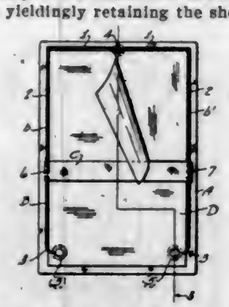


1. In combination with an elevator pit, an elevator, means for moving the same vertically intermittently up and down therein, a series of fixed vertical supports in said pit with horizontal rollers supported thereon at their upper ends and adapted to move through said elevator frame as the latter is raised and lowered thereover, a receiving unit adapted to said elevator and having a series of spaced horizontal supports also adapted to move down over said rollers, said rollers being adapted to be positioned between said horizontal supports as said elevator is moved step by step, and means for removing said receiving unit from said elevator and replacing it with another unit.

1,766,252. SCRATCH SHEET OR PAD HOLDER. ISIDOR HEIDENREICH, St. Louis, Mo. Filed June 6, 1927. Serial No. 196,883. 4 Claims. (Cl. 281—44.)

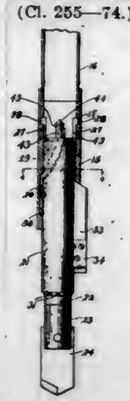
1. In a scratch sheet holder, a base for supporting for consecutive use a plurality of sheets in piled superposed relation, a pair of spring-wire strips fixed upon the base

and extending lengthwise along the opposite sides of the base and the scratch sheets supported thereupon, and a second strip adapted to extend crosswise the base over said sheets for yieldingly retaining the sheets in total and



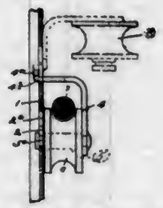
successively reduced number on the base, the second strip being permanently connected at one end with one of the first strips and being adapted for detachable engagement at its other end with the other of the first strips.

1,766,253. DRILLING TOOL. JAN HENDRIK HOLLESTELLE, St. Louis, Mo., assignor to The Kennedye Corporation, Wilmington, Del., a Corporation of Delaware. Filed Sept. 8, 1922. Serial No. 586,932. Renewed July 12, 1929. 2 Claims. (Cl. 255—74.)



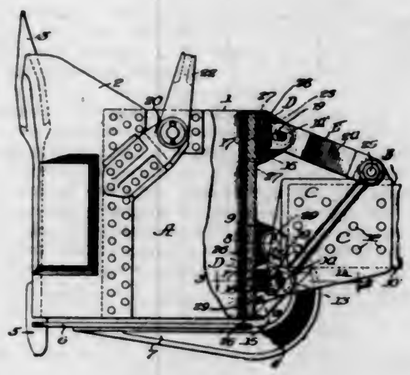
1. In a drilling tool, a casing carried shoe having a slot therein, a bit carrying member movably positioned within the shoe and also having a slot therein, a normally retracted lateral extension bit within the bit carrying member, interengaging means between the shoe and bit carrying member to bring the slots into register when the said bit carrying member is moved within the shoe, means to lock the bit carrying member and shoe against relative movement when the slots are in register, and means operable when the bit carrying member and shoe are locked together to force the bit laterally through the slots.

1,766,254. CABLE RACK. JAMES R. KEARNEY, Kansas City, Mo. Filed Apr. 17, 1922. Serial No. 553,321. 1 Claim. (Cl. 248—36.)



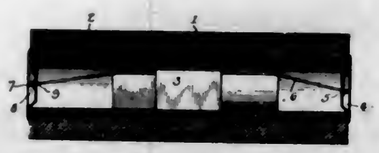
In a cable support, a base member provided with perforations, said perforations having a greater length than width and provided with an enlarged central portion and restricted end portions, a cable supporting rack having an arm provided with a bent up end portion wider than the enlarged portion of the perforation adapted to pass into one of the perforations lengthwise thereof and including a notched portion for slidable engagement with the restricted portion of the perforation, and another arm on said rack provided with locking means adapted to pass into the enlarged portion of another perforation and notched to permit positioning thereof upon a sliding movement into a restricted portion of said last-named perforation, said second arm provided with means to support a cable between said arms, the connection between the first-named arm and the base being such as to permit swinging of the second arm about said connection as a pivot after upward movement of said second arm.

1,766,255. CUSHION-BACK DIPPER. WALTER J. MULLALLY, Chicago Heights, Ill., assignor to American Manganese Steel Company, Chicago, Ill., a Corporation of Maine. Filed May 5, 1927. Serial No. 189,121. 11 Claims. (Cl. 214—145.)



1. In a device of the character described, the combination of a dipper stick, a dipper bucket, recesses in said bucket and stick, and cushioning means in said recesses.

1,766,256. END CLOSING AND PROTECTING MEANS FOR FABRIC ROLLS. JENS P. NIELSEN, Chicago, Ill. Filed Dec. 29, 1927. Serial No. 243,277. 2 Claims. (Cl. 206—59.)



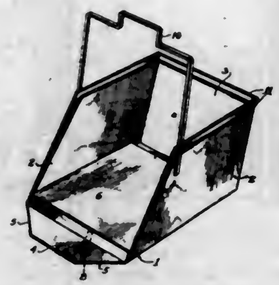
1. An end closing and protecting device for a fabric roll comprising a pair of end plates adapted to engage opposite ends of the roll, and a tie rod having one end anchored to one of the end plates and its other end passing through the other end plate and projecting a short distance therefrom, said projecting portion of the tie rod being split to provide two portions, one of which is bent into interlocking relation to the other to form an enlargement engaging with the outer side of the last mentioned end plate and acting to hold the rod under tension.

1,766,257. END CLOSING AND PROTECTING MEANS FOR FABRIC ROLLS. JENS P. NIELSEN and JOSEPH R. RICHER, Chicago, Ill., said Richer assignor to said Nielsen. Filed Dec. 22, 1927. Serial No. 241,742. 2 Claims. (Cl. 206—59.)



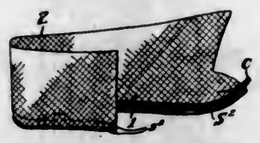
1. An end closing and protecting device for a fabric roll comprising a pair of end plates adapted to engage opposite ends of the roll, and a tie rod having one end anchored to one of the end plates and its other end passing through the other end plate and projecting a short distance therefrom, said projecting portion of the tie rod having a metallic block secured thereon in position to hold the rod under tension, said block and rod being compressed transversely so as to effect their interengagement with the block engaging the last mentioned end plate.

1,766,258. ICE-CARRYING DEVICE. JOSEPH JACKSON PARKERSON, Jacksonville, Fla. Filed Apr. 25, 1929. Serial No. 358,064. 6 Claims. (Cl. 224—48.)



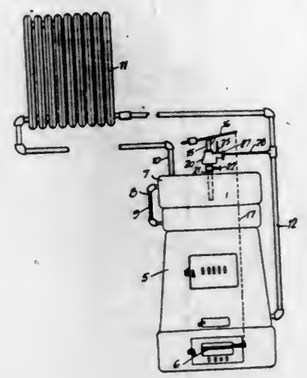
1. A device of the character described, comprising a receptacle having a bottom, side and back walls and a false bottom spaced from the main bottom, connected with the main bottom, adjacent the front open end of the receptacle and also connected with the side walls, the rear end of said false bottom being spaced from the rear wall of the container.

1,766,259. COLLAR AND THE LIKE. SAMUEL G. PAYNE, Howard, R. I. Filed Nov. 12, 1926. Serial No. 148,058. Renewed Jan. 10, 1930. 2 Claims. (Cl. 2—131.)



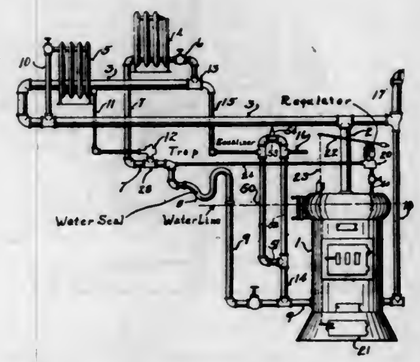
1. A one-piece collar presenting when overfolded upon itself, a neck band portion and an overfold portion, said neck band portion being provided with stretch retarding means for preventing stretching and permissive of longitudinal stretch in its areas above said retarding means, thereby causing the collar when stretched to assume a fan-like form, the fabric from which said collar is formed being cut on the bias continuously across the full width of the combined band portion and overfold portion to produce an increasing longitudinal stretchability in a direction from the retarding means on the band towards the outside of the overfold portion.

1,766,260. TEMPERATURE CONTROL. GUSTAV SCHWARZ, Wauwatosa, Wis. Filed May 9, 1927. Serial No. 189,836. 6 Claims. (Cl. 236—32.)



1. In a device of the character described, the combination with a boiler, of a pipe communicating therewith below the water level therein, a fitting to which said pipe is connected, an outlet for said fitting above the level of water in said boiler, and a thermostatic regulating device having a portion within said fitting.

1,766,261. STEAM OR VAPOR HEATING SYSTEM. GUSTAV SCHWARZ, Wauwatosa, Wis. Filed Feb. 16, 1928. Serial No. 254,722. 5 Claims. (Cl. 236—1.)

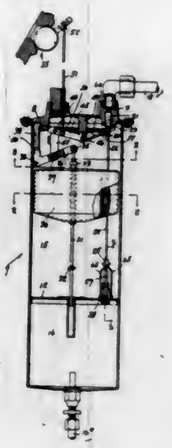


1. A trap comprising a casing having a pair of ports and a threaded opening axially of one of said ports, a thermostatic valve wafer controlling the last mentioned port, and a stem carrying said wafer and threadably engaging said opening, said stem having a vent hole.

1,766,262. FUEL METER FOR AUTOMOBILES. CLAUDE SIMMONS, Reno, Nev. Filed Dec. 8, 1926. Serial No. 153,441. 1 Claim. (Cl. 137—68.)

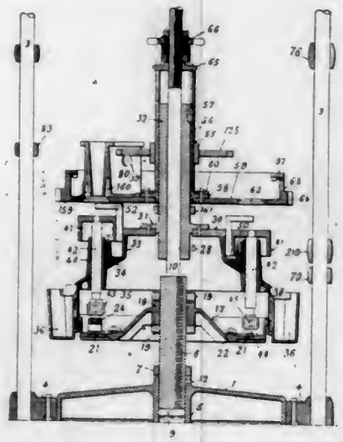
An apparatus of the character described, comprising a receptacle having alined valves in the top and bottom

thereof, a common rod operating the valves having an oval enlargement thereon, spring fingers yieldingly gripping



the enlargement to oppose movement of the same from one end position to the other, and a float control for said rod.

1,766,263. CAN-FILLING MACHINE. CHESLEY T. SMALL, St. Louis, Mo. Filed Feb. 17, 1926. Serial No. 88,765. 29 Claims. (Cl. 226—71.)



1. In a device of the class described, the combination with a supporting frame, of a vertical shaft carried thereby, a rotary can table having a top, vertically movable individual can holders carried by stems and forming a part of said table top, a conical shed extending beneath said holders, and upwardly extending bearings for the holder stems on said shed, said holders being provided with downwardly projecting flanges surrounding the upper ends of said bearings.

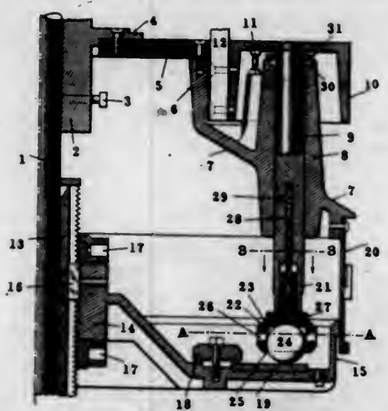
5. In a device of the class described, the combination with a base, of an externally threaded sleeve in said base, means for preventing relative rotation between the sleeve and the base, means for vertically adjusting said sleeve, and a track carrying member vertically adjustable on said sleeve.

12. In a device of the class described, the combination with a feed disk, a hopper for said disk, and a stirrer in said hopper provided with curved arms forming a packing device, said curved arms being provided with concaves in their forward faces.

15. In a device of the class described, the combination with a hopper having a plurality of discharge openings, of abutments between said openings, means for successively moving the can toward the hopper to compress the charges of material therein against said abutments.

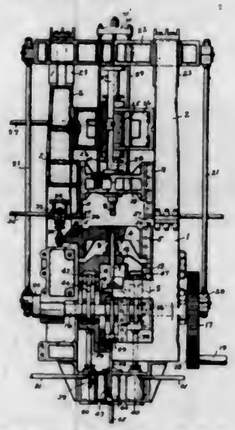
28. In a device of the class described, the combination with a rotary can table, of can filling means including a flange adapted to enter a can for forming a mound of powder projecting above the can, a member sliding on the flange and fitting over the can, and a levelling device for depressing the mound to the can level.

1,766,264. PLUNGER SUPPORT. CHESLEY T. SMALL, St. Louis, Mo. Original application field Feb. 17, 1926, Serial No. 88,765. Divided and this application filed Feb. 25, 1928. Serial No. 256,999. 3 Claims. Cl. 184—64.)



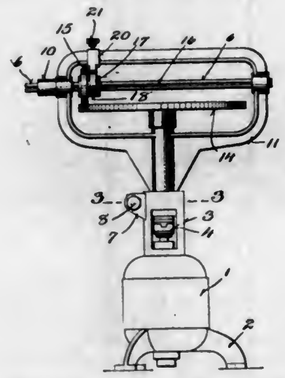
1. In a device of the class described, the combination with a bearing, of a plunger stem sliding in said bearing, a ball cage carried on the lower end of said stem, an oil passage in said stem for lubricating the bearing and terminating in the interior of said ball cage, and an anti-friction ball in said cage covering the inlet of said passage to form a valve therefor.

1,766,265. PRESS. FRANK H. SMITH, Kent, Ohio, assignor of one-half to Alois K. Nowak, Chicago, Ill. Filed Feb. 15, 1928, Serial No. 254,375. Renewed May 9, 1930. 18 Claims. (Cl. 18—16.)



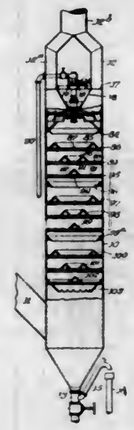
1. In a press for molding loose material, a mold chamber having an open end, a core member mounted in said chamber, an ejecting plunger mounted in the chamber for movement toward and from the open end thereof, a pressure applying plunger movable into and out of the open end of the chamber and having a sliding fit in the chamber and on the core member, means for reciprocating the latter plunger, and means for retracting the ejecting plunger and vibrating the core member before the pressure stroke and for advancing the ejecting plunger during the return stroke of the pressure applying plunger.

1,766,266. VARIABLE-SPEED TRANSMISSION. PETER M. STRACKE, Racine, Wis. Filed Dec. 22, 1926. Serial No. 156,392. 3 Claims. (Cl. 74—26.)



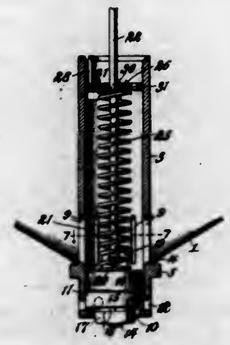
1. The combination of a driving shaft, a support therefor, a yoke reversibly carried by said support, a pair of shafts carried by said yoke and arranged at right angles to each other, either of said shafts being adapted for driving connection with said driving shaft, a friction disc and a co-operating friction wheel carried by the shafts carried by the yoke, and means for sliding the friction wheel towards or from the center of the friction disc.

1,766,267. GAS WASHER. HARRY A. STRAIN, Chicago, Ill. Filed Oct. 6, 1927. Serial No. 224,407. 15 Claims. (Cl. 261—88.)



1. A gas washer comprising in combination, a tower having a gas inlet and a gas outlet, a rotatable spray and beating arrangement mounted in said tower, and a series of splash rings mounted in said tower between the spray arrangement and the gas inlet, the said splash rings being arranged in concentric series in staggered relation with each other in said tower.

1,766,268. SELF-CLEANING VALVE FOR RESERVE TANKS FOR MOTOR VEHICLES. FRED SWOYER, Silver Grove, Ky. Original application filed July 17, 1928, Serial No. 293,442. Divided and this application filed July 17, 1928. Serial No. 293,443. 8 Claims. (Cl. 251—75.)

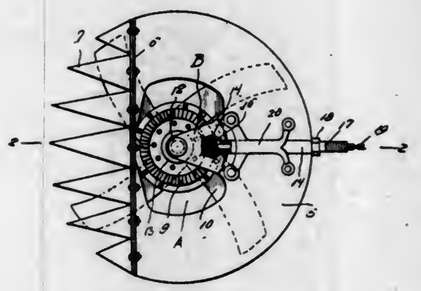


3. A valve of the class described including a valve cylinder open at the lower end and having an inwardly extending flange therent and provided at the lower portion above the flange with spaced sets of openings and having a seat portion between the spaced sets of openings, a valve piston slidable in the cylinder to and from the seat portion and having a wiping action to clean the said seat portion and prevent accumulation of dirt thereon, a spring for holding the valve piston normally on said seat portion, and a removable stop detachably interlocked with the upper portion of the valve cylinder and forming an abutment for the upper end of the coiled spring.

1,766,269. COMBUSTIBLE MIXTURE AND PROCESS FOR PREPARING THE SAME. JULIUS THIECKE, Berlin, Germany, assignor to Minimax A.-G., a Corporation of Germany, and Deutsche Pyrotechnische Fabriken A.-G., a Corporation of Germany, Berlin, Germany. Filed Dec. 20, 1928, Serial No. 327,462, and in Germany Oct. 25, 1927. 2 Claims. (Cl. 23—6.)

1. The process of preparing a combustible compound for generating compressed gas, choke gas or heat, which consists in mixing about 15 parts by weight of animal charcoal and 85 parts by weight of ammonium nitrate in a state of fine division.

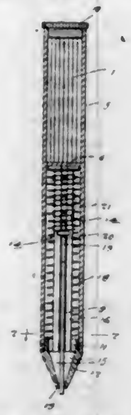
1,766,270. CLIPPER. MARION R. THROWER, Tuckerman, Ark., assignor of one-half to Hubert Hall, Tuckerman, Jackson County, Ark. Filed June 13, 1927. Serial No. 198,458. 1 Claim. (Cl. 30—11.)



A clipper of the character described comprising a flat plate having a downturned marginal flange and an upturned marginal flange, and further being provided with

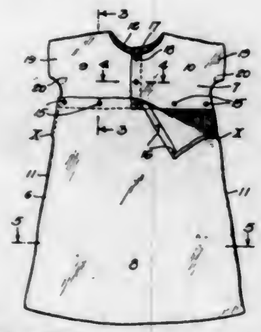
an opening adjacent the upturned flange, an integral supporting arm on the plate extending into the opening, an integral journal housing adjacent the free end of the arm extending upwardly thereon and having an open bottom, a shaft rotatably mounted in the housing and depending therefrom, a ring gear mounted on the depending portion of the shaft, anti-friction means interposed between the ring gear and the arm, radially extending cutting blades mounted on the ring gear and extending beneath the plate and within the downturned flange thereon, stationary cutting teeth extending forwardly in the horizontal plane of the plate and having an upturned flange for connection with the upturned plate flange for detachably mounting said teeth thereon in a manner to co-act with the radial blades, a casing mounted on the arm rearwardly of the journal housing and extending rearwardly over the plate, a drive shaft rotatably mounted in the casing, a pinion gear on the drive shaft in mesh with the ring gear, and means for connecting the shaft to a source of power in a manner to rotate the same.

1,766,271. MECHANICAL PENCIL. HENRY TURNER, Kerry, Oreg. Filed June 18, 1929. Serial No. 371,830. 1 Claim. (Cl. 120—21.)



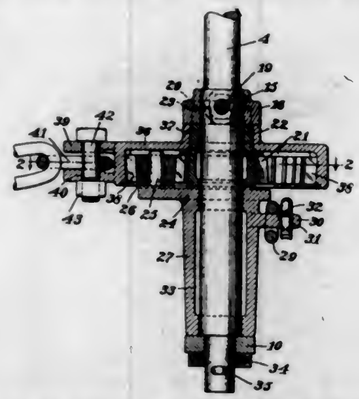
A mechanical pencil comprising a barrel, a pair of clamp members, said clamp members being of wedge-shape, a removable tapering cap at one end of the barrel for receiving the wedge-shaped clamp members, securing means for retaining the clamp members within the barrel when the cap is being removed, and tensional feed means for moving the marking element between the clamp members.

1,766,272. GARMENT. SAMUEL W. VALLIER, Santa Monica, Calif. Filed Feb. 3, 1930. Serial No. 425,617. 3 Claims. (Cl. 2—74.)



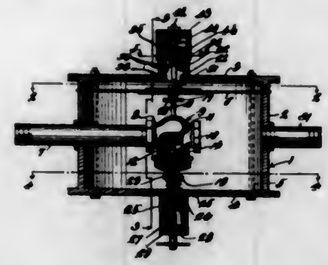
2. A garment having a skirt portion and a waist portion, the back of the garment being open from the extreme bottom of the garment to the neck of the garment, the front of the skirt portion terminating at the waist line and having detachable connection with the front of the waist portion of the garment, the front of the waist portion of the garment being open along a vertical line so as to provide overlapping portions, and means for detachably connecting the overlapping portions together, the waist portion provided with short sleeves.

1,766,273. GEARED HAND BRAKE FOR FREIGHT CARS. WILLIAM E. WINE, Toledo, Ohio. Filed Sept. 21, 1926. Serial No. 136,792. 12 Claims. (Cl. 74—119.)



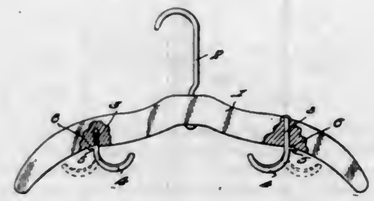
3. In a hand geared brake for railway rolling stock, the combination of a hand wheel and brake mast, a pawl and ratchet connected with the mast, a planetary unit the sun gear of which is operably connected to the lower end of the mast, the spider having a drum extending beneath the same, a chain connected with the ring gear and also connected to the drum on the spider and adapted to be operably connected with the brakes, the chain holding the ring gear from operating when said sun gear is operated by said mast, to thereby cause the drum to revolve when said hand wheel is operated, to thereby apply the brakes.

1,766,274. GAS REGULATOR. WILLIAM WALLACE WILLIAMS, Lubbock, Tex., assignor to The Federal Supply Company, a Corporation of Texas. Filed May 19, 1928. Serial No. 279,088. 4 Claims. (Cl. 50—23.)



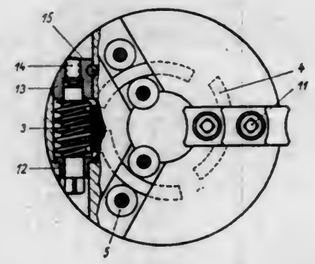
1. In a gas regulator of the class described, a casing, a diaphragm within the casing, the diaphragm being located between the closed top and bottom of the casing, a gas inlet pipe leading into the casing below the diaphragm, a gas suction pipe leading from the casing below the diaphragm, a valve within the casing below the diaphragm for controlling the flow of gas from the said inlet pipe to the casing, means yieldably resisting opening movement of the valve, operative means interposed between the diaphragm and the resisting means for rendering the resisting means inactive upon flexing of the diaphragm by the suction in the casing set up by the suction pipe to permit opening of the valve, an air inlet spout in the top of the casing above the diaphragm, the spout having a series of air inlet openings in its wall arranged at successively greater elevations with respect to the said top of the casing, and a cap adjustably mounted upon the spout and in its different positions of adjustment being adapted to extend over a greater or less number of said openings whereby to regulate the supply of air to the casing above the diaphragm.

1,766,275. GARMENT HANGER. WERDON H. ALLEN, South Montrose, Pa. Filed Mar. 23, 1928. Serial No. 264,020. 2 Claims. (Cl. 223—62.)



1. In a garment hanger, a hanger bar, hook-like elements including an attaching portion connected with the bar to permit turning movement of the hook, and teats carried by the attaching portion for engagement with said bar to hold the hook in either of two given positions.

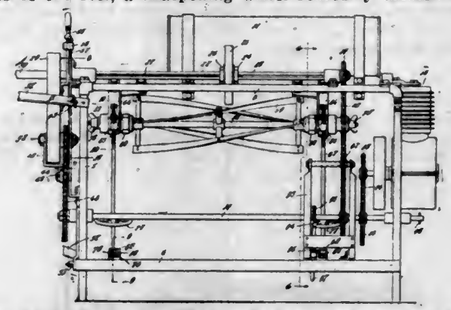
1,766,276. JAW CHUCK FOR MACHINE TOOLS. WILHELM BERG, Bielefeld, Germany. Filed Dec. 16, 1927, Serial No. 240,501, and in Germany Jan. 25, 1927. 2 Claims. (Cl. 279—115.)



1. A jaw chuck for machine tools, comprising in combination a body having cylindrical borings, a worm-wheel, cams on said worm-wheel, and round rods serving as guide-pieces all accommodated in said chuck, clamping jaws on said guide pieces, connecting screws for said jaws, a roller bolt supported on both ends by two bearings in said guide piece carrying between said two bearings of said guide-piece the roller and formed on one end as a collar to support said roller, a worm for driving said worm-wheel, two bushings in said body, in which said worm is journalled, a counter-pressure-screw in one of said bushings and a safety pin connecting said bushing with said body.

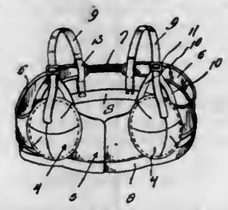
1,766,277. LAWN-MOWER REEL-TRUING AND SHARPENING MACHINE. WILLIAM O. BLACKMUN, Hays City, Kans. Filed May 26, 1928. Serial No. 280,808. 2 Claims. (Cl. 51—50.)

1. A lawn mower reel sharpening and truing machine comprising a pair of reel supporting chucks adapted for supporting the opposite ends of the reel in a horizontal position upon the machine, means for independently adjusting either of said chucks vertically, longitudinal adjusting means for one of said chucks, a shaft rotatably supported in spaced parallel relation with respect to the axis of the reel, a sharpening wheel rotatably carried on



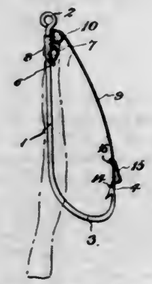
said shaft, a screw arranged within the shaft and arranged for longitudinal movement with respect thereto, means connecting the screw with the sharpening wheel, common drive means for one of said chucks, said shaft and said screw, and manual control means for the screw and arranged for reversing the direction of movement thereof, independent of the rotation of said shaft.

1,766,278. BRASSIÈRE. MARY A. BOLLWINE, Tampico, Mexico. Filed Aug. 21, 1928, Serial No. 301,077, and in Mexico May 22, 1928. 2 Claims. (Cl. 2—42.)



1. A brassière comprising a pair of form fitting breast pockets, a web joining said pockets together, rearwardly tapering wing-like extensions connected to said pockets and adapted to embrace the sides and back of the wearer, an elastic band connecting the narrow ends of said extensions together, and shoulder straps associated with said pockets and extensions, together with a waist encircling band attached to said web and pockets and free of connection with said extensions and elastic strap, said shoulder straps being fastened at their rear ends to said waist encircling band and having adjustable connections at their forward ends with said pockets.

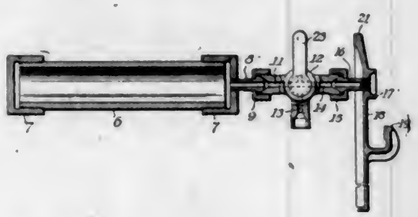
1,766,279. FISHHOOK AND WEED GUARD. JOHN E. BROWN, Elyria, Ohio. Filed Oct. 24, 1928. Serial No. 314,741. 7 Claims. (Cl. 43—40.)



6. A fish hook having a shank and a bill terminating in a prong at its free end, and a strand of resilient wire

secured against the upper portion of the shank longitudinally thereof with its lower end bent outwardly and upwardly to form a bait-engaging member having an enlarged head, said strand being bent outwardly and downwardly from the upper end of its attached portion to form a guard arm diverging from the hook and having its lower end portion bent to form an open head adapted to engage about said prong and prevent accidental separation of the guard and bill.

1,766,280. TESTING SIGNAL SYSTEMS. CHARLES A. CAMPBELL, Watertown, N. Y., assignor to The New York, Brake Company, a Corporation of New Jersey. Filed Feb. 27, 1928. Serial No. 257,450. 2 Claims. (Cl. 73—51.)



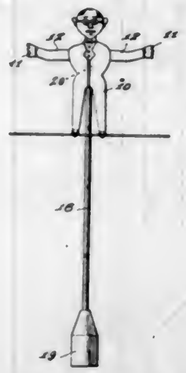
1. The method of testing a pneumatic signal system including a signal pipe, signal valve and whistle, which consists in charging the pipe and valve with air; reducing the pressure in said pipe by discharging air therefrom into a chamber of fixed capacity and at a definite lower initial pressure until the pressures in the pipe and chamber equalize; repeating said pressure reducing step by discharging air from said pipe successively into confined equal volumes of air at said definite initial pressure as rapidly as is possible and yet cause the signal valve to function to blow the whistle upon each pressure reduction; and observing the attained number of blasts per unit of time.

1,766,281. CONTINUOUS TREATMENT OF HYDROCARBONS WITH SULPHUR DIOXIDE. GUISEPPE CATTANEO, Hilversum, Netherlands, and PAUL JODECK, Berlin, Germany, assignors to Allgemeine Gesellschaft für Chemische Industrie m. b. H., Berlin, Germany, a Corporation of Germany. Filed May 10, 1927, Serial No. 190,330, and in Germany Nov. 1, 1926. 1 Claim. (Cl. 196—37.)



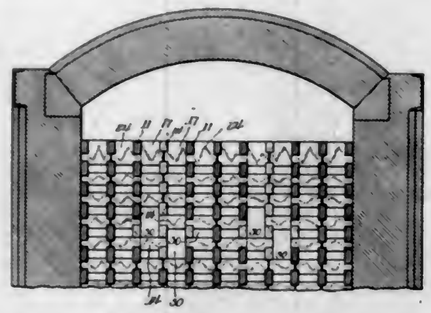
In the process of continuously treating hydrocarbon oils with liquid sulphur dioxide, the steps which comprise introducing oil to be treated into the bottom of a tower, and introducing liquid sulphur dioxide into the upper portion of the tower whereby the oil and sulphur dioxide mix and flow in counter-current relation to each other, and decreasing the linear velocity of the upwardly flowing oil in the upper portion of the tower above the point of entrance of the sulphur dioxide, whereby droplets of liquid sulphur dioxide carried up by the oil are given time to separate from the oil and thus are returned to the oil undergoing treatment.

1,766,282. TOY. JAMES A. COLBERT, Liberty Center, Ind. Filed Oct. 21, 1929. Serial No. 401,236. 1 Claim. (Cl. 46—40.)



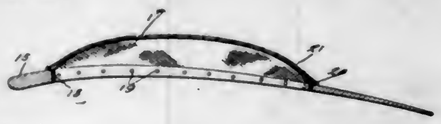
A toy comprising a figure having laterally projecting outstretched arms, the head, fingers and feet of the figure being grooved to facilitate accommodation of a tight wire during swinging and sliding action of the figure thereon, an attaching bar adjustably connected with the body of the figure, and a counter-balancing beam depending from and rigidly connected with the outermost projecting extremity of the adjusting bar in obliquely disposed relation to dispose the weighted extremity thereof in line with the vertical axis of the figure upon the wire.

1,766,283. CHECKERWORK. GEORGE L. DANFORTH, JR., and ALBERT E. PETERSON, Chicago, Ill., assignors to Open Hearth Combustion Company, Chicago, Ill., a Corporation of Illinois. Filed July 31, 1928. Serial No. 296,581. 10 Claims. (Cl. 72—15.5.)



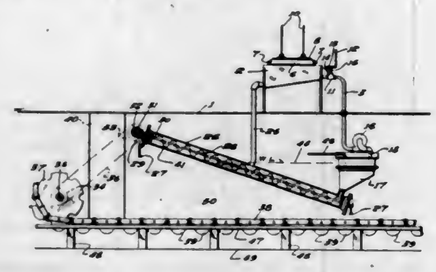
1. A brick for checkerwork construction comprising a rectangular shaped member having notched out portions at adjacent corners, one of said notches being substantially twice the extent of the other notch, said larger notch being of an extent in one direction substantially equal to the thickness of the brick.

1,766,284. AIRPLANE. JULIUS DANKO, Toledo, Ohio. Filed Feb. 10, 1928. Serial No. 253,453. 1 Claim. (Cl. 244—12.)



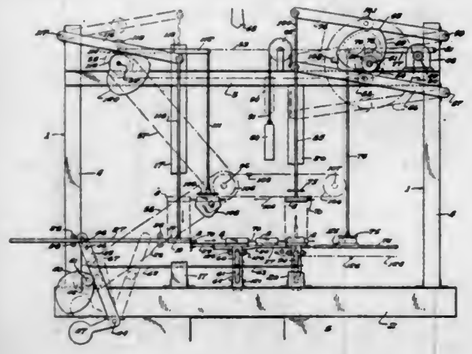
An airplane wing comprising a frame, a fabric web extending over the space defined by the members of the frame and capable of upward bulging, a metallic strip disposed against the marginal portions of the web and secured to the members of the frame, and a restraining sheet marginally secured to the frame members and extending in an upwardly bulged form over the said web and comprising diagonally intersecting strands.

1,766,285. BRICKMAKING MACHINE. ROY P. M. DAVIS, Mount Union, Pa. Filed June 11, 1929. Serial No. 370,131. 9 Claims. (Cl. 25—2.)



1. In a brick making machine, a sectional mold and support therefor, mold washing means positioned beneath the mold support, means for covering the top of the mold, and means for causing the washing means to discharge a washing fluid against the bottom of said covering means.

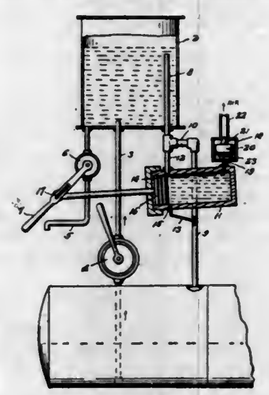
1,766,286. BRICK-MAKING MACHINE. ROY P. M. DAVIS, Mount Union, Pa. Filed June 11, 1929. Serial No. 370,132. 6 Claims. (Cl. 25—2.)



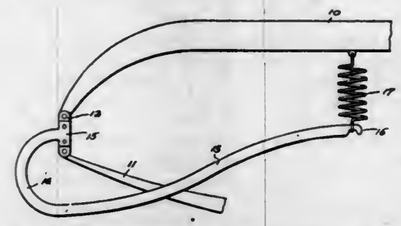
1. A brick making machine comprising upper and lower pairs of horizontal mold tracks, a pair of vertical tracks adjacent each end of said horizontal tracks, an elevator confined between one of said pairs of vertical tracks for lowering the molds from said upper to said lower tracks, a combined elevator and stripper confined between the other of said pairs of vertical tracks for stripping the molds from the brick therein and elevating the molds from the lower to the upper tracks, means for transferring the molds from the elevators to the horizontal tracks and from the horizontal tracks to the elevators, and means for filling the molds, slicking the brick therein, and washing the molds in transit over said horizontal tracks.

1,766,287. LIQUID-DISPENSING APPARATUS. TORCUATO DI TELLA, Buenos Aires, Argentina. Filed Apr. 4, 1928, Serial No. 267,422, and in Great Britain Jan. 30, 1928. 9 Claims. (Cl. 221—100.)

1. Liquid dispensing apparatus, comprising a dispensing chamber provided with an outlet valve; a lever for operating the valve; a cylinder; a piston working therein and connected to said lever; and means for supplying a motive agent to the cylinder when the level of the liquid in the chamber rises above a predetermined level, thereby to lock said piston and lever against movement.

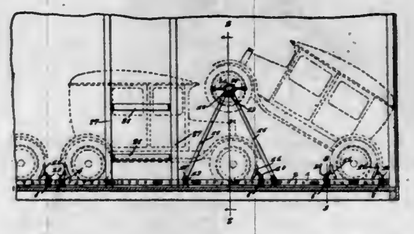


1,766,288. SHOCK ABSORBER. NORMAN L. DOOTSON, San Francisco, Calif. Filed Aug. 4, 1928. Serial No. 297,489. 1 Claim. (Cl. 267—17.)



A device of the character described comprising, in combination, a chassis bar, a leaf spring, and shackle links pivotally connecting said bar and spring at their rear ends in spaced relation, a pair of rearwardly, downwardly, forwardly and upwardly curved spaced arms, an integral apertured T-head on the rear end of each arm rigidly secured to the links for mounting the arms thereon, said arms embracing the leaf spring therebetween intermediately their ends, said arms terminating intermediate the horizontal plane of the chassis bar and leaf spring, and means for resiliently connecting the same to the chassis at their free ends.

1,766,289. AUTOMOBILE TRANSPORTATION-SUPPORTING DEVICE. HOBART P. DOUD and BERT A. LOGAN, Decatur, Ill. Filed July 5, 1929. Serial No. 376,069. 6 Claims. (Cl. 105—368.)



1. Means for supporting vehicles in a car comprising a pair of strips fastened to the sides of the car at the

floor thereof and having square holes therein, transverse rods having their ends passing through certain of said holes, wheel engaging members adjustably connected with said rods, a pair of inverted V-shaped members adjustably and detachably connected with the strips and means at the upper ends of said V-shaped members for receiving parts of the hubs of a vehicle.

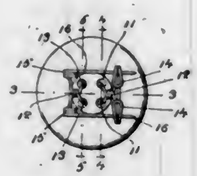
2. Means for supporting vehicles in a car comprising a longitudinally extending strip fastened to each side of the car adjacent the floor thereof and having non-circular holes therein, a plurality of sectional rods having non-circular ends passing through certain of said holes, said rods extending transversely of the car, means for detachably connecting the sections together, arms rotatably connected with each rod, ratchet means for holding the arms in adjusted position and tire engaging shoes carried by the arms.

1,766,290. NECKTIE APPLIANCE. FRANK S. FITHIAN, Camden, N. J. Filed Aug. 16, 1929. Serial No. 386,290. 2 Claims. (Cl. 2—156.)



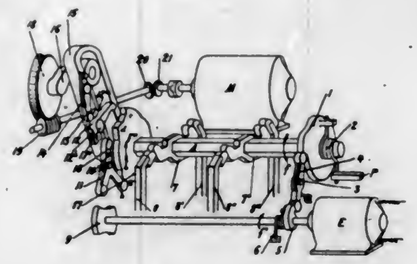
1. A guide for the neck bands of scarfs or ties which is passed through the folds of a turnover collar, comprising an inner and an outer arched resilient plate that have their ends, at their upper corners, connected but spaced away from each other, and the distance between the plates being greatest at the center thereof and gradually decreasing therefrom to their connected ends.

1,766,291. BUTTON. CÉLESTINE FOURNIER, Lewiston, Me. Filed Oct. 30, 1929. Serial No. 403,631. 2 Claims. (Cl. 24—103.)



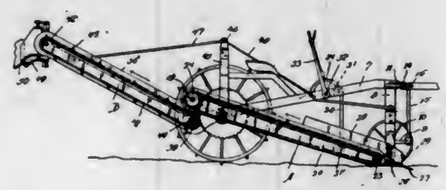
1. In combination, a button having a plurality of holes therein, an attaching means formed from a single length of resilient material and including spaced centrally located loop-like portions passed through the adjacent holes of the button, spaced confronting hooks formed by the intermediate portion of the material, and a pair of resilient pins forming part of the material and adapted to be received by said hooks for the purpose specified.

1,766,292. AUTOMATIC SWITCH. ELIE GRANAT, Paris, France, assignor of one-half to Compagnie des Forges et Acieries de La Marine et d'Homecourt, Paris, France, a Company of France. Filed Feb. 8, 1927, Serial No. 166,800, and in France Mar. 29, 1926. 4 Claims. (Cl. 200—89.)



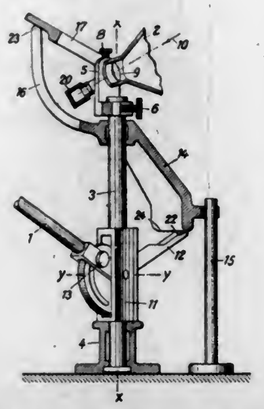
1. In a switch of the class described, the combination with a shaft, of means whereby the shaft is brought into its circuit breaking position when the energy of the current in the circuit passes above normal value, means constantly moving, at least while the shaft in its circuit breaking position and operating to release said shaft to its circuit closing position, and means whereby the moving means are rendered inoperative during the time the energy of the current in the circuit remains above its normal value.

1,766,293. BEET LOADER. WILLIAM L. GRIMES, Franklin, Minn. Filed Sept. 9, 1926. Serial No. 134,455. 1 Claim. (Cl. 198—233.)



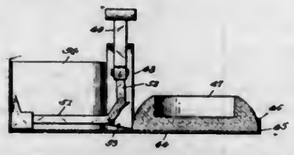
A mechanism of the class described including, in combination, a wheeled axle shaft, an arch mounted on and rising from the shaft, a pair of forwardly and upwardly inclined side beams disposed in parallelism, the axle shaft being journaled in the side beams adjacent their rear ends, an auxiliary frame depending from the forward end of the side beams, wheels journaled on the auxiliary frame, extensions rising from the rear end of the side beams, a conveyer mechanism, pivot means located rearwardly and upwardly of the axle shaft for mounting the rear end of the conveyor mechanism in the upper ends of the extensions, said conveyor mechanism inclining downwardly and forwardly in respect to the pivot means and having slots through which the axle shaft extends, means on the side beams for raising and lowering the conveyor mechanism, a second conveyor, means for mounting the second conveyor mechanism on the pivot means and on the rear ends of the side beams so as to incline upwardly and rearwardly therefrom, a gear operatively connected with one of the wheels of the wheel axle, a gear in mesh with the first mentioned gear and operatively connected with the rear end of the first conveyor mechanism, and a chain and sprocket mechanism between the second gear and the driving shaft of the second conveyor mechanism.

1,766,294. AEROCARTOGRAPH. REINHARD HUGERSHOFF, Dresden, Germany, assignor to "Ikarus" Internationale Patent-Verwertungs A.-G., Vaduz, near Furstentum, Liechtenstein, Germany. Filed Apr. 4, 1927, Serial No. 180,934, and in Germany May 7, 1926. 2 Claims. (Cl. 33—20.)



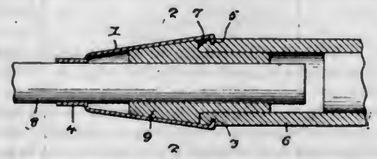
2. In a means for transmitting motion of movable parts in an instrument for plotting of measuring photographs having movable parts, comprising measuring members and a movable plotting device, comprising a spatial guide for transmitting the motions of the said measuring members and the plotting device, a member capable of motion, an intermediate body between the said member and the corresponding guide and capable of sliding along a vertical axis, extensions on the said intermediate body, having their points of support at the guide on the one hand and at the member capable of motion on the other hand, one of the said extensions being in the form of a segment of a circular ring at right angles to the said axis, as and for the purpose set forth.

1,766,295. MATCH SCRATCHER. BUNPACHI IIZUKA, San Mateo, Calif. Filed Jan. 7, 1928. Serial No. 245,155. 5 Claims. (Cl. 44—48.)



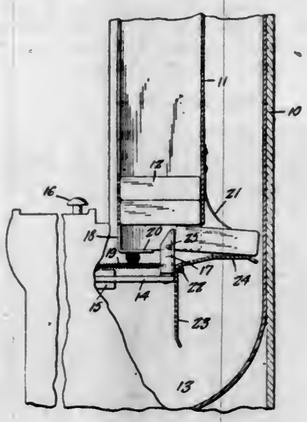
1. A device of the class described, provided with match lighting mechanism including a vertically movable slide provided with a match receiving head, a striking lever movable upwardly and downwardly and arranged to engage the head of a match for lighting the same, and means for operatively connecting the slide and the striking lever.

1,766,296. SAFETY DEVICE FOR PNEUMATIC HAMMERS. FRANK IZZO, Huntington, W. Va. Filed July 13, 1927. Serial No. 205,465. 2 Claims. (Cl. 121—32.)



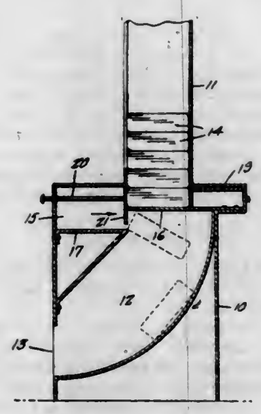
2. A safety device for a pneumatic hammer comprising a sleeve, means for connecting the sleeve to the end of the barrel of the hammer, a chuck bushing having a part fitting in the sleeve whereby the sleeve will hold said chuck bushing in the end of the barrel and a part on the sleeve for slidingly receiving the tool of the hammer.

1,766,297. VENDING MACHINE. GORDON B. MACKE, Washington, D. C. Filed May 10, 1929. Serial No. 362,069. 1 Claim. (Cl. 312—67.)



In a vending machine, a housing, an article magazine therein, a reciprocatory ejector arranged to eject articles singly from the magazine, a pivotally mounted plate in the housing and having angularly related portions providing an ejector-engaging arm and an article receiving and supporting arm, said ejector engaging arm adapted to be engaged by the ejector during the ejecting and returning movements thereof to position the receiving and supporting arm to receive the ejected articles from the magazine and support the latter against delivery from the housing until said ejector returns to its non-ejecting position.

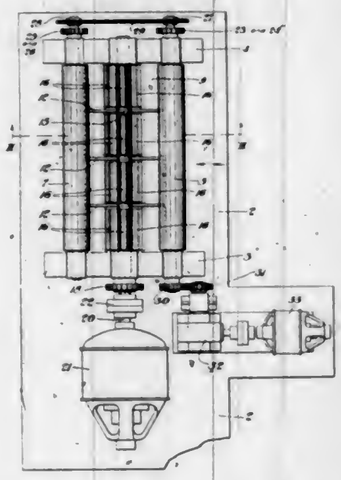
1,766,298. VENDING MACHINE. GORDON B. MACKE, Washington, D. C. Filed May 10, 1929. Serial No. 362,070. 3 Claims. (Cl. 312—67.)



1. A vending machine including a housing with a magazine and a delivery compartment thereunder, an upper platform in the housing between the magazine and the delivery

compartment to provide an ejector support, a lower platform in the housing and disposed in a plane below and forwardly of the upper platform and providing a discharge passage between one end thereof and one end of the upper platform to permit articles to pass into the delivery compartment, an ejector frame slidably mounted and normally positioned under the magazine to receive an article therefrom and adapted to be moved over the lower platform to deliver an article carried thereby onto the lower platform, means on said frame to move the articles positioned on the lower platform through said passage to the delivery compartment by the ejector frame returning to normal position, and means on said frame to underlie the magazine to retain the articles therein when said frame is moved to deliver an article onto the lower platform.

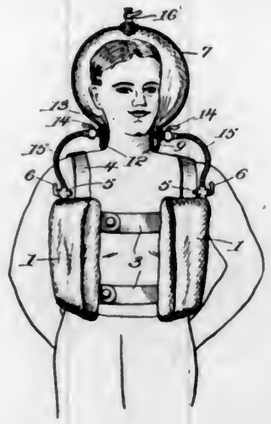
1,766,299. PACK OPENER. ARTHUR R. MCARTHUR, Gary, Ind., assignor to American Sheet and Tin Plate Company, a Corporation of New Jersey. Filed Oct. 19, 1928. Serial No. 313,544. 3 Claims. (Cl. 80—17.)



1. A pack opening machine for packs of sheets and plates comprising a main frame, a pair of feed-in pinch rollers, a pair of feed-out pinch rollers, a pair of spaced guide members between said pairs of pinch rollers, a pair of beater members journaled intermediate said pairs of pinch rollers and above and below said guide members so as to alternately strike the opposite faces of the packs to bend and flex said packs out of their normal line of feed, said guides being continuous between said beaters and said feed-in pinch rollers and being spaced only sufficient to permit a workable clearance so that said beaters can force said packs to bend and flex along the edge of said continuous portion of said guides.

1,766,300. MARINE ESCAPE. WASHINGTON MEREDITH, Addyston, Ohio. Filed Jan. 27, 1930. Serial No. 423,846. 3 Claims. (Cl. 9—20.)

2. A device for rescuing persons from sunken marine vessels comprising water proof sacks containing air or oxygen supported under the armpits of a person and having valve controlled nipples, a water and air proof helmet to be arranged over the head of the user having a window therein, and having its collar portion rounded inwardly and thickened and merging into a neck band to be arranged around the neck of the user, cocks secured to the collar portion of the helmet and detachable flexible hose members connecting the cocks with the nipples, the said collar portion of the helmet having a thickened part, a split spring ring arranged in said thickened part and having lapping ends, and



one portion of the ring being offset to afford a shoulder with which the opposite end of the ring contacts for limiting the contraction of the ring.

1,766,301. SHEARS. EDWIN EARL MOORE, Gary, Ind., assignor to American Sheet and Tin Plate Company, Pittsburgh, Pa., a Corporation of New Jersey. Filed Feb. 24, 1928. Serial No. 256,606. 10 Claims. (Cl. 164—49.)



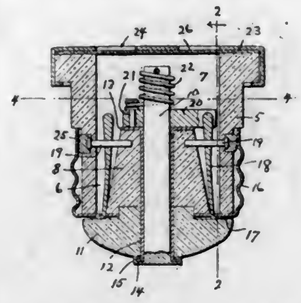
9. In a shearing machine, shear means, feed means, a drive for the feed means including a variable ratio means, gauge means adjustable to different positions depending on the length of a piece of material to be sheared, and a connection between the gauge means and the variable ratio means effective for adjusting the variable ratio means.

1,766,302. ADHESIVE PAPER AND THE MANUFACTURE OF SAME. JOHN MUIR, London, England, assignor of one-half to George Henry Wilkinson, London, England. Filed June 15, 1928, Serial No. 285,786, and in Great Britain Mar. 2, 1928. 1 Claim. (Cl. 91—68.)

The method of treating paper to render one surface thereof adhesive while preventing the paper from curling when the adhesive is dry and preventing the adhesive from becoming effective in damp atmosphere consisting in applying to one side of the paper an intimate mixture of glue, water and mineral matter, and drying the adhesive.

1,766,303. FUSE PLUG. HRAND M. MUNCHERIAN, Atlanta, Ga. Filed Sept. 13, 1928. Serial No. 305,735. 3 Claims. (Cl. 200—126.)

1. A fuse plug comprising a body having a plurality of of concentrically arranged compartments formed therein, a fusible link disposed within each of said compartments, a pivot pin extending through the upper portion of each of said links, contact members for the plug, one of said contact members being arranged in contacting relation with one end of each of said links, the opposite end of said links being arranged for pivotal movement about its associated



pivot pin upon the fusing of the link and a switch arm connected with the other of said contacts and movable in a path for successive engagement with the pivoted end of said links.

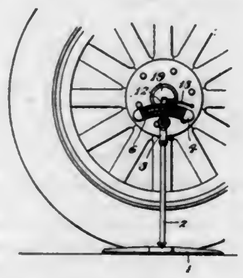
1,766,304. PROCESS FOR SEPARATING AND PURIFYING SULPHO-ACIDS OF HIGH MOLECULAR WEIGHT. GRIGORI PETROFF, Moscow, Union of Soviet Socialist Republics. Filed Apr. 23, 1927, Serial No. 186,180, and in Union of Soviet Socialist Republics Nov. 26, 1926. 4 Claims. (Cl. 260—159.)

1. A process of purifying and separating sulpho acids of high molecular weight which comprises mixing a solution of the sulpho acids with cellulose in porous condition, drying the mixture, extracting the mixture with a solvent for the impurities in the sulpho acids to free the latter from said impurities, and then extracting the residue with a solvent for the sulpho acids.

1,766,305. PROCESS FOR TREATING MINERAL AND NAPHTHA OILS. GRIGORI PETROFF, Moscow, Union of Soviet Socialist Republics. Filed Apr. 23, 1927, Serial No. 186,181, and in Union of Soviet Socialist Republics Nov. 8, 1926. 3 Claims. (Cl. 196—40.)

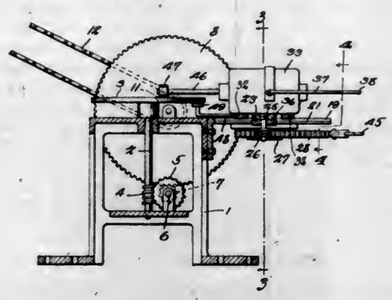
2. In the process of treating mineral oils to purify and deodorize the same, the steps which comprise adding a minor quantity of a high molecular weight fatty acid to the oil to be treated and then treating the mixture with sulphuric acid.

1,766,306. TOOL FOR MEASURING THE CASTER OF AXLES. CLYDE H. PHELPS, Mount Vernon, N. Y., assignor to Accurometer Mfg. Co., Inc., New York, N. Y., a Corporation of New York. Filed Aug. 12, 1929. Serial No. 385,352. 3 Claims. (Cl. 33—203.)



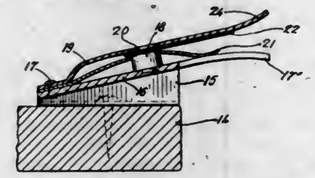
2. A tool for the purpose set forth comprising a tiltable head, a level on the head, and a meter arm pivoted at one end upon the center of the head to swing across the top of the head and provided at its free end on its opposite sides with points to engage a hub cap.

1,766,307. DRIVE MECHANISM. CHARLES A. RINKER, Galesburg, Ill. Filed Oct. 19, 1928. Serial No. 313,519. 6 Claims. (Cl. 192—4.)



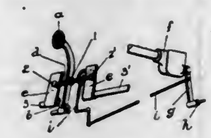
4. The combination with driven mechanism including a friction disk, of a slotted bracket, a slide thereon, a motor extending over the slide and movable on the bracket, bars beneath the bracket and yieldingly connected to the motor, a saddle above the slide engaging the motor, a lifting screw engaging the saddle and carried by the slide, rack and gear mechanism for actuating the screw to raise or lower the motor relative to the bracket, a brake shoe connected to the motor and supported beneath the disk, a friction wheel carried by the motor shaft and above the disk, said shoe and gear adapted to alternately engage the disk during the raising and lowering of the motor respectively, and means for shifting the slide and motor radially of the disk.

1,766,308. PUNCHING DEVICE. LOUIS ROCHAT, New York, N. Y. Filed Aug. 3, 1929. Serial No. 383,256. 2 Claims. (Cl. 164—119.)



1. A punching device comprising lateral plate members having openings therein, said openings adapted to receive fastening elements for attaching said device adjacent the edge of a fixed structure, a pair of walls rising from said plate members, an inclined platform integral with said walls and having a rear extension adapted to be positioned above and beyond the edge of the fixed structure, a stud rigid with said platform, and a resilient strip having an aperture therein registering with said stud, one end of said strip attached to the front of said platform and the opposite end of said strip extending above and in mating relation with the rear of said platform.

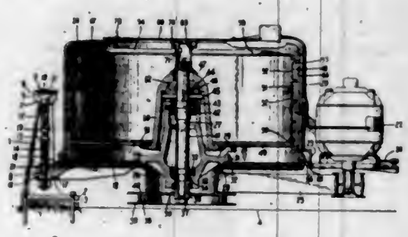
1,766,309. BRAKE-OPERATING DEVICE FOR MOTOR VEHICLES. LOUIS ROUANET, Ivry-Port, France, assignor to Compagnie D'Applications Mecaniques, Ivry-Port, France, a French Company. Original application filed Mar. 9, 1925, Serial No. 14,255, and in France Mar. 21, 1924. Divided and this application filed Dec. 14, 1927. Serial No. 240,015. 3 Claims. (Cl. 188—204.)



1. A brake device arrangement including a balancing device comprising a casing, plate shaped secondary brake

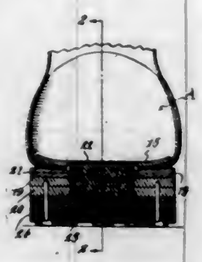
operating members journaled in the side walls of said casing, a primary member one end of which is slidably mounted in a guide on the casing and the other end of which is pivotally connected to a crank shaped member journaled in the rear wall of the casing an intermediate member formed integral with the primary member and having ball shaped ends bearing on the plate shaped secondary members, resilient thrust members acting on the secondary members and adapted to return same to their positions of rest, a resilient member adapted to hold the ends of the intermediate member in contact with the plate shaped parts of the secondary members, brake operating means adapted to actuate the primary member and means, controlled by the steering mechanism, and adapted to actuate the crank shaped member.

1,766,310. HYDRO EXTRACTOR. FLETCHER SCHAUM, Philadelphia, Pa., assignor to Fletcher Works, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Mar. 29, 1928. Serial No. 265,761. 11 Claims. (Cl. 210—63.)



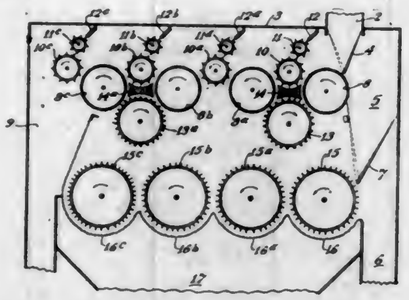
1. A hydro extractor comprising a guard, said guard having a base, central casting, side walls and a top, a rotatable shaft fixedly mounted on said guard, a basket comprising a bottom, side walls and upper rim and a central casting within the bottom and the greater diameter of the casting being less in diameter than the greatest diameter of the casting of the guard, said basket freely mounted on said shaft, pin and groove means in the basket and said shaft for interlocking one with the other and means mounted on the guard for rotating said shaft and basket.

1,766,311. SHOE HEEL. WILLIS S. SHAFT, Faribault, Minn., assignor to Shaft-Pierce Shoe Company, Faribault, Minn. Filed May 29, 1928. Serial No. 281,518. 1 Claim. (Cl. 36—35.)



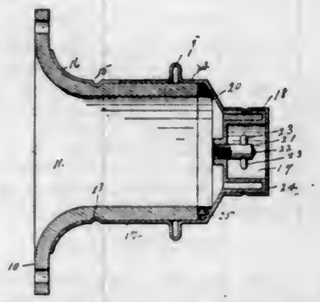
In a shoe, an inner sole having a cavity formed in the lower face thereof, an outer sole, heel lifts secured to the outer sole, the heel lifts and outer sole being provided with aligned openings, a pad of cushioning material fitted into said openings extending above and below said openings with the upper end thereof fitted into said cavity, and a rubber heel secured to the lowermost heel lift and having a substantially flat top face engaging the extended lower end of said cushioning pad whereby the rubber heel will be spaced from said lifts about the pad.

1,766,312. HULL EXTRACTOR. ALGERNON L. SMITH, Birmingham, Ala. Filed Apr. 23, 1928. Serial No. 272,272. 4 Claims. (Cl. 19—86.)



1. In an apparatus for the removal of hulls and trash from seed cotton or the like, a casing having a feed inlet, a seed cotton outlet, a hull outlet and a plurality of toothed cylinders disposed to engage the hulls and seed cotton successivly and rotatable in a direction to move the hulls progressively towards the hull outlet, a group of agencies associated with each saw cylinder, each group comprising a stripper roller so disposed and rotated as to be adapted to deliver the hulls knocked off of a cylinder to the next succeeding cylinder, and a means to regulate the rate of delivery of the hulls by a picker roller of one group to the cylinder of the succeeding group.

1,766,313. HUB CAP. CHARLES L. STOKES, Los Angeles, Calif. Filed Sept. 19, 1927. Serial No. 220,399. 2 Claims. (Cl. 301—105.)

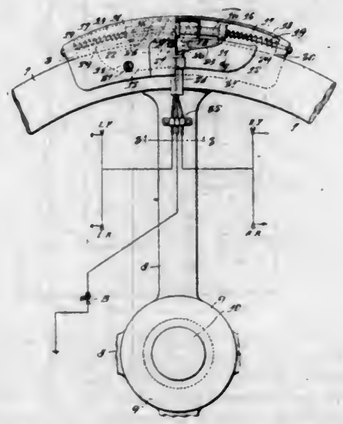


1. The combination with an open-ended circular hub having an annular groove therearound, of a lubricant-holding cap for closing the hub, having a skirt of large diameter and a reduced portion of smaller diameter provided with a depression in the end thereof, a grease gun nipple within said depression and spaced from the side walls thereof, a shoulder between the skirt and reduced portion, a locking flange on the cap, and a grease-tight gasket held by said shoulder on the end of said hub when said locking flange is forced into said groove.

1,766,314. HEAT TREATMENT OF STEEL. WILLIAM B. SULLIVAN, Detroit, Mich., assignor to Chrobaltic Tool Company, Detroit, Mich., a Corporation of Illinois. Filed June 2, 1926. Serial No. 113,337. 2 Claims. (Cl. 148—21.5.)

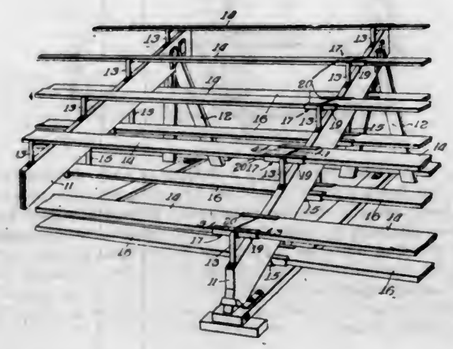
1. The process of treating steel which includes soaking the same at a temperature above the lowest point in the decalescent curve but below the upper point thereof for a comparatively long period of time to effect transformation and then cooling to preserve the steel in its transformed condition.

1,766,315. AUTOMOBILE DIRECTION-SIGNAL SWITCH. CLARENCE H. TWETTEN and ALEXANDER M. HUDSON, Round Lake, Minn. Filed May 25, 1927, Serial No. 194,073. Renewed Nov. 29, 1929. 7 Claims. (Cl. 200—59.)



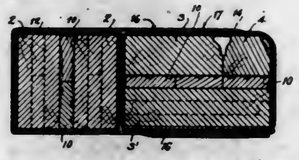
1. In an automobile direction signalling system wherein is provided right and left hand signalling instrumentalities; a switch mountable on the steering wheel of the automobile to control the actuation of the signalling instrumentalities, said switch comprising a shell partially encircling a portion of and secured to the wheel, three contact lugs secured upon and insulated from the shell, one adjacent its center and one adjacent each end thereof, a segmentally curved hollow handle having its short side open and slidable on the wheel and encasing the shell and contacting lugs, means to slidably-guide and connect the handle on the shell, means tending to hold the handle centered on the shell, and a contact strip carried by the handle and having contact arms to electrically connect the central lug with one or the other of the end lugs accordingly as the handle is moved in one direction or the other.

1,766,316. BLEACHER STRUCTURE. FORREST VANCE, Champaign, Ill. Filed Nov. 14, 1928. Serial No. 319,829. 3 Claims. (Cl. 155—133.)



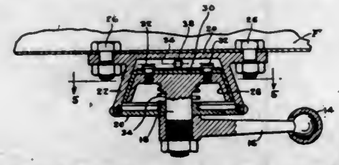
1. A seat and foot-board connector for bleacher structures comprising a longitudinal U-shaped member having a base portion and leg portions formed thereon, flange portions formed on the free ends of the leg portions of said member and adapted to extend inwardly toward each other in a common plane substantially parallel to the base portion of the member, a resilient clip associated with said member and offset from the plane thereof in a manner to extend substantially parallel thereto, a hook portion formed at the free end of said clip, and a cam portion adjacent the said hook portion at the free end of said clip and inclined at an angle with respect thereto.

1,766,317. PACKAGE FOR KNOCKED-DOWN WINDOW-SCREEN FRAMES. WESLEY E. WHELESS, Shreveport, La., assignor to Allen Manufacturing Company, Shreveport, La. Filed June 8, 1929. Serial No. 369,417. 2 Claims. (Cl. 206—60.)



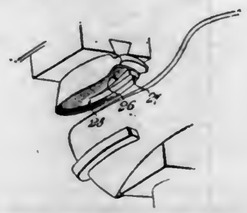
1. A package for shipping knocked-down screen frames of that type, the width dimension of whose long pieces is so designed with respect to the thickness dimensions of whose short pieces that the aggregate thickness of a number of the short pieces equals the width dimension of the long pieces, said package comprising two parts in which the long and short pieces are separately stacked, the long pieces being arranged with their width dimension forming one dimension of the package and the short pieces being adjacently arranged, with their width dimensions perpendicular to the width dimension of the long pieces, and stacked to the same height as the width dimension of the long pieces, said parts being secured together to form a single package.

1,766,318. SHOCK-ABSORBING DEVICE FOR AUTOMOBILES. ALBERT A. WILSON and ALEXANDER D. ROBERTSON, Minneapolis, Minn. Filed Dec. 17, 1927. Serial No. 240,792. 6 Claims. (Cl. 188—130.)



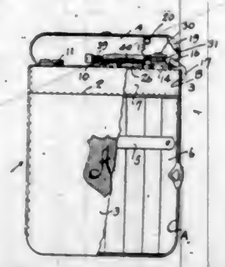
1. In combination with the internal combustion engine of an automobile, a tapered cylinder mounted on the automobile, a tapered piston rotatably mounted in said cylinder, a pipe connection between the smaller end of said cylinder and the intake of the engine whereby said piston is subjected to suction produced in the engine cylinders, and a device connected with said piston for causing a shock absorbing action.

1,766,319. HEEL-SEAT-PREPARING MEANS. HARRY ZUBICK, Nashua, N. H. Filed May 4, 1929. Serial No. 360,592. 6 Claims. (Cl. 12—17.)



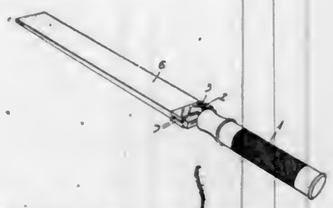
2. A heel seat preparing die head having a concavity to fit and pressure-shape heel seat portions to form a heel seat, and knife edges carried by the head within the concavity shaped to suitably trim an out-sole extension for forming a central part of said heel seat.

1,766,320. CIGARETTE CASE AND LIGHTER. EDWARD G. AHRENS, San Francisco, Calif., assignor of one-half to Herbert A. Gladstone, San Francisco, Calif. Filed May 14, 1928. Serial No. 277,537. 5 Claims. (Cl. 7—7.1.)



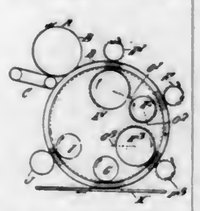
4. A cigarette lighter comprising a casing, a wheel rotatably carried by said casing and having a serrated periphery, a flint yieldingly held in engagement with said wheel, a trigger manually swingable in one direction for rotating the wheel, spring means for quickly swinging the trigger back to normal position and for quickly rotating the wheel, a cover for the casing enclosing all of the working parts, and cooperating means carried by the cover and trigger for opening the cover, said trigger having an extension for swinging the cover into full open position.

1,766,321. FINGER-NAIL BUFFER. ERNEST LEMUEL ARTHUR, Fayetteville, W. Va., assignor of one-third to Charles E. Mahan, Jr., Fayetteville, W. Va. Filed May 27, 1929. Serial No. 366,339. 6 Claims. (Cl. 132—78.)



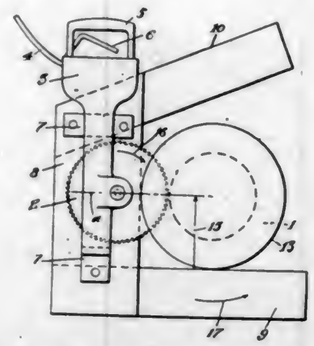
6. A finger nail buffer comprising a buffer element, a handle having a socket, and a doubled spring clamp having diverging arms movable into said socket and forced toward one another when moved into said socket, said arms having jaws at their free ends to clamp said buffer element between them.

1,766,322. MANUFACTURE OF INLAID FLOOR CLOTHS. EDWARD BATTEN and JAMES DENNE BATTEN, London, England, assignors to American Medallion Inlaid Linoleum Company (Batten's New Patents) Inc., a Corporation of Delaware. Filed Mar. 8, 1928. Serial No. 260,138. 5 Claims. (Cl. 154—24.)



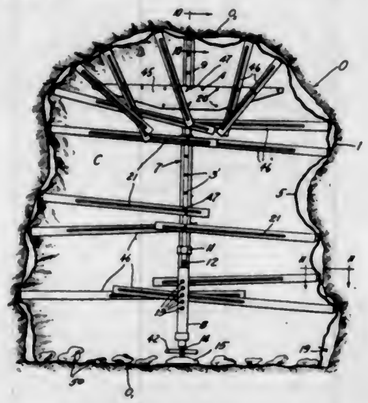
1. Rotary machinery comprising cutting cylinders for producing inlaid floor cloth from sheets of plastic material, wherein a series of pattern rolls is arranged to cooperate with each cutting cylinder and to rotate therewith, each pattern roll having determinate periods of pattern selecting action and inaction.

1,766,323. METHOD OF AND APPARATUS FOR LEVELING WORK. RAYMOND F. BENNETT, Portland, Me. Filed Apr. 26, 1928. Serial No. 272,885. 7 Claims. (Cl. 143—34.)



1. In pile leveling mechanism, in combination with a straight edge mounted on the piles to be cut, a saw mount, a saw carried thereby, a flat faced cheek plate carried by said mount and disposed parallel to the plane of and suitably spaced from said saw an angular arm carried by said cheek plate and lying in the plane thereof, said arm adapted to lie parallel to the depth axis of the saw cut whereby to guide said saw in said cut during the circumferential progress of the same about the work, the flat lower face of said cheek plate and arm bearing on said straight edge during the cutting operation.

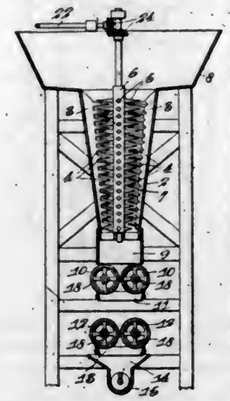
1,766,324. BRATTICE. VERNON T. BERNER, Ray, Ariz. Filed Feb. 9, 1929. Serial No. 338,807. 7 Claims. (Cl. 262—8.)



1. A brattice comprising a flexible curtain member, an inflated flexible tubular member engaging an edge portion of said curtain member, and an adjustable supporting frame adapted to hold said flexible tubular member and the side and top edge portions of the curtain member outwardly against the corresponding walls of an opening, the bottom edge portion of said curtain member being adapted to rest upon the bottom of said opening so as to complete the closure thereof.

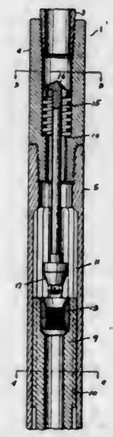
1,766,325. REFUSE-TREATING APPARATUS. GEORGE A. BOZE, Detroit Lakes, Minn. Original application filed Oct. 21, 1927, Serial No. 227,748. Divided and this application filed Oct. 16, 1929. Serial No. 400,098. 5 Claims. (Cl. 83—12.)

1. In apparatus of the class described, a macerator comprising a supporting frame, a vertically disposed casing mounted in said frame, a hopper for delivering material into the upper end of said casing, a shaft rotatably mounted in said casing, macerating teeth on the inside of said casing and on said shaft, a throat at the delivery end of said casing, a pair of parallel crushing rollers beneath



said throat, roller scrapers associated with said rollers, and means to heat said rollers all being arranged whereby the steam generated by the crushing rollers is so confined that it rises to the macerator and preliminarily dries the material being treated at that place.

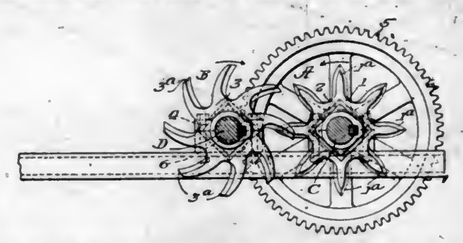
1,766,326. DRILL STEM. JOHN F. BOZEMAN, West Lake, La., and JAUDON D. COLE, Hebronville, Tex. Filed Apr. 7, 1928. Serial No. 268,192. 4 Claims. (Cl. 255—27.)



1. A drill stem comprising two sections connected by a slip joint and having a fluid course therethrough, a seat in one section, a yieldably mounted means carried by the other section adapted to be actuated by fluid pressure to close said seat and block said fluid course when said sections are relatively moved in one direction and to unblock the said when relatively moved in the other direction.

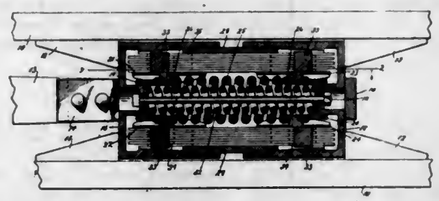
1,766,327. CAN-MANGLING MACHINE. WILLIAM CHARLTON BAUTON, Albany, Calif., assignor to American Manganese Steel Company, Chicago, Ill., a Corporation of Maine. Filed Dec. 17, 1927. Serial No. 240,716. 5 Claims. (Cl. 164—10.6.)

1. In a can mangling machine, a rotatably mounted shaft having a multiplicity of teeth projecting substantially radially from said shaft, and a second shaft rotatably mounted near the first shaft and having a multiplicity of



cutter blades projecting therefrom and intermeshing with the teeth of the first shaft; said cutter blades being curved in the direction of rotation of said second shaft.

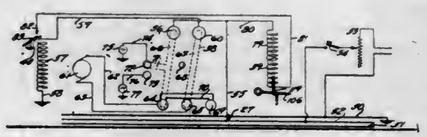
1,766,328. DRAFT GEAR. JAMES R. CARDWELL and WALTER H. COTTON, Chicago, Ill., assignors to Union Draft Gear Company, Chicago, Ill., a Corporation of Delaware. Filed Sept. 15, 1923. Serial No. 662,845. 4 Claims. (Cl. 213—33.)



1. In a draft gear, in combination, a pair of chambered followers having friction surfaces, a set of central wedging elements in each follower, intercalating plates interposed between the two sets of such elements and said friction surfaces, the plates at each side comprising upper and lower groups, the sets of plates of the two groups at each side being arranged in reverse order, and means for yieldingly resisting the compression of said gear.

4. In a friction shock absorbing mechanism, the combination with front and rear follower members; of a plurality of longitudinally disposed, friction plates interposed between said followers, said plates being alternated and divided into two separated groups; means enclosing said groups of plates for resisting lateral outward movement thereof; lateral pressure-creating means at each end of the mechanism, said means including friction wedge shoes co-operating with the two groups of friction plates, said shoes having lugs thereon for restoring the plates to normal position; and spring resistance means for said lateral pressure means.

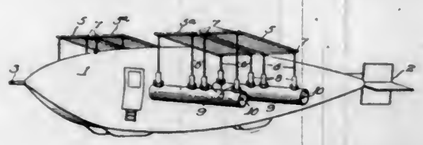
1,766,329. REVERSIBLE ELECTRIC LOCOMOTIVE. LOUIS CARUSO, Irvington, N. J., assignor to The Lionel Corporation, New York, N. Y., a Corporation of New York. Filed July 20, 1926. Serial No. 123,684. 39 Claims. (Cl. 104—151.)



1. A system for controlling electric motors, comprising, motor leads connectible to a power source through a main switch, a reversing switch, interconnections between the reversing switch and the motor field and the motor armature for reversing the direction of rotation of the motor, electromagnetic means for actuating the reversing switch, and a normally closed circuit controlling device in circuit

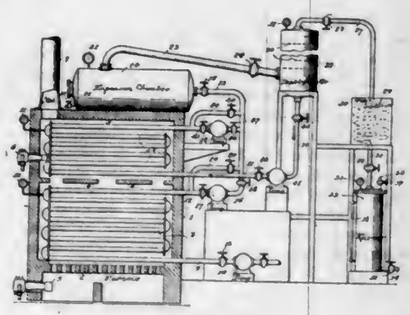
with the electromagnetic means, said circuit controlling device remaining closed for a sufficient time after the closing of the main switch to permit the electromagnetic means to actuate the reversing switch and then being opened and held open by the stray field of the motor.

1,766,330. FLYING MACHINE. JOSEPH DE KORWIN-SOKOLOWSKI, Brussels, Belgium. Filed Feb. 20, 1929. Serial No. 341,339. 5 Claims. (Cl. 244—11.)



1. A flying machine comprising an approximately horizontal wing and a plurality of supporting rods for said wing mounted for oscillation in a vertical plane fore and aft of the machine, spaced apart in said plane, hingedly connected with said wing, and while maintaining approximate horizontalism of the wing, imparting movement thereto in a path that is forward and downward and then rearward and upward.

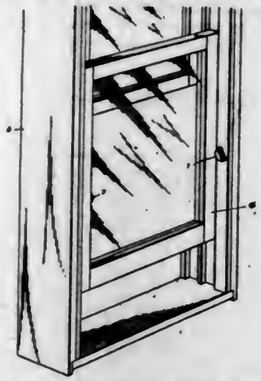
1,766,331. PROCESS AND APPARATUS FOR CRACKING OIL. GUSTAV EGLOFF, Chicago, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Dec. 6, 1920, Serial No. 428,787. Renewed May 25, 1929. 7 Claims. (Cl. 196—48.)



1. A process for converting oil, comprising passing a stream of charging oil through a heating zone to be subjected to a temperature sufficient to vaporize a substantial part thereof, in introducing the heated hydrocarbons under a pressure, in excess of that maintained on the charging oil during passage through the heating zone, to an enlarged expansion chamber where vaporization occurs, in subjecting the vapors to dephlegmation, in heating the reflux condensate in a separate stream to a cracking temperature, in passing the heated reflux condensate under pressure to said expansion chamber, and in withdrawing the unvaporized residual oil from the expansion chamber.

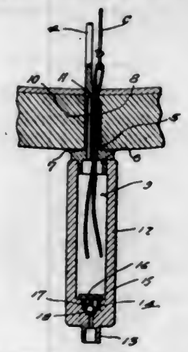
1,766,332. WINDOW ANTIRATTLER AND FASTENER. CHARLIE FISTER, Seattle, Wash. Filed Nov. 14, 1927. Serial No. 233,027. 1 Claim. (Cl. 292—202.)

A window anti-rattler and fastener comprising a disc member, a handle formed by bending an edge portion of said disc at right angles with its body portion, said disc member having two holes disposed in diametrical alignment parallel with the handle and at equal distances from the center of the disc, said member having a slot connecting



the two holes, and a screw for said holes whereby the direction of cam function may be reversed by shifting the disc on said screw along its slot from one hole to the other.

1,766,333. REPAIR INSTRUMENT. THOMAS H. FOREHAND, Nashville, Tenn. Filed Apr. 16, 1928. Serial No. 270,393. 6 Claims. (Cl. 152—27.)



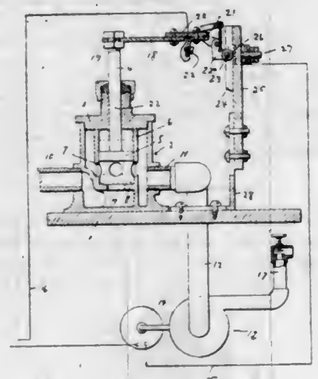
1. A tire repair instrument of the class described comprising a needle adapted to be passed thru openings in a tire and inner tube produced by a puncture, a rubber band mounted upon the needle, a pull cord attached to the band and to the needle, together with means for applying adhesive material to the rubber band.

1,766,334. CALENDAR. ALFRED S. GLOSSBRENNER and GEORGE L. GLOSSBRENNER, Indianapolis, Ind. Filed Apr. 9, 1928. Serial No. 268,432. 2 Claims. (Cl. 40—119.)



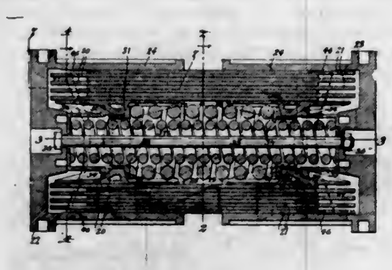
1. A calendar comprising a plurality of calendar sheets secured together intermediate of their upper and lower edges in book leaf form, a fastener securing the free edges of said calendar sheets together, said sheets being perforated around said fastener to permit the same to be torn free therefrom and a cover sheet secured at its upper edge to the calendar sheets and having its opposite edge free, said cover sheet being adapted to overlie the upper half of the calendar sheets when the same are unfolded.

1,766,335. HIGH-PRESSURE VALVE STRUCTURE. MICHAEL HADDAD, Sonora, Ariz. Filed May 5, 1928. Serial No. 275,516. 4 Claims. (Cl. 103—25.)



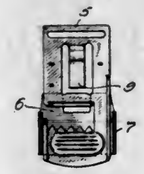
1. In a structure of the class described, a base, a valve casing supported on said base including intake and discharge ports, a cylinder in the casing having discharge ports and an apertured valve seat, a slide valve in said cylinder having a valve head cooperable with said seat and ports and a stem extending upwardly through the top of the casing, an upright adjustably mounted on the base including a switch contact, a relatively movable switch contact carried by the valve stem and cooperable with the first named contact, and spring means connected with the valve stem for normally holding the valve head down upon said valve seat.

1,766,336. SHOCK ABSORBER. JOSEPH M. HALL, Hamilton, Ontario, Canada, assignor to Universal Draft Gear Attachment Co., Chicago, Ill., a Corporation of Illinois. Filed Mar. 22, 1927. Serial No. 177,277. 7 Claims. (Cl. 213—33.)



1. A friction draft gear comprising a plurality of sets of intercalated friction plates adapted to slide lengthwise relatively to one another, each of said plates having shoulders on the side edges thereof at one end only, means for moving said plates lengthwise relative to each other when subjected to a shock, means at each end of said gear for pressing said plates together laterally when subjected to a shock, a spring resistance, and means engaging said shoulders for laterally separating said plates during the release movement of said gear.

1,766,337. BELT CLASP. ROBERT W. JOHNSON, New Brunswick, N. J., assignor to Johnson & Johnson, New Brunswick, N. J., a Corporation of New Jersey. Filed Dec. 8, 1928. Serial No. 324,667. 1 Claim. (Cl. 24—263.)



A clasp comprising a carrier having a side opening slot, a runner mounted thereon for longitudinal movement to open and close the slot, and means for insuring positive retention of the runner in its closing position, said means embodying a tongue struck up from the carrier in offset relation so that its free end normally occupies a plane beyond the carrier and such that it will engage the runner and prevent accidental opening movement thereof, said tongue having a smooth surface so that when manually depressed the runner is free to glide over it to engage the point of offset thereby to be held in open position.

1,766,338. METHOD OF REFINING LIQUID HYDROCARBONS. JOHN JOHNSTON, Jr., Escondido, Calif., assignor of one-half to James R. Townsend, Los Angeles, Calif. Filed Mar. 28, 1923, Serial No. 628,291. Renewed Mar. 29, 1930. 2 Claims. (Cl. 196—79.)

2. The method of producing purified petroleum products from crude petroleum oil, which consists in mixing 100 parts of the crude oil with 10 parts of acidulated earth and distilling off and recovering in successive stages of conversion at increasing temperatures up to coking temperature the hydrocarbons in accordance with the varying degrees of distillation heat applied.

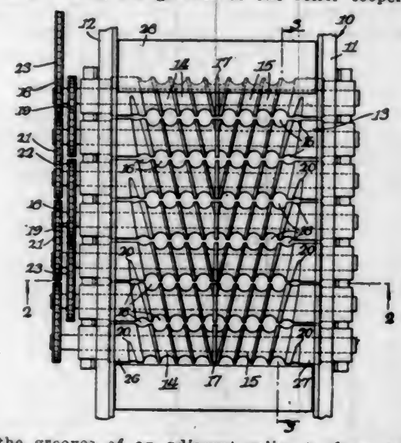
1,766,339. METHOD OF REFINING HYDROCARBONS. JOHN JOHNSTON, Jr., Escondido, Calif., assignor of one-half to James R. Townsend, Los Angeles, Calif. Filed Aug. 11, 1925, Serial No. 49,648. Renewed Mar. 28, 1929. 6 Claims. (Cl. 196—35.)

1. The method set forth of refining liquid hydrocarbon which consists in producing a mixture of such liquid and acidulated adsorbent earth composed substantially of silicate of aluminum, 95 parts; and sulphuric acid, 3 parts; heat treating the mixture to approximately 750° F., and liquifying the resulting vapors obtained during such heat treatment.

1,766,340. ROLLER GRIZZLY. MYRON A. KENDALL, Aurora, Ill., assignor to Stephens-Adamson Mfg. Co., a Corporation of Illinois. Filed Mar. 20, 1929. Serial No. 348,483. 12 Claims. (Cl. 209—104.)

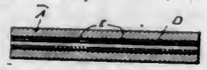
1. In a screen, a frame, a plurality of rollers journaled in said frame, said rollers being provided with spiral grooves, the turn of said grooves adjacent each end

of said roller shallowing until they merge with the periphery thereof, the grooves of one roller cooperating



with the grooves of an adjacent roller to form screen openings, and means for rotating said rollers whereby material lodged in said groove may be forcibly ejected.

1,766,341. ABSORBENT ROLL. IRVING KULIK, Brooklyn, N. Y. Filed June 18, 1927. Serial No. 199,780. 5 Claims. (Cl. 32—33.)



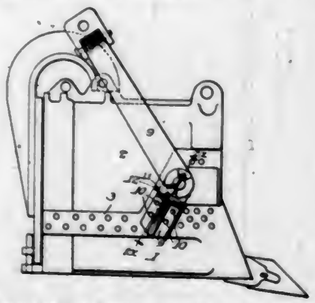
1. A dental absorbent roll hollowed out interiorly and inside of which hollow is a flexible hollowed out member.

1,766,342. AUTOMOBILE BUMPER. EDWARD H. MCCLOUD, Columbus, Ohio. Filed Nov. 9, 1929. Serial No. 405,931. 18 Claims. (Cl. 293—55.)



1. In a bumper, supporting plates extending across the end of a vehicle, common bumper means connected to the outer ends of said supporting plates and independent supplementary bumper supports connected at points within the ends of the common bumper means to the first bumper means and to the inner ends of the supporting plates.

1,766,343. BAIL BRACKET FOR EXCAVATING DIPPERS. WILLIAM T. MCNINCH, Chicago Heights, Ill., assignor to American Manganese Steel Company, Chicago, Ill., a Corporation of Maine. Filed Nov. 30, 1928. Serial No. 322,637. 3 Claims. (Cl. 214—145.)

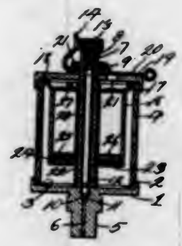


1. In an excavating implement, an offset bracket mounted upon a surface of said implement through which to attach its lifting connection, and a shoulder on said implement providing abutment for the offset of said bracket in the direction of lifting; said shoulder extending in the plane of the offset of the bracket and perpendicularly to said direction; and said bracket and shoulder being constructed, one with a mortise and the other with a tenon, interengaging against relative movement of the bracket in a direction perpendicular to the surface of the implement upon which the bracket is mounted.

1,766,344. CONDENSATION PRODUCTS OF HYDROGENATED NAPHTHALENES WITH ETHYLENE. RICHARD MICHEL, Krefeld, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Apr. 7, 1928, Serial No. 268,363, and in Germany Feb. 4, 1926. 5 Claims. (Cl. 160—168.)

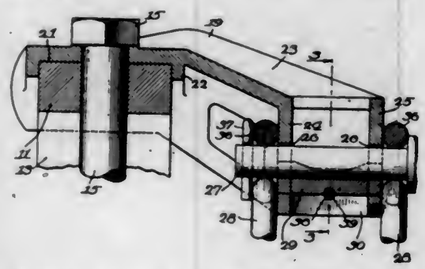
1. Process, which comprises reacting with ethylene upon a partially hydrogenated naphthalene compound in the presence of a catalytically acting metallic halide, under conditions of elevated temperature above 50° C. and super-atmospheric pressure.

1,766,345. OIL CUP. HOWARD B. MORROW, La Porte, Ind. Filed May 16, 1928. Serial No. 278,213. 4 Claims. (Cl. 184—65.)



2. A combined oil cup and filter comprising a main casing, a filter cup in the main casing in spaced relation thereto, an axially disposed extension carried by the main casing and extending upwardly through the filter cup, a valve in said extension controlling the flow from the main casing to a discharge port, a coiled spring surrounding the extension and interposed between the main casing and the filter cup, a cap carried by the upper end of the main casing, a single washer interposed between said cap and the upper ends of said casing and the filter cup, a nut threaded on the extension, said nut cooperating with the cap whereby it is forced downwardly into engagement with the washer.

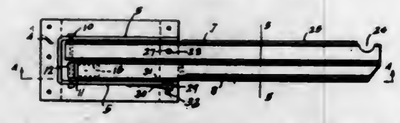
1,766,346. BEARING FOR BRAKE HANGERS. CHARLES J. NASH, Chicago, Ill., assignor to Universal Draft Gear Attachment Company, a Corporation of Illinois. Filed Aug. 15, 1927. Serial No. 212,870. 4 Claims. (Cl. 188—209.)



1. A wear member for a brake banger comprising a bearing block having a curved seat on one side thereof,

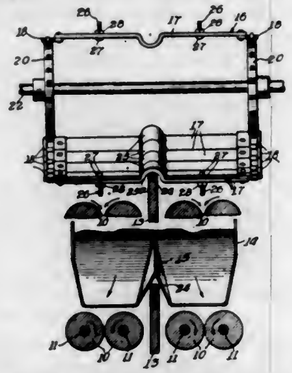
and a transverse groove on the side of said block opposite to said seat for cooperating with a groove on a tie bar of a brake hanger for receiving a retaining pin.

1,766,347. FINGER BOARD. HERMAN F. NEWMAN, Rosenberg, and FRANK A. WILLIAMS, Houston, Tex.; said Williams assignor to said Newman. Filed Nov. 26, 1928. Serial No. 322,032. 10 Claims. (Cl. 255—1.)



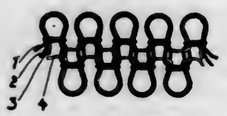
2. A device of the character described including a finger board support, a finger board normally extending substantially horizontally therefrom, and formed of two adjacent arms, one forming a supporting arm and the other forming a guard arm, said supporting arm being pivoted to swing upwardly from said normal position and said guard arm being pivoted to swing upwardly or downwardly from said normal position.

1,766,348. CORN PICKING AND HUSKING MACHINE. JOHN VAN NORTWICK, Batavia, Ill., assignor to Appleton Manufacturing Company, a Corporation of Illinois. Filed Dec. 21, 1928. Serial No. 327,629. 9 Claims. (Cl. 130—5.)



1. The combination in a corn picking and husking machine, of a plurality of pairs of husking rolls, a divider board positioned between the respective pairs of rolls and extending a substantial distance above the upper faces thereof, flexibly connected conveyor strips positioned above said rolls for depressing unhusked ears of corn into close engagement with said rolls, and offset portions on said strips intermediate their ends adapted to overlie the upper edge of said board, the lugs of said portions being adapted to form substantial right angles with the body portion of said strips at a point intermediate said board and the vertical planes of the rolls adjacent the board.

1,766,349. KNITTED FABRIC. OTTO NUBER, Reutlingen, Germany. Filed June 19, 1928, Serial No. 286,688, and in Germany Nov. 8, 1927. 1 Claim. (Cl. 66—196.)



A plated double-surfaced knitted fabric comprising ground threads and plating threads forming double loops on each separate row, the sinker-loops of the plating threads being shorter than and separate from the sinker loops of the ground thread of the same row and interlooping only with the sinker loops of the ground thread of the opposite plain row, but being free from the plating thread of said opposite plain row.

1,766,350. BASE-EXCHANGE MATERIAL AND PROCESS OF MAKING SAME. EDWIN M. PARTRIDGE, Hammond, Ind., and ELWOOD W. SCARRITT, Oak Park, Ill., assignors, by mesne assignments, to The Permutit Company, New York, N. Y., a Corporation of Delaware. Filed Jan. 5, 1926. Serial No. 79,475. 5 Claims. (Cl. 23—113.)

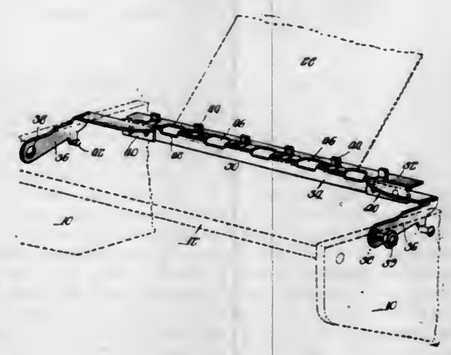
1. The process which consists in preparing a solution of aluminum sulfate, separately preparing a mixed solution of sodium silicate and sodium phosphate, combining the two solutions to form a gel and drying the latter at a temperature below the boiling point of water.

1,766,351. FABRIC FLOWER AND METHOD OF MAKING THE SAME. ANNA M. PATTERSON, Long Beach, Calif. Filed May 23, 1928. Serial No. 279,923. 5 Claims. (Cl. 41—15.)



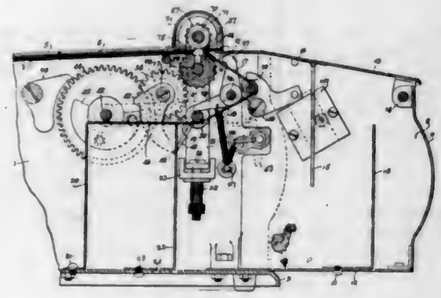
1. An artificial flower comprising a pointed, tight-rolled center and having a petal composed of a strip having a twisted portion forming a neck and a curled edge.

1,766,352. MARGIN BAR FOR HEKTOGRAPH MACHINES. JOHN P. PEDERSON, Chicago, Ill., assignor to Ditto, Incorporated, Chicago, Ill., a Corporation of West Virginia. Filed Aug. 15, 1929. Serial No. 386,164. 11 Claims. (Cl. 101—133.)



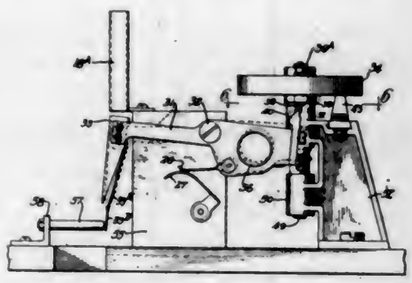
1. In a duplicator, the combination with a frame, having duplicated means and a carriage mounted to travel thereover, of a margin bar comprising a strip of metal, apertures formed in said strip at spaced intervals, lugs formed integral with said strip adjacent the apertures, and bracket members secured to the respective ends of said strip for pivoting the bar in said frame.

1,766,353. AUTOGRAPHIC REGISTER. FRANK E. PFEIFFER, Dayton, Ohio, assignor to The Egry Register Company, Dayton, Ohio, a Corporation of Ohio. Filed Jan. 2, 1929. Serial No. 329,701. 28 Claims. (Cl. 282—16.)



1. In an autographic register having a plurality of superimposed sheets with spaced perforations, means to eject the sheets, means to render the ejecting means inoperative, and means having an overhanging ledge to align the sheets shaped to engage the forward walls of the apertures in the sheets only.

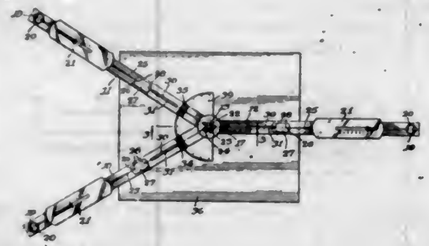
1,766,354. COIN-CONTROLLED ELECTRIC SWITCH. WILLIAM PODROUZEK, Chicago, Ill. Filed Oct. 24, 1929. Serial No. 402,051. 5 Claims. (Cl. 194—9.)



1. The combination with an electric power circuit of a radio receiver, of a coin-operated switch for controlling the electric power to said receiver, said switch comprising a motor, a member rotatable by said motor, a shoe carried by said rotatable member, a pivotally mounted device having a coin receiver and an abutment, and a pair of circuit closing contacts adapted to be brought into contacting position to close the power circuit to said motor and said radio receiver upon the tilting of said device by the deposit of a coin in said receiver, said motor being operative upon the closing of said power circuit to rotate said member with said shoe into engagement with said abutment to thereby tilt said device in opposite direction to release the coin from said receiver to thus open the circuit to said motor and radio receiver between said circuit closing contacts.

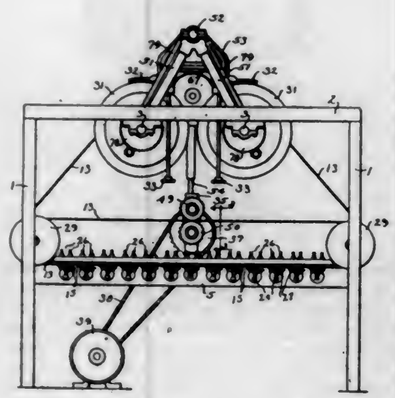
1,766,355. EDUCATION APPARATUS. STERLING L. REDMAN, Evanston, Ill., assignor to Central Scientific Company, Chicago, Ill., a Corporation of Illinois. Filed May 31, 1928. Serial No. 281,663. 6 Claims. (Cl. 35—12.)

1. In apparatus of the class described, several similar bars having corresponding ends superposed, a pivot connecting said bars to swing about a common axis normal to the bars, a floating ring disposed coaxially with the



pivot, and a connection between the ring and the outer portion of each of the bars including a tension measuring device and a tension adjusting device.

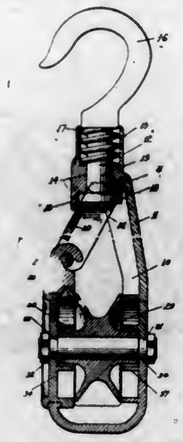
1,766,356. POWER-DRIVEN WIRE-STEEL-WOOL MACHINE. WILLIAM H. ROBBINS, Springfield, Ohio, assignor to The Williams Company, London, Ohio, a Corporation of Ohio. Filed Aug. 31, 1928. Serial No. 303,248. 16 Claims. (Cl. 29—4.5.)



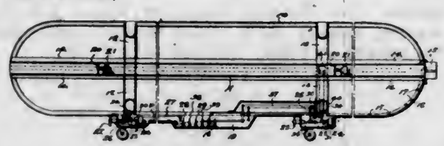
1. In a steel wool machine, means for supporting a loop of wire, means for maintaining said wire under tension in a looped condition, means for cutting said wire and means for driving the wire independently of the means for maintaining it under tension, said driving means being located between the looped supports.

1,766,357. AUTOMATIC SNATCH BLOCK. CHARLES ROBERTSON, Seattle, Wash. Filed Oct. 12, 1928. Serial No. 312,182. 4 Claims. (Cl. 254—193.)

1. A snatch block comprising a body portion open at one end, a connecting element carried upon one end of the body, a spring included upon the attaching portion of the connecting element being adapted to normally tension same to occupy an extended position, and a closure member mounted upon the body and operable in conjunction with the attaching portion of the connecting element for detachable locking engagement with the open end of the body.

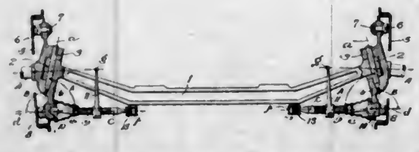


1,766,358. DIRIGIBLE. THAD ROSE, Van Nuys, Calif. Filed July 26, 1929. Serial No. 381,228. 3 Claims. (Cl. 244—10.)



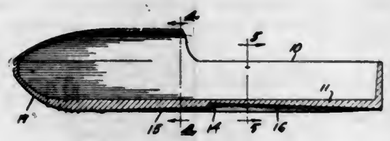
1. A dirigible having a longitudinal air passage coextensive in length therewith and opening at both ends, metallic plates radiating from said passage and projecting beyond one end of the dirigible, a rudder supported by said plates, means for controlling said rudder, and motor actuated propellers operating in said longitudinal air passage for the purpose specified.

1,766,359. BRAKE OPERATING DEVICE FOR STEERING WHEELS. LOUIS ROUANET, Ivry-Port, France, assignor to Compagnie d'Applications Mecaniques, Ivry-Port, France, a French Company. Filed Dec. 11, 1924, Serial No. 755,328, and in France Dec. 20, 1923. 10 Claims. (Cl. 188—194.)



1. A brake device for steering wheels, comprising in combination, for each steering wheel, a brake drum, two brake shoes mounted inside the drum, an operating cam, an actuating rod supported on a knuckle sliding on the vehicle axle and actuating the operating cam by means of a universal joint the center of which is spaced from the pivoting axis of the wheel, and an operating lever receiving the brake pull and slidably mounted on the actuating rod, said operating lever having all its points located between planes at right angles to the common axis of and passing through the centers of the knuckle and of the universal joint on the actuating rod and means on the lever to secure it in operative position.

1,766,360. BOAT. ALEXANDER C. SCHIPPER, Hamilton, Ohio. Filed Dec. 15, 1928. Serial No. 326,355. 1 Claim. (Cl. 114—66.5.)

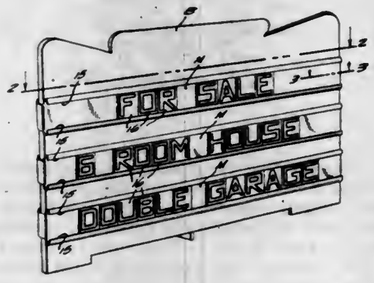


In a boat, a hull having a substantially flat bottom extending from a point adjacent the bow to the stern, and said bottom having a longitudinally disposed substantially oval-shaped concavity therein whose edges define a closed air pocket when the boat is in the water, and a step extending transversely of the bottom at a point to one side of the transverse center of said cavity to divide the pocket into a forward shallow section and a rearward relatively deep section.

1,766,361. FORMALDEHYDE BISULPHITE AMINOARYL-ANTIMONY COMPOUNDS. HANS SCHMIDT, Vohwinkel, near Elberfeld, Germany, assignor to Winthrop Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed Sept. 28, 1928, Serial No. 309,130, and in Germany Oct. 6, 1927. 6 Claims. (Cl. 260—11.)

1. Process which comprises reacting upon an aminoaryl-antimony compound with formaldehyde-bisulphite in the presence of water.

1,766,362. SIGN. JAMES A. SEARS, Long Beach, Calif. Filed Oct. 2, 1928. Serial No. 309,699. 2 Claims. (Cl. 40—63.)

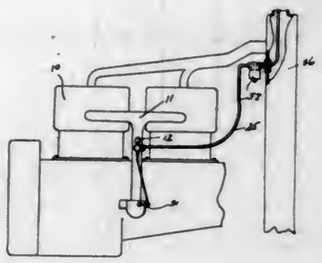


1. In a sign, a board, a member for supporting sign characters on one side of the board, and extensions on the member formed of a bendable material to permit bending of the extensions so as to lie contiguous the edges of the board, and coiled at their outer ends to provide enlargements contacting with the other side of the board to maintain the extensions in bent form.

1,766,363. VAPOR-SUPPLY MEANS FOR INTERNAL-COMBUSTION ENGINES. CHRISTIAN L. SMITH, Akron, Ohio, assignor of one-half to Victor J. Robinson, Akron, Ohio. Filed Nov. 19, 1928. Serial No. 320,451. 1 Claim. (Cl. 123—25.)

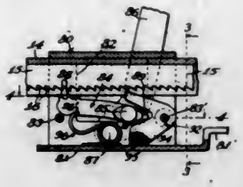
In a water vapor supply means for an internal combustion engine, wherein the engine includes a radiator and a carbureter; a hollow body having an inlet port, and an outlet port, the outlet port being provided with a valve seat, a sleeve connected to and depending from the lower

end of said hollow body directly below and in longitudinal alignment with the outlet port, a pipe for establishing connection between the radiator and the inlet port, a plunger disposed longitudinally within said hollow body and sleeve and depending below the same, a needle valve at the upper end of said plunger for said seat, a coil



spring urging said needle valve on its seat, and an adjusting screw carried by the lower extremity of said plunger, and a connecting member from said adjusting screw to the butterfly valve of the carburetor to cause a downward pull on the plunger and needle valve to unseat the same to admit vapor from the radiator and the inlet port to the outlet port and the intake manifold.

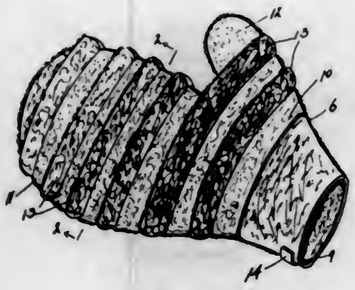
1,766,364. RATCHET FEEDING DEVICE. JOHN A. WALLER, Los Angeles, Calif., assignor to The Stanley Works, New Britain, Conn., a Corporation of Connecticut. Filed Mar. 19, 1928. Serial No. 262,632. 6 Claims. (Cl. 74—54.)



6. A ratchet feed comprising a substantially straight bar having a rectilinear rack provided with ratchet teeth, a frame slidably mounted on said bar, a handle pivoted in said frame for oscillatory movement, a feeding pawl pivoted on said handle and adapted to directly engage said rack, whereby upon movement of the handle on its operative stroke, the feeding pawl feeds the frame longitudinally of said bar, a locking pawl pivoted on said frame and adapted to interlock with said rack for holding said frame against movement upon said bar when the handle is moved on its inoperative stroke, and a spring for each pawl normally urging the same into direct engagement with the rack of said bar, said feeding pawl having a finger adapted to engage said locking pawl when the handle has been moved to the full extent of its inoperative stroke, whereby both of said pawls are disengaged from said rack so that said frame, handle and pawls may be moved longitudinally of the rack without operating the handle.

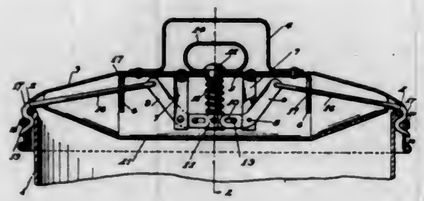
1,766,365. BATHING AND MASSAGING MITTEN. HERSH WEISS and ADOLF NEEDELMAN, Philadelphia, Pa.; said Weiss assignor to Rose Weiss, Philadelphia, Pa. Filed July 2, 1928. Serial No. 289,941. 1 Claim. (Cl. 15—227.)

A bathing and massaging mitten comprising palm and back sections including thumb portions united at their marginal side and outer end edges, a panel including a thumb portion united to the palm section of the mitten



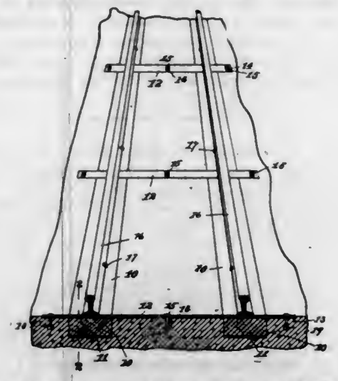
forming a pocket in the region of the finger and thumb parts of said panel and rows of folded pile fabric strips secured to the panel and extending transversely thereof.

1,766,366. CAN COVER. DENNIS M. WELCH and CLARE WARNER, Lansing, Mich. Filed May 17, 1929. Serial No. 363,820. 1 Claim. (Cl. 220—57.)



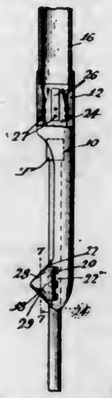
A garbage or like can having its mouth formed with an outwardly extending continuous bead and a flanged cover for said can, and said cover having a handle thereon, a post movable through the top of the cover, a grip on the outer end of the post arranged within the handle of the cover, a block secured to the lower end of the post and having bifurcated ends, a spring surrounding the post and exerting a pressure between the cover and the block, depending elements supported from the cover and arranged to the opposite sides of the block, angle arms pivoted at their bends to said elements and having their inner ends provided with elongated slots which are received in the bifurcated ends of the block, pivots passing through the block and said slots, rods secured to the second ends to the angle levers, guides carried by the cover for the rods, said rods having their outer ends rounded upon themselves to provide jaws and from thence extended outwardly at a downward angle, the cover having slots to receive the said ends of the rods therethrough, the jaw ends of the rods designed to engage with the beads of the can, as and for the purpose set forth.

1,766,367. RAILWAY-ROADBED CONSTRUCTION. CHRISTIAN WELLER, Atlantic City, N. J. Filed July 31, 1929. Serial No. 382,387. 3 Claims. (Cl. 238—5.)



1. In a railway, a concrete roadbed, lengthwise stringers set in said bed, cross bars for holding said stringers in position, bolts molded in the roadbed for removably securing the cross bars in place and rails secured to the stringers lengthwise thereof.

1,766,368. OIL-WELL FISHING TOOL. WILSON B. WIGLE, Compton, Calif. Filed Apr. 22, 1929. Serial No. 356,969. 1 Claim. (Cl. 294—90.)



A fishing tool comprising a hollow cylindrical body member having the greater portion of its wall cut away to form a pair of longitudinally extending edges, a substantially triangular shaped scoop hingedly secured to one of said body member edges at the lowermost end, said tool being of arcuate form in cross section and adapted to open when the tool is rotated and draw the object fished for into the channel formed by the cut away portion of the body member, and a plurality of spring dogs secured to the inner surface of the body member beyond the cut away portion, the free ends of said dogs projecting upwardly and towards each other for engaging the object fished for to elevate the same out of the well.

1,766,369. PROCESS OF PREPARING BORNEOL AND THE LIKE. HARRY P. BASSETT, Cynthiana, Ky., and RICHARD C. MORRISON, Lansdowne, Pa., assignors to Charles A. Bianchi, Nutley, N. J. Meigs, Bassett & Slaughter, Inc., Philadelphia, Pa., a Corporation of Pennsylvania. Filed Nov. 6, 1928. Serial No. 317,686. 2 Claims. (Cl. 260—153.)

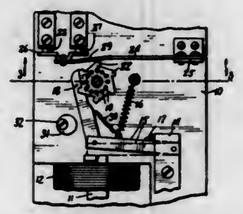
1. The herein described process which comprises mixing with a pinene acid addition product an aqueous solution of an alkali-forming metal hydroxide and a soluble salt of the metal present in said hydroxide, and heating said mixture with agitation in a closed container at a temperature favorable to the reaction of said addition product with said hydroxide, said hydroxide being present in a slight excess of the theoretical amount required to combine with the acid radical present in said addition product, the water present being in the proportion of from approximately 10 to 20 parts to 1 part of said addition product, and said salt being present in an amount sufficient to approximately saturate the water present.

1,766,370. PROCESS OF MANUFACTURING CAPACITORS. SIDNEY A. BEYLAND, Rochester, N. Y., assignor to The Stromberg-Carlson Telephone Manufacturing Company, Rochester, N. Y., a Corporation of New York. Filed June 20, 1927. Serial No. 200,279. 7 Claims. (Cl. 175—41.)



1. The process of manufacturing capacitor units which consists in forming the unmounted capacitor units, drying the units thus formed to eliminate moisture, impregnating the unmounted units in a bath of impregnating material, removing the units from the bath of impregnating material, then pressing them to their final dimensions while flooded with an excess of impregnating material in a temporary liquid-retaining receptacle, and placing the units in containers.

1,766,371. REMOTE CONTROL SYSTEM FOR ELECTRIC CIRCUITS. TIMOTHY F. BLUDWORTH, Fanwood, N. J., and IGOR S. BOBROVSKY, New York, N. Y. Filed Feb. 15, 1927, Serial No. 168,381. Renewed Apr. 2, 1930. 5 Claims. (Cl. 200—105.)



1. In a switch of the character described, a star wheel, a spring-pressed switch arm engaging the star wheel, the switch arm being formed with a bearing surface and a recess contiguous thereto, said surface and recess being adapted to be engaged successively by a tooth of the star wheel, and means for rotating the star wheel intermittently by steps of half a tooth space, whereby during successive steps of the star wheel the switch arm will be alternately moved in one direction by a tooth engaging said bearing surface and moved in the other direction by spring pressure as the tooth enters the recess.

1,766,372. REMOTE CONTROL SWITCH. TIMOTHY F. BLUDWORTH, Summit, N. J. Filed Dec. 22, 1927. Serial No. 241,878. 5 Claims. (Cl. 200—92.)

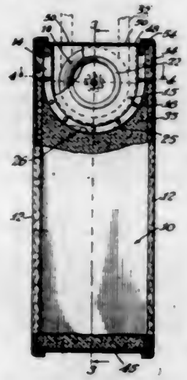
1. In a control switch, a driving member, a driven member reciprocable between limits in the path of the

driving member, one of said members being formed with a spring providing a yieldable engagement of the two members and permitting disengagement of the two members



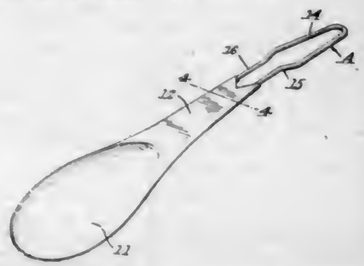
when the driven member has been moved to either limit of reciprocation, and an actuating means for propelling the driving member.

1,766,373. SASH WEIGHT. CLAUDE E. BOWERS, Los Angeles, Calif. Filed Mar. 12, 1928. Serial No. 260,860. 1 Claim. (Cl. 16—217.)



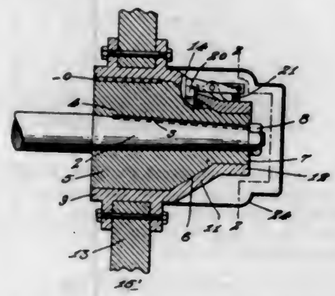
A sash weight comprising a sheet metal casing, a sheave housing formed of sheet metal mounted within the casing adjacent one end thereof, a sheave within the housing having an annular groove to receive a sash cord, a weighting and a plastic binding material therefor packed in said casing, and end plates for closing the ends of said casing, the end plate adjacent the sheave housing having openings for the passage therethrough of the sash cord.

1,766,374. SHOE HORN AND BUTTONER. GUY W. BYRD, Raleigh, N. C., assignor of one-third to Emily W. Inscoe, La Grange, N. C. Filed Apr. 1, 1929. Serial No. 351,742. 3 Claims. (Cl. 12—7.)



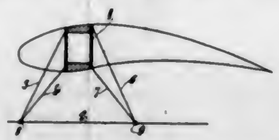
3. As a new article of manufacture, a combined shoe buttoner and shoe horn comprising a body concaved for an appreciable distance in the length thereof to provide a horn, ears carried upon the body in oppositely disposed relation to the horn proper, the buttoner consists of a loop having legs enclosed by said ears to provide an extension handle for the horn, and arms carried by the loop and legs and inwardly directed therefrom to provide an entrance opening at the intersection of the loop therewith to dispose the legs in conformity with the disposition of said ears.

1,766,375. WHEEL-ATTACHING DEVICE. CLAY CRAIN, West Frankfort, Ill. Filed July 8, 1929. Serial No. 376,784. 1 Claim. (Cl. 301—9.)



A device for the purpose set forth, including a boxing having a flared portion receiving therethrough the spindle end of an axle which is removably fixed thereto, a wheel hub arranged over the boxing, keyed thereto and having a flared portion to overlie the flared portion of the boxing, said hub having equidistantly spaced openings therethrough and the boxing having notches alining with said openings, dogs pivotally secured to the hub and having their active ends received through the openings and in the notches of the boxing, spring means influencing the dogs to such position, an annular flexible element passing through the outer ends of the dogs and a rotatable pin through which the flexible element is received, as and for the purpose set forth.

1,766,376. METHOD FOR ATTACHING ON FUSELAGES WINGS HAVING SINGLE SPARS. EMILE JULIEN EUGENE DEWOITINE, Chatillon-Sous-Bagneux, France. Filed Dec. 14, 1928, Serial No. 325,978, and in France Dec. 27, 1927. 2 Claims. (Cl. 244—12.)



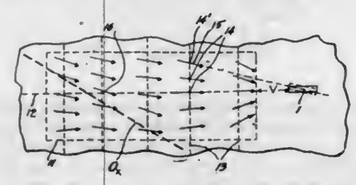
1. In a monoplane, a wing including a single spar and upper and lower flange plates, a fuselage arranged below the wing, and means for suspending the fuselage from the upper flange plate and from the lower flange plate of the spar.

1,766,377. CLIP FOR HOLDING GLASS TUBE HOLDERS. SAMUEL A. GAEDE, Los Angeles, Calif. Filed Dec. 27, 1927. Serial No. 242,732. 1 Claim. (Cl. 248—30.)



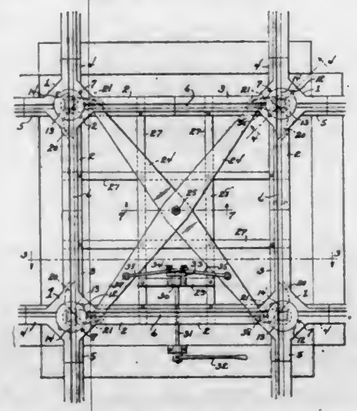
A spring clip bracket for the stem of a glass tube holder including a fastening base from one side of which extends a perpendicular part forming a rigid arm which has a parallel arm rolled upward and away from the base and rigid arm and forming a U-shaped socket having its roll contiguous to the side of the base and its arms being close to the base plane; said arms being provided with opposite concave seats relatively yieldable to receive the inserted stem; the open ends of the spaced arms forming a receiving mouth about equal to the diameter of said roll to facilitate insertion of the tube therebetween for movement to said seats.

1,766,378. METHOD OF LOCATING UNKNOWN CONDUCTIVE BODIES. EDWARD H. GUILFORD, Glendale, Calif., assignor to The Radiore Company, Los Angeles, Calif., a Corporation of California. Filed Apr. 11, 1927. Serial No. 182,628. 11 Claims. (Cl. 175—182.)



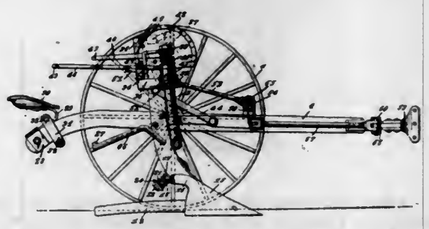
1. The method of locating conductive bodies within a mass of less conductive material which comprises setting up a primary high frequency electromagnetic field within said less conductive mass by means of a transmitting loop entirely independent of said less conductive mass, so as to cause alternating current of such frequency to be induced in a conductive body within such field and thereby produce a secondary electromagnetic field of such frequency about the axis of said conductive body, and then determining the resultant effects of the primary and secondary fields upon a direction-finding coil, at a plurality of points, within both of said fields and spaced from the transmitting loop, and calculating the location of the axis of said conductive body from the effects so determined, the plane of the transmitting loop being maintained vertical and being directed toward the direction-finding coil at each position at which such coil is used.

1,766,379. RAILWAY CROSSING. ORVIA GETMAN, Clearwater, Fla. Filed Aug. 16, 1929. Serial No. 386,291. 2 Claims. (Cl. 246—371.)



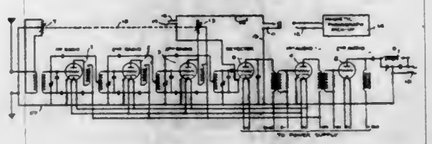
1. A railway crossing formed of four units each comprising right angularly extending grooved members, the corners of each of the members being provided each with a round opening, whose lower wall affords a shoulder and which shoulder is provided with a centrally rounded opening that also merges into a shoulder, and the inner ends of the said corners being slotted, means for connecting the confronting ends of the rails, a disc having its outer face grooved and designed to be dropped in each of the mentioned openings and to rest upon the upper shoulder therein, each of said discs having extensions to be received in the mentioned openings at the corners and the lower extension having its upper portion squared, a slotted lever having a squared opening to receive the square portion of the disc extensions therethrough and which lever rests upon the lower shoulder at the corners and projects through the slots at said corners, means bracing the rails of the crossing, a plate supported upon said means, cross arms pivoted to the plate and having a pivotal connection with the slots of the slotted grooves, and throw links pivotally secured to the arms, and a throw arm for operating the links to swing the arms toward or away from each other, the arms being limited in such swinging of the contacting end wheels by the slots at the corners.

1,766,380. PLOW. YSAUNO GÓMEZ, Ballinger, Tex. Filed Apr. 8, 1929. Serial No. 353,457. 1 Claim. (Cl. 97—83.)



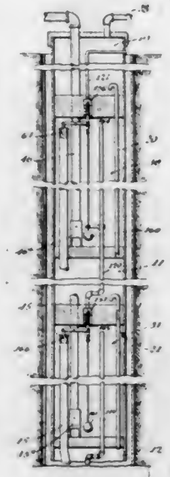
An agricultural implement comprising a wheel supported frame, a beam connected with the frame, a standard connected with the beam, said standard having a bifurcated lower part, a plow having a rearward extension which passes between the lower end of the bifurcated portion, means for pivoting the extension in said bifurcated part, a bolt passing through an upper part of the plow and through the bifurcated portion, a spring on the rear of the bolt and bearing against the rear edge of the beam and the nut on the bolt, said extension having an upwardly extending part arranged between the members of the bifurcated portion of the standard, with teeth on its upper end, a pinion carried by the standard and engaging the teeth and a foot actuated member connected with the pinion for rotating the same whereby the plow will be tilted upwardly or downwardly when the foot engaging member is actuated.

1,766,381. COMBINED RADIO AND PHONOGRAPHIC RADIO REPRODUCING SYSTEM. PAUL HAAS, Rochester, N. Y., assignor to The Stromberg-Carlson Telephone Manufacturing Company, Rochester, N. Y., a Corporation of New York. Filed Dec. 24, 1928. Serial No. 328,143. 6 Claims. (Cl. 179—100.11.)



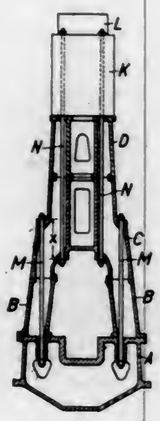
5. In combination with an electrical phonograph, a radio receiver including a radio frequency amplifier, a detector and an audio amplifier, a volume control device for said radio receiver, and means including said volume control device and a switch actuated by said volume control device for rendering the radio amplifier ineffective and for electrically connecting the electrical phonograph to said audio amplifier through said detector.

1,766,382. MULTISTAGE AND EXPANSION FLUID PUMP. CHARLES H. HARDIE, South Gate, and WILLIAM JONES, Los Angeles, Calif. Filed Mar. 5, 1929. Serial No. 344,392. 6 Claims. (Cl. 103—239.)



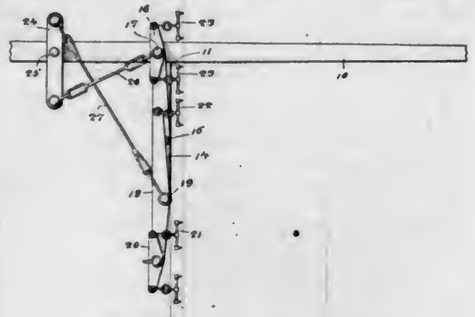
1. A fluid lift comprising a plurality of high pressure air chambers, a plurality of fluid lifting chambers interposed between said high pressure air chambers, conduits connecting said fluid lifting chambers, conduits connecting said high pressure air chambers, and means for controlling the admission of compressed air from said high pressure air chambers to said lifting chambers to effect a plurality of expansions of compressed air in said fluid lifting chambers.

1,766,383. BED FOR VERTICAL INTERNAL-COMBUSTION ENGINES. ERNST HEAKT, Kiel, Germany, assignor to Fried. Krupp Germaniawerft Aktiengesellschaft, Kiel-Gaarden, Germany. Filed Sept. 3, 1925, Serial No. 54,361, and in Germany Apr. 28, 1925. 2 Claims. (Cl. 121—194.)



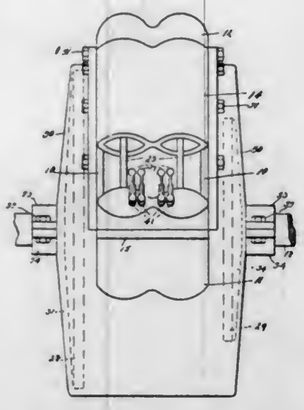
1. A vertical internal combustion engine comprising a working cylinder, a standard supporting the working cylinder, a base plate on which said standard rests, tie rods connecting the cylinder to said standard, and tie rods connecting said standard to said base plate, said first-named tie rods overlapping said last-named tie rods.

1,766,384. ANIMAL DRAFT EQUALIZER. PEARLE M. HODGE, Barnston, Nebr. Filed Mar. 1, 1929. Serial No. 343,660. 1 Claim. (Cl. 278—6.)



A draft equalizer comprising a supporting bar having connection at one end and projecting laterally of a vehicle tongue, an evener bar pivotally and eccentrically mounted upon the other end of the supporting bar having its longer end extended above said tongue, a three-horse evener pivotally and eccentrically mounted upon the outermost shorter end of the evener bar having its longer end extended over the aforementioned extremity of the evener bar, whiffle trees carried upon the outermost ends of the evener bar and three-horse evener respectively, single trees for the whiffle trees and longer end of the three-horse evener, and an equalizer bar pivotally and eccentrically mounted upon the tongue behind the evener bar having linkage connections between the long and short ends thereof with the evener bar and three-horse evener respectively.

1,766,385. INTERNAL-COMBUSTION ENGINE. JOHN S. JACKSON, Philadelphia, Pa. Filed Dec. 29, 1928. Serial No. 329,295. 11 Claims. (Cl. 123—43.)

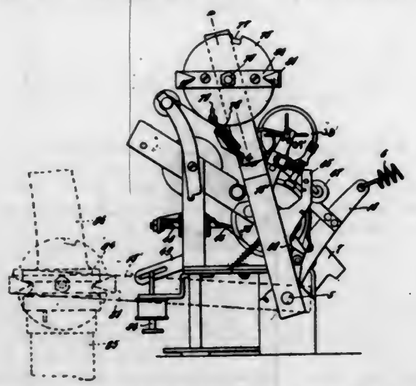


1. In an internal combustion engine, a rotary member having internal cam surfaces, and means for transmitting power from the pistons of said engine to said rotary member by successive outward pulls upon said cam surfaces.

1,766,386. CONTROLLING MEANS FOR RECORDING PUMPS. DANIEL F. KAY, Jr., Ashland, Oreg. Filed July 7, 1928. Serial No. 291,115. 2 Claims. (Cl. 221—100.)

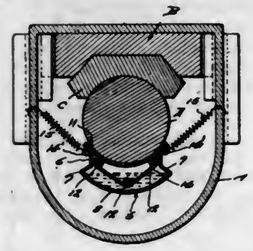
1. In a controlling device for dispensing and recording mechanism, means for obstructing the dispensing mecha-

nism, a shaft mounting said means, an arm rigid with reference to the shaft, a U-shaped frame rotatable with



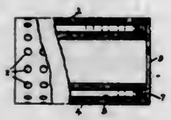
reference to the arm, a spring connected with the frame and with the arm, and means for limiting the movement of the frame.

1,766,387. LUBRICATOR FOR CAR JOURNALS. WILLIAM L. KNIGHT, Greensburg, Ind. Filed Apr. 19, 1929. Serial No. 356,422. 5 Claims. (Cl. 308—83.)



1. A lubricator for car axles comprising a reservoir for containing a lubricant, and tensional means for urging the reservoir against the axle, and packing means interposed between the reservoir and the car axle.

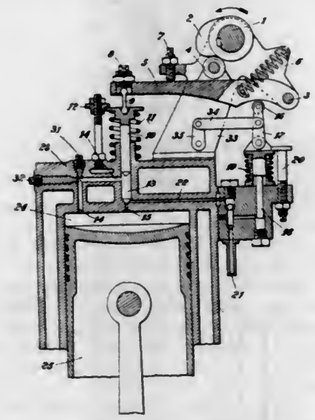
1,766,388. BRUSH. JÁNOS KOVÁCS, Budapest, Hungary, assignor to Carl Hüller, Wurttemberg, Germany. Filed June 28, 1928, Serial No. 288,919, and in Hungary July 1, 1927. 2 Claims. (Cl. 15—183.)



1. A brush comprising a stock provided with a multiplicity of holes grouped in longitudinal rows, and with perforations running transversely to the axes of said holes, extending to substantially the whole length of said stock and partially penetrating into said holes, brush bundles inserted in said holes and elongate bodies filling in said perforations so as to wedge said bundles in said holes.

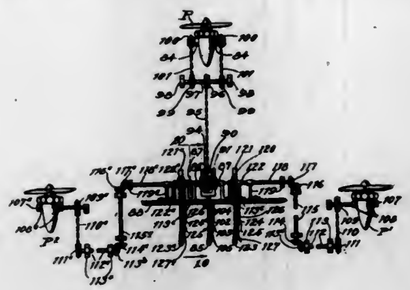
1,766,389. DEVICE FOR SPRAYING FUEL INTO THE CYLINDERS OF INTERNAL-COMBUSTION ENGINES. ADOLPH WILHELM KRÄMLING, Berlin-Schmargendorf, Germany. Filed June 23, 1925, Serial No. 39,133, and in Germany July 1, 1924. 7 Claims. (Cl. 123—33.)

1. In an internal combustion engine the combination with a working cylinder and a piston therein, and a fuel injecting device comprising in combination a compression chamber, two separate means of communication between the compression chamber and the cylinder, one of said means establishing permanent communication between the compression chamber and the cylinder, an auxiliary piston in the said compression chamber, a fuel supplying pump, a piston in the said pump, means for driving the said pump piston and the said auxiliary piston, the said pistons being separately actuated by the said driving means, said auxiliary piston being adapted to control the second means



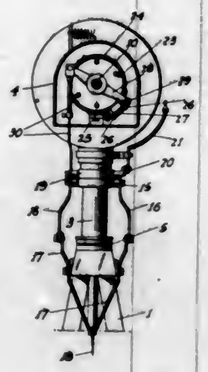
of communication between the compression chamber and the working cylinder, the arrangement being such that during the compression stroke of the piston in the working cylinder air from said cylinder is forced into the compression chamber and is further compressed therein by the auxiliary piston in the compression chamber whilst fuel is supplied outside of the piston in the said compression chamber into the air flowing from the said chamber to the said cylinder during the compression stroke of the said piston in the compression chamber.

1,766,390. AIRCRAFT. CHARLES V. LAPIN, Los Angeles, Calif. Filed Dec. 3, 1928. Serial No. 323,343. 2 Claims. (Cl. 244—25.)



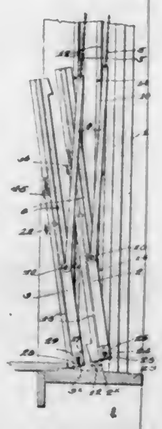
1. In an aircraft, a power plant having a propeller, a yoke secured to the aircraft, trunnions carried by the power plant and mounted in the yoke to support the power plant for pivotal movement to vary the direction of thrust exerted by the propeller when in operation, means for moving the power plant and means for securing the power plant in a selected position of adjustment, said means for moving the power plant comprising a pinion rotatably mounted on a fixed axis, means for operatively connecting the pinion to at least one of the trunnions to rotate the latter in response to rotation of the pinion, and a segmental internal gear constantly meshing with the pinion.

1,766,391. WINDMILL. JOSE LECUONA, Stockton, Calif. Filed July 21, 1928. Serial No. 294,388. 4 Claims. (Cl. 170—47.)



1. A windmill including a supporting structure, a member turnably surmounted on the same, a horizontal shaft above and supported from said member, a wind-wheel on the shaft, a brake drum on the shaft, a band about the drum and anchored at one end, an ear projecting radially from the other end of the band, an arm rockably mounted on the shaft adjacent the drum, a pin projecting from the arm parallel to the shaft for detachable engagement with the ear, and means controlled from below the member for turning the arm to cause the pin to engage the ear and compress the band about the drum irrespective of the turning of said member relative to the supporting structure.

1,766,392. WINDOW STRUCTURE. JOHN FREDERICK MASSEY, Chicago, Ill. Filed Nov. 24, 1928. Serial No. 321,666. 8 Claims. (Cl. 20—42.)



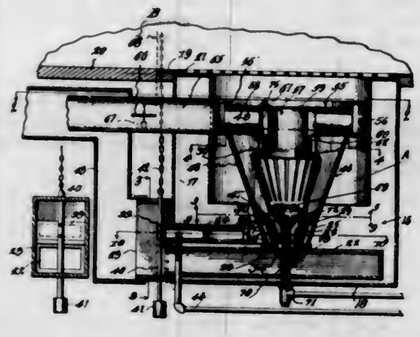
1. In combination, a window frame having vertically-grooved side stiles, slidable and swingable sashes in the frame, counterbalance means, connections between the sashes and said means and including bars to which the sashes are pivotally connected for the swinging movements of the sashes, sash-guides movable relative to the sashes and into and out of the said frame grooves, and means carried by the sashes and connected to the guides and through the medium of which the guides may be projected from and retracted into the outlines of the sashes.

1,766,393. AUTOMOBILE WHEEL ATTACHMENT. WILLIAM RUCE METTS, Atlanta, Ga. Filed Aug. 3, 1928. Serial No. 297,139. 1 Claim. (Cl. 301—39.)



An attachment for a vehicle wheel carrying a pneumatic tire, comprising a relatively wide ring like body curved transversely upon itself to substantially follow the transverse curvature of the side walls of the pneumatic tire, a tire carrying rim formed with the outer periphery of said body, a flange formed with the inner periphery of said body, clamping means for cooperating with said flange for securing the attachment to the wheel and said clamping means including U-shape clamping plates having openings formed in the arms thereof, a curved tongue formed with one of said arms, lugs formed with openings adapted to register with the openings of the other arms, a tongue for each of the lugs, said flange being provided with openings registering with the openings of the arms and lugs respectively, bolt and nut connections having the bolts thereof passing through the registering openings, and said tongues being opposed and disposed in gripping engagement with a part of the wheel for securing the attachment thereto.

1,766,394. GAS HEATER. ALBERT B. MILLER and WALTER H. KELLNER, Green Bay, Wis. Filed May 11, 1929. Serial No. 362,220. 7 Claims. (Cl. 126—116.)



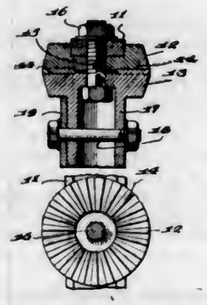
1. A heating appliance comprising an air chamber having an air outlet opening, a gas burner of hollow annular construction having a plurality of burner outlets and fitted over the air opening, an air and gas mixing pipe communicating with the hollow burner, a head receiving the air chamber and the air and gas mixing pipe, a fresh air conduit pipe connected to the head and leading from the outside of the building to be heated, means for controlling the flow of air into the air and gas mixing pipe, an air heating baffle arranged to receive the air from the air chamber and the products of combustion from the burner, and means for receiving the products of combustion from the baffle and for leading the same exteriorly of the building.

1,766,395. MINING MACHINE. FREDERICK B. MILLER, Scottdale, Pa. Filed Sept. 13, 1929. Serial No. 392,449. 4 Claims. (Cl. 262—8.)



1. The combination with a mining machine of a skid base, a traction pinion on said machine, a rack on said base with which said pinion is meshed, a telescoping anchor-bar connected to said base, a jack, means removably connecting said bar to said jack, and means for removably locking said bar against telescoping movement.

1,766,396. SPRING-TOOTH MOUNTING FOR CULTIVATORS. GEORGE J. MILLER, Mankato, Minn. Filed July 12, 1928. Serial No. 292,064. 1 Claim. (Cl. 55—36.)



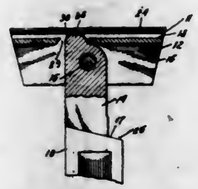
A spring tooth mounting comprising in combination with a support, a pair of companion disk-like sections having their adjacent surfaces serrated, a bolt passed through said sections and through said support for attaching the mounting upon the support, one of said sections being capable of rotation with relation to the other, a hollow tubular extension projecting from the rotatable section in axial alignment with said bolt, and having diametrically opposed openings, a spring tooth having an offset curved extremity partly embracing the tubular extension and having an opening registering with the openings of said tubular extension, and a bolt passed through all of said openings in right angular relation to the first mentioned bolt for holding the tooth fixed relatively to said mounting.

1,766,397. SAFETY RAZOR. JOSEPH MUROS, New York, N. Y. Filed Mar. 22, 1928. Serial No. 263,666. 2 Claims. (Cl. 30—12.)



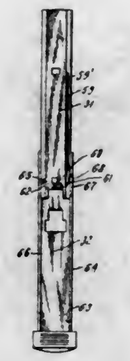
1. A safety razor comprising a frame including two spaced bearing plates, a blade holder oscillatably carried on said plates, a blade on said holder, a bail-shaped support including a bar element for co-operation with the cutting edge of said blade and two rearwardly extending sections extending in parallel relation to and spaced from the outer faces of said bearing plates, the free ends of said rearwardly extending sections extending through said bearing plates toward one another and forming pivot pins for said blade support, means on said bar element adapted to support said blade and for spacing its cutting edge from said bar element, and a strop engaging roller rotatably arranged on the free ends of said pivot pin elements.

1,766,398. SAFETY RAZOR. JOSEPH MUROS, New York, N. Y., assignor to Frederick E. Perry, New York, N. Y. Filed Apr. 11, 1928. Serial No. 269,104. 10 Claims. (Cl. 30—12.)



1. A razor comprising a handle, a blade holder pivoted to said handle and adapted to be swung to one position for receiving a blade and to another position for shaving, a guard forming part of said holder, a clamping means on said holder for maintaining a blade thereon in operative relation to said guard in either position of said holder, and means on said handle co-operating with said clamping means for adjusting the distance between said guard and the cutting edge of said blade, said means being caused to operate upon varying the relative angular position of said holder and said handle.

1,766,399. SAFETY RAZOR. JOSEPH MUROS, New York, N. Y., assignor to Frederick E. Perry, New York, N. Y. Filed Jan. 29, 1929. Serial No. 335,896. 11 Claims. (Cl. 30—12.)

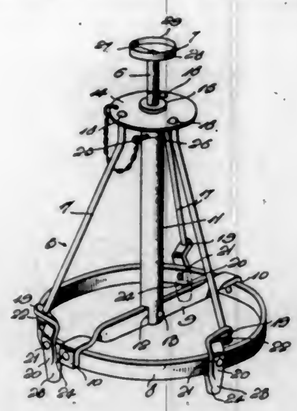


1. A razor including a handle provided with a discharge opening, a magazine within said handle adapted to hold a stack of blades, a plunger movable longitudinally on said handle for successively feeding blades from the stack toward said discharge opening, a spring-pressed pawl on said handle, said plunger being provided with a notch in which said pawl is adapted to be seated, said notch being positioned to prevent said plunger to complete its idle stroke when said pawl is operative, and means on said plunger for rendering said pawl inoperative immediately prior to the end of its feeding stroke and operative immediately prior to the end of its idle stroke.

1,766,400. LUMBER JACK. RANT Y. NEELY, Willamina, Oreg. Filed Nov. 8, 1928. Serial No. 317,975. 3 Claims. (Cl. 248—41.)

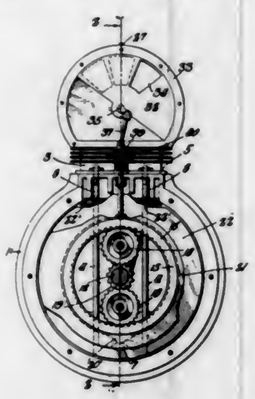
3. A lumber jack comprising a base, a vertical standard rising from said base and having a lumber rest at its upper end, inclined brace rods secured at their upper

ends to said standard, and a plurality of short vertical bars secured between their ends to said base, the upper ends of said short vertical bars having openings in which



the lower ends of said brace rods are secured, the lower ends of said short vertical bars projecting downwardly from said base to provide ground-engaging feet.

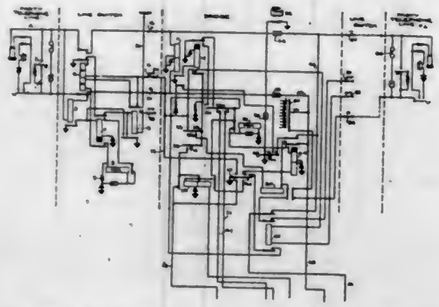
1,766,401. INTERNAL-COMBUSTION ENGINE. GERHARDT PLATO, Chicago, Ill. Filed Mar. 21, 1929. Serial No. 348,873. 2 Claims. (Cl. 123—64.)



1. An internal combustion engine comprising a crank case, a cylinder movably connected therewith, a crank shaft passing through the crank case, a piston in the cylinder, a rod connecting the shaft with the piston, means for moving the cylinder toward the piston during the compression stroke and when the crank of the shaft has passed dead center, such means comprising anchor members connected with the cylinder and passing into the crank case, shoes connected with the lower ends of the anchor members, a cam engaging the shoes for lowering the parts, means for operating the cam from the cam shaft and inlet and exhaust means associated with the cylinder.

1,766,402. REMOTE-CONTROL TELEPHONE SYSTEM. WINFRED T. POWELL, Rochester, N. Y., assignor to The Stromberg-Carlson Telephone Manufacturing Company, Rochester, N. Y., a Corporation of New York. Filed Oct. 16, 1929. Serial No. 399,968. 6 Claims. (Cl. 179—26.)

1. The method of extending telephone connections which comprises initiating the non-numerical automatic automatic extension of a calling subscriber to an operator by the use of alternating current control, informing the operator of the wanted subscriber's designation, employing operator-transmited code impulses corresponding to the wanted subscriber's designation to automatically



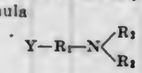
connect the called subscriber with the calling subscriber, and utilizing direct current control effected by the interruption of a portion of the conversational circuit between the called subscriber and the calling subscriber for releasing the connection.

1,766,403. PHARMACEUTICAL PRODUCT. WERNER SCHULEMANN, Vohwinkel-Hammerstein, and AUGUST WINGLER and FRITZ MIETZSCH, Elberfeld, Germany, assignors to Winthrop Chemical Company, Inc., New York, N. Y. Filed Aug. 24, 1925, Serial No. 52,228, and in Germany Sept. 11, 1924. 7 Claims. (Cl. 260—27.)

1. A process of making therapeutically valuable derivatives, comprising reacting upon an amino derivative of an aromatic compound of the series containing the grouping

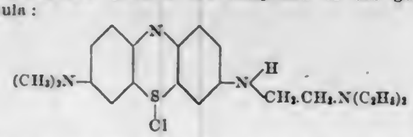


wherein one A represents an element of the group N, S, and O, and the other A represents an element of the group C and N, with an aminoalkylhalogenide compound of the general formula



wherein Y represents a halogen atom, R_1 an alkylene residue; R_2 represents hydrogen or an alkyl group and R_3 stands for an alkyl group.

7. As a new product the compound of the general formula:

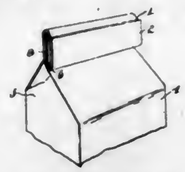


which in a dry state is a bronze-colored powder, easily soluble in water.

1,766,404. PROCESS FOR THE CONCENTRATION OF ACETIC ACID. GEORG SCHWAEBEL, Leverkusen-on-the-Rhine, and FRANZ SCHLEICHER, Wiesdorf-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed May 10, 1927, Serial No. 190,356, and in Germany May 12, 1926. 7 Claims. (Cl. 260—122.)

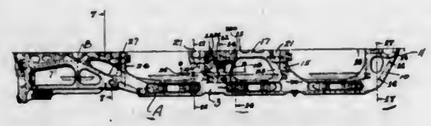
1. Process for the concentration of acetic acid which comprises extracting a dilute aqueous solution of acetic acid by means of an organic base which does not form a stable compound by chemical reaction with acetic acid.

1,766,405. PACKAGE SEALING. JAMES G. SHAW, San Jose, Calif. Filed May 3, 1928. Serial No. 274,875. 1 Claim. (Cl. 93—2.)



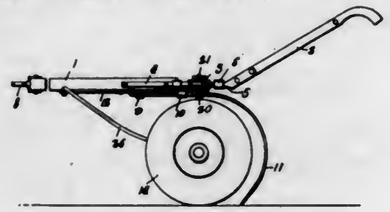
The method of sealing a package which consists in providing both sides of a strip of foldable material with adhesive, closing the package by bringing the opposing edges of the open end together, folding the said strip over the closed edges to seal the same, then folding the sealed end of the package over upon itself twice in succession to bring both sides of the outer surface of the strip into sealing engagement therewith.

1,766,406. LOCOMOTIVE STRUCTURE. WILLIAM M. SHEEHAN, St. Louis, Mo., assignor, by mesne assignments, to General Steel Castings Corporation, Granite City, Ill., a Corporation of Delaware. Filed Aug. 13, 1928. Serial No. 299,331. 60 Claims. (Cl. 105—175.)



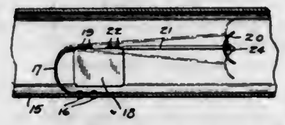
1. In a frame of the class described, side members, and a motor supporting transom extending diagonally of said members being of deeper section intermediate its ends than the depth of said side members and connecting the same and adapted to support a center plate.

1,766,407. COMBINATION PLOW AND CULTIVATOR. WILLIAM A. SHOTTS, Hackleburg, Ala., assignor of one-third to J. S. Conway and one-third to H. M. Conway, Hackleburg, Ala. Filed Apr. 17, 1929. Serial No. 355,899. 1 Claim. (Cl. 97—54.)



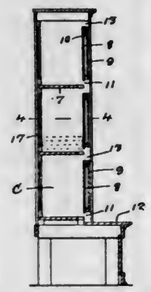
An agricultural implement of the class described comprising a draft beam, a plate having a U-shaped guide on the under face of the beam, a second plate also secured on the under face of the beam and extending laterally thereof and having its said extensions provided with series of longitudinally arranged apertures, an arched spring tooth having a straight portion received through the guide and also fixed to the under face of the beam, a centrally split substantially rectangular frame having its split ends spaced and provided with oppositely directed extensions, the forward extensions being fixed to the sides of the beam, brace beams between the extensions, the rear extensions having angle ends, spaced handle members secured to said ends, discs arranged in pairs, a shaft connecting each pair of discs and upon which shafts the discs are rotatable, a standard having a bearing for each shaft, a rod member connected with each bearing and having a hooked end to engage with the apertures in the plate, each of said standards having an upper and enlarged end which merges into a centrally arranged threaded extension that is received between the sides of the rectangular frame at points opposite the longitudinal center thereof, spaced pairs of bearing plates having their edges notched to receive the spaced members of the frame therein and bolts screwed on the threaded extensions of the standards, said bearings having longitudinally arranged oppositely extending portions which are apertured, an arched rod having hooked ends, one of which is received in the aperture of each of the forward extensions and the second end being also hooked and received in certain of the apertures in the plate, said bearings having inwardly extending apertured extensions, rods having hooked ends received in said apertures and also received in certain of the apertures in the plate.

1,766,408. AUXILIARY WATER-CIRCULATING MEANS FOR AUTOMOBILE ENGINES USING THERMO-SIPHON SYSTEMS. ROBERT F. STEPHENSON, Los Angeles, Calif. Filed Apr. 1, 1926. Serial No. 98,979. 12 Claims. (Cl. 123—175.)



1. In a combination with a water passage of an engine cooling system, a water circulating device in the passage comprising an impeller having a concave surface, and means for mounting the impeller for vibratory movement in response to vibration, whereby said concave surface will impel water in the passage in one direction constantly, to thereby effect uni-directional circulation of water in the system.

1,766,409. SELF-SERVICE HABERDASHERY. CHARLES E. STOCKS, El Paso, Tex. Filed Sept. 24, 1927. Serial No. 221,696. 1 Claim. (Cl. 312—42.)

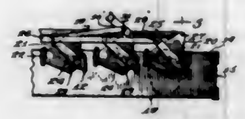


Shelving for use in self-serving stores, comprising a base, pairs of uprights mounted on said base, a top extending across said uprights, a plurality of shelves extending between each pair of uprights and a plurality of members having shallow compartments therein and provided with transparent fronts, secured at their opposite ends to each pair of uprights above and below and at the front of said shelves, the upper and lower edges of each of said members being vertically spaced from said shelves, whereby articles of merchandise may be withdrawn from below the lower edge of each of said members and returned to said shelves over the upper edges thereof.

1,766,410. EGG-TURNING DEVICE. ROBERT L. STRAIN, Garnett, Kans. Filed July 5, 1927. Serial No. 203,533. 5 Claims. (Cl. 119—44.)

1. A device of the character described comprising a pivoted cradle including a pair of relatively movable hori-

zontally elongated members normally converging toward their lower edges to support a plurality of eggs therebetween, a pair of operating members connected respectively to said movable members and simultaneously movable to



swing said cradle about its pivots, and means pivotally connected with said operating members for moving said operating members with respect to each other to impart relative movement to said first named members to discharge eggs therefrom.

1,766,411. FILTER FOR ABSORBING ULTRA-VIOLET LIGHT. TSUNEO SUZUKI and SUEO SAKURAI, Tokyo, Japan, assignors to Zaidan Hojin Rika Gaku Kenkyujo, Tokyo, Japan. Original application filed Aug. 11, 1924, Serial No. 731,488, and in Japan Dec. 20, 1923. Divided and this application filed Jan. 8, 1927. Serial No. 159,094. 1 Claim. (Cl. 95—81.5.)

A light filter containing, as active material, a salt of the condensation product of a dextrose-containing sugar and phenylhydrazine parasulfonic acid.

1,766,412. PIGMENT HAVING INSECTICIDAL AND FUNGICIDAL PROPERTIES AND PROCESS OF MAKING SAME. EDWARD A. TAYLOR, Cleveland, Ohio, assignor, by mesne assignments, to The Grasselli Chemical Company, Cleveland, Ohio, a Corporation of Delaware. Filed Aug. 5, 1926. Serial No. 127,478. 6 Claims. (Cl. 167—15.)

3. The process of producing a pigment adapted for use as a fungicide and insecticide which comprises precipitating copper chromate as superstratum upon calcium arsenate in finely divided form as substratum.

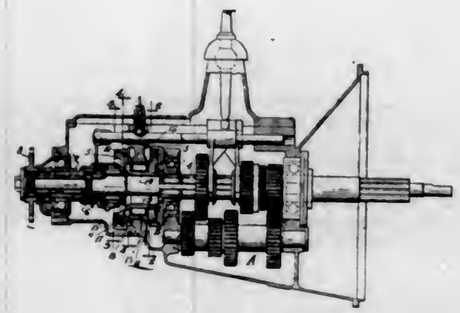
6. As an insecticide and fungicide a pigment comprising copper chromate precipitated as superstratum upon calcium arsenate in finely divided form as substratum.

1,766,413. ALKALINE CONDENSATION PRODUCTS OF BZ-1-ETHERS OF BENZANTHRONE. KARL THIESS, WALTER GMELIN, and KARL ZAHN, Hochst-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed July 19, 1926, Serial No. 123,592, and in Germany Aug. 26, 1925. 6 Claims. (Cl. 260—61.)

1. A process of making vat dyestuffs of the iso dibenzanthrone series, which comprises subjecting a benzanthrone compound unsubstituted in the 2-position and containing an ether group in the Bz-1-position to the action of an alkaline condensing agent.

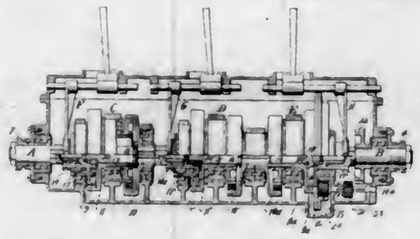
1,766,414. CHANGE-SPEED DEVICE. FRED C. THOMPSON, Detroit, Mich., assignor to Morse Chain Company, a Corporation of New York. Filed May 12, 1925. Serial No. 29,697. 2 Claims. (Cl. 74—59.)

1. In a change speed device the combination of a shaft having an internal gear thereon; a second shaft having an external gear thereon; a lay shaft having an external and internal gear thereon meshing with the aforesaid internal and external gears respectively; a casing, a bearing



in the casing for the lay shaft; a movable eccentric sleeve in said bearing and means for moving said eccentric sleeve, said means being accessible from outside the casing.

1,766,415. GEAR TRANSMISSION. FRED C. THOMPSON, Detroit, Mich., assignor to Morse Chain Company, Ithaca, N. Y., a Corporation of New York. Filed Jan. 23, 1926, Serial No. 83,183. Renewed Sept. 28, 1929. 6 Claims. (Cl. 74—59.)



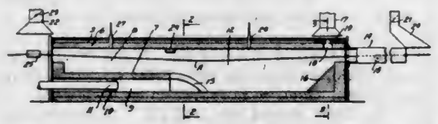
5. A gear transmission comprising, in combination, a drive shaft, a driven shaft; and a plurality of gear units each comprising a driving gear and a coaxial driven gear, one being external and the other being internal, and a compound gear for connecting said gears; shafts drivingly related with the driven and driving gears of adjacent units; and a clutch for each gear unit, said clutches having positions for connecting all of said shafts for direct drive from the drive shaft to the driven shaft and having positions for connecting said drive and driven shafts for geared drive of various ratios.

1,766,416. WINDOW ENVELOPE. WALTER T. VON WINKLER, Chicago, Ill., assignor of ten one-hundredths to Von Winkler Chemical Co., a Corporation of Illinois, forty-five one-hundredths to Samuel W. Weis and forty-five one-hundredths to Marim Gentile, Chicago, Ill. Filed Aug. 27, 1928. Serial No. 302,314. 2 Claims. (Cl. 229—71.)



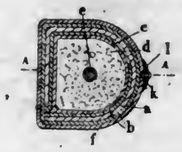
1. A window envelope having a wall thereof consisting of a single integral sheet and formed with an opening, and a transparent film occupying said opening and having marginal portions thereof embedded in the portions of said wall bounding said opening.

1,766,417. PRODUCTION OF METAL FILMS. WILLIAM E. WATKINS, New York, N. Y., assignor to Copper Plate Sheet and Tube Company, New York, N. Y., a Corporation of New Jersey. Filed Jan. 6, 1927. Serial No. 159,337. 7 Claims. (Cl. 91—70.1.)



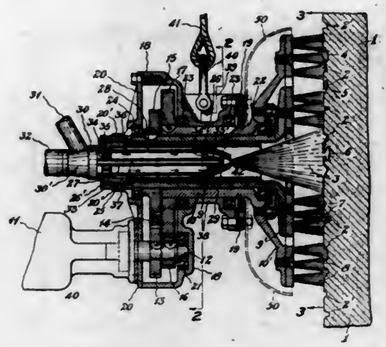
2. The herein described process consisting essentially of coating ferrous metal with a plating suspension of copper, and then heating it to the sintering temperature of copper for sufficient time to form an adherent film of copper on the ferrous metal.

1,766,418. ELECTRIC CELL. GUSTAVE WEISSMANN, Paris, France. Filed Nov. 8, 1926, Serial No. 147,054, and in France Nov. 30, 1925. 3 Claims. (Cl. 136—130.)



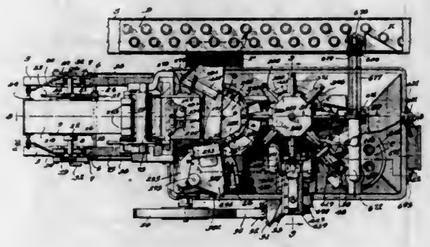
1. In the process of manufacturing primary cells, the steps comprising covering over a sheet of zinc with a pervious insulating coating, folding said sheet in such a way as to form a deformable container, placing in the interior of space formed by said container, a bag made of pervious insulating material and containing a powdered depolarizing agent and the positive electrode, subjecting the whole arrangement thus formed to a compression, and surrounding the compressed arrangement with an outer tightening cover retaining the said arrangement in its state of compression.

1,766,419. APPARATUS FOR TREATING MASONRY SURFACES. LOUIS S. WERTZ, Shaker Heights, Ohio, assignor to The Wertz Company, Cleveland, Ohio, a Corporation of Ohio. Filed Dec. 7, 1927. Serial No. 238,444. 6 Claims. (Cl. 72—130.)



1. Means for treating masonry walls comprising, a nozzle; means furnishing treating material thereto under air pressure; brush sections positioned outwardly of said nozzle, the blast from the latter centrally intersecting the brush sections; and means for moving a part of said brush sections in one direction and the balance of said brush sections in the opposite direction.

1,766,420. PAPER-CUP-MAKING MACHINE. EDWIN G. WESSMAN, Easton, Pa., and HENRY A. STONE, Bogota, N. J., assignors to Individual Drinking Cup Company Inc., Easton, Pa., a Corporation of Pennsylvania. Filed Apr. 4, 1923. Serial No. 629,783. 171 Claims. (Cl. 93—39.)



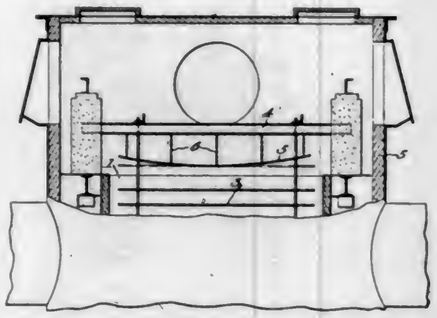
1. In a machine for making paper cups or the like, a supply of paper, means for cutting the paper into bottom and side blanks, means for shaping the bottom blank, and means for shaping the side blank around the shaped bottom and connecting the same thereto.

8. In a machine for making paper cups or the like, a source of paper supply, cutters, means for feeding the paper to the cutters, means for operating the cutters to cut a blank from the paper, suction means for removing the cut blank from the cutters, means for shaping the cut blank to form a cup body, and means for securing a bottom within the body.

76. In a machine for making paper cups or the like, means for forming a bottom, means for forming and securing a body around the bottom, and means for curling the bottom edge of the body without effecting the previously shaped bottom.

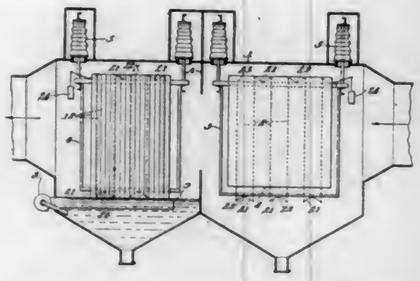
142. In a machine of the character described, a mandrel and means associated therewith for forming a blank into a cup body, and means associated with the mandrel to form a bottom for said cup body, and means whereby the body and bottom are secured together while associated with the mandrel.

1,766,421. ELECTRICAL PRECIPITATION. HARRY A. WINTERMUTE, New York, N. Y., and CARL WILLIAM JULIUS HEDBERG, Middlesex Borough, N. J., assignors to Research Corporation, New York, N. Y., a Corporation of New York. Filed Apr. 19, 1926. Serial No. 103,135. 8 Claims. (Cl. 183—7.)



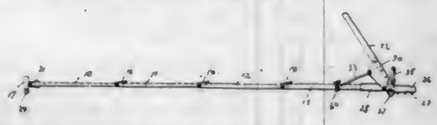
1. In an electric precipitator, the combination with collecting electrodes defining a gas passage therebetween, and a discharge electrode extending into the said gas passage, of a baffle plate disposed exterior of and opposite to one end of the passage and formed to have a varying restrictive effect upon the gas flow in said passage at different points in a plane extending tranaversely of said passage.

1,766,422. METHOD AND APPARATUS FOR ELECTRICAL PRECIPITATION. HARRY A. WINTERMUTE, Plainfield, and CARL W. J. HEDBERG, Middlesex Borough, N. J., assignors to Research Corporation, New York, N. Y., a Corporation of New York. Filed Nov. 28, 1927. Serial No. 236,335. 4 Claims. (Cl. 183—7.)



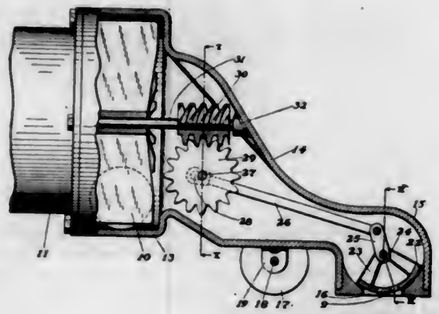
1. The method of electrically precipitating suspended particles from a gas stream which consists in passing said stream first through a high tension electrical precipitator to precipitate and collect in dry condition a portion of the suspended material and then passing the stream through an electrical precipitator in which the collecting electrodes are provided with flushing streams of liquid to wash down the particles precipitated thereagainst.

1,766,423. CARPET STRETCHER. JUSTIN D. BARTLOW, Long Beach, Calif. Filed Feb. 17, 1928. Serial No. 254,974. 2 Claims. (Cl. 254—62.)



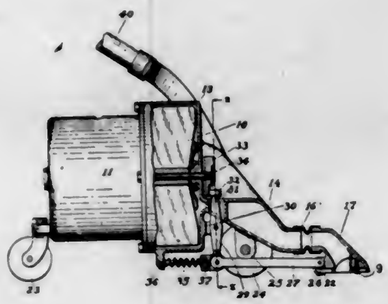
1. In a structure of the class described, a base board abutment, an extensible member connected therewith and extending at right angles therefrom, and carpet engaging means comprising a block, teeth carried by said block, a sleeve fastened to said block, and slidable on said member, a lever pivotally connected with said sleeve, and links connected with said lever and said member, whereby when said lever is moved, said sleeve will be adjusted on or off of said member to vary the position of said block.

1,766,424. VACUUM SWEEPER. CARL P. BROCKWAY, Paterson, N. J., assignor to Industrial Research Corporation, Toledo, Ohio, a Corporation of Delaware. Filed Jan. 23, 1919, Serial No. 272,726. Renewed May 14, 1927. 2 Claims. (Cl. 15—16.)



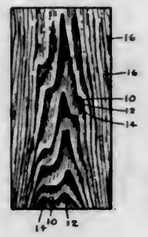
1. In a suction sweeper, an air exhausting means, a nozzle, a chamber connecting said exhausting means and nozzle, a movable shutter extending across the mouth of said nozzle, said shutter having an air inlet opening therethrough and means to produce a rapid succession of movements of said shutter with respect to the nozzle.

1,766,425. VACUUM SWEEPER. CARL P. BROCKWAY, Toledo, Ohio, assignor to Industrial Research Corporation, Toledo, Ohio, a Corporation of Delaware. Filed Jan. 23, 1919, Serial No. 272,727. Renewed Apr. 4, 1923. 8 Claims. (Cl. 15—16.)



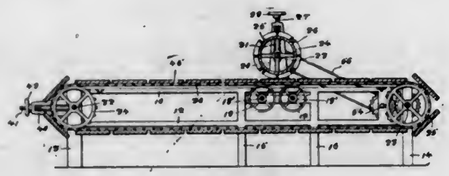
6. In combination, a suction sweeper adapted normally to be continuously reciprocated over the surface to be cleaned, a handle for propelling and steering said sweeper, and air exhausting means, a nozzle, and a connecting chamber between said nozzle and exhausting means, said nozzle being provided with an air inlet, and means for causing said inlet to move intermittently in the direction of travel of the sweeper during action of the cleaning mechanism with respect to the surface being operated upon.

1,766,426. PROCESS FOR THE REPRODUCTION OF THE NATURAL APPEARANCES OF ARTICLES ON OTHER SURFACES. LLOYD V. CASTO, Detroit, Mich., assignor to The Oxford Varnish Corporation, Detroit, Mich., a Corporation of Michigan. Filed Nov. 23, 1927. Serial No. 235,196. 1 Claim. (Cl. 95—5.)



The process of reproducing photogravure plates and rolls which includes the steps of preparing a master drawing of the surface appearance of an article which surface appearance is to be simulated on other articles and forms of dissimilar materials by filling in on the master drawing over-emphasized full tone, half tone, quarter tone and under tone shades corresponding to and in configuration with the full tones, half tones, quarter tones and under tones of the configurations of the surface of the subject whereby said drawing may be utilized to produce a full sized carbon resist by the photographic process and the over-emphasis of the tonal contrasts becomes eliminated in the photographic steps of making the negative, positive and carbon resist.

1,766,427. SHEET-GLASS-CUTTING MACHINE. WILLIAM H. CLELLAND, Huntington, W. Va. Filed Jan. 30, 1928. Serial No. 250,531. 1 Claim. (Cl. 49—14.)

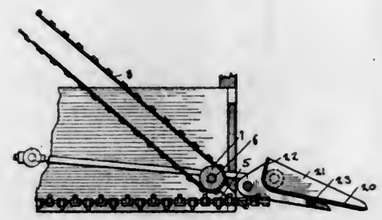


In a machine of the class described, a plurality of traveling devices, forming elements carried thereby, rollers mounted beneath the upper run of the traveling devices, means for imparting movement to said traveling devices, rotary glass cutting means including connected and intersecting longitudinal and circumferential cutting elements, said cutting means being mounted above the rollers and above said upper run, and means for imparting movement to the cutting means.

1,766,428. PROCESS OF STABILIZING CEREAL BEVERAGES. DONATO COZZOLINO, Los Angeles, Calif. Filed July 16, 1927. Serial No. 206,389. 2 Claims. (Cl. 99—11.)

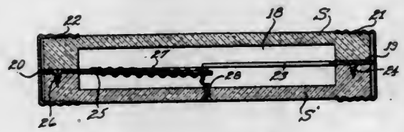
1. A process of stabilizing cereal beverages containing less than 0.5% by volume of alcohol, which consists in treating the beverage at any stage of the brewing process with tannin and a siliceous clay to precipitate the undesirable albuminoids which render the finished beverage turbid when chilled and produce a change in color and taste when pasteurized and removing the precipitate.

1,766,429. DIRT AND DUST REMOVER FOR MINING MACHINES. THOMAS J. CROMBIE and ROBERT C. CROMBIE, California, Pa.; Rose Crombie, executrix of said Thomas J. Crombie, deceased, assignor to said Robert C. Crombie. Filed Apr. 28, 1927. Serial No. 187,356. 1 Claim. (Cl. 214—130.)



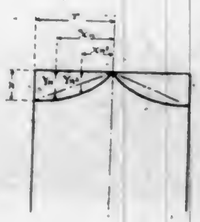
In a machine for handling material, a frame, supporting arms rigidly secured to the sides of the frame having bearing heads, a pair of tripping arms rockably mounted in said bearing heads and projecting forwardly and downwardly therefrom and having rearwardly and upwardly inclined faces, said tripping arms having sockets adjacent to the rear ends of said upwardly inclined faces, a cross bar connecting said tripping arms together, a scoop having trunnions slidable on the inclined faces of the tripping arms and movable into and out of the sockets, the scoop being adapted to rest on said cross bar when the trunnions are in the sockets, and means for moving the scoop forwardly and rearwardly on said arms, the rearward movement of the scoop causing the rocking of said tripping arms upon the seating of the trunnions in said sockets.

1,766,430. THERMOSTATIC ELECTRIC SWITCH. CLARENCE K. DAVIS and ARTHUR DICK, Los Angeles, Calif. Filed Aug. 29, 1927. Serial No. 216,268. 2 Claims. (Cl. 200—122.)



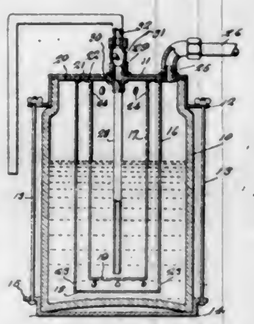
1. A switch of the character described comprising a two-part body of insulating material, the parts of said body having pockets in the confronting sides thereof coacting to form a chamber and grooves extending from the ends of the pockets and coacting to form axially disposed channels extending longitudinally of the body, caps on the ends of the body and embracing the sections to secure the latter to each other, a contact compriaing a flat strip of conducting material secured at one end within one channel and extending into said chamber and longitudinally of the body, a thermo-responsive element secured at one end in the other channel and extending into said chamber and normally engaging said contact, the outer ends of said contacting elements having engagement with said caps, a coil of insulated wire electrically connected at one end to said element and surrounding the latter, and a conductor mounted in the body to extend exteriorly thereof and electrically connected to the other end of said wire.

1,766,431. PISTON FOR ENGINES AND PROCESS FOR THE MANUFACTURE OF THESE PISTONS. RAYMOND DE FLEURY, Paris, France. Filed June 1, 1925, Serial No. 34,257, and in France July 2, 1924. 1 Claim. (Cl. 74—108.)



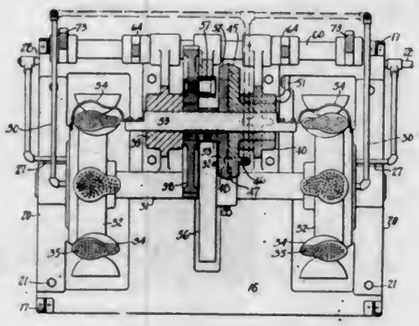
An engine piston in which the bottom has a thickness varying according to such law that the ratio between the thickness, at a point of the bottom, and a distance from this point to the center of the bottom constantly decreases from the center towards the periphery.

1,766,432. MANIFOLD ATTACHMENT. MILLARD FERN, Juniata, Pa. Filed July 20, 1927. Serial No. 207,254. 1 Claim. (Cl. 123—25.)



In a humidifier for an internal combustion engine, a vessel adapted to contain water, means for supporting said vessel, means detachably closing the top of said vessel, concentrically mounted tubular members arranged in said vessel and having closed upper and lower ends, said concentrically mounted vessels being alternately provided with openings adjacent the top and bottom thereof, a check valve controlled air inlet pipe passing centrally within the inner tubular member and terminating adjacent the bottom thereof, an air outlet leading from between the wall of the outer tubular member and the wall of the vessel, and a valve control pipe between the air outlet and the intake manifold of the engine.

1,766,433. PEAR-PEELING MACHINE. WILLIAM A. FONKEN, Seattle, Wash. Filed Sept. 12, 1927. Serial No. 219,068. 18 Claims. (Cl. 146—48.)



1. A half-pear peeling machine having, in combination, a pear holder; a curved knife for removing the skin from a half-pear held on said holder; means movable with respect to the holder for positioning a half-pear on said holder; and means for rotating said knife in a manner to peel said half-pear while held on said holder.

1,766,434. NAPHTHO-CARBAZOLE-HYDROXY-AZO DYESTUFFS. HARRY GRIMMEL, Wiesdorf-on-the-Rhine, and HEINRICH CLINGESTEIN, Cologne-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed June 28, 1926, Serial No. 119,196, and in Germany June 26, 1925. 6 Claims. (Cl. 260—86.)

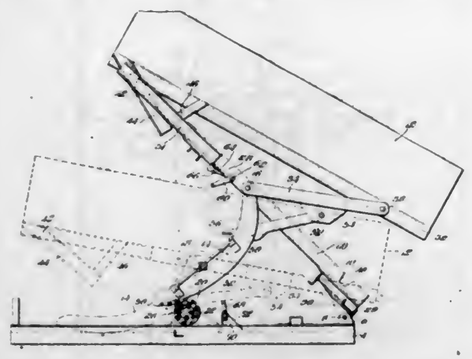
1. As new products the azo dyestuffs which are obtainable by coupling an unsulfonated hydroxy-naphtho-carbazole compound which may be substituted by an alkyl group or halogen with an unsulfonated diazo compound of the benzene series containing a nitro group.

1,766,435. SHOE FASTENER. EDDIE F. HALL, West Lynn, Mass. Filed May 13, 1929. Serial No. 362,672. 1 Claim. (Cl. 24—73.)



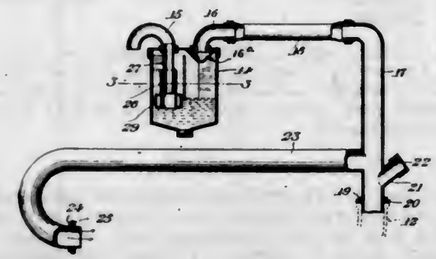
A shoe fastening comprising spaced reinforcing elements in the nature of elongated strips located within the eyelet stays and adjacent the meeting edges of the shoe flaps, shanks carried by and outwardly projecting from the uppermost ends of the reinforcing elements terminating to provide enlarged heads beyond the outer surfaces of the shoe flaps, and a fastening element of strip like curvilinear formation having aligned and oppositely disposed key-hole slots adjacent the ends thereof designed to accommodate said headed shanks for pivotal connection therewith.

1,766,436. DUMPING VEHICLE. CLARK F. HIGGINS, Melrose, Mass. Filed Apr. 3, 1925. Serial No. 20,380. 2 Claims. (Cl. 298—11.)



1. A dumping vehicle having, in combination, body supporting members pivoted at the rear end of the vehicle, a body connected at its front end with the body supporting members, hoist arms for elevating the body supporting members about their pivots, thrust members connected with the body and having provision for selective engagement at different positions with the hoist arms to elevate the rear end of the body to different heights relatively to the body supporting members, and means for holding the thrust members in position out of engagement with the hoist arms to permit the body to be raised to rear dump position.

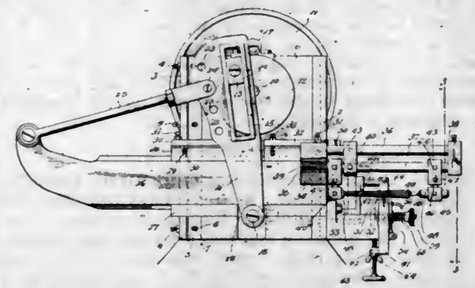
1,766,437. ATTACHMENT FOR INTERNAL-COMBUSTION ENGINES. HUBERT E. KANEHL, Solomon, Kans. Filed June 6, 1927. Serial No. 196,886. 1 Claim. (Cl. 261—120.)



An air filter for internal combustion engines comprising a casing adapted to contain water, vertically disposed circumferentially spaced baffles extending inwardly from the wall of the casing, an air intake pipe having one end in communication with the atmosphere and its opposite end extending downwardly within the casing between the spaced baffles, a suction pipe having one end in communication with the top of the casing between the baffles and spaced from the intake pipe, and means at the other end of the suction pipe for communication with the carbureter and the crank case breather pipe of an engine.

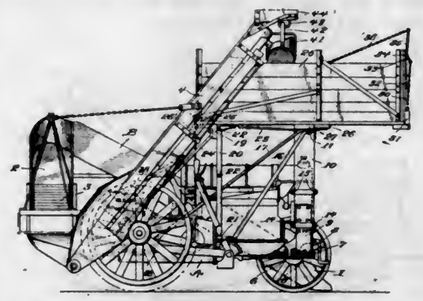
1,766,438. SAW-FILING MACHINE. LOUIS J. KLUNK, York, Pa., assignor to Beaver Saw Filing Machine Co., York, Pa., a Corporation of Pennsylvania. Filed Sept. 8, 1927. Serial No. 218,203. 8 Claims. (Cl. 76—33.)

1. In a saw-filing machine, the combination of a file, means for moving the file across a saw tooth to sharpen the same and imparting a return stroke to the file, means for raising the file for the return stroke and lowering the file for a working stroke, and means for rocking the file



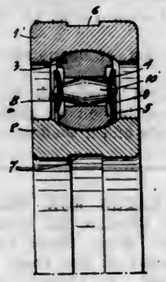
during the raising and lowering movements whereby to move it obliquely from a sharpened saw tooth and dispose it against an unsharpened tooth between two working strokes.

1,766,439. TRACTOR ATTACHMENT FOR CORN PICKERS. GEORGE W. LANG, Litchfield, Nebr. Filed Mar. 5, 1928. Serial No. 259,203. 3 Claims. (Cl. 56—18.)



1. In combination with a tractor and corn picker including an elevator, an upright frame supported on the tractor and including horizontal sills arranged above the tractor, a box hingedly connected intermediate its ends to the front sill and having its rear portion normally resting upon the rear sill whereby the box can be dumped forwardly in front of the tractor, a latch for holding the box in normal position, an end gate at the front of the box and a chute for delivering the ears of corn from the elevator of the picker into the box.

1,766,440. ANTIFRICTION BEARING. KARL OSKAR LEON, London, England. Filed Dec. 11, 1925, Serial No. 74,831, and in Sweden Dec. 17, 1924. 11 Claims. (Cl. 308—194.)



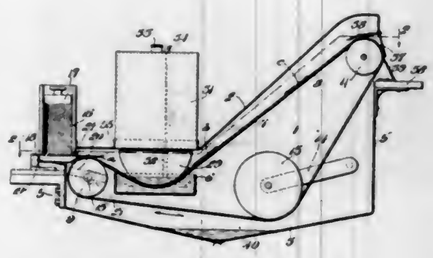
1. An antifriction bearing comprising race rings and rolling bodies placed between said race rings, the races

of said rings and the rolling bodies having a curved generatrix and at least one of said race rings having at the side opposite to its race an annular recess, the width of said recess and the relation between the radius of curvature of the generatrix of the rolling body and the radius of curvature of the generatrix of the race being such that upon a certain load the axial extension of the contact surfaces between the race and the rolling body will be at least equal to the width of said recess in the race ring, before the stress in the ring material reaches the limit of elasticity or exhaustion.

1,766,441. DISINFECTING, BACTERICIDAL, INSECTICIDAL, FUNGICIDAL, AND VERMIN-DESTROYING PREPARATION. RUDOLF LIESKE, Leverkusen, near Cologne, and WILHELM SCHEPSS, Wiesdorf, near Cologne, Germany, assignors, by mesne assignments, to Winthrop Chemical Company, New York, N. Y., a Corporation of New York. Filed Feb. 14, 1925, Serial No. 9,338, and in Germany Apr. 10, 1924. 4 Claims. (Cl. 167—15.)

2. The herein described new disinfecting, bactericidal, insecticidal, fungicidal and vermin destroying preparations comprising the arsenate of malachite green.

1,766,442. BOX-TOE CONDITIONING MACHINE. STANLEY P. LOVELL, Brockton, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Aug. 29, 1923. Serial No. 659,922. 31 Claims. (Cl. 91—46.)



1. A shoe stiffener conditioning machine having, in combination, a carrier having projections of small cross-section on its stiffener-supporting surface, a receptacle for liquid into which the carrier dips, and means for actuating the carrier to cause the stiffener to be immersed in and carried out of the liquid.

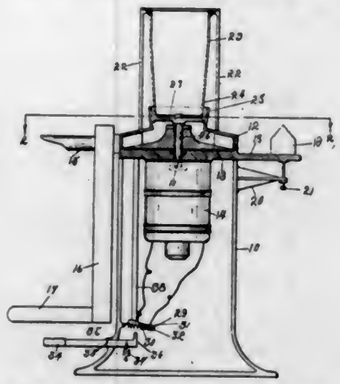
1,766,443. PRODUCTION OF ALKYL KETONES OF THE ANTHRACENE SERIES. ARTHUR LÜTTRINGHAUS and FILIP KAČER, Mannheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Mar. 24, 1927, Serial No. 178,134, and in Germany July 15, 1926. 8 Claims. (Cl. 260—131.)

1. As new articles of manufacture, anthracyl-alkyl-ketones.

2. The process of producing anthracyl-alkyl-ketones which consists in acting on an anthracene body with a fatty acid halogenide and a condensing agent.

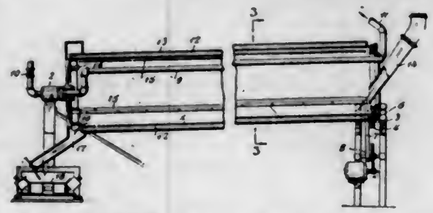
1,766,444. APPARATUS FOR FILLING PACKAGES. ESLI A. MARSH, Chicago, Ill., assignor, by mesne assignments, to St. Regis Paper Company, New York, N. Y., a Corporation of New York. Filed Jan. 7, 1929. Serial No. 330,840. 14 Claims. (Cl. 249—60.)

1. In combination, a feeding and weighing device mounted upon a horizontal axis and means to discharge material to said feeding and weighing device directly above said axis and symmetrically arranged with respect thereto, said feeding and weighing device comprising a weight on



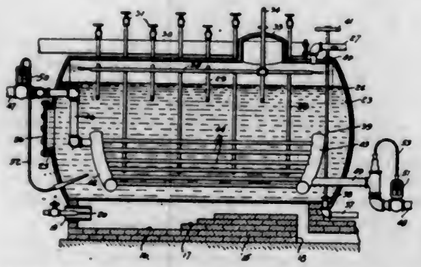
one side of said axis, a receptacle support on the other side of said axis and means for feeding material from the plane of said axis to said receptacle.

1,766,445. METHOD AND APPARATUS FOR TREATING FOOD MATERIALS. EUGENE H. MCKAY, Battle Creek, Mich., assignor to Kellogg Company, Battle Creek, Mich., a Corporation of Delaware. Filed Aug. 30, 1928. Serial No. 303,004. 7 Claims. (Cl. 34—6.)



4. A rotary toasting, crisping, or puffing oven comprising a revolvable cylinder provided with external heat-insulating material carried by and moving therewith, said cylinder being provided with a source of heat located internally thereof.

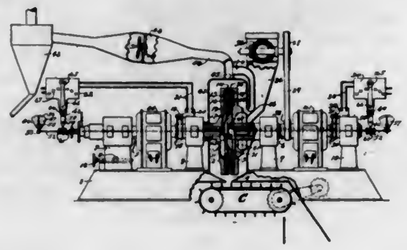
1,766,446. APPARATUS FOR TREATING ASPHALTIC OILS FOR THE PRODUCTION OF ASPHALT. MAX REE LOW MILLER, Wilmington, Calif. Filed Jan. 8, 1927. Serial No. 159,977. 4 Claims. (Cl. 196—74.)



3. An apparatus for treating asphaltic oils comprising a still adapted to contain a body of oil to be treated, means exteriorly of the still for heating the oil therein, means for supplying air into the lower portion of the still to effect oxidization of the oil, pipes disposed in the lower portion of the still so as to be submerged in the oil, means by which

a cooling fluid is circulated through the pipes, a thermostatically operated valve controlling the supply of fluid to the pipe in accordance with the temperature of the oil in the still, and a second thermostatically operated valve controlling the discharge of fluid from the pipes in accordance with the temperature of the fluid.

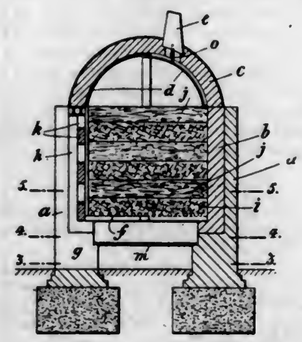
1,766,447. PROCESS AND APPARATUS FOR GRINDING MATERIAL AND EXTRACTING VOLATILE MATTER THEREFROM. HARRY WILSON MOIR, Los Angeles, Calif. Filed Feb. 20, 1926, Serial No. 89,679. Renewed Aug. 12, 1927. 24 Claims. (Cl. 83—8.)



1. Grinding and dehydrating apparatus comprising a pair of plates having opposed grinding surfaces, means for relatively moving said plates, means for feeding material between said plates during the movements thereof, and non-fluid means carried by each of said plates for heating them.

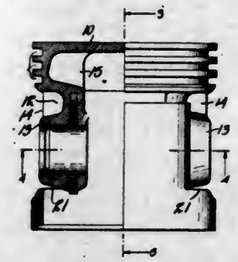
20. That process of comminuting material which consists in grinding the material, specially confining the material during the grinding thereof, and applying heat at a predetermined temperature to said material during the spatial confinement thereof to explode the ground particles thereof.

1,766,448. MANUFACTURE OF A CEMENT OR PLASTER FROM GYPSUM. FRANCIS MULLIGAN, Belfast, Ireland. Filed Feb. 20, 1925, Serial No. 10,549, and in Great Britain May 28, 1924. 2 Claims. (Cl. 222—6.)



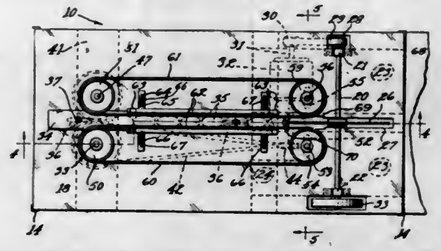
1. A process for the manufacture of a cement or plaster from gypsum, in one heating operation, comprising stacking crude gypsum together with coal in a closed kiln and in about the proportion by weight of one part of coal to eight parts of gypsum, subjecting the gypsum to slow calcination by burning the coal so that in the process of calcination the products of combustion are caused to permeate the gypsum and thoroughly act thereon for such a period of time as will bring the gypsum to a stage when efflorescence begins to appear, and then cooling the calcined mass.

1,766,449. PISTON. ADOLPH L. NELSON, Detroit, Mich., assignor to Bohn Aluminum & Brass Corporation, Detroit, Mich. Filed May 23, 1925, Serial No. 32,478. Renewed Sept. 14, 1929. 18 Claims. (Cl. 74—108.)



4. In a piston, a piston head, a skirt, struts integral with the skirt said skirt otherwise being independent of the piston head, and piston pin bosses integral with the head said bosses being cast about portions of the struts, substantially as set forth.

1,766,450. BUN-CUTTING MACHINE. JOHN A. OST, Los Angeles, Calif. Filed Mar. 14, 1928. Serial No. 261,647. 5 Claims. (Cl. 146—73.)



1. A machine for cutting buns, or the like, the machine comprising a frame structure; a knife rotatably mounted in the structure; means associated with the structure in order to support the buns during their travel toward the knife; means for adjustably securing the bun-supporting means to the structure so that the supporting means may be shifted edgewise of the knife to selected positions away from the knife or in proximity thereto; means for frictionally carrying the buns toward the knife; means for adjusting the carrying means laterally of the knife so as to maintain or to release the frictional holding of the carrying means upon the buns, when the latter have been carried to the discharge end of the bun-supporting means, and thereby to co-operate with the bun-supporting means in order to effect a complete, or only a partial, severing of the buns; and means for rotating the knife and for simultaneously operating the bun-carrying means.

1,766,451. SPRING. FRANCIS D. PARKER, La Farge, Wis. Filed Jan. 18, 1928. Serial No. 247,659. 1 Claim. (Cl. 267—47.)

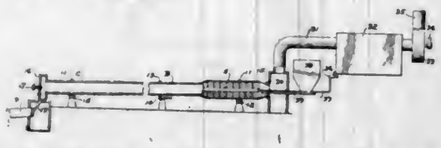


A suspension spring for a vehicle body comprising a series of superposed resilient laminæ in a plurality of groups, the first group comprising a series of laminæ of progressively shorter lengths, an adjacent group of progressively longer laminæ, elastic wedges disposed beneath the ends of the shorter laminæ, a plurality of spaced clamps uniformly distributed longitudinally of the groups between the spring ends adjacent the wedges, flat cushions under the clamp nuts, and a pair of eyes at the ends of the spring adapted to form a support for the body.

1,766,452. ART OF TREATING FUR. CHARLES D. PARKS, Danbury, Conn. Filed May 8, 1925. Serial No. 28,975. 12 Claims. (Cl. 92—9.)

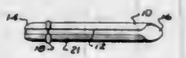
1. The herein described art of treating fur, which consists in applying to a fur-bearing skin a heated fluid adapted to attack the skin and cause separation thereof from the fur fibers, and cooling said fluid during said application to prevent injury to the fur fibers.

1,766,453. ROTARY KILN. ROBERT D. PIKE, Piedmont, Calif. Filed May 6, 1926. Serial No. 107,016. 3 Claims. (Cl. 222—7.)



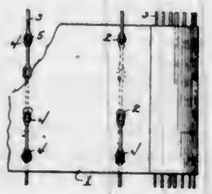
3. An inclined rotary kiln of the character described having a diametrically enlarged section at the upper end thereof divided into a plurality of longitudinally extending open-ended passageways, said passageways being outlined by radially and circumferentially extending partitions of corrugated metal having a high heat conductivity and a high degree of heat resistance.

1,766,454. IDENTIFICATION RECEPTACLE FOR UMBRELLAS AND THE LIKE. JOSEPH R. RAWLEY, New York, N. Y. Filed May 25, 1928. Serial No. 280,456. 2 Claims. (Cl. 40—19.)



1. An article of the character described comprising in combination a pair of telescoping, elongated tubular members each with a longitudinal slot extending throughout its length and each having a reduced outer end constituting a wall provided with a perforation in communication with the longitudinal slot.

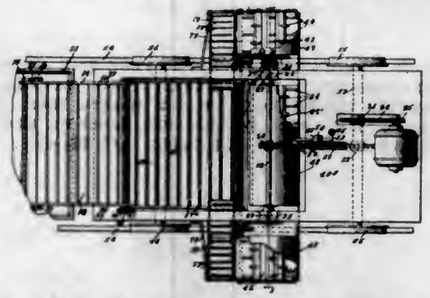
1,766,455. PLANT-PROTECTING DEVICE. CLYDE S. RIGHTS and ANNA O. RIGHTS, Tampa, Fla. Filed Jan. 4, 1929. Serial No. 330,207. 4 Claims. (Cl. 47—21.)



1. A protective device for plants comprising a plurality of normally straight rods of spring material and a flexible strip adjustably attached to the rods whereby the rods can be bowed over the plants with the ends penetrating the ground, with the strip covering the plants or the rods can be placed in vertical position with one end of each rod penetrating the ground, with the strip adjusted on the rods at one side of the plants to act as a wind break.

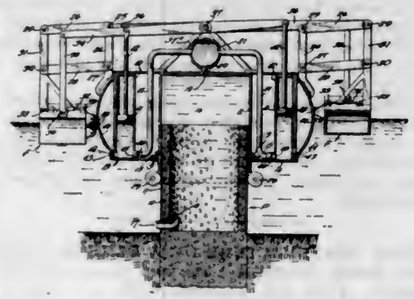
1,766,456. ROAD CLEANER. ROBERT HENRY ROLLER, Mammoth, W. Va. Filed Jan. 14, 1928. Serial No. 246,860. 3 Claims. (Cl. 198—9.)

1. A machine for cleaning railways comprising a vehicle, means for propelling the vehicle along the railway, rollers on said vehicle and means for rotating the same, an endless belt revolubly mounted and extending from a point adjacent said rollers to the rear of said vehicle, a scoop extending under one of said rollers and adapted to direct



material dislodged thereby onto said endless belt, said rollers being provided with teeth extending radially therefrom, and some of the rollers being arranged upon the outer sides of the railway.

1,766,457. WAVE AND TIDE MOTOR. CHARLES H. RUTH, Huntington Park, Calif. Filed Apr. 23, 1928. Serial No. 272,248. 10 Claims. (Cl. 103—70.)



1. A motor of the character described comprising a float, means for mounting the float in a body of water for movement in response to wave action, and mounting means for the first means comprising a body of such buoyancy and displacement as to be unaffected by wave action, yet responsive to a variation in water level to move upwardly or downwardly according as the water level rises or falls so as to maintain the float at a fixed elevation relative to the surface of the water, and a pier on which the body is mounted for vertical movement, adapted to be fixed in the bed of the body of water.

1,766,458. WRENCH. FREDERICK SCHWEIGEAT, New York, N. Y. Filed May 6, 1929. Serial No. 360,703. 2 Claims. (Cl. 40—19.)



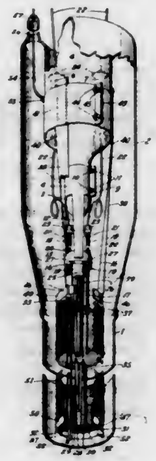
1. A wrench, comprising a stationary jaw connected with a handle and formed with an aperture, a movable jaw moved by manipulation of a control nut rotatively mounted in the said aperture, biting pieces on the jaws, means for holding the biting pieces in place, and means for automatically moving the holding means to an inoperative position upon removal of the control nut.

1,766,459. PLIERS. FREDERICK SCHWEIGERT, New York, N. Y. Filed May 8, 1929. Serial No. 361,454. 3 Claims. (Cl. 81—52.)



1. A pair of pliers, comprising pivoted jaws, handles connected with the jaws and extending to the rear of the pivot point, biting pieces with tongues engaging in grooves formed in the jaws, and means for holding the biting pieces in place, comprising pivoted levers mounted in the jaws and engaging in apertures in the biting pieces, and means for disengaging the levers when the jaws are fully opened.

1,766,460. ELECTRON-DISCHARGE DEVICE. PAUL SCHWERIN, New York, N. Y., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed May 29, 1924. Serial No. 716,606. 7 Claims. (Cl. 250—275.)



1. In an electron discharge device, a grid comprising a plurality of serrated members, a continuous wire helix encircling said members, reinforcing bands positioned above and below said helix, and retaining means for said helix and said reinforcing bands passing through said members.

1,766,461. DETECTOR ELEMENT. WALTER O. SNELLING, Allentown, Pa. Filed Mar. 7, 1923. Serial No. 623,547. 6 Claims. (Cl. 250—31.)

1. The process of preparing a contact rectifying product which comprises reducing an oxide of an element of the odd series of the fourth long period of the periodic classification of the elements having an atomic weight greater than 198 by an element of the sulfur group.

6. A contact rectifier comprising an intimate mixture of oxide of lead and sulfide of lead.

1,766,462. CURRENT-RECTIFYING DEVICE. WALTER O. SNELLING, Allentown, Pa. Filed Feb. 14, 1927. Serial No. 168,245. 5 Claims. (Cl. 175—366.)

3. In the preparation of contact rectifying elements the process which comprises heating metallic copper in an atmosphere comprising sulfur vapor and an inert fluid diluent.

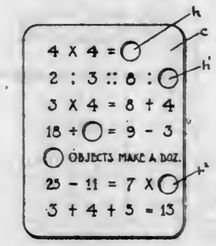
1,766,463. METALLURGY OF TIN. WALTER O. SNELLING, Allentown, Pa. Filed Mar. 5, 1928. Serial No. 259,391. 3 Claims. (Cl. 204—17.)

3. In the electro-metallurgy of tin the process which comprises reducing the surface of cassiterite electrolytically to metallic tin, stripping the reduced tin from the surface of the cassiterite and mechanically removing insulating impurities from the resulting surface of the cassiterite.

1,766,464. CURRENT-RECTIFYING DEVICE. WALTER O. SNELLING, Allentown, Pa. Filed Sept. 20, 1928. Serial No. 307,346. 3 Claims. (Cl. 204—17.)

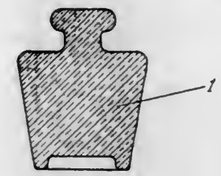
3. The process of preparing current rectifying products which comprises reducing a substantially dry basic lead carbonate by an element of the sulfur group.

1,766,465. PLAYING CARDS. WALTER O. SNELLING, Allentown, Pa. Filed Dec. 8, 1928. Serial No. 324,685. 8 Claims. (Cl. 273—152.)



1. Playing cards comprising a plurality of cards each inscribed with a plurality of groups of symbols forming individual intelligible combinations, some combinations of symbols being correct and some combinations of symbols being incorrect, the playing value of any card being determined by the number of correct combination upon it.

1,766,466. BALANCE WEIGHT. WALTER O. SNELLING, Allentown, Pa. Filed Dec. 8, 1928. Serial No. 324,686. 3 Claims. (Cl. 265—49.)

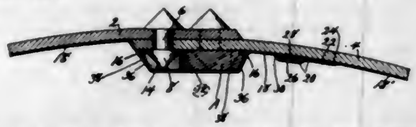


1. A weight having substantially the specific gravity of brass comprising an intimate admixture of a chemically inert matrix material having a specific gravity of 5 or less and a pulverulent filler material having a specific gravity of 9 or more.

1,766,467. CURRENT-RECTIFYING DEVICE. WALTER O. SNELLING, Allentown, Pa. Original application filed Sept. 20, 1928, Serial No. 307,346. Divided and this application filed July 31, 1929. Serial No. 382,594. 6 Claims. (Cl. 250—31.)

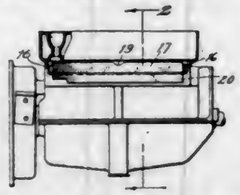
2. The process of preparing current rectifying products which comprises reducing a substantially dry salt of lead by a hydrogen compound of an element in the sulfur group.

1,766,468. LINED TANK. FREDERICK A. STEVENSON, New York, N. Y., assignor to American Car and Foundry Company, New York, N. Y., a Corporation of New Jersey. Filed Dec. 20, 1928. Serial No. 327,246. 7 Claims. (Cl. 220—63.)



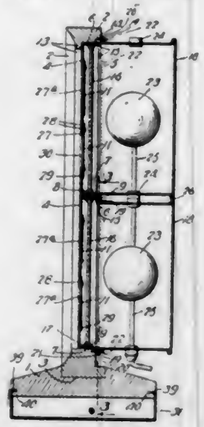
1. In a tank, sheets, rivets connecting said sheets to form a longitudinal joint, a guard secured to one of said sheets at the joint and partly surrounding the rivets, and connected lining sheets in the tank, one thereof extending over the guard.

1,766,469. PROTECTING TRAY FOR VALVE CHAMBERS. CHAUNCEY H. STOUT, Orange, Calif. Filed Apr. 1, 1929. Serial No. 351,804. 8 Claims. (Cl. 123—198.)



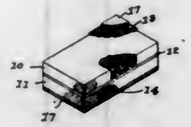
1. A tray of the character described, comprising a partition, and means secured to and so positioned on the partition as to engage parts of a valve chamber when applied thereto in a manner to retain the partition substantially horizontal within the valve chambers so as to cover the oil contained in the chamber.

1,766,470. INTERCHANGEABLE-LETTER SIGN. PAUL SCHUYLER VAN BLOEM, Great Neck, N. Y., assignor to Viking Products Corporation, New York, N. Y., a Corporation of New York. Filed June 8, 1928. Serial No. 283,952. 12 Claims. (Cl. 40—133.)



1. A display sign comprising a plurality of elongated panels disposed in superposed relation edge to edge in substantially the same plane; means supporting the panels in said relation to form a sign unit; overlapping sealing flanges formed upon said panels along their opposed edges to prevent the passage of light between the panels, each panel being formed with a plurality of apertures in its face; a plurality of character-bearing plates to close said apertures; means to removably hold said character-bearing plates in position to close the apertures in the panels; and illuminating means mounted at the rear of the panels and forming part of the sign unit to illuminate the characters.

1,766,471. STRUCTURAL MATERIAL. CHARLES A. VAN DUSEN, Cleveland, Ohio, assignor to The Glenn L. Martin Company, Cleveland, Ohio, a Corporation of Ohio. Filed Sept. 16, 1927. Serial No. 219,875. 10 Claims. (Cl. 154—45.9.)



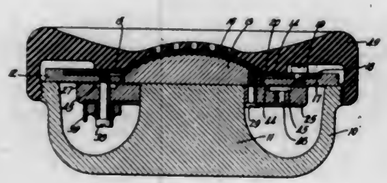
1. As a new article of manufacture, a structural member of sheet form having a high strength-weight ratio, comprising a body portion of hard vulcanized cellular rubber, and a reenforcement of sheet metal associated with said body portion and arranged parallel with the surface of said member.

1,766,472. HELIROTOR FOR AEROPLANES. FREDERICK WANDER, Jr., New York, N. Y. Filed Oct. 12, 1929. Serial No. 399,150. 2 Claims. (Cl. 244—16.)



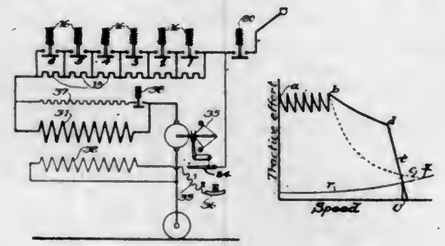
1. A device of the class described, comprising two pairs of spaced lugs for connection with an aeroplane wing or the like and the front and rear lugs constituting each pair disposed in a line longitudinal with the travel of said wing, a screw rotatively mounted on each front and rear lug, a journal threadedly engaged on each screw, a helirotor rotatively mounted between said journals with its axis of rotation transverse to the travel of said wing, and coacting means on said screws and lugs for holding said screws against turning and the helirotor in adjusted positions relative to the wing.

1,766,473. ELECTRODYNAMIC DEVICE. EDWARD C. WENTE, New York, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed May 5, 1928. Serial No. 275,542. 22 Claims. (Cl. 179—115.5.)



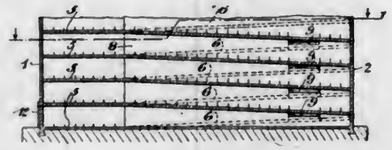
1. An electrodynamic device comprising a diaphragm which is sufficiently rigid to vibrate as a whole, an annular coil attached to said diaphragm and suspended in an air gap between the poles of said device, and means forming a restricted chamber under said diaphragm, the acoustic impedance of the restricted chamber combined with the mechanical impedance of the diaphragm being such that the resultant impedance of the diaphragm is inversely proportional with frequency.

1,766,474. RAILWAY-MOTOR CONTROL. ALFRED WICHERT, Mannheim, Germany. Filed Apr. 29, 1927, Serial No. 187,618, and in Germany May 3, 1926. 3 Claims. (Cl. 172—179.)



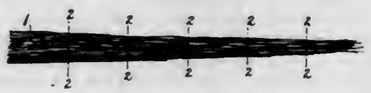
1. The method of operating electrically propelled vehicles comprising a commutator motor having an armature and field windings connected and disposed to have a cumulative exciting effect with respect to said motor, which comprises starting said motor at first as a series motor with the field windings connected in series with the armature, and subsequently removing certain of said field windings from such series and separately exciting the winding so removed and reducing the excitation thereof to extend the period of high tractive effort and limit the maximum speed thereof.

1,766,475. BUILDING. JAMES FRANK WILLIAMS, New York, N. Y., assignor to Ramp Buildings Corporation, New York, N. Y., a Corporation of Delaware. Filed July 26, 1929. Serial No. 381,238. 10 Claims. (Cl. 20—1.13.)



1. A garage building comprising a group of superposed, level storage and driveway floors overlying one ground area; a group of superposed, inclined storage and driveway floors overlying another ground area and leading upwardly to said level floors and joined thereto in succession; a group of superposed, inclined storage and driveway floors overlying another ground area, alongside said first group of inclined floors, inclined reversely to the inclination of the latter and joined to the level floors in succession and leading upwardly therefrom; and ramps successively connecting the inclined floors of one group to the adjacent inclined floors of the companion group at points spaced a material distance along their inclination from said level floors and completing a continuous and substantially spiral driveway leading upwardly through the building.

1,766,476. METHOD OF PREPARING HAIR. LOUIS ZEITLIN, Philadelphia, Pa. Filed Sept. 13, 1928. Serial No. 305,713. 6 Claims. (Cl. 300—21.)



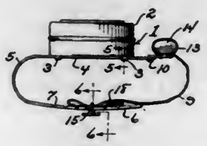
1. The method of preparing horse hair, comprising hackling a bundle of long hair, cutting the bundle of hair into sections of suitable length for the brush industry, mixing the hair of sections of similar length, and combing the hair.

1,766,477. FASTENING DEVICE FOR WATCH BRACELETS. FERDINAND ARMBRUST, Providence, R. I., assignor to Armbrust Chain Company, Providence, R. I., a Corporation of Rhode Island. Filed Nov. 4, 1929. Serial No. 404,584. 4 Claims. (Cl. 24—71.)



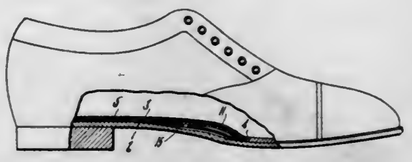
3. In a device of the type specified, a keeper including a front plate and lateral walls provided with pairs of opposed perforations, an adjusting member in the keeper engageable with the walls in one of the pairs of the opposed perforations, an extension member comprising a plurality of hingedly connected leaves superposed upon the plate and the adjusting member between the walls, the innermost of said leaves being pivotally attached to the walls, an attaching sleeve upon the outermost of said leaves, and a resilient hook integral with the end of the front plate engaging the sleeve.

1,766,478. TOILET ARTICLE. HARRY M. BAKER, Wilkinsburg, and JOHN R. GIER, Jr., Pittsburgh, Pa. Filed July 18, 1927. Serial No. 206,622. 2 Claims. (Cl. 224—28.)



1. In a device of the character described, a resilient flexible element looped upon itself to provide parallel portions normally retained in parallelism and clamping engagement with the hand of a person by the natural inherent resiliency of said element, one of said parallel portions being adapted to be secured to an article to be worn on the hand of a person, a strap, hooked means secured to one end of said strap and being adapted to be detachably secured with the free end of one of said parallel portions, and means for adjustably securing the opposite end of said strap to the other parallel portion.

1,766,479. SHOE AND SHOE SOLE AND SHANK STIFFENER THEREFOR. REINHARD B. BARTELS, Melrose, Mass. Filed Jan. 12, 1928. Serial No. 246,163. 1 Claim. (Cl. 36—76.)

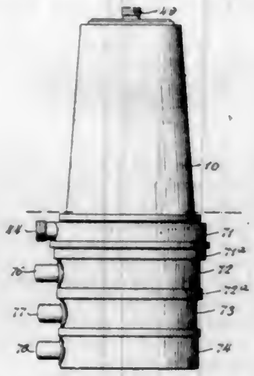


A shoe having inner and outer soles, said innersole being laminated, a plate between said laminations shaped to produce an upwardly convex face to said innersole and positioned to form a metatarsal arch support, and a shank reinforcement between said soles underlying said plate.

1,766,480. LIQUID HEATER. FREDERIC D. BLAUVELT, Montclair, N. J. Filed Apr. 5, 1926, Serial No. 99,798. Renewed May 3, 1929. 16 Claims. (Cl. 219—39.)

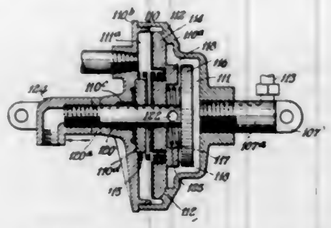
1. A water heater having an outer casing containing a circumferential slit and a central opening at one end,

means for introducing a liquid through said circumferential slit and withdrawing it through said central opening, and means within the casing providing concentric an-



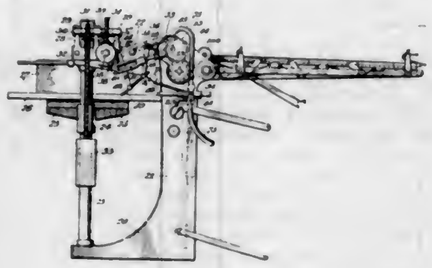
nular flow passages connected in series, the outer passage communicating with said circular slit, and the inner annular passage with said central outlet.

1,766,481. POWER ACTUATOR. CALEB S. BRAGG, Palm Beach, Fla., and VICTOR W. KLIESRATH, Port Washington, N. Y., assignors to Bragg-Kliesrath Corporation, Long Island City, N. Y., a Corporation of New York. Filed Dec. 12, 1927, Serial No. 239,442. Renewed Apr. 9, 1929. 13 Claims. (Cl. 121—41.)



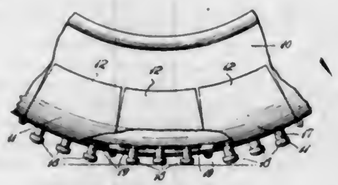
1. Valve mechanism for controlling the operation of fluid pressure actuators, comprising among its members a valve casing provided with a valve seat within the same, a lower pressure valve of relatively large diameter for engaging said seat and dividing said casing into a lower pressure chamber and a variable pressure chamber, said casing being provided with means for connecting the lower pressure chamber with a source of lower fluid pressure and for connecting the variable pressure chamber to a portion of the actuator to be controlled, the face of said valve adjacent to the variable pressure chamber being provided with a valve seat and a recess within the same and having its opposite face exposed at all times to the lower fluid pressure, yielding resistance means interposed between said valve and the casing and having sufficient power to seat said valve against the maximum differential of fluid pressures on its opposite faces and being nearly counterbalanced by the maximum differential of fluid pressures, said resistance means being capable of offering material resistance to the movement of said valve in a direction away from its seat when the fluid pressures on opposite faces of the said valve are equalized, a higher pressure inlet valve in said variable pressure chamber adapted to engage said seat on the lower pressure valve, means for connecting said higher pressure valve with an operator operated part for effecting the opening of one valve after the seating of the other by a movement in either direction, means for connecting said recess with a source of higher fluid pressure, thereby subjecting the adjacent face of the higher pressure valve at all times to the higher fluid pressure in a direction to open it, and yielding means for normally maintaining the higher pressure valve in open position when the fluid pressures on opposite faces thereof are equalized.

1,766,482. SHEET FEEDER. ALBERT BROADMEYER, Harrisburg, Pa., assignor to W. O. Hickok Manufacturing Company, Harrisburg, Pa., a Corporation of Pennsylvania. Filed Apr. 13, 1928. Serial No. 269,737. 8 Claims. (Cl. 271—27.)



1. In a sheet feeder, the combination with a support for the sheets, of a rock shaft thereon, crank arms carried by the rock shaft, a second rock shaft journaled on the crank arms, an oscillatory suction head carried by the second rock shaft, a drive shaft having cam mechanism, an actuating arm fixed to the first rock shaft and operated by the cam mechanism, a crank arm on the second rock shaft, an actuating arm journaled on the first rock shaft and connected to the crank arm of the second rock shaft, and means for swinging the actuating arm from the cam mechanism.

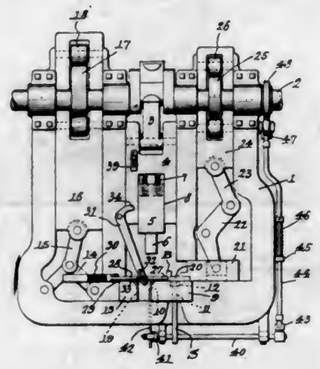
1,766,483. ANTISKID DEVICE. JOHN CAMPANARO, Philadelphia, Pa. Filed Feb. 28, 1925. Serial No. 12,298. 2 Claims. (Cl. 152—16.)



1. An anti-skid attachment for vehicle wheels comprising a member of a shape to follow the contour of the outside periphery of the tire, said member having hinged sections constructed to articulate when in operation, the sections engaging the periphery and sides of the tire, and ground gripping means coacting independently with a plurality of sections, and each having a tire engaging portion and a plurality of shanks extending from the tire engaging portion through its section of the member and having portions outward of the outer periphery of the member.

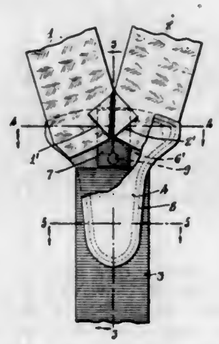
1,766,484. HEADER. WILLIAM L. CLOUSE, Tiffin, Ohio, assignor to The National Machinery Co., Tiffin, Ohio. Filed Dec. 6, 1926. Serial No. 152,883. 4 Claims. (Cl. 78—18.)

1. The combination with opposed gripping dies having depressions in the meeting faces thereof, there being a stock receiving opening in one of the dies, of a heading slide, a heading die, yieldable means for transmitting thrust from the slide to the dies, a yieldingly held holding element adjacent the opening in the gripping die, means for severing stock projecting from said opening, forcing it against the holding element, and shifting the stock and holding element to position the severed stock in line with the depressions in the gripping dies, means for advancing the heading slide to press the heading die yieldingly against the gripped stock during the first portion of



the advance movement of the heading slide, and means operated by the continued advance movement of the heading slide for shifting the holding element away from the engaged stock, said heading slide constituting means for imparting a thrust through the heading die and against the stock during the last portion of the advancing movement of the slide.

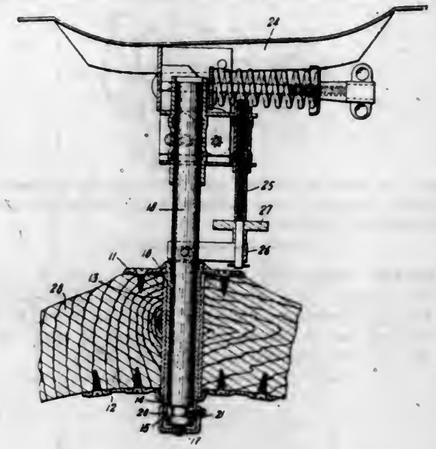
1,766,485. SUSPENDER BACK. MOSES COHEN, New York, N. Y. Filed Feb. 19, 1930. Serial No. 429,670. 2 Claims. (Cl. 241—19.)



1. A suspender back comprising two connection pieces each provided with a slit extending inwardly from its top edge, a pair of shoulder straps each engaging the connection pieces on either side of the slits, a back strap engaging the connection pieces at their lower ends and an elastic piece secured between the connecting pieces under the slits and means for securing the whole together.

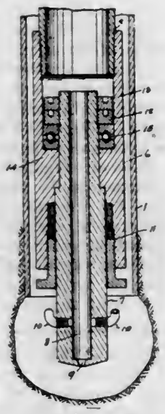
1,766,486. CHAIR IRON. DAVID R. COLLIER, Gardner, Mass., assignor to Collier-Keyworth Company, Gardner, Mass., a Corporation of Massachusetts. Filed Feb. 27, 1928. Serial No. 257,467. 3 Claims. (Cl. 155—95.)

1. A chair iron comprising a hub having a tubular member, a cup-shaped closure threaded onto the lower end portion of said member, a bearing element within said closure, a spindle extending through said member and



resting on said bearing element, and single means for retaining said spindle and cap assembled with said tubular member.

1,766,487. PUMP. JULIAN BUFORD CONNER, Humble, Tex. Filed Sept. 7, 1926. Serial No. 133,971. 1 Claim. (Cl. 166—20.)

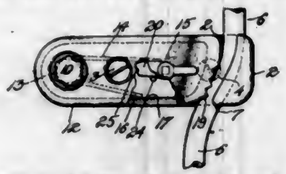


A device of the character described including a string of pipe adapted to be suspended in a well casing, a coupling attached to the lower end thereof and having an internal annular shoulder, a tubular nipple supported on said shoulder and rotatably mounted in the coupling and having its lower end extended beneath the coupling, said nipple having an axil channel therethrough whose lower end terminates in a restricted discharge opening, a plurality of radially disposed discharge nozzles carried by the lower end of the nipples whose discharge ends are upwardly curved and correspondingly inclined to the axis of the rotation of the nipple and means carried by the nipple and coupling respectively for maintaining the nipple against endwise movement in the coupling.

1,766,488. CLAMPING DEVICE. JOHN B. CRAPO, East Wakefield, N. H. Filed Mar. 8, 1928. Serial No. 259,941. 7 Claims. (Cl. 24—134.)

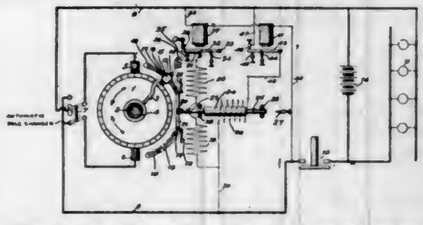
1. A device of the character described comprising a fixed member and a pivoted member, one of said members hav-

ing a groove for a rope or the like and a wall at the end of the groove and the other of said members having a projection, said wall and said projection forming a bite



upon the rope or the like when the pivoted member is in clamping position; and means to hold the pivoted member in clamping position.

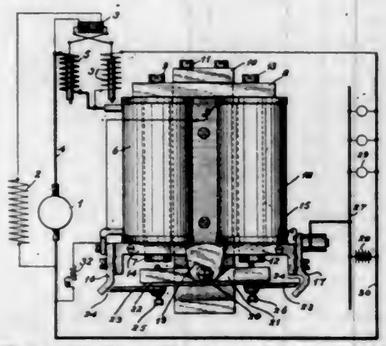
1,766,489. ELECTRIC REGULATION. JOHN L. CREVELING, Oracle, Ariz., assignor, by mesne assignments, to Simplex Equipment Company, Inc., New York, N. Y., a Corporation of Delaware. Filed June 6, 1924. Serial No. 718,314. 12 Claims. (Cl. 171—313.)



1. The combination with a variable speed generator having a commutator, an external circuit connected therewith and a field circuit, of means for connecting the field circuit independently with said commutator, said means being adapted to change its position with respect to said commutator upon reversal in rotation thereof.

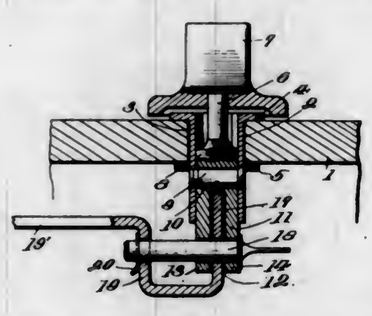
9. The combination with a storage battery and a variable speed dynamo arranged to charge the same comprising field exciting means affected by the shifting of the axis of commutation upon speed changes so as to tend to produce automatic inherent regulation of the dynamo throughout speed changes while charging the battery, means for preserving the inherent regulating function upon reversal of direction of operation of said dynamo, and means cooperating therewith for affecting the inherent regulating function affected by the voltage across the battery, of means for further affecting said dynamo upon failure of its inherent regulating characteristic.

1,766,490. ELECTRIC SYSTEM. JOHN L. CREVELING, near Tucson, Ariz., assignor, by mesne assignments, to Simplex Equipment Company, Inc., New York, N. Y., a Corporation of Delaware. Filed Dec. 7, 1925, Serial No. 73,536. Renewed Mar. 4, 1930. 19 Claims. (Cl. 171—313.)



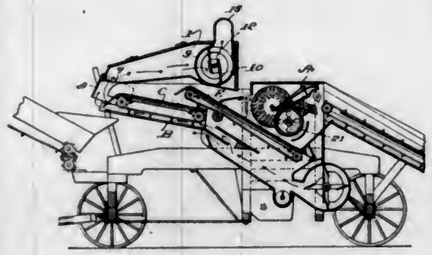
1. The combination with a generator, a storage battery charged thereby and means for connecting said generator and battery, of means operated to cause such connection by a coil in shunt around said connection and a coil in series with said connection having a material effect in causing said connection.

1,766,491. FLUSH-VALVE OPERATING LEVER. EDWARD L. DELANEY, Brooklyn, N. Y., assignor to Delaney Realty Corporation, Brooklyn, N. Y. Filed Sept. 28, 1926. Serial No. 138,239. 11 Claims. (Cl. 4—67.)



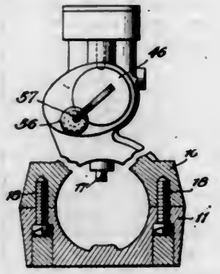
1. A flush valve operating mechanism comprising a sleeve adapted to be secured to the flush tank, an operating lever passing through the sleeve and pivoted therein, and a valve lever pivoted to the end of the operating lever and cooperating with the sleeve and adapted to have a greater throw than the operating lever.

1,766,492. CORN-SHELLER BLOWER. HENRY D. EDIGER, Henderson, Nebr. Filed Dec. 3, 1928. Serial No. 323,301. 1 Claim. (Cl. 209—148.)



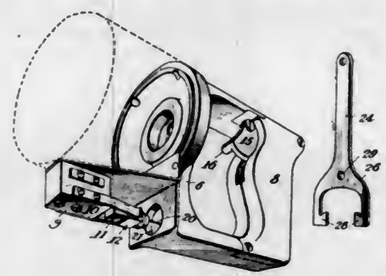
In combination with a corn sheller, a blower casing slidably seated on the cob conveyor casing of the sheller, depending members on the side of said blower casing extending over the sides of the cob casing, means for movably and detachably connecting the lower casing to the cob conveyor casing, said blower casing having a passage in one end which is in communication with the cob discharge end of the cob conveyor casing, a fan cylinder in the other end of the blower casing at one side thereof, said cylinder having its inlet in communication with the casing, a discharge spout in communication with the discharge outlet of the cylinder, a fan in said cylinder, a casting connected with one side of the blower casing, a shaft journaled in the casting and connected with the fan, a pulley on the shaft, a belt passing over the pulley and over a pulley on one of the shafts of the sheller, a bar connected with the casting and having its other end bent downwardly, a threaded rod connected with the sheller and passing through the bent end and nuts on the rod engaging the bent end of the bar whereby when the nuts are moved, the bar will be moved to impart longitudinal movement to the blower casing.

1,766,493. PUSH-ROD LOCK. CHARLES N. FAIRCHILD, New Haven, Conn., assignor to Fairchild Lock Corporation, New York, N. Y., a Corporation of Delaware. Filed Sept. 12, 1927. Serial No. 219,044. 9 Claims. (Cl. 70—127.)



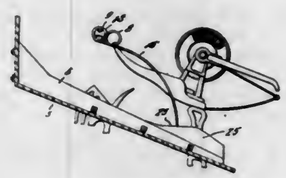
1. In combination, a bolt, key operated means for moving the bolt in one direction, and means normally positioned to prevent completion of the movement of the bolt but readily movable manually out of such position.

1,766,494. ELECTRIC-CIRCUIT CONTROLLER. JAMES J. FLANAGAN, Louisville, Ky., assignor to The Louisville Electric Manufacturing Company, Louisville, Ky., a Corporation of Kentucky. Filed Sept. 21, 1927. Serial No. 221,089. 12 Claims. (Cl. 200—157.)



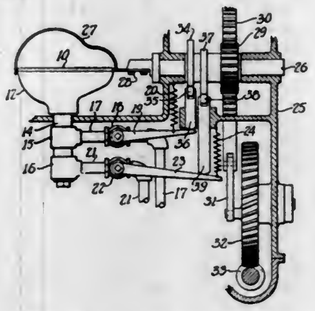
1. In an electric circuit controller, the combination with a pivoted actuated member having abutment elements on opposite sides of its pivot axis, of a reciprocatory actuating member movable longitudinally of the actuated member and having spaced elements that respectively and alternately engage the abutments to swing the actuated member in opposite directions.

1,766,495. BUNDLE ADJUSTER. HENRY E. FLYNN, Apache, Okla. Filed May 2, 1928. Serial No. 274,607. 2 Claims. (Cl. 56—472.)



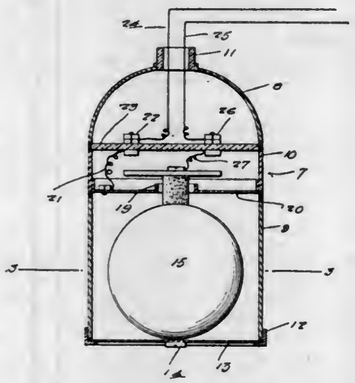
1. The combination with a deck, deck head and binder spring rail of a grain binder, of an extension to the rail directed toward the deck head, a spring finger on the extension, said spring finger including a bowed body portion terminating at one end in a coil disposed about the extension and having a looped terminal, a bolt extending through the extension and loop terminal to hold the finger in place, an elongated plate bolted to said deck head, and extending along one side thereof, the upper edge of said plate being inclined upwardly in a direction opposite to the upper edge of the said deck head to provide a shoulder extending above the lower portion of the deck head.

1,766,496. METHOD OF AND APPARATUS FOR PARING FRUIT. WILLIAM A. FONKEN, Seattle, Wash. Filed Jan. 20, 1927. Serial No. 162,278. 9 Claims. (Cl. 146—43.)



7. A method of paring fruit consisting of progressively cutting the fruit to form a plane surface thereon; then holding the fruit against said plane surface with its entire skin surface free; and then paring the skin from said fruit.

1,766,497. FIRE-ALARM SWITCH. GEORGE J. FRANCOEUR, Kankakee, Ill. Filed Mar. 22, 1929. Serial No. 349,119. 3 Claims. (Cl. 200—142.)

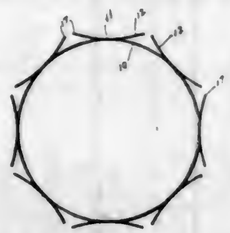


1. A fire alarm switch of the class described comprising a housing, an insulation disc in said housing, a pair of binding posts mounted on said disc, circuit wires connected with said binding posts, a metallic partition in said housing in spaced parallelism to said disc and electrically connected with the housing, a ground wire connected with one of said posts and with said partition, an inflammable element in said housing spaced from said partition, and a relatively movable circuit closing device located in the housing between said partition and said inflammable element and connected with said inflammable element and also electrically connected with the remaining binding post.

1,766,498. PISTON-RING SPREADER. HARRY S. FRANK, Brooklyn, N. Y. Filed Sept. 13, 1926. Serial No. 135,005. 5 Claims. (Cl. 74—109.)

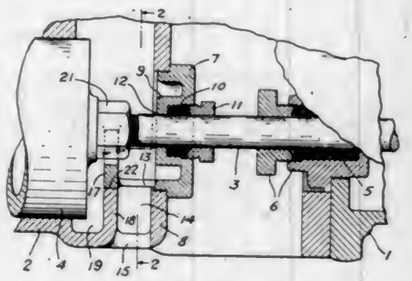
1. A piston ring spreader, comprising a resilient band, divided longitudinally into two portions of uneven width,

the one portion of lesser width forming a continuous strip or carrier of a certain curvature, the other portion constituting a continuous chain of adjacent, individual springs of other curvatures and of greater width than



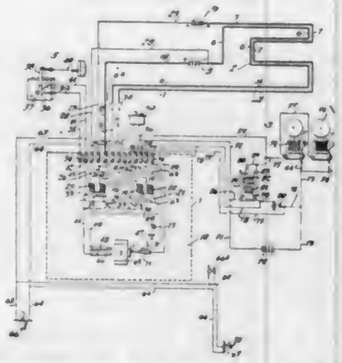
that of the carrier, said springs and said carrier being integral parts and formed from the material of said band, the joint between said springs and said carrier constituting minute tangential connections, each serving as fulcrum for its respective spring.

1,766,499. PUMP. JOHN W. GARDNER, Quincy, Ill., assignor, by mesne assignments, to Gardner-Denver Company, a Corporation of Delaware. Filed Feb. 1, 1927. Serial No. 165,084. 38 Claims. (Cl. 103—202.)



1. In a pump including a piston rod, a wiping member extending around said rod, and a frame supporting said wiping member presenting downwardly directed drain passages on opposite sides thereof external of the pump mechanism.

1,766,500. FOUR-WIRE BURGLAR-ALARM SYSTEM. JAMES J. GILLIGAN, New York, N. Y., assignor to Henry K. King, New York, N. Y. Filed May 15, 1923. Serial No. 639,039. 1 Claim. (Cl. 177—314.)

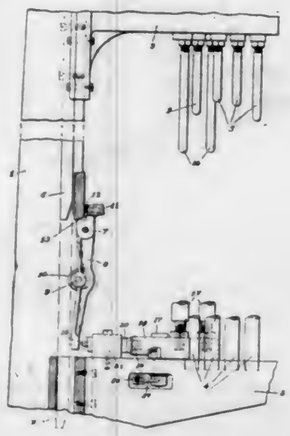


In a burglar alarm system, a first source of electrical energy and a second source of electrical energy located in a central station, a normally closed electric circuit for each of said sources of energy, including a magnet at the central station, and a portion which extends out to a premise to be protected, said portions being adjacent, an electrical connection including a third electro-magnet connected at its ends adjacent to like terminals of said electrical sources, an armature common to the electromagnets first mentioned and a cooperating stationary contact, an armature and a cooperating contact for the electromagnet in said connection, a circuit including a relay, a third source of electrical energy, and said first armature and cooperating contact, an electrical connection from said first armature to said second armature and an electrical connection from the cooperating contact of said second armature to the cooperating contact of the first armature, the armature of the first electromagnets being spaced from the cooperating contacts when the cooperating electromagnets are energized, while the armature for the electromagnet in said connection is spaced from its cooperating contact when the cooperating electromagnet is deenergized, like poles of the first and second batteries being connected to opposite terminals of said first named magnets and an alarm controlled by said relay.

1,766,501. LIQUID COMBUSTIBLE. CHARLES A. BUERK, Chicago, Ill. Filed May 4, 1926. Serial No. 106,753. 6 Claims. (Cl. 44—9.)

6. A combustible fuel containing a small quantity of a material selected from the group consisting of benzoyl peroxide, hydrogen peroxide, naphthalene peroxide, and per salts.

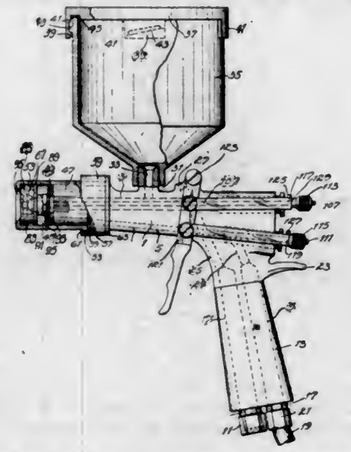
1,766,502. GLOVE-TURNING MACHINE. DAVID BAUM, Livermore Falls, Me. Filed Feb. 20, 1928, Serial No. 255,688. Renewed Nov. 15, 1929. 6 Claims. (Cl. 223—20.)



1. A glove-turning machine comprising in combination a column, a bracket fixed to said column, a bracket, superjacent said fixed bracket, reciprocable on said column, two glove thumb plungers fixed in said reciprocable bracket, a bifurcated carrier pivotally secured on said fixed bracket, two glove thumb supports on said carrier, and means to automatically align one only of said glove thumb supports with its respective and mating plunger on each downward stroke of said reciprocable bracket.

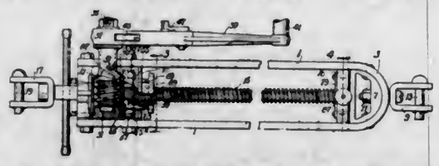
1,766,503. PAINT GUN. THEODORE BIRKENMAIER, St. Louis, Mo., assignor to W. N. Matthews Corporation, St. Louis, Mo., a Corporation of Missouri. Filed Feb. 20, 1925. Serial No. 10,495. 7 Claims. (Cl. 91—45.)

6. In a nozzle for coating apparatus the combination of a nozzle cylinder, a nozzle casing adjustably mounted thereon and a valved nipple thereon, a teat on said nipple, a central opening in said casing adapted to receive said teat in spaced relationship thereto said nipple extending forwardly beyond the limits of said opening, a plu-



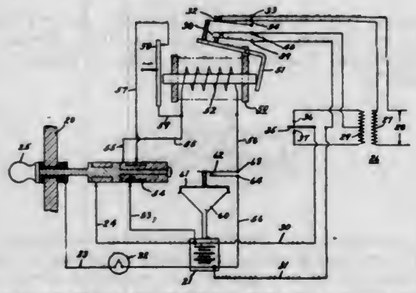
rality of auxiliary side openings in said casing and a spider within said casing adapted to open and block said auxiliary openings upon adjustments being made of said casing on said cylinder.

1,766,504. SLACK PULLER. THEODORE BIRKENMAIER, St. Louis, Mo., assignor to W. N. Matthews Corporation, St. Louis, Mo., a Corporation of Missouri. Filed Oct. 12, 1927. Serial No. 225,645. 9 Claims. (Cl. 254—67.)



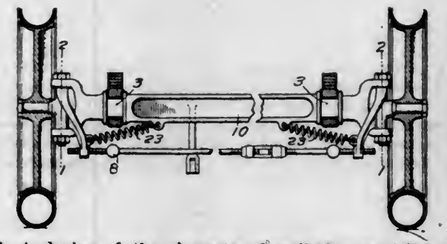
1. A slack puller comprising a frame, a housing joined thereto, a screw passing longitudinally and slidably through the housing, a split nut mounted within the housing adapted to open and close on said screw, speed reducing means for rotating said split nut, means for preventing and permitting rotation of the screw and means for applying torque directly to said screw independently of said speed reducing means.

1,766,505. ELECTRICAL APPARATUS. ORIN E. MARVEL, Dayton, Ohio, assignor, by mesne assignments, to General Motors Radio Corporation, Dayton, Ohio, a Corporation of Ohio. Filed Mar. 2, 1925. Serial No. 12,786. 9 Claims. (Cl. 250—20.)



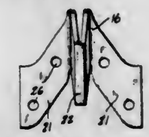
1. An apparatus for receiving radio signals comprising, in combination, a radio receiving set having a filament circuit, a control panel for said set, a manually operable switch carried by said control panel for opening and closing said circuit, a source of electrical energy connected with said circuit, a second source of electrical energy adapted to charge said first source of energy, and means operable upon the opening of said filament circuit by the opening movement of said switch to automatically connect the second source of energy in charging relation with said first source, and means responsive to the state of charge of said first source to disconnect the second source therefrom.

1,766,506. TRANSPORT VEHICLE AND THE LIKE. JOSÉ LUIS DELPINI, Buenos Aires, Argentina. Filed Oct. 29, 1925. Serial No. 65,666. 2 Claims. (Cl. 280—95.)



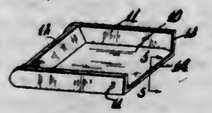
1. A device of the character described comprising an axle rotatably mounted in aligned, horizontal bearings; a spindle pivotally mounted on each end of said axle; a wheel for each spindle; and means secured to said axle for rotating the axle in order to obtain different positions.

1,766,507. HOOK FOR SCRAP BARRELS OR OTHER ARTICLES. JAMES R. COE, Waterbury, Conn., assignor to The American Brass Company, Waterbury, Conn., a Corporation of Connecticut. Original application filed Feb. 18, 1927, Serial No. 169,208. Divided and this application filed May 16, 1928. Serial No. 278,278. 3 Claims. (Cl. 294—68.)



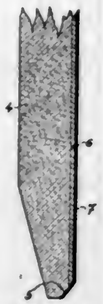
1. A lifting hook adapted to be secured to the side wall of an object to be lifted comprising an integral piece of metal including a substantially V-shaped central portion having the connecting edge portion upright and extending downwardly below the lower edges of the side portions to form a hook, and integral attaching wings extending laterally from the opposite edges of the V-shaped portion, said wings having means to cooperate with means for attaching the wings to the object.

1,766,508. BAKER'S PAN. ALFONS GRAF, New York, N. Y. Filed Oct. 25, 1928. Serial No. 315,024. 2 Claims. (Cl. 53—6.)



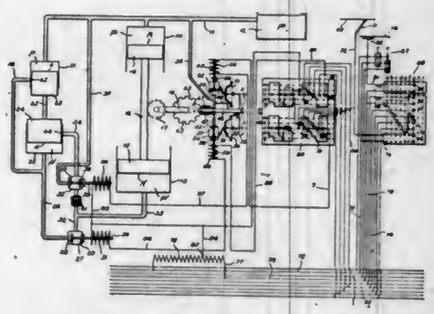
1. A baker's pan, comprising a base portion formed with an upwardly inclined free end portion and vertical sides with end extensions adjacent said end portion, and the said end portion being bendable downwards to various positions and in all positions disposed between said end extensions.

1,766,509. COATED GLASS PLATE. CARL GRAMBACH, Zurich, Switzerland. Filed July 12, 1927, Serial No. 205,084, and in Germany July 23, 1926. 2 Claims. (Cl. 91—68.)



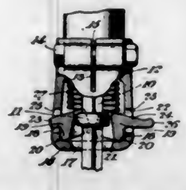
1. A glass body comprising a body having a rear face and a bezeled marginal edge bounding said rear face, a coating covering the rear face up to the line of intersection of said rear face and said bezeled marginal edge, and a protective layer covering the outer surface of said coating and extending beyond the latter into adhering contact with the bezeled marginal edge.

1,766,510. CONTROL APPARATUS. HAROLD D. GREGORY, Philadelphia, Pa., assignor to American Brown Boveri Electric Corporation, Camden, N. J., a Corporation of New York. Filed July 11, 1927. Serial No. 205,010. 3 Claims. (Cl. 121—40.)



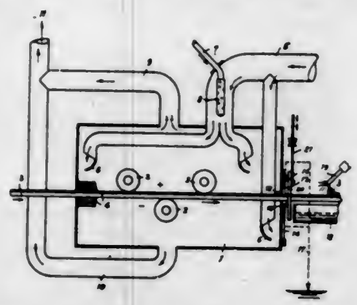
1. In control apparatus, an operating member movable in a given direction from a rest position or in a direction from said rest position different from said given direction, a piston for imparting movement to said member in said given direction, a cylinder for said piston, means providing for the supply of fluid at substantially constant pressure to said cylinder on one side of said piston during conditions of rest and movement of said member in both said directions, a second piston for imparting movement to said member in said different direction and having a greater diameter than that of said first-named piston, a cylinder for said second piston, valve means for said cylinder comprising differential cylinders and connected pistons operating therein, said valve means being cooperable with said fluid supply means and said two first-named cylinders and operable during the condition of rest of said member to maintain automatically a pressure relation between said two first-named cylinders substantially inversely proportional to the area relation between said two first-named pistons, and means operable independently of said differential fluid-actuated means to effect a change in such pressure relation between said two first-named cylinders.

1,766,511. TOOL RETAINER. HJALMER C. GUSTAFSON, Denver, Colo., assignor, by mesne assignments, to The Gardner-Denver Company, Quincy, Ill., a Corporation of Delaware. Filed Oct. 12, 1926. Serial No. 141,197. 2 Claims. (Cl. 121—32.)



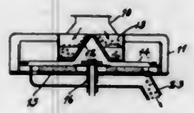
1. A tool holder comprising a housing, a pair of tool-retaining dogs formed of substantially arcuate shaped walls and having journal bearings at the outer sides of their outer ends in the outer portion of the housing, the inner sides of the walls abutting and having interfitting portions at the outer ends of the dogs that insure their simultaneous movement away from each other, the inner ends of the dogs having laterally outstanding enlargements that abut against the inner face of the housing to limit the movement of the dogs away from each other, and a spring bearing against the enlargements.

1,766,512. METHOD AND DEVICE FOR COMPENSATING ELECTRICITY ON HIDES. FRITZ HAUSMANN, Offenbach-on-the-Main, Germany, assignor to the Firm Lederwerke Becker & Co., Offenbach-on-the-Main, Germany. Filed June 23, 1928, Serial No. 287,867, and in Germany Aug. 25, 1927. 10 Claims. (Cl. 149—15.)



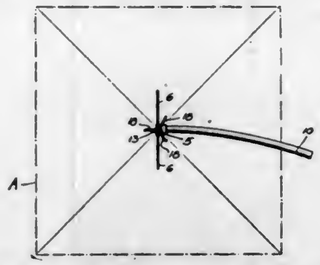
7. In an apparatus for treating leather, in combination, means for freeing the leather of dust, comprising brushes, means for discharging from the leather the static electric charges formed by the brushing means, conductive brushes contacting the faces of the leather for discharging static electricity from such faces, and means for depositing treating material on the surface of the leather.

1,766,513. DECORTICATING MACHINE. JOSEF HELLER, Vienna, Austria. Filed Sept. 19, 1928, Serial No. 306,804, and in Austria Oct. 22, 1927. 3 Claims. (Cl. 83—37.)



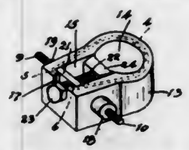
1. A decorticating machine, comprising in combination with a revolving grinder, a means for subjecting the material to be hulled in a plurality of separated rows to the action of the grinder in the direction of the longitudinal axis of the material.

1,766,514. LAWN SPRINKLER. HENRY L. HENRY, Burbank, Calif., assignor of one-half to Joseph R. Preter, Los Angeles, Calif. Filed Aug. 24, 1925. Serial No. 52,244. 3 Claims. (Cl. 299—18.)



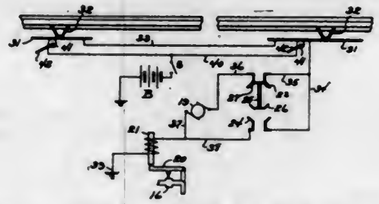
1. A sprinkler comprising snugly fitting, mating and apertured instrumentalities adapted to be arranged on a vertical axis in a water-supply source of constant pressure, one of the instrumentalities being rotatable around said axis, and means for continuously and automatically determining and constantly changing the length of a stream of water from the sprinkler, so that an area bordered by straight lines can be sprinkled.

1,766,515. STORAGE-BATTERY CLAMP. ERDMAN R. HIEBERT, Gretna, Manitoba, Canada. Filed July 23, 1926. Serial No. 124,472. 1 Claim. (Cl. 173—259.)



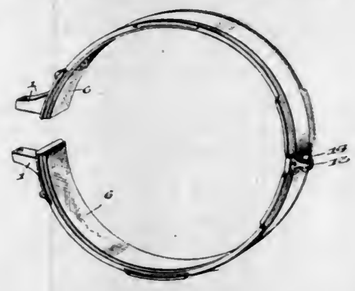
A lead battery terminal clamp having a substantially U-shaped lead body presenting a vertical terminal opening at one end and having the other end vertically slotted and provided with a horizontally disposed integrally formed cross web, an internal substantially U-shaped reinforcing plate contained within the lead body and terminating in opposing inturned abutments situated at the end of the clamp remote from the terminal opening, a nut located adjacent to the inner side of the slot, engaging the abutments and bearing on the cross web, an adjusting screw carried by the nut and extending towards the terminal opening and a jaw carried by the inner end of the screw.

1,766,516. AUTOMATIC RAILROAD GATE. ED J. HOLLY, Taylor, Tex. Filed June 30, 1928. Serial No. 289,470. 1 Claim. (Cl. 246—125.)



Means for closing railroad crossing gates comprising a cylinder associated with each gate, a piston in each cylinder, a piston rod having rack teeth thereon, a gear on the shaft of each gate meshing with the rack teeth, a tank containing fluid, a pump having its inlet connected with the tank, pipes connecting the outlet of the pump with the cylinders, a discharge pipe connected with the first mentioned pipes, a valve in the discharge pipe, a spring for normally holding the valve in open position, magnetic means for closing the valve, a motor for operating the pump, circuits for the pump and magnetic means, a double switch for controlling the circuits, said switch closing the circuits of the magnetic means and the motor when in raised position and closing the circuit of the magnetic means and breaking the circuit of the motor when in lowered position, means for lowering the switch by the piston when said piston is in raised position, a third rail adjacent the track in advance of the crossing, a source of electrical supply on the train, brushes on the train for engaging the third rail, conductors connecting the brushes with a source of supply, a switch controlling the flow of current through the conductors from the source, and means for connecting the third rail to the circuits of the magnetic means and motor.

1,766,517. BRAKE. DANIEL T. HOLMES, Webb City, Mo., assignor of one-fourth to Oll Rogers and one-fourth to Ernest Williams, Webb City, Mo. Filed Mar. 22, 1927. Serial No. 177,445. 6 Claims. (Cl. 188—259.)



1. The combination of a brake-lining having flanges formed integral thereon, and a frame having notches formed therein for engaging the flanges for detachably holding the lining in its proper position.

1,766,518. STREET MARKER. JOHN V. JANIN, Seattle, Wash. Filed Nov. 14, 1927. Serial No. 232,968. 1 Claim. (Cl. 40—145.)

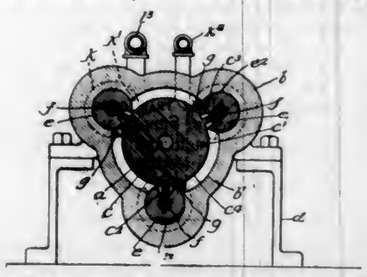


In a street marking sign, two plates positioned at right angles to each other, straps extending continuously through the central portions of the plates, and means for attaching the plates to an object through the straps, both of the said plates having the names of the intersecting streets on both sides thereof with the name of the cross street in the upper position and provided with arrows pointing in both directions, the name of the street facing the sign in the lower position and with an arrow pointing downward, and in combination with the names of both the streets the number of blocks in the street, and also the number of blocks from one end of the street.

1,766,519. MOTOR. AUGUST O. JOHNSON, Chicago, Ill. Filed July 14, 1927. Serial No. 205,582. 3 Claims. (Cl. 121—71.)

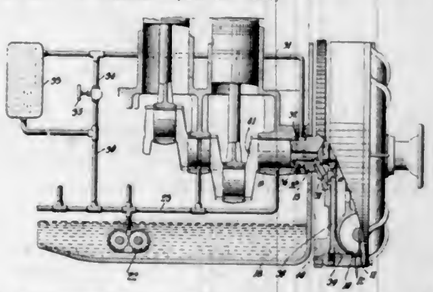
1. In a fluid motor of the character described, the combination of a casing having a cylinder formed therein and recesses adjoining the cylinder, a rotor concentrically mounted in the cylinder and provided with a cylindrical periphery and pistons projecting therefrom, coacting rotary

elements mounted in the recesses and provided with peripheries engaging the periphery of the rotor, said elements being provided with notches for permitting the pistons to pass therethrough during rotation, the said peripheries of the rotor and elements and the inner periphery



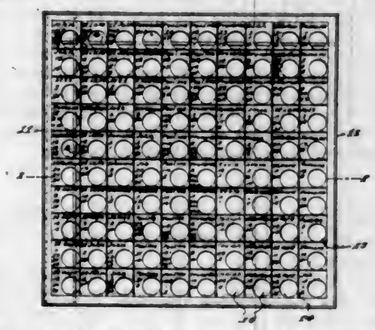
of the cylinder forming together pressure compartments for the pistons, means in the casing forming an inlet port at one end of each compartment and an outlet port at the other end, and valves rotatable with said elements, for controlling the ingress and egress of fluid through said inlet and outlet ports.

1,766,520. HYDRAULIC POWER TRANSMITTER. GUSTAV A. KLIMEK, East Rutherford, N. J., assignor to Turbine Patents Corporation, New York, N. Y., a Corporation of Delaware. Filed June 9, 1927. Serial No. 197,581. 7 Claims. (Cl. 60—54.)



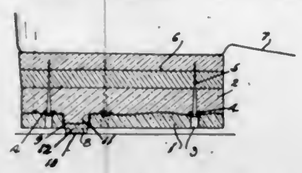
1. In combination, an internal combustion engine having a crank shaft, bearings therefor, a hydraulic power transmitter coupled to said crank shaft, an oil pump, means for delivering oil from said pump to said bearings, and means independent of said bearings for conducting pumped oil to said transmitter to serve as the drive fluid thereof.

1,766,521. EDUCATIONAL APPLIANCE. THOMAS W. KLINK, Lebanon, Pa. Filed Oct. 3, 1927. Serial No. 223,688. 1 Claim. (Cl. 35—12.)



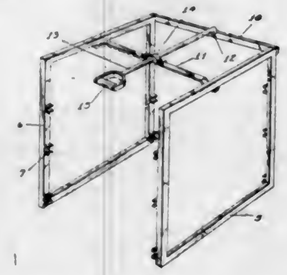
In a device of the class described, a board including divisional spaces carrying distinctive inscriptions, each space having an opening therethrough providing a seat, means including upstanding portions for spacing the board above a supporting element, and a spherical member adapted to pass over the board and to be supported within any one of the divisional spaces, by the edge portions surrounding the opening thereof.

1,766,522. ANTISKID DEVICE. PERCY H. LETCHFORD, Winnipeg, Manitoba, Canada. Filed Feb. 11, 1928. Serial No. 253,614. 3 Claims. (Cl. 36—59.)



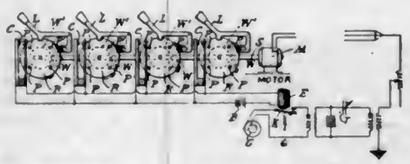
1. The combination with a rubber heel, of an anti-skid device comprising a member normally extending beyond the tread face of the heel and separated from the body of the heel by a recess extending inwardly from the tread face of the heel, the part of the member within the recess being formed from relatively soft rubber and the ground engaging part of the member being formed from a wear resisting material.

1,766,523. STOVE RACK. JOHN LEWIS, St. Louis, Mo. Filed Apr. 8, 1929. Serial No. 353,453. 1 Claim. (Cl. 126—339.)



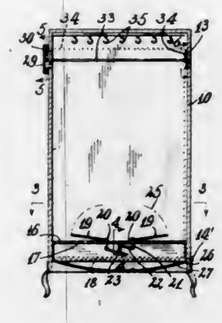
The combination with the oven of a cook stove, of substantially U-shaped rails fixed in the corners thereof, rollers pivoted between the sides of the rails and the pivots of the rollers securing the rails in the oven, a rack having side members whose upper and lower edges are mounted for movement on the rollers, and which sides have inwardly pairs of spaced lugs for the reception of a pan supporting rack therebetween, plates connecting the sides at the top thereof, a rod secured to said plates and said rod having an outer handle portion.

1,766,524. SYSTEM OF TELEDYNAMIC CONTROL. EDWARD H. LOFTIN, New York, N. Y. Filed Sept. 11, 1924, Serial No. 737,059. Renewed July 10, 1928. 20 Claims. (Cl. 250—2.)



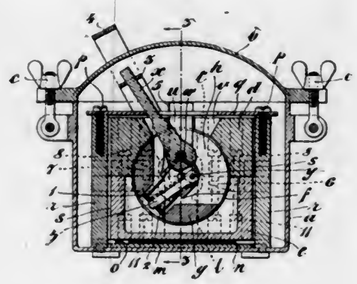
1. In a vehicle control system, a traffic medium, a vehicle traveling within said medium, automatic means for producing in said medium a code of abrupt electrical current changes at predetermined recurrent intervals, a receiver on said vehicle responsive to said abrupt electrical current changes comprising a relay responsive to an individual abrupt current change and vehicle control means governed by said relay.

1,766,525. THERMOSTAT HEATER FOR DESTROYING MOTHS. HENRY MAFFONI, Queens Village, N. Y. Filed July 10, 1929. Serial No. 377,103. 3 Claims. (Cl. 219—34.)



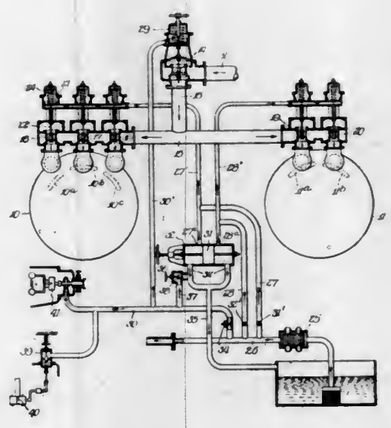
1. In an exterminator of the class described, a cabinet, means of access thereto, air vents in the said cabinet and a rotatable shutter over the said vents, a thermostatic element on the said cabinet and attached to the wall opposite to the said vents, a rod connected at one end to the said thermostatic element and to the said shutter at the other, an electric contact adjacent to the said thermostatic element and adapted to be opened and closed simultaneously with the operation of the said shutter, a heating element at the base of the said cabinet, deflector panels above the said heating element and an electric circuit connecting the contacts of the said thermostatic element with the currernt supply of the aforesaid heating element.

1,766,526. ELECTRIC SWITCH. THOMAS RICHARD MARTIN, Tyseley, Birmingham, England. Filed Apr. 9, 1928, Serial No. 268,649, and in Great Britain May 21, 1927. 4 Claims. (Cl. 200—67.)



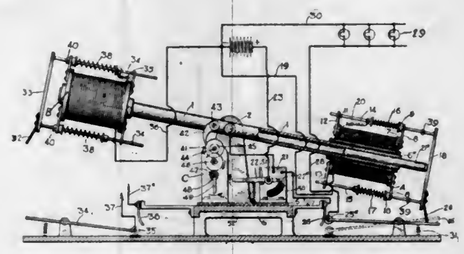
1. An electric switch, comprising in combination a rotary drum-like body of insulating material, movable contacts mounted on an insulating face or faces of said rotary body, a closed housing of insulating material having an internal chamber inclosing said rotary body and movable contacts, fixed contacts located in said chamber to cooperate with said movable contacts, a fixed insulating face or faces located within said chamber in opposed adjacency to said rotatable insulating face or faces so as to form therewith an arc-quenching and arc-restricting area or areas, an internal compartment within said rotary body, a spring-controlled quick make and break device inclosed within said compartment for operating said rotary body in either direction to open or close the switch, and external means for actuating said quick make and break device.

1,766,527. CONTROL GEAR FOR TURBINE PLANTS. ADOLF MEYER, Kusnacht, near Zurich, Switzerland. Filed Aug. 22, 1927, Serial No. 214,564, and in Germany Aug. 28, 1926. 5 Claims. (Cl. 137—158.)



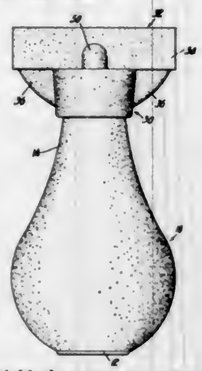
5. In control gear of the character described, motive power machines, means common with respect to said machines for controlling operating conditions thereof, said means including a fluid-pressure system, and means forming part of said control means and disposed in said system and being operable to render the same effective selectively with respect to said machines.

1,766,528. AUTOMATIC ELECTRICAL SWITCH. ROBERT VAUGHAN OWEN, New York, N. Y. Filed Mar. 1, 1928. Serial No. 258,387. 2 Claims. (Cl. 200—90.)



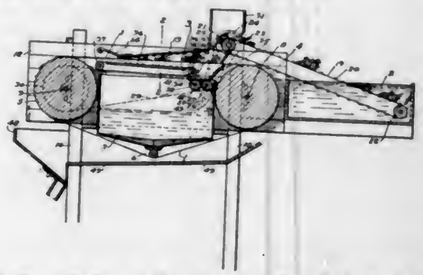
2. An automatic timing switch comprising a pivoted tube, a weight within the tube, a magnet at each end of the tube, a spring engaged magnetic plate at the end of each tube, and movable toward the magnet by magnetic attraction and away from the magnet by its spring connection, a circuit through the magnet which includes said weight and magnet plate and a circuit closing member mechanically acted upon by the rocking tube.

1,766,529. WINDSHIELD CLEANER. CECIL R. PEIRSON, Bloomfield, N. J. Filed Oct. 26, 1928. Serial No. 315,216. 3 Claims. (Cl. 15—126.)



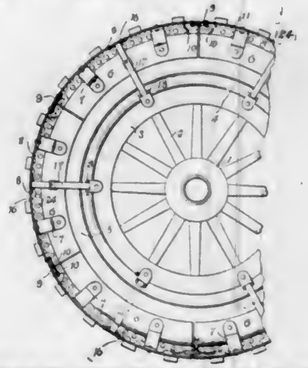
1. In a windshield cleaner, a compressible rubber cleaning fluid reservoir, a head for said reservoir comprising a rubber cap having integral therewith a wiper and a discharge tube and a nipple valve member fitting over said tube and sealing the same against fluid loss when said cleaner is not in use.

1,766,530. GRAPE-STRIPPING MACHINE. HENRY E. PETERSON, Grapeview, Wash. Filed Nov. 5, 1928. Serial No. 317,277. 4 Claims. (Cl. 130—30.)



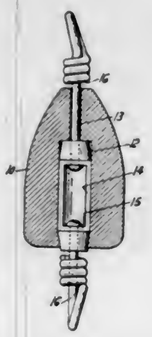
1. In a device of the character described, a conveyer having a perforated belt, an inclined baffle plate above the said conveyer belt, and means for feeding bunches of grapes to the said belt, said baffle plate being positioned to force the individual grapes from the branches and through the perforations in the belt.

1,766,531. TIRE PROTECTOR. MARTIN A. PETERSON, Fremont, Nebr. Filed Nov. 11, 1927. Serial No. 232,668. 1 Claim. (Cl. 152—16.)



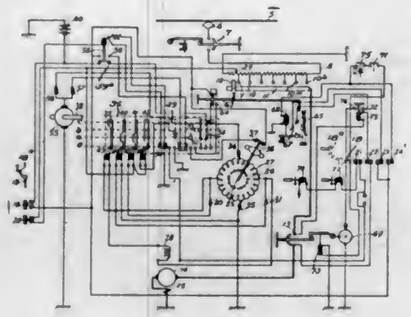
A tire protector comprising a plurality of hingedly connected tread sections curved longitudinally and straight transversely, a like number of tire engaging sections curved both longitudinally and transversely, brackets between the marginal longitudinal edge portions of the tread and tire engaging sections and forming positive and brace connecting means therebetween, ribs between the middle portions of the tread and tire engaging sections, and cleats passing through the tread sections and secured in the said ribs.

1,766,532. FISHING TACKLE. CHARLES T. PFLUEGER, Akron, Ohio, assignor to The Enterprise Manufacturing Company, Akron, Ohio, a Corporation of Ohio. Filed Aug. 6, 1927. Serial No. 211,164. 4 Claims. (Cl. 43—52.)



1. A sinker for fishing lines, comprising a sinker body, a chamber within the body, a yoke located within the chamber, and swivel links carried by the yoke and projecting at opposite ends of the sinker body.

1,766,533. REGENERATIVE BRAKING SYSTEM FOR SINGLE-PHASE ELECTRIC-RAILWAY LOCOMOTIVES. FRANZ PRANTL, Wettingen; WALTER LUTHI, Ennetbaden; and ERNST SCHROEDER, Baden, Switzerland, assignors to A. G. Brown Boveri & Cie., Baden, Switzerland, a Joint Stock Company of Switzerland. Filed Sept. 11, 1928, Serial No. 305,283, and in Germany Sept. 12, 1927. 14 Claims. (Cl. 172—237.)

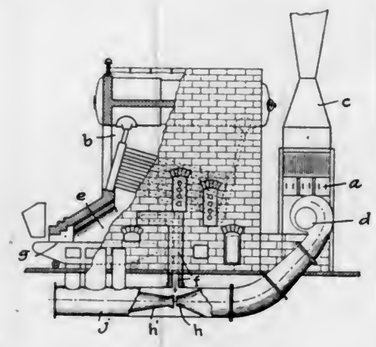


1. In a system of regenerative braking comprising a single phase motor and a phase advancer for changing the phase of current supplied to the field of said motor and comprising a supply circuit, a transformer connected to said circuit, a step switch associated with the transformer for varying the voltage supplied thereby, and a regenerative braking controller, means for automatically connecting said phase advancer to said transformer for starting said advancer and subsequently for automatically connecting said advancer to said transformer and to the field of said motor for regenerative braking, said means being controlled only by said transformer switch and said braking controller.

7. In a regenerative braking system comprising a phase advancer for the excitation of A. C. commutator machines during regenerative operation, said advancer having a uniformly distributed stator winding, a starting circuit for the advancer connected to taps on the stator of said advancer displaced from the diametrical position.

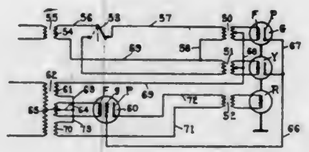
13. In a regenerative braking system compris'ng a phase advancer for the excitation of A. C. motors during regenerative operation, a winding on said motor and a starting circuit for said advancer comprising taps on said winding displaced from the diametrical position.

1,766,534. FURNACE. EMILE PRAT, Paris, France, assignor to Prat-Daniel Corporation, New York, N. Y., a Corporation of New York. Filed Apr. 27, 1927, Serial No. 187,057, and in France Apr. 28, 1926. 3 Claims. (Cl. 110—49.)



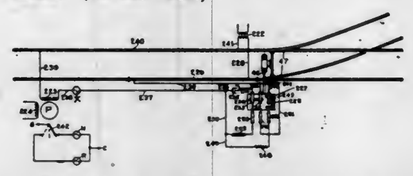
1. In comb'nation with a furnace and an air heater, a blower and a conduit for conveying combustion air from said heater to the furnace, an ejector within said conduit and a duct terminating opposite said ejector and connected with the combustion chamber of the furnace.

1,766,535. LIGHT SIGNAL. CHARLES W. PRESCOTT, Rochester, N. Y., assignor to General Railway Signal Company, Rochester, N. Y. Filed July 11, 1924. Serial No. 725,389. 6 Claims. (Cl. 246—53.)



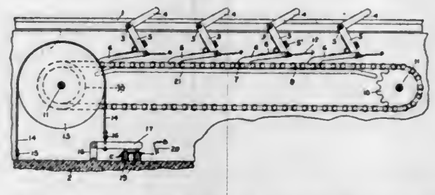
3. In a light signal of the multiple aspect type; in combination, three signals, each including an incandescent lamp, for indicating proceed, caution, and stop respectively; the proceed and caution lamps being of the two element rectifying type and each including a filament and an anode plate; and means depending for its operation on the ionization of the space immediately surrounding the filaments of the proceed and caution lamps for illuminating the stop lamp if both the proceed and caution lamps are extinguished.

1,766,536. SWITCH-INDICATING MEANS. CHARLES W. PRESCOTT, Mill Hill, England, assignor to General Railway Signal Company, Rochester, N. Y. Original application filed Apr. 16, 1925, Serial No. 23,543. Divided and this application filed June 2, 1927. Serial No. 196,156. 7 Claims. (Cl. 246—162.)



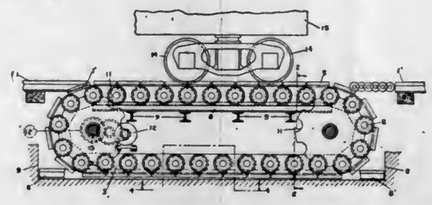
6. In an indicating system, a polyphase relay, distinctive indicators, governed by the relay, a track switch, and means controlled by the position of the track switch to vary the phase of the current to its voltage in one phase of the relay.

1,766,537. CAR RETARDER FOR CLASSIFICATION YARDS. CHARLES W. PRESCOTT, Mill Hill, Enugland, assignor to General Railway Signal Company, Rochester, N. Y. Filed Sept. 28, 1927. Serial No. 222,616. 5 Claims. (Cl. 104—249.)



1. In a track brake for railway vehicles, an arm pivoted on a fixed pivot in the path of a vehicle wheel, a brake, means for putting the brake in active or passive condition, a drive chain for the brake, and ratchet means for driving the chain and forming a drive connection between the fixed arm and the movable chain.

1,766,538. MEANS FOR FACILITATING OPERATION OF RAILWAY CARS IN CLASSIFICATION YARDS. CHARLES W. PRESCOTT, Mill Hill, England, assignor to General Railway Signal Company, Rochester, N. Y. Filed Sept. 28, 1927. Serial No. 222,618. 13 Claims. (Cl. 104—137.)

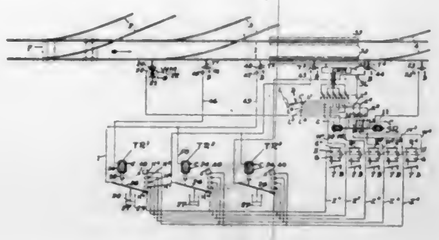


1. A method for conditioning railway cars for classification yard operation, comprising, rotating the car wheels, while the car is in motion, at a speed in excess of that corresponding to the motion of the car.

1,766,539. CAR-RETARDER SYSTEM FOR RAILROADS. CHARLES W. PRESCOTT, Mill Hill, England, assignor to General Railway Signal Company, Rochester, N. Y. Filed Dec. 14, 1927. Serial No. 239,949. 12 Claims. (Cl. 246—182.)

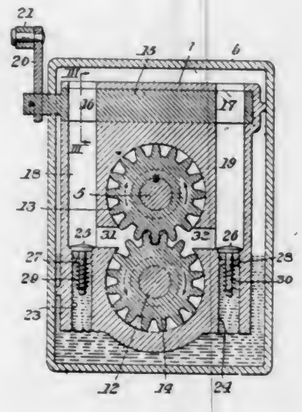
1. In a combined manual and automatic car retarding system, the combination with a car retarder of the type in which suitable electrically controlled power operated mecha-

nism is employed for determining the degree of retardation to be effected, manually operable means for controlling the power operated mechanism of such car retarder, automatic means for controlling the power operated mechanism of



such retarder, and selecting means whereby either said manually operable means or said automatic means may be selected and rendered capable of controlling the power operated mechanism.

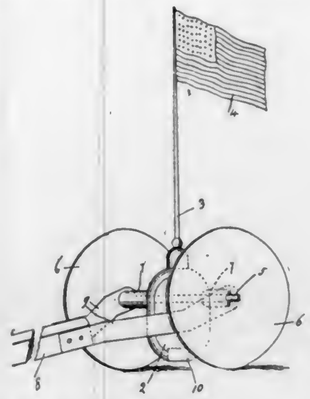
1,766,540. HYDRAULIC BRAKING METHOD AND APPARATUS. WILLIAM G. PRICE, Yakima, Wash.; Mary Kelley Price, executrix of said William G. Price, deceased. Filed Feb. 26, 1927. Serial No. 171,187. 25 Claims. (Cl. 188—92.)



1. Hydraulic braking apparatus comprising a liquid reservoir, a pump casing having ports in opposite sides thereof, pumping mechanism within the casing, a duct affording communication between each of said ports and said reservoir, a check valve for each port, each having opening movement in a direction toward its associated port, and a conduit communicating with each of said ports and arranged to receive liquid drawn from one of said ducts through operation of the pumping mechanism.

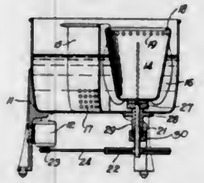
1,766,541. WHEELED TOY. ALFIO RAPISARDI, Boston, Mass. Filed Dec. 8, 1926. Serial No. 153,313. 1 Claim. (Cl. 46—48.)

In a toy of the character described, the combination of a flag, a staff therefor, a holder for the staff, an axle supporting said holder and permitting it to swing freely in a vertical plane, wheels mounted on said axle at opposite sides of said holder, and a tongue connected to said axle



whereby to haul the toy, said holder having a weight disposed below said axle and tending to maintain said staff constantly in a substantially upright position.

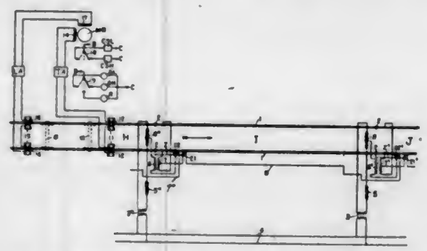
1,766,542. COMBINED WASHING MACHINE AND DRIER. CHARLES E. REDDIG, Kew Gardens, Richmond Hill, N. Y., assignor to Graybar Electric Company, New York, N. Y., a Corporation of New York. Filed Oct. 8, 1927. Serial No. 224,780. 9 Claims. (Cl. 68—37.)



8. In a machine of the character described, a cylindrical tank, an eccentrically mounted centrifugal drier in said tank, impeller means for circulating fluids in said tank concentrically mounted with said drier, external thereto and means for driving said drier and impeller means.

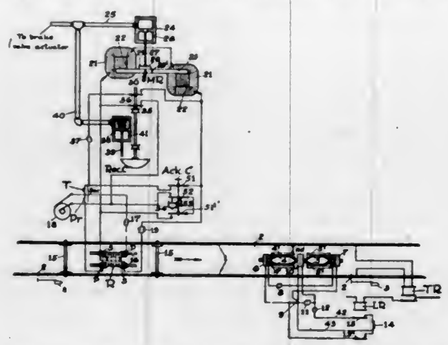
9. In a machine of the character described a washing tank, a centrifugal drier in said tank mounted toward one side of said tank, impeller means for circulating fluid throughout said tank and means for driving said drier and impeller.

1,766,543. TRACK RELAYLESS-TRAIN-CONTROL SYSTEM. WADE H. REICHARD, Rochester, N. Y., assignor to General Railway Signal Company, Rochester, N. Y. Filed May 29, 1925. Serial No. 33,683. 17 Claims. (Cl. 246—63.)



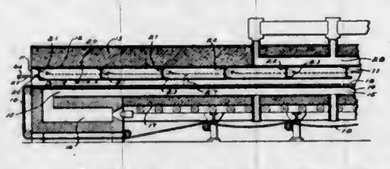
1. In an automatic train control system of the continuous inductive type, the combination of car-carried apparatus designed and organized to detect trackway currents distinctive from each other, and of trackway means for deriving one of these distinctive currents of a section from current flowing in a track circuit of the next section in advance.

1,766,544. TRAIN-CONTROL SYSTEM. WADE H. REICHARD, Rochester, N. Y., assignor to General Railway Signal Company, Rochester, N. Y. Filed Apr. 27, 1929. Serial No. 358,577. 5 Claims. (Cl. 246—63.)



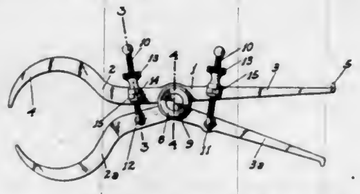
1. In a train control system, in combination, a relay normally energized by alternating current through a circuit tuned, when in attracted position, to the frequency of the alternating current employed, and controlled in accordance with traffic conditions ahead, an armature for the relay, a brake pipe, means controlled by the armature for venting the brake pipe to thereby cause an automatic brake application when the armature is released and to detune said tuned circuit, and reset means operable to complete a tuned energizing circuit for the relay and also to vent said brake pipe.

1,766,545. LEER. WILLIAM STANLEY RENDALL, West Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed Mar. 12, 1928. Serial No. 260,924. 13 Claims. (Cl. 49—47.)



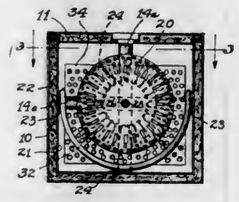
11. In a muffle leer for annealing glassware, a tunnel having insulated top, side and bottom walls, a muffle flue formed in one of said walls, and an auxiliary wall within said tunnel, said last-named wall being separate from the first-named walls and said flue.

1,766,546. COMBINATION CALIPERS. AXEL H. ROOS, Chico, Calif. Filed Nov. 13, 1928. Serial No. 319,078. 1 Claim. (Cl. 33—149.)



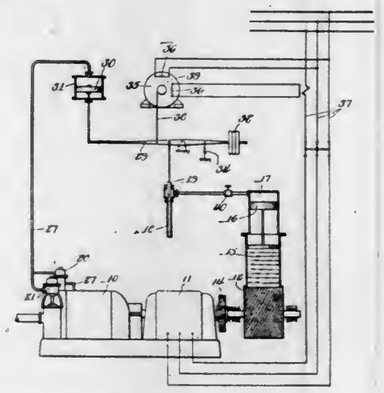
A combination calipers comprising a rigid member shaped at its opposite ends for inside and outside measuring purposes respectively, arms separate from each other and from said member shaped to correspond to and cooperate with the different end portions of said member, a common pivotal connection between said arms at their adjacent ends and said member intermediate its ends arranged to permit of movement of either arm independent of the other arm and said member, means between one arm and said member for adjusting the spacing between the corresponding outer ends of the same, and independent means between the other arm and said member for independently adjusting the setting of the corresponding outer ends of the same.

1,766,547. BOTTLE COOLER. JOHN M. SCHILLING, Lima, Ohio. Filed Sept. 21, 1927. Serial No. 220,896. 17 Claims. (Cl. 312—36.)



1. In a bottle cooler, the combination of a tank for containing a refrigerant, a plurality of drums contained in said tank rotatable independently of each other, each drum comprising end disks and radial partitions forming compartments between the outer portions of said disks for receiving the necks and adjacent portions of bottles to be cooled, said disks having inwardly extending tongues at the bottom portions of said compartments cooperating with said partitions to maintain bottles in said compartments in radial arrangement, a continuous rod in semi-circular form around the lower half of each drum forming a bearing support of small contact surface for the bottoms of bottles carried by said drum, a frame work extending around said drums and secured to said semi-circular rods to support the same, and a shaft extending centrally through said drums to support the same and supported by said framework.

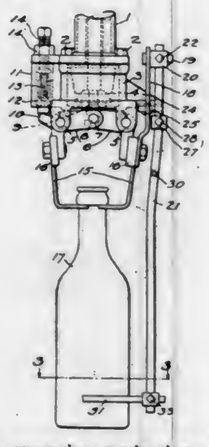
1,766,548. APPARATUS FOR GOVERNING DUPLEX-MACHINE DRIVERS. RICHARD SCHNITZER, Zurich, Switzerland, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland, a Joint-Stock Company of Switzerland. Filed Apr. 13, 1927, Serial No. 183,305, and in Germany Apr. 26, 1926. 10 Claims. (Cl. 290—40.)



9. In apparatus of the character described, a prime mover, a plurality of machines driven thereby, means for

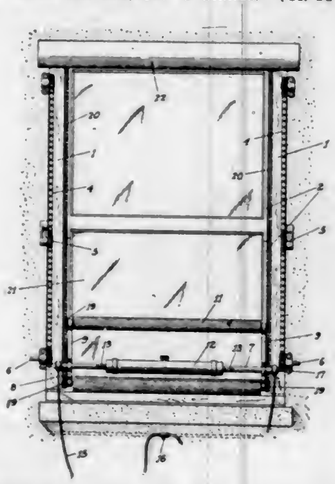
controlling operating conditions of certain of said machines, and means responsive to operating conditions of said prime mover and certain other of said machines and operable to regulate said control means.

1,766,549. WARE-CONVEYING HEAD. JOHN E. SCHRODER, Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed Nov. 21, 1927. Serial No. 234,869. 20 Claims. (Cl. 294—106.)



1. In a ware conveying mechanism, a ware gripping device comprising a support, a pair of bell-crank levers pivotally mounted thereon, a pair of ware gripping tongs connected respectively to one arm of each of said levers, the remaining arms of said levers being interconnected for simultaneous motion, a fluid pressure operated piston, means associated with said piston to operate said levers to open said tongs, a projection on one of said bell-crank levers, and resilient means associated with said projection tending to close said tongs about the ware.

1,766,550. AUTOMATIC WINDOW CLEANER. KURT E. SCHUBERT, Susanville, Calif., assignor of one-half to Alma Adele Lindquist, Susanville, Calif. Filed Mar. 2, 1929. Serial No. 344,088. 6 Claims. (Cl. 15—250.)



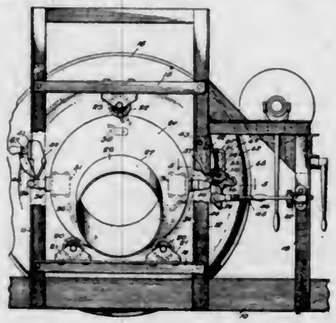
1. A window cleaning apparatus including a washing element to engage and traverse the window, a drying element to traverse the window, a common movable supporting structure for said elements, and means for mounting and operating said structure to cause the elements to automatically and alternately engage and traverse the window.

1,766,551. BAKER'S PEEL. SAMUEL M. SCOTT, West View, Pa. Filed Nov. 22, 1928. Serial No. 321,095. 4 Claims. (Cl. 107—67.)



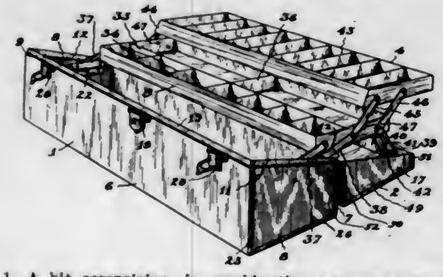
1. In a baker's peel a blade portion, a member countersunk and fixed to lie substantially within the surfaces of said blade portion, said member having a conical threaded bore and thin side projections extending longitudinally with said bore to serve as fastening means to rigidly fix said member within said peel blade, and a handle threaded to seat in said conical bore.

1,766,552. DISCHARGE CHUTE FOR CONCRETE MIXERS. SAMUEL SHAFER, Jr., Milwaukee, Wis., assignor to Chain Belt Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Feb. 11, 1929. Serial No. 339,199. 9 Claims. (Cl. 83—73.)



1. In a concrete mixer, a rotatable mixing drum having a discharge opening; a discharge chute associated with said opening, rotatable from discharging to non-discharging position and vice versa; driving means on said drum; a radially slidable driving jack carried by said chute; and means for moving said jack into and out of the path of travel of said drum-carried means.

1,766,553. KIT. HARRY P. SHRIVER, Van Wert, Ohio, assignor to Kennedy Manufacturing Company, Van Wert, Ohio, a Corporation of Ohio. Filed Jan. 10, 1927. Serial No. 160,082. 3 Claims. (Cl. 190—17.)



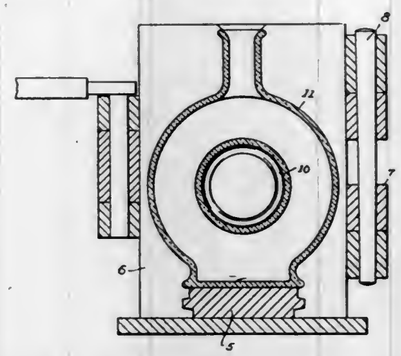
1. A kit comprising, in combination, an open-top substantially rectangular box having vertical sides and ends, the front side being higher than the rear side, a cover hinged to the rear side of said box, said cover when in open position being arranged to be supported from a surface upon which said box is disposed, a first tray, pairs of links secured to the ends of said tray and the interior of said box, compound links secured to each end of said tray and to the interior of said cover, one element of each link being secured to said tray, a second element thereof being secured to said cover, and a third element thereof connecting said first and second elements, all said links being so arranged that opening said cover will move said tray from a nested position within said box to an outwardly extending position over said cover and vice versa, said tray when the cover is open being supported in part by said compound links a second tray adapted to be superimposed upon said first tray, independently operable pairs of links connecting the ends of said first and second trays respectively, and stops secured to the ends of said first tray to limit the movement of said second tray relative to first tray.

1,766,554. DEVICE FOR REGULATING FLOW OF FLUIDS. FRITZ SIEBER, Baden, Switzerland, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland, a Joint-Stock Company of Switzerland. Filed July 9, 1926, Serial No. 121,338, and in Germany Aug. 13, 1925. 2 Claims. (Cl. 251—77.)



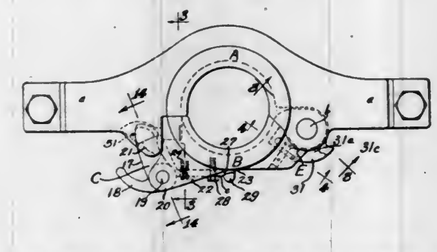
1. In a device of the character described, cooperating elements adjustable with respect to each other and being operable upon such adjustment to provide a fluid opening of varying dimension, one of said elements being provided with a smooth cylindrical bore, the other of said elements being provided throughout a portion of its length with a smooth cylindrical surface fitting said bore with air-tight exactness and being beveled at one end on a small angle for a portion of its length, said elements being operable when in a given position with respect to each other to completely close such opening by virtue of the exact fit between their respective cylindrical configurations, said second-named element being provided with a threaded portion, means holding said second-named element against rotary movement, and means for effecting adjustment of said elements with respect to each other, said adjusting means including a nut engaging said threaded portion, said nut being supported for rotary movement about the axis of said second-named element and held against longitudinal movement with respect to said device.

1,766,555. METHOD OF FORMING GLASSWARE. MAURICE A. SMITH, Jeannette, Pa., assignor to McKee Glass Company, Jeannette, Pa., a Corporation of Pennsylvania. Filed July 11, 1928. Serial No. 291,788. 2 Claims. (Cl. 49—83.)



2. The method of forming glassware which comprises expanding a mass of glass by a blowing action, and cutting out a mid portion at one side of the mass and causing the edges left by the cut-out portion to unite with the remainder of the mass.

1,766,556. WELL TOOL AND APPLIANCE. NELSON K. SMITH, Los Angeles, Calif., assignor to Byron Jackson Co., West Berkeley, Calif., a Corporation of Delaware. Filed Mar. 24, 1925. Serial No. 17,901. 25 Claims. (Cl. 294—90.)

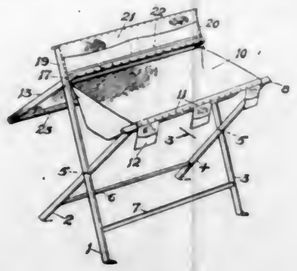


1. A device of the general character disclosed, comprising two members adapted to embrace an object, and latch means for holding said members in embracing relation and comprising a swinging T-head on one of said members and spaced angular lugs on the other of said members for co-engagement with said T-head to oppose relative movement of said members in an opening direction, there being openings in the second mentioned member at the level of the lugs extending to the outer face of the second mentioned member to permit of the movement of the T-head to and from position behind the lugs; said latch means having a handle rigidly connected with said T-head.

1,766,557. BATHING TUB FOR BABIES. ROBERT L. SMITH, Brooklyn, N. Y. Filed Jan. 20, 1928, Serial No. 248,036. Renewed Oct. 25, 1929. 5 Claims. (Cl. 4—177.)

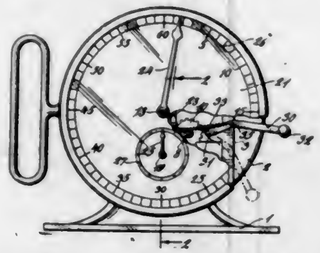
1. A baby bathtub structure including oppositely disposed legs pivoted to fold together, cross-braces connecting the legs, a front top rail, a back top rail, a collapsible tub of rubber or the like secured between the rails, guides on the back rail, a detachable table or top movable on the guides from a position over the tube when

extended to a position backwardly and downwardly with respect to the back rail, and means for preventing the top from moving downwardly its entire length, so that



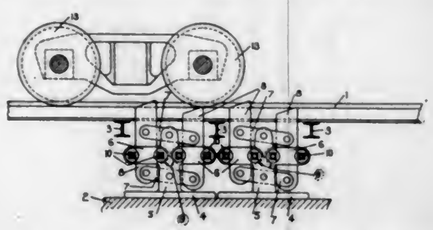
its edge will project above the back rail toward the tub and at an angle to the rail in a position to be readily reached by a user.

1,766,558. ATHLETIC TIMER. JAMES H. STEELE, Denver, Colo. Filed Feb. 28, 1928. Serial No. 257,606. 3 Claims. (Cl. 161—17.)



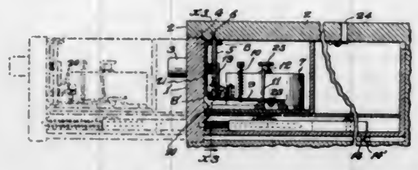
1. A device of the class described comprising, in combination, a clock gear train having an arbor that rotates at a uniform speed, two independently movable pointers, an arm rotatably secured to the arbor, a gear wheel carried by the free end of the arm, said gear wheel being operatively connected with a similar gear on the arbor whereby it will be rotated from the arbor, and means for operatively connecting the gear wheel on the end of the arm with either one of the pointers and for simultaneously applying a clamping device to the other pointer.

1,766,559. RAILWAY TRACK BRAKE. JAMES E. STEPHENSON, Rochester, N. Y., assignor to General Railway Signal Company, Rochester, N. Y. Filed Dec. 15, 1926. Serial No. 154,944. 11 Claims. (Cl. 188—62.)



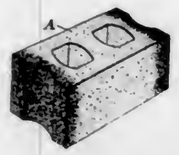
1. In a track brake for railway vehicles, a reciprocable arm adjacent and projecting at times above a track rail and reciprocated by a passing car treading upon the same, an adjustable friction brake for the arm, the upper end of the arm being upwardly inclined in the direction of traffic.

1,766,560. CASH PROTECTOR. HERBERT C. STOCKWELL, Los Angeles, Calif. Filed Nov. 17, 1925. Serial No. 69,655. 2 Claims. (Cl. 70—26.)



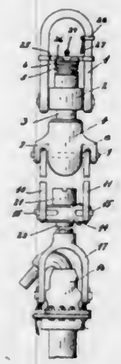
1. In a cash register having a reserve fund drawer a main lock; a delay lock mechanism adapted and arranged to be locked by said main lock; and a time movement controlling said delay lock and adapted and arranged to be set into operation by the unlocking of the main lock for locking the reserve fund drawer.

1,766,561. BUILDING BLOCK. FRANCIS J. STRAUB, New Kensington, Pa. Original application filed Nov. 16, 1926, Serial No. 148,676. Divided and this application filed Mar. 21, 1928. Serial No. 263,398. 2 Claims. (Cl. 72—41.)



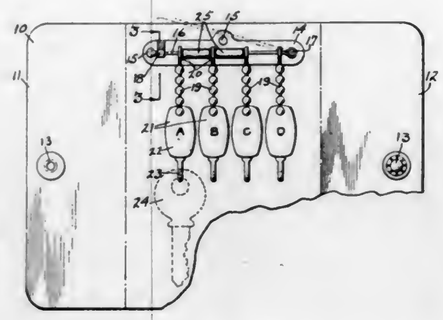
1. A building block composed of continuously similar air-dried concrete aggregate having a light porous main body side portion and a comparatively hard dense end portion.

1,766,562. ROTARY SWIVEL. JOHN H. SWAIN, Long Beach, and HERBERT H. HASTINGS, Anaheim, Calif. Filed June 23, 1928. Serial No. 287,874. 1 Claim. (Cl. 59—95.)



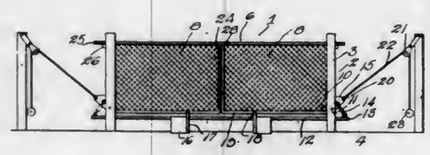
A rotary swivel adapted to be supported by an elevator comprising a yoke pivotally secured to the swivel, a pin therefor rising from the yoke, a head formed on the upper end of said pin against which the elevator is adapted to bear, a stop pin pivotally mounted in the head said stop pin engaging the yoke to prevent rotation of the swivel, a plate in the head adapted to press against said last named pin, and spring means urging said plate against the last named pin.

1,766,563. POCKET KEY CARRIER. REUEL H. THAYER, New York, N. Y., assignor to Thayer Telkee Corporation, San Francisco, Calif., a Corporation of California. Filed May 14, 1926. Serial No. 108,999. 6 Claims. (Cl. 150—40.)



1. In a key container comprising a flexible covering for said keys, a rod pivotally attached to said container by one end thereof, a releasable catch to secure the other end of said rod to said container, a plurality of chains slidably mounted on said rod and means to attach a key to each of said chains.

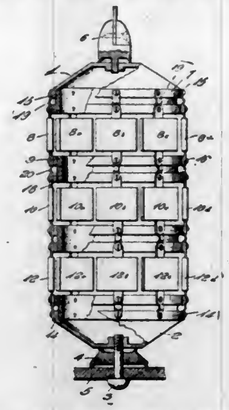
1,766,564. GATE. GEORGE H. THOMAS, Walla Walla, Wash. Filed Mar. 13, 1929. Serial No. 346,654. 2 Claims. (Cl. 39—44.)



1. In a gate, a supporting structure, a movable weight actuated threshold slidably mounted in said structure, a closure pivotally mounted at a lower corner in said structure, a yoke attached to the outer end of said closure above the pivotal point, a lever attached to said closure and extended above and operably secured to said movable threshold, to operate said closure to the open position with the downward movement of said threshold, means attached to said lever and engageable with said yoke and disposed to automatically close said closure with a progressively decreasing impulse to a point past the center of gravity, and to utilize gravity for the completion of the closing operation and to restore said threshold for subsequent action.

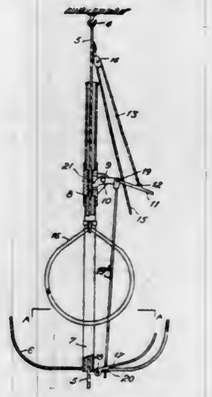
1,766,565. ELECTRICAL CONDENSER. ARTHUR M. TROGNER, Takoma Park, Md., assignor, by mesne assignments, to Federal Telegraph Company, a Corporation of California. Filed Dec. 16, 1926. Serial No. 155,223. 8 Claims. (Cl. 175—41.)

1. A high frequency system comprising a frame structure having a plurality of equalizing conductive ring members and a plurality of fixed condenser units of substantially the same capacity symmetrically arranged between said equalizing conductive ring members forming a substantially hollow cylindrical frame whereby high frequency current may be distributed through said frame structure while compensating for inequalities in resistance and capacity of said condenser units and terminals



positioned at opposite ends of said frame structure and connected with the ring members adjacent the extremities of said frame structure.

1,766,566. INDIVIDUAL FIRE ESCAPE. FREDERICK E. TUCKER, Vancouver, British Columbia, Canada. Filed May 17, 1928. Serial No. 278,507. 2 Claims. (Cl. 227—11.)

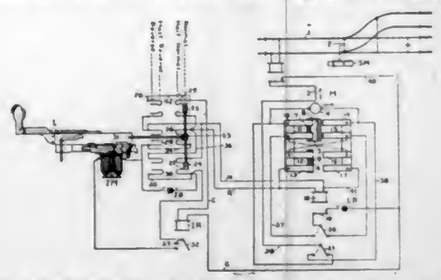


1. An individual fire escape device comprising, a cable suspended vertically from the top of an edifice and within reach of the walls thereof, a tubular member slidable on said cable, a longitudinal slot in said member, laterally projecting ears on each side of said slot parallel thereto and to each other, a pin secured transversely through said ears, a lever pivotal on said pin and curved adjacent its fulcrum to act as a cam for engaging said cable, a cross-bar secured to the lower extremity of said tubular member and adapted to form a seat, a lever of the second order shaped to correspond with said cross-bar seat and fulcrumed thereto, a connecting member between said seat lever and said cam lever whereby the leg of a person using the device necessarily engages the lower lever and thus secures the engagement of the cam of the top lever with the rope.

1,766,567. RAILWAY-TRAFFIC CONTROLLING SYSTEM. MORTON C. TWITCHELL, Spencerport, N. Y., assignor to General Railway Signal Company, Rochester, N. Y. Filed Feb. 3, 1927. Serial No. 165,627. 13 Claims. (Cl. 246—135.)

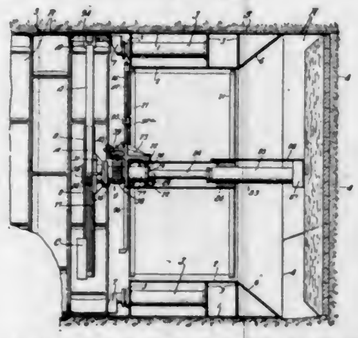
12. In a system for controlling a switch machine, the combination with a power operated switch machine, a

polar control relay for controlling said switch machine located near said switch machine, a distant lever for controlling said control relay, a polar indicating relay located near said lever, three wires connecting said lever location



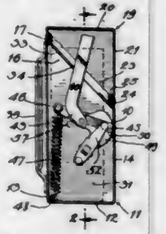
and said switch machine location, two of said wires being used to control said control relay from a source of energy at said lever and one of said two wires and the third wire being used to control said indicating relay from a source of energy at said switch machine.

1,766,568. ERECTOR FOR TUNNEL LININGS. WILLIAM BARRETT UPDEGRAFF, Elizabeth, N. J., assignor to The Watson-Stillman Co., New York, N. Y., a Corporation of New Jersey. Filed Apr. 25, 1928. Serial No. 272,757. 15 Claims. (Cl. 61—84.)



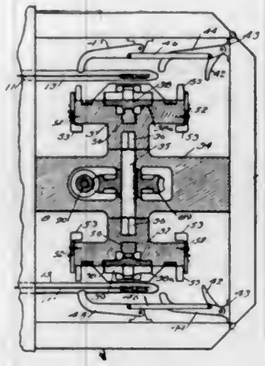
1. In a device including a rotor and a fluid-pressure-operated mechanism carried thereby, a pivotal mounting for said rotor formed with a socket extending in the direction of the rotor axis; and means removably mounted in said socket forming a fluid pressure connection through the rotor mounting for the delivery of fluid to the fluid pressure-operated mechanism carried by the rotor, said means being removable in an axial direction from the rotor and its mounting.

1,766,569. WATERPROOF RECEPTACLE. ARTHUR VON FRANKENBERG, New York, N. Y. Filed July 20, 1928. Serial No. 294,094. 13 Claims. (Cl. 206—41.)



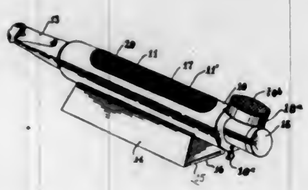
1. In a water tight receptacle of the character described, in combination with a container and a cover therefor, hingeless means for actuating said cover to open or closed position.

1,766,570. BALE PRESS. JOHN B. WALLACE, Grove City, Pa. Filed June 27, 1927. Serial No. 201,895. 10 Claims. (Cl. 100—20.)



1. In a bale press, the combination of a press chamber; a reciprocating plunger; power means actuating the plunger; wire operating mechanism comprising devices forming a return loop of the bale end of the wire; means bringing the single return end of the loop and the leading in wire into overlapping position; and means twisting the overlapping portions.

1,766,571. CIGARETTE HOLDER AND ASH RECEPTACLE. LOUIS WEISBERG, Brighton Beach, N. Y. Filed June 29, 1928. Serial No. 289,153. 4 Claims. (Cl. 131—51.)

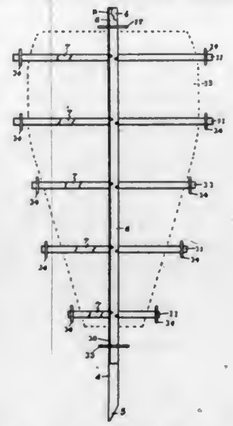


1. A device of the class described, comprising a tubular body member formed with a top and a bottom elongated aperture, a screen covering the top opening, a cigarette holding stem removably engaged in one end of the said tubular member, an ash receptacle attached to the tubular member and having an open top aligned with one of the said apertures for receiving ashes from burning cigarettes disposed within the tubular body, and a tubular burnt match holder disposed with the tubular body for simultaneously holding the burnt matches and closing the entrance opening to the ash receptacle.

1,766,572. GRIDIRON. JOE T. WELCH and JOHN E. MCALPINE, Ten Mile Township, Whatcom County, Wash. Filed July 3, 1929. Serial No. 375,751. 1 Claim. (Cl. 126—30.)

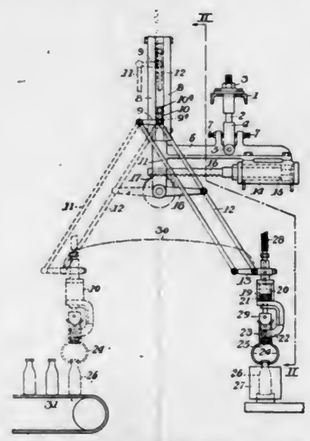
A gridiron comprising a front grid and a back grid, said back grid consisting of a staff sharpened at its bottom end and a plurality of spaced cross bars fastened to said staff, said front grid consisting of a central bar tapered at each end and a plurality of cross bars fastened thereto

equally spaced with said cross bars on said staff adapted to be disposed opposite thereto in pairs therewith, in combination with two rings through which the juxtaposed



ends of said staff and said central bar are extended with said rings disposed on said tapered ends of said central bar, and a plurality of rings through each of which one of the pairs of ends of said cross bars are extended.

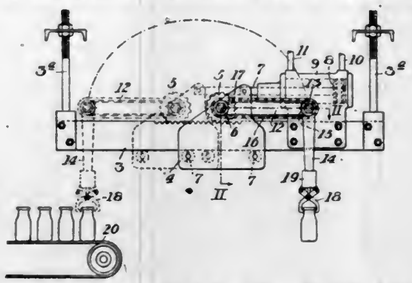
1,766,573. APPARATUS FOR HANDLING GLASSWARE. DANIEL B. WESTIN, Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed June 22, 1926. Serial No. 117,745. 12 Claims. (Cl. 214—1.)



1. Apparatus for removing glassware from molds comprising a vertically disposed guide, a member mounted for movement in said guide, a supporting arm and a guiding arm pivotally connected at their upper ends to said member on laterally offset axes, said arms forming a parallel-motion system, a ware-supporting device having pivotal connection with the lower ends of said arms, and a crank device rotatable about a fixed axis and pivotally connected to one of said arms between the ends thereof.

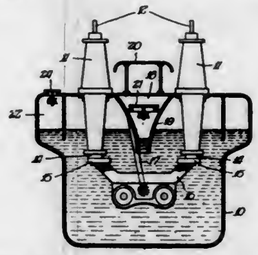
1,766,574. APPARATUS FOR HANDLING GLASSWARE. DANIEL B. WESTIN and HENRY W. INGLE, Hartford, Conn., assignors to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed June 1, 1926. Serial No. 112,759. 15 Claims. (Cl. 214—1.)

1. Apparatus for handling glassware comprising a support, a carriage mounted on said support for movement thereon toward and away from a ware receiving station and a ware delivering station, ware transferring means mounted on said carriage, means for moving said transferring means about a horizontal axis to transfer ware



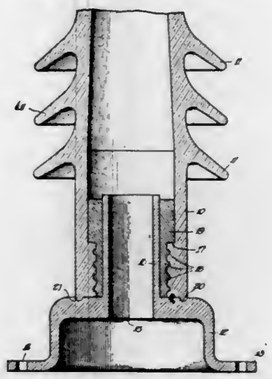
from said receiving station to said ware delivering station, ware holding means mounted on said transferring means, and means for actuating said holding means at said stations to grasp and release the ware.

1,766,575. OIL SWITCH. ALFRED WICHERT, Mannheim-Neuostheim, Germany, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland, a Joint-Stock Company of Switzerland. Filed May 13, 1926, Serial No. 108,706, and in Germany July 24, 1925. 6 Claims. (Cl. 200—150.)



1. The combination with an oil switch including a casing and switch contacts disposed therein, of a contracting venting member having its smaller end opening adjacent the contacts and its larger end opening exteriorly of the casing.

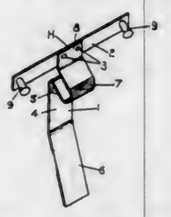
1,766,576. INSULATOR STRUCTURE. LAURENCE R. WILDER, New York, N. Y., assignor to American Brown Boveri Electric Corporation, New York, N. Y., a Corporation of New York. Filed May 29, 1926. Serial No. 112,471. 1 Claim. (Cl. 173—318.)



Insulating means comprising a hollow insulating member open at both ends, and a fastening member therefor hav-

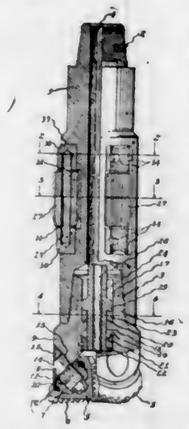
ing a face fitting against the adjacent end face of said insulating member and an element extending into and being disposed in spaced relation with respect to the adjacent end of the latter to provide a space between said members for receiving cementitious material poured into said space in the plastic state by way of the other end of said insulating member, the adjacent fitting faces of said members being complementary to each other and formed respectively to provide a seal of the male-and-female type operating to confine said material against leakage while in such state between said faces.

1,766,577. RELAY-MOUNTING MEANS. JOSEPH E. WILLING, Rochester, N. Y., assignor to General Railway Signal Company, Rochester, N. Y. Filed Nov. 17, 1926. Serial No. 148,941. 5 Claims. (Cl. 248—30.)



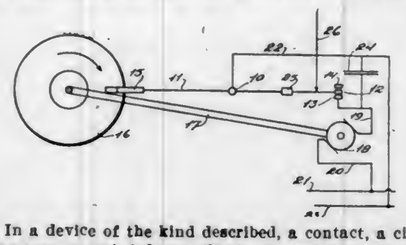
1. A spring hanger for supporting relays in railway signalling systems comprising, a spring member having holes near the middle therein for screw fastening the same to a vertical wall, said spring member having its upper and lower portions bent inwardly to be spaced from the wall so as to leave a comparatively small area of contact with such vertical wall, a cross arm fastened to said upper portion and having means associated therewith for so supporting a relay that the lower edge of the relay bears against the lower forwardly bent portion of the spring member, said spring member being looped inwardly between said middle and said arm so that the relay is mounted for yielding in a horizontal plane about the point of support as a pivot.

1,766,578. ROCK DRILL. WALTER T. WOOD, Long Beach, Calif., assignor, by mesne assignments, to Byron Jackson Co., San Francisco, Calif., a Corporation of Delaware. Filed Nov. 9, 1927. Serial No. 232,046. 7 Claims. (Cl. 255—71.)



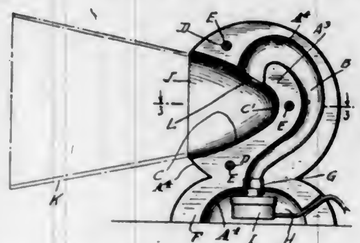
1. In means of the class described, a plurality of cutter carriers, cutters revolvably secured to said carriers, the carriers together forming a hollow bore, and clamping means in said bore clamping the carriers together.

1,766,579. MEANS FOR PRODUCING SPEEDS PROPORTIONAL TO VARIATIONS IN STATIC FORCE. WILLIAM C. WOODSON, Jr., Brooklyn, N. Y. Filed Aug. 20, 1928. Serial No. 300,766. 10 Claims. (Cl. 265—1.)



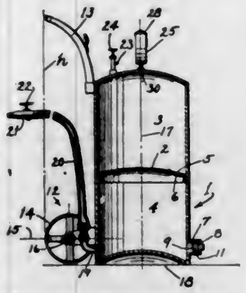
1. In a device of the kind described, a contact, a circuit closing arm mounted for oscillation to and from the contact, means operated by a non-magnetic static force adapted to urge said arm toward the contact, an electro-magnetic torque device tending to rotate said arm and including a rotative element, a motor connected to said element to rotate the same, a source of electro-motive energy, and circuit connections between the arm and source of energy and between the contact and source of energy and including the motor.

1,766,580. HORN. MERWIN F. ASHLEY, Chicago, Ill. Filed Apr. 9, 1925. Serial No. 21,776. 5 Claims. (Cl. 181—27.)



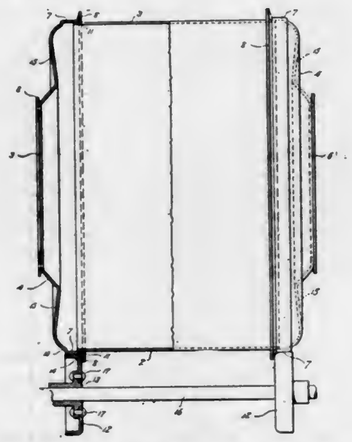
1. A horn comprising a massive body portion having thick walls and recessed to form a bell and having a throat formed therein extending from the lower surface of said body portion and opening into said bell at its upper side.

1,766,581. ART OF AND MEANS FOR MEASURING LIQUIDS. THEODORE EDWARD BAKER, Long Beach, Calif., assignor to Aero Liquid Meter Corporation, Los Angeles, Calif., a Corporation of California. Filed May 8, 1926. Serial No. 107,644. 5 Claims. (Cl. 221—74.)



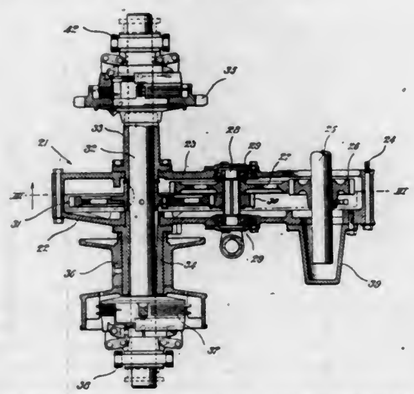
1. A liquid measuring device comprising a container; means to allow and control discharge of liquid from the container; means to hold a given quantity of air under pressure on top of the liquid in the container for the purpose of forcing the liquid out of the container, and a calibrated air gage having a dial and an indicating hand in connection with the dial and operable by change of air pressure in the container, for the purpose of indicating changes in the volume of liquid discharge according to the pressure of the air-filled space of the container; said gage being provided with lost motion means whereby air pressures below a predetermined amount will not be indicated by the hand.

1,766,582. MIXING DRUM. CHARLES F. BALL, Milwaukee, Wis., assignor to Chain Belt Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Dec. 27, 1926. Serial No. 157,330. 1 Claim. (Cl. 83—73.)



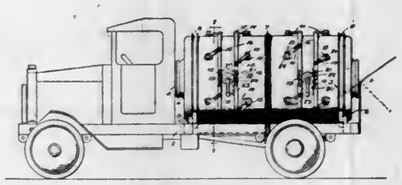
A metallic mixing drum having a body portion with cylindrical ends, and sheet metal heads pressed into shape secured to the ends of the drum and formed with end walls and cylindrical parts adapted to be fitted and secured to the ends of the body portion of the drum and to serve as tracks to be engaged by wheels that support the drum, the free edges of the cylindrical parts of the heads being formed with out-turned smooth-faced flanges which are inclined to the face of the body of the drum and reinforced by deposit of metal in the acute angles of the joints between the said flanges and the adjacent portions of the body of the drum.

1,766,583. POWER TRANSMISSION UNIT FOR CONCRETE MIXERS. CHARLES F. BALL, Milwaukee, Wis., assignor to Chain Belt Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Mar. 21, 1927. Serial No. 177,116. 1 Claim. (Cl. 254—186.)



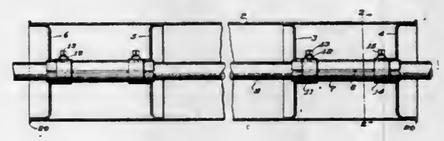
A power transmission unit for concrete mixers comprising a casing; readily detachable bearing sleeves carried by said casing; a countershaft journalled in said sleeves; a gear train housed in said casing, adapted to transmit power from a source to said countershaft; a sprocket carried by said countershaft adjacent one of said sleeves for driving a mixing drum; a cable winding drum journalled on the other of said sleeves; and means for connecting and disconnecting said winding drum with said countershaft.

1,766,584. MIXING AND AGITATING MACHINE. CHARLES F. BALL, Milwaukee, Wis., assignor to Chain Belt Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Feb. 9, 1929. Serial No. 338,775. 9 Claims. (Cl. 83—73.)



1. In a machine for mixing concrete and other substances, the combination of a rotatable tank for the material, agitating blades inside the tank and revolving with it, arranged in sets, and means by which the blades of a set may be simultaneously adjusted to a desired inclination.

1,766,585. DRIVING CYLINDER FOR SPINNING FRAMES. FREDERIC E. BANFIELD, Jr., Saco, Me., and FRANK O. HOAGLAND, Bridgeport, Conn., assignors to Saco-Lowell Shops, Boston, Mass., a Corporation of Massachusetts. Filed Mar. 25, 1926. Serial No. 97,433. 2 Claims. (Cl. 64—17.)

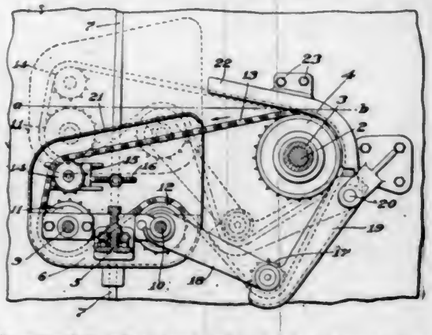


2. A driving cylinder of the character described, comprising a driving shaft; a plurality of the hubs mounted on said shaft to revolve therewith; each of said hubs including a split sleeve fitting on said shaft and two cupped sheet metal heads welded on said sleeve and spaced from each other, each of said hubs also including two collars mounted, respectively, beside said heads and on said sleeve, said collars being welded to said sleeve; and a sheet metal cylinder encircling said hubs and supported on the peripheral portions of said heads.

1,766,586. DRIVING MECHANISM FOR BOBBIN SHAFTS OF ROVING FRAMES. FREDERIC E. BANFIELD, Jr., and GEORGE F. ALBRECHT, Saco, Me., assignors to Saco-Lowell Shops, Boston, Mass., a Corporation of Massachusetts. Filed Oct. 10, 1928. Serial No. 311,645. 5 Claims. (Cl. 118—41.)

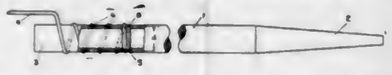
1. In a roving frame or the like having a compound, the combination of a driving sprocket wheel driven by said compound, two parallel bobbin shafts each provided with a driven sprocket wheel, a slide with which said bobbin shafts are associated, said slide and bobbin shafts being mounted for vertical traversing movement in unison, a guide sprocket wheel mounted on said slide, a

chain engaging all of said wheels and driving the bobbin shafts, and a chain tightening sprocket wheel engaging the driving run of said chain, the upper edges of said



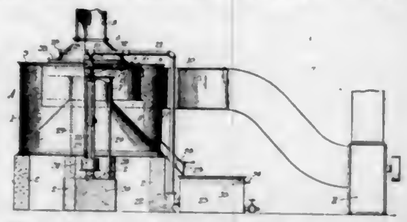
guide sprocket wheel and said driving sprocket wheel being located in approximately the same horizontal plane when the slide is in the middle of its traverse.

1,766,587. GROUND-ROD CONNECTION. FRANK H. BANNER, Rochester, N. Y., assignor to General Railway Signal Company, Rochester, N. Y. Filed Oct. 30, 1926. Serial No. 145,289. 7 Claims. (Cl. 173—31.)



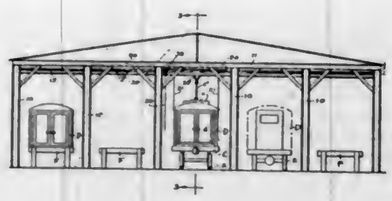
1. In combination, a ground rod, a hole in the rod, a wire pinned in the hole, a helical groove in the rod, the wire being wound around the rod to lie in the said groove.

1,766,588. AIR AND GAS WASHING APPARATUS. EDWIN M. BASSLER, Milwaukee, Wis. Filed Aug. 20, 1923. Serial No. 658,360. 10 Claims. (Cl. 261—89.)



1. In a gas washing apparatus, the combination of a housing provided with admission and discharge openings for the gas to be treated and the treated gas, respectively, a spraying wheel rotatably mounted within said housing comprising a disk, a multiplicity of pins secured in said disk adjacent to its periphery, said pins being spaced short distances apart and arranged in a circular series concentric with the axis of rotation of said spraying wheel, said spraying wheel being mounted in position to define a restricted passageway in communication with the gas admission opening and formed between a wall of the housing of the apparatus and the disk portion of the spraying wheel, and across which passageway the pins of the spraying wheel extend, means for rotating said spraying wheel at a high peripheral velocity, means for discharging water upon said spraying wheel, and a baffle which surrounds said spraying wheel and against which the mixed water spray, the gas undergoing treatment and solid particles entrained therewith are projected, thereby depositing the water spray and entrained solid particles upon the baffle in the form of a fluid mixture which drains therefrom into the lower end of the housing of the apparatus.

1,766,589. APPARATUS FOR TRANSFERRING FREIGHT. ALBERT H. BATES, Cleveland, Ohio, assignor to Motor Terminals Company, Wilmington, Del., a Corporation of Delaware. Filed Oct. 27, 1928. Serial No. 315,451. 11 Claims. (Cl. 191—36.)

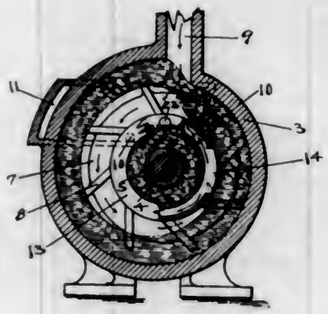


1. The combination with a railway track and a trolley wire above it, of a supporting structure at the side thereof, laterally movable hoisting mechanism carried by such structure and adapted to extend above the track, and means mounted on a laterally movable part of the hoist mechanism for supporting a trolley-wheel-guide normally in alignment with the trolley wire.

1,766,590. ART OF PRODUCING LIQUID FOOD AND THE PRODUCTS THEREOF. CHARLES BAUER, Westbury, N. Y., assignor to Vet Products Laboratory Inc., Westbury, N. Y. Filed Apr. 17, 1928. Serial No. 270,809. 2 Claims. (Cl. 99—11.)

1. The process of producing food for young animals of the small variety comprising adding to fresh cow's milk in a cold condition lactic acid in such proportions to the milk as to correspond to a ratio of one hundred twenty drops of lactic acid to one quart of milk, and effecting the addition by dropping the lactic acid in successive drops into the milk while stirring the milk and thoroughly intermixing the acid therewith, and adding corn sugar to the resulting mixture in a quantity sufficient to bear that proportion to the milk which a heaping tablespoonful of corn sugar bears to one quart of milk.

1,766,591. PUMP. RANDOLPH V. BINGHAM, Portland, Oreg. Filed Nov. 12, 1928. Serial No. 318,735. 4 Claims. (Cl. 230—79.)

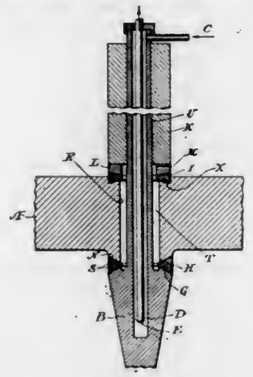


1. In a rotary pump: a casing having exhaust and intake ports; a pocketed rotor within said casing; a ring of liquid upon the inner surface of said casing and cooperating with said pockets to compress gas therein; a chamber within said rotor independent of said pockets; and a body of liquid within said chamber to seal the chamber from the rotor pockets.

1,766,592. PRODUCTION OF COMPOSITE PIGMENTS CONTAINING TITANIUM DIOXIDE. JOSEPH BLUMENFELD, Paris, France, assignor to Commercial Pigments Corporation, New York, N. Y., a Corporation of Delaware. Filed Mar. 13, 1928. Serial No. 261,421. 8 Claims. (Cl. 134—58.)

4. A process which comprises agitating pigment particles in an aqueous mixture containing colloidal titanium dioxide and a peptizing quantity of hydrochloric acid, adding sulfuric acid to coagulate the colloidal titanium dioxide and recovering the composite pigment thus formed.

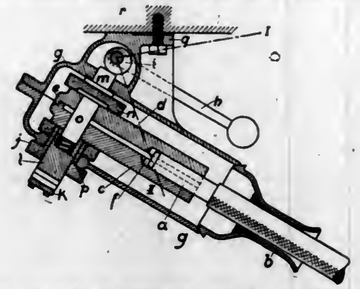
1,766,593. INSULATOR FOR ELECTRIC CONDUCTORS. FRANCIS HERBERT BRAMWELL, Hartford, England, assignor to Atmospheric Nitrogen Corporation, Solvay, N. Y., a Corporation of New York. Filed May 1, 1926, Serial No. 105,990, and in Great Britain May 4, 1925. 5 Claims. (Cl. 173—311.)



2. The combination of a vessel of electrically conductive material adapted to withstand high internal pressures and having a wall provided with an opening therein, an electrical conductor passing through said opening from the exterior to the interior of the vessel without making electrical contact with said vessel, and being provided with a shoulder disposed inside the vessel, the shoulder being larger than the mouth of said opening through the wall of the vessel and having an annular seat facing the edge portions of said mouth of said opening and inclined outwardly from its inner circumference and away from the mouth of the opening, a corresponding annular seat being associated with the inside of the wall of the vessel around its opening and presenting a surface inclined outwardly from its inner circumference and oppositely divergent with respect to the inclined face of said shoulder, an annular washer of insulating material presenting opposed surfaces to said seats, said opposed surfaces to said seats, said opposed surface being tapered from the outer rim of the washer toward its center, said washer thus having a trapezoidal cross-section wherein the larger base is the outer periphery of the washer and fitting snugly between the aforementioned seats associated with the shoulder of the conductor and with the wall of the vessel, mechanical means for compressing said washer between said seats, said vessel and said conductor being out of electrical connection through said mechanical means and gas under high pressure within the vessel, the pressure of said gas acting upon the outer periphery of the washer and tending to wedge said washer between the tapered surfaces presented by said seats.

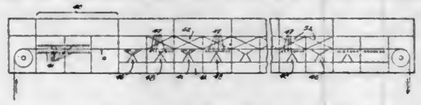
1,766,594. ELECTRICAL COUPLING. JACOB BUCHLI, Baden, Switzerland, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland. Filed Oct. 1, 1921, Serial No. 504,670, and in Switzerland Oct. 14, 1920. 2 Claims. (Cl. 173—324.)

1. An electric coupling of the plug and socket type including a casing, a socket member located in said casing and subdivided into a plurality of relatively movable sectors, and pressing device associated with the sectors and



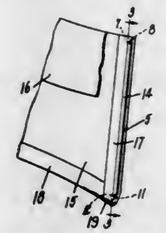
including cooperating members, one of the last-mentioned members constituting a guide for the sectors and the other member being supported in said casing.

1,766,595. DRYING APPARATUS AND METHOD. LUCIEN BUCK, North Adams, Mass., assignor of one-half to James Hunter Machine Company, North Adams, Mass., a Corporation of Massachusetts. Filed Apr. 25, 1929. Serial No. 357,932. 6 Claims. (Cl. 34—48.)



1. Drying apparatus of the character described comprising an elongate chamber, means for passing a fabric therethrough, a plurality of heating coils arranged below the fabric path, means for supporting the fabric out of contact with the coils but in closely spaced relation thereto whereby radiant heat from the latter is effective in heating the fabric, a plurality of drying air outlets interspersed with the coils and adapted to emit drying air upon the lower face of the fabric, means for supplying drying air to said outlets including heating means and a draft inducing factor, and a series of air outlets arranged to receive air from said air supplying means and to emit the same over the upper surface of the fabric.

1,766,596. COLLAR SUPPORT. DAVID F. BURKE, Manchester-by-the-Sea, Mass. Filed Feb. 25, 1929. Serial No. 342,383. 3 Claims. (Cl. 2—132.)

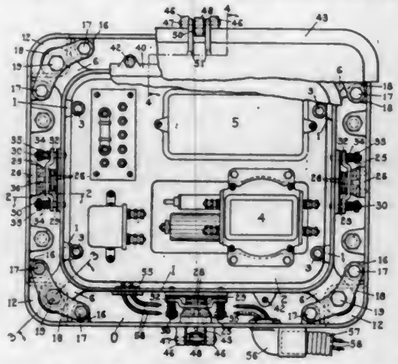


1. A collar support comprising a strip of stiff material, one end terminating in a pair of prongs, one of said prongs extending longitudinally of said strip beyond the other and having a hooked-shaped projection on its inner edge.

1,766,597. INSTRUMENT CASING FOR TRAIN-CONTROL SYSTEMS. CHARLES S. BUSHNELL, Rochester, N. Y., assignor to General Railway Signal Company, Gates, N. Y., a Corporation of New York. Filed May 31, 1923. Serial No. 642,652. 10 Claims. (Cl. 248—30.)

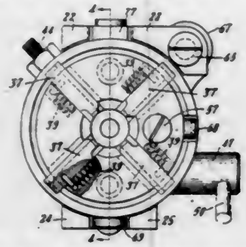
1. In a supporting structure for sensitive electro- responsive devices, the combination with a support, a casing,

two sets of springs for resiliently supporting said casing by said support for movement in a horizontal and vertical



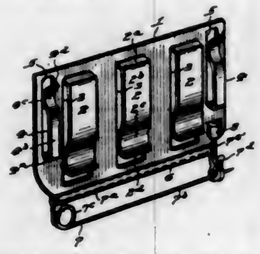
plane respectively, and a friction device for absorbing energy due to oscillation of said casing in both a vertical and a horizontal plane.

1,766,598. SCREW-CUTTING DIE. ERNEST T. BYSSHE and ROBERT R. FINN, Springfield, Vt., assignors to Jones & Lamson Machine Company, Springfield, Vt., a Corporation of Vermont. Filed Feb. 28, 1928. Serial No. 257,638. 6 Claims. (Cl. 10—95.)



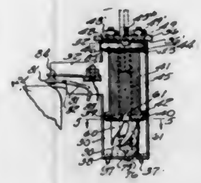
2. In a screw-cutting die, a plurality of chasers movable to open and closed positions, a body member in which said chasers are mounted, springs pressing the chasers toward their open position, a sleeve movable on said body member, said sleeve having a cam surface engageable with said chasers to move them against said springs to closed position when the sleeve is moved forwardly on said body member, means for latching said sleeve in its forward position on said body member to hold the chasers in closed position, means actuable by further forward motion of said sleeve to release said latching means, and means for positively locking said sleeve against said further forward motion, said locking means being unlocked by operative engagement of the work with said chasers.

1,766,599. SAFETY CARRIER. ELIZABETH CAHILL, New York, N. Y. Filed Apr. 20, 1929. Serial No. 356,630. 5 Claims. (Cl. 24—13.)



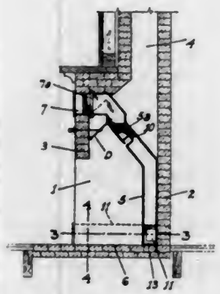
1. In a combined paper currency, ring and key holder, the combination of a plate of resilient sheet metal having a top edge and a bottom edge and provided with a series of parallel vertically disposed slots and with a series of downwardly extending resilient paper holding fingers extending parallel to said slots and integrally connected at their upper ends to the plate at the upper edges of said slots, extending slightly outwardly away from the plane of the surface of one side of said plate and then extending substantially parallel to and spaced from said surface, then curved back to normally lie in the slots thereunder, substantially in the plane of said plate, and having their extreme lower ends curved outwardly a little above the plane of the said surface of said plate, and a safety pin permanently secured to the bottom horizontal edge of said plate and extending generally parallel to said edge for removably securing said carrier to clothing, pockets, bags and the like.

1,766,600. LOCOMOTIVE REVERSING SWITCH. MARIO CARUSO, Irvington, N. J., assignor to The Lionel Corporation, New York, N. Y., a Corporation of New York. Filed Dec. 23, 1926. Serial No. 156,561. 18 Claims. (Cl. 104—151.)



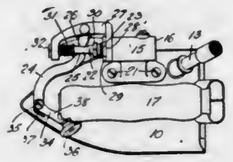
1. An electromagnetic switch comprising, a solenoid coil, a plunger normally hold in one position and axially movable to another position upon energization of the coil, a plurality of stationary contacts, an insulating disk carrying a plurality of contacts arranged to change circuit connections with the fixed contacts upon rotation of the disk, the plunger having a slidable nonrotatable connection with the disk, and means to advance the plunger a partial revolution upon energization of the coil.

1,766,601. FIREPLACE HEATER. JOSEPH M. CESA, Antioch, Calif. Filed Apr. 10, 1929. Serial No. 353,983. 3 Claims. (Cl. 126—121.)



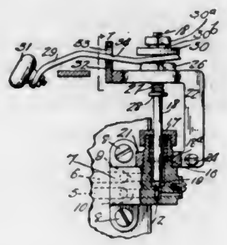
2. A hot air attachment for fireplaces including a drum adapted to be mounted at the back of the fireplace, an air outlet passage projecting from the top of the drum through the front wall of the fireplace, an air-intake passage extending from the front of the fireplace through a side wall thereof to one end of the drum, and an auxiliary air passage formed about the top and bottom walls of said intake passage from end to end, and also along the side thereof nearest the fire containing area of the fireplace.

1,766,602. PRESSING IRON OR IMPLEMENT. FREDERICK J. CLARK, Buffalo, N. Y., assignor to Steam Pressing Iron Company, Chicago, Ill. Filed Mar. 17, 1926. Serial No. 95,262. 6 Claims. (Cl. 68—26.)



1. In a pressing iron provided with a handle and means for the discharge of fluid for moistening the work, the combination of a valve provided with a movable member for controlling the discharge of the moistening fluid, an actuating lever for opening said movable valve member, a spring for closing said valve, a finger piece movably mounted on said lever and located so as to be readily engaged and moved by a digit of the hand grasping the handle, a part on said iron adapted to be engaged by said finger piece for releasably holding said valve member open against the action of said spring, said finger piece being adapted to be moved to actuate said lever to open said valve member and to engage said part for holding the valve member open, and to release the valve member to permit it to be closed by its spring.

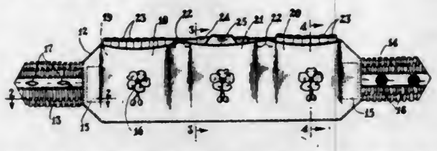
1,766,603. PRESSING IRON. FREDERICK J. CLARK, Buffalo, N. Y., assignor to Steam Pressing Iron Company, Chicago, Ill. Filed June 15, 1927. Serial No. 198,942. 12 Claims. (Cl. 68—26.)



1. In a pressing iron or the like provided with a handle, a fluid controlling valve having a valve stem, and means for operating said valve stem including a controlling member extending into a position for operation by a digit of one's hand while that hand is grasping said handle, means mounting said member for rocking movement in one path to cause movement of the valve stem, and also independently of that movement in a direction transversely to said path, said iron having a portion cooperating with said member when the latter is moved transversely to said path, while at a particular point of its movement in said path, for securing said member releasably at said point.

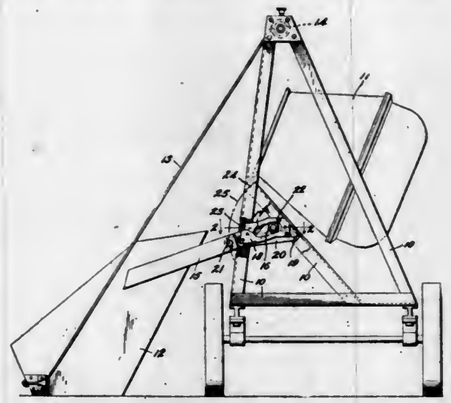
12. In a pressing iron or the like, a valve casing removably secured to the body of the iron and having a fluid passage communicating with the interior of the iron body, a valve element extending into said casing and controlling said passage, a bracket extending from said casing and having a bearing for mounting and guiding said element, an operating member for said element connected thereto for moving it between open and closed positions, said bracket having means to latch said member releasable in one of its positions against movement towards the other position, and said member, said valve element, said casing and said bracket being connected together to form a unitary device attachable to and detachable from the iron body.

1,766,604. CIGARETTE-HOLDING GARTER. HENRY COHEN, New York, N. Y. Filed May 9, 1928. Serial No. 276,230. 1 Claim. (Cl. 224—26.)



In a cigarette holding garter, front and rear material arranged to form a pocket, a pocket for holding cigarettes slidably mounted in the first mentioned pocket, a spring for normally urging the slidable pocket slightly upwards, a flap secured on the inner side of the first pocket, a rod attached on the spring and passing thru an aperture in the flap, and the flap being arranged to extend to and be secured on the outer side of the first pocket so as to hold the rod and spring downwards for permitting the slidable pocket to assume a retracted position.

1,766,605. CONCRETE MIXER. BYRON B. COLLINGS, Washington, D. C., assignor to Chain Belt Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Dec. 13, 1928. Serial No. 325,868. 5 Claims. (Cl. 214—130.)



1. In a charging device for concrete mixers having a frame and a mixing receptacle mounted thereon, the combination of a charging skip having an arm; means for raising and lowering said skip; a link pivotally connected to said frame and to said arm; and a guide having two connected portions disposed at an angle to one another, one of said portions guiding said arm during the first part of the upward movement of said skip, and the other portion guiding said arm during the latter part of said skip movement.

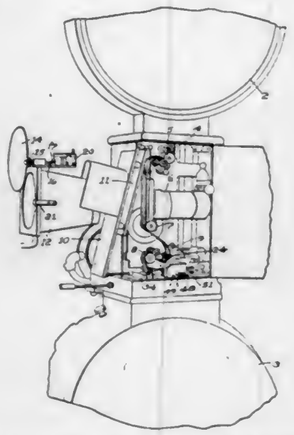
1,766,606. IMPREGNATED WOOD AND PROCESS OF TREATING WOOD. JOSEPH R. COOLIDGE, 3d, Brookline, Mass., assignor to Montan, Inc., Boston, Mass., a Corporation of Massachusetts. Filed June 3, 1927. Serial No. 196,394. 9 Claims. (Cl. 99—12.)

1. An article of the character described comprising wood impregnated for a substantial depth with borax and ammonium phosphate.

3. That improvement in processes of treating wood which consists in impregnating the wood at elevated temperatures with a solution containing borax associated with a sufficient quantity of ammonium phosphate to prevent discoloration of the wood.

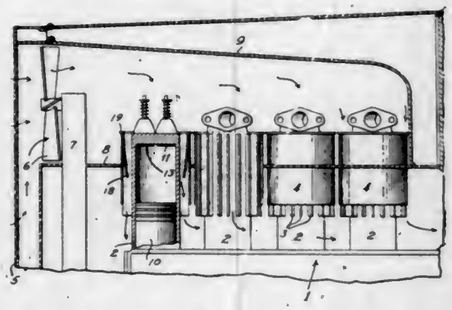
6. That improvement in processes of fireproofing wood, which consists in impregnating the wood with water soluble fireproofing salts including a sufficient percentage of common salt to promote the penetration of the entire solution.

1,766,607. SAFETY ATTACHMENT FOR MOVING-PICTURE-PROJECTING MACHINES. HENRY C. CORNETTA, East Boston, Mass., assignor to Coda Appliance Co., Inc., New York, N. Y., a Corporation of New York. Filed Aug. 6, 1924. Serial No. 730,380. 3 Claims. (Cl. 200—52.)



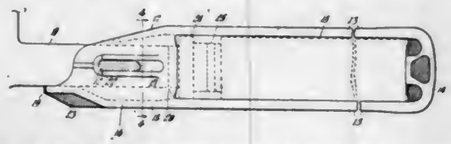
1. In a safety attachment for moving picture projecting machines, the combination of two rolls arranged to engage the film, a pivoted arm supporting one of said rolls, a slidable rod supporting the other roll, means acting through said arm and rod to yieldingly hold said rolls in position to be engaged by the film at spaced points, and electrical contacts arranged to be closed by predetermined movements of said rolls.

1,766,608. AIR-COOLED MOTOR. CLARENCE M. CREWS, Jackson Heights, N. Y. Filed Nov. 8, 1927. Serial No. 231,871. 5 Claims. (Cl. 123—171.)



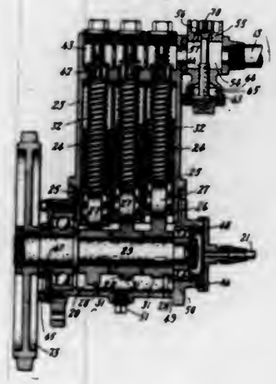
1. In an air-cooled motor, a cylinder, radiating fins on the cylinder extending longitudinally thereof and having air channels therebetween, and means for individually throttling the air channels.

1,766,609. YOKE MEANS. CHARLES E. DATH, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed Feb. 15, 1929. Serial No. 340,112. 6 Claims. (Cl. 213—70.)



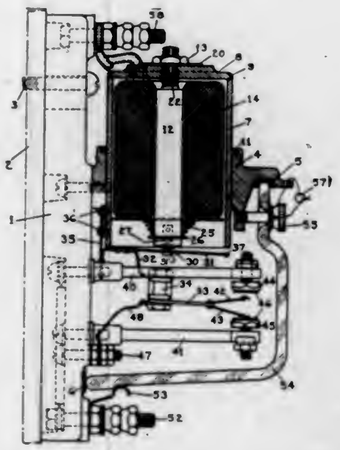
1. In a yoke, the combination with a strap portion adapted to enclose a shock absorbing mechanism; of a hood member at one end of the yoke, adapted to receive the shank of a coupler, said hood member being defined by spaced top and bottom walls and spaced side walls, said side walls being provided with alined coupler key receiving slots; and a supporting ledge at the outer end of the hood forwardly of the slots of said side walls, and offset upwardly with respect to the main portion of said bottom wall, said bottom wall having an upstanding guide rib having the upper edge thereof flush with the upper surface of said ledge.

1,766,610. PUMP. FRANCIS W. DAVIS, Waltham, Mass. Filed Apr. 25, 1927. Serial No. 186,190. 3 Claims. (Cl. 103—169.)



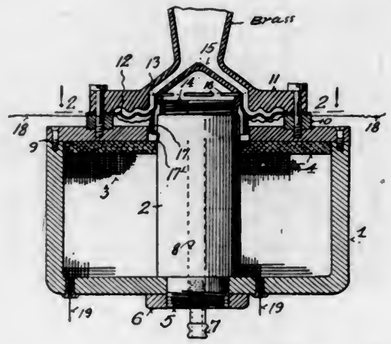
1. In a single acting three-cylinder reciprocating pump having pistons in its cylinders, means for reciprocating said pistons to deliver from the pump a strictly uniform flow of fluid, said means comprising an edge cam for each piston rotatable about an axis, each said cam having a surface with high and low points or points of maximum and minimum distance from the axis of rotation, said high and low points being spaced by substantially 120°.

1,766,611. RELAY. SALISBURY M. DAY, Rochester, N. Y., assignor to General Railway Signal Company, Rochester, N. Y. Filed Mar. 19, 1925. Serial No. 16,747. 11 Claims. (Cl. 200—104.)



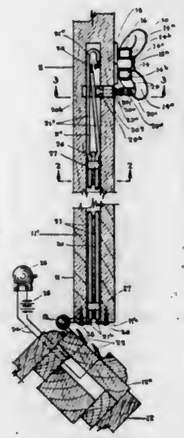
1. An approach light signal relay for connection to the track in series with a track circuit battery bridged directly across the rails of a railway track comprising, a shell of magnetic material, a magnetizable core threaded into said shell so as to be vertically adjustable therein, a hinged armature adapted to move toward and away from said core and shell, a coil on said core which when energized causes said armature to be attracted toward said core and shell, and a coil spring surrounding said core for holding said coil against said shell.

1,766,612. SOUND-REPRODUCING DEVICE. LEE DE FOREST, New York, N. Y., assignor, by mesne assignments, to General Talking Pictures Corporation, a Corporation of Delaware. Filed Dec. 10, 1927. Serial No. 239,017. 13 Claims. (Cl. 179—113.)



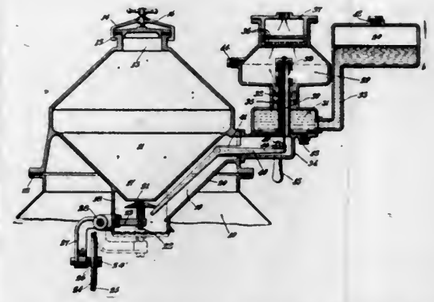
1. In a sound reproducing device employing compressed air, the combination with means for producing a magnetic field of means under the influence of said means for controlling the escape of compressed air for producing sounds.

1,766,613. SIGNAL DEVICE. FAYE DE LASHMÉ, Palisades Park, N. J. Filed Nov. 23, 1927. Serial No. 235,183. 2 Claims. (Cl. 177—333.)



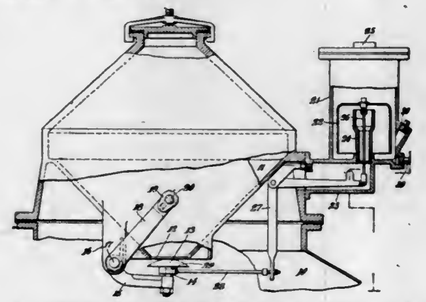
1. A device of the kind described comprising a hinged door having a recess extending from the hinged edge of the door between the inner and outer sides thereof, a knocker having an anvil and a pivoted striker for bearing against the anvil mounted on the exterior side of the door, an electrically operated signal device including a control switch extending into said recess, and a movable member under control of said knocker extending into said recess to control said switch.

1,766,614. ACETYLENE GENERATOR. EARL M. EVLETH, Grand Haven, Mich., assignor to The Bastian-Blessing Company, Chicago, Ill., a Corporation of Illinois. Filed June 24, 1925. Serial No. 39,177. 23 Claims. (Cl. 48—38.)



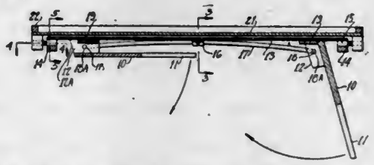
1. An acetylene generator, including a carbide chamber having a carbide outlet, a water chamber adapted to receive the carbide, a carbide feed valve of the poppet type movable vertically in respect to the outlet to open or closed position, means for limiting the opening movement of said valve whereby when at rest it prevents the flow of a continuous stream of carbide from said carbide chamber to the water chamber and means operated by the flow of generated gas for agitating said valve to effect feeding action.

1,766,615. ACETYLENE GENERATOR. EARL M. EVLETH, Grand Haven, Mich., assignor to Bastian-Blessing Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 10, 1927. Serial No. 160,040. 4 Claims. (Cl. 48—53.)



1. An acetylene generator including a carbide chamber, a gas generating chamber, a carbide feed valve of the poppet type movable vertically to open or closed position, said valve being of such size and such positioning when in full open position as to prevent the flow of a continuous stream of carbide from said carbide chamber to said gas generating chamber, and means for oscillating the valve about its axis to effect a feeding action of the carbide.

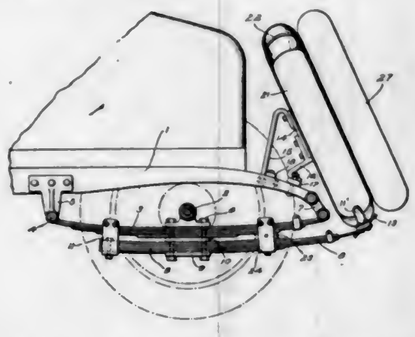
1,766,616. TABLE. JOHN N. PARIS, Portland, Oreg. Filed Apr. 28, 1928. Serial No. 278,559. 1 Claim. (Cl. 45—74.)



A table having a top provided with cleats secured to the under side of two opposite edges, a pair of legs for

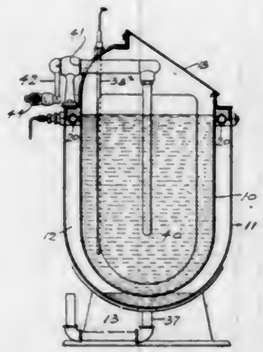
supporting said table, each of said legs having a pair of cleats secured to its upper innermost corners, a pair of springs secured to the under side of said table top having inturned ends journaling in said leg cleats in a manner to form a yieldable pivotal support therefor, and a stop cleat adjacent each table top cleat adapted to engage the inner side of its respective leg when in a table supporting position.

1,766,617. VEHICLE. THOMAS J. FAY, Brooklyn, N. Y. Filed Aug. 7, 1925. Serial No. 48,703. 17 Claims. (Cl. 267—31.)



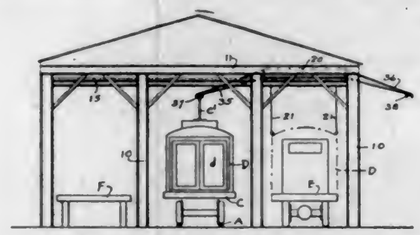
1. In a vehicle construction having a chassis frame part, an axle part, and a spring suspension device between said parts pivotally connected to said axle part, a resilient arm secured at one end to said device and having a projecting free portion thereof, additional means interposed between the chassis frame part and the free portion of said arm, whereby the latter will resiliently oppose any relative movement of said part and means for varying the effective length of the free portion of said arm to vary the resilient opposition to relative movement of said parts.

1,766,618. HEAT-EXCHANGE APPARATUS. HARVEY FELDMEIER, Little Falls, N. Y., assignor, by mesne assignments, to Cherry-Burrell Corporation, Wilmington, Del., a Corporation of Delaware. Original application filed Oct. 10, 1921, Serial No. 506,647. Divided and this application filed Aug. 4, 1925. Serial No. 48,159. 6 Claims. (Cl. 257—55.)



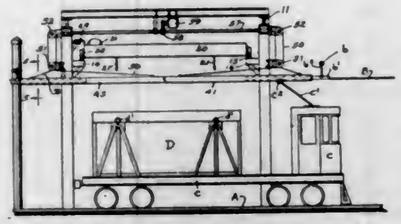
1. In an apparatus for changing the temperature of a substance, in which a flowing temperature changing medium is used, the combination of a vat containing the substance, discharge means arranged to produce a flowing film of the temperature changing medium on the outer surface of said vat, means associated with said discharge means to form a closed circuit in which said medium is adapted to circulate, means for directing into said circuit at one point thereof, a driving fluid jet to circulate said temperature changing medium through said circuit continuously, means for controlling said driving jet to regulate the rate of flow of the temperature changing medium, and means for admitting to said circuit at another point thereof a supplemental fluid jet which alters the temperature of said circulating medium and is controllable independently of said driving jet for regulating the temperature of said circulating temperature changing medium.

1,766,619. APPARATUS FOR TRANSFERRING FREIGHT. BENJAMIN F. FITCH, Greenwich, Conn., assignor to Motor Terminals Company, Wilmington, Del., a Corporation of Delaware. Filed Oct. 27, 1928. Serial No. 315,449. 12 Claims. (Cl. 191—36.)



1. In an apparatus for transferring freight, the combination of a railway track and a trolley wire above it, of a structure alongside of the railway track, and laterally movable traveling hoisting mechanism carried by such structure, the continuous trolley wire being replaced by a movable section carried by a laterally movable portion of the hoist at one side thereof, whereby the trolley wire may be substantially continuous while the load engaging portion of the hoist is in position for operation at the side of the railway track.

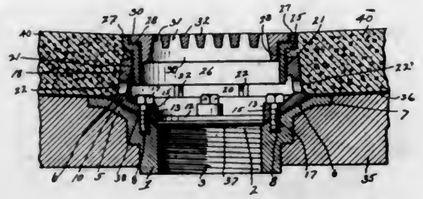
1,766,620. APPARATUS FOR TRANSFERRING FREIGHT. BENJAMIN F. FITCH, Greenwich, Conn., assignor to Motor Terminals Company, Wilmington, Del., a Corporation of Delaware. Filed Feb. 9, 1929. Serial No. 338,680. 15 Claims. (Cl. 191—36.)



1. In an apparatus for transferring freight, the combination of a superstructure, a traveling crane carried thereby, and two slidable trolley wheel guides carried by the superstructure and adapted to stand in registration or to be moved longitudinally of the trolley wire to clear a space for the depending member of the traveling crane.

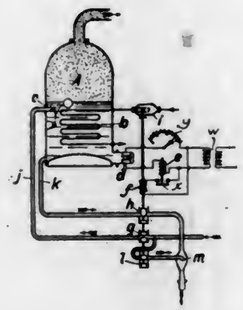
1,766,621. CONVERTIBLE DRAIN FITTING. WELLS S. FLEMING, Portland, Oreg. Filed July 31, 1928. Serial No. 296,451. 2 Claims. (Cl. 285—37.)

1. A drain fitting, consisting of a tubular body formed with a lateral flange the upper face of which has a conical depression, an annular clamping plate having a bottom conforming with said depression and adapted to be secured on said flange with a sheet of water proofing material therebetween, said clamping plate having an integral wall extending upwardly, formed with drain openings at its base, and an inward projection at the top overhanging



its interior chamber, said projection provided with interior screw-threads, a drain section having an external screw-thread adjustable in said wall, and a strainer plate seated in the upper end of said drain section having an annular skirt extending downwardly within the wall of said drain section.

1,766,622. AUTOMATIC CONTROL FOR EVAPORATORS. OTTO FREY, Windisch, Switzerland, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland, a Joint Stock Company of Switzerland. Filed Feb. 10, 1926, Serial No. 87,467, and in Germany Feb. 14, 1925. 5 Claims. (Cl. 159—44.)

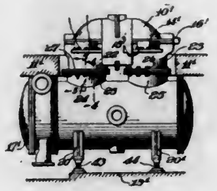


1. Evaporating apparatus, comprising, in combination, an evaporating container, a heat supply, a liquid supply pipe, a drain pipe, valves operable respectively to govern the heat supply and liquid-flow through said pipes, and automatically operating means common to said valves and governed by the degree of concentration in the evaporator for operating said valves.

2. The combination with a plurality of evaporators operating in parallel, each having a drainage outlet, of control mechanism for the respective outlets, and automatically operating means associated with each evaporator and governed by the concentrate contained in said evaporator for operating its control mechanism and inhibiting operation of the others.

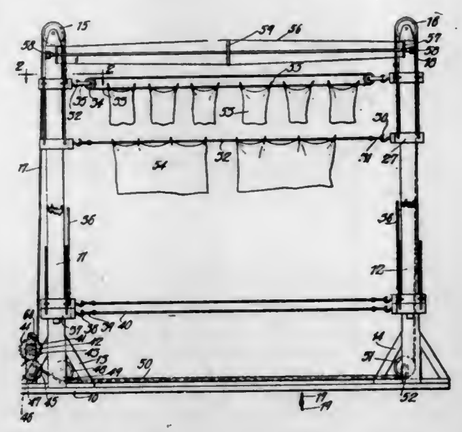
1,766,623. STEAM-POWER PLANT. OTTO FREY, Windisch, Switzerland, assignor to Aktiengesellschaft Brown, Boveri & Cie., Baden, Switzerland, a Joint-Stock Company. Filed Feb. 23, 1928, Serial No. 256,196, and in Switzerland June 16, 1927. 14 Claims. (Cl. 60—95.)

2. In a steam power plant, a supporting foundation, a steam turbine having a casing seated on said foundation for expanding and contracting action in a substantially horizontal plane and provided with a pair of downwardly-directed exhaust connections, a condenser arranged below said turbine and having a casing disposed for such action in substantially a horizontal plane and provided with a pair of upwardly-directed inlet connections complementary respectively to said turbine-exhaust connections, one of said condenser-inlet connections seating firmly against and being rigidly secured to its associated turbine-exhaust connection and providing therewith a fluid-tight operating connection between said casings, the other of said condenser-inlet connections seating firmly against its associated turbine-exhaust connection and being freely



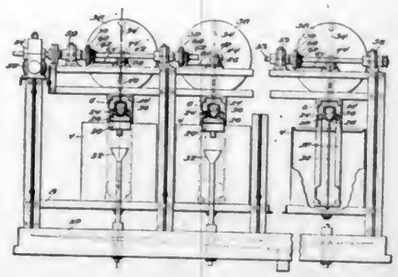
movable with respect thereto in such plane while providing with the same a second operating connection between said casings, means interposed between said last-mentioned connections and cooperating therewith to render said second operating connection fluid-tight, and means providing for application to said condenser casing of a substantially vertically-directed supporting force and being operable to exert such force while permitting of expanding and contracting action of said condenser casing in a vertical plane.

1,766,624. WASH-HANGING APPARATUS. JOSEF FROHMANN, Newark, N. J. Filed Dec. 6, 1926. Serial No. 152,865. 1 Claim. (Cl. 68—3.)



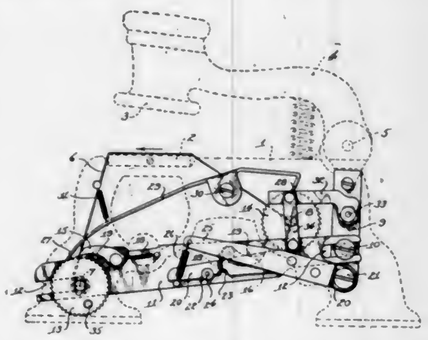
A clothes drier comprising vertical posts spaced from each other, upper and lower cross bars bearing against said posts and having forks straddling the posts, the upper cross bars and their forks being slidable along the posts towards and away from the lower cross bars, frames connecting the upper and lower forks each having a bridge extending transversely above the upper forks and depending arms secured to the lower forks, eyes at the sides of the upper forks slidably receiving said arms, guide rollers carried by said posts, cables connected with the upper cross bars and engaged with said rollers and extended down the posts, means to draw upon said cables to raise the upper cross bars and clothes line extending between the posts and connected with the cross bars.

1,766,625. REAGENT FEEDER. JAMES F. GEARY, Salt Lake City, Utah. Filed Dec. 1, 1925. Serial No. 72,595. 24 Claims. (Cl. 221—97.)



1. A reagent feeder comprising a plurality of vertically reciprocating buckets each adapted to feed a portion of the contents from a tank, means for tipping each bucket as it approaches the top of its stroke, means for reciprocating each bucket through a predetermined stroke, and means for relatively varying the speeds of the different buckets with respect to one another.

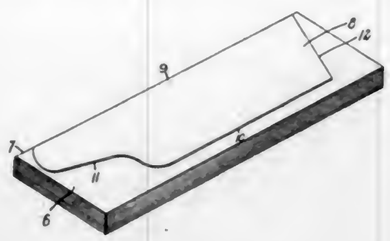
1,766,626. AUTOMATIC RIBBON-REVERSING MECHANISM. GORDON G. GLASGOW, San Francisco, Calif. Filed Feb. 2, 1929. Serial No. 337,088. 5 Claims. (Cl. 101—336.)



1. In a printing machine having a movable printing member and an ink ribbon; a pair of spaced spindles upon which said ribbon is wound; a ratchet wheel secured upon each spindle; a non-oscillating reciprocable elongated bar extending between said spindles; pawls mounted directly and movably upon said bar for selectively operating said ratchet wheels according to the position of said bar in its range of movement; and a connection between said bar and said printing member, said connection being shiftable to cause said bar to reciprocate, upon the movement of said member, near one end or the other of said range of movement.

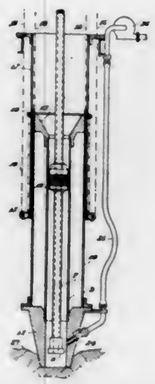
1,766,627. METHOD OF MANUFACTURING LININGS FOR MOLDED BOOTS. ALFRED A. GLIDDEN and THOMAS M. KNOWLAND, Watertown, and WILLIAM J. DUFFY, Melrose, Mass., assignors, by mesne assignments, to Hood Rubber Company, Inc., Wilmington, Del., a Corporation of Delaware. Filed Feb. 15, 1929. Serial No. 340,281. 1 Claim. (Cl. 12—142.)

The method of making a lining for a rubber boot which consists in folding a sheet of material on an approximately straight line, then severing the two thicknesses of said material thus folded along a predetermined path including a pair of reverse curves oppositely and reversely disposed, the said path terminating at its opposite ends adjacent said fold line, then severing the length of material



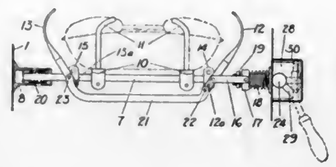
thus obtained transversely thereof between said reverse curves and sewing the cut edges of the pieces thus obtained together for a portion of their length including said reverse curves, thus providing a pair of tubular articles with one end of each closed.

1,766,628. SUBAQUATIC DRILL. WILLIAM D. GRANT, Vancouver, British Columbia, Canada. Filed Aug. 6, 1928. Serial No. 297,893. 3 Claims. (Cl. 255—51.)



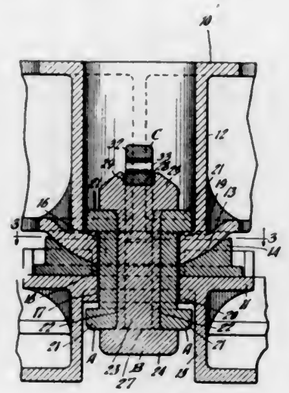
1. The combination with a subaquatic drill rod to which an endwise reciprocating motion is imparted, of two cylindrical casings surrounding said drill rod, the outer of the said casings being of the nature of a hollow column surrounding the inner casing, the said outer casing being in two parts telescopically connected and being adapted to act as a "spud" in connection with an operating scow for the said drill, a substantial closure member between the lower extremities of the said casings and having a conical exterior whereby it tends to seat and centre itself into the rock cavity formed by the drill, a second closure member between the top extremities of the said inner casing and the said outer casing formed with a conical recess on its upper surface whereby the entrance of the drill head may be self-centred below water level, means for the telescopic adjustment of the said outer casing from the deck of the said scow, a stopper member of the nature of a slidably adjustable stuffing box piston fitting the said inner casing and said drill rod whereby fluid pressure enclosed in the cavity of the said inner tube below said stopper may be intensified by the reciprocating action of the said stopper, an aperture in said bottom closure member connected to a source of vacuum whereby the detritus from the said drill rod may be withdrawn as desired.

1,766,629. BEDPAN CLEANER. GEORGE F. HALL, Erie, Pa., assignor to American Sterilizer Company, Erie, Pa., a Corporation of Pennsylvania. Filed Oct. 15, 1924. Serial No. 743,826. 10 Claims. (Cl. 141—1.)



1. In a bed pan cleaner, the combination of a closed case; a pan frame in the case; a shaft on which the frame is mounted; clamping fingers pivotally mounted on the shaft; a link connecting the fingers and communicating movement from one to the other; and means operating on one of the fingers to clamp the pan on the frame.

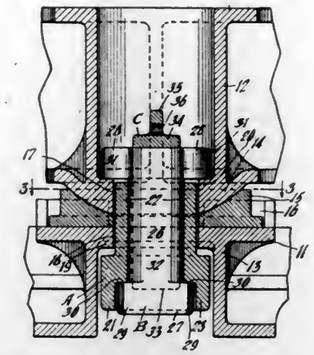
1,766,630. CAR CONSTRUCTION. STACY B. HASELTINE, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed Jan. 24, 1929, Serial No. 334,693. Renewed Dec. 5, 1929. 11 Claims. (Cl. 105—200.)



1. In car construction, the combination with body and truck bolsters having aligned center pin openings, each bolster having a shoulder adjacent its opening; of a center pin including a plurality of sections and a filler member for holding said sections apart, said sections each having means at the opposite ends thereof adapted to overlap and engage the shoulders of said bolsters, respectively, said filler member having a head at one end, the shape of said head being such that it may be inserted between said sections in one position, but is prevented from passing therebetween when given a partial turn to prevent removal of said member in one direction, said filler member having means at the other end to prevent removal in the opposite direction.

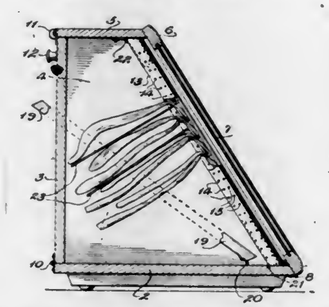
1,766,631. CAR CONSTRUCTION. STACY B. HASELTINE, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed Jan. 24, 1929, Serial No. 334,694. Renewed Dec. 5, 1929. 5 Claims. (Cl. 105—200.)

1. In car construction, the combination with body and truck bolsters having aligned center pin receiving openings; of a center pin provided with heads at opposite ends having shouldered engagement with the body and truck bolsters, respectively, each of said heads having a shank portion extending therefrom, one of said shanks having an opening and the head thereof being hollow, the



other shank extending through said opening and having locking means at the end thereof projecting into the hollow head and having shouldered engagement therewith.

1,766,632. DISPLAY CABINET. DODSON HASLUP, Grafton, W. Va. Filed Jan. 19, 1928. Serial No. 247,940. 6 Claims. (Cl. 312—128.)



6. In a display cabinet a pair of apertured substantially upright bars and a plurality of pins removably mounted in overlapping pairs in said apertures, whereby a plurality of flexible articles may be doubled over said pins with their display surfaces overlapping.

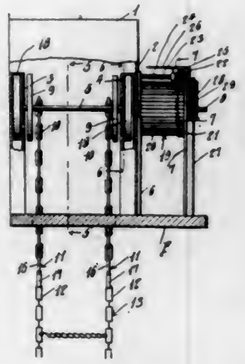
1,766,633. APPARATUS FOR HEAT-TREATING METAL ARTICLES. THOMAS R. HEYWOOD, Jr., Pittsburgh, Pa. Filed July 19, 1929. Serial No. 379,584. 2 Claims. (Cl. 263—6.)

2. In combination with a continuous heat treating furnace and conveyor means in the furnace for moving through the furnace metal to be heat treated, a carrier sheet engageable with and carried by the conveyor means and adapted to carry thereon and through the furnace metal articles to be treated, the carrier sheet being composed of an alloy having high resistance to oxidation and scaling as compared to iron or steel at the temperatures to which it is subjected in the furnace, and having throughout substantially its full serviceable life the property of transmitting heat to articles thereon substantially uniformly to and from all surfaces of the articles being treated which make contact with the alloy carrier sheet.

1,766,634. TIRE-CHAIN CARRIER FOR MOTOR VEHICLES. MAMIE E. HILL, Walden, Colo. Filed Mar. 22, 1928. Serial No. 263,703. 4 Claims. (Cl. 242—107.)

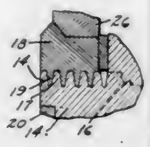
2. A tire chain carrier for vehicles, comprising a shaft suitably journaled and adapted to wind a tire chain there-

on, a spring motor to rotate the shaft to wind the chain, a drum secured for rotation with the shaft, said drum having a ratchet face and a gear face, a pawl engaging said ratchet face to hold the shaft from rotation by said



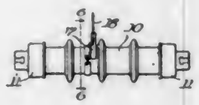
spring motor, a screw shaft threadedly engaging and pivoting the pawl, a pinion secured to said screw shaft and meshing with said gear face, and an arm engageable with the pawl to hold it from engagement with the drum during winding rotation of the shaft.

1,766,635. PIN THREAD FOR DISK-BIT MOUNTINGS. HALL H. HOLDAWAY, Long Beach, Calif., assignor to Byron Jackson Co., West Berkeley, Calif., a Corporation of Delaware. Filed July 26, 1927. Serial No. 208,498. 1 Claim. (Cl. 85—1.)



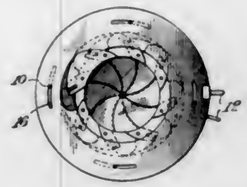
In combination, a body, a metal pin projecting from the body and provided with external threads, a metal nut having internal threads, the nut being a more easily replaceable member than the pin, the threads of the nut and the threads of the pin closely fitting substantially throughout the length of the threads of the nut to maintain and secure frictional coupling of the nut and pin releasable at will to permit removal of the nut from the pin, and the threads on the pin being of substantially greater cross-sectional area than the threads of the nut.

1,766,636. INSULATOR GUARD. JOHANNES HOLZEL, Pasing, near Munich, Germany, assignor to A. G. Brown Boveri & Cie., Baden, Switzerland, a Joint Stock Company of Switzerland. Filed Oct. 8, 1926, Serial No. 140,226, and in Germany Oct. 19, 1925. 3 Claims. (Cl. 173—318.



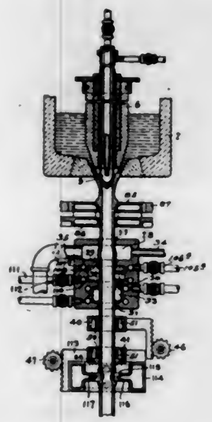
1. The combination with a line insulator having connection members at its ends, of a hoop mounted on the insulator between the connection members and radially extending portions carried by the hoop, said radial portions extending from said hoop for such distance as to prevent short circuiting of the connection members.

1,766,637. COLOR LAMP. LESTER H. HOPEWELL, Brooklyn, N. Y. Filed May 4, 1928. Serial No. 275,054. 9 Claims. (Cl. 240—3.)



5. In a device for controlling the color of light rays, a frame comprising a plurality of spaced discs having aligned central openings through which the light rays may be projected, a plurality of supporting rods extending through other openings in the frame discs, a plurality of other or operating discs associated with each of the frame discs, said operating discs being mounted between the frame discs and having central openings aligned with the central openings of the frame discs and also having arcuate slots through which the supporting rods may extend, a plurality of translucent blades pivotally mounted on each frame disc around its central opening and operatively associated with the operating discs to be rocked thereby to extend into the path of the light rays, and means individual to each screen for actuating the operating discs of that screen.

1,766,638. DRAWING GLASS TUBING. GEORGE E. HOWARD, Butler, Pa., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed May 28, 1923. Serial No. 642,021. 74 Claims. (Cl. 49—17.1.)

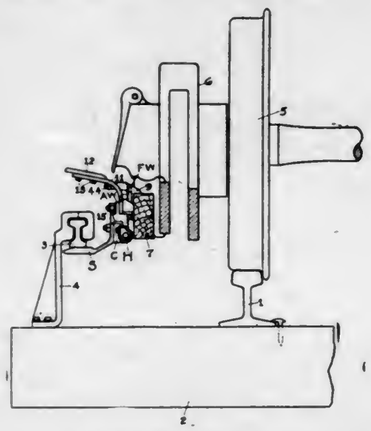


26. Apparatus for drawing glass tubing comprising means for causing molten glass to flow downwardly in an annular stream, a former for shaping the descending stream into a tube of approximately the desired diameter, means for subjecting the initially formed tube to sub-atmospheric pressure, a plurality of spaced sizing members for compressing the tube to its final diameter, and means for applying sub-atmospheric pressure to said tube in the intervals between said sizing members.

33. Apparatus for drawing glass tubing comprising means for establishing a descending annular stream of molten glass, means for forming said stream into a solidified tube, and means for applying downward traction to the said tube, said traction means comprising two clamps, means for reciprocating each of said clamps vertically, and a burner carried by one of the said clamps for severing the glass tube into lengths.

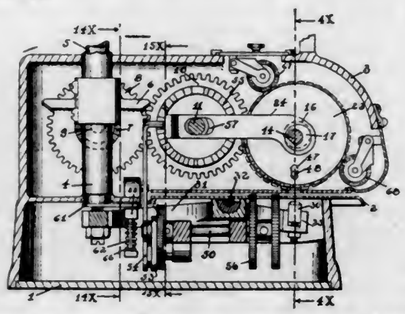
34. Apparatus for drawing glass tubing compring a receptacle having a downwardly opening discharge outlet; an annular member disposed below said outlet and adjustable vertically therebeneath, said annular member, when in its upper position, forming a substantial continuation of said discharge outlet, means for cooling said annular member, and a vertically adjustable plug disposed above said discharge outlet and having a lower end adapted to chill the glass flowing in contact with said lower end.

1,766,639. CONTACT SHOE. WINTHROP K. HOWE, Rochester, N. Y., assignor to General Railway Signal Company, Rochester, N. Y. Filed Dec. 1, 1928. Serial No. 323,112. 9 Claims. (Cl. 191—49.)



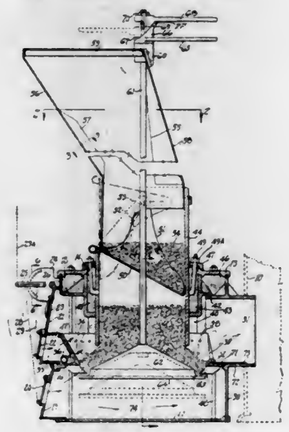
1. In a contact shoe for third rails, in combination, a fixed wash board, a movable wash board adjustably carried by said fixed wash board, a separate carrier pivoted to said movable wash board, a contact shoe rigidly removably clamped to said carrier, an integral tongue on said carrier extending upwardly and rearwardly, resilient means positioned between said tongue and said movable wash board to bias said contact shoe in one direction, and an integral stop on said movable wash board positioned in the path of movement of said tongue to thus limit the biased movement of said contact shoe.

1,766,640. CHECK WRITER. ALFRED E. ISCHINGER, Philadelphia, Pa. Refiled for abandoned application Serial No. 265,219, filed Dec. 4, 1918. This application filed Mar. 18, 1926. Serial No. 95,814. 13 Claims. (Cl. 197—6.4.)



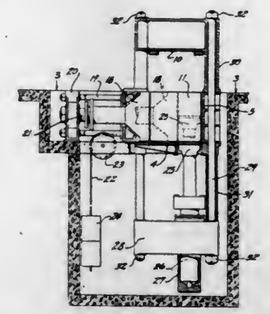
1. In a printing machine, the combination of a shaft, two printing wheels mounted thereon, and connections between one of said wheels and the shaft whereby on the turning of the shaft the wheel is shifted radially with reference to the other wheel for the purpose of selecting the one or the other of said wheels for a printing operation.

1,766,641. BURNER FOR HARD FUEL. ANDREW O. JACKSON, Portland, Oreg. Filed Jan. 26, 1928. Serial No. 249,517. 5 Claims. (Cl. 110—29.)



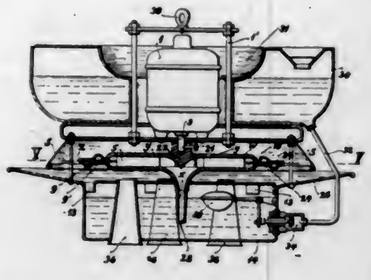
1. A burner having an upright fuel magazine and having an outwardly sloping floor each of which is vertically movable independently of the other and having a perforated grate around said floor between which and said floor fuel falling from said magazine can be burned and means for controlling the supply of air through said perforated grate into the combustion area.

1,766,642. BALING PRESS. HENRY JACOBSON, Wauwatosa, and CHARLES J. KRUSE, Milwaukee, Wis., assignors to Logemann Brothers Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed June 9, 1927. Serial No. 197,625. 2 Claims. (Cl. 78—42.)



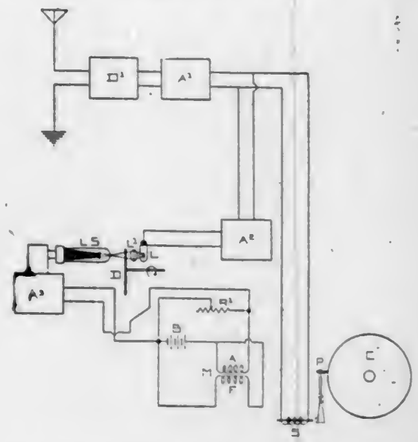
1. In a baling press, the combination with a press box having a closed end and a removable cover, of a pressing member working in said box toward said closed end, a second pressing member working in said box at right angles to said first pressing member and said end, and a third pressing member working in said box at right angles to and across the faces of said first and second pressing members and said end.

1,766,643. FLUID-MIXING DEVICE. PAUL JANES, Vienna, Austria. Filed Mar. 1, 1928, Serial No. 258,235, and in Austria July 30, 1927. 8 Claims. (Cl. 261—91.)



1. In an apparatus for the production of an intimate mixture of several media comprising a rotatable wheel, means for supplying the media to such rotatable wheel, means for imparting to such rotatable wheel, a rapid rotary movement, means provided in the rotatable wheel for imparting to the media supplied to the said rotatable wheel a rapid rotary movement, an opening at the periphery of such rotatable wheel for the mixture of media to escape therethrough, and a shield provided in and inclined to the path of flow of the mixture, such shield consisting of a porous material.

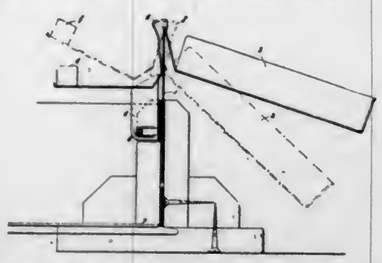
1,766,644. SYNCHRONIZING SYSTEM. CHARLES FRANCIS JENKINS, Washington, D. C., assignor to Jenkins Laboratories, Washington, D. C., a Corporation of the District of Colmbia. Filed July 21, 1927. Serial No. 207,515. 8 Claims. (Cl. 178—53.)



1. In a synchronizing system the combination of means for producing synchronizing current variations, a motor to be synchronized, a source of current for operating said motor, means for translating said current into corresponding light variations, means to translate said light variations in the current variations in the motor circuit, and means controlled by the motor to vary the effect of said light variations upon the current in the motor circuit.

1,766,645. CONVEYER FOR SHOES AND THE LIKE. KARL ALAIN ABRAHAM JOHANSSON, Stockholm, Sweden. Filed June 21, 1928, Serial No. 287,116, and in Sweden June 21, 1926. 1 Claim. (Cl. 198—19.)

A conveyer of the character described comprising, a conveyer belt, a shoulder or stop adjacent said belt, and a work supporting member including a fork-like portion, said member being adapted to be supported in a plurality of positions upon said belt, a container on one branch of the fork-like portion, and a counter balance on the

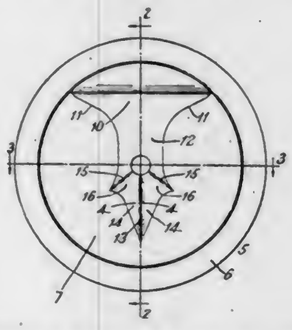


other branch of said portion, whereby the member will rest in one position when the container contains a piece of work, and in another position when the container is empty.

1,766,646. METHOD AND MATERIAL FOR PREVENTING THE TARNISHING OR SILVERWARE. GRINNELL JONES, Cambridge, Mass., assignor to Pacific Mills, Lawrence, Mass., a Corporation of Massachusetts. Filed July 11, 1929. Serial No. 377,629. 17 Claims. (Cl. 23—241.)

1. A fabric for protecting silverware from tarnish comprising a material suitable for wrapping, impregnated with a silver constituent in a combination or condition which will combine with the tarnishing gases in the atmosphere accessible to the silverware wrapped therein.

1,766,647. REFLECTOR FOR HEADLIGHTS. RUDOLPH JURGENSON, Boston, Mass. Filed Aug. 21, 1928. Serial No. 301,107. 2 Claims. (Cl. 240—41.)

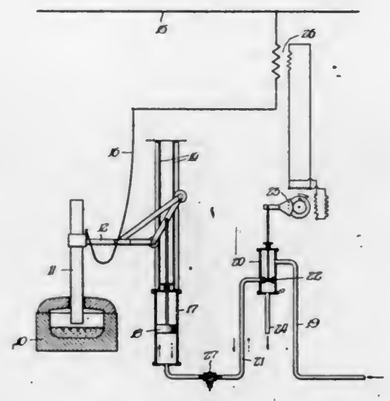


1. A reflector for a headlight having, in combination, a main parabolic reflecting surface, a plane downwardly and rearwardly inclined reflecting surface above the axis of the reflector and intersecting said parabolic surface, and a plurality of ridges having flat inclined sides projecting outwardly from the parabolic reflecting surface below the axis of the reflector and adjacent to the central portion of the reflector and adapted to reflect rays of light emanating from a source of light at the focal point of the reflector downwardly toward the front and sides.

1,766,648. REGULATION OF FURNACE ELECTRODES. GOTTLIEB KELLER, Brugg, Switzerland, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland, a Joint-Stock Company of Switzerland. Filed Sept. 30, 1926, Serial No. 138,745, and in Germany Oct. 16, 1925. 5 Claims. (Cl. 266—1.5.)

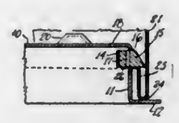
1. In an electric furnace, the combination with a movable electrode carrier and an electrode mounted thereon,

of a power cylinder for controlling the position of the carrier, a regulating device responsive to variations in the electrical power taken by the electrode for regulating flow of liquid under pressure to and from the cylinder,



and a throttling device in the supply line between the power cylinder and regulating device, said throttling device opening under pressure of liquid flowing to the power cylinder and partially closing under pressure of liquid flowing from the power cylinder.

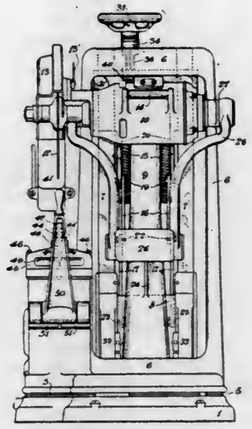
1,766,649. BURIAL VAULT. FRED C. KING, Portland, Oreg. Filed July 25, 1928. Serial No. 295,194. 1 Claim. (Cl. 27—35.)



A burial vault having in combination an elevated base having upright side walls and horizontal outwardly extending lower edges, a plurality of latches disposed around said side walls above said outwardly turned edges, each of said latches consisting of a flat spring secured on the inner side of said elevated base having a latch formed on each end thereof projecting freely through the side wall of said base giving access to said spring from the under side of said base, means for holding said latch in a retracted position consisting of a pin passing through the top of said base into said latch member, a cover for said vault having vertical side walls and an upwardly turned U-shaped bottom edge, the innermost portion of said edge forming a shoulder for engagement with said latch, and the lowermost portion of said edge normally resting upon said outwardly turned base edge.

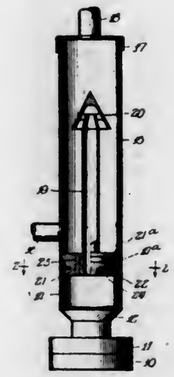
1,766,650. WOODWORKING MACHINE. FREDERICK J. KISTNER and WILLIAM S. WILLIAMS, Cincinnati, Ohio, assignors to The J. A. Fay & Egan Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Apr. 9, 1929. Serial No. 353,768. 6 Claims. (Cl. 143—6.)

6. In a straight line cut off saw, the combination of a base having an upwardly extending hollow post, a column pivotally received upon said post, means for adjusting said column vertically upon said hollow post comprising a thrust bearing carried by said post, a disc resting upon said thrust bearing, a threaded bolt, the lower end of which is adapted to rest upon said disc and the threaded portion of which engages a corresponding threaded portion within said column whereby when said bolt is rotated within said col-



umn, said column is raised or lowered with respect to said base, depending upon the direction in which said hollow bolt is rotated.

1,766,651. MERCURY-VAPOR VACUUM PUMP. ERNST KOBEL, Baden, Switzerland, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland, a Joint-Stock Company of Switzerland. Filed Aug. 21, 1926, Serial No. 130,627, and in Germany Sept. 9, 1925. 4 Claims. (Cl. 230—101.)

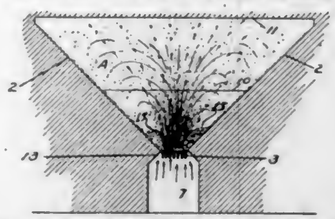


1. In a vacuum pump, in combination, a vapor generator, a pump casing connected thereto, said casing having an air inlet and air outlet, a nozzle mounted in the casing with its discharge end between the air inlet and the air outlet, said casing being free of internal obstructions between the air inlet and the discharge end of a nozzle.

1,766,652. MEANS FOR BURNING PULVERIZED FUEL. FRITZ KOCH, St. Paul, Minn. Filed Dec. 26, 1924. Serial No. 758,250. 7 Claims. (Cl. 110—28.)

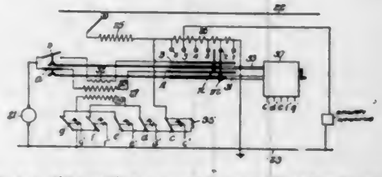
7. A furnace for burning pulverized fuel, comprising a combustion chamber having downwardly converging spaced side walls, a fuel supporting grate connecting the lower portion of the side walls, fuel feeding means for said

grate, and air blast means disposed below said grate for agitating and depositing a portion of the fuel upon the side walls of the combustion chamber whereby the fuel



is moved by gravity toward said grate and in the path of the air blast in continually recurring cycles until consumed.

1,766,653. ALTERNATING-CURRENT CONTROL SYSTEM. JOHANNES KUBLER, Baden, Switzerland, assignor to A. G. Brown Boveri & Cie., Baden, Switzerland, a Joint Stock Company of Switzerland. Filed Feb. 3, 1927, Serial No. 165,725, and in Switzerland Mar. 10, 1926. 7 Claims. (Cl. 171—119.)



1. In an alternating current control system comprising a transformer having a plurality of taps for deriving therefrom a plurality of increasing voltages, a load having one terminal permanently connected to said transformer and means for connecting the other terminal of said load to the taps of said transformer, said means comprising switch means for establishing successive connections with the taps of said transformer and an arcing switch connected between said switch means and said load, means for varying the voltage impressed upon said load in steps smaller than the steps between the taps of said main transformer, said means comprising an auxiliary transformer having a primary winding and a secondary winding connected between said switch means and said arcing switch, and means providing for either short-circuiting said primary winding or for supplying the same with a voltage component to act additively or subtractively with respect to the voltage derived from the taps of said main transformer.

1,766,654. TRANSFORMER COOLING APPARATUS. JOHANNES KUBLER, Baden, Switzerland, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland, a Joint Stock Company of Switzerland. Filed Oct. 28, 1927, Serial No. 229,303, and in Germany Nov. 13, 1926. 2 Claims. (Cl. 257—191.)



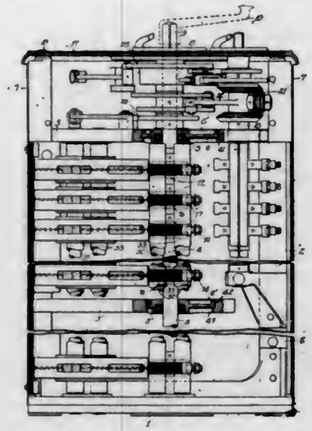
1. In transformer cooling apparatus, a casing, a radiator unit comprising a plurality of vertically disposed laterally spaced tubular elements communicating at their upper and lower ends with the interior of said casing, a fluid discharge member disposed at one end of said unit intermediate said elements and arranged to direct cooling fluid in a direction substantially longitudinally of said unit from said end thereof toward the opposite end of the same, said elements converging in said direction to form a contracting passage for said fluid, and means for supplying cooling fluid under pressure to said member for discharge therefrom in said direction.

1,766,655. COOLING DEVICE. JOHANNES KUBLER, Baden, Switzerland, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland, a Joint Stock Company of Switzerland. Filed Jan. 2, 1929, Serial No. 329,917, and in Germany Jan. 2, 1928. 2 Claims. (Cl. 257—191.)



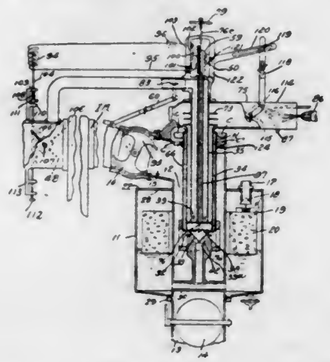
2. In a cooling device for inclosed electrical apparatus immersed in an insulating fluid, an upper and a lower header adapted to communicate with the enclosure for said apparatus, a plurality of tubes arranged at an angle to a vertical line through said headers and connected therewith to form a central passageway, a plurality of nozzles extending through said lower header and discharging into the central passageway within said tubes at different points, and a common conduit for guiding air under pressure to said nozzles.

1,766,656. ELECTRIC CONTROL APPARATUS. KARL KUNTZE, ARNOLD HALLER, and ERNST WIRZ, Baden, Switzerland, assignors to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland, a Joint Stock Company of Switzerland. Filed Apr. 1, 1927, Serial No. 180,299, and in Germany Apr. 3, 1926. 35 Claims. (Cl. 200—10.)



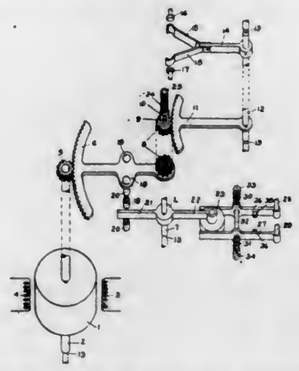
1. A controller comprising a control member movable over a predetermined path to a plurality of control positions, a plurality of control elements actuated by said control member in said positions, the number of simultaneously actuated control elements varying for the different positions and the resistance offered to the movement of said control member being dependent on the number of simultaneously actuated control elements, and compensating means for equalizing the variations of the resistance opposing the movement of said control member to cause said resistance to be substantially the same irrespective of the number of elements actuated by said control member in said positions.

1,766,657. CARBURETOR. LOGAN B. LAMPTON, Los Angeles, Calif. Filed Sept. 29, 1924. Serial No. 740,513. 6 Claims. (Cl. 261—12.)



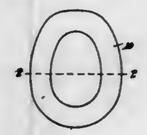
1. A carburetor comprising: a container for liquid fuel; a mixing chamber to which fuel is admitted by a delivery passage extending from said container; heating means comprising a substantially hollow heat conductive valve, placed near the outlet end of said fuel delivery passage and forming a restricted passage therewith; means for conducting exhaust gases into a heat conductive relationship with said valve and thermostatic means for controlling the heating effect of said gases with respect to said valve, said heat conductive valve being adapted to vaporize liquid fuel in the upper end of said delivery passage and to impart additional heat thereto during the passage of said vapors through said restricted passage.

1,766,658. RELAY-OPERATING MECHANISM. RICHARD C. LEAKE, Rochester, N. Y., assignor to General Railway Signal Company, Rochester, N. Y. Filed Mar. 25, 1926. Serial No. 97,369. 8 Claims. (Cl. 200—91.)



1. In an alternating current relay, in combination with a movable contact element having a neutral position and an energized position, a power operated element for moving said contact element to said energized position, a centering device for returning said contact element to said neutral position and including spring biased spaced arms, spaced pins, and a pivoted lever with its ends respectively positioned between said arms and pins, and means for dissipating the momentum acquired by said power operated element when moved by said centering device.

1,766,659. WATER-CLOSET SEAT AND THE LIKE. HOWARD C. LESLIE, Milton, Mass., assignor to B. R. E. Manufacturing Co., Hyde Park, Mass., a Corporation of Massachusetts. Filed Oct. 22, 1929. Serial No. 401,399. 7 Claims. (Cl. 4—237.)



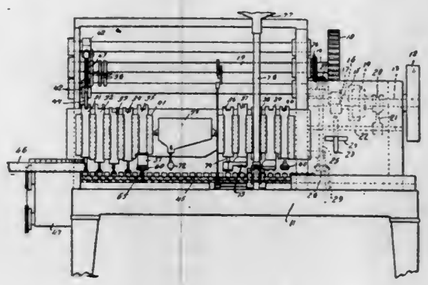
1. In an article of the class described, a wooden core having recesses in the corners thereof; strips of plastic material embedded in said recesses; and sheets of material such as celluloid cemented to the surfaces of said core and to the outer faces of said strips.

1,766,660. JIGGING CONVEYER. JOHN LITHGOE, Rawnscliffe, Sandal, Wakefield, England, assignor to British Jeffrey Diamond Limited, Wakefield, England, a British Company. Filed Dec. 6, 1927, Serial No. 238,115, and in Great Britain Dec. 14, 1926. 1 Claim. (Cl. 198—220.)



A jigging conveyer comprising a trough, rolling bodies on which the trough can reciprocate, a pair of stationary runways and a pair of movable runways, the latter being secured to the trough and disposed within the stationary runways so as to form with the stationary runways a housing for the rolling bodies, said movable runways having portions thereof cut away to enable the rolling bodies to engage the walls of the stationary runways.

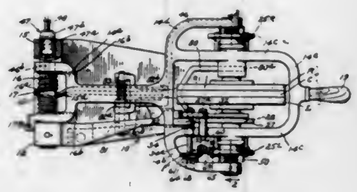
1,766,661. APPARATUS FOR MAKING DRY CELLS. ROBERT A. LORIG, Madison, Wis., assignor to Burgess Battery Company, a Corporation of Wisconsin. Filed Mar. 21, 1928. Serial No. 263,232. 5 Claims. (Cl. 153—2.)



1. Apparatus for assembling dry cells consisting essentially of means for advancing a zinc can to successive

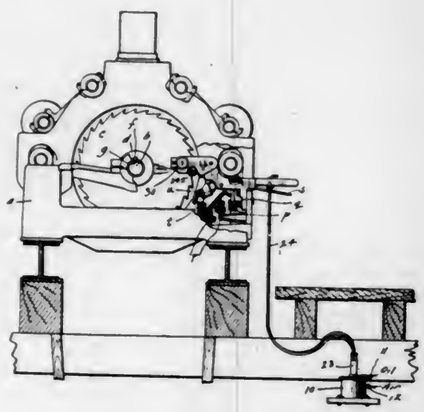
stations and causing it to pause at each of said stations, means for indenting the exterior of said can at spaced circumferential points near its top while pausing at one of said stations and means for crimping the upper edge of said can while pausing at another of said stations.

1,766,662. MARKING, PRINTING, AND EMBOSSING DEVICE. MAX A. G. LUEDTKE, Weehawken, N. J., and HUGO HOFFMANN, New York, N. Y. Filed Feb. 5, 1926. Serial No. 86,314. 30 Claims. (Cl. 41—7.)



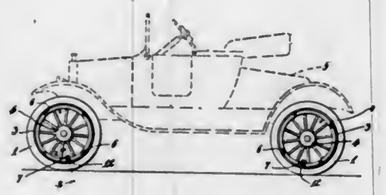
1. An apparatus of the character described comprising a plurality of sets of type elements, means for heating said elements, said means and each set of elements being mounted for individual relative rotary movement, at least one of said sets being slidably supported with respect to the other sets, and means for holding the last mentioned set while rotating the other sets to align the type elements in a desired sequence.

1,766,663. LUBRICATING MECHANISM FOR EDGER SAWS. EDWARD E. MCCLURE, Portland, Oreg. Filed July 28, 1928. Serial No. 295,888. 12 Claims. (Cl. 143—157.)



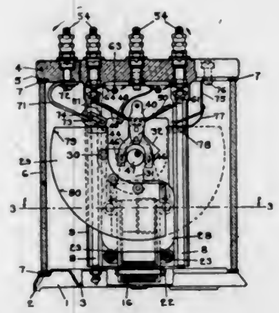
12. In an edger saw, the combination with the arbor, the edger saws slidably mounted thereon, and the shifter mechanism, of lubricating means for said arbor comprising a tank for holding lubricant, a chamber, means for feeding lubricant from said tank into said chamber, means for delivering air under pressure to said tank, and by-passing part of said air and delivering the same to said chamber, a tubular outlet from the chamber, air ports opening from said chamber into said outlet, an atomizer tube located in said outlet and extending downward into the lubricant contained in said chamber, a valve controlling the admission of lubricant into said chamber and a float in the latter controlling said valve, said shifter mechanism provided with a conduit terminating in a spray nozzle, and a manually operated valve controlling said conduit, said valve carried by said shifter mechanism.

1,766,664. TIRE LOCK. CHARLES A. MELOY, Santa Monica, Calif. Filed Feb. 25, 1927. Serial No. 170,834. 3 Claims. (Cl. 70—90.)



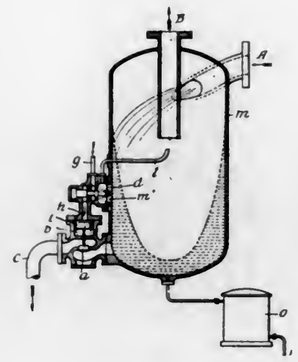
1. In a tire lock for locking a tire on a wheel, the combination of a pair of members adapted to be mounted over the rim of the wheel of a motor vehicle, the said members being formed with hooks at their engaging ends, one of said members having a shank and a key-operated lock having a bolt for engaging the side of said shank to lock the said members together.

1,766,665. ALTERNATING-CURRENT RELAY. JOSEPH FRED MERKEL, Rochester, N. Y., assignor to General Railway Signal Company, Rochester, N. Y. Filed Aug. 31, 1926. Serial No. 132,835. 25 Claims. (Cl. 175—30.)



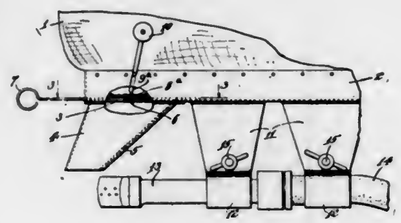
1. In a relay, a top plate, spaced side plates carried by the top plate, a horizontal carrier bar pivoted to the side plates, a vane spindle pivoted to the side plates and substantially parallel to the carrier bar, a vane on the spindle, portions of each side plate being cut away to form upstanding, integral, resilient arms between which the vane spindle is mounted, and an operating connection between the carrier bar and the vane spindle.

1,766,666. STEAM SEPARATOR. ADOLF MEYER, Kusnacht, near Zurich, Switzerland, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland, a Joint Stock Company of Switzerland. Filed June 7, 1926, Serial No. 114,066, and in Germany July 22, 1925. 13 Claims. (Cl. 183—42.)



1. In a separator, the combination with a receptacle, of means for revolving a body of liquid therein, an outlet valve, and means operable by centrifugal pressure of the revolving liquid for opening the valve.

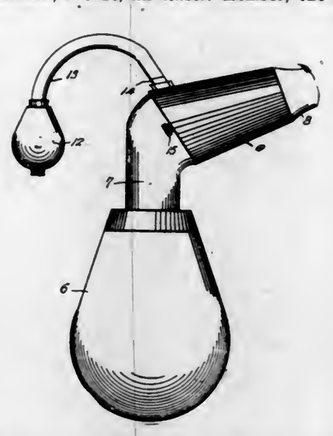
1,766,667. APPARATUS FOR SPREADING FERTILIZER. GEORGE F. MILLER, Los Angeles, Calif. Filed Mar. 6, 1928. Serial No. 259,407. 3 Claims. (Cl. 299—84.)



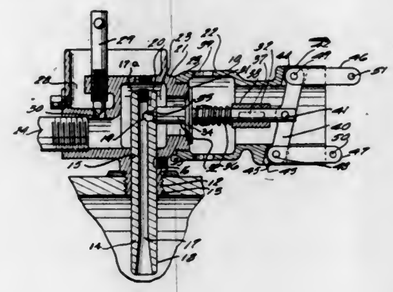
1. An apparatus for spreading finely divided fertilizing materials comprising, a receptacle for finely divided fertilizing material, an outlet in the bottom of said receptacle, means for detachably attaching the receptacle to a water hose and nozzle, said nozzle being adapted to discharge a flat stream of water, means for controlling the size of the opening in the bottom of said receptacle, a spout positioned beneath said opening and terminating above and in front of said nozzle, and means on the lower surface of said spout for uniformly distributing fertilizing material passing through said spout over the upper surface of the flat stream discharged by said nozzle.

1,766,668. MANUAL SYRINGE. PHILIP M. MILLER, Brooklyn, N. Y., assignor to Florence R. Miller, Brooklyn, N. Y. Filed Nov. 11, 1925. Serial No. 68,472. 11 Claims. (Cl. 128—246.)

1. A syringe comprising an elastic liquid container open at one end, an interchangeable elbow-shaped vaginal nozzle projecting from the end thereof, a conical member projecting from the nozzle, a conical air container on the conical member, a tube, an elastic member, the tube connecting the air container with the elastic member, and means checking and releasing the air pressure in the air container.



1,766,669. CONVERSION VALVE. ARLINGTON MOORE, New York, N. Y., assignor, by mesne assignments, to Maxmoor Corporation, New York, N. Y., a Corporation of Delaware. Filed Jan. 8, 1923, Serial No. 611,391. Renewed Oct. 23, 1929. 13 Claims. (Cl. 123—119.)

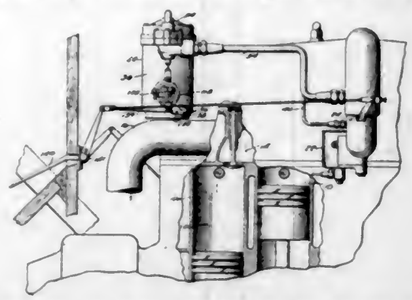


1. The combination with an internal combustion engine comprising an intake passage, a carburetor and an exhaust conduit, of a hollow casing communicating with the intake passage, and supported directly on the exhaust conduit and having an opening extending to the interior of the exhaust conduit, an elongated member of high heat conductivity having a portion of its length fitting closely in and extending through said opening and having a portion integral with the first named portion extending substantially transversely of the passage within the casing, a passage for hot exhaust gases leading through said conducting member, a valve for the passage in the heat conducting member, a valve for admitting air into the hollow casing, both valves being formed on a single member to move together, and means for actuating said valve member to open and close the valves.

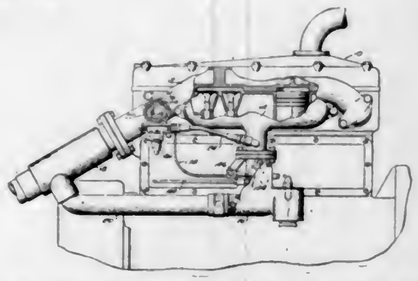
1,766,670. CONVERSION VALVE. ARLINGTON MOORE, New York, N. Y., assignor, by mesne assignments, to Maxmoor Corporation, New York, N. Y., a Corporation of Delaware. Filed Dec. 19, 1924, Serial No. 757,075. Renewed Oct. 23, 1929. 41 Claims. (Cl. 123—119.)

1. In apparatus for converting into a state for efficient combustion the air and fuel mixture delivered by the car-

buretor of an internal combustion engine, means below the engine throttle for admitting highly heated gases including a small proportion of exhaust gas, means for admitting such mixture beyond the engine throttle, and means for shutting off the admission means above the throttle while leaving operative the admission means below the throttle.

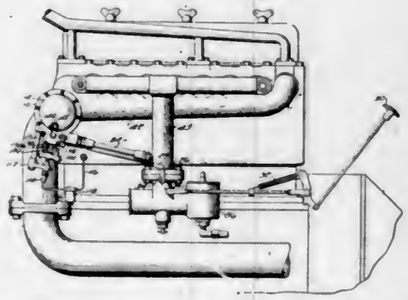


1,766,671. MIXTURE-CONVERSION APPARATUS FOR INTERNAL-COMBUSTION ENGINES. ARLINGTON MOORE, New York, N. Y., assignor, by mesne assignments, to Maxmoor Corporation, New York, N. Y., a Corporation of Delaware. Filed Apr. 27, 1925. Serial No. 26,265. Renewed Jan. 17, 1930. 30 Claims. (Cl. 123—119.)



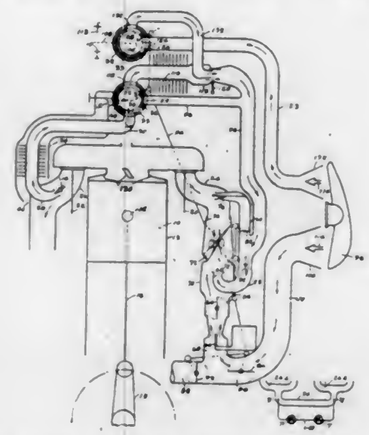
1. The combination in an internal combustion engine of means for supplying exhaust gases from the engine exhaust manifold to the intake, and means for supplying gases direct from an engine cylinder into admixture with said exhaust gases and delivering same therewith to the intake.

1,766,672. CONVERSION VALVE FOR INTERNAL-COMBUSTION ENGINES. ARLINGTON MOORE, New York, N. Y., assignor, by mesne assignments, to Maxmoor Corporation, New York, N. Y., a Corporation of Delaware. Filed June 8, 1926. Serial No. 114,545. 24 Claims. (Cl. 123—25.)



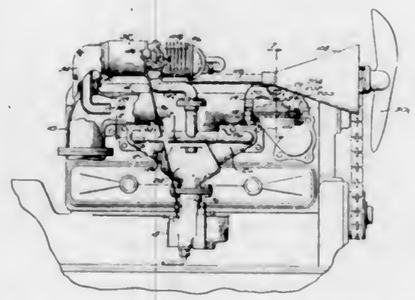
1. In an internal combustion engine including exhaust and intake manifolds and throttle, means for bypassing exhaust gas from exhaust to intake over the throttle, a spring opposed air inlet valve to the bypass conduit, and means for preventing opening of said valve at predetermined positions of the throttle.

1,766,673. PROCESS OF PREPARING CHARGES FOR COMBUSTION IN INTERNAL-COMBUSTION ENGINES. ARLINGTON MOORE, New York, N. Y., assignor, by mesne assignments, to Maxmoor Corporation, New York, N. Y., a Corporation of Delaware. Filed Dec. 13, 1926. Serial No. 154,345. 27 Claims. (Cl. 123—119.)



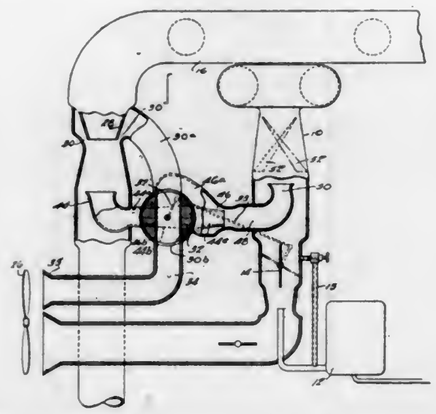
1. The process of forming charges for internal combustion engines, which comprises admixing liquid fuel with an air stream, throttling the fuel and air stream on its way to the engine cylinders, taking exhaust gas from the main exhaust gas stream with the driving force of the main exhaust gas stream behind it, admixing additional air with the exhaust gas, and adjunctively to throttling metering the exhaust gas and additional air and controlling the admission of the additional air with the exhaust gas to provide hot air for cylinder charges of low density and cold air for cylinder charges of relatively higher density.

1,766,674. APPARATUS FOR CONTROL OF COMBUSTION IN INTERNAL-COMBUSTION ENGINES. ARLINGTON MOORE, New York, N. Y., assignor, by mesne assignments, to Maxmoor Corporation, New York, N. Y., a Corporation of Delaware. Filed Dec. 30, 1926. Serial No. 158,015. 70 Claims. (Cl. 123—119.)



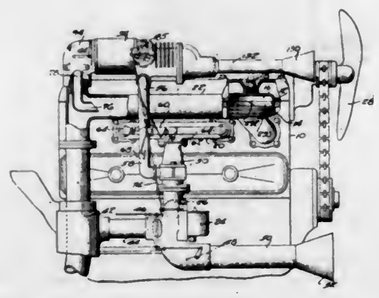
1. In an internal combustion engine, a cooler, valved means for supplying exhaust gas of the engine to the intake conduit either direct or through the cooler, means for aspirating air into admixture with the exhaust gas when the latter is passed through the cooler, and means for driving the air into the aspirating means.

1,766,675. PROCESS OF EXHAUST GAS AERATION AND CHARGE PREPARATION FOR INTERNAL-COMBUSTION ENGINES. ARLINGTON MOORE, New York, N. Y., assignor, by mesne assignments, to Maxmoor Corporation, New York, N. Y., a Corporation of Delaware. Filed Feb. 12, 1927. Serial No. 167,830. 13 Claims. (Cl. 123—119.)



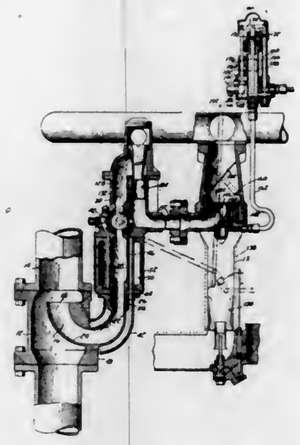
1. In the process of forming charges for internal combustion engines, the steps which consist in admixing air with the exhaust gas stream, admixing additional air with a part of the mixture of air and exhaust gas, and delivering the resulting mixture to the engine cylinders with the fuel supply thereto.

1,766,676. CHARGE-SUPPLEMENTING APPARATUS FOR INTERNAL-COMBUSTION ENGINES. ARLINGTON MOORE, New York, N. Y., assignor, by mesne assignments, to Maxmoor Corporation, New York, N. Y., a Corporation of Delaware. Filed Mar. 7, 1927. Serial No. 173,388. 6 Claims. (Cl. 123—119.)



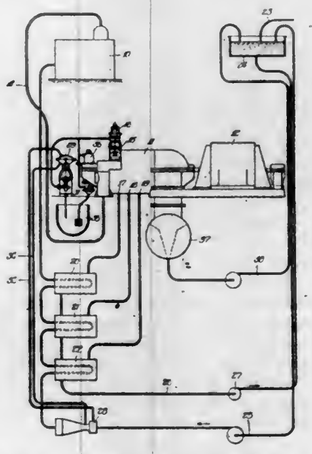
1. In an internal combustion engine, means for metering and admixing exhaust gases of the engine and air, means for conveying said mixed gases to the engine intake close up to the intake ports and over the engine throttle, and means operated adjunctively to engine throttling for controlling said second named means to deliver said mixed gases to the engine intake either close up to the intake ports or substantially immediately over the engine throttle.

1,766,677. CHARGE-SUPPLEMENTING APPARATUS FOR INTERNAL-COMBUSTION ENGINES. ARLINGTON MOORE, New York, N. Y., assignor, by mesne assignments, to Maxmoor Corporation, New York, N. Y., a Corporation of Delaware. Filed Apr. 7, 1927. Serial No. 181,711. 6 Claims. (Cl. 123—119.)



1. In a charge supplementer for internal combustion engines, valve means for controlling passage of air and exhaust gas into the stream to the engine cylinders, exteriorly exposed replaceable cam means adapted to be moved for operating said valve means, and means for operating said cam means adjunctively to engine throttling whereby substantially any desired interrelation between the throttle and valve means may be readily obtained.

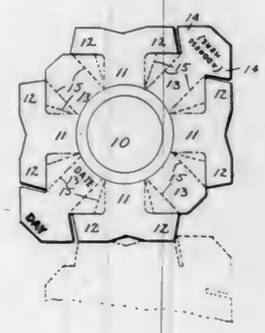
1,766,678. FLUID-PRESSURE APPARATUS. WALTER GUSTAV NOACK, Baden, Switzerland, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland, a Joint Stock Company of Switzerland. Filed Apr. 20, 1927, Serial No. 185,140, and in Germany Apr. 26, 1926. 1 Claim. (Cl. 60—64.)



In apparatus of the character described, a steam-operated prime mover, valve means operable to provide for the supply of operating steam to said prime mover, governing means for said valve means, a fluid-conduit, steam-operated heating means associated with said conduit and operable to impart heat thereto, means providing for the passage of exhaust steam from said prime mover to

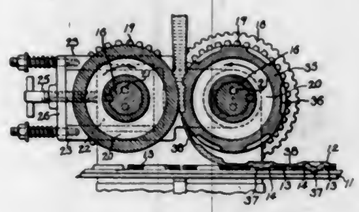
said heating means, and means responsive to the relation between the respective fluid-pressures at different points in said conduit and operable upon variation in such relation to effect governing action of said governing means.

1,766,679. BOTTLE CLOSURE. FRANK O'NEILL, Jr., New York, N. Y., assignor to Empire Hood Seal Corporation, New York, N. Y., a Corporation of Delaware. Filed Apr. 23, 1928. Serial No. 272,237. 15 Claims. (Cl. 215—38.)



1. In combination with a container having a mouth, a container closure consisting of a piece of material having a central portion overlying the mouth of the container and a plurality of bendable marginal fingers folded downwardly over the lip of the container mouth, alternate ones of said fingers having portions overlying intermediate fingers, said portions being turned back upon themselves substantially 180 degrees thereby forming hooked extremities; and a retaining clip interlocked with the adjacent hooked extremities of two of said fingers.

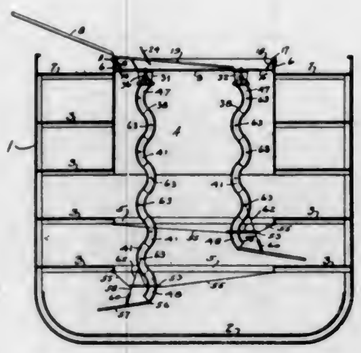
1,766,680. GLASS-RIBBON-FEEDING APPARATUS AND METHOD. SIDNEY F. PARHAM, West Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed July 31, 1928. Serial No. 296,567. 18 Claims. (Cl. 49—33.)



13. In the process of manufacturing glass articles from a ribbon of molten glass, the steps of forming a glass ribbon which is adapted to assume an arcuate path when lying in tis own plane by forming the ribbon at a progressively differential speed from one edge to the other thereof, and thereafter depositing the ribbon in an arcuate path in its own plane.

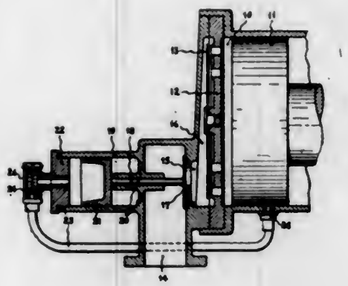
1,766,681. SHIP-LOADING CHUTE. ALFRED PAYNE, Tacoma, Wash. Filed Apr. 17, 1928. Serial No. 270,657. 10 Claims. (Cl. 193—23.)

1. A chute comprising a fixed supporting means; a hopper secured thereto; a receiving chute supported thereon and adapted to dump into said hopper; a vertical sinuous chute rotatably depending from said hopper; a bracing means rotatably engaging the lower end thereof to prevent its swaying but permitting its free rotation therein;



and a distributing chute extending laterally from the lower end of said vertical sinuous chute and adapted to extend in any direction from the axis of the sinuous chute as the said sinuous chute is rotated.

1,766,682. SAFETY DEVICE FOR AIR COMPRESSORS. RAUL PATERAS PESCARA, Paris, France. Filed Apr. 6, 1927, Serial No. 181,556, and in France Apr. 10, 1926. 6 Claims. (Cl. 230—223.)

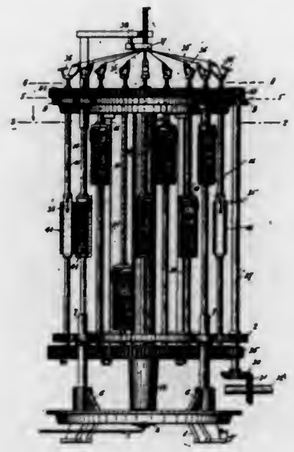


1. In an air compressor the combination of a cylinder, a directly actuated compressing piston therein, outlet valves in said compressing cylinder and means controlled by said piston for exerting a predetermined pressure thereon when the load thereon falls below a predetermined pressure.

1,766,683. CORD-MAKING MACHINE. CHARLES M. PETERSEN, Shirley, Mass., assignor to Samson Cordage Works, Boston, Mass., a Corporation of Massachusetts. Filed Mar. 16, 1929. Serial No. 347,607. 6 Claims. (Cl. 96—4.)

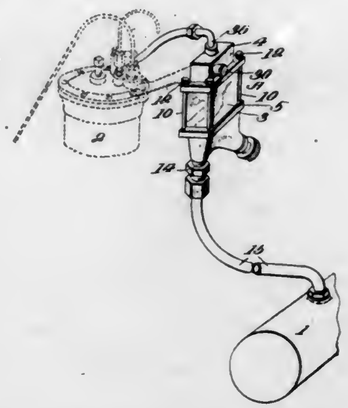
1. In a cordage machine having a number of spindles and means common to all said spindles for moving them

to describe circuitous paths with passage by one another, spools borne by the spindles and arranged in sets lying in



separate superposed planes, those spools borne by spindles passing relatively near one another in the operation of the machine lying in separate ones of said planes.

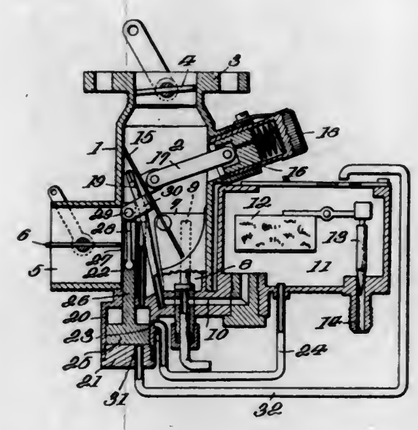
1,766,684. FUEL-FEEDING DEVICE FOR MOTOR VEHICLES. BURT NEULON PIERCE, New York, N. Y. Filed Jan. 28, 1925. Serial No. 5,363. 6 Claims. (Cl. 210—165.)



4. A device of the kind described comprising a receptacle adapted to be disposed in the fuel line pipe of a fuel feeding system having a detachable frame carrying a pair of shafts, said shafts having a strip of pervious material wound thereon and capable of being wound from one shaft to the other.

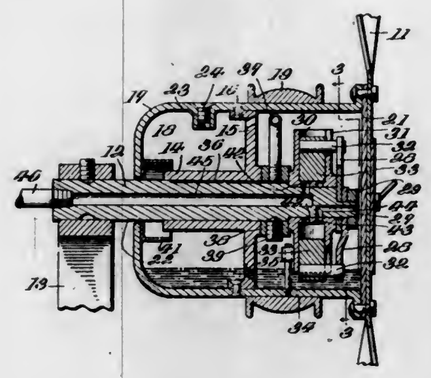
1,766,685. CARBURETOR. ALBERT G. REDMOND, Flint, Mich., assignor to Jacob Richard Francis, Flint, Mich. Filed June 8, 1922. Serial No. 566,782. 9 Claims. (Cl. 261—34.)

1. A carburetor having parallel air inlet passages, high and low speed nozzles arranged respectively in said air passages, a throttle valve, a suction controlled valve movable independently of said throttle valve arranged over the high speed nozzle for closing one of said passages, a cylinder having an inlet in communication with the fuel supply means, a piston in said cylinder, a nozzle extending from said cylinder into one of said air passages and terminating under said suction controlled valve in a



plane below the end of said high speed nozzle, a connection between said piston and said suction controlled valve, said piston closing said fuel inlet as the suction controlled valve is moved into open position.

1,766,686. FUEL-FEEDING SYSTEM FOR MOTOR VEHICLES. ALBERT G. REDMOND, Flint, Mich., assignor to Jacob Richard Francis, Flint, Mich. Filed June 15, 1927. Serial No. 199,114. 12 Claims. (Cl. 230—177.)

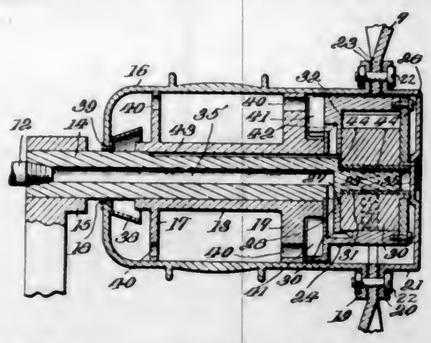


1. In an internal combustion engine power plant, a hollow fixed supporting shaft, a fan provided with a hub mounted on said shaft, driving means for said hub, and vacuum producing means enclosed in said hub and actuated by the driven member for drawing air through said hollow shaft.

1,766,687. FUEL-FEEDING SYSTEM FOR MOTOR VEHICLES. ALBERT G. REDMOND, Flint, Mich., assignor to Jacob Richard Francis, Flint, Mich. Filed June 15, 1927. Serial No. 199,115. 15 Claims. (Cl. 230—152.)

1. In combination with a driven part of an explosive engine, including a hub part and a shell carried thereby,

and a stationary shaft supporting the hub part, of a pump including a cylinder secured to said shaft, and a rotor,



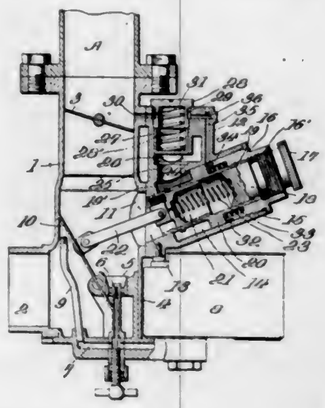
said shell including a removable cover, and means connecting the cover with the rotor for imparting movement thereto.

1,766,688. VIOLIN BOW. JESSE BARTON REED, Fort Smith, Ark. Filed Apr. 19, 1929. Serial No. 356,491. 4 Claims. (Cl. 84—282.)



1. A musical instrument bow of the class described comprising a longitudinally bowed staff in the form of a resilient metal stick of half circular channel shaped cross section, a tip in one end of the staff, a frog adjustably mounted on the opposite end of the staff, and hair trained between the tip and frog in a conventional manner.

1,766,689. CARBURETOR. EUGENE C. RICHARD, Flint, Mich., assignor to Marvel Carburetor Company, Flint, Mich., a Corporation of Illinois. Filed Apr. 16, 1923. Serial No. 632,428. 16 Claims. (Cl. 261—45.)



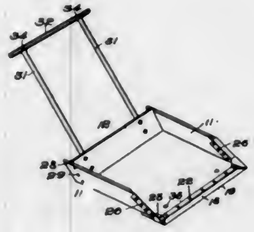
1. A carburetor having a suction operated air valve with an auxiliary nozzle arranged thereunder, a throttle valve and an auxiliary air inlet, a plunger for controlling the admission of air through said auxiliary inlet, said plunger having a connection with said suction operated air valve, an auxiliary air valve for said auxiliary air inlet controlled by the vacuum above the throttle valve and a member in which said plunger works controlled by the vacuum above the throttle valve for regulating the amount of air passing through said auxiliary air inlet.

1,766,690. GUARD. REINHOLD W. ROHRKE, Norfolk, Nebr. Filed June 14, 1929. Serial No. 370,849. 4 Claims. (Cl. 2—2.)



3. In a device of the class described, an elongated frame member adapted to be secured to the leg of the wearer and extend in spaced parallelism thereto, an ankle engaging member carried by said frame at one end thereof, leg straps carried by said frame intermediate its ends, said leg straps adapted to engage the leg of the wearer beneath the knee of the leg, and said frame being formed at its opposite end to provide a horizontally disposed loop portion adapted to extend above the knee of the wearer when the guard is in an applied position.

1,766,691. SHOVEL. FRANK D. RUGG, Greenfield, Mass. Filed Dec. 8, 1927. Serial No. 238,522. 13 Claims. (Cl. 37—53.)

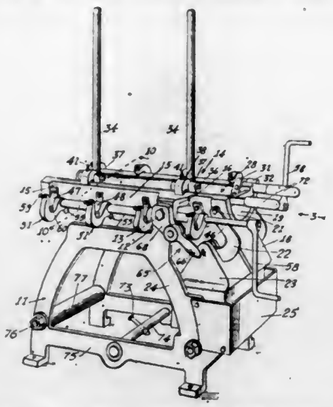


6. In a shovel, the combination of a bottom, side walls, and a continuous, one-piece sheath extending across the front of said bottom, and thence part way about and embracing each wall.

1,766,692. STEREOTYPE-PLATE-CASTING MACHINE. CARL A. RUPP, Los Angeles, Calif., assignor to Commercial Iron Works of Los Angeles, Los Angeles, Calif., a Corporation of California. Filed Aug. 21, 1928. Serial No. 300,990. 21 Claims. (Cl. 22—2.)

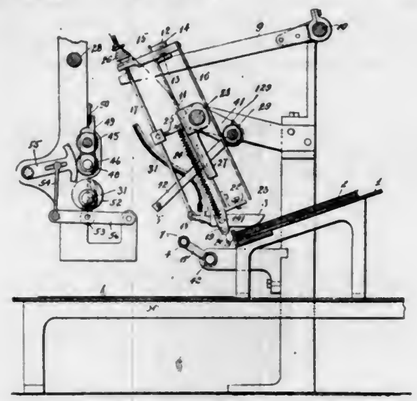
2. A stereotype plate casting machine comprising in combination a frame, a mold having a drag, a pivotal mounting for the drag on the frame transverse to the longitudinal axis of the mold, a cope hingedly connected to one side of the drag, the axis of the hinge being parallel to the axis of the mold, means securing the cope and the drag, and a releasing means having a lever and jarring action between

the cope and drag to loosen the cope and the drag after pouring the metal, the releasing means including a leg



connected to the cope and a lever means engaging the drag, the said leg being adapted to partly support the cope in an open position.

1,766,693. PATCH-APPLYING MECHANISM FOR ENVELOPE MACHINES. WILLIAM H. SHEPPARD, Worcester, Mass. Filed Oct. 20, 1927. Serial No. 227,466. 12 Claims. (Cl. 33—61.)



1. In mechanism of the class described for applying an auxiliary blank to a gummed main blank, the combination comprising an oscillating carrier for the auxiliary blank adapted to have carrying engagement with the auxiliary blank along only one edge thereof leaving free the body of the blank lying back of said edge, and means for operating the carrier for depositing the auxiliary blank on the main blank whereby the engaged edge of the auxiliary blank will become inverted preliminary to its application by the carrier to the main blank and afterward the free trailing body of the auxiliary blank lying back of said edge will become inverted and deposit itself on the main blank.

1,766,694. EXTENSION TABLE. HARRY SISKIN, Los Angeles, Calif. Filed Oct. 20, 1926. Serial No. 142,884. 1 Claim. (Cl. 45—112.)



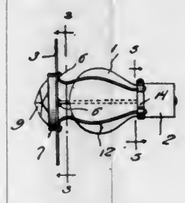
A table comprising a stationary table frame in which rails are disposed, there being dove-tailed grooves formed in the tops of the rails, rollers mounted for rotation in recesses in the bottoms of said grooves and projecting slightly above the bottoms of the grooves, table top sections movable over the top of the frame, and cleats secured to the top sections substantially fitting said grooves and movable upon said rollers.

1,766,695. NECKTIE HOLDER. ABRAHAM SORKIND, Brawley, Calif. Filed Jan. 21, 1929. Serial No. 334,043. 6 Claims. (Cl. 24—49.)



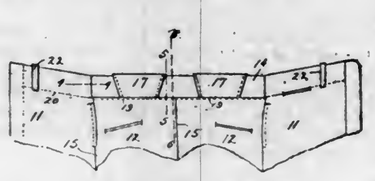
1. A necktie holder comprising a mounting part, an arm extending from adjacent one end of the mounting part toward the other end, a hinged member hingedly mounted upon the other end of the mounting part and means for detachably fastening the hinged member to the arm so that the hinged member and arm may enclose the small end of a four-in-hand necktie and clamp the plait of a shirt between them.

1,766,696. ATTACHMENT FOR HEADLIGHT LAMPS. HARRY STALLINGS, Boston, Mass. Filed Apr. 29, 1929. Serial No. 358,928. 1 Claim. (Cl. 240—48.6.)



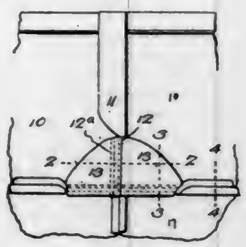
The combination with a headlight lamp, of a disc arranged vertically in front of the lamp and being formed with a central opening, and slots adjacent the opening, a bull's-eye positioned over the front side of the opening, a supporting member for the bull's-eye, tongues projecting rearwardly from said supporting member through the respective slots in the disc, a band encircling the base of the lamp, and spring arms engaging with the lamp, the forward ends of the spring arms passing through openings in said tongues to hold the supporting member rigid with the disk, the rear ends of the arms being connected to the band.

1,766,697. CONSTRUCTION OF TROUSERS. SAMUEL F. STEIN, Williamsport, Pa. Filed Mar. 12, 1925. Serial No. 14,957. 11 Claims. (Cl. 2—227.)



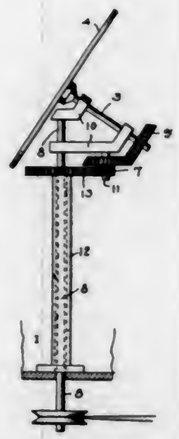
8. Trousers composed of complementary front parts and back parts joined on the side by a seam, the front parts having integral waist-forming portions and a member constituting a waist portion attached to the upper edge of the back part, said member forming an extension to the top of the part to which it is attached and made to aline substantially with the top edge of said front parts.

1,766,698. TROUSERS. SAMUEL F. STEIN, Williamsport, Pa. Filed July 14, 1926. Serial No. 122,398. 4 Claims. (Cl. 2—231.)



4. Trousers having front parts and back parts, said front parts being joined at the crotch, and a seam joining said front and back parts thereat, a sweat piece stitched at the crotch by stitches which join said front and back parts, said sweat piece overlying said seam.

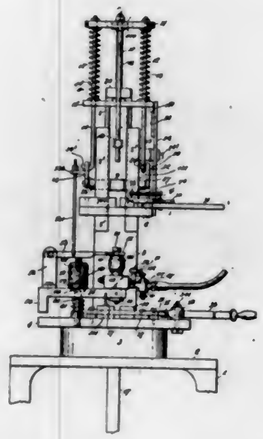
1,766,699. APPARATUS FOR CONTINUOUS DISTILLATION OF DIFFICULTLY-DISTILLABLE LIQUIDS. HANS ADOLF VON STADEN and ALBERT BERENBRUCH, Neurossen, and ANTON HÖHN, Leuna-Ockendorf, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Sept. 28, 1927, Serial No. 222,576, and in Germany Sept. 11, 1926. 10 Claims. (Cl. 202—64.)



1. Apparatus for volatilizing at least part of a difficultly distillable liquid, which comprises a still, means for heating the walls of said still, a disc mounted in said still and being rotatable around two axes forming an angle with each other, a planetary gear device for rotating said disc around said two axes, means for supplying the liquid to be distilled to the surface of said disc, and means for withdrawing vapors from said still.

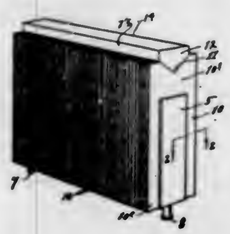
1,766,700. MACHINE FOR SHAPING HOLLOW METAL BLANKS. CARL G. ANDERSON, Boston, Mass., assignor to S. H. Reynolds Sons Company, Boston, Mass., a Corporation of Massachusetts. Filed Dec. 2, 1926. Serial No. 152,149. 18 Claims. (Cl. 113—39.)

1. In a machine for shaping hollow metal blanks, the combination with a blank-forming mechanism, of a reciprocating hammer, a guide for the hammer, a primary lever having lifting engagement with the hammer, a secondary lever in operative engagement with the primary lever and actuated thereby as the primary lever is moved, releasable



means for holding the hammer in an elevated position, a spring, means whereby said spring may be compressed by the secondary lever and the tension thereof be directed against said hammer when the hammer is in its elevated position, and means for releasing the hammer.

1,766,701. RADIATOR. BENJAMIN BLACKMORE, Cuyahoga Falls, Ohio. Filed July 18, 1927. Serial No. 206,461. 4 Claims. (Cl. 257—139.)



2. In a radiator, a chambered radiator body, said body provided with parallel side walls, each of said side walls provided on the exterior face thereof with a plurality of parallel grooves, each of the grooves being positioned in the same plane with the like groove on the opposite side of the body and fins detachably secured on said body, each fin extending around three sides of the body with the inner edge thereof seated in said grooves.

1,766,702. LUBRICATOR. FREDERICK C. BLANCHARD, Dorchester, Mass. Filed Feb. 8, 1929. Serial No. 338,547. 6 Claims. (Cl. 184—76.)

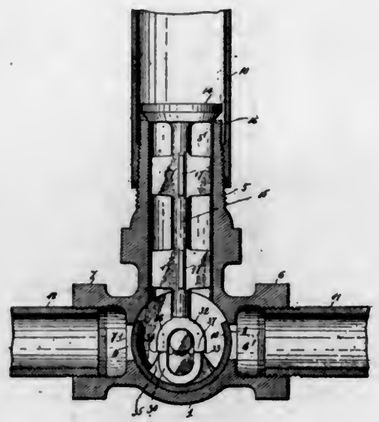
1. In a lubricator for pulsating systems, the combination of a casing having a supply passage, a chamber above said supply passage, a passage leading from said supply passage upwardly to said chamber, and a passage leading from said chamber in a downward direction to an outlet; a normally closed, upwardly opening valve disposed within said chamber and normally closing communication between

the second-mentioned passage and said chamber; and a spring normally maintaining said valve in its closed position and adapted to yield under the pressure within said



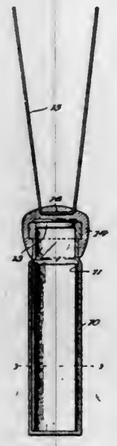
supply passage and to permit oil to flow from said supply passage upwardly through the second-mentioned passage into said chamber and thence through the third-mentioned passage to said outlet.

1,766,703. VALVE. ARTHUR L. BRIDGHAM, Boston, Mass., assignor of one-half to Charles H. Sherburne, Boston, Mass. Filed Aug. 31, 1926. Serial No. 132,809. 2 Claims. (Cl. 277—7.)



1. A valvular device comprising a chambered body having an inlet and an outlet, a reciprocating valve for controlling the inlet and arranged to be closed by the fluid pressure admitted to the inlet, said reciprocating valve being provided with a valve stem extending inside the chamber of said body, said stem of the reciprocating valve being provided with a shoulder on the end thereof within the chamber of said body, a rotary valve inside said body for controlling the outlet as said rotary valve is turned, means for operating the rotary valve for opening and closing it from outside the chambered body, a member borne by the rotary valve axially arranged, means whereby the stem of the reciprocating valve is loosely connected to said axial member to permit of the reciprocating valve occupying an open position when the rotary valve is closed, and means movable with the rotary valve adapted and arranged to have bearing engagement with said shoulder on the stem of the reciprocating valve for opening the reciprocating valve when the rotary valve is opened, and for maintaining the reciprocating valve in an open position when the rotary valve is maintained is open position, and to draw away from said shoulder when the rotary valve is closed, whereby the reciprocating valve may be closed by the fluid pressure.

1,766,704. HORTICULTURAL MARKER. FRANCIS E. CHASE, Chevy Chase, Md. Filed Nov. 30, 1929. Serial No. 410,786. 1 Claim. (Cl. 40—19.)

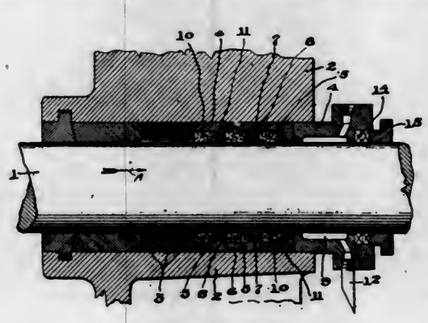


A marker tag comprising a glass bottle of cylindrical form, a label disposed in said bottle, a stopper in the end of said bottle, a cap disposed over said stopper and bottle and in such manner as to seal the same, and a flexible attaching element having a portion thereof embedded in the body of the cap.

1,766,705. STABLE AMMONIUM BICARBONATE. ERICH DEHNEL, Rossen, near Merseburg, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed June 8, 1925, Serial No. 35,791, and in Germany June 10, 1924. 6 Claims. (Cl. 23—64.)

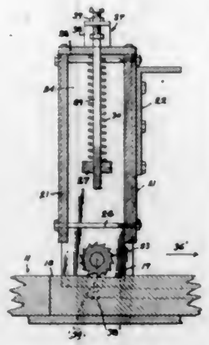
1. The process of manufacturing stable ammonium bicarbonate which comprises allowing ammonium bicarbonate to crystallize from a hot solution in the permanent presence of carbon dioxid during crystallization.

1,766,706. PACKING. OSCAR H. DORER, East Orange, and GERRIT H. VAN HENGEL, Orange, N. J., assignors to Worthington Pump and Machinery Corporation, New York, N. Y., a Corporation of Virginia. Filed Oct. 24, 1927. Serial No. 228,193. 5 Claims. (Cl. 286—25.)



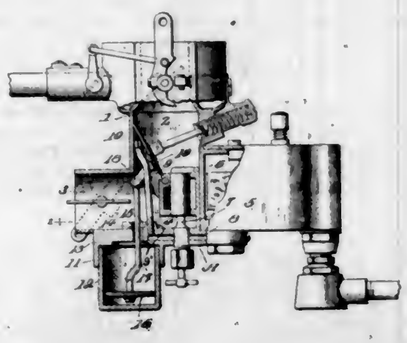
1. In a packing, the combination with a shaft, of a plurality of metal rings L shaped in cross section and positioned to provide pockets about the shaft within the rings and having the inner perimeters of their radial portions spaced from the shaft to provide leakage ducts from one pocket to the pocket next thereto, and flexible packing in said pockets and engaging said shaft.

1,766,707. DEVICE FOR BUNTING BARS AND MUNTINGS IN SASH AND DOOR CONSTRUCTIONS. LEON G. EDGCOMB, Pasadena, Calif. Filed Jan. 5, 1929. Serial No. 330,554. 3 Claims. (Cl. 144—5.)



1. A device for trimming an edge face of a tenon, comprising means for mounting a cutter, means tending to force said cutter toward the work, a gaging device or devices at the side or sides of the cutter arranged to engage the work laterally of the cutter and maintain the cutter out of engagement therewith but so that as the work passes the device the gaging device passes off a shoulder of the work, the cutter may advance into engagement with the edge of the tenon, and means to limit the advance of the cutter to cause it to trim said edge as the work continues to advance.

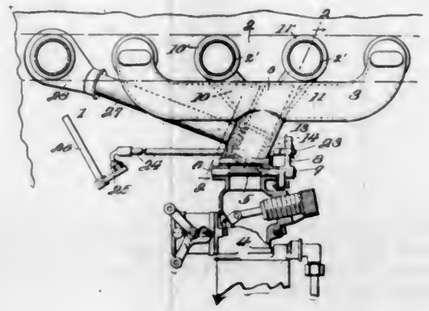
1,766,708. CARBURETOR. JACOB RICHARD FRANCIS, Flint, Mich. Filed June 15, 1921. Serial No. 477,769. 2 Claims. (Cl. 261—63.)



1. The combination with a carburetor having a mixing chamber provided at its bottom with a removable insert, of a pivoted suction controlled valve carried by said insert, a cylinder carried by said insert in communication with said mixing chamber provided with a piston and a connection between said suction controlled valve and said piston for retarding the swinging movement of said valve.

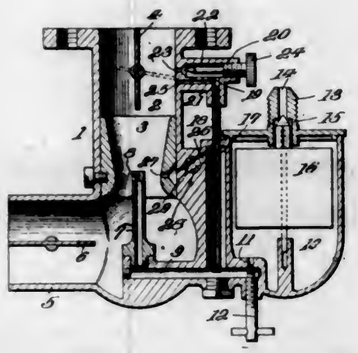
1,766,709. HEATING-MEDIUM CONTROL FOR CHARGE-FORMING DEVICES. WALTER G. HEGINBOTTOM, Flint, Mich., assignor of one-half to Jacob Richard Francis, Flint, Mich. Filed Sept. 8, 1923. Serial No. 661,616. 12 Claims. (Cl. 123—122.)

1. The combination with an internal combustion engine having an exhaust manifold, intake manifold and charge forming device connected thereto provided with a throttle valve controlling the passage of explosive fluid to the engine, of a heating chamber disposed adjacert said intake manifold in communication with the exhaust having a socket, a pair of concentrically arranged valves controlling



the outlet of the socket of said heating chamber, one of said valves being actuated by the movement of the throttle valve of the charge forming device and the other valve being manually controlled for regulating the volume of exhaust gases passing through said heating chamber.

1,766,710. CARBURETOR. FRANK H. HEITGES, Flint, Mich., assignor of one-half to Jacob Richard Francis, Flint, Mich. Filed Jan. 4, 1922. Serial No. 526,925. 13 Claims. (Cl. 216—47.)

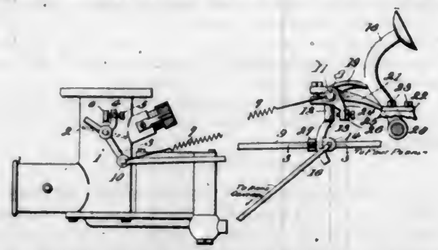


8. A carburetor having a carbureting passage provided with a main fuel nozzle and a throttle valve, a fuel passage for supplying fuel to said nozzle, a reservoir having a restricted outlet for feeding fuel to said fuel passage, an auxiliary reservoir in communication with said fuel passage, said auxiliary reservoir having an atmospheric inlet, an air passage leading from said auxiliary reservoir to said carbureting passage and through which only air passes, a valve in said air passage, and a connection between said valve and said throttle valve for regulating the pressure in said auxiliary reservoir.

1,766,711. THROTTLE CONTROL FOR INTERNAL-COMBUSTION ENGINES. FRANK H. HEITGER, Flint, Mich. Filed July 21, 1927. Serial No. 207,489. 12 Claims. (Cl. 123—179.)

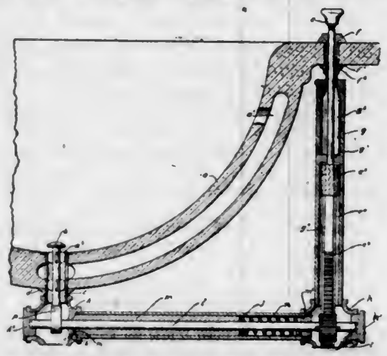
1. In combination, a carburetor having a throttle valve, a rod operatively connected to said valve, an abutment

member on the rod, a movably mounted arm member arranged to impinge against the abutment member, a starter



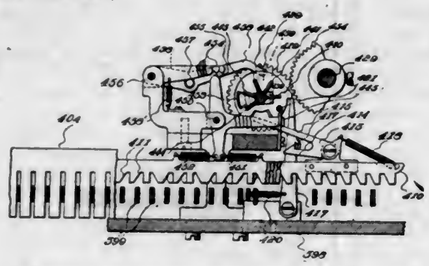
control element, a movable projection adapted to engage one of said members for actuating the same, and means for actuating the projection from said control member.

1,766,712. WASTE-VALVE MECHANISM. FRANK A. JOHNSON, Portland, Oreg. Filed Oct. 30, 1928. Serial No. 316,075. 2 Claims. (4—200.)



1. In waste valve mechanism in combination with a reciprocally mounted waste plug of a closed conduit, a spring extended sealing member loosely mounted in such conduit, such member and such pipe being relatively formed to form a fluid-tight joint, a shaft journaled in such conduit, a cam element carried by such shaft engaging the lower end of such waste plug, a reciprocal rod also mounted in such conduit and being operatively connected with such shaft, such conduit constituting a fluid cylinder and a piston carried by such rod engaging the bore of the conduit.

1,766,713. TRANSMITTER. EDWARD E. KLEINSCHMIDT, Chicago, Ill., assignor to Teletype Corporation, Chicago, Ill., a Corporation of Delaware. Filed Oct. 26, 1925, Serial No. 64,958. Renewed Apr. 1, 1929. 57 Claims. (Cl. 178—27.)



1. A signalling transmitter comprising a rotary shaft movable endwise to transmit signalling conditions; means whereby said shaft invariably transmits a predetermined impulse and means controlling the endwise movement of said shaft in accordance with the signal to be transmitted.

1,766,714. DEHYDRANT FOR ELECTRIC INSULATORS AND CONTACT POINTS AND METHOD FOR RESTORING NORMAL ELECTRIC CONDITIONS. GEORGE S. LEWIN, Santa Monica, and CHARLES A. LOGUE, Venice, Calif. Filed July 11, 1927. Serial No. 205,033. 11 Claims. (Cl. 173—28.)

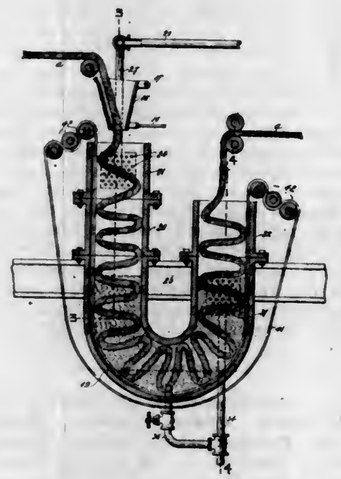
2. A dehydrant composition to restore normal conditions of electric contact points and the like in internal combustion engines which have been temporarily short circuited by the presence of water, comprising volatile hydrocarbon, an agent to render the same non-inflammable, and a small percentage of a hygroscopic agent.

7. The process of reconditioning electric circuits which have been short-circuited by an electrically conducting liquid which consists in applying at the place of short circuit an electrically non-conducting chemical agent for counteracting the short-circuiting tendency of said liquid.

1,766,715. PRODUCTION OF LACTIC ACID AND ITS DERIVATIVES. MARTIN LUTHER, Mannheim, and HANS BEELER, Oppau, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Feb. 4, 1928, Serial No. 252,039, and in Germany Feb. 12, 1927. 3 Claims. (Cl. 260—122.)

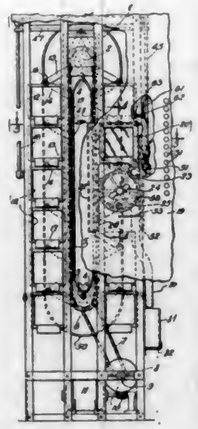
1. A process for the production of derivatives of lactic acid from the residue containing a lactate obtained by the evaporation of the neutralized fermentation product of materials containing carbohydrates, which comprises extracting the lactate from the said residue with methanol.

1,766,716. APPARATUS FOR BLEACHING. THOMAS MCCONNELL, Easthampton, Mass., assignor to F. Colt Johnson, James W. Lane, Oliver L. Johnson, Thomas McConnell, and Hugh McConnell, trustees, doing business as Hampton Company, Easthampton, Mass. Filed Dec. 8, 1925. Serial No. 74,035. 2 Claims. (Cl. 8—19.)



1. In a bleaching apparatus, the combination with a U-shaped kier adapted to contain a caustic alkaline solution, of an endless slack conveyor belt of loosely woven material, means for depositing material to be treated and maintaining it adjacent to the outer walls and bottom thereof, and means, comprising two sets of driving rolls, for carrying said belt through said kier.

1,766,717. AUTOMATIC DISPENSING APPARATUS. HARRY MILLER, New York, N. Y. Filed Sept. 9, 1929. Serial No. 391,218. 4 Claims. (Cl. 312—96.)



1. In apparatus of the class described, an endless chain, wheels for supporting the chain, and around which the chain passes, with straight reaches of the chain between the wheels, a plurality of containers carried by the chain at the outer face thereof, and connections between the several containers and the chain for spacing the containers further apart from each other when passing around the wheels than when on the straight reaches of the chain and for holding them upright throughout their travel, each of said connections including links pivoted to a common connection on the container and diverging from each other toward the chain and connected therewith.

4. In apparatus of the class described, an endless carrier having a plurality of containers, an electric motor for operating the carrier and a cabinet having an opening past which the containers are moved in succession, a normally open circuit for the motor, a switch for closing the same, selective mechanism to close the switch and to hold it closed a sufficient length of time to bring any selected container to the opening, said selective mechanism comprising a roller operated by the carrier and provided with radially extending pins corresponding in number to the number of containers in a series spiral to the roller, push buttons corresponding in number to the pins and adapted to be moved into the path of movement thereof, a cam plate having openings through which the push buttons extend, the push buttons having cam surfaces to move the plate in one direction when said buttons are pressed toward the roller, and having means interengaging with the cam plate to hold the push buttons in inward position, a spring urging the plate in the opposite direction, and connections between the plate and the switch.

1,766,718. MANUFACTURE OF VALUABLE ORGANIC COMPOUNDS. ALWIN MITTASCH, Mannheim, and WALTER FRANKENBURGER, Ludwigshafen-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Jan. 6, 1927, Serial No. 159,498, and in Germany Jan. 15, 1926. 4 Claims. (Cl. 260—168.)

1. The process of producing valuable organic compounds, which consists in bringing gases comprising saturated aliphatic hydrocarbons at a temperature of at least 700° C. but not exceeding 1000° C. into contact with lustrous, graphite-like carbon deposits produced on granular, fire-proof materials by the pyrogenic decomposition of carbon-containing compounds in the state of gas.

1,766,719. ALKYLATION PRODUCTS OF PYRAZOLANTHRONES. PAUL NAWIASKY and ARTUR KRAUSE, Ludwigshafen-on-the-Rhine, and ALFRED HOLL, Offenbach-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Dec. 21, 1926, Serial No. 156,256, and in Germany Dec. 22, 1925. 3 Claims. (Cl. 260—45.)

1. As new articles of manufacture, compounds of paraffin hydrocarbons with at least one molecule of a pyrazolanthrone.

1,766,720. PRODUCTION OF PHOSPHORIC ESTERS OF ALIPHATIC ALCOHOLS. FRITZ NICOLAI, Ludwigshafen-on-the-Rhine, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Sept. 4, 1928, Serial No. 303,955, and in Germany Oct. 12, 1927. 7 Claims. (Cl. 260—98.)

1. The process of producing neutral phosphoric esters of primary aliphatic alcohols which comprises acting with phosphorus oxychlorid upon a primary aliphatic alcohol while heating and continuously removing the hydrochloric acid formed during the process.

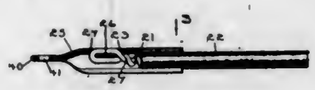
1,766,721. PRODUCTION OF PHOSPHORIC ESTERS OF ALIPHATIC ALCOHOLS. FRITZ NICOLAI, Ludwigshafen-on-the-Rhine, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Original application filed Sept. 4, 1928, Serial No. 303,955, and in Germany Oct. 12, 1927. Divided and this application filed Sept. 4, 1929. Serial No. 390,427. 3 Claims. (Cl. 260—98.)

1. As new articles of manufacture neutral phosphoric esters of aliphatic alcohols containing more than 4 carbon atoms in the molecule.

1,766,722. PROCESS FOR THE ELECTROLYTIC MANUFACTURE OF COMPOUNDS CONTAINING ACTIVE OXYGEN. OSWIN NITZSCHKE and ERICH NOACK, Wiesdorf, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed June 4, 1927, Serial No. 196,629, and in France Apr. 26, 1926. 3 Claims. (Cl. 204—9.)

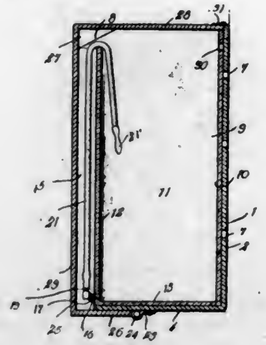
3. A process for the electrolytic manufacture of compounds containing active oxygen comprising the electrolysis of a saturated ammonium sulfate solution containing sulfuric acid in the anode chamber and of a diluted sulfuric acid solution of about 0.5% strength in the cathode chamber using an anode of platinum, a cathode of amalgamated gold, an anodic current density of 20 amps. per square decimeter, a cathodic current density of 0.4 amps. per square decimeter and passing a vigorous stream of oxygen through the solution contained in the cathode chamber.

1,766,723. HARNESS CORD FOR LOOMS. OSCAR V. PAYNE, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Aug. 10, 1929. Serial No. 384,828. 5 Claims. (Cl. 24—123.)



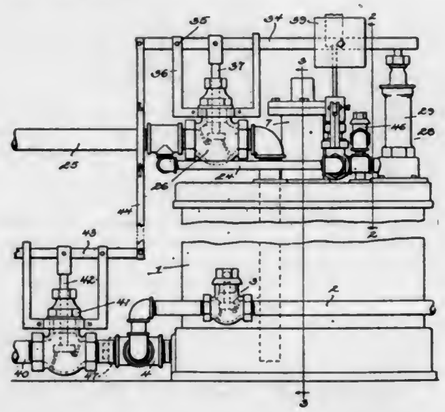
1. In a connector for loom harnesses, a flexible cord having a fibrous sheath and a wire core, a head having holes through which the core extends, the core being wrapped on itself and being held embedded in the sheath by a portion of the head.

1,766,724. IRRIGATOR. MARSHALL A. RUSSOW, Chicago, Ill. Filed Oct. 3, 1928. Serial No. 310,133. 3 Claims. (Cl. 128—227.)



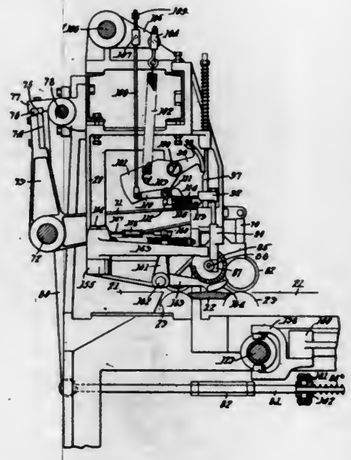
1. A surgical irrigator comprising a vessel, a fluid discharge pipe connected with the vessel, a closure sleeve rotatably mounted on the pipe, a hose connected with the sleeve and supported by the vessel to normally hold the closure sleeve against rotation to prevent the flow of fluid from the vessel into the hose and to permit flow of fluid when the hose is disengaged from the vessel.

1,766,725. STEAM TRAP. JOHN RYAN, Columbus, Ohio. Filed Apr. 26, 1928. Serial No. 273,136. 2 Claims. (Cl. 137—101.)



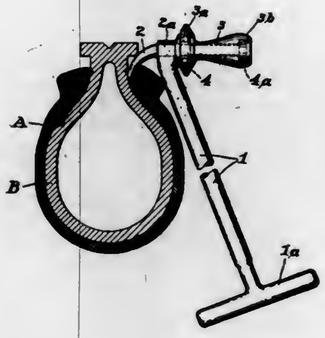
1. In apparatus of the character set forth, a condensate receiving reservoir provided with a condensate inlet and outlet, a conduit adapted to contain a fluid under pressure communicating with said reservoir, a main control valve in said conduit, said valve being normally closed to prevent the pressure fluid from entering said reservoir, a pressure actuated plunger, a pipe line between said conduit and said plunger, an exhaust line for said plunger, valves in said lines, the valve in the first mentioned line being normally closed and the valve in the exhaust line normally open, weighted arms for closing said valves, a float operated mechanism mounted in said reservoir, an oscillatory weighted arm pivotally mounted between said valves of the two lines and connected with said float mechanism, a lost motion connection between said weighted arms and said oscillatory arm, the movement of said last mentioned arm being applied to effect the opening and closing of said valves in said lines, whereby the pressure fluid may be transferred from said conduit to said plunger while the valve in said exhaust line is held closed, and motion transmitting devices actuated by the movement of said plunger to effect the opening and closing of said main valve.

1,766,726. THICKNESS GAUGING AND STAMPING MACHINE. EDWARD K. STANDISH, Hartford, Conn., assignor to Graton & Knight Company, Worcester, Mass., a Corporation of Massachusetts. Filed June 27, 1928. Serial No. 288,786. 12 Claims. (Cl. 101—43.)



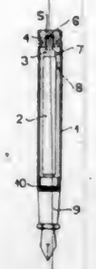
3. A thickness gauging and stamping machine for leather hides and similar sheet material comprising a gauging and stamping device, means to feed said material intermittently by said device, and means to actuate said device intermittently to gauge said material and to stamp an indication of thickness thereon at regular spaced intervals.

1,766,727. COMPOUND TOOL. CHARLES W. STEELE, Akron, Ohio, assignor to The Miller Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Oct. 8, 1928. Serial No. 311,087. 7 Claims. (Cl. 154—9.)



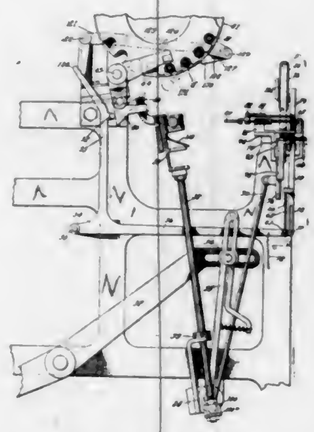
1. A compound tool for the purpose described comprising a suitable handle having at the end thereof a hook and a rotatable knob extending in different directions.

1,766,728. FOUNTAIN PEN. HUGO STEIN, Vienna, Austria. Filed Oct. 19, 1928, Serial No. 313,609, and in Austria Dec. 3, 1927. 4 Claims. (Cl. 120—46.)



1. In a fountain pen, an ink reservoir capable of being twisted, a member movable in both directions from the position of rest and operably connected with said reservoir to twist the same, and means for limiting the number of turns in either direction of said movable member.

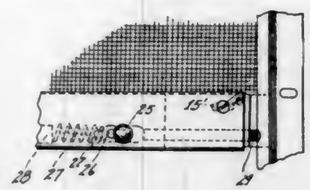
1,766,729. WEFT-REPLENISHING MECHANISM FOR DOUBLE-SHUTTLE LOOMS. SAMUEL STEWART, MILFORD L. ALLEN, and SIMEON O. ROY, Lewiston, Me., assignors to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Jan. 31, 1929. Serial No. 336,627. 10 Claims. (Cl. 139—232.)



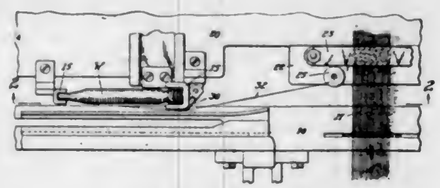
1. A weft replenishing loom having, in combination, a lay, a set of shifting shuttle boxes at each end of the lay, a weft carrier magazine associated with each set of shuttle boxes, a pair of shuttles, mechanism to pick each shuttle back and forth between the top box on one side of the loom and a lower box on the other side of the loom, weft detecting means operative to indicate substantial weft exhaustion as a shuttle in a top shuttle box approaches front center, and means to transfer a weft carrier from the corresponding magazine as the lay next approaches back center after indication of weft exhaustion.

1,766,730. DRAWBAR FOR SCREENS. CLIFFORD TRAUT, Newport, Ky., assignor to The Higgin Manufacturing Company, Newport, Ky., a Corporation of West Virginia. Filed Mar. 17, 1928. Serial No. 262,418. 8 Claims. (Cl. 156—39.)

1. In a controlling device for roll closures, a hollow draw bar, a sliding member with an enlarged portion to ride in the channel of a guide, a neck portion to pass through the slot of said guide and a portion slidably fitting within said hollow draw bar, and means preventing the withdrawal of said portion while limiting the sliding motion thereof.

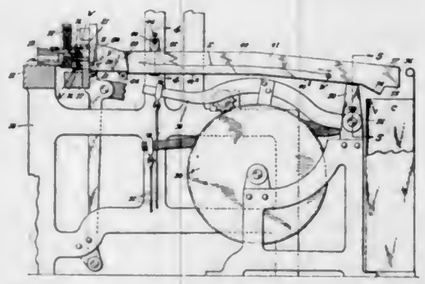


1,766,731. END-HOLDING MEANS FOR WEFT-REPLENISHING LOOMS. RICHARD G. TURNER, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Jan. 31, 1929. Serial No. 336,626. 9 Claims. (Cl. 139—257.)



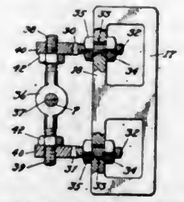
1. In a weft replenishing loom, end holding means positioned between the magazine and the cloth selvage and adapted to receive and hold the weft end extending from the magazine to the selvage, said means comprising a loosely mounted weight, and a support for said weight having a surface with which said weight engages by gravity, the weft end being clamped between said weight and said surface.

1,766,732. DISPOSAL DEVICE FOR EJECTED WEFT CARRIERS. RICHARD G. TURNER, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Feb. 19, 1929. Serial No. 341,156. 6 Claims. (Cl. 139—255.)



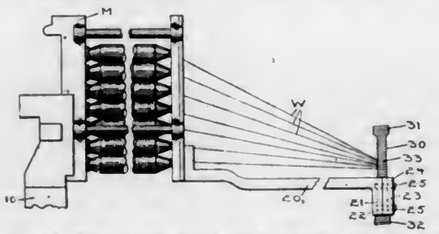
1. In a weft replenishing loom having means to eject a weft carrier substantially horizontally rearward, means to dispose of said weft carrier comprising a chute mounted to extend rearward from the rearward position of the lay to a position over a container placed behind the rearmost part of the loom frame, said chute being mounted on fixed supporting members at its front and rear ends and being positioned above and extending over the cam and crank shafts of the loom.

1,766,733. LOOM PICKER-ROD SPINDLE SUPPORT. KENNETH J. UNWIN, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Jan. 15, 1929. Serial No. 332,638. 5 Claims. (Cl. 139—158.)



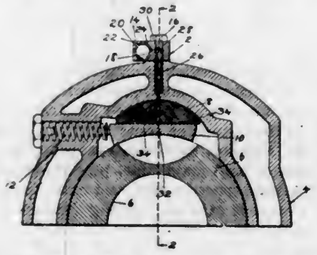
1. In a loom lay having a picker spindle the inner end of which is supported in fixed position with respect to the lay, a supporting member for the outer end of the picker spindle having oppositely- extending threaded portions, and a pair of threaded eye members, one for each threaded portion of the supporting member, said eye members extending through a portion of the lay and being capable of assuming a plurality of horizontal positions with respect to the lay.

1,766,734. THREAD HOLDER FOR WEFT-REPLENISHING LOOMS. WALTER H. WAKEFIELD, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Aug. 27, 1929. Serial No. 388,826. 5 Claims. (Cl. 139—247.)



1. In a weft replenishing loom having reserve bobbins from which extend weft ends, a support, a thread holder movable vertically under action of gravity in the support and formed at the ends thereof with relatively large coils between which are located smaller closed coils, the lower large coils engaging the support to limit upward movement of the lower part of the closed coils and the upper large coils forming means whereby the closed coils may be expanded, said upper large coils also capable of engaging the support to limit downward movement of the holder, the smaller coils gripping the weft ends and the holder moving downwardly under the action of gravity to keep the weft ends taut.

1,766,735. LUBRICATING SYSTEM. RUDOLPH WEHR, Los Angeles, Calif., assignor to The Wehr Motor Company, a Corporation of California. Filed Apr. 15, 1929. Serial No. 355,061. 10 Claims. (Cl. 123—190.)



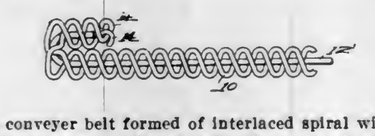
1. In a lubricating system, a pair of relatively sliding members, one of which is provided on its engaging surface with a set of lubricating grooves, a lubricant conveying means, a lubricant introducing means for said grooves in fluid connection with said lubricant conveying means, and perforated and grooves oscillating means in said lubricant conveying means for controlling the flow of the lubricant to said grooves.

1,766,736. SELVAGED WIRE CONVEYER BELT. FRANCIS N. WOODMAN, Clinton, Mass., assignor to Wickwire Spencer Steel Company, New York, N. Y., a Corporation of Delaware. Filed Apr. 6, 1928. Serial No. 267,969. 3 Claims. (Cl. 74—67.)



1. A wire conveyer belt formed of a plurality of interlaced spiral members, the end turns of said members being crowded against each other to closely adjacent parallel positions at the edges of the conveyer belt to provide longitudinally flexible selvages therefor.

1,766,737. CONVEYER BELT. FRANCIS N. WOODMAN, Clinton, Mass., assignor to Wickwire Spencer Steel Company, New York, N. Y., a Corporation of Delaware. Filed July 27, 1928. Serial No. 295,808. 2 Claims. (Cl. 198—193.)

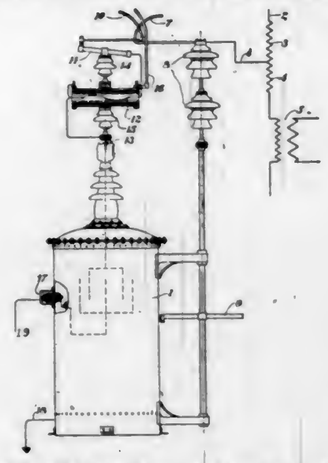


1. A conveyer belt formed of interlaced spiral wires extending transversely of said belt, the ends of adjacent wires being twisted together in pairs at the selvages and the selvages being folded lengthwise of the belt to form edge portions of double thickness, the extra thickness being disposed entirely at one side of the belt and constituting retaining means for material transported on said belt.

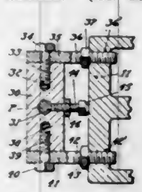
1,766,738. PROTECTIVE APPARATUS AND CIRCUITS. ARTHUR O. AUSTIN, Barberton, Ohio, assignor, by mesne assignments, to The Ohio Brass Company, Mansfield, Ohio, a Corporation of New Jersey. Filed June 25, 1924. Serial No. 722,206. 17 Claims. (Cl. 175—30.)

14. In combination, a grounded metallic housing, condenser elements disposed within said housing, a carrier current conductor connected with one of said elements and insulated from said housing, a spark gap between said housing and carrier current circuit, a bushing insulator projecting from said housing, a conductor connected with the other element of said condenser and extending through said bushing insulator, a terminal member for said conductor carried by said bushing insulator, an insulator mounted on said terminal member, a tubular housing carried by said insulator, a fuse disposed within said housing and having one end thereof connected with said terminal member, a switch pole mounted on said tubular housing and connected with the other end of said fuse, a second insulator mounted on said tubular housing, a resistance element carried by said second insulator and having one end thereof connected with said switch pole, a spring-held contact member connected with the other end of said resistance element, a movable switch arm arranged when closed to engage first with said spring-held

contact member and thereafter with said switch pole, said resistance element being short circuited when said switch arm engages said switch pole, a rotatably mounted upright post, an insulator carried by said post for supporting said switch arm, a transmission line, resistance in series with said transmission line, and station apparatus connected through said resistance with said transmission line, said switch arm being connected with said transmission line between said line and station apparatus.

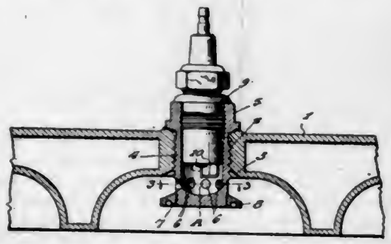


1,766,739. MOUNTING FOR LOOM PICKING SPINDLES. CARL P. BERGSTROM, Millbury, Mass., and CARL J. LINDEGREN, Providence, R. I., assignors to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Jan. 15, 1929. Serial No. 332,692. 8 Claims. (Cl. 139—158.)



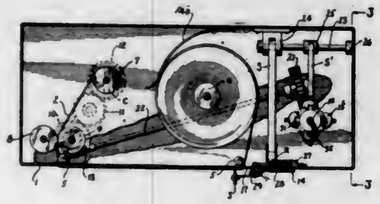
8. In a loom lay having a picker spindle the inner end of which is supported in fixed position with respect to the lay, a threaded member extending into and capable of assuming a plurality of horizontal positions relatively to the lay, and a threaded spindle supporting element operatively related to the member and capable of being held in a plurality of vertical positions relatively to the member.

1,766,740. SPARK-PLUG MOUNTING. OSCAR BITCHMAN, Habana, Cuba. Filed Oct. 8, 1929. Serial No. 398,215. 1 Claim. (Cl. 123—169.)



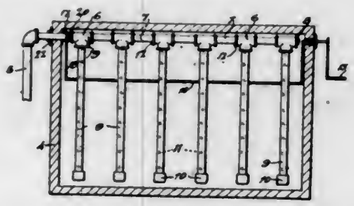
An internal combustion engine having a threaded opening in its wall communicating with a combustion chamber, a hollow plug open at its upper end and closed at its inner end, the plug being externally threaded for engagement with the threads of the opening and having its inner end portion projecting into the combustion chamber when the plug is screwed tightly into the opening, side ports being formed through the walls of the plug adjacent its closed inner end, the wall of the engine being formed with an annular seat about the inner end of its opening, a collar about said plug between the ports and the inner end of the plug, the ports being adapted to be closed by the walls of the plug receiving opening when the plug is screwed outwardly and the collar constituting a valve head engageable with the seat when the plug is screwed outwardly to tightly seal the inner end of the plug receiving opening about the plug, and a spark plug removably mounted in said plug above the ports and removable through the open upper end thereof.

1,766,741. RECORDING SPEED INDICATOR. THOMAS E. BUTTERS, La Crescenta, Calif. Filed Nov. 11, 1924. Serial No. 749,150. 3 Claims. (Cl. 234—31.)



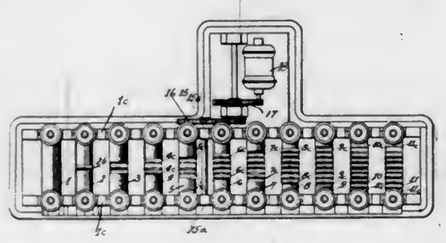
1. A speed indicator comprising a casing provided in one side with a vertical slot, a slide mounted in said slot and having a rack on its rear face, a shaft mounted in the casing in spaced relation to the slide, a pair of concentric toothed segments interconnected and mounted on said shaft with the segment of larger diameter meshing with the rack of said slide, a speed responsive device mounted in the casing, and a rack bar connected to the speed responsive device and meshing with the segment of smaller diameter for moving the same and indicating at an increased ratio variations in speed by said slide with respect to the marginal portion of the vertical slot.

1,766,742. GRAIN-DRYING DEVICE. JOSEPH CAMPBELL, Milner, British Columbia, Canada. Filed Sept. 23, 1929, Serial No. 394,616, and in Canada July 20, 1929. 2 Claims. (Cl. 34—19.)



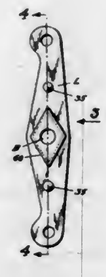
1. A grain drying device in combination with a grain storage bin comprising, a main distributing pipe consisting of a consecutive series of T-shaped pipe connectors united by nipples of the nature of short lengths of pipe to form a main supply member, each said connector being movable about the axis of said main pipe, pipes having a series of small perforations spaced apart and extending throughout their lengths one of said pipes being secured to each said branch connector and movable with it, whereby a series of pipes disposed in parallelism is made available, said main pipe being connected to a source of dry air under pressure, whereby the floor surface of said bin may be impinged by a numerous series of spaced air jets and numerous air currents distributed amongst the stored grain to percolate through it and absorb the moisture enclosed therein and whereby said perforated pipes may be pivotally raised from the horizontal floor surface to the vertical for the purpose of clearing the said bin.

1,766,743. MACHINE FOR CORRUGATING SHEET METAL. JONATHAN ROY FREEZE, Middletown, Ohio, assignor to The American Rolling Mill Company, Middletown, Ohio, a Corporation of Ohio. Filed Mar. 28, 1928. Serial No. 265,485. 1 Claim. (Cl. 153—77.)



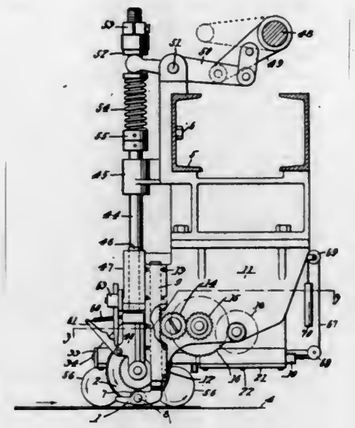
A machine for forming corrugations in sheet metal, which comprises a series of stands of rolls having circumferential ridges and matching grooves, said rolls arranged so that in the first stand a pair of opposed folds is formed in the metal lengthwise and centrally thereof, and in the succeeding stands one fold is made at each side of the previously folded portions, and a drive for said rolls in the said stands, comprising a gear system between the several rolls of the several stands to drive all of them, and a main drive for said gear system located substantially centrally intermediate the said gear system, for the purpose described.

1,766,744. DOBBY LEVER FOR LOOMS. ALBERT A. GORDON and ROLAND M. COOK, Worcester, Mass, assignors to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Mar. 21, 1928. Serial No. 263,467. 3 Claims. (Cl. 139—74.)



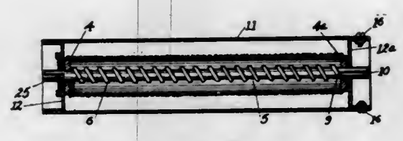
1. A dobby back lever formed of two substantially similar sections each with a body portion, each section formed with a non-circular depression to provide a bearing portion out of the plane of the body portion, said depressions facing each other and being symmetrical about a transverse axis, a non-circular bearing element substantially filling the cavity formed by the depressions, and means passing through the sections at points removed from the non-circular depressions and being the sole means for holding said sections together.

1,766,745. THICKNESS-GAUGING DEVICE FOR LEATHER, ETC. WINFRED S. GRIFFITH, Worcester, Mass., assignor to Graton & Knight Company, Worcester, Mass., a Corporation of Massachusetts. Filed June 28, 1928. Serial No. 288,938. 4 Claims. (Cl. 101—43.)



1. A device for gauging leather comprising a fixed framework, a gauge mounted therein for relative movement, a rack mounted in said framework for endwise movement and gear-driven from said gauge, a reciprocatory head, a second rack mounted in said head and coupled to said first-named rack with capacity to move endwise in unison therewith and also for relative up-and-down movement with respect thereto, a stamping-wheel gear-driven from said second rack and bearing upon its periphery figures representing the numerical values of measurements of thickness; and means to reciprocate said head to press said stamping-wheel against material being measured by the gauge to stamp upon the surface of the said material the figure representing the measurement being taken by the gauge.

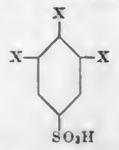
1,766,746. SPRING-ROLLER-CONTROLLING DEVICE. WILLIAM F. HECKMAN, Newport, Ky., assignor to The Higgin Manufacturing Company, Newport, Ky., a Corporation of West Virginia. Filed Mar. 1, 1929. Serial No. 343,748. 8 Claims. (Cl. 156—36.)



8. In a controlling device for spring rollers, a shaft and a support therefor, a fixed washer having tongues fastened to said support, a movable washer having notches fastened to said shaft so as to be non-rotatable therewith, said shaft having a slot therein and said movable washer having a bar fitting into said slot whereby rotation of said movable washer with respect to said shaft is inhibited, said tongues offset from said fixed washer a distance equal to the thickness of said movable washer and having portions parallel to said fixed washer said portions adapted to engage portions of said movable washer whereby movement of said washers away from each other is inhibited when they are in engaged position, said slot in said shaft terminating in an abutment engaging said bar whereby, when said washers are engaged, longitudinal movement of said shaft in one direction is inhibited.

1,766,747. PROCESS FOR MANUFACTURING VIC. TRIHALOGENBENZENES. RICHARD HERZ and EDUARD ALBRECHT, Frankfort-on-the-Main, Fechenheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Sept. 29, 1928, Serial No. 309,351, and in Germany Oct. 5, 1927. 3 Claims. (Cl. 260—161.)

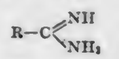
1. Process which comprises diazotizing a halogenaminobenzene-sulfonic acid of the formula:



wherein Y means halogen or an aminogroup and the X's mean amino groups in the case of Y being halogen, or halogen in the case of Y being an amino group, treating the diazocompound obtained with a copper halide according to Sandmeyer's reaction and heating the 1.2.3-trihalogenbenene-5-sulfonic acid thus obtained with sulfuric acid.

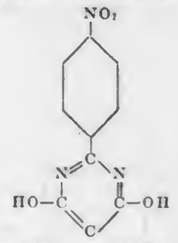
1,766,748. 2-ARYL-4,6-DIHYDROXYPYRIMIDINES. JOSEF HILGER, Cologne-Mulheim, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Mar. 28, 1929, Serial No. 350,837, and in Germany Apr. 3, 1928. 15 Claims. (Cl. 260—32.)

1. The process which comprises heating an amidine of an aryl-carboxylic acid of the general formula



wherein R stands for an aromatic nucleus which may be substituted by any monovalent substituents with at least the molecular quantity of malonic acid diethylester to an elevated temperature for about one hour.

15. As a new product the compound of the formula



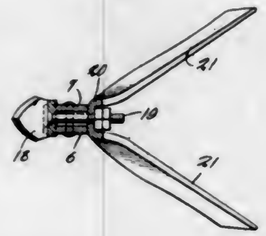
being a yellowish crystalline substance, melting at 320° C., being insoluble in alcohol, ether, acetone, mineral acids, soluble in soda lye and in hot pyridine, and being a valuable intermediate product in the manufacture of dyestuffs.

1,766,749. CAP. MARION M. HUSMAN, New York, N. Y. Filed July 17, 1929. Serial No. 379,013. 1 Claim. (Cl. 2—174.)



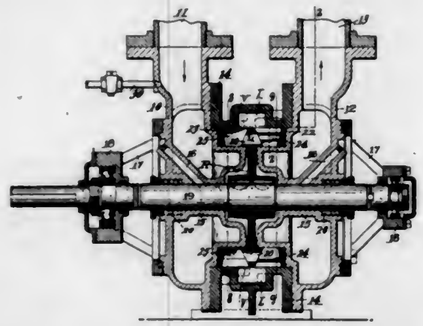
A cap comprising a sheet of material having portions at its front extending forwardly to cover a person's ears when the cap is worn, the sheet being adapted to be placed upon a person's head with its rear portion extending downwardly and its side portions folded to form flaps extended rearwardly over the rear portion of the sheet, reinforcing disks applied against the under surface of said sheet adjacent opposite sides of the front portion thereof and the said portions of the sheet being crimped transversely through the disks, tabs straddling the said crimped portions of the sheet and disks, fasteners passed through the tabs and disks to firmly secure the tabs, and companion securing elements carried by said tabs and adapted to be united to connect the flaps.

1,766,750. PLOW ATTACHMENT. AMON ALTON HUTTO, Samson, Ala. Filed Sept. 1, 1928. Serial No. 303,559. 1 Claim. (Cl. 97—78.)



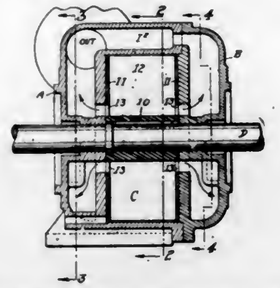
A subsoiling attachment for plows, including spaced beams having curved lower ends, means for securing the front ends of the spaced beams to the beam of a plow, a curved subsoiling blade fitted against the curved ends of the spaced beams, a bolt extending between the spaced beams and through the subsoiling blade, a subsoiling member embodying laterally and rearwardly extended blades and a central offset portion, said bolt extending through the offset portion to connect the curved subsoiling blade and subsoiling member, and a nut on the bolt positioned in the offset portion to secure the subsoiling blade and subsoiling member in position.

1,766,751. ROTARY PUMP. IRVING C. JENNINGS, South Norwalk, Conn. Filed Sept. 4, 1924, Serial No. 735,986. Renewed Jan. 24, 1928. 17 Claims. (Cl. 230—79.)



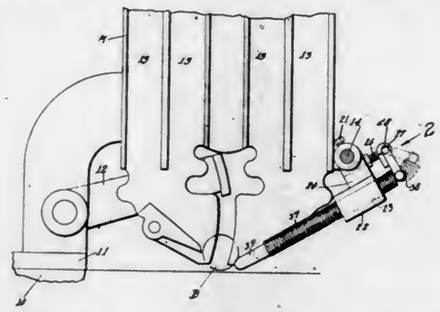
1. In a rotary pump employing a liquid as the motivating agent, the combination of an eccentric casing, a rotor therein having blades or partitions forming peripheral buckets or displacement chambers, certain of the blades being set at a backward angle to obtain a centrifugal effect and certain of the blades being set so as not to obtain a centrifugal effect and suitable ports for allowing the fluid to be pumped to enter and leave said displacement chambers.

1,766,752. HYDROTURBINE PUMP. IRVING C. JENNINGS, South Norwalk, Conn. Filed June 11, 1928. Serial No. 284,325. 6 Claims. (Cl. 230—79.)



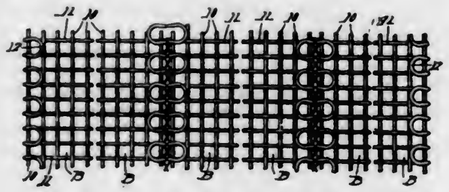
1. In a hydro-turbine pump, the combination of an eccentric casing, a circular rotor fitted therein, said rotor comprising a hub and vanes or wings extending therefrom to form displacement chambers, the depth of each displacement chamber being greater than the radius of the hub, and ports on each side of the rotor located adjacent the rotor hub.

1,766,753. YIELDABLE BOBBIN SUPPORT FOR WEFT-REPLENISHING LOOMS. WILLIAM H. KING, Clinton, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Dec. 3, 1928. Serial No. 323,342. 17 Claims. (Cl. 139—251.)



1. In a weft replenishing mechanism, a substantially cylindrical inherently resilient bobbin support movable as a unit along its axis and resisting a bending of the axis thereof, means to cause a bending of said support when the latter is moved longitudinally along its axis, and means cooperating with the bent part of the support to assist the support by the inherent resilience thereof to restore the axis of the support to normal.

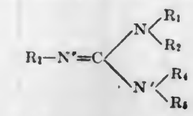
1,766,754. SECTIONAL WIRE CONVEYER BELT. VERNON C. KING, Worcester, Mass., assignor to Wickwire Spencer Steel Company, New York, N. Y., a Corporation of Delaware. Filed Apr. 12, 1929. Serial No. 354,623. 4 Claims. (Cl. 140—3.)



1. A sectional wire conveyer belt comprising a plurality of unit belts having loops of weft wire projecting beyond the selvage and reversely bent over the body of the belt, and lacing wires interwoven around said projecting loops.

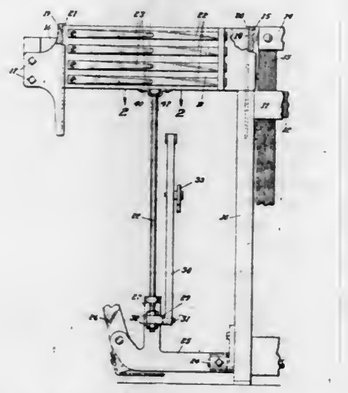
1,766,755. VULCANIZATION ACCELERATOR. HANS LECHER and WALDEMAR ZIESER, Leverkusen-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed May 9, 1929, Serial No. 361,836, and in Germany May 18, 1928. 3 Claims. (Cl. 18—53.)

1. As vulcanization accelerators liquid pentasubstituted guanidines corresponding to the probable general formula



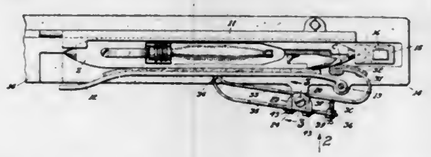
wherein R_1, R_2, R_3, R_4 and R_5 mean aliphatic-, aromatic-, aliphatic-aromatic-, or hydroaromatic hydrocarbon residues.

1,766,756. LOOM DROP-BOX CONNECTION. CARL J. LINDEGREN, Providence, R. I., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Jan. 15, 1929. Serial No. 332,591. 8 Claims. (Cl. 139—182.)



1. In a loom having a shifting shuttle box and having also a box lifter rod to give the shuttle box a plurality of positions relatively to the lay, means defining a non-circular pocket on the under side of the shuttle box, and a singular non-circular element secured to the box lifter rod and located loosely within the pocket and positioned to engage the side walls of the pocket, the upper surface of the element being convex and being the sole supporting connection between the lifter rod and the shuttle box.

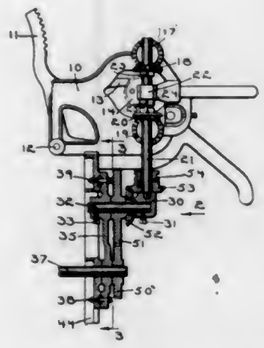
1,766,757. SHUTTLE CHECK. WILLIAM E. LUNDGREN, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Jan. 15, 1929. Serial No. 332,705. 14 Claims. (Cl. 139—186.)



1. In a shuttle check for a loom having a lay with a binder to engage a shuttle, means defining a pivot, an in-

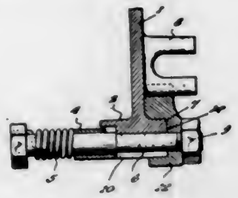
herently resilient shuttle check extending on opposite sides of the pivot and having one arm to engage the rounded end of the shuttle and the other arm to engage the binder, means to hold the shuttle check, said means having connection with the aforesaid pivot, and a device to vary the amount of the shuttle check which extends to one side of the pivot.

1,766,758. LOOM DRIVING MECHANISM. WILLIAM E. LUNDGREN, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Dec. 5, 1929. Serial No. 411,935. 5 Claims. (Cl. 139—66.)



1. In a loom having a head motion with upper and lower cylinder gears, a substantially upright shaft and bevel gears connecting said shaft to rotate said cylinder gears, in combination, a driving shaft, a pinion on said shaft, an intermediate gear meshing therewith and mounted for adjustment about the axis of said driving shaft, and bevel gears connecting said intermediate gear with the lower end of said upright shaft.

1,766,759. BATTERY PATCH. LEE MCDANIEL, Pacolet Mills, S. C., assignor to Bahan Textile Machinery Company, Greenville, S. C., a Corporation of South Carolina. Filed Feb. 27, 1929. Serial No. 343,172. 2 Claims. (Cl. 139—251.)

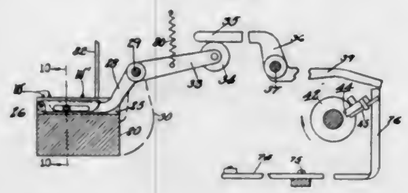


1. A patch dev'ce for the purpose set forth consisting of a tapered elongated body having end portions formed to rest on the flanges of a battery plate and having an eye in its lower edge betwen its end portions to fit around and house the end of the bobbin support bearing of the battery plate and the end of the holding member of the bobbin support.

1,766,760. ALDEHYDE AND ANTIOXIDANT AGENT AND PROCESS. HAROLD A. MORTON, Akron, Ohio. Filed Aug. 17, 1928. Serial No. 300,371. 24 Claims. (Cl. 23—250.)

1. The method of retarding the oxidation of aldehydes which comprises adding to the aldehyde a derivative of hydrogenated glyoxaline.

1,766,761. THREAD CUTTER FOR WEFT-REPLENISHING LOOMS. SAMUEL A. NELSON, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Apr. 10, 1928. Serial No. 268,945. 10 Claims. (Cl. 139—265.)



1. In a loom, a lay, a thread cutter mounted on the lay, a controlling member therefor, an actuator for said controlling member having a continuous movement of rotation and also movable to operative and inoperative positions relative to said member, and a weft detector connected to move said actuator to operative position upon indication of weft exhaustion.

1,766,762. APPARATUS FOR DRYING, SMOKING, AND CURING MEAT PRODUCTS. ARTHUR E. OZOUF, Chicago, Ill., assignor to The Allbright-Nell Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 12, 1928. Serial No. 260,945. 18 Claims. (Cl. 99—9.)

8. In combination; a vertical chamber; a plurality of transversely alined pairs of sprockets supported adjacent the top of said chamber; a plurality of transversely alined pairs of sprockets substantially below said first plurality of sprockets; an endless conveyor passing continuously and successively over said transversely alined pairs of sprockets of said first plurality of sprockets and said second plurality of sprockets respectively; and means for individually driving said transversely alined pairs of sprockets of said first plurality of sprockets.

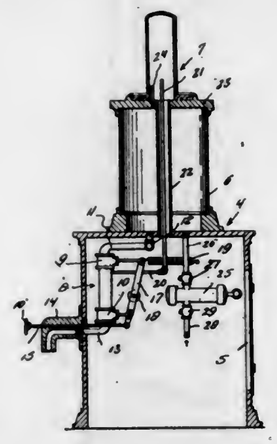
18. In a smoke house; an endless conveyor; transversely alined hangers carried by said conveyor in closely spaced relation throughout the length thereof; each of said hangers provided with a conical seat; a supporting member for each pair of transversely alined hangers; each supporting member comprising a channel bar and a notched supporting bar secured in spaced relation to said channel bar; each supporting member provided with a conical projection at each end thereof for detachable engagement in one of said conical seats.

1,766,763. PROCESS OF PRODUCING GASES FOR THE MANUFACTURE OF OXYGENATED ORGANIC COMPOUNDS. MATHIAS PIER, Heidelberg, and MARTIN MÜLLER-CUNRADI, GUSTAV WIETZEL, and KARL WINKLER, Ludwigshafen-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Sept. 15, 1923. Serial No. 662,961. 4 Claims. (Cl. 260—156.)

1. In a process of manufacturing methanol or other oxygenated organic compounds by catalytically reducing, under pressure, carbon oxids with hydrogen, the step comprising freeing the gases from volatile compounds of iron prior to their coming into contact with the catalyst.

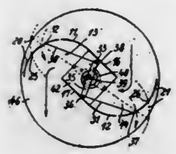
3. A process of manufacturing methanol or other oxygenated organic compounds by catalytically reducing, under pressure, carbon oxids with hydrogen, which is characterized by passing the gas mixture containing a carbon oxid and hydrogen prior to the catalytic reaction through a layer of active carbon sufficient to retain the volatile iron compounds.

1,766,764. PORTABLE DISPENSING DEVICE. HARRY R. PRICE and EVERETT W. NICE, Detroit, Mich.; said Price assignor to said Nice. Filed Feb. 6, 1928, Serial No. 252,302. Renewed May 17, 1930. 2 Claims. (Cl. 221—112.)



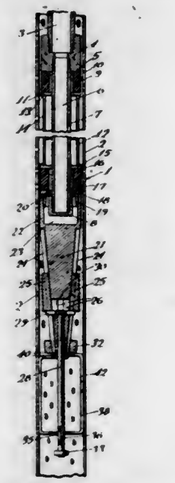
1. A liquid dispenser for filling pocket cigar and cigarette lighters comprising a hollow supporting base, a transparent reservoir supported on said base and having communication with the interior of said base, a manually controlled pump arranged within said hollow base, means for supplying liquid from a suitable container to said pump, fluid conducting means leading from said pump to said reservoir, a vertically disposed gage tube arranged within said hollow base, for containing a predetermined quantity of liquid, a fluid conducting pipe leading from said reservoir and communicating with said gage tube at the upper end of said tube, whereby fluid may be fed by gravity from the reservoir to said gage tube, upper and lower valves arranged within said gage tube, means operatively connecting said valves, whereby said valves may be simultaneously actuated, said last mentioned means including spring means for normally maintaining the upper valve in an open position and the lower valve in a closed position, a dispensing spigot mounted on said base exteriorly of said base, a pipe leading from the lower end of said gage tube and communicating with said dispensing spigot, a rod slidably mounted in said dispensing spigot, and means operatively connecting said rod with said valve connecting means whereby said upper valve may be moved to a closed position and said lower valve moved to an open position, all in the manner and for the purpose specified.

1,766,765. WIND ROTOR. SIGURD J. SAVONIUS, Helsingfors, Finland. Filed Oct. 11, 1928, Serial No. 311,793, and in Great Britain Dec. 16, 1927. 5 Claims. (Cl. 170—33.)



1. A rotor comprising two oppositely curved vanes overlapping each other in the centre, there being a gap between the inner sides of said vanes, the walls of the vanes being provided with openings particularly at the places of the vane channels where changes occur in the stream relations, regulating flaps for said openings, and interlocking means for the corresponding flaps of said vanes adapted to cause said flaps to move in unison.

1,766,766. WELL PACKER. LAWRENCE E. SHEPARD and HUBERT L. SHEPARD, Los Angeles, Calif. Filed Sept. 7, 1926. Serial No. 133,844. 8 Claims. (Cl. 166—1.)

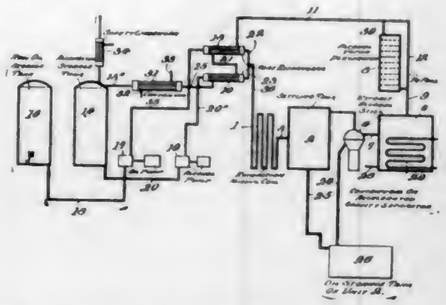


1. A packer comprising in combination a flow pipe, a coupling, a perforated tube extending downwardly from the coupling, an upper packing ring bearing against the lower surface of the coupling, a perforated cage, a lower packing ring, plates on the packing rings engaging the cage, a wedge block having a downward taper loosely connected to the perforated tube, slips slidably mounted on the wedge block, friction means loosely connected to the wedge block and extending below same, means interconnected betwen the friction means and the wedge block and the slips to force the slips into engagement with a well casing, the downward movement of the flow pipe causing the gripping of the slips and the casing and compressing the packing.

1,766,767. PROCESS OF TREATING REFRACTORY AURIFEROUS ORES. CHARLES L. VOTAW and CHARLES A. ANDREWS, Bakersfield, Calif. Filed Apr. 25, 1928. Serial No. 272,866. 3 Claims. (Cl. 75—185.)

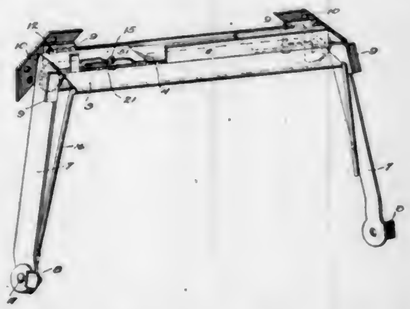
1. A process of treating refractory auriferous ores containing gold in other than the free state, comprising grinding the ore and forming a pulp by adding a solution containing a cyanide, a hydroxide of the alkali metals and sodium carbonate, drying said pulp without removing the solution and smelting said dried pulp.

1,766,768. PROCESS OF AND APPARATUS FOR THE FRACTIONAL EXTRACTION OF PETROLEUM HYDROCARBONS WITH ALCOHOL. THEODORE A. WERKENTHIN, Lima, Ohio, assignor to The Solar Refining Company, Lima, Ohio, a Corporation of Ohio. Filed Dec. 30, 1927. Serial No. 243,643. 14 Claims. (Cl. 196—13.)



1. The process of treating heavy petroleum oils comprising preheating oil, preheating alcohol, thereafter successively extracting preheated oil with preheated alcohol in a mixing coil at a temperature not exceeding the boiling point of the alcohol whereby there is insured a high degree of solubility of the oil in the alcohol, and separating from each successive extraction product in a centrifugal separator the resulting alcohol extraction product and undissolved oil.

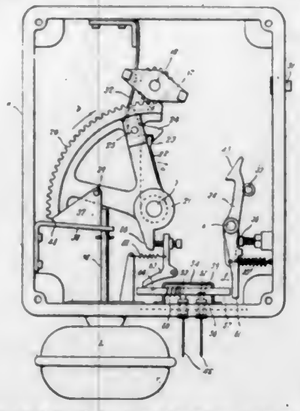
1,766,769. AWNING FOR AUTOMOBILES. HAROLD E. WILLIAMS, Carthage, Mo. Filed Dec. 16, 1927. Serial No. 240,504. 7 Claims. (Cl. 156—44.)



4. An awning or shade for automobiles and the like comprising a frame having a rigid central portion supporting the awning and side portions adapted to engage with the glass grooves of the window frame, the side portions being resilient and normally standing apart at their free ends a distance greater than the width of the window opening to which the awning frame is to be applied, and means for holding the central rigid portion of the awning frame frictionally in engagement with the window casing.

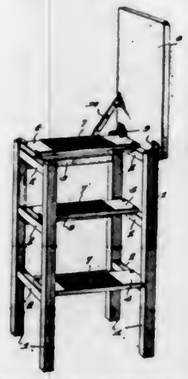
1,766,770. MECHANISM FOR TIMING MECHANICAL OPERATIONS. CHARLES F. BALL, Milwaukee, Wis., assignor to Chain Belt Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Apr. 25, 1927. Serial No. 186,375. 11 Claims. (Cl. 161—1.)

2. In combination, a timing device for use in connection with concrete mixers or other apparatus whose operations are to be timed, and means for setting the timing device, comprising a part that is moved by the apparatus to be timed, a second part that is connected with the timing device, a detent between the two parts through which the first part moves the second, the said detent being constructed to remain in the various positions to which it may be adjusted until positively moved by extraneous means, means for adjusting the detent to a position to cause the first part to move the second when moved in



one direction arranged to operate when the parts come to normal or inactive position, and other means to move the detent to disconnect the said first and second parts to permit the second part to move without imparting motion to the first part or engaging with the said detent.

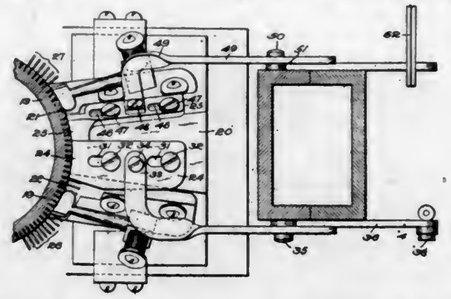
1,766,771. COMBINATION STOOL AND STEPLADDER. HARRY E. BARROWS, Sheboygan, Wis., assignor to Dillingham Manufacturing Co., Sheboygan, Wis., a Corporation of Wisconsin. Filed May 26, 1928. Serial No. 280,874. 3 Claims. (Cl. 155—42.)



3. A combined stool and stepladder comprising a supporting structure including steps, and a member hingedly connected at one side of the supporting structure, said member when lowered being positioned horizontally over the supporting structure and when raised extending vertically to the side of a person ascending or descending the steps to be readily grasped by the hand, the line of pull on the member when grasped being at right angles to the longitudinal axis of the steps and in a direction at right angles to the movement of the member when being lowered to horizontal position.

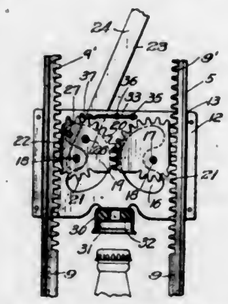
1,766,772. MECHANISM FOR FORMING CLOCKED, FLOATED-THREAD HOSIERY. HARRY K. BERGMAN, Shillington, Pa., assignor to Hemphill Company, Central Falls, R. I., a Corporation of Massachusetts. Filed Mar. 16, 1928. Serial No. 262,275. 9 Claims. (Cl. 66—40.)

1. In a circular, independent needle, hosiery knitting machine attachment for making opposite so-called clocking areas composed of an additional thread or threads, said areas connected together by float portions of said threads, which float portions extend uninterruptedly from one of said clocking areas to the other, and for which needles having contrasting butts are provided, a two-part top guide cam at and constituting a part of the stitch cam



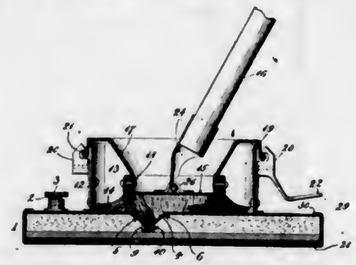
set, and mechanical connections for automatically and separately moving each part of said two-part top guide cam so as to render said two parts active or nonactive upon certain needles, according to the contrasting butt formation.

1,766,773. BOTTLE-CAPPING MACHINE. KERNEY R. BUNKER, Kansas City, Mo., assignor to The Everedy Company, Frederick, Md., a Corporation of Maryland. Filed Mar. 13, 1926. Serial No. 94,551. 11 Claims. (Cl. 226—84.)



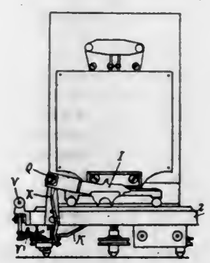
4. A bottle capper comprising a double rack, a rider slidably engaging said double rack, gear devices rotatably mounted within said rider and arranged to mesh with each other and to engage said double rack, a capper throat carried by said rider for pressing a crown cap upon a bottle positioned between said double rack, and means for rotating said gear devices for moving said rider with respect to said double rack.

1,766,774. COMBINATION WAX DISTRIBUTOR AND POLISHER. WILLIAM L. BUTCHER, Newton, Mass., assignor to The Butcher Polish Co., Boston, Mass., a Corporation of Massachusetts. Filed Jan. 26, 1928. Serial No. 249,680. 11 Claims. (Cl. 91—41.)



1. The combination comprising a liquid wax containing receptacle having an open trough in the top wall thereof in communication with the interior of the receptacle whereby liquid wax therein may flow into the trough, an enclosure forming wall around said trough co-operating with the top wall of the receptacle to form a chamber with an open top through which a mop may be introduced to lie within said chamber seated on the top wall of the receptacle and lying in part within said trough, a mop capable of being introduced into said chamber and seated as aforesaid, a cover connected to the mop and adapted to close the top of said chamber when the mop is contained therein as aforesaid, and releasable means for holding the cover in place.

1,766,775. DIFFERENTIAL RECORDING DILATOMETER. PIERRE CHEVENARD, Imphy, France, assignor to Societe Anonyme de Commentry, Fourchambault & Decazeville, Paris, France. Filed Apr. 23, 1926, Serial No. 104,130, and in France May 8, 1925. 3 Claims. (Cl. 234—11.)



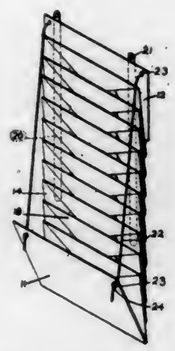
1. A differential dilatometer comprising a device containing a standard piece and a test piece, amplifying levers adapted to be acted upon by the said pieces, during expansion thereof, a tripod adapted to be displaced by said amplifying levers about two rectangular axes, the movement on one axis corresponding to the expansion of the test piece, and the movement on the other axis corresponding to the difference between the expansion of the test piece and the standard piece, a rod mounted on said tripod, a pen secured to said rod, and means for recording the successive positions of the pen.

1,766,776. COVERED ELASTIC STRAND. LESTER B. CHISHOLM, Stoneham, Mass., assignor to Everlastik, Inc., Chelsea, Mass., a Corporation of Massachusetts. Filed Mar. 22, 1928. Serial No. 263,770. 1 Claim. (Cl. 117—57.)



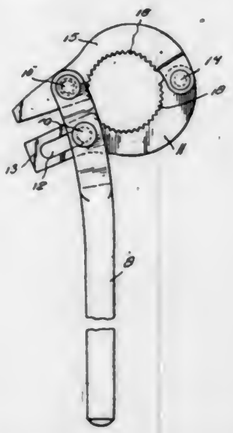
As a new article of manufacture, a covered elastic thread or cord comprising an elastic core, a covering-thread wrapped around the said core, so that its reaches normally abut against each other to limit the contraction of the said elastic core, and an adhesive interposed directly between the outer surface of the said elastic core and the inner surface of the said covering-thread, but excluded from between the abutting surfaces of the respective reaches thereof, whereby the elastic core is prevented from creeping with respect to the covering-thread and whereby, owing to the absence of adhesive between the respective abutting reaches of the said covering-thread, the said elastic core or thread may be readily stretched without rupturing the bond between the said core and covering.

1,766,777. EXTENSIBLE AND COLLAPSIBLE ENVELOPE FILE. ALICE C. CRULL, Inglewood, Calif. Filed Apr. 3, 1929. Serial No. 352,199. 4 Claims. (Cl. 129—15.)



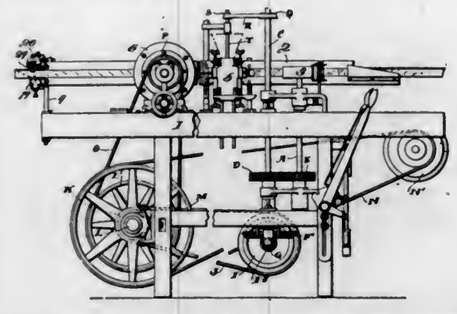
1. A device as described comprising in combination rigid cover elements, a flexible sheet material binding connecting an edge of each of the covers, a plurality of envelopes, each having one of their lower faces secured to the binding with a loose section of the binding between each envelope, the covers, the envelopes and the binding being collapsible to form a package which may be opened with the binding in the folded position similar to a book, the envelopes forming the leaves or which may be opened with the binding stretched and the envelopes overlapping each other, means secured to one of the covers to suspend such cover from a wall and means depending from such cover to the other cover to hold the envelopes from tilting.

1,766,778. PIPE WRENCH. GIUSEPPE DELUCA, Rayland, Ohio. Filed June 13, 1928. Serial No. 284,945. 1 Claim. (Cl. 18—91.)



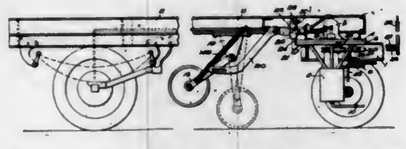
In a pipe wrench, a handle, complementary inner and outer jaws pivotally connected together at their outer ends, each of said jaws being formed at its inner end with a straight shank substantially parallel to each other, and approximately perpendicular to the handle, the shank of the inner jaw being formed with a longitudinally disposed slot, said handle being pivoted at one end to the inner end portion of the shank carried by the outer jaw, and a pin carried by the pivoted end portion of the handle for cooperation with the aforementioned slot.

1,766,779. MACHINE FOR COATING STRIPS OF LUMBER. IRVIN F. DITTMAR, Williamsport, Pa., assignor to The Cromar Company, Williamsport, Pa., a Corporation of Pennsylvania. Filed Sept. 13, 1924. Serial No. 737,528. 12 Claims. (Cl. 198—33.)



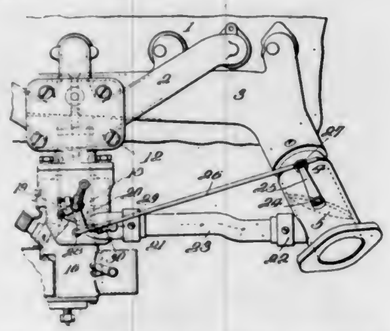
1. A machine for coating strips of lumber having means for guiding and moving a strip on edge therethrough and a roller disposed at the delivery end of said machine for turning said strip as it is delivered therefrom.

1,766,780. TRACTOR AND TRAILER. NATHANIEL FINCH, New York, N. Y. Filed Mar. 26, 1926. Serial No. 97,583. 12 Claims. (Cl. 280—331.)



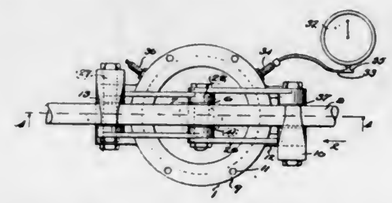
1. In the combination of a tractor and trailer, a fifth wheel mechanism comprising a coupling pin presented by the tractor, a housing presented by the trailer for receiving the pin to couple the tractor and trailer together, means permitting the tractor to turn relative to the trailer and fluid-operated piston means moving in alignment with the coupling pin to force said pin into coupling engagement with said housing.

1,766,781. HEATING-MEDIUM CONTROL FOR CHARGE-FORMING DEVICES FOR INTERNAL-COMBUSTION ENGINES. JACOB RICHARD FRANCIS, Flint, Mich. Filed Sept. 29, 1922. Serial No. 591,845. 5 Claims. (Cl. 123—122.)



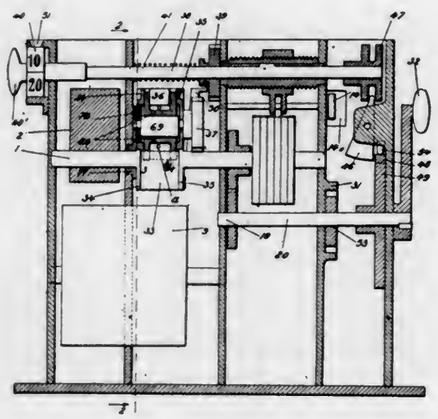
1. The combination with an internal combustion engine having an exhaust pipe, intake manifold and a charge forming device connected thereto, of a heating jacket surrounding the central portion of said intake manifold in communication with said exhaust pipe, a heating jacket surrounding the mixing chamber of said charge forming device in communication with the first mentioned heating jacket, a throttle valve for said charge forming device, a throttle valve for the exhaust pipe, a pipe connecting the heating jacket of said charge forming device to the exhaust pipe to the muffler side of the throttle valve thereof, a connection between the throttle valve of the charge forming device and the throttle valve of the exhaust pipe, a valve disposed within the outlet of the heating jacket of said charge forming device and a connection between said valve and the throttle valve of said charge forming device.

1,766,782. STRESS-MEASURING DEVICE. OTTO BERGER GOLDMAN, Long Beach, Calif., assignor to May Fety Goldman, Long Beach, Calif. Filed Jan. 30, 1928. Serial No. 250,640. 11 Claims. (Cl. 265—47.)



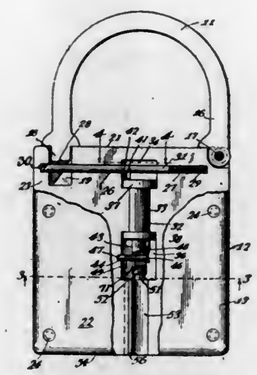
1. A device for measuring the stress imposed upon a member, comprising a chamber, a piston reciprocal within said chamber, a receptacle of flexible material disposed within and conforming to said chamber and piston, a rod carried by said piston and extending from the chamber to engage said stressed member, means for deflecting said stressed member towards said chamber on opposite sides of said rod, a fluid in said receptacle, and means for measuring the pressure of said fluid.

1,766,783. FRANKING MACHINE. GABRIEL GRANDJEAN, Paris, France. Filed Mar. 26, 1925, Serial No. 18,510, and in France Apr. 10, 1924. 15 Claims. (Cl. 101—91.)



1. A franking machine comprising a stamping roller, a stamp on said roller, a guide roller for said stamp, means for guiding envelopes between said stamping roller and said guide roller and means carried by said first mentioned roller for preventing true carbon impressions from being made from said stamp.

1,766,784. LOCK. JOHN C. GREGORY, Milford, Utah. Filed June 13, 1928. Serial No. 284,992. 8 Claims. (Cl. 70—106.)

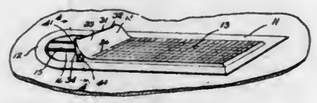


1. In a lock, a housing, a bolt slidably mounted within said housing to be optionally withdrawn from a recess let into a side of the housing or extended thereacross into a socket in the opposite wall of said recess, a key-rotatable cylinder revolubly mounted within said housing and operatively connected to said bolt to retract the bolt when turned, a detent mounted for movement transversely of the cylinder, and spring means urging said detent into a recess in said housing to lock the cylinder against rotary movement.

1,766,785. PRODUCTION OF CALCIUM NITRATE, ALUMINA, AND PHOSPHORUS. ROBERT GRIESSBACH, Ludwigshafen-on-the-Rhine, and OTTO SCHLIEPHAKE and OTTO HEUSLER, Mannheim, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-Main, Germany, a Corporation of Germany. Filed Jan. 17, 1928, Serial No. 247,453, and in Germany Jan. 24, 1927. 7 Claims. (Cl. 23—102.)

6. A process for producing calcium nitrate together with alumina and phosphorus which comprises mixing a raw phosphate with coaly matter and an aluminous material, expelling the phosphorus by heating to 1600° C., drawing off the iron, treating the resulting slag with nitric acid, filtering off silica, precipitating, while heating, the aluminium with milk of lime in the presence of small quantities of superficially-active compounds and separating calcium nitrate from alumina by filtration.

1,766,786. SCRAPER STEP PLATE. GEORGE A. KEENAN, Los Angeles, Calif. Filed Nov. 2, 1927. Serial No. 230,546. 7 Claims. (Cl. 280—164.)



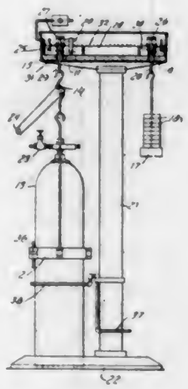
1. A step plate having a frame with a grid formed of transverse and longitudinal bars, a scraper blade extending transversely across the frame, the top of the blade being above the top of the grid, an arcuate molding connected from one side of the blade to the other, and cross bars from the molding to the scraper blade.

1,766,787. BOX. LAURENCE W. KENDRICK, Wellesley, Mass., assignor to The Carter's Ink Company, Cambridge, Mass., a Corporation of Massachusetts. Filed Nov. 22, 1928. Serial No. 321,100. 3 Claims. (Cl. 150—0.5.)



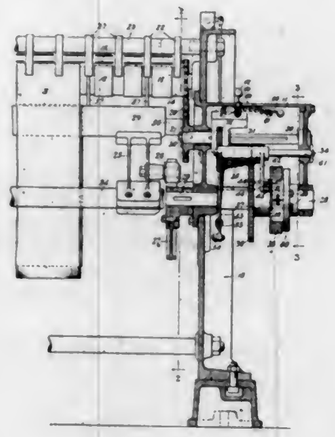
1. In a box having separate members, one a box body and the other a cover, means forming a hinged connection between said members comprising a knuckle on one of said members with pintle-receiving openings in the knuckle, said knuckle being of elastic material admitting of its automatic return to normal shape after distortion, and pintles on the other of said members arranged to extend respectively into the openings in the knuckle and to co-operate with the knuckle in manner whereby the pintles may be plied to or removed from the knuckle by distorting the knuckle.

1,766,788. CHLORINE-WEIGHING APPARATUS. JAMES DOUGLAS MACMAHON, Niagara Falls, N. Y., assignor to The Mathieson Alkali Works, Inc., New York, N. Y., a Corporation of Virginia. Filed May 19, 1928. Serial No. 278,996. 3 Claims. (Cl. 265—27.)



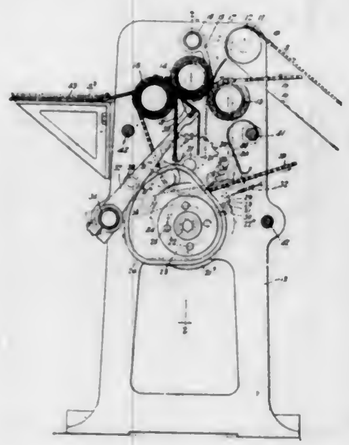
1. An improved scales for supplying measured weights of liquefied gases comprising a pivoted beam having a short load carrying arm and a long weight carrying arm, clamping means adapted to receive a standard container, toggle means supporting said clamping means and pivoted to the load carrying arm of said pivoted beam, means for counterpoising the average standard container including an adjustable counter-poise carried by said pivoted beam adapted to correct for variation in weight of the standard container, weight carrying means pivoted to the weight carrying arm of said pivoted beam, and a plurality of aliquot weights adapted to be carried thereby.

1,766,789. ADJUSTABLE SHEET FOLDER. WALDEMAR F. MAYER, Rutherford, N. J., assignor to The Alba Corporation, St. Albans, Vt., a Corporation of Vermont. Filed Nov. 14, 1928. Serial No. 319,290. 11 Claims. (Cl. 270—80.)



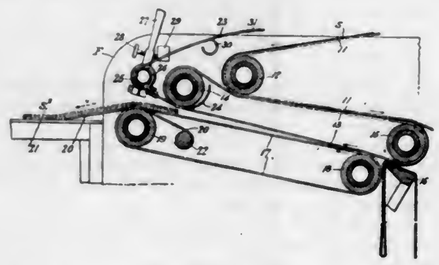
1. In an apparatus of the class described, a feeding device and means to drive the same, a discharge device, a folding blade over which a sheet may be draped from said feeding device, means for operating said folding device in a cycle during a predetermined travel of said feeding device whereby said blade receives the sheet and delivers the draped sheet to said discharge device, and a speed controlling device included in said operating means whereby the cycle may be accomplished during different predetermined distances of travel of said feeding device.

1,766,790. SHEET FOLDER. WALDEMAR F. MAYER, Rutherford, N. J., assignor to The Alba Corporation, St. Albans, Vt., a Corporation of Vermont. Filed Nov. 24, 1928. Serial No. 321,733. 7 Claims. (Cl. 270—80.)



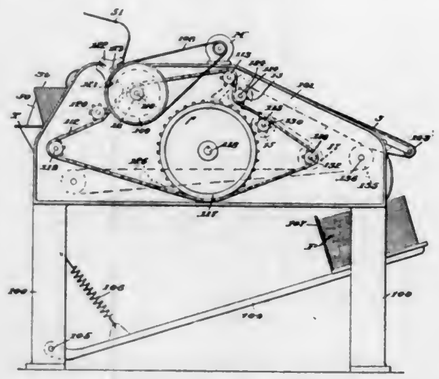
1. In a folding mechanism, first, second and third rolls, means to drive said rolls continuously, said second roll being in surface contact with said first and third rolls when the machine is empty, means to feed a sheet between said first and second rolls, said first and second rolls frictionally holding said sheet and determining its speed of advancement so that the sheet moves downward at a constant speed, a receiving means located beneath said first and second rolls, and devices to actuate said receiving means so that the sheet is delivered on both sides of said receiving means and to press said receiving means and the draped sheet thereon between said second and third rolls so that said rolls remove the sheet from said receiving means.

1,766,791. BY-PASS SHEET FOLDER. WALDEMAR F. MAYER, Rutherford, N. J., assignor to The Alba Corporation, St. Albans, Vt., a Corporation of Vermont. Filed Nov. 22, 1928. Serial No. 321,135. 4 Claims. (Cl. 270—68.)



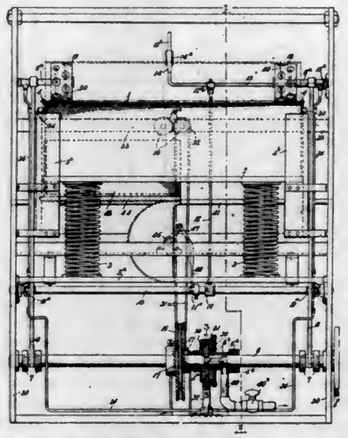
1. In a folding mechanism, a feeding conveyor, a discharge element, a folding device adapted to receive sheets from said conveyor and simultaneously fold and deliver them to said discharge element in folded condition, and a by-pass means to shunt a selected sheet from said conveyor to said element directly without passing to said folding device.

1,766,792. FOLDING MACHINE. WALDEMAR F. MAYER, Rutherford, N. J., assignor to The Alba Corporation, St. Albans, Vt., a Corporation of Vermont. Filed Jan. 22, 1929. Serial No. 334,322. 23 Claims. (Cl. 270—82.)



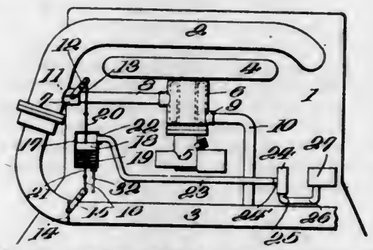
1. In a folding machine, a presenting device for temporarily holding a sheet to be folded, a feeding mechanism to receive the sheet from the presenting device, said presenting mechanism including fingers for holding the sheet in contact with moving parts of the feeding mechanism and means to prevent the movement of the fingers from such position except during operation of an actuating device, a folder mechanism to receive and fold the sheet from the feeding mechanism, and a uniform speed drive for the feeding and folding mechanisms which includes said actuating device to operate the same at uniform speed for actuating said fingers to deliver the sheet to said feeding mechanism at intervals timed with respect to the folding device.

1,766,793. ART OF FOLDING SHEETS. WALDEMAR F. MAYER, Rutherford, N. J., assignor to The Alba Corporation, St. Albans, Vt., a Corporation of Vermont. Filed Feb. 11, 1929. Serial No. 339,115. 11 Claims. (Cl. 270—62.)



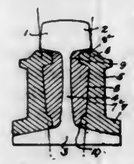
1. A machine for folding sheets comprising means to present a sheet, means to engage the sheet and form it into a tube by rolling it upon itself, said means including rollers having a circumference equal to two-thirds the width of the sheet whereby the sheet is rolled into a tube having one layer for half the circumference thereof and two layers for the other half of the circumference thereof, and a device to crush the tube so formed.

1,766,794. AUTOMATIC CHARGE-HEATING CONTROL FOR INTERNAL-COMBUSTION ENGINES. DONALD P. MOLONY, Flint, Mich., assignor to Marvel Carbureter Company, Flint, Mich., a Corporation of Indiana. Filed Dec. 1, 1924. Serial No. 753,175. 10 Claims. (Cl. 123—122.)



1. The combination with an internal combustion engine having a forced feed lubricating system, of a heating chamber for heating the charge delivered to said engine, a valve for controlling the admission of heating fluid to said heater and means for actuating said valve controlled by the pressure existing in said forced feed lubricating system.

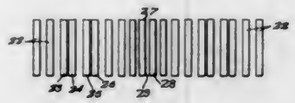
1,766,795. RAILWAY-RAIL JOINT. GEORGE W. MULLER, Washington, D. C. Filed Dec. 18, 1928. Serial No. 326,828. 5 Claims. (Cl. 238—244.)



5. In combination with the meeting ends of railroad rails, members spanning said connected ends and having

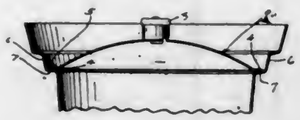
terminal connections with the rails, and filler pieces shorter than said members and interposed between the latter and the connecting ends of the rails, said filler pieces having their lower edges spaced from the rail bases and the rail webs and said filler pieces having co-operating camming surfaces.

1,766,796. ROADBED. GEORGE W. MULLER, Washington, D. C., assignor to Muller Railway Track Systems, Incorporated, Wilmington, Del., a Corporation of Delaware. Filed Apr. 14, 1928. Serial No. 269,935. 2 Claims. (Cl. 238—27.)



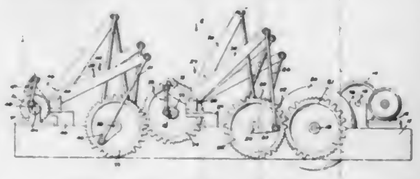
1. A railroad roadbed including cross ties for supporting rails, certain of the ties being arranged in groups and the ties of each group being arranged at regular intervals apart, other of the ties being arranged in groups located intermediate the first mentioned groups, the ties constituting the second mentioned groups being arranged in pairs and the ties of each pair being located in closer relation than the ties of the first mentioned group.

1,766,797. COOKING UTENSIL. SHOICHI NAKAGAWA, San Jose, Calif. Filed Nov. 24, 1928. Serial No. 321,578. 1 Claim. (Cl. 53—1.)



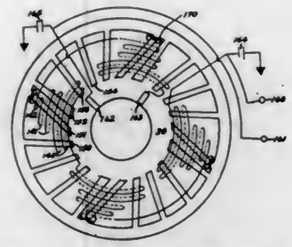
A cooking utensil comprising a vessel having the top portion of its walls flare upwardly and inwardly, and provided with a shoulder near the top of the wall, a plurality of tongues extending inwardly from the walls thereof, spaced above said shoulder, a domed cover provided with a plurality of notches on its periphery adapted to pass said tongues, said cover being formed to drain water over the periphery at all points, and a handle suitable for turning and lifting said cover, said tongues being spaced above the periphery of the cover to allow a limited tilting of the cover without the removal of the same.

1,766,798. MECHANICAL MOVEMENT. CHARLES E. NELSON, Los Angeles, Calif. Filed Dec. 19, 1928. Serial No. 327,070. 2 Claims. (Cl. 74—14.)



1. A mechanical movement comprising in combination a first drive gear and a first driven gear having teeth of varying pitch but meshing on the same pitch circle, a crank connected to the first driven gear, a pivotally mounted bell crank having a long arm connected by a link to said crank, the bell crank having a short arm with a link and a crank driven by said second link with means to take off power from said crank.

1,766,799. ELECTRIC MOTOR. LAURENCE M. PERKINS, Anderson, Ind., assignor, by mesne assignments, to Delco-Remy Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Nov. 20, 1926. Serial No. 149,755. 9 Claims. (Cl. 172—276.)

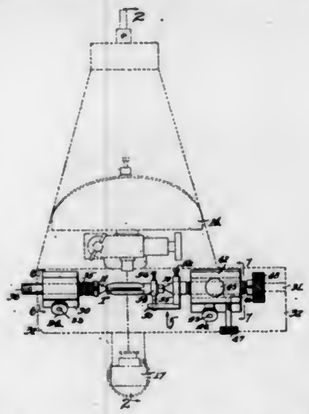


1. An alternating current motor having an interpole winding and a single turn closed loop resistance winding inductively related to the interpole winding.

2. An alternating current motor having an interpolar projection, an interpole winding surrounding said projection, and a separate single turn closed loop resistance winding surrounding the projection.

6. A single phase alternating current motor with a slotted stator having non-overlapping groups of stator windings, each group having coils connected in series one of said coils threading a slot intermediate slots threaded by the other coils in the group, said coils being so distributed in the stator slots as to produce exciting, compensating and interpole flux.

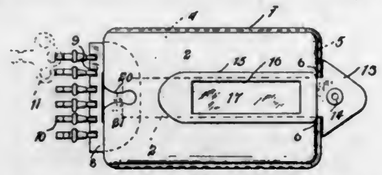
1,766,800. ASSEMBLING MACHINE. HAROLD L. PETERSON and OWEN B. BURBIDGE, Worcester, Mass., assignors, by mesne assignments, to John Bath, Worcester, Mass. Filed Oct. 22, 1928. Serial No. 314,052. 7 Claims. (Cl. 88—24.)



6. In an assembling machine, a screen having a position indicating means thereon, means to project an outline of a tap tooth on said screen, means to rotatably support a tap in position for projection on said screen, said tap having a dog loosely mounted thereon, and means to locate said dog in predetermined angular relation to said tap when the projection of a selected tooth is in a predetermined position on said screen.

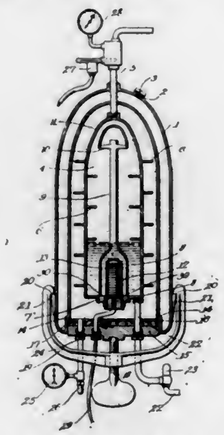
1,766,801. KEY CASE. CHARLES M. RAGSDALE, Louisville, Ky. Filed Mar. 29, 1927. Serial No. 179,261. 1 Claim. (Cl. 150—40.)

A key case comprising front and back walls united at opposite edges and part way at one end to provide a central opening, a strap slidable in the case through the end opening thereof and having a head at one end, a key plate at the opposite end of the strap and coacting with the head to limit the sliding movement of the strap, the latter being foldable across the front of the case, complemental fastener elements on the head of the strap and the



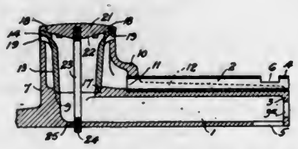
back of the case to secure the free end of the strap and the detached ends of the front and rear walls of the case, a label holder on the front of the case having the card receiving opening adjacent the end opening of the case to be closed by the strap when folded, said strap serving to protect the holder and retain the card in place therein.

1,766,802. FLUID-HEATING APPARATUS. RICHARD D. SANDERS, Norfolk, Va. Filed Apr. 18, 1929. Serial No. 356,280. 9 Claims. (Cl. 219—38.)



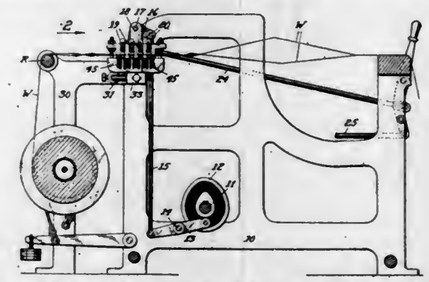
1. In apparatus of the class described, the combination of a primary fluid container having an outlet, an upwardly projecting secondary fluid container centrally disposed at the bottom of said primary container, a pipe extending from said secondary container and delivering to the upper part of said primary container, a showering head for diverting fluid delivered by said pipe downwardly into said primary container, heating means in said upwardly projecting secondary container, means responsive to temperature in the outlet of said primary container to control said heating means, and heat insulating means enclosing said primary container.

1,766,803. GAS-HEATING BURNER. ANNIE ALICE SCOTT, EARNEST HERBERT SCOTT, and PERCY RANDALL SCOTT, Christchurch, New Zealand. Filed Aug. 12, 1927, Serial No. 212,594, and in New Zealand Feb. 11, 1927. 1 Claim. (Cl. 158—99.)



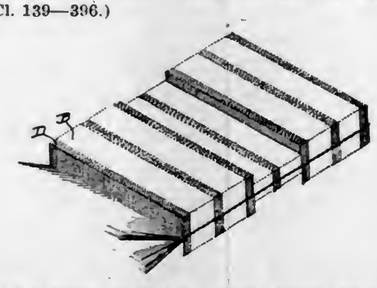
A gas burner comprising a lower fuel pipe of comparatively large diameter having gas and air inlet openings, an upper fuel pipe of less diameter, also having gas and air inlet openings, a structure forming a chamber into which said upper pipe discharges, a cylinder in said chamber into which said lower pipe directly discharges, said cylinder having its wall flared outwardly at the upper end and provided on the upper side of said flared portion with comparatively large openings for discharging mixed gas and air from the lower pipe for a flame of greater intensity, and comparatively small openings on the lower side of said flared portion for discharging mixed gas and air from the upper pipe for a flame of lesser intensity, and a deflecting cone covering the upper end of said cylinder.

1,766,804. WARP STOP MOTION FOR LOOMS. GEORGE H. SHUTT, New Bedford, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed May 25, 1927. Serial No. 194,178. 3 Claims. (Cl. 139—369.)



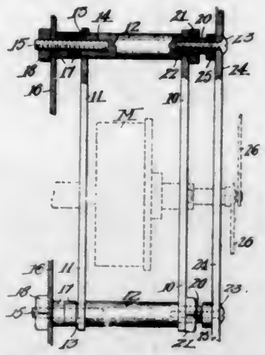
1. In a warp stop motion having drop wires, detector rods to cooperate with fallen drop wires, separator bars located normally below the detector rods, a frame to hold the detector rods, a support for the separator bars, a threaded rod extending upwardly from each end of the separator bar support and having operative engagement with the frame, and means to hold each bar with respect to the frame, each threaded rod capable of adjusting the corresponding end of the support relatively to the frame while the other end of the support remains stationary with the frame.

1,766,805. TERRY FABRIC WITH PILES OF DIFFERENT COLORS. WALTER H. WAKEFIELD, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Dec. 21, 1927. Serial No. 241,706. 4 Claims. (Cl. 139—396.)



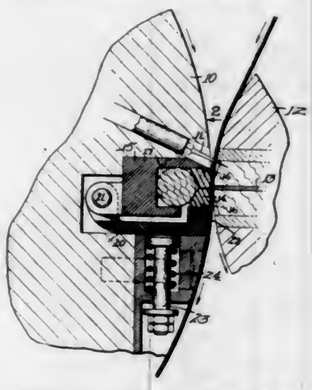
1. In a woven terry fabric having ground warp threads extending throughout the length of the fabric interwoven with shots of filling, two sets of distinctively different looped pile forming terry warp threads, the threads of each set being interwoven with the shots of filling, the looped piles in any one continuous row extending across the fabric being drawn from one set and being of a given height and looped piles extending across the fabric in another row being formed of the warp threads in another set and being of a different height from the looped piles formed by the threads in the first named set of terry pile forming warp threads.

1,766,806. CLOCK MOVEMENT AND DIAL-SUPPORTING MEANS. JOSEPH WILCOX, Jr., Athol, Mass., assignor to Wilcox Novelty Company, Athol, Mass., a Corporation of Massachusetts. Filed Feb. 1, 1926. Serial No. 85,142. 3 Claims. (Cl. 58—52.)



1. In a clock, a movement having front and back movement plates, a plurality of movement posts by which said plates are secured in fixed spaced relation, certain of said posts being forwardly extended through and beyond said front movement plate and being externally threaded and having axially disposed tapped holes therein, a dial, and screws extending through said dial and into said holes to detachably secure said dial in position, forwardly spaced from said plate, spacing collars provided on said screws between said dial and said post projections, whereby the space between said dial and said posts may be adjusted, and means on said extensions to lock said front plate to said posts.

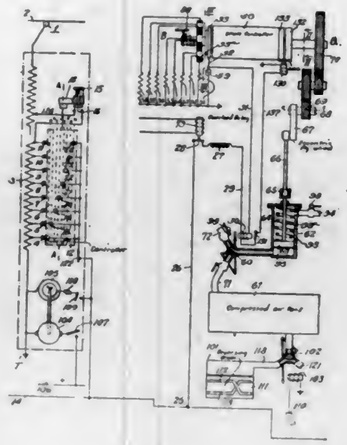
1,766,807. CUTTING CUSHION FOR FOLDING CYLINDERS. HENRY A. WISE WOOD, New York, N. Y., assignor to Wood Newspaper Machinery Corporation, New York, N. Y., a Corporation of Virginia. Filed Sept. 27, 1928. Serial No. 308,686. 8 Claims. (Cl. 164—66.)



1. The combination with a cutting blade, of a cushion for receiving the blade, a carrier or support for the cushion, and solid means behind the cushion for backing it up, capable of being turned to present different surfaces to the blade.

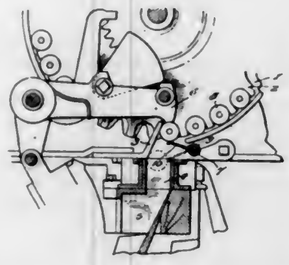
1,766,808. SYSTEM OF REMOTE CONTROL FOR ELECTRIC MOTORS. JEAN ALTMAYER, surnamed Altmayer-Delaruelle, St.-Germain-en-Laye, France. Filed June 19, 1925, Serial No. 38,342, and in France July 3, 1924. 2 Claims. (Cl. 172—179.)

1. In a control system for electric motors, a control switch arranged in single controlling circuit for producing therein, when the said switch is operated, variations of voltage, a relay arranged in the circuit, a compressed air motor, a valve actuated by the said relay, a secondary switch actuated by the said motor and adapted to close the said circuit on different resistances so that its position corresponds at every instance to that of the control



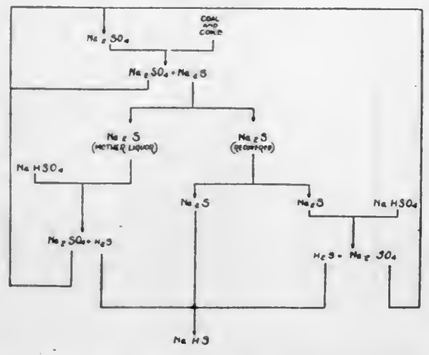
switch, a controller, rigid with the secondary switch, a clutch system for engaging the said controller with the motor, a spring acting in antagonism with the rotation of the controller under the action of the motor, an electromagnet for actuating this clutch, a contact arranged in the circuit of the said electromagnet and controlled by the preceding relay.

1,766,809. BOBBIN SUPPORT. WILLIAM H. BAHAN, Greenville, S. C. Filed July 6, 1927. Serial No. 203,826. 2 Claims. (Cl. 139—251.)



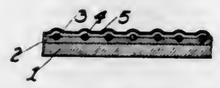
1. In a loom structure, a pintle, a bobbin support pivotally mounted upon said pintle and being formed from a strip of resilient material folded intermediate its length to form a pintle-receiving eye and having its end portions extending radially from the eye in face to face engagement with each other to form a flat arm, the said end portions being movable away from each other to open the eye along one side whereby the support may slide out of engagement with the pintle, and a spring coiled about said pintle and having one end anchored to the pintle and its other end provided with a finger extending beneath said arm in free contacting engagement therewith to yieldably hold the arm in a raised position, the ends of the strip being bent transversely to form a lip extending downwardly at the outer end of the arm and adapted to enter a shuttle and bear flat against a wall of the shuttle when the support is swung downwardly about a pintle received in its eye.

1,766,810. PROCESS OF MAKING ALKALI-METAL SULPHYDRATES. HARRY P. BASSETT, Cynthiana, Ky. Filed Mar. 24, 1927. Serial No. 178,153. 5 Claims. (Cl. 23—137.)



5. The herein described process of making sodium sulphydrate which comprises furnacing a mixture of sodium sulphate coal and coke in a reducing atmosphere at a temperature of from about 650° to 850° C. to produce sodium sulphide and sodium sulphate, leaching the cinder to obtain a solution of the sodium sulphide and sulphate, evaporating the solution to about 42° Baumé, to precipitate sodium sulphate, removing the precipitate, diluting the remaining solution to about 34° Baumé and allowing it to cool to crystallize out a portion of the sodium sulphide present in the solution, dissolving the crystals thus formed in water, dividing such solution into two parts, treating the said mother liquor and a portion of the sodium sulphide solution with a solution of nitre cake to produce hydrogen sulphide and sodium sulphate, reacting upon the other portion of the solution of the sodium sulphide with the hydrogen sulphide to produce sodium sulphydrate, and furnacing a mixture of coal, a portion of the cinder produced in the first step of the process and sodium sulphate produced in the subsequent steps of the process to produce sodium sulphide and sulphate in the further practice of the first step of the process.

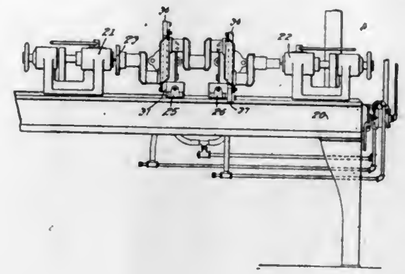
1,766,811. COMPOSITION FLOORING. NEIL L. CAMPBELL, Glendale, Ohio, assignor, by mesne assignments, to Carthage Mills Incorporated, Cincinnati, Ohio, a Corporation of Ohio. Filed June 29, 1926. Serial No. 119,454. 1 Claim. (Cl. 154—49.)



In a composition flooring, the combination with a base material of a paint surface thereon, including a ground coat, a piece of open-work fabric or netting embedded therein and coated thereby, and a design of paint imprinted upon the coated fabric threads and upon the ground coat, in the spaces between the threads.

1,766,812. CENTERING MACHINE. MARK H. DAMERELL, Worcester, Mass., assignor to Wyman-Gordon Company, Worcester, Mass., a Corporation of Massachusetts. Filed June 9, 1926. Serial No. 114,844. 22 Claims. (Cl. 77—18.)

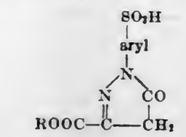
1. A machine for centering crankshafts comprising a frame, a center marking device mounted thereon and having a center axis along which said device is longitudinally movable to mark the work, a pair of supporting members mounted on said frame, means to move said members simultaneously in a given direction of movement transversely of said axis and to operative position relative to said crankshaft and also to move said members toward



and away from each other in a direction transverse to the direction of simultaneous movement, and means on said members effective to engage and center a crankshaft in substantial alignment with the axis of movement of said center marking device.

1,766,813. SULFOARYLPYRAZOLONECARBOXYLIC ACID ESTERS AND PROCESS OF MAKING SAME. HEINZ EICHWEDE and ERICH FISCHER, Hochst-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Nov. 8, 1927, Serial No. 231,989, and in Germany Nov. 27, 1924. 6 Claims. (Cl. 260—45.)

1. The process for preparing sulfoarylpyrazolone-carboxylic acid esters of the general formula:



wherein aryl means a benzene nucleus, substituted in any way or non-substituted and wherein R stands for an alkyl residue which process comprises condensing an arylhydrazinesulfonic acid with an oxalacetic ester to produce the corresponding hydrazone and converting the latter by heating it with an alkaline earth carbonate into the pyrazolone.

1,766,814. PROCESS FOR COLORING MINERAL GRANULES. HARRY C. FISHER, Lockland, Ohio, assignor, by mesne assignments, to The Philip Carey Manufacturing Company, a Corporation of Ohio. Filed Oct. 13, 1926. Serial No. 141,431. 10 Claims. (Cl. 91—70.)

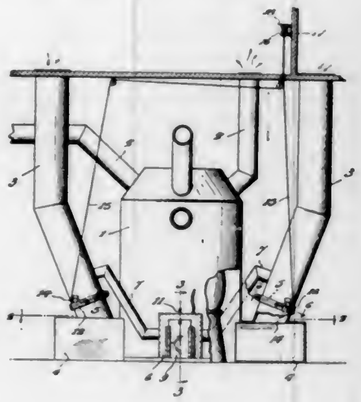
1. That process of coloring granular mineral matter which will withstand a roasting treatment, which consists in wetting the granules with a water-soluble silicate and heating said granules with agitation through a stage where the silicate becomes intumesced to a stage when it flows into a fused glaze upon the granules.

1,766,815. PROCESS FOR COLORING MINERAL MATTER. HARRY C. FISHER, Lockland, Ohio, assignor, by mesne assignments, to The Philip Carey Manufacturing Company, a Corporation of Ohio. Filed Oct. 13, 1926. Serial No. 141,432. 6 Claims. (Cl. 91—70.)

1. That process of forming a glaze on mineral granules, which consists in forming a slurry of glass forming ma-

terials, some of which are insoluble, imposing said slurry upon the granulated mineral matter, and heat treating the product with agitation to a temperature to cause a formation of a glass from said glass forming materials.

1,766,816. AIR-HEATING SYSTEM. LEWIS J. FISHER, Reedsburg, Wis. Filed Dec. 14, 1928. Serial No. 325,999. 4 Claims. (Cl. 126—110.)

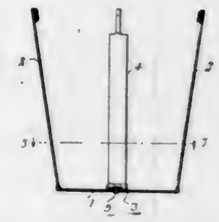


1. In a hot air heating system including a furnace having a hot air chamber, a cold air pipe connected with the hot air chamber for supplying air thereto, a damper in the cold air pipe, a forced air supply connected with the hot air chamber including an electrically operated fan, and manually operable means for simultaneously closing the damper in the cold air pipe to prevent back flow through said pipe and for closing the circuit through the motor to supply air under pressure to the hot air chamber for accelerating the action of the heating system.

1,766,817. SUBSTITUTE FOR HARD PAPER, EBONITE, FIBER, AND THE LIKE AND A PROCESS FOR MANUFACTURING THE SAME. HANS FRIEDLANDER, Berlin-Wilmersdorf, and ARTHUR JANSER, Berlin-Charlottenburg, Germany; said Janser assignor to said Friedlander. Filed June 24, 1925, Serial No. 39,376, and in Austria June 26, 1924. 1 Claim. (Cl. 91—70.)

The process of preparing hard sheet material which comprises impregnating felted fibrous material with Montan wax heated to above 200° C.

1,766,818. TRANSPLANTER. IDA EISENHART HAFLER, Bingen, Pa. Filed May 5, 1928. Serial No. 275,480. 5 Claims. (Cl. 47—37.)



1. A transplanter comprising a circular member, arms hinged thereto at diametrically opposite points, a narrow strip pivoted intermediate its ends to the circular member at a central point for rotary movement upon the member, and arms hinged to opposite ends of the strip.

1,766,819. PROCESS FOR PROTECTING WOOL, RUGS, AND THE LIKE AGAINST THE ATTACK OF MOTHS AND PRODUCT THEREOF. ERICH HARTMANN and MAX HARDTMANN, Wiesdorf-on-the-Rhine, and PAUL KUMMEL, Leverkusen-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Nov. 26, 1926, Serial No. 151,008, and in Germany Nov. 27, 1925. 23 Claims. (Cl. 167—37.)

19. Material liable to attack by moths having incorporated therein or combined therewith a moth-repelling organic compound of an element of the group comprising phosphorus, arsenic, antimony and bismuth, said element being directly attached to carbon in the compound and being in the trivalent state.

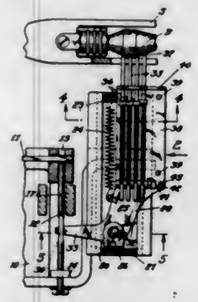
1,766,820. ORTHO-CYANARYLSULPHOCYANOGEN COMPOUNDS AND PROCESS OF MAKING SAME. RICHARD HERZ, Frankfort-on-the-Main, and MAX SCHUBERT, Fechenheim, near Frankfort-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Mar. 15, 1928, Serial No. 262,032, and in Germany Mar. 17, 1927. 4 Claims. (Cl. 260—108.)

2. As new products cyano-aryl-sulphocyanogen compounds of the general formula:

(4) Y—aryl $\begin{matrix} \text{CN} & (1) \\ \text{SCN} & (2) \end{matrix}$

wherein Y means that the 4-position is blocked, which products are colorless crystalline substances having a definite melting point, soluble in organic solvents, insoluble in water.

1,766,821. SIDE-SLIPPING MOVABLE-PLUNGER WEFT DETECTOR. ELBRIDGE R. HOLMES, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Nov. 16, 1927. Serial No. 233,711. 5 Claims. (Cl. 139—285.)

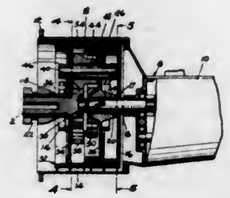


1. In a side slipping weft detector mechanism for looms, a carrier member normally stationary and out of contact with the surface at detection and movable about a normally fixed center, a group of substantially parallel yielding plungers having weft engaging portions, and means to support said group of plungers on the normally stationary member in a plurality of different positions along the length of the surface being detected and relatively to the center of the carrier.

1,766,822. PROCESS FOR THE PREPARATION OF BODIES FROM ACIDYL CELLULOSES. EMIL HUBERT, LUDWIG LOCK, and OTTO LEUCHS, Elberfeld, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort, Germany. Filed Apr. 17, 1925, Serial No. 23,961, and in Germany Apr. 29, 1924. 5 Claims. (Cl. 18—54.)

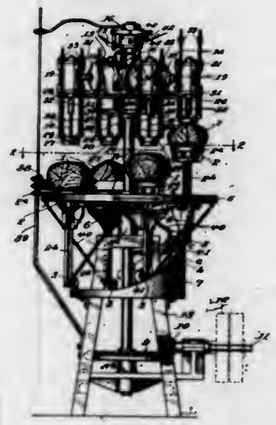
1. Process for the preparation of bodies from acidyl celluloses by spining solutions thereof into precipitating salt solutions characterized in that the spun acidyl cellulose solution is precipitated directly and in a single bath containing the precipitating salt and a substance which acts as a solvent or swelling agent for the acidyl cellulose.

1,766,823. MULTIPLE-POWER CLUTCH. ARNOLD H. JESSEN, Los Angeles, Calif. Filed May 7, 1928. Serial No. 275,873. 6 Claims. (Cl. 74—34.)



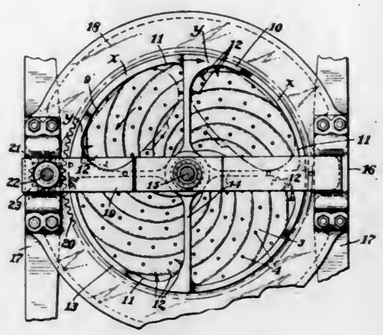
1. A multiple power clutch comprising a drive shaft, a driven shaft, a drum mounted on each end of said shafts, a slidable conical member on said drive shaft, interconnected means in both of said drums for transmitting the power developed by said drive shaft to said driven shaft, a set of friction shoes in one of said drums, means associated with each of said shoes for automatically holding them in engagement with said drum to lock said drums together so they will rotate in unison to transmit the movement of said drive shaft directly to said driven shaft, said conical member, when said shoes are released, being adapted to overcome the centrifugal action of said shoes, and means associated with said conical member whereby the latter may release said shoes.

1,766,824. VEGETABLE-CUTTING APPARATUS. WHITNEY WALLACE JONES, Baltimore, Md. Filed Jan. 10, 1928, Serial No. 245,700. Renewed Mar. 4, 1930. 19 Claims. (Cl. 146—52.)



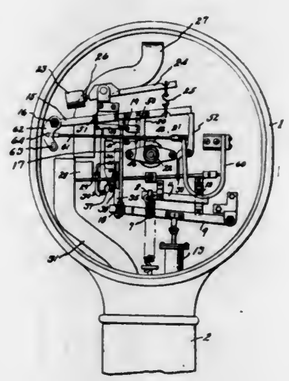
16. In a vegetable cutter the combination of a rotary coring knife, a circular trimmer cutter surrounding the coring knife axis to cut the leaves of the vegetable while it is being cored, a yielding mounting for said trimmer, driving means for rotating the coring knife, said coring knife having upward movement as a consequence of contacting with the vegetable, said driving means being set to rotate the coring knife in one direction as a consequence of the upward movement of the coring knife and to rotate the knife in the opposite direction as a consequence of the downward movement of the coring knife, substantially as described.

1,766,825. VEGETABLE SLICER. WHITNEY W. JONES, Baltimore, Md., and JOHN H. BAILEY, Phelps, N. Y. Filed Feb. 27, 1928. Serial No. 257,249. 8 Claims. (Cl. 146—125.)



3. In apparatus for slicing vegetables or the like, a vegetable holder or carrier having a pocket with fixed cabbage engaging means projecting from the wall of the pocket to hold the cabbage against rotating and a cutter knife to cut the cabbage, said carrier and knife being coaxial and having relative rotary movement.

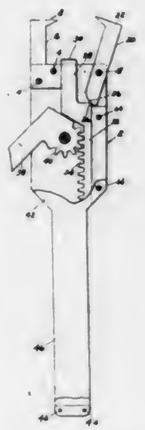
1,766,826. SCALE. BERT W. KING, Detroit, Mich., assignor to Barnes Scale Company, Detroit, Mich., a Corporation of Michigan. Filed Sept. 30, 1927. Serial No. 223,162. 13 Claims. (Cl. 265—69.)



1. In a scale, the combination of means movable in the first instance in accordance with a load applied to the scale, including a scale lever, a load resisting means, and a primary steelyard connecting the lever to the load resisting means, an adjustable connection between this primary steelyard and one of the parts connected thereby, a secondary steelyard connecting a part of the load resisting means to an intermediate member, an adjustable connection between this secondary steelyard and one of the members connected thereby, indicating means including a follower mechanism having a part associated with the said intermediate member to position the indicating means in accordance with the position of this member, said part constituting a third portion of the steelyard, and an ad-

justable connection between this said part and the intermediate member and follower mechanism operably associated thereby.

1,766,827. BATTERY TONGS. DAVID E. LEASURE, Los Angeles, Calif., assignor of one-half to Roy E. Leasure, Ventura, Calif. Filed July 13, 1928. Serial No. 292,445. 5 Claims. (Cl. 29—84.)



5. In a battery tongs, an elongated handle member having a widened portion forming a casing, and stationary jaw at one end thereof, said jaw being adapted to engage the side of a battery terminal, and below the top thereof, a cover for said casing, a reciprocating member in said casing, said member having a portion adapted to engage the top of said terminal, and elongated means for operating said member, said means being positioned on the stationary jaw side of said casing.

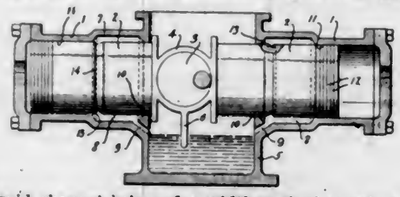
1,766,828. GARMENT FASTENER. FRANK M. MULRONEY, Fort Dodge, Iowa. Filed Aug. 13, 1929. Serial No. 385,510. 5 Claims. (Cl. 24—208.)



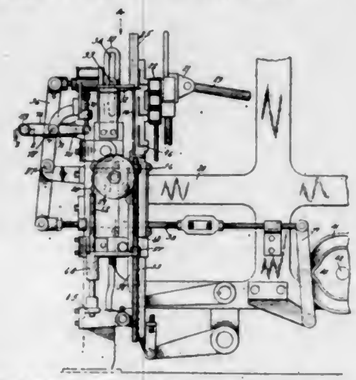
1. An article having overlapping portions, and means for holding the overlapping portions closed including a vacuum cup on one of said portions and a receiving member attached to the other portion and adapted to receive and afford a surface against which the vacuum cup will engage by suction.

1,766,829. MEANS FOR PREVENTING OIL FROM PASSING PISTONS. FREDERICK A. MYERS, Philadelphia, Pa., assignor to Dunning Compressor Co., Philadelphia, Pa., a Corporation of Pennsylvania. Filed Dec. 9, 1927. Serial No. 238,907. 3 Claims. (Cl. 74—108.)

1. In combination, a cylinder, a piston reciprocable therein, a circumferential channel in the wall of the cylinder, said channel being defined at its inner side by an annular flange providing oppositely facing oil scraping walls and said channel being defined at its other side by an inwardly facing wall capable of scraping oil, a lubricant sump and a vent for said channel communicating with said sump, an annular undercut groove in said piston, said channel being of a width such that said groove communicates therewith throughout the stroke of the piston in the cylinder.

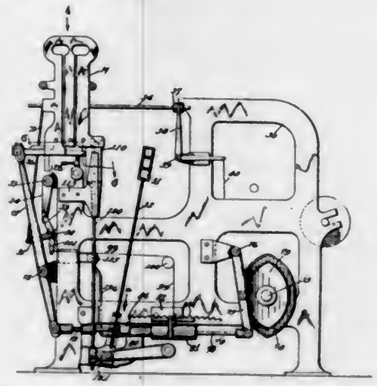


1,766,830. WEFT-CARRIER MAGAZINE. SAMUEL A. NELSON, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Dec. 3, 1926. Serial No. 152,489. 6 Claims. (Cl. 139—232.)



1. In a weft replenishing loom, a loom frame, a magazine support fixed on said loom frame, a magazine removably mounted in said support, and an end holder mounted on said magazine and removable from the loom therewith, said end holder having forward and rearward movement with the lay.

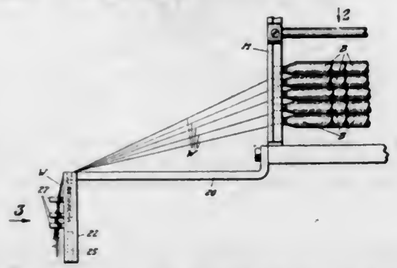
1,766,831. WEFT-REPLENISHING MECHANISM FOR PICKS AND PICK LOOMS. SAMUEL A. NELSON, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Aug. 1, 1928. Serial No. 296,732. 10 Claims. (Cl. 139—232.)



1. In a weft replenishing loom, a plurality of shifting shuttle boxes, a multicolor magazine associated therewith,

means to release a selected weft carrier therefrom corresponding to the shuttle about to be picked to the magazine side of the loom, means to move said weft carrier rearward to an intermediate position as said shuttle is boxed, and fixed means to resist forward movement of said weft carrier from said intermediate position when engaged by a substantially exhausted weft carrier in a boxed shuttle thereby causing rearward ejection thereof.

1,766,832. THREAD HOLDER AND TENSIONER FOR WEFT-REPLENISHING LOOMS. SAMUEL A. NELSON, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Dec. 14, 1928. Serial No. 326,137. 12 Claims. (Cl. 139—247.)



1. In a thread holder and tensioning device for a weft replenishing mechanism having a supply of reserve bobbins, from which extend weft ends, a relatively fixed guide, a weighted member having a movement of displacement with respect to the guide to take up slack of the weft ends of the reserve bobbins, and a clamp moving with the weighted member, the thread being operatively related to the weighted member and clamp and extending over a portion of the fixed guide between the clamp and weight.

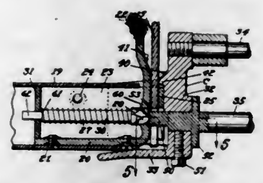
1,766,833. COIL AND SWITCH UNIT. HARRY E. NORVIEL, Anderson, Ind., assignor to Delco-Remy Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Oct. 31, 1927. Serial No. 229,867. 7 Claims. (Cl. 175—357.)



1. An ignition coil and lock switch unit comprising a tubular case enclosing windings and magnetizable parts, an end cover carrying coil terminals closing one end of the case and having means for holding one end of the magnetizable parts, a non-conducting block, positioning and supporting the other end of said parts, a partition closing the coil housing within the case and attached to the case a substantial distance within the case from the other end of the case, said partition carrying a switch contact, and a switch frame providing a cover for the other end of the case and carrying a key controlled movable switch contact.

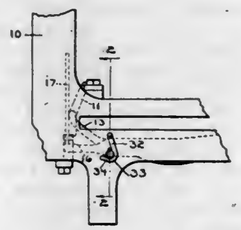
1,766,834. TUBE FRAME FOR AXMINSTER LOOMS. ARTHUR P. PAINE, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed May 18, 1928. Serial No. 278,891. 2 Claims. (Cl. 139—10.)

1. In an Axminster loom having a transporting chain and a tube frame, a finger on the chain, a plunger on the tube frame to engage the finger to support the tube frame from the chain, said finger having a vertical slot in the lower portion thereof, a clutch to support the tube frame, a stud carried by the clutch and having a thin vertical tongue to pass through the slot in the finger to engage the plunger and move the latter out of engagement



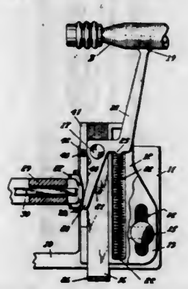
with the finger, said stud having a smooth cylindrical surface to extend through the clutch to be capable of sliding therethrough to adjusted angular and longitudinal position, said tongue thereby being capable of assuming a position to register with the slot, and means to hold the stud to the clutch.

1,766,835. LOOM DOBBY. HARRY O. PASHOIAN, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Sept. 12, 1929. Serial No. 392,180. 6 Claims. (Cl. 139—331.)



1. In a dobby having a frame with opposite sides between which lie dobby fingers, a bar affording a pivotal support for the fingers, a rod extending above the fingers to limit upward movement thereof, means to limit movement of the bar in one direction, means to limit movement of the rod in the opposite direction, and a connection between the bar and rod to prevent relative movement of one with respect to the other.

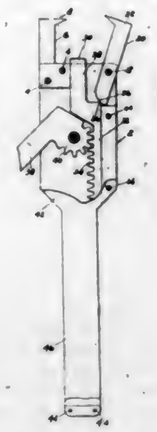
1,766,836. WEFT DETECTOR FOR LOOMS. OSCAR V. PAYNE, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Apr. 6, 1928. Serial No. 267,959. 7 Claims. (Cl. 139—286.)



1. In a weft detector having an angularly movable side slipping yarn engaging detector element pivotally connected to a carrier slidable on a fixed support, a removable roll, a fixed guide pin for the roll, said roll effective to prevent premature angular movement of the detector at

justable connection between this said part and the intermediate member and follower mechanism operably associated thereby.

1,766,827. BATTERY TONGS. DAVID E. LEASURE, Los Angeles, Calif., assignor of one-half to Roy E. Leasure, Ventura, Calif. Filed July 13, 1928. Serial No. 292,445. 5 Claims. (Cl. 29—84.)



5. In a battery tongs, an elongated handle member having a widened portion forming a casing, and stationary jaw at one end thereof, said jaw being adapted to engage the side of a battery terminal, and below the top thereof, a cover for said casing, a reciprocating member in said casing, said member having a portion adapted to engage the top of said terminal, and elongated means for operating said member, said means being positioned on the stationary jaw side of said casing.

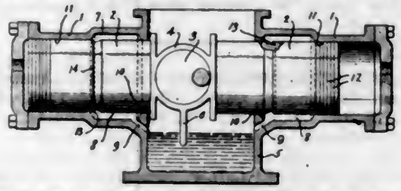
1,766,828. GARMENT FASTENER. FRANK M. MULRONEY, Fort Dodge, Iowa. Filed Aug. 13, 1929. Serial No. 385,510. 5 Claims. (Cl. 24—208.)



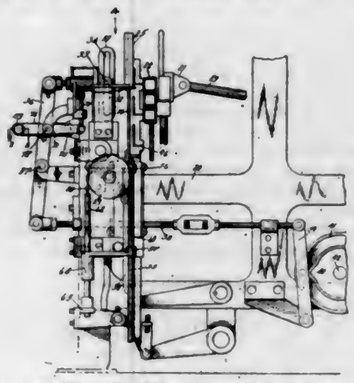
1. An article having overlapping portions, and means for holding the overlapping portions closed including a vacuum cup on one of said portions and a receiving member attached to the other portion and adapted to receive and afford a surface against which the vacuum cup will engage by suction.

1,766,829. MEANS FOR PREVENTING OIL FROM PASSING PISTONS. FREDERICK A. MYERS, Philadelphia, Pa., assignor to Dunning Compressor Co., Philadelphia, Pa., a Corporation of Pennsylvania. Filed Dec. 9, 1927. Serial No. 238,907. 3 Claims. (Cl. 74—108.)

1. In combination, a cylinder, a piston reciprocable therein, a circumferential channel in the wall of the cylinder, said channel being defined at its inner side by an annular flange providing oppositely facing oil scraping walls and said channel being defined at its other side by an inwardly facing wall capable of scraping oil, a lubricant sump and a vent for said channel communicating with said sump, an annular undercut groove in said piston, said channel being of a width such that said groove communicates therewith throughout the stroke of the piston in the cylinder.

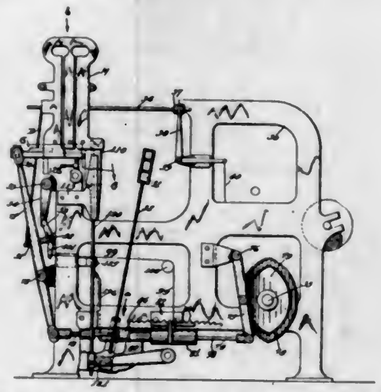


1,766,830. WEFT-CARRIER MAGAZINE. SAMUEL A. NELSON, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Dec. 3, 1926. Serial No. 152,489. 6 Claims. (Cl. 139—232.)



1. In a weft replenishing loom, a loom frame, a magazine support fixed on said loom frame, a magazine removably mounted in said support, and an end holder mounted on said magazine and removable from the loom therewith, said end holder having forward and rearward movement with the lay.

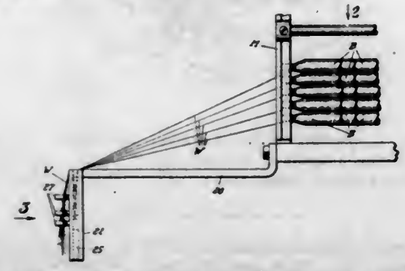
1,766,831. WEFT-REPLENISHING MECHANISM FOR PICKS AND PICK LOOMS. SAMUEL A. NELSON, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Aug. 1, 1928. Serial No. 296,732. 10 Claims. (Cl. 139—232.)



1. In a weft replenishing loom, a plurality of shifting shuttle boxes, a multicolor magazine associated therewith,

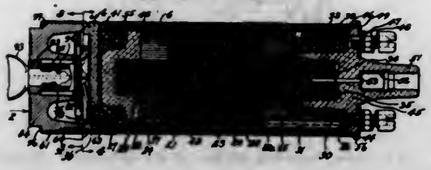
means to release a selected weft carrier therefrom corresponding to the shuttle about to be picked to the magazine side of the loom, means to move said weft carrier rearward to an intermediate position as said shuttle is boxed, and fixed means to resist forward movement of said weft carrier from said intermediate position when engaged by a substantially exhausted weft carrier in a boxed shuttle thereby causing rearward ejection thereof.

1,766,832. THREAD HOLDER AND TENSIONER FOR WEFT-REPLENISHING LOOMS. SAMUEL A. NELSON, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Dec. 14, 1928. Serial No. 326,137. 12 Claims. (Cl. 139—247.)



1. In a thread holder and tensioning device for a weft replenishing mechanism having a supply of reserve bobbins, from which extend weft ends, a relatively fixed guide, a weighted member having a movement of displacement with respect to the guide to take up slack of the weft ends of the reserve bobbins, and a clamp moving with the weighted member, the thread being operatively related to the weighted member and clamp and extending over a portion of the fixed guide between the clamp and weight.

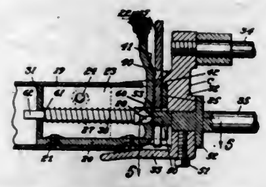
1,766,833. COIL AND SWITCH UNIT. HARRY E. NORVIEL, Anderson, Ind., assignor to Delco-Remy Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Oct. 31, 1927. Serial No. 229,867. 7 Claims. (Cl. 175—357.)



1. An ignition coil and lock switch unit comprising a tubular case enclosing windings and magnetizable parts, an end cover carrying coil terminals closing one end of the case and having means for holding one end of the magnetizable parts, a non-conducting block, positioning and supporting the other end of said parts, a partition closing the coil housing within the case and attached to the case a substantial distance within the case from the other end of the case, said partition carrying a switch contact, and a switch frame providing a cover for the other end of the case and carrying a key controlled movable switch contact.

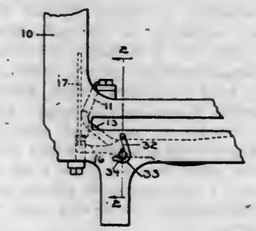
1,766,834. TUBE FRAME FOR AXMINSTER LOOMS. ARTHUR P. PAINE, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed May 18, 1928. Serial No. 278,891. 2 Claims. (Cl. 139—10.)

1. In an Axminster loom having a transporting chain and a tube frame, a finger on the chain, a plunger on the tube frame to engage the finger to support the tube frame from the chain, said finger having a vertical slot in the lower portion thereof, a clutch to support the tube frame, a stud carried by the clutch and having a thin vertical tongue to pass through the slot in the finger to engage the plunger and move the latter out of engagement



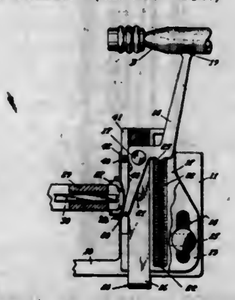
with the finger, said stud having a smooth cylindrical surface to extend through the clutch to be capable of sliding therethrough to adjusted angular and longitudinal position, said tongue thereby being capable of assuming a position to register with the slot, and means to hold the stud to the clutch.

1,766,835. LOOM DOBBY. HARRY O. PASHOIAN, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Sept. 12, 1929. Serial No. 392,180. 6 Claims. (Cl. 139—331.)



1. In a dobby having a frame with opposite sides between which lie dobby fingers, a bar affording a pivotal support for the fingers, a rod extending above the fingers to limit upward movement thereof, means to limit movement of the bar in one direction, means to limit movement of the rod in the opposite direction, and a connection between the bar and rod to prevent relative movement of one with respect to the other.

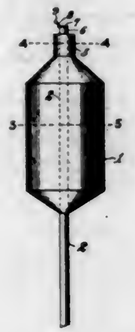
1,766,836. WEFT DETECTOR FOR LOOMS. OSCAR V. PAYNE, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Apr. 6, 1928. Serial No. 267,959. 7 Claims. (Cl. 139—286.)



1. In a weft detector having an angularly movable side slipping yarn engaging detector element pivotally connected to a carrier slidable on a fixed support, a removable roll, a fixed guide pin for the roll, said roll effective to prevent premature angular movement of the detector at

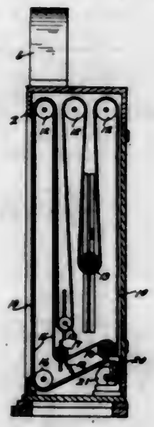
the beginning of the forward movement of the detector, and said pin being located so as to be out of the path of the detector to permit angular movement of the latter when the detector is in its rearmost position and the roll is removed.

1,766,837. SUBMARINE SAVING DEVICE. EDUARDO F. QUINTEROS, Buenos Aires, Argentina. Filed Oct. 11, 1929, Serial No. 398,956, and in Argentina Aug. 23, 1929. 2 Claims. (Cl. 114—16.5.)



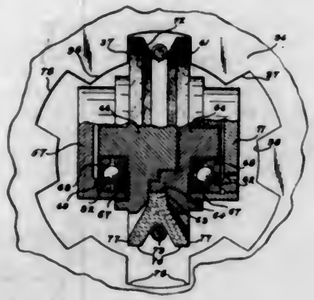
1. In a submarine salvaging device, a floating buoy adapted to be released from the submarine vessel when submerged; means for detachably securing said buoy to the vessel; means operable from within the vessel for releasing said buoy; a hollow cable divided by a longitudinal diaphragm throughout its length and communicating with the interior of the vessel, said cable extending through the buoy longitudinally thereof and having fluid-tight connection with the buoy; and a chamber projecting beyond the top of the buoy and having its lower end in fluid-tight communication therewith and with the outlet end of said cable.

1,766,838. ADVERTISING APPARATUS. LOYAL GRANT ROBBERTS, Santa Monica, Calif. Filed May 9, 1929. Serial No. 361,712. 6 Claims. (Cl. 40—32.)



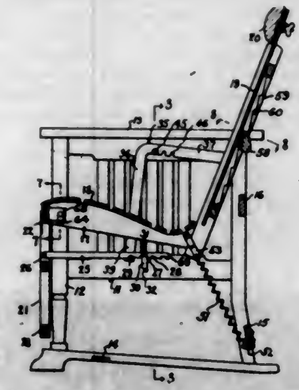
1. In an advertising apparatus, an endless display curtain, upper and lower, guide rollers between which the curtain operates in a front plane position, and drive means including an endless driven belt running over the guide rollers and one which the plane front of the curtain is lapped.

1,766,839. GRINDING MACHINE. EDWARD F. ROBERTS, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Apr. 15, 1925. Serial No. 23,229. 16 Claims. (Cl. 51—3.)



1. In a machine of the character described, a grinding disk having a grooved driving circumference and parallel grinding faces on either side of said driving circumference.

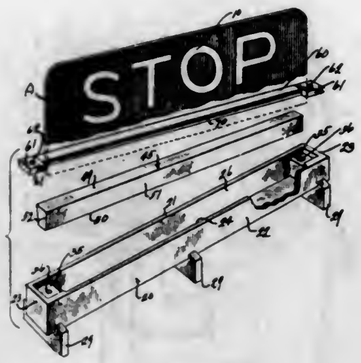
1,766,840. SWING SEATING DEVICE. FRANK G. ROSE, Dayton, Ky. Filed Aug. 27, 1928. Serial No. 302,187. 5 Claims. (Cl. 155—70.)



1. In a swing seating device of the character described, the combination of a main frame, a seat-frame in said main frame; said seat-frame provided with a seat and a back, an angle-bar provided with an upright portion and a rearwardly extending portion, the lower part of said upright portion secured to said seat and the rear part of said rearwardly extending portion secured to said back, pivot means between said main frame and said angle-bar adjacent to the angle of said angle-bar, and a helical spring the respective ends whereof are respectively secured to the rear lower portion of said main frame and to said seat-frame at the rear portion of said seat, the axis of said spring extending in a line substantially parallel with the plane in which the point of attachment of the lower end of said spring to said main frame and the pivotal axis of said pivot means are located.

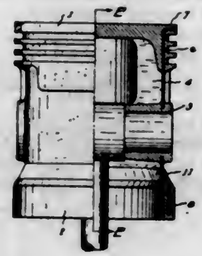
1,766,841. TRAFFIC MARKER. WARREN S. SHERMAN, Oklahoma City, Okla. Filed Jan. 10, 1929. Serial No. 331,508. 4 Claims. (Cl. 40—125.)

1. As an article of manufacture a metal clamping base for traffic markers comprising an elongated container having an elongated compartment, said container having longitudinally facing side walls converging downwardly into the compartment, wedge means operable upon one of said



side walls along the compartment, and means to clamp the wedge means in the compartment against a side wall of the container and against a marker strip at the opposite side of the container.

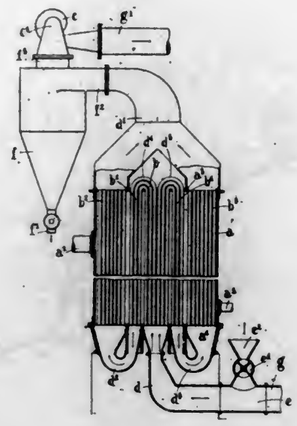
1,766,842. PISTON. DAVIS E. SMITH, Detroit, Mich. Filed July 9, 1927. Serial No. 204,531. 1 Claim. (Cl. 74—108.)



In a piston of high thermal expansion material having a head and a separate skirt, a separate tubular member of low expansion material inserted circumferentially in the wall of said head and skirt and forming a connecting means therebetween.

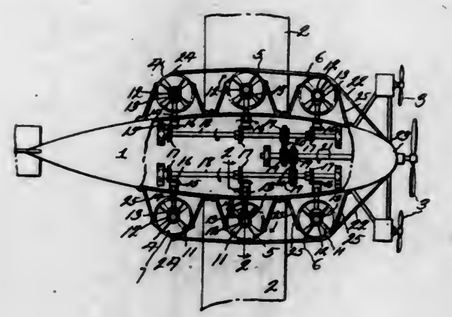
1,766,843. DRYING OF MOIST MATERIAL. OLOF SÖDERLUND and THOMAS GRAM, London, England, assignors to Technochemical Laboratories, Limited, London, England. Original application filed Oct. 8, 1927, Serial No. 223,750, and in Great Britain Oct. 7, 1926. Divided and this application filed Oct. 11, 1929. Serial No. 399,013. 8 Claims. (Cl. 34—24.)

1. The method of evaporating moisture from divided material comprising charging material in particles having at least one small dimension into a compact moving stream of gaseous carrying medium, increasing the length of the wall perimeter of the cross section of said stream without substantially altering the cross-sectional area thereof, conducting said stream a considerable distance along said



increased perimeter region while heating the walls thereof and finally separating the material from the stream of medium.

1,766,844. AIRPLANE LIFTER. ALBERT R. SPRINGER, Wirt, Okla. Filed July 11, 1928. Serial No. 291,758. 3 Claims. (Cl. 244—15.)

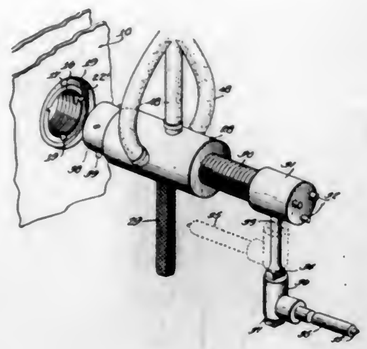


2. The combination with an airplane comprising a fuselage, a wing extending outwardly from said fuselage, a casing extending vertically through an opening in said wing adjacent the fuselage, a rotated bladed member in said casing, means for driving the bladed member and a streamline shield carried by the fuselage forwardly of the casing and extending outwardly and rearwardly into engagement with the outer side of the casing, said wing extending through an opening in said shield.

1,766,845. SUBMARINE SAFETY DEVICE. JOHN G. STEELE, Latrobe, Pa. Filed Jan. 18, 1928. Serial No. 247,694. 13 Claims. (Cl. 114—16.4.)

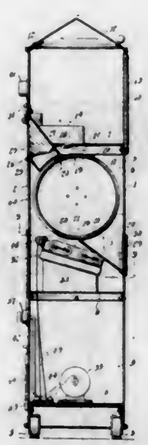
1. The combination with a marine vessel having an interior compartment and including a hull, of a sleeve extending through the hull and adapted to afford communication with said compartment from the outside of the hull, means normally sealing said sleeve and adapted to

be removed therefrom upon the application of pressure against the outside of said means, supply means adapted for attachment to said sleeve, and means for locking said



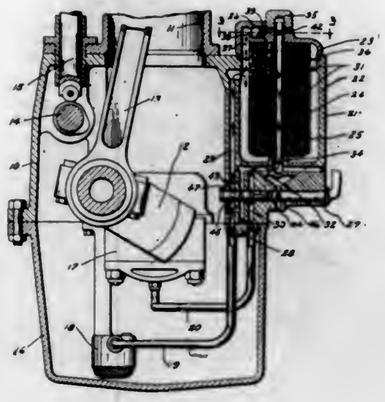
supply means to said sleeve, said supply means having a portion inwardly movable to exert pressure against said sealing means to remove it from said sleeve.

1,766,846. PEANUT ROASTER. LAWRENCE WILLIE THOMAS, Marion, S. C. Filed Sept. 10, 1929. Serial No. 391,645. 3 Claims. (Cl. 34—5.)



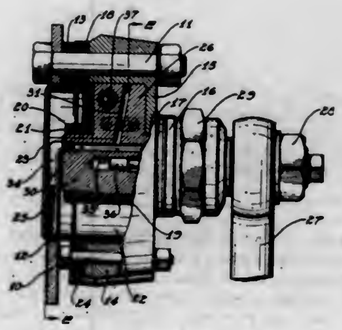
1. A peanut roaster, comprising a casing, a roasting cylinder rotatably mounted in the casing and having a pair of diametrically opposite doors in the wall thereof, a partition within the casing over said cylinder forming an upper warming chamber, a chute opening downwardly through the back wall of the casing toward said cylinder and opening at its lower end adjacent the cylinder in position for access to the door thereof, a door hingedly closing the upper end of said chute, an outlet chute extending downwardly from the lower part of the cylinder through the front wall of the casing and having its inner end in position for access to a door of the cylinder, a door closing the lower end of said outlet chute, heating means for the cylinder, and means for rotating the cylinder.

1,766,847. OIL FILTER FOR INTERNAL-COMBUSTION ENGINES. MILTON TIBBETTS, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Nov. 20, 1924. Serial No. 751,009. 1 Claim. (Cl. 210—167.)



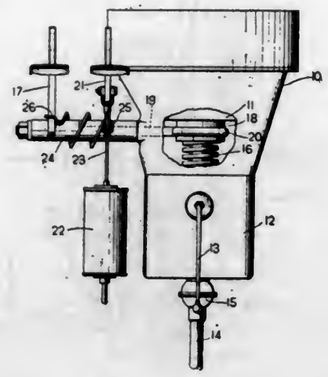
In a filter, dual inlet and outlet passages for conducting the liquid to be filtered to and from the filter, one of said inlet passages being adapted to cause liquid to pass in one direction through the filter, the other of said inlet passages being adapted to cause liquid to pass in the reverse direction through the filter to clean the filter, one of said passages being adapted to conduct liquid from the filter to the device in which the liquid is to be used, the other outlet passage being adapted to conduct liquid and any foreign matter mixed therewith from the filter to the atmosphere, and a valve for controlling all of the passages, said valve in one position being adapted to open an inlet and an outlet passage and in another position to open an inlet and two outlet passages.

1,766,848. SHOCK ABSORBER. MILTON TIBBETTS, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Nov. 28, 1927. Serial No. 236,046. 14 Claims. (Cl. 188—89.)



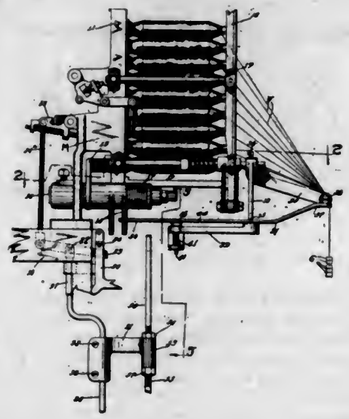
1. In a shock absorber, a casing, a piston in the casing, a shaft for the piston, an auxiliary supply chamber, and a tube on the shaft extending into said supply chamber.

1,766,849. BRAKE MECHANISM. MILTON TIBBETTS, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich, a Corporation of Michigan. Filed Mar. 21, 1928. Serial No. 263,304. 10 Claims. (Cl. 192—13.)



2. In a motor vehicle, the combination with a clutch and a brake mechanism, of means interconnecting the clutch and brake tending but not sufficient to operate the clutch when the brake mechanism is applied.

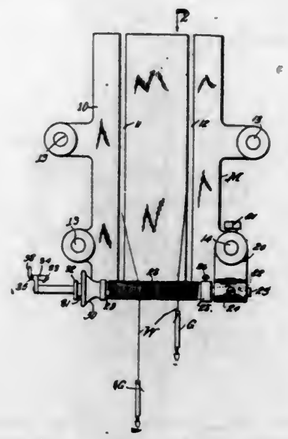
1,766,850. THREAD HOLDER FOR WEFT-REPLENISHING LOOMS. JOHN F. TINSLEY, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Dec. 6, 1928. Serial No. 324,132. 23 Claims. (Cl. 139—247.)



1. In a weft replenishing loom having a plurality of reserve bobbins from each of which extends a weft end, means normally operative to take up slack occurring in the weft ends, and means operative during the pick following transfer to clamp the weft ends and render the first named means inoperative.

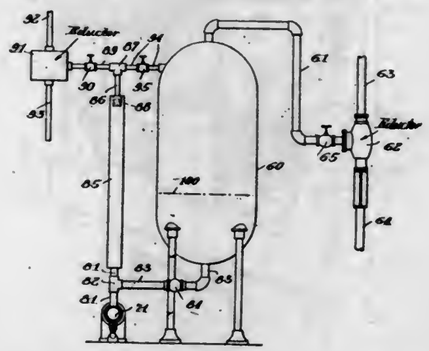
1,766,851. RESILIENT THREAD HOLDER FOR WEFT-REPLENISHING LOOMS. JOHN F. TINSLEY, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Dec. 14, 1928. Serial No. 326,057. 12 Claims. (Cl. 139—247.)

1. In a thread holder for weft replenishing looms having reserve bobbins from which extend weft ends, a horizontal coil spring the coils of which are normally closely adjacent each other to clamp the weft ends, means by which



the spring may be expanded to separate the coils, and means acting on the weft ends to render the latter taut when the springs are separated.

1,766,852. PUMP. ULYSESS G. TODD, Rochester, N. Y., assignor to The Pfaudler Co., Rochester, N. Y., a Corporation of New York. Filed Oct. 13, 1928. Serial No. 312,361. 8 Claims. (Cl. 103—5.)

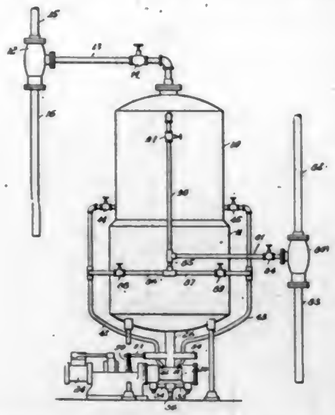


1. The combination with a vessel containing liquid, of a source of vacuum, conduit means connecting said source of vacuum to said vessel to produce a partial vacuum therein, a pump for extracting liquid from said vessel when the latter is partially evacuated, conduit means connecting said pump to said vessel below the liquid level therein, a second source of vacuum, and conduit means connecting said pump to said second source of vacuum to assist the flow of liquid into said pump from said evacuated vessel.

1,766,853. PUMPING APPARATUS. ULYSESS G. TODD, Rochester, N. Y., assignor to The Pfaudler Co., Rochester, N. Y., a Corporation of New York. Filed Jan. 18, 1930. Serial No. 421,718. 13 Claims. (Cl. 103—5.)

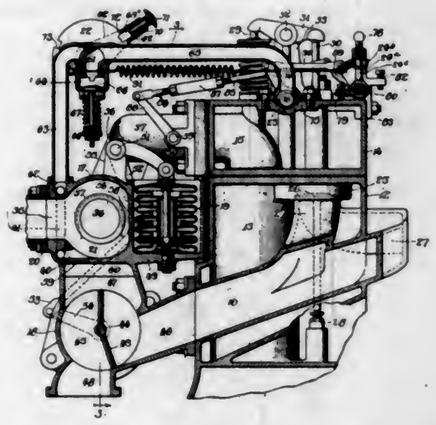
1. A pump for extracting liquid from a partially evacuated vessel, said pump comprising a plunger chamber having an inlet port for connection to said vessel, an outlet port, and a supplementary port for connec-

tion to a source of vacuum, said inlet port and supplementary port communicating with each other through said



plunger chamber, and a plunger movable within said chamber, said supplementary port being on the same side of said plunger as said outlet port.

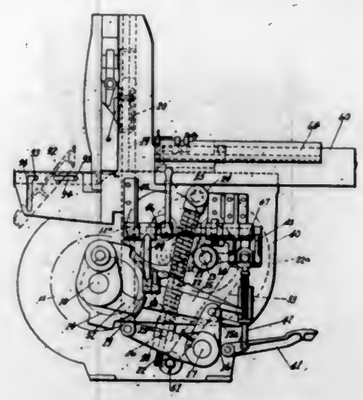
1,766,854. FUEL VAPORIZATION AND INDUCTION SYSTEM FOR INTERNAL-COMBUSTION ENGINES. HOMER A. TRUSSELL, Chicago, Ill. Filed June 29, 1922. Serial No. 571,776. 31 Claims. (Cl. 123—122.)



1. In an internal combustion engine, means for conveying combustible mixture to the combustion chamber through a small passage while the engine is running with a small throttle opening, means for conveying combustible mixture to said combustion chamber through a large passage while the engine is running with a large throttle opening, and means for conveying air to said combustion chamber through said small passage while the combustible mixture is being conveyed through said large passage.

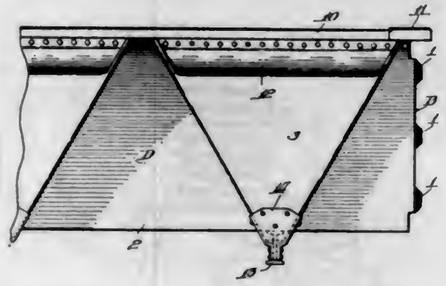
1,766,855. PAPER-CUTTING MACHINE. WILLIAM L. VALIQUETTE, Dayton, Ohio, assignor to The Harris-Seybold-Potter Company, Dayton, Ohio, a Corporation of Delaware. Filed Aug. 15, 1927. Serial No. 213,040. 8 Claims. (Cl. 164—54.)

1. In a paper cutter of the class described in combination with a reciprocating knife and means for reciprocating said knife to cut the paper, a reciprocating clamp for holding the paper to be cut, and resilient means to apply the pressure to said clamp, said reciprocating clamp having interconnecting mechanism for compressing said resilient means, said resilient means adapted to be com-



pressed upon the withdrawal of the clamp from the paper, and said interconnecting mechanism comprising a pair of levers pivoted in axial alignment and movable in the same direction during the compressing operation.

1,766,856. GONDOLA-CAR BODY. WILLIAM E. VAN DORN, Pasadena, Calif. Filed Nov. 12, 1928. Serial No. 318,848. 8 Claims. (Cl. 105—406.)



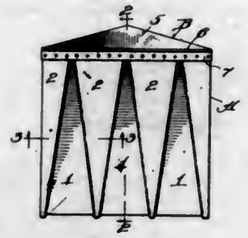
1. A frameless gondola car body comprising end and side walls of a single thickness composed of metal panels shaped to overlap at the four corners, and the overlapping portions of the panels being secured together, the end panels being folded upon themselves to produce stiffening ribs, the side panels being folded to produce therein vertical stiffening ribs, stirrups fixed to the lower ends of said vertical ribs, and transverse floor beams extending between and secured to corresponding stirrups on opposite sides of the body.

2. A frameless gondola car body comprising end and side walls of a single thickness composed of metal panels shaped to overlap at the four corners, and the overlapping portions of the panels being secured together, the end panels being folded upon themselves to produce horizontal stiffening ribs, the side panels being folded to produce vertical stiffening ribs, and said ribbed panels being stiff enough to give to the car body the required stiffness.

1,766,857. METAL CAR END. WILLIAM E. VAN DORN, Pasadena, Calif. Filed Nov. 12, 1928. Serial No. 318,850. 4 Claims. (Cl. 105—410.)

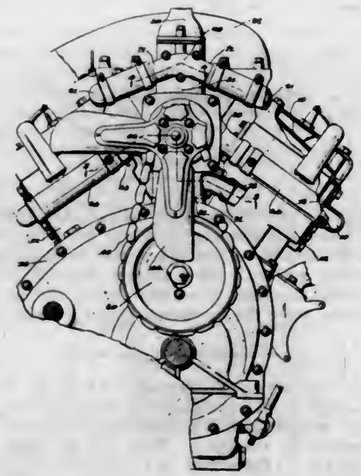
1. A car end comprising a metal sheet folded to transform it into flat areas lying in two parallel planes spaced

apart from each other and connected together at their sides by flat webs extending transversely to said planes, said areas being in the form of long narrow triangles, and



the triangles being so disposed that triangles having their bases at the bottom of the sheet alternate with those having their bases at the top.

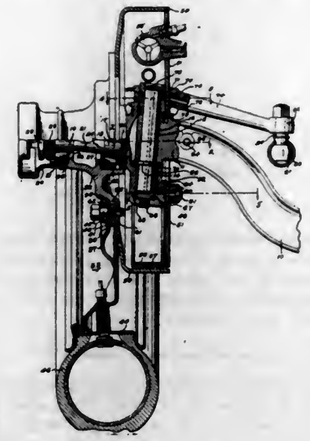
1,766,858. INTERNAL-COMBUSTION ENGINE. JESSE G. VINCENT, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Jan. 26, 1924. Serial No. 688,664. 2 Claims. (Cl. 123—178.)



1. The combination with an internal combustion engine having a pair of cylinder blocks arranged to form a V and each having cooling jackets, of a housing supported between the blocks at one end thereof, a pump in said housing, a radiator, a single connection from the outlet of the radiator to the pump inlet, a connection from the pump outlet to each of the jacket inlets, a chamber carried by the housing, a connection from each of the jacket outlets to the chamber, and a single connection from said chamber to the radiator inlet.

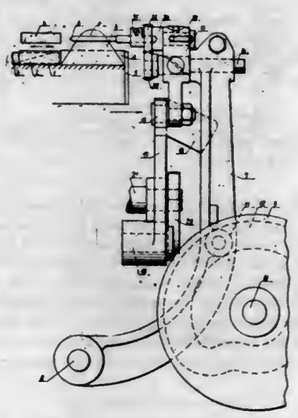
1,766,859. MOTOR VEHICLE. JESSE G. VINCENT, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed May 9, 1925. Serial No. 29,016. 10 Claims. (Cl. 280—96.1.)

1. The combination in a motor vehicle having wheels, an axle and an inclined pin rigidly secured in each end thereof, of a bearing on each pin above and below the axle, a housing connecting the bearings and adapted for support by the



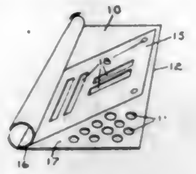
vehicle wheel, and a brake supporting plate secured to the housing, the upper bearing being clamped between said housing and plate.

1,766,860. APPARATUS FOR CLOSING PACKETS PROVIDED WITH A CLOSURE FLAP. ROBERT WILHELM VOIGT, Dresden, Germany, assignor to the Firm Universelle Cigarettenmaschinen-Fabrik J. C. Muller & Co., Dresden, Germany. Filed Feb. 8, 1928, Serial No. 252,885, and in Germany Feb. 19, 1927. 7 Claims. (Cl. 93—6.)



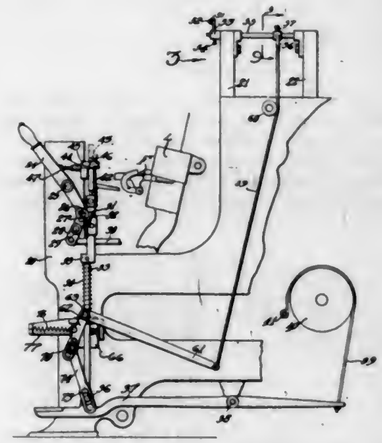
1. Apparatus for closing a packet provided with a closure flap and a slit for the insertion of said closure flap, comprising a bending strip, a folder located beside said bending strip for coacting therewith to bend the outer end of the closure flap upwardly, and a controlled gripper adapted to seize the bent-up end of the closure flap and press it down on to the packet in such a way that the tip of the closure flap passes into the slit provided in the packet for its insertion.

1,766,861. BOBBIN FOR ELECTRIC WEFT DETECTORS. WALTER H. WAKEFIELD, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Aug. 10, 1929. Serial No. 384,868. 7 Claims. (Cl. 139—289.)



1. A weft cop formed of a sheet of paper wound on itself to form a tube, a sheet of metallic foil located between successive winds of the paper, the last wrap of the paper having a perforation through which the foil is accessible to an electric weft detector.

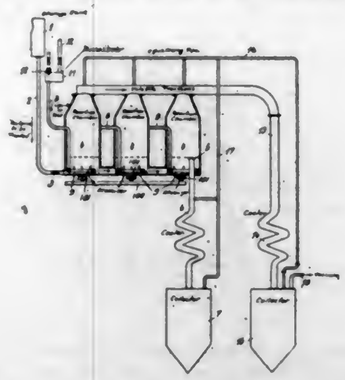
1,766,862. BRAKE-CONTROLLING MECHANISM FOR LOOMS. WILLIAM M. WATTIE, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Aug. 27, 1929. Serial No. 388,827. 5 Claims. (Cl. 139—336.)



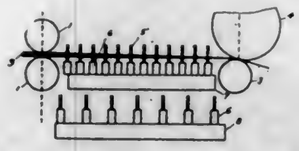
1. In a loom having brake mechanism located at one side of the loom and movable to braking and also non-braking positions, a lever operatively connected to the brake mechanism and movable therewith, means defining a toggle joint interposed between a fixed point and the lever, and a connection from the toggle extending to the opposite side of the loom and effective when operated with the brake in braking position to move the toggle and lever to move the brake mechanism from braking to non-braking position.

1,766,863. SEPARATING SUBSTANCES OF DISSIMILAR VOLATILITIES. ERNST WECKER, Heilbronn, Germany. Filed July 23, 1926. Serial No. 124,520, and in Germany Mar. 17, 1926. 7 Claims. (Cl. 87—12.)

1. In an apparatus for separating liquids of different volatility, the combination of at least one chamber adapted to contain liquids to be treated, a heating device to heat liquid contained in said chamber, a spray pipe arranged in the lower part of said chamber, a liquid overflow pipe terminating in said chamber, a cooler connected with said overflow pipe, a tank in communication with said cooler to collect liquid flowing out of said chamber and through said overflow pipe and cooler, a vapor pipe leading from the upper part of said chamber, a cooler connected with said vapor pipe to cool vapors formed in said chamber, a collecting vessel connected with said last mentioned cooler, and vacuum equalizing pipes connecting said vapor pipe with said tank.



1,766,864. DOUBLE-DRAFT ARRANGEMENT FOR SPINNING FLAX, JUTE, AND SIMILAR FIBER. GEORG P. WERSHININ, Moscow, Union of Soviet Socialist Republics. Filed June 5, 1929, Serial No. 368,510, and in the Union of Soviet Socialist Republics Apr. 19, 1928. 2 Claims. (Cl. 19—130.)



1. A process of a double draft for flax, jute and the like on preparatory and spinning machines, consisting in carrying said flax or jute on combing needles between feed rolls and drawing rolls at a speed greater than the peripheral speed of said feed rolls by at least 100% and correspondingly slower than the peripheral speed of said drawing rolls.

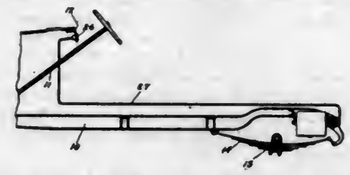
1,766,865. ALLOY STRUCTURE. HARRY M. WILLIAMS and ALFRED L. BOEGEHOLD, Dayton, Ohio, assignors to General Motors Research Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Apr. 6, 1923. Serial No. 630,414. 21 Claims. (Cl. 29—149.5.)



2. As a new article of manufacture a hollow cylinder of peripherally laminated structure, one of the laminations of which is of a non-porous relatively strong metal and another of which comprises a porous alloy, said metal and alloy being secured together by a metallic alloy bond.

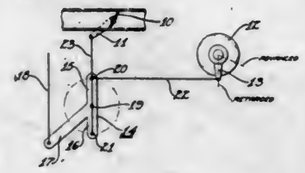
1,766,866. MOTOR VEHICLE. LIONEL M. WOOLSON, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Dec. 26, 1924. Serial No. 758,029. 4 Claims. (Cl. 73—54.)

1. In a motor vehicle, the combination of a frame having side members and separate cross members, a fuel tank arranged between said cross members, flexible supporting means connecting the tank to one of said cross members, supporting means connecting said tank to the other of said cross members and including a resilient deformable



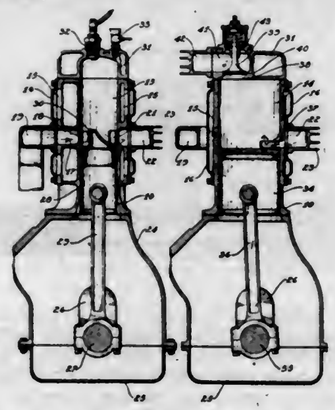
device responsive to the weight of fuel in the tank, a gauge, a tube between the gauge and said device, and means to transmit compressive and expansive movements of said device through the tube to said gauge.

1,766,867. INTERNAL-COMBUSTION ENGINE. LIONEL M. WOOLSON, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Aug. 10, 1927. Serial No. 211,975. 7 Claims. (Cl. 123—99.)



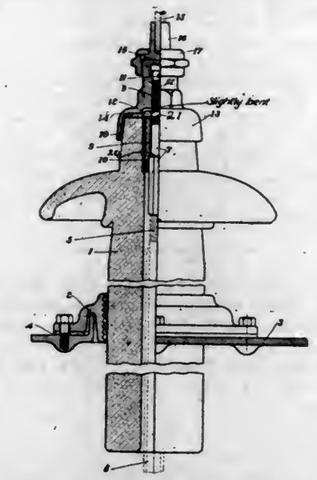
1. A control device for an internal combustion engine comprising throttle and spark controls, a movable member and connections between the movable member and the controls whereby a small movement imparts a relatively large movement to the spark whereas the corresponding movement of the throttle is small.

1,766,868. INTERNAL-COMBUSTION ENGINE. LIONEL M. WOOLSON, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Mar. 9, 1928. Serial No. 260,267. 5 Claims. (Cl. 60—32.)



5. In a two-stroke cycle internal combustion engine, a plurality of alternately disposed working cylinders and scavenging cylinders each having a piston, a crank-shaft operatively connected to said piston, whereby each working piston operates in phase with one of the scavenging pistons throughout the engine cycle, a manifold common to all said cylinders, a port connecting each of said cylinders to the manifold, a valve means adapted to open said ports when each related pair of pistons is near its bottom, dead-center position.

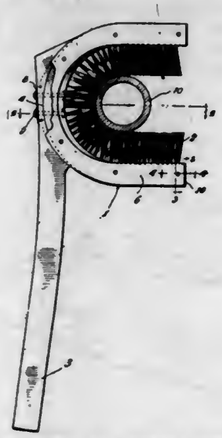
1,766,869. INSULATOR BUSHING. ARTHUR O. AUSTIN, Barberton, Ohio, assignor, by mesne assignments, to The Ohio Brass Company, Mansfield, Ohio, a Corporation of New Jersey. Filed July 29, 1922. Serial No. 578,467. 6 Claims. (Cl. 173—353.)



3. In a bushing insulator, an elongated tubular dielectric member having an opening therethrough, a conductor extending through said opening, means adjacent the outer end of said opening for limiting the outward movement of said conductor, a nut threaded on the projecting end of said conductor, means for preventing rotation of said conductor in said opening, an imperforate cap threaded on the end of said conductor and having clearance for said nut, said cap making a tight joint with said dielectric member to close said opening, and means for securing a line to the end of said conductor to hold said conductor while said dielectric member is removed therefrom.

4. The combination with a bushing insulator, of a conductor having a threaded end projecting therefrom, and a terminal member threaded on said conductor, said conductor having a slight initial bend in the threaded portion thereof within the portion of said terminal member threaded on to said conductor to insure a tight fit between said conductor and terminal member.

1,766,870. BRUSH. WILLIAM E. BECKER, Waukesha, Wis. Filed Nov. 16, 1928. Serial No. 319,947. 2 Claims. (Cl. 15—160.)



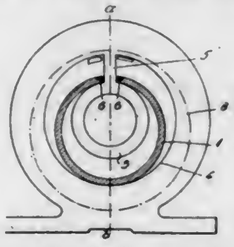
1. A brush comprising a U-shaped head of wood and bristles extending radially inward from the inner concave

wall of the head, a handle in the plane of the head having a side portion cut away to provide a curved seat in which the closed end of the brush head is snugly fitted, and reinforcing plates secured to the opposite flat sides of the brush head and overlapping the joint formed between the head and handle and provided with flanges engaging the outer side of the handle.

1,766,871. LEAD ALLOY. SYDNEY BECKINSALE and HERBERT WATERHOUSE, Woolwich, London, England. Filed Apr. 11, 1927, Serial No. 182,999, and in Great Britain Apr. 16, 1926. 3 Claims. (Cl. 75—1.)

3. A cable sheathing formed from a lead alloy containing from 0.10 per cent to 2 per cent cadmium and 0.25 per cent to 5 per cent metal from the group consisting of tin and antimony.

1,766,872. TIGHTENING MEANS FOR ROTARY MACHINES. OTTO ROBERT PERCIVAL BERGLUND, Lidingo-Brevik, Sweden, assignor to Aktiebolaget Vacuum-Compressor, Stockholm, Sweden, a Company of Sweden. Filed Apr. 27, 1928, Serial No. 273,405, and in Sweden May 11, 1927. 4 Claims. (Cl. 103—131.)



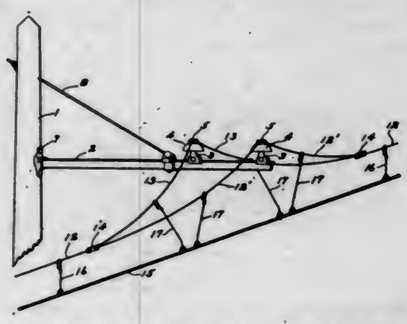
3. In a rotary machine having an eccentrically movable annular piston cooperating with two concentric parts between which a working space is provided, a cover plate at one end connected with the piston and covering said space, and a partition extending through a lateral opening provided in the piston and dividing said space, tightening strips inserted in the edges of said lateral opening and bearing against said partition, an angularly projecting abutment at the end of each of said strips which is directed toward said cover plate, said abutment being inserted in a recess in the cover plate and bearing against the edge of said partition which is in contact with said cover plate.

1,766,873. CONDUCTOR SUPPORT. LELAND W. BIRCH, Mansfield, Ohio, assignor to The Ohio Brass Company, Mansfield, Ohio, a Corporation of New Jersey. Filed July 25, 1929. Serial No. 380,862. 5 Claims. (Cl. 191—41.)



1. An overhead system comprising an upstanding support and a substantially horizontal arm support projecting therefrom, a curved contact wire positioned below the arm in a plane substantially horizontal to the track, an insulator on said arm, a messenger cable mounted on the insulator, an auxiliary cable positioned below the arm and above the contact wire and having its ends secured to spaced points on the messenger cable on opposite sides of the arm, an insulated device secured to the auxiliary cable and to the support and forcing the auxiliary cable out of alinement with the messenger cable and contact wire, hangers connecting the contact wire to the messenger cable and obliquely disposed hangers between the auxiliary cable and contact wire and holding the contact wire to proper curvature.

1,766,874. CONDUCTOR SUPPORT. LELAND W. BIRCH, Mansfield, Ohio, assignor to The Ohio Brass Company, Mansfield, Ohio, a Corporation of New Jersey. Filed July 25, 1929. Serial No. 380,863. 5 Claims. (Cl. 191—41.)



1. An overhead system comprising an upright support and a support arm, a pair of spaced insulators mounted on the arm, a catenary cable extending over and supported by one of the insulators, an auxiliary cable secured to the first cable at divergent points distant from both sides of the arm and supported on the other insulator, a contact wire suspended below the catenary cable by vertically disposed hangers between the said divergent points positioned between two arms and by obliquely disposed hangers positioned between the divergent points on either side of the arm, the last said hangers biased to prevent side swaying of the contact wire.

1,766,875. ELECTROLYTIC CELL HOOK-UP. FRANK HALEY BUCK, Wilmington, Del. Filed Apr. 16, 1928. Serial No. 270,521. 1 Claim. (Cl. 204—58.)

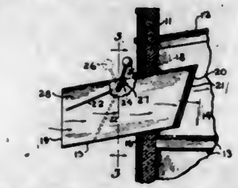


A cell comprising a plurality of spaced apart anodes arranged in two parallel rows, a basket cathode enclosing said anodes and having a central part projecting up between said rows, current inlet bars connected to the tops of said anodes, and a current outlet bus bar connected to the bottom of the cathode substantially centrally thereof and extending substantially the entire length thereof.

1,766,876. VENTILATOR FOR BUILDINGS. ROBERT S. BUSBY, West Palm Beach, Fla., assignor of one-half to Richard R. MacMahon, Columbus, Ohio. Filed Aug. 24, 1929. Serial No. 388,182. 3 Claims. (Cl. 98—37.)

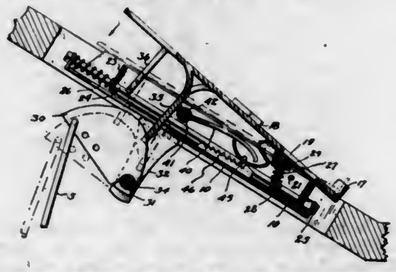
1. An improved ventilator comprising a casing adapted to be inserted angularly through the wall of the building

and projecting downwardly and outwardly from said building with its outer end more nearly vertical within a right angle to the axis of the casing and having its inner



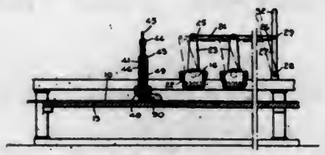
end cut off at a greater acute angle to the axis of the casing with its higher part innermost, and a counterweighted valve in said casing.

1,766,877. ACCELERATOR CONTROL. NAASON Z. BUTTERICK, Miami, Fla. Filed Aug. 18, 1928. Serial No. 300,472. 8 Claims. (Cl. 74—81.)



1. A device adapted to operate the throttle controlling the speeds of a motor vehicle, comprising a support, a pedal mounted for pivotal and slidable movements thereon, operative means connecting said pedal and the throttle, said operative means being actuated first by the pivotal movement of the pedal and then further actuated by the sliding movement of the pedal.

1,766,878. ORNAMENTATION PROCESS AND APPARATUS THEREFOR. JOHN B. CAMPBELL, Salem, N. J., assignor, by mesne assignments, to Carthage Mills Incorporated, Cincinnati, Ohio, a Corporation of Ohio. Filed Nov. 9, 1925. Serial No. 67,787. 6 Claims. (Cl. 91—68.)



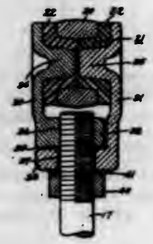
1. The process of coating a material intended to form a floor covering so as to produce a floor runner, said process comprising the steps of depositing varied colored materials over the width of a strip along areas running generally in the direction of the length of the strip and then spreading those materials deposited intermediate the edges of the strip transversely of the length of the strip and preventing the deposits adjacent the edges from spreading laterally thereof and toward the opposite edge.

1,766,879. FLOOR COVERING. JOHN B. CAMPBELL, Salem, N. J., assignor, by mesne assignments, to Carthage Mills Incorporated, Cincinnati, Ohio, a Corporation of Ohio. Filed Dec. 10, 1925. Serial No. 74,476. 6 Claims. (Cl. 154—2.)



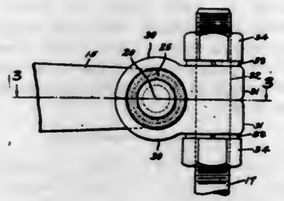
1. The process of making a carpet floor covering which includes the association of superposed layers, one of which is a dry felt product containing rags as an element to an extent of more than 60%, and the other of which contains rags to an extent of less than 60%.

1,766,880. UNIVERSAL JOINT FOR SHOCK ABSORBERS. WILLIAM A. CHRYST, Dayton, Ohio, assignor, by mesne assignments, to Delco Products Corporation, Dayton, Ohio, a Corporation of Delaware. Filed July 18, 1928. Serial No. 293,758. 5 Claims. (Cl. 287—100.)



1. A pivot joint connecting two relatively movable parts comprising: a fixed eye member on one of said parts, a resilient non-metallic bushing within said eye and having annular end flanges overlapping the end surfaces of said eye member, two opposed complementary clamps clamped internally upon said end flanges and each having a central fitting snugly within said bushing whereby the resilient material of said bushing is put under initial compression, said opposed clamps each being rigidly fixed to the second of said movable parts.

1,766,881. UNIVERSAL JOINT FOR SHOCK ABSORBERS. WILLIAM A. CHRYST, Dayton, Ohio, assignor, by mesne assignments, to Delco Products Corporation, Dayton, Ohio, a Corporation of Delaware. Filed July 18, 1928. Serial No. 293,759. 4 Claims. (Cl. 287—93.)

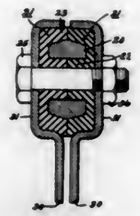


1. In combination, a lever arm, a rigid link connected to said arm by a pivot joint capable of transmitting thrust between said link and arm, said joint comprising: a pivot journal rigid with and projecting laterally from said arm, a resilient non-metallic bushing telescoped upon said journal, two half-sleeve metal clamps clamped upon the exterior of said bushing and radially compressing the resilient material thereof, said clamps having aligned projecting ears each having a hole extending therethrough, said link extending through the hole in said ears and having means thereon for rigidly clamping said clamps together.

1,766,882. PIVOT JOINT. WILLIAM A. CHRYST, Dayton, Ohio, assignor to Delco Products Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Feb. 21, 1929. Serial No. 341,809. 5 Claims. (Cl. 287—100.)

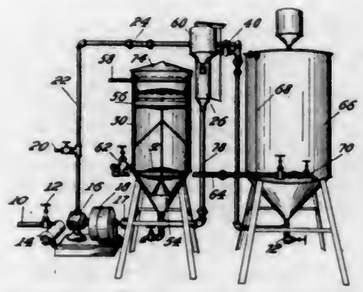
1. A pivot joint connecting two relatively movable parts comprising: an eye member fixed on one of said parts, a resilient nonmetallic member surrounding said eye mem-

ber and extending interiorly thereof, an exterior metal casing clamped upon said resilient member and fixed to the



second relatively movable part, and a pin extending transversely through said casing and eye member but isolated from said eye member by said resilient material.

1,766,883. CLARIFIER. WILLARD M. COFFIELD and THOMAS C. MOORE, Little Rock, Ark. Filed Dec. 15, 1927. Serial No. 240,186. 3 Claims. (Cl. 210—44.)



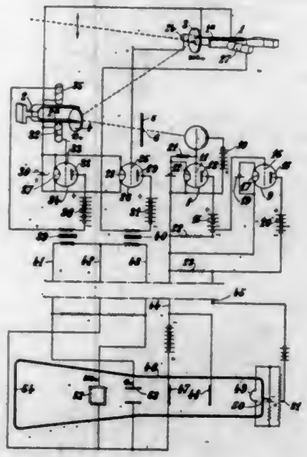
1. In a clarifier, means for continuously removing foreign material from a fluid while the fluid is acting in a cleaning capacity, said means including automatically operating moisture and dirt removing traps for stopping said continuous operation when an excess amount of foreign material accumulates, said trap comprising a cylinder in the system, a float in the cylinder, a valve adjacent the cylinder, and means connected with the float for automatically closing said valve when the float attains a certain predetermined height.

1,766,884. GLARE PROTECTOR. CHARLES F. COX, Omaha, Nebr. Filed Apr. 15, 1929. Serial No. 355,262. 1 Claim. (Cl. 296—95.)



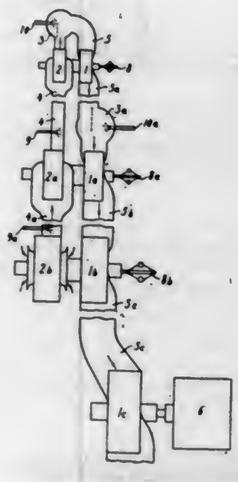
The combination with a glare shield transversely pivoted and supported beneath an automobile visor and forwardly of a windshield, of means for controlling said glare shield, said means comprising a shaft rotatably mounted above the windshield, a threaded shaft universally connected to the first mentioned shaft and extending forwardly, a rearwardly extending arm carried by the glare shield, double link connections between said arm and the visor, a block connecting the double links, said threaded shaft being threaded through said block.

1,766,885. TELEVISION SYSTEM. ALEXANDRE DAUVILLIER, Paris, France. Original application filed Aug. 22, 1924, Serial No. 733,651, now Patent No. 1,661,603, dated Mar. 6, 1928, and in France Nov. 29, 1923. Divided and this application filed Dec. 10, 1927. Serial No. 239,187. 4 Claims. (Cl. 178—6.)



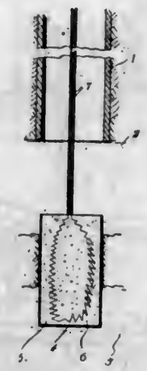
1. In a television system, a light distributor arranged for continuously analyzing a rear image to be transmitted by selecting therein at every instant, a beam of invariable section, vibrating means for imparting to said beam two simultaneous harmonic movements of constant amplitudes, the said movements occurring in planes at right angles to each other, means for producing, by means of this beam, photoelectric currents, means depending from the light distributor for simultaneously and directly producing and without loss of time synchronism currents, which vary according to the position of the said beam, and are consequently sinusoidal in form.

1,766,886. GAS-TURBINE UNIT. JENS WILLIAM AEGIDIUS ELLING, Christiania, Norway. Filed Dec. 2, 1924, Serial No. 753,530, and in Norway Dec. 13, 1923. 6 Claims. (Cl. 60—41.)



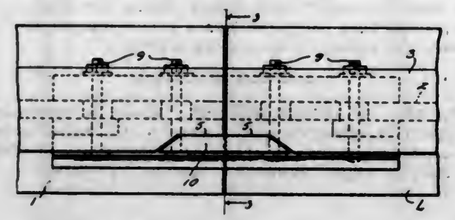
1. A gas turbine unit, comprising a series of mechanically independent means for compressing the gas in stages, means for adding energy of heat to the gas after compression, a series of means for expanding the compressed gas in stages down to an appropriate degree, each compressing means being mechanicaly coupled to one of the expanding means, an engine mechanically independent of said means for compressing and expanding the gas, and means for conducting the gas after final expansion as a driving fluid to the said independent engine.

1,766,887. WELL PACKER. ADAM J. EULBERG, Sunburst, Mont. Filed May 24, 1928. Serial No. 280,277. 3 Claims. (Cl. 166—13.)



1. A well packer comprising a cartridge of a mineral which increases its volume under heat and having an electric resistance coil embedded therein.

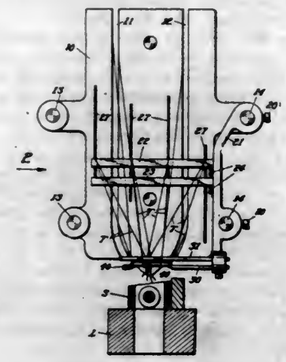
1,766,888. RAILWAY-RAIL JOINT. WILLIAM A. EVERS, Martinsburg, W. Va. Filed June 4, 1929. Serial No. 368,284. 4 Claims. (Cl. 238—221.)



1. A joint plate provided with a recess opening out through the upper edge thereof, a tread member having its lower portion arranged in the recess, the upper and lower edges of the tread member being similar, and means means detachably securing the tread member to the joint plate.

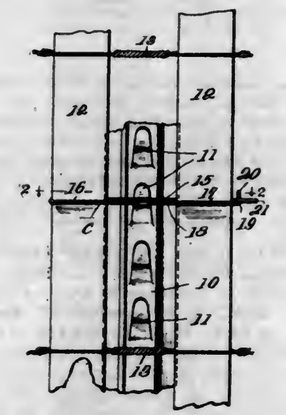
1,766,889. THREAD HOLDER FOR WEFT-REPLENISHING LOOMS. HENRY S. FAVOR, Providence, R. I., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Dec. 20, 1928. Serial No. 327,378. 10 Claims. (Cl. 139—247.)

1. In a weft replenishing mechanism having a plurality of reserve bobbins from each of which extends a weft end, a thread holder to which the several weft ends are attached, a plurality of weights, one for each thread, to engage the weft ends between the reserve bobbins and the thread holder, guide means for said weights located above the thread holder to prevent rotation of said



weights on their axes, and a thread guide located below said weights, the weighted members being between the thread guide and the thread holder.

1,766,890. FENCE CLAMP. DANIEL T. FINKBEINER, Beaver, Pa. Filed Aug. 16, 1929. Serial No. 386,419. 9 Claims. (Cl. 256—29.)



1. A fence clamp of the character described comprising a single piece of wire shaped to provide two spaced apart picket engaging loops, and an intermediate post-lug-engaging loop, one extremity of said wire having a transversely disposed hook and the other extremity having an offset portion positioned to engage said hook.

1,766,891. PROCESS OF COLORING GRANULATED SLATE. HARRY C. FISHER, Cincinnati, Ohio, assignor, by mesne assignments, to The Philip Carey Manufacturing Company, a Corporation of Ohio. Filed Apr. 29, 1925. Serial No. 26,829. 18 Claims. (Cl. 91—70.)

1. A granular slate, surface-coated with a body of dehydrated soluble silicate.

6. A process of forming colored mineral matter for surfacing, which consists in crushing natural slate to granular form, mixing the granules with a wet body of soluble silicate and coloring matter, and then treating the resultant mass with heat to permanently cause adhesion of the silicate to the granules with concurrent agitation of the mass.

1,766,892. COLORING MINERAL GRANULES. HARRY C. FISHER, Cincinnati, Ohio, assignor, by mesne assignments, to The Philip Carey Manufacturing Company, a Corporation of Ohio. Filed May 14, 1926. Serial No. 109,175. 12 Claims. (Cl. 91—70.)

1. A process for coloring slate which consists in treating salte in a granular or crushed condition with an acid, thus converting a portion of the ingredients of said mineral matter into salts convertible into oxides, said mineral matter being treated concurrently with a chromic salt which under a subsequent heat treatment will pass through a jell stage prior to an oxide-forming stage, and then heat treating the said substances to cause them to pass through said jell stage and into said oxide-forming stage.

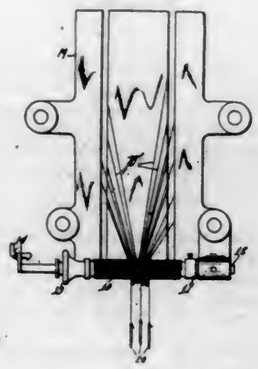
7. A process for coloring slate granules which consists in forming sulphates at the surface of said granules by treatment of ingredients in the slate with an acid, in the presence of a solution containing a chromic salt which will form a jell with the said sulphates during reduction to oxide form thereof by heat, and finally heat treating said granules to effect a reduction to oxides of the substances thereon.

1,766,893. FRONT WING FOR FLYING MACHINES. HENRICH FOCKE, Bremen, Germany, assignor to the Firm Focke-Wulfe Flugzeugbau, Aktiengesellschaft, Bremen, Germany. Filed Feb. 6, 1928, Serial No. 252,331, and in Germany Mar. 12, 1926. 3 Claims. (Cl. 244—12.)



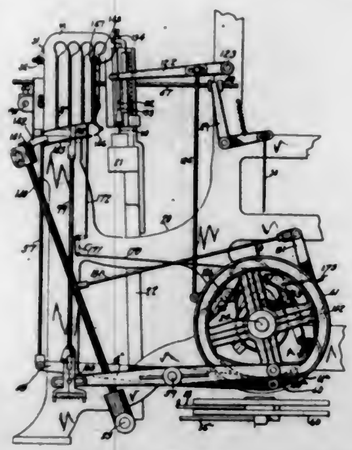
1. A flying machine having a front steering plane mounted for vertical angular movement and comprising a pair of oppositely extending wings, the rear edges of which diverge forwardly, the said wings also diverging downwardly and the pivotal axis of said steering plane being substantially coincident with the line of junction of said wings.

1,766 894. WEIGHT FOR WEFT-REPLENISHING-LOOM THREAD HOLDERS. HERBERT V. FOSTER, Providence, R. I., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Dec. 20, 1928. Serial No. 327,438. 1 Claim. (Cl. 139—247.)



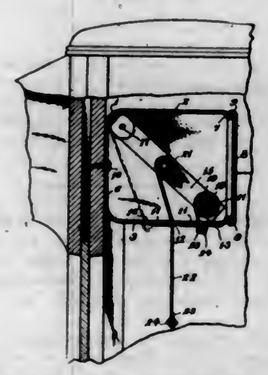
A weighted thread tensioning element for a weft replenishing loom having weft ends, said element comprising a rod, a stop located at the upper end thereof, a sleeve slidably mounted on the rod, a head formed on the lower end of the rod, and a compression spring interposed between the head on the rod and the lower end of the sleeve and acting to move the sleeve against the stop to clamp a weft end, said sleeve being yieldable to move away from the stop to release a weft end, the lower portion of said head being rounded to facilitate movement of the same with respect to adjoining weighted elements.

1,766,895. WEFT-REPLENISHING LOOM. ALBERT A. GORDON, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Aug. 15, 1927. Serial No. 212,996. 15 Claims. (Cl. 139—232.)



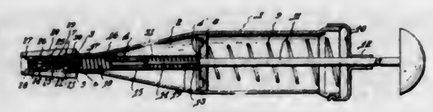
1. In a weft replenishing loom, a magazine having a stationary frame and comprising a plurality of separately movable compartments each having capacity for a plurality of bobbins of a selected kind or color, means to depress a selected compartment, a carrier effective to positively move the lowermost bobbin in said depressed compartment rearward, fixed means to support said bobbin against downward movement during the first part of its rearward movement, and additional and separate means to similarly support said bobbin during the latter part of its rearward movement, and a transferrer effective to insert said bobbin in the running shuttle.

1,766,896. ROAD-MAP HOLDER. HARRY A. GOYKE and ROY C. LA DUE, Clinton Corners, N. Y.; Naomi Goyke administratrix of said Harry A. Goyke, deceased. Filed Mar. 6, 1929. Serial No. 344.739. 2 Claims. (Cl. 40—83.)



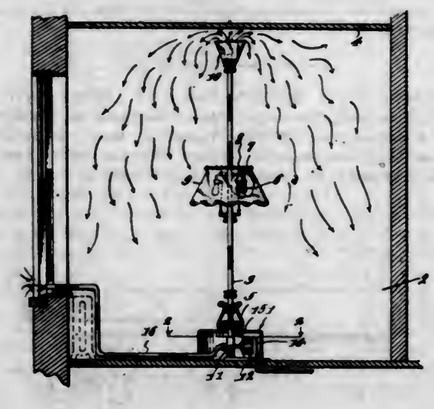
1. A device of the character described including a casing open at the front thereof and having top and bottom walls provided with flanges at the open front of the casing, the bottom wall being formed with a slot, a roller operatively mounted in the casing and removable through the open front of said casing, a flexible element normally wound on the roller and extending at its free end through said slot whereby said element may be withdrawn to extend exteriorly of the casing in view, and a front plate normally closing the front of the casing and having flanges mating with the flanges of the casing and slidably connecting said front plate with the casing.

1,766,897. GREASE GUN. PETER GRESSER, Detroit, Mich. Filed Dec. 8, 1928. Serial No. 324,671. 5 Claims. (Cl. 221—47.4.)



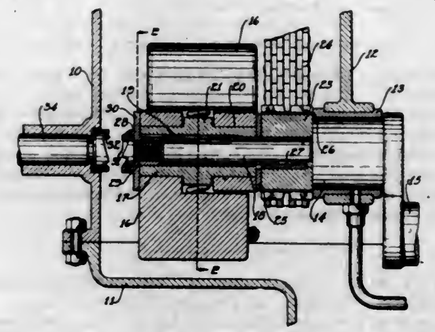
1. A grease gun comprising a cylinder, an outlet tube in one end thereof, a ported abutment in said tube, a sleeve slidable in said tube, a spring between said abutment and sleeve, a plunger slidably mounted in said tube and dimensioned for a sliding fit in said sleeve whereby to drive lubricant through said sleeve, a stronger spring between said sleeve and plunger, and means for admitting lubricant from said cylinder to said tube.

1,766,898. VENTILATING APPARATUS. EDWARD P. GRIBHAM, St. Louis, Mo. Filed Oct. 1, 1928. Serial No. 309,493. 1 Claim. (Cl. 98—39.)



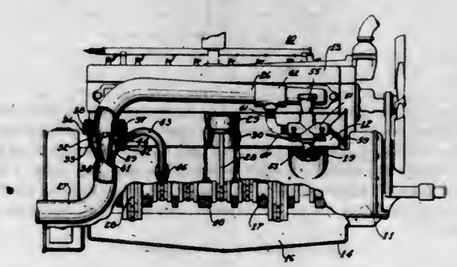
Ventilating apparatus comprising a hollow base, a rotary air compressor housed within the base, motor means for driving said compressor also housed within the base, the compressor including a casing having an inlet and an outlet, a tubular air conducting standard having its lower end extending into the base and in communication with the outlet of the compressor casing, an inverted conical distributor mounted upon the upper end of the said standard whereby to be presented toward the ceiling of a room in which the apparatus is installed, and a fresh air intake pipe in communication with the inlet of the compressor.

1,766,899. INTERNAL-COMBUSTION ENGINE. WALTER R. GRISWOLD, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Dec. 13, 1926. Serial No. 154,371. 12 Claims. (Cl. 74—6.)



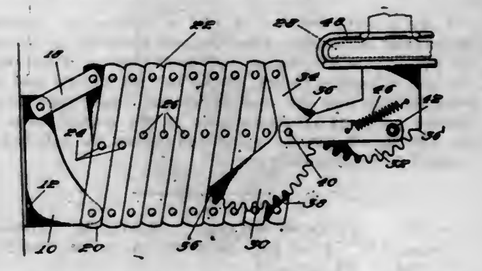
11. The combination in an internal combustion engine having a crank shaft, of a vibration damper comprising a bearing member carried by the shaft, opposed inertia members pivoted thereon, and resilient spacing means between the inertia members and the bearing member.

1,766,900. INTERNAL-COMBUSTION ENGINE. WALTER R. GRISWOLD, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Apr. 9, 1927. Serial No. 182,258. 11 Claims. (Cl. 123—171.)



1. The combination with an internal combustion engine having a crankcase and an exhaust pipe, of suction means operable by the engine exhaust to withdraw gases and vapors from the crankcase, a breather for the crankcase, means including the exhaust pipe for heating air connected to said breather and means to control the proportions of heated and cold air passing through said breather.

1,766,901. DISAPPEARING TELEPHONE BRACKET. ARTHUR GUSTAVSON, Jamestown, N. Y. Filed Oct. 24, 1925. Serial No. 64,667. 6 Claims. (Cl. 248—1.)



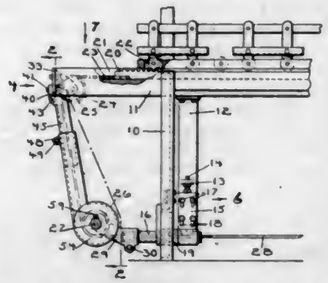
1. An extensible bracket including a base, two extremities of a lazy tongs connected to the base, and the other

two extremities terminating in an object supporting platform, together with means for moving said platform through an arc upwardly, and for maintaining said object supporting platform in a horizontal position at all times, said means including a pair of gears, and a bell crank lever, said bell crank lever being connected to the gears and extremity of the lazy tongs.

1,766,902. CORROSION PREVENTION OF IRON AND STEEL. MARION M. HARRISON, Akron, Ohio. Filed July 14, 1928. Serial No. 292,918. 12 Claims. (Cl. 148—8.)

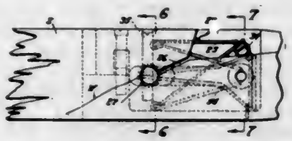
1. In the method of preventing corrosion of iron or steel by acid substances the step consisting in the addition of a derivative of 1-2 diamino ethane to the acid substances, as a corrosion inhibitor.

1,766,903. CHAIN GUARD FOR NARROW-WARE LOOMS. ELBRIDGE R. HOLMES, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Sept. 12, 1929. Serial No. 392,225. 14 Claims. (Cl. 139—136.)



1. A guard for a narrow ware loom having a lay and a rocker shaft between which extends a shuttle driving rack operating member, a pair of telescoping members, one pivotally mounted with respect to the lay, and the other pivotally mounted with respect to the rocker shaft and having portions to lie around the rack rod operating member.

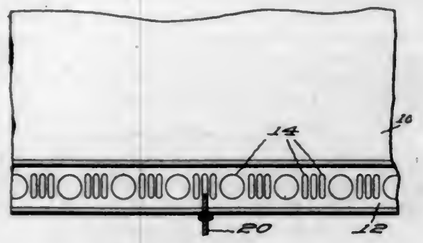
1,766,904. SHUTTLE TENSION AND TAKE-UP MECHANISM. ALLAN S. HUTCHINS, Worcester, Mass., assignor to Crompton & Knowles Loom Works,, Worcester, Mass., a Corporation of Massachusetts. Filed Nov. 24, 1928. Serial No. 321,682. 2 Claims. (Cl. 139—216.)



1. In a self-threading shuttle, a shuttle eye, tension mechanism associated therewith and operative to tension the weft during the normal continued running of the shuttle, and a tension device having in said shuttle and associated with said eye, said device two cooperating spring tension members positioned out of the normal path of the weft but effective to engage and tension the weft before complete threading thereof.

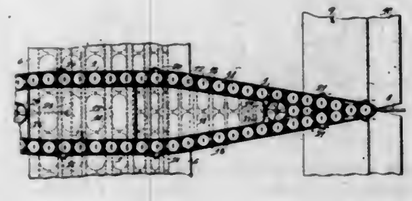
1,766,905. WINDOW SHADE. GEORGE M. JACKSON, Chicago, Ill. Filed July 29, 1927. Serial No. 209,253. 2 Claims. (Cl. 156—31.)

2. A window shade, comprising a section of shade cloth and a lower edge applied thereto, said edge comprising a slotted slat formed in one piece, a head at the top and at the bottom of the slat the slot extending longitudinally of the slat and at the upper edge thereof, said slot being



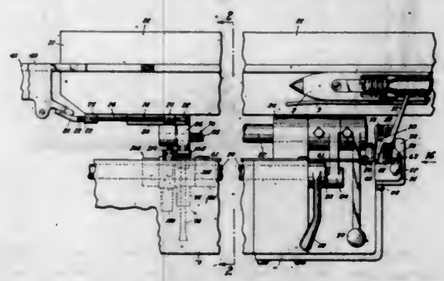
adapted for the reception of the lower edge of the window shade cloth and means co-operating with the shade cloth and the slat for retaining the slat in operating position on the lower edge of the cloth.

1,766,906. AIRCRAFT. ALBERT SHEPHARD JAMES, Eureka, Calif. Filed Sept. 6, 1927. Serial No. 217,720. 9 Claims. (Cl. 244—6.)



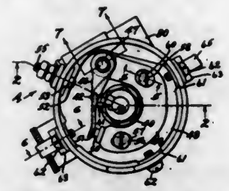
9. In air craft comprising a body, a plurality of longitudinal buoyant medium encasing receptacles in the body, means link-connecting the receptacles end to end in series, and means for connecting series of receptacles in multiple to fixed parts of the craft.

1,766,907. STOP MOTION FOR BOX LOOMS. VICTOR H. JENNINGS, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed July 19, 1928. Serial No. 293,886. 21 Claims. (Cl. 139—336.)



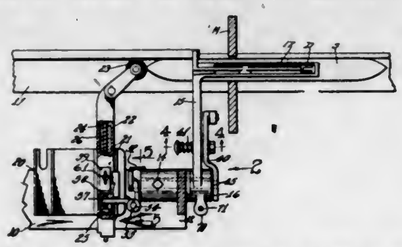
1. In a loom, shifting shuttle boxes to operate with a plurality of shuttles any one of which may become active, weft detecting mechanism, loom stopping mechanism, and a train of devices to delay the operation of the stopping mechanism interposed mechanically between said mechanisms and operative only upon a shifting of the shuttle boxes to complete a stopping of the loom which is initiated by the weft replenishing mechanism.

1,766,908. IGNITION TIMER. CARL H. KINDL, Anderson, Ind., assignor, by mesne assignments, to Delco-Remy Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Jan. 12, 1926. Serial No. 80,714. 5 Claims. (Cl. 200—22.)



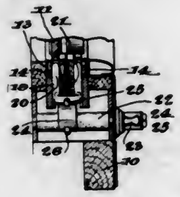
1. An ignition distributor, comprising in combination, a housing including wall portions; a breaker mechanism in said housing, comprising a stationary contact adapted to be engaged by a contact carried on a pivoted lever; a cam for operating said pivoted lever; a terminal comprising an insulating member supported in a wall of the housing, said member having a conductor supported therein, the conductor being provided with a recess inside the housing; and a resilient conductor blade, one end of which is secured to the pivoted lever, adjacent the other end there being a button secured to said blade, said button being adapted to fit into the recess of the conductor, whereby said blade is retained in proper position and electrically connected with the conductor.

1,766,909. REVOKER FOR WEFT-REPLENISHING LOOMS. WILLIAM H. KING, Clinton, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Mar. 1, 1929. Serial No. 343,690. 15 Claims. (Cl. 139—231.)



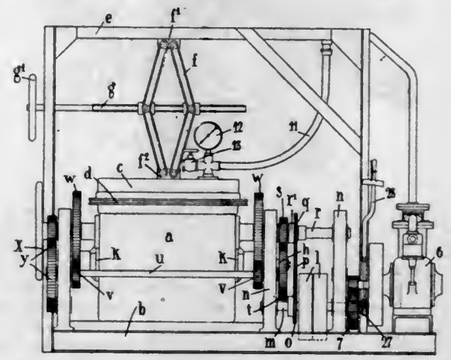
1. In a weft replenishing loom, a regularly moving actuator, a transferrer arm, a lever pivoted on the transferrer arm and normally operatively connected to the actuator, means to cause said lever and transferrer arm to move together normally to cause the actuator to move the transferrer arm regularly, and mechanism operated by a misplaced shuttle to move said means so that the latter is ineffective to cause the transferrer arm and said lever to move together so that said actuator moves without causing motion of the transferrer arm.

1,766,910. WINDOW LATCH. ARCHER L. KNAPP, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Dec. 7, 1925. Serial No. 73,587. 1 Claim. (Cl. 292—159.)



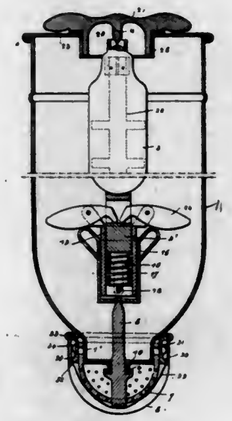
In combination, a runway, a pair of windows slidable therein, said windows having notches adapted to register, a floating reciprocatory U-shaped latch bolt positioned in the runway, a spring between the bolt and the runway intermediate the arms of the bolt, a cam engaging the bolt by line contact between the arms thereof, means actuating the cam to engage the notches and means limiting the travel of the cam so that movement thereof in one direction will be stopped when the nose of the cam engages the bolt and reverse movement of the cam will be stopped when the heel of the cam engages the bolt.

1,766,911. MANUFACTURE OF CEMENT CONCRETE AND APPARATUS FOR USE THEREWITH. ARTHUR CYRIL KNIPE, Westminster, London, England, assignor to Modern Concrete Development Company Limited, London, England. Filed Nov. 29, 1926, Serial No. 151,560, and in Great Britain Dec. 3, 1925. 2 Claims. (Cl. 83—73.)



1. The method of producing densified, deaerated cement concrete consisting in mixing the ingredients in a vessel open to the air until a homogeneous mass is obtained then submitting the mass to agitation in a way to bring all portions thereof to the upper surface of the mass and while being agitated subjecting the surface of the mass to a high vacuum until the air is extracted and after the air is extracted working the material under normal atmospheric conditions.

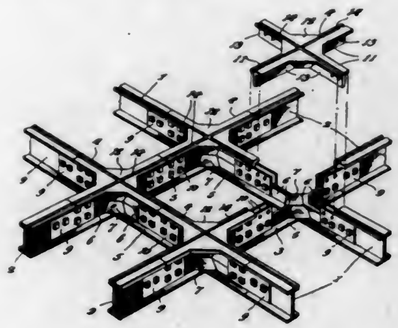
1,766,912. AUTOMATIC FIRE EXTINGUISHER. HENRI CHARLES LAENGEL, Paris, France. Filed Dec. 19, 1927, Serial No. 241,197, and in France Dec. 24, 1926. 6 Claims. (Cl. 169—26.)



1. An automatic fire extinguisher comprising a liquid container, a percussion mechanism carried by the con-

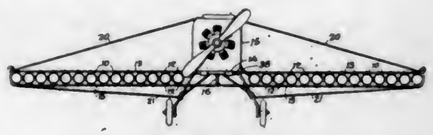
tainer, an outlet valve for the liquid, a gas filled cartridge arranged to be ruptured by the mechanism, and a combustible means on the outside of the container which normally holds the valve in closed position and which when subjected to heat releases the percussion mechanism.

1,766,913. RAILWAY CROSSING. JESSE D. LASSWELL, Chicago, Ill. Filed Aug. 28, 1929. Serial No. 388,987. 6 Claims. (Cl. 246—460.)



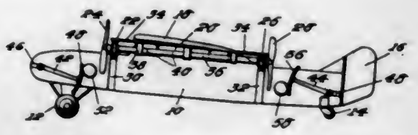
1. A device of the character described comprising a base section consisting of a frame having side bars intersecting to form corner portions and having their ends projecting from corners of the frame, upper removable sections each having crossed arms united at their intersections and of half the length of the side bars of the base whereby the upper sections may be set in place upon the base with their inner ends contacting midway the ends of the side bars and their outer ends terminating at the ends of the side bars of the base, plates secured against opposite side faces of the side bars of said base and projecting therefrom, the arms of the upper sections fitting between said plates, and removable fasteners passed through the plates and arms of the upper sections.

1,766,914. AEROPLANE. JOSEPH A. LEMIEUX, Washington, D. C. Filed Dec. 5, 1929. Serial No. 411,905. 6 Claims. (Cl. 244—12.)



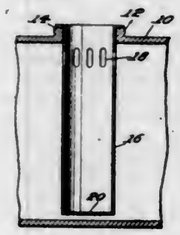
1. In an aeroplane, the combination of a fuselage, a series of tubes arranged in substantially the direction of the flight of said aeroplane, and beneath the fuselage, means for deflecting said tubes above or below the horizontal, and means for shifting them to the right or the left.

1,766,915. FLOATING AIR LINER. SWAN M. LINDSTRAND, Chicago, Ill. Filed Apr. 9, 1928. Serial No. 268,438. 1 Claim. (Cl. 244—29.)



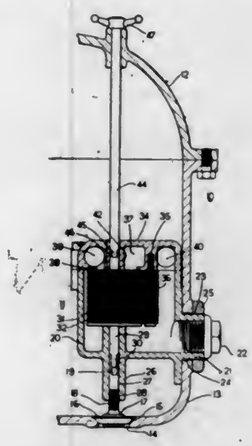
A floating air-liner, including in combination, a fuselage and a pair of elevating planes mounted on the front and rear of the fuselage, respectively, and means for separately operating each pair of elevating planes, said means comprising a rotatable drum, a cable wrapped around the drum, the ends of the cable connected to the elevator, and means for supporting the cable ends, said means including an arcuate member at one inner corner of the elevator, a system of gears associated with each pair of elevators, and manually controlled means for operating each system of gears, said manually controlled means comprising two independently rotated handwheels mounted on the same shaft.

1,766,916. GASOLINE THEFTPROOF DEVICE. MARY MACLIVER, Trinidad, Colo. Filed July 19, 1928. Serial No. 293,972. 2 Claims. (Cl. 220—86.)



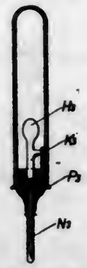
1. In a theft preventing device for tank contained liquids, a tank having a filling opening provided therein, a receptacle mounted within the tank immediately below the filling opening, the upper outer surface of the said receptacle being provided with a plurality of overflow openings, a downwardly extending tube integral with the receptacle and extending substantially to the bottom of the tank, and a closure for the lower end of the tube, the said closure being provided with a small opening.

1,766,917. INTERNAL-COMBUSTION ENGINE. JAMES H. MARKS, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed June 20, 1928. Serial No. 286,833. 10 Claims. (Cl. 184—1.5.)



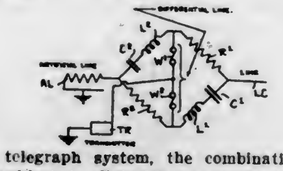
1. In combination with an internal combustion engine having an oiling system and a drain therefor, a filter connected in the oiling system and means for cleaning the filter automatically upon opening or closing the drain and without altering the connection of the filter to the oiling system.

1,766,918. HYPODERMIC SYRINGE FOR INJECTING LIQUIDS INTO THE BODY OR FOR TAKING THEM THEREFROM. FELIX MEYER, Aachen, Germany. Filed Nov. 7, 1924, Serial No. 748,390, and in Germany July 23, 1924. 5 Claims. (Cl. 128—216.)



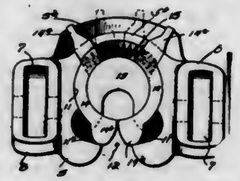
1. A syringe for injecting a gaseous or liquid fluid into the body of a human being or animal or for drawing it therefrom comprising a container, a stopper closing the container, and a cannula carried by and passing through the said stopper, the stopper being made of elastic material and the said cannula extending in the interior of the container in such a manner that normally the communication between it and the interior of the container is closed and when the stopper is moved from the outside communication is caused to be established between the cannula and the container.

1,766,919. DUPLEX TELEGRAPH SYSTEM. JOSEPH W. MILNOR, Maplewood, and WILLIAM D. CANNON, Metuchen, N. J., assignors to The Western Union Telegraph Company, New York, N. Y., a Corporation of New York. Filed Oct. 30, 1928. Serial No. 316,018. 6 Claims. (Cl. 178—60.)



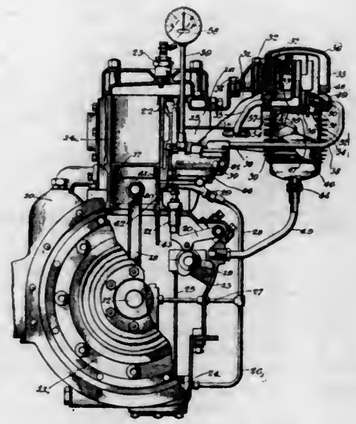
1. In a telegraph system, the combination of a line conductor subject to disturbing currents, a return path for said line conductor, a balanced Wheatstone bridge connected between said line and return path comprising two opposite resistance arms and two opposite tuned arms in resonance with the disturbing currents, a receiving relay having two operating windings connected in a diagonal of said bridge, and a transmitting circuit connected from a point between said windings and said return path, the transmitted signal current dividing at said receiving relay and flowing equally through said resistance arms in opposite directions and said receiving signal current flowing through said resistance arms and receiving relays in series whereby the receiving relay is responsive to received current and non-responsive to transmitted signal current.

1,766,920. OIL-WELL APPARATUS. JOSEPH F. MOODY, Tulsa, Okla. Filed Nov. 16, 1928. Serial No. 319,968. 9 Claims. (Cl. 294—91.)



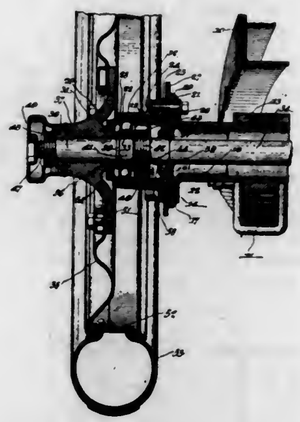
1. The combination with an elevator; of a detachable wear plate, removable bail attaching pins, and said pins being adapted to overlie said wear plate to hold the same in place.

1,766,921. INTERNAL-COMBUSTION ENGINE. ALFRED MOORHOUSE, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Oct. 14, 1925. Serial No. 62,337. 17 Claims. (Cl. 123—196.)



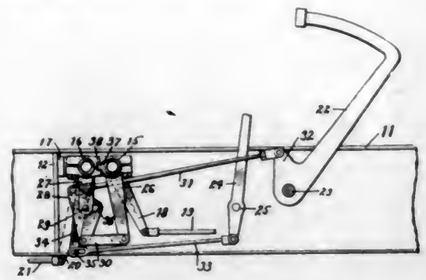
1. In an internal combustion engine, the combination of the oil circulation system, means for purifying the oil of the system including a conduit connected to the cylinder wall of the engine, and means for disconnecting said conduit from said purifying means and connecting it in said circulation system.

1,766,922. MOTOR VEHICLE. ALFRED MOORHOUSE, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Nov. 6, 1925. Serial No. 67,457. 12 Claims. (Cl. 180—75.)



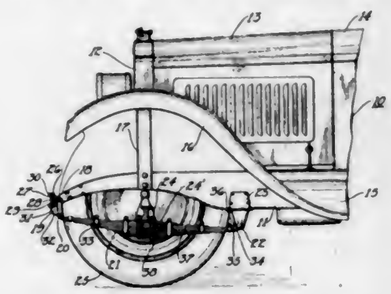
1. The combination in a motor vehicle of a wheel mounting comprising a tubular axle housing having an integral radial flange at the outer end thereof, a two-part bearing support having telescopic members each secured to the face of said flange, a bearing having an outer face secured between the parts of said support and having an inner race, means to secure said inner race to the axle, and a wheel having a hub portion removably secured to the end of said axle.

1,766,923. BRAKE-OPERATING MECHANISM. ALFRED MOORHOUSE, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed May 21, 1926. Serial No. 110,783. 19 Claims. (Cl. 188—204.)



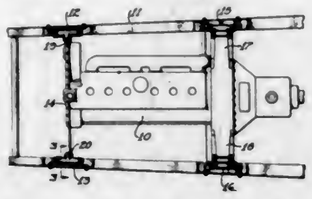
6. In a motor vehicle, the combination with two rock shafts for operating separate brakes, a lever, and means for rocking said shafts from said lever, of gearing between said shafts having considerable back lash in both directions so that the bearing is normally inoperative but becomes operative upon failure of some other part of the mechanism.

1,766,924. MOTOR VEHICLE. ALFRED MOORHOUSE, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Oct. 30, 1926. Serial No. 145,214. 8 Claims. (Cl. 261—51.)



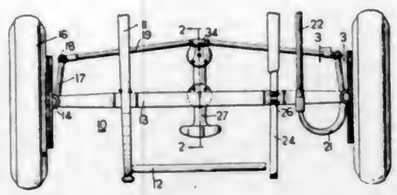
1. In a motor vehicle, the combination with the frame, and a spring shackled to the end of the frame, of a bumper mounted on the frame adjacent the spring shackle, a clamping plate for the bumper, and means on said clamping plate to limit the swinging action of the spring shackle.

1,766,925. MOTOR VEHICLE. ALFRED MOORHOUSE, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Mar. 18, 1927. Serial No. 176,369. 6 Claims. (Cl. 180—64.) 180—64.)



1. In a motor vehicle, a frame member having a web and flanges, a bracket for said frame member secured to the web and one of the flanges, an engine for the vehicle and resilient connections between the bracket and engine positioned substantially within the limits of the flanges.

1,766,926. MOTOR VEHICLE. ALFRED MOORHOUSE, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Mar. 12, 1928. Serial No. 260,907. 9 Claims. (Cl. 280—95.)

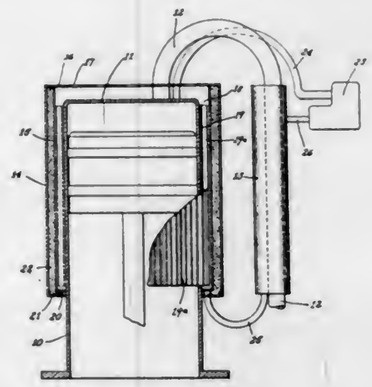


1. The combination with a motor vehicle having pivoted steering wheels, of a brake member connected to and movable with said wheels, a friction member cooperable with said brake member and normally out of braking relation therewith and an inertia device operable upon oscillatory vibration of the steering wheels to establish such braking relation.

1,766,927. PROCESS OF PRODUCING RESINS. JACQUE C. MORRELL and GUSTAV EGLOFF, Chicago, Ill., assignors to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Jan. 3, 1928. Serial No. 244,366. Renewed Dec. 21, 1929. 1 Claim. (Cl. 260—2.)

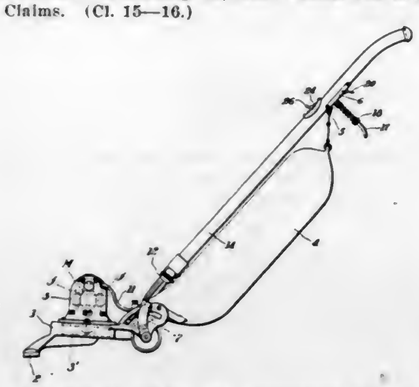
A process of making resins which comprises subjecting a mixture of polymeric hydrocarbons and a phenolic body to an elevated temperature below that which would prevent reaction from taking place in the presence of an oxidizing gas and containing the treatment until the material has reached the desired viscosity, then allowing the finished product to cool.

1,766,928. MOTOR PREHEATER AND COOLER. ALFONS MUELLER, New York, N. Y. Filed Mar. 5, 1927. Serial No. 172,977. 1 Claim. (Cl. 123—122.)



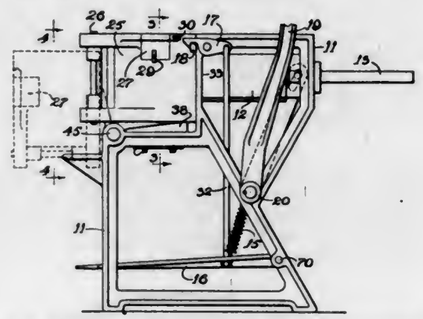
A device for double heating of carburetor air comprising a carburetor, a cylinder of a combustion engine, an exhaust pipe extending from said cylinder, a container enclosing said exhaust pipe, a tube leading from the carburetor to said container, a casing enclosing said cylinder having air inlet perforations therein, and a tube leading from said casing to said carburetor, said tubes leading from said container and said casing forming a passageway for the air circulating into said carburetor, the confined air being heated by radiation from the cylinder.

1,766,929. ELECTRIC SUCTION CLEANER. JAMES M. NAUL, Plainfield, N. J., assignor to The Singer Manufacturing Company, Elizabeth, N. J., a Corporation of New Jersey. Filed Aug. 15, 1929. Serial No. 386,165. 4 Claims. (Cl. 15—16.)



1. In a suction cleaner, the combination with a fan-casing and nozzle, of an electric motor having a main current-supply lead and a plurality of speed-control leads, a hollow tubular handle connected to said fan-casing and through which said leads extend, a plurality of separate switches disposed within said handle, and a current-supply cord leading into said handle, one of said switches being an "on-and-off" switch connected in one of the current-supply legs and the other switch being a selector-switch connected to the speed-control leads from the motor.

1,766,930. MACHINE TO MAKE CONCRETE BUILDING BLOCKS. EDWARD SEYMOUR NICHOLAS, Monroe Center, Ill. Filed Feb. 2, 1928. Serial No. 251,241. 8 Claims. (Cl. 25—41.)



3. In a concrete block machine, a mold box mounted on a frame, said box having means to open and close the same, and a removable core within said box the mold box having a face plate that has slots cut through it in design, movable bars mounted in the slots, a movable frame on the back of the face plate having said bars moving therewith, a shaft mounted on the back of the face plate with one or more eccentrics that engage the movable frame, a lever to operate the shaft, and springs to exert pressure between the movable frame and face plate to assist in moving the bars on withdrawing them from the box.

1,766,931. FRICTION ELEMENTS AND METHOD OF MAKING SAME. IZADOR J. NOVAK, Bridgeport, Conn., assignor, by mesne assignments, to Raybestos-Manhattan, Inc., a Corporation of New Jersey. Filed Jan. 23, 1924, Serial No. 688,108. Renewed Dec. 2, 1929. 3 Claims. (Cl. 91—70.)

3. Steps in a process of producing friction elements consisting in impregnating a non-combustible fibrous base with a saturant, partially hardening the saturant by subjecting the impregnated base to heat in a non-oxidizing atmosphere, and finally hardening the saturant in the impregnated base by subjecting said base to heat and an oxidizing atmosphere under pressure.

1,766,932. HARDENED CELLULAR OR FIBROUS FRICTION ELEMENTS AND METHOD OF PRODUCING SAME. IZADOR J. NOVAK, Bridgeport, Conn., assignor, by mesne assignments, to Raybestos-Manhattan, Inc., a Corporation of New Jersey. Filed June 9, 1926. Serial No. 114,849. 5 Claims. (Cl. 91—70.)

1. A method of producing elements adapted for frictional purposes, comprising impregnating an incombustible fibrous base with a saturant comprising phenolic resin capable of transformation by heat to an infusible binder and a modifier capable per se of also becoming a binder under the conditions of cure, and thereafter heat treating the saturated incombustible fibrous base to render the saturant infusible and produce an element having satisfactory frictional quality, said modifier being of such a character that the resultant binder is infusible.

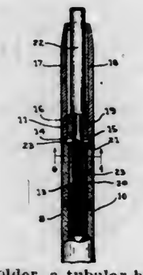
1,766,933. FRICTION ELEMENTS AND METHOD OF MAKING SAME. IZADOR J. NOVAK, Bridgeport, Conn., assignor, by mesne assignments, to Raybestos-Manhattan, Inc., a Corporation of New Jersey. Original application filed Jan. 23, 1924, Serial No. 688,108. Divided and this application filed Mar. 11, 1929. Serial No. 346,271. 6 Claims. (Cl. 91—70.)

6. The method of producing friction elements which comprises impregnating asbestos fibrous elements with a saturant stacking the impregnated elements in the form of a close pack, and partially hardening the saturant by heat treatment of the impregnated elements while maintained in said close pack to produce a non-glazed uniformly hardened product.

1,766,934. HARDENED CELLULAR OR FIBROUS FRICTION ELEMENTS AND METHOD OF PRODUCING SAME. IZADOR J. NOVAK, Bridgeport, Conn., assignor, by mesne assignments, to Raybestos-Manhattan, Inc., a Corporation of New Jersey. Filed Apr. 15, 1929. Serial No. 355,421. 5 Claims. (Cl. 91—70.)

3. A process of producing elements adapted for use as frictional material comprising impregnating an incombustible fibrous base with a saturant comprising phenolic resin capable of transformation by heat into an infusible body and a modifier which does not per se become a binder under the conditions of cure, thereafter heat-treating the saturated fibrous base to render the phenolic resin infusible and produce a product having satisfactory frictional quality, said process being characterized in that the type and amount of modifier used are corelated so as not to prevent the phenolic resin from becoming infusible or substantially impair the frictional quality of the final product.

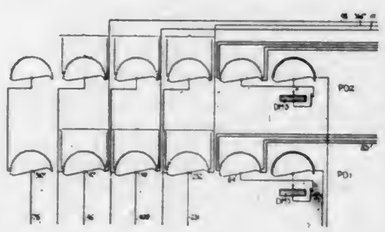
1,766,935. ADJUSTABLE ERASER. ARTHUR A. PAGE, Racine, Wis. Filed July 1, 1929. Serial No. 375,084. 3 Claims. (Cl. 120—36.)



1. In an eraser holder, a tubular body portion, an internally threaded cylinder member rotatably mounted on an

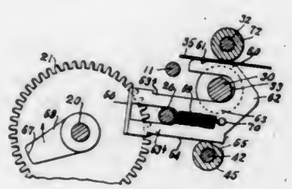
end portion thereof and removable therefrom, an elongated hollow projector member longitudinally movably mounted within said body portion and the cylinder member, said projector member being closed at its inner end and open at its outer end and having on its outer end portion a threaded head member in threaded engagement with an inner portion of said cylinder member, and means for holding said projector member against rotation, said projector member being adapted to support and move an eraser within said cylinder.

1,766,936. TELEPHONE SYSTEM. OWEN AVIS PEARCE, Liverpool, England, assignor to Associated Telephone and Telegraph Company, Kansas City, Mo., a Corporation of Delaware. Filed Sept. 27, 1928, Serial No. 308,754, and in Great Britain Oct. 10, 1927. 8 Claims. (Cl. 179—175.)



1. In an automatic telephone system employing a plurality of similar pieces of apparatus having incoming and outgoing conductors including condensers in the conductors, a routine test mechanism for automatically testing said apparatus, means for associating said test mechanism directly with the incoming and outgoing conductors of one of said apparatus, and means in said test mechanism for testing the condition of the condensers in said conductors.

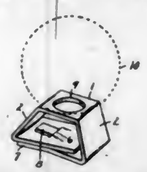
1,766,937. AUTOGRAPHIC REGISTER. WILLIAM C. PFEIFFER, Dayton, Ohio, assignor to The Egry Register Company, Dayton, Ohio, a Corporation of Ohio. Filed Jan. 5, 1929. Serial No. 330,457. 19 Claims. (Cl. 282—16.)



1. In an autographic register, having a plurality of superimposed sheets, means for feeding such sheets and supplementary feeding and aligning means adapted to engage portions of said sheets adjacent file punch holes therein which are out of alignment with the remainder of the sheets for aligning said sheets, and means for rendering inoperative said first mentioned feeding means, and common means for raising and lowering a part of the feeding means and the supplementary feeding and aligning means into operative and inoperative positions.

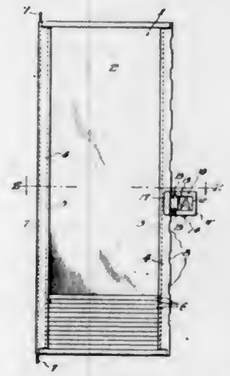
1,766,938. GOLF TEE. THOMAS W. PHILLIPS, Jackson, Mich. Filed Aug. 30, 1929. Serial No. 389,333. 4 Claims. (Cl. 273—33.)

4. A golf tee comprising a strip of cardboard having transverse scores facilitating folding along predetermined lines and comprising a central portion constituting a top member and having a hole therein providing a ball seat,



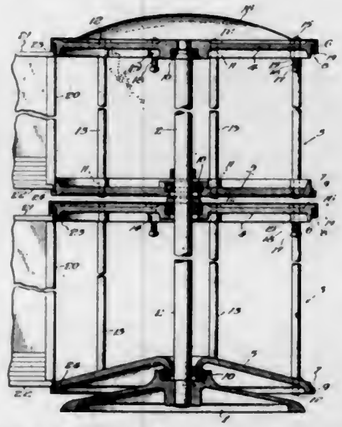
intermediate portions constituting side members, and end portions constituting base members adapted to be brought into overlapping relation.

1,766,939. FRAME AND INDEX TAB THEREFOR. FRANK D. POWELL, Chicago, Ill., assignor to Acme Card System Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 25, 1928. Serial No. 272,598. 5 Claims. (Cl. 40—102.)



1. In combination, a frame having an aperture opening to a marginal edge, an index tax adapted for engagement with said frame comprising a body portion and a hook member positioned within said body portion, said hook member being adapted to engage in said marginal aperture.

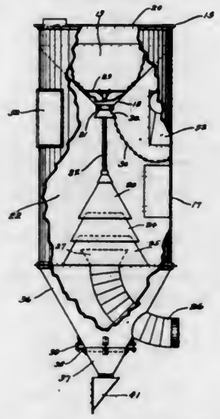
1,766,940. STAND FOR VISIBLE INDEXES. FRANK D. POWELL, Chicago, Ill., assignor to Acme Card System Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 25, 1928, Serial No. 272,599. Renewed Mar. 7, 1930. 8 Claims. (Cl. 40—72.)



1. In combination, a stand comprising spaced upper and lower supports provided with inwardly facing opposed

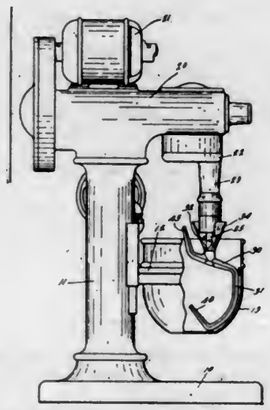
grooves confined by walls, a movable plate cooperatively connected with one of said supports having an edge lying in different plane than the body portion of said plate and projecting beyond the edge of the wall confining the groove in that support, and means for maintaining said movable plate under spring tension.

1,766,941. SEPARATING SYSTEM. WILLIAM B. PROUTY, Evanston, Ill., assignor to Federal Pneumatic Systems, Inc., a Corporation of Illinois. Filed Feb. 9, 1925. Serial No. 7,744. 11 Claims. (Cl. 209—144.)



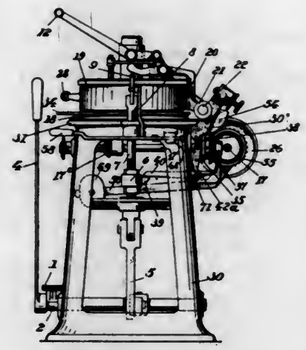
11. In a device for removing dust from granular material, in combination, a dust separator, a dust collector, means including a mechanical element and a gravity feed for delivering crushed material to said separator, a conduit between said separator and collector, a fan in said conduit for exhausting dust laden air from said separator and elevator and delivering the same under pressure to said collector, a screening device for receiving the coarsely ground material from said separator, and a conduit between said screening device and system for removing dust particles from said screening device and introducing the same into said system.

1,766,942. APPARATUS FOR TREATING FOODSTUFFS. THOMAS F. RATAICZAK and MILTON K. AKERS, Troy, Ohio, assignors to The Hobart Manufacturing Company, Troy, Ohio, a Corporation of Ohio. Filed Sept. 24, 1926. Serial No. 137,503. 13 Claims. (Cl. 259—102.)



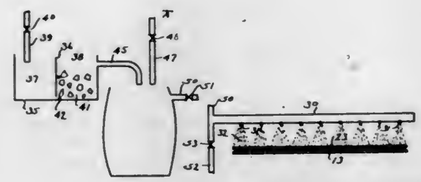
1. For use in a mixing machine of the class described, a beater comprising a downwardly extending main body portion, an arm attached to said main body portion at the upper end thereof and inclined to the general plane of the body portion of the beater, a second arm attached to said body portion at the lower end thereof, and oppositely inclined with respect to the general plane of the body portion and inclined with respect to each other.

1,766,943. DOUGH DIVIDING AND WORKING MACHINE. GOTTFRIED RAUSCH, Ammendorf, near Halle-on-the-Saale, Germany. Filed Mar. 31, 1928, Serial No. 266,293, and in Germany Sept. 24, 1926. 9 Claims. (Cl. 107—20.)



1. A dough-dividing and working machine comprising a frame, a presser head pivotally supported on said frame, a driving shaft, a toothed sector on said presser head, a spur gear on said driving shaft meshing with said sector, a balance weight secured on said spur gear, and means for operatively connecting said driving shaft with said spur gear.

1,766,944. MANUFACTURE OF PULP. FRANCIS G. RAWLING, Chillicothe, Ohio, assignor to The Mead Pulp & Paper Company, Dayton, Ohio, a Corporation of Ohio. Filed Jan. 21, 1929. Serial No. 333,861. 9 Claims. (Cl. 92—41.)

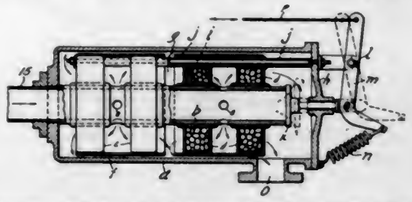


1. In the treatment of fibrous material in which the material is first defibered and suspended in a liquid medium, and the mass then dried, the method which comprises maintaining the fibrous mass being dried of a character controlled as to its acidity.

1,766,945. EXHAUST PURIFIER. WILHELM RIEHM, Augsburg, Germany, assignor to the Firm: Maschinenfabrik Augsburg-Nuernberg, Aktiengesellschaft, Augsburg, Germany, a German Corporation. Filed Mar. 15, 1926, Serial No. 94,875, and in Germany Feb. 5, 1926. 5 Claims. (Cl. 60—29.)

1. An exhaust container for an internal combustion engine comprising a casing having an outlet, an exhaust inlet pipe projecting into said casing, a plurality of spaced

screens positioned about said exhaust inlet pipe, a jacket surrounding said screens and spaced from the inner wall of said casing, catalytic material arranged within said screens, said exhaust pipe and said jacket having openings



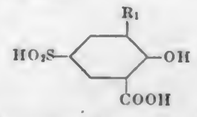
respectively arranged in staggered relation with respect to said screens and catalytic material, whereby the exhaust gases are constrained to pass through said catalytic material in passing through the exhaust container from said exhaust inlet pipe to said outlet.

1,766,946. AZO DYES DERIVED FROM AMINOSULPHURS. KENNETH HERBERT SAUNDERS, Manchester, England, assignor to British Dyestuffs Corporation Limited, Manchester, England. Filed Aug. 29, 1925, Serial No. 53,404, and in Great Britain Oct. 21, 1924. 14 Claims. (Cl. 260—91.)

1. In the manufacture of azo dyes, the process which comprises reacting upon a 5-sulphino salicylic acid with an aromatic nitro compounds having a labile chlorine atom, reducing the nitro sulphone to an amino sulphone, diazotizing said amino sulphone and then coupling the diazotized sulphone with the usual azo dye coupling components.

1,766,947. MANUFACTURE OF NEW AZO DYESTUFFS. KENNETH HERBERT SAUNDERS, Manchester, England, assignor to British Dyestuffs Corporation Limited, Manchester, England. Filed June 10, 1926, Serial No. 115,122, and in Great Britain Aug. 4, 1925. Renewed Sept. 10, 1929. 12 Claims. (Cl. 260—68.)

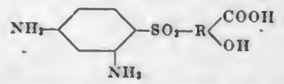
1. In the manufacture of chromable azo dyestuffs of the triarylmethane series in which the chelate group is situated in a part of the molecule separated from the rest of the molecule containing the chromophore groups by a sulphone (—SO_2—) bridge, the process which comprises condensing a tetraalkyldiaminobenzhydrol with an aminosulphone obtained by reducing the product of the reaction between a sulphinic acid of the type—



in which R_3 is a substituent group, and an aromatic nitro compound having a reactive halogen atom, and then diazoting this condensation product and coupling with the usual second components.

1,766,948. MORDANT AZO DYESTUFFS. MORDECAI MENDOZA and KENNETH HERBERT SAUNDERS, Manchester, England, assignors to British Dyestuffs Corporation Limited, Manchester, England. Filed Sept. 29, 1926, Serial No. 138,567, and in Great Britain Nov. 13, 1925. 12 Claims. (Cl. 260—96.)

1. In the manufacture of azo dyes, the process which comprises coupling a compound containing a diazo group with a diamino diaromatic sulphone having the probable formula



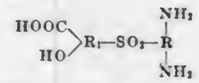
where R represents a beneze residue and in which the hydroxyl and carboxyl groups are ortho to each other.

1,766,949. MANUFACTURE OF NEW INTERMEDIATE COMPOUNDS AND OF AZO DYES THEREFROM. MORDECAI MENDOZA, Blackley, Manchester, England, assignor to British Dyestuffs Corporation Limited, Manchester, England. Filed May 25, 1928, Serial No. 280,649, and in Great Britain May 27, 1927. 15 Claims. (Cl. 260—86.)

1. In the manufacture of new azo dye intermediates and new azo dyes therefrom, the process which comprises condensing a compound selected from a class consisting of 1-carboxy-2-hydroxy-3-sulphino benzene and naphthalene compounds with a second compound selected from a class consisting of benzene and naphthalene nitro compounds which contain a labile halogen atom and reducing at least one of the nitro groups to an amino group.

1,766,950. AZO DYESTUFFS. MORDECAI MENDOZA and KENNETH HERBERT SAUNDERS, Blackley Manchester, England, assignors to British Dyestuffs Corporation Limited, Manchester, England. Original application filed Sept. 29, 1926, Serial No. 138,567, and in Great Britain Nov. 13, 1925. Divided and this application filed Aug. 31, 1928. Serial No. 303,366. 6 Claims. (Cl. 260—76.)

1. Disazo dyes carrying a chelate group and adapted for mordant dyeing with the chelate group separated from and connected to the chromophore group by a sulphone bridge, said azo dyes being mixed sulphones having the probable formula



wherein R_1 represents a benzene residue and R represents a benzene or naphthalene residue both of which may be further substituted and having attached thereto by means of an azo group an azo dye component containing a second azo group, the group represented by R possessing chromophoric properties and in which the —COOH and —OH groups attached to the R_1 are ortho to each other, the said dyes producing shades which are substantially unchanged when chromed.

1,766,951. INTERMEDIATE DERIVED FROM AMINOSULPHONES. KENNETH HERBERT SAUNDERS, Manchester, England, assignor to British Dyestuffs Corporation Limited, Manchester, England. Filed Aug. 31, 1928, Serial No. 303,371, and in Great Britain Oct. 21, 1924. 12 Claims. (Cl. 260—111.)

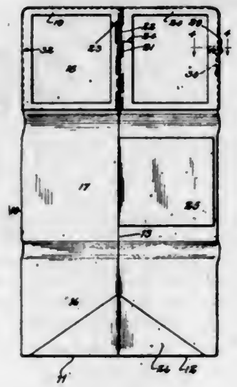
1. The step in the production of new intermediates for dyes which consists in condensing a 5-sulphino salicylic acid with an aromatic nitro compound containing a labile halogen atom.

1,766,952. INTERMEDIATE DERIVED FOM AMINOSULPHONES. KENNETH HERBERT SAUNDERS, Manchester, England, assignor to British Dyestuffs Corporation Limited, Manchester, England. Original application filed Aug. 31, 1928, Serial No. 303,371, and in Great Britain Oct. 21, 1924. Divided and this application filed Oct. 10, 1929. Serial No. 398,805. 10 Claims. (Cl. 260—111.)

5. In the manufacture of azo dyestuff intermediates, the process which comprises condensing a 5-sulphino salicylic acid with an aromatic mono-nitro compound having a labile halogen atom and reducing the nitro sulphone formed to a mono-amino sulphone.

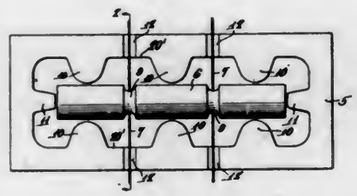
1,766,953. FRAME WALLET. LEO SCHAEFER, New York, N. Y. Filed June 24, 1929. Serial No. 373,136. 3 Claims. (Cl. 150—38.)

1. A folding wallet composed of two elongated members adapted to be folded upon one another along their median line, transverse creases forming three endwise folding members and allowing a folding of the wallet into a small compass, frame members for the upper pair of said members, a locking means, hinges connecting said pair of members, a means combined with said hinges for throwing



the elongated members into unfolding position, a means for preventing loss and for limiting the unfolding action of said elongated members, and a plurality of of pockets on one of said members.

1,766,954. THREAD OILER OR MOISTENER. FREDERICK C. SCHOLLER, Philadelphia, Pa. Filed Feb. 20, 1926. Serial No. 89,529. 10 Claims. (Cl. 91—46.)



1. In a liquid treating device for textile purposes, a container adapted to hold the treating liquid and a freely floating grooved roller guide adapted to float in the liquid and to submerge a thread beneath the liquid in combination with guide means for limiting the bodily movement of the float.

8. In a liquid treating device for textile threads, a vessel adapted to hold a treating liquid, means for guiding a thread beneath the surface of the liquid and a wiper for the thread comprising guides forming a tortuous passage for the thread and ribs over which the fiber is passed, both adapted to wipe the thread and drain liquid from it.

1,766,955. BRAKE DRUM. CHESTER SCULL, Sr., Philadelphia, Pa., assignor to Budd Wheel Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Sept. 20, 1926, Serial No. 136,494. Renewed Nov. 18, 1929. 3 Claims. (Cl. 188—218.)



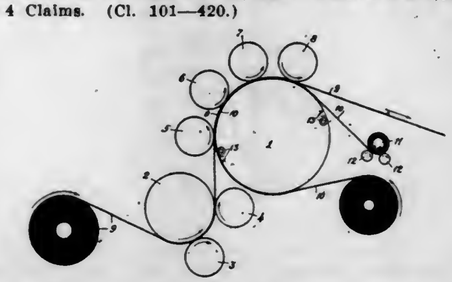
1. A laminated brake drum unit comprising an outer drum of high carbon steel, an intermediate drum of low carbon steel and an inner drum of high carbon steel, said drums being disposed in nested relation and in intimated contact with each other at substantially all points of their engaging surfaces.

1,766,956. METHOD OF MAKING BRAKE DRUMS. CHESTER SCULL, Sr., Philadelphia, Pa., assignor to Budd Wheel Company, Philadelphia, Pa., a Corporation of Pennsylvania. Original application filed Sept. 20, 1926, Serial No. 136,494. Divided and this application filed Aug. 4, 1927. Serial No. 210,532. 6 Claims. (Cl. 29—159.)



1. The method of making brake drums which consists in providing a blank of high carbon steel and a blank of low carbon steel, arranging said blanks in superposed position, and then deforming both of said blanks simultaneously to form a unit brake drum.

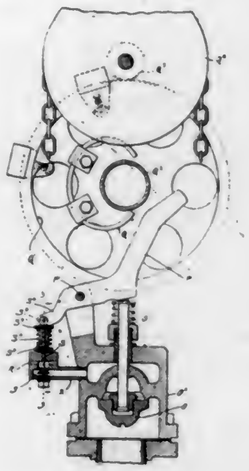
1,766,957. MACHINE-PRINTING ART. OZRO P. SMITH, Passaic, N. J. Filed Nov. 6, 1928. Serial No. 317,601. 4 Claims. (Cl. 101—420.)



1. In a printing press, means for minimizing offset at the freshly printed side of a paper web travelling between

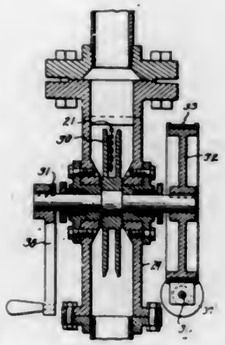
a plate cylinder and an impression cylinder with the freshly printed side towards the impression cylinder, which comprises a thin tough tympan having a fibrous structure in its interior and a relatively hard calendered exterior surface of acid-affected cellulosic products of fibers of the same type as the interior.

1,766,958. BOILER CLEANER. NORMAN L. SNOW, Detroit, Mich., assignor to Diamond Power Specialty Corporation, Detroit, Mich., a Corporation of Michigan. Filed Feb. 26, 1923. Serial No. 621,433. 8 Claims. (Cl. 122—392.)

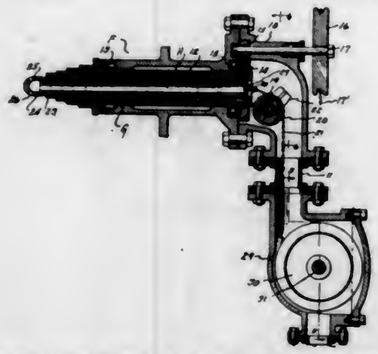


1. In a boiler cleaner, the combination with a blower unit, of a valve controlling the steam supply to said unit, the casing of said valve having an air inlet for admitting air to said unit upon closing of the steam valve for relief of the vacuum effect arising from condensation, and a common automatic means controlling said valve and inlet.

1,766,959. BOILER CLEANER. NORMAN L. SNOW, Detroit, Mich., assignor to Diamond Power Specialty Corporation, Detroit, Mich., a Corporation of Michigan. Filed May 25, 1925. Serial No. 32,799. 3 Claims. (Cl. 122—392.)

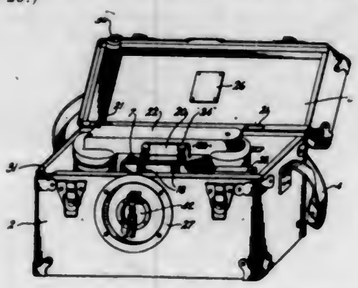


1. In a boiler cleaner, an extensible and retractable blower element mounted for rotation, means for supplying a cleaning fluid to said blower element, the cleaning fluid acting on said blower element and tending to extend the same, a single blower nozzle head carried by said blower element and movable relative to the boiler surfaces to be cleaned upon the extension of the blower element, means for checking the extension of said blower element by the cleaning fluid at a plurality of desired points to locate the



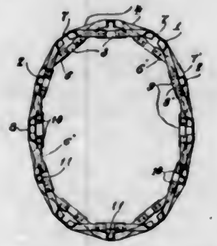
said blower nozzle head in a plurality of blowing positions, means for rotating the blower element with the blower nozzle head in any one of its blowing positions, and a flexible element for returning the blower element to its retracted position.

1,766,960. PORTABLE TELEPHONE SET. WILLARD J. STANTON and HENRY A. GOSLING, Chicago, Ill., assignors, by mesne assignments, to American Electric Company, Inc., Chicago, Ill., a Corporation of Delaware. Filed Sept. 7, 1928. Serial No. 304,476. 9 Claims. (Cl. 179—29.)



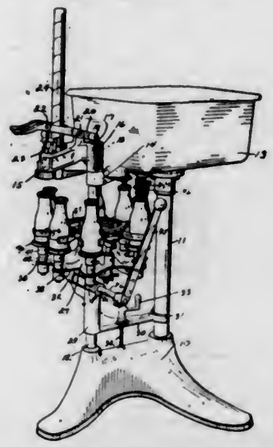
1. In a portable telephone set, the combination of an outer carrying case together with an inner apparatus case inside said outer case, telephonic apparatus mounted in said inner case, a cover on said inner case, and a compartment in said cover for enclosing certain of said telephonic apparatus extending beyond the top of said inner case.

1,766,961. FUSELAGE FRAME. ARTHUR B. STEUART, Baltimore, Md. Filed Sept. 25, 1929. Serial No. 394,955. 8 Claims. (Cl. 244—30.)



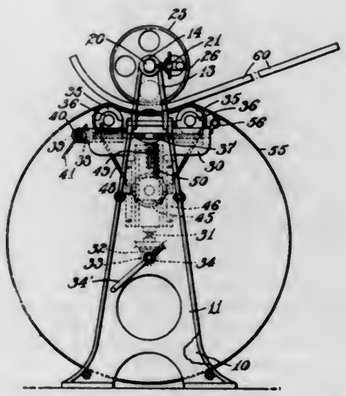
1. A fuselage frame comprising longitudinal members spaced about the transverse circumference, transverse circumferential members intersecting and connecting alternating longitudinal members forming points of intersection and diagonal members extending substantially the entire length of the fuselage and connecting said points of intersection.

1,766,962. BOTTLE FILLER AND CAPPER UNIT. GUSTAV E. STRANDT, Milwaukee, Wis., assignor, by mesne assignments, to Cherry-Burrell Corporation, Cedar Rapids, Iowa, a Corporation of Delaware. Filed June 25, 1926. Serial No. 118,446. 14 Claims. (Cl. 226—76.)



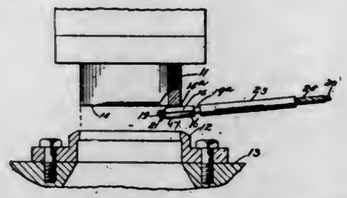
2. In a bottle filling and capping unit, the combination with a reservoir provided with filler nozzles, a capper, a supporting post, a capper mechanism swiveled to said post and supported for capping operations at a distance from the axis thereof equal to the distance of the filler nozzles therefrom, said nozzles being concentric to said axis, a bottle supporting carrier adapted to convey bottles along a curved path concentric to the axis and into position for successive registry with the filler nozzles and capper, and means for raising and lowering said carrier to bring bottles into engagement with the filler nozzles and support them there while capping operations are being performed on other carrier supporting bottles.

1,766,963. BENDING MACHINE. CECIL H. STRUPE, Indianapolis, Ind. Filed July 13, 1928. Serial No. 292,439. 5 Claims. (Cl. 144—255.)



4. A bending machine comprising a bending drum, a pair of backing rollers parallel with said drum, a carriage supporting said rollers, means by which said carriage may be adjusted toward and from the axis of the drum, means by which the backing rollers may be adjusted toward and from each other, an idler roller mounted on said carriage, a spring backing for said idler roller, and an endless belt encompassing said backing rollers and idler roller.

1,766,964. METHOD OF SHARPENING PUNCHES OR THE LIKE. SWAN N. TEVANDER, Maywood, Ill. Filed Sept. 6, 1929. Serial No. 390,788. 4 Claims. (Cl. 76—89.2.)



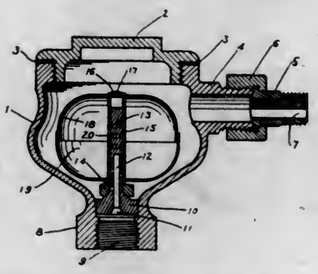
1. The method of sharpening the cutting edge of a punch or the like consisting in applying a rapidly rotating element of non-circular cross-section to successive portions of the cutting edge of the punch while the punch remains in normal position in its machine for causing uniform swedging or upsetting of the cutting edge to a size in excess of normal, then passing the punch through its cooperating die to trim off the excess material, thereby restoring the cutting edge of the punch to proper size.

1,766,965. THERMOSTAT. ADOLPH A. THOMAS, New York, N. Y. Filed Apr. 8, 1927. Serial No. 181,988. 19 Claims. (Cl. 297—15.)



1. In a thermostat, the combination of a bowed spring member adapted to reverse its curvature abruptly by external force, a thermostatic element connected to and supported by said spring member, and means whereby the movements of said element under predetermined increase and decrease of temperature exert pressure on said spring member until the latter snaps into a position of reverse curvature, said thermostatic element being bodily carried along by said spring member when the latter reverses its curvature.

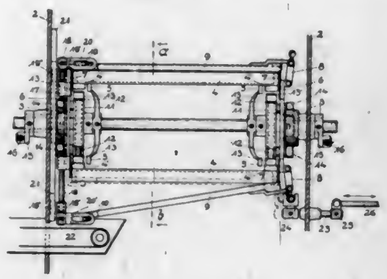
1,766,966. STEAM TRAP. CHARLES E. WALSH, Cleveland Heights, Ohio; Winifred S. Walsh administratrix of said Charles E. Walsh, deceased. Filed May 2, 1927. Serial No. 188,353. 3 Claims. (Cl. 137—103.)



1. In a steam trap the combination of a casing with a removable cap at the top thereof, said casing having an

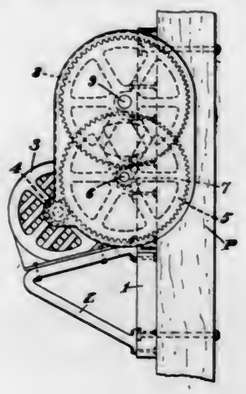
inlet connection detachably arranged with the supply, and provided with a discharge opening in the bottom; a tubular valve-seat having one or more lateral apertures, one end closed, and an enlarged bevelled section adjacent said discharge opening and fitted therein whereby bottom discharge may occur only through the apertures of said valve-seat; lateral peripheral grooves in said valve seat; and a valve comprising a tubular stem having a float attached thereto, one end of said stem being closed but for a small aperture and the other end enlarged and internally bevelled, operative on said seat.

1,766,967. APPARATUS FOR UNPOWDERING SUGAR BODIES. ALFRED WINKLER and MAX DÜNNEBIER, Neuwied, Germany. Filed Nov. 21, 1929, Serial No. 408,918, and in Germany Apr. 9, 1929. 19 Claims. (Cl. 107—44.)



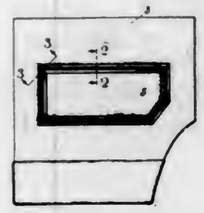
10. Apparatus for unpowdering sugar bodies contained in a box comprising means for turning and holding the box in an inverted position, a perforated closure flap for the box, means for swinging the flap downwardly to serve as an oblique slide, means for jolting the said flap to deliver the sugar bodies received from the box and to separate the powder therefrom, and a perforated conveyor for receiving the said bodies from said jolting flap and for effecting the further separation of the powder.

1,766,968. PORTABLE HOIST. ROBERT E. WYMAN, Billerica, Mass. Filed May 21, 1928. Serial No. 279,410. 3 Claims. (Cl. 254—145.)



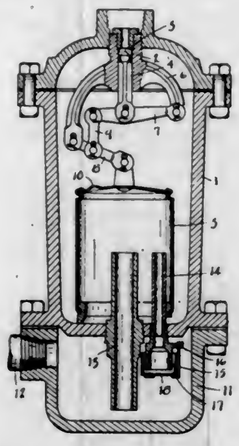
1. In a portable hoist of the winch drum type adapted to be supported in a substantially vertical position and adapted to be operated by a single person, a base, a shaft rotatably supported near the upper end of said base, a winch drum mounted on one end of the shaft and so arranged as to extend to one side of the base and a relatively large gear mounted on the other end of said shaft, an intermediate shaft rotatably mounted below said first named shaft, a gear and pinion mounted on said intermediate shaft, the pinion being in engagement with the first relatively large gear above mentioned, a motor, a V shaped bracket support for said motor, said bracket being secured to the base, said motor being mounted on one of the V portions of the bracket so that the base of said motor is substantially normal to the base of the machine whereby the motor is nested to one side of the base and behind said second named larger gear, and a pinion on said motor shaft engaging said second gear.

1,766,969. UPHOLSTERY UNIT. ALBERT H. ACKERMAN, South Bend, Ind., assignor to The Studebaker Corporation, South Bend, Ind., a Corporation of New Jersey. Filed May 17, 1929. Serial No. 363,763. 7 Claims. (Cl. 45—138.)



1. An upholstery unit comprising, an upholstery panel frame having an opening therein, a closure panel having a slot formed therein secured to said panel frame for closing said opening, a finishing tape secured to the outer face of said closure panel having a free end extending through said slot, and an adhesive tape for securing said free end of said tape to the back of said closure panel.

1,766,970. TRAP. ADAM E. ARMSTRONG, Three Rivers, Mich. Filed Oct. 7, 1927. Serial No. 224,751. 8 Claims. (Cl. 137—103.)



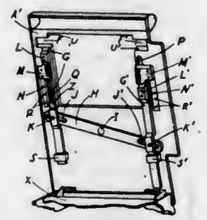
1. In a trap, the combination of a float chamber provided with a discharge valve, an open inverted float provided with a vent at the top and operatively connected to said discharge valve, a separating chamber below said float chamber having an inlet connection, a delivery pipe for said separating chamber depending into said separating chamber and opening adjacent the bottom thereof and projecting upwardly into said float chamber within said float, a vent-pipe connecting said separating chamber with said float chamber and projecting upwardly into said float, said vent pipe having an enlarged mouth depending into said separating chamber, a valve cage suspended from said vent pipe, and a cup-like valve embracing the lower end of said vent pipe and floatingly supported within said cage whereby the valve is closed by the water accumulated in said separating chamber.

1,766,971. FLEXIBLE BAND. KARL C. AUGENSTEIN, Cranston, R. I., assignor to Automatic Gold Chain Company, a Firm composed of Edwin F. M. Speidel and Albert E. R. Speidel. Providence, R. I. Filed May 31, 1928. Serial No. 282,004. 2 Claims. (Cl. 63—11.)



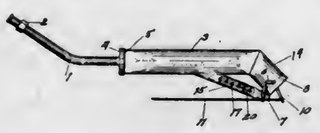
1. A flexible, ornamental bracelet or the like comprising a core of flexible, inelastic material of a width substantially many times its thickness and a covering for said core comprising a thin, flat, flexible metal ribbon helically wound in contact with said core and with its edges substantially contiguous.

1,766,972. AUTOGRAPHIC REGISTER. HENRY BARTHOLDI, Geneva, Switzerland, assignor to The Egry Register Company, Dayton, Ohio, a Corporation of Ohio. Filed May 2, 1929, Serial No. 359,755, and in Switzerland June 18, 1928. 8 Claims. (Cl. 282—21.)



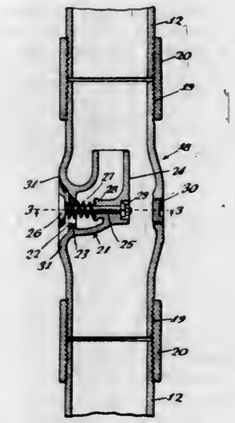
1. A writing machine comprising a casing, an apertured cover therefor, means for supporting recording paper beneath the aperture in the cover, clamping means within the frame for securing supplementary sheets of paper introduced through the aperture in the cover, and means for operating said clamping means from the exterior of the casing.

1,766,973. MUFFLER. CHARLES W. BECK, Toledo, Ohio, assignor to John E. Goerlich, Toledo, Ohio. Filed Apr. 4, 1927. Serial No. 180,647. 4 Claims. (Cl. 137—160.)



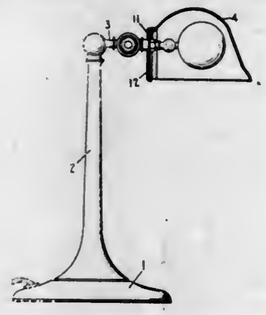
1. In a muffler, a container connected to the exhaust pipe and having a diameter much larger than the diameter of the exhaust pipe, an outlet pipe extending along and diagonally from approximately the central part of the container and away from the exhaust pipe, the diameter of the outlet pipe being considerably smaller than the diameter of the container, the outlet of the outlet pipe being oblong in form to spread fanwise the escaping gases, a plurality of baffle plates located in the outlet pipe for reducing the rate of movement of the gases through the outlet pipe, the baffle plates conforming to the shape of the outlet pipe and having edge portions located in spaced relation with respect to the walls of the baffle plates to form openings alternately at opposite edges of juxtaposed baffle plates, and a rod extending centrally through the outlet pipe for securing the baffle plates in position.

1,766,974. APPARATUS FOR FLOWING DEEP WELLS BY STAGES. ROBERT H. BESS, Long Beach, Calif., assignor to J. E. B. Daniel. Filed Oct. 24, 1928. Serial No. 314,818. 12 Claims. (Cl. 103—232.)



1. An apparatus for flowing deep wells, comprising in combination a flow pipe adapted to extend to a considerable depth below the oil level in a well casing, there being an outer column of oil between the pipe and the casing, and an inner column in the pipe, an intake valve positioned between the bottom of the flow pipe and the level of the outer column, means to retain said valve normally open, means to exert pressure on the outer column whereby the oil flows in the valve, said valve being constructed to close on the relative change of interior and exterior pressures.

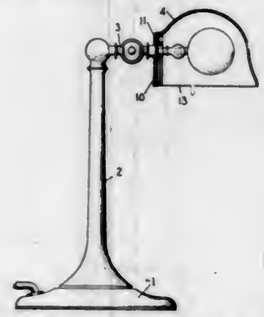
1,766,975. SHADE SUPPORT FOR PORTABLE ELECTRIC LAMPS. MICHAEL B. BOWEN, Decatur, Ill., assignor to Faries Manufacturing Company, Decatur, Ill., a Corporation of Illinois. Filed Aug. 20, 1929. Serial No. 387,189. 5 Claims. (Cl. 240—73.)



5. The combination, with a portable lamp, of a plate mounted thereon, having V-shaped guides formed in its vertical edges, a shade, having a slot therein, a pair of plates adapted to clamp the edges of said slot, one of said plates being provided with a curved shoulder fitted to

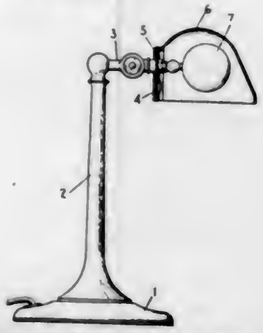
the edge of said slot and having an arch-like opening in its central portion, the other of said plates having a peripheral flange which covers the edges of said slot and abuts the wall of said shape, V-shaped tongues formed on one plate, which extend into the arch-like opening formed in the other plate, said tongues being fitted to the grooves in the edge of the plate carried by the arm, shoulders formed on the bottom of said second plate, said shoulders having an inclined portion and a horizontal portion, and means to clamp said pair of plates together, whereby said shade is held in a horizontal position.

1,766,976. SHADE HOLDER FOR PORTABLE ELECTRIC LAMPS. MICHAEL B. BOWEN, Decatur, Ill., assignor to Faries Manufacturing Company, Decatur, Ill., a Corporation of Illinois. Filed Aug. 20, 1929. Serial No. 387,190. 4 Claims. (Cl. 240—73.)



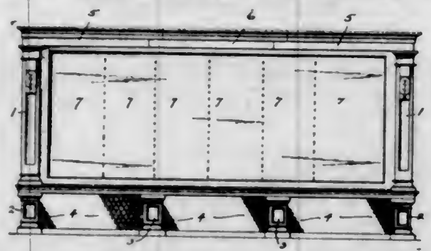
1. In a portable desk lamp, having a shade provided with a slot, a shade holder mounted in said slot, said holder comprising front and rear plates having arch-like openings formed therein, an intermediate plate having an arch-like opening and having its upper edge flanged in arcuate form, registering apertures in said plates, upper and lower screws to hold said plates together, an arch-shaped guide-plate mounted on said lamp, having a V-shaped groove on its top and side edges, parallel V-shaped tongues formed on the vertical edges of the arch-like openings in the front and rear plates, adapted to fit the V-shaped groove on said guide-plate, inwardly extending shoulders on the lower edge of the front plate at either side of the arch-like opening, screw-threaded eccentric cams mounted on said lower screws, serrations on the edges of said cams, and detents on said rear plate which engage the serrated edges of said cams.

1,766,977. SHADE HOLDER FOR PORTABLE ELECTRIC LAMPS. MICHAEL B. BOWEN, Decatur, Ill., assignor to Faries Manufacturing Company, Decatur, Ill., a Corporation of Illinois. Filed Aug. 20, 1929. Serial No. 387,191. 4 Claims. (Cl. 240—73.)



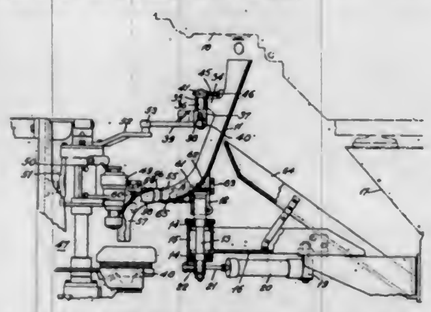
1. A portable desk lamp having a shade provided with a slot, a shade holder mounted in said slot, said holder comprising front and rear plates having arch-like openings formed therein, registering apertures in said plates, the upper pair of apertures in the front plate and the lower pair of apertures in the rear plate being slotted, the upper apertures in the rear plates being threaded, shoulders formed on said rear plate intermediate the upper and lower apertures at either side of said arch-like opening, shoulders on the bottom edge of the front plate at either side of said arch-like opening, a pair of bow springs, one end of which rests against the shoulder on the rear plate, the other end of which rests against the shoulder on the front plate, and screws which extend through said lower apertures in said plates and engage said bow springs.

1,766,978. ADVERTISING-SIGNBOARD STRUCTURE. WILLIAM G. BROWNE, Yonkers, N. Y., and ROGER W. OLMSTED, San Francisco, Calif. Filed Sept. 21, 1927. Serial No. 221,018. 3 Claims. (Cl. 40—125.)



1. A multipart column element for composite advertising signboard structures, said column element comprising uprights and transverse parts joined to form a skeleton, and panels and mouldings secured thereto, said parts being formed in duplicate and arranged to constitute a face portion and a return side portion.

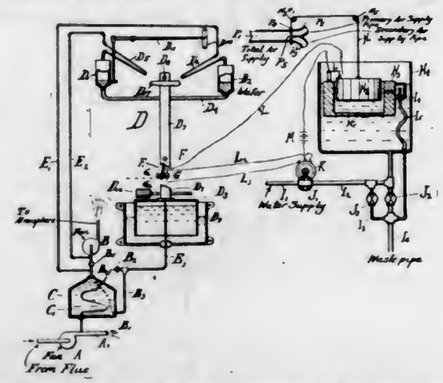
1,766,979. MOVABLE GLASS-DELIVERY CHUTE. ROBERT W. CANFIELD, West Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed Jan. 30, 1929. Serial No. 336,073. 10 Claims. (Cl. 49—14.)



1. In glassware making apparatus, means for feeding charges of molten glass, means for forming the charges of glass into glassware, a movable chute for delivering the charges of glass from the feeding means to the forming means, the said forming means having a head adapted to assist in the forming of the glassware, the said head being movable, and means operated by a movement of the said head for moving the chute.

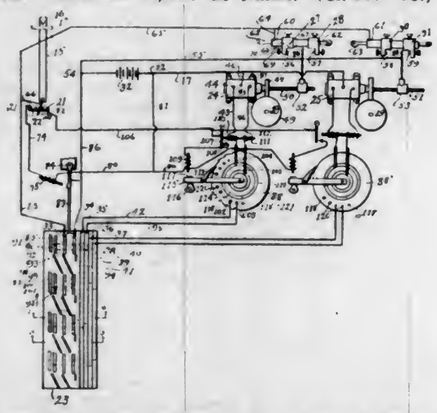
1,766,980. COMBUSTION CONTROL APPARATUS. WILLIAM JAMES CROWELL, Jr., Wyncote, Pa. Filed Oct. 9, 1920, Serial No. 415,945. Renewed May 12, 1927. 17 Claims. (Cl. 236—15.)

1. In apparatus for automatically controlling the distribution of air to a furnace by successive automatic adjustments of a continuously operative air distributor, automatic means for slightly reciprocating the air distribution,



and other automatic means responsive to furnace conditions for adjusting the distributor at intervals synchronous with the reciprocation.

1,766,981. AUTOMATIC REACTION CONTROL. WILLIAM J. CROWELL, Jr., Wyncote, Pa. Filed Dec. 21, 1925. Serial No. 76,845. 20 Claims. (Cl. 236—15.)



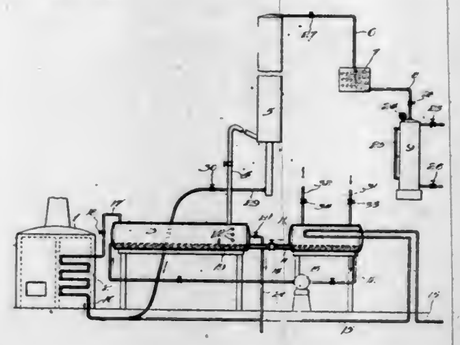
1. In the art of combustion control, in controlling the size of one or more component streams to advantageously affect an inter-reaction between the streams after they flow together, the method which consists in making an orienting experimental change in the size of one of the streams, and in using a resultant change in the reaction to automatically effect a permanent adjustment in the size of the stream to improve a condition of the reaction.

1,766,982. PLASTER-RECEIVING BOARD. HARRY A. CUMFER, Chicago, Ill., assignor of one-half to Willard J. Mason, Greenwich, Conn. Filed Jan. 30, 1928. Serial No. 250,374. 3 Claims. (Cl. 72—116.)



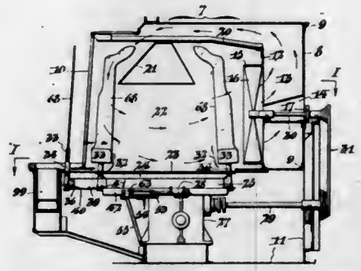
2. A built up board comprising a flat base sheet of felted fibrous material having a coating of adhesive waterproofing material on one surface thereof, a second sheet adhesively united with a coated surface of said base sheet provided with a series of alternate channels and ridges to form spaced closed pockets, surfaces of said ridges being provided with spaced perforations, cut outs formed in producing said perforations being adhesively united to said base sheet within said pockets substantially directly opposite said perforations.

1,766,983. PROCESS FOR THE DESTRUCTIVE DISTILLATION OF PETROLEUM OIL. AUBREY D. DAVID, Chicago, Ill., assignor to The Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Feb. 14, 1923. Serial No. 619,037. 5 Claims. (Cl. 196—69.)



1. A process for cracking petroleum oil consisting in heating the oil to a conversion temperature, permitting the oil to vaporize while maintaining it in a substantial body above a flotation medium in an enlarged expansion zone, drawing off the carbon separated out during conversion by withdrawing the flotation medium from the expansion zone, removing the carbon from the flotation medium by oxidation and recycling the medium back to the expansion stage.

1,766,984. AUTOMATIC CARRIER-TURNING MECHANISM FOR DRYING MACHINES. JOHN WESLEY DENNIS, Philadelphia, Pa., assignor to The Philadelphia Drying Machinery Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Oct. 31, 1927. Serial No. 229,926. 12 Claims. (Cl. 198—19.)

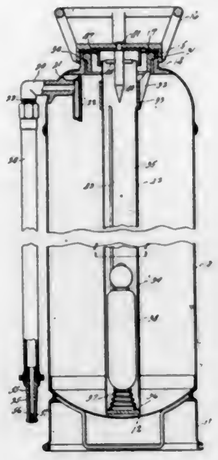


1. In a drying machine including a rotary platen sustaining radially-thrustable article-carriers, the combination of an intermittently reciprocative member adapted by direct action to correctly align the individual carriers for predetermined positional entry into, progress about, and ejectment from the machine.

1,766,985. FIRE EXTINGUISHER. CHARLES R. D'OLIVE, Dayton, Ohio, assignor to the Fyr-Fyter Company, Dayton, Ohio, a Corporation of Ohio. Filed Aug. 6, 1927. Serial No. 211,112. 10 Claims. (Cl. 169—32.)

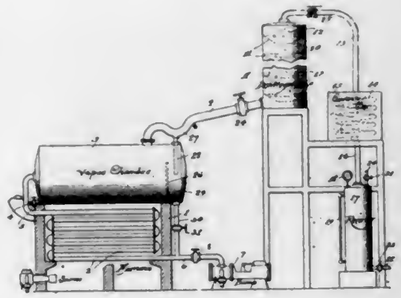
1. A fire extinguisher of the character described, comprising an outer container adapted to receive a fire extinguishing liquid, a frangible inner container adapted to receive a second liquid for reaction with said first mentioned liquid upon inversion of the extinguisher to gener-

ate an expelling gas, a tube for said frangible inner container supported within said extinguisher, said inner container being adapted to slide by gravity along said tube upon inversion of the extinguisher and cooperating means



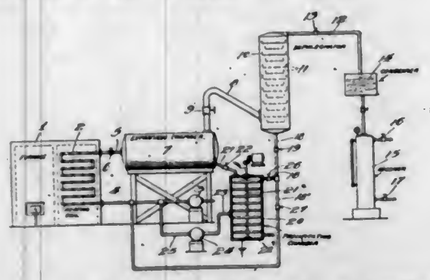
between the tube and frangible inner container for reducing the resistance to the sliding movement of said frangible inner container along said tube upon inversion of the extinguisher.

1,766,986. APPARATUS FOR CRACKING OIL. GUSTAV EGLOFF, Chicago, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed May 23, 1921, Serial No. 471,559. Renewed Dec. 17, 1929. 2 Claims. (Cl. 196—99.)



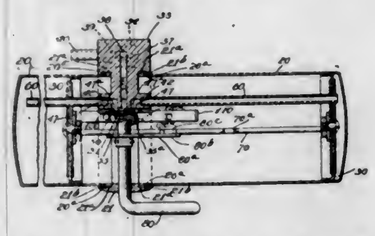
1. In an apparatus for cracking oil, the combination with a heating coil, of a furnace in which said coil is seated, an enlarged vapor chamber communicating with one end of the coil, a vertical partition disposed within said chamber near one side thereof and extending a considerable distance upwardly therein to thereby divide the same and form a relatively small compartment at one side of the chamber, a vapor discharging line leading from said chamber, a dephlegmator communicating with said line, means for discharging reflux condensate directly into said relatively small compartment at one side of the vapor chamber, a discharge line from the bottom of the compartment for admitting the reflux to the heating coil, and means for withdrawing residual oil from the vapor chamber to maintain its level substantially below the upper portion of the partition.

1,766,987. PROCESS OF CRACKING PETROLEUM OIL. GUSTAV EGLOFF, Chicago, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Oct. 18, 1923, Serial No. 669,223. Renewed July 2, 1928. 2 Claims. (Cl. 196—81.)



2. A process for cracking hydrocarbon oil comprising subjecting the oil to cracking conditions of temperature and pressure in a still, taking off vapors, subjecting the same to reflux condensation, drawing off residue from the still and commingling the same with reflux condensate resulting from the subjection of the vapors to the reflux condensing action and subjecting the commingled residue to the action of an electric current to separate therefrom solid and pitch-like constituents and reintroducing the residual oil and reflux condensate free from such constituents into the still.

1,766,988. WINDSHIELD WIPER. WILLARD H. FARR, Chicago, Ill., assignor to Stewart-Warner Corporation, Chicago, Ill., a Corporation of Virginia. Filed Jan. 16, 1928. Serial No. 247,029. 4 Claims. (Cl. 121—164.)

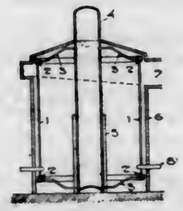


1. In a device for the purpose indicated in combination with two cylinders disposed in axial alignment having their remote ends closed and open to atmosphere at their proximate ends, a junction member by which the cylinders are joined at their proximate ends; pistons reciprocably mounted in said cylinders respectively, and means within the cylinders connecting the two pistons for simultaneous reciprocation; an end-to-end-hollow rod extending in each cylinder from a point in the cylinder beyond the outward stroke of the piston therein through the pistons to the junction member, the junction member having a duct open at one end exteriorly of said member and at that end adapted to be connected to a source of suction, and at the inner end arranged for communication with the inner ends of said hollow rods; valve means for shifting said communication of said ducts alternately from one to the other of said hollow rods, and means actuated by the connection between the pistons for operating said valve means to shift said communication at the limit of each stroke of the pistons.

1,766,989. STEAM GENERATOR. NILS FORSSBLAD, Villa Ekbacka, Vasteras, Sweden. Filed Mar. 30, 1927. Serial No. 179,677, and in Great Britain Apr. 20, 1926. 1 Claim. (Cl. 122—235.)

An internally fired radiant heat boiler consisting, in combination, of an open combustion chamber formed of

a continuous water wall made up of independent sections each having an upper and a lower header connected by rows of closely spaced vertical tubes, a central column having a steam and water space therein extending the



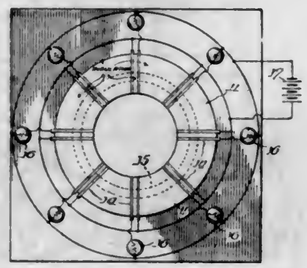
height of the combustion chamber and insulated throughout a substantial portion of its lower part against the heat of the combustion chamber, and substantially horizontal tubes connecting the said headers of each section to said central column adjacent its top and bottom.

1,766,990. LIP STICK. SAMUEL FREEMAN, New York, N. Y. Filed Apr. 24, 1929. Serial No. 357,639. 3 Claims. (Cl. 132—79.)



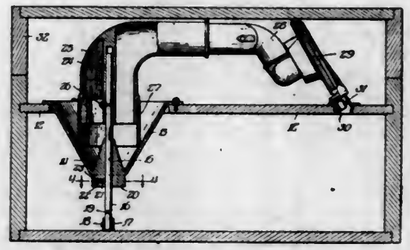
1. In combination, a lipstick container in which a lipstick snugly fits, said container having a metal cover whose outer end surface is polished to act as a mirror.

1,766,991. APPARATUS FOR TESTING SURFACES. EDWARD B. GARDNER, Beloit, Wis. Filed June 11, 1928. Serial No. 284,290. 6 Claims. (Cl. 175—183.)



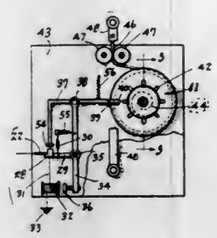
1. An apparatus for testing the shape of articles comprising a base of insulating material, a plurality of electrical contact elements imbedded therein and arranged in spaced relation to conform to the desired shape of the article to be tested, a plurality of electrically operable indicators, and an electric circuit including a source of current, said elements and indicators, the circuit being adapted to be closed by the article to be tested.

1,766,992. PHONOGRAPH CONSTRUCTION. OTTO R. GRASS, Chicago, Ill., assignor to The Oro-Tone Company, Chicago, Ill., a Corporation of Illinois. Filed May 31, 1924. Serial No. 716,898. 6 Claims. (Cl. 274—23.)



3. In sound reproducing apparatus, a tone arm and sound box, a shaft extending from the tone arm, a fixed member having an opening therein slidably receiving the shaft, said shaft having a groove formed therein, and a spring pressed ball carried by the fixed member and adapted to engage the groove in the shaft to maintain the tone arm in operative position.

1,766,993. CIRCUIT-CONTROLLING DEVICE. MASAO HASEGAWA, Santa Rosa, Calif. Filed June 30, 1928. Serial No. 289,372. 2 Claims. (Cl. 200—59.)

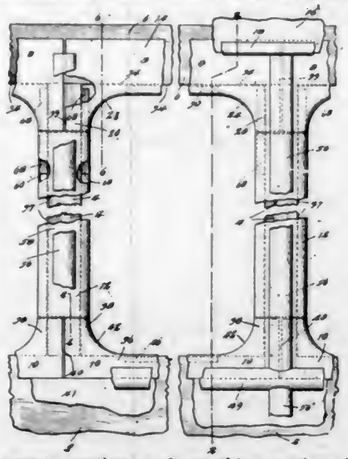


1. In a circuit controlling device, a circuit breaker, a drum for actuating said circuit breaker when said drum is moved in one direction, means for moving said drum in the opposite direction and including an arm, a cable secured to said arm and being passed between two guide rollers and then secured to the drum, said guide rollers being disposed adjacent to said arm when the latter is in normal position, means connecting said arm with the steering mechanism of a vehicle for swinging said arm when the steering mechanism is actuated, said arm having a one way acting pawl for causing said drum to rotate in one direction regardless in which direction the arm is swung, spring means for returning the drum to normal position, and means actuated by the drum only when the latter is moved by the spring for opening the circuit breaker.

1,766,994. BODY FOR MOTOR VEHICLES. ARTHUR G. HAWKES, Detroit, Mich., assignor to American Car and Foundry Motors Company, New York, N. Y., a Corporation of New York. Filed Nov. 23, 1927. Serial No. 235,279. 11 Claims. (Cl. 296—28.)

1. In a motor vehicle, a belt rail, a side plate, posts between the belt rail and the side plate, a window framing comprising upper and lower units secured to the side plate and belt rail respectively, and having end extensions lap-

ping the side posts for a portion only of the width thereof, said units having their inner edges flanged to provide



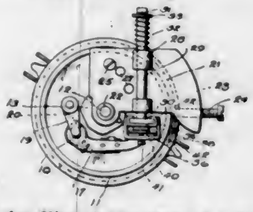
curved corner portions and attaching sections intermediate the corner portions, and panels secured to the side posts and extending between the extensions.

1,766,995. OSCILLATION DAMPING DEVICE FREE FROM RADIATION FOR ELECTRIC LINES. JOHANNES WILHELM HOFMANN, Kotzschenbroda, near Dresden, Germany. Filed Aug. 17, 1927, Serial No. 213,564, and in Germany Feb. 11, 1927. 3 Claims. (Cl. 173—13.)



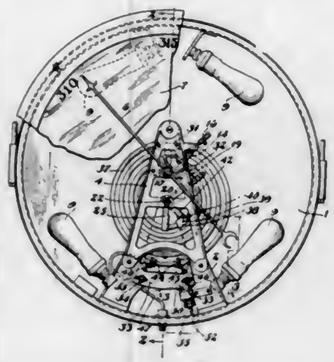
1. An oscillation damper for electric lines comprising, an annular body and springs situated therein for resiliently connecting the body with the line, said body being so rounded as to be free from emissions.

1,766,996. FILING DEVICE. EDWARD A. HORNER, Chambersburg, Pa. Filed Oct. 13, 1926. Serial No. 141,358. 7 Claims. (Cl. 29—76.)



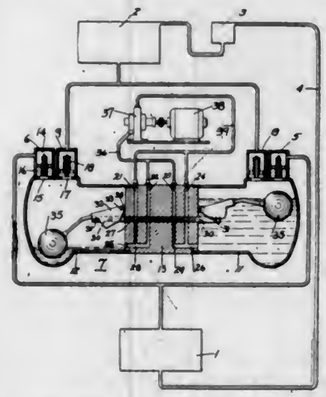
1. A device for filing the contacts of a distributor while in place in a distributor casing, comprising a frame having an opening to receive the shaft of the distributor, means for clamping said frame in place upon the distributor casing, a file member, and a carrier to which said file member is rigidly secured, said carrier being supported on said frame for rocking movement relative to said frame and the casing.

1,766,997. PRESSURE GAUGE. EMIL A. ILEMAN, New York, N. Y., assignor, by mesne assignments, to Consolidated Ashcroft Hancock Company, Inc., New York, N. Y., a Corporation of Delaware. Filed July 16, 1926. Serial No. 122,764. 12 Claims. (Cl. 73—109.)



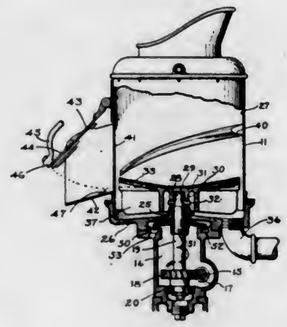
1. A pressure gauge having in combination a frame work, a hollow coil spring to the interior of which fluid pressure is applied, a member mounted to swing about an axis passing centrally through the coils of the spring, one end of the spring being fixed to the framework and the other end of the spring being attached to said member, an indicating movement, a lever pivoted about said axis and connected to operate said indicating movement, and means connected with the movable end of the spring and adapted to operate said lever but only after the spring has been expanded to a certain extent by the application of a predetermined pressure thereto.

1,766,998. APPARATUS FOR COMPRESSING SUBSTANCES. GEORGE T. JACOCKS, Brooklyn, N. Y., assignor, by mesne assignments, to Heat Transfer Products, Inc., a Corporation of New York. Filed Sept. 7, 1928. Serial No. 304,413. 2 Claims. (Cl. 230—85.)



2. In a compressor adapted to compress a fluid by the alternate exchange of a compressor liquid from one chamber to another, the combination of a pump having an inlet and an outlet; a first chamber and a second chamber each having inlet and outlet means for a fluid to be compressed a valve body having an opening for a slide valve, communicating with each of the chambers; a first passageway leading from the first chamber through the opening in the valve body to the inlet of the pump; a second passageway leading from the first chamber through the opening in the valve body to the outlet of the pump; a third passageway leading from the second chamber through the opening in the valve body to the inlet of the pump; a fourth passageway leading from the second chamber through the opening in the valve body to the outlet of the pump; a slide valve in the opening in the valve body adapted to be moved by the pressure of the fluid to be compressed in the first chamber to a first position closing the second and third passageways and opening the first and fourth passageways, and by the pressure of the fluid to be compressed in the second chamber to a second position closing the first and fourth passageways and opening the second and third passageways; and means in the first chamber comprising a float, and adapted to coact with the slide valve to lock the same against movement until the compressor fluid in that chamber reaches a predetermined volume and to release the slide valve when said predetermined volume is reached; and means in the second chamber comprising a float, and adapted to coact with the slide valve to lock the same against movement until the compressor fluid in that chamber reaches a predetermined volume, and to release the slide valve when said predetermined volume is reached.

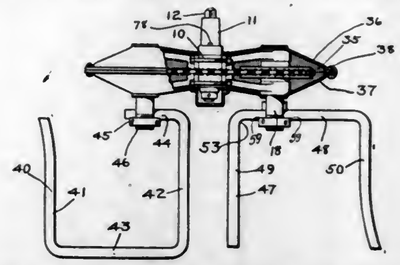
1,766,999. FOOD-HANDLING MACHINE. HERBERT L. JOHNSTON, Troy, Ohio, assignor to The Hobart Manufacturing Company, Troy, Ohio, a Corporation of Ohio. Filed Feb. 11, 1927. Serial No. 167,522. 9 Claims. (Cl. 146—49.)



1. In a machine of the class described, a vegetable container, a metal side wall for said container, a rotatable table on which the vegetables rest, power means for rotating said table, said table having a top surface for rotating the vegetables as the table is rotated, and a smooth non-abrasive upwardly sloping guide surface provided in said side wall for mixing the vegetables together as they are rotated on said table said guide surface increasing in cross section upwardly from a point adjacent the table.

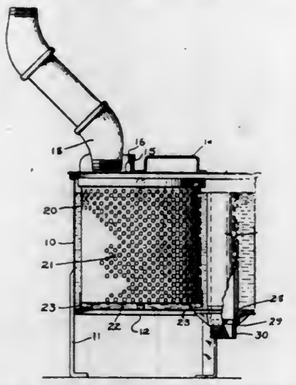
1,767,000. FOOD-HANDLING APPARATUS. HERBERT L. JOHNSTON and DAVID A. MEEKER, Troy, Ohio, assignors to The Hobart Manufacturing Company, Troy, Ohio, a Corporation of Ohio. Filed Aug. 2, 1927. Serial No. 210,146. 19 Claims. (Cl. 107—30.)

5. A candy-pulling attachment unit adapted to be detachably connected to and operated from a food-handling machine comprising a stationary support, a drive shaft rotatably mounted in said support having an exposed end, a pair of spaced driven shafts mounted parallel to said drive shaft, interconnected drive gears on said drive and driven shafts, a two-part enclosing housing enclosing said drive gears, pulling arms on said driven shafts, means on the exposed end of said drive shaft and on the adjacent



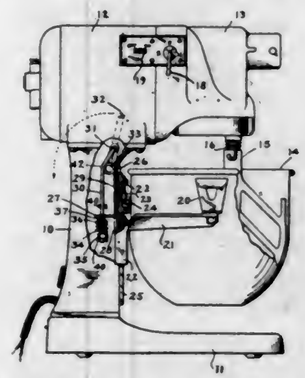
portion of said support for fastening said drive shaft and said support to corresponding rotatable and fixed members of a food-handling machine, and wear-compensating means for adjusting said driven shafts in relation to said drive shaft.

1,767,001. WASTE-FOOD-HANDLING APPARATUS. HERBERT L. JOHNSTON, Troy, Ohio, assignor to The Hobart Manufacturing Company, Troy, Ohio, a Corporation of Ohio. Filed Jan. 16, 1928. Serial No. 247,235. 5 Claims. (Cl. 210—149.)



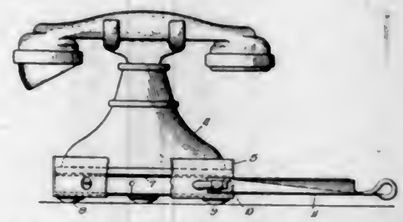
1. A strainer adapted for use with a vegetable peeling machine having a discharge pipe through which a water suspension of peelings and impurities is discharged, comprising a tank having an opening therein, a hollow manually portable container having side and bottom walls and removably supported within said tank to be readily removed as a unit through said opening in said tank for dumping, said container being adapted to receive the water suspension from said discharge pipe of said peeling machine within the interior of said container, and having perforations in the wall thereof of a comperatively large size to form the straining surface and permit the water and finer impurities to freely pass therethrough while serving to retain the larger impurities and peelings within said container, and means for maintaining water in the tank and container to a predetermined level for partially submerging the perforated wall of the container but below the top of the container whereby the water suspension does not normally overflow the top of the container, the container communicating freely through said comparatively large size perforations with the water space within the tank on the exterior of the container providing a gradual flow of water from the inside to the outside of said container without objectionable packing or clogging of the peelings within the container against the said perforations therein.

1,767,002. FOOD-HANDLING APPARATUS. HERBERT L. JOHNSTON and DAVID A. MEEKER, Troy, Ohio, assignors, by mesne assignments, to The Kitchen Aid Manufacturing Company, Troy, Ohio, a Corporation of Ohio. Original application filed May 14, 1928, Serial No. 277,616. Divided and this application filed Jan. 7, 1929. Serial No. 330,837. 18 Claims. (Cl. 259—102.)



1. In a machine of the class described, a frame, a bowl, means for raising and lowering the bowl along the frame, a device for holding the bowl in position between its upper and lower limits of movements, said device being releasable by operation of said means.

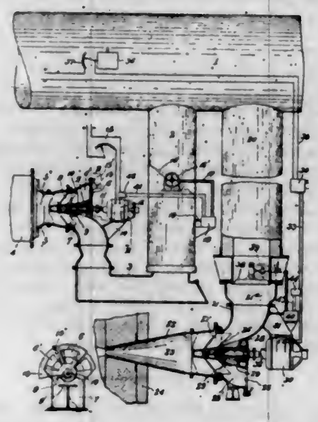
1,767,003. TELEPHONE-PAD ATTACHMENT. HARRY E. KAPLAN and BERNARD L. ROUER, Chicago, Ill. Filed Mar. 14, 1929. Serial No. 346,911. 1 Claim. (Cl. 45—82.)



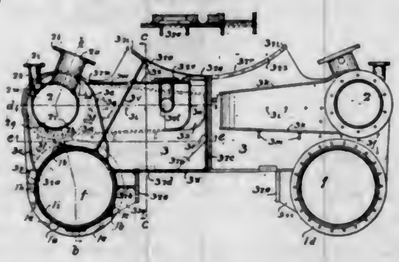
An attachment for a telephone desk set comprising a circular member including a bottom wall and an annular upstanding wall, said bottom wall having parallel slots therein, tubular guide members adapted to hold pencils therein extending across said circular member as chords of the circle thereof and connected at spaced points to said annular wall, said guide members being parallel to said slots, said circular member having an opening therein, a slide movable through said opening and disposed between and guided by said guide members, and button guides on said slide disposed in said slots to limit the movement of said slide through said opening.

1,767,004. METHOD OF UTILIZING FUEL GAS PRODUCED UNDER CONDITIONS OF VARYING PRESSURE. ARTHUR G. MCKEE, Cleveland Heights, Ohio. Filed Aug. 10, 1925. Serial No. 49,193. 3 Claims. (Cl. 158—117.5.)

1. The method of utilizing the fuel gas produced in a blast furnace or similar source wherein such gas is generated under varying pressure, which consists in withdrawing a part of said gas at a maintained constant predetermined pressure, applying thereto a predetermined forcing pressure and thus conducting the same into a mixing chamber, positively conducting into said mixing chamber, by the same predetermined forcing pressure, a predetermined proportion of air derived from a source at atmospheric pressure, the constantly maintained predetermined pressure of the withdrawn gas having no definite necessary pressure relation to the atmospheric pressure of the air, and burning the gas and air, simultaneously withdrawing the varying balance of the generated gas, maintaining said balance at a constant predetermined pressure, applying to this balance of the gas a predetermined forcing pressure and thus conducting the same into a second mixing chamber, positively conducting into said second mixing chamber, by the same predetermined forcing pressure applied to said balance of the gas, a predetermined proportion of air derived from a source at atmospheric pressure, the constantly maintained predetermined pressure of the withdrawn balance of gas having no definite necessary pressure relation to the atmospheric pressure of the air, changing said last-mentioned forcing pressure in proportion to the varying pressure of the gas at its source without changing the proportions of the gas and air, and burning said last-mentioned gas and air.



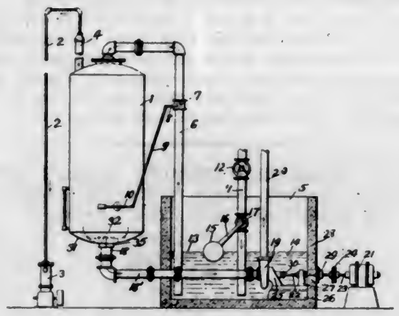
1,767,005. LOCOMOTIVE CYLINDER AND ASSOCIATED PARTS AND METHOD OF MANUFACTURING THE SAME. SHERMAN MILLER, Schenectady, N. Y. Filed Mar. 25, 1929. Serial No. 349,597. 19 Claims. (Cl. 105—44.)



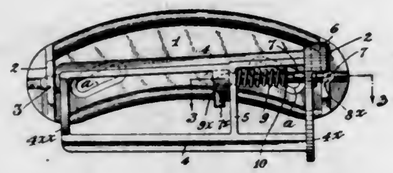
5. A locomotive cylinder saddle formed of a plurality of plates welded together.

1,767,006. APPARATUS FOR REMOVING GASES FROM LIQUIDS. LOUIS D. MILLS, Palo Alto, Calif., assignor to The Merrill Company, San Francisco, Calif., a Corporation of California. Filed June 13, 1928. Serial No. 284,924. 2 Claims. (Cl. 137—21.)

1. In an apparatus of the character described including a tank having an outlet in the bottom thereof for the discharge of liquid therethrough, means located in the bottom of the tank for preventing the discharging liquid from swirling and forming a vortex in the liquid in the tank comprising a series of vertical, radially extending baffle plates, the inner parts of said baffle plates being located over the outlet and the outer parts of said baffle plates being supported by the lower edges on the bottom of the tank, and a flat, horizontally arranged plate supported on the upper edges of the baffle plates and arranged substantially co-axially with the outlet.

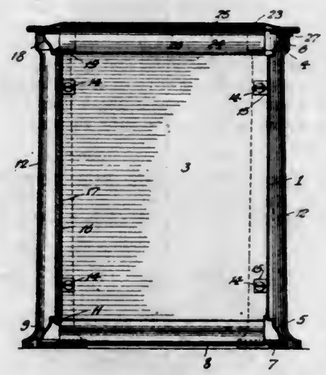


1,767,007. TOILET-ROLL HOLDER. LOUIS H. MORIN, New York, N. Y., assignor, by mesne assignments, to Doehler Vending Machines, Inc., a Corporation of New York. Filed Nov. 18, 1926. Serial No. 149,095. 1 Claim. (Cl. 242—55.2.)



In a roll holder, the combination of a roll-receiving core frame of flattened transverse shape including substantially oval end pieces provided with aligned eccentric pivots adjacent their upper ends, a rod rotatably and slidably mounted in the frame to form one of the said pivots, a spring for causing the outer end of the rod to project to form a pivot which may be withdrawn against the force of the spring, a handle lever fixed on and projecting at an angle from the inner end of the pivot rod normally to extend downward within the limits of the transverse bounds of the flattened core frame and substantially in the plane thereof, a cam on the core frame having a gradual spiral cam rise terminating in a flat top, a stop shoulder for the handle lever formed on the core frame at the end of the flat top of the cam rise, the said cam being disposed and arranged to be engaged by the handle lever when the latter is swung outward along the cam rise to a projecting position on the flat top of the cam adjacent the said stop shoulder thereby to withdraw the projecting pivot end of the rod and the said cam being also disposed and arranged to cooperate with the spring for holding the said handle at its normal non-projecting position within the confines of the roll-receiving core frame, the said roll-receiving core frame further including a pair of spaced side bars which connect together the ends of the said end pieces and the upper one of which side bars forms the said stop shoulder for the handle lever at the end of the flat top of the cam rise, and a cross bar connecting together the side bars between the end pieces and on the side of which adjacent to the handle lever the said cam is provided.

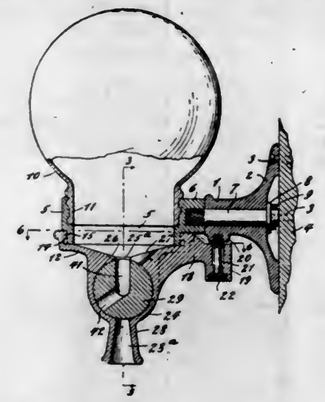
1,767,008. METAL CABINET. LOUIS H. MORIN, New York, N. Y., assignor to Doehler Die-Casting Co., a Corporation of New York. Filed June 8, 1927. Serial No. 197,281. 12 Claims. (Cl. 312—141.)



1. A metal cabinet or the like, comprising three integral side panels having integral top and bottom molding members, and a bottom panel member adapted to cooperate with said bottom molding members, and having another molding member integral therewith, and an auxiliary top molding member, cooperating with said previously mentioned top molding members and having a groove formed at the bottom thereof.

2. A metal cabinet or the like, comprising a plurality of sheet metal panel members having integral marginal molding portions, and a plurality of corner columns having vertical grooves or recesses, the walls of which form an angle of 90°, and means for securing the edges of said panels within the recesses of the column members, said column members having portions removed for the insertion of said molding portions therein.

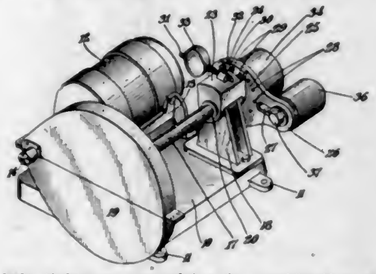
1,767,009. DISPENSER FOR PARTICULATE MATERIALS. LOUIS H. MORIN, New York, N. Y., assignor, by mesne assignments, to Doehler Vending Machines Inc., a Corporation of New York. Filed May 14, 1928. Serial No. 277,628. 8 Claims. (Cl. 221—106.)



1. In a dispenser, the combination of a rigid supporting bracket having a horizontal bore therein forming a bearing, a normally horizontal ring rigidly carrying a radially projecting journal stud journaled in the said bearing of the bracket, means for holding the journal stud in its bearing while providing for its rotative movement therein, a normally inverted container bowl carried by

the ring and opening downward at its mouth into the upper side of the ring, a valve body independent of the container bowl carried by and forming a closure for the lower side of the ring, releasable means for keeping such closure closed, a releasable locking device to have engagement with the valve body closure and the bracket for thereby locking the ring against rotative movement on its journal stud and for locking the valve body closure in its closed position on the ring, and a device suitable for dispensing a measured quantity of a particulate material comprising a manually operable dispensing valve member movably mounted in the valve body closure.

1,767,010. BELT TIGHTENER FOR POWER UNITS. ANTON E. NIELSEN, Brooklyn, N. Y. Filed Oct. 10, 1927. Serial No. 225,074. 5 Claims. (Cl. 64—5.)

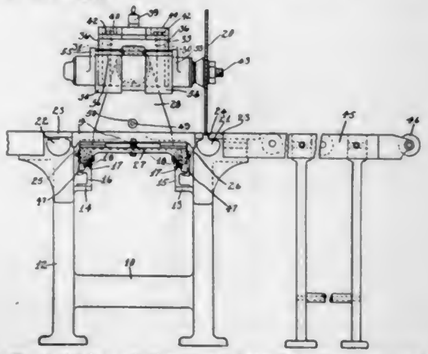


1. A belt tightener comprising in combination with a bearing, a drive shaft and pulley, of a frame journalled on said shaft to straddle the bearing whereby its rotative movement is limited, a radial arm mounted on said shaft intermediate the pulley and frame, said arm having spaced perforations disposed in a circle to receive bolts from said frame whereby it may be adjusted at any radial angular position, a counterweight for said arm adjustably carried by said frame, and an idle pulley carried by said arm adjustable with respect to the first named pulley.

1,767,011. ALLOY. CHARLES PACK, Brooklyn, N. Y., and JOSEPH C. FOX, Toledo, Ohio, assignors to Doehler Die-Casting Co., a Corporation of New York. Filed Aug. 8, 1927. Serial No. 211,623. 6 Claims. (Cl. 75—1.)

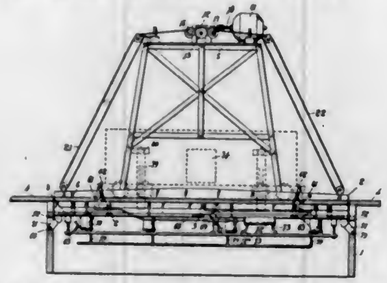
4. An alloy comprising in combination, a zinc base in excess of 75%, aluminum within the range of 1 to 15%, copper within the range of 1 to 10%, nickel less than 5%, and lithium in appreciable amount less than 5%.

1,767,012. CUT-OFF SAW. WILLIAM F. PFAU, Cincinnati, Ohio, assignor to John T. Towsley Manufacturing Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Dec. 4, 1926. Serial No. 152,574. 3 Claims. (Cl. 143—47.)



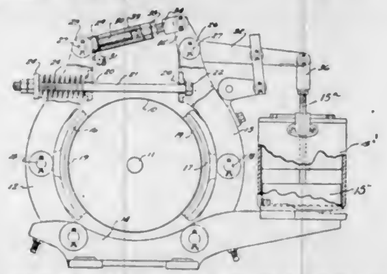
1. In a device of the class described the combination of a bed having opposed supporting legs, a track on each of the opposed faces of the supporting legs, a work supporting table carried by the bed and disposed above the tracks, a carriage, means secured to the carriage contacting the tracks and supporting the carriage on the tracks whereby it may be reciprocated longitudinally of the bed and in a plane beneath the work table, a goose-neck secured to the carriage, and a self container motor driven tool carried by the end of the goose-neck adapted to be actuated in a plane above the work table so that the tool may operate on the material on said work table.

1,767,013. UNLOADING DEVICE. HENRY L. POWER, Brandon, Manitoba, Canada. Filed Sept. 1, 1928. Serial No. 303,519. 3 Claims. (Cl. 214—54.)



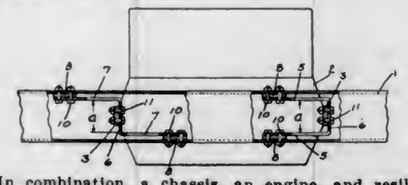
1. A car having an opening in one end; a door controlling said opening; a draft connection on the door; a cable connecting member adapted to releasably engage the draft connection; a retaining member normally holding the cable connecting member in engagement with the draft connection; and means for disengaging the retaining member by the relative movement of the door and car end.

1,767,014. BRAKE. EDWIN CHARLES ROSENBERG, Milwaukee, Wis. Filed Sept. 14, 1928. Serial No. 305,899. 5 Claims. (Cl. 188—171.)



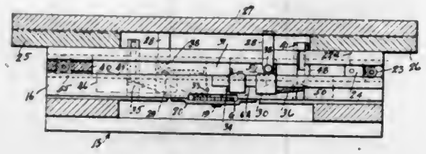
1. A brake including opposed friction surfaces, pressure means for forcing the surfaces into contact and a connection for forcing the surfaces apart, said connection in brake set position being impositively connected with said friction surfaces.

1,767,015. RESILIENT ENGINE MOUNTING. ROBERT SARDESON, FRANK J. LA MERE, and JOHN CORSER, Minneapolis, Minn. Filed Aug. 3, 1927. Serial No. 210,338. 15 Claims. (Cl. 180—64.)



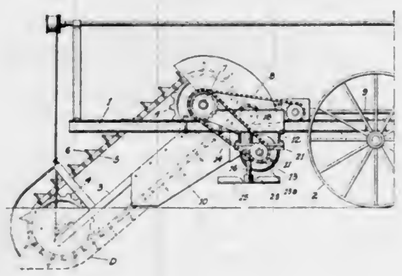
1. In combination, a chassis, an engine, and resilient connections between them, comprising spring elements arranged in vertically spaced substantially parallel relation.

1,767,016. EXTENSION TABLE. WALTER P. SAUER, Forest Hills, N. Y., assignor to Theodor Sauer Company, New York, N. Y., a Corporation of New York. Filed Feb. 16, 1929. Serial No. 340,543. 12 Claims. (Cl. 45—113.)



1. In an extensible table, a fixed slide, a movable slide in operative engagement therewith, a leaf secured to the movable slide, a vertically movable table top normally overlying the said leaf, means attached to the fixed slide and a cam on the movable slide, cooperating with said means to provide a clearance between the table top and leaf when the table is being extended.

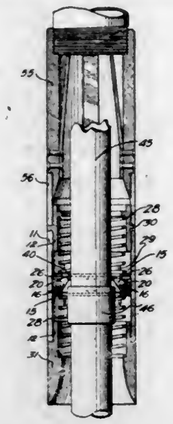
1,767,017. DIRT SPREADER FOR DITCHING MACHINES. GORDON F. SCHECKLER, Stockton, Calif. Filed Mar. 19, 1929. Serial No. 348,217. 2 Claims. (Cl. 37—86.)



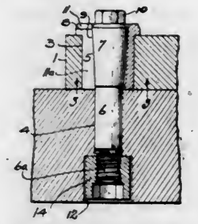
1. In a ditching machine having excavating means, and conveying means cooperating therewith to convey the dirt as excavated away from the excavation; said conveyor being arranged to discharge the dirt from its outer end, a rotary disc mounted on a substantially vertical axis under the discharge end of the conveyor in a position to receive the dirt as discharged from the conveyor, dirt engaging elements projecting upwardly from the disc and means supporting the disc in a manner to enable the angle of the same relative to a horizontal plane to be altered at will.

1,767,018. SWINGING CUTTER CUTTING-OFF TOOL. AUGUST L. SEGELHORST, Whittier, Calif., assignor of one-half to Walter G. Black, Whittier, Calif. Filed Sept. 30, 1922. Serial No. 591,543. 4 Claims. (Cl. 81—189.)

1. In a cutting-off tool: the combination of a rotatable tubular body; a series of inwardly extending cutters pivotally mounted on said body in substantially the same horizontal plane and opposed compression spring mounted in said body for resiliently holding the cutting edges of said cutters inwardly in engagement with the pipe to be cut.

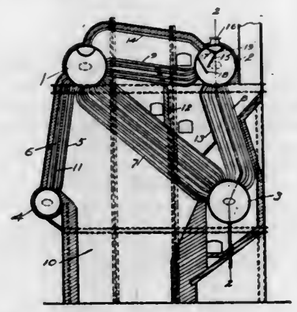


1,767,019. DOWEL. GEORGE SERGEEFF, Detroit, Mich. Filed Apr. 8, 1927. Serial No. 181,927. 1 Claim. (Cl. 85—2.4.)



A dowel comprising a pin having an eccentric, tapered, shank portion, and provided adjacent one end of said eccentric portion with tool engaging means, the opposite end of the pin being threaded, and a split sleeve of substantially uniform diameter throughout its length having an eccentric tapered bore receiving and cooperating with the tapered shank portion of the pin, substantially as and for the purpose described.

1,767,020. STEAM BOILER. MARK E. SMITH, Erie, Pa., assignor to Union Iron Works, Erie, Pa., a Corporation of Pennsylvania. Filed Jan. 27, 1927. Serial No. 163,914. 4 Claims. (Cl. 122—491.)



1. In a steam boiler, the combination of a front steam and water drum; a rear steam and water drum; a water

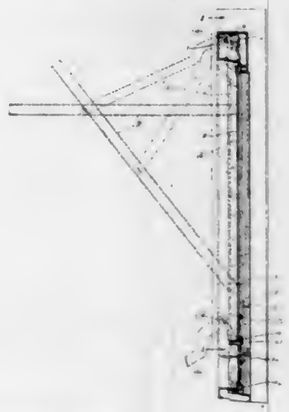
circulating system comprising water tubes connecting said drums; steam tubes connecting said drums entering the drums in a radial direction; a steam discharge opening leading from the upper wall of one of said drums; and a separating plate in the last-mentioned drum arranged in a plane parallel to the axis of the drum and leading from the upper wall of the drum at the side of the discharge opening opposite the incoming steam tubes, said plate extending downwardly into the path of the steam discharged from the steam tubes and deflecting the separated steam upwardly to the discharge opening and the separated water downwardly, said separating plate being free to discharge the separated water to the drum space from its lower edge.

1,767,021. BALL VALVE. JOHN WILLARD TAYLOR, Cincinnati, Ohio. Filed Dec. 1, 1926. Serial No. 152,051. 4 Claims. (Cl. 4—56.)



2. As a new article of manufacture a valve for flush tanks and the like comprising a multi-cellular body having an integral non-porous surface and an internally threaded tubular member extending through the body and vulcanized therein, said body being attachable to a threaded suspending member at either of its opposite ends.

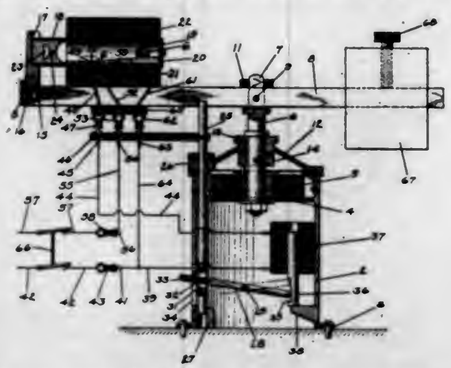
1,767,022. REVERSIBLE WINDOW. LEROY B. TAYLOR, Cleveland, Ohio. Filed Aug. 8, 1929. Serial No. 384,386. 6 Claims. (Cl. 189—67.)



1. A reversible window comprising a casing the jambs of which are provided with notches, a reversible swinging sash, pivoted arms connecting the sash and casing, and yielding pivots mounted on the sash and slidable up and down along the jambs and engageable in said notches to hold the sash in desired positions.

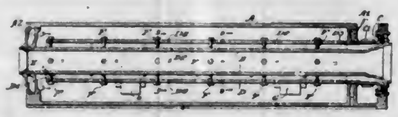
1,767,023. CENTRIFUGAL CASTING MACHINE. GEORGE B. THOMAS and HENRY A. COONS, Duluth, Minn., assignors to M. F. Patterson Dental Supply Co., St. Paul, Minn., a Corporation of Delaware. Filed Oct. 3, 1928. Serial No. 310,107. 13 Claims. (Cl. 22—65.)

13. In a centrifugal casting machine, the combination of a casing having a motor therein, a shaft connected with the motor and projecting from the upper end of the casing, a bar secured to said shaft and adapted to be rotated by said motor, a mold secured to said bar, a heating chamber also secured to said bar and communicating with said mold, a member normally engaged with said bar to prevent rotation thereof, a latch connected with said member and pivotally mounted in said casing, a solenoid associated with said latch and connected with a source of



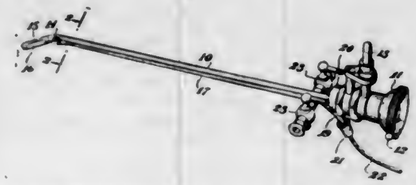
electrical energy, and a pair of contacts within said heating chamber, one of which is connected with the solenoid and the other with a source of electrical energy, said contacts being positioned to be bridged by the metal to be cast, when said metal is in a molten state, whereby the solenoid circuit will be closed to cause the solenoid to actuate said latch and move it out of engagement with said bar to permit rotation of the latter.

1,767,024. CENTRIFUGAL PIPE-MOLD STRUCTURE. JOHN H. URRIG, Beverly, N. J., assignor to United States Cast Iron Pipe & Foundry Company, Burlington, N. J., a Corporation of New Jersey. Filed June 29, 1928. Serial No. 289,136. 9 Claims. (Cl. 26—65.)



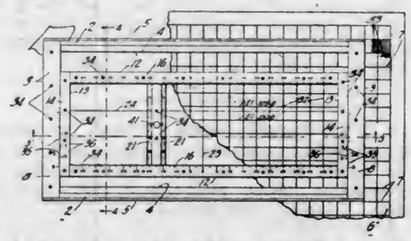
1. A centrifugal pipe mold comprising in combination a mold proper, a strengthening jacket spaced from the mold to afford a substantial water space, said jacket having an open end for the inflow of water and a series of openings formed through it for the outflow of water during the rotation of the mold and for the vertical flow of water during rest periods and means for aligning the mold in the jacket.

1,767,025. SMALL-SIZED CYSTOSCOPE. REINHOLD H. WAPPLER, Yonkers, N. Y. Filed June 15, 1929. Serial No. 371,125. 12 Claims. (Cl. 127—7.)



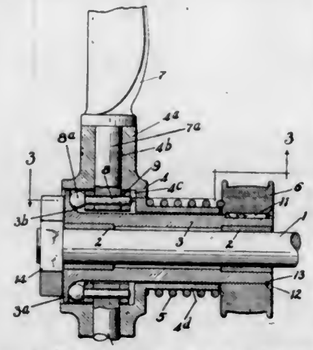
1. A cystoscope comprising a pair of adjacent tubes, one a telescope tube having an objective which commands a lateral field of vision, the other a catheter tube, said tubes being arranged side by side with their axes in a plane substantially perpendicular to the axis of said field of vision.

1,767,026. PLOTTING DEVICE. WEBSTER EARLE WATERBURY, Schodack, N. Y. Filed July 7, 1923. Serial No. 649,997. 6 Claims. (Cl. 33—80.)



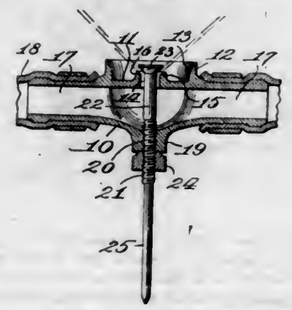
6. In a device of the character described, the combination with an open frame provided with an aligning edge, of a scale having a zero index thereon and slidably mounted within said frame to move both parallel and normal to said aligning edge and means for indicating the precise movement of the zero index relative to said aligning edge.

1,767,027. COOLING-FAN MECHANISM. RUSSELL R. WATERMAN, Long Beach, Calif., assignor to Farmers' National Bank of Greenville, Ohio, trustee, Greenville, Ohio, a Corporation of Ohio. Filed June 7, 1926. Serial No. 114,294. 5 Claims. (Cl. 170—162.)



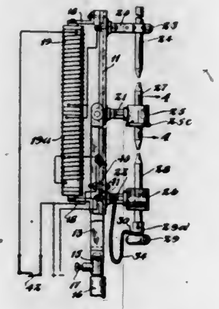
1. In a cooling fan mechanism, a shaft, a sleeve revolubly mounted thereon, a drive pulley secured to said sleeve, a hub member revolubly mounted on said sleeve, a plurality of fan blades rotatably mounted in said hub, and means secured to said fan blades engaging said sleeve for rotating said fan blades in said hub with varying loads on said fan blades.

1,567,028. WATER-SPRINKLING DEVICE. GEORGE A. WILLIAMS, Los Angeles, Calif. Filed Aug. 21, 1928. Serial No. 301,047. 4 Claims. (Cl. 299—75.)



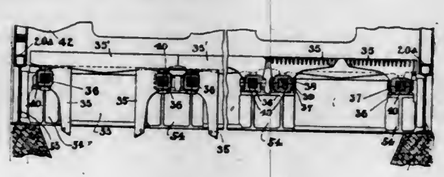
1. In a sprinkling device, a substantially bowl-shaped body, a top plate therefor, a marginal flange projecting upwardly from said top plate, a jet orifice at the center of said plate, said jet orifice having a conical valve seat that occupies a horizontal plane above the plane occupied by the upper surface of the top plate and below the upper edge of the marginal flange, a valve stem having a threaded portion seated in the lower portion of the bowl-shaped body, a valve on the upper end of said valve stem, which valve is adapted to rest on said valve seat, a lock nut mounted on the threaded portion of said valve stem below said bowl-shaped body, and a prong depending from said valve stem.

1,767,029. MULTIPLE HAND ARC LAMP. MAURICE J. WOHL, Long Island City, N. Y. Filed Jan. 6, 1926. Serial No. 79,567. 11 Claims. (Cl. 176—103.)



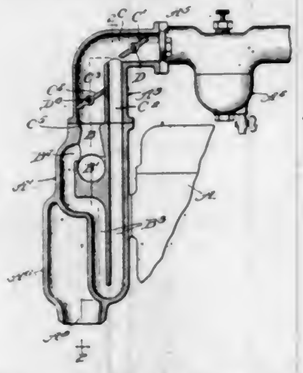
2. In an arc lamp a support, a pair of electrodes, one of which tends to move in one direction, a pair of arms on said support, one of said arms being provided with electrode clamping means, the other arm being provided with a container through which said electrode passes, said container forming a guide for the movable electrode supported thereby and means confined therein to adjust the position of the electrode along said guide when the electrode is moved against the force tending to restore it and permitted to return to normal position.

1,767,030. INCINERATOR GRATE. JOSEPH C. WOODMAN, Brooklyn, N. Y., assignor to Decarie Incinerator Corporation, New York, N. Y., a Corporation of New York. Filed Oct. 13, 1924. Serial No. 743,279. 3 Claims. (Cl. 126—162.)



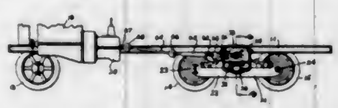
1. In a grate system, a metallic base frame open at the top and bottom, supporting members correspondingly distributed along opposite sides of said frame and provided with upper horizontal flanges, bearings detachably mounted on said flanges, a plurality of pairs of shafts each mounted in a pair of said bearings the shafts of each pair of shafts being relatively widely spaced apart and the contiguous shafts of adjacent pairs being in proximity to each other, a plurality of grate elements carried by each shaft, said elements overhanging the opposite sides of the shafts that carry them to a different extent and operating means adapted to turn said shafts to move the grate elements into upper positions substantially closing the upper opening of the frame and to swing said grate elements downward through the bottom frame opening into a dumping position.

1,767,031. INTAKE MANIFOLD. WAYNE H. WORTHINGTON, Battle Creek, Mich. Filed Mar. 20, 1925. Serial No. 16,876. 6 Claims. (Cl. 123—122.)



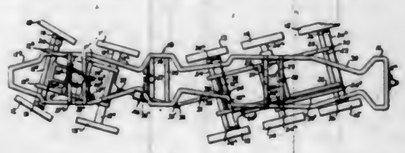
1. A fuel supply means for internal combustion engines, comprising an air mixing or metering means, a mixture intake passage leading therefrom, a plurality of mixture passages arranged in parallel, adapted to receive the mixture from the first mentioned passage and adapted subsequently to join and to direct their respective streams together along sharply converging paths, a single mixture passage adapted to receive both streams and to discharge the mixture to the engine, and a venturi in one of said parallel passages, positioned adjacent their junction, said single passage being sharply inclined to both said parallel passages.

1,767,032. VEHICLE. JAMES E. WRIGHT, Los Angeles, Calif. Filed Jan. 15, 1927. Serial No. 161,310. 2 Claims. (Cl. 180—22.)



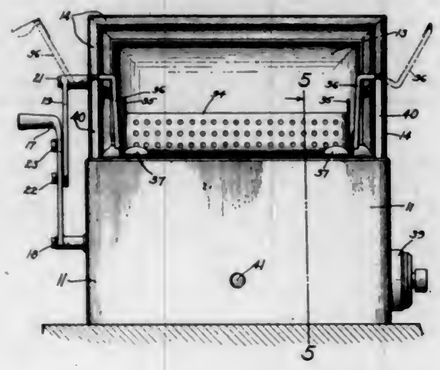
1. In a motor vehicle, a frame, said frame having steerable front wheels thereon, a bogie truck supporting the rear of said frame, said bogie truck having front and rear wheels, said front wheels being steerable, a differential housing supported on said bogie truck, an engine on said frame, a change speed gear device driven by said engine, drive means from said engine to said differential, said drive means including universal joints and a slip joint, a bevel gear at each end of said differential and driven thereby, a pair of propelling bevel gears driven by each of said first gears, a propelling shaft driven by each of said propelling gears, a gear on each of the bogie wheels, a gear on each propelling shaft and engaging a bogie gear, said propelling shafts each including universal joints and a slip joint.

1,767,033. VEHICLE STEERING APPARATUS. JAMES E. WRIGHT, Los Angeles, Calif. Filed Apr. 16, 1927. Serial No. 184,203. 7 Claims. (Cl. 280—81.5.)



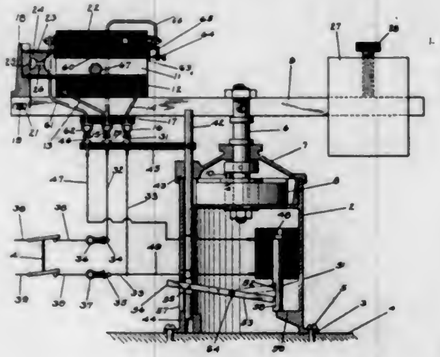
1. In a vehicle, a frame having front wheels thereon, a truck supporting the rear end of said frame, wheels on said truck, said last mentioned wheels being swivelly connected to said truck, means associated with said frame and said truck for turning said front wheels and other means associated with said first mentioned means and said frame and selective to turn the front wheels of said truck in either of two directions when said first mentioned front wheels are turned in a single direction.

1,767,034. STERILIZER. LAURITZ BREDENBERG ANDRESEN, Minneapolis, Minn., assignor to M. F. Patterson Dental Supply Company, St. Paul, Minn., a Corporation of Illinois. Filed Sept. 1, 1923. Serial No. 660,609. 1 Claim. (Cl. 167—3.)



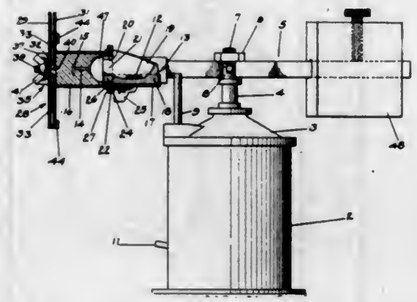
In a sterilider, the combination of a cover thereon, rack-bars slidably mounted at opposed sides of the sterilizer, toothed means on the cover to engage each of the rack-bars whereby, upon raising of the cover, the rack-bars are raised, a holder for articles to be heated connected with the rack-bars, and heating means for the utensil.

1,767,035. CENTRIFUGAL CASTING MACHINE. LAURITZ B. ANDRESEN, Minneapolis, Minn., assignor to M. F. Patterson Dental Supply Co., St. Paul, Minn., a Corporation of Illinois. Filed May 28, 1928. Serial No. 281,323. 9 Claims. (Cl. 22—65.)



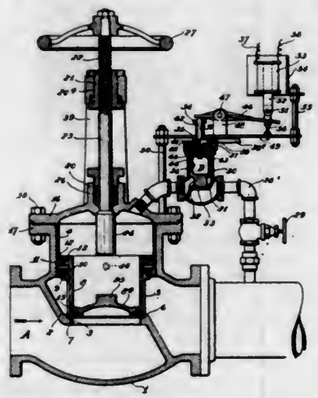
1. A centrifugal casting machine provided with a heating chamber adapted to receive the metal to be cast, a heating circuit for said chamber, a switch for closing said circuit to effect heating of said chamber, and means within said chamber responsive to temperature changes and adapted to effect opening of said heating circuit, after a predetermined time interval.

1,767,036. CENTRIFUGAL CASTING MACHINE. LAURITZ B. ANDRESEN and CLIFFORD W. PAULSON, Minneapolis, Minn., assignors to M. F. Patterson Dental Supply Co., St. Paul, Minn., a Corporation of Delaware. Filed Dec. 8, 1928. Serial No. 324,610. 11 Claims. (Cl. 22—65.)



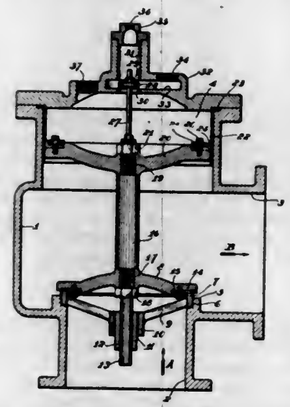
1. A dental casting machine comprising in combination, a drive shaft, an arm mounted thereon and adapted for rotation therewith, a crucible mounted upon the arm and adapted to support the melted gold or metal to be cast, a flask also supported upon said arm and substantially alined with said crucible, said flask having a cavity therein adapted to receive the melted gold from the crucible, and said crucible and flask being disposed at an angle to the direction of rotation whereby the melted gold in said crucible will follow a direct line of travel therefrom into the cavity in said flask, when the machine is started.

1,767,037. CUSHIONED COKE-QUENCHING VALVE. EDWARD V. ANDERSON, Belle Vernon, Pa., assignor of one-half to Charles E. Golden, Crafton, Pa. Filed Jan. 3, 1927. Serial No. 158,494. 3 Claims. (Cl. 137—139.)



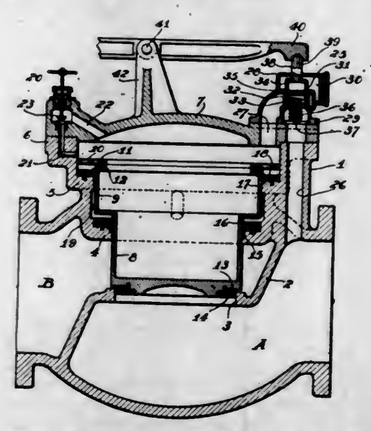
1. A valve mechanism comprising a main casing having an inlet and an outlet chamber, a diaphragm between the chambers with a port therein, a main valve controlling the port, said valve comprising a rear piston of larger area than said port, a cylinder enclosing said piston, the main valve having a leakage port leading from the side exposed to water pressure in the casing to said cylinder whereby pressure behind the piston closes the valve, a by-pass from the cylinder to the outlet side of the casing, a valve mechanism controlling said by-pass and comprising a pilot valve adapted to seat by gravity to close the by-pass, the pilot valve being slidably mounted in a cylindrical casing so as to permit leakage to the rear of the valve, a third valve, a spring normally closing the third valve, said third valve controlling an escape port from the cylinder at the rear of the pilot valve, and a solenoid adapted to open the third valve against spring pressure, whereby to permit the main valve to be unseated by normal water pressure beneath it while the solenoid is operating.

1,767,038. BALANCED COKE-QUENCHING VALVE. EDWARD V. ANDERSON, Belle Vernon, Pa., assignor of one-half to Charles E. Golden, Crafton, Pa. Filed Feb. 3, 1927. Serial No. 165,642. 5 Claims. (Cl. 137—139.)



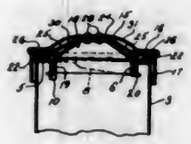
1. A valve mechanism comprising in combination, a casing having a passage therethrough, a valve controlling the passage, a fluid actuated piston for operating said valve in its passage controlling movement, and means associated with said valve for graduating the fluid pressure acting upon said piston, said valve, piston, and regulating means being mounted on a common central stem.

1,767,039. STANDPIPE VALVE. EDWARD V. ANDERSON, Belle Vernon, Pa., assignor of one-half to Charles E. Golden, Crafton, Pa. Filed Feb. 10, 1927. Serial No. 167,190. 5 Claims. (Cl. 137—139.)



1. A valve mechanism comprising a casing having a diaphragm therein with a port in the diaphragm, a piston valve slidably mounted in the casing and adapted to control said port, said piston valve having three cylindrical portions of different diameters, each being larger than the next inner one, bores in the casing for receiving said cylindrical portions of the valve and for forming cushioning chambers therearound, packing members secured to the shoulders formed above the two inner bores, the larger outer bore being closed by a removable cover.

1,767,040. CLOSURE. CHARLES H. BELL, Cleveland, Heights, Ohio, assignor, by mesne assignment, to The Eaton Axle & Spring Company, Cleveland, Ohio, a Corporation of Ohio. Filed July 19, 1928. Serial No. 293,851. 6 Claims. (Cl. 220—40.)

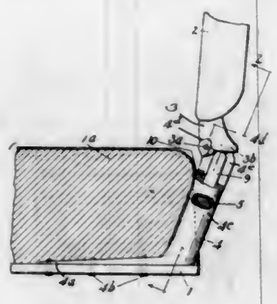


1. A closure for necks having opposed rigid cam portions, comprising a body member, a locking member having rigid locking fingers for cooperative locking engagement with the cam portions of a neck, and an inherently resilient member having the central part thereof rigidly secured between said body member and said locking member and having other parts thereof arranged to press against the outer end of a neck, whereby said fingers engage said cam portions with yielding effect.

1,767,041. CASTER-OIL SOAP AND PROCESS OF MAKING CASTOR-OIL SOAP. WYLY M. BILLING, Cincinnati, Ohio, assignor to The Wm. S. Merrell Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Apr. 14, 1926. Serial No. 102,078. 5 Claims. (Cl. 87—16.)

5. As a new article of manufacture a concentrated castor oil soap solution rendered clear, non-solvent upon glass and freely soluble in water by the presence of an excess of free fatty acid of castor oil.

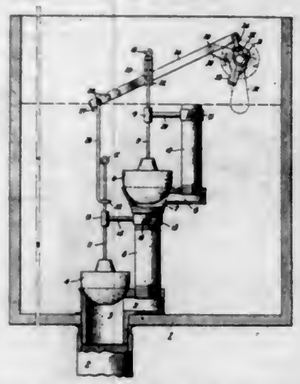
1,767,042. YIELDABLE BACK SUPPORT FOR SEATS. FRANK C. BITZENBURGER, Los Angeles, Calif. Filed Apr. 8, 1925. Serial No. 21,715. 16 Claims. (Cl. 155—157.)



1. In a seat back supporting means, a hollow cylindrical bracket secured to the seat, a seat back positioning member reciprocal longitudinally therein, resilient means for supporting said seat back positioning member therein, and a seat back supporting bracket pivotally mounted on said cylindrical bracket provided with an extending lug adapted to engage said seat back positioning member.

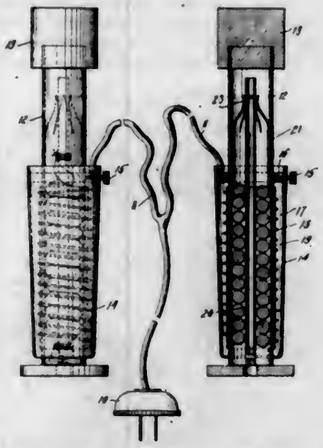
1,767,043. DOUBLE-FLUSH VALVE. HERBERT L. BLAUN and JOSEPH G. MOSKOW, Glenwood Landing, N. Y. Filed June 29, 1929. Serial No. 374,680. 4 Claims. (Cl. 4—37.)

1. In a device of the character described, the combination of a flush tank, a valve for discharging a major portion of the contents of said tank, a second valve for discharging a minor portion of said contents, actuating



means common to said valves, and a handle rotatable in either direction for controlling the movements of said actuating means.

1,767,044. ELECTRIC HEATER. BELA BOGNAR, New York, N. Y. Filed Feb. 16, 1926. Serial No. 88,596. 6 Claims. (Cl. 132—36.)



1. An electric heater comprising a cylindrical shell, a cylindrical locking member in said shell held by friction therein and provided with a plurality of resilient prongs extending toward the longitudinal center line of said shell, and a core adapted to be inserted into said shell into engagement with said prongs.

1,767,045. GUARD FOR ROLLER WINDOW SHADES. WIRT B. BOYCE, Chicago, Ill. Filed July 5, 1924. Serial No. 724,188. 3 Claims. (Cl. 156—10.)



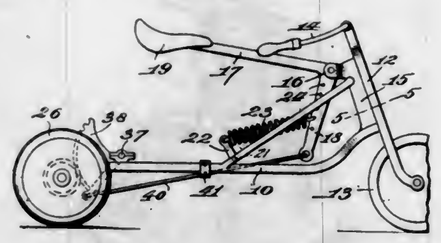
2. In a guard for roller window shades; a shield piece of sheet metal comprising a plurality of members each having downturned stiffening ribs on their corresponding edges, whereby said members are mutually and slidably engageable, transverse stay pieces extending across the non-adjacent ends of said members and rigidly secured thereto, and rigidly attached suspending tenons on said stay pieces.

1,767,046. DEVICE FOR OPERATING REAR CURTAINS OF AUTOMOBILES. WILLIAM BROWN, Revere, Mass. Filed Oct. 29, 1928. Serial No. 315,673. 5 Claims. (Cl. 156—28.)



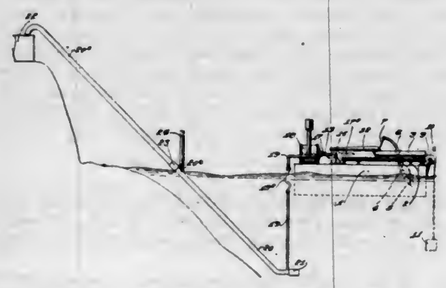
1. In a device for actuating the rear curtain of an automobile, a pulling member therefor including a short length of chain, a tubular member secured to the dash board and through which said chain extends; a ring on the end of said chain; and a member on the inner end of said tubular member provided with a notch adapted to receive a link of said chain and prevent end movement of said chain.

1,767,047. VELOCIPEDE. HOWARD K. BURDICK, Los Angeles, Calif. Filed Aug. 24, 1927. Serial No. 215,074. 3 Claims. (Cl. 208—37.)



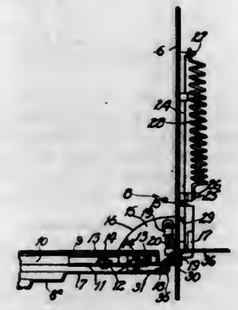
1. In a velocipede, a frame, wheels supporting the rear portion thereof, and having a horizontal arm and a vertical arm, a bell crank fulcrumed on the forward portion of the frame, a seat carried by the rear portion of the horizontal arm of the bell crank, a ratchet wheel secured to the hub of one of the wheels at the rear of the frame, an arm mounted for operation adjacent to said ratchet wheel, a reversible pawl carried by said arm, driving connections between the lower end of the vertical arm of the bell crank and the pawl carrying arm, and a retractile spring having one end connected to the frame and the other end adjustably connected to the vertical arm of the bell crank.

1,767,048. WAVE POWER PLANT. WALTER H. BURRY, El Cajon, Calif. Filed June 7, 1928. Serial No. 283,575. 5 Claims. (Cl. 253—12.)



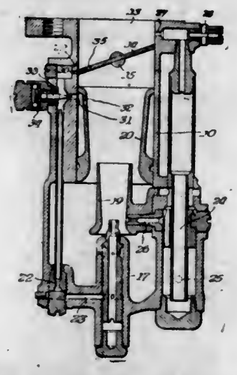
1. In an apparatus of the class described, a wave actuated mechanism including a reciprocable carriage mechanism, paddle arms connected thereto, a wave impact plate secured between said paddle arms, means for raising said water impact plate at the end of each reciprocation of said carriage mechanism, and other means for lowering said water impact plate at the other end of each reciprocation of said carriage mechanism.

1,767,049. HINGE. WILLIAM A. BUSIEK, Belleville, Ill. Filed Feb. 4, 1929. Serial No. 337,250. 4 Claims. (Cl. 126—191.)



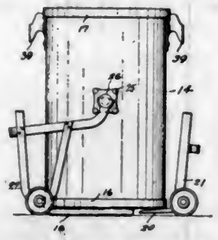
1. In combination with an oven frame, an oven door, a hinge mechanism secured in said oven frame and to the lining of said oven door, said hinge mechansim comprising a hinge plate secured to the lining of said oven door and in sliding engagement in a slot formed in said oven frame, a finger formed on said oven frame and having a pivotal projection formed thereon at its free end and extending partially over the slot in said oven frame, said pivotal projection pivotally secured in a journal notch formed in said hinge plate.

1,767,050. CARBURETOR. MILTON E. CHANDLER, Chicago, Ill., assignor to Stromberg Motor Devices Co., Chicago, Ill., a Corporation of Illinois. Filed Dec. 17, 1925. Serial No. 75,951. 1 Claim. (Cl. 261—41.)



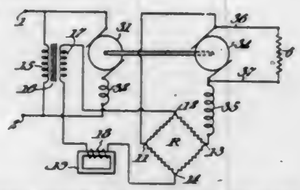
In a carburetor, in combination, a carbureting chamber having an air inlet, a throttle valve in said chamber, the carburetor having an idling fuel passageway and two outlets therefrom to the carbureting chamber, one of said outlets being of constant effective area and disposed outwardly beyond the valve when said valve is closed, the other outlet being closed by the valve when the latter is in closed position and uncovered as the valve is opened, said valve having an opening unobstructed in all positions of the valve and disposed to cause air flowing through said opening when the valve is closed to intersect the fuel spray ejected from the first mentioned outlet.

1,767,051. BARREL. JAMES R. COE, Waterbury, Conn., assignor to The American Brass Company, Waterbury, Conn., a Corporation of Connecticut. Filed Feb. 18, 1927. Serial No. 169,208. 5 Claims. (Cl. 220—72.)



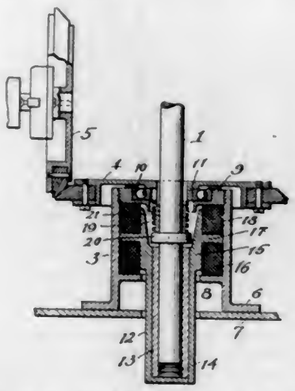
1. A barrel having a body, a sheet metal head or closure at its lower end having a triangularly shaped strengthening rib struck downwardly from the surface of said head and below the normal plane of said head, with its three corners located near the outer periphery of the head, and said rib being substantially U-shape in cross section.

1,767,052. VOLTAGE REGULATOR. GEORGE B. CROUSE, Woodcliff, and JACOB L. JATLOW, Elizabeth, N. J., assignors to Conner Crouse Corporation, New York, N. Y., a Corporation of New York. Original application filed Sept. 8, 1926, Serial No. 134,249. Divided and this application filed Sept. 15, 1926. Serial No. 135,694. 4 Claims. (Cl. 171—119.)



1. A frequency regulator for a motor-generator comprising a motor having a temperature-variant resistance in the field winding circuit thereof, a generator, means for subjecting said resistance to the heating effect of a current whose magnitude varies as a function of the output voltage, and a coil associated with the means and wound upon an iron core substantially at the point of saturation.

1,767,053. SUPPORTING AND DRIVING MEANS FOR GYRATORY SHAFTS. ARTHUR R. CURTIS, Cleveland, Ohio. Filed Apr. 28, 1924. Serial No. 709,480. 1 Claim. (Cl. 308—141.)



In a device of the character described, the combination with a vertical shaft, of a supporting member at the lower end of said shaft in which said shaft is rotatably mounted, means for yieldably supporting said member to permit the shaft to gyrate, said supporting member having a lower bearing portion in which the shaft is journaled and an enlarged tubular portion surrounding the shaft above the bearing portion, a fixed bearing surrounding the shaft above said supporting member, a driving member having a hub rotatable in the fixed bearing and an axial opening through which the shaft extends and within which the shaft is free to gyrate, and means within the enlarged upper portion of the supporting member forming a driving connection between said hub and shaft, said driving connection permitting lateral movement of the shaft within the hub.

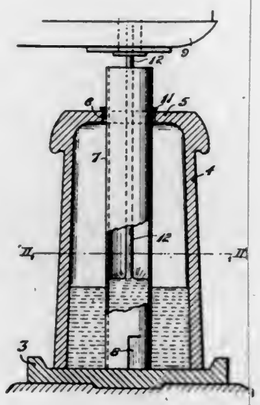
1,767,054. PROCESS FOR TREATING MEATS. FREDERICK BRIGGS, Washington, D. C., assignor to Briggs Packing Co., Washington, D. C., a Corporation of Delaware. Filed Mar. 17, 1924. Serial No. 699,612. 1 Claim. (Cl. 99—11.)



A process for treating lean fresh beef trimmings, consisting in removing the gristle, fat and sinews passing them through a coarse plate grinder, putting them down in pickle of salt, sugar and saltpeter for a substantial period, soaking them in hot solution, compressing the same to remove the moisture and brine, grinding the same as fine as possible, binding the meat particles in gauze and flattening the bulk, and then again placing the same under pressure, retaining the compressed meat in shape in a fabric holder, and forming it into the desired shape, subjecting the compressed meat to a drying heat while in such shape, turning the bulk while in the holder first on one side and then the other and maintaining it in a horizontal position, whereby the drying heat may thoroughly percolate through the meat and finally smoking the same.

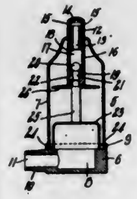
1,767,055. METHOD OF AND APPARATUS FOR CASTING METAL INGOTS. HARRY A. DEUEL, Pittsburgh, Pa. Filed Mar. 3, 1928. Serial No. 258,798. 11 Claims. (Cl. 22—139.)

5. An ingot mold comprising a stool, a metal mold casing for resting upon the stool and having an open bottom and a top provided with an opening, a tubular charging member extending through and closing the opening in the top and having its outer end extending above the top exteriorly thereof and its lower end provided with a vent arranged for discharging the molten metal poured into



the upper end of the tube in a tangential direction for imparting a swirling movement to the metal as it enters the mold casing.

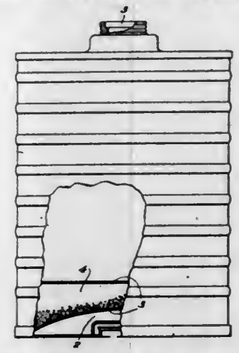
1,767,056. VACUUM-RADIATOR VALVE. EDWARD F. DONNELLY, Malden, Mass. Filed Oct. 28, 1927. Serial No. 229,322. 2 Claims. (Cl. 137—122.)



1. A vacuum radiator valve having, in combination, a casing provided with a passage adapted to communicate with a fluid circulating system, a nipple mounted in said casing and provided with a port communicating with the atmosphere, a sleeve attached to said nipple and co-operating therewith to form a fluid chamber, a movable valve member within said fluid chamber and adapted to close said port, an inverted cup-shaped member interposed between said passage and movable valve member to intercept impurities entering the casing through the passage, means depending from said sleeve to engage said cup-shaped member and prevent the same from lifting from above the inner extremity of said passage, and a baffle plate attached to said sleeve and intercepting impurities within the casing, whereby they are prevented from reaching the valve member.

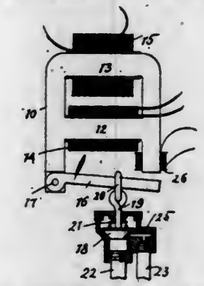
1,767,057. PROCESS AND APPARATUS FOR PURIFYING AIR. ARTHUR L. DOTTER, Pittsburgh, Pa., assignor to Mine Safety Appliances Company, a Corporation of Pennsylvania. Filed Mar. 26, 1928. Serial No. 264,758. 6 Claims. (Cl. 23—4.)

4. A process of purifying air containing ammonia to render it suitable for breathing directly after treatment, comprising passing the air through a body of dry, inert, highly porous gas-purifying material having adsorbed in pores thereof an inorganic acid which in a one-normal aqueous solution has an ionization degree of about 0.5 or



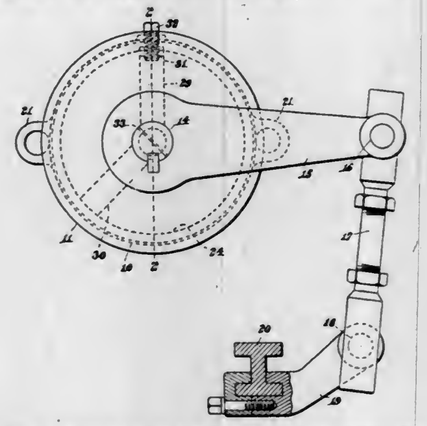
over at 18° C., said material acting to remove substantially all of the ammonia from the air without causing material heating of the air.

1,767,058. COMBINED IGNITION TRANSFORMER AND FUEL CONTROL. ROBERT J. EISEMAN, Cleveland, Ohio, assignor to The K-W Ignition Corporation, Cleveland, Ohio, a Corporation of Ohio. Filed Nov. 11, 1927. Serial No. 232,578. 12 Claims. (Cl. 175—356.)



1. A transformer comprising a core having thereon primary and secondary windings, said core having a movable leg forming a magnetic shunt when the transformer is in operation and breaking said shunt when the operation of the transformer is discontinued.

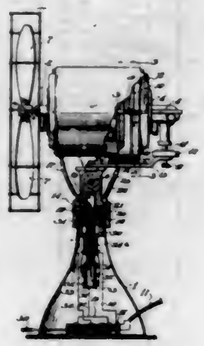
1,767,059. SHOCK ABSORBER. FREDERICK T. ELLIOTT, Somerville, Mass. Filed Sept. 11, 1928. Serial No. 305,261. 15 Claims. (Cl. 188—89.)



1. The combination of a casing having an inner chamber with a cylindrical wall; an oscillating shaft extending

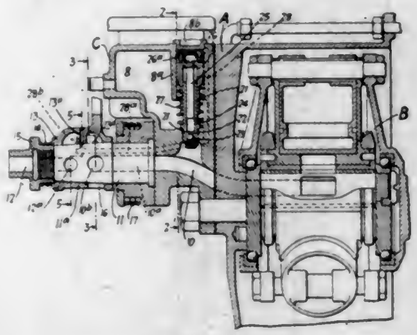
through a wall of said casing and across said chamber; a blade thereon with its sides and ends contacting with the walls of said chamber extending from said shaft to the wall of said chamber; a partition in said chamber coacting with said blade to divide said chamber into two compartments; and a member within said shaft having two passages connecting said compartments and adapted to be opened and closed by the oscillation of said shaft.

1,767,060. ELECTRIC MOTOR-DRIVEN DESK FAN. JAMES R. FERGUSON, Dallas, Tex., assignor of one-half to W. H. Addington, Dallas, Tex. Filed Oct. 4, 1928. Serial No. 310,388. 2 Claims. (Cl. 230—259.)



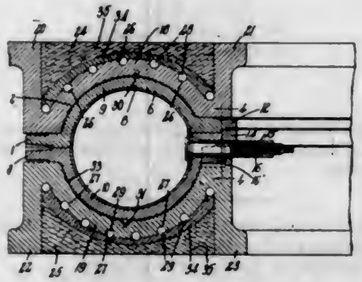
1. In a fan, a tubular base, a perforated nut on the upper end of the base, a perforated gear fixed to the nut, a member above the nut, a tubular conduit fixed to the member and extending downwardly therefrom and through said perforations of the nut and gear, a pinion journaled on said member and meshed with the gear, a motor having a fan carried by the member, a second gear, means to drive said gear from the motor, a second pinion in mesh with the second gear, said member having a concentric part enclosing the first gear and the first pinion, and means to drive the first pinion from the second pinion including an extensible shaft on the exterior of the member.

1,767,061. LUBRICATION OF FLUID-PRESSURE MOTORS. ALBERT H. FUNK, Cleveland, Ohio, assignor to Chicago Pneumatic Tool Company, New York, N. Y., a Corporation of New Jersey. Filed Apr. 8, 1926. Serial No. 100,508. 8 Claims. (Cl. 121—59.)



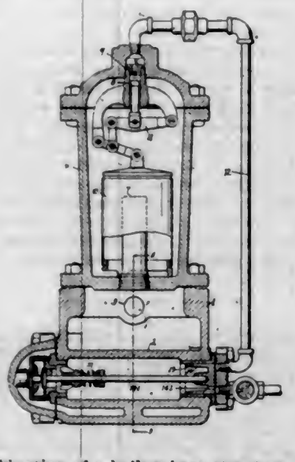
8. In combination, a reversible fluid pressure motor, a lubricating device actuated by fluid pressure and having resilient means for yieldingly resisting its actuation, a post having ports and passages leading to said motor, and a single port and passage leading to said device, a valve of the sleeve type rockably mounted on said post to control said motor and said device, said valve having spaced interconnected axially directed chambers and a partition therebetween, said partition having a vent adapted to register with said device port and being cut away so as to establish prompt connection between said port and one of said chambers on rocking movement of said valve in one direction, a rib extending from said partition across the other of said chambers and having a groove communicating with said vent whereby said port is maintained in communication with said vent when said valve is rocked in the opposite direction.

1,767,062. APPARATUS FOR MANUFACTURING INNER TUBES. ALFRED A. GLIDDEN and THOMAS M. KNOWLAND, Watertown, Mass., assignors, by mesne assignments, to Hood Rubber Company, Inc., Wilmington, Del., a Corporation of Delaware. Filed June 1, 1927. Serial No. 195,778. 4 Claims. (Cl. 18—38.)



1. A mold having, in combination, an inner member provided with a core to receive an article to be molded, an outer member provided with a core to receive said inner member, the inner and outer members being spaced apart and forming an air space therebetween, and means to heat said outer member independently of said inner member, whereby heat from said outer member may be transmitted through said air space to said inner member.

1,767,063. STEAM TRAP. LEONARD D. GOFF, Three Rivers, Mich., assignor to Armstrong Machine Works, Three Rivers, Mich. Filed Feb. 14, 1927. Serial No. 168,049. 1 Claim. (Cl. 137—103.)



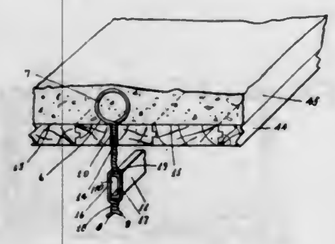
The combination of a hollow base structure, with intake and outlet for the steam line being trapped, an inverted bucket type float steam trap of usual construction mounted on said hollow base, a piston actuated spring loaded valve for controlling the outlet from said base, the piston of which contains a by-pass perforation of less capacity than the valve port of the steam trap, and connections beyond the steam trap valve to the cylinder of the piston control whereby the pressure of water passing the steam trap will open the piston actuated valve against the spring pressure and which will allow the piston actuated valve to close when steam actuates the steam trap valve.

1,767,064. BOX END AND METHOD OF MAKING SAME. HENRY J. GOFF, Stockton, Calif., assignor of one-third to C. A. Webster and one-third to H. V. Taster, Stockton, Calif. Filed June 1, 1928. Serial No. 282,234. 1 Claim. (Cl. 144—309.)



A box end consisting of a plurality of separate strips arranged in a plurality of superimposed rows, glued together; the ends of adjacent strips of each row being spaced from each other and being arranged in offset relation to the ends of the strips of an adjacent row.

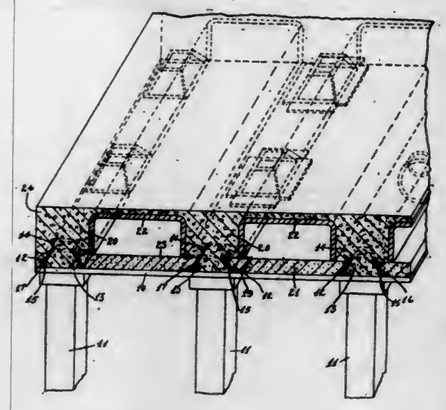
1,767,065. CEILING TIE AND SPACER. MAX S. GOLDSMITH, Cincinnati, Ohio, assignor to The Goldsmith Metal Lath Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Aug. 2, 1922. Serial No. 579,144. 5 Claims. (Cl. 72—101.)



4. A unitary ceiling tie and spacer comprising a member for enclosure in a cementitious mass, a seat forming portion spaced from the first mentioned portion and to be disposed without said mass, and means extending beyond the seat forming portion and adapted to be twisted together for attaching a support member to the tie and spacer and for holding the support member in engagement upon the seat forming portion.

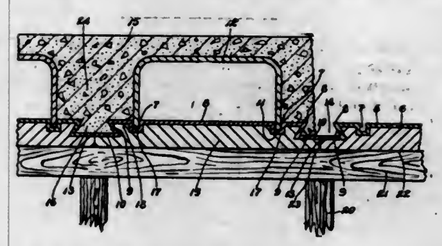
1,767,066. FLOOR CONSTRUCTION. MAX S. GOLDSMITH, Cincinnati, Ohio, assignor to The Goldsmith Metal Lath Company, Cincinnati, Ohio, a Corporation of Ohio. Filed June 18, 1926. Serial No. 116,948. 8 Claims. (Cl. 72—66.)

5. In a floor and ceiling construction the combination of a poured in place cementitious slab providing a finished ceiling face and having pockets formed in its upper face and a cementitious structural floor mass cast upon said



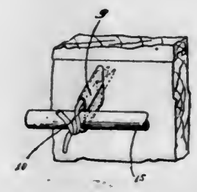
upper face of the ceiling and entering the pockets to form integral keys whereby the ceiling is suspended from the floor.

1,767,067. CEILING PLATE. MAX S. GOLDSMITH, Cincinnati, Ohio, assignor to The Goldsmith Metal Lath Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Nov. 19, 1927. Serial No. 234,516. 10 Claims. (Cl. 72—66.)



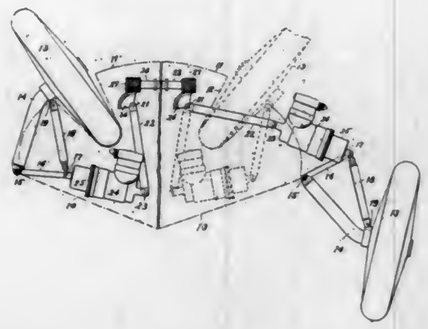
2. As a new article of manufacture a non-frangible faced pre-formed ceiling slab, said non-frangible facing having undercut grooves therein whereby it may be suspended from a plastic floor mass.

1,767,068. LATH SPACER. WILLIAM M. GOLDSMITH, Cincinnati, Ohio, assignor to The Goldsmith Metal Lath Company, Cincinnati, Ohio, a Corporation of Ohio. Filed July 3, 1922. Serial No. 572,473. 4 Claims. (Cl. 72—118.)



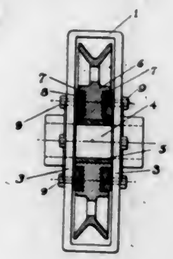
1. In a spacing and retaining device of the class described the combination of a substantially V shaped wire frame, means to secure the base of the frame on a given surface and a spacing means adapted to be mounted on the arms of the frame comprising an elongated tubular clip thru which the arms may extend.

1,767,069. SHOCK ABSORBER FOR AIRCRAFT. LOUIS W. GREVE, Cleveland, Ohio, assignor to The Cleveland Pneumatic Tool Company, Cleveland, Ohio, a Corporation of Ohio. Filed Apr. 30, 1928. Serial No. 273,929. 3 Claims. (Cl. 244—2.)



2. In landing gear for amphibians, a ground wheel, an axle therefor mounted to swing upon the amphibian, a pair of bracing members connected together and to separated points of said axle to constitute a triangular frame, and a combined bracing and retracting means connected with the apex of said triangular frame, said means comprising a fluid shock absorbing strut.

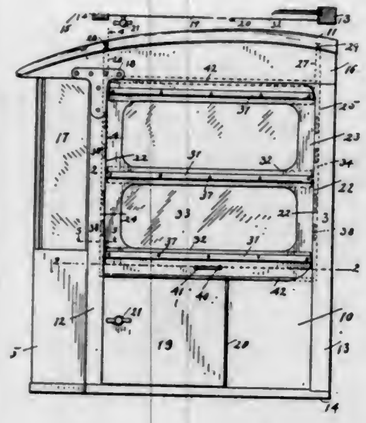
1,767,070. SHEAVE. EDWARD L. HARRINGTON, Erie, Pa., assignor to G. H. Williams Company, Erie, Pa., a Corporation of Pennsylvania. Filed Oct. 29, 1926. Serial No. 144,960. 4 Claims. (Cl. 254—192.)



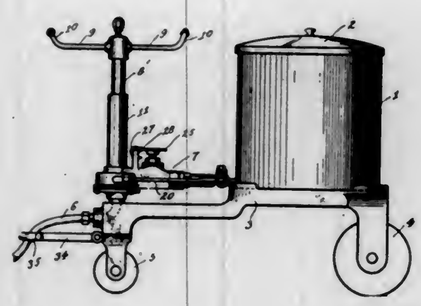
1. In a sheave, the combination of a sheave block having side cheeks; a sheave pin mounted in the cheeks; a sheave pulley journaled on the pin; and annular rings detachably mounted in the cheeks and provided with ribbed and grooved faces arranged in sealing relation with the sides of the pulley.

1,767,071. CURTAIN FOR MOTOR VEHICLES. JAMES HOLAN, Cleveland, Ohio, assignor to The American Coach & Body Company, Cleveland, Ohio, a Corporation of Ohio. Filed Sept. 10, 1927. Serial No. 218,768. 6 Claims. (Cl. 296—140.)

1. A closure of the type described, comprising a sheet of flexible metal, transverse openings therein, transparent material covering said openings, detachable means extending transversely of said sheet for maintaining said material over said openings and permitting substantially uniform flexibility therebetween, and lacing extending through said sheet and transparent material for maintaining the latter in proper position.

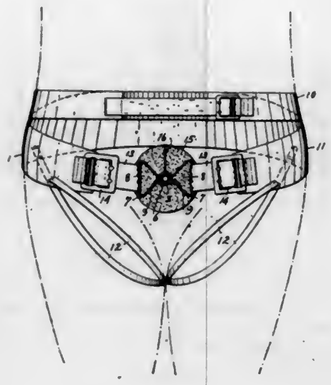


1,767,072. FLUID-PRESSURE PUMP. PETER HONN, Grand Rapids, Mich. Filed Feb. 25, 1928. Serial No. 256,903. 9 Claims. (Cl. 299—69.)



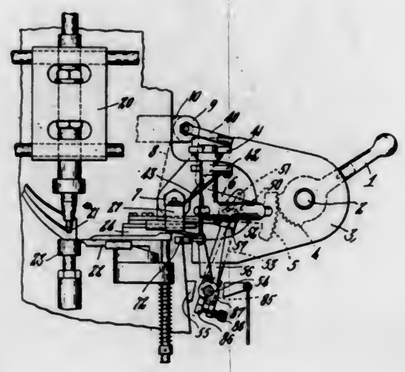
1. In a device of the class described, a tubular shaft for carrying a stream of water and rotatable by the pressure of said stream, a cam carried by said shaft and rotatable therewith, a fluid container having a fluid line communicating with said tubular shaft, and a pump located in the fluid line leading from the container to the tubular shaft and having a spring tensioned piston adapted to be reciprocated by the rotation of said cam for withdrawing fluid from said container and delivering said withdrawn fluid into said water stream.

1,767,073. CATHETER. CARL F. INGOLD, Milwaukee, Wis. Filed Sept. 17, 1927. Serial No. 220,099. 3 Claims. (Cl. 128—350.)



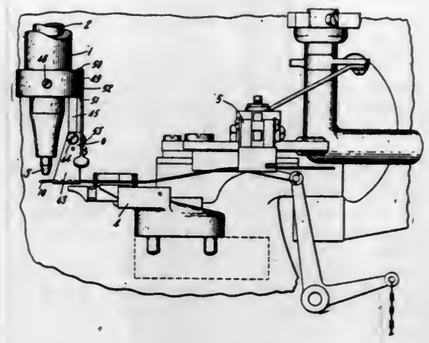
1. A catheter comprising a non-corrodible metallic tube having a shouldered enlargement at its end adapted for insertion into an incision.

1,767,074. TOP GAUGE MECHANISM FOR FASTENER-SETTING MACHINES. GEORGE W. JACQUES, New Bedford, Mass., assignor to Atlas Tack Corporation, Fairhaven, Mass., a Corporation of New York. Filed July 23, 1925. Serial No. 45,636. 9 Claims. (Cl. 218—17.11.)



1. In a fastener setting machine, fastener setting mechanism, a top gauge, means for presenting sections of tape to be fixed by the fastenings to work, means for adjusting the spacing of the fasteners, means for regulating the length of the tape sections in accordance with said spacing, and means for automatically adjusting the position of said gauge in accordance with said spacing.

1,767,075. TENSION DEVICE. GEORGE W. JACQUES, New Bedford, Mass., assignor to Atlas Tack Corporation, Fairhaven, Mass., a Corporation of New York. Original application filed Nov. 24, 1924, Serial No. 751,934. Divided and this application filed Feb. 1, 1928. Serial No. 251,089. 4 Claims. (Cl. 218—17.11.)



1. A tape tension device comprising a member having a flat support against which the tape passes, a spool shaped member having end flanges spaced to bear on the marginal portions of the tape and elsewhere out of contact therewith, and a spring for urging said member in a direction to press the tape against said support.

1,767,076. LUBRICANT AND METHOD OF PRODUCING THE SAME. RUSH NICHOLAS JARMAN, Milwaukee, Wis., assignor to Lindsay-McMillan Company, a Corporation of Wisconsin. Filed Feb. 7, 1927. Serial No. 166,593. 2 Claims. (Cl. 87—9.)

1. As a new lubricant, a petroleum oil having a paraffin base and having a small amount of zinc degras soap added thereto to reduce the cold test of said oil.

1,767,077. WIRE CUTTER. AXEL A. JOHNSON, Holly, Mich. Filed Mar. 5, 1929. Serial No. 344,149. 4 Claims. (Cl. 140—123.)



1. A wire cutter comprising two handles each having an opening therethrough towards one end, a pin extending through said openings, the ends of said handles through which said pin passes having depressions in their adjacent sides extending from their extremities beyond said openings, cutting dies in said depressions of at least as great a thickness as the depth of the depressions so that their adjacent sides are in contact with one another, said dies having holes therethrough through which said pin passes, means for supporting said dies so that each must turn with the handle against which it bears and is held against independent movement, and said dies having peripheral slots formed therein which are so positioned that the slots in one die are over the slots in the other die when the outer ends of the handles are wide apart, and cover each other when the outer ends of the handles are brought nearer together.

1,767,078. SCREEN FOR FILTER PRESSES. JOHN JOHNSON, Maplewood, N. J. Filed Nov. 29, 1927. Serial No. 236,450. 2 Claims. (Cl. 210—195.)



1. A filter press screen, comprising a fine mesh filter cloth, a substantially rigid woven mesh backing sheet of relatively heavy wire underlying said filter cloth, the marginal portions of said superimposed sheets being inclined rearwardly from the plane thereof, and a molded peripheral binding in which the inclined margins of said assembled cloth and backing sheet are imbedded to provide a substantially rigid unitary screen structure, with the forward face of said binding disposed substantially in alignment with the forward face plane of said screen and the rear portion of said binding being off-set from the rear face plane of said screen to provide a packing ring portion.

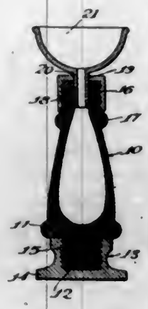
1,767,079. WAX-APPLYING TOOL. ARTHUR E. KENYON, Newark, N. J. Filed June 12, 1928. Serial No. 284,687. 9 Claims. (Cl. 219—21.)



1. A tool for applying molten wax, comprising in combination, a wax holding chamber having a discharge port; a cylinder having a port intermediate its ends which connects with said holding chamber and a second port on a side opposite first said port, said cylinder being closed at one end; a piston in the other end of said cylinder; and a closure member in said cylinder between its closed end and said piston, attached to said piston and held thereby against the chamber port side of the cylinder; said closure being spaced away from the discharge port side of the cylinder; and said closure and piston being formed to define a passageway therebetween adapted by moving said piston and closure to be disposed in and out of registry with both said chamber port and said discharge port.

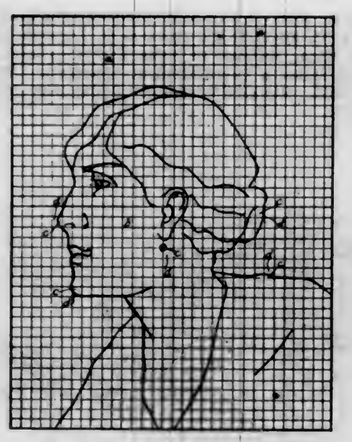
1,767,080. EYE-TREATING DEVICE. FRANCIS KING, Los Angeles, Calif., assignor to Vera M. King, San Bernardino, Calif. Filed July 16, 1928. Serial No. 292,959. 3 Claims. (Cl. 128—249.)

1. In an eye treating device, a hollow collapsible body provided at one end with an opening, a cap secured on the end of said collapsible body and provided with an opening that coincides with the opening in said body,



a tubular stem removably positioned in the openings in said cap and body, and a concave applicator carried by the outer end of said stem.

1,767,081. METHOD AND MEANS FOR PRODUCING MOSAIC DESIGNS FOR PORCELAIN OR OTHER FINE CERAMIC MATERIALS. PAUL KÖRBER, Bad Homburg-vor-der-Hohe, Germany. Filed Aug. 28, 1926, Serial No. 132,292, and in Germany Oct. 20, 1925. 3 Claims. (Cl. 41—23.)

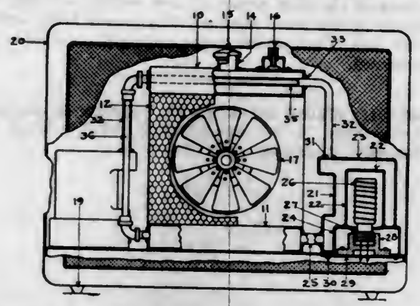


1. A mosaic assemblage comprising a plurality of relatively small tesseræ of regular polygonal shape, and a plurality of irregularly shaped tesseræ of different colors which combine in pairs to form two part tesseræ of the same regular polygonal shape, the irregular joining edges of said pairs defining portions of the mosaic picture.

1,767,082. AIR HEATER. DONALD W. LAKE, Chicago, Ill. Filed Dec. 7, 1927. Serial No. 238,253. 2 Claims. (Cl. 257—137.)

2. In a heat exchange device, a casing having a bottom, top, three closed sides and one open side, a radiator having spaced upper and lower longitudinal headers positioned adjacent said open side, a water jacket, a heating element

for said jacket, means connecting said jacket with the upper and lower headers of the radiator, said jacket and

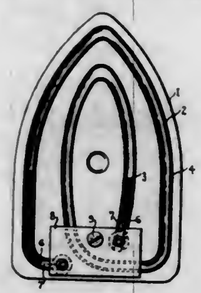


connecting means being positioned adjacent the open side of the casing, a fan positioned within the casing to the rear of the radiator, and means for driving said fan.

1,767,083. FOOD PRODUCT AND PROCESS FOR MAKING SAME. OTTO LEOPOLD, Cincinnati, Ohio. Filed Feb. 12, 1927. Serial No. 167,869. 5 Claims. (Cl. 99—11.)

2. A process for preparing a food product comprising the steps of admixing a small quantity of buttermilk with ½ pound of cane sugar and applying heat thereto for dissolving the sugar and producing a brown syrup-like mass, adding to that mass a sufficient quantity of buttermilk to approximate a total of 3 pints of buttermilk in the admixed substance and boiling off the water at approximately 212 degrees F. at approximately atmospheric pressure for approximately 1½ hours.

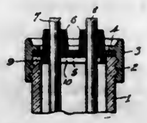
1,767,084. ELECTRIC HEATING DEVICE AND METHOD OF PRODUCING THE SAME. EDWIN N. LIGHTFOOT, Milwaukee, Wis., assignor, by mesne assignments, to Cutler-Hammer, Inc., Milwaukee, Wis., a Corporation of Delaware. Filed Feb. 2, 1925. Serial No. 6,170. 10 Claims. (Cl. 219—25.)



1. The method of equipping a body to be heated with a resistor for heating thereof, which comprises applying to the body a quantity of magnesium oxide particles in which the resistor is embedded and then subjecting the mass of magnesium oxide per se to a pressure for effecting cohesion of its particles and anchorage to said body.

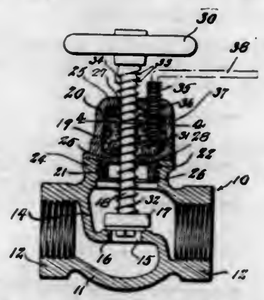
1,767,085. RADIO BATTERY CONSTRUCTION. PAUL M. MARKO, Brooklyn, N. Y., assignor to Willard Storage Battery Company, Cleveland, Ohio, a Corporation of West Virginia. Filed July 5, 1924. Serial No. 724,383. 8 Claims. (Cl. 136—169.)

1. A battery construction, which comprises a cap of pliable material adapted to be placed across the open end of a battery container and to rest on the upper edge thereof, a dependent flange formed on the under surface of the cap, said flange adapted to provide a shoulder to bear



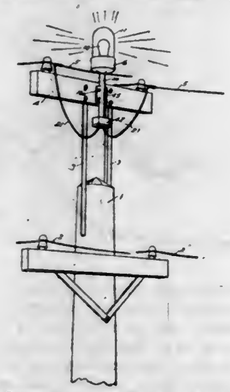
against the inner upper edge of the container to form a tight joint therewith and means engageable with said cap to force the latter into contact with the upper edge of said container.

1,767,086. VALVE. PAUL J. MCCULLOUGH, St. Louis, Mo. Filed Oct. 31, 1927. Serial No. 229,907. 11 Claims. (Cl. 251—50.)



1. A valve construction comprising in combination a body portion, a valve arranged therein for controlling the passage of fluid therethrough, an extension on said body portion provided with an elongated stuffing chamber, a threaded valve stem for actuating said valve, said stem extending through said stuffing chamber, there being aligned openings formed in the end walls of said stuffing chamber for receiving said stem, packing material completely filling said stuffing chamber and closely packed around said stem, whereby the major portions of the latter has a threaded operative engagement, the thread of said stem being comparatively wide and deep with the crown portion formed thin and the root portion formed wide and curved, and means in said extension for placing said packing under pressure.

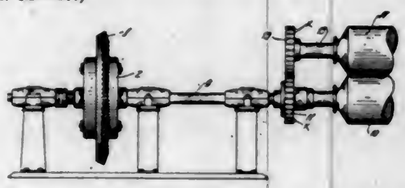
1,767,087. LIGHTING FIXTURE. GEORGE R. METCALF, Jr., Erie, Pa., assignor to Erie Malleable Iron Company, Erie, Pa., a Corporation of Pennsylvania. Filed Feb. 25, 1928. Serial No. 256,849. 2 Claims. (Cl. 240—11.)



1. A lighting fixture comprising a lamp socket and globe-receiving head; a conduit sleeve extending from and

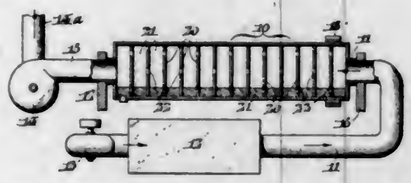
integral with the head and having a projecting mounting ear thereon; and an outlet box on and integral with the sleeve, said socket, globe-receiving head, conduit sleeve and outlet box being in axial alinement.

1,767,088. PRESS-ROLL DRIVE. WALTER W. METCALF, Hoosick Falls, and JOSEPH BROWN, Middle Falls, N. Y. Filed June 17, 1929. Serial No. 371,423. 9 Claims. (Cl. 92—49.)



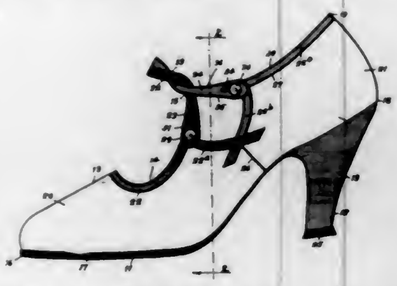
1. In a paper making machine, the combination with upper and lower press rolls of a differential gear, and means for driving both rolls.

1,767,089. METHOD FOR DEALING WITH PARTICLES IN GASEOUS SUSPENSION. AMOS L. MILLER, Philadelphia, Pa., and HENRY J. MASSON, New York, N. Y. Filed Apr. 30, 1925. Serial No. 26,854. 5 Claims. (Cl. 134—60.)



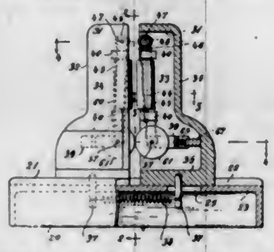
1. The method of collecting lampblack evolved by combustion which comprises passing the products of combustion, under pressure, through restricted orifices, to impart to them velocity sufficient to enable the particles to resist deflection with the medium in which they are floating, and directing them against receptive surfaces to cause impingement and adhesion of the lampblack thereon.

1,767,090. DEMONSTRATING SHOE SAMPLE. CHARLES MILLER, Long Island City, N. Y. Filed Dec. 2, 1926. Serial No. 152,233. 2 Claims. (Cl. 35—17.)



1. A demonstrating shoe sample in flat form, comprising a backing sheet of material of a color and shape similar to the material, color and contour of a shoe of a given style, a plate fixed on the backing sheet, said plate being of a shape similar to the contour of a shoe of a given style and the plate including portions each of the same material, color and shape as the material, color and contour of the corresponding parts of the depicted shoe and the portions of the plate being placed on the backing sheet in the identical positions of the parts of the shoe which said portions of the plate represent, and means connecting the portions of the plate together, said means being similar to the connections of the corresponding parts of the shoe represented.

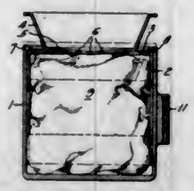
1,767,091. KNIFE SHARPENER. ROBERT E. MILLSAP, Jersey City, N. J. Filed Mar. 7, 1929. Serial No. 345,020. 7 Claims. (Cl. 76—87.)



1. In a knife sharpener the combination of a pair of adjustable standard, a base slidably supporting said adjustable standards, a base slidably supporting said each standard, an adjusting roller pivoted to each standard adjacent to its sharpening wheel and means to transmit rotation from each adjusting roller to the sharpening wheel of its standard.

3. In a knife sharpener the combination of a pair of adjustable standards, means to slidably support said standards, a spindle journaled in each standard, a roller fastened to each of said spindles, a second spindle journaled in each standard, a sharpening wheel fastened to each second spindle, a third spindle journaled in each standard, a gear fastened to each third spindle, a gear fastened to each of the spindles of the rollers, the said gears in mesh with each other, a sprocket chain wheel fastened to each third spindle, a sprocket chain wheel fastened to the spindle of each sharpening wheel and a sprocket chain connecting the sprocket chain wheels.

1,767,092. CIGARETTE EXTINGUISHER. DANIEL J. NEE, San Francisco, Calif., assignor of one-third to James P. Callahan and one-third to William F. Pringle. Filed June 26, 1928. Serial No. 288,415. 4 Claims. (Cl. 131—51.)

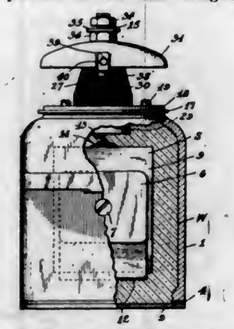


1. A cigarette extinguisher comprising a well, a sponge contained in said well, a hollow plunger slidably fitting within the well inverted over and embracing the sponge, and an upstanding cup secured to the upper end of the plunger and the bottom of the cup having perforations extending to the sponge space.

1,767,093. CONDENSER LEAD AND TERMINAL. WILLIAM H. PRIESS, Montclair, N. J., assignor to Wireless Specialty Apparatus Company, Boston, Mass., a Corporation of New York. Original application filed Aug. 31, 1921, Serial No. 497,113. Divided and this application filed Oct. 1, 1924. Serial No. 740,917. 3 Claims. (Cl. 175—41.)

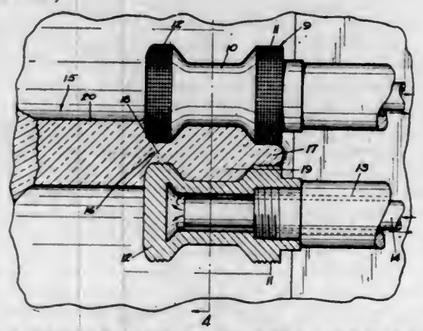
1. A capacitor stack comprising sheets of foil and dielectric material, means for clamping said stack, at least one of said foils projecting as a tab from a side of said stack,

and a terminal lead connected to said projecting foil tab, said lead being of reduced thickness and spread out on each side of the lead axis where attached to said foil to increas the area of contact between the foil and lead, the spread out portion of the lead being soldered to the



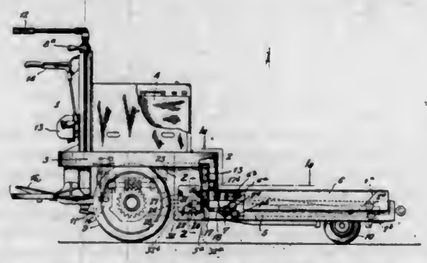
foil tab substantially centrally of the projecting foil and the lead being largely within a plane substantially normal to the plane of the adjacent side of the stack whereby any pull on the lead transmits tension to the foil in a manner to reduce likelihood of tearing one edge of the projecting foil tab more than another.

1,767,094. SHEET-EDGE-FORMING DEVICE. JOSEPH A. REECE, Toledo, Ohio, assignor to Libbey-Owens Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Sept. 17, 1925. Serial No. 56,834. 12 Claims. (Cl. 49—17.)



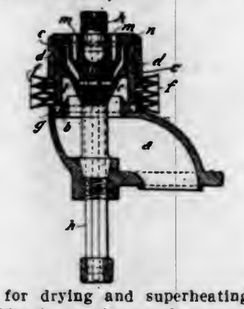
2. In sheet glass apparatus, means for drawing a sheet from a mass of molten glass, including pairs of rolls, having smaller circumferences at their centers than at their ends, engaging the respective sheet edges.

1,767,095. RAISING AND LOWERING APPARATUS. EDWARD H. REMDE, Cleveland, Ohio, assignor to The Baker-Raulang Company, Cleveland, Ohio, a Corporation of Ohio. Filed Dec. 19, 1921. Serial No. 523,286. 7 Claims. (Cl. 254—2.)



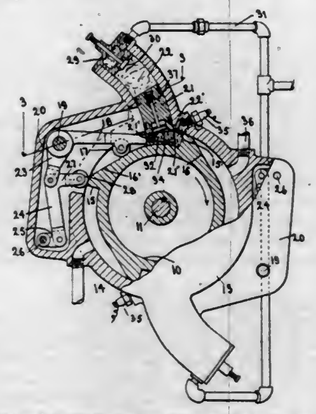
6. In apparatus of the character described, the combination with a pair of relatively movable members, of means for operating one of said members relative to the other in opposite directions, said means including separate leads each having a switch therein, a pair of swingable devices on one of said members movable to either side of a plane cutting the axes on which said devices swing, one device being connected to the other member and carrying a tappet and the other device comprising arms extending laterally to either side of said plane and disposed in the path of movement of and arranged to be engaged by said tappet whereby the latter swings said device to one side or the other of said plane, and means actuated by said last referred to device for opening one of said switches accordingly as said device is swung in one direction or the other direction, each of said arms being shaped to permit movement of the first mentioned device after it has operated the other device and the switch operating means due to inertia of said movable member and its operating means.

1,767,096. DEVICE FOR SUPERHEATING AND DRYING STEAM. GIUSEPPE RESTUCCI, Naples, Italy, assignor to Francesco Vitale, Naples, Italy. Filed June 7, 1923, Serial No. 644,012, and in Italy Oct. 19, 1922. 6 Claims. (Cl. 122—459.)



1. A device for drying and superheating steam comprising in combination a piston valve comprising a head portion and an imperforate skirt carried directly by said head portion and connected to an external operating organ, a piston cylinder having a plurality of nozzles fixed in the wall thereof such nozzles being adapted to be regulated and opened at will by means of said piston to allow of the passage of steam therethrough, and a valve located in the head of the piston for equalizing the pressure on said piston above and below said head.

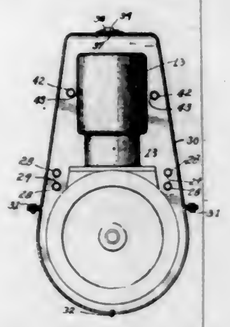
1,767,097. ROTARY INTERNAL-COMBUSTION ENGINE. ERNEST ABERT RICHARDSON, Cochituate, Mass. Filed Apr. 30, 1927. Serial No. 187,873. 1 Claim. (Cl. 123—15.)



In a rotary internal combustion engine, including as elements a casing, a rotor formed with peripheral abutments

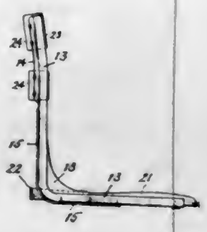
and corresponding cam faces, revoluble therein, a gas chamber extending therefrom and having a duct and a check valve therein; in combination therewith; a recessed piston integral with a radius arm hinged within the casing, the piston being adapted to reciprocate in the chamber; an anti-friction element connected to the arm and adapted to engage the periphery of the rotor; an extension from the radius arm; a bell crank hinged thereto, one arm of which is journaled in a link hinged within the casing, and the other arm being provided with an anti-friction element adapted to engage the periphery of the rotor and to coordinate with the anti-friction element connected with the radius arm for the purpose of reciprocating the piston in the chamber, as and for the purposes set forth.

1,767,098. FIRE-EXTINGUISHING DEVICE. WILLIAM J. RUFF, Quincy, Ill. Filed May 1, 1919. Serial No. 294,105. 2 Claims. (Cl. 169—2.)



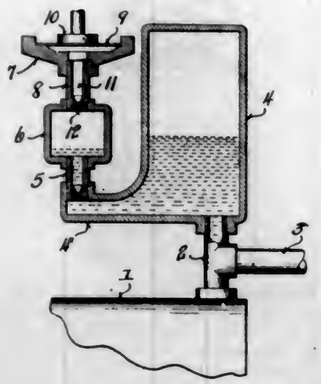
1. In combination with an aeroplane, of a casing completely enclosing a part of the aeroplane; means for admitting a fire extinguishing medium to said casing; and a cleaning fluid tank connected with said casing for removing said fire extinguishing medium from said casing.

1,767,099. BRACKET. CLARENCE E. STEVENS, Cleveland, Ohio, assignor to White Sewing Machine Corporation, Cleveland, Ohio, a Corporation of Delaware. Filed Mar. 30, 1928. Serial No. 265,950. 5 Claims. (Cl. 155—194.)



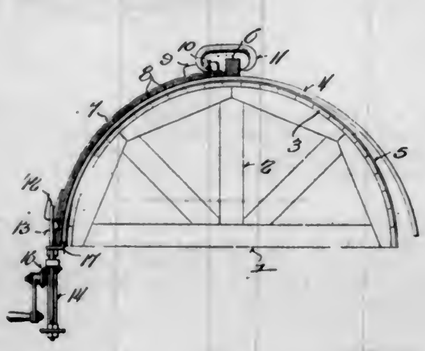
5. A bracket adapted to be used as a post for connecting the seat and back of a chair comprising a metal strip flanged along one longitudinal edge thereof and angularly bent intermediate its ends so as to form angularly disposed chair seat and chair back receiving arms respectively, and a strengthening angle member secured to the strip at the junction of the arms and having a flange adapted to engage the upper side of the seat.

1,767,100. PULSATION ELIMINATOR FOR PUMPS. VERNON L. TANNEHILL, Fort Wayne, Ind., assignor to Fort Wayne Engineering & Manufacturing Co., Fort Wayne, Ind. Filed July 9, 1928. Serial No. 291,240. 1 Claim. (Cl. 103—25.)



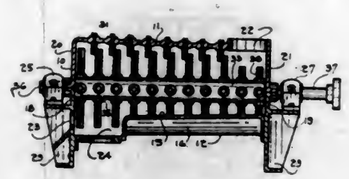
The combination of a water pump having a delivery portion, a primary air chamber communicating with said delivery portion, a lateral extension on said primary air chamber having a threaded upper aperture, an auxiliary air chamber, a throttling nipple having one end connected with the auxiliary air chamber and the other end threaded into the aperture on the lateral extension, a controller and a second throttling nipple providing communication between said controller and the auxiliary air chamber.

1,767,101. METHOD AND APPARATUS FOR THE MANUFACTURE OF BOATS. PETER THOMPSON, Peshtigo, Wis., assignor to Thompson Bros. Boat Mfg. Co., Peshtigo, Wis. Filed Aug. 2, 1929. Serial No. 383,097. 1 Claim. (Cl. 9—6.5.)



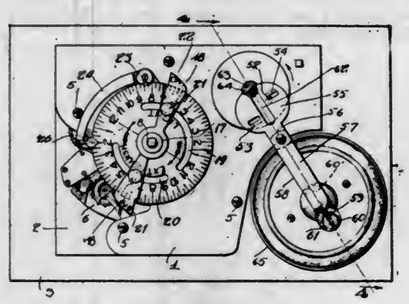
A device of the class described comprising a flexible strap for engaging abutting strips positioned over a circular form with a keel at the intermediate portion of the form, spaced brackets carried by one end of the strap, a transverse stud engaged with the brackets, a clevis engaging the stud, and the keel for retaining the strap in position at one end, a hook member carried by the other end of the strap and a pressure jack carrying a U-bolt adapted to be engaged with the hook on the strap with the pressure jack bearing against one edge of the outermost strip for retaining said strips in closely abutting relation.

1,767,102. MIXING MACHINE. CARL BUSCH THORNE, Hawkesbury, Ontario, Canada. Filed Mar. 8, 1928. Serial No. 260,184. 3 Claims. (Cl. 259—9.)



1. A mixing machine comprising a casing having a chute bottom emptying into a well communicating with a weir, rotary members having pegs or fingers radially extending therefrom intercepting one another and stationary pegs secured to the casing wall and projecting inwardly therefrom and intercepting said rotary pegs.

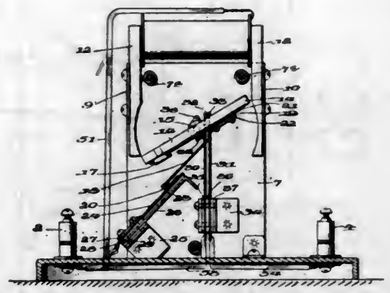
1,767,103. ELECTRIC TIME SWITCH. SIDNEY C. VINCENT, Baltimore, Md. Filed June 19, 1924. Serial No. 721,025. 4 Claims. (Cl. 200—40.)



2. In a mechanism of the character described, in combination, a suitable frame, a clock mechanism including a dial having tripping arms adjustably secured thereto, a tripping lever actuated by said arms, a switch operating mechanism including a shaft journaled in the frame, a spring for rotating said shaft at intervals, said spring being independent of the driving spring of the clock mechanism, a shaft journaled in the frame carrying pins adapted to be alternately engaged and released by the tripping lever to hold the switch operating mechanism inactive, or to permit it to operate, a switch including a switch lever, a link connected at one end to the top of the switch lever and provided at the other end with a head having an elongated slot therein adapted to embrace the upper end of the main shaft of the switch operatnig mechanism for guiding the link in a straight line in either direction, said head being provided with two downwardly extending lugs out of line with each other, a disk mounted on the shaft of the switch operating mechanism and carrying an upwardly extending lug adapted to engage alternately the lugs on said head to operate the switch through the link in either direction.

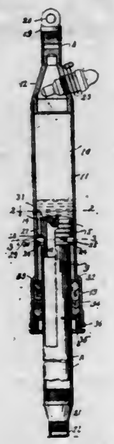
1,767,104. FLASHER SIGNAL. FREDERICK C. VOLKMAN and SIDNEY C. VINCENT, Baltimore, Md. Filed Feb. 24, 1928. Serial No. 256,499. 6 Claims. (Cl. 200—90.)

1. In combination, a base, vertical spaced plates supported by said base, an armature pivoted between said plates, an electromagnet supported by said plates, said magnet having depending poles, means attached to one end of said armature for causing it to be normally positioned at an angle to the horizontal, a contact member carried by said armature, a contact member supported by one of said vertical plates and adapted to contact with the contact member carried by said armature when said armature is in its angular position, a pair of vertical contact



members also supported by one of said plates, said contacts being normally open, and a cam member actuated by movement of said armature to close said vertical contact members.

1,767,105. SHOCK-ABSORBING STRUT. JOHN F. WALLACE, Shaker Heights, Ohio, assignor to The Cleveland Pneumatic Tool Company, Cleveland, Ohio., a Corporation of Ohio. Filed Dec. 9, 1927. Serial No. 238,838. 6 Claims. (Cl. 267—64.)

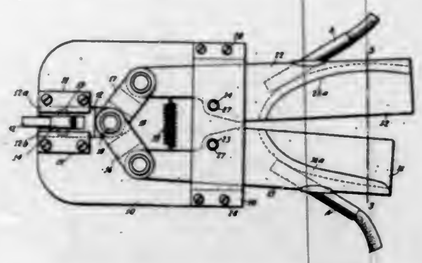


1. In a shock-absorbing strut, a cylinder, a member telescoping therewith, a piston on the inner end of said member in sliding engagement with the cylinder, expansible packing between said cylinder and telescoping member exposed to the pressure of the fluid surrounding said member behind said piston, and means for permitting the flow of fluid from one side of the piston to the other more freely in one direction than in the other, whereby the fluid between said piston and said packing serves not only as a rebound check but also as means for regulating the friction between said packing and the adjacent parts.

1,767,106. MOLDING MACHINE. AARON WINKLER, Bronx, and CHARLES MILLER, Long Island City, N. Y.; said Winkler assignor to said Miller. Filed Dec. 15, 1928. Serial No. 326,181. 7 Claims. (Cl. 12—51.)

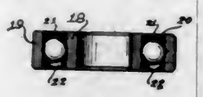
1. A machine of the class described comprising in combination, a stationary base member, a first mold section pivotally mounted upon said member, a second mold

section pivotally mounted upon said member, said first and said second mold sections being shaped to conform to the contour of a shoe last forwardly of the shank portion when said sections are placed together and having



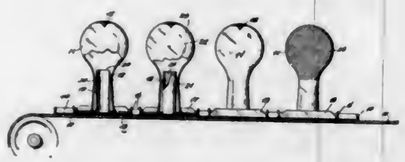
edges adapted to enter the crease of the shoe between the uppr and the outsole, and means to swing said sections about their respective pivots, whereby to position said sections relatively to each other.

1,767,107. BALL RETAINER FOR ANTIFRICTION BEARINGS. FREDERICK CHARLES YATES, New York, N. Y. Filed May 16, 1927. Serial No. 191,679. 9 Claims. (Cl. 308—201.)



1. In a ball-bearing retainer, a body of elastic yieldable non-metallic fibrous material, said body having a socket provided with a lateral circular opening normally smaller than the diameter of the ball which is adapted to be forcibly inserted through said opening and retained thereby.

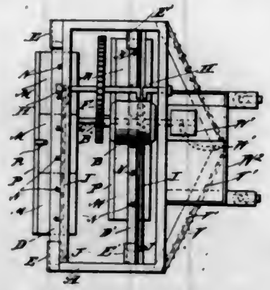
1,767,108. METHOD AND APPARATUS FOR COLORING THIN GLASS BODIES. EDWARD A. ZEH, Passaic, N. J., assignor to Zeh, Incorporated, Clifton, N. J., a Corporation of New Jersey. Filed Mar. 16, 1928. Serial No. 262,199. 14 Claims. (Cl. 49—82.)



1. In the art of fusing a decalcomania to a thin hollow glass body, the method which consists in subjecting the glass body to heat at a temperature sufficiently high to cause the decalcomania to fuse into the glass and at a temperature less than the temperature at which the glass sags, while absorbing heat from the lower portion of the glass body thereby to minimize the tendency of the lower portion of the glass body to sag under its own weight.

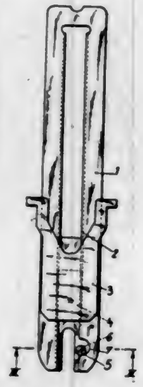
1,767,109. SCRUBBING MACHINE. ABRAHAM H. ZUCKER, Cleveland, Ohio. Filed May 11, 1928. Serial No. 277,024. 6 Claims. (Cl. 15—50.)

3. In a floor scrubbing machine, a frame, rigid bars transversely secured across the lower part of said frame, spaced bearings on said rigid bars and brush holding bars reciprocable in said bearings, a motor and a crank shaft, and connecting rods, wrist pins connecting said



brush holding bars, and said connecting rods, said bearings and rigid bars being provided with openings for the passage of said wrist pins.

1,767,110. TRUING WEDGE FOR MATRIX-SETTING AND LINE-CASTING MACHINES. ERNST GOTTLIEB ALBRECHT, Berlin, Germany. Filed Dec. 1, 1928, Serial No. 323,022, and in Germany Jan. 3, 1928. 1 Claim. (Cl. 199—68.)

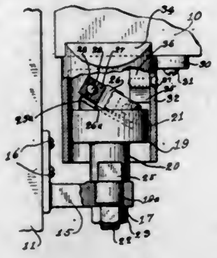


A device of the kind described comprising a bar having a slotted portion extending lengthwise thereof, the opposed faces of the walls of said slot constituting parallel opposed guide faces, and said bar being formed with a recess adjacent one end, said recess communicating with said slot, in combination with a slide fitting between and slidably engaging said opposed faces and being slidable lengthwise thereof and separable therefrom by continued movement endwise of said bar in a direction toward and beyond said recess, and an eccentric stop mounted in said recess and partially rotatable in the direction of endwise separating movement of said slide to project beyond said recess into the path of said slide and to eccentrically engage a wall of said recess to be thereby locked against further turning in that direction under impact by said slide, said eccentric stop being partially rotatable in the reverse direction to be entirely received in said recess.

1,767,111. GRAVITY HINGE. GUSTAVE HILDING ANDERSON, New Britain, Conn., assignor to The Hart & Hutchinson Company, New Britain, Conn., a Corporation of Connecticut. Filed Sept. 23, 1926. Serial No. 137,220. 9 Claims. (Cl. 16—154.)

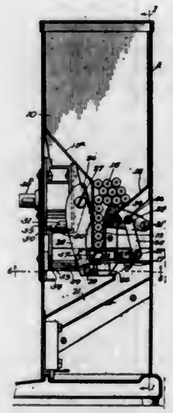
1. In a gravity hinge, a bracket member adapted to be secured to a door, a second bracket member adapted to be

rigidly secured to a door post, an inclined pintle on said second bracket, an annular ball-bearing raceway on said



pintle, and means on said first bracket for engaging the lower edge of said raceway whereby said door will return by gravity to closed position after being opened.

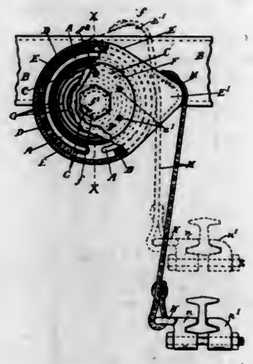
1,767,112. VENDING MACHINE. ALFRED D. ANTOINE, Chicago, and ALBERT E. GEBERT, Wilmette, Ill., assignors to Advance Machine Company, Chicago, Ill., a Corporation of Illinois. Filed June 20, 1927. Serial No. 199,944. 2 Claims. (Cl. 312—67.)



1. A vending machine embodying a container for the articles, a delivery chute, a reciprocable ejector for ejecting the articles, an agitator pivotally mounted by one end, the free end of the agitator being movable into and out of the container, an operative connection between the ejector and agitator for rocking the latter as the ejector is reciprocated, and a projection extending above the agitator for assisting in separating the articles in the container.

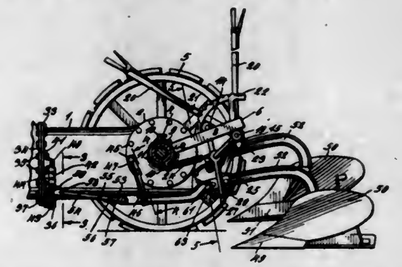
1,767,113. SHOCK-ABSORBING MEANS FOR VEHICLES. FULLERTON GEORGE GORDON ARMSTRONG, Beverley, England. Filed May 7, 1926, Serial No. 107,429, and in Great Britain May 14, 1925. 6 Claims. (Cl. 267—10.)

6. A shock absorber comprising in combination a circular fixed casing, a shoulder on said fixed casing, a hollow casing fitting over and rotatable relatively to said fixed casing provided with an annular groove on the inner surface, a radially split ring sprung into engagement with said annular groove, a felt washer arranged between said ring and said shoulder, a circular cap fitting into said rotatable casing, a felt washer arranged between said ring and said cap, a torsion spring connecting said casings, a constant frictional brake applied between said casings irrespective



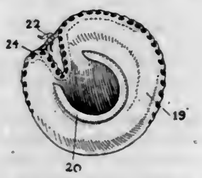
of their angular movement, a moving part, a flexible connection between said moving part and said rotatable casing, and means to vary the torque applied by said flexible connection to said rotatable casing according to the angular displacement of said rotatable casing.

1,767,114. TRACTOR HITCH. EMERY E. BASHOR and EDWARD N. WRAY, Berthoud, Colo. Filed Apr. 18, 1927. Serial No. 184,569. 7 Claims. (Cl. 97—47.)



1. A device of the class described, comprising, in combination, a tractor, a plow having a beam, and a supporting means carried by the tractor for raising and lowering the beam and plow, said means comprising a pin secured to the supporting means and a bearing member secured to the plow beam, the axis of the pin lying in a vertical plane parallel with the direction of movement of the plow and having an upward and forward inclination with respect to the bottom of the plow whereby the plow will be rotated about its longitudinal axis whenever it is rotated about the axis of the pin.

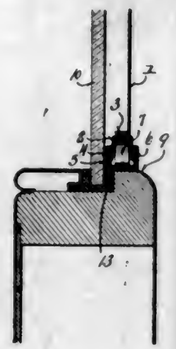
1,767,115. BASEBALL PLAYER'S MITT OR GLOVE. UPTON C. BERRY, Lincoln, Nebr. Filed Oct. 31, 1925. Serial No. 65,996. 1 Claim. (Cl. 2—19.)



A base ball player's mitt or glove including back and palm portions for receiving a player's hand therebetween,

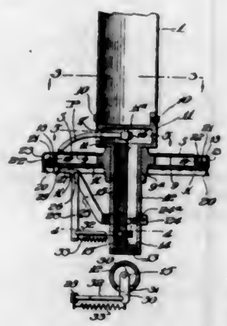
a padded false palm secured at its edges to said back and palm portions, and a horse-shoe shaped strip of flexible material secured at its outer edge only to said false palm against the outer surface thereof.

1,767,116. WINDOW SCREEN. OTTO W. BRANDES, Milwaukee, Wis. Filed July 20, 1928. Serial No. 294,215. 3 Claims. (Cl. 156—14.)



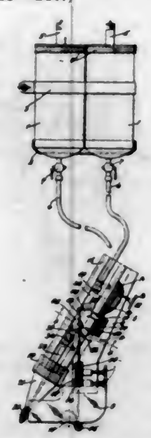
2. An expansible screen comprising an inner rectangular frame channel-shaped in cross-section, a wire mesh member carried by said frame and secured to the intermediate wall thereof, an outer frame formed of channel sections telescopically receiving said inner frame, and spring interposed between said frames, said second frame being formed of corner portions and straight sections between the corner portions and telescopically fitted to said corner portions.

1,767,117. RADIO COMPASS COMPENSATOR. WILLIAM M. BROWER, Palo Alto, Calif., assignor to Federal Telegraph Company, San Francisco, Calif., a Corporation of California. Filed June 1, 1925. Serial No. 34,006. 20 Claims.. (Cl. 250—11.)



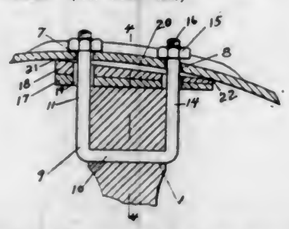
1. Radio apparatus comprising an electrical system having a non-uniform directional characteristic, a rotatable member in said electrical system, an indicating member coacting with said rotatable member, and means for automatically varying the position of said indicating member with respect to said rotatable member comprising a cam surface disposed substantially normal to the axes of rotation of said rotatable member and of said indicating member, and a cam follower engaging said surface for controlling the position of said indicating member with respect to said rotatable member.

1,767,118. STRIPING DEVICE. KENLY C. BUGG, St. Louis, Mo. Filed Jan. 19, 1927. Serial No. 162,006. 17 Claims. (Cl. 15—140.)



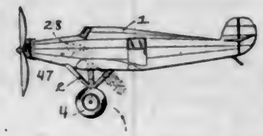
1. A striping device comprising a frame, a supporting runner at each side of said frame, means holding said runners in different spaced relationships with respect to each other and said frame, a brush carrier supported by said frame, and means adapted to discharge paint through said carrier into said brush.

1,767,119. GARDEN TOOL. ORIN M. BULLOCK, Oakland, Calif., assignor to Bullock Garden Tool Company, a Corporation of California. Filed Jan. 13, 1925. Serial No. 2,070. 1 Claim. (Cl. 306—40.)



A tool comprising in combination a handle, a transverse opening therethrough, a U-shaped clamping bolt having its base extending through said opening and its leg portions lying parallel to and along the sides of said handle, the ends of said legs being threaded and extending a substantial distance beyond the end of the handle, an apertured concave tool blade fitted over the extending ends of said U-bolt legs, nuts threaded on the ends of said U-bolt legs for clamping said blade in position and means at the end of said handle against which said blade is clamped, said means projecting laterally beyond said U-bolt legs and adapted to contact with said blade at points more remotely spaced than said U-bolt legs.

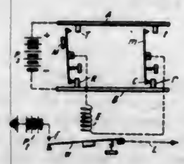
1,767,120. TAKE-OFF DEVICE FOR AEROPLANES. DUDLEY CANFIELD, Milwaukee, Wis. Filed Nov. 26, 1928. Serial No. 321,902. 1 Claim. (Cl. 244—2.)



In an aeroplane, hollow struts extending downwardly, a supporting axle at the lower end of the struts, piston rods

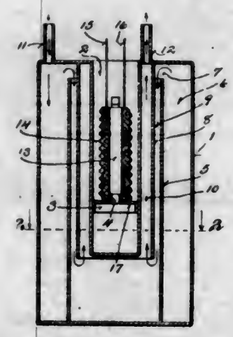
connected to the axle adjacent the ends thereof, cylinders supported by the frame of the aeroplane having closed bottom walls, a piston connected to each piston rod and operating in the cylinders, a coil spring at the closed end of each cylinder against which the piston abuts, a spring-pressed catch member adjacent each piston rod and a cam member carried by each rod for engagement by the catch when the pistons are in the lower ends of the cylinders for retaining said piston rods in a projected position, and means for manually releasing the catch members whereby the tension of the springs in the cylinders will cause the pistons to be returned to the opposite ends of the cylinders and return the axle to a normal position adjacent the lower ends of the struts.

1,767,121. SECRET-TELEGRAPHY SYSTEM. FRANCOIS CARTIER, Paris, France. Filed July 14, 1927, Serial No. 205,711, and in France Aug. 3, 1926. 7 Claims. (Cl. 178—22.)



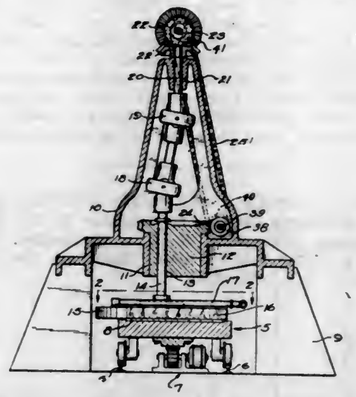
1. In a system of secret telegraphy, a manually operative key, an auxiliary key for enciphering the manually keyed signals, a perforated strip for automatically controlling said auxiliary key, an electromagnet connected to both said keys and controlled thereby for energising a line circuit, and means including said electromagnet for feeding said perforated strip forward with each impulse sent through the line circuit.

1,767,122. PORTABLE ELECTRIC WATER HEATER. CHARLES G. DEAN, Milwaukee, Wis. Filed July 3, 1929. Serial No. 375,743. 2 Claims. (Cl. 219—39.)



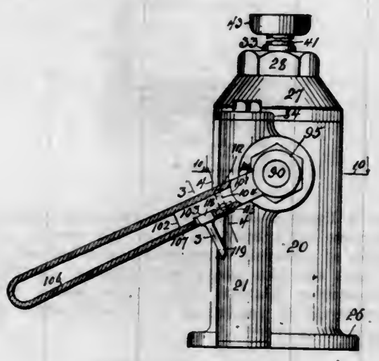
1. A device of the class described including a body forming a water receiving chamber, an inset portion extending inwardly from the top thereof to form a centrally disposed heating chamber with its inner end extending beyond the horizontal center of the body, an annular wall extending inwardly from the bottom of the body to a point adjacent the top and spaced from the outer wall of the body, a second annular wall extending inwardly from the top to a point slightly beyond the inner end of the inset portion and spaced from the first annular wall, the second wall being disposed between the heating chamber and the first annular wall to provide an indirect passage between the water receiving chamber and the heating chamber, and a heating element arranged in the heating chamber.

1,767,123. GLASS-SURFACING APPARATUS. JOHN L. DRAKE, Toledo, Ohio, assignor to Libbey-Owens Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed May 4, 1926. Serial No. 106,649. 3 Claims. (Cl. 51—120.)



1. In combination in sheet glass surfacing apparatus, a table for carrying the sheets to be surfaced in a definite substantially horizontal path, a surfacing tool arranged to rest upon said sheets a frame work having a main center bearing, a bushing journaled within said bearing above the table, a vertical spindle carrying the surfacing tool at its lower end and being journaled within the bushing eccentrically thereof, a vertical shaft centrally mounted in the top of the frame work and eccentrically arranged with relation to said spindle, a plurality of universal connections between said shaft and spindle, a worm gear carried by said bushing, a worm meshing with said worm gear, means for driving the shaft to impart rotary movement to the spindle, and operative connections between said driving means and said worm for rotating the bushing to cause a shifting circular movement of the surfacing tool upon the sheet.

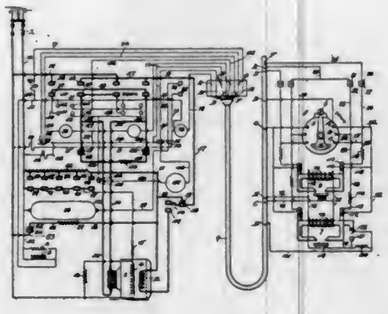
1,767,124. HYDRAULIC JACK. DAVID FLANAGAN, Bayonne, N. J. Filed May 31, 1928. Serial No. 281,709. 3 Claims. (Cl. 138—9.)



1. In an hydraulic jack the combination of an operating cylinder, a piston adapted to reciprocate in the cylinder, a supporting rod moving with the piston, a pump barrel adjacent to said cylinder, said cylinder and barrel connected by ports for an operating fluid, a plunger in said barrel having release ports, a rack formed with the

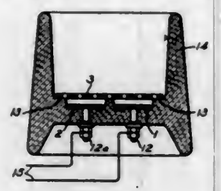
plunger, a gear chamber formed with the pump barrel, a shaft journaled in the gear chamber, a spur gear fastened to the shaft meshing with said rack, a hub fastened to said shaft having a shank with a cylindrical portion, a sleeve handle rotatably supported on the cylindrical portion of said shank to oscillate the operating shaft, means to lock the sleeve handle in different positions on said shank, said sleeve handle having an opening, and a bracket extending from the pump barrel positioned to coact with the opening in the sleeve handle to control the downward position and inclination of said sleeve handle, the lower-most portion of said sleeve handle uncovering the release ports of the plunger to release the pressure of the operating fluid under the piston in the operating cylinder.

1,767,125. ELECTRIC ELEVATOR SYSTEM. GRAHAM B. GROSVENOR, Chicago, Ill., assignor to Otis Elevator Company, Jersey City, N. J., a Corporation of New Jersey. Filed Feb. 16, 1923. Serial No. 619,425. 14 Claims. (Cl. 172—152.)



1. An electric elevator system comprising, a hoisting motor, a separately excited field winding for said motor, a series field winding for said motor, and means for connecting said series field winding in the armature circuit of said motor only during periods of retardation.

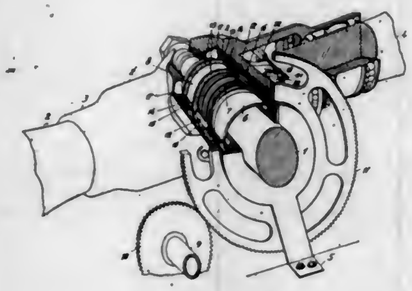
1,767,126. LIQUID-CONDUCTOR HEATER. MARSHALL W. HANKS, Madison, Wis. Filed Mar. 16, 1929. Serial No. 347,547. 4 Claims. (Cl. 219—40.)



1. In a liquid-conductor heater, the combination with a receptacle for a body of liquid, and spaced terminal electrodes of relatively large surface area located therein, of a plate electrode above said terminal electrodes in liquid-conductor relation thereto to cooperate with the body of liquid in conducting a heat-generating electric current between them.

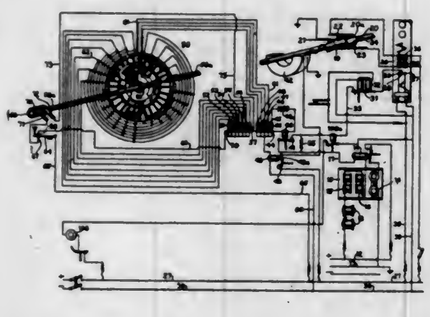
1,767,127. ADJUSTABLE PROPELLER. JAKOB HAW, Berlin-Staaken, Germany. Filed Nov. 10, 1928, Serial No. 318,363, and in Germany Nov. 12, 1927. 1 Claim. (Cl. 170—163.)

In a propeller for aircraft, whose pivoted blades have an adjustable pitch, the combination of a bush rigidly mounted on the aircraft and having an externally threaded portion arranged between the propeller shaft and boss and projecting into the latter, a setting wheel rotatably mounted on the outer non-threaded end of said bush, an internally threaded movable sleeve concentric with the propeller shaft and coupled with the setting wheel, so as



to be longitudinally displaceable and rotatable on the externally threaded portion of the bush, racks connected with the movable sleeve, so as to be entrained by the latter, and supported by guide rails inserted transversely through the propeller boss and, meshing with said racks, gears mounted on the pivotal axes of the feet of the blades.

1,767,128. PRINTING-TELEGRAPH SYSTEM. GEORGE S. HILTZ, Brooklyn, N. Y., and WILLIAM F. PURCELL, Hoboken, N. J., assignors to Stock Quotation Telegraph Company, New York, N. Y., a Corporation of New York. Filed Mar. 21, 1928. Serial No. 263,364. 16 Claims. (Cl. 178—41.)

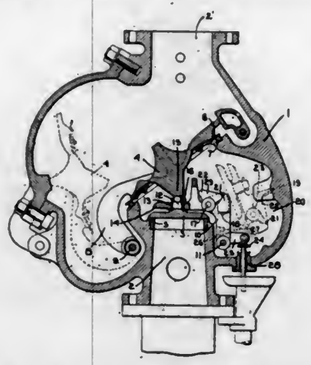


1. In a printing telegraph system, in combination, a sunflower having a revolving wiper, a unison circuit across the wiper and normally open at two points, means operable at will for closing said unison circuit at one point, and means operating in harmony with the wiper to close the unison circuit at the other point.

1,767,129. DRY PIPE VALVE. WILLIS K. HODGMAN, Jr., Taunton, Mass. Filed June 29, 1927. Serial No. 202,435. 4 Claims. (Cl. 169—22.)

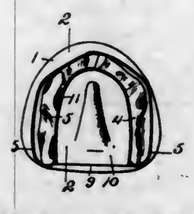
2. In a dry pipe valve, a casing having a waterway, a pivotally-mounted air valve adapted to close the waterway, a water valve also adapted to close the waterway and provided with an upstanding stem, said air valve having a portion which directly engages said stem when the valves are closed, a swinging arm pivoted to the casing and provided with an opening larger than said stem and through which the latter extends, and means to prevent

the stem from being withdrawn from the aperture, the pressure on the air valve being transmitted directly to the water valve through said stem independently of the



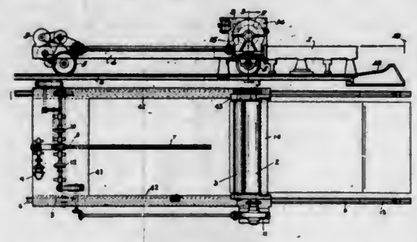
arm and the latter functioning merely as a means to guide the water valve in its opening movement, which is in a direction different from that of the air valve.

1,767,130. PLATE FRAME FOR SUPPORTING ARTIFICIAL TEETH AND METHOD OF MAKING SAME. JEPTHA G. HOLLINGSWORTH, Kansas City, Mo. Filed July 16, 1928. Serial No. 293,239. 4 Claims. (Cl. 32—4.)



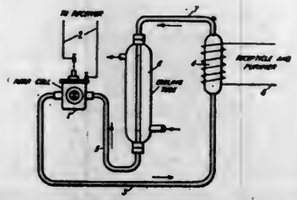
1. The method of making a plate frame for supporting artificial teeth, consisting in forming by bending over the gum portion of a matrix two sheet metal plates of pliable frame forming material, adjacent end portions of said plates meeting at the front part of said matrix, forming over the palate portion of said matrix a pliable plate, and uniting adjacent portions of said two plates with each other and with the adjacent peripheral portions of the other plate.

1,767,131. GLASS-ROLLING MACHINE. HARRIS B. HOLT, Pittsburgh, Pa., assignor to Rosedale Foundry & Machine Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed July 19, 1927. Serial No. 206,880. 1 Claim. (Cl. 49—33.)



In a glass-rolling machine the combination of a table and a truck movable relatively to the table, the truck including a body portion which throughout the range of truck movement is disposed beyond one end of the table, and including also parallel arms which in the range of truck movement advance and recede along the sides of the table, glass spreading means mounted upon the arms of the truck and in the range of truck movement advancing above the surface of the table, truck driving means including a motor borne by the body of the truck, and driving connection between said motor and glass spreading means.

1,767,132. LIGHT VALVE. GILLES HOLST, Eindhoven, Netherlands, assignor to Radio Corporation of America, a Corporation of Delaware. Filed Apr. 5, 1928, Serial No. 267,697, and in the Netherlands Apr. 13, 1927. 4 Claims. (Cl. 88—61.)



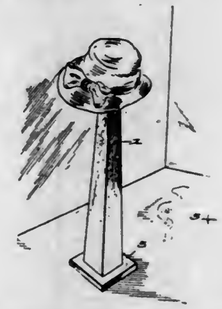
1. A system for supplying dielectric material to Kerr cells and the like which includes a closed liquid dielectric material supply system having the Kerr cell forming one part thereof, a dielectric purifying means also forming one part of said closed supply system, and means for continually circulating said dielectric material through said supply system.

1,767,133. DRUM. HENRY G. HUNT, Granville, Mass. Filed Feb. 23, 1928. Serial No. 256,275. 7 Claims. (Cl. 84—415.)



1. A drum structure comprising in combination, a pair of drums in superposed relation, each drum including an outer head and an inner head, the inner head of one drum being spaced from the inner head of the other drum to provide a central air chamber between the two drums, and means at the peripheries of said drums to secure them in the relation specified.

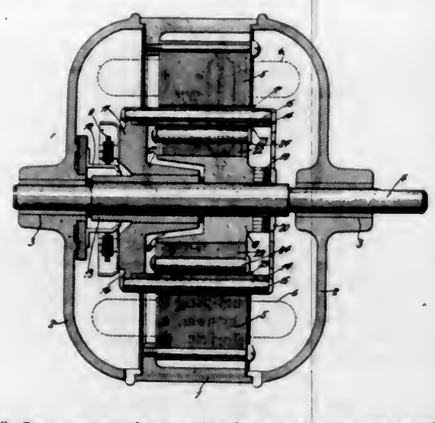
1,767,134. DISPLAY STAND. JOSEPH G. HUYE, New Orleans, La. Filed Oct. 29, 1928. Serial No. 315,811. 6 Claims. (Cl. 211—33.)



1. A display stand comprising a light tubular vertical member having tongues connected to its lower end portion

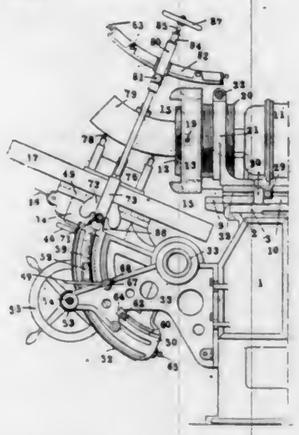
and adapted to be folded inward, in combination with a small block disposed in the lower portion of said tubular member immediately above said tongues as folded, a flat bottomed block of much larger transverse area than the base of said tubular member, and means for drawing and holding said blocks toward each other into clamping engagement with said tongues interposed between said blocks.

1,767,135. MOTOR. JOSEPH J. JANCA, St. Louis, Mo., assignor to The Emerson Electric Mfg. Co., St. Louis, Mo., a Corporation of Missouri. Filed Apr. 8, 1929. Serial No. 353,406. 5 Claims. (Cl. 172—278.)



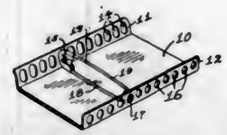
3. In a motor, the combination of an armature, with a stationary field structure having starting and main windings, means for producing a revolving field for influencing the rotation of the armature, and a device under the influence of said means for cutting in and out the starting windings aforesaid.

1,767,136. BRICK-GRINDING MACHINE. ARTHUR JONES, Belleville, Ill., assignor to U. S. Smelting Furnace Company, Belleville, Ill., a Corporation of Illinois. Filed Aug. 12, 1927. Serial No. 212,395. 7 Claims. (Cl. 51—122.)



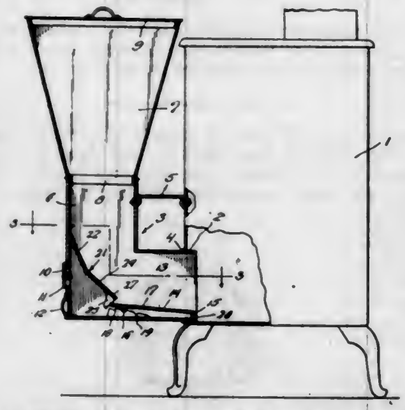
6. In a device of the class described, the combination with a grinding wheel, of a rotating and tilting table, a three-point brick support on the table, a gauge frame having adjustable gauge points on both sides and one end for positioning the brick on the support, and means for clamping a brick on the support.

1,767,137. SAFETY-PIN HOLDER. PETER KELLEY, Winsted, Conn. Filed June 3, 1927. Serial No. 196,884. 3 Claims. (Cl. 206—66.)



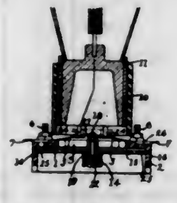
3. In a safety pin holder, a base having a pair of opposing upstanding flanges for detachably holding the ends of a row of closed safety pins, said flanges having alined sockets shaped to snugly receive the caps and coils respectively of said safety pins.

1,767,138. SAWDUST BURNER. ALLAN C. KENNEDY, Kelso, Wash. Filed Mar. 25, 1929. Serial No. 349,760. 6 Claims. (Cl. 126—225.)



1. A burner of the class described comprising a casing including a fire-box, the inner end of the fire-box being open, a grate arranged in the bottom of the fire-box and provided with air holes in the outer end portion thereof, means for adjustably spacing the outer end portion of the grate with respect to the bottom of the fire-box, the outer end of the fire-box being provided with a draft opening, and means within the outer end portion of the fire-box for delivering fuel onto the grate, said means including an inclined chute, the lower edge thereof terminating adjacent the outer edge of the grate, the upper edge of the chute adapted to engage with the outer side of the casing, and means carried by the lower edge of the chute for engagement with the adjacent edge of the grate to support the latter or to support the chute in position in the casing.

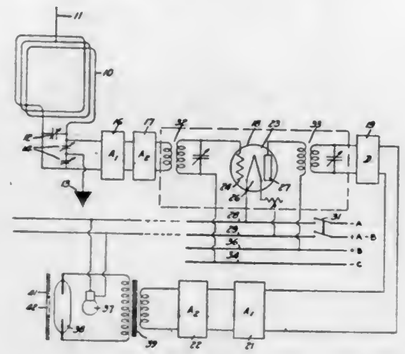
1,767,139. RADIOSOCKET. JAMES B. KIRBY, West Richfield, Ohio. Filed Sept. 15, 1925. Serial No. 56,456. 8 Claims. (Cl. 173—328.)



2. A radio socket comprising a base, a receptacle pivoted to said base, and a plurality of contact springs carried by said base and adapted to engage the contact points of

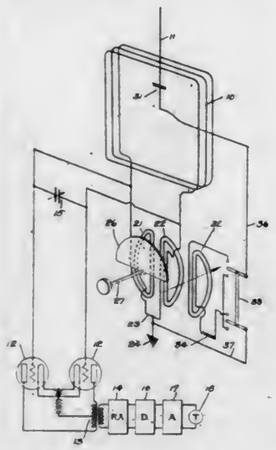
a tube secured in said receptacle, said springs serving the double function of electrical connections to said points and cushioning supports for said tube, the pivot center being located between said contact points and in substantially the same plane therewith.

1,767,140. RADIO-COMPASS INDICATOR. FREDERICK A. KOLSTER, Palo Alto, Calif., assignor to Federal Telegraph Company, San Francisco, Calif., a Corporation of California. Filed Feb. 26, 1927. Serial No. 171,141. 5 Claims. (Cl. 250—11.)



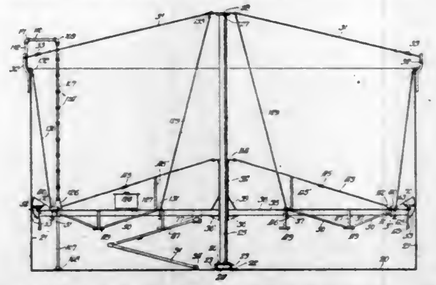
1. In a radio compass system having a directional antenna, the method which comprises utilizing received signal energy to produce light of characteristic color, effecting visibility of light of another color when the signal energy is less than a predetermined minimum, and determining from the color of light visible, critical position of the antenna with respect to the source of signal energy.

1,767,141. RADIO COMPASS SYSTEM. FREDERICK A. KOLSTER, Palo Alto, Calif., assignor to Federal Telegraph Company, San Francisco, Calif., a Corporation of California. Filed May 11, 1927. Serial No. 190,634. 7 Claims. (Cl. 250—11.)



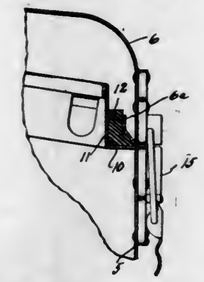
1. In a radio signaling system, a directional loop antenna, an inductance connected across the terminals of said loop, a ground connection to said inductance whereby the inductance is divided into two sections, and means including a movable inductor plate for simultaneously and oppositely varying the inductance of each section.

1,767,142. FLOATING-DECK TANK. ANDREW A. KRAMER, Kansas City, Mo. Filed Apr. 1, 1927. Serial No. 180,242. 16 Claims. (Cl. 220—26.)



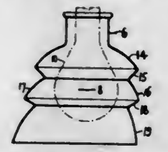
1. The combination with a tank, of a floating deck therefor and drainage means for said deck comprising a drain well carried by said deck, a drain line extending therefrom and means associated with said well permitting the flow of liquid from said deck into said well and preventing the flow of liquid from said well onto said deck.

1,767,143. METALLIC TRUNK. LOUIS M. LA DUKE, Jackson, Mich., assignor to Potter Manufacturing Company, Jackson, Mich. Filed Dec. 13, 1926. Serial No. 154,846. 5 Claims. (Cl. 190—28.)



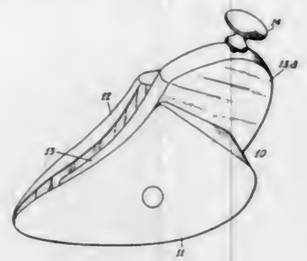
5. A trunk having a body portion provided with a horizontal shelf and inset wall at the upper extremity of its front and sides, a resilient sealing strip having a substantially horizontal lower arm resting upon the shelf and a substantially vertical arm secured to the inset wall, and a cover portion carrying a resilient strip at its front and sides arranged to contact both arms of the resilient strip while the cover is being closed.

1,767,144. REFLECTOR FOR DIRECTING LIGHT. NIELS LANO, Cleveland, Ohio. Filed Jan. 26, 1926. Serial No. 83,813. 3 Claims. (Cl. 240—103.)



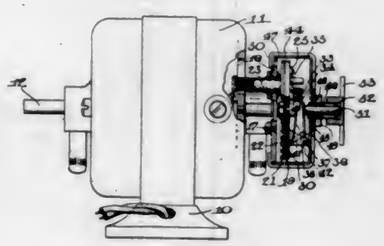
1. A tubular shaped light reflector, comprising a series of reflecting surfaces surrounding a common longitudinal axis and each having curvature compounded individually in the axial plane, and other reflecting surfaces, said surfaces being alternately inclined outwardly and inwardly telescopically and adapted to reflect light from the same source, whereby there may be produced a desired degree of light concentration to illuminate a predetermined area with a reflector of substantially smaller maximum perimeter than a continuous reflecting surface contoured to effect a similar distribution of outwardly reflected light.

1,767,145. SHOE TREE. STEPHEN D. LAYMAN, East Orange, N. J., assignor to Charles Miller, Long Island City, N. Y. Filed May 21, 1928. Serial No. 279,405. 6 Claims. (Cl. 12—128.5.)



1. A shoe tree comprising two side sections shaped to the form of a shoe or slipper and having uni-planar surfaces, an intermediate wedge shaped section having uni-planar surfaces slidably disposed with respect to said side sections, means to hold said wedge in association with said sections and to prevent their separation, means to guide said wedge section in its sliding movement, and means to grip said wedge section, said last mentioned means extending rearwardly and upwardly of said slide sections.

1,767,146. VARIABLE-SPEED ELECTRIC-MOTOR SWITCH. ROYAL LEE, Milwaukee, Wis., assignor to Lee Engineering Research Corporation, Milwaukee, Wis., a Corporation of Wisconsin. Filed Aug. 4, 1926. Serial No. 127,041. 10 Claims. (Cl. 200—80.)

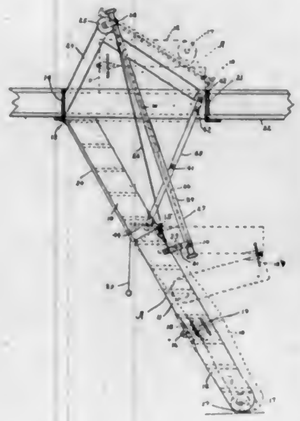


1. In a centrifugal switch, the combination of a rotary member, a pair of relatively movable resiliently mounted contacts carried by said member and separable under the influence of centrifugal force, means for conducting electric current to said contacts, and means including an actuating member movable along the axis of said rotary member for adjusting the position of one of said contacts to predetermine the speed of rotation at which the other resiliently-mounted contact will be centrifugally displaced from said first-named contact.

1,767,147. LUBRICATING OIL. NEIL MACCOULL, Jr., Englewood, N. J., assignor to The Texas Company, New York, N. Y., a Corporation of Delaware. Filed Aug. 15, 1928. Serial No. 299,881. 6 Claims. (Cl. 87—9.)

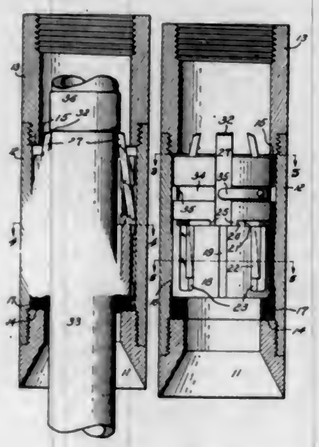
1. An unused lubricating oil for internal combustion engines consisting of a lubricating oil having a viscosity equal to or higher than that normally used for the lubrication of internal combustion engines blended with a lesser amount of a hydrocarbon boiling below 500° F. and about 2% of oxidized paraffin wax, and having a relatively low decrease in viscosity during use.

1,767,148. FOLDING AND DISAPPEARING STAIRS. REINHOLD B. MARSCHKE, St. Paul, Minn., assignor to Berthold V. Marschke, St. Paul, Minn. Filed Apr. 27, 1925. Serial No. 26,271. 6 Claims. (Cl. 228—50.)



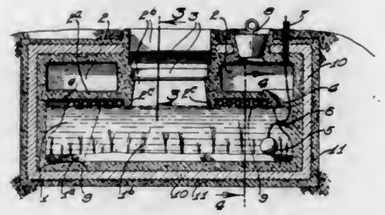
1. A folding and disappearing stairway including sectional stair members pivotally connected together having the steps therein, one of said sectional members forming the upper end of said stairs, another of said members forming the lowermost section of said stairs, and an intermediate section between the upper an lowermost stair members, and means adjacent one of said sections for folding the lowermost section over onto the adjacent section and above the top section and to project the same beyond the adjacent section when unfolding.

1,767,149. OVERSHOT. HORACE E. MARSHALL, Los Angeles, Calif. Filed Aug. 27, 1928. Serial No. 302,206. 9 Claims. (Cl. 294—90.)



1. A device of the character described, comprising; a tubular housing; a compressible annular packing ring within the housing; and longitudinally slidable means within the housing for gripping a fish, and for thereafter compressing said ring inwardly against the fish, by exerting an upward pull upon the housing; said gripping means being releasable, and capable of being made inoperative, by partially rotating the housing.

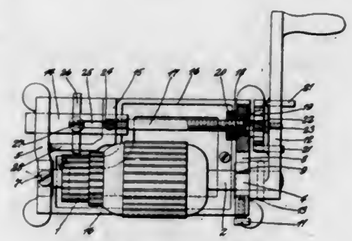
1,767,150. MEANS AND METHOD OF ACCLIMATIZING FUR-BEARING ANIMALS. GEORGE L. MCCASSEY and RALPHE H. COX, San Diego, Calif., assignors to Acclimated Fur Farm, San Diego, Calif., a Special Partnership. Filed Oct. 25, 1928. Serial No. 314,904. 12 Claims. (Cl. 119—1.)



1. The herein described method of artificially acclimatizing fur bearing animals consisting in raising said animals under normal conditions until partly grown, then placing said animals in a temperature controlled tank having dens associated therewith, and then artificially and gradually reducing the temperature of said tank for a required length of time.

4. In a means of acclimatizing animals, a tank, a refrigerating system associated therewith for controlling the temperature of said tank, and dens connected with said tank.

1,767,151. HAND LATHE. CLAUDE M. MCCORD, Richmond Heights, Mo. Filed Nov. 4, 1925. Serial No. 66,694. 14 Claims. (Cl. 82—1.)

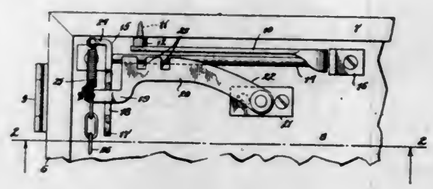


1. A machine of the character described, comprising a frame having parts designed and operative to support the bearings of an armature shaft, a crank arm, means for attaching the crank arm to the armature shaft, a cutting tool, and means operated by the crank arm for operating the cutting tool.

10. A machine of the character described comprising a frame having openings designed to receive the bearings of an armature shaft, a crank arm, means for attaching the crank arm to the armature shaft outside of said frame, a cutting tool, a gear wheel rotatively supported by the frame and held from axial movements thereby, a rod in connection with said cutting tool having threaded connection with said gear wheel for longitudinal movements by said gear wheel, and means operated by said crank for rotating said gear wheel.

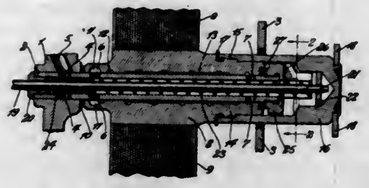
12. The method of machining armature commutators consisting in centering the armature bearings in a lathe and supporting the armature for normal rotation in said bearings, mechanically rotating the armature in said bearings, and simultaneously feeding a tool along a line parallel to the armature axis in cutting relation to the peripheral surface of its commutator.

1,767,152. LATCH. EWALD MEININGHAUS, Lancaster, N. Y. Filed Aug. 11, 1928. Serial No. 298,970. 5 Claims. (Cl. 292—271.)



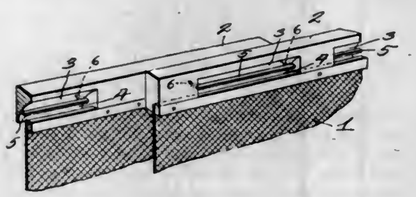
1. A device for holding a swinging member in fixed relation to its frame, comprising a flat catch bar pivotally secured to the inner side of the frame, the outer end of said catch bar being twisted and formed to provide a laterally extending end provided with an opening, a guide rod mounted on the inner side of said swinging member and penetrating said opening, and a latch carried by said swinging member and adapted to engage the edge of the laterally extending end of said catch and hold the same against movement along said guide rod.

1,767,153. LUBRICATING DEVICE. ANDREW J. PFAFF, St. Louis, and JOHN A. DRIY and CHARLES J. SINNING, Webster Groves, Mo., assignors to The Emerson Electric Mfg. Co., St. Louis, Mo., a Corporation of Missouri. Filed Sept. 22, 1927. Serial No. 221,315. 13 Claims. (Cl. 308—98.)



12. In a device of the class described, the combination of a hollow shaft having an opening through the wall thereof adapted to allow the passage of lubricant, a member revolubly mounted on said shaft, an internal shaft mounted within said hollow shaft, said internal shaft being revoluble with said revoluble member, and a spirally wound wire carried by said internal shaft having a section of spirals wound in one direction forward of said opening in the shaft wall and wound in the opposite direction rearwardly of said opening.

1,767,154. SCREEN EXIT. CHARLES ROCHON, Fall River, Mass. Filed Oct. 7, 1929. Serial No. 397,959. 2 Claims. (Cl. 156—37.)



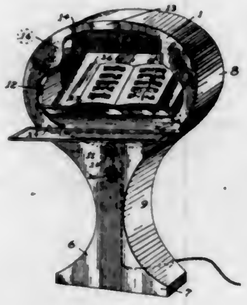
2. The combination with a screen rail exit having an arcuate bottom, of a U-shaped barrier transversely disposed in the exit in engagement with the arcuate bottom thereof, the arms of said U-shaped barrier being sharpened and imbedded in the bottom of the exit.

1,767,155. BELT-REPLACING DEVICE. ERWIN E. SCHUETTE, Milwaukee, Wis. Filed July 9, 1928. Serial No. 291,295. 4 Claims. (Cl. 64—51.)



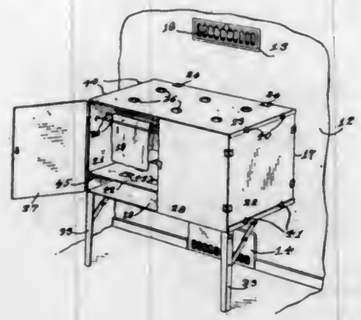
3. A belt replacing device comprising a standard having a hub at its upper end, said hub having a transverse aperture therethrough, a sleeve slidably carried by said hub, means for locking said sleeve to said hub in any desired position of adjustment, a plunger slidably carried by the outer end of said sleeve, a spring urging said plunger inwardly, a hook carried by the outer end of said plunger and having a tapered angularly set end adapted to engage a belt and the rim of a pulley, said hub having a flange adapted to engage the opposite rim of the pulley from that engaged by said hook.

1,767,156. RESONANT SHADELESS DESK. EDWARD J. SMITH, Cleveland, Ohio, assignor to Mary E. Smith, Cleveland, Ohio. Filed Sept. 2, 1927. Serial No. 217,048. 4 Claims. (Cl. 240—4.)



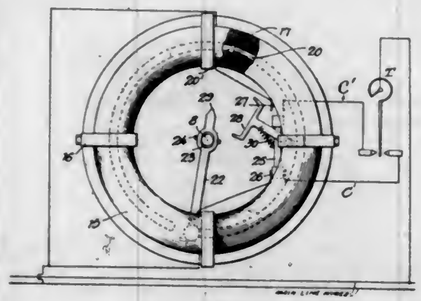
4. A hollow stand having a base portion connected by a reduced neck portion, with an upper portion having a front opening approximately oval shaped and bordered by an irregular frame portion, the latter having a projecting portion extending into the said opening, and a lamp pivotally mounted on the rear surface of said projecting portion, so that the latter will confine the light from the lamp to the interior of the stand when the lamp is directly rearward of the projection, but whose pivotal mounting will permit swinging of the lamp out into the opening and beyond the outline of the projection for adjustment purposes.

1,767,157. CLOTHES DRIER. MAURICE G. STEELE, Farmington, Conn., assignor to Revere Copper and Brass Incorporated, Rome, N. Y., a Corporation of Maryland. Filed Sept. 19, 1928. Serial No. 306,830. 9 Claims. (Cl. 34—19.)



1. In a clothes drier, a stack, having a side opening a cabinet having an inlet aperture adapted to fit said opening and adapted to receive a supply of heated air from said stack, a baffle partition above said inlet opening, a plurality of clothes-supporting racks in the upper part of said cabinet above said partition, and hook members on said stack for detachably supporting said cabinet against said stack, and means for supporting the front of said cabinet.

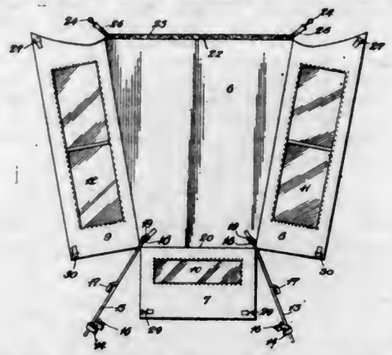
1,767,158. ELECTROMAGNETIC ROTARY MOTOR. THOMAS E. THOMAS, Ogden, Utah. Filed Dec. 11, 1928 Serial No. 325,339. 4 Claims. (Cl. 137—139.)



1. An electromagnetic rotary motor comprising a member to be rotated, a spirally arranged circular solenoid and its electric operating circuit, a reversing switch and a control switch in the circuit, a spirally arranged circular armature for the solenoid, and a lever arm between the armature and said member.

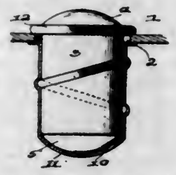
1,767,159. SHELTER COVER FOR RUMBLE SEATS. WALTER C. TZINSKI, Baltimore, Md. Filed Jan. 26, 1928. Serial No. 249,711. 3 Claims. (Cl. 296—99.)

1. An auxiliary shelter for rumble seats comprising a flexible cover, supporting standards connected to the cover near the rear corners thereof, means for connecting said standards to a vehicle body for supporting the cover over an exposed seat of the vehicle, said standards forming the sole supporting means for the rear portion of the cover, said standards including securing elements adapted to



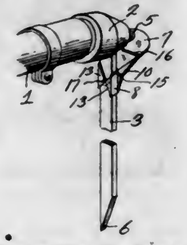
engage the vehicle body at a plurality of points whereby to maintain the standards substantially vertical and to maintain the flexible cover taut between the standards.

1,767,160. LIGHT-REFLECTING UNIT AND MEANS FOR SUPPORTING THE SAME. SIDNEY C. VINCENT, Baltimore, Md. Filed May 28, 1929. Serial No. 366,713. 7 Claims. (Cl. 88—1.)



1. A reflecting device including a lens having a threaded body portion and a support-engaging means, a threaded cap having support-engaging means and adapted to envelop said body portion and coact with the threads on said body portion, the cap and lens being adapted to be moved relative to each other, whereby the cap and lens may be secured to a suitable support.

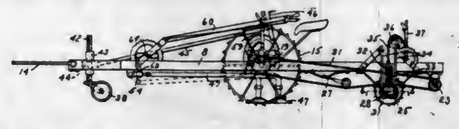
1,767,161. NOZZLE SUPPORT AND SPRAY. THOMAS J. WEAVER, Provo, Utah. Filed Oct. 16, 1928. Serial No. 312,797. 4 Claims. (Cl. 299—76.)



1. The combination with a discharge nozzle having a discharge port, a stake carried by said nozzle at an angle to said discharge port, of a deflecting member forwardly of the nozzle, said deflecting member being adjustably mounted on the stake, whereby it may be adjusted transversely in relation to the axis of the discharge nozzle.

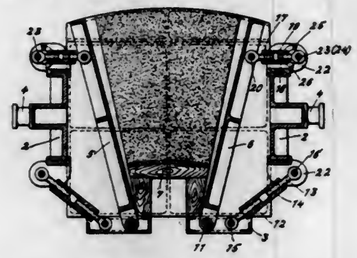
1,767,162. COMBINATION CULTIVATOR, WEEDER, AND PULVERIZER. JULIUS YACKLEY, Spokane, Wash. Filed June 7, 1929. Serial No. 369,059. 3 Claims. (Cl. 55—85.)

1. A combination cultivator weeder and pulverizer comprising a frame, a pair of tractor wheels, two relatively large spiked drums mounted for independent rotation at the rear of the frame, a chain drive arranged to rotate said drums in directions contrary to the directions of rotation



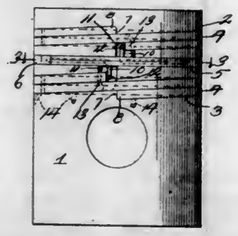
of the tractor wheels, two sets of cultivator discs mounted on substantially vertical axes in opposite halves of the frame, means for raising and lowering said discs, and mean for tilting said discs forward and backward.

1,767,163. MOLDING BOX. HUGO ACKERMANN, Godesberg-on-the-Rhine, Germany. Filed Jan. 16, 1928, Serial No. 247,223, and in Germany Jan. 17, 1927. 11 Claims. (Cl. 25—121.)



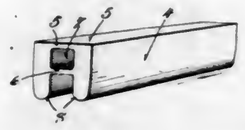
9. A molding box for slabs, blocks and other objects having at least two plane, parallel faces, molded by tamping a mass of low plasticity, comprising in combination a pair of plane, parallel walls, lateral connecting members provided at the opposite sides of the parallel walls and lower connecting members provided adjustably beneath the parallel walls, the lateral connecting members being adapted to space apart said parallel walls at a distance corresponding to the width of the object to be molded, one lower and two lateral insert elements arranged between said parallel walls, adapted to determine with their inner faces the shape of the object to be molded and bearing against said connecting members, said lateral insert elements being pivotally supported by pivots provided in said lower connecting members, spindles pivotally connected at one end with the lateral insert elements and at the other end with the lateral connecting members, means for adjusting the length of said spindles and means adapted to lift and turn the molding box.

1,767,164. PISTON AND ROD PACKING. JAMES LEO AHEAN and LETCHER GILBERT LEDGER, New Orleans, La. Filed Sept. 4, 1928. Serial No. 303,912. 7 Claims. (Cl. 74—109.)



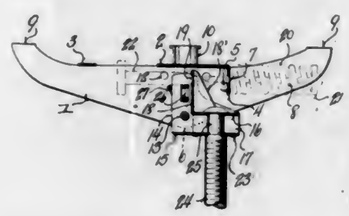
1. The combination with a piston, spaced piston ring grooves in said piston, spaced expansible piston rings in the grooves an intermediate groove of an expansible member disposed in said intermediate groove and cooperating with the expansible piston rings.

1,767,165. WEATHER STRIPPING. LE ROY M. BICKETT, Watertown, Wis., assignor to Bickett Rubber Products Corporation, Watertown, Wis. Filed Jan. 12, 1929. Serial No. 332,101. 2 Claims. (Cl. 296—445.)



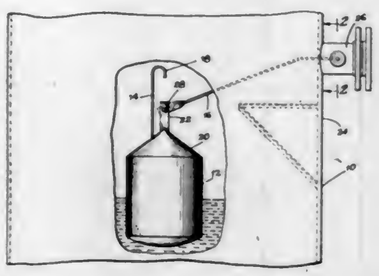
1. A weather strip molded in a single piece and including a substantially U-shaped body with a flexible intermediate unbroken transverse wall connecting the sides of the U-shaped body at a point inwardly of the free edges thereof.

1,767,166. CHAIR IRON. HARRY W. BOLENS, Port Washington Wis. Filed Feb. 11, 1929. Serial No. 339,223. 7 Claims. (Cl. 155—77.)



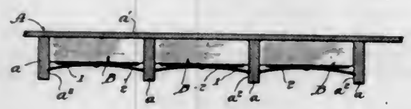
6. A chair iron comprising a spindle, a sheet metal yoke formed of upper and lower members having interlocking portions, said spindle passing through said upper and lower members and being riveted in place to secure said members together, one of said members having upwardly extending arms, the other of said members having an upwardly extending plate apertured for the reception of a spring bolt, and a spider pivoted to said arms.

1,767,167. LIQUID-LEVEL-INDICATING DEVICE. GUINTHER H. BAUNOW, Port Arthur, Tex., assignor, by mesne assignments, to The Texas Company, New York, N. Y., a Corporation of Delaware. Filed Apr. 26, 1923. Serial No. 234,916. 6 Claims. (Cl. 73—82.)



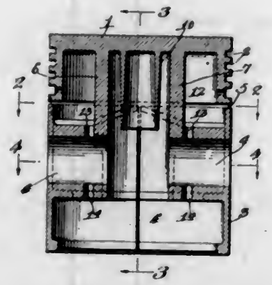
1. The combination with a still for oil maintained under heat and pressure, of a liquid level indicating device comprising, a vertically movable float disposed within the still, a chambered member secured to the outer wall of the still and in open communication with the interior thereof, a rotatable shaft supported at one end within the chambered member and having its other end extending through the opposite wall thereof, a lever arm pivotally connected at one end to the float and rigidly secured at the opposite end to the rotatable shaft, a sleeve member secured to and connecting with the interior of the chambered member for enclosing the extended end of the shaft and providing an elongated vapor space, a bearing near the outer extremity of the sleeve member for supporting one end of the shaft, packing means disposed in the outer end of the sleeve member and cooperating with the shaft for preventing the loss of pressure from the still, means for indicating the movement of the float within the still, and means responsive to the movement of the shaft for controlling the indicating means.

1,767,168. BUILDING MATERIAL. HENRY J. BURT, Jr., Wheaton, Ill. Filed Mar. 9, 1929. Serial No. 345,849. 4 Claims. (Cl. 20—4.)



1. An insulating unit for the purpose specified and means for securing it within an open-sided space consisting of a follower plate adapted to be inserted into said space outside of said insulating unit and providing means for subjecting the same to pressure, and a spring applied to the outer side of said follower plate, said spring being longer than the width of said space and in use being inserted crosswise thereof, whereby, when said spring is applied to said follower plate, it will be flexed and when released its ends will grip the side walls of said space.

1,767,169. PISTON. THOMAS FRANK BUTZEN and THOMAS C. OLSON, Madison, Wis. Filed Dec. 30, 1929. Serial No. 417,492. 6 Claims. (Cl. 74—108.)

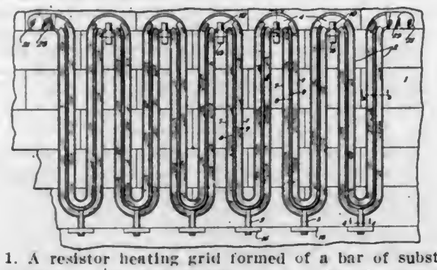


1. In a piston, in combination, a head, a skirt spaced from the head, bearing sleeves carried by the skirt, an oval-shaped sleeve connecting the head with the bearing sleeves and said oval-shaped sleeve having opposed thick side walls and opposed thin side walls.

1,767,170. SEALING COMPOUND. ALBERT M. COLEMAN, Brookline, Mass. Filed Jan. 2, 1929. Serial No. 329,968. 5 Claims. (Cl. 106—8.)

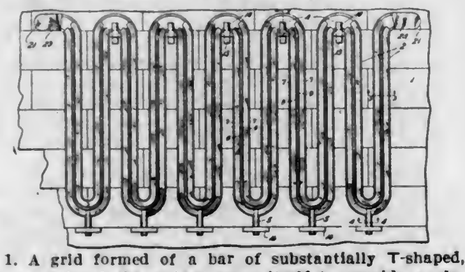
1. A sealing compound comprising graphite thoroughly mixed with corn syrup as the main ingredients thereof.

1,767,171. RESISTOR GRID. FRANK T. COPE, Salem, Ohio, assignor to The Electric Furnace Company, Salem, Ohio, a Corporation of Ohio. Original application filed Sept. 17, 1923, Serial No. 663,275. Divided and this application filed May 13, 1930. Serial No. 451,976. 13 Claims. (Cl. 266—1.5.)



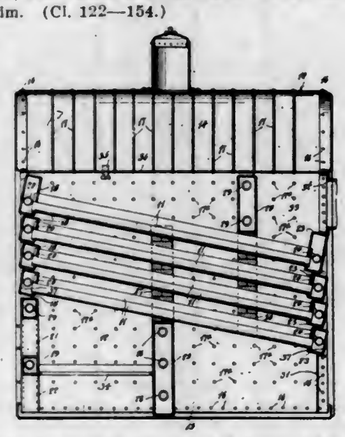
1. A resistor heating grid formed of a bar of substantial thickness of substantially channel shaped, cross sectional shape, bent upon itself to provide a plurality of vertical parallel portions connected at alternate ends by curved portions.

1,767,172. RESISTOR GRID AND METHOD OF SUPPORTING SAME. FRANK T. COPE, Salem, Ohio, assignor to The Electric Furnace Company, Salem, Ohio, a Corporation of Ohio. Filed Sept. 17, 1923. Serial No. 663,275. 3 Claims. (Cl. 266—1.5.)



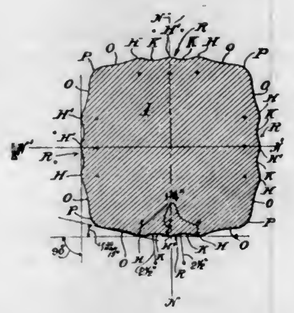
1. A grid formed of a bar of substantially T-shaped, cross sectional shape, bent upon itself to provide a plurality of vertical parallel portions connected at alternate ends by curved portions, the curved portions at the upper end of the grid being of substantially flat cross sectional shape and supporting hooks engaging said upper curved portions.

1,767,173. WATER TUBE BOILER. SAMUEL P. COULTER, Muncie, Ind. Filed Mar. 28, 1928. Serial No. 265,370. 1 Claim. (Cl. 122—154.)



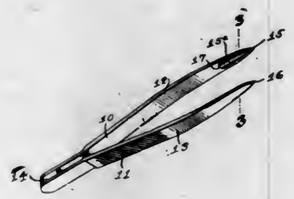
A steam generator, comprising a drum, water legs coextensive with the drum and disposed at opposite sides thereof, front and rear sets of headers spanning the water legs, the headers of each set being free of communication and connection with each other, nipples establishing communication between the water legs and the ends of the headers and constituting the sole means for connecting the headers to the water legs, one set of headers being disposed at a lower level than the other set and the headers of both sets being cross-sectionally angular in form and disposed at a slight angle to the perpendicular with the rear lower edge of each header below the horizontal plane of the front upper edge of the next lower header, tubes connecting the headers, a hollow cast steel front spanning the water legs below the front headers and having fire and ash door openings and connected to the water legs and free of communication and connection with the headers, a hollow back wall spanning the water legs below the tubes and communicating with the water legs, and a hollow baffle spanning the water legs above the tubes and communicating with the water legs.

1,767,174. INGOT MOLD AND INGOT. EMIL GATHMANN, Baltimore, Md. Filed Aug. 12, 1929. Serial No. 385,343. 7 Claims. (Cl. 22—218.)



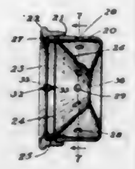
2. A metallic ingot having two sets of oppositely arranged relatively narrow primary sides and four outwardly arched corners connected to the primary sides by inwardly curved sides, at least two of the oppositely arranged primary sides being provided with a plurality of inwardly bellied corrugations, the chord of the arc of each of which is less than the radius from which said arc is struck.

1,767,175. TWEEZERS. ISIDORE B. GLASS, Waterbury, Conn. Filed Sept. 26, 1929. Serial No. 395,362. 1 Claim. (Cl. 81—43.)



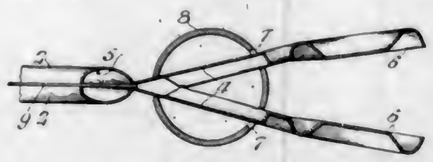
In a watchmaker's tweezers, a pair of jaws connected together at their rear ends, the forward ends of said jaws being pointed, one of said pointed ends having an interior rib and the other pointed end having an interior groove for fitting said rib, said groove and rib tapering so as to provide opposed surfaces of differing curvatures at different distances from the point.

1,767,176. AUDIPHONE. ALFRED WINSLOW HALL and JOHN R. DONNELLY, Portland, Me. Filed Sept. 14, 1928. Serial No. 305,930. 2 Claims. (Cl. 181—25.)



1. An audiphone comprising in combination a hollow body member having perforations in the wall thereof, an inwardly-dished end on said body having an aperture therethrough, a diaphragm, a second diaphragm, an annular ring adapted to hold said diaphragms in spaced relation, relatively, an annular cap securing said diaphragms and said annular ring to said body member, and a pin disposed interjacent and axially of said diaphragms and having each end unattached to and in normal contact with, but subject to intermittent separation from its adjacent diaphragm when vibrations of the latter occur.

1,767,177. COMBINED READING GUIDE AND BOOK-MARK. MABEL HARTWELL, Lake Geneva, Wis. Filed Aug. 26, 1929. Serial No. 388,344. 1 Claim. (Cl. 116—119.)

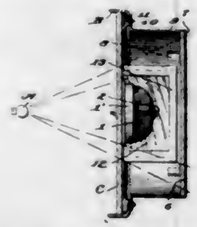


A device of the kind described embodying therein a pair of elongated open rectangular frames each including top and bottom bars, an end bar member and an end plate member, means providing a spring hinge connection for said end plate member of both frames, each of which end plate members has an extension thereon for opening said frames against the action of said means providing said spring joint.

1,767,178. FEED. HORACE T. HERRICK, ORVILLE E. MAY, and HARRY W. TITUS, Washington, D. C.; said May and said Titus assignors to said Herrick. Filed Aug. 15, 1928. Serial No. 299,870. 2 Claims. (Cl. 99—11.)

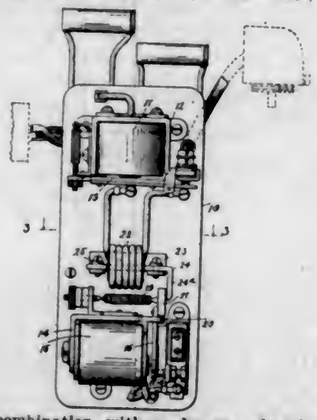
2. A feed including calcium gluconate as its essential ingredient.

1,767,179. ANTIGLARE DEVICE. MILTON G. JOHNS, Lancaster, Pa. Filed Jan. 31, 1929. Serial No. 336,612. 2 Claims. (Cl. 240—48.4.)



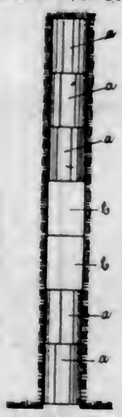
1. A light projector anti-glare device comprising a transparent closure arranged in front of the source of light, a glass closure disposed in axial alignment with, and in advance of, said transparent closure, and means for holding said glass closure in proper spaced and centered relation to said transparent closure, in combination with a concave fine-mesh wire light-beam disintegrator and diffuser mounted with its edge presented toward, and arranged substantially concentric with the center of said transparent closure and with the extreme forward portion of its convex face spaced from the adjacent face of said glass closure, and axially disposed means extending through the approximate central portions of said transparent closure and said disintegrator and diffuser for holding the same in proper relation.

1,767,180. REGULATOR. BENNETT M. LEECE, Cleveland, Ohio, assignor to The Leece-Neville Company, Cleveland, Ohio, a Corporation of Ohio. Filed Feb. 20, 1928. Serial No. 255,585. 6 Claims. (Cl. 171—229.)



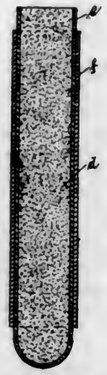
1. The combination with a dynamo electric machine having a field winding, of a regulator for varying the ampere turns of the field winding, said regulator having a vibratory armature, one or more voltage coils responsive to changes of voltage for vibrating the same, and a series coil for affecting the rate of vibration when the load reaches a predetermined value, the voltage coil or coils and the series coil having separate magnetic paths.

1,767,181. BLASTING METHOD AND TAMPING CARTRIDGE WITH UTILIZATION OF LIQUEFIED GASES. LEOPOLD LISSE, Berlin-Lichterfelde, Germany. Filed Mar. 14, 1929, Serial No. 347,140, and in Germany Oct. 22, 1926. 5 Claims. (Cl. 102—5.)



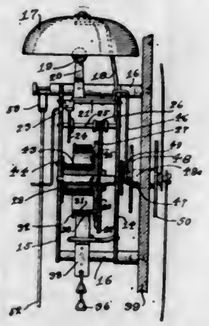
1. A blasting method with utilization of liquefied gases consisting in charging the bore hole alternately with impregnated blasting cartridges and with tamping cartridges composed of oxidizable substances.

1,767,182. BLASTING CARTRIDGE WITH COVER AND PROCESS OF PRODUCTION. LEOPOLD LISSE, Berlin-Lichterfelde, Germany. Filed Mar. 14, 1929, Serial No. 347,141, and in Germany Jan. 12, 1928. 2 Claims. (Cl. 102—6.)



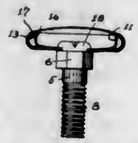
1. A process of regulating the dynamic effect of blasting cartridges, consisting in covering the cartridge coming from the impregnating bath with aluminium or equivalent material, said coating being of a thickness according to the degree of dynamic effect to be obtained.

1,767,183. ALARM CLOCK. PAUL LUX, Waterbury, Conn., assignor to The Lux Clock Manufacturing Company, Waterbury, Conn., a Corporation of Connecticut. Filed Nov. 22, 1927. Serial No. 234,988. 4 Claims. (Cl. 58—16.)



1. In an alarm clock, a cam, a time-keeping mechanism for slowly rotating said cam, a bell, a vibratory lever for sounding said bell to give the alarm, said cam normally holding said vibratory lever out of action, a line-suspended weight for supplying the power to vibrate said lever, and a take-up spring for rewinding said line when the operator raises said weight, and means for suspending said weight out of action.

1,767,184. ORNAMENTAL PROP DEVICE. EDWARD R. MARBACH, Cleveland, Ohio. Filed Apr. 4, 1928. Serial No. 267,264. 1 Claim. (Cl. 85—53.)



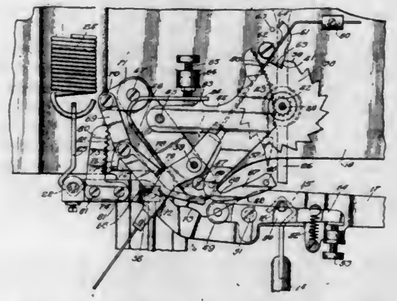
A device as specified comprising a bolt having an integral enlarged polygonal head portion and an upper plain cylindrical reduced part and an oppositely directed reduced threaded end, the polygonal head portion providing upper and lower shoulders on the bolt, and a cap for the bolt, said cap comprising an outer lower cup member seated on the upper shoulder and having a central aperture receiving said plain cylindrical part of the bolt therethrough, a reduced and apertured lower cup member seated in the outer cup member over the plain cylindrical part of the bolt, said cylindrical plain part of the bolt being swaged against said lower cup member for holding the same on the bolt, and an upper cup member seated on the lower outer cup member and having its peripheral flange telescoping and rounded with the peripheral flange of the lower outer cup member to interlock the cup members together and with the top of the upper cup member seated against the upper edge of the inner lower cup member to reinforce the cap.

1,767,185. FOOD FOR INVALIDS OR INFANTS. CARL NIELSEN, Lake Bluff, Ill., assignor to Abbott Laboratories, North Chicago, Ill., a Corporation of Illinois. Filed Sept. 11, 1926. Serial No. 134,942. 8 Claims. (Cl. 99—11.)

1. As a new article of diet, substantially unfermented milk containing as a minor added ingredient an innocuous acid in sufficient amount to substantially reduce the buffer action normally present in said milk without said acid.

3. The improvement in the art of manufacturing a readily digestible milk powder which consists in adding to substantially unfermented milk a small percentage of an innocuous acid in sufficient amount to substantially reduce the buffer action normally present in said milk without said acid, and subsequently vaporizing the liquid.

1,767,186. WEIGHING SCALE. BRUNO RADTKE, Libertyville, Ill., assignor to Mills Novelty Company, a Corporation of Illinois. Filed Mar. 15, 1926. Serial No. 94,747. 18 Claims. (Cl. 265—68.)

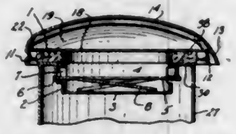


1. In a weighing scale, the combination of a pivotal weighing beam, means yieldingly resisting the movement of said beam in one direction, means engaging said beam to one side of its pivot for actuating said beam in the opposite direction upon application of weight to the scale, weight-indicating means, and means separate from, and controlled by, said beam for controlling said weight-indicating means and comprising a cam device through the medium of which said weight-indicating means are controlled.

1,767,187. CLOSURE. JAMES S. REID, Cleveland, Ohio, assignor to The Eaton Axle and Spring Company, Cleveland, Ohio, a Corporation of Ohio. Filed Jan. 9, 1929. Serial No. 331,174. 7 Claims. (Cl. 220—40.)

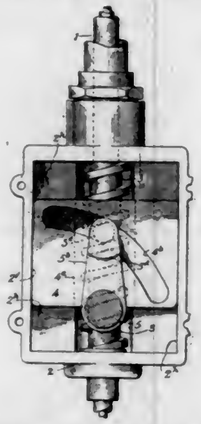
1. A closure for the openings of devices having opposed cam portions adjacent said openings, comprising an element provided with two opposed openings, and a locking member having a body portion spaced from said element and provided with locking fingers extending through and movable in said openings toward and from said element

and with integral resilient means yieldingly engaging said element and normally tending to move said body portion and said fingers from said element, whereby when the



closure is applied to a device for closing the opening thereof, the locking fingers of said closure engage the cam portions of said device with yielding effect.

1,767,188. STEERING GEAR. DAVID E. ROSS, La Fayette, Ind., assignor to Ross Gear & Tool Company, La Fayette, Ind., a Corporation of Indiana. Filed July 1, 1926. Serial No. 119,885. 12 Claims. (Cl. 74—79.)



1. A steering gear comprising a casing; an actuating member slidably mounted in the casing having a diagonally disposed curved slot; a rocker shaft, means for moving the actuating member; a finger on the rocker shaft having a pin engaging the slot; the slot in the member varying in pitch from the center towards its ends; said casing having an opening for the admission of said actuating member; and a removable closure for said opening having a bearing for the rocker shaft.

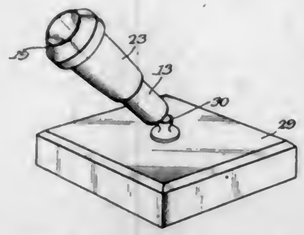
1,767,189. WRITING PEN. GUSTAV J. SENGBUSCH, Milwaukee, Wis. Filed Jan. 7, 1927. Serial No. 159,680. 4 Claims. (Cl. 120—113.)



1. In a pen of the class described, the combination of a pen point, a solid feed bar formed with a plurality of unconnected slots extending across the top and down the sides of said feed bar and constituting independent reservoirs, each adapted, when said bar is dipped in writing fluid, to retain therein a quantity of said fluid, and means for mounting said pen point and feed bar in cooperative position so that the feed bar is capable of feeding the fluid in said reservoirs to the nib of said pen point.

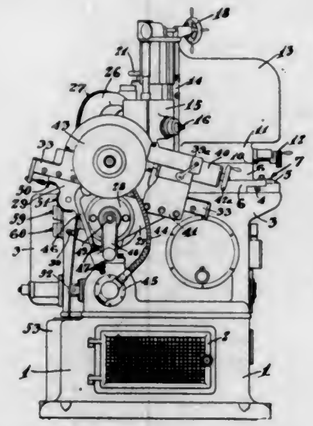
1,767,190. PEN SUPPORT. GUSTAV J. SENGBUSCH, Milwaukee, Wis. Filed Nov. 16, 1928. Serial No. 319,899. 17 Claims. (Cl. 120—108.)

1. In a pen support of the class described, the combination of an elongated tubular member having means therein for receiving the lower end of a penholder to thereby support the same, positioning means adjustable to larger or smaller size within predetermined limits for adapting the device to support pens of various cross-sec-



tional sizes substantially coaxial with said tubular member, and adjusting means, constituting part of the pen support, selectively operable to positively adjust said positioning means to larger or smaller size within said limits.

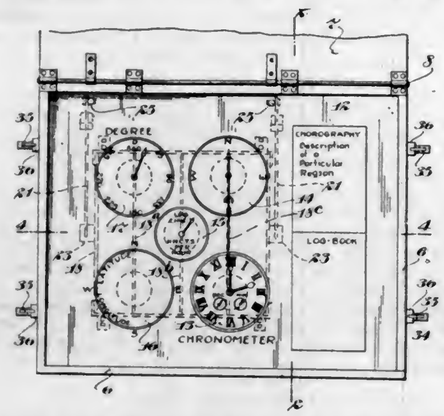
1,767,191. METHOD OF AND APPARATUS FOR GENERATING HELICAL GEARS. OLIVER G. SIMMONS, Lakewood, Ohio. Filed Mar. 26, 1928. Serial No. 264,626. 9 Claims. (Cl. 51—52.)



1. The herein described method of generating on teeth of gear shaped articles, involute helicoid surfaces having any desired axial pressure angle and any desired angle of helix by means of a cutting element engaging teeth of the blank in a single plane while the blank is oscillated about its axis and is simultaneously given correlated linear movements toward and away from the cutting element, which comprises adjusting the direction of linear movement of the blank to an angle equal to the desired pressure angle with respect to a plane perpendicular to the plane of the cutting element, and adjusting the cutting element about a fixed axis disposed at right angles with respect to the axis of the blank to an angle with respect to a plane including said fixed axis and perpendicular to the axis of the blank such that the lines of intersection of the last mentioned plane and of the plane of the cutting element with the plane of movement of the blank intersect each other at an angle equal to the desired helix angle.

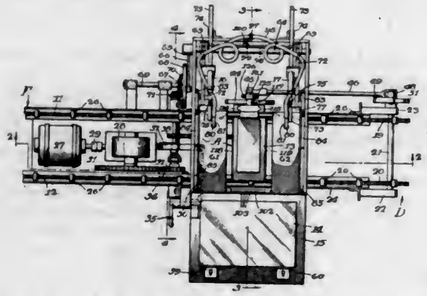
1,767,192. FLOATABLE RECORD-INSTRUMENT LOCK. WILLIAM J. STAPLETON, Minneapolis, Minn. Filed Jan. 21, 1929. Serial No. 333,977. 5 Claims. (Cl. 9—10.)

1. In a device of the kind described, a floatable casing having a displaceable cover, a plurality of indicating instruments applied in said casing, normally inactive locking means operative to lock all of said indicating instru-



ments to show conditions existing at the time of locking and means whereby closing of the cover of said casing will render said lock operative.

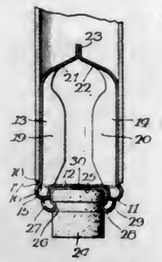
1,767,193. MACHINE FOR LINING BOXES. WAYNE E. VESEY, Plymouth, Wis., assignor to K-P-C Company, Chicago, Ill., a Corporation of Illinois. Filed July 5, 1927. Serial No. 203,285. 12 Claims. (Cl. 271—26.)



1. In a machine of the class described, means for feeding lining sheets or the like one at a time from a pile of sheets to a predetermined position to one side of said pile, said means including means for engaging the uppermost sheet on said pile, yielding means for effecting such engagement, whereby said engaging means is adapted to successively engage the top sheet at a gradually lowering height incidental to the progressive removal of sheets from the pile, means for causing said uppermost sheet to adhere to said engaging means, means for initially rasing said engaging means and a portion of the sheet adhering thereto and subsequently moving said engaging means and the sheet carried thereby to one side of the pile, and means for causing said sheet to be released from said engaging means thereby to deposit the sheet in said predetermined position.

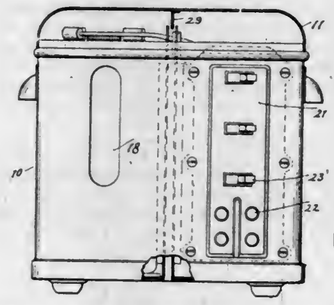
1,767,194. CUSHIONED TIP. WILLIAM A. VOLLMER, Kenosha, Wis., assignor to Simmons Company, New York, N. Y., a Corporation of Delaware. Filed Nov. 21, 1927. Serial No. 234,603. 8 Claims. (Cl. 45—137.)

4. A tip of the class described, including a compressible cushion member, means for mounting the cushion member on the end of a leg or the like and including a cup-shaped member adapted to receive said cushion, said cup member comprising bottom and side walls, the rim portion of the side wall being bent so as to form a flange extending inwardly from and laterally of the side wall of the cup member, for engaging and locking the cushion in the cup, and said rim portion being also bent so as to form an



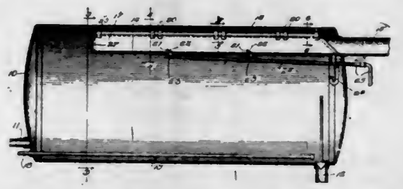
outwardly facing cornerless edge portion on the cup, which edge portion is adapted to slide over a floor surface or the like, without scratching or injuring the same when the cushion member is worn away.

1,767,195. CONTAINER FOR POWER UNITS. THEODORE A. WILLARD, Cleveland Heights, Ohio, assignor to Willard Storage Battery Company, Cleveland, Ohio, a Corporation of West Virginia. Filed Sept. 8, 1926. Serial No. 134,303. 3 Claims. (Cl. 220—22.)



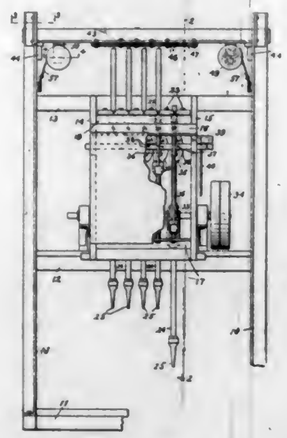
1. A container having two compartments with a double walled, vertical partition separating the compartments, said double walled partition forming a vertical air duct open at the top and extending through the bottom of the container.

1,767,196. VAPOR OUTLET FOR STILLS. ROBERT E. WILSON, Chicago, Ill., assignor to Standard Oil Company, Whiting, Ind., a Corporation of Indiana. Filed May 22, 1924. Serial No. 715,063. 9 Claims. (Cl. 196—130.)



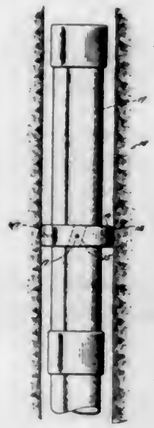
8. A vapor take-off conduit provided with a relatively narrow opening therein, a curved guide adjacent said opening adapted to impart a curved motion to vapors passing through said opening, means adjacent said guide and extending into the conduit provided with a surface adapted to receive liquid particles projected thereagainst owing to said curved motion, means for leading off the vapors and separate means for leading off unvolatilized oil.

1,767,197. TAMPING MACHINE. ARTHUR B. BABBITT, Kent, Ohio. Filed June 5, 1928. Serial No. 282,901. 8 Claims. (Cl. 25—41.)



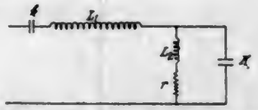
7. In a tamping machine, a frame, tampers supported therein for vertical movement, means for imparting upward impulses to said tampers, a pad against which said tampers are adapted to strike at substantially the upward limit of their motion, means upon said frame upon which said pad is adapted to fulcrum, and means connecting a remote portion of the pad with the frame comprising a device arranged to frictionally retard the upward tilting of the pad.

1,767,198. WELL-CASING-CENTERING DEVICE. REUBEN C. BAKER, Coalinga, Calif., assignor to Baker Oil Tools, Inc., a Corporation of California. Filed Jan. 31, 1928. Serial No. 250,850. 3 Claims. (Cl. 166—4.)



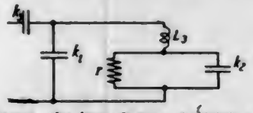
1. A device of the character described comprising a member adapted to be fixed on the exterior of a well casing and engage the sides of a well bore to maintain the casing spaced from the sides of the bore, said member having spirally formed passageways formed therethrough to assist cementitious material in enveloping the casing, said member being formed in separable parts whereby it may be assembled and clamped on a well casing.

1,767,199. LINE BALANCE FOR LOADED TELEPHONE CIRCUITS. ALBERT CHARLES BARTLETT, Watford, England, assignor to The General Electric Company Limited, London, England. Filed Mar. 30, 1925, Serial No. 19,421, and in Great Britain Apr. 4, 1924. 6 Claims. (Cl. 178—44.)



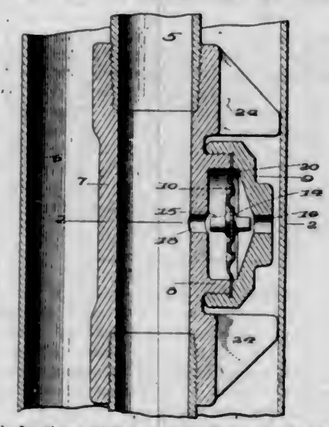
1. A line balance, the impedance of which over the range of telephonic frequencies simulates closely the sending end impedance of a periodically loaded cable terminated at half loading coil, the said balance comprising elements including a capacity, an inductance, a second inductance, and a resistance, all arranged in series, and a second capacity connected in parallel with the second inductance and the resistance, the values of the several elements being determined in terms of the constants of the line to be balanced, substantially as described.

1,767,200. LINE BALANCE FOR LOADED TELEPHONE CIRCUITS. ALBERT CHARLES BARTLETT, Watford, England, assignor to The General Electric Company Limited, Magnet House, London, England. Original application filed Mar. 30, 1925, Serial No. 19,421, and in Great Britain Apr. 4, 1924. Divided and this application filed Mar. 25, 1927. Serial No. 178,458. 3 Claims. (Cl. 178—44.)



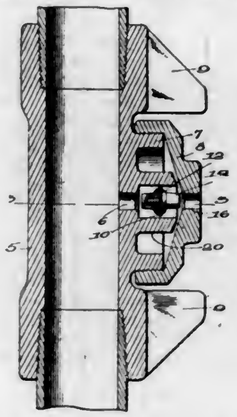
1. A line balance, the impedance of which over the range of telephonic frequencies simulates closely the sending end impedance of a periodically loaded cable terminated at half cable section, comprising a number of elements including one capacity arranged in parallel with a group of elements comprehending an inductance in series with a resistance and a second capacity connected in parallel with the resistance and a third capacity placed in series with the parallel circuits afforded by the one capacity and the group of elements, the values of the several elements being determined in terms of the constants of the line to be balanced, substantially as described.

1,767,201. STAGE-LIFT FLOWING DEVICE. ALEXANDER BOYNTON, San Antonio, Tex. Filed May 6, 1927. Serial No. 189,305. 5 Claims. (Cl. 137—111.)



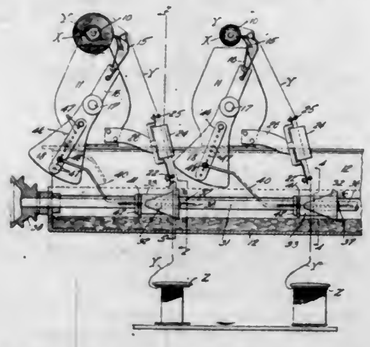
1. An induction valve comprising a body having a housing provided with a cap, said housing and the cap thereof being provided with separate aligned passages, a double acting diaphragm having the edge portion thereof engaged by said cap, valves mounted on opposite sides of said diaphragm and having stems adapted to be received in said separate aligned passages to control the effective cross sectional areas of the passages.

1,767,202. STAGE-LIFT FLOWING DEVICE. ALEXANDER BOYNTON, San Antonio, Tex. Filed May 6, 1927. Serial No. 189,306. 3 Claims. (Cl. 137—111.)



3. A valve comprising a body having a port and a housing, a leaf spring secured within said housing and consisting of oppositely slotted leaves, and a valve element extending through the slotted portions of said leaves and adapted to control said port.

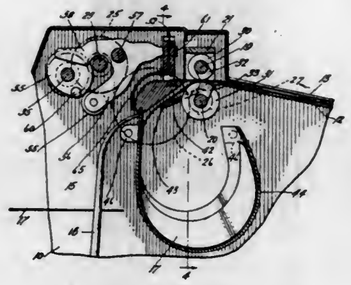
1,767,203. DEVICE FOR APPLYING OIL OR OTHER LIQUID TO THREAD. CLARENCE E. COLEMAN, Buffalo, N. Y., assignor, by mesne assignments, to Du Pont Rayon Company, New York, N. Y., a Corporation of Delaware. Filed June 18, 1925. Serial No. 37,990. 21 Claims. (Cl. 91—51.)



1. In a winding machine having a rotary support operating at an approximately constant speed of rotation and on which a thread is wound, the combination of a device having a surface with which the thread contacts at intervals in passing to said support and which is wetted to supply liquid to said thread, said surface varying in width from one end thereof to the other, and means for passing said thread over portions of said surface of greater width as the diameter of the mass of thread on said rotary support increases.

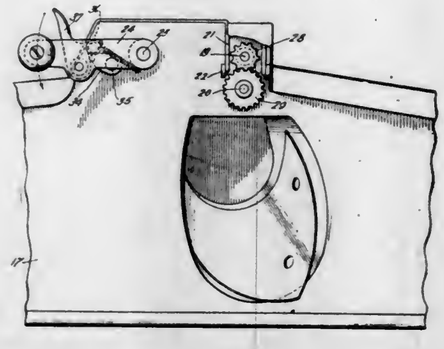
21. In an apparatus for applying a liquid to a strand having a progressively increasing speed which comprises a member having a surface which contacts with said strand, said member having a progressively varying surface, means for applying liquid to said varying surface and means for effecting a relative movement between said strand and said member in accordance with the variation in the speed of the strand.

1,767,204. AUTOGRAPHIC REGISTER. ALLEN B. COOKE, Danville, Ill., assignor to United Autographic Register Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 14, 1926. Serial No. 135,451. 19 Claims. (Cl. 282—16.)



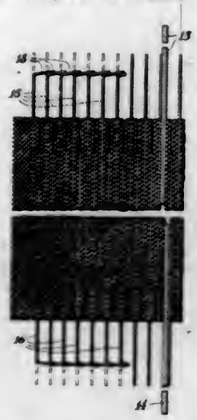
1. In an autographic register a casing including a platen, there being an opening in a side-wall of said casing, devices for feeding a paper strip across said platen, and a conical chute positioned in said casing opening into which the strip is fed and from which the same is withdrawn laterally to the side-wall of the casing.

1,767,205. AUTOGRAPHIC REGISTER. ALLEN B. COOKE, Danville, Ill., assignor to United Autographic Register Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 14, 1926. Serial No. 135,452. 16 Claims. (Cl. 271—2.1.)



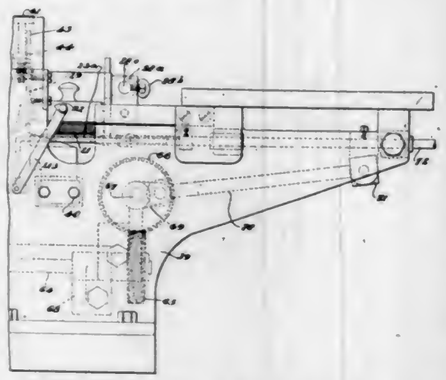
1. In an autographic register, means for normally feeding an apertured paper strip, which means include upper and lower rotatable shafts and feed roller members mounted thereon to engage the strip and which become ineffective to advance the strip upon registration with strip apertures, and initial feed mechanism consisting of feed members fixed on said shafts and adapted to intermittently engage the strip, and means for rotating said shafts at different speeds whereby one of said initial feed members describes a plurality of revolutions before being in coactive relation with its companion member.

1,767,206. FOIL CONDENSER AND METHOD OF MAKING THE SAME. HAROLD I. DANZIGER, New York, N. Y., assignor to Condenser Corporation of America, Jersey City, N. J., a Corporation of New York. Filed May 21, 1927. Serial No. 193,094. 4 Claims. (Cl. 175—41.)



1. A condenser body comprising a coiled set of layers of alternately superposed aluminum foil and paper strips, a terminal element in the coil and contacting with a foil layer, said foil layers and said terminal projecting beyond the paper layers at an end of the coil, the foil edges in a predetermined area of said coil end being bent transversely into contacting relationship, whereby said foil layers are in electrical contact with each other and electrically connected to said terminal.

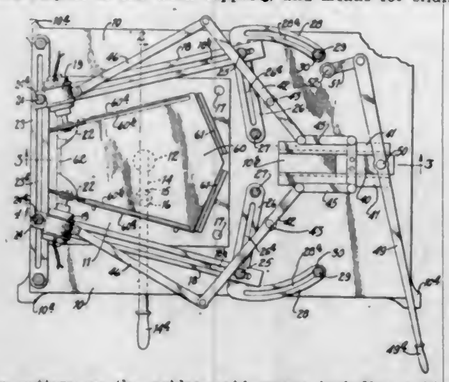
1,767,207. CARD-THROWING MACHINE. LABURTON A. GALE, Belmont, Mass., assignor, by mesne assignments, to Remington Rand Inc., New York, N. Y., a Corporation of Delaware. Filed Jan. 24, 1927. Serial No. 162,993. 20 Claims. (Cl. 271—64.)



1. In a throwing machine, a series of containers, means for successively feeding the cards of a stack along said series of containers, and means operated during the movement of and by each card to cause a card to be deposited in each of said series of containers.

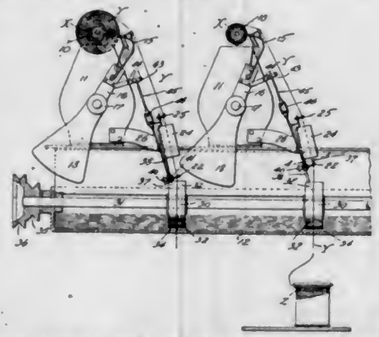
1,767,208. CUTTING MACHINE. WILLIAM GILLOOLY, Streator, Ill., assignor to Metal Stampings Corporation, Streator, Ill., a Corporation of Illinois. Filed May 20, 1929. Serial No. 364,587. 1 Claim. (Cl. 144—3.)

A machine of the character described including; a suitable base; a work support mounted thereon; means for raising or lowering the work support; a guide on the base at each side of the work support and adjacent thereto; a rotary cutter slidably mounted on each guide and adapted to engage work on the work support when in its raised position; means for adjusting the positions of the guides with respect to the work supports; and means for sliding



the cutters on the guides, said means including a block slidably mounted on the base, means for sliding the block, a pair of levers pivotally mounted on the base, links connecting the block with one end of each of said levers, and links connecting each cutter with the other end of each of said levers.

1,767,209. METHOD AND DEVICE FOR APPLYING OIL OR OTHER LIQUID TO THREAD. ERNEST K. GLADDING, Buffalo, N. Y., assignor, by mesne assignments, to Du Pont Rayon Company, New York, N. Y., a Corporation of Delaware. Filed July 2, 1925. Serial No. 41,080. 27 Claims. (Cl. 91—51.)

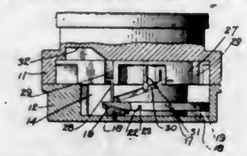


1. In a winding machine having a rotary support on which a package of thread is wound in successive layers of increasing diameters, the combination of a device having a surface with which the thread contacts at intervals in passing to said support and which supplies liquid to the thread, and means for causing said thread to contact with larger areas of said surface as the diameter of the package and the speed of movement of the thread increases.

23. The process of applying liquid to a linearly traveling thread, which comprises causing intermittent contact between the thread and a liquid bearing contact surface, and varying the duration of such contacts, considered linearly of the thread, with variations in the rate of travel of said thread.

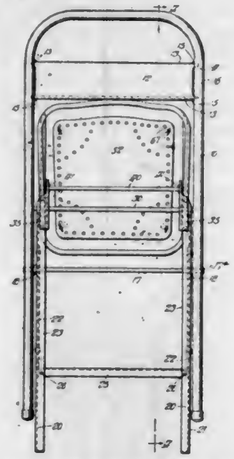
1,767,210. FLUID METER. ALBERT J. GRANBERG, Berkeley, Calif., assignor to Ralph N. Brodie Company, Oakland, Calif., a Corporation of California. Filed Apr. 30, 1928. Serial No. 273,788. 10 Claims. (Cl. 73—37.)

1. A meter comprising a casing, a channel formed in the casing, relatively fixed elements revolving about a common axis and within the channel, an intake port communicating with said channel, a discharge port communicating with said channel, said elements being caused to revolve by fluid entering the channel from the intake port, the volume of fluid passing through the channel from the



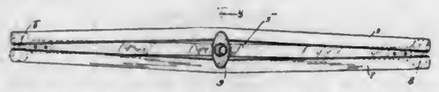
intake port to the discharge port being in direct ratio to the movement of said elements, means driven by said elements for indicating the volume of fluid passing through the discharge port, and means for varying the volume of the channel to change the ratio between the passage of fluid and the movement of said elements.

1,767,211. FOLDING CHAIR. FRANK B. HARMAN and WILLIAM ANDERSON, Kenosha, Wis., assignors to Simmons Company, New York, N. Y., a Corporation of Delaware. Filed Sept. 2, 1927. Serial No. 217,038. 8 Claims. (Cl. 155—143.)



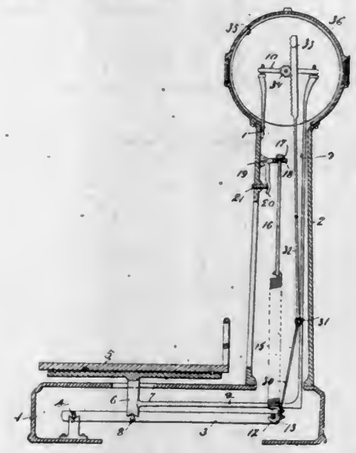
6. A folding chair comprising a frame forming the back member and front legs of the chair, a sheet metal seat having integral, depending front and side flanges, forwardly and rearwardly extending guide members secured to said seat and located on the bottom thereof inside of said side flanges, means extending through said depending side flanges and guide members adjacent the rear end of the latter and into engagement with said front legs, for pivotally mounting the seat on said frame, and rear legs pivotally connected to said front legs at a distance below the pivotal connections between said seat and front legs, and slidably connected inwardly of said side flanges to said guide members.

1,767,212. AUTOMOBILE BUMPER. JAMES M. HOWE, Cleveland, Ohio, assignor to The Eaton Axle & Spring Company, Cleveland, Ohio, a Corporation of Ohio. Filed Oct. 27, 1928. Serial No. 315,484. 8 Claims. (Cl. 293—55.)



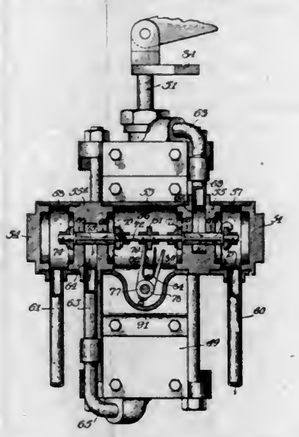
1. A bumper comprising a supporting bar and a plurality of impact bars secured to said supporting bar, said supporting bar having a central bend extending forwardly into proximity with said impact bars, one of said impact bars having a central forwardly extending bend and being tilted upwardly from a horizontal plane whereby substantially the full length of said tilted bar has a vertically arched appearance when the bumper is viewed from the front.

1,767,213. SCALE MECHANISM. LEONARD T. JOHNSON, Newark, N. J. Filed Aug. 4, 1926. Serial No. 127,069. 12 Claims. (Cl. 265—69.)



1. In a compensating scale, the combination of a weight actuated means, a spring for resisting movement of the weight actuated means, a graduated member and connections between said means and graduated member including a thermostatic device joining one end of said spring with said connections.

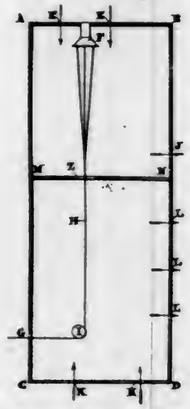
1,767,214. FLUID-PRESSURE MOTOR. ORIN KELLY, Columbus, Ohio. Filed Aug. 1, 1927. Serial No. 209,716. 4 Claims. (Cl. 121—164.)



1. A fluid-motor comprising a cylinder, a piston operating therein, and means operating automatically responsive to the movement of said piston for controlling the admission of the operating fluid to the ends of said cylinder alternately and the exhaust therefrom comprising a valve casing containing a chamber in communication with a source of fluid under pressure and containing passages in communication with the opposite ends of said cylinder, a reciprocable valve device located wholly within said valve casing and so positioned and arranged that the

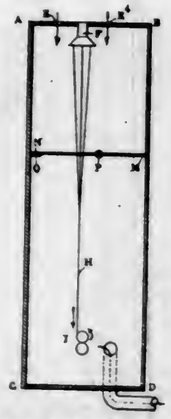
operating fluid, by the exertion of the pressure of the fluid against said valve device, holds said valve device in either of the positions to which it is shiftable, and spring means operatively engaging said valve device within said casing and operating when said piston nears the limit of its movement in either direction to become tensioned and overcome the pressure of the fluid tending to hold said valve device in shifted position and thereupon shift said device in the reverse direction.

1,767,215. APPARATUS FOR SPINNING SOLUTIONS OF CELLULOSE ETHERS OR ESTERS. MELITTA KLEIN, Vienna, Austria, assignor to Ruth-Aldo Company, Inc., New York, N. Y. Filed Mar. 27, 1928, Serial No. 265,156, and in France July 6, 1927. 16 Claims. (Cl. 18—8.)



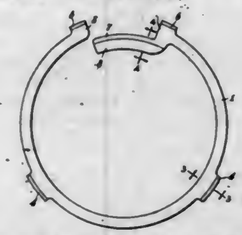
1. Apparatus for spinning cellulose ethers or esters, comprising a spinning cell, means dividing the cell into separate zones to be successively traversed by the spun thread passing through said cell, and a spinning nozzle located in one of said zones, said zones having admission and discharge orifices to provide separate circuits, one through each zone in the cell, for the circulation of air and solvent vapors.

1,767,216. APPARATUS FOR SPINNING SOLUTIONS OF CELLULOSE ETHERS OR ESTERS. MELITTA KLEIN, Vienna, Austria, assignor to Ruth-Aldo Company, Inc., New York, N. Y. Filed Mar. 27, 1928, Serial No. 265,158, and in France June 22, 1927. 5 Claims. (Cl. 18—8.)



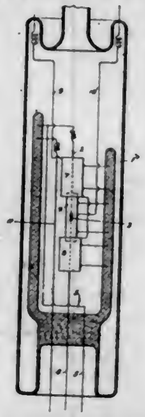
2. Apparatus for use in spinning artificial thread, comprising a spinning cell, at least one diaphragm dividing the interior of the cell into superimposed zones adapted to be traversed by the spun thread, a downwardly directed spinning nozzle in the upper zone, means for admitting air to the upper zone about the spinning nozzle, and means whereby hot air and solvent vapours can be drawn from the lower zone.

1,767,217. CLIP FOR BUCKET COVERS. FRED G. KRAFT, Buffalo, N. Y., assignor, by mesne assignments, to Du Pont Rayon Company, New York, N. Y., a Corporation of Delaware. Filed May 24, 1928. Serial No. 280,372. 7 Claims. (Cl. 118—49.)



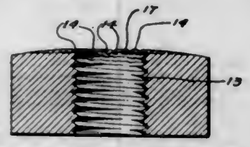
1. A device to lock a cover on a spinning bucket comprising a circular noncontinuous ring member normally having its ends spaced apart, a plurality of lugs extending outwardly therefrom and means adjacent the spaced ends to balance said ring.

1,767,218. POSITIVE-ION EMITTER. CHARLES H. KUNSMAN, Stone Church, Pa., assignor to Arthur B. Lamb, trustee. Filed Sept. 28, 1925. Serial No. 59,212. 12 Claims. (Cl. 250—27.5.)



1. An ion emitting composition comprising a substance capable of promoting the escape of positive ions, a positive ion emitting substance, and a substance which affects the quantity of such ions escaping.

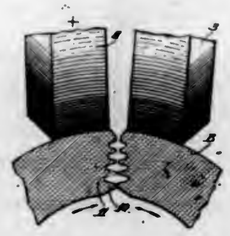
1,767,219. UNIT LOCK NUT. JOHN A. MACLEAN, Chicago, Ill., assignor to MacLean-Fogg Lock Nut Company, Chicago, Ill., a Corporation of Illinois. Filed July 30, 1927. Serial No. 209,576. 4 Claims. (Cl. 151—22.)



2. In a unit lock nut, a nut comprising a metal member having a plurality of flat sides and a threaded bore

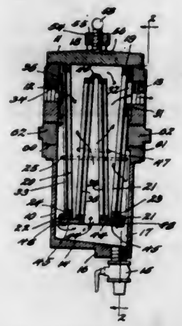
centrally located between said sides, a plurality of relatively sharp, narrow depressions formed in one face thereof, and a portion of one of the threads adjacent that face of the nut and below each depression being depressed to form similarly shaped depressions therein.

1,767,220. METHOD OF ELECTRIC WELDING. ROYAL D. MALM, La Grange, Ill. Filed Dec. 17, 1928. Serial No. 326,494. 11 Claims. (Cl. 219—6.)



1. A method of welding a seam in tubular blanks which comprises forming a plurality of projections on an opposed edge of said seam which projections decrease in height from the bottom to the top of the seam, forcing said projections progressively against the other opposed edge of said seam, and passing an electric current through said latter edge and the projections in engagement with the same.

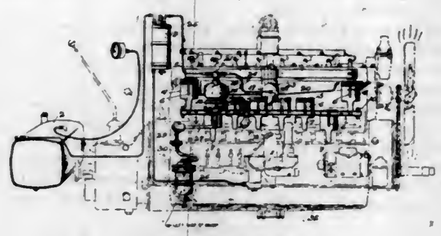
1,767,221. STRAINER. RICHARD A. MEYER, New York, N. Y. Filed Aug. 20, 1927. Serial No. 214,482. 14 Claims. (Cl. 210—165.)



1. A strainer of the class described, comprising in combination a casing having a detachable cover, a two-part screening element dividing the casing into two chambers communicating only through said screen, an inlet connected to one chamber and an outlet connected to the other, said element being of zigzag cross section, presenting rectangular screening surfaces to the liquid being treated, one part of said element being connected to the cover and detachable therewith for overhaul.

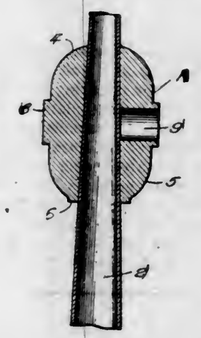
1,767,222. INTERNAL-COMBUSTION ENGINE. ALFRED MOORHOUSE, Detroit, Mich., assignor to Packard Motor Car Company, Dtroit, Mich., a Corporation of Michigan. Filed Sept. 19, 1924. Serial No. 738,684. 17 Claims. (Cl. 123—196.)

1. In combination with an internal combustion engine and an exhaust manifold therefor, a vaporizing retort secured to said manifold and surrounded by a portion of the latter, a suction connection for said retort, a float chamber positioned at a distance from said retort, means



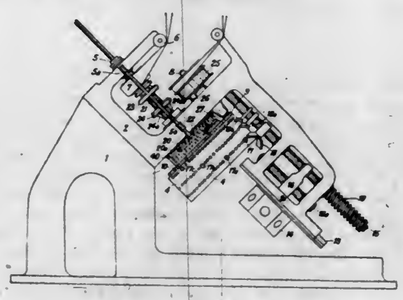
connecting said retort to said chamber, and an oil reservoir in communication with said chamber, said chamber being partially mounted within said reservoir.

1,767,223. ATTACHMENT FOR OIL CANS. EMMET H. MORROW, Chicago, Ill., assignor, by direct and mesne assignments, to Automatic Oilingseal Corporation, Chicago, Ill., a Corporation of Illinois. Filed Nov. 19, 1927. Serial No. 234,334. 5 Claims. (Cl. 221—33.)



1. An attachment for oil can spouts, comprising a resilient member having an opening therethrough for detachable application to the spouts for engaging an oil aperture, the opposite ends of said member being provided with rounded faces.

1,767,224. AUTOMATIC LATHE. FRIEDRICH MULKA, Suhl in Thuringen, Germany. Filed Nov. 4, 1926, Serial No. 146,216, and in Germany Nov. 16, 1925. 11 Claims. (Cl. 82—20.)

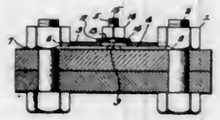


1. In an automatic lathe having a fixed face plate carrying radially movable tool supports and a rotatable

gear-driven control ring for said tool supports, said control ring being provided with a series of interchangeable and adjustable cam members, said cam members acting directly on the outer end of said tool supports for moving the latter toward the work.

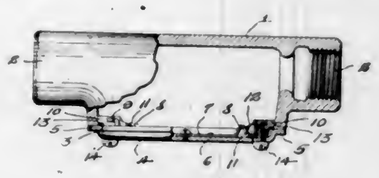
4. In an automatic lathe, a fixed face plate through which the work extends, tools mounted on the face plate and surrounding the work, said tools being movable radially of the work, a rotatable ring mounted on the face plate and having parallel circumferential grooves the walls of which are pierced with a number of openings, cams positioned within said grooves for engaging and moving said tools, each cam having an opening in line with corresponding openings in the walls of the grooves, and stay means engaged in said openings to secure the cams in position.

1,767,225. NUT LOCK. HOWARD B. OURSLER, Pittsburgh, Pa. Filed May 9, 1929. Serial No. 361,721. 5 Claims. (Cl. 151—55.)



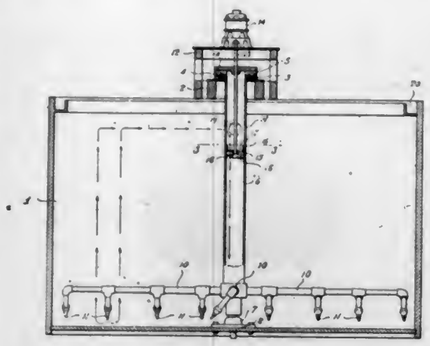
1. A nut lock comprising a contact plate designed to be arranged between the nuts of a pair of bolts and provided at its ends with means for engaging the nuts at the inner abutting faces thereof, a lock plate fitted against the contact plate and provided at its ends with recesses engaging the adjacent portions of the nuts for holding the same against rotation, said plates being provided with interfitting male and female portions interlocking the said plates, a center bolt carried by the contact plate and piercing the lock plate and provided with a nut for engaging the same, the latter bolt being provided with means for securing its nut in engagement with the lock plate.

1,767,226. COVER FOR CONDUIT OUTLET BOXES. JOHN T. PEARSON, Syracuse, N. Y., assignor to Crouse-Hinds Company, Syracuse, N. Y., a Corporation of New York. Filed Sept. 7, 1928. Serial No. 304,504. 3 Claims. (Cl. 247—15.)



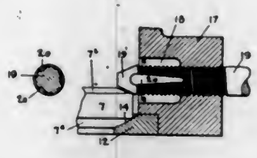
1. The combination of a conduit outlet box, having an elongated unobstructed opening in one side thereof, a cover for the open side of the box, said cover having a marginal flange for coacting with the edge wall of the box around the opening, means secured to the under side of the cover for alining the same on the opening of the box, comprising a plate with cross ribs formed near each end thereof, said ribs having inclined sides and being substantially the same length as the width of the opening in the box, wedge means located at the end of the cover and securing the cover to the box, said wedge means being movable lengthwise of the cover and operable from the outer side of the cover and when operated, engaging an inclined side of the adjacent rib and the end of the opening in the box.

1,767,227. APPARATUS FOR TREATING MIXED MATERIALS. WALTER L. REMICK, Hazleton, Pa. Filed May 20, 1929. Serial No. 364,629. 3 Claims. (Cl. 259—3.)



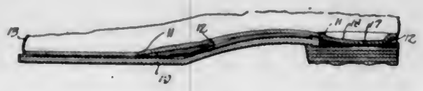
1. In an apparatus for treating mixed materials, the combination of a liquid container; a pipe rotatably mounted in said container and provided with a series of intake openings, and a series of discharge openings; and impeller means disposed in said pipe between the two series of openings.

1,767,228. VALVE. EDWIN B. SADTLER, New York, N. Y., assignor to Peabody Engineering Corporation, New York, N. Y., a Corporation of New York. Filed Dec. 6, 1927. Serial No. 238,112. 2 Claims. (Cl. 251—166.)



2. A valve unit for pulverized coal conduits comprising a casing having a valve mounted therein and a seat for the valve, said casing having threaded openings therein and recessed sections, screws supported in said openings and projecting at their inner ends into said recesses, said screws having pockets formed on their sides for the purpose described.

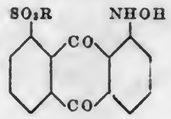
1,767,229. ORTHOPEDIC SHOE. WILLIAM M. SCHOLL, Chicago, Ill. Filed Apr. 2, 1925. Serial No. 20,049. 7 Claims. (Cl. 36—76.)



1. In a shoe, a built in stiffening shank extending from the rear of the heel to the front end of the longitudinal arch and having a heel receiving recess in the heel portion to provide a socket for the heel of the wearer; a yielding pad at the front end of the shank underlying the anterior metatarsals of the foot; and an inner sole overlying the shank and pad and having a heel receiving recess conforming to the shank recess.

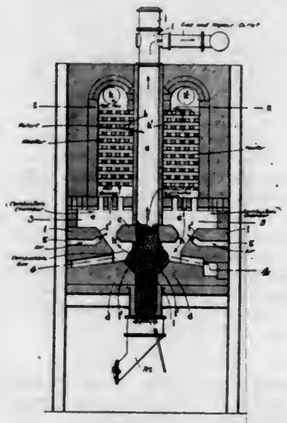
1,767,230. 1-HYDROXYLAMINO-8-SULPHO-ANTHRAQUINONE. ARNOLD SHEPHERDSON and ANTHONY JAMES HAILWOOD, Manchester, England, assignors to British Dyestuffs Corporation Limited, Manchester, England. Filed Mar. 28, 1927, Serial No. 179,182, and in Great Britain Apr. 26, 1926. 1 Claim. (Cl. 260—60.)

As a new material a substance having the probable structure



in which R stands for H or a metallic atom, which substance, in the form of the free acid, is a greyish purple powder, is moderately soluble in water to an orange red solution, dissolves easily with a deep green colour in cold caustic soda solution, dissolves in concentrated sulphuric acid, becoming yellow, and is converted by boiling aqueous alkali into a sulphonated indanthrone.

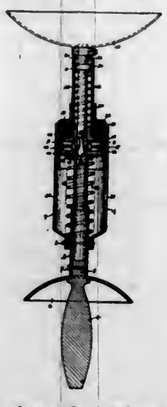
1,767,231. DISTILLATION OF CARBONACEOUS SUBSTANCES. EDGAR ROUSE SUTCLIFFE, Leigh, England. Filed July 16, 1924, Serial No. 726,294, and in Great Britain July 25, 1923. 4 Claims. (Cl. 202—111.)



1. An apparatus for the distillation of coal and similar carbonaceous substances, comprising in combination within a setting, of a substantially vertical retort, two chequered blast stoves one at each side of the said retort, means by which hot gas may be passed through one of the said chequered blast stoves alternately and means by which a gaseous medium may be passed through the other of the said chequered blast stoves alternately and into the said retort, the said setting also having combustion chambers respectively beneath each of the said chequered blast stoves, the said combustion chambers being in communication with the said respective chequered blast stoves and with the lower end of the said retort throughout both phases of the alternating cycle, the said combustion chambers serving alternately for the combustion of the said hot gas therein, substantially as hereinbefore described.

1,767,232. BALL CATCHING AND THROWING DEVICE. KARL ROBERT UHLIG, Spiegelau, Germany. Filed Jan. 26, 1929, Serial No. 335,226, and in Germany Jan. 27, 1928. 2 Claims. (Cl. 273—96.)

1. A ball-catching and throwing device comprising a casing, a spring-pressed, hollow plunger fitted in said casing, a spring-controlled rod arranged to slide in said plunger, a ball-catching shell carried on the outer end of the rod, latches adapted to retain the plunger in depressed position in the casing in opposition to its spring,



springs tending to release the latches, and a wedge on the rod adapted to retain the latches normally in operative position and to release them and the plunger on being depressed by the impact of a ball on the shell.

1,767,233. ANNUNCIATOR. NATHAN UNGER, New York, N. Y. Filed Sept. 17, 1924. Serial No. 738,252. 6 Claims. (Cl. 200—106.)

1. In an instrument of the class described, a plurality of relays each of which has two coils, an armature for each relay, a slide plate, links connecting said plate to each of said armatures whereby the plate will be moved upon operation of either of said relays, a circuit closing switch, a trip arm on said switch and a pin on said plate for engaging said arm, the pin being adapted to release said arm on a movement of said plate.

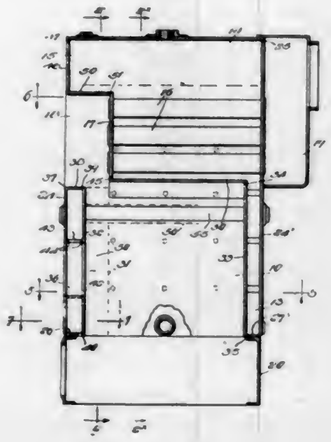
1,767,234. TREAD STOCK AND METHOD OF MAKING THE SAME. WILLIAM BURTON WESCOTT, Dover, Mass., assignor to Rubber Latex Research Corporation, Boston, Mass., a Corporation of Massachusetts. Filed Mar. 28, 1924. Serial No. 702,697. 7 Claims. (Cl. 106—28.)

6. As an article of manufacture, a rubber fibre tread stock consisting of particles of partially cured rubber and fibre constituting the major portion of the weight of the article, and interstitial latex rubber gel surrounding and uniting the particles of rubber and fibre.

1,767,235. BOILER. ROBERT W. BIRCHFIELD, Joliet, Ill., assignor to Heggie Simplex Boiler Company, Joliet, Ill., a Corporation of Illinois. Filed Oct. 29, 1924. Serial No. 746,548. 10 Claims. (Cl. 122—76.)

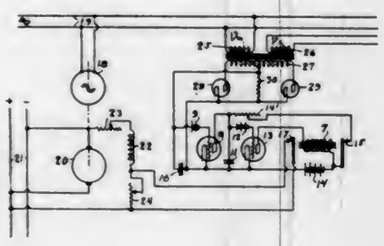
1. In a self contained boiler, a main combustion chamber in the lower part, an auxiliary combustion chamber

at the front end and above the main combustion chamber, an outer U-shaped shell, an inner shell formed to provide a crown sheet extending forward from the rear wall of the boiler to the rear end of the auxiliary combustion chamber and to provide water walls at the sides and at the front and back of the main combustion chamber and at the sides of the auxiliary combustion chamber, a baffle wall below the crown sheet and in spaced relation thereto



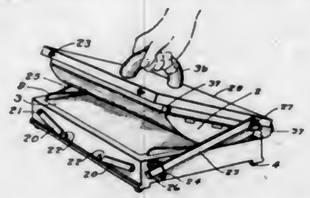
and extending from the front wall of the main combustion chamber to a point spaced forward from the rear wall of the main combustion chamber, whereby the gases of combustion are directed forwardly from the rear end of the main combustion chamber beneath the crown sheet and into the auxiliary combustion chamber, and flues extending from the auxiliary combustion chamber through the upper part of the boiler to the rear end thereof.

1,767,236. VIBRATION REGULATOR. WALTHER BOCK, Berlin-Schoneberg, Germany, and KARL RATH, New York, N. Y., assignors to C. Lorenz-Aktiengesellschaft, Berlin-Tempelhof, Germany. Filed Mar. 3, 1928, Serial No. 261,095, and in Germany Mar. 14, 1927. 6 Claims. (Cl. 171—119.)



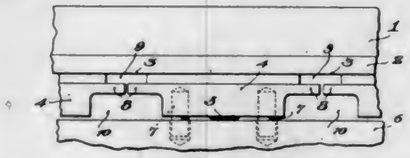
1. In a speed regulating system for a rotatable body, an electric circuit for controlling the speed of said body, a relay, a source of alternating current of constant frequency and amplitude for periodically energizing and de-energizing said relay, means for deriving an electric voltage proportional to the speed of said rotatable body, a biasing circuit for said relay supplied by said voltage, the current flowing in said biasing circuit being approximately equal to the response current of said relay when the speed of said rotatable body is normal and circuit connections whereby said relay controls said first-mentioned circuit.

1,767,237. DUPLICATING MACHINE. GERALDINE PHIN CLARK, Victoria, British Columbia, Canada. Filed July 10, 1928. Serial No. 291,516. 7 Claims. (Cl. 101—126.)



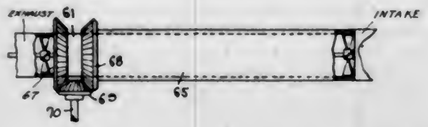
1. In a device of the class described, a base, a cover, a curved platen removably attached to the cover, means adjacent the ends of the base for resiliently supporting the platen, means for holding the platen upright at one edge of the base, an ink pad on the platen, and means for holding a stencil over the said ink pad.

1,767,238. BEARING. HARRY A. S. HOWARTH, Frankford, Philadelphia, Pa., assignor to Kingsbury Machine Works, Inc., Frankford, Philadelphia, Pa., a Corporation of Delaware. Filed Nov. 27, 1926. Serial No. 151,215. 38 Claims. (Cl. 308—160.)



1. In a bearing, in combination with an oil well and relatively movable bearing members including bearing segments, means extending throughout the major portion of the width of adjacent segments for dividing the intersegmental space into channels, the outlet of one channel being in communication with the inlet of the other channel and the opposite extremities of said channels being in communication with said oil well, whereby the oil will circulate through said channels in succession and in opposite directions.

1,767,239. ROTARY VALVE. JOHN HUSBAND, Montreal, Quebec, Canada. Filed Sept. 10, 1926. Serial No. 134,729. 2 Claims. (Cl. 123—59.)



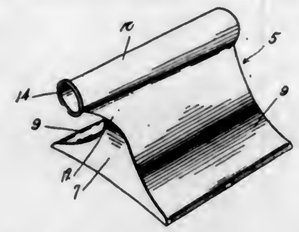
1. A rotary valve for internal combustion engines including a cylindrical valve body having spiral ports formed therein and a partition formed in the valve body providing intake and exhaust manifolds, a sleeve rotatably positioned about the valve body and formed with a plurality of ports adapted for selective registration with the main valve ports, beveled gears fixed on the forward ends of the valve body and sleeve, and a drive pinion in mesh with the said beveled gears to rotatably operate the valve body and sleeve in reverse rotary movement.

1,767,240. URINAL. MERCIE IVORY and THOMAS W. ALLRED, Nephi, Utah. Filed Sept. 25, 1929. Serial No. 395,083. 4 Claims. (Cl. 4—110.)

1. In a device of the class described, a portable container having a relatively broad bottom and a narrow top,

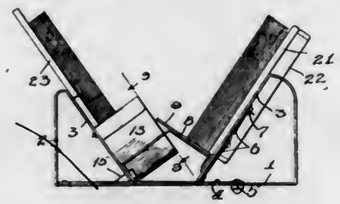
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the walls of said container at the top merging into a tubular neck extending longitudinally of the container,



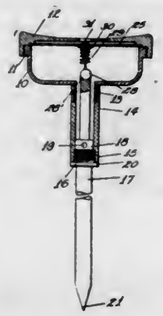
said neck being closed at one end and opened at its opposite end, and the side walls of said container curving inwardly and upwardly from the bottom to the top.

1,767,241. SHEET-HANDLING TRAY. HARRY S. JONES, Chicago, Ill. Filed Sept. 20, 1923. Serial No. 663,772. 1 Claim. (Cl. 45—57.)



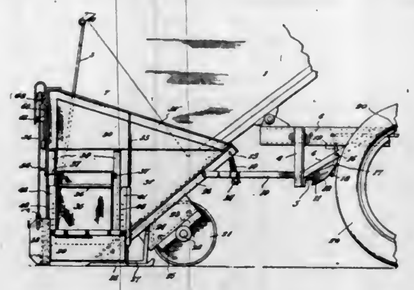
In a posting tray, a pair of transversely spaced side members, each member having a pair of inclined portions, inverted V-shaped rest members secured to the inclined portions of each member, an alining member of V-shaped trough form mounted on the said inclined portions and having its apex extending downward between said rest members, and a pair of members carried on said tray below said rest members and having converging surfaces adapted to receive the sides of the alining member adjacent its apex.

1,767,242. MICROPHONE. RAYMOND A. KIEFER, Sellersville, Pa. Filed Mar. 11, 1929. Serial No. 346,204. 4 Claims. (Cl. 181—24.)



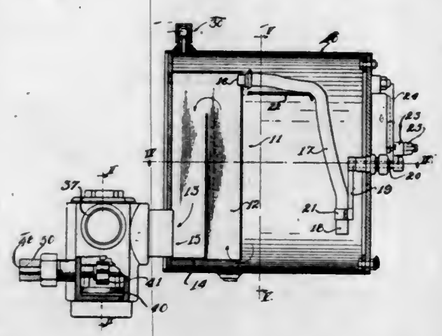
1. In a microphone, a diaphragm, a housing for the diaphragm, a rod and means for mounting the rod with one end portion spaced from the diaphragm, a coiled metallic element and an externally curved element connected with each other, these elements being interposed between the rod and the diaphragm and bearing thereon, for the transmission of sound vibrations from the rod to the diaphragm.

1,767,243. ASPHALT SPREADER. CHARLES G. KIMB, Crestline, Ohio, assignor to The Burch Corporation, Crestline, Ohio, a Corporation of Ohio. Filed July 12, 1928. Serial No. 292,224. 15 Claims. (Cl. 94—44.)



1. An apparatus for spreading road material comprising a hopper having its bottom portion and its rear wall constructed to admit free discharge of road material deposited therein, means on the front wall of the hopper for supporting the same for travel at the rear of a vehicle, and rigid draft bars pivoted to the front wall of the hopper and extending forwardly therefrom to engage with the frame of a vehicle for coupling the hopper thereto.

1,767,244. LIQUID-METERING TANK. WILLIAM B. KNICKERBOCKER, Jackson, Mich., assignor to The Knickerbocker Company, a Corporation of Michigan. Filed Nov. 7, 1927. Serial No. 231,428. 2 Claims. (Cl. 221—95.)

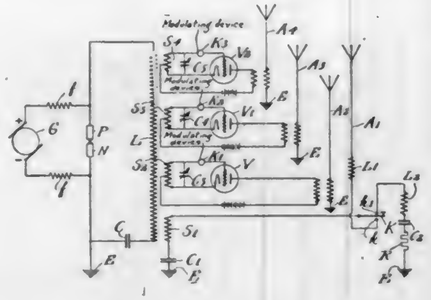


1. In a metering tank, a syphon for discharging the contents of said tank, a flexible hose having one end connected to said syphon, a shaft extending into said tank, a crank upon said shaft within said tank, means for connecting said crank and the free end of said hose, a crank upon said shaft without said casing, means for indicating the extent of movement of said last mentioned crank and a support within said tank for supporting said hose against sagging.

1,767,245. RADIO TRANSMITTING SYSTEM. FREDERICK A. KOLSTER, Palo Alto, Calif., assignor to Federal Telegraph Company, San Francisco, Calif., a Corporation of California. Filed May 23, 1925. Serial No. 32,360. 22 Claims. (Cl. 250—17.)

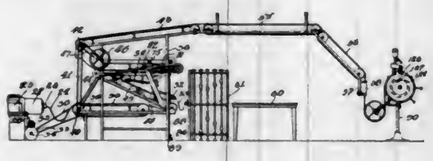
10. Transmitting apparatus comprising an arc, inductance and capacity related to produce oscillations of fundamental frequency, said inductance having characteristics causing accentuation therein of oscillations of harmonic frequency, means resonant in said inductance osci-

lations of said harmonic frequency, means for amplifying the oscillations of harmonic frequency, means for transmonic frequency, means resonant to a harmonic frequency for reinforcing in said inductance oscillations of said harmonic frequency, means for amplifying the oscillations of harmonic frequency, means for transmitting a signal or



message represented by the oscillations of harmonic frequency, means for abstracting from said inductance oscillations of fundamental frequency, and means for transmitting signals or messages represented by said oscillations of fundamental frequency at substantially their original amplitude.

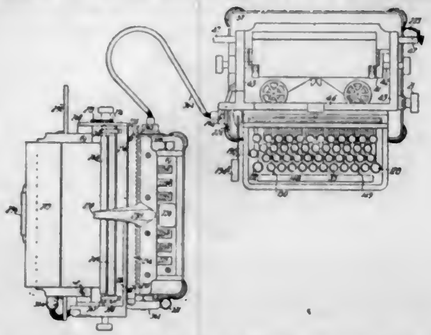
1,767,246. TREAD FORMING AND FINISHING MACHINE. ARNOLD R. KRAUSE, Eau Claire, Wis., assignor to Gillette Rubber Company, a Corporation of Wisconsin. Filed May 3, 1926. Serial No. 106,357. 24 Claims. (Cl. 154—9.)



1. A tread building machine, comprising a conveyor belt for receiving tread rubber stock in an inverted position, breaker fabric feeding mechanism positioned adjacent said belt, means for applying said fabric from said feeding mechanism to the rubber stock on said belt, cushion rubber holding mechanism arranged for cooperation with said belt, means for removing the backing cloth from said cushion rubber as it leaves said holding mechanism, and means for applying said cushion rubber to said tread rubber stock over the breaker fabric, said two applying means being arranged to lead said breaker fabric and said cushion rubber forward in substantially parallel paths disposed diagonally to the tread rubber stock.

1,767,247. TYPEWRITING MACHINE FOR THE BLIND. ALFRED G. F. KUROWSKI and CHARLES M. LAWRENCE, Brooklyn, N. Y., assignors to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Filed May 1, 1926. Serial No. 105,932. 71 Claims. (Cl. 197—6.1.)

1. Means for automatically operating an embossing typewriter for the blind from a standard typewriting machine, including a main line circuit and a series of independent circuits arranged in parallel, each of said independent circuits operating a single embossing key-lever, means controlled by each typewriter-key for closing different combinations of said circuits, and a main line switch actuated



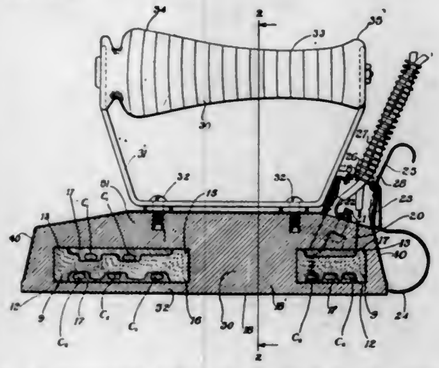
by said closing means for closing the main circuit, thereby energizing the parallel circuits to operate said embossing key-levers.

1,767,248. MATERIAL FEEDER. VERNON G. LEACH, Chicago, Ill., assignor to Modern Coal Burner Co., Chicago, Ill., a Corporation of Illinois. Filed Oct. 27, 1927. Serial No. 229,056. 2 Claims. (Cl. 198—15.)



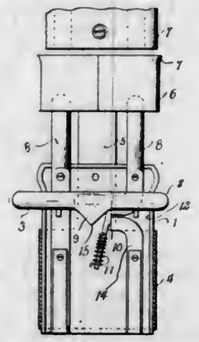
1. In an underfeed stoker, the combination with a coal hopper having a discharge neck, a retort, and a cylindrical conduit connecting the hopper and the retort, the conduit having an internal diameter substantially equal to that of the neck, of a screw conveyor extending through the conduit and into the hopper and the retort, the portions of the conveyor within the hopper and the retort having vanes with their diameter increasing toward the conduit, and that portion of the conveyor within the conduit having vanes with a pitch materially greater than the pitch of the vanes within the hopper and the retort.

1,767,249. ELECTRIC HEATER. HERBERT V. LECKIE, Stratford, and WATSON H. WOODROAD, Bridgeport, Conn., assignors to Remington Arms Company, Inc., a Corporation of Delaware. Filed Aug. 9, 1920. Serial No. 402,276. Renewed Dec. 18, 1928. 22 Claims. (Cl. 219—25.)



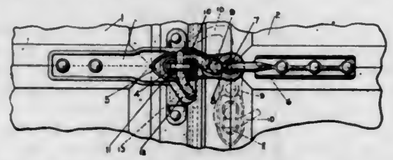
2. An electrically heated device comprising in combination a heat storing and applying body and a resistance for heating said body, a high resistance conductor having a very low resistance temperature coefficient and a regulating conductor in series therewith having a high positive resistance temperature coefficient, both conductors being adjacent to said heat storing and applying body, and connected therewith by short heat conducting paths of relatively great cross sectional area.

1,767,250. REMOVABLE-SWITCH PLUG. OMER V. LEMAY, Powers, Mich. Filed Nov. 11, 1927. Serial No. 232,642. 3 Claims. (Cl. 200—51.)



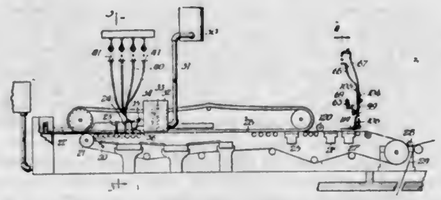
1. A device of the class described comprising a sleeve for attachment to a switch plug, said sleeve having a guide collar carried thereby and spaced above the upper end of the sleeve to provide a guide, as and for the purpose set forth.

1,767,251. DOOR-LOCKING MECHANISM FOR HOUSE CARS. GABRIEL MADLAND and KENNETH J. TOBIN, Chicago, Ill., assignors to Camel Co., Chicago, Ill., a Corporation of Illinois. Filed Aug. 4, 1927. Serial No. 210,497. 3 Claims. (Cl. 292—285.)



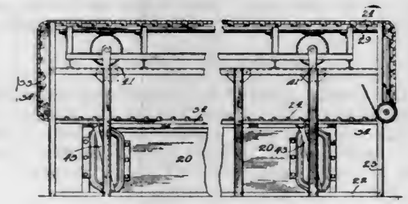
1. In a car door latching mechanism, a pivot support, a hasp having a bearing recess for receiving said support and having a forwardly extending restricted slot, and a latch hook having a headed stud extending through said slot and locked from removal by said pivot support.

1,767,252. APPARATUS FOR THE MANUFACTURE OF ORNAMENTAL PAPER. ERNST MAHLER and CHARLES G. BRIGHT, Neenah, Wis., assignors to Paper Patents Company, Neenah, Wis., a Corporation of Wisconsin. Filed Apr. 1, 1926, Serial No. 98,952, and in Canada Oct. 9, 1925. Renewed Jan. 23, 1928. 12 Claims. (Cl. 92—40.)



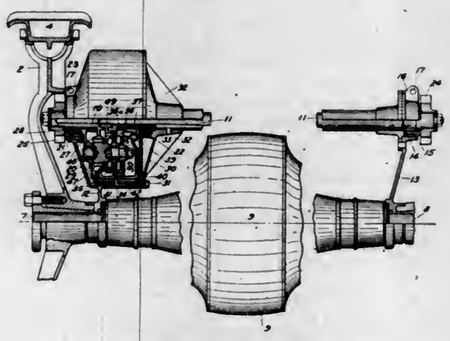
1. In apparatus for making ornamental paper, the combination with the usual traveling screen, main flow box, and slice, of a secondary flow box for blending stock beyond said slice, guide aprons for delivering the blending stock from said secondary flow box onto the base layer coming from the main flow box in the direction of travel of said base layer and while the latter is still in a fluid condition, means for depositing drops of liquid color onto the base layer between said slice and said guide aprons, and means located beyond said secondary flow box for spraying liquid color upon the upper surface of said blending stock.

1,767,253. CONTINUOUS AUTOMATIC CLEANING AND PLATING MACHINE. CONSTANTINE G. MILLER and CHARLES FRANKLIN CLEVELAND, Chicago, Ill., assignors to The Meaker Co., Chicago, Ill., a Corporation of Illinois. Filed July 3, 1926. Serial No. 120,314. 11 Claims. (Cl. 198—85.)



1. A conveyor system comprising a pair of spaced parallel endless chains, a portion of the pathway described by said chains being vertical, hanger bars propelled by said chains at fixed intervals therein, sprockets for said chains having cut-out portions to receive the ends of said bars, and a second pair of vertical chains adapted to hold said bars against the first pair of chains during the vertical downward movement thereof.

1,767,254. STEERING MECHANISM. EMIL F. NORELIUS, Davenport, Iowa. Filed Oct. 9, 1925. Serial No. 61,385. 12 Claims. (Cl. 180—9.2.)

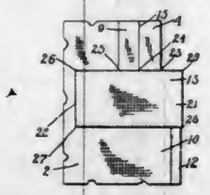


1. In a steering mechanism, the combination of differential means, a pair of shafts driven thereby, power wheels mounted on said shafts and carrying ring gears, an interrupted shaft carrying a pair of pinions meshing with the ring gears and means cooperating with the sections of the interrupted shaft whereby the sections of the shaft may be permitted to rotate as a unit or caused to rotate at different rates.

1,767,255. METHOD OF PRODUCING REAR VENTS FOR UNLINED GARMENTS. JOHN P. O'BRIEN, Chicago, Ill. Filed Feb. 11, 1929. Serial No. 338,950. 10 Claims. (Cl. 2—93.)

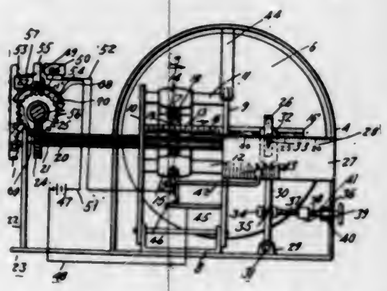
2. The method of producing a vent for an unlined garment, said method consisting of seaming together two

sections of a garment to a certain point at the junction with a vent section to provide seam inlay strips and vent underlay strips and securing one end of a reinforcing strip in said seam and bending said strip over the end of the



seam and the end of the vent section and stitching the margin of the reinforcing strip to the seam inlay and vent underlay strips and to one of said garment sections only.

1,767,256. APPARATUS FOR DISPENSING GASOLINE AND THE LIKE. SYLVESTER JOSEPH POCOCK, St. Marys, Ontario, Canada, assignor of one-half to John Knox Richardson, St. Marys, Ontario, Canada. Filed Sept. 27, 1926. Serial No. 138,073. 9 Claims. (Cl. 221—101.)



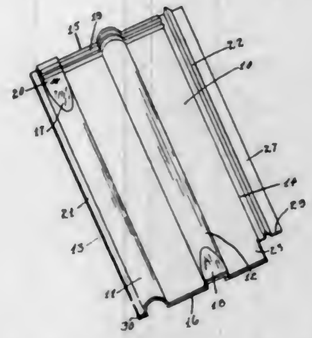
1. In a gasoline dispenser, a casing, a friction means rotatably mounted in the casing, means coacting with the purchasing coin for manually rotating said friction means a definite distance, a friction pinion contacting with the face of said friction means, and means operated by the pinion for limiting the amount of gasoline dispensed.

1,767,257. INDEX DEVICE. JAMES H. RAND, North Tonawanda, N. Y., assignor to Remington Rand Inc., New York, N. Y., a Corporation of Delaware. Filed June 11, 1924. Serial No. 719,306. 5 Claims. (Cl. 129—16.7.)



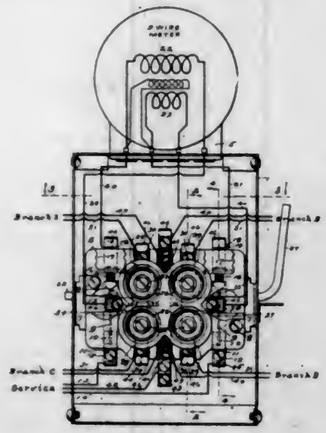
5. A holder for index slips, comprising a card, a sheath engaging one margin of the card, and strips arranged in spaced relation, each having one end permanently fixed to the card and the opposite end permanently fixed to the sheath, said strips being provided to compensate for differences in expansion and contraction between the sheath and card.

1,767,258. ROOF STRUCTURE. SAMUEL RICHMOND, Batavia, Ohio, assignor to The Edwards Manufacturing Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Oct. 4, 1927. Serial No. 223,891. 5 Claims. (Cl. 108—17.)



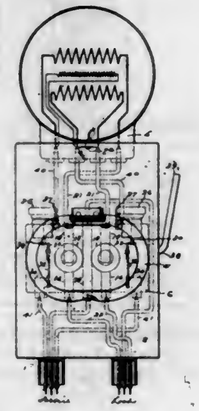
1. A relatively large, light weight, metal roofing unit adapted to have its end edges secured to the purlins of a roof structure comprising a pair of longitudinal rolls formed in the unit intermediate its side edges, one end of each roll being tapered toward its adjacent end edge, transverse corrugations formed in the unit at one end thereof forming a dam when the units are mounted upon one another, and complementary locking means formed along the opposite side edges.

1,767,259. PROTECTED ELECTRIC-METER-SERVICE APPURTENANCE. JOSEPH SACHS, West Hartford, Conn. Filed Feb. 15, 1924, Serial No. 693,010. Renewed Jan. 11, 1929. 9 Claims. (Cl. 247—2.)



4. A protected switch and fuse device comprising in combination, a box having an openable front cover with an opening therein, means whereby the cover may be sealed in closed position, an insulating base in the box having a plurality of faces adapted for mounting electrical parts, the said base being positioned in the box so as to close the said opening in the cover when the cover is closed, means forming a current path across the base and including a switch on the back face of the base and a pair of fuse receiving contacts mounted on a face of the base other than the back face, the said means being inaccessible through the said cover opening and being adapted to be connected between an incoming service wire and the service side of a meter, a plurality of pairs of fuse receiving contacts additional to those aforesaid and mounted on the front face of the base so as to be accessible through the said opening in the cover when the cover is closed, means for connecting one contact of each of the last said pairs in series with the said current path and with the meter at the load side of the latter, and a plurality of terminals inaccessible through the cover opening and corresponding in number to the last said pairs of contacts for respectively connecting the remaining contacts of the last said pairs with branch load circuit wires.

1,767,260. PROTECTED ELECTRIC-METER-SERVICE APPURTENANCE. JOSEPH SACHS, West Hartford, Conn. Filed Aug. 2, 1922. Serial No. 579,178. 16 Claims. (Cl. 247—2.)

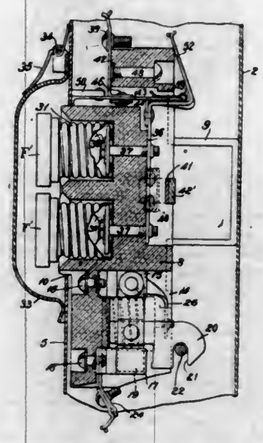


1. In a fuse block, the combination of a unitary insulating base adapted to be mounted in fixed relation to a support, the said base having a plurality of faces adapted for mounting electrical parts and respectively facing in different directions substantially at right angles to each other and one of them facing outward away from the said support, a pair of fuse receiving contacts on the last said face of the base, another pair of fuse receiving contacts on another said face of the base, and means whereby the said pairs of fuse contacts may be electrically connected in series with each other with a meter between them so that the first said contacts are on the load side of the meter and the second said contacts are on the service side of the meter.

5. In a switch and fuse block, the combination of a unitary insulating base adapted to be mounted in fixed relation to a support, the said base having a plurality of faces adapted for mounting electrical parts and respectively facing in different directions and one of them facing outward away from the said support, a pair of fuse receiving contacts on the last said face of the base, another pair of fuse receiving contacts on a face of the base substantially perpendicular to the face on which the first said fuse contacts are mounted, a switch on the face of the base opposite the face on which the first said fuse contacts are mounted, and means whereby the said pairs of fuse contacts and the said switch may be electrically connected in series with each other with a meter between the said pairs of fuse contacts so that the first said contacts are on the load side of the meter and the second said contacts on the service side of the meter.

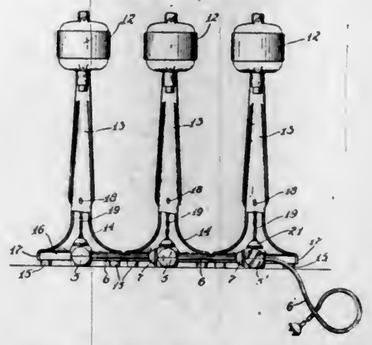
1,767,261. ELECTRIC-METER SERVICE APPLIANCE. JOSEPH SACHS, West Hartford, Conn. Filed Mar. 17, 1927. Serial No. 176,270. 18 Claims. (Cl. 247—2.)

1. An enclosed switch and fuse device comprising in combination, a cabinet including an openable flat front cover having an opening therein, means whereby the cover may be sealed in closed position, a unitary insulating base in the cabinet having service and load portions located at opposite ends thereof, the said service portion being separated from the said opening in the cover and the said load portion being immediately adjacent the said flat cover and serving to normally close the opening therein, a switch and a pair of fuse contacts connected in series with each other



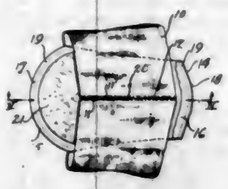
and connectible on the service side of a meter, the said switch and fuse contacts being located on the service portion of the base and being inaccessible through the said opening in the cover, means operable from the exterior of the cabinet for opening and closing the switch, and a pair of fuse contacts for a branch load circuit connectible on the load side of the meter and mounted on the load portion of the base in position to be accessible through the said opening in the cover.

1,767,262. DRINK-MIXER UNIT. GEORGE C. SCHMITZ, Racine, Wis., assignor to Arnold Electric Company, Racine, Wis., a Corporation of Wisconsin. Filed Aug. 27, 1926. Serial No. 131,834. 2 Claims. (Cl. 259—131.)



1. A drink mixer unit, adapted to be used with similar units for the formation of a drink mixer battery, comprising a drink mixer having a hollow standard and base adapted to enclose power connection devices, power connection devices extending from said mixer in said hollow standard, and a power connection device adapted to connect a plurality of said units in a drink mixer battery, said latter power connection device comprising an outwardly projecting part for connection to a source of supply, a quickly detachable connection with said extending connections, and an auxiliary power connection for use in connecting the unit with connection devices in adjacent units.

1,767,263. METATARSAL ARCH SUPPORT. WILLIAM M. SCHOLL, Chicago, Ill. Filed Dec. 1, 1924. Serial No. 753,330. 11 Claims. (Cl. 128—166.5.)

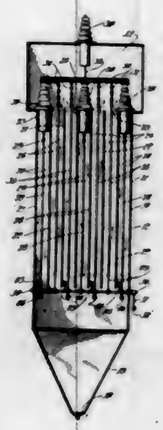


2. A foot corrective appliance comprising an elastic, closed band to be applied transversely about the foot; and a pocket structure comprising two relatively stiff plate members, one on each side of said bandage, said members secured together across their ends, leaving said members disconnected along their side edges and covered by said band whereby said pocket is substantially closed by the band.

1,767,264. FATTY-OIL COMPOSITION. ALBERT A. SOMERVILLE, Flushing, N. Y., assignor of two-thirds to R. T. Vanderbilt Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Jan. 17, 1927. Serial No. 161,709. 15 Claims. (Cl. 87—9.)

2. An oil composition comprising a fatty oil and a small amount of a condensation product of an aldehyde with an amine.

1,767,265. APPARATUS FOR ELECTRICAL PRECIPITATION. WILFRED SYKES, Chicago, Ill., assignor to The Neblett Engineering Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 29, 1926. Serial No. 151,496. 1 Claim. (Cl. 183—7.)



In electrical precipitation apparatus, the combination of a casing containing a series of partitions forming flues certain of which are closed at their upper ends and through which gaseous fluid introduced into the casing, descends, the others of said flues being open to receive, at their lower ends and direct upwardly therethrough, the fluid after passing through said first-referred-to flues, the walls of said flues forming positive electrodes, and negative electrodes located in said flues, the combined cross sectional area of those of the flues through which the fluid passes upwardly being greater than that of the others of said flues.

1,767,266. ILLUMINATING DEVICE FOR DIAGNOSTIC INSTRUMENTS. REINHOLD H. WAPPLER, Yonkers, and FREDERICK CHARLES WAPPLER, New York, N. Y., assignors to American Cystoscope Makers, Inc., New York, N. Y., a Corporation of New York. Filed Apr. 14, 1928. Serial No. 270,023. 20 Claims. (Cl. 128—6.)



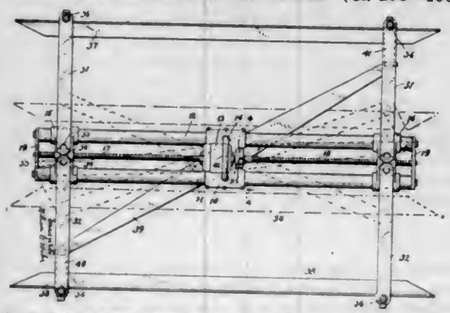
1. In an illuminating device for diagnostic instruments, a tubular casing, an incandescent-filament lamp coaxially mounted in one end of said casing, optical means in the other end of the casing and including a reflecting surface against which the light rays from the filament are directed and by which said rays are transmitted laterally from the casing, and means for rotatably adjusting said lamp in said casing to control the direction in which the light rays are directed against said surface.

1,767,267. CATHETERIZING INSTRUMENT. REINHOLD H. WAPPLER, Yonkers, N. Y. Filed Apr. 20, 1929. Serial No. 356,812. 24 Claims. (Cl. 128—349.)



1. In a catheterizing instrument, the combination of a telescope having at its inner end an objective which commands a lateral field of vision, a catheter tube mounted alongside of the telescope and rotatable about the axis of the latter, and means on the outer end of the telescope for constantly indicating the position of the catheter tube axis relative to the field of vision.

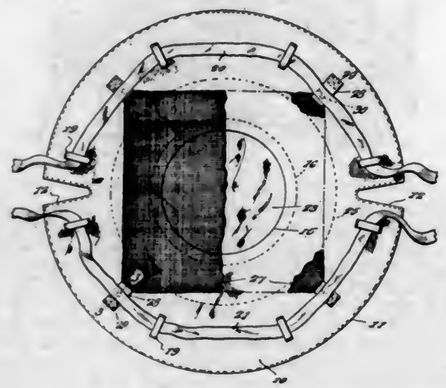
1,767,268. MECHANISM FOR HANDLING SHEET METAL. WILLIAM G. WEHA, East Cleveland, Ohio, assignor to The Cleveland Crane & Engineering Company, Wickliffe, Ohio., a Corporation of Ohio. Filed Mar. 17, 1928. Serial No. 262,505. 19 Claims. (Cl. 294—106.)



1. A mechanism for handling sheet material comprising members adapted to grip and lift the sheets, and means for

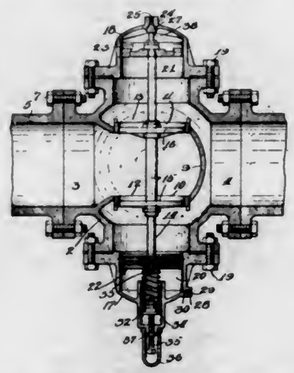
relatively moving said members, said means operating with frictional drive for one direction of relative movement of the said members and a positive drive for the other direction.

1,767,269 STRAINER FOR MILK PAILS. JENNIE M. WESTERBERG, Boring, Oreg. Filed Jan. 23, 1930. Serial No. 422,855. 4 Claims. (Cl. 210—158.)



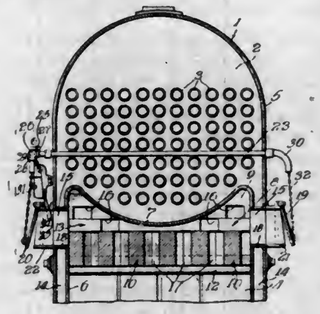
3. A milk pail strainer comprising a fabric cover having a central openings, an annular loop member sewed at the bight to the marginal portion of said opening and extending below said cover, snap fasteners at intervals near the free edges of said member and a strainer cloth receivable within the loop of said member and removable within the loop of said member and removably secured thereto by said snap fasteners.

1,767,270. PRESSURE-REGULATING VALVE. JOHN O. WOODSOME, Detroit, Mich. Filed Mar. 12, 1928. Serial No. 261,040. 1 Claim. (Cl. 50—85.)



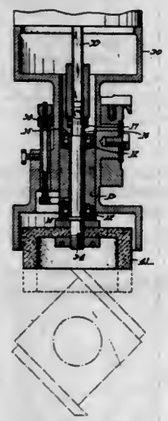
A balanced pressure regulating valve comprising a casing having alined main inlet and outlet ports and having an integral internal substantially globular shell doubly ported in a direction normal to the said main inlet and outlet ports and presenting a barrier to fluid flow in a line parallel to the fluid flow in the said main inlet and outlet ports, the said casing having a pair of auxiliary ports in alinement with the ports in the internal shell, cylinders, closed at one end, removably mounted on the casing in alinement with the said auxiliary ports, a stem extending through the internal shell and into the said cylinders, spaced plungers on the stem arranged to simultaneously close the ports in the inner shell, pistons on the stem slidable in the cylinders and normally in communication with the fluid space of the casing, the said pistons each having a diameter less than that of the said plungers, spring means arranged to balance the weight of the said stem and the plungers and pistons thereon, and means arranged to admit fluid to the pistons on the side opposite that in communication with the main outlet port.

1,767,271. DRAFT-DOOR APPARATUS. ARTHUR K. BAKER, Chicago, Ill., assignor to Heggie Simplex Boiler Company, Joliet, Ill., a Corporation of Illinois. Filed Apr. 17, 1929. Serial No. 355,874. 6 Claims. (Cl. 110—176.)



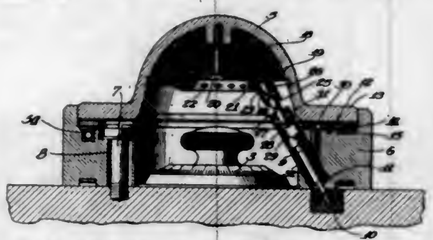
4. A boiler having a combustion chamber and provided with an opening at each side for admitting auxiliary air to the combustion chamber, doors controlling said openings, a protective conduit extending transversely through the boiler above said doors, a single door control device, a door operating means connecting said device with both the doors and passing through said conduit.

1,767,272. KNIFE-GRINDER BEARING. ARTHUR W. BEAMAN, Worcester, Mass. Filed Aug. 25, 1927. Serial No. 215,472. 3 Claims. (Cl. 308—230.)



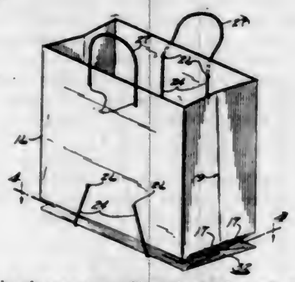
1. In a grinding machine, the combination with a hollow support, of a sleeve located therein, ball bearings in the ends of the sleeve, a spindle carried by the inner races of said ball bearings, a grinding wheel on the end of the spindle, a motor shaft at the opposite end of the spindle for driving it, a spring bearing on the inner race of one ball bearing for taking up slack between the two ball bearings and reducing vibration and a dust-excluding compressible washer located between the outer race of the other ball bearing and the grinding wheel.

1,767,273. VAULT-LOCK PROTECTOR. HERBERT BORKENHAGEN and AUGUST OLSON, Chicago, Ill. Filed June 3, 1929. Serial No. 367,917. 8 Claims. (Cl. 109—6.)



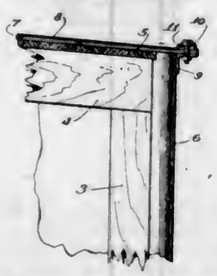
1. In a lock protecting device, a mounting ring for surrounding the controlling element of a lock mechanism, a lock cover interfitting with said ring, means for holding said cover in spaced relation to said ring, locking means for securing said cover to said ring, a noxious material contained in said cover, means in said cover for vaporizing said material, and means in said ring adapted to energize said vaporizing means upon either a shifting movement of the ring or downward movement of said cover from the locked position.

1,767,274. CONVERTIBLE LONG AND SHORT SHOPPING BAG. MARTIN T. BRODERICK, Minneapolis, Minn. Filed July 5, 1927. Serial No. 203,330. 10 Claims. (Cl. 229—53.)



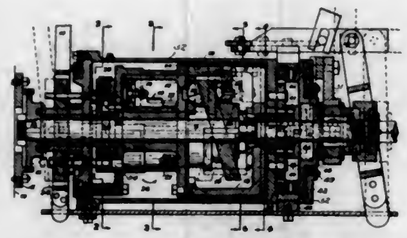
1. A bag having an accordion pleat adapted, when folded, to form a short bag and, when straightened out, to form a long bag, a supplemental bottom applied to the main bottom of the bag and having extensions overlapping the sides of the bag and reinforcing the accordion pleat.

1,767,275. METHOD OF ELIMINATING STATIC ELECTRICITY FROM COMBUSTIBLE ROOFS. NATHAN G. BURGSTER, Chicago, Ill. Filed Apr. 4, 1928. Serial No. 267,359. 1 Claim. (Cl. 173—31.)



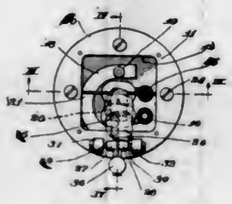
The method of protecting roofs of oil tanks and the like against damage by lightning and static electricity which tanks have roofs of non-metallic material, which consists in spraying a continuous unbroken thin electrical conductor over all of said roof, and joining the conductor to a ground.

1,767,276. FLUID-PRESSURE TRANSMISSION DEVICE. GEORGE CASSADY, New Westminster, British Columbia, Canada. Filed June 9, 1927. Serial No. 197,773. 1 Claim. (Cl. 192—59.)



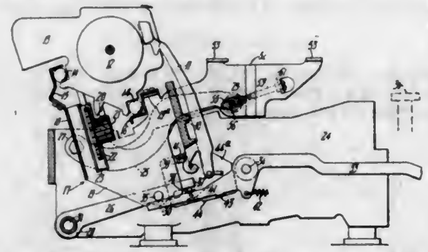
A hydraulic speed change mechanism comprising, a central and longitudinally disposed driving shaft, a flat angularly faced propeller keyed to said shaft and revolving in an oil tight enclosure, a plurality of cylinders symmetrically disposed and revolvable around the axis of said shaft, said cylinders having a common head of the nature of an end closure, the axes of said cylinders being parallel with the axis of said shaft, a cylindrical casing revolvable on said shaft and surrounding the said cylinders and the said propeller enclosure to form a second oil tight enclosure, hollow pistons slidable in said cylinders and each provided with a lateral aperture, an aperture in the wall of each said cylinder corresponding with the said piston wall aperture and adapted to intermittently register with same whereby oil may be admitted from the said second oil enclosure to the interior of the said hollow piston, a valve aperture in the head end of each of said pistons said valve aperture being closable by a spring controlled valve, hemispherical members having their flat surfaces slidably contacting the angular flat front and rear surfaces of said propeller, arcuate concave recesses in and connected with the tail ends of said hollow pistons, said arcuate recesses being adapted to oppositely engage the slad hemispherical members whereby upon the revolution of the said propeller the said pistons are reciprocated in a direction parallel to the axis of the said drive shaft, an annular cavity formed in a head integral with said cylinders, an aperture connecting the said annular cavity with the said second oil enclosure, a throttle valve controlling the effective area of the last said aperture, apertures in the head ends of said cylinders connecting with valve controlled passageways leading to said annular cavity, and means controlling the operation of said throttle valve.

1,767,277. ACOUSTICAL DEVICE. RAYMOND T. CLOUD, Chicago, Ill., assignor to Orchestraphone Company, Chicago, Ill., a Corporation of Delaware. Filed Mar. 19, 1928. Serial No. 262,633. 22 Claims. (Cl. 179—100.41.)



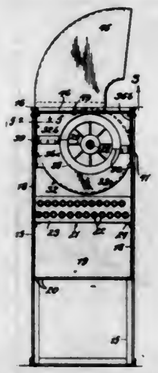
1. In combination, a vibratory element, and a damping medium having the acoustical characteristics of printers' roll composition therefor carried solely by the vibratory element.

1,767,278. TYPEWRITING MACHINE. WILLIAM A. DOBSON, Bridgeport, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Filed July 21, 1927. Serial No. 207,368. 21 Claims. (Cl. 197—149.)



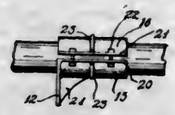
1. In a typewriting machine, the combination with a main frame, a platen-carriage mounted for case-shift movement upon a shift-frame, a parallel link-system including an upper and a lower link at either side of the machine to connect said shift-frame to the main frame and to guide its up-and-down case-shift movement within the main frame, whereby said links at their rear ends are pivoted to the main frame and at their forward ends to the shift-frame, and swinging type-bars of a device at either side of the machine to change the forward articulation point of the upper links, so as to allow either side of the shift, frame to be adjusted independently and relatively to the main frame, said device including a shouldered hub to serve as a forward pivot for the upper guide-link, said hub slidable in a slot of the shift-frame side plate, a screw to fit into said hub and having a head which holds the link in place upon the shouldered hub and having a nut to tighten up said screw, so that the shouldered hub within the slot may be secured to the shift-frame in adjusted position, and an auxiliary screw idling relatively to the shift-frame and threaded into the head of said first-mentioned screw rectangular thereto, so that, by rotation of said auxiliary screw, the shouldered hub or pivot may be adjusted within the slot to obtain proper relation between the platen-carriage and the type-bars, and means to lock said auxiliary screw in place.

1,767,279. FAN HOUSING. CLAUDE A. BULKELEY, Kenmore, N. Y., assignor to Niagara Blower Company, Buffalo, N. Y., a Corporation of New York. Filed Apr. 8, 1929. Serial No. 353,530. 5 Claims. (Cl. 230—133.)



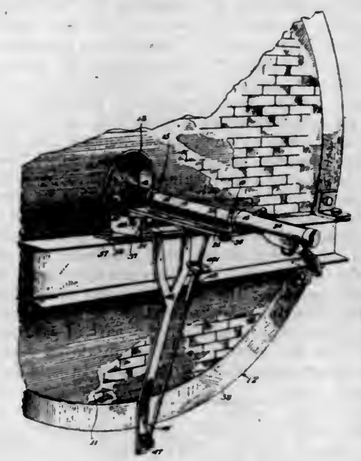
1. In an apparatus of the character described, an open ended sheet metal casing, a sheet metal fan housing arranged in said casing, said fan housing being composed of two sections removable through the open end of said casing, each of said sections being independently attached to and exclusively supported by said casing in cooperative relation to one another.

1,767,280. CLAMP. GEORGE G. FENHOUSE, Melrose Park, Ill. Filed July 17, 1926. Serial No. 123,072. 2 Claims. (Cl. 248—31.)



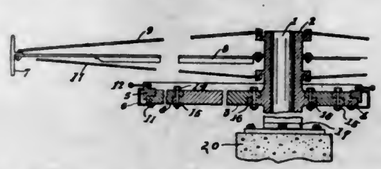
1. In a clamp, a pair of hinged complemental clamping elements of light material defining a circular passage for receiving a pipe to be clamped therebetween, said elements having a length considerably greater than the diameter of said pipe, an outwardly projecting longitudinal flange on each of said elements, a circumferential rib integral with the exterior of each element and terminating in the flange for strengthening the elements longitudinally and transvrsely, a bolt on each side of the rib extending through the flange of each element for clamping said elements around the pipe, and an anchoring plate integrally formed at the end of one of the elements.

1,767,281. BURNING KILN. GEORGE HENRY GARRISON, Bridgeport, Conn., assignor to Remington Arms Company, Inc., a Corporation of Delaware. Filed Apr. 15, 1925. Serial No. 23,396. 7 Claims. (Cl. 89—1.)



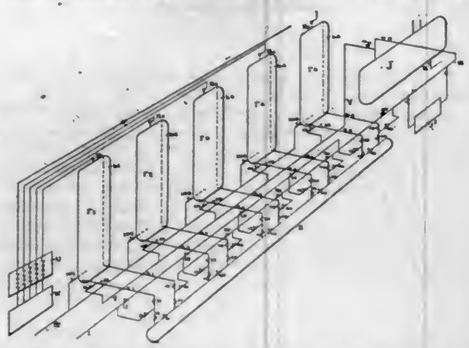
1. Means for mounting a firearm on a burning kiln comprising a yoke having ends which encircle the barrel of said firearm, and a recoil spring abutting one of said ends.

1,767,282. PUMPING POWER. BERT G. GOBLE, Tulsa, Okla, assignor to W. A. Quigley. Filed Apr. 16, 1928. Serial No. 270,371. 4 Claims. (Cl. 74—1.)



2. An adjustable eccentric comprised of a hub having an outwardly extending flange, an inner ring having a flange riding on said outwardly extending flange, an outer ring having a flange riding on said niner ring, rim means encircling said outer ring, means for holding the inner and the outer rings together, and means for holding the inner ring and the hub flange together.

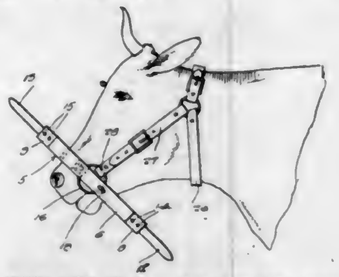
1,767,283. CONTINUOUS LOW-TEMPERATURE PROCESS AND APPARATUS FOR TREATING HYDROCARBONS. WILLIAM L. GOMORY, Chicago, Ill., assignor to Standard Oil Development Company, a Corporation of Delaware. Filed Nov. 24, 1923, Serial No. 676,760, and in Hungary Aug. 1, 1923. 9 Claims. (Cl. 196—49.)



1. A continuous low temperature process for cracking heavy hydrocarbons into lighter hydrocarbons which comprises heating the raw material to a predetermined decomposing temperature while rapidly forced under pressure through a heating coil at such rate that no substantial decomposition occurs and then continuously passing the heated oil through a series of decomposing chambers, without distillation, while the temperature and pressure are maintained, cutting out from the system any intermediate one of the series of decomposing chambers for cleaning and reconnecting it into the system after it has been cleaned, each while continuing the chambers on each side of said intermediate chamber in normal series operation.

6. An apparatus for cracking hydrocarbons comprising a plurality of cracking chambers connected in series and means for delivering heated oil under pressure to and in succession through said chambers, a vaporizing chamber to which the series of cracking chambers is connected, means for maintaining the temperature and pressure, and means including the necessary pipe connections and valves for charging and connection or disconnection of any one of the chambers forming a part of said series into and from the system while maintaining series flow through all of the remaining chambers in said series.

1,767,284. CATTLE POKE. RALPH W. HARTER, De Witt, Mich. Filed Aug. 30, 1929. Serial No. 389,505. 3 Claims. (Cl. 119—141.)



1. A cattle poke of the class described comprising an oval metallic yoke adapted to be circumposed about the nose and mouth of the animal, a pair of straight prongs projecting from the yoke in opposite directions along the major axis of the yoke, a pair of rings secured to the opposite sides of the yoke, a pliable arcuate support secured at its opposite ends to the rings and bridging the minor axis of the yoke, a neck band for disposition about the neck of the animal and a pair of adjustable straps secured at one end to the band and at their other ends to the rings for holding the yoke on the animal.

1,767,285. REFLECTING MATERIAL. HENRY HAROLD HIGBIE, Ann Arbor, Mich. Filed July 28, 1928. Serial No. 296,105. 2 Claims. (Cl. 154—43.)

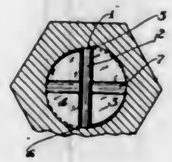
1. A light reflecting material, which comprises pulverulent magnesium carbonate the particles being surrounded by air and a translucent flexible film enclosing the same.

1,767,286. FRICTION SUB. FRANK J. HINDERLITER, Tulsa, Okla. Filed Oct. 19, 1927. Serial No. 227,195. 12 Claims. (Cl. 255—1.)



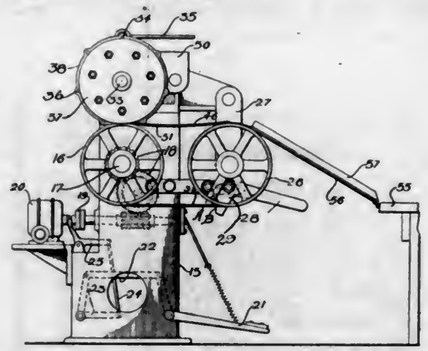
1. In combination, a jar adapted to be lowered into a well casing, a frictional device disposed between the jar and the lower part of the well adapted to frictionally embrace the inner surface of the wall of the casing, and work performing mechanism associated with the lower end of said device arranged to be acted upon by said jar through said device, said device serving to hold up said mechanism in the well casing during the down or return stroke of the jar.

1,767,287. BOLT LOCK. RICHARD T. HOSKING, Wilmette, Ill., assignor, by mesne assignments, to Shakeproof Lock Washer Company, Incorporated, Chicago, Ill., a Corporation of Delaware. Filed Apr. 30, 1928. Serial No. 273,805. 4 Claims. (Cl. 151—31.)



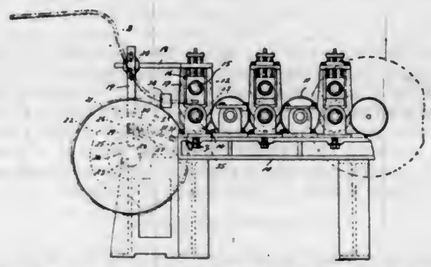
3. A threaded screw adapted to be received in a complemental threaded hole in a piece of work, its entering end solid and its other end formed with a slit extending lengthwise the screw, and defining a spring tongue, the free end of which is displaced in a direction parallel to the plane of the slot to provide a biting edge remote from the entering end of the screw that normally projects beyond the cylindrical periphery of the solid end of the screw and engages the work in locking relation.

1,767,288. FLAT-TIRE-BUILDING MACHINE. EDWARD HUTCHENS, Milwaukee, Wis., assignor to Utility Manufacturing Co., Cudahy, Wis., a Corporation of Wisconsin. Filed Dec. 15, 1926. Serial No. 154,866. 19 Claims. (Cl. 154—10.)



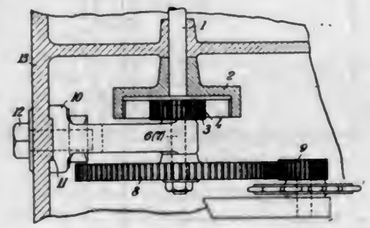
1. In a machine of the class described an endless feed belt, and a turret positioned over said belt including a plurality of forming rolls adapted to be successively brought into operative position adjacent said belt for combining successive layers of tire building material fed onto said belt into a tire carcass.

1,767,289. METAL-WORKING MACHINE. HOMER G. KELLOGG, Detroit, Mich., assignor to Motor Products Corporation, Detroit, Mich., a Corporation of New York. Filed Aug. 9, 1926. Serial No. 128,249. 20 Claims. (Cl. 153—3.)



15. The combination with means for advancing a molding strip or the like and means for longitudinally fashioning said strip, of a cam for actuating said fashioning means to change the longitudinal contour of the strip, a clutch for controlling the operation of said cam, and means operated by said strip and connected to the clutch for actuating the latter.

1,767,290. REVERSING GEAR. JOHANN JACOB KEYSER, Aarau, Switzerland. Filed Aug. 12, 1929, Serial No. 385,334, and in Germany and Switzerland Oct. 18, 1928. 4 Claims. (Cl. 74—58.)

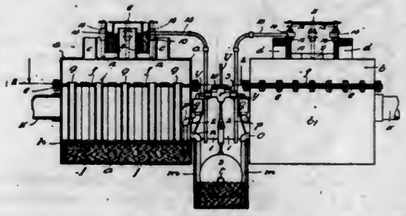


1. In a reversing gear for spinning and twisting machines having feeding and stretching mechanism an actuating shaft for the said feeding and stretching mechanism, an internally toothed pinion mounted on the said shaft two permanently meshing intermediate pinions having a permanent operative connection with a driving shaft arranged parallel with the said actuating shaft and sliding means carrying the said intermediate pinions and permitting to effect intermeshment thereof, respectively, with the said internally toothed pinion while maintaining their operative connection with the said other shaft.

1,767,291. CARBONYL COMPOUND AND PROCESS OF PREPARING THE SAME. STEPHEN A. KISS, Bayonne, N. J., assignor to Standard Oil Development Company, a Corporation of Delaware. Filed Feb. 27, 1926. Serial No. 91,266. 4 Claims. (Cl. 260—138.)

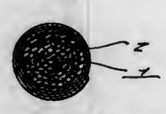
1. Process of preparing carbonyl compounds of hydrocarbons, comprising treating olefins of greater molecular weight than butylene with hypochlorous acid, whereby chlorin-containing compounds are formed, and transforming the chlorin-containing compounds into carbonyl compounds by heating with water.

1,767,292. GAS WASHER FOR ELECTROLYTIC APPARATUS. ALBERT EDGAR KNOWLES, Heswall, England. Filed Oct. 15, 1926, Serial No. 141,777, and in Great Britain Oct. 19, 1925. 3 Claims. (Cl. 261—124.)



1. Means for washing the gas evolved from an electrolytic cell and containing electrolyte in suspension, comprising a closed liquid-containing chamber, automatic valve controlled means for feeding liquid into the chamber, automatic overflow means for withdrawing liquid from the chamber to maintain a constant head therein, a removable upper part to said chamber, two spaced tube plates arranged transversely in said chamber, tubes connecting said plates, a gas inlet leading into said removable upper part, perforations in the lower tube plate between the tubes, and a gas outlet from the chamber between the tube plates.

1,767,293. FIRE KINDLER. CHRIS KREI and FRED KREI, Samoa, Calif. Filed Apr. 7, 1928. Serial No. 268,254. 2 Claims. (Cl. 44—34.)



2. A fire kindler comprising a piece of burlap coated with paraffine wax, said piece of burlap being reduced to a spiral body, and an inflammable covering enclosing and secured on the body of burlap.

1,767,294. PROCESS OF TREATING ARTIFICIAL FILAMENTS. CARL LANDESKROENER, Dresden, Germany. Filed Jan. 28, 1929, Serial No. 335,573, and in Germany Feb. 13, 1928. 1 Claim. (Cl. 18—54.)

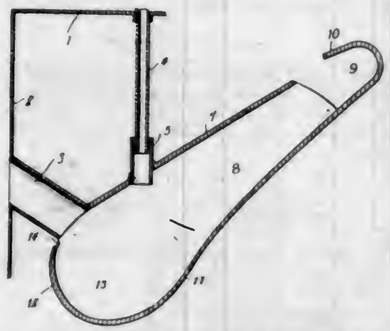
A process for treating cakes of rayon obtained from a centrifugal spinning box, preparatory to spraying in

the various liquid agents under a series of sprays for the purpose of washing, desulphurizing, bleaching and the like; said treatment consisting in threading the cakes side by side on a suitable supporting rod having angular cross-



section, weighting the assembled cakes by inserting a suitable rod and rotating the supporting rod during the spraying operation in order to expose different parts of the cakes to the spray.

1,767,295. OIL BURNER. GROVER C. LEE, Taft, Calif. Filed June 1, 1928. Serial No. 282,194. 4 Claims. (Cl. 158—8.)



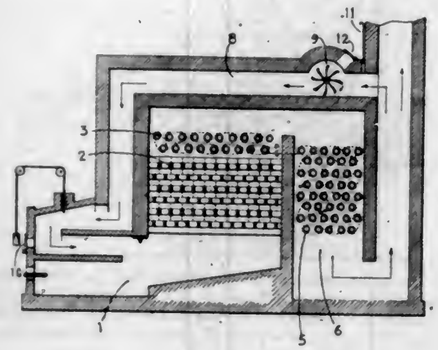
1. An oil burner comprising an inclined hollow upwardly tapered open-ended body, a lateral deflecting flame spreader across the upper smaller end of the body, the bottom wall of the body constituting a vaporizing plate at its lower larger end, and with a fuel inlet through the top of the body adjacent the larger end thereof.

1,767,296. DEVICE FOR HOLDING AND MANIPULATING SCREWS, NUTS, AND LIKE SMALL ARTICLES. HENRY EDWARD LEWIS, Redditch, England. Filed Sept. 18, 1928, Serial No. 306,771, and in Great Britain Jan. 26, 1928. 2 Claims. (Cl. 7—16.)



1. A device for holding and manipulating screws, nuts, and like small articles comprising a handle, a pair of resilient parallel arms on said handle, a pair of parallel resilient strips pivoted between said arms, tapered cooperating portions at one end of said strips which are normally separated and can be pressed together to enter a slot in a screw head, and angular parts at the other end of said strips which are normally pressed together and can be separated to grip the corners of a nut placed between them.

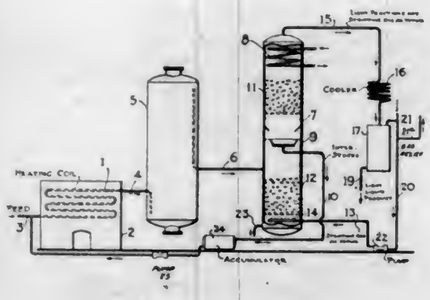
1,767,297. ART OF OBTAINING PRODUCTS FROM HYDROCARBONS BY HEAT TREATMENT. WARREN K. LEWIS, Newton, Mass., and NATHANIEL E. LOOMIS, Elizabeth, N. J., assignors to Standard Oil Development Company, a Corporation of Delaware. Filed Mar. 30, 1923. Serial No. 628,947. 6 Claims. (Cl. 196—116.)



1. Process for heating oil comprising burning fuel, passing the combustion products so formed through and out of a zone wherein they encounter a large number of surfaces adapted for heat absorption and radiation, heating a stream of oil by radiation from said zone and convection passing said stream of oil into a space shielded from radiation, further heating said stream in said space by indirect heat exchage with combustion products passing from said zone, and regulating the temperature of said zone by return of cool combustion products thereto.

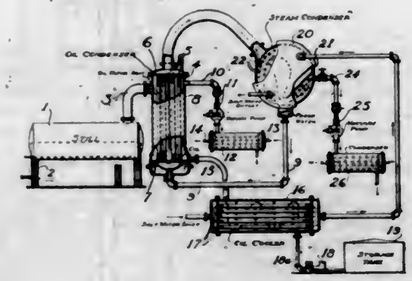
5. Oil heating apparatus, comprising a combustion furnace, a series connected pipe coil, a checkerwork arranged to shield the coil from freshly generated combustion gases and to absorb and radiate heat to the coil, and a second coil connected to receive a stream of oil from said coil and out of heat radiation range of said checkerwork.

1,767,298. PROCESS OF FRACTIONATION AND APPARATUS THEREFOR. WARREN K. LEWIS, Newton, Mass., assignor to Standard Oil Development Company, a Corporation of Delaware. Filed Jan. 12, 1925. Serial No. 1,781. 3 Claims. (Cl. 196—62.)



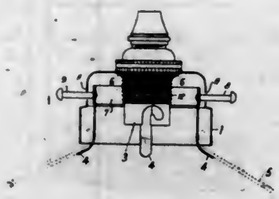
3. Process of operating hydrocarbon cracking and fractionating systems, comprising cracking hydrocarbons under superatmospheric pressure in a cracking zone, fractionating the cracked products into tar, cycle stock and overhead distillate in a fractionating zone under superatmospheric pressure not exceeding the pressure in the cracking zone, furthering vaporization in the fractionating zone by introducing inert gas thereinto in effective counter curent relation to unvaporized cycle stock to the crackng zone for further cracking.

1,767,299. METHOD FOR THE CONDENSATION OF HYDROCARBON VAPORS AND APPARATUS THEREFOR. NATHANIEL E. LOOMIS, Westfield, N. J., assignor to Standard Oil Development Company, a Corporation of Delaware. Filed July 12, 1927. Serial No. 205,095. 6 Claims. (Cl. 196—138.)



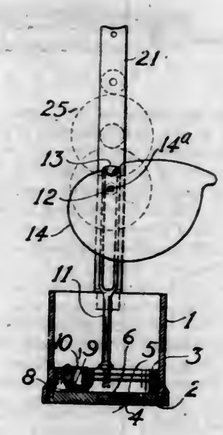
2. The process of condensing vapors of petroleum oils which comprises passing such vapors under less than atmospheric pressure in heat exchanging relationship with a cooling fluid maintained under less than atmospheric pressure.

1,767,300. GALLERY FOR ELECTRIC LAMPS. JAMES MCLEAN, Glasgow, Scotland. Filed Mar. 22, 1929, Serial No. 349,047, and in Great Britain Oct. 31, 1928. 2 Claims. (Cl. 240—128.)



1. A gallery for electric lamps comprising in combination, a shell having a central aperture intended for accommodation of an externally screw-threaded lamp socket and formed around its periphery with tongues which are directed inwardly so as to engage the screw-threads of said lamp socket, so that, when the lamp socket is pressed into the gallery, the tongues are caused lightly engage said screw threads and then forcibly to engage the threads as the weight of an ornamental bowl is applied to said shell, and an expansible open ring floatingly mounted on said shell and provided with arms engageable with the interior of such ornamental bowl.

1,767,301. TANK SAMPLER. MERLE R. MEACHAM and WILLIAM J. SEELAND, Elizabeth, N. J., assignors to Standard Oil Development Company, a Corporation of Delaware. Filed May 22, 1928. Serial No. 279,800. 13 Claims. (Cl. 137—18.)



1. A sampler for liquids in tanks comprising a receptacle of variable capacity, an inlet therein, means for moving the receptacle through the liquid to be sampled, and means adapted to operate while the receptacle is being so moved for varying the capacity of the receptacle in a predetermined relationship to the distance moved.

1,767,302. MANUFACTURE OF CONDENSATION PRODUCTS FROM OLEFINES AND NAPHTHALENE HYDROCARBON COMPOUNDS. RICHARD MICHEL, Uerdingen, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Aug. 14, 1928, Serial No. 299,635, and in Germany Aug. 22, 1927. 6 Claims. (Cl. 260—168.)

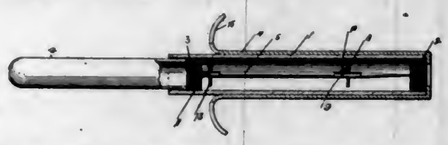
1. Process which comprises reacting with an olefine containing at least three carbon atmos upon a naphthalene hydrocarbon in the presence of a catalytically active metallic halide under a pressure not essentially exceeding normal atmospheric pressure.

1,767,303. WIND-POWER GENERATOR. BASIL MILLER, Newton, Iowa. Filed Apr. 9, 1927, Serial No. 182,296. Renewed Apr. 21, 1930. 4 Claims. (Cl. 170—46.)



1. An apparatus of the class described comprising a portion of said shaft and formed with an elongated sleeve and with a shoulder at the base of said sleeve, a gear housing pivotally supported on said shoulder and having a bearing on said sleeve, a bevel pinion fixed to said shaft within said gear housing, a driving shaft arranged at right angles to said vertical shaft and having a bevel gear thereon meshing with said pinion, a wind wheel fixed to said driving shaft, a vane pivotally mounted on the rear side of said gear housing and normally causing said wind wheel to face into the wind, and a spring attached to said vane and to said gear housing and tending to return the latter to its normal position.

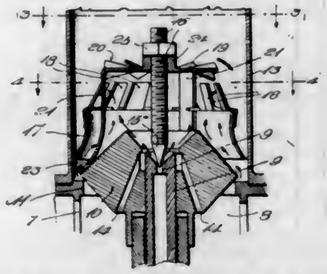
1,767,304. INJECTION APPARATUS. HENRY S. MORTON, Forest Glen, Md. Filed Dec. 30, 1927. Serial No. 243,563. 8 Claims. (Cl. 128—218.)



2. A needle for an ampul of that type in which the needle is enclosed in the fluid chamber of the ampul and is caused to successively puncture the end closures of said ampul when one of said closures is forced inward, functioning as a plunger, said needle comprising a tubular portion having an angularly disposed inner end, and an imperforate stem, fixed to said needle substantially axially thereof adjacent said angularly disposed end.

6. In combination, an ampul, and a syringe for receiving the same, said ampul having end closures, the inner end closure being movable, and said syringe having a hollow plunger rod for pushing said inner end closure into said ampul, a needle initially wholly encloser within said ampul, the ends of which penetrate and protrude through the end closures as the rear end closure is pushed in said plunger rod telescoping over the rearwardly protruding end of said needle.

1,767,305. CARBURETING MEANS. CHARLES A. MUSALL, Detroit, Mich. Filed Dec. 7, 1928. Serial No. 324,462. 5 Claims. (Cl. 261—44.)



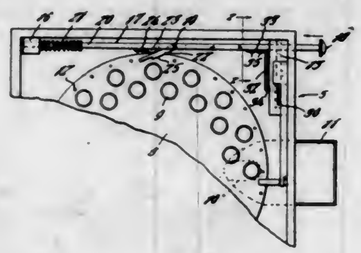
1. In a carbureting means embodying a passage, a vertically slidable fuel nozzle in said passage, a suction-raised air valve around and secured to the upper end of said nozzle, said passage having an air inlet below said valve and the latter being formed with air ports from its lower side to the upper end of said nozzle; a vertical stem having a pointed lower end disposed at the delivery end of said nozzle for spreading the fuel and directing it over the upper ends of said air ports to insure intimate contact of fuel and air, an annular air deflector over said valve for inwardly directing air passing around the valve to insure contact of this air also with the fuel, and an air and fuel agitator above said air valve through which all air and fuel must pass, said stem, deflector and agitator being unitarily connected with each other and mounted on said air valve for movement therewith.

1,767,306. MOUSETRAP. HERBERT WILLIAM NORMAN, Lodi, N. J. Filed July 17, 1928. Serial No. 293,360. 1 Claim. (Cl. 43—81.)



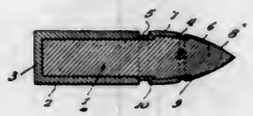
An animal trap comprising a base having a U-shaped striker bar pivotally mounted thereon and a U-shaped handle for the free end of the striker bar having its ends secured at the opposite side edges of the bar and with the intermediate portions of the striker bar and the handle disposed in spaced parallel relation whereby to position the handle above the bar when the bar is in sprung position.

1,767,307. VENDING MACHINE. HENRY H. PETERSON, Edmund, Wis. Original application filed Oct. 27, 1927, Serial No. 229,213. Divided and this application filed Aug. 6, 1929. Serial No. 383,901. 1 Claim. (Cl. 194—38.)



In combination with a vending machine wherein the latter comprises a vending device, including a spring pressed reciprocating control bar, and a coin receiving chute, of a lever pivoted intermediate its ends and having one end thereof extending transversely of said control bar, said one end of the lever being provided with a weighted head adapted to be received in a notch in a control bar for positively locking the latter against longitudinal movement, said lever at its opposite end provided with a longitudinally extending coin receiving groove adapted for disposition below the lower end of the coin chute, an angular arm secured at one end to said control bar and extending at right angles therefrom, said arm having its opposite end disposed at right angles thereto for disposition beneath the grooved end of said lever for limiting the movement of said lever upon its pivot, whereby the grooved end of said lever may cooperate with the lower end of the coin receiving chute for retaining the coin partially in the lower end of said chute when said weighted head is moved out of the notch in said control bar, said last mentioned end of said arm being adapted to be moved out of engagement with the grooved end of said lever only when said control bar is moved against the tension of the spring.

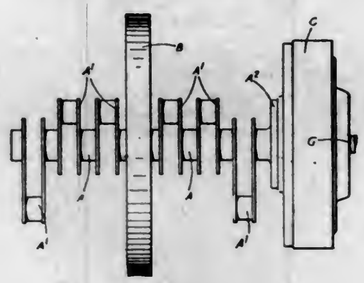
1,767,308. BULLET. JOHN T. PHILLIPS, Durango, Colo. Filed Nov. 27, 1929. Serial No. 410,220. 3 Claims. (Cl. 102—28.)



1. A bullet comprising a lead body, a metallic jacket fitted upon the body, said jacket having cannelures formed thereon to provide spaced bands, the thickness and length of the bands being less than a major portion of the jacket.

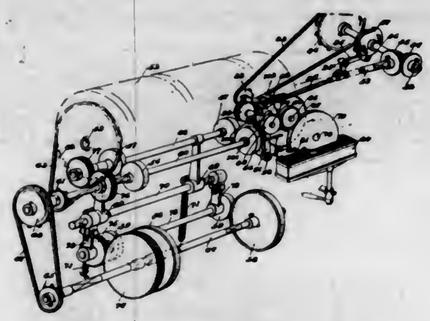
1,767,309. MULTICYLINDER RECIPROCATING ENGINE. HARRY RALPH RICARDO, London, England. Filed Aug. 6, 1928, Serial No. 297,788, and in Great Britain Sept. 20, 1927. 2 Claims. (Cl. 74—38.)

1. A crankshaft assembly for a multi-cylinder reciprocating engine including in combination a multi-throw crankshaft, a flywheel so placed on the crankshaft that it has at least one crank on each side thereof, and a transmission clutch at the end of the crankshaft from which the drive is taken, said clutch being of light weight as



compared with the weight of the flywheel whereby the presence of the clutch will not have sufficient effect on the natural frequency of torsional vibration of the crankshaft assembly to bring the same within the range of frequencies induced by the operation of the engine.

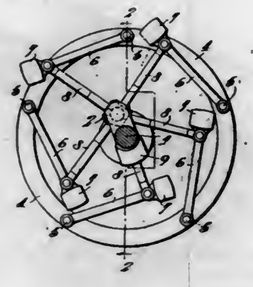
1,767,310. GLUE-APPLYING MECHANISM. GEORGE A. ROBINSON, Braintree, Mass., assignor to Johnson Automatic Sealer Co., Ltd., Battle Creek, Mich. Original application filed Jan. 4, 1927, Serial No. 158,978. Divided and this application filed May 17, 1928. Serial No. 278,583. 12 Claims. (Cl. 91—50.)



1. In combination, a glue roller and a pressure roller bodily movable relatively in opposite directions, blank feeding means extending substantially at right angles to the axes of the glue and pressure rollers and adapted to feed a carton blank so that a flap bent from the body of said blank passes between said rollers, means for moving one roller toward and away from the other as the bent flap passes therethrough whereby glue is applied on one side of the bent flap by said glue roller, and means movable with and relative to one roller for preventing relative bodily movement of the rollers in the event a blank is not fed by said feeding means.

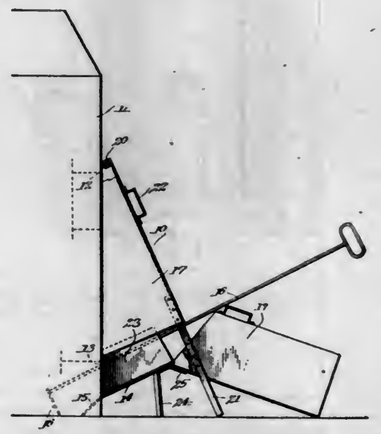
1,767,311. VARIABLE TRANSMISSION OR TORQUE CONVERTER. EARL W. ROHRBACHER, Detroit, Mich. Filed Mar. 17, 1927. Serial No. 176,151. 4 Claims. (Cl. 74—14.)

4. In a variable transmission and torque converter, a driving shaft and a driven shaft, a fly wheel on one shaft, a crank having a crank pin on the other shaft, an odd number of pendulous arms with masses attached to oscillating ends, said arms being pivoted to the outer rim of said



fly wheel, links connecting said arms to said crank, counterweights on said crank shaft directly opposite said crank pin.

1,767,312. DUSTLESS ASH REMOVER. THOMAS F. RUSSELL, North Lima, Ohio. Filed Mar. 21, 1929. Serial No. 348,953. 3 Claims. (Cl. 126—242.)

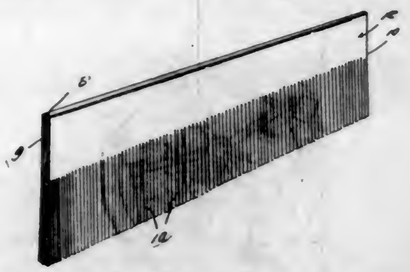


1. A device for use in removing ashes from furnaces comprising a hood member open at its lower end and adapted to be positioned in front of and covering the firebox doorway of a furnace with its open lower end positioned above the ash-pit doorway thereof, a trough member comprising an inclined surface and supporting means therefor adapted to be positioned relative to the ash-pit doorway of the furnace so that ashes may be drawn from the ash-pit over the inclined surface of said trough member, and supporting means on said trough member adapted to support the open end of an ash receiving receptacle in position to receive ashes drawn from the ash pit by way of said inclined surface.

1,767,313. DUSTING BRUSH. NUNZIATO SALVUCCI, Lynn, Mass. Filed Apr. 26, 1928. Serial No. 272,949. 1 Claim. (Cl. 15—187.)

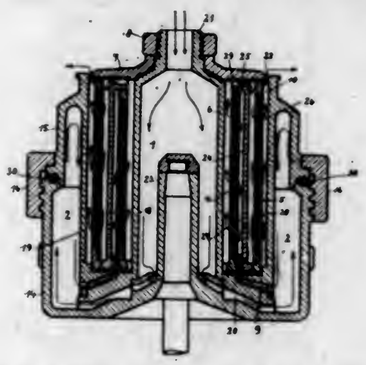
As a new article of manufacture, a brush member comprising a plurality of sections of paper folded upon them-

selves and nested and having free slitted portions and also having unslitted portions back of the slitted portions and a smooth back edge afforded by the bight of the outermost



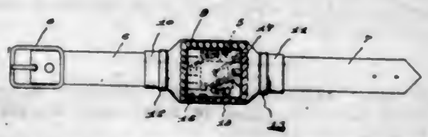
folded sections; said member adapted to be reduced to a laminated contracted state for attachment to and cooperation with a handle.

1,767,314. CENTRIFUGAL MACHINE FOR CLARIFYING LIQUIDS AND THE LIKE. CARL SCHMITZ, Oelde, Germany. Filed Nov. 20, 1928, Serial No. 320,624, and in Germany Nov. 22, 1927. 6 Claims. (Cl. 210—64.)



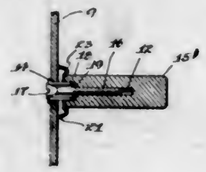
1. In a centrifugal machine for clarifying liquids and the like, in combination a centrifugal drum, admission and eduction means on said drum, concentric partition walls in said drum dividing its interior in at least one inner and at least one outer closed chamber, these chambers communicating at their one end with one another in series connection, means for producing a preliminary clearing in these chambers, a middle chamber situated between the inner and outer clearing chambers and communicating at its one end with the eduction means and at its other end with the outer clearing chamber, filtering means in this middle chamber and means for conducting the liquid to be treated first through the inner and outer clearing chambers and then through the middle filtering chamber to the eduction means.

1,767,315. WRIST-WATCH PROTECTOR. HARRY SCHNEIDER, New York, N. Y. Filed May 23, 1928. Serial No. 279,988. 3 Claims. (Cl. 58—105.)



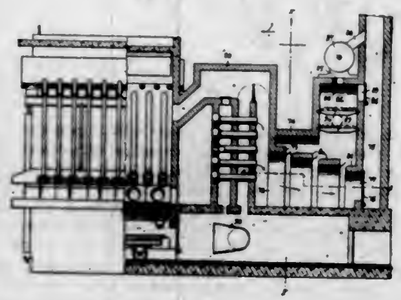
1. A protector for a wrist watch composed of flexible, waterproof material and including a body portion adapted to envelop the casing of a watch, flexible extensions disposed laterally of esaid body portion and adapted to fit over the straps adjacent said casing, fastening means embracing said extensions, said body portion having a sight opening for exposing the face of the watch and absorptive material arranged marginally of said opening.

1,767,316. REMOVABLE SUPPORTING DEVICES FOR REFRIGERATOR SHELVES. PERCY T. SEALEY, Grand Rapids, Mich., assignor to Kelvinator Corporation, Detroit, Mich., a Corporation of Michigan. Filed Aug. 25, 1927. Serial No. 215,337. 1 Claim. (Cl. 248—18.)



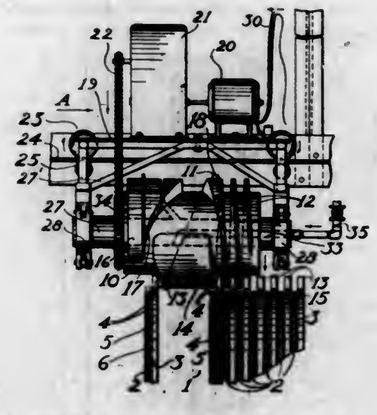
A shelf supporting structure comprising an expansible member adapted to be inserted within an opening, a spreader for expanding one end of the expansible member, a spacing ring surrounding the opposite end of the expansible member, a supporting member adapted to engage the spacing member and provided with a recess for the reception of the end of the expansible member projecting through the spacing member, and means for moving the spreader axially with respect to the expansible member.

1,767,317. GAS SEPARATOR. BERNHARD F. SHAUGHNESSY, Brooklyn, N. Y. Original application filed Oct. 7, 1925, Serial No. 60,960. Divided and this application filed Nov. 7, 1927. Serial No. 231,661. 2 Claims. (Cl. 183—43.)



2. A gas separator including a flueway, a chamber at least partly surrounding said flueway, said flueway having a series of openings between its ends for the flow into said chamber of the products of combustion which move along the outside of the stream passing through said flueway, and means for creating a forced draft from said flueway through said openings and chamber.

1,767,318. METHOD AND APPARATUS FOR OPERATION OF FILTER PRESSES. CHARLES E. SHAW, Cranford, N. J. Filed May 2, 1929. Serial No. 359,748. 19 Claims. (Cl. 210—193.)

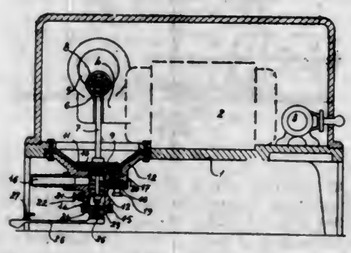


1. In plate-separating means for a press, the improvement which comprises a separating member, means for operatively supporting the member with respect to the plates of the press, and means for progressively inserting the member, thereby exciting lateral pressure to separate adjacent plates.

1,767,319. PROCESS FOR THE DISSOCIATION OF SULPHUR VAPOR. PHILIPP C. H. SIEDLER, Griesheim-on-the-Main, and EUGEN SCHULTE, Schwanheim-on-the-Main, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Oct. 1, 1928, Serial No. 309,681. and in Germany Oct. 12, 1927. 1 Claim. (Cl. 23—227.)

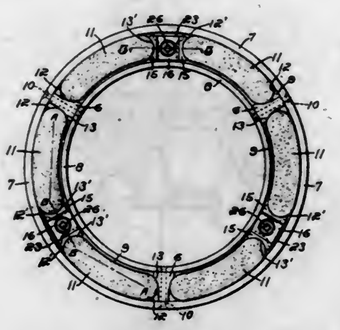
The process of dissociating sulphur into S_2 molecules which comprises imparting heat to the sulphur vapor at a temperature between about 500° and 800° C., the heat being transferred to such vapor mainly by contacting surfaces of silicon carbide.

1,767,320. VACUUM MEDICAL APPARATUS. ORESTE SINANIDE, London, England. Filed Feb. 7, 1928, Serial No. 252,569. and in France Dec. 1, 1927. 2 Claims. (Cl. 128—39.)



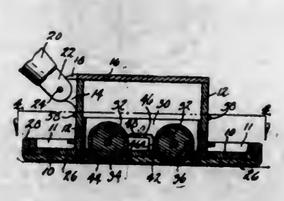
1. A vacuum apparatus for medical treatment, comprising an air pump, a vacuum chamber related thereto and provided with an inlet and a valve-controlled outlet and having at its bottom a plug and a flexible diaphragm above the same to form an air-tight joint, a normally-closed suction valve in said chamber above said diaphragm to control communication between the chamber and its outlet, and an endwise movable member mounted in said plug in line with the suction valve to lift said diaphragm and thereby raise said valve into open position.

1,767,321. ABRASIVE WHEEL. HAROLD F. SKILLINGS, Cambridge, Mass., assignor to The Blanchard Machine Company, Cambridge, Mass., a Corporation of Massachusetts. Filed Apr. 16, 1928. Serial No. 270,461. 24 Claims. (Cl. 51—209.)



1. In an abrasive wheel, the combination of a body having inner and outer, annular walls and an intermediate annular groove; a plurality of partitions connecting said walls to each other at intervals and dividing said groove into a plurality of arcuate chambers, each partition presenting on each side thereof an arc-shaped abutment; a plurality of arcuate, abrasive segments arranged in pairs, one pair in each chamber, each segment having two arc-shaped ends, each resting against one of said arc-shaped abutments; each segment having an arc-shaped surface engaging said outer annular walls, and expansible means between the two adjacent ends of the segments of each pair, each expansible means including two shoes, each presenting an arc-shaped abutment which engages the adjacent arc-shaped end of one of said segments; a wedge between and engaging said shoes, a U-shaped spring secured to said body and having two arms secured to said shoes, respectively, and tending to move them toward each other, and a screw for moving said wedge relatively to said shoes to force them apart.

1,767,322. FLOOR WAXER. ANDREW J. SNYDER, Des Moines, Iowa. Filed Apr. 1, 1929. Serial No. 351,550. 6 Claims. (Cl. 91—39.)

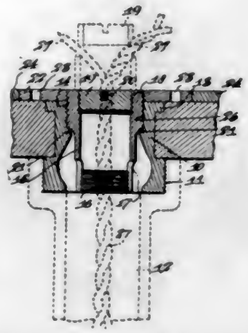


1. In a waxer, a base, a wax holder thereon, a frame received within said holder for vertical reciprocation, a pair of rollers journaled in said frame said frame having horizontally elongated slots in its side walls, a lifter rod extending across said frame between the rollers and through said slots, cranks on said rod, journaled in the walls of said holder, one of said cranks having a portion projecting through the holder wall, and a handle on said projecting portion.

1,767,323. FLOOR OUTLET. EUGENE A. STAPLES, Brooklyn, N. Y. Filed May 22, 1929. Serial No. 365,136. 8 Claims. (Cl. 247—15.)

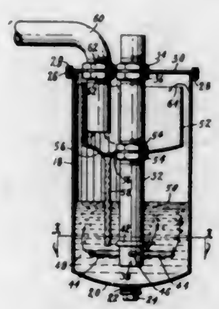
1. A device of the class described comprising a casing having an opening at the top thereof and having a shoulder below the top, that portion of the casing above the

shoulder being internally threaded, said casing at the bottom thereof having means to receive and hold a conduit, a reversible tubular conduit member having an externally threaded portion at one end fitting into the threaded part of said casing and abutting said shoulder,



and also having an internally threaded portion at the end which has the external threads, that end of the reversible member which is opposite to the end having the externally threaded portion being provided with an outlet for wires, and a removable cap screwed into said internally threaded portion.

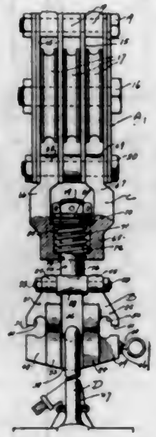
1,767,324. AIR CLEANER FOR INTERNAL-COMBUSTION ENGINES. GUY E. TASKER, Dubuque, Iowa. Filed July 5, 1927. Serial No. 203,355. 1 Claim. (Cl. 183—24.)



An air cleaner for use with internal combustion engines comprising a closed container adapted to receive a cleansing liquid, an intake pipe for discharging air into said liquid and into the lower part of said container, said intake pipe being supported by and depending from the top of said container and having at its discharge end a plurality of reduced nozzles, a cup-shaped separating compartment arranged in the container above the assumed level of the liquid therein having its bottom surrounding and attached to said intake pipe and communicating at its open upper part with the container, and an air outlet passage leading from a position spaced above the bottom of said cup-shaped compartment upwardly therefrom and thence to a point outside the container.

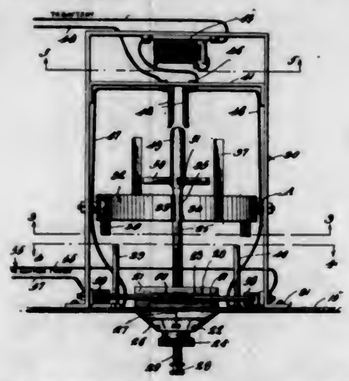
1,767,325. BECKET. JAMES S. TAYLOR, Wynona, Okla., assignor of one-half to Lory J. Mildren, Ponca City, Okla. Filed June 17, 1927. Serial No. 199,578. 11 Claims. (Cl. 294—82.)

3. In an elevator supporting construction a frame comprising a body having a passageway therethrough, a vertical bolt in said passageway, said body having a lower shoulder in the passageway and an upper shoulder above the lower shoulder, an anti-friction bearing about the upper end of the bolt, means at the upper end of the bolt to prevent the anti-friction bearing from moving away from the bolt, a spiral compression spring around the bolt resting on the lower shoulder and at its upper end



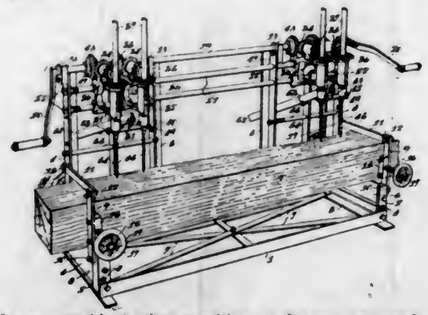
against the anti-friction bearing for normally forcing the anti-friction bearing away from the upper shoulder, said bolt at the lower end having laterally extending spindles, a becket comprising a pair of sections pivoted on said spindles, with the sections in spaced relation immediately below the bolt, said sections having spaced inwardly facing extensions at the lower end thereof of a complementary nature for receiving thereon an elevator link or hook.

1,767,326. ALARM SWITCH FOR AUTOMOBILES, SAFES, AND THE LIKE. CHARLES W. TIMMONS, Lapel, Ind. Filed Jan. 9, 1928. Serial No. 245,504. 2 Claims. (Cl. 200—4.)



1. In an electric alarm circuit, a circuit controlling device comprising a rotatable dial, a rod slidably carried by the dial and rotatable therewith, a pair of contact members arranged in rear of the rod and adapted to be engaged by the rod upon inward movement thereof, a pair of semi-circular contact members arranged forwardly of the first contact members, contact strips carried by the semi-annular contact members, a bridge strip carried by the rod and normally disposed in the path of said contact strips, said semi-annular members having their terminals spaced a sufficient distance to permit the passage of said bridge strip therethrough without contact therewith, when the dial is in a predetermined position, contact pins arranged forwardly of the semi-annular contact members in a predetermined spaced relation relative thereto.

1,767,327. PORTABLE TIE-BORING MACHINE. JORGE TRIANA, Bogota, Colombia, assignor to Track Specialties Company, New York, N. Y., a Corporation of New York. Filed May 24, 1928. Serial No. 280,291. 1 Claim. (Cl. 144—112.)



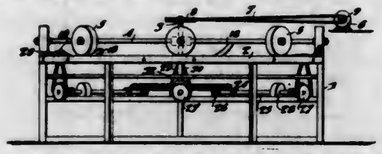
In a portable boring machine, a frame composed of a base part and an upright part, means for retaining a tie on said base part, an operating shaft journalled in bearings on said upright part, a pair of drill-head-supporting rods paralleling said shaft and carried by said upright part, drill heads, said drill heads each comprising an open frame having top and bottom bars joined at their back ends by an upright bar and at their front ends by a spindle bearing, said upright bar having a pair of split bearings to receive said supporting rods and including clamp ears, clamp screws in said ears to secure said split bearings to said supporting rods, said upright bar having a bearing at its top for said operating shaft, said head having an upwardly projecting portion from its top bar which is provided with a bearing, a short shaft journalled in said last named bearing, bevelled gears on the ends of said short shaft, a bevel gear on said operating shaft to mesh with one of said short shaft's bevel gears, a spindle mounted in said spindle bearing, a bevel gear on said spindle meshing with the other of said short shaft's gears, and a chuck carried by said spindle to receive and hold a bit substantially as shown and described.

1,767,328. HORSESHOE. JOSEPH N. TROXELL, North Catasauqua, Pa. Filed May 18, 1928. Serial No. 278,760. 2 Claims. (Cl. 168—13.)



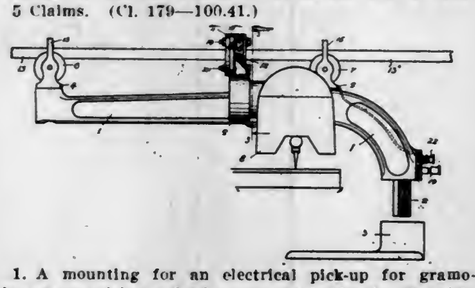
2. A horseshoe having the upper and lower sides of its rear ends cut away to form vertically yieldable spring fingers, said fingers having their upper sides below the upper side of the shoe body and their lower sides above the lower sides of the shoe body, thereby forming upper and lower shoulders at the inner ends of the upper and lower sides of the spring fingers, said lower shoulder being square to provide an abrupt stop for a heel pad.

1,767,329. POWER-TRANSMISSION MECHANISM. RANDALL T. VAN VALKENBURGH, Ann Arbor, and CECIL J. VAN VALKENBURGH, Detroit, Mich. Filed Mar. 9, 1929. Serial No. 345,700. 6 Claims. (Cl. 74—54.)



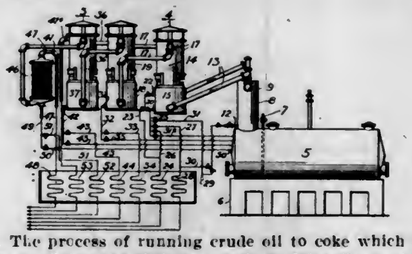
1. A power transmission mechanism comprising a slotted track, a power impulse lever mounted for swinging movement within the slotted portion of the track, leverage links associated with said impulse lever and arranged to extend from said slotted portion of the track when the impulse lever is in certain positions, and weighted wheels traveling on the track to roll into contact with and swing the leverage links and consequently move the power impulse lever.

1,767,330. GRAMOPHONE AND THE LIKE. CECIL MONTAGUE WALTER, Four Oaks, and RICHARD GREGORY MARSH, Birmingham, England. Filed Feb. 5, 1929, Serial No. 337,660, and in Great Britain Feb. 6, 1928. 5 Claims. (Cl. 179—100.41.)



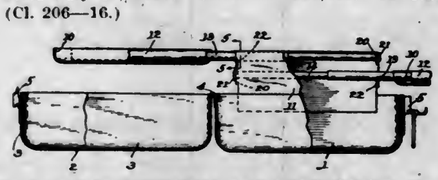
1. A mounting for an electrical pick-up for gramophones comprising a fixed support, a holder for the pick-up, and travelling connection means between the support and the holder, said means constraining said support to travel in a path parallel to a radius of a record disc through the point of contact with the disc of a stylus carried by the pick-up and said means permitting the support to be rocked in a plane at right angles to its line of travel.

1,767,331. PROCESS OF COKING OILS. DANIEL R. WELLER and LOUIS LINK, Baton Rouge, La., assignors to Standard Oil Development Company, a Corporation of Delaware. Original application filed Apr. 8, 1922, Serial No. 550,731, and in Canada June 6, 1924. Divided and this application filed Sept. 18, 1925. Serial No. 57,078. 3 Claims. (Cl. 196—76.)



1. The process of running crude oil to coke which comprises confining the oil in a container, firing the container gradually until a temperature of 680 to 720° F. is attained and paraffin distillate is formed, and continuing the distillation at a rate such that the vaporizable portion of the oil is substantially completely vaporized in not less than 10 and not more than 18 hours and drawing off and fractionally condensing the vapors substantially as rapidly as formed.

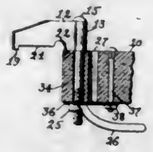
1,767,332. TOOL BOX. ALTON J. WELLS, Bell, Calif. Filed July 17, 1928. Serial No. 293,403. 12 Claims. (Cl. 206—16.)



1. A container comprising a receptacle having an open top, a cover having a top and depending side walls and

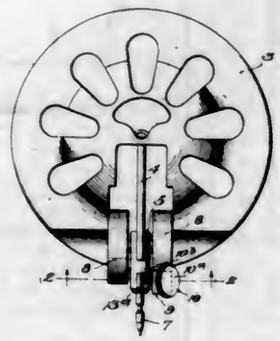
adapted for displaceable mounting on the receptacle so as to define an enclosed space within the cover above the open-top receptacle, and a tray fixed against vertical displacement and slidably mounted on the receptacle for retraction and support in said enclosed space when the cover is in place and adapted for extension beyond the receptacle when the cover is removed.

1,767,333. PUTLOG. FRANK L. WELT, Somerville, Mass.; Howard L. Welt, administrator of said Frank L. Welt, deceased, assignor to Frank G. Kingston, Charles C. Plimm, and Mabel G. Kitchen, Somerville, Mass., and A. Roy Kingston, Arlington, Mass., a Partnership doing business as Builders Patent Scaffolding Company. Filed Feb. 10, 1928. Serial No. 253,458. 4 Claims. (Cl. 304—39.)



1. The combination with a putlog having a plurality of openings extended through it near the end thereof and spaced apart, a bolt extended through the opening nearest the end of the putlog, an anchor plate mounted on said bolt above the putlog and projecting beyond the latter, a reinforcing plate for the putlog through which said bolt is extended, a nut on said bolt co-operating with said reinforcing plate, and a second bolt extended through an opening through the putlog removed from the end thereof, and through said reinforcing plate, and a nut on said second bolt co-operating with the reinforcing plate.

1,767,334. STYLUS-HOLDING MEANS. CLARENCE S. WICKES, Merchantville, N. J., assignor to Victor Talking Machine Company, a Corporation of New Jersey. Filed Sept. 28, 1926. Serial No. 138,222. 9 Claims. (Cl. 274—37.)



1. In a sound-box, the combination with the sound-box casing, of a stylus bar carried by the casing, a rotatable stylus retaining member carried by the bar, a wrench operatively associated with said member to release or engage the stylus, and means normally retaining said wrench out of engagement with the retaining member.

1,767,335. PLASTERER'S CORNER-BEAD SETTER. HOMER R. WILCOX, Quaker City, Ohio. Filed Jan. 5, 1928. Serial No. 244,607. 4 Claims. (Cl. 72—128.)

1. An instrument for setting a plasterer's corner bead including a pair of substantially continuous bars having flat forward faces, said bars hinged together longitudinally at adjacent cornors and adapted at said faces to grip the corner bead, including the flanges thereof



throughout substantially their entire lengths, and spring means tending to hold said bars in corner bead gripping position.

1,767,336. LID HINGE AND SUPPORT. SELDEN T. WILLIAMS, Woodbury, and THOMAS T. GREENE, Collingswood, N. J., assignors to Victor Talking Machine Company, Camden, N. J., a Corporation of New Jersey. Filed Sept. 19, 1927. Serial No. 220,567. 8 Claims. (Cl. 16—138.)

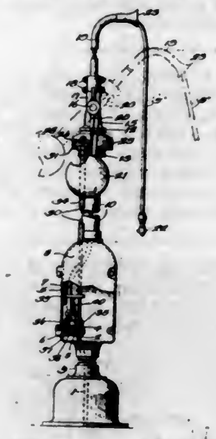


1. A device of the class described comprising a pair of pivotally connected hinge leaves, pivotally connected links pivoted to said leaves, and means cooperating with one of the pivots for yieldingly resisting the pivotal movement of said links throughout the range of movement of said links.

1,767,337. APPARATUS FOR SUPPLYING AIR UNDER PRESSURE. CHARLES G. WILSON, Bryan, Ohio, assignor to Service Station Equipment Company, Bryan, Ohio, a Corporation of Delaware. Filed July 27, 1928. Serial No. 295,791. 3 Claims. (Cl. 299—80.)

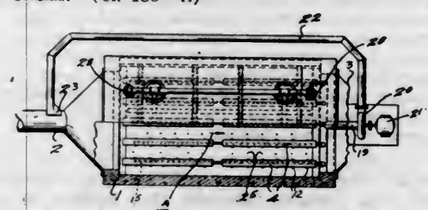
1. The combination with as ource of air under pressure, of discharge piping, a valve preventing and permitting the passage of air from said source through said piping, an arm mounted to swing in an upright plane and supporting a portion of said piping whose discharge end passes from one end of the arm, which arm end occupies an upright position to lift the discharge end of the piping when the piping is not in use, the arm being swung by the piping to lower this arm end when the discharge end of the piping is lowered for use, and

mechanism operatively engaged by said arm enabling the closure of the valve when said arm end is restored to an upper position and causing the valve to be opened when this arm end is lowered upon lowering of the discharge end of the piping, the valve controlling mech-



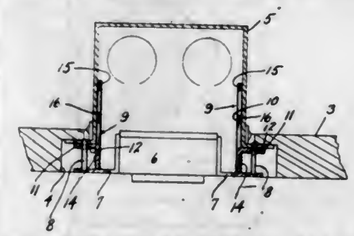
anism that is engaged by the arm including a lever structure which is in controlling relation to the valve and a longitudinally movable upright rod in engaging relation to the lever structure and in turn operatively engaged by the arm.

1,767,338. ELECTRICAL PRECIPITATING APPARATUS. ADAM ARRAS, Frankfort, Germany, assignor to International Precipitation Company, Los Angeles, Calif., a Corporation of California. Filed May 3, 1928, Serial No. 274,929, and in Germany May 27, 1927. 5 Claims. (Cl. 183—7.)



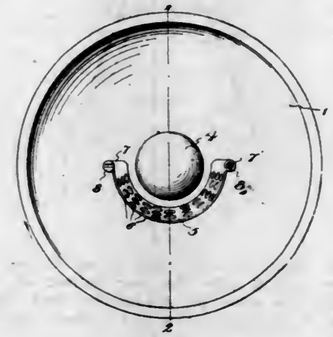
1. In an electrical precipitating apparatus, a collecting electrode having an interior chamber and provided with opening means leading into said chamber and baffles cooperating with said opening means to direct precipitated material into said chamber, and means for maintaining within said chamber a pressure less than that in the precipitator and outside said chamber.

1,767,339. JUNCTION-BOX FIXTURE. RHINEHART O. BEERHALTER, Junction City, Kans. Filed May 16, 1929. Serial No. 363,617. 3 Claims. (Cl. 247—20.)



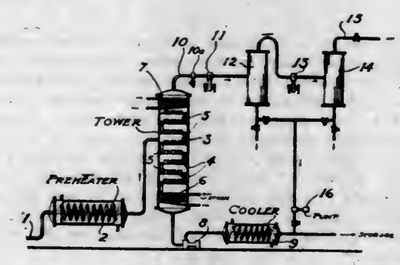
1. In a structure of the class described, in combination, a support having a socket formed therein, a junction box having a flange located in said socket, a switch, mounting means for the switch including attaching arms, bolts connecting said arms with the box flanges, and a pair of brackets attached to said bolts and including portions bearing against said arms, said portions being in the form of extensions functioning as abutments, and said abutments being transversely scored to facilitate shortening by severing with cutting pliers and the like.

1,767,340. HEADLIGHT DIMMER. CLIFFORD W. BEMAN, North Emporia, Va. Filed Oct. 10, 1928. Serial No. 311,676. 1 Claim. (Cl. 240—48.6.)



A headlight dimmer comprising a shield to be disposed in a headlight and extend partially about a bulb in shielding relation to a reflector, the said shield being formed of a sheet of material having openings formed therein and having its side portions rolled to form sleeves extending longitudinally of the shield, and bolts passed through said sleeves and engaged through the reflector to secure the shield within a headlight with the shield extending partially about the bulb and projecting forwardly from the surface of the reflector.

1,767,341. PROCESS AND APPARATUS FOR STABILIZING CRUDE PETROLEUM. FREDERICK B. BIMEL, Westfield, N. J., assignor to Standard Oil Development Company, a Corporation of Delaware. Filed Aug. 19, 1926. Serial No. 130,167. 5 Claims. (Cl. 183—114.6.)

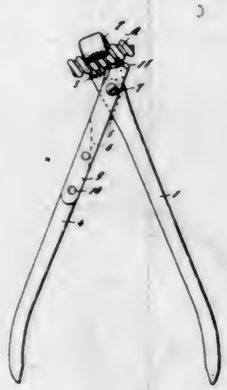


3. A process for stabilizing crude petroleum, comprising rectifying the petroleum, separately removing liquid and gas containing vapor, cooling said liquid, recovering normally liquid constituents from the gas containing vapor, and returning said constituents to the cooled liquid.

1,767,342. ARMORED-CONDUIT-CUTTING TOOL. IVAN L. BLAKE, Hannibal, N. Y. Filed Apr. 6, 1928. Serial No. 268,001. 2 Claims. (Cl. 81—9.5.)

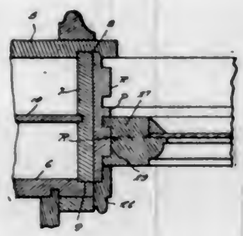
2. In a tool for slitting armored conduits longitudinally, a pair of pivotally connected levers, a conduit en-

gaging hook formed on the upper end of one lever, the inner face of the hook being formed with means for engagement with the cable to prevent longitudinal movement of the latter, a blade secured on the other lever,



the upper edge of said blade being formed with a serpentine cutting edge the rear salient of which is higher than the other for engagement with the bottom portion of the conduit, to slit the conduit longitudinally.

1,767,343. WINDOW CONSTRUCTION. MORRIS G. BRUMBACH, Laureldale, Pa. Filed June 30, 1928. Serial No. 289,457. 2 Claims. (Cl. 20—52.)



1. In a window structure, a frame having uprights with outer and inner spaced plates, one pair of said plates being provided with vertical grooves, side strips between and at right angles to said outer and inner plates disposed in said grooves, each side strip being provided with vertically extending integral ribs and an integral partition between and spaced by vertical grooves from the ribs, a pair of sashes having grooved side rails receiving said ribs and portions disposed in said grooves, and holding sections detachably connected to certain of said plates and lapping over and holding the side strips in position.

1,767,344. SULPHONIC COMPOUND AND PROCESS OF MAKING THE SAME. LOUIS BURGESS, Jersey City, and HYYM E. BUC, Roselle, N. J., assignors to Standard Oil Development Company, a Corporation of Delaware. Filed Nov. 21, 1924. Serial No. 751,377. 3 Claims. (Cl. 260—159.)

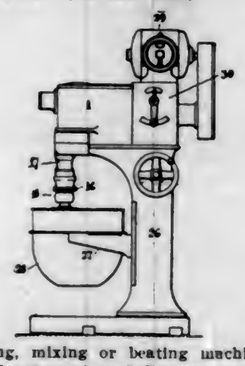
2. The process according to claim 1 carried out at temperatures between 90° and 120° F.

3. Process of preparing sludge sulphonic compounds, comprising diluting with water a sludge containing sulphonic compounds and uncombined sulfuric acid produced by sulphonating petroleum oil, so that the sulfuric acid strength will not exceed 75% of the total amount of sulfuric acid and water present, subjecting the diluted sludge to a temperature not in substantial excess of 360° F. until the sulphonic acids have been rendered insoluble in the aqueous sulfuric acid and separating the sulphonic compounds.

1,767,345. DETERGENT. BENJAMIN F. CARVER, Bayonne, N. J., assignor to Standard Oil Development Company, a Corporation of Delaware. Filed May 21, 1923. Serial No. 640,550. 2 claims. (Cl. 87—5.)

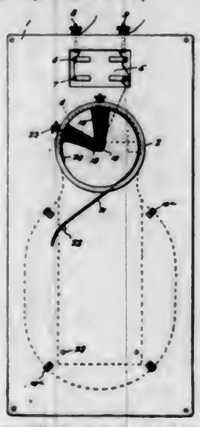
2. A detergent comprising about 25% by weight of an alkali-metal sulphonate derived from sludge of mineral oils treated by concentrated sulphuric acid, about 25% of cocoanut oil soap and about 50% water.

1,767,346. MIXING OR STIRRING MACHINE. EJNAR CHRISTIANSEN, Birmingham, England. Filed Sept. 24, 1929. Serial No. 394,839, and in England Jan. 10, 1929. 4 claims. (Cl. 259—102.)



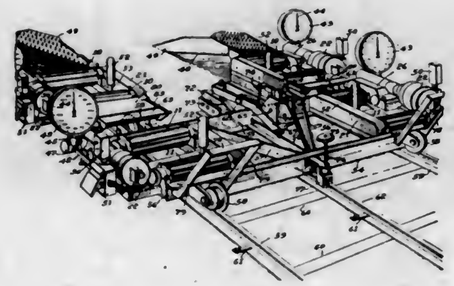
1. A stirring, mixing or beating machine comprising a plurality of concentric spindles, means for separately rotating said spindles in opposite directions, means for rotating the spindles bodily in a circular path and a mixing or beating tool having beating members rotating with each spindle so that the path of the beating members on one spindle crosses the path taken by the beating members of another spindle.

1,767,347. TIME-CONTROLLED SWITCH. WILLIAM JENNINGS COWARD, Lakeland, Fla., assignor of one-half to Charles H. Phillips, Binghamton, N. Y. Filed Oct. 3, 1927. Serial No. 223,683. Renewed Feb. 13, 1930. 7 Claims. (Cl. 200—36.)



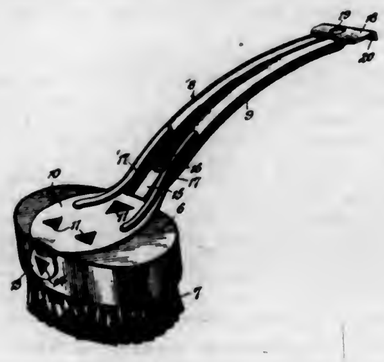
3. In a time controlled switch mechanism, comprising a base, an annular wall projecting from said base, a contact band arranged on the inner side of said wall, a pair of arcuate shaped insulating elements adapted to cover said contact band, said insulating elements adapted to be adjusted in spaced relation to each other, and a rotatable contact element adapted to engage the exposed portion of the contact band, for closing an electrical circuit.

1,767,348. AUTOMOBILE BRAKE-TESTING MACHINE. CHARLES FRANCIS COWDREY, Fitchburg, Mass., assignor by mesne assignments, to Bendix-Cowdrey Brake Tester, Inc., Fitchburg, Mass., a Corporation of Delaware. Filed July 23, 1928. Serial No. 294,748. 37 Claims. (Cl. 265—25.)



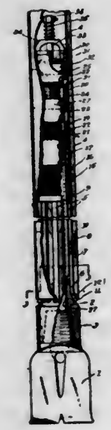
1. An apparatus for testing brakes of automobiles, comprising in combination, a fixed support provided with means for rotatably supporting a wheel of an automobile, a carriage mounted for movement by the automobile toward and from said fixed support, power mechanism for rotating the wheel resting upon said supporting means, an indicator associated therewith for indicating the action of the brake upon the rotating wheel, wheel arresting means associated with said support and mounted for movement to and from its wheel arresting position, and means under the control of the carriage movement for positioning said wheel arresting means.

1,767,349. BRUSH. PAUL A. CROSS, Takoma Park, Md. Filed May 20, 1929. Serial No. 364,637. 1 Claim. (Cl. 15—143.)



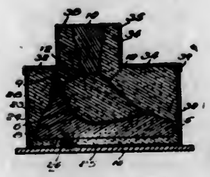
A brush holder including an attaching portion and a handle portion composed of a single piece of approximately flat metal, said attaching portion comprising a plate having a reduced portion forming a downwardly extended ear connected to the brush head, the handle portion having an ear cut out therefrom, forming an opening, said last mentioned ear being extended downwardly into spaced alignment with the aforesaid ear of the attaching plate and being secured to the side of the brush head opposite the side to which the aforesaid ear is connected, said attaching plate having connection with the top of the brush head between said ears, the handle portion at said opening adjacent the brush head having a depression to receive the user's thumb and thereby afford a firm grip on the handle portion at the inner side of the brush head and thereby provide for a substantial pressure on the brush in use, and longitudinally extending strengthening ribs disposed on the opposite sides of said opening and said depression and extending into both the handle portion and attaching plate to strengthen the side of the brush head where the handle portion projects from the attaching portion and the brush head.

1,767,350. ROTARY DRILL MECHANISM. ERD V. CROWELL, Los Angeles, Calif. Filed Sept. 12, 1928. Serial No. 305,446. 6 Claims. (Cl. 255—1.)



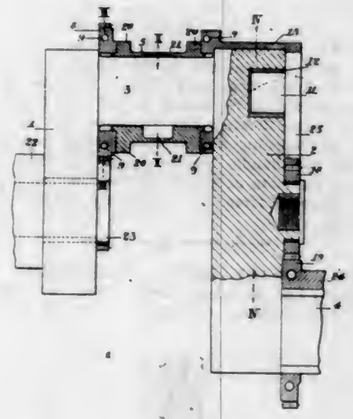
3. In combination, a drill stem, a mandril adapted to telescope in said stem, means for suspending a drill bit from the mandril, a wear-resisting collar on the mandril, cushioning means mounted on the mandril and abutting against the wear-resisting collar, a coupling connected to the mandril and abutting against the cushioning means, and an abutment on the drill stem adapted to engage the wear-resisting collar for limiting projection of the mandril relative to the drill stem.

1,767,351. METHOD OF AND MEANS FOR INVESTING DENTURE MODELS AND PATTERNS. ERNEST E. DALTON and CHARLES J. RINGLE, Chicago, Ill. Filed Oct. 7, 1927. Serial No. 224,749. 12 Claims. (Cl. 22—97.)



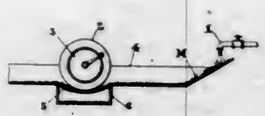
1. A boxing device comprising a box formed to receive a denture model and having an open top and a cover removably fitting the top of said box and provided with a tubular projection opening into the interior of the box.

1,767,352. CRANK SHAFT. LOUIS DAMBLANC, Paris, France. Filed Mar. 26, 1928. Serial No. 264,670, and in France Mar. 26, 1927. 5 Claims. (Cl. 74—38.)



2. In a motor crank shaft having a plurality of eccentrics mounted on the crank pins thereof for varying the length of stroke, the combination of a connecting piece rigidly connected to one of the said eccentrics mounted on the crank pin, said connecting piece passing over the arm of the crank shaft which connects to the said crank pin, and means for transmitting the movement of said connecting piece to other of said eccentrics on the other of said crank pins.

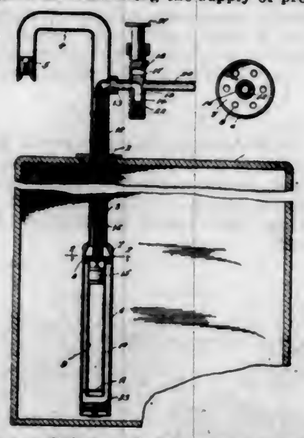
1,767,353. SEPARATING, DISINTEGRATING, AND MIXING APPARATUS. EUGÈNE DE DORLODOT, Paris, France. Filed Nov. 13, 1928, Serial No. 319,087, and in France Nov. 18, 1927. 5 Claims. (Cl. 209—283.)



1. A separating, disintegrating and mixing device for general application, but more particularly for the treatment of ores and similar materials comprising a rotary wheel, a pneumatic tyre mounted on said wheel and in which said wheel is mounted, and a screen mounted in said trough, said tyre being adapted to force the fine particles of material through said screen and to yield to the larger particles whereby these are removed from the screen.

1,767,354. OIL-DISPENSING PUMP. JAMES B. EASTES, Konawa, Okla. Filed Apr. 30, 1929. Serial No. 359,292. 3 Claims. (Cl. 103—52.)

1. A pump including a casing having an upwardly opening valve at its lower end, a discharge pipe connected with the casing and provided with a downwardly opening valve, a tube within the casing and having an enveloping space forming a chamber which is in communication with the said discharge pipe, a piston in the tube, an air pipe in the discharge pipe and spaced therefrom and connected with the upper end of the said tube, means normally holding the piston elevated, a pressure supplying pipe connected with said air pipe, and a manually operable valve for controlling the supply of pressure to the



piston and permitting a discharge of the spent pressure when the piston is returning to normal position after being actuated.

1,767,355. PROTECTIVE DEVICE FOR HYDROMETERS. LEO EDELMANN, Chicago, Ill., assignor to E. Edelmann & Co., Chicago, Ill., a Corporation of Illinois. Filed Feb. 16, 1929. Serial No. 340,371. 4 Claims. (Cl. 265—45.)



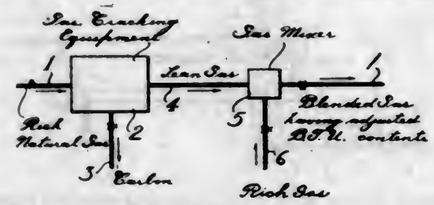
2. In combination with a hydrometer having a frangible barrel, a nozzle provided with a plug portion to be fitted into one end of the barrel, and a protective sleeve fitted on said end of the barrel in contact with the nozzle portion adjacent the plug thereof, said nozzle portion having a flange with which said protective sleeve engages.

1,767,356. PROCESS FOR PURIFICATION OF HYDROCARBON OILS. HERBERT G. M. FISCHER, Westfield, N. J., assignor to Standard Oil Development Company, a Corporation of Delaware. Filed Aug. 19, 1927. Serial No. 214,215. 8 Claims. (Cl. 196—29.)

1. An improved process for treating hydrocarbon oil, comprising agitating with litharge and aqueous caustic soda, blowing a strong current of an oxygen containing gas through the mixture and successively adding small quantities of sulphur during the blowing, whereby the formation of undesirable sulphur compounds is substantially prevented.

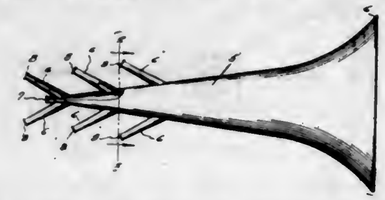
1,767,357. PROCESS OF MAKING A FUEL GAS. JAMES B. GARNER, Pittsburgh, Pa., assignor to Standard Oil Development Company, a corporation of Delaware. Filed Mar. 30, 1923. Serial No. 628,771. 1 Claim. (Cl. 48—196.)

Process of making a fuel gas having a thermal value of substantially 800 B. T. U. per cubic foot and carbon black from natural gas of undesirably high B. T. U. content, comprising decomposing a natural gas having a B. T. U. content in excess of 800 per cubic foot to produce carbon black and a residual gas having a thermal value substantially less than is commercially desirable, collecting said residual gas, collecting the carbon black,



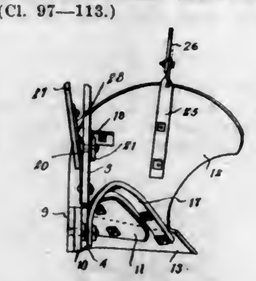
and mixing the residual gas with natural gas having a B. T. U. content in excess of commercial requirements, in an amount sufficient to raise the heating value of the mixed gas at least substantially to 800 B. T. U. per cubic foot.

1,767,358. MEGAPHONE. TYLER B. GOTTSHALL, Souderton, Pa. Filed July 25, 1929. Serial No. 380,981. 3 Claims. (Cl. 181—27.)



1. A megaphone construction comprising a horn and a plurality of mouth pieces communicating with the interior of the horn.

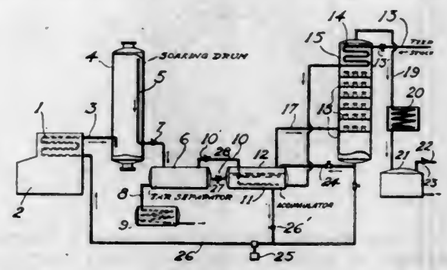
1,767,359. PLOW. GORGE L. GREGORY, McAlester, Okla., assignor of one-third to Will H. Robbins, McAlester, Okla. Filed Sept. 13, 1928. Serial No. 305,789. 3 Claims. (Cl. 97—113.)



1. In a plow, the combination of a mold board, a standard at the rear of the mold board, a bracket secured to the rear side of the mold board and having a slotted member disposed against the inner side of the standard, said slotted member having a corrugated inner face, a washer fitted against said corrugated and slotted member and mating therewith, and a securing bolt inserted through the standard, washer and said slotted member to adjustably secure the parts together.

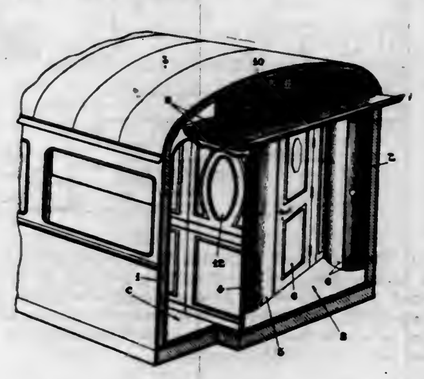
1,767,360. METHOD AND APPARATUS FOR CRACKING OIL. JOHN STEWART HARRISON, Cleveland, Ohio, assignor to Standard Oil Development Company, a Corporation of Delaware. Filed Mar. 26, 1927. Serial No. 178,547. 7 Claims. (Cl. 196—51.)

2. Process of cracking petroleum oil and separating a distillate therefrom containing the cracked gasoline, which comprises heating petroleum oil to a cracking temperature by conducting same in a confined stream through a heating zone, retaining the heated oil under pressure in a digestion zone, continuously withdrawing cracked hydrocarbon material from the digestion zone in a single stream, discharging the stream of cracked hydrocarbon material under reduced pressure and principally in the vapor phase into a separating zone, separating tar therefrom and bubbling the remnant substantially tar free hydrocarbon vapors through a body of oil in a stripping zone under conditions adapted to partially



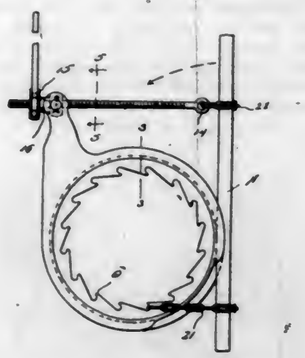
condense said vapors while permitting a fraction containing substantially all the gasoline originally present in the said cracked hydrocarbon material withdrawn from the digestion zone to remain uncondensed, rectifying the last mentioned uncondensed vapors in a rectifying zone under conditions of partial condensation to produce a condensate and an overhead distillate containing substantially all the gasoline, continuously supplying feed oil to the stripping zone and continuously withdrawing oil therefrom and conducting the same through the heating zone in the confined stream first mentioned.

1,767,361. RAILWAY CARRIAGE. MAURICE HAUTOT, Paris, France, assignor to Compagnie Internationale des Wagons-Lits et des Grands Express Europeens, Paris, France, a Company of France. Filed June 26, 1928. Serial No. 288,400, and in France Dec. 6, 1927. 3 Claims. (Cl. 105—315.)



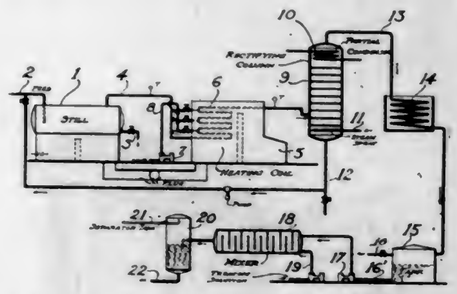
1. In a railway compartment including lateral walls and a roof, and S-shaped partition subdividing said compartment into two chambers, the central part of said partition forming an angle with the transverse axis of the vehicle, said compartment being characterized in that said partition is connected with two horizontal plates forming baggage racks and connected with a vertical plate extending to the roof, the assemblage of these horizontal and vertical plates forming a T-member which braces the lateral walls of the compartment and assures perfect rigidity of the entire vehicle and the parallelism of the passage partition with said lateral walls.

1,767,362. PIPE-BENDING TOOL. JOSEPH F. HEER, Washington, Pa. Filed Jan. 20, 1928. Serial No. 248,168. 2 Claims. (Cl. 153—32.)



1. A pipe bending device of the character described comprising an annulus having its periphery grooved to receive tangentially a pipe to be bent, means whereby the pipe may be secured to the annulus, means associated with the annulus whereby the pipe may be bent to conform with the curvature of the annulus, said means for securing the pipe to the annulus consisting of a rib provided on the annulus, said rib being formed with notches to provide hooks, and a tie member adapted to engage one of said hooks and the pipe.

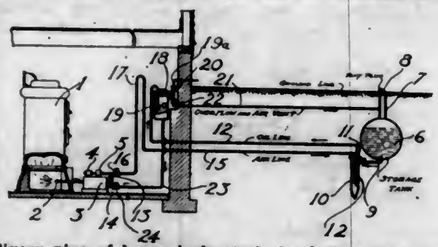
1,767,363. ART OF PREPARING HYDROCARBON PRODUCTS. MARION B. HOPKINS, Elizabeth, N. J., assignor to Standard Oil Development Company, a Corporation of Delaware. Filed Aug. 16, 1922. Serial No. 582,133. 7 Claims. (Cl. 196—142.)



4. The process of preparing hydrocarbon products rich in unsaturates, which comprises passing hydrocarbon vapor at substantially atmospheric pressure through a temperature zone between 300° and 650° F., in the presence of air in the proportion of between 5 and 20 cubic feet per pound of hydrocarbon.

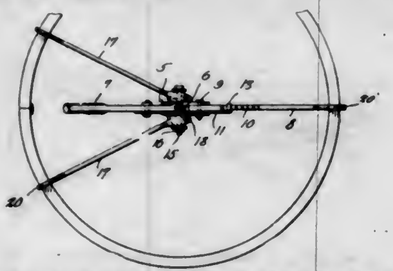
1,767,364. DWELLING HEATER INSTALLATION. FRANK A. HOWARD, Elizabeth, N. J., assignor to Standard Oil Development Company, a Corporation of Delaware. Filed Oct. 10, 1927. Serial No. 225,183. 5 Claims. (Cl. 158—36.5.)

1. An oil supply system for oil burners comprising a source of oil supply, a receptacle at a level above the source of supply, a delivery pipe extending into the source of supply adjacent the bottom thereof and communicating with the receptacle, a source for supplying gas under pressure, means for discharging gas from the source of gas to the delivery pipe adjacent the lower end thereof and beneath the level of oil in said oil supply source, whereby a mixed column of gas and oil is formed in the



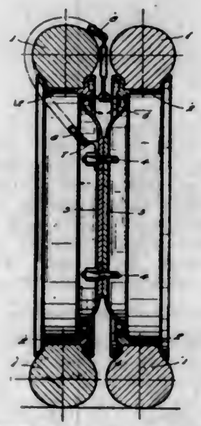
delivery pipe of lesser hydrostatic head than the column of oil in the oil supply source and the oil is caused to flow to the receptacle, and a pipe to conduct oil by gravity from the receptacle to the burner.

1,767,365. TIRE-RIM TOOL. JOHN H. HUFFMAN, Washington, D. C. Filed Oct. 8, 1929. Serial No. 398,209. 2 Claims. (Cl. 157—1.)



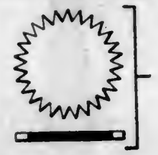
1. In a rim tool, a main bar, an arm pivotally connected with the main bar, a bolt extending through the main bar, enlarged bearing members on the main bar and through which the bolt extends, arms having enlarged openings, mounted on the enlarged bearing members, spaced ribs on the arms and adapted to engage opposite sides of the main bar to hold the arms against lateral movement when the arms are in their folded positions.

1,767,366. SKID CHAIN FOR MOTOR VEHICLES. HERBERT DAVID JACKSON and FRANK WHITE, Walsall, England. Filed July 27, 1928. Serial No. 295,762, and in Great Britain Nov. 23, 1927. 4 Claims. (Cl. 152—2.)



1. A skid chain for twin wheels of motor vehicles comprising a collapsible anchorage member adapted to fit between the rims of the twin wheel, a chain secured at one end to the anchorage member and passing over the tyre on the outer rim, and means for retaining the other end of the chain on the outer face of the wheel.

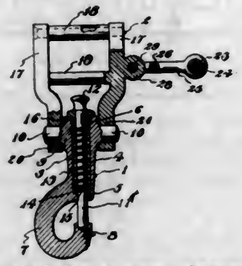
1,767,367. ALTERNATING-CURRENT RECTIFIER. ROBERT C. JACQUELET, Norwood, Ohio. Filed Apr. 1, 1927. Serial No. 180,280. 4 Claims. (Cl. 175—366.)



1. A unit for rectifying alternating current, comprising, a plate coated with copper oxides, a contact forming area of reduced copper on the surface of the outer oxide layer, a margin of unreduced black oxide surrounding said reduced oxide, and a heat radiating plate periphery.

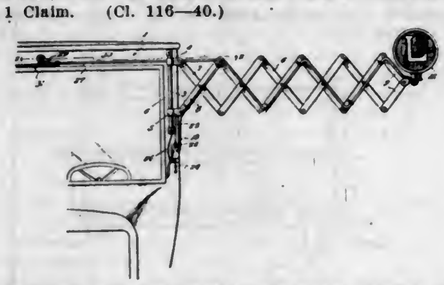
4. The process of manufacturing rectifying units of the class described, comprising, the step of configurating the periphery of each unit into a radiator, the step of oxidizing a surface of each unit at elevated temperatures, the step of cooling each unit to a temperature at which the marginal zone of the copper oxide surface is relatively unreducible and the central portion of said copper oxide surface is relatively reducible, and the step of reducing the interior of said copper oxide surface.

1,767,368. SNAP HOOK. PETER W. JENSEN, Princeton, Minn. Filed July 3, 1928. Serial No. 290,111. 3 Claims. (Cl. 24—265.)



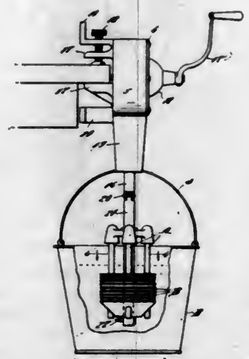
1. A snap hook including a shank having a bill at one end and integral trunnions adjacent the opposite end, and a shackle comprising side arms formed with openings in which the said trunnions are journaled, and a cross bar connecting the side arms intermediate their ends and forming a part thereof.

1,767,369. TRAFFIC SIGNAL. HARRY JOHNSON, Sweetwater, Nebr. Filed Jan. 20, 1928. Serial No. 248,200. 1 Claim. (Cl. 116—40.)



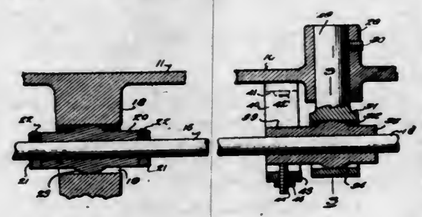
Vehicular signaling means including a vertical rod secured at its upper and lower ends to the vehicle and spaced therefrom intermediate its ends, a lazy tongs mounted on said rod and provided at its outer end with a signal, an operating member disposed between the vehicle and the beforementioned vertical rod and pivoted to the lazy tongs, a crank mounted on the vehicle, an arm connected with the crank and having the inner end of the said operating member pivoted thereto, and a contractile spring associated with the crank and operating member to restore the parts to normal position after being actuated.

1,767,370. WASHING DEVICE FOR SEPARATOR DISKS. HARRY KEHN, Goodrich, N. Dak. Filed Oct. 8, 1928. Serial No. 311,157. 1 Claim. (Cl. 141—1.)



A device of the character described comprising a casing, a vertical shaft section journaled with the casing and depending therefrom, means on the casing whereby the casing may be attached to a supporting surface, a second shaft section coupled to the first shaft section for receiving a separator frame to be washed, means on the lower end of the second shaft section for supporting said separator frame, and means connected with the casing adjacent the first shaft section for supporting a container of washing liquid, the application of which will result in the immersion of the frame in the liquid.

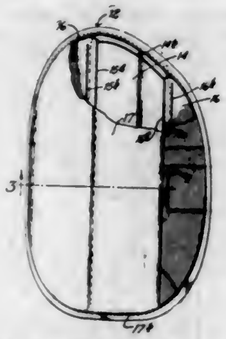
1,767,371. DRIVE-CHAIN TENSION ADJUSTER. RALPH S. KELSO, Rockford, Ill., assignor to Free Sewing Machine Company, Rockford, Ill., a Corporation of Illinois. Filed Dec. 3, 1925. Serial No. 73,063. 4 Claims. (Cl. 308—15.)



1. A device of the character described comprising a rotatable shaft, spaced bearing bushings surrounding said shaft, each of said bushings being provided with a substantially spherical enlargement, supports for said bushings, said supports being provided with cylindrical openings corresponding in diameter to said enlargements, a flexible driving element passing around said shaft adjacent and outwardly of one of said bearing supports, the bushing in said last named support being extended inwardly, means adapted to contact with the inwardly extending portion of said last named bushing to exert a lateral force thereagainst, means for permitting adjust-

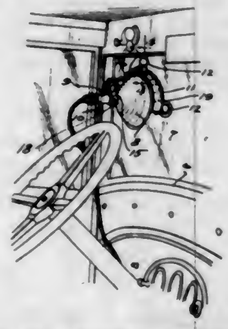
ment of said last named support in a line substantially at right angles to the axis of said shaft, and a set screw passing through each of said bearing supports, said enlargements being provided with depressions pivotally receiving the ends of said set screws.

1,767,372. PAD. WILLIAM C. KING, Chicago, Ill., assignor to O'Shea Knitting Mills, Chicago, Ill., a Corporation of Illinois. Filed May 20, 1929. Serial No. 364,661. 1 Claim. (Cl. 2—22.)



A pad of the character described including; a sheet of padding material with a plurality of vertical strips of stiff sheet material substantially covering its outer surface, said strips having their adjacent edges horizontally curved and overlapping and separately attached directly to the padding material by sewing.

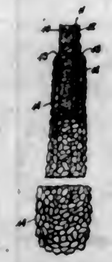
1,767,373. SPOTLIGHT. OTIS M. KIRLIN, Watertown, S. Dak. Filed May 17, 1929. Serial No. 363,782. 4 Claims. (Cl. 240—61.)



1. A mounting for a spotlight comprising a yoke-like frame having spaced vacuum cups for attaching the same to a support, a rearwardly projecting arm on the frame, and means on the arm for attaching a spotlight thereto substantially at the center of the frame.

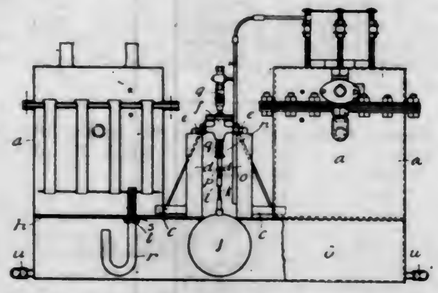
1,767,374. METHOD OF MAKING ROOFING ELEMENTS. LESTER KIRSCHBRAUN, Leona, N. J., assignor, by mesne assignments, to The Patent and Licensing Corporation, Boston, Mass., a Corporation of Massachusetts. Continuation of application Serial No. 134,412, filed Sept. 9, 1926, which is a division of application Serial No. 51,949, filed Aug. 24, 1925. Patent No. 1,612,776, dated Dec. 28, 1926. This application filed Oct. 8, 1929. Serial No. 398,232. 19 Claims. (Cl. 91—68.)

1. A method of making roofing elements, which comprises dipping the butt portion of a previously formed element, having an asphaltic coating and a layer of partially embedded granular material on one face thereof, into a bath of molten asphalt, withdrawing the



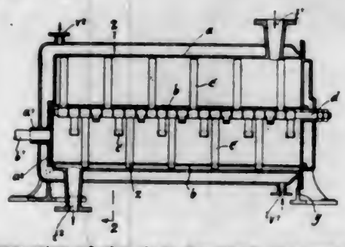
element and suspending it in an upright position for a brief period with its butt edge down, and applying a granular material to the coating thus formed while it is soft and plastic.

1,767,375. ELECTROLYTIC APPARATUS. ALBERT EDGAR KNOWLES, Heswall, England. Filed Apr. 13, 1929, Serial No. 354,970, and in Great Britain Apr. 14, 1928. 4 Claims. (Cl. 204—5.)



1. Means for maintaing the liquid level in electrolytic cells comprising a shallow tank of large superficial area to maintain a large volume of liquid at a low and substantially uniform head instantly available to cope with a sudden demand from the cells, gas-washing chambers arranged above said tank, means for drawing off fluid from said chambers into said tank, means for supplying fluid from said tank to the electrolytic cells, a valve controlling a fluid delivery to said chambers, and a float in said tank operating said valve.

1,767,376. DISINTEGRATING, KNEADING, MIXING, AND DRYING MACHINE. ANDREAS KRÄMER, Berlin, Germany, assignor to Deberag, Deutsche Beratungsgesellschaft Für Die Chemische und Metallurgische Industrie m. b. H., Berlin, Germany, a Joint Stock Company of Germany. Filed Sept. 27, 1929, Serial No. 395,050, and in Germany Oct. 19, 1928. 3 Claims. (Cl. 259—110.)



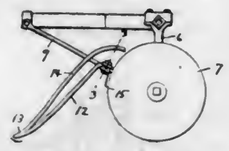
1. In apparatus of the class described, the combination with a cylindrical casing, of a plurality of beater arms

rotatable about an axis substantially coincident with the axis of the casing and extending radially of the casing so that the ends of said arms move in close proximity to the cylindrical casing wall, and a framework in which the beater arms are slidably supported, said framework being rotatably mounted within the casing about an axis eccentric to the casing axis, whereby rotation of the framework effects rotation of the beater arms at speeds varying in accordance with the positions of the arms with respect to the plane containing the axis of rotation of the arms and the axis of rotation of the framework.

1,767,377. YELLOWISH VAT DYESTUFFS. GEORG KRÄNZLEIN, HEINRICH GREUNE, and HEINRICH VOLLMANN, Hochst-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Original application filed Feb. 6, 1925, Serial No. 7,390, and in Germany Feb. 16, 1924. Divided and this application filed Nov. 27, 1925. Serial No. 71,708. 6 Claims. (Cl. 260—29.)

1. The process which comprises heating 2-chloronaphthosultam-3.4-phenazine with a 1.4-quinone which is substituted in the 2 and 3 positions by hydrogen, in the presence of an organic solvent and treating the condensation product with an alkaline oxidizing agent.

1,767,378. ATTACHMENT FOR LISTED-CORN CULTIVATORS. JAROSLAV F. KROUPA, Kimball, S. Dak. Filed Jan. 6, 1928. Serial No. 244,916. 1 Claim. (Cl. 97—192.)



In combination with a lister corn cultivator wherein the cultivator includes a frame, a cross member, a tongue projecting forwardly from the frame, wheels, means mounting the wheels below the cross member, braces extending diagonally between the tongue and cross members, of a substantially V-shaped attachment straddling the path of the wheels, a clamp detachably connected to the braces, and longitudinally adjustable with respect thereto, one leg of said attachment detachably secured to said clamp to provide for spacing the apex in a predetermined distance in front of the wheels and also with respect to the ground.

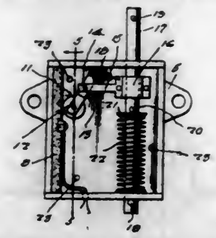
1,767,379. PROCESS OF TREATING COMPLEX METALLIC COMPOUNDS OF O-HYDROXYAZO DYESTUFFS. HANS KRZIKALLA and HANS KÄMMERER, Mannheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Mar. 24, 1927, Serial No. 178,130, and in Germany Mar. 31, 1926. 5 Claims. (Cl. 260—12.)

1. The process which comprises treating with a reducing agent a complex metallic compound of an ortho-hydroxyazodyestuff containing at least one nitro group.

2. The process which comprises treating a complex metallic compound of an ortho-hydroxy-azo-dyestuff containing at least one nitro group with a reducing agent to the corresponding amino compound and acylating the resulting product.

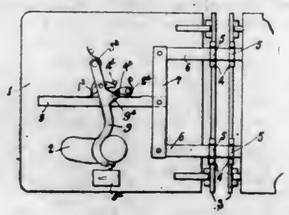
1,767,380. SWITCH FOR AUTOMOBILE BURGLAR-ALARM SYSTEMS. FRANK KUDERA, Jr., and NICHOLAS YIRKOSKY, Chicago, Ill. Filed Nov. 22, 1926. Serial No. 150,049. 1 Claim. (Cl. 200—164.)

A circuit closer comprising a stationary casing, a rod slidably arranged in the casing with one end extending outwardly therefrom, through which said rod may be operated, a pair of spaced apart stationary contact members arranged in the casing, circuit wires attached thereto, a movable contact carried by the rod and arranged to close the circuit between said stationary contacts during a predetermined period of the movement of the rod and comprising an arm, a clamp at one end of the arm for attaching to said rod, a roller support pivotally mounted



at the outer end of the arm, a contacting roller mounted on one end of said support for engagement with said stationary contact, and spring means attached to the opposite end of said support yieldably urging the roller into contacting position, said contacts being disposed out of engagement upon the movement of the rod into either of its extreme opposite positions, and spring means arranged in the casing and connected to the rod for yieldably urging the rod outwardly of the casing.

1,767,381. LOOSE-LEAF BINDER OF THE FLEXIBLE-THONG TYPE. PERCY CHARLES GIDLEY LAKE, London, England. Filed Sept. 12, 1928, Serial No. 305,529, and in Great Britain Nov. 8, 1927. 4 Claims. (Cl. 129—41.)



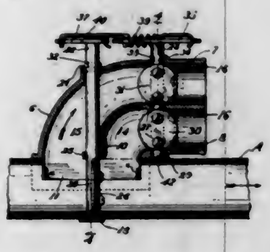
1. In a loose leaf binder of the class described, a construction including a cover member, a plurality of flexible thongs attached at one end to said cover member, a cross-bar attached to the other end of the thongs, another cover member, a clamping bar carried by each cover member, the said clamping bars being connected with the flexible thongs, a ratchet bar carried by the cross-bar, a thumb lever pivotally mounted on the second-mentioned cover member, an adjusting pawl pivotally mounted on the said lever and adapted to engage with the teeth of the ratchet bar, a detent pawl pivotally mounted on the said second named cover member and adapted to engage with the teeth of said ratchet bar, bolt means carried by the said second named cover member and adapted to cooperate with the adjusting pawl to raise the pawl out of engagement with the ratchet bar when the thumb lever is in one position, and other bolt means carried by the detent pawl and adapted to cooperate with the thumb lever to raise the detent pawl out of engagement with said ratchet bar when the thumb lever is in such position.

1,767,382. PROCESS FOR THE CONVERSION OF DIFFICULTLY SOLUBLE OR INSOLUBLE CARBOHYDRATE ETHERS INTO A SOLUBLE STATE. OTTO LEUCHS, Elberfeld, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed June 24, 1926, Serial No. 118,373, and in Germany June 27, 1925. 5 Claims. (Cl. 260—152.)

1. The process which comprises treating a difficultly soluble ether of a colloidal carbohydrate, in the presence

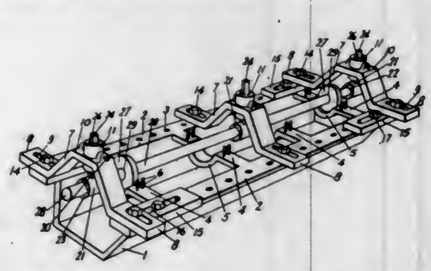
of an agent exerting a swelling action upon the ether, with an acid in sufficient quantity to produce a degradation of the ether.

1,767,383. VALVE CONSTRUCTION FOR AUTOMOBILE HEATERS. ASA E. LINENDOLL, Norwalk, Ohio. Filed Jan. 22, 1926. Serial No. 82,914. 4 Claims. (Cl. 277—19.)



1. A valve fitting provided with a base flange shaped to fit over an opening in an exhaust pipe, an internal chamber divided longitudinally by a partition into parallel passages both connected with said opening and leading to separate branch pipes, valve stems mounted to intersect said opening and said passages, respectively, valve members mounted on said stems, and mechanism common to the said stems for actuating in unison the valve members carried thereby.

1,767,384. BEARING-BORING APPARATUS. FREDERICK A. LITTER, Columbus, Ohio. Filed Apr. 21, 1926. Serial No. 103,582. 15 Claims. (Cl. 77—2.)

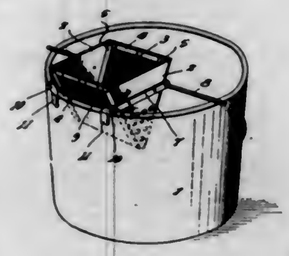


1. Main bearing boring apparatus comprising bridge pieces having openings, cutter shaft bearings having stems adapted to interfit with said openings, means for aligning said cutter shaft bearings and melted material means for embracing said stems in the openings to maintain said cutter shaft in alignment.

10. The combination with a crank case having main bearing saddles, of collars adapted to rest in said saddles, a shaft adapted to be mounted in said collars, bearings having members thereon for said shaft, supports for said bearings, the members on said bearings being so mounted upon said supports as to be capable of movement freely in any direction thereby enabling the bearings to be shifted to any position demanded by proper alignment thereof, and means for securing the bearings in the aligned position.

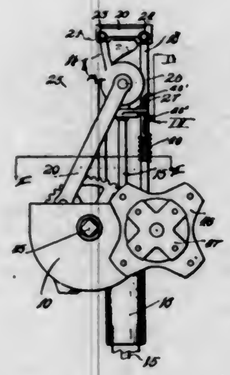
1,767,385. WATER EXPELLER. THOMAS J. LOGAN, Wapato, Wash. Filed May 7, 1929. Serial No. 361,137. 1 Claim. (Cl. 15—261.)

A device for the purpose set forth comprising a receptacle consisting of triangular end walls having openings through their lower apex portions, a reticulated plate V-shaped transversely to correspond to the edges of the end walls, reinforcing strips secured along the edges of said reticulated plate, inwardly projecting flanges along the edges of the end walls to which the flanges of the reticulated plate are secured, supporting strips secured across the end walls and having their outer ends formed into pendent hangers to engage across



the edge of a tub and against the outer side of the tub, a brace fitted in and extending between the projecting front ends of said strips, and a rod carried by the rear ends of the strips to extend across and rest upon the edge of a tub.

1,767,386. LUBRICATING SYSTEM. JOHN AUGUST LUND, Batavia, Ill., assignor to Challenge Company, Batavia, Ill., a Corporation of Illinois. Filed Oct. 18, 1926. Serial No. 142,327. 7 Claims. (Cl. 184—4.)

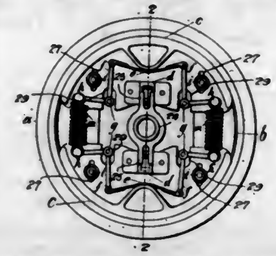


4. The combination with a casing having a lubricant therein, of a trough disposed in said casing above said lubricant, means in said casing to transfer lubricant from said casing to said trough, lubricant conveying means disposed beneath said trough, said conveying means comprising a driving shaft, a helical stationary member enveloping said shaft, and means on said shaft for deflecting the drip from said trough to said conveyor, said deflecting means comprising a shoulder having irregular means on the surface thereof.

1,767,387. EXPANDING FRICTION CLUTCH FOR MOTOR CARS. WILLIAM HILL MCBRIDE, Coatbridge, Scotland. Filed Apr. 6, 1928, Serial No. 267,966, and in Great Britain Apr. 23, 1927. 2 Claims. (Cl. 192—76.)

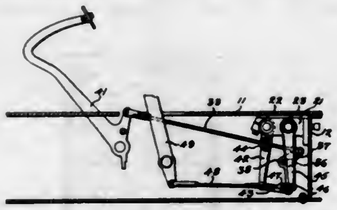
1. A friction clutch comprising an outer ring, a rotatable disc, segments slidably mounted upon the face

of the disc in position to engage the inner surface of the ring, angle levers fulcrumed upon the disc and arranged in pairs, one pair being disposed adjacent each



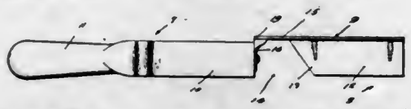
segment, evener springs extending between the levers of each pair and engaging the respective segments whereby to hold them in frictional engagement with the ring, and tensile springs connecting the pairs of levers.

1,767,388. BRAKE-OPERATING MECHANISM. ALFRED MOORHOUSE, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Aug. 7, 1925. Serial No. 48,910. 10 Claims. (Cl. 188—10.)



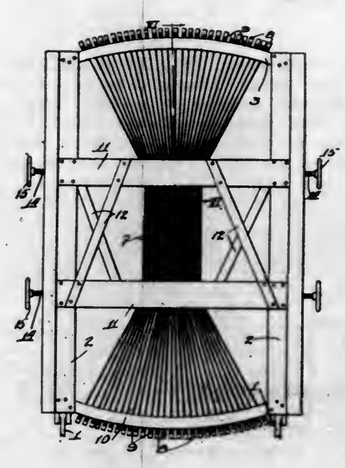
1. The combination in a motor vehicle having front and rear brakes, of a front rock shaft to operate the front brakes, a rear rock shaft to operate the rear brakes, means to operate all said brakes including an arm on the rear rock shaft, a floating lever on the arm, an operating lever connected to one end to the floating lever and the other end of the floating lever connected to the front rock shaft, and a separate operating lever independently connected to the rear rock shaft.

1,767,389. MEANS FOR MAKING POTATO CHIPS. LOU A. MORRIS, Aurora, Nebr. Filed Dec. 11, 1928. Serial No. 325,288. 1 Claim. (Cl. 146—171.)



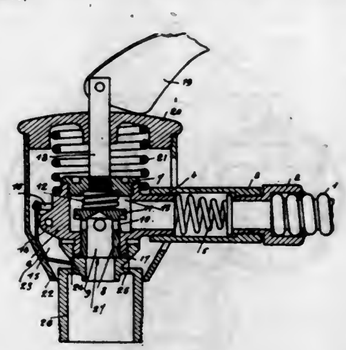
A potato slicer comprising a paddle shaped rest having a handle and presenting an upper flat face against which the potato is adapted to be supported, a longitudinally corrugated slicing plate having depending legs at one end, provided with slots, said legs adapted to rest flat against the forward edge of the said paddle shaped rest, fastening means carried by the said saddle rest and engaging the said slotted legs of the said slicing plate, for adjustably connecting together the said saddle rest and slicing plate, the latter being normally positioned with its cutting edge slightly spaced above the plane of the said flat face of the rest, whereby the slices are adapted to pass under the slicing plate, and an abutment member secured to the under side of the slicing plate and presenting a rearwardly and downwardly inclined edge against which the said slices are adapted to abut and by which they are deflected downwardly.

1,767,390. GANG SAW. CHARLES F. MOSES, Sheboygan, Wis., assignor of fifty-one one-hundredths to Gardner Lumber Company, a Corporation of Wisconsin. Filed May 9, 1929. Serial No. 361,641. 17 Claims. (Cl. 143—156.)



4. A gang saw sash device of the class described comprising a frame having arcuate end members and intermediate cross members, a series of saw blades, stretcher devices mounted in the arcuate end members of the frame and connected to the ends of said saw blades to mount said saw blades with the ends thereof arranged in a fanned out relationship, grooved curved separators mounted in said frame intermediate cross members between the saw blades to hold the middle portions of said saw blades arranged in closely spaced parallel relation, clamping blocks adjustably mounted in said intermediate cross members of the frame, and screw means connected with said clamping blocks adapted to adjust said blocks and the separators to hold the saw blades properly mounted in tensioned form within the gang saw sash.

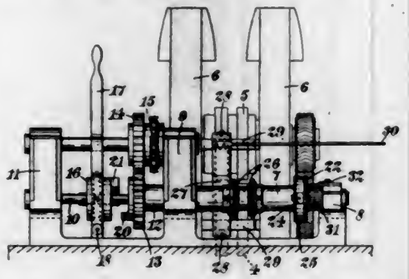
1,767,391. DISCONNECTING COUPLING FOR PIPES AND THE LIKE. JACQUES MULLER, La Garenne Colombes, France. Filed Dec. 20, 1926, Serial No. 156,033, and in France Dec. 22, 1925. 1 Claim. (Cl. 284—17.)



A detachable coupling for pipes and the like comprising relatively longitudinally movable inner and outer members, the latter having a conical part, a ported valve in the inner member, a spring acting against the inner end of said valve, the inner member being in communication with a fluid conduit and provided with exterior lock-

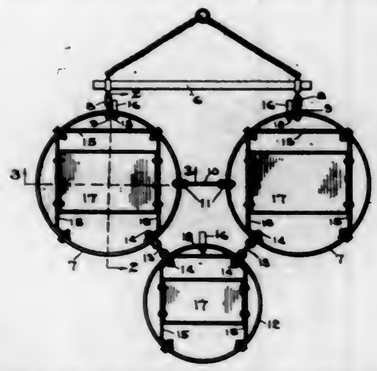
ing lugs or claws and means whereby the same are adapted to be operated by said conical part of the outer member to lock the coupling to a conical part of the member to which it is to be connected, and means whereby the operation of coupling will open the valve in the inner member.

1,767,392. ECCENTRIC ROLLS FOR ROLLING MILLS AND THE LIKE. ARTHUR EDWARD FINCHES, Sheffield, England, assignor of one-half to The Tinsley Rolling Mills Company Limited, Sheffield, England. Filed Jan. 26, 1928, Serial No. 249,729, and in Great Britain Jan. 26, 1927. 7 Claims. (Cl. 80—43.)



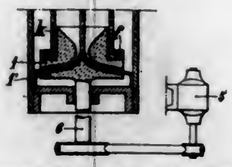
7. In a rolling mill, the combination with shaped rolls, of feed apparatus comprising a feed roller fitted with gripping guide collars and mounted on an axis parallel with those of said rolls, a clutch member coaxial with and rotatable in relation to the feed roller at the same speed as the rolls, a second clutch member rotating with the feed roller, a single dog projection on each clutch member, means for moving the dogs into and out of an engaging position, a stop defining the position of work to be fed to the rolls, means for bringing the stop between the feed roller and the rolls, and for withdrawing it, and means for turning the feed roller by hand and for indicating when it is at a given position, substantially as specified.

1,767,393. ROAD DRAG. OSCAR POLLOCK, Fremont, Nebr., assignor of ten per cent to James M. Maher, ten per cent to Glenn Beaty, ten per cent to Swan Anderson, ten per cent to F. H. Rehrhenke, and ten per cent to R. E. Hammond, Fremont, Nebr. Filed Aug. 27, 1929. Serial No. 388,818. 7 Claims. (Cl. 37—143.)



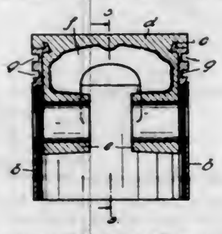
1. In a road drag, a draw-bar, upright hollow cylinders disposed rearwardly of and connected with the draw-bar, frames approximately rectangular in plan disposed within and secured to the cylinders, and a plurality of trays each disposed inwardly of and secured to a frame.

1,767,394. APPARATUS FOR THE MANUFACTURE OF HOLLOW BODIES. ALBERT PORTEVIN, Paris, France, assignor to Société d'Expansion Technique, Paris, France, a Company of France. Filed Nov. 7, 1927, Serial No. 231,729, and in France Nov. 10, 1926. 3 Claims. (Cl. 22—65.)



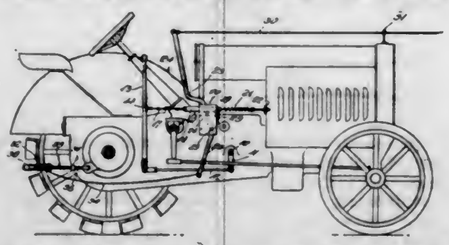
1. In an apparatus for the manufacture of tubular bodies, a deflector positioned to intercept an exposed descending stream of solidifiable fluid, said deflector being cupped and open at its upper end to receive the fluid and having a formation adapted to peripherally deliver said fluid, and a vertical tubular mould surrounding and co-axial with said deflector, said mould and deflector being adapted for relative movement in the direction of their axis and at least one thereof being rotatable.

1,767,395. PISTON FOR INTERNAL-COMBUSTION ENGINES. PERCY PRITCHARD, Smethwick, England. Filed Apr. 10, 1928, Serial No. 268,988, and in Great Britain May 25, 1927. 2 Claims. (Cl. 74—108.)



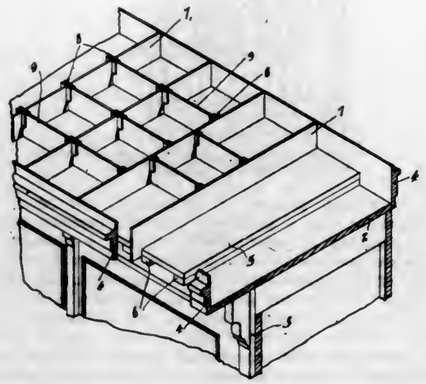
1. A composite piston for internal combustion engines comprising a cast metal head, a cylindrical shell on to which the head is cast, an inwardly directed annular flange at the upper end of the shell, and an upwardly and outwardly directed lip on the flange to form a re-entrant angle therewith, the flange and lip being wholly embedded in the metal of the head.

1,767,396. TRACTOR CLUTCH-THROW-OUT MEANS. ARTHUR E. RACKOW, Campbellsport, Wis. Filed Oct. 22, 1928. Serial No. 314,224. 6 Claims. (Cl. 180—14.5.)



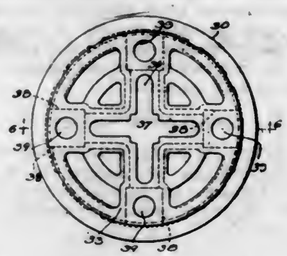
1. In a clutch throw-out means, the combination of a clutch throw-out lever, an actuator for moving said lever, said actuator having an actuating spring, latch means for normally holding said actuator against movement under the influence of said spring, one-way connecting means between said actuator and said lever for permitting clutch throw-out movement of said lever without moving said actuator and for moving said lever in clutch throw-out direction upon operation of said actuator, and means for releasing said latch means to permit movement of said actuator under the influence of the aforesaid spring.

1,767,397. DISPLAY COUNTER. JACK R. RAGLAND, Los Angeles, Calif., assignor of one-third to A. F. Hubbert and one-third to G. A. Crittenden, Los Angeles, Calif. Filed June 2, 1928. Serial No. 282,495. 1 Claim. (Cl. 312—140.)



A display counter comprising counter boards, vertical plates between abutting edges of the counter board, plate brackets having base sections extending under the counter boards and having body seat portions forming plate holding grooves and plates transverse to the first-mentioned plates positioned in the grooves of said brackets.

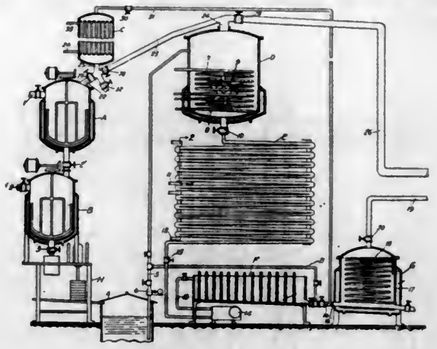
1,767,398. INSULATOR CAP. ALLAN RAMSEY, Chicago, Ill., assignor to Schweitzer & Conrad, Chicago, Ill., a Corporation. Filed Mar. 9, 1925. Serial No. 13,965. 4 Claims. (Cl. 173—313.)



1. A cap for insulators comprising a body portion having a flat top surface and depending means for securing the body upon the end of an insulator, a plurality of connected T slots being formed in the body, the outer end of said slots being covered, the opening below the covered portion being adapted to receive a nut for a clamping bolt, and the covered end of the slot having a bolt opening leading through said nut receiving portion.

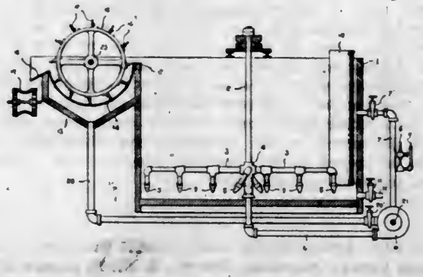
1,767,399. PROCESS OF PRODUCING GRAPE JUICE. LLOYD C. REILING, Columbus, Ohio. Filed May 17, 1927. Serial No. 192,114. 5 Claims. (Cl. 99—11.)

5. The method of clarifying grape juice which comprises heating the grape juice to a temperature of from 150° to 190° F., thereby effecting a flocculation of colloid material, subjecting the juice to a rapid cooling medium



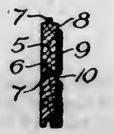
while substantially at such high temperature to reduce it to a temperature below 50° F., thereby throwing out tartrates in filtrable form, and filtering the juice.

1,767,400. PROCESS OF THE SEPARATION OF COMBUSTIBLE MATERIAL FROM ITS ASSOCIATED NONCOMBUSTIBLE MATERIAL. WALTER L. REMICK, Hazleton, Pa. Filed May 27, 1929. Serial No. 366,423. 2 Claims. (Cl. 209—166.)



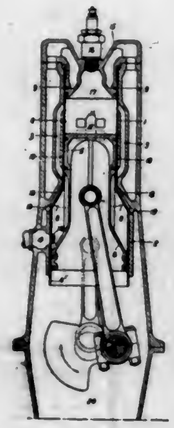
1. The process of the separation of combustible material from its associated noncombustible material which consists in discharging a mixture of combustible and noncombustible material into a liquid mass, separating the finer particles of the combustible material from the coarser particles of the combustible material and from the mass, agitating said finer particles with oil, and reintroducing said oiled particles into the liquid mass.

1,767,401. BUILDING CONSTRUCTION. FRED M. REUTER, Chicago, Ill. Filed Mar. 31, 1927. Serial No. 179,798. 1 Claim. (Cl. 20—5.)



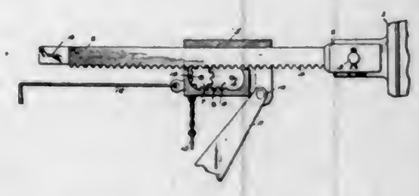
A building construction material comprising a strip of wood, a cementitious material coating one face of the said strip, and strips of roofing material narrower than the said strip of wood cemented in spaced edgewise relation to each other on the wood, each with one of its horizontal edges substantially flush with one of the horizontal edges of the strip of wood.

1,767,402. TWO-STROKE CYCLE INTERNAL-COMBUSTION ENGINE. JAMES WALTER ROBERTSON, Drymen, Scotland. Filed Aug. 27, 1929, Serial No. 388,687, and in Great Britain Sept. 5, 1928. 1 Claim. (Cl. 123—71.)



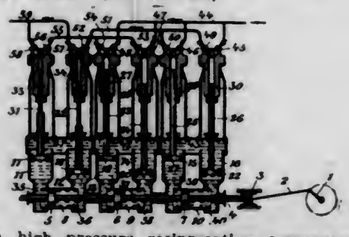
A two-stroke cycle internal combustion engine comprising, in combination, a two-diameter cylinder provided with transfer passages, exhaust ports, intermediate the upper and lower ends of said passages, and an inlet in the part of larger diameter, a two-diameter ported sleeve reciprocable in said cylinder, a piston having a fluted trunk and an enlarged skirt and reciprocable in said sleeve, said sleeve and said piston being adapted to reciprocate with the same frequency but out of phase with one another, and said skirt and said sleeve bounding an annular space constituting a compressor cylinder which is vented to the crankcase and which, at given times, is opened to said transfer passages and, at other times, to said cylinder inlet.

1,767,403. REGULATOR FOR BRAKE RIGGING. WILLIAM HENRY SAUVAGE, New York, N. Y., assignor, by mesne assignments, to Royal Railway Improvements Corporation, New York, N. Y., a Corporation of Delaware. Original application filed Nov. 1, 1927, Serial No. 230,350. Divided and this application filed Oct. 30, 1928. Serial No. 315,965. 6 Claims. (Cl. 188—197.)



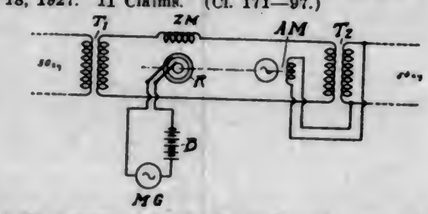
1. In combination with a brake rigging lever having a normally fixed point of support, manually actuated means for changing said fixed point of support including a relatively fixed toothed rod, a housing supported on said rod, holding means associated with said housing and coacting with said toothed rod whereby to permit a free relative movement of the housing substantially proportional to brake shoe clearance and a further movement thereby permanently to take up and hold any excess travel if and when the same occurs, and means for moving said housing.

1,767,404. HIGH-PRESSURE RECIPROCATING PISTON COMPRESSOR. CHARLES SCHAER, Langenthal, Switzerland, assignor to the Firm of Sulzer Frères Société Anonyme, Winterthur, Switzerland. Filed Feb. 3, 1928, Serial No. 251,714, and in Switzerland June 8, 1927. 9 Claims. (Cl. 230—49.)



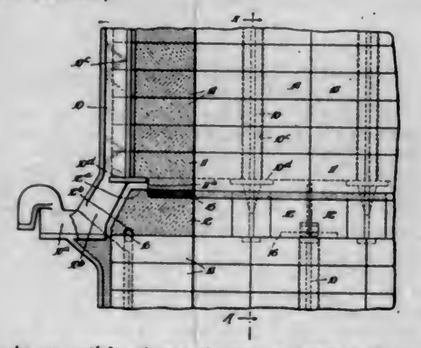
1. In a high pressure reciprocating compressor, the combination with a positively actuated primary piston, of a plurality of intermediate pistons, a plurality of compressor pistons arranged in parallel and each actuated by one of said intermediate pistons, an oscillating column of liquid between one side of said primary piston and one of said intermediate pistons, an oscillating liquid column between the other side of said primary piston and another of said intermediate pistons, and an oscillating liquid column between said intermediate pistons.

1,767,405. POWER SYSTEM. KARL SCHMIDT, Berlin-Lichtenrade, Germany, assignor to C. Lorenz, Aktiengesellschaft, Berlin-Tempelhof, Germany. Filed Mar. 17, 1928, Serial No. 262,461, and in Germany Mar. 18, 1927. 11 Claims. (Cl. 171—97.)



1. In a power network of a definite frequency, a system for superimposing other frequencies on said network comprising a synchronous machine of the network frequency, an exciter winding for said synchronous machine, and means for introducing a second frequency to the exciter circuit of said machine.

1,767,406. FURNACE-WALL CONSTRUCTION. FRANK I. SHEAHAN, Chicago, Ill., assignor to M. H. Detrick Company, Chicago, Ill., a Corporation of Illinois. Filed June 16, 1928. Serial No. 286,049. 12 Claims. (Cl. 72—101.)



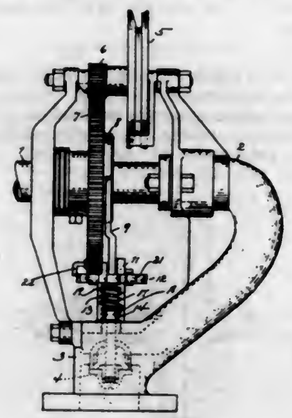
9. As an article of manufacture, a polyhedral furnace wall refractory having parallel side faces, a bottom face perpendicular thereto and an end face perpendicular to said bottom and side faces and a top face portion parallel to the bottom face, said refractory being provided on its upper side with a transversely extending offset portion extending upwardly from said top face portion and in its bottom with a transverse groove extending perpendicularly to the side faces and disposed near the end of the refractory opposite said end face.

1,767,407. ANTIFRICTION-BEARING CAGE. CHARLES B. SIMMONS, Bristol, Conn., assignor to The New Departure Manufacturing Company, Bristol, Conn., a Corporation of Connecticut. Filed Mar. 21, 1928. Serial No. 263,278. 7 Claims. (Cl. 308—201.)



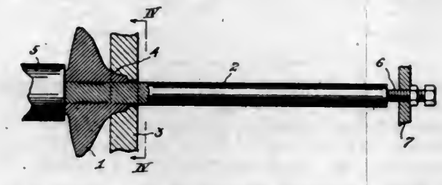
1. In an antifriction bearing, a cage comprising opposed rings of channelled cross section abutting against one another at their edges and having registering pockets for rolling elements, and a device comprising a combined rivet and key fastening the rings together between adjacent pockets and interlocking with said rings at their abutting edges, for holding them against relative rotation; substantially as described.

1,767,408. BOILER CLEANER. NORMAN L. SNOW, New Canaan, Conn., assignor to Diamond Power Specialty Corporation, Detroit, Mich., a Corporation of Michigan. Filed Nov. 26, 1923, Serial No. 677,166. Renewed Jan. 28, 1929. 13 Claims. (Cl. 122—392.)



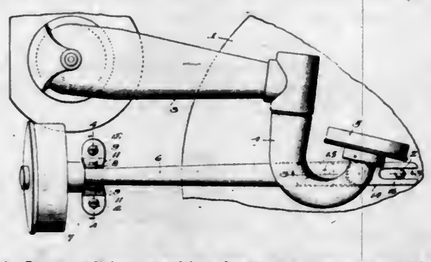
1. In a boiler cleaner unit the combination with a blower element movable through a succession of cycles and a valve for controlling the admission of steam or the like to said blower element, of means mounted on the unit for moving said blower element consecutively through said cycles, and means including mechanical connections between the blower element operating means and the valve dependent upon the moving of said blower element for opening and closing said valve in each of a predetermined number only of said cycles whereby said valve remains closed during movement of said blower element through one or more cycles after completion of said predetermined number of cycles.

1,767,409. VALVE. WILLIAM H. SPIRE and RICHARD E. BISSELL, Cleveland, Ohio, assignors to Thompson Products, Incorporated, Cleveland, Ohio, a Corporation of Ohio. Filed Dec. 14, 1921. Serial No. 522,297. 3 Claims. (Cl. 123—188.)



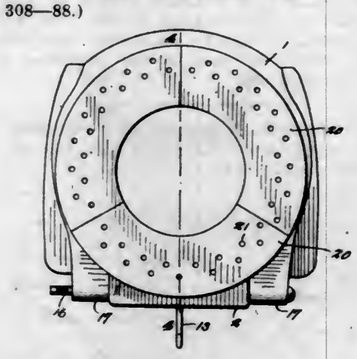
1. A poppet valve for internal combustion engines consisting of a cast iron head and a stem of non-oxidizable steel and having an end portion integral with said head, the integral portion of said stem being heat-treated; the steel of such stem being of a character such as to have permitted the heat-treating at a temperature less than that which would deleteriously affect the cast iron head.

1,767,410. COMBINATION TALKING MACHINE AND RADIO RECEIVING DEVICE. LLOYD Y. SQUIBB, Camden, N. J., assignor to Victor Talking Machine Company, a Corporation of New Jersey. Filed Dec. 11, 1925. Serial No. 74,838. 21 Claims. (Cl. 179—100.2.)



1. In a talking machine having a sound conduit including a movable tone arm, independently mounted means for adapting the sound conduit of the talking machine as a radio amplifying device, comprising a means of radio reception and sound conducting means operatively associated therewith said tone arm being movable into sound conducting relation with said sound conducting means.

1,767,411. LOCOMOTIVE JOURNAL BOX. GEORGE M. STONE and GEORGE W. CUYLER, Cedar Rapids, Iowa. Filed Feb. 9, 1928. Serial No. 253,091. 1 Claim. (Cl. 308—88.)



The combination with a box having an opening, a cellar removably mounted in the opening, and a spring pressed follower in the cellar for supporting a lubricant,

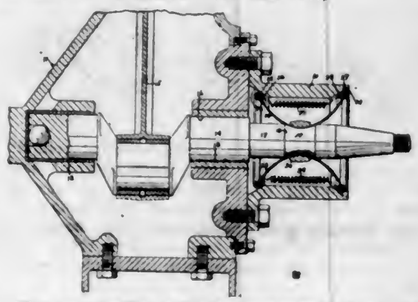
of a sectional brass mounted for rotation in the box and having apertures for receiving lubricant from the cellar, the sections of the brass being removable separately thruogh the opening after the removal of the cellar, and apertured flanges carried by the sections at one end cooperating to provide a continuous annular flange outside of the box, there being apertures in the cellar for supplying lubricant to the apertures in the flanges.

1,767,412. ELECTRICAL CONDENSER AND METHOD OF MAKING THE SAME. ROBERT C. SPRAGUE, Quincy, Mass., assignor to Sprague Specialties Co., Quincy, Mass., a Corporation of Massachusetts. Filed Sept. 14, 1926. Serial No. 135,342. 14 Claims. (Cl. 175—41.)



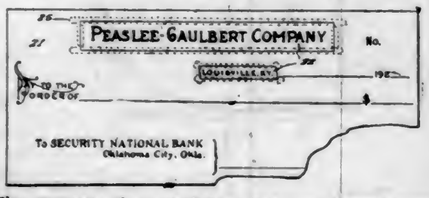
1. A method of manufacturing electrical condensers which comprises forming from fiber board a thin base of extended area, pressing portions of two separate metallic leads into a surface of said base so as to cling thereto, attaching the foil side of a strip of combined paper and foil to each of said leads, winding the strips around the base material in the same direction so as to form continuous coils of the foil having paper between the adjacent metallic coils to serve as a dielectric medium and leaving portions of said leads exposed, immersing the body in paraffin above its melting point, and removing excess paraffin from the said body.

1,767,413. SEAL FOR COMPRESSORS. CHARLES C. SPREEN, Detroit, Mich. Filed Apr. 22, 1927. Serial No. 185,785. 2 Claims. (Cl. 286—11.)



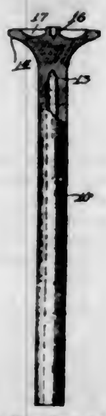
1. The combination with a compressor casing having an aperture, a plate provided with a bearing, said plate being adapted to close the aperture in said casing, and a shaft extending beyond said plate; of a seal structure comprising an annular extension secured to said plate, seats formed on said extension at each end thereof, a tubular diaphragm secured to said shaft, and means for resiliently sealing the ends of said diaphragm to said seats on said extension.

1,767,414. PHOTOLITHOGRAPHING PROCESS. SIDNEY A. STAPP, Louisville, Ky. Filed Jan. 25, 1927. Serial No. 163,467. 1 Claim. (Cl. 95—5.)



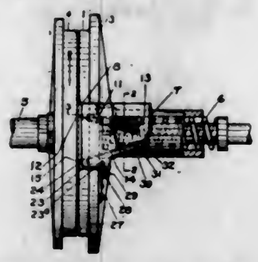
The process of preparing a negative for photolithographing herein described consisting in cutting a sheet to remove thereon a section containing matter to be used and cutting another sheet to form an opening of the same outline and dimensions as the section removed from the first sheet, inserting the section cut from the first sheet in the opening cut in the second sheet to form a copy to be reproduced, applying adhesive tape to the back of the copy to cover the seams, imparting translucency to the prepared copy, transmitting light through the copy to a sensitized film in contact with the copy, underdeveloping the film, and then intensifying the back ground of the film.

1,767,415. METHOD OF MAKING POPPET VALVES. CHARLES E. THOMPSON and RICHARD E. BISSELL, Cleveland, Ohio, assignors to Thompson Products Inc., Cleveland, Ohio, a Corporation of Ohio. Filed Nov. 12, 1928. Serial No. 318,752. 4 Claims. (Cl. 29—156.7.)



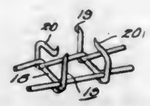
1. In a method of forming hollow stemmed valves having solid heads, the step of upsetting one end of a seamless tube to close said end and form thereon a solid bulb of metal.

1,767,416. GRINDING MACHINE AND INTERCHANGER THEREFOR. ALBERT VUILLEUMIER, Bristol, Conn., assignor to The New Departure Manufacturing Company, Bristol, Conn., a Corporation of Connecticut. Filed June 27, 1922. Serial No. 571,285. 2 Claims. (Cl. 51—130.)



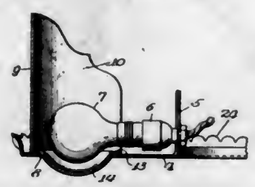
1. In apparatus of the character described, a rotary grinding member having article receiving grooves, in combination with an interchanger for removing the articles from the grooves and returning them to the grooves in a different order, said interchanger comprising a receptacle having a partition flat at one end and concave at the other to remove the articles from the grooves and cause them to converge and pile up, the bottom of the receptacle being flat, and arranged to receive the articles from the partition and spread them out before returning them to the grooves; substantially as described.

1,767,417. DITCH DIGGER. FRANZ N. WEBER, Dunlap, Iowa, assignor of one-half to Peter Weber, jr., Dunlap, Iowa. Filed Feb. 2, 1927. Serial No. 165,421. 1 Claim. (Cl. 37—86.)



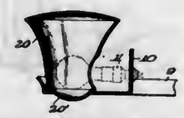
An excavating chain, adapted for operation through a sprocket wheel, comprising a plurality of interconnected links having bight sections engageable with the teeth of the sprocket wheel, each link being provided at said bight section with a pair of outwardly extending prongs bent at right angles to the bight section and disposed in spaced parallel relation, with each other, one of said prongs having its end turned toward said other prong and parallel to said bight section, and a pair of spaced parallel members extending from each bight section longitudinally of the chain for connection to an adjacent bight section.

1,767,418. LIGHTING FIXTURE. RICHARD WILLIAMSON, Chicago, Ill., assignor, by mesne assignments, to Beardslee Chandelier Manufacturing Co., Chicago, Ill., a Corporation of Delaware. Filed Jan. 26, 1928. Serial No. 249,568. 3 Claims. (Cl. 240—73.)



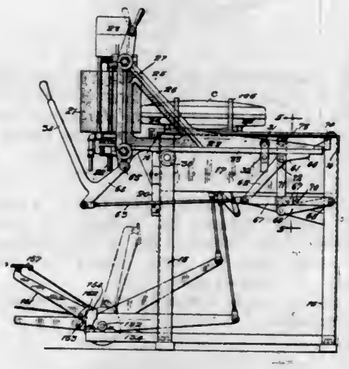
1. In a lighting fixture, the combination of a supporting arm provided with an opening therein, a lamp supported in a substantially horizontal position on said arm and projecting above said opening, and a shade seated on the arm and having a convex portion arranged in said opening, the convex portion fitting in said opening to prevent lateral movement of the shade on the arm and the lamp projecting partly in the concave back of the convex portion of the shade to prevent accidental displacement of the shade.

1,767,419. LIGHTING FIXTURE. RICHARD WILLIAMSON, Chicago, Ill., assignor, by mesne assignments, to Beardslee Chandelier Manufacturing Co., Chicago, Ill., a Corporation of Delaware. Filed June 14, 1928. Serial No. 285,445. 1 Claim. (Cl. 240—73.)



In a lighting fixture, the combination of a horizontally disposed supporting arm provided with a bottom opening and having a seat portion surrounding said opening, a glass shade having a bottom wall removably supported on said seat portion and an upstanding wall surrounding said bottom wall, said upstanding wall having an enclosed side opening adjacent the bottom wall, a socket mounted on said arm outside of said shade and a lamp mounted in said socket and extending substantially horizontally into said shade through said side opening and adjacent said bottom wall.

1,767,420. CAR-CUSHION-CLEANING MACHINE. ELLSWORTH M. WILSON, Montclair, N. J., assignor to Wilson Imperial Company, Newark, N. J., a Corporation of Delaware. Filed Sept. 3, 1926. Serial No. 133,308. 46 Claims. (Cl. 15—21.)



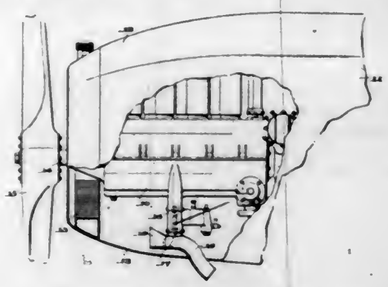
1. In a machine for cleaning car cushions and like articles having a substantially flat side outlined by a plurality of substantially flat side edges, the combination of a supporting frame, a brush mounted for both rotary and bodily movement in one direction, a carriage therefor slidably mounted on the frame for advancing the brush relative to the cushion in another direction, a turn table for rotating the cushion to present its edges to the brush, and means for elevating the cushion off the turn table and to present a flat side of the cushion to the action of the brush.

1,767,421. METHOD OF PRODUCING CHEMICALLY STABLE ARTICLES. JOHANN KARL WIRTH, Berlin-Wilmersdorf, Germany. Filed Nov. 19, 1925, Serial No. 70,197, and in Germany April 11, 1925. 6 Claims. (Cl. 18—59.)



3. A method of producing chemically stable articles consisting in providing such articles with depressions, filing the latter with a mixture of a condensation product of phenols and aldehydes with fillers, coating the surface with a layer of this mixture, hardening the condensation product in situ by heating, removing the outermost skin of the hardened coating and heating to temperatures up to 200° C, then applying to the surface a layer of phenol-aldehyde condensation product and finally hardening the latter.

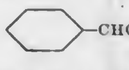
1,767,422. HYDROCARBON MOTOR. LIONEL M. WOOLSON, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Mar. 22, 1921. Serial No. 454,555. 11 Claims. (Cl. 123—122.)



1. The combination with a hydrocarbon motor, of a casing surrounding the motor, an air intake injector suspended by the motor carburetor within the casing and having its discharge passage outside the casing.

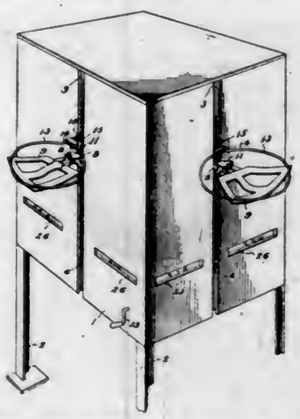
1,767,423. ARYLAMINOALCOHOL COMPOUND. ROGER ADAMS, Urbana, Ill., assignor to Abbott Laboratories, North Chicago, Ill., a Corporation of Illinois. Filed Jan. 27, 1928. Serial No. 250,076. 2 Claims. (Cl. 260—128.5.)

1. As a new article of manufacture, a compound of the general formula



where R represents an alkyl group, R′ represents a monovalent saturated aliphatic hydrocarbon radical, and R″ represents a hydrogen or a monovalent saturated aliphatic hydrocarbon radical containing more than one carbon atom, and the R, R′, and R″ substituents together contain not less than 3 carbon atoms.

1,767,424. EDUCATIONAL GAME APPARATUS. BENTON APPLEGATE, Wood Lake, Nebr. Filed Dec. 18, 1928. Serial No. 326,713. 8 Claims. (Cl. 35—2.)



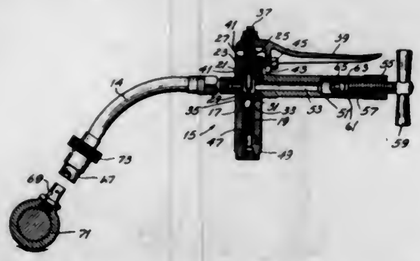
1. A game apparatus of the class described, comprising a casing, rollers journaled in the casing, endless webs trained around the rollers, a goal ring, an arm having a head thereon, said head being adapted to be engaged by an object passing through the ring to rock the arm, and means associated with the arm for imparting movement to the webs when said arm is rocked.

1,767,425. SHAKING CONVEYER. PETER AURICH, Bochum, Germany, assignor to the Firm Gebr. Eickhoff, Maschinenfabrik, Bochum, Germany. Filed Oct. 15, 1927, Serial No. 226,481, and in Germany July 27, 1927. 11 Claims. (Cl. 198—220.)



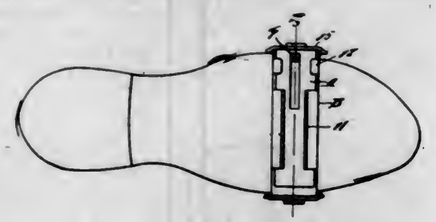
9. A shaking conveyer of the character described comprising a longitudinally reciprocable conveyer element, means for effecting lateral displacement of said conveyer element and a loading ramp positioned to extend along one of the longitudinal sides of the conveyer element.

1,767,426. DISPENSING APPARATUS. FRANK S. BARKS, St. Louis, Mo. Filed May 8, 1929. Serial No. 361,271. 1 Claim. (Cl. 221—474.)



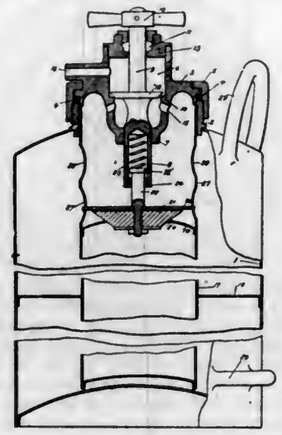
Dispensing apparatus comprising a body, an inlet therefor, a check valve normally preventing flow from the inlet to the body, an outlet from the body communicating with the inlet by means of said check valve and adapted to receive material therefrom, means communicating with the outlet adapted to decrease pressure thereat and independent manually operable means for opening said check valve to permit flow from the inlet to the outlet, said pressure decreasing means being adapted to force material through said check valve to the inlet should the outlet be clogged.

1,767,427. ICE CREEPER. ANSEL BARNES, Syracuse, N. Y. Filed Sept. 26, 1929. Serial No. 395,347. 1 Claim. (Cl. 36—63.)



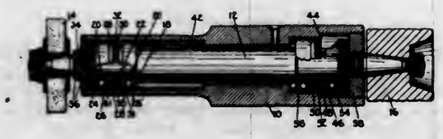
A device of the class described comprising a pair of L-shaped members having longer legs and shorter legs, means for slidably connecting the longer legs, strap and buckle means engaged with the shorter legs, one of said longer legs having side extensions extending under the other longer leg, and terminating in depending cleat forming ears.

1,767,428. FIRE EXTINGUISHER. LOUIS BRILLOU, Paris, France. Filed Nov. 26, 1927, Serial No. 235,948, and in France Dec. 4, 1926. 3 Claims. (Cl. 169—32.)



1. In a fire extinguisher the combination of an exterior chemical receptacle, a concentric inner receptacle fixed in said first receptacle, a common outlet for said receptacles, a manually controlled valve for said outlet, a spring-pressed valve carried by said first mentioned valve for closing said inner receptacle, and means for guiding said spring-pressed valve.

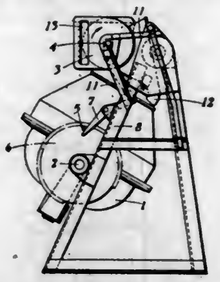
1,767,429. BEARING MOUNTING. RICHARD J. BRITTAIN, Jr., and PHILIP H. HUTCHINSON, East Orange, N. J., assignors to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Aug. 14, 1923. Serial No. 657,273. 5 Claims. (Cl. 308—189.)



1. In a device of the character indicated, the combination with a tool-carrying, rotary spindle, and a stationary casing in which said spindle is rotatably mounted, said casing being diametrically reduced at one side only, whereby the tool carried by the spindle projects diametrically a greater distance beyond one side of said casing than the other, and said other side of the casing affords, maximum casing-body to resist the working strain upon the tool; substantially as described.

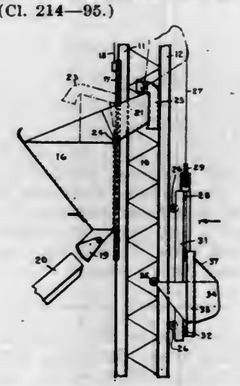
1,767,430. MEANS FOR SUPPLYING LIQUID TO DRUMS OF CONCRETE OR OTHER MIXING MACHINES. JOHN FAULDER BURN, London, and JOHN STUART LANCASTER, Leamington, England; William Deans Forster and Thomas Alfred Bertram Forster, executors of said John Faulder Burn, deceased. Filed Feb. 7, 1929, Serial No. 338,297, and in Great Britain Jan. 17, 1928. 7 Claims. (Cl. 83—73.)

1. The combination of an oscillating mixing drum having an opening for the entry and discharge of material to be treated and means for supplying liquid to the drum through said opening comprising a member having a liquid outlet positioned to deliver liquid to said opening when by the oscillation of the drum said opening is brought opposite said outlet and means to control the supply of liquid to said outlet comprising an element connected with and moving with the drum in its oscillations and a



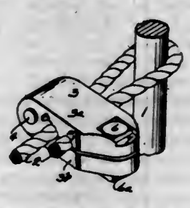
movable element supported independently of the drum into contact with which said drum element is brought to move the same when said drum opening is presented in liquid-receiving position to said outlet.

1,767,431. CONCRETE ELEVATING AND DISTRIBUTING APPARATUS. JAMES E. BUSHNELL, North Plainfield, N. J., assignor to Ransome Concrete Machinery Company, Plainfield, N. J., a Corporation of New Jersey. Filed Jan. 4, 1928. Serial No. 244,394. 14 Claims. (Cl. 214—95.)



1. The combination in apparatus of the character described of a rigid upright mast, a hopper for receiving material for distribution, pivotally mounted means for elevating material arranged to be elevated and lowered on said mast, and mechanism for elevating and lowering said means, said hopper having portions on two sides of said mast for receiving material from said means.

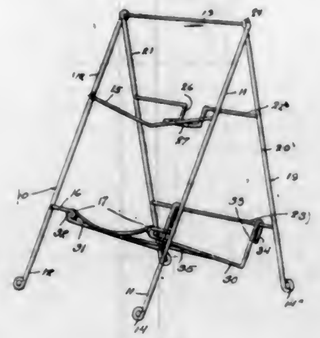
1,767,432. CABLE-FASTENING DEVICE. GEORGE PECK CAULKINS, Detroit, Mich. Filed Apr. 26, 1929. Serial No. 358,309. 3 Claims. (Cl. 24—135.)



1. A cable fastener consisting of two fastener portions pivotally connected to one another, a plurality of recesses formed in the adjacent sides of each of said fastener portions, means for holding said fastener portions together towards their extremities remote from their

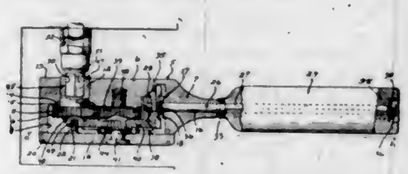
pivotal connection, and said recesses having serrations or corrugations therein adapted to engage the peripheries of cables which extend therethrough, said serrated or corrugated recesses being adapted to grip two portions of each of at least one cable and hold said portions relative to one another.

1,767,433. DISPLAY RACK. ANDREW C. CHAPPORY, Jr., Brooklyn, and JOHN B. POSEY, White Plains, N. Y., assignors to National Biscuit Company, New York, N. Y., a Corporation of New Jersey. Filed Apr. 6, 1929. Serial No. 353,071. 10 Claims. (Cl. 211—161.)



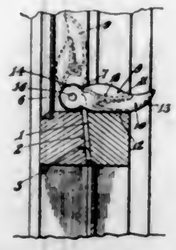
1. A display rack comprising a front frame member including a container engaging element, a rear frame member hinged to the upper portion of the front frame member, and rods linked to the front frame member and each extending downwardly and rearwardly for a portion of their lengths and thereafter, inclined upwardly, said upwardly inclined portions being detachably hooked to the rear frame to hold said frame members in spaced relation, said downwardly and rearwardly extending portions of the rods and said element of the front frame member providing a mounting for a container.

1,767,434. RIGHT-ANGLE SOCKET STOCK. ADELBERT A. CHILDS, Orleans, Mass. Filed Mar. 5, 1928. Serial No. 259,264. 3 Claims. (Cl. 81—57.)



1. In a right-angle socket stock, a substantially flat head portion including a body portion being recessed at one face and a shank portion projecting from one end of the body portion, said body portion adjacent its forward end being provided with a bore extending from the recess and opening at the upper face thereof, a removable cover plate closing the lower recessed side of the body portion and having an inwardly projecting bearing stud arranged co-axial with the axis of said bore, a tool receiving member rotatably supported in the head portion by said bore and bearing stud and including a peripherally toothed portion forming a spur gear, a bevel drive pinion fixedly carried by the drive shaft within the recess of the body portion, a compound gear member connecting the drive pinion and spur gear of the tool receiving member, and a hand grip carried by the drive shaft for imparting rotation thereto.

1,767,435. LOCK FOR WINDOWS AND DOORS. GIUSEPPE CORBO, Camden, N. J. Filed Nov. 10, 1928. Serial No. 318,404. 4 Claims. (Cl. 292—209.)



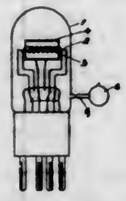
1. A locking device for doors, windows and the like, comprising a securing member adapted to engage a support, a restraining unit hingedly connected to said securing member, teeth carried by said securing member and a spring pressed latching means mounted wholly within the restraining unit and adapted to engage said teeth for locking said restraining unit in a set position upon said securing member.

1,767,436. CUFF BUTTON. PETER A. CURTIN, Buffalo, N. Y. Filed July 25, 1928. Serial No. 295,154. 9 Claims. (Cl. 24—102.)



1. A cuff button, comprising two heads, each having a single slot therein and a stretchable link passed through said slots and detachably connected at opposite ends to the opposite heads, said link being compressed within side of each head to prevent it being removed from said slot under stretching of said link.

1,767,437. DISCHARGE TUBE. JAN HENDRIK DE BOER and PIETER CLAUSING, Eindhoven, Netherlands, assignors to N. V. Philips' Gloeilampenfabrieken, Eindhoven, Netherlands. Filed Oct. 18, 1926. Serial No. 142,498, and in the Netherlands Dec. 12, 1925. 2 Claims. (Cl. 250—27.5.)

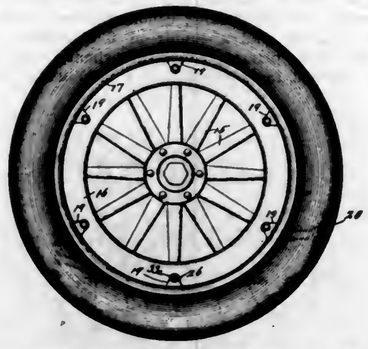


1. The process which comprises introducing into a discharge tube a mixture of an alkali-metal compound with the azide of a metal of the second principal group of the periodic system, and subsequently liberating the alkali-metal from the said mixture by the presence of heat.

1,767,438. BOLT LOCK. JOHN F. DRANTER and MICHAEL PANEK, Chicago, Ill. Filed Jan. 10, 1928. Serial No. 245,760. 11 Claims. (Cl. 70—90.)

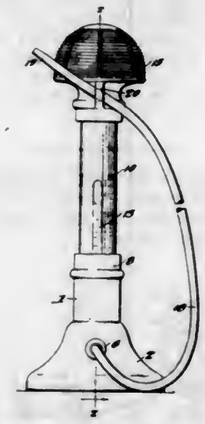
6. A bolt lock comprising a keeper, a nut carried by the latter, a bolt engageable with the nut, a retainer

normally urged to engage the nut and lock the same against rotation, and a plunger carried axially by the



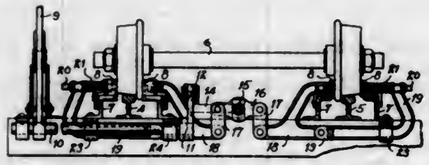
bolt and operable to back the retainer for the release of the nut when the bolt has been threaded into the latter.

1,767,439. SPECIFIC-GRAVITY TESTER. LEO EDELMANN, Chicago, Ill., assignor to E. Edlemann & Co., Chicago, Ill., a Corporation of Illinois. Filed Oct. 19, 1926. Serial No. 142,690. 7 Claims. (Cl. 265—45.)



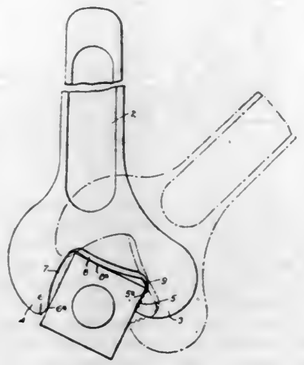
1. A specific gravity tester comprising a float chamber, a widened base to support said float chamber in a standing position, a hydrometer element within said chamber, an extension nozzle connected with the lower end of the float chamber, means to draw liquid into said float chamber through said nozzle, and means to support said extension nozzle with the discharge opening thereof disposed upwardly when not in use.

1,767,440. CAR RETARDER. LOUIS E. ENDSLEY, Pittsburgh, Pa., assignor to Fort Pitt Mine Equipment Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Oct. 8, 1928. Serial No. 310,995. 9 Claims. (Cl. 188—62.)



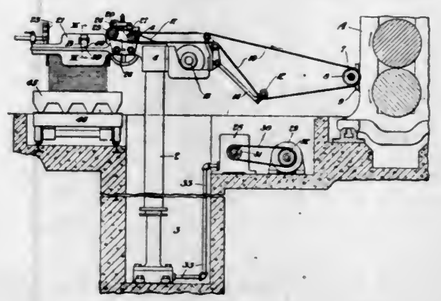
1. Car retarding apparatus comprising a pair of shoes, a lever having pivotal engagement with one of said shoes, a pull rod having engagement with the other shoe and pivotally connected to the said lever, and means for rocking the lever about the first-named pivotal point.

1,767,441. WRENCH. LOUIS E. ENDSLEY, Pittsburgh, Pa. Filed Feb. 19, 1930. Serial No. 429,582. 4 Claims. (Cl. 81—119.)



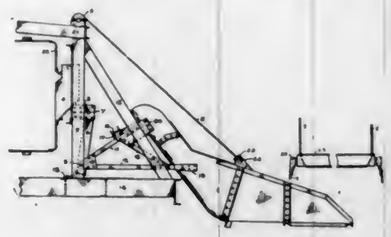
1. A wrench for polygonal nuts comprising oppositely-disposed jaw portions defining two sides of a nut-receiving recess, and a surface constituting the inner wall of said recess, the said surface being of convex form in a direction transversely thereof, one of said jaws being greater in length than one-half the length of the said inner wall, and the other jaw being less than one-half the length of the inner wall.

1,767,442. SHEET-PACKING APPARATUS. ARCHIBALD D. EVANS and HARRY R. GRAVENSTRETER, New Castle, Pa., assignors to American Sheet and Tin Plate Company, a Corporation of New Jersey. Filed May 22, 1928. Serial No. 279,825. 4 Claims. (Cl. 214—6.)



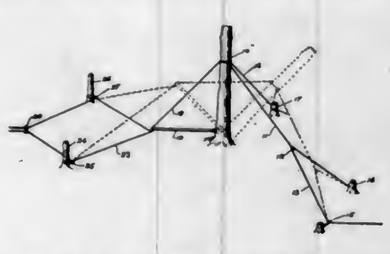
1. A cold mill packer comprising a vertically movable support, a sheet feeding conveyor having its delivery end carried on said support, a piling mechanism carried by said support, said piling mechanism including a series of stationary guides for guiding the sheets onto a pile and cooperating concave and convex rolls adapted to feed the sheets horizontally between said guides, means for moving said support vertically, and means operable by the sheets as they pass downwardly between said guides for automatically controlling said means for moving said support.

1,767,443. LOADER BUCKET FOR CONCRETE MIXERS. JOHN P. FABER, Dunellen, N. J., assignor to Ransome Concrete Machinery Company, Plainfield, N. J., a Corporation of New Jersey. Filed June 2, 1925. Serial No. 34,281. 10 Claims. (Cl. 214—130.)



1. In a device of the character described, a supporting frame, a loader bucket having charging and discharging portions at an angle to each other, means for elevating same comprising a cable attached to the bucket and extending to the upper part of the frame and a source of power connected with said cable, a member pivotally mounted on said frame and extending downwardly therefrom, and a second member pivoted to the lower portion of the first member and extending laterally therefrom to the bucket when the said bucket is in loading position, said member composed of parts extending from the pivot on divergent lines secured to the bucket at different points, a jaw shaped member mounted on said second member and positioned for contact with the pivot of the first named member for supporting said bucket in its final arcuate travel, the construction and arrangement being such that the bucket in rising first moves on the pivot of the second member to a position in which its outer portion is above horizontal position and its inner or discharging portion is in approximately horizontal position, and then swings inwardly and upwardly on the pivot of the first and downwardly extending member.

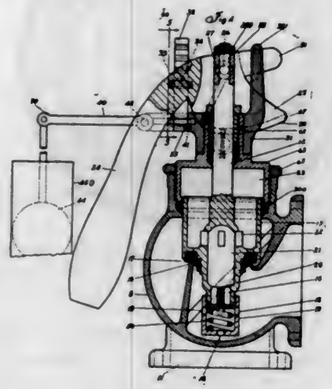
1,767,444. TREE FALLING AND LOWERING DEVICE. FRANK C. FRASER, Fortuna, Calif. Filed May 2, 1928. Serial No. 274,455. 3 Claims. (Cl. 254—135.)



2. A device for falling and lowering trees comprising a pull line secured to the tree and to an anchor, a strut resting upward of the base of the tree and extending substantially horizontally away from the tree and being guyed to the tree, and a hold-back line having two diverging branches and being secured to said strut.

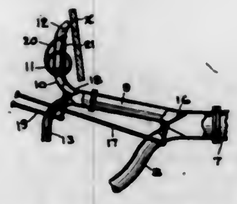
1,767,445. VALVE. ISRAEL B. GILBERT, Cincinnati, Ohio. Filed Aug. 30, 1924. Serial No. 735,124. 17 Claims. (Cl. 137—68.)

1. A valve of the class described comprising a housing having a valve seat therein, a reciprocating valve stem extending into the housing, a primary valve carried by the stem and having a cup-like extension adapted to engage the valve seat, the cup-like extension reciprocally engaging the housing and with a portion of the housing forming a pressure chamber, the valve stem having a way therethrough for establishing communication between the pressure chamber and a supply of fluid under pressure controlled by the primary valve, the primary valve having unequal opposed faces exposed to a fluid under pressure



in relation such that the primary valve is normally retained upon its seat, an auxiliary valve carried by the valve stem and arranged for relatively slow filling and fast discharge of the pressure chamber, and means for actuating the valve stem for opening the primary and secondary valves and for effecting a rapid discharge from the pressure chamber.

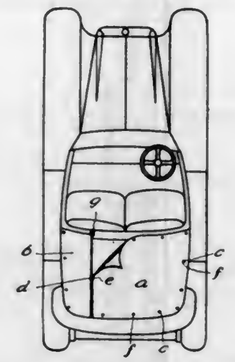
1,767,446. HOT-AIR CONTROL FOR WINDSHIELDS AND CAR INTERIORS. WILLIAM W. GRAHAM, Fremont, Nebr. Filed May 13, 1929. Serial No. 362,823. 4 Claims. (Cl. 26—40.5.)



1. In a heating means for the windshield of a car, a sleeve stationary with the car and arranged to be heated, a waste pipe normally communicating with the sleeve, an apertured distributing-pipe, disposed adjacent to the windshield, a conducting-pipe normally in communication with the distributing-pipe and sleeve, means for terminating the communication of the waste pipe with the sleeve, and an upwardly projecting nozzle-member adapted to be removably mounted on the conducting-pipe for a communication therewith to terminate the communication of the last named pipe with the distributing-pipe.

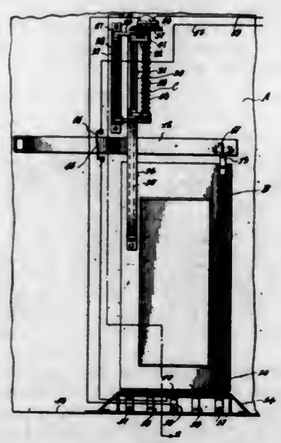
1,767,447. PROTECTIVE DEVICE FOR THE TONNEAU OF MOTOR CARS AND FOR OTHER PURPOSES. MARTHA GERTAUDE SARAH GRIFFITH, Dudley, England. Filed Oct. 17, 1927, Serial No. 226,734, and in Great Britain Mar. 24, 1927. 5 Claims. (Cl. 135—5.)

2. A protective device comprising a two-part flexible covering, a strip fastening to connect the parts along their meeting edges, a sliding member to operate the said strip fastening, means for locking the said sliding member when the fastener is closed, and securing means for the



cover consisting of headed studs and eyelets engaged by the studs, the eyelets having slots with entrance and retaining portions.

1,767,448. AUTOMATIC DOOR. GEORGE DAVIS HALL, Kearney, Nebr. Filed June 19, 1929. Serial No. 372,126. 9 Claims. (Cl. 268—38.)



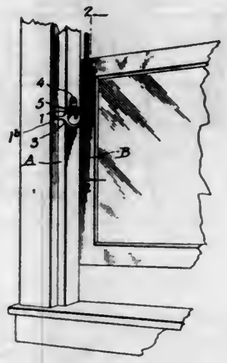
1. The combination with a wall having a door opening and a sliding door for said opening, of means for opening said door comprising a hinge member including laterally extending leaves pivotally connected together and to the door and wall respectively, a wheel rotatably mounted on one leaf, a pitman eccentrically connected to the wheel and pivotally connected to the other leaf, and means for actuating the wheel.

1,767,449. SYRINGE PLUG. JAMES E. HARDING, Lyme, Conn. Filed Apr. 15, 1929. Serial No. 355,389, 6 Claims. (Cl. 128—233.)



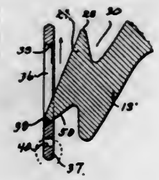
1. An attachment for converting a fountain pen into a syringe consisting of a substantially cylindrical plug having a body portion of a diameter snugly fitting within the pen barrel upon removal therefrom of the pen nib and feed plug, and having a tapered nozzle portion extending therefrom, the plug being provided with a longitudinal bore delivering thru the nozzle portion.

1,767,450. SASH FASTENER. CLARENCE L. HARRINGTON, Battle Creek, Mich., assignor of one-half to Harold W. Jackman, Battle Creek, Mich. Filed Sept. 20, 1929. Serial No. 393,966. 1 Claim. (Cl. 292—238.)



A sash fastener comprising a circular body formed of two stamped disks placed back to back; the peripheries of the disks being oppositely flanged to form a tire holding groove; the outer disk having a handle and the inner disk having an eccentrically disposed offset hub portion; a tire in said groove projecting beyond the peripheries of the flanges; a base plate adapted to be secured to a window frame; and a pin securing the disks together and pivotally connecting them to the base plate.

1,767,451. FASTENER. RUSSELL H. HEDGE, Delta, Iowa. Filed May 4, 1927. Serial No. 188,776. 2 Claims. (Cl. 24—230.5.)

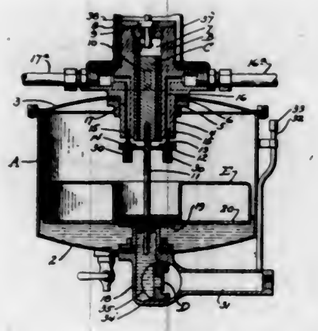


1. In a device of the class described, a chain attaching lug including a chain attaching portion having a triangular shaped keeper formed on its outer face and forming a triangular shaped groove, and a chain fastening member for detachable connection with the keeper, provided with a triangular shaped opening having an outwardly and downwardly beveled lower edge, said opening being of less height than that of the face of the triangular shaped keeper.

1,767,452. FUEL-FEEDING SYSTEM. WILLIAM R. HEWITT, New York, N. Y. Filed July 25, 1928. Serial No. 295,303. 4 Claims. (Cl. 103—236.)

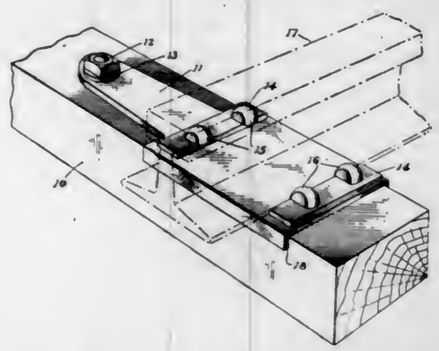
1. In a device of the character described, a tank; a valve casing secured thereto and having a pair of passages formed therein, one being a fuel delivering passage and the other a suction passage; a fuel and a suction controlling valve, one for each passage, a venting valve in one end of the valve casing; a plug slidably mounted in the valve casing and having passages formed there-

in communicating at one end with the venting valve and at the opposite end with the interior of the tank; a spring actuated dead beat lever connected at one end with the plug; a float within the tank whereby movement is im-



parted to the plug and the dead beat lever; and means actuated by the plug whereby the venting valve, the suction and the fuel valves are intermittently opened and closed in unison.

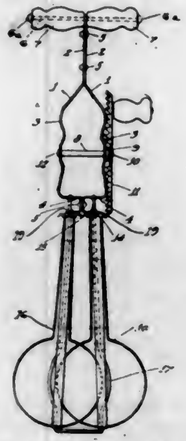
1,767,453. RAILWAY TIE-PLATE. WILLIAM R. HEWITT, New York, N. Y. Filed Sept. 3, 1929. Serial No. 390,110. 8 Claims. (Cl. 238—299.)



1. A tie plate of the character described comprising a main plate portion adapted to support a rail, an inwardly extending portion formed integral with said main portion adapted to be secured to the tie at a point between the rails, and limit plates upon said main portion adapted to co-operate with the rail holding means to prevent movement of said rail longitudinally of the tie.

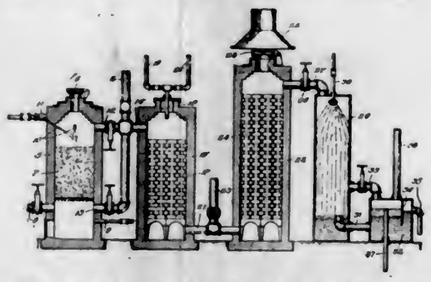
1,767,454. EGGBEATER. SAMUEL T. HOBBS, Worcester, Mass., assignor to The Washburn Company, Worcester, Mass., a Corporation of Massachusetts. Filed Aug. 9, 1929. Serial No. 384,668. 2 Claims. (Cl. 259—131.)

1. In an egg beater, a frame comprising similar strip metal members each comprising a straight portion and a portion bent sidewise and terminating in a U-shaped portion, said frame members being secured together in



opposed relation along their engaged straight portions, and at the bases of their U-shaped portions, with said bent side portions spaced from each other.

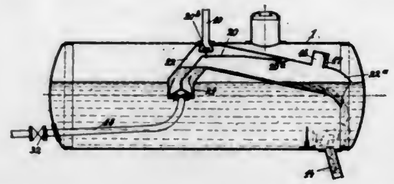
1,767,455. METHOD OF SIMULTANEOUSLY PRODUCING LIGHT HYDROCARBON MOTOR FUEL OIL AND CARBURETED WATER GAS. FRANK A. HOWARD, Elizabeth, N. J., assignor to Standard Oil Development Company, a Corporation of Delaware. Filed Nov. 5, 1923. Serial No. 673,015. 2 Claims. (Cl. 196—62.)



1. The method of producing light hydrocarbon motor fuel oil from heavier hydrocarbon oil while simultaneously manufacturing carbureted water gas of predetermined B. t. u. rating; which comprises blasting a body of incandescent carbonaceous material with steam, thereby producing water gas, passing the water gas over hot refractory material and injecting the heavy hydrocarbon oil thereinto, the temperature of said refractory material being such that the gases and vapors leave it at from 1200° to 1300° F., whereby the gases are carbureted, the proportion of heavy hydrocarbon oil injected being controlled relative to the desired calorific value of the gas in amount corresponding to about 5.4 gallons per thousand cubic feet of gas of 665 B. t. u. rating, passing the resulting gases and vapors over additional refractory material heated to such a temperature that the gases and vapors leave it at a temperature between 1100° and 1200° F., and subsequently condensing and separating from said gases and vapors the condensible low boiling point oil.

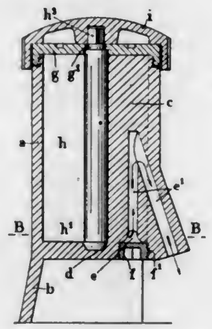
1,767,456. APPARATUS FOR PRODUCING NONOXYDIZING STEAM. CHRISTIAN HÜLSMEYER, Dusseldorf, Germany. Filed Sept. 18, 1923, Serial No. 663,518, and in Germany Feb. 19, 1923. Renewed Mar. 24, 1930. 4 Claims. (Cl. 122—435.)

1. A device of the class described comprising a boiler, a feed water chamber, a feed water supply for said chamber, check valve controlled means for introducing live steam directly from the boiler into said chamber to drive the gases out of the feed water in said chamber, an outlet in said chamber for said gases, a valve in said chamber



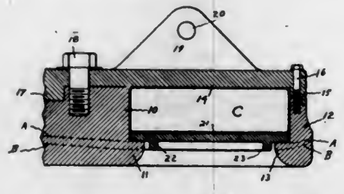
controlling said outlet, a valve in said chamber controlled by the flow of the feed water, and a connection between said last two valves for causing them to open simultaneously.

1,767,457. RECEPTACLE FOR DISPENSING LIQUID, SEMILIQUID OR PASTY MATERIALS. MAURICE IOCHUM, Carcassonne, France. Filed Feb. 27, 1929, Serial, No. 343,059, and in France Jan. 26, 1929. 4 Claims. (Cl. 221—1.)



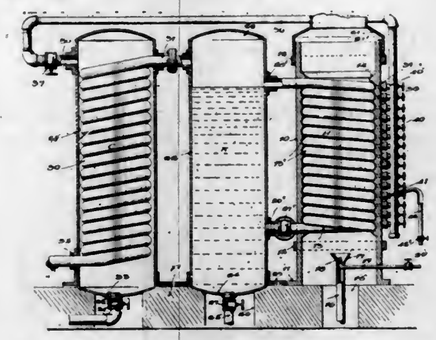
1. An apparatus for dispensing liquids, semi-liquids or pastes, comprising a receptacle with an outlet conduit extending from the interior of the receptacle towards the top and then down again towards the exterior by passing through a fixed vertical partition, and a movable vane centered in the bottom of the receptacle.

1,767,458. LIFTING MAGNET. FRANCIS W. JESSOP, Cleveland Heights, Ohio, assignor to The Ohio Electric Controller Company, Cleveland, Ohio, a Corporation of Ohio. Filed Jan. 13, 1930. Serial No. 420,377. 18 Claims. (Cl. 175—367.)



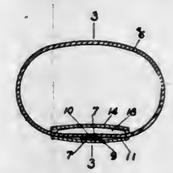
1. A lifting magnet including spaced pole-pieces composed of material of high magnetic susceptibility, means for attaching said pole-pieces together, a shoulder carried by each of said pole-pieces, a plate composed of material of high magnetic reluctance carried by said shoulders and means tending to cause a magnetic flux between said spaced pole-pieces, said plate having a projection near one of said pole-pieces.

1,767,459. PROCESS FOR REFINING OIL. WALTER JOHNSON, Houston, Tex. Filed Mar. 27, 1922, Serial No. 547,072. Renewed Oct. 25, 1929. 2 Claims. (Cl. 196—65.)



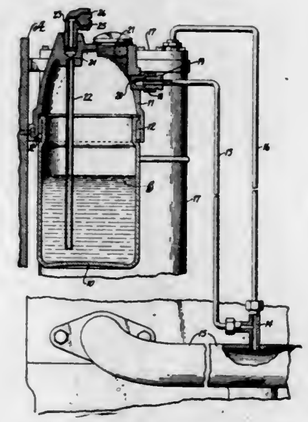
1. A process for treating mineral oil which comprises heating a vertical helically arranged column of the oil, supplying steam at different horizontal levels to the column of oil and forcing air into the heated column of oil.

1,767,460. ARCH SUPPORT. GEORGE H. JUNG, Jr., Cincinnati, Ohio, assignor to The Jung Arch Brace Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Apr. 15, 1926. Serial No. 102,290. 5 Claims. (Cl. 128—166.5.)



5. An arch support comprising an endless elastic band, means to render inelastic a narrow section of the band and a leather pad holding member adhesively attached to said means.

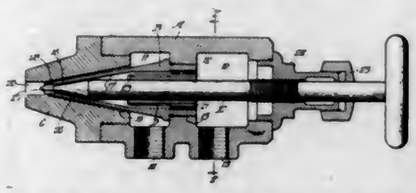
1,767,461. LUBRICATING DEVICE. ALBERT J. KACENA, Chicago, Ill., assignor of one-half to William L. Thaler, Chicago, Ill. Filed Nov. 23, 1928. Serial No. 321,366. 3 Claims. (Cl. 123—196.)



1. In a lubricating device for internal combustion engines, a container for lubricating oil, an intake pipe

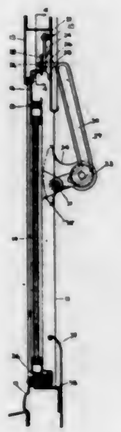
terminating near the bottom of said container, means for regulating the flow of air through said pipe, a tube connecting the upper portion of said container with the intake of an internal combustion engine, and a restriction in said pipe and tube for limiting the flow of air, the cross-sectional area of the restriction in the pipe being larger than that of the restriction in the tube.

1,767,462. NOZZLE. GEORGE C. LAMMERT and FRANK B. LAMBERT, Chicago, Ill. Filed Jan. 31, 1927. Serial No. 164,680. 7 Claims. (Cl. 299—140.)



1. In an oil burner nozzle of the character described, a casing having air and oil annular chambers therein separated by an annular rib, a bushing threaded into said rib and having an outside and inside tapered nozzle, extending toward the nozzle end of the casing, the inside end opening of said nozzle being of cylindrical cross section, a nozzle cap at the end of the casing having a tapered interior fitting over the tapered bushing, the tapered interior of the cap and tapered exterior of the bushing extending at angles converging toward the nozzle end so as to provide a gradually decreasing tapering passage toward the nozzle end, and an adjustable valve stem provided with a taper adapted to cooperate with the inside taper of the tapered nozzle, and a cylindrical tip adapted to extend into the cylindrical passageway at the end of said nozzle and project slightly beyond the same so as to provide a ring feed for the oil.

1,767,463. WINDSHIELD CONSTRUCTION. JOSEPH LEDWINKA, Philadelphia, Pa., assignor to Edward G. Budd Manufacturing Co., Philadelphia, Pa., a Corporation of Pennsylvania. Filed Nov. 14, 1925. Serial No. 69,011. 5 Claims. (Cl. 296—84.)



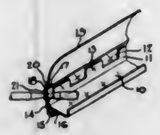
4. A vehicle windshield construction comprising a supporting frame and a windshield mounted therein, separate means for independently effecting vertical and horizontal adjustment of said windshield with respect to said supporting frame, and common means for clamping said windshield in all adjusted positions.

1,767,464. SILL CONSTRUCTION. JOSEPH LEDWINKA, Philadelphia, Pa., assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Dec. 21, 1926. Serial No. 156,082. 5 Claims. (Cl. 296—28.)



1. In an automobile body construction, a main body side sill a part of which is an angle and another part of which is an upwardly presenting channel, and a separate member in the form of an inwardly presenting channel having its lower arm overlapping and secured to the base of the angle of the sill and its vertical arm in longitudinal continuation of the outer arm of the channel part of the sill, the upper arm of the separate member forming a threshold.

1,767,465. SHEET-METAL CONSTRUCTION FOR VEHICLE BODIES AND OTHER SIMILAR BUILT-UP SHEET-METAL STRUCTURES. JOSEPH LEDWINKA, Philadelphia, Pa., assignor to Edward G. Budd Manufacturing Co., Philadelphia, Pa., a Corporation of Pennsylvania. Filed Dec. 21, 1927. Serial No. 241,690. 4 Claims. (Cl. 296—28.)



1. A side header construction for vehicle bodies comprising an angular side rail having its outer vertically extending wall formed with spaced openings, a side panel having its upper edge secured to said wall and a roof panel having its lower edge overlapping and spot welded to the upper edge of the side panel at said openings.

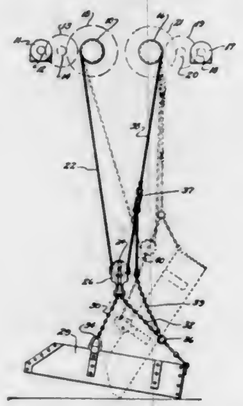
1,767,466. GARMENT BAG. JACOB H. LE MONTREE, Cincinnati, Ohio, assignor to The Le Montree Manufacturing Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Sept. 11, 1926. Serial No. 134,889. 3 Claims. (Cl. 206—7.)



1. In a garment bag, a body formed of a piece of paper folded to form side walls of a bag open at the top, bottom and along one side, extensions of the piece at the bottom and along the open side providing means for closing said side and bottom openings, a strip of gummed tape formed as a hook providing a top closure for the bag, and a reinforcing strip having an exterior

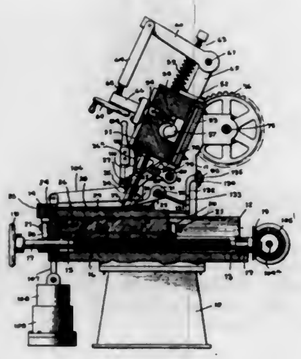
support and provided with means for supporting a garment interiorly of the bag secured in the loop of the gummed tape.

1,767,467. TROLLEY HOIST. CHARLES H. LOCHER, Hancock, Md., and JOHN P. BURT, Kearny, N. J.; said Burt assignor to Harnischfeger Corporation, Milwaukee, Wis., a Corporation of Wisconsin. Filed Sept. 15, 1926. Serial No. 135,517. 7 Claims. (Cl. 214—116.)



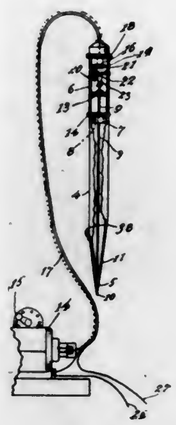
1. The combination with hoisting apparatus of the character described including cable drums and driving motors therefor, of manually-operable control levers for said motors, a shaft for supporting said levers for movement independently of each other, said levers being operable upon movement into a given relation with respect to each other to cause equal effective hoisting and lowering movement of said drums, and means cooperable with said levers for locking the same to the shaft in such relation.

1,767,468. FILE MACHINE. COLIN M. LOGAN, Newark, N. J., assignor to Heller Brothers Company, Newark, N. J., a Corporation of New Jersey. Filed May 7, 1921. Serial No. 467,740. 19 Claims. (Cl. 76—17.)



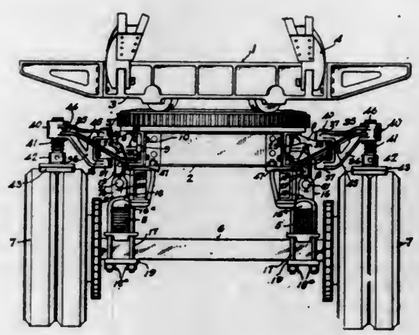
1. A file making machine comprising means for feeding a file blank, a chisel sliding in the general direction of the file feed but at an angle thereto and arranged to impinge upon the blank, and means for imparting repeated blows to the chisel while it is in each cutting engagement with the blank.

1,767,469. MANIFOLDING DEVICE. ALBERT W. METZNER, Dayton, Ohio, assignor to John Q. Sherman, Dayton, Ohio. Filed Aug. 7, 1922. Serial No. 580,375. 3 Claims. (Cl. 120—435.)



1. A device of the character described, comprising an ink barrel, a stem therein, said stem having a stylus to project beyond the stem, an ink forcing piston on the stem adapted to force an ink supply to the stylus and means for reciprocating said stem.

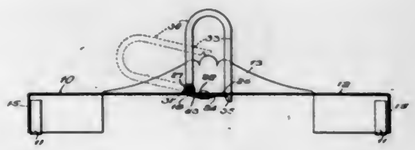
1,767,470. DEVICE FOR STABILIZING CRANES. HOLGER L. MITCHELL, Milwaukee, Wis., assignor to Harnischfeger Corporation, Milwaukee, Wis., a Corporation of Wisconsin. Filed Nov. 8, 1926. Serial No. 146,962. 4 Claims. (Cl. 212—145.)



1. The combination with a wheeled crane of the character described having a frame, an axle and a plurality of supporting springs adapted to support said frame on said axle near each end thereof, of a single rigid bridge between the frame and the axle near each spring, one end of each bridge being positively and rigidly connected to the frame, the other end of each bridge being positively connected to the axle whereby each bridge serves to relieve its associated spring of compressive stresses and to constrain the associated portion of the frame against movement away from its axle, each bridge being made up of a plurality of members, and releasable means for

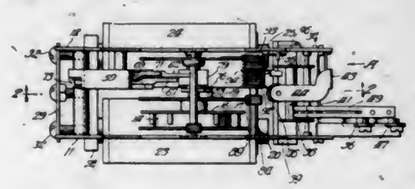
positively connecting said members, and a jack attachment associated with each bridge and cooperable with the adjacent wheel for lifting the frame on the wheels to permit of connection and disconnection of the bridge members, said jack attachment also serving to aid said bridge members in taking up the compressive stresses.

1,767,471. CALENDAR-PAD STAND. RALPH MUHLBACKER, Chicago, Ill., assignor to Wm. P. Greenhill & Son, a Copartnership consisting of William P. Greenhill and Harold Greenhill, Chicago, Illinois. Filed Nov. 12, 1928. Serial No. 318,740. 7 Claims. (Cl. 40—120.)



1. In a device of the class described, a base member, a resilient retaining member attached to the lower portion of said base member and having a loop extending upwardly through said base member, and a pad-engaging member pivotally secured in said loop and having its opposite ends detachably locked by said retaining member.

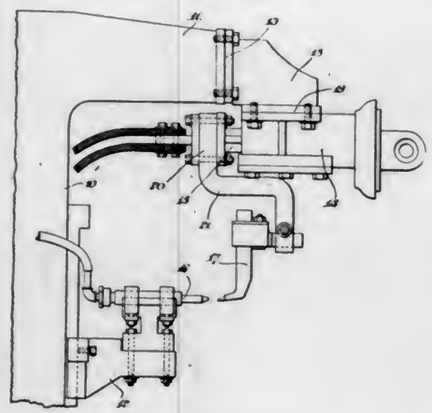
1,767,472. TRANSMISSION DEVICE. ERNEST S. OSTLER, Chicago, Ill., assignor, by mesne assignments, to Stromberg Electric Company, a Corporation of Delaware. Filed June 18, 1926. Serial No. 116,843. 1 Claim. (Cl. 74—53.)



A transmission comprising a cylindrical drum, an actuating coil spring surrounding one portion of said drum, a holding coil spring surrounding another portion of said drum, the inside diameters of said coil springs being slightly less than the diameters of those portions of the drum which they respectively surround when the springs are untensioned, said coil springs being wound in the same direction on said drum, means for oscillating one end of the actuating spring whereby it grips in one direction and slips in the other to intermittently actuate the drum, and means for holding one end of the holding spring to cause said holding spring to grip when the actuating spring slips to prevent reverse rotation of the drum and to cause said holding spring to slip when the actuating spring grips to permit of forward rotation of the drum.

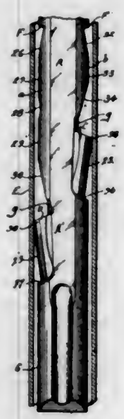
1,767,473. WELDING MACHINE. JAMES J. PAUCH, Philadelphia, Pa., assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Mar. 3, 1928. Serial No. 258,783. 9 Claims. (Cl. 219—4.)

1. A welding machine comprising a substantially vertical main pedestal having a horizontal overhanging arm at its upper end, a lower electrode horizontally supported from the main pedestal, a relatively movable upper electrode supported from and in depending relation to said



overhanging arm, and means for effecting a straight line movement of said upper electrode toward and away from said lower electrode.

1,767,474. UNDERREAMER. JOHN T. PHIPPS, Huntington Park, Calif., assignor to John Grant, Los Angeles, Calif. Filed May 15, 1925. Serial No. 30,590. 13 Claims. (Cl. 255—75.)

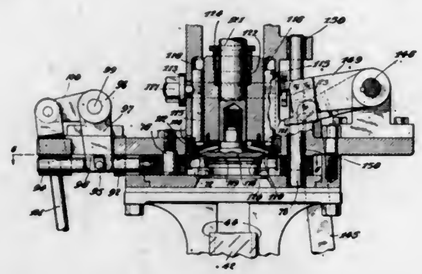


1. In an underreamer, a body, cutters movable lengthwise on said body, and means for causing longitudinal movement of said cutters to cause collapsion and expansion of the cutters in cooperation with the body; said cutters being positioned out of opposition to each other when collapsed, and being positioned in opposition to each other when expanded.

1,767,475. VACUUM SEALING MACHINE. ABRAHAM PODEL, Long Island City, N. Y., assignor to Anchor Cap & Closure Corporation, Long Island City, N. Y., a Corporation of New York. Filed Dec. 17, 1924. Serial No. 756,416. 33 Claims. (Cl. 226—82.)

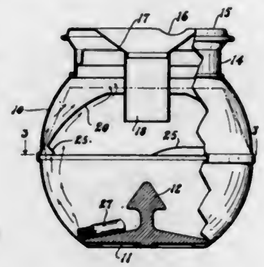
26. In a vacuum sealing machine, the combination of a vacuum chamber adapted to receive a vessel through

the bottom thereof, oppositely disposed sealing dies in said chamber for sealing a vessel, one of said dies being adapted to cooperate with the vessel to close the



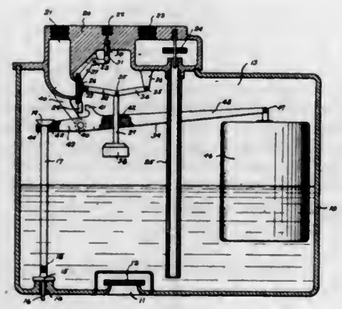
bottom of said chamber by forming an air-tight seal between said die and a container, and means for exhausting the air from said chamber.

1,767,476. SMOKER'S RECEPTACLE. BENJAMIN PUTTERMAN, Brooklyn, N. Y., assignor to Yankee Metal Products Corp., a corporation of New York. Filed Mar. 11, 1929. Serial No. 346,213. 4 Claims. (Cl. 131—51.)



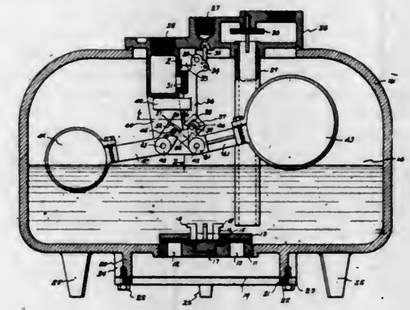
4. A smoker's receptacle including a body, a cover therefor, a tube depending from said cover and a downwardly and outwardly extending deflector surrounding said tube, said tube being apertured to communicate with said receptacle above said member.

1,767,477. PNEUMATIC PUMP. HOMER S. ROGERS and RICHARD RADDATZ, Milwaukee, Wis., assignors to Milwaukee Air Power Pump Co., Milwaukee, Wis., a Corporation of Wisconsin. Filed May 17, 1926. Serial No. 109,590. 2 Claims. (Cl. 103—248.)



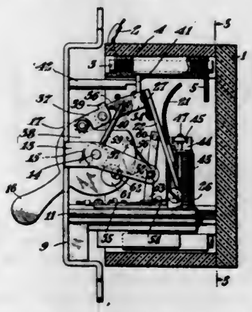
1. In a pneumatic pump, the combination with a pumping chamber and the fluid exhaust valve thereof, the latter being arranged to close with the pressure in the pump chamber, of means for causing said valve to open and including a plurality of disconnected parts supported for movement into spaced relation with respect to each other to permit closing of said valve and for movement into engaging relation with each other to effect opening of the latter, means responsive to high level condition in said chamber for placing said parts in said spaced relation and tending under low level condition in the pump chamber to cause movement of said parts into said engaging relation, and means arranged for coaction with said first-named means for releasably holding said parts in said spaced relation and acting to permit said second-named means to store up a predetermined amount of potential energy during discharge of the water from said chamber and until the water level in the latter reaches the low point, said last-named means yielding at this time to the action of said second-named means whereby said stored energy thereof is released to cause said parts to engage with each other with an impact to effect opening of said valve against the existing pressure in the pump chamber.

1,767,478. PNEUMATIC PUMP. HOMER S. ROGERS and RICHARD RADDATZ, Milwaukee, Wis., assignors to Milwaukee Air Power Pump Co., Milwaukee, Wis., a Corporation of Wisconsin. Filed May 17, 1926. Serial No. 109,591. 7 Claims. (Cl. 103—248.)



1. A pump of the character described including a pump chamber having air inlet and exhaust valves, a single valve carrying lever fulcrumed within the pump and operatively connected to said valves, a pivoted float having a loose connection with the lever for operating said valve with a snap action at high and low level conditions in the pump, a second float and an interlock between said floats for holding the first float against movement during intermediate level conditions.

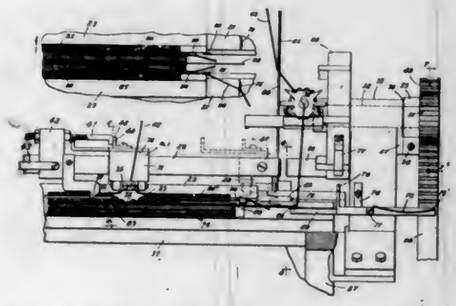
1,767,479. CIRCUIT BREAKER. FRANK W. ROLLER, East Orange, N. J., assignor to Roller-Smith Company, a Corporation of New York. Filed Oct. 12, 1927. Serial No. 225,613. 7 Claims. (Cl. 200—89.)



1. A circuit breaker switch comprising a movable switch element, a manually operated element, a locking

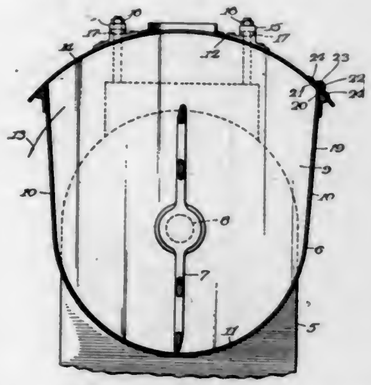
linkage connecting said manually operated element and said movable switch element, and means for simultaneously opening the breaker and changing said manually operated element to open position upon the occurrence of an overload current without breaking said linkage.

1,767,480. YARN-CHANGING MECHANISM. WALTER F. ROLSTON, Rockford, Ill., assignor, by direct and mesne assignments, of one-half to Burson Knitting Company, Rockford, Ill., a Corporation of Illinois. Filed Jan. 20, 1926, Serial No. 82,388. Renewed Oct. 17, 1929. 32 Claims. (Cl. 66—127.)



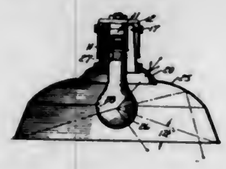
27. In a straight knitting machine, in combination, opposed beds of needles defining a throat, a yarn-carrier rail supported in a stationary position above the throat, a yarn-carrier adapted to be reciprocated on said rail, a driver head on said rail adapted for reciprocating said yarn-carrier, a yarn-retaining element at one side of said throat extending from a suture point longitudinally of the throat, means for holding a yarn emanating from said suture point, and a finger carried by said driver head adapted to engage said yarn and draw it behind said yarn-retaining element.

1,767,481. MIXING MACHINE. GEORGE ROYAN, Chicago, Ill., assignor, by mesne assignments, to American Machine & Foundry Company, New York, N. Y., a Corporation of New Jersey. Filed Dec. 27, 1926. Serial No. 157,095. 6 Claims. (Cl. 220—24.)



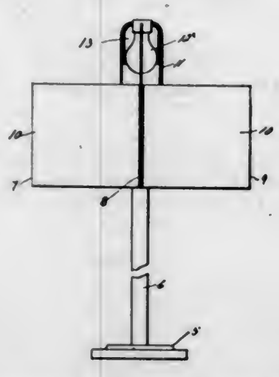
1. In a mixing machine, the combination of a receptacle having an open top, a cover for closing said open top, said receptacle and cover being mounted so as to be movable relative to each other and said cover being slotted over a top edge portion of the receptacle, a strip of compressible material having a greater cross sectional dimension than the width of said slot, disposed therein on the outside of the cover, the greater cross section dimension of the strip being effective to position the strip in the slot so that the strip projects through the slot beyond the inner side of the cover a distance sufficient to require compression thereof when the cover and receptacle are in closed position, and means for retaining said strip in said slot.

1,767,482. LIGHTING FIXTURE. FREDERICK C. RUNGE, New York, N. Y. Filed July 22, 1927. Serial No. 207,598. 1 Claim. (Cl. 240—78.)



A lighting fixture comprising a lamp socket, a socket cover, a sleeve removably carried in the socket cover and having an outwardly directed flange at its lower end, a glass ring resting on the flange, a locking ring for locking the glass ring in place, the glass ring having a peripheral flange, and a reflector supported solely on said flange, the sleeve, rings and reflector being bodily removable from the socket cover.

1,767,483. SIGN. JAMES P. SALMON, Philadelphia, Pa., assignor of part interest to John W. France and Joseph A. Missar, Philadelphia, Pa. Filed Aug. 25, 1926. Serial No. 131,371. 1 Claim. (Cl. 40—130.)

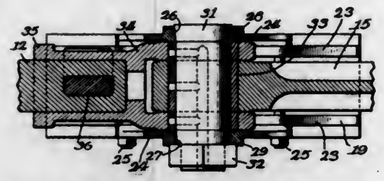


A sign including a support, three wings permanently mounted on said support spaced equi distant apart and radiating therefrom in the same horizontal plane and providing a plurality of stationary display surfaces, an arched frame carrying a source of light and secured to said wings at points spaced from the intersections of said wings so as to leave the space below the source of light unobstructed, and a combined reflector and shield also supported by said frame to direct the light rays on to the wing surfaces and partially conceal the source of light from an onlooker's vision.

1,767,484. LOCOMOTIVE PISTON-ROD CROSSHEAD CONNECTION. WILLIAM J. SCHLACKS, Chicago, Ill. Filed July 5, 1929. Serial No. 376,031. 8 Claims. (Cl. 105—84.)

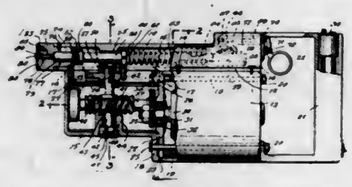
1. In a locomotive engine, a cross head comprising spaced bearing members, a pair of webs interconnecting

said members, a removable wrist pin rigidly supported in said webs, a piston rod pivotally secured to said



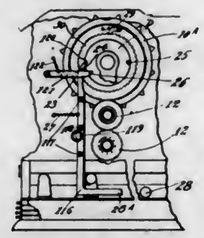
wrist pin, a connecting rod pivotally secured to the wrist pin, and means for guiding the bearing members of said cross head.

1,767,485. POWER HAMMER. JOHN W. SHALLENBERGER, Bridgeport, Conn. Filed Oct. 22, 1925. Serial No. 64,094. 2 Claims. (Cl. 1—47.)



1. In a power hammer, an impact member adapted to have to and fro movement, a motor, spring means adapted to impart movement to said impact member in one direction, means between said motor and impact member adapted to impart movement to the latter in the other direction against the force of said spring means, a tabular guide to receive a fastening, and a striker movable in said guide adapted to be moved by said impact member during its spring actuated movement according to the inserting movement given the fastener in the guide.

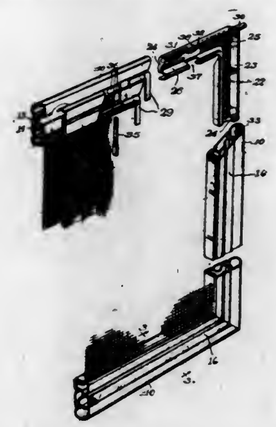
1,767,486. CASH-DRAWER MANIFOLDING DEVICE. JOHN Q. SHERMAN, Dayton, Ohio, assignor, by direct and mesne assignments, to The Standard Register Company. Filed May 2, 1923. Serial No. 636,239. 6 Claims. (Cl. 235—4.)



1. In combination, a manifolding device, having an independent paper feed means and a cabinet with a drawer in the cabinet, the manifolding device having a paper feed element, and means on the drawer for driving said element to feed the paper upon inward movement of the drawer into the cabinet, and means to prevent said independent means from operation except when the drawer is open.

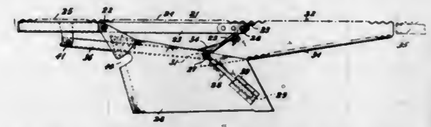
1,767,487. METAL FRAME FOR SCREENS. CHARLES A. SHOGREN, Chicago, Ill. Filed Aug. 3, 1928. Serial No. 297,144. 5 Claims. (Cl. 156—14.)

3. In combination, a pair of hollow metal frame members having channeled front walls, an angular corner brace adapted to telescope within said members, said brace comprising an outer angular flange bearing against the inner surfaces of the front and rear walls of said metal members, an inner angular flange adapted to bear against certain channel walls of said hollow frame mem-



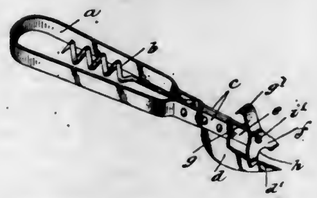
bers, an intermediate flange uniting said angular flanges, said intermediate flange being reversely bent in cross section for supporting contact with other channel walls of said frame members and transverse end flanges integral with said outer and intermediate flanges.

1,767,488. CONVERTIBLE CHAIR. WILLIAM B. STOUT, Detroit, Mich. Original application filed July 11, 1924, Serial No. 42,944. Divided and this application filed Oct. 5, 1926. Serial No. 139,593. 3 Claims. (Cl. 155—45.)



1. A device of the character described having seat, back and foot portions, a stationary support for one of the portions, a slot in the support, a link having one end pivotally secured to one of the portions, the other end being slidably fitted within the slot, said other end of the link being pivotally secured to another of the portions, and another link between said other end of said first link and the third portion.

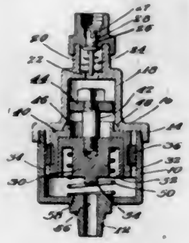
1,767,489. COMBINATION TOOL. JOHN T. SWEENEY, Kingston, N. Y. Filed Aug. 4, 1922. Serial No. 579,588. 5 Claims. (Cl. 7—1.)



1. A tool of the character described embodying therein a looped handle formed of strip metal, having a portion adjacent its ends closed together, whereby a cutting blade may be secured between the portion of said handle adjacent the closed ends of the strip forming the same,

with its cutting edge projected forwardly thereof, the ends of the handle-forming strip being cut obliquely, and a fulcrum head plate permanently secured against the oblique ends of the handle-forming strip above and extending laterally of the closed ends of said handle.

1,767,490. LUBRICATING METHOD AND MEANS. DONALD H. SWEET, Evanston, Ill., assignor to Alemite Corporation, Chicago, Ill., a Corporation of Delaware. Filed Apr. 27, 1925. Serial No. 26,102. 11 Claims. (Cl. 184—7.)



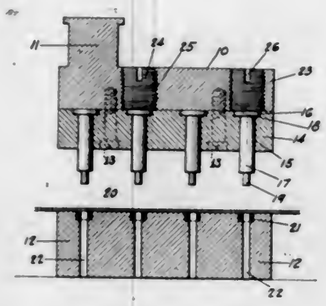
1. A lubricant measuring device comprising a body having an inlet and an outlet, piston means normally subjected to the pressure of lubricant at the inlet, valve means arranged to by-pass said piston means, a lost motion connection between said piston and said valve means whereby said valve means will be opened upon a predetermined movement of said piston means, and a spring biasing said piston toward one end of its stroke.

1,767,491. DISPENSING DEVICE. WALTER TITTLE, Philadelphia, Pa. Filed Mar. 1, 1929. Serial No. 343,711. 5 Claims. (Cl. 221—79.)



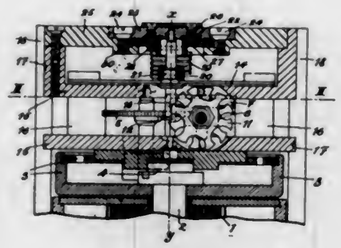
1. In a device of the character stated, an outer casing, a soap holder positioned within said casing, a discharge nozzle for said soap holder, a plunger in said container, a threaded feed screw in engagement with said plunger, and having a polygonal rear end, an actuator rotatably mounted on the rear of said casing, having a polygonal opening engaging the lower end of said feed screw for rotating the latter, a resilient apertured disc at the exit end of said nozzle, a head on the forward end of said feed screw adapted to contact with said disc, ball bearings intermediate the end of said soap container and said actuator, inner and outer ball races, and a flange on the inner ball race in threaded engagement with said casing.

1,767,492. PUNCHING MACHINE. WILLIAM A. VALENTINE, Philadelphia, Pa., assignor to Edward G. Budd Manufacturing Co., Philadelphia, Pa., a Corporation of Pennsylvania. Filed Nov. 20, 1925. Serial No. 70,294. 2 Claims. (Cl. 164—90.)



1. A punch block for punching machines comprising a pair of superimposed plates, punches projecting through and socketed in one plate and held in their sockets by the other plate, means detachably connecting said plates together whereby the punches may be removed and replaced as a group, and individually assembled punch retaining members projecting through the other plate in line with the punches and permitting individual assembly of certain of said punches.

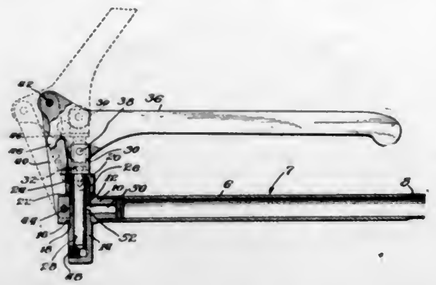
1,767,493. REGULATING DEVICE FOR CLOCKWORK-OPERATED MECHANICAL FUSES FOR ARTILLERY PROJECTILES. ANDRÉ VARAUD, Geneva, Switzerland. Filed May 26, 1927, Serial No. 194,271, and in Switzerland May 28, 1926. 7 Claims. (Cl. 102—36.)



1. In a clock work operated mechanical fuse for artillery projectiles, a regulating device including a balance spindle, a balance carried thereby, a balance spring, a read beat escapement permitting no back-lash in the balance, means for driving the escapement, and a rotary body mounted eccentrically to the axis of the balance spindle and associated therewith whereby the action of centrifugal force on the said rotary body produces a braking effect on the spindle and balance in proportion to the rotary speed of the projectile.

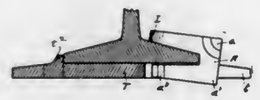
1,767,494. BOOSTER PUMP. REUBEN WEDEBERG, Chicago, Ill., assignor to Alemite Corporation, Chicago, Ill., a Corporation of Delaware. Filed Aug. 23, 1928. Serial No. 301,536. 12 Claims. (Cl. 221—473.)

1. In apparatus of the class described, the combination of a pipe handle, a transversely bored body secured thereto, a cylinder member fitting in the transverse bore of said body, means to clamp said member in said body, a plunger reciprocable in said member, a bracket mounted upon the outer end of said plunger, an operating lever, a pivotal connection between said bracket and said operating lever, a pair of links pivotally mounted on said body



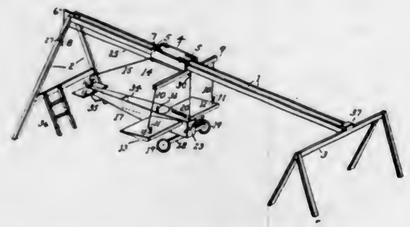
and pivotally connected to said lever, and cooperating means on said lever and said bracket to limit the stroke of said lever.

1,767,495. ANTICREEPER FOR RAILWAY RAILS. WILLIAM S. WESTON, Dallas, Tex. Filed Jan. 12, 1929. Serial No. 332,176. 10 Claims. (Cl. 238—304.)



1. A spring clamp rail anchor adapted to be strained on installation and having a part arranged to snap into engagement with a part of the substructure to retain the anchor in position on the rail base.

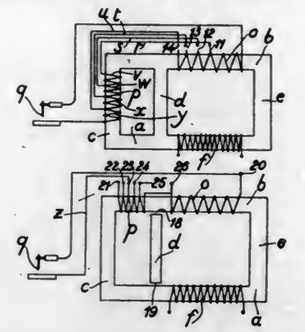
1,767,496. PLAY AIRWAY FOR AMUSEMENT PURPOSES. BROADUS WILSON, Raleigh, N. C. Filed July 12, 1928. Serial No. 292,317. 11 Claims. (Cl. 104—23).



1. In a device of the kind described a gravity locking device adapted to align wheels and to prevent changing line of wheels while said device is suspended, and adapted to automatically release and permit steering within determined limits when the device is on the ground.

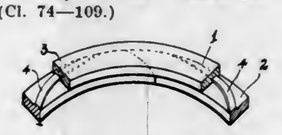
1,767,497. REGULATING TRANSFORMER FOR ARC WELDING BY ALTERNATING CURRENT. FRANZ WÖRTMANN, Geneva, Switzerland, assignor to Société Anonyme Des Ateliers de Secheron, Geneva, Switzerland, a Corporation of Switzerland. Filed Nov. 11, 1925, Serial No. 68,468, and in Germany Dec. 23, 1924. 3 Claims. (Cl. 171—119.)

1. In an alternating current welding transformer for simultaneous regulation of voltage and current intensity, a core, primary and secondary windings on the said core, one of the said windings having a plurality of groups of turns, and means for switching in and out said groups of turns whereby a number of turns are eliminated from one winding and a greater number of turns are inserted into another winding so that there is included in



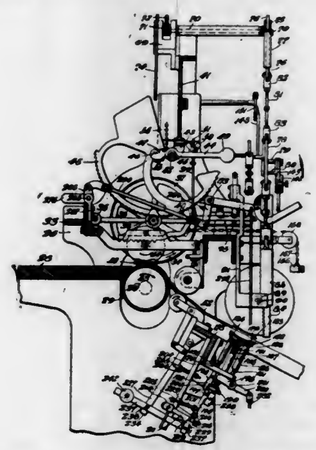
the circuit with each added group a sufficiently greater number of turns to effect an increase in the no load tension and a corresponding reduction of the welding current, and vice versa.

1,767,498. PISTON RING. BERNARD YOUNG, San Pedro, Calif. Filed May 8, 1929. Serial No. 361,299. 4 Claims. (Cl. 74—109.)



1. A packing element, a wearing ring, a control ring, said wearing ring having a plurality of oppositely directed arcuate grooves formed on the face thereof, and said control ring being formed with a plurality of arcuate shoulders adapted to fit into said grooves.

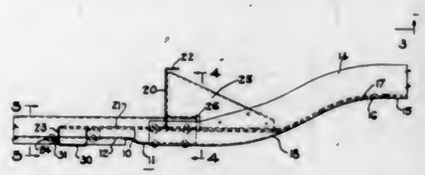
1,767,499. LEATHER-MEASURING MACHINE. HOWARD POLLOCK YOUNG, Wilmington, Del., assignor to F. F. Slocomb & Co., Inc., Wilmington, Del., a Corporation of Delaware. Filed Nov. 14, 1927. Serial No. 232,957. 11 Claims. (Cl. 101—43.)



1. In a measuring machine of the character stated, a series of measuring wheels for registering the linear measurements of a sheet, means for measuring the thickness of said sheet while the same is moving through said machine, means for referring said measurement to a pre-

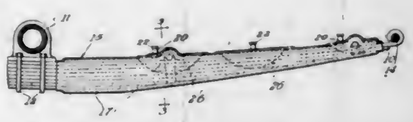
determined part of said sheet with respect to the entering wedge thereof, and means for stamping said thickness measurement upon the sheet after said predetermined part of said sheet has passed beyond the measuring means.

1,767,500. AUTOMOBILE BODY CONSTRUCTION. RALPH L. ADAMS, Philadelphia, Pa., assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Nov. 20, 1926. Serial No. 149,589. 15 Claims. (Cl. 296—28.)



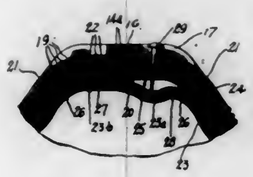
1. In an automobile body construction, a main body side sill and a tonneau side sill forming an extension thereof, said main body side sill being a downwardly presenting flanged channel member the inner flange of which is raised and the outer flange of which is depressed adjacent one end thereof, and said tonneau side sill being an angle member overlapping and attached to both the depressed outer flange and the raised inner flange of the main body side sill.

1,767,501. COVER. CHARLES D. ANDERSON, Chicago, Ill. Filed Aug. 17, 1925. Serial No. 50,729. 6 Claims. (Cl. 267—37.)



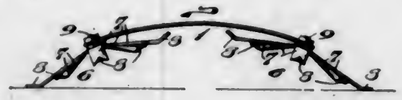
1. In a cover of the class described, the combination with a flexible sheet comprising rubber and provided with tabs, of a coating of adhesive substance applied to said tabs and adapted to secure the sheet upon a spring.

1,767,502. PUNCTURE-PROOF PNEUMATIC TIRE. HIRAM C. ANDERSON, New York, N. Y. Filed Apr. 13, 1928. Serial No. 269,630. 2 Claims. (Cl. 152—18.)



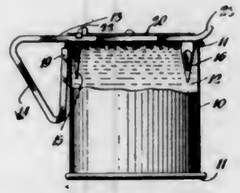
2. A device of the character described, including a tire casing, an inner pneumatic tube, and a liner between the tube and the casing, said liner being secured to the casing at the sides thereof and being separate from the casing adjacent to the tread portion, said liner including a body portion to protect the pneumatic tube, said liner and casing having annular elastic connecting portions to secure the same together at the sides, said annular portions being of a width to permit inward yielding movement of the liner under pressure of a foreign object.

1,767,503. TOY. HAROLD S. BARNES, Allentown, Pa., assignor to P. R. Baker, Columbia, Pa., trading as the United States Lock and Hardware Company. Filed July 23, 1929. Serial No. 380,440. 4 Claims. (Cl. 46—45.)



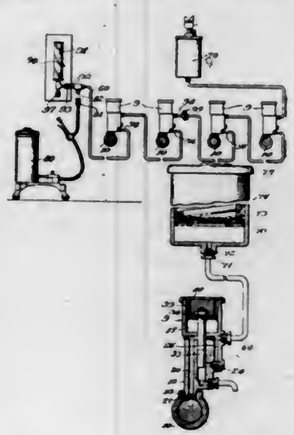
1. As a new article of manufacture, a toy depicting a crab, crustacean or like creature, the feet of which comprise opposed hubs provided with radial arms constituting wheels the axes of which wheels are inclined with respect to one another and to the surface over which the toy is to be drawn.

1,767,504. CAN-POURING APPARATUS. LAMPERT BEMELMANS, Miami, Fla. Filed Oct. 31, 1928. Serial No. 316,323. 1 Claim. (Cl. 220—51.)



An apparatus of the class described comprising a bar, means for applying the bar to the top of a can in service, prongs associated with the bar and adapted to punch out holes in the can when the bar is applied thereto, said prongs having openings for communicating with the interior of the can, said openings being opened to the outer air, means for covering and uncovering the open ends of the openings at will, said means comprising a slide pivoted to the bar between the prongs for pivotal movement relative to the bar.

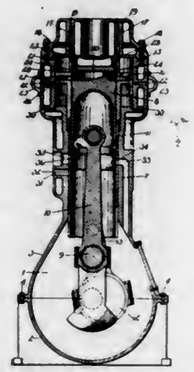
1,767,505. CENTRALIZED LUBRICATING SYSTEM. CLIFFORD C. BRADBURY, Glencoe, Ill., assignor to Alemite Corporation, Chicago, Ill., a Corporation of Delaware. Filed Oct. 22, 1928. Serial No. 314,006. 12 Claims. (Cl. 184—7.)



1. A system of lubrication comprising a plurality of bearings to be lubricated, a lubricant measuring device associated with each of said bearings and adapted to receive a charge of lubricant to be subsequently delivered

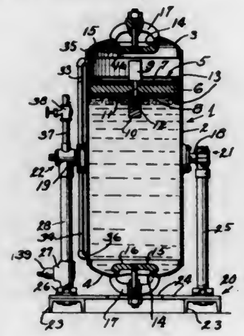
to said bearings, means to open an outlet passage when the measuring device is filled, a conduit connecting said outlet with an inlet passage of the next adjacent device, a semaphore connected to the last device in the series to indicate when the devices are filled, and a visible indicator to indicate when all the devices are empty.

1,767,506. HIGH-PRESSURE ENGINE. CARL P. BROCKWAY Paterson, N. J., assignor to Industrial Research Corporation, Toledo, Ohio, a Corporation of Delaware. Filed Sept. 13, 1920. Serial No. 410,020. Renewed Apr. 7, 1930. 14 Claims. (Cl. 123—71.)



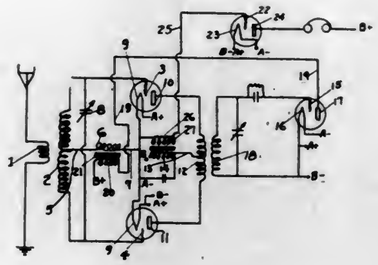
5. In an internal combustion engine, a cylinder having an enlarged bore in one portion thereof, a cylindrical sleeve operable within said cylinder and having a plunger thereon operable within said enlarged bore of said cylinder for compressing fuel gas therein, a piston operable within said cylindrical sleeve, means for compressing air in the combustion space of said cylinder, means for transporting the compressed gas in a movable chamber, means for interconnecting said movable chamber with said combustion space to cause a slow intermixture and slow burning of the gas and air.

1,767,507. PNEUMATICALLY-OPERATED GREASING APPARATUS. CONRAD R. BUCHET, Long Beach, Calif. assignor, by direct and mesne assignments, to Alemite Corporation, Chicago, Ill., a Corporation of Delaware. Filed Oct. 28, 1927. Serial No. 229,353. 7 Claims. (Cl. 221—47.1.)



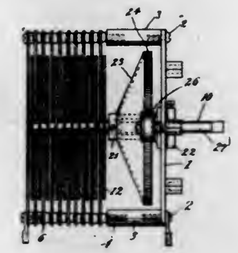
1. A greasing apparatus comprising a tank; a piston within the tank; a filling opening at each end of the tank; a mounting providing bodily inversion of the tank; means operable by inversion of the tank for interchangeably admitting fluid pressure to the tank at one end of the tank and delivering grease from the other end of the tank; and vice versa.

1,767,508. VACUUM-TUBE CIRCUITS. EMMERY J. H. BUSSARD, Cincinnati, Ohio, assignor to The Crosley Radio Corporation, Cincinnati, Ohio, a Corporation of Ohio. Filed July 27, 1925. Serial No. 46,258. 3 Claims. (Cl. 179—171.)



1. In an audion amplifier, two audions connected in out-of-phase parallel relation for radio frequency amplification, and in-phase parallel relation for audio frequency amplification the plate terminals of said tubes connected each to opposing terminals of a radio frequency inductance, the center point of said radio frequency inductance being connected through a device sensitive to audio frequency signals, and a source of plate potential to the common filament circuit of the said audion tubes, means for rectifying and amplifying the modulated radio frequency current in the said plate inductance and impressing the resulting audio frequency current on the primary of a transformer, the secondary of which is connected in the common grid filament lead of the said audion tubes.

1,767,509. VARIABLE CONDENSER. EMMERY J. H. BUSSARD and CHARLES E. KILGOUR, Cincinnati, Ohio, assignors to The Crosley Radio Corporation, Cincinnati, Ohio, a Corporation of Ohio. Filed Apr. 8, 1925. Serial No. 21,672. 6 Claims. (Cl. 175—41.5.)

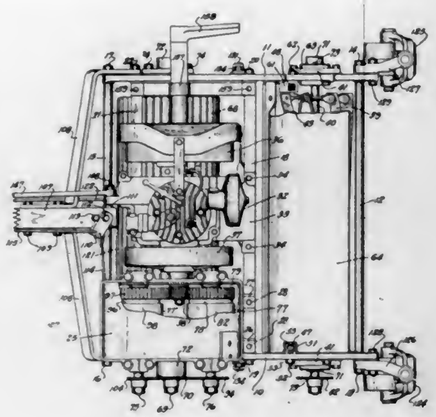


1. In a variable interlocking plate air condenser in combination with a plate supporting the condenser in which plate the rotor spindle is journaled, venier actuating mechanism for rotating the rotor spindle comprising a driving portion near the plane of the supporting plate and driven portions near the plane of the rotor plates, whereby a long bearing may be employed.

1,767,510. POWER-DRIVEN LAWN MOWER. JOHN A. E. CARLSON, Racine, Wis., assignor to Jacobsen Mfg. Co., Racine, Wis., a Corporation of Wisconsin. Filed July 12, 1926. Serial No. 121,764. 5 Claims. (Cl. 56—26.)

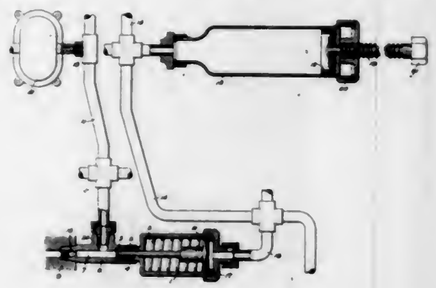
1. A motor driven lawn mower including a motor, a cutting element, traction means and clutch controlled

driving connections between the motor and the cutting element and the traction means, a casing enclosing the clutch controlled driving connection, each clutch controlled



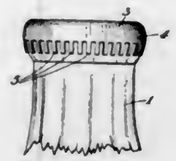
driving connection including a shaft mounted on said casing, a pair of clutch members mounted on the shaft, a collar fixed to the shaft and abutting one of the clutch members but spaced from the adjacent portion of the casing, a spring urging the clutch members into engagement, a collar fixed to the shaft and affording an abutment for said spring, and a thrust bearing on the casing with which said abutment collar is engageable.

1,767,511. LUBRICATING SYSTEM. MOSES F. CARR, Lexington, Mass., assignor, by mesne assignments, to Alemite Corporation, Chicago, Ill., a Corporation of Delaware. Filed Aug. 25, 1925. Serial No. 52,326. 7 Claims. (Cl. 184—7.)



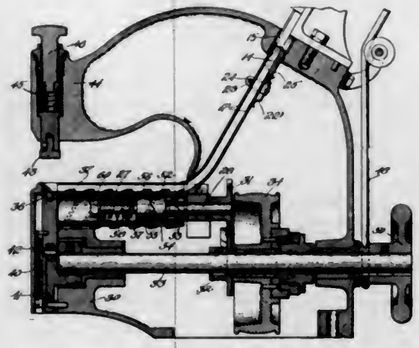
1. A lubricating system comprising, in combination, a lubricant cup having a charge determining chamber, a conduit communicating directly with said chamber, a pump for filling said chamber with lubricant through said conduit and continuously maintaining lubricant under low pressure in said chambers, valve means for trapping the lubricant in said chamber, pressure operated imperforate plunger means located in said cup for forcing the lubricant from said chamber under a relatively high potential pressure, a second pump, and a second conduit connecting said pump and cup for supplying a fluid under pressure to actuate said plunger.

1,767,512. CAP CLOSURE. WALLACE PATTEN COHOE, Riverdale-on-the-Hudson, N. Y., assignor to Wallace P. Cohoe & Company, a Corporation of New York. Filed June 18, 1926. Serial No. 116,824. 16 Claims. (Cl. 215—38.)



1. A container closure having a slitted engaging portion coated with an aqueous cellulose solution extending between the slits therein that has been coagulated, said engaging portion being contracted by the cellulose of the solution extending between the slits to seal the container.

1,767,513. MACHINE FOR SORTING AND SETTING FASTENERS. EARLE M. CROSBY, Birmingham, Mich., assignor, by mesne assignments, to United-Carr Fastener Corporation, Cambridge, Mass., a Corporation of Massachusetts. Filed Dec. 9, 1926. Serial No. 153,549. 7 Claims. (Cl. 1—3.)



1. In a machine for handling fasteners, a mechanism for transferring fasteners comprising a screw conveyor having its threads slotted transversely to the axis thereof, and guiding means for said fasteners having projections extending into the slots in said threads.

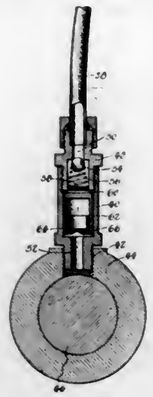
1,767,514. POROUS MASS FOR THE STORAGE OF EXPLOSIVE GASES AND METHOD OF MAKING SAME. GUSTAF DALÉN, Stockholm, Sweden, assignor to American Gasaccumulator Company, Elizabeth, N. J., a Corporation of New Jersey. Filed May 14, 1925, Serial No. 30,362, and in Sweden May 27, 1924. 4 Claims. (Cl. 23—246.)

1. A porous mass within a tank or receiver for the storage of explosive gases, consisting of lumps, each of which comprises a core of solid material incased in a coating of porous composite material, and porous material in the form of finely divided particles completely filling the voids between the said lumps.

1,767,515. LUBRICATING SYSTEM. ERNEST W. DAVIS, Oak Park, Ill., assignor to Alemite Corporation, Chicago, Ill., a Corporation of Delaware. Filed Aug. 1, 1925. Serial No. 47,528. 9 Claims. (Cl. 184—7.)

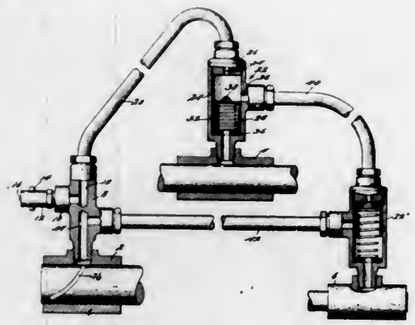
1. A lubricating system comprising means acting periodically to deliver measured charges of lubricant, check

valved means receiving said charges, a calibrated flow resistance receiving said charges from said last named



means, a resilient storage chamber receiving said charges from said calibrated flow resistance and a bearing to be lubricated communicating with said chamber.

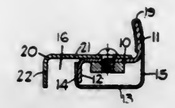
1,767,516. LUBRICATING SYSTEM AND APPARATUS. ERNEST W. DAVIS, Oak Park, Ill., assignor to Alemite Corporation, Chicago, Ill., a Corporation of Delaware. Filed Nov. 11, 1927. Serial No. 232,549. 6 Claims. (Cl. 184—7.)



In a lubricating system of the class described, the combination of a plurality of machine bearings to be lubricated, a series of measuring devices adjacent each except one of said bearings, each of said devices being adapted successively to supply a measured quantity of lubricant to its associated bearing and uncover a passage to the next device of the series, and a fitting attached to one of said bearings, said fitting having means for receiving lubricant under high pressure and having a passage leading therefrom to the first device of the series and a second passage leading from the last device of the series to the bearing associated with the fitting whereby the completion of the operation of the system will be indicated by the extrusion of lubricant from the bearing adjacent the fitting through which lubricant is supplied to the system.

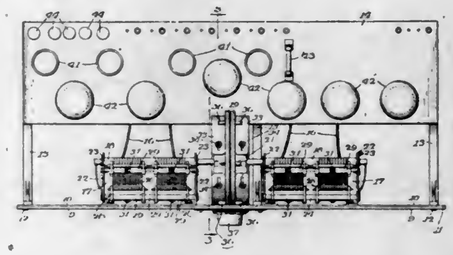
1,767,517. DOOR-WINDOW FRAME. EDWARD JACOB DEISLEY, Philadelphia, Pa., assignor to Edward G. Budd Manufacturing Co., Philadelphia, Pa., a Corporation of Pennsylvania. Filed Jan. 29, 1925. Serial No. 5,429. 3 Claims. (Cl. 296—44.)

1. A top rail for doors of closed vehicle bodies comprising a main member having a transverse portion of web cross section, flanged at its outer and inner edges, and a panel stamping of hollow form having one side



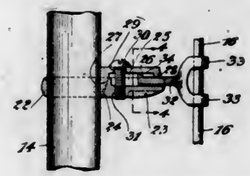
open applied with its open side to the inner face of the main member and secured at its opposite edges to the flanges of said main member.

1,767,518. RADIORECEIVER. OLIVER C. DENNIS, Wilmette, Ill. Filed Oct. 10, 1927. Serial No. 225,213. 5 Claims. (Cl. 175—41.5.)



In a radio receiver, a front panel, a pair of variable condensers secured on the reverse side of said panel and having their rotor plate shafts in alignment, a pair of hand wheels each secured to one of said shafts and positioned side by side with a portion of their arcs extending through the panel for turning the same, and a quickly removable pin extending through the two hand wheels causing them normally to be operated in unison but adapted to be removed to permit independent adjustment.

1,767,519. VALVE-ROD GUIDE FOR FLUSH TANKS. JAMES F. DUNCAN, Waterville, Conn. Filed Aug. 30, 1928. Serial No. 302,935. 7 Claims. (Cl. 4—57.)

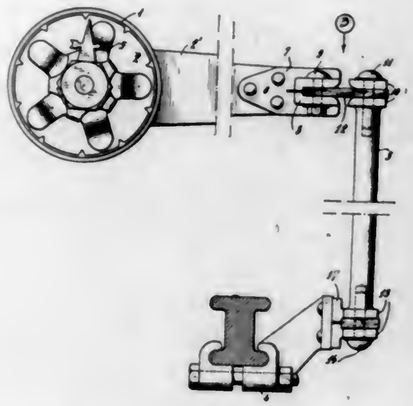


1. In a valve rod guide for flush tanks, an arm, a supporter therefor, an extension member adjustable to position relatively to the said arm, and means for simultaneously securing the arm to its support and maintaining the extension member in position relatively to the said arm.

1,767,520. SHOCK ABSORBER. CLIFFORD E. DUNN, Short Hills, N. J. Filed Apr. 17, 1925. Serial No. 23,802. 7 Claims. (Cl. 267—9.)

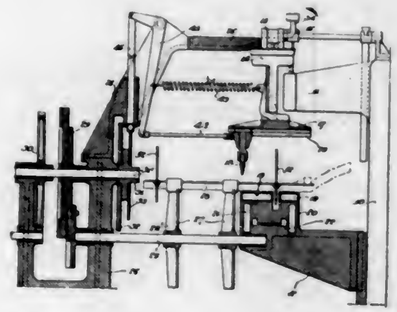
1. In a shock absorber, the combination with a plurality of friction elements, of an arm extending from one of said friction elements, a bracket at the extremity of said arm, flanges on said bracket, a flexible fabric, means for fixing one end of said fabric between said flanges, a drag-link, flanges on said drag-link, means for fastening the other end of said fabric on said drag-link whereby to provide a flexible joint between said arm and said drag-

link, a second flange on said drag-link at the opposite end thereof and perpendicular to said first flange, a second fabric attachable to said flange, a clamping member at-



tachable to a vehicle part, and a plurality of flanges on said clamping member adapted for fastening the other end of said second fabric therebetween.

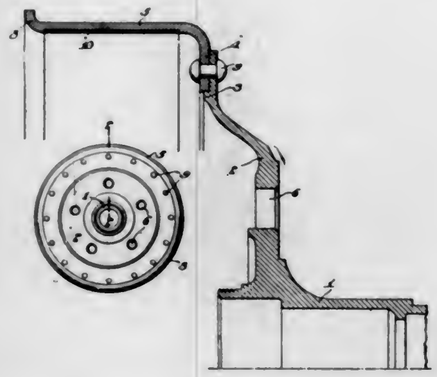
1,767,521. AUTOMATIC SPOT-WELDING MACHINE. CAROLUS L. EKSERGIAN, Philadelphia, Pa., assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Apr. 4, 1928. Serial No. 267,149. 7 Claims. (Cl. 219—4.)



1. An automatic spot welding machine comprising relatively fixed and movable electrodes having a step by step movement relative to each other, together with synchronized means operating the electrodes and effecting their step by step movement.

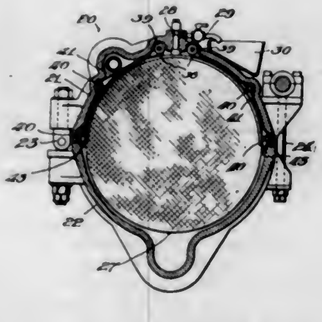
1,767,522. BRAKE DRUM AND METHOD OF MAKING SAME. GORDON M. EVANS, Detroit, Mich., assignor to Budd Wheel Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed July 14, 1927. Serial No. 205,572. 3 Claims. (Cl. 29—159.)

1. The process of forming cylindrical brake drum bodies of material so hard as to be impracticably die drawn which consists in taking strip stock of the material of a width substantially equal to the cylindrical main body, the length approximately the circumference of the main body, bending said stock into an annulus of the diameter of the main body desired, and welding together the abutting ends of the annulus, and thereafter subjecting said annulus to an extending and contracting operation to size the body of the drum.



3. A cylindrical main body for a broke drum comprised of a circumferentially extended piece of strip stock of bendable material of a hardness approximately of the hardness of high carbon steel rendering it impractical for die drawing throughout the principal portion of its width, but having flanged marginal portions throughout of a material practically capable of being die drawn.

1,767,523. FILTER COVER. CHARLES A. FRANKENHOFF, Evanston, Ill. Filed July 8, 1929. Serial No. 376,642. 8 Claims. (Cl. 210—195.)

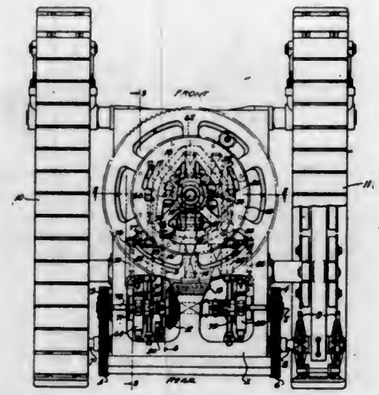


1. The combination of a filter casing, a filter leaf positioned therein, a filter cover including an opening enclosing said leaf, means on said cover operable in one direction to draw the meeting edges of said opening toward each other and in the other direction to separate said edges to permit the withdrawal of the cover, and means on said casing connectable to said first named means for operating the same while said leaf is in position.

1,767,524. STEERING GEAR. ARTHUR G. HENRICKS, and HOLGER L. MITCHELL, Milwaukee, Wis., assignors to Harnischfeger Corporation, Milwaukee, Wis., a Corporation of Wisconsin. Filed Apr. 9, 1926. Serial No. 100,791. 11 Claims. (Cl. 180—9.2.)

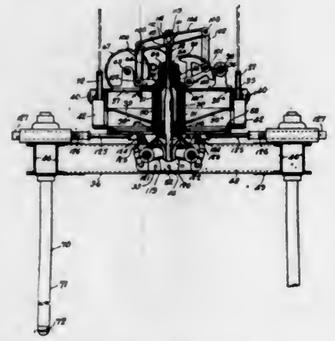
1. In steering gear of the character described, the combination with the clutches and brakes thereof, of a lever

common to one of said clutches and one of said brakes for actuating the same, a second lever common to the other clutch and brake for actuating the same, a rotary member provided with a cam groove receiving an end of



each of said levers and so shaped that the levers are actuated upon rotary movement of said member to various predetermined positions to effect adjustment of said steering gear for straight ahead movement, for turning in either direction, or for stopping.

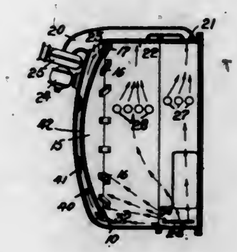
1,767,525. LUMBER GRAPPLE. GEORGE R. HOFFMAN, West Allis, Wis., assignor to Milwaukee Electric Crane & Manufacturing Company, West Allis, Wis., a Corporation of Wisconsin. Filed Jan. 5, 1927. Serial No. 159,037. 17 Claims. (Cl. 294—67.)



1. In a lumber handling apparatus, a lumber grapple comprising an upper frame, a lower frame suspended on the upper frame for rotary movement and means directly mounted on and carried entirely by the upper frame and operatively connected with the lower frame for adjusting the lower frame angularly.

1,767,526. SEARCHLIGHT-VENTILATING MEANS. FRANK R. HOUSE, Baldwin Harbor, N. Y. assignor, by mesnes assignments, to Sperry Gyroscope Company, Inc., a Corporation of New York. Filed Sept. 3, 1924. Serial No. 735,540. 9 Claims. (Cl. 176—51.)

1. In combination, a searchlight comprising a drum, a front window, a reflector, said drum having air inlet means adjacent the bottom and a plurality of air outlets adjacent the top, suction means connected to said air outlets, said outlets being positioned adjacent said front



window, above the arc, and adjacent the reflector respectively whereby a plurality of streams of unused air are caused to travel upwardly through said drum from said inlet means.

1,767,527. LUBRICATING APPARATUS. WALTER I. JONES, Arlington, Mass., assignor, by mesne assignments, to Alemite Corporation, Chicago, Ill., a Corporation of Delaware. Filed Oct. 9, 1926. Serial No. 140,493. 6 Claims. (Cl. 221—47.4.)



1. A lubricant compressor comprising a low pressure cylinder, a piston in said cylinder, a high pressure cylinder in communication with said low pressure cylinder, a high pressure piston in said high pressure cylinder actuated automatically upon the creation of a predetermined pressure in said low pressure cylinder to discharge lubricant from said high pressure cylinder, means for effecting a mechanically interlocking connection with a lubricant-receiving fitting, said means rigidly carried by said high pressure cylinder, and a single handle for connecting said compressor to a lubricant-receiving fitting and discharging lubricant from said compressor at both high and low pressure.

1,767,528. CLEANING AND DISINFECTING COMPOUND. WILLIAM E. JONES, Milwaukee, Wis., assignor to Eagle Chemical Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Nov. 5, 1928. Serial No. 317,498. 1 Claim. (Cl. 87—5.)

A cleaning and disinfecting composition formed by mixing together the following ingredients: an alkaline chloride—48 parts, bisulphate of soda—48 parts, barium peroxide—2 parts, and a substance tending to prevent lumping and consolidation—2 parts.

1,767,529. BRACELET CHAIN. PERCIVAL W. JONES, Warwick, R. I., assignor to Rosenheim Co., Inc., Providence, R. I., a Corporation of Rhode Island. Filed June 12, 1928. Serial No. 284,871. 5 Claims. (Cl. 59—80.)

1. In an ornamental chain, a plurality of units each having side walls, a projecting connector member hinged

to the side walls of one unit and extendible into an adjacent unit between the side walls thereof, said connector member having a compressible part, said adjacent unit



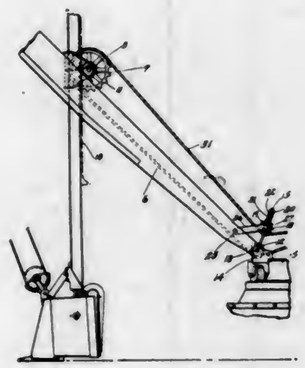
having an inwardly extending catch part adapted to be engaged by said compressible part to lock the units together.

1,767,530. EXTENSION DEVICE. PERCIVAL W. JONES, Warwick, R. I., assignor to Rosenheim Co. Inc., Providence, R. I., a Corporation of Rhode Island. Filed Feb. 6, 1929. Serial No. 337,837. 6 Claims. (Cl. 24—71.)



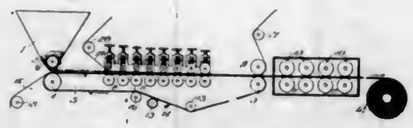
1. In an extension device, a plurality of sections, means for connecting said sections together to permit folding one on the other, one section having an outer wall and spaced side portions, said spaced side portions having fingers extending therefrom toward each other and spaced from the outer wall and another of said sections having portions at its free end to snap between said fingers and said outer wall due to resiliency of said fingers in a direction longitudinally of the device.

1,767,531. TENSIONING DEVICE. JOHN M. KERR, Bay City, Mich., assignor to Bay City Shovels, Inc., Bay City, Mich., a Corporation of Michigan. Filed Oct. 17, 1929. Serial No. 400,362. 8 Claims. (Cl. 214—135.)



1. The combination with an excavating machine, of a tensioning device comprising a transversely disposed shaft journaled on the excavator, vertically disposed members adjustably secured thereto, a second shaft mounted on said members, links pivotally connected thereto and to the excavator boom, and sprockets mounted on said respective shafts.

1,767,532. PROCESS OF MAKING CONTINUOUS WATERPROOF SHEETS AND PRODUCT THEREOF. LESTER KIRSCHBRAUN, Leonia, N. J., assignor to the Flintkote Company, Boston, Mass., a Corporation of Massachusetts. Filed May 24, 1923, Serial No. 641,113. Renewed Dec. 29, 1927. 13 Claims. (Cl. 154—2.)

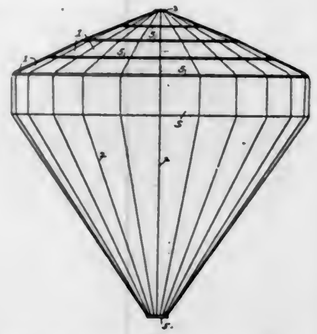


4. An unfelted waterproof composition, comprising a mixture of fibrous stock and a comminuted non-fibrous filler combined with a fusible waterproof bituminous binder, and said binder being derived from an emulsion of waterproofing material and an emulsifying agent for the bituminous binder.

1,767,533. PAVEMENT. LESTER KIRSCHBRAUN, Leonia, N. J., assignor to The Flintkote Company, Boston, Mass., a Corporation of Massachusetts. Original application filed May 26, 1920. Serial No. 384,258. Divided and this application filed Oct. 8, 1928. Serial No. 311,257. 4 Claims. (Cl. 94—19.)

3. A cured concrete product comprising a concrete structure and an adherent layer of coalesced bituminous particles derived from a water external phase emulsion, said adherent layer being interlocked and integrated with the concrete by a coalescence of the bituminous particles thereof while the concrete is wet whereby the adherent layer is intimately interlocked with the concrete to prevent separation therebetween.

1,767,534. PARACHUTE. ROLLIE M. LANE, Colorado Springs, Colo. Filed Sept. 26, 1929. Serial No. 395,344. 5 Claims. (Cl. 244—21.)

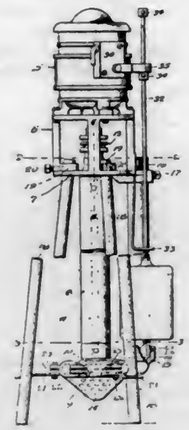


1. A section for a parachute, comprising a strip of fabric cut so as to provide a longitudinal straight edge extending the full length of said strip, and a longitudinal edge having a straight portion extending parallel with said first named edge for substantially one fifth, and a convex curved portion extending obliquely towards said first named edge the remainder of the length of said strip.

1,767,535. PUMP. WILLIAM H. J. LANNERT and PAUL W. COWLE, Chicago, Ill., assignors to Chicago Pump Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 30, 1928. Serial No. 273,811. 3 Claims. (Cl. 103—87.)

1. In an electric motor driven pump unit, the combination of a tripod, an electric motor supported and secured

thereon, a housing for an impeller shaft secured to said tripod and extending down therefrom, a pump secured to

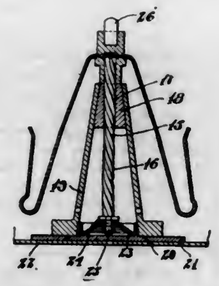


the lower end of said housing, and supporting legs adjustably and removaly secured to said tripod and forming the support for the entire unit.

1,767,536. PROCESS FOR DEHAIRING HIDES AND SKINS AND PREPARING THEM FOR TANNING. CHARLES JOSEPH MICHEL MARIE LE PETIT, Paris, France, assignor, by direct and mesne assignments, to Röhm and Haas Company, Philadelphia, Pa., a Corporation of Delaware. Filed May 21, 1926, Serial No. 110,816, and in France April 18, 1925. 2 Claims. (Cl. 149—2.)

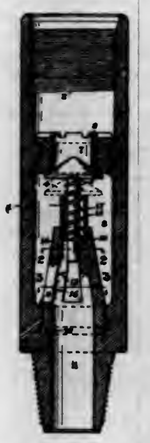
1. In the process of unhairing and bating hides and skins the step which comprises subjecting them to the action of a solution containing the culture of mucedinaceous fungi.

1,767,537. APPARATUS FOR CLEANING GLASSWARE. VASILIOS S. MACKRES, Brockton, Mass. Filed Sept. 30, 1927. Serial No. 223,213. 2 Claims. (Cl. 15—76.)



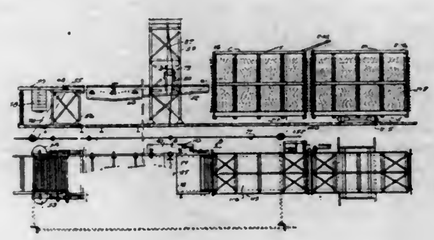
1. In an apparatus for cleaning glassware used in dispensing food and beverages, a support, a cylindrical wall projecting vertically from the support, a casing secured to the exterior of the wall, a stationary nut secured to the casing, a brush supporting spindle mounted for rotation and longitudinal reciprocation in the nut, a collar secured to the spindle, and a frusto-conical spring having its larger base engaged with the support within the cylindrical wall and its smaller base engaged with the collar.

1,767,538. BACK-PRESSURE VALVE FOR DRILL PIPES. JOSEPH R. MAHAN, Toledo, Ohio, assignor to The National Supply Company, Toledo, Ohio, a Corporation of Ohio. Filed June 11, 1928. Serial No. 284,389. 5 Claims. (Cl. 137—69.)



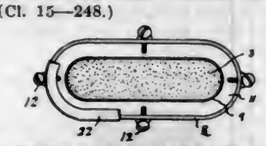
3. In a coupling in a drill string, a chamber, an annular valve seat at its upper end, a valve in the chamber seating upwardly against the valve seat, a valve stem connected to the lower side of the valve, a spring tending to move the valve upwardly and a member having a guiding opening for the stem, a passage in the member and in communication with the stem and the opening for fluid to pass from the chamber down into the interior of the drill string below the chamber.

1,767,539. PROCESS OF MAKING COMPOSITION BOARDS AND THE LIKE AND APPARATUS THEREFOR. WILLIAM H. MASON, Laurel, Miss., assignor to Masonite Corporation, Laurel Miss., a Corporation of Delaware. Filed Nov. 30, 1926. Serial No. 151,809. 33 Claims. (Cl. 92—30.)



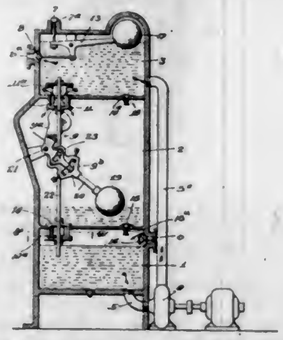
1. The hereindescribed method of making composition board and the like which consists in forming sections thereof in relatively soft condition, transferring the soft sections being formed one at a time to another point and supporting several thereof in superposed position independently of each other, transferring said several sections simultaneously to a third point for further treatment while supporting the same in superposed position independently of each other, and delivering said sections simultaneously into position for said treatment, and supporting the same during said treatment in superposed position independently of each other.

1,767,540. PAINTBRUSH. ALBERT J. MAY, Houston, Tex. Filed Feb. 16, 1929. Serial No. 340,466. 2 Claims. (Cl. 15—248.)



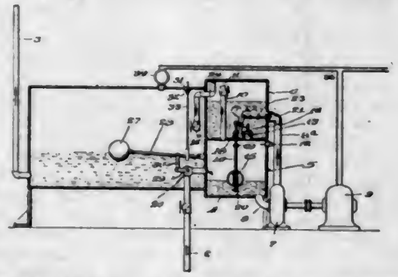
2. A brush having a handle and bristles, an outwardly extending rib around the brush, packing means on opposite sides of said rib, a container around the brush having outer and inner walls said walls being spaced apart and being formed with bottom flanges above and below said packing means to clamp said container against said rib.

1,767,541. FLUID-DISPLACEMENT PUMP. EDWARD F. MCCARTHY, Chicago, Ill., assignor to Chicago Pump Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 9, 1928. Serial No. 268,699. 10 Claims. (Cl. 103—5.)



1. A fluid displacement pump comprising in combination a plurality of superimposed tanks intermittently filled with liquid which is discharged from one tank into the other by gravity, whereby gas contained in a lower tank is discharged therefrom and admitted into a higher one, there being an inlet to the lower tank and a discharge from the upper tank, a float valve controlled port between an upper and lower tank through which the liquid discharges at predetermined intervals from a higher tank into a lower one by gravity, a valve controlled gas port through which gas is admitted at predetermined intervals from a lower tank to a higher tank when expelled from a lower one by liquid entering the lower tank, and pumping means having its inlet connected to the lower tank and its discharge connected to the higher tank for elevating the liquid from the lower one into the higher one.

1,767,542. PNEUMATIC WATER-SUPPLY SYSTEM. EDWARD F. MCCARTHY, Chicago, Ill., assignor to Chicago Pump Company, Chicago, Ill., a Corporation of Illinois. Filed July 19, 1928. Serial No. 293,806. 9 Claims. (Cl. 103—6.)

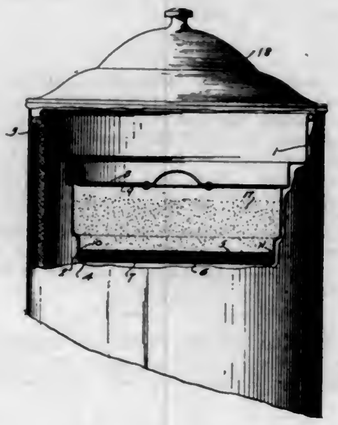


1. In a pneumatic water supply system, the combination with a fluid displacement pump employing tanks for receiving water and air, a liquid piston transferable from one tank to another and operating to displace air contained in the tanks and a water pump for transferring the liquid from one tank to the other, said fluid displacement pump being connected to a water supply pipe and having a valve controlled air inlet, of a reservoir into which said fluid displacement pump discharges water and air under pressure, said reservoir being connected to a water delivery pipe.

1,767,543. PROCESS OF BLEACHING CELLULOSE PRODUCTS. RALPH H. MCKEE, Jersey City, EARLE H. MORSE, Nutley, and PHILIP EDWARD ROLLHAUS, East Orange, N. J., assignors to Pilot Laboratory, Inc., Arlington, N. J., a Corporation of New Jersey. Filed Feb. 15, 1928. Serial. No. 254,607. 7 Claims. (Cl. 8—2.)

1. The process of bleaching cellulose products which comprises subjecting the material to be treated to the action of a peroxidized organic acid.

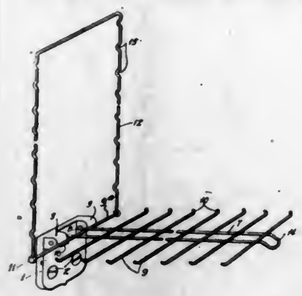
1,767,544. COFFEE-MAKING APPARATUS. THEODORE C. MILLER, Brooklyn, N. Y. Filed Aug. 8, 1928. Serial No. 298,248. 2 Claims. (Cl. 53—3.)



1. In a coffe making apparatus, the combination with a liquid receiving receptacle, of a detachable filter device comprising a pair of superposable screens one of which is provided with a marginal flange for receiving the periphery of the other in nesting relation, and a filter sheet removably inserted between said screens, said combined screens and filter-sheet being insertable in and removable from said apparatus as a unitary structure.

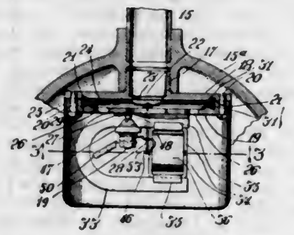
1,767,545. NECKTIE RACK. SOLOMON MOSSBACHER, New York, N. Y., assignor of one-half to Edward M. Schreiber, New York, N. Y. Filed Aug. 7, 1928. Serial No. 297,935. 4 Claims. (Cl. 211—106.)

2. In a neck-tie rack, the combination of a suitable attaching plate provided with bearings, a carrier frame pivotally mounted in the bearings of the attaching plate for pivotal movement on a horizontal axis, a spring connection between the plate and frame for normally impelling the carrier frame into substantially vertical position, laterally extending arms on the carrier frame for supporting neck-ties, said arms being provided at their outer ends with stops to preclude sliding of the neck-ties off of the arms, and a bail pivotally supported on the carrier frame and shaped to be folded into engagement with the arms of said frame adjacent the outer ends of the arms to positively retain the neckties



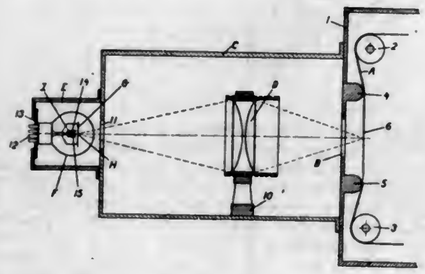
on said arms, and a stop carried by the plate and engageable by the frame for limiting the downward pivotal movement of the frame to a substantially horizontal position.

1,767,546. SOUND-REPRODUCING DEVICE. HERMAN C. MUELLER, Milwaukee, Wis. Filed Oct. 21, 1926. Serial No. 143,103. 12 Claims. (Cl. 179—115.)



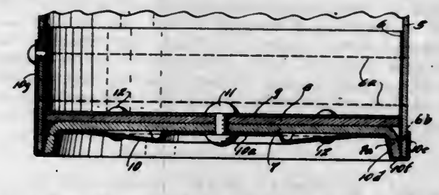
4. In a device of the character described, an armature of thin sheet material provided with a rigidifying surface disposed lengthwise thereof, the opposite sides of the armature being slotted, a yieldable element arranged transversely of the armature with the ends thereof disposed through the slots in the armature and bent in lateral directions to permit tilting of the armature.

1,767,547. APPARATUS FOR PHOTOGRAPHICALLY RECORDING AND REPRODUCING SOUND. THEODORUS HENRIK NAKKEN, Brooklyn, N. Y., assignor to Nakken Patents Corporation, a Corporation of Delaware. Filed Nov. 6, 1928. Serial No. 317,586. 2 Claims. (Cl. 179—1003.)



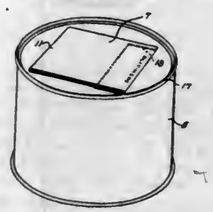
2. In an illuminating system for photographic sound-records, a film for the sound record; means for operatively moving said film; a walled enclosure for shielding said film against exposure to light and provided with a relatively large window exposing a relatively large area of the face of said film; an optical condenser opposite the exposed face of said film; a primary light source of too great a transverse size for its image to be focused in the form of a reduced image upon said film of sufficiently small dimensions for sound photographic recording or reproducing; a minutely slotted light shield mounted in close proximity to said primary light source and free from the interposition of any focusing means between said primary light source and said minutely slotted light shield and forming by the minute slot provided therein a secondary light source capable of being focused by said condenser as a light image of the desired shape and dimensions upon said film for the purpose of photographically recording or reproducing a sound-record, said condenser, said primary light source and said secondary light source being spaced and proportioned to effect straight line illumination of substantially all of said condenser surface from said primary light source.

1,767,548. GOLF-BAG BOTTOM. GEORGE D. NOE, Minneapolis, Minn. Filed Feb. 23, 1926. Serial No. 90,029. 2 Claims. (Cl. 150—1.5.)



1. A golf bag comprising a tubular portion of flexible non-metallic material, a bottom member disposed in said tubular portion and having a downward annular flange fitting said portion and having its edge substantially flush with the bottom edge of said tubular portion, a sheet metal plate having an annular trough at its outer side embracing said flange and the bottom of said tubular portion and engaging the bottom of said bottom member, a thin tubular lining member fitting the inner side of said tubular portion adjacent the bottom thereof, an inner bottom member disposed on said first mentioned bottom member, a fiber plate disposed on said inner bottom member, said plate and inner bottom member fitting said lining member, and means connecting said metallic plate, bottom members and fiber plate.

1,767,549. CONTAINER WITH ATTACHED CIRCULAR. PAUL F. PAIGE, Detroit, Mich., assignor to Forbes Lithograph Manufacturing Company, Boston, Mass., a Corporation of Massachusetts. Filed June 19, 1926. Serial No. 117,044. 5 Claims. (Cl. 220—85.)



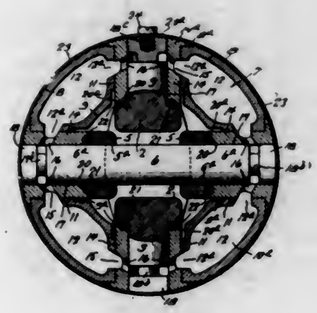
1. In combination with a container a booklet-like folder having a back and a front, said front having a marginal portion folded over rearwardly, the back and said portion being secured to the container and said front and back presenting disconnected top and bottom edges providing for insertion of a tool for severance of said portion from the said front, such severance permitting the front to be raised for inspection of the interior of the folder.

1,767,550. INSIGNIA DEVICE. HEREWARD J. PEELE, St. Louis, Mo., assignor to S. G. Adams Stamp & Stationery Company, St. Louis, Mo., a Corporation of Missouri. Filed Oct. 10, 1927. Serial No. 225,075. 2 Claims. (Cl. 40—140.)



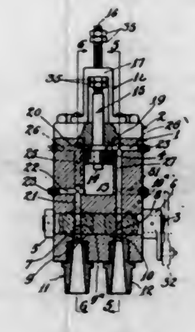
1. A metal insignia comprising a one piece, stamped out member shaped to the desired form, a hollow extension on said member to space same from the element by which it is supported, said extension being arranged in contact with said support and being provided with an aperture formed in a wall thereof, a headed fastening device extended through said aperture and into said support to secure the insignia to the support, the entire head portion of said fastening device including the outer face thereof being spaced inwardly of the outer surface of the insignia.

1,767,551. UNIVERSAL JOINT. FREDERICK W. PETERS, Cleveland, Ohio, assignor to The Almetal Universal Joint Company, Cleveland, Ohio, a Corporation of Ohio. Filed July 14, 1927. Serial No. 205,602. 4 Claims. (Cl. 64—102.)



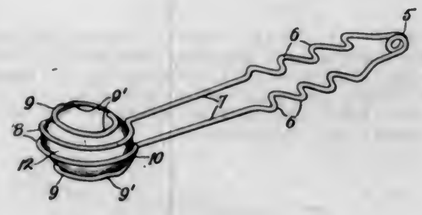
1. In a universal joint, the combination of a driving and a driven member each provided with trunnions, a hollow lubricant-containing ring provided with quarteringly spaced radial bores extending therethrough, each bore having a port communicating with the interior of said ring, a bushing for each bore and adapted to receive a trunnion in its own bore, each bushing being provided with a port adapted to communicate with a port in the bore in which it is mounted, a thrust block in the outer end of the bore of each bushing, each block having a reduced stem arranged to engage the end of the trunnion in the bore of such bushing, the said stem and head providing a chamber beyond the end of such trunnion, which chamber communicates with the port or ports in said bushing, and a band mounted on the exterior of said ring and engaging the outer ends of the bushings and the thrust blocks therein.

1,767,552. LUBRICATING VALVE. SAMUEL S. ROBERTS, Pittsburgh, Pa., assignor of one-half to John H. Bullen, Oakmont, Pa. Filed July 3, 1928. Serial No. 290,097. 3 Claims. (Cl. 184—34.)



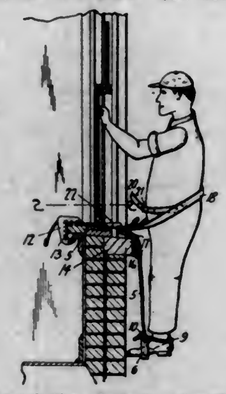
1. In a lubricating valve comprising a valve-body having a lubricant container coaxially disposed therein, two inlet connections disposed in angular relation to each other on said body and two similarly disposed outlet connections; a piston movable within the container and a valve-plug disposed at right agles to the container and rotatable within the body; said valve-plug having a straight diametral inlet-port and a straight diametral outlet-port, each port being adapted to register with either one of its corresponding inlet and outlet connections; said valve-body having a set of ducts formed within the valve-body for connecting the inlet-port with the container at either side of the piston and another set of ducts similarly formed and adapted to connect the outlet port with the container at either side of the piston.

1,767,553. EGG TONGS. CARL L. ROSE, Kansas City, Mo. Filed Mar. 14, 1929. Serial No. 346,922. 1 Claim. (Cl. 294—99.)



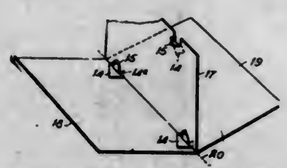
An egg tongs device comprising a pair of handle members, and an egg-gripping element carried by each of said handle members, each of said elements comprising a single piece of wire bent to form a pair of split expansible coils, a relatively large coil secured to one end of the corresponding handle member and a relatively smaller coil formed by a backward bend of the free end portion of the wire, and thereby forming oval cup elements adapted for gripping the opposite sides of an egg and yieldingly conforming to the exterior thereof, the major axis of each of said cup elements being substantially at right angles to the corresponding handle member.

1,767,554. SUPPORT FOR WINDOW CLEANERS. WALTER E. ROSE, Denver, Colo., assignor of one-half to C. W. Rose, Denver, Colo. Filed Mar. 1, 1927. Serial No. 171,779. 7 Claims. (Cl. 304—24.)



1. An appliance of the character described comprising a support for the feet, straps to suspend the support outside a window, means to anchor the straps inside the window, and flexible saddles connected on the straps, to engage the edge of the wall outside the window.

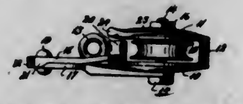
1,767,555. TAB. WALTER R. C. ROWAN, Pittsburgh, Pa. Filed Sept. 28, 1928. Serial No. 309,015. 2 Claims. (Cl. 24—67.)



1. The combination with a mounting sheet, of a second sheet and a tab securing said sheets together, said tab comprising a body portion, spaced ears projecting therefrom, and a tongue interposed between said ears, said body portion and ears having adhesive connection with the mounting sheet and said second sheet having adhesive connection with the tongue, said ears and tongue being integral with the body portion and being formed by slits extending inwardly from the perimeter of the tab.

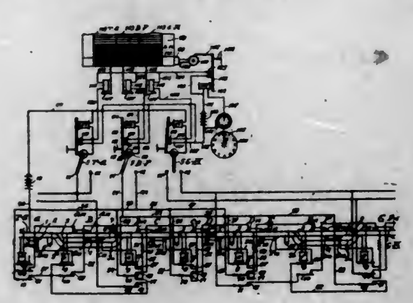
A corn shock binder comprising a loop of flexible mate-

1,767,556. CORN-SHOCK BINDER. HEINRICH W. SCHON, Pomeroy, Iowa. Filed Mar. 21, 1929. Serial No. 348,764. 1 Claim. (Cl. 100—31.)



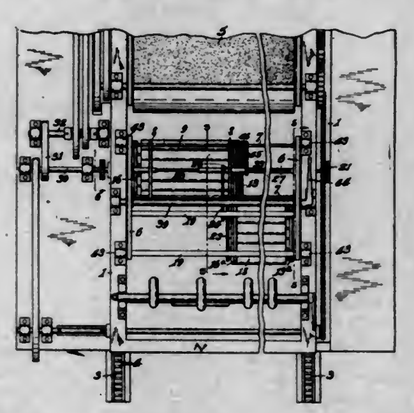
rial secured at one end to a fastener body and having its other end received through said fastener body for adjustable positioning therein, said fastener body comprising a U-shaped portion having arms of unequal length, an anti-friction roller pivotally mounted between said arms, an eye on the longer of said arms and spaced from said roller, a guard on the shorter of said arms extending toward and spaced laterally from said eye, said eye and guard cooperating to position the adjustable portion of said loop within said fastener body and adjacent said roller, an extension on the longer of said arms beyond said eye, a dog pivoted to said extension and a head laterally offset from the free end of said dog and adapted to be received at times between said eye and roller.

1,767,557. SYSTEM OF TRAIN CONTROL. PAUL J. SIMMEN, Eden, N. Y. Filed Sept. 10, 1923. Serial No. 661,853. 14 Claims. (Cl. 246—4.)



1. In a system of train control, in combination, a trackway divided into sections, each section being divided into blocks, sidings adjacent the ends of the sections, train control means arranged on each side of the trackway in the rear of each block, a source of current, a switch provided for each section for connecting one terminal of the source selectively to the train control means at either side of the section whereby to cause such means to give a proceed signal to trains, travelling in one direction, means controlled by the presence of a train in a block for deconditioning the train control means in the rear of such block whereby to give a stop signal to a following train, normally inoperative locking means for said switch, and means controlled by the presence of a train in any block between those blocks adjacent the sidings for causing an operation of said locking means whereby the switch may not be operated to de-condition the train control means governing the movement of such train while said train is remote from the blocks adjacent the sidings but may be operated when a train is in the blocks adjacent the sidings.

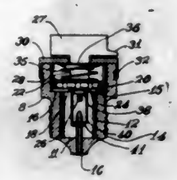
1,767,558. RUG-CLEANSING MECHANISM. CARLOS A. SMITH, Sr., Bellaire, Ohio. Filed Aug. 29, 1928. Serial No. 302,731. 5 Claims. (Cl. 15—40.)



1 In a machine of the character described, a base, a fluid removal device comprising an elevatable support slidably mounted on said base, a plurality of spaced independent housings carried by said support, one of said housings being shiftable laterally of the machine, each of said housings being provided with a plurality of cylindrical compartments having their under sides open throughout the lengths thereof, a screw propeller journalled for rotation in each of said compartments and having the blade thereof protruding through the under-

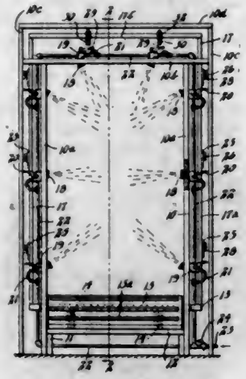
side opening for engaging the surface of an underlying rug, means for rotating said propellers, and means for conducting from said chambers fluid collected by said propellers.

1,767,559. MULTIPLE-FUSE PLUG. ROBERT T. SMITH, Kansas City, Mo. Filed Aug. 19, 1929. Serial No. 386,924. 2 Claims. (Cl. 200—125.)



1. A multiple fuse structure comprising a hollow plug element containing a pin terminal and an interior brush terminal, a cap piece fitting the open end of said plug, a rotary disk journaled in said cap piece and carrying a spring jack yoke slidingly engaging said pin terminal, a plurality of radial fuse elements carried by said disk for selective engagement with said brush element, said disk being formed with ribs separating said fuse arms and providing radial depressions between said ribs, and means permitting slight retracting movement of said disk for seating and unseating said brush element in said depressions.

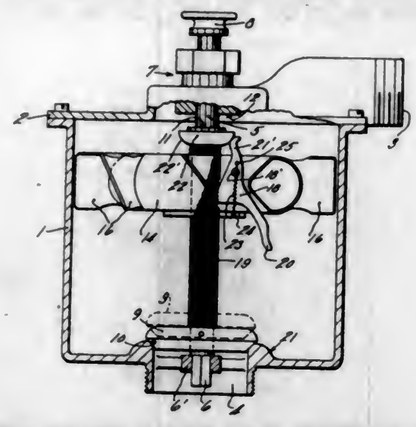
1,767,560. CATTLE-TREATING APPARATUS. JOE SNYDER, Iroquois, S. Dak. Filed Sept. 12, 1928. Serial No. 305,422. 2 Claims. (Cl. 119—159.)



1. A device for applying treatment material to animals having in combination, an openwork frame, a plurality of nozzles carried in said frame and spaced about the top and sides of the same for projecting material onto said animal an operating member for each nozzle, a supply pipe for said nozzles, a hinged platform at the bottom of said frame over which the animal passes, adapted to be depressed by the weight of the animal, a resilient means normally holding said platform elevated, and a member guided in said frame and connected to said platform to be moved thereby, said member having means thereon for respectively engaging and operating each of said operating members whereby said nozzles are actuated.

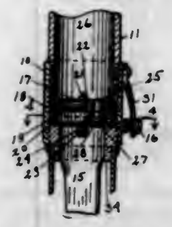
1,767,561. FLUSH VALVE. WILLIAM H. STADDEN, Springfield, Mass. Filed Apr. 6, 1928. Serial No. 268,014. 10 Claims. (Cl. 221—101.)

1. The combination of a flush valve having a valve seat and a valve disc movable towards and away therefrom with means for operating said disc comprising a guide and a float rotatable thereon by a flow of water through



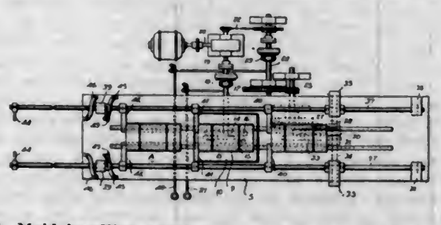
said valve, means associated with said guide and float whereby in its rotation it is caused to traverse said guide and abut said disc for a closing movement thereof.

1,767,562. FOUNTAIN-FEED DRAWING PEN. JOSEPH SZINAY, New York, N. Y. Filed Oct. 15, 1928. Serial No. 312,413. 1 Claim. (Cl. 251—90.)



A reservoir valve comprising a seat within a sleeve and the said seat having a downwardly disposed boss thereon, a rotatable disk recessed to fit over the said boss and secured in position thereon by means of a central bolt and a tension spring which bears against the bolt head and the base of the said disk, an elongated hole in the seat element and a perforation in the rotatable disk which is adapted to be brought into alignment with the said elongated hole when actuated by a push rod which is pivotally attached to the said disk at an off center point of same and which rod is retractable by means of a spring located between the outer wall of the said sleeve and a button head on the said push rod.

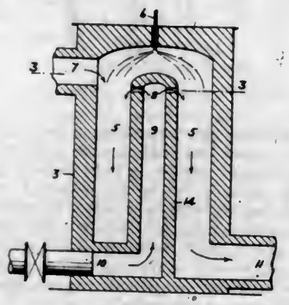
1,767,563. APPARATUS FOR MOLDING CASTINGS. SAMUEL BLAINE STINE, Osceola Mills, Pa. Filed May 31, 1929. Serial No. 367,210. 5 Claims. (Cl. 22—45.)



1. Mold handling apparatus comprising a table, a pull rod, a pusher pin carried by said rod for advancing molds

during advance movements of the rod, a second pin carried by the rod, a cam positioned to be engaged by said second pin and cause rotative movement to said rod to turn the pusher pin to inoperative position at the completion of an advance movement of the rod, and a cam positioned to be engaged by the first-named pin, for restoring said pin to operative position at the completion of retractive movement of said rod.

1,767,564. CARBURETOR FOR CARBURETED WATER-GAS APPARATUS. HARUTYUN G. TERZIAN Philadelphia, Pa., assignor to The U. G. I. Contracting Company, Philadelphia, Pa., a Corporation of Delaware. Filed Mar. 1, 1926. Serial No. 91,440. 2 Claims. (Cl. 48—80.)



1. A carbureted water gas set, comprising a water gas generator in which air blast gas is generated, an air emission conduit for supplying blast air, a generally cylindrical carburetor, the generator being one vessel and the carburetor a second vessel, a pier arranged in the carburetor and terminating short of the top thereof, an oil spray device at the top of the carburetor arranged to spray oil substantially clear of the top of the pier to preserve a hot spot at the top of the pier, an air blast and blast gas inlet connections located near the top of the carburetor in proximity with the hot spot, and both in communication with the interior of the carburetor.

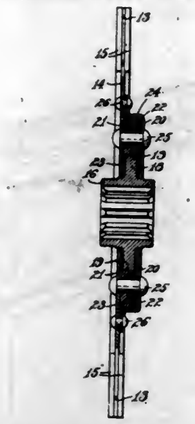
1,767,565. FURRING DEVICE. MERTON B. THRIFT and FRED E. PLANETT, Oakland, Calif., assignors to Planett Mfg. Co., Oakland, Calif., a Corporation of California. Filed July 18, 1928. Serial No. 293,585. 5 Claims. (Cl. 72—118.)



3. Means for securing metal lathing to a wall member in spaced relation therefrom comprising a nail arranged to be driven into the member, a spacer carried by and frictionally gripping an intermediate portion of said nail for movement of the nail therethrough, and stop means on said nail cooperative with said spacer to limit the amount of driving of said nail into the wall member.

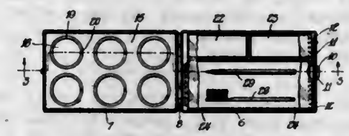
1,767,566. DRIVING CLUTCH. JAMES W. UPDIKE, Indianapolis, Ind., assignor to Marmon Motor Car Company, Indianapolis, Ind., a Corporation of Indiana. Filed June 9, 1928. Serial No. 284,257. 4 Claims. (Cl. 192—68.)

1. A friction clutch member comprising a friction annulus, a hub having a circumferential flange having a series of circumferentially-spaced perforations therethrough, rubber plugs mounted in said perforations, rubber elements arranged on each side of the flange, plates



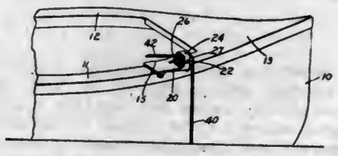
associated with said annulus and upon opposite sides of the flange encasing the rubber, and pins carried by the annulus and passing through the plugs.

1,767,567. MAKE-UP CASE. LOUIS B. WEIL, Chicago, Ill., assignor to Pierre Dumonde, Inc., Chicago, Ill. Filed Nov. 21, 1928. Serial No. 320,776. 11 Claims. (Cl. 132—83.)



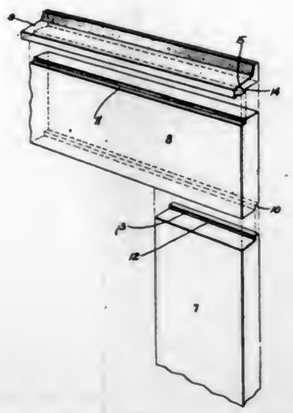
1. In a make-up case, a pair of members hinged together and having upstanding edges fitting one within the other, a perforated plate disposed in one of the members, a plurality of rouge pans fitting removably in the perforations of the plate, shallow pans forming separate compartments together substantially filling the other case member, one of the pans terminating short of the hinge between the members, a mirror hinged to the pan adjacent the hinge between the members and adapted to cover the pans and support them from the rouge pans in the other member when the case is closed.

1,767,568. ANCHOR HOIST. THOMAS H. WILLS, Minneapolis, Minn. Filed Sept. 26, 1928. Serial No. 308,512. 9 Claims. (Cl. 114—199.)



1. In combination, a plate-like member adapted to lie along the gunwale of a boat, means for securing said member to the boat, said plate-like member having an overhanging portion extending angularly outwardly beyond the boat proper, and means attached to said overhanging portion for guiding and anchoring the anchor rope, said means serving to direct the rope away from side of the boat.

1,767,569. WINDOW AND DOOR FRAME. FRED C. ANDERSEN, Bayport, Minn., assignor to Andersen Frame Corporation, Bayport, Minn., a Corporation of Wisconsin. Filed Oct. 4, 1929. Serial No. 397,332. 1 Claim. (Cl. 20—11.)



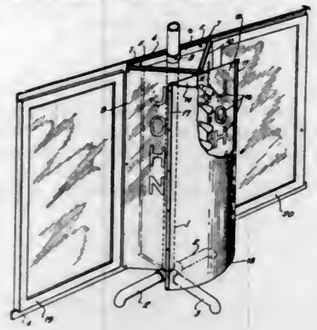
A window or door frame having a head casing with rabbets in the upper and lower edges thereof, a water drip having a rabbeted under surface to fit the rabbeted upper edge of said head casing and side casings having rabbeted upper ends to fit the rabbeted lower edge of said head casing, the rabbets of the head casing being in the diagonally opposite upper and lower edges whereby either face of said casing may be exposed in setting the frame.

1,767,570. ADVERTISING DEVICE. JOHN W. ASHWORTH, New York, N. Y., assignor to Ashworth Advertising Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 8, 1929. Serial No. 353,612. 2 Claims. (Cl. 40—39.)



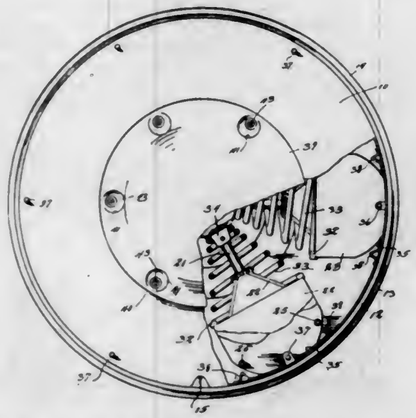
1. An advertising device embodying a rotary display element provided with a plurality of faces adapted to contain advertising matter and mounted to rotate, two wind wheels mounted to be rotated by moving air currents, separate and independent trains of operating connections between the respective wind wheels and the opposite ends of the display element, whereby said element may be rotated by wind power developed by either wind wheel independently of the other, each train of operating connections comprising a pawl and ratchet which will permit the driving of the display element by the wind wheel which rotates at the highest speed without imposing upon said element the drag incident to the slower speed of the slower wind wheel.

1,767,571. EXHIBITING SIGN. JOHN W. ASHWORTH, New York, N. Y., assignor to Ashworth Advertising Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 23, 1929. Serial No. 357,423. 5 Claims. (Cl. 40—130.)



4. An exhibiting sign embodying a pair of mirrors arranged side by side and edge to edge and extending rearwardly in devergent relation, a light housing medially disposed at the apex of the mirror assembly, said housing having light penetratable back walls in opposed relation to the respective mirrors, display characters on said back walls, and a source of illumination within the housing to illuminate said characters, whereby they may be seen on the mirrors by persons approaching the sign from opposite lateral directions.

1,767,572. RESILIENT WHEEL. ROBERT R. BISHTON, Herkimer, N. Y. Filed May 11, 1929. Serial No. 362,428. 17 Claims. (Cl. 152—28.)



13. In a wheel of the class described having a hub and a wheel rim, spokes secured to and radially extending from the hub into socket forming members arranged on the inner periphery of the wheel rim, cushioning means interposed between the hub and the socket forming members, said socket forming members suitably recessed and of such configuration to enable the socket to rock or roll laterally in either direction on the inner periphery of the wheel rim.

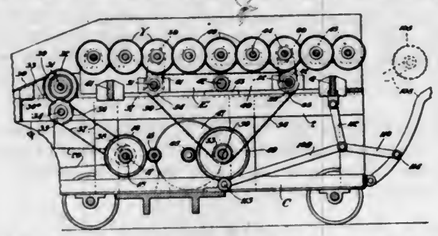
1,767,573. ADDRESS CARD FOR SHIPPING CONTAINERS. MILTON BRAUNSTEIN, New York, N. Y. Filed Apr. 9, 1928. Serial No. 268,603. 2 Claims. (Cl. 40—17.)

1. In combination with a container wall having an opening, an enclosing member secured on the container wall and under the said opening and having a small opening registering with the first mentioned opening for visual inspection of the interior of the container, a sealing member disposed within the enclosing member, a transparent member and an address card engaged in the sealing



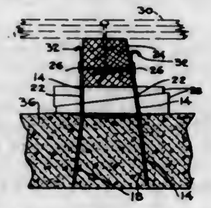
member, and normally covering the said inspection opening, and coacting means on the card and sealing member for holding the card wholly within said member or projecting therefrom so as to expose the opening in the enclosing member.

1,767,574. HOT MILL CATCHER. DARIO BUCCICONE, Gary, Ind., asignor to American Sheet and Tin Plate Company, a Corporation of New Jersey. Filed July 19, 1928. Serial No. 293,849. 6 Claims. (Cl. 80—47.)



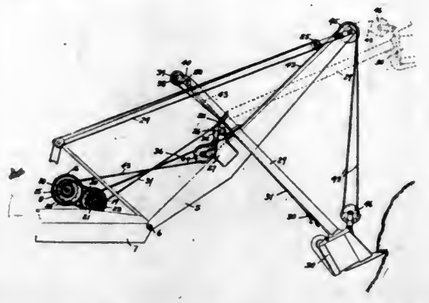
6. In a hot mill catcher, a rigid frame member, a table mounted on said frame for rocking movement about a horizontal axis, coveying means on said table for conveying plates and sheets along said table, means for driving said conveying means in reverse directions, means for automatically tilting said table in the direction of the drive of said conveying means, a supporting roller journaled on the upper end of an arm pivotally supported on the rear end of said frame, said arm being adapted to be swung rearwardly away from said frame when said table is tilted in one direction and to be swung toward said frame when said table is tilted in the other direction, and toggle-levers operable by said table for swinging said arm away from said frame when said table is tilted.

1,767,575. SLEEPER TIE. HERMAN C. BUJACK, Chicago, Ill. Filed Mar. 21, 1928. Serial No. 263,360. 2 Claims. (Cl. 72—101.)



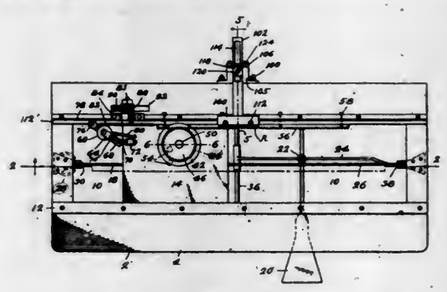
1. A sleeper tie formed of a single strip of sheet material incised along its longitudinal center from each end towards the middle but terminating short thereof to form divided arms and provide a central rectangular saddle portion, spaced apart pointed tangs struck upwardly from said saddle portion on a line with said incision, linearly spaced perforations in each of the said arms, one pair of opposed arms being bent downwardly toward each other to form with the said saddle portion a substantially U-shaped structure.

1,767,576. POWER SHOVEL. PAUL BURKE, Green Bay, Wis., assignor to Northwest Engineering Corporation, Green Bay, Wis., a Corporation of Wisconsin. Filed Apr. 5, 1929. Serial No. 352,694. 6 Claims. (Cl. 214—135.)



1. In an excavating machine, the combination with a supporting boom, of a dipper and dipper handle mounted thereon for swinging and shifting movements relative thereto, a hoisting drum, a hoisting and thrusting cable mounted on said drum and associated with the dipper and its handle for hoisting the dipper and crowding it outwardly into the material to be excavated, a single cable-winding means, a back-haul cable associated with said cable-winding means and with the dipper and dipper handle for retracting the dipper, a thrust cable also associated with said cable-winding means for moving the dipper and its handle outwardly, and separately controlled reversible drive means for said cable-winding means.

1,767,577. PRINTING MACHINE. LAURENCE L. BUCHANAN, Independence, and EDWARD M. BOHLKEN, Kansas City, Mo. Filed Oct. 11, 1928. Serial No. 311,784. 5 Claims. (Cl. 101—39.)

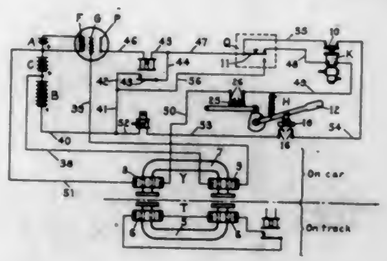


1. In a press of the character described, a suitable support, a reciprocatory member mounted upon said support, a horizontally disposed rotatable member mounted upon said reciprocatory member and having a recess in its upper portion for the reception of the lower end of an article to be printed upon, coacting means on said support and said rotatable member for rotating the latter as it is carried to and fro on the reciprocatory member, and printing means arranged in the path of the article for printing thereon.

1,767,578. AUTOMATIC TRAIN-CONTROL SYSTEM. CHARLES S. BUSHNELL, Rochester, N. Y., assignor to General Railway Signal Company, Gates, N. Y., a Corporation of New York. Filed May 18, 1921. Serial No. 470,592. 55 Claims. (Cl. 246—63.)

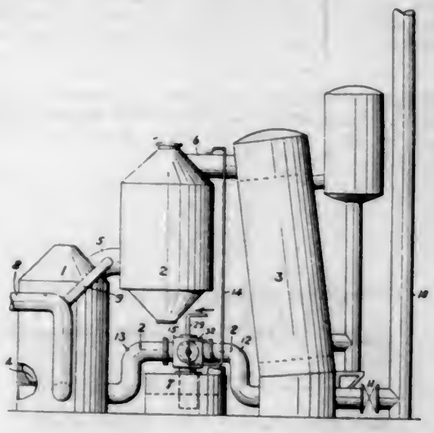
1. In an automatic train control system, a brake control device on a vehicle, a normally energized stick relay controlling said device, means partly on the vehicle and

partly on the track causing deenergization of the relay under dangerous traffic conditions, and manually operable means for preventing operation of said device upon



deenergization of the relay, said manually operable means if maintained in its operating condition for more than a predetermined time acting to actuate said brake control device.

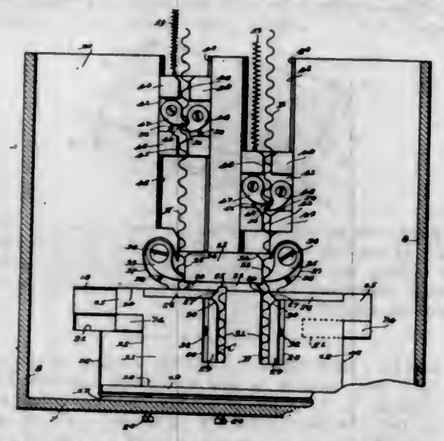
1,767,579. WATER-GAS APPARATUS. CHARLES S. CHRISMAN, West Chester, Pa., assignor to the U. G. I. Contracting Company, Philadelphia, Pa., a Corporation of Delaware. Filed Apr. 18, 1925. Serial No. 24,084. 2 Claims. (Cl. 48—78.)



1. A water gas apparatus including in combination; a water gas generator adapted to contain a fuel bed, an igniter, a steam boiler, pipe connections between the generator and boiler, valve mechanism including a steam reversing valve controlling the flow of steam to the generator, a water gas flow valve controlling the flow of water gas from the generator, the flow valve comprising a reciprocating shaft having pistons and disks attached thereto, said pistons being controlled by the steam reversing valve, and a steam connection from the steam reversing valve to the igniter.

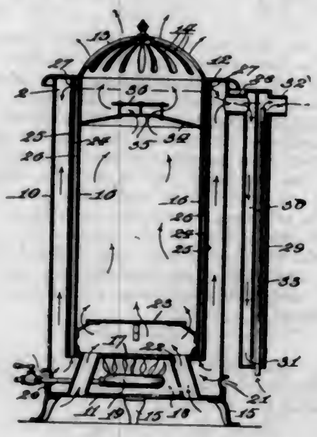
1,767,580. CORRUGATED-FASTENER DRIVING MECHANISM. ALBERT EARL CRANSTON, Spokane, Wash. Filed May 29, 1929. Serial No. 367,011. 9 Claims. (Cl. 1—9.)

1. In a corrugated fastener driving mechanism, a frame block having a driving face abreast of the advancing material to be fastened and having an ejector opening, a driver for forcing a fastener through said opening into the material, a transfer head having a plurality of fastener holders, a plurality of corrugated strip feeders one for each holder for feeding a strip thereto, means



for actuating said transfer head to advance a fastener into registry with said driver and ejector opening, and means for severing a strip to form a fastener as said head is being actuated.

1,767,581. HEATER. JAMES W. CUTHBERTSON, Los Angeles, Calif., assignor to Arthur L. Erickson, Turlock, Calif. Filed July 22, 1929. Serial No. 380,192. 6 Claims. (Cl. 126—90.)

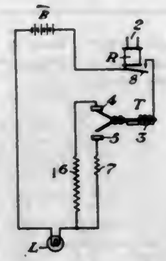


1. In a gas heater, a housing, a heating drum arranged within said housing, a burner arranged within the housing beneath the heating drum, air inlet pipes leading through the bottom of the housing and through the bottom of said drum, a corrguated wall surrounding the heating drum, a layer of heat insulating material on said corrugated wall, there being openings formed through the upper portion of the corrugated wall and a cover for said shell and heating drum, which cover is perforated above said heating drum.

1,767,582. APPARATUS FOR THE CONTROL OF ELECTRIC LAMPS. ARTHUR W. FISHER, Forest Hills Borough, Pa., assignor to the Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed July 7, 1927. Serial No. 203,965. 4 Claims. (Cl. 176—10.)

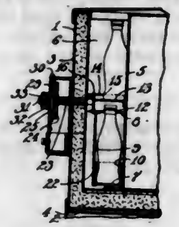
1. In combination, a source of electric current the voltage of which rises above its normal value when on

open circuit for a considerable period of time, an electric lamp, a normally open circuit including said source and said lamp, a slow acting thermostatic circuit controller having a winding included in said circuit, and means con-



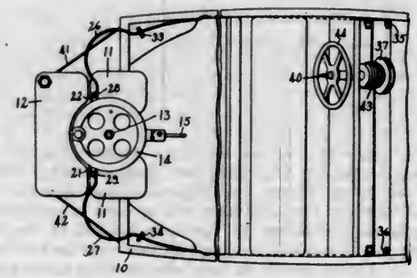
trolled by said circuit controller for preventing the supply of excessive current to said lamp when the circuit becomes closed and for subsequently reducing the resistance of the circuit.

1,767,583. BOTTLE-VENDING MACHINE. CHESTER A. FRICK and ROBERT E. BAKER, Muncie, Ind., assignors to Glascock Brothers Mfg. Company, Muncie, Ind., a Corporation of Indiana. Filed July 13, 1927. Serial No. 205,301. 4 Claims. (Cl. 312—36.)



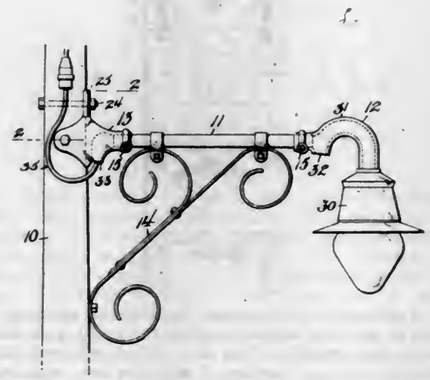
1. In a bottle cooling refrigerator, the combination with a horizontally rotatable platform arranged to carry a series of bottles in a row, of a second horizontally rotatable platform vertically disposed with respect to the first platform and rotatable in an opposite direction therefrom and adapted to carry a series of bottles in a row, means for depositing a bottle from said second platform onto the first platform and means for simultaneously rotating said platforms.

1,767,584. CONTROL FOR OUTBOARD MOTORS AND THE LIKE. FORRESTER L. HAMMER, Branford, Conn. Filed Sept. 18, 1929. Serial No. 393,428. 13 Claims. (Cl. 115—18.)



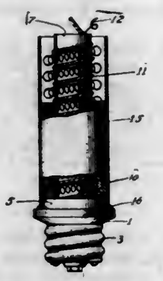
1. In a speed control device for an outboard motor secured to a boat and having a speed control lever, a pair of tension elements leading in opposite directions from said lever, and a manually operable member to which said tension elements are connected, said manually operable member being arranged to apply a tensional force to said elements.

1,767,585. BRACKET. JOHN P. HEBENDAHL, Elizabeth, N. J. Filed Apr. 3, 1929. Serial No. 352,074. 6 Claims. (Cl. 240—73.)



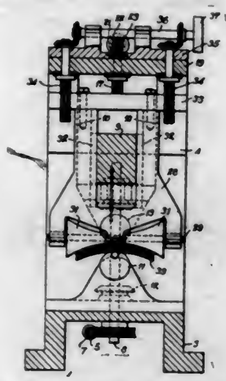
3. A bracket comprising a tubular arm, a tubular inverted U-shaped fixture at the end of the arm for supporting a lamp, the fixture including a straight portion for attachment to the arm, the fixture having a drainage opening in said portion, a clamp for securing the arm to a pole, the clamp having a drainage opening communicating with the end of the arm thus also forming a passage for a cable.

1,767,586. RADIANT ENERGY GENERATING UNIT AND PROCESS FOR MAKING THE SAME. WALTER HUDSON, Milton, Wis., assignor to The Burdick Corporation, Milton, Wis., a Corporation of Delaware. Filed Apr. 16, 1927. Serial No. 184,354. 6 Claims. (Cl. 18—59.)



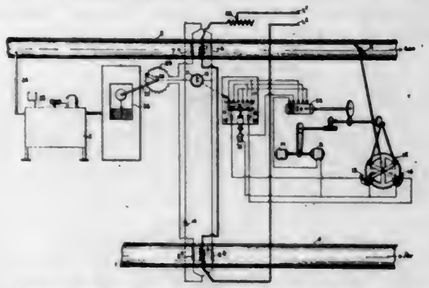
4. A method of constructing a radiant energy generating unit which consists in placing an electrical heating element upon a combustible core, separating the adjacent portions of the heating element with combustible material, enveloping the heating element with a refractory compound in plastic condition, causing the compound to settle against the adjacent surfaces of the core, and subsequently kiln drying the refractory compound at a temperature sufficient to thoroughly harden the compound and burn away the combustible core.

1,767,587. METHOD OF AND APPARATUS FOR SEPARATING METAL SHEETS. PERCY E. HUNTER and LOUIS E. ENDSLEY, Pittsburgh, Pa.; said Endsley assignor to said Hunter. Filed June 17, 1929. Serial No. 371,327. 8 Claims. (Cl. 29—19.)



1. The method of operating upon packs composed of sheets of material, which comprises rotating a pack about an axis perpendicular to the plane of the pack and simultaneously deflecting portions of said pack into undulatory paths of travel.

1,767,588. APPARATUS FOR PROPORTIONING AND CONTROLLING THE RATES OF FLOW OF FLUIDS. ULRIC O. HUTTON, Wauwatosa, Wis., assignor, by mesne assignments, to Cutler-Hammer Inc., a Corporation of Delaware. Filed Apr. 15, 1927. Serial No. 184,039. 14 Claims. (Cl. 48—180.)



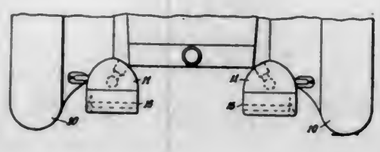
1. Apparatus for proportioning flowing gaseous fluids comprising means to regulate the volumetric rate of flow of one fluid, control means therefor including thermoelectric means subjected to influence of variations in the volumetric rate of flow of another of such fluids per se, and means to further subject said regulating means to control in accordance with variations in potential heating value of said first mentioned fluid.

1,767,589. EDGE GAUGE. GEORGE W. JACQUES, New Bedford, Mass., assignor to Atlas Tack Corporation, Fairhaven, Mass., a Corporation of New York. Original application filed Nov. 24, 1924, Serial No. 751,934. Divided and this application filed Feb. 1, 1928. Serial No. 251,090. 7 Claims. (Cl. 218—17.2.)



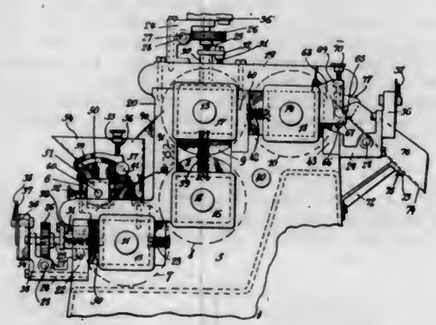
1. In a machine of the class described, a work support, an edge gauge thereon, a pivot for said edge gauge eccentrically disposed relative to its work-engaging face, said pivot having a wedge slot therein, a wedge slidable in said slot to clamp and release said gauge with relation to said work support, and screw means for sliding said wedge.

1,767,590. VEHICLE LAMP. HAROLD C. JAQUITH, Glenbrook, Conn. Filed Nov. 1, 1928. Serial No. 316,381. 5 Claims. (Cl. 240—48.4.)



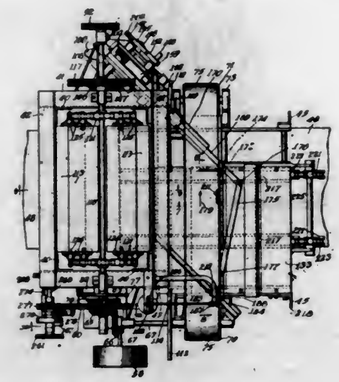
1. A vehicle lamp comprising a casing having a source of light and a main reflector therein, said casing being formed at one side with a window, a vertically disposed side reflector located within the casing adjacent said window and arranged in front of an edge of said reflector at such an angle with respect to the longitudinal axis of said main reflector as to receive light rays from said main reflector and direct them through said window as a side beam extending laterally of the beam from the main reflector.

1,767,591. ROLLER MILL. JAMES W. KENT, Brooklyn, N. Y. Filed May 9, 1929. Serial No. 361,636. 7 Claims. (Cl. 83—12.)



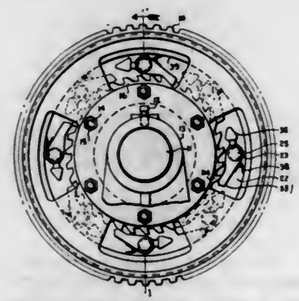
1. A roller mill of the character described comprising in combination a first relatively large grinding roll, a feed roll of materially less diameter mounted above and to one side of the said first roll, a pair of superposed grinding rolls mounted on the opposite side of the first grinding roll, a final grinding roll mounted on the same level as the uppermost of said pair of superposed grinding rolls, the said four grinding rolls being all of the same size, means for supporting each of said rolls in frictional grinding contact with the adjacent rolls and means for exerting pressure between each pair of adjacent rolls separate from the pressure on the other rolls.

1,767,592. MATERIAL-HANDLING APPARATUS. ROY D. KING, deceased, Chicago, Ill., by Anna G. King, administratrix, Chicago, Ill., assignor to Fred R. Wetsel, Chicago, Ill. Filed May 28, 1926. Serial No. 112,307. 19 Claims. (Cl. 214—6.)



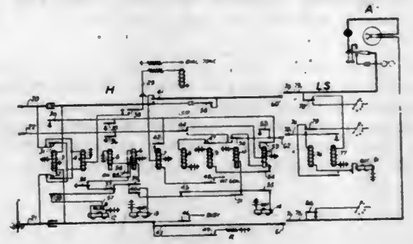
1. Apparatus of the kind described comprising a traveling belt adapted to receive a plurality of articles, a plate, means for displacing the articles transversely of the belt onto the plate, and means for advancing the plate laterally and longitudinally while the articles are being transferred thereto.

1,767,593. CLUTCH. ERIC H. LAABS, Milwaukee, Wis., assignor, by mesne assignments, to Cutler-Hammer, Inc., a Corporation of Delaware. Filed Nov. 9, 1927. Serial No. 232,123. 7 Claims. (Cl. 192—42.)



1. In an overtraveling clutch mechanism, in combination, a ratchet toothed wheel, a disk rotatable relatively to said wheel, a plurality of pawls pivotally carried by said disk and surrounding said wheel, spring means normally biasing each of said pawls inwardly into engagement with said ratchet wheel, said pawls and said ratchet teeth being so arranged that cooperative engagement of one of said pawls with one of said ratchet teeth is insured within a maximum travel of said wheel equal to a fraction of the distance between said teeth corresponding to the number of pawls employed, and a projection on each of said pawls adapted to counterbalance approximately ninety per cent of the weight of the latter whereby the biasing effect of said spring means may be so light as to insure disengagement of said pawls from said wheel under centrifugal action at a relatively low overtraveling speed of said disk, thus reducing to a minimum the period of overtraveling engagement of the pawls with said wheel during acceleration of said pawl carrying disk.

1,767,594. CONNECTER SWITCH. CLARENCE E. LOMAX, Oak Park, Ill., assignor to Reserve Holding Company, Kansas City, Mo., a Corporation of Delaware. Filed Sept. 21, 1927. Serial No. 220,953. 12 Claims. (Cl. 179—18.)



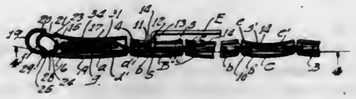
1. In a telephone system, a line, normal conductors permanently connected therewith, a connecter switch for connecting with said line through said normal conductors, a line switch individual to said line for extending a connection therefrom, a line relay in said line switch normally connected to said normal conductors, a cut-off relay in said line switch adapted when energized to disconnect said line relay from said normal conductors, a switching relay in said connecter, a ringing relay in said connecter adapted when energized to connect ringing current to said normal conductors, means for closing an energizing circuit for said switching and cut-off relays in series, and contacts on said switching relay for closing an energizing circuit for said ringing relay.

1,767,595. KNITTING-MACHINE NEEDLE. VINCENT LOMBARDI, Brooklyn, N. Y. Filed Aug. 26, 1927. Serial No. 215,565. 3 Claims. (Cl. 66—121.)



1. A knitting machine needle, comprising a straight shank having a uniform thickness throughout, a yarn-receiving member at the end of the shank, said shank being widened throughout its central portion, the widened portion terminating at a point a short distance from said yarn-receiving member to provide a shoulder whereby a yarn may be advanced sufficiently to one side of the body of a fabric being knitted to permit the advancement of a transverse needle between the yarn and the body of the fabric.

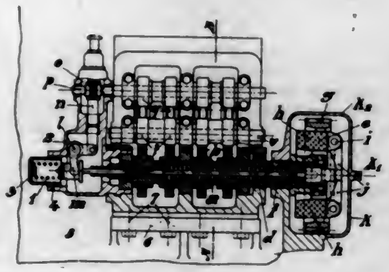
1,767,596. JEWELRY BRACELET. HERMANN H. LOTT, Webster Groves, Mo. Filed Jan. 30, 1928. Serial No. 250,569. 4 Claims. (Cl. 24—236.)



1. In a jewelry-link, a shell comprising connected side and opposed front and back walls, the front wall having a slot and a hook continuation, the latter terminating adjacent the end of the back wall to provide an ornament-bar accommodating opening, in combination with a

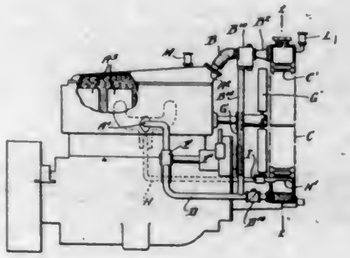
latch-member of tubular formation embraced by the shell and its said hook-continuation to normally underlie and provide a closure for said opening, said latch-member having a pivot-bearing upon the inner face of the shell front-wall for rocking movement and also having an atcuating extension projecting outwardly the shell through said slot for finger-engagement.

1,767,597. FUEL-CHARGING PUMP. JOHANN MAHLER, Augsburg, Germany, assignor to Maschinenfabrik Augsburg-Nuernberg, Aktiengesellschaft, Augsburg Germany, a German Corporation. Filed Mar. 8, 1926. Serial No. 93,170, and in Germany Feb. 11, 1926. 10 Claims. (Cl. 123—140.)



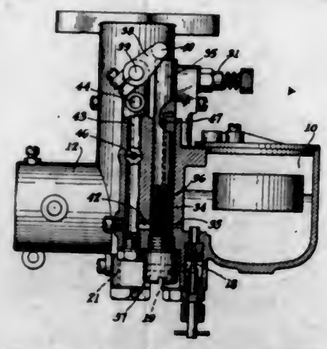
1. A fuel pump for an internal combustion engine of the character described, comprising fuel feeding means, a hollow camshaft for driving said fuel feeding means, and means for controlling the degree of fuel admission, said fuel admission controlling means including a governor, a governor rod positioned within said hollow cam-shaft, a bell-crank lever operated by said governor rod, a rack operated by said bell-crank lever, a gear meshing with said rack, and a controlling shaft fixed to said gear adapted to transmit the motion of the governor rod to rock said controlling shaft for adjusting the admission.

1,767,598. ENGINE-COOLING SYSTEM. HARRY C. MALLORY, New York, N. Y.; Sue R. Mallory administratrix of said Harry C. Mallory, deceased. Original application filed July 22, 1921, Serial No. 486,685. Divided and this application filed Mar. 23, 1923. Serial No. 627,014. 7 Claims. (Cl. 123—174.)



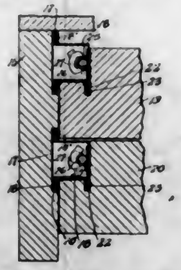
1. The method of engine cooling which consists in passing a cooling liquid through the engine jacket, dividing the liquid leaving the jacket into two portions, reducing the pressure of the liquid in one of said portions and thereby converting some of that portion into vapor, condensing said vapor, mixing the resultant liquid of condensation and the unvaporized residue of said one portion of the liquid with the other portion of the liquid, and returning said mixture to the engine jacket.

1,767,599. CARBURETOR. CHARLES W. MCKINLEY, Toledo, Ohio, assignor to The Tillotson Manufacturing Company, Toledo, Ohio, a Corporation of Ohio. Filed May 27, 1924. Serial No. 716,091. 7 Claims. (Cl. 261—34.)



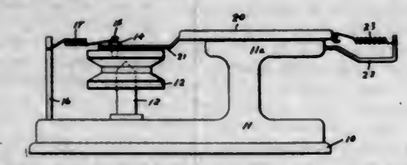
1. A carburetor comprising a mixing passage, a fuel supply chamber, a throttle valve, a well having a discharge opening to said passage, a plunger chamber having a small opening from said fuel supply chamber and a larger opening to said distributing well, a plunger in said plunger chamber, a spring confined between the bottom of said plunger and the bottom of the plunger chamber, said plunger having an air vent passage leading from said plunger chamber to the atmosphere closed by the wall of the chamber as the plunger is depressed, and means for depressing said plunger in said chamber against the pressure of said spring as said throttle valve is moved towards open position.

1,767,600. WINDOW CONSTRUCTION. BEN MILLER, Kansas City, Mo. Filed Mar. 29, 1928. Serial No. 265,755. 3 Claims. (Cl. 20—49.)



1. A sash and window frame construction comprising jambs provided with slideways having inturned marginal portions, and a sash having pivotal slides operating along said slideways and formed with outturned flanges engaging within said inturned marginal portions, said jambs and slidways having interengaging grooves and beads providing weather-proof seals between the jambs and slideways.

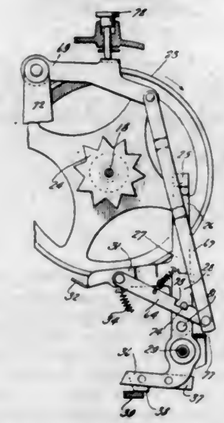
1,767,601. AGITATOR. EARL R. MILLER, Cleveland, Ohio. Filed Feb. 10, 1930. Serial No. 427,143. 6 Claims. (Cl. 259—72.)



1. An agitator including a base, a horizontal table carried by said base, a slide holder slidable on said table,

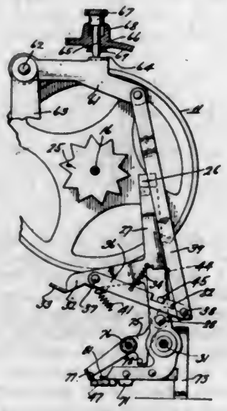
opposing spring means connected to said slide holder and normally positioning the same with respect to said table, and means carried by said base for giving to one point on said slide holder, a rotary motion in a horizontal plane.

1,767,602. COIN-CONTROLLED VENDING MACHINE. FRED L. MILLS, Oak Park, Ill., assignor to Mills Novelty Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 8, 1927. Serial No. 181,946. 9 Claims. (Cl. 273—138.)



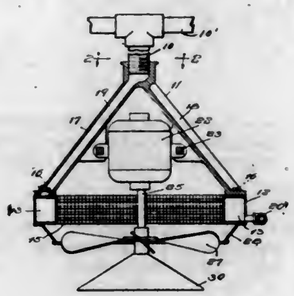
1. In a coin-controlled machine, the combination of a rock shaft, a plurality of legend-displaying reels, means actuated by said rock shaft for starting rotation of said reels, automatic means for stopping the rotation of said reels to present varying combinations of legends, and means operable by the operator of the machine during the rotation of said reels to control said last-mentioned means whereby the final position of reels, and the combination of legends presented in their position of rest, may be controlled by the skill of the operator.

1,767,603. CONTROL DEVICE FOR COIN-OPERATED MACHINES. FRED L. MILLS, Oak Park, Ill., assignor to Mills Novelty Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 8, 1927, Serial No. 238,478, and in Canada Nov. 19, 1927. 13 Claims. (Cl. 194—1.)



1. A coin-controlled machine comprising pay-out mechanism, means for controlling the operation of said mechanism including rotatable reels and automatic stopping devices therefor, and manually operable means for actuating said stopping device after the machine has been set in motion and prior to the normal operation of said stopping devices to thereby render the action of the pay-out mechanism subject to the control of the operator.

1,767,604. HEATING APPARATUS. ARTHUR B. MODINE, Racine, Wis., assignor to Modine Manufacturing Company, Racine, Wis., a Corporation of Wisconsin. Filed Sept. 25, 1925. Serial No. 58,543. 12 Claims. (Cl. 257—259.)



4. In an apparatus of the class described, a heating unit, a bracket supporting said heating unit and having a passage for conducting heated fluid to said unit, tubular means for supplying a heated fluid to said passage and forming the sole support for said bracket, a motor supported by said bracket, a shaft driven by said motor and passing through said unit, and a fan mounted on said shaft on the side of said unit opposite to said motor for advancing air through said units.

1,767,605. METHOD OF PRODUCING HEAT-EXCHANGE UNITS. ARTHUR B. MODINE, Racine, Wis., assignor to Modine Manufacturing Company, Racine, Wis., a Corporation of Wisconsin. Filed Mar. 25, 1927. Serial No. 178,488. 7 Claims. (Cl. 29—157.3.)

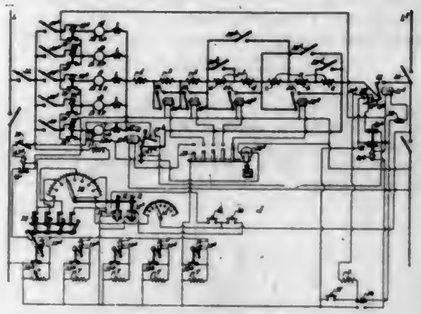


2. A method of forming heat exchange units which comprises forming an assembly of a plurality of plates and tubes, securing guide means to said plates, and then sawing through said guiding means and said plates to divide the assembly into a plurality of units.

1,767,606. CONTROLLER FOR ELECTRIC MOTOR-DRIVEN MACHINERY. NIELS L. MORTENSEN, Milwaukee, Wis., assignor, by mesne assignments, to Cutler-Hammer, Inc., Milwaukee, Wis., a Corporation of Delaware. Filed Mar. 28, 1925. Serial No. 19,014. 11 Claims. (Cl. 172—293.)

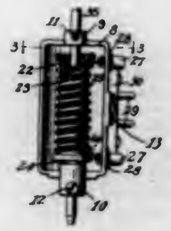
8. The combination with a plurality of motors having common starting resistance, of means for starting the motors in unison, said means including separately operable switchs whereby certain of said motors may be dis-

connected from circuit, each of said switches when so operated being also adapted to simultaneously and defi-



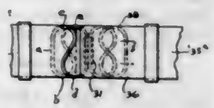
nitely vary the value of said starting resistance accordingly, and automatically operable control means tending to maintain a constant speed relation of all active motors.

1,767,607. ELECTRIC SOLDERING DEVICE. LEMBERT H. MOULTHROP, South Norwalk, Conn. Filed Sept. 17, 1927. Serial No. 220,251. 5 Claims. (Cl. 219—26.)



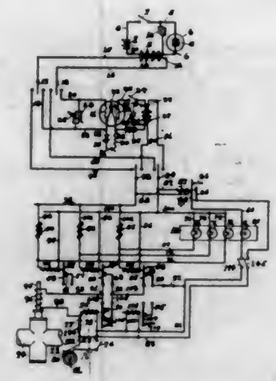
1. In an electric soldering iron, a housing having alined perforations therein, an electric heater including a tubular body of electric insulating and thermal conducting material and a resistance element carried by said body, said heater being of less cross sectional dimension than the housing, an insulator block carrying contact terminals exterior of the housing to which the resistance element is electrically connected, a bit extended through the openings in the housing and the opening in the heater body contiguous to the wall thereof to mount and maintain the heater in spaced relation to the wall of the housing, and means to releasably support the bit in the housing openings.

1,767,608. SPRING CLIP FOR BELTS, GARTERS, AND THE LIKE. CLARENCE MURPHY, Bridgeport, Conn. Filed Oct. 14, 1926. Serial No. 141,513. 6 Claims. (Cl. 24—163.)



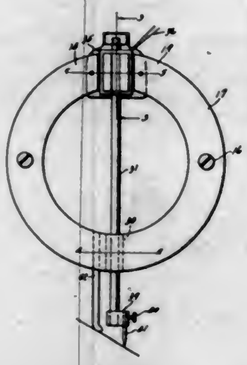
6. A fastening clip for use upon belts and the like, comprising a wire bent to form two outer loops, each having a straight outer cross bar and connecting intermediate portions crossing each other at two or more spaced apart positions and yieldably disposed one against the other and forming relatively small intermediate loops.

1,767,609. SELECTIVE REMOTE-CONTROL SYSTEM. HOWARD J. MURRAY, Brooklyn, N. Y. Filed Nov. 7, 1927. Serial No. 231,688. 17 Claims. (Cl. 246—29.)



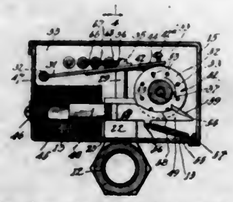
1. In a device of the class described, means forming a portion of a signal system and designed to selectively produce beams of light, means operatively associated with the said light producing means designed to selectively affect the intensity of the said beams at a remote point at a desired uniform rate, light sensitive circuit means positioned at the said remote point to operatively intercept the said affected beams, means constituting a selective circuit organization including the said light sensitive circuit means, a source of power, transformer windings, impedance elements, and selective relays, and speed control means operatively connected to the said relays and designed to control the movement of a vehicle.

1,767,610. ACOUSTIC APPARATUS. WILLIAM J. O'LEARY, Dayton, Ohio. Filed Dec. 24, 1927. Serial No. 242,402. 10 Claims. (Cl. 179—100.41.)



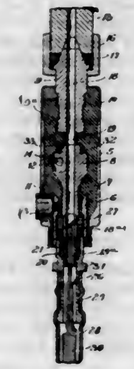
1. An electrical sound reproducer for phonographs comprising a magnet, a coil rotatably mounted in the field of the magnet, a shaft on which said coil is fixed with the axis of rotation of the coil coinciding with the axis of the shaft, a rubber block mounted in said magnet, and snugly receiving said shaft to mount the shaft for rotational oscillations, a rubber mounting block supporting one end of the shaft adjacent said coil, and a stylus holder fixed to the other end of said shaft and adapted to receive a stylus with its axis displaced from the axis of the shaft, whereby oscillations of the stylus are transmitted through said shaft to the coil to cause the generation of currents in the coil.

1,767,611. ELECTRICALLY-OPERATED VALVE. EL ROY L. PAYNE, Los Angeles, Calif., assignor to Gas Furnace Control Co., a Corporation of California. Filed Mar. 26, 1924. Serial No. 702,018. 15 Claims. (Cl. 137—139.)



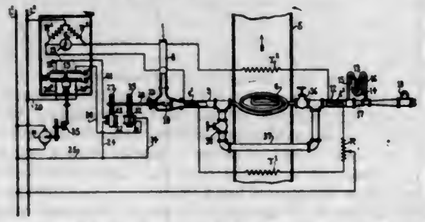
1. In combination, a valve having a stem, yielding means to hold said valve normally closed, a cam lever pivotally mounted adjacent said valve, a loose, adjustable lifting connection between said valve stem and lever for raising the valve against the action of its holding means, a cam wheel adapted to engage said lever to intermittently open the valve or move it to intermediate positions to pass gas in quantity less than its full capacity, and adjusting means to individually vary the extent of each valve movement.

1,767,612. COUPLING FOR CONDUCTORS. ALPHONSE F. PIEPER, Rochester, N. Y. Filed Apr. 28, 1926. Serial No. 105,306. 3 Claims. (Cl. 285—14.)



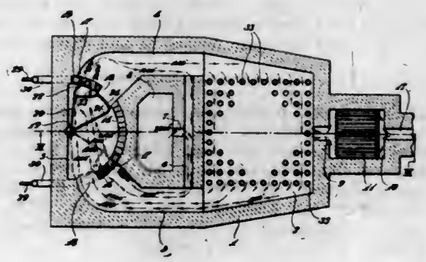
2. A supply line coupling comprising a tubular member, a casing comprising a body of molded material in which said tubular member is embedded, and a yieldable ring encircling said tubular member and adapted to be compressed by said material whereby upon separation of the latter from the tubular member the ring will expand to maintain a fluid tight joint between the molded material and the tubular member.

1,767,613. METHOD OF AND APPARATUS FOR MEASURING THE FLOW OF FLUIDS. CLARENCE S. PINKERTON, Milwaukee, Wis., assignor, by mesne assignments, to Cutler-Hammer, Inc., a Corporation of Delaware. Filed Aug. 28, 1925. Serial No. 53,040. 9 Claims. (Cl. 73—167.)



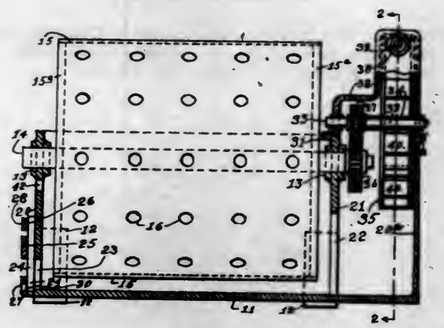
8. A fluid meter comprising a conduit through which a stream of the fluid to be measured flows, means for effecting a heat exchange between said fluid and a flowing medium, and associated means respectively subjected to the temperatures of said fluid and said medium before and after said heat exchange, said means including means to automatically vary the rate of flow of said medium to maintain only a constant proportionality between the temperature change of said fluid and the temperature change of said medium resulting from the heat transfer and irrespective of relatively wide variations in the values of such temperature changes per se.

1,767,614. HEATING APPARATUS. FRANZ PUENING, O'Hara Township, Allegheny County, Pa. Filed Nov. 23, 1927. Serial No. 235,153. 15 Claims. (Cl. 263—1.)



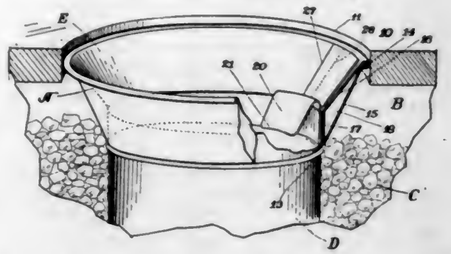
2. Heating apparatus comprising an enclosure to be heated and means for reciprocating hot gases through said enclosure, said means comprising aspirators for effecting the flow of gases in accordance with the position of said aspirators, and means for shifting the position of said aspirators.

1,767,615. APPARATUS FOR WASHING VEGETABLES. BERTHA RABINOWITZ (NÉE BRIER), Brooklyn, N. Y. Filed Mar. 7, 1928. Serial No. 259,816. 4 Claims. (Cl. 146—200.)



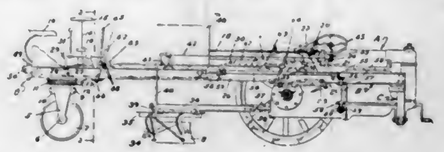
1. In an apparatus for washing vegetables a container for water, a means for connecting said container to a source of water supply, a weir, for continuously discharging water from said container, thereby causing a stream of water from said supply continuously to pass through said container, a perforated receptacle for the vegetables to be washed movably suspended over the bottom of said container, and a means for continuously moving said receptacle in a plane transversely to the flow of said stream, to have said vegetables washed by said stream.

1,767,616. SANITARY FROSTPROOF COLLAR. DAVID B. REESE, St. Paul, Minn. Filed Aug. 16, 1927. Serial No. 213,308. 7 Claims. (Cl. 62—75.)



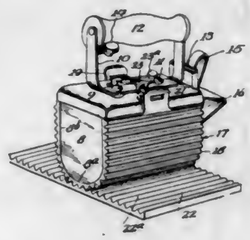
1. A sanitary collar means for ice cream cans and cabinets including, a collar, a flaring collar flange, a straight cylindrical band portion adapted to fit over the ice cream can, and a dead air space formed in said flaring portion.

1,767,617. ROAD MACHINE. ADOLPH RONNING, Minneapolis, and ANDREAN G. RONNING, deceased, Minneapolis, Minn.; by Adolph Ronning, Minneapolis, Minn., and Jacob A. Ronning, executors, St. Paul, Minn. Original application filed July 18, 1924, Serial No. 726,662, now Patent No. 1,600,050, dated Feb. 21, 1928. Divided and this application filed Feb. 4, 1928. Serial No. 252,013. 5 Claims. (Cl. 94—46.)



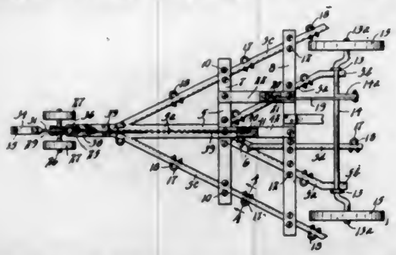
2. The combination with a vehicle, of an implement arranged thereunder to be drawn therewith, a container arranged on the vehicle, and means for delivering material in the container to either end thereof so that such material may be selectively dropped either in front or rearwardly of the implement.

1,767,618. PLAITING IRON. GEORGIE BEATRICE CAMPBELL-ROSS, Round Lake, Ill. Filed Apr. 23, 1928. Serial No. 271,996. 2 Claims. (Cl. 68—7.)



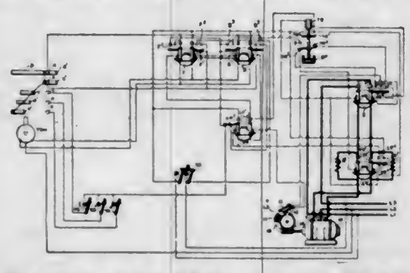
1. A plaiting iron comprising in combination, a body embodying a semi-cylindrical bottom and substantially parallel sides, a handle secured fixedly to the body, and a member formed separately from and removably connected to the body and consisting of a bottom part curved transversely and so as to fit against the body-bottom, and parallel side parts for lapping the sides of the body, the outer faces of the bottom and side parts of said member being fluted, and adapted to form plaits in conjunction with a correspondingly fluted plate and when the body and member are rocked sidewise over such plate.

1,767,619. QUACK-GRASS ERADICATOR. KNUTE RUE, Mapleton, Minn. Filed Sept. 29, 1926. Serial No. 138,421. 1 Claim. (Cl. 55—19.)



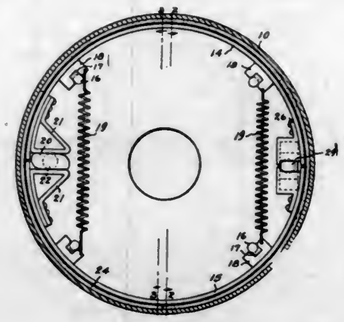
A quack grass destroying machine having in combination, a frame comprising a longitudinally extending central beam, rearwardly diverging bars extending from adjacent the front end of said beam, a plurality of vertically and individually adjustable blades secured to said bars and spaced thereafong, a pair of rearwardly diverging bars extending from adjacent the rear of said beam, a plurality of vertically and individually adjustable blades secured to said last mentioned bars and spaced thereafong, all of said blades being spaced substantially equal distances transversely of said frame, a crank axle journaled in the ends of said last mentioned bars, wheels carried at the ends of said axle within the rear ends of said first mentioned bars and within the lines of the outermost teeth, a seat, a lever within reach of said seat, means connected to said lever for oscillating said axle and raising and lowering the rear end of said frame, a post journaled in the front end of said central beam, castor wheels carried by the lower end of said post, a second lever within reach of said seat and means connected to said second lever for raising and lowering the front end of said beam on said post, said post and castor wheels being oscillatable about the axis of said post and said seat, second lever and last mentioned means being mounted on said central beam.

1,767,620. TIMING CONTROLLER FOR ELECTRIC MOTORS. EDWIN W. SEEGER, Wauwatosa, Wis., assignor, by mesne assignments, to Cutler-Hammer Inc., Milwaukee, Wis., a Corporation of Delaware. Filed July 18, 1927. Serial No. 206,561. 2 Claims. (Cl. 172—239.)



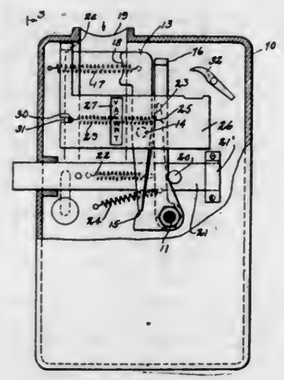
1. In a motor control system, in combination, a unidirectionally operable main driving motor and a reversible pilot motor, each of said motors having a limit switch to be driven thereby, means operable automatically upon normal positioning of the parts to complete an initial energizing circuit for said pilot motor independently of said limit switches, said means being thereupon also operable to complete an energizing circuit for said main motor and to effect interruption of the energizing circuit of said pilot motor, means for maintaining the energizing circuit of said main motor pending a predetermined operation of the limit switch driven thereby, and means controlled by said last mentioned limit switch and cooperating with the limit switch of said pilot motor to thereupon complete an energizing circuit for said pilot motor to effect operation of the latter in a reverse direction.

1,767,621. FRICTION BRAKE. BENJAMIN F. SHIELDS and CHARLES G. CROMBIE, Seattle, Wash. Filed Aug. 2, 1927. Serial No. 210,043. 4 Claims. (Cl. 188—79.5.)



2. In a brake, a rotatable drum, a relatively fixed plate at one end of said drum, brake shoes disposed within said drum, means for adjusting the brake shoes expansively within the drum and devices extending outwardly through said plate for positioning said adjusting means, said devices leaving said shoes free to move circumferentially.

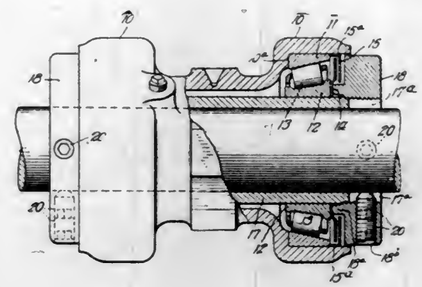
1,767,622. LOCK FOR PAY TOILETS. JOSEPH SMITH, Hoboken, N. Y. Filed Dec. 7, 1928. Serial No. 324,379. 1 Claim. (Cl. 194—54.)



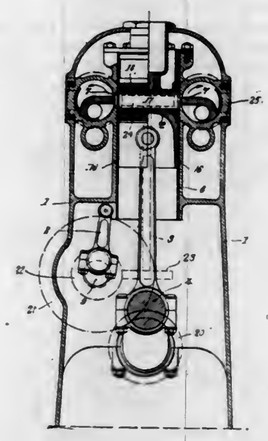
In a lock, preferably for pay toilets, a casing having a coin slot, a dog having a head with a concave edge, a spring for normally keeping said head to partly close the coin slot, a divided handle spindle, a dog engaged by said first named dog, said engagement to be interrupted by the insertion of a coin, a sign plate having a slot closing extension, means for holding said extension in slot closing position while the toilet is occupied, and a means for freeing said plate, and for releasing the lock upon the operation of one part of said handle spindle.

1,767,623. BEARING. ARTHUR P. STRONG, Chicago, Ill., assignor to Dodge Manufacturing Corporation, Mishawaka, Ind., a Corporation of Delaware. Filed May 11, 1927. Serial No. 190,390. 5 Claims. (Cl. 308—207.)

1. A device of the class described comprising a casing, a substantially non-contractile sleeve located in said casing and apertured adjacent its ends, a bearing unit interposed between said sleeve and casing, a ring threadedly engaging said sleeve and adjustable thereon to position said bearing, and a set screw carried by said ring and extensible through the aperture in said sleeve to engage a shaft, said set screw functioning to draw the ring toward and thereby to clamp the end of the sleeve to the shaft.

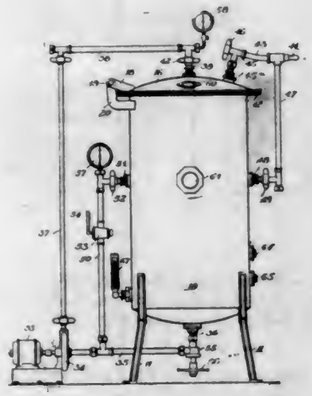


1,767,624. VALVE SYSTEM FOR RECIPROCATING ENGINES. ALEXANDRE CARDUNETS TALLADE, Barcelona, Spain. Filed Dec. 1, 1926, Serial No. 151,889, and in France Dec. 9, 1925. 3 Claims. (Cl. 123—79.)



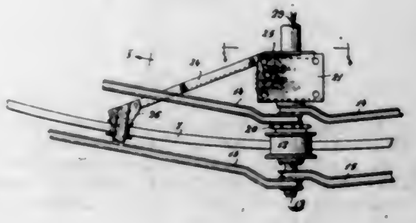
1. An apparatus of the class described comprising in combination a cylinder having a passage formed in the wall thereof, a cylindrical sleeve slidably mounted inside the cylinder, said sleeve having a slot therethrough located so as to come opposite the passage in the cylinder wall during part of the sliding movement of the sleeve, a rotatable valve controlling the passage in the cylinder wall, said rotatable valve having a feed and a discharge orifice in its peripheral wall spaced so as to communicate with the passage in the cylinder wall during the intake and discharge periods respectively, said orifices being isolated from one another by a wall formed inside the valve and dividing said valve into independent open-ended chambers, a piston slidably mounted inside the sleeve, a crank-shaft connected to the piston, and means for actuating the sleeve and the rotatable valve so that the feed and discharge orifices in the rotatable valve register with the passage in the cylinder during the feed and discharge periods respectively.

1,767,625. LIQUID-EXTRACTING MEANS. ULYSESS G. TODD, Rochester, N. Y., assignor to The Pfaudler Co., Rochester, N. Y., a Corporation of New York. Filed Jan. 27, 1926. Serial No. 84,047. 14 Claims. (Cl. 87—6.)



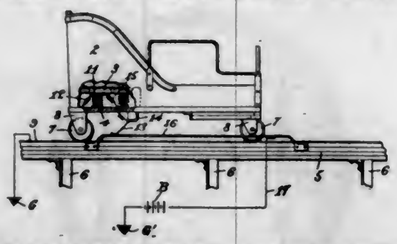
1. In apparatus of the class described, a tank, a container therein adapted to hold a batch of pulp or the like, said container having a screen in its bottom for the escape of liquid from the pulp to the tank, a rotatable spraying element in the tank above the container means adapted both to deliver liquid under pressure to said spraying element and to tend to produce suction in the tank below the container, and means by which reduction of the pressure is automatically effected when the difference in pressure on the two sides of said container exceeds a predetermined limit.

1,767,626. AMUSEMENT RIDE. HARRY G. TRAVER, Beaver Falls, Pa. Filed Feb. 21, 1929. Serial No. 341,620. 6 Claims. (Cl. 272—44.)



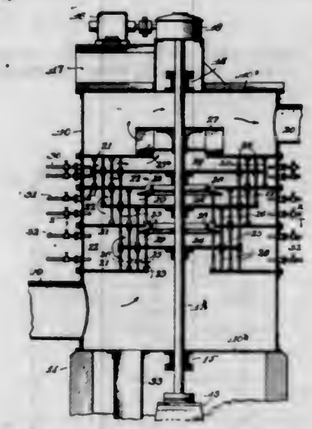
1. In amusement rides, a circular track, a sweep, pivotally supported centrally of the track and carrying a wheel to support the sweep upon and run about the track, a motor mounted on the sweep having a driving connection with the sweep supporting wheel to propel the wheel about the track and the sweep about the central support, and means secured to the motor operatively positioned upon and moved around the track with the sweep and take up the driving torque of the motor in the track structure.

1,767,627. AMUSEMENT RAILWAY. HARRY G. TRAVER, Beaver Falls, Pa. Original application filed Mar. 19, 1925, Serial No. 16,831, now Patent No. 1,713,793, dated May 21, 1929. Divided and this application filed May 1, 1929. Serial No. 359,516. 8 Claims. (Cl. 104—53.)



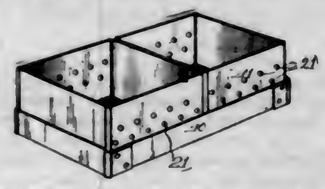
1. In an amusement railway, a passenger carrying car having a seat, and electric shocking means comprising a plate of electric conducting material carried by the car in proximity to the seat and adapted to be placed in circuit with a source of electricity.

1,767,628. GAS-WASHING APPARATUS. EDMUND VON MALTITZ, Gary, Ind., assignor to H. A. Brassert & Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 7, 1927. Serial No. 166,848. 5 Claims. (Cl. 261—89.)



4. A gas washing apparatus comprising a vertically extending casing provided with a gas inlet at the bottom and a gas outlet at the top, a plurality of sets of disintegrator members located in vertically spaced zones between said inlet and outlet, means for introducing water into said casing for contact by said members, and means for causing relative movement between separate sets of said members, whereby the latter may centrifugally discharge said water towards the bottom of said casing in a direction counter to the flow of gas.

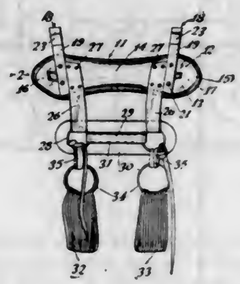
1,767,629. FIBER-BOARD CRATE. HARRISON B. WALTER, Chicago, Ill. Filed July 29, 1927. Serial No. 209,223. 1 Claim. (Cl. 229—15.)



A multiple unit fiber board crate comprising a multiple body consisting of separate like tubular units, engaged

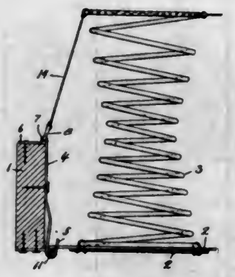
side to side, each unit being open at its top and bottom ends, and top and bottom closure members, each consisting of a wall adapted to provide a common closure for the one end of all the units of the crate and of side and end flanges adapted to embrace the exposed sides of said units and to maintain them in aligned relation, the several members of said crate being collapsible to permit their shipment flat to the consumer.

1,767,630. PACK TREE AND HARNESS. ROSCOE F. WARREN, Los Angeles, Calif. Filed Dec. 28, 1927. Serial No. 243,061. 4 Claims. (Cl. 54—37.)



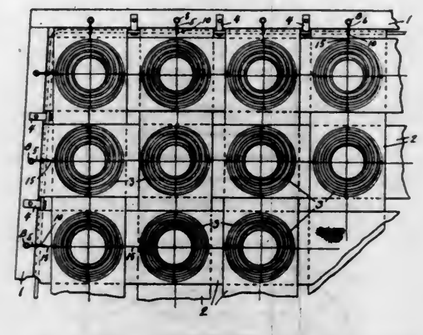
1. In the art described, a pack saddle having a pair of saddle boards extending longitudinally and at an angle to each other, a plurality of trees formed of bars secured to the saddle boards and each tree having a pair of bars secured to each other, a pair of supporting straps connecting to each of the saddle boards, a ring attached to each strap, cinches connected to opposite rings, and a flexible spacing link strap between each of the rings on each side of a pack animal.

1,767,631. UPHOLSTERY-FRAME ATTACHMENT. SIMON L. WARREN, Quincy, Mass. Filed May 20, 1929. Serial No. 364,405. 2 Claims. (Cl. 155—179.)



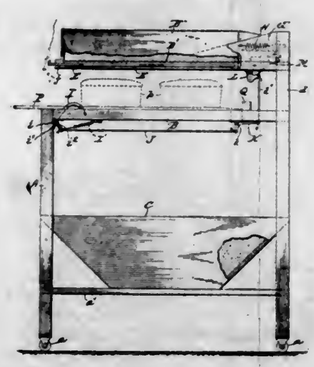
1. In an upholstery construction including a frame of uniform depth having strips of webbing secured to its under side, a rigid rod engaged with the undersides of the strips adjacent the inner sides of the frame, and a series of uniformly constructed devices for supporting said rod, each comprising a metal strip having an angular portion at one end engaged with the top side of the frame and an elongated portion corresponding in length to the height of the frame and depending at its inner side between adjacent webbing strips, the lower end portion thereof being formed to provide an open hook to receive said rod, and means to attach said devices to the frame, whereby said rod may be supported above the level of, and in parallel relation to the under side of the frame, and in position to draw the webbing strips upward as they extend from the bottom side of the frame.

1,767,632. UPHOLSTERY-FRAME ATTACHMENT. SIMON L. WARREN, Quincy, Mass. Filed June 22, 1929. Serial No. 372,969. 2 Claims. (Cl. 155—179.)



1. In an upholstery construction including a frame having a support at its bottom side and a series of coiled springs mounted on said support within the frame, a series of cord-attaching devices, each consisting of a metal strip secured to the inner side of the frame and extending downwardly from top thereof and having a plurality of cord-receiving loops arranged to project within the frame at different elevations between the top and bottom thereof, and cords connecting said loops and the correspondingly located coils of the springs adjacent thereto.

1,767,633. PEEL-DUSTING MACHINE FOR BAKERY PURPOSES. JOSEPH WEBER, Jersey City, and HENRY TIETJEN, Hoboken, N. J. Filed Feb. 11, 1929. Serial No. 339,057. 4 Claims. (Cl. 107—7.)

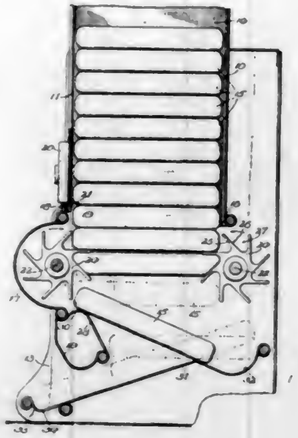


1. In a peel dusting machine, a sifting box provided with a perforated bottom, a spring-actuated hammer carried by the sifting box, and a peel-actuated trigger for locking and releasing said hammer.

1,767,634. VENDING MACHINE. GEORGE WEISS, Chicago, Ill. Filed Feb. 6, 1928. Serial No. 252,059. 7 Claims. (Cl. 312—70.)

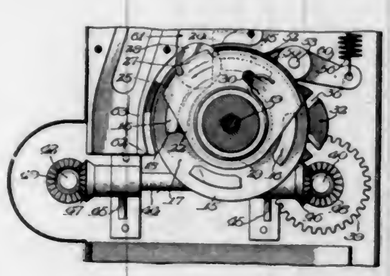
1. A vending machine embodying a casing including means for holding a supply of articles, revoluble article delivery drums adjacent the bottom of said supply, said drums being provided with spaced blades, the active faces of said blades being arranged tangential to the axis of the respective drums, the spaces between adjacent blades of the respective drums receiving opposite edges of the lowermost article to remove the article from the supply and thus support the article, the walls of said spaces

converging from the periphery of the drum inwardly toward the axis of the drum, and means for rotating the drums in directions towards each other to advance the



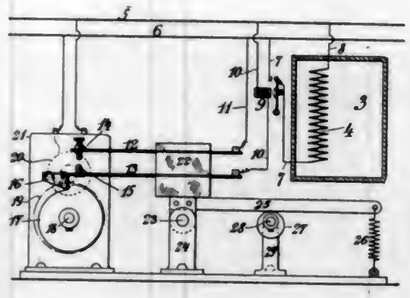
article while thus supported, the supported article being delivered from the drums by gravity when the said active tangential faces of the blades assume vertical parallel positions.

1,767,635. COIN-CONTROLLED MECHANISM. GEORGE WEISS, Chicago, Ill. Filed Feb. 6, 1928. Serial No. 252,060. 7 Claims. (Cl. 194—84.)



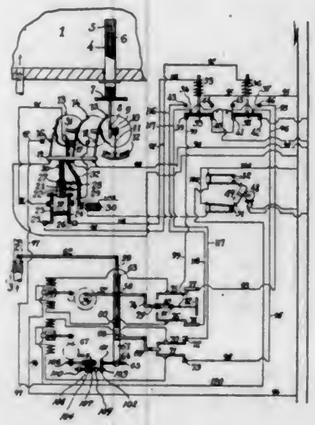
1. Coin controlled mechanism embodying a shaft, a member connected with the shaft for movement therewith, a plurality of coin holders formed on said member, a second member mounted for free movement with respect to the first said member and said shaft, spaced means on the said second member for engaging a coin in said holders and between which means the coin stands when in said holder for operatively connecting said members, an operating handle connected with said second member, a driven shaft, and an operative connection between the first recited member and the said driven shaft, said connection embodying means constituting a two point lock between the last recited member and the last said shaft.

1,767,636. PERIODIC CIRCUIT MAKER FOR ELECTRIC OVENS. CHRISTIAN WILHJELM, Philadelphia, Pa. Filed Nov. 15, 1927. Serial No. 233,396. 1 Claim. (Cl. 200—31.)



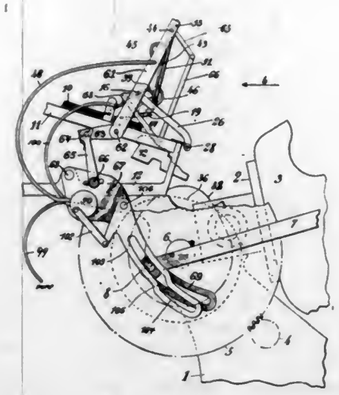
An electric circuit closing device comprising a support, a member pivoted thereon, a pair of normally open contacts carried by said member to the one side of the pivot, an arm on said member extending to the opposite side of the pivot, a motor driven cam for closing said contacts at regular intervals, an eccentric in engagement with said arm and means for adjusting the eccentric to regulate the position of the said contacts with respect to the said cam.

1,767,637. TEMPERATURE-CONTROL APPARATUS. CHRISTIAN WILHJELM, Philadelphia, Pa. Filed June 26, 1929. Serial No. 373,741. 6 Claims. (Cl. 236—15.)



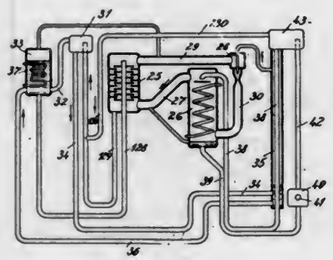
1. The combination of a furnace having a fuel supply controlled by a valve for maintaining a predetermined temperature within the furnace, means for opening said valve to increase the fuel supply in the event the temperature decreases, mechanism for prematurely closing the valve when the temperature thereafter begins to increase and means for opening the valve during said increase if the said premature closing of the valve occurs within the time lag period of the furnace.

1,767,638. AUTOMATIC SHEET-FEEDING MECHANISM. AMOS ACKLEY, Camden, N. J., assignor to American Type Founders Company, a Corporation of New Jersey. Filed June 9, 1928. Serial No. 284,216. 11 Claims. (Cl. 101—287.)



1. An automatic feeder for platen presses comprising suction nozzles for separating the top sheet from a pile of sheets, other suction nozzles for seizing the separated sheet from the first named suction nozzles and means for operating the said other suction nozzles to convey the separated sheet to the platen.

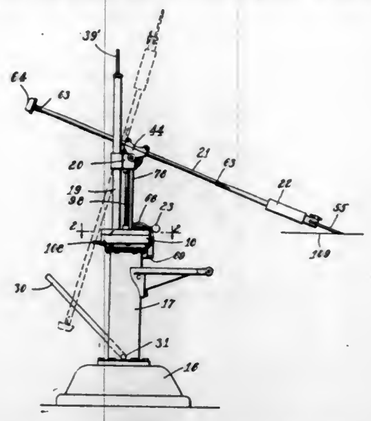
1,767,639. ABSORPTION MACHINE. EDMUND ALTENKIRCH, Alt-Landsberg-Sud, Germany, assignor to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, a Corporation of Germany. Filed Oct. 27, 1927, Serial No. 229,074, and in Germany Oct. 30, 1926. 10 Claims. (Cl. 62—119.5.)



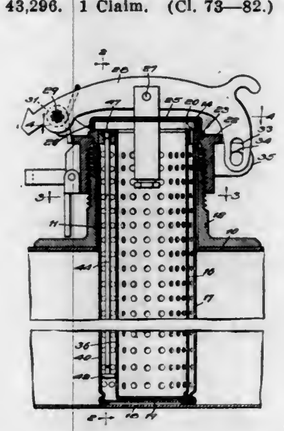
1. Absorption system comprising an absorption liquid, a working medium, an inert gas, an absorber and a reabsorber for said working medium, means for causing part of said working medium to create circulation of said inert gas, and means for liberating this part of said working medium separately from the remainder.

1,767,640. POWER SCRAPER. SWAN F. ANDERSON, Rockford, Ill. Filed Apr. 30, 1927. Serial No. 187,759. 29 Claims. (Cl. 29—1.)

1. A surface working machine comprising a base having an upstanding column, a turntable head on said column, a ram carriage mounted for vertical adjustment on said head, a tool ram mounted for reciprocation on said carriage, a mechanically operating drive mechanism on the ram carriage for reciprocating the ram, and means on the tool ram for controlling said drive mechanism.



1,767,641. GAUGE. RUDOLPH J. ANSCHICKS, Chicago, Ill., assignor to Protectoseal Company of America, Chicago, Ill., a Corporation of Illinois. Filed July 13, 1925. Serial No. 43,296. 1 Claim. (Cl. 73—82.)

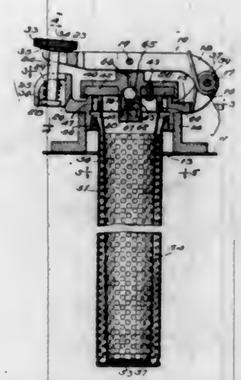


In a device of the kind described and in combination with a tank, a member arranged for securement to the tank, and a cover member operatively carried thereon, said first-mentioned member being of annular shape and provided with an opening at one side, and a tape carried by said first-mentioned member and displayable through said opening, means connected with the tape for controlling movement thereof upon variation of the liquid level within the tank, and a pair of foraminous telescoping cylinders having an annular space therebetween depending from said first mentioned member and forming a housing for said tape and the parts operatively connected thereto.

1,767,642. TANK FITTING. RUDOLPH J. ANSCHICKS, Chicago, Ill., assignor to Protectoseal Company of America, Chicago, Ill., a Corporation of Illinois. Filed Sept. 10, 1928. Serial No. 305,087. 7 Claims. (Cl. 220—86.)

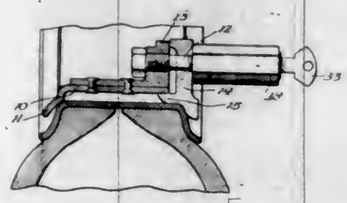
1. In a device of the class described, an annular member adapted to be seated in a filling opening of a tank or

the like, a closure member pivotally mounted on said annular member and adapted to be unseated upon the exertion of a predetermined pressure within said tank,



means on said closure member for relieving a vacuum within said tank, and releasable means for yieldably retaining said closure member in closing engagement with said annular member.

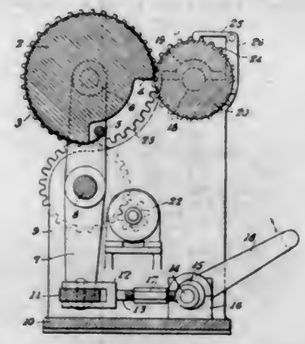
1,767,643. LOCK. EDWARD PAYSON BAIRD, Evanston, Ill. Filed Apr. 19, 1926. Serial No. 102,873. 5 Claims. (Cl. 70—122.)



1. In a locking device, the combination of a casing, a lock mounted in one end of the casing, an element mounted in the other end of the casing and provided with a screw-thread to receive a threaded part, the casing and said element being rotatable together and relatively to each other, a ball thrust bearing between the casing and the element to prevent rotation of the element by friction when the element and casing are rotatable relatively to each other, and means disposed between said element and lock and controlled by the lock, for locking the casing and element for conjoint rotation so that the element can be rotated by the casing, and for releasing the casing for independent rotation so that said element cannot be rotated thereby.

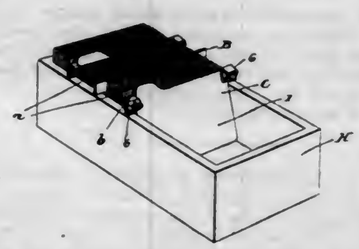
1,767,644. PROCESS OF APPLYING DESIGNS TO CYLINDERS. WILLIAM H. BANZETT, Bergenfield, N. J., assignor to American Lithographic Company Inc., New York, N. Y., a Corporation of New York. Filed Feb. 7, 1928. Serial No. 252,446. 5 Claims. (Cl. 101—84.)

1. That improvement in the art of applying a design to a cylinder comprising, first preparing the design by arranging in predetermined position on a layout surface carbon tissue, then rolling together said prepared layout



surface and the surface of the cylinder under yielding pressure in predetermined register and thereby transferring the carbon tissue to the surface of the cylinder.

1,767,645. INDEX. THOMAS J. BARRETT, Los Angeles, Calif. Filed Aug. 18, 1926. Serial No. 129,940. 2 Claims. (Cl. 129—16.7.)



1. As a new article of manufacture, a divider having a body portion and a pair of lug portions outwardly extending from said body portion, said lug portions being triangularly bent.

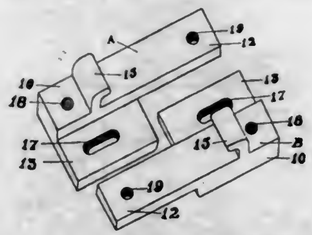
1,767,646. PROCESS FOR MANUFACTURING YEAST. GEORGE S. BRATTON, St. Louis, Mo., assignor to Anheuser-Busch, Incorporated, St. Louis, Mo., a Corporation of Missouri. Filed Mar. 6, 1926. Serial No. 92,957. 3 Claims. (Cl. 195—20.)

2. A process for manufacturing yeast, which consists in preparing an initial setting solution that is rich in yeast assimilable proteins, rich in yeast nutrient salts and deficient in yeast assimilable sugars; preparing a feeding solution that is rich in yeast assimilable sugars, deficient in yeast assimilable proteins, and deficient in yeast nutrient salts; seeding said setting solution with seed yeast; initiating propagation of yeast in said setting solution; and thereafter adding the feeding solution to the setting solution during a substantial period of time while continuing the yeast propagation.

1,767,647. TIE PLATE. BURCHARD F. BECKMAN, Fort Smith, Ark. Filed June 18, 1929. Serial No. 371,783. 7 Claims. (Cl. 238—290.)

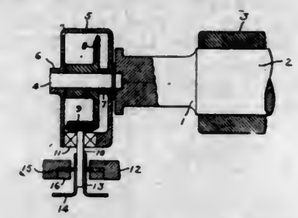
1. A tie-plate comprising a pair of members which are adapted to be assembled from opposite sides of the rail, each of said members comprising a thickened portion adapted to rest upon the tie, a thinner portion extending from the thickened portion in the direction of the rail and also adapted to rest upon the tie, and a second thinner

portion extending from the thickened portion transversely of the rail and adapted to overlap the first mentioned thinner portion of the opposite member, the first mentioned thinner portion of each member being provided



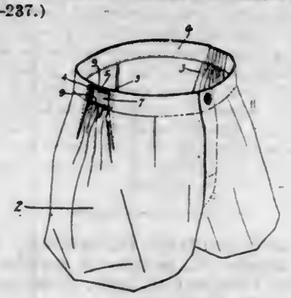
with an opening therethrough and the second thinner portions having openings therethrough adapted to register with the first mentioned openings for the reception of means for securing the members to the tie.

1,767,648. GEAR MECHANISM FOR DRIVING TRAIN-LIGHTING GENERATORS. JOSEPH FRÉDÉRIC JULIEN BETHENOD and ACHILLE JONET, Paris, France. Filed Sept. 17, 1926, Serial No. 136,032, and in France Sept. 18, 1925. 1 Claim. (Cl. 74—7.)



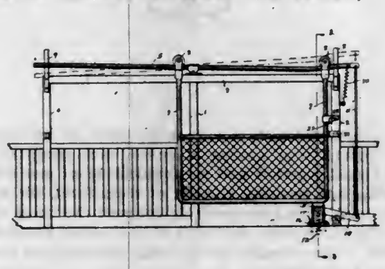
Means for driving a train-lighting generator comprising, in combination, a car axle-box, a gear box enclosed within said axle box, an auxiliary shaft rigidly attached to the extremity of the car axle, said gear box being mounted on said shaft and supported thereon by means of end bearings, a bevel gear wheel rigidly mounted on said shaft within said gear box, a driven shaft, a bevel pinion in mesh with the said gear wheel and carried by the driven shaft, means for connecting the said driven shaft to the shaft of the generator, and means for preventing the loss of lubricant through the clearance provided between the driven shaft and the wall of the axle-box.

1,767,649. TRACK PANTS. FRANKLIN CHATFIELD, Minneapolis, Minn., assignor to The Munsingwear Corporation, Minneapolis, Minn., a Corporation of Minnesota. Filed Feb. 20, 1928. Serial No. 255,657. 2 Claims. (Cl. 2—237.)



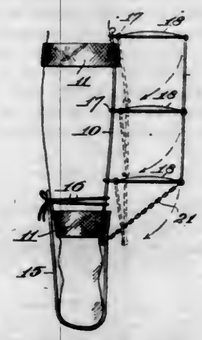
2. Track pants having leg portions and a waist portion, the waist portion having a pair of plaits on either side of the track pants said plaits being formed vertically in adjacent relation, more goods being taken up at the upper portion of the plaits and the plaits decreasing in width downwardly to points on either side of the track pants the material between the plaits being gathered to form a series of vertical tucks, an elastic band having its ends inserted under the plaits and stitched through the plaits and waist portion of the pants at their ends and stitched to the gathers at their upper edges.

1,767,650. GATE. SEBASTIANO F. CANGEMI and ANTHONY CANGEMI, Houston, Tex. Filed Feb. 21, 1928. Serial No. 255,886. 4 Claims. (Cl. 39—67.)



1. A device of the character described including upright posts, a beam on said posts, a track mounted on said beam, to pivot on a substantially horizontal axis, a gate, carriers connected to the gate, and movable on said track to carry the gate into open and closed position, a spring normally holding said track in position to maintain the gate in closed position, by gravity, and mechanism operable to move the gate into another position to effect the movement of the gate, by gravity, into open position, said mechanism comprising a pivotally mounted lever, yieldable means supporting one end of said lever, a rod connecting the other end of said lever to the corresponding end of said track and oppositely disposed vehicle tracks, linked together at one end, said linked ends being supported on the supported end of said lever.

1,767,651. SWIMMING APPLIANCE. JAMES W. CUTHBERTSON, Los Angeles, Calif., assignor of one-half to Arthur L. Erickson, Turlock, Calif. Filed July 5, 1929. Serial No. 376,225. 1 Claim. (Cl. 9—21.)



In a swimming appliance, a plate, a plurality of vanes hinged to said plate for vertical swinging movement, straps secured to the ends of the plate and adapted to pass around the swimmer's leg, one end of each strap being folded upon itself and secured so as to provide a plurality of tabs, eyelets seated in said tabs, eyelets seated in the opposite end of the strap and ties adapted to pass through said eyelets.

1,767,652. TUBE ASSEMBLY FOR HEAT-TRANSFER DEVICES. WALTER A. DALBY, Chicago, Ill., assignor to Bell & Gossett Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 23, 1927. Serial No. 186,062. 6 Claims. (Cl. 257—248.)



1. A tube assembly for heat transfer devices comprising a plurality of groups of tubes, each group of tubes being joined together and communicaitng at one end, and a spacing and securing element of cross form, the arms of which cross extend respectively between the tubes of each and adjacent groups, the arms of said cross which extend between tubes of each group being extended to partially encircle said tubes.

1,767,653. METAL ARTICLE. ALVAN L. DAVIS, Waterbury, Conn., assignor to Scovill Manufacturing Company, Waterbury, Conn., a Corporation of Connecticut. Filed Nov. 18, 1925. Serial No. 69,812. 3 Claims. (Cl. 148—31.)

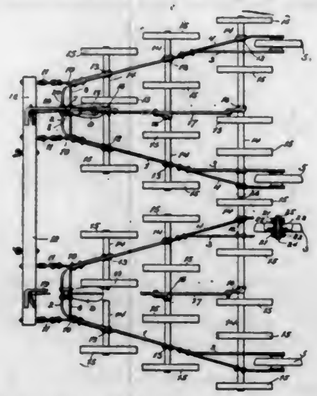


1. A cap screw or bolt having a faceted head and a stem, the crystalline structure of the metal in the stem being modified so that some or all of the crystals are somewhat elongated whereby the strength of the stem is increased, the metal in and behind the facets of the head having somewhat the characteristics of the metal in the stem, and the bulk of the metal in the interior of the head being in the recrystallized condition characteristic of annealed metal.

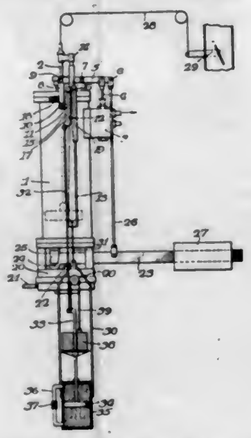
1,767,654. HARROW. WILLIAM D. DEWEND, South Bend, Ind., assignor, by mesne assignments, to Oliver Farm Equipment Company, a Corporation of Delaware. Filed Mar. 22, 1927. Serial No. 177,425. 3 Claims. (Cl. 55—90.)

1. The combination of harrow sections arranged side by side, hollow transverse members on said sections, said members on one section being axially alined with corresponding members on the other section, a link having its adjacent ends engaged in the ends of alined hollow members and provided with transverse slots adjacent its ends, and bolts passing through the slots in the link and secured diametrically in the respective hollow members, the bolts being in angular relation to each other.

2. A harrow frame consisting of a bar forming rearwardly diverging side members and a cross member integrally connecting the front ends of said side members, a cross brace rigidly secured to and connecting the side members immediately adjacent said cross member, a support mounted upon and disposed between the cross member and the brace at the center thereof, and supports carried by the rear ends of the side members.



1,767,655. AUTOMATIC REGULATOR. WILLIAM D. DREISKE, Oak Park, Ill. Filed Jan. 12, 1928, Serial No. 246,142. Renewed Mar. 11, 1929. 20 Claims. (Cl. 236—85.)



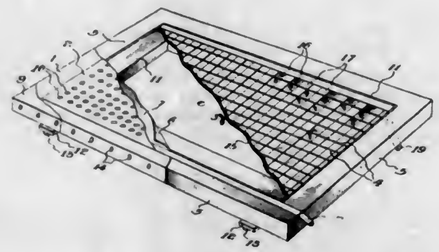
1. In an automatic damper regulator for boiler furnaces, subject to control by the variation of the boiler pressure, the combination of a piston, a damper controlled by said piston, valve mechanism to control fluid pressure to operate said piston, means controlled by the boiler pressure to control said valve mechanism, a main compensating device to govern the action of said valve mechanism, and an auxiliary compensating device acting conjointly with said main compensating device to control the action of said damper regulator, together with a third compensating device for directly modifying the action of said auxiliary compensating device and operative thereby to indirectly modify the action of said main compensating device.

1,767,656. LOUD ACOUSTIC CONDENSER. PHILIP E. EDELMAN, Chicago, Ill., assignor to Ephraim Banning, Chicago, Ill. Filed July 19, 1929. Serial No. 379,359. 8 Claims. ((Cl. 179—111.)

1. In a condenser speaker, a flexible back electrode, a flexible sheet insulator positioned closely adjacent to the front face of the back electrode, a front electrode mounted on the front side of said insulator, said back electrode having a series of spaced raised projections to prevent the insulator from normally contacting with the back electrode over a large portion of the area at one time.

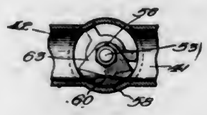


1,767,657. CAPACITY REPRODUCER. PHILIP E. EDELMAN, Chicago, Ill., assignor to Ephraim Banning, Chicago, Ill. Filed Aug. 9, 1929. Serial No. 384,739. 13 Claims. (Cl. 179—111.)



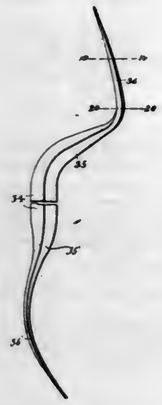
13. A capacity reproducer consisting of a dielectric diaphragm, a conductive coating on said diaphragm, a cooperating air permeable electrode held adjacent to said diaphragm, and thin spaced flexible elements disposed between said diaphragm and said air permeable electrode.

1,767,658. FLOW-CONTROL VALVE. FRED C. FANTZ, Webster Groves, Mo., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Mar. 7, 1927. Serial No. 173,430. 2 Claims. (Cl. 251—107.)



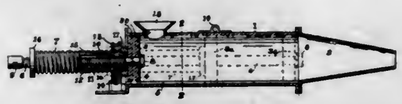
2. A valve adapted to be seated in the opening from a main conduit into a plurality of branches, comprising a valve stem and a deflecting valve carried thereby, the latter having a segmental arc shaped body portion, increasing in thickness inwardly from both side edges and tapering to an intermediate meeting point.

1,767,659. SHEET-METAL BUMPING-OUT TOOL. WILLIAM FERGUSON, Flint, Mich. Filed May 4, 1928. Serial No. 275,218. 14 Claims. (Cl. 81—15.)



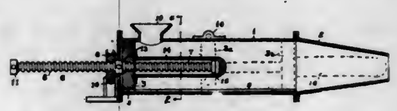
11. A metal bumping out tool comprising a handle, an extension projecting from one end thereof at an obtuse angle, and a curved anvil projecting outwardly from said extension at an inclination towards the line of the handle and having one of its faces plane.

1,767,660. MUD GUN. JAMES S. FRASER, Warren, Ohio. Filed May 8, 1929. Serial No. 361,319. 3 Claims. (Cl. 266—42.)



1. In a mud gun, a cylinder, a piston having non-rotary travel therein, a non-rotary screw carried by the piston, a rotary traveling member having longitudinal internal threads to receive the threads on the screw and having also external threads, a non-traveling nut threaded on the said external threads, means for clutching the traveling member to the nut at the limit of travel of the said member in each direction, and means for clutching the piston to the traveling member at the limit of travel of the piston in each direction.

1,767,661. MUD GUN. JAMES S. FRASER, Warren, Ohio. Original application filed May 8, 1929, Serial No. 361,319. Divided and this application filed Sept. 30, 1929. Serial No. 396,309. 2 Claims. (Cl. 266—42.)



1. In a mud gun, a traveling member having two threaded portions, a non-rotary piston having threaded connection with one portion, a cylinder in which the piston is reciprocable, a rotary device having threaded connection with the other threaded portion of the said member, means for rotating the said device, and means for clutching the said traveling member to the rotary device at the limit of travel of the said member in either directon, and for clutching the piston to the traveling member at the limit of travel of the piston in either direction.

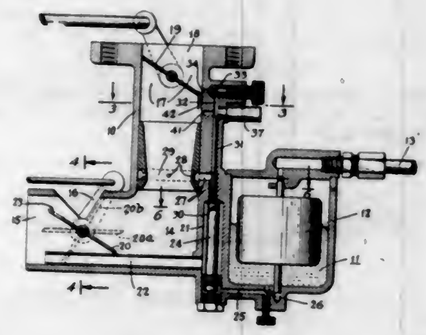
1,767,662. PROCESS OF TREATING CELLULOSE TO PRODUCE VULCANIZED FIBER AND THE LIKE. ROBERT R. FULTON, Wilkinsburg, Pa., assignor to The Koppers Company, a Corporation of Delaware. Filed Mar. 16, 1927. Serial No. 175,932. 7 Claims. (Cl. 8—20.)

1. The process of gelatinizing cellulosic material which comprises treating it with a solution of calcium thiocyanate and formaldehyde at substantially atmospheric temperatures.

1,767,663. PROCESS OF TREATING FABRIC. ROBERT R. FULTON, Pittsburgh, Pa., assignor to The Koppers Company, a Corporation of Delaware. Filed June 7, 1927. Serial No. 197,236. 6 Claims. (Cl. 91—68.)

1. The process of treating fabric which comprises spreading cellulosic pulp over the fabric and then effecting a gelatinization of the pulp.

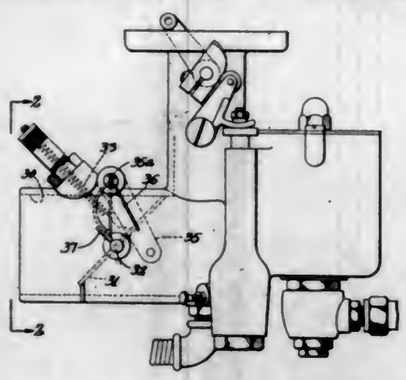
1,767,664. CARBURETOR. EDWARD F. GEIGER, Binghamton, N. Y. Filed Apr. 30, 1926. Serial No. 105,668. 4 Claims. (Cl. 261—41.)



4. A carburetor comprising a conduit with a treadle, valve therein and having a mixing chamber adjacent the throttle, means for supplying mixture above the throttle at idling speeds, said means comprising a passage with means for supplying both fuel and air thereto, means for supplying mixture to the mixing chamber for running with open throttle, said means comprising a supplementary fuel passage, means for supplying fuel and air to said passage, ports leading from said last mentioned passage to the mixing chamber, and means for supplying progressively greater quantities of auxiliary air as the throttle is opened, said means comprising air parts in the conduit disposed to be directly traversed and uncovered by the edge of the throttle to afford an air passage above the throttle of progressively greater size as the throttle opens.

1,767,665. CARBURETOR. EDWARD F. GEIGER, Binghamton, N. Y. Original application filed Mar. 17, 1927, Serial No. 176,097. Divided and this application filed Nov. 28, 1927. Serial No. 236,032. 9 Claims. (Cl. 187—139.)

1. An air choke for a carburetor comprising a valve member which is spring restrained against a pivotal opening movement under the influence of engine suction, a pivot shaft mounting for said valve member, a manipulative member, an arm fixed to the aforesaid pivot shaft and a yielding blade-like spring intermediate the manipulative member and the said arm for effecting varying degrees of restraint to the opening movement of the valve under the control of the manipulative member.



1,767,666. SOCK. FLORENCE L. GILBERT, Los Angeles, Calif. Filed June 22, 1927. Serial No. 200,527. 8 Claims. (Cl. 2—239.)

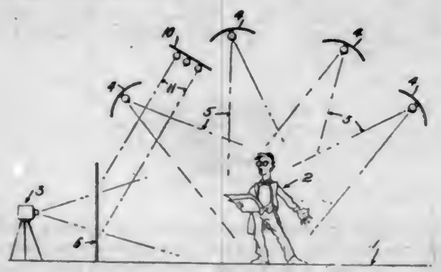


1. In combination, a sock, a heel reinforcing member having wing portions to be wrapped around the ankle, and fastening means therefor including a bow for ornamental purposes, said sock being also provided around its top with ornamental ruffles.

1,767,667. GERMICIDAL COMPOUND. JAMES M. GRAY, Webster Groves, Mo. Filed Oct. 11, 1926. Serial No. 141,036. 8 Claims. (Cl. 161—60.)

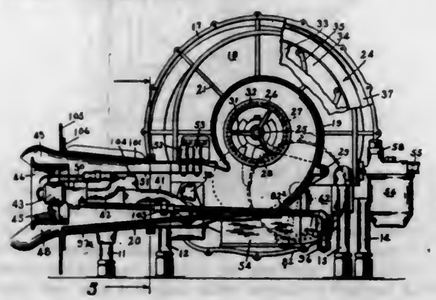
7. A medicinal preparation comprising a solution of zinc iodide, resublimed iodine, glycerine, water and alcohol, mixed with copper sulfate.

1,767,668. MEANS AND METHOD FOR TAKING MOVING PICTURES. DAVID WARK GRIFFITH, New York, N. Y. Filed Apr. 12, 1926. Serial No. 101,299. 2 Claims. (Cl. 88—16.)



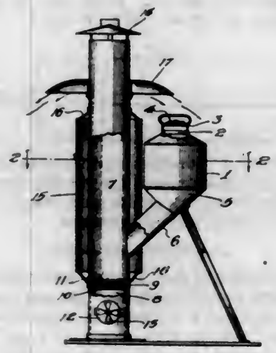
2. The process of making moving pictures which consists in positioning a screen having an image thereon which is invisible unless oblique lights be thrown on the screen, illuminating an actor by a series of lights, illuminating with oblique rays the screen by an independent light source, positioning the camera before the screen and substantially in alignment with the actor and exposing a previously unexposed sensitive film within the camera and before the illuminated screen.

1,767,669. OIL BURNER. FORRESTER L. HAMMER, Branford, Conn. Filed May 23, 1927. Serial No. 193,624. 1 Claim. (Cl. 158—76.)



In an oil burner, a base, a burner nozzle connected to the base, a housing within which the nozzle is mounted, an oil line leading to said nozzle comprising a controlling valve mounted on the base, and a pipe leading downwardly from the base to a point within the housing adjacent the nozzle and providing means whereby leakage oil may flow by gravity from the base to the nozzle to be burned.

1,767,670. ORCHARD HEATER. LYMAN C. HUFF, Chicago, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed June 18, 1927. Serial No. 199,643. 4 Claims. (Cl. 126—59.5.)



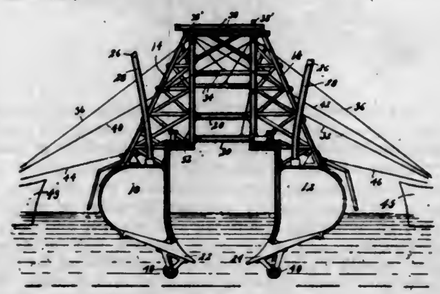
1. An article of manufacture comprising a vertically disposed cylindrical tube of uniform diameter mounted on a flat base, a grate near the bottom of said tube, a second tube of larger diameter coaxial therewith and extending upward above said grate, a third straight cylindrical tube of smaller diameter passing through said second tube terminating in the first tube and inclined upwardly therefrom and means for supporting the outer end of said inclined tube from said base.

1,767,671. MOUNTING AND SUPPORTING MEANS FOR TIME INDICATORS. BENJAMIN F. HUTCHES, Jr., Allendale, N. J. Filed Oct. 12, 1927. Serial No. 225,637. 9 Claims. (Cl. 58—56.)

1. The combination of a time indicator arranged with setting means therefor, a supporting bracket on which the indicator is adjustably mounted and adapted to be adjusted to lie in contiguous relation to the bracket with the setting means free to manipulate the same to set the indicator, and to be adjusted to extend laterally and in the plane of the bracket, and means to releasably retain the indicator in said latter position and arranged to enclose and to prevent manipulation of the indicator setting means in said position of the indicator.

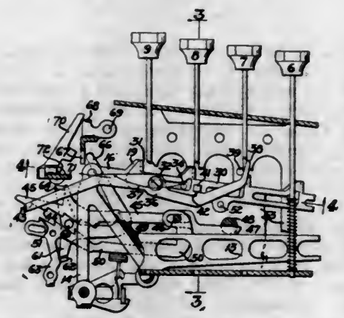


1,767,672. DEVICE FOR RAISING AND FOR BUOYING UP SHIPS. JOHN C. HILLS, Melrose, Mass. Filed Apr. 3, 1926. Serial No. 99,471. 6 Claims. (Cl. 114—53.)



1. A caisson for raising ships comprising a pair of upright levers; jaws thereon for engaging a hull; a fulcrum beam pivotally connecting the levers and spacing them apart, to operate on opposite sides of the hull; beams extending laterally from the levers, across the hull above the fulcrum beam and adapted to transmit force applied to said lateral beams for effecting closing of the jaws; and means attached to said jaws adapted to render them buoyant or not at will.

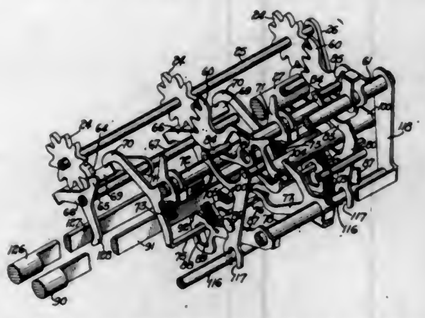
1,767,673. KEY LOCK FOR CALCULATING MACHINES. ALLEN A. HORTON, Plymouth, and CHARLES MARTI, Livonia Township, Wayne County, Mich., assignors to Burroughs Adding Machine Company, Detroit, Mich., a Corporation of Michigan. Filed Mar. 5, 1928. Serial No. 259,168. 25 Claims. (Cl. 235—130.)



20. The combination in a key driven calculator of depressible keys, means urging said keys toward a normal

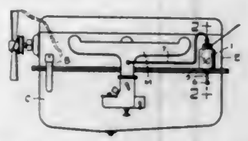
undepressed position, actuating mechanism operated by depression of the keys for actuating a counter, and means controlled by said actuating mechanism acting to lock all of said keys against depression when one of the keys is depressed before it has been allowed to fully return to normal from a prior depression.

1,767,674. TRANSFER MECHANISM FOR CALCULATING MACHINES. ALLEN A. HORTON, Plymouth, Mich., assignor to Burroughs Adding Machine Company, Detroit, Mich., a Corporation of Michigan. Filed June 16, 1928. Serial No. 285,806. 8 Claims. (Cl. 235—133.)



1. In a transfer mechanism for a calculating machine having a plural pinion counter and a means for conditioning the machine for addition or subtraction; a transfer member adapted to engage one of the pinions of the counter, said member being movable in one direction to effect a carry and in the opposite direction to effect a borrow, an actuating means for said member acting in a fixed direction, and connections between said actuating means and said transfer member for transferring the actuating force of said actuating means to said member, said connections being controlled by the means for conditioning the machine for addition or subtraction and being movable to one position to cause said actuating means to act on said transfer member to move it in one direction and to another position to cause said actuating means to act on said transfer member to move it in the opposite direction.

1,767,675. MEANS FOR COOLING ENGINES AND PURIFYING LUBRICANTS. JOHN FREDERICK HOWARTH, New York, N. Y. Filed Feb. 27, 1928. Serial No. 257,324. 10 Claims. (Cl. 123—196.)

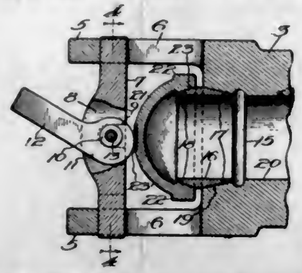


1. Apparatus of the character described comprising a condensing chamber, a connection from an intake part thereof to an engine crank case, and a connection from a discharge part of the casing to the engine intake manifold, and means for controlling vapor flow through the condensing chamber, said means being under control of pressure in the engine intake manifold.

1,767,676. PROCESS AND COMPOSITION FOR THE GENERATION OF CHLORINE. GERALD J. HOWITZ, New York, N. Y., assignor of one-half to Le Roy Seidell, Plainfield, N. J. Filed Aug. 11, 1924. Serial No. 731,491. 12 Claims. (Cl. 23—6.)

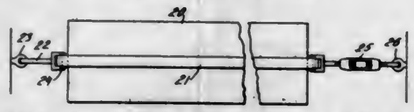
3. The process of generating chlorine, which comprises the treatment of an oxidizing agent and a chloride with an organic acid of vegetable origin.

1,767,677. RETURN BEND FITTING. LYMAN C. HUFF, Chicago, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Original application filed June 19, 1925, Serial No. 38,295. Divided and this application filed June 24, 1929. Serial No. 373,395. 3 Claims. (Cl. 137—76.)



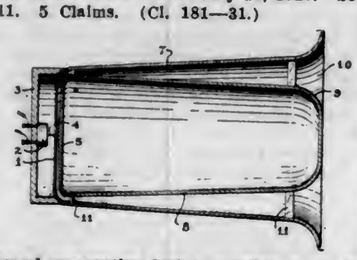
1. A return bend fitting for a tubular oil still comprising a header and plurality of openings in one side of said header adapted to receive the ends of still tubes, a second series of openings in said header, the openings of said second series being diametrically opposed to said first mentioned openings, an annular open ended member having inwardly tapered sides adjacent one end thereof and inwardly tapered sides adjacent the other end thereof inserted into each of said second series of openings, plugs adapted to fit over the tapered sides at one end of each of said open ended annular members, a plurality of pairs of projections carried by said header, each pair of projections being positioned in alignment with one of said series of openings, a removable bar adapted to cooperate with each pair of projections, a cam lever carried by each removable bar said cam levers being adapted to bear against said plugs and clamp the same in position.

1,767,678. SOUNDING BOARD. MILLER REESE HUTCHISON, West Orange, N. J., assignor, by mesne assignments, to Acoustic Products Company, New York, N. Y., a Corporation of Delaware. Filed Apr. 1, 1927. Serial No. 180,182. 6 Claims. (Cl. 84—192.)



4. In a resilient sounding board formed of fibrous material, musically inert means for varying the longitudinal tension of the board to render said board responsive to a plurality of sound wave frequencies.

1,767,679. TRUNCATED HORN SPEAKER HAVING PLURALITY OF CHAMBERS. MILLER REESE HUTCHISON, West Orange, N. J., assignor, by mesne assignments, to Acoustic Products Company, New York, N. Y., a Corporation of Delaware. Filed May 24, 1927. Serial No. 193,811. 5 Claims. (Cl. 181—31.)



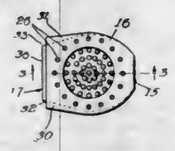
1. A sound propagating device comprising a substantially flat diaphragm and a cone shaped disk spaced therefrom to form a substantially disk shaped space having a greater cross section at the periphery thereof than at the center.

1,767,680. PRESSURE DEVICE IN DISPENSING FLUIDS AND SEMIFLUIDS. ALBERT E. HUTT, New Rochelle, N. Y. Filed Oct. 1, 1929. Serial No. 396,457. 12 Claims. (Cl. 221—74.)



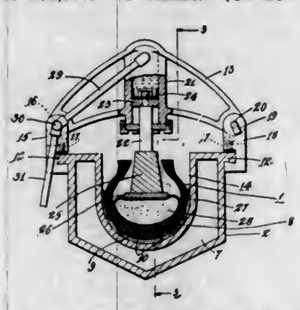
1. A device of the character stated comprising a base, a casing detachable from said base and having its lower end hermetically sealed with respect to said base, said casing having a space therein to receive a fluid or semi-fluid container, a container having a fixed top within said casing, an exit pipe fixed in said casing for placing the contents of said container in communication with the outside of said casing, and means for raising the pressure within said casing and inside of said container simultaneously and equally, the pressure so raised being used directly on the contents of said container to expel said contents therefrom.

1,767,681. END-CURL FASTENER. MAE C. KAPUSTKA, Chicago, Ill. Filed Aug. 20, 1929. Serial No. 356,682. 11 Claims. (Cl. 132—40.)



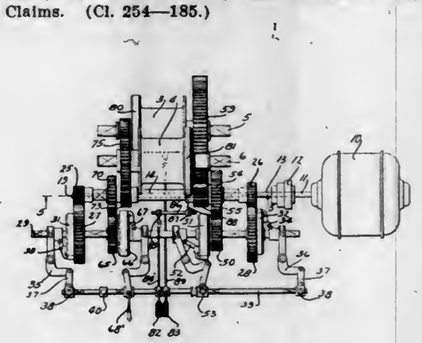
1. An end curl fastener comprising two separable clamping members provided with co-operating substantially circular telescoping portions, said telescoping portions being adapted to receive an end curl therebetween, and means for holding said members in clamping position upon a ringlet or curl of hair.

1,767,682. VULCANIZING APPARATUS. JOHN L. KELLY, Los Angeles, Calif. Filed June 26, 1928. Serial No. 288,369. 14 Claims. (Cl. 18—18.)



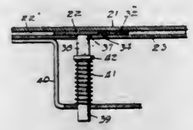
14. In apparatus for vulcanizing tires or the like, the combination of an arcuate mold having a vulcanizing socket extending along the same, a block of non-conducting material located at each end of the arcuate mold and projecting inwardly beyond the inner face of the vulcanizing socket, a matrix in the form of a liner for the said socket disposed on the face of the socket with its ends adjacent said blocks, a yielding cushion extending along the vulcanizing socket and adapted to rest upon the inner face of the tire, a plurality of hydraulic presses supported on said mold and having rams movable into the socket, a block corresponding to each ram and capable of being shifted out of line with the axis of its corresponding ram for imparting pressure to said cushion, and a pressure equalizing plate located between the blocks and the cushion for distributing the pressure of the blocks against the cushion.

1,767,683. HOIST MECHANISM. FRED T. KEAN, Milwaukee, Wis. Filed Jan. 16, 1929. Serial No. 332,761. 6 Claims. (Cl. 254—185.)



1. In a mechanism of the character described, a pair of drums, and means for selectively driving the drums at variable speed and power ratios and comprising a motor driven drive shaft, a fixed sleeve shaft in which the drive shaft is rotatably supported, a countershaft, change speed gearing for driving the countershaft, and drum selection gearing for driving the drums from the countershaft and including gear wheels rotatably mounted on the fixed sleeve shaft.

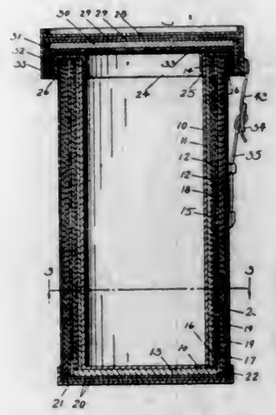
1,767,684. VENDING MACHINE. DAVE LAZAR, Brooklyn, N. Y. Filed Dec. 21, 1927. Serial No. 241,534. 1 Claim. (Cl. 194—93.)



In a coin operated vending machine, a coin carrier comprising a bar having a coin slot opening out on one side of the carrier, a pivoted lever projecting into said slot and having a stepped end to embrace the edge of the coin and prevent movement of the carrier unless a coin of the proper gauge is being carried, an underplate upon which the carrier and coin are supported, said underplate having two openings disposed in the overlying path of movement of the coin one opening being disposed short of the said means to engage the carrier and of a diameter slightly smaller than that of the proper coin to allow small devices to drop through the coin slot and opening, a strap spaced from the under plate and provided with an opening registering with the second opening in the said under plate, an upright shouldered spindle arranged in said alined open-

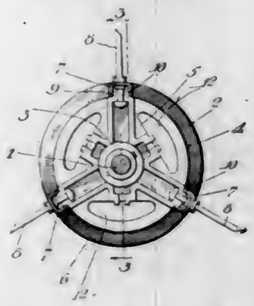
ings and having an end projecting through the second opening in the underplate and a spring supporting the spindle and abutting the shoulder thereof at one end and the strap at the other, said spring being arranged to project the end of said spindle into an annular device disposed in the coin slot to prevent further movement of the carrier.

1,767,685. SANITARY ICELESS SHIPPING CONTAINER. ELMER LENÉ, Lexington, Nebr. Filed June 26, 1928. Serial No. 288,446. 3 Claims. (Cl. 220—11.)



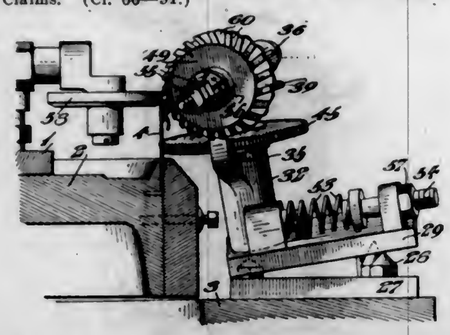
1. A container comprising an inner receptacle, layers of insulating material therearound, said layers being comprised of materials of porosity different one from the other, and a ring at the top of the receptacle covering the ends of and securing said material to the receptacle, and a cover adapted to be resiliently fitted over and around the outside of said ring, said cover being formed in the shape of an inverted cup and comprising a rigid core, a resilient covering on the underside of the core, an annular band fixed to and depending from said core, and layers of nonconducting material on both sides of said band, the total combined horizontal thickness of said material and band being sufficient to space the outer annular face of said cover at a substantial distance from the vertical wall of said container.

1,767,686. EXPANSIBLE-BEATER WHEEL. DEAN J. LITCHFIELD, Waterloo, Iowa. Filed Apr. 20, 1928. Serial No. 271,448. 3 Claims. (Cl. 275—3.)



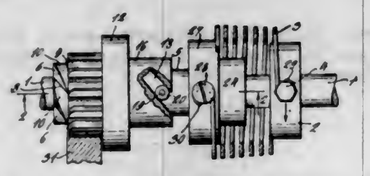
1. In a beater wheel, a shaft, spaced heads on the shaft, bars having thereon laterally projecting teeth, and a plurality of sets of seats on the heads for receiving and supporting the ends of said bars, said sets of seats being located at different radial distances from the shaft.

1,767,687. LOOP CUTTING ATTACHMENT FOR CIRCULAR SPRING BEARD KNITTING MACHINES. LAWRENCE F. MCKENNA and JOHN J. MCKENNA, Abington, Pa. Filed Aug. 19, 1929. Serial No. 386,764. 8 Claims. (Cl. 66—91.)



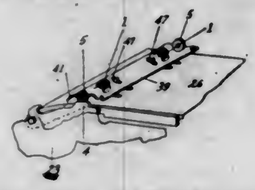
1. In a device of the character stated, a horizontally adjustable cutter support, means for adjusting the angular disposition of said support, a pair of cutters carried by said support, a press roll coacting with said cutters, and means for simultaneously rotating said cutters independently and in different directions.

1,767,688. MOTOR STARTER. HERBERT L. MEEDER, Denver, Colo., assignor of two-fifths to Benjamin F. Price, Denver, Colo. Filed July 18, 1929. Serial No. 379,214. 2 Claims. (Cl. 74—7.)



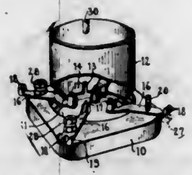
1. A power operated motor starter comprising, in combination, a driving member adapted to be rotated, a pinion mounted for rotation thereon, a sleeve carried by the driving member, the inner surface of the sleeve having a helical groove, a pin projecting outwardly from the driving member for engagement with the sides of the groove, one end of the sleeve having a radial flange at one end, the pinion having a circular recess at one end which is adapted to receive the flange of the sleeve, a removable spring ring for holding the flange in the recess, friction means between the pinion and the flange, and interengaging lugs on the pinion and the driving member for holding them against relative rotation when the pinion is in a predetermined position.

1,767,689. MANIFOLDING MACHINE. ALBERT W. METZNER, Dayton, Ohio, assignor to John Q. Sherman, Dayton, Ohio. Filed July 22, 1929. Serial No. 380,170. 7 Claims. (Cl. 282—16.)



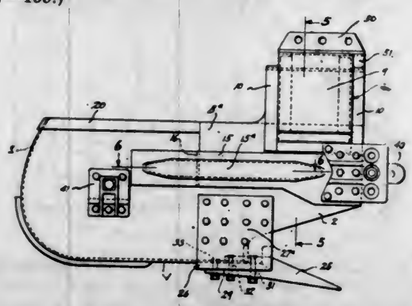
1. In a manifolding register, the combination of a disk for feeding paper, a writing table over which paper to be fed may pass, a pressure element to coact with said disk in feeding the paper, an aligning pin moving with said disk, said disk being cut away to release the paper during the period of action of said aligning pin, and means on said pressure element and said table to hold said pressure element out of contact therewith during the operation of said aligning pin.

1,767,690. VACUUM-TUBE SOCKET. GEORGE J. MEUER and WILLIAM C. STEVENS, Milwaukee, Wis., assignors, by mesne assignments, to Cutler-Hammer, Inc., Milwaukee, Wis., a Corporation of Delaware. Filed Sept. 13, 1924. Serial No. 737,516. 8 Claims. (Cl. 173—328.)



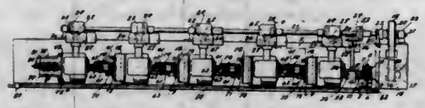
1. A vacuum tube socket comprising a molded insulating base having a recess in the top surface thereof to provide a shoulder, a separately molded insulating shell adapted to rest on said shoulder, cooperative engaging portions on said shell and base to properly position the same and prevent relative rotary movement thereof, said shell having a plurality of circumferentially spaced openings therein adjacent to said base, and a plurality of combined contact terminal and clip members secured to said base and extending inwardly through the openings in said shell, said members being adapted to positively engage the walls of said openings to thereby hold said base and shell against relative longitudinal movement.

1,767,691. DRAG-LINE BUCKET. HOLGER L. MITCHELL, Milwaukee, Wis., assignor to Harnischfeger Corporation, Milwaukee, Wis., a Corporation of Wisconsin. Filed Dec. 20, 1926. Serial No. 155,785. 13 Claims. (Cl. 37—135.)



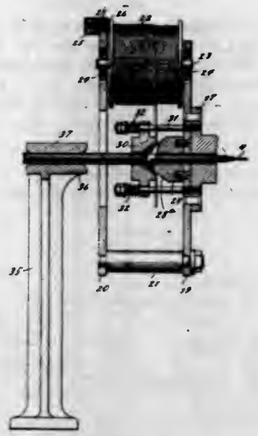
1. An excavating bucket comprising a bucket body having side walls and a tubular bracing bridge extending above and between the side walls and positively and rigidly connected thereto, said tubular bracing bridge being made up of spaced plates and connecting pieces extending between and secured to said plates.

1,767,692. FLEXIBLE-SHAFT-MAKING MACHINE. LOUIS H. MORIN, New York, N. Y. Filed July 29, 1927. Serial No. 209,205. 8 Claims. (Cl. 140—130.)



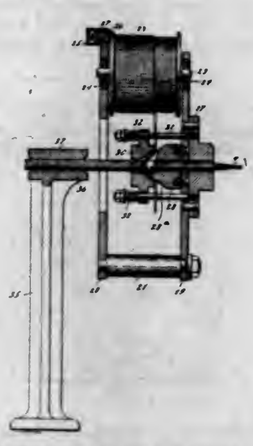
1. In a flexible shaft making machine, means for continuously feeding a core wire, said feeding means comprising a plurality of ball chucks operable to grip the core wire when moved in one direction only and means for actuating said chucks in sequence to cause them to alternately grip the core wire and feed it continuously through the machine.

1,767,693. FLEXIBLE-SHAFT-MAKING MACHINE. LOUIS H. MORIN, New York, N. Y. Filed Apr. 13, 1928. Serial No. 269,719. 9 Claims. (Cl. 117—20.)



3. A flexible shaft making machine comprising a plurality of successively disposed rotative winding heads each including an axial support for a core wire and a support for a spool of wire, means to rotate the several heads simultaneously to cause each of them to wind a layer of wire around the core wire, and a conical member associated with each head having an axial passage therethrough constituting part of the core wire support and so disposed as to have wire from the spool of its head drawn obliquely across the surface of the cone prior to winding upon the core wire, the conical surface being uninterrupted and of sufficient angle to develop a propelling force longitudinally upon the core wire and thereby cause the core wire to move continuously through its head.

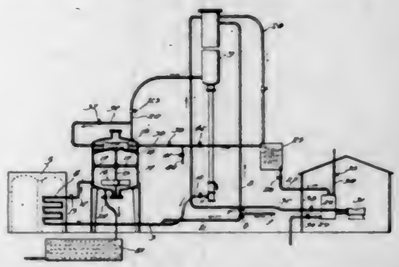
1,767,694. METHOD OF MAKING FLEXIBLE SHAFTING. LOUIS H. MORIN, New York, N. Y. Original application filed Apr. 13, 1928, Serial No. 269,719. Divided and this application filed Nov. 13, 1928. Serial No. 319,106. 2 Claims. (Cl. 117—20.)



1. The method of making flexible shafting having a core wire and a plurality of layers of wire successively

wound thereon consisting in passing the core through the axes of a plurality of cones having an apex angle of at least 45° and disposed in succession and rotating a wire strand about the axis of each cone and thereby winding it about the core and simultaneously pulling it obliquely about the conical surface and utilizing the downward components of the force of the wires thus created to advance the core through the cones.

1,767,695. PROCESS AND APPARATUS FOR CRACKING PETROLEUM OIL. JACQUE C. MORRELL and HARRY P. BENNER, Chicago, Ill., assignors to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Feb. 1, 1923, Serial No. 616,371. Renewed June 4, 1929. 4 Claims. (Cl. 196—68.)

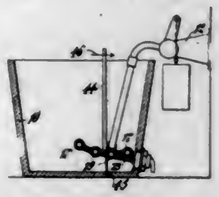


1. In a device of the class described, the combination with a tube and drum oil cracking apparatus, of mechanical agitating means positioned in said drum, means for utilizing the expansive force of the vapors evolved from the oil in said drum for positively driving said mechanical agitating means to maintain the liquid oil in the expansion chamber in a turbulent condition and prevent substantial deposition of carbon therein and means for removing the vapors used to drive said agitating means from said drum.

1,767,696. SYNTHETIC RESIN AND METHOD OF MAKING THE SAME. EMIL E. NOVOTNY, Philadelphia, Pa., assignor to John Stogdell Stokes, Huntingdon Valley Post Office, Pa. Filed Aug. 14, 1926. Serial No. 129,282. 3 Claims. (Cl. 260—4.)

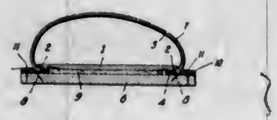
3. A potentially reactive water-insoluble synthetic resin which will not become infusible at ordinary temperatures, comprising a condensation product formed by the reaction, under heat, of resorcin and paraformaldehyde in the proportions of not more than one-half mol. of paraformaldehyde to one mol. of resorcin, and having additional paraformaldehyde added thereto as a hardening agent.

1,767,697. OUTLET COUPLING DEVICE FOR THERAPEUTIC BATH COILS. RICHARD PABST, Wurzburg, Germany. Filed Apr. 18, 1929, Serial No. 356,030, and in Germany Oct. 18, 1927. 6 Claims. (Cl. 257—200.)



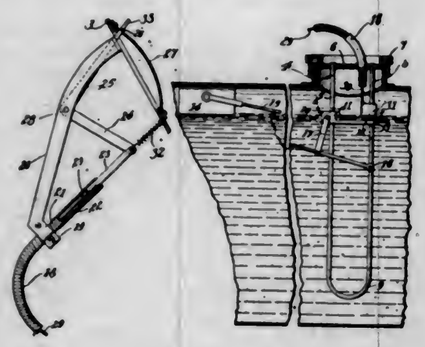
1. A device for use in a bath receptacle to provide an outlet from a steam coil therein, comprising a discharge pipe with a self-closing valve fixed to the receptacle, and a self-closing valve on the coil outlet arranged to be pressed against said first mentioned valve to cause the opening movement of both of said valves whereby to allow the discharge of liquid from said coil outlet to said discharge pipe, said coil being movable toward the discharge pipe so as to provide an application of force for effecting the opening movement of said valves.

1,767,698. SHOE. LYMAN O. PICKETT, Binghamton, N. Y., assignor of one-half to Percy W. Valentine, New York, N. Y. Filed Sept. 18, 1928. Serial No. 306,759. 10 Claims. (Cl. 36—16.)



1. A stitch-down shoe consisting of an inner sole cut to the exact size of the last and having a flap formed by making an outwardly extending cut in the marginal portion of the inner sole and outwardly turning the flap thus formed, a lining lasted to the edge of the inner sole, an outer sole, a welt, and an upper preliminarily lasted to the outwardly turned flap and to the outer sole and permanently secured to the flap, the outer sole and the welt.

1,767,699. LIQUID-LEVEL INDICATOR. PERCY F. RICE, Tustin, Calif. Filed Sept. 10, 1923. Serial No. 661,839. 7 Claims. (Cl. 73—82.)



6. In a liquid level indicating gage, the combination of a float, a rider, means for guiding the rider to move up and down in a substantially straight line, means connecting the float with the rider and operating to give the rider a reduced amount of movement compared with the movement of the float, a scale and a hand actuated pointer cooperating with the scale, a member, means connecting said member with the pointer, means for guiding said member to move downward along the path of movement of the rider, said member operating to engage the rider, said rider being constructed in the form of a clutch and operating when engaged by said member to maintain itself fixed on the guide means to limit the movement of the pointer.

1,767,700. DEVICE FOR GRINDING VALVES OR THE LIKE. AUSTIN RIEGEL, Hayward, Calif. Filed Apr. 22, 1929. Serial No. 357,063. 2 Claims. (Cl. 51—29.)

1. A grinding device comprising a tube, a shaft movably located in the tubes having a plurality of right hand spiral grooves and a plurality of left hand spiral grooves therein; the said left hand spiral grooves intercepting the right hand spiral grooves at points apart from the points



where the right hand grooves intercept the left hand spiral grooves, and slidable means carried by the tube and located inside the grooves.

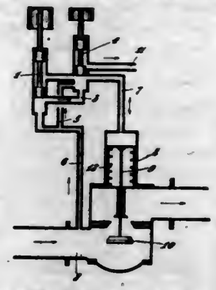
1,767,701. INTERNAL-COMBUSTION ENGINE OF THE SOLID-FUEL INJECTION TYPE. WILHELM RIEHM, Augsburg, Germany, assignor to Maschinenfabrik Augsburg-Nuernberg, Aktiengesellschaft, Augsburg, Germany, a German Corporation. Filed Oct. 12, 1925, Serial No. 62,040, and in Germany Oct. 25, 1924. 2 Claims. (Cl. 123—32.)



1. An internal combustion engine of the character described comprising, in combination, a cylinder having a combustion space therein, means for introducing combustion air into said combustion space and for imparting rotary motion thereto, means for injecting a heavy combustible fuel into said combustion space, and means for injecting a light ignition fuel into said combustion space in a separate but closely adjacent stream in small angular advance of said combustible fuel, whereby the rotating combustion air carries said ignition fuel into contact with said combustible fuel shortly after injection and during the time of ignition of said ignition fuel.

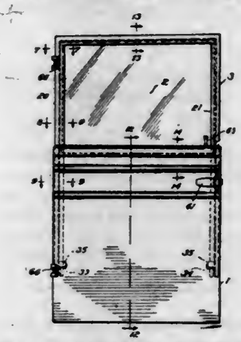
1,767,702. REGULATING VALVE. ALWIN RUCKSTUHL, Winterthur, Switzerland, assignor to Swiss Locomotive and Machine Works, Winterthur, Switzerland, a Corporation. Filed May 6, 1929, Serial No. 360,649, and in Germany May 10, 1928. 1 Claim. (Cl. 137—153.)

The combination with a primary conduit, a valve for controlling the same, a spring tending to close said valve, and a cylinder and piston for opening said valve of a pipe opening at one end into said primary conduit, a piston valve controlling the other end of said pipe, a second pipe having one end connected to said cylinder, a pressure-equalizing duct connecting said pipes together, and a second piston valve arranged to control the connection



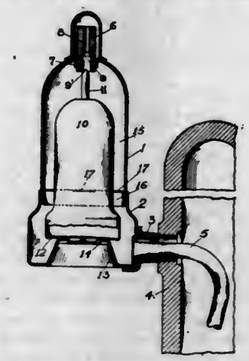
of said pipes one with the other, and to close and open said pressure-equalizing duct, and to place said second pipe into communication with the atmosphere.

1,767,703. DOOR. HERMAN C. RUSCH, Milwaukee, Wis., assignor to Seaman Body Corporation, Milwaukee, Wis., a Corporation of Wisconsin. Filed June 20, 1925. Serial No. 38,398. 24 Claims. (Cl. 296—44.)



1. A window frame having a side frame member formed with flanges to define a channel adapted for guiding an edge of a window, said side frame member also having attaching portions at least one of which is positioned and adapted to engage the lap portion of the automobile door whereby to serve also as a reinforcement for the lap portion.

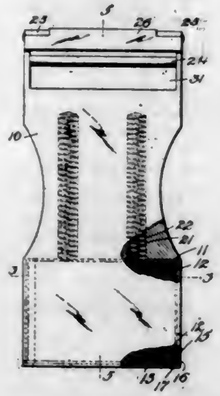
1,767,704. AIR VALVE. WILLIAM A. RUSSELL, Yonkers, N. Y., assignor to W. A. Russell & Co., New York, N. Y., a Corporation of New York. Filed Apr. 30, 1927. Serial No. 187,735. 1 Claim. (Cl. 137—122.)



In an air valve, the combination of a single walled casing and means for securing it to a radiator, an

elongated valve in the casing spaced from the inner walls thereof to form an air passage, a ring having a vertical flange secured to the inner walls of the casing, projecting lips extending across the air passage with wide air openings between the projections and freely engaging the valve, and an air vent in the casing controlled by the valve.

1,767,705. SHAVING UNIT. JACOB SCHICK, East Orange, N. J., assignor to Magazine Repeating Razor Company, a Corporation of New Jersey. Filed May 19, 1926. Serial No. 110,109. 6 Claims. (Cl. 30—12.)



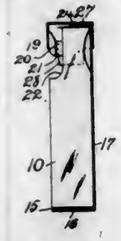
1. A box-like receptacle slitted at the bottom and adapted to hold a stack of blades on said bottom whereby only one blade at a time can be extracted through the slit, and a cover to fit over the end of the receptacle and having a lip of a size to enter the slit whereby a blade can be partially projected from the receptacle.

1,767,706. SAFETY RAZOR. JACOB SCHICK, Stamford, Conn., assignor to Magazine Repeating Razor Company, a Corporation of New Jersey. Filed Feb. 26, 1927. Serial No. 171,090. 4 Claims. (Cl. 30—12.)



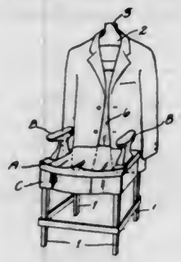
1. A magazine razor comprising a handle with a shaving head to receive blades from the handle, the handle being recessed to receive a clip of blades, a blade ejecting slide in the handle and having its end open and forming a grip, a clip spring and remover within the slide and having a grip within the grip of the slide, and manually operable holding means on the grip of the spring and the handle, the slide having an open end to allow the passage of the grip of the clip spring and having its grip arranged to conceal the holding means when the slide is in normal position.

1,767,707. COMBINED SALES PACKAGE AND RAZOR. JACOB SCHICK, Stamford, Conn., assignor to Magazine Repeating Razor Company, a Corporation of New Jersey. Filed Feb. 26, 1927. Serial No. 171,092. 7 Claims. (Cl. 30—12.)



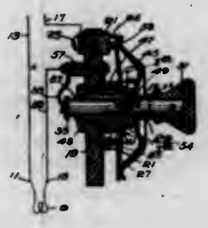
1. An article of the kind described comprising a casing with a recess for blades and a guard for a blade, and a plate on the casing and extending across the bottom as a support for the blades in the recess and extending across the top as a spring means for holding a blade on the guard.

1,767,708. WARDROBE CHAIR. ROY B. SIMPSON, St. Louis, Mo. Filed May 2, 1928. Serial No. 274,467. 2 Claims. (Cl. 155—188.)



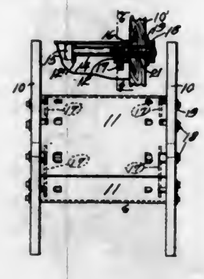
1. A man's wardrobe chair, provided with a back equipped with a coat form on which a coat is adapted to be positioned, and a seat whose rear edge is partly separated from the back of the chair by slots or spaces that are adapted to receive the front portions of the coat positioned on the coat form.

1,767,709. ELECTRIC SWITCH. RAYMOND D. SMITH, Pleasantville, N. Y., assignor, by mesne assignments, to Tremont Products Corporation, Boston, Mass., a Corporation of Massachusetts. Filed July 20, 1922. Serial No. 576,322. 14 Claims. (Cl. 260—12.)



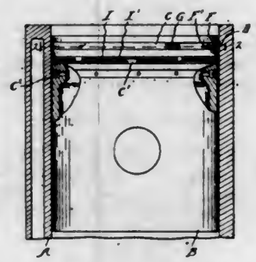
1. A circuit breaker embodying in combination, a circuit governing contact, means to store up and liberate a force for impelling said contact including a thermostatic plate adapted to impel said contact by passing abruptly from one to the other of two oppositely flexed conditions responsive to change in temperature, and a circuit control handle arranged to operate said contact by acting mechanically upon said plate.

1,767,710. SECTIONAL BARREL FOR REELS. RAYMOND D. SMITH, Pleasantville, N. Y. Filed Feb. 27, 1926, Serial No. 91,155. Renewed May 11, 1928. 19 Claims. (Cl. 242—115.)



1. A sectional sheet metal drum for reels embodying in combination, a plurality of sheet metal sections of common cylindrical curvature means to secure said sections rigidly to one another to form a hollow cylindrical drum, together with means carried at the cylindrical ends of said drum for securing the reel head rigidly thereto.

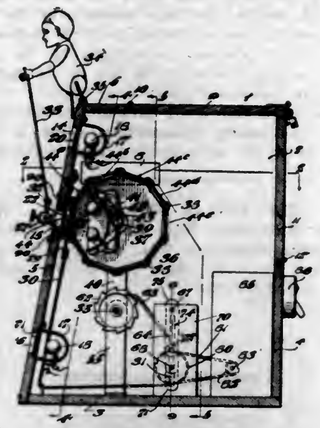
1,767,711. PISTON RING. DEAN M. SOLENBERGER, Cleveland, Ohio, assignor to The Simplex Piston Ring Company of America, Inc., a Corporation of Ohio. Filed Oct. 29, 1928. Serial No. 315,868. 4 Claims. (Cl. 74—109.)



1. A sealing ring comprising a trans-split ring member grooved in its inner peripheral face to form a U-shaped cross section and a circumferentially expansible flexible annular expander engaging said groove and subjecting said ring member to a distributed radial outward pressure as the resultant of its circumferentially expansive force, said expander being adjustable in circumferential length to alter its tension.

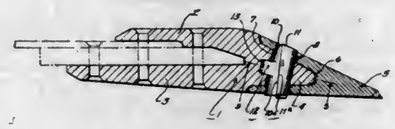
1,767,712. ADVERTISING DEVICE. DAVID SOLODAR, Ephrata, Pa. Filed Mar. 28, 1929. Serial No. 350,512. 12 Claims. (Cl. 40—33.)

1. In a device of the character stated, a casing having an aperture in a wall thereof, a shutter for intermittently closing said aperture, a drum rotatably mounted in said casing in registration with said aperture, means for intermittently rotating said drum, means for simultaneously



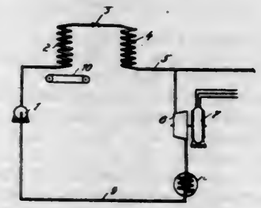
and synchronously actuating said shutter and said drum and means for varying the speed of rotation of said drum independently of the actuation of said shutter.

1,767,713. EXCAVATOR TOOTH. ERNEST RICHARD STANDFUSS, Milwaukee, Wis., assignor to Harnischfeger Corporation, Milwaukee, Wis., a Corporation of Wisconsin. Filed Nov. 25, 1927. Serial No. 235,453. 8 Claims. (Cl. 37—142.)



3. A tooth for use with excavating equipment including a body provided with a shank, a point having a socket in which the shank is snugly fitted, said shank having a transverse opening, said point having an opening intersecting the socket thereof and adapted to be alined with the opening in the shank, cooperable keys extending through said openings and engaging the point and shank respectively, one of the keys having means cooperable with the shank for holding it against lengthwise movement through the openings, and means for releasably locking the other key in position.

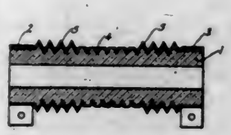
1,767,714. STEAM POWER PLANT FOR HIGH PRESSURE. WALDEMAR STENDER, Berlin-Charlottenburg, Germany, assignor to Siemens-Schuckertwerke, Gesellschaft mit beschränkter Haftung, Siemensstadt, near Berlin, Germany, a Corporation of Germany. Filed May 12, 1925, Serial No. 29,743, and in Germany May 13, 1924. 4 Claims. (Cl. 122—460.)



4. A steam generating plant, having a steam generator for generating steam at high pressure, which steam is to

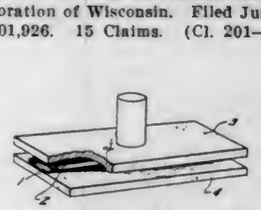
be supplied at lower pressure to a steam consumer, and including in combination a tubular superheater so proportioned in tube size that when the generator operates at maximum output, the high pressure of the steam is gradually reduced to the desired working pressure during the superheating process substantially by the resistance offered by the superheater to the flow of the steam, and a throttle valve between the generator and the superheater for compensating for small pressure variations due to practically unavoidable inconsistent steam or load conditions, to which the superheater cannot respond.

1,767,715. ELECTRICAL RESISTANCE. ERWIN R. STOEKLE, Milwaukee, Wis., assignor to Central Radio Laboratories, Milwaukee, Wis., a Corporation of Wisconsin. Filed Feb. 19, 1927. Serial No. 169,425. 14 Claims. (Cl. 201—63.)



1. The method of making an electrical resistance which comprises coating a spirally grooved insulating core with a thin layer of conducting material and then removing said coating from the spiral ridges on said core to leave a helical conducting coating in said grooves and providing suitable terminals for making electrical connections to said conducting coating.

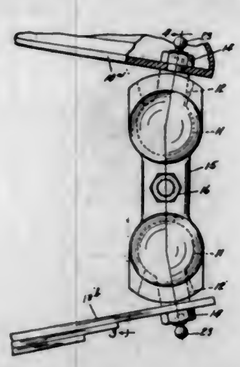
1,767,716. ELECTRICAL RESISTANCE AND METHOD OF MAKING SAME. ERWIN R. STOEKLE, Milwaukee, Wis., assignor to Central Radio Laboratories, Milwaukee, Wis., a Corporation of Wisconsin. Filed June 27, 1927. Serial No. 201,926. 15 Claims. (Cl. 201—63.)



11. The method of making an electrical resistance which comprises winding a wire helix on a tube having thin flexible walls, supported by a suitable collapsible mandril; removing said tube from said mandril; coating the outside and inside surfaces of said tube with a suitable adhesive; pressing said tube and helix into a thin flat sheet, folding said sheet transverse to the wires, inserting an insulating sheet between the folded surfaces of said wire-wound sheet, pressing said folded sheet into a compact strip, and forming said strip into a ring to form the resistance element of a rheostat.

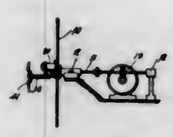
1,767,717. SPRING SHACKLE. JOHN L. STOVER, Kenmore, Ohio. Filed Mar. 21, 1928. Serial No. 263,277. 9 Claims. (Cl. 267—54.)

1. A spring shackle for vehicles comprising ball members having shanks adapted for attachment respectively to the chassis and spring of a vehicle, and shackle plates having mating sockets therein at both ends, said plates being adapted to be secured together about said balls, said plates also having mating grooves in the ends thereof for defining elongated slots through which said shanks extend with slight lateral clearance to permit free oscillation of the shackle and shims between said plates whereby the plates may be adjustably fitted to said ball members, said ball members having ducts extending therein through said shanks and branch ducts extending from the first



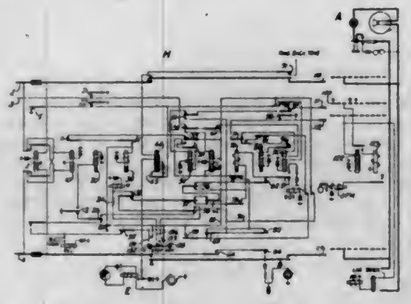
named ducts to the surfaces of the balls to supply lubricant thereto, said branch ducts being enlarged at their outer ends.

1,767,718. SCANNING DEVICE. ELMER A. TAMBERT, Culver City, Calif. Filed Feb. 23, 1929. Serial No. 342,011. 13 Claims. (Cl. 178—6.)



1. In a device of the character described, the combination of a carrier adapted to be rotated on an axis, an aperture plate carried about said axis by said carrier, said aperture plate having a light aperture, and means for moving the aperture plate on the carrier as the carrier is rotated, in a direction substantially at right angles to its direction of motion due to rotation about the said carrier axis.

1,767,719. CONNECTER SWITCH. VICTOR S. THARP, Elmhurst, Ill., assignor to Reserve Holding Company, Kansas City, Mo., a Corporation of Delaware. Filed Dec. 12, 1927. Serial No. 239,384. 20 Claims. (Cl. 179—18.)



1. In a telephone system, trunks arranged in groups, a two-motion trunk hunting switch having access to said trunks, said switch including a group selecting magnet and a trunk selecting magnet, means for causing the

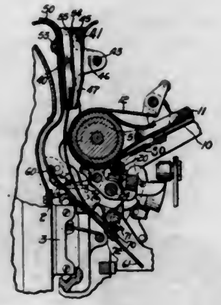
switch to hunt for an idle trunk, said means including means for operating the group selecting magnet to select the groups one by one, means for directively operating the trunk selecting magnet to select the first trunk in the first group, means for automatically operating the trunk selecting magnet to hunt for an idle trunk in each group after the first of the group is selected, and means for stopping the hunting action of the switch responsive to an idle trunk being reached.

1,767,720. HAIR CLASP. DANIEL E. TRELOAR, Seattle, Wash. Filed Mar. 27, 1929. Serial No. 350,169. 5 Claims. (Cl. 132—41.)



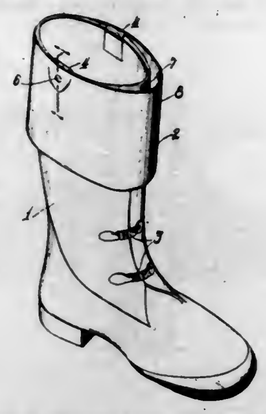
5. An openable one-piece hair clasp comprising spaced pairs of parallel arms terminating in alined resilient loops, an arched cross bar connecting the spaced arms of the pairs and a lug at the junction of an arm and a bar, a pair of parallel pins integral with said bars, and one of said pins being wider than the other.

1,767,721. CARRIAGE EQUIPMENT FOR ACCOUNTING MACHINES. ARTHUR S. TREW, Detroit, Mich., assignor to Burroughs Adding Machine Company, Detroit, Mich., a Corporation of Michigan. Original application filed July 3, 1924, Serial No. 724,086. Divided and this application filed Mar. 16, 1927. Serial No. 175,642. 10 Claims. (Cl. 197—127.)



1. The combination in an accounting machine of a platen movable to and from printing position, a paper table for guiding a record sheet around the platen from the rear thereof, means for holding said record sheet about said platen, a guiding means for guiding work sheets about the platen from the front thereof while the platen is out of printing position, collating stops for automatically arresting the work sheets in proper position relative to the record sheet when said sheets are inserted from the front, and feed rolls automatically engaging said work sheets when the platen is moved to printing position.

1,767,722. BOOT-TOP FASTENER. GEORGE L. VAN DINTER, Mishawaka, Ind., assignor to Mishawaka Rubber and Woolen Manufacturing Company, Mishawaka, Ind., a Corporation of Indiana. Filed Apr. 6, 1928. Serial No. 267,840. 9 Claims. (Cl. 36—4.)



1. The combination with a high top boot having a main portion and an extension portion foldable down around the main portion, of a flexible member at the upper end of one of said portions detachably connecting with the upper end of the other portion for holding the extension portion in folded position.

1,767,723. FISHING TACKLE. VSEVOLOD VASILEVSKY, New York, N. Y., assignor of one-half to George Vasilevsky, New York, N. Y. Filed June 6, 1929. Serial No. 368,827. 3 Claims. (Cl. 43—34.)

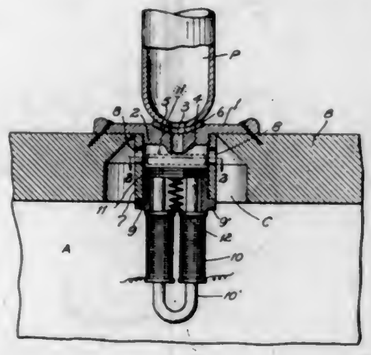


2. A fishing device comprising a bushing slidably mounted upon a rod, two impaling hooks on opposite sides of said rod rigidly mounted in said bushing, a bait hook movably mounted in said bushing between said impaling hooks, resilient means urging said bushing toward one end of said rod, and means coupled to said bait hook for releasably holding said resilient means under tension.

1,767,724. VALVE ACTION FOR PIPE ORGANS. HARRY F. WATERS, St. Louis, Mo., assignor to Magnetic Organ Action Company, University City, Mo., a Corporation of Missouri. Filed Dec. 21, 1927. Serial No. 241,511. 6 Claims. (Cl. 84—339.)

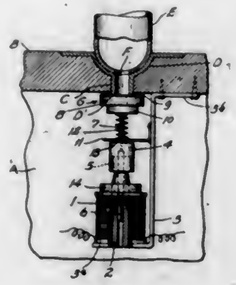
3. An organ comprising a wind chest having an opening formed in a wall thereof, a pipe having an orifice in the toe portion thereof through which air may pass from the wind chest into said pipe, a pipe block provided with an air passageway formed therethrough, said pipe block be-

ing fixed to said wind chest above the opening in the wall thereof and being adapted to support the pipe, and the air passageway formed through said pipe block leading directly to the orifice in the toe portion of said pipe, and a valve action arranged in close proximity to the orifice in said pipe, said valve action including a perforated sleeve suspended from said pipe block, a valve seat



located at the lower end of the passageway formed through said pipe block and at a point within said sleeve, an electrical device at the lower end of said sleeve and an armature within said sleeve, said armature being adapted to function as a closure for the passageway in said pipe block and being capable of being attracted by said electrical device away from said valve seat, whereby air may pass through the passageway in said pipe block.

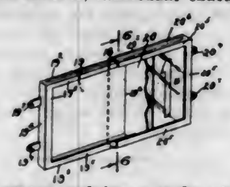
1,767,725. ELECTROMAGNET. HARRY F. WATERS and VERNIE ROY BROWN, St. Louis, Mo., assignors to Magnetic Organ Action Company, University City, Mo., a Corporation of Missouri. Filed Feb. 23, 1928. Serial No. 256,286. 7 Claims. (Cl. 175—344.)



1. In a device for actuating a movable element of a pipe organ, an electro-magnet comprising a core, an electrical conductor arranged about said core in the form of a coil, a portion of said core being extended from said coil, and an armature located entirely outside of said coil and adapted to move in a straight line into telescoping relation with said extended portion of said core, said armature being guided during the entire movement thereof by said core.

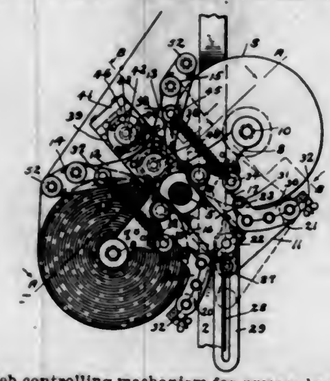
1,767,726. SIGN. FREDERICK WOERZ, Weehawken, N. J. Filed Mar. 18, 1929. Serial No. 347,861. 3 Claims. (Cl. 40—140.)

1. An expandible sign composed of two telescopically engaging sections each formed in the upper and lower walls with longitudinally extending grooved beads slidably interengaging one another, individual character plates each



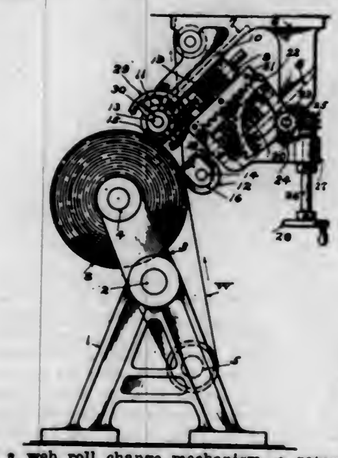
formed at its upper and lower ends with resilient lips adapted to slidably engage said grooved beads of either of said sections.

1,767,727. WEB-ROLL CHANGER. HARRY V. BALL, Concord, Mass., assignor to R. Hoe & Co. Inc., New York, N. Y., a Corporation of New York. Filed Nov. 1, 1926. Serial No. 145,400. 11 Claims. (Cl. 242—58.)



5. Web controlling mechanism for presses having in combination a support for a web roll while it is unwinding and a spare roll, friction means engaging the surfaces of both rolls, means for holding the friction means in engagement with the roll surface under a constant tension, and means for driving the friction means at speeds varying from that of the unwinding roll and either in the direction of rotation of the roll or in the opposite direction.

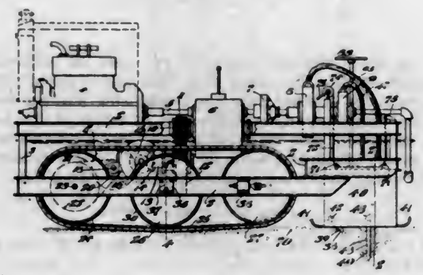
1,767,728. WEB-JOINING MECHANISM. HARRY V. BALL, Concord, Mass., assignor to R. Hoe & Co., Inc., New York, N. Y., a Corporation of New York. Filed Feb. 10, 1928. Serial No. 253,244. 6 Claims. (Cl. 242—58.)



5. In a web roll change mechanism, a rotary support for supporting a spare roll and a running roll, fixed

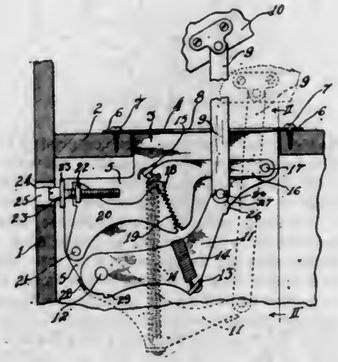
framing, a speed-up roll, a pasting roll, a casting in which the rolls are mounted, means for giving the casting a sliding movement to adjust the rolls relatively to the framing, and a hand wheel operatively connected with the speed-up roll for rotating it.

1,767,729. FILTER-SAND-WASHING MACHINE. MORRIS L. BAYARD and MINOR HARVEY, Philadelphia, Pa. Filed Apr. 1, 1929. Serial No. 351,606. 4 Claims. (Cl. 210—128.)



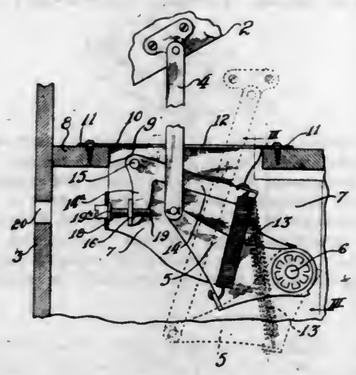
1. A filter sand washing machine of the character stated, comprising a self-propelled supporting vehicle, driving and supporting buoyant wheels therefor sand cultivating and washing devices positioned at and carried by the rear of said vehicle, including relatively short stationary nozzles for acting on the surface of said sand, and relatively long movable nozzles for acting on said sand at a predetermined depth below the surface thereof, and means for actuating said long nozzles into and from engagement with said sand.

1,767,730. BALANCED-COVER SUPPORT. ALFRED BERSTED and MARTIN BERSTED, Chicago, Ill. Filed Apr. 23, 1927. Serial No. 185,939. 6 Claims. (Cl. 217—60.)



6. A talking machine cabinet having a hinged lid, a plate secured in said cabinet, a link connected at one end to said lid, a lever pivoted to said plate and to said link, two members pivoted at the outer ends thereof to said plate and with the inner ends in geared engagement with each other, a spring secured at one end to said lever, and at the other end to one of said members, said plate having an outturned ear thereon, a threaded ear on one of said members and a screw in said ears for varying the angular position of said members about the pivots thereof to vary the tension of said spring.

1,767,731. BALANCED COVER SUPPORT. ALFRED BERSTED and MARTIN BERSTED, Chicago, Ill. Filed Apr. 23, 1927. Serial No. 185,940. 6 Claims. (Cl. 217—60.)



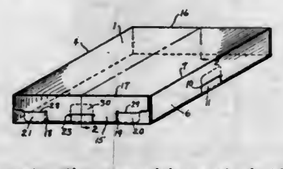
1. In a phonograph cabinet or the like having a rear wall with an opening therein, a bracket supported adjacent one wall of the cabinet, a lever pivoted upon said bracket, a link connecting said lever with the cabinet cover, a spring connected at one end to an intermediate part of said lever, an anchoring device to which the other end of said spring is connected, said anchoring device including a bellcrank having a depending arm and horizontally disposed screw means accessible through said opening in the rear wall of said cabinet and connected to said depending arm for adjusting said anchoring device.

1,767,732. SHOE LACE. WILLIAM C. BREADON, Astoria, N. Y. Filed Apr. 2, 1929. Serial No. 351,902. 1 Claim. (Cl. 24—143.)



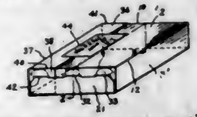
A device of the character described including a shoe provided with eyelets arranged to receive an extensible lacing means, the free ends of which are anchored to two or more of said eyelets having formed therewith prongs adapted to engage said lace to hold same against movement, the elasticity of said lace providing means permitting the expansion of said shoe at the point of lacing thereof.

1,767,733. FOLDABLE BOX. ARTHUR EMLEN BROWN, Philadelphia, Pa., assignor to Brown & Bailey Company, a Corporation of Pennsylvania. Filed Feb. 21, 1929. Serial No. 341,582. 2 Claims. (Cl. 229—33.)



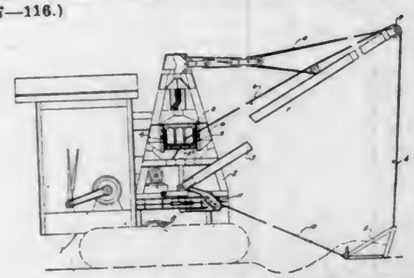
1. A box construction comprising a single blank of sheet material having top, bottom, side and end sections, the end sections being carried by the top and bottom sections and adapted to be folded into overlapping relation, the end sections on top having a plurality of spaced tongues and a slot therebetween, and the end sections on the bottom having a plurality of spaced slots to receive the tongues on the end sections carried by the top and a tongue on the end section carried by the bottom adapted to pass through the slot in the end section carried by the top.

1,767,734. FOLDABLE BOX. ARTHUR EMLEN BROWN, Philadelphia, Pa., assignor to Brown & Bailey Company, a Corporation of Pennsylvania. Filed Feb. 21, 1929. Serial No. 341,583. 3 Claims. (Cl. 229—33.)



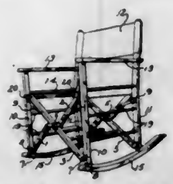
1. A foldable box comprising a top panel, a bottom panel, an intermediate side panel connecting the top and bottom panels, overlapping side and end panels, an extension on one of said side panels forming a flap adapted to overlap the bottom panel of the box when assembled, foldable flaps on said extension having openings therein, and locking tongues on a pair of the side panels engaging said openings when the box is assembled to secure the extension in position.

1,767,735. HOIST-LINE FAIR LEAD. FRANK E. BROWN, Milwaukee, Wis., assignor to Harnischfeger Corporation, Milwaukee, Wis., a Corporation of Wisconsin. Filed Jan. 21, 1928. Serial No. 248,288. 11 Claims. (Cl. 37—116.)



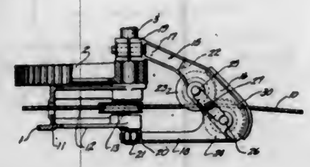
11. A fair lead of the character described comprising a fixed frame, an adjustable frame including side members and cross members, trunnions co-operable with the fixed frame and with the side members for supporting the adjustable frame on the fixed frame, means for securing the adjustable frame in any one of a number of positions, and rollers mounted on the cross members of the adjustable frame.

1,767,736. FOLDABLE CHAIR. NEWTON N. BROWN, Racine, Wis., assignor to Gold Medal Camp Furniture Mfg. Co., Racine, Wis., a Corporation of Wisconsin. Filed Aug. 9, 1928. Serial No. 298,473. 1 Claim. (Cl. 155—140.)



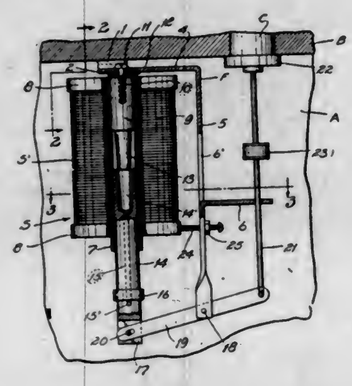
A foldable wooden chair comprising a pair of similar side frame sections of equal size having front and rear uprights in the same transverse plane, a collapsible stool interposed between said sections and having wooden crossed legs at its front and rear, each pair of crossed legs being in a common plane, the front crossed legs being in the same transverse plane as the front uprights and the rear crossed legs being in the same transverse plane as the rear uprights, and hinges comprising integral angular side plates providing a pivotal connection between the lower ends of the crossed legs and the uprights and serving to offset the lower ends of the crossed legs inwardly from the uprights whereby to permit compact folding.

1,767,737. DRAG-LINE FAIR-LEAD. ROBERT L. BROWN, Milwaukee, Wis., assignor to Harnischfeger Corporation, Milwaukee, Wis., a Corporation of Wisconsin. Filed Jan. 21, 1928. Serial No. 248,287. 9 Claims. (Cl. 37—116.)



3. A drag line fair lead for use with an excavating machine having the usual drag line and a boom swingable about a vertical axis and comprising guiding means for the drag line adjacent the axis of swing of the boom, and movable means mounted on the boom axis and carrying guides engageable with the drag line and automatically following the swinging movement of the drag line.

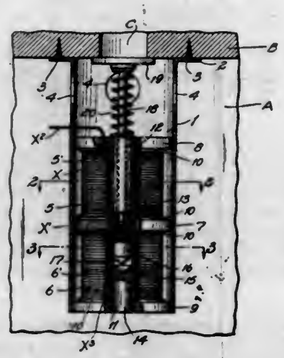
1,767,738. VALVE ACTION FOR PIPE ORGANS. VERNIE ROY BROWN, University City, Mo., assignor to Magnetic Organ Action Company, University City, Mo., a Corporation of Missouri. Filed June 4, 1928. Serial No. 282,561. 6 Claims. (Cl. 84—338.)



4. A valve action for pipe organs comprising a solenoid, a frame for supporting said solenoid, a movable core associated with said solenoid, a fixed core associated with said solenoid, a valve, means whereby said valve is cooperatively connected with said movable core, said movable core being provided with a recess and said fixed core having a portion adapted to be extended into said recess when said movable core is moved toward said fixed core, said movable core having an air passageway formed therein, said air passageway being in communication with the recess formed in said movable core and having an open end located at the outer face thereof, and means adjustably mounted on said movable core and movable with respect to the open end of said air passageway, whereby the passage of air through said air passageway may be controlled.

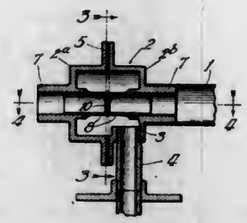
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1. A horn comprising a tubular sound-emitting body, a casing from which said body extends, said casing having an inlet for air or gas under pressure and opposite outlets and being interiorly undivided, there being communication between the casing and tubular sound-emitting body through one of said outlets, and a vibratory reed arranged between and which by its vibrations strikes against and alternately closes said outlets.

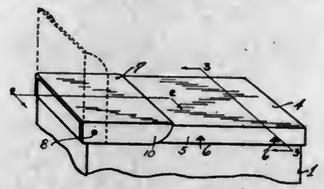
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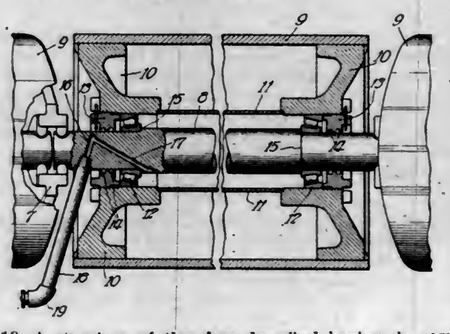
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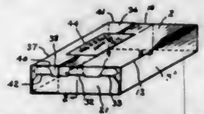
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1,767,743. BELT-CONVEYER ROLL WITH LUBRICATION SYSTEM. JAMES T. COGHILL, Mishawaka, Ind., assignor to Dodge Manufacturing Corporation, a Corporation of Delaware. Filed Dec. 29, 1924. Serial No. 758,508. 15 Claims. (Cl. 308—20.)



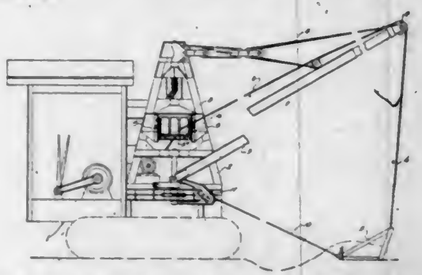
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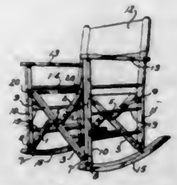
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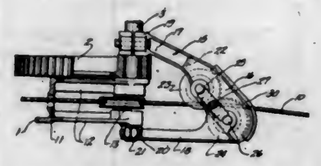
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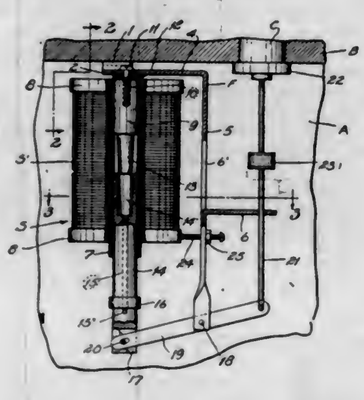
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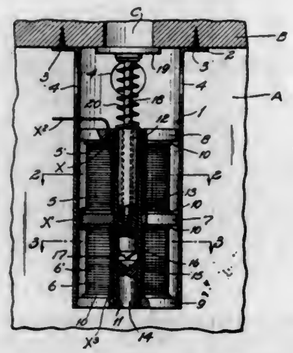


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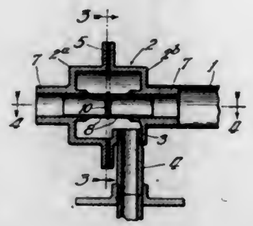
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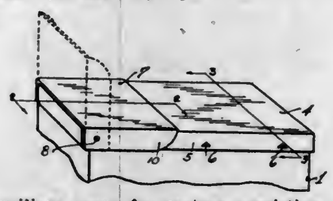
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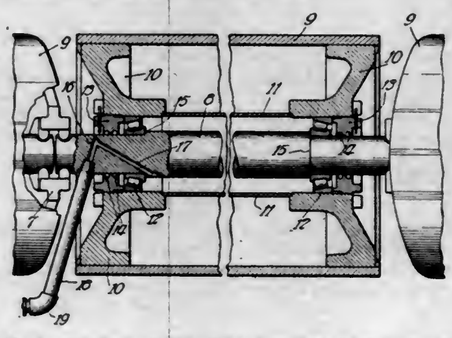
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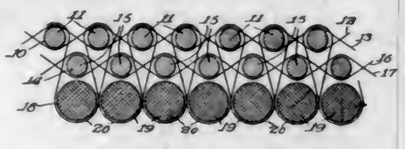
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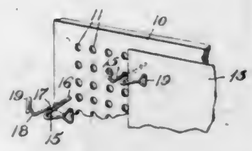
end, including an intermediate roll to which other such rolls are relatively inclined; the respective rolls having axles and antifriction bearings to sustain radial load and end thrust mounted on said axles, on which bearings the rolls revolve; the said bearings being set inwardly from the roll ends and the axle ends being outside said bearings; means supporting the axle ends so as to hold the rolls with their adjacent ends close to one another; said axles having grease conduits and said rolls having reservoirs into which said conduits discharge and through which the grease enters the roll bearings on the inner sides of the bearings; there being grease seals on the outer sides of the bearings; and grease introducing means at roll ends connected with the roll axles at points between the ends of the roll and the adjacent roll bearings for introducing grease to said conduits, including a grease introducing pipe connected with said intermediate roll axle and projecting laterally between adjacent roll ends to a readily accessible point; whereby the bearings may be maintained efficiently lubricated and grease may be supplied to the bearings of the individual rolls while they are in position and in operation.

1,767,744. SUCTION CLEANER. WALTER C. DAVIDSON, North Canton, Ohio, assignor to The Hoover Company, a Corporation of Ohio. Filed July 19, 1929. Serial No. 379,418. 6 Claims. (Cl. 139—412.)



1. A filter member for use in a suction cleaner, formed of multi-ply fabric comprising a ply of material having a rough surface and a surface ply of material having a smooth surface, and warp threads uniting said plies.

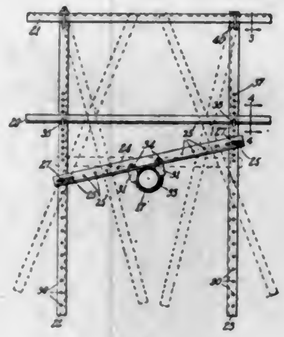
1,767,745. DISPLAY DEVICE. ZENO W. DAY, Newark, N. J. Filed May 16, 1928. Serial No. 278,160. 1 Claim. (Cl. 40—125.)



The combination of a sheet with spaced perforations therein, with a clip formed of wire bent into divergent arms, the wider end forming a finger piece for compressing the clip on of said arms having an inwardly bent portion intermediate its ends, the wire then extending from the outer ends to form arms to yieldingly engage the face of the sheet when the clip is inserted through a hole in the sheet.

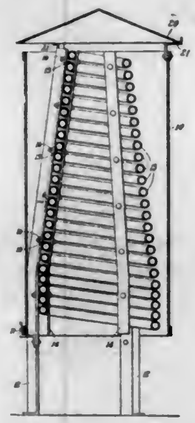
1,767,746. STRUCTURE FOR ADAPTING OIL BURNERS TO CONCRETE-MIXER APPARATUS. WALTER C. ELZE, Forest Hills, N. Y., assignor to Hauck Manufacturing Company, Brooklyn, N. Y., a Corporation of New York. Filed Oct. 25, 1926. Serial No. 143,987. 4 Claims. (Cl. 248—30.)

1. A three-piece separable supporting structure for rigidly securing a burner member in position on concrete mixer apparatus of the character set forth, such structure comprising two lateral angle pieces perforated along one side, a transverse angle piece slotted at its outer ends, clamping means for the burner and carried by the transverse angle piece, bolts and nuts for adjustably securing the outer



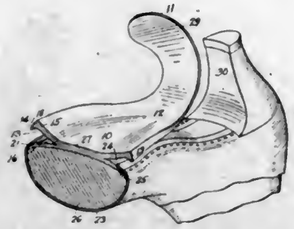
ends of said transverse angle piece through its said slots to the lateral pieces, adjustable securing means at the inner end of each of the lateral pieces for attaching the same to the mixer apparatus, and securing means at an intermediate point of each of the lateral pieces for attaching the said pieces to the mixer apparatus.

1,767,747. OIL-BURNING WATER HEATER. WALTER C. ELZE, Forest Hills, N. Y., assignor to Hauck Manufacturing Company, Brooklyn, N. Y., a Corporation of New York. Filed Feb. 20, 1929. Serial No. 341,317. 2 Claims. (Cl. 122—250.)



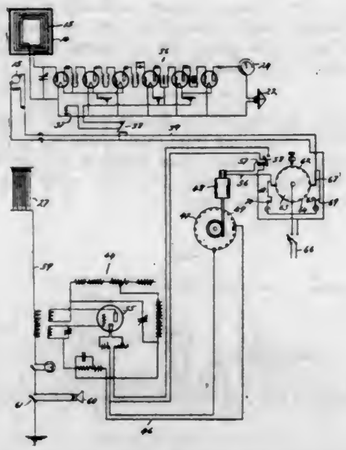
1. An oil-burning water heater, comprising a vertically disposed metal shell open at the top and bottom, a frame to sustain the same in elevated position to allow access of air through the bottom opening, a hood or cover fitted to the top of the shell, and a water coil or helix of pipe attached to the frame and mounted within the said shell with inlet entering said shell through the bottom and outlet passing through the space between the hood and top of shell, a number of the lowermost convolutions of the helix being of equal diameter, spaced closely together and in close proximity to the inner wall of the shell, while the remaining convolutions are of progressively lesser diameter to provide a combustion chamber exteriorly of said coil and above the lower portion of the shell, and a burner member associated therewith to direct a flame into the lower portion of said coil.

1,767,748. SHOE AND THE METHOD OF MAKING SAME. FRANK FALECK, Brooklyn, N. Y. Filed Sept. 1, 1928. Serial No. 303,389. 18 Claims. (Cl. 36—12.)



1. In a shoe structure, a sole of a single piece of material split at the edges thereof for allowing the insertion of a shoe upper into the interior of said sole, an upper inserted into said split, and concealed stitching arranged between the opposed faces of the sole and substantially parallel to said faces and securing said upper to the inner split portion of the sole only.

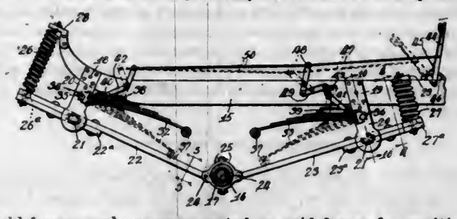
1,767,749. METHOD OF PROTECTING SHIPS FROM COLLISIONS AND RADIO APPARATUS THEREFOR. CHARLES R. FISHER and FREDERICK V. N. BRADLEY, Rogers City, Mich. Filed Sept. 19, 1927. Serial No. 220,563. 1 Claim. (Cl. 250—11.)



A device for protecting moving ships from collisions comprising a radio transmitter adapted to emanate directional radio waves having the greatest range in the direction of movement of the ship, a radio receiver tuned in resonance with said transmitter, a direction indicating antenna operatively connected to said receiver, means for indicating the angular positions of said antenna relative to the direction of travel of the ship, means for indicating the intensity of the received signals, means for automatically rotating said antenna for a predetermined interval, and means for alternately operating said transmitter during the remaining intervals.

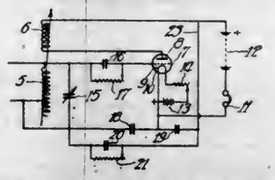
1,767,750. SPRING SUSPENSION FOR VEHICLE BODIES. RUSSELL W. FISHER, Noblesville, Ind. Filed May 1, 1926. Serial No. 105,925. 7 Claims. (Cl. 267—16.)

1. In a device of the class described, the combination of a frame, an axle housing, means for supporting said frame resiliently on said housing, auxiliary supporting means comprising a leaf spring associated with said first mentioned means and pivotally mounted with respect to



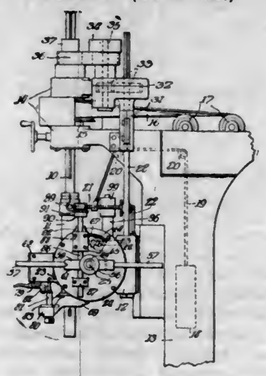
said frame, and means mounted on said frame for positioning the free end of said auxiliary means in operative or inoperative relation with respect to said first mentioned supporting means.

1,767,751. RECEIVING CIRCUIT. EDMUND T. FLEWELLING, Jr., Highland Park, Ill., assignor to Buell Manufacturing Co., Chicago, Ill., a Corporation of Illinois. Filed Sept. 25, 1924. Serial No. 739,771. 6 Claims. (Cl. 250—27.)



1. A receiving set comprising a receiving circuit, a grid circuit containing not less than two capacities in series between the grid and filament, and a plate circuit containing two reactances in series between the plate and filament, one of said reactances being the sound producing means and the other constituting an inductive feed-back means, a shunt connection from a point in the plate circuit separated from the plate by one of said reactances and from the filament by the other of said reactances, said shunt connection being branched to tap the grid circuit on opposite sides of one of said grid circuit capacities, a condensor in each branch of said shunt, a variable leak around the shunt condenser connected to the grid circuit remote from the filament, and means for delivering incoming signals to said grid circuit.

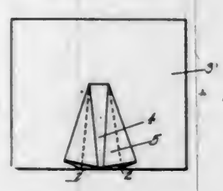
1,767,752. FEED MECHANISM FOR DRILLING MACHINES. JOSEPH FRIEDL, Covington, Ky., assignor to The Avey Drilling Machine Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Mar. 20, 1924. Serial No. 700,525. 34 Claims. (Cl. 77—33.)



1. In a drilling machine, the combination with a drill spindle, of a power feed mechanism for the spindle in-

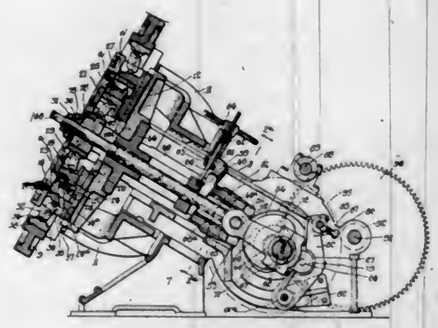
cluding driving and driving members adapted to be connected and disconnected to throw the power feed mechanism into and out of operation and an overrunning connection permitting the quick approach of the spindle when said members are operatively connected, a hand feed lever and means actuated by the movement of said lever in one direction for successively operatively connecting said driving and driven members and effecting the quick approach of the spindle.

1,767,753. EASEL SUPPORT. STANLEY B. FREIBERG, Cincinnati, Ohio. Filed Dec. 16, 1926. Serial No. 155,296. 7 Claims. (Cl. 40—150.)



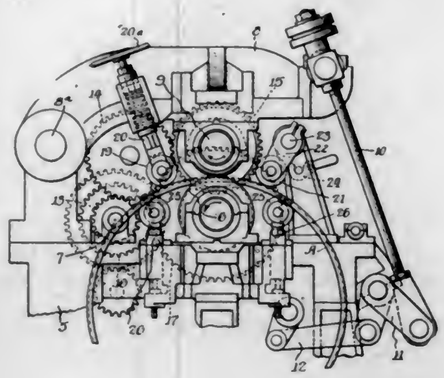
1. An easel support for an article to be displayed, cut from a unitary blank, and comprising portions for attachment to the article, a leg portion, the lower edge of which is adapted to bear against the surface on which the article is to be displayed, and interconnecting longitudinally bellows-folding portions extended between the attaching portions and the leg portion.

1,767,754. METAL-WORKING MACHINE. CARL C. GROTNES, Chicago, Ill., assignor to Charles G. Grotnes, Park Ridge, Ill., doing business as Chas. Grotnes Machine Works, Chicago, Ill. Filed Dec. 31, 1923. Serial No. 683,553. 12 Claims. (Cl. 153—2.)



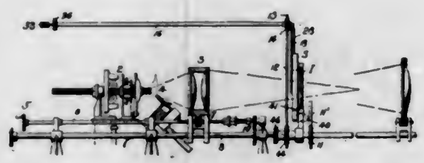
1. A machine of the character described having two relatively movable axially alined heads, toggle mechanisms arranged to be actuated in the movement of said heads, and cam-actuated means for effecting relative movement between the heads including a shaft having a lost-motion connection with one of said heads, said lost-motion connection comprising a member pivoted with respect to the last mentioned head, means on the shaft with which said pivoted member is adapted to engage to lock the shaft and head against relative movement, and means operable in the movement of the head with the shaft to effect the disconnection of the member and thereby of the head from the shaft.

1,767,755. METAL-WORKING MACHINE. CARL C. GROTNES, Chicago, Ill. Filed Aug. 4, 1928. Serial No. 297,471. 6 Claims. (Cl. 153—29.)



1. In a metal working machine, a pair of rolls shaped to bend a rim or the like, to form flanges at opposite edges thereof, and in bending to narrow it, and a guiding roll for holding the rim against longitudinal displacement axially of the bending rolls as the width of the rim decreases, said guiding roll being held against axial movement and having surfaces thereon formed arcuately substantially on a radius equal to the width of the bent portions of the rim, said surfaces being positioned to engage the edges of the rim during the bending thereof.

1,767,756. RECTANGULAR SHUTTER FOR SPOTLIGHTS. THEODORE HALL, New York, N. Y., assignor to Hall & Connolly, Inc., New York, N. Y., a Corporation of New York. Filed Mar. 26, 1929. Serial No. 349,931. 6 Claims. (Cl. 240—3.)

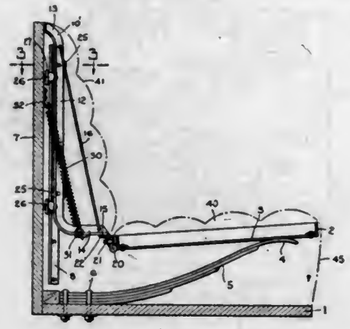


6. In a projector lamp, a source of light, an optical system therefor including a condenser, and objective lens, means for varying the beam spread by adjusting the optical system, a shutter comprising a plurality of pairs of telescopic slides having overlapping apertures therein, an iris shutter, and a common means for adjusting both said slides and iris shutter by said first-named means.

1,767,757. VEHICLE SEAT. LEONARD B. HARRIS, New York, N. Y., assignor of one-half to Edgar M. Goldsmith, New York, N. Y. Filed Feb. 27, 1928. Serial No. 257,192. 1 Claim. (Cl. 155—53.)

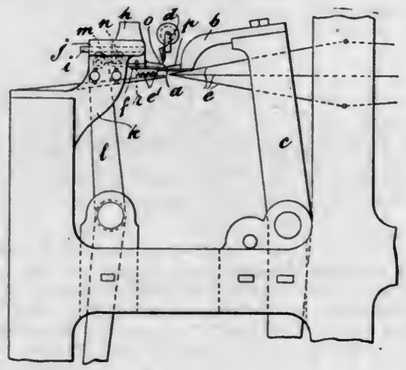
A seat structure of the class described comprising a base, a back support, multiple cantilever leaf springs connected near the rear of the base and extending forward, a seat frame having steel re-enforcing strips running longitudinally thereof and adapted to rest on a forward portion of said leaf springs, a back frame having pairs of anti-friction rollers providing for vertical sliding move-

ment in relation to the rear support and including angularly bent side members the lower ends of which lie in substantially the same plane as the plane of said seat frame, springs tending to support the back frame, and a com-



bined horizontal pivot and vertical hinge connection between a rear part of the seat frame and a tie piece joining the ends of the angularly disposed portions of the side members.

1,767,758. LOOM FOR WEAVING TUFTED PILE FABRICS. THOMAS WILLIAM HEAD, Bridgworth, England. Filed Mar. 9, 1929, Serial No. 345,647, and in Great Britain Apr. 13, 1928. 4 Claims. (Cl. 139—8.)



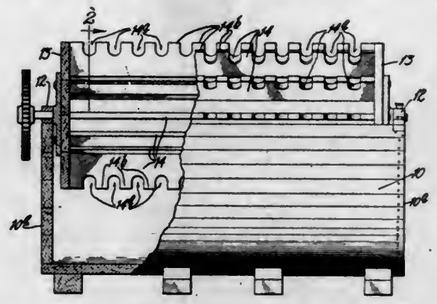
1. In a loom for weaving tufted pile fabrics, a two-bladed tuft cutter mechanism which comprises a straight cutter blade mounted on a movable supporting block on one side of the row of tuft yarns to be cut, a plurality of blade sections mounted end to end in stepped formation on an opposed movable supporting block on the other side of said row to constitute the complementary cutter blade, and pressure springs separately applied to the individual blade sections so as to ensure independent but flexible and uniform shearing actions of the plurality of blade sections extending across the fabric.

1,767,759. SOLID RESINOUS CONDENSATION PRODUCT. WILLY O. HERRMANN and HANS DEUTSCH, Munich, Germany, assignors to Consortium Für Elektrochemische Industrie G. m. b. H., Munich, Bavaria, Germany. Filed Apr. 4, 1921. Serial No. 458,610. 15 Claims. (Cl. 260—140.)

1. A method of producing solid resinous condensation products from liquid aldehydes in one step, consisting in allowing alkaline substances to react at temperatures above 30° C. upon aliphatic aldehydes with more than one carbon atom, the condensation being not stopped when viscous reaction products are formed but continued until the reaction product is practically totally converted into a resin substantially insoluble in alkaline lye.

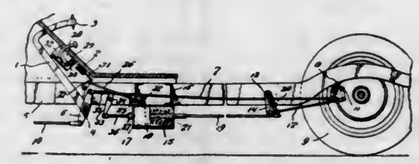
15. Solid resinous condensation products obtained by allowing alkaline substances to react at temperatures above 30° C. upon the liquid intermediary products of condensation of aliphatic aldehydes with more than one carbon atom, the condensation being not stopped when viscous reaction products are formed but continued until the reaction product is practically totally converted into a solid resin substantially insoluble in alkaline lye and treating the solid resinous product with mineral acid in dissolution in an organic solvent.

1,767,760. PADDLE WHEEL FOR TANNING APPARATUS. ISIDORE HORWEEN, Chicago, Ill. Filed July 5, 1928. Serial No. 290,486. 4 Claims. (Cl. 149—10.)



4. Tanning apparatus having a rotatable paddle wheel carrying paddles with finger-like projections at their outer edges.

1,767,761. VEHICLE BRAKE. JACK INSUL, Chicago, Ill. Filed Mar. 28, 1929. Serial No. 350,612. 6 Claims. (Cl. 188—2.)

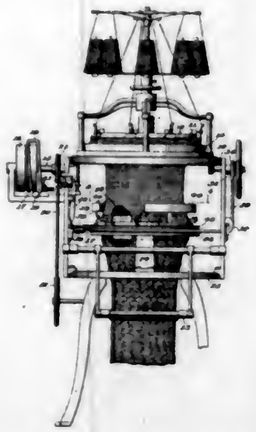


2. In combination with the service and emergency brakes of an automobile including the usual foot lever and the means for connecting the same with the service brakes, foot-controlled means to actuate the emergency brakes, said last-mentioned means including a cylinder, means for supporting the same on the frame of an automobile, a piston operable within the cylinder, a plunger rod connected at one end with the piston and being slidable through one end of the cylinder and connected at its other end to the emergency brakes, means for holding the piston in one position in the cylinder, and foot-control means to effect the movement of the piston in the cylinder to actuate the plunger rod and apply the emergency brakes.

1,767,762. KNITTING-MACHINE FOR SPOT-DYEING APPARATUS. ROBERT G. JENNINGS, Elmira, N. Y., assignor to The R. G. Jennings Yarn Cleaning Machine Co. Inc., Elmira, N. Y., a Corporation of New York. Filed July 17, 1928. Serial No. 293,474. 27 Claims. (Cl. 66—147.)

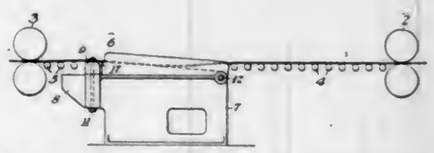
1. In a knitting machine, stopping means, a support having movement relatively to the cloth in a direction trans-

verse to the wales thereof, a color-applying device mounted on said support, means for causing said device to apply coloring matter to the cloth being knitted after passing



the knitting point during the operation of said knitting machine, and means actuated by the stopping means for removing said device from the fabric when the machine stops.

1,767,763. AUTOMATIC CROPPING SHEARS. LANE JOHNSON, Ingram, Pa., assignor to United Engineering & Foundry Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Apr. 8, 1926. Serial No. 100,655. 12 Claims. (Cl. 164—49.)



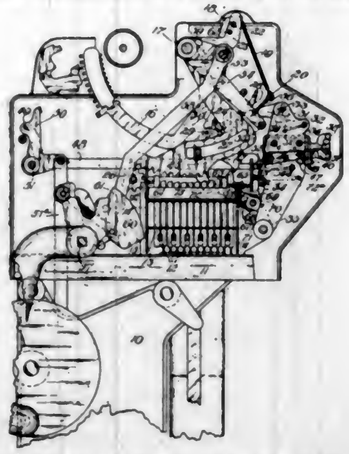
1. A cropping shear comprising an upper cross member, a cutter carried thereby, means cooperating therewith and movable relative thereto for performing a shearing operation, and mechanism for actuating said means, said means including a work supporting table movably supported, a lower cross member of less width than the length of the table, said member being associated with and connected to the table for simultaneous movement of said table and said member on the cutting stroke of the shear, and a cutter carried by the lower cross member.

1,767,764. MOLD WASH. AUGUSTUS E. KAYES and FRITZ MOEHLING, Huntington, W. Va., assignors to The International Nickel Company, Inc., New York, N. Y., a Corporation of Delaware. Filed Apr. 18, 1929. Serial No. 356,299. 7 Claims. (Cl. 22—189.)

1. A coating or wash for molds for casting nickel or nickel alloys with copper, chromium, iron, or manganese, in which the nickel constitutes at least 30% of the alloy, comprising a mixture of powdered silicon and a vehicle therefor.

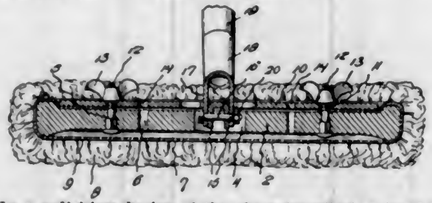
1,767,765. ADDING MACHINE. HARRY LANDSIEDEL, Cincinnati, Ohio, assignor, by mesne assignments, to Remington Rand Inc., New York, N. Y., a Corporation of Delaware. Filed Apr. 20, 1923. Serial No. 633,374. 25 Claims. (Cl. 235—60.)

3. In an adding machine, the combination of rows of digit stops, means for selectively projecting the digit stops, a type carrier associated with each row of digit stops and adapted to be arrested by a projected stop in said row, a rack member associated with each type carrier, a latch for latching together each type carrier with its associated



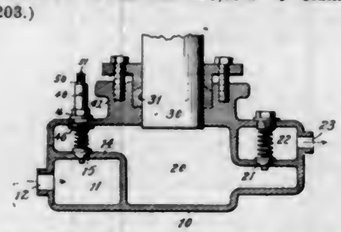
rack member, a key for each latch adapted when pressed to actuate the latch, means for simultaneously restoring all of the pressed keys to normal position, and means for moving all of the keys out of co-acting relation with the latches.

1,767,766. POLISHING BRUSH. FREDERICK N. LUNKENHEIMER, Johnstown, N. Y. Filed Apr. 12, 1929. Serial No. 354,525. 1 Claim. (Cl. 15—231.)



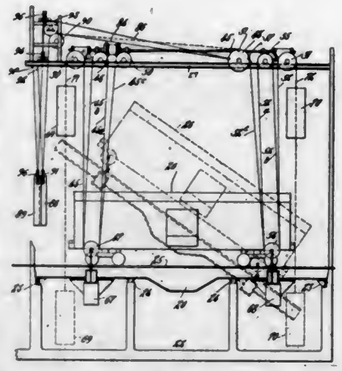
In a polishing device of the class described, a head having a recess in the upper face thereof, a piece of pelt stretched across the bottom face of the head and over the peripheral edge of the head, the free edge of the pelt extending inwardly into the recess, a clamping plate disposed within the recess, and securing means extending through the head and the plate to clamp the edge portion of the pelt therebetween, an opening in the central portion of the head, downwardly extending ears formed from the plate for disposition within the opening and adapted to receive a pivotally mounted handle.

1,767,767. PRIMER FOR WASHER PUMPS. ROBERT E. MANLEY, York, Pa., assignor to Manley Manufacturing Company, York, Pa., a Corporation of Delaware. Filed June 7, 1927. Serial No. 197,084. 6 Claims. (Cl. 103—203.)



1. In a priming device for a pump for discharging liquid under pressure, a pump chest having a relief passage giving direct and free communication from the chest to the atmosphere, which passage must be closed during normal pumping operation to prevent loss of liquid therethru, a valve seat, a valve yielding to pressure within the chest during priming to permit air to escape from the chest and engaging said seat to close the relief passage during priming when the atmospheric pressure is greater than the pressure within the chest, and means for locking the valve to its seat to seal the relief passage during normal pumping operation, that is, when the liquid in the passage reaches the level of the valve so that the pump chest is completely filled with liquid.

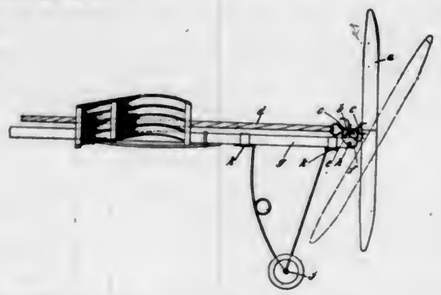
1,767,768. CAR HOISTING AND DUMPING APPARATUS. MARTIN B. MCLAUTHLIN, Malden, Mass. Filed Nov. 7, 1924. Serial No. 748,418. 22 Claims. (Cl. 214—122.)



1. In a car dumping apparatus an elevating platform a superstructure, two lifting drums and a tilting drum on said superstructure above the front and the rear sides of the platform, a cable passing from the lifting drum downward and around a sheave on the platform, thence upward and around a pulley on the superstructure, thence downward and around another sheave on the platform, and finally upward and to the adjacent tilting drum; there being one such cable so arranged between each lifting drum and the tilting drum at the same side of the apparatus.

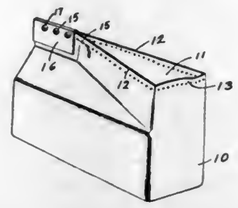
18. In an apparatus of the character described, a cable drum, a cable connected to said drum and consisting of two stretches running side by side, and a spreader on the drum arranged to enter between the stretches of said cable and lead them in helices of opposite pitch when the drum is rotated.

1,767,769. TOY AEROPLANE. FREDERICK JOHN MEE, London, England. Filed Feb. 10, 1928, Serial No. 253,341, and in Great Britain Jan. 28, 1928. 9 Claims. (Cl. 46—50.)



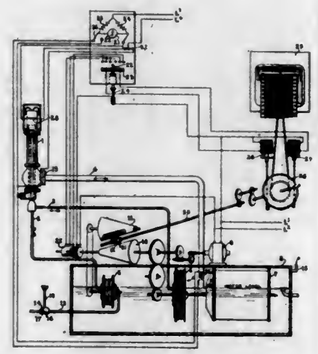
2. In a toy aeroplane, a body, a propeller thereon rotatable about an axis, adapted normally to extend longitudinally of said body in the direction of flight, a hinged bearing support for the propeller adapting it for angular displacement about a pivot transverse to the direction of flight and an elastic motor adapted to impart rotary motion to said propeller and normally to maintain it with its axis substantially parallel with the direction of flight.

1,767,770. METHOD AND MEANS FOR SEALING CONTAINERS. NEAL S. OLSEN, Brooklyn, N. Y. Filed Apr. 24, 1929. Serial No. 357,804. 5 Claims. (Cl. 229—62.)



5. In a container seal, the combination of a stitched member, an overlapping stiff clamp provided with perforations and spaced to expose and guard the stitches in their clamped position.

1,767,771. METHOD AND APPARATUS PARTICULARLY APPLICABLE TO MEASUREMENTS OF THE CALORIFIC VALUE OF COMBUSTIBLE GASES. HORACE N. PACKARD, Milwaukee, Wis., assignor, by mesne assignments, to Cutler-Hammer, Inc., a Corporation of Delaware. Filed Jan. 21, 1921. Serial No. 438,954. 31 Claims. (Cl. 73—184.)



1. The method of calorimetry which comprises effecting a chemical reaction involving a given agent definitely proportioned relatively to another substance and effecting predetermined variations in the relative proportions of such agent and other substance automatically in response to variations in certain calorific effects of the reaction.

1,767,772. TIRE-BEAD REENFORCING ELEMENT. ROBERT C. PIERCE, Niles, Mich., assignor to National Standard Company, a Corporation of Michigan. Filed Mar. 13, 1929. Serial No. 346,642. 1 Claim. (Cl. 245—1.5.)

A tire bead reinforcing element comprising a plurality of initially separate and substantially parallel tension strands, a retaining strand separate from the first mentioned strands and wound spirally about the same, said element

with its ends unconnected being adapted for winding in a tire bead, whereby maximum relative movement between the tension strands is permitted inside of the retaining



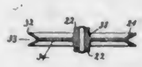
strand to prevent the element from becoming unduly loosened in the bead as the latter is turned in different places during the building of a tire.

1,767,773. EAVES-TROUGH-DRAIN STRAINER. VALENTINO RENZULLI, Bridgeport, Conn. Filed Apr. 26, 1929. Serial No. 358,224. 3 Claims. (Cl. 210—170.)



1. An eaves trough drain strainer comprising a plurality of vertical wires; a ring upon which the upper ends of the wires are bent to fasten them together and to the ring; and a crown plate engaging said wires adjacent the ring to cover the ring and substantially close the hole thereof, to cover the ends of the wires connected thereto and to hold the wires predeterminedly spaced from each other.

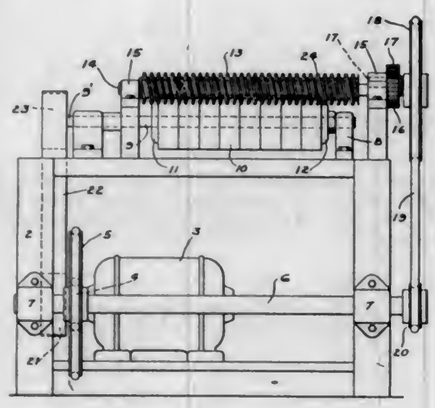
1,767,774. EDUCATIONAL APPLIANCE. HERMAN PAUL SACHSE, Chicago, Ill., assignor to Central Scientific Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 5, 1925. Serial No. 60,392. 1 Claim. (Cl. 254—192.)



In an educational device a small, comparatively light pulley designed for educational purposes, said pulley comprising a relatively light sheave block, a sheave molded from bakelite and means for journaling said sheave in said block, said sheave comprising a wheel portion having a peripheral groove extending about the same and an integral hub portion extending laterally in opposite directions from, and axially of, said wheel portion, said wheel being substantially symmetrical with respect to the axis of said hub portions.

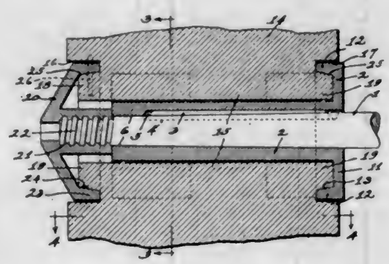
1,767,775. GRINDING MACHINE AND METHOD OF GRINDING. EDWIN E. SLICK, Jr., Pittsburgh, Pa. Filed Aug. 19, 1927. Serial No. 214,093. 12 Claims. (Cl. 51—103.)

1. In a grinding machine, a movable grinding element, rotatable supports adjacent said grinding element and in spaced relationship to each other and said element, said supports being located above the grinding element, and



means to rotate the supports to insure longitudinal feeding movement of an article carried upon and by said supports.

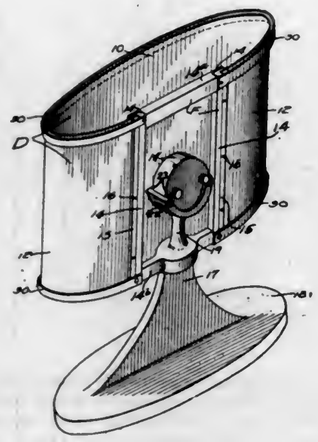
1,767,776. PROPELLER FOR AIRPLANES AND THE LIKE. SAMUEL E. SLONIMSKY, Sawtelle, Calif. Filed Dec. 24, 1928. Serial No. 328,215. 4 Claims. (Cl. 170—173.)



1. A propeller comprising a driving shaft, a hub fixed thereto and provided with a flange having an inturned annular rim at one end, said shaft having a threaded extension at its end, a plurality of longitudinal grooves being formed in the periphery of said hub, propeller blades having inner portions mounted in certain of said grooves, and a keeper threaded on the extension of said shaft and having an inwardly turned annular rim thereon corresponding to the rim on said hub, said blades having lateral recesses for receiving said rims.

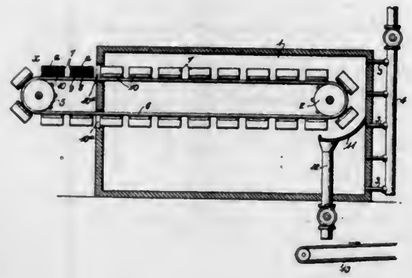
1,767,777. LOUD-SPEAKER. ADOLPH A. THOMAS, New York, N. Y. Filed Oct. 15, 1926. Serial No. 141,692. 28 Claims. (Cl. 181—31.)

1. In an electric acoustic device, a diaphragm consisting of a sheet of resilient material so flexed as to provide a central section and a pair of inwardly curved end sections, means engaging the edges of said end sections to support the flexed sheet in a condition of normal strain, said end sections being of sufficient length to form a resilient support for said central section to permit the latter to vibrate with substantially equal amplitude over its entire surface, and driving mechanism operatively associated with said



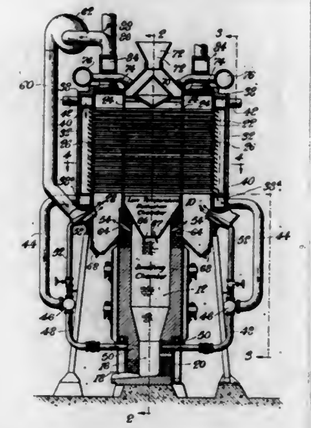
central section for vibrating said diaphragm in a direction substantially at right angles to the plane of the central section.

1,767,778. PROCESS FOR CARBONIZING COAL. WALTER EDWIN TRENT, New York, N. Y., assignor to Trent Process Corporation, New York, N. Y., a Corporation of Delaware. Filed Feb. 27, 1925. Serial No. 12,129. 8 Claims. (Cl. 202—14.)



2. A process for carbonizing preformed masses of carbonaceous material of at least plastic consistency, consisting in preliminarily introducing said masses to a heating zone, in there heating the masses to a temperature sufficient to cause only partial carbonization thereof while permitting a free unobstructed entrance of air to said preliminary heating zone, in introducing the partially carbonized fuel masses to a final heating zone, in subjecting said masses in said zone to a substantially higher temperature for such time as to completely carbonize the fuel masses without causing distortion or shrinkage thereof while substantially excluding air from said final heating zone, the initial heat treatment of the fuel masses being characterized by the application of heat to said masses transmitted thereto by heat storage elements containing sufficient heat to partially carbonize said masses.

1,767,779. APPARATUS FOR PRODUCING METALS FROM THEIR OXIDE ORES. WALTER E. TRENT, New York, N. Y., assignor to The Trent Process Corporation, a Corporation of Delaware. Filed May 11, 1928. Serial No. 276,862. 17 Claims. (Cl. 266—11.)

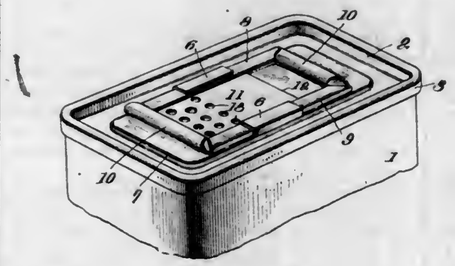


1. In a metallurgical furnace, in combination, a reduction chamber, means for indirectly heating said chamber comprising tubes extending into said chamber, said tubes terminating externally of said chamber and being heated externally of said reduction chamber.

1,767,780. PROCESS FOR THE MANUFACTURE OF AMMONIA. CHARLES URFER, Geneva, Switzerland, assignor to Société D'Etudes Minières et Industrielles, Paris, France, a Corporation of France. Original application filed Jan. 2, 1926, Serial No. 79,039, and in France Jan. 8, 1925. Divided and this application filed June 2, 1927. Serial No. 196,152. 5 Claims. (Cl. 23—198.)

1. A process for the manufacture of ammonia which consists in causing a mixture of heated nitrogen and hydrogen to react in the presence of at least one metal of the iron group, a lithium nitrogenated compound which does not react when heated with hydrogen, and a compound from the group consisting of alumina, magnesia and lime.

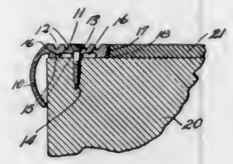
1,767,781. SPICE DREDGE. CHARLES J. AULBACH and WILLIAM F. PUNTE, Passaic, N. J., assignors to Continental Can Company, Inc., New York, N. Y., a Corporation of New York. Filed May 2, 1929. Serial No. 359,836. 2 Claims. (Cl. 221—61.)



1. A spice dredge comprising a body portion, a top secured thereto and having an opening therethrough cen-

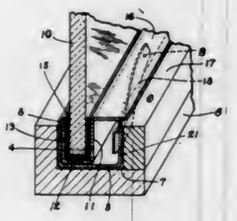
trally of the top, a slide having an opening therethrough, an imperforated portion and a perforated portion, guide members formed integral with said top at the side edges of said opening, said guide members being bent outwardly, thence upwardly and inwardly to form guideways for said slide, whereby said slide is shiftably attached to said top for controlling said opening.

1,767,782. STAIR NOSING. SAMUEL C. AWBREY, Kansas City, Mo., assignor to Ethel Awbrey, Kansas City, Mo. Filed July 5, 1928. Serial No. 290,327. 4 Claims. (Cl. 20—79.)



1. As a new article of manufacture, a stair nosing, comprising a vertically extending nosing flange having a rearwardly extending securing flange integral therewith, and a series of longitudinal, downwardly extending ratchet teeth on the inner surface of said stair nosing adapted to engage the outer edge of a tread covering when in operative position, said ratchet teeth being in substantially perpendicular alinement with the surface of said securing flange.

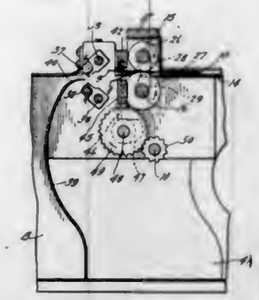
1,767,783. AUTOMOBILE WINDOW AND THE LIKE. SAMUEL O. BALLENTINE, Greenfield, Ohio. Filed May 18, 1928. Serial No. 278,874. 5 Claims. (Cl. 296—44.5.)



1. In a device of the class described the combination of a U-shaped metal channel adapted for mounting in a frame, a U-shaped metal binder adapted to loosely slide in said channel, a spring means mounted on said binder abutting an inner wall of the channel whereby to yieldingly retain the binder in the channel and a flange on the binder overhanging an edge of the channel and closing the space between the binder and channel.

4. In an automobile door structure, a pair of opposed frames, removable molding on said frames, a pair of metal channels secured to the frames and retained against removal by the molding, and a metal bound glass slidably and yieldably mounted in the channels, said channels and molding being severed on a biased line intermediate the ends, to permit removal of the glass and part of its slidable mounting channel as a unit.

1,767,784. AUTOGRAPHIC REGISTER. ALLEN B. COOKE, Danville, Ill., assignor to The United Autographic Register Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 27, 1926. Serial No. 144,610. 13 Claims. (Cl. 164—17.)



1. In an autographic register including a platen, feed devices for advancing a paper strip across said platen, and means for engaging the portion of the strip advanced past said feed devices and adapted to exert a pull upon the strip progressively from one side to the other whereby to detach the delivered portion of the strip.

1,767,785. URETHRAL BOUGIE. ALEXANDER DE SUSHKO, Chicago, Ill. Filed Jan. 19, 1927, Serial No. 161,987. Renewed May 12, 1930. 11 Claims. (Cl. 128—358.)

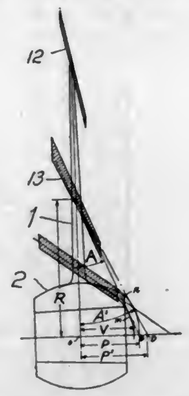


1. A bougie of the class described comprising: a tubular supporting member open at both ends; and a medicament affixed to the outer surface of said supporting member.

1,767,786. PROPELLER. GUNNAR C. ENGSTRAND, Brooklyn, N. Y., assignor to William Braat, Englewood, N. J. Filed May 6, 1927. Serial No. 189,321. 29 Claims. (Cl. 170—159.)

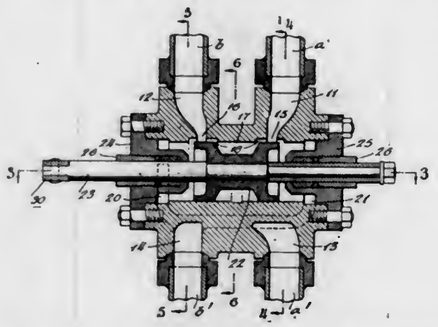
26. A propeller having a plurality of blades, each blade having an active suction surface consisting of substantially helical elements, the pitches of such elements varying with the radius so as to be substantially equal to a constant divided by the cosine of the inclination angle of the element under consideration, and each blade having an active pressure surface consisting of substantially helical elements, the pitches of such elements varying with the radius so as to be at any radius substantially equal

to the pitch of the suction surface at the same radius divided by the inclination angle of the pressure element under consideration, the width of the said suction surface



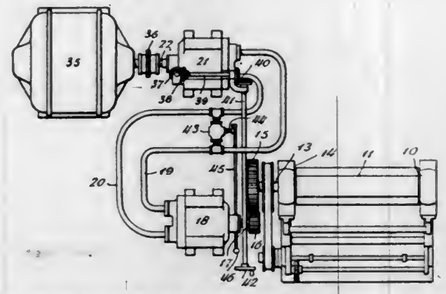
at any radius being substantially equal to the clearance between the helices of which the elements of adjacent blades at that radius are portions.

1,767,787. VARIABLE-SPEED-GEAR TRANSMISSION. DANIEL R. FRANCIS, Waterbury, Conn., assignor to The Waterbury Tool Company, Waterbury, Conn., a Corporation of Connecticut. Filed Oct. 9, 1926. Serial No. 140,433. 1 Claim. (Cl. 92—38.)



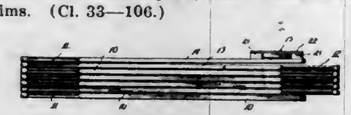
In combination with a paper making machine having a plurality of units each of which is composed of a plurality of rolls, a hydraulic variable speed gear comprising a variable pump, a delivery motor for each of said units, and suction and pressure pipe lines connecting each of said motors in parallel with said pump, said pump having an adjustable control shaft for varying the speed of said gear between zero and a maximum, means for instantly stopping or reversing the drive of each unit without changing the adjustment of the control shaft of said pump or the adjustment of the remainder of said motor driven units, whereby the rolls of each unit may be driven at a correlated speed ratio, said means comprising a valve casing connected across said pressure and suction pipe lines to each motor, said valve casing being provided with two pairs of conduits, a valve mounted in said casing, said valve being movable to a plurality of set positions, in one of which the conduits of each pair of conduits are in direct communication with each other and with said motor to cause the fluid to flow through said motor in one direction, in a second position one conduit of each pair of conduits is in communication with a conduit of the other pair to reverse the flow of fluid through said valve and motor, thereby to reverse said motor, and in a third position one conduit of each pair of conduits is in communication with a different conduit of the other pair than in said second position, to cause the fluid to be bypassed through said valve, and thereby render said motor inoperative, whereby one unit of said paper machine may have its speed altered without disturbing the related speed ratio between the remainder of said units.

1,767,788. DRIVING GEAR FOR PAPER CALENDERS. DANIEL R. FRANCIS, Waterbury, Conn., assignor to The Waterbury Tool Company, Waterbury, Conn., a Corporation of Connecticut. Filed June 16, 1927. Serial No. 199,150. 1 Claim. (Cl. 92—71.)



In combination with a paper calendering machine having a plurality of rolls, a hydraulic variable speed transmission gear, comprising a pump, a motor actuated by fluid under pressure from said pump, said pump and motor each having intake and outlet ports, a pair of conduits connecting the ports of the pump with the ports of the motor, said pump having adjustable means for reversing the direction of flow through said conduits and for gradually varying the output of said pump, thereby reversing the direction of rotation and varying the speed of said motor driving shaft, a single gear train connecting the motor with the rolls of the calendering machine, a by-pass connecting said pairs of conduits, a valve adapted to be instantaneously opened in said by-pass, manually operable means located adjacent said calendering rolls for controlling the adjustable means on said pump, and manually operable means located adjacent said calendering rolls for controlling said valve in said by-pass, whereby said calendering rolls may be quickly stopped.

1,767,789. CARPENTER'S RULE. RAYMOND GARNS, Kankakee, Ill. Filed Sept. 4, 1928. Serial No. 303,885. 6 Claims. (Cl. 33—106.)

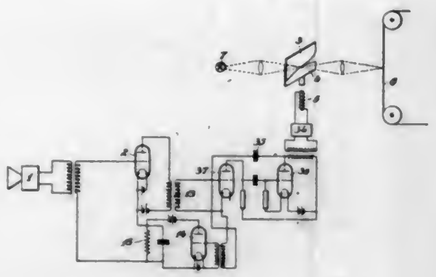


1. An attachment for a carpenter's rule comprising an auxiliary rule and a metal clip pivotally connected thereto for turning movement thereon and consisting of two substantially rectangular plates one slidable with respect to the other, opposing flanges on the plates adapted to clamp the carpenter's rule between them, and a spring interposed between adjoining flanges of the companion plates to move the slidable plate to clamping position.

1,767,790. PROCESS AND APPARATUS FOR THE PRODUCTION AND REPRODUCTION OF PHONOFILMS. ERWIN GERLACH, Berlin-Siemensstadt, Germany, assignor to Siemens & Halske Aktiengesellschaft, Siemensstadt, near Berlin, Germany, a Corporation of Germany. Filed Oct. 3, 1927, Serial No. 223,687, and in Germany Aug. 31, 1925. 21 Claims. (Cl. 179—100.3.)

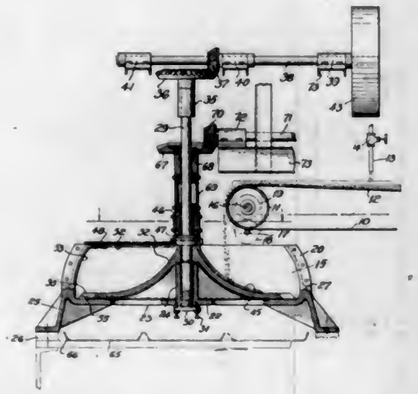
3. In a device for producing varying amplitude photographic sound films, a source of waves, and means for

recording the variations in amplitude of said waves, said means including a source of light and a pair of shutters which are adjustable towards each other in accordance with the variations in amplitude of said waves, the effective edges of said shutters being curvilinear, whereby the said record is distorted.



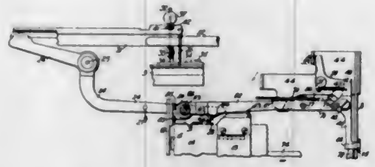
6. In a system for reproducing distorted photographic sound films, an amplifier whose characteristic curvature is adapted to emphasize the larger amplitudes comprising a tube, a secondary tube in the circuit in advance of said first tube, a resistance between the grid and the anode of the secondary tube, a contact on said resistance, a connection from said contact to the grid of said first tube, said contact being so located that the transmission degree of the secondary tube on account of the impressed voltage becomes small on account of the anode tension which has an opposing phase.

1,767,791. MIXER FOR STUCCO COMPOSITIONS. FRED J. GOUGH, Fort Dodge, Iowa, WILLIAM M. MCNEIL, Chicago, Ill., and FREDERIC D. PFEFFER, Fort Dodge, Iowa, assignors to United States Gypsum Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 1, 1928. Serial No. 316,410. 16 Claims. (Cl. 83—73.)



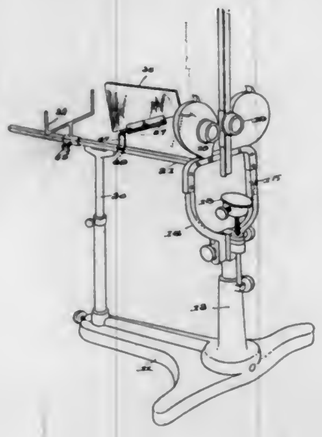
1. In a mixing device, a mixing container, a rotor having mixing surfaces, said rotor being rotatably mounted in said container, and scraping means closely adjacent to said rotor and adapted for scraping movement over said surfaces of said rotor.

1,767,792. COMBINED TYPEWRITING AND COMPUTING MACHINE. FREDERICK A. HART, New Britain, Conn., assignor to Remington Accounting Machine Corporation, New York, N. Y., a Corporation of New York. Filed Feb. 18, 1926, Serial No. 89,134. Renewed Apr. 12, 1930. 9 Claims. (Cl. 235—59.)



1. The combination with cross footing mechanism including a jumping element and clearance proof mechanism, of means whereby said clearance proof mechanism is disabled by the jumping element occupying one position of its travel, and means for retaining said jumping element in such position.

1,767,793. SEPTUM. BENJAMIN WOODWARD HAZELL, Baltimore, Md. Filed June 4, 1927. Serial No. 196,537. 5 Claims. (Cl. 88—20.)

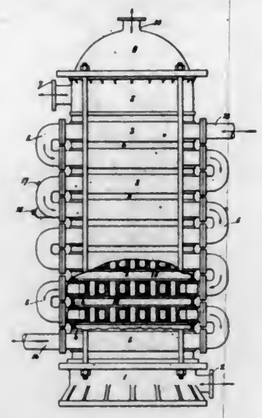


1. A septum including a septum portion, a clamp, elements rotatably securing said septum portion to said clamp and cooperating holding members for frictionally locking said septum portion in vertical or substantially horizontal position.

1,767,794. HEAT EXCHANGER. JULES HEIZMANN, Strasbourg, France. Filed Mar. 31, 1928, Serial No. 266,275, and in France Feb. 28, 1928. 7 Claims. (Cl. 257—230.)

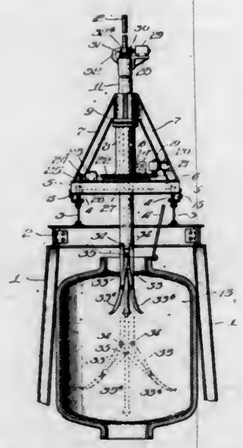
1. In a heat exchanger of the column type, the combination of a series of superposed exchange units, each having transverse circulation tubes running across the units, partitions inside the units extending from one side to the other side of same, and dividing each unit into a plurality of independent chambers, some of the transverse circulation tubes forming a part of said partitions, an individual

inlet and an individual outlet for each chamber, and external interchangeable unions forming connections between



the chambers of one exchange unit and also between the chambers of one unit and the chambers of adjacent exchange units in the column.

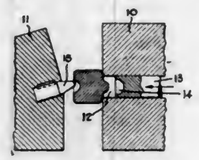
1,767,795. CLEANING APPARATUS. LYMAN C. HUFF, Chicago, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Aug. 30, 1923, Serial No. 660,098. Renewed Apr. 6, 1929. 5 Claims. (Cl. 15—93.)



1. A cleaning apparatus for disintegrating solid or semi-solid materials in collecting chambers comprising a vertically movable element, a second element longitudinally movable relative to said first element, extension cutting arms carried by one of said elements, means for rotating said first mentioned element, means for causing said second mentioned element to be elongated below the first element, and means operative upon elongation of said second mentioned element to extend the extension cutting arms.

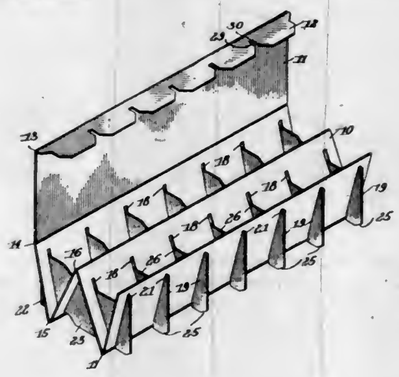
1,767,796. METHOD OF ROLLING DISKS. JAMES W. HUGHES, Philadelphia, Pa., assignor to Budd Wheel Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Oct. 5, 1927. Serial No. 224,072. 3 Claims. (Cl. 80—60.)

1. The method of rolling relatively thin hubless wheel disks which consists in first forging a relatively thick disk with a dummy hub, centering and holding the disk for rolling by means of said hub, rolling the disk to thin the



same, feeding metal outwardly during the rolling of the disk, and thereafter removing the dummy hub therefrom to provide a hub receiving aperture.

1,767,797. EGG BOX. HARRY A. INMAN, Newark, N. Y. Filed Nov. 25, 1927. Serial No. 235,505. 4 Claims. (Cl. 229—29.)



3. An egg box comprising walls collapsible to lie in juxtaposition to each other and expansible to form an egg-receiving trough between them, said walls having sets of closed-end slots, the slots of one set registering with each other when said walls are collapsed, and partition members formed with lugs and so shaped that a partition member may be inserted through a set of registering slots without distortion of such partition member when said walls are collapsed and will be retained by said lugs against removal from said slots when said walls are expanded.

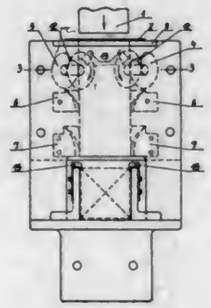
1,767,798. PROCESS FOR PURIFYING EXPLOSIVES. DEAN M. JACKMAN, Kenvil, N. J. Filed July 24, 1925. Serial No. 45,931. 6 Claims. (Cl. 260—142.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928, 370 O. G. 757.)

1. A process for purifying a normally solid aromatic nitro explosive compound insoluble in water which consists in forming a solution of the explosive compound in a solvent which is practically insoluble in water and agitating the solution with a substantially equal volume of water of approximately the same temperature as the solution.

1,767,799. MEANS FOR FORMING PAPER BAGS OR CARDBOARD BOXES. ERNST HERMANN JÄHNE, Dresden, Germany, assignor to the Firm "Universelle" Cigarettenmaschinen-Fabrik J. C. Muller & Co., Dresden, Germany. Filed June 19, 1929, Serial No. 372,197, and in Germany June 26, 1928. 3 Claims. (Cl. 93—51.)

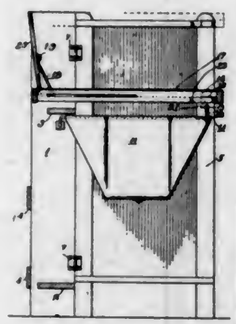
1. Means for forming paper bags or cardboard boxes with flat rectangular bottoms comprising in combination with a former and a shaping channel serving in conjunc-

tion with the former to form the blank to U-shape, folding means acting to form two sides and the bottom and means for pressing the other sides against the former, said folding means including a pair of rollers located within



the shaping channel one at each side of the former, said rollers provided with peripheral wedge shaped grooves and said rollers being freely rotatable and adapted to roll along the former with the wedge shaped grooves engaging the edges of the former.

1,767,800. BATH CABINET. DEWEY M. KENNEDY and BENJAMIN H. KENNEDY, Rochester, N. Y. Filed July 25, 1921, Serial No. 487,300. Renewed May 10, 1930. 8 Claims. (Cl. 45—88.)



6. A bathing appliance comprising in combination a collapsible tub, means for supporting said tub in a horizontal operative position, an independently movable dressing table overlying said tub and comprising a frame having a fabric covering, and a sliding connection between said tube and said supporting means permitting the table to be slid and swung to a vertical lowered position to one side of said tub while the latter remains stationary.

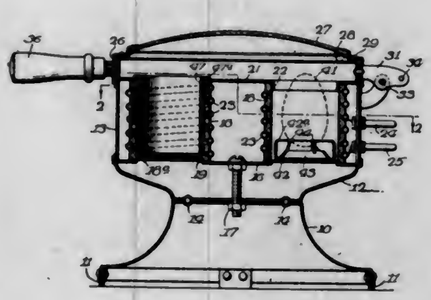
7. The combination with a support, a collapsible bathtub carried thereby and a dressing table overlying the tub horizontally when in operative position and movably connected to the support to assume an inoperative upright folded position in rear of the tub, of a screen guard disposed to project above the dressing table and at one side thereof when the dressing table is in its horizontal operative position.

1,767,801. SHOE. CHARLES L. LAIBLE, Fort Thomas, Ky. Filed Jan. 27, 1928. Serial No. 250,046. 4 Claims. (Cl. 36—76.)



1. A shoe having a stiff shank stiffener retained between the insole and the outsole thereof, and having a resilient pad attached to the forward end of the stiffener piece, and said pad having a bearing surface to abut the lower surface of the shoe insole, said surface being indented with cup like depressions to increase the flexibility of the pad and to establish a predetermined flex line.

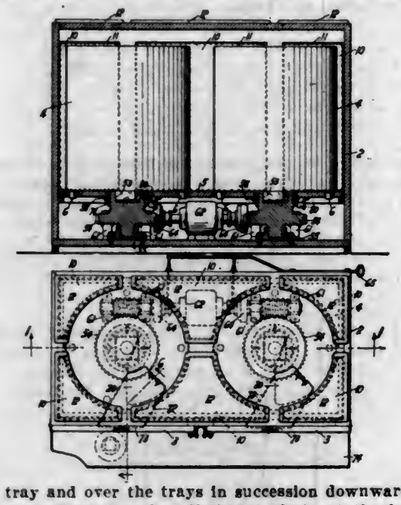
1,767,802. TABLE COOKER. OTTO A. LANGOS, Chicago, Ill. Filed Oct. 8, 1927. Serial No. 224,782. 5 Claims. (Cl. 53—1.)



1. A table cooker adapted to cook eggs without water, said cooker including a casing, an electric heating element within the casing, a removable pan, and an egg holder within the pan having pointed upward extensions on which the egg is adapted to rest during the cooking operation.

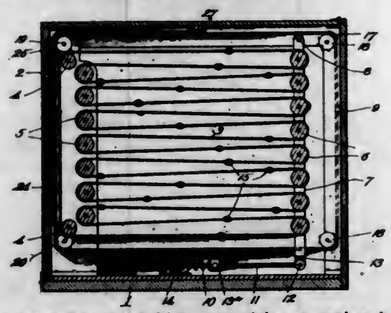
1,767,803. BUTTER-SERVING MACHINE. JERRY M. LEATHERMAN, Akron, Ohio. Filed Mar. 7, 1928. Serial No. 259,643. 7 Claims. (Cl. 312—36.)

1. In an apparatus for dispensing butter, a cabinet having a vertical refrigerating compartment therein, a magazine received within the cabinet and removable therefrom, said magazine having a plurality of superposed trays therein, each of said trays adapted to receive a plurality of filled butter chips to support them adjacent said compartment, means to pass the butter chips over



each tray and over the trays in succession downwardly of said compartment, and a discharge chute at the base of the magazine to receive a butter chip.

1,767,804. AUTOMATIC ADVERTISING MACHINE. JOHN D. MACLACHLAN, Kansas City, Mo., assignor, by mesne assignments, to Mac-Ad-Co., Kansas City, Mo., a Corporation of Missouri. Filed Aug. 20, 1928. Serial No. 300,627. 6 Claims. (Cl. 40—82.)



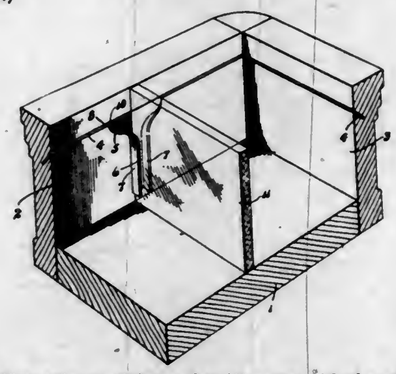
1. An advertising machine comprising a casing having a display window, an endless web containing matters for successive display at said window, driven means within the casing, and completely surrounding the web means actuated by the driven means for periodically moving the web to withdraw display matter thereon from a display position at said window and dispose other display matter indisplay position at said window ,and means movable constantly with the driven means for interposition between the web and window during movement of the former.

1,767,805. STUD FOR SNAP FASTENERS. GEORGE S. MAYNARD, Newtonville, Mass., assignor, by mesne assignments, to United-Carr Fastener Corporation, Cambridge, Mass., a Corporation of Massachusetts. Filed Jan. 19, 1928. Serial No. 247,854. 4 Claims. (Cl. 24—219.)



1. A snap fastener stud comprising, in combination, an attaching element having a head and a single pointed shank adapted to be drawn into a carrying medium, a hollow sheet metal cap secured to the head of the attaching element and having a head and a neck for cooperative engagement with a snap fastener socket, and a third member located within the hollow cap and normally engaged directly with the head of the attaching element and with the inner surface of the upper end of the stud head provided by the cap, thereby providing means for reinforcing the cap to prevent crushing of the stud head during attachment of the fastener to a carrying medium.

1,767,806. PARTITION HOLDER FOR COUNTERS. EDMUND MORRIS, Grand Rapids, Mich., assignor to Grand Rapids Store Equipment Corporation, Grand Rapids, Mich., a Corporation of Michigan. Filed May 31, 1928. Serial No. 281,798. 8 Claims. (Cl. 312—140.)



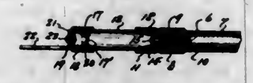
8. Means for receiving and guiding one end of a vertical partition comprising a vertically positioned channel guide and a horizontal lip extending from said guide in a direction opposite to the opening of the channel thereof, said lip being wider than the web of the channel guide.

1,767,807. OPHTHALMIC MOUNTING. JOHN N. NELSON, Providence, R. I., assignor to Universal Optical Corporation, Providence, R. I., a Corporation of Rhode Island. Filed July 10, 1928. Serial No. 291,577. 4 Claims. (Cl. 88—43.)



1. An ophthalmic mounting comprising a bridge member having a cross bar with inwardly-curved downwardly-extending side arms of a length substantially one-half the height of the lenses to which they are attached, lens attaching members, said arms each having an integral projection on its lateral edge at its lower portion provided with an extended attaching surface connected to its lens attaching member.

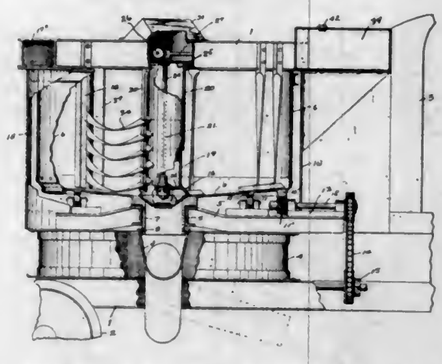
1,767,808. TERMINAL CONNECTER FOR ELECTRIC CONDUCTORS. CHARLES T. NIETMAN, Jamaica, N. Y. Filed June 8, 1928. Serial No. 283,775. 2 Claims. (Cl. 173—269.)



1. A convertible terminal conductor for the purposes described, comprising a tubular split body having means

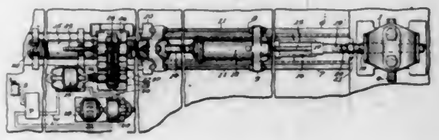
comprising a pair of attached caps arranged back to back at one end to connect an electric conductor therewith, said body having an open free end, a bifurcated contact clip, and means for detachably connecting said contact clip with said open free end of said body.

1,767,809. ROTARY CONCRETE MIXER. FRANCIS O'REILLY, San Francisco, Calif. Filed Sept. 12, 1928. Serial No. 305,340. 9 Claims. (Cl. 83—73.)



1. In a mixer of the character described, an open topped bowl, provided with a central bottom discharge opening, means by which said bowl may be bodily revolved on a vertical axis, and means extending within said bowl arranged and adapted for mixing a load of material in the bowl and for forcing it toward said central opening, a conical valve seated downwardly against said opening provided with a tubular neck extending upward in said bowl, and means for lifting and lowering said valve extending into said neck, and a fixed tubular member depending into said bowl guiding said neck.

1,767,810. FEEDING MECHANISM FOR TUBE MILLS. ALFRED G. PLACE, Youngstown, Ohio; Edna L. Place and The Dollar Savings and Trust Company executors of said Alfred G. Place, deceased. Filed Sept. 24, 1927. Serial No. 221,710. 5 Claims. (Cl. 80—14.)



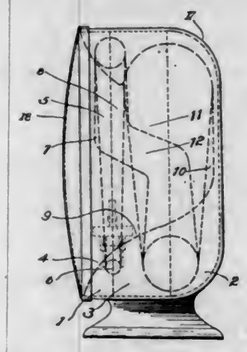
1. In a machine for forming tubes from a pierced ingot by progressively moving the ingot through a pair of grooved rolls rotating in opposition to the movement of the ingot, a pair of rolls, ways disposed in front of the rolls, a carriage adapted for reciprocation on the ways and means for reciprocating the carriage for feeding the ingot forwardly to the rolls at different speeds and for moving the carriage backwardly at different speeds to produce a slow starting movement and then a rapid backward movement, comprising a motor, means interconnecting the carriage and the motor whereby rotation of the motor in a predetermined direction is operative to impart movement to the carriage in a corresponding predetermined direction, a generator, means for driving the generator, connections between the generator and the motor, and control means operative to vary the output voltage delivered to the motor from the generator whereby said carriage may be moved on the ways at predetermined speeds under different loads by suitably varying said voltage.

1,767,811. SURF BOARD. RAYMOND MCMILLEN POLLARD, Los Angeles, Calif. Filed Nov. 9, 1929. Serial No. 405,868. 5 Claims. (Cl. 9—11.)



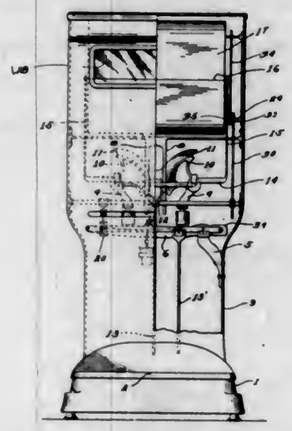
1. A device as described consisting of a flat board, a hinged plate carried by said board between its ends, means limiting the swinging movement of said hinged plate to a perpendicular position relatively to said board, said board having a pocket to receive said hinges when the plate is in close position and in overlying relationship upon the board.

1,767,812. ACOUSTICAL HORN. WLADIMIR J. POLYDOROFF, Chicago, Ill., assignor to Johnson Laboratories, Inc., Chicago, Ill., a Corporation of Illinois. Filed June 21, 1928. Serial No. 287,053. 7 Claims. (Cl. 181—27.)



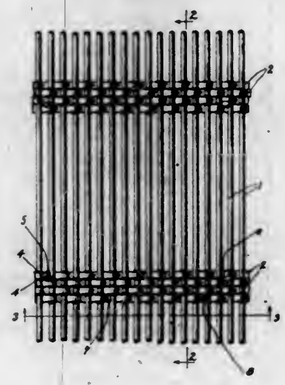
1. A horn having mating grooved sections forming sound channels, said channels being united by a port extending through one of said sections.

1,767,813. COMPUTING SCALE. ORWELL C. REEVES, Toledo, Ohio, assignor to Toledo Scale Company, Toledo, Ohio, a Corporation of New Jersey. Filed Mar. 22, 1922. Serial No. 545,752. 8 Claims. (Cl. 265—37.)



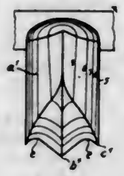
1. In a weighing scale, in combination, a commodity-receiver, automatic load-offsetting mechanism connected to said commodity-receiver, manipulative load-offsetting mechanism connected to said commodity-receiver, means for manipulating said manipulative load-offsetting mechanism, and an indicating device comprising relatively movable elements, one of said elements being connected to and moved by said automatic load-offsetting mechanism, the other element being connected to and moved by the means for manipulating said manipulative load-offsetting mechanism, the parts being so proportioned and arranged that movement of the automatic load-offsetting mechanism or movement of the manipulative load-offsetting mechanism to counterbalance a given load on the platform will cause equal relative movement of the elements of the indicating device.

1,767,814. WOVEN-WIRE SCREEN. MORLEY PUNSHON REYNOLDS, Cleveland Heights, Ohio, assignor to The W. S. Tyler Company, Cleveland, Ohio, a Corporation of Ohio. Filed Dec. 27, 1927. Serial No. 242,917. 3 Claims. (Cl. 209—401.)



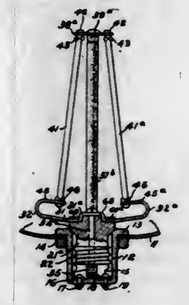
1. A woven wire screen comprising a series of spaced parallel wires, and a second series of transverse wires, the wires of said second series being arranged in spaced groups, and the two outermost wires in each such group being secured to certain of the wires of the first-named series.

1,767,815. FLOATING BODY FOR SEAPLANES. ADOLF ROHRBACH, Berlin-Wilmersdorf, Germany, assignor to Rohrbach Patents Corporation, a Corporation of Delaware. Filed Apr. 18, 1927, Serial No. 184,751, and in Germany Apr. 19, 1926. 33 Claims. (Cl. 244—2.)



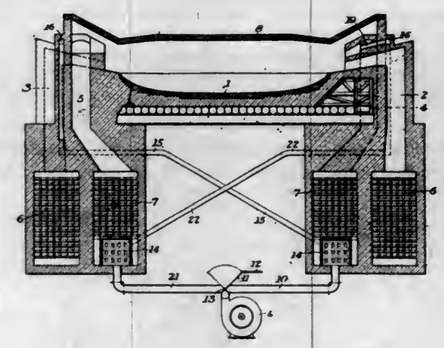
6. In a hydroaeroplane capable of flight and taking off and alighting upon the water, a floating and hydroplaning body provided in the vicinity of the center of displacement with a bottom which is laterally curved between the keel and the chines to form concave bottom parts on a considerably long stretch in the vicinity of the chine on both sides of the keel with the chines located at a higher level than the keel but lower than the vertices of the concave curvatures, the floating and hydroplaning body being provided with a step substantially beneath the center of gravity of the craft with the downwardly curved chine structure beginning at this step and extending forward to the vicinity of the bow-top and to a point above the water line, the bow being cruiser-shaped and provided with a high stem, the side walls of the bow running from the chines to the deck without acute interruption the bottom surfaces which are located behind the step having a higher elevation than those located in front of the step, whereby the step is continuous throughout the width of the body.

1,767,816. ELECTRICAL HEATING UNIT. HAROLD N. SHAW, Milwaukee, Wis., assignor to Globar Corporation, Niagara Falls, N. Y., a Corporation of New York. Filed May 19, 1926. Serial No. 110,088. 9 Claims. (Cl. 219—34.)



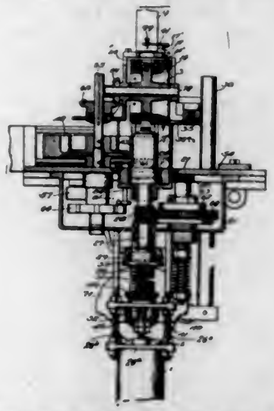
3. In an electrical heating device, the combination of an insulating support having a plurality of circuit terminals concentrically arranged thereon, a recessed contact element mounted at one end of said support, a self-sustaining heating element having one terminal thereof in engagement with said recessed contact portion, a second contact element disposed at a point remote from said support and in axial alinement therewith, and yielding supporting means for said second contact, said supporting means comprising a plurality of spaced arms associated with said second contact and mounted upon said plug through the intermediary of a securing bolt arranged substantially axially of said support.

1,767,817. FURNACE. ALBERT W. SMITH and RICHARD B. JONES, Youngstown, Ohio. Filed Aug. 12, 1921. Serial No. 491,716. 8 Claims. (Cl. 263—15.)



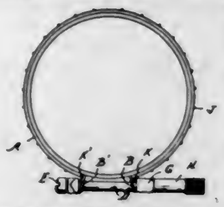
1. The method which consists in conducting gas into the port of a furnace and conducting air into the region of the port and subjecting the air therein to a transverse gaseous current to direct said air into the port and mix it and the gas together and to a longitudinal current for conducting the mixture into a combustion and heating chamber.

1,767,818. CAN-CAPPING MECHANISM. THEODORE J. SMULSKI, Lake Zurich, Ill., assignor to The Anderson Co., Gary, Ind., a Corporation of Indiana. Filed Mar. 13, 1924. Serial No. 698,943. 20 Claims. (Cl. 226—88.)



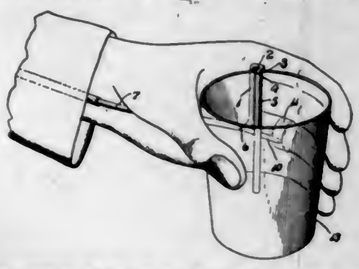
14. In a device of the kind described and in combination, means for singly feeding caps, means for singly feeding cans into registry with said caps and for discharging the capped cans, means for gripping a can at the base thereof when in registry with a cap, and means intermittently rotating said can and raising it into engagement with a cap.

1,767,819. PISTON-RING INSTALLING DEVICE. DEAN M. SOLENBERGER, Cleveland, Ohio, assignor to The Simplex Piston Ring Co. of America Incorporated, Cleveland, Ohio, a Corporation of Ohio. Filed July 11, 1927. Serial No. 204,952. 12 Claims. (Cl. 29—86.4.)



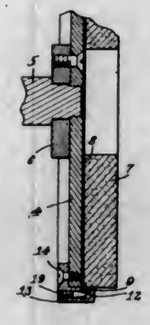
1. A device for installing rings in grooved pistons comprising a flexible split sleeve for surrounding the rings and piston, removable means engaging said sleeve for contracting the same, and means independent of said contracting means for retaining the sleeve in contracted position after removal of the contracting means therefrom.

1,767,820. DRINK-COLLECTING DEVICE. ROBERT G. TETRO, Grand Rapids, Mich. Filed Apr. 24, 1929. Serial No. 357,840. 4 Claims. (Cl. 137—18.)



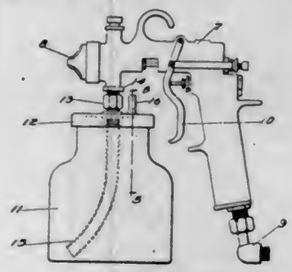
1. In a device of the class described, a finger engaging means, a tubular member of substantially U-shape adapted to be placed over the upper edge of a glass, with one leg extending into the glass and the other located at the outside thereof attached to the finger engaging member so as to be concealed by the hand, a tube connected at one end to the leg of the U-shaped member at the outer side of the glass, and an air tight compressible bulb connected with the other end of said tube.

1,767,821. DISK GRINDING WHEEL. THOMAS V. THOMPSON, Beloit, Wis. Filed Apr. 7, 1928. Serial No. 268,158. 6 Claims. (Cl. 51—209.)



1. An abrasive tool comprising a disk wheel, an abrasive disk or ring attached to the face of the wheel, a sectional clamping ring on the periphery of the disk having beveled faces, and means connecting the sectional ring to the wheel including screws having tapered ends complemental to and acting against said bevel faces adjustable for clamping the sectional ring to the disk.

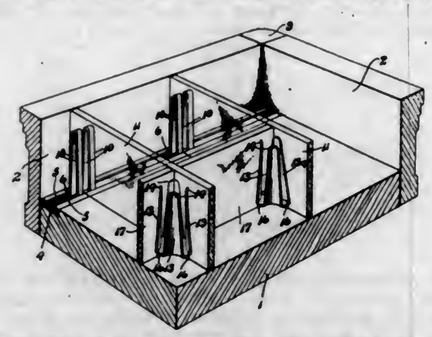
1,767,822. APPARATUS OR TOOL FOR APPLYING COATING. WAYNE B. THOMPSON, Winchester, Mass. Filed Aug. 7, 1928. Serial No. 297,983. 13 Claims. (Cl. 91—45.)



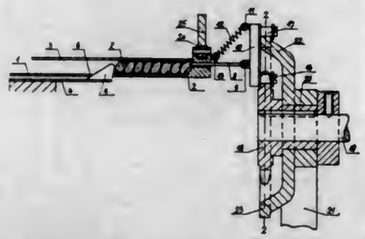
1. In a spray gun, the combination with a source of supply for the coating material, including an outlet for the coating material and an inlet for atmospheric air, and means for producing a condition of unbalanced pressure within the source of supply whereby the atmospheric air forces the coating material through the outlet, of a valve for closing the inlet during the operation of the spray gun.

1,767,823. COUNTER ATTACHMENT. ANTHONY VANDERVELD and EDMUND MORRIS, Grand Rapids, Mich., assignors to Grand Rapids Store Equipment Corporation, Grand Rapids, Mich., a Corporation of Michigan. Filed May 7, 1928. Serial No. 275,842. 9 Claims. (Cl. 312—140.)

1. In combination with a top for a counter, a channel guide attached to said top and a partition holder associated with said channel guide comprising a body having a portion located in said channel guide and adapted to be moved longitudinally therein, said portion having yieldable frictional engagement with the sides of said guide and means on said body for holding a partition.

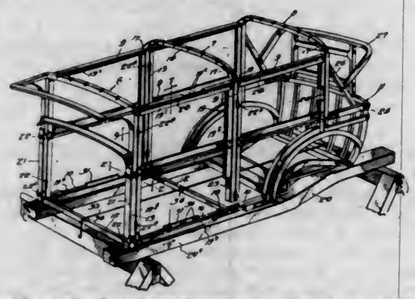


1,767,824. MEANS FOR TRANSFERRING GROUPS OF OVAL CIGARETTES. ROBERT WILHELM VOIGT, Dresden, Germany, assignor to the firm "Universelle" Cigaretten-Maschinen-Fabrik, J. C. Müller & Co., Dresden, Germany. Filed Mar. 24, 1928, Serial No. 264,498, and in Germany July 7, 1927. 10 Claims. (Cl. 226—5.)



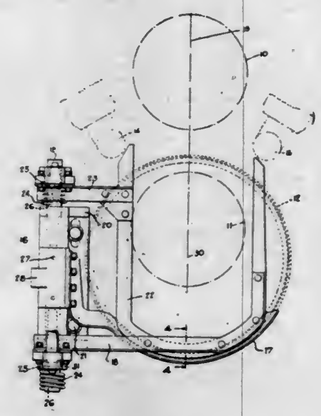
10. Means for transferring groups of cigarettes from a collecting position in a covered channel to a packing position comprising a pusher, an endless conveyor means for feeding said pusher along said covered channel and means for forcing said push member into operative position in said channel to push said cigarettes into packing position and to automatically cause said pusher to clear said packing position when said cigarettes have been completely pushed into said position.

1,767,825. METHOD OF ASSEMBLING VEHICLE BODIES. CHARLES TERRES WEYMANN, Paris, France, assignor, by mesne assignments, to Weymann Motor Bodies, Inc., Wilmington, Del., a Corporation of Delaware. Filed Dec. 20, 1927. Serial No. 241,418. 10 Claims. (Cl. 296—28.)



1. The method of assembling, without the use of jigs or forms, vehicle body skeletons comprising a plurality of transverse vertical frame units, longitudinal connecting members between said units, and door frames, which consists in securing one of the end transverse vertical frame units in fixed vertical position, positioning the door frames with respect thereto, placing the next transverse vertical frame in vertical position with respect to the door frames with spacing strips between the door frames and at least one of the transverse vertical frames, and flexibly connecting together the transverse vertical frames, as spaced apart by said door frames and spacing strips, by said connecting members, and thereafter removing said spacing strip whereby to form a skeleton capable of weaving and flexing.

1,767,826. FEEDING DEVICE FOR RIM-ROLLING MACHINES. CHARLES L. WILES, Detroit, Mich., assignor to Budd Wheel Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Jan. 31, 1928. Serial No. 250,851. 6 Claims. (Cl. 80—43.)



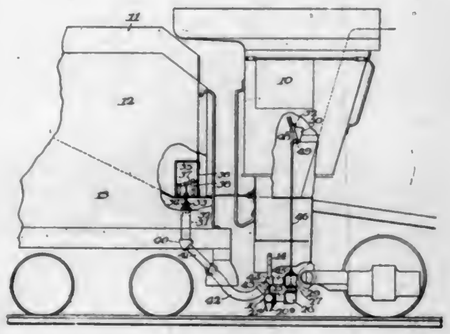
6. A machine of the character described, a forming roll having the mid plane of its working face arranged in a determinate plane, a feeding device having a feeding movement toward and from said plane and means for adjusting said feeding device independent of the feeding movement toward and from said mid plane.

1,767,827. MANUFACTURE OF PAPER TUBES. WATSON H. WOODFORD, Bridgeport, Conn., assignor to Remington Arms Company, Inc., a Corporation of Delaware. Filed July 5, 1927. Serial No. 203,445. 14 Claims. (Cl. 93—81.)



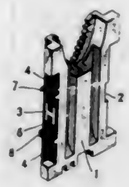
1. In the manufacture of paper shot shells, the method of controlling charring of the paper under the heat of firing the shell which comprises the application of petrolatum to the shell.

1,767,828. TRACK-BED SPRAYER. WALTER F. WRATTEN, Fairbury, Nebr. Filed Mar. 23, 1928. Serial No. 264,126. 6 Claims. (Cl. 299—31.)



1. In a track-bed sprayer, the combination with a spray pipe mounted on and beneath the rear end of a locomotive, of a water supply line from the tender tank to said spray pipe, a valve controlling said water supply line, and a valve opening and closing means extending into and operable from the engineer's cab.

1,767,829. MATRIX FOR COMPOSING MACHINES. CLIFFORD YEWDALL, Great Neck, N. Y. Filed Dec. 23, 1927. Serial No. 242,063. 2 Claims. (Cl. 199—63.)



1. In a composing machine of the character described, in combination, a plurality of metal matrices, having reference characters, assembled together side by side, each matrix having upper and lower narrow ribs between which the reference character is exposed to view, said ribs projecting in front of the reference characters and longitudinally aligning with each other above and below the reference characters, and providing a plurality of parallel channels across the reference character edges of the assembly of matrices, the reference character edges of each matrix between the upper and lower ribs being in sharp color contrast to that of the reference characters.

1,767,830. PAVING MATERIAL AND METHOD OF PREPARING SUCH MATERIAL. GLENN H. ALVEY and ERNEST A. YOUNG, San Antonio, Tex., assignor to Uvalde Rock Asphalt Company, San Antonio, Tex., a Corporation of Texas. Filed Apr. 2, 1928. Serial No. 266,868. 4 Claims. (Cl. 106—31.)

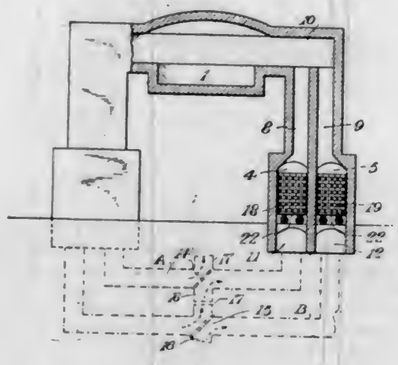
1. The method of preparing a paving composition which comprises crushing rock asphalt, and treating said rock asphalt with a flux and with water acidified with an acid combining with the rock to form carbon dioxide.

1,767,831. POLARIMETRIC APPARATUS. MAX BEREK, Wetzlar, Germany, assignor to Ernst Leitz, Optische Werke, Wetzlar, Germany, a Firm. Filed Apr. 21, 1927. Serial No. 185,506. 1 Claim. (Cl. 88—14.)



In polarimetric apparatus, a lens, a rotatable body containing a substance to be analyzed, an analyzer between said lens and body, a polarizer, a half-shade wedge in front of the same, and a tiltable glass plate between said half-shade wedge and said glass plate.

1,767,832. DEVICE FOR REPLACING CHECKER BRICKS. BANKS D. BROWN, Connelisville, Pa., assignor to Capstan Glass Company, Connelisville, Pa., a Corporation of Delaware. Filed Oct. 3, 1927. Serial No. 223,589. 2 Claims. (Cl. 263—15.)

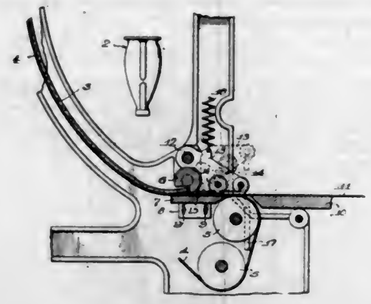


2. In a regenerative glass furnace, the combination of checker chambers associated therewith, passages leading from said chambers to said furnace whereby certain of said chambers may be used to preheat the incoming gases and other chambers may receive the exhaust gases and absorb heat therefrom, removable portions in the side wall of the checker chambers beneath said passages, segregated portions of checker work adjacent thereto, whereby said portions may be removed and said segregated portions of worn checker work removed from said chambers as a unit without shutting down the furnace.

1,767,833. MEANS FOR FEEDING TRACINGS TO BLUE-PRINT MACHINES. HAROLD J. BRUNK, Chicago, Ill., assignor to C. F. Pease Company, a Corporation of Delaware. Filed May 23, 1928. Serial No. 279,900. 1 Claim. (Cl. 95—75.)

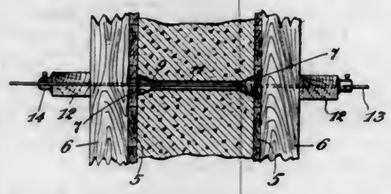
A machine for making blue prints and the like, comprising a travelling belt for carrying the negatives and prints past the source of light, a transverse member past which said belt moves, carrying said negatives and prints between itself and said transverse member and a roller

normally out of engagement with said belt as it approaches said transverse member to permit the operator to smooth



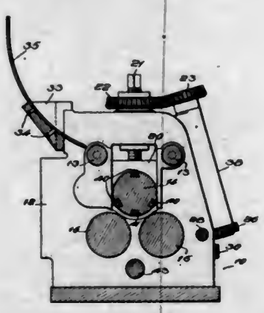
the negatives upon the paper in making an exposure and means for moving said roller into engagement with said belt.

1,767,834. SPACING MEANS FOR MOLD FORMS. FREDERICK G. CARLSON, Brooklyn, N. Y. Filed Mar. 28, 1928. Serial No. 265,282. 2 Claims. (Cl. 25—131.)



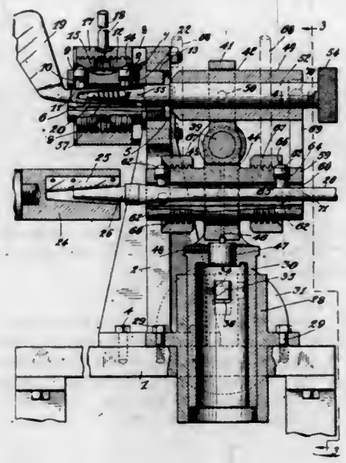
1. A spacing device for walls comprising a pair of hollow sheet metal cones having flanges at their wider ends engaging against the inner sides of the wall and having shoulders and extensions at their smaller ends, a sheet metal tube having its ends fitted over the extensions of the two cones and abutting at its ends against the shoulders of the two cones, a tie rod passing through the walls, cones and tube, and clamp means on the tie rod.

1,767,835. COILING MACHINE. CHARLES D. DALLAS, Chicago, Ill. Filed Jan. 14, 1929. Serial No. 332,366. 4 Claims. (Cl. 153—7.)



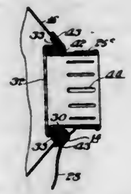
1. In a coiling machine of the class described, a plurality of rollers operable to curve a sheet of material fed therethrough, one of said rollers having a plurality of longitudinally extending sockets, bars mounted in selected ones of said sockets to form longitudinal ridges on said roller and filler bars mounted in the intermediate sockets having their exposed faces continuous with the peripheral surface of said roller.

1,767,836. METHOD AND APPARATUS FOR SHAPING SHAFTS. HENRY K. B. DAVIS, Mamaroneck, N. Y., assignor, by direct and mesne assignments, to Mavis Machine Corporation, New York, N. Y., a Corporation of New York. Filed July 7, 1928. Serial No. 291,095. 18 Claims. (Cl. 144—145.)



1. The method of correcting for the error in the bore of an iron head which consists in shaping the end of the shaft to be assembled therein with a corresponding error, and then turning the shaft substantially one hundred and eighty degrees with respect to the error in the bore and assembling same.

1,767,837. LOUD-SPEAKER. LEWIS H. DAVIS, Upper Darby, and RUSSELL T. KINGSFORD, Wyncote, Pa., assignors to Atwater Kent Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Apr. 28, 1930. Serial No. 447,786. 9 Claims. (Cl. 179—115.5.)

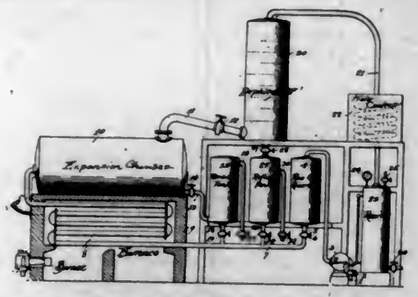


1. A telephonic sound reproducer comprising a diaphragm substantially of the shape of a truncated cone and terminating in an inwardly directed flanged portion, annular reinforcing collars engaging opposite sides of and clamping said flanged portion between them, and a reticulated centering disc integral with one of said collars and extending across the area bounded thereby.

1,767,838. APPARATUS FOR CONVERTING HYDROCARBONS. GUSTAV EGLOFF, Chicago, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed June 6, 1921, Serial No. 475,242. Renewed Feb. 21, 1929. 2 Claims. (Cl. 196—108.)

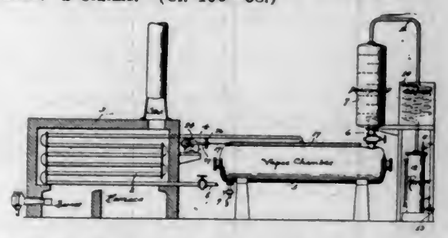
2. In an apparatus for converting hydrocarbon oils, the combination with means for raising the oil to a cracking temperature comprising a heating coil, of a vaporizing chamber connected thereto, dephlegmating and condensing means connected with the vaporizing chamber, means for collecting separately the residual oil from the

vaporizing chamber and the reflux condensate from the dephlegmating means, and alternate drawoff lines from



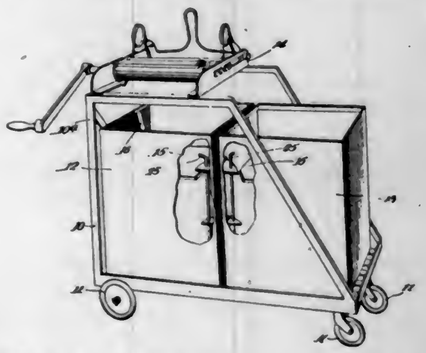
said collecting means for directing the residuum and reflux back to the heating means or for directing said products to storage.

1,767,839. PROCESS AND APPARATUS FOR TREATING OILS. GUSTAV EGLOFF and HARRY P. BENNER, Chicago, Ill., assignors to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Apr. 23, 1921, Serial No. 463,939. Renewed July 16, 1928. 2 Claims. (Cl. 196—58.)



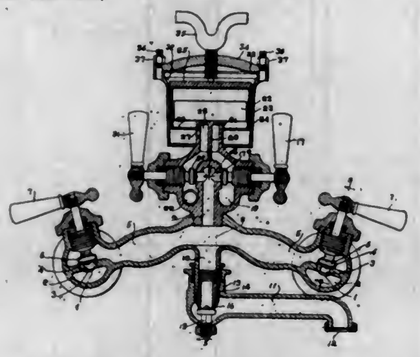
1. A process for converting hydrocarbons, consisting in raising the oil to a cracking temperature in a heating zone, passing the oil to a unitary vaporizing zone and there intermittently introducing it to different parts of the vaporizing zone, whereby the carbon is uniformly distributed throughout said zone, drawing off the residual products and condensing and collecting the vaporized oil.

1,767,840. RECEPTACLE FOR MOPPING MACHINES. WALTER S. FINNELL, Elkhart, Ind. Filed Aug. 8, 1927. Serial No. 211,420. 13 Claims. (Cl. 15—264.)



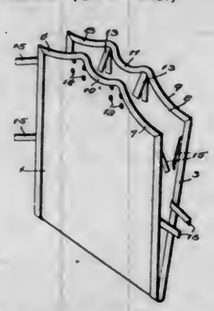
1. In a receptacle for mopping apparatus, a mop shield; and means for supporting said shield in horizontal position in and spaced from the walls of said receptacle, including flexible straps suspended from opposite walls of the receptacle and having their free ends extending downwardly and angularly away from said walls, and means carried by said shield engaging the free end of said straps for supporting one shield edge, and means for supporting another edge surface of said shield, the shield being readily disconnected by springing said straps away from said shield toward said walls.

1,767,841. DISHWASHING FIXTURE. GEORGE W. FISHER, Marysville, Ohio, assignor to The Fisher Brass Company, Marysville, Ohio, a Corporation of Ohio. Filed Feb. 15, 1928. Serial No. 254,362. 8 Claims. (Cl. 299—84.)



1. In combination, a soap chamber, means for holding the soap in position, means of delivering water laterally and substantially horizontally therethrough to circulate beneath and around the soap so arranged as to prevent the force of the water from boring a hole in the soap, and means of removing the soapy water.

1,767,842. BLANKET OR SIMILAR DEVICE. IRENE F. GEHRKE, Chicago, Ill. Filed July 5, 1928. Serial No. 290,485. 4 Claims. (Cl. 5—343.)

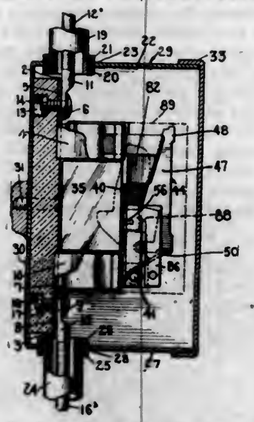


1. In a device of the character described, a body member of flat construction and symmetrical about its transverse axis, the opposite end edges of said member being extended beyond the line or plane between the corners of the body member to form two extreme rounded projecting portions with the space between the projections defining an arcuate enclosure for the neck, and the space between the projections and corners of the body member defining arcuate indentations to permit free movement of the arms of an infant when said member is folded to bring its end edges in proximity to each other, and means for securing the rounded projecting portions together.

1,767,843. CIRCUIT BREAKER. STEPHEN S. GRADY, Magnolia, N. C., assignor to Fusoid Electric Co., Inc., a Corporation of New York. Filed Aug. 31, 1928. Serial No. 303,189. 8 Claims. (Cl. 200—88.)

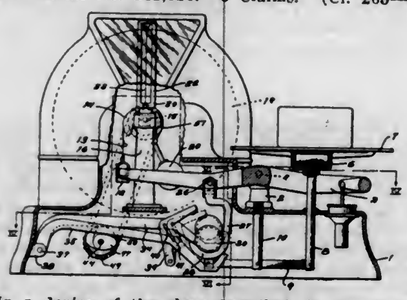
1. A circuit breaker comprising a pair of terminals, a pair of contact jaws operatively associated with one of

said terminals, a switch blade pivotally connected at one end and adapted to engage said jaws in circuit making position, an insulated lever operatively associated with said switch blade, a spring operatively connected to actuate said blade into circuit breaking position and to interpose said insulated lever between said contact jaws,



a latch for anchoring said blade in circuit making position against the tension of said spring, and a thermostatic operating member operatively connecting the other end of said blade with the other terminal, said thermostatic operating member being operative to trip said latch in case of a light overload to permit said spring to snap said blade into circuit breaking position.

1,767,844. WEIGHING SCALE. CLARENCE H. HAPGOOD, Toledo, Ohio, assignor to Toledo Scale Company, Toledo, Ohio, a Corporation of New Jersey. Filed Nov. 12, 1927. Serial No. 232,810. 6 Claims. (Cl. 265—37.)



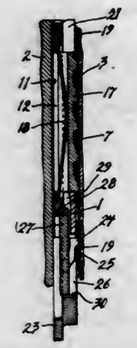
1. In a device of the class described, in combination, automatic weighing mechanism, an indicating hand controlled by said automatic weighing mechanism, a chart bearing a plurality of sets of price computations, and manually operated means for selectively moving said sets of price computations into co-operative relation with said indicating hand.

1,767,845. APPARATUS FOR DRAWING HOLLOW BLANKS. HEINRICH HEETKAMP, Duisburg, Germany, assignor to Demag Aktien Gesellschaft, Duisburg, Prussia, Germany, a Stock Company of Prussia, Germany. Filed May 25, 1928, Serial No. 280,476, and in Germany May 31, 1927. 11 Claims. (Cl. 205—7.)



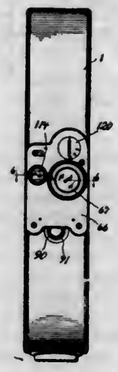
1. Apparatus for drawing hollow blanks comprising a supporting bed, drawing dies supported on said bed, a mandrel permanently supported at one end, means for moving the mandrel longitudinally through the drawing dies, supports for the mandrel movable longitudinally with the mandrel and movable relative to the mandrel, and means for permitting movement of the supports relative to the mandrel as the mandrel passes into the drawing dies.

1,767,846. INTERMITTENT-FEED MECHANISM. ALBERT S. HOWELL, Chicago, Ill., assignor to The Bell & Howell Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 21, 1925. Serial No. 70,450. 5 Claims. (Cl. 88—18.4.)



2. In an intermittent feed mechanism the combination of a member reciprocable longitudinally of a perforated film strip for intermittently feeding the same, of registering means mounted independently of said reciprocable member and adapted for engagement and disengagement with perforations of said strip and yieldably urged into disengaging position, and means including a cam portion on said reciprocable member and means engaged by said cam portion adjacent the end of the feeding stroke thereof whereby said reciprocation of said reciprocable member effects engagement and disengagement of said registering means with said film strip.

1,767,847. MOTION PICTURE CAMERA AND THE LIKE. ALBERT S. HOWELL, Chicago, Ill., assignor to The Bell & Howell Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 30, 1926. Serial No. 132,475. 18 Claims. (Cl. 88—17.)

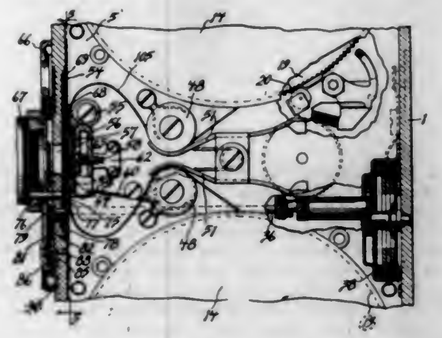


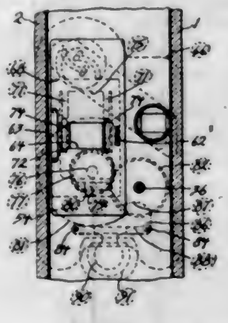
1. In a motion picture camera the combination with a vertically elongated closure, of a pair of power spring devices disposed within said closure adjacent one side thereof on vertically spaced transverse axes, a pair of

film reel spindles disposed within said closure on vertically spaced transverse axes and adapted to carry film reels between said power spring devices and the other side of said closure, film feeding and exposing mechanism arranged intermediate the horizontal axial planes of said spindles, and means for driving said film feeding and exposing mechanism from said power spring devices.

12. In a motion picture camera the combination with a power spring device, of a revoluble film reel spindle disposed coaxially therewith, film feeding mechanism, means for driving said feeding mechanism from said power spring device, and means for driving said spindle from said spring device independently of said first mentioned driving means.

1,767,848. MOTION-PICTURE CAMERA AND THE LIKE. ALBERT S. HOWELL, Chicago, Ill., assignor to The Bell & Howell Company, Chicago, Ill., a Corporation of Illinois. Original application filed Aug. 30, 1926. Serial No. 132,475. Divided and this application filed Jan. 30, 1928. Serial No. 250,377. 7 Claims. (Cl. 88—18.4.)

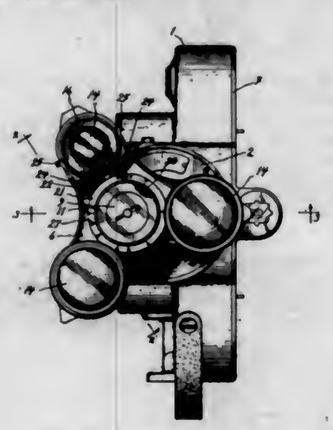




1. In an internal feeding device the combination of an elongated rectangular plate reciprocable longitudinally thereof, a pair of parallel resilient arms struck from intermediate metal of the plate and connected to one marginal end portion of the plate and extending longitudinally of the movement thereof toward the other end of the plate and adapted for engagement with a perforated film for intermittently feeding the same, said plate having intermediate metal thereof removed to provide a marginal formation, and revoluble means engaging a transverse slot in a marginal end portion of said plate for reciprocating the same.

7. In a spring driven motion picture camera the combination of a casing, a housing member detachably secured on the front face of the front wall of said casing and forming a narrow transverse enclosure therewith, intermittent feeding and exposing mechanism including a revoluble segmental light shutter disposed in a transverse plane in said enclosure, a pair of spaced studs extending rearwardly from said housing member in said enclosure, a stop member extending in said enclosure and mounted on said studs for tilting movement normal to the plane of the shutter into and out of position to engage the leading edge of said shutter for stopping operation of said feeding and exposing mechanism, forwardly facing shoulder formations associated with said studs at the rear of said stop member, a flat bow spring mounted on said studs in front of said stop member and yieldably urging said stop member against said shoulder formations to yieldably position the stop member engagement with said shutter, said stop member extending outwardly beyond a side of said housing member into a recess in the front face of the front wall of said casing for manual operation of the stop member out of engagement with said shutter.

1,767,849. PLURAL-LENS-ADJUSTING MEANS. ALBERT S. HOWELL, Chicago, Ill., assignor to The Bell & Howell Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 10, 1928. Serial No. 318,461. 2 Claims. (Cl. 95—45.)



1. In a device of the character described the combination with an angularly movable carrier member, of a plurality of axially adjustable lenses carried on said carrier member and spaced about the axis thereof and having their axes disposed in parallelism with the axis of said carrier member, a common angularly movable cam member disposed on the axis of said carrier member, and fingers engaged with said cam member for axially adjusting said lenses in coordination with angular adjustment of said cam member.

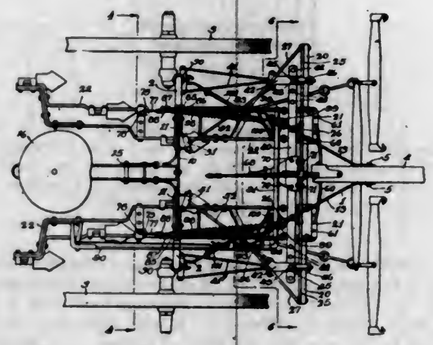
1,767,850. LENS STRUCTURE. ALBERT S. HOWELL, Chicago, Ill., assignor to The Bell & Howell Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 3, 1928. Serial No. 323,225. 13 Claims. (Cl. 95—81.5.)



1. In a device of the character described the combination with an optical element carrier, of a bored mounting member engaged with its bore on said carrier and angularly movable with respect thereto and removably engageable over a front end cylindrical formation of a photographic

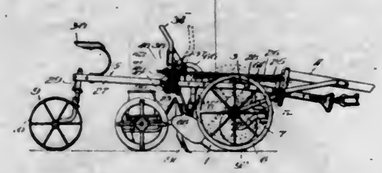
lens carrier for the mounting of said first mentioned carrier thereon, and releasable means for securing said mounting member in angularly adjusted position on said first mentioned carrier, said mounting member being provided with an open ended axially extending slot for angularly positioning said first mentioned carrier with said second mentioned carrier.

1,767,851. CULTIVATOR. LEE H. KAUPKE, Rock Island, Ill., assignor to Rock Island Plow Company, Rock Island, Ill., a Corporation of Illinois. Filed Aug. 1, 1924. Serial No. 729,509. 8 Claims. (Cl. 97—155.)



1. In a cultivator, the combination of a main frame having a transversely extending draft bar at the forward end thereof, a cultivator beam supported for transverse movement on said draft bar, supporting wheels having axles mounted for pivotal movement on vertical axes, means connecting said wheel axles for simultaneous pivotal movement thereof including a transversely movable connecting bar, a yoke affording support for the opposite ends of said connecting bar independently of said draft bar and means for connecting said beam with said draft bar for shifting the latter bodily therewith during the transverse movement of said bar.

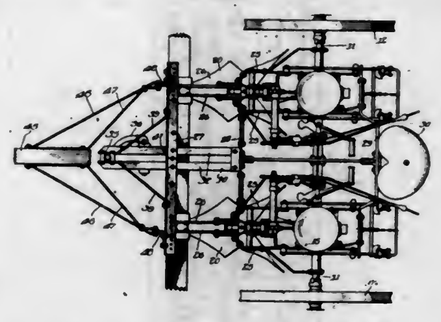
1,767,852. LISTER. LEE H. KAUPKE, Rock Island, Ill., assignor to Rock Island Plow Company, Rock Island, Ill., a Corporation of Illinois. Filed Aug. 1, 1924. Serial No. 729,510. 22 Claims. (Cl. 97—84.)



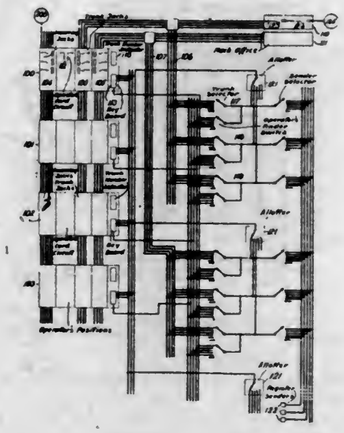
1. In a lister, the combination of a main frame, a plow and beam carried by said frame, a sub-frame extending rearwardly from said main frame and pivotally connected thereto on a transverse axis, crank axles having supporting wheels mounted on said main frame and lever means mounted on said sub-frame operatively connected with said crank axles for raising or depressing them with respect to the plow.

1,767,853. TWO-ROW PLANTER. LEE H. KAUPKE, Rock Island, Ill., assignor to Rock Island Plow Company, Rock Island, Ill., a Corporation of Illinois. Filed June 22, 1925. Serial No. 38,607. 5 Claims. (Cl. 780—82.)

5. In a two-row planter, the combination of a wheeled frame having a centrally disposed forward extension, a tongue truck mounted at the forward end of said extension, a tongue having a yoke at its rear end embracing the forward end of said extension and having pivotal connection with said frame rearwardly of and on opposite sides of said tongue truck mounting, and an evener bar pivotally connected with said frame.



1,767,854. TELEPHONE-EXCHANGE SYSTEM. ALBEN E. LUNDELL, New York, and EDGAR H. CLARK, Richmond Hill, N. Y., assignors to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed July 27, 1923. Serial No. 654,106. 68 Claims. (Cl. 179—27.)

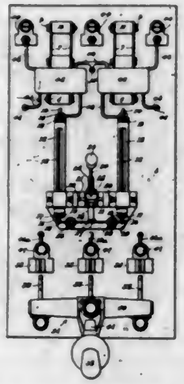


1. In an automatic telephone exchange system, a plurality of operators' positions, trunk selector switches common to said operators' positions, indicating devices individual to each operator's position, means under the control of any one of said operators to put an idle trunk selecting switch into operation, and means to operate the indicating devices at said operator's position in accordance with the position assumed by said trunk selecting switch.

1,767,855. ALTERNATING-CURRENT CIRCUIT BREAKER. HENRY FLOYD MCBRIDE, Silao, Mexico. Filed Aug. 4, 1924. Serial No. 729,964. 1 Claim. (Cl. 200—116.)

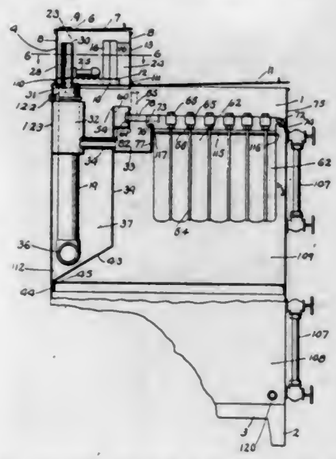
In a switch of the type described, and comprising a series of thermally expansive elements, a series of contact terminals, a normally open switch and a weighted trip lever to hold said switch in closed position, the combination therewith of means for unlocking said switch by the release of said lever, said means comprising a pair

of levers mounted on separate pivots and having arms of unequal length the shorter arms being in operative relation to the thermal elements, and the longer arms in



operative relation to the weighted trip lever whereby the expansion of the thermal elements is multiplied to effectively operate the trip lever under small degrees of expansion.

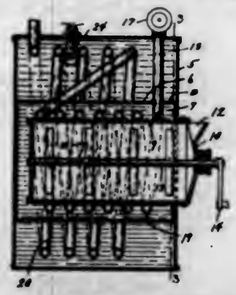
1,767,856. FILTERING APPARATUS. WILLIAM W. NUGENT, Chicago, Ill. Filed June 30, 1924. Serial No. 723,158. 29 Claims. (Cl. 210—43.)



1. In a combined filtering and sterilizing apparatus for used lubricating oils, a receptacle into which the contaminated oil is introduced, means in said receptacle for raising the temperature of the oil to a degree sufficient to sterilize the same, means also associated with said receptacle for effecting a preliminary filtering of the oil, a water-separating receptacle into which the oil is introduced from said first-named receptacle, means in said water-separating receptacle for separating the water from the oil by flotation, and means for varying the depth of the water in the water-separating receptacle to regulate the flow of the oil separated therefrom.

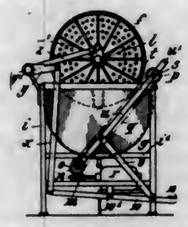
1,767,857. COMBINED REFRIGERATING TANK AND ICE-CREAM FREEZER. ALBERT F. SAWYER, Haverhill, Mass., assignor to Irving L. Keith, Haverhill, Mass. Filed Oct. 30, 1928. Serial No. 316,084. 5 Claims. (Cl. 62—95.)

1. A brine-receiving refrigerating tank having a container mounted in one of its walls and extending into the tank with its outer end opening to the exterior thereof, a partition disposed within the tank and arranged to enclose said container and provide a supplemental brine-receiving chamber surrounding said container, and separated from and surrounded by the brine in the main por-



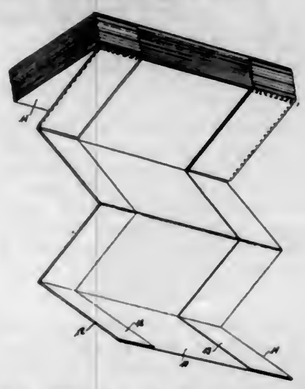
tion of the tank, a supplemental expansion coil in said chamber, a main expansion coil in said tank, exteriorly of said chamber, connected at its inlet end to the discharge end of said supplemental coil, and means for causing circulation of a refrigerant through said coils.

1,767,858. WASHING DRUM FOR PHOTOGRAPHIC PICTURES. WOLFGANG MAX SCHULTZ, Berlin-Karlshorst, Germany, assignor to Schering-Kahlbaum A. G., Berlin, Germany. Filed May 13, 1929, Serial No. 362,713, and in Germany May 19, 1928. 7 Claims. (Cl. 95—93.)



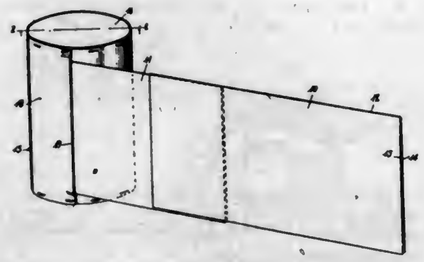
1. A washing apparatus for photographic pictures, comprising in combination with a trough, a drum, the peripheral wall of which is composed of radial portions having openings, and of oblique portions therebetween, said drum being rotatably supported in said trough.

1,767,859. INTERLEAVED SHEET AND PACKAGE THEREOF. GLENN A. SHAFFER, Green Bay, Wis., assignor to Fort Howard Paper Company, Green Bay, Wis., a Corporation of Wisconsin. Filed July 18, 1929. Serial No. 379,210. 4 Claims. (Cl. 206—57.)



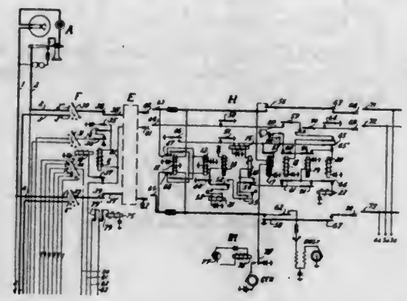
1. A package of interleaved sheets comprising, in combination, a plurality of sheets, each sheet folded longitudinally to provide superimposed portions, transverse portions of said superimposed portions interleaved with transverse portions of like superimposed portions of adjacent sheets in the package, the thus provided strip of interleaved sheets folded zig-zag to form the package.

1,767,860. ROLL OF INTERLEAVED SHEETS. GLENN A. SHAFFER, Green Bay, Wis., assignor to Fort Howard Paper Company, Green Bay, Wis., a Corporation of Wisconsin. Filed July 18, 1929. Serial No. 379,211. 6 Claims. (Cl. 206—58.)



1. A roll of sheets comprising, in combination, a plurality of sheets, each sheet folded longitudinally to provide superimposed parts, successive sheets having the end of the multi-thickness of the folded sheet enclosed between the superimposed parts of the adjacent sheets for a portion of the length thereof.

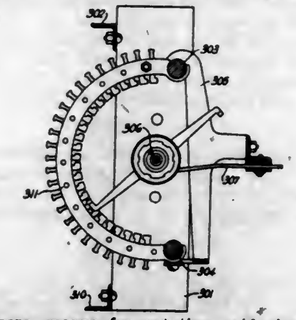
1,767,861. TELEPHONE SYSTEM. RUDOLPH F. STEHLIK, Chicago, Ill., assignor to Automatic Electric Inc., Chicago, Ill., a Corporation of Delaware. Filed July 6, 1926, Serial No. 120,547. Renewed Feb. 3, 1930. 52 Claims. (Cl. 179—18.)



1. In a telephone system, a group of lines, a finder having access thereto, a line relay and a cut off relay common to said lines, means for associating said relays with a calling one of said lines, and means controlled by said line relay responsive to said association for directing said finder to said line to establish a connection therewith.

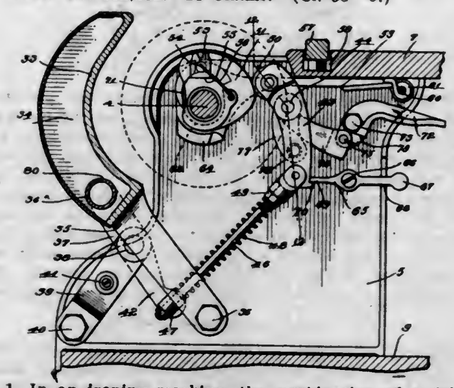
1,767,862. TELEPHONE SYSTEM. RUDOLPH F. STEHLIK, Chicago, Ill., assignor, by mesne assignments, to Automatic Electric Inc., Chicago, Ill., a Corporation of Delaware. Original application filed July 6, 1926, Serial No. 120,547. Divided and this application filed Oct. 27, 1927. Serial No. 229,018. 6 Claims. (Cl. 179—27.5.)

1. In a telephone system, a switch mechanism containing a shaft, a plurality of wipers mounted on said shaft, the entire contacting surface of said wipers being disposed in a plane containing the axis of said shaft, a plurality of contact sets arranged in a semicircular bank and accessible to the contact surface of said wipers, a plurality of contacts in each of said sets, one for each



of said wipers, means for rotating said shaft to move said wipers from one contact set to another, said contacts being so shaped and arranged with respect to each other that the wipers engage their respective contacts of a set at different times in a definite sequence and depart therefrom at different times in another definite sequence.

1,767,863. IRONING MACHINE. RANDOLPH V. WELLER, Rochester, N. Y., assignor to The Dexter Company, Fairfield, Iowa, a Corporation of Iowa. Filed Apr. 16, 1923. Serial No. 632,182. 23 Claims. (Cl. 68—9.)



1. In an ironing machine, the combination of a drive shaft, a rotary bed driven thereby, an iron, mechanism for effecting a movement of the iron toward and from the bed, a clutch interposed between the drive shaft and said mechanism for connecting said mechanism with the drive shaft at will, and a heating device for the iron controlled by such mechanism to cause the heating effect of the heating device to be reduced on the movement of the iron away from the bed.

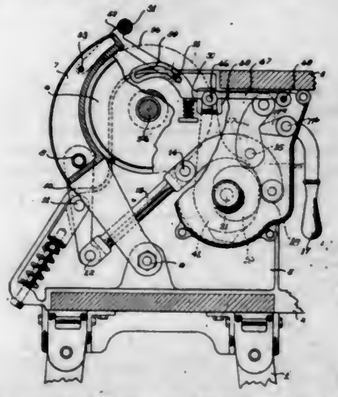
4. In an ironing machine, the combination with a rotary bed and an iron movable toward and from the bed, mechanism for turning the bed, mechanism operated by said turning mechanism for effecting the movement of the iron toward and from an extreme position away from the bed, and a movable stop for limiting the movement of the iron away from the bed under the action of said mechanism, and means giving to said stop a tendency to move to stopping position so that, when the iron is moved from its extreme position toward the bed, its next movement away from the bed will be limited.

9. In an ironing machine, the combination with a rotary bed and an iron, of mechanism for effecting the movement of one of said parts relatively to the other for effecting the separation and the cooperation of said parts, a feeding table for feeding the work between said parts, and controlling means for controlling said mechanism movable

relatively to the table and so positioned that the goods passed between the parts from the feeding table must pass thereover.

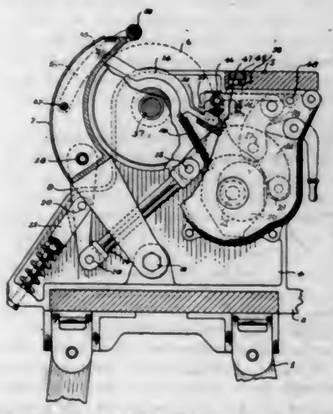
15. In an ironing machine, the combination with a rotary bed and an iron movable toward and from the bed, of a mechanism for effecting the movement toward and from the bed, and mechanism for rotating the bed embodying a gear connected to the bed, a movably mounted motor support, and a gear carried by said motor support and movable therewith so as to be brought into and out of connection with the gear connected to the bed.

1,767,864. IRONING MACHINE. RANDOLPH V. WELLER, Rochester, N. Y., assignor to The Dexter Company, Fairfield, Iowa, a Corporation of Iowa. Filed Sept. 4, 1926. Serial No. 133,521. 7 Claims. (Cl. 192—130.)



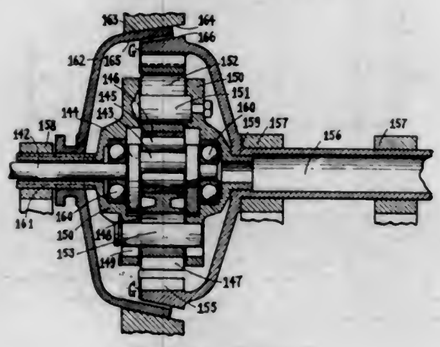
2. In an ironing machine, the combination with a rotary bed, a curved iron movable toward and from the bed and arranged in rear of the latter, and power mechanism for effecting movement of the iron toward and from the bed, of controlling mechanism for the power mechanism embodying a controlling bar extending substantially throughout the length of the iron arranged above the bed and mounted on the iron in advance of the upper end of the latter, said bar having a lost motion connection with the other parts of the controlling mechanism whereby the movement of the iron relatively to the bed is permitted.

1,767,865. IRONING MACHINE. RANDOLPH V. WELLER, Rochester, N. Y., assignor to The Dexter Company, Fairfield, Iowa, a Corporation of Iowa. Filed Sept. 27, 1926. Serial No. 137,875. 6 Claims. (Cl. 192—130.)



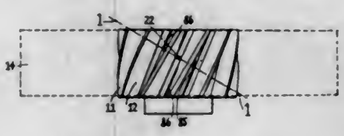
1. In an ironing machine, the combination with a bed, an iron cooperating with the bed, and power mechanism for effecting relative movement between the bed and the iron to bring them into and out of cooperation, of means under the control of the operator for controlling the power mechanism, a movable member extending above the bed in advance of the iron, and adapted to be displaced by the hand of the user of the machine in introducing material between the bed and the iron, and means operated by said movable member for locking the controlling means against movement when said movable member is displaced by the hand of a user in introducing material between the bed and the iron and the iron and the bed are separated.

1,767,866. GEARING. ERNEST WILDHABER, Brooklyn, N. Y. Filed Nov. 10, 1927. Serial No. 232,306. 11 Claims. (Cl. 74—35.)



1. Gearing comprising a shaft having a portion offset from and parallel to its axis, a member rotatably mounted on said offset portion, a stationary member, circular holes provided in both members, said holes extending parallel to said shaft, and cylindrical rollers internally engaging said holes and suited to roll in the holes of both members.

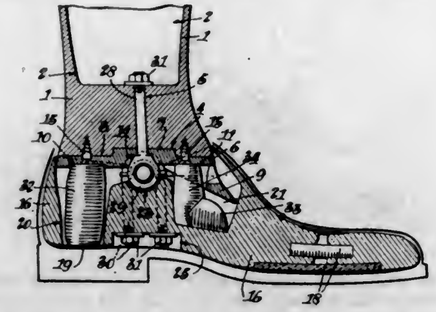
1,767,867. GEAR. ERNEST WILDHABER, Brooklyn, N. Y. Filed Mar. 10, 1928. Serial No. 260,798. 20 Claims. (Cl. 74—41.)



1. A gear containing helical teeth suited to contact with its basic rack along lines curved in a projection to the pitch plane of said rack, the active profile of a normal section of said teeth being wholly concave and having a changing curvature, the perpendiculars of said profile intersecting the pitch surface inside of a distance smaller than one half of the pitch of said normal section.

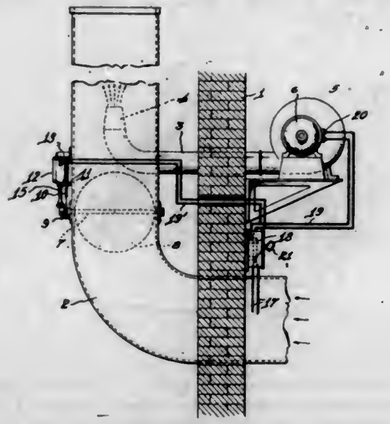
1,767,868. ARTIFICIAL-LIMB ANKLE JOINT. LOUIS H. BARGHAUSEN, Pittsburgh, Pa. Filed June 25, 1929. Serial No. 373,565. 9 Claims. (Cl. 3—6.)

1. In an artificial limb ankle joint, foot and limb sections movable relatively during walking, cushioning means including a composite cushioning element composed of two progressively effective resilient bodies, one being in constant contact with the limb section and adapted to impose constant relatively slight resistance to the walking action, the other being brought into contact with the limb section to cushion the final portion only of a progressive walking step, the resiliency of the two bodies being so related that the resistance set up by the constantly effective body bradually increases during a progressive walking step until it substantially equals the resistance of which the other body is capable at the time said other body becomes effective.



4. In an artificial limb wherein is provided a lower limb section and a foot section, an ankle joint plate secured to one section, said one section having therein a receiving recess, said plate having a positioning boss snugly fitting within the recess to permit adjustment of the plate relatively to the sections to which it is secured, and means to secure the sections together to form an ankle joint.

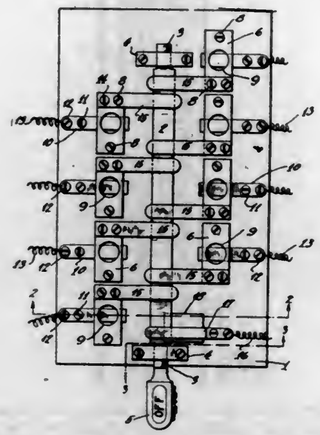
1,767,869. AUTOMATIC DAMPER. HUGO C. BAUMGARTEN, Detroit, Mich., assignor to Newcomb-David Company, Inc., Detroit, Mich. Filed Oct. 29, 1928. Serial No. 315,900. 4 Claims. (Cl. 98—43.)



1. In a ventilating device including a stack, a nozzle extending thereinto, a blower for forcing air through said nozzle and a motor for driving said blower, said blower and motor being exterior of said stack, the combination of a damper in said stack, and electrical means for actuating said damper, said means and motor having a common source of current supply, whereby the position of the damper is determined by the operation of the motor.

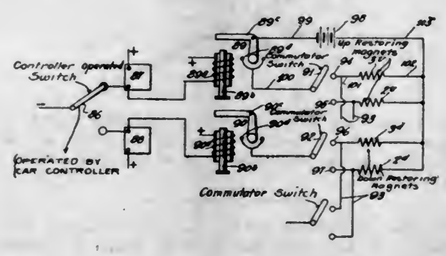
1,767,870. CUT-OFF SWITCH FOR ELEVATOR ANNUNCIATORS. FRANZ A. BOEDTCHER, Bergenfield, N. J., assignor to Otis Elevator Company, Jersey City, N. J., a Corporation of New Jersey. Filed June 24, 1924. Serial No. 722,053. 4 Claims. (Cl. 177—339.)

1. An annunciator for elevator signalling systems embodying a plurality of spring contacts, a like number of signalling devices, one of which is associated with each contact, a current switching bar, means for mounting said bar for rotation on its longitudinal axis in a position for simultaneous electrical engagement with or disengagement from all of said contacts, a current feed or return wire leading to the current switching bar, a current tap leading from each signalling device, whereby current may be



fed from the main or return through the several contacts to the respective signalling devices when the current switching bar is in electrical engagement with said contacts, the circuit between the current switching bar and the several signals being completely broken when the current switching bar is in electrical disengagement from the contacts.

1,767,871. ELEVATOR-SIGNAL-RESTORATION SYSTEM. FRANZ A. BOEDTCHER, Bergenfield, N. J., assignor to Otis Elevator Company, Jersey City, N. J., a Corporation of New Jersey. Filed July 23, 1924. Serial No. 727,615. 15 Claims. (Cl. 177—336.)

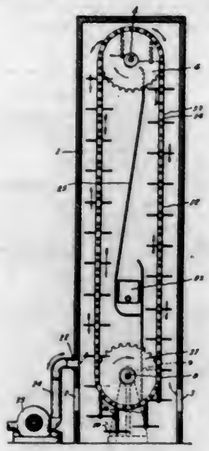


2. In an elevator signal restoration system, the combination of a car, up and down restoring magnets for a given floor, a circuit including the up magnet, a circuit including the down magnet, commutator means for partially completing each of said circuits when the car is in proximity of said floor, and means operable by starting of the car from the floor in either direction for selectively completing the co-directional circuit to energize the co-directional magnet.

1,767,872. AIR-CIRCULATION SYSTEM FOR OVENS. VERNIE A. FOX, Detroit, Mich., assignor to Young Brothers Company, Detroit, Mich., a Corporation of Michigan. Filed June 22, 1928. Serial No. 287,523. 4 Claims. (Cl. 34—12.)

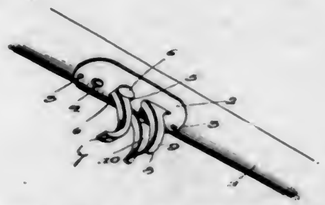
1. In an oven, a vertically moving conveyor, a work inlet and a work outlet at the bottom of the oven and at the ascending and descending sides respectively of the

conveyor, air inlet means at the work outlet and air exhaust means at the opposite wall of the oven, a heat source in said oven, a baffle partitioning the heat exchange area



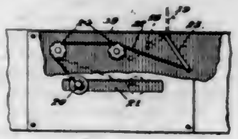
of said source from said exhaust means, and a guard partitioning the heat exchange area of said heat source from the descending side of the conveyor to provide a cooling zone at said work outlet.

1,767,873. GUARD FOR TRIGGER SWITCHES. ELNATHAN ALFRED FOWLER, York, Pa., assignor to The Floorola Corporation, York, Pa., a Corporation of Delaware. Filed Aug. 13, 1929. Serial No. 385,605. 3 Claims. (Cl. 200—157.)



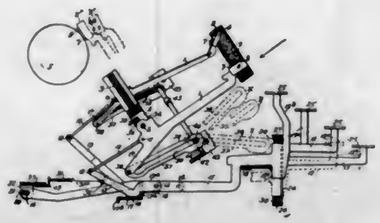
1. A guard for an electric switch including a plate and a guard member extending outwardly therefrom and provided with an opening therein for receiving a portion of the switch.

1,767,874. KITCHEN SINK. SARAH M. GILLARD, Huntington, W. Va. Filed May 1, 1929. Serial No. 359,633. 1 Claim. (Cl. 220—36.)



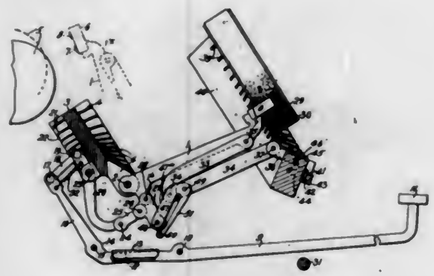
In a kitchen sink with a depending front wall section, a vessel in said sink behind said wall section, a tilting cover for said vessel, said cover having a bell-crank lever projecting downwardly behind said wall section, pulleys below the surface of said cover behind said section, a horizontal slot through said front wall section, a horizontally movable knob slidable in said slot, a cable connecting said bell-crank and said knob and passing over said pulleys, whereby the sliding of said knob in said slot serves to raise said cover, and said cover adapted to close upon the release of said knob.

1,767,875. TYPEWRITING MACHINE. GEORGE G. GOING, Middletown, Conn., assignor to Remington Typewriter Company, Ilion, N. Y., a Corporation of New York. Filed Nov. 11, 1927. Serial No. 232,582. 28 Claims. (Cl. 197—25.)



28. The combination of a rigid type bar pivoted to swing freely to the printing point in an arc and having a type fixed thereto, key controlled means connected directly to the type bar for actuating it, and means for controlling the movement of the type bar at the last part of its printing stroke and effective thereon at such time to slow up the movement of the type bar and substantially noiselessly effect a presure imprint, said means comprising a single controlling member only which is connected directly with and is carried by and actuates the type bar and is movable relatively thereto.

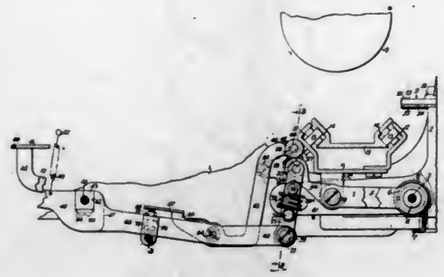
1,767,876. TYPEWRITING MACHINE. GEORGE G. GOING, Middletown, Conn., assignor to Remington Typewriter Company, Ilion, N. Y., a Corporation of New York. Filed Feb. 21, 1928. Serial No. 255,971. 14 Claims. (Cl. 197—27.)



1. The combination of a platen; a pivoted type bar; controlling-means therefor comprising two pairs of toggles, one member of one pair being pivoted to the type bar near the type head and the second member of the same pair having a stationary anchorage, one member of the second pair of toggles being pivoted directly to the said second member of the first pair, and the second member of the second pair being pivoted to the type bar near its pivot; and key actuated means for operating the type bar comprising a drive link pivoted directly to the second member of the second pair of toggles.

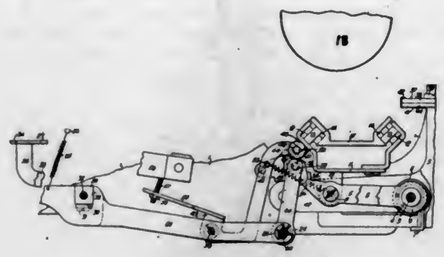
1,767,877. TYPEWRITING MACHINE. GEORGE G. GOING, Stamford, Conn., assignor to Remington Typewriter Company, Ilion, N. Y., a Corporation of New York. Filed May 23, 1929. Serial No. 365,426. 19 Claims. (Cl. 197—73.)

1. Case shift mechanism for typewriting and like machines comprising two members that have a relative movement one towards the other as the case shifted part moves away from normal position and have a relative movement one away from the other as the shifted part returns to normal position, a detent, and automatically operating controlling means for said detent that enable the detent to be wedged into position between said members as the



case shifted part returns to normal position and thereby prevent a rebound of said part from such position, and which enables said detent to be pinched out of obstructing position by and from between said members as the case shifted part is moved away from normal position.

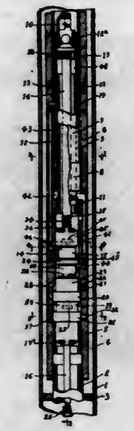
1,767,878. TYPEWRITING MACHINE. GEORGE G. GOING, Stamford, Conn., assignor to Remington Typewriter Company, Ilion, N. Y., a Corporation of New York. Filed May 28, 1929. Serial No. 366,623. 11 Claims. (Cl. 197—73.)



1. Case shift mechanism for typewriting and like machines comprising two members that have a relative movement one towards the other as the case shifted part moves away from normal position and have a relative movement one away from the other as the shifted part returns to normal position, a detent, spring means for forcing said detent into wedging engagement with and between said members as the case shifted part returns to normal position and thereby prevent a rebound of said part from such normal position, and means for positively withdrawing said detent from such wedging engagement when the case shifted part is moved away from normal position.

1,767,879. DEEP-WELL PUMP. EMIL S. GRAFENSTATT, Los Angeles, Calif. Filed Mar. 10, 1926. Serial No. 93,576. 24 Claims. (Cl. 103—46.)

1. In a deep well pump, the combination of a well casing with a flow-pipe within the same, a pump barrel connected into the flow-pipe, said casing being arranged for maintaining a pressure zone therewithin and externally of the flow pipe, a connection to the well casing for supplying fluid under pressure to the pressure zone, a plunger within the pump barrel, check-valves cooperating with the same to enable the plunger to raise liquid, said barrel having ports for opening communication to the pressure zone, a valve chamber, and passages connecting the valve chamber with opposite portions of the pump barrel, and a control valve below the plunger for controlling the flow



of the fluid through said ports and passages, from the pressure zone to both ends of the pump barrel, the fluid pressure operating to move the plunger in opposite directions.

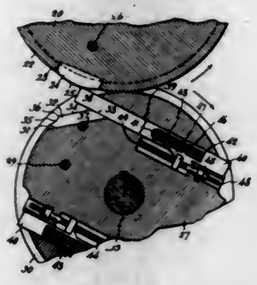
1,767,880. DEEP-WELL PUMP. EMIL S. GRAFENSTATT, Los Angeles, Calif. Filed Oct. 18, 1927. Serial No. 226,933. 16 Claims. (Cl. 103—46.)



1. A deep well pump comprising a barrel, a pump cylinder therewithin providing separate pressure and exhaust chambers externally of said cylinder, a hollow plunger centrally mounted in said cylinder and adapted to receive the contents of the well, a flow pipe in communication with said cylinder and the interior of said plunger for discharging the contents of the well, a valve mechanism intermediate said plunger and said flow pipe for controlling the out-put of the well, a pressure mechanism connected with said barrel for maintaining pressure externally of the flow pipe and in said pressure chamber, a tandem arranged power head and control valve embracing said plunger, means formed on said power head and said control valve and cooperating with ports formed in said barrel for affording communication between different portions of said cylinder and said pressure and exhaust

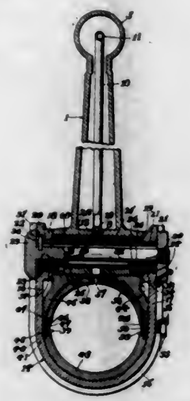
chambers for alternately applying pressure to opposite ends of said power head, said control valve serving to regulate the application of pressure to said plunger, said plunger, power head and control valve being differentially connected, for the purpose described.

1,767,881. BIT-FORMING MACHINE. JEREMIAH V. GUSTIN, Little Rock, Ark. Filed Aug. 30, 1927. Serial No. 216,452. 10 Claims. (Cl. 76—5.)



1. In a bit forming machine, a pair of oppositely rotatable rolls, one of said rolls having a recess therein for the reception of stock from which a bit is to be formed, coacting dies respectively carried by said rolls for exerting pressure on the stock in the rotation of the rolls to form the bit, and means carried by the stock receiving roll operated by the other roll in the rotation of both rolls for ejecting the stock from the recess after the bit has been formed.

1,767,882. CONNECTING ROD. CLAYSON ROSS HAMMOND, Salem, Oreg. Filed June 28, 1928. Serial No. 288,899. 13 Claims. (Cl. 74—17.)



6. A connecting rod comprising a tubular body portion having a tubular cross head at one end thereof and a hollow globular head at its other end, and a crank box connected to and pivotally supporting said cross head, said box provided with bearings for the crank and with means for automatically aligning said cross head and bearings.

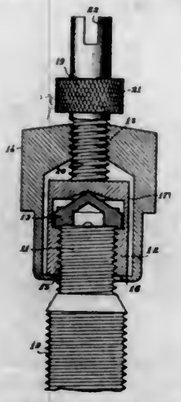
1,767,883. AUGER OR DRILL. LESTER C. HARDSOCG, Ottumwa, Iowa, assignor to Hardsocg Manufacturing Company, Ottumwa, Iowa, a Corporation of Iowa. Filed July 16, 1926. Serial No. 122,929. 1 Claim. (Cl. 287—125.)

In an auger of the class specified, a spiral shank having its lower extremity of the same lateral extent and twist as the major portion thereof, a head having a spiral socket in its upper extremity open at the top and closed at the sides thereof, said socket being of the depth of the spiral of the shank at said lower extremity and exter-



nally of spiral form, said socket internally being of the shape of said extremity and snugly and removably engaged thereby, said lower extremity being insertible into the socket by screw action, and a transverse pin engaging the shank and head to hold them against relative rotation.

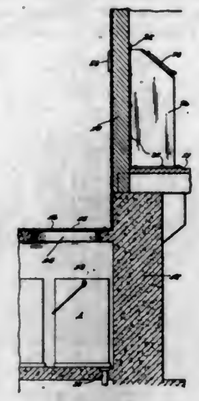
1,767,884. THEFTPROOF TIRE-VALVE CAP. HARRISON HEINRICH, Brooklyn, N. Y. Filed Mar. 30, 1929. Serial No. 351,144. 1 Claim. (Cl. 152—12.)



The combination with an internally threaded valve stem cap, of a hollow member open at one end within which said cap is arranged, said member having rotatory and axial movement on said cap, said hollow member being provided with an interior edge on the open end, said edge preventing said cap from being separated from said hollow member, and a separate element for threading engagement with said hollow member and adapted when so engaged to bear on said cap, to bring said cap into engagement with said edge, to cause said cap to rotate with said hollow member, for the purpose of screwing said cap on a valve stem, said element being removable to release said cap from engagement with said edge, to allow said hollow member to rotate on said cap, to prevent said cap from being unscrewed from said stem.

1,767,885. GARBAGE CHUTE. JACOB HELGESEN, White Plains, N. Y. Filed Oct. 5, 1928. Serial No. 310,553. 4 Claims. (Cl. 193—34.)

1. In a garbage chute, an enclosed chute, one end of which opens directly to the atmosphere, a pit at the bottom of said chute, an openable cover in the top of said pit, a door at the top of said chute through which refuse may be deposited upon opening of the same, and means operable upon the opening of said door for sealing the



lower end of said chute therefrom, said cover having ventilating openings therein for circulating atmospheric air through said chute and pit when said door is in a closed position.

1,767,886. PROCESS FOR BLEACHING MONTAN WAX. THEODOR HELLTHALER, Granschutz, Germany, assignor to the Firm A. Riebeck'sche Montanwerke Aktiengesellschaft, Halle, Saale, Germany. Filed July 18, 1927, Serial No. 206,799, and in Germany July 26, 1926. 18 Claims. (Cl. 196—21.)

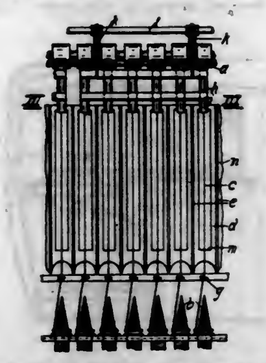
1. Process for bleaching Montan wax which comprises treating the wax with an oxidant in presence of moderately diluted sulfuric acid.

1,767,887. FISHERMAN'S OUTFIT. ART E. HOLBROOK, Joplin, Mo. Filed Mar. 30, 1928. Serial No. 266,013. 2 Claims. (Cl. 43—32.)



1. A fisherman's outfit comprising a tubular container open at one end, a closure therefor, a body of yieldable material having a longitudinal bore to receive said container and frictionally support it thereon, said body being stepped to provide shoulders in which hooks and lures are adapted to be secured thereto and a slip cover adapted to entirely conceal said container.

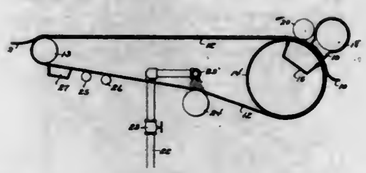
1,767,888. RING-SPINNING FRAME. GEORG JACOB, Gautzsch, near Leipzig, Germany, assignor of one-half to the Firm Kammgarnspinnerei Gautzsch Bei Leipzig Aktiengesellschaft, Gautzsch, near Leipzig, Germany. Filed Aug. 20, 1927, Serial No. 214,334, and in Germany Sept. 20, 1926. 5 Claims. (Cl. 118—11.)



1. A ring spinning frame comprising spindles, a calender roller, a plate arranged intermediate said spindles and said roller, having channels formed therein which are open toward the front end of the frame and defining a gap intermediate the upper end of said plate and said roller, and auxiliary channels extending across said gap, and arranged so that their open sides face the rear end of said frame.

5. A ring spinning frame comprising spindles, a calender and guiding channels for the threads intermediate the points of said spindles and said calender roller, the sides of said channels being painted in light colors, and the bottoms of said channels being painted in a color contrasting with that of the threads.

1,767,889. PAPER-MAKING MACHINE. HARVEY H. JURGENSEN, Thorold, Ontario, Canada. Filed Nov. 16, 1927. Serial No. 233,684. 1 Claim. (Cl. 92—38.)

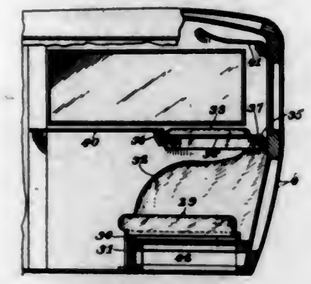


A device of the character set forth comprising a perforated drying roller and an end guide roller spaced therefrom, a woven wire belt mounted on said rollers to move paper from the guide roller towards and over the drying roller, a suction box located within the drying roller, a hot air element having the discharge end disposed opposite to the suction box and on the outer periphery of the drying roller and having the belt and paper passing between the discharge end thereof and said drying roller, a pressure roller in advance of the hot air element and bearing against the paper and belt on the drying roller and arranged opposite the suction box, a spray cleaning means for said belt, a roller engaging said belt below said means, a second suction box located against the belt and adjacent the end guide roller, and a pair of water removing rollers engaging the belt before reaching the second suction box.

1,767,890. AUTOMOBILE BED. MATTHEW KONZELMAN, Peru, Ill. Original application filed July 8, 1927, Serial No. 204,285. Divided and this application filed Mar. 26, 1928. Serial No. 264,870. 2 Claims. (Cl. 155—7.)

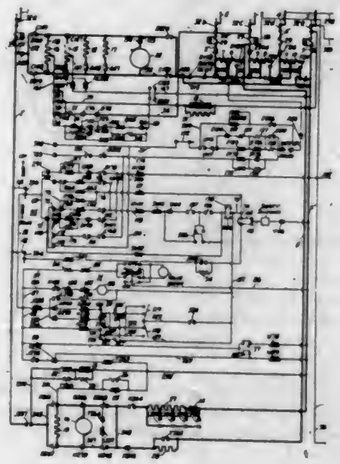
1. A convertible structure for use for automobiles comprising spaced lugs adapted to be secured to the inner face

of each side of the automobile body, fastener devices adapted to be secured to the inner face of each side of the automobile body, a removable back element for the rear seat of the automobile, said fastener devices arranged rearwardly of certain of said lugs, a flexible support for connection to the lugs positioned forwardly of the fastener devices, means at the ends of and extended



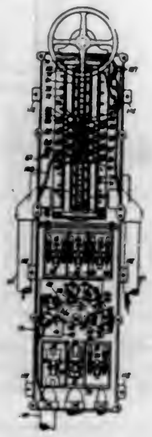
above said back element for normally connecting the latter to the other of said lugs, and said back element provided with means for receiving said fastener devices for maintaining said back element in connection with the lugs to which the back element is attached in a horizontal position to form a continuation of said flexible support.

1,767,891. ELEVATOR SYSTEM. DAVID L. LINDQUIST, Hartsdale, N. Y., EDWARD L. DUNN, Montclair, N. J., and DAVID C. LARSON, Yonkers, N. Y., assignors to Otis Elevator Company, Jersey City, N. J., a Corporation of New Jersey. Original application filed Feb. 3, 1925, Serial No. 6,561. Divided and this application filed Oct. 9, 1925, Serial No. 61,474. Renewed Jan. 8, 1930. 7 Claims. (Cl. 172—152.)



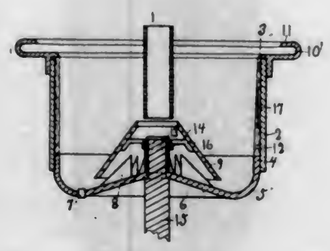
1. The combination with an elevator car and an electric driving motor therefor of a source of power for the motor, means for discontinuing the supply of power from said source to the motor at a predetermined point in the travel of the car means dependent on the voltage across the motor armature, means dependent on the current in the motor armature circuit, and means controlled conjointly by said voltage dependent means and said current dependent means for determining the speed of the motor and therefore of the car at said predetermined point.

1,767,892. SWITCHING MECHANISM. DAVID L. LINDQUIST, Hartsdale, N. Y., EDWARD L. DUNN, East Orange, N. J., and DAVID C. LARSON, Yonkers, N. Y., assignors to Otis Elevator Company, Jersey City, N. J., a Corporation of New Jersey. Original application filed Feb. 3, 1925, Serial No. 6,561. Divided and this application filed Oct. 16, 1925. Serial No. 62,769. 3 Claims. (Cl. 200—104.)



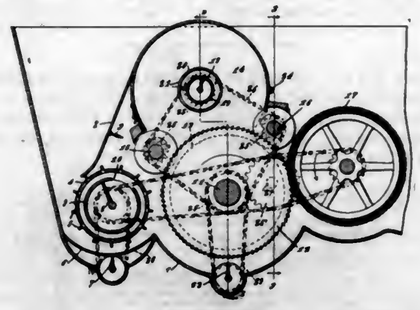
1. In combination; a plurality of individually operable push button switches; a plurality of armatures, one for each of said switches; an electromagnet common to all of said armatures, said electromagnet being arranged to be energized regardless of whether any of said push button switches are operated or not and being adapted, when energized, to cooperate with the armatures of all the switches that are operated to maintain said operated switches in their operated positions after their manual operation, regardless of when during the time that the electromagnet is energized the switches are operated; and means for causing the operated switches to be restored to their inoperative positions upon the deenergization of said electromagnet.

1,767,893. CENTRIFUGAL AMALGAMATOR AND SEPARATOR. PAUL A. NEUMANN, Chicago, Ill. Filed Sept. 6, 1927, Serial No. 217,722, and in Canada Sept. 18, 1926. 2 Claims. (Cl. 209—199.)



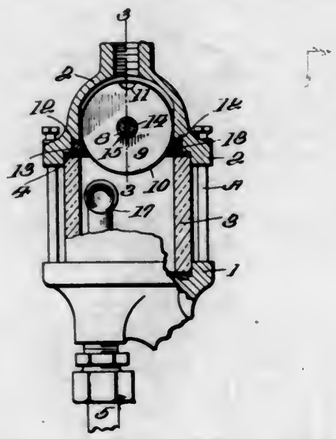
1. In a centrifugal amalgamator and separator of the type having a rotating drum with practically cylindrical walls, the combination of a mercury lining with an unbroken surface kept up against these walls by the rotation, means to protect the lower edge of this lining against the onrushing pulpstream, means to direct this pulpstream parallel to this lining, a rim bordering the upper edge of this lining and determining its thickness, and a mercury trap outwardly spaced around the top of the drum and connected therewith.

1,767,894. COTTON GIN. WILLIAM J. PETTY and EUGENE M. HANCOCK, Hollis, Okla. Filed Apr. 8, 1929. Serial No. 353,447. 4 Claims. (Cl. 19—55.)



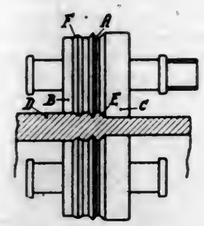
1. A cotton gin comprising a casing, a shaft journaled therein, a plurality of saws carried by the shaft, a box arranged above the saws with the upper portions of the saws entering the lower part of the box the front and rear edges of the box being spaced from the saws, a huller roll journaled in the casing between the front edge of the box and the saws, said roll having grooves therein for receiving the saws and permitting seeds and cotton to enter the box, while preventing hulls from entering the box, a grooved roll journaled in the casing between the rear edge of the box and the saws, the saws passing through the grooves and said grooves preventing seeds from passing from the box, conveyor means in the box for removing the stripped seeds therefrom, said conveyor including a casing having an inlet opening therein, means for regulating the size of the inlet opening, means for feeding the material to the saws and means for rotating the various parts.

1,767,895. FUEL-CLEANING DEVICE FOR LIQUID FUELS. BURT NEULON PIERCE, New York, N. Y. Filed Oct. 3, 1925. Serial No. 60,326. 3 Claims. (Cl. 210—167.)



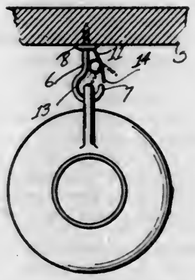
1. In a fuel feeding system for feeding fuel from a low level tank to a charge forming device, of a receptacle disposed in the feed line pipe between said tank and said charge forming device, said receptacle having an inlet at its bottom and an outlet at its top, a drum mounted in the upper end of said receptacle having a foraminous periphery cut away to form an outlet, means for oscillating said drum and wipers disposed to engage said foraminated surface for removing the foreign matter therefrom.

1,767,896. METHOD OF AND APPARATUS FOR ROLLING TUBES FROM A HOLLOW BLOCK. MARTIN ROECKNER, Mulheim-Ruhr, Germany, assignor to the Firm Vereinigte Stahlwerke Aktiengesellschaft, Dusseldorf, Germany. Filed Feb. 6, 1928, Serial No. 252,375, and in Germany Feb. 25, 1927. 5 Claims. (Cl. 80—62.)



1. In a method of rolling tubes from hollow blocks consisting in drawing-out the latter in substantially axially direction by the utilization of pairs of rolls acting both from inside and outside upon said block and of which the axes are inclined to the axis of the latter, engaging the hollow block by inlet extensions of said rolls prior to the main working parts of the latter acting thereon thereby advancing the block and introducing it into the main working parts of the rolls.

1,767,897. HOOK. HARRY J. ROMAN and WILLIAM C. DIETRICH, Dunsmuir, Calif. Filed July 26, 1929. Serial No. 381,230. 1 Claim. (Cl. 24—236.)

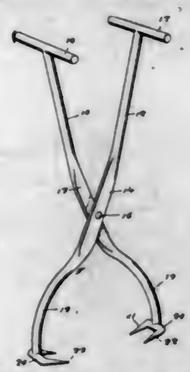


In a device of the character described a hook having a bent end terminating in a nose, said hook having a ferrule thereon, a spring connected to said ferrule, said spring comprising a tongue, coils formed integral with said tongue and having the ends thereof secured to said ferrule, the tongue of said spring being spaced from the nose of said hook and in axial alignment therewith.

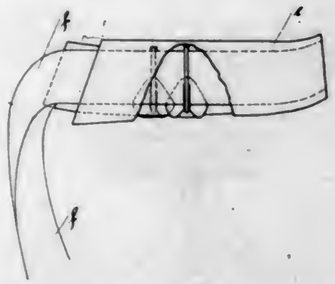
1,767,898. FISH TONGS. AUGUST SARGENT, Challis, Idaho. Filed May 24, 1926. Serial No. 111,333. 1 Claim. (Cl. 294—118.)

In a pair of fish tongs, a plurality of leg members, pivotally connected, shank portions extending beyond the pivotal point, and adapted to mount engaging devices, and jaws carried by the shank portions, said jaws projecting toward each other, and each constituting a U-shaped element, the middle portion of the U-shaped element extending transversely of the shank, said middle portions on opposite jaws being in parallel relation when the jaws are closed, and the U-shaped element including prongs of conical form and extending in approximately parallel rela-

tion and on opposite sides of each shank portion, said prongs being positioned and proportioned to approach each other in approximately similar paths, without interlocking if slightly deflected from these paths of movement, and the jaws being proportioned to jointly retain and to individually release a fish.

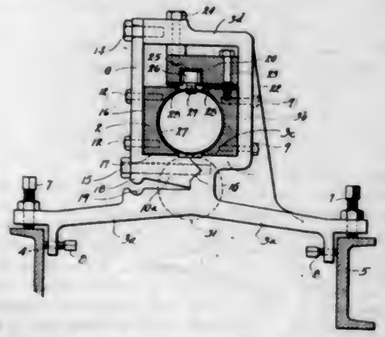


1,767,899. GUIDE DEVICE FOR NECKTIES. HANS SATTLER, Munich, Germany. Filed Oct. 16, 1928, Serial No. 312,799, and in Germany July 14, 1928. 1 Claim. (Cl. 2—156.)



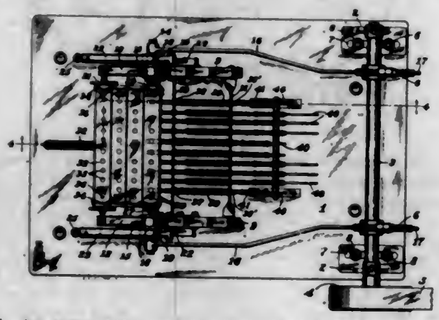
A guiding device for neckties, comprising in combination a clamp, a loop, and a sleeve arranged on the outside of said loop, fastening said loop evrtically adjustable on said clamp.

1,767,900. SOLDER HORN. NORBERT J. SCHAAL, Seattle, Wash., assignor, by mesne assignments, to Continental Can Company, Inc., New York, N. Y., a Corporation of New York. Filed Apr. 26, 1927. Serial No. 186,699. 17 Claims. (Cl. 113—115.)



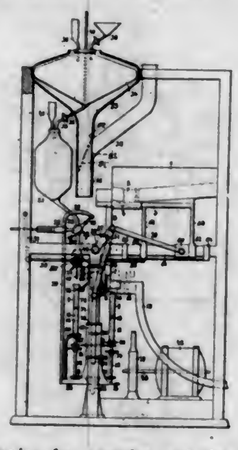
1. In a can body forming machine, a stationary, outside solder horn comprising complemental rigid bars arranged in parallel relation and provided in adjacent faces with grooves to contact with the periphery of can bodies and together provide a substantially closed guideway within which can bodies may be advanced through their soldering and cooling stages.

1,767,901. AUTOMATIC CONTROL MECHANISM. FLETCHER SCHAUM, Philadelphia, Pa., assignor to Fletcher Works, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Nov. 16, 1927. Serial No. 233,996. 6 Claims. (Cl. 139—59.)



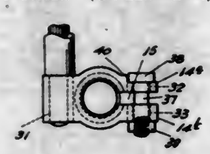
1. An automatic control comprising a series of perforated cards mounted for movement about an intermittently rotatable reciprocatory cylinder, a series of rods movably mounted for reciprocation in the path of the cards, each rod being connected with a distinct controlling lever means and each card when reciprocated adapted to engage certain of the rods and through the rod so engaged energize the controlling means connected thereto and means for reciprocating the entire series of cards.

1,767,902. AMPUL-FILLING DEVICE. HELMUT SICKEL, Leipzig, Germany. Filed Nov. 15, 1923. Serial No. 674,937. 16 Claims. (Cl. 226—75.)



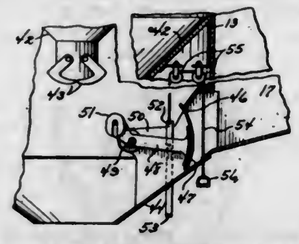
8. Filling device for ampules and the like comprising a plurality of ampul carriers each adapted to receive an ampul and connected with each other, an inlet tube for filling the ampules, mechanism for imparting positive movement to said carriers, means for supplying each of said carriers with an empty ampul, means for severing the necks of said ampules, means for supplying a predetermined quantity of the substance with which the ampules are to be filled, through said inlet tube into the ampul which is in alignment with said inlet tube at the time, and means for sealing said filled ampules, all said means being operatively connected with said mechanism.

1,767,903. STORAGE-BATTERY TERMINAL CLAMP. JOHN GORDON SPARKES, Great Neck, N. Y., assignor to Press Products, Inc., Long Island City, N. Y., a Corporation of New York. Filed Mar. 27, 1929. Serial No. 350,142. 1 Claim. (Cl. 113—119.)



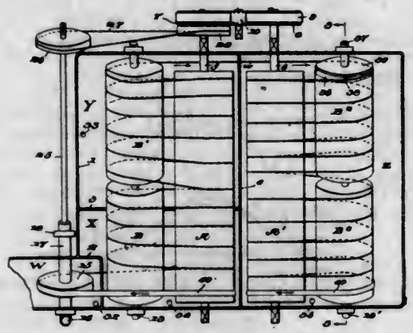
The method of making a storage battery terminal clamp which consists in providing a sheet metal blank of substantially circular body form with two diametrically opposed projections therefrom, a central opening bifurcating one of the said projections and terminating at the center of the circular body, in drawing a split terminal clamping ring from the central body, in bending the end of one projection to form a conductor sleeve, in bending the end of a bifurcated projection to form clamping bolt and nut receiving lugs.

1,767,904. GATE-OPERATING MEANS. FRANK W. STENTZ, Gary, Ind. Filed Sept. 15, 1926. Serial No. 135,609. 1 Claim. (Cl. 137—139.)



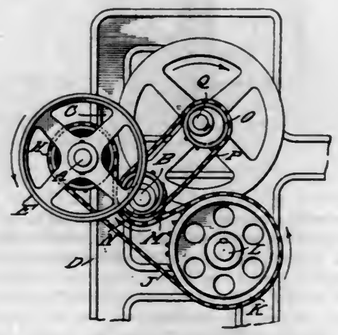
Means for operating a gate, comprising a lever attached at one end to the gate and mounted between its ends for pivotal movement, a counterbalancing weight carried by the other end of the lever, a yoke supported by the lever and projecting above and below the latter, said yoke being extended to provide a handle for moving the gate to a closed position, guide pulleys supported in spaced relation to the gate, a cable secured to one end of the yoke and trained over said pulleys, and a hand grip suspended from the cable and arranged adjacent said yoke whereby the gate may be moved to an open position.

1,767,905. CONTINUOUS CENTRIFUGAL SEPARATOR. WILLIAM C. WALKER, New York, N. Y. Filed Feb. 27, 1926. Serial No. 91,145. 20 Claims. (Cl. 210—68.)



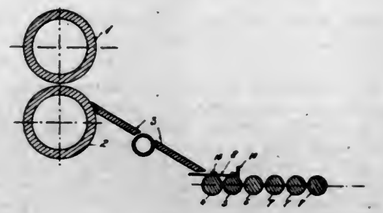
1. In apparatus for separating liquids from solids, the combination with an endless foraminous belt, of means for feeding onto said belt the material to be separated, and pulleys around which said belt continuously passes in such manner that the material is subjected to the action of centrifugal force in the same direction a plurality of times while on the belt.

1,767,906. LOOM OPERATING DEVICE. KARL WERNER, Nuremberg-Eibach, Germany, assignor to Progress Gesellschaft fuer Textilmaschinen mit Beschraenkter Haftung, Nuremberg, Germany, a Corporation of Germany. Filed June 27, 1927. Serial No. 201,901, and in Germany Mar. 21, 1927. 7 Claims. (Cl. 139—190.)



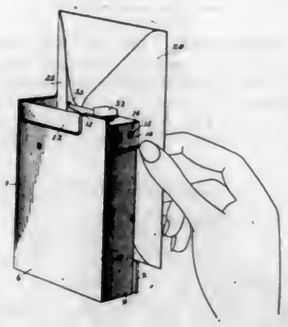
1. In a loom operating device in combination, a main driving shaft, a shuttle-beating shaft, and a jack-shaft intermediate thereof, driving means for the main shaft, a chain connection between the main shaft and the beating shaft, engageable with a member on the jack shaft, and adapted to drive the jack shaft in a direction opposite to that of the beating shaft, an operating crank shaft, and a chain connection between said crank shaft and the jack shaft and eccentric means for increasing and decreasing the velocity of the crank shaft, the operative relation of the parts being such that the beater shaft operates the shuttle driving mechanism and the crank shaft operates the lay in timed relation to the shuttle driving mechanism and at a variable speed to provide a slow movement of the lay while the shuttle driving mechanism is operating.

1,767,907. METHOD AND APPARATUS FOR CONVEYING STRIPS, SHEETS, OR PLATES OF GLASS. SÉRAPHIN WEROTTE, Auvelais, Belgium, assignor, by mesne assignments, to The American Bicheroux Company, a Corporation of Delaware. Filed Jan. 16, 1928. Serial No. 247,239. 11 Claims. (Cl. 49—33.)



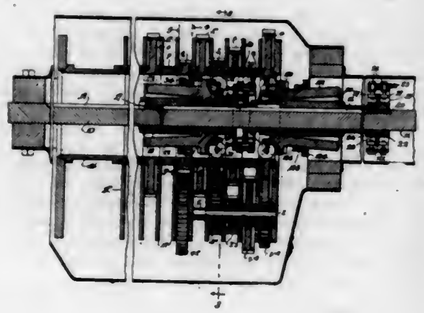
11. A glass rolling apparatus comprising in combination a pair of rolling cylinders and a set of conveying rollers, means to conduct the rolled strip, sheet or plate from the rolling cylinders to the conveying rollers and a receiving member supported on said conveying rollers and adapted to receive the leading edge of the rolled strip, sheet or plate and support said leading edge during the travel of the strip, sheet or plate on the said conveying rollers.

1,767,908. ENVELOPE SEALER. BENJAMIN ZUCKERMAN, Jr., New York, N. Y. Filed Dec. 21, 1928. Serial No. 327,567. 6 Claims. (Cl. 120—6.)



1. An envelope sealer, comprising a casing, a bodily removable moistening device carried by said casing, said casing and moistening device presenting means for guiding an envelope, and a resilient member movably connected to said casing and positioned internally thereof for pressing the flap of the envelope against the moistening device and also for pressing the flap to a sealed position.

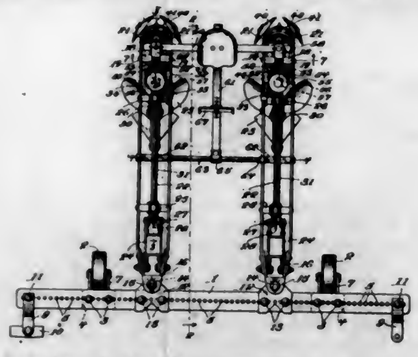
1,767,909. MULTIPLE-SPEED TRANSMISSION MECHANISM. HERBERT GEORGE ALTVATER, Gary, Ind. Original application filed Nov. 2, 1923, Serial No. 672,436. Divided and this application filed Nov. 20, 1926. Serial No. 149,696. 5 Claims. (Cl. 74—59.)



5. In a clutch and power control mechanism for the engagement and disengagement of rotative power, a drive shaft, a shiftable carriage mounted on said drive shaft and rotatable with it, levers on said drive shaft, transverse rollers mounted on said levers, a series of drive elements of practically constant interior diameters arranged contiguous to each other to provide uninterrupted frictional line engagement between each transverse roller and each element in succession as the shiftable carriage is moved through the elements.

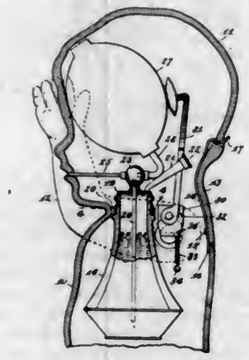
1,767,910. LISTER PLANTER. ROY N. ANDERSON, Clovis N. Mex. Filed July 13, 1927. Serial No. 205,517. 7 Claims. (Cl. 111—57.)

1. An agricultural implement of the class described comprising a draw bar, caster wheels supporting the same and a number of lister units pivotally connected with the draw bar so that they can move about vertical axes, each unit comprising a frame having its front end pivoted to



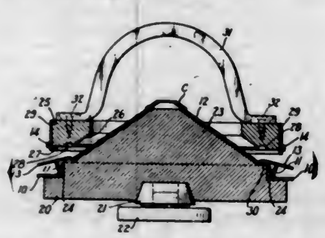
the draw bar, a wheel supporting the rear end of the frame, and a cross bar having its ends pivotally connected with the rear ends of the frames.

1,767,911. ATOMIZER. BENJAMIN BERKO and JOSEPH BREWER, New York, N. Y. Filed Apr. 13, 1928. Serial No. 269,785. 4 Claims. (Cl. 299—88.)



1. An atomizer comprising a hollow doll having external movable members, atomizing means within the doll and associated therewith so as to discharge a liquid spray through an orifice in the doll when operated, and means adapted to be operated by the movement of each one of said members to operate said atomizing means.

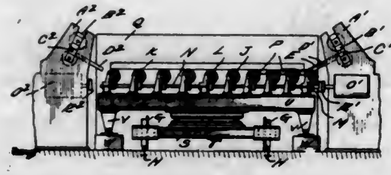
1,767,912. ART OF ASSEMBLING LOUD-SPEAKERS. IGOR S. BOBNOVSKY, Rochester, N. Y., assignor, by mesne assignments, to United Reproducers Corporation, a Corporation of New Jersey. Filed Feb. 20, 1928. Serial No. 255,532. 5 Claims. (Cl. 93—1.)



1. A tool for mounting a diaphragm having a flexible edge, upon a plate having an opening therein and having

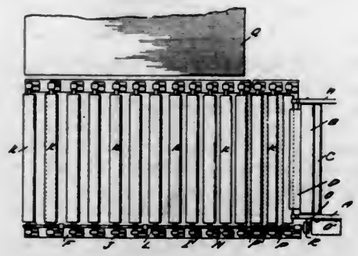
an outwardly extending projection adjacent said opening, against which said edge is to be mounted, said tool comprising a base for supporting said diaphragm and said plate in desired space relation, and a top arranged to engage said edge and bend it over said projection.

1,767,913. APPARATUS FOR CONVEYING GLASS FROM FORMING DEVICES. LOUIS BOUDIN, St. Gobain, France, assignor to Société Anonyme des Manufactures des Glaces & Produits Chimiques de Saint-Gobain. Chauny & Cirey, Paris, France. Filed Oct. 20, 1927. Serial No. 227,580, and in France Oct. 30, 1926. 5 Claims. (Cl. 49—3.)



1. The combination with a lehr, of two machines for forming discontinuous glass sheets a mechanism for receiving sheets from either of said machines, comprising a carriage mounted for turning about a central vertical pivot and carrying a plurality of sheet supporting rollers located in front of the lehr and having their axes parallel to the line of feed into the lehr, and means for driving the rollers at a peripheral speed slightly in excess of the speed of the sheet formation, comprising a shaft mounted on the carriage and a clutch by which it may be connected to and driven from the drive of either of the sheet forming machines.

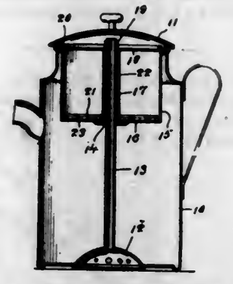
1,767,914. METHOD AND APPARATUS FOR CONVEYING GLASS FROM FORMING DEVICES. LOUIS BOUDIN, St. Gobain, France, assignor to Societe Anonyme des Manufactures des Glaces & Produits Chimiques de Saint-Gobain, Chauny & Cirey, Paris, France. Filed Apr. 4, 1929, Serial No. 352,636, and in France Oct. 30, 1926. 9 Claims. (Cl. 49—3.)



1. The combination with a lehr, of a machine forming discontinuous glass sheets, and mechanism for receiving the sheets therefrom as formed comprising a plurality of rollers driven at a peripheral speed slightly in excess of the speed of sheet formation, located in front of the lehr, and having their axes parallel to the line of feed into the lehr.

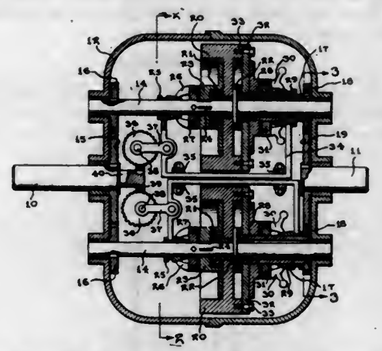
1,767,915. PERCOLATOR AND STRAINER. JOHN W. BUGG, Columbus, Ga. Filed Aug. 26, 1929. Serial No. 388,590. 1 Claim. (Cl. 53—3.)

In combination with a percolator having a hollow stem, a coffee container having a perforated bottom and imperforate side walls and a concentrically located sleeve mounted upon the stem and rising from the bottom of the coffee container, a second sleeve removably mounted upon the



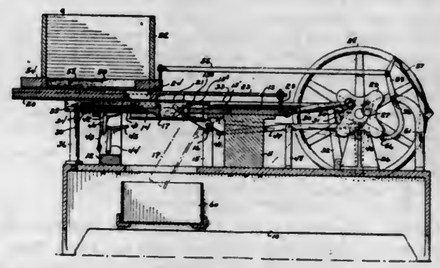
first mentioned sleeve, a perforated disk carried at the bottom of said sleeve, a filtering cloth removably positioned between the perforated disk and the bottom of the coffee container, and a perforated cover for the container.

1,767,916. TRANSMISSION. GEORGE B. COLEMAN, Philadelphia, Pa., assignor to Coleman Automatic Transmission Company, a Corporation of California. Filed June 23, 1926. Serial No. 118,025. 3 Claims. (Cl. 74—6.)



1. A transmission comprising driving and driven members, a plurality of freely rotating mass members, and means for effecting operative connections between the mass members and the driving member and the mass members and the driven member, said means being actuable to effect connection between one of the mass members and the driving member simultaneously with the connection of another mass member with the driven member.

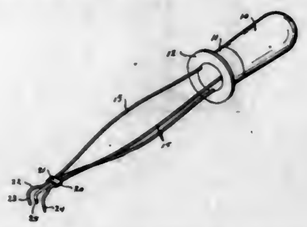
1,767,917. NUTCRACKER. AMBROZ DEMEK, Granger, Tex. Filed June 15, 1928. Serial No. 285,696. 11 Claims. (Cl. 146—12.)



1. A nut cracking machine including a tray, nut cracking bars capable of movement toward and away from each

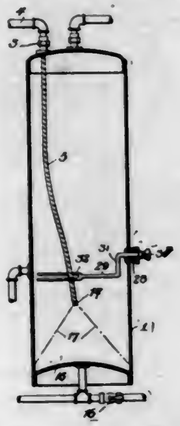
other through said tray, means for conveying nuts singly to the tray, means for operating said bars, means for holding one of said bars immovable in its active position, said tray being mounted for tilting movement, and means for tilting the tray as and simultaneously effect a release of said bar.

1,767,918. IMPLEMENT FOR FILLING FARINACEOUS TUBULAR ROLLS WITH FOOD PRODUCTS. CHARLES C. EGBERT, Niagara Falls, N. Y. Filed Sept. 16, 1926. Serial No. 135,784. 5 Claims. (Cl. 294—49.)



1. An implement for placing food products within a tubular farinaceous roll, comprising a handle, a plurality of interspaced, resilient holding wires carried by the handle and having outwardly bulging portions, and each of the wires being formed at its outer end with a rigid, interspaced hook, the hook of the middle wire being shorter than the hooks of the outside wires.

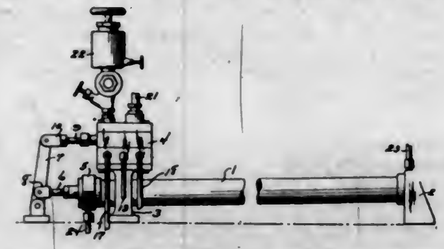
1,767,919. COLD-WATER TUBE AND CLEANER FOR DOMESTIC BOILERS AND HEATERS. WILLIAM EIERMANN, Brooklyn, N. Y. Filed Aug. 9, 1927. Serial No. 211,759. 3 Claims. (Cl. 122—405.)



1. A cleaner for domestic boilers and the like, comprising a flexible tube of metal formed as a thread, means at the upper end for operatively connecting the tube with the boiler and water supply, and means at the lower end presenting a spray structure, said spray structure including a sleeve formed as a thread adapted to be screwed into and out of the lower end of said tube, a stem cross-shaped in cross section fitting into said sleeve and a cone positioned at the end of said stem whereby water passing the stem will be divided into several streams and then into a conically shaped shower.

1,767,920. AUTOMATIC FEED-WATER REGULATOR. HARRY W. GANG, Huntington, W. Va. Filed Mar. 5, 1926. Serial No. 92,523. 1 Claim. (Cl. 122—451.1.)

A feed water regulator for boilers comprising an expansible tube, a stationary support for one end of the tube, said support having a threaded socket therein for receiving the end of the tube and said support having a threaded hole in communication with the tube, a pipe extending into said hole and adapted to connect to the steam space of a boiler, a second support having an opening therein through which the tube passes, the opening being below the plane of the point of attachment of the tube with the first support so that one end of the tube is lower than the other end thereof, a cap closing the low end



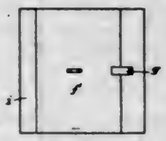
of the tube, a pipe adapted to connect the low end of the tube with the water space of a boiler, said pipe being connected with the cap, a steam chest on the second support, a slide valve therein for controlling the flow of steam to a water feeding device, a lever pivoted to a stationary part at its lower end, a stem connected with the valve and pivotally connected with the upper end of the lever and a rod connecting the cap on the low end of the tube with the lever so that the expansion and contraction of the tube will operate the lever.

1,767,921. CUTTING AND GRINDING MILL. STEVE R. GATELY, Syracuse, Nebr. Filed May 25, 1927. Serial No. 194,208. 2 Claims. (Cl. 83—1.)



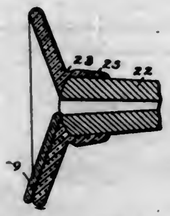
1. In a mill of the class described, a casing having an inlet at one side and an outlet at the other, an adjustable door for varying the size of said outlet according to the size of the material to be discharged therethrough and means within the casing for first cutting the material into small pieces for dispensing through the inlet and then crushing it.

1,767,922. GLASS-PLATE-FEED TRACK. RICHARD GENENGER, Aachen-Forst, Germany, assignor, by mesne assignments, to The American Bicheroux Company, a Corporation of Delaware. Filed Jan. 27, 1928. Serial No. 249,956. 8 Claims. (Cl. 49—33.)



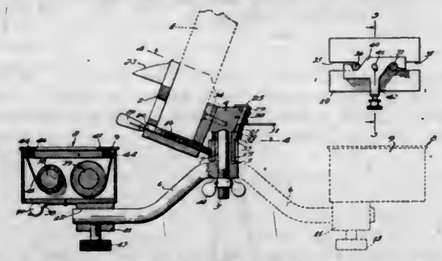
8. A bridge for a glass plate feed track, said bridge having a point of contact along one edge thereof and a narrower point of contact on the other edge.

1,767,923. METHOD OF MAKING TUBING. CHARLES E. GITHLES, Corning, N. Y., assignor to Corning Glass Works, Corning, N. Y., a Corporation of New York. Filed May 31, 1928. Serial No. 281,779. 7 Claims. (Cl. 49—79.)



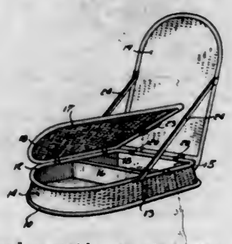
1. The method of making tubing which consists in gathering molten glass on the end of a blow pipe, marvering it, blowing a cavity in the glass, opening the cavity, placing a strip of glass in the cavity, closing the opening, gathering additional glass, elongating, marvering and drawing out the gather to form tubing of the desired size.

1,767,924. RECORDING DEVICE FOR AUTOMOBILES. NELSON L. GREENE, Chicago, Ill. Filed June 22, 1928. Serial No. 287,494. 4 Claims. (Cl. 40—130.)



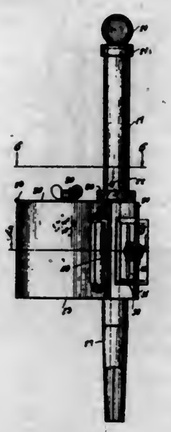
4. A device of the type described comprising a supporting member provided with clamp means whereby the supporting member may be detachably mounted upon an instrument board, a shaft carried by said supporting member, an arm movably disposed upon said shaft for supporting a recording device, and means associated with said supporting member and operatively connected with the arm for swinging the latter, whereby the recording device may be moved from one side of the instrument board to the opposite side.

1,767,925. COMBINED SEAT AND CARRIER. THOMAS HARGREAVES, Hillside, N. J. Filed June 16, 1928. Serial No. 286,014. 3 Claims. (Cl. 190—8.)



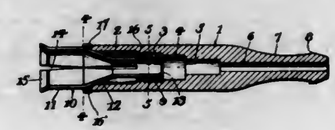
1. A combined portable carrying case and seat including a body open at its upper end, an inner cover and seat member and an outer cover and back rest member, said members being respectively pivoted to different edges of the upper open end of the body and a portion of said outer cover and back rest member extending outwardly from the pivoted end thereof to constitute means for respectively limiting the swinging of said member to an open position and to serve as a handle for carrying the device when closed.

1,767,926. NAILING TOOL. JOHN E. HOFFMAN, Casper, Wyo. Filed July 11, 1929. Serial No. 377,435. 5 Claims. (Cl. 1—53.)



1. A nailing tool including a barrel, a hammer operable in the barrel, a casing through which the barrel passes, interengaging screw threads connecting the barrel and casing together, means to feed nails from the casing into the barrel in the path of operation of the hammer, a post in the casing rising from the bottom thereof, a closure for the casing, a fastening securing the closure to said post, said post serving as a means around which a strip containing nails may be wrapped, a nail feed magazine journaled on the barrel, and guide means in the casing for the strip located relatively close to the magazine.

1,767,927. CIGARETTE AND CIGAR HOLDER. HARRY F. HUSTED, Winchester, Va., assignor to Lawrence W. Scott, Wyoming, Pa. Filed Jan. 18, 1928. Serial No. 247,666. 2 Claims. (Cl. 131—10.)

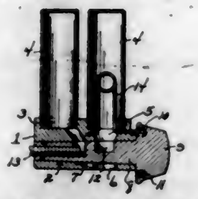


1. A holder for the purpose set forth comprising a carrier section and a combined clamping and sealing section extending into and threadedly engaging with the carrier section, said combined clamping and sealing section provided with one or more slits extending lengthwise thereof, each of said slits tapering in opposite directions approximately from the center thereof to each end to provide each of the edges of the slits, intermediate its ends with a point, said combined clamping and sealing section including an intermediate tapered portion coacting with the carrier section to provide for the abutting of the points of each slit to seal the inner portion of the slit to the outer portion thereof and further to contract the clamping section to detachably secure a cigar or cigarette with the carrier section.

1,767,928. DISPENSING DEVICE FOR DENTAL ALLOY AND MERCURY. FREDERICK G. JELLISON, Rowley, Mass. Filed July 23, 1928. Serial No. 294,761. 1 Claim. (Cl. 221—96.)

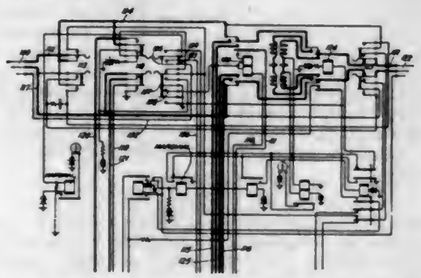
A device of the class described comprising a base having a bore therein and ports in its upper portion communicating with the bore and an outlet port in its lower part arranged under the other ports, containers sup-

ported by the base and in communication with the upper ports and a shaft rotatably mounted in the bore and having pockets therein arranged to register alternately with the upper ports and the lower port during the rotation of the shaft so that some of the material in each container



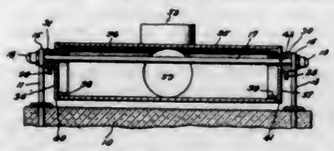
will drop into the pockets and then be discharged through the outlet port, an agitator in one of the containers having a part passing through a part of the base, a handle forming head on the outer end of the shaft and a cam on said head engaging said part of the agitator by moving the agitator when the shaft is turned.

1,767,929. TELEPHONE SYSTEM. HERBERT B. JOHNSON, Flushing, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Aug. 14, 1929. Serial No. 385,881. 6 Claims. (Cl. 179—41.)



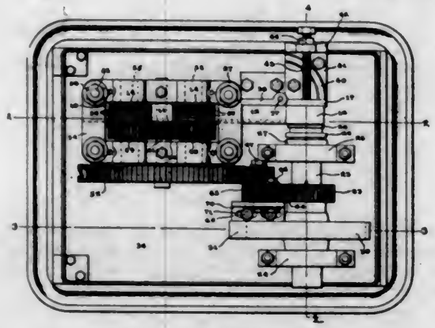
1. In a telephone system, a first position including an operator's telephone set arranged to function in a first manner, a second position including an operator's telephone set arranged to normally function in a second manner, and means for grouping said positions under control of said second operator's set including means for adapting said second operator's set to function also in the manner of said first operator's set.

1,767,930. ADJUSTABLE VENTILATING TOILET SEAT. GEORGE F. KAHL, Vincennes, Ind. Filed May 7, 1929. Serial No. 361,109. 2 Claims. (Cl. 4—217.)



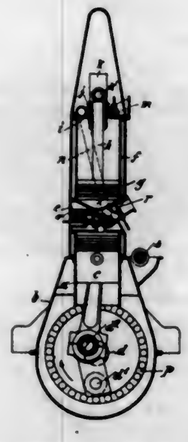
1. In combination with a toilet bowl, a seat having a pocket on its rear inner corner, a pair of spaced supports anchored in the rear of the bowl, a pair of brackets secured to the rear of the seat, a T-shaped hollow conductor having a slot across its length in communication with said pocket and adapted to be connected at the end of the stem to the vent pipe of a plumbing system, a pair of caps rotatably mounted in opposite ends of the legs of the conductor, a bolt rigidly secured to the support, and rotatably connected and extending through said brackets, legs and caps, said caps rotatably mounted on said bolt eccentrically thereof to provide for adjusting said conductor to meet varying vent pipe connections.

1,767,931. MACHINE FOR WINDING COIL SPRINGS. RANDALL A. KING, Pueblo, Colo. Filed June 22, 1929. Serial No. 372,946. 20 Claims. (Cl. 153—66.)



1. A coil spring forming machine comprising a spring receiving spindle, wire feeding means for advancing spring wire towards the spindle, and a die swingingly mounted in front of the spindle and provided with a forming groove in communication at one end with the feeding means and at the other end with the spindle.

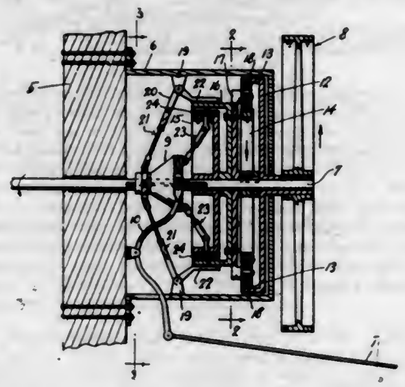
1,767,932. INTERNAL-COMBUSTION ENGINE. WOLFGANG KNOCHENHAUER, Wernigerode, Germany. Filed Mar. 9, 1929, Serial No. 345,826, and in Germany Mar. 10, 1928. 2 Claims. (Cl. 123—66.)



1. An internal combustion engine, comprising in combination a lower compressor cylinder, a working cylinder above said compressor cylinder, means for admitting air for combustion into said working cylinder into the upper end of the same, a low pressure conduit on the other side of the upper end of said working cylinder adapted to conduct into said compressor cylinder the air for combustion sucked into said working cylinder, a valve box between said working cylinder and said compressor cylinder, and a fuel nozzle in said valve box along which said highly compressed and highly heated air for combustion is conducted into said working cylinder.

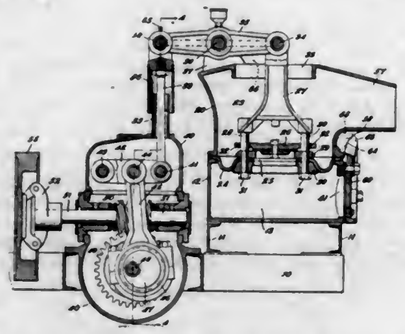
1,767,933. REVERSIBLE CLUTCH. PERCY BAXTER LEDWELL, Minerva, Tex. Filed Oct. 17, 1929. Serial No. 400,289. 1 Claim. (Cl. 74—34.)

In a clutch structure of the character described, a housing, a shaft mounted for rotation in the housing, a ring gear fixed on the shaft, a ring gear loosely mounted on the shaft and disposed in spaced concentric relation to the fixed ring gear, means for driving the loosely mounted ring gear, a spider loosely mounted on the shaft, pinion gears rotatably mounted on the spider and disposed between the ring gears and in mesh therewith, a drum loosely mounted on the shaft and rigidly connected to the spider, a drum fixed on the shaft and disposed concentrically in the loosely mounted drum and spaced therefrom, frictional brake shoes pivotally mounted on the housing and engage-



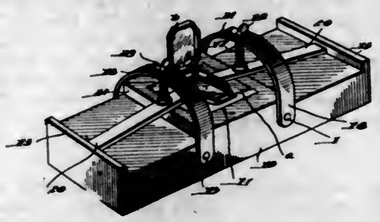
able with the outer side of the loosely mounted drum in a manner to retain same against rotation, frictional clutch shoes disposed between the drums and mounted for radial sliding movement on the fixed drum for engagement with the inner side of the loosely mounted drum for frictionally coupling the drums together for rotation in unison, a shift device slidably mounted on the shaft for rotation therewith, adjustable means for operatively connecting the shift to the brake and clutch shoes in a manner to simultaneously move same to operative and inoperative position and manually operable means for actuating the shift device.

1,767,934. DIAPHRAGM PUMP. CHARLES I. LONGENECKER, Milwaukee, Wis., assignor to Chain Belt Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Apr. 23, 1928. Serial No. 272,079. 1 Claim. (Cl. 103—151.)



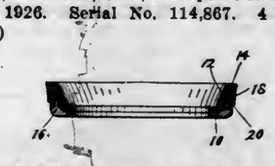
In a diaphragm water pump, a base member; a top member; a flexible diaphragm normally clamped between said base and top members; means carried by said top member connected to said diaphragm for flexing the latter; power means for actuating said flexing means; a readily detachable connection between said actuating means and said flexing means; and a removable clean-out plate carried by said base member provided with a portion for pivotally engaging said top member, whereby said top member, diaphragm and flexing means may be readily swung to an inoperative position to facilitate access to said diaphragm.

1,767,935. WATCH-CRYSTAL-FITTING DEVICE. JAMES BRUCE MCDANIEL, Macon, Ga. Filed July 24, 1928. Serial No. 295,066. 2 Claims. (Cl. 81—6.)



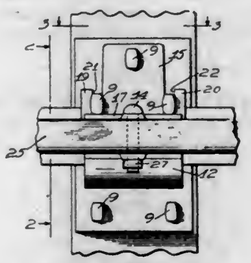
1. A watch crystal fitter comprising a base, a flat centrally disposed portion rising from said base and having a seat therein to receive a sheet of material from which a crystal is to be cut, shoulders formed at the opposite ends of said raised portion, flanges rising from the opposite ends of said base, clamp bars adapted to be laid on the opposite end portions of said base crosswise of said shoulders and with their outer ends abutted against said flanges and the inner end portions thereof resting on adjacent edges of a template which is adapted to be placed on the material in said seat, arched members disposed transversely of and above said base, and clamp members carried by said arched members and adapted to engage said clamp bars at points thereon in line with said shoulders.

1,767,936. CUP WASHER. JOHN J. MCELROY and EUGENE L. BEECHER, New Haven, Conn., assignors, by mesne assignments, to The Cleveland Pneumatic Tool Company, Cleveland, Ohio, a Corporation of Ohio. Filed June 9, 1926. Serial No. 114,867. 4 Claims. (Cl. 74—109.)



1. A cup washer structure for operation in a cylinder comprising, in combination, a ring-shaped heel with an upstanding rim, and an envelope of different material formed integral therewith, said heel being formed of hard material to provide stiffness to the structure, and said envelope being formed of soft rubber to provide an advantageous working surface on the cylinder.

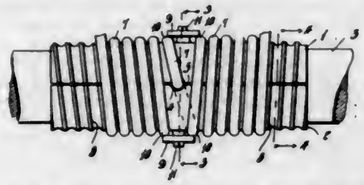
1,767,937. COMBINED TIE PLATE AND RAIL ANCHOR. WILLIAM ANDREW MCFARLAND, Bena, Minn. Filed July 15, 1927. Serial No. 206,043. 1 Claim. (Cl. 238—292.)



The combination with a railway tie and a rail, of a rail anchor comprising a plate disposed between the tie and the rail, said plate being provided with an upwardly projecting flange adapted to abut one side of the rail, a supplementary flange oppositely disposed from said first named flange and adapted to abut the opposite side of said rail,

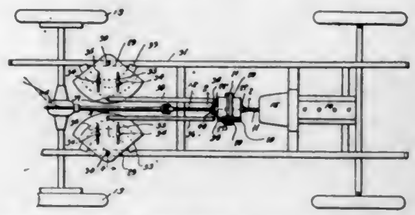
said supplementary flange being provided with a base portion receivable in an opening in said plate, said base portion being provided with a projecting fluke for engaging the under side of the rail, said plate being provided with openings adapted to receive spikes for fastening said plate to the tie, said supplementary flange having an opening adapted to receive a railway spike for fastening said flange to the tie, and fastening means associated with the flanges and the rail for locking the plate, the flanges, and the rail together.

1,767,938. WINDING DRUM AND MEANS FOR FASTENING HOISTING CABLES THERETO. RUSSEL A. MONNIER and GEORGE P. MONNIER, Algonac, Mich. Filed Apr. 30, 1929. Serial No. 359,252. 3 Claims. (Cl. 242—117.)



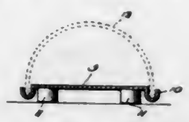
1. In a winding drum, in combination with a shaft having a transverse opening, drum segments mounted thereon, a cable inserted through said opening and wound on the drum segments, and clamping members secured to said drum segments and engaging the initial turns of the cable on the drum to hold the segments on the shaft.

1,767,939. AUTOMATIC TRANSMISSION MECHANISM. JOHN NELSON, Ericson, Nebr. Filed Sept. 19, 1929. Serial No. 393,720. 4 Claims. (Cl. 74—34.)



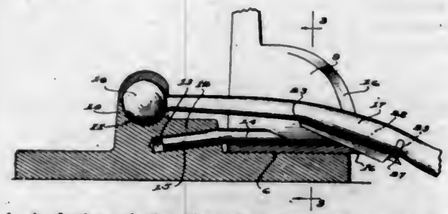
1. An automatic transmission comprising a balance wheel, governor means operatively connected to said balance wheel, a driving and a driven shaft section on which the balance wheel is journaled, gears keyed to said shaft sections within the balance wheel, intermediate gearing between said gears, said wheel being in sections having offset portions secured together and providing a groove, and a lug extending from the intermediate gearing into said groove to cause rocking of the balance wheel.

1,767,940. HOLDER AND PROTECTOR FOR ARTIFICIAL FLOWERS. GRACE PENROSE, New Paris, Pa. Filed Mar. 6, 1928, Serial No. 259,500. Renewed Feb. 18, 1930. 5 Claims. (Cl. 312—100.)



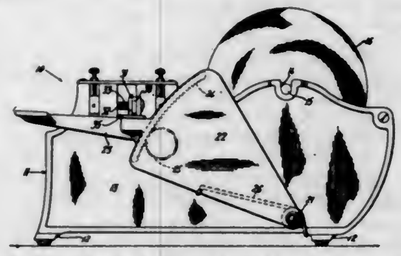
1. A holder and protector for artificial flowers including a base equipped with a series of supporting fingers below its upper margin, and a transparent cover engaged over said base in the depressions and with the fingers.

1,767,941. SHARPENING DEVICE FOR CURVED-EDGED TOOLS. NORRIS T. PINDAR, Valdosta, Ga. Filed Feb. 14, 1928. Serial No. 254,289. 4 Claims. (Cl. 76—82.)



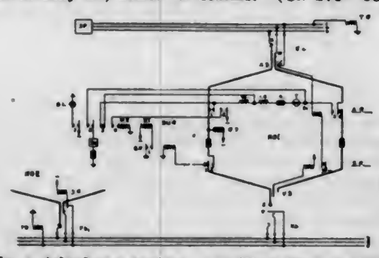
1. A device of the character described comprising a base having an abutment thereon conforming to and seating one side of the curved cutting blade of a curved edge tool, means on said base for clamping said blade against said abutment seat, means for holding said blade down on said base, a support uprising from said base, a blade sharpening arm having its inner end mounted on said support for universal movement and extending transversely of the cutting edge of a clamped cutting blade, and an elongated cutter seated on said arm to traverse said blade edge.

1,767,942. AUTOMATIC GUM-TAPE-DISPENSING MACHINE. JOHN RUGEN, New York, N. Y. Filed July 13, 1928. Serial No. 292,339. 5 Claims. (Cl. 164—42.)



2. In combination with the spring actuated lever of a gum tape dispensing machine, a transverse bar beneath which the strip of gum tape to be dispensed is adapted to pass, a knife blade pivoted to one side of said bar for swinging movement with respect thereto, a striker plate carried by said actuating lever, and knife blade actuating means operable by said striker plate during an interval in the return movement of said actuating lever after depression and release of the same, said knife blade actuating means including a bell crank pivoted to said knife blade and having one of its arms extending into the path of upward movement of said striker plate.

1,767,943. TELEPHONE SYSTEM. RUDOLF SCHENK, Vienna, Austria, assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Oct. 20, 1928, Serial No. 313,685, and in Austria May 14, 1926. 2 Claims. (Cl. 179—55.)

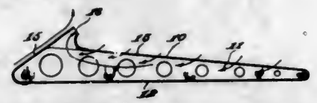


1. In a telephone system, a calling line, a circuit terminating at one end in a connection to said calling line

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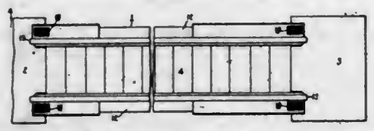
and at another end in a cord and plug, a source of tone current, a busy lamp and an operator's set associated with said circuit, a called line terminating in a jack, and means responsive to a transient connection between the tip of said plug and the sleeve of said called line jack for connecting said source of tone current to said calling line and said operator's set and for lighting said busy lamp.

1,767,944. AEROFOIL. HENRY SCHLEUSNER, Garner, Iowa. Filed Mar. 14, 1929. Serial No. 347,022. 3 Claims. (Cl. 244—12.)



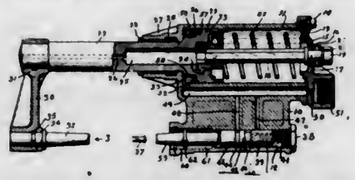
1. An aerofoil having a thickened advance edge, provided with a rearwardly and upwardly inclined upper part, said foil being substantially hollow in the direction of its movement and having a jet opening immediately adjacent the upper termination of said rearwardly inclined edge whereby ejection of air is induced by external air, and having air inlet openings upon its upper side from closely adjacent the jet opening rearwardly thereof a substantial distance.

1,767,945. MOVING STAIRWAY. MARTIN C. SCHWAB, Chicago, Ill., assignor to Otis Elevator Company, New York, N. Y., a Corporation of New Jersey. Filed May 15, 1928. Serial No. 277,993. 1 Claim. (Cl. 198—16.)



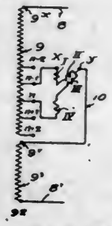
In combination, a moving stairway having a balustrade on each side thereof, means to cause motion of said stairway in either the up or down direction, a direction-of-motion indicator mounted in each balustrade at each end and flush with the surface thereof, and means responsive to each starting of the moving stairway in the up direction for rendering visible each up symbol in all of said indicators and responsive to each starting of the moving stairway in the down direction for rendering visible each down symbol in all of said indicators, said last-named means being also responsive to each stopping of the stairway to render invisible all symbols in all of said indicators.

1,767,946. RIVETER. ARTHUR SCOTT, Cleveland, Ohio, assignor to The Cleveland Pneumatic Tool Company, Cleveland, Ohio, a Corporation of Ohio. Filed Aug. 12, 1927. Serial No. 212,405. 3 Claims. (Cl. 218—19.)



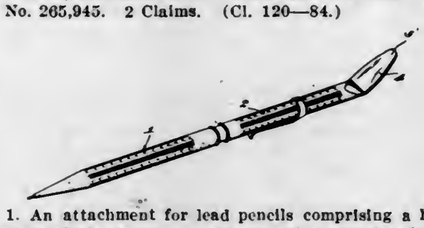
1. In a pneumatic riveter, an anvil, a die, a piston rigidly connected with the anvil, a second piston adapted to operate the die, a block containing cylinders for both said pistons, one of said cylinders being out of alignment with said anvil and die, means for preventing rotation of the piston for said last named cylinder, whereby said anvil and die are maintained in alignment, and means for introducing pressure flu'd to both said cylinders to actuate said pistons substantially simultaneously.

1,767,947. AUTOTRANSFORMER FOR ALTERNATING CURRENT HAVING VARIABLE TRANSFORMATION RATIOS. PIETRO STRAGIOTTI, Turin, Italy, assignor to Federico Pagliani, Turin, Italy. Filed Apr. 18, 1927, Serial No. 184,735, and in Italy Apr. 22, 1926. 5 Claims. (Cl. 171—119.)



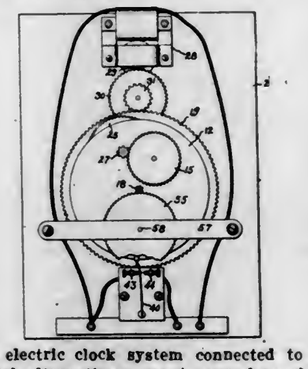
1. An auto-transformer having variable transformation ratios, comprising four winding electrically connected in series, a core for the pair of intermediate windings and a core for the pair of outer windings of the series, the windings of the intermediate pair of windings arranged to generate equal and opposite fluxes and the windings of the external pair being arranged to generate equal fluxes in the same direction when the current traverses all four windings in sries, and means for varying the relative orientation of the magnetic fluxes generated by the two pairs of windings to vary the difference of potential between the middle point of the series connected windings and the two terminals thereof.

1,767,948. ATTACHMENT FOR PENCILS. JOHN C. TAYLOR, Anaconda, Mont. Filed Mar. 30, 1928. Serial No. 265,945. 2 Claims. (Cl. 120—84.)



1. An attachment for lead pencils comprising a hollow metal body having one end extended longitudinally, flattened to bring the opposed walls thereof into contact, said flattened portion being sharpened, to provide a scraping or cutting blade.

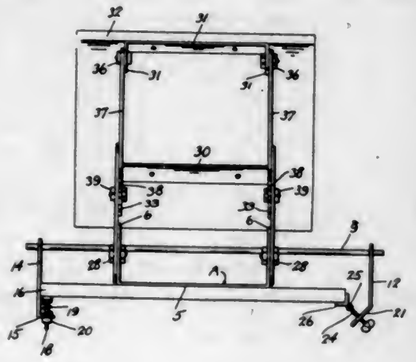
1,767,949. ELECTRIC CLOCK SYSTEM. HENRY E. WARREN, Ashland, Mass., assignor to Warren Telechron Company, Asland, Mass., a Corporation of Maine. Original application filed Jan. 24, 1928, Serial No. 249,175. Divided and this application filed June 4, 1929. Serial No. 368,270. 3 Claims. (Cl. 58—24.)



1. In an electric clock system connected to a source of commercial alternating current, secondary clocks oper-

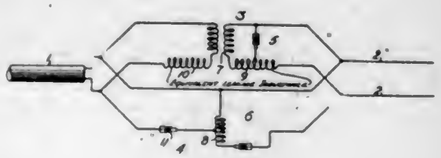
ated by synchronous motors, a second source of alternating current having a frequency greater than the first source, and means for connecting said clock system to said high frequency source to correct for the negative frequency error of the first source, including a master clock provided with a minute hand, means to rotate said master clock in synchronism with, but in opposite direction to, the secondary clock minute hand and provided with a switch controlled by said master minute hand and arranged to connect said clock system to either of said two sources.

1,767,950. TABLE AND LAP DRAWING AND READING STAND. WILLIAM E. WESTBROOK, Tiffin, Ohio. Filed July 6, 1929. Serial No. 376,419. 4 Claims. (Cl. 45—131.)



1. In an apparatus of the class described, a U-shaped supporting stand, a rod extending through the sides thereof, means for clamping the rod to a table or the like, a board, and means for adjustably mounting the board on the stand.

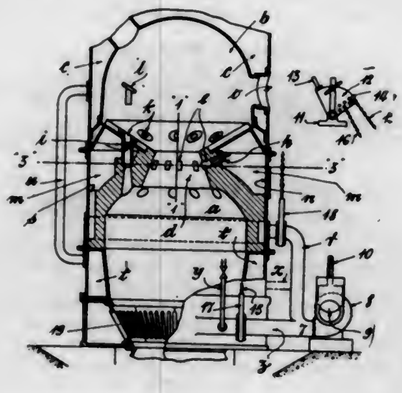
1,767,951. TRANSMISSION CIRCUITS. HORACE WHITTLE, New York, N. Y., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Feb. 1, 1923. Serial No. 616,259. 14 Claims. (Cl. 178—44.)



1. In combination, an input circuit, a transformer, a broad band filter and a load circuit in series relation, the filter and load circuit having characteristics substantially equivalent to that of an infinite filter having identical sections, and an impedance of the transformer constituting the shunt terminating impedance of the filter.

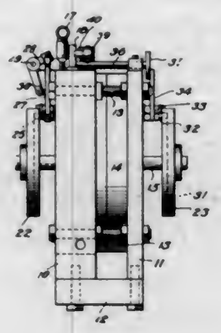
1,767,952. GAS PRODUCER AND COMBINED FURNACE. THOMAS ROLAND WOLLASTON, Manchester, England. Filed May 31, 1927. Serial No. 195,509, and in Great Britain Aug. 3, 1926. 1 Claim. (Cl. 110—31.)

In a gas producer combined with a furnace, an air supply conduit therefor, said conduit having a branch conduit leading to the producer, and a second branch conduit leading to the furnace, a valve for said air supply conduit, a valve in each of said branch conduits, and



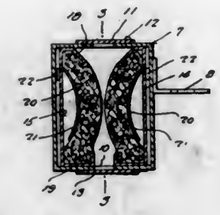
manually operable means connected to last-named valves whereby they may be set to control the supply of air through the branches in fixed pre-determined relative proportions, as herein set forth.

1,767,953. ENGINE. ROSS ZUMWALT, West Baden, Ind. Filed June 22, 1928. Serial No. 287,506. 2 Claims. (Cl. 121—73.)



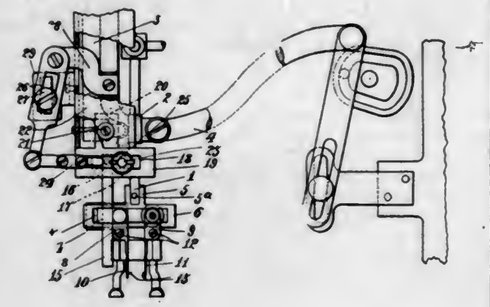
2. An engine of the character described comprising spaced plates, a shaft journaled thereon, a rotor carried by the shaft and operating between said plates, a sliding abutment for said rotor, means for operating said abutment, an inlet pipe communicating with the rotor, a valve controlling said communication, a disk carried by said shaft and having a cam shaped groove, a second shaft rotatably mounted on the upper edges of said plates and parallel with the rotor shaft, an extension rising from the second named shaft, an extension projecting from the stem of the valve, a coupling member having U-shaped extremities arranged in right angular relation to each other and pivotally connected with said extensions, a link pivoted on one of said plates, a pin projecting from one end of the link and operating in the groove of said disk, a wheel carried by one end of the second named shaft, and a link pivoted on said pin and eccentrically connected with said wheel, whereby the said shaft, is rotated incident to the operation of said rotor.

1,767,954. OIL-ROD WIPER. CARL ADAM, Easton, Pa. Filed Nov. 29, 1929. Serial No. 410,578. 4 Claims. (Cl. 15—210.)



4. In an attachment of the class described, a housing provided in its top and bottom with rod holes disposed in vertically aligned relationship, closures for said holes, an attaching bracket on said casing, a pair of absorbent pads in said casing and resilient backing and bowing springs associated with said pads.

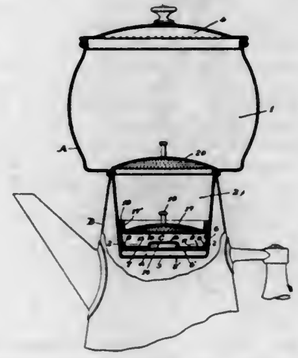
1,767,955. SEWING MACHINE. EDWARD WEST ARMSTRONG, Belfast, Northern Island. Filed May 16, 1928, Serial No. 278,115. and in Great Britain Feb. 6, 1928. 7 Claims. (Cl. 112—158.)



1. In an embroidery sewing machine, the combination of a fixed frame, a swinging head, a needle bar operatively carried by the said head, and means whereby said head is vibrated laterally with a pair of needles, supports therefor, means for securing one of said needle supports in fixed position relatively to said needle bar, means whereby the other of said supports is carried slidably relatively to said bar, a rocking member, a fulcrum for said member on said frame, means connecting one end of said member to said swinging head, and means connecting the other end of said member to said slidable needle support so as to cause said support to vibrate laterally.

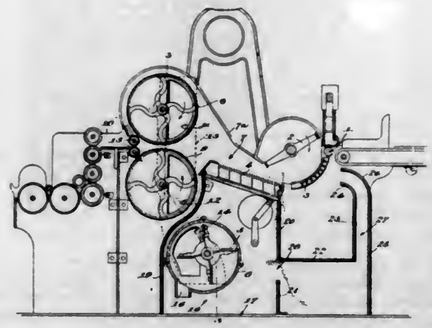
1,767,956. APPARATUS FOR INFUSING COFFEE, TEA, AND THE LIKE. ELMER N. BACHELDER, Portland, Me. Filed May 22, 1929. Serial No. 365,199. 6 Claims. (Cl. 53—3.)

1. In apparatus of the class described, the combination with a water and coffee holding container having a perforate bottom, a cup within the lower portion of said container, a finely perforated disc in said cup, a filtering element disposed beneath and in spaced relation to said disc except at its marginal portion which is secured between the periphery of said disc and the wall of said cup, and means to predeterminedly delay the passage of



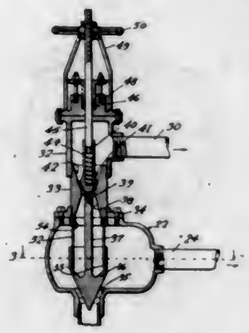
the beverage from said cup whereby said filtering element may be submerged, either completely or partially, in said beverage during the filtration process.

1,767,957. MACHINE FOR CLEANING COTTON AND THE LIKE. JOHN SNELGROVE BACHMAN, Rome, Ga., assignor to Elwin Chappell, Atlanta, Ga. Filed Mar. 19, 1928. Serial No. 262,756. 3 Claims. (Cl. 19—89.)



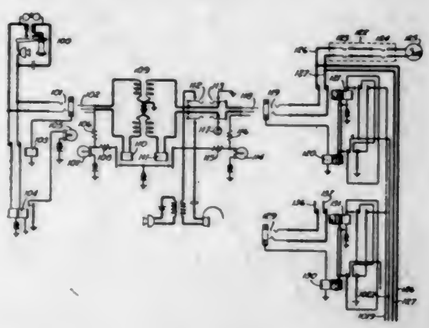
1. In a machine of the character described comprising means to set a volume of air in motion, loading means including a beater and its concave by which fibrous material is loaded upon the air current, means to screen out the fibrous material and direct the unloaded air back into the current; means defining a conduit in which the air is continuously circulated, said means extending up to the extremities of and embracing the concave thus bridging the concave across the air conduit to receive the entire volume of air at full force.

1,767,958. AUTOMATIC FLOW NIPPLE AND SEPARATOR FOR OIL WELLS. HANS SYVER BERG, Ventura, Calif. Filed June 11, 1927. Serial No. 198,129. 4 Claims. (Cl. 277—42.)



I. In a flow nipple, a receiving chamber having an inlet, a lower outlet and an upper outlet, a second chamber connected with said upper outlet and receiving therefrom, a Venturi tube forming said connection, and connected tensioned valves for said inlet and said Venturi tube to control the flow into the respective chambers.

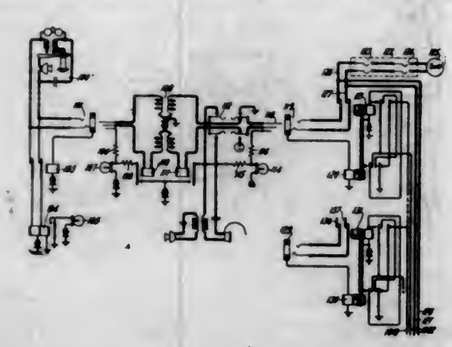
1,767,959. AUTOMATIC TELEPHONE-EXCHANGE SYSTEM. EDGAR H. CLARK, Forest Hills, and WARREN W. CARPENTER, Queens Village, N. Y., assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Sept. 29, 1928. Serial No. 309,174. 17 Claims. (Cl. 179—27.)



1. In an automatic telephone exchange system, a plurality of operators' positions, a plurality of offices, a group of trunks outgoing to each of said offices and terminating therein in switching mechanism, a plurality of senders common to said operators' positions for operating said switching mechanism, means for associating any position with an idle one of said senders, and a single train of selector switches for associating a selected sender with an idle trunk in any desired ones of said trunk groups.

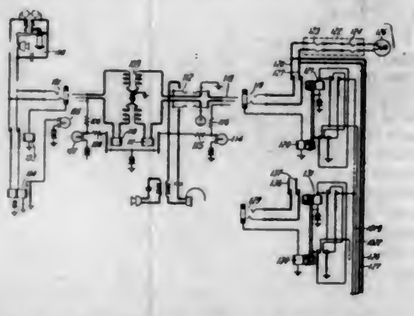
1,767,960. AUTOMATIC TELEPHONE EXCHANGE. EDGAR H. CLARK, Forest Hills, and WARREN W. CARPENTER, Queens Village, N. Y., assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Sept. 29, 1928. Serial No. 309,175. 15 Claims. (Cl. 179—27.)

1. In an automatic telephone exchange system, a plurality of operators' positions, a plurality of offices, a group of trunks outgoing to each of said offices and terminating therein in switching mechanism, a plurality of senders common to said operators' positions for operating said switching mechanism, a selector switch individual to each sender for associating an idle sender with a calling oper-



ator's position, a second selector switch operable in accordance with the selective operation of said first switch to extend additional control conductors from said sender to said calling position, and selector switches for associating a selected sender with an idle trunk in any desired ones of said trunk groups.

1,767,961. AUTOMATIC TELEPHONE-EXCHANGE SYSTEM. EDGAR H. CLARK, Forest Hills, and WARREN W. CARPENTER, Queens Village, N. Y., assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Sept. 29, 1928. Serial No. 309,176. 13 Claims. (Cl. 179—27.)

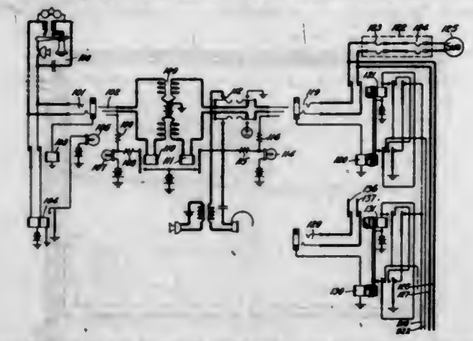


1. In an automatic telephone exchange system a plurality of offices, a group of trunks outgoing to each of said offices, a plurality of operators' positions, office keys at each of said positions corresponding to said plurality of offices, a register switch at each of said positions, selector switches, and means for operating said selector switches and said register switch in unison under the control of said office keys for connecting a calling one of said positions with a desired one of said trunk groups.

1,767,962. AUTOMATIC TELEPHONE-EXCHANGE SYSTEM. EDGAR H. CLARK, Forest Hills, and WARREN W. CARPENTER, Queens Village, N. Y., assignors to Bell Telephone Laboratories, New York, N. Y., a Corporation of New York. Filed Sept. 29, 1928. Serial No. 309,177. 14 Claims. (Cl. 179—27.)

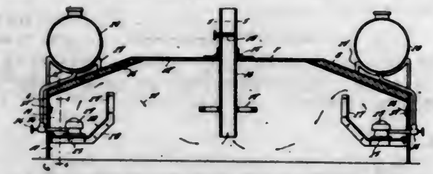
1. In an automatic telephone exchange system a plurality of operators' positions, a plurality of offices, a group of trunks outgoing to each of said offices and terminating therein in switching mechanism, office keys at each position corresponding to said plurality of offices, a plurality

of senders common to said positions for operating said switching mechanism, means for associating any position with an idle sender, a plurality of link circuits each comprising a trunk selector and sender finder for con-



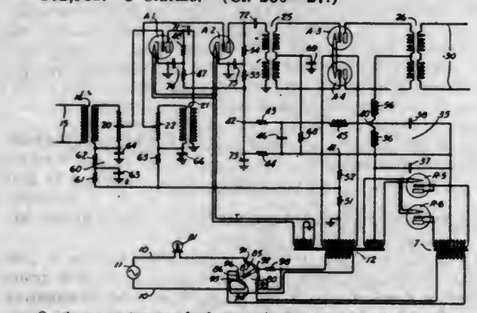
necting said sender with outgoing trunks, a link selector in each sender, and means under the control of said office keys for directing the link selector of a sender and the trunk selector of a selected link to select a group of trunks outgoing to a desired office.

1,767,963. HEATING STOVE. STANLEY G. COOK, Auburn, Nebr. Filed Apr. 23, 1929. Serial No. 457,553. 3 Claims. (Cl. 126—93.)



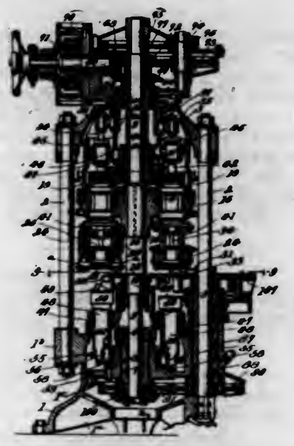
1. A stove of the class described comprising a hood including a pair of side walls, a pair of end walls, and a top the end portions of which incline downwardly and outwardly, said end walls being provided with openings, plates extending inwardly from the end walls adjacent the lower edges of the openings and having upwardly directed extension terminating in spaced relation to the top wall, burners located on said plates, oil tanks located on the inclined portions of the top, and piping connecting the tanks with the burner, valve means incorporated in said piping, and a smoke stack extending through the center of the top and disposed vertically and terminating at its lower end a distance from the bottom edge of the side.

1,767,964. VACUUM-TUBE CIRCUITS. VAN METER COUSINS, Lyndhurst, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed June 22, 1929. Serial No. 372,933. 3 Claims. (Cl. 250—27.)



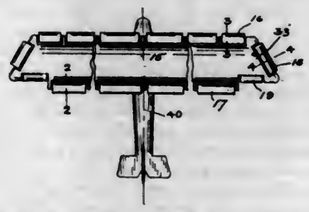
2. A wave transmission system comprising electric space discharge means having cathode means, a power supply circuit, a ballast resistance in series in said circuit, a cathode heating circuit for said cathode means, a heating current transformer in said heating circuit, a space current circuit for said electric space discharge means, a space current transformer for the latter circuit, a protective resistor for said heating circuit, and a switch having one position in which it disconnects said power supply source from said transformers, a second position in which it disconnects said power supply circuit from said space current transformer but connects said power supply circuit to said heating current transformer with said ballast resistance and said protective resistor in series with said heating current transformer, and a third position in which it short circuits said protective resistor and connects said power supply circuit to said transformers in parallel, with said ballast resistance in series with the parallel connected transformers.

1,767,965. MACHINE FOR CLOSING FILLED CANS. JOHN COYLE, JOHN C. TALIAFERRO, Jr., and OTTO A. SCHMITT, Baltimore, Md., assignors to Continental Can Company, Inc., New York, N. Y., a Corporation of New York. Filed Nov. 10, 1927. Serial No. 232,313. 13 Claims. (Cl. 113—24.)



1. A closing machine comprising a supporting base, a lower turret rotatably mounted on said base, a plurality of columns mounted on said base and disposed outside of said turret, an upper frame carried by said columns, a center spindle supported by and connected to said lower turret, an upper turret mounted on said spindle and keyed thereto for rotation, said upper turret being journaled in said upper frame, and a series of seaming units and cooperating can supporting units mounted on said turrets.

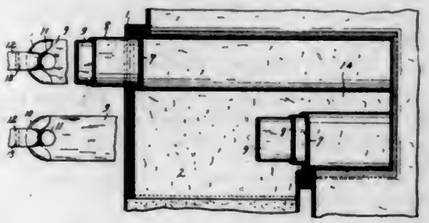
1,767,966. WING SYSTEM WITH STABILIZING VANES FOR AIRCRAFT. LOUIS H. CROOK, Washington, D. C. Filed Mar. 20, 1928. Serial No. 263,155. 2 Claims. (Cl. 244—12.)



1. A wing construction for aircraft, comprising a substantially rigid wing-body surrounded by flexible edges;

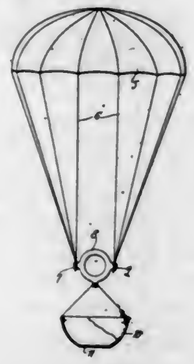
each of said edges consisting of a series of vane sections, means for mounting each section about an axis parallel to the respective edge of said wing-body to obtain free oscillation as actuated by fluid pressure, thereby regulating the width of the fluid passage between said section and the corresponding edge of the body in accordance with the inclination between the pressure surfaces of said wing-body and the vane section.

1,767,967. POCKET REENFORCEMENT. SAMUEL DAVIDOFF, Milwaukee, Wis. Filed July 30, 1927. Serial No. 209,435. 1 Claim. (Cl. 2—248.)



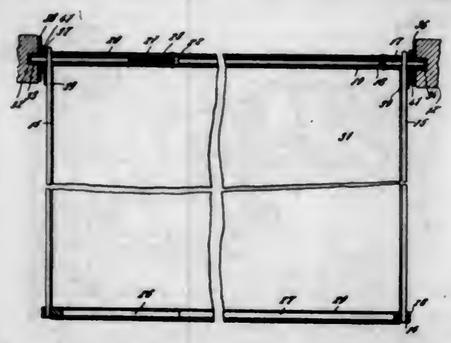
In a garment, the combination with a pocket having an opening, a tubular welt extending along each side of the pocket opening, a separate longitudinally flexible stiffening strip in each of said welts, the opposed edges of the strips being spaced from each other throughout their length, and flexible straps extending from the ends of the strips and connected to the garment, said welts being sustained from each other in the plane of the material of the garment and the pocket being openable only by the flexibility of said strips in a plane normal to the strips.

1,767,968. PARACHUTE. LYNN DETZEL, Brooklyn, N. Y. Filed May 25, 1929. Serial No. 365,859. 1 Claim. (Cl. 46—52.)



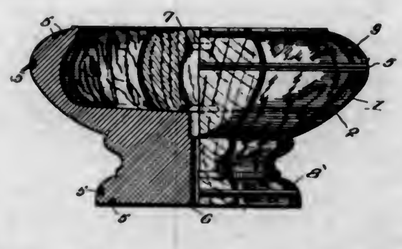
In a parachute of the character described, a strip of flexible material, guy cords depending from the edge of the strip of material and in predetermined spaced relation with each other, a spreader member in the form of an annulus having diametrically opposite perforated ears thereon, connection between the lower ends of the guy cords at one side of the flexible material and the respective ear on the spreader member, and connections between the lower ends of the other guy cords and the other ear on the spreader member, and an open top basket member associated with said spreader member adapted to receive the strip, cords and spreader member, said basket being provided with an opening in its bottom for the passage of air to remove the strip, cords and spreader therefrom.

1,767,969. ADJUSTABLE AWNING. JAMES L. DROHEN, Dunkirk, N. Y. Filed June 13, 1927. Serial No. 198,543. 6 Claims. (Cl. 156—15.)



4. An awning adapted for use with a window frame having guide grooves in its opposite sides and top to slidingly receive a window glass, comprising an awning frame mounted for swinging movement within the window frame, means to hold the awning frame in adjusted position, a fabric cover for the awning frame and means extending from the cover to provide a waterproof joint between the upper edge of the window glass and the upper edge of the window frame when the awning is in or out of position for use.

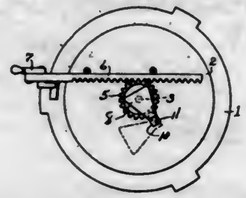
1,767,970. WOODWORKING. CHARLES W. ERICKSON, Los Angeles, Calif. Filed June 15, 1928. Serial No. 285,749. 1 Claim. (Cl. 144—309.)



In a method of forming bowls in numbers from a single block of wood constructed by securing together a plurality of sections of wood that are substantially triangular shape in cross section and of various kinds and colors to provide a block having many sides, with veneer strips between the adjacent sides of the sections extending from the apices formed by the meeting side wall portions outwardly in line with the outer surfaces thereof, the apices of the sections being cutaway at intervals and registered to form the cup portions of the bowls, applying means for securing said sections together including veneer strips and bands countersunk in the bowls circumferentially of and about the outer surfaces thereof, supporting said block in a wood working machine for turning out the bowls in design formation, sawing the bowl forms apart through the cup portions and thence finishing the bowls within the cup portions.

1,767,971. WASHING-MACHINE ATTACHMENT. EMMA J. ERICKSON, Reliance, S. Dak. Filed Oct. 25, 1929. Serial No. 402,519. 1 Claim. (Cl. 259—101.)

The combination with a washing machine of the type including a tub having a lid, an agitator shaft extending upwardly through the lid, a gear upon said shaft, and means meshing with the gear and operable to rotate the same to effect rotation of the agitator shaft, of means for preventing upward displacement of the shaft through the lid, the said means comprising an abutment member including a base portion swivelled upon the lid, a portion upstanding substantially at right angles with respect thereto and beside the periphery of the gear, and a portion extending from the upper end of the upstanding portion and broadened in the direction of its outer end and projecting above the free end of the shaft to offer an obstruction to upward movement of the shaft, the space above the gear being unobstructed and the said member being movable about its swivel into and out of position to obstruct the shaft.



1,767,972. PHOTOGRAHPIC-FILM PACKAGE. JOHN L. GARRETSON, Buffalo, N. Y. Filed Mar. 23, 1929. Serial No. 349,365. 9 Claims. (Cl. 95—72.)



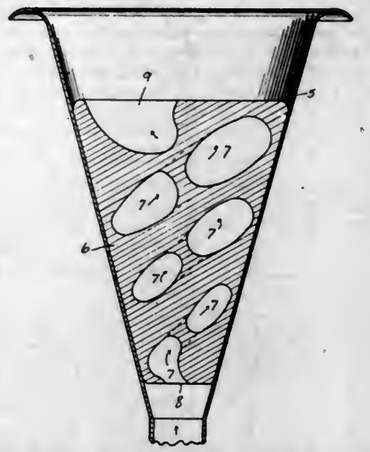
1. A photographic film package comprising an envelope, a photographic element arranged within said envelope and adapted for withdrawal from one end thereof, a member substantially impervious to daylight secured to said element at its withdrawal end and affording a means of withdrawing said element from said envelope, said member being arranged to protect the withdrawal end of the element from exposure to light prior to its withdrawal.

1,767,973. CLIP. STANLEY L. GEDNEY, Maplewood, N. J. Filed Feb. 27, 1929. Serial No. 343,061. 1 Claim. (Cl. 24—261.)



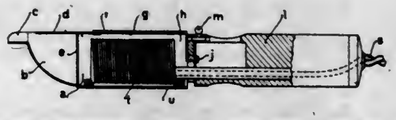
A clip of the character described, comprising an intermediate member and two clamping tongues at opposite ends of the intermediate member and at opposite sides of the intermediate member, said intermediate member and said tongues each composed of spaced runs of material, said tongues projecting in opposite directions and having resilient gripping action to clamp paper money or other articles against opposite sides of the intermediate member whereby money gripped at opposite sides of the intermediate member cannot be removed from the clamp by motion in one direction, said clamping tongues being wider than the intermediate member and extending at their free ends across the intermediate member.

1,767,974. MUTE. JOSEPH VALSIN GODBERY, San Francisco, Calif. Filed Aug. 9, 1926. Serial No. 128,226. 1 Claim. (Cl. 84—400.)



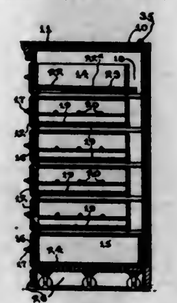
A muting device embodying in its construction, a plastic truncated cone body, having an internal spiral passageway formed therethrough, one end of the passageway being centrally located at the smaller diameter of the body portion and the other end being positioned at the larger diameter of the body portion.

1,767,975. LADLE FOR LOW-MELTING MATERIALS. IGNATZ GONYK, Vienna, Austria. Filed Aug. 23, 1928, Serial No. 301,594, and in Germany Aug. 26, 1927. 5 Claims. (Cl. 22—86.)



1. A ladle for low melting materials comprising a ladle proper, a heating chamber in said ladle, and a detachable handle carrying a heating device for the ladle.

1,767,976. MILK-SHIPPING CABINET. JACOB H. GRAVES, Lexington, Ky. Filed Oct. 30, 1928. Serial No. 316,020. 1 Claim. (Cl. 62—46.)



A refrigerator consisting of a cabinet and drawers arranged in tiers of which the top and bottom drawers are respectively adapted for the reception of a refrigerant and the moisture therefrom and the intermediate drawers for the reception of goods to be cooled, the depth of all the drawers except the bottom drawer being less than the depth of the cabinet by an amount sufficient to provide a material air circulating space between them and the rear wall of the cabinet.

1,767,977. FRUIT PICKER. MARY HARTER, Thurston, Ohio. Filed July 24, 1929. Serial No. 380,602. 1 Claim. (Cl. 56—340.)



A fruit gatherer comprising a standard having a receptacle arranged adjacent its uppermost end and extended in parallelism therewith, guide sleeves having clamping arms frictionally engageable with said standard, fastening elements for the clamping arms upon the guide sleeves having pointed projections designed for biting engagement with the adjacent portions of the standard, an operating rod having sliding connection with said sleeves and extending for appreciable distances therebeyond, a picker arm carried upon the uppermost end of the operating rod and extended over the mouth of the receptacle, said arm having a tong like fruit engaging portion, and a handle carried upon the lowermost end of the operating rod operable to impart lateral and reciprocating actions to the picker arm beyond the mouth of the receptacle.

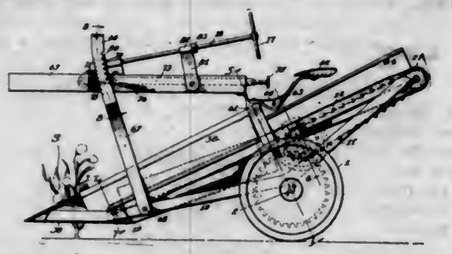
1,767,978. BINDER. WALTER EASTER HASKIN, New York, N. Y., assignor to Pressed & Welded Steel Products Company, Inc., New York, N. Y., a Corporation of New York. Original application filed Jan. 12, 1927, Serial No. 160,680. Divided and this application filed Apr. 23, 1929. Serial No. 357,551. 2 Claims. (Cl. 281—19.)



2. A book binder, including a back portion, sides hingedly connected to the back portion, a frame located in the back portion, a sleeve extending through the frame and back portion and coupling the same together, a bar pivotally connected at one end to the frame and adapted to project between the leaves of a book, a bracket on the frame for receiving the bar and means for removably securing one end of the bar to the bracket.

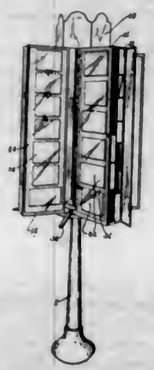
1,767,979. COTTON HARVESTER. BEDFORD HESTAND, Verden, Okla., assignor of one-half to Bert Lackey, Chickasha, Okla. Filed June 1, 1927. Serial No. 195,733. 4 Claims. (Cl. 56—33.)

1. In a harvesting machine, a wheeled supporting structure, plant product gathering means carried by said structure, and means for adjustably supporting said gathering means according to the elevation of the rows of plants to be operated upon, said adjusting means comprising an



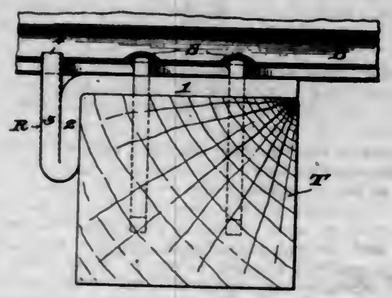
inverted U-shaped yoke mounted at its ends on said supporting structure, a tongue mounted on said structure, and cooperating means carried by said tongue and yoke adjustable to raise and lower said gathering means.

1,767,980. DISPLAY RACK AND STAND. RAYMOND S. HINTZE, Chicago, Ill. Filed Apr. 18, 1929. Serial No. 356,172. 4 Claims. (Cl. 312—120.)



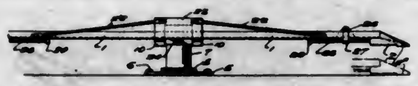
2. A device of the type described comprising a casing, a booklet-supporting member, means for removably securing a plurality of booklets to said booklet-supporting member, means carried by said casing for receiving said booklet-supporting member, a door for said casing, and means carried by said door for opening said booklets when said door is opened.

1,767,981. RAIL ANCHOR. CHARLES T. HOFFMAN, Washington, D. C. Filed Jan. 9, 1930. Serial No. 419,599. 24 Claims. (Cl. 238—299.)



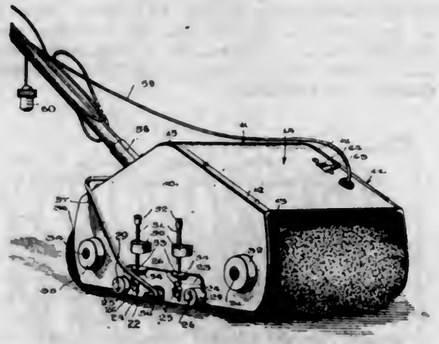
1. A rail anchor including a portion adapted to lie between the rail and the tie and a tie abutting portion having rail gripping means.

1,767,982. AUTOMOBILE LIFT. EDWARD E. HOLLISTER, Quincy, Ill., assignor to Hollister-Whitney Company, Quincy, Ill., a Corporation of Illinois. Filed Aug. 24, 1926. Serial No. 131,261. 5 Claims. (Cl. 254—89.)



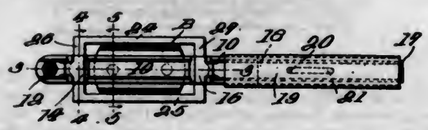
1. An automobile lift comprising a lifting device, a table mounted centrally thereon and having rails to receive the automobile wheels, a stop at the center of the table for limiting its descent, and ramps at the ends of the rails arranged to rest on a floor when the table is in its lowermost position and operative to prevent tipping of the table.

1,767,983. FLOOR POLISHER. WILLIAM HENRY HUGHES, Falls City, Nebr. Filed Jan. 8, 1927. Serial No. 159,961. Renewed Apr. 5, 1930. 1 Claim. (Cl. 15—49.)



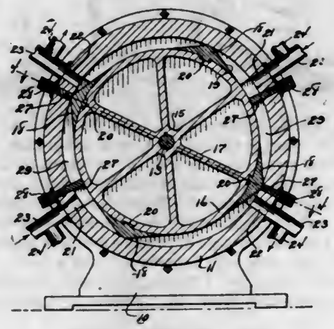
A floor polisher comprising a casing provided with side walls having inturned flanges projecting in a horizontal plane, a table providing a support for a motor located within the casing and having depending flanges resting on the inturned flanges, the ends of the table having means for securing the table to the casing, lugs projecting from the sides of the casing and provided with threaded vertical passages, screws mounted in the passages of the lugs, a plate associated with each side wall of the casing, means including the screws for adjustably positioning each plate in a vertical plane, lips projecting from the upper edges of each plate and adapted to be engaged by the screws, axles mounted on the plates and adapted to be adjusted vertically when the plates are adjusted, supporting rollers on the axles, brushes rotatably carried on the interior of the casing and projecting below the bottom of the casing, the adjustment of the plates and likewise the axles being adapted to regulate the polishing contact of the brushes with the floor, the casing being vertically adjustable on the plates when the screws are moved towards or away from the lips.

1,767,984. RAZOR-BLADE STROPPER. ROBERT H. INGERSOLL, New York, N. Y.; Charles S. Smith, Lansing, Mich., and Frederic C. Leubuscher, Essex Fells, N. J., executors of said Robert H. Ingersoll, deceased, assignors to Robt. H. Ingersoll, Inc., New York, N. Y., a Corporation of New York. Filed Oct. 10, 1925. Serial No. 61,693. 3 Claims. (Cl. 51—218.)



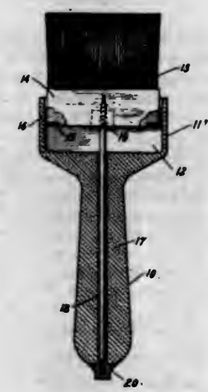
1. In a razor blade holder for use during stropping, a pair of holder members, means to hold said members permanently together and permit their relative movement into blade-clamping and blade-releasing positions, means to secure said holders in blade-clamping position, bent portions formed in said members to present an open transverse passage between said members in the clamping position thereof, and a transverse bar loosely held in said passage and in permanent attachment to one of said members in the clamping position thereof, a side bar supported by said transverse bar opposite the edge of a razor blade clamped in said members, and means to hold said side bar in parallelism with the edge of the razor blade.

1,767,985. ROTARY ENGINE. JOSEPH JOHNSON, Prescott, Ariz., assignor of one-half to Elvin R. Jackson, Phoenix, Ariz. Filed Aug. 7, 1929. Serial No. 384,086. 3 Claims. (Cl. 121—77.)



1. In a rotary engine, a cylindrical casing having spaced ports defining inlet and exhaust ports, a cylindrical rotor concentric with and of less diameter than the inner periphery of the casing, reversely inclined pistons carried by the rotor and engaging the inner periphery of the casing, spaced spring pressed cut off members slidingly mounted in the casing adjacent each of the ports and defining with the pistons, expansion chambers, and spaced diametrically located by-pass passages formed in the casing, each of said passages having their opposite ends in communication with two of the ports.

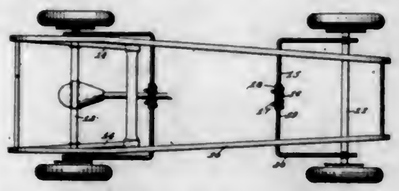
1,767,986. PAINTBRUSH. RUTH JOHNSON, Owls Head, Me. Filed Aug. 23, 1929. Serial No. 387,957. 2 Claims. (Cl. 15—176.)



1. The combination with a brush head having a bristle base, of a hollow handle formed with a receptacle within

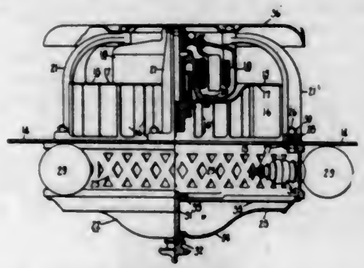
one end to accommodate said base, angle plates carried upon the inner side walls of the receptacle to support said base in spaced relation to the bottom and side walls of the receptacle, a shaft extended through the handle having detachable connection with said base, and remote control means included upon a projecting portion of the shaft to facilitate releasing of the brush head from a remote point.

1,767,987. SPRING EQUALIZER. DICK JOHNSTON, Buffalo, Wyo. Filed May 31, 1929. Serial No. 367,596. 2 Claims. (Cl. 280—104.)



1. In a spring equalizer for vehicles, a U-shaped frame including a cross bar and side bars extending from the ends of the cross bar, means to pivotally connect the cross bar to the side bars of the frame of the vehicle, means to provide a pivotal sliding connection between the side bars and the axle of the vehicle, said means comprising spaced parallel vertically disposed plates adapted to be carried by the axle of the vehicle, and a pair of spaced horizontally disposed bearing elements connecting the plates and slidingly receiving the side bars between them.

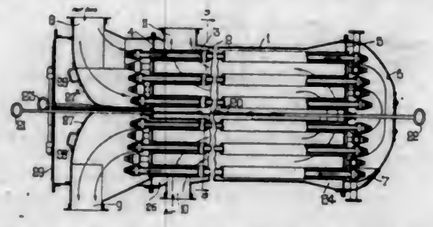
1,767,988. VENTILATING APPARATUS. JOHN COVINGTON KNAPP, New York, N. Y., assignor to Otis Elevator Company, New York, N. Y., a Corporation of New Jersey. Filed Jan. 26, 1929. Serial No. 335,266. 3 Claims. (Cl. 98—43.)



1. In an elevator installation; an elevator cab of the closed type having an opening provided in the ceiling thereof; a grille depending from said ceiling and covering said opening, said grille being provided with apertures communicating with said opening; a centrifugal fan mounted over said opening, said fan comprising a driving disc and a plurality of radial blades secured to and depending from said disc; and a motor mounted on the top of the cab above said fan, said motor having a rotating member to which said disc is connected so as to be driven thereby upon operation of the motor, said fan upon being driven drawing air in the cab out through said apertures and said opening, and said disc being of solid construction to prevent air being drawn into the blades of said fan from above.

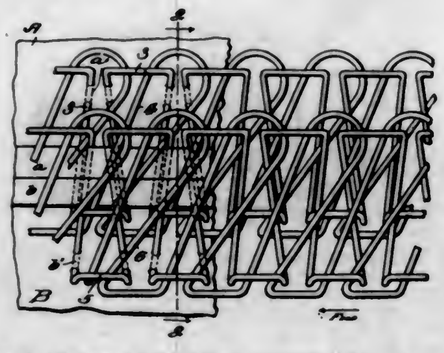
1,767,989. HEAT INTERCHANGER. ALBERT EDWARD LEEK, Wigan, England. Filed Apr. 22, 1927, Serial No. 185,878. and in Great Britain Dec. 8, 1926. 4 Claims. (Cl. 257—247.)

1. A heat interchanger comprising a casing, end plates spaced from the ends of said casing, hot gas flues connecting said end plates, water tubes coaxially within said hot gas flues, means to pass hot gas at high velocity through said hot gas flues, concave baffles in the path of said gases



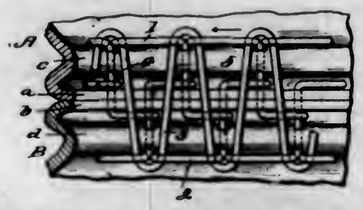
leaving said tubes to maintain the velocity and smooth eddyless flow of said gases, and means to pass water through said water tubes in contraflow to said hot gas.

1,767,990. SEAM FOR SEWED ARTICLES. HAROLD J. LE VESCONTE, Chicago, Ill., assignor to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 8, 1927. Serial No. 182,056. 5 Claims. (Cl. 112—268.)



1. A seam for sewed articles comprising fabric sections having their edge portions turned out of the plane of the fabric sections and placed face to face, a series of thread loops passing through the edge portions of the fabric sections and into and out of one of said fabric sections only, and a second series of thread loops passing through the edge portions of the fabric sections and into and out of the other fabric section only whereby lateral strain on the seam will draw the edge portions of the fabric sections together.

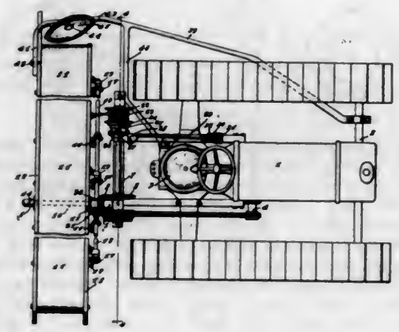
1,767,991. SEAM FOR SEWED ARTICLES. HAROLD J. LE VESCONTE, Chicago, Ill., assignor to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 8, 1927. Serial No. 182,057. 3 Claims. (Cl. 112—268.)



1. A seam for sewed articles comprising fabric sections having the edge portions thereof placed face to face, a needle thread having a series of thread loops, each of which passes into and out of one fabric section only and through the edge portions of the fabric sections, a second needle thread having a series of loops therein, each of

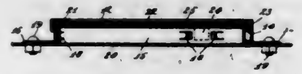
which passes into and out of the outer fabric section back from the edge portions thereof, and then through the edge portions, the loops in the needle threads being secured by the shank of a succeeding loop, and a cross thread passing about the shanks of the successive loops in both threads and crossing and covering the edges of the fabric sections.

1,767,992. ATTACHMENT FOR TRACTORS. ERNEST W. LILLY, Raymond, Wash. Filed Mar. 25, 1929. Serial No. 349,775. 2 Claims. (Cl. 37—110.)



1. A ditching and dirt elevating attachment for tractors comprising a hitch having inner angle arms which are loosely connected to the tractor and having an outer angle portion merging into a straight arm which is slotted, a ditching plow pivotally secured to the said angle arm, an endless elevator against whose outer side the end of the hitch rests, a removable headed element passing through the slot of the said end and entering the said side of the elevator, said elevator including a belt having end rolls and a plurality of intermediate rolls, a shaft secured to the tractor and pivotally supporting the elevator beyond the center thereof, supporting means between the outer end of the shaft and the tractor, and means between the elevator and tractor and operated by the engine of the tractor for imparting a simultaneous swinging to the hitch and to the lower end of the elevator and means also operated by the engine of the tractor for imparting a slow turning to the intermediate rolls of the elevator.

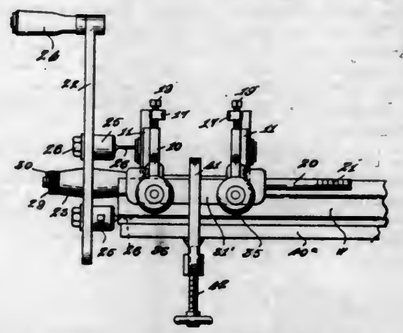
1,767,993. CARD HOLDER. ADOLPH G. LORENZ, Little Rock, Ark. Filed June 8, 1929. Serial No. 369,426. 5 Claims. (Cl. 40—10.)



1. A card holder comprising two circular parts adapted to hold a card so as to be visible through one of said parts, the latter part having an opening for that purpose, and cooperative means on said parts adapted to be brought into cooperative relationship by associating one part with the other part and imparting to the former a turning movement, to permanently lock said parts together.

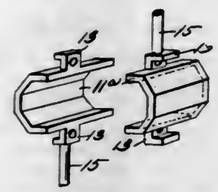
1,767,994. CUTTING MACHINE FOR WOOD GUTTERS. JULIUS H. MASON, Duncan Falls, Ohio. Filed Nov. 4, 1929. Serial No. 404,707. 5 Claims. (Cl. 145—121.)

1. In a machine for cutting grooves, spaced brackets, a shaft disposed transversely of the brackets, a cutter arm rotatably mounted upon the shaft, a cutter carried by said arm and disposed parallel with the shaft, means to feed the cutter longitudinally of the shaft when the cutter arm is rotated, means mounted on said brackets to clamp



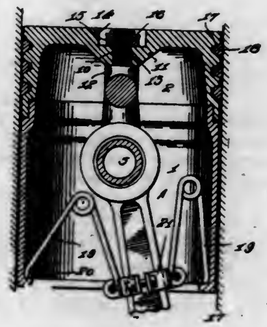
the work in position, means to center the shaft with respect to the work, and means to adjust the cutter with respect to the work and radially with respect to the shaft.

1,767,995. CURRENT MOTOR. PRESLEY B. MCCHESNEY, Bowling Green. Ky. Filed June 11, 1929. Serial No. 370,123. 2 Claims. (Cl. 170—173.)



1. A current motor comprising an elongated shaft angularly shaped in vertical transverse cross section, a plurality of sleeves mounted on said shaft and conforming in transverse shape to the transverse shape of the shaft, said sleeve being formed from registering sections, said sections at opposite sides thereof having outwardly extending lugs, the lugs of adjacent sections being secured together, arms carried by one sleeve section lug and extending in opposite directions, said arms of adjacent sleeves extending outwardly in relation to the shaft radially from the flat surfaces thereof and in spiral alinement, and spiral vanes extending around the shaft and secured to said arms.

1,767,996. PISTON. ALBERT JOHN MENCHEY, Philadelphia, Pa. Filed Jan. 14, 1929. Serial No. 332,380. 1 Claim. (Cl. 74—108.)



A piston of the class described comprising a lower section and a head section, means for connecting a connect-

ing rod to the lower section, rings carried by the head section, means for detachably connecting the head section with the lower section, such means comprising a member having its lower end connected with a part of the lower section with a threaded upwardly extending part thereon and the head section having a depending projection for resting on a part of said member, with a threaded hole in said projection for receiving the threaded part, said upper section having a tool receiving recess therein surrounding the threaded hole and a nut in the recess engaging the threaded part.

1,767,997. PIPE. ROBERT W. NICHOLLS, Palisade, N. J., assignor, by mesne assignments, to Andrew J. Sorbello, New York, N. Y. Filed Sept. 15, 1924, Serial No. 737,668. Renewed Feb. 12, 1930. 8 Claims. (Cl. 131—12.)



3. A pipe including an open bottomed bowl and a sectional flat stem upon which the bowl seats, a spring ring encircling the bowl and including an integral offset spring hook portion embracing the stem and holding the stem and bowl together.

1,767,998. MUSICAL INSTRUMENT. WILLIAM B. PARKINSON, Le Mars, Iowa. Filed Sept. 16, 1929. Serial No. 392,842. 5 Claims. (Cl. 84—384.)

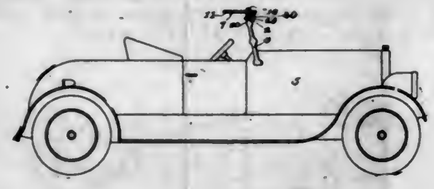


4. A musical wind instrument comprising a tubular body having an opening in one side wall to form a mouth, a substantially U-shaped spring wire fixed at the free end of one arm to said body and having a coil formed intermediate its ends, the other arm overlying said coil which forms a combined spring and fulcrum for the overlying arm, said arm having its free end bent to overlie said mouth and equipped with a pad to cooperate with said mouth to control the pitch of the tone.

1,767,999. TREATMENT OF LARD. LLEWELLYN B. PARSONS, Omaha, Nebr., assignor to The Cudahy Packing Company, Omaha, Nebr., a Corporation of Maine. Filed June 1, 1929. Serial No. 367,836. 3 Claims. (Cl. 99—11.)

1. The method of treating lard to remove free fatty acids therefrom, which comprises subjecting the lard to the action of an excess of sodium bicarbonate in the presence of a limited amount of water and with vigorous agitation of the mixture at a temperature of about 140 to 200° F.

1,768,000. WINDBREAK. FRANCIS A. REID, Phoenix, Ariz. Filed June 2, 1927. Serial No. 196,055. 2 Claims. (Cl. 296—84.)



2. A windbreak for automobiles comprising a pair of spaced clamping devices for connection to the supporting means for a windshield above the top of the latter and each including a lateral pivot, a deflector having a pair of spaced, endwise aligning slots disposed lengthwise of and adjacent the ends thereof, a pair of spaced, angularly adjustable coupling members mounted on said pivots and including inwardly extending deflector supporting arms apertured intermediate their ends, means extending through said arms and slots for adjustably connecting said deflector, intermediate its ends to said members, said members supporting said deflector lengthwise thereof between its sides, and said devices including means mounted on said lateral pivots for clamping said members to the devices to retain the latter in adjusted position.

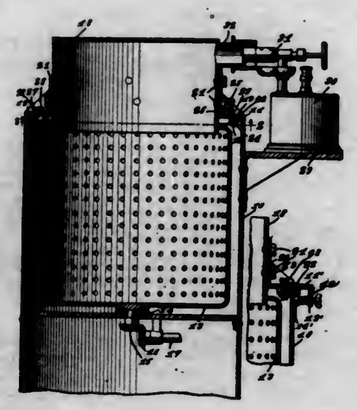
1,768,001. WINDOW FRAME. CONRAD REIFSCHNEIDER, St. Louis, Mo. Filed Sept. 12, 1929. Serial No. 392,181. 2 Claims. (Cl. 20—11.)



1. A window frame provided with a sash weight pocket and a sash retaining rail, one of the walls of said pocket being formed with an entrance opening for the latter, the end walls of said opening being oppositely bevelled outwardly, said rail partly overlapping said opening from one side wall of the latter to provide an abutment, a closure for positioning under the overlapping portion of said rail for normally closing said opening and having one side inwardly bevelled throughout, the corners at the ends of such side oppositely bevelled and the outer and inner corners of its other side oppositely bevelled, said bevelled portions providing for the positioning and removing of the closure in and from said opening, said closure further having its ends oppositely bevelled inwardly for seating against the end walls of said opening, and means carried by said closure and coacting with the wall of said pocket and said rail for detachably securing the closure within said opening.

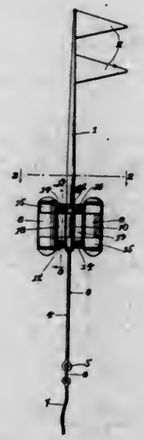
1,768,002. HEATING DEVICE FOR DRYING MACHINES. EVANS ROBESON, Fort Meade, Fla. Filed Aug. 14, 1929. Serial No. 385,807. 5 Claims. (Cl. 210—66.)

1. A heating device of the character described, comprising in combination with a casing open at its upper end, of a hood partly received by the open end of the casing, and having an open bottom communicating with the casing, means for supplying the hood with heat, means carried by the hood for adjusting the latter laterally with



a view of centering the hood with relation to the casing, and means carried by the hood for detachably connecting the same with the casing.

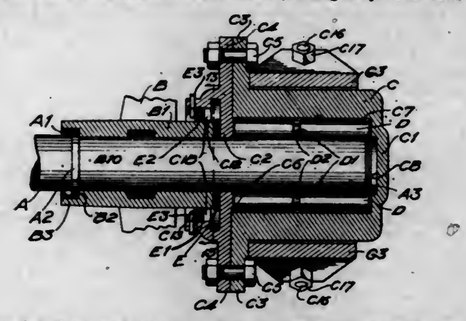
1,768,003. BUOY. HENRY ROTH, Two Rivers, Wis. Filed Oct. 2, 1929. Serial No. 396,860. 7 Claims. (Cl. 9—8.)



1. A buoy for the purpose set forth comprising an indicator carrying staff, a tail piece extending therefrom, a pair of floats spaced from and opposing opposite sides of the staff, a pair of arrestor blades positioned between the staff and floats, and means common to the floats and blades for coupling them to the staff.

1,768,004. JOURNAL BOX AND AXLE. HUGH W. SANFORD and HARRY W. JONES, Knoxville, Tenn., assignors to Sanford Investment Company, Wilmington, Del., a Corporation of Delaware. Filed Apr. 27, 1927. Serial No. 186,959. 8 Claims. (Cl. 295—42.)

1. In a structure of the kind described, the combination of a journal, an axle box surrounding the journal and comprising a body and a cap each having ears at each side of the box, the ears on said body being positioned to serve as pedestal arm abutments, means joining adjacent ears



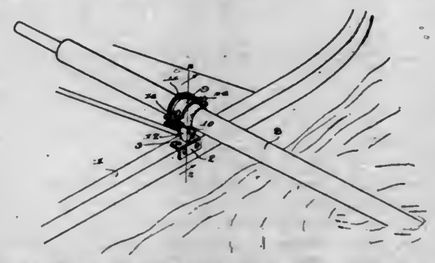
to each other, and said body having bearing faces at its sides, and a pedestal having rigid downward-directed arms adjacent said bearing faces and said abutments.

1,768,005. GARMENT-HANGER ATTACHMENT. HARRY SCHWARTZMAN, Jersey City, N. J. Filed June 14, 1929. Serial No. 370,947. 1 Claim. (Cl. 24—255.)



A clip for attaching a garment to a hanger, comprising a body of substantially inverted U shape and having its extremities first converging and then diverging, whereby the device can be pressed over a portion of a garment on a hanger, inwardly extending portions at the extremities of the diverging portions, a lining covering the interior portions of the device and having its ends extending between the diverging portions and the inwardly extending portions and gripped therebetween, to hold the lining in place, said lining being formed of resilient material.

1,768,006. OARLOCK. ARIN G. SEBERG and HAROLD M. SEBERG, Racine, Wis. Filed Sept. 11, 1929. Serial No. 391,888. 4 Claims. (Cl. 9—26.)

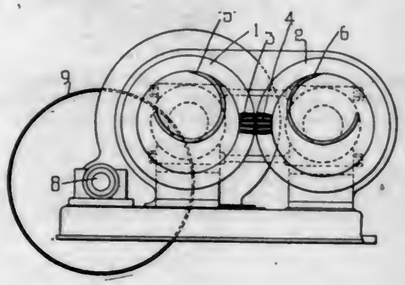


1. An oar lock comprising a sleeve adapted to receive an oar and bear against the collar thereon, said sleeve consisting of substantially semi-circular upper and lower members, means for adjustably connecting said semi-circular members together, an angle-iron plate adapted to be secured to the gunwale of a boat and having a struck-up portion in its upper face, said struck-up portion carrying an upwardly projecting pin, the lower sleeve member bearing on said struck-up portion, said pin extending into the lower sleeve member and having a friction roller thereon, said pin and roller adapted to engage the opposite sides of the lower member in the back and forth movements of the oar, and also permit a pivotal movement of the oar.

1,768,007. CHEMICAL COMPOUND OR TABLET FOR PROLONGING BLOOM LIFE OF CUT FLOWERS. FRED L. SIGMUND, Moorestown, N. J. Filed Mar. 7, 1930. Serial No. 434,166. 2 Claims. (Cl. 47—1.)

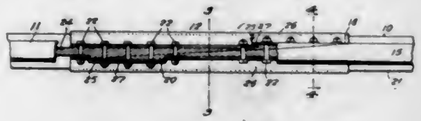
1. A chemical composition for the purpose set forth, consisting of one percent of phosphoric acid and a menstruum of milk sugar.

1,768,008. MACHINE FOR THE MOLDING OF PLASTIC SUBSTANCES. ALBERT WILLIAM SIZER, Hessle, England. Filed Nov. 12, 1929, Serial No. 406,612, and in Great Britain Nov. 10, 1928. 1 Claim. (Cl. 107—8.)



A machine for molding plastic substances comprising a hollow cylinder having radial ports through its wall, a second cylinder in intimate contact with the outside of said first cylinder and adapted to cooperate therewith to force the plastic substances through the radial ports into the internal cavity of said first cylinder, and a stationary knife of partial cylindrical shape providing a receiving trough within said hollow cylinder and providing a knife edge intimately engaged with the inner surface of said first cylinder, and means to rotate said first cylinder, said knife cooperating with said first cylinder to cut off and convey axially out of the first cylinder the material forced through the ports thereof by the second cylinder.

1,768,009. RAIL JOINT. WILLIAM H. SMITH, Mobile, Ala. Filed June 24, 1929. Serial No. 373,239. 2 Claims. (Cl. 238—237.)



1. In a rail joint, rail sections having their adjacent ends disposed in meeting relation at an angle relative to the longitudinal axis of the rail, the extreme ends of said rail sections being formed as feather edges disposed beneath the tread surface at opposite sides of the rail, laterally projecting lug portions formed on the rail webs adjacent the feather edge portions, and fish plates connecting said sections, said fish plates having laterally offset recesses engaging over said lugs.

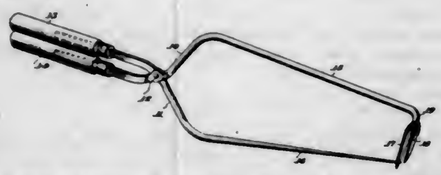
1,768,010. AUTOMATIC STOP SIGNAL. JOHN G. SNIP, Lamar, Mo. Filed Sept. 13, 1929. Serial No. 392,409. 4 Claims. (Cl. 116—37.)

1. A vehicle signal comprising a support, means for securing said support to a vehicle, a shaft located at one end of said support, signal arms journaled to said shaft and normally depending downwardly therefrom and hidden from view by said support, a rod hinged to the lower end of said support and normally extending upwardly and inwardly relative to said support, a weight carried by the upper end of said rod and connected to said arms to swing



the rod outwardly from said support and to swing the arms horizontally and in view by the slackening of speed of the vehicle.

1,768,011. FORKED KITCHEN UTENSIL. EDMUND RENDLE SPARKS, Edmonton, Alberta, Canada. Filed Sept. 22, 1928. Serial No. 307,668. 1 Claim. (Cl. 294—53.)



A fork comprising a plurality of pivotally connected elements, one of these elements including a shank and a flat bifurcated end portion at approximately right angles with reference to its shank, and the other of said elements including a tapered shank, terminating at a point adjacent to the bifurcated end portion, when the pivotally connected elements are in closed position.

1,768,012. EGG BEATER. RANDOLPH STONE and JOHN CAMERON, Chicago, Ill. Filed Apr. 8, 1929. Serial No. 353,628. 5 Claims. (Cl. 259—124.)

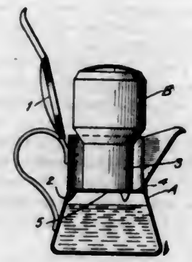


1. An egg beater comprising, in combination, a spiral bar spring repeller of substantially conical contour and having its convolutions provided with perforations, a liquid material deflector of conical contour secured at the top of the spring, and reciprocator rigidly secured to the deflector and the top of the spring.

1,768,013. MILK POT. JOSEPH M. TANZI, Los Angeles, Calif. Filed Oct. 21, 1929. Serial No. 401,241. 1 Claim. (Cl. 53—1.)

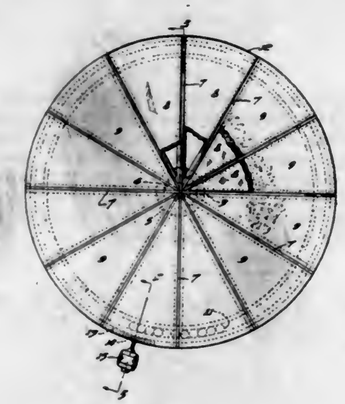
A device of the class described comprising an outer receptacle adapted to contain the liquid to be sterilized,

projections on the outer wall thereof spaced above the liquid level of the receptacle, an inner receptacle having a lower reduced part fitting in the upper part of the outer receptacle and adapted to contain a cooling medium, a flange on the lower end of the reduced part having notches for passing over the flanges when the inner receptacle



is to be placed entirely within the outer receptacle, the flange resting on the projections to hold the inner receptacle spaced from the bottom of the outer receptacle and said flange having openings therein through which the boiling liquid in the outer receptacle will pass to contact the inner receptacle.

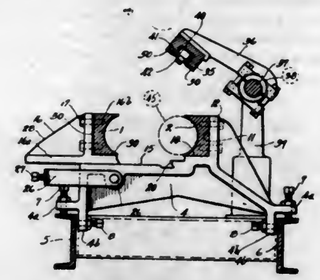
1,768,014. TURNTABLE. ROBERT THOMPSON, Plainfield, N. J. Filed Aug. 12, 1929. Serial No. 385,309. 2 Claims. (Cl. 104—44.)



1. A turntable comprising a central pivot, inverted substantially T-shaped bars radiating from the central pivot, bearing means supporting the outer ends of said bars, substantially triangle shape plates having rounded outer edges supported by the flanges of the bars, slabs following the shape of the plates and supported thereby, and means for rotating said turntable.

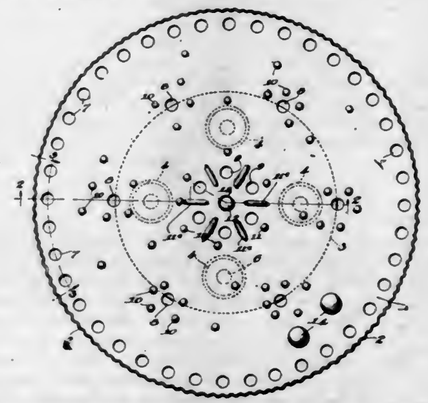
1,768,015. OUTSIDE SOLDER HORN. NELSON TROYER, Seattle, Wash., assignor to Seattle Astoria Iron Works, Seattle, Wash., a Corporation of Washington. Filed May 24, 1927. Serial No. 193—827. 11 Claims. (Cl. 113—115.)

1. A solder horn comprising supporting means and two complemental opposite side bars together forming a substantially closed guideway in which can bodies may be advanced through their soldering and cooling stages; one



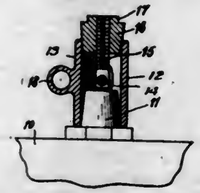
of said bars being fixedly mounted on the supports and the other being slidably adjustable thereon from and toward the fixed bar to open and close the horn.

1,768,016. GAME BOARD. ARTHUR L. WALKER, Hinsdale, Ill. Filed Dec. 17, 1928. Serial No. 326,644. 3 Claims. (Cl. 273—116.)



1. A game apparatus including a base board, a plurality of helical springs mounted thereon in a circular row, a circular game board having a corrugated outer rim and supported on said springs, said board having stud members extending downwardly therefrom and loosely fitting within said springs whereby to permit lateral sliding movement of the board, said board having a central aperture adapted to receive and seat a game piece or ball, said board also provided with a plurality of projections and apertures located between the rim and central aperture, whereby to act as deflectors to the game pieces.

1,768,017. BATTERY CONNECTER. RUDOLPH YAGODA, Old Forge, Pa. Filed Apr. 29, 1929. Serial No. 359,034. 1 Claim. (Cl. 173—259.)



In a connecter, a hollow clamping member comprising relatively movable sections, means carried by one section for connection with an electric conductor, a pin pivotally

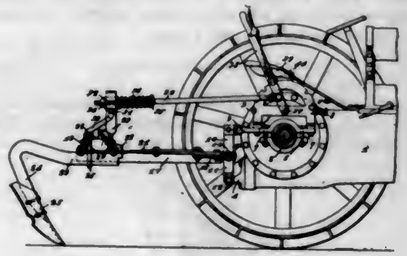
connecting said sections intermediate their ends, a threaded stud having one end connected with the pin, and a tapered spreader threaded upon the stud and engaging one end of the pivotally connected sections to force the ends of the sections relatively outward and move the opposite ends of said sections relatively inward.

1,768,018. LEAF-TURNING DEVICE. METRO YAHOLNITSKY, Rhein, Saskatchewan, Canada. Filed Sept. 4, 1928. Serial No. 303,908. 3 Claims. (Cl. 84—507.)



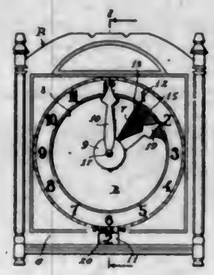
1. In combination, a support, a rotatably mounted shaft, arms having their inner ends mounted for free rotary movement upon the shaft and arranged in superimposed relation, a disk mounted for free rotation upon the shaft, a cam flange carried by the disk to successively engage the arms and move the latter singly in one direction when the disk is rotated, means to rotate the disk, means secured to the shaft for engagement with the arms to move the latter simultaneously in the opposite direction, and means to rotate the shaft.

1,768,019. DITCHER FOR TRACTORS. EDWARD A. ABELING and FRED W. ABELING, Cashmere, Wash. Filed June 10, 1929. Serial No. 369,741. 1 Claim. (Cl. 97—47.)



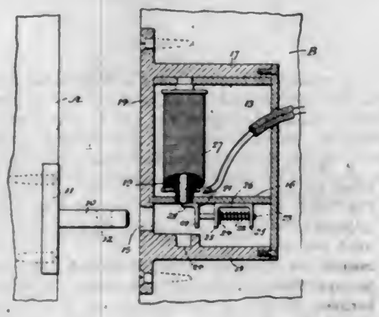
A tractor attachment, comprising sectional clamps which are bolted on the rear axle housing of a tractor and the upper elements of the clamps carrying segmental racks, a U-shaped member having its parallel arms bolted to the clamps, resting on the draw bar cap of the tractor and removably bolted thereto, a shaft journaled transversely through the arms of the U-shaped member, pairs of spaced beams having their inner ends journaled on the shaft, transversely arranged angle plates having their inner flanges upwardly directed secured to the beams and providing frames, brace means between the beams and the outer ends of the frame, plow carrying standards provided with short beams that have hooked ends to engage with the inner members of the frames, U-shaped bolts surrounding the beams and contacting with the outer members of the frames, and passing through plates which rest on the frames, nuts engaging said bolts, upstanding U-shaped brackets on the inner members of the frames, brace means between the brackets and the outer members of the frame, a socket pivotally secured in each bracket, a threaded rod passing through each socket member, a nut screwed on each rod and contacting with the outer face of the socket member, a stop element on each rod, a spring surrounding each rod and exerting a pressure between the stop element and the socket, a lever pivotally secured to each of the racks and to which the mentioned rods are pivoted, and hand operated spring influenced dogs carried by each lever for engaging with the racks.

1,768,020. TALLY CARD. JOSEPH J. ARNOLD, New York, N. Y. Filed June 6, 1929. Serial No. 368,953. 5 Claims. (Cl. 40—70.)



1. A tally card including front and rear stationary leaves and an intermediate relatively movable leaf, said leaves respectively bearing indicia, the front leaf having an opening through which the indicia on the intermediate leaf are selectively displayed and the intermediate leaf having a pointer and an opening by means of which the indicia on the front and rear leaves are respectively pointed out and displayed selectively.

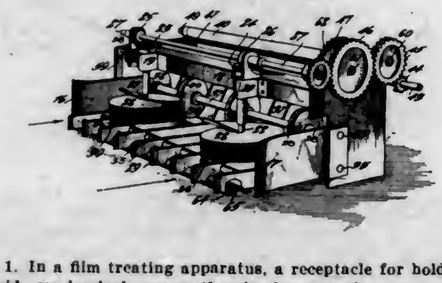
1,768,021. LOCK. WILLIAM E. BAUERBAND, Elizabeth, N. J. Filed Apr. 8, 1926. Serial No. 100,702. 2 Claims. (Cl. 70—50.)



1. A lock comprising a bolt having a vertical opening, a casing having an opening in its front face to receive the bolt and provided with a horizontal apertured partition

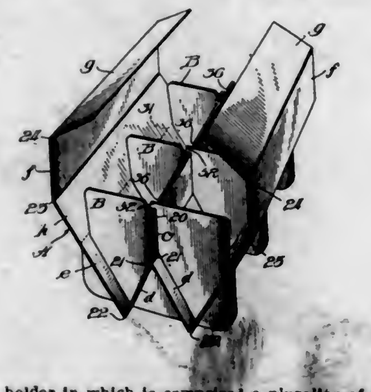
and a socket in its lower wall, a gravity locking member mounted above the partition and having an unbroken peripheral surface, said members being adapted to extend through the aperture thereof and pass through the opening in the bolt into said socket when the bolt is projected into the casing, an inverted U-shaped bracket on the under side of said partition, an inverted L-shaped support having a stem projecting from its vertical member and slidable in the bracket, a spring surrounding the stem between the members of the bracket and normally holding the horizontal member of the support below the opening of the partition with the end of the locking member resting thereon, the vertical member of the support being adapted to be engaged by the bolt and slide it inwardly and thereby release the locking member.

1,768,022. APPARATUS FOR TREATING PHOTOGRAPHIC FILMS. GEORGE C. BEIDLER, Rochester, N. Y. Filed Feb. 21, 1927. Serial No. 169,994. 16 Claims. (Cl. 95—94.)



1. In a film treating apparatus, a receptacle for holding fluid, mechanical means therein for engaging successive films and moving them downwardly in the fluid, and means for successively removing each film when it reaches the lowermost position.

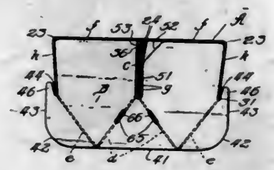
1,768,023. EGG CARTON. LÉON BENOIT, Chicago, Ill. Filed Oct. 24, 1927. Serial No. 228,304. 14 Claims. (Cl. 229—29.)



8. A holder in which is comprised a plurality of slotted cross walls, and a blank interlocking with said cross walls, the blank having one side foldable over the cross walls adjacent thereto, and having its other side also foldable over the cross walls but in spaced relation thereto, and means for securing in fixed relation the two blank sides so extended over the cross walls, substantially as described.

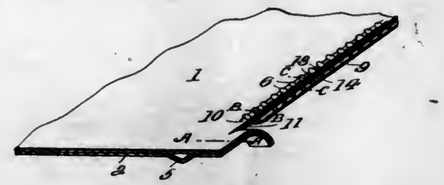
13. An egg holder comprising a longitudinally creased and bent blank provided with a longitudinal series of transverse slots aligned transversely in groups of at least three slots, and a plurality of cross walls, each cross wall cooperating with a group of slots by means of two upwardly facing notches formed on the edge thereof for supporting the blank thereon by engagement with two of said slots, said cross walls being formed to provide edge means extending transversely through the third slot of each group and cooperating with said other engaged slots and notches to secure said wrapper and each respective cross wall against relative movement.

1,768,024. EGG CARTON. LEON BENOIT, Chicago, Ill. Original application filed Oct. 24, 1927, Serial No. 228,304. Divided and this application filed Feb. 6, 1930. Serial No. 426,397. 8 Claims. (Cl. 229—29.)



1. An egg holder or filler in which is comprised a blank bent in the form of a letter W with slotted oblique bottom sections meeting at an elevated point centrally of the holder, the blank also providing front and rear sides and a cover, a plurality of cross walls collapsibly supported within the blank and extended through the slotted bottom sections thereof, and coacting means on the cross walls and oblique central bottom sections for sustaining said oblique bottom sections at a point intermediately of their upper and lower edges.

1,768,025. METHOD OF PRODUCING SEWED ARTICLES. JOSEPH BERGER, Utica, N. Y., assignor to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 9, 1926. Serial No. 147,264. 2 Claims. (Cl. 112—262.)

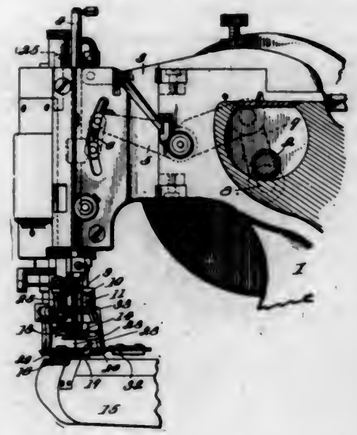


1. The method of forming seams for sewed articles consisting in superposing fabric sections and uniting the edges of same by stitches, folding one of said fabric sections only while the stitching is being formed for positioning a folded edge substantially in line with the outer edges of the joined fabric sections and securing said joined edges to the folded edge by stitches passing through said joined edges and into and out of the fabric section at the fold therein while said superposed edge portions are being joined.

1,768,026. SEWING MACHINE. JOSEPH BERGER, Utica, N. Y., assignor to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 8, 1927. Serial No. 166,704. 17 Claims. (Cl. 112—122.)

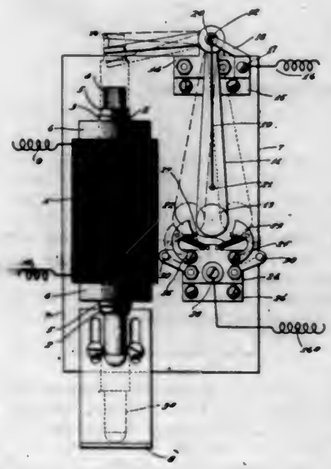
1. The combination of a plurality of needles, horizontally disposed trimming blades arranged in advance of said needles, a presser foot having an opening for the needles and a guiding channel extending from the front end of the presser foot to a point in front of the opening, said guiding channel being adapted to receive the upturned edge portions of fabric sections for directing the same to the trimming blades, said presser foot having

means for turning the trimmed edge portions into overlapped relation to each other, said trimming blades being disposed relative to the guiding channel so that the line of cutting is at one side of the guiding channel whereby the edge portion of the fabric section which is



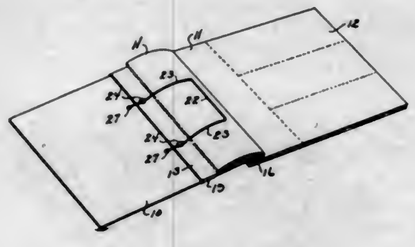
to be folded underneath, is substantially vertical, when trimmed, while the edge portion of the other fabric section lies in an inclined position from the bottom of the presser foot to the line of trimming so as to provide a free space beneath said edge portion for the turning down of the edge portion of the other fabric section.

1,768,027. ELECTRIC SWITCH. FRANZ A. BOEDTCHER, Bergenfield, N. J., assignor to Otis Elevator Company, Jersey City, N. J., a Corporation of New Jersey. Filed Aug. 29, 1921. Serial No. 496,260. 7 Claims. (Cl. 200—111.)



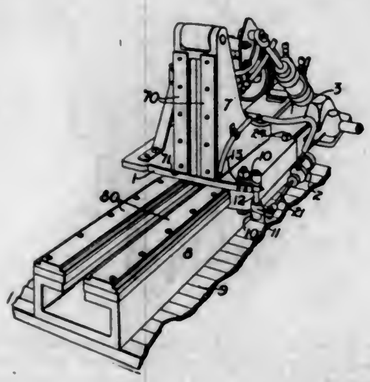
1. In an assembly of the character described, a plurality of spaced contacts, normally insulated from one another, an operating member adapted when actuated to effect the completion of a circuit through the contacts, a solenoid provided with a movable core and positioned in such relationship to the operating member that when the solenoid is energized and the core magnetically held at rest, said core will be free from engagement with the operating member, means to permit the core to retract in a direction away from the operating member when the solenoid is de-energized and said operating member extending into the path of overtravel of the core, whereby when the solenoid is initially energized, the overtravel of the core will actuate the operating member to effect closing of the circuit.

1,768,028. HOLDER FOR CHECK STUBS. MARION F. BOWES, Pensacola, Fla. Filed Dec. 11, 1928. Serial No. 325,213. 1 Claim. (Cl. 281—42.)



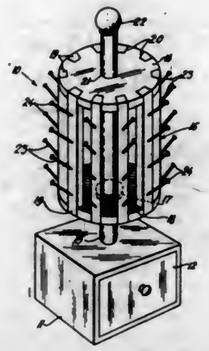
In a holder for the stubs of checks, a plate and guiding devices carried thereby, extensions slidable in the guides, the extensions including deflected ends constituting hooks for engaging the edges of the cover of a check book, said book including check-stub binding means, and the plate including a hook to be passed through an element of the binding means, and stub holding means mounted on the plate.

1,768,029. SAWMILL-BLOCK CLEANER. ARTHUR BRATLIE, Snoqualmie Falls, Wash., assignor to Weyerhaeuser Timber Company, Tacoma, Wash., a Corporation of Washington. Filed May 13, 1929. Serial No. 362,760. 7 Claims. (Cl. 143—124.)



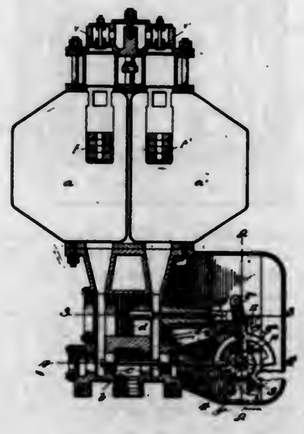
5. In combination with the block and knee of a sawmill carriage, a transverse bar disposed normally inwardly of the face of the knee and contacting with the the surface of said block, means for pivotally supporting said bar by one end from the knee, and means likewise supported from the knee for swinging said bar at will over the surface of the block.

1,768,030. SPOOL RACK. HARRY BURZI, New York, N. Y. Filed Sept. 12, 1928. Serial No. 305,553. 2 Claims. (Cl. 242—134.)



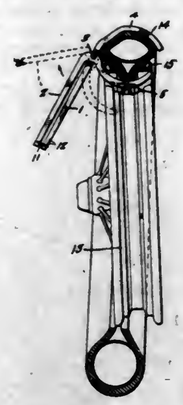
1. A spool rack comprising a rod, a collar rigid therewith, spaced bars disposed in parallel relation with said rod, spool carrying pins mounted on said bars, and spaced disks revolvably mounted on said rod and fixedly carrying the opposite ends of said bars, one of said disks being supported on said collar.

1,768,031. AUTOMATIC RECORDING LIQUID METER. MARIUS C. CARBONARO, Paris, France, assignor to Societe Hardoll Anciens Etablissements Hariveau & Dolivier et Rene Porte & Cie. Reunis, Levallois-Perret, France. Original application filed Mar. 6, 1923, Serial No. 623,140, and in France Mar. 10, 1922. Divided and this application filed Feb. 6, 1926. Serial No. 86,580. 4 Claims. (Cl. 221—101.)



1. In a meter apparatus for measuring liquids, the combination of two measuring chambers of given capacity, devices for air venting each chamber, a supply valve for controlling the supply of liquid to said measuring chambers, automatically operating valve mechanism actuated by the pressure developing on the liquid for controlling the supply to said chambers so that one chamber is filled while the other is being discharged, and means operatively associated with said valve mechanism whereby the supply valve is automatically closed when the desired quantity has been measured.

1,768,032. TIRE TOOL. JOE W. COX and EDWIN A. RANDALL, Hot Springs, Ark. Filed Dec. 13, 1929. Serial No. 413,867. 3 Claims. (Cl. 157—6.)



1. A tire removing tool as herein set forth comprising two handle members which have lapping portions which are pivotally connected and which have laterally extending oppositely directed arched jaws on the said pivoted ends thereof, and a tongue having an arched shank portion which is mounted on the pivot said tongue being of a materially less length than that of the jaws.

1,768,033. WEED GUARD FOR FISHING LINES. ADAM C. DEATZ, Kansas City, Mo. Filed Apr. 8, 1929. Serial No. 353,459. 2 Claims. (Cl. 43—39.)

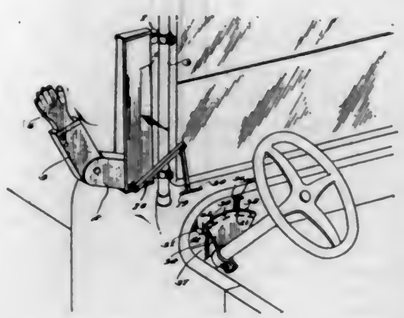


1. In a weed guard for a fishing line, a downwardly flaring tubular guard having a relatively small apex provided with an opening adapted to receive therethrough a fishing line, said guard having a bottom having an opening adapted to receive a means for attaching a hook to said line, said bottom having two concentric rows of holes, and V shaped guard wires each of which bears at its transverse portion against the under side of said bottom and has its arms extended upwardly through two of the holes of one of said rows and thence laterally, downwardly and outwardly through two holes in the other row.

1,768,034. SIGNALING DEVICE FOR MOTOR VEHICLES. JOHN DEBLIEUX, Opelousas, La. Filed Nov. 22, 1929, Serial No. 409,145, and in Canada Jan. 24, 1930. 6 Claims. (Cl. 116—52.)

1. A signaling device for vehicles comprising a fixed support, a rock shaft mounted thereon, a signal arm

carried by said rock shaft comprising an upper arm section carried by and moving with said rock shaft and a fore-arm section pivotally mounted on one end of said upper arm section and normally extended outwardly therefrom in alinement therewith, vehicle driver operable connections to said rock shaft for effecting determinate movements of said shaft and its alined arms from an inactive to successive signaling positions of the arm, means operated by initial swinging movement of said rock shaft and



upper arm section from inactive signaling position with the arm sections alined to a first signaling position to coincidently move the fore-arm and hand sections from its initially extended alined position relatively to the upper arm section to a determinate signaling position at an angle thereto, and means operative by further movement of said rock shaft and upper arm section toward a successive signaling position for coincidently moving said fore-arm section into alinement therewith.

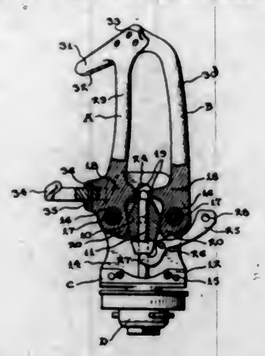
1,768,035. ICE PICK. WILLIAM E. DOMARATIUS, Brooklyn, N. Y. Filed Apr. 2, 1929. Serial No. 351,950. 2 Claims. (Cl. 83—62.)



1. An ice pick having the combination of a hollow handle open at one end and the other end being closed, a separate pick element in the form of a headed spike of a length to be contained by said handle, a member secured to the open end of the handle adapted to receive the headed end of the spike, and an abutment on said member movable to a position to abut the headed end of the spike to cooperate with said member to hold the spike operatively disposed for use, said abutment being movable to a position to allow said spike to drop into the handle, and said abutment being movable to a position to keep the spike in the handle when not in use.

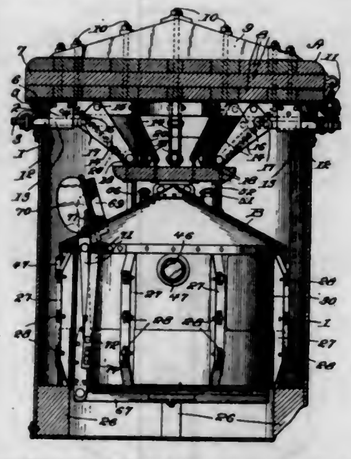
1,768,036. ARTIFICIAL HAND. DAVID W. DORRANCE, San Jose, Calif. Filed Dec. 6, 1928. Serial No. 324,157. 5 Claims. (Cl. 3—12.)

1. An artificial hand comprising a frame provided with means for connection to a stump carried member, complemental fingers pivotally mounted on the frame, a wedge member mounted for movement axially of the frame and having a double inclined nose portion and double inclined heel portion, said fingers having feet bearing on the in-



clined surfaces of the nose and heel respectively, resilient means normally retracting said wedge, and mechanical means for advancing said wedge.

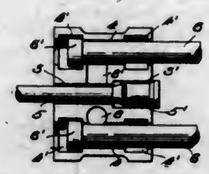
1,768,037. SUBMARINE ESCAPE BUOY. THOMAS CARROLL DULIN, Easton, Md., assignor of one-half to Harry Fox, Easton, Md. Filed Feb. 15, 1929. Serial No. 340,231. 3 Claims. (Cl. 114—16.7.)



1. In combination with a ship, a tank therein and opening out through an exterior part thereof, a buoyant cabin in the tank, doors in the tank and cabin whereby occupants can enter the cabin from the ship, means for admitting sea water into the tank by an occupant entering the cabin and after the door of the tank is closed, said water causing the cabin to pass from the tank, a watertight buoyant cover for the tank, latch means for holding the same in closed position, means operated by the movement of the cabin in the tank for releasing the latch means, a rudder member pivoted to the lower part of the cabin and resting against the cabin when the cabin is in the tank, a latch for holding the rudder in this position, means for automatically swinging the member to operative position when the latch is retracted and a trough carried by said member above the rudder thereof.

1,768,038. PULL-ROD CLAMP. HAROLD GIBSON DURNELL and SAMUEL T. STEEL, Bartlesville, Okla. Filed May 18, 1929. Serial No. 364,233. 2 Claims. (Cl. 24—123.)

1. A clamp of the class described comprising two sections having recesses on their inner faces forming a central arranged passage and two side passages, the side passages receiving the limbs of a U bolt and the central passage receiving a pull rod, bolts for clamping the sections together, said central passage having an enlargement at one end whereby a pull rod having an enlargement thereon can be used with the clamp, the enlargement fitting in the enlarged part of the passage and each side



passage having an enlargement adjacent each end thereof for receiving the head at the end of each limb of the U bolt, the heads fitting in the enlargements adjacent one end of the clamp when the U bolt extends through the opposite end and said heads fitting in the other enlargement when the bolt is reversed, each end of the clamp being flat, whereby either end of the clamp can be placed against a knock-off block.

1,768,039. COLD-WATER TUBE AND CLEANER FOR DOMESTIC BOILERS AND HEATERS. WILLIAM EIERMANN, Brooklyn, N. Y. Filed Sept. 14, 1927. Serial No. 219,512. 3 Claims. (Cl. 122—405.)

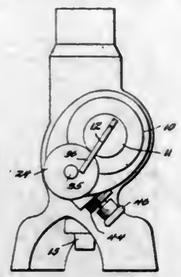


1. A combined cold water pipe and cleaner for boilers and heaters, comprising a pipe extending from the top of the boiler to near the bottom, said pipe at the upper end being flared, the fitting connected with the boiler having a flange underlying said flare whereby the pipe may be swung, means for connecting a cold water pipe to said fitting, and means extending through the side of the boiler capable of manual actuation for swinging said pipe so as to distribute the water from the pipe over the bottom of the boiler.

1,768,040. AUTOMOBILE LOCK. CHARLES N. FAIRCHILD, Plantaville, Conn., assignor to Fairchild Lock Corporation, New York, N. Y., a Corporation of Delaware. Filed May 23, 1928. Serial No. 279,978. 15 Claims. (Cl. 70—127.)

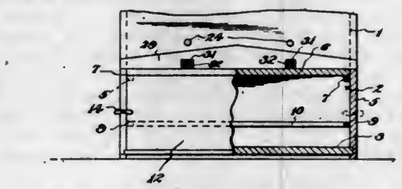
1. In a device of the character described, a bolt, a key operated mechanism for manipulating said bolt, means

lying normally in the path of rotation of the key but movable out of the path of the key, and means positively



holding the first named means in key obstructing position, but manually movable to permit movement of the first means out of the path of the key.

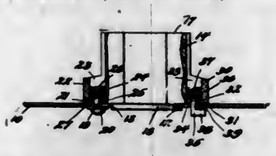
1,768,041. BEEHIVE. GRACE LEE FENNO, Palos Park, Ill. Filed Feb. 20, 1928. Serial No. 255,829. 9 Claims. (Cl. 6—1.)



1. In a bee hive, a body, a base supporting said body and open at its front, upper and lower seats in said base, a platform supported upon one of said seats and projecting forwardly beyond said body, and a closure for the open front of said base adapted to be removably secured therein between the bottom of the base and platform when the platform is supported upon the upper seat.

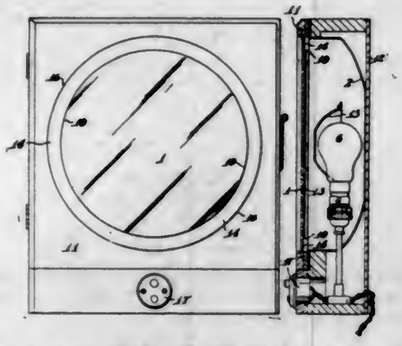
9. In a bee hive, a body, a base supporting said body and open at its front, a platform in said base projecting forwardly beyond said body and spaced below the body, and a winter closure resting upon said platform in front of said body in overlapping relation to the front of the body and having a rear extension fitting into the space between the platform and body, the portion of the closure in front of the body having its upper surface sloping towards the sides of the base, the under surface of said closure having grooves formed therein and constituting passages through which bees may leave and enter the hive.

1,768,042. ELECTRIC SIGN. JOHN RUSSELL FERGUSSON, Syracuse, N. Y., assignor to Pass & Seymour, Incorporated, Syracuse, N. Y., a Corporation of New York. Filed Feb. 25, 1927. Serial No. 170,976. Renewed Aug. 10, 1929. 9 Claims. (Cl. 173—339.)



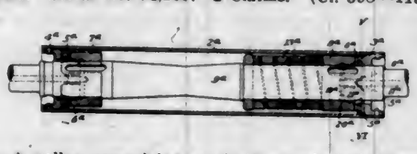
1. In an electric sign, in combination, a sign plate having a perforation therethru, a receptacle having an insulating body abutting the rear face of said plate at said perforation, spring means secured to one end of said body, passing thru said perforation and engaging the front face of the plate, and a rotatable member mounted in said body, passing thru said perforation, and having an eccentric head adapted to be rotated to engage the front face of said plate.

1,768,043. TOILET MIRROR. AUBREY CLARENCE FINER, London, England. Filed July 6, 1927, Serial No. 203,849, and in Great Britain Nov. 17, 1926. 2 Claims. (Cl. 240—4.)



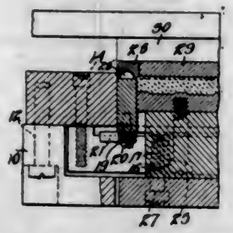
1. In a device of the class described, a sheet of transparent material having a central portion thereof silvered on the back to provide a mirror and having the marginal portion thereof unsilvered, a lamp positioned behind the silvered portion of said transparent sheet, a reflector to direct light rays from said lamp through the marginal unsilvered portion of said sheet, and a shield interposed between said lamp and the silvered portion of the sheet and spaced from the latter, said shield being dished and substantially one-half of the lamp being disposed within said shield to insure interception of all rays directed forwardly from the lamp.

1,768,044. FLEXIBLE ROLLER. GUSTAF L. FISK, Midland, Pa., assignor to Blaw-Knox Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Mar. 12, 1926. Serial No. 94,209. 2 Claims. (Cl. 308—113.)



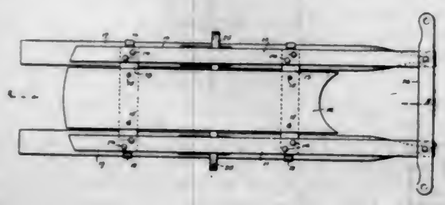
2. A roller comprising a shaft, a relatively movable body, a hub slidable on the shaft, and wedge means on the hub for controlling the movement of the roll body, the shaft having an opening extending therethrough for the supply of lubricant, the opening terminating within the hub, and the hub having an opening therein adapted to register with the opening in the shaft despite movement of the hub, the opening in the hub leading to the wedge means thereon.

1,768,045. MOLD FOR TILES. GARFIELD W. FISHER and CARL G. HENRIKSON, Anderson, Ind., assignors to The National Tile Company, Anderson, Ind., a Corporation of Ohio. Filed Apr. 23, 1928. Serial No. 272,202. 6 Claims. (Cl. 25—42.)



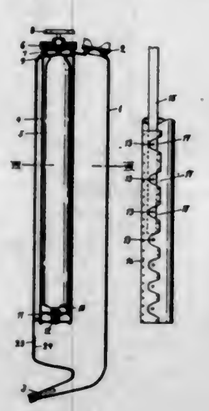
1. A mold or die for tile, comprising means for pressing the tile into shape and for simultaneously shaping the edge of the tile, said means comprising an inner box and an outer box, upper and lower die members, a mitered frame around the upper die member movable within the outer box, and springs holding the inner box against said frame, substantially as set forth.

1,768,046. SKI SLED. CHRISTIAN FREDRICKSON, Rice Lake, and ELMER J. GUSTAFSON, Superior, Wis., assignors to Northway Manufacturing Company, Superior, Wis. Filed Mar. 13, 1929. Serial No. 346,760. 1 Claim. (Cl. 280—12.)



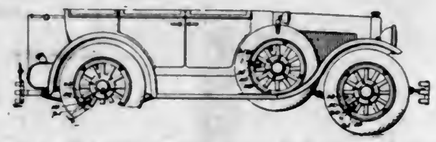
The combination of a supporting structure in the form of a platform, skis, and devices to rigidly but detachably connect said skis to said structure in positions to serve as runners for said structure, each of said devices comprising a pair of separate cooperative members detachably engageable with the related ski, one of said members being rigidly secured to said structure on the underside thereof, and the other member being attached to the first member by clamping means which securely holds said last mentioned member in engagement with the ski to cooperate with the other member, for the aforesaid purpose.

1,768,047. DRY FIRE EXTINGUISHER CONTAINING A PRESSURE-GAS CYLINDER. WILHELM FRIEDRICH, Berlin-Lankwitz, Germany. Filed May 11, 1927, Serial No. 190,541, and in Germany Feb. 7, 1927. 9 Claims. (Cl. 169—31.)



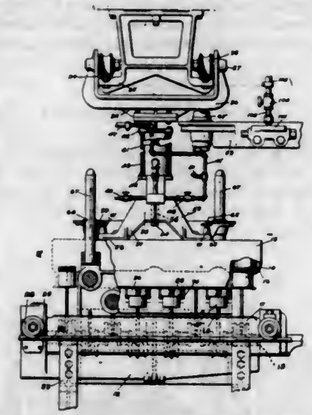
1. A dry fire extinguisher comprising a powder container, a closure therefor, a container for gas under pressure, a closure for said container, a chamber disposed longitudinally within said powder container for said gas container, the chamber being spaced from the wall of said powder container, a closure for said chamber, means for admitting said gas from the gas container to the chamber containing said gas container, openings disposed at intervals along the chamber means cooperating with said openings for causing a substantially unidirectional, circumferential flow of gas around said wall and a nozzle upon said powder container for the discharge of the powder.

1,768,048. TIRE ALARM. LOUIS C. GALLI, Ferndale, Md. Filed May 27, 1929. Serial No. 366,384. 14 Claims. (Cl. 116—34.)



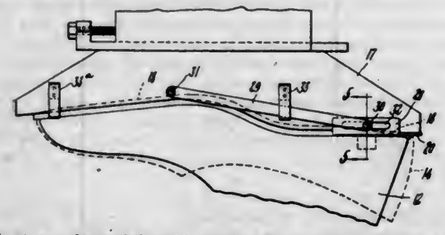
1. In a tire alarm, a base member adapted to be mounted on a wheel, a diaphragm mounted on said base member, and a lever pivotally mounted on said base member, said lever having one end extending adjacent to and operatively related to said diaphragm and its opposite end disposed for actuation by the tire.

1,768,049. MEANS FOR ASSEMBLING INTERNAL-COMBUSTION ENGINES. REUBEN O. GILL, Bloomfield, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Original application filed Feb. 13, 1924, Serial No. 692,506. Divided and this application filed Jan. 19, 1925. Serial No. 3,330. 9 Claims. (Cl. 29—84.)



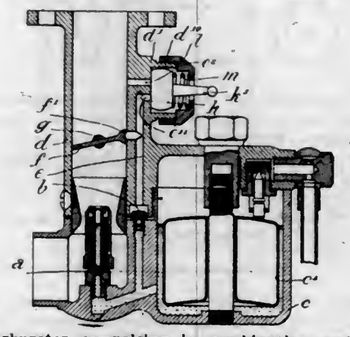
1. In a device for assembling an internal combustion engine having a crank case, a cylinder block, a crank shaft mounted in the crank case, and pistons secured to the crank shaft, the combination of a fixture having upwardly disposed guide members, means adapted to secure the crank case in fixed relation to the fixture, a bracket adapted to slide upon the guide members, and means for securing the cylinder block to the bracket.

1,768,050. MOLD FOR SOLE PRESSING MACHINES. EDWARD J. GOODWIN, Haverhill, Mass., assignor of one-half to Joseph O. Paris, Haverhill, Mass. Filed Aug. 15, 1928. Serial No. 299,844. Renewed Jan. 31, 1930. 3 Claims. (Cl. 12—17.)



1. A supplemental mold member formed to compress and mold the heel end of the outsole of a supported shoe, to form thereon a heel seat conforming to the recessed end of a wood heel, and a transverse shoulder defining the forward end of the heel seat and offset therefrom, to overlap the upper portion of the heel breast, said member being provided with means whereby it may be engaged with the outer mold of a sole-leveling machine, and located in its operative position relative to said mold, said member being a plate formed to extend across the heel end of the outer mold face, and having a rear end formed to be seated on said face, and a forward edge including relatively thick shoulder-forming end portions, and a curved thin-edged central portion offset from said face.

1,768,051. CARBURETOR. MAURICE GOUDARD, Neuilly Sur Seine, France. Filed Dec. 8, 1924, Serial No. 754,622, and in Belgium Dec. 19, 1923. 5 Claims. (Cl. 261—41.)



1. A carburetor comprising in combination main and auxiliary jets, a main mixing chamber, said main chamber having walls which are rectilinear in the direction of its longitudinal axis, an auxiliary mixing chamber having a terminal orifice in said main mixing chamber, a butterfly valve having a surface for controlling the main mixing chamber and a second surface for controlling the auxiliary mixing chamber, said second surface having a depression therein, said depression being so positioned as to lie in line with the terminal orifice of the auxiliary mixing chamber when the valve is in the position of maximum throttling said valve being limited so that in its opening movement said second surface moves away from the jet end of the main mixing chamber.

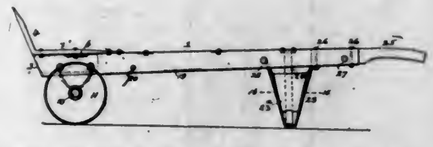
1,768,052. RECORD HOLDER FOR TALKING MACHINES. THOMAS T. GREENE, Collingswood, N. J., assignor to Victor Talking Machine Company, a Corporation of New Jersey. Filed Sept. 19, 1927. Serial No. 220,561. 5 Claims. (Cl. 312—8.)



1. In combination with a cabinet having a hinged cover, a holder adapted to be housed in said cover, pivot mem-

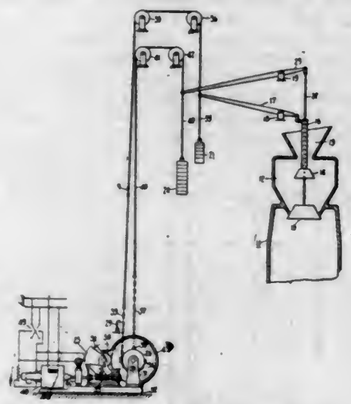
bers securing said holder to the cover, a bracket having an arcuate slot therein secured to the cabinet, the curvature of said slot increasing toward the upper end thereof, and a pin operatively connected to said record holder and cooperating with the slot in said bracket.

1,768,053. HAND TRUCK. HOWARD T. HALLOWELL, Jenkintown, Pa., assignor to Standard Pressed Steel Company, Jenkintown, Pa., a Corporation of Pennsylvania. Filed Nov. 18, 1926. Serial No. 149,097. 6 Claims. (Cl. 280—56.)



1. The combination in a hand-truck, of channel-shaped side members; a nose-piece and cross-bars connecting the side members; a bracket extending into each of the channel members near the forward end of the truck; an axle mounted in the brackets; wheels mounted on the axle; a reinforcing member inserted in each of the channel members; and means for securing the reinforcing members and brackets to the side members.

1,768,054. BELL HOIST. ARTHUR E. HANDY, Lynbrook, N. Y., assignor to Otis Elevator Company, New York, N. Y., a Corporation of New Jersey. Filed Jan. 26, 1928. Serial No. 249,607. 11 Claims. (Cl. 214—35.)



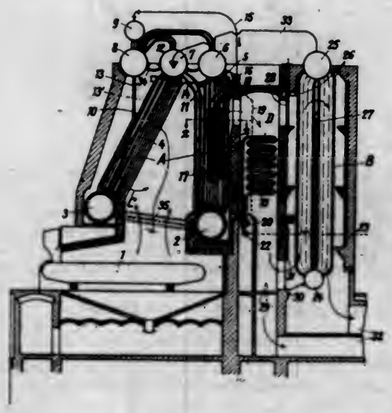
1. In a furnace charging mechanism having a small bell and a large bell, actuating mechanism for the bells, said actuating mechanism comprising; a rotary member operably connected to the small bell, said rotary member upon rotating from a neutral position causing the small bell to open; a second rotary member, the axis of said second rotary member being coincident with the axis of said first rotary member, operably connected to the large bell, said second rotary member upon rotating from a neutral position causing the large bell to open; a motor; means for causing connection between said motor and said rotary members to be effected only with respect to said first mentioned rotary member upon operation of said motor in one direction for causing only that member to rotate from its neutral position by said operation of said motor in one direction; and means for causing connection between said motor and said rotary members to be effected only with respect to said second mentioned rotary member upon operation of said motor in the other direction for causing only that member to rotate from its neutral position by said operation of said motor in the other direction.

1,768,055. HAIR-WAVING DEVICE. HANNAH M. HART, Chicago, Ill. Filed Feb. 18, 1928. Serial No. 255,328. 13 Claims. (Cl. 133—33.)



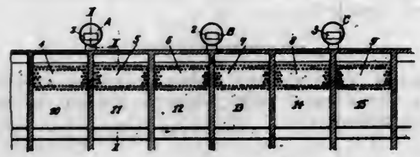
1. A device for use with a permanent wave machine and adapted to produce a Marcel wave, comprising a fork having two prongs tapering toward the base, a forked member integral with said base and having two prongs projecting in parallel therefrom in a direction opposite to said tapering prongs, said tapering prongs terminating in guide members disposed parallel to each other, a locking member having openings to receive said guide members, and means in said locking member to lock said tapering prongs thereto.

1,768,056. WATER-TUBE BOILER WITH STEAM SUPERHEATER. OTTO H. HARTMANN, Cassel-Wilhelmshohe, Germany, assignor to Schmidt'sche Heissdampf-G. m. b. H., Cassel-Wilhelmshohe, Germany, a Corporation of Germany. Filed Aug. 20, 1926, Serial No. 130,545, and in Germany Oct. 19, 1925. 6 Claims. (Cl. 122—325.)



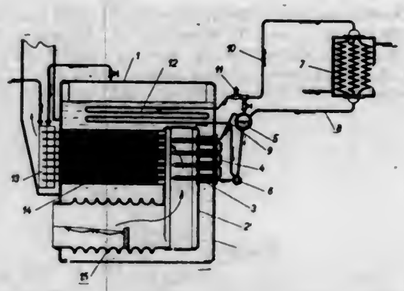
1. In a water tube boiler having front and rear banks of water tubes with upper and lower drums arranged after the manner of a roof-like combustion chamber over the grate and adapted to serve as the evaporator proper, and front, rear and upper walls enclosing said tubes and drum, one of said walls being provided with a passage forming the sole outlet of the combustion chamber, the water tubes being substantially aligned in the direction of gas flow and the rows of tubes of the rear bank situated between the outlet of said combustion chamber and the source of combustion gases, and being spaced so as to provide lanes of travel for the said gases; superheater tubes placed in said lanes extending longitudinally of the bank and throughout the greater length of the tubes of the bank so as to impede the flow of the escaping gases and cause a swirling of part of said gases toward and through the front bank of water tubes.

1,768,057. BOILER GENERATING STEAM ACCORDING TO THE INDIRECT METHOD. OTTO H. HARTMANN, Kassel-Wilhelmshohe, Germany, assignor to Schmidt'sche Heissdampf-G. m. b. H., Kassel-Wilhelmshohe, Germany, a Corporation of Germany. Filed Jan. 24, 1928, Serial No. 249,120, and in Germany Mar. 17, 1927. 2 Claims. (Cl. 122—33.)



1. A boiler installation, comprising in combination, a steam drum, a plurality of furnaces, a plurality of sets of tubes in said drum, and a set of tubes in each of said furnaces disposed below the said sets of tubes in the drum, each of said sets of furnace tubes being connected with an individual set of the tubes in the drum to form a closed system therewith for a circulating heating medium, whereby said drum is adapted to be heated by a plurality of closed systems.

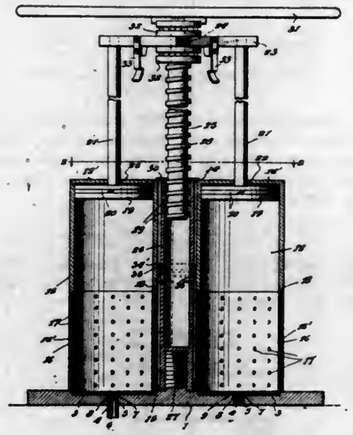
1,768,058. SUPERHEATING OF INTERSTAGE STEAM. OTTO H. HARTMANN, Cassel-Wilhelmshohe, Germany, assignor to Schmidt'sche Heissdampf-Gesellschaft mit beschrankter Haftung, Cassel-Wilhelmshohe, Germany, a Corporation of Germany. Filed July 11, 1928, Serial No. 291,802, and in Germany July 29, 1927. 3 Claims. (Cl. 122—483.)



1. An arrangement for the superheating of interstage steam in marine steam boilers provided with a reversing chamber for the hot gases and having live steam superheater elements arranged in its heating tubes, by means of a heat carrier in the form of steam which circulates in a closed cycle through its steam generator and the heating coils of the interstage superheater and which is produced by an auxiliary steam boiler having its heated part lying in the reversing chamber, the said heated part projected into the reversing chamber from the outside thereof.

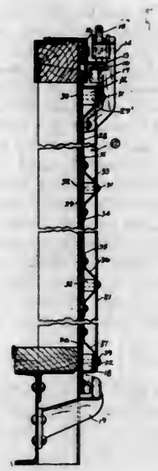
1,768,059. CARBON-DIOXIDE-SNOW COMPRESSOR. LOUIS W. HASSENSALL, Toledo, Ohio. Filed May 22, 1929. Serial No. 365,211. 11 Claims. (Cl. 62—121.)

1. A compressor comprising a cylinder open at one end, a perforated container inserted through the open end of said cylinder, means for closing the open end of said cylinder and admitting matter to be compressed into the



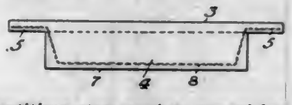
cylinder through the perforated container, and means in the cylinder for compressing matter therein into the container.

1,768,060. DOOR. FREDERICK C. HEINEN and WILLIAM W. DARROW, Chicago, Ill., assignors to Camel Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 6, 1925. Serial No. 48,460. 8 Claims. (Cl. 189—46.)



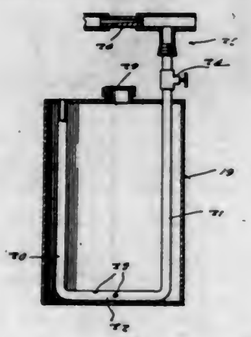
1. A railway car door comprising a rectangular frame made up of structural steel members, said structural steel members at opposite vertical sides of said frames comprising integral h-bars including channel portions and metal plates having horizontal ribs mounted in said frame with the ribs of said plates located within said channel portions, said h-bars having portions shaped to provide a rear edge angle at the rear edge of said door and a piloting member at the front edge of said door, said structural steel member at the bottom of said frame comprising an angular member having an outwardly presented vertical flat face, the lowermost of said plates having its lower edge portion disposed outwardly of said angular member and within said channel portions.

1,768,061. STEP. ALBERT HENDERSON, Pittsburgh, Pa., assignor to Henderson & Hatcher, Inc., Pittsburgh, Pa., a Corporation of Delaware. Filed Oct. 12, 1928. Serial No. 312,144. 6 Claims. (Cl. 72—96.)



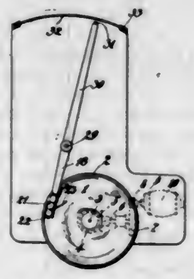
1. A cementitious step member, comprising a tread, an integral riser, the tread extending beyond the riser, whereby a supporting surface is provided under the ends of the tread and reinforcing extending from the riser into the extended portion of the tread.

1,768,062. SPRAYING DEVICE. GROVER L. HILL, Bagley, Wis. Filed June 4, 1928. Serial No. 282,699. 1 Claim. (Cl. 299—88.)



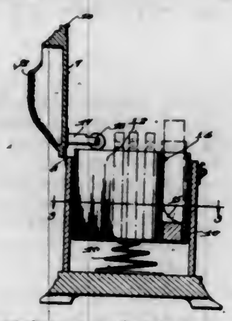
A solution spray device of the class described comprising a solution container having a closure cap threaded thereon at the top of said container, a substantially U-shaped pipe arranged within said container, said U-shaped pipe having one branch thereof secured at its terminal to the top wall of said container for communication with the atmosphere, said U-shaped pipe having a second branch extending upwardly and through the top wall of said container, a manually controlled valve on the extended upper end of said second branch, a substantially T-shaped spray nozzle having one branch thereof threaded on the upper free end of said second branch of said U-shaped pipe, said spray nozzle having a second branch adapted to be connected to a pressure supply mechanism, and the intermediate portion of said U-shaped pipe being provided with solution intake ports, the said intermediate portion of said U-shaped pipe resting upon the bottom of said container.

1,768,063. INDICATOR FOR MOTION-PICTURE-PROJECTION APPARATUS. MICHAEL HOFFMAN, Brooklyn, N. Y. Filed Mar. 30, 1927. Serial No. 179,524. 1 Claim. (Cl. 88—16.2.)



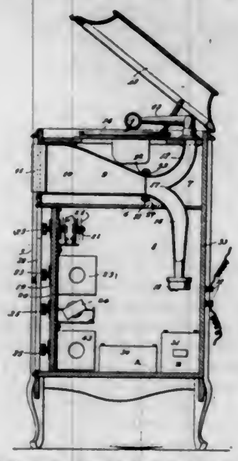
In an apparatus of the character described, the combination of a sound reproducing machine having a disk record operated in synchronism with motion picture projecting apparatus, an indicator operatively connected with the reproducer arm of said sound reproducing machine for synchronous movement and adjustment therewith and mounted for movement over a longer range than the reproducer, and a chart having indications of the pictorial features being projected mounted on the sound reproducing machine adjacent the path of movement of and with which said indicator cooperates to give visual indication on an enlarged scale of the picture projection relative to the sound reproduction.

1,768,064. CONTAINER. GEORGE O. HOLBEN, Allentown, Pa. Filed May 7, 1928. Serial No. 275,736. 5 Claims. (Cl. 206—41.)



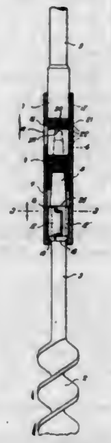
1. In a container, a casing having a hinged closure, a resiliently raised article holder in the casing, and a roller projecting from the inner face of the closure and contacting with the holder whereby to depress the latter upon closing movement of the closure, and means normally holding the closure in closed position which upon release, permits the holder to rise and swing the closure to open position.

1,768,065. COMBINED PHONOGRAPH AND RADIO APPARATUS. LOUIS P. HORNING, Jr., Elizabeth, N. J., assignor to Victor Talking Machine Company, Camden, N. J., a Corporation of New Jersey. Filed July 27, 1922. Serial No. 577,941. 11 Claims. (Cl. 179—100.12.)



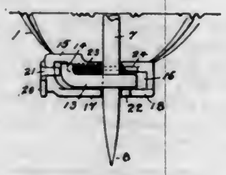
2. In combination, a phonograph mechanism, a radio apparatus, a common amplifier therefor, and means for guiding the sound from either the phonograph mechanism or the radio apparatus to the amplifier without passing to the other, said means being adjustable so that the phonograph mechanism and the radio apparatus are in communication.

1,768,066. TOOL HOLDER. JAY C. HUROWITZ, New York, N. Y., assignor to L. W. Jones Tool Company, Incorporated, a Corporation of New York. Filed Oct. 5, 1927. Serial No. 224,201. 3 Claims. (Cl. 279—56.)



1. A holder for boring and similar tools, comprising a socketed spindle, a pair of curved jaws adapted to encircle and clamp the shank of the tool, a sleeve sliding over the jaws for forcing them into clamping engagement with the tool, said sleeve having screw-threaded engagement with the spindle, another sleeve having sliding engagement upon the spindle, and spring pressed means carried by said spindle for restraining the latter sleeve against rotation, the two sleeves having their ends constructed to interlock when the sliding sleeve is moved toward the clamp sleeve.

1,768,067. BADGE. JOHN JACHENS, San Francisco, Calif. Filed Aug. 27, 1928. Serial No. 302,197. 4 Claims. (Cl. 24—158.)



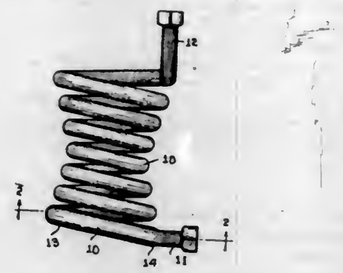
1. A badge fastener comprising a pin pivot and a pin latch hook fixed to a badge; a stick pin engaging said pivot and latch hook; a lock plate surrounding and slidable beneath a retaining lug on said hook and havnig a flange adapted to engage said pin.

1,768,068. EAR PROTECTOR. LOUIS JAUSS, Stuttgart, Germany, assignor to Emil Kohl, Canstatt, Germany. Filed Nov. 10, 1928, Serial No. 318,483, and in Germany Sept. 12, 1927. 1 Claim. (Cl. 2—209.)



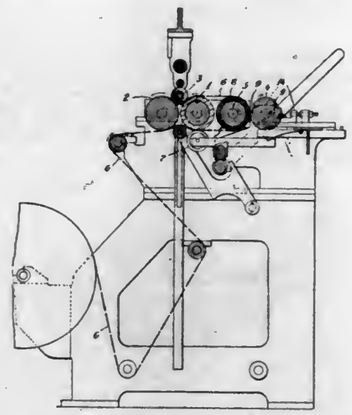
An ear protector consisting of a capsule made of a single piece of leather, the tanned leather layers being removed from each side of the central portion to reduce the central portion to a thickness equivalent to a thin drum skin whereby sound waves arrive in the ear in approximately undiminished strength.

1,768,069. WATER-HEATING COIL. THOMAS J. JOHNSTON, Bradford, Pa. Filed Oct. 20, 1927. Serial No. 227,531. 3 Claims. (Cl. 122—250.)



1. A household water heater comprising a metallic vertically disposed heating coil adapted to cooperate with a gas flame to heat a stream of water passing through said coil and having its lowest convolution exposed to the oxidizing action of the flame and to direct play of the flame, said lower convolution having a thin exposed heat conducting coating for protecting said convolution against puncture, said coating comprising a baked layer of non-metallic refractory material.

1,768,070. CUTTING AND PERFORATING MACHINE. ROBERT McC. JOHNSTONE, Roselle Park, N. J., assignor to Cameron Machine Company, Brooklyn, N. Y., a Corporation of New York. Filed Jan. 5, 1928. Serial No. 244,038. 2 Claims. (Cl. 164—66.)



1. Transverse severing means for webs of flexible material including: two rotary members, a cutting member adjustably mounted on one of said rotary members to increase or decrease the cutting radius thereof to thereby vary the distance between successive lines of severance, and driving connections to impart equal surface speed to the two rotary members notwithstanding changes in the cutting radius of one of said members, said connections including a power transmitting member adapted to be readily displaced to permit introduction of a different size power transmitting member in said driving connections.

1,768,071. CONDENSATION PRODUCTS OF THE BENZANTHRONE SERIES AND PROCESS OF MAKING SAME. GEORG KALISCHER and HEINZ SCHEYER, Frankfort-on-the-Main, and PAUL NAWIASKY and EMIL KRAUCH, Ludwigshafen-on-the Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed June 17, 1927, Serial No. 199,626, and in Germany June 28, 1926. 4 Claims. (Cl. 260—61.)

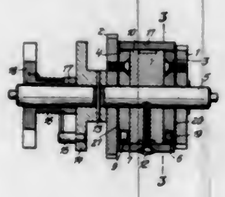
1. As new compounds condensation products of the benzanthrone series, being when dry grey to black colored powders, practically insoluble in organic solvents, soluble in concentrated sulfuric acid to an olive solution forming with an alkaline solution of hydrosulfite a reddish colored vat dyeing cotton therefrom green'sh to bluish grey to black shades of a very good fastness, which products are substantially identical with those obtainable by treating Bz.1-nitro-2-methylbenzanthrone with acid condensing agents.

1,768,072. VEGETABLE SLICER. HENRY H. KEETON, Richmond, Va. Filed Sept. 13, 1928. Serial No. 305,838. 3 Claims. (Cl. 146—151.)



1. A vegetable slicer comprising two members, means for connecting said members for reciprocation one with respect to the other, said members comprising plates, the plate of one of the members being provided with an opening defined by an outstanding flange to provide a cup, the plate of the second member serving as the bottom of sa'd cup and having a transversely disposed slot, the portion of the plate of the second member to one side of the slot being depressed, the margin of sa'd plate of the second member defining the slot remote from the depressed portion constituting a cutting edge, and means extending within the depressed portion of the plate of the second member to assure discharge of a severed sl'ce through the slot.

1,768,073. FARE INDICATOR. LEO KERN, Villingen, Germany, assignor to Kienzle Uhrenfabriken Aktiengesellschaft, Schwenningen A. N., Schwenningen-on-the-Neckar, Germany, a Corporation of Germany. Filed May 29, 1925, Serial No. 33,851, and in Germany June 2, 1924. 1 Claim. (Cl. 235—30.)

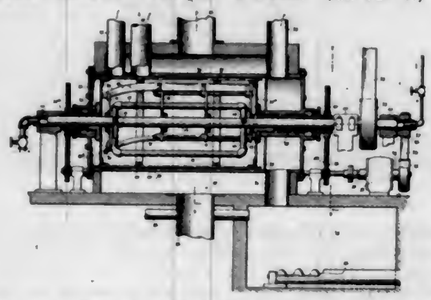


In a fare indicator including indicating means and a pair of independently driven operating mechanisms, the combination of a shaft, means on said shaft whereby movement is transmitted to said indicating means, a pa'r of independently rotatable gears, one for each of said operating mechanisms, loosely mounted on said shaft in spaced axial relation and driven in the same direction, a pa'r of clutch disks having inclined recesses gradually increasing in depth in the direction of operation of said shaft, sa'd clutch disks being fixed upon the opposed faces of said gears respectively and being loosely rotatable therewith on said shaft, a clutch device fixed on said shaft and projecting over the peripheral surfaces of said clutch disks to enclose said inclined recesses, and frictional clamping rollers of cylindrical form located in said inclined recesses and arranged for linear surface engagement with said clutch device and inclined recesses, one set of clamping rollers being urged by one of said clutch disks into the shallow portions of its recesses to clamp the clutch device to the associated gear, and the other set of clamping rollers being co'ncidentally urged by said clutch device into the deeper portions of the recesses of the other clutch disk to disconnect its associated gear from said shaft, and vice versa, dependent upon which of the independent operating mechanism is the controlling one, whereby said shaft is driven continuously in the same direction by either and both of said mechanisms.

1,768,074. FILLER. EBEN W. KING, East Chatham, N. Y. Filed Jan. 9, 1928. Serial No. 245,638. 2 Claims. (Cl. 134—49.)

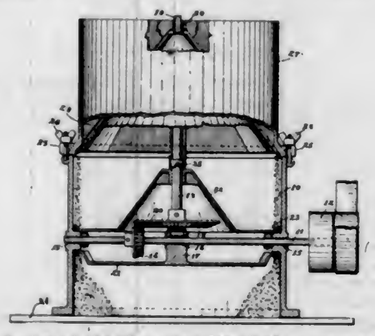
1. A filler composition comprising aluminum magnesium silicate reduced to a fine smooth powder, a large amount of drying oil, a much smaller amount of a non-dry'ng oil, water and turpentine, all mixed together in such proportions as to form a creamy mass of homogeneous appearance.

1,768,075. MANUFACTURE OF FERTILIZER SALTS. HERMAN B. KIPPER, Muskegon, Mich. Filed Jan. 14, 1928. Serial No. 246,807. 1 Claim. (Cl. 71—7.)



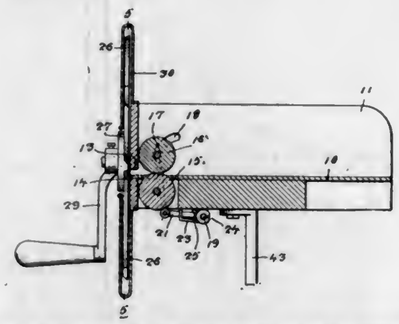
In the process of manufacturing ammonium salts from gypsum and phosphate rock by reaction therewith with ammonia, carbon dioxide and water, the step which comprises beating such reaction mixture to a fine mist in the presence of steam in order to facilitate the chemical reaction between the constituents, and then separating the soluble from the insoluble salts.

1,768,076. CONICAL GRATER. JOHN W. KLENSCH, Jr., and ARTHUR E. KLENSCH, Forest Hills, N. Y. Filed Sept. 13, 1928. Serial No. 305,804. 1 Claim. (Cl. 146—73.)



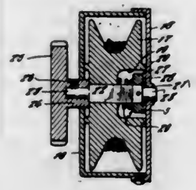
In a device of the character described, a receptacle for receiving grated material, a grating chamber detachably superposed thereon, driving mechanism within said receptacle, said driving mechanism including a horizontal drive shaft extending through said receptacle and journaled in diametrically opposite sides thereof, a bevelled driving gear intermediate the ends of said horizontal shaft, a vertical drive shaft extending through said grating chamber, a bevel gear provided at the lower end of said vertical shaft cooperating with said bevelled driving gear, a housing for said driving mechanism, a removable conical grating surface carried by said vertical drive shaft adapted to rotate therewith, and stationary radially extending baffle members within said grating chamber carried thereby for association with said conical grating surface, said baffle members being joined at their tops, forming a bearing for one end of said vertical drive shaft, said baffle members being inclined in the direction of rotation of said grating surface for forcibly directing the material to be grated into contact with said conical grating surface.

1,768,077. NOODLE CUTTER. JOSEPH KOVACICH, Virginia, Minn. Filed Dec. 26, 1928. Serial No. 328,501. 1 Claim. (Cl. 107—21.)



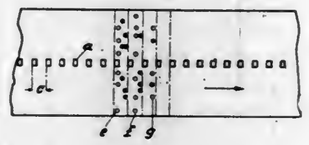
In a noodle cutting machine, a feed trough having arcuate slots therein, pressure rollers located adjacent the discharge end of said trough, said rollers including a roller having trunnions extending through the arcuate slots of the trough, a spring influenced rock shaft mounted in bearings and extending transversely beneath the trough, crank arms at opposite ends of the shaft, and rods connecting the crank arms and trunnions to yieldingly force the rollers together, and means to regulate the pressure of the pressure rollers, a cutter at the discharge end of the trough, and means to drive the rollers and cutter.

1,768,078. CABLE-WINDING DRUM. FRED WM. KRAUSE and HENRY A. BAECHTEL, Natrona, Pa. Filed Mar. 14, 1928. Serial No. 261,650. 1 Claim. (Cl. 242—101.)



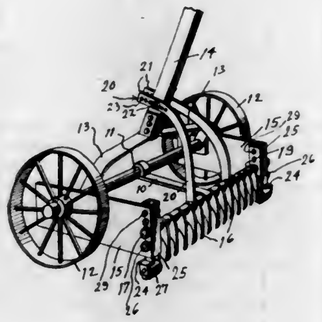
A cable winding drum for the purpose set forth, including a two-part casing having a partly open face, removable means connecting the parts of the casing, an annular clutch surface on one part of the casing, a grooved drum in the casing on which the cable is wound and secured, a shaft having a squared portion passing through a squared opening in the drum and having rounded ends, one of which is journaled in one of the parts of the casing, said drum having one of its faces depressed, a clutch disc fixed on the shaft and arranged in said recess, spring means surrounding the shaft and exerting a pressure against the drum and the friction disc to move the latter into engagement with the friction surface in the casing, and an operating handle having a rounded protrusion journaled through the one side of the casing receiving the second rounded end of the shaft thereon and which handle is fixed to said shaft.

1,768,079. MEANS FOR PLAYING MUSICAL INSTRUMENTS. STANISLAUS KUCHARSKI, Berlin-Charlottenburg, Germany. Filed June 23, 1928, Serial No. 287,842, and in Germany June 25, 1927. 1 Claim. (Cl. 84—161.)



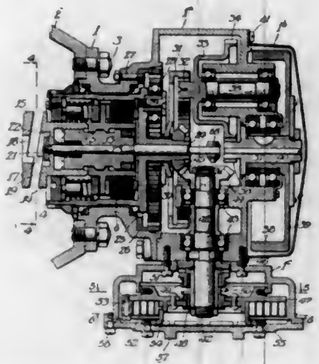
Means for playing musical instruments comprising a music band moved forward progressively by hand in which a group of holes in said band adapted to produce a harmony cooperates with a plurality of sound producing elements in parallel rows positioned transversely to the direction of movement of said band, distinguished thereby that each movement forward of the music band is smaller than the interval between two of such rows, that, further, the sum of the intervals between said rows is different by a whole multiple of the distance moved forward and that finally in the interval of the music band corresponding to the distance moved forward are arranged several additional transverse rows of holes, each of which rows belong to another harmony so that by each forward movement of the music band another group of rows of holes is made to cooperate therewith by being in coincidence with the parallel rows of the sound producing elements.

1,768,080. LAWN RAKE. YASAKU KURIHARA, Los Angeles, Calif. Filed Dec. 27, 1927. Serial No. 242,731. 2 Claims. (Cl. 55—10.)



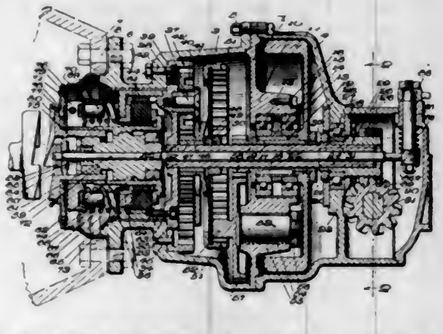
1. In a lawn rake, a frame including a wheel shaft, a rake shaft, and frame members connected thereto, wheels supporting the frame relative to the ground, a handle extending from the frame, brackets adjustable relative to and supporting the frame, rake teeth mounted on the rake shaft, spacing members interposed between adjacent rake teeth, and clamping means serving to retain the frame, rake shaft, rake teeth, and spacing elements in assembled form.

1,768,081. ENGINE STARTER. RAYMOND P. LANSING, Montclair, N. J., assignor to Eclipse Machine Company, Elmira, N. Y., a Corporation of New York. Filed Sept. 29, 1926. Serial No. 138,557. 20 Claims. (Cl. 123—179.)



1. An engine starter including a drive having a driving member adapted to be engaged with and to crank a member of the engine to be started, a rotatable inertia means and spring-returned oscillating ratchet mechanism for rotating the inertia means.

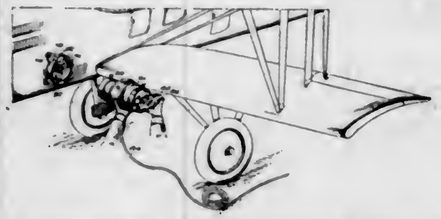
1,768,082. ENGINE-STARTING MECHANISM. RAYMOND P. LANSING, Montclair, N. J., assignor to Eclipse Machine Company, Elmira Heights, N. Y., a Corporation of New York. Filed Apr. 17, 1929. Serial No. 355,902. 10 Claims. (Cl. 123—179.)



1. In starting mechanism for internal combustion engines, a flywheel adapted for high speed rotation, a clutch member shiftable to engage a member of an engine to be started, means including reduction gearing for drivably connecting said flywheel and clutch member, means in driving engagement with said gearing for accelerating said flywheel, said means including a spiral gear, and a cranking shaft having a spiral gear intermediate its ends in mesh with said first named spiral gear, the opposite ends of said shaft being formed for engaging cranking means therewith.

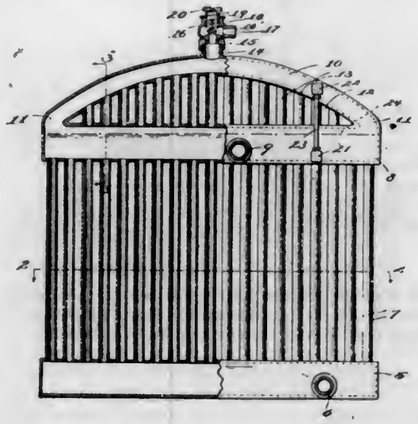
1,768,083. ENGINE-STARTING MECHANISM. RAYMOND P. LANSING, Montclair, N. J., assignor to Eclipse Machine Company, Elmira Heights, N. Y., a Corporation of New York. Filed Apr. 19, 1929. Serial No. 356,542. 15 Claims. (Cl. 123—179.)

1. In engine starting apparatus, inertia starting mechanism including an inertia member adapted for high speed rotation, means including reduction gearing for drivably engaging said inertia member with a member of an engine to be started, a clutch member adapted to engage said inertia member for rotating the latter, driving means for said clutch means, portable accelerating apparatus for said inertia mechanism including an electric motor adapted



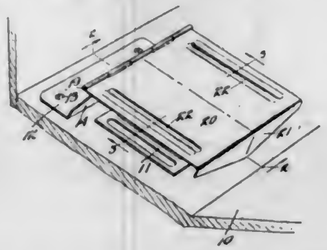
to be energized from an external source of current, and means for detachably locking said portable apparatus in driving engagement with said driving means.

1,768,084. CONDENSING RADIATOR. JACOB F. LEANHART, Louisville, Ky. Filed Dec. 5, 1927. Serial No. 237,825. 1 Claim. (Cl. 257—25.)



In a condensing radiator structure for internal combustion engines, a radiator having an upper header, a condenser header offset intermediate its ends from the first header and having its ends in substantially unobstructed communication with the ends of the upper header, and condenser tubes bridging the space between said upper header and said condenser header and connecting said upper header to said condenser header.

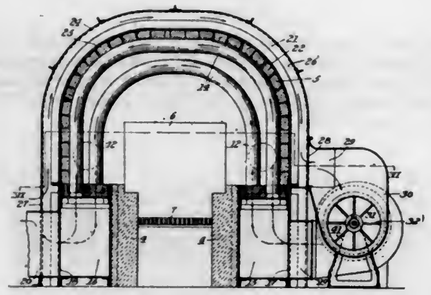
1,768,085. HEAT CONTROLLER. RALPH D. LEATHERMAN, Tipton, Ind. Filed Mar. 5, 1929. Serial No. 344,426. 5 Claims. (Cl. 98—2.)



1. A heat controller for directing the flow of heat issuing from the register of a heater, said deflector com-

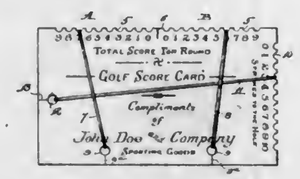
prising a plate of a size to cover the register, means for supporting said plate to permit the same to be tilted at various angles upon an axis parallel to the register, and means for permitting the plate to pivot on an axis transverse to the first axis, whereby the plate may be moved from a position over the register, substantially as set forth.

1,768,086. HEATING SYSTEM. LEIF LEE, Youngstown, Ohio. Filed Nov. 1, 1928. Serial No. 316,497. 11 Claims. (Cl. 126—104.)



9. A heater comprising a plurality of walls defining a combustion chamber, a duct mounted on an external surface of one of said walls, a duct mounted internally of said chamber, and a circulating device for drawing fluid through the external duct wherein the fluid is preheated and discharging the fluid through the internal duct wherein the fluid is further heated.

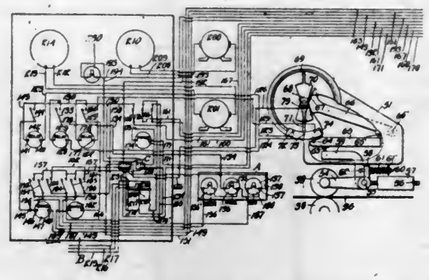
1,768,087. SCORE CARD. IRVING B. LEVERSON, Hawley, Minn. Filed July 3, 1928. Serial No. 290,109. 1 Claim. (Cl. 116—130.)



A device for keeping a record of points or scores in the playing of games comprising a card having notches, in one of the edges thereof and a hole through the card near the opposite edge with an entrance slit leading from this edge of the card to said hole, and a rubber band one end of which is looped over the notched edge of the cord and the other looped end passed through the slit into the hole for retaining said rubber band on the card and stretched across the front and back of the card for flexible movement of said rubber band from one notch to another over the intervening wall in registering the score.

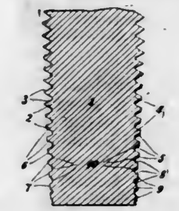
1,768,088. CONTROL MECHANISM FOR PAPER-MAKING MACHINES. DARCY E. LEWELLEN, Columbus, Ind., and GRANVILLE R. ZECHER, Middletown, Ohio. Filed Apr. 23, 1928. Serial No. 272,255. 13 Claims. (Cl. 92—46.)

1. In a paper making machine the combination with a stock gate for regulating the amount of stock fed to the machine, of means for operating said gate, means for engaging the paper, electro-responsive means for controlling the operation of said gate operating means, signalling means to indicate when said controlling means is in op-



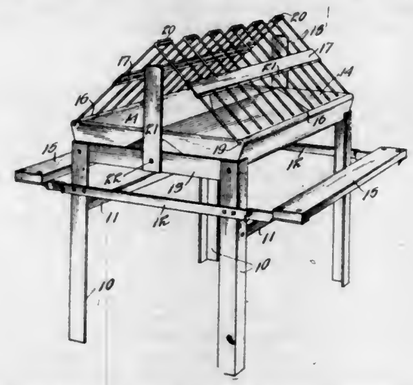
eration, and safety means limiting the movement of said gate beyond predetermined limits, substantially as set forth.

1,768,089. THREAD CUTTER. HERBERT LINDNER, Berlin, Germany. Filed Apr. 8, 1924, Serial No. 705,060, and in Germany Apr. 25, 1923. 2 Claims. (Cl. 10—141.)



1. A screw tap, comprising a body tapered in the direction to its free end and having a plurality of longitudinal grooves, ledge-like racks located between said grooves and constituting the remainder of the body, teeth on said racks having peripheral projections, the flanks of said teeth being located at the said grooves and presenting the cutting edges proper, said peripheral projections of the teeth of the respective racks following each other around the tap in staggered arrangement so that their cutting flanks are located on different portions of the racks of teeth distributed around the tap body.

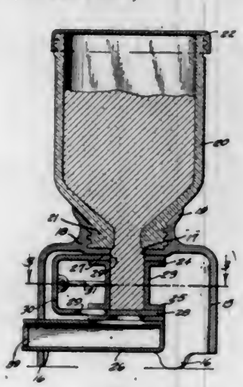
1,768,090. POULTRY FEEDER. FRED W. LORD, Tipton, Ind., assignor to The Oakes Manufacturing Company, Tipton, Ind., a Corporation of Indiana. Filed May 20, 1926. Serial No. 110,516. 5 Claims. (Cl. 119—61.)



1. A poultry feeder comprising a frame, a trough supported in said frame, a pair of wire guards mounted at

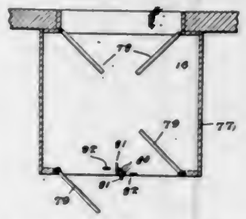
each side of said trough and connected at their contiguous edges, and a bar pivoted centrally of the ends of the frame and adapted to be disposed normally in upright position but adapted to be turned about its pivot to permit access to said trough, substantially as set forth.

1,768,091. SUGAR DISPENSER. GUS N. ADAIR, Los Angeles, Calif. Filed Aug. 1, 1928. Serial No. 296,746. 4 Claims. (Cl. 221—114.)



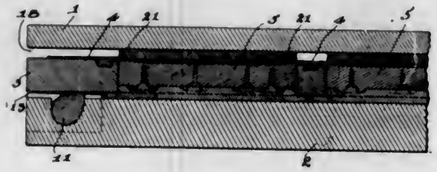
1. A sugar dispenser comprising a hollow base having an opening in its top, a cap surrounding the opening, a sugar receptacle having a neck threaded in the cap so as to be supported in upright position on the base, a tubular body secured to the under side of the top of the base and constituting a measuring chamber vertically aligned with respect to said opening, heads on the opposite ends of the body, valves slidable in the heads and having vertically disaligned ports adapted to alternately register with the opposite ends of the measuring chamber according as the valves occupy one extreme position or another, a member connecting the valves by which the latter may be moved simultaneously, a lever pivoted within the base, an eye on the connecting member through which said lever extends, a spring engaging the lever to yieldably urge the connecting member to one extreme position in which the port of the upper valve registers with the measuring chamber while the port of the lower valve is out of registration with the measuring chamber, said base being provided with a slot and a handle on the base adjacent one end of the slot, and a handle on the lever extending through the slot and adapted to be gripped concurrently with gripping of the first handle to move the lever against the tension of said spring whereby the valves are moved to the other extreme position to reverse the position of said ports and open the lower end of the measuring chamber and close its upper end.

1,768,092. BANK-PROTECTING DEVICE. HENRY LEE ALSTADT, Rector, Ark. Filed Jan. 21, 1929. Serial No. 333,950. 1 Claim. (Cl. 20—1.01.)



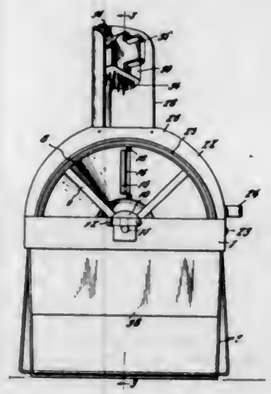
Combination with a door frame, and single doors hingedly mounted at the opposite sides of the frame one to swing inwardly and the other outwardly, a fixed stop arranged in the path of swinging movement of each door to prevent swinging thereof in the direction opposite to that intended, a post mounted for rotation upright midway between the opposite sides of the door frame, longitudinally extending ribs extending tangentially from the post at the opposite sides thereof to engage the free edges of the respective doors, at the sides thereof opposite the sides which engage the fixed stops, when the doors are closed, means operable to close said doors, and means operating automatically to rotate the post to effect engagement of the ribs thereon with the respective doors upon completion of the closing movement of the doors.

1,768,093. COMBINATION MOLD AND TRIMMER FOR RUBBER HEELS, SOLES, AND ALL MECHANICAL MOLDED RUBBER GOODS. JOSEPH M. ANDRE, Montello, Mass. Filed Dec. 28, 1925. Serial No. 77,978. 10 Claims. (Cl. 18—42.)



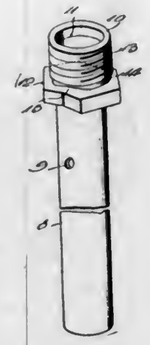
1. A combination mold and trimmer having an upper and lower plate, a movable plate therebetween and having a molding aperture therethrough, clearance between the upper and lower plate being sufficient to allow suitable movement of the movable plate, a cutting edge connected with the upper plate and adapted to fit slidably in said aperture, means rotatably mounted in the lower plate and engaging the bottom of the movable plate for moving the movable plate to cause the cutting edge to enter said aperture.

1,768,094. VEGETABLE SLICER. JOHN A. ANDRUSIS, Brooklyn, N. Y. Filed Feb. 7, 1928, Serial No. 252,598. Renewed Apr. 5, 1930. 3 Claims. (Cl. 146—89.)



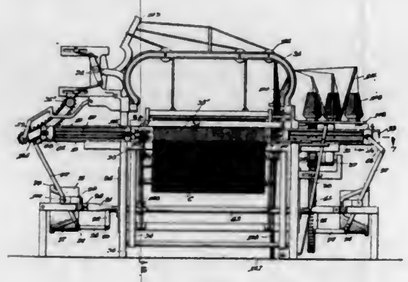
1. A device of the class described comprising a frame, a cover thereon, a hopper carried by the cover, a frusto-conical member rotatably mounted in the frame, a handle for turning the member, said member having slots therein, a knife located adjacent each slot, means for adjusting the knives towards and away from the member to vary the thickness of the slices cut from the articles operated upon, and strips adjustably connected with the member for regulating the width of the slots.

1,768,095. TUBE JOINT. JAMES F. ARTHUR, Dickson, Pa. Filed Mar. 31, 1928. Serial No. 266,394. 2 Claims. (Cl. 285—161.)



1. In a joint, a metal tube, and a metal bushing around one end of said tube provided with an enlarged head for engagement with a wrench, said head having an inward distortion projecting into a similar distortion in said tube to hold tube and bushing in assembled relation.

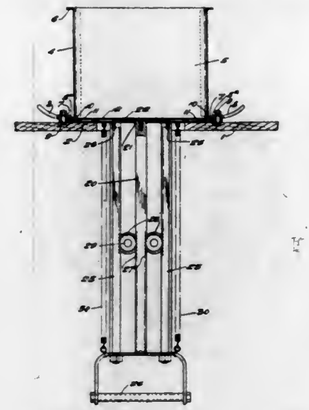
1,768,096. LOOM. FRANCIS E. ASHTON, Chester, Pa., assignor to Aberfoyle Manufacturing Company, Chester, Pa., a Corporation of Pennsylvania. Filed Jan. 31, 1928. Serial No. 250,790. 19 Claims. (Cl. 139—21.)



1. In a loom for weaving double fabric, means to provide concurrent and successive warp sheds, a plurality of weft-threads adjacent said sheds, means for selectively raising one of said threads for each shed, means for engaging and carrying said selected weft threads to the approximate center of said sheds, and means for receiving and disengaging said weft threads and carrying the same to the other side of said sheds.

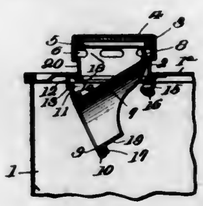
1,768,097. BOX-BAG-PACKING DEVICE. TRUE M. AVERY, Glens Falls, N. Y., assignor, by mesne assignments, to Marshall Field & Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 15, 1925. Serial No. 75,642. 4 Claims. (Cl. 226—129.)

1. A bag packing device comprising a supporting plate having buttons projecting upwardly from its upper surface to interchangeably receive formers or molds of different sizes, a former or mold applied to the buttons of said plate, clamping devices engaging opposite edges of the former



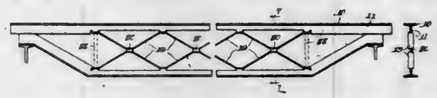
or mold, and means for supporting the bottom of a bag in the former or mold and for pushing the bag upwardly therein.

1,768,098. POURING SPOUT FOR CONTAINERS. CHARLES J. AULBACH, Passaic, N. J., assignor to Continental Can Company, Inc., New York, N. Y., a Corporation of New York. Filed Jan. 22, 1929. Serial No. 334,236. 5 Claims. (Cl. 221—27.)



1. A container comprising a body portion having a projecting nozzle, means for closing and sealing said nozzle, a pouring spout hingedly supported within said container and adapted to swing from a position completely housed within said nozzle to a position projecting from said nozzle for pouring, said pouring spout being provided with a gasket whereby a sealing engagement with the container is provided so that the liquid to be dispensed is compelled to pass through the pouring spout, and an independent yielding means for holding said spout in pouring position and sealing engagement with the end of the container.

1,768,099. EXPANDED-METAL STRUCTURE. WALTER A. BATES, Gary, Ind., assignor to Walter Bates Steel Corporation, Gary, Ind., a Corporation of Delaware. Filed Aug. 8, 1927. Serial No. 211,311. 9 Claims. (Cl. 189—37.)



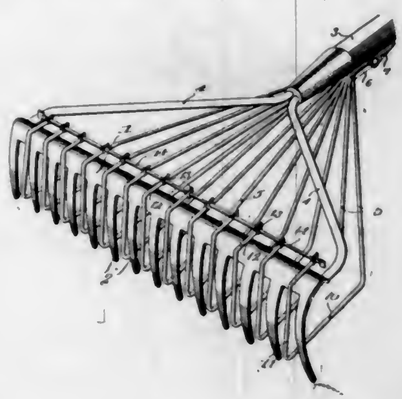
1. An expanded metal structure comprising an integral member having flanges upon the two opposite sides thereof, web portions contiguous to said flanges, and diagonals connecting said web portions, said diagonals intersecting one another to form diamond shapes, said diagonals being disposed in planes normal to the plane of said web portions.

1,768,100. CLOCK. PAUL BAUMGARTEN, Berlin-Wilmersdorf, Germany, assignor to Adolf Riese, Berlin, Germany. Filed Jan. 28, 1926, Serial No. 84,461, and in Germany Jan. 31, 1925. 2 Claims. (Cl. 58—126.)



2. In a clock, a casing, transparent plates located in the casing, a shaft like member connecting the medial portions of the plates, clock hands having the inner terminals loosely mounted on the shaft like member intermediate the transparent plates, and annular driving members connected with the outer terminals of the clock hands.

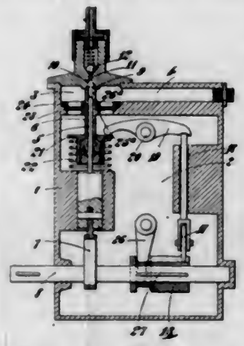
1,768,101. RAKE CONSTRUCTION. ERWIN L. BELL, Lebanon, Tenn. Filed Nov. 29, 1927. Serial No. 236,514. 5 Claims. (Cl. 55—146.)



1. In a rake having a supporting handle and a toothed head, a plurality of follower bars pivotally mounted at their rear ends on the supporting handle and extending forwardly therefrom and normally moved downwardly by gravity to overlie, engage and compact matter collected by said teeth, said bars arising in response to upward pressure due to increase in mass of the matter collected by said teeth with means for limiting downward movement of said follower bars relatively to the head.

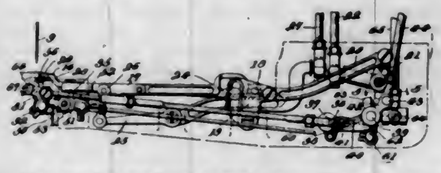
1,768,102. PUMP. LOUIS HENRI LIBERT BELLEM, Asnieres, France. Filed Jan. 24, 1928. Serial No. 249,113, and in France Dec. 9, 1927. 4 Claims. (Cl. 103—163.)

1. In a fluid discharging pump, the combination of a cylinder plunging in the liquid to be pumped, a discharge pipe in alignment with the axis of said cylinder, said cylinder being displaceable into and out of contact with the edge of the orifice of said discharge pipe, a plunger reciprocating in said cylinder, said plunger discharging fluid through said discharge orifice when said cylinder contacts with the edge of said orifice, means for displacing said cylinder independently of said plunger, and means,



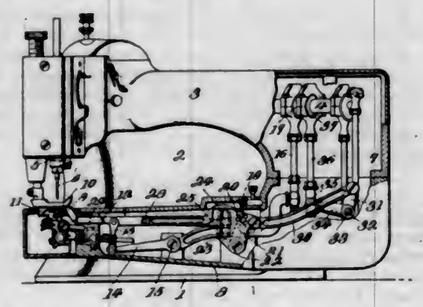
operable both when the pump is stationary and when it is working, for varying the instant at which said cylinder is brought into contact with the edge of said discharge orifice during the discharge stroke of said plunger.

1,768,103. LOOPER MECHANISM FOR SEWING MACHINES. JOSEPH BERGER, Utica, N. Y., assignor to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed May 4, 1928. Serial No. 275,068. 16 Claims. (Cl. 112—199.)



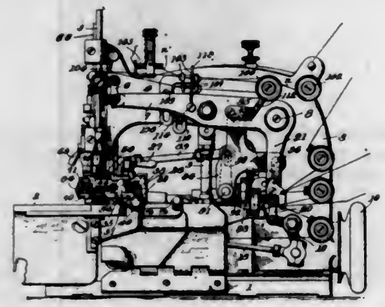
1. In a sewing machine a work supporting arm, means for feeding the material lengthwise of the arm, a looper, means disposed at the free end of the arm for supporting said looper for oscillation in a fixed vertical plane parallel with the feed, and a loop spreader movable in a fixed path at right angles to the plane of movement of the looper for engaging the looper thread and positioning the same so that the needle will pass into the looper thread loop.

1,768,104. FEEDING MECHANISM FOR SEWING MACHINES. JOSEPH BERGER, Utica, N. Y., assignor to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed May 10, 1928. Serial No. 276,783. 9 Claims. (Cl. 112—215.)



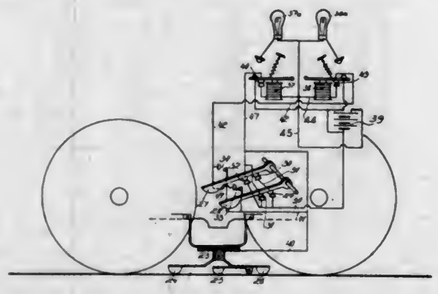
3. A feeding mechanism for sewing machines comprising a feed bar, a feed dog carried at one end of said feed bar, a swinging frame at the other end of said feed bar supporting a fulcrum pin, said feed bar having its end forked and slidingly engaging said fulcrum pin, means connected to the feed bar for raising and lowering the end thereof carrying the feed dog, a link shiftably connected at one end to said swinging frame substantially beneath the feed bar and connected at the other end to the feed bar, said link lying substantially in a vertical plane coincident with the line of feed.

1,768,105. SEWING MACHINE. JOSEPH BERGER, Utica, N. Y., assignor to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 26, 1929. Serial No. 342,922. 15 Claims. (Cl. 112—162.)



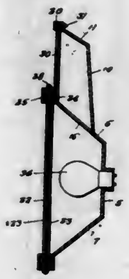
1. A sewing machine including in combination independent stitching devices arranged with their needles parallel and so as to operate in succession on the fabric, and means for presenting fabric sections to said devices so that said sections are joined at their edges by stitches formed by one of said stitching devices and said joined edge portions secured flat against one of said fabric sections by stitches formed by the other stitching devices.

1,768,106. DEVICE FOR INDICATING SIGNALS ON RAILWAY VEHICLES. KARL BEYERMANN, Haida, Kreuzgasse, Czechoslovakia. Filed Nov. 26, 1927, Serial No. 235,991, and in Czechoslovakia Mar. 2, 1926. 2 Claims. (Cl. 246—180.)



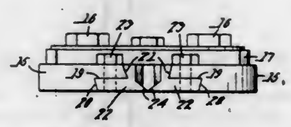
1. In a device for indicating signals on track-bound vehicles two signalling current rails arranged in succession and adapted to be disconnected from a source of current when the signal is at "danger", two lugs, each coordinated to one of said rails, a collector on said vehicle adapted to move permanently on one of the rails of said track and adapted to cooperate with the said rails, two circuit breaking levers adapted to be operated independently of each other, one of said lugs being adapted to operate but a single circuit breaking lever, the other being adapted to operate both levers, two electromagnets, each electromagnet having in its circuit a first and a second switch, a movable contact of one of said first switches being permanently engaged with the fixed contact of the other first switch, and a permanent conductive connection between the movable and the fixed contact parts of the two second switches, each circuit breaking lever supporting the movable contacts of one each of said first and second switches.

1,768,107. VEHICLE SIGNAL. JOHN MICHAEL BLACKBURN and FRED RAYMOND LAUDEN, Franklin, La. Filed Sept. 29, 1928. Serial No. 309,105. 2 Claims. (Cl. 40—132.)



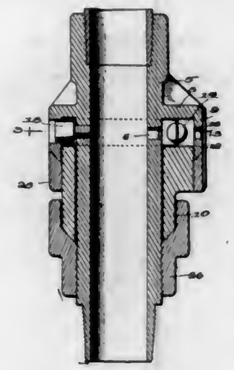
2. In a signal housing, a main housing, a supplemental housing arranged above the main housing and fixedly secured thereto, said housings having communication with each other and each of the housings being open at their front side, said main housings having the edges about its open side formed about the shoulder having its outer surface disposed at a vertical plane and with a flange extending outwardly at right angles from the shoulder with slotted openings therein, said supplemental housing having its upper edge formed with a downwardly disposed channel, individual cover plates for each of said housings, and means for securing the main cover plates in position, comprising a strip disposed above the edges of the cover with its edges disposed at right angles to each other, stud bolts extending outwardly from the edge of said strip and insertable in said notches for securing the parts in assembled position, said supplemental cover plate having its upper edge inserted in said channel and with its lower edge resting upon the upper edge of the opening of the main housing and disposed inwardly of the bolt carried thereby for retaining the supplemental cover in position.

1,768,108. BOLT CUTTER. HENRY P. BLUMENAUER and FRANK D. BRISSE, Worcester, Mass., and WILLIAM C. BAISSE, Detroit, Mich. Filed July 10, 1928. Serial No. 291,618. 2 Claims. (Cl. 81—199.)



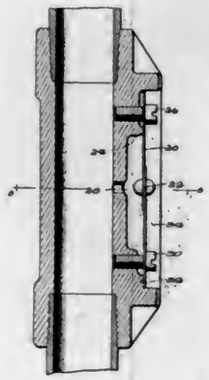
1. In a bolt cutter, the combination with a pair of hand levers and a pair of jaw levers pivoted together, said jaw levers having a notch in the inner side of each with a backwardly slanting or undercut rear edge and a plane wall parallel to the line of thrust and a forward edge in advance of the same slanting in a substantially parallel direction but off-set laterally therefrom, thus forming a Z-shaped outline, of a pair of removable steel jaws secured thereto and having surfaces fitting said plane and slanting surfaces, whereby the steel jaws will have a bearing on both of said slanting surfaces, and bolts for securing the steel jaws in position on the said jaws, whereby even if the bolts get loose the jaws will tend to remain in position.

1,768,109. STAGE-LIFT FLOWING DEVICE. ALEXANDER BOYNTON, San Antonio, Tex. Filed May 6, 1927. Serial No. 189,303. 11 Claims. (Cl. 137—111.)



5. In a stage lift flowing device a body having an eccentrically disposed housing, said housing and said body being provided with two-way ports for the passage of a fluid lifting medium, a leaf spring between said ports and having a valve to control the ports.

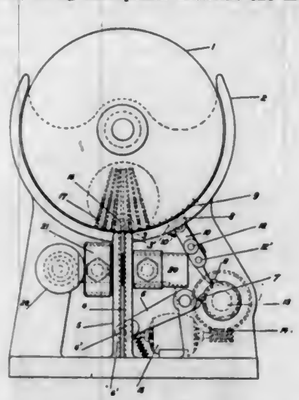
1,768,110. STAGE-LIFT FLOWING DEVICE. ALEXANDER BOYNTON, San Antonio, Tex. Filed May 6, 1927. Serial No. 189,304. 4 Claims. (Cl. 137—111.)



2. An induction valve comprising a body having a port for the passage of a fluid lifting medium, a valve controlling said passage, a leaf spring having sections connected to said valve, and tensioning devices for tensioning said sections in opposite directions.

1,768,111. LUMINOUS PROJECTION APPARATUS. MAURICE LOUIS BRANGER, Paris, France. Filed Dec. 23, 1927. Serial No. 242,234, and in France Mar. 26, 1927. 4 Claims. (Cl. 88—27.)

1. In a luminous projection apparatus, the combination with a circular slide-carrying rotary magazine having radial guide grooves for the slides and means for intermittingly rotating the said magazine, of projection devices and a slide-receiving guideway arranged below said magazine, said projecting devices including a lamp, a shutter disposed in said guideway and serving to lift the slides, and means for lifting said shutter after a slide, resting on said shutter, has been exposed, said shutter, when lifted, being interposed between the members of

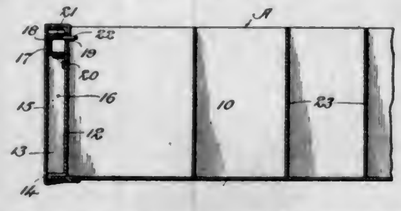


the projecting device, so as to shut off the light from said lamp, and said shutter, when lifted, returning the exposed slide to said magazine.

1,768,112. TREATING MANGANESE ORES. JOSEPH H. BRENNAN, Niagara Falls, N. Y., assignor to Electro Metallurgical Company, a Corporation of West Virginia. Filed June 28, 1928. Serial No. 289,086. 3 Claims. (Cl. 75—85.)

1. The process of working ores containing manganese dioxide and iron which comprises subjecting the ore to a self-propagating silico-thermic reduction using a quantity of silicon insufficient to reduce the manganese substantially beyond the manganous stage, and separating the non-metallic part of the reaction product as a manganiferous slag having a higher Mn to Fe ratio than the ore treated.

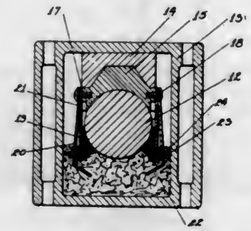
1,768,113. INDICATOR FOR DRAWERS. JOHN RUSSELL CALDWELL, Youngstown, Ohio, assignor to The General Fireproofing Company, Youngstown, Ohio, a Corporation of Ohio. Filed June 4, 1929. Serial No. 368,374. 6 Claims. (Cl. 116—135.)



1. In combination with a vertical wall having a window opening therein and a shelf located at the rear of said wall, an indicating element for cooperation with said window inclusive of a vertical flat side disposed so that by longitudinal movement of the element different portions of the vertical flat side thereof are exposed to view through said window, said element further being inclusive of a flat horizontally and rearwardly extending portion slidably resting on said shelf and cooperating with the latter to maintain said vertical flat side in a vertical position.

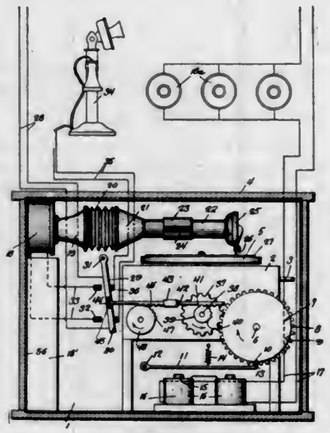
1,768,114. JOURNAL LUBRICATOR. GEORGE CARR, Pettus, W. Va., assignor of one-half to Teela M. Lewis, Charleston, W. Va. Filed Feb. 6, 1929. Serial No. 337,920. 2 Claims. (Cl. 308—89.)

2. A journal lubricator for use within the journal boxes of rolling stock comprising plate members, said plates being arranged upon and depending from the brass for the journal, bristles carried by and obliquely disposed from the inner sides of the plates adjacent the journal being shaped in conformity with the outer wall contour of the journal, baffle plates carried upon the attaching portions of the plate members being progressively outwardly flared therefrom and disposed throughout the major portions of their lengths in spaced relation to the plate members, flanges arranged upon the opposite ends of the baffle



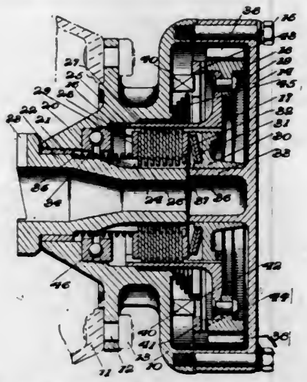
plates beyond the extremities of the plate members and projecting inwardly therebeneath to retain a suitable quantity of the saturated waste within the journal box against the exposed portion of the journal between the bristle portions of the plate members, and adjusting elements carried by the plate members engageable with the baffle plates to regulate the clearance between the free extremities of the bristles and the outer side wall of the journal to the extent of the space defined between the baffle plates and plate members.

1,768,115. ALARM SYSTEM. CONRAD CHIERIGHINO, New York, N. Y. Filed Dec. 21, 1927. Serial No. 241,625. 2 Claims. (Cl. 179—5.)



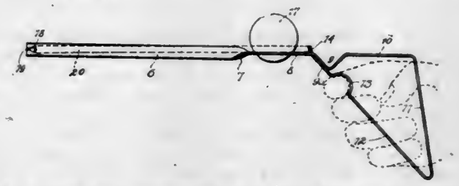
1. In alarm signalling apparatus, a telephonic transmitting circuit including a transmitter, a switch for closing said circuit, a phonographic unit including a rotatable record support, means for rotating the same, and a reproducer supported in cooperative relation to the record support and in communication with the telephonic transmitter, the record support rotating means including a gear having a continuously toothed peripheral portion and a peripherally smooth portion having a notch, an electromagnet, a remote control switch in circuit with the magnet, an armature for the magnet having a tooth coacting with the notch of the last mentioned portion of said gear in the normal position of the gear and adapted to be disengaged from the notch upon attraction of the armature through energization of the magnet, and means actuated through the rotation of said gear for effecting closing of said first mentioned switch for a predetermined period of time and a subsequent opening of said first mentioned switch, the said means comprising a gear in mesh with the first mentioned gear and a segmental pinion rotatable therewith, a segmental gear, a driving connection between said second gear and the segmental gear to rotate the segmental gear in a direction reverse to the rotation of said second gear, a rack bar connected with said first mentioned switch and having spaced series of rack teeth for engagement by the teeth of the segmental pinion and the teeth of the segmental gear, said drive connection between the second mentioned gear and the last mentioned segmental gear providing for engagement of the teeth of the segmental pinion with the rack to shift the rack in a direction to close said first mentioned switch, and a subsequent engagement of the teeth of the segmental gear with the other series of teeth of the rack to effect return shifting of the rack to effect opening of said first mentioned switch.

1,768,116. ENGINE STARTER. ROLAND CHILTON, Keyport, N. J., assignor to Eclipse Machine Company, Elmira Heights, N. Y., a Corporation of New York. Filed Apr. 24, 1929. Serial No. 357,833. 6 Claims. (Cl. 123—179.)



1. In an engine starter, a casing, a barrel member slidably and rotatably mounted therein, a member slidably mounted within said barrel member and adapted to engage and drive a member of an engine to be started, a yielding driving connection between the barrel member and engine engaging member, driving means for said barrel member and adapted to impart rotary and longitudinal movement thereto, means for transmitting longitudinal movement of the barrel member to the engine engaging member to move it into operative position, and means slidably but non-rotatably mounted in said casing for preventing reverse rotation of said barrel member.

1,768,117. TOY GUN. EDWARD A. CHRISTOPH, Chicago, Ill. Filed Oct. 22, 1927. Serial No. 227,902. 4 Claims. (Cl. 124—14.)



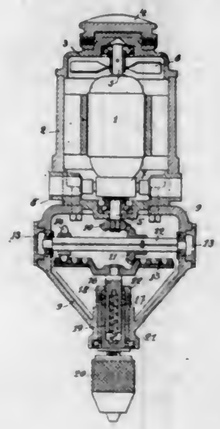
4. A toy gun comprising a strip of resilient metal formed into a portion simulating a gun barrel and a grip terminating in a detent intersecting said portion, and a rubber band attached to the forward end of said portion and adapted to be stretched onto said detent.

1,768,118. NAPKIN DISPENSER. AUSTIN E. COFRIN, Green Bay, Wis. Filed Oct. 10, 1928. Serial No. 311,640. 3 Claims. (Cl. 312—61.)



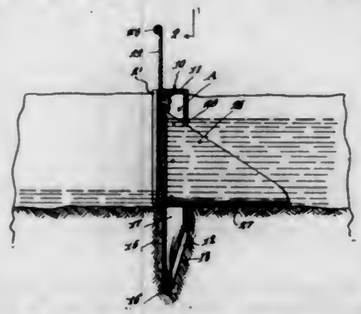
1. A device for dispensing napkins or the like comprising, in combination, a casing having a delivery opening in a vertical side thereof, marginal, sheet retaining flanges surrounding said opening, a follower plate supported in said casing for movement toward and from said opening, a sheet supporting member rigidly secured in said casing adjacent the lower end thereof and inclined upwardly and rearwardly from said opening, a projection carried by the rear edge of said member turned into a plane parallel with said opening and a follower plate supporting member mounted on said rear edge projection and attached to said plate adjacent the middle of its rear surface.

1,768,119. ELECTRIC DRILLING APPARATUS. CAMILLE CONTAL, St. Cloud, and PIERRE KRETTLY, Paris, France. Filed Feb. 29, 1928, Serial No. 257,980, and in France Mar. 5, 1927. 1 Claim. (Cl. 74—58.)



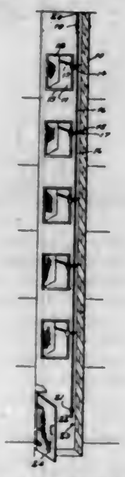
In an electric breast drill, the combination of a frame having at one end a seat adapted to receive an electric motor and at the opposite end a socket, the axis of which is in line with the axis of the electric motor a pinion secured to the shaft of the electric motor, a transverse shaft journaled in the frame a bevel gear secured to this shaft on one side of the axis of the said socket, and adapted to be engaged by said pinion of the electric motor a pinion with pointed teeth slidable on the said shaft on the opposite side relatively to the said axis, a bearing in the said socket, the said bearing and the said socket having threaded parts adapted to be screwed together, a tool-holding shaft and a disc secured to this tool-holding shaft and provided with several rows of holes adapted to engage the pointed teeth, the said tool-holding shaft being journaled in the said bearing so as to rotate but not to slide in the axial direction relatively to the same.

1,768,120. HEAD GATE. ALPHONSO CRILL, Nampa, Idaho. Filed May 31, 1929. Serial No. 367,448. 1 Claim. (Cl. 61—29.)



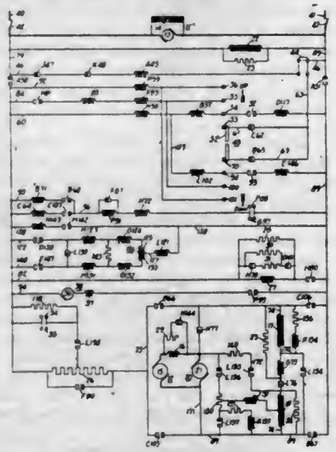
A headgate for irrigation ditches comprising an inverted U shaped angle iron frame, a sheet metal plate secured to one face of the frame, a reinforcing strap secured to and depending from the lower edge of the plate and connected to the terminals of the legs of said frame constituting an inserting cutting edge, the plate having a gate opening formed therein, vertical guides formed on the side walls of the gate opening, a gate proper slidably mounted in said guides, angle iron bars secured to the rear face of the plate and connected to the strap and to the top bar of the inverted U shaped angle iron frame, and a substantially U shaped tail piece connected to said bars, the tail piece including diverging side walls for engaging the banks of the ditch and a bottom wall for engaging the bed of the ditch, said walls having laterally extending attaching flanges, the side flanges being disposed between the angle iron bars and the plate and the bottom flange being secured to the front face of said plate and overlying the lower wall of the gate opening, the lower ends of the angle iron bars constituting inserting posts.

1,768,121. DUMBWAITER CLOSING AND LOCKING DEVICE. WALLACE A. CURTIS, New York, N. Y. Filed Sept. 24, 1928. Serial No. 308,016. 2 Claims. (Cl. 187—53.)



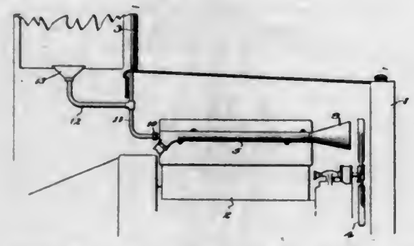
2. In a closing and locking device for dumbwaiter doors, chains attached at one end near the outer edge of each door, pulley on the frames of said doors over which the other ends of said chains are guided, a nut in the outer link of each chain, a cable passed through each nut, a spiral spring for suspending said cable from the dumbwaiter ceiling, screw eyes above said nuts projecting from the dumbwaiter wall through which said cable is passed, said nuts constituting abutments for engaging said screw eyes to limit the upward movements of chains and cables, and a means for securing the lower end of said cable when said doors are closed to lock all doors simultaneously against individual opening.

1,768,122. CONTROL SYSTEM. LEE I. DAVIS, New York, N. Y., assignor to Otis Elevator Company, Jersey City, N. J., a Corporation of New Jersey. Original application filed Oct. 29, 1925, Serial No. 65,612. Divided and this application filed Apr. 21, 1928. Serial No. 271,953. 19 Claims. (Cl. 172—239.)



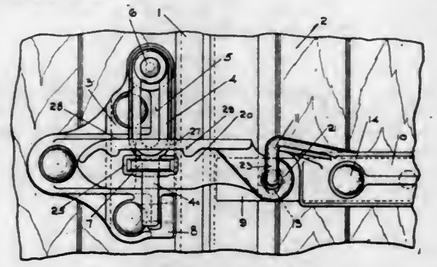
1. In combination, a generator having an armature and a field winding, a source of current, means for connecting the whole of said field winding to said source, and means for reconnecting said field winding in such manner that one portion thereof is connected to said source and another portion thereof is connected to the armature of the generator.

1,768,123. HEATER. CARL A. MACMILLER, Hibbing, Minn. Filed May 21, 1927. Serial No. 193,227. 1 Claim. (Cl. 257—241.)



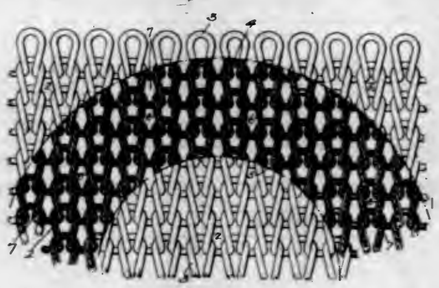
A combined exhaust manifold and air heater for motor vehicles consisting of an elongated hollow body closed at opposite ends and wholly open at its rear side which is closed by a side of the engine to which the body is attached, an air pipe within and integral with the body and extending through the closed ends thereof, said body having an integral spud adjacent one end for attachment of the exhaust pipe thereto, and a funnel removably attached to the opposite end of the body and in communication with the air pipe to supply air thereto.

1,768,124. HASP CONSTRUCTION. GABRIEL MADLAND and WILLIAM W. DARROW, Chicago, Ill., assignors to Camel Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 11, 1927. Serial No. 167,396. 9 Claims. (Cl. 292—283.)



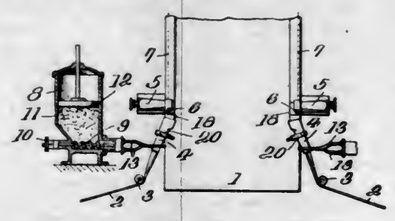
1. In combination, a staple, and a hasp for cooperation with said staple, said hasp being L-shaped in cross section transversely of said hasp and having a staple receiving slot in each of the legs of said L-shaped cross section one of said slots being of a length to closely receive said staple, the other of said slots being of greater length.

1,768,125. PROCESS OF PRODUCING PATTERNS ON PLATED KNITTING AND THE CORRESPONDING PRODUCT. JOSEF MAHLER, Nemecky Brod, Czechoslovakia, assignor to Fidelity Machine Company, Philadelphia, Pa., a Corporation of Delaware. Filed Oct. 10, 1927, Serial No. 225,402, and in Czechoslovakia July 1, 1927. 7 Claims. (Cl. 28—1.)



1. A process of producing patterns on plated knitting consisting in forming the plating and the ground work out of different materials, and printing the pattern on the knitting with a corrosive agent adapted to destroy the plating material without attacking the ground work.

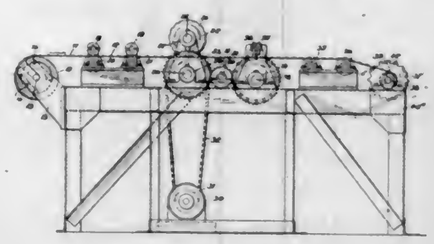
1,768,126. APPARATUS FOR FORMING BAGS. KARL MAIER, Stuttgart, Germany, assignor to Union Special Maschinenfabrik, G. m. b. H., Stuttgart, Germany. Filed June 30, 1928, Serial No. 289,452, and in Germany Dec. 22, 1927. 9 Claims. (Cl. 112—10.)



1. An apparatus for joining sections of material comprising a stitching unit, means for directing a strip about

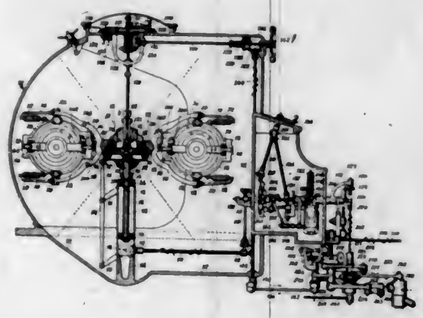
the edge portion of the material and to the stitching unit, and means for applying a strip of adhesive between the line of stitching and the edge of the strip, said last named means including a pipe for applying a strip of adhesive directly to the strip and a distributing roll for distributing the adhesive prior to the strip contacting with the edge portions to be joined.

1,768,127. MACHINE FOR FORMING JOINT REENFORCEMENTS. FREDERICK A. MANSKE and WILLIAM M. MCNEIL, Chicago, Ill., assignors to United States Gypsum Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 17, 1928. Serial No. 306,582. 8 Claims. (Cl. 140—4.)



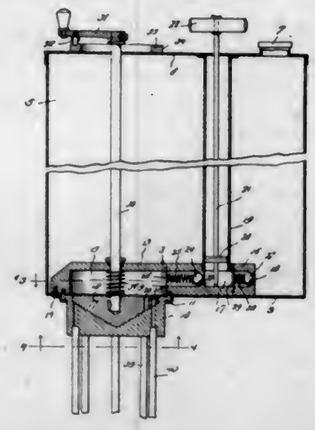
1. In a machine for forming strips of wire reenforcement, means for supplying wire fabric having longitudinal and cross wires, cutting means adapted to sever such cross wires to form a plurality of strips of wire reenforcement, and means for bending said cut ends of the cross wires to form loops.

1,768,128. GYROSCOPIC GROUP FOR AUTOMATICALLY STABILIZING AND STEERING AEROPLANES. LOUIS MARMONIER, Lyon, France. Filed June 29, 1927. Serial No. 202,336, and in France July 2, 1926. 2 Claims. (Cl. 249—29.)



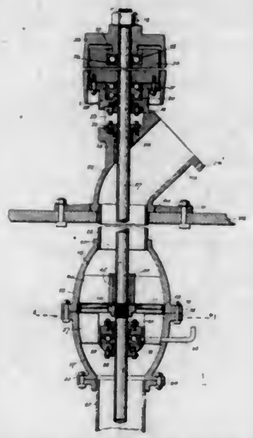
1. A device for automatically stabilizing and steering aeroplanes comprising a gyroscopic group, a leverage system actuated by the relative displacements of the aeroplane with respect to the true planes of the gyroscopic group, electric feeding circuits opened or closed by action of the leverage system, electro-mechanical means operated through said electric leading circuits, servo-motors operatively connected to the electro-mechanical means for driving the stabilizing and steering members of the aeroplane, uncoupler corrector means for bringing an automatic intervention of a servo-motor to assist the correcting coupler of the planes, and means for connecting said members to the servo-motors for automatic steering and stabilization or for disconnecting those members used by the pilot when the automatic device is not in operation.

1,768,129. MULTIPLE-VALVE DISPENSER. JOHN L. MCCAIN, Atwood, Kans. Filed May 11, 1928. Serial No. 276,975. 1 Claim. (Cl. 184—28.)



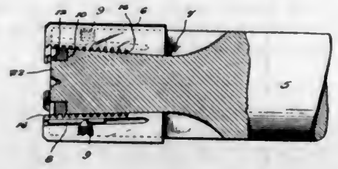
A grease dispenser of the character described comprising a container having a discharge opening formed therein, a pressure compartment forming housing mounted in the container and communicating with the discharge opening, a lateral extension on the housing having a longitudinal bore therethrough comunicating with the pressure compartment and the interior of the container, check valves mounted in the bore in longitudinally spaced relation, said valves opening toward the pressure compartment, a manually operated pump associated with the extension intermediate the check valves and adapted to draw grease therefrom into the container and eject the grease therefrom into the pressure compartment and manually operable valve means associated with the opening in the container for controlling the discharge of the grease therefrom.

1,768,130. PUMP. ROBERT L. MEAUX, Eunice, La. Filed Sept. 19, 1928. Serial No. 307,013. 1 Claim. (Cl. 103—89.)



In a pump, a casing, an axially extending rotary shaft and an impeller secured thereto for rotation therewith, said impeller including a hub, a rim and radiating blades of the same width thoughout their length and gradually increasing pitch from the inner ends to the outer ends, the trailing edge of each of said blades being disposed in radial alignment with the axial center of the impeller and the leading edge of each blade being disposed out of radial alignment with the axial center of said impeller.

1,768,131. INSERTED-BLADE CUTTER. FRANK P. MILLER, Meadville, Pa. Filed May 16, 1925. Serial No. 30,786. 1 Claim. (Cl. 77—75.5.)



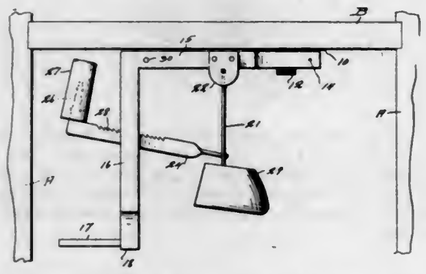
A rotary cutter comprising an elongated body having grooves, blades in said grooves and having their inner edges formed with transverse ribs, the forward portion of said body being provided with an annular groove, an adjusting and thrust member in the annular groove at the forward portion of the body and having contact with the inner wall of the groove to hold the adjusting and thrust member against endwise movement in one direction with respect to the body, said adjusting and thrust member being confined to the forward end of the body and provided with peripheral threads engaged with the transverse ribs on the inner edges of said blades, whereby the turning of said member in one direction will advance said blades.

1,768,132. ROTARY CUTTER. FRANK P. MILLER, Meadville, Pa. Filed May 11, 1926. Serial No. 108,297. 3 Claims. (Cl. 29—105.)



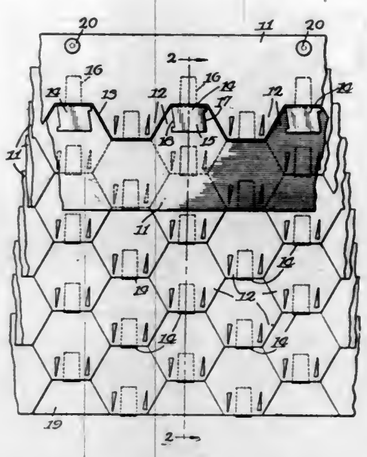
1. A rotary cutter comprising a carrier having grooves, blades adjustable in the grooves and having the inner edge portions thereof provided with notches, thrust pins having their intermediate portions intersecting said grooves and snugly received in said notches, the opposite ends of the thrust pins being firmly anchored to the carrier.

1,768,133. SHOE-CLEANING SUPPORT. CLEM F. MINGUS, Oakland, Calif. Filed June 13, 1929. Serial No. 370,575. 5 Claims. (Cl. 12—124.)



1. A shoe cleaning support of the character described comprising a member adapted to be applied to the top of a cabinet, an arm pivotally mounted upon said member for rotation in a horizontal plane, the arm having a depending portion with an angularly disposed foot, a last section removably disposed upon said foot, a heel engaging member mounted upon said arm for adjustment toward or from the depending portion thereof, and means extending through the depending portion and manually operable for adjusting said heel form.

1,768,134. ROOFING. ALBERT E. F. MOONE, Chicago, Ill., assignor to The Lebon Company, a Corporation of Illinois. Filed Jan. 30, 1928. Serial No. 250,404. 3 Claims. (Cl. 108—7.)



3. A roofing strip comprising a body portion, and a plurality of thin bendable metal fastenera secured to the underside of the body along one edge thereof, and projecting beyond and in the plane of the bottom of the strip, said strips being adapted to be laid in overlapping courses with the fasteners adapted to be freely inserted upwardly beneath the body portion of the course below and to be bent by the strip about the lower edge of the body portion when the strip is rotated upwardly into overlapping relation with the course last laid.

1,768,135. PLOWSHARE. DELMER H. MOORE, Greenville, Mich., assignor to Moore Plow and Implement Company, Greenville, Mich., a Corporation of Michigan. Filed Feb. 24, 1928. Serial No. 256,721. 3 Claims. (Cl. 97—125.)

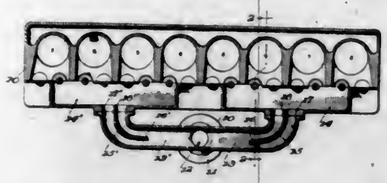


1. A self-sharpening plow share having its edge formed with a plurality of saw teeth, with grooves in both faces of the lower part of the share, said grooves being parallel and sloping upwardly and rearwardly, each groove having a vertical front wall and an outwardly and rearwardly extending rear wall, with the vertical walls of the top grooves being in alignment with the vertical walls of the bottom grooves and said vertical walls terminating at the front end of each tooth whereby each tooth is of wedge shape in cross section toward the landside and the bottom face of the toothed section being hardened.

1,768,136. INTERNAL-COMBUSTION ENGINE. ALFRED MOONHOUSE, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed May 14, 1926. Serial No. 109,125. 3 Claims. (Cl. 123—52.)

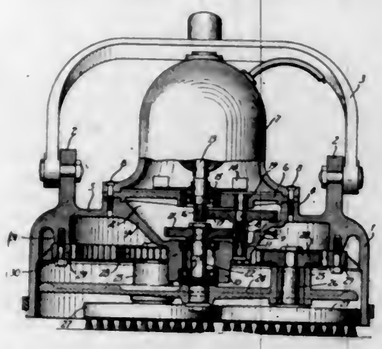
1. In an internal combustion engine, a carburetor, a plurality of motor cylinders, a manifold chamber com-

municating with said cylinders, a conduit leading from said carburetor and connecting said manifold chamber at a point between said cylinders, said conduit having a bend or curve adjacent the point where it communicates with



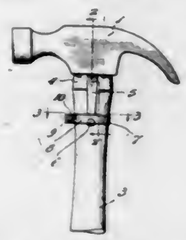
the manifold chamber, and a partition in said conduit extending from said manifold chamber toward said carburetor past the bend thereof, the end of said partition nearest the carburetor being unevenly spaced between the walls of said conduit.

1,768,137. FLOOR-POLISHING MACHINE. ERNEST J. NEWCOMER, Baltimore, Md. Filed Dec. 14, 1926. Serial No. 154,729. 3 Claims. (Cl. 15—49.)



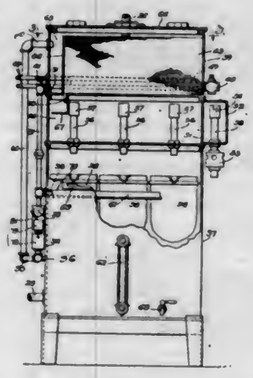
1. In a machine of the character described, the combination of an outer casing, a motor supported thereby, rubbing members, shafts on which said rubbing members are secured, a fixed gear mounted at the outer portion of the outer casing, gears fixed on the shafts and meshing with said fixed gear, a supporting plate carrying said shafts and extending outwardly beyond the shafts substantially to the edge of said outer casing forming a guard, and means for turning the supporting plate from the motor.

1,768,138. TOOL HEAD AND FASTENER. EMMA F. NICHOLS, Lincoln, Nebr. Filed Aug. 3, 1927. Serial No. 210,404. 1 Claim. (Cl. 306—32.)



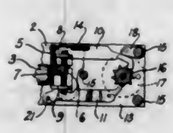
A tool comprising a head having a handle-receiving eye, a handle having one end fitted into the eye of the head and having a reduced portion adjacent the head, arms extending from the head along the opposite sides of the handle and having their free end portions formed into hooks facing the head, a clamping band fitted around the reduced portion of the handle and extending across the arms, the hooked end portions of the arms passing between the handle and the band, across the edge of the band and back against the outer side of the band, and means connecting the ends of the band for closing the band upon the handle and said arms.

1,768,139. FILTERING SYSTEM FOR LUBRICANTS. WILLIAM W. NUGENT, Chicago, Ill. Filed July 23, 1924. Serial No. 727,605. 16 Claims. (Cl. 210—43.)



1. In a filtering apparatus, the combination with filtering mechanism, of a reservoir, alarm mechanism adapted to be operated by overflow from said filtering mechanism, an overflow by-pass, and connections between said alarm mechanism and said reservoir and between said by-pass and said reservoir, for conducting overflow to said reservoir.

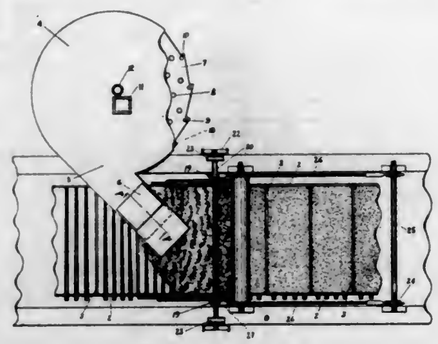
1,768,140. COUNTING METER. HERBERT F. OBERGFELL, River Forest, and THEODORE C. RIEBE, Chicago, Ill., assignors to Reserve Holding Company, Kansas City, Mo., a Corporation of Delaware. Filed June 18, 1929. Serial No. 286,114. 11 Claims. (Cl. 175—336.)



1. In an electromagnetic device, a coil having a core, an armature pivoted opposite one end of said core and in operative relation therewith, and means on said armature adjustably arranged parallel to the plane of the armature for limiting the movement of the armature against said core.

1,768,141. APPARATUS FOR MAKING BLOCKS. FREDERIC D. PFEFFER and FRED TROTTER, Fort Dodge, Iowa, assignors to United States Gypsum Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 5, 1926. Serial No. 99,816. 5 Claims. (Cl. 25—42.)

5. A continuous block forming machine which comprises movable open top forms and means for discharging continuously a plastic mass into the forms, gauging means to limit the thickness of plastic material applied to the forms, movable means extending above the upper edges of the forms at the ends thereof for confining the plastic mass therebetween, and an agitator having the fingers which reciprocate in the direction of movement of the

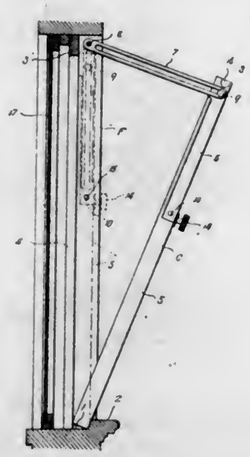


forms for engaging the plastic mass in advance of the gauging means to agitate and assist in leveling the plastic mass before it reaches the gauging means.

1,768,142. CURING OF TOBACCO. WILLIAM A. PIKE, HUTCHISON M. PIKE, and WILLIAM T. HENRY, Springfield, Tenn. Filed Nov. 7, 1927. Serial No. 231,770. 1 Claim. (Cl. 131—6.)

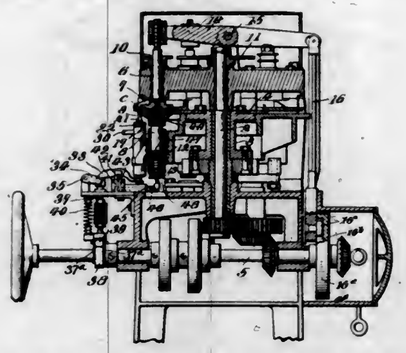
The process of curing tobacco, which consists in subjecting the newly cut leaves to heat sufficient to expand the sap therein and commingling with said heat fumes from a tarry substance embodying the properties of creosote, lignin and acetic acid, commingling the fumes with the sap, thus causing an entire impregnation of the fumes throughout the leaf body before the sap is evaporated therefrom, and continuing the subjection of the tobacco to heat until thoroughly dried.

1,768,143. CASEMENT. ALDEN A. POTTER, Montgomery County, Md. Filed Sept. 26, 1927. Serial No. 221,953. 6 Claims. (Cl. 189—67.)



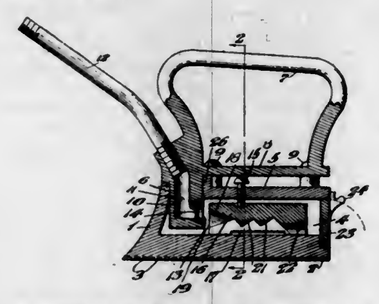
1. The combination with a frame therefor of a casement; means adapted to limit the movement of the casement when it is pivoted on its lower edge; and reciprocable means adapted to co-act with said limiting means to furnish a hinge for said casement at its upper edge.

1,768,144. MACHINE FOR COATING CAN ENDS. FREDERICK A. PRAHL, New York, N. Y., and HENRY A. FINK, Chicago, Ill., assignors to Continental Can Company, Inc., New York, N. Y., a Corporation of New York. Filed Feb. 1, 1928. Serial No. 251,092. 5 Claims. (113—80.)



1. A can end coating machine including in combination, upper and lower chucks rotating about a common axis, means for giving said chucks a relative movement toward and from each other to clamp and release a can end, with the channel to be coated facing downwardly, a nozzle located beneath the can end and disposed so as to discharge a coating of sealing material against the under face of the channel, a pipe attached to said nozzle through which sealing material may be supplied to the nozzle under pressure, a valve mechanism for controlling the discharge of the sealing material from said nozzle, and means for rendering said valve mechanism ineffective when no can end is positioned for coating.

1,768,145. GAS IRON. CARL RADITSCH, Camden, N. J. Filed Mar. 23, 1928. Serial No. 264,099. 3 Claims. (Cl. 158—23.1.)

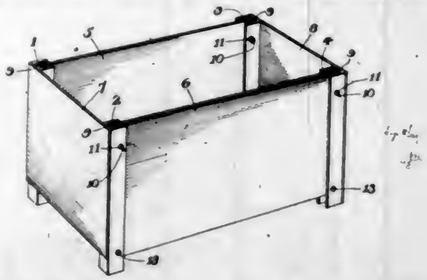


3. The combination with a gas iron having a combustion chamber with means to feed commingled air and fuel under pressure to it and provided with a vent, of a deflector into which said feeding means discharges, said deflector being open at its ends and bottom and having its top face forming baffles diverging towards the heel of the iron, the opening at the rear of said deflector being restricted and at the opposite end curving outwardly, the side walls of said deflector at its bottom being cut away to form passages for the products of combustion and a controllable opening at the rear of the iron through which said deflector is removable.

1,768,146. RETAINING DEVICE OR FORM WHEN EXCAVATING. WINFIELD SCOTT RAMEY, Utica, Ohio. Filed Nov. 22, 1928, Serial No. 321,160. Renewed Apr. 12, 1930. 5 Claims. (Cl. 61—41.)

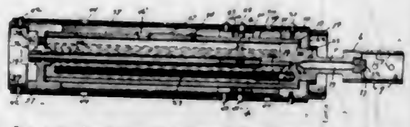
1. A retaining device for the purpose set forth comprising a set of corner posts each provided with a channel,

and walls secured to said posts for connecting them together, supporting members extending across said channels in proximity to the lower ends of the posts, side walls having their ends positioned in said channels, said walls



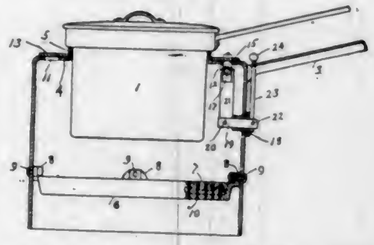
seating on said members, and means extending through said posts and side walls in proximity to the upper ends thereof for detachably connecting the side walls to said posts.

1,768,147. SOLDERING IRON. FREDERICK R. RAYMOND, San Francisco, Calif. Filed Oct. 3, 1928. Serial No. 310,110. 2 Claims. (Cl. 158—27.)



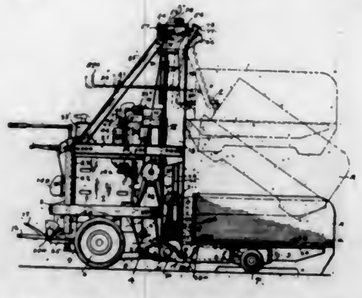
2. In a tool of the character described a reservoir having a neck portion provided with a bore therethrough, a burner tip carried by said neck portion, a head surrounding said burner tip and secured to said neck, a soldering tip secured to said head, a ring secured to said neck, a cap secured to said reservoir at the opposite end thereof from said ring, a casing extending between said ring and said cap, said casing being formed by two parts, one of said parts being secured to said ring, the other of said parts being rotatably supported on said cap and a needle valve extending through said cap and adapted to close said bore in said neck, means carried by said casing for rotating said needle valve, said casing being spaced from said reservoir, a safety valve secured to said reservoir and positioned in the space between said reservoir and said casing, and ports formed in said casing to permit the escape of excess pressure created in said reservoir.

1,768,148. SAFE HEAT COOKING UTENSIL. ROBERT EDWIN REARDON, Columbia, Pa. Filed Nov. 1, 1928. Serial No. 316,477. 7 Claims. (Cl. 53—1.)



1. A cooking utensil having a container vessel, supporting means for said container vessel forming in combination therewith an air well about said container, normally closed at top and sides, means for admitting heated air to said well and shielding said container from flame contact, and cooker enclosed thermostat means actuated by said heated air in the air well for venting superheated air from said well.

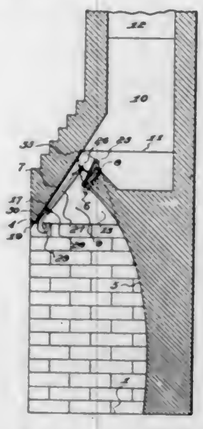
1,768,149. INDUSTRIAL TRUCK. EDWARD H. REMDE, Cleveland, Ohio, assignor to The Baker-Raulang Company, Cleveland, Ohio, a Corporation of Ohio. Filed Aug. 25, 1924. Serial No. 733,890. 27 Claims. (Cl. 214—65.)



1. In apparatus of the class described, the combination of a truck frame, wheels for the frame, an elevating member movably mounted on said frame and having a horizontal position adapted to support a supporting means during its movement, means for raising and lowering said elevating member, an arm swingably mounted on said frame and provided with an element movable into and out of the path of movement of the supporting means, whereby said element when in one position engages one end of the supporting means to tilt the latter relative to said elevating member as said member moves in one direction.

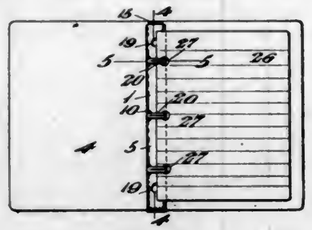
25. A combination according to claim 13 in which said pivotal supporting means comprises a part movable into and out of the vertical path of travel of said body, whereby said body may be raised above said supporting means without interference, the said supporting means being then movable into the path of movement of said body to engage said body when lowered.

1,768,150. FIREPLACE. ERI H. RICHARDSON, San Mateo, Calif. Filed May 8, 1926. Serial No. 107,668. 13 Claims. (Cl. 126—288.)



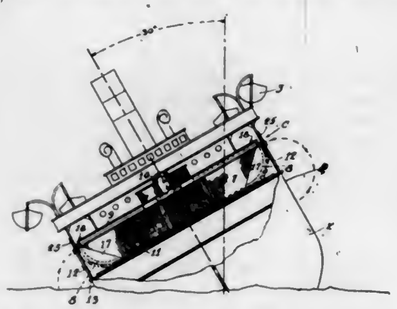
1. A fireplace including a narrow soffit, a fireback extending a substantial distance above said soffit but spaced therefrom to form a hood, a smoke chamber, a flue, a throat of restricted width but of a length equal to the full width of the fireplace opening leading from said hood to said smoke chamber, the smoke chamber being of the full width of the fireplace opening adjacent the throat and gradually converging to said flue, said flue and said throat being of substantially the same cross sectional area.

1,768,151. LOOSE-LEAF BINDER. WILLIAM A. RINGLER, Philadelphia, Pa. Filed Aug. 19, 1925. Serial No. 51,109. 1 Claim. (Cl. 129—24.)



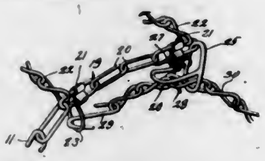
A loose leaf binder, comprising a base member folded to form a rectangular tube, a filler carrying member hinged to said base member, provided with filler retaining loops and with a hook, and a slide in said tubular member cooperating with said hook to secure said loops in their locked or unlocked position, said base having deflected portions to secure it to its cover, and said base and slide having registering openings to receive a tool to clinch the ends of such portions.

1,768,152. EMERGENCY SECTION FOR SHIPS. CHARLES F. ROBIN, San Francisco, Calif. Filed Jan. 19, 1929. Serial No. 333,689. 15 Claims. (Cl. 114—77.)



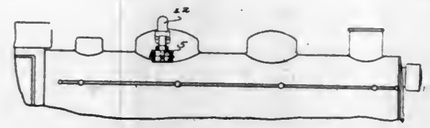
2. The combination with a boat, of a detachable floatable section, means for securing the section to the boat, said means automatically releasing said section from the boat when the section starts to float due to the sinking of the boat, said securing means being manually actuated for launching the section.

1,768,153. TIRE CHAIN. FREDERICH ROMAIN, Marias, Mont. Filed Oct. 27, 1926. Serial No. 144,573. 2 Claims. (Cl. 152—17.)



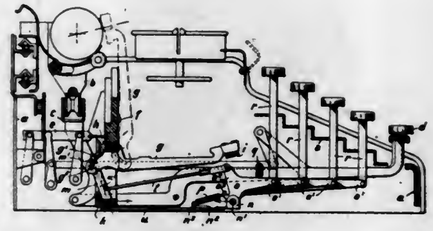
1. In a tire chain of the character described including a chain section having overlapping end portions, a locking member comprising a loop carried by one end portion, a U-shaped guide formed on said loop and extending at substantially right angles thereto, said guide being bent arcuately adjacent its outer end, a gripping means carried by said guide, the remaining end portion passing through said loop and said guide and being engaged by said gripping means, as and for the purposes set forth.

1,768,154. SIGNAL RECORDER. HARRY O. SAMPSON, Beaumont, Tex. Filed Jan. 30, 1928. Serial No. 250,600. 1 Claim. (Cl. 234—27.)



In combination, a pressure operated audible signal, a casing supported adjacent the signal, a recording mechanism arranged therein including a longitudinally shiftable spring urged member, a stamp carried thereby, a bell crank lever pivoted in the casing with one leg bearing against the spring urged member, a slotted member arranged to one side of the stem and through which said leg passes and operable to limit the pivotal movement of the bell crank lever, and a vane projecting laterally from the other leg of the bell crank lever and extending into the signal whereby actuating pressure flowing through the signal will move the vane to rock the bell crank lever in a direction to depress the spring urged member.

1,768,155. TYPEWRITER. ADOLF FRITZ SCHAUSS, Obersursel, near Frankfort-on-the-Main, Germany. Filed Apr. 25, 1927, Serial No. 186,408, and in Germany Nov. 30, 1926. 5 Claims. (Cl. 197—27.)

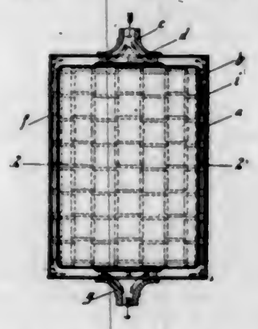


1. A typewriter having in combination on a frame, a slidable carriage and roller in the rear part of the said frame, a key board with rows of keys and corresponding key rods at the front of said frame, the length of the key rods decreasing in length from row to row towards the front of the frame, a stepped guide plate for the key rods, pivoted typebars adapted to swing upwardly for printing and arranged in a circular, substantially vertical sector, coupled levers pivotally mounted in a segment lying concentrically to the typebar sector, coupling means between the typebars and the coupling levers, angle levers pivotally arranged on a common spindle, and comprising substantially forwardly directed extensions of different lengths and substantially upwardly directed extensions of different heights, the shortest of said forwardly directed extensions being connected to the longest of the said key rods and progressively the longest of such extensions being connected to the shortest of the key rods and connecting rods connecting said upwardly directed extensions to the said coupling levers.

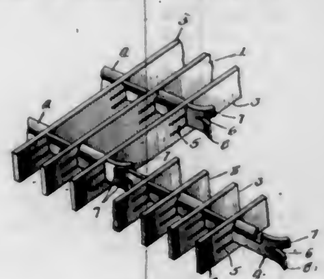
1,768,156. COOLING DRUM. WILHELM GOTTHILF SCHRÖDER, Lubeck, Germany. Filed May 16, 1928, Serial No. 278,163, and in Germany May 21, 1927. 1 Claim. (Cl. 257—95.)

A cooling drum having in combination two walls defining a free annular space, means whereby cooling liquid may be admitted to and withdrawn from the drum at the ends thereof so that the liquid may flow through said

annular space, and agitating means comprising a net work of wires located in said annular space to obstruct a portion of the flow of cooling medium in said space whereby to agitate it and cause it to be driven against the outer of said walls.

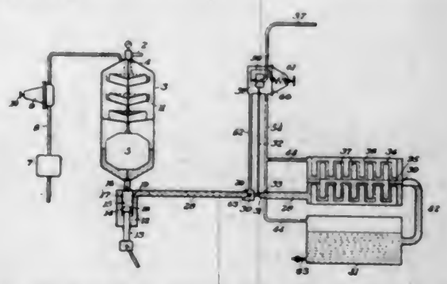


1,768,157. GRATING. CHARLES C. SHELDEN, Gary, Ind., assignor to Walter Bates Steel Corporation, Gary, Ind., a Corporation of Delaware. Filed Aug. 12, 1929. Serial No. 385,368. 6 Claims. (Cl. 94—30.)



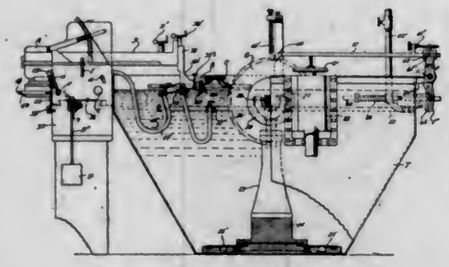
1. A connection for floor grating sections and the like having longitudinal members and cross members, comprising cross members having their end portions deflected from the normal plane of said cross members whereby to effect supporting engagement with an adjacent grating section.

1,768,158. METHOD AND APPARATUS FOR CARBONATING. PATRICK W. SHIELDS, Pittsburgh, Pa. Filed Oct. 20, 1923. Serial No. 669,684. 13 Claims. (Cl. 261—76.)



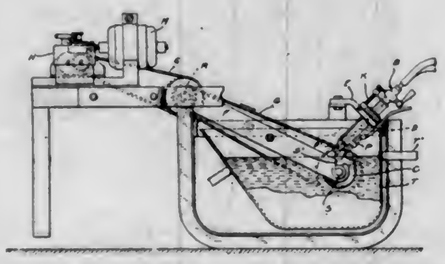
1. The method of impregnating a liquid with a gas, which includes degasifying the liquid and thereafter maintaining it substantially out of contact with any gas other than the gas with which it is to be impregnated, expanding the gas, and utilizing the lowered temperature thereof to cool the liquid, whereby the saturation point of the liquid is raised.

1,768,159. APPARATUS FOR HARDENING METAL SURFACES. ALBERT EDWARD SHORTER, London, and CYRIL LETT BOUCHER, Little Bookham, England, assignors to The Patent Gear Hardening Company, Ltd., London, England, a British Corporation. Filed Dec. 21, 1927, Serial No. 241,632, and in Great Britain Sept. 29, 1927. 12 Claims. (Cl. 266—4.)



1. A machine for surface hardening gear teeth, comprising a blowpipe for applying intense heat to a tooth, means for traversing said blowpipe relatively to said tooth, means whereby the tooth is progressively quenched immediately after intensely heating it, means operative to automatically turn the gear after a tooth has been treated to present a succeeding tooth for treatment, and means operative to shut off the gas supply for the heating flame of said blowpipe after each tooth has been treated.

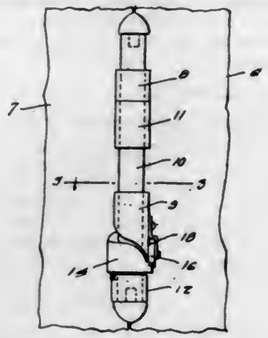
1,768,160. MACHINE FOR HARDENING IRREGULAR METAL SURFACES. ALBERT EDWARD SHORTER, London, and CYRIL LETT BOUCHER, Little Bookham, England, assignors to The Patent Gear Hardening Company, Ltd., London, England, a British Corporation. Filed Dec. 21, 1927, Serial No. 241,633, and in Great Britain Sept. 29, 1927. 11 Claims. (Cl. 266—4.)



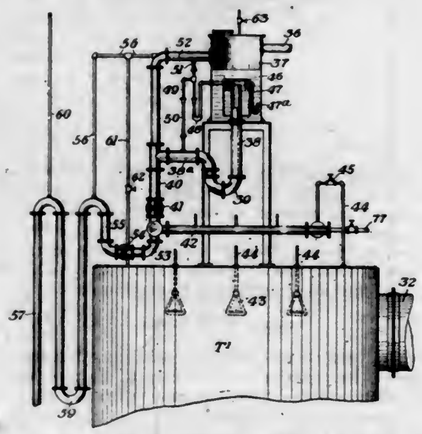
1. A machine for surface hardening metal articles having irregular peripheral surfaces, comprising the combination of a fixed high-temperature heating device, and means whereby successive parts of the peripheral surface of such article are presented to said device at a substantially uniform distance therefrom.

1,768,161. GRAVITY HINGE. WILLIAM T. SNYDER, Sodus, N. Y. Filed June 14, 1928. Serial No. 285,491. 2 Claims. (Cl. 16—154.)

1. In a hinge structure of the class described, a pair of complemental leaves provided with pivot knuckles, one of said knuckles being formed with a bearing opening, a bracket carried by said one knuckle and having a opening for cooperation with the first-named opening, a journal pin having flattened ends fitting into said openings, a bushing surrounding the pin, between the bracket and knuckle, and a roller mounted on said bushing, said roller having a beveled periphery, and a pintle pin extending through said knuckles and being provided with a cam track with which said roller is cooperable, one of said knuckles being provided with depressions forming keeper seats, and said cam having a depending projection forming a detent selectively receivable in said seats.

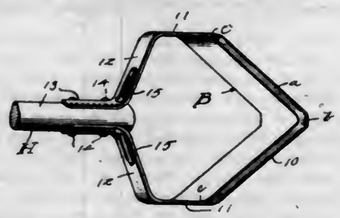


1,768,162. APPARATUS FOR TREATING GASES. FREDERICK W. SPEER, Jr., Pittsburgh, Pa., assignor to The Koppers Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Jan. 29, 1926. Serial No. 84,640. 8 Claims. (Cl. 137—78.)



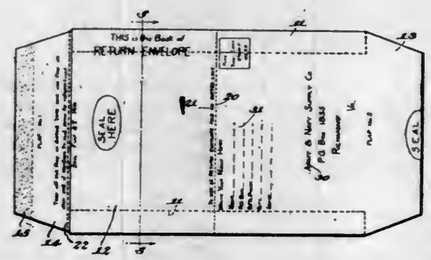
7. In combination, a treating tower, a reservoir, time controlled means for supplying liquid to the reservoir, means for accumulating liquid therein and for releasing it at a high rate of flow into the treating tower, and means for bypassing a portion of the released liquid.

1,768,163. PUSH HOE. JOHN E. STEINOUR and PETER BRUBAKER, Los Angeles, Calif. Filed July 2, 1929. Serial No. 375,372. 1 Claim. (Cl. 97—68.)



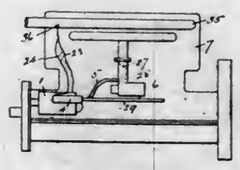
A push hoe comprising a V-shaped blade having its arms arranged on an acute angle one with respect to the other, the rear portions of said arms being continued by upwardly and rearwardly inclined arms, the forward margins of the first named arms and the lower portions of the second named arms being formed into knife edges, said second arms being continued by inwardly disposed arms terminating in outstanding arms, a handle member having an end portion disposed between the last named arms, and means for attaching said last named arms to the handle member, the forward apex portion of the blade being blunt and providing a straight edge substantially at right angles to the handle member.

1,768,164. ENVELOPE. NATHAN STERNHEIMER, Richmond, Va. Filed Dec. 28, 1928. Serial No. 329,013. 1 Claim. (Cl. 229—73.)



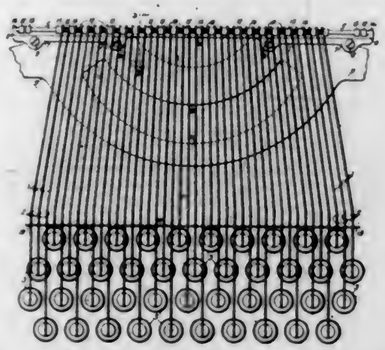
A remailing envelope of the single pocket type formed of two sheets of paper, each sheet having a sealing flap projecting from one end, one of the sheets being provided with a flange coextensive with each side edge and projecting laterally therefrom, the flanges being sealed to a face of the other sheet, the flap on one sheet extending from one end of the envelope while the flap on the other end of the sheet extending from the opposite end of the envelope, the envelope being foldable on a line which is intermediate the ends thereof, one of the flaps being employed for sealing the adjacent ends of the envelope in folded condition for first class mailing purposes, the other flap being insertable in the opposite open end for temporarily retaining the adjacent ends of the envelope in position when the envelope is folded for mailing printed matter.

1,768,165. METHOD AND MEANS FOR CONTROLLING THE OUTPUT OF ELECTRICAL MACHINES. CHARLES LAWRENCE STOKES, Los Angeles, Calif. Filed Nov. 10, 1924. Serial No. 748,933. 1 Claim. (Cl. 290—7.)



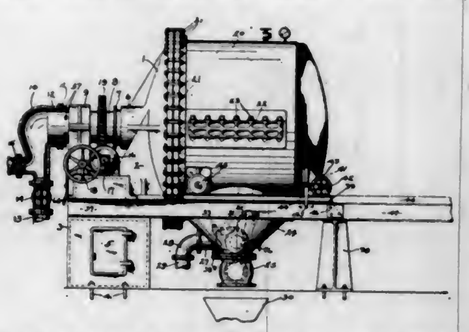
In combination, an engine, a storage battery, a generator operated by said engine for charging said battery, and means controlled by the heat of the exhaust and by the suction of said engine for maintaining a substantially constant output from said generator.

1,768,166. TYPEWRITING MACHINE. JOSEPH E. STRAUB, Syracuse, N. Y., assignor to Remington Typewriter Company, Ilion, N. Y., a Corporation of New York. Filed June 7, 1927. Serial No. 197,063. 15 Claims. (Cl. 197—106.)



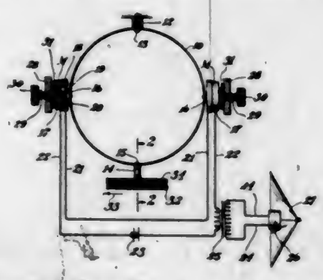
6. In a typewriting or like machine, the combination of a type bar, a manually operated actuating lever for the type bar, a fixed pivot on which said lever is adapted to turn, and a spring that exerts its force directly against said lever in the direction of and near the axis of said pivot.

1,768,167. FILTER. ERNEST J. SWEETLAND, Hazleton, Pa., assignor to Oliver United Filters Inc., San Francisco, Calif., a Corporation of Nevada. Filed June 3, 1925. Serial No. 34,509. 22 Claims. (Cl. 210—200.)



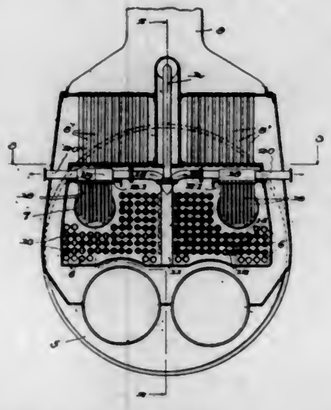
1. A filter having a horizontal shaft carrying a plurality of filter elements surrounded by a casing which is so mounted as to be movable in line with the axis of said shaft.

1,768,168. ELECTRIC TRANSMITTER. ADOLPH A. THOMAS, New York, N. Y. Filed Dec. 16, 1927. Serial No. 240,389. 21 Claims. (Cl. 179—100.41.)



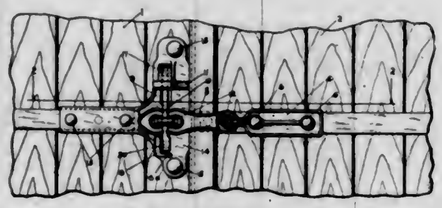
2. An electric transmitter comprising an elastic ring mounted to vibrate in its own plane by deformational movements, a stylus member for actuating said ring, a support to which said ring is attached at a point in its circumference, vibratory acoustic means connected to said ring diametrically opposite said point of support, a variable resistance device mechanically controlled by the vibrations of said ring, and means for supporting said resistance device independently of said ring.

1,768,169. SUPERHEATING SYSTEM FOR FIRE-TUBE BOILERS. PETER THOMSEN, deceased, Cassel, Germany, by Reinold Krummacher, administrator, Cassel, Germany, assignor to Schmidt'sche Heissdampf-Gesellschaft mit beschränkter Haftung, Cassel-Wilhelmshohe, Germany, a Corporation of Germany. Filed Jan. 22, 1927, Serial No. 162,873, and in Germany Jan. 23, 1926. 5 Claims. (Cl. 122—462.)



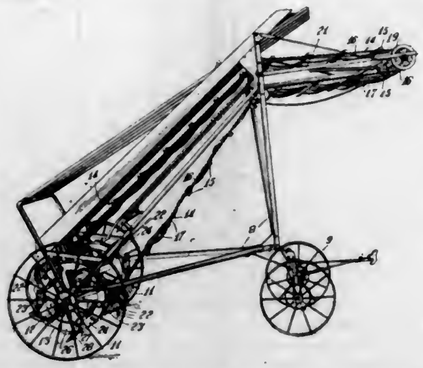
1. A superheater for a fire tube boiler, comprising besides the fire tubes a tube or chamber of large cross-section extending lengthwise of the boiler and adapted to conduct combustion gases, said superheater comprising a first stage disposed in the fire tubes of the boiler, and a second stage disposed in said tube or chamber and connected in series with said first stage to receive steam therefrom.

1,768,170. SECURING MEANS. KENNETH J. TOBIN, WILFRED A. BEAUCHAMP, and CONRAD R. VEGREN, Chicago, Ill., assignors to Camel Company, Chicago, Ill., a Corporation of Illinois. Filed May 31, 1928. Serial No. 281,852. 6 Claims. (Cl. 292—233.)



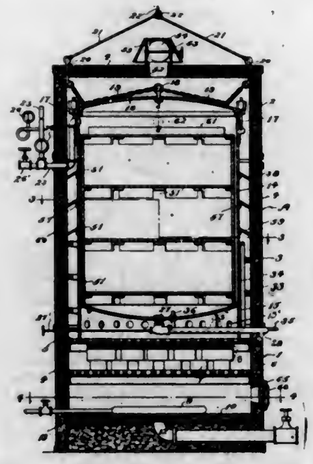
1. In combination a wall member, a door member, a hasp pivoted to one of said members and a keeper secured to the other of said members, said keeper being provided with a reciprocable bolt, a keeper lug for receiving said hasp and said bolt, and a guide lug for receiving said bolt, said keeper being open in rear of said guide lug, said bolt being provided with enlarged end portions for preventing removal of said bolt in either direction through said guide lug, the opening in rear of said guide lug being restricted adjacent to said guide lug but being of sufficient width above and below said guide lug to permit the passage therethrough of one of the enlarged end portions of said bolt.

1,768,171. HAY LOADER. BARNEY TOMS, Ottumwa, Iowa, assignor to Dain Manufacturing Company of Iowa, Ottumwa, Iowa, a Corporation of Iowa. Filed Oct. 25, 1926. Serial No. 143,827. 13 Claims. (Cl. 56—364.)



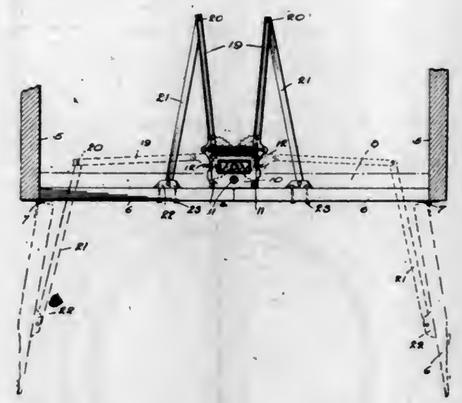
5. The combination with a hay loader comprising a traction driven cylinder and a carrier passing around said cylinder, said carrier having spaced transversely extending slats defining openings in said carrier, of a plurality of rows of teeth pivotally mounted on said cylinder and adapted in the normal forward travel of the machine to be projected through successive openings in said carrier, and means effective upon retrograde movement of said carrier for preventing any row of teeth which has been projected into one of said carrier openings from being withdrawn from such opening.

1,768,172. METHOD FOR COOKING FOOD. ARMSTEAD E. TRIPLETT, Dallas, Tex. Original application filed Apr. 3, 1929, Serial No. 352,257. Divided and this application filed Sept. 12, 1929. Serial No. 392,130. 5 Claims. (Cl. 99—11.)



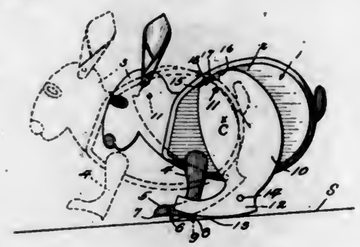
5. A method of cooking food which comprises placing said food in a container closed to the access of the atmosphere, applying heat externally of said container sufficient to effect the cooking of said food, and maintaining a uniform predetermined air pressure within said container throughout the cooking operation, said air pressure being maintained by continuously forcing through said container a stream of preheated filtered air, whereby thorough ventilation of and the elimination from said container of the gases and vapors generated during the cooking operation takes place.

1,768,173. DOOR-OPERATING DEVICE. GORDON TUCKER, Minneapolis, Minn. Filed Jan. 14, 1928. Serial No. 246,855. 4 Claims. (Cl. 268—67.)



1. In a door operating mechanism of the character described, in combination, a support having a pair of spaced apart pivots, a pair of cooperating gears adapted to be connected with the doors mounted upon said pivots, spring means between said gears and so disposed at one side of the pivots as to be tensioned as the gears rotate thru a portion of their movement past a dead center position with respect to the pivots and operative to complete the rotative movement of the gears thereafter, and link mechanism interposed between said gears and the doors to be actuated, whereby movement of either one of said doors will cause simultaneous movement of the other door.

1,768,174. GRAVITY-OPERATED FIGURE TOY. JOHN N. VASCONCELLOS, Honolulu, Territory of Hawaii. Filed May 2, 1927. Serial No. 188,373. 1 Claim. (Cl. 46—40.)



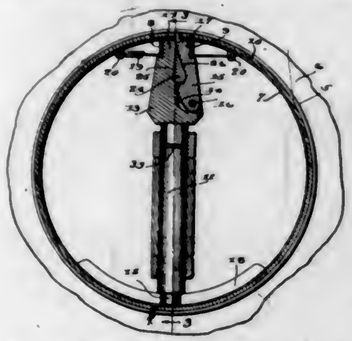
An automatic-motion toy comprising a body, a surface-contacting supporting member fixed with respect to the body at one side of the center of gravity thereof, means at the lower engaging end of the member for co-action with the surface to prevent slipping of the member when engaging the same, a second surface-contacting supporting member pivoted to the body at a point of the same side of the center of gravity thereof, the last mentioned member being provided in its upper edge with a recess concentric to the pivot, the end walls of the recess constituting abutments, and a pin projecting laterally from the body and into the recess.

1,768,175. PROCESS OF TREATING WOOD. FERNANDO SOMOZA VIVAS, New York, N. Y., assignor to International Fireproof Products Corporation, New York, N. Y., a Corporation of Delaware. Filed Oct. 8, 1927. Serial No. 225,037. 3 Claims. (Cl. 99—12.)

3. The process of treating wood to make the same insect-proof and fire-proof which comprises saturating the wood

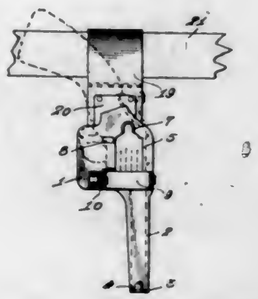
with a solution of sodium carbonate comprising substantially two and one-half pounds of carbonate to the gallon of water, drying the wood in vacuum until substantially sixty per cent of the water is removed, placing the wood in a solution of copper sulphate in substantially the proportion of one-half pound of sulphate to a gallon of water and forcing the solution into the pores of the wood under pressure, withdrawing the solution and drying the wood.

1,768,176. MOTOR-VEHICLE BRAKE. GUS WALKER, Huntington, W. Va. Filed Dec. 4, 1928. Serial No. 323,643. 5 Claims. (Cl. 188—194.)



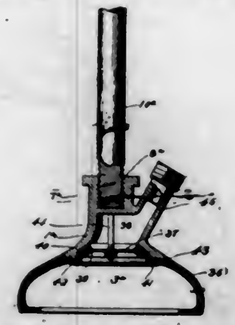
1. In a brake, a brake drum, a split brake band received therein, a fixed abutment engaging one end of the band to hold the latter stationary, a movable abutment engaging the opposite end of the band, and a manually operable element interposed between the two abutments and operating against the movable abutment.

1,768,177. GUN HOLSTER. GEORGE M. WANEE, Red Bluff, Calif. Filed Dec. 14, 1928. Serial No. 326,092. 1 Claim. (Cl. 224—2.)



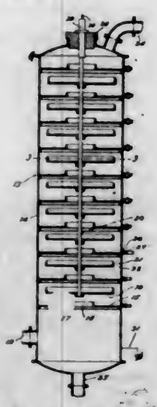
A holster of the class described comprising a supporting member having a reduced depending part formed with a bent end, a projection on said bent end for entering the muzzle end of the barrel of the gun, a yoke-shaped member hingedly connected with the supporting member and adapted to hold a gun on the supporting member when said yoke shaped member is in closed position, spring means for moving the member to open position, a latch member for holding the member in closed position, a bell crank pivoted to the supporting member and having its lower end connected with the latch member, an upward extension on the other end of the bell crank, a thumb piece extending at rightangles from the upper end of the extension whereby the thumb of the hand grasping the handle of the gun can depress the thumb piece to cause the bell crank to move the latch member to releasing position and spring means for holding the bell crank in a position with the latch member in latching position.

1,768,178. HYDRAULIC FORCE CUP. LAWRENCE R. WATSON, Portland, Oreg., assignor to M. & M. Sales & Mfg. Co., Inc., Portland, Oreg. Filed June 25, 1928. Serial No. 287,932. 2 Claims. (Cl. 4—256.)



1. In a waste pipe cleaner, a chambered body open at the bottom and having flexible side walls and an opening in its top, an inflexible member having a recess in its lower end for register with the opening in the top of the body and a handle receiving socket in its upper end, an apertured clamping plate removably connected with said inflexible member to engage and clamp the upper edge of the chambered body to said inflexible member.

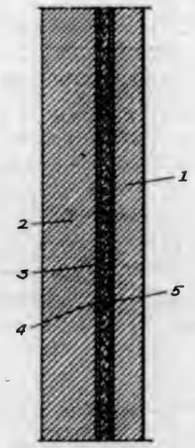
1,768,179. ART OF DISTILLATION. HARRY V. WELCH, Los Angeles, Calif., assignor to International Precipitation Company, Los Angeles, Calif., a Corporation of California. Filed July 22, 1925. Serial No. 45,197. 4 Claims. (Cl. 196—81.)



1. An apparatus for separating constituents of different volatilities from vapors containing the same comprising, a condenser provided with successively arranged means for cooling vapor passing therethrough in stages and with means for separately collecting liquids condensed due to such successive cooling stages and for maintaining in the condenser a body of liquid so collected in each stage so as to cause said liquid to be heated by the vapors therein, means for introducing vapors to said condenser, and means for subjecting vapors passing through such condenser to electrical precipitating operations at portions thereof adjacent the respective cooling means to separate therefrom suspended particles of condensed material.

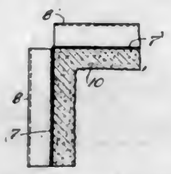
1,768,180. METHOD OF JOINING DISSIMILAR BODIES. EDWARD A. WERNER, Atlanta, Ga. Filed Mar. 5, 1928. Serial No. 259,316. 3 Claims. (Cl. 72—0.5.)

1. A method of joining a body of wood with a body of stone comprising the coating of one surface of the wood with an animal-organic glue, applying a sheet of asbestos to the coated surface, simultaneously pressing and heating the assemblage to superdry the glue, applying a coating of shellac to one surface of the stone, releasing the



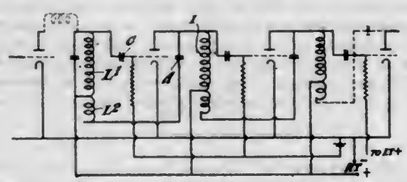
pressure on said assemblage and applying the coated surface of the stone to the exposed surface of the asbestos sheet while the preheated assemblage is still warm whereby the shellac is changed from a liquid to a solid insoluble mass

1,768,181. BUILDING MATERIAL. HALBERT E. WHITE, Tampa, Fla. Filed Oct. 28, 1926. Serial No. 144,789. 4 Claims. (Cl. 72—16.)



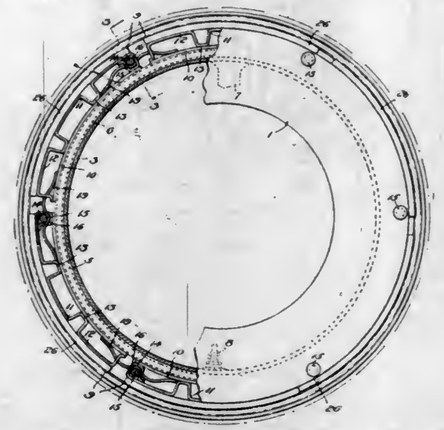
2. A fabricated building element comprising a sheet of metal having a plurality of longitudinal dove-tailed ridges formed integrally therein, said ridge portions being severed in a transverse line across the sheet to permit the bending of the sheet along such line.

1,768,182. THERMIONIC VALVE CIRCUITS. PETER WILLIAM WILLANS, Pattishall, Towcester, England. Filed Apr. 5, 1926, Serial No. 99,944, and in Great Britain Apr. 7, 1925. 3 Claims. (Cl. 179—171.)



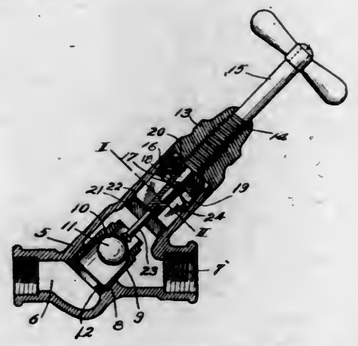
1. Apparatus for neutralizing capacity coupling between the grid and plate circuits of a thermionic valve comprising a transformer, a capacitative device and an inductance, said transformer having one of its windings connected between the plate and the filament system and the other winding between the grid and the filament system, said capacitative device being connected in series with one of said windings and, together with said one winding, across said inductance, said capacitative device moreover having a capacity of the order of ten or more times the capacity between the plate and grid of the thermionic valve and constituting, with said inductance and said latter winding, a resonant oscillatory circuit, tuned to the required frequency of which it is the dominating capacity.

1,768,183. BRAKE MECHANISM. WILLIAM E. WINE, Toledo, Ohio. Filed July 7, 1927. Serial No. 203,995. 7 Claims. (Cl. 188—78.)



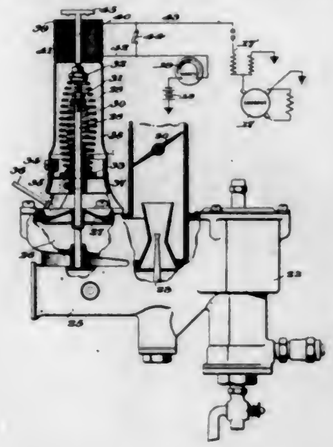
1. A brake mechanism for a vehicle comprising a member having an annular groove, a plurality of shoes circumferentially arranged within said groove, means cooperable with each shoe for moving all portions thereof radially of said member into engagement with a rotating part of the vehicle for arresting movement of the latter, and means cooperable with the shoes for preventing substantial movement thereof circumferentially of the groove, said shoes being radially slidable with respect to said last named means and the latter being arranged so as to maintain said shoes in tension when they are operated to arrest forward movement of the car.

1,768,184. VALVE. ALFRED E. WOLFF, Kansas City, Mo. Filed Dec. 10, 1927. Serial No. 239,061. 4 Claims. (Cl. 277—27.)



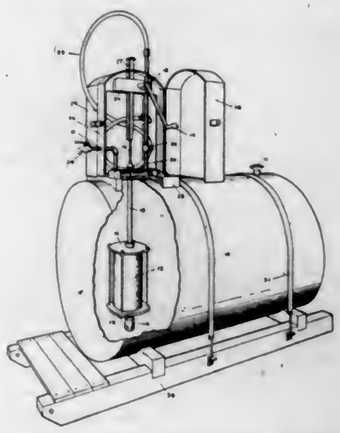
1. A valve of the class described including a body portion having an inlet opening and an outlet opening, a removable ball valve housing within the valve body and having an internal valve seat, a ball valve in the valve housing and adapted to contact with the internal valve seat to restrict the passage of liquid through the valve body, a manually controlled removable main valve and auxiliary valve operating in the valve body and adapted to engage one end of the valve housing, and means for substituting the auxiliary valve for the main valve.

1,768,185. HYDROCARBON MOTOR. LIONEL M. WOOLSON, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Dec. 9, 1920. Serial No. 429,585. 21 Claims. (Cl. 123—124.)



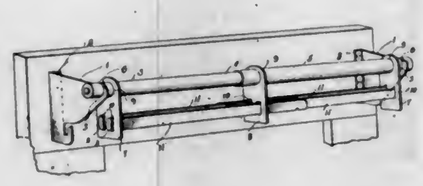
1. A carburetor for a hydrocarbon motor comprising an auxiliary air supply duct, a valve controlling said duct, resilient means for controlling said valve, means operable at a distance from said resilient means for adjusting the control of the latter, and means including a plunger actuated when the motor reaches the lowest cruising range speed for controlling said valve, said resilient means being effective to yieldingly resist movement of the valve induced by the suction of the motor when the latter reaches a speed greater than the highest cruising range speed.

1,768,186. COMBINED PORTABLE GASOLINE TANK AND PUMP. FRANK J. VNUK, Clarkson, Nebr. Filed Aug. 13, 1928. Serial No. 299,362. Renewed Feb. 27, 1930. 1 Claim. (Cl. 221—80.)



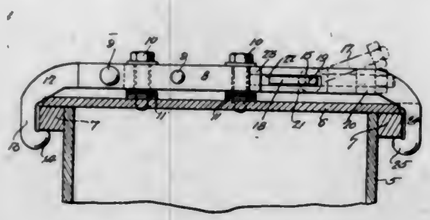
A portable liquid dispenser including a container having a U-shaped trap secured thereto at its extremities, a liquid conductor communicating with the interior of said container and projecting out through said strap, manually operable means within said U-shaped strap for forcing the liquid from said container through said conductor, and a pair of closures hingedly secured to the opposite sides of said strap whereby the interior portion of said strap may be entirely enclosed to prevent access to said manually operable means, one of said closures being provided with a notch for embracing said conductor with said nozzle positioned against the inner side of said closure whereby access to said nozzle may be had only by first opening said closure.

1,768,187. COMBINED WINDOW SHADE, CURTAIN, AND DRAPERY SUPPORT. WILLIAM BUSHEY and ERNEST H. BUSHEY, Plattsburg, N. Y. Filed Dec. 30, 1927. Serial No. 243,665. 2 Claims. (Cl. 156—23.)



1. A device of the class described, comprising a pair of spaced brackets, a rod supported by the brackets, outer plates slidably adjustable on the rod, an intermediate plate supported by the rod, paired bars having their outer ends engaged in the outer plates and their inner ends supported in overlapped relation in the intermediate plate, said bars being disposed in spaced parallel relation.

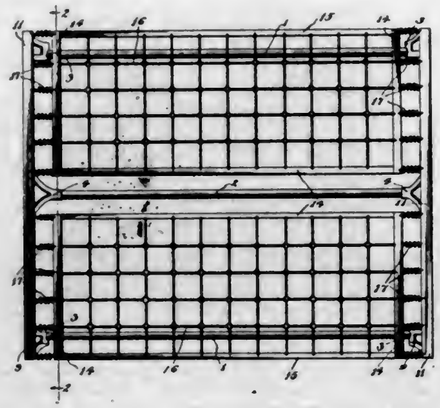
1,768,188. DOOR FASTENER. EARL M. CHAMPION, Jr., Royersford, Pa., assignor to Royersford Foundry and Machine Company, Incorporated, Royersford, Pa., a Corporation of Pennsylvania. Filed Jan. 20, 1928. Serial No. 248,172. 2 Claims. (Cl. 220—57.)



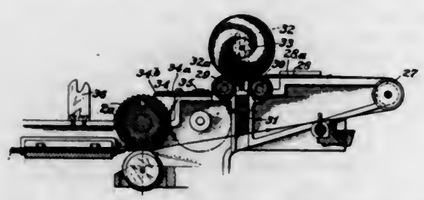
1. The combination with a receptacle having an opening, a bead surrounding the opening on the exterior of the receptacle, and a door for the opening having marginal engagement with the receptacle, of a door securing device comprising a member forked for a considerable distance at one end and having a depending portion at its other end for engagement with the said bead, means in said fork for the reception of a slidable block, said block having a depending portion at its outer edge for engagement with the said bead, and a locking means to fix the member and block in their desired position relative to each other.

1,768,189. BEDSPRING. MOSES L. COHN, Brooklyn, N. Y. Filed Apr. 11, 1929. Serial No. 354,395. 2 Claims. (Cl. 5—203.)

1. A bed spring comprising a frame having side bars, and a center bar extending longitudinally of the frame, end bars disposed in transverse relation to the side bars and center bar and above their ends, brackets carried by the side bars at their ends and extending upwardly therefrom and secured to the end bars, brackets secured tightly about the ends of the center bar and each having arms extending upwardly from opposite sides of the center bar in diverging relation to each other and secured to the adjacent end bar, mattress supporting units extending between said end bars at opposite sides of said center bar, and springs connecting said units with the end bars.



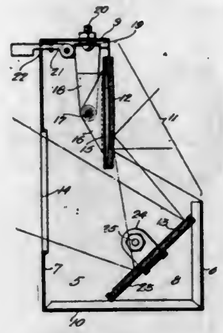
1,768,190. WINDING MACHINE. ARTHUR E. COLLINS, Cuyahoga Falls, Ohio, assignor, by mesne assignments, to Miller Rubber Company Inc., Wilmington, Del., a Corporation of Delaware. Original application filed Dec. 14, 1926, Serial No. 154,748. Patent No. 1,687,607, dated Oct. 16, 1928. Divided and this application filed Apr. 27, 1928. Serial No. 273,293. 6 Claims. (Cl. 242—66.)



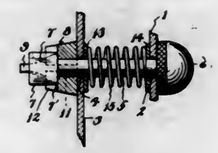
5. In a winding machine of the type employing a pair of spaced driven winding rolls and winding spools adapted to be supported by and driven through frictional contact of said rolls and the stock wound on said spools, said spools having axial projections, and guide means for said spools comprising uprights located midway of said re-winding rolls and having vertical slots in their juxtaposed faces to receive said spool projections, and having angular entrance slots adjacent the periphery of one of the winding rolls, and a ribbon support adjacent said one of the winding rolls, said support having ribbon receiving channels intersected by a transverse cutter guide, the portions of the channels adjacent said winding roll being widened out sufficiently to receive the spools, whereby the latter may be placed in the channels for ribbon attachment and then rolled over the face of the winding roll for entering the hubs in the guides.

1,768,191. TRAFFIC-SIGNAL PROJECTOR. ALFRED I. CROOK, Lansdowne, Pa. Filed May 11, 1927. Serial No. 190,458. 2 Claims. (Cl. 88—1.)

1. A traffic signal projector comprising a casing, having a finding aperture and an observing aperture therein; a convexed mirror adjustably mounted in said casing adjacent said finding aperture; a frame for supporting said convexed mirror; a yoke member for supporting said frame; a pivot member between said frame and said yoke element permitting adjustment of said frame in a vertical plane relative to said yoke; a pivot member between said yoke and said casing, permitting adjustment of said yoke element in a horizontal plane; and a reflecting mirror so located in said casing in a position relative to said finding mirror and said observing aperture as to be capable of receiving a reflection of the signal image from the finding mirror and to reflect said image through said observing aperture.



1,768,192. LICENSE-PLATE HOLDER FOR AUTOMOBILES. WILLIAM DEPPER, Donora, Pa. Filed Nov. 14, 1928. Serial No. 319,326. 1 Claim. (Cl. 40—125.)

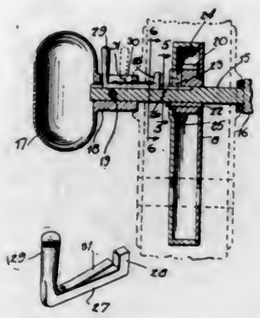


A holder comprising an unthreaded bolt adapted to be passed through alined openings formed in a support and an article to be held and having a head at one end to bear against the support, the other end of the bolt being provided with a flat wing extending longitudinally of the bolt and projecting from opposite sides thereof, a nut having an unthreaded bore to receive said bolt and slots leading from opposite sides of the bore for passage of the projecting side portions of the wing through the nut, the outer face of the nut having grooves formed therein leading from opposite sides of the bore between said slots and constituting seats to receive the projecting side portions of said wing and prevent outward movement of the nut off the bolt, wings projecting outwardly from the nut with the bore and slots disposed between the same, the wing of said bolt being spaced from the wings of the nut when seated in said notches and adapted to be grasped to facilitate rotation of the nut and bolt relative to each other, and a spring coiled about said bolt to bear against the support and article and yieldably resist movement of the nut and wing of the bolt away from each other.

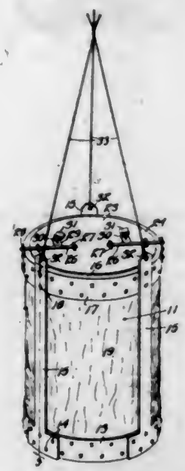
1,768,193. DOOR LATCH. SALVATORE DE VITA, Philadelphia, Pa. Filed May 11, 1928. Serial No. 276,925. 1 Claim. (Cl. 292—359.)

In combination with the casing of a mortise lock having a latch spindle provided with a longitudinal groove in its inner end, said lock casing having a spring projected latch bolt and an actuator keyed on the spindle for retraction of the latch bolt when the spindle is turned, the inner side of the lock casing and the actuator having

normally registered slots, a dog slidable in the groove of the spindle and normally disposed outwardly of the lock casing, a right angularly projecting lug at the inner terminal end of the dog adapted upon inward sliding movement of said sliding dog to enter the registering slots of the actuator and the lock casing to lock the spindle and actuator against turning and be limited in the sliding movement by the lug engaging the bottom wall of the slot in the actuator, a knob secured on the inner end of the latch spindle and having a socket provided with a longitudinal elongated slot closed at its outer end, an outwardly projecting handle on the outer end of the dog slidably projecting through said elongated slot, and a leaf spring attached to the outer side of the dog and extending within the socket of the knob with its inner end free.

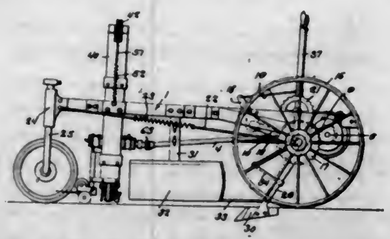


1,768,194. ARTICLE CARRIER FOR AIRPLANE DELIVERY. SOPHIA O. DONNELL, Tampa, Fla. Filed Apr. 4, 1928. Serial No. 267,399. 3 Claims. (Cl. 150—51.)



1. An article carrier for airplane delivery comprising a bottom having an upstanding flange, a top having a depending flange and an inwardly projecting flange for supporting a detachable cover for said carrier, spaced uprights on the exterior of said upstanding flange and said depending flanges holding the top and bottom apart and forming a skeleton frame, a water proof casing having its upper and lower extremities disposed within said last mentioned flanges, an annular band within each end of the casing reenforcing the same and maintaining it in extended position, and fastening means extending through the uprights, flanges, casings and bands and binding them together to form a unitary structure, substantially as set forth.

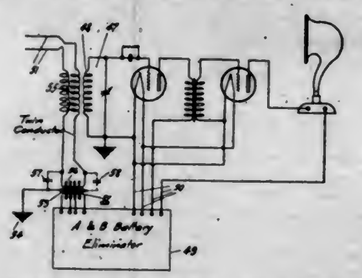
1,768,195. BEET-HARVESTING MACHINE. FRED DRISCOLL, Nisland, S. Dak. Filed Sept. 19, 1927. Serial No. 220,579. 5 Claims. (Cl. 55—107.)



2. In a beet harvester, a wheel supported frame, a second frame, means connecting said second frame to said first frame for vertical shifting movement with respect thereto, means yieldingly supporting said second frame, beet top cutting means carried by said second frame, a beet top contacting roller arranged in advance of said cutting means, means for supporting said roller from said second frame, ground contacting rollers arranged at the ends of said first roller, means yieldingly connecting said ground contacting rollers to said roller supporting means, and operating means for said cutting means.

3. In a beet harvester, a wheel supported frame, a second frame, means connecting said second frame to said first frame for vertical shifting movement with respect thereto, means yieldingly supporting said second frame, bearings secured to said second frame in relatively spaced relation, a shaft journaled in said bearings, a pulley secured to said shaft between said bearings, other pulleys journaled on said second frame below said first pulley, a band saw supported by said pulleys, and driving means connected to said shaft.

1,768,196. RADIO PICK-UP SYSTEM. HAROLD F. ELLIOTT, Palo Alto, Calif., assignor, by direct and mesne assignments, to Victor Talking Machine Company, Camden, N. J., a Corporation of New Jersey. Filed Mar. 11, 1927. Serial No. 174,456. 6 Claims. (Cl. 250—20.)

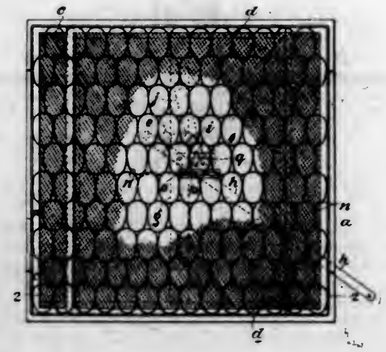


1. In a radio receiving system, means for receiving electrical impulses and acting upon the received impulses to make them perceptible, said means including devices to which electrical energy must be passed, means for supplying electrical energy to said devices, said means including a plurality of leads formed into a multiple conductor transformer winding coupled to the input side of the system, and means providing a counterpoise for that part of the supplying means which connects to the leads to form an absorbing circuit.

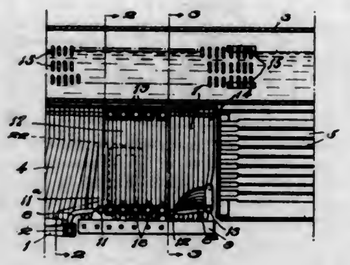
1,768,197. EGG-TURNING TRAY FOR INCUBATORS. EDWARD LEE GODFREY and GEORGE WILLIAM WRENTMORE, Stroud, England. Filed May 19, 1927, Serial No. 192,732, and in Great Britain June 29, 1926. 2 Claims. (Cl. 119—44.)

1. In an incubator, an egg tray comprising a frame, a strut extending across the lower side of said frame, a

relatively fixed grid supported by the frame, a movable bottom member spaced below the grid and provided with a slot, a stud connecting said strut and said grid and extending through said slot and means mounted on said strut and active to move said bottom member.



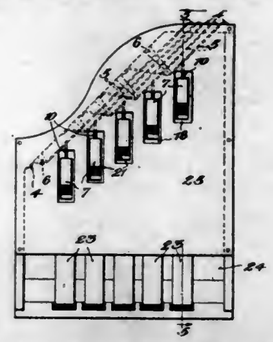
1,768,198. LOCOMOTIVE BOILER. OTTO H. HARTMANN, Cassel-Wilhelmshohe, and WILHELM JUNG, Cassel, Germany, assignors to Schmidt'sche Heissdampf-Gesellschaft, m. b. H., Cassel-Wilhelmshohe, Germany, a Corporation of Germany. Filed Feb. 9, 1928, Serial No. 253,140, and in Germany Feb. 14, 1927. 2 Claims. (Cl. 122—37.)



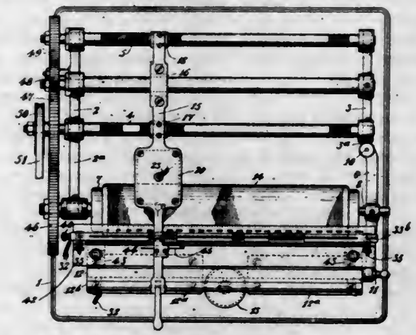
1. A locomotive boiler comprising a water-tube fire box, upper and lower longitudinal headers to which the tubes in said fire box are connected, a high pressure steam drum, coils in said drum communicating with the headers and with the tubes comprising the fire box, a fire-tube boiler in which low pressure steam is generated by combustion gases from said fire box, water tubes connected to the aforesaid headers forming a constricted combustion channel located between said fire box and said fire-tube boiler, and a plurality of additional tubes traversing said combustion channel, said additional tubes communicating with transverse chambers which are connected to the aforesaid headers whereby a complete circulation through the additional tubes in the combustion channel and the coils in the aforementioned drum is effected.

1,768,199. MUSICAL TOY. GRANVILLE A. HEIMER, Nazareth, Pa. Filed May 21, 1929. Serial No. 364,880. 4 Claims. (Cl. 84—404.)

2. A musical toy of the type described, comprising a vibrant wire, a toy piano on which said vibrant wire is mounted in tense position, a plectrum disposed so that its end may be brought into contact with the vibrant wire to sound same, a means for resiliently supporting the plectrum, a pivotally mounted member on which the resilient plectrum carrying member is mounted, and a pivotally mounted piano key having its end directly connected with the pivoted plectrum carrying member.

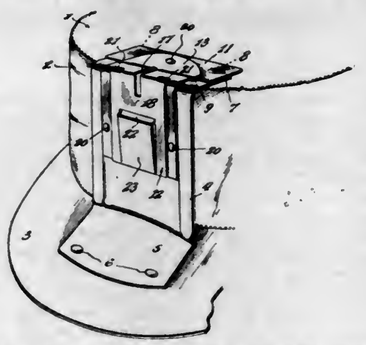


1,768,200. SOUND-REPRODUCING MACHINE. MICHAEL HOFFMAN, Brooklyn, N. Y. Filed Oct. 11, 1927. Serial No. 225,407. 16 Claims. (Cl. 274—22.)



1. In a sound reproducing machine, the combination with the reproducer arm and feed mechanism therefor, of means for automatically discontinuing and resuming sound reproduction at predetermined points while continuing the forward feed of the reproducer arm, and thereby automatically eliminating from reproduction certain parts of a sound record.

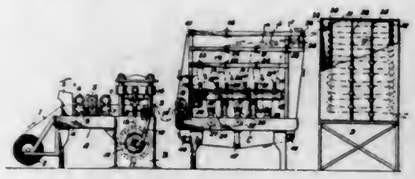
1,768,201. LAMP HOLDER FOR MINERS' CAPS. ELI ISRAEL, Wilkes-Barre, Pa., assignor of one-half to Ralph Israel, Wilkes-Barre, Pa. Filed Apr. 11, 1929. Serial No. 354,420. 8 Claims. (Cl. 240—60.)



1. A lamp supporting attachment for caps comprising a bracket having a flange extending rearwardly from its

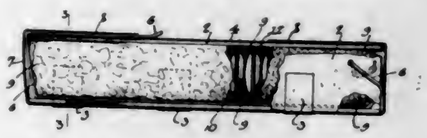
upper end, a depending lip being provided intermediate the length of said flange and formed with a vertical passage intermediate its width constituting a socket, a slot being provided leading from the socket through the flange and upper end of the bracket whereby a securing prong of a lamp may be engaged in the socket with the upper portion of the prong projecting forwardly through the slot and supporting the lamp in front of the bracket.

1,768,202. MATCH. FELIX KÄPPLER, Dresden, Germany. Filed Sept. 19, 1928. Serial No. 306,998. 5 Claims. (Cl. 144—51.)



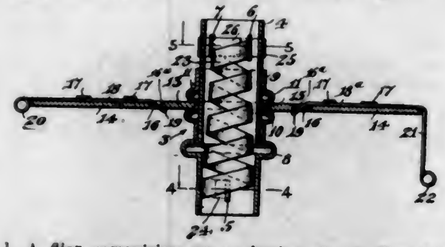
1. A process for the manufacture of matches of rectangular form from strips of pasteboard and the like from the breadth of which is a multiple of the length of the matches to be made, comprising dividing the broad strip into unit strips the breadth of which is substantially equal to the length of the matches to be made, the dividing lines being in the form of rows of rectangular teeth with rectangular gaps between them, the breadth of each tooth and the breadth of each gap being equal to the breadth of the individual matches to be made, the teeth and gaps along the edge of one unit strip meshing with the gaps and teeth along the edge of the adjacent unit strip so that no material goes to waste, and the teeth and gaps along one edge of each unit strip being opposite to gaps and teeth respectively along the other edge of the same unit strip, saturating the broad strip with liquid paraffin, separting the unit strips from one another along the lines of interengaging teeth, applying ignition material to the projecting teeth along both edges of each unit strip, drying the ignition material, and dividing up the unit strips by transverse cuts at distances equal to the breadth of a tooth to obtain individual matches with their heads projecting to the right and left alternately.

1,768,203. SPECIAL PACKAGE FOR COMPACTS. LESSING L. KOLE, Milwaukee, Wis. Filed Jan. 12, 1929. Serial No. 332,550. 5 Claims. (Cl. 206—65.)



1. A special package for rouge and face powder compacts, comprising tubular cardboard or similar casing elements open at the end and of appropriate size to provide a narrow channel between the longitudinal free edges of same, a flexible hinge element hingedly connecting the aforesaid casing elements along adjacent longitudinal edges, a cord secured to one of the casing elements near one end thereof and extending around the end of the container and longitudinally in the channel above described and around the other end of the container, and a cord binding strip of paper affixed to the package and extending around both ends of the container and along one side thereof and concealing all but the ends of the cord, said paper strip permitting of the package being opened by merely pulling the cord sufficiently to tear the paper strip

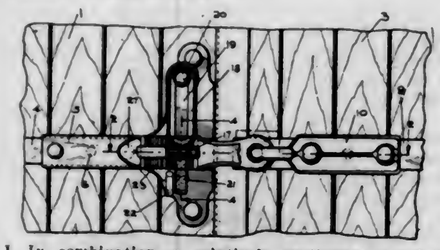
1,768,204. FLYER FOR SILK SPINNING MACHINES. JOHN E. LAWTON, Coudersport, Pa. Filed Mar. 6, 1929. Serial No. 344,771. 10 Claims. (Cl. 118—57.)



1. A flier comprising an anchoring sleeve, flier wires, means adapted to rotatably connect the flier wires to the sleeve, and a spiral spring arranged within the sleeve and having its ends secured thereto and adapted to frictionally engage a spindle.

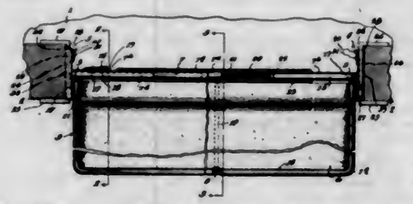
10. A flier comprising a base plate provided with pairs of oppositely extending projections, and a flier wire resting upon the base plate and said oppositely extending projections engaging said wire for retaining the wire in engagement with said base plate.

1,768,205. HASP CONSTRUCTION. RICHARD A. LEHNHOFF and GEORGE R. TREPTOW, Chicago, Ill., assignors to Camel Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 11, 1927. Serial No. 167,404. 9 Claims. (Cl. 292—283.)



1. In combination, a relatively stationary member, a sliding door member, one of said members being provided with a plate, said plate having a staple secured thereto, and holding means for securing said plate upon said last mentioned member, the other of said members being provided with a hasp, a bolt cooperating with said hasp and said staple, said bolt being capable of a movement of translation across the face of said hasp, said hasp having an end portion overlying said holding means when said hasp is in operative position, said hasp having a staple receiving slot of greater length than the corresponding dimension of said staple and having abutment means for preventing endwise movement of said hasp relative to said staple when said locking bolt is in operative position.

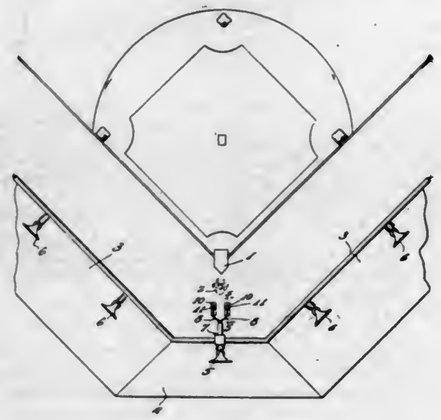
1,768,206. WEATHER SHIELD FOR FREIGHT CARS. ROBERT C. LEMONS and WILLIAM A. IRONS, Clifton Forge, Va. Filed June 11, 1928. Serial No. 284,550. 2 Claims. (Cl. 135—9.)



1. A canopy comprising a frame, a cover therefor, clamps, means yieldably connecting one of the clamps

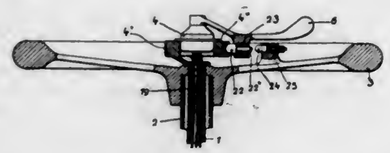
to the frame, means adjustably connecting the other clamp to the frame, and means for securing the other clamp in adjusted position.

1,768,207. ANNOUNCING APPARATUS. RAY E. LUMPKIN and ROY A. NOVE, San Antonio, Tex. Filed July 26, 1928. Serial No. 295,558. 5 Claims. (Cl. 179—1.)



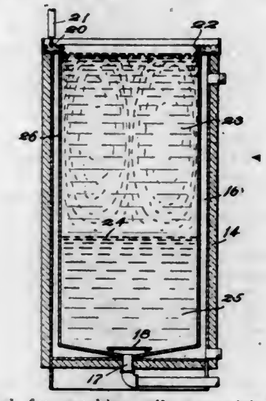
1. Announcing apparatus comprising a loud speaker having an energizing circuit including conductor wires and terminals for said wires embedded in insulation position for a person to stand thereon, companion mechanism to be worn by a person including a microphone, means to support the microphone in an operative position with respect to a person, conductor wires for said microphone, terminals for the microphone wires, and shoes having the terminals of the microphone wires secured against the under surface of the soles thereof, the microphone terminals having depending tongues constituting anti-slipping cleats and adapted to establish intimate contact with the loud speaker terminals when a person is standing thereon.

1,768,208. CIRCUIT CLOSER TO INDICATE TURNS OF A VEHICLE. AUGUSTIN MARŠIK, Prague, Czechoslovakia, assignor to Ceskomoravska-Kolben-Danek Akciova Spolecnost, Prague, Czechoslovakia, a Corporation of Czechoslovakia. Filed Mar. 21, 1928, Serial No. 263,423, and in Czechoslovakia Apr. 1, 1927. 4 Claims. (Cl. 200—59.)



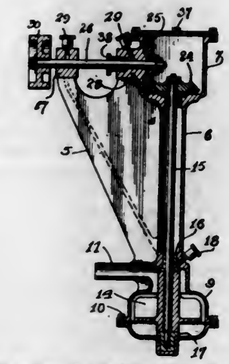
1. In a signaling switch for direction indicators of a vehicle, in combination, a steering wheel, a switch lever adapted for movement from a neutral position to positions indicating a right or a left turn, a stop on said lever, a cooperating stop mounted for movement with the steering wheel of said vehicle, said stops being radially in alignment but separated when said lever is in neutral position and said steering wheel in position to steer the vehicle in a straight path, and guide means for moving said stop on the lever radially into the path of movement of the steering wheel stop when said lever is moved to indicate a turn.

1,768,209. METHOD AND APPARATUS FOR RECLAIMING LUBRICATING OIL. CARL D. MILLER, Millis, Mass. Filed Dec. 17, 1927. Serial No. 240,842. 6 Claims. (Cl. 210—47.)



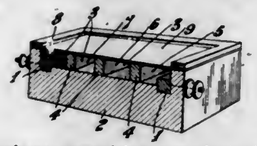
1. A method for washing oil, comprising passing a washing solution through the oil in a substantially continuous sheet without such agitation as will cause an emulsion.

1,768,210. WATER-PUMPING DEVICE. WILLIAM NAGY, Bethlehem, Pa. Filed Feb. 28, 1927. Serial No. 171,627. 1 Claim. (Cl. 103—103.)



A casing structure for water pumping devices consisting of a single piece casting comprising a vertical shaft housing, a gear casing at the upper end thereof, a chamber at the lower end for the reception of a fluid impeller, a horizontal shaft bearing formed on the side of said gear casing, a web located in a vertical plane coincident with the axis of the vertical shaft housing and having at its upper end a shaft bearing, axially alined with the first named horizontal shaft bearing, the impeller chamber at the lower end of the vertical shaft housing having inlet and outlet connections for fluid circulation.

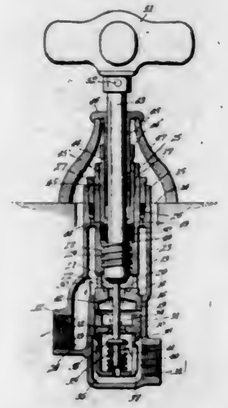
1,768,211. MICROPHONE. LESLIE HAROLD PADDLE, London, England. Filed Aug. 28, 1928, Serial No. 302,615, and in Great Britain Aug. 30, 1927. 6 Claims. (Cl. 179—122.)



2. A microphone comprising two electrodes, a quantity of granular material completing a conductive path be-

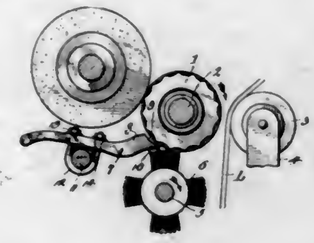
tween them, means dividing said granular material into separate groups in series with one another in said conductive path and means whereby sound waves approaching in a direction normal to said conductive path set up variations in the conductivity thereof by varying the density of the granules in the several groups, said granules being graded according to the groups which comprise them whereby the conductivity variation will faithfully accord to the sound waves over a wide range of frequencies.

1,768,212. BUILT-IN VALVE. EMMETT M. REEDY, Decatur, Ill., assignor to Mueller Co., Decatur, Ill., a Corporation of Illinois. Filed Mar. 1, 1928. Serial No. 258,306. 7 Claims. (Cl. 277—27.)



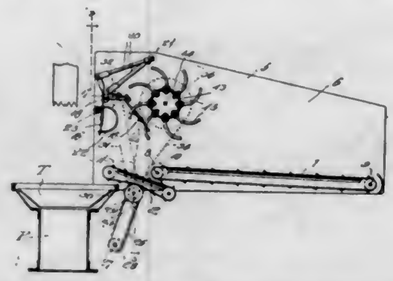
1. In combination, a valve casing having inlet and outlet ports and a lateral tubular extension projecting through a wall opening, a sleeve removably mounted in said extension and having a main valve seat, a coaxial stop valve seat beneath said sleeve, a valve having its stem extending beyond said sleeve for controlling the supply through the main valve seat, a stop valve associated with the stop valve seat for cutting off the supply, said valves being removable from the casing through said extension, means connected to said main valve for normally maintaining the stop valve in its open position, means upon the removal of the main valve from the casing for automatically closing the stop valve, and an escutcheon on said main valve stem for concealing the wall opening and valve casing.

1,768,213. GUARD FOR LEATHER-SHAVING MACHINES. NAPOLEON R. RIVERS, Ashtabula, Ohio. Filed Aug. 8, 1927. Serial No. 211,589. 4 Claims. (Cl. 149—16.)



3. In a leather shaving machine, the combination with a rotary cutter, a leather feeding roller, a supporting rod extending substantially parallel to said cutter, of an elongated substantially wide guard plate having transversely extending apertures formed therein, clamping means extending through said apertures and engaging said rod for for clamping said plate in transverse and rotary adjusted relation with respect to said rod, whereby the inner edge of said plate may be held in proper spaced relation with respect to said cutter.

1,768,214. BALING-PRESS FEEDER. WILLIAM C. RUTH, Gap, Pa. Filed June 23, 1928. Serial No. 287,753. 5 Claims. (Cl. 100—25.)



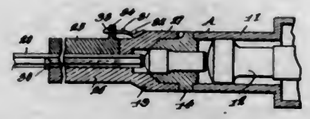
1. A baling press feeder comprising two laterally spaced side walls whose inner ends are disposed at the inlet throat of a baling press, a main endless conveyor between the lower portions of said walls terminating in inwardly spaced relation with the inner ends thereof, an auxiliary conveyor extending from the delivery end of said main conveyor to said inner ends of said walls, a rotary drum extending transversely between the upper portions of said walls above said delivery end of said main endless conveyor and having projecting arms co-operable with the latter in feeding material onto said auxiliary conveyor, said arms and said main conveyor being adapted to hold the material on said main conveyor against further advance when said main conveyor and said drum are stopped, forks for cleaning said arms as the latter ascend, said forks normally co-operating with said auxiliary conveyor in advancing the material received by the latter but being operable upon stopping of said drum and said main conveyor to tear all material in advance of the drum from the material held by the drum arms and main conveyor, said forks being mounted between the inner extremities of said side walls over said auxiliary conveyor, means for continuously driving said auxiliary conveyor and said forks, and means for driving said main conveyor and said drum and for stopping them at will.

1,768,215. MEANS FOR DEHYDRATION OF SUBSTANCES SUSPENDED IN WATER. RAGNAR SALWÉN and JOHAN ÖHRN, Grangesberg, Sweden, assignors to Morgardshammars Mekaniska Verkstads Aktiebolag, Morgardshammar, Sweden, a Joint Stock Company. Filed Jan. 26, 1928, Serial No. 249,754, and in Sweden Aug. 18, 1926. 6 Claims. (Cl. 210—55.)



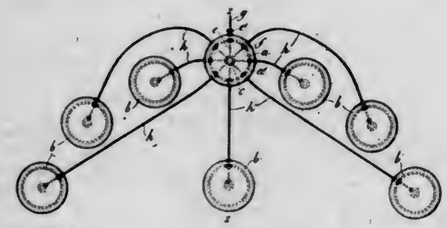
1. A device of the character described including a longitudinally movable table having its upper surface inclined to one side, longitudinally arranged and laterally spaced riffles on said upper surface, said riffles successively increasing in height toward the lower lateral edge of the table to permit the water to flow off at said side but retain the solids by the riffles.

1,768,216. HAMMER DRILL. PARIS L. SAVAGE, Bisbee, Ariz., and WILLIAM RHODES, Long Beach, Calif.; said Rhodes assignor to John Valdin, Bisbee, Ariz. Original application filed Jan. 16, 1928, Serial No. 247,124. Divided and this application filed Dec. 22, 1928. Serial No. 328,022. 2 Claims. (Cl. 308—3.)



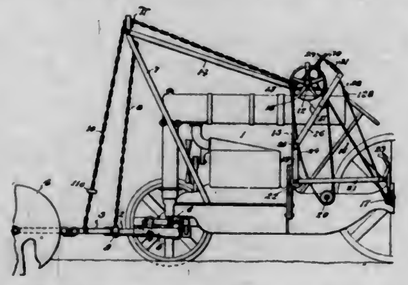
1. A front head for hammer drills comprising a body, a semi-cylindrical extension on said body, a companion semi-cylindrical extension each having a portion of a guideway therein for a drill bit, a tongue and groove connection between said extensions, latch plates for normally covering the tongue and groove connection at the outer end of the head, and a latch for engaging the removable section carried by said body.

1,768,217. TURNTABLE OR REVOLVING SHOW STAND FOR SHOP WINDOWS AND THE LIKE. ALBERT SCHLICK, Borna B/Leipzig, Germany. Filed Dec. 6, 1927, Serial No. 238,162, and in Germany Feb. 3, 1927. 1 Claim. (Cl. 211—1.6.)



A revolving show stand comprising a power driven unit and a plurality of independent units remotely situated from one another and from the main unit, each of the units being of similar construction and embodying a base, an upstanding annular wall, a boss rising centrally from the base, a turntable mounted on the boss and upstanding wall and having teeth on its under side, a plurality of radially disposed shafts mounted in the boss and upstanding wall of the power driven unit, a single radial shaft mounted in the boss and upstanding wall of each of the other units, and independent shafts between the shafts of the power driven unit and the shafts of the respective remotely situated units.

1,768,218. TRACTOR GUIDE. EARL W. SKELTON and GLENN R. KNOTWELL, Wauneta, Nebr. Filed Apr. 19, 1928. Serial No. 271,333. 1 Claim. (Cl. 97—49.)



An attachment for a tractor having a power take-off pulley and equipped with a guide to run in a furrow in advance of the tractor, said attachment comprising supporting frames adapted to be secured upon the tractor in upstanding position at the sides thereof, a winding shaft carried by the upper ends of said frames to extend across the top of the tractor, a flexible connection between said winding shaft and the guide, a pulley on the winding shaft, a pedal mounted adjacent the lower end of one frame, a belt trained around the pulley on the winding shaft and passing loosely about the power take-off pulley of the tractor, a hanger pivotally mounted on the frame, an idler carried by the lower end of said hanger and adapted to bear against the belt for tightening the same about the pulleys, a link connecting said hanger with the pedal, a yoke pivoted upon said frame and extending upwardly past the pulley on the winding shaft, a brake shoe carried by said yoke in position to bear against the periphery of said pulley, a bracket secured adjacent the winding shaft and extending upwardly beyond the pulley thereon, a yieldable connection between said bracket and the upper end of the yoke normally holding the brake shoe against the pulley, and a connecting rod extending between said yoke and the link whereby movement of the pedal to tighten the belt will withdraw the brake shoe from the pulley.

1,768,219. EXTENSION-BIT HOLDER. CHARLES W. SMITH, Green Island, N. Y. Filed Apr. 9, 1928. Serial No. 268,599. 1 Claim. (Cl. 279—90.)

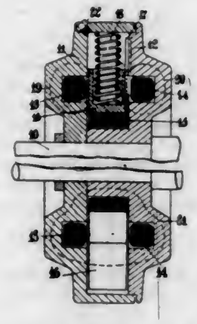


In a tool of the class described, the combination with a shank provided at its free end with a coupling connected head equipped with a block like projection and a centralized abutment, together with outstanding retaining lugs, of an extension bit coupling comprising a cylindrical body open at its opposite ends, said body being provided with a socket receiving said block like extension and diametrically opposite slots receiving said lugs, a retaining slide in said sockets provided with tongues extending into said slots, said slide being provided with an apertured central portion adapted to receive the head of a bit, and a spring anchored to said centralized abutment at one end and bearing against the retaining slide at its other end, said spring being adapted for convolution about the head of the bit.

1,768,220. AUTOMATIC STARTER FOR INDUCTION MOTORS. JOSEF SOUSEDÍK, Vsetin, Moravia, Czechoslovakia. Filed Aug. 9, 1927, Serial No. 211,777, and in Czechoslovakia Sept. 6, 1926. 1 Claim. (Cl. 172—280.)

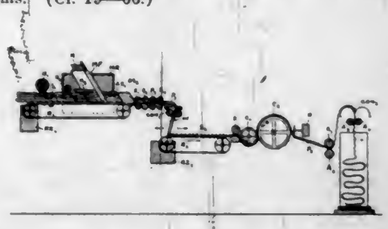
An automatic starter for induction motors comprising a shaft, a rotary magnetic body in the form of a casing

having two sides and an inner connecting part mounted on the said shaft and annular recesses in the said sides, short-circuited coils mounted around the said inner connecting part, coils electrically connected with the rotor winding of the motor and mounted within the said recesses in the sides of the rotary magnetic body and cores of magnetic material mounted between the said sides of the casing forming the rotary magnetic body, the said cores normally facing the said annular recesses and being capable of being displaced between the said sides under the



action of centrifugal force, whereby at the beginning of the starting operation, the displaceable cores will cause the lines of force of the coils connected to the rotor winding to be closed through the sides of the casing and the said cores practically without passing through the short-circuited coils, whilst as the speed increases and the cores move away from the said recesses towards the periphery of the starter, the said lines of force are closed through the cores, the sides of the casing and the inner connecting part of the casing, at the same time passing through the short-circuited coils.

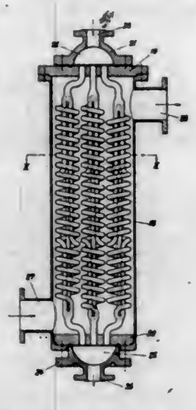
1,768,221. PROCESS OF FORMING SPINNABLE SLIVERS FROM ARTIFICIAL FILAMENTS AND APPARATUS THEREFOR. MEINARD F. THOMA, Fitchburg, Mass. Filed Mar. 12, 1929. Serial No. 346,468. 6 Claims. (Cl. 19—66.)



1. The process of forming a spinnable sliver from artificial filaments which comprises transforming a compact mass of parallel artificial filaments into a thin layer of the filaments while maintaining the parallel position of the filaments and converting then the thin layer thus obtained into a spinnable sliver.

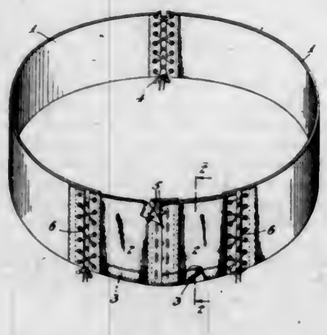
1,768,222. HEAT TRANSFERRER. ROBERT UHDE, Kassel-Wilhelmshohe, Germany, assignor to Schmidt 'Sche Heissdampf-Gesellschaft mit beschränkter Haftung, Kassel-Wilhelmshohe, Germany, a Corporation of Germany. Filed Dec. 19, 1928, Serial No. 327,033, and in Germany Dec. 29, 1927. 3 Claims. (Cl. 257—229.)

1. In a heat-transferrer of the class described, the combination of a casing, an inlet to and an outlet from said casing, a plurality of like heating elements arranged side by side in said casing, and an inlet connection and an outlet connection communicating with said heating elements, each of which elements consists of two or more tubes arranged in parallel, which are formed partly as



helical coils and partly as straight lengths, and are so assembled that they provide a coil sub-divided to correspond with the number of tubes of the individual elements.

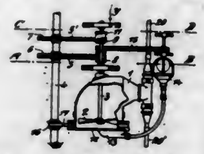
1,768,223. BODY SUPPORT, AND METHOD OF PRODUCING SAME. MILLARD VON HALLE, Palisades Park, N. J., assignor to The Standard Corset Company, New York, N. Y., a Corporation of Massachusetts. Filed Oct. 12, 1927. Serial No. 225,761. 1 Claim. (Cl. 2—41.)



The combination with a support extending around the body of the wearer, of an elastic webbing, composed of two parts, located at the front end of the support and extensible in a circumferential direction, means to tighten the support around the body of the wearer, and two circumferentially extending bands of elastic material, each normally of shorter length circumferentially than the normal length of each part of the webbing, each of said bands extended beyond its normal length to equal the normal length of one part of the webbing, and one band secured at the lower edge of one part and the other band at the lower edge of the other part of the webbing to thereby oppose the action of the tightening means and so impart an inward curve to the lower edge of the webbing.

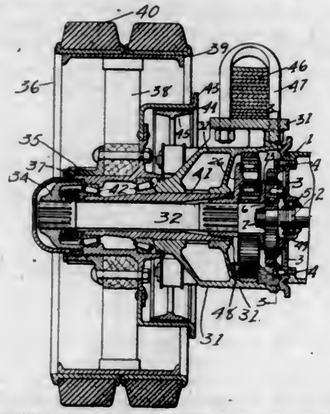
1,768,224. AUTOMATIC LOCKING PLANT FOR VEHICLE DOORS. EGON WELSCH, Berlin-Britz, Germany. Filed Feb. 20, 1929, Serial No. 341,517, and in Germany Aug. 11, 1928. 7 Claims. (Cl. 105—395.)

1. An automatic locking plant for vehicle doors, especially railway car doors, comprising, in combination with the individual doors of a car and with individual pneumatic locking devices for said doors, a centrifugal blower adapted to produce compressed air suited for the actuation of said locking devices; a filter arranged on the suction



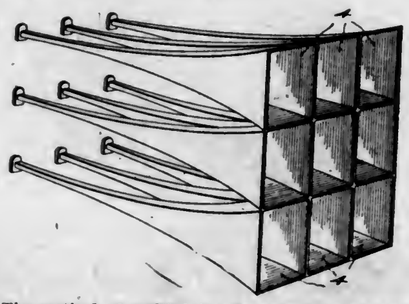
side of said blower, means for conducting the compressed air from said blower to said devices, means adapted to transmit power from an axle of the car to the said blower.

1,768,225. DOUBLE CONCENTRIC GEARING. EDDY R. WHITNEY, Philadelphia, Pa. Filed Oct. 17, 1928. Serial No. 313,059. 9 Claims. (Cl. 74—34.)



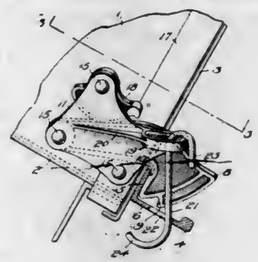
1. In combination, a concentric gear system having a central pinion, an annulus arranged thereabout, a plurality of intermediate gears carried by a spider and located between said pinion and said annulus, said spider having a rearwardly extending hub on the exterior of which is mounted a plurality of gear teeth, an annulus arranged about said hub, and a spider affixed to a drive shaft, said spider carrying a plurality of intermediate gears located between said hub and said last mentioned annulus, the intermediate gears being held by said spider in fixed axial relation to one another, the spider being adapted for both radial and circumferential movements.

1,768,226. SOUND AMPLIFICATION. SELDEN T. WILLIAMS, Woodbury, N. J., assignor to Victor Talking Machine Company, a Corporation of New Jersey. Filed Feb. 12, 1927. Serial No. 167,785. 23 Claims. (Cl. 181—27.)



1. The method of multiplying the sound energy adapted to be handled by a predetermined basic amplifier design which consists in multiplying the number of sound producing units employed in the number required to obtain the desired energy without overloading of the individual units and amplifying the sound produced by each unit by an amplifier-section the cross sectional area of which throughout its length corresponds with the cross sectional areas of a section of equal length adjacent the inlet end of the basic design and the inlet area of which is determined by the outlet of said unit.

1,768,227. CAR-DOOR MECHANISM. WILLIAM E. WINE, Toledo, Ohio. Filed May 21, 1928. Serial No. 279,480. 6 Claims. (Cl. 105—308.)



1. In door mechanism for railway cars, the combination with a hinged door movable to open position under the influence of gravity, of a hook member pivotally mounted on the car-body, a cover plate member overlying the outer face of the hook member, said door being provided with an arm having a plurality of flanges, one of which is provided with an aperture and the other of which is adapted to cooperate with the hook to maintain the door in closed position, and means connected to one of said members and having a portion projecting through said aperture when the door is in closed position, said means being adapted, upon the release of the hook from the door, to cooperatively engage the said apertured portion of the door arm to arrest opening movement of the door and sustain it in a position for dampening the discharge of lading from the car, the lower end of said means being so formed that when the door is in closed position the said means may be retracted from operative association with the door arm by being displaced from its normal position.

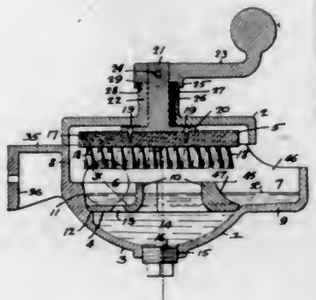
1,768,228. WHEEL SKATE OR THE LIKE. JOHN HENRY WYNDHAM, Leicester, England, assignor to Dale Forty and Company, Limited, Birmingham, England. Filed Mar. 9, 1928, Serial No. 260,520, and in Great Britain Mar. 18, 1927. 4 Claims. (Cl. 208—175.)



1. A three wheeled skate comprising two longitudinally adjustable wheeled sole and heel plate members, toe and

heel engaging means integrally associated respectively with each of said plate members and cooperating to secure the skate upon a foot in accordance with the degree of adjustment made, said heel engaging means being so located that the heel portion of the foot resides substantially in the region between the two rear wheels of the skate, said sole plate member being provided with a yoke having forwardly and rearwardly extending fork limbs, the former for the reception of the front wheel and the latter slidable on the underside of the heel plate member and provided with an eyelet, said heel plate member having a longitudinal slot, and a bolt in said slot and eyelet and detachably clamping said sole and heel plate members together at any desired adjustment thereof.

1,768,229. GOLF-BALL WASHER. ALFRED P. BLAKEMORE, Philadelphia, Pa., assignor to Katz and Blakemore, Philadelphia, Pa., a Firm composed of Siegfried Katz and Alfred P. Blakemore. Filed Apr. 3, 1928. Serial No. 267,079. 7 Claims. (Cl. 15—21.)



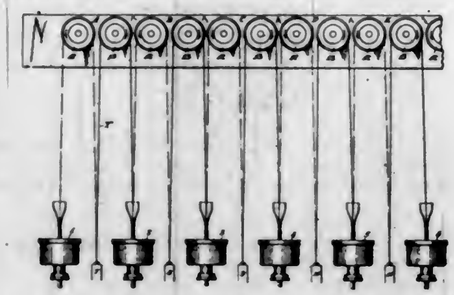
1. In a cleaning device for spherical objects, the combination of a body element having a continuous passageway disposed in a substantially horizontal plane, said passageway comprising a series of rectilineal sections arranged at angles relative to each other and the said passageway being open at its upper side throughout its course, a flat disc-like cleaning element mounted for rotation in a plane substantially parallel to the plane of said passageway and disposed above the open side thereof, means for rotating said cleaning element and a single cup extending laterally from said body element and having communication with said passageway, for receiving a ball to be cleaned and for receiving the ball after it has been cleaned.

1,768,230. FOOD PRODUCT AND METHOD OF MAKING SAME. HENRY L. BOAO, Stamford, Conn., assignor to Postum Company, Incorporated, Battle Creek, Mich., a Corporation of Delaware. Filed Feb. 15, 1927. Serial No. 168,473. 11 Claims. (Cl. 99—16.)

7. The process of making chocolate, consisting in subjecting chocolate beans to moisture and at a temperature below that destructive of enzymes, then subjecting the beans to a temperature of 165° to 170° F., under reduced pressure to reduce the content of moisture to about 1% to 2%, developing the aroma and flavor of the beans by heating said beans from 223° to 238° F. while stirring, separating the nibs, and disintegrating and emulsifying the latter out of contact with the air.

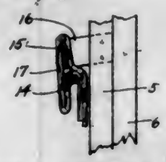
11. A chocolate product substantially free of moisture and characterized in that the cell walls of the oxcynic cells of the cocoa bean retain their identity.

1,768,231. SPINNING MACHINE. JULIUS BRENZINGER, Fairfield, Conn., assignor to The Max Ams Chemical Engineering Corporation, Bridgeport, Conn., a Corporation of Connecticut. Filed Mar. 29, 1928. Serial No. 265,566. 8 Claims. (Cl. 118—49.)



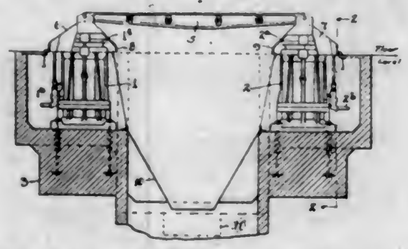
1. A spinning machine for artificial silk or the like including: two spinning devices, two oppositely rotating godets, one to direct thread to one and the other to direct thread to the other spinning device, and a source of supply of thread to supply thread to either godet at will.

1,768,232. COMBINATION IMPLEMENT. STEPHEN J. BRUTOFSKI, JOHN ARMSTRONG, and LOUIS SHERMAK, Scranton, Pa. Filed May 2, 1929. Serial No. 359,908. 1 Claim. (Cl. 15—104.)



A clothes line cleaner comprising a handle, a laterally projecting rigid U-shaped member adjacent one end of the handle, said member being adapted to have a cloth disposed about the bight portion thereof, the arms of the U-shaped member forming an acute angle with the handle, whereby the clothes line may be readily retained in the crotch formed between the arms and the handle, the cloth being disposed so that it presses on the clothes line on one side, the U-shaped member and handle on the other side affording a backing for the cloth to resist movement thereof.

1,768,233. MECHANISM FOR SHAKING OUT MOLDS. EDWIN S. CARMAN, East Cleveland, Ohio, assignor to The Osborn Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed Jan. 14, 1927. Serial No. 161,224. 10 Claims. (Cl. 22—1.)



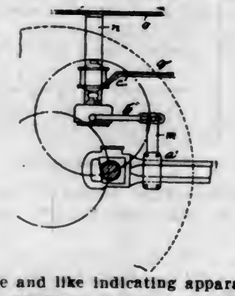
1. In a device of the character described, the combination of two spaced jolt mechanisms, and a grating platform carried at its ends on reciprocatory elements of said mechanisms, respectively, said platform being adapted to receive a mold in position for shaking the sand therefrom.

1,768,234. BURNER. ERNEST L. DAVIS, Cleveland, Ohio, assignor to The Acetylene Stove Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed Oct. 8, 1927. Serial No. 224,884. 3 Claims. (Cl. 158—101.)



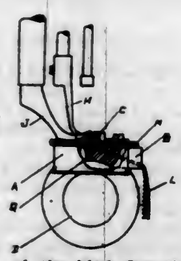
3. A gas burner comprising a slot, and a removable elongated tip therein consisting of a pair of strip members held therein and in mutual contact by friction, and extending partially above the top of said slot, each of said strip members having an inner face and spacing projections extending therefrom, certain of said projections forming closures between the ends of said strip members, said faces and the projections thereon defining gas passageways.

1,768,235. STATION AND ROUTE INDICATOR FOR RAILWAY TRAINS, TRAMS, AND OTHER FIXED ROUTE VEHICLES. MIGUEL DE LUNA PEREZ, Barcelona, Spain. Filed Oct. 14, 1926, Serial No. 141,630, and in Spain Oct. 28, 1925. 1 Claim. (Cl. 40—53.)



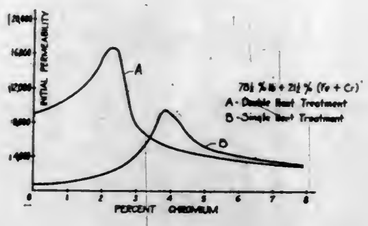
A vehicle route and like indicating apparatus designed particularly for passenger trains, comprising a casing adapted to be removably supported in the cars of the train, a fixed pointer visibly mounted on the casing, rollers supported in the casing, a tape wound on the respective rollers and extending across an opening in the casing so as to be visible together with the pointer, the tape bearing surface indications of the route over which the train is traveling, a motor arranged in the casing on the shaft of one of the rollers, a current generator in circuit with the motor, the said generator being driven by a crank arm from the driving rod of the locomotive, the said generator being thereby synchronized with the driving wheels and also with the motor, whereby the tape controlled by the motor is moved in synchronism with the wheels of the locomotive.

1,768,236. MACHINERY USED IN THE MANUFACTURE OF LEATHER GOODS AND FABRICS. JOHN J. DONOVAN, Lynn, Mass. Filed Aug. 31, 1928. Serial No. 303,141. 7 Claims. (Cl. 154—42.)



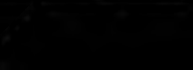
7. In a machine of the kind described, a centralized feed and guide member adaptable to oscillate in a work table, a feed foot, a presser foot, a fixed plate contact, a notched shuttle cover, and an oscillating guide plate.

1,768,237. MAGNETIC MATERIAL. GUSTAF W. ELMEN, Leonia, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Aug. 5, 1925. Serial No. 48,188. 32 Claims. (Cl. 178—45.)



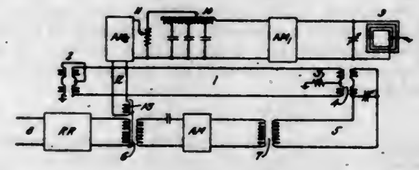
1. A magnetic composition comprising at least two elements of the magnetic group and other metallic substance composed of metals of melting point above 1150° C, which when added to magnetic compositions composed of such two elements increases the realativity, characterized in that the proportion of such other substance is such as not to decrease the initial permeability.

1,768,238. MAGNETIC MATERIAL. GUSTAF W. ELMEN, Leonia, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Jan. 12, 1927. Serial No. 160,569. 10 Claims. (Cl. 178—45.)



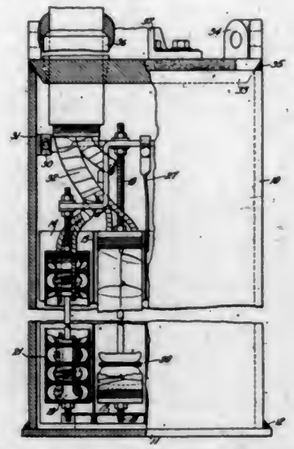
1. A magnetic material having a higher permeability at low magnetizing forces than iron and comprising nickel, iron, and silicon as essential elements thereof, more than 25% of the nickel-iron content being nickel.

1,768,239. DIRECTIVE ANTENNA SYSTEM. CARL R. ENGLUND, Freehold, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed July 8, 1925. Serial No. 42,128. 12 Claims. (Cl. 250—11.)



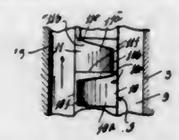
6. In a directive radio receiving circuit, in combination, a wave antenna, comprising a substantially horizontal wave conducting circuit extending in the general direction of the source of radio waves which it is desired to receive, said circuit being substantially aperiodic, having a wave length of the order of the waves incident thereon and a propagation velocity comparable with that of ether waves, a circuit connecting the end nearest the distant source with ground and having an impedance substantially equal to the surge impedance of the conducting circuit; a radio receiving apparatus; means for impressing on said apparatus the waves propagated to the end of the wave antenna remote from said source; a dirigible antenna comprising an aerial loop and means for rotating it about a vertical axis; and means for impressing the waves received by said loop on said apparatus in any desired phase relation with respect to the propagated waves.

1,768,240. LOADING-COIL CASE. ARTHUR H. FALK, Brooklyn, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Nov. 30, 1926. Serial No. 151,641. 7 Claims. (Cl. 178—46.)



1. In a protective casing for electrical apparatus, means for electrically shielding certain parts of said electrical apparatus from the other parts thereof, said means comprising a metallic partition comprising at least two members at right angles to each other, said members having interlocking slots in opposed relation, and reinforcing means welded to said members.

1,768,241. CENTRIFUGAL PUMP IMPELLER. GALE L. FERGUSON, Muncie, Ind., assignor, by mesne assignments, to Auto Prime Pump Company, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 10, 1927. Serial No. 174,251. 7 Claims. (Cl. 103—96.)



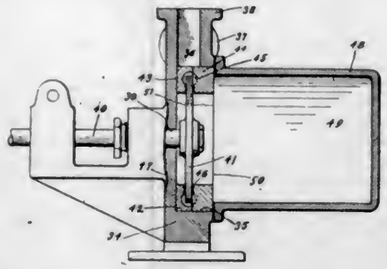
4. A rotary pump impeller provided with buckets opening out through the periphery thereof and having their front walls inclined forwardly with respect to the axis of rotation and their rear walls arranged parallel to said axis, alternate buckets opening out through opposite sides of the impeller.

1,768,242. PUMPING APPARATUS. GALE L. FERGUSON, Cleveland, Ohio, assignor, by mesne assignments, to Auto Prime Pump Company, Cleveland, Ohio, a Corporation of Ohio. Filed Nov. 9, 1927. Serial No. 232,037. 12 Claims. (Cl. 103—96.)



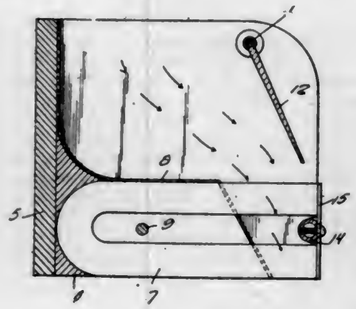
1. A pump ring comprising an outer rim, an annular channel concentric with said rim throughout a part of its length but provided with inlet and outlet ports through said rim, a bearing aperture centrally located in said ring, a land dividing channel from said aperture, and sealing grooves in said land.

1,768,243. PRIMING MEANS FOR CENTRIFUGAL PUMPS. GALE L. FERGUSON, Cleveland, Ohio, assignor, by mesne assignments, to Auto Prime Pump Company, Cleveland, Ohio, a Corporation of Ohio. Filed Dec. 12, 1927. Serial No. 239,366. 14 Claims. (Cl. 103—113.)



1. In a pump, a casing comprising a priming chamber, and an impeller chamber in communication with each other, mating pump rings in said impeller chamber providing a pump channel therebetween, and an impeller mounted in said impeller chamber between said rings and extending into said channel, there being a slight clearance between said impeller and said rings whereby said impeller is enabled to force liquid from the interior of said chamber through such clearance and into said pump channel.

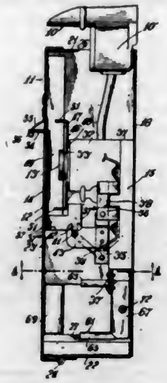
1,768,244. SEPARATING DEVICE. OSCAR B. FILKINS, Stanton, Mich. Filed Sept. 1, 1927. Serial No. 216,951. 4 Claims. (Cl. 209—223.)



1. In a magnetic separator of the character described, a hopper open at its top, bottom and front sides, a plurality of spaced horizontally extending magnets arranged within the lower portion of the hopper, and spacing means between the magnets, said spacing means terminating inwardly of the outer ends of the said magnet to permit the material to be separated to pass between the end portions of the magnets.

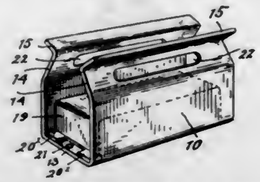
1,768,245. ELECTRICAL SWITCH APPARATUS. DON ROSS FURNAS, Aurora, Ill., assignor to Aurora Steel Products Company, Aurora, Ill., a Corporation of Illinois. Filed Oct. 18, 1926. Serial No. 142,289. 4 Claims. (Cl. 200—50.)

1. In switch apparatus of the class described, a housing having an opening therein, a fuse mounting in said housing accessible through said opening, a switch in the housing and in circuit with said fuse mounting, a pivotally supported switch operating shaft bent to provide a crank portion within the housing and a handle portion outside of the housing, an operating connection between the switch and the crank portion of the shaft, a closure plate mounted on the housing for movement into positions to cover and uncover said opening, and a member carried by the plate and disposed and adapted for cooperation with the crank portion of the shaft for locking the switch open when the plate is in full open position, said member intersecting the



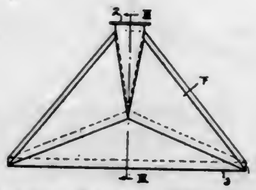
path of movement of the crank portion of the shaft in switch closing direction when the plate has been moved in closing direction into a position slightly beyond switch locking position.

1,768,246. INSERT FOR CONCRETE. HUGH L. GADDIS, Cleveland, Ohio, assignor to Globe Machine & Stamping Company, Cleveland, Ohio, a Corporation of Ohio. Filed Jan. 23, 1928. Serial No. 248,602. 1 Claim. (Cl. 72—105.)



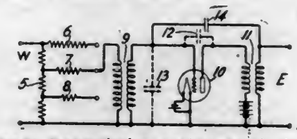
An insert for concrete consisting of a sheet metal body having bottom and side walls and open ends, said bottom wall having an opening therein through which a nut may be inserted, and an inverted U-shaped sheet-metal member arranged between said side walls with its longitudinal edges in engagement therewith and with its vertical sides spaced inwardly from the ends of the walls of said body, said vertical sides having outwardly bent flanges secured to the inner face of said bottom wall and lying wholly within the spaces between said vertical sides and the ends of the walls of said body.

1,768,247. NONSEGREGATING CHUTE. ROLLAND GARDNER, Lakewood, Ohio. Filed Nov. 14, 1927. Serial No. 233,035. 8 Claims. (Cl. 193—3.)



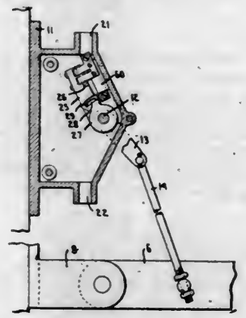
1. In a feed chute, means for preventing segregation in ungraded materials passing thereover, said means including a downwardly inclined distributing edge diagonal to the direction of feed, and a forwarding surface for receiving material therefrom, said surface being inclined in more than one plane.

1,768,248. ATTENUATION EQUALIZING CIRCUIT. CHARLES W. GREEN, Millburn, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 24, 1926. Serial No. 104,362. 7 Claims. (Cl. 178—44.)



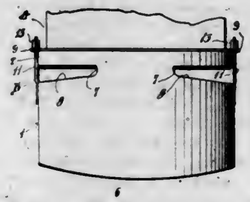
1. In a wave transmission system employing waves of different frequencies, a line in which the waves of higher frequencies are attenuated to a greater extent than those of lower frequencies, a repeater including an appreciable inter-electrode capacity effect, a transformer for coupling the input circuit of said repeater to said line, means for making the voltage across said input circuit substantially proportional to the frequency of the waves impressed thereon comprising means for neutralizing said capacity, and means to control the rate of change of said voltage across said input circuit with frequency to a value such as to compensate for the unequal attenuation of the waves by said line comprising a resistance cooperating with said transformer.

1,768,249. SWITCH MECHANISM. THOMAS E. GRIFFITH and LEE L. DODDS, Cleveland, Ohio, assignors to The W. S. Tyler Company, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 5, 1923. Serial No. 623,055. 1 Claim. (Cl. 200—54.)



In an elevator switch mechanism, operating means therefor, a pivotally movable arm, connections between said arm and said means, a horizontal shaft for mounting such arm, a switch means including two spaced contacts positioned above the plane of said shaft, a closing member for said switch carried by said shaft, said member normally hanging below and out of engagement with said contacts and having a projecting pin thereon, and means including an element fixed to said shaft and having a lost-motion slot therein engaging over said pin on said member, said element being operated by the movement of said arm.

1,768,250. HEADLIGHT GLARE SHIELD. EDGAR L. GUIN, Deerwood, Minn. Filed July 26, 1928. Serial No. 295,405. 2 Claims. (Cl. 240—48.4.)

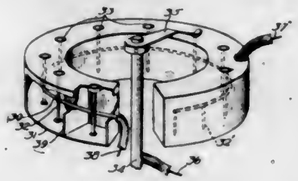


1. A headlight glare shield, comprising an open ring adapted to enclose a headlight lens frame, means to secure

said ring in engagement with the frame, a visor, a tongue connecting the visor and the ring and resiliently hinging the visor thereto, the visor being terminally free of the ring arms extending from said visor adjacent its terminals, ears on said ring having openings to receive the arms, and means engaging said arms and ears to hold the visor in adjusted positions.

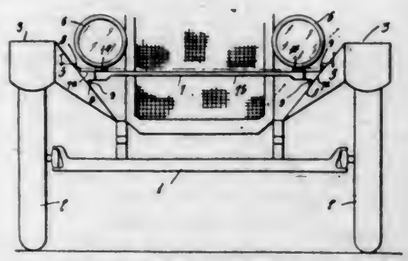
2. A headlight glare shield comprising a ring adapted for attachment to a headlight lens frame, a visor extending forwardly from an integral with said ring, said visor being curved on substantially the same arc as the ring and having its terminal portion severed from and in spaced relation to the ring, ears extending outwardly from the ring, and arms extending rearwardly from the visor adjacent its terminals and passing through said ears, and adjusting means on said arms and engageable with said ears.

1,768,251. ELECTRIC WAVE TRANSMISSION DEVICE. RAYMOND A. HEISING, Millburn, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed May 29, 1926. Serial No. 112,521. 9 Claims. (Cl. 178—44.)



8. A plural section attenuation network for high frequencies comprising a plurality of conductors of large dimensions for the energy transmitted thereby, a plurality of conductors of negligible resistance connecting said first mentioned conductors, and means for so spacing said conductors relatively to each other that the reactance of one kind, presented by said network for energy transmitted thereby, is negligible compared to its reactance of another kind.

1,768,252. DIRIGIBLE HEADLIGHT. JULMER HELSTROM, Virginia, Minn. Filed May 19, 1927. Serial No. 192,654. 1 Claim. (Cl. 240—61.)

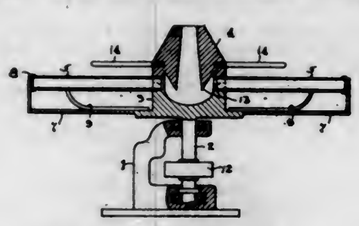


A dirigible headlight structure comprising a bar provided with an intermediate portion and with end portions of greater width than said intermediate portion and offset laterally therefrom, depending flanges extending substantially throughout the length of both of said portions and having curved parts at the junction of said portions, headlight-mounting spindles journaled at the junction of said portions, return coil springs for said spindles engaging said curved parts and the opposite portions of the flanges whereby the springs are positioned, forwardly extending arms on said spindles, a connection between said arms housed by the first mentioned portion, laterally extending arms on said spindles, one of said arms extending outwardly beyond the adjacent curved parts whereby it may be operated, the adjacent spring being connected to the last mentioned arm and to the bar, the other laterally extending arm being located between the flanges at one of the offset portions, adjustable stop members disposed in the latter flanges coacting with the last mentioned arm, the other coil spring being connected to the last mentioned arm and to the bar.

1,768,253. METHOD OF MAKING PYROXYLIN SOLUTIONS OF LOW VISCOSITY. HAROLD HIBBERT, Montreal, Quebec, Canada, and JOHN L. PARSONS, Erie, Pa., assignors to Hammermill Paper Company, Erie, Pa., a Corporation of Pennsylvania. Filed June 8, 1926. Serial No. 114,559. 8 Claims. (Cl. 260—146.)

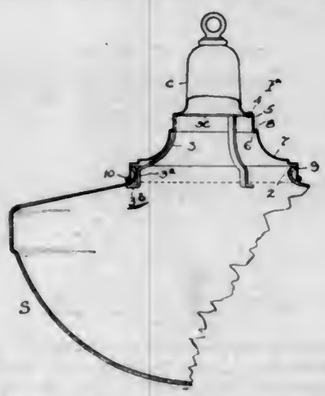
1. In a process for the production of a low viscosity solution of a nitrated cellulosic material in an organic solvent, the step of subjecting the cellulosic material before nitration to an oxidation treatment to impart a low viscosity to the final solution, said oxidation being conducted in a medium which may vary in character from slight alkalinity to slight acidity.

1,768,254. CASTING MECHANISM. JOHN E. HOY, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Nov. 12, 1926. Serial No. 147,888. 5 Claims. (Cl. 22—65.)



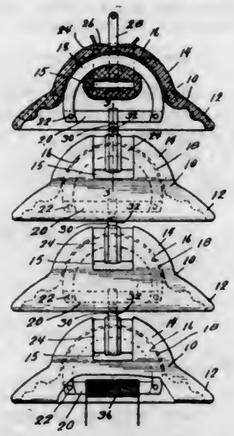
1. In a casting machine, the combination of a rotatable pouring-box comprising upper and lower sections, a skimming obstruction in said box, said sections having shouldered radial recesses in the mating surfaces, mold-tubes engageable in such radial recesses, and peripheral means for holding said tubes in relation.

1,768,255. LIGHTING FIXTURE. JOSEPH L. JAFFE, Cleveland, Ohio, assignor to The Perfectlite Company, Cleveland, Ohio, a Corporation of Ohio. Filed Feb. 2, 1928. Serial No. 251,268. 5 Claims. (Cl. 240—133.)



1. In a lighting fixture, the combination of an open-end lampbase-protecting shell, globe-support fingers at more than two points extending in fixed relation from within said shell outwardly and laterally beyond the open end of the shell to engage within the rim of the globe, and a ring slidable on said shell relatively to said fingers and having a cover flange to sent over the rim of the globe.

1,768,256. TRANSFORMER. GUSTAV E. JANSSON, Wollaston, Mass., assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass., a Corporation of Massachusetts. Filed May 12, 1927. Serial No. 190 862. 14 Claims. (Cl. 175—358.)

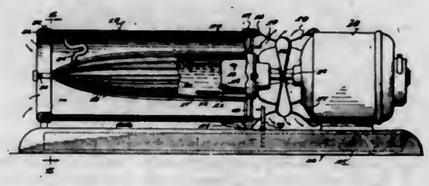


1. A combined high tension transformer and insulating unit consisting of a plurality of insulator-sections arranged in series relation, each section having a transformer comprising a core, and primary and secondary windings associated with it, with the secondary winding of one transformer connected to the primary winding of an adjacent transformer and the insulating section interposed between the primary and secondary windings of its transformer and also between the primary winding of its transformer and the primary winding of the adjacent transformer.

1,768,257. METHOD OF PRODUCING THYMOL. HANS JORDAN, Berlin-Steglitz, Germany, assignor to the Firm: Chemische Fabrik auf Actien vorm. E. Schering, Berlin, Germany. Filed Aug. 15, 1927, Serial No. 213,201, and in Germany Aug. 16, 1926. 7 Claims. (Cl. 260—154.)

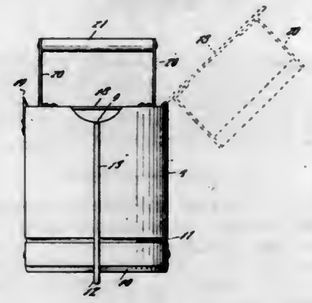
1. The process of producing thymol and its isomers and homologues comprising treating a product of condensation produced in the presence of an acidic condensing agent of an alkyl phenol and an aliphatic ketone at elevated temperature in the presence of a hydrogenation catalyst and a phenolate body with hydrogen, until four hydrogen atoms have entered into combination.

1,768,258. CONDENSER. ROBERT L. KING, Richmond, Va. Filed July 21, 1927. Serial No. 207,490. 5 Claims. (Cl. 257—39.)



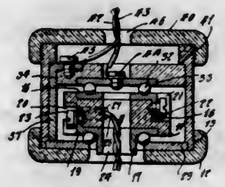
1. A refrigerating unit including an elongated pressure chamber, and a condenser surrounding said chamber, said condenser comprising spaced concentric inner and outer walls forming a condensing chamber therebetween, and structural means arranged in said chamber and contacting with said walls.

1,768,259. CONFECTIONER'S APPLIANCE. JAY F. KNAPP, Great Bend, N. Y. Filed June 21, 1929. Serial No. 372,680. 2 Claims. (Cl. 226—19.)



1. In a carton holder and filling device, a cylinder open at both ends, the lower end of said cylinder being sharpened to provide an annular cutter, a cutting element extending across the lower end of said cylinder, a hingedly mounted handle section mounted on the upper end of said cylinder, and a substantially U-shaped valve controlled vent tube mounted on said cylinder and having one branch thereof adapted to extend into the carton within the cylinder and the other branch thereof disposed exteriorly of said cylinder.

1,768,260. ELECTRIC SWIVEL CONNECTION. CHARLES S. LARKEY, Tulsa, Okla. Filed June 9, 1928. Serial No. 284,226. 1 Claim. (Cl. 173—324.)



A connection of the class described, comprising a shell, a conductor disk carried thereby and provided with a central opening, a plate of insulation carried by the shell, a conductor secured to said plate and engaging the conductor disk, a conductor disk secured to said plate, conductors secured to said second conductor disk and the first mentioned conductor, said conductor disks providing bearing members, a swivel head within the shell consisting of a body of insulation, conductor disks on said swivel head oppositely disposed relatively to the first and second mentioned conductor disks, anti-friction bearing members of conducting material interposed between said oppositely disposed disks, and said swivel head having a central opening therein alined with the first mentioned opening and other openings connecting said central opening and the conductor disks secured thereto to receive conductor wires.

1,768,261. GUITAR. AUGUST LARSON, Chicago, Ill. Filed Feb. 25, 1927. Serial No. 170,875. 1 Claim. (Cl. 84—291.)

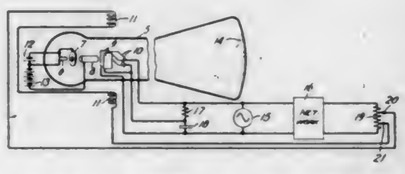
A neck-straightening device for guitars and like instruments having a sound body and neck adjustably secured

thereto, comprising a dowel stick extending lengthwise through said sound body in the upper portion thereof, a straining brace rod extending through said sound body from a point adjacent the dowel stick at the outer end



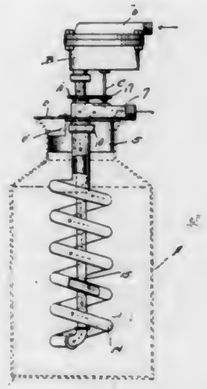
of the instrument sound body and disposed at an inclined angle to said dowel stick to engage the neck of the instrument adjacent the base thereof, and means at the outer end of the rod to brace said body about said neck to equalize the strain of the instrument strings.

1,768,262. PHASE MEASURING SYSTEM AND METHOD. WARREN A. MARRISON, Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Feb. 7, 1928. Serial No. 252,628. 8 Claims. (Cl. 172—245.)



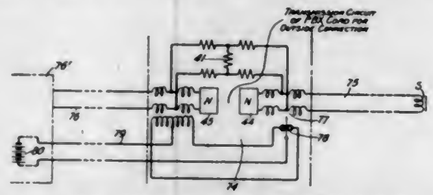
3. A circuit for measuring the phase relation of two waves comprising a cathode ray oscillograph having means for producing a beam of cathode rays, two pairs of deflector plates, and a coil arranged to be rotated around the axis of the cathode beam, means for producing from one of said waves two phase quadrature components, means for impressing said components upon the pairs of deflector plates, respectively, and means for impressing the other wave upon the coil.

1,768,263. CREAM-COOLING OR PASTEURIZING DEVICE. FRANK L. MARSHALL, Fergus Falls, Minn. Filed Mar. 20, 1928. Serial No. 263,176. 1 Claim. (Cl. 257—104.)



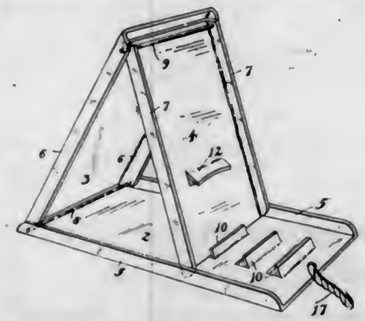
In a heating device adapted for arrangement within a cream can, a ring like member constructed for engagement within the neck of a conventional can, a closure for the upper end of the ring having means whereby to facilitate the pouring of the cream through the ring and into the can, an L-shaped pipe arranged at the upper end of the ring and having one end extending into the ring, a pipe section rotatably mounted within the end of the L-shaped pipe within said ring, a coil depending from said pipe section and communicating at its lower end with a pipe arranged concentrically within said coil and extending at its upper end through said pipe section, a motor having an inlet and a discharge, and also a rotating pin depending from the motor and operable by the fluid passing through said motor, a rotary connection between the discharge of the motor and the upper end of the pipe arranged concentrically within the coil, and means between said motor pin and the upper end of said pipe whereby to cause the rotation of the pipe and its associated coil.

1,768,264. TELEPHONE SYSTEM. ROBERT C. MATHES, Wyoming, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Original application filed May 21, 1927, Serial No. 193,242. Divided and this application filed Sept. 28, 1927. Serial No. 222,484. 7 Claims. (Cl. 179—42.)



1. A private branch exchange telephone system comprising a private branch exchange, subsets each having a transmitter and a receiver, a two-wire trunk circuit connected to said exchange, a one-way energy amplifier at said exchange, a transmitter line connecting each transmitter to said exchange, a receiver line connecting each receiver to said exchange, means at said exchange for connecting said amplifier and the receiver line of one of said subsets to said trunk circuit in conjugate relation to each other, and for connecting to said amplifier the transmitter line of said one subset, and means at said exchange for connecting the transmitter line and the receiver line of said one subset to the receiver line and the transmitter line, respectively, of another of said subsets.

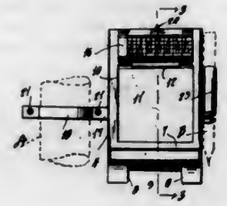
1,768,265. COLLAPSIBLE CHOCK FOR ROAD-VEHICLE WHEELS. FREDERICK TILDESLEY NICHOLLS, Haberfield, near Sydney, New South Wales, Australia. Filed Jan. 12, 1928, Serial No. 246,302, and in Australia June 13, 1927. 1 Claim. (Cl. 188—32.)



A chock, including a base plate having edge flanges, a bearing plate having edge flanges, said bearing plate being smaller than the said base plate, the bearing plate being pivoted at one end to one end of the base plate and a strut plate having edge flanges, said strut plate being

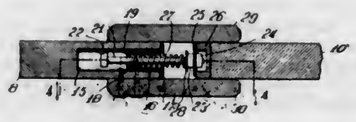
smaller than the bearing plate and pivotally connected at one end to the end of the bearing plate remote from the base plate, the base plate having upturning lugs adapted to engage the end of the strut plate to arrange the bearing plate in chocking position a projection integral with said strut plate to form a handle for setting the strut plate in position, the said plates by reason of their relative size and pivotal relation being foldable to the thickness of the edge flanges of the base plate and to completely house the upturned lugs.

1,768,266. LOOSE-LEAF-MEMORANDUM-PAD HOLDER. THOMAS P. O'CONNELL, London, Ontario, Canada. Filed Aug. 2, 1928. Serial No. 297,044. 2 Claims. (Cl. 281—44.)



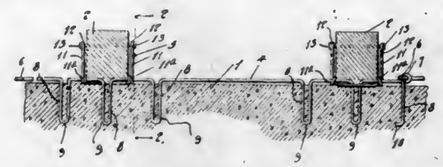
1. A loose sheet memorandum pad holder, comprising a base adapted to support superposed loose sheets, a cover frame engaging said sheets and having an opening therein providing a writing space on the uppermost sheet, said frame having depending flanges on its sides and one end engaging corresponding edges of the base to guide the frame for gravity adjustment, the base extending beyond the corresponding edge of the remaining side of the frame forming a space for the removal of the sheets from under the frame, the side flanges extended beyond the last mentioned edge of the frame and beyond the corresponding edge of the base and provided with reentrant portions spaced from said last mentioned edge of the frame, and the extremities of said reentered portions being remote from one another to provide a space to engage edges of the sheets for removal through the space aforesaid.

1,768,267. FOLDING DOOR. ELLIS J. G. PHILLIPS, Aurora, Ill., assignor to Richards-Wilcox Manufacturing Company, Aurora, Ill., a Corporation of Illinois. Filed Dec. 14, 1925. Serial No. 75,210. 3 Claims. (Cl. 20—20.)



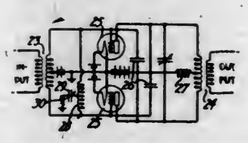
1. The combination of a swinging and sliding folding door leaf having pockets in its outer margin, a strip disposed opposite said outer margin, a metallic plate secured to the inner face of said strip, bolts movable longitudinally in said pockets, thimbles mounted in said pockets and forming bearings for said bolts, said bolts having threaded ends passing through holes in said metallic plate, nuts engaging over said threaded ends on opposite sides of said metallic plate, springs mounted on said bolts between said thimbles and said nuts for normally pressing said strip away from said leaf, and plates secured at opposite sides of said leaf and forming a channel to receive said strip.

1,768,268. CLIP FOR SECURING WOOD SLEEPERS TO CONCRETE FLOORS. JOHN H. PRESCOTT, Columbus, Ohio. Filed Sept. 22, 1927. Serial No. 221,359. 3 Claims. (Cl. 72—101.)



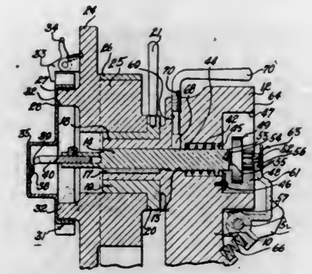
1. A clip of the character set forth comprising a bar, said bar having depending anchoring members thereon adapted to be secured with the bar proper elevated, and a sleeper-retaining member having loops surrounding and slidably mounted on said bar.

1,768,269. SIGNALING SYSTEM. JOHN C. SCHELLENG, Millburn, N. J., assignor, by mesne assignments, to Western Electric Company, Incorporated, a Corporation of New York. Filed May 13, 1925. Serial No. 29,900. 15 Claims. (Cl. 179—171.)



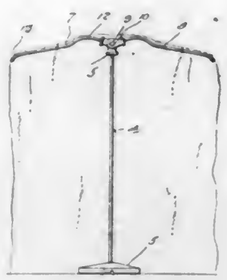
1. A high power transmission system including a source of high frequency waves and an amplifier therefor comprising a plurality of space discharge devices for use at such high frequency that parasitic oscillations tend to occur characterized in this, that the devices are connected in opposed relation with respect to the source of waves and that a dissipative path is provided for the parasitic oscillations whereby they are substantially suppressed.

1,768,270. APPARATUS FOR PREPARING MEMBERS FOR ASSEMBLY. MARION LLEWLLYN STRAWN, La Grange, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 13, 1927. Serial No. 183,426. 10 Claims. (Cl. 82—1.)



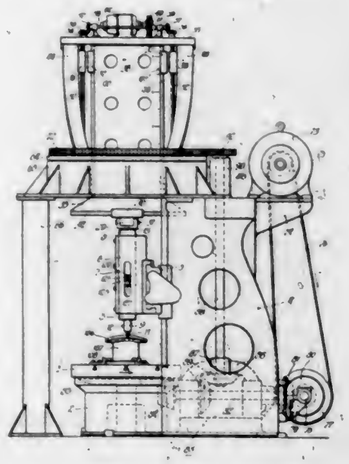
1. In apparatus for preparing a member for assemblage with another member, a material working means, means for normally urging the working means in one direction, means eccentrically mounted for supporting a member to be prepared for assemblage adjacent a working portion of the working means, means for holding another member forming a part of the assemblage in operative relation with another portion of the working means to control the effectiveness of the working means, and means for causing a relative movement between the first member and the working means to prepare the first-mentioned member for a predetermined assembled relation with the latter member.

1,768,271. DISPLAY STAND. MICHAEL TARDY, Paterson, N. J. Filed Feb. 23, 1928. Serial No. 256,353. 1 Claim. (Cl. 223—18.8)



A display stand for body garments comprising an upright standard having a head formed at its upper end and including an apertured double face disk like portion, a pair of duplicate garment supporting arms of predetermined longitudinal formation, double faced heads formed at one end of said arms and offset from the longitudinal plane of the arms for positioning the arms in longitudinal alinement when said heads are disposed at the opposite sides of said disk like portion, said last named heads being adapted for reversible mounting at the opposite faces of said disk like portion and provided with openings in registry with the aperture in said disk like portion and means inserted through said openings for securing said offset heads in position upon said disk like portion.

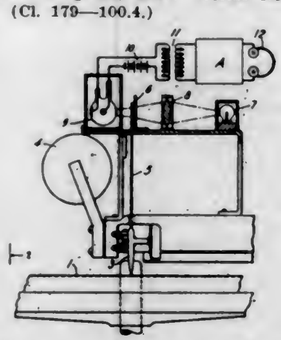
1,768,272. FACING MACHINE. JAMES HALL TAYLOR, Oak Park, Ill. Filed Jan. 27, 1928. Serial No. 249,973. 28 Claims. (Cl. 82—11.)



1. In a machine for facing frusto-cylindrical surfaces, work holding means and tool holding means having relative rotary and radial movement, an oscillating member movable in an arc toward and away from the work holding means, the arc of movement of said member extending transversely of said work holding means, connections between the oscillating member and the tool holding means, said connections moving the tool holding means toward and away from the work holding means through a path corresponding to the arc of movement of the reciprocating member, and means for varying the radius of the arc of movement of said member.

18. In a machine for facing frusto-cylindrical surfaces, a work supporting table rotatable about a vertical axis, a carriage above the table and moveable transversely thereof, tool holding means mounted in the carriage for movement toward and away from the table, a frame mounted above the carriage and rotatable about an axis coincident with the axis of rotation of the table, a member mounted in the frame for swinging movement about an axis extending diametrically of the table, means for rotating the table and the frame simultaneously and at the same speed, the member having a head at its lower end extending transversely of the table, a block connected to said head for vertical movement therewith, said head being slidable through the block, a universal connection between the block and the tool holding means, and means for adjusting the axis about which said member swings toward and away from the table.

1,768,273. SOUND RECORDING. ROY V. TERRY, Montclair, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Aug. 20, 1927. Serial No. 214,434. 5 Claims. (Cl. 179—100.4.)



1. In a sound recording device, a source of light, means to direct a beam of light, an auditory circuit and a light sensitive element therein to receive said light beam, an engraving tool, and means intercepting only a portion of the light beam actuated in accordance with the movements of said tool.

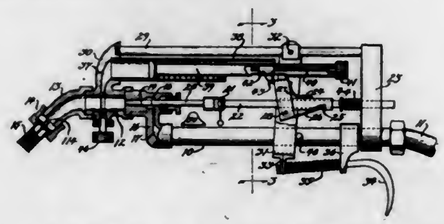
1,768,274. INDUCTANCE DEVICE FOR LOADING PHANTOM CIRCUITS. PAUL THOMAS, New Cologne, Berlin, and FRITZ FISCHER, Charlottenburg, Berlin, Germany, assignors to Siemens & Halske Aktiengesellschaft, Siemensstadt, near Berlin, Germany, a Corporation of Germany. Filed Apr. 23, 1927, Serial No. 185,959, and in Germany May 19, 1926. 5 Claims. (Cl. 178—46.)



1. Induction coil for loading phantomed circuits having its windings distributed symmetrically over an annular

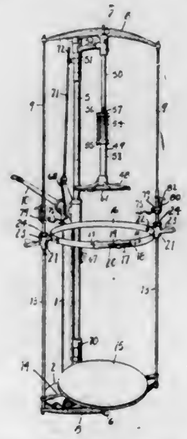
core, the coil winding for each of the four conductors of the phantomed circuit being divided into sections, the successive sections being applied in the same direction advancing in order over consecutive quarters of the core, so that each winding is equally distributed on all quarters of the core, the winding sections for each winding being so wound that the winding direction of the sections allotted to one side circuit of the phantomed circuit is opposite to the winding direction of the sections allotted to the other side circuit, whereby for the phantom circuit currents the magnetizing ampere turns of the coil add together while for the side circuit currents the magnetizing ampere turns are neutralized.

1,768,275. AIR-PRESSURE GAUGE. WILLIAM COOLEY URTON, Roswell, N. Mex. Filed Jan. 31, 1928. Serial No. 250,855. 4 Claims. (Cl. 50—8.)



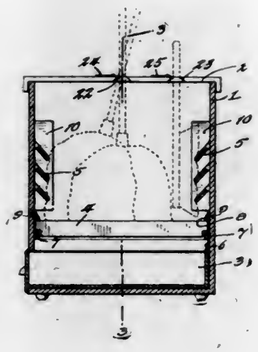
1. In a gauge device of the class described, a supporting member, an air pipe carried by the member and adapted to be connected with an air supply, a fitting to which the air pipe is connected, a spring pressed stem mounted for reciprocation longitudinally of the supporting member, a valve carried by the stem for controlling communication between the air pipe and fitting, a lever swingably mounted in the supporting member, a latch pivoted on the lever, means on the stem engageable with the latch for connecting the latch with the stem so that when the lever is oscillated the stem will be reciprocated to place the valve in open position, and means controlled by the air pressure in the fitting when the valve is opened to cause the latch to be released from means on the stem to permit release of the stem and closing of the valve.

1,768,276. FRUIT AND VEGETABLE PACKING MACHINE. DWIGHT W. WADSWORTH, Fennville, Mich. Filed Sept. 23, 1927. Serial No. 221,540. 19 Claims. (Cl. 226—17.)



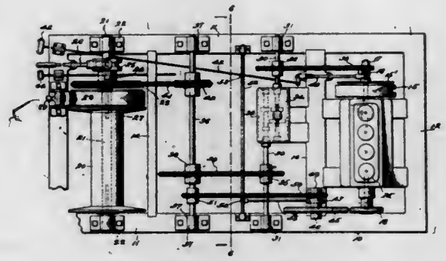
16. In a structure of the class described, the combination of a barrel support, an expansible barrel clamping band provided with a retracting spring, slidably mounted supporting brackets for said band, barrel clamping fingers mounted for adjustment independently of said supporting brackets, and actuating slides for said clamping fingers.

1,768,277. MOP CLEANER. ANN M. WHITE, Brooklyn, N. Y. Filed Dec. 3, 1927. Serial No. 237,457. 5 Claims. (Cl. 15—142.)



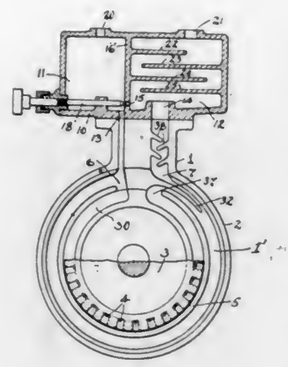
1. A mop cleaning device including a frame, an impact element mounted thereon composed of slats spaced from the bottom of said frame and having greater depth than thickness.

1,768,278. HOIST. ROBERT D. WHITAKER, Jr., Tahlequah, Okla. Filed Nov. 11, 1926. Serial No. 147,768. 7 Claims. (Cl. 254—187.)



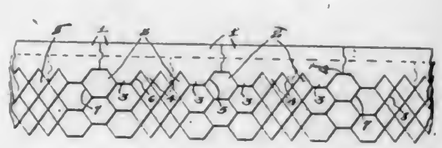
1. In hoisting apparatus, a motor, a hoisting drum, operative connections from the motor to the drum for driving the latter, clutch mechanism between the motor and said connections, clutch mechanism between the drum and said connections, and means driven by the motor for releasing the load on the drum clutch mechanism to permit of disengaging the same, when the clutch mechanism between the motor and said connections is disengaged.

1,768,279. AIR PUMP. CLARENCE G. WOOD, Cleveland, Ohio, assignor, by mesne assignments, to Auto Prime Pump Company, Cleveland, Ohio, a Corporation of Ohio. Filed Sept. 26, 1927. Serial No. 222,015. 14 Claims. (Cl. 230—75.)



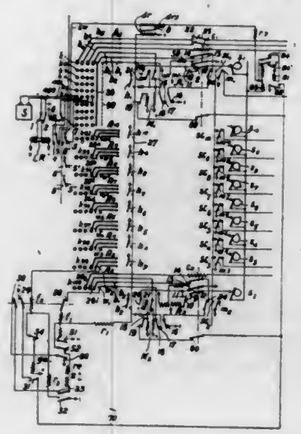
1. A liquid sealed air pump comprising a casing, a centrifugal pump member in said casing, an inlet and an outlet for said casing, a reservoir mounted on said casing and having an aperture adapted to register with said inlet, an air inlet port in said reservoir, and means in said outlet for separating air and liquid.

1,768,280. SHINGLE CONSTRUCTION. SALVATORE ARCIDIACONO, Fulton, N. Y. Filed May 31, 1928. Serial No. 281,767. 2 Claims. (Cl. 108—7.)



1. A roofing comprising two classes of shingles, cut from a continuous strip of material without waste, the shingles of each class being placeable end to end and the shingles of one class being arranged alternately with and lapping the shingles of the other class, one edge of both shingles being straight, the shingle of one class having at its other edge projections and cut-outs of substantially one half of two forms of geometrical figures, the shingles of the other class having at its other edge complemental cut-outs and projections of the other half of said geometrical figures so arranged that the two classes when brought into juxtaposition, the projections of each with the cut-outs of the other complete the two forms of geometrical figures, and the completed roof forming a plurality of rows of each of said geometrical figures alternately arranged.

1,768,281. ELECTROMECHANICAL SWITCHING SYSTEM. FRITZ ALDENDORFF, Berlin, Germany; Charlotte Aldendorff, widow and sole heir of said Fritz Aldendorff, deceased, assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Sept. 30, 1927, Serial No. 223,169, and in Germany Oct. 6, 1926. 17 Claims. (Cl. 179—18.)

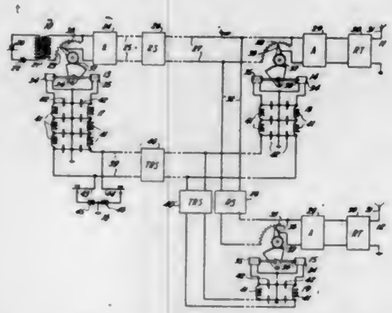


1. In a telephone exchange system a plurality of calling lines, a plurality of line finders for extending said lines, and means for causing each line finder to move to a waiting position and then to a position of readiness prior to executing its line finding movement.

1,768,282. POWDERED METALLIC CHLORIDE AND METHOD OF MAKING SAME. EDWIN O. BARSTOW and SHELDON B. HEATH, Midland, Mich., assignors to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Aug. 30, 1928. Serial No. 302,940. 21 Claims. (Cl. 23—90.)

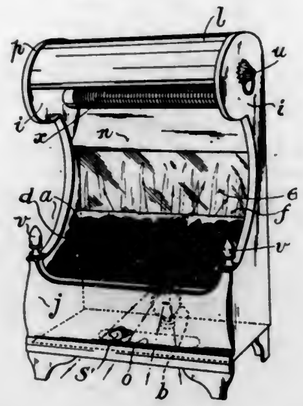
13. As a new article of manufacture, a metallic chloride in the form of a fine air separated powder containing water of crystallization and having a hygroscopic character.

1,768,283. CONTROL SYSTEM. JOHN H. BELL, South Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 10, 1926. Serial No. 101,031. 10 Claims. (Cl. 178—44.)



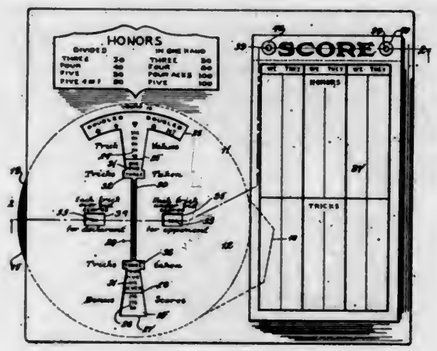
10. In a control system, the method of effecting control of a plurality of devices which comprises, adjusting the interval between a plurality of control actions effective at separate points with respect to a signal wave, to the time of propagation of said wave between said respective points.

1,768,284. ELECTRIC FIRE OR RADIATOR. HERBERT HENRY BERRY, London, England. Filed May 13, 1927, Serial No. 191,232, and in Great Britain June 9, 1926. 3 Claims. (Cl. 272—8.)



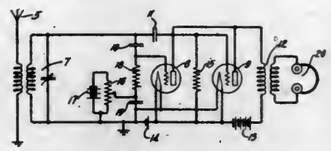
2. An imitation fire of the kind provided with imitation fuel, a light source thereunder and means to cause a directional flickering of the light therefrom including upwardly extending beams moving longitudinally of the grate; a reflector at the back of the fire, the fuel having its rearmost edge adjacent the reflector and having said edge formed with irregularities between salients of which light may pass from said source to the reflector, the flicker device being adapted to produce upwardly extending longitudinally movable beams to be interrupted by said salients, the reflector, the flicker device and said edge being constructed and arranged so that moving images simulating tongues of flame are formed on the reflector.

1,768,285. SCORE-CALCULATING DEVICE. FRANKLIN H. BIGELOW, Buffalo, N. Y. Filed Feb. 12, 1927. Serial No. 167,754. 4 Claims. (Cl. 235—90.)



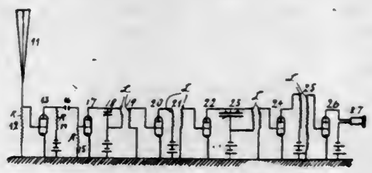
1. In a device of the character described, a support including a front wall and a rear wall, a movable member arranged between said walls, said movable member carrying indicia, a pair of sight openings provided in said front wall and adapted to expose related indicia on said movable member, said front wall being also provided with an elongated opening adapted to expose a series of indicia on said movable member, and a slide arranged between said movable member and said front wall, and adapted to indicate indicia on said movable member related to the indicia appearing in said first named sight openings.

1,768,286. RADIORECEIVER. NATHANIEL BISHOP, Bridgeport, Conn., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 20, 1928. Serial No. 271,434. 6 Claims. (Cl. 250—20.)



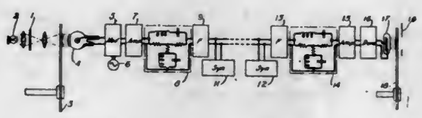
1. In combination, a carrier frequency circuit, a low frequency circuit, a pair of translating devices connected in parallel between said circuits, one of said devices being operated to produce low frequency waves in response to signal waves in said carrier frequency circuit, and means for causing the other of said devices to produce low frequency waves only when the amplitude of said signal waves exceeds a predetermined value, while operating as a repeater for signal waves of amplitude below said value.

1,768,287. TRANSMISSION OF MESSAGES BY ELECTROMAGNETIC WAVES. ERNST BRÄUER, Voigtsdorf, Germany. Filed Dec. 9, 1925, Serial No. 74,414, and in Germany Jan. 25, 1924. 1 Claim. (Cl. 250—8.)



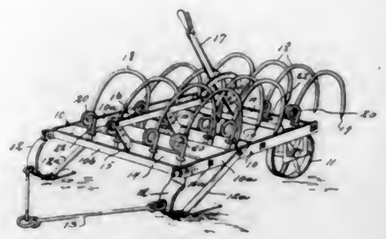
A method for the transmission of wireless messages from antennæ and for selectively receiving these messages from any one of said antennæ consisting in successively modulating lower intermediate frequencies upon a high frequency carrier wave to obtain a multiplicity of messages, selectively receiving and detecting this successively modulated carrier wave free from interfering signal waves so that the energies received become almost zero at the zero points of the transmitting waves, by damping the disturbing energies approximately to the amount of the signal amplitude at each stage of demodulation in advance of the respective tuned circuit of lower frequency.

1,768,288. SYSTEM FOR CONVERTING LIGHT ENERGY INTO ELECTRICAL ENERGY AND VICE VERSA. FRANKLIN MOHR, New York, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 6, 1927, Serial No. 181,533. Renewed May 25, 1929. 18 Claims. (Cl. 178—6.)



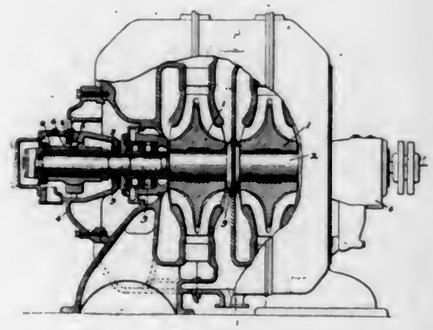
1. In a system for converting light energy into electrical energy or vice versa, a light source, a control element for light from said source having an aperture associated therewith, an optical field, means for causing relative motion between said aperture and said field, and means having such a frequency-attenuation characteristic as to compensate, in part at least, for the distortion produced by said aperture.

1,768,289. MACHINE FOR KILLING QUACK GRASS. HENRY P. MOHR, Morris, Minn. Filed Sept. 25, 1928. Serial No. 308,182. 1 Claim. (Cl. 55—92.)



In a machine for killing quack grass, a frame structure having a pair of spaced parallel bars, means for maintaining the bars in spaced relation to each other, a plurality of pivotally mounted transverse bars mounted between said parallel bars, a plurality of semi-circular cultivator teeth mounted on said pivoted bars, operating means mounted on the frame for turning the pivoted bars on their pivots, skid means mounted on the forward end of said parallel bars, bracing means mounted at one end on the parallel bars and at the opposite end secured to said skid means for holding the same in rigid position, and a pair of wheels mounted adjacent the rear end of said parallel bars for holding the frame in substantially horizontal position.

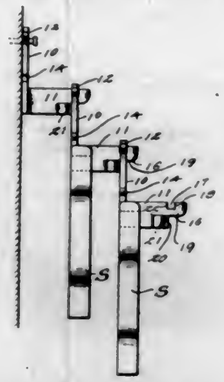
1,768,290. HIGH-SPEED MACHINE. BURT L. NEWKIRK, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Sept. 22, 1923. Serial No. 664,331. 4 Claims. (Cl. 308—72.)



1. The combination of a mechanical rotor normally operated above its critical speed and subject to the development of internal friction when so operated, and a yieldingly supported bearing in which said rotor is journalled, whereby whipping of the rotor is prevented.

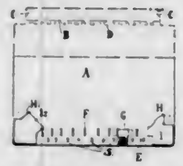
1,768,291. BRACKET FOR SUPPORTS. WILLIAM W. NICODEMUS, Taylorville, Ill. Filed Oct. 2, 1928. Serial No. 309,842. 3 Claims. (Cl. 248—20.)

1. A bracket for supports comprising angularly related arms, one arm of the bracket having an opening and the outer end of the other arm of the bracket being provided with a shoulder and a nose extending beyond the shoulder for engagement in the opening of a similar bracket, said nose having in its upper face a notch the outer wall of



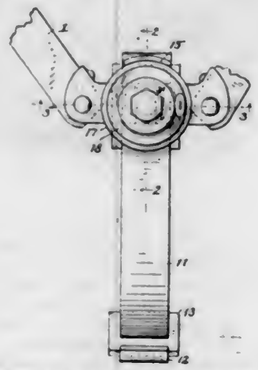
which is spaced from the shoulder a distance equal to the thickness of the first named arm, the shoulder being of greater breadth than the opening.

1,768,292. INDICATOR OR PROTECTOR FOR VISIBLE INDEXES OR THE LIKE. RICHARD FITZ POWER, London, England, assignor to Morland & Impey Limited, Birmingham, England. Filed May 31, 1928, Serial No. 281,933, and in Great Britain Dec. 7, 1927. 4 Claims. (Cl. 129—16.7.)



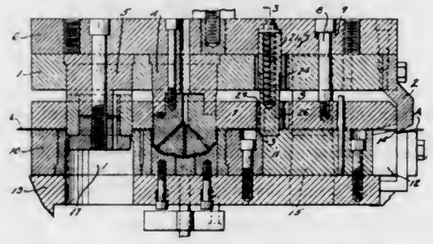
1. In combination with an index card, a series of slots adjacent and parallel to one edge of said card, reference characters along the edge of said card, and an indicator adapted for interlocking engagement with said slots and arranged to form a frame for one or other of the reference characters to call attention to a particular reference character.

1,768,293. SPARE-TIRE LOCK. GEORGE R. REED, Cleveland, Ohio, assignor to The Eaton Axle and Spring Company, Cleveland, Ohio, a Corporation of Ohio. Filed Oct. 10, 1928. Serial No. 311,482. 2 Claims. (Cl. 70—122.)



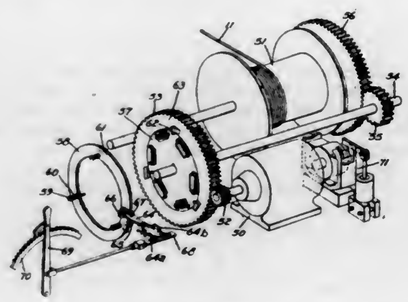
1. In a locking device, the combination of a housing, a retaining member rotatably mounted in said housing and adapted to engage a fixed member, an operating member rotatably mounted in said housing, means for retaining said operating member and said retaining member in said housing, means movable to connect said operating member and said retaining member for rotation together to thereby effect engagement between said fixed member and said retaining member, and key controlled means mounted in said operating member for actuating said movable means, said key controlled means being positioned with its axis inclined to the axis of said operating member.

1,768,294. PRESS. JAMES S. REID, Cleveland, Ohio, assignor to The Eaton Axle and Spring Company, Cleveland, Ohio, a Corporation of Ohio. Filed Oct. 10, 1928. Serial No. 311,528. 3 Claims. (Cl. 113—50.)



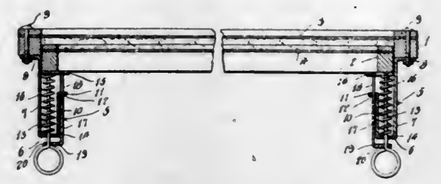
1. In a press of the class described and having head and bed members arranged for relative press-opening and press-closing movement, punch means and die means associated respectively with said members for corresponding movement to perform a forming operation as the press is closed, and pad means arranged between said punch means and said die means and associated with said punch means to close upon the work in advance thereof, and stripper means associated with said punch means and extending through an opening in said pad means, to strip the work from said die means as the press is opened.

1,768,295. APPARATUS FOR TOWING, MOORING, AND THE LIKE. ROBERT H. ROGERS, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Mar. 17, 1923. Serial No. 625,895. 4 Claims. (Cl. 254—172.)



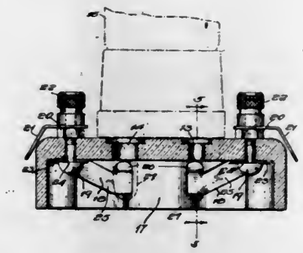
1. Apparatus for controlling the cable of a towing or mooring machine or the like, comprising a drum for winding up the cable, an electric motor, a driving connection between said motor and said drum including a member having cooperating parts relatively rotatable in response to the tension of the cable, and means operated responsively to the relative movement of said parts for controlling the energization of said motor.

1,768,296. FRUIT DRYING FRAME. DANIEL C. ROSENBERG, Sobieski, Wis. Filed Dec. 12, 1929. Serial No. 413,613. 3 Claims. (Cl. 34—17.)



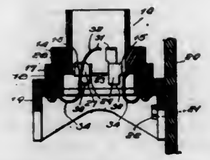
1. A fruit drying frame, comprising telescoping screen frames adapted to receive fruit for drying therebetween, and resilient means holding the frames in assembled relation and providing means for spacing the frames to accommodate the thickness of material therebetween and for automatically reducing the space between the frames during the drying process.

1,768,297. TUBE MOUNTING. NEWTON C. SCHELLENGER, Elkhart, Ind., assignor to Chicago Telephone Supply Company, Elkhart, Ind., a Corporation of Delaware. Filed Jan. 18, 1926. Serial No. 81,882. 6 Claims. (Cl. 173—328.)



1. A contact spring comprising a base portion and a pair of legs extending diagonally downward from said base portion.

1,768,298. TUBE SOCKET. NEWTON C. SCHELLENGER, Elkhart, Ind., assignor to Chicago Telephone Supply Company, Elkhart, Ind., a Corporation of Delaware. Filed Sept. 21, 1925. Serial No. 57,487. 3 Claims. (Cl. 173—328.)

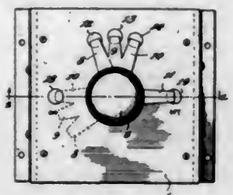


1. A contact spring comprising a flat horizontal mounting portion, an abutment portion at substantially right angles to said horizontal portion, and a generally U-shaped spring member integral with said abutment portion and extending out laterally therefrom one of the legs of said spring member being longer than the other and extending upwardly and over the top of the end of the short leg.

1,768,299. SWITCH. OSCAR SIMON, Kincaid, Ill. Filed June 7, 1928. Serial No. 283,570. 1 Claim. (Cl. 200—11.)

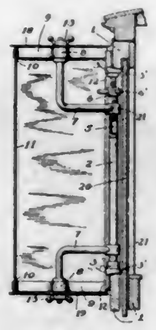
A switch of the class described, comprising contact heads arranged in a group, a pair of independent con-

tact heads, a group of contact arms and an independent contact arm, and means for moving the group of arms into engagement with the respective contact heads of the grouped heads and for successively moving the arms of the group into engagement with one of the independent



contact heads and the independent arm successively into engagement with the heads of the group, the group of arms and independent arm being angularly disposed, whereby all of the grouped arms will engage the grouped contact heads when the independent arm is engaged with an independent contact head.

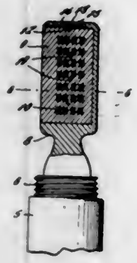
1,768,300. WIND AND RAIN DEFLECTOR FOR MOTOR VEHICLE WINDOWS. JOHN R. TAYLOR, Portland, Me. Filed May 20, 1929. Serial No. 364,573. 2 Claims. (Cl. 296—84.)



1. A wind and rain deflector for motor vehicle windows, comprising in combination with the window frame therefor, a vertical standard member, a thrust plate secured at each end thereof, means whereby a strain in opposite directions may be exerted on said thrust plates tending to hold them firmly against opposite portions of said window frame, two angular brackets secured on said standard member—one near the top and the other near the bottom thereof, a channel member pivotally secured on each of said angular brackets, a glass deflector plate secured in and interjacent said channel members, and two plates secured, respectively, on the said top and on the said bottom channel member and adapted to enclose the upper and lower sides of the space included between the said deflector plate and the said window frame.

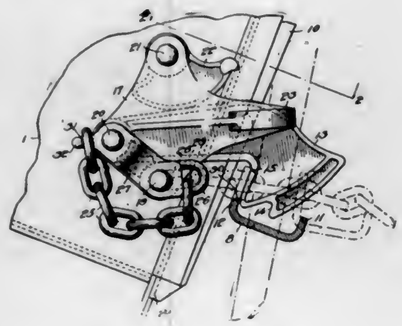
1,768,301. FOUNTAIN TOOTHBRUSH. WALTER P. WEBER, Watertown, Wis. Filed Apr. 15, 1930. Serial No. 444,588. 1 Claim. (Cl. 15—133.)

A toothbrush comprising a barrel member constituting a handle for the brush and provided with a threaded opening at one end, a brush head threadedly mounted on the open end of the barrel, said head having one side of its outer end flattened and formed with a recessed face, an inturned flange formed about three sides of the recess of the head, one of the longitudinal edges of the recess being unobstructed, a duct leading from the recess through the head and communicating with the interior of the barrel, a bristle supporting plate adapted for insertion through the unobstructed side of the recess transversely of the head with its edges disposed under said flanges and constituting a cover for the recess, said plate also having openings formed therein communicating with



said duct and said plate having one edge formed with a flange for closing the unobstructed edge of the recess when the plate is mounted in position and a spring clip carried by the head and engaging one edge of the plate whereby to releasably secure the plate against transverse sliding movement.

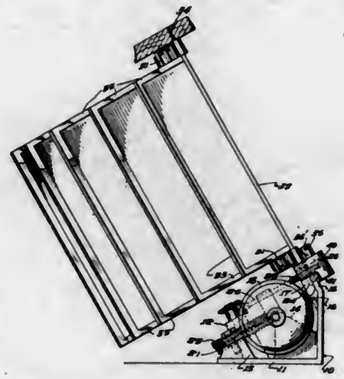
1,768,302. CAR-DOOR MECHANISM. WILLIAM E. WINE, Toledo, Ohio. Filed Aug. 1, 1928. Serial No. 296,699. 5 Claims. (Cl. 105—308.)



1. In a railway car having a lading discharge opening, the combination with a door for closing the opening, the door being movable to open position under the influence of gravity, of mechanism for retaining the door in closed position involving a hook pivotally mounted on the car body and an arm rigidly secured to the door provided with an upwardly projecting flange engageable with the hook, said flange being provided with a slot, and a chain secured to the car body having a plurality of links, the latter being adapted to be inserted in said slot of the door arm to support the door in a plurality of positions of closure for dampening the discharge of lading from the car.

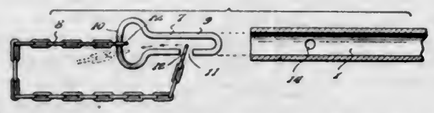
1,768,303. ADVERTISING DEVICE. JOSEPH E. WOOD, Detroit, Mich., assignor, by mesne assignments, to Fout Advertising Corporation, Detroit, Mich., a Corporation of Delaware. Filed Apr. 10, 1929. Serial No. 353,986. 4 Claims. (Cl. 40—104.)

1. An advertising mechanism including in its organization a plurality of rectangular leaf-holding frames having eyes in their upper and lower ends, means pivotally engaging the upper and lower eyes and motor operated means acting to intermittently turn each one of said leaf holding frames through an angle of approximately 180°, the inner



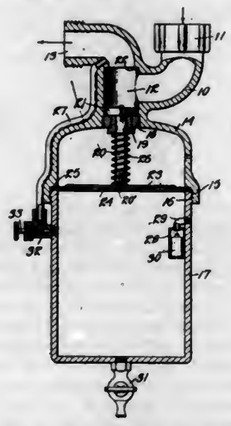
margin of the leaf of any one frame being connected to the inner margins of the leaves of an adjacent frame whereby to permit advertising matter to extend across two leaves.

1,768,304. TOWING BAR. FRANK AYLER, Tacoma, Wash. Filed Apr. 17, 1929. Serial No. 355,924. 5 Claims. (Cl. 280—33.14.)



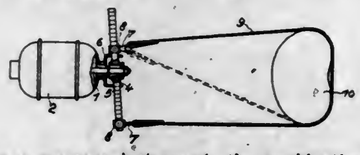
1. A towing device comprising a bar having an open end, an open link loosely received in the end portion of said bar and projecting outwardly therefrom and formed with a passage adjacent its inner end, a fastener releasably connecting the link and bar with the bar disposed about the link and closing the passage thereof, and a flexible member having its ends removably engaged through the link.

1,768,305. WATER CUT-OFF. WARREN H. BENTLEY, Miami, Fla., assignor of one-half to J. Grady Tingle, Miami, Fla. Filed July 5, 1928. Serial No. 290,661. 3 Claims. (Cl. 137—153.)



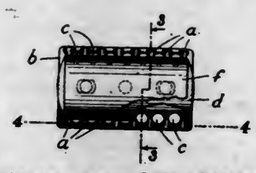
1. A valve casing having a normally unobstructed passageway therethrough, a valve for closing the flow through the valve casing, a flexible diaphragm for operating the valve, a chamber at one side of the diaphragm, means for causing a gradual filling of the chamber and distortion of the diaphragm for closing the valve, said means comprising a passage forming communication between the valve body and said chamber, a passage from said chamber to the atmosphere and a float valve for closing said passage, substantially as set forth.

1,768,306. MASSAGE INSTRUMENT. HANS BERGER, Wiesbaden, Germany, assignor to the Firm Rossel, Schwarz & Co., A. G., Wiesbaden, Germany. Filed Aug. 17, 1928, Serial No. 300,287, and in Germany, Apr. 23, 1928. 2 Claims. (Cl. 128—63.)



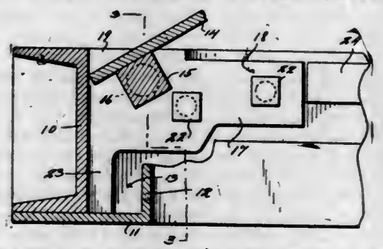
1. In a massage instrument, the combination with a rotating driving shaft having a bearing portion thereon inclined to the shaft axis, of a two-armed lever adapted to oscillate about a point located substantially centrally thereof, means for restricting the movement of said lever to one plane, means for connecting said lever to said inclined shaft bearing portion, a massage belt adapted to be placed around the body, and means for connecting each end of the belt to one end of the two-armed lever.

1,768,307. SAFETY RAZOR. WILLIAM EDWIN BLELOCH, Johannesburg, South Africa, and WILLIAM BLELOCH, Epsom, England. Filed July 12, 1928, Serial No. 292,203, and in Great Britain June 23, 1928. 6 Claims. (Cl. 30—12.)



1. In a safety razor, a guard plate having a straight, unbroken operative edge, a blade detachably secured on said guard plate, the guard plate being formed with a row of apertures adjacent each of said edges so that the medial line of the row of apertures is parallel to and slightly inward of the respective longitudinal cutting edges of said blade, the guard plate having shallow depressions located in the solid outer portion of the guard plate in front of and in staggered relation to the said apertures and extending inward on the portions of the guard plate intervening between the apertures so as to provide a very gently undulating surface in front of and beneath the cutting edge of the blade.

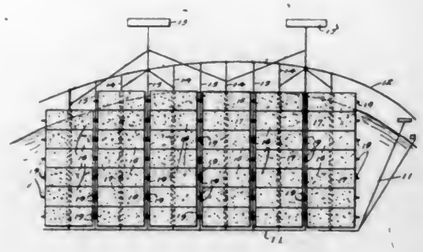
1,768,308. HINGE STRUCTURE FOR SIDEWALK DOORS. DAVIS CARPENTER, New York, N. Y. Filed Dec. 15, 1928. Serial No. 326,259. 8 Claims. (Cl. 94—34.)



8. In a door structure, a frame, a door having a gudgeon mounted upon and projecting laterally from the edge face

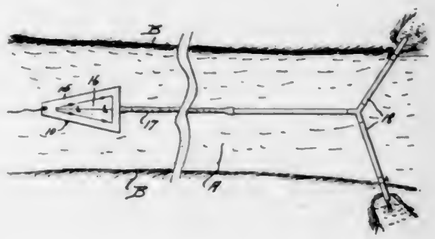
of the door adjacent one end thereof and rigid with the door, and a supporting member for the gudgeon having an aperture for the reception of the gudgeon and being detachably engaged with the door frame against that face of the door frame confronting the edge face of the door.

1,768,309. REVETMENT. RAY OLIVER DARK, Shreveport, La. Filed June 14, 1928. Serial No. 285,443. 1 Claim. (Cl. 61—38.)



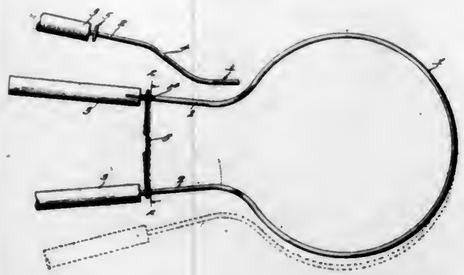
In a revetment, flexible elements defining the inner and outer edges of the revetment, relatively spaced transverse flexible elements secured to said first elements, a plurality of transversely extending series of pre-cast blocks, the blocks of each series having their ends arranged in alinement and the series being relatively spaced, the blocks being provided at their transverse centers with openings for the reception of certain of said transverse elements and the blocks increasing in thickness in the direction of their transverse centers, and reinforcing elements embedded in and extending longitudinally of the blocks and provided at their ends with eyes receiving the remainder of said transverse elements and serving to maintain the series of blocks in relatively spaced relation.

1,768,310. IRRIGATING SYSTEM. PAUL E. ERICKSON, Scandia, Kans. Filed May 1, 1928. Serial No. 274,306. 2 Claims. (Cl. 61—12.)



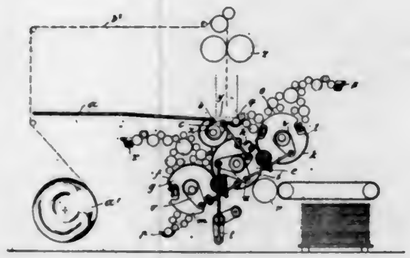
1. An irrigating system of the character described including a buoyant structure formed with a longitudinally extending chamber approximately triangular in cross section, the chamber having a flat upper wall and two downwardly and medially extending bottom walls, the bottom walls extending downward and rearward and being provided with longitudinally extending inlet openings, a pipe leading down-stream from the large end of the chamber and including a flexible section and a laterally extending irrigating pipe leading from the flexible section over a bank of the stream, and means for anchoring the floating structure at such a point up-stream that the chamber is disposed on a level higher than the highest point of said irrigating pipe.

1,768,311. PAN LIFTER. MARY FAHRNKOPF, Bement, Ill. Filed Dec. 18, 1928. Serial No. 326,727. 2 Claims. (Cl. 294—33.)



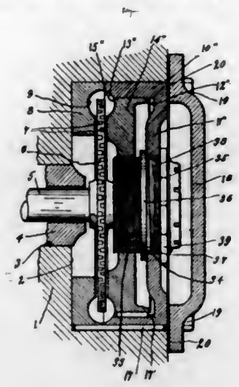
1. A pan lifter comprising a resilient loop member having outwardly extending arms, a pair of handles mounted on said arms, and a locking member loosely engaging one of said arms, said locking member being adapted to removably engage the other of said arms, said locking member comprising a closed loop and an open loop, said closed loop being mounted about one of said arms, and said open loop being adapted to removably engage the other of said arms and means carried by one of the handles whereby to prevent longitudinal movement of said locking member.

1,768,312. TWO-COLOR ROTARY PRINTING MACHINE. ALFRED FALLOT, deceased, Plauen, Germany; by Harry Priester, executor, Berlin, Germany. Original application filed Feb. 1, 1924, Serial No. 690,030, and in Germany Feb. 14, 1923. Divided and this application filed May 2, 1928. Serial No. 274,597. 4 Claims. (Cl. 101—137.)



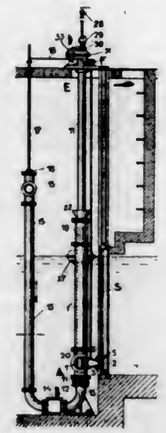
1. In a two color rotary printing machine a blanket-cylinder, two blankets on the same, two plate cylinders adapted to cooperate with said blanket cylinder, an impression cylinder of only the half diameter of the blanket cylinder, a paper feeding device, a set of grippers on the said impression cylinder by means of which the sheet coming from the feeding device is passed once around the impression cylinder to be printed upon by one of the blankets of the blanket cylinder, a second set of grippers on the blanket cylinder by means of which the sheet thereupon is caught and is printed upon by passing between the impression cylinder and the second blanket of the blanket cylinder and a delivery device for removing the printed sheet from the machine.

1,768,313. PUMPING APPARATUS. GALE L. FERGUSON and CLARENCE G. WOOD, Cleveland, Ohio, assignors, by mesne assignments, to Auto Prime Pump Company, Cleveland, Ohio, a Corporation of Ohio. Filed Dec. 29, 1927. Serial No. 243,230. 9 Claims. (Cl. 103—114.)



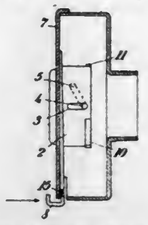
1. In a centrifugal pump, a casing providing a chamber, a pump ring snugly seated in said chamber and having an annular groove in its outer face, a second ring snugly seated in said chamber and provided with an annular recess in its innerface, a third ring snugly received in said recess, and means to adjust said third ring axially.

1,768,314. CLEANING OF FILTERS. EMANUEL FOLTA, Prague, Czechoslovakia. Filed Mar. 21, 1929, Serial No. 348,882, and in Czechoslovakia Apr. 2, 1928. 10 Claims. (Cl. 210—152.)



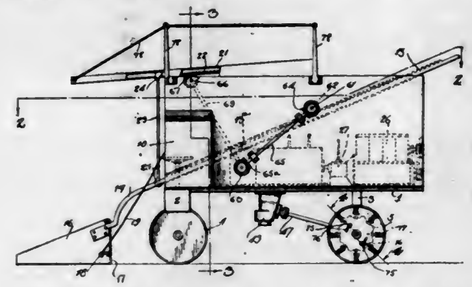
1. In an apparatus for cleaning filter sieves and gratings, a slotted suction nozzle arranged in front of the filtering surface, means for producing a relative movement between the filtering surface and the suction nozzle below the water level, toothed mud arresters, one above and one below the suction nozzle, an adjustable packing roller arranged between said suction nozzle and each mud arrester, mounting means for said rollers, and a common means acting at the end of the stroke of the relative movement between the suction nozzle and the filtering surface for simultaneously reversing the position of both rollers in front of the filtering surface whereby the rear roller, in the direction of the said relative movement, bears against the filtering surface, the other roller being out of contact with said surface.

1,768,315. OBJECTIVE-SHUTTER CASING. LEO GOLDHAMMER, Munich, Germany, assignor to Agfa Ansco Corporation, Binghamton, N. Y., a Corporation of New York. Filed Jan. 22, 1929, Serial No. 334,280, and in Germany Jan. 18, 1928. 7 Claims. (Cl. 95—45.)



1. A fixed objective shutter casing for photographic cameras comprising a fixed guiding tube and a lens carrying tube axially and rotarily movable in the shutter casing.

1,768,316. LOADING APPARATUS. FRANK GRAHEK, Adah, Pa., assignor of one-half to Frank Kufrin, Adah, Pa. Filed Feb. 21, 1929. Serial No. 341,667. 6 Claims. (Cl. 214—132.)

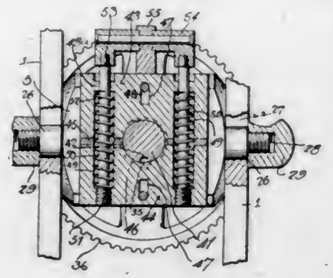


1. In a loading apparatus or motor shovel, a base platform supported on ground wheels, a housing mounted on the platform, a prime mover, gear box and power transmitting mechanism in the housing, said power transmitting mechanism including a shaft adapted to be connected to the prime mover, gearing operated by the prime mover and including a train and an associated rear differential drive, a shovel, rack bars slidable in the housing to which the shovel is pivoted, a separate sliding rack bar carrying a link support for the shovel, means for reciprocating the rack bars to forwardly project the shovel, and said means operating to retract the rack bar having the link connection with the shovel for swinging the shovel upwardly into dumping position.

1,768,317. PROCESS OF CARBURIZING IRON OR STEEL. ROBERT G. GUTHRIE and OSCAR J. WOZASEK, Chicago, Ill., assignors to Peoples Gas By-Products Corporation, Chicago, Ill., a Corporation of Illinois. Filed Mar. 30, 1929. Serial No. 351,450. 2 Claims. (Cl. 148—17.)

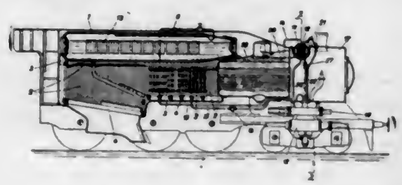
2. The process of carburizing iron or steel comprising heating the iron or steel to an elevated temperature in a retort, supplying said retort with a carbonaceous gas rich in carbon, and causing said gas to flow over said iron or steel for a period of time short of interfering soot precipitation, discontinuing the supply of carbonaceous gas and supplying said retort with an oxidizing gas while the retort is maintained at an elevated temperature, and causing the same to flow over the iron or steel for a period of time until the iron or steel is again receptive to the carbonaceous gas without interfering soot precipitation, and continuing alternately intermittently supplying of the carbonaceous gas and the oxidizing gas for intervals of time until the desired carburization of the iron or steel is obtained.

1,768,318. MINE DRILL. WACLAW HARASIMIAK, Camden, N. J. Filed July 5, 1928. Serial No. 290,545. 4 Claims. (Cl. 255—46.)



1. In a miners' drill, a frame, a block mounted on the frame, a pair of relatively movable thread jaws detachably mounted on the block, a drill rod feeding screw extending through the block and adapted to be engaged by the thread jaws, rotatable means on the block having a spline connection with the feed screw, springs normally separating the jaws, guide pins for the jaws surrounded by the springs, and means for closing the jaws against the spring tension thereon positioned exteriorly of the jaws and connected to the pins.

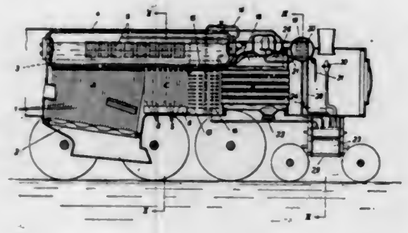
1,768,319. SUPERHEATING IN HIGH-PRESSURE LOCOMOTIVES. OTTO H. HARTMANN, Cassel-Wilhelmshohe, Germany, assignor to Schmidt'sche Heissdampf-Gesellschaft m. b. H., Cassel-Wilhelmshohe, Germany, a Corporation of Germany. Filed Oct. 27, 1928, Serial No. 315,557, and in Germany Aug. 1, 1928. 6 Claims. (Cl. 122—460.)



1. In a high-pressure locomotive the combination of a high-pressure-water-tube boiler, a low-pressure-smoke-tube boiler receiving the furnace flue gases from the high-pressure boiler, at least one superheater to superheat the high-pressure steam, and at least one superheater to superheat the low-pressure steam, the high-pressure boiler having a series of steam generating water tubes crossing the channel of flue gases and the lengths of the high-pressure superheater tubes passing between the said series of steam generating water tubes in planes transverse to the direction of flow of the flue gases.

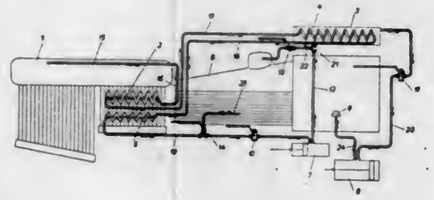
1,768,320. HIGH-PRESSURE LOCOMOTIVE. OTTO H. HARTMANN, Cassel-Wilhelmshohe, Germany, assignor to Schmidt'sche Heissdampf-Gesellschaft m. b. H., Cassel-Wilhelmshohe, Germany, a Corporation of Germany. Filed Oct. 27, 1928, Serial No. 315,558, and in Germany June 15, 1928. 4 Claims. (Cl. 122—460.)

1. In a high-pressure locomotive having a multi-stage engine, the combination of a high-pressure boiler constituting the fire box, a smoke-tube-feed-water heater lying in the flue of the high-pressure boiler, a fire gas channel leading from the fire box to the smoke tubes, a steam heated interstage superheater adapted to superheat the exhaust steam of the high-pressure stage of the engine, a superheater adapted to superheat the high-pressure-steam and delivering to said interstage superheater, a second superheater adapted to re-superheat the high-pressure steam coming from the heating elements of the



interstage superheater, the first mentioned superheater being located to receive heat from the fire gas channel, and water tubes of the high-pressure boiler distributed over the cross section of said channel and arranged in front of this superheater as a protection against the radiant heat of the furnace.

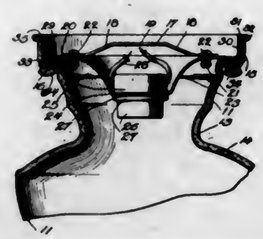
1,768,321. APPARATUS FOR CONTROLLING THE WORKING STEAM IN HIGH-PRESSURE LOCOMOTIVES. OTTO H. HARTMANN, Cassel-Wilhelmshohe, Germany, assignor to Schmidt'sche Heissdampf-Gesellschaft m. b. H., Cassel-Wilhelmshohe, Germany, a Corporation of Germany. Filed Oct. 27, 1928, Serial No. 315,559, and in Germany Aug. 17, 1928. 3 Claims. (Cl. 122—460.)



1. In an apparatus for controlling the working steam in high-pressure locomotives with interstage superheating wherein steam is supplied to the high pressure and the low pressure cylinder of on engine, the combination of a high-pressure steam boiler, a pre-superheater connected to said high pressure boiler, a steam heated interstage superheater provided with a heating tube system connected to said pre-superheater, a re-superheater connected to said interstage superheater, a low-pressure smoke-tube-feed-water-heater boiler, disposed beyond the said pre-superheater and re-superheater in the path of the furnace gases, a high-pressure throttle valve, being arranged in a conduit beyond the said re-superheater, a flow-over-valve operable from the cab and being disposed in the steam conduit between the said re-superheater and the said high-pressure throttle, and a steam conduit leading from the flow over valve to the water space of the said feed-water-heater boiler.

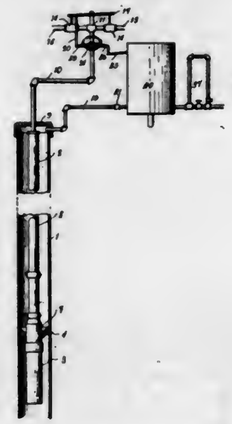
1,768,322. LIGHTING FIXTURE. CAREY C. HOEL, Columbus, Ohio, assignor to Jeannette Shade and Novelty Company, Jeannette, Pa. Filed Apr. 27, 1928. Serial No. 273,324. 2 Claims. (Cl. 240—78.)

1. In a lighting fixture, a reflector having a cylindrical neck and a flat peripheral flange terminating in an outwardly rolled bead spaced from said neck, means for supporting said reflector with said flange in engagement with a ceiling or wall, lamp supporting means carried by said



reflector a translucent shade surrounding said reflector and engaging said flange with the edge of the shade between said neck and said bead, and means for detachably securing said shade to said reflector.

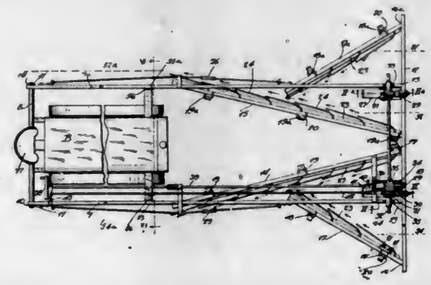
1,768,323. OIL-WELL APPARATUS. CALVIN M. HUNT and ROBERT W. WILKINSON, Borger, Tex. Filed Nov. 28, 1928. Serial No. 322,456. 2 Claims. (Cl. 103—14.)



1. Oil well apparatus comprising an oil-collecting chamber, a fluid pressure conduit leading into the top of the said chamber, a governor tank, an inlet pipe leading into the fluid pressure conduit, an exhaust pipe leading from said conduit, said inlet and outlet pipes having a common connection with the conduit, reversely acting valves in said inlet pipe and in said exhaust pipe respectively controlling the flow through the same and the conduit, a single lever fulcrumed between its ends and connected at its ends with the respective valves, and cooperating rocking arms having a common pivot, retractile springs connecting the outer ends of said arms, a connection between one of said arms and the lever, and means connected to the other of said arms and controlled by the outflow of oil for rocking the arms.

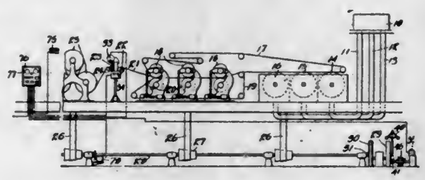
1,768,324. HARVESTING MACHINE. ADOLF KERNS, Gonzales, Calif. Filed Oct. 18, 1928. Serial No. 313,275. 7 Claims. (Cl. 56—192.)

1. The combination in a harvesting machine, of a structural frame having adjacent the rear end thereof vertically pivotal means of attachment to a propelling means, said frame comprising forwardly-extending parallel members suitably spaced apart, a front transverse frame member secured to the forward ends of said parallel members, portions of said member extending beyond each parallel member, outer diagonal frame members whose forward ends are secured adjacent the ends of each extending member, the backward ends thereof being secured to the adjacent parallel member, inner diagonal frame members secured to said transverse member adjacent the middle thereof, said inner members being of greater length than the outer members and each secured to the inner side of its companion parallel frame member, said inner diagonal



members inclosing an isoscelar triangular figure open at the apex, the said outer diagonals enclosing right triangular figures so disposed as to leave passage-way for crop matter between the apexes thereof and the sides of the isoscelar figure; front wheels for the support of said frame in normally horizontal position, standards suitably attached to said inner and said outer frame members and blade means secured to said standards, said blades being adapted to shear the stem of crop matter while traversing along the rows thereof.

1,768,325. CONTROL MECHANISM FOR PAPER-MAKING MACHINES. DARCY E. LEWELLEN, Columbus, Ind., and GRANVILLE R. ZECHER, Middletown, Ohio. Filed June 27, 1928. Serial No. 288,573. 15 Claims. (Cl. 92—46.)

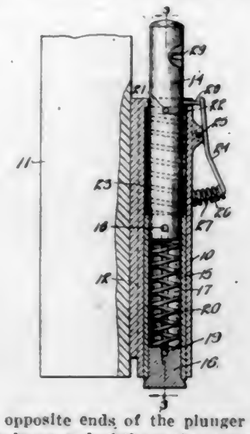


1. A paper making machine comprising feeding means, means operable to move the paper through the machine, means responsive to variations in the thickness of the paper at a point where the paper becomes sufficiently thick to be measured, means operable to vary the speed of travel of the paper through the machine, the said speed varying means operating intermittently for short durations when the thickness of the paper varies from predetermined standards, substantially as set forth.

1,768,326. DOOR HOLDER. HENRY W. MILLER, Miami, Fla. Filed June 30, 1928. Serial No. 289,364. 2 Claims. (Cl. 292—153.)

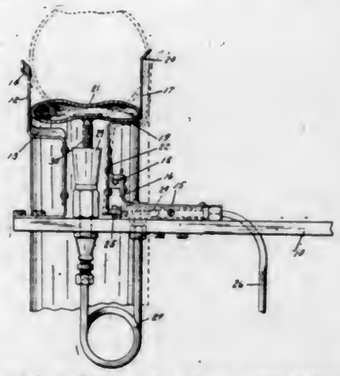
2. A device of the class described, comprising a casing having its upper end forming an internal annular flange, a plunger mounted in said casing projecting from the top of the same, a stop on the plunger adapted to engage the flange on the casing for limiting the upward movement of the plunger, a slotted sleeve within said casing housing the lower end of the plunger, a pin carried

by the plunger and having one end located in the slot in the sleeve, a spring about said plunger confined between said stop and the end of the sleeve for holding the plunger and sleeve in predetermined relation, but permitting the plunger to move into the sleeve when pressure is



applied to the opposite ends of the plunger and sleeve, a pin through the lower end of the casing extending through the slot in the sleeve, and a spring confinde between said pin and the lower end of the plunger, substantially as set forth.

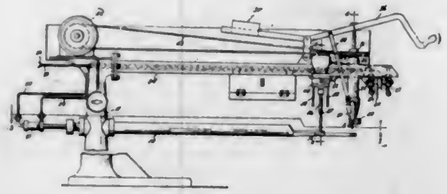
1,768,327. INFLATION APPARATUS. GEORGE B. NICHOLS, Akron, Ohio, assignor to The Firestone Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Apr. 13, 1929. Serial No. 354,803. 2 Claims. (Cl. 152—11.)



1. Inner tube inflation apparatus comprising opposed arm members having shoulders thereon for supporting an inner tube therebetween, one of said members being pivoted to swing toward and from the other, an inflation valve arranged between said arms for cooperation with the inner tube valve, a supply valve connected to the inflation valve, means normally urging the pivoted arm member toward the opposite arm member, said pivoted arm member cooperating with said supply whereby it is normally held open, said supply valve being adapted to close when said pivoted arm member is moved away from the opposite arm member by expansion of the inner tube a predetermined amount.

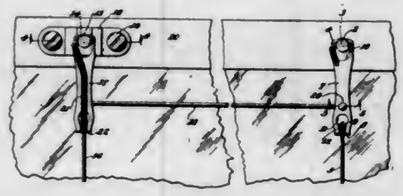
1,768,328. MACHINE FOR INSERTING VALVES IN INNER TUBES. GEORGE B. NICHOLS, Akron, Ohio, assignor to The Firestone Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed June 7, 1929. Serial No. 369,155. 16 Claims. (Cl. 154—9.)

1. A tube punching and valve inserting machine including an elongated anvil adapted to have a tube slipped thereon over one end, a punching die adjacent said end of the anvil, a punch movable toward and from said die to punch a valve aperture in the tube, a seat for a valve on said anvil adjacent said end, said seat having a portion adapted to assist in supporting the valve in a reclined position on the anvil and a portion for seating the valve vertically of the anvil, a reciprocable element movable on the anvil in cooperation with the seat including means for embracing the valve to support it in said reclined position when the element is in one of its positions, and



means for engaging the valve to swing it to a vertical position and to position its base in the second named seating portion when said element is actuated to its other position, and an inserter movable toward and from a valve on said anvil, said inserter including a member adapted to be forced down to a position about said valve to depress a tube with its valve aperture aligned with the valve down onto the base of the valve, said inserter having means thereon for engaging in the valve aperture of a tube to align the same with the valve.

1,768,329. WINDSHIELD CLEANER. JOHN R. OISHEI, Buffalo, N. Y., assignor to Trico Products Corporation, Buffalo, N. Y. Filed Aug. 24, 1926. Serial No. 131,196. 8 Claims. (Cl. 15—255.)

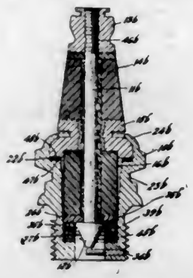


1. A windshield cleaner comprising an operating shaft, an auxiliary shaft, a wiper carrying arm for each shaft detachably interlocked therewith, a spring on each arm, and a connector unit for securing the arms to their respective shafts against displacement therefrom and for transmitting the swinging movement from one arm to the other in synchronism, said conntector unit comprising a stirrup member at each end, each stirrup being detachably interlockable both with the adjacent shaft and its wiper carrying arm, each spring being stressed by the adjacent stirrup member for securing the respective wiper carrying arm against accidental displacement from its shaft and acting to hold the respective stirrup member operative.

1,768,330. SPARK PLUG. HECTOR RABEZZANA, Flint, Mich., assignor to A C Spark Plug Company, Flint, Mich., a Company of Michigan. Filed Dec. 7, 1928. Serial No. 324,509. 13 Claims. (Cl. 123—169.)

1. A spark plug comprising: an inner electrode element, provided with a head; a grounded electrode shell element surrounding said inner electrode element; and "sandwich

type" insulation, comprising thermally conductive elements interposed between electrically non-conductive elements



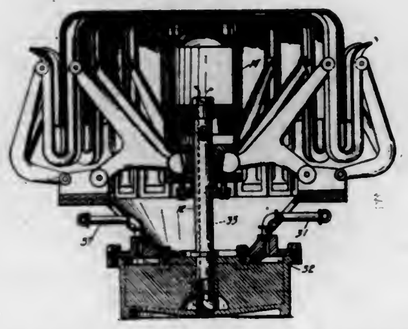
and so disposed between said electrode elements in the region of said head as to augment the flow of heat from said region.

1,768,331. SIGN. WILLIAM H. RAMSEY, Corpus Christi, Tex. Filed Nov. 16, 1928. Serial No. 319,936. 4 Claims. (Cl. 40—140.)



1. A sign comprising a series of symbols and means to support the same in operative relation to each other, said symbols each consisting of a frame open at the front and having the outline of the required symbol and adapted to receive loose goods to be displayed, and a wire fabric closing the front of the frame to retain the goods therein and admit of ready observation thereof.

1,768,332. FABRIC-BAND EXPANDER. ROSCOE V. RITCHEY, Akron, Ohio, assignor to The Firestone Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Nov. 17, 1927. Serial No. 233,887. 8 Claims. (Cl. 154—10.)



1. A tire ply band stretching device, comprising a plurality of parallel yoke members, arranged about a central axis and radially movable with respect thereto, each of said yoke members having inner and outer arms, a plurality of links, each having one end pivoted to the outer arm of one of said yoke members, a plurality of rocker arms, each having one end pivoted to the inner arm of one of said members, a base to which are connected the other ends of said links and said rocker arms, a piston affixed to said base and extending along said central axis, and a fluid pressure operated cylinder reciprocable with respect to said piston and engageable with said rocker arms for expanding and contracting said yoke members to stretch a tire ply band placed thereabout.

1,768,333. ELECTRICAL CONDENSER AND METHOD OF MAKING THE SAME. ROBERT C. SPRAGUE, Quincy, Mass., assignor to Sprague Specialties Co., Quincy, Mass., a Corporation of Massachusetts. Filed Dec. 13, 1927. Serial No. 239,684. 8 Claims. (Cl. 175—41.)



1. A condenser comprising a flat body of alternate layers of insulating and conducting material, and two terminals extending obliquely to the lateral edges of the body in approximately parallel offset relationship and projecting respectively from the opposite end edges of the body approximately midway between the lateral edges.

1,768,334. DOLL. CHARLES STEIN and WILLIAM M. HELLER, Atlantic City, N. J. Filed Dec. 5, 1927. Serial No. 237,838. 3 Claims. (Cl. 46—40.)

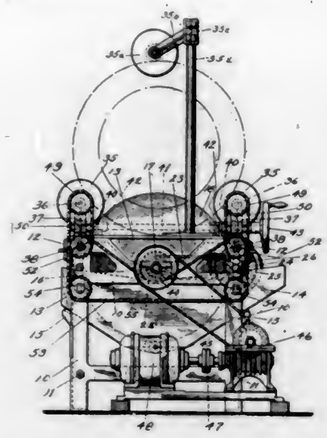


1. A toy figure that comprises a figure having a body, adapted to be grasped by the band, and a flexibly supported hollow head mounted above said body, the head having a neck with an opening for thrusting a finger into the head, said opening being situated so that it is accessible to a finger of the hand grasping the doll to wiggle the head and pad means comprising portions that respectively extend from a point substantially below the head, and reach downward and laterally, and then upward, and provide overlying cushion layers, a pad in rear of the head, a curtain extending from the top of the last named pad downward, and safety pins atacking said pads and said curtain at the edges; the curtain being free at the bottom for thrusting the hand between it and the adjacent pad.

1,768,335. MACHINE FOR WASHING TIRES, COATING AIR BAGS, OR THE LIKE. HORACE D. STEVENS, Akron, Ohio, assignor to The Firestone Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed June 21, 1924. Serial No. 721,481. 15 Claims. (Cl. 15—97.)

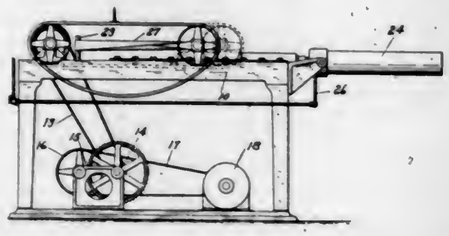
2. A machine for treating annular articles comprising a tank, traveling wipers adapted to pass through the tank,

means for supporting and circumferentially driving the article, and means for relatively adjusting the wipers and the first means.



10. Apparatus of the class described comprising means for supporting and circumferentially driving an article of torus-shape in a vertical position, a tank beneath said means and rotary wipers partly submerged in the tank and engageable with the outer periphery and side-walls of the article at a point at which they are not submerged.

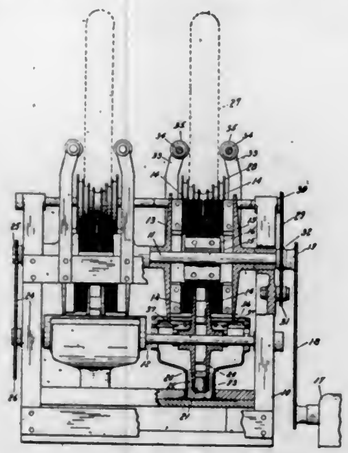
1,768,336. TUBE-POLISHING MACHINE AND METHOD OF POLISHING TUBES. HORACE D. STEVENS, Akron, Ohio, assignor to The Firestone Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Nov. 20, 1926. Serial No. 149,724. 4 Claims. (Cl. 15—97.)



1. Apparatus for cleaning inner tubes comprising a fixedly journaled roller, a shiftably journaled roller, means normally holding the second roller in a position spaced from the first roller, means for shifting the second roller from said position away from the first roller, and means for driving the fixedly journaled roller.

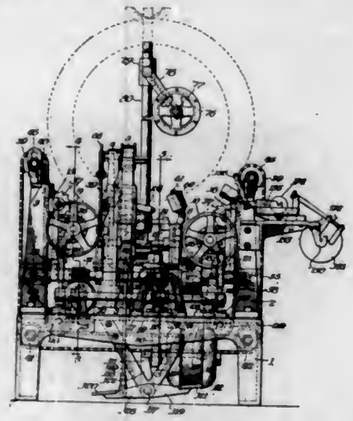
1,768,337. MACHINE FOR COATING AIR BAGS. HORACE D. STEVENS, Akron, Ohio, assignor to The Firestone Tire and Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Jan. 14, 1927. Serial No. 161,050. 2 Claims. (Cl. 91—40.)

1. A machine for coating annular objects, comprising a frame having journaled therein upper and lower shafts, a pair of spaced discs fixed to said upper shaft, a series of wipers mounted radially about said discs on the confronting faces thereof for engaging the sides of an annular article to be coated, a central series of wipers mounted radially about said upper shaft and affixed thereto between said discs or engaging the periphery of the annular article to be coated, a pair of spaced discs fixed to said lower shaft and having a series of radial plates mounted therebetween, the upper portions of the last-named discs and said plates engaging a portion of the side engaging wipers and central wipers respectively, a receptacle for containing liquid in said last named discs and plates are adapted to be partly submerged, whereby rotation of said



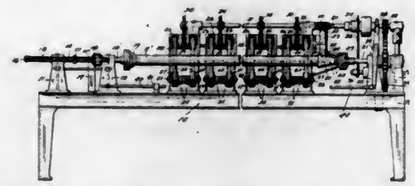
discs and said wipers will transfer a quantity of liquid from the receptacle to the sides and periphery of the annular article to be coated, means for varying the quantity of liquid thus transferred, driven rollers for supporting and circumferentially rotating the annular object to be coated, means for guiding the latter on said rollers, and means for rotating said shafts and said rollers.

1,768,338. WRAPPING MACHINE. WILLIAM C. STEVENS, Akron, Ohio, assignor to The Firestone Tire and Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Mar. 5, 1924. Serial No. 696,946. 6 Claims. (Cl. 242—6.)



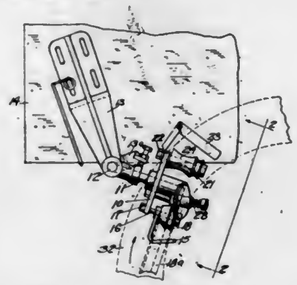
1. Apparatus for wrapping annular articles, said apparatus comprising a rotary annular shuttle, transversely flat rollers for driving an annular article by engagement with its periphery circumferentially through the eye of the shuttle, a pair of guide rollers positioned at either side of said shuttle adapted to receive the article therebetween, and means for positively and simultaneously adjusting the rollers of both pairs toward or from each other relatively of the shuttle.

1,768,339. MANDREL-POLISHING MACHINE. WILLIAM C. STEVENS, Akron, Ohio, assignor to The Firestone Tire and Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed June 17, 1926. Serial No. 116,576. 1 Claim. (Cl. 51—145.)



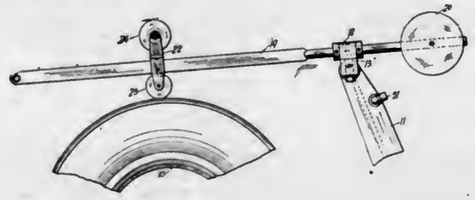
Apparatus for polishing poles, comprising a shiftably mounted chuck, a shiftably mounted center, yielding means urging the center toward the chuck, abrasive belts operable against a pole supported in the chuck and center, each belt being mounted on pulleys one of which is yieldable toward and from the other to tension the belt and urge it against the pole, means for rotating the chuck to drive the pole and for driving the belts in opposite lineal directions to the pole, and means for shifting the chuck and center against said yielding means to shift the pole longitudinally to and fro relative to the belts.

1,768,340. STRIP-APPLYING DEVICE. WILLIAM C. STEVENS, Akron, Ohio, assignor to The Firestone Tire and Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Nov. 6, 1926. Serial No. 146,698. 3 Claims. (Cl. 154—10.)



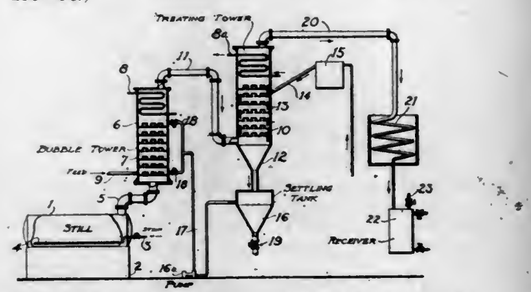
1. A tire-making machine comprising, in combination, a rotatable core adapted to be supported in reversed horizontal positions, and a strip applying device movable onto a side of the core in either horizontal position thereof for operation successively on both sides of a tire built on said core.

1,768,341. TIRE-BUILDING MACHINE. WILLIAM C. STEVENS, Akron, Ohio, assignor to The Firestone Tire and Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Nov. 6, 1926. Serial No. 146,699. 3 Claims. (Cl. 154—10.)



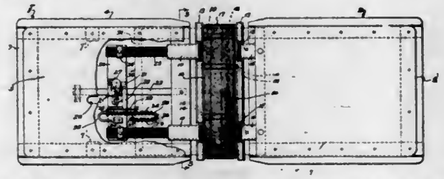
1. A tire building machine comprising, in combination, a rotatable core, a standard, and a manually operable lever pivotally mounted on the standard and carrying a stitcher for operation on the core, the pivotal mounting of the lever permitting movement of the stitcher transversely from bead to bead of a tire about the core, said stitcher comprising spaced rotatable discs each adapted to act against the core as a tool rest for the other respectively, on opposite sides of the core.

1,768,342. PROCESS AND APPARATUS FOR TREATING HYDROCARBON OILS. REGINALD K. STRATFORD, Sarnia, Ontario, Canada, assignor to Standard Oil Development Company, a Corporation of Delaware. Filed Oct. 16, 1925. Serial No. 62,710. 32 Claims. (Cl. 196—96.)



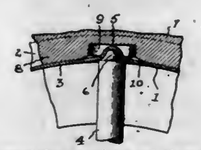
1. Process of treating petroleum oil vapors, comprising bringing the vapors into intimate contact in a treating zone with a stream of oil carrying finely divided clay, maintaining a temperature sufficient to cause the desired product to pass as vapor from the treating zone, and condensing said product.

1,768,343. LOOSE-LEAF BINDER. NICHOLAS H. STUART, Buffalo, N. Y., assignor to Remington Rand Inc., Buffalo, N. Y. Filed Mar. 13, 1929. Serial No. 346,594. 3 Claims. (Cl. 129—41.)



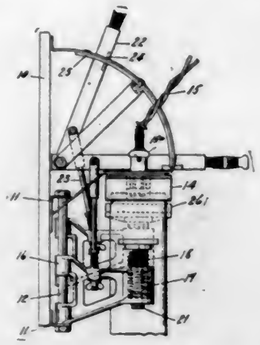
1. A temporary binder comprising in combination a pair of cover members, a cross-bar movably mounted on one of said cover members, binding members connecting said cross-bar to the other of said cover members, a backing strip connected at one edge to said last-mentioned cover member, a guide mounted on said cross-bar, a compression spring mounted on said guide and means connected to the free edge of said cover strip having a portion slidable on said guide and operatively engaging said spring.

1,768,344. WHEEL CONSTRUCTION. JOSEPH G. SWAIN, Akron, Ohio, assignor to The Firestone Steel Products Company, Akron, Ohio, a Corporation of Ohio. Filed Feb. 21, 1921. Serial No. 446,803. 2 Claims. (Cl. 301—67.)



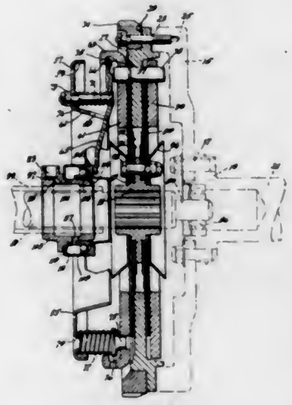
1. A wheel comprising a channel-shaped steel felloe and a plurality of spokes, the base of the felloe being in circular form throughout its circumference, except at the areas immediately surrounding but not contacting the spoke ends which said areas are distorted outwardly.

1,768,345. DEVICE FOR REPAIRING INNER TUBES OR THE LIKE. JOSEPH C. THOMAS and WILLIAM H. BINES, Akron, Ohio, assignors to The Firestone Tire and Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Jan. 16, 1928. Serial No. 247,123. 13 Claims. (Cl. 18—18.)



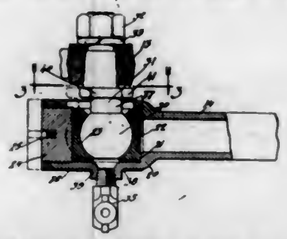
1. A device for vulcanizing repairs in rubber articles, said device including a wall bracket, an upper, electrically heated and controlled curing plate supported upon said bracket, a series of lower, generally rectangular, presser plates movable toward and from said curing plate, brackets on which said presser plates are swiveled, said brackets being vertically shiftable on said wall bracket, springs for yieldingly supporting said plates on said brackets, lever means above the curing plate for vertically shifting each of the brackets, and means for releasably latching the brackets in positions with the presser plates yieldingly urged against the curing plate.

1,768,346. DISK CLUTCH. EARL A. THOMPSON, Detroit, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed June 20, 1927. Serial No. 200,228. 21 Claims. (Cl. 192—68.)



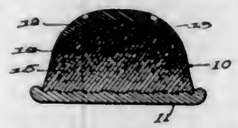
1. In a clutch, a primary driving member, axially movable driving members positioned on either side thereof and rotatable therewith, a driven member comprising parts positioned between said primary driving member and said axially movable driving members yielding means, and means associated therewith to exert equal pressures upon said axially movable members to effect clutch engagement.

1,768,347. TIE-ROD CONSTRUCTION. JOHN T. TRUMBLE, Lansing, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Feb. 2, 1925. Serial No. 6,323. 1 Claim. (Cl. 280—95.)



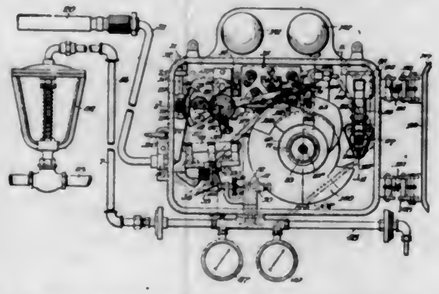
The combination in a vehicle steering gear, of stub axles, arms projecting from the stub axles, a rod connecting said arms, and means for adjusting the relation between said arms, comprising; a stud having a shank rotatably mounted in one of said arms, means for retaining said stud fixedly in selected position, and a ball on the stud cooperating with a socket in the connecting rod, said ball being eccentric to the axis of the stud.

1,768,348. COMPOSITE RUBBER ARTICLE OF GRADED PROPERTIES AND METHOD OF MAKING THE SAME. WILLIAM BURTON WESCOTT, Boston, Mass., assignor to Rubber Latex Research Corporation, Boston, Mass., a Corporation of Massachusetts. Filed Dec. 27, 1927. Serial No. 242,648. 10 Claims. (Cl. 18—55.)



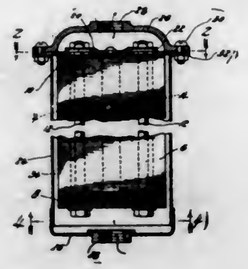
1. As an article of manufacture, a composite body of rubber and short lengths of cord disposed therein in random arrangement, the rubber being composed in part of old vulcanized rubber and in part of new bonding rubber, the concentration of old rubber and of cords varying throughout the extent of the body.

1,768,349. INSTRUMENT FOR CONTROLLING TEMPERATURES. ROY W. BROWN, Akron, Ohio, assignor to The Firestone Tire and Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed July 17, 1924. Serial No. 726,611. 12 Claims. (Cl. 236—46.)



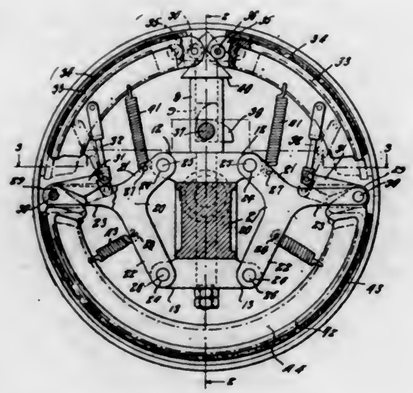
1. A timed temperature controller comprising an element whose positions in space determine definite temperatures, means adapted to vary the position of said element comprising time-controlled cams having drops therein for repositioning the element to determine a relatively higher temperature for each drop, and means for relatively adjusting the drops to define different time intervals between the variations in the position of said element.

1,768,350. OIL FILTER. THERON P. CHASE, Detroit, Mich., assignor to General Motors Research Corporation, Detroit, Mich., a Corporation of Delaware. Filed Dec. 24, 1926. Serial No. 156,974. 8 Claims. (Cl. 210—165.)



4. In a fluid filter comprising a container, a cap for said container, a member secured between said cap and container, a filtering medium suspended from said member, a plurality of passages in said medium to permit the flow of fluid, inlet and outlet ports to said container, and a bolt passing through said filtering medium and forming the means for securing said filtering medium to said member.

1,768,351. BRAKE MECHANISM. STUART H. CLAPP, Washington, D. C., assignor, by mesne assignments, to Bendix Brake Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 20, 1925. Serial No. 17,028. 18 Claims. (Cl. 188—78.)

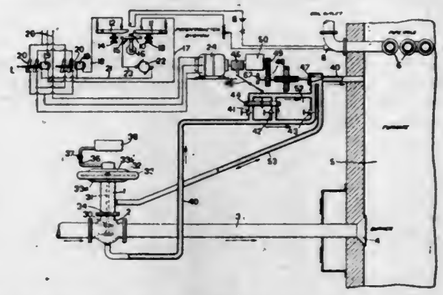


13. A brake comprising a central shoe, in combination with two other shoes acting on opposite ends of the central shoe with a power-multiplying leverage when the brake is applied.

1,768,352. [WITHDRAWN.]

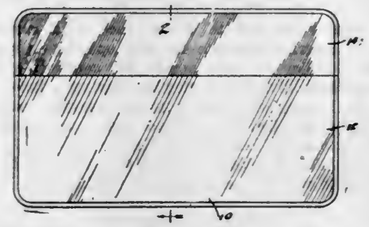
1,768,353. APPARATUS FOR FLOW CONTROL. LUIS DE FLOREZ, Pomfret, Conn., assignor to The Texas Company, New York, N. Y., a Corporation of Delaware. Filed Jan. 3, 1929. Serial No. 330,023. 5 Claims. (Cl. 236—70.)

1. In a fluid supply system the combination comprising a supply line, a diaphragm valve located therein and having a diaphragm, means for subjecting one side of the diaphragm to a predetermined pressure, a chamber of which one wall is the other side of the diaphragm, means for continuously withdrawing a small portion of fluid from the low pressure side of said valve, means for automatically regulating the amount of such withdrawal,



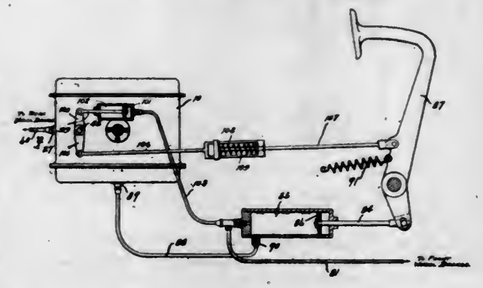
and a fluid pressure compensating line between the point of regulation and the chamber, whereby movement of the diaphragm valve is effected in accordance with the regulating means to thereby control the flow of fluid in the supply line.

1,768,354. REAR-VIEW MIRROR. ROBERT N. FALGE, Detroit, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Apr. 30, 1928. Serial No. 274,076. 9 Claims. (Cl. 88—1.)



1. A one piece uniplanar rear vision mirror provided with an upper zone of low reflecting efficiency and a lower zone of high reflecting efficiency.

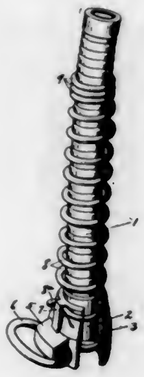
1,768,355. HYDRAULIC BRAKING SYSTEM FOR MOTOR VEHICLES. GEORGE E. A. HALLETT, Dayton, Ohio, assignor to General Motors Research Corporation, Dayton, Ohio, a Corporation of Delaware. Filed June 23, 1925. Serial No. 39,076. 17 Claims. (Cl. 188—152.)



16. In a hydraulic braking system for a vehicle having two front wheels and two rear wheels and a brake operating cylinder at each wheel, in combination, manual means for supplying braking pressure to one set of wheel brake cylinders, servo-power means for supplying braking

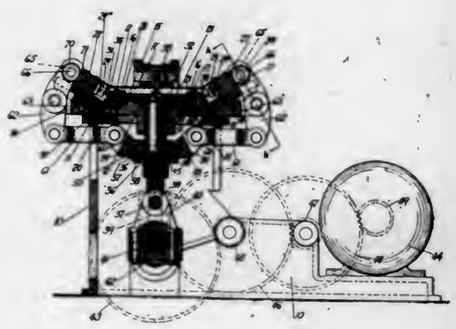
pressure to the other set of brake cylinders, and means for maintaining the pressure supplied to the front wheel brake cylinders at a predetermined fraction of the pressure supplied to the rear wheel brake cylinders, whereby the braking effect at the rear wheels varies directly with but exceeds the braking effect at the front wheels.

1,768,356. HOSE NOZZLE. WILLIAM E. HARMAN, Los Angeles, Calif., assignor to Harman Pacific Company, Los Angeles, Calif. Filed Mar. 18, 1925. Serial No. 16,508. 4 Claims. (Cl. 221—100.)



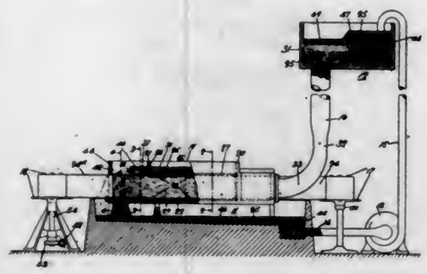
1. A nozzle adapted to be attached to a supply hose and to be inserted through an inlet opening in a tank, a coupling member on said nozzle for connecting it to a supply hose, said coupling member having a hole therein, means for holding said nozzle in said opening, said means consisting of a spiral wire wound loosely upon said nozzle and having one end inserted into said hole in said coupling member and having its other end free to move longitudinally of said nozzle, for the purpose indicated.

1,768,357. PUNCH PRESS. DALLAS C. CARROLL, Akron, Ohio, assignor to The Firestone Steel Products Company, Akron, Ohio, a Corporation of Ohio. Filed Mar. 27, 1924. Serial No. 702,409. 6 Claims. (Cl. 164—90.)



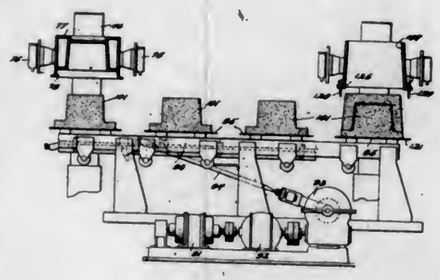
1. A punch press for forming perforations spaced in the periphery of a wheel rim having flanges, said press comprising a table formed with a depression adapted to support a rim therein and with guideways on its periphery sloping downwardly and inwardly toward said depression, punch-carrying heads reciprocably mounted in said guideways whereby perforations may be made adjacent the flanges, and means for simultaneously reciprocating said heads on said guideways.

1,768,358. ELECTROLYTIC PROCESS AND APPARATUS. HERBERT CHAMPION HARRISON, Lockport, N. Y.; Florence M. Harrison, Arthur B. B. Harrison, and William W. Campbell, executors of said Herbert Champion Harrison, deceased. Filed May 21, 1925. Serial No. 31,922. 19 Claims. (Cl. 204—5.)



1. The process of depositing metal electrolytically upon a cathode surface, using extremely high cathode current densities, which consists in completely separating the anode and cathode in the cell by a semi-permeable, non-conducting partition of low electrical resistance when saturated with electrolyte, thereby forming two compartments affording no passage for electrolyte from one to the other except through said partition, and forcing electrolyte through the cell in two streams under differential pressures, the higher pressure being in the cathode compartment.

1,768,359. MEANS FOR MAKING MOLDS. JOSEPH W. HAZELL, Washington, D. C., assignor to New Process Multi-Castings Company, a Corporation of New Jersey. Filed Dec. 31, 1926. Serial No. 158,265. 5 Claims. (Cl. 22—193.)

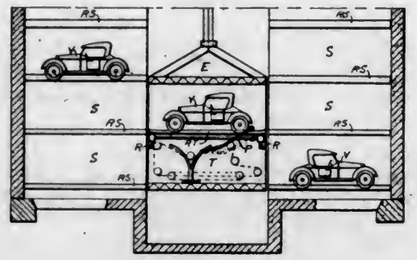


1. A mold making apparatus including cope and drag flask parts and a pattern, means for packing sand in said flask parts to form cope and drag molds, means for drawing said pattern, means operable during the pattern drawing movement for stripping said drag mold of its drag, and operable thereafter for closing said mold.

1,768,360. MICROMETER SPRING-BUFFER STOP. ROBERT T. JENNEY, Los Angeles, Calif., assignor, by mesne assignments, to Cross Parking Systems, Inc., Chicago, Ill., a Corporation of Illinois. Filed Aug. 3, 1925, Serial No. 47,879. Renewed Aug. 13, 1928. 19 Claims. (Cl. 214—16.)

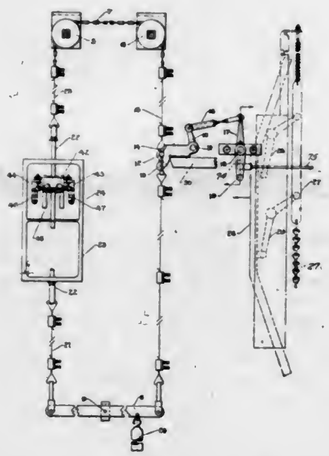
1. Two bodies, a motor on one of said bodies for moving it relative to the other, a stop on said body movable into

and out of locking engagement with the other body, means on said stop for operating said motor when said body passes



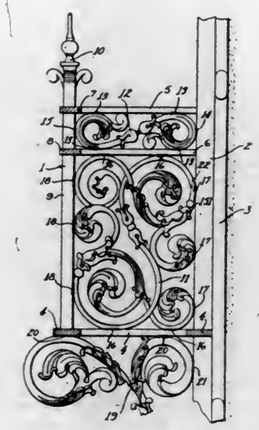
a predetermined position on the other body, and means operable by the operation of said motor for withdrawing said stop from locking engagement with the other body.

1,768,361. CONTROL APPARATUS FOR ELECTRICALLY-OPERATED ELEVATOR SIGNALS. FRED E. KALTE, Los Angeles, Calif., assignor to Randall Control & Hydrometric Corporation, Los Angeles, Calif. Filed June 26, 1925. Serial No. 39,791. 2 Claims. (Cl. 177—336.)



1. In an elevator signaling apparatus in a building having a plurality of floors, in combination, an elevator car; means to cause the stopping and starting of said car; means to lock said car operating means against starting the movement of the car after it stops at a floor; a signal call circuit for each floor with signals therein; means to lock said signals in operative position when a signal to the car has been given; a restoration circuit having a normally open switch therein, said switch when closed causing the restoration circuit to unlock the call signals; and means connected to the car operating locking means to cause the closing of the switch in the restoration circuit when said locking means are unlocked.

1,768,362. PROCESS OF MAKING GRILLE WORK. LLOYD D. KAY, Los Angeles, Calif., assignor to Kay-Brunner Steel Products Inc., Los Angeles, Calif., a Corporation of Delaware. Filed May 23, 1928. Serial No. 279,910. 6 Claims. (Cl. 29—160.)

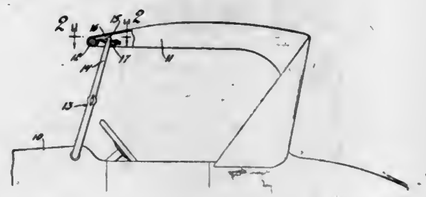


1. A process of constructing grille-work which consists in constructing a frame of wrought iron or steel, setting castings of ornamental form in contact with the frame, welding the castings to the frame at the points of contact, and annealing the structure thereafter.

1,768,363. PLASTIC COMPOSITION. HERBERT V. LECKIE, Stratford, and WATSON H. WOODFORD, Bridgeport, Conn., assignors to Remington Arms Company, Inc., a Corporation of Delaware. Original application filed Aug. 9, 1920, Serial No. 402,276. Divided and this application filed Dec. 24, 1926. Serial No. 156,984. 4 Claims. (Cl. 106—10.)

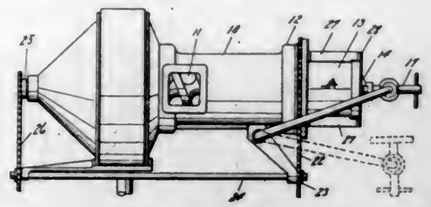
1. A heat conducting refractory composition for electric heating units comprising silicon carbide, ground slate, calcined ground slate, and sodium silicate.

1,768,364. TOP BRACKET. STUART R. LAWTON, Detroit, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Mar. 2, 1929. Serial No. 344,020. 1 Claim. (Cl. 296—120.)



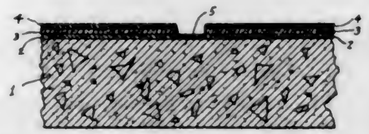
In means suitable for releasably connecting a top with a windshield post: a bracket including a concave and apertured body which is provided with flanges angularly disposed with reference thereto, said flanges being respectively provided with openings for threaded elements serving to secure said bracket to a top frame element and to receive a screw engaging a terminal element on said post and being formed from sheet metal, and a thread-receiving portion of one of said flanges being reinforced by means of a rebent and integral sheet metal element which is threaded continuously therewith.

1,768,365. CUT-OFF DEVICE FOR EXTRUDING MACHINES. WALTER C. MACFARLANE, Kenmore, Ohio, assignor to The Xylos Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Dec. 15, 1927. Serial No. 240,201. 4 Claims. (Cl. 146—174.)



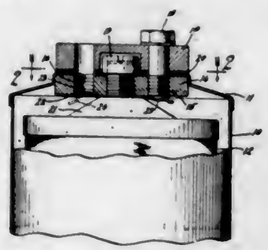
2. The combination with an extruding machine comprising cylindrical extrusion head provided with lateral and end apertures, of a knife mounted to travel about said head in proximity to the lateral and end apertures therein, and means for rotating the knife about the head to sever therefrom the material extruded through said apertures.

1,768,366. PROCESSES FOR RETAINING WATER IN CONCRETE FOR THE HYDRATION OF CEMENT. CLAUDE L. MCKESSON, Sacramento, Calif., assignor to American Bitumuls Company, San Francisco, Calif., a Corporation of Delaware. Filed July 2, 1928. Serial No. 289,844. 9 Claims. (Cl. 94—24.)



1. The process of retaining water in concrete for hydration of cement by placing water-pervious cover material on the surface of the concrete and by applying to said cover material a treatment of non-absorptive material.

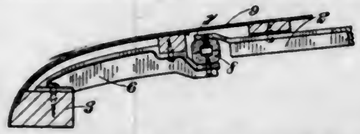
1,768,367. OIL FILTER. CHARLES W. MCKINLEY and HERBERT G. KAMRATH, Flint, Mich., assignors to A C Spark Plug Company, Flint, Mich., a Company of Michigan. Filed May 11, 1927. Serial No. 190,549. 9 Claims. (Cl. 210—62.)



1. In a purifier, a head having openings, a stamping attached to said head, pressed out portions on said stamping, and means passing through said openings for operating on said pressed out portions.

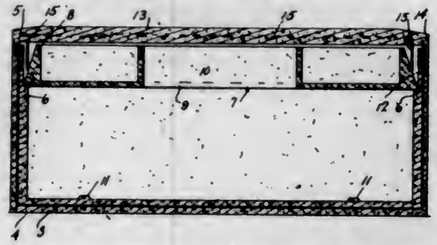
1,768,368. VEHICLE ROOF. JAMES LISTER MENZIES, Coventry, England. Filed Feb. 7, 1929, Serial No. 338,191, and in Great Britain Feb. 25, 1928. 3 Claims. (Cl. 296—137.)

1. In a vehicle, the combination with side, front and rear roof members, of a roof frame, brackets secured, respectively, to said roof members and said roof frame, resilient connections between said brackets for supporting



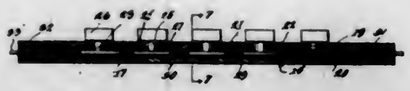
said roof frame from said roof members, and flexible covering material stretched against said roof frame and secured to said roof members.

1,768,369. BURIAL CRYPT. DONNA E. MINTON and SENETH H. GALLAGHER, Parsons, Kans. Filed Mar. 20, 1929. Serial No. 348,447. 2 Claims. (Cl. 72—7.)



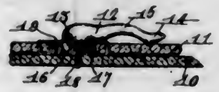
1. A burial crypt comprising a moisture proof container adapted for receiving a casket, a tray for receiving an absorbent material supported within the upper portion of the container, said tray being provided with an opening in the bottom thereof and a lid for said container, the side walls of said tray being bevelled to provide a channel between the container and said tray wherein a suitable binding agent may be placed.

1,768,370. NONSKID OVERSHOE. CHARLES C. PEARSON, North Providence, and ELI M. MCLELLAN, Cranston, R. I. Filed July 8, 1929. Serial No. 376,578. 1 Claim. (Cl. 152—14.)



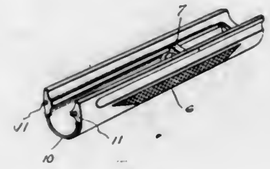
A non-skid and traction attachment for vehicle tires comprising side circumferentially extending tire chains and a plurality of spaced transversely extending tread members each including a rubber body, spaced fabric strips embedded in said body, sockets embedded in the body each including a hollow internally threaded stem extending through one fabric strip to the outer surface of the body and a wide base arranged between the fabric strips, reinforcing metal strips placed over the fabric strips through which the hollow stems extend, fastening members connecting the metal strips, the last mentioned fabric strip and the wide bases together, traction lugs including threaded stems detachably received in said hollow stems, and hooks carried by the terminals of the body receiving adjacent links of the side tire chains.

1,768,371. FASTENER. GASPARD D. PILON, Montreal, Quebec, Canada. Filed May 13, 1929. Serial No. 362,772. 1 Claim. (Cl. 24—68.)



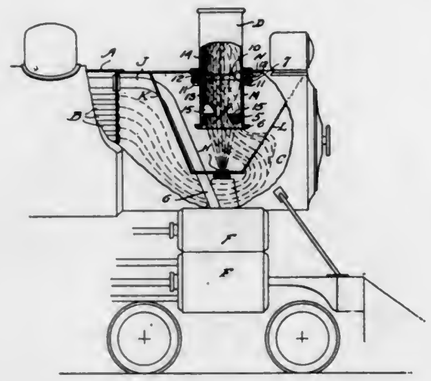
A garment fastener adapted to be permanently secured to a garment comprising an elongated body portion the middle of which is slightly convex and curved upwardly at one end, an enlargement at the other end of the body the under face of which is in line with the under portion of the other end, a longitudinally disposed ear integral with the enlargement extending downwardly therefrom at right angles and having an aperture therethrough, and a link passed through said aperture and adapted to permanently secure the fastener to one flap of a garment, the fastener furthermore cooperating with a button hole in a corresponding flap of the garment to secure both flaps thereof when the body of the fastener is inserted into the buttonhole.

1,768,372. FORE END FOR SHOTGUNS. CHARLES S. POWELL, Macon, Mo. Filed Sept. 30, 1929. Serial No. 396,329. 3 Claims. (Cl. 42—71.)



1. A fore end for repeating shot guns comprising a metallic elongated trough shaped body and a stop ring cast integrally in said body forming an abutment for the barrel guide ring of the gun.

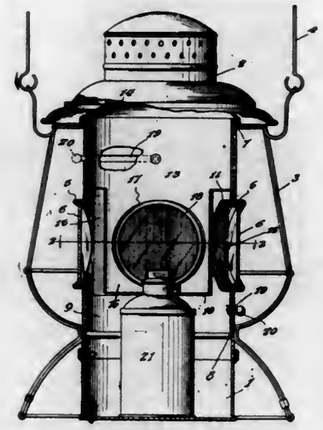
1,768,373. LOCOMOTIVE DRAFT APPLIANCE. WILLIAM T. RAY, Wichita, Kans. Filed Mar. 26, 1929. Serial No. 350,105. 5 Claims. (Cl. 230—96.)



1. An exhaust deflector for locomotives comprising a cylindrical shell, and a plurality of flat wings extending from the internal wall surface of the cylinder and arranged in inclined relation to the axis of the cylinder.

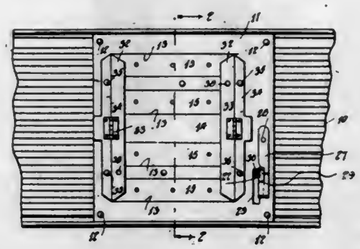
1,768,374. LANTERN. PATRICK J. ROONEY, Sugar Notch, Pa. Filed June 5, 1929. Serial No. 368,591. 2 Claims. (Cl. 240—23.)

1. A lantern provided with openings at diametrically opposite points, clear lenses fitted over said openings, slides mounted within the lantern body and having reversely arranged cut-away portions whereby either slide may move within the cut-away portion of the other slide,



and colored lenses carried by the respective slides and adapted to be moved into axial alinement with the clear lenses.

1,768,375. BOOT AND SHOE SCRAPER. JOSEPH N. SANTHONY, Lincoln Park, Mich. Filed Oct. 24, 1929. Serial No. 402,288. 5 Claims. (Cl. 280—164.)

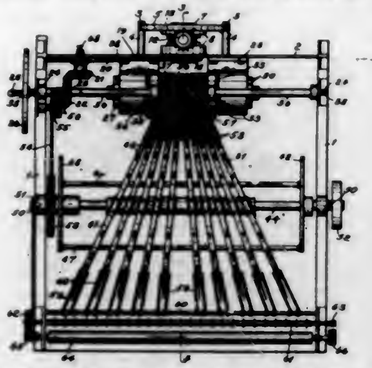


1. A scraper device of the class described comprising a scraping blade, means mounting said blade for projecting movement, a normally folded guard hingedly secured and associated with said blade, and spring means to fold said guard, said blade being mounted so as to engage the guard and move it automatically as the blade is projected.

1,768,376. UNRAVELING MACHINE FOR HORSEHAIR, GRASS WRACK, AND THE LIKE. WERNER SCHMID, Rumlang, Switzerland. Filed Jan. 10, 1929, Serial No. 331,560, and in Switzerland Feb. 10, 1928. 6 Claims. (Cl. 19—83.)

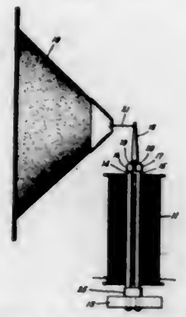
1. An unraveling machine specially for horse hair, grass wrack and the like, comprising in combination with the frame, a feeding disc having a central hole with toothed edge, two untwisting cylinders adapted to circulate and to rotate around their axes receiving the strand of material from said charging disc, a plucking drum, pins in said plucking drum positively driven so that they are

displaced in axial direction to unravel the untwisted material, wheels mutually inclined towards said plucking drum, pointed pins projecting from said wheels, stripping



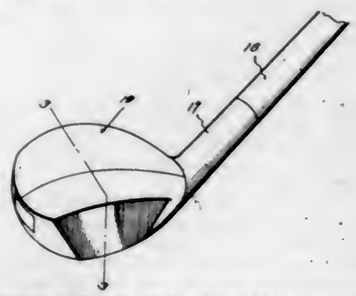
forks behind said wheels, a set of reels behind said stripping forks and draw rolls behind said reels rotating at a higher speed than said reels.

1,768,377. SOUND REPRODUCING AND RECORDING DEVICE. JAMES T. SERDUKE, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Jan. 22, 1929. Serial No. 334,250. 6 Claims. (Cl. 179—110.)



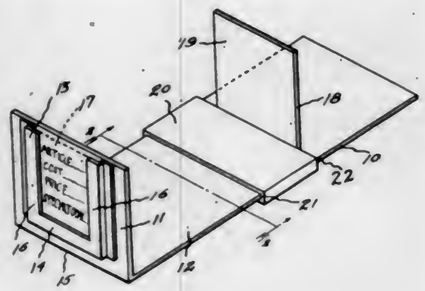
6. The combination of means for producing a magnetic field, two magneto-strictive members rigidly mounted at one end and respectively operable to contract and elongate when subjected to said field, a movable member, and driving means arranged between said movable member and the free ends of said magneto-strictive members.

1,768,378. GOLF-CLUB-HEAD CONSTRUCTION. BENJAMIN BOORMAN SMITH, Tullahoma, Tenn. Filed Aug. 21, 1929. Serial No. 387,471. 4 Claims. (Cl. 273—77.)



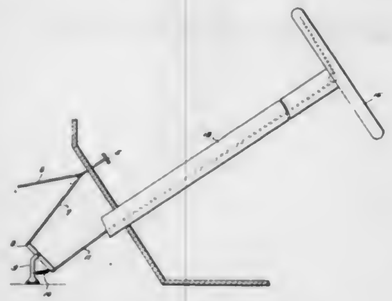
1. A wooden golf club head comprising a longitudinally grained straight piece of wood bent to an oblique angle to form a stem, a pair of rectangular blocks of wood of different texture from the stem, said blocks having registering channels on their inner faces intermediate the upper and lower faces thereof, said registering channels overlapping and secured to one leg of the stem by an agglutinating material.

1,768,379. TAG AND TAG-HOLDING DEVICE. GEORGE W. SMITH, Neosho Falls, Kans. Filed Dec. 11, 1929. Serial No. 413,337. 2 Claims. (Cl. 40—10.)



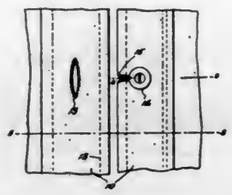
1. A tag and holding device comprising a short vertical portion and a long horizontal portion integral therewith, a U-shaped angle member rigidly attached to the front surface of said vertical portion and defining guide means with said surface for the insertion of a tag, and a clamping member slidably mounted on the horizontal portion of said device to hold an article between said clamping member and said vertical portion.

1,768,380. AUTOMOBILE GAS-THROTTLE CONTROL. WILLIAM JOSEPH STAKER, Cairo, N. Y. Filed Nov. 1, 1928. Serial No. 316,479. 3 Claims. (Cl. 74—39.)



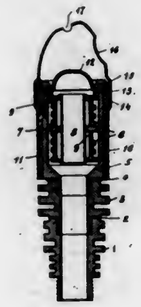
1. In combination, a steering column, a steering wheel on the steering column, a cable trained through the steering column, a pulley in the steering column, over which the cable is trained, one spoke of the steering wheel being hollow, to which the cable is trained, a reel rotatably mounted within the rim of the steering wheel, about which said cable is windable, said reel being flanged at one end, the flange of said reel extending to the outer surface of the reel rim, whereby said flange may be engaged by the finger of the hand of the operator, exteriorly of the rim, a coil spring disposed about a portion of the rim of the steering wheel, and having one end anchored to said flange, and one end anchored to the wheel so as to hold the reel in a predetermined position.

1,768,381. REVERSIBLE SHIRT. FRANK L. STEWART and MARGARET STEWART, Framingham, Mass. Filed June 12, 1929. Serial No. 370,196. 1 Claim. (Cl. 2—128.)



A reversible shirt including a body portion, sleeves, cuffs and a collar permanently attached to each other and having the edges of the connecting seam folded under to present a finished appearance at each side of the material, reinforcing strips for the flap of the shirt opening and for said cuff also having the edge of said strips folded under similar to the folded edges of the seams, one of said flaps having a row of button-holes the other of the flaps having a row of buttons, said last named flap having recesses extending inwardly from and entirely through its edge and terminating adjacent the buttons and through which recesses the buttons may be inserted for positioning upon the surface of the shirt when in either an obverse or reverse position, the edges of the recesses cooperating with the backs of the buttons, to maintain the latter upon the surface of the skirt when in either position.

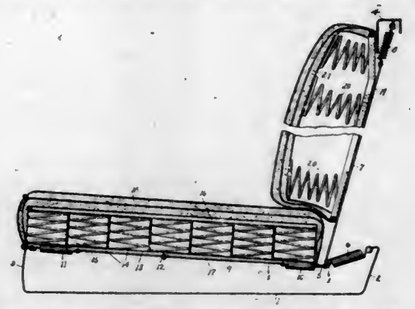
1,768,382. AUTOMATIC THERMIC IGNITION DEVICE FOR INTERNAL-COMBUSTION ENGINES. RENÉ TOUCHELAY, La Calle, Algeria. Filed Aug. 13, 1928. Serial No. 299,312, and in France Mar. 14, 1928. 3 Claims. (Cl. 123—143.)



1. An igniter of the class described comprising a casing formed with a chamber open at the bottom, hollow heating elements mounted in the chamber and spaced from the walls of the latter and formed with openings, means for separating the hollow heating elements, a tubular element open at both ends and extending through the heating elements and secured to the ends thereof, and a heater cap secured to the upper end of the casing and engaging the upper heating element.

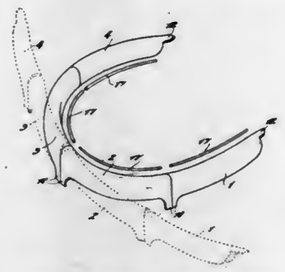
1,768,383. SEAT-CUSHION STRUCTURE. DESIRE H. VAN HOVE, Royal Oak, Mich., assignor to L. A. Young Spring & Wire Corporation, Detroit, Mich. Filed July 7, 1928. Serial No. 290,996. 8 Claims. (Cl. 155—55.)

4. In a seat structure, the combination with front and rear support members, of a cross bar disposed adjacent to said rear support member, coiled spring hangers for said cross bar connected thereto and to said rear support member, a plurality of cushion supporting straps of



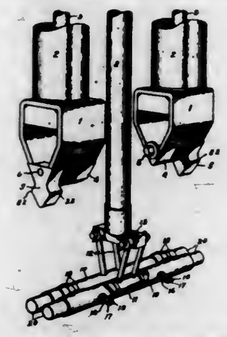
flexible material, coiled springs connecting the rear ends of said straps to said cross bar and their front ends to said front support member, and coiled springs connecting adjacent straps.

1,768,384. COLLAR PROTECTOR. EDUARDO T. VILLASENOR, New York, N. Y. Filed Oct. 25, 1928, Serial No. 314,986, and in Mexico Nov. 29, 1927. 4 Claims. (Cl. 2—60.)



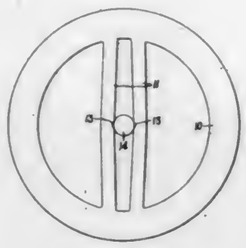
1. A coat collar protector, characterized by its stiffness and composed of a plurality of channel shaped, connected, arcuate sections, each section having two longitudinally extending ribs therein to hold the protector in position upon the collar.

1,768,385. ELECTRIC SWITCH. LUDWIG S. WALLE, Scotia, N. Y., assignor to General Electric Company, a Corporation of New York. Filed June 13, 1928. Serial No. 285,162. 11 Claims. (Cl. 200—146.)



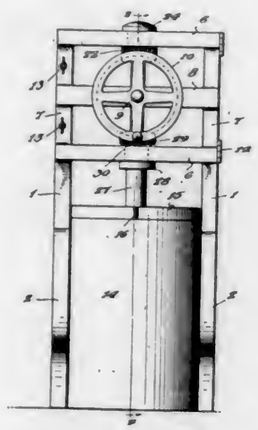
1. An electric switch comprising relatively movable cooperating contacts, one of the contacts being inclined relative to the direction of movement and having means operative when the contacts approach each other for directly engaging and moving the other contact laterally prior to actual engagement of the contacts.

1,768,386. MOTOR ROTOR. HENRY E. WARREN, Ashland, Mass., assignor to Warren Telechron Company, Ashland, Mass., a Corporation of Maine. Filed Sept. 23, 1929. Serial No. 395,160. 6 Claims. (Cl. 172—120.)



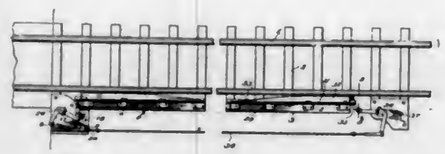
2. A rotor for self starting synchronous motors comprising a ring of magnet steel and a double bar across its diameter integral with the ring, and a shaft for said rotor resiliently embraced between the sections of said double bar.

1,768,387. CHURN. GADDIS D. WIGGINS, La Feria, Tex. Filed Apr. 24, 1929. Serial No. 357,814. 1 Claim. (Cl. 259—105.)



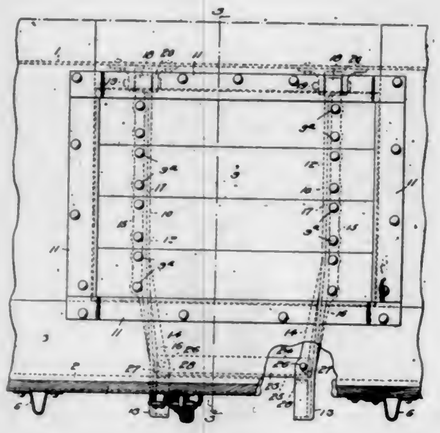
A churn including a frame comprising standards, upper and lower cross bars extending between the upper ends of the standards and secured thereto, a gate hinged to one standard and adapted to be releasably fastened to the other standard, said gate having upper and lower cross bars bearing against the upper and lower cross bars carried by the standards and an intermediate cross bar, the upper and lower cross bars of the gate and standards having their contacting side faces formed with registering recesses constituting bearings, concentric shafts received in the recesses of the cross bars and rotatable therein when the gate is closed and readily removable when the gate is opened, gears fast upon the respective shafts, a driving gear rotatably connected with the intermediate cross bar of the gate and movable therewith into and out of engagement with the gears fast upon the two mentioned shafts, a receptacle receiving the lower portions of said shafts, and beaters carried by said shafts for operating in the receptacle.

1,768,388. RAILWAY-CROSSING GATE. JOHN J. WILMOTH and AUGUST MOOS, Lincoln, Ill. Filed May 9, 1929. Serial No. 361,760. 6 Claims. (Cl. 246—293.)



1. The combination with a railway gate bar, of a pair of trip plates mounted adjacent the track, said plates comprising angularly disposed webs, shafts fixed to the webs, connections between the shafts and gate bar for raising and lowering the same when the webs are successively actuated, and means carried by a train passing over the track for actuating said webs.

1,768,389. RAILWAY CAR. WILLIAM E. WINE, Toledo, Ohio. Filed Aug. 28, 1929. Serial No. 389,017. 14 Claims. (Cl. 105—280.)

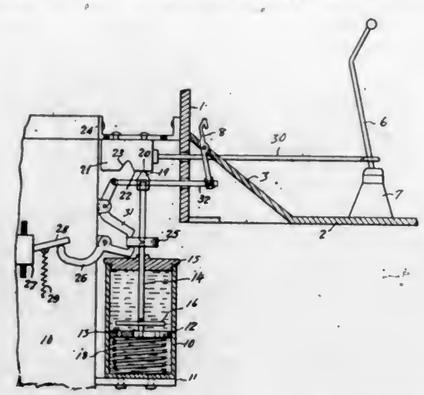


1. In a railway car having a lading discharge opening, the combination with a door for closing said opening, of a stiffening member for the door having a top flange and a portion substantially normal thereto, a portion of said flange being secured to the door and a portion thereof being adapted to co-operate with mechanism for supporting the door in closed position, the portion of the flange secured to the door projecting in one direction from the normal portion of the stiffening member and the portion of the flange adapted to co-operate with the door supporting mechanism projecting in the opposite direction from the said normal portion.

1,768,390. AUTOMATIC IGNITION-CUT-OFF CONTROL FOR ENGINE IDLING. ROY E. WING, Highland, Park, Mich. Filed Mar. 5, 1929. Serial No. 344,455. 16 Claims. (Cl. 123—140.5.)

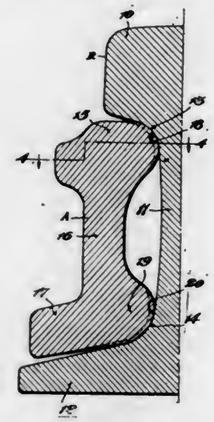
1. In a motor vehicle, the combination with an internal combustion engine having electrical conductors for conveying electrical currents from an ignition switch

to the primary interrupter, a gear-shift lever, and a starter pedal, of an electrical switch for controlling the passage of electrical currents through said conductors,



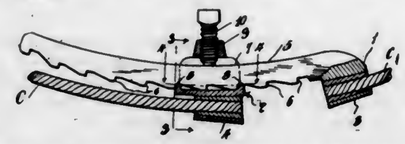
means operable when said lever is in a predetermined position to open said last mentioned switch, and means operable by said starter pedal to close said switch.

1,768,391. RAIL-JOINT BAR. DAVID P. WOLHAUPTER and EMORY L. GROFF, Washington, D. C. Filed Jan. 17, 1930. Serial No. 421,564. 10 Claims. (Cl. 238—243.)



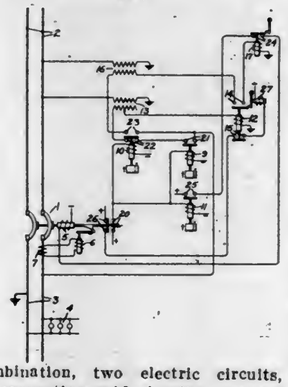
1. A rail joint including the rail, joint bolts, and a splice bar having head-clearance from the underside of the rail head and flange-clearance from the upper side of the rail flange and also having a loading engagement at the head and base fillets of the rail.

1,768,392. CABLE END CONNECTER. WILLIAM BENIEN, Lincoln, Kans., assignor to Steel Cable Mud Chain Company, Lincoln, Kans., a Corporation of Kansas. Filed June 27, 1929. Serial No. 374,145. 1 Claim. (Cl. 24—123.)



Means for connecting adjacent ends of cables and the like, comprising a member having means to engage an end of a flexible member, an arm extending from said member, a series of shoulders on one side of said arm and equidistant from one another, another member having means to engage another end of a flexible member, the second member provided with an opening to receive said arm, lugs on said second member extending into said opening and spaced to engage alternate shoulders on the arm, and a screw bolt engaging said second member and engaging the side of said arm opposite to said shoulders and midway between the lugs to hold said lugs and shoulders in engagement.

1,768,393. AUTOMATIC RECLOSING CIRCUIT-BREAKER SYSTEM. ELMER F. BLISS, Scotia, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Aug. 30, 1929. Serial No. 389,583. 5 Claims. (Cl. 175—294.)



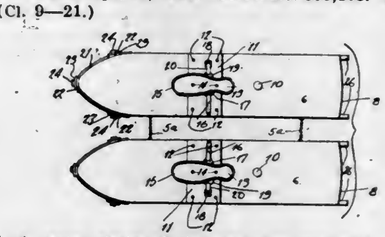
1. In combination, two electric circuits, a circuit breaker for connecting said circuits, means for impressing a plurality of different voltages across one of said circuits while said circuit breaker is open, and means dependent upon a predetermined relation between the currents produced in said one of said circuits by said voltages for controlling the closing of said circuit breaker.

1,768,394. SELECTOR SWITCH. OSCAR BRACKE, Antwerp, Belgium, assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Aug. 23, 1929, Serial No. 387,883, and in Great Britain Oct. 31, 1928. 7 Claims. (Cl. 200—11.)



1. In a selector switch, a bank comprising one or more rows of terminals supported in insulated relationship, a support adjacent each row of terminals formed by an extension of said insulation and brushes to engage each row of terminals, the extremity of each of said brushes adapted to rest on said support when out of engagement with said terminals.

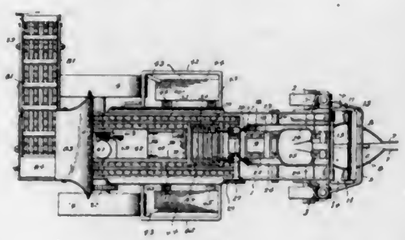
1,768,395. WATER SLEIGH. JOSEPH S. BRYLKA, Du Bois, Pa. Filed Sept. 26, 1929. Serial No. 395,403. 4 Claims. (Cl. 9—21.)



1. A water skate of the character described, comprising an elongated waterproof tank, being pointed at its

front end and square at its rear end, a foot receptor mounted on the top wall of the waterproof tank, water displacing means mounted on the front or pointed end thereof, adapted for vertical sliding movement and runners on the bottom wall of the waterproof tank for preventing side slippage.

1,768,396. BEET HARVESTER. WILLIAM B. CONRAD, Casper, Wyo. Filed May 18, 1929. Serial No. 364,102. 3 Claims. (Cl. 55—9.)



1. A beet harvester comprising a wheeled frame, a digger carried by said frame at the front end thereof, an elevator receiving the beets from the digger, a divider table arranged at the rear of the elevator and inclining from its center toward both sides, a shield at the rear of divider table, conveyers arranged at the sides of the divider table and receiving beets therefrom, and rotating cutters arranged between and adjacent the conveyers at the rear of the shield.

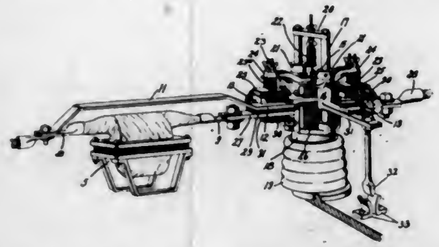
1,768,397. SURGICAL SADDLETTE. BENJAMIN B. COURTNEY, New Orleans, La. Filed Nov. 22, 1929. Serial No. 409,124. 1 Claim. (Cl. 128—98.)



A saddlette comprising a belt, a rear strap extending down from the rear of the belt, a rear tape depending from the rear strap, a pair of front straps connected with the belt to opposite sides of the front thereof and extending down in convergent relation, a front tape having its ends secured to the front straps and its intermediate portion looped, the rear tape being knotted about the looped portion and having a terminal part inserted within the looped portion and secured thereto, a wad of cotton placed about the joined portions of the tapes, and an oval envelope of chamois brought together about the cotton wad and stitched together to form an elongated pad tapering at both ends.

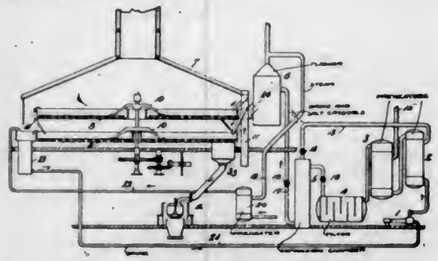
1,768,398. TRANSFORMER PROTECTIVE SWITCH. WILBUR K. DICKINSON, Lynn., Mass., assignor to General Electric Company, a Corporation of New York. Filed July 2, 1928. Serial No. 289,730. 3 Claims. (Cl. 200—87.)

1. An electro-magnetically operated circuit closer for use as a protective device comprising a stationary magnetic core structure having a transverse slot, a bar which extends through said slot and forms the winding of an electromagnet, a contact carried by and insulated from



said bar, a movable contact structure which forms the armature of the electromagnet, and flexible conductors connecting the movable contact structure to said bar.

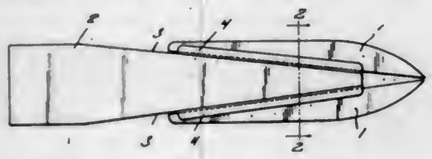
1,768,399. METHOD AND APPARATUS FOR THE MANUFACTURE OF SALT. WILLIAM F. DOWNING, Jr., St. Clair, Mich., assignor to Diamond Crystal Salt Company, St. Clair, Mich., a Corporation of Michigan. Filed May 29, 1924. Serial No. 716,776. 17 Claims. (Cl. 159—45.)



4. A process for the recovery of salt from brine comprising concentrating the brine solution substantially to its saturation point, subjecting the saturated solution to a course of crystallization treatment, controlling the effective time of said crystallization treatment by re-passing a portion of said solution and suspended crystals through a selected stage thereof, and separating the crystals thus formed from the supernatant liquor.

16. Apparatus tor the manufacture of salt from brine comprising an evaporating pan having a brine inlet and a plurality of salt outlets in series, means for moving salt crystals from said inlet to said outlets, and means for selectively closing said outlets.

1,768,400. ANIMAL-PELT STRETCHER. SAMUEL JULIUS FALLEY, Rochelle, Ill. Filed June 16, 1928. Serial No. 285,958. 1 Claim. (Cl. 149—21.)

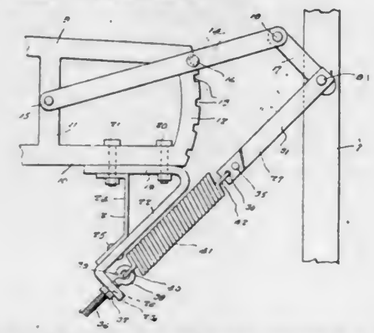


A sectional pelt stretching device comprising, a pair of elongated pelt engageable members, each having one of its longitudinal edges curved and its opposite longitudinal edge substantially straight, an elongated body provided with tapering longitudinal edge portions, and guide means on said tapering edge portions for receiving said pelt engageable members, said means consisting of an elongated U-bar secured to each longitudinal edge of the body, with its flanged portions extending outwardly.

1,768,401. TRANSLUCENT ARTIFICIAL SILK. HENRY A. GARDNER, Washington, D. C. Filed Nov. 26, 1928. Serial No. 322,094. 6 Claims. (Cl. 18—54.)

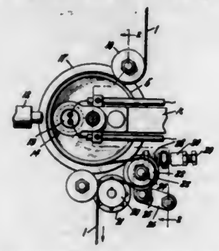
1. In delustering artificial silk formed by the extrusion process from solutions of cellulose esters and ethers, the process which comprises admixing with the solution prior to extrusion a small amount of a solution of a material adapted to go out of solution during drying of the extruded thread and to form a colloid suspension therein, the amount of such added solution being sufficient to afford an amount of material imparting a slight haze in the dried extruded material.

1,768,402. SIDE DRAFT ELIMINATOR FOR GANG PLOWS. WILLIAM E. HECK and JOHN ELLERMEYER, Du Bois, Wash. Filed Sept. 9, 1929. Serial No. 391,241. 4 Claims. (Cl. 278—96.3.)



1. A draft device for gang plows comprising a tree bar an acute angled bracket having one leg adapted to be secured to either side of the forward end of the plow beam, an extension formed on the free end of the other leg at right angles thereto, a substantially U-shaped link adapted to have the legs thereof straddle the tree bar and having aligned openings adjacent the ends of each leg to receive the bolt by which the tree is secured to the plow beam, and resilient means connecting the inner end of the link and the extension.

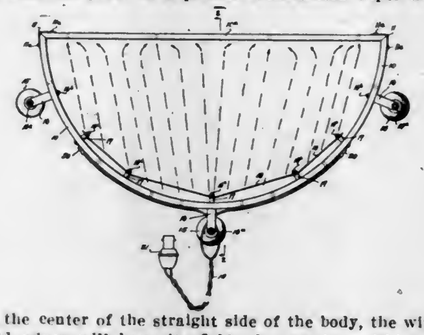
1,768,403. FILM-DRIVING MEANS. CHARLES L. HEISLER, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Sept. 18, 1928. Serial No. 306,684. 8 Claims. (Cl. 271—2.3.)



1. Film driving means including a drum, a film roll and a driven member over which members a film is adapted to pass serially, said members having friction rolls associated therewith and arranged in engagement with one another to supply a driving torque to the drum from the driven member through the film roll.

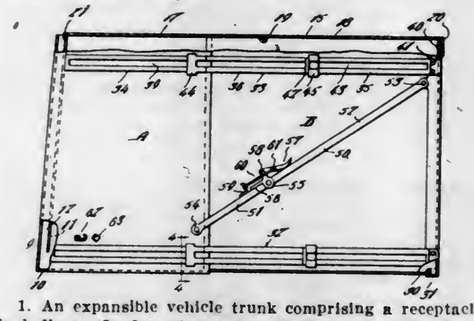
1,768,404. FOG, FROST, AND SNOW ELIMINATOR. VERNAL V. HERMAN, Vancouver, Wash. Filed Oct. 31, 1929. Serial No. 403,688. 4 Claims. (Cl. 20—40.5.)

1. A fog, frost and snow eliminator for the inside of windows comprising a body having a substantially semicylindrical chamber, a transparent side and an opposite open side to be closed by the window surface to be warmed and means for warming the air within the chamber, the body being of a size and having such proportions that when installed on a window with its straight side uppermost and with the pivot of a pivoted wind-shield wiper adja-



cent the center of the straight side of the body, the wind-shield wiper will have its field of operation within the area of the wind-shield warmed by the chamber and with the outer edge of the field of operation adjacent the outer edge of the area of the wind-shield warmed.

1,768,405. EXPANSIBLE VEHICLE TRUNK. JOHN C. HOFFMAN, Sioux City, Iowa. Filed Aug. 8, 1929. Serial No. 384,270. 3 Claims. (Cl. 224—29.)

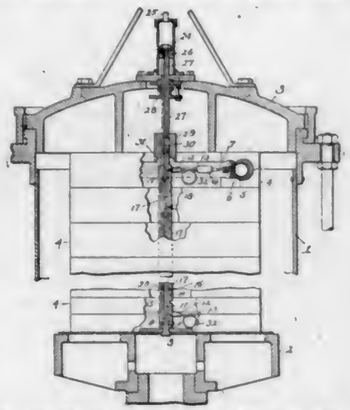


1. An expansible vehicle trunk comprising a receptacle including a fixed section and a slidable section, the fixed section formed of bottom and side walls rigidly secured together, a transverse partition secured to the side walls coextensive with and spaced from the forward wall to provide a compartment, a lid formed of two sections transversely hingedly connected together and the forward section adapted to be folded into the compartment when the receptacle sections are folded, said movable section including a rigid rear wall, an upwardly folding bottom wall horizontally hinged to the bottom of the rear wall, a pair of inwardly folding side walls vertically hinged to the rear wall, a telescoping track secured to the rear wall of the movable section and the side wall of the section on each side of the receptacle, a sectional arm on each side of the receptacle pivotally connected at its opposite ends to the rear wall of the slidable section and the side wall of the fixed section, the adjacent ends of the sections of the arms hingedly connected together, and latch means on the hinge connection of the arms and on one section respectively locking the arms in extended position.

1,768,406. FLUID-CONDUCTING TREE FOR VULCANIZERS. WALTER E. HUMPHREY and THORNTON G. GRAHAM, Kent, Ohio, assignors, by mesne assignments, to The Mason Tire & Rubber Co., Kent, Ohio, a Corporation of Delaware. Filed Dec. 7, 1923, Serial No. 679,126. Renewed Feb. 10, 1930. 15 Claims. (Cl. 18—17.)

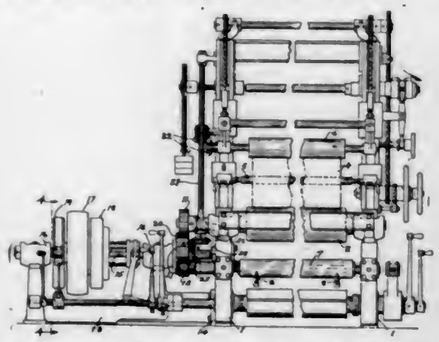
1. In a vulcanizer, the combination with a vulcanizing tank adapted to receive a pile of annular tire molds of a

sectional fluid conducting tree adapted to be built up within the annular moulds of a pile, said tank having a detachably fastened cover whereby access may be had to the interior of the tank, of a sectional fluid conducting tree adapted to be built up within a pile of moulds, said tree composed of tubular sections having telescopic slip joints, each section having a branch tube adapted to be detachably connected to a mould to supply fluid thereto,



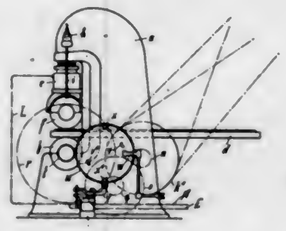
a cylinder carried by the cover, a piston in the cylinder, a piston rod extending through the lower end of the cylinder into the tank, said piston and piston rod having an axial passageway therethrough, the lower end of the piston rod being detachably connected to the uppermost section of the tree, and means for admitting fluid under pressure to the cylinder above the piston to supply fluid to the tree and to exert endwise pressure thereon.

1,768,407. COMBINED SLITTING AND WINDING MACHINE. ROBERT MCC. JOHNSTONE, Roselle Park, N. J., assignor to Cameron Machine Company, Brooklyn, N. Y., a Corporation of New York. Filed Aug. 29, 1924. Serial No. 734,845. 2 Claims. (Cl. 164—65.)



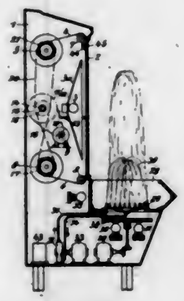
1. A combined slitting and surface winding machine including: two surface winding drums spaced apart and rotating in the same direction, slitting means including a rotating element and score-cut slitters, a gear on the end of each drum, a gear on the rotating element, a power shaft located below and intermediate the gears on the winding drums, a gear on the power shaft meshing with the gears on the winding drums and on the rotating element and transmitting power to all of said gears, a riding roll above the winding drums and intermediate the same, a vertical shaft for driving the riding roll extending downwardly in a plane between the two winding drums and intermediate the ends of the drums and their gears, a bevel gear at the lower end of said vertical shaft, and a bevel gear moving with the gear on the power shaft and engaging the bevel gear on the vertical shaft.

1,768,408. LUSTERING AND EMBOSSING MACHINE FOR LEATHER AND THE LIKE. JOHANNES KLEINEWEFERS, Krefeld, Germany, assignor to the Firm: Joh. Kleinewefers Söhne, Krefeld, Germany, a Firm of Germany. Filed June 10, 1929, Serial No. 369,901, and in Germany June 3, 1926. 6 Claims. (Cl. 101—22.)



1. A lustering and embossing machine for leather or the like in which whole skins are worked on the full width and length in a single working pass on a reciprocating table between pressure rolls, of which the upper one is hydraulically moved, comprising in combination with said table and said upper pressure roll, means for automatically pressing said pressure roll onto said table at the beginning of each working pass, and means for automatically raising said roll from said table at the end of each working pass.

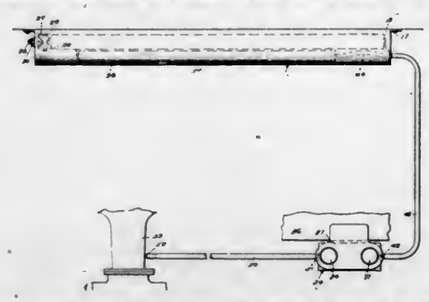
1,768,409. ADVERTISING DEVICE. WILHELM KUCZORRA, Berlin, Germany. Filed Oct. 24, 1929, Serial No. 402,283, and in Germany Oct. 19, 1927. 5 Claims. (Cl. 40—53.)



1. An advertising device, comprising, in combination, a casing, a mirror in the casing wall, a movable support adapted to hold advertisements behind said mirror, means for moving said support, lamps arranged behind the mirror, a fountain basin at said casing, the walls of the same consisting partly of glass, jet-producing nozzles in said basin, a water pump, a pipe connecting said pump with said nozzles, a motor for driving said pump, lamps behind the glass walls of the fountain basin, and a time switch so designed as to be adapted to switch on and off periodically and alternately the lamps behind the said mirror and the lamps behind the fountain basin glass walls, as well as the means for moving the advertisement support.

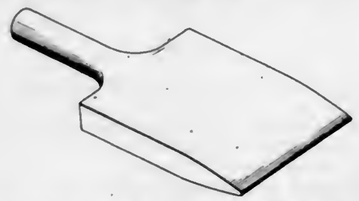
1,768,410. WINDOW-SHADE DEVICE. ELMER R. LAWTON, Philadelphia, Pa. Filed Oct. 4, 1929. Serial No. 397,245. 6 Claims. (Cl. 145—28.)

1. A window shade device comprising a roll, a shade attached to the roll, a spring to turn the roll in one direction to wind the shade thereon, a suction operated device connected with the roll to turn it in an opposite direction to unwind the shade therefrom, a suction line connected with the suction operated device and with the



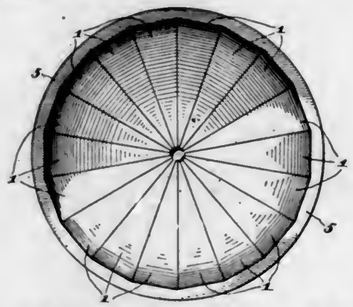
suction side of an internal combustion engine, a valve device connected in the suction line, including a control valve and a separate vent valve.

1,768,411. PLASTERER'S PADDLE. ALFRED J. LORD, Conshohocken, Pa. Filed Dec. 17, 1927. Serial No. 240,912. 2 Claims. (Cl. 72—128.)



1. A plasterer's paddle comprising a working blade of flexible rubber.

1,768,412. TRAFFIC-SIGNAL REFLECTOR. RICHARD W. LUCE, Maplewood, N. J., assignor to American Gas-accumulator Company, Elizabeth, N. J., a Corporation of New Jersey. Filed Apr. 7, 1927, Serial No. 181,645. 5 Claims. (Cl. 88—1.)

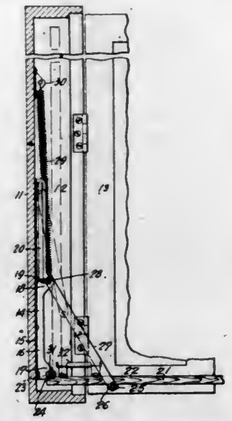


2. A traffic signal reflector, comprising an even sided pyramidal structure consisting of suitable material, the inner surfaces of the sides of the said structure being light reflecting and the surfaces of opposing sides being arranged in right angular relation with respect to each other.

1,768,413. FOLDING IRONING BOARD, TABLE, SEAT, AND THE LIKE. JOHN J. LYTH, Valleyfield, Quebec, Canada. Filed Dec. 13, 1926. Serial No. 154,589. 7 Claims. (Cl. 68—10.)

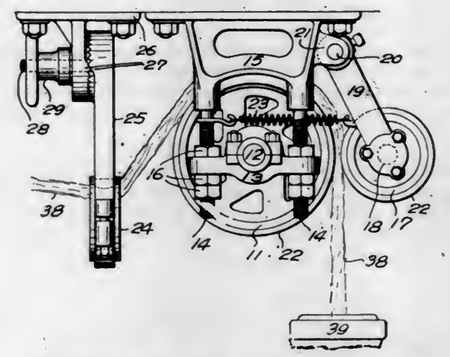
3. A folding structure comprising a base, L-shaped guides disposed lengthwise of the base, a swinging member

hingedly connected at one end to the base, links each connected at one end to the swinging member intermediate the ends thereof and slidably connected at their opposite ends with said guides, respectively and springs connected



with the links and with the base near the opposite end thereof from that at which the swinging member is hinged, said springs being constantly in tension and tending to swing the hinged member to a position substantially parallel with respect to said base.

1,768,414. FEEDING MECHANISM FOR CLOTH-PILING MACHINES AND THE LIKE. JOHN J. LYTH, Valleyfield, Quebec, Canada. Filed July 6, 1928. Serial No. 290,865. 7 Claims. (Cl. 8—19.)



1. In feeding mechanism for cloth piling machines and the like, in combination with a receiving device, a horizontal feed roll above the receiving device to supply material thereinto, an idler roll urged toward the feed roll and adapted to hold material in contact with the feed roll, the feed roll being vertically adjustable relatively to said idler to determine the point of departure and direction of material leaving the feed roll whereby the material will be directed to any desired point of the receiving device.

1,768,415. VACUUM GAUGE. YOSINOBU MATUNAGA, Azabuku, Tokyo, Japan, assignor to General Electric Company, a Corporation of New York. Filed Apr. 7, 1927, Serial No. 181,859, and in Japan Sept. 7, 1926. 2 Claims. (Cl. 73—31.)

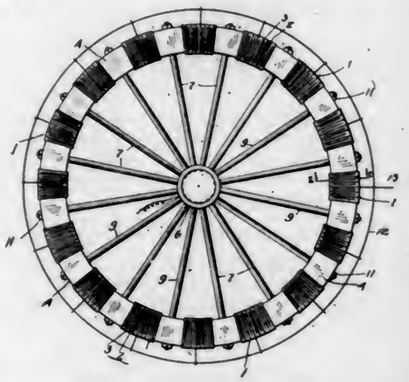
2. In a vapor pressure measuring system, an electric pressure measuring unit adapted to be exposed to a vapor

the pressure of which is to be measured, comprising a vapor tight sealed chamber containing an inert gas and an electric heater in said chamber having an appreciable temperature coefficient of resistance, said gas-filled con-



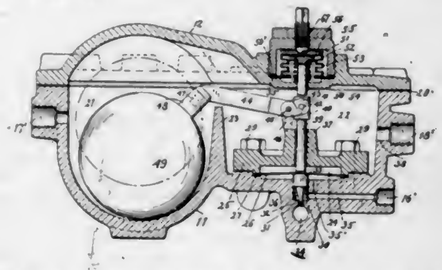
tainer serving to protect the heater from direct contact with the vapor, the pressure of which is to be measured, and serving also as a heat conducting medium between the vapor and the heater.

1,768,416. ELECTRICAL CONDENSER. ALEXANDER NYMAN, East Orange, N. J., assignor to Dubilier Condenser Corporation, a Corporation of Delaware. Filed May 24, 1924. Serial No. 715,629. 10 Claims. (Cl. 175—41.)



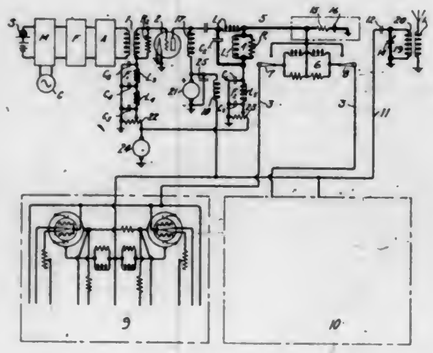
1. An electrical condenser comprising sections arranged in pairs, the sections of each pair being in multiple and a wedge block between each pair of sections to enable pressure to be exerted thereon.

1,768,417. REFRIGERATING APPARATUS. OLAF C. OLSEN, Cleveland, Ohio, assignor of two-thirds to The Borden Company, Warren, Ohio, a Corporation of Ohio. Filed May 2, 1927. Serial No. 188,093. 4 Claims. (Cl. 62—8.)



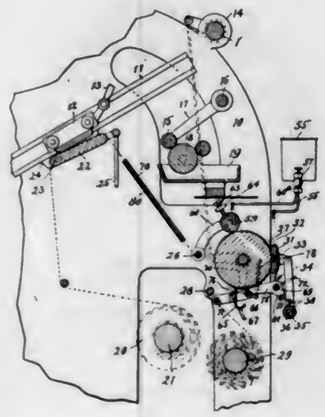
1. In a refrigerating system, a casing comprising a float chamber and an overflow chamber, said float chamber being arranged to overflow into said overflow chamber, a take-off from the overflow chamber below the level of the overflow from said float chamber, a valve chamber below said overflow chamber, a valve therein, a diaphragm mounted directly above said valve, said valve chamber comprising a cover for said diaphragm including a projection upstanding above the level of said take-off, a valve operating rod mounted for sliding movement in said projection and engaging the diaphragm above the valve, a float in said float chamber, and an operative connection between said float and said valve operating rod, whereby liquid collecting in said overflow chamber is prevented from flowing into the space between the diaphragm and its cover.

1,768,418. SPACE DISCHARGE SYSTEM. ARTHUR A. OSWALD, East Orange, and JOHN C. SCHELLENG, Millburn, N. J., assignors to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Dec. 4, 1924. Serial No. 753,805. 14 Claims. (Cl. 179—171.)



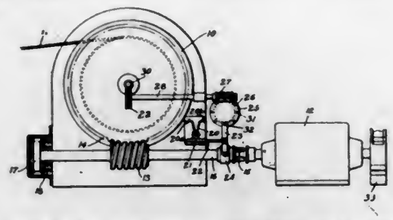
1. In a space discharge system, including a plurality of units comprising one or more tubes, the method of preventing the production of undesired oscillations of a frequency higher than that of the desired waves in the system which comprises introducing a path to ground consisting of high impedance for waves of desired frequency and low impedance for said undesired oscillations.

1,768,419. CLEANING ATTACHMENT FOR PRESSES. JOHN A. PECK, Cleveland, Ohio, assignor to The Peck Engraving Company, Cleveland, Ohio, a Corporation of Ohio. Filed Dec. 12, 1927. Serial No. 239,529. 9 Claims. (Cl. 101—168.)



1. In a printing apparatus the combination with means for feeding a strip of paper and means for causing surplus ink from the die to be transferred thereto at one point in its travel, of a member engageable with said paper, and means for reciprocating said member during engagement with the paper to thereby remove the ink from said paper.

1,768,420. APPARATUS FOR TOWING, MOORING, AND THE LIKE. ROBERT H. ROGERS, Aiplaus, N. Y., assignor to General Electric Company, a Corporation of New York. Original application filed Mar. 17, 1923, Serial No. 625,895. Divided and this application filed Oct. 15, 1924. Serial No. 743,836. 6 Claims. (Cl. 254—172.)



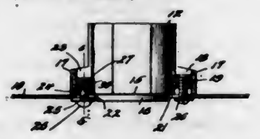
1. Apparatus for controlling the cable of a towing or mooring machine or the like, comprising a drum for winding up the cable, a motor for operating said drum, means operated responsively to the tension of the cable for controlling said motor to pay out cable upon the occurrence of a predetermined tension, and auxiliary means responsive to rotation of said drum for increasing the tension required to cause said motor to pay out cable, said auxiliary means including means for limiting the response of said auxiliary means to a predetermined movement of said drum.

1,768,421. ELECTRON-DISCHARGE DEVICE. WILLIAM A. RUGGLES, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Dec. 14, 1927. Serial No. 240,023. 6 Claims. (Cl. 250—27.5.)



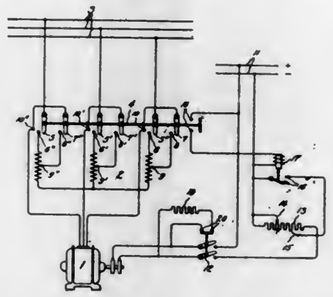
1. An electron discharge device comprising an evacuated receptacle, means for introducing an alkali metal into said receptacle, said means including a metal disc mounted in the receptacle, said disc having a sealed gas-tight vitreous capillary tube secured thereto, said tube containing alkali metal.

1,768,422. ELECTRIC SIGN. MARK N. RUSSELL and JOHN W. BROOKS, Syracuse, N. Y., assignors to Pass & Seymour, Incorporated, Syracuse, N. Y., a Corporation of New York. Filed Nov. 30, 1926. Serial No. 151,803. 11 Claims. (Cl. 173—339.)



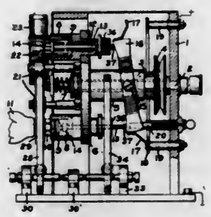
1. In an electric lamp receptacle, in combination, an insulating body, lamp contact elements within said body, a face on said body adapted to abut a thin plate, a projection on said body having a surface in substantially the same plane as said face, a stud slidable in said projection and having a head near said face and resilient means to bias said head toward said face.

1,768,423. CONTROL SYSTEM. HAROLD T. SEELEY, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Apr. 28, 1926. Serial No. 105,277. 6 Claims. (Cl. 171—118.)



1. In combination, a synchronous dynamo-electric machine, a source of alternating current, a switch for connecting said source and said machine, a source of direct current, a resistor, switching means for connecting the field winding of said machine and a fixed portion of said resistor in series across said direct current source, an adjustable contact on said resistor, and means responsive to a predetermined position of said switch for connecting said adjustable contact in the field circuit of said machine whereby the field current may be varied.

1,768,424. STAMPING DEVICE FOR INCANDESCENT LAMPS AND SIMILAR ARTICLES. ALFRED SITTEL, Berlin-Lankwitz, Germany, assignor to General Electric Company, a Corporation of New York. Filed Mar. 27, 1928, Serial No. 265,165, and in Germany Apr. 14, 1927. 7 Claims. (Cl. 101—40.)

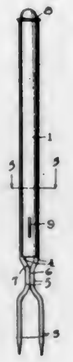


1. In a device of the character described the combination of a lamp carrier having two lamp holding heads mounted to travel in a closed path, a printing stamp resiliently mounted adjacent said path in position to be encountered by the lamps in said heads, and lamp ejecting means for ejecting the lamp from either head and responsive to the introduction of another lamp into the other head for automatically ejecting a lamp after it has passed over said printing stamp.

1,768,425. COLLAPSIBLE FORK AND LIKE IMPLEMENT. BENJAMIN H. SMITH, Niles, Mich., assignor to Michigan Wire Goods Company, Niles, Mich. Filed Apr. 29, 1927. Serial No. 187,449. 1 Claim. (Cl. 30—5.)

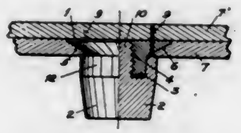
In a fork, the combination of a handle having longitudinal oppositely facing grooves therein of substantial depth, a combined shank and tine member formed of wire and comprising a pair of tines and a pair of shank mem-

bers, the shank members being inwardly offset and secured together at the base of the tines, the shank members being slidably disposed in said grooves in said handle, the grooves being of such depth as to enclose a substantial portion of the shank members arranged therein, a curved cross member connecting the outer ends of the shank mem-



bers and disposed at one side of said handle to slidably embrace the same, said handle having a recess in its top adjacent its inner end, and a spring catch disposed in said recess to project therefrom into coacting engagement with said cross piece when the handle is in its fully extended position.

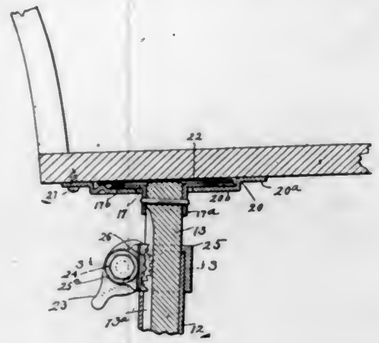
1,768,426. CALK FOR FOOTBALL SHOES. ADOLF STELZER, Zürich, Switzerland. Filed Dec. 20, 1928, Serial No. 327,291, and in Switzerland Dec. 21, 1927. 2 Claims. (Cl. 36—59.)



1. A calk for football boots, comprising in combination a circular top element fitted in the outer sole of the boot and bearing against the under sole of the boot and tapering towards the centre in downward direction, a tubular extension from the middle of said top element projecting through the outer sole of the boot and having a screw threaded bore in the middle extending through the top element, a calk head having a cavity in its upper end, a screw threaded pin in the centre of said cavity adapted to engage in the screw thread of the bore in said top element, a fluted surface on the lower end of said tubular extension, and a fluted surface on the bottom of said cavity adapted to engage with the fluted surface of said tubular extension and to prevent the calk working loose.

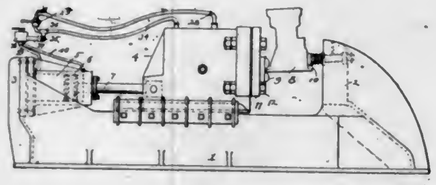
1,768,427. CLAMP FOR SEAT CONSTRUCTION. CLARENCE E. STEVENS, Cleveland, Ohio, assignor to White Sewing Machine Corporation, Cleveland, Ohio, a Corporation of Delaware. Original application filed Feb. 14, 1927, Serial No. 167,882. Divided and this application filed Feb. 6, 1928. Serial No. 252,105. 3 Claims. (Cl. 155—94.)

1. In an article of furniture, a tubular standard, a vertically grooved post mounted for vertical adjustment in said standard, said standard having a collar attached thereto at the upper end thereof, said collar having a lug extending outwardly therefrom, a dog pivotally connected with said lug outside said standard, said standard having



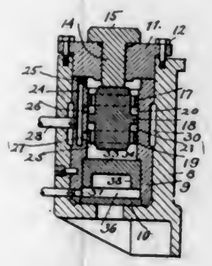
a slot therethrough through which said dog extends into said groove, whereby the dog is adapted to engage said post to support the latter in any adjusted position.

1,768,428. APPARATUS FOR CLEANING CASTINGS. JOHN T. STONEY, Cleveland, Ohio. Filed June 28, 1924. Serial No. 722,970. 6 Claims. (Cl. 121—17.)



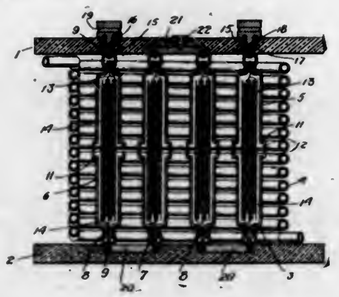
1. Apparatus of the character described comprising a support, means thereon for holding an article to which vibrations are to be imparted, and means for imparting a series of impacts in rapid succession and in a single direction to the article.

1,768,429. METHOD FOR FORMING SAND MOLDS. JOHN T. STONEY, Cleveland, Ohio. Filed Aug. 16, 1924. Serial No. 732,358. 7 Claims. (Cl. 22—45.)



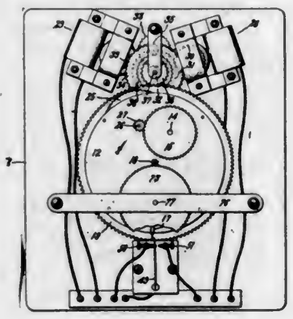
1. The method of forming sand molds or cores, which comprises placing sand within a flask or box and subjecting the flask or box to a series of rapidly recurring impacts, in one direction only, thereby to cause the sand to settle in the flask or box.

1,768,430. POWER CONDENSER AND COOLING MEANS THEREFOR. HARRY R. VAN DEVENTER, New York, N. Y., assignor to Dubilier Condenser Corporation, New York, N. Y., a Corporation of Delaware. Filed June 10, 1924. Serial No. 719,140. 13 Claims. (Cl. 175—41.)



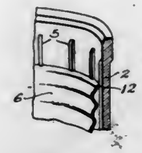
1. A condenser comprising a body of elements of electrically conductive material, separated by insulation, clamps each enclosing the opposite ends of all of said elements and projecting beyond one side of said elements, and clips engaging the extremities of said clamps opposite the ends of said elements.

1,768,431. ELECTRIC CLOCK SYSTEM. HENRY E. WARREN, Ashland, Mass., assignor to Warren Telechron Company, Ashland, Mass., a Corporation of Maine. Filed Jan. 24, 1928. Serial No. 249,175. 9 Claims. (Cl. 58—24.)



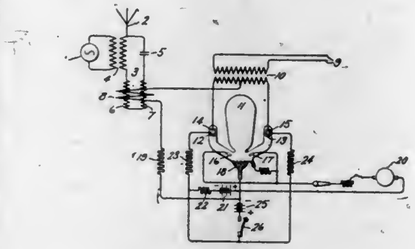
1. An electric clock system arranged to receive energy from an alternating current source including a master clock provided with a minute hand, a synchronous motor normally energized and arranged to rotate said master clock at a speed equal and opposite to that of said minute hand, a second synchronous motor normally deenergized and arranged when energized to rotate said master clock at a greater speed and opposite to that of said minute hand, a switch operated by said minute hand and arranged to control the energization of said second synchronous motor, and secondary clocks each provided with two synchronous motors arranged and connected to respectively operate said secondary clocks in synchronism with the two above mentioned rotational movements of said master clock.

1,768,432. LAMP SOCKET. FREDERICK H. WESTON, Bridgeport, Conn., assignor to General Electric Company, a Corporation of New York. Filed Mar. 29, 1928. Serial No. 265,723. 5 Claims. (Cl. 173—358.)



1. A lamp socket comprising an insulating outer shell of slightly elastic material provided internally with longitudinal ribs, and a metal contact shell disposed within said outer shell and having interlocked engagement with the ribs thereof, whereby said parts are permanently held in fixed relation both axially and rotatably.

1,768,433. RADIOTELEGRAPHY. ERNST F. W. ALEXANDERSON, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Aug. 9, 1926. Serial No. 128,268. 5 Claims. (Cl. 250—19.)



1. The combination of a consumption device, a variable impedance device connected to said consumption device, a source of alternating current, a vapor electric device provided with a cathode and anode connected between said source and said impedance device and with a grid for controlling the current transmitted to said impedance device, means connected between said grid and cathode for biasing said grid to a negative potential, and means connected to said source for producing an electromotive force which is opposed to said negative potential whereby said grid is charged to a positive potential.

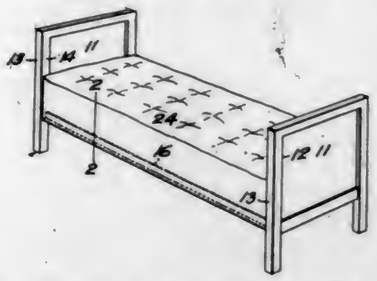
1,768,434. METHOD OF PREVENTING POLYMERIZATION OF VINYL COMPOUNDS AND REACTION OF SAME WITH ALDEHYDES. KENNETH G. BLAIKIE, Shawinigan Falls, Quebec, Canada, assignor to Canadian Electric Products Company, Limited, Montreal, Canada. Filed Aug. 15, 1927. Serial No. 213,216. 4 Claims. (Cl. 23—250.)

1. The method of preventing polymerization of vinyl compounds, which comprises adding sulphur to the vinyl compounds.

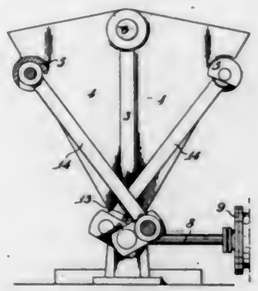
1,768,435. DAY-BED OR BOX-LOUNGE CONSTRUCTION. RICHARD BRADSHAW and REGINALD FERGUSON, Montreal, Quebec, Canada, assignors, by mesne assignments, to Simmons Company, New York, N. Y., a Corporation of Delaware. Filed Nov. 2, 1927. Serial No. 230,665. 2 Claims. (Cl. 5—131.)

1. In metal frame beds, day beds and the like, the combination with ends and a box frame, of side rails connect-

ing the ends each of said side rails being formed with a horizontal flange and a vertical flange rising from the inner edge of the horizontal flange, said box frame including side members lying outside the vertical rail flanges supporting the box frame on the horizontal rail flanges and concealing both the vertical and horizontal flanges of the rails.

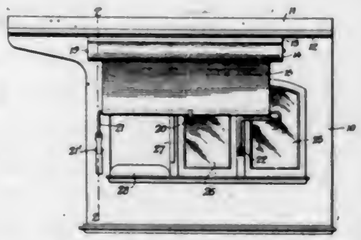


1,768,436. LINKWORK FOR RECIPROCATING ENGINES AND THE LIKE. EDWARD MELVILLE BYTHWAY, Swansea, Wales. Filed Nov. 14, 1927, Serial No. 233,274, and in Great Britain Nov. 19, 1926. 3 Claims. (Cl. 74—14.)



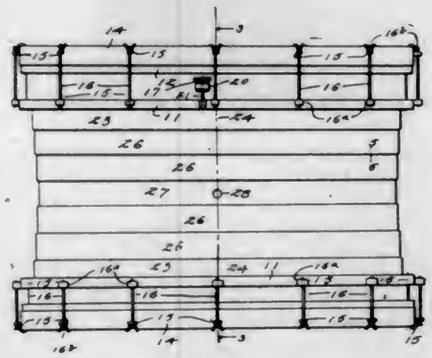
1. Mechanism for translating reciprocating motion to rotary motion comprising a reciprocal power member, a rotary shaft, disposed at a predetermined angle with respect to one another, a pair of equal length crank arms on said shaft, a pivoted lever connected with said power member for oscillation by the latter, a pair of equal length arms rigid with said lever and disposed with respect to one another at the same angle as said crank arms, and links connecting said lever arms with said crank arms, respectively.

1,768,437. AWNING FOR LOCOMOTIVE CABS. DOMINICK J. CARA and JAMES W. HOUGH, Memphis, Tenn. Filed July 8, 1927. Serial No. 204,171. 2 Claims. (Cl. 156—44.)



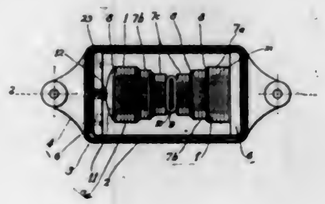
1. In an awning for a locomotive cab including a spring roller adapted to be secured over the window of the cab and a shade on said roller, a substantially U-shaped bow adapted to be pivotally mounted on the cab adjacent the lower portion of the window, said bow comprising a straight longitudinal member adapted to have the free end of the shade secured thereto, said member having a return-bend at one end, and transverse arms of the bow forming extensions of said return-bend and of the other end of said straight member whereby a shade of greater width than the distance between the transverse arms may be secured to the bow.

1,768,438. COLLAPSIBLE DRUM. ISRAEL L. CLARK, Riverside, R. I. Filed Oct. 27, 1927. Serial No. 229,207. 3 Claims. (Cl. 84—412.)



1. A drum comprising heads, and relatively rigid body sections connected thereto and adapted to telescope in said heads, and relatively rigid body sections connecting the first mentioned body sections and adapted to telescope therewith.

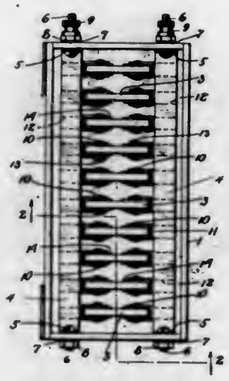
1,768,439. CONDENSER. WILLIAM DUBILIER, New York, N. Y., assignor to Dubilier Condenser Corporation, a Corporation of Delaware. Filed Apr. 4, 1924. Serial No. 704,195. 16 Claims. (Cl. 175—41.)



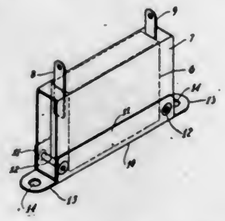
1. A condenser comprising a body containing sections of conductive and dielectric elements, and having a spring terminal extending transversely of the body and held by pressure in position between two sections to connect with the body of the condenser.

1,768,440. CONDENSER KIT. WILLIAM DUBILIER, New York, N. Y., assignor to Dubilier Condenser Corporation, New York, N. Y., a Corporation of Delaware. Filed Sept. 3, 1924. Serial No. 735,567. 2 Claims. (Cl. 175—41.)

1. A condenser kit comprising a casing having a pair of conductor bars therein disposed parallel to each other, clips of conductive material in transverse alinement secured to said bars, and condensers having bearing plates of conductive material at opposite ends thereof and joined to opposite poles of the condensers, so that said condensers can be detachably engaged by said clips in contact with said plates to connect said condensers to said bars.

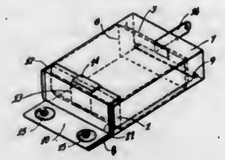


1,768,441. ELECTRICAL CONDENSER. WILLIAM DUBILIER, New Rochelle, N. Y., assignor to Dubilier Condenser Corporation, New York, N. Y., a Corporation of Delaware. Filed July 29, 1926. Serial No. 125,797. 10 Claims. (Cl. 175—41.)



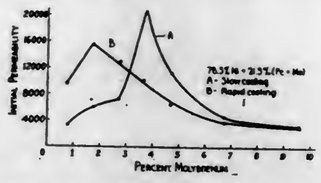
1. A condenser comprising a body, a casing in the form of a sleeve for the body, and having its ends projecting beyond the ends of the body, and clamping means engaging the projecting ends of said casing to enable the condenser to be mounted in position.

1,768,442. ELECTRICAL CONDENSER. WILLIAM DUBILIER, New Rochelle, N. Y., assignor to Dubilier Condenser Corporation, New York, N. Y., a Corporation of Delaware. Filed July 29, 1926. Serial No. 125,798. 3 Claims. (Cl. 175—41.)



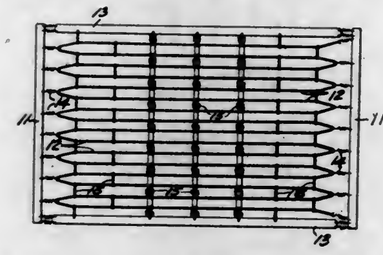
2. A condenser comprising a body, a sleeve enclosing the body and forming an open-ended casing, a contact for the condenser projecting out of one end of the casing, said end being filled with an insulating embedment to seal the same, and a mounting member attached to the casing and substantially covering the opposite end of the condenser.

1,768,443. MAGNETIC MATERIAL AND APPLIANCE. GUSTAF W. ELMEN, Leonia, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed July 12, 1926. Serial No. 121,830. 19 Claims. (Cl. 178—45.)



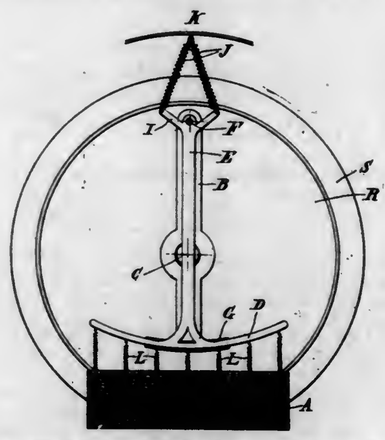
1. A magnetic material containing iron, nickel over 40% of the entire iron-nickel contents, and a material amount but less than 10% of molybdenum and having higher initial permeability than iron.

1,768,444. BEDSPRING FABRIC. REGINALD FERGUSON, Montreal, Quebec, Canada, assignor, by mesne assignments, to Simmons Company, New York, N. Y., a Corporation. Filed June 25, 1927, Serial No. 201,548, and in Canada Mar. 17, 1927. 7 Claims. (Cl. 245—9.)



1. A bed-bottom fabric comprising longitudinal strands, a continuous jointed cross linkage between the strands located approximately midway between the ends of the strands, and non-continuous cross linkage of the strands between said continuous cross linkage and the ends of the strands.

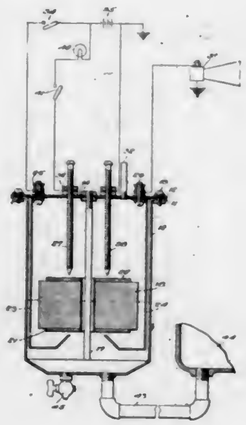
1,768,445. MUD-GUARD SYSTEM FOR MOTOR CARS AND THE LIKE. ARTHUR GAUCHOT, Parc St. Maur, France. Filed Feb. 24, 1927, Serial No. 170,707, and in France Feb. 24, 1926. 4 Claims. (Cl. 280—157.)



1. A mud guard for vehicles comprising an arm pivotally supported on the wheel of the vehicle, a flexible

shield spaced from said arm, and a plurality of springs relatively spaced along one edge of said shield with one of their ends connected to the latter and having their other ends secured to said arm and freely supporting said shield, whereby the latter will have free movement in all directions against the tension of the springs.

1,768,446. FLOAT SWITCH. NICHOLAS GRON, Chicago, Ill. Filed Aug. 7, 1925. Serial No. 48,774. 3 Claims. (Cl. 200—84.)



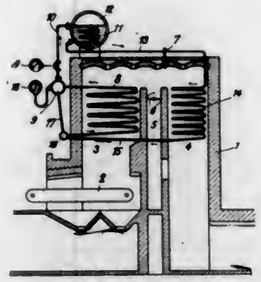
1. An indicating apparatus including a receptacle, a cover demountably carried by said receptacle, a pair of electric contacts adjustably mounted on said cover and depending within said receptacle, a second pair of contacts mounted on said cover and depending within said receptacle below the extremities of said first mentioned contacts, a spindle mounted on said cover and also depending into said receptacle, a float slidably mounted on said spindle intermediate the extremities of said two pairs of contacts, said float having a conductor on its upper and lower faces, and means for connecting each pair of contacts with an electric circuit.

1,768,447. COATING COMPOSITION. HENRY J. HAIN, Vermilion, Ohio, assignor to The Sherwin-Williams Company, Cleveland, Ohio, a Corporation of Ohio. Filed June 9, 1927. Serial No. 197,767. 4 Claims. (Cl. 134—46.)

3. A coating composition consisting of a pigment, linseed meal and water.

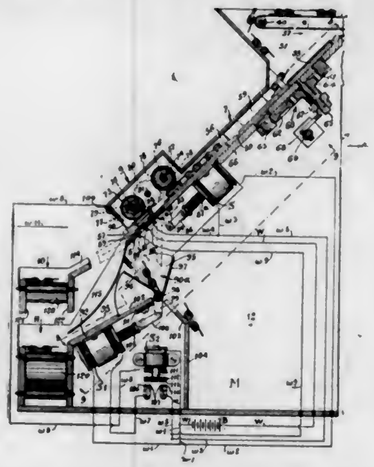
1,768,448. HIGH-PRESSURE STEAM GENERATOR. OTTO H. HARTMANN and ROBERT UHDE, Kassel-Wilhelmshohe, Germany, assignors to Schmidt'sche Heissdampf-G. m. b. H., Kassel-Wilhelmshohe, Germany, a Corporation of Germany. Filed June 8, 1927, Serial No. 197,428, and in Germany June 11, 1926. 3 Claims. (Cl. 122—33.)

3. In combination, a high pressure steam generator in which high pressure steam is generated indirectly, a closed system in which the medium for indirectly generating the steam circulates, said steam having heat receiving and heat emitting parts, the latter lying in the working steam generator, the circulating medium in said closed system normally comprising part water and part saturated steam, and a temperature responsive device in the closed heating system between the evaporator and condenser units threreof



to indicate to an observer when the saturated steam of the circulating medium has been changed to superheated steam, upon the arising of which condition replenishment of water in the closed system is necessary.

1,768,449. FEEDING APPARATUS FOR CONDENSERS. ANATOLE C. HEINY, Ridgefield Park, N. J., assignor to Dubilier Condenser Corporation, New York, N. Y., a Corporation of Delaware. Filed Oct. 1, 1925. Serial No. 59,882. 4 Claims. (Cl. 209—81.)

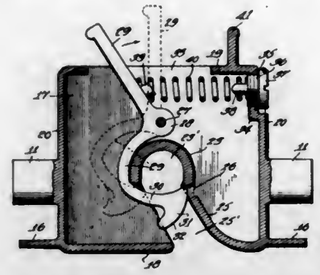


3. Feeding mechanism comprising parts forming a channel, a trap-door at the discharge end of said channel, electrical contacts carried by said door, electric circuits connected to the contacts, and electrical appliances in said circuits to cause the trap door to open when required, together with a trap-pocket below the trap-door, and electric circuits and electric appliances therein to cause said pocket to receive inverted articles delivered thereto from said channl and turn them over to right position.

1,768,450. ROD ELEVATOR. BENJAMIN P. HOFFMAN, Tulsa, Okla. Filed May 9, 1928. Serial No. 276,403. 2 Claims. (Cl. 294—91.)

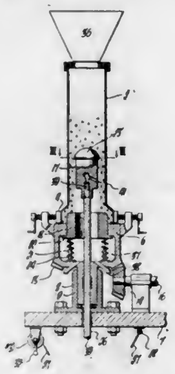
1. A device of the character described comprising a casing provided with front, rear and side walls, a top and a bottom, said top and bottom being provided with alined openings and being further provided with angular slots communicating with said openings, said rear wall being provided with an elongated opening, a hook pivoted between said top and bottom and having a portion adapted

to be moved into and out of a position closing the entrance to said first named openings, said hook being further provided with an integral handle extending through the opening in said rear wall, a stationary handle secured to



said rear wall and extending outwardly thereof in proximity to said first named handle whereby both of said handles may be grasped to manually move said hook into and out of closing position, and means normally urging said hook into closed position.

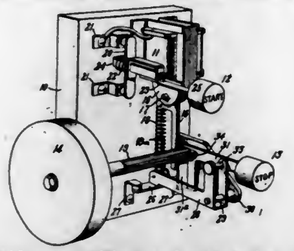
1,768,451. METHOD OF AND APPARATUS FOR FORMING OR LINING PIPES. WALTER REGINALD HUME, Melbourne, Victoria, Australia. Filed July 1, 1927, Serial No. 202,938, and in Australia May 3, 1927. 9 Claims. (Cl. 25—30.)



3. Apparatus for the centrifugal manufacture of pipes or pipe linings from plastic materials, comprising in combination, an open ended mold, a ring member, means for detachably holding said mold at its bottom to said ring member in concentric relationship therewith, means for imparting rotary motion to said ring member, a hollow plug within said ring member, springs supporting the plug and adapted to project it into the lower end of the mold, a vertically reciprocal non-rotary distributing core of circular cross section concentrically aligned with said mold and normally accommodated within said hollow plug to thereby prevent egress of the plastic material from the bottom of the mold, and means for raising said core through the body of material within the rotating mold to distribute material into the zone of maximum centrifugal force within the mold without exerting compressive force on the distributed material.

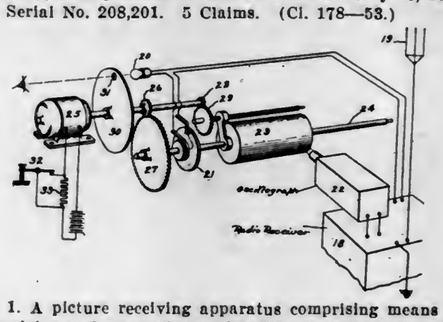
1,768,452. TIME-DELAY CONTROLLING DEVICE AND SYSTEM. BENJAMIN W. JONES, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Dec. 29, 1926. Serial No. 157,815. 23 Claims. (Cl. 200—97.)

1. In a controlling device, the combination of a movable controlling member, means tending to move the member in one position, means for maintaining the member in another position and for automatically releasing the member in response to predetermined conditions for operation by said first means, time delay means for retarding the movement of the member by said first means from said other



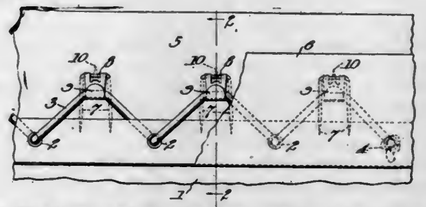
position to said one position, and means for controlling said automatically responsive holding means and said movement retarding means to effect substantially instantaneous movement of the member from said other position to said one position by said first means independently of said conditions.

1,768,453. TRANSMISSION OF PICTURES. RAY D. KELL, Scotia, N. Y., assignor to General Electric Company, a Corporation of New York. Filed July 25, 1927. Serial No. 208,201. 5 Claims. (Cl. 178—53.)



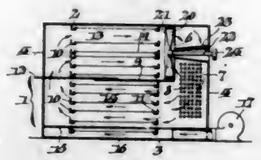
1. A picture receiving apparatus comprising means for receiving and separating a plurality of electrical impulses each having successive maximum and minimum values, means for driving said apparatus, a member arranged to be manually vibrated for controlling the speed of said driving means, and means for indicating when said driving means is operating at a speed in synchronism with the variations in the magnitude of one of said impulses.

1,768,454. MEANS FOR ATTACHING SEAT COVERS AND THE LIKE. GEORGE A. KING, Waterbury, Conn., assignor to Scovill Manufacturing Company, Waterbury, Conn., a Corporation of Connecticut. Filed Nov. 1, 1927. Serial No. 230,287. 2 Claims. (Cl. 155—182.)



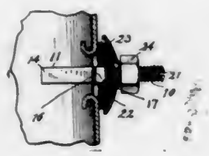
2. The combination of a seat cover having an elastic cord associated therewith, the said cover being provided with means for loosely holding said cord at intervals leaving portions of said cord exposed to form a series of loops, and pivoted hooks having downwardly projecting prongs adapted to be attached to a fixed part of the seat in position to engage the several loops of the elastic medium and to support the cover yieldingly in position.

1,768,455. FABRIC-TREATING MACHINE. WALTER W. SIMSON, Philadelphia, Pa., assignor to The Philadelphia Drying Machinery Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Sept. 12, 1929. Serial No. 392,056. 8 Claims. (Cl. 34—48.)



1. A material treating machine comprising an inclosure subdivided by partitions to define communicating treating sections; means for progressing material through said sections in paralleling runs; means circulating drying medium across the material in the respective sections; and a movable means controlling the extent of communication between said sections to accommodate differing widths of material passed through the machine.

1,768,456. PLUG. ALLEN C. SMITH, Cleveland, Ohio, assignor to The T-Hold Mfg. Co., Cleveland, Ohio, a Corporation of Ohio. Filed Apr. 14, 1928. Serial No. 269,888. 2 Claims. (Cl. 137—99.)

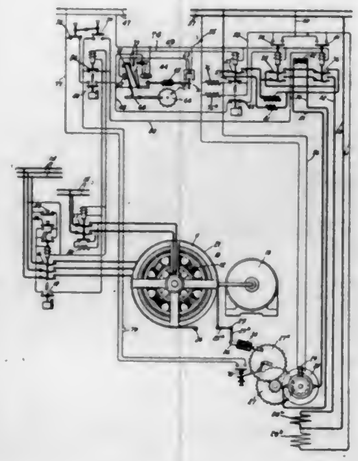


1. A plug for repairing leaks in boilers, pipes and the like, comprising a bolt threaded at one end and having an enlarged head at its other end, said head having a sharp driving and penetrating edge and being substantially of an equal transverse thickness throughout its length, whereby the bolt may be driven through the wall of the member being repaired and then upon being turned approximately 90° the head will engage the inner surface of the wall thereof with a substantially flat metal to metal engagement over a relatively large substantially rectangular surface on both sides of the opening formed therein, a gasket arranged on said bolt, a washer fitted on said bolt and engaging said gasket, and a nut arranged on the threaded end of the bolt outwardly of the washer.

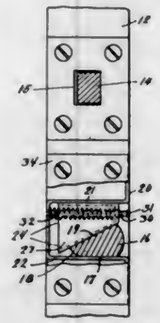
1,768,457. BRAKE MECHANISM. AUBREY SMITH, Scotia, and RICHARD M. MATSON, Schenectady, N. Y., assignors to General Electric Company, a Corporation of New York. Filed Mar. 14, 1929. Serial No. 347,057. 14 Claims. (Cl. 172—280.)

1. In combination, an electric motor having rotatable field and armature members, one of said members being provided to drive a load, a brake for the other of said members, means for establishing power connections for said field and armature members, means for effecting an application of said brake and means responsive to the establishment of the power connections for said field and to a time interval for controlling said brake-applying means.

4. A control system for an alternating current synchronous motor having rotatable field and armature members, one of said members being connected to drive a load, comprising control means for establishing power connections for said field and armature members so that the other of said members can be accelerated to substantially synchronous speed after which said field member is excited so as to lock said field and armature members in synchronism, a brake for said other member and time element means for controlling said brake responsively to the operation of said control means so that a braking force is applied a predetermined interval of time after the excitation of said field member.

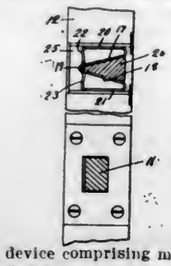


1,768,458. DOOR HOLDER. GEORGE W. WELLS, Amesbury, Mass., assignor of one-half to Walker Body Company, Amesbury, Mass., a Corporation of Massachusetts. Filed May 24, 1928. Serial No. 280,123. 8 Claims. (Cl. 16—85.)



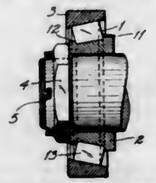
1. In combination with a horizontally swinging door having a horizontally projecting lug rigidly mounted thereon, a casing having a recess into which said lug is arranged to pass when the door is closed, said recess having horizontally disposed top and bottom sides and said lug being arranged to engage said bottom side and support the door, a wedge mounted to move horizontally in said recess with its top side engaged with the top side of said recess and having an inclined face at its bottom side arranged for engagement by the top side of said lug, when the lug is engaged with the bottom side of said recess, to hold the lug against upward movement from its door supporting position.

1,768,459. COMBINED DOOR HOLDER AND BUFFER. GEORGE W. WELLS, Amesbury, Mass., assignor of one-half to Walker Body Company, Amesbury, Mass., a Corporation of Massachusetts. Filed Sept. 18, 1929. Serial No. 393,443. 1 Claim. (Cl. 16—86.)



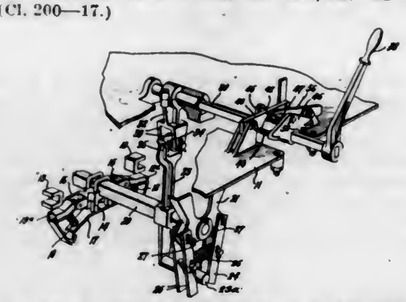
A door holding device comprising male and female members movable relatively in a predetermined path and having correspondingly formed sides arranged for engagement each with the other as the door is closed, said female member being slidably movable in the direction of said path and non-movable transversely thereof and having its side non-yieldable relatively thereto, and a cushioning device arranged to resist inward movement of said female member when engaged by said male member during said closing movement and to yield to permit the female member to be forced inward by the male member.

1,768,460. BEARING. ERNEST G. BODEN, Canton, Ohio, assignor to The Timken Roller Bearing Company, Canton, Ohio, a Corporation of Ohio. Filed Sept. 20, 1929. Serial No. 394,050. 5 Claims. (Cl. 308—71.)



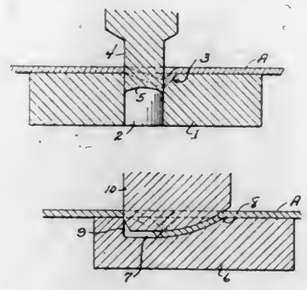
1. A bearing comprising inner and outer race members having conical raceways formed thereon and a ring interposed therebetween, said ring having a conical cross section and engaging the raceways of both inner and outer bearing members.

1,768,461. SWITCH-OPERATING MECHANISM. CHARLES F. CARPENTER, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Apr. 13, 1928. Serial No. 269,743. 11 Claims. (Cl. 200—17.)



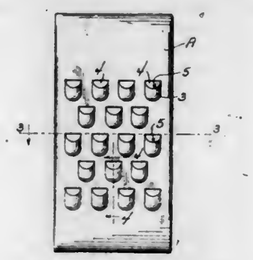
1. A switch comprising, a plurality of stationary contacts, a plurality of movable contacts cooperating with said stationary contacts, an operating member for said movable contacts provided with a plurality of cams, one for each of said movable contacts, and an actuator member for selectively engaging said cams so as to cause said operating member to move the corresponding movable contact into engagement with its stationary contact.

1,768,462. METHOD OF MAKING SHREDDERS. ALBERT H. DIXON and THOMAS SIMPSON ROBSON, Seattle, Wash., and FERDINAND A. HENSCHELL, Vancouver, British Columbia, Canada. Filed Oct. 21, 1929. Serial No. 401,268. 2 Claims. (Cl. 76—104.)



1. The herein described method of forming teeth on a sheet of material consisting in punching a hole in the sheet and bending a portion of the sheet adjacent the hole at an angle so that that part of the wall of the hole in said bent portion is beveled, then pressing the sheet at one side of the hole outwardly beyond the plane of the sheet whereby the bent portion is further bent and forms part of the outwardly bent portion so as to produce a tooth having a beveled edge.

1,768,463. SHREDDER. ALBERT H. DIXON and THOMAS SIMPSON ROBSON, Seattle, Wash., and FERDINAND A. HENSCHELL, Vancouver, British Columbia, Canada. Filed Oct. 21, 1929. Serial No. 401,269. 2 Claims. (Cl. 146—180.)

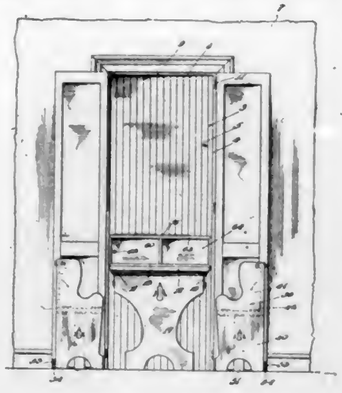


1. A shredder of the class described comprising a body part formed of a single piece of sheet material and having downwardly bent ends forming feet and teeth in the body part having beveled cutting edges, each tooth being formed by perforating the body and raising a portion thereof in rear of each perforation, with the cutting edge formed by the perforation beveled, the side edges of the body being of closed tubular form to reinforce the body and the end edges of the body being folded over to provide reinforcing means.

1,768,464. CONCEALABLE FURNISHINGS. WALTER C. FAIN, Norfolk, Va. Filed Mar. 12, 1924. Serial No. 698,792. 4 Claims. (Cl. 155—123.)

4. In concealable furnishings, a cabinet having a rear wall and an open front, a table unit foldiably connected with said rear wall, bench units, means pivotally connecting said bench units endwise to said cabinet to swing about horizontal axes, said bench units being adapted to be folded in said cabinet or to be projected from said cabinet parallel to the table, supporting members at the outer ends of said bench units hingedly connected therewith and

foldable to lie against the under side thereof, said supporting members extending above the plane of the seats when the bench members are set out for use, backs for said bench units foldably connected therewith and adapted

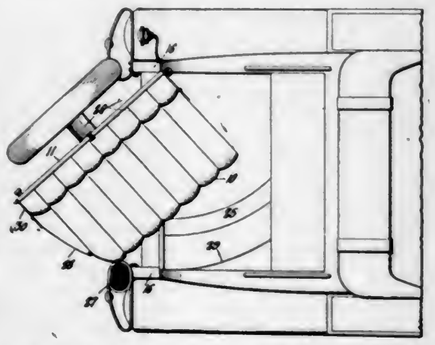


when folded to lie against the upper sides thereof, and coacting means upon the upwardly extending portions of the supporting members and upon the backs for supporting the backs in raised position.

1,768,465. PROCESS OF TREATING FULLER'S EARTH AND THE LIKE. HENRY J. HARTLEY, New York, N. Y., assignor to Nichols Copper Company, New York, N. Y., a Corporation of New York. Filed Feb. 23, 1928. Serial No. 256,103. 1 Claim. (Cl. 252—2.)

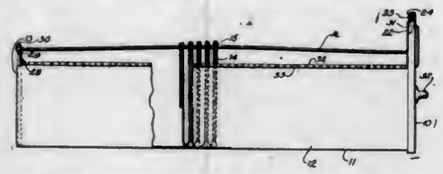
The continuous process of revivifying spent fuller's earth or the like materials charged with the residue from oil filtration, which comprises oxidizing such residue by substantially continuously passing the material through a multiple hearth furnace with sufficient rabbling action or agitation to maintain the material in loose finely divided condition, supplying sufficient air to the material in the furnace and initially heating the same to a temperature causing combustion of said residue, and thereafter controlling the air supply and preheating the same with heat of said oxidizing process, and utilizing substantially solely the heat of combustion of the residue to supply the heat necessary to substantially completely oxidize the residue and to maintain the process.

1,768,466. RUMBLE SEAT. VERLINGTON FARROW HITT and JOSEPH ORD EVANS, Miami Beach, Fla. Filed Mar. 6, 1929. Serial No. 344,786. 3 Claims. (Cl. 296—66.)



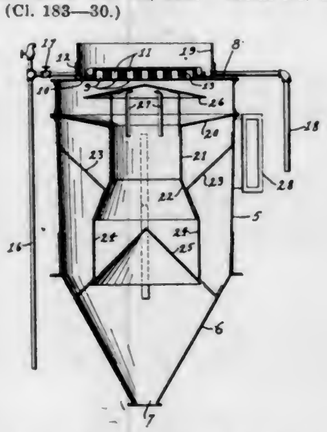
1. In an automobile, a rumble seat arranged within the rear deck thereof and comprising a seat portion and a sectional back portion having one section rigid with the seat portion and adapted to support a tire carrier or trunk, and the other section relatively movable, means to mount the seat for horizontal swinging movement to project one end of the seat beyond the rear end of the automobile body when the seat is swung outward, and means to prevent outward swinging movement of the seat.

1,768,467. FILING DRAWER. LE ROI EARLE HUTCHINGS and JOSEPH D. LEAR, Buffalo, N. Y., assignors, by mesne assignments, to Remington Rand, Inc., New York, N. Y., a Corporation of Delaware. Filed Feb. 15, 1927. Serial No. 168,455. 9 Claims. (Cl. 129—16.)



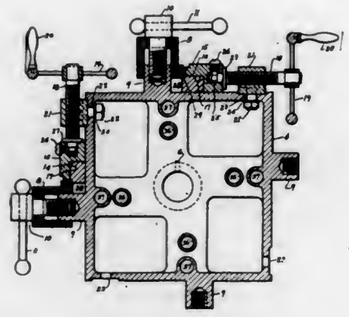
1. A filing drawer having a front wall and having a socket formed adjacent each rear corner thereof, vertical standards adapted to be positioned in each socket, a pair of slide members, each supported at one end by said standards and at the other end by said front wall, cross-bars slidably mounted on said slide members and a pocket-forming member for reference data suspended from said cross-bars.

1,768,468. AIR PURIFIER. MARTIN MADSEN, Monterey Park, Calif. Filed Dec. 21, 1926. Serial No. 156,081. 1 Claim. (Cl. 183—30.)



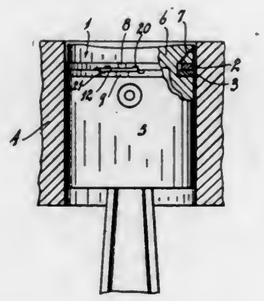
An air purifier comprising a casing having a circular body provided with a perforated top and a tapered bottom, said bottom having a port; a pipe secured to said body and opening thereinto tangentially; a main deflector within and secured to said body by its top wall, said main deflector comprising an inwardly and downwardly extending top wall, a vertical tubular body secured at the top to said top wall, and a skirt secured to said tubular body at the bottom thereof and having an opening therethrough auxiliary detectors, one above and the other below the opening through the main deflector and secured thereto and spaced therefrom; a top plate having a plurality of ports therein, each port being surrounded by an upstanding flange and resting upon and supported by the perforated top of said circular body, said ports registering with the perforations of said top, said plate having an outer upstanding flange; caps surrounding the flanges of the ports of said plate and spaced from said flanges, said caps having slitted lower edges; a water inlet pipe and overflow means secured to said port plate flange.

1,768,469. ADJUSTABLE ROTARY PRESSING MACHINE. EVERETT R. MANLEY, Fairmont, W. Va. Filed May 10, 1927. Serial No. 190,217. 4 Claims. (Cl. 18—21.)



1. In a molding machine having on its face thereof an adjustable yoke which is normally held away from said face which carries it, an adjustable side bar having a notch therein which limits the adjustment of the yoke towards the working face of the molding machine.

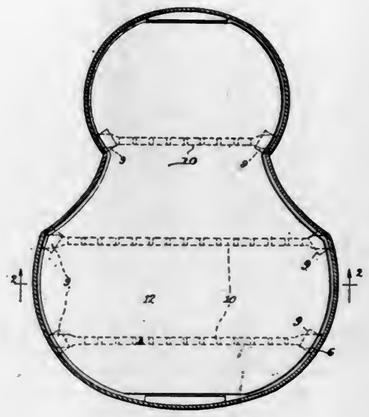
1,768,470. PISTON RING. BERNARD YOUNG, San Pedro, Calif. Filed Sept. 4, 1929. Serial No. 390,248. 4 Claims. (Cl. 74—109.)



1. A piston ring comprising a pair of superimposed rings, both of said rings being split to permit expansion and contraction, and links secured at one end to one of said rings and at the other end to the other of said rings, said links extending across the splits in said rings.

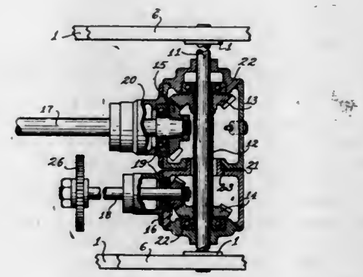
1,768,471. MUSICAL STRINGED INSTRUMENT. ROBERT B. FERGUSON, Los Angeles, Calif., assignor to G. E. Harpham, San Francisco, Calif., as trustee. Filed Nov. 7, 1927. Serial No. 231,518. 4 Claims. (Cl. 84—291.)

1. In a stringed musical instrument top and bottom boards connected by a rim member; posts mounted on the bottom board and secured to the member uniting the top and bottom boards, brace members secured upon said posts; and a sound board intermediate the top board and the bottom board secured upon said brace members and dividing the space between the top and bottom boards



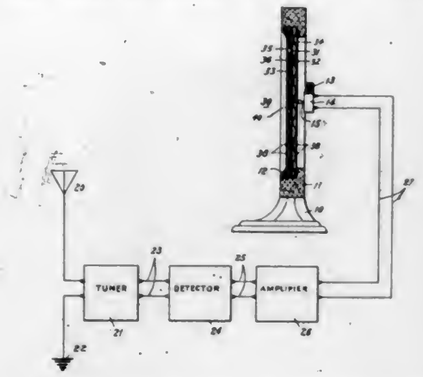
into two parts; said intermediate board having all its edges free to vibrate except where secured to said brace members.

1,768,472. MECHANICAL DRIVING MEANS FOR CONCRETE MIXERS. RICHARD C. FRANKIE, Seattle, Wash. Filed Sept. 2, 1927. Serial No. 217,175. 3 Claims. (Cl. 74—101.)



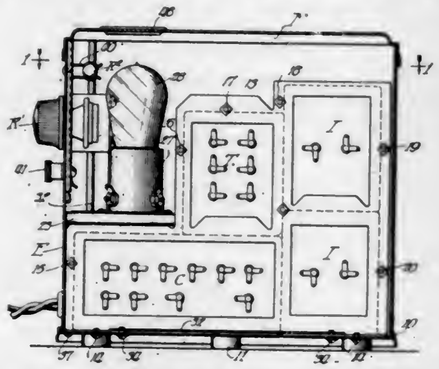
1. A gearing comprising a sleeve, a housing enclosing the sleeve, and within which the latter is rotatably mounted at its ends, said housing being divided transversely of the axis of rotation of the sleeve into a plurality of co-operating sections relatively rotatable about the sleeve, a rotatable shaft carried by each section and mounted for movement therewith about the axis of the sleeve, means for operatively connecting said shafts with said sleeve, and a supporting shaft extending through said sleeve and affording a support for the housing.

1,768,473. SOUND-PROPAGATING DIAPHRAGM. JOHN POMEROY GATY, Madison, N. J. Filed May 2, 1928. Serial No. 274,598. 6 Claims. (Cl. 182—32.)



1. A sound propagating apparatus comprising in combination a diaphragm, having spaced outer faces, an actuating unit, and means for imparting motion from said actuating unit to a point between the faces of said diaphragm.

1,768,474. BATTERY SUBSTITUTE. WILLIAM C. GRUNOW, Chicago, Ill., assignor to Grigsby-Grunow Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 6, 1926. Serial No. 139,789. 3 Claims. (Cl. 250—27.)



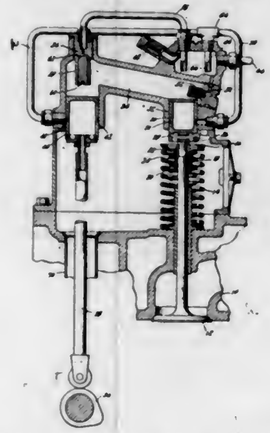
1. In a current supply device of the character described, a suitable base, a plurality of condenser and coil elements suitably enclosed as individual units, and a frame work for holding said units upon said base and including means for independently removably securing the units thereby, said frame including two vertically disposed side walls between which said units are clamped, one of said side walls being readily removable to permit ready removal of any of said units.

1,768,475. SEPARABLE FASTENER. CHARLES L. HALL, Great Neck, N. Y., assignor, by mesne assignments, to United-Carr Fastener Corporation, Cambridge, Mass., a Corporation of Massachusetts. Filed Apr. 10, 1928. Serial No. 268,832. 3 Claims. (Cl. 24—77.)



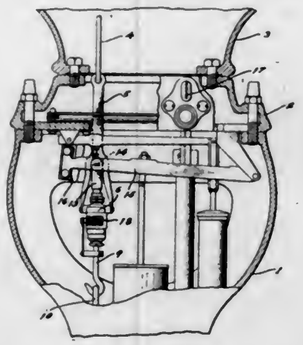
3. A snap fastener unit for adjustable atachment to a strap or like support comprising a base portion having slots for reception of a strap, snap fastener means presented between the slots for cooperative engagement with another snap fastener unit, means providing an opening at one edge of the base and adjacent to one of said slots whereby said base may be attached to a strap by entering the edges of the strap through said opening and prong means intersecting at least one of the slots and located substantially opposite the opening through which the strap is entered to prevent interference with the entering operation of the strap while being adapted to hold the fastener unit against slipping relative to the strap in at least one direction.

1,768,476. HYDRAULIC MECHANISM. GEORGE E. A. HALLETT, Detroit, Mich., assignor to General Motors Research Corporation, Detroit, Mich., a Corporation of Delaware. Filed Jan. 3, 1928. Serial No. 244,220. 11 Claims. (Cl. 123—90.)



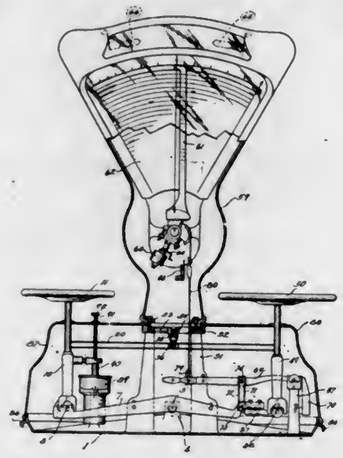
1. A hydraulic operating system comprising an hydraulic chamber, mechanism associated with the chamber for transmitting motion through pressure on the fluid therein, a fluid reservoir, and a vent of small size establishing communication between the chamber and reservoir, said vent serving at times for the discharge of air and excess oil from the chamber, and, upon contraction of the body of oil in the chamber, serving for the passage of oil from the reservoir to the chamber.

1,768,477. COUNTING DEVICE. HALVOR O. HEM, Toledo, Ohio, assignor to Toledo Scale Company, Toledo, Ohio, a Corporation of New Jersey. Filed Oct. 18, 1926. Serial No. 142,216. 5 Claims. Cl. 194—1.)



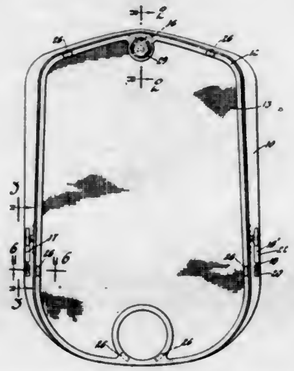
1. In a device of the class described, in combination, an extensible connection, one part of said connection being adapted for connection to a load receiver, another part thereof being adapted for connection to load-counterbalancing mechanism, a counter adapted for operation by relative movement of said parts, and coin-controlled mechanism for releasably preventing relative movement thereof.

1,768,478. WEIGHING SCALE. HALVOR O. HEM, Toledo, Ohio, assignor to Toledo Scale Company, Toledo, Ohio, a Corporation of New Jersey. Filed Oct. 17, 1928. Serial No. 313,025. 19 Claims. (Cl. 265—36.)



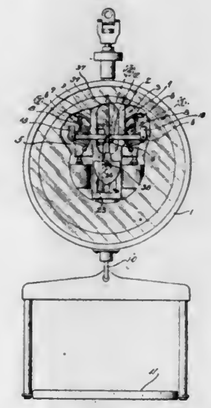
1. In a weighing scale, in combination, a lever having a knife-edged load pivot, a load-receiver supported on said pivot, a knife-edged retaining pivot on said lever, a bearing member engaging said retaining pivot, and means yieldably connecting said bearing member to said load-receiver.

1,768,479. RADIATOR SCREEN. PHILO J. HOLZHAUER, Detroit, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Apr. 13, 1929. Serial No. 354,879. 7 Claims. (Cl. 293—54.)



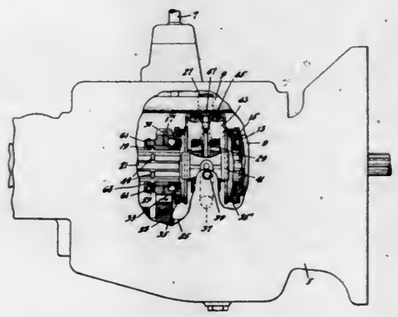
1. The combination with a radiator shell of a member having the same general contour as the radiator shell adapted to be secured to the radiator shell in advance thereof, means to secure the member to the shell including a hook-like element through which the member is adapted to be supported from the shell, and spring-tensioned means independent of the hook-like element adapted to maintain the hook-like element in engagement with the shell.

1,768,480. WEIGHING SCALE. SAMUEL N. HURT, Toledo, Ohio, assignor to Toledo Scale Manufacturing Company, Toledo, Ohio, a Corporation of New Jersey. Filed Apr. 8, 1929. Serial No. 353,333. 4 Claims. (Cl. 265—62.)



1. In a weighing scale, in combination, load counterbalancing mechanism and indicating mechanism operated thereby, said indicating mechanism including a rack, means for adjusting said rack longitudinally, and automatically acting friction means to maintain said rack in adjustment.

1,768,481. TRANSMISSION. OLIVER K. KELLEY, Detroit, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed May 11, 1929. Serial No. 362,422. 6 Claims. (Cl. 74—59.)

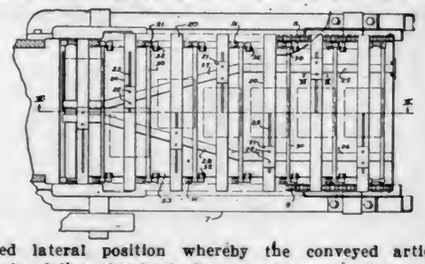


1. In combination, a shaft, a bushing thereon, a gear rotatable about said bushing, means to retain said gear from axial movement relative to said bushing, and means to retain said bushing from axial movement relative to said shaft, said last mentioned means including a plurality of lugs radially extending from said shaft, said bushing having a radial face to engage said lugs on one side thereof, a retaining member carried by said bushing to engage said lugs on the other side thereof.

1,768,482. CONVEYER MECHANISM. WILLIAM JOHN KOCH, Midland Park, N. J., assignor to The Fred H. Knapp Corporation, Ridgewood, N. J., a Corporation of New Jersey. Filed Jan. 12, 1928. Serial No. 246,156. 3 Claims. (Cl. 198—31.)

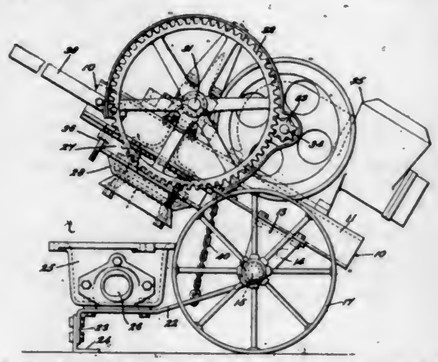
1. A conveyer mechanism for advancing articles and separating the same into a plurality of rows comprising a longitudinally movable conveyer, a plurality of laterally

movable article engaging elements carried thereby, and means for moving said elements selectively to predeter-



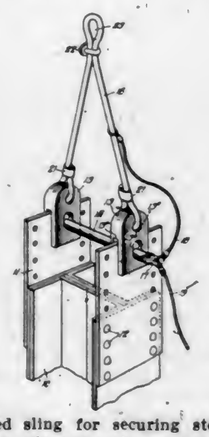
mined lateral position whereby the conveyed articles may be delivered selectively at predetermined positions, substantially as described.

1,768,483. PORTABLE PUMP. CHARLES I. LONGENECKER, Milwaukee, Wis., assignor to Chain Belt Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Dec. 7, 1929. Serial No. 412,552. 6 Claims. (Cl. 103—152.)



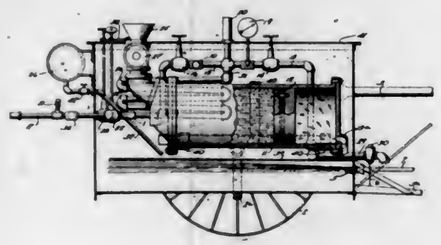
1. In a portable pumping unit, a supporting frame comprising a pair of pivotally connected members; and a pump carried by said frame having a separable casing, a part of said casing being carried by each of said frame members.

1,768,484. APPARATUS FOR ERECTING COLUMNS ON STEEL STRUCTURES. WILLIAM H. LOTTS, River Forest, Ill., assignor to The Overland Construction Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 20, 1928. Serial No. 307,122. 10 Claims. (Cl. 294—74.)



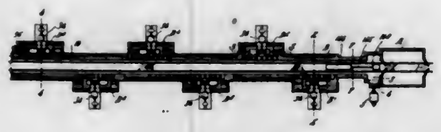
1. An improved sling for securing steel columns for raising, said sling adapted to be used with splice plates secured to the top of a column, and comprising means extending over the ends of the splice plates, an anchor pin extending through said means and through apertures in the splice plates to secure said means to said splice plates, and means connected to both of said first mentioned means adapted to be gripped for raising the column directly vertically.

1,768,485. APPARATUS FOR APPLYING FILMS OF FLUID MATERIALS TO SURFACES. JOHN R. MACK, Caldwell, N. J., assignor to Quigley Furnace Specialties Company, Inc., a Corporation of New York. Filed Feb. 29, 1928. Serial No. 257,874. 1 Claim. (Cl. 299—35.)



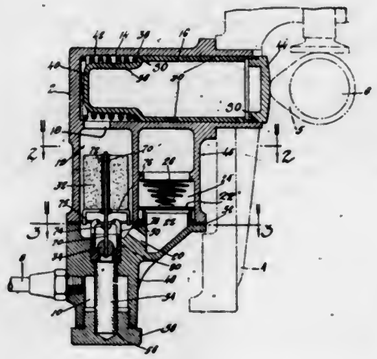
In a portable device for spraying hot asphalt on surfaces to be covered by an asphalt film, the combination of a casing, vehicle wheels for supporting said casing, a cylinder having a free piston therein mounted in said casing, a discharge hose connection and a valve controlled inlet connection adapted to convey hot asphalt, both communicating with one end of said cylinder, a compressed air connection to each end of said cylinder, a fluid fuel burner located in the lower part of said casing, a baffle plate between said burner and said cylinder, a tank for fluid fuel supported on said casing and connected to said burner and an air heater located in said casing, exposed to the heat generated by said burner, and connected to said discharge hose and compressed air connections, together with suitable valves controlling said compressed air connections; whereby said piston may be forced to the end of the cylinder remote from the discharge hose connection, the cylinder filled with fluid asphalt, and the movement of the piston reversed to expel said asphalt, through said hose, or hot air forced through said hose to melt and expel any asphalt therein.

1,768,486. CONTINUOUS-CAR-TUNNEL FURNACE AND METHOD OF OPERATING THE SAME. DANA P. OGDEN, Ottawa, Ill., assignor of one-half to Ermin F. Plumb, Streator, Ill. Filed Nov. 12, 1924. Serial No. 749,430. 47 Claims. (Cl. 25—142.)



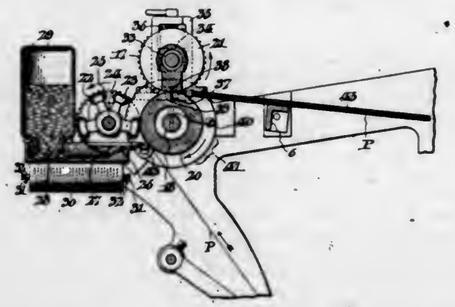
1. A heat treating mechanism comprising a chamber for containing material to be treated, means for moving the material in one direction through said chamber, means for drawing gases over the material in the opposite direction through said chamber, means at a portion intermediate the length of said chamber for heating the material, and means at either end of said portion for effecting a lateral circulation of the gases.

1,768,487. FUEL PUMP. JOSEPH P. REMINGTON, Philadelphia, Pa. Filed Mar. 30, 1925. Serial No. 19,460. 14 Claims. (Cl. 103—40.)



1. In a pump wherein a body of gas is interposed between an actuator and the fluid operated upon with a second body of gas influencing the outlet valve so that the fluid is pumped between two cushioning bodies of gas, the combination of an engine crankcase associated with said pump, and a spiral bleed conduit in the actuator of limited flow capacity for establishing communication between the first mentioned body of gas and the body of gas in the engine crankcase.

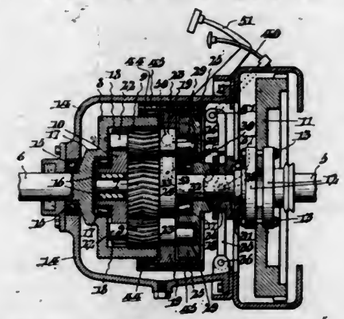
1,768,488. ADHESIVE-APPLYING MECHANISM FOR WRAPPING MACHINES. JOSEPH PERCY REMINGTON, Philadelphia, Pa. Original application filed Nov. 1, 1918, Serial No. 260,629, now Patent No. 1,554,369, dated Sept. 22, 1925. Divided and this application filed Sept. 14, 1925. Serial No. 56,259. 5 Claims. (Cl. 91—14.)



1. In a wrapping machine including a supply of adhesive with means for maintaining such adhesive in a molten condition during application, the combination of the material feeding and severing platen roller and serial means including single and multiple-faces co-operative with the platen feed roller in applying said adhesive to wrapping sheet material at regions corresponding to the subsequent folds thereof and prior to partially severing such material.

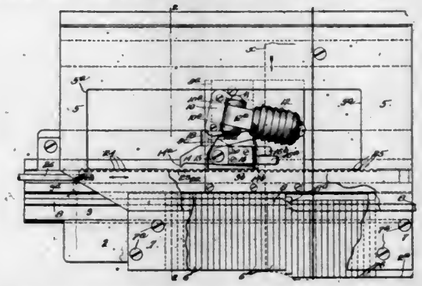
1,768,489. VARIABLE-SPEED GEARING. JOSEPH PERCY REMINGTON, Philadelphia, Pa., assignor to James H. Bell, Philadelphia, Pa. Filed Jan. 25, 1929. Serial No. 334,875. 5 Claims. (Cl. 74—34.)

3. The combination with an epicyclic transmission gearing and its revoluble intermediate member and gears; of an eccentric mounted co-axially with said intermediate member; means actuated by said gears for rotating said



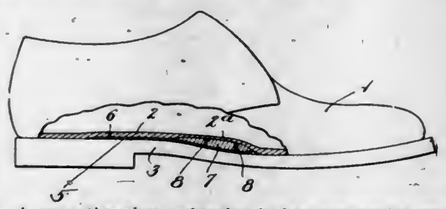
eccentric; and means for yieldingly resisting revolution of said eccentric as aforesaid, and for varying the resistance and thus varying transmission ratio of the gearing.

1,768,490. CLOTH-REST CONSTRUCTION FOR CLOTH SHEARS. CHARLES G. RICHARDSON, Springfield, Vt., assignor to Parks & Woolson Machine Company, Springfield, Vt., a Corporation of Vermont. Filed Jan. 9, 1924. Serial No. 685,245. 17 Claims. (Cl. 26—18.)



1. In an extensible cloth rest for a cloth shear, the combination with a main cloth rest, a series of automatically adjustable end sections arranged to form an extension of the cloth rest, said end sections being movable to and from cloth-supporting position in approximately parallelism with the plane of travel of the cloth in front of the shearing line, andmeans including a transversely movable cam bar, actuated by cloth-controlled means, to shift said sections according to the lateral movement of the cloth traveling to the shear whereby thrust of the sections against the cam bar is substantially eliminated.

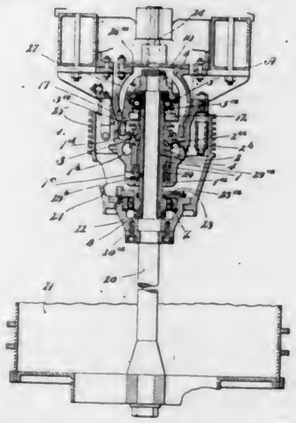
1,768,491. CORRECTIVE SHOE. FRED L. RICHARDSON and LAURIE S. MACDONALD, Brockton, Mass., assignors to Thompson Bros. Shoe Co., Brockton, Mass., a Corporation of Massachusetts. Filed Apr. 15, 1927. Serial No. 184,108. 2 Claims. (Cl. 36—71.)



1. A corrective shoe embracing in its construction outer and innersoles peripherally stitched together, the underside of the innersole at its metatarsal arch portion being recessed to leave a thin flexible area of the innersole above said recess, a shank stiffener comprising a longitudinal up-

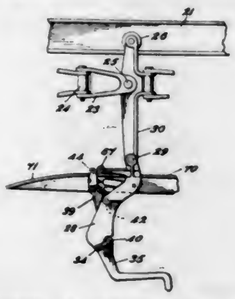
wardly arched strip of spring steel of substantially flat cross section anchored to the heel portion of the innersole and extending forward to said recess, an arch supporting pad of yielding but elastic material whose convex upper side is adapted to be seated in said recess, secured to the forward end of said shank stiffener and acting through its engagement with the recess and its attachment to the unanchored forward end of said shank stiffener, to maintain both itself and the shank stiffener in correct position between the medial portion of the metatarsal arch of an inserted foot, while allowing sufficient play to accommodate the longitudinal extension of the foot when supporting the weight of the wearer.

1,768,492. MOUNT FOR CENTRIFUGAL MACHINES. EUGENE ROBERTS, Salt Lake City, Utah, assignor to The Western States Machine Company, Salt Lake City, Utah, a Corporation of Utah. Filed May 23, 1925. Serial No. 32,507. 6 Claims. (Cl. 308—143.)



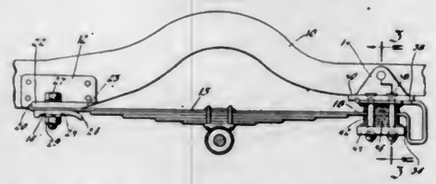
1. In a suspended gyratory centrifugal, the combination with a non-rotating gyratory suspender supported on a non-gyratory support by a ball and socket joint, of an elastic centralizing buffer of compressible material located below said ball and socket point and arranged to support the weight of the centrifugal and to be compressed thereby inwardly into tight gripping engagement with the suspender passing through it, to prevent it from lifting from its seat, under the stress of gyration, and a basket-carrying shaft rotatably supported on bearings carried by the gyratory suspender.

1,768,493. TROLLEY CONVEYER AND TRIP HOOK THEREFOR. GUSTAV R. RODDY, Milwaukee, Wis., assignor to Chain Belt Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Oct. 24, 1928. Serial No. 314,728. 8 Claims. (Cl. 198—177.)



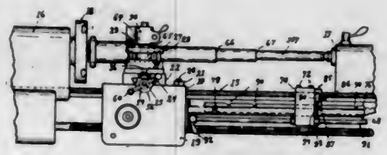
1. In a conveyer, a conveyer belt; article carrying means carried by said belt, comprising a body member transversely pivotally connected to said belt, an article-receiving member carried by said body member, and a latch for releasably holding said receiving member in carrying position; means for tripping said latch to release said receiving member; and means for preventing the swinging of said body member about its pivot during the tripping of the latch.

1,768,494. SPRING SUSPENSION. ERIC OLIE SCHJOLIN, Birmingham, Mich., assignor, by mesne assignments, to Yellow Truck & Coach Manufacturing Co., Pontiac, Mich., a Company of Maine. Filed Sept. 8, 1927. Serial No. 218,283. 12 Claims. (Cl. 267—30.)



1. In a spring suspension, a spring having one end in the general plane of the spring and rigidly clamped, a resilient suspension for the other end, and an integral return bent portion on said resiliently suspended end.

1,768,495. MACHINE-TOOL-STOP MECHANISM. WILLIAM SCHRODER, Covington, Ky., assignor to The Sebastian Lathe Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Mar. 3, 1926. Serial No. 92,082. 8 Claims. (Cl. 82—21.)

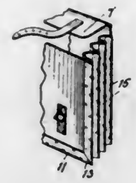


1. A stop mechanism for machine tools comprising in combination with a machine tool, a main tool carriage, a cross feed tool carriage, stop mechanism to repeatedly stop, the cross-feed tool carriage at predetermined positions relative to the main tool carriage, a stop bar supporting and carrying member mounted upon and movable with the main tool carriage relative to the machine tool, a plurality of stop bars respectively detachably, mounted upon said supporting and carrying member and movable endwise with said main tool carriage, said respective stop bars being provided with a plurality of stop faces faced in one direction, a stop engaging member mounted in fixed position relative to said machine tool, and in position to normally engage the stop faces of one of said stop bars and adjustable selectively into the path of the stop faces of the opposite stop bar, and means operable to successively shift one of said interengaging stop members ont of the path of the opposite stop member.

8. A step mechanism for machine tools comprising in combination with a machine tool a main tool carriage mounted thereon to move longitudinally, a cross feed tool carriage mounted to move transversely upon said main tool carriage, a cross feed screw adapted to feed said cross feed tool carriage relative to said main tool carriage, a sleeve in which said cross feed screw is journaled and held against movement endwise thereof adapted to be stationarily mounted upon said cross feed carriage, a collar mounted upon said cross feed screw outside of said sleeve and provided with a plurality of stop faces all faced in one direction and adapted to be successively employed to stop the cross feed of said cross feed carriage at different positions of the main tool carriage longitudinally of the machine tool,

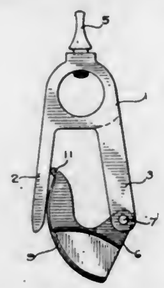
a stop member mounted upon said sleeve and riding upon the periphery of said stop collar and movable radially of said stop collar to successively stop the cross feed at different positions of the tool carriage longitudinally of the machine tool, a second collar mounted upon said cross feed screw outside of said sleeve and provided with a plurality of stop faces all faced in one direction and in the opposite direction to that of the stops of said first collar, a second stop member mounted upon said sleeve and riding upon the periphery of said second stop collar and movable radially of said stop collar to successively stop the cross feed at a different series of positions of the tool carriage longitudinally of the machine tool.

1,768,496. BRIEF BAG. BENJAMIN TRAGER, Bronx, N. Y. Filed Mar. 3, 1928. Serial No. 258,708. 5 Claims. (Cl. 150—1.6.)



1. A brief bag or case of the class described comprising a front face, a rear face having a top flap, end gussets and a bottom and metallic clamping means for joining the edges of the gussets and bottom to the edges of the said front and rear faces, said clamping means extending throughout the height of the gussets and length of the bottom of said bag or case.

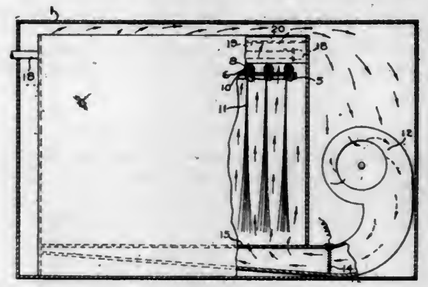
1,768,497. CLIP FOR SHEET MATERIAL. JASPER B. WILLSEA, Rochester, N. Y., assignor to Willsea Works, Rochester, N. Y., a Corporation of New York. Filed Apr. 5, 1929. Serial No. 352,752. 5 Claims. (Cl. 24—248.)



1. A clip for sheet material comprising a body member having a pair of spaced arms, a dog having a clamping portion pivoted to the end of one of said arms and movable by gravity to clamp one or more sheets between it and the other arm, and a stop adjacent to said clamping portion for engagement with said other arm to arrest the movement of the dog before its clamping portion engages said other arm so that the dog may yield more easily to permit one or more sheets to be inserted when engaged thereby.

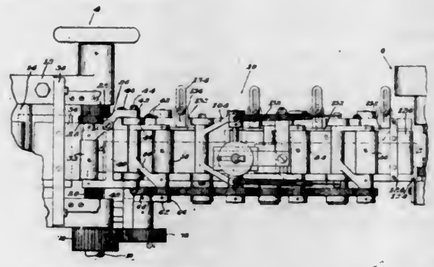
1,768,498. SHEET-DRYING PROCESS AND APPARATUS. JASPER B. WILLSEA, Rochester, N. Y., assignor to Willsea Works, Rochester, N. Y., a Corporation of New York. Filed Apr. 5, 1929. Serial No. 352,753. 6 Claims. (Cl. 34—19.)

1. In a sheet drying apparatus comprising a casing, the combination of means in said casing for suspending a plurality of sheets clamped together, means for directing air currents against the sheets causing them to spread so that



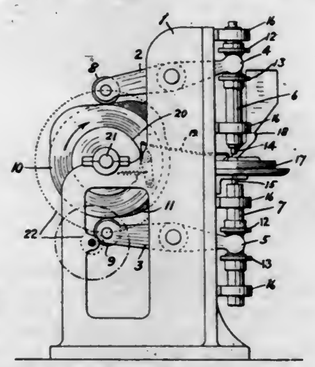
the air passes between them, and means for heating the clamped portions of the sheets near and adjacent the suspending means.

1,768,499. MACHINE FOR MAKING COUNTERS. WILLIAM J. YOUNG, Peabody, Mass., assignor to W. J. Young Machinery Company, Lynn, Mass., a Corporation of Massachusetts. Filed Sept. 11, 1928. Serial No. 305,202. 10 Claims. (Cl. 12—65.)



1. A machine for making counters having, in combination, a counter skiving device for skiving blanks in flat condition, a counter rolling device, and a conveyor for receiving the blanks in flat condition from the skiving device and delivering them flat to the rolling device.

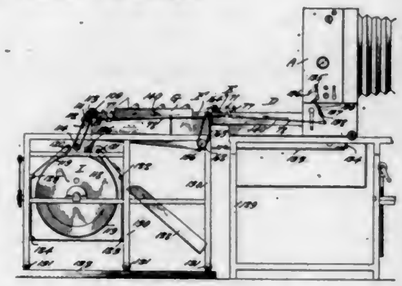
1,768,500. COMPRESSING MACHINE. LAWRENCE H. BAILEY, Philadelphia, Pa., assignor to F. J. Stokes Machine Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed June 16, 1928. Serial No. 286,007. 2 Claims. (Cl. 107—18.)



1. A compressing machine having a frame provided with stationary bearings, a stationary die mounted on the frame, top and bottom plungers carrying punches and mounted in

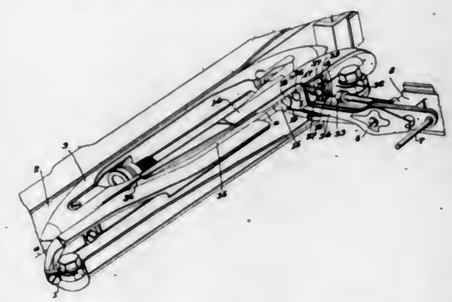
said stationary bearings, arms pivoted to the frame and having ends adjacent said punches, regulating collars adjustably mounted on said punches to cooperate with said ends of said arms, and separate cams for each of the arms mounted on one axis on the frame and adapted to operate on the arms to simultaneously move and force both the top punch and the bottom punch towards each other in the die.

1,768,501. APPARATUS FOR TREATING PHOTOGRAPHIC FILMS. GEORGE C. BEIDLER, Rochester, N. Y. Filed Aug. 5, 1927. Serial No. 210,894. 17 Claims. (Cl. 95—89.)



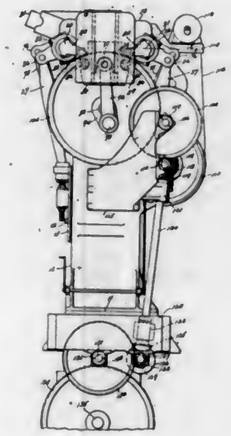
1. In an apparatus for treating films, an exposing chamber for the films, a receptacle to which films are delivered for development, a receptacle in proximity thereto for receiving films for fixing the same, means for moving the films downwardly in the said receptacle, means for removing the lowermost of the films successively, a washing tank, means for conveying the said films to the washing tank and delivering them in approximately horizontally superimposed relation to one another therein, means for moving the films downwardly in the washing tank in superimposed relation to one another, means for removing the lowermost of the films successively from the washing tank, a drier to which the films are delivered, and means for moving the films with relation to the drying device and ejecting them therefrom in a finished state.

1,768,502. OUTGOING THREAD CONTROL FOR AUTOMATICALLY REPLENISHING LOOMS. HORACE H. BURDETT, Hopedale, Mass., assignor to Draper Corporation, Hopedale, Mass., a Corporation of Maine. Filed Apr. 4, 1929. Serial No. 352,445. 16 Claims. (Cl. 139—260.)



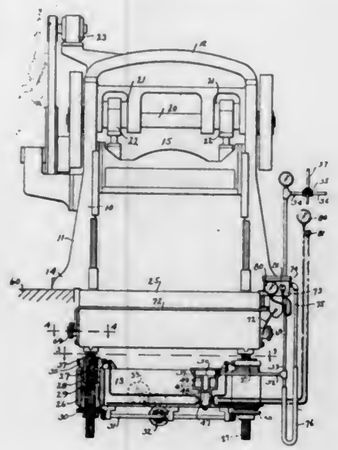
1. In a filling replenishing loom, the combination of a thread parter to act upon and part the outgoing thread between the ends of a shuttle when in the replenishing shuttle box, a thread positioner mounted on the shuttle box and having a thread engaging portion, and means rendered effective on call for replenishment of filling to move the thread engaging portion of the positioner into the shuttle box to engage and position the thread for the action of the parter.

1,768,503. DRAWING PRESS. ARTHUR A. BYERLEIN, Detroit, Mich., assignor, by mesne assignments, to General Machinery Corporation, Hamilton, Ohio, a Corporation of Delaware. Filed Dec. 21, 1927. Serial No. 241,547. 24 Claims. (Cl. 113—38.)



1. A drawing press having a frame, three movable die-slides provided in said frame, a crank-shaft rotatable in said frame, and three distinct driven connections from said crank-shaft for independently operating the three slides, the three slides all being movable to effective positions in the same direction relatively to the press.

1,768,504. PRESS. ARTHUR A. BYERLEIN, Detroit, Mich., assignor, by mesne assignments, to General Machinery Corporation, Hamilton, Ohio, a Corporation of Delaware. Filed Nov. 8, 1928. Serial No. 318,041. 8 Claims. (Cl. 113—38.)



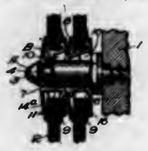
1. In a press, a frame, a slide movable in said frame, operating means for said slide, a bed adjustably mounted on said frame for a range of height adjustment, means for raising and lowering said bed, and a fluid pressure locking system for locking said bed fixed in any desired position of adjustment.

1,768,505. NUT AND SCREW FASTENING. FRED S. CARR, Newton, Mass., assignor, by mesne assignments, to United-Carr Fastener Corporation, Cambridge, Mass., a Corporation of Massachusetts. Filed July 22, 1925. Serial No. 45,276. 3 Claims. (Cl. 85—32.)



1. A fastening device comprising, in combination, a one-piece nut-holder having a base portion, a plurality of resilient fingers each extending from said base portion first in one direction and then in the opposite direction to provide for substantial expansion and contraction of said fingers, a nut located between said fingers and resting upon said base portion, and means providing a lost motion connection between the nut and the nut-holder whereby the nut may shift laterally in any direction relative to the nut holder.

1,768,506. SEPARABLE FASTENER. FRED S. CARR, Newton, Mass.; Moses F. Carr, executor of said Fred S. Carr, deceased, assignor, by mesne assignments, to United-Carr Fastener Corporation, Cambridge, Mass., a Corporation of Massachusetts. Filed Feb. 12, 1927. Serial No. 167,675. 7 Claims. (Cl. 24—217.)



4. A fastener socket including two plates adapted to be secured to opposite sides of a carrying medium, one of said plates having a boss which is oval in cross-sectional outline adjacent to said plate and circular in cross-sectional outline at the other end, said boss being divided into a plurality of resilient fingers thereby permitting expansion and contraction of said boss at all sides thereof, each finger having a shoulder engaging face at the circular end of the boss for engagement with a shoulder presented by a stud, and means located within said boss intermediate its ends for engagement with the shank of a cooperating stud to hold the socket in an eccentric relation with the stud when engaged therewith, thereby to prevent substantial engagement between the shoulder engaging faces provided by some of the fingers and the shoulder of the stud at a predetermined side of the socket.

1,768,507. SEPARABLE FASTENER. FRED S. CARR, Newton, Mass.; Moses F. Carr, executor of said Fred S. Carr, deceased, assignor, by mesne assignments, to United-Carr Fastener Corporation, Cambridge, Mass., a Corporation of Massachusetts. Filed Feb. 12, 1927. Serial No. 167,676. 3 Claims. (Cl. 16—4.)



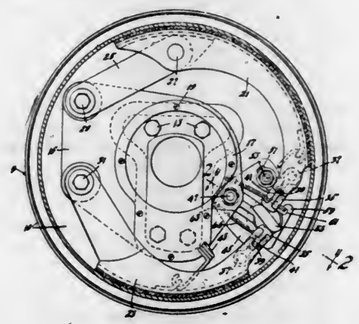
1. A fastener socket comprising a casing having an upstanding laterally yieldable wall, a pair only of neck-engaging jaws extending inwardly from said wall, said neck-engaging jaws being laterally yieldable with said wall and terminating at a stud receiving aperture, means spacing said jaws a substantial distance apart circumferentially thereby to permit said socket to be engaged with a stud by first hooking one jaw into engagement with the neck of the stud and then pressing the other jaw over the head to engage the neck, said first jaw acting as a fulcrum.

1,768,508. CONNECTING ROD. THERON P. CHASE, Detroit, Mich., assignor to General Motors Research Corporation, Detroit, Mich., a Corporation of Delaware. Filed Dec. 6, 1928. Serial No. 324,281. 2 Claims. (Cl. 74—17.)



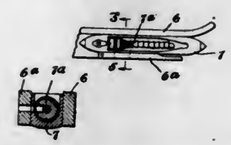
1. In a connecting rod having bearing portions, said rod having an I-section between the bearing portions, and a strip of metal bent about said I-section to form a lubricant channel.

1,768,509. BRAKE CENTRALIZER. THERON P. CHASE, Detroit, Mich., assignor to General Motors Research Corporation, Detroit, Mich., a Corporation of Delaware. Filed Jan. 21, 1929. Serial No. 333,974. 5 Claims. (Cl. 188—78.)



1. In combination, a brake drum, anchored shoes to engage the drum, rotatable means to engage the adjacent ends of said shoes and expand them into contact with the drum, a pivoted member supporting said rotatable means at a position removed from its pivot, yielding elements terminally secured to said pivoted member, one on each side of its pivot, said yielding elements engaging, under tension, projections at points on said pivoted member removed from the pivot, rigid abutments engaging said yielding elements to flex one or the other of said yielding elements when the pivoted member turns about its pivot.

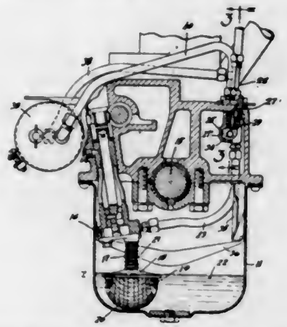
1,768,510. LOOM. JOHN S. COLDWELL, Fall River, Mass., assignor to Leno Elastic Web Company of Massachusetts. Filed Oct. 10, 1928. Serial No. 311,549. 2 Claims. (Cl. 139—371.)



1. In a loom-stop mechanism, the combination with a freely slidable shuttle-penetrating filling feeler arranged in front of the filling containing shuttle, a gravity actuated

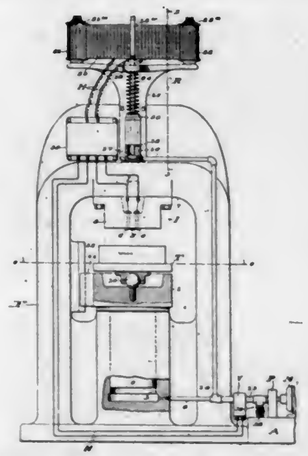
rock shaft at the front of the loom connected with said feeler to normally project the feeler into the path of the advancing filling and itself to be reversely rocked by the filling-induced movement of the feeler, a loom-stop motion embracing a weft fork, a supporting slide and an actuating vibratory hammer, a latch mounted on said slide to be engaged by said hammer to actuate the slide to loom-stopping position independently of the weft fork, said rock shaft being provided with an arm having a two-way actuating engagement with said latch to insure the movement of the latch into and out of the path of the vibratory hammer.

1,768,511. OIL FILTER INSTALLATION. LEROY V. CRAM and CHARLES W. MCKINLEY, Flint, Mich., assignors, by mesne assignments, to A C Spark Plug Company, Flint, Mich., a Company of Michigan. Filed May 19, 1927. Serial No. 192,712. 9 Claims. (Cl. 184—6.)



1. In combination with an automotive vehicle having an internal combustion engine, an oil pump in the oil pan of said engine, an impurity remover outside the engine, a distributor in the engine crankcase, means for delivering oil from the pump to the distributor and impurity remover, means for delivering the oil from the impurity remover to the distributor, and means for permitting the outflow of oil from the distributor to the bearing parts of the engine.

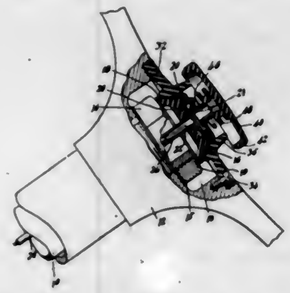
1,768,512. HARDNESS-MEASURING MEANS. ADOLPH L. DE LEEUW, Plainfield, N. J., assignor of one-half to Albert F. Nathan, New York, N. Y. Filed Oct. 19, 1925. Serial No. 63,380. 15 Claims. (Cl. 265—14.)



1. A testing machine combining a work-support; an indenting tool; means to effect relative movement between the tool and the work-support to cause the tool to indent the work carried by the work-support; a gauge to limit the extent of indentation by said tool; a normally inactive recording device adapted, upon actuation, to record the force utilized to effect the predetermined indentation in the work; and means rendered active by the contact of the work with said gauge to cause said recording device to be actuated.

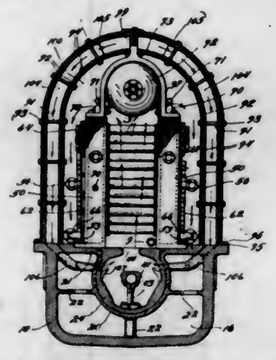
14. A testing machine combining a work-support; an indenting tool; a fluid pressure system; means actuated by pressure from said system to effect relative movement between the tool and the work-support to cause said tool to indent the work on said work-support; means to limit the extent of indentation to a predetermined depth; a device to measure and record the pressure utilized to effect the predetermined indentation, said device comprising a record sheet; an electric circuit including spaced terminals located at opposite sides of said sheet and constituting a spark-gap; means to move said spark-gap relatively to said record sheet by the pressure utilized to effect the indentation; and means to cause a spark to jump said gap and penetrate said sheet instantaneously with the completion of said indentation.

1,768,513. HORN BUTTON. HARRY M. DENYES, Saginaw, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Oct. 29, 1927. Serial No. 229,670. 4 Claims. (Cl. 200—59.)



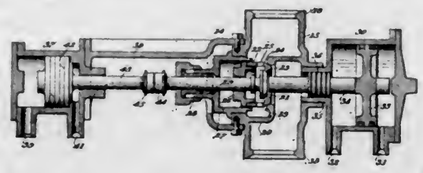
1. In combination, a steering wheel, an insulating base on said wheel, a horn wire contact on said base, a conductor shell enveloping said base, a contact button held in place by said shell, and a plate clamping said shell to said wheel.

1,768,514. STEAM-GENERATING PLANT. OVAL L. DILLON, Kansas City, Mo., assignor to Victor L. Phillips, Kansas City, Mo. Filed Apr. 7, 1924. Serial No. 704,761. 6 Claims. (122—3.)



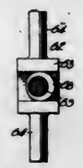
2. In a steam generating plant of the character described, a base casing formed with a burner chamber having a longitudinal top opening, the space below and at the sides of said chamber providing a water supply chamber, means providing a burner structure arranged in longitudinally extending relation beneath said top opening, and a boiler structure comprising a set of vertical header members arranged in a longitudinal series at each side of said top opening of the casing and a series of water tubes extending transversely over said top opening and connecting said sets of header members.

1,768,515. AUXILIARY VALVE FOR LOCOMOTIVES. FRANK W. EDWARDS, Chicago, Ill., assignor to The Chicago Lubricator Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 18, 1919. Serial No. 345,840. 5 Claims. (Cl. 121—137.)



1. In a drifting valve mechanism, a casing adapted to be connected with a steam boiler at one end and with the engine cylinders at the other end, a valve seat interposed between the two ends, a hollow valve cooperating with said seat to permit and cut off passage through the seat, a valve arranged within the hollow valve and adapted to open and close in the same direction as the hollow valve, an air-driven piston having a stem extending into the casing to contact with the valve in the hollow valve to unseat it to permit passage of fluid through the casing, said enclosed valve having a stem extending outwardly, and a stem-actuated piston arranged in a cylinder connected with the casing and having a stem adapted to be brought into moving contact with the stem of the enclosed valve to close both the hollow valve and its enclosed valve.

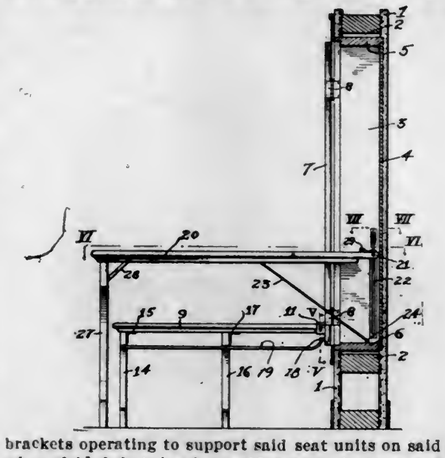
1,768,516. LUBRICATOR. FRANK W. EDWARDS, Chicago, Ill., assignor to The Chicago Lubricator Company, Chicago, Ill., a Corporation of Illinois. Filed June 7, 1926. Serial No. 114,322. 11 Claims. (Cl. 184—27.)



1. A lubricator, having an oil reservoir, and a lubricant forcing unit composed of a ported body portion for controlling the flow of lubricant, provided with a recess open to the oil reservoir and communicating with the ports of said body portion, a pumping cylinder detachable from said body portion, a screen mounted on the body portion and enclosing said recess and held in fixed relation thereto by said cylinder, and a plunger in said cylinder, the forcing unit being applicable to and removable from said reservoir bodily, and means for imparting motion to said plunger.

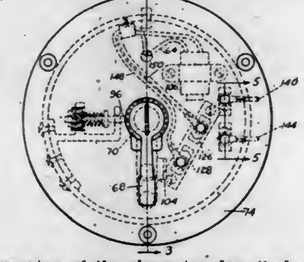
1,768,517. CONCEALABLE FURNISHINGS. WALTER C. FAIN, Norfolk, Va. Filed July 31, 1924. Serial No. 729,365. 1 Claim. (Cl. 155—83.)

In concealable furnishings, a cabinet having a rear wall and an open front, hinged doors for closing the front of said cabinet, brackets on said doors having vertically slotted portions projecting from the inner faces of the doors, and seat units having laterally outstanding pins engaging the slots in said brackets, said pins and



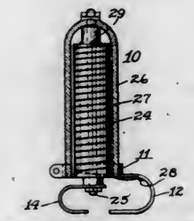
brackets operating to support said seat units on said doors when folded but leaving said seat units susceptible of vertical movement with respect to said doors when in position for use.

1,768,518. CONTROLLING MECHANISM. FRANCIS D. HARDESTY, Birmingham, Mich. Filed Feb. 2, 1925. Serial No. 6,347. 14 Claims. (Cl. 70—127.)



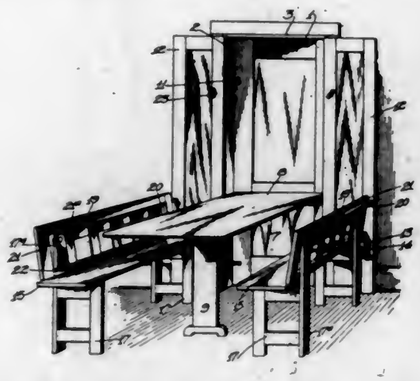
1. In apparatus of the character described, an ignition circuit having a switch actuating member movable to on and off positions, in combination with mechanism for holding the circuit closed after the switch actuating member has been moved to its off position.

1,768,519. DEVICE FOR PRODUCING INFRA-RED RAYS. HECTOR P. MACLAGAN, Oak Park, Ill. Filed Mar. 1, 1926. Serial No. 91,404. 3 Claims. (Cl. 250—35.)



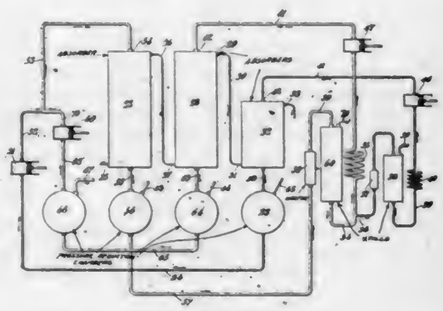
1. In an infra-red ray generator, the combination of a core of refractory insulating material, a high temperature resistance wire wound on said core, a shell of material opaque to light rays surrounding said resistance wire and out of contact with it, a rod extending through said core to support it, and means on said rod engaging said shell to support said shell from said rod.

1,768,520. COMBINATION TABLE AND SEATS. ROBERT H. ANDERSON, San Diego, Calif., assignor to Walter C. Fain, Norfolk, Va. Filed June 10, 1924. Serial No. 719,085. 20 Claims. (Cl. 155—123.)



9. In concealable furnishings, the combination of a cabinet having a rear wall and an open front, hinged doors for closing the front of said cabinet, seat units, means providing a vertically shiftable hinged connection for each of said seat units with respect to one of said doors, whereby to support said seat units on said doors when folded but to leave said seat units susceptible of vertical movement with respect to said door when in position of use.

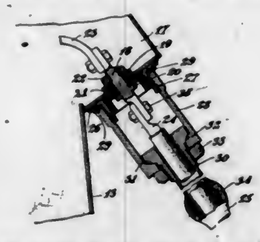
1,768,521. ABSORPTION OF GASOLINE FROM NATURAL GAS. EUGENE E. AYRES, Jr., Swarthmore, Pa., assignor to B. A. S. Company, Philadelphia, Pa., a Corporation of Delaware. Filed July 9, 1925. Serial No. 42,392. 15 Claims. (Cl. 196—8.)



14. In a process of separating gases, the steps comprising passing the gases through successive absorption stages, contacting oil with gas passing through a later absorption stage, then subjecting the oil to a partial stripping operation, and then passing the partially stripped oil directly into contact with gas passing through an earlier absorption stage.

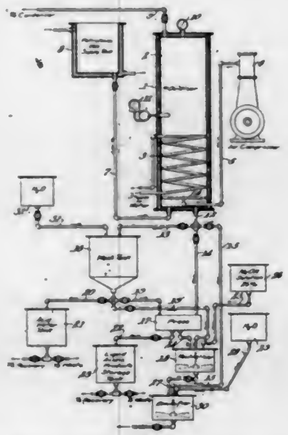
1,768,522. SUBWAY TRANSFORMER. GEORGE NELSON BROWN, Pittsburgh, Pa., assignor, by mesne assignments, to Allis-Chalmers Manufacturing Company, a Corporation of Delaware. Filed June 23, 1926. Serial No. 117,915. 5 Claims. (Cl. 175—361.)

1. In combination with a casing containing electrical apparatus, a lead from said electrical apparatus extending through said casing and having a terminal on the outside of said casing, a cable, means for connecting the conducting portion of said cable to said terminal, means for



forming a continuous sealed tubular means extending from said casing to the covering of said cable including means whereby said connecting means may be exposed without disconnecting the same.

1,768,523. EMULSIONS FROM PARTIALLY-OXIDIZED PETROLEUM WAX AND PROCESS OF MAKING THE SAME. ARTHUR W. BURWELL, Niagara Falls, N. Y., assignor to Alox Chemical Corporation, New York, N. Y., a Corporation of New York. Filed Mar. 23, 1927. Serial No. 177,803. 11 Claims. (Cl. 134—1.)



2. Process which comprises contacting an oxygen-containing gas with a normally solid petroleum wax, at reacting temperature and at a pressure greater than atmospheric pressure, in the presence of an exciter of oxidation, until the acidic compounds content of the reaction mixture is about 30% by weight, and emulsifying the resulting partially oxidized wax with water.

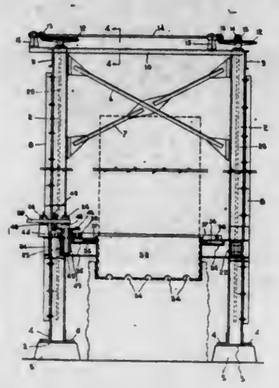
8. As a new composition of matter, an emulsion comprising neutralized, partially oxidized petroleum wax and water.

1,768,524. TRACK SIGNALING DEVICE. WILLIAM FREDERICK CLEAVER, Montreal, Quebec, Canada, assignor to Hugh A. Peck, Montreal, Quebec, Canada. Filed Apr. 8, 1929. Serial No. 353,573. 4 Claims. (Cl. 246—249.)



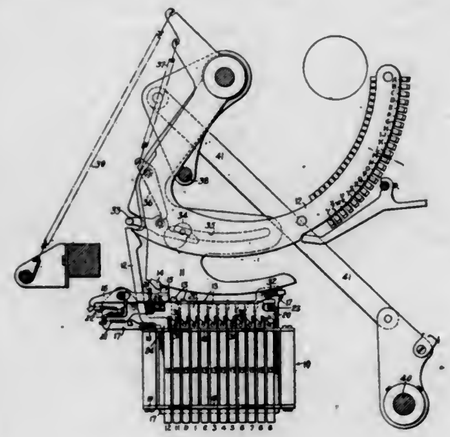
1. A magnetic signaling system consisting of a permanent magnetic bar encircled by a coil embracing the middle portion thereof, in combination with the rails of a railway track, the said rails being divided and having the ends of the permanent magnetic bar connected thereto between the divided parts thereof, a magnetic device within the circuit of the coil around the bar, and means whereby the energizing of the magnetic device energizes a separate operating circuit.

1,768,525. STONECUTTING MACHINE. CHARLES HEPBURN, Beebe, Quebec, Canada. Filed Dec. 1, 1927. Serial No. 236,917. 7 Claims. (Cl. 125—20.)



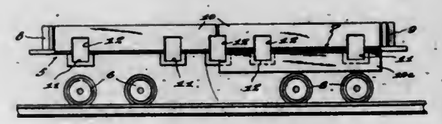
1. A stone cutting machine consisting of means for producing a cylindrical column from a rough stone block, such means comprising a cylindrical saw, means for supporting the cylindrical saw in alignment with the portion of the block from which the column is to be cut, means for feeding the saw into the block, means for actuating the saw and means whereby the column being produced will project through the cylindrical saw.

1,768,526. ALPHABETICAL PRINTING MECHANISM. WILLIAM W. LASKER, Brooklyn, N. Y., assignor to Remington Rand Incorporated, New York, N. Y., a Corporation of Delaware. Filed June 26, 1929. Serial No. 373,852. 5 Claims. (Cl. 101—93.)



1. In mechanism of the character described, the combination of rows of stop pins, a home position stop for each row of stop pins, sectors controlled by said pins and stops, slides operatively mounted between adjacent rows of stop pins and normally locking said stops, and means for moving each slide by a setting movement of any one of the corresponding stop pins and thereby permitting withdrawal of said home position stop.

1,768,527. RAILWAY ROLLING STOCK. HARRY J. NELSON, Elizabeth, N. J. Filed Feb. 16, 1928. Serial No. 254,738. 2 Claims. (Cl. 105—366.)



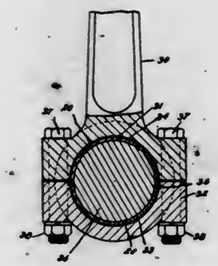
1. Railway rolling stock comprising a platform having a plurality of runways extending transversely thereof and disposed below the top surface of said platform and sides hingedly connected to laterial edges of said platform, said sides having openings adapted to register with the runways of said platform when in a let-down position.

1,768,528. BEARING. CHARLES R. SHORT, Detroit, Mich., assignor to The Moraine Products Corporation, Dayton, Ohio, a Corporation of Ohio. Filed May 5, 1927. Serial No. 188,929. 4 Claims. (Cl. 308—241.)



1. A bearing element comprising a thin porous facing of metal having relatiyely slight tensile strength and having absorbed therein a considerable amount of lubricant, and a metal backing therefor co-extensive therewith and bonded thereto by an alloy bond throughout the area common to both facing and backing.

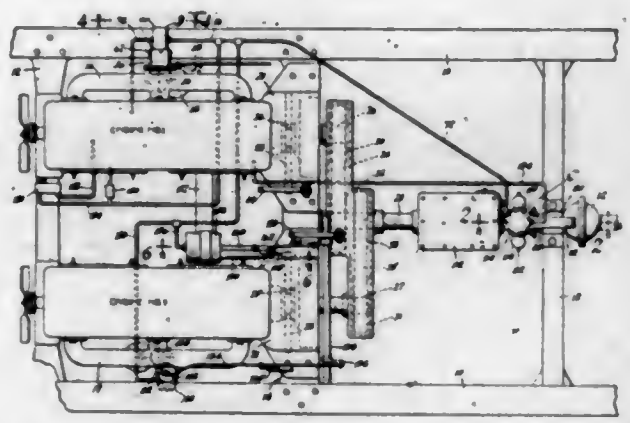
1,768,529. METHOD OF MAKING BEARINGS. CHARLES R. SHORT, Detroit, Mich., assignor to The Moraine Products Corporation, Dayton, Ohio, a Corporation of Ohio. Filed May 5, 1927. Serial No. 188,930. 4 Claims. (Cl. 29—149.5.)



1. The method of making a bearing for shafts and the like which comprises: forming a relatively thin, flat plate

having a porous metallic structure forming the porous plate while in detached condition into the desired cylindrical shape and then attaching the formed porous plate to a preformed reinforcing body by a metallic bond.

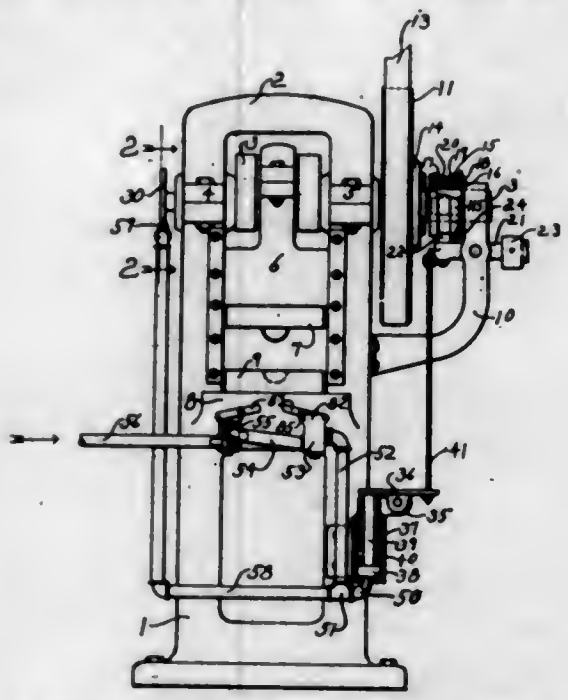
1,768,530. FLUID CONTROL OF POWER PLANTS. CHARLES R. SHORT, Detroit, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Dec. 27, 1927. Serial No. 242,926. 16 Claims. (Cl. 60—97.)



10. In combination, propelling means, two engines independently connectible with said propelling means, a conduit having a fluid supplied thereto under pressure, means for controlling the operation of said first engine including a throttle, a valve within said conduit normally held open when the throttle is closed and closed when the throttle is open, a governor valve in said conduit, means for connecting said second engine with said propelling means, means operated by an increase in speed of said engine past a predetermined point for opening said governor valve, and means operable by a fall in pressure within said conduit for disconnecting said second engine from said propelling means.

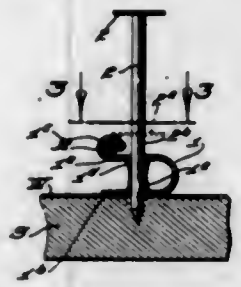
1,768,531. SAFETY DEVICE FOR PRESSES. HARRY S. WALSH and MARTIN H. MATHESON, Detroit, Mich., assignors to Murray Body Corporation, Detroit, Mich., a Corporation of Michigan. Filed Dec. 23, 1926. Serial No. 156 565. 3 Claims. (Cl. 192—131.)

1. In combination with a press ram, a source of power and clutch means for connecting the same, spring means for moving said clutch means into engagement, means for holding said clutch out of engagement, fluid pressure operated means for releasing said hold out means, manual means for controlling the passage of fluid to said fluid pressure operated means, fluid escape means operable by movement of said ram to relieve the pressure on said fluid



pressure operated means, and means cooperating with said hold out means to move said clutch out of engagement at the termination of a complete movement of said ram.

1,768,532. PAPER AND PLASTER FOUNDATION-SUPPORTING DEVICE. GUY L. WOODJARD, San Diego, Calif., assignor, by direct and mesne assignments, to Economy Products Corporation, Los Angeles, Calif., a Corporation of California. Filed June 29, 1928. Serial No. 289,195. 2 Claims. (Cl. 72—118.)



1. In a device of the class described, a spacing clip member, curved near its central portion forming a pair of extended portions, means for holding said extended portions in spaced relation, and a hook portion formed in one of said extended portions for engaging reinforcing netting.

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